WKE

JANUARY 2022

PROJECT ID: 1090-08-71

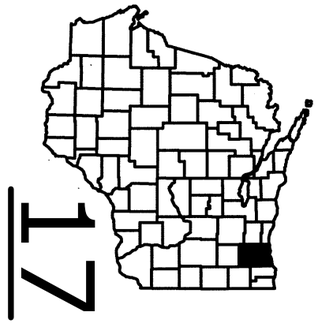
WITH:

COUNTY: WAUKESHA & MILWAUKEE

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 = 554



N

DESIGN DESIGNATION		IH 43 (MOORLAND RD TO 124TH ST)	IH 43 (124TH ST TO STH 100)	IH 43 (STH 100 TO HALE IC)
A.A.D.T.	2018/2019	= 72,000	= 59,800	= 82,900
A.A.D.T.	2042	= 77,200	= 63,400	= 86,700
D.H.V.		=	=	=
D.D.		= 56/44	= 56/44	= 56/44
T.		= 11.3%	= 11.2%	= 8.4%
DESIGN SPEED		= 70 MPH	= 60 MPH	= 60 MPH
ESALS		=	=	=

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 (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

IH 43 ROCK FREEWAY

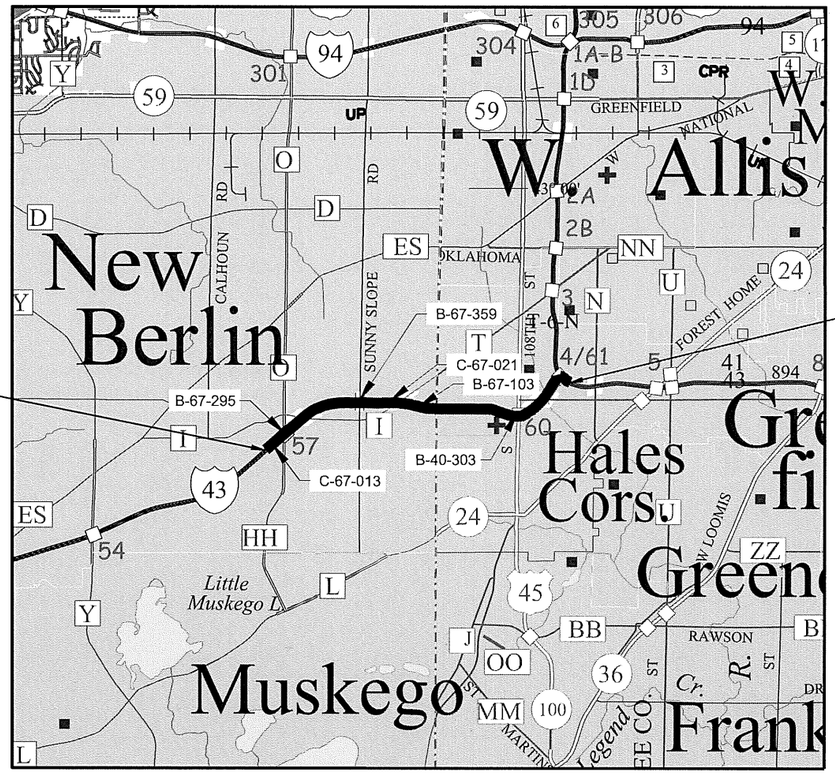
MOORLAND RD TO HALE I/C

IH 43

WAUKESHA & MILWAUKEE COUNTY

STATE PROJECT NUMBER
1090-08-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1090-08-71	WISC 2022119	1



BEGIN PROJECT
STA 780NB+00
X = 715443.03
Y = 139039.99

END PROJECT
STA 210NB+80

LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 3.452 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, WAUKESHA COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2007). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	
Designer	WISDOT
Project Manager	EVAN LIMBERATOS, P.E.
Regional Examiner	
Regional Supervisor	WAFA ELQAQ, P.E.

APPROVED FOR THE DEPARTMENT
DATE: 7/30/21 (Signature)

E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\010101_TI.DWG

PLOT DATE : 7/2/2021 7:11 AM

PLOT BY : ABU AJWA, MUNTHER J

PLOT NAME :

UTILITY CONTACTS

AT&T WISCONSIN - COMMUNICATION LINE
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cdailey@atcllc.com

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Jgraser@newberlin.org

CITY OF NEW BERLIN - WATER
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WISDOT SIGNAL OPERATIONS
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OTHER CONTACTS

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DAVID LOCHER
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SOUTHEAST WISCONSIN REGIONAL PLANNING COMMISION
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CHIEF SURVEYOR
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ANDY TRAEGER
CONSTRUCTION COORDINATOR
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CELL: (262)853-8463
FAX: (262)547-1103
atraeger@sewrpc.org

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STANDARD ABBREVIATIONS

AEW	APRON END WALL
AGG	AGGREGATE
ASPH	ASPHALTIC
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
C&G	CURB AND GUTTER
C/L	CENTER OR CONSTRUCTION LINE
CMCP	CULVERT PIPE CORRUGATED METAL
CONC	CONCRETE
CP	CULVERT PIPE
CPRC	CULVERT PIPE REINFORCED CONCRETE
CSD	CONCRETE SURFACE DRAIN
CY	CUBIC YARD
D	DEGREE OF CURVE
Δ	DELTA
DISCH	DISCHARGE
EB	EASTBOUND
FE	FIELD ENTRANCE
FL	FLOW LINE
HFST	HIGH FRICTION SURFACE TREATMENT
HMA	HOT MIX ASPHALT
INV	INVERT
L	LENGTH OF CURVE
LP	LOW POINT
LT	LEFT
MIN	MINIMUM
M/L	MATCHLINE
NB	NORTHBOUND
NC	NORMAL CROWN
PAVT	PAVEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PGL	PROFILE GRADE LINE
PLE	PERMANENT LIMITED EASEMENT
PRC	POINT OF REVERSE CURVE
PT	POINT OF TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
RC	REVERSE CROWN REQUIRED
RO	RUN OFF LENGTH
RRSP	RAILROAD SPIKE
RT	RIGHT
SALV	SALVAGED
SB	SOUTHBOUND
SDD	STANDARD DETAIL DRAWING
SE	SUPER ELEVATION
SF	SQUARE FOOT
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STA	STATION
SY	SQUARE YARD
T	TANGENT LENGTH
TLE	TEMPORARY LIMITED EASEMENT
VCL	VERTICAL CURVE LENGTH
VPC	POINT OF VERTICAL CURVE
VPI	POINT OF VERTICAL INTERSECTION
VPT	POINT OF VERTICAL TANGENT
WB	WESTBOUND

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE, OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

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

CONVERSION TABLE (FDM 14-5-10.3.2)

MATERIAL	UNIT WEIGHT
HMA PAVEMENT	112 LB/SY/INCH
BASE AGGREGATE DENSE 3/4-INCH	2.1 TON/CY

CONTACT THE PROJECT ENGINEER AND SEWRPC AT LEAST TWO WEEKS BEFORE WORKING NEAR ANY SECTION CORNER MONUMENT.

ANY REINFORCEMENT LOCATED IN EXISITNG CONCRETE PAVEMENT SHALL BE CONSIDERED INCIDENTIAL TO THE REMOVING CONCRETE PAVEMENT ITEM, AND NO ADDITIONAL COMPENSATION WILL BE GRANTED.

VERIFY EXISTING PAVEMENT ELEVATIONS AT ALL TIE-INS TO EXISTING PAVEMENT PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IF A DISCREPANCY IS FOUND BETWEEN PROPOSED PLAN ELEVATIONS AND EXISTING PAVEMENT ELEVATIONS.

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

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

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES AND PIPES SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER TO FIT THE EXISTING FIELD CONDITIONS.

VERIFY THE EXISTING STORM SEWER SYSTEM CONNECTION LOCATIONS AND ELEVATIONS BEFORE ORDERING DRAINAGE STRUCTURES AND PIPES. NOTIFY THE ENGINEER OF ANY DEVIATIONS FROM THE INFORMATION SHOWN ON PLANS BEFORE INSTALLING THE PROPOSED STORM SEWER.

PRIOR TO THE REPLACEMENT OF MGS GUARDRAIL, THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED UNLESS SHOWN OTHERWISE.

RE-TOPSOIL OF GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. SEED, FERTILIZE, AND MULCH/EROSION MAT TOP-SOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL. IF GRADED AREAS ARE LEFT EXPOSED FOR MORE THAN (14) CALENDAR DAYS, SEED THOSE AREAS WITH TEMPORARY SEED.

STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THE STOCKPILE WITH TEMPORARY SEED.

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

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLAN
PLAN DETAILS
EROSION CONTROL
STORM SEWER
PERMANENT SIGNING
FTMS PLAN
SIGNAL PLAN
PAVEMENT MARKING
STAGING/TRAFFIC CONTROL
DETOUR PLAN
ALIGNMENT LAYOUT

STATE AGENCIES

WISCONSIN DEPARTMENT OF TRANSPORTATION

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N

WAUKESHA COUNTY
MILWAUKEE COUNTY

CITY OF NEW BERLIN

CTH O (MOORLAND RD)

SUNNY SLOPE RD

124TH ST

116TH ST

STH 100 (108TH ST)

CITY OF GREENFIELD

LAYTON AVE

IH 43

B-67-359
-THIN POLYMER OVERLAY (TPO)

C-67-021
-NW & SW WING
WALL REPLACEMENT

END CONSTRUCTION

B-40-303
-CONCRETE SURFACE REPAIR
-REMOVING LOOSE CONCRETE

END MILL & OVERLAY
(WEST-TO-NORTH RAMP)
STA 118NB+79

END MILL & OVERLAY
(IH 43 SB)
STA 119SB+07

END PROJECT
STA 210NB+80
END MILL & OVERLAY
(IH 43 NB)

BELOIT RD

BEGIN MILL & OVERLAY
(MATCH CONCRETE)

B-67-103
-DECK REPLACEMENT
-THIN POLYMER OVERLAY (TPO)

LINE TWO CULVERT
PIPES ALONG IH 43

HIGH FRICTION SURFACE TREATMENT
IH 43 NB
(STA 56NB+42 TO STA 87NB+15)

HIGH FRICTION SURFACE TREATMENT
IH 43 SB OFF-RAMP TO STH 100
(STA 366+24 TO STA 376+48)
(STA 21+45 TO STA 26+54)

END CONSTRUCTION

HIGH FRICTION
SURFACE TREATMENT
(MOORLAND RD
ROUNDABOUT)

B-67-295
-PARAPET REPAIR

C-67-013
-SE WING WALL REPLACEMENT

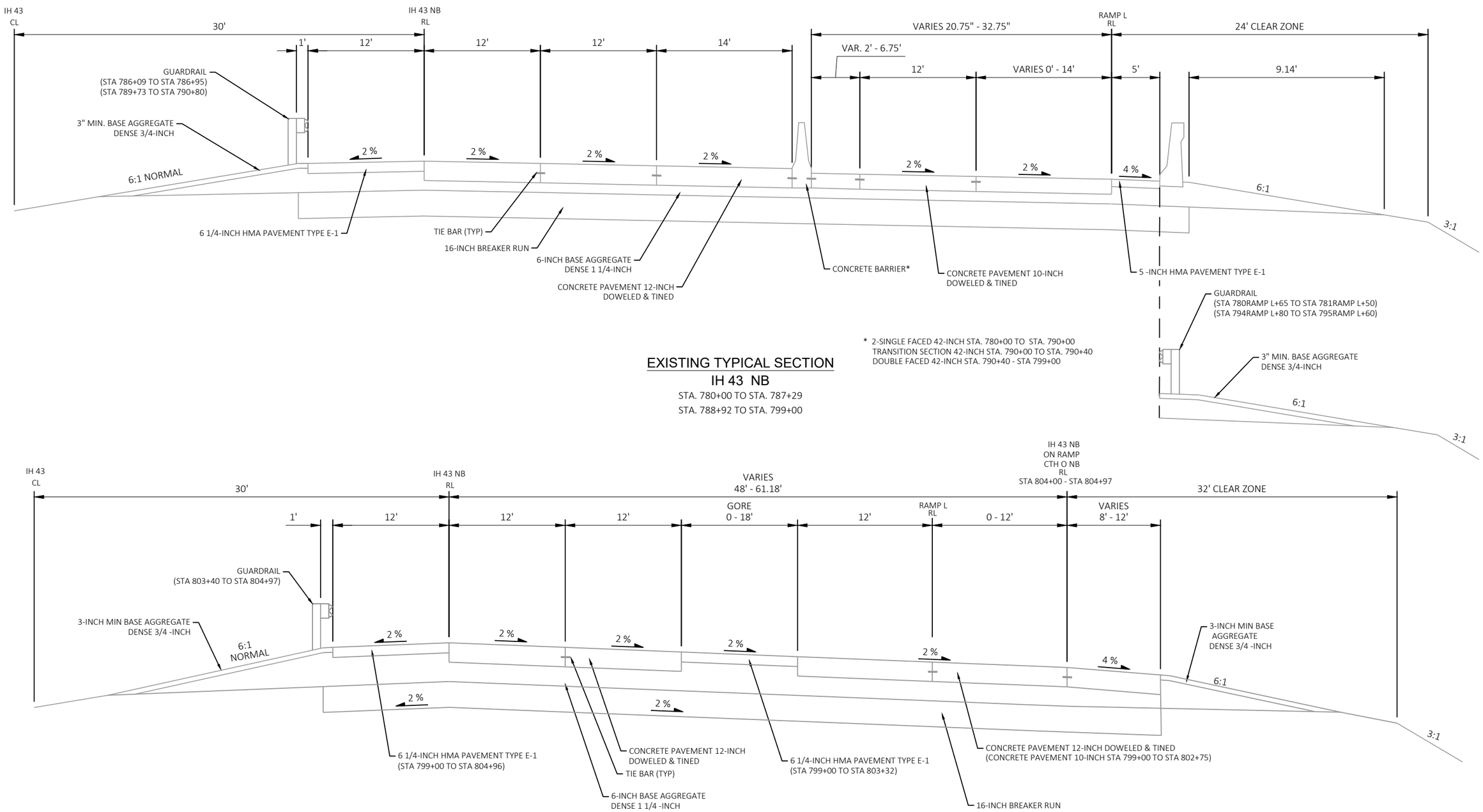
BEGIN PROJECT
STA 780NB+00

CITY OF NEW BERLIN

CITY OF GREENFIELD

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\020201_PO.DWG
LAYOUT NAME - 020201
PLOT DATE : 7/21/2021 9:27 PM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:1500 FT
WISDOT/CADDS SHEET 42

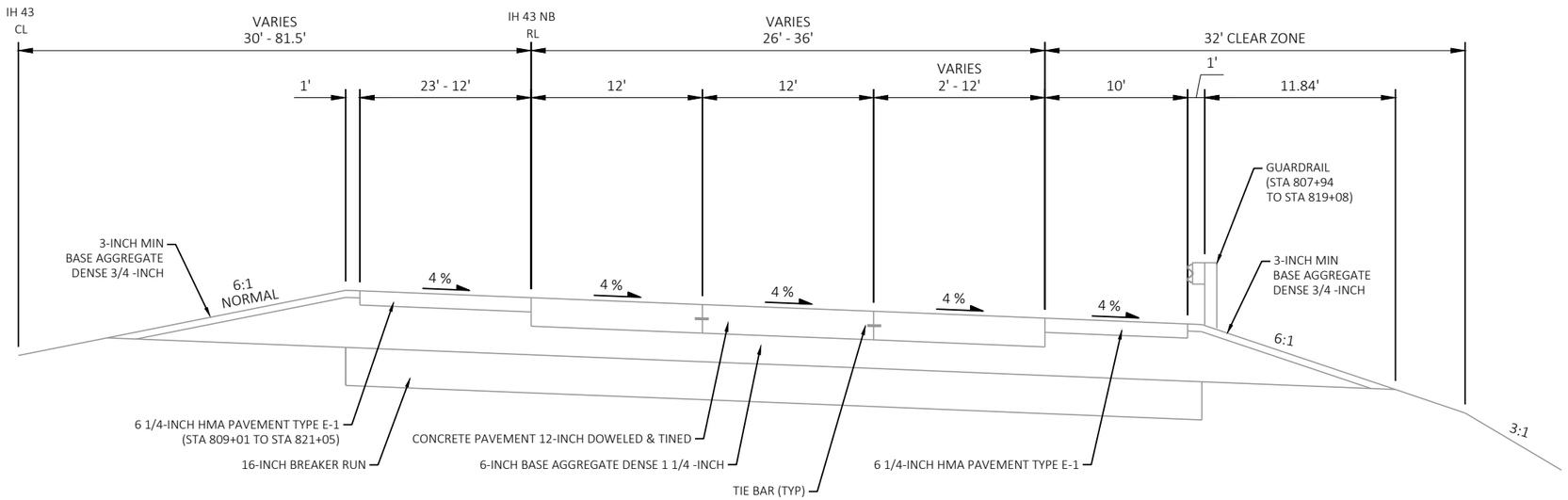


* 2-SINGLE FACED 42-INCH STA. 780+00 TO STA. 790+00
TRANSITION SECTION 42-INCH STA. 790+00 TO STA. 790+40
DOUBLE FACED 42-INCH STA. 790+40 - STA 799+00

EXISTING TYPICAL SECTION
IH 43 NB
STA. 780+00 TO STA. 787+29
STA. 788+92 TO STA. 799+00

EXISTING TYPICAL SECTION
IH 43 NB
STA. 799+00 TO STA. 804+97

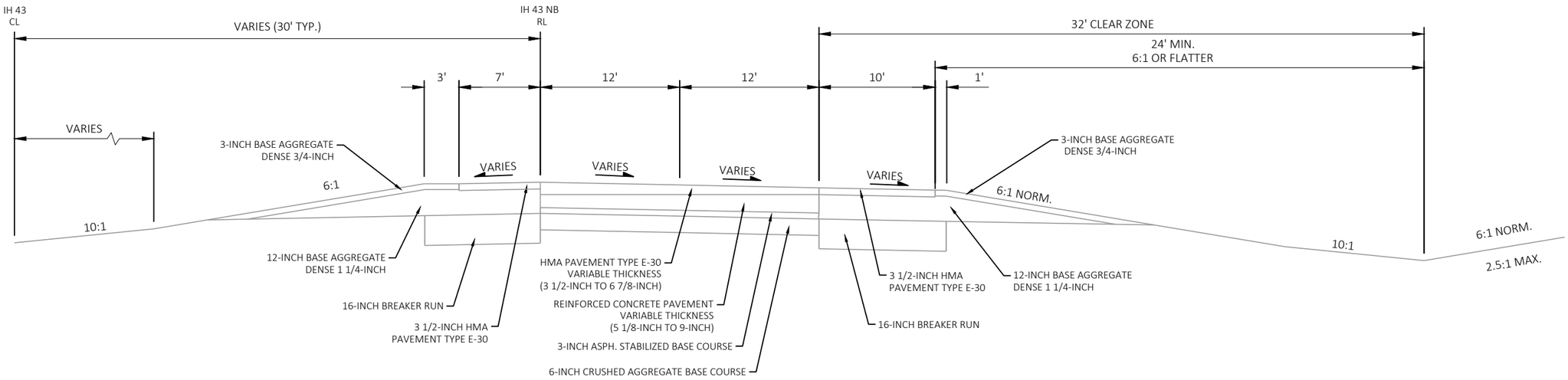
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 5	E



EXISTING TYPICAL SECTION

IH 43 NB

STA. 807+94 TO STA. 821+05



EXISTING TYPICAL SECTION

IH 43 NB

STA. 821+05 TO STA. 840+00

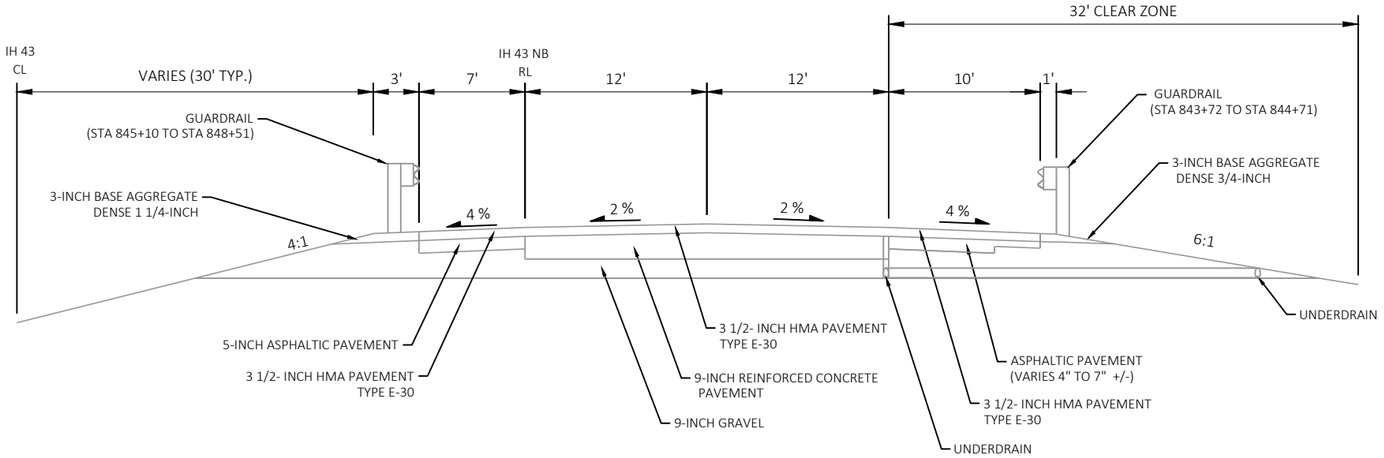
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 6	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020302

PLOT DATE : 7/2/2021 7:46 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

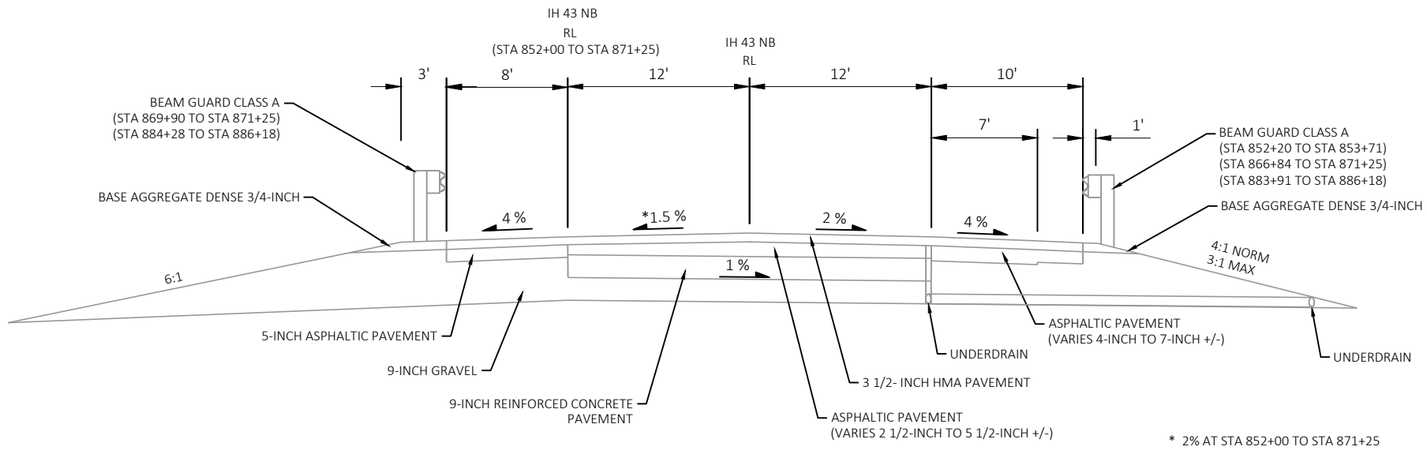
2



EXISTING TYPICAL SECTION

IH 43 NB

STA. 840+00 TO STA. 852+00



EXISTING TYPICAL SECTION

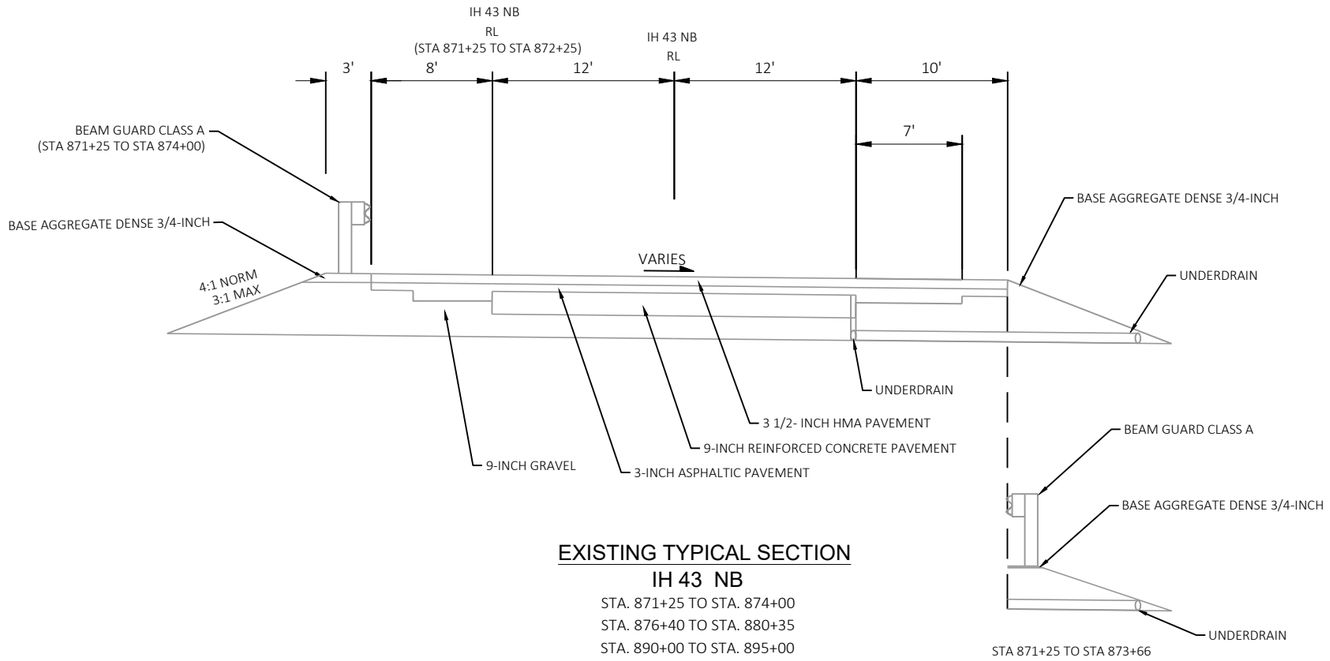
IH 43 NB

STA. 852+00 TO STA. 871+25

STA. 880+35 TO STA. 890+00

STA. 895+00 TO STA. 899+00

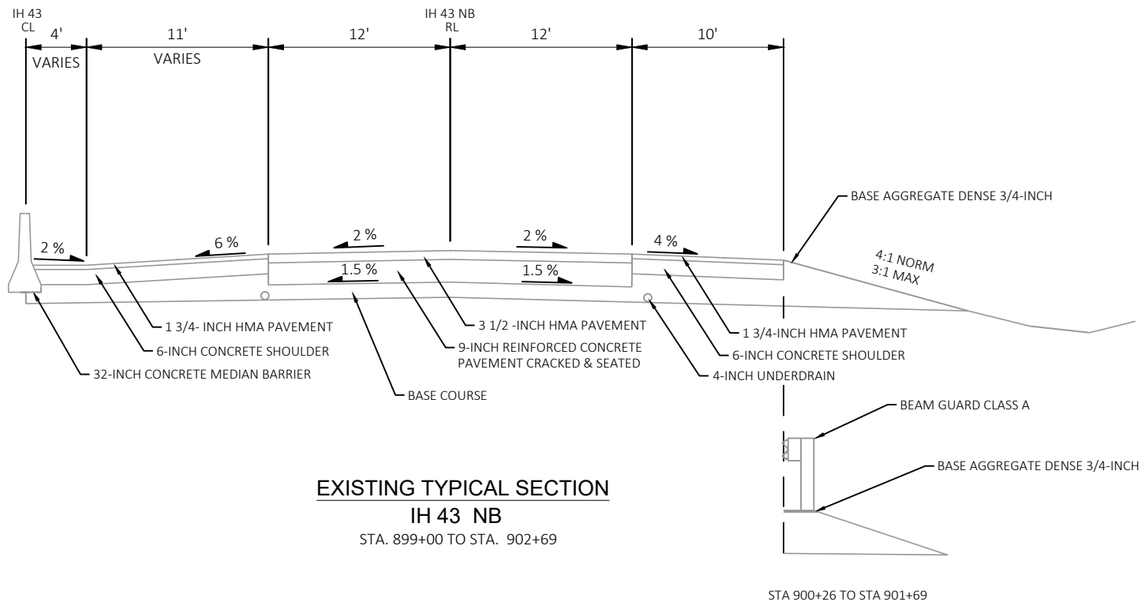
2



EXISTING TYPICAL SECTION

IH 43 NB

STA. 871+25 TO STA. 874+00
STA. 876+40 TO STA. 880+35
STA. 890+00 TO STA. 895+00

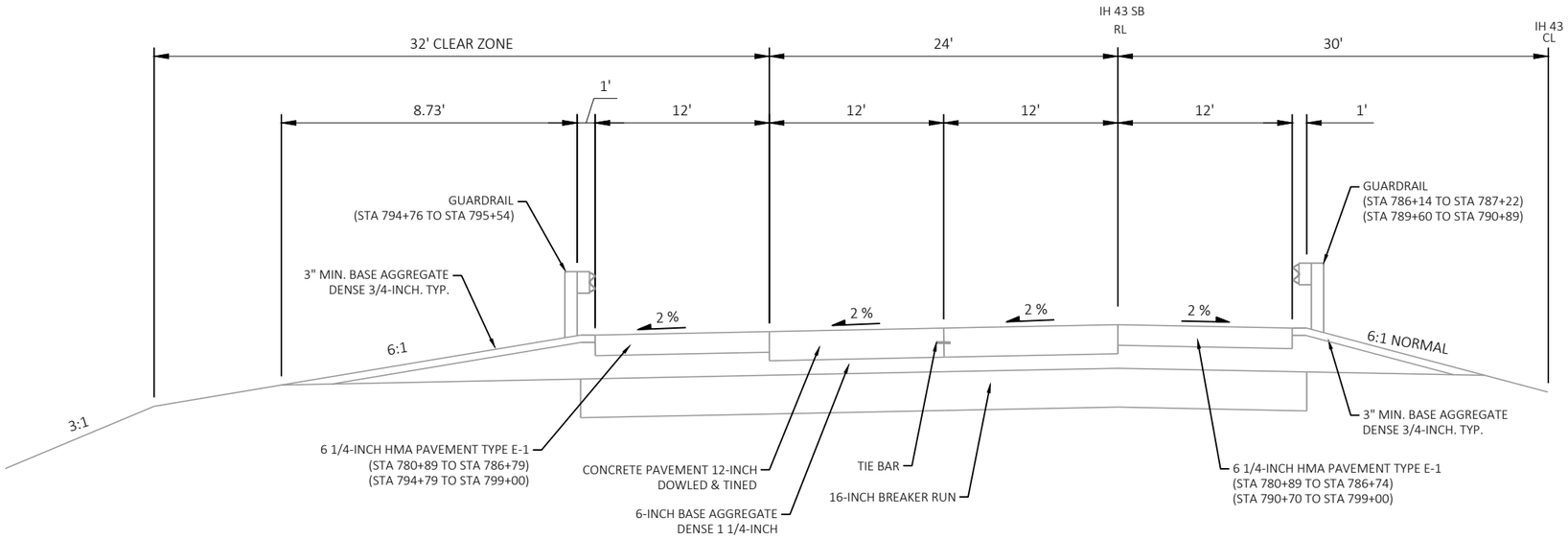


EXISTING TYPICAL SECTION

IH 43 NB

STA. 899+00 TO STA. 902+69

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 8	E

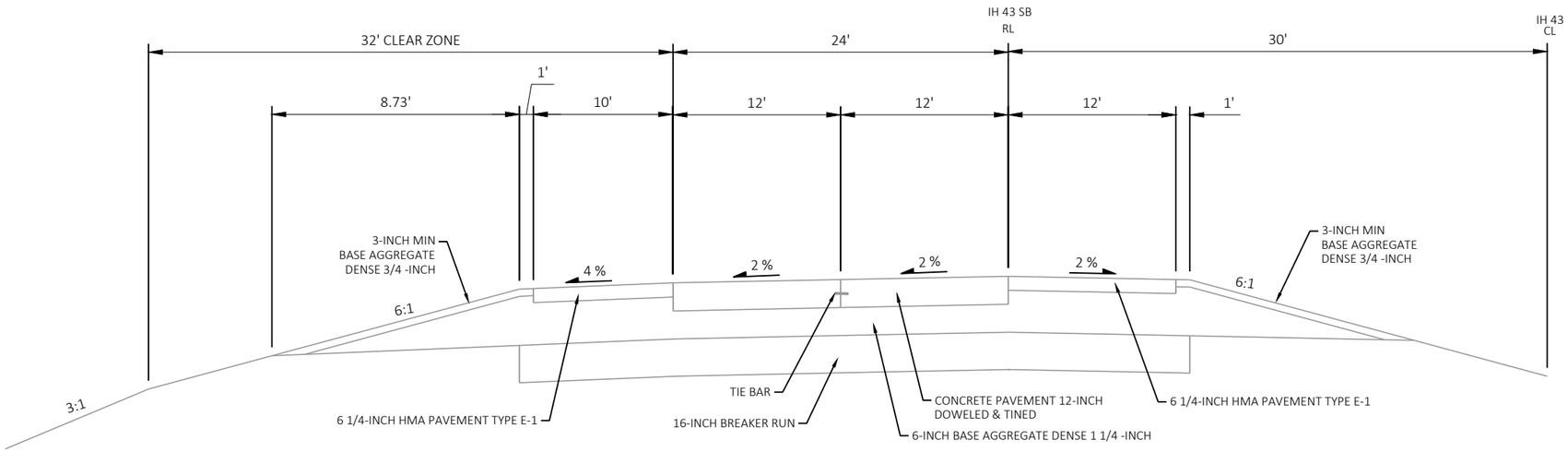


EXISTING TYPICAL SECTION

IH 43 SB

STA. 780+89 TO STA. 787+75

STA. 789+60 TO STA. 799+00



EXISTING TYPICAL SECTION

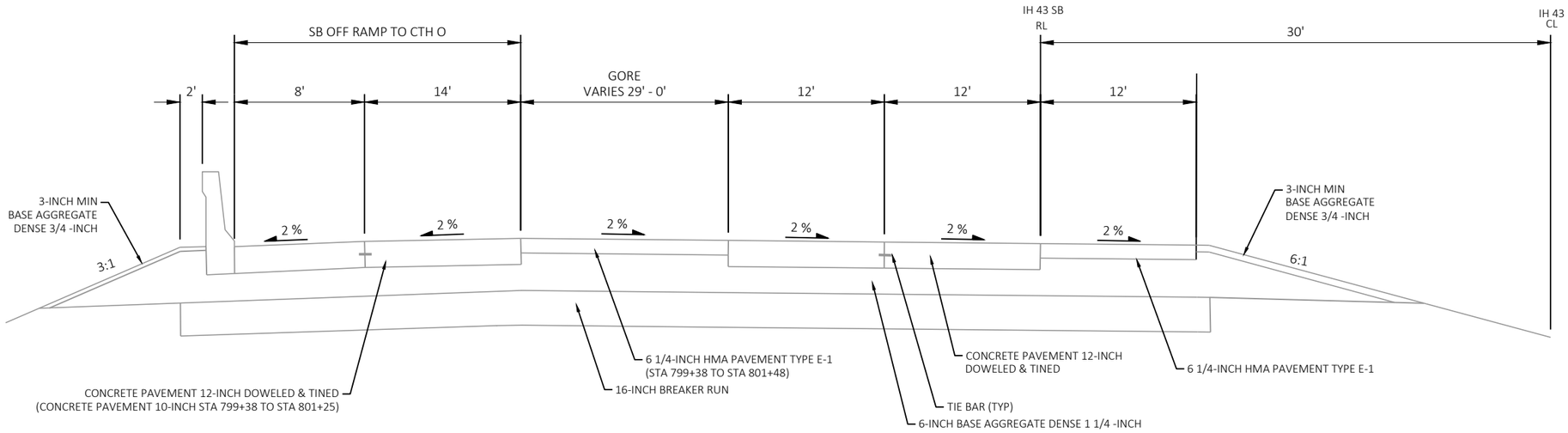
IH 43 SB

STA. 799+00 TO STA. 799+38

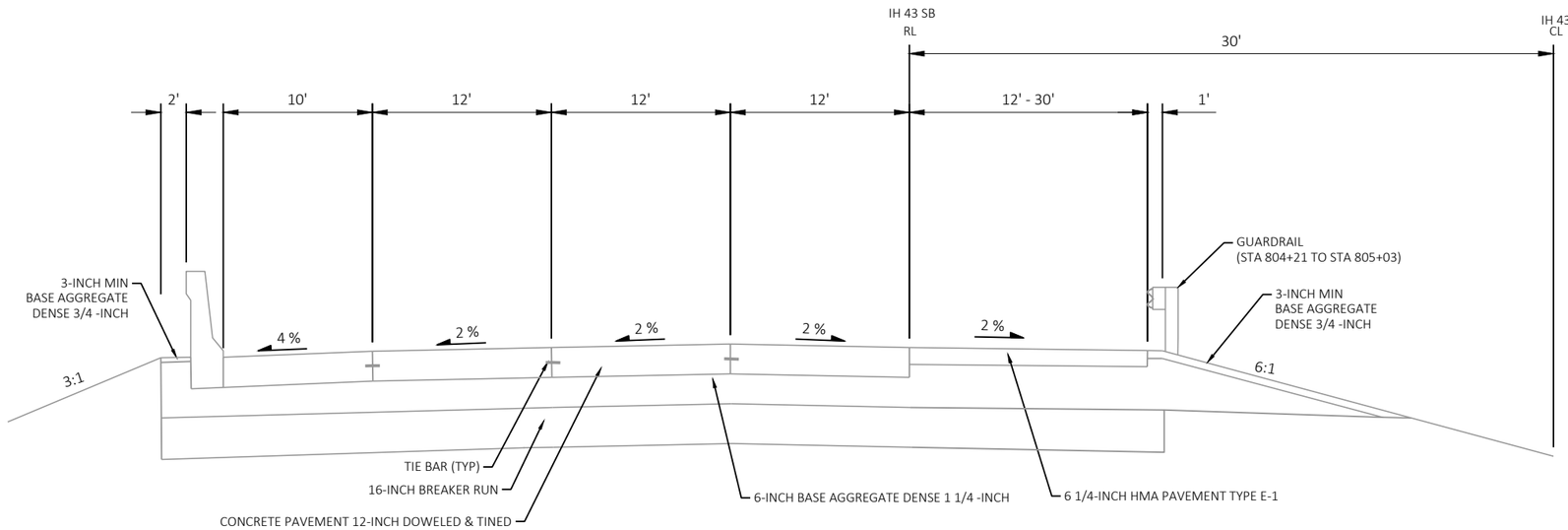
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 9	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020305

PLOT DATE : 2/6/2021 7:54 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:10 FT

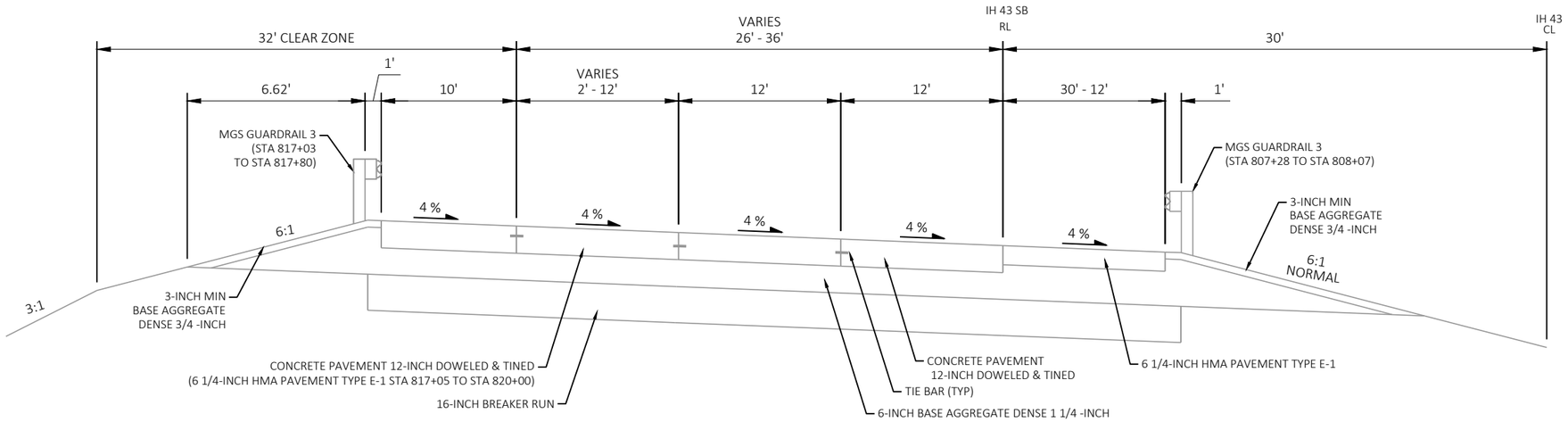


EXISTING TYPICAL SECTION
IH 43 SB
STA. 799+38 TO STA. 802+36



EXISTING TYPICAL SECTION
IH 43 SB
STA. 802+36 TO STA. 805+03

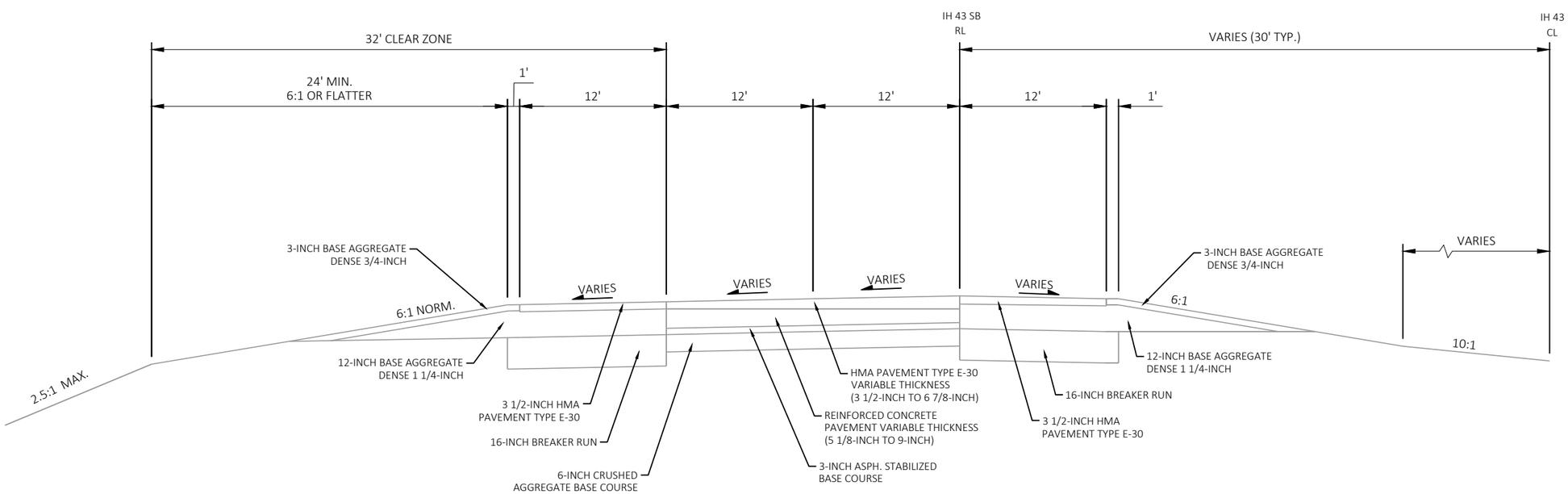
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 10	E



EXISTING TYPICAL SECTION

IH 43 SB

STA. 807+22 TO STA. 820+00



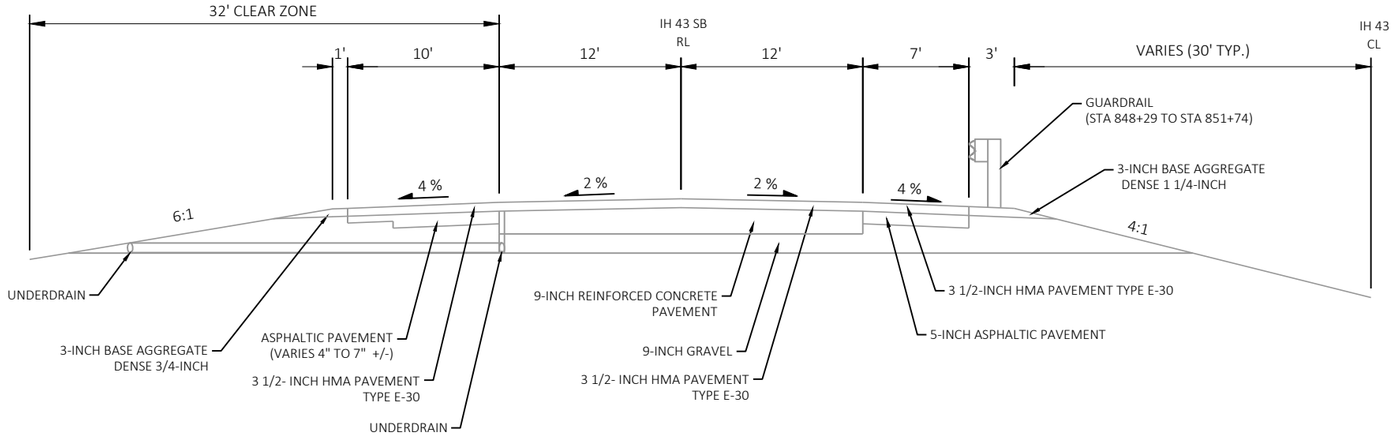
EXISTING TYPICAL SECTION

IH 43 SB

STA. 820+00 TO STA. 840+00

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 11	E

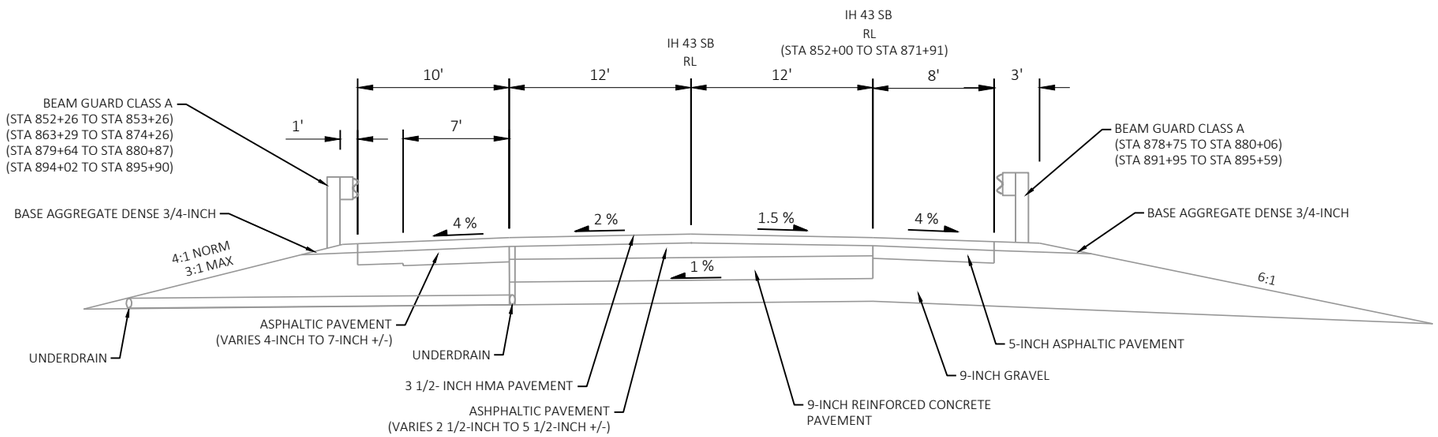
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EXISTING TYPICAL SECTION

IH 43 SB

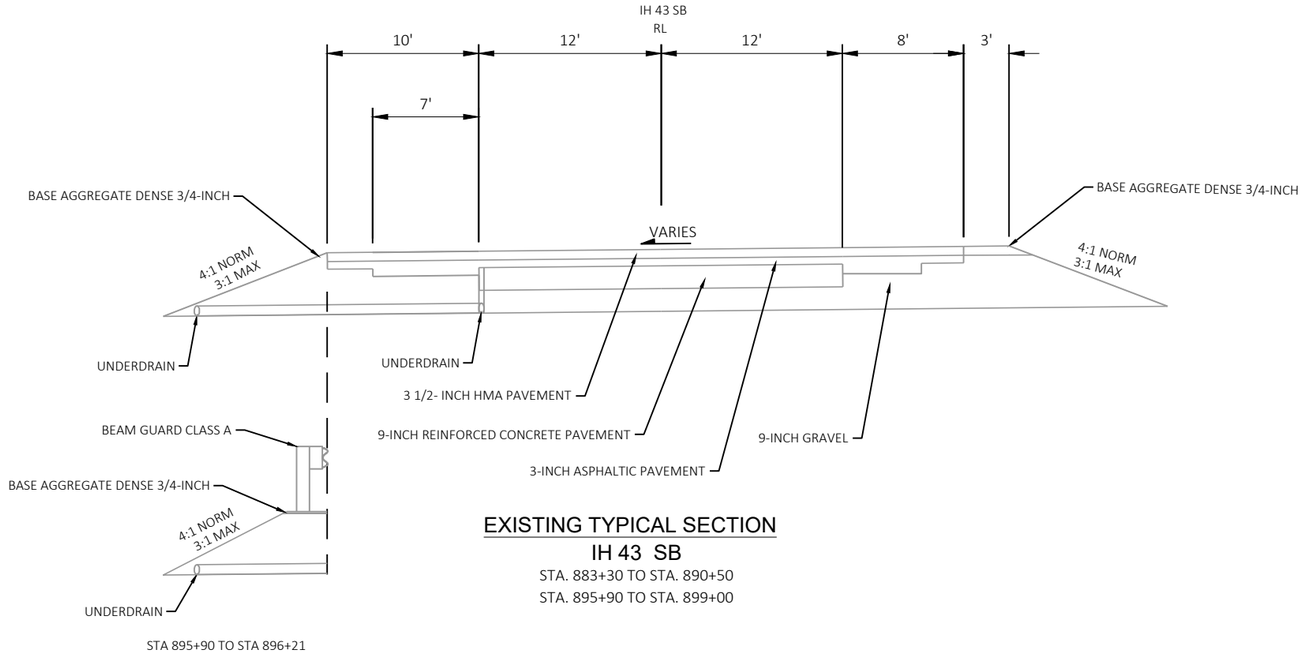
STA. 840+00 TO STA. 852+00



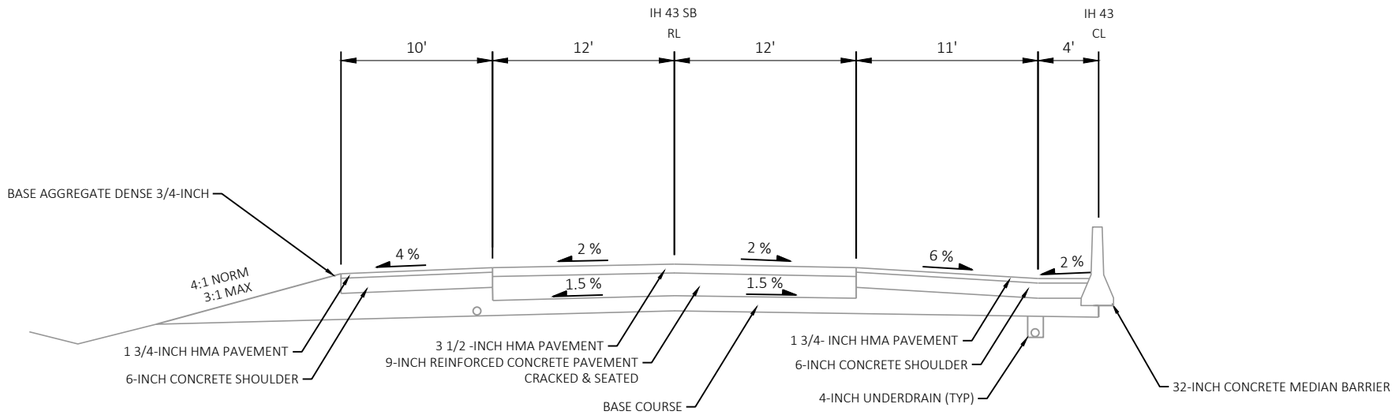
EXISTING TYPICAL SECTION

IH 43 SB

STA. 852+00 TO STA. 875+79
STA. 877+56 TO STA. 883+30
STA. 890+50 TO STA. 895+90

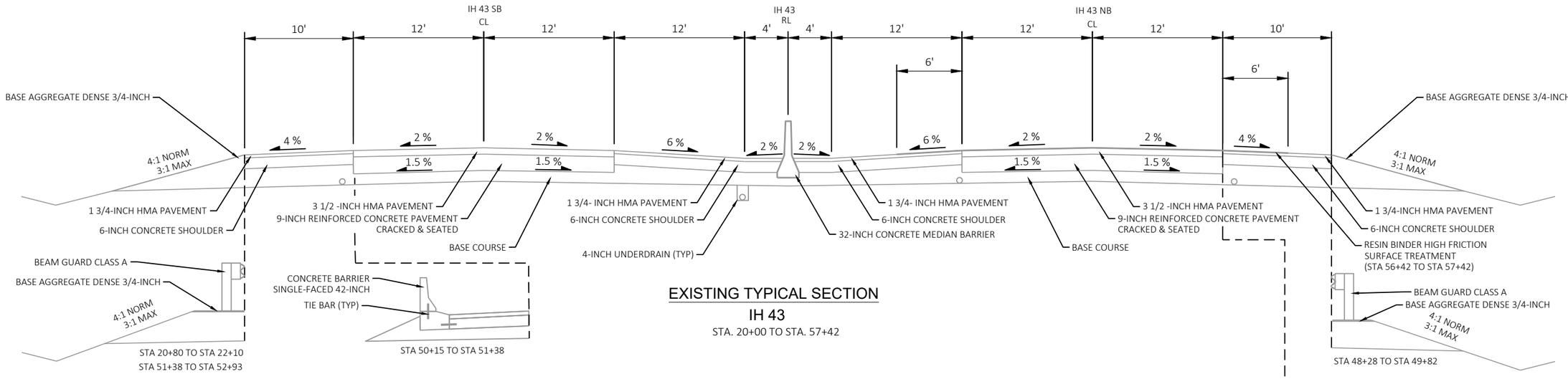


EXISTING TYPICAL SECTION
IH 43 SB
STA. 883+30 TO STA. 890+50
STA. 895+90 TO STA. 899+00



EXISTING TYPICAL SECTION
IH 43 SB
STA. 899+00 TO STA. 902+69

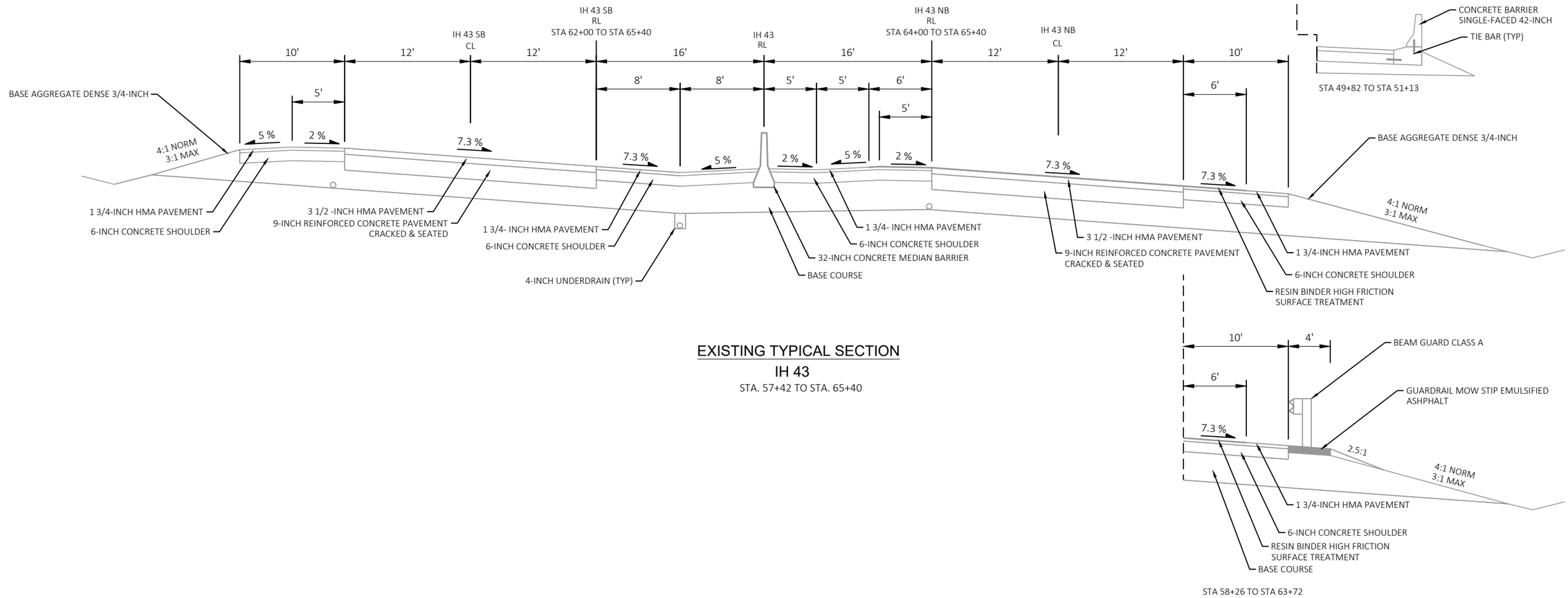
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 13	E



EXISTING TYPICAL SECTION

IH 43

STA. 20+00 TO STA. 57+42

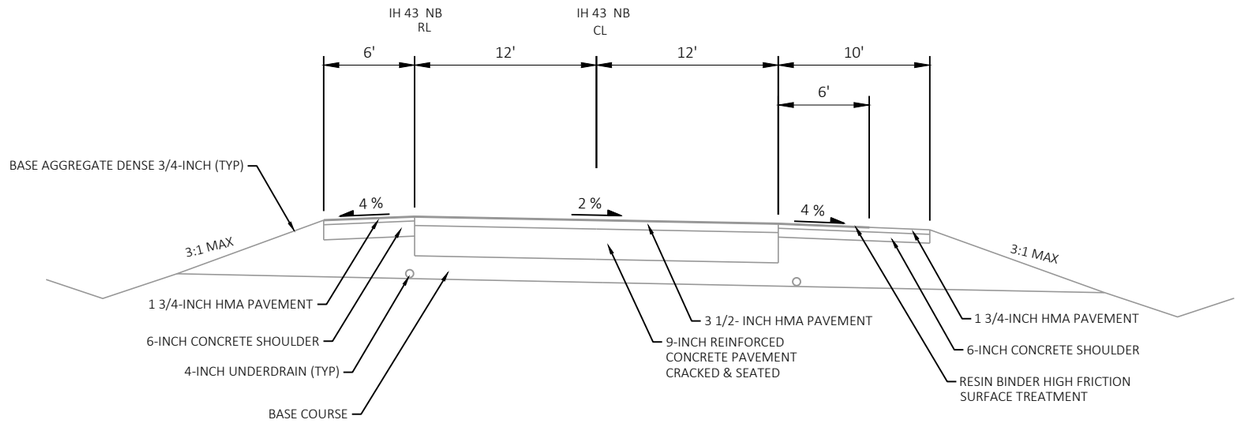


EXISTING TYPICAL SECTION

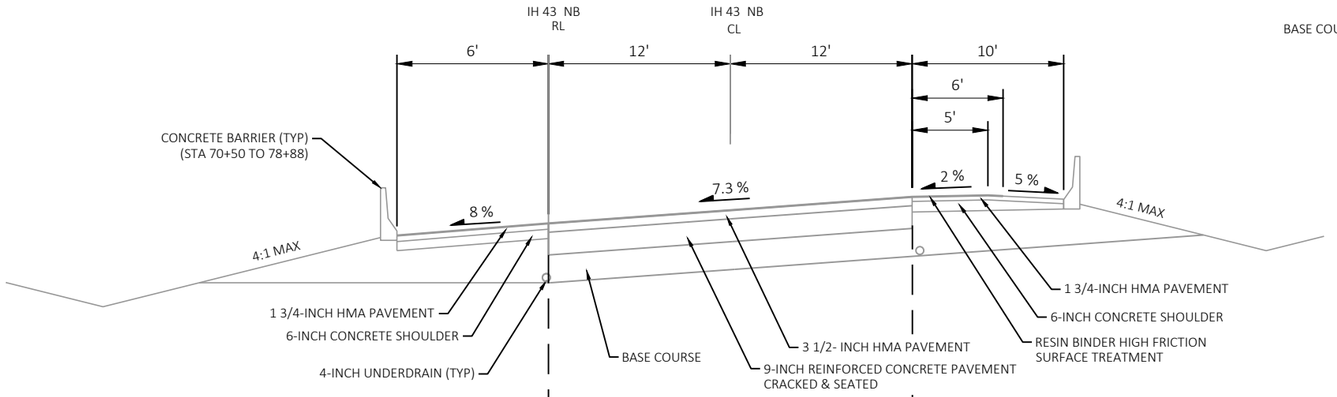
IH 43

STA. 57+42 TO STA. 65+40

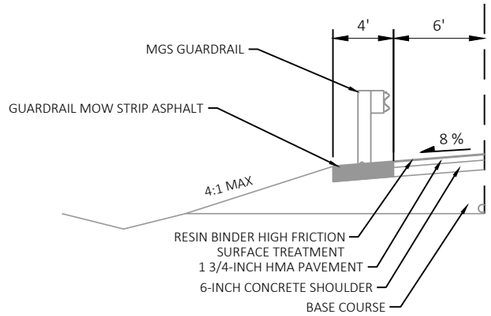
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 14	E



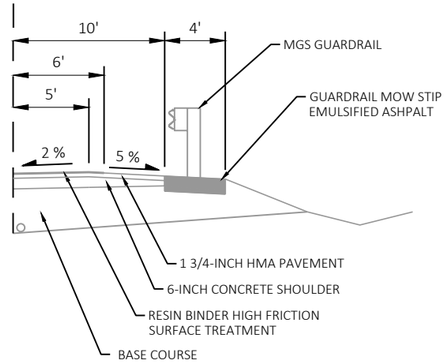
EXISTING TYPICAL SECTION
IH 43 NB
STA. 65+40 TO STA. 70+50



EXISTING TYPICAL SECTION
IH 43 NB
STA. 70+50 TO STA. 86+50



STA 70+55 TO STA 71+35
STA 78+90 TO STA 84+30

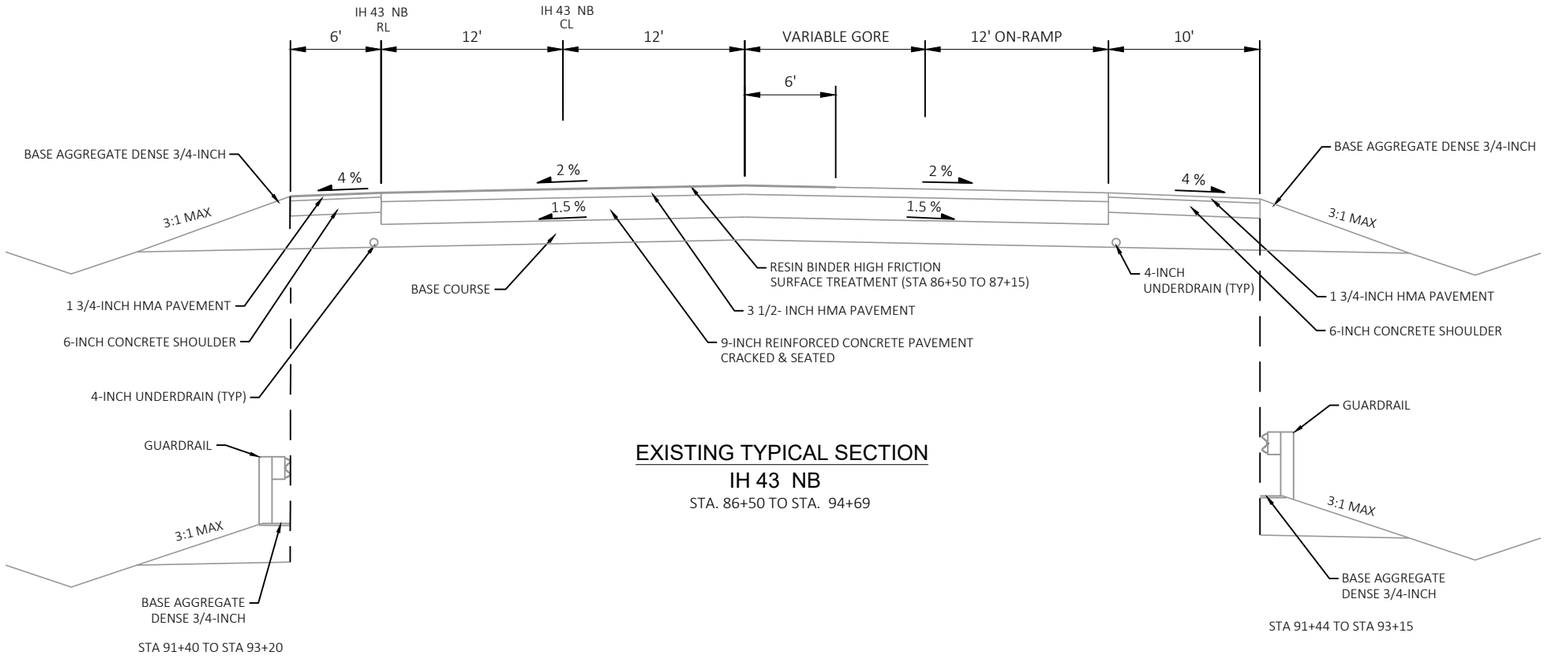


STA 71+16 TO STA 71+96
STA 78+88 TO STA 83+50

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 15	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020311
PLOT DATE : 2/6/2021 7:56 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

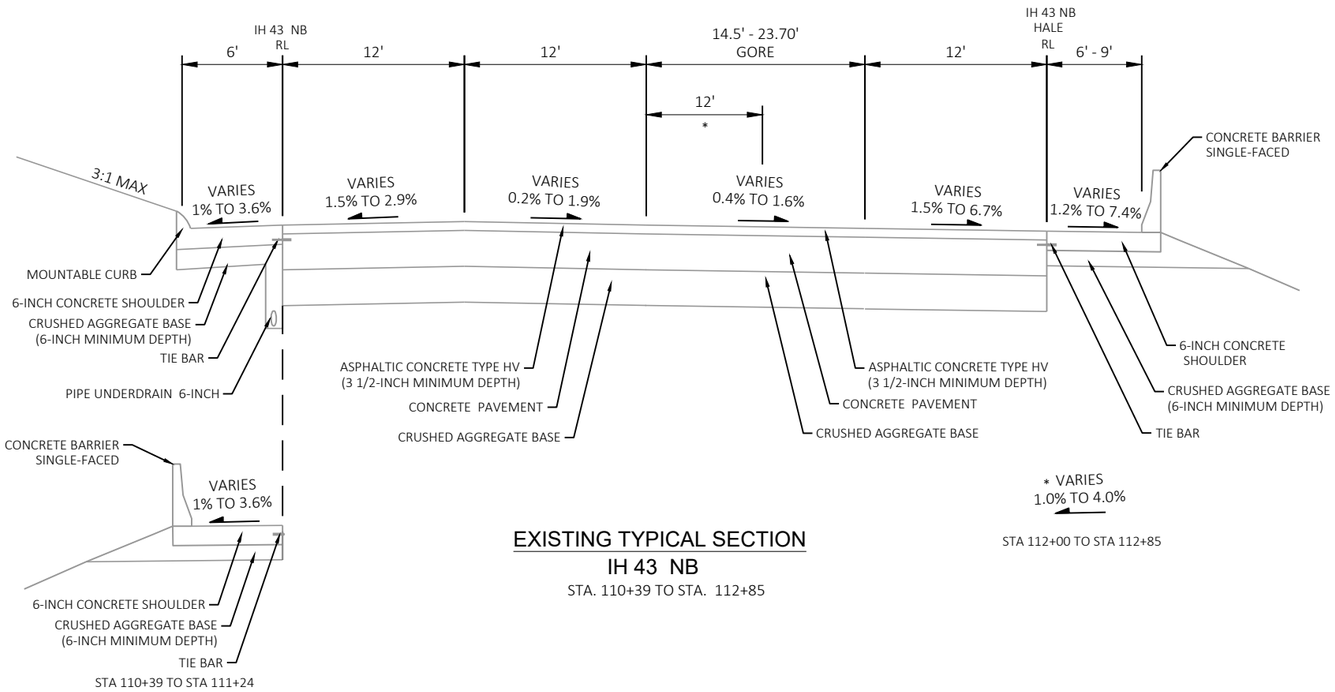
2



STA 91+40 TO STA 93+20

STA 91+44 TO STA 93+15

EXISTING TYPICAL SECTION
IH 43 NB
STA. 86+50 TO STA. 94+69



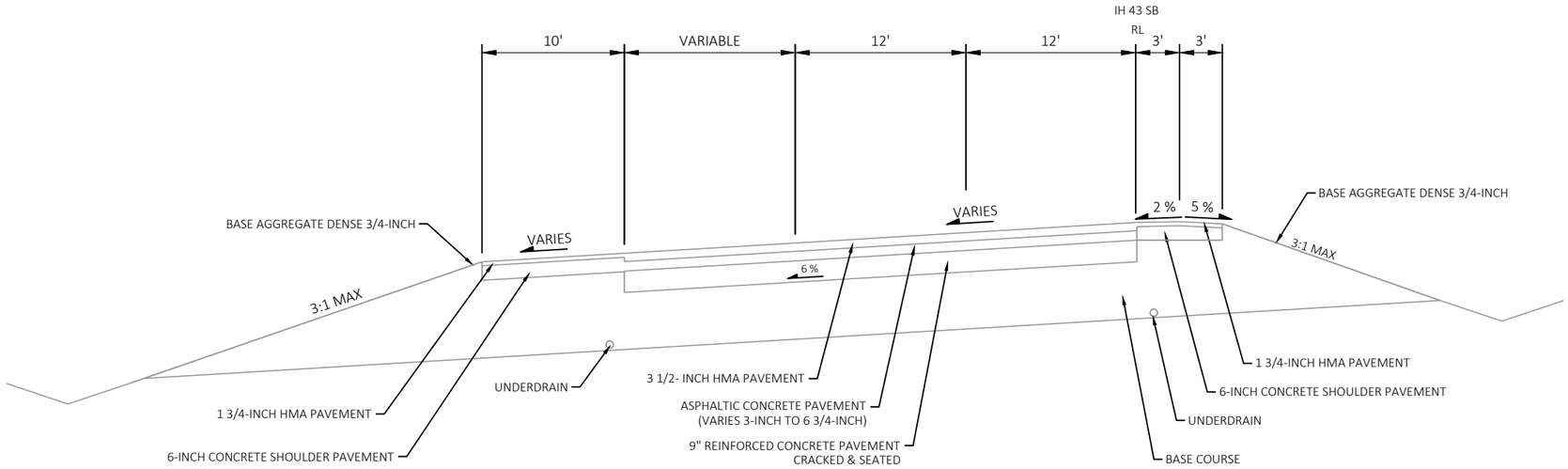
STA 110+39 TO STA 111+24

STA 112+00 TO STA 112+85

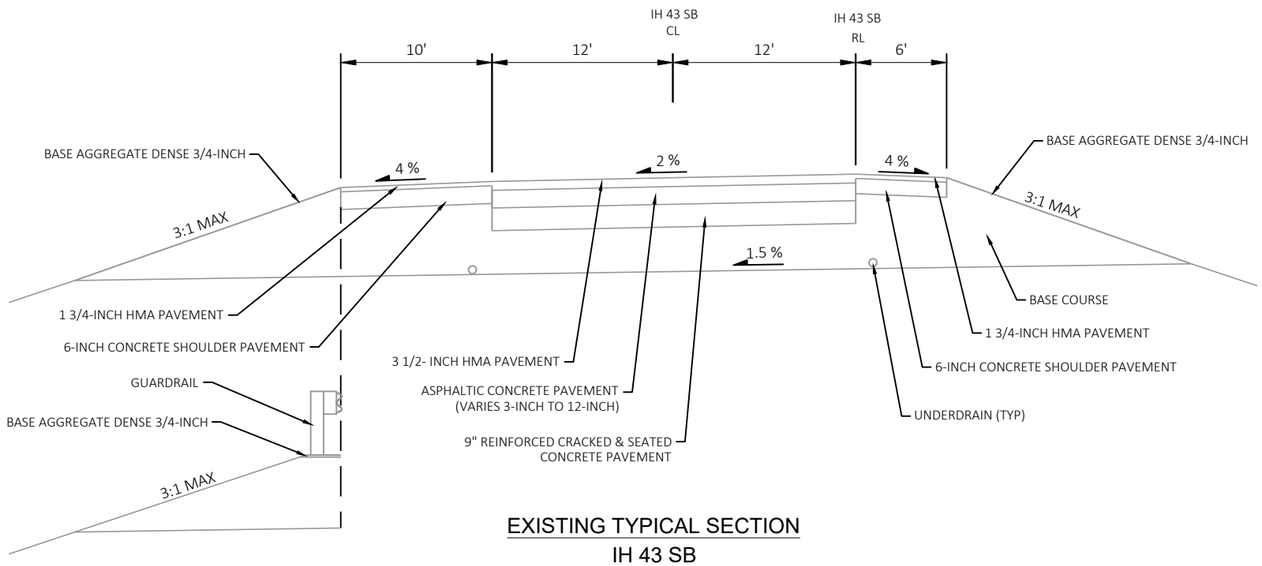
EXISTING TYPICAL SECTION
IH 43 NB
STA. 110+39 TO STA. 112+85

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 16	E

2



EXISTING TYPICAL SECTION
IH 43 SB
STA. 65+40 TO STA. 75+50



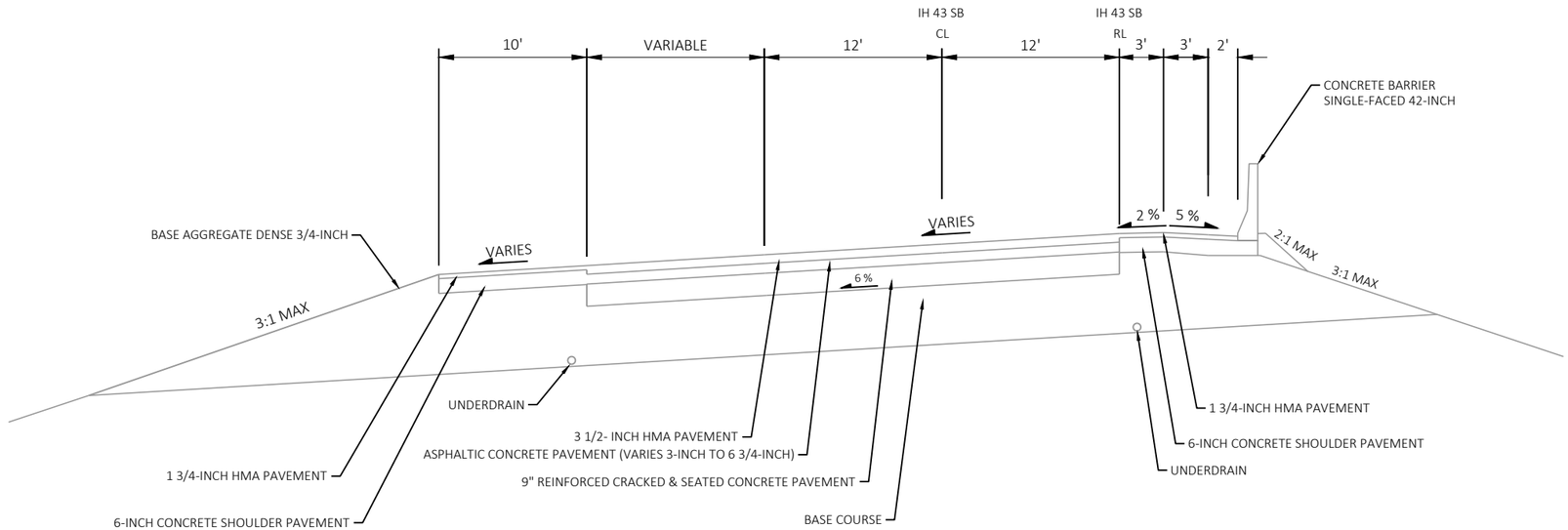
EXISTING TYPICAL SECTION
IH 43 SB
STA. 75+50 TO STA. 76+48
STA. 78+22 TO STA. 81+25

STA 78+45 TO STA 80+78

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 17	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020313
PLOT DATE : 2/6/2021 7:57 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

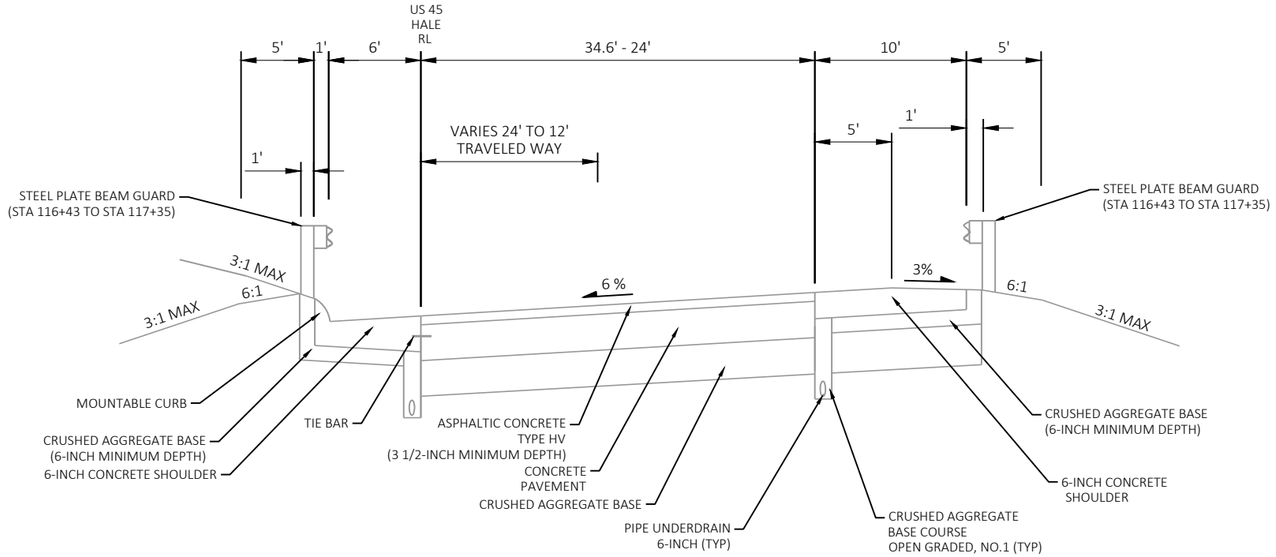
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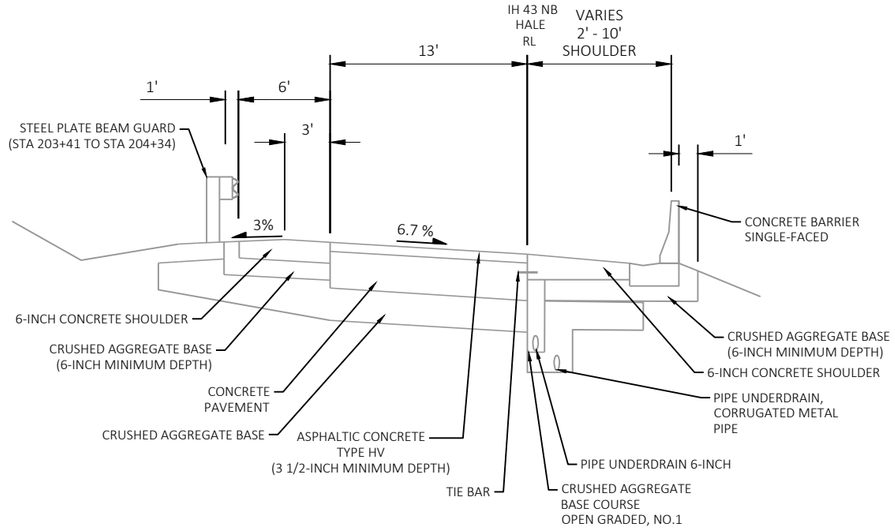
EXISTING TYPICAL SECTION

IH 43 SB

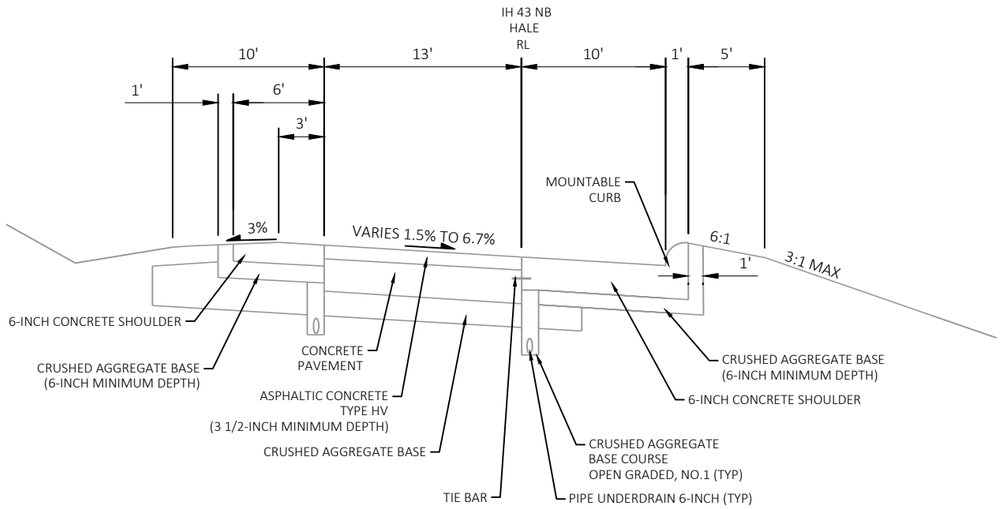
STA. 81+25 TO STA. 92+51



EXISTING TYPICAL SECTION
W-N RAMP (HALE INTERCHANGE)
STA. 112NB+85 TO STA. 118NB+85



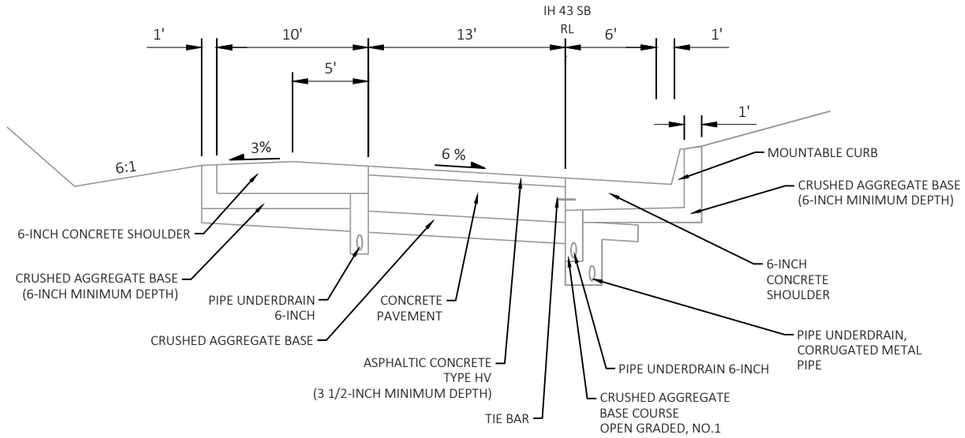
EXISTING TYPICAL SECTION
W-E RAMP (HALE INTERCHANGE)
STA. 203NB+40 TO STA. 205NB+18



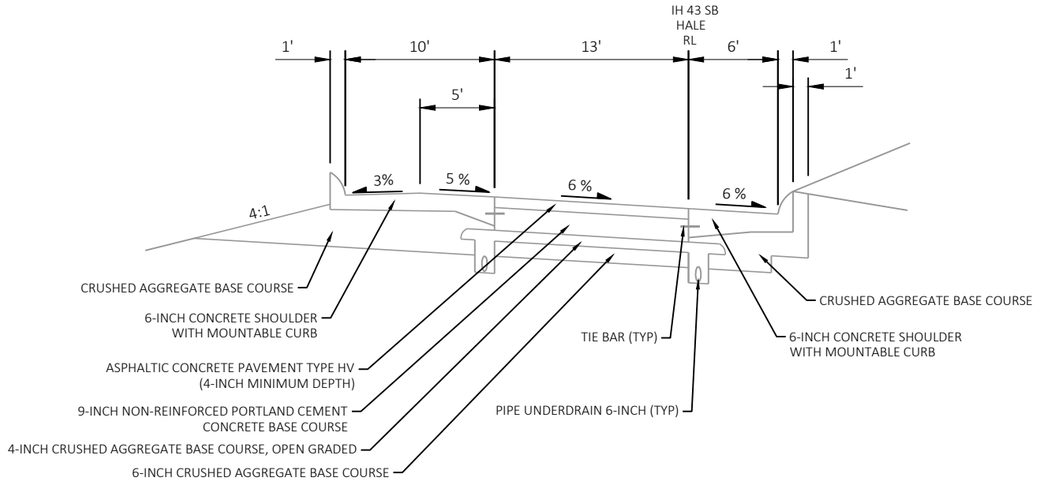
EXISTING TYPICAL SECTION
W-E RAMP (HALE INTERCHANGE)
STA. 208NB+81 TO STA. 210NB+80

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 19	E

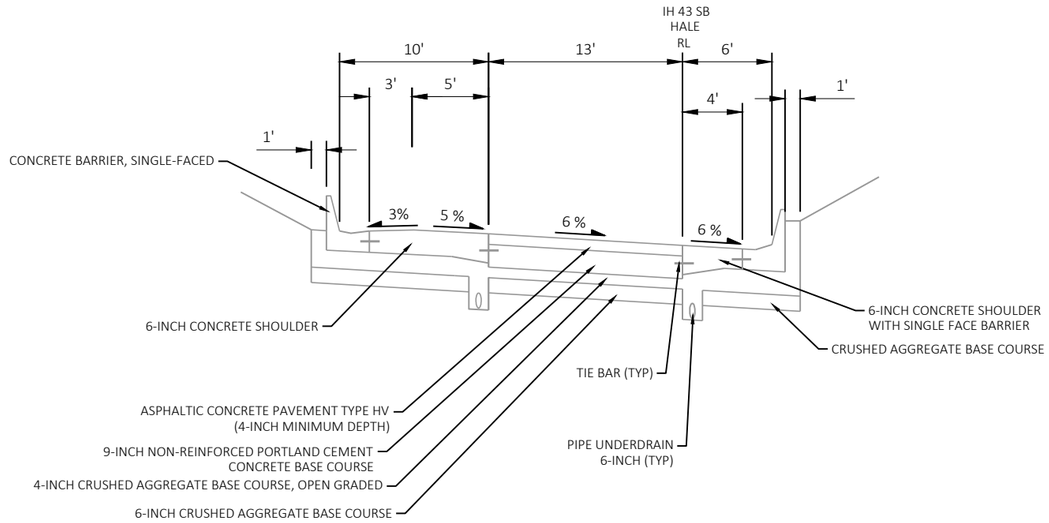
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EXISTING TYPICAL SECTION
E-W RAMP (HALE INTERCHANGE)
STA. 110SB+47 TO STA. 111SB+46

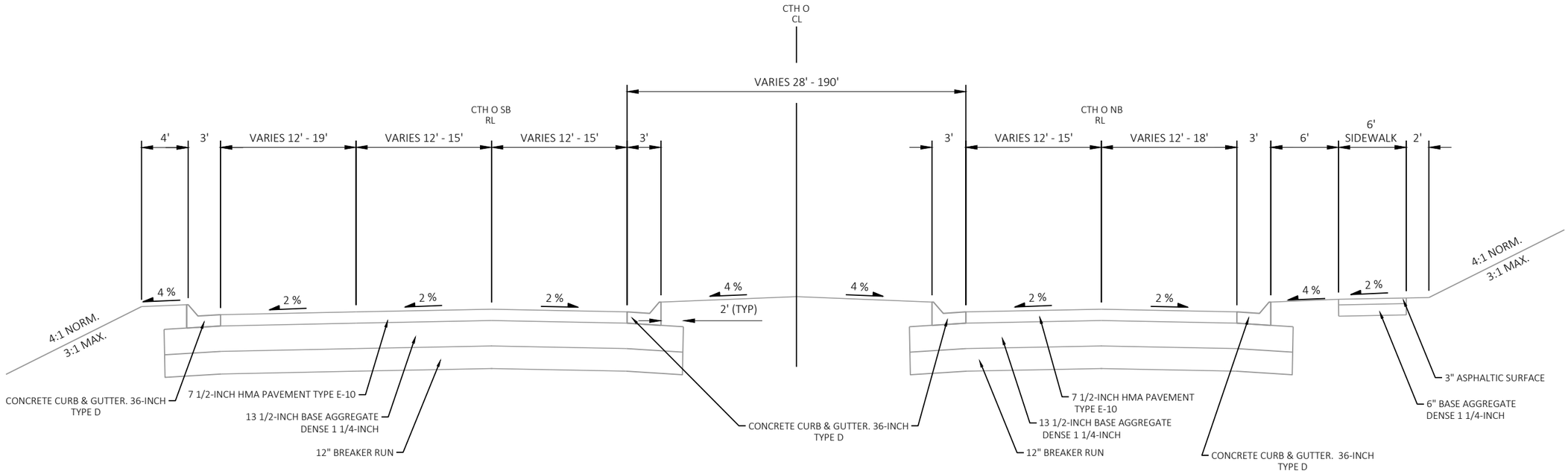


EXISTING TYPICAL SECTION
E-W RAMP (HALE INTERCHANGE)
STA. 111SB+46 TO STA. 112SB+12



EXISTING TYPICAL SECTION
E-W RAMP (HALE INTERCHANGE)
STA. 112SB+12 TO STA. 119SB+07

2

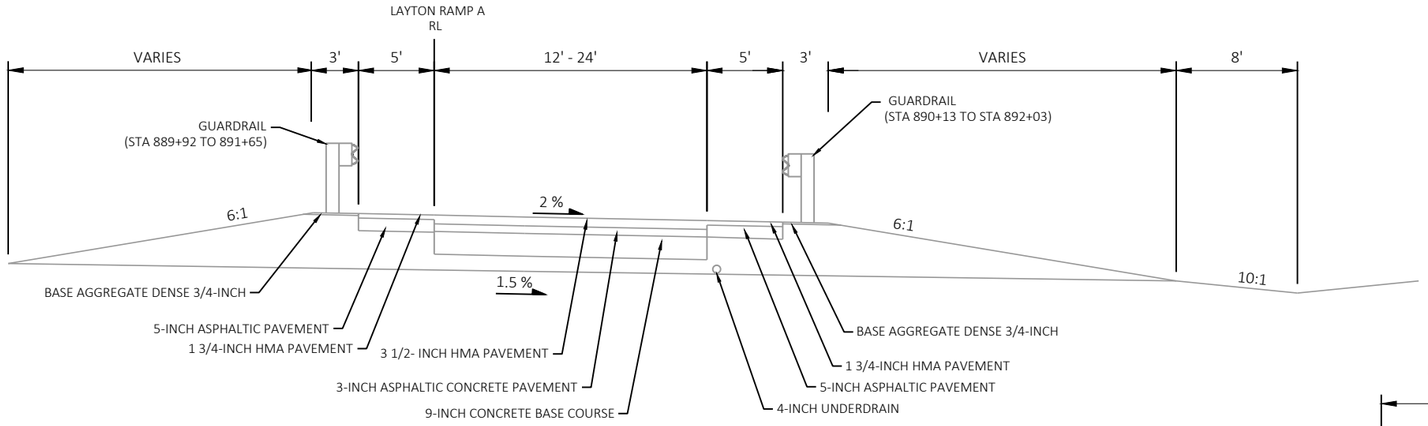


EXISTING TYPICAL SECTIONS

CTH O

STA. 32+69 TO STA. 34+63

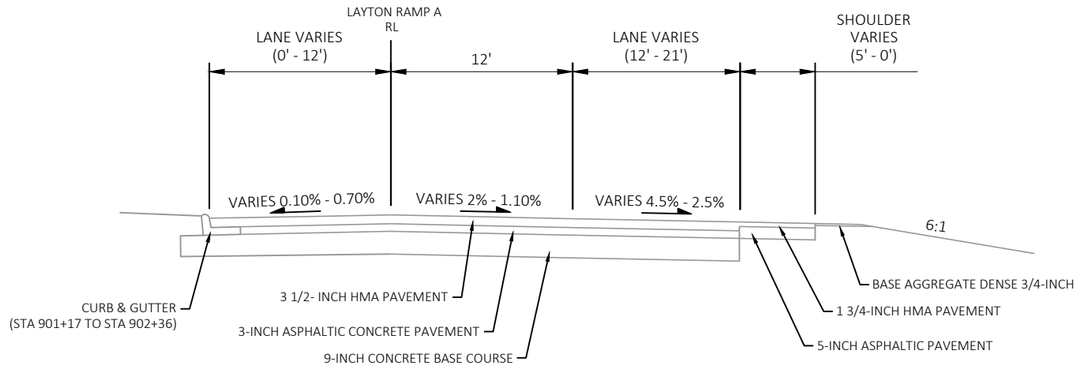
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 21	E



EXISTING TYPICAL SECTION

LAYTON RAMP A

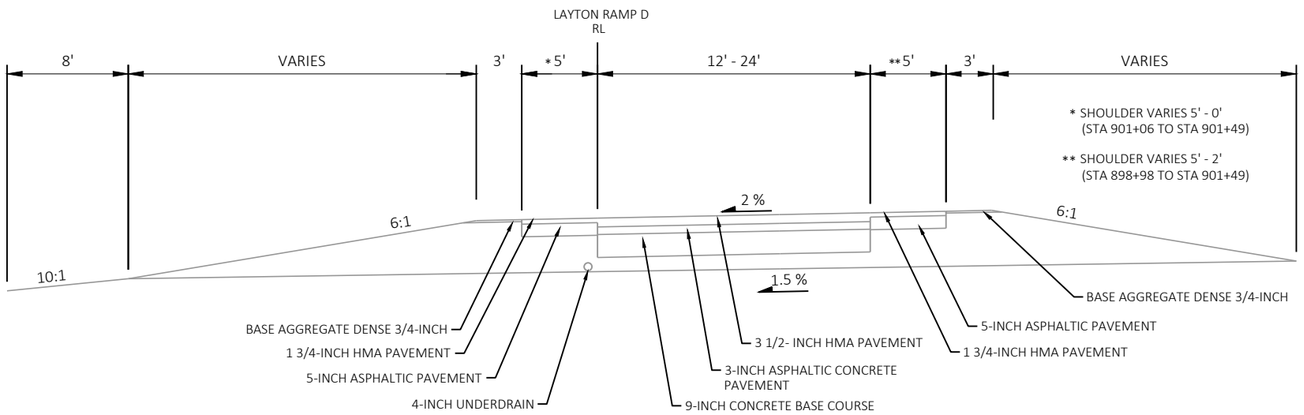
STA. 887+45 TO STA. 892+13
STA. 893+54 TO STA. 899+79



EXISTING TYPICAL SECTION

LAYTON RAMP A

STA. 899+79 TO STA. 902+36

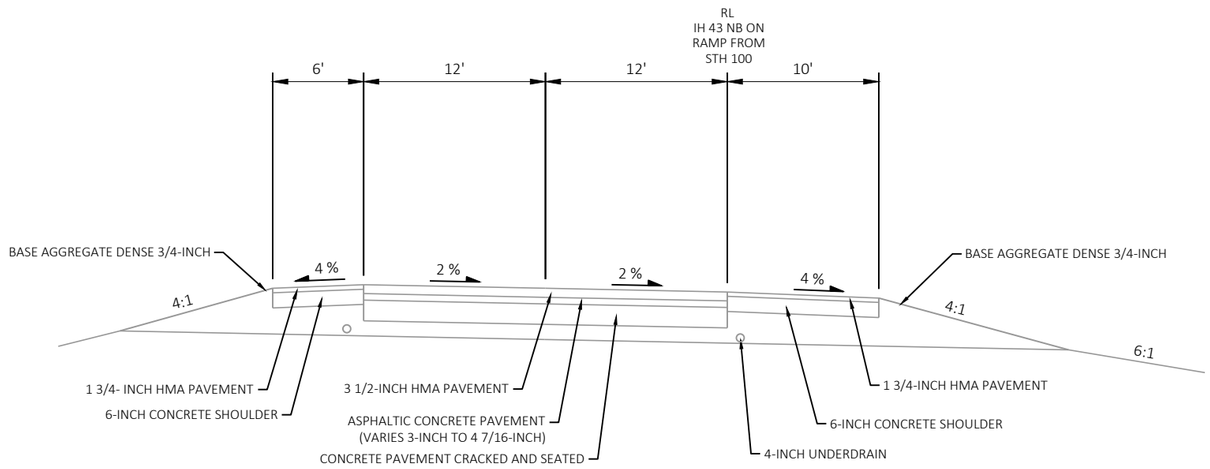


EXISTING TYPICAL SECTION

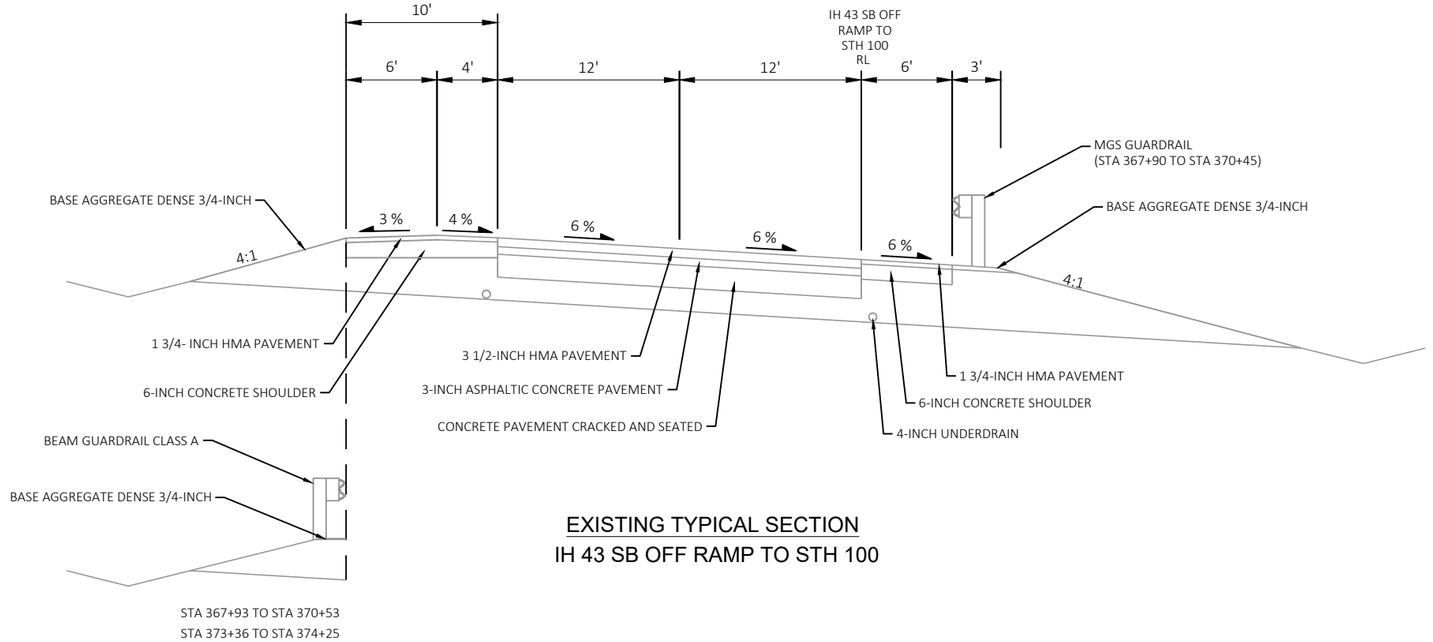
LAYTON RAMP D

STA. 885+15 TO STA. 901+49

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 22	E

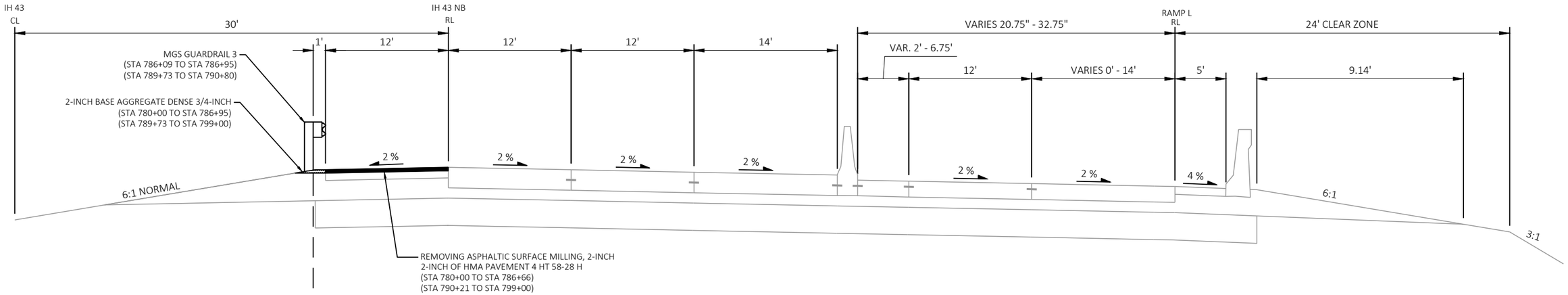


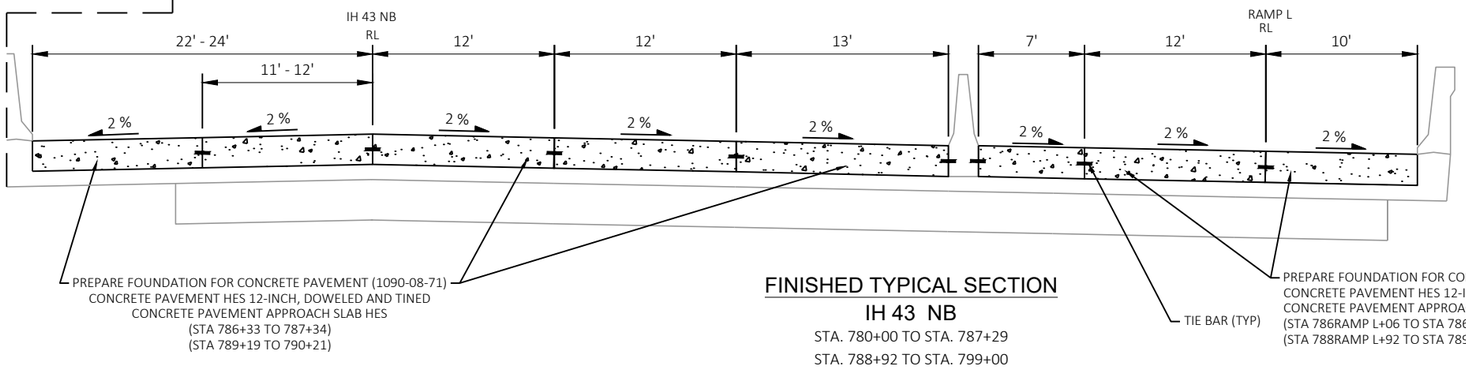
EXISTING TYPICAL SECTION
IH 43 NB ON RAMP FROM STH 100



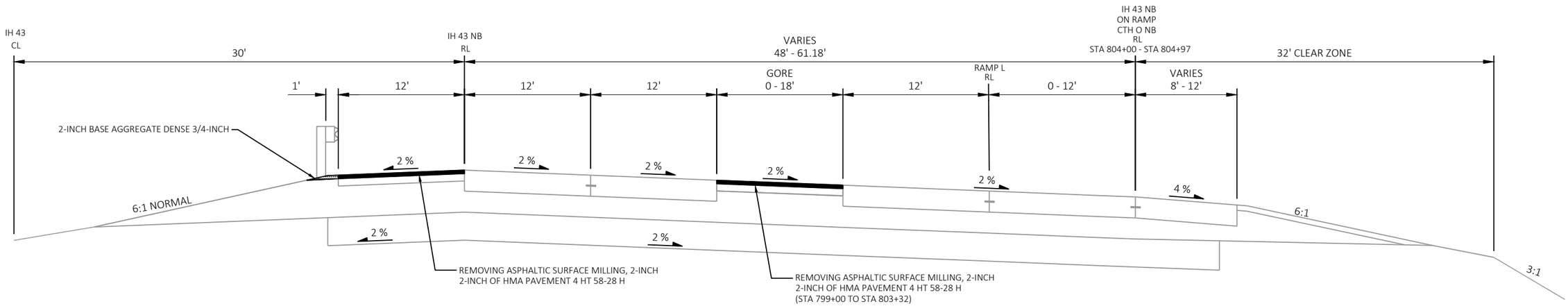
EXISTING TYPICAL SECTION
IH 43 SB OFF RAMP TO STH 100

STA 367+93 TO STA 370+53
STA 373+36 TO STA 374+25



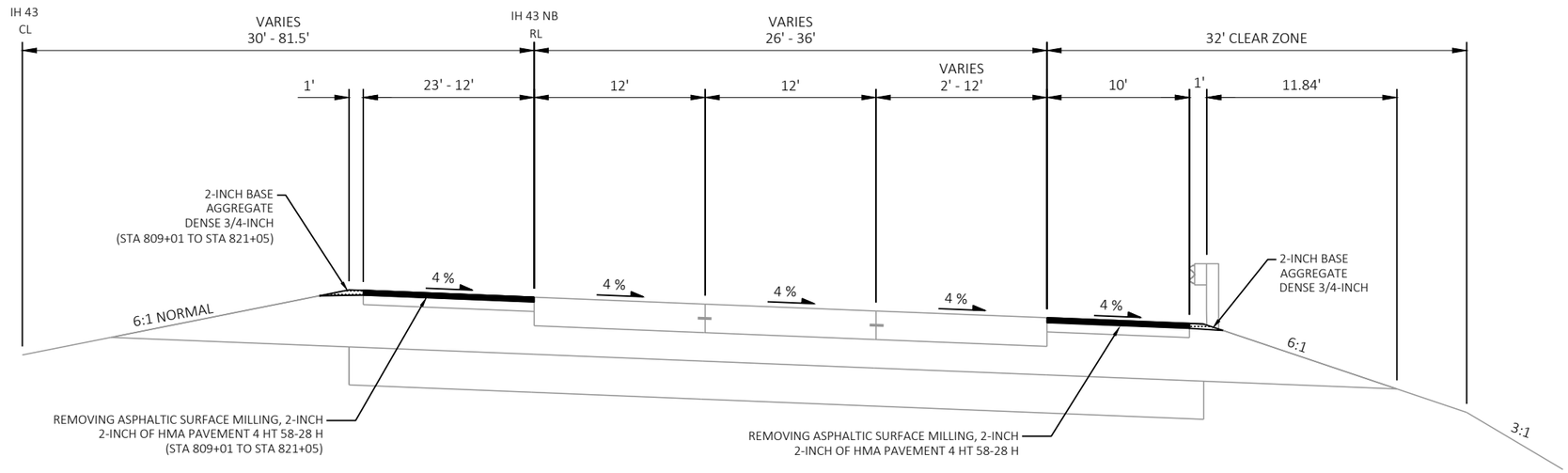


FINISHED TYPICAL SECTION
IH 43 NB
STA. 780+00 TO STA. 787+29
STA. 788+92 TO STA. 799+00



FINISHED TYPICAL SECTION
IH 43 NB
STA. 799+00 TO STA. 804+96

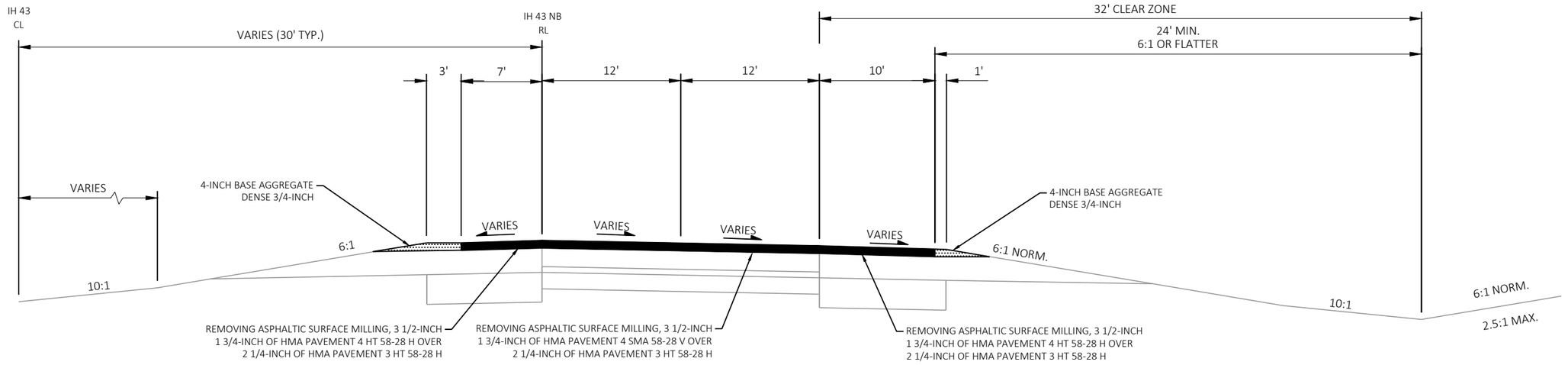
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 24	E



FINISHED TYPICAL SECTION

IH 43 NB

STA. 807+94 TO STA. 821+05



FINISHED TYPICAL SECTION

IH 43 NB

STA. 821+05 TO STA. 840+00

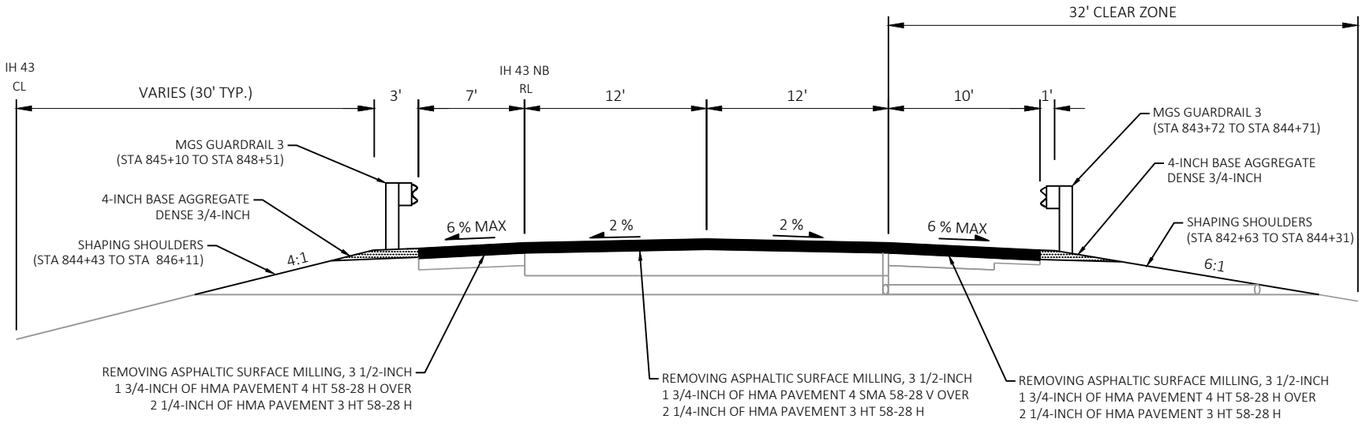
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 25	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020321

PLOT DATE : 10/22/2021 2:00 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

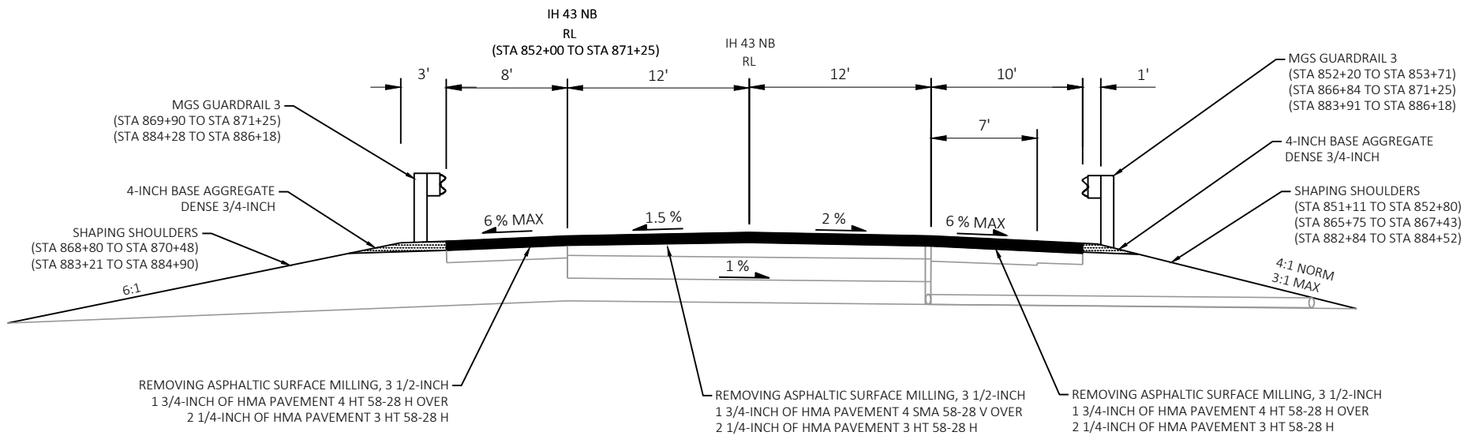
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FINISHED TYPICAL SECTION

IH 43 NB

STA. 840+00 TO STA. 852+00



FINISHED TYPICAL SECTION

IH 43 NB

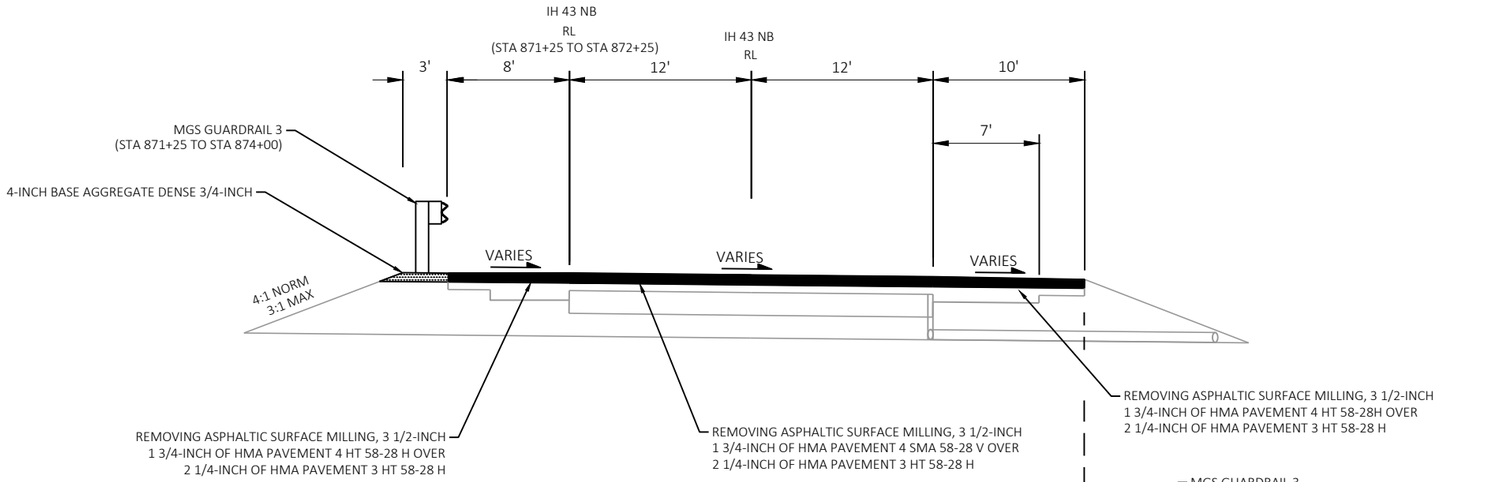
STA. 852+00 TO STA. 871+25

STA. 880+35 TO STA. 890+00

STA. 895+00 TO STA. 899+00

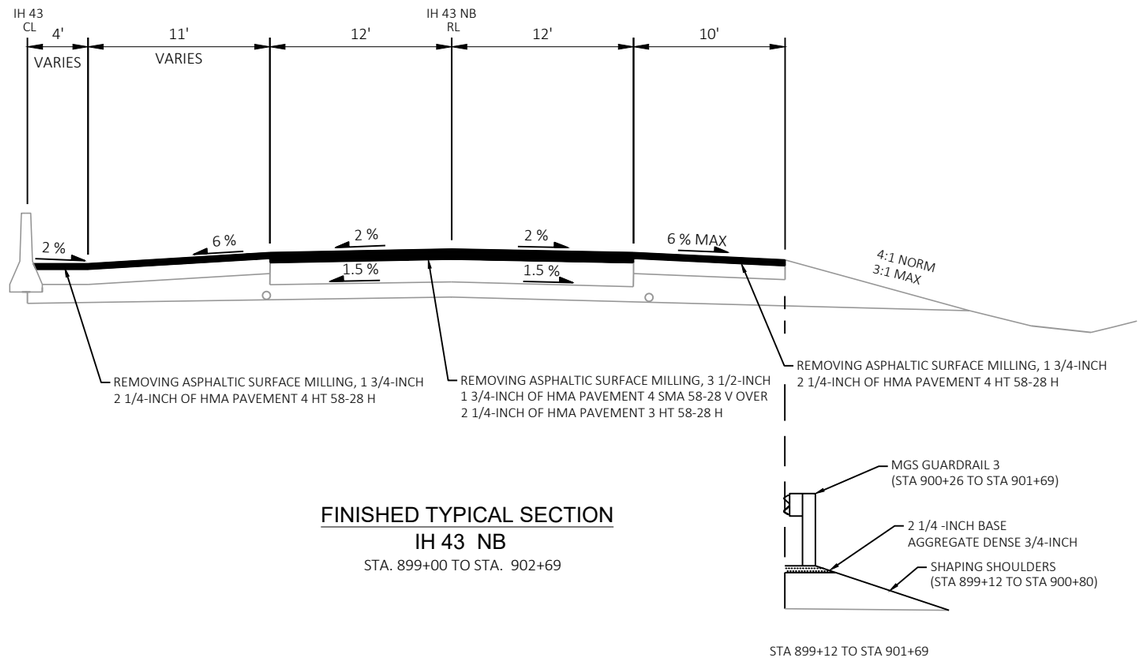
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 26	E

2



FINISHED TYPICAL SECTION
IH 43 NB
STA. 871+25 TO STA. 874+00
STA. 876+40 TO STA. 880+35
STA. 890+00 TO STA. 895+00

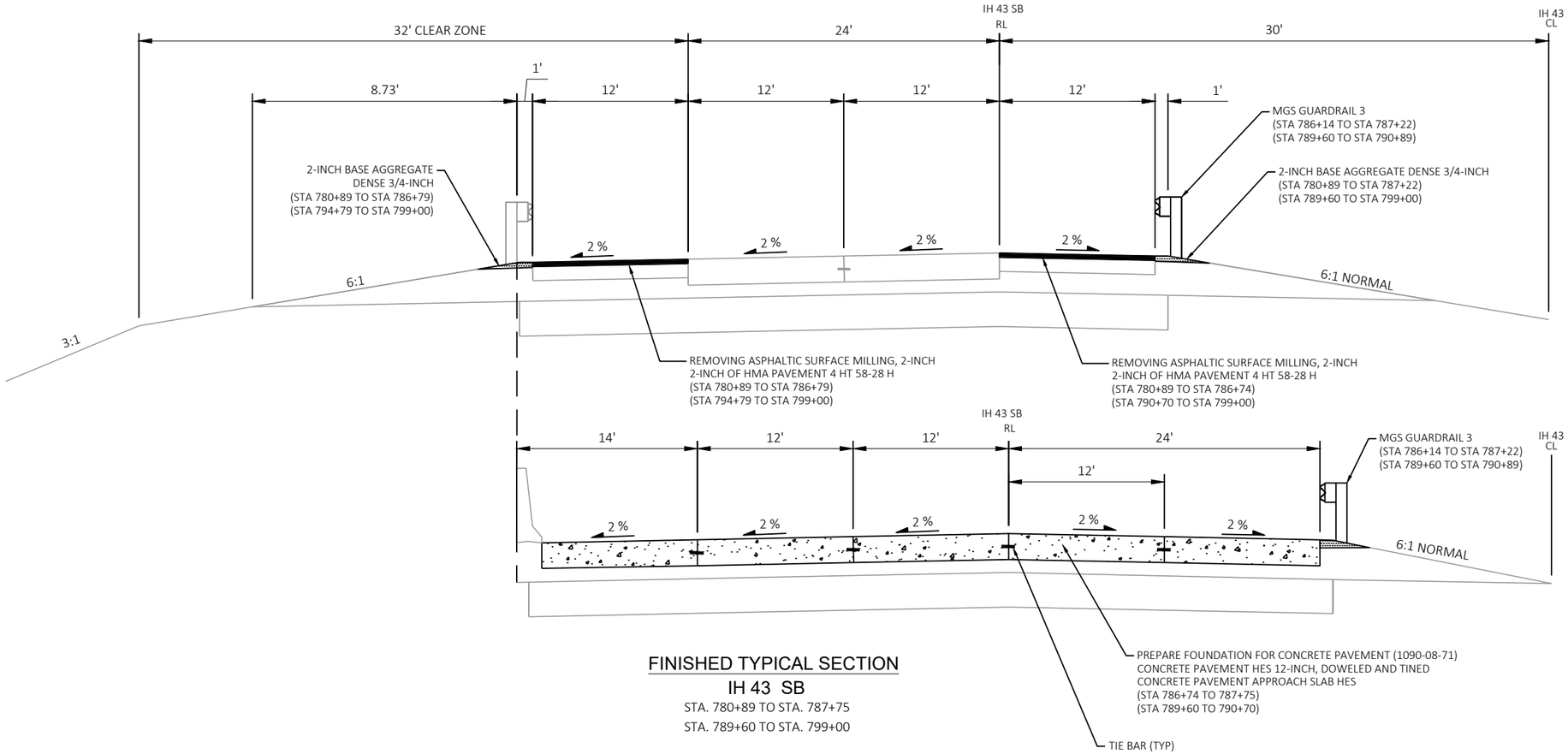
STA 871+25 TO STA 873+66



FINISHED TYPICAL SECTION
IH 43 NB
STA. 899+00 TO STA. 902+69

STA 899+12 TO STA 901+69

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 27	E

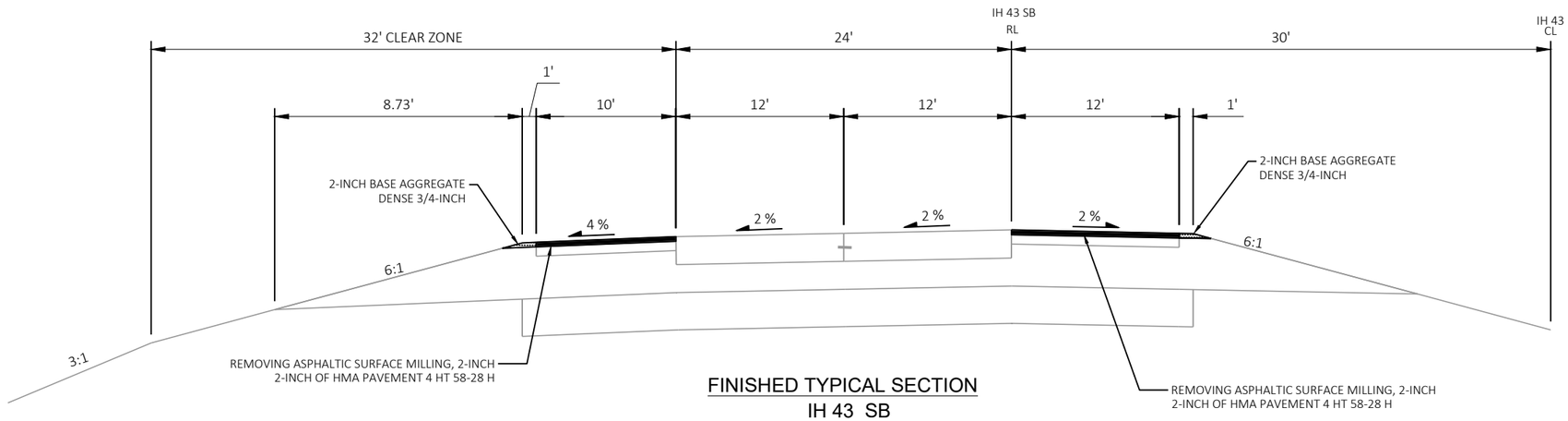


FINISHED TYPICAL SECTION

IH 43 SB

STA. 780+89 TO STA. 787+75

STA. 789+60 TO STA. 799+00



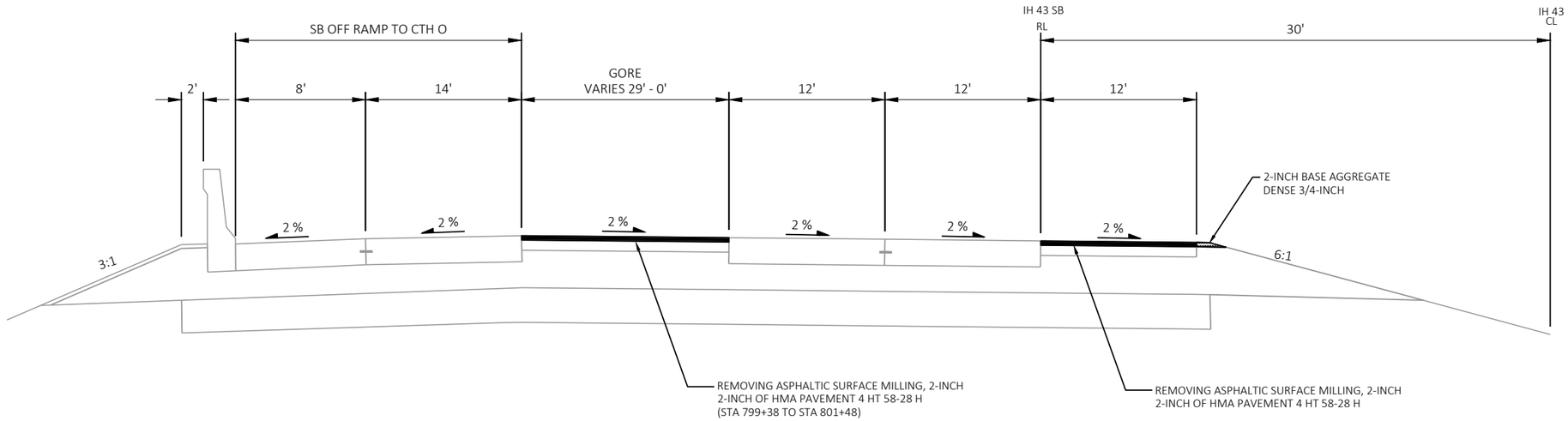
FINISHED TYPICAL SECTION

IH 43 SB

STA. 799+00 TO STA. 799+38

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 28	E

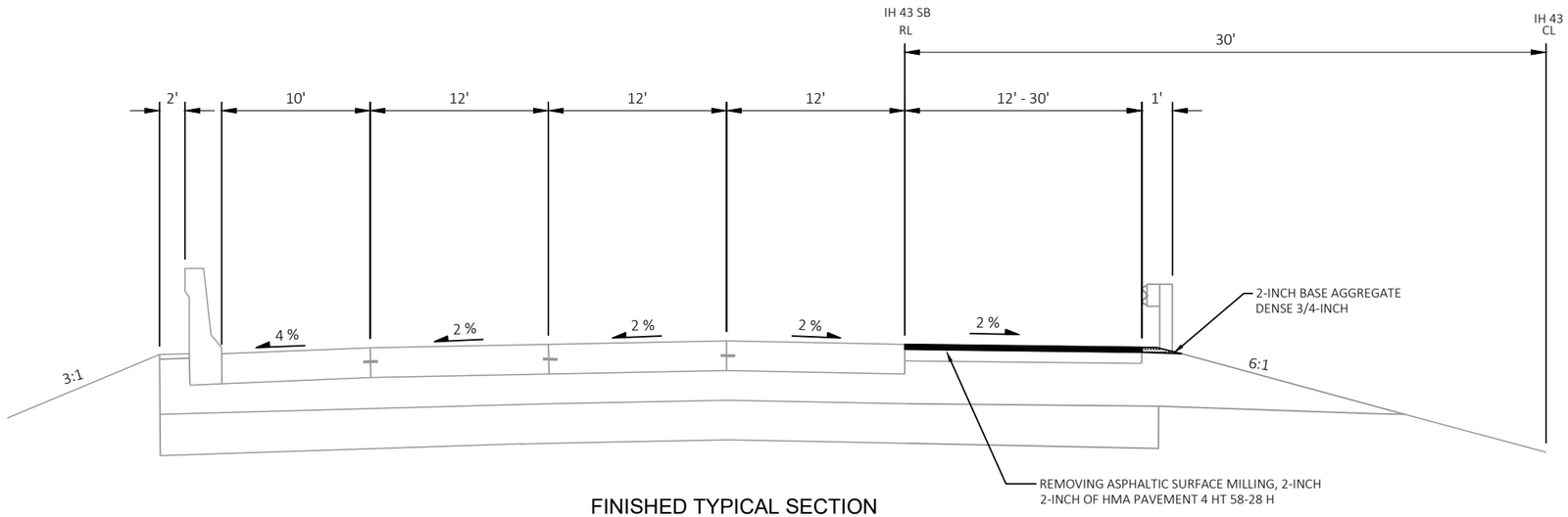
FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020324
PLOT DATE : 10/23/2021 8:46 AM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



FINISHED TYPICAL SECTION

IH 43 SB

STA. 799+38 TO STA. 802+36

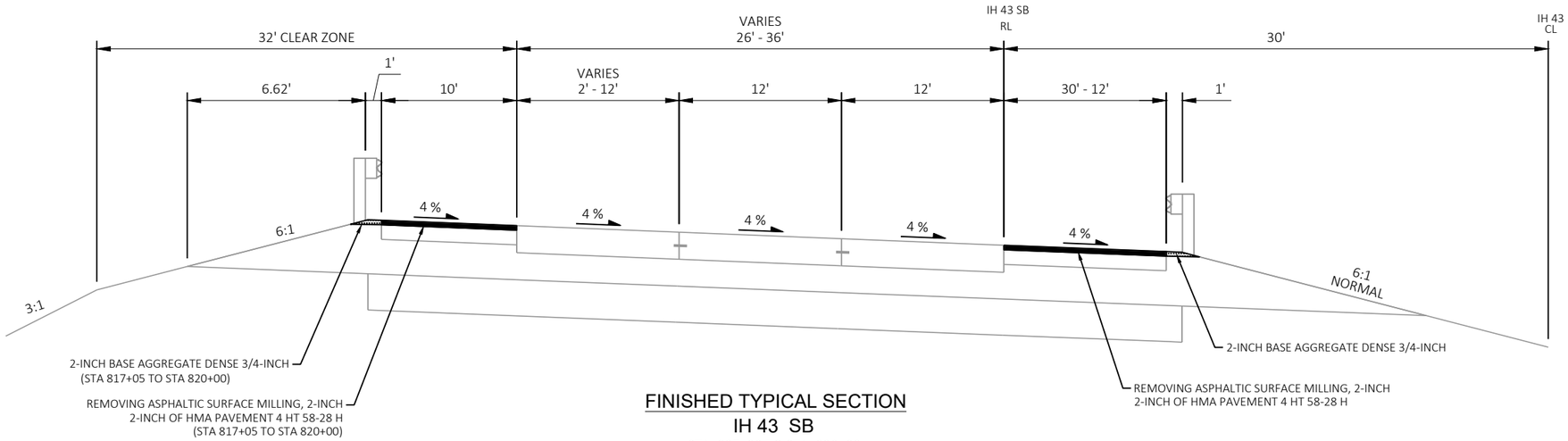


FINISHED TYPICAL SECTION

IH 43 SB

STA. 802+36 TO STA. 805+03

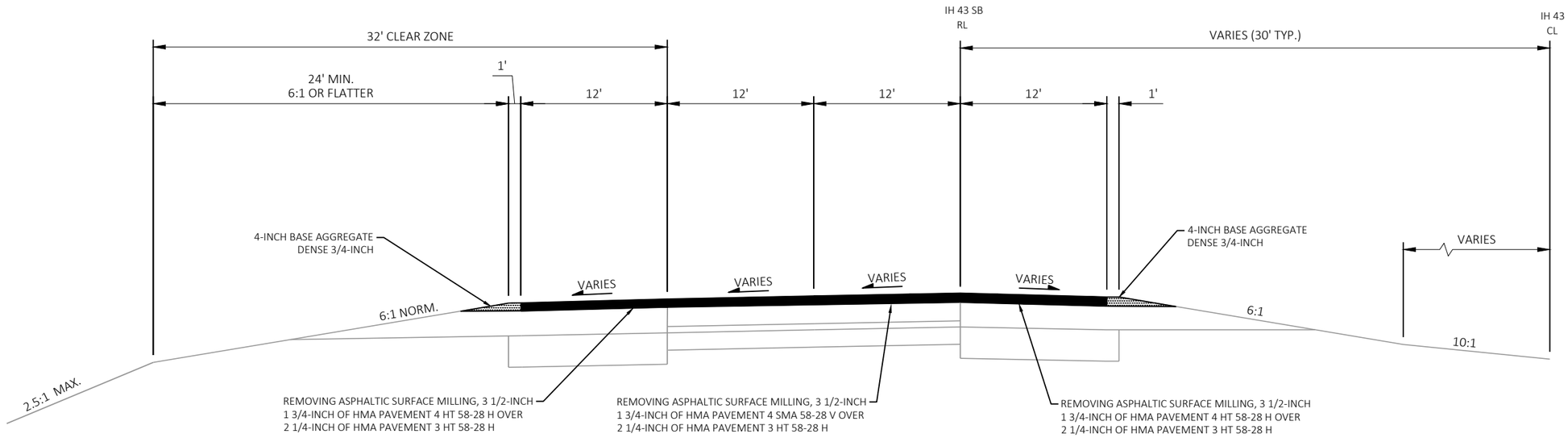
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 29	E



FINISHED TYPICAL SECTION

IH 43 SB

STA. 807+22 TO STA. 820+00



FINISHED TYPICAL SECTION

IH 43 SB

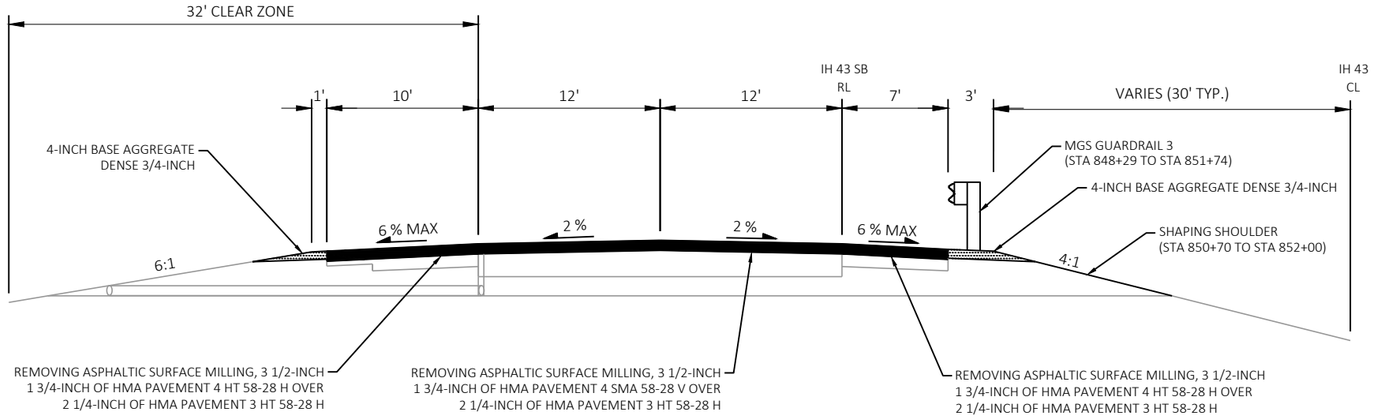
STA. 820+00 TO STA. 840+00

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 30	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020326

PLOT DATE : 10/23/2021 8:51 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:10 FT

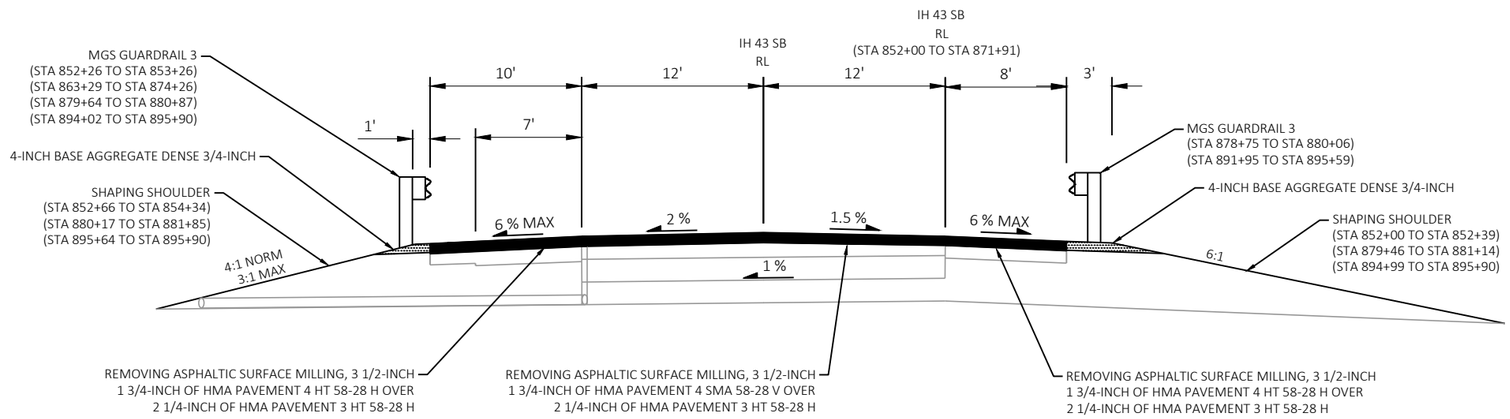
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FINISHED TYPICAL SECTION

IH 43 SB

STA. 840+00 TO STA. 852+00



FINISHED TYPICAL SECTION

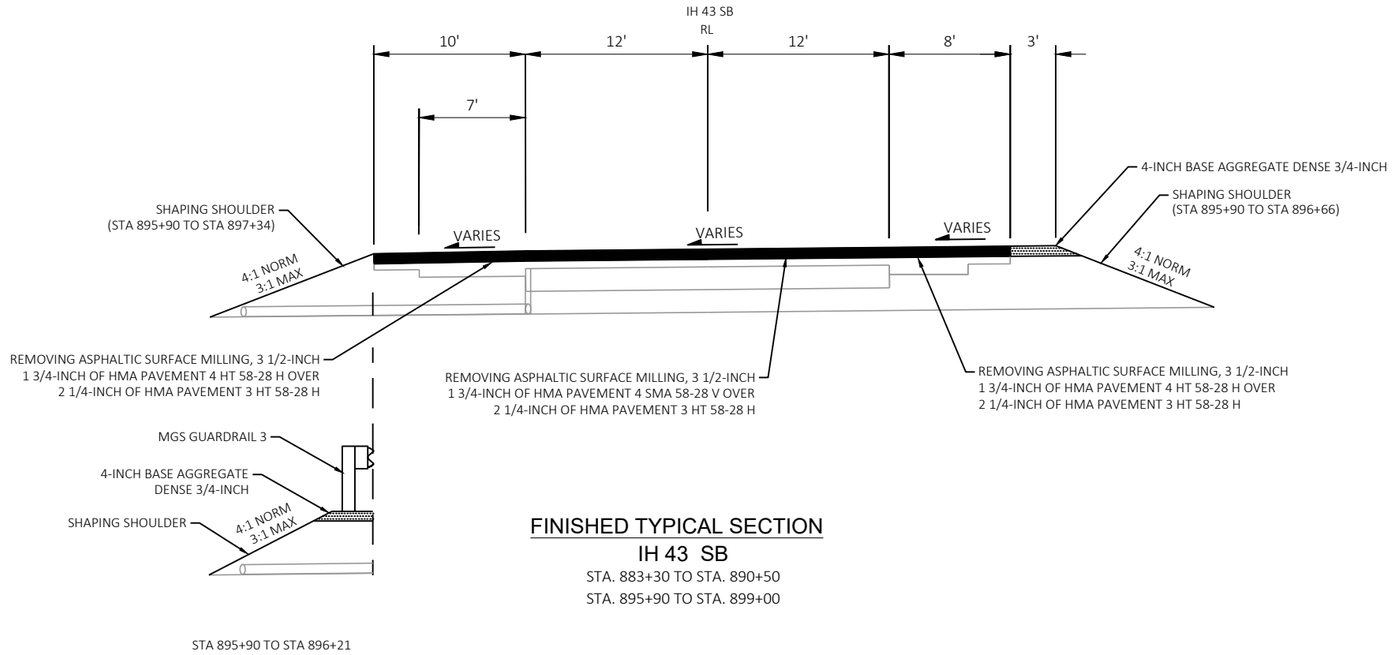
IH 43 SB

STA. 852+00 TO STA. 875+79

STA. 877+56 TO STA. 883+30

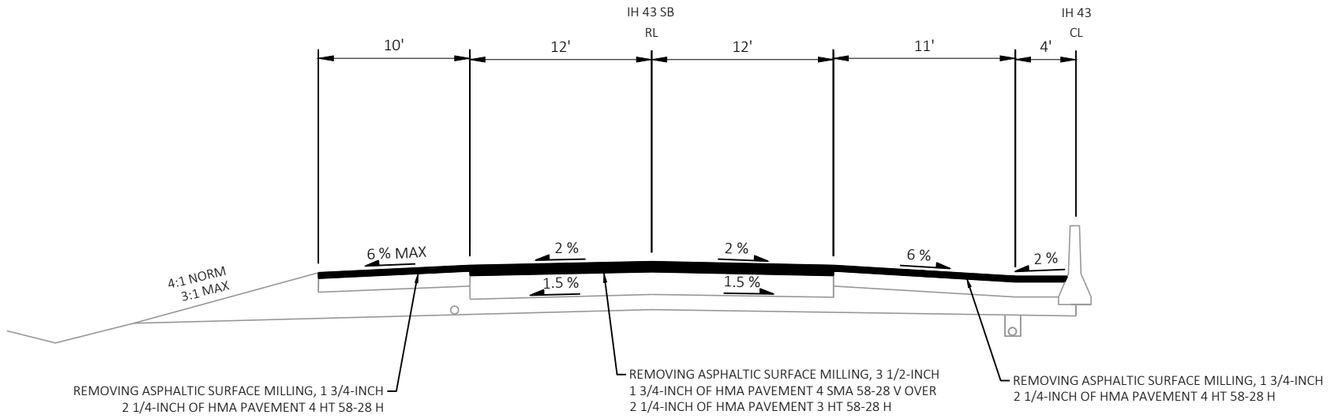
STA. 890+50 TO STA. 895+90

2



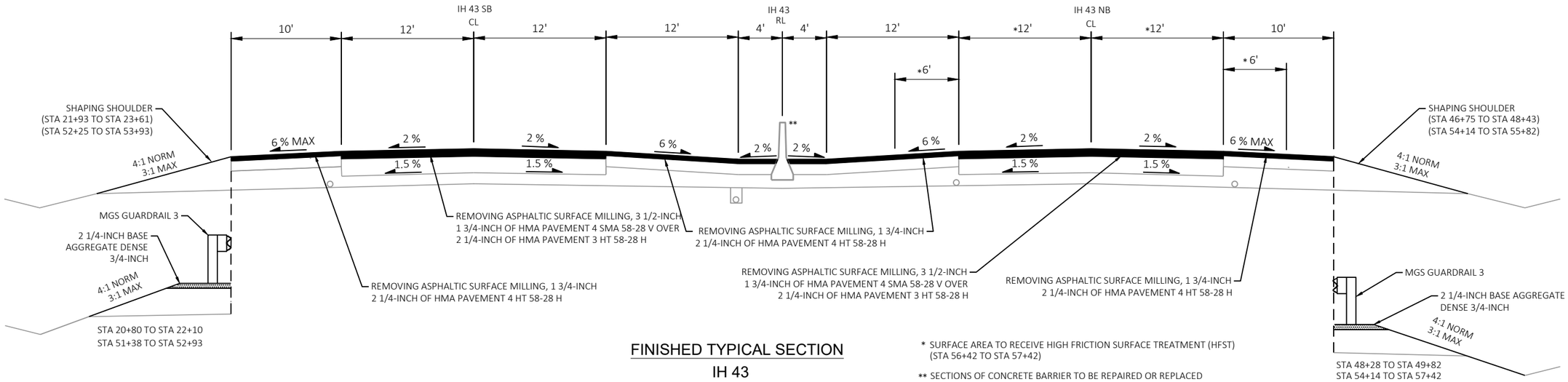
STA 895+90 TO STA 896+21

FINISHED TYPICAL SECTION
IH 43 SB
STA. 883+30 TO STA. 890+50
STA. 895+90 TO STA. 899+00



FINISHED TYPICAL SECTION
IH 43 SB
STA. 899+00 TO STA. 902+69

2



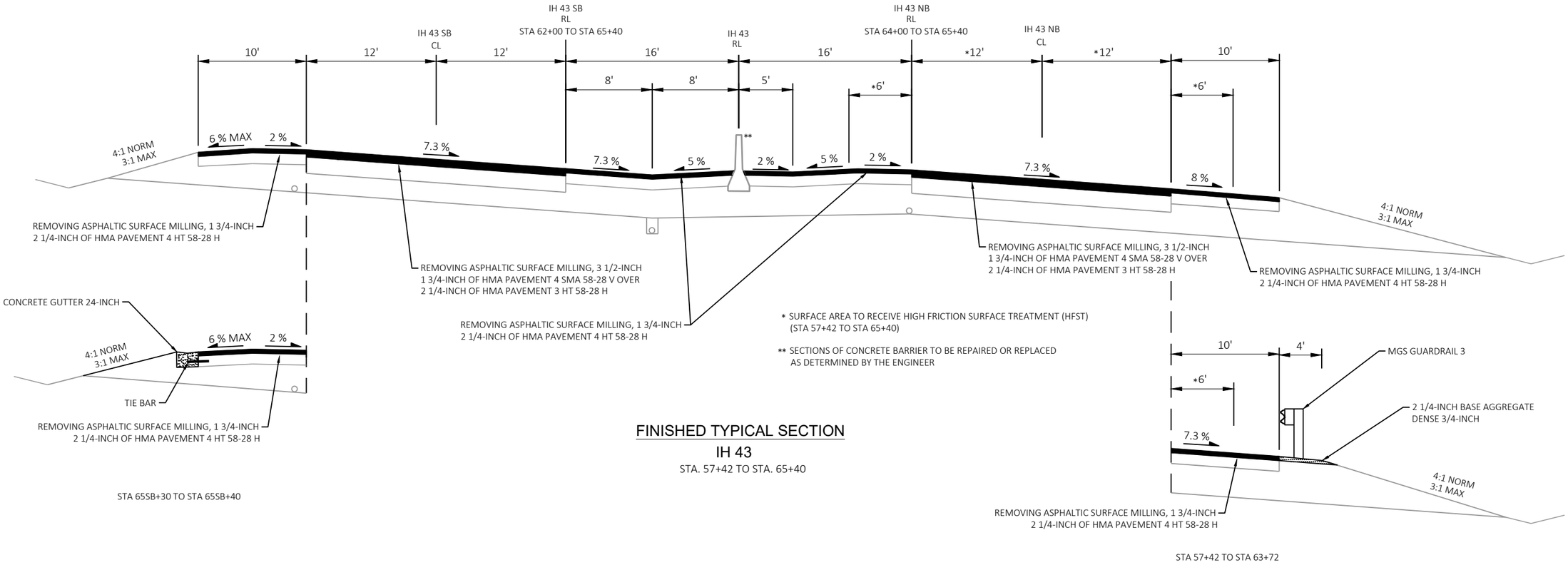
FINISHED TYPICAL SECTION

IH 43

STA. 20+00 TO STA. 57+42

* SURFACE AREA TO RECEIVE HIGH FRICTION SURFACE TREATMENT (HFST)
(STA 56+42 TO STA 57+42)

** SECTIONS OF CONCRETE BARRIER TO BE REPAIRED OR REPLACED
AS DETERMINED BY THE ENGINEER



FINISHED TYPICAL SECTION

IH 43

STA. 57+42 TO STA. 65+40

* SURFACE AREA TO RECEIVE HIGH FRICTION SURFACE TREATMENT (HFST)
(STA 57+42 TO STA 65+40)

** SECTIONS OF CONCRETE BARRIER TO BE REPAIRED OR REPLACED
AS DETERMINED BY THE ENGINEER

STA 65SB+30 TO STA 65SB+40

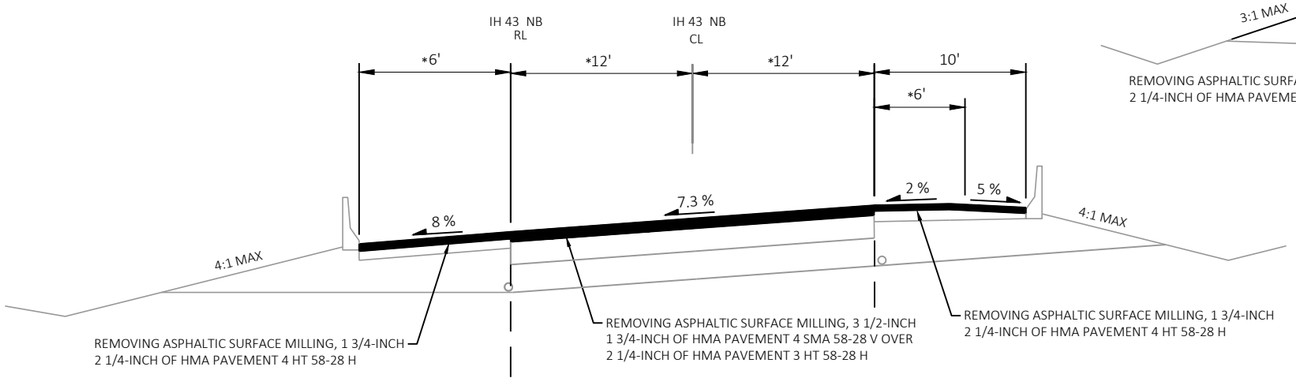
STA 57+42 TO STA 63+72

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 33	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020329

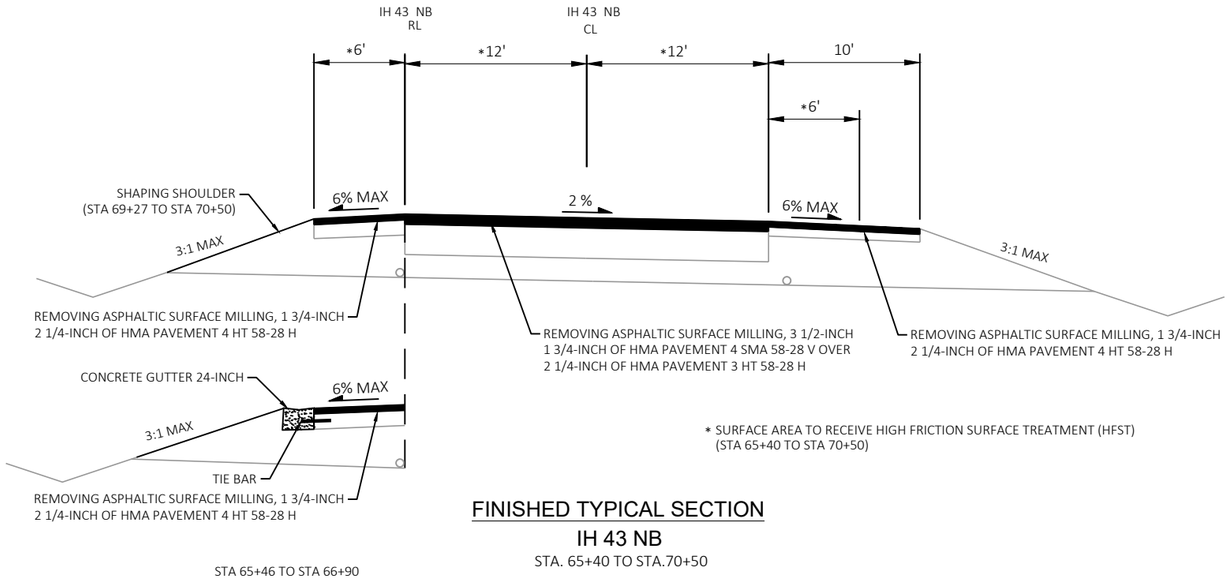
PLOT DATE : 10/23/2021 9:49 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



* SURFACE AREA TO RECEIVE HIGH FRICTION SURFACE TREATMENT (HFST)
(STA 65+40 TO STA 70+50)

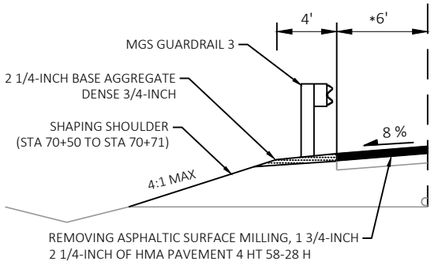
FINISHED TYPICAL SECTION
IH 43 NB
STA. 65+40 TO STA.70+50



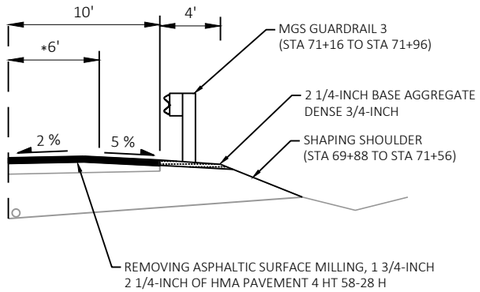
STA 65+46 TO STA 66+90

* SURFACE AREA TO RECEIVE HIGH FRICTION SURFACE TREATMENT (HFST)
(STA 70+50 TO STA 86+50)

FINISHED TYPICAL SECTION
IH 43 NB
STA. 70+50 TO STA. 86+50



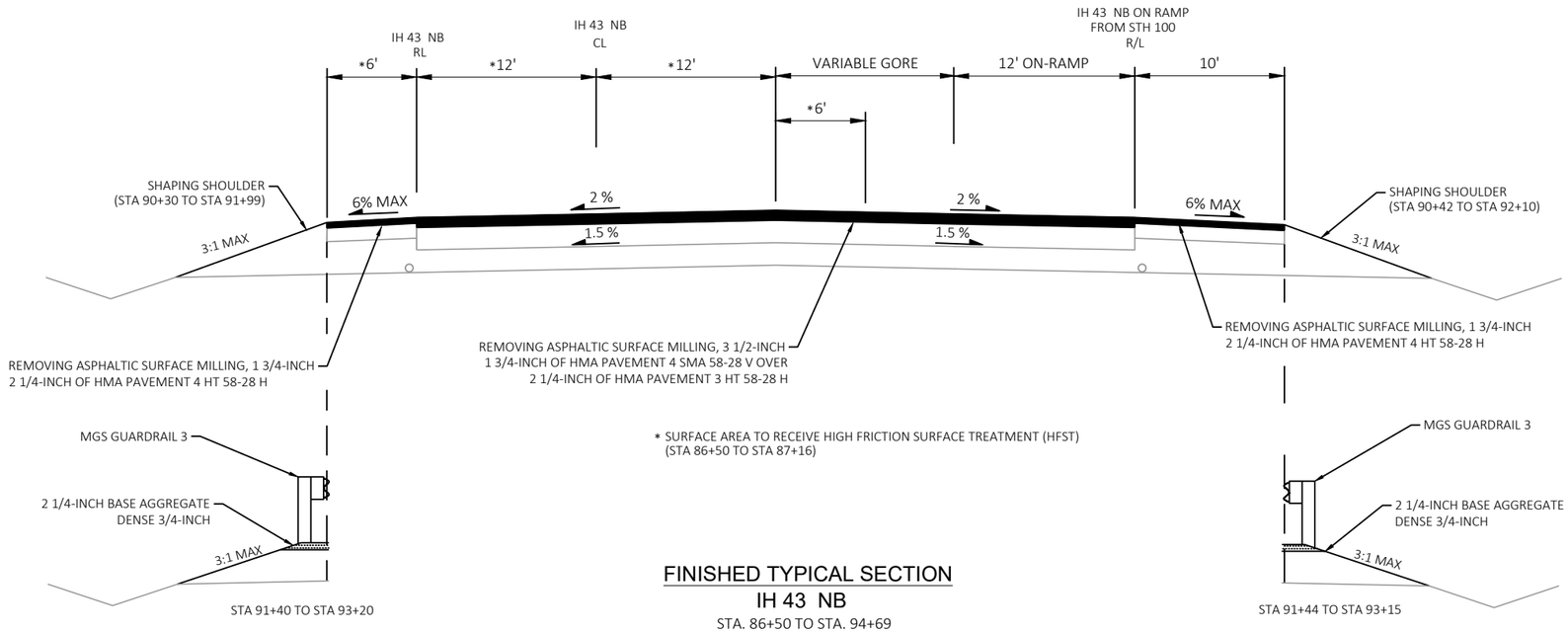
STA 70+50 TO STA 71+35
STA 78+90 TO STA 84+30



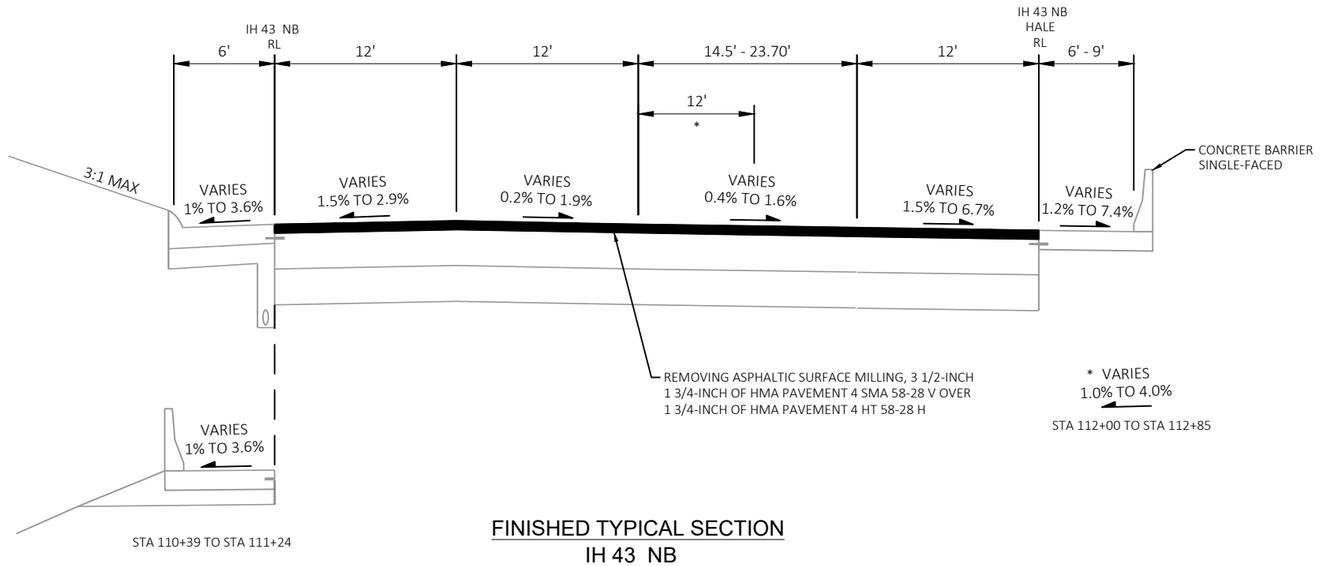
STA 69+88 TO STA 71+96
STA 78+88 TO STA 83+50

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 34	E

2

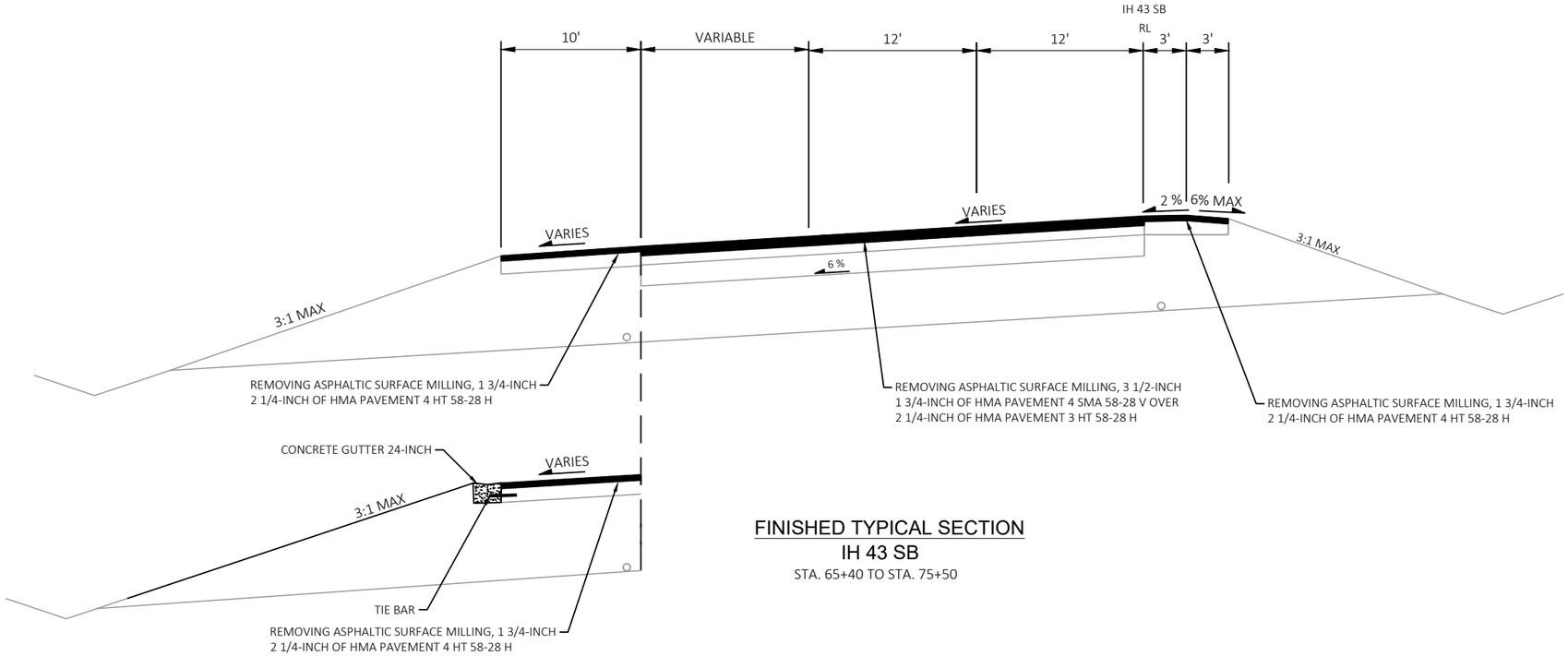


FINISHED TYPICAL SECTION
IH 43 NB
STA. 86+50 TO STA. 94+69



FINISHED TYPICAL SECTION
IH 43 NB
STA. 110+39 TO STA. 112+85

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 35	E

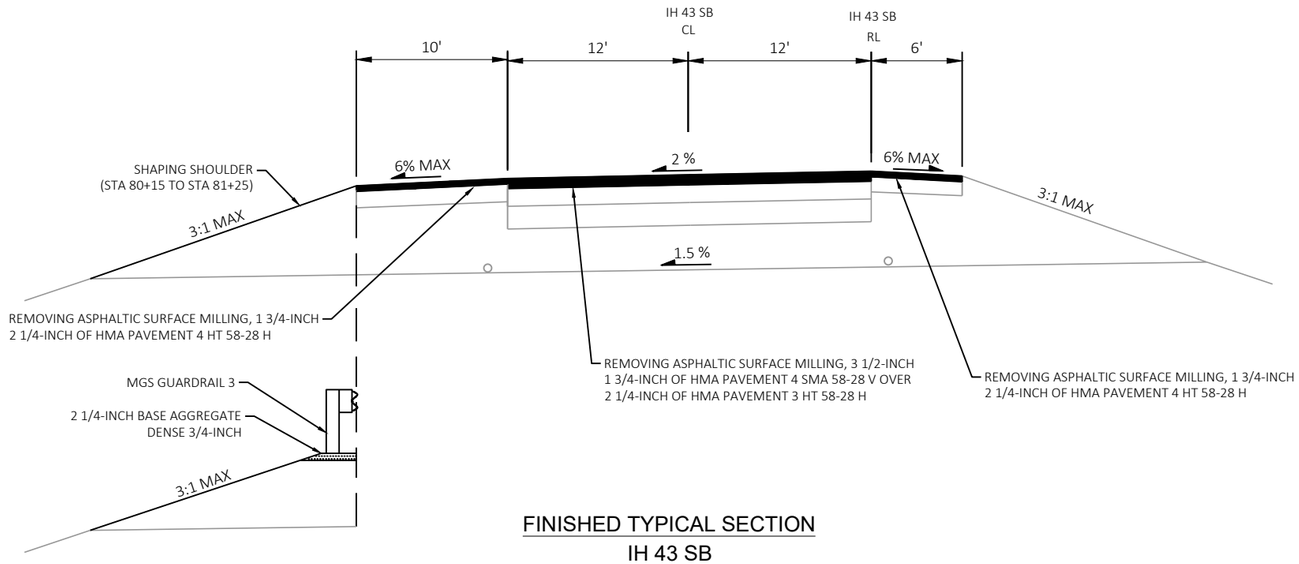


FINISHED TYPICAL SECTION

IH 43 SB

STA. 65+40 TO STA. 75+50

STA 65+40 TO STA 67+40



FINISHED TYPICAL SECTION

IH 43 SB

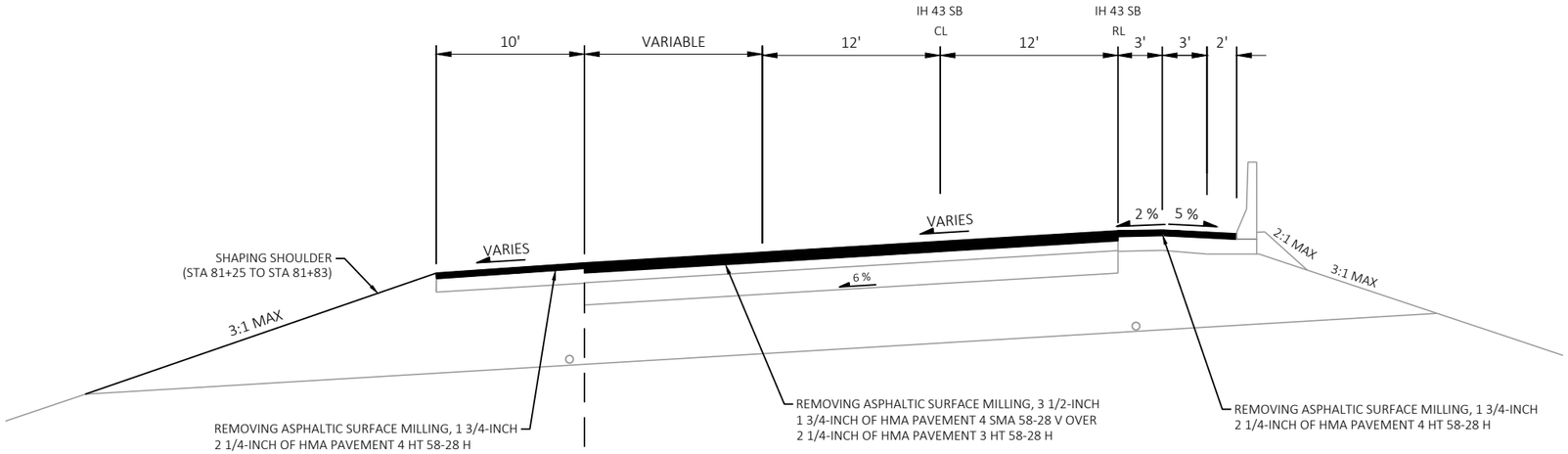
STA. 75+50 TO STA. 76+48

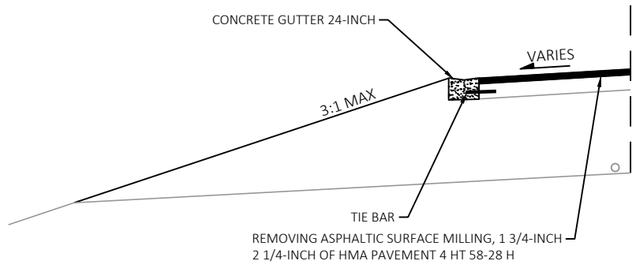
STA. 78+22 TO STA. 81+25

STA 78+45 TO STA 80+78

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 36	E

2



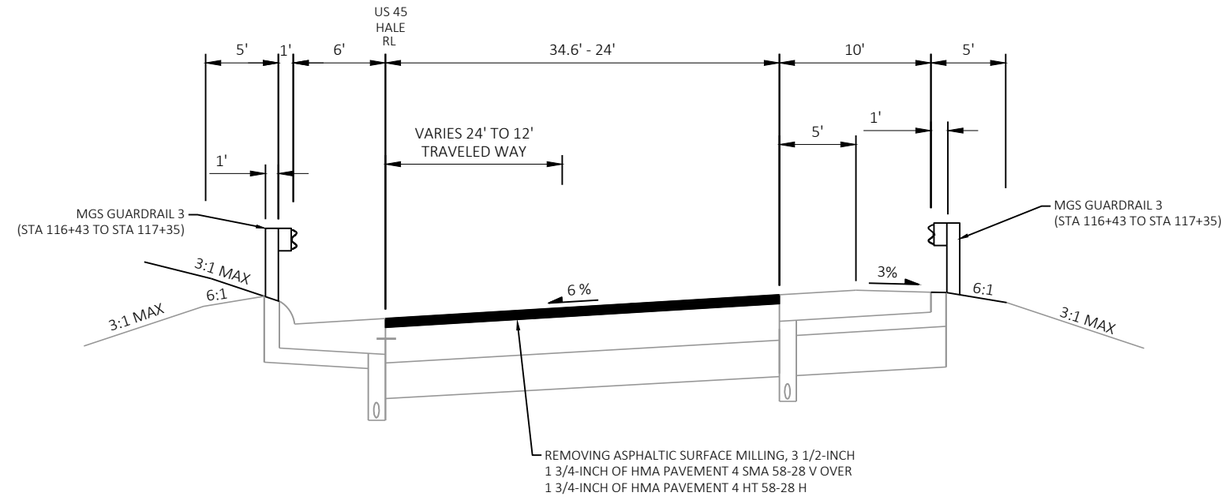


STA 83+40 TO STA 89+60

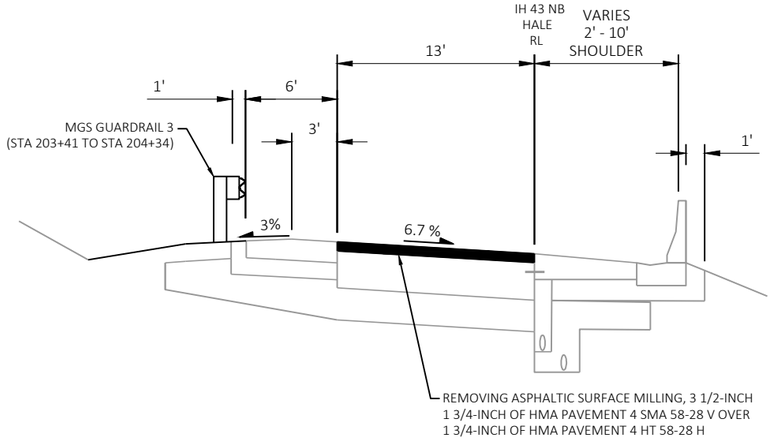
FINISHED TYPICAL SECTION

IH 43 SB

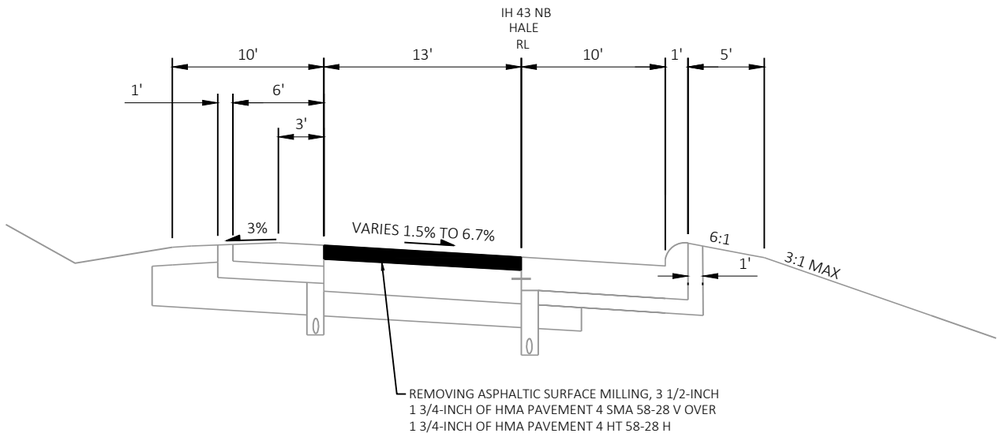
STA. 81+25 TO STA. 92+51



FINISHED TYPICAL SECTION
W-N RAMP (HALE INTERCHANGE)
STA. 112NB+85 TO STA. 118NB+85

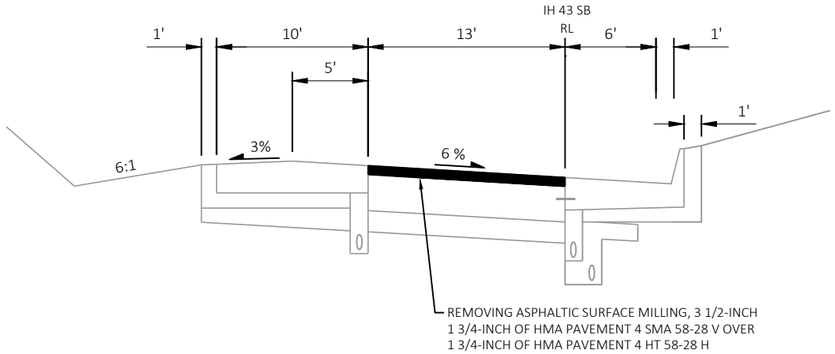


FINISHED TYPICAL SECTION
W-E RAMP (HALE INTERCHANGE)
STA. 203NB+40 TO STA. 205NB+18

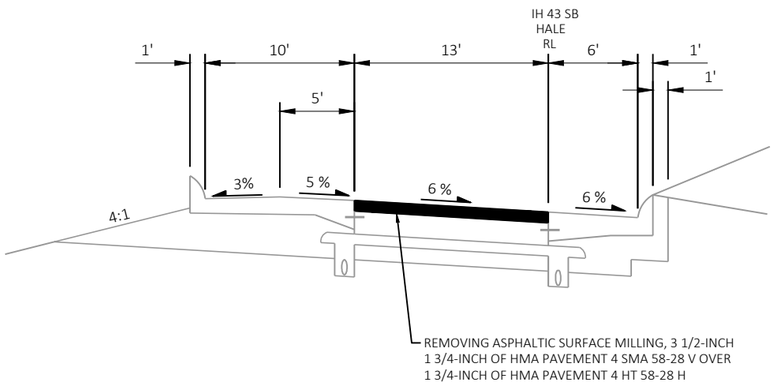


FINISHED TYPICAL SECTION
W-E RAMP (HALE INTERCHANGE)
STA. 208NB+81 TO STA. 210NB+80

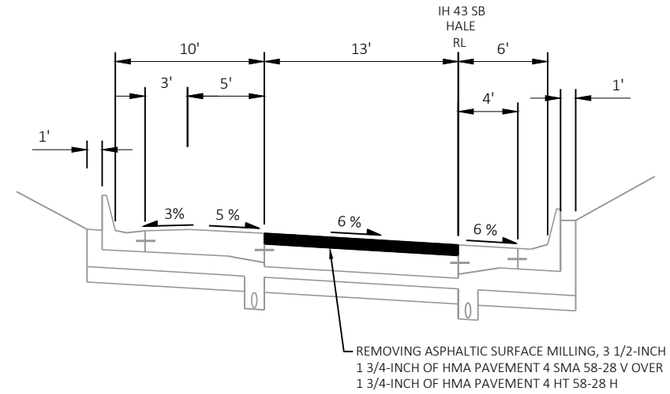
2



FINISHED TYPICAL SECTION
E-W RAMP (HALE INTERCHANGE)
STA. 110SB+47 TO STA. 111SB+46

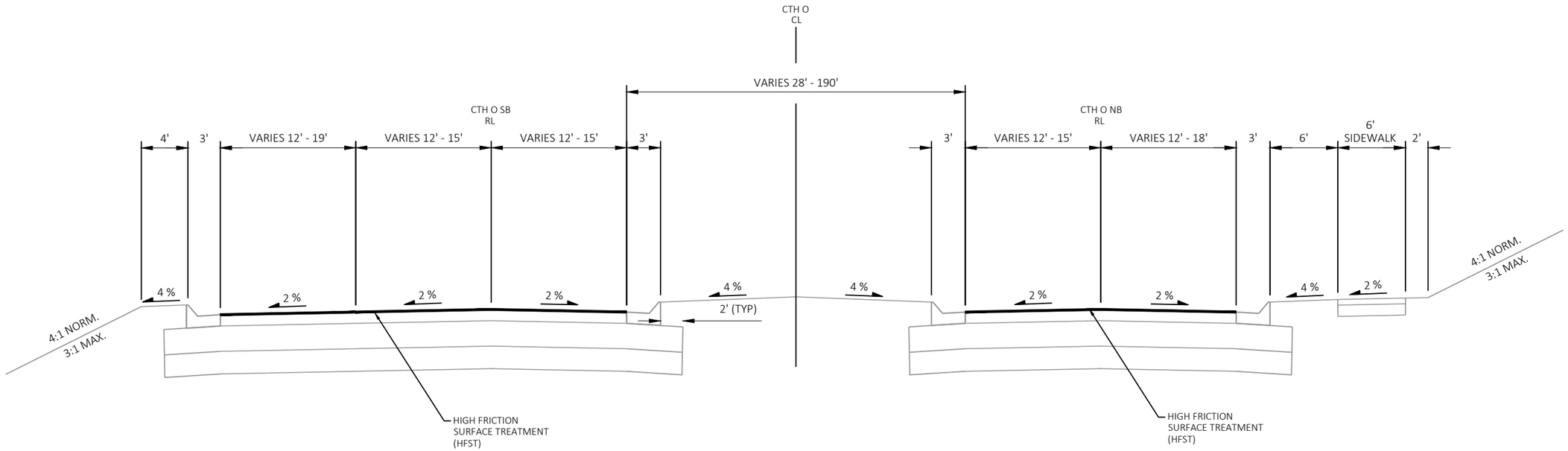


FINISHED TYPICAL SECTION
E-W RAMP (HALE INTERCHANGE)
STA. 111SB+46 TO STA. 112SB+12



FINISHED TYPICAL SECTION
E-W RAMP (HALE INTERCHANGE)
STA. 112SB+12 TO STA. 119SB+07

2

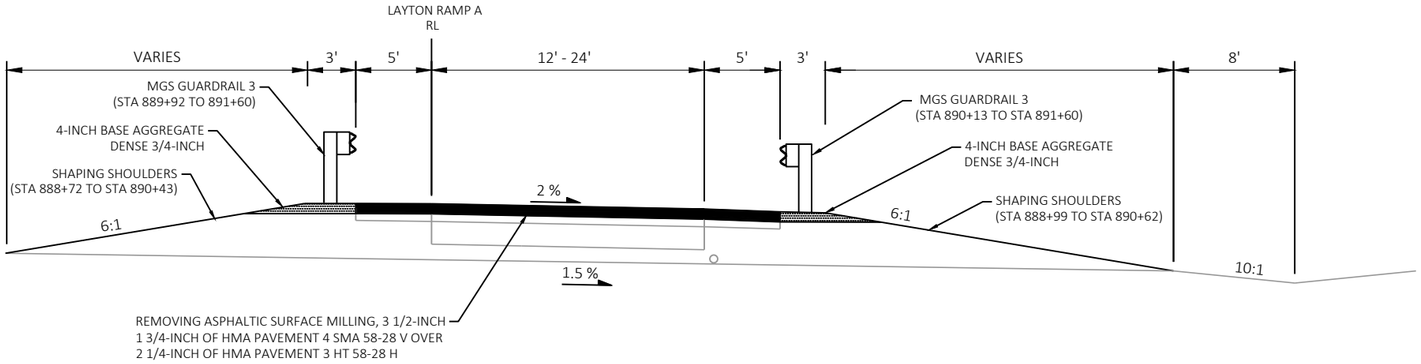


FINISHED TYPICAL SECTIONS

CTH O

STA. 32+69 TO STA. 34+63

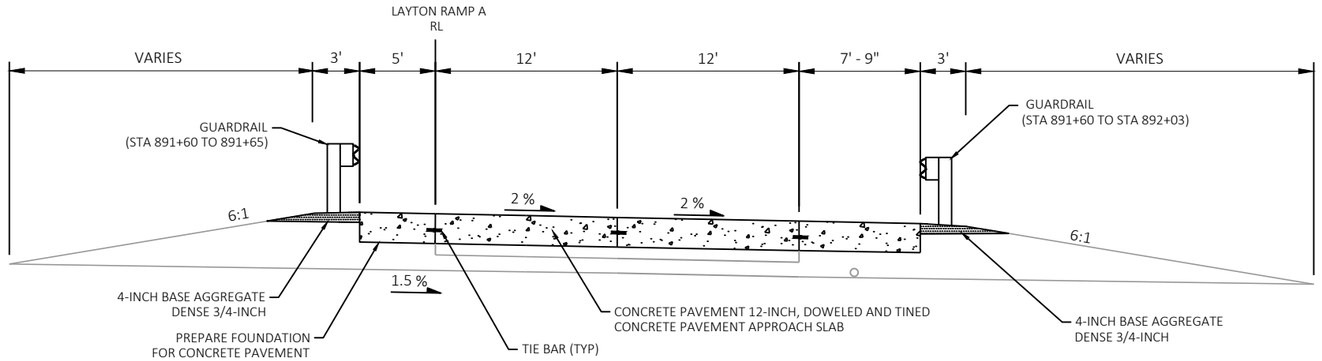
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 40	E



FINISHED TYPICAL SECTION

LAYTON RAMP A

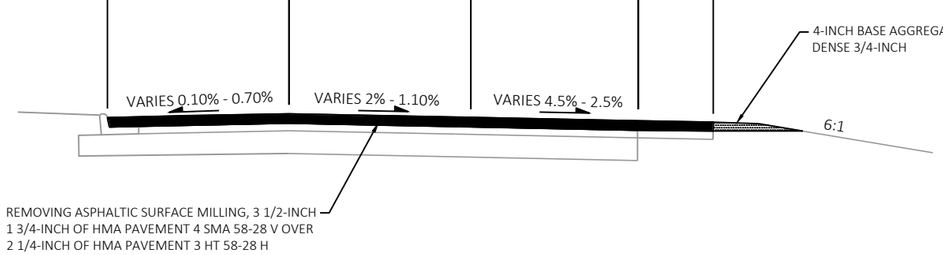
STA. 887+45 TO STA. 891+44
STA. 894+19 TO STA. 899+79



FINISHED TYPICAL SECTION

LAYTON RAMP A

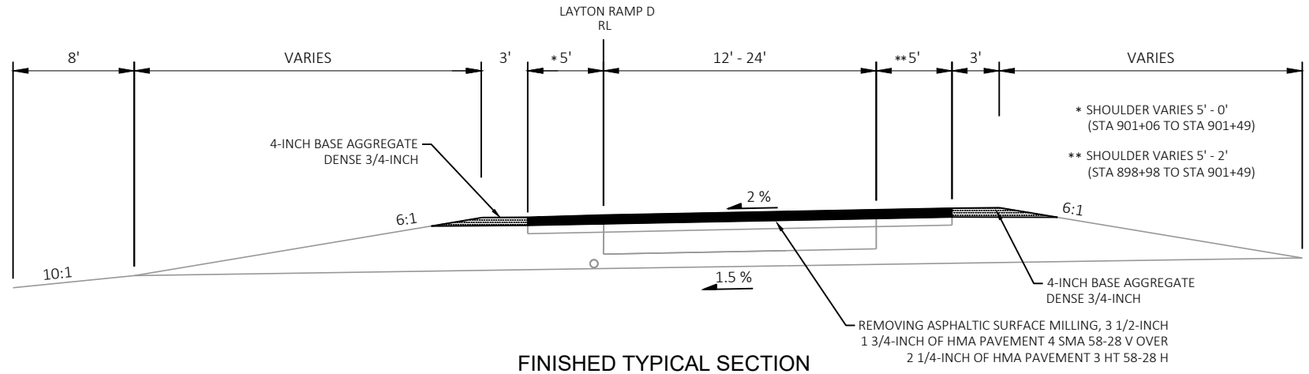
STA. 891+44 TO STA. 892+13
STA. 893+54 TO STA. 894+19



FINISHED TYPICAL SECTION

LAYTON RAMP A

STA. 899+79 TO STA. 902+36

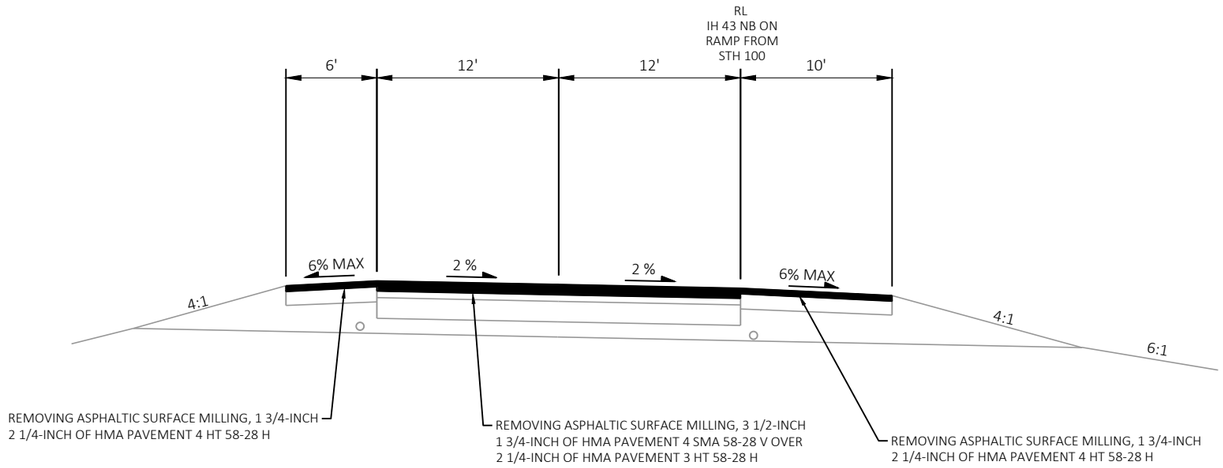


FINISHED TYPICAL SECTION

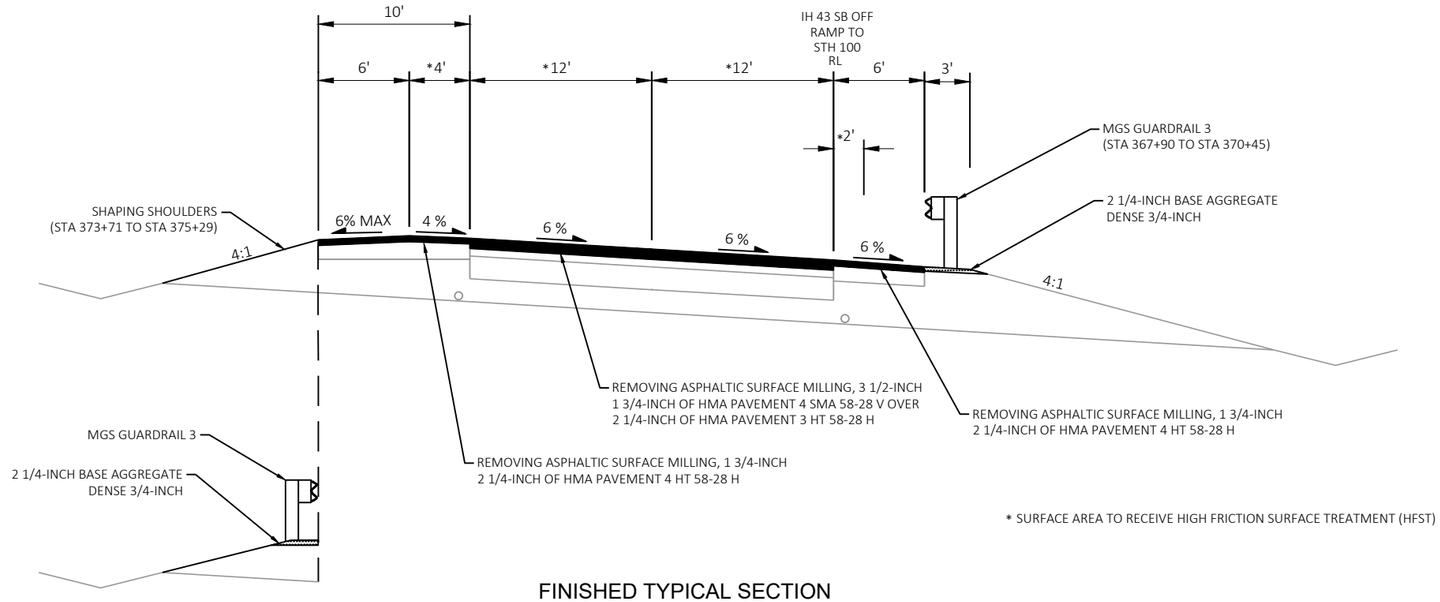
LAYTON RAMP D

STA. 885+15 TO STA. 901+49

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 41	E



FINISHED TYPICAL SECTION
IH 43 NB ON RAMP FROM STH 100

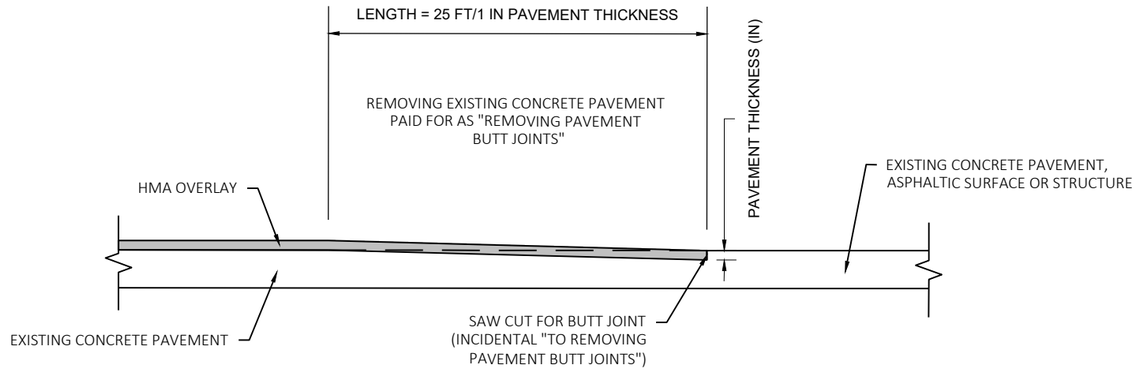


* SURFACE AREA TO RECEIVE HIGH FRICTION SURFACE TREATMENT (HFST)

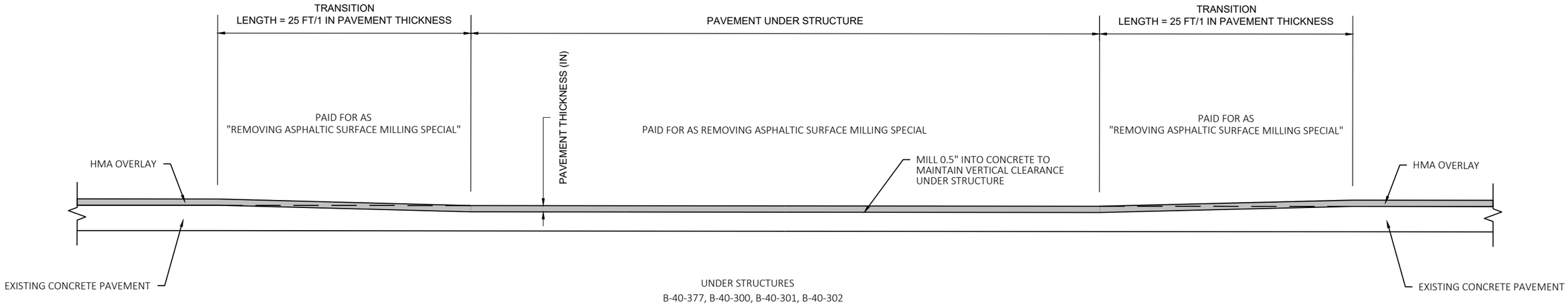
FINISHED TYPICAL SECTION
IH 43 SB OFF RAMP TO STH 100

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TYPICAL SECTIONS	SHEET 42	E

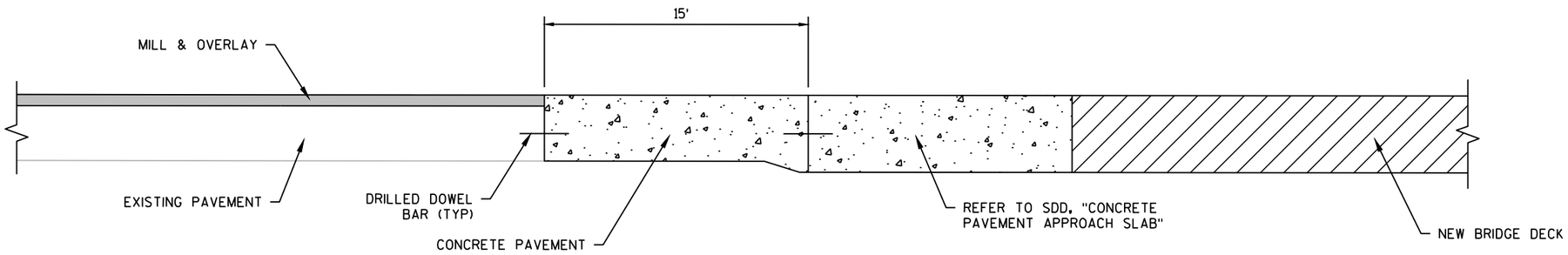
2



BUTT JOINT DETAIL



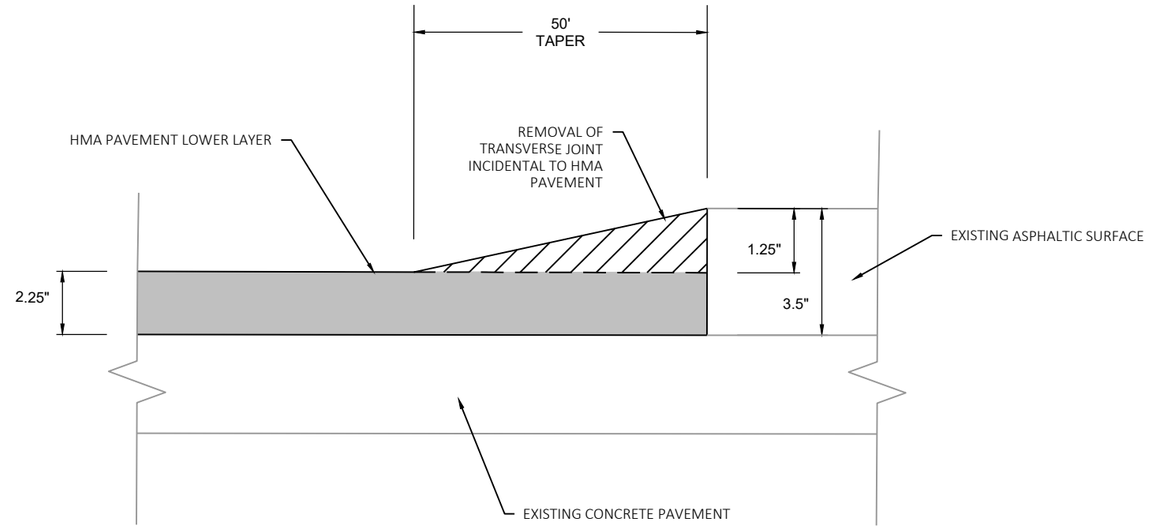
PAVEMENT UNDER STRUCTURES DETAIL



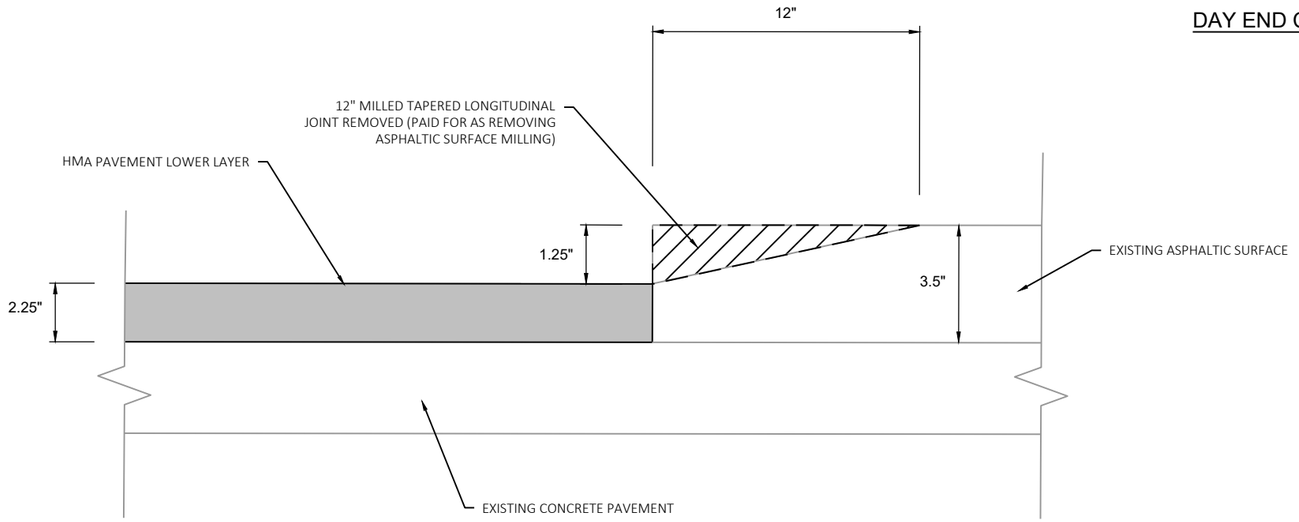
BRIDGE APPROACH DETAIL

B-67-103

2

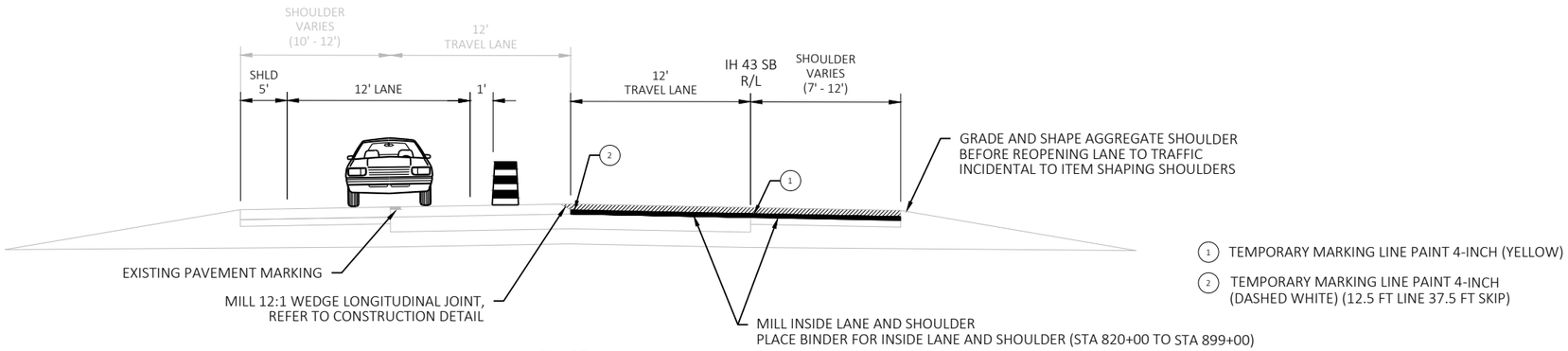


DAY END CONSTRUCTION - TRANSVERSE JOINT DETAIL



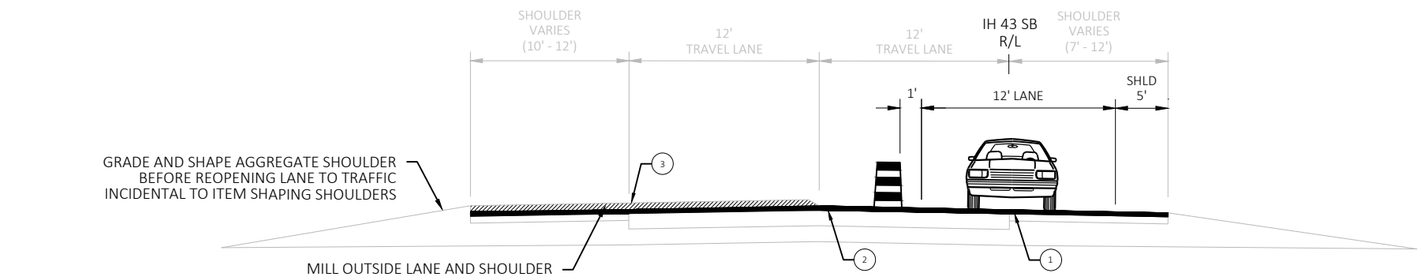
DAY END CONSTRUCTION - MILLED WEDGE LONGITUDINAL JOINT DETAIL

2



PHASE 1
(STAGE 2A)

1. TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)
2. TEMPORARY MARKING LINE PAINT 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)



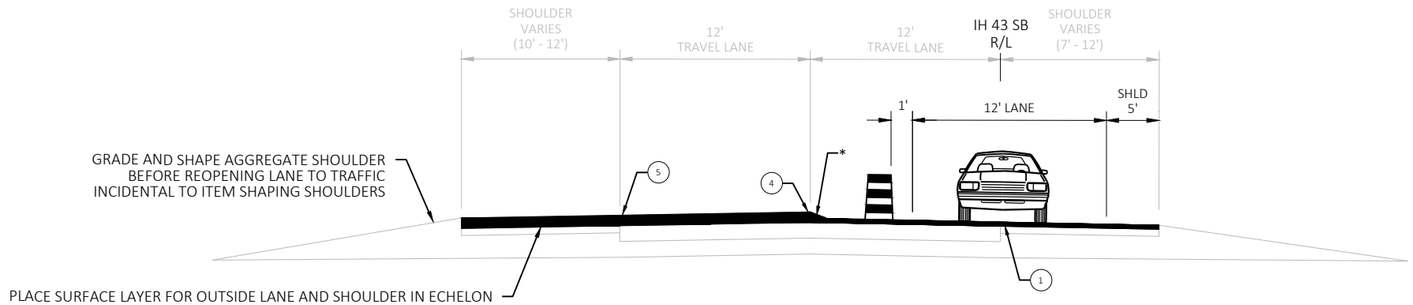
PHASE 2
(STAGE 2B)

1. EXISTING TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW) APPLIED DURING PHASE 1
2. EXISTING TEMPORARY MARKING LINE PAINT 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP) APPLIED DURING PHASE 1
3. TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)

PAVING SEQUENCE

SB DIRECTION SHOWN (MIRROR FOR NB DIRECTION)

2



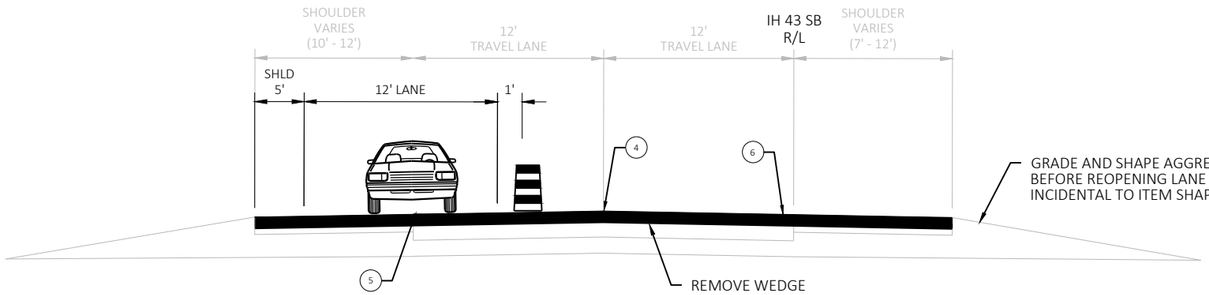
PHASE 3
(STAGE 2C)

(1) EXISTING TEMPORARY MARKING LINE APPLIED DURING PHASE 1

(4) TEMPORARY MARKING LINE PAINT 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

(5) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)

* NOTCHED WEDGE LONGITUDINAL JOINT REQUIRED REFER TO SDD, "HMA LONGUITUDINAL JOINTS"



PHASE 4
(STAGE 2D)

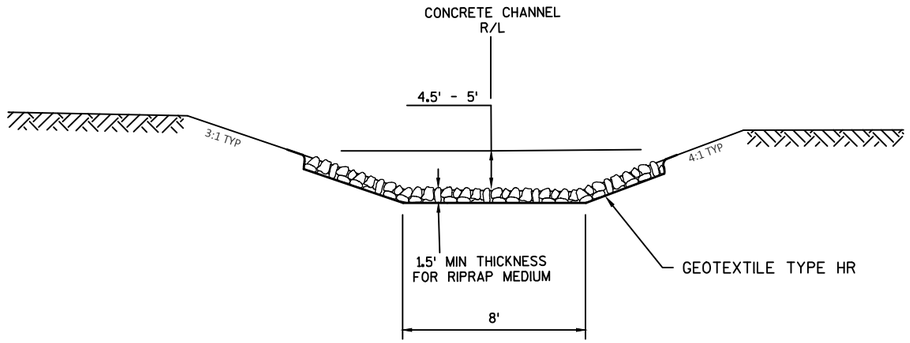
(4) EXISTING TEMPORARY MARKING LINE PAINT 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP) APPLIED DURING PHASE 3

(5) EXISTING TEMPORARY MARKING LINE APPLIED DURING PHASE 3

(6) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)

PAVING SEQUENCE

SB DIRECTION SHOWN (MIRROR FOR NB DIRECTION)



RIPRAP MEDIUM - CHANNEL

SEE EROSION CONTROL PLAN FOR LOCATIONS

NOTES

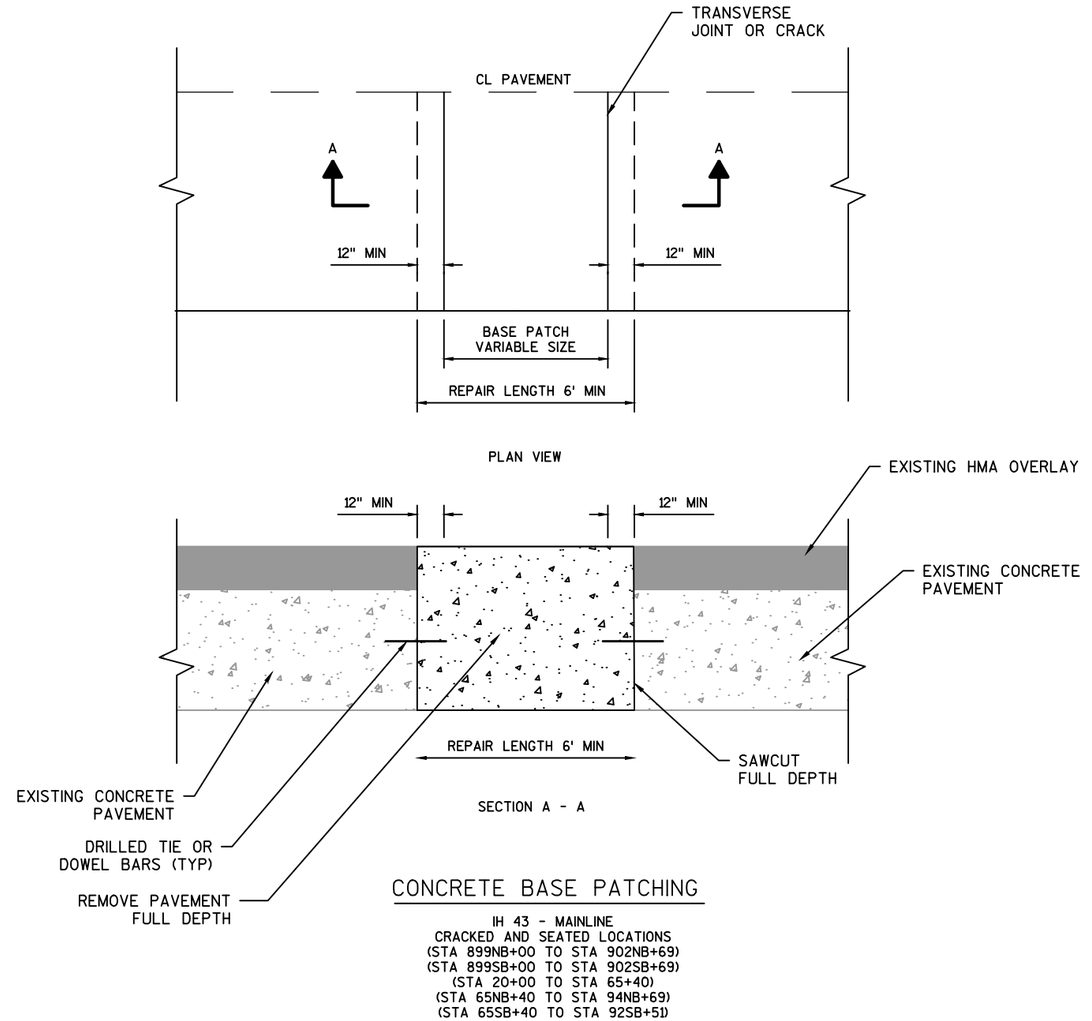
(1) PREPARE THE BED FOR THE RIPRAP BY EXCAVATING, SHAPING THE SLOPES, AND CONSTRUCTING THE TOE FOR RIPRAP INSTALLATION.

(2) AFTER PLACING THE RIPRAP, RESTORE THE SURFACE OF ADJACENT WORK AND DISPOSE OF SURPLUS MATERIAL.

(3) THE CONTRACTOR MAY PLACE MEDIUM RIPRAPE BY MECHANICAL MEANS. LIMIT HANDWORK TO THE QUANTITIY NECESSARY TO FILL LARGE VOIDS OR TO CORRECT SEGREGATED AREAS.

(4) A GEOTEXTILE TYPE HR MUST BE PLACED BENEATH THE RIPRAP TO PREVENT THE WASHOUT OF THE UNDERLYING SOIL.

(5) FABRIC SHOULD BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.



CONCRETE BASE PATCHING

IH 43 - MAINLINE
CRACKED AND SEATED LOCATIONS
(STA 899NB+00 TO STA 902NB+69)
(STA 899SB+00 TO STA 902SB+69)
(STA 20+00 TO STA 65+40)
(STA 65NB+40 TO STA 94NB+69)
(STA 65SB+40 TO STA 92SB+51)

NOTES

1) SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

2) PROVIDE 6' MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK.

3) THE LENGTH OF REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

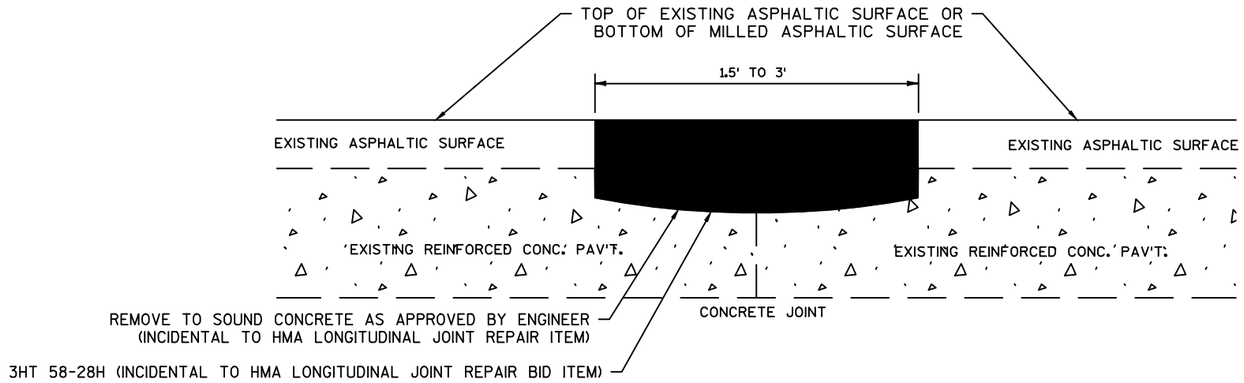
4) NO DOWEL BARS WILL BE INCLUDED AT CRACKED AND SEATED LOCATIONS.

5) LOCATIONS OF BASE PATCHING TO BE DETERMINED IN THE FIELD. PERFORM BASE PATCHING AS DIRECTED BY THE ENGINEER.

6) BASE PATCHING SHALL BE CONSTRUCTED TO FINISHED SURFACE AND MILLED OFF.

7) REFER TO SDD, "BASE PATCHING CONCRETE" FOR ADDITIONAL DETAILS.

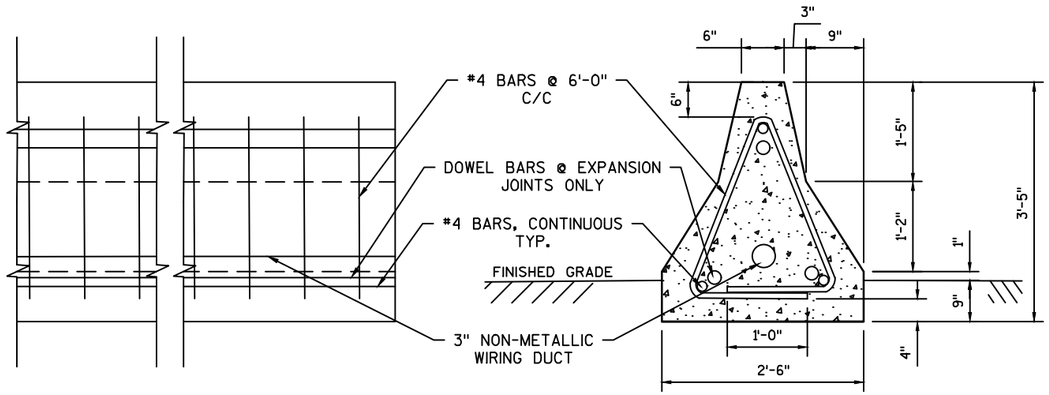
2



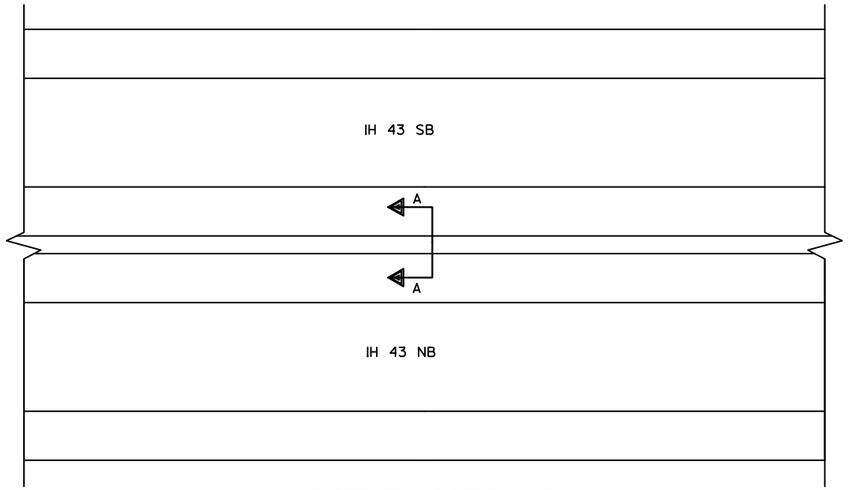
HMA LONGITUDINAL JOINT REPAIR DETAIL

NOTES

1) IN ALL AREAS OF JOINT REPAIR, REMOVE ASPHALTIC MATERIAL AND/OR LOOSE, DETERIORATED CONCRETE. CLEAN AND REPLACE WITH HMA PAVEMENT AS DIRECTED BY THE ENGINEER.
2) LOCATIONS FOR JOINT REPAIR TO BE APPROVED BY THE ENGINEER PRIOR TO THE START OF REPAIR WORK.
3) ACTUAL WIDTH TO BE DETERMINED BY THE ENGINEER.



SECTION A - A



CONCRETE MEDIAN BARIER PLAN VIEW

CONCRETE MEDIAN BARRIER

IH 43 (STA 20+00 TO 64+00)

NOTES

1) SECTIONS OF CONCRETE BARRIER TO BE REPAIRED OR REPLACED AS DETERMINED BY THE ENGINEER IN THE FIELD.
2) ALL BAR STEEL REINFORCEMENT SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATION.
3) SPLICES OF LONGUITUDINAL BARS SHALL BE MADE WITH BARS LAPPED AT LEAST 18" AND FIRMLY TIED OR FASTENED TOGETHER.
4) ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED AT LEAST 2".

2

N

MOORLAND ROAD (CTH O)

34NB+50

34NB+75

35NB+00

35NB+25

IH 43 SB OFF RAMP TO MOORLAND ROAD

34+43.92, 23.16' RT
871.28 (MATCH EXISTING)

1.6%

1.5%

1.7%

34+42.77, 29.15' RT
871.37 (MATCH EXISTING)

34+56.02, 28.96' RT
871.02 (MATCH EXISTING)

34+52.71, 34.33' RT
871.14 (MATCH EXISTING)

34+69.91, 41.35' RT
871.03 (MATCH EXISTING)

34+65.22, 46.52' RT
871.01 (MATCH EXISTING)

0.4%

0.8%

34+73.45, 44.48' RT
871.05 (MATCH EXISTING)

34+69.12, 49.97' RT
871.05 (MATCH EXISTING)

35+52.90, 80.17' RT
869.98 (MATCH EXISTING)

35+39.03, 88.64' RT
869.49

35+31.80, 83.73' RT
869.09 (MATCH EXISTING)

35+24.00, 88.49' RT
869.09 (MATCH EXISTING)

1.9%

4.1%

4.3%

35+59.57, 84.37' RT
870.09 (MATCH EXISTING)

35+46.03, 92.92' RT
869.59

SLOPE INTERCEPT

35+37.94, 97.72' RT
869.49

35+30.95, 93.28' RT
869.40

6.1%

1.5%

1.5%

1.5%

1.5%

4.6%

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CURB RAMP DETAILS - MOORLAND ROAD	SHEET 49	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\021001_CD.DWG
LAYOUT NAME - 021001

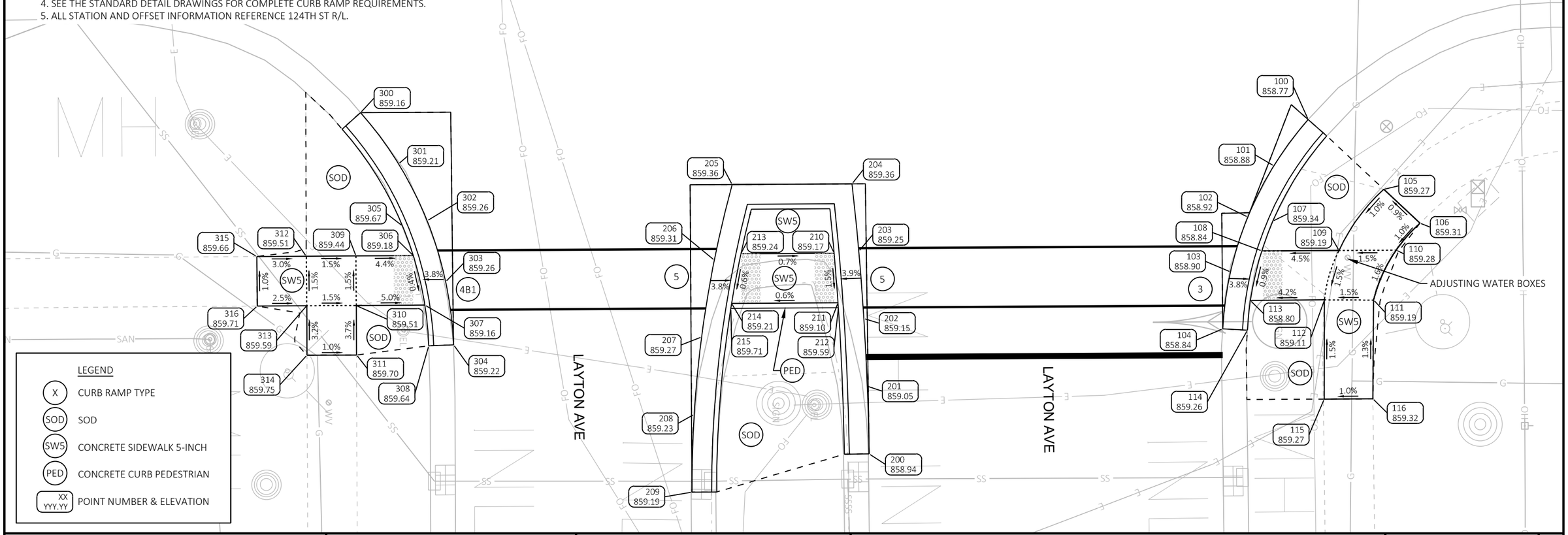
PLOT DATE : 3/17/2021 6:59 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

LAYTON AVE & 124TH ST						LAYTON AVE & 124TH ST						LAYTON AVE & 124TH ST						LAYTON AVE & 124TH ST					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
100	30+48.19	30.48' RT	858.77	142108.71	726727.88	113	30+42.48	48.79' RT	858.80	142102.75	726746.12	209	29+85.47	68.37' RT	859.19	142046.22	726765.10	306	29+57.42	44.37' RT	859.18	142018.23	726741.04
101	30+44.76	35.16' RT	858.88	142105.21	726732.53	114	30+42.20	51.79' RT	859.26	142102.43	726749.12	210	30+00.40	44.30' RT	859.17	142060.74	726741.08	307	29+58.56	49.37' RT	859.16	142019.36	726746.04
102	30+42.15	40.36' RT	858.92	142102.54	726737.69	115	30+50.00	58.70' RT	859.27	142110.14	726756.13	211	30+00.83	49.29' RT	859.10	142061.10	726746.07	308	29+58.95	53.49' RT	859.64	142019.74	726750.16
103	30+40.45	45.92' RT	858.90	142100.77	726743.22	116	30+54.91	58.64' RT	859.32	142115.06	726756.13	212	30+00.87	49.80' RT	859.59	142061.13	726746.58	309	29+51.62	44.39' RT	859.44	142012.43	726741.04
104	30+39.70	51.68' RT	858.84	142099.94	726748.97	200	30+04.07	64.53' RT	858.94	142064.14	726761.35	213	29+90.51	44.32' RT	859.24	142051.32	726741.07	310	29+51.64	49.39' RT	859.51	142012.43	726746.04
105	30+55.87	37.47' RT	859.27	142116.29	726734.98	201	30+03.85	57.71' RT	859.05	142064.01	726754.52	214	29+89.55	49.32' RT	859.21	142050.35	726746.07	311	29+51.64	54.39' RT	859.70	142012.42	726751.04
106	30+59.55	40.86' RT	859.31	142119.93	726738.42	202	30+03.45	50.88' RT	859.15	142063.70	726747.70	215	29+89.47	49.82' RT	859.71	142050.26	726746.57	312	29+46.61	44.39' RT	859.51	142007.42	726741.02
107	30+44.69	40.76' RT	859.34	142105.07	726738.12	203	30+02.89	44.07' RT	859.25	142063.23	726740.88	300	29+52.14	29.91' RT	859.16	142012.99	726726.56	313	29+46.64	49.39' RT	859.59	142007.43	726746.02
108	30+43.60	43.77' RT	858.84	142103.94	726741.11	204	30+02.16	37.28' RT	859.36	142062.59	726734.08	301	29+55.96	35.10' RT	859.21	142016.80	726731.76	314	29+46.64	54.39' RT	859.75	142007.42	726751.02
109	30+51.39	43.68' RT	859.19	142111.73	726741.13	205	29+89.66	37.32' RT	859.36	142050.48	726734.07	302	29+58.83	40.86' RT	859.26	142019.65	726737.53	315	29+41.61	44.40' RT	859.66	142002.42	726741.03
110	30+57.16	43.61' RT	859.28	142117.50	726741.13	206	29+87.82	44.96' RT	859.31	142048.63	726741.70	303	29+60.68	47.02' RT	859.26	142021.48	726743.69	316	29+41.64	49.40' RT	859.71	142002.43	726746.03
111	30+54.92	48.67' RT	859.19	142115.20	726746.16	207	29+86.51	52.70' RT	859.27	142047.30	726749.44	304	29+61.45	53.40' RT	859.22	142022.23	726750.08						
112	30+49.95	48.68' RT	859.11	142110.23	726746.11	208	29+85.73	60.52' RT	859.23	142046.50	726757.25	305	29+56.34	41.37' RT	859.67	142017.16	726738.03						

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5. ALL STATION AND OFFSET INFORMATION REFERENCE 124TH ST R/L.

124TH ST

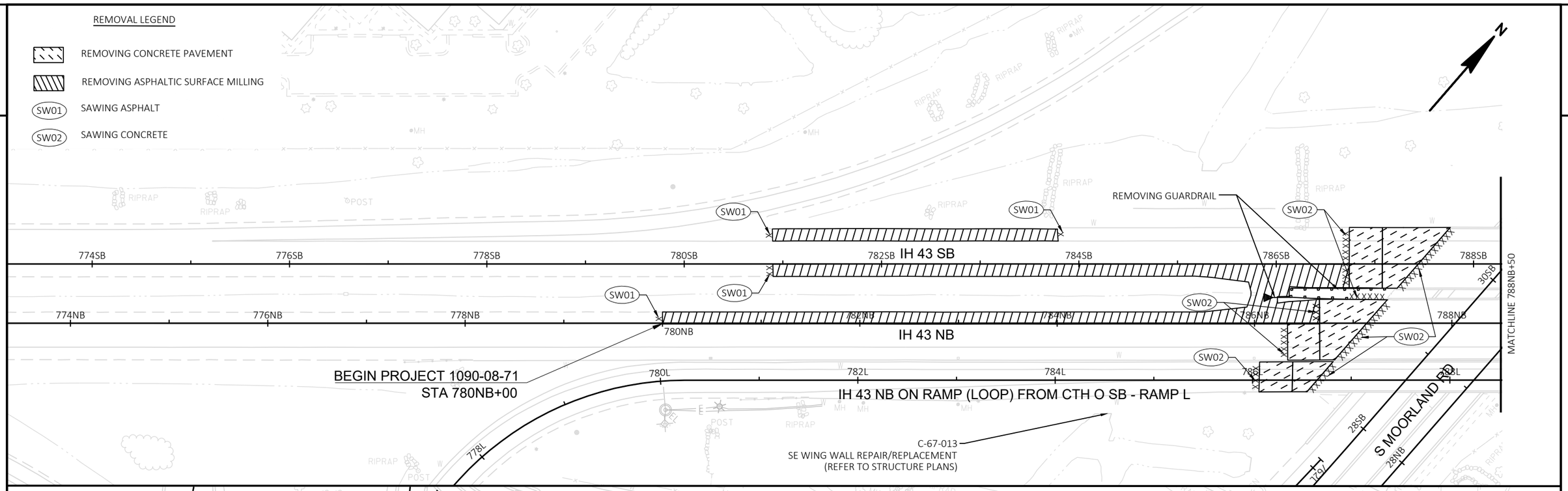


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CURB RAMP DETAILS - 124TH ST & LAYTON AVE	SHEET 50	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\021001_CR.DWG
LAYOUT NAME - 021010
PLOT DATE : 7/22/2021 8:23 AM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

REMOVAL LEGEND

- REMOVING CONCRETE PAVEMENT
- REMOVING ASPHALTIC SURFACE MILLING
- SW01 SAWING ASPHALT
- SW02 SAWING CONCRETE



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 51	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021101

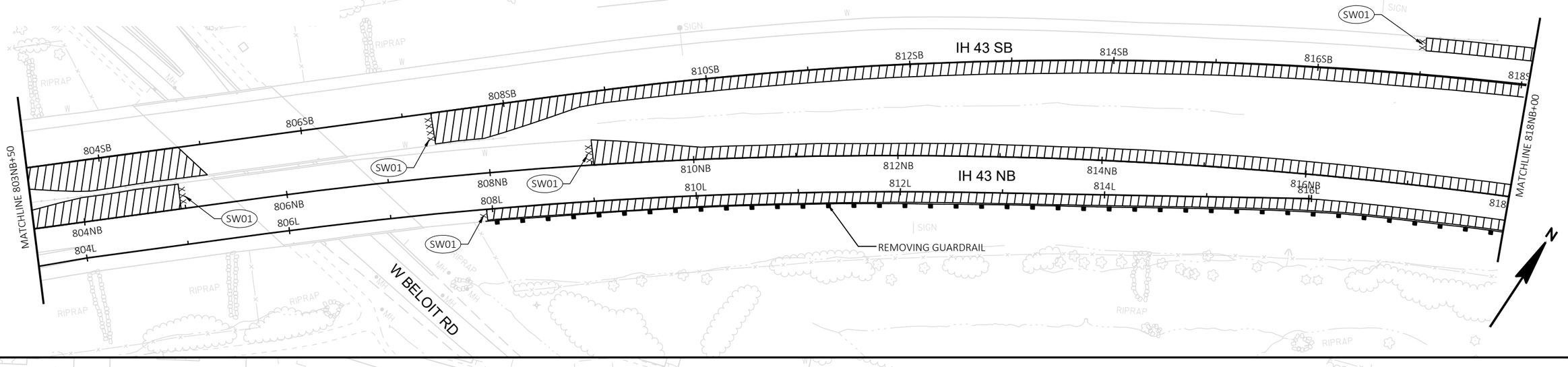
PLOT DATE : 7/2/2021 10:34 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

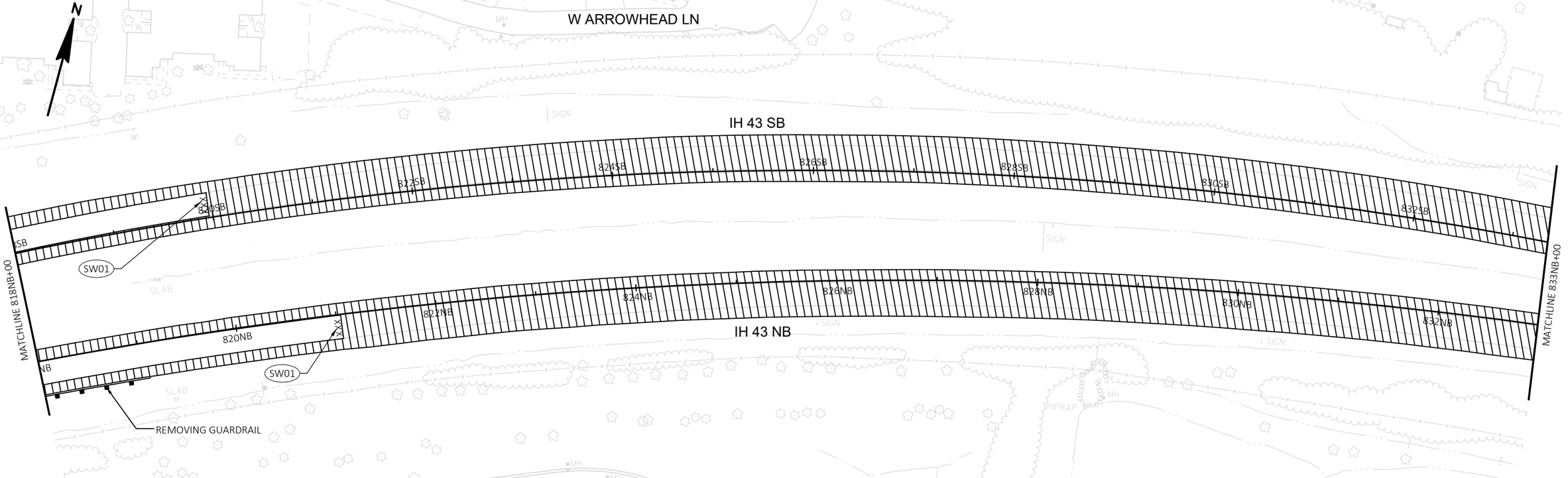
WISDOT/CADDS SHEET 42

REMOVAL LEGEND

REMOVING ASPHALTIC SURFACE MILLING

SW01 SAWING ASPHALT





PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 52	E

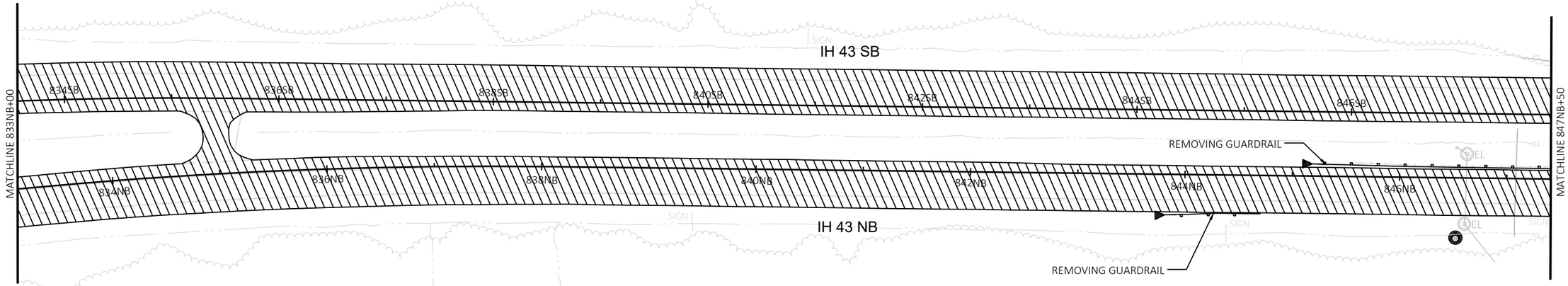
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LAYOUT NAME - 021102

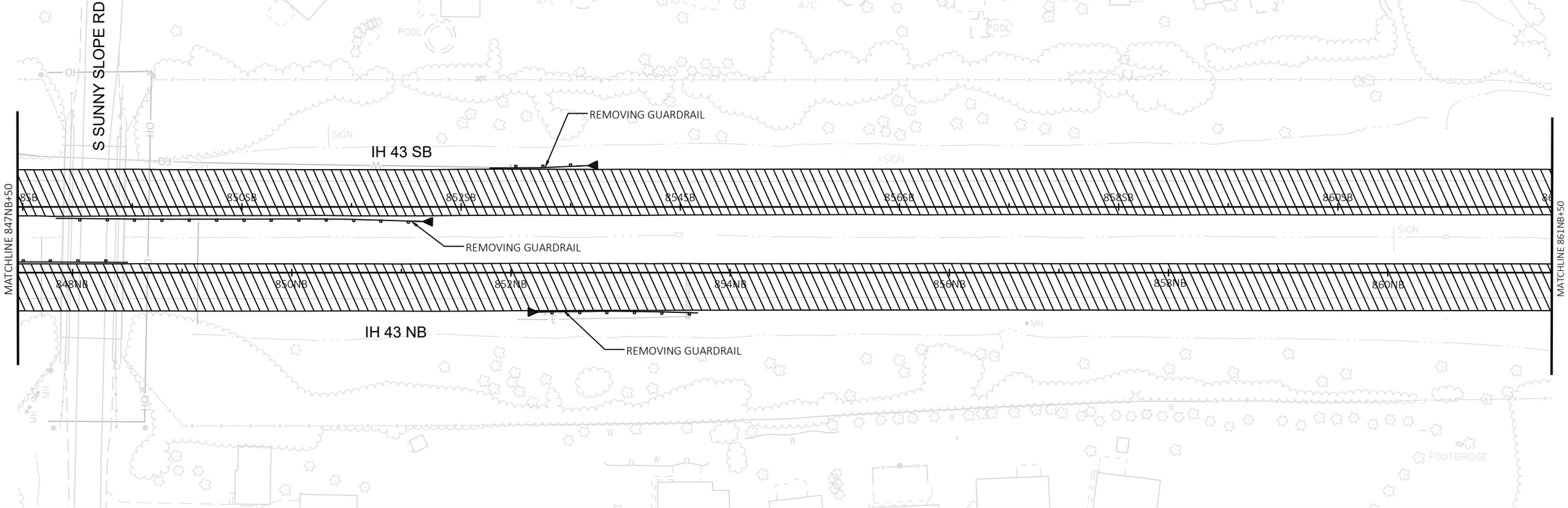
PLOT DATE : 7/13/2021 3:10 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

REMOVAL LEGEND

REMOVING ASPHALTIC SURFACE MILLING





PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 53	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021103

PLOT DATE : 2/6/2021 12:50 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN: 100FT

WISDOT/CADDS SHEET 42

2

2

N

W ARMOUR AVE

C-67-021
NW WING WALL REPAIR/REPLACEMENT
(REFER TO STRUCTURE PLANS)

REMOVING FENCE

869SB+03 , -118.67' LT

870SB+28, -117.87' LT

REMOVING GUARDRAIL

IH43 SB

MATCHLINE 861NB+50

862SB 864SB 866SB 868SB 870SB 872SB 874SB 874SBR 876SB 876SBR

REMOVING GUARDRAIL

862NB 864NB 866NB 868NB 870NB 872NB 874NB 874NB

MATCHLINE 876NB+00

IH 43 NB

REMOVING GUARDRAIL

W BELOIT RD

S LANGLADE DR

REMOVAL LEGEND

REMOVING ASPHATIC SURFACE MILLING

CLEARING AND GRUBBING (STA)

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 54	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021104

PLOT DATE : 2/6/2021 12:52 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

W BELOIT RD

PLAYGROUND

SEPTIC

SIGN

REMOVING GUARDRAIL

878D

878SB

880D

880SB

882D

882SB

884D

884SB

886D

886SB

888D

LAYTON RAMP D

IH 43 SB

888SB

REMOVING GUARDRAIL

MATCHLINE 876NB+00

876NB

878NB

880NB

882A

882NB

884A

884NB

REMOVING GUARDRAIL

REMOVING GUARDRAIL

886A

886NB

888A

LAYTON RAMP A

888NB

890A

890NB

MATCHLINE 890NB+50

IH 43 NB

IH 43 NB

SLAB

POOL

A/C

TV

REMOVAL LEGEND

REMOVING ASPHATIC SURFACE MILLING

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 55	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021105

PLOT DATE : 4/17/2021 1:14 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

LAYTON RAMP D

890D
892D
894D
896D
898D
900D
902D

LAYTON RAMP A

890A
892A
894A
896A
898A
900A
902A

IH 43 SB

890SB
892SB
894SB
896SB
898SB
900SB
902SB

IH 43 NB

892NB
894NB
896NB
898NB
900NB
902NB

S 124TH ST

32
30
28
26
24

MATCHLINE 890NB+50

MATCHLINE 21+00

SW02

REMOVING INLETS

REMOVE TREE

B-67-103
DECK REPLACEMENT
(REFER TO STRUCTURE PLANS)

REMOVING GUARDRAIL

REMOVING GUARDRAIL

REMOVING GUARDRAIL

REMOVING GUARDRAIL

REMOVING
CONCRETE SIDEWALK

SECTIONS OF CONCRETE BARRIER
TO BE REPAIRED OR REPLACED AS
DETERMINED BY THE ENGINEER (TYP)

REMOVAL LEGEND

REMOVING ASPHATIC SURFACE MILLING

REMOVING CONCRETE PAVEMENT

SW02 SAWING CONCRETE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 56	E

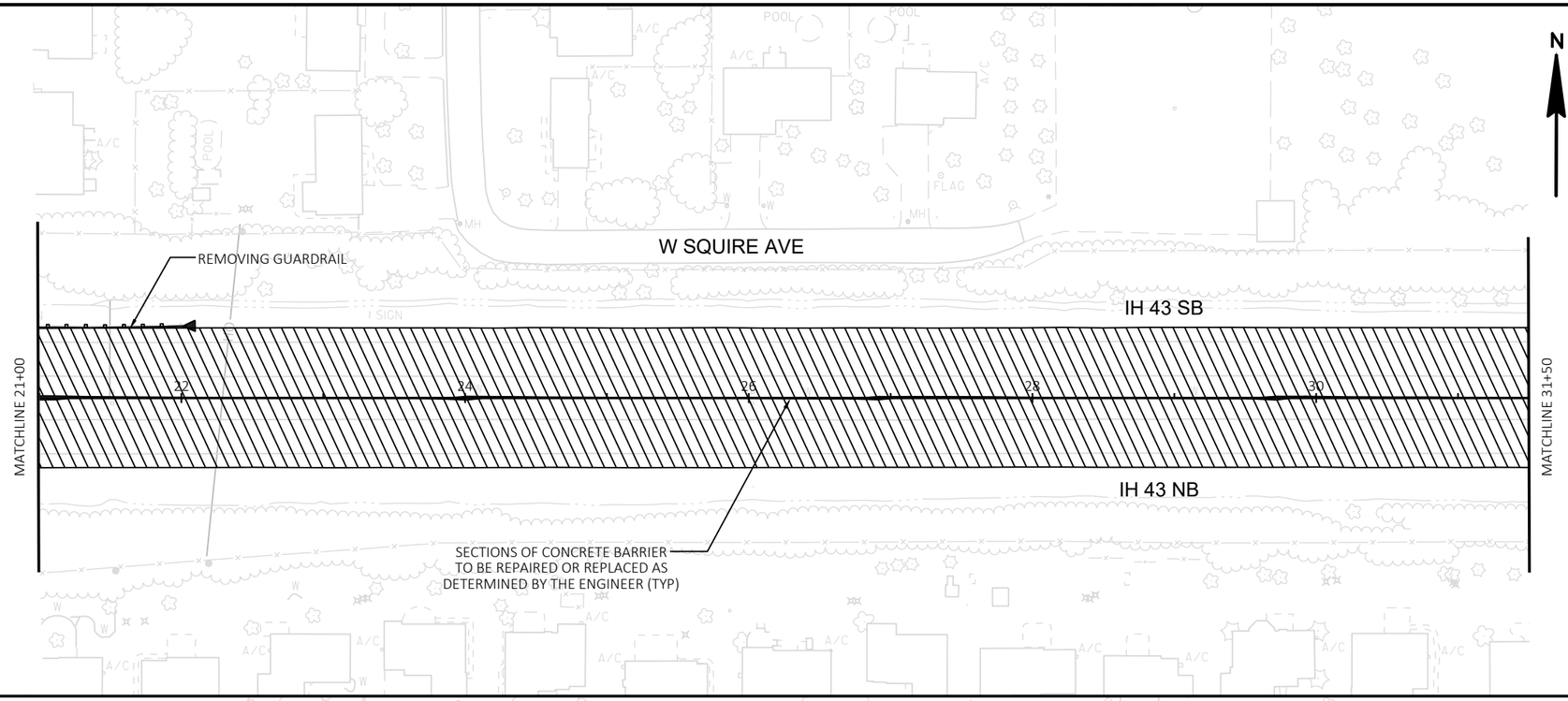
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LAYOUT NAME - 021106

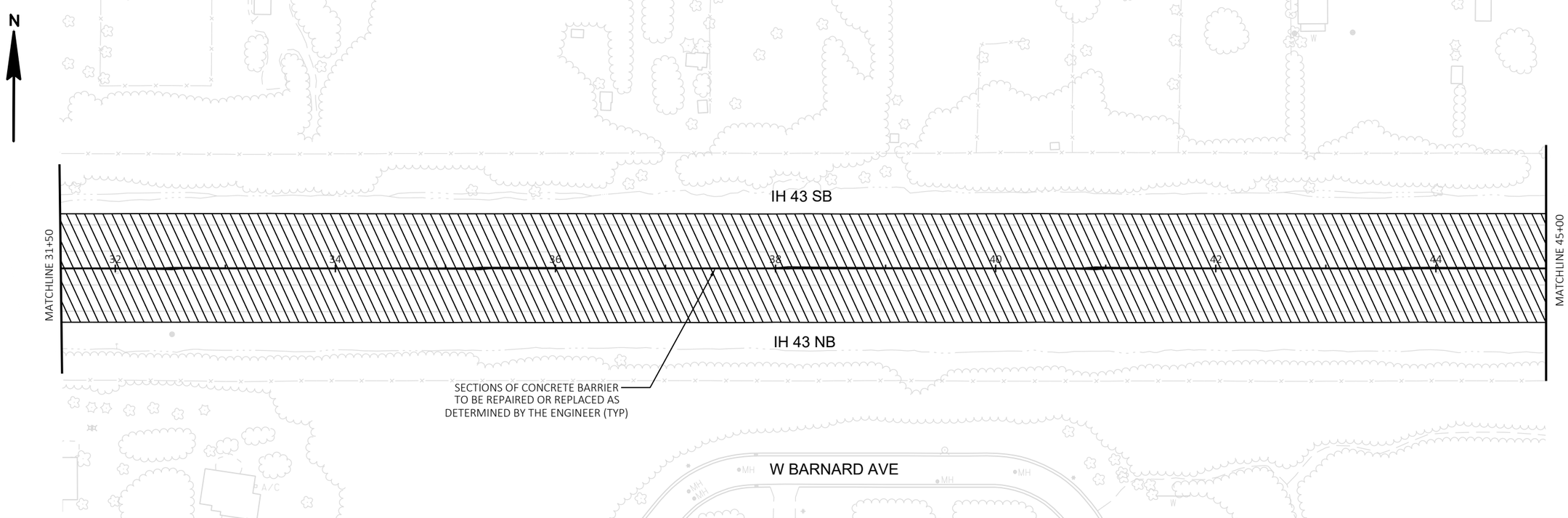
PLOT DATE : 7/13/2021 8:45 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

REMOVAL LEGEND

REMOVING ASPHATIC SURFACE MILLING





PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 57	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021107

PLOT DATE : 7/13/2021 8:50 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

W LAYTON AVE

S 116TH ST

N

59+43 , -108.00' LT

59+45 , -97.75' LT

REMOVING GUARDRAIL

IH 43 SB

IH 43 NB

MATCHLINE 59+50

MATCHLINE 45+00

REMOVING GUARDRAIL

REMOVING GUARDRAIL

SECTIONS OF CONCRETE BARRIER TO BE REPAIRED OR REPLACED AS DETERMINED BY THE ENGINEER (TYP)

46 48 50 52 54 56 58

REMOVAL LEGEND

REMOVING ASPHATIC SURFACE MILLING

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 58	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021108

PLOT DATE : 7/21/2021 9:16 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

74SB+43 , -110.37' LT

REMOVING CONCRETE CHANNEL

IH 43 SB

60SB

62SB

62

64SB

66SB

68SB

70SB

72SB

74SB

REMOVING GUARDRAIL

MATCHLINE 59+50

IH 43 SB

64NB

66NB

68NB

70NB

72NB

74NB

REMOVING GUARDRAIL

SECTIONS OF CONCRETE BARRIER TO BE REPAIRED OR REPLACED AS DETERMINED BY THE ENGINEER (TYP)

IH 43 NB

REMOVING GUARDRAIL

REMOVING GUARDRAIL

MATCHLINE 74NB+50

REMOVING GUARDRAIL

REMOVAL LEGEND

REMOVING ASPHATIC SURFACE MILLING

REMOVING CONCRETE PAVEMENT

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 59	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021109

PLOT DATE : 7/13/2021 10:23 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

REMOVAL LEGEND

REMOVING ASPHATIC SURFACE MILLING

SW02 SAWING CONCRETE

MATCHLINE 74NB+50

REMOVING GUARDRAIL

REMOVING GUARDRAIL

REMOVING GUARDRAIL

SB OFF RAMP TO STH 100

IH 43 NB

IH 43 SB

STH 100 SB

STH 100 NB

STH 100

STH 100

NB ON RAMP FROM STH 100

MATCHLINE 85NB+00

SW02

SW02

SW02

SW02

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 60	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021110

PLOT DATE : 2/12/2021 10:14 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

W LAYTON AVE

MATCHLINE 100NB+50

IH 43 SB/US 45 SB

IH 43 NB/US 45 NB

82SB

84SB

86SB

88SB

90SB

92SB

94SB

96SB

98NB

100NB

296

294

292

290

288

286

REMOVING GUARDRAIL

REMOVING GUARDRAIL

94NB

92NB

90NB

88NB

86NB

NB ON RAMP FROM STH 100

MATCHLINE 85NB+00

REMOVAL LEGEND

REMOVING ASPHATIC SURFACE MILLING

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 61	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021111

PLOT DATE : 11/25/2020 12:10 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

REMOVAL LEGEND

REMOVING ASPHATIC SURFACE MILLING

SW01 SAWING ASPHALT

N

MATCHLINE 100NB+50

98SB

100SB

102SB

104SB

106SB

108SB

110SB

SW01

44SB

46SB

48SB

IH 43 SB / US 45 SB

102NB

104NB

106NB

108NB

110NB

200NB

202NB

112NB

114NB

SW01

204NB

REMOVING GUARDRAIL

206NB

MATCHLINE 115NB+50

IH 43 NB / US 45 NB

ROOT R.

RIPRAP

FO

SLAB

SIGN

GUARDRAIL

S ROOT RIVER PKWY

LAYTON AVENUE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 62	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021112

PLOT DATE : 11/25/2020 12:12 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

NORTH-TO-WEST RAMP (US 45 SB)

NORTH-TO-EAST RAMP (IH 41 SB/IH 894 EB)

WEST-TO-NORTH RAMP (US 45 NB)

EAST-TO-NORTH RAMP (IH 41 NB/IH 894 WB)

EAST-TO-WEST RAMP (IH 43 SB)

WEST-TO-EAST RAMP (IH 43 NB)

RIPRAP

ATHLETIC FIELD

MH

W

124SB

122SB

120SB

118SB

116SB

114SB

112SB

110SB

108SB

106SB

104SB

102SB

100SB

98SB

96SB

94SB

92SB

90SB

88SB

86SB

84SB

82SB

80SB

78SB

76SB

74SB

72SB

70SB

68SB

66SB

64SB

62SB

60SB

58SB

56SB

54SB

52SB

50SB

48SB

46SB

44SB

42SB

40SB

38SB

36SB

124NB

122NB

120NB

118NB

116NB

114NB

112NB

110NB

108NB

106NB

104NB

102NB

100NB

98NB

96NB

94NB

92NB

90NB

88NB

86NB

84NB

82NB

80NB

78NB

76NB

74NB

72NB

70NB

68NB

66NB

64NB

62NB

60NB

58NB

56NB

54NB

52NB

50NB

48NB

46NB

44NB

42NB

40NB

38NB

36NB

34NB

32NB

30NB

28NB

26NB

24NB

22NB

20NB

18NB

16NB

14NB

12NB

10NB

8NB

6NB

4NB

2NB

END MILL & OVERLAY
(IH 43 SB)
STA 119SB+07

END MILL & OVERLAY
(WEST-TO-NORTH RAMP)
STA 118NB+79

REMOVING GUARDRAIL

REMOVING GUARDRAIL

END PROJECT 1090-08-71
STA 210NB+80

SW01

MATCH LINE 115NB+50

REMOVAL LEGEND

REMOVING ASPHALTIC SURFACE MILLING

SW01 SAWING ASPHALT

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 63	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021113

PLOT DATE : 11/25/2020 12:14 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

REMOVAL LEGEND

- REMOVING CONCRETE PAVEMENT
- SW01 SAWING ASPHALT
- SW02 SAWING CONCRETE

ON RAMP TO IH 43 WB

S MOORLAND RD

S MOORLAND RD

OFF RAMP FROM IH 43 WB

ON RAMP FROM S MOORLAND RD

IH 43 WB

IH 43 EB

REMOVING CONCRETE SIDEWALK

REMOVING CONCRETE SIDEWALK

REMOVING CONCRETE SIDEWALK

REMOVING GUARDRAIL

REMOVING GUARDRAIL

38SB 38NB 36NB 36SB 34SB 34NB 32SB 32NB 30SB 30NB 28SB 28NB

784SB 786SB 788SB 790SB 792SB 794SB 796SB 798SB

784NB 786NB 788NB 790NB 792NB 794NB 796NB 798NB

784L 788L 790L 792L 794L 796L 798L

SW01 SW02

N

2

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	REMOVAL PLAN	SHEET 64	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 021114

PLOT DATE : 7/2/2021 10:44 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

PLAN DETAIL LEGEND

- E — HMA PAVEMENT 4 HT 58-28 H, 2-INCH
- PV29 — CONCRETE PAVEMENT APPROACH SLAB HES
- CP34 — CONCRETE PAVEMENT HES 12-INCH, DOWELED AND TINED
- AG01 — BASE AGGREGATE DENSE 3/4-INCH
- BG10 — GUARDRAIL MOW STRIP EMULSIFIED ASPHALT
- *REFER TO BRIDGE APPROACH CONSTRUCTION DETAIL
- BG15 — MGS GUARDRAIL 3
- BG16 — MGS THRIE BEAM TRANSITION
- BG17 — MGS GUARDRAIL TERMINAL EAT
- BG18 — MGS GUARDRAIL TERMINAL TYPE 2
- HIGH FRICTION SURFACE TREATMENT (HFST)

783SB+79, -23.23' LT
MATCH EXISTING CONCRETE
785SB+72, 18.37' RT
786SB+74, -36.92' LT
MATCH EXISTING CONCRETE
787SB+76, -37.00' LT
780SB+90, -23.17' LT
780SB+90, 0.22' RT
774SB 776SB 778SB 780SB 782SB IH 43 SB 784SB 786SB 788SB
B-67-293
305SB
780NB+00, -11.29' LT
774NB 776NB 778NB 780NB 782NB IH 43 NB 784NB 786NB 788NB
785NB+48, -11.25' LT
786NB+34, 24.14' RT
B-67-294
BEGIN PROJECT 1090-08-71
STA 780NB+00
780L 782L 784L 786L 788L
IH 43 NB ON RAMP (LOOP) FROM CTH O SB - RAMP L
B-67-295
786L+06, 11.90' RT
MATCH EXISTING CONCRETE
786L+81, -18.05' LT
MATCHLINE 788NB+50
WETLAND BOUNDARY (TYP)
R-67-87
SEALING CRACKS AND JOINTS
BETWEEN RETAINING WALL GUTTER
AND PAVEMENT
C-67-013
SE WING WALL REPAIR/REPLACEMENT
(REFER TO STRUCTURE PLANS)
R-67-80
SEALING CRACKS AND JOINTS AT THE SOUTH
CORNER OF THE EAST ABUTMENT
S MOORLAND RD
28SB
28NB
778L
774L
32SB
34NB
32NB
32NB+37, -19.26' LT
32NB+89, 14.15' RT
MATCH EXISTING CONCRETE
790SB+70, -37.24' LT
794SB+80, -23.34' LT
MATCH EXISTING CONCRETE
GUARDRAIL REPAIRS
799SB+35, -53.26' LT
801SB+48, -23.30' LT
MATCH EXISTING CONCRETE
802SB+69, 12.72' RT
790SB+84, 23.89' RT
790SB 792SB 794SB 796SB IH 43 SB 798SB 800SB 802SB
791SB+74, 13.30' RT
803NB+01, -12.35' LT
MATCHLINE 788NB+50
MATCHLINE 803NB+50
30NB
790NB 792NB IH 43 NB 794NB 796NB 798NB 800NB 802NB
792NB+00, -11.63' LT
790NB+96, -23.69' LT
790L 792L 794L 796L 798L 800L 802L
790NB+22, 37.77' RT
MATCH EXISTING CONCRETE
789L+70, 12.01' RT
MATCH EXISTING CONCRETE
B-67-295
PARAPET REPAIR/REPLACEMENT
(REFER TO STRUCTURE PLANS)
IH 43 NB ON RAMP FROM CTH O NB
790 792 794 796 798 800 802
799NB+00, 23.83' RT
MATCH EXISTING CONCRETE
803NB+32, 26.96' RT
MATCH EXISTING CONCRETE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 65	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021201
PLOT DATE : 10/22/2021 8:59 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

PLAN DETAIL LEGEND

- (A) HMA PAVEMENT 4 SMA 58-28 V, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH
- (B) HMA PAVEMENT 4 HT 58-28 H, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH
- (E) HMA PAVEMENT 4 HT 58-28 H, 2-INCH
- (BG15) MGS GUARDRAIL 3
- (BG16) MGS THRIE BEAM TRANSITION
- (BG18) MGS GUARDRAIL TERMINAL TYPE 2

IH 43 SB

IH 43 NB

W BELOIT RD

W ARROWHEAD LN

MATCHLINE 803NB+50

MATCHLINE 818NB+00

MATCHLINE 818NB+00

MATCHLINE 833NB+00

803SB+88, 31.03' RT

804SB

804NB

804NB+01, -23.87' LT

GUARDRAIL REPAIRS

804NB+96, -24.41' LT
MATCH EXISTING CONCRETE

805SB+03, 30.41' RT

806SB

806NB

806L

807SB+30, 30.38' RT
MATCH EXISTING CONCRETE

807SB+78, 31.80' RT

807NB+94, 35.82' RT
MATCH EXISTING CONCRETE

GUARDRAIL REPAIRS

808SB

808SB+73, 13.54' RT

808NB

808L

809NB+01, -24.81' LT
MATCH EXISTING CONCRETE

WETLAND BOUNDARY (TYP)

810SB

810NB+08, -11.87' LT

810NB

810L

812SB

812NB

812L

814SB

814NB

814L

816SB

816NB

816L

817SB+05, -23.96' LT
MATCH EXISTING CONCRETE

818SB

818NB

819SB+98, -35.60' LT

BEGIN MILL & OVERLAY
(MATCH EXISTING CONCRETE)
REFER TO BUTT JOINT CONSTRUCTION DETAIL

819SB+97, 11.27' RT

820SB

820NB

821NB+05, -11.22' LT

822SB

822NB

824SB

824NB

826SB

826NB

828SB

828NB

830SB

830NB

832SB

832NB

BEGIN MILL & OVERLAY
(MATCH EXISTING CONCRETE)
REFER TO BUTT JOINT CONSTRUCTION DETAIL

821NB+05, 35.11' RT

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 66	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021202
PLOT DATE : 10/22/2021 9:03 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

PLAN DETAIL LEGEND

- A — HMA PAVEMENT 4 SMA 58-28 V, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH
- B — HMA PAVEMENT 4 HT 58-28 H, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH
- AG01 — BASE AGGREGATE DENSE 3/4-INCH
- BG15 — MGS GUARDRAIL 3
- BG16 — MGS THRIE BEAM TRANSITION
- BG17 — MGS GUARDRAIL TERMINAL EAT
- BG18 — MGS GUARDRAIL TERMINAL TYPE 2



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 67	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021203

PLOT DATE : 10/22/2021 9:07 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : I IN: 100FT

WISDOT/CADDS SHEET 42

2

N

W ARMOUR AVE

IH 43 SB

IH 43 NB

W BELOIT RD

S LANGLADE DR

FENCE CHAIN LINK 8-FT

C-67-021
NW WING WALL REPAIR/REPLACEMENT
(REFER TO STRUCTURE PLANS)

869SB+03, -118.67' LT

870SB+28, -117.87' LT

MATCH CONCRETE
(REFER TO BUTT JOINT
CONSTRUCTION DETAIL

875SB+79, -23.41' LT

874NB+38, -22.20' LT

875SB+14, 22.80' RT

873NB+81, 22.11' RT

MATCH CONCRETE
(REFER TO BUTT JOINT
CONSTRUCTION DETAIL

WETLAND BOUNDARY (TYP)

MATCHLINE 861NB+50

MATCHLINE 876NB+00

BG18 BG15 BG16 BG17 AG01 A B

862NB 864NB 866NB 868NB 870NB 872NB 874NB

862SB 864SB 866SB 868SB 870SB 872SB 874SB 876D 876SB

PLAN DETAIL LEGEND

A	HMA PAVEMENT 4 SMA 58-28 V, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH
B	HMA PAVEMENT 4 HT 58-28 H, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH
AG01	BASE AGGREGATE DENSE 3/4-INCH
BG15	MGS GUARDRAIL 3
BG16	MGS THRIE BEAM TRANSITION
BG17	MGS GUARDRAIL TERMINAL EAT
BG18	MGS GUARDRAIL TERMINAL TYPE 2

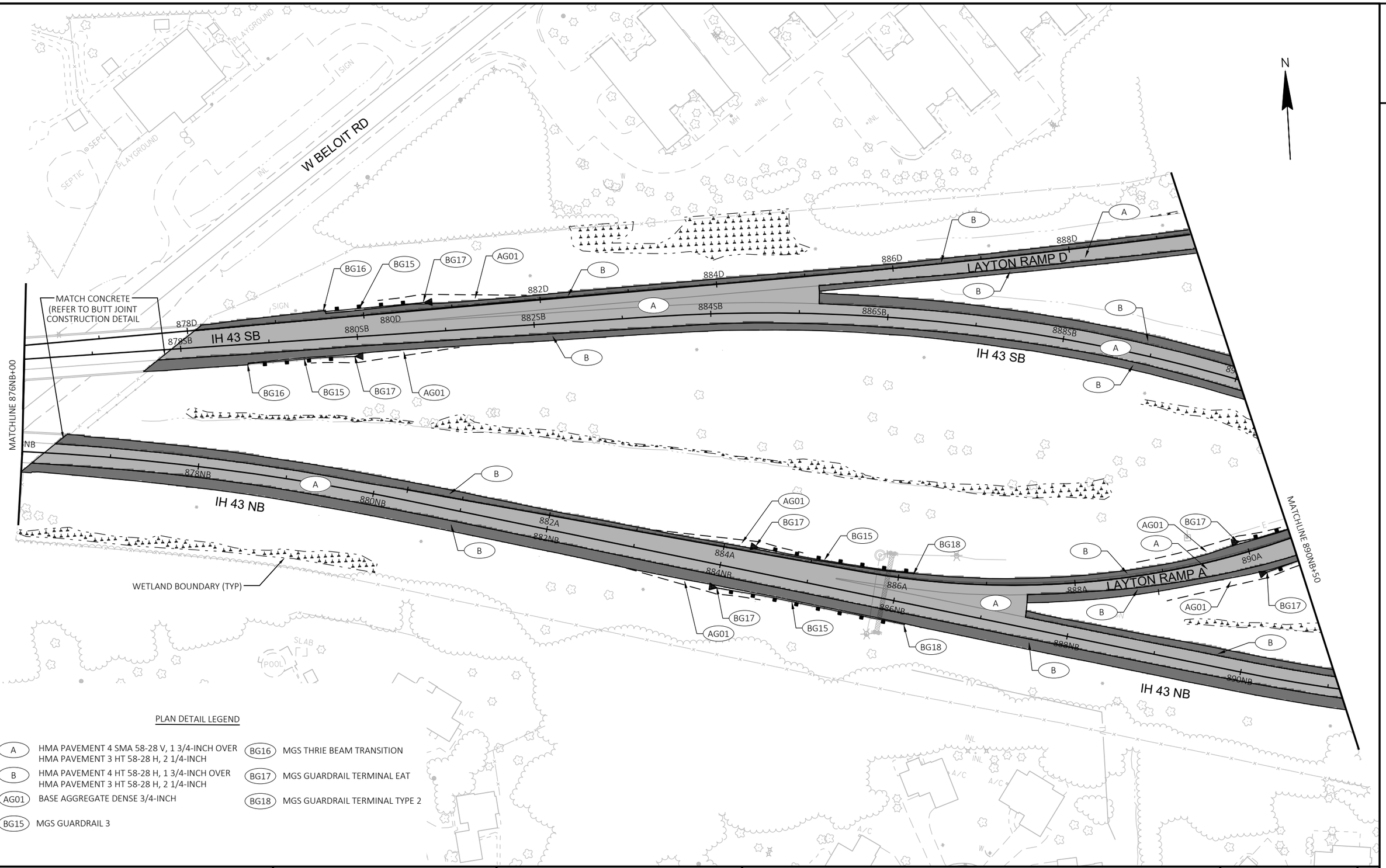
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 68 E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021204

PLOT DATE : 10/22/2021 9:10 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



PLAN DETAIL LEGEND

- (A) HMA PAVEMENT 4 SMA 58-28 V, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH
- (B) HMA PAVEMENT 4 HT 58-28 H, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (BG15) MGS GUARDRAIL 3
- (BG16) MGS THRIE BEAM TRANSITION
- (BG17) MGS GUARDRAIL TERMINAL EAT
- (BG18) MGS GUARDRAIL TERMINAL TYPE 2

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 69	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021205
PLOT DATE : 10/22/2021 9:12 AM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

PLAN DETAIL LEGEND

- (A) HMA PAVEMENT 4 SMA 58-28 V, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH
- (B) HMA PAVEMENT 4 HT 58-28 H, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH
- (C) HMA PAVEMENT 4 HT 58-28 H, 2 1/4-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (BG15) MGS GUARDRAIL 3
- (BG16) MGS THRIE BEAM TRANSITION
- (PV01) CONCRETE PAVEMENT APPROACH SLAB
- (CP18) CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED
- (BG17) MGS GUARDRAIL TERMINAL EAT
- (BG18) MGS GUARDRAIL TERMINAL TYPE 2
- (CG58) CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D
- (PV03) CONCRETE SURFACE DRAINS

NOTE:
*REFER TO BRIDGE APPROACH CONSTRUCTION DETAIL

LAYTON RAMP D
LAYTON RAMP A
IH 43 SB
IH 43 NB
S 124TH ST
MATCHLINE 890NB+50
MATCHLINE 21+00

REFER TO BUTT JOINT CONSTRUCTION DETAIL
30+46, 28.97' RT
30+40, 40.00' RT
30+04, 37.26' RT
29+85, 37.33' RT
29+61, 29.91' RT
REFER TO CONSTRUCTION DETAIL "CURB RAMP DETAILS - 124TH ST & LAYTON AVE" FOR DETAILS

894A+04, -7.64' LT
894A+19, -7.07' LT
893A+69, -6.97' LT
893A+63, -7.20' LT
894A+19, 28.57' RT
894A+04, 30.92' RT
891A+59, -7.82' LT
891A+44, -7.84' LT
891A+60, 30.14' RT
891A+46, 30.03' RT
B-67-103
DECK REPLACEMENT
THIN POLYMER OVERLAY (TPO)
(REFER TO STRUCTURE PLANS)

SOLAR PANEL AND WAVETRONIX COLLECTOR TO BE MOUNTED ON LIGHT POLE TO BE MOUNTED BY WISDOT
WETLAND BOUNDARY (TYP)
899SB+00, -23.09' LT
SECTIONS OF CONCRETE BARRIER TO BE REPAIRED OR REPLACED AS DETERMINED BY THE ENGINEER (TYP)
899SB+00, 19.96' RT
898NB+79, -19.42' LT
899NB+00, 23.21' RT

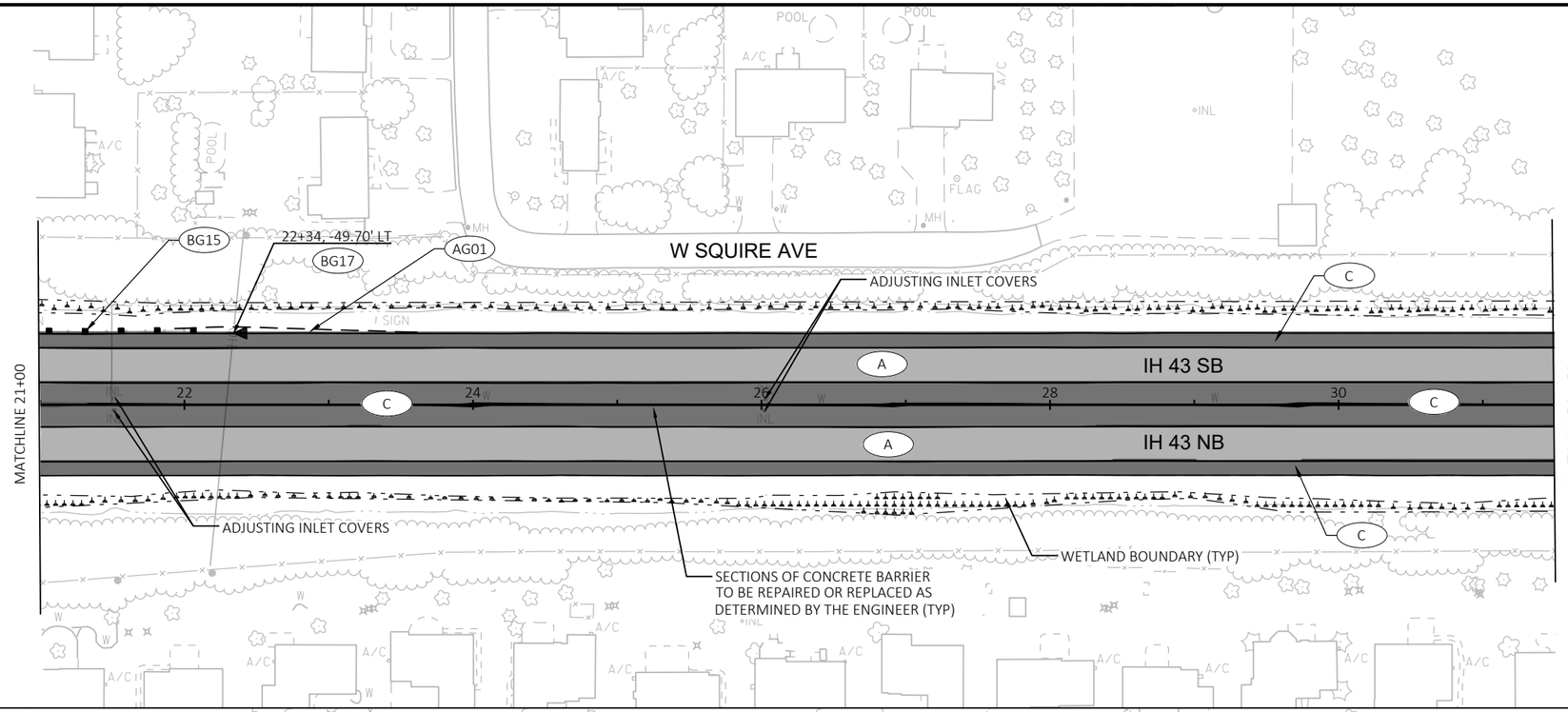
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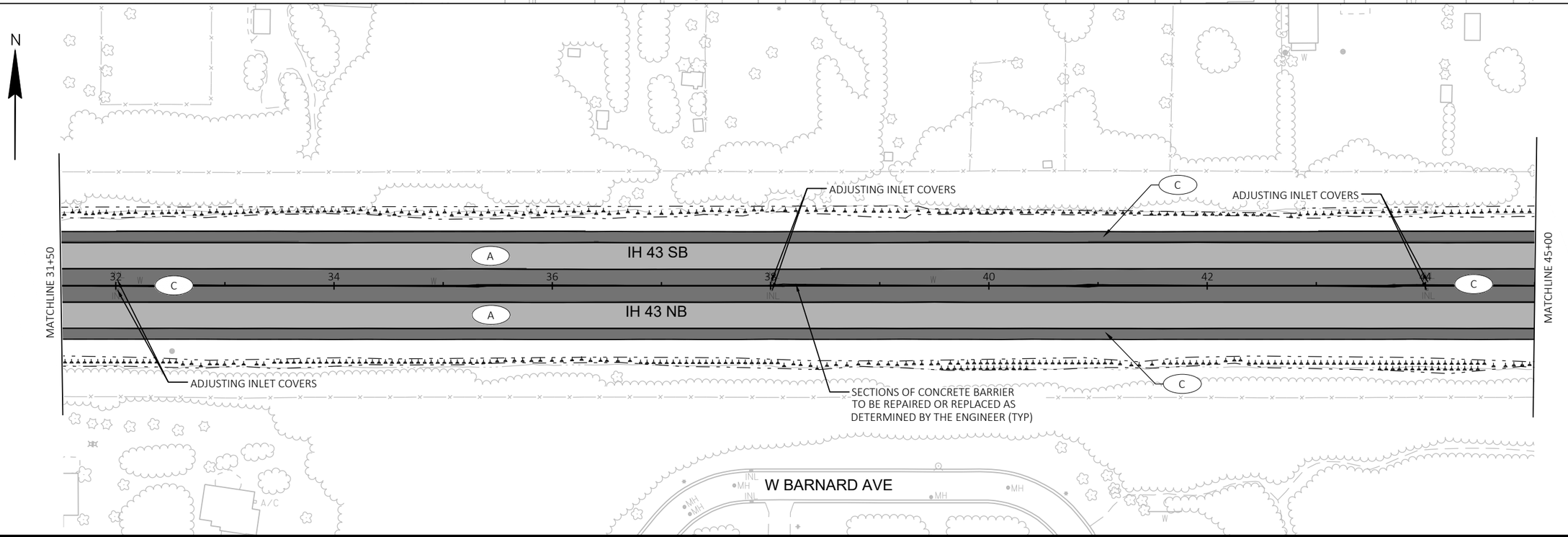
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 70	E

2

PLAN DETAIL LEGEND

- (A) HMA PAVEMENT 4 SMA 58-28 V, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH
- (C) HMA PAVEMENT 4 HT 58-28 H, 2 1/4-INCH
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (BG15) MGS GUARDRAIL 3
- (BG17) MGS GUARDRAIL TERMINAL EAT



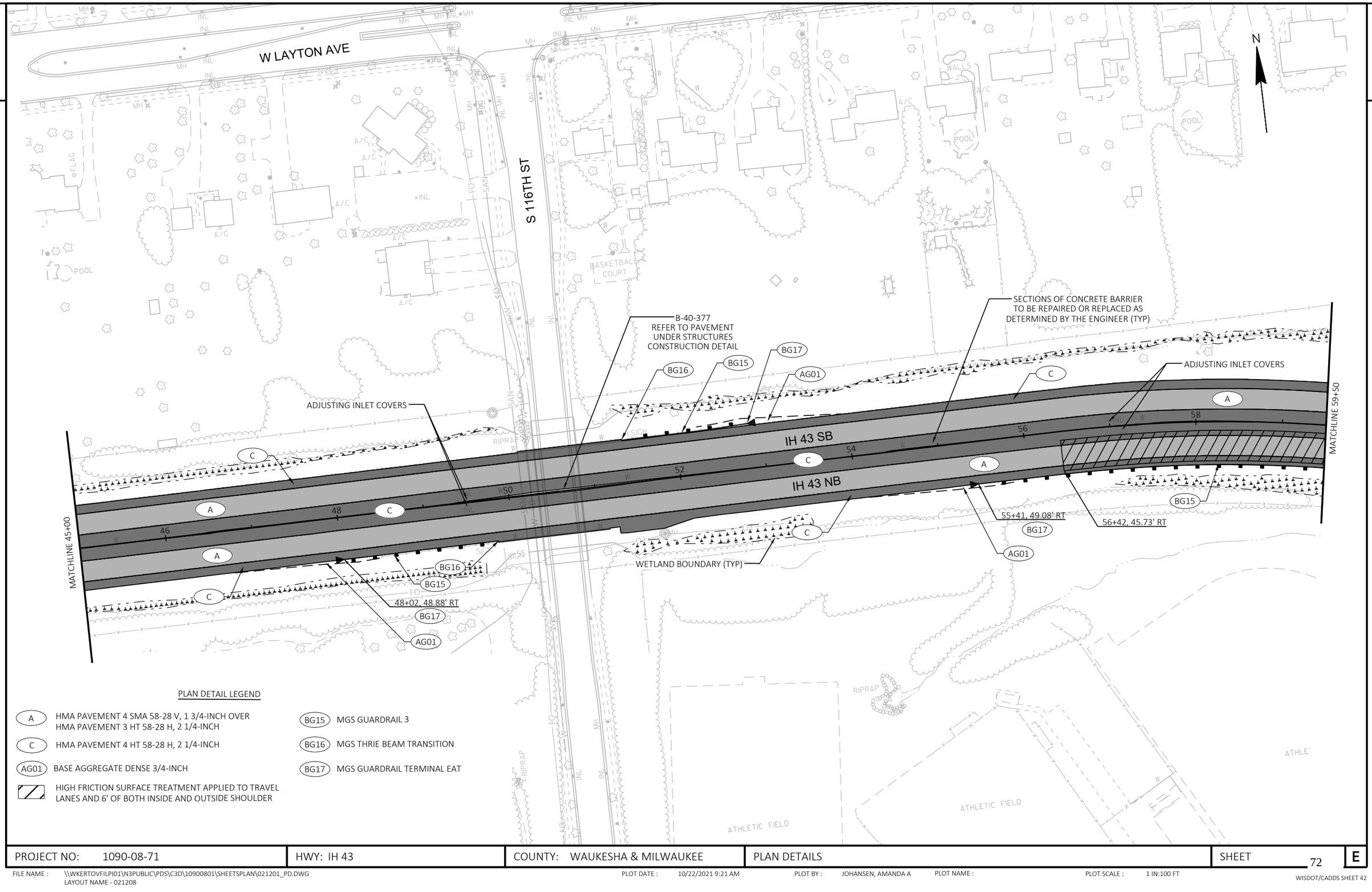


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 71	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021207

PLOT DATE : 10/22/2021 9:18 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



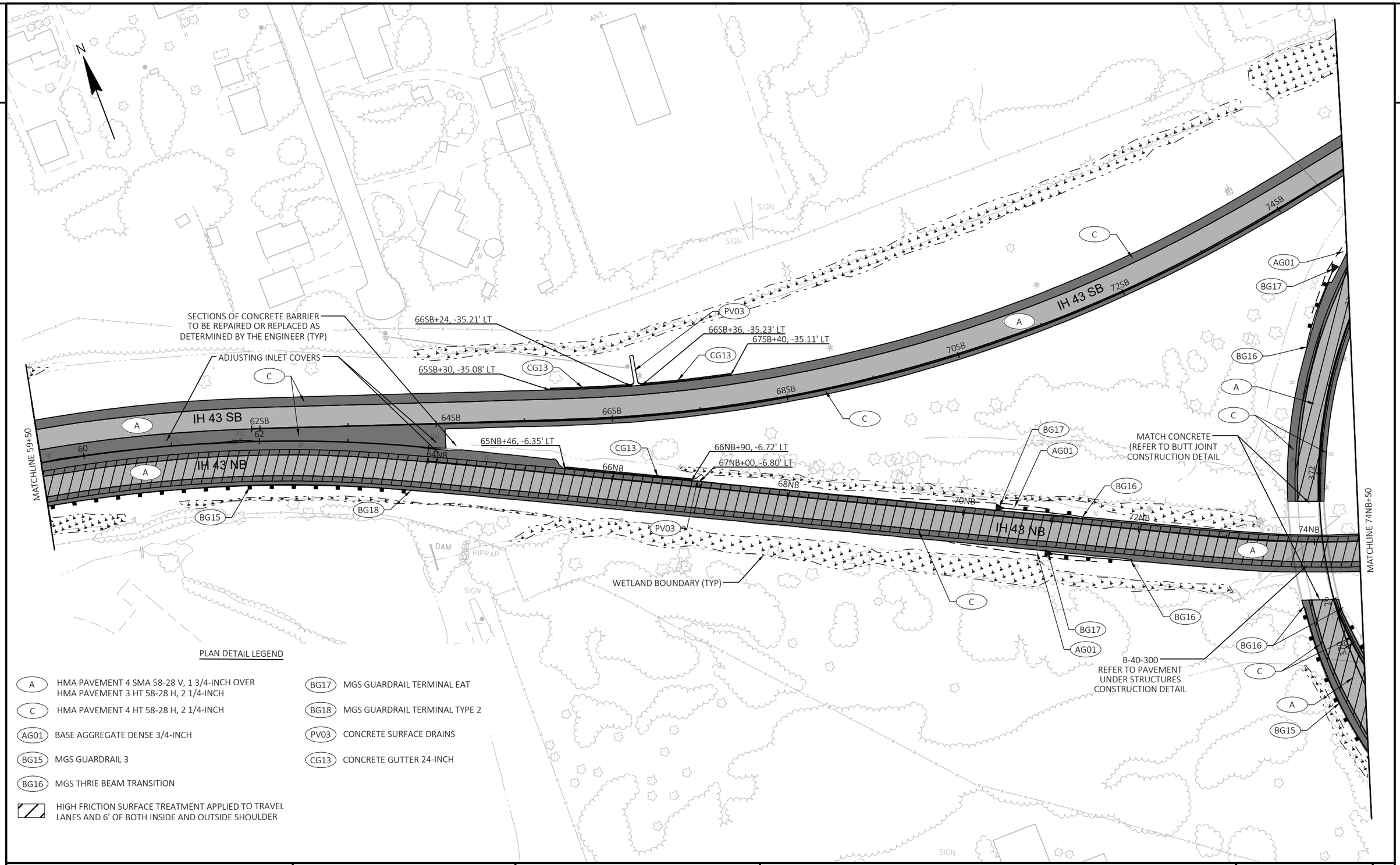
PLAN DETAIL LEGEND

A	HMA PAVEMENT 4 SMA 58-28 V, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH	BG15	MGS GUARDRAIL 3
C	HMA PAVEMENT 4 HT 58-28 H, 2 1/4-INCH	BG16	MGS THRIE BEAM TRANSITION
AG01	BASE AGGREGATE DENSE 3/4-INCH	BG17	MGS GUARDRAIL TERMINAL EAT
	HIGH FRICTION SURFACE TREATMENT APPLIED TO TRAVEL LANES AND 6' OF BOTH INSIDE AND OUTSIDE SHOULDER		

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 72	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021208
PLOT DATE : 10/22/2021 9:21 AM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



PLAN DETAIL LEGEND

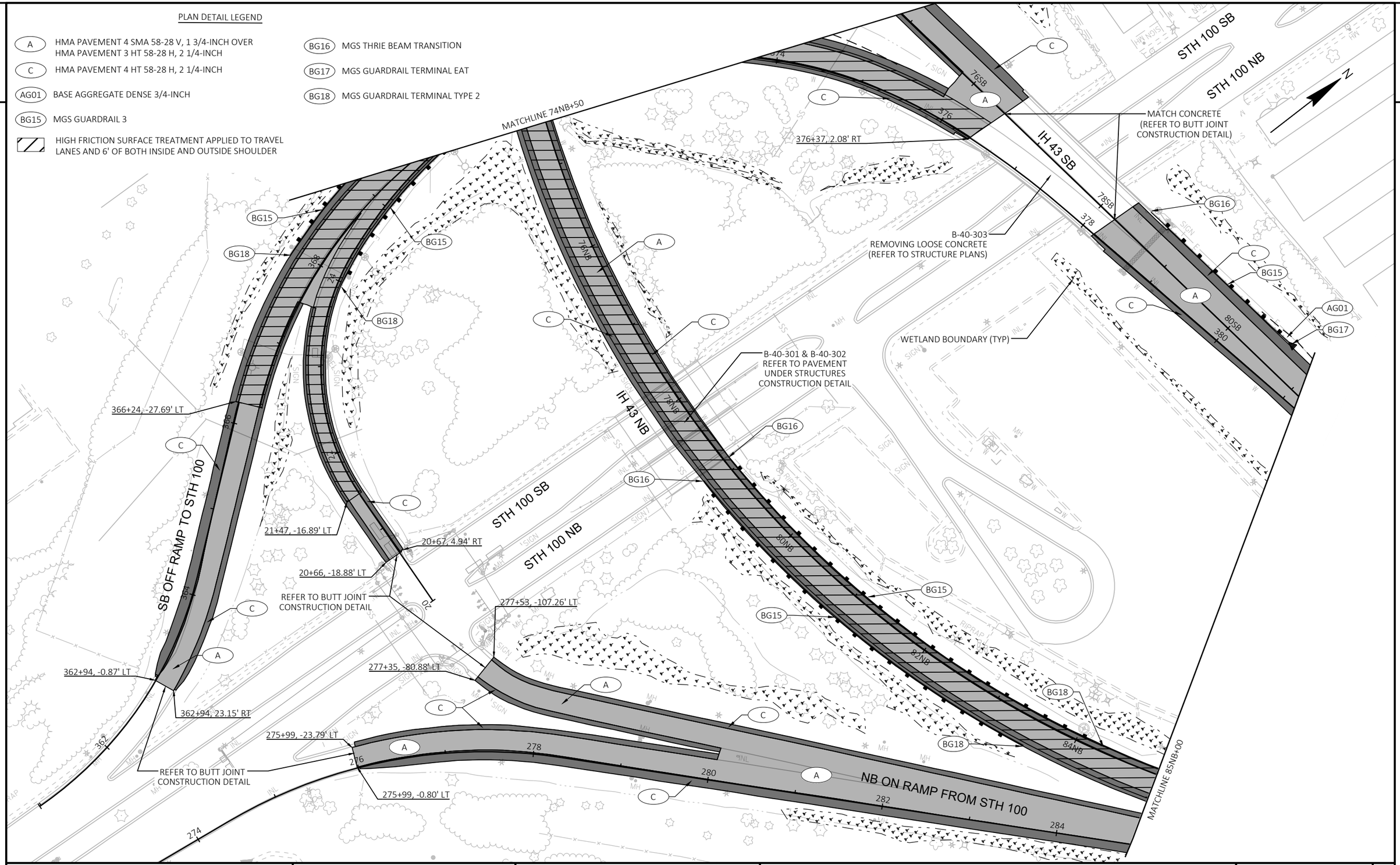
A	HMA PAVEMENT 4 SMA 58-28 V, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH	BG17	MGS GUARDRAIL TERMINAL EAT
C	HMA PAVEMENT 4 HT 58-28 H, 2 1/4-INCH	BG18	MGS GUARDRAIL TERMINAL TYPE 2
AG01	BASE AGGREGATE DENSE 3/4-INCH	PV03	CONCRETE SURFACE DRAINS
BG15	MGS GUARDRAIL 3	CG13	CONCRETE GUTTER 24-INCH
BG16	MGS THRIE BEAM TRANSITION		
	HIGH FRICTION SURFACE TREATMENT APPLIED TO TRAVEL LANES AND 6' OF BOTH INSIDE AND OUTSIDE SHOULDER		

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 73	E

2

PLAN DETAIL LEGEND

- A — HMA PAVEMENT 4 SMA 58-28 V, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH
- C — HMA PAVEMENT 4 HT 58-28 H, 2 1/4-INCH
- AG01 — BASE AGGREGATE DENSE 3/4-INCH
- BG15 — MGS GUARDRAIL 3
- HIGH FRICTION SURFACE TREATMENT APPLIED TO TRAVEL LANES AND 6' OF BOTH INSIDE AND OUTSIDE SHOULDER
- BG16 — MGS THRIE BEAM TRANSITION
- BG17 — MGS GUARDRAIL TERMINAL EAT
- BG18 — MGS GUARDRAIL TERMINAL TYPE 2



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 74	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021210
PLOT DATE : 10/22/2021 9:26 AM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

W LAYTON AVE

MATCHLINE 100NB+50

IH 43 SB/US 45 SB

IH 43 NB/US 45 NB

94SB

96SB

98NB

100NB

298

296

294

292

290

288

286

82SB

84SB

86SB

88SB

90SB

92SB

94NB

92NB

90NB

88NB

86NB

AG01

CG13

PV03

C

A

BG15

BG16

BG17

83SB+40, -46.86' LT

85SB+40, -46.78' LT

85SB+53, -46.81' LT

87SB+47, -46.94' LT

87SB+60, -46.89' LT

89SB+60, -46.61' LT

89SB+66, -46.65' LT

MATCH CONCRETE
(REFER TO BUTT JOINT
CONSTRUCTION DETAIL)

NB ON RAMP FROM STH 100

87NB+16, -5.99' LT

WETLAND BOUNDARY (TYP)

MATCHLINE 85NB+00

PLAN DETAIL LEGEND

A	HMA PAVEMENT 4 SMA 58-28 V, 1 3/4-INCH OVER HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH	BG16	MGS THRIE BEAM TRANSITION
C	HMA PAVEMENT 4 HT 58-28 H, 2 1/4-INCH	BG17	MGS GUARDRAIL TERMINAL EAT
AG01	BASE AGGREGATE DENSE 3/4-INCH	PV03	CONCRETE SURFACE DRAINS
BG15	MGS GUARDRAIL 3	CG13	CONCRETE GUTTER 24-INCH
	HIGH FRICTION SURFACE TREATMENT APPLIED TO TRAVEL LANES AND 6' OF BOTH INSIDE AND OUTSIDE SHOULDER		

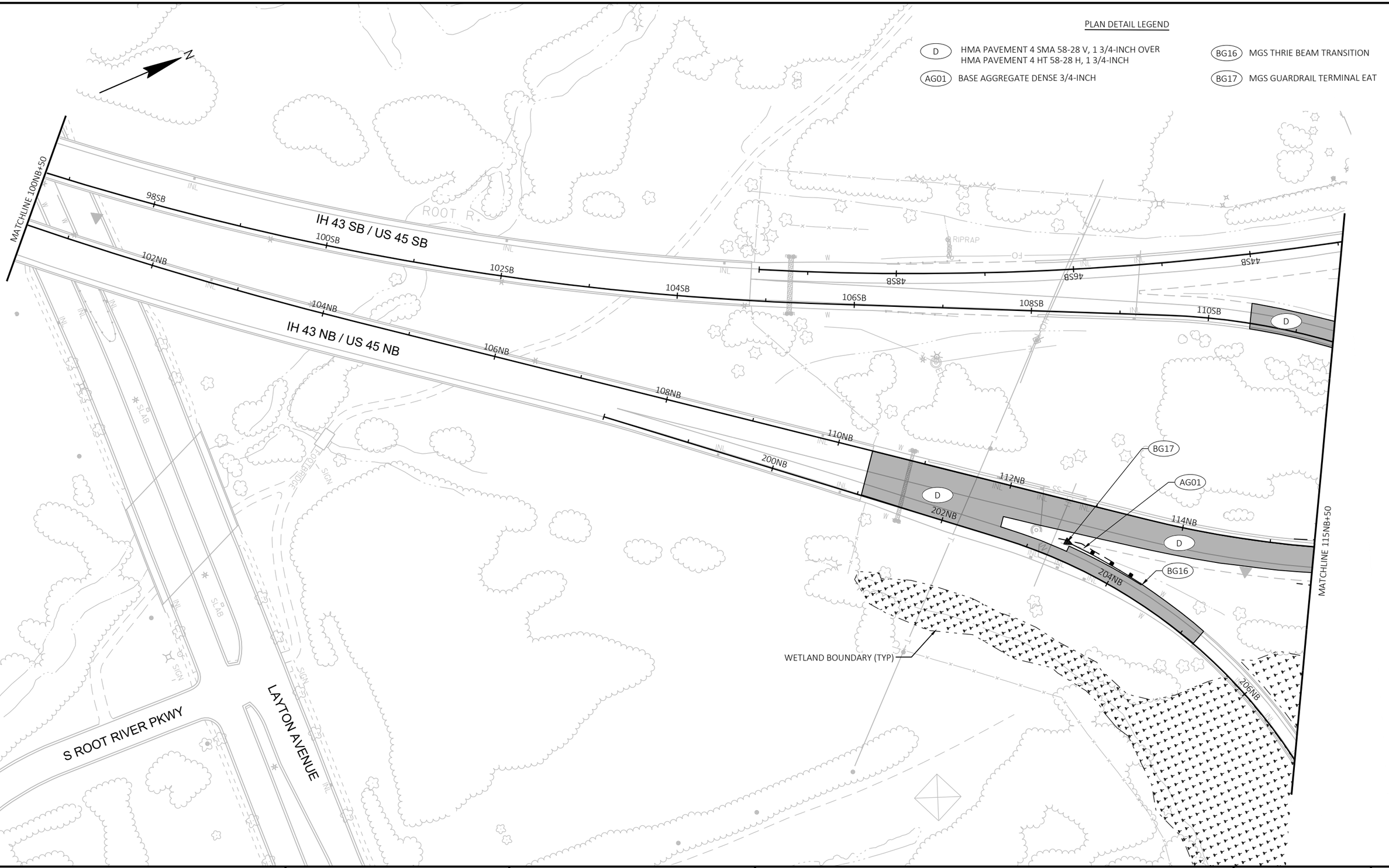
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 75	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021211
PLOT DATE : 10/22/2021 9:28 AM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

PLAN DETAIL LEGEND

- D — HMA PAVEMENT 4 SMA 58-28 V, 1 3/4-INCH OVER HMA PAVEMENT 4 HT 58-28 H, 1 3/4-INCH
- AG01 — BASE AGGREGATE DENSE 3/4-INCH
- BG16 — MGS THRIE BEAM TRANSITION
- BG17 — MGS GUARDRAIL TERMINAL EAT



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 76	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021212

PLOT DATE : 10/22/2021 9:31 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

NORTH-TO-WEST RAMP (US 45 SB)

NORTH-TO-EAST RAMP (IH 41 SB/IH 894 EB)

WEST-TO-NORTH RAMP (US 45 NB)

EAST-TO-NORTH RAMP (IH 41 NB/IH 894 WB)

EAST-TO-WEST RAMP (IH 43 SB)

WEST-TO-EAST RAMP (IH 43 NB)

ATHLETIC FIELD

FLAG

RIPRAP

END MILL & OVERLAY
(IH 43 SB)
STA 119SB+07

END MILL & OVERLAY
(WEST-TO-NORTH RAMP)
STA 118NB+79

WETLAND BOUNDARY (TYP)

END PROJECT 1090-08-71
STA 210NB+80

MATCH LINE 115NB+50

124SB
122SB
120SB
118SB
116SB
42SB
40SB
38SB
36SB
124NB
122NB
120NB
118NB
116NB
114SB
112SB
212NB
210NB
208NB

BG16
BG17
AG01
D

PLAN DETAIL LEGEND

- D — HMA PAVEMENT 4 SMA 58-28 V, 1 3/4-INCH OVER HMA PAVEMENT 4 HT 58-28 H, 1 3/4-INCH
- AG01 — BASE AGGREGATE DENSE 3/4-INCH
- BG16 — MGS THRIE BEAM TRANSITION
- BG17 — MGS GUARDRAIL TERMINAL EAT

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 77	E

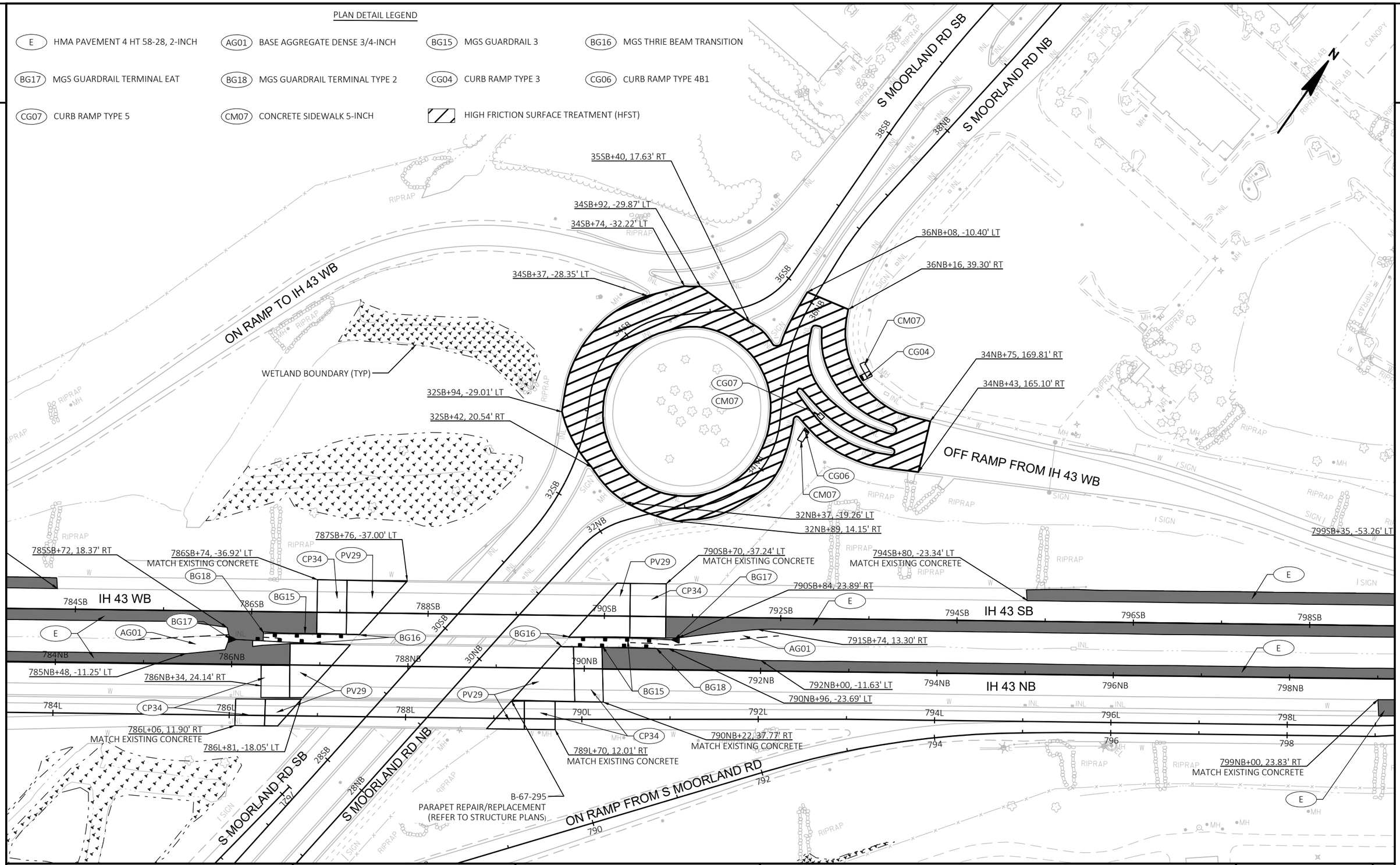
FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021213

PLOT DATE : 10/22/2021 9:33 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

PLAN DETAIL LEGEND

- E — HMA PAVEMENT 4 HT 58-28, 2-INCH
- AG01 — BASE AGGREGATE DENSE 3/4-INCH
- BG15 — MGS GUARDRAIL 3
- BG16 — MGS THRIE BEAM TRANSITION
- BG17 — MGS GUARDRAIL TERMINAL EAT
- BG18 — MGS GUARDRAIL TERMINAL TYPE 2
- CG04 — CURB RAMP TYPE 3
- CG06 — CURB RAMP TYPE 4B1
- CG07 — CURB RAMP TYPE 5
- CM07 — CONCRETE SIDEWALK 5-INCH
- HIGH FRICTION SURFACE TREATMENT (HFST)



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 78	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021214

PLOT DATE : 7/2/2021 8:27 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

EROSION CONTROL LEGEND

- INLET PROTECTION TYPE (B,C,D)
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- #### EROSION MAT CLASS I, TYPE B TOPSOIL, FERTILIZER TYPE B & SEEDING MIXTURE NO.20
- SILT FENCE
- HEAVY DUTY SILT FENCE

780SB on ramp

774SB 776SB 778SB 780SB 782SB 784SB 786SB 788SB

IH 43 SB

774NB 776NB 778NB 780NB 782NB 784NB 786NB 788NB

IH 43 NB

BEGIN PROJECT 1090-08-71
STA 780NB+00

780L 782L 784L 786L 788L

IH 43 NB ON RAMP (LOOP) FROM CTH O SB - RAMP L

WETLAND BOUNDARY (TYP)

778L

C-67-013
SE WING WALL
REPAIR/REPLACEMENT
(REFER TO STRUCTURE PLANS)

30SB

28SB

28NB

S MOORLAND RD

MATCHLINE 788NB+50

32SB

32NB

30NB

790SB 792SB 794SB 796SB 798SB 800SB 802SB

790NB 792NB 794NB 796NB 798NB 800NB 802NB

IH 43 NB

790L 792L 794L 796L 798L 800L 802L

IH 43 NB ON RAMP FROM CTH O NB

MATCHLINE 788NB+50

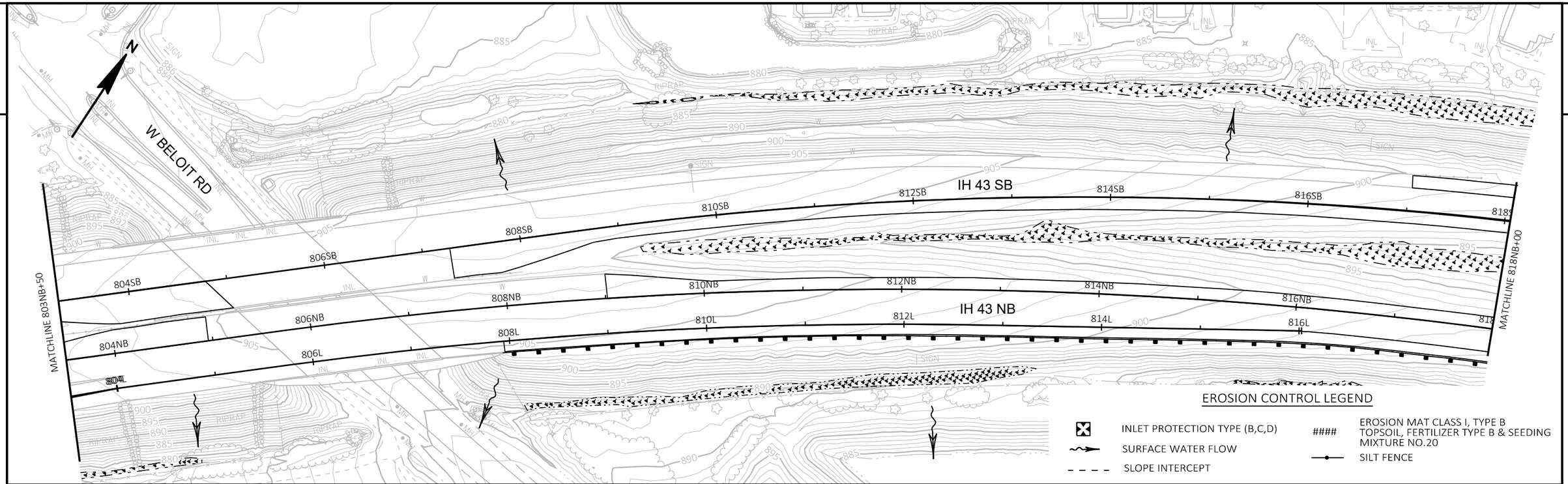
MATCHLINE 803NB+50

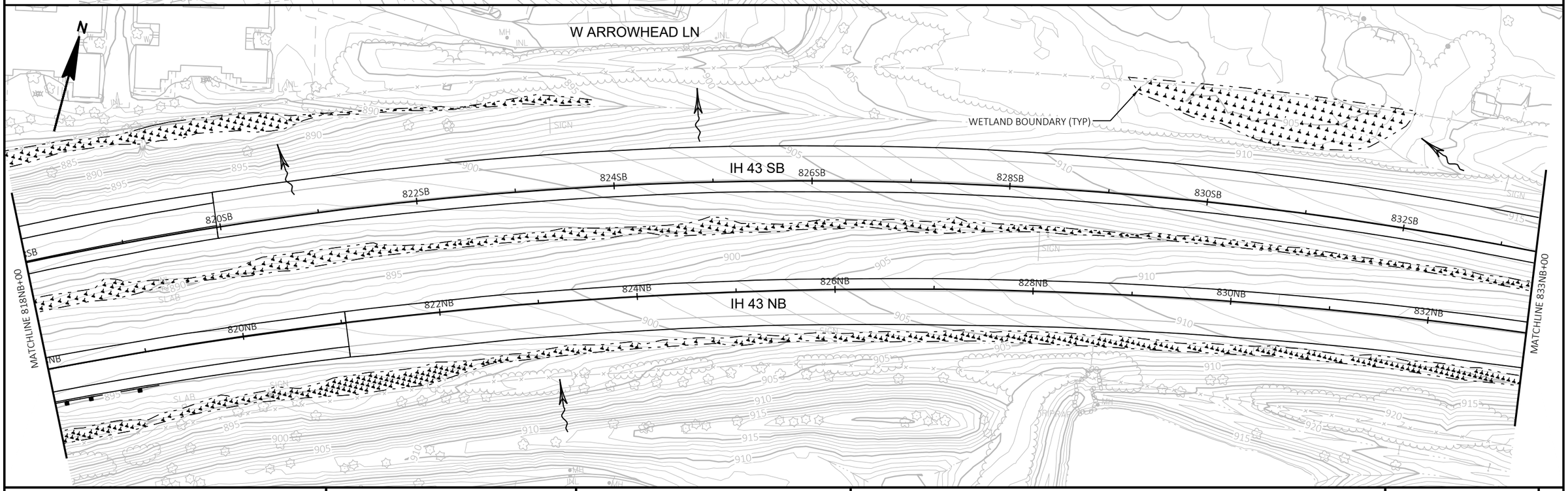
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	EROSION CONTROL	SHEET 79	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022001

PLOT DATE : 7/2/2021 9:27 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

2





PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	EROSION CONTROL	SHEET 80	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022002
PLOT DATE : 7/13/2021 4:09 PM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

MATCHLINE 833NB+00

834SB 836SB 838SB 840SB 842SB 844SB 846SB

IH 43 SB

834NB 836NB 838NB 840NB 842NB 844NB 846NB

IH 43 NB

WETLAND BOUNDARY (TYP)

MATCHLINE 847NB+50

2

N

MATCHLINE 847NB+50

8SB 850SB 852SB 854SB 856SB 858SB 860SB

IH 43 SB

848NB 850NB 852NB 854NB 856NB 858NB 860NB

IH 43 NB

S SUNNY SLOPE RD

MATCHLINE 861NB+50

EROSION CONTROL LEGEND

- INLET PROTECTION TYPE (B,C,D)
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- #### EROSION MAT CLASS I, TYPE B TOPSOIL, FERTILIZER TYPE B & SEEDING MIXTURE NO.20 (WEST OF SUNNY SLOPE RD) MIXTURE NO.70 & SEEDING NURSE CROP (EAST OF SUNNY SLOPE RD)
- SILT FENCE
- HEAVY DUTY SILT FENCE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	EROSION CONTROL	SHEET 81	E

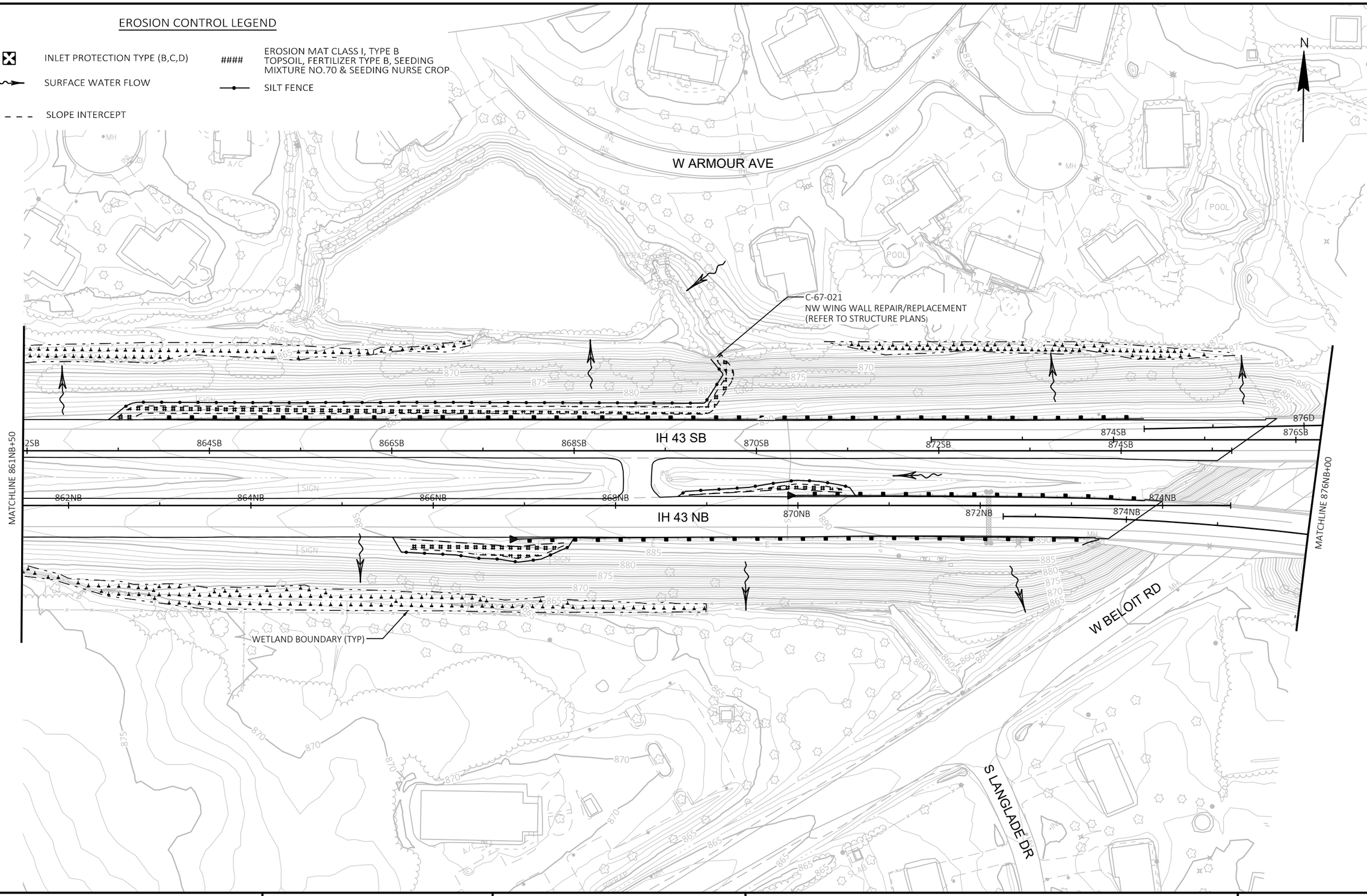
FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022003

PLOT DATE : 4/8/2021 1:00 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : I IN: 100FT

2

EROSION CONTROL LEGEND

- INLET PROTECTION TYPE (B,C,D)
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- #### EROSION MAT CLASS I, TYPE B TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO.70 & SEEDING NURSE CROP
- SILT FENCE



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	EROSION CONTROL	SHEET 82	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022004
PLOT DATE : 4/9/2021 7:34 AM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

2

EROSION CONTROL LEGEND

- INLET PROTECTION TYPE (B,C,D)
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- #### EROSION MAT CLASS I, TYPE B TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO.70 & SEEDING NURSE CROP
- SILT FENCE

N

W BELOIT RD

WETLAND BOUNDARY (TYP)

LAYTON RAMP D

IH 43 SB

878D 878SB 880SB 882SB 884SB 886SB 888SB 888D 886D 884D 882D 880D

MATCHLINE 876NB+00

IH 43 NB

878NB 880NB 882A 882NB 884A 884NB 886A 886NB 888NB 888A 890A 890NB

LAYTON RAMP A

MATCHLINE 890NB+50

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	EROSION CONTROL	SHEET 83	E

N

LAYTON RAMP D

LAYTON RAMP A

IH 43 SB

IH 43 NB

S 124TH ST

MATCHLINE 890NB+50

MATCHLINE 21+00

REFER TO DETAIL A

WETLAND BOUNDARY (TYP)

890D 892D 894D 896D 898D 900D 902D

890A 892A 894A 896A 898A 900A 902A

890SB 892SB 894SB 896SB 898SB 900SB 902SB

892NB 894NB 896NB 898NB 900NB 902NB

EROSION CONTROL LEGEND

- INLET PROTECTION TYPE (A,B,C,D)
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- RIP RAP
- #### EROSION MAT CLASS I, TYPE B TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO.70 & SEEDING NURSE CROP
- SILT FENCE
- HEAVY DUTY SILT FENCE

DETAIL A
SCALE 1 IN:20 FT

SLOPE INTERCEPT SOD SOD B A D

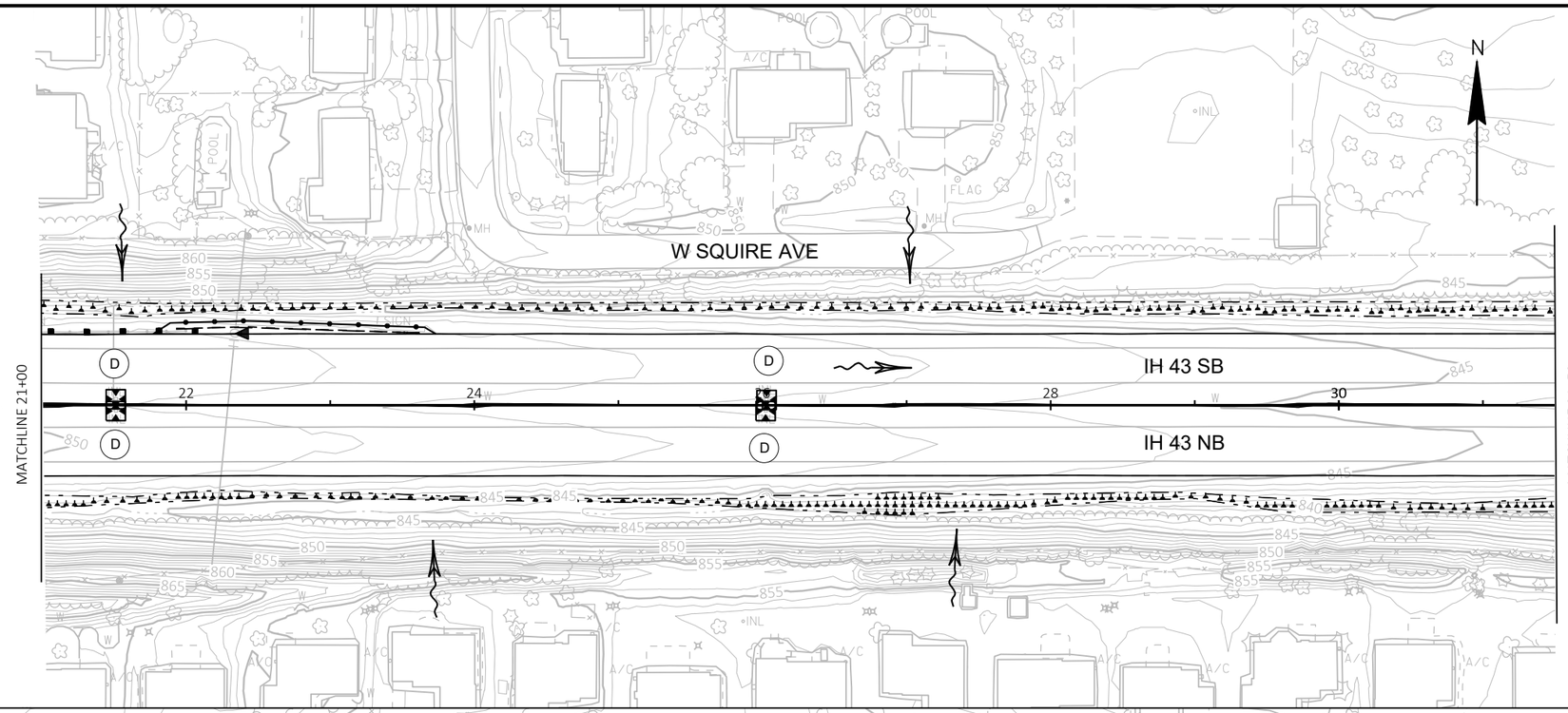
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	EROSION CONTROL	SHEET 84	E

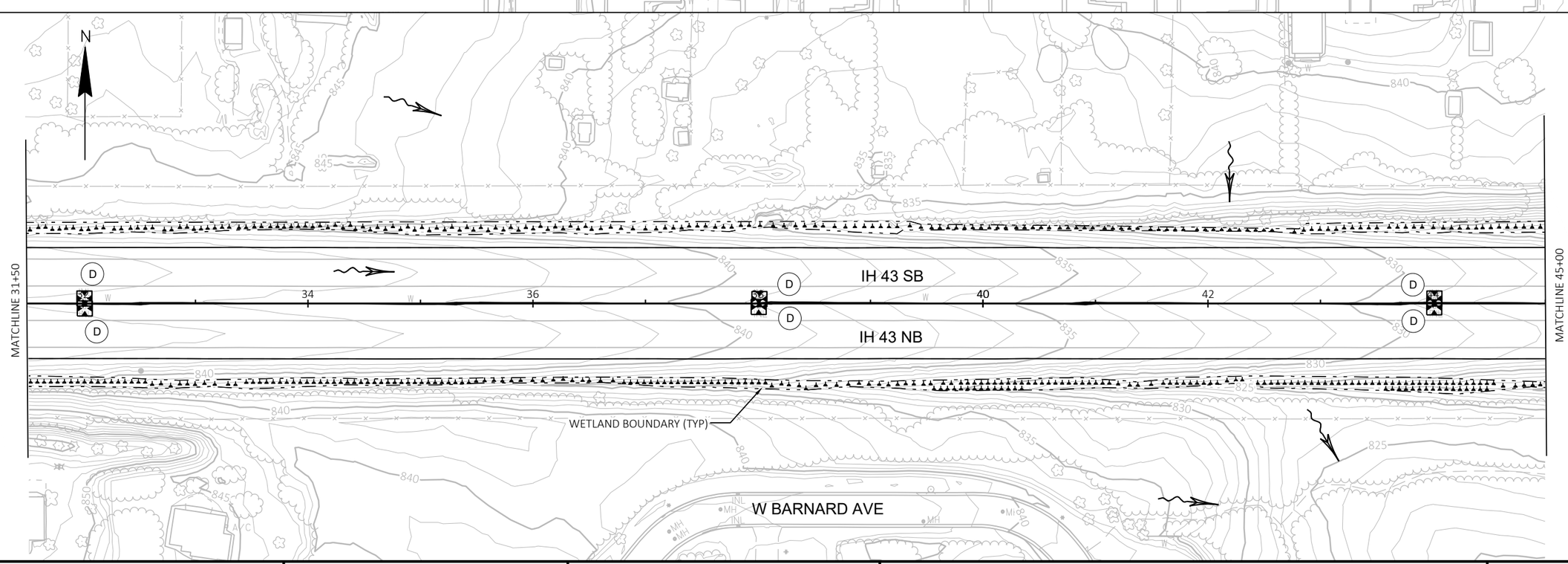
FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022006
PLOT DATE : 7/6/2021 3:44 PM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

EROSION CONTROL LEGEND

- INLET PROTECTION TYPE (B,C,D)
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- SILT FENCE
- #### EROSION MAT CLASS I, TYPE B TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO.70 & SEEDING NURSE CROP





PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	EROSION CONTROL	SHEET 85	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022007

PLOT DATE : 4/9/2021 7:41 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

W LAYTON AVE

S 116TH ST

CULVERT PIPE LINERS 36-INCH

IH 43 SB

IH 43 NB

MATCHLINE 45+00

MATCHLINE 59+50

WETLAND BOUNDARY (TYP)

CULVERT PIPE LINERS 36-INCH

BASKETBALL COURT

POOL

ATHLETIC FIELD

RIPRAP

N

EROSION CONTROL LEGEND

- INLET PROTECTION TYPE (B,C,D)
- SURFACE WATER FLOW
- SILT FENCE
- SLOPE INTERCEPT
- #### EROSION MAT CLASS I, TYPE B TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO.70 & SEEDING NURSE CROP
- HEAVY DUTY SILT FENCE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	EROSION CONTROL	SHEET 86	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022008

PLOT DATE : 7/21/2021 8:54 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

RIPRAP CHANNEL
REFER TO CONSTRUCTION DETAIL,"RIPRAP MEDIUM - CHANNEL"

IH 43 SB

IH 43 NB

MATCHLINE 59+50

MATCHLINE 74NB+50

WETLAND BOUNDARY (TYP)

EROSION CONTROL LEGEND

- INLET PROTECTION TYPE (B,C,D)
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- HEAVY DUTY SILT FENCE
- SILT FENCE
- #### EROSION MAT CLASS I, TYPE B TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO.70 & SEEDING NURSE CROP
- RIP RAP

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	EROSION CONTROL	SHEET 87	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022009

PLOT DATE : 7/3/2021 1:25 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

EROSION CONTROL LEGEND

- INLET PROTECTION TYPE (B,C,D)
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- #### EROSION MAT CLASS I, TYPE B TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO.70 & SEEDING NURSE CROP
- SILT FENCE

MATCHLINE 74NB+50

IH 43 NB

SB OFF RAMP TO STH 100

STH 100 SB

STH 100 NB

IH 43 SB

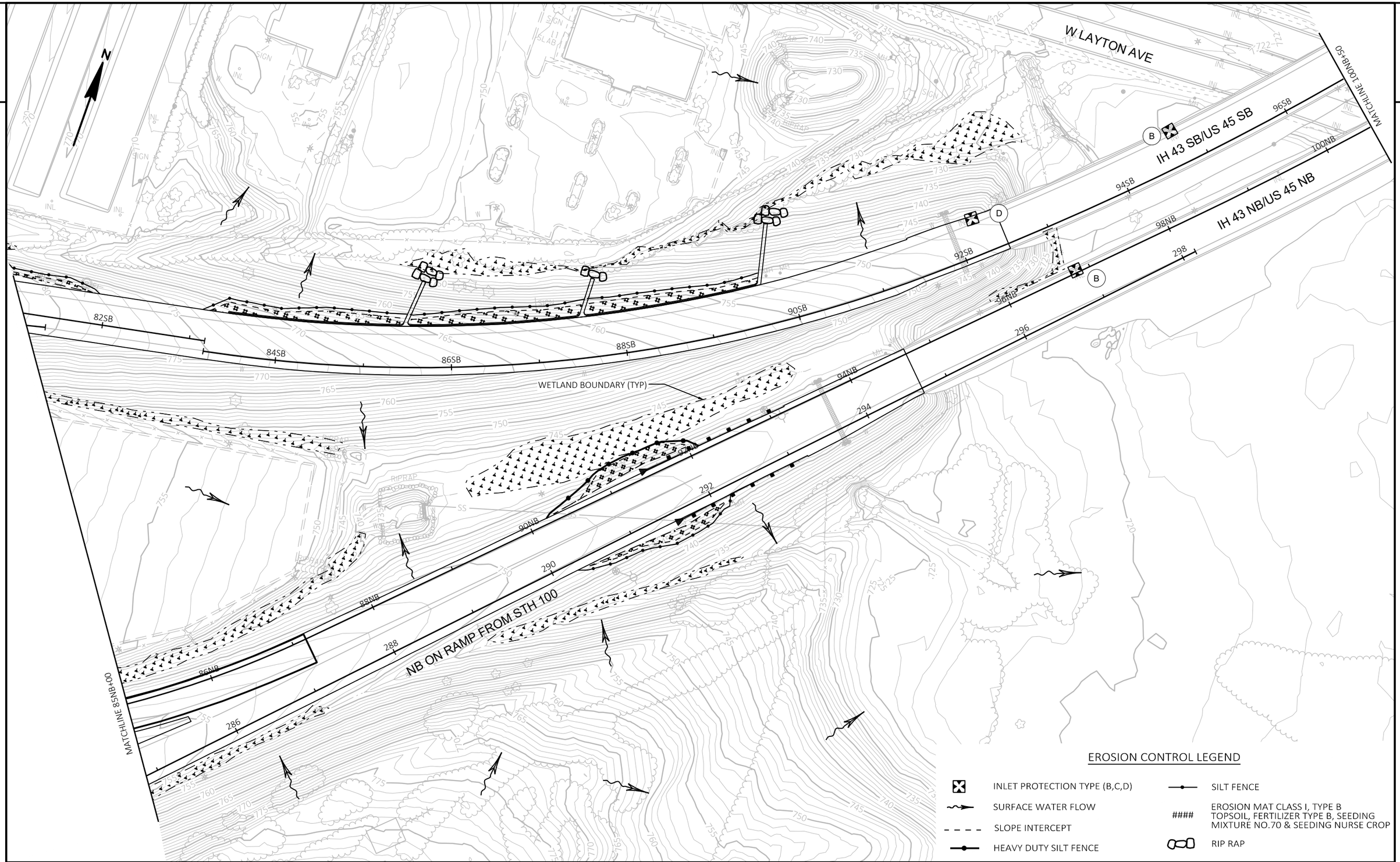
NB ON RAMP FROM STH 100

WETLAND BOUNDARY (TYP)

MATCHLINE 85NB+00

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	EROSION CONTROL	SHEET 88	E

2



EROSION CONTROL LEGEND

- INLET PROTECTION TYPE (B,C,D)
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- HEAVY DUTY SILT FENCE
- SILT FENCE
- #### EROSION MAT CLASS I, TYPE B TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO.70 & SEEDING NURSE CROP
- RIP RAP

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	EROSION CONTROL	SHEET 89	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022011

PLOT DATE : 7/3/2021 1:43 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

EROSION CONTROL LEGEND

- INLET PROTECTION TYPE (B,C,D)
- SURFACE WATER FLOW
- #### EROSION MAT CLASS I, TYPE B TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO.70 & SEEDING NURSE CROP
- SLOPE INTERCEPT
- SILT FENCE

N

MATCHLINE 100NB+50

IH 43 SB / US 45 SB

IH 43 NB / US 45 NB

98SB 100SB 102SB 104SB 106SB 108SB 110SB

102NB 104NB 106NB 108NB 110NB 112NB 114NB

200NB 202NB 204NB 206NB

48SB 46SB 44SB

ROOT R.

RIPRAP

WETLAND BOUNDARY (TYP)

S ROOT RIVER PKWY

LAYTON AVENUE

MATCHLINE 115NB+50

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	EROSION CONTROL	SHEET 90	E

2

2

N

NORTH-TO-WEST RAMP (US 45 SB)

NORTH-TO-EAST RAMP (IH 41 SB/IH 894 EB)

WEST-TO-NORTH RAMP (US 45 NB)

EAST-TO-NORTH RAMP (IH 41 NB/IH 894 WB)

EAST-TO-WEST RAMP (IH 43 SB)

WEST-TO-EAST RAMP (IH 43 NB)

ATHLETIC FIELD

RIPRAP

END MILL & OVERLAY
(IH 43 SB)
STA 119SB+07

END MILL & OVERLAY
(WEST-TO-NORTH RAMP)
STA 118NB+79

WETLAND BOUNDARY (TYP)

END PROJECT 1090-08-71
STA 210NB+80

MATCH LINE 115NB+50

365SB
385SB
405SB
425SB
124NB
120NB
124SB
122SB
120SB
118SB
116SB
114SB
112SB
118NB
116NB
114NB
212NB
210NB
208NB

EROSION CONTROL LEGEND

- INLET PROTECTION TYPE (B,C,D)
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- #### EROSION MAT CLASS I, TYPE B TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO.70 & SEEDING NURSE CROP
- SILT FENCE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN DETAILS	SHEET 91	E

2

EROSION CONTROL LEGEND

- INLET PROTECTION TYPE (B,C,D)
- SURFACE WATER FLOW
- SLOPE INTERCEPT
- #### EROSION MAT CLASS I, TYPE B TOPSOIL, FERTILIZER TYPE B, SEEDING MIXTURE NO.20
- SILT FENCE
- HEAVY DUTY SILT FENCE

N

ON RAMP TO IH 43 WB

790SB on ramp

WETLAND BOUNDARY (TYP)

S MOORLAND RD

38SB

38NB

36SB

36NB

34SB

34NB

32SB

32NB

30SB

30NB

28SB

28NB

OFF RAMP FROM IH 43 WB

IH 43 SB

IH 43 NB

IH 43 NB ON RAMP FROM CTH O NB

784SB 786SB 788SB 790SB 792SB 794SB 796SB 798SB

784NB 786NB 788NB 790NB 792NB 794NB 796NB 798NB

784L 786L 788L 790L 792L 794L 796L 798L

SLOPE INTERCEPT

SCALE 1 IN:20 FT

2

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	EROSION CONTROL	SHEET 92	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022014

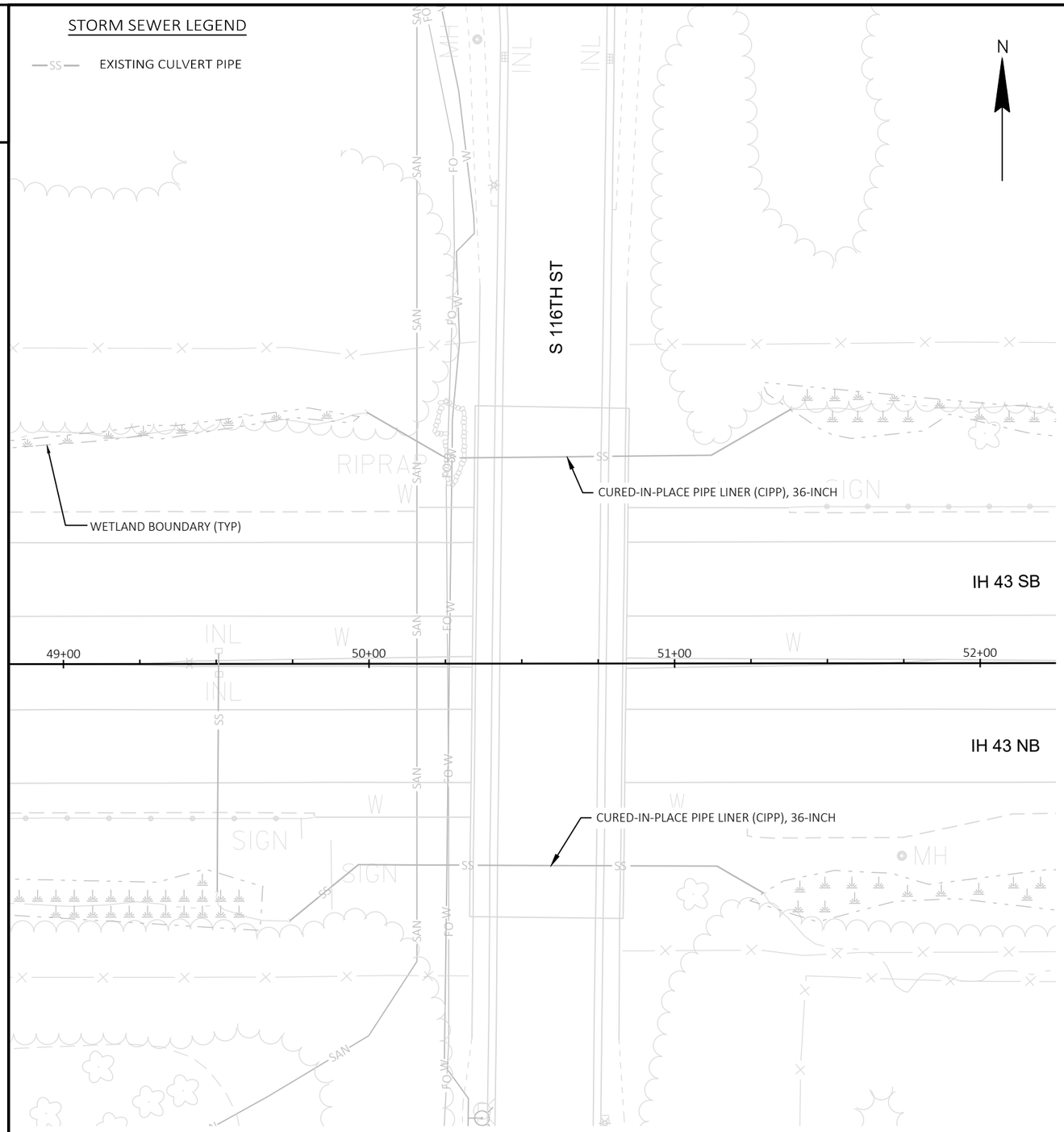
PLOT DATE : 7/3/2021 1:48 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

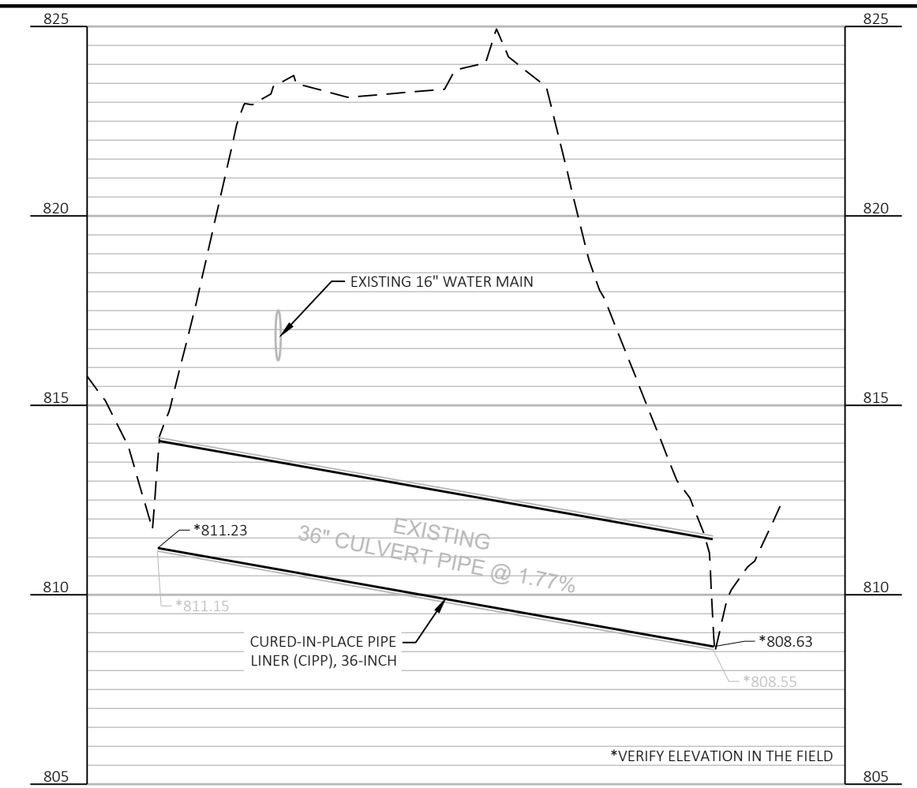
WISDOT/CADDS SHEET 42

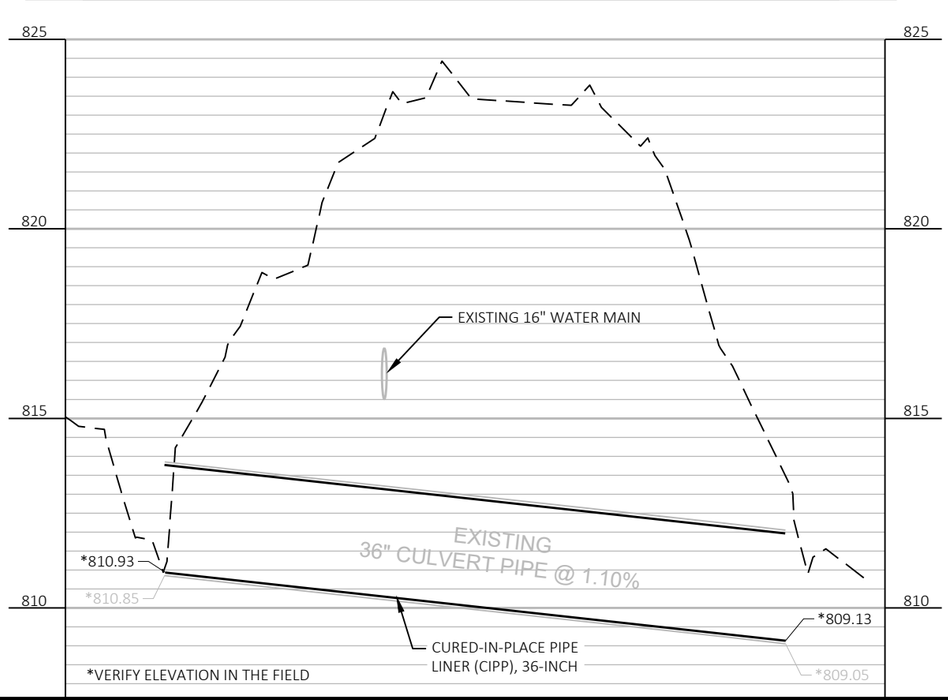
2

STORM SEWER LEGEND

SS EXISTING CULVERT PIPE





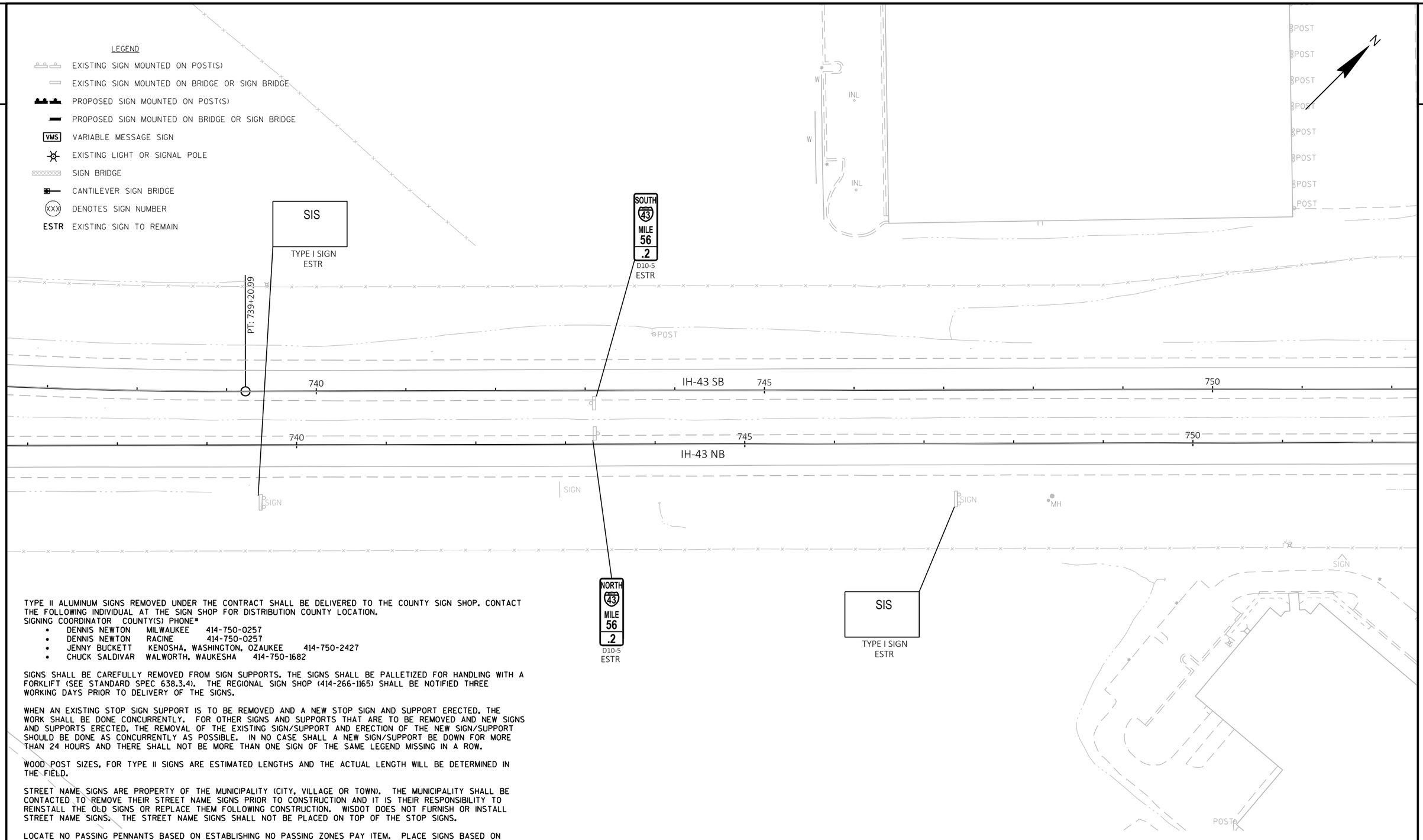


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	STORM SEWER	SHEET 93	E

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN



TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE COUNTY SIGN SHOP. CONTACT THE FOLLOWING INDIVIDUAL AT THE SIGN SHOP FOR DISTRIBUTION COUNTY LOCATION.
SIGNING COORDINATOR COUNTY(S) PHONE#

- DENNIS NEWTON MILWAUKEE 414-750-0257
- DENNIS NEWTON RACINE 414-750-0257
- JENNY BUCKETT KENOSHA, WASHINGTON, OZAUKEE 414-750-2427
- CHUCK SALDIVAR WALWORTH, WAUKESHA 414-750-1682

SIGNS SHALL BE CAREFULLY REMOVED FROM SIGN SUPPORTS. THE SIGNS SHALL BE PALLETIZED FOR HANDLING WITH A FORKLIFT (SEE STANDARD SPEC 638.3.4). THE REGIONAL SIGN SHOP (414-266-1165) SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

WHEN AN EXISTING STOP SIGN SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED, THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POST SIZES, FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

STREET NAME SIGNS ARE PROPERTY OF THE MUNICIPALITY (CITY, VILLAGE OR TOWN). THE MUNICIPALITY SHALL BE CONTACTED TO REMOVE THEIR STREET NAME SIGNS PRIOR TO CONSTRUCTION AND IT IS THEIR RESPONSIBILITY TO REINSTALL THE OLD SIGNS OR REPLACE THEM FOLLOWING CONSTRUCTION. WISDOT DOES NOT FURNISH OR INSTALL STREET NAME SIGNS. THE STREET NAME SIGNS SHALL NOT BE PLACED ON TOP OF THE STOP SIGNS.

LOCATE NO PASSING PENNANTS BASED ON ESTABLISHING NO PASSING ZONES PAY ITEM. PLACE SIGNS BASED ON WHERE THE PAVEMENT MARKING FOR NO PASSING ZONES BEGIN.

BOX OUT OR CORING OF CONCRETE FOR SIGN POSTS IS INCIDENTAL TO THE POST.

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 94	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020301_PS
PLOT DATE : 6/14/2021 3:31 PM
PLOT BY : MARTENS, KAREN L
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN

N

PI: 752+92.28

PI: 753+21.73

SLOWER TRAFFIC KEEP RIGHT
R4-3
ESTR

SOUTH 43 MILE 56 .4
D10-5
ESTR

TRAVEL INFO CALL 511
D12-5
ESTR

R3-4
EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
R3-4A
ESTR

SPEED LIMIT 70
R2-1
ESTR

755

IH-43 SB

760

BP: 762+58.85

765

SOUTH 43 MILE 56 .6
D10-5
ESTR

SOUTH INTERSTATE 43
J4-1
ESTR

IH-43 NB

NORTH 43 MILE 56 .4
D10-5
ESTR

SIS
TYPE I SIGN
ESTR

R3-4
EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
R3-4A
ESTR

EXIT 57
1A
1
0
Moorland Rd
TYPE I SIGN
REUSE STEEL POSTS

NORTH 43 MILE 56 .6
D10-5
ESTR

EXIT 57
0
Moorland Rd
REMOVE

SHEET 2 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 95	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020302_PS

PLOT DATE : 6/14/2021 3:32 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN

IH-43 SB

IH-43 NB

IH 43 SB ON RAMP

IH 43 NB OFF RAMP

IH 43 NB ON RAMP

BP: 772+09.85

PI: 775+09.84

PC: 779+05.17

PC: 769+75.39

PT: 780+24.39

PT: 777+62.92

SOUTH 43 MILE 56 .8 D10-5 ESTR

NORTH 43 MILE 56 .8 D10-5 ESTR

W4-2R ESTR

SIS ESTR

EXIT 57 E5-1A ESTR

W2-6 ROUNDABOUT AHEAD W2-6P 15 MPH W13-1 ESTR

W3-2 ESTR

PARK & RIDE D4-2L ESTR

D4-55L ESTR

EMERGENCY MEDICAL CARE D9-13C

MB6-1 ESTR

W1-6 ESTR

W4-2R MOVE

SHEET 3 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 96 E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020303_PS

PLOT DATE : 6/14/2021 3:34 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN

IH 43 NB OFF RAMP

IH 43 NB ON RAMP

PT: 777+62.92

PC: 778+77.87

PT: 780+48.17

ALTERNATE NORTH INTERSTATE 43
J3-1
ESTR

ALTERNATE EAST INTERSTATE 94
J3-1
ESTR

EXISTING OVERHEAD SIGN STRUCTURE TO REMAIN
S-67-272

EXISTING OVERHEAD SIGN STRUCTURE TO REMAIN
S-67-275

PI: 23+00.00
PT: 23+06.59

PC: 21+91.59

BP: 782+55.76

STA AHEAD = 23+00.00
STA BACK = 23+25.68

PC: 784+55.07

BP: 786+88.42

PI: 786+03.65

CTH O (MOORLAND RD)

ROCK RIDGE RD

PC: 767+98.72

PC: 780+38.72
PI: 781+36.23
PT: 782+33.74

PC: 779+90.20
PI: 781+17.22
PT: 782+44.24

PC: 20+00.00
PT: 20+17.22

STA AHEAD = 20+00.00
STA BACK = 20+27.99

PT: 782+99.81

PC: 17+75.32
PT: 17+78.39

PC: 18+72.91
PI: 781+81.27
PT: 783+63.74

PC: 16+30.35

PC: 16+64.59

BP: 14+59.98

3
NORTH
Moorland Rd
USE LEFT LANE
TYPE I SIGN
I-BEAMS INCIDENTAL

4
SOUTH
Moorland Rd
Rock Ridge Rd
USE RIGHT LANE
TYPE I SIGN
I-BEAMS INCIDENTAL

NORTH
Moorland Rd
USE LEFT LANE
REMOVE

SOUTH
Moorland Rd
Rock Ridge Rd
USE RIGHT LANE
REMOVE

7 8
NORTH
INTERSTATE 43
ONLY
D16-1
TYPE I SIGN
I-BEAMS INCIDENTAL

NORTH
INTERSTATE 43
ONLY
REMOVE

5
Moorland Rd
Rock Ridge Rd
TYPE I SIGN
I-BEAMS INCIDENTAL

6
Moorland Rd
TYPE I SIGN
I-BEAMS INCIDENTAL

Moorland Rd
Rock Ridge Rd
REMOVE

Moorland Rd
REMOVE

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 97	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020303A_PS

PLOT DATE : 6/14/2021 3:35 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN

IH-43 SB ON RAMP

PC: 787+57.28

PT: 784+60.10

IH-43 SB OFF RAMP

PC: 34+98.71

PT: 34+59.80

PC: 36+56.59

PT: 36+23.46

PT: 36+08.10

PC: 35+97.51

STA AHEAD = 36+99.99

STA BACK = 37+49.38

PC: 33+12.70

PT: 33+04.24

PC: 32+14.96

PC: 31+41.12

PC: 31+72.30

PT: 30+42.13

PC: 33+37.08

PT: 33+21.32

PT: 34+60.32

PC: 22+00.54

PC: 33+37.08

PT: 791+64.02

PT: 791+91.15

PT: 793+24.19

PC: 796+03.78

9 — NORTH 43 MILE 57 .0 — D10-5 MOVE

10 — SOUTH 43 MILE 57 .0 — D10-5 MOVE

11 — W5-52L MOVE 4 FT MOUNT HEIGHT

W4-1R ESTR

W5-52R ESTR

IH-43 SB

IH-43 NB

CTH O (MOORLAND RD)

PI: 30+42.13

PI: 27+76.13

PI: 23+00.07

PC: 784+55.07

PT: 761+88.42

PI: 788+03.63

PI: 780+99.84

PI: 792+99.86

PI: 794+99.85

PI: 795+45.90

PI: 796+46.23

12 — W5-52L MOVE

W4-2R ESTR

W5-52R ESTR

IH-43 NB ON RAMP

W4-1R ESTR

SHEET 4 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 98	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020304_PS

PLOT DATE : 6/14/2021 3:36 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN

Moorland Rd
REMOVE

NORTH INTERSTATE 43
REMOVE

SOUTH INTERSTATE 43
REMOVE

23
Moorland Rd
TYPE I SIGN
I-BEAMS INCIDENTAL

24
NORTH INTERSTATE 43
TYPE I SIGN
I-BEAMS INCIDENTAL

25
SOUTH INTERSTATE 43
TYPE I SIGN
I-BEAMS INCIDENTAL

EP: 797+79.84
PI: 39+49.99
PT: 796+54.90
PI: 39+82.38
PI: 39+15.41
STA AHEAD = 39+49.99
STA BACK = 39+96.58
CTH O (MOORLAND RD)
EXISTING OVERHEAD SIGN STRUCTURE
TO REMAIN
S-67-271

PC: 795+79.90
PT: 794+48.01
PC: 37+80.13
PC: 794+24.25
PT: 36+99.99
PT: 37+36.99
PT: 793+67.47
PC: 36+56.59
PT: 36+08.10
PC: 35+97.51
PT: 34+59.80
PC: 791+14.08
PT: 791+14.08
PC: 787+57.28
IH-43 SB ON RAMP
790
795
800

13 ONE WAY R6-1L
14 DO NOT ENTER R5-1
15 WRONG WAY R5-1A
MOVE

PC: 33+12.70
PT: 33+04.24
PC: 32+13.95
PC: 31+41.12
PC: 31+72.30
PI: 30+42.13
PC: 34+98.71
PT: 33+60.32
PC: 33+04.32
PC: 32+37.38
PT: 32+13.95

16 YIELD R1-2
17 ONE WAY R6-2R
MOVE

WRONG WAY R5-1A
ESTR

18 W11-2
19 W16-7L
MOVE

YIELD R1-2
ONE WAY R6-2R
ESTR

ALTERNATE WEST INTERSTATE 94
J3-1
ESTR

PC: 796+03.78
PC: 796+64.02
PT: 791+91.15
PC: 793+24.19

W11-2 AHEAD W16-9P
ESTR

PT: 797+87.77
PC: 798+08.39

EXISTING OVERHEAD SIGN STRUCTURE
TO REMAIN
S-67-967

IH-43 SB OFF RAMP

SOUTH Moorland Rd
REMOVE

NORTH Moorland Rd Beloit Rd WEST
REMOVE

NORTH Moorland Rd Beloit Rd EAST
REMOVE

20 SOUTH Moorland Rd
TYPE I SIGN
I-BEAMS INCIDENTAL

21 NORTH Moorland Rd Beloit Rd WEST
TYPE I SIGN
I-BEAMS INCIDENTAL

22 NORTH Moorland Rd Beloit Rd EAST
TYPE I SIGN
I-BEAMS INCIDENTAL

CANOPY
FILLER CAP
I SIGN
MH
INL
W
AB

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 99	E

SHEET 4 OF 19

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020304A_PS

PLOT DATE : 6/14/2021 3:38 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN

PC: 796+03.08

EXIT 57
E5-1A
ESTR

W5-54 ESTR
W5-54 ESTR

PT: 797+87.77
PC: 798+08.39

PT: 801+28.36
PC: 801+37.95

PT: 803+32.90

IH-43 SB OFF RAMP

CTH I (BELOIT RD)

EXIT 57
0
Moorland Road
REMOVE

S FOREST POINT BLVD

EXIT 57
29A
0
Moorland Rd
EXIT ONLY
29

TYPE I SIGN
I-BEAMS INCIDENTAL
MAINTAIN 18'-3" MIN.
VERTICAL CLEARANCE

EXISTING OVERHEAD SIGN STRUCTURE TO REMAIN
S-67-310

W5-52R ESTR
W5-52L ESTR

PC: 808+57.98
PC: 808+76.56

ALTERNATE WEST
INTERSTATE 94
J3-1
ESTR

SOUTH 43
MILE 57 .4
D10-5
ESTR

PC: 796+03.08
PT: 797+87.77
PC: 798+08.39
PT: 801+28.36
PC: 801+37.95
PT: 803+32.90
PC: 807+76.51
PC: 808+57.98
PC: 808+76.56

800
805
810
IH-43 SB
IH-43 NB

NORTH 43 MILE 57 .2
D10-5
ESTR

SOUTH 43 MILE 57 .2
D10-5
ESTR

Hwy I Beloit Rd
26
MOVE

27
W5-52L
MOVE

W5-52R
ESTR

28
W4-2R
MOVE

NORTH 43 MILE 57 .4
D10-5
ESTR

Hwy I Beloit Rd
ESTR

CTH I

WATER TOWER

SHEET 5 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 100	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020305_PS

PLOT DATE : 6/14/2021 3:39 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN

Park & Ride
CRASH INVESTIGATION SITE
EXIT 57
REMOVE

Park & Ride
CRASH INVESTIGATION SITE
EXIT 57
TYPE I SIGN
REUSE STEEL POSTS

EXIT 50 MPH
W13-2
ESTR

SOUTH 43 MILE 57 .6
D10-5
ESTR

SIS
TYPE I SIGN
ESTR

Greenfield
NEXT 4 EXITS
E9-1
TYPE I SIGN
REUSE STEEL POSTS

Greenfield
NEXT 4 EXITS
REMOVE

NORTH 43 MILE 57 .6
D10-5
ESTR

ALTERNATE MB4-1
EAST MB3-2
INTERSTATE 94 M1-1
MB6-1
J3-1
MOVE

SIS
TYPE I SIGN
ESTR

NORTH INTERSTATE 43
J4-1
ESTR

IH-43 SB
IH-43 NB
W ARROWHEAD LN
S LYNN DR
SLAB
EP: 811+99.54
PT: 812+44.90
EP: 816+02.65
30
31
32

SHEET 6 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 101	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020306_PS
PLOT DATE : 6/14/2021 3:41 PM
PLOT BY : MARTENS, KAREN L
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN

N

ALTERNATE WEST INTERSTATE 94 J2-1 ESTR

NORTH 43 MILE 57 .8 D10-5 ESTR

SOUTH 43 MILE 57 .8 D10-5 ESTR

SIS TYPE I SIGN ESTR

ALTERNATE WEST INTERSTATE 94 J3-1 ESTR

PT: 835+50.30

PT: 838+07.84

IH-43 SB

IH-43 NB

R3-4 EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES R3-4A ESTR

SPEED LIMIT 70 R2-1 ESTR

33A LEFT EXIT 59

33 TO 100 Layton Ave 1 MILE USE LEFT LANE

TYPE I SIGN NEW STEEL POSTS

TRAVEL INFO CALL 511 D12-5 ESTR

LEFT EXIT 59 TO 100 Layton Ave 1 MILE INTERSTATE 43

REMOVE

SHEET 7 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 102	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020307_PS

PLOT DATE : 6/14/2021 3:42 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

VMS VARIABLE MESSAGE SIGN

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

XXX DENOTES SIGN NUMBER

ESTR EXISTING SIGN TO REMAIN

SOUTH 43 MILE 58 .0
D10-5
ESTR

SIS
TYPE I SIGN
ESTR

PT: 838+07.84

840 845 850

IH-43 SB

IH-43 NB

S SUNNYSLOPE RD

EXIT 57
Moorland Rd
3/4 MILE
REMOVE

EXIT 57
35A
35
O
Moorland Rd
3/4 MILE
TYPE I SIGN
NEW STEEL POSTS

Sunnyslope Rd
14000 WEST
ESTR

SOUTH 43 MILE 58 .2
D10-5
MOVE
36

NORTH 43 MILE 58 .0
D10-5
ESTR

34
OVERSIZE LOADS
RESTRICTED
BEYOND NEXT EXIT
TYPE I SIGN
REUSE STEEL POSTS

Sunnyslope Rd
14000 WEST
ESTR

OVERSIZE LOADS
RESTRICTED
BEYOND NEXT EXIT
REMOVE

NORTH 43 MILE 58 .2
D10-5
ESTR

N

SHEET 8 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 103	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020308_PS

PLOT DATE : 6/14/2021 3:43 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN

N

Muskego
New Berlin
NEXT 2 EXITS
REMOVE

Muskego
New Berlin
NEXT 2 EXITS
38
E9-1
TYPE I SIGN
REUSE STEEL POSTS

14'-5"
W12-2
ESTR

40
SPEED LIMIT 70
R2-1
MOVE

RIDESHARE
INFO CALL
1 - 800 - 455 - POOL
D12-2A
ESTR

SOUTH 43
MILE 58 .4
D10-5
ESTR

855 860 865

IH-43 SB

IH-43 NB

EXISTING OVERHEAD STRUCTURE TO REMAIN
DMS
S-67-408

DMS

SEE FTMS PLAN FOR NEW
(DMS) SIGN PROPOSED FOR
EXISTING SIGN STRUCTURE

Hales Corners
NEXT LEFT
37
TYPE I SIGN
REUSE STEEL POSTS

Hales Corners
NEXT LEFT
REMOVE

NORTH 43
MILE 58 .4
D10-5
ESTR

LOW BRIDGES
1 ½ MILES AHEAD
W12-50
ESTR

14'-5"
W12-2
ESTR

Park & Ride
CRASH
INVESTIGATION SITE
LEFT EXIT 59
REMOVE

39
Park & Ride
CRASH
INVESTIGATION SITE
LEFT EXIT 59
TYPE I SIGN
REUSE STEEL POSTS

FOOTBRIDGE

SHEET 9 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 104	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020309_PS

PLOT DATE : 6/14/2021 3:45 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

VMS VARIABLE MESSAGE SIGN

EXISTING LIGHT OR SIGNAL POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

XXX DENOTES SIGN NUMBER

ESTR EXISTING SIGN TO REMAIN

N

HOSPITAL
EXIT 57
E10-61
TYPE I SIGN
ESTR

41
ALTERNATE WEST INTERSTATE 94
MB4-1
MB3-4
M1-1
MB6-1
J3-1
MOVE

42
NORTH 43 MILE 58 .6
D10-5
MOVE

SOUTH 43 MILE 58 .6
D10-5
ESTR

SOUTH INTERSTATE 43
J4-1
ESTR

BP: 872+00.00

BP: 872+84.74

BP: 874+24.59

BP: 874+74.68

BP: 875+21.38

CTH I

Hwy I
Beloit Rd
ESTR

SIS
TYPE I SIGN
ESTR

PC: 883+33.36

W5-52R
ESTR

IH-43 SB

870

875

880

IH-43 NB

W5-52L
ESTR

PT: 880+96.38

R3-4

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
R3-4A
ESTR

43
Hwy I
Beloit Rd
MOVE

EXISTING OVERHEAD STRUCTURE TO REMAIN
DMS
S-67-403

DMS
ESTR

44
W5-52R
MOVE
4 FT MOUNT
HEIGHT

45
W5-52L
MOVE
4 FT MOUNT
HEIGHT

SLAB

POOL

SEPTIC

SEPV

A/C

SIGN

INL

MH

W

SHEET 10 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 105	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020310_PS

PLOT DATE : 6/14/2021 3:46 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN

N

46A

LEFT EXIT 59 / TO 100 / Layton Ave / EXIT ONLY

E11-1D

TYPE I SIGN
I-BEAMS INCIDENTAL
MAINTAIN 18'-3" MIN.
VERTICAL CLEARANCE

46

LEFT EXIT 59 / TO 100 / Layton Ave

REMOVE

PC: 883+33.36

PC: 884+83.32

PT: 891+83.32

PC: 894+26.75

885

890

895

IH-43 SB

PT: 890+53.05

W4-1R
ESTR

PC: 895+66.64

47

NORTH 43 MILE 58 .8

D10-5
MOVE

SOUTH 43 MILE 58 .8

D10-5
ESTR

W3-1
MOVE

58 59

PT: 892+24.43

SIS

ESTR

48

EXIT 50 MPH

W13-2
MOVE

49

W5-52L
MOVE
4 FT MOUNT
HEIGHT

PC: 885+59.41

60

W5-52R
MOVE
4 FT MOUNT
HEIGHT

PC: 895+98.41

IH-43

52 53

SPEED LIMIT 35

W3-5
MOVE

57

W5-52L
MOVE

54

W3-1
MOVE

55

W5-52L
MOVE
4 FT MOUNT
HEIGHT

56

W5-52R
MOVE
4 FT MOUNT
HEIGHT

SPEED LIMIT 55

W3-5
ESTR

NORTH 43 MILE 59 .0

D10-5
ESTR

PT: 894+89.97

SOUTH 43 MILE 59 .0

D10-5
MOVE

61

50

INTERSTATE 43 / Milwaukee

TYPE I SIGN
I-BEAMS INCIDENTAL

51

W5-52R
MOVE
4 FT MOUNT
HEIGHT

Milwaukee

REMOVE

EXISTING OVERHEAD SIGN
STRUCTURE TO REMAIN
S-67-22

EXIT 59

E5-1A(MOD)
ESTR

PC: 889+94.74

IH-43 NB

SHEET 11 OF 19

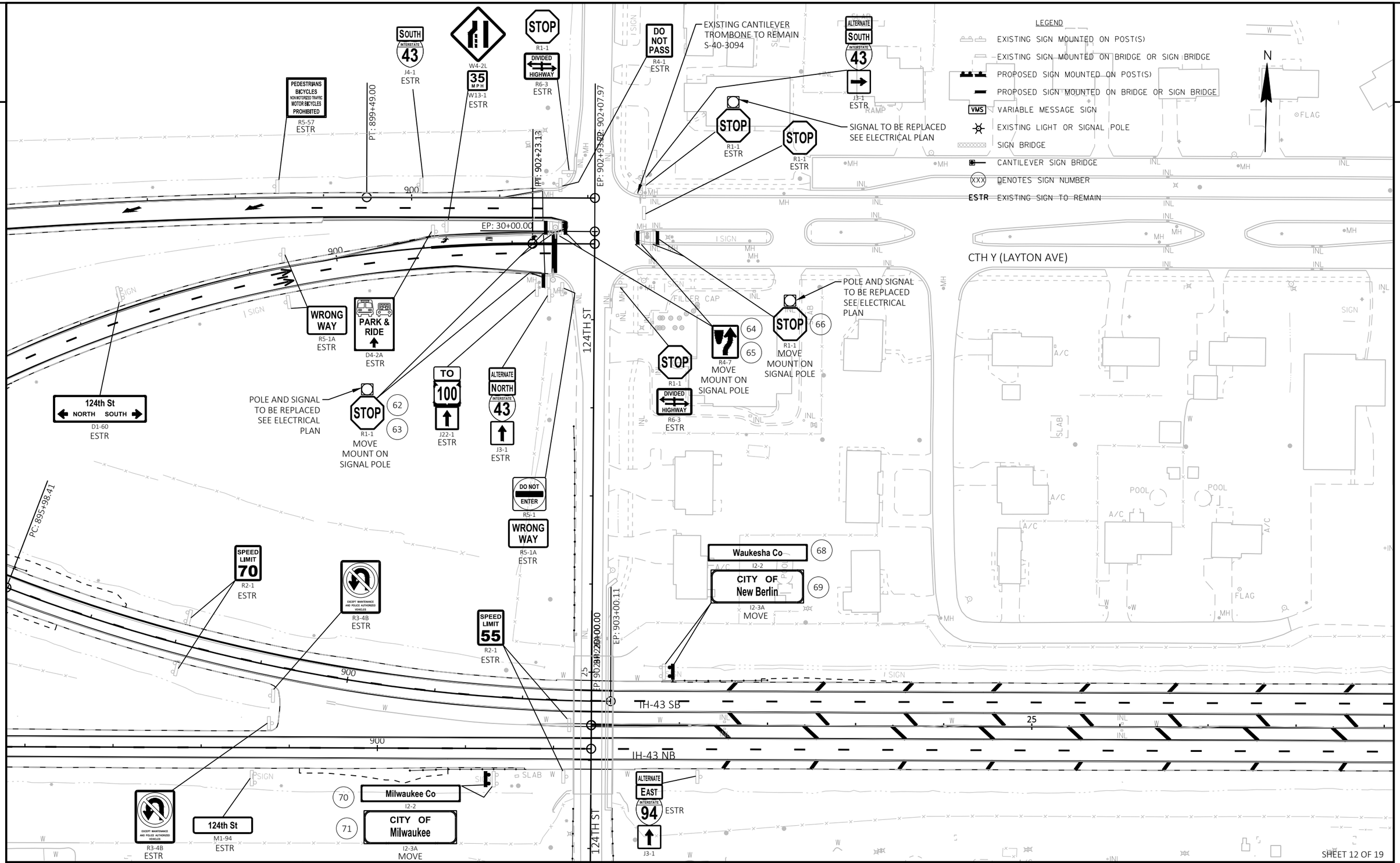
PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 106	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020311_PS

PLOT DATE : 6/14/2021 3:48 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



SHEET 12 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 107 E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020312_PS

PLOT DATE : 6/14/2021 3:49 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN

N

SPEED LIMIT 55
R2-1
ESTR

SPEED LIMIT 55
R2-1
ESTR

IH-43 SB

IH-43 NB

30 35 40

POOL SLAB U/C A/C FLAG MH INL W

STATUE

SHEET 13 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 108	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020313_PS

PLOT DATE : 6/14/2021 3:50 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN

S 116TH ST

IH-43 SB

IH-43 NB

EP: 50+59.24

PC: 56+41.59

116th St (74)
M1-94
MOVE

72 116th St
M1-94
MOVE

W8-5
ESTR

41 FOLLOW 41
TYPE I SIGN
ESTR

LEFT EXIT 61 (73A) (73)

NORTH			SOUTH NORTH EAST
41	894	45	41 43 894
BOTH LANES			USE RIGHT LANE

1 ¼ MILES

TYPE I SIGN
NEW STEEL POSTS

LEFT EXIT 61

NORTH 894 41 45 — EAST 894 43 43

1 ¼ MILES

REMOVE

ATHLETIC FIELD

ATHLETIC FIELD

SHEET 14 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 109	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020314_PS

PLOT DATE : 6/14/2021 3:52 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN

N

PC: 56+41.59

SLOWER TRAFFIC KEEP RIGHT
R4-3
ESTR

MILE 6 0
D10-2
ESTR

BP: 61+90.58

BP: 60+97.90

PC: 65+45.88

W1-2L
ESTR

14'-5"
W12-2

1/4 MILE AHEAD
W57-52
ESTR

MILE 6 0
D10-2
ESTR

W1-2L

45 MPH
W13-1
ESTR

IH-43

IH-43

60

65

65

70

70

70

ANT.

SIGN

SIGN

DAM

SIGN

ATHLETIC FIELD

ATHLETIC FIELD

POOL

SHEET 15 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 110	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020315_PS

PLOT DATE : 6/14/2021 3:53 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN

EXISTING OVERHEAD SIGN STRUCTURE TO REMAIN S-40-350

EXISTING OVERHEAD SIGN STRUCTURE TO REMAIN S-40-916

IH-43 SB

IH-43 NB

USH 45 SB

USH 45 NB

STH 100

PT: 74+03.02

PC: 76+80.76

PT: 377+76.50

EP: 381+36.55

BP: 83+17.38

PC: 72+94.51

EP: 26+54.46

PCC: 24+38.40

PT: 278+31

75 — NORTH / SOUTH; 100 / 45; USE LEFT LANE; 100; USE RIGHT LANE; M3-1, M3-3, M1-6, M1-4, M4-20L, M1-6, M4-20R — MOVE

76 — ONLY ONLY — R3-8LR — MOVE

104 — 35 MPH — E13-1P (2S) — ESTR

82 — W5-52R — MOVE 4 FT MOUNT HEIGHT

83 — 108th St — M1-94 — MOVE

ALTERNATE WEST INTERSTATE 94 — J3-1 — ESTR

84A — LEFT EXIT 60

84 — 45 / 100; 108th St; EXIT ONLY — TYPE I SIGN I-BEAMS INCIDENTAL MAINTAIN 18'-3" MIN. VERTICAL CLEARANCE

85 — INTERSTATE 43 SOUTH; Beloit — TYPE I SIGN I-BEAMS INCIDENTAL

INTERSTATE 43 SOUTH; Beloit — REMOVE

LEFT EXIT 60; 45 / 100; 108th Street; EXIT ONLY — REMOVE

77 — W1-2L (3)

78 — 35 MPH — W13-1 (3)

SPEED LIMIT 35 — W3-5 — ESTR

ONLY ONLY — R3-8LR — ESTR

NORTH / SOUTH; 100 / 45; USE LEFT LANE; 100; USE RIGHT LANE — ESTR

D4-55L — ESTR

PARK & RIDE — D4-2L — ESTR

W1-2L — 40 MPH — W13-1 — ESTR

79 — SPEED LIMIT 35 — R2-1 — MOVE

14'-5" — W12-2 — ESTR

108th St — M1-94 — ESTR

81 — NORTH 100 ONLY — D16-1

NORTH 100 ONLY — REMOVE

W1-8 — ESTR

W4-1R — ESTR

W4-2R — ESTR

SOUTH 45 100 — REMOVE

80 — SOUTH 45 100 ONLY — TYPE I SIGN I-BEAMS INCIDENTAL

SHEET 16 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 111	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020316_PS

PLOT DATE : 6/14/2021 3:55 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- ESTR EXISTING SIGN TO REMAIN
- [2015] EXISTING SIGN YEAR INSTALLED

Park & Ride
CRASH INVESTIGATION SITE
EXIT 57
REMOVE

88
Park & Ride
CRASH INVESTIGATION SITE
EXIT 57
TYPE I SIGN
REUSE STEEL POSTS

LEFT EXIT 60
45 100 108th Street
SOUTH 43 Beloit
EXIT ONLY
REMOVE

89A
LEFT EXIT 60
89
45 100 108th St
SOUTH 43 Beloit
EXIT ONLY
TYPE I SIGN
I-BEAMS INCIDENTAL

87
ALTERNATE MB4-1
WEST MB3-4
94 M1-1
MB5-2R
J2-1
MOVE

86
EXIT 35 MPH
W13-2C (MOD. LEFT)(2S)

LEFT EXIT 61
NORTH 41 45 WEST 894
Fond du Lac
Madison
TYPE I SIGN
ESTR [2015]

SOUTH 41
NORTH 43
EAST 894
EXIT ONLY
TYPE I SIGN
ESTR [2015]

41 FOLLOW 41
TYPE I SIGN
ESTR [2015]

Downtown Milwaukee
Chicago
NEXT RIGHT
TYPE I SIGN
ESTR [2015]

SPEED LIMIT 55
R2-1
ESTR

90
W5-52R
MOVE

ALTERNATE MB4-1
EAST MB3-2
94 M1-1
MB6-2
J3-1
ESTR

EXISTING OVERHEAD SIGN STRUCTURE TO REMAIN
S-40-811

EXISTING OVERHEAD SIGN STRUCTURE TO REMAIN
S-40-813

CTH Y (LAYTON AVE)

TH-43/USH 45 SB

IH-43/USH 45 NB

EP: 3811+36.50
PC: 83+37.88
BP: 83+17.38
PT: 87+15.80
PC: 91+60.96
PT: 94+00.05
EP: 2+13.1+Dc: 96+15.82

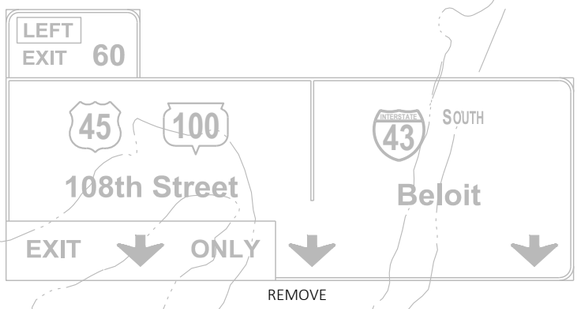
SHEET 17 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 112	E

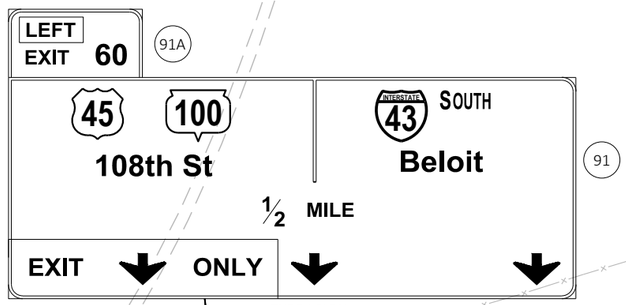
FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020317_PS
PLOT DATE : 6/14/2021 3:56 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN
- [2015] — EXISTING SIGN YEAR INSTALLED



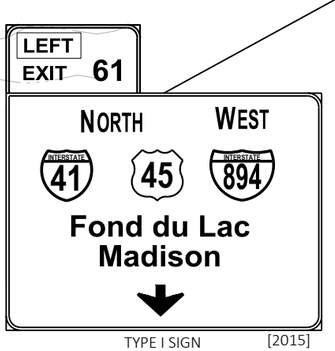
REMOVE



TYPE I SIGN
I-BEAMS INCIDENTAL

EXISTING OVERHEAD SIGN STRUCTURE TO REMAIN
S-40-21

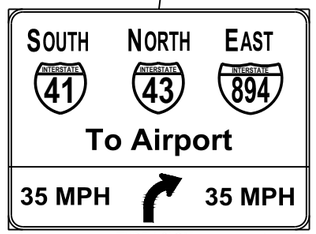
EXISTING OVERHEAD SIGN STRUCTURE TO REMAIN
S-40-157



TYPE I SIGN
ESTR
[2015]



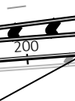
W9-62
ESTR



TYPE I SIGN
ESTR
[2015]



W13-3
ESTR



W13-1
ESTR

W1-2L

IH-43/USH 45

ROOT R.

CTH Y (LAYTON AVE)

SHEET 18 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 113	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020318_PS

PLOT DATE : 6/14/2021 3:58 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- ESTR — EXISTING SIGN TO REMAIN

MILE 61
D10-2
ESTR

USH 45 SB

PC: 109+52.58

93 94 95
W1-8(3)
4 FT MOUNT HEIGHT

W1-6
ESTR

IH 894 EB

96
W1-8(3)
4 FT MOUNT HEIGHT

IH 43 SB

W4-3L
ESTR

92
W5-52L
MOVE

W1-6
ESTR

97 98
W1-8(3)
4 FT MOUNT HEIGHT

EXIT 61
E5-1A(MOD)
ESTR

PC: 113+53.57

PC: 202+70.98

USH 45 NB

W1-6
ESTR

IH 894 WB

LANE ENDS
MERGE LEFT
W9-2L
ESTR

RIGHT LANE ENDS
W9-1R
ESTR

99 100
W1-8(3)
4 FT MOUNT HEIGHT

W1-8
ESTR

MILE 61
D10-2
ESTR

W1-8
ESTR

EXIT 4
E5-1A(MOD)
ESTR

PT: 121+14.71

35 MPH
101
E13-1P(2S)
72"X24"

102
W5-54
MOVE

103
W5-54
MOVE

W1-8
ESTR

IH 43 NB

PT: 209+26.63

SHEET 19 OF 19

PROJECT NO: 1090-08-71	HWY: IH-43	COUNTY: WAUKESHA / MILWAUKEE	PERMANENT SIGNING PLAN	SHEET 114	E

FILE NAME : C:\CIVIL 3D PROJECTS\10900801\SIGN\023201_PS_18.DWG
LAYOUT NAME - 020319_PS

PLOT DATE : 6/14/2021 3:59 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

FTMS CONVENTIONAL SYMBOLS

	PROPOSED	EXISTING
ITS FIELD CABINET		
METER BREAKER PEDESTAL		
24X42-INCH CSCP PULL BOX		
FTMS (ITS) CONDUIT		
BREAKER DISCONNECT BOX		
COMMUNICATIONS VAULT, TYPE 1		
POLE AND MICROWAVE DETECTOR		
OVERHEAD SIGN STRUCTURE AND SIGN		

FTMS STANDARD ABBREVIATIONS

CB	CONTROLLER CABINET
CCTV	CLOSED CIRCUIT TELEVISION SITE
PB	PULL BOX
EX	EXISTING
FOC	FIBER OPTIC CABLE
F.O.	FIBER OPTIC
MD	MICROWAVE DETECTOR
S-F	STATE-FURNISHED
DMS	DYNAMIC MESSAGE SIGN

FTMS GENERAL NOTES

1. THESE PLANS AND THE ASSOCIATED SPECIAL PROVISIONS REFLECT CONDITIONS KNOWN DURING THE DEVELOPMENT OF THE PLANS AND TECHNICAL SPECIAL PROVISIONS. ALL SCALES, DIMENSIONS AND LOCATIONS SHOWN IN THESE PLANS ARE APPROXIMATE. ACTUAL PHYSICAL FIELD CONDITIONS SHALL PROVIDE THE BASIS FOR THE APPLICATION OF WORK SHOWN IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE APPLICATION OF ALL WORK SHOWN IN THE PLANS TO THE ACTUAL PHYSICAL FIELD CONDITIONS TO PROVIDE A COMPLETE AND ACCEPTED PROJECT. IN THE EVENT THAT ACTUAL PHYSICAL FIELD CONDITIONS AFFECT OR PREVENT THE APPLICATION OR PROGRESSION OF ANY WORK SHOWN IN THE PLANS OR TECHNICAL SPECIAL PROVISIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY, AND PRIOR TO ANY FURTHER WORK ACTIVITY. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY LOCATION CHANGES OTHER THAN MINOR ADJUSTMENTS.
2. BE AWARE THAT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES.
3. BE AWARE THAT NO TEST BORINGS WERE MADE WHERE CONDUITS, PULLBOXES, POLES, CABINET FOUNDATIONS, OR OTHER EQUIPMENT IS TO BE INSTALLED. THE CONTRACTOR IS FULLY RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.
4. NO TREES (AND/OR SHRUBS) SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
5. AREAS WITHIN THE RIGHT-OF-WAY DISTURBED SPECIFICALLY FOR FTMS CONSTRUCTION SHALL BE RESTORED TO THE ORIGINAL CONDITION WITH TOPSOIL, FERTILIZER, SEED, AND EROSION MAT, AND SHALL BE INCLUDED IN THE COST OF INSTALLING FTMS ITEMS. RESTORATION FOR AREAS DISTURBED FOR OTHER CONSTRUCTION OPERATIONS BUT ALSO CONTAINING FTMS CONSTRUCTION SHALL BE DONE ACCORDING TO REQUIREMENTS AND PAYMENT PROVISIONS FOR THE OTHER CONSTRUCTION OPERATIONS.
6. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
7. DUE TO RAMP, LANE, SHOULDER CLOSURE RESTRICTIONS, AND WORK UNDER OTHER CONTRACTS, SOME WORK MAY BE REQUIRED TO BE PERFORMED AT NIGHT.
8. THE CONTRACTOR IS FULLY RESPONSIBLE FOR COORDINATING RAMP, LANE, SHOULDER, AND ROADWAY CLOSURES WITH OTHER CONTRACTS IN THE AREA.
9. THE CONTRACTOR SHALL CONTACT THE WISDOT STATEWIDE TRAFFIC OPERATIONS CENTER AT (414) 227-2166 FIVE (5) WORKING DAYS PRIOR TO ENTERING ANY EXISTING WISDOT FTMS OR ITS CABINET.
10. ALL LOOP DETECTORS ARE STATIONED TO CENTER OF LEADING EDGE AS APPROACHED BY NORMAL VEHICLE PATH.
11. HAND DIG TRENCHES CROSSING EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE.
12. VISUALLY VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE OR SPECIAL METHOD.

2

2

W ARMOUR DR

SOUTH SUNNYSLOPE RD

W MARIA DR

WEST MARIA DRIVE

N

REMOVE EXISTING CABLES
INSTALL IN EXISTING CONDUIT
(3) NO. 2 AWG TRAFFIC SIGNAL WIRES,
(1) PRE-TERMINATED FOC (S-F), AND
(1) NO. 10 AWG TRAFFIC SIGNAL WIRE

REMOVE EXISTING 3/C NO. 10 AWG
TRAFFIC SIGNAL CABLE
(DO NOT DISTURB OTHER CABLES)

EXDPSS02

EXDPSS01
CONNECT CONTACT CLOSURE OUTPUT FROM OVERHEIGHT
DETECTION SYSTEM TO AN UNUSED PAIR OF WIRES IN
EXISTING MD CABLE TO TRANSMIT CONTACT CLOSURE
TO DMS CONTROLLER BEING INSTALLED IN
EX-CB-CCTV-67-0087 / SDS-67-0087

EXPBSS03

EXPBSS02

EXPBSS04

EXPBSS05

EX-S-67-408 / EX-OHS-40-0004
(1) REMOVE ELECTRONIC BLANK OUT SIGN
(1) INSTALL OVERHEIGHT WARNING SYSTEM DMS (S-F)
(1) F.O. TO COPPER ETHERNET CONVERTER (S-F)

EXPBSS01

EX-CCTV-67-0087

REMOVE THE FOLLOWING EXISTING CABLES:
- (3) NO. 6 AWG TRAFFIC SIGNAL WIRES
- (1) 3/C NO 10 AWG TRAFFIC SIGNAL CABLE
INSTALL IN VACATED EXISTING CONDUIT
(3) NO. 2 AWG TRAFFIC SIGNAL WIRES
(1) PRE-TERMINATED FOC (S-F)

EX-CB-CCTV-67-0087 / SDS-67-0087
INSTALL (1) DMS CONTROLLER (S-F)
(2) F.O. TERMINATIONS IN EXISTING TERMINATION PANEL
(1) F.O. TO COPPER ETHERNET CONVERTER (S-F)

REMOVE THE FOLLOWING EXISTING CABLES:
- (3) NO. 6 AWG TRAFFIC SIGNAL WIRES
- (1) 3/C NO 10 AWG TRAFFIC SIGNAL CABLE
INSTALL IN VACATED EXISTING CONDUIT
(3) NO. 2 AWG TRAFFIC SIGNAL WIRES
(1) PRE-TERMINATED FOC (S-F)

WEST NORTH OAK COURT

ASPEN COURT

SUNNYSLOPE ROAD

WEST PRAIRIE LAN

W PRARIE LN

IH 43

143

NOTES:
DO NOT DISCONNECT NOR REMOVE ANY EQUIPMENT
OR CABLES UNTIL ALL MATERIALS ARE ON HAND
AND INSTALLATION OF NEW CABLES AND EQUIPMENT
AND RE-INTEGRATION OF THE SYSTEM CAN BE
COMPLETED WITHIN 1-WEEK OF SHUTTING THE
OVERHEIGHT WARNING SYSTEM DOWN.

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA	FTMS PLAN SHEET	SHEET	E

FILE NAME : \\milw00\ingrproj\77532\base\waukesha_co\10900871_43-sunnyslope-ftms.dgn PLOT DATE : 4/30/2021 PLOT BY : PKutz PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

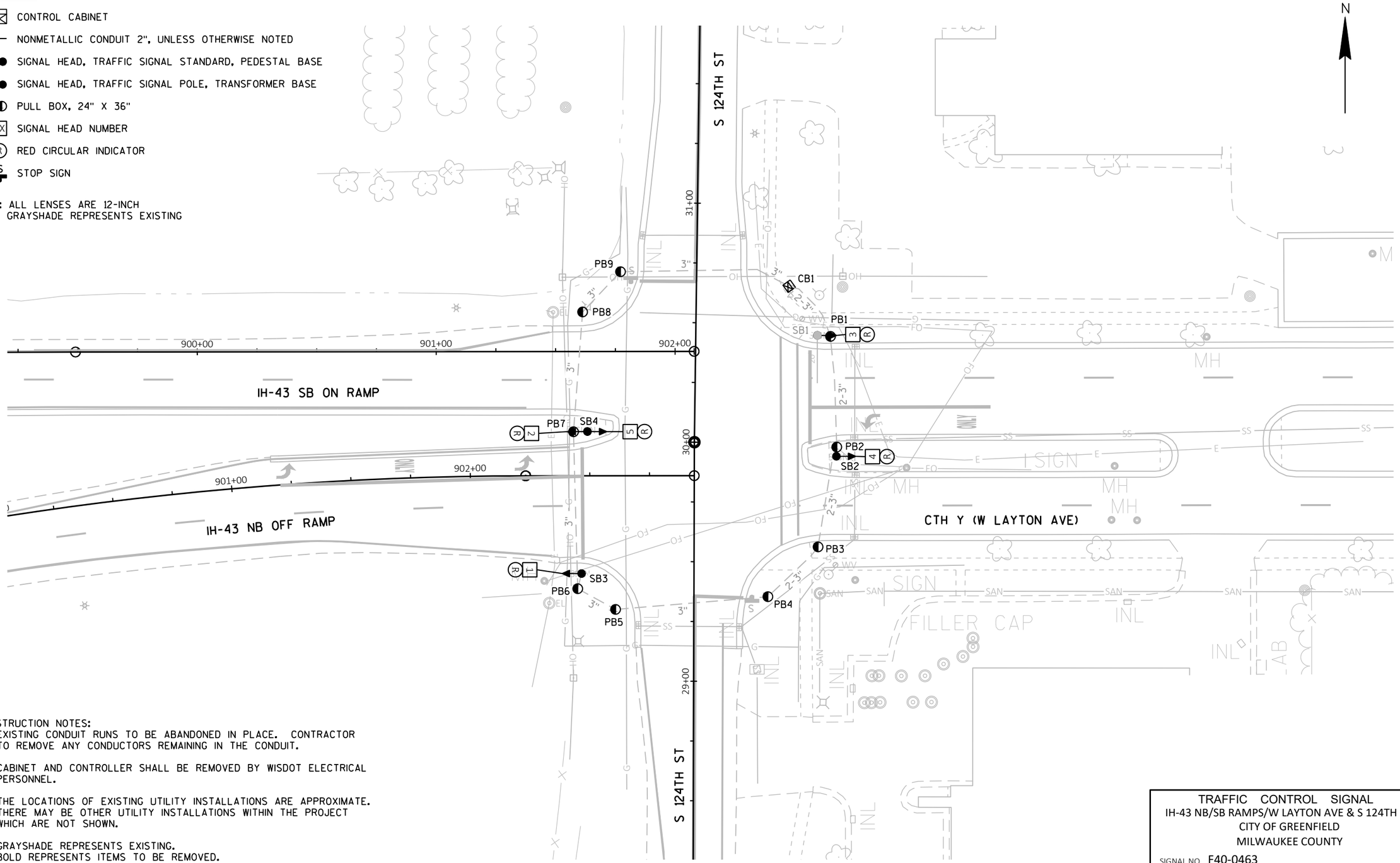
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2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PULL BOX, 24" X 36"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- S STOP SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES:

1. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
2. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.
3. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. GRAYSHADE REPRESENTS EXISTING.
   BOLD REPRESENTS ITEMS TO BE REMOVED.

TRAFFIC CONTROL SIGNAL
IH-43 NB/SB RAMPS/W LAYTON AVE & S 124TH ST
CITY OF GREENFIELD
MILWAUKEE COUNTY

SIGNAL NO. F40-0463

REGION CONTACT: J. BRUGGEMAN
DESIGNED BY:
REVISED BY: C. VANDE LEEST

PAGE 1 OF 1

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: MILWAUKEE	FLASHER REMOVAL PLAN	SHEET 117	E

FILE NAME : N:\PDS\C3D\CAD\10900801\SIG\F40-0463\F40-0463_REM_18.DWG
LAYOUT NAME - F40-0463_rem_pg1

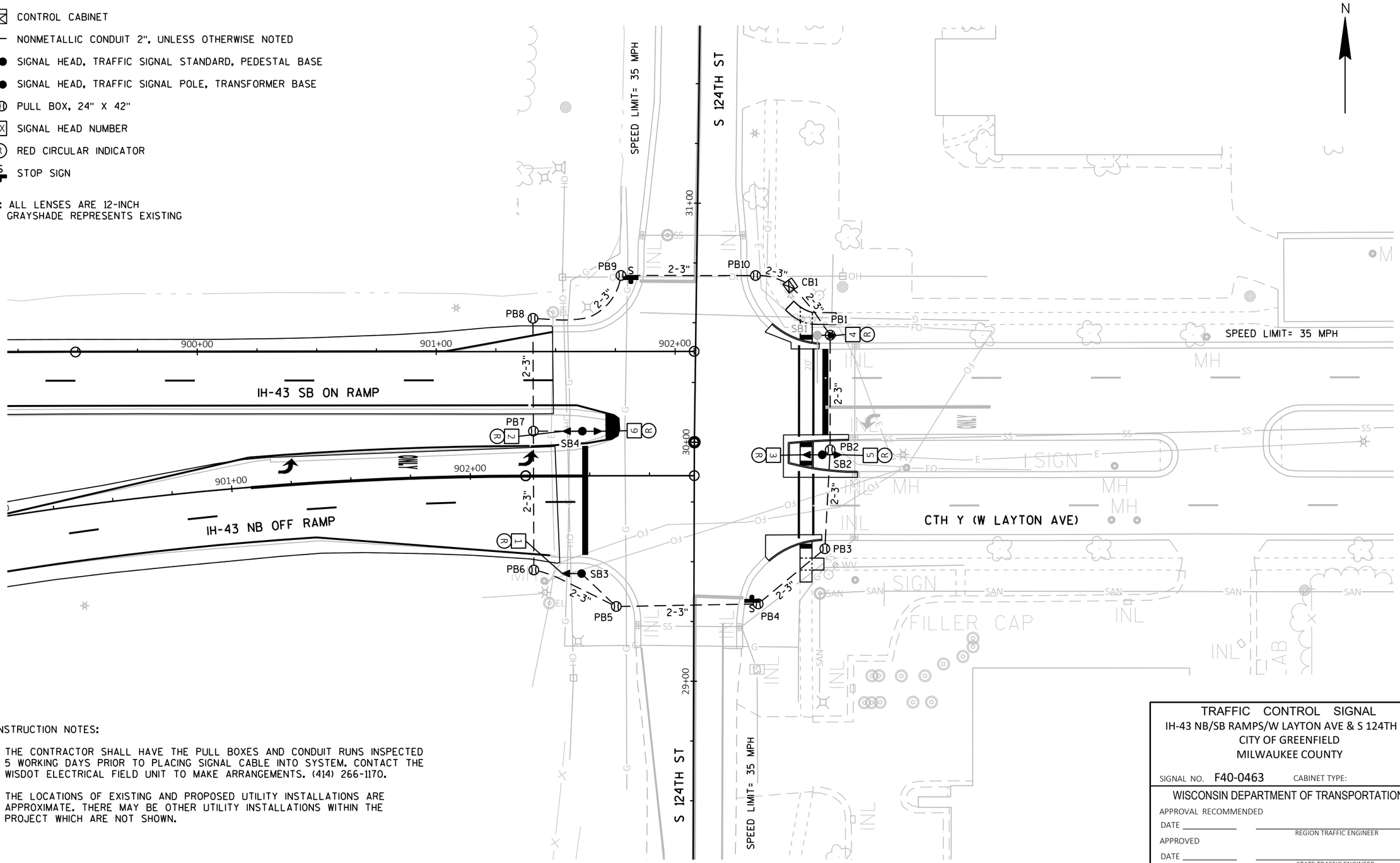
PLOT DATE : 7/27/2021 6:58 AM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- S STOP SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.

2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.

TRAFFIC CONTROL SIGNAL
IH-43 NB/SB RAMPS/W LAYTON AVE & S 124TH ST
CITY OF GREENFIELD
MILWAUKEE COUNTY

SIGNAL NO. F40-0463 CABINET TYPE:

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

DATE _____ _____ REGION TRAFFIC ENGINEER

APPROVED

DATE _____ _____ STATE TRAFFIC ENGINEER

REGION CONTACT: J. BRUGGEMAN
DESIGNED BY: C. VANDE LEEST
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: MILWAUKEE	FLASHER PLAN	SHEET 118	E

FILE NAME : N:\PDS\C3D\CAD\10900801\SIG\F40-0463\F40-0463_18.DWG
LAYOUT NAME - F40-0463_pg1

PLOT DATE : 7/27/2021 6:56 AM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

PROJECT ID:	1090-08-71
INTERSECTION:	IH-43 NB/SB RAMPS/W LAYTON AVE & S 124TH ST

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	FUTURE APS
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK		
SB1	5	4	RED										
SB2	5	3	RED										
		5	BLK										
SB3	5	1	RED										
SB4	5	2	RED										
		6	BLK										

*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications
*Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the ungrounded conductors.
*At the signal bases, connect one terminal from the pedestrian push buttons to the color indicated in the chart. Connect the other terminal to the grounded conductor.
*Reconnect the grounding conductors wherever the circuit has been interrupted to ensure the grounding circuit is complete.

Equipment Grounding Conductor 10 AWG Green XLP	
From	To
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	CB1

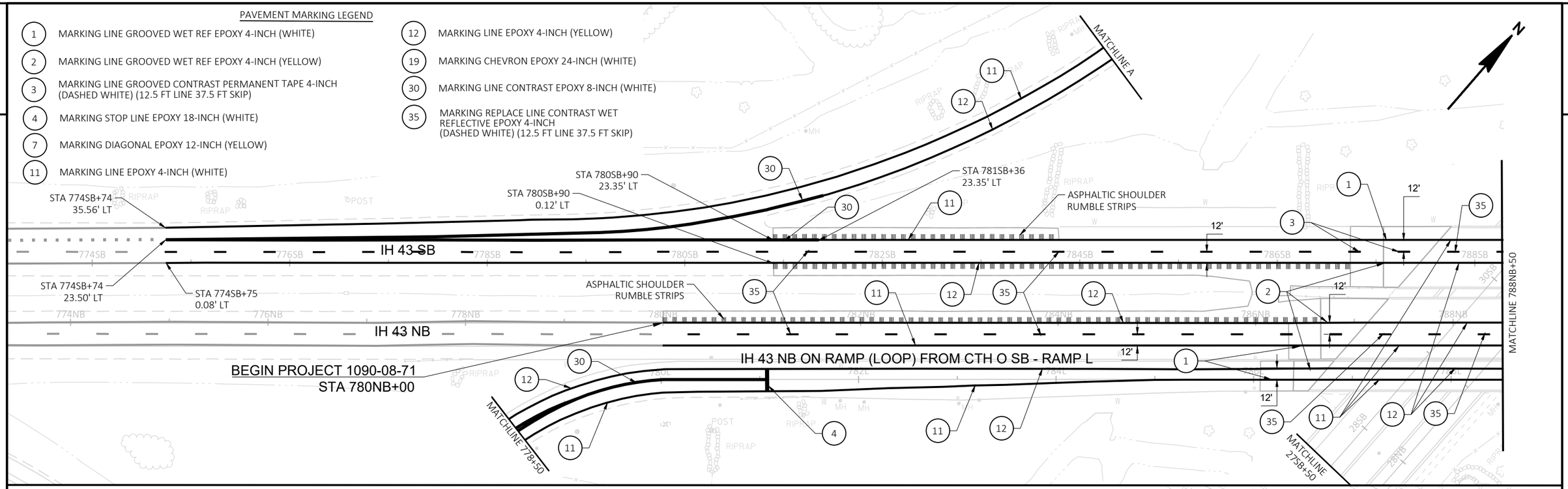
Pull Box Bonding Jumper 10 AWG Green XLP	
From	To
PB1	SB1
PB2	SB2
PB3	SB2
PB4	SB3
PB5	SB3
PB6	SB3
PB7	SB4
PB8	SB4
PB9	CB1
PB10	CB1

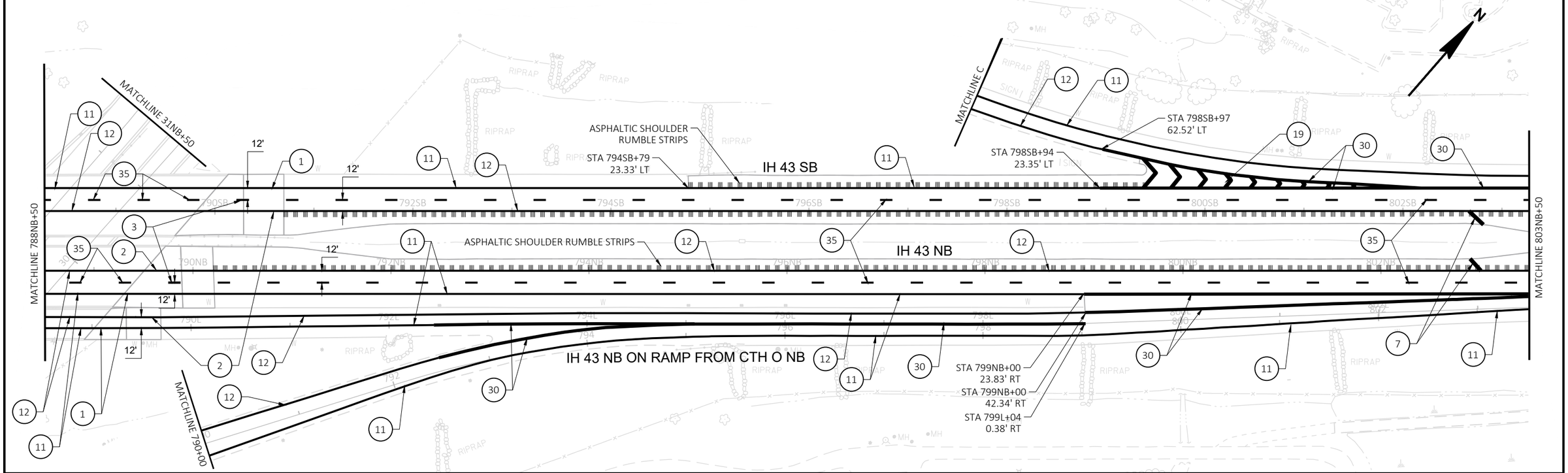
FILE NAME : N:\PDS\C3D\CAD\10900801\SIG\F40-0463\F40-0463_cr.pptx PLOT DATE : 4/22/2021 PLOT BY : DOTCMV PLOT NAME : F40-0463_cr.pdf PLOT SCALE : 1:1

2

PAVEMENT MARKING LEGEND

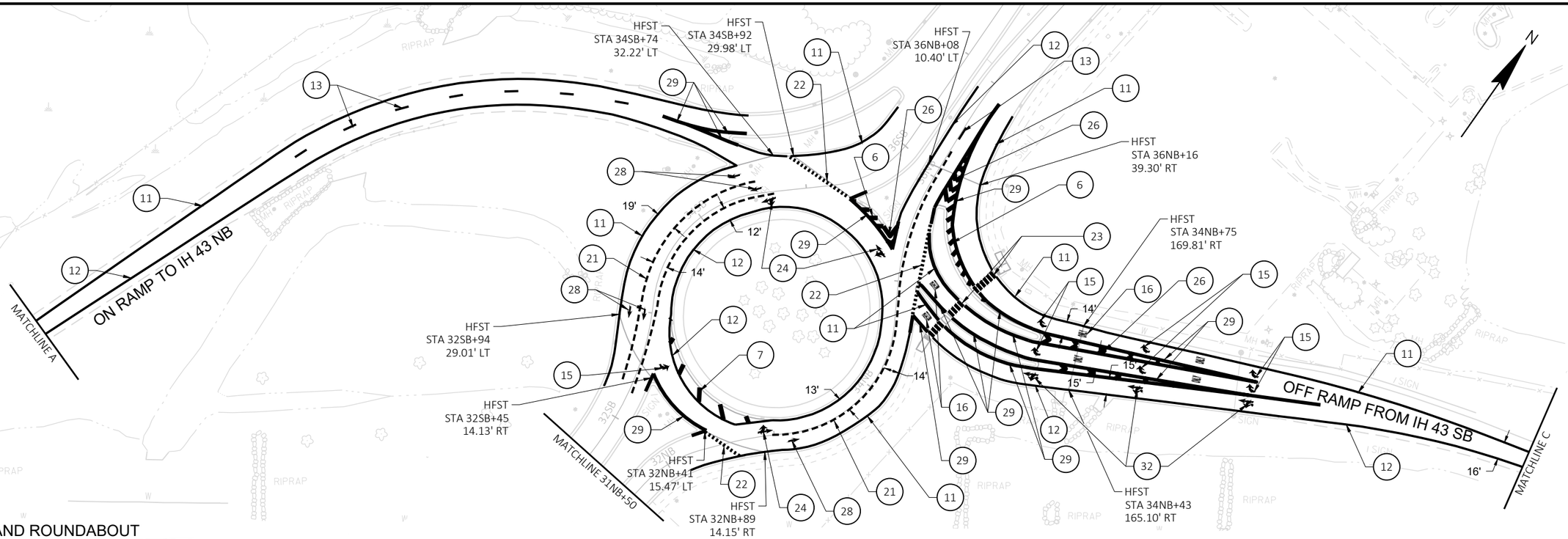
1	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
2	MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
3	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
4	MARKING STOP LINE EPOXY 18-INCH (WHITE)
7	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
11	MARKING LINE EPOXY 4-INCH (WHITE)
12	MARKING LINE EPOXY 4-INCH (YELLOW)
19	MARKING CHEVRON EPOXY 24-INCH (WHITE)
30	MARKING LINE CONTRAST EPOXY 8-INCH (WHITE)
35	MARKING REPLACE LINE CONTRAST WET REFLECTIVE EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)





PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 120 E

2



NORTH MOORLAND ROUNDABOUT

PAVEMENT MARKING LEGEND

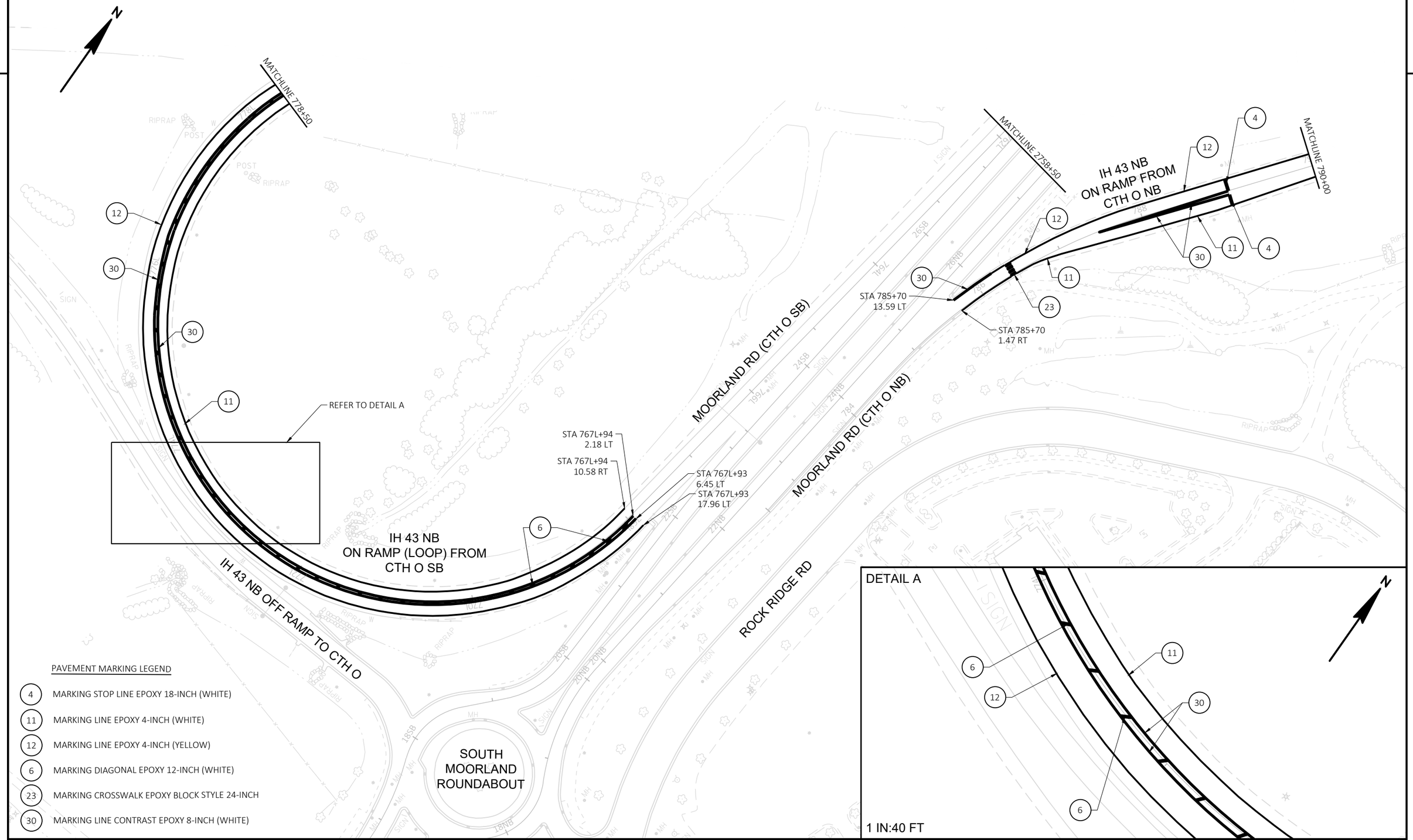
6	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
7	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
11	MARKING LINE EPOXY 4-INCH (WHITE)
12	MARKING LINE EPOXY 4-INCH (YELLOW)
13	MARKING LINE CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
15	MARKING ARROW EPOXY (TYPE 2) (WHITE)
16	MARKING WORD EPOXY (WHITE)
21	MARKING LINE EPOXY 8-INCH (DASHED WHITE) (6 FT LINE 3 FT SKIP)
22	MARKING DOTTED EXTENSION EPOXY 18-INCH (DOT PATTERN WHITE) (2 FT LINE 2 FT SKIP)
23	MARKING CROSS WALK EPOXY BLOCK STYLE 24-INCH
24	MARKING ARROW EPOXY (TYPE 3) (WHITE)
26	MARKING CHEVRON EPOXY 12-INCH (WHITE) (TO PAID FOR AS MARKING DIAGONAL EPOXY 12-INCH)
28	MARKING ARROWS EPOXY (TYPE 1) (WHITE)
29	MARKING LINE EPOXY 8-INCH (WHITE)
32	MARKING ARROW EPOXY (TYPE 3R) (WHITE)

HFST: HIGH FRICTION SURFACE TREATMENT

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 121	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024514
PLOT DATE : 8/27/2021 9:50 AM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



PAVEMENT MARKING LEGEND

4	MARKING STOP LINE EPOXY 18-INCH (WHITE)
11	MARKING LINE EPOXY 4-INCH (WHITE)
12	MARKING LINE EPOXY 4-INCH (YELLOW)
6	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
23	MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH
30	MARKING LINE CONTRAST EPOXY 8-INCH (WHITE)

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 122 E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024515

PLOT DATE : 7/3/2021 9:33 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

PAVEMENT MARKING LEGEND

1 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)

2 MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)

3 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

7 MARKING DIAGONAL EPOXY 12-INCH (YELLOW)

11 MARKING LINE EPOXY 4-INCH (WHITE)

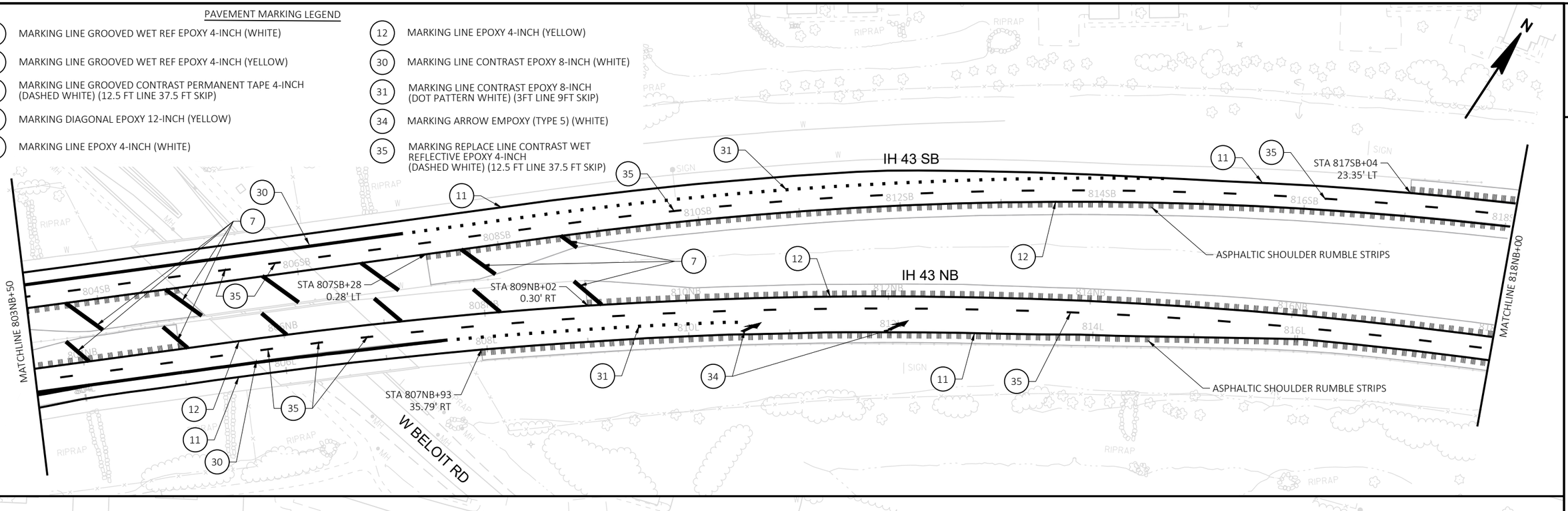
12 MARKING LINE EPOXY 4-INCH (YELLOW)

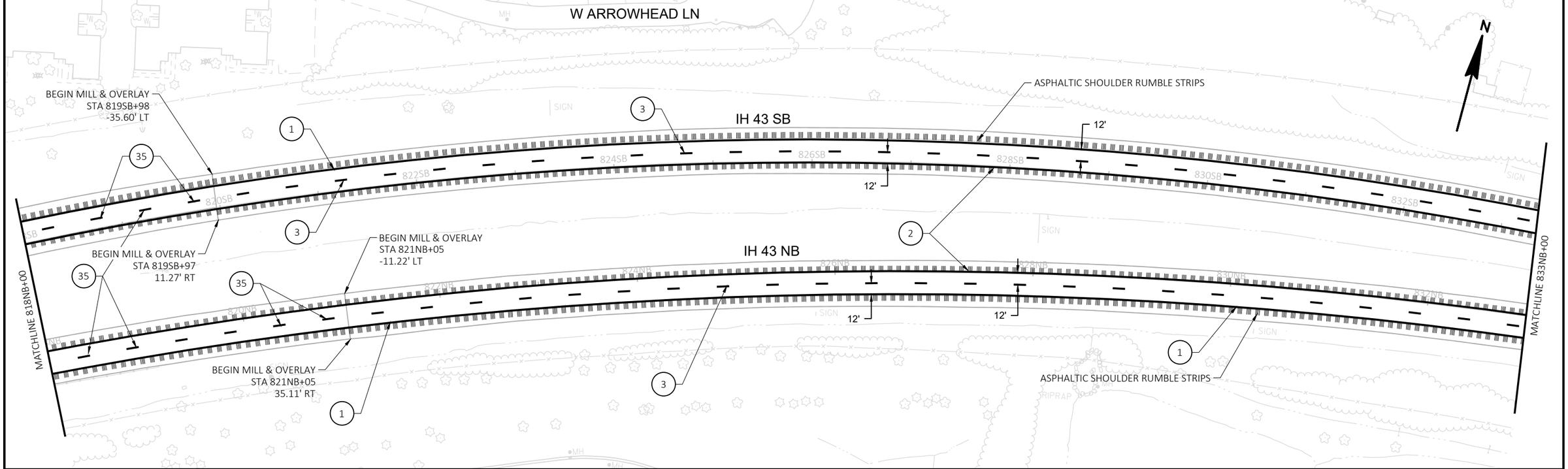
30 MARKING LINE CONTRAST EPOXY 8-INCH (WHITE)

31 MARKING LINE CONTRAST EPOXY 8-INCH (DOT PATTERN WHITE) (3FT LINE 9FT SKIP)

34 MARKING ARROW EMPOXY (TYPE 5) (WHITE)

35 MARKING REPLACE LINE CONTRAST WET REFLECTIVE EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)





PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 123	E

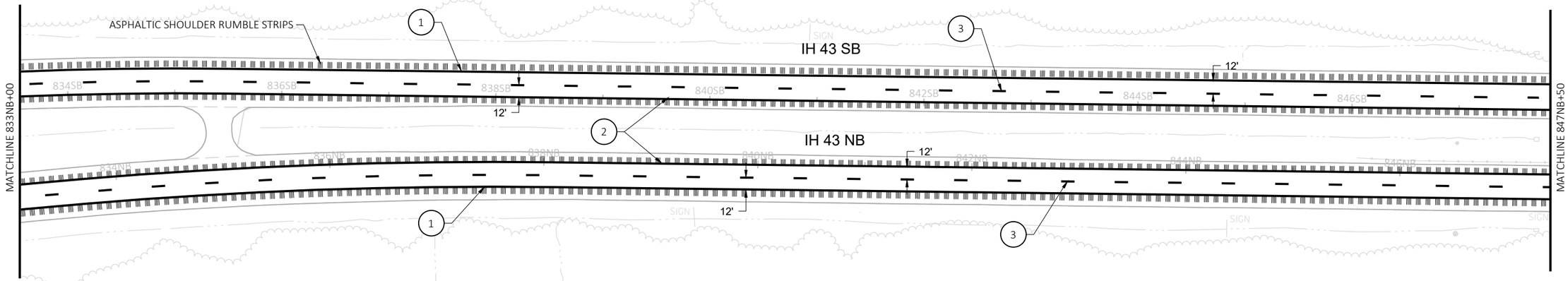
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2

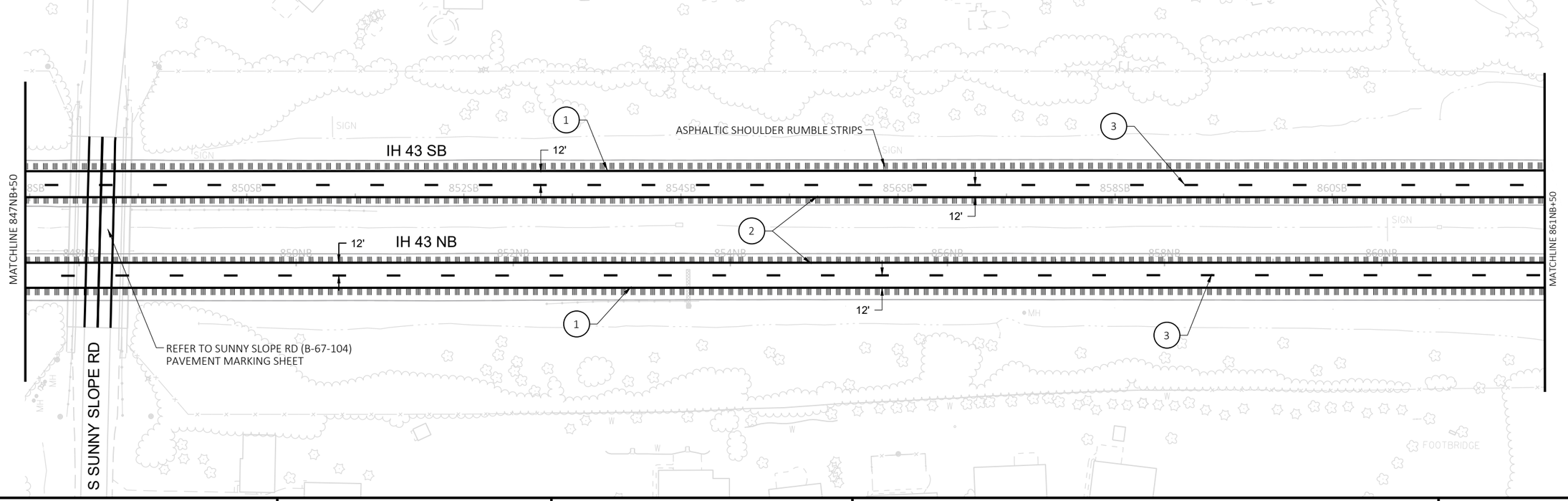
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PAVEMENT MARKING LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
2. MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
3. MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)



N



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 124	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024503

PLOT DATE : 7/6/2021 4:18 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : I IN: 100FT

WISDOT/CADDS SHEET 42

2

N

W ARMOUR AVE

W BELOIT RD

S LANGLADE DR

RIPRAP

MH

SIGN

ASPHALTIC SHOULDER RUMBLE STRIPS

12'

IH 43 SB

IH 43 NB

MATCHLINE 861NB+50

MATCHLINE 876NB+00

STA 875SB+67
14.66' LT

STA 875SB+29
11.87' RT

STA 874NB+25
11.95' LT

STA 873NB+95
11.10' RT

862SB 864SB 866SB 868SB 870SB 872SB 874SB 876D 876SB

862NB 864NB 866NB 868NB 870NB 872NB 874NB

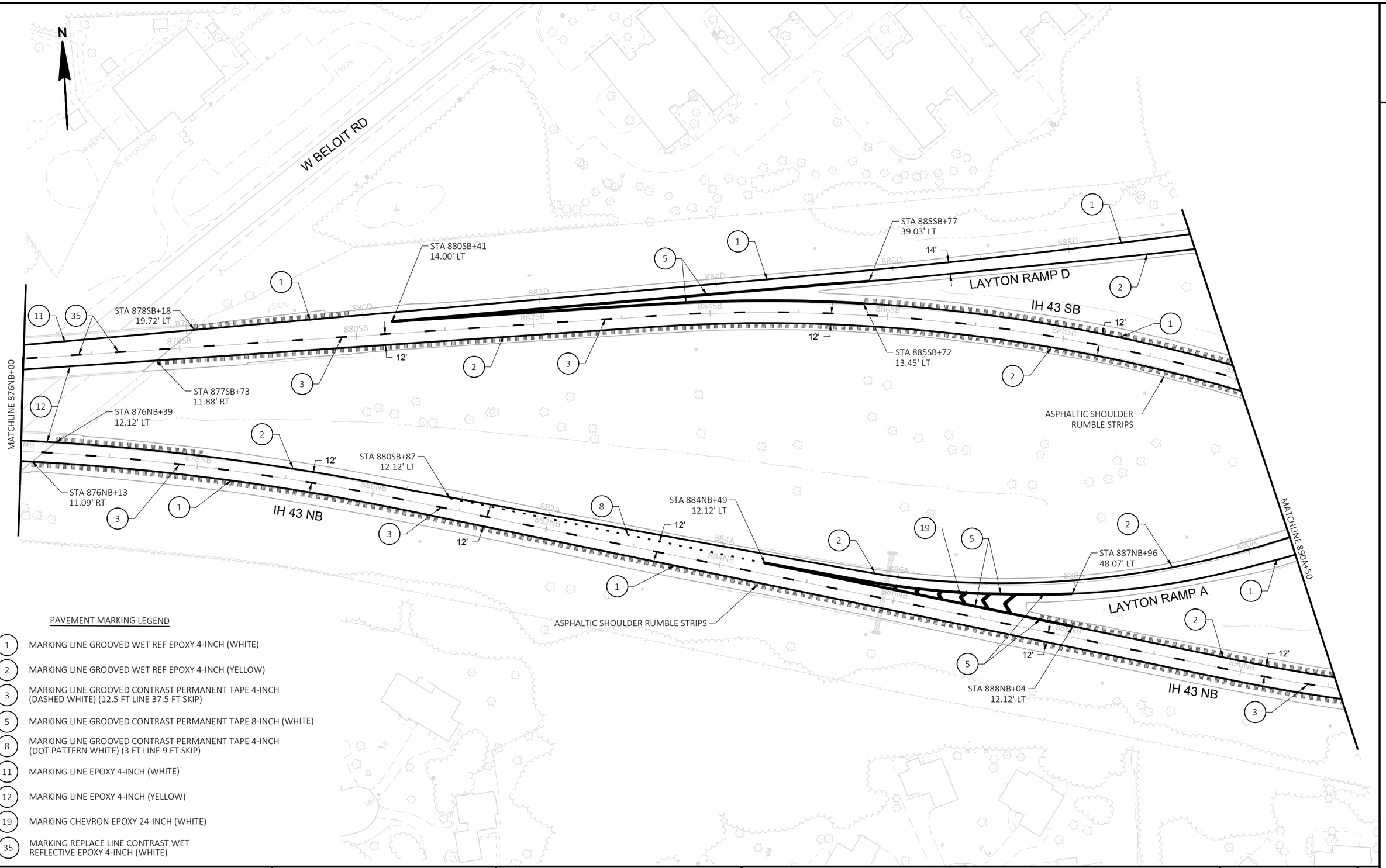
PAVEMENT MARKING LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
2. MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
3. MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
11. MARKING LINE EPOXY 4-INCH (WHITE)
12. MARKING LINE EPOXY 4-INCH (YELLOW)
35. MARKING REPLACE LINE CONTRAST WET REFLECTIVE EPOXY 4-INCH (WHITE)

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 125	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024504
PLOT DATE : 7/6/2021 4:20 PM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



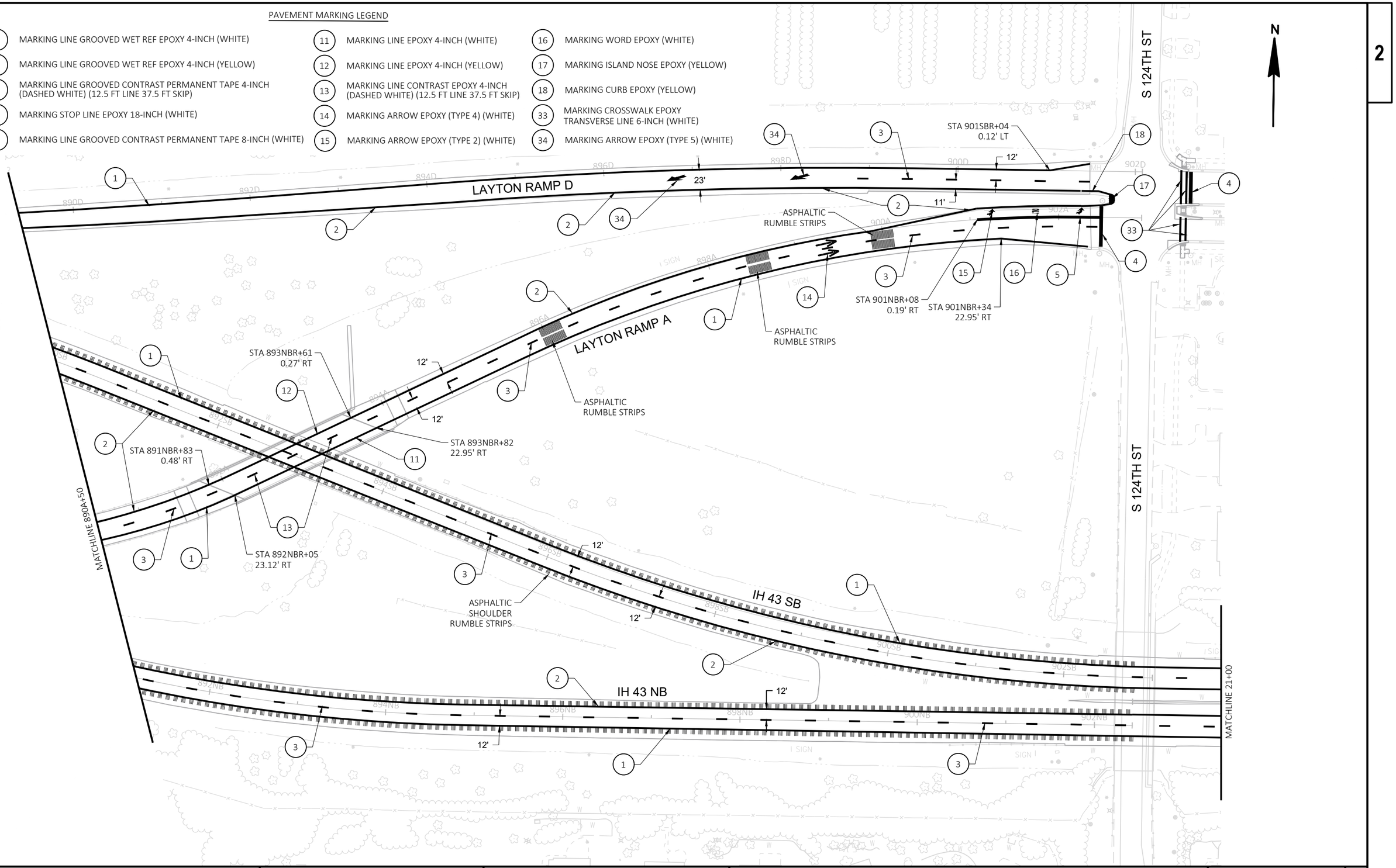
PAVEMENT MARKING LEGEND

1	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
2	MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
3	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
5	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
8	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
11	MARKING LINE EPOXY 4-INCH (WHITE)
12	MARKING LINE EPOXY 4-INCH (YELLOW)
19	MARKING CHEVRON EPOXY 24-INCH (WHITE)
35	MARKING REPLACE LINE CONTRAST WET REFLECTIVE EPOXY 4-INCH (WHITE)

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 126	E

PAVEMENT MARKING LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
2. MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
3. MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
4. MARKING STOP LINE EPOXY 18-INCH (WHITE)
5. MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
11. MARKING LINE EPOXY 4-INCH (WHITE)
12. MARKING LINE EPOXY 4-INCH (YELLOW)
13. MARKING LINE CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
14. MARKING ARROW EPOXY (TYPE 4) (WHITE)
15. MARKING ARROW EPOXY (TYPE 2) (WHITE)
16. MARKING WORD EPOXY (WHITE)
17. MARKING ISLAND NOSE EPOXY (YELLOW)
18. MARKING CURB EPOXY (YELLOW)
33. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
34. MARKING ARROW EPOXY (TYPE 5) (WHITE)



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 127	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024506

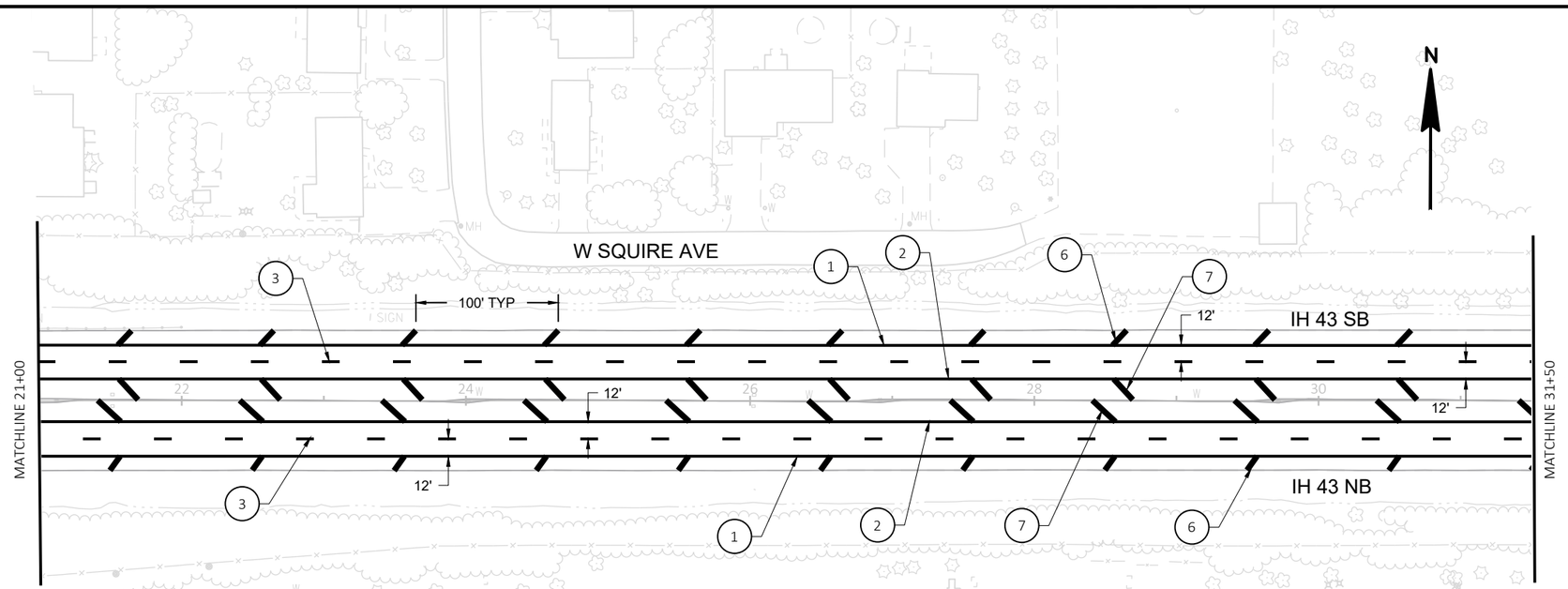
PLOT DATE : 7/6/2021 4:24 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

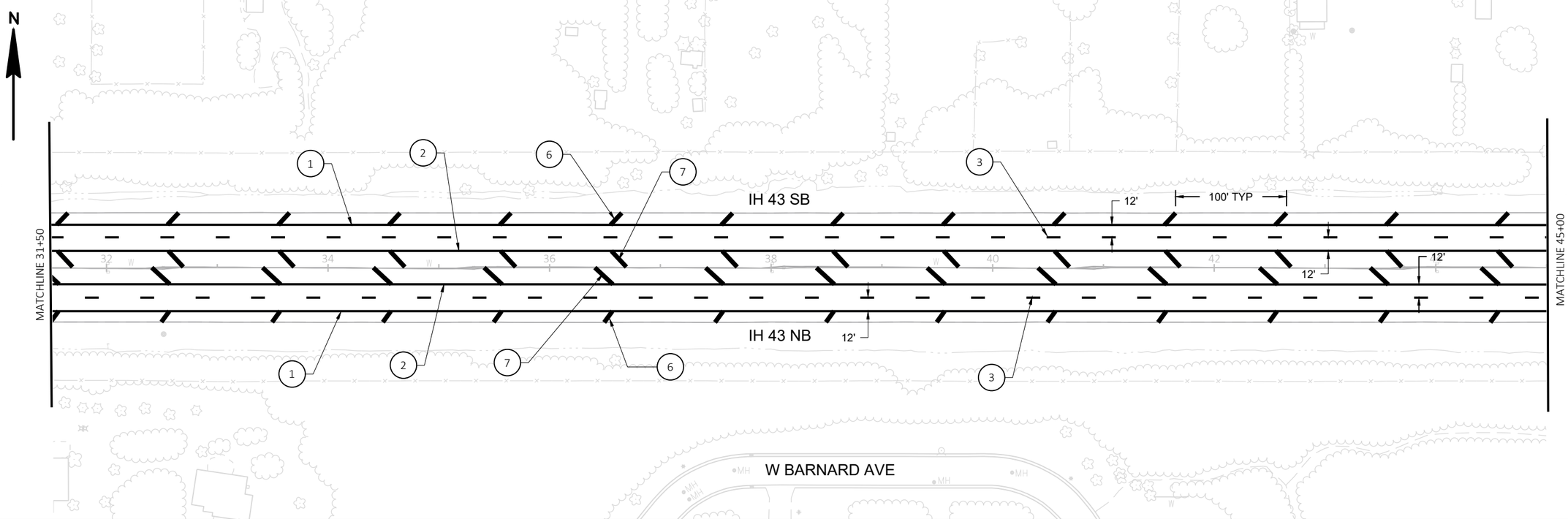
WISDOT/CADDS SHEET 42

2

PAVEMENT MARKING LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
2. MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
3. MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
6. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
7. MARKING DIAGONAL EPOXY 12-INCH (YELLOW)





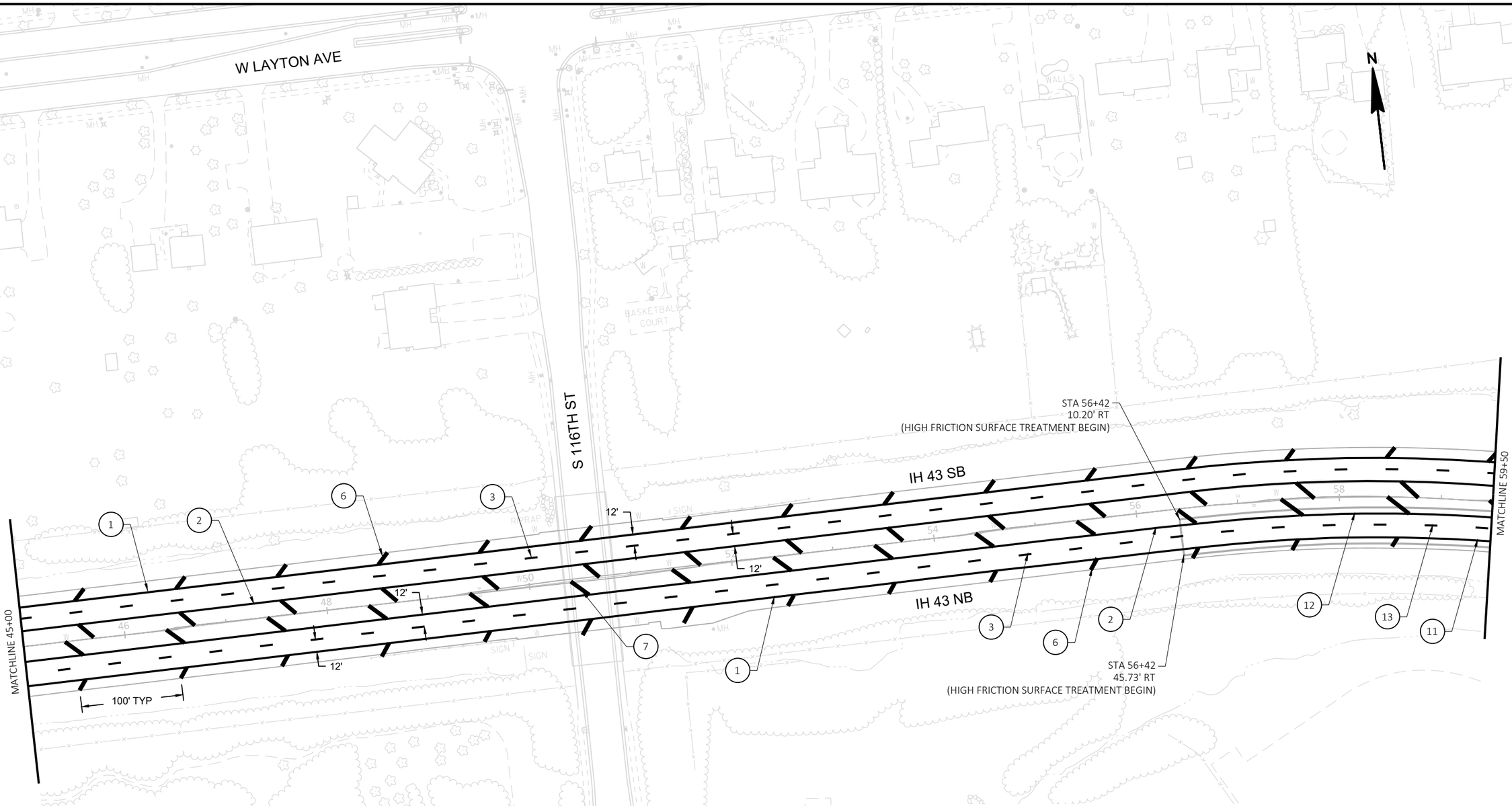
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 128	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024507

PLOT DATE : 7/6/2021 4:28 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



PAVEMENT MARKING LEGEND

1	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)	11	MARKING LINE EPOXY 4-INCH (WHITE)
2	MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)	12	MARKING LINE EPOXY 4-INCH (YELLOW)
3	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)	13	MARKING LINE CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
6	MARKING DIAGONAL EPOXY 12-INCH (WHITE)		
7	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)		

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 129	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024508
PLOT DATE : 7/6/2021 9:13 PM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

PAVEMENT MARKING LEGEND

1 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)

2 MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)

3 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

6 MARKING DIAGONAL EPOXY 12-INCH (WHITE)

7 MARKING DIAGONAL EPOXY 12-INCH (YELLOW)

11 MARKING LINE EPOXY 4-INCH (WHITE)

12 MARKING LINE EPOXY 4-INCH (YELLOW)

13 MARKING LINE CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

15 MARKING ARROW EPOXY (TYPE 2) (WHITE)

19 MARKING CHEVRON EPOXY 24-INCH (WHITE)

30 MARKING LINE CONTRAST EPOXY 8-INCH (WHITE)

31 MARKING LINE CONTRAST EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)

IH 43 SB

IH 43 NB

MATCHLINE 59+50

MATCHLINE 74NB+50

100' TYP

12'

N

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 130	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024509

PLOT DATE : 7/6/2021 9:15 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

PAVEMENT MARKING LEGEND

1 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
2 MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
3 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
4 MARKING STOP LINE EPOXY 18-INCH (WHITE)
5 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
6 MARKING DIAGONAL EPOXY 12-INCH (WHITE)
7 MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
9 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
11 MARKING LINE EPOXY 4-INCH (WHITE)
12 MARKING LINE EPOXY 4-INCH (YELLOW)
13 MARKING LINE CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
14 MARKING ARROW EPOXY (TYPE 4) (WHITE)
15 MARKING ARROW EPOXY (TYPE 2) (WHITE)
19 MARKING CHEVRON EPOXY 24-INCH (WHITE)
20 MARKING SYMBOL EPOXY (WHITE)
24 MARKING ARROW EPOXY (TYPE 3) (WHITE)
30 MARKING LINE CONTRAST EPOXY 8-INCH (WHITE)
31 MARKING LINE CONTRAST EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
33 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

MATCHLINE 74NB+50

IH 43 NB

STA 376+38
0.88' LT
(HIGH FRICTION SURFACE TREATMENT BEGIN)

STA 376+47
24.19' LT

STA 76SB+54
24.28' LT

STA 76SB+49
1.25' LT

STA 78SB+21
3.87' RT

STA 378+16
0.74' LT

STA 79SB+02
0.73' LT

IH 43 SB

STA 366+24
3.76' LT
(HIGH FRICTION SURFACE TREATMENT END)

STA 366+24
2.43' RT

STA 21+47
16.89' LT
(HIGH FRICTION SURFACE TREATMENT END)

STA 21+47
3.32' RT
(HIGH FRICTION SURFACE TREATMENT END)

STH 100 SB

STH 100 NB

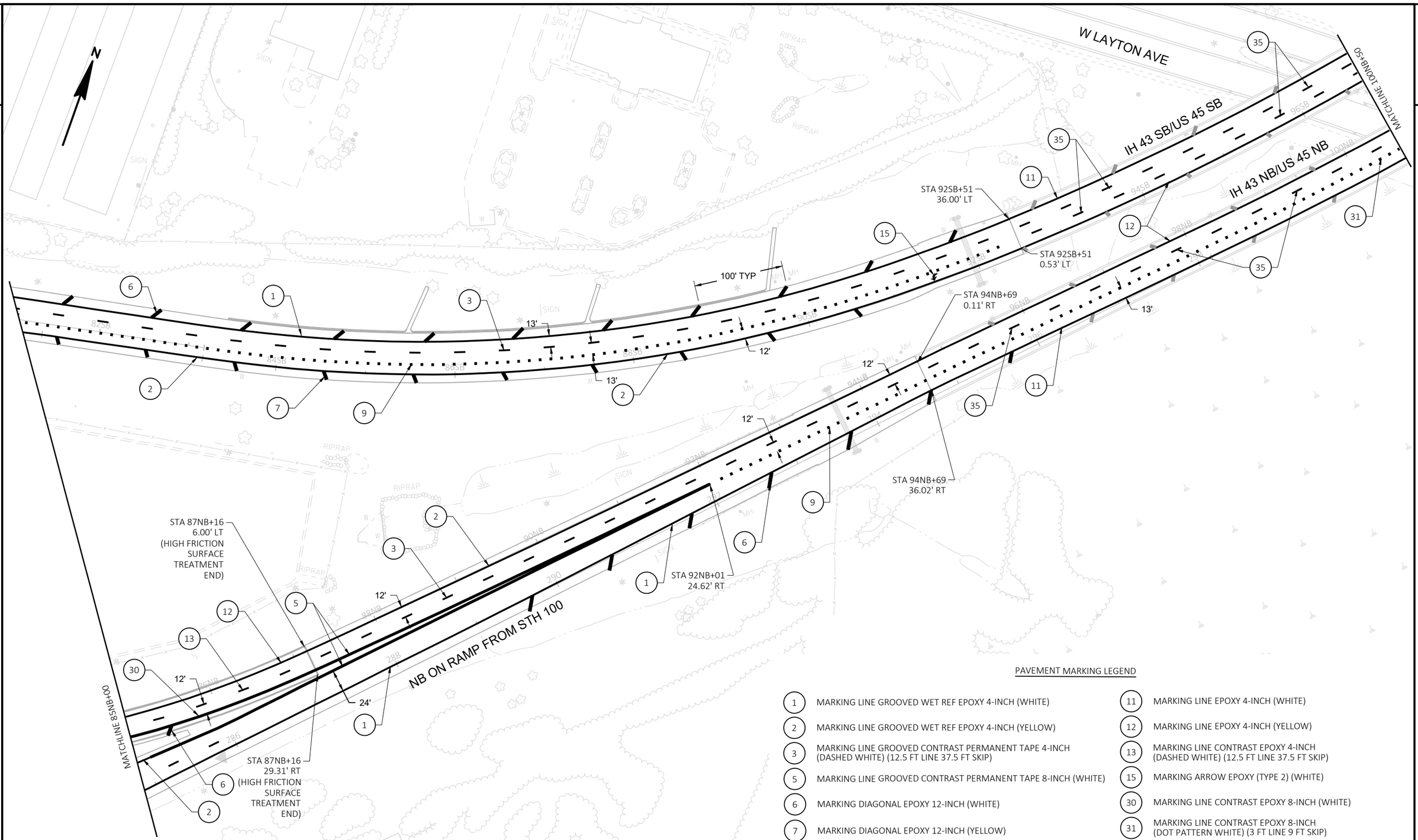
SB OFF RAMP TO STH 100

STA 282+27
24.00' LT

NB ON RAMP FROM STH 100

MATCHLINE 85NB+00

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 131	E

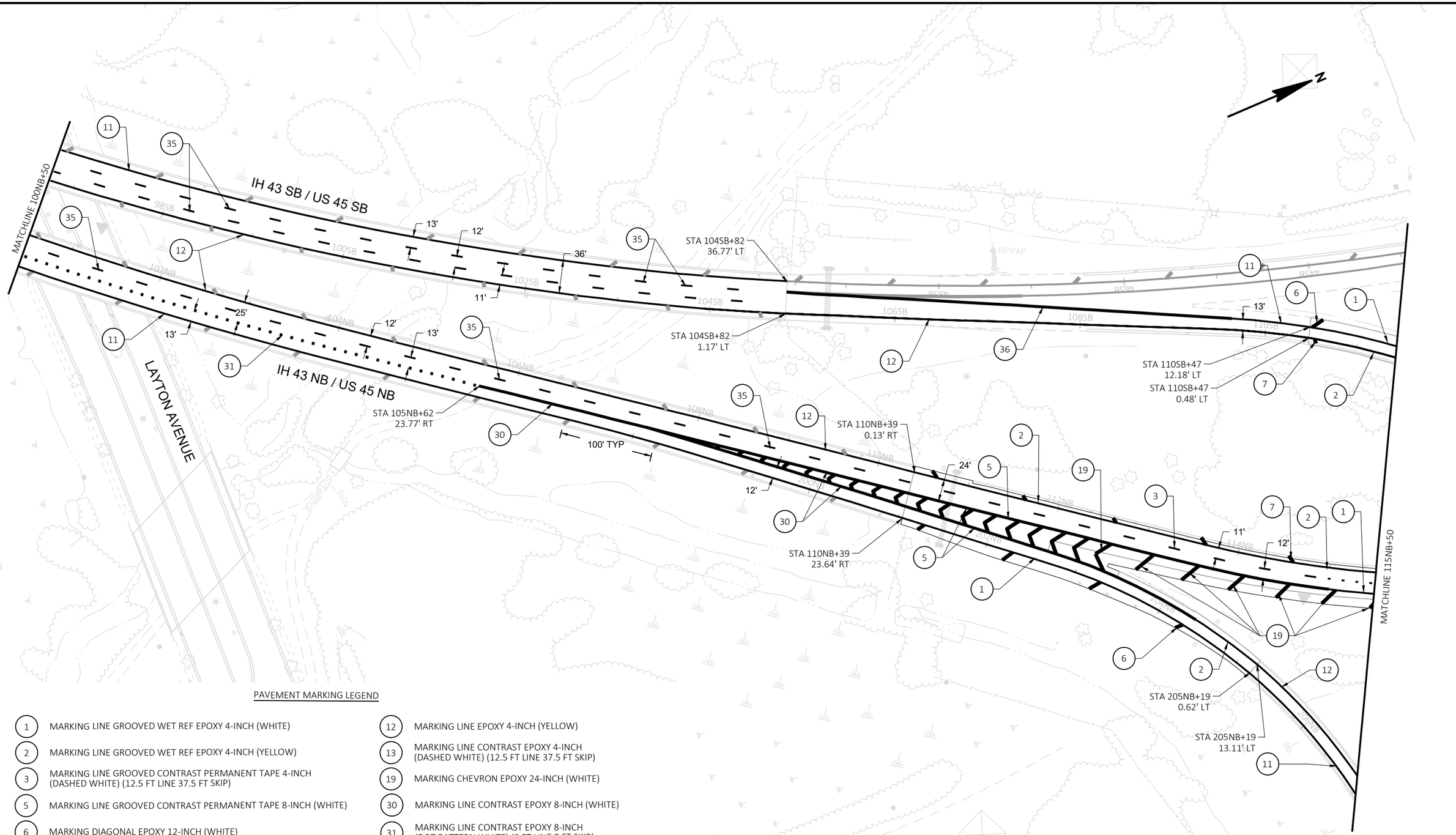


PAVEMENT MARKING LEGEND

1	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)	11	MARKING LINE EPOXY 4-INCH (WHITE)
2	MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)	12	MARKING LINE EPOXY 4-INCH (YELLOW)
3	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)	13	MARKING LINE CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
5	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)	15	MARKING ARROW EPOXY (TYPE 2) (WHITE)
6	MARKING DIAGONAL EPOXY 12-INCH (WHITE)	30	MARKING LINE CONTRAST EPOXY 8-INCH (WHITE)
7	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)	31	MARKING LINE CONTRAST EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
9	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (DOTT PATTERN WHITE) (3 FT LINE 9 FT SKIP)	35	MARKING REPLACE LINE CONTRAST WET REFLECTIVE EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 132	E

2



PAVEMENT MARKING LEGEND

1	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
2	MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
3	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
5	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
6	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
7	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
11	MARKING LINE EPOXY 4-INCH (WHITE)
12	MARKING LINE EPOXY 4-INCH (YELLOW)
13	MARKING LINE CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
19	MARKING CHEVRON EPOXY 24-INCH (WHITE)
30	MARKING LINE CONTRAST EPOXY 8-INCH (WHITE)
31	MARKING LINE CONTRAST EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
35	MARKING REPLACE LINE CONTRAST WET REFLECTIVE EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
36	MARKING REPLACE LINE WET REFLECTIVE EPOXY 8-INCH (WHITE)

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 133 E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024512
PLOT DATE : 7/6/2021 9:17 PM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

NORTH-TO-WEST RAMP (US 45 SB)

NORTH-TO-EAST RAMP (IH 41 SB/IH 894 EB)

WEST-TO-NORTH RAMP (US 45 NB)

EAST-TO-NORTH RAMP (IH 41 NB/IH 894 WB)

EAST-TO-WEST RAMP (IH 43 SB)

WEST-TO-EAST RAMP (IH 43 NB)

END MILL & OVERLAY
(IH 43 SB)
STA 119SB+07

END MILL & OVERLAY
(WEST-TO-NORTH RAMP)
STA 118NB+79

END PROJECT 1090-08-71
STA 210NB+80

STA 208NB+80
12.93' LT

STA 208NB+80
0.14 LT

23'

13'

11'

100' TYP

MATCH LINE 115NB+50

RIPRAP

ATHLETIC FIELD

PAVEMENT MARKING LEGEND

1	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
2	MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
6	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
7	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
11	MARKING LINE EPOXY 4-INCH (WHITE)
12	MARKING LINE EPOXY 4-INCH (YELLOW)
19	MARKING CHEVRON EPOXY 24-INCH (WHITE)
25	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (DOT PATTERN WHITE) (3 FT LINE 12 FT SKIP)

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PAVEMENT MARKING	SHEET 134 E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 024513

PLOT DATE : 7/3/2021 10:07 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

S SUNNY SLOPE RD

W ARMOUR AVE

IH 43 NB

IH 43 SB

11

12

DOUBLE LINE

11

12'

12'

11

TPO APPLIED
TO STRUCTURE B-67-104

11

PAVEMENT MARKING LEGEND

11 MARKING LINE EPOXY 4-INCH (WHITE)

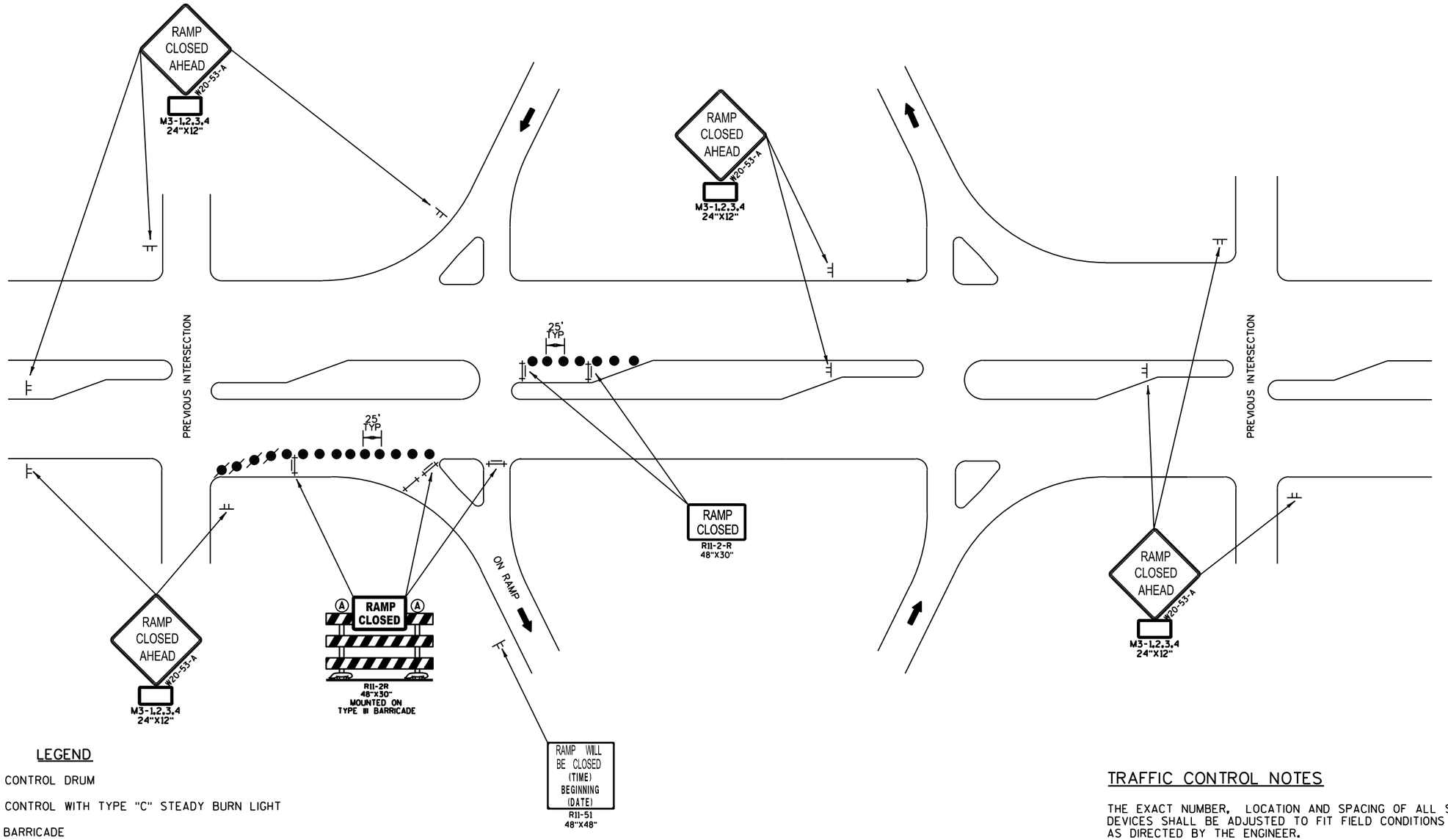
12 MARKING LINE EPOXY 4-INCH (YELLOW)

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	SUNNY SLOPE RD (B-67-104) PAVEMENT MARKING	SHEET 135	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\024501_SUNNY SLOPE RD - B-67-104_PM.DWG
LAYOUT NAME - 024516

PLOT DATE : 7/6/2021 9:31 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH 2 TYPE "A" WARNING LIGHT (FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
SHORT TERM ONLY

TRAFFIC CONTROL NOTES

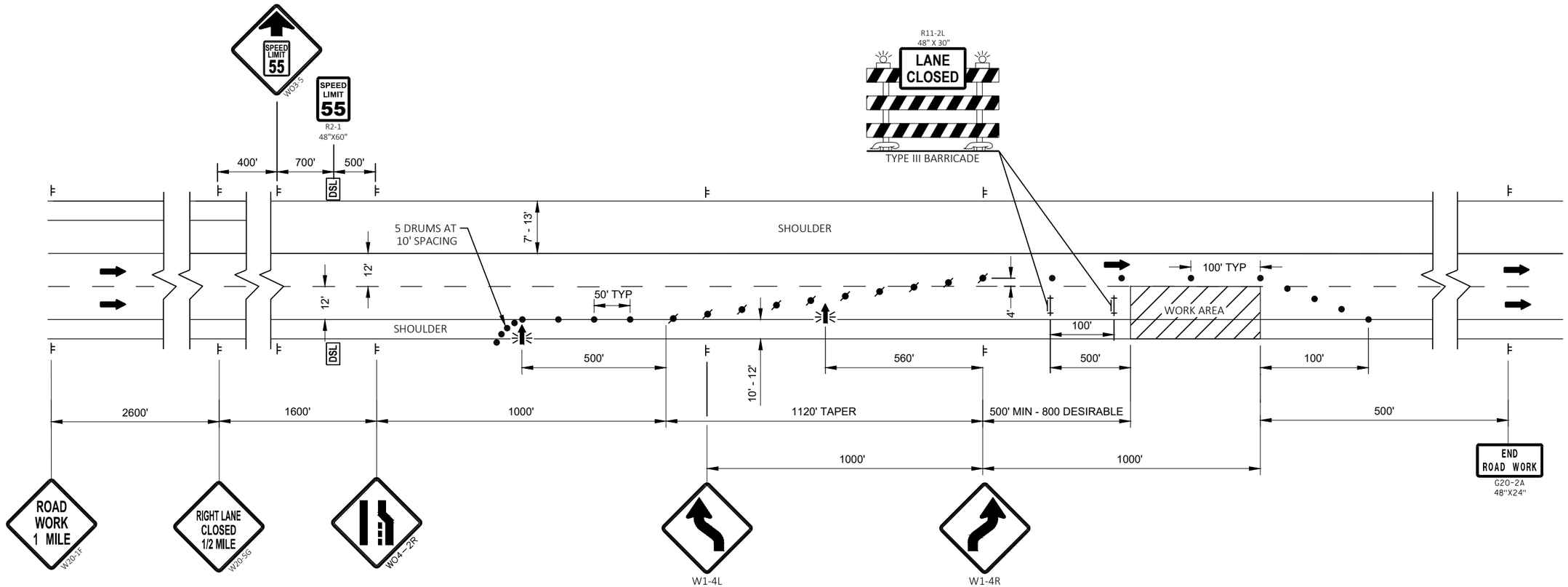
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

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

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

SHORT TERM DEFINED AS 7 DAYS/NIGHTS OR LESS. FOR NIGHT TIME OPERATIONS ALL DRUMS IN TAPERS SHALL HAVE WARNING LIGHT, TYPE C (STEADY BURN). MAY BE APPLIED TO ARTERIALS OR LOCAL ROADS.

2



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- TYPE III BARRICADE WITH SIGN WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA
- DSL — DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY

TRAFFIC CONTROL NOTES

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

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

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

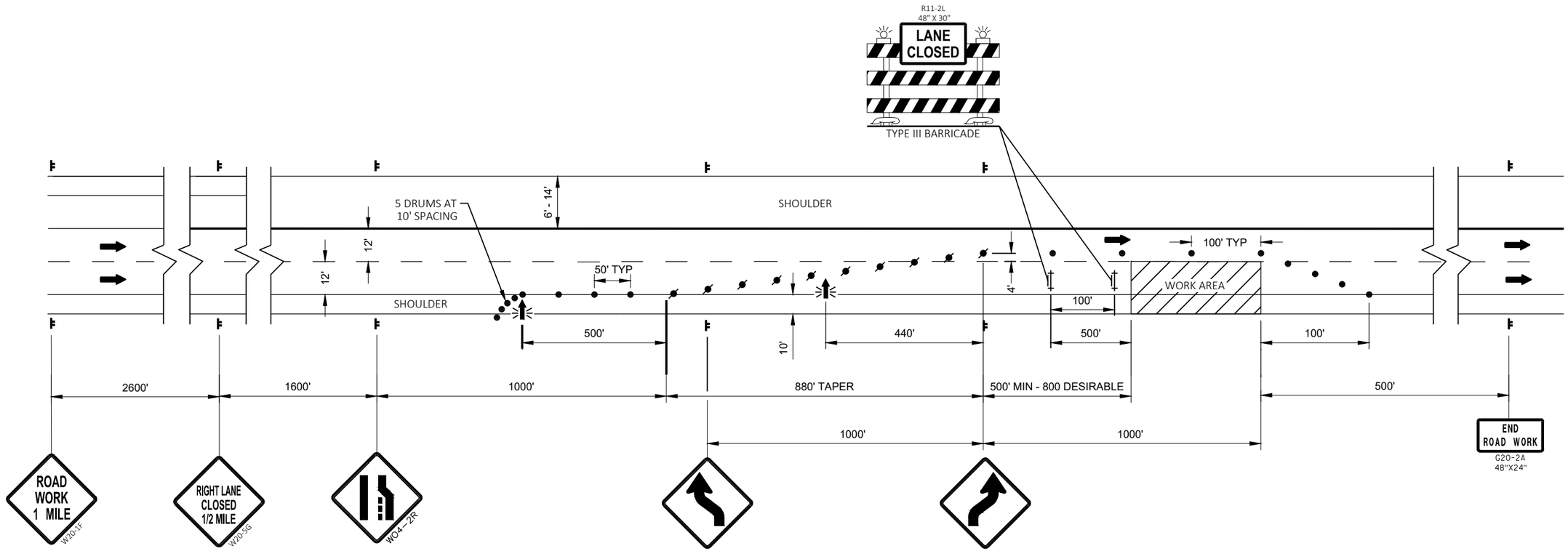
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROWBOARD AND LANE CLOSURE DRUMS.

* USE A MAX WIDTH SIGN IF THE WIDTH OF THE LEFT OVER THRU IS LESS THAN 16'.

NIGHT TIME LANE CLOSURE

WAUKESHA COUNTY
(MOORLAND RD TO 124TH ST)



* USE A MAX WIDTH SIGN IF THE WIDTH OF THE LEFT OVER THRU IS LESS THAN 16'.

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- TYPE III BARRICADE WITH SIGN WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL NOTES

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

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

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

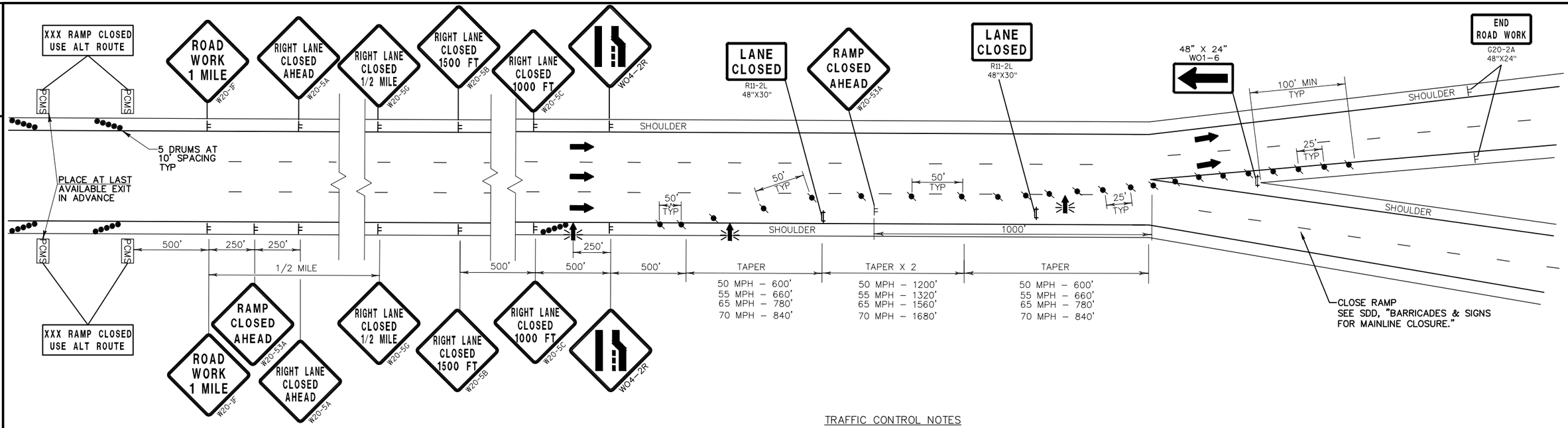
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROWBOARD AND LANE CLOSURE DRUMS.

* USE A MAX WIDTH SIGN IF THE WIDTH OF THE LEFT OVER THRU IS LESS THAN 16'.

NIGHT TIME LANE CLOSURE

MILWAUKEE COUNTY
(124TH ST TO HALE INTERCHANGE)



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- TYPE III BARRICADE WITH SIGN WITH TWO (2) AND TYPE "A" WARNING LIGHTS (FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- PCMS TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE BOARD

TRAFFIC CONTROL NOTES

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

ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

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

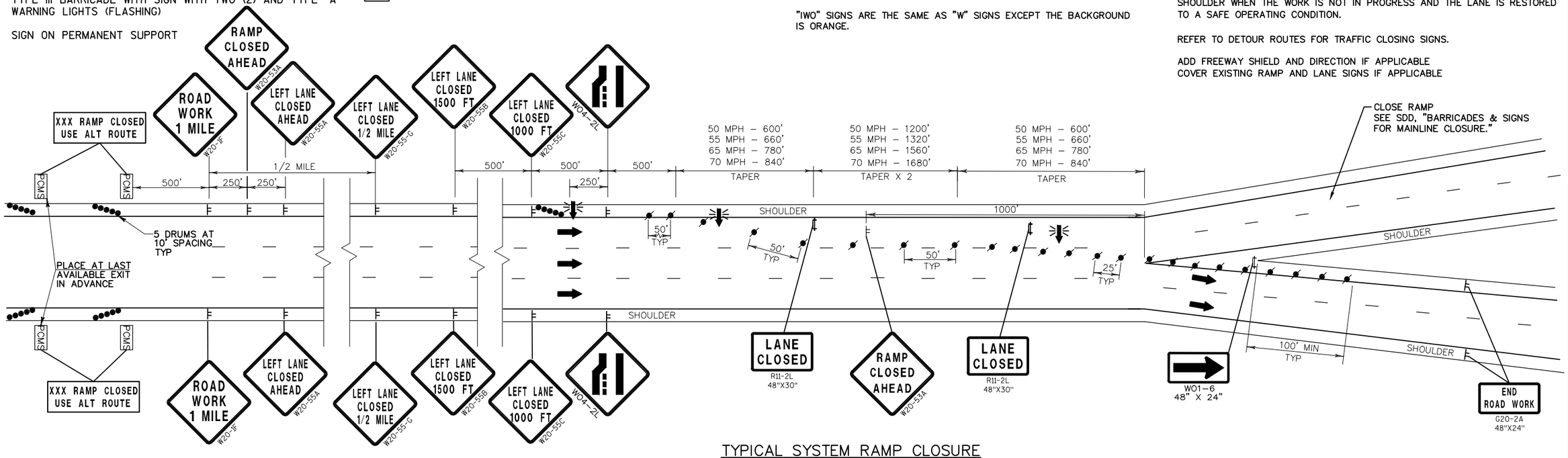
"IWO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

ALL SHORT-TERM LANE CLOSURE SIGNS SHALL BE COMPLETELY REMOVED OR COVERED AND ALL ARROW BOARDS AND DEVICES REMOVED BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

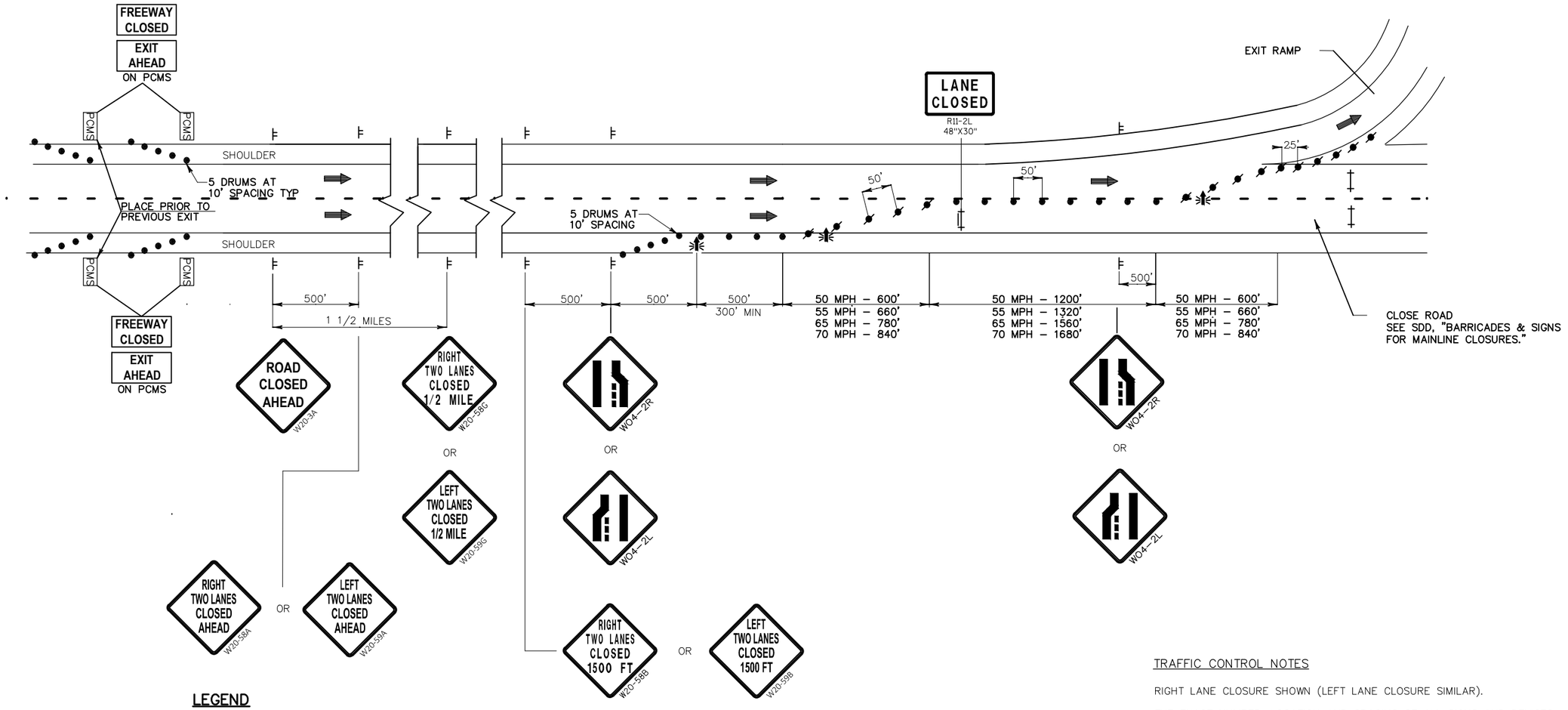
REFER TO DETOUR ROUTES FOR TRAFFIC CLOSING SIGNS.

ADD FREEWAY SHIELD AND DIRECTION IF APPLICABLE
COVER EXISTING RAMP AND LANE SIGNS IF APPLICABLE



TYPICAL SYSTEM RAMP CLOSURE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - CONSTRUCTION DETAILS	SHEET 139	E



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- TYPE III BARRICADE WITH SIGN WITH TWO (2) TYPE "A" WARNING LIGHTS (FLASHING)
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- PCMS TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA

TWO LANE FULL FREEWAY CLOSURE

TRAFFIC CONTROL NOTES

RIGHT LANE CLOSURE SHOWN (LEFT LANE CLOSURE SIMILAR).

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

FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

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

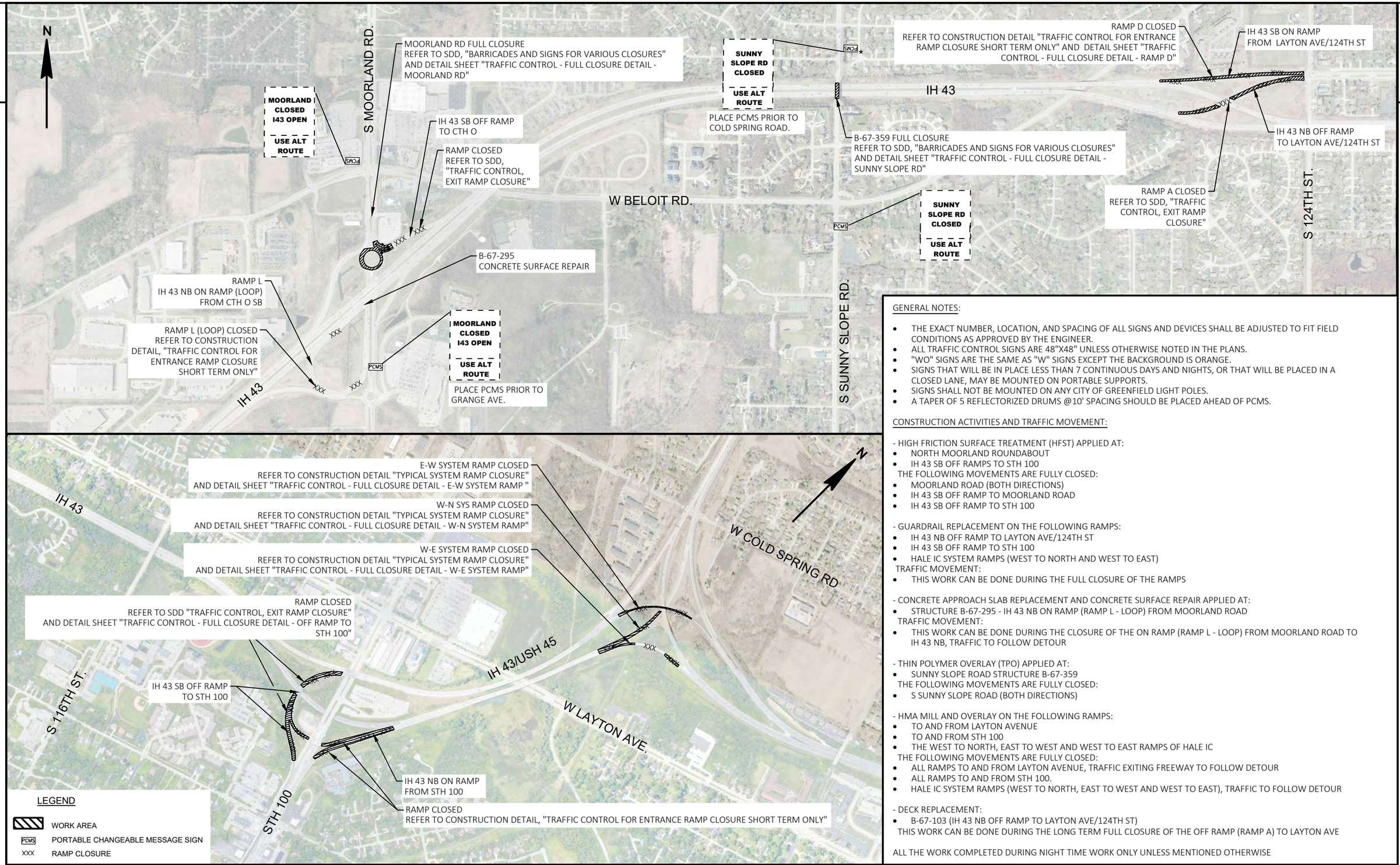
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1000' ACROSS EACH CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500' IN FRONT OF DRUMS, WITH LANE CLOSED SIGN.

REFER TO DETOUR ROUTES FOR TRAFFIC CLOSING SIGNS.



GENERAL NOTES:

- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- ALL TRAFFIC CONTROL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED IN THE PLANS.
- "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.
- SIGNS SHALL NOT BE MOUNTED ON ANY CITY OF GREENFIELD LIGHT POLES.
- A TAPER OF 5 REFLECTORIZED DRUMS @10' SPACING SHOULD BE PLACED AHEAD OF PCMS.

CONSTRUCTION ACTIVITIES AND TRAFFIC MOVEMENT:

- HIGH FRICTION SURFACE TREATMENT (HFST) APPLIED AT:
  - NORTH MOORLAND ROUNDABOUT
  - IH 43 SB OFF RAMPS TO STH 100

  THE FOLLOWING MOVEMENTS ARE FULLY CLOSED:
  - MOORLAND ROAD (BOTH DIRECTIONS)
  - IH 43 SB OFF RAMP TO MOORLAND ROAD
  - IH 43 SB OFF RAMP TO STH 100

- GUARDRAIL REPLACEMENT ON THE FOLLOWING RAMPS:
  - IH 43 NB OFF RAMP TO LAYTON AVE/124TH ST
  - IH 43 SB OFF RAMP TO STH 100
  - HALE IC SYSTEM RAMPS (WEST TO NORTH AND WEST TO EAST)

  TRAFFIC MOVEMENT:
  - THIS WORK CAN BE DONE DURING THE FULL CLOSURE OF THE RAMPS

- CONCRETE APPROACH SLAB REPLACEMENT AND CONCRETE SURFACE REPAIR APPLIED AT:
  - STRUCTURE B-67-295 - IH 43 NB ON RAMP (RAMP L - LOOP) FROM MOORLAND ROAD

  TRAFFIC MOVEMENT:
  - THIS WORK CAN BE DONE DURING THE CLOSURE OF THE ON RAMP (RAMP L - LOOP) FROM MOORLAND ROAD TO IH 43 NB, TRAFFIC TO FOLLOW DETOUR

- THIN POLYMER OVERLAY (TPO) APPLIED AT:
  - SUNNY SLOPE ROAD STRUCTURE B-67-359

  THE FOLLOWING MOVEMENTS ARE FULLY CLOSED:
  - S SUNNY SLOPE ROAD (BOTH DIRECTIONS)

- HMA MILL AND OVERLAY ON THE FOLLOWING RAMPS:
  - TO AND FROM LAYTON AVENUE
  - TO AND FROM STH 100
  - THE WEST TO NORTH, EAST TO WEST AND WEST TO EAST RAMPS OF HALE IC

  THE FOLLOWING MOVEMENTS ARE FULLY CLOSED:
  - ALL RAMPS TO AND FROM LAYTON AVENUE, TRAFFIC EXITING FREEWAY TO FOLLOW DETOUR
  - ALL RAMPS TO AND FROM STH 100.
  - HALE IC SYSTEM RAMPS (WEST TO NORTH, EAST TO WEST AND WEST TO EAST), TRAFFIC TO FOLLOW DETOUR

- DECK REPLACEMENT:
  - B-67-103 (IH 43 NB OFF RAMP TO LAYTON AVE/124TH ST)

  THIS WORK CAN BE DONE DURING THE LONG TERM FULL CLOSURE OF THE OFF RAMP (RAMP A) TO LAYTON AVE

ALL THE WORK COMPLETED DURING NIGHT TIME WORK ONLY UNLESS MENTIONED OTHERWISE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - OVERVIEW - FULL CLOSURES	SHEET 141	E

2

2

IH 43 SB

IH 43 NB

2SB 754SB 756SB 758SB 760SB 762SB 764SB 766SB

753NB 754NB 755NB 756NB 757NB 758NB 759NB 760NB 761NB 762NB 763NB 764NB 765NB 766NB 767NB

5 DRUMS AT
10' SPACING

1600'

2600'

RAMP
WORK
AHEAD
W20-1A (MOD.)

NORTH
MOORLAND
CLOSED

USE ALT
ROUTE

LEFT LANE
CLOSED
1/2 MILE
W20-5-G

RAMP
M4-10 (MOD.)
24"X12"

MATCH LINE 767NB+50

768SB 769NB 770NB

768NB

IH 43 NB

2600'

MATCH LINE 767NB+50

5 DRUMS AT 10' SPACING

IH 43 NB ON RAMP (LOOP) FROM
MOORLAND RD (CTH O) SB

IH 43 NB OFF RAMP
TO MOORLAND RD (CTH O) SB

500'

50' TYP

1

MATCHLINE A

GENERAL NOTE

REFER TO SDD, "TRAFFIC CONTROL LANE CLOSURE".

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM WITH TYPE C STRADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- ARROW BOARD

1

R11-2L
48" X 30"

LANE
CLOSED

TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - MOORLAND RD	SHEET 142	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_MOORLAND ROAD HFST.DWG
LAYOUT NAME - 1
PLOT DATE : 4/21/2021 8:29 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

- PLACE PCMS PRIOR TO W GRANGE AVE.
- PLACE 7 CALENDAR DAYS PRIOR TO CLOSURE.

MOORLAND CLOSED I43 OPEN

USE ALT ROUTE

5 DRUMS AT 10' SPACING

ROAD WORK AHEAD W20-1A

200'

W WESTRIDE DR

MOORLAND RD (CTH O) SB

MOORLAND RD (CTH O) NB

PCMS

350' 350' 350'

ROAD WORK AHEAD W20-1A

LEFT LANE CLOSED AHEAD W20-5SA

W04-2L

W SMALL RD

200'

ROAD WORK AHEAD W20-1A

5 DRUMS AT 10' SPACING

25' TYP

320' TAPER

50' TYP

16SB

16NB

MATCHLINE A

18SB

18NB

25' TYP

SOUTH MOORLAND ROUNDABOUT

200'

MATCHLINE 20NB+00

ROAD WORK AHEAD W20-1A

N

ROAD TO CLOSE

XXXDAY XX XX XX

PLACE PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE

MOORLAND RD (CTH O) SB

22SB 24SB 26SB 28SB 30SB

22NB 24NB 26NB 28NB 30NB

786NB 786SB 787NB 788NB 788SB 789NB 789SB 790NB 790SB 791NB

IH 43 SB

IH 43 NB

IH 43 NB ON RAMP

5 DRUMS AT 10' SPACING

MATCHLINE 20NB+00

MATCHLINE 31NB+50

25' TYP

50' 500'

1500' 500' 500'

MOORLAND RD (CTH O) NB

ROCK RIDGE RD

ROAD CLOSED AHEAD W20-3A

ROAD CLOSED 1000 FT W20-3C

ROAD CLOSED 500 FT W20-3D

GENERAL NOTES

REFER TO SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY".

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM WITH TYPE C STRADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- ARROW BOARD
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

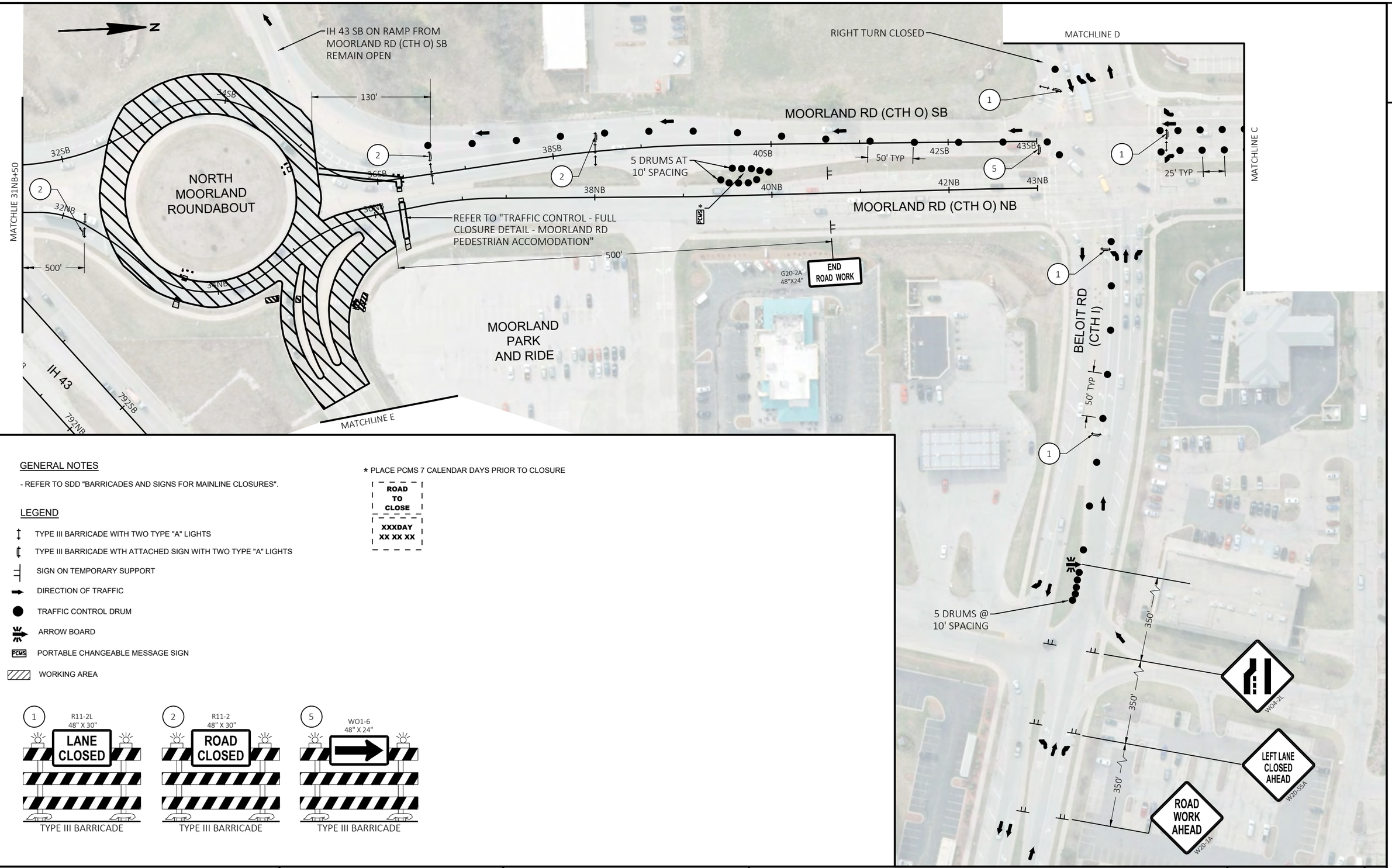
1 — R11-2L 48" X 30" — LANE CLOSED — TYPE III BARRICADE

2 — R11-2 48" X 30" — ROAD CLOSED — TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - MOORLAND RD	SHEET 143	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_MOORLAND ROAD HFST.DWG
LAYOUT NAME - 2
PLOT DATE : 4/17/2021 2:21 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



GENERAL NOTES

- REFER TO SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES".

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- ARROW BOARD
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- WORKING AREA

* PLACE PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE

ROAD TO CLOSE

XXXDAY XX XX XX

1 R11-2L 48" X 30"

TYPE III BARRICADE

2 R11-2 48" X 30"

TYPE III BARRICADE

5 WO1-6 48" X 24"

TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - MOORLAND RD	SHEET 144	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_MOORLAND ROAD HFST.DWG
LAYOUT NAME - 3
PLOT DATE : 4/17/2021 2:26 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

ROAD WORK AHEAD W20-1A

350'

RIGHT LANE CLOSED AHEAD W20-5A

350'

W04-2R

350'

5 DRUMS @ 10' SPACING

BELOIT RD (CTH I)

1

50' TYP

MATCHLINE D

ROAD WORK AHEAD W20-1A

MATCHLINE C

25' TYP

MOORLAND RD (CTH O) SB

1

5

BEGIN LEFT TURN LANE R3-20LL 24"X36"

WO12-1D 48"X48"

320' TAPER

350'

25' TYP

25' TYP

MOORLAND RD (CTH O) NB

1

5

ROAD WORK AHEAD W20-1A

WO12-1D 48"X48"

BEGIN LEFT TURN LANE R3-20LL 24"X36"

MATCH LINE B

GENERAL NOTES

- REFER TO SDD "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY".

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STRADY BURN LIGHT
- ARROW BOARD

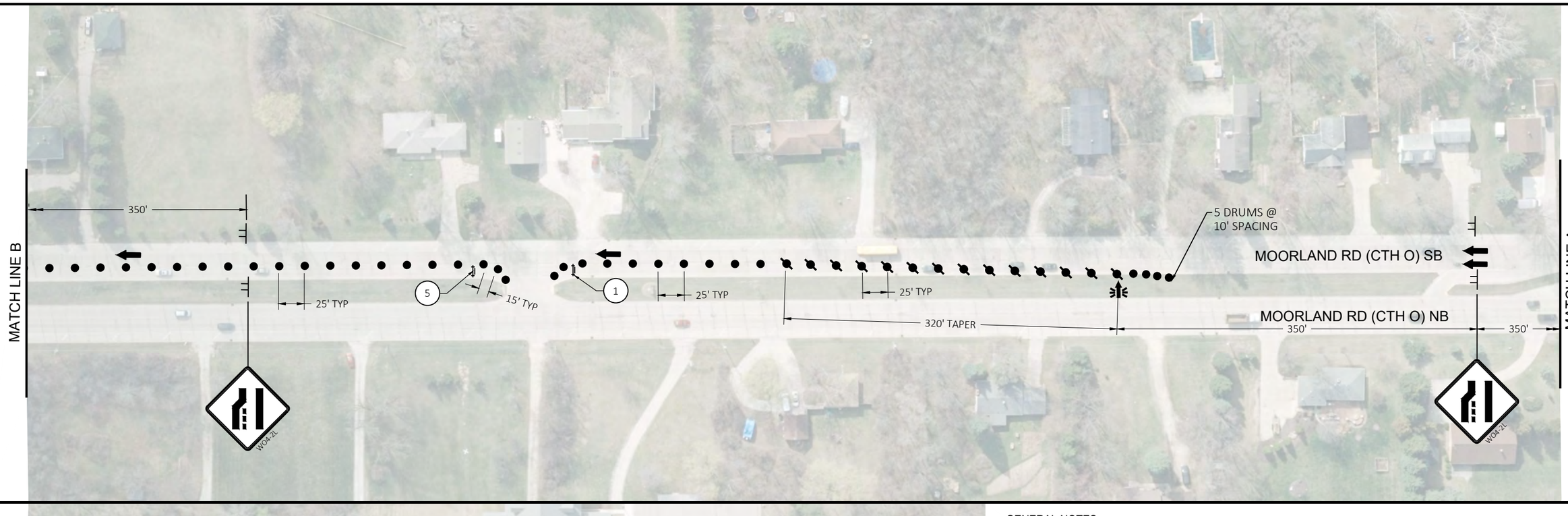
1 R11-2L 48" X 30" LANE CLOSED TYPE III BARRICADE

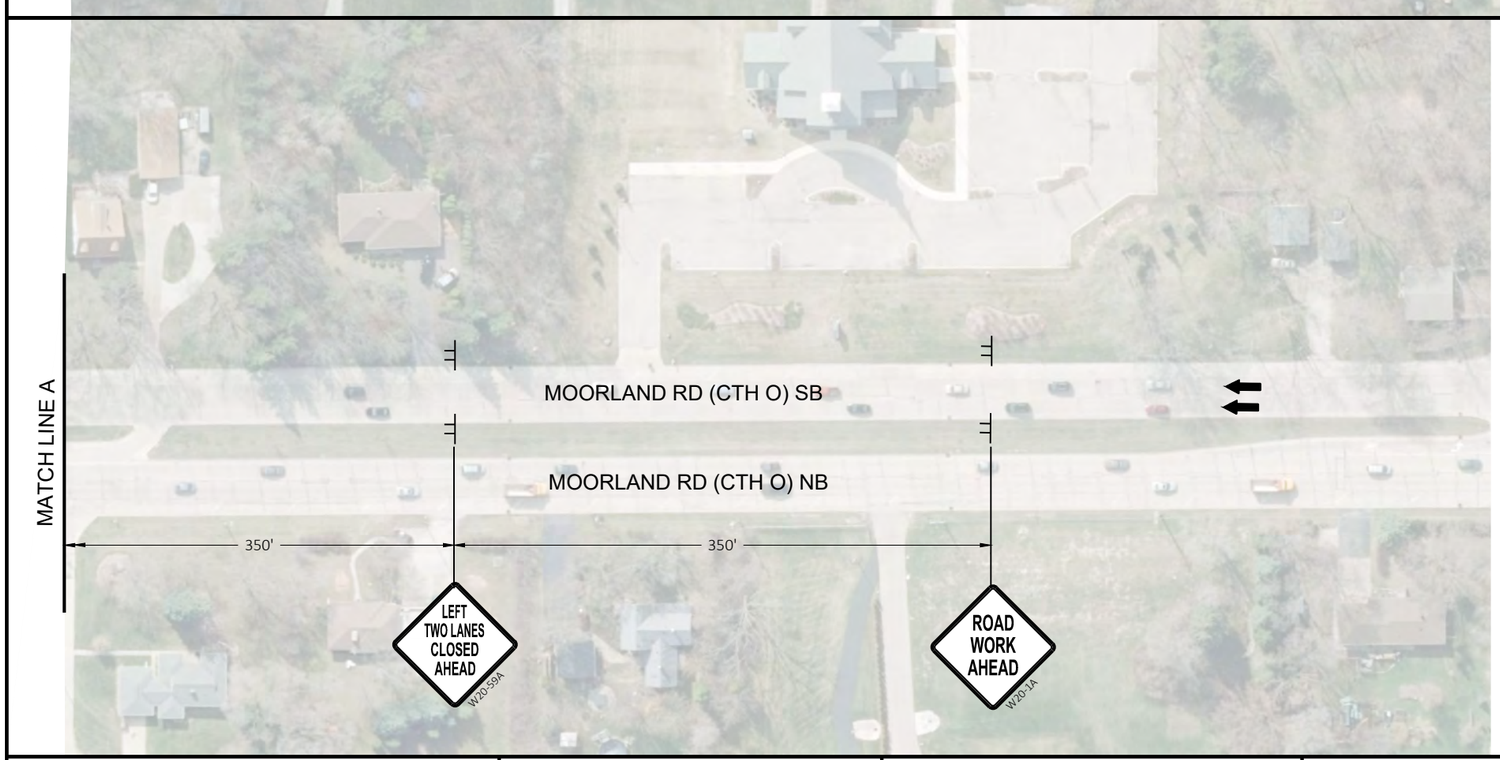
5 WO1-6 48" X 24" TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - MOORLAND RD	SHEET 145	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_MOORLAND ROAD HFST.DWG
LAYOUT NAME - 4
PLOT DATE : 4/17/2021 2:28 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



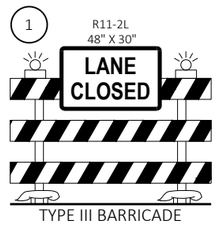


GENERAL NOTES

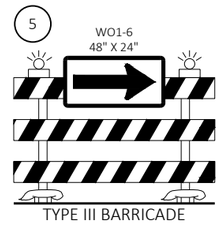
- REFER TO SDD "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY".

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STRADY BURN LIGHT
- ARROW BOARD



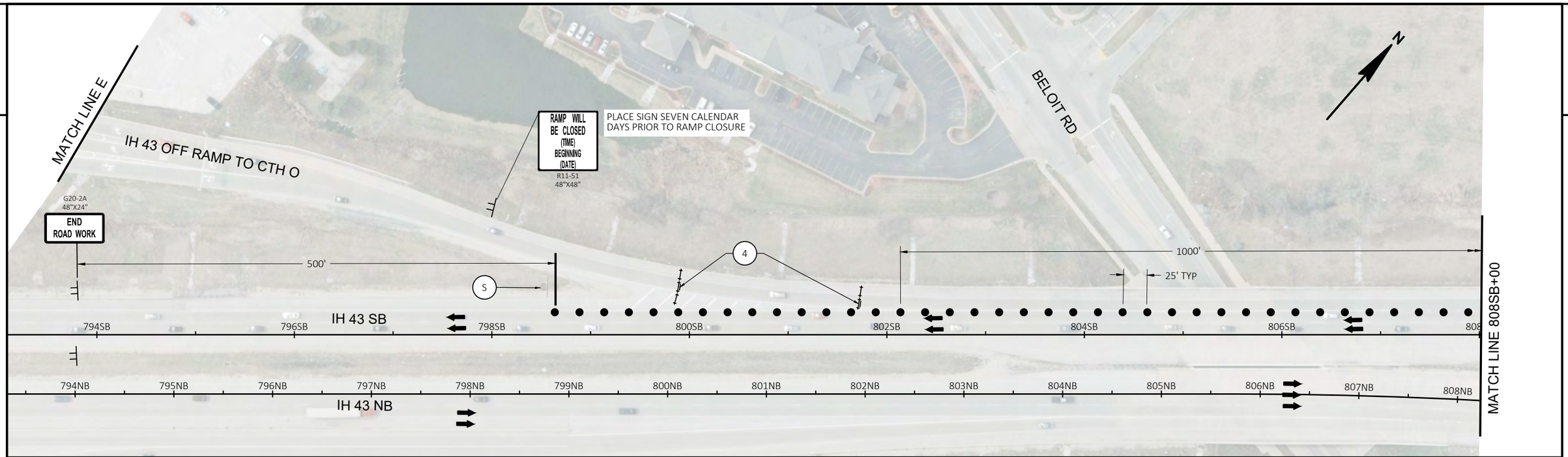
TYPE III BARRICADE

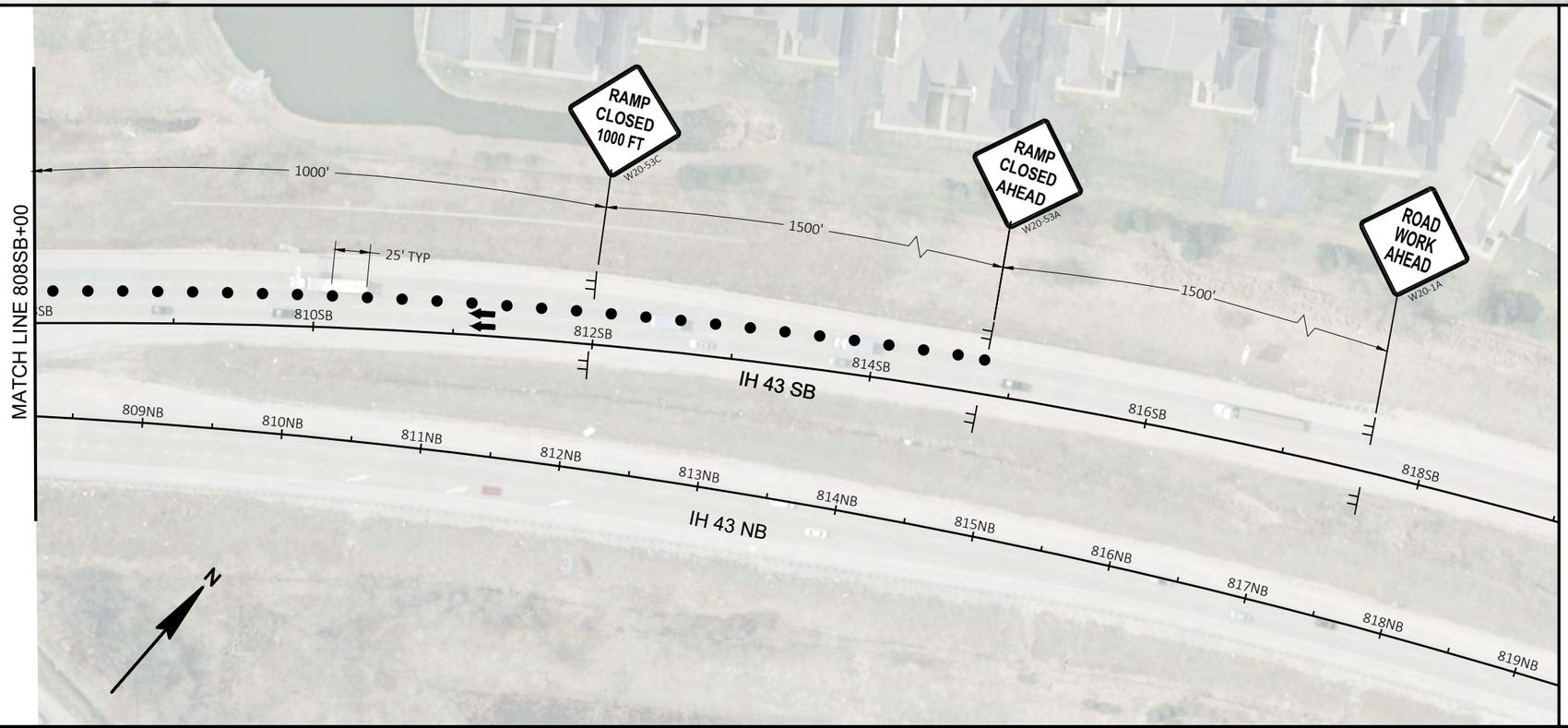


TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - MOORLAND ROAD ROUNDABOUT HFST	SHEET 146	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_MOORLAND ROAD HFST.DWG
LAYOUT NAME - 5
PLOT DATE : 3/31/2021 4:04 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42





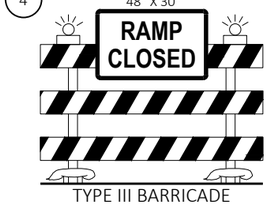
GENERAL NOTES

REFER TO SDD "TRAFFIC CONTROL, EXIT LANE CLOSURE".

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STRADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- EXISTING SIGN

(4) R11-2R 48" X 30"



TYPE III BARRICADE

(S) COVER EXISTING SIGN



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - MOORLAND RD	SHEET 147	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_MOORLAND ROAD HFST.DWG
LAYOUT NAME - 6

PLOT DATE : 4/21/2021 8:31 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

NORTH MOORLAND ROUNDABOUT

CTH O SB

CTH O NB

IH 43 SB

32SB

34SB

36SB

38SB

32NB

34NB

36NB

HIGH FRICTION SURFACE TREATMENT (HFST) APPLIED

TEMPORARY CURB RAMP PERPENDICULAR TO CURB WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB WITH PROTECTIVE EDGE

WORKING AREA CLOSED SIDEWALK

WORKING AREA CLOSED SIDEWALK

HIGH FRICTION SURFACE TREATMENT (HFST) APPLIED

6'

6'

6'

NOTES

- ALL WORK WILL BE PERFORMED OVERNIGHT.
- CURB RAMP REPLACEMENT WILL BE COMPLETED DURING FULL ROAD CLOSURE.
- ALL TEMPORARY CURB RAMPS ARE 48" IN WIDTH WITH 2-INCH MINIMUM HEIGHT PROTECTIVE EDGES.
- TEMPORARY CURB RAMPS AND LANDINGS SHALL HAVE 2% MAX CROSS-SLOPE.
- TEMPORARY CURB RAMPS SHALL HAVE 8.33% RUNNING SLOPE.
- CLEAR SPACE OF 48"X48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- PROVIDE DETECTABLE WARNING FIELD FOR EACH CURB RAMP.
- ALL TYPE II BARRICADE SHALL HAVE ONE WARNING LIGHT, TYPE A, LOW INTENSTIY FLASHING.
- REFER TO SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION."

LEGEND

TEMPORARY PEDESTRIAN PATH

TEMPORARY PEDESTRIAN BARRICADE

(1) TEMPORARY PEDESTRIAN CROSSWALK LINES REMOVABLE TAPE 4-INCH (WHITE) - 6' APART

TEMPORARY PEDESTRIAN SURFACE PLYWOOD - 4' WIDE

R9-11A 24"X12" SIDEWALK CLOSED CROSS HERE

TYPE II BARRICADE (2)

R9-11A 24"X12" SIDEWALK CLOSED CROSS HERE

TYPE II BARRICADE (3)

R9-9 24"X12" SIDEWALK CLOSED

TYPE III BARRICADE (4)

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - MOORLAND RD PEDESTRIAN ACCOMMODATION	SHEET 148	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_MOORLAND ROAD HFST.DWG
LAYOUT NAME - 7

PLOT DATE : 4/17/2021 3:08 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

R11-3 (MOD.)
60"X30"

TYPE III BARRICADE

2



LEGEND

- DIRECTION OF TRAFFIC
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - SUNNY SLOPE RD	SHEET 149	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_SUNNY SLOPE RD B-67-359 TPO.DWG
LAYOUT NAME - 1

PLOT DATE : 4/17/2021 3:13 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

MATCH LINE 1

S SUNNY SLOPE RD.

PRAIRIE LN

IH 43 NB

IH 43 SB

W ARMOUR AVE.

B-67-359

N

ROAD CLOSED AHEAD W20-3A

G20-2A 48"X24" END ROAD WORK

200'

500'

5 DRUMS SPACED AT 10'

50'

ROAD CLOSED 1000 FT W20-3C

ROAD CLOSED 500 FT W20-3D

R3-1 24"X24"

FCMS

*

1

3

MATCH LINE 2

2

1 R11-2B 48"X30"

BRIDGE OUT

TYPE III BARRICADE

3 R11-3C (MOD.) 60"X24"

BRIDGE OUT 500 FEET AHEAD

TYPE III BARRICADE

GENERAL NOTES

REFER TO SDD, "BARRICADES AND SIGNS FOR MAINLINE CLOSURES".

* BRIDGE TO CLOSE

XXXDAY XX XX XX

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- PORTABLE CHANGEABLE MESSAGE SIGN
- CLOSURE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - SUNNY SLOPE RD	SHEET 150	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_SUNNY SLOPE RD B-67-359 TPO.DWG
LAYOUT NAME - 2
PLOT DATE : 3/31/2021 4:17 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

MATCH LINE 2

MATCH LINE 3

W MAPLE RIDGE RD.

W SUN VALLEY DR.

S SUNNY SLOPE RD.

500'

END ROAD WORK

G20-2A
48"X24"

W MARIA DR.

MATCH LINE 3

SUNNY SLOPE RD CLOSED

USE ALT ROUTE

4

DISTANCE TO BE DETERMINED BY THE ENGINEER IN THE FIELD

PCMS

5 DRUMS SPACED AT 10'

ROAD CLOSED AHEAD

W20-3A

W LINFIELD DR.

S SUNNY SLOPE RD.

W COLD SPRING RD.

200'

ROAD CLOSED AHEAD

W20-3A

GENERAL NOTES

REFER TO SDD, "BARRICADES AND SIGNS FOR MAINLINE CLOSURES".

LEGEND

- DIRECTION OF TRAFFIC
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM

R11-3
60" X 30"

4

ROAD CLOSED
0.5 MILES AHEAD
LOCAL TRAFFIC ONLY

TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - SUNNY SLOPE RD	SHEET 151	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_SUNNY SLOPE RD B-67-359 TPO.DWG
LAYOUT NAME - 3

PLOT DATE : 3/31/2021 4:16 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

RAMP WILL BE CLOSED (TIME) BEGINNING (DATE)
R11-51
48"X48"

PLACE SIGN SEVEN CALENDER DAYS IN ADVANCE PRIOR TO CLOSURE

IH 43 NB ON RAMP (RAMP L - LOOP) FROM CTH O SB CLOSED

IH 43 SB

IH 43 NB

IH 43 SB ON RAMP FROM CTH O SB REMAIN OPEN

WORKING AREA

B-67-295

50' TYP

15' TYP

CTH O SB

CTH O NB

NORTH MOORLAND ROUNDABOUT

ROCK RIDGE RD

WORKING AREA

500'

END ROAD WORK
G20-2A
48"X24"

MATCHLINE 36NB+00

RAMP CLOSED AHEAD
W20-53A

NORTH
INTERSTATE
43
M3-1
24"X12"
M1-1
24"X24"

350'

R3-20R
24"X36"
BEGIN RIGHT TURN LANE

BELOIT RD (CTH I)

25' TYP

MATCHLINE A

WO12-1D
48"X48"

RAMP CLOSED AHEAD
W20-53A

NORTH
INTERSTATE
43
M3-1
24"X12"
M1-1
24"X24"

350'

GENERAL NOTES

- REFER TO THE FOLLOWING SDD:
 -"TRAFFIC CONTROL, EXIT LANE CLOSURE"
 -"TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY".
 -"TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY".
 - "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE".

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- EXISTING SIGN

1 R11-2L 48" X 30" LANE CLOSED TYPE III BARRICADE

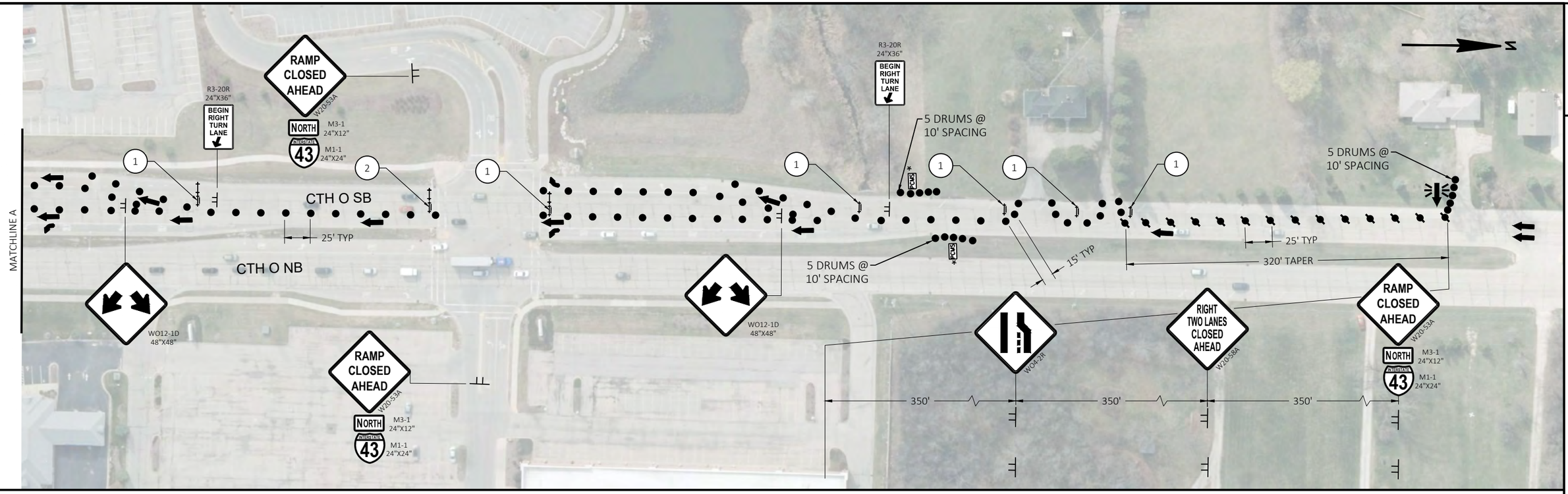
2 WO1-6 48" X 24" TYPE III BARRICADE

3 R11-2R 48" X 30" RAMP CLOSED TYPE III BARRICADE

S NORTH INTERSTATE 43 COVER EXISTING SIGN

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - RAMP L	SHEET 152	E

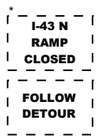
FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_IH 43 ON RAMP (LOOP) FROM CTH O SB - B-67-295.DWG
LAYOUT NAME - 1
PLOT DATE : 4/18/2021 2:36 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

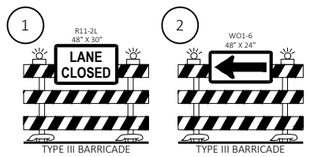


GENERAL NOTES

REFER TO THE FOLLOWING SDD:
-"TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY".
-"TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY".
-"TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE".

FOR DETOUR ROUTE REFER TO "DETOUR PLAN - IH 43 NB ON RAMP (LOOP) FROM MOORLAND RD CLOSURE".





LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- ARROW BOARD
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - RAMP L	SHEET 153	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_IH 43 ON RAMP (LOOP) FROM CTH O SB - B-67-295.DWG
LAYOUT NAME - 2
PLOT DATE : 4/18/2021 2:37 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

GENERAL NOTES:

REFER TO THE FOLLOWING SDD:

"TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY".

"TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE".

LEGEND

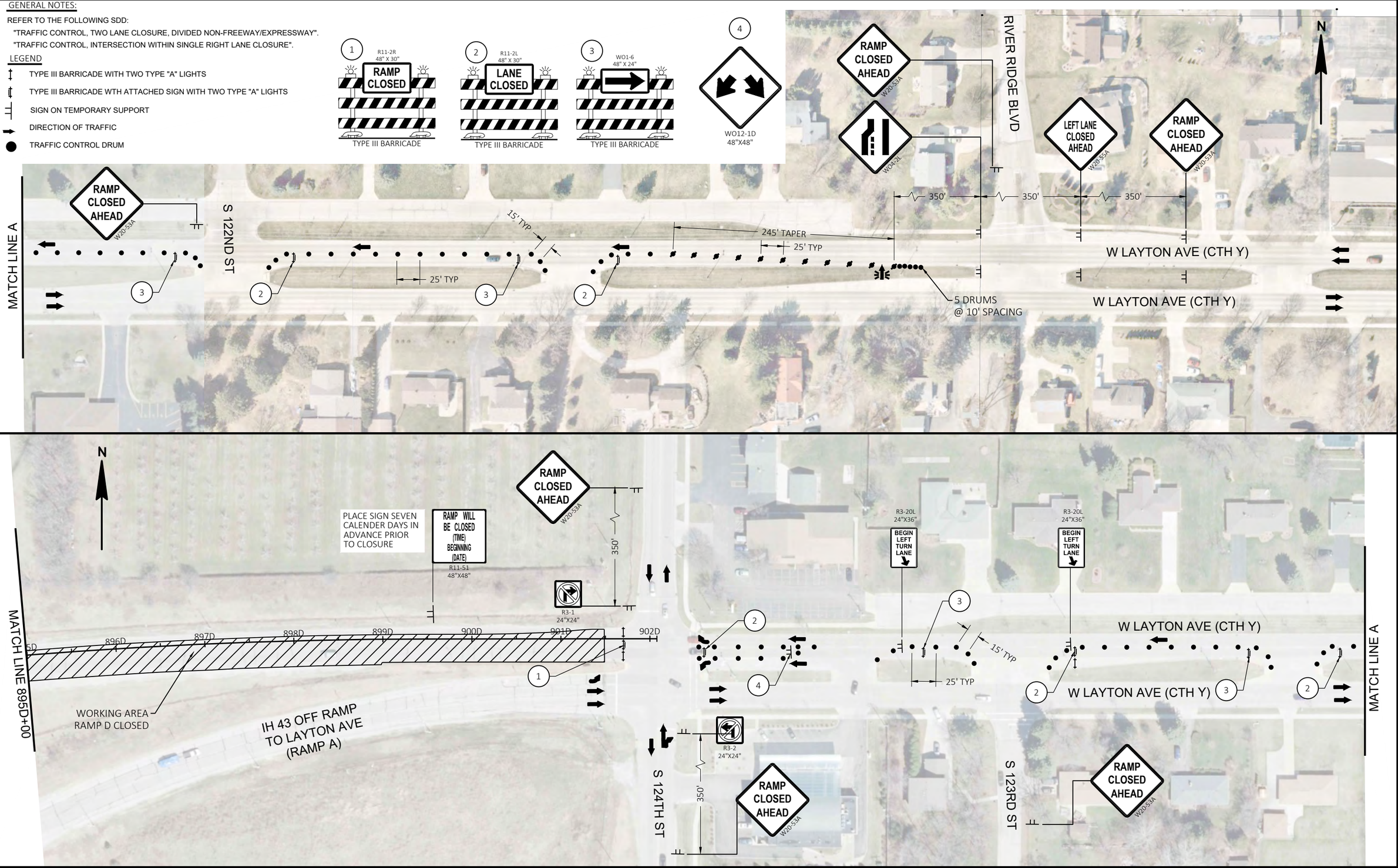
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM

1 — R11-2R, 48" X 30", RAMP CLOSED — TYPE III BARRICADE

2 — R11-2L, 48" X 30", LANE CLOSED — TYPE III BARRICADE

3 — WO1-6, 48" X 24" — TYPE III BARRICADE

4 — WO12-1D, 48"X48"



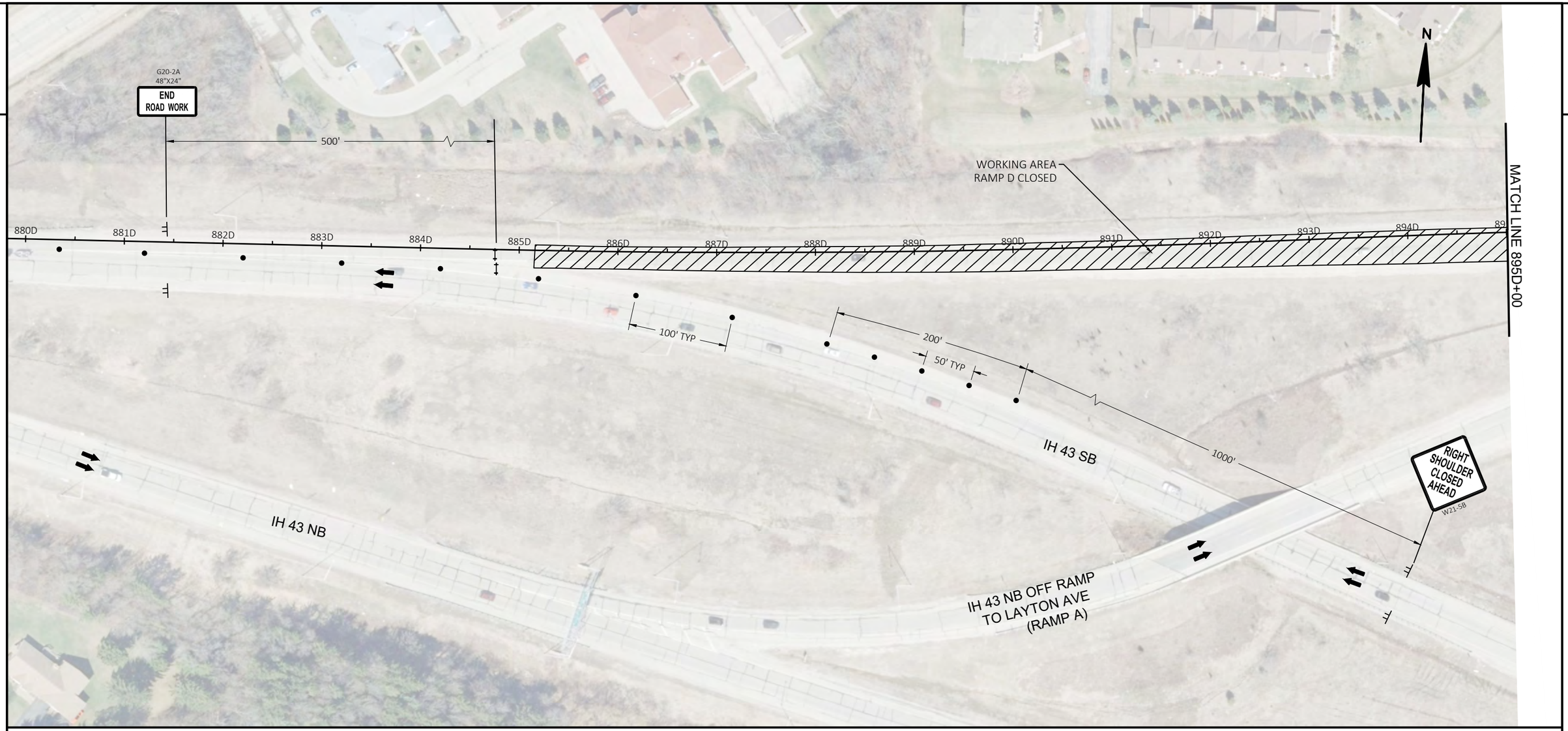
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - RAMP D	SHEET 154	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_IH 43 ON RAMP FROM LAYTON AVE (RAMP D).DWG
LAYOUT NAME - 1

PLOT DATE : 4/17/2021 3:23 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

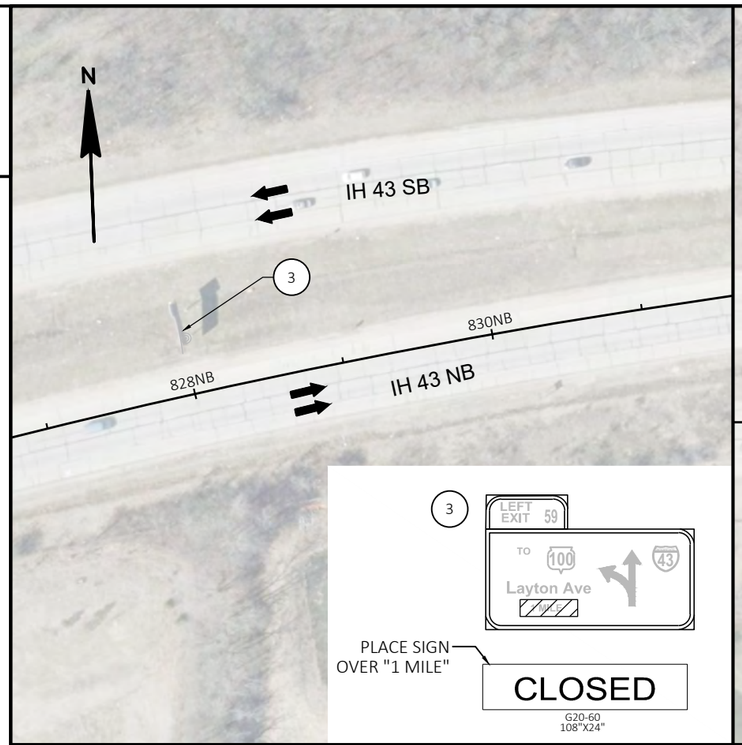


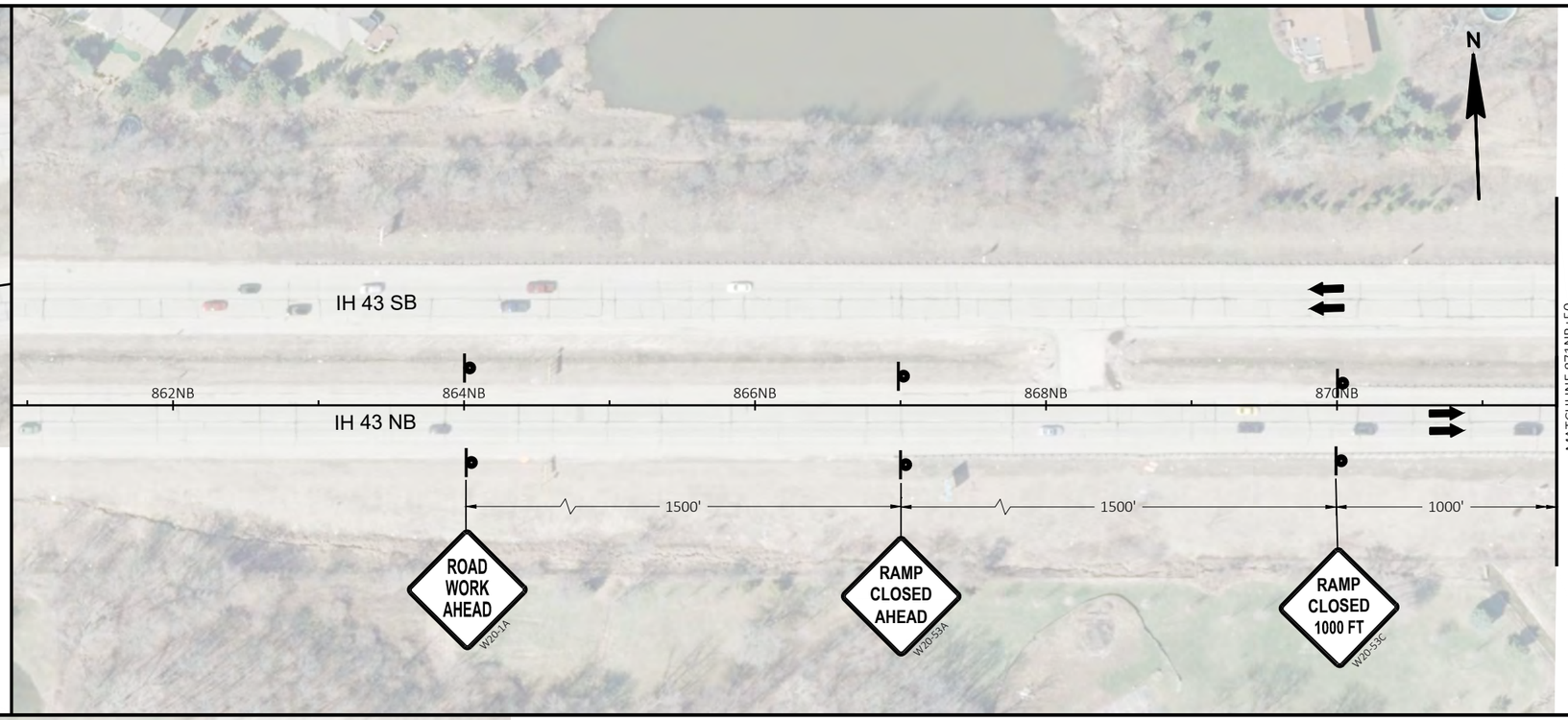
2

LEGEND

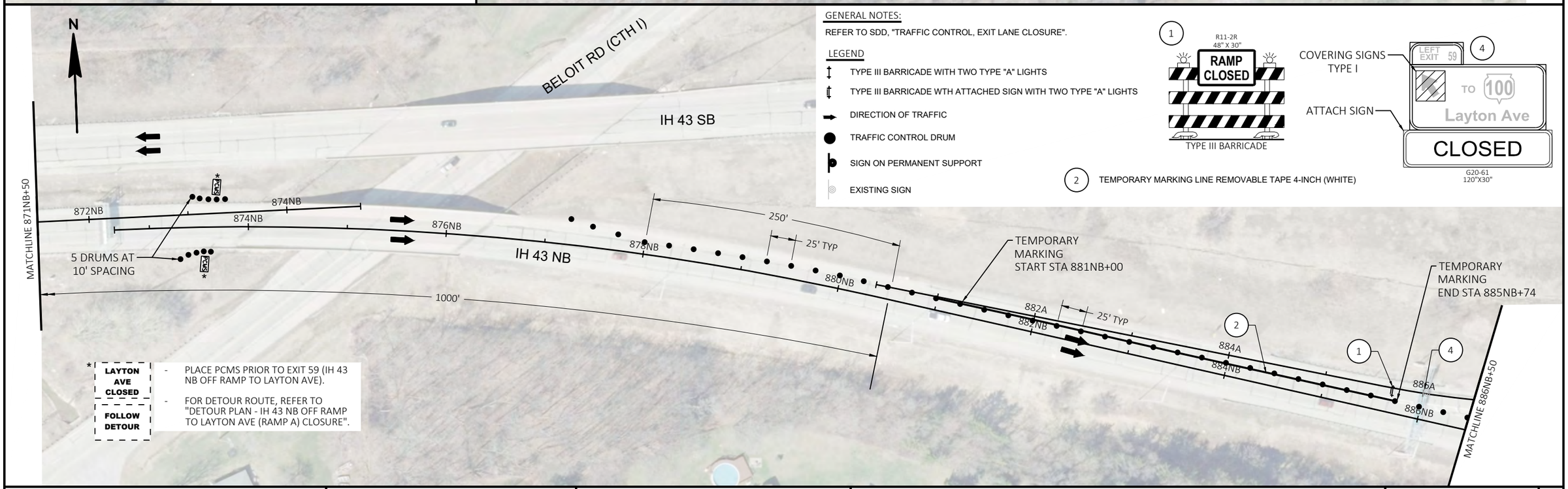
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - RAMP D	SHEET 155	E





2



GENERAL NOTES:

REFER TO SDD, "TRAFFIC CONTROL, EXIT LANE CLOSURE".

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- EXISTING SIGN

1 — R11-2R 48" X 30" — RAMP CLOSED — TYPE III BARRICADE

2 — TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

4 — COVERING SIGNS TYPE I; ATTACH SIGN — LEFT EXIT 59 — TO 100 — Layton Ave — CLOSED — G20-61 120"X30"

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - RAMP A	SHEET 156	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A) - LONG TERM CLOSURE.DWG
LAYOUT NAME - 1
PLOT DATE : 3/31/2021 9:14 PM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

GENERAL NOTES

REFER TO SDD, "TRAFFIC CONTROL, EXIT LANE CLOSURE".

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- EXISTING SIGN

1 R11-2R 48" X 30"

RAMP CLOSED

TYPE III BARRICADE

2 COVER EXISTING SIGN

N

IH 43 SB ON RAMP FROM LAYTON AVE (RAMP D)

IH 43 SB

IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A)

894A

896A

898A

900A

902A

WORKING AREA

B-67-103

IH 43 SB TO CLOSE DURING BRIDGE DECK (B-67-103) REMOVAL AND POURING. REFER TO THE DETAIL SHEET "TRAFFIC CONTROL - FULL CLOSURE DETAIL - IH 43 SB"

IH 43 SB

WORKING AREA

890A

888A

RAMP WILL BE CLOSED (TIME) BEGINNING (DATE)

R11-51 48"X48"

PLACE SIGN 7 CALENDAR DAYS PRIOR TO THE RAMP CLOSURE.

G20-2A 48"X24"

END ROAD WORK

MATCHLINE 886NB+50

888NB

890NB

892NB

894NB

896NB

898NB

900NB

500'

100'

IH 43 NB

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - RAMP A	SHEET 157	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A) - LONG TERM CLOSURE.DWG
LAYOUT NAME - 2

PLOT DATE : 4/21/2021 8:38 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

GENERAL NOTES

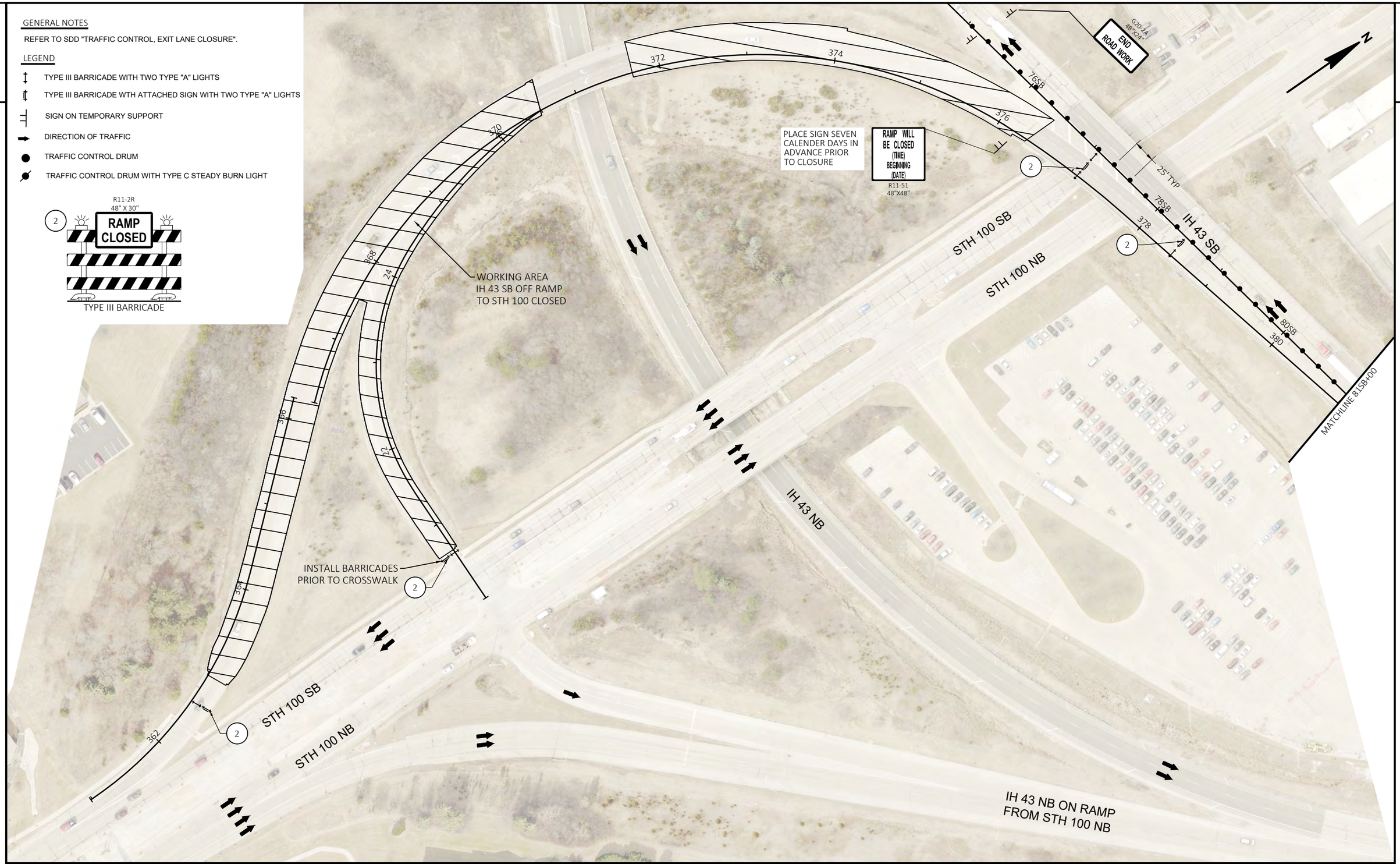
REFER TO SDD "TRAFFIC CONTROL, EXIT LANE CLOSURE".

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

R11-2R
48" X 30"

TYPE III BARRICADE



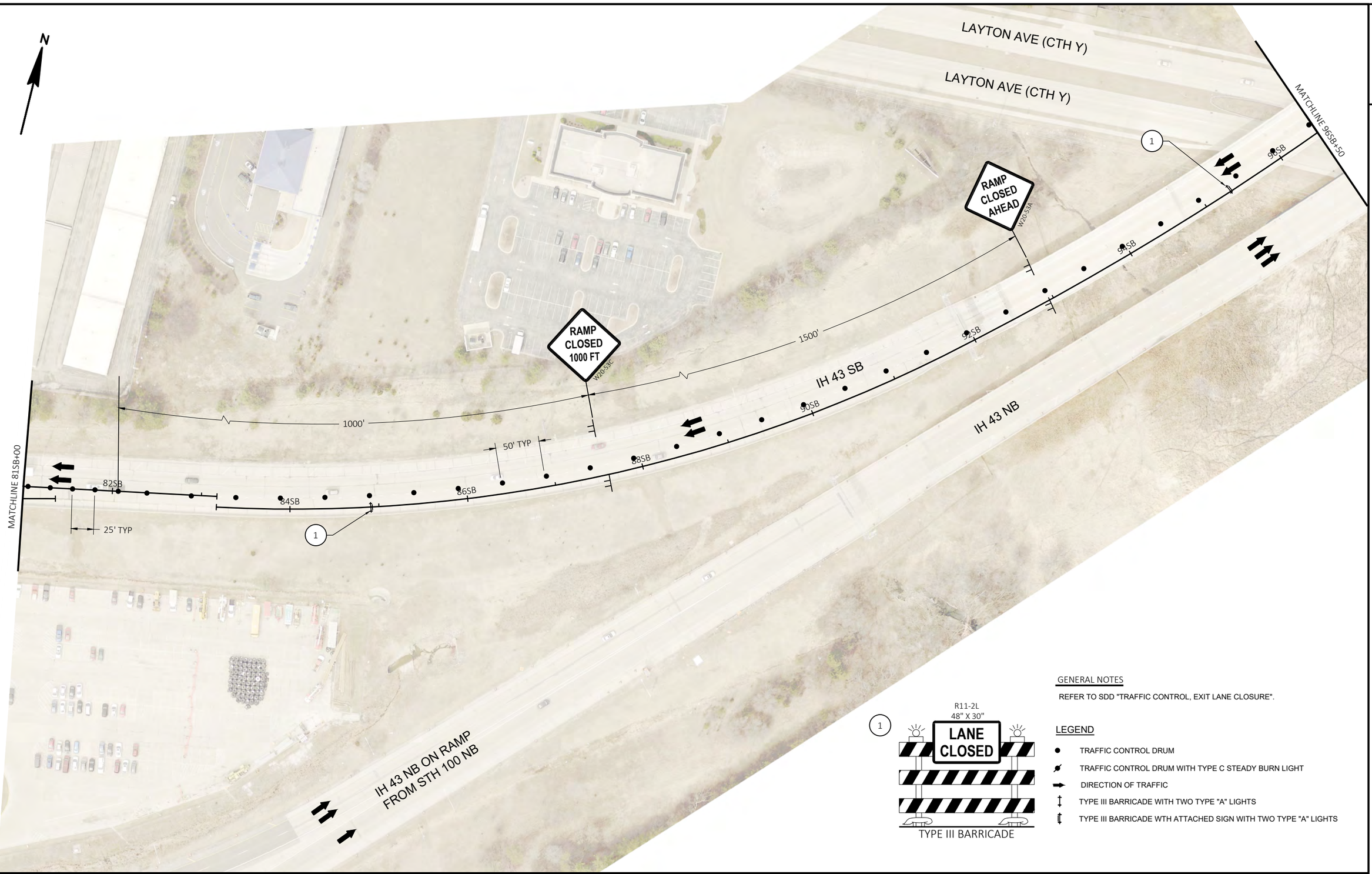
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - OFF RAMP TO STH 100	SHEET 158	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_IH 43 OFF RAMP TO STH 100.DWG
LAYOUT NAME - 2

PLOT DATE : 3/31/2021 5:09 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



1

R11-2L
48" X 30"

TYPE III BARRICADE

GENERAL NOTES

REFER TO SDD "TRAFFIC CONTROL, EXIT LANE CLOSURE".

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - OFF RAMP TO STH 100	SHEET 159	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_IH 43 OFF RAMP TO STH 100.DWG
LAYOUT NAME - 1
PLOT DATE : 3/31/2021 5:07 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

MATCHLINE 96SB+50

MATCHLINE 42SB+50

IH 43 SB/US 45 SB

IH 43 NB/US 45 SB

W LAYTON AVE

NORTH-TO-WEST RAMP (US 45 SB)

50' TYP

25' TYP

500' TAPER

500'

W4-3L
30"X30"

5 DRUMS AT
10' SPACING

1

95SB

100SB

102SB

104SB

106SB

108SB

110SB

112SB

44SB

46SB

48SB

ROAD
WORK
AHEAD
W20-1A

LEFT LANE
CLOSED
AHEAD
W20-5A

EAST-TO-WEST RAMP (IH 43 SB)

NORTH-TO-EAST RAMP (IH 41 SB/IH 894 EB)

W GOLD
SPRING RD

42SB

40SB

38SB

36SB

34SB

32SB

114SB

LEGEND

- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS

1

R11-2L
48" X 30"

LANE
CLOSED

TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - OFF RAMP TO STH 100	SHEET 160	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_IH 43 OFF RAMP TO STH 100.DWG
LAYOUT NAME - 1

PLOT DATE : 3/31/2021 5:06 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

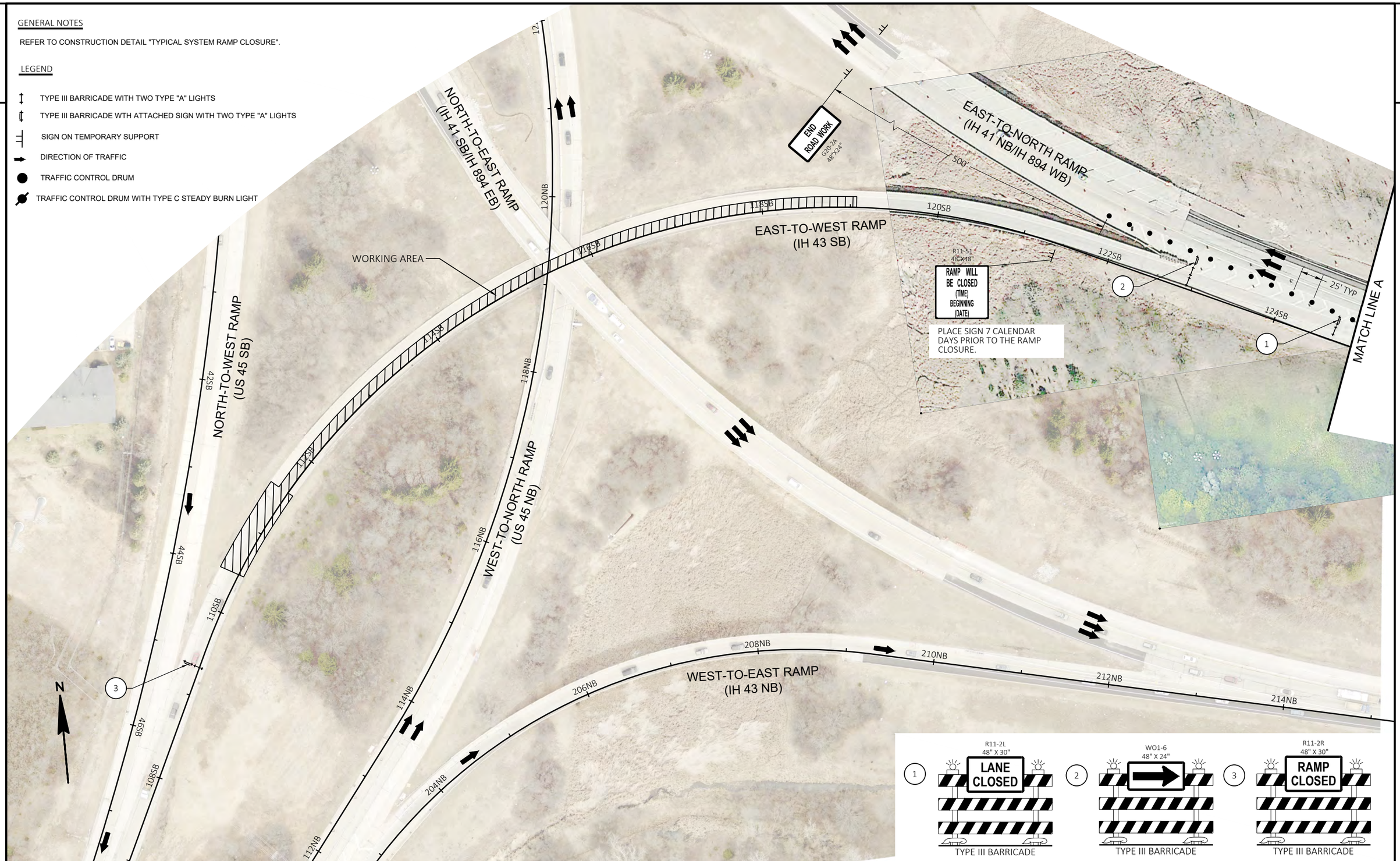
2

GENERAL NOTES

REFER TO CONSTRUCTION DETAIL "TYPICAL SYSTEM RAMP CLOSURE".

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT



1 — R11-2L, 48" X 30", LANE CLOSED, TYPE III BARRICADE

2 — WO1-6, 48" X 24", TYPE III BARRICADE

3 — R11-2R, 48" X 30", RAMP CLOSED, TYPE III BARRICADE

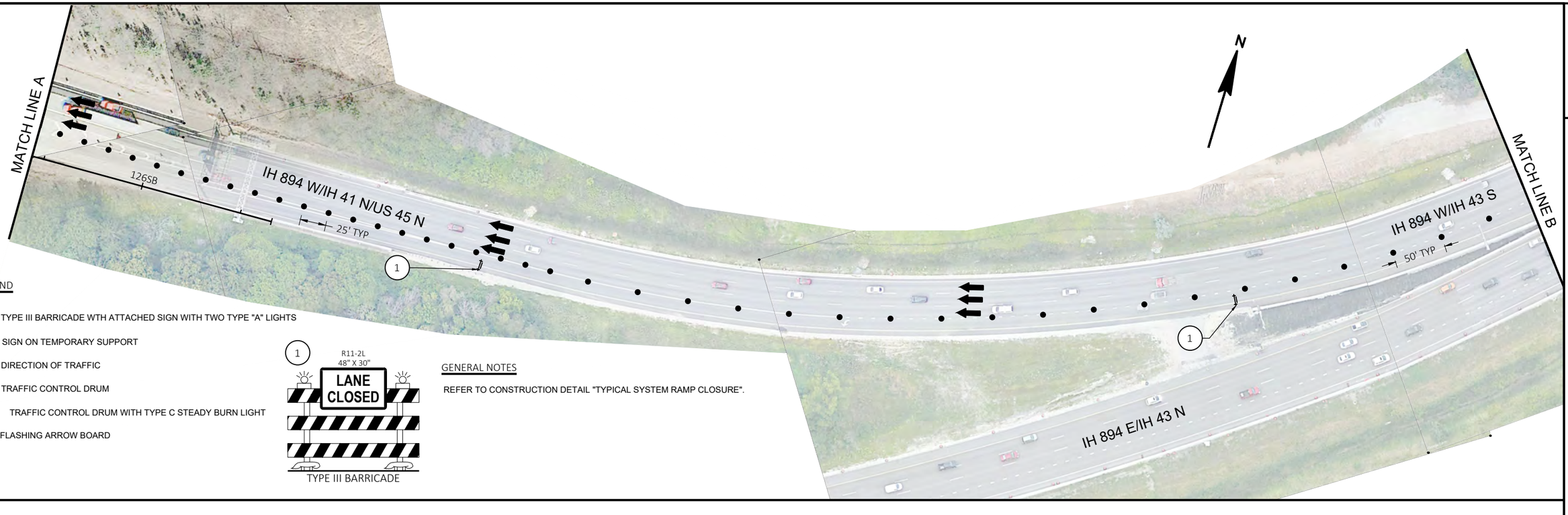
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - E-W SYSTEM RAMP	SHEET 161	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_HALE IC - E-W_SYS-RAMP CLOSURE.DWG
LAYOUT NAME - 1

PLOT DATE : 4/17/2021 4:00 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD

TYPE III BARRICADE

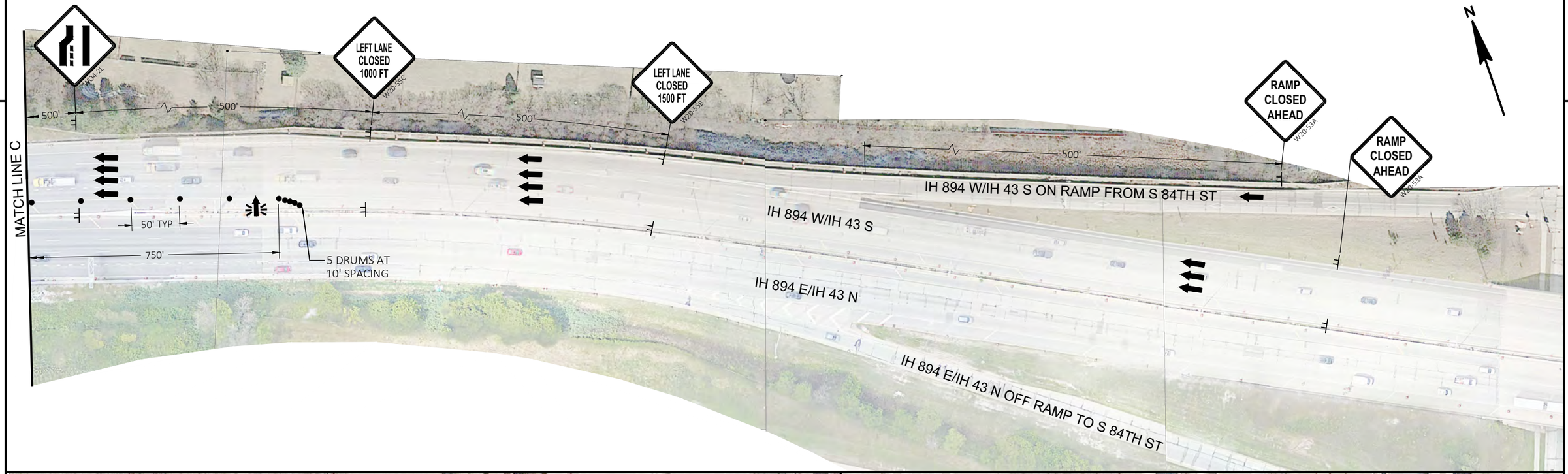
GENERAL NOTES

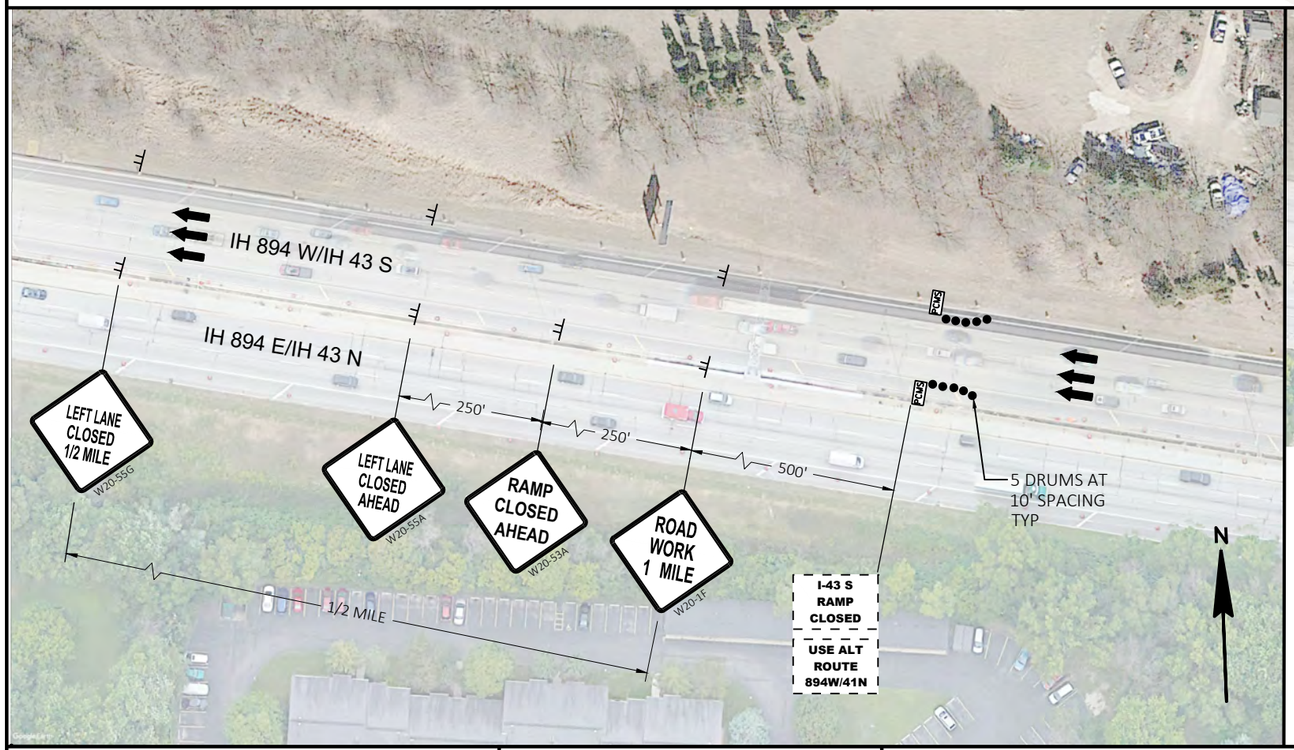
REFER TO CONSTRUCTION DETAIL "TYPICAL SYSTEM RAMP CLOSURE".

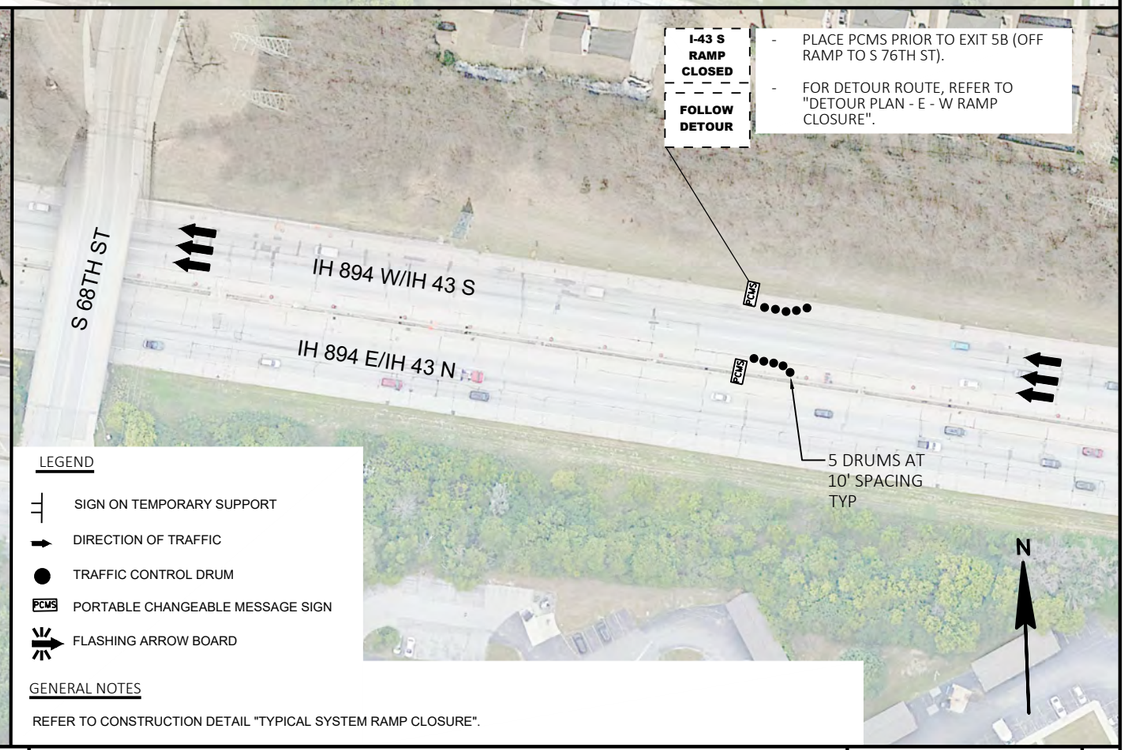


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - E-W SYSTEM RAMP	SHEET 162	E

2







LEGEND

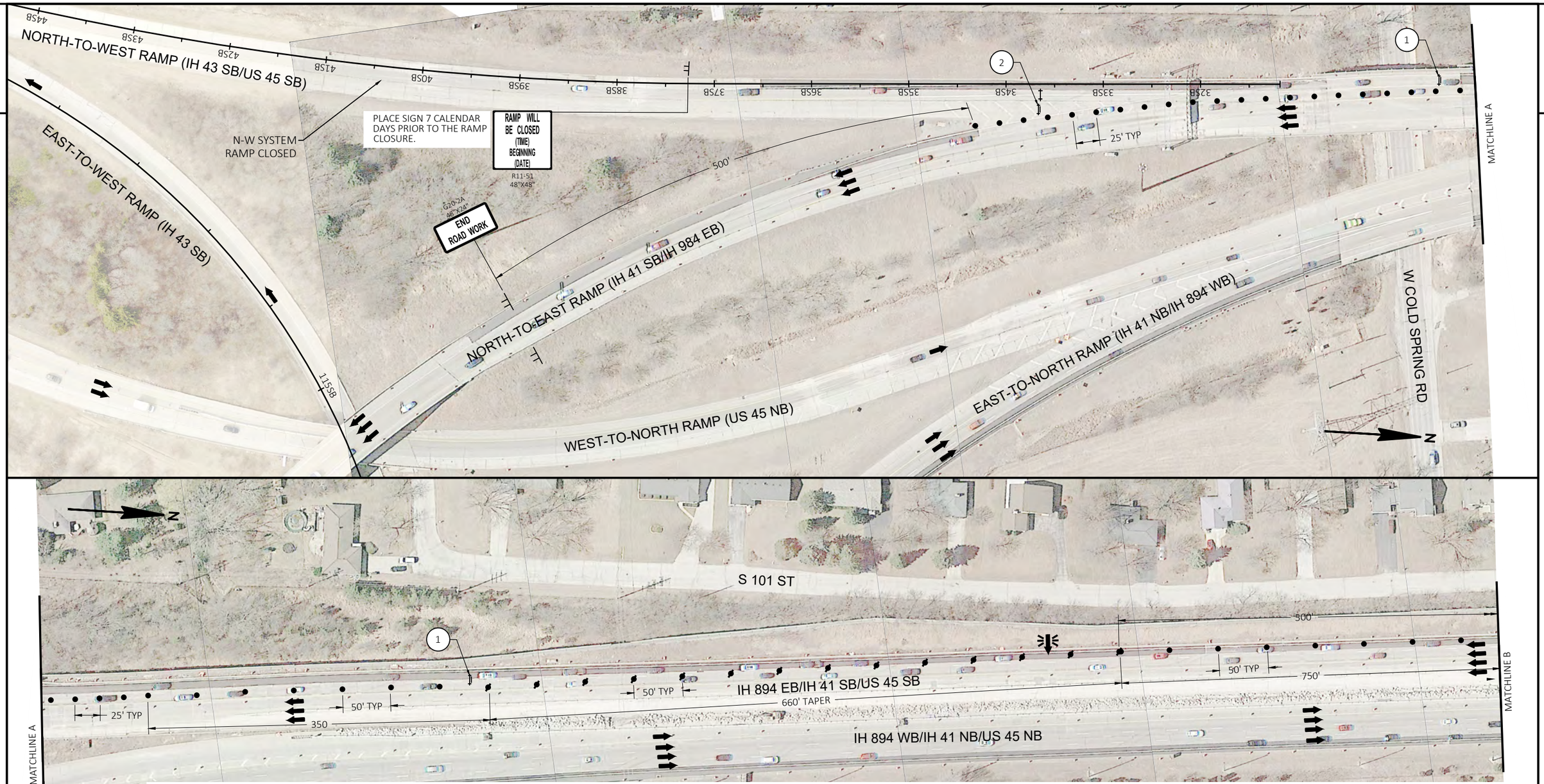
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLASHING ARROW BOARD

GENERAL NOTES

REFER TO CONSTRUCTION DETAIL "TYPICAL SYSTEM RAMP CLOSURE".

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - E-W SYSTEM RAMP	SHEET 163	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_HALE IC - E-W_SYS-RAMP CLOSURE.DWG
LAYOUT NAME - 3
PLOT DATE : 4/21/2021 8:50 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS

GENERAL NOTES

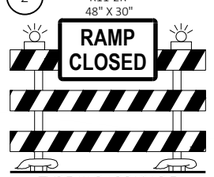
REFER TO CONSTRUCTION DETAIL "TYPICAL SYSTEM RAMP CLOSURE".

1 R11-2L 48" X 30"



TYPE III BARRICADE

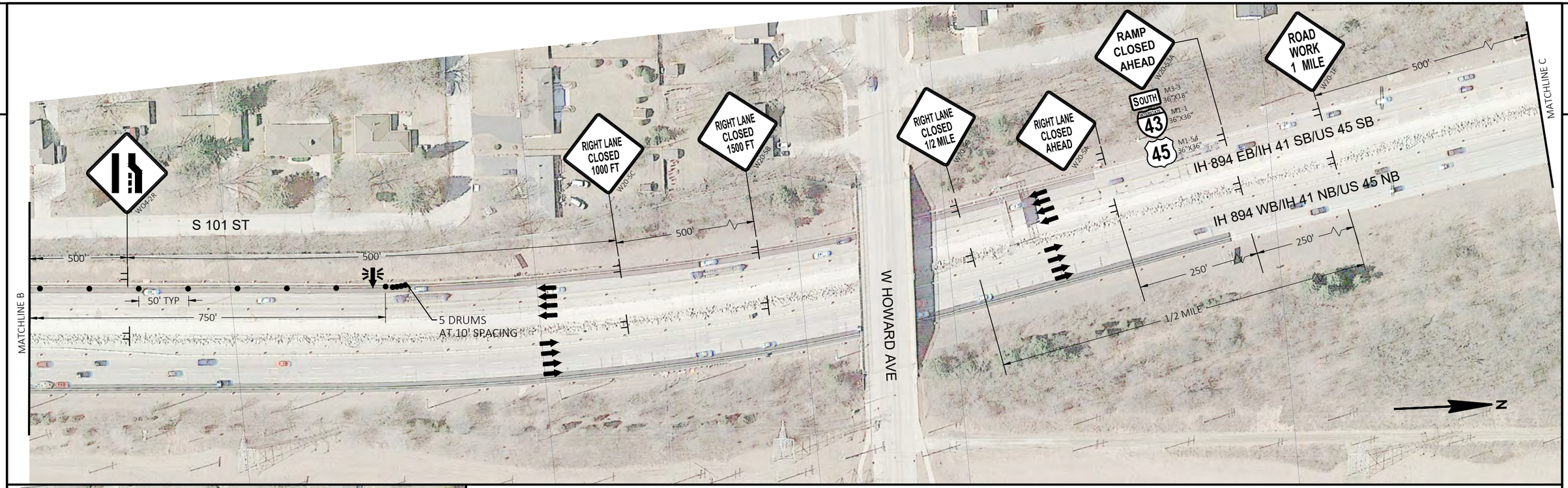
2 R11-2R 48" X 30"

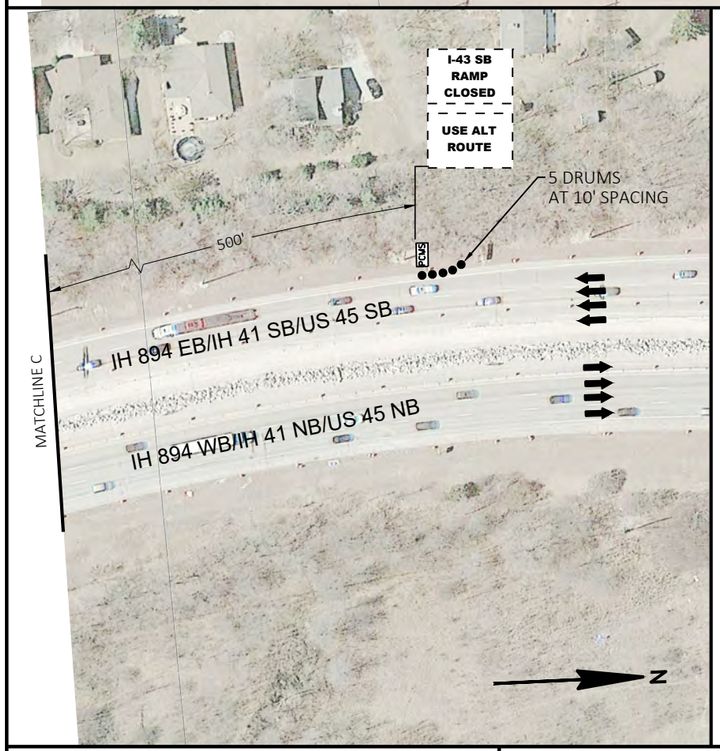


TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - N-W SYSTEM RAMP	SHEET 164	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_HALE IC - N-W_SYS-RAMP CLOSURE.DWG
LAYOUT NAME - 1
PLOT DATE : 4/17/2021 5:02 PM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42





GENERAL NOTES

- REFER TO CONSTRUCTION DETAIL "TYPICAL SYSTEM RAMP CLOSURE".
- FOR DETOUR ROUTE, REFER TO "DETOUR PLAN - N - W RAMP CLOSURE".

LEGEND

- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - N-W SYSTEM RAMP	SHEET 165	E

2

894E/41S RAMP CLOSED

USE ALT ROUTE 894W/41N

ROAD WORK 1 MILE W20-1F

RAMP CLOSED AHEAD W20-53A

500'

250'

IH 43 SB

48

50

52

PCMS

IH 43 NB

S 116TH ST

LEFT EXIT 61

COVER EXISTING SIGN

NORTH

EAST

894

41

45

894

41

43

11/4 MILES

5 DRUMS AT 10' SPACING TYP

N

RIGHT SHOULDER CLOSED AHEAD W21-5B

1000'

HALES CORNERS PARK & RIDE

N

82NB

IH 43 NB

84NB

86NB

88NB

200' TAPER

50' TYP

50' TYP

IH 43 NB ON RAMP FROM STH 100 NB

282

284

286

288

MATCH LINE 89NB+00

IH 43 NB ON RAMP FROM STH 100 CLOSED
REFER TO CONSTRUCTION DETAIL "TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE SHORT TERM ONLY".

GENERAL NOTES

- REFER TO CONSTRUCTION DETAIL "TYPICAL SYSTEM RAMP CLOSURE".
- FOR DETOUR ROUTE, REFER TO "DETOUR PLAN - W - E RAMP CLOSURE".

LEGEND

- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- EXISTING SIGN
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS

1 R11-2L 48" X 30" LANE CLOSED

TYPE III BARRICADE

LAYTON AVE (CTH Y)

N

MATCH LINE 89NB+00

90NB

92NB

94NB

96NB

98NB

100NB

102NB

104

IH 43 SB/USH 45 SB

IH 43 NB/USH 45 NB

290

292

294

296

298

1

1

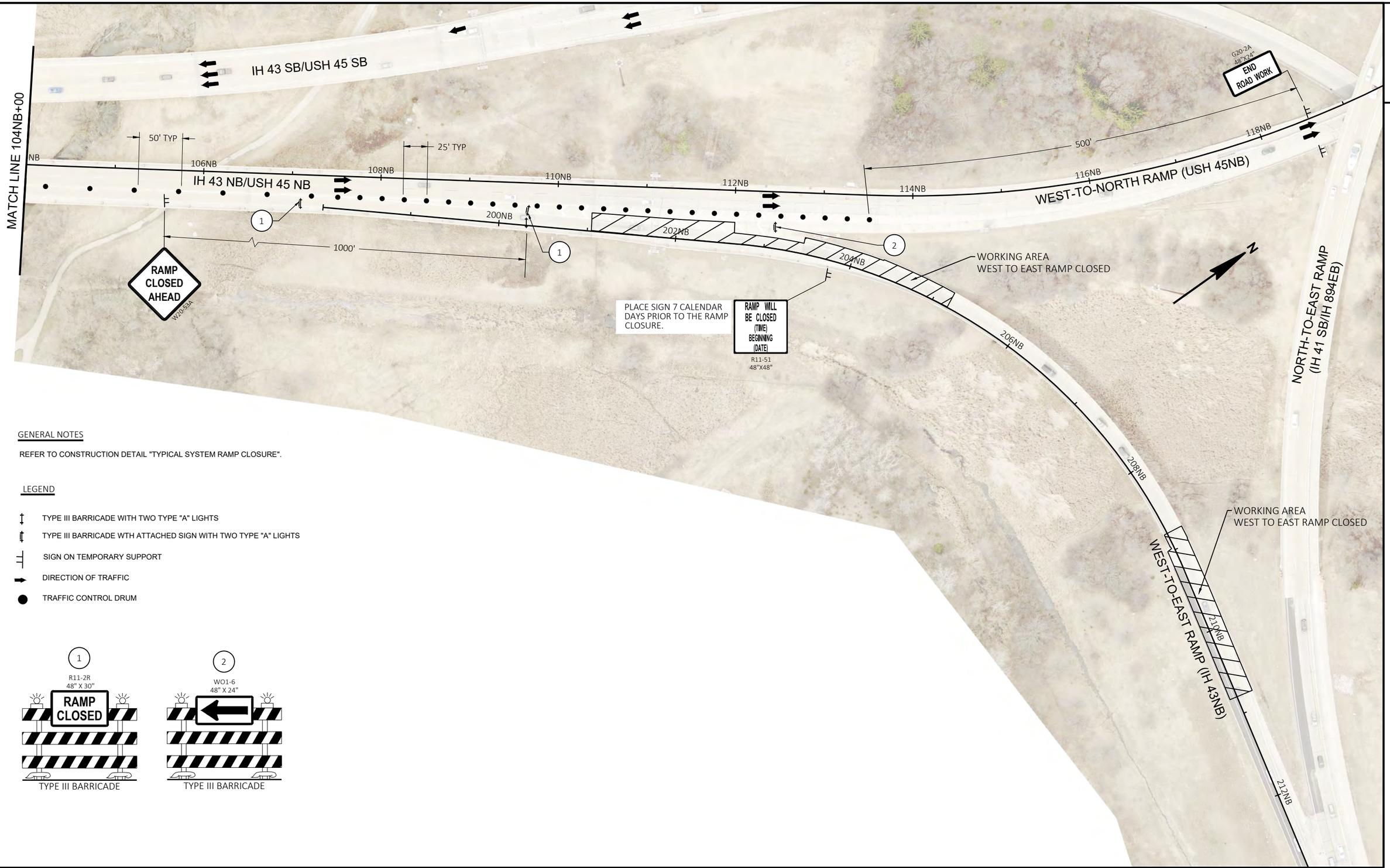
50' TYP

MATCH LINE 104NB+00

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - W-E SYSTEM RAMP	SHEET 166	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_HALE IC - W-E_SYS-RAMP CLOSURE.DWG
LAYOUT NAME - 1
PLOT DATE : 4/20/2021 8:23 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



GENERAL NOTES

REFER TO CONSTRUCTION DETAIL "TYPICAL SYSTEM RAMP CLOSURE".

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM

1

R11-2R
48" X 30"

TYPE III BARRICADE

2

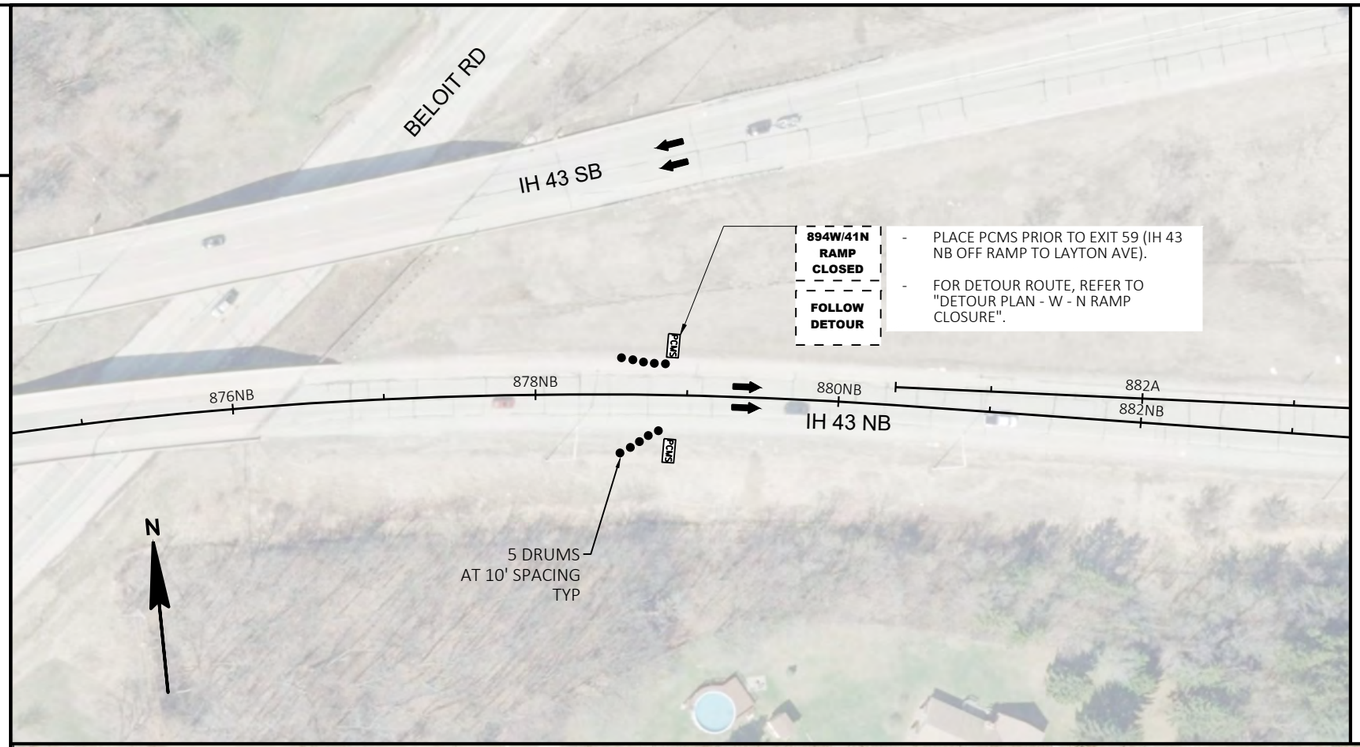
WO1-6
48" X 24"

TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - W-E SYSTEM RAMP	SHEET 167	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_HALE IC - W-E_SYS-RAMP CLOSURE.DWG
LAYOUT NAME - 2
PLOT DATE : 4/17/2021 5:09 PM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



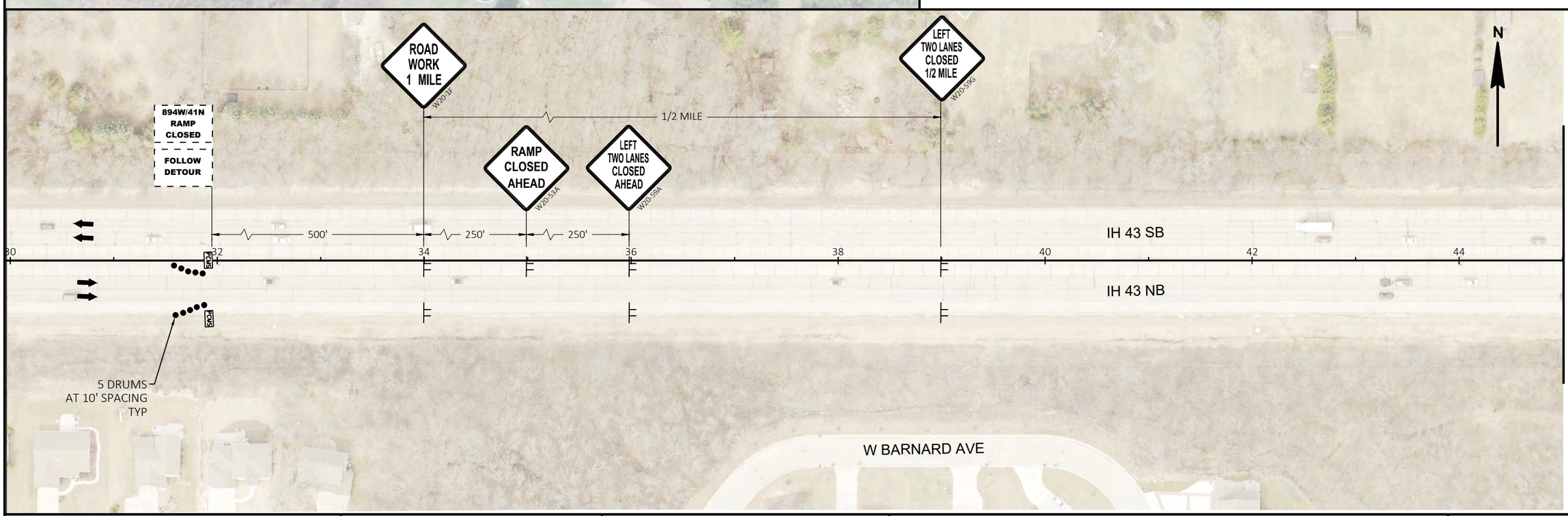
GENERAL NOTES

REFER TO CONSTRUCTION DETAIL "TYPICAL SYSTEM RAMP CLOSURE".

- PLACE PCMS PRIOR TO EXIT 59 (IH 43 NB OFF RAMP TO LAYTON AVE).
- FOR DETOUR ROUTE, REFER TO "DETOUR PLAN - W - N RAMP CLOSURE".

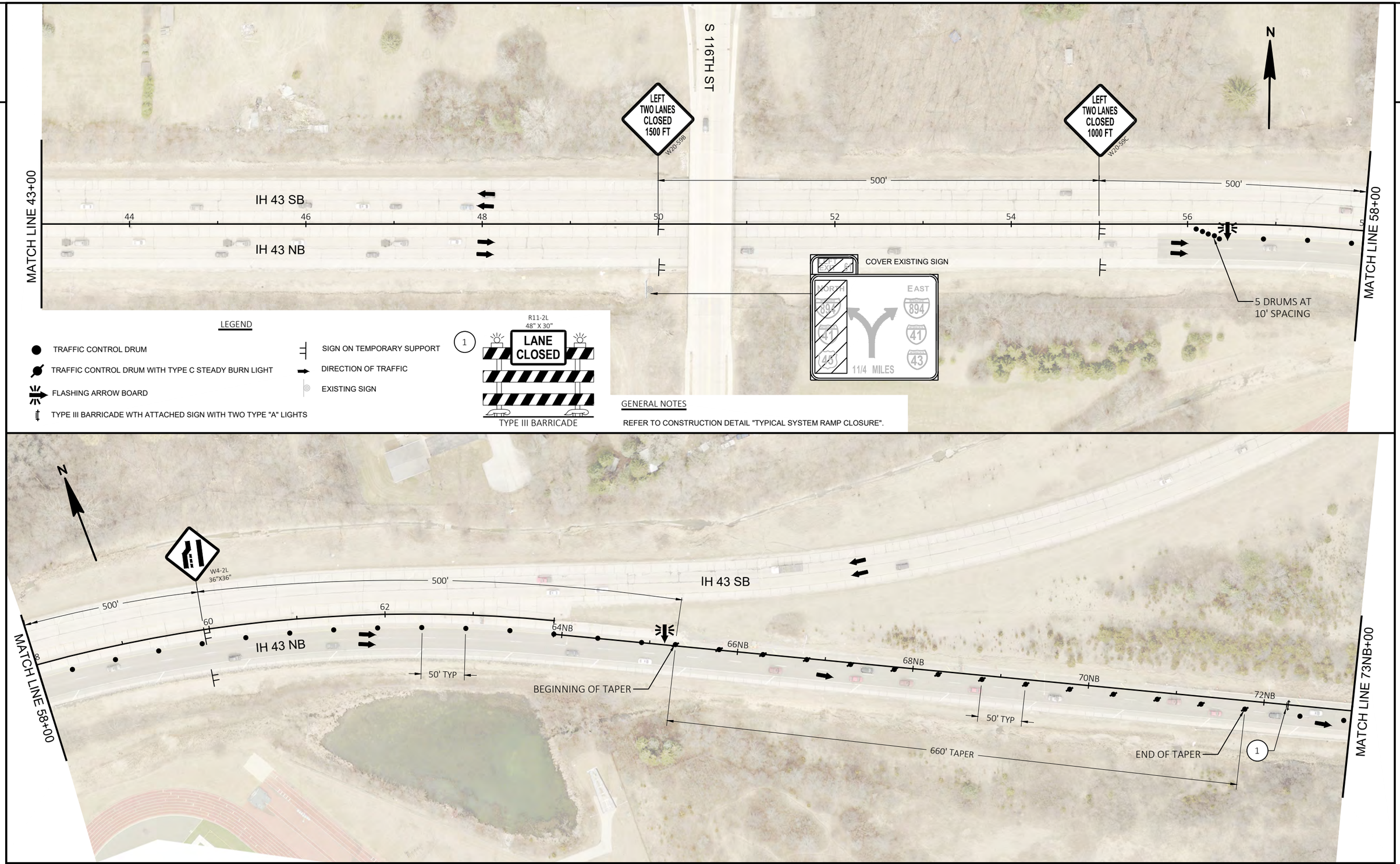
LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - W-N SYSTEM RAMP	SHEET 168	E

2



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- EXISTING SIGN

1 R11-2L 48" X 30"

TYPE III BARRICADE

GENERAL NOTES

REFER TO CONSTRUCTION DETAIL "TYPICAL SYSTEM RAMP CLOSURE".

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - W-N SYSTEM RAMP	SHEET 169	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_HALE IC - W-N_SYS-RAMP CLOSURE.DWG
LAYOUT NAME - 2
PLOT DATE : 4/1/2021 9:10 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

MATCH LINE
73NB+00

IH 43 SB OFF RAMP
FROM STH 100 SB

74NB

76NB

50' TYP

78NB

80NB

IH 43 NB

82NB

84NB

86NB

88NB

90

MATCH LINE 90NB+00

IH 43 SB

N

W4-2L
36"X36"

1000'

1

STH 100 SB

STH 100 NB

2

IH 43 NB ON RAMP FROM STH 100 NB

276

278

280

282

284

286

288

IH 43 NB ON RAMP FROM STH 100 CLOSED
REFER TO CONSTRUCTION DETAILS
"TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE SHORT TERM ONLY"

GENERAL NOTES

REFER TO CONSTRUCTION DETAIL "TYPICAL SYSTEM RAMP CLOSURE".

LEGEND

- TRAFFIC CONTROL DRUM
- EXISTING SIGN
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS

1

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

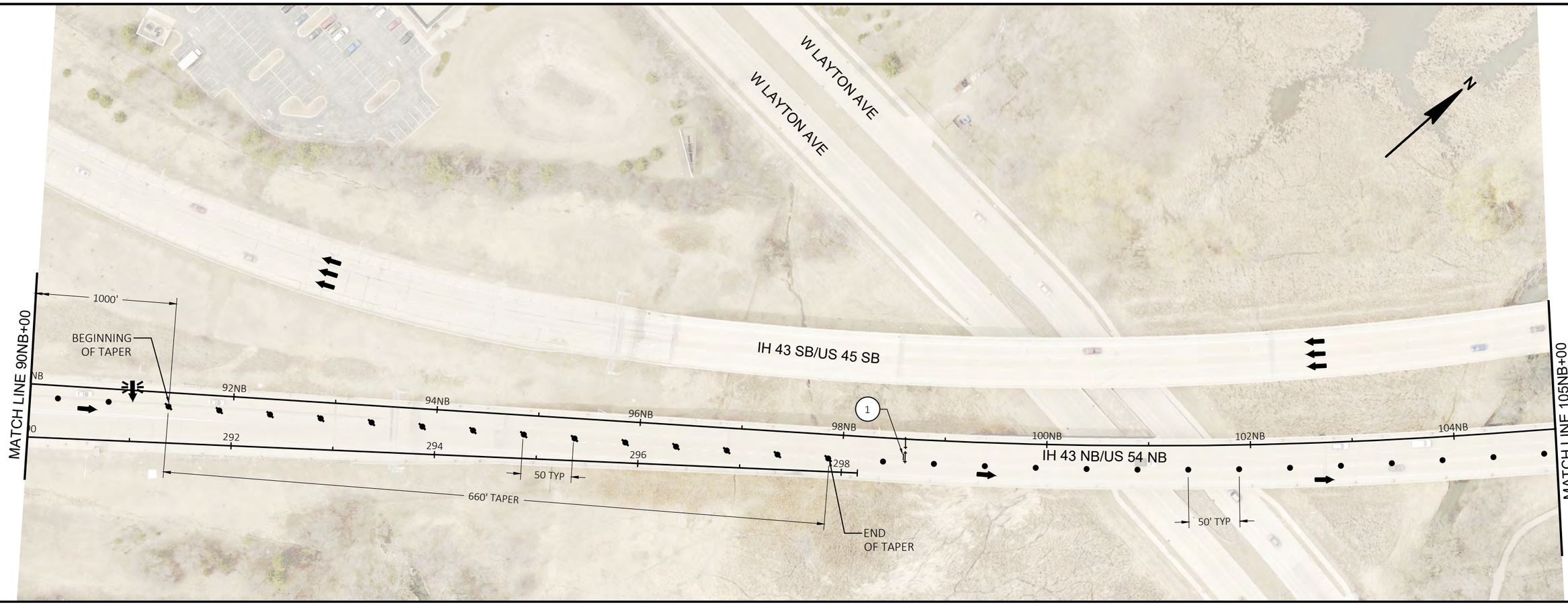
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - W-N SYSTEM RAMP	SHEET 170	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_HALE IC - W-N_SYS-RAMP CLOSURE.DWG
LAYOUT NAME - 3

PLOT DATE : 4/1/2021 9:11 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

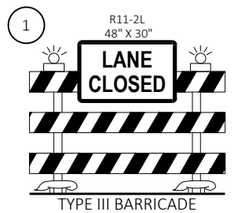


GENERAL NOTES

REFER TO CONSTRUCTION DETAIL "TYPICAL SYSTEM RAMP CLOSURE".

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS



TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - W-N SYSTEM RAMP	SHEET 171	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_HALE IC - W-N_SYS-RAMP CLOSURE.DWG
LAYOUT NAME - 4
PLOT DATE : 4/1/2021 9:13 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

MATCH LINE 105NB+00

IH 43 SB/US 45 SB

RAMP CLOSED AHEAD

W20-53A

NORTH-TO-WEST RAMP (US 45 SB)

EAST-TO-WEST RAMP (IH 43 SB)

IH 43 NB/US 45 NB

106NB

1

1000'

108NB

2

110NB

50' TYP

200NB

112NB

202NB

25' TYP

WORKING AREA
WEST-TO-NORTH RAMP CLOSED

114NB

116NB

118NB

120N

204NB

WEST-TO-NORTH RAMP (US 45 NB)

RAMP WILL BE CLOSED (TIME) BEGINNING (DATE)

R11-51
48"X48"

PLACE SIGN 7 CALENDAR DAYS PRIOR TO THE RAMP CLOSURE.

206NB

WEST-TO-EAST RAMP (IH 43 NB)

END ROAD WORK

G20-2A
48"X24"

208NB

NORTH-TO-EAST RAMP (IH 41 SB/IH 894 EB)

210NB

N

GENERAL NOTES

REFER TO CONSTRUCTION DETAIL "TYPICAL SYSTEM RAMP CLOSURE".

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS

1

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

2

WO1-6
48" X 24"

TYPE III BARRICADE

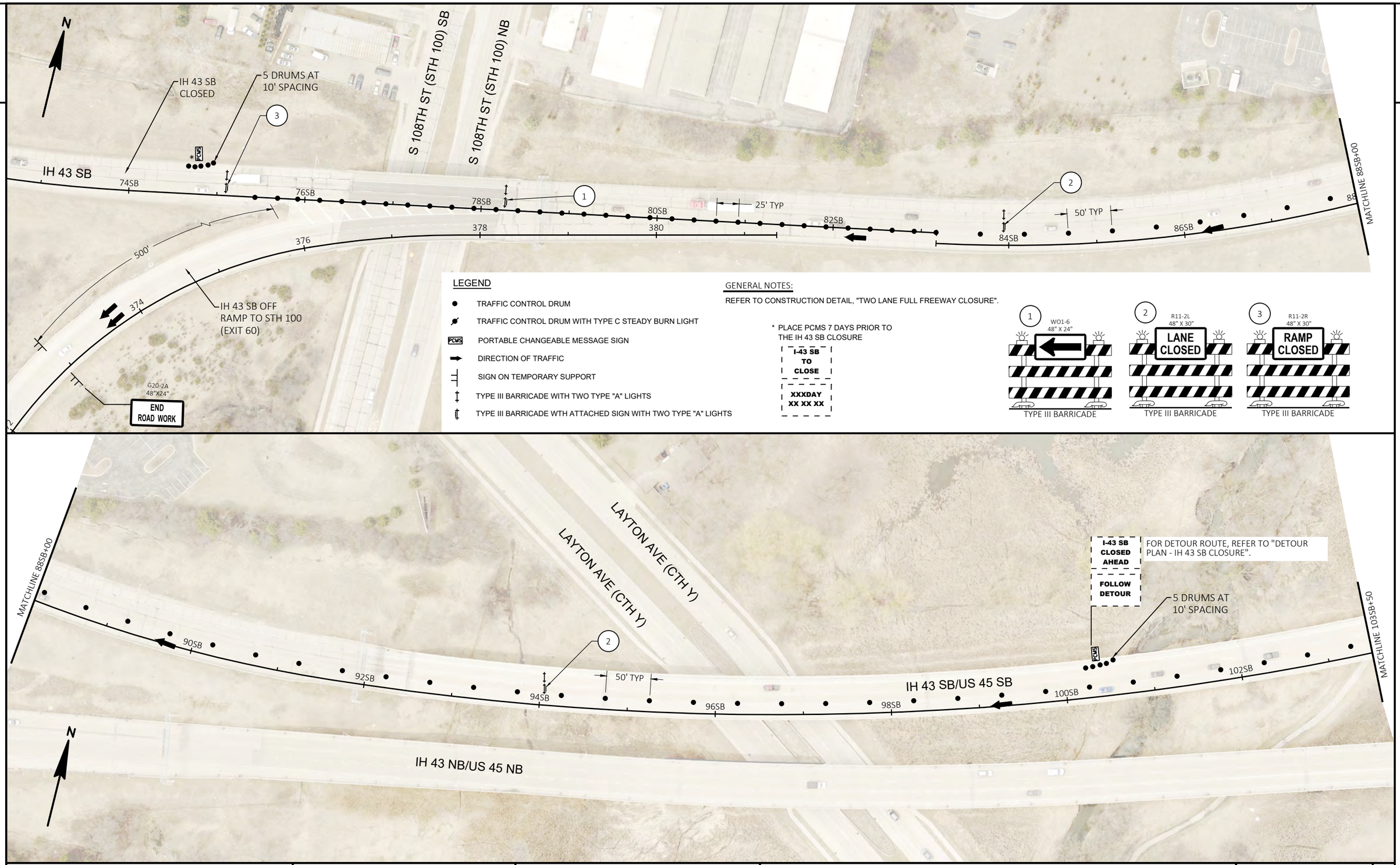
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - W-N SYSTEM RAMP	SHEET 172	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_HALE IC - W-N_SYS-RAMP CLOSURE.DWG
LAYOUT NAME - 5

PLOT DATE : 4/17/2021 5:30 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- DIRECTION OF TRAFFIC
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS

GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "TWO LANE FULL FREEWAY CLOSURE".

* PLACE PCMS 7 DAYS PRIOR TO THE IH 43 SB CLOSURE

I-43 SB TO CLOSE

XXXDAY XX XX XX

1 WO1-6 48" X 24" — TYPE III BARRICADE

2 R11-2L 48" X 30" — LANE CLOSED — TYPE III BARRICADE

3 R11-2R 48" X 30" — RAMP CLOSED — TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - IH 43 SB	SHEET 173	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_IH 43 SB FULL CLOSURE SHORT TERM.DWG
LAYOUT NAME - 1
PLOT DATE : 4/1/2021 12:05 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

N-W RAMP CLOSED
REFER TO "TRAFFIC CONTROL - FULL CLOSURE DETAIL - N-W SYSTEM RAMP CLOSURE"

1

2

MATCHLINE 103SB+50

104SB

106SB

48SB

108SB

46SB

44SB

110SB

112SB

50' TYP

EAST-TO-WEST RAMP
(IH 43 SB)

114SB

116SB

118SB

MATCHLINE 120SB+00

SB

200'

50' TYP

122SB

1000'

124SB

126SB

500'

RIGHT SHOULDER CLOSED AHEAD
W21-5B

ROAD CLOSED AHEAD
W20-3A

IH 894 WB/IH 4 NB/US 45 NB

N

PCMS

PCMS

5 DRUMS AT
10' SPACING

1

WO1-6
48" X 24"

TYPE III BARRICADE

2

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

200' TAPER

50' TYP

12

MATCHLINE 120SB+00

LEGEND

- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS

GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "TWO LANE FULL FREEWAY CLOSURE".

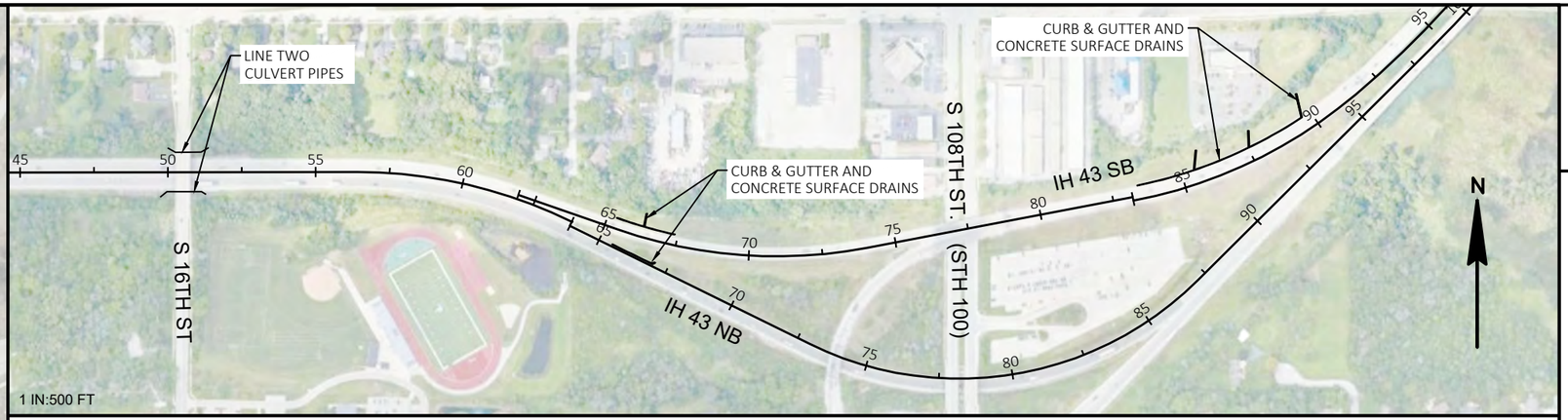
* I-43 SB CLOSED AHEAD - PLACE PCMS PRIOR TO EXIT 5A (OFF RAMP TO W FOREST HOME AVE) WITH A TAPER OF REFLECTORIZED DRUMS PLACED AHEAD OF PCMS.

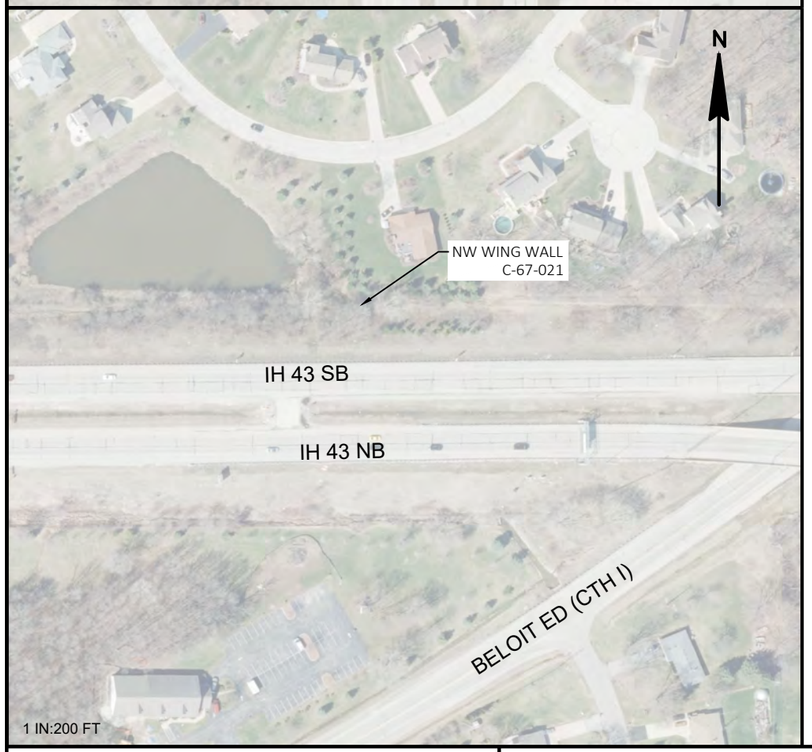
FOLLOW DETOUR - FOR DETOUR ROUTE, REFER TO "DETOUR PLAN - IH 43 SB CLOSURE".

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - FULL CLOSURE DETAIL - IH 43 SB	SHEET 174	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_IH 43 SB FULL CLOSURE SHORT TERM.DWG
LAYOUT NAME - 1
PLOT DATE : 4/1/2021 1:26 PM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42







GENERAL NOTES:

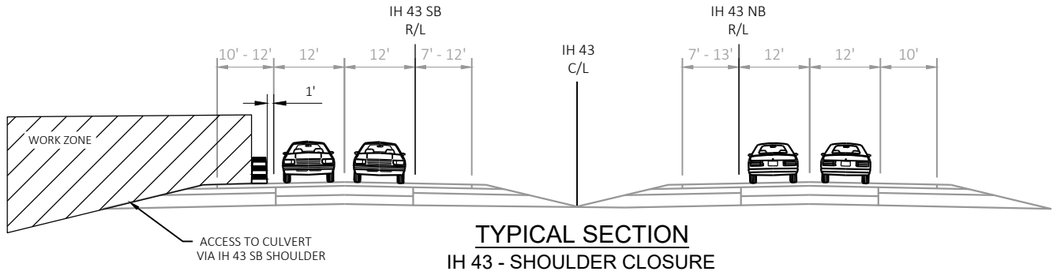
REFER TO SDD, "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH".

CONSTRUCTION ACTIVITIES:

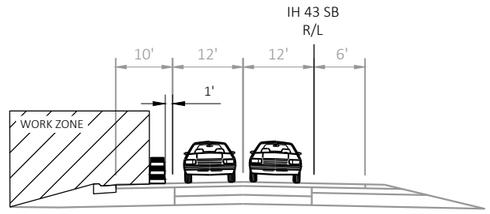
- PLACING CONCRETE GUTTER AND CONCRETE SURFACE DRAINS.
- LINING TWO CULVERT PIPES (STORM SEWER).
- ASPHALTIC SHOULDER RUMBLE STRIPS REMOVAL.
- SE WING WALL REPAIR/REPLACEMENT OF CULVERT C-67-013. (CROSSING IH 43, WEST OF MOORLAND ROAD).
- NW WING WALL REPLACEMENT OF CULVERT C-67-021 (CROSSING IH 43, WEST OF BELOIT ROAD).

TRAFFIC:

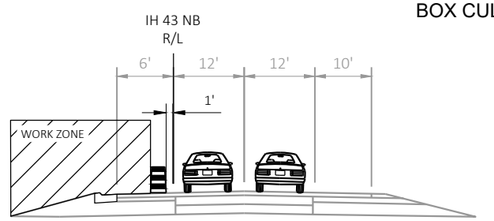
ALL LANES WILL BE OPEN TO TRAFFIC.



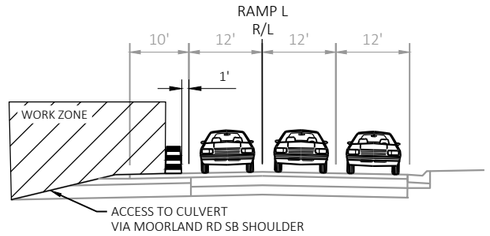
TYPICAL SECTION
IH 43 - SHOULDER CLOSURE
LOOKING EAST
BOX CULVERT WORK C-67-021



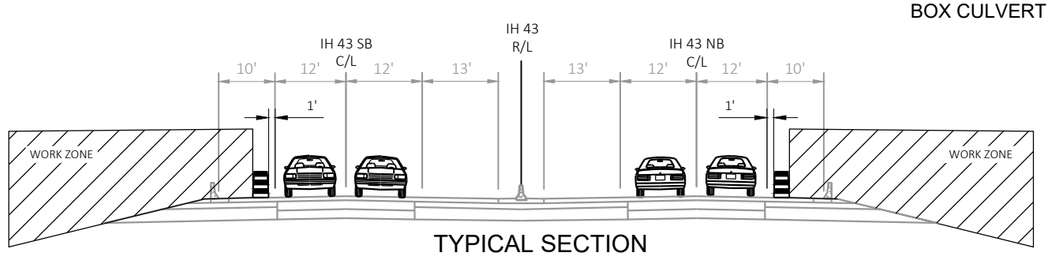
TYPICAL SECTION
IH 43 SB - SHOULDER CLOSURE
LOOKING EAST
GUTTER
CONCRETE SURFACE DRAINS



TYPICAL SECTION
IH 43 NB - SHOULDER CLOSURE
LOOKING EAST
GUTTER
CONCRETE SURFACE DRAINS



TYPICAL SECTION
MOORLAND RD (CTH O) SB - SHOULDER CLOSURE
LOOKING NORTH
BOX CULVERT WORK C-67-013

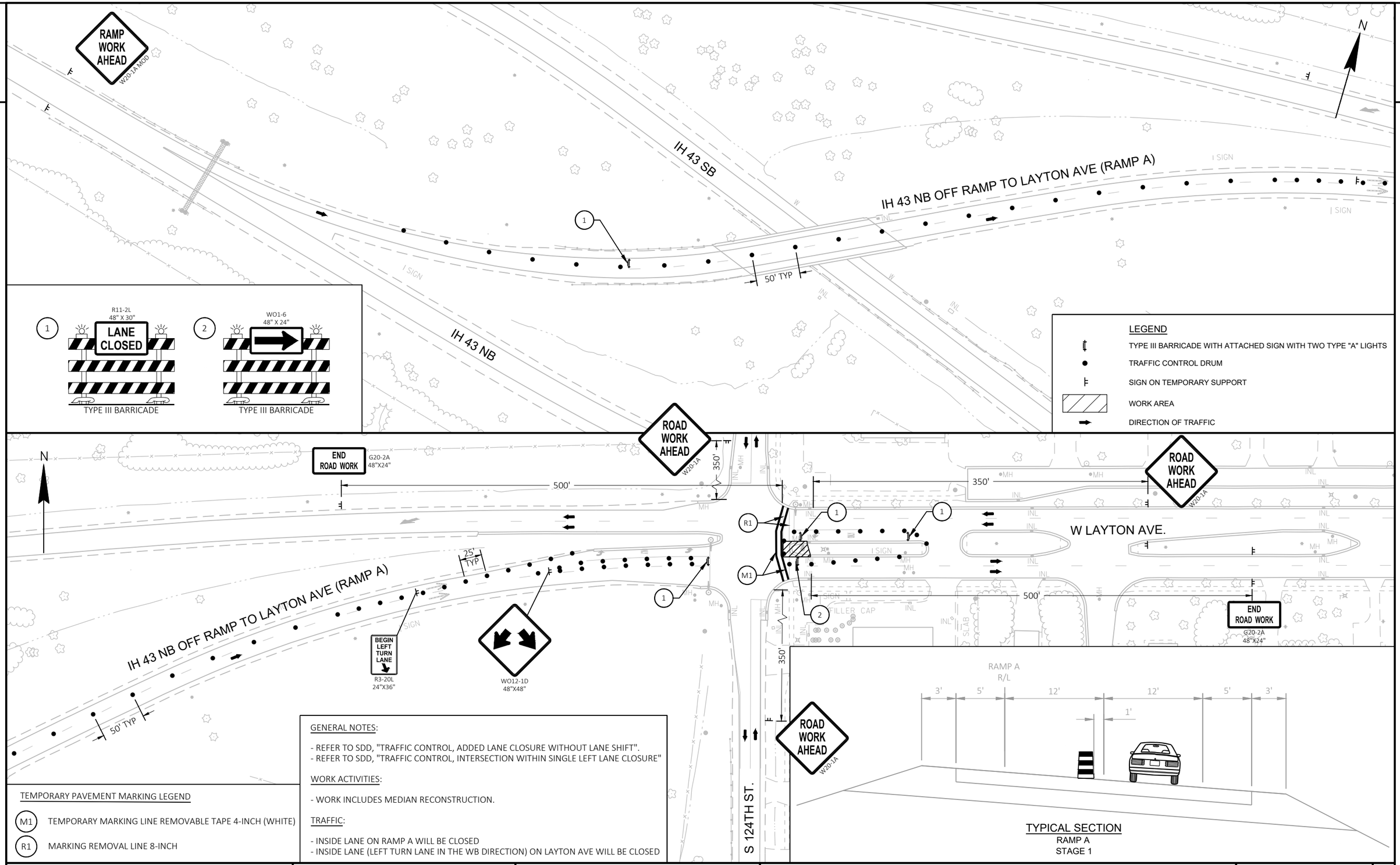


TYPICAL SECTION
IH 43 - SHOULDER CLOSURE
LOOKING EAST
STORM SEWER WORK AT 116TH ST.

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - SHOULDER CLOSURES OVERVIEW	SHEET 175	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\025001-TC - OVERVIEW - SHOULDER CLOSURES.DWG
LAYOUT NAME - Shoulder Closure Overview
PLOT DATE : 7/21/2021 9:55 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2



GENERAL NOTES:

- REFER TO SDD, "TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT".
- REFER TO SDD, "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE"

WORK ACTIVITIES:

- WORK INCLUDES MEDIAN RECONSTRUCTION.

TRAFFIC:

- INSIDE LANE ON RAMP A WILL BE CLOSED
- INSIDE LANE (LEFT TURN LANE IN THE WB DIRECTION) ON LAYTON AVE WILL BE CLOSED

TEMPORARY PAVEMENT MARKING LEGEND

M1	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
R1	MARKING REMOVAL LINE 8-INCH

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - LAYTON AVE & 124TH ST INTERSECTION - STAGE 1	SHEET 176	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\025001-TC-LAYTON CURB RAMPS-STAGE 1_REV.DWG
LAYOUT NAME - LAYTON INT - STAGE 1
PLOT DATE : 3/16/2021 1:00 PM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

RAMP WORK AHEAD
W20-1A MOD

IH 43 SB

IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A)

I SIGN

50' TYP

IH 43 NB

N

1 R11-2L 48" X 30" LANE CLOSED
TYPE III BARRICADE

2 WO1-6 48" X 24"
TYPE III BARRICADE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

500'

350'

500'

REFER TO "TRAFFIC CONTROL - LAYTON AVE & 124TH ST INTERSECTION - PEDESTRIAN ACCOMMODATION"

120'

245'

350'

350'

350'

RIGHT LANE CLOSED AHEAD
W20-5A

WO4-2R

ROAD WORK AHEAD
W20-1A

W LAYTON AVE.

RAMP

FLAG

25' TYP

IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A)

BEGIN RIGHT TURN LANE
R3-20R
24"X36"

500'

END ROAD WORK
G20-2A
48"X24"

350'

ROAD WORK AHEAD
W20-1A

S 124TH ST.

TEMPORARY PAVEMENT MARKING LEGEND

M1 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

GENERAL NOTES:

- REFER TO SDD, "TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT".
- REFER TO SDD, "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE"
- REFER TO SDD, "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY"

WORK ACTIVITIES:

- WORK INCLUDES SIDEWALK AND CURB RAMP CONSTRUCTION.

TRAFFIC:

- OUTSIDE LANE ON RAMP A WILL BE CLOSED
- OUTSIDE LANE ON LAYTON AVE WILL BE CLOSED

RAMP A
R/L

3' 5' 12' 12' 5' 3'

1'

TYPICAL SECTION
RAMP A
STAGE 2

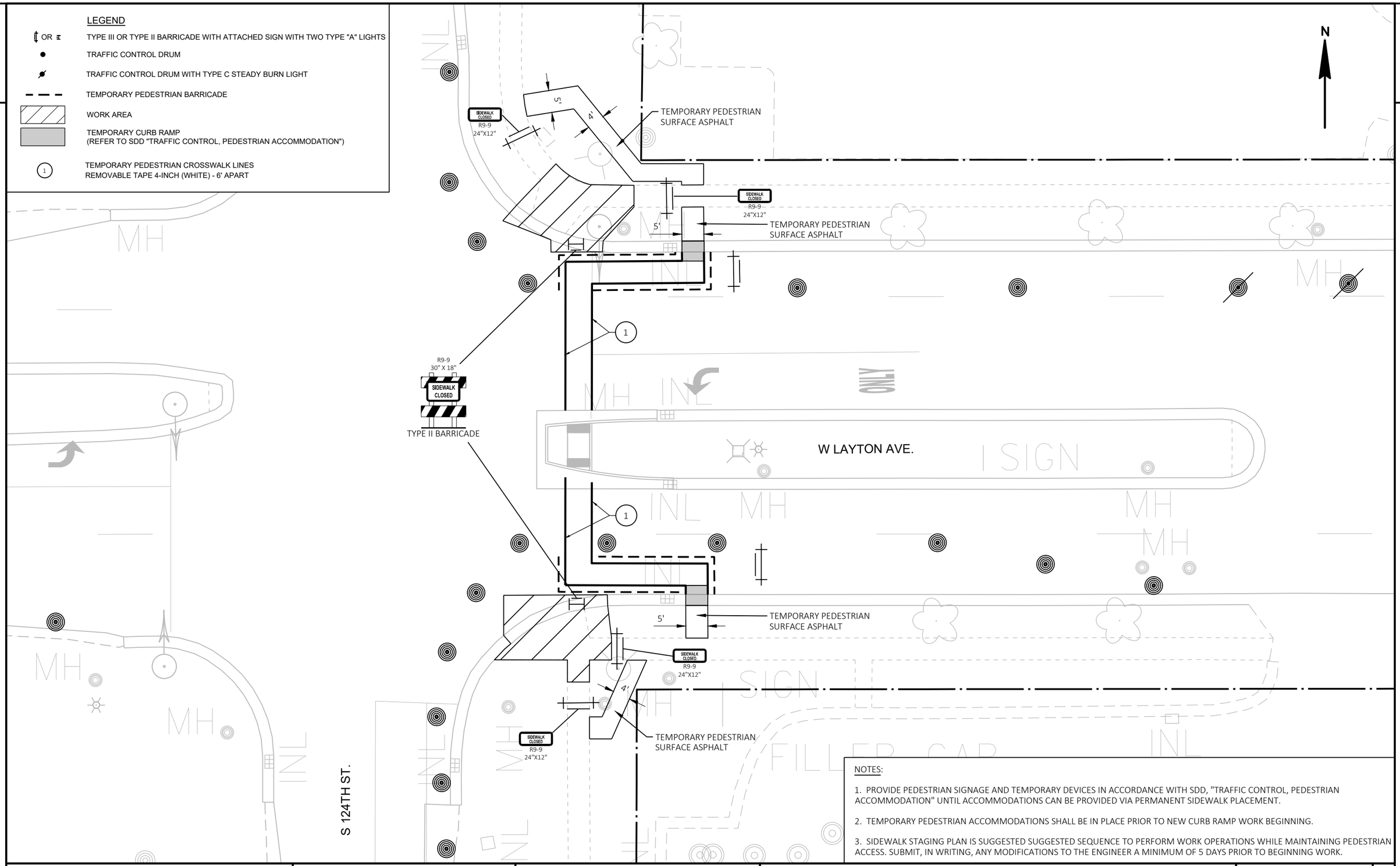
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - LAYTON AVE & 124TH ST INTERSECTION - STAGE 2	SHEET 177	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\025001-TC-LAYTON CURB RAMPS-STAGE 2.DWG
LAYOUT NAME - LAYTON INT - STAGE 2
PLOT DATE : 3/18/2021 9:07 AM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III OR TYPE II BARRICADE WITH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA
- TEMPORARY CURB RAMP (REFER TO SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION")
- (1) TEMPORARY PEDESTRIAN CROSSWALK LINES REMOVABLE TAPE 4-INCH (WHITE) - 6' APART



NOTES:

1. PROVIDE PEDESTRIAN SIGNAGE AND TEMPORARY DEVICES IN ACCORDANCE WITH SDD, "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" UNTIL ACCOMMODATIONS CAN BE PROVIDED VIA PERMANENT SIDEWALK PLACEMENT.

2. TEMPORARY PEDESTRIAN ACCOMMODATIONS SHALL BE IN PLACE PRIOR TO NEW CURB RAMP WORK BEGINNING.

3. SIDEWALK STAGING PLAN IS SUGGESTED SUGGESTED SEQUENCE TO PERFORM WORK OPERATIONS WHILE MAINTAINING PEDESTRIAN ACCESS. SUBMIT, IN WRITING, ANY MODIFICATIONS TO THE ENGINEER A MINIMUM OF 5 DAYS PRIOR TO BEGINNING WORK.

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - LAYTON AVE & 124TH ST INTERSECT - PEDESTRIAN ACCOMMODATION	SHEET 178	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\025001-TC-LAYTON CURB RAMPS-PED ACC.DWG
LAYOUT NAME - LAYTON INT - PED ACC

PLOT DATE : 7/3/2021 11:01 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT

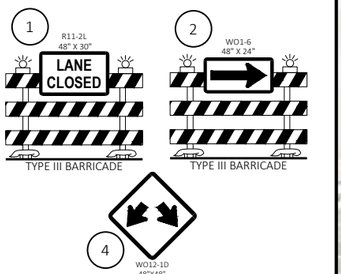
2

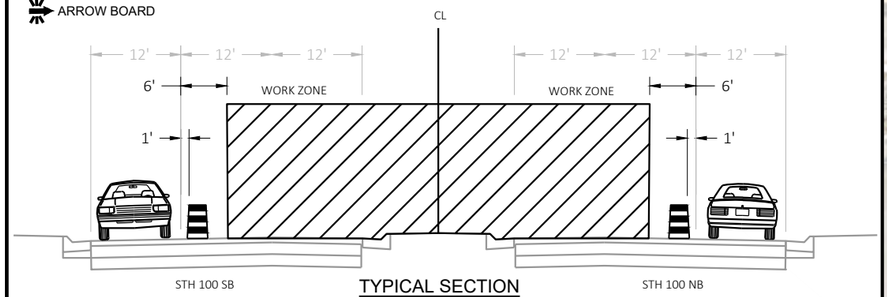
GENERAL NOTES

- REFER TO SDD "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY" AND "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE".
- WORK INCLUDES REMOVING LOOSE CONCRETE UNDER STRUCTURE B-40-303 (IH 43 NB).
- WORK TO BE COMPLETED DURING THE NIGHT.
- ALL CROSSWALKS WILL REMAIN OPEN.

LEGEND

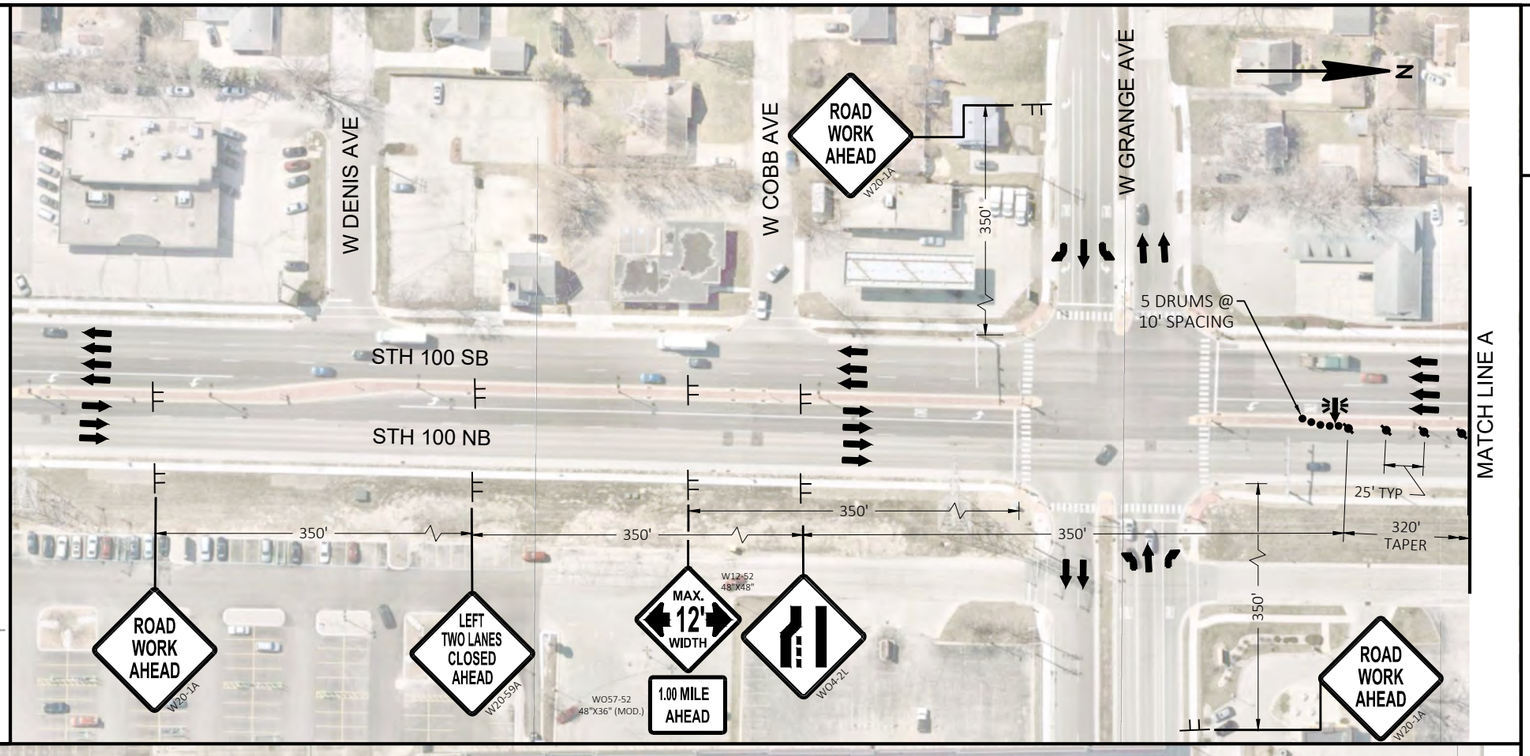
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- ARROW BOARD

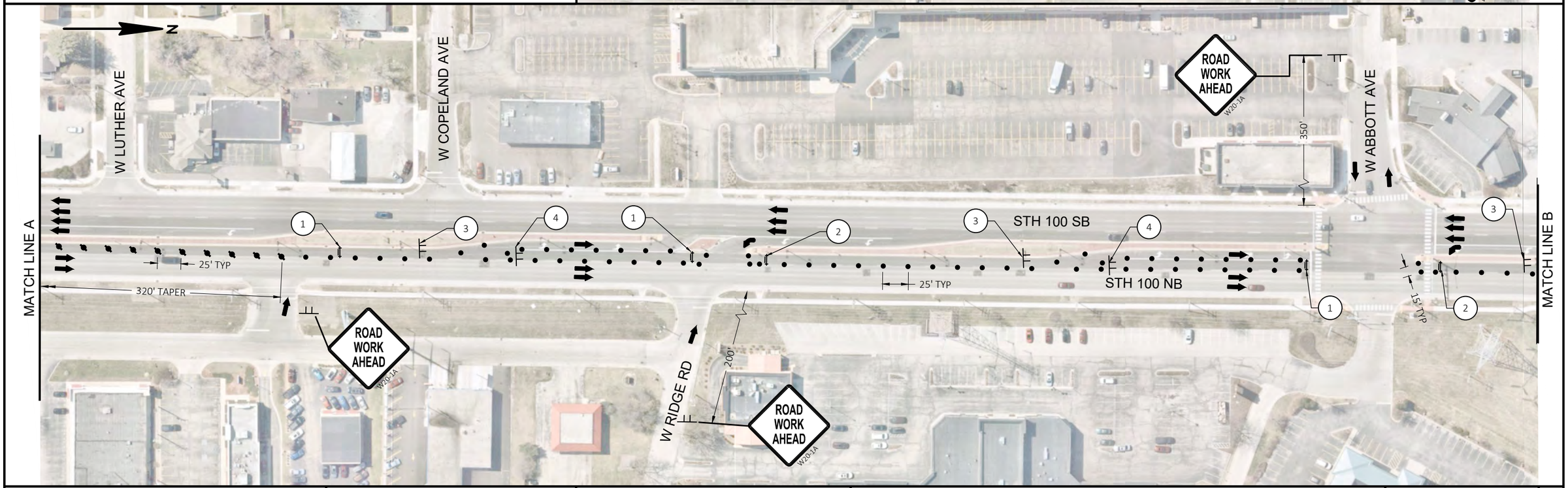




TYPICAL SECTION

STH 100 - LOOKING NORTH - STAGE 1
REMOVING LOOSE CONCRETE UNDER B-40-303





PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - STAGE 1 DETAIL - STH 100	SHEET 179	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_STH 100_STAGE 1.DWG
LAYOUT NAME - 1

PLOT DATE : 4/6/2021 4:04 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

MATCH LINE B

ROAD WORK AHEAD
W20-1A

350'

STH 100 SB

STH 100 NB

25' TYP

MATCH LINE C

2

1

2

3

4

1

4

1

1

350'

350'

MAX. 12' WIDTH
W12-52
48"X48"

WIDE LOADS EXCEEDING 12 FT

R12-70
96"X42" (MOD.)

M05-2R
21"X21"

ON RAMP
M4-10
24"X12"

W EDGERTON AVE

350'

ROAD WORK AHEAD
W20-1A

N

IH 43 SB OFF RAMP

ROAD WORK AHEAD
W20-1A

IH 43 SB OFF RAMP

350'

END ROAD WORK
G20-2A
48"X24"

GENERAL NOTES

- REFER TO SDD "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY" AND "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE".
- WORK INCLUDES REMOVING LOOSE CONCRETE UNDER STRUCTURE B-40-303 (IH 43 NB).
- WORK TO BE COMPLETED DURING THE NIGHT.
- ALL CROSSWALKS WILL REMAIN OPEN.

LEGEND

TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS

TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS

DIRECTION OF TRAFFIC

TRAFFIC CONTROL DRUM

ARROW BOARD

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

3
BEGIN LEFT TURN LANE
R3-20LL
24"X36"

4
WO12-1D
48"X48"

1
R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

2
WO1-6
48" X 24"
TYPE III BARRICADE

500'

MATCH LINE C

15' TYP

25' TYP

1

2

1

2

1

2

1

2

350'

320' TAPER

25' TYP

50' TYP

WORKING ZONE

B-40-303

500'

MATCH LINE D

IH 43 NB ON RAMP

IH 43 NB OFF RAMP

IH 43 NB

IH 43 NB

HALES CORNERS PARK & RIDE

WO4-2L

END ROAD WORK
G20-2A
48"X24"

N

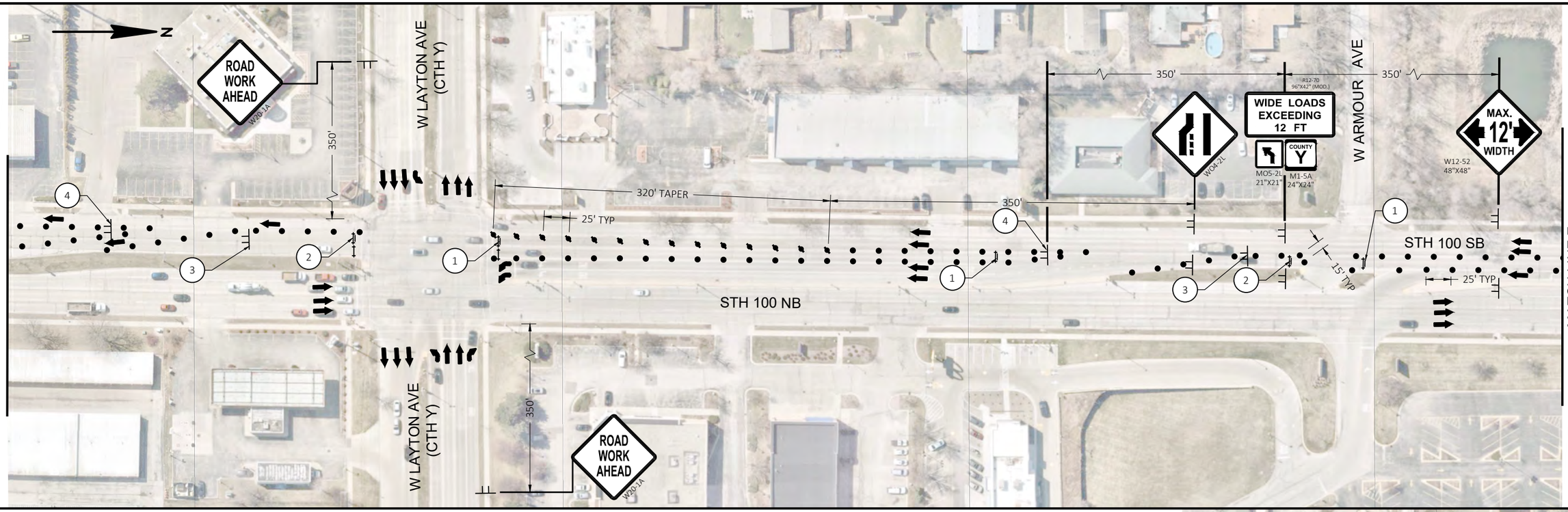
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - STAGE 1 DETAIL - STH 100	SHEET 180	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_STH 100_STAGE 1.DWG
LAYOUT NAME - 2

PLOT DATE : 4/6/2021 4:06 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



GENERAL NOTES

- REFER TO SDD "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY" AND "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE".
- WORK INCLUDES REMOVING LOOSE CONCRETE UNDER STRUCTURE B-40-303 (IH 43 NB).
- WORK TO BE COMPLETED DURING THE NIGHT.
- ALL CROSSWALKS WILL REMAIN OPEN.

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

3 — BEGIN LEFT TURN LANE — R3-20LL 24"X36"

4 — W012-1D 48"X48"

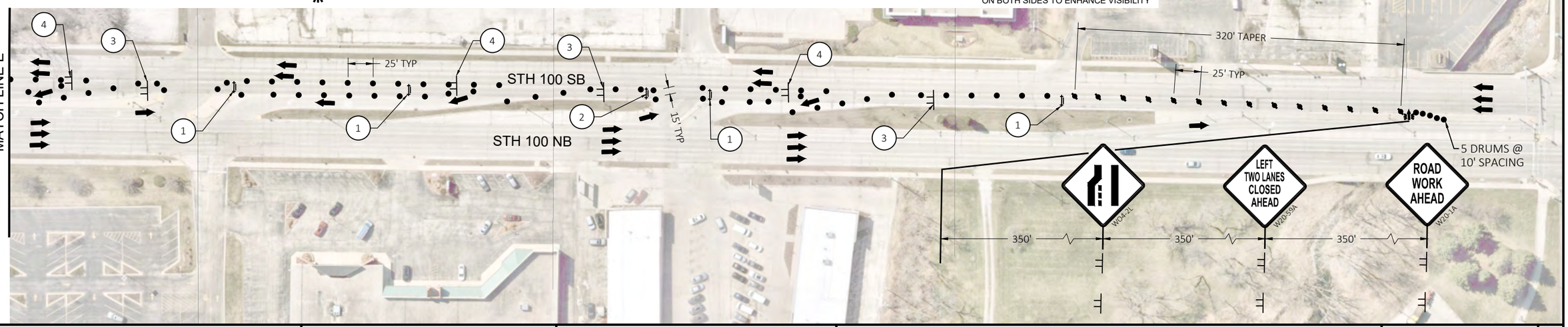
1 — R11-2L 48" X 30" — LANE CLOSED — TYPE III BARRICADE

2 — WO1-6 48" X 24" — TYPE III BARRICADE

MAX. 12' WIDTH — W12-52 48"X48"

1.00 MILE AHEAD — WO57-52 48"X36" (MOD.)

PLACE WIDTH WARNING SIGN PRIOR TO BELOIT RD (CTH I) ON BOTH SIDES TO ENHANCE VISIBILITY



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - STAGE 1 DETAIL - STH 100	SHEET 181	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_STH 100_STAGE 1.DWG
LAYOUT NAME - 3
PLOT DATE : 4/6/2021 5:20 PM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

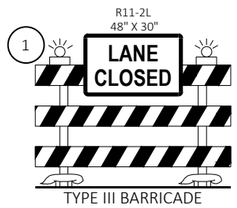
2

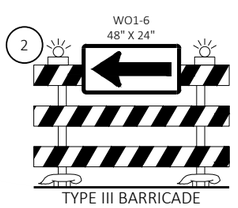
GENERAL NOTES

- REFER TO SDD "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY".
- WORK INCLUDES REMOVING LOOSE CONCRETE UNDER STRUCTURE B-40-303 (IH 43 NB).
- WORK TO BE COMPLETED DURING THE NIGHT.
- ALL CROSSWALKS WILL REMAIN OPEN.

LEGEND

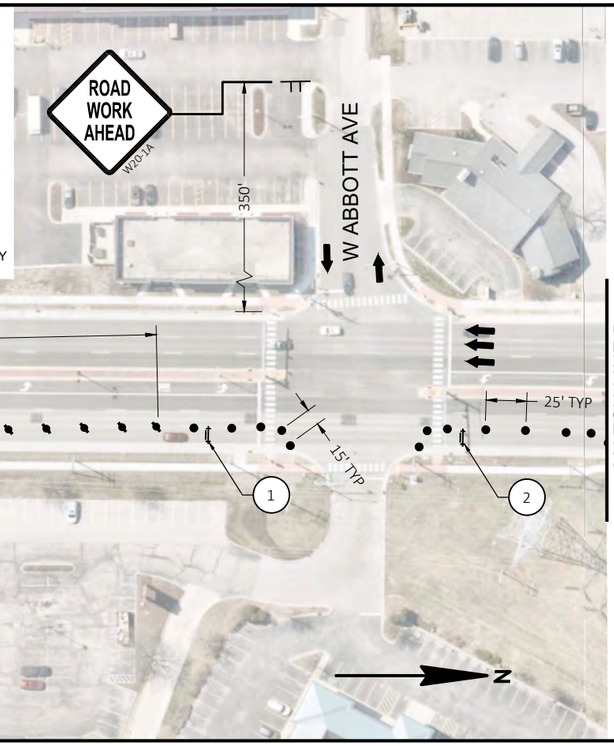
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- ARROW BOARD
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT

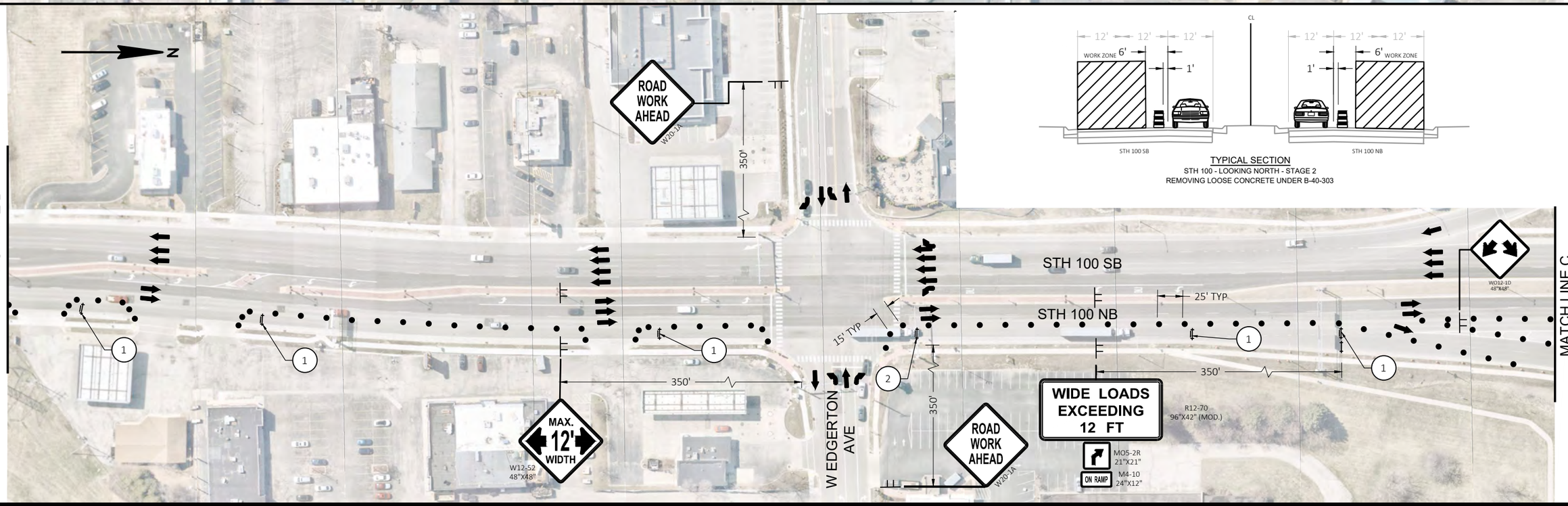






PLACE WIDTH WARNING SIGN PRIOR TO W GRANGE AVE ON BOTH SIDES TO ENHANCE VISIBILITY





TYPICAL SECTION
STH 100 - LOOKING NORTH - STAGE 2
REMOVING LOOSE CONCRETE UNDER B-40-303

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - STAGE 2 DETAIL - STH 100	SHEET 182	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_STH 100_STAGE 2.DWG
LAYOUT NAME - 1
PLOT DATE : 4/21/2021 8:54 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

GENERAL NOTES

- REFER TO SDD "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY".
- WORK INCLUDES REMOVING LOOSE CONCRETE UNDER STRUCTURE B-40-303 (IH 43 NB).
- WORK TO BE COMPLETED DURING THE NIGHT.
- ALL CROSSWALKS WILL REMAIN OPEN.

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- ARROW BOARD
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT

R11-2L 48" X 30" — LANE CLOSED — TYPE III BARRICADE

WO1-6 48" X 24" — TYPE III BARRICADE

IH 43 SB OFF RAMP

ROAD WORK AHEAD W20-1A

IH 43 SB OFF RAMP

350'

END ROAD WORK G20-2A 48"X24"

500'

WO4-2R

350'

MATCH LINE C

STH 100 SB

320' TAPER

25' TYP

25'

15' TYP

50' TYP

B-40-303

STH 100 NB

WORKING ZONE TYP

500'

MATCH LINE D

IH 43 NB ON RAMP

IH 43 NB OFF RAMP

IH 43 NB

HALES CORNERS PARK & ROAD

ROAD WORK AHEAD W20-1A

IH 43 NB

END ROAD WORK G20-2A 48"X24"

N

ROAD WORK AHEAD W20-1A

350'

W LAYTON AVE

ROAD WORK AHEAD W20-1A

200'

W ARMOUR AVE

MATCH LINE D

STH 100 SB

STH 100 NB

15' TYP

25' TYP

320' TYP

350'

350'

MATCH LINE E

W LAYTON AVE

350'

ROAD WORK AHEAD W20-1A

WIDE LOADS EXCEEDING 12 FT R12-70 96"X42" (MOD.)

COUNTY Y

MO5-2L 21"X21"

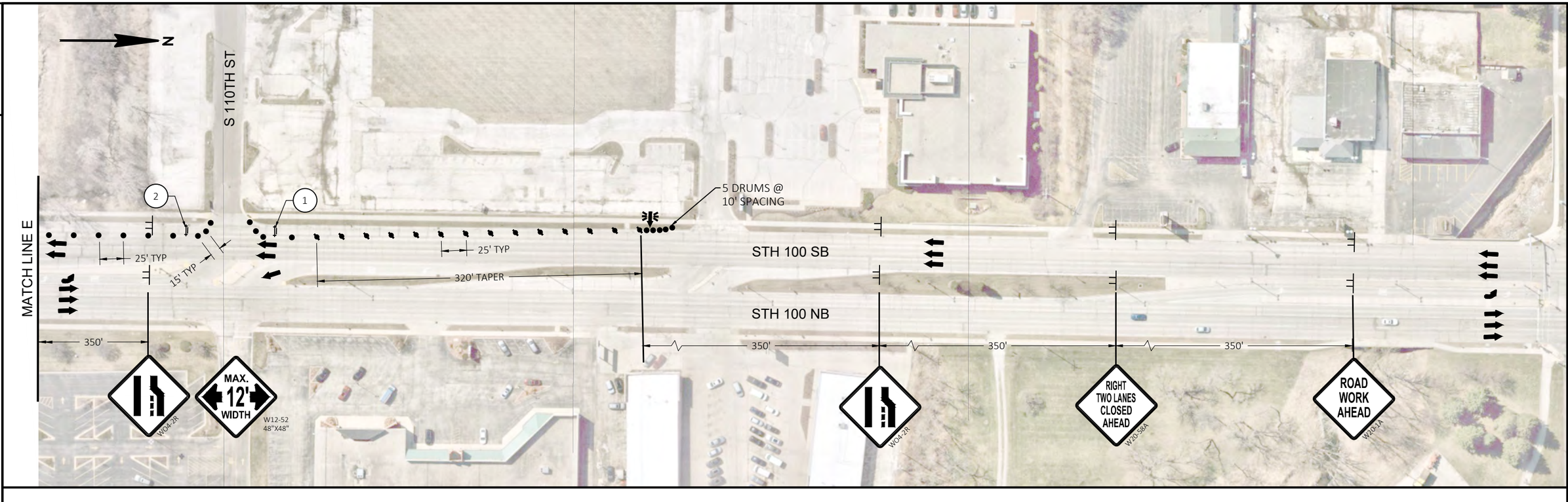
M1-5A 24"X24"

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - STAGE 2 DETAIL - STH 100	SHEET 183	E

FILE NAME : C:\USERS\DOTMJA\DESKTOP\MOORLAND RD TO HALE IC PROJECT 10900801 - C3D\025001B_TC_STH 100_STAGE 2.DWG
LAYOUT NAME - 2

PLOT DATE : 4/21/2021 8:59 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

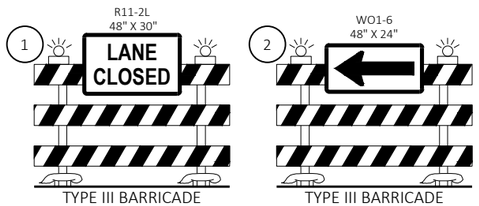


GENERAL NOTES

- REFER TO SDD "TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY".
- WORK INCLUDES REMOVING LOOSE CONCRETE UNDER STRUCTURE B-40-303 (IH 43 NB).
- WORK TO BE COMPLETED DURING THE NIGHT.
- ALL CROSSWALKS WILL REMAIN OPEN.

LEGEND

- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- ARROW BOARD
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT

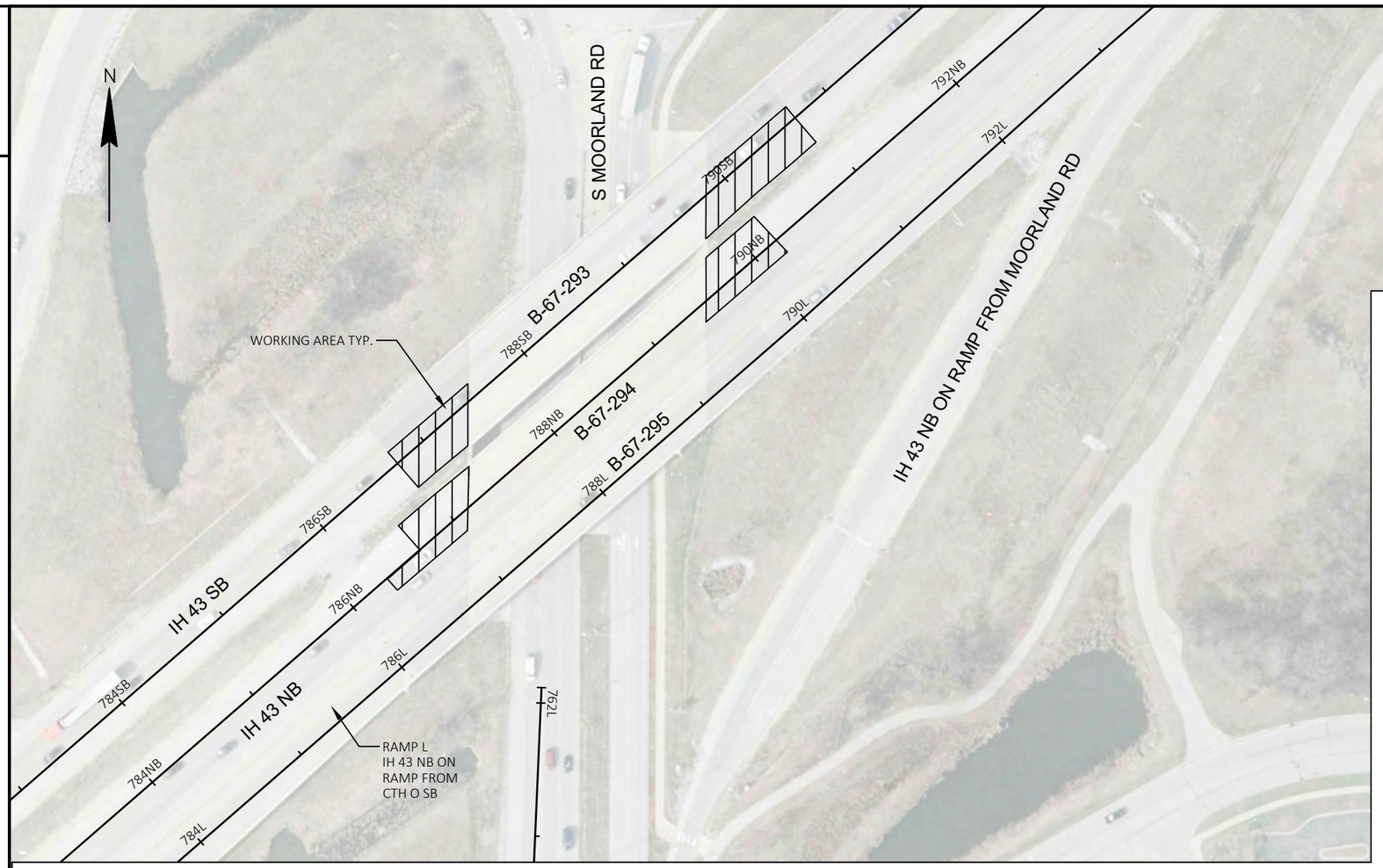




PLACE WIDTH WARNING
SIGN PRIOR TO BELOIT RD (CTH I)
ON BOTH SIDES TO ENHANCE VISIBILITY

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - STAGE 2 DETAIL - STH 100	SHEET 184	E

2



GENERAL NOTES:

- REFER TO THE DETAIL SHEET, "TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1A (WEEKEND): INSIDE LANE CLOSED".
- REMOVE SHOULDER RUMBLE STRIPS PRIOR TO WORK.

STAGE 1A (WEEKEND):

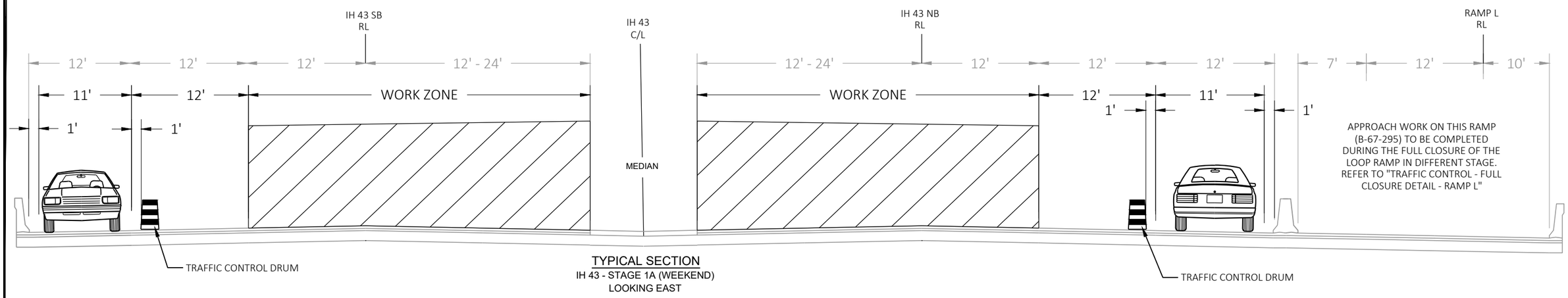
- WORK INCLUDES CONCRETE APPROACH SLABS (INNER LANES AND SHOULDERS) THAT WILL BE REPLACED IN STAGE 1A FOR THE FOLLOWING STRUCTURES:
  B-67-294 (IH 43 NB)
  B-67-293 (IH 43 SB)

- ALL WORK WILL BE COMPLETED DURING THE WEEKEND.

TRAFFIC:

- INNER LANES (NB & SB) WILL BE CLOSED WHEN THE CONSTRUCTION ARE PRESENT AND THE TWO TRAFFIC LANES WILL BE OPEN AND SHIFTED TO THE OUTSIDE SHOULDER WHEN THE CONCRETE IS CURING, REFER TO "TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1A: BOTH LANES OPEN OVERVIEW".

- ALL RAMPS REMAIN OPEN.

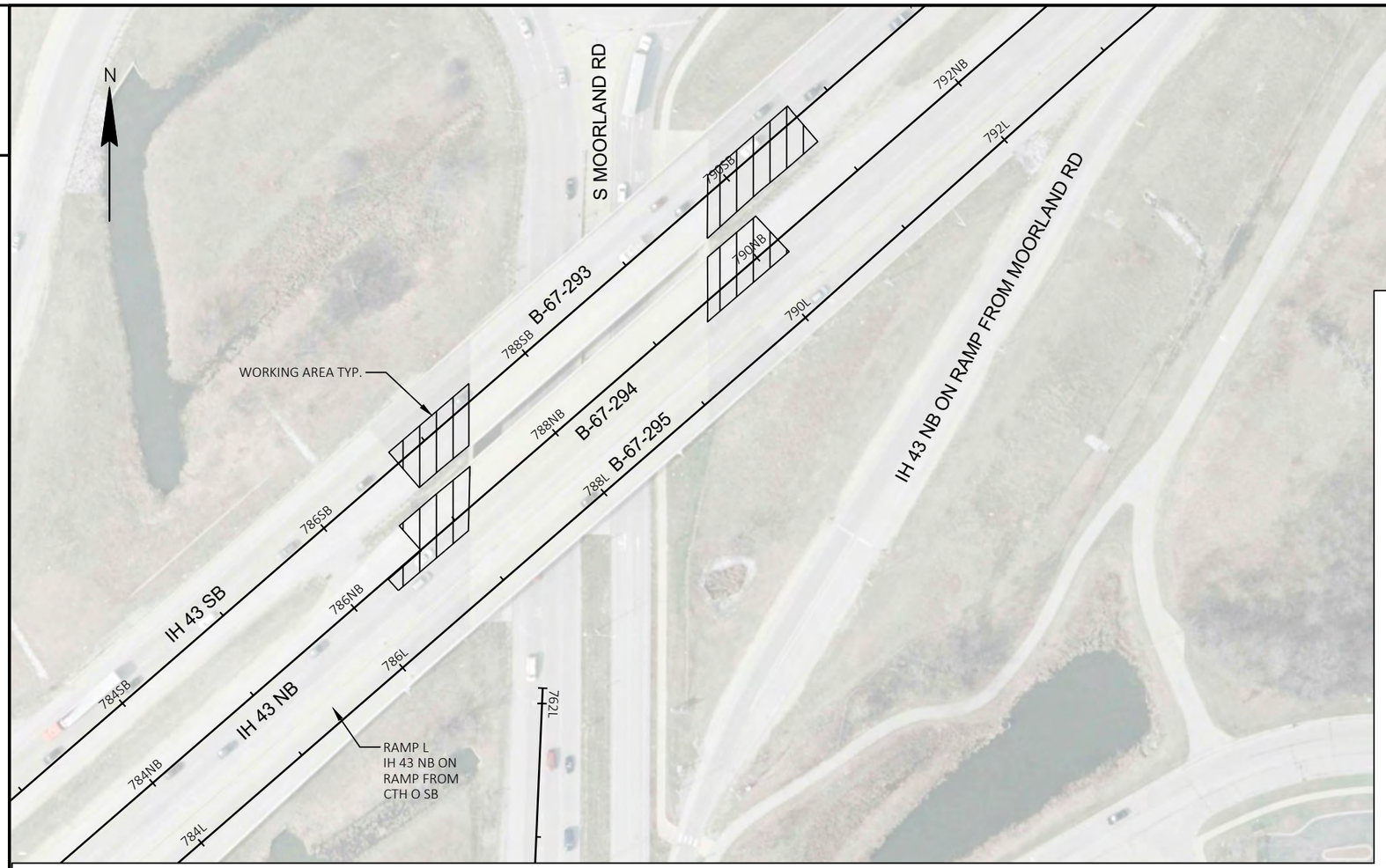


TYPICAL SECTION
IH 43 - STAGE 1A (WEEKEND)
LOOKING EAST

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1A (WEEKEND): INSIDE LANE CLOSED OVERVIEW	SHEET 185	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\025001-TC-APPROACH WORK - STAGE 1A (WEEKEND) - OVERVIEW.DWG
LAYOUT NAME - STAGE 1A (WEEKEND)
PLOT DATE : 9/22/2021 7:55 AM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



GENERAL NOTES:

- REFER TO THE DETAIL SHEET, "TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1A: BOTH LANES OPEN".
- REMOVE SHOULDER RUMBLE STRIPS PRIOR TO WORK.

STAGE 1A: BOTH LANES OPEN:

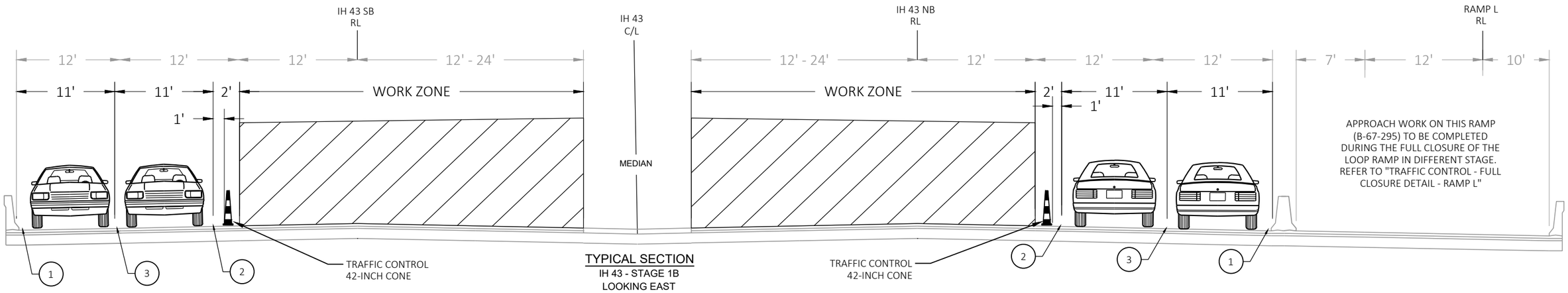
- WORK INCLUDES CURING TIME FOR CONCRETE APPROACH SLABS (INNER LANES AND SHOULDERS) THAT WILL BE REPLACED IN STAGE 1A FOR THE FOLLOWING STRUCTURES:
  B-67-294 (IH 43 NB)
  B-67-293 (IH 43 SB)

TRAFFIC:

- TWO LANES WILL BE SHIFTED AND REDUCED TO 11 FT WHILE THE CONCRETE IS CURING.
- ALL RAMPS REMAIN OPEN.

TEMPORARY PAVEMENT MARKING LEGEND

1. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
2. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

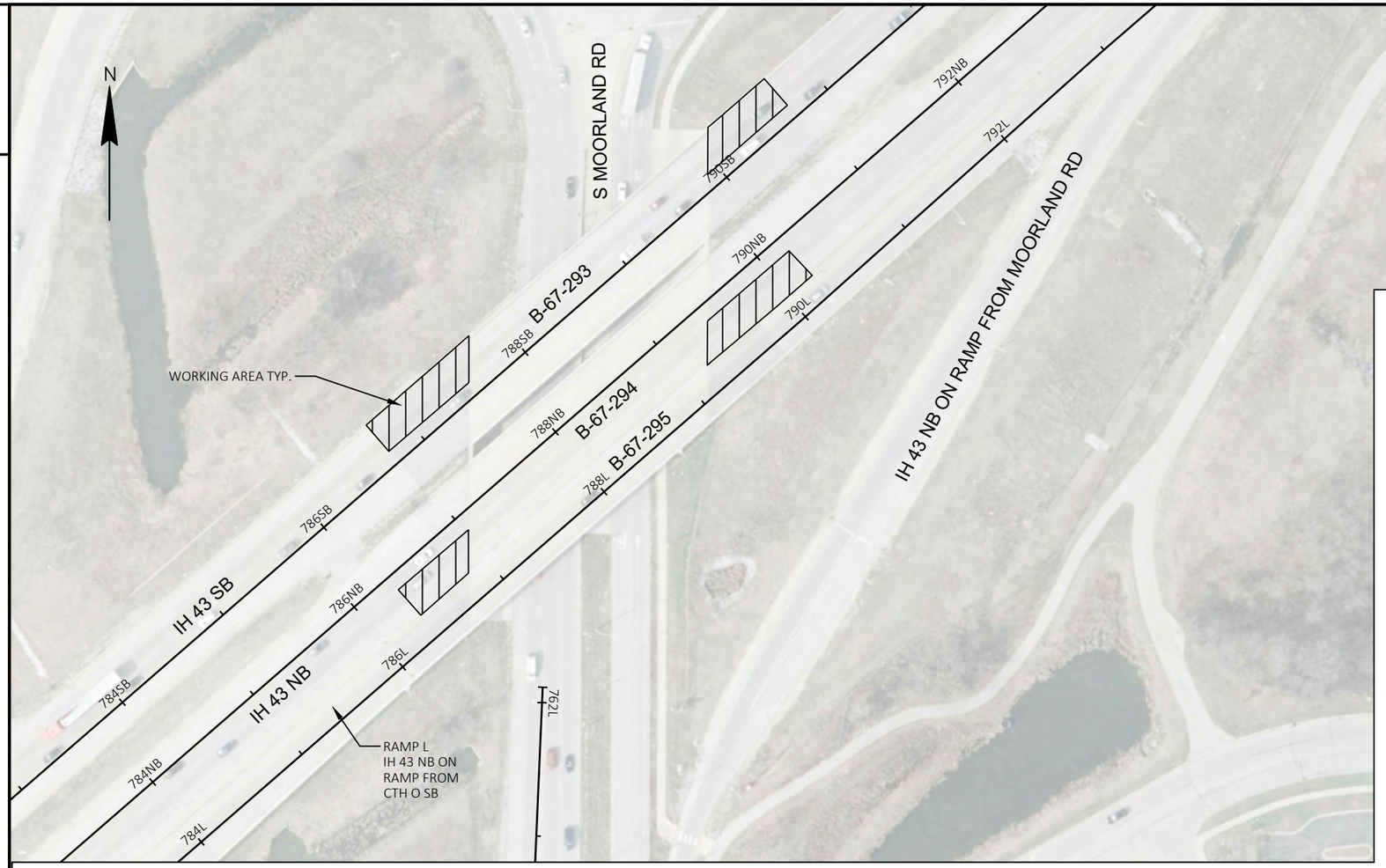


TYPICAL SECTION
IH 43 - STAGE 1B
LOOKING EAST

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1A: BOTH LANES OPEN OVERVIEW	SHEET 186	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\025001-TC-APPROACH WORK - STAGE 1A - OVERVIEW.DWG
LAYOUT NAME - STAGE 1A
PLOT DATE : 9/22/2021 7:46 AM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



GENERAL NOTES:

- REFER TO THE DETAIL SHEET, "TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1B (WEEKEND): OUTSIDE LANE CLOSED".
- REMOVE SHOULDER RUMBLE STRIPS PRIOR TO WORK.

STAGE 1B (WEEKEND):

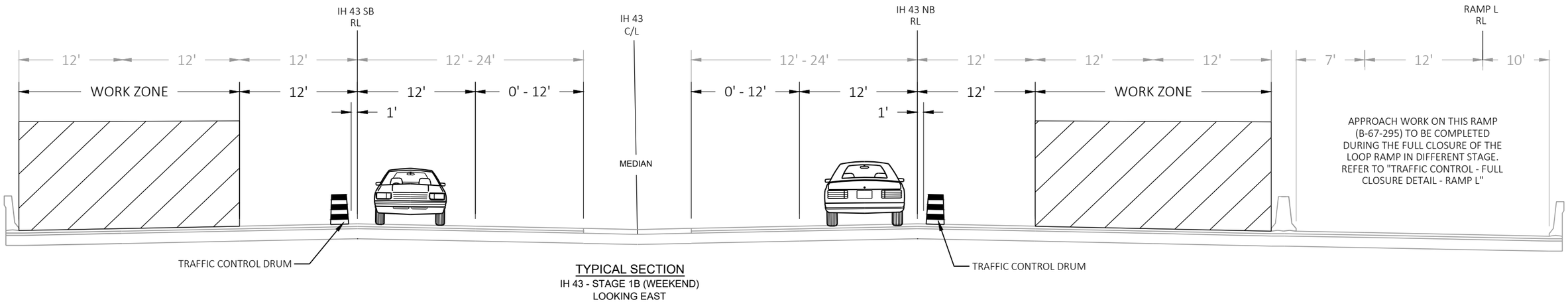
- WORK INCLUDES CONCRETE APPROACH SLABS (OUTER LANES AND SHOULDERS) THAT WILL BE REPLACED IN STAGE 2A FOR THE FOLLOWING STRUCTURES:
  B-67-294 (IH 43 NB)
  B-67-293 (IH 43 SB)

- ALL WORK WILL BE COMPLETED DURING THE WEEKEND.

TRAFFIC:

- OUTER LANES (NB & SB) WILL BE CLOSED WHEN THE CONSTRUCTION ARE PRESENT AND THE TWO TRAFFIC LANES WILL BE OPEN AND SHIFTED TO THE INSIDE SHOULDER WHEN THE CONCRETE IS CURING, REFER TO "TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1B: BOTH LANES OPEN OVERVIEW (DAYTIME)".

- ALL RAMPS REMAIN OPEN.

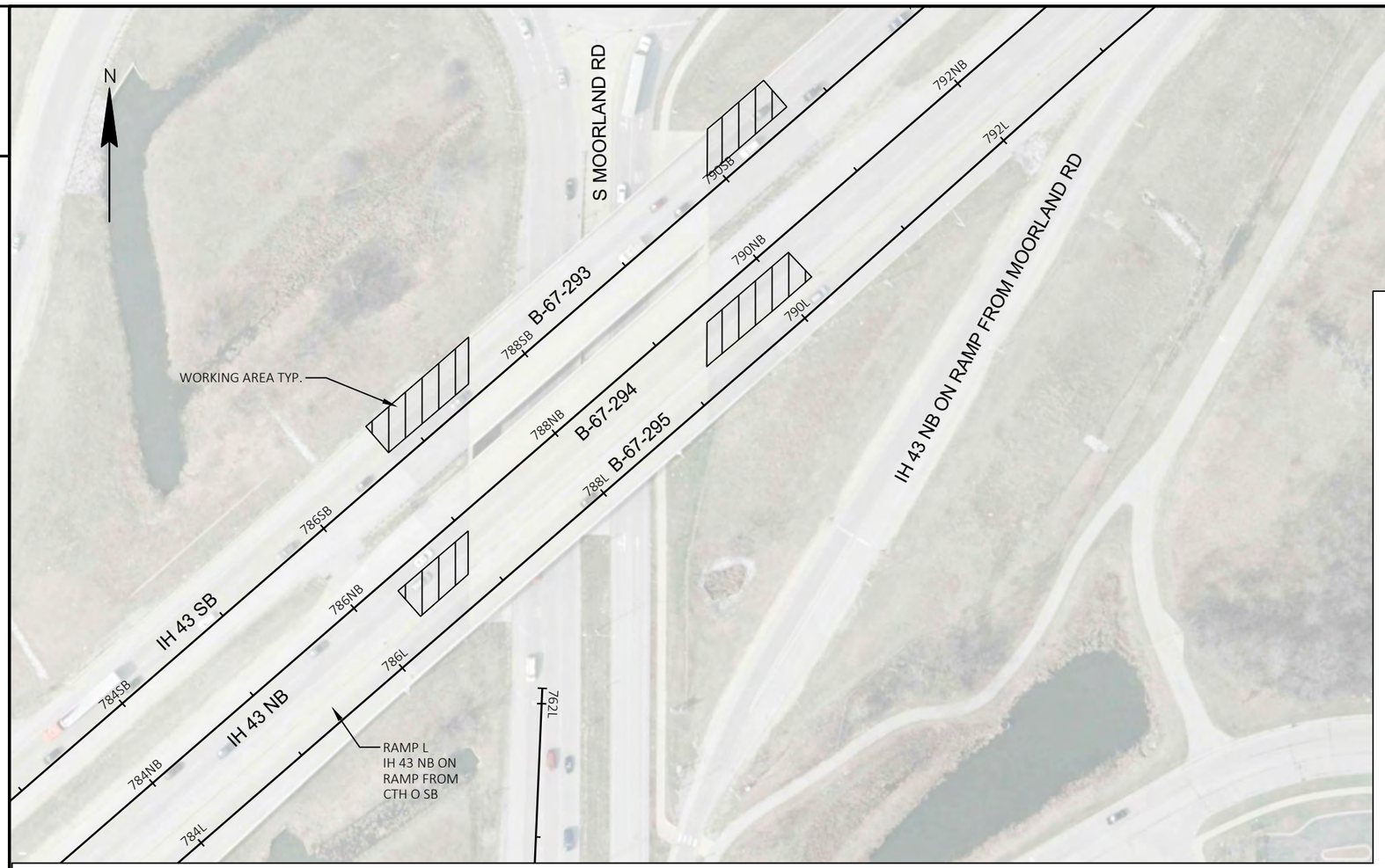


TYPICAL SECTION
IH 43 - STAGE 1B (WEEKEND)
LOOKING EAST

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1B (WEEKEND): OUTSIDE LANE CLOSED OVERVIEW	SHEET 187	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\025001-TC-APPROACH WORK - STAGE 1B (WEEKEND) - OVERVIEW.DWG
LAYOUT NAME - STAGE 1B (WEEKEND)
PLOT DATE : 9/22/2021 7:52 AM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



GENERAL NOTES:

- REFER TO THE DETAIL SHEET, "TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1B: BOTH LANES OPEN".
- REMOVE SHOULDER RUMBLE STRIPS PRIOR TO WORK.

STAGE 1B:

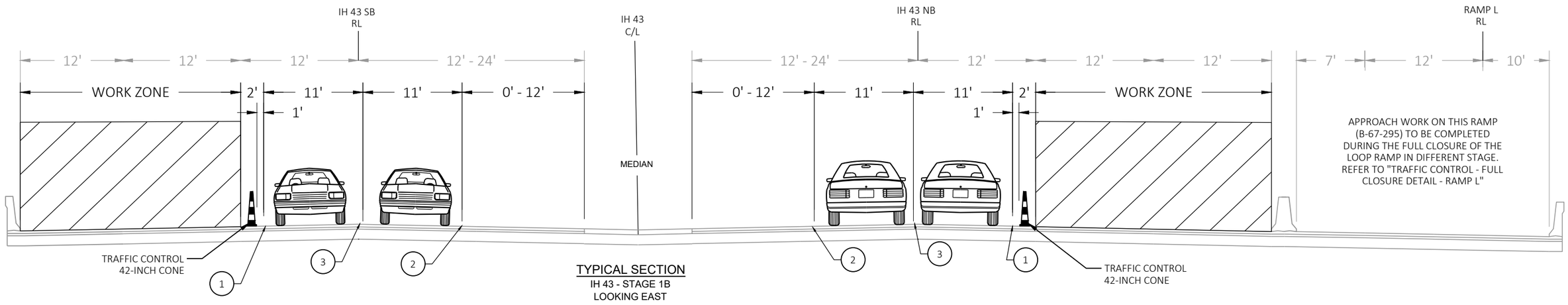
- WORK INCLUDES CURE TIME FOR CONCRETE APPROACH SLABS (OUTER LANES AND SHOULDERS) THAT WILL BE REPLACED IN STAGE 2A FOR THE FOLLOWING STRUCTURES:
  B-67-294 (IH 43 NB)
  B-67-293 (IH 43 SB)

TRAFFIC:

- TWO LANES WILL BE SHIFTED AND REDUCED TO 11' WHILE THE CONCRETE IS CURING.
- ALL RAMPS REMAIN OPEN.

TEMPORARY PAVEMENT MARKING LEGEND

1. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
2. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)



TYPICAL SECTION
IH 43 - STAGE 1B
LOOKING EAST

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1B: BOTH LANES OPEN OVERVIEW (DAY TIME)	SHEET 188	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\025001-TC-APPROACH WORK - STAGE 1B - OVERVIEW.DWG
LAYOUT NAME - STAGE 1B
PLOT DATE : 9/22/2021 8:17 AM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

GENERAL NOTES:

- REFER TO CONSTRUCTION DETAIL, "NIGHT TIME LANE CLOSURE".

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

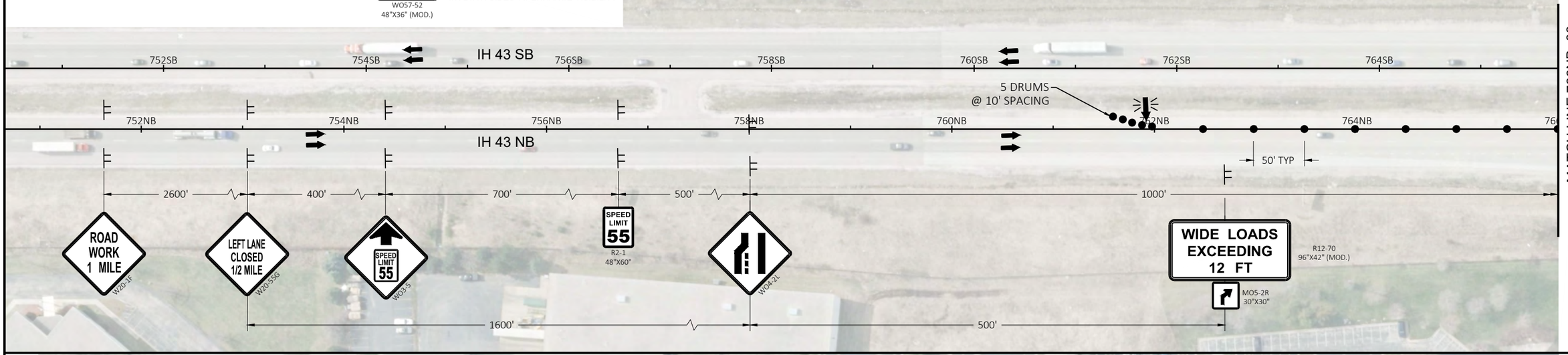


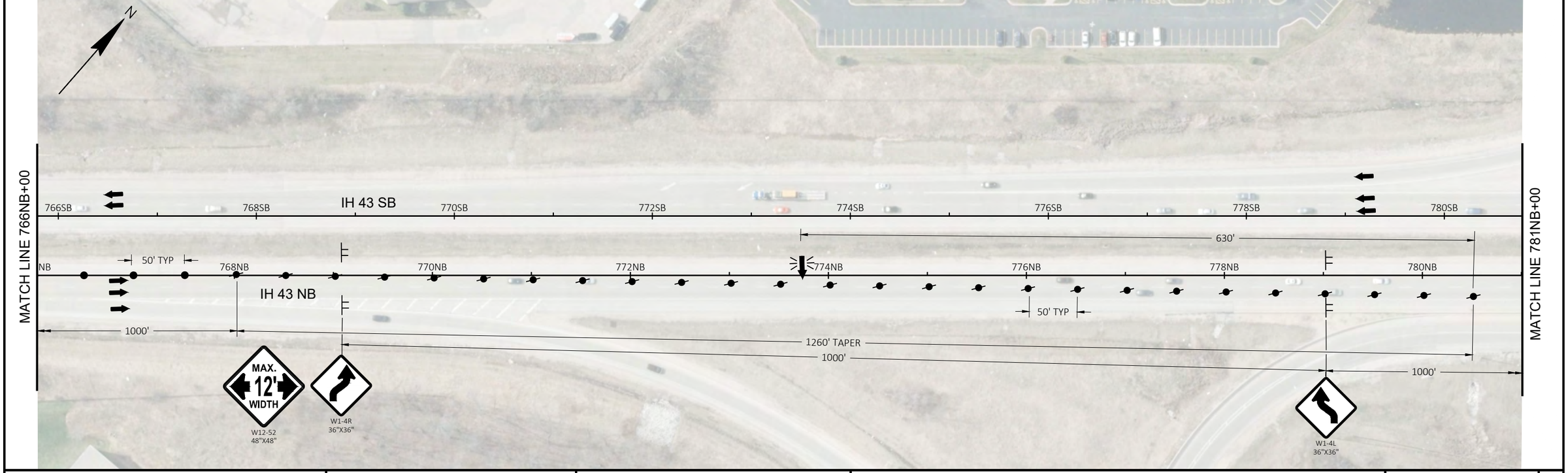
W12-52
48"X48"



WO57-52
48"X36" (MOD.)

PLACE WIDTH WARNING
SIGN PRIOR TO EXIT 54
(IH 43 NB OFF RAMP TO RACINE AVE)
ON BOTH SIDES TO ENHANCE VISIBILITY





PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1A (WEEKEND): INSIDE LANE CLOSED	SHEET 189	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\TRAFFIC CONTROL C3D - TRANSFERRED ON 07-29-2021\025001B_TC_B-67-294&B-67-293 APPROACH SLABS - STAGE 1A (WEEKEND).DWG
LAYOUT NAME - 1
PLOT DATE : 9/21/2021 10:30 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

G20-2A
48"X24"
END
ROAD WORK

500'

1000'

100' TYP

WORKING AREA
TYP

MATCH LINE 781NB+00

782SB IH 43 SB 784SB 786SB 788SB 790SB 792SB 794SB

782NB IH 43 NB 784NB 786NB 788NB 790NB 792NB 794NB

MATCH LINE 796NB+00

1000'

100' TYP

500'

CTH O SB

CTH O NB

BELOIT RD

END
ROAD WORK
G20-2A
48"X24"

W1-4L
36"X36"

1000'

1000'

1260' TAPER

W1-4R
36"X36"

MAX.
12'
WIDTH
W12-52
48"X48"

50' TYP

MATCH LINE 796NB+00

796SB 798SB 800SB 802SB 804SB 806SB 808SB 810SB

IH 43 SB

630'

50' TYP

798NB 800NB 802NB 804NB 806NB 808NB 810NB

IH 43 NB

MATCH LINE 811NB+00

GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "NIGHT TIME LANE CLOSURE".

LEGEND

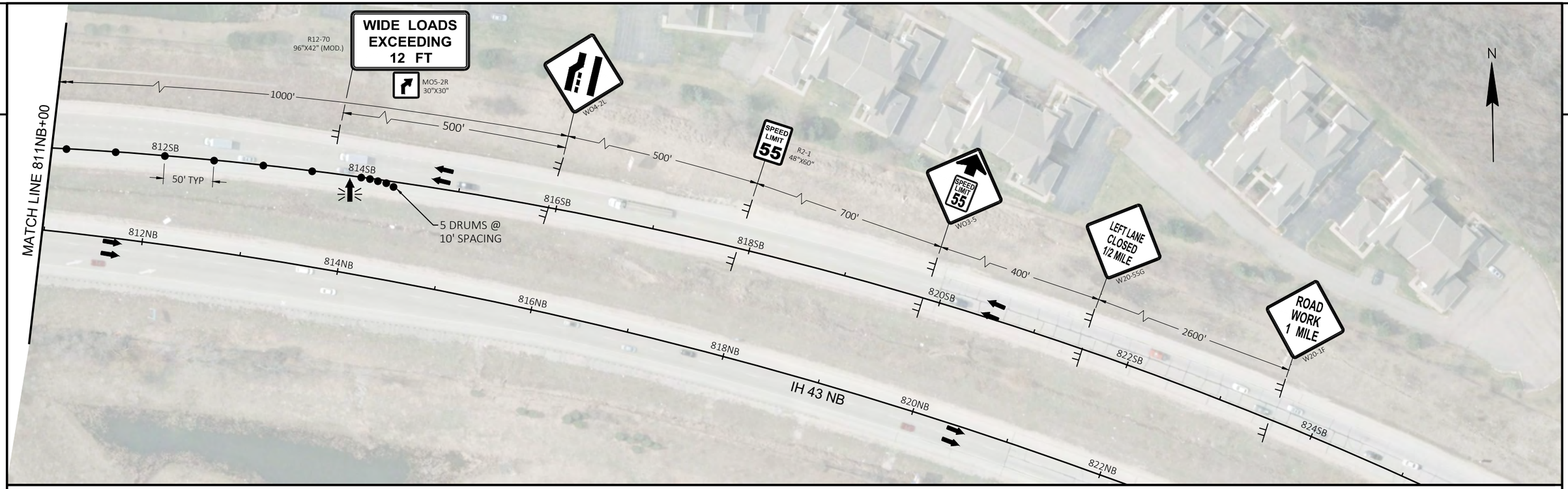
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS

1 R11-2L 48" X 30" LANE CLOSED
TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1A (WEEKEND): INSIDE LANE CLOSED	SHEET 190	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\TRAFFIC CONTROL C3D - TRANSFERRED ON 07-29-2021\025001B_TC_B-67-294&B-67-293 APPROACH SLABS - STAGE 1A (WEEKEND).DWG
LAYOUT NAME - 2

PLOT DATE : 9/21/2021 10:31 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT



2

GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "NIGHT TIME LANE CLOSURE".

LEGEND

- ● TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC



W12-52
48"X48"

PLACE WIDTH WARNING
SIGN PRIOR TO EXIT 60
(IH 43 SB OFF RAMP TO STH 100)
ON BOTH SIDES TO ENHANCE VISIBILITY



W057-52
48"X36" (MOD.)

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1A (WEEKEND): INSIDE LANE CLOSED	SHEET 191	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\TRAFFIC CONTROL C3D - TRANSFERRED ON 07-29-2021\025001B_TC_B-67-294&B-67-293 APPROACH SLABS - STAGE 1A (WEEKEND).DWG
LAYOUT NAME - 3
PLOT DATE : 9/21/2021 10:31 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

TEMPORARY PAVEMENT MARKING REMOVAL LEGEND

(RW) MARKING REMOVAL LINE 4-INCH
FROM STA 772NB+26 TO STA 781NB+00

(RD) MARKING REMOVAL LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH
FROM STA 772NB+26 TO STA 781NB+00
FROM STA 780SB+00 TO 780SB+79

(RY) MARKING REMOVAL LINE 4-INCH
FROM STA 772NB+26 TO STA 781NB+00
FROM STA 780SB+00 TO 780SB+79

(RT) MARKING REMOVAL LINE 8-INCH
FROM STA 780SB+00 TO STA 780SB+79

TEMPORARY PAVEMENT MARKING LEGEND

(1) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

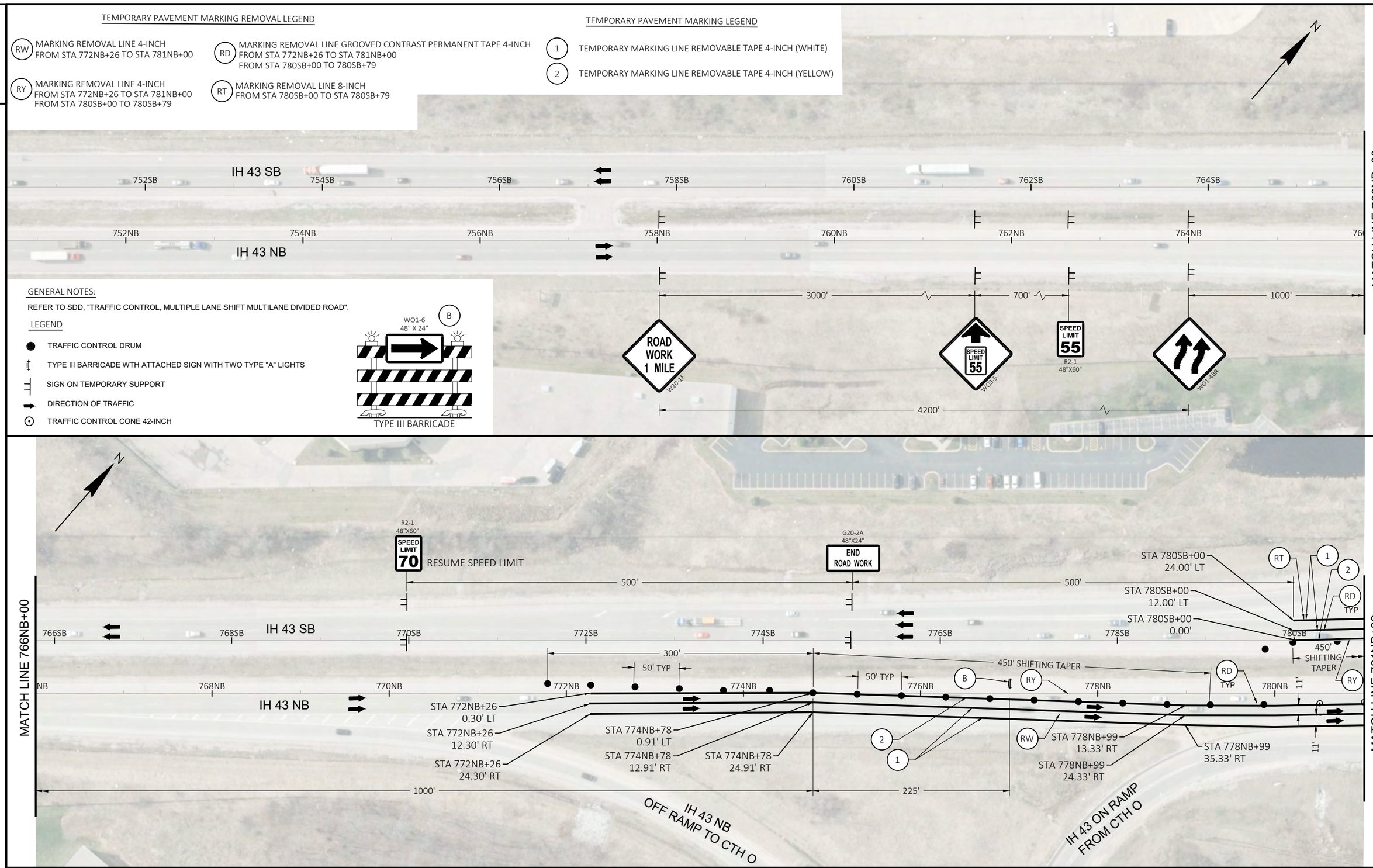
(2) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

GENERAL NOTES:

REFER TO SDD, "TRAFFIC CONTROL, MULTIPLE LANE SHIFT MULTILANE DIVIDED ROAD".

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL CONE 42-INCH



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1A: BOTH LANES OPEN	SHEET 192	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\TRAFFIC CONTROL C3D - TRANSFERRED ON 07-29-2021\025001B_TC_B-67-294&B-67-293 APPROACH SLABS - STAGE 1A.DWG
LAYOUT NAME - 1
PLOT DATE : 9/21/2021 10:38 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

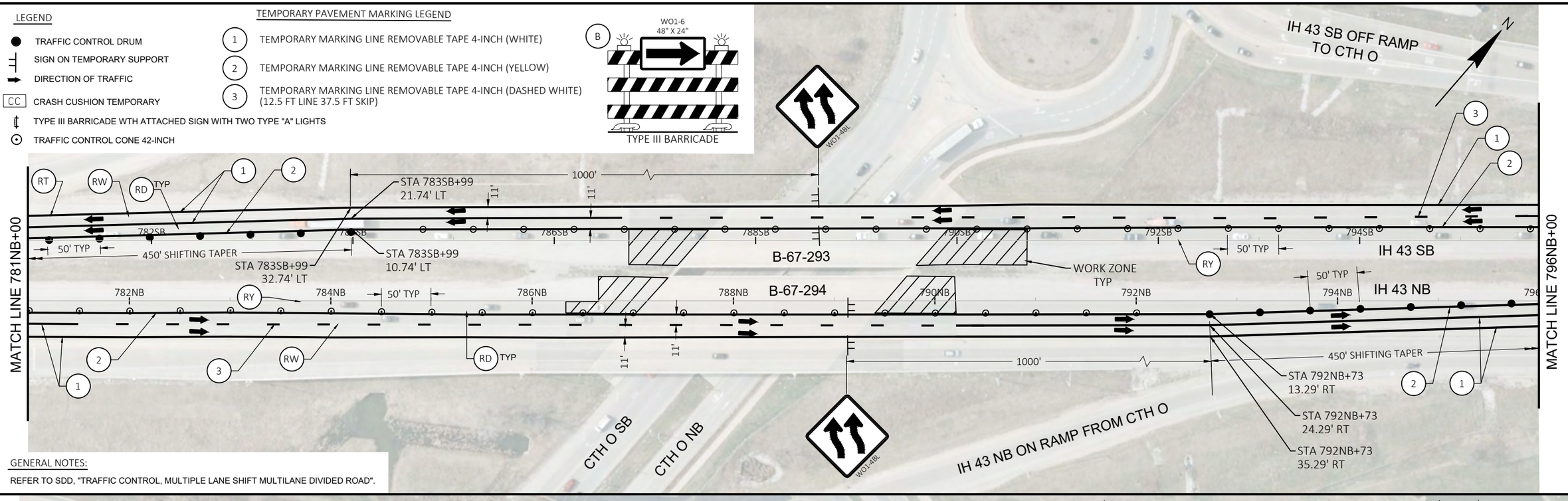
LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL CONE 42-INCH

TEMPORARY PAVEMENT MARKING LEGEND

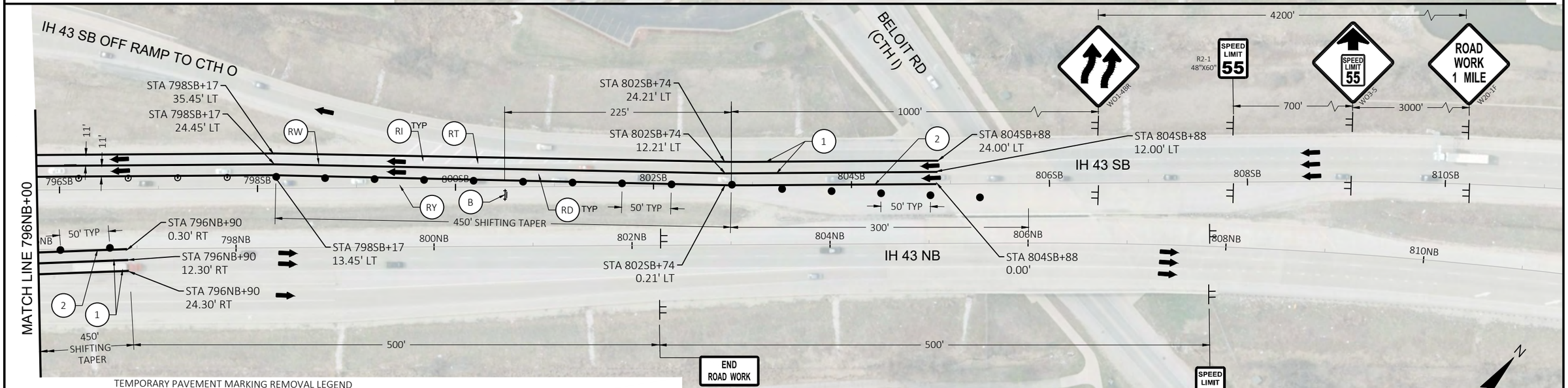
1. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
2. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

B — WO1-6 48" X 24" — TYPE III BARRICADE



GENERAL NOTES:

REFER TO SDD, "TRAFFIC CONTROL, MULTIPLE LANE SHIFT MULTILANE DIVIDED ROAD".



TEMPORARY PAVEMENT MARKING REMOVAL LEGEND

- RW MARKING REMOVAL LINE 4-INCH FROM STA 781NB+00 TO STA 796NB+90 FROM STA 781SB+34 TO STA 798SB+91
- RY MARKING REMOVAL LINE 4-INCH FROM STA 781NB+00 TO STA 796NB+90 FROM STA 780SB+79 TO STA 804SB+88
- RD MARKING REMOVAL LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH FROM STA 781NB+00 TO STA 796NB+90 FROM STA 780SB+79 TO STA 804SB+88
- RT MARKING REMOVAL LINE 8-INCH FROM STA 780SB+79 TO STA 781SB+34 FROM STA 798SB+91 TO STA 804SB+88
- RI MARKING REMOVAL LINE WIDE (DIAGONALS)

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1A: BOTH LANES OPEN	SHEET 193	E

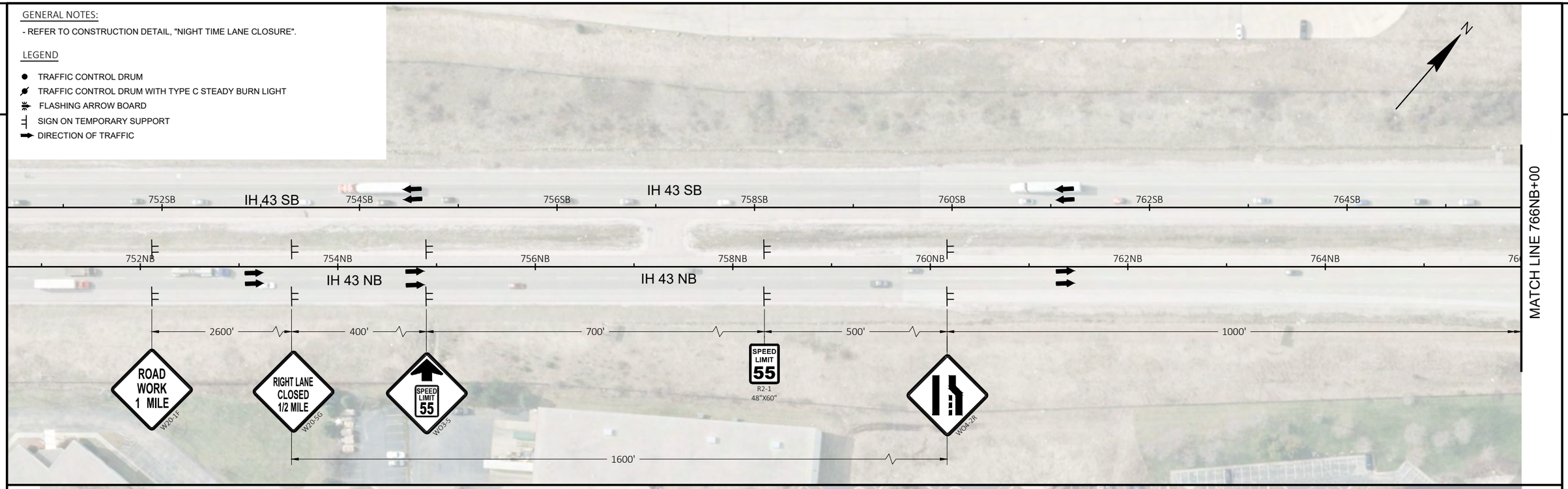
FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\TRAFFIC CONTROL C3D - TRANSFERRED ON 07-29-2021\025001B_TC_B-67-294&B-67-293 APPROACH SLABS - STAGE 1A.DWG
LAYOUT NAME - 2
PLOT DATE : 9/21/2021 10:46 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

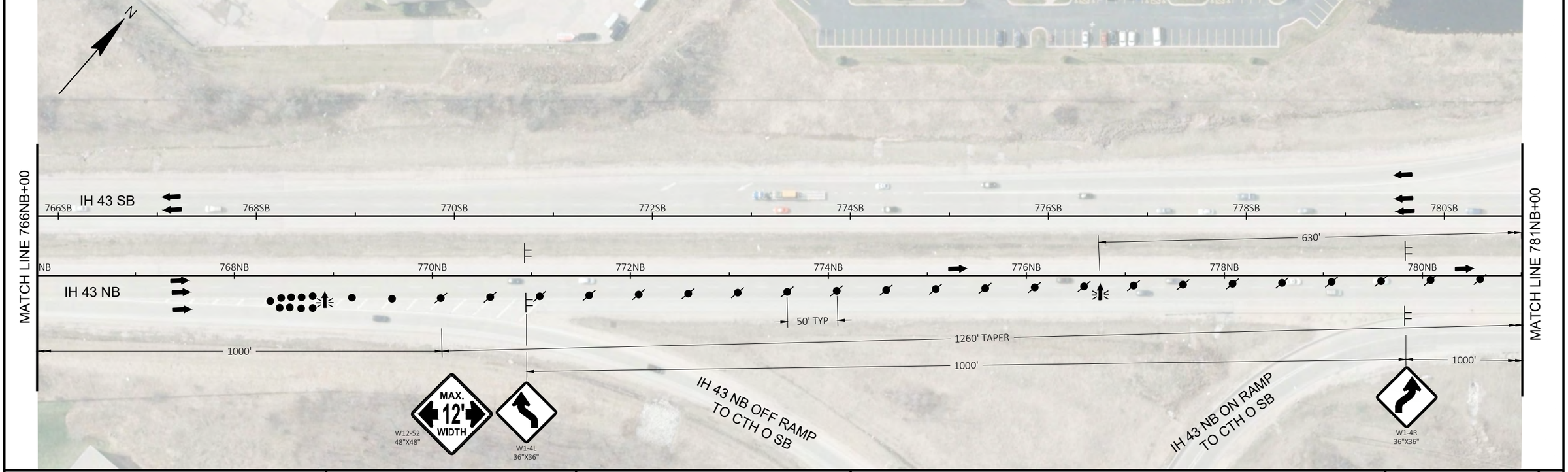
GENERAL NOTES:

- REFER TO CONSTRUCTION DETAIL, "NIGHT TIME LANE CLOSURE".

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC





PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1B (WEEKEND): OUTSIDE LANE CLOSED	SHEET 194	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\TRAFFIC CONTROL C3D - TRANSFERRED ON 07-29-2021\025001B_TC_B-67-294&B-67-293 APPROACH SLABS - STAGE 1B (WEEKEND).DWG
LAYOUT NAME - 1
PLOT DATE : 9/21/2021 10:53 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

IH 43 SB ON RAMP FROM CTH O SB

G20-2A
48"X24"
END ROAD WORK

500'

WORKING AREA TYP

1

100' TYP

IH 43 SB

782SB 784SB 786SB 788SB 790SB 792SB 794SB

630'

MATCH LINE 781NB+00

782NB 784NB 786NB 788NB 790NB 792NB 794NB 796

IH 43 NB

1260' TAPER

1000'

500'

MATCH LINE 796NB+00

END ROAD WORK
G20-2A
48"X24"

CTH O SB

CTH O NB

IH 43 NB ON RAMP FROM CTH O NB

N

2

R11-51
48"X48"
RAMP WILL BE CLOSED (TIME) BEGINNING (DATE)

PLACE SIGN 7 CALENDAR DAYS PRIOR TO THE RAMP CLOSURE.

RAMP CLOSED
IH 43 SB OFF RAMP
TO CTH O NB

BELOIT RD

1260' TAPER

1000'

2

50' TYP

1

100' TYP

IH 43 SB

796SB 798SB 800SB 802SB 804SB 806SB 808SB 810SB

630'

MATCH LINE 796NB+00

798NB 800NB 802NB 804NB 806NB 808NB 810NB

IH 43 NB

MATCH LINE 811NB+00

N

GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "NIGHT TIME LANE CLOSURE".

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS

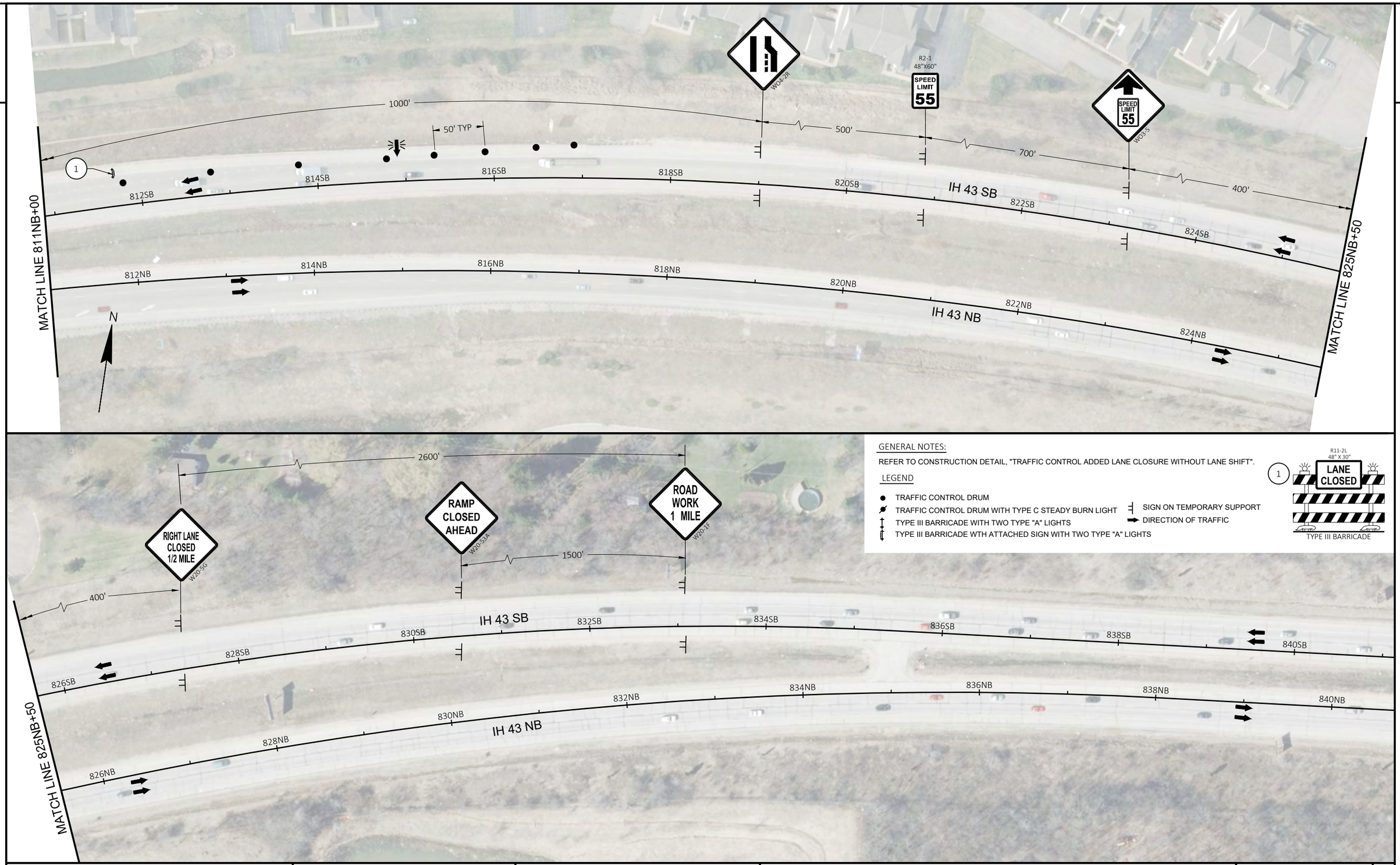
1 R11-2L 48" X 30" LANE CLOSED TYPE III BARRICADE

2 R11-2R 48" X 30" RAMP CLOSED TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1B (WEEKEND): OUTSIDE LANE CLOSED	SHEET 195	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\TRAFFIC CONTROL C3D - TRANSFERRED ON 07-29-2021\025001B_TC_B-67-294&B-67-293 APPROACH SLABS - STAGE 1B (WEEKEND).DWG
LAYOUT NAME - 2
PLOT DATE : 9/21/2021 10:54 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "TRAFFIC CONTROL ADDED LANE CLOSURE WITHOUT LANE SHIFT".

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

1 R11-2L 48" X 30" LANE CLOSED

TYPE III BARRICADE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1B (WEEKEND): OUTSIDE LANE CLOSED	SHEET 196	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\TRAFFIC CONTROL C3D - TRANSFERRED ON 07-29-2021\025001B_TC_B-67-294&B-67-293 APPROACH SLABS - STAGE 1B (WEEKEND).DWG
LAYOUT NAME - 3
PLOT DATE : 9/21/2021 10:55 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

TEMPORARY PAVEMENT MARKING REMOVAL LEGEND

(RW) MARKING REMOVAL LINE 4-INCH
FROM STA 771NB+48 TO STA 772NB+26

(RD) MARKING REMOVAL LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH
FROM STA 771NB+02 TO STA 772NB+26
FROM STA 779SB+65 TO 780SB+00

(RY) MARKING REMOVAL LINE 4-INCH
FROM STA 771NB+02 TO STA 772NB+26
FROM STA 779SB+65 TO 780SB+00

(RT) MARKING REMOVAL LINE 8-INCH
FROM STA 771NB+02 TO STA 771NB+48
FROM STA 779SB+65 TO 780SB+00

752SB 754SB IH 43 SB 756SB 758SB 760SB 762SB 764SB

752NB 754NB 756NB 758NB 760NB 762NB 764NB 76

IH 43 NB

MATCH LINE 766NB+00

3000' 700' 1000'

ROAD WORK 1 MILE W20-1F

SPEED LIMIT 55 W03-5

SPEED LIMIT 55 R2-1 48"X60"

WO1-4BL

4200'

GENERAL NOTES:

REFER TO SDD, "TRAFFIC CONTROL, MULTIPLE LANE SHIFT MULTILANE DIVIDED ROAD".

LEGEND

- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL CONE 42-INCH

WO1-6 48" X 24" (B)

TYPE III BARRICADE

TEMPORARY PAVEMENT MARKING LEGEND

(1) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

(2) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

R2-1 48"X60" SPEED LIMIT 70 RESUME SPEED LIMIT

G20-2A 48"X24" END ROAD WORK

500' 500'

MATCH LINE 766NB+00

766SB 768SB IH 43 SB 770SB 772SB 774SB 776SB 778SB 780SB

NB 768NB 770NB 772NB 774NB 776NB 778NB 780NB IH 43 NB

MATCH LINE 781NB+00

STA 771NB+02 0.26' LT

STA 771NB+02 11.74' RT

STA 771NB+02 23.74' RT

STA 773NB+47 0.23' RT

STA 773NB+47 12.23' RT

STA 773NB+47 24.23' RT

STA 778NB+03 12.33' LT

STA 778NB+03 1.33' LT

STA 778NB+03 9.67' RT

STA 779SB+65 25.56' LT

STA 779SB+65 13.56' LT

STA 779SB+65 1.56' LT

450' SHIFTING TAPER

1000' 250' 225' 450' SHIFTING TAPER

50' TYP 50 TYP 50' TYP

11' 11'

RT RD TYP RY RW

B

IH 43 NB OFF RAMP TO CTH O

IH 43 ON RAMP FROM CTH O

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1B: BOTH LANES OPEN	SHEET 197	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\TRAFFIC CONTROL C3D - TRANSFERRED ON 07-29-2021\025001B_TC_B-67-294&B-67-293 APPROACH SLABS - STAGE 1B.DWG
LAYOUT NAME - 1
PLOT DATE : 9/21/2021 10:59 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

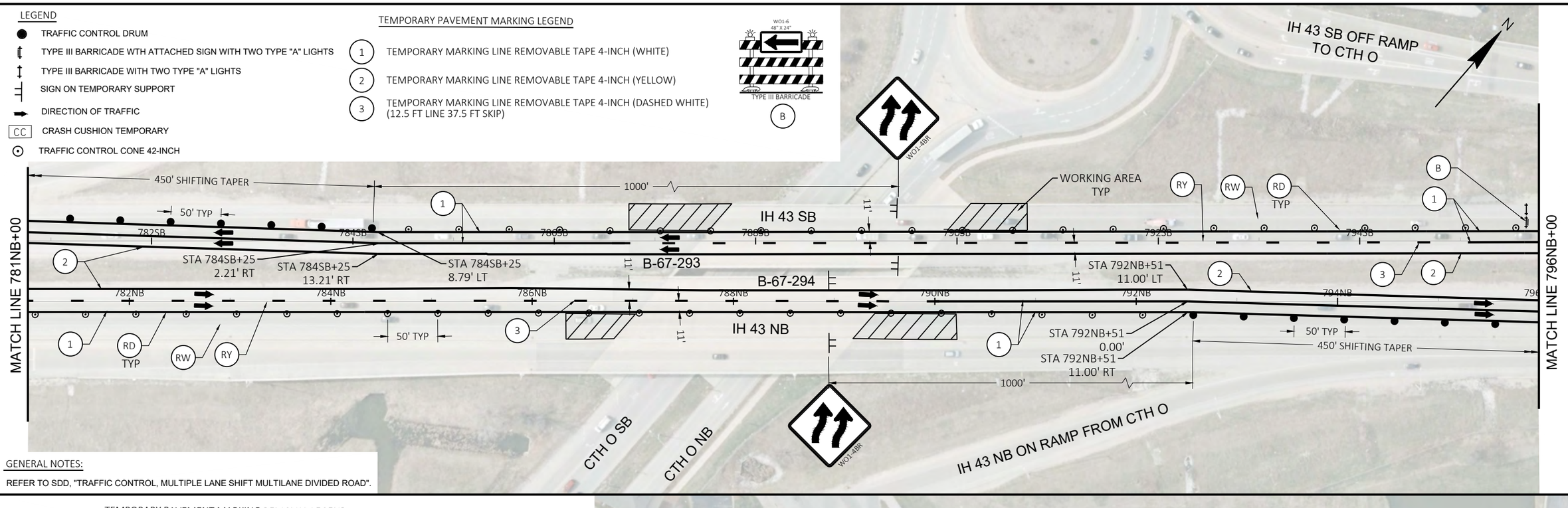
LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WTH ATTACHED SIGN WITH TWO TYPE "A" LIGHTS
- TYPE III BARRICADE WITH TWO TYPE "A" LIGHTS
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY
- TRAFFIC CONTROL CONE 42-INCH

TEMPORARY PAVEMENT MARKING LEGEND

1. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
2. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
3. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)

W01-6 48" X 24"
TYPE III BARRICADE
B

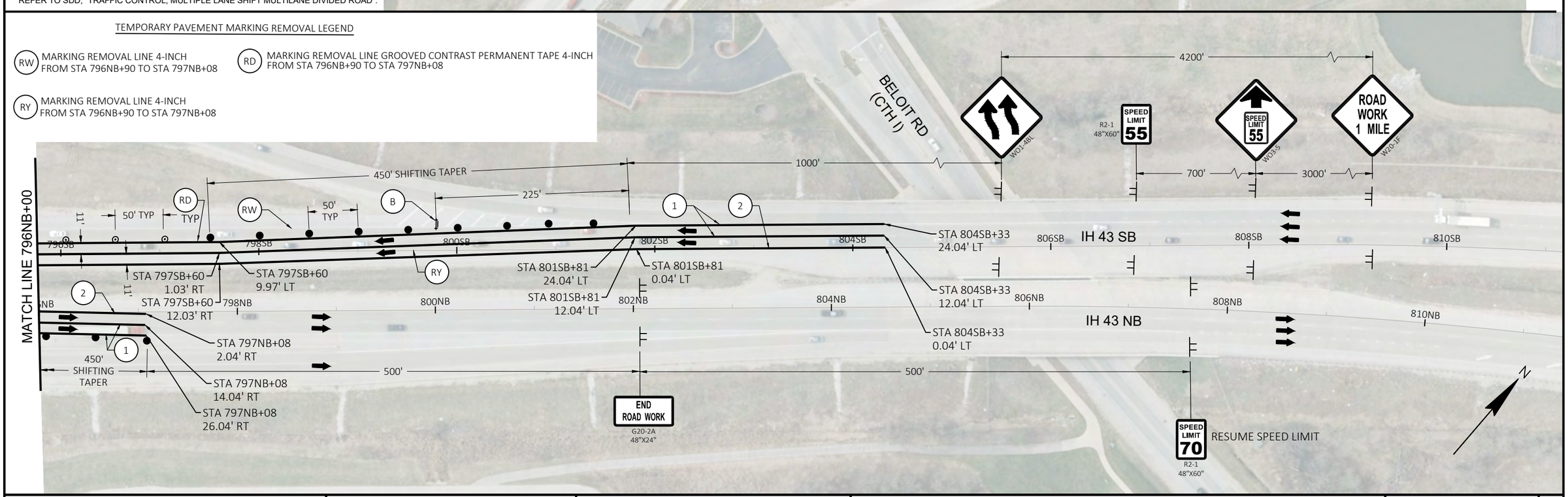


GENERAL NOTES:

REFER TO SDD, "TRAFFIC CONTROL, MULTIPLE LANE SHIFT MULTILANE DIVIDED ROAD".

TEMPORARY PAVEMENT MARKING REMOVAL LEGEND

- RW MARKING REMOVAL LINE 4-INCH FROM STA 796NB+90 TO STA 797NB+08
- RD MARKING REMOVAL LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH FROM STA 796NB+90 TO STA 797NB+08
- RY MARKING REMOVAL LINE 4-INCH FROM STA 796NB+90 TO STA 797NB+08



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 APPROACH WORK - STAGE 1B: BOTH LANES OPEN	SHEET 198	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\TRAFFIC CONTROL C3D - TRANSFERRED ON 07-29-2021\025001B_TC_B-67-294&B-67-293 APPROACH SLABS - STAGE 1B.DWG
LAYOUT NAME - 2
PLOT DATE : 9/21/2021 11:01 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

S MOORLAND RD. (CTH O)

S SUNNY SLOPE RD.

W BELOIT RD.

S 124TH ST.

IH 43

W BELOIT RD.

IH 43 SB ON RAMP FROM LAYTON AVE/124TH ST CLOSED
REFER TO "TRAFFIC CONTROL - FULL CLOSURE DETAIL - RAMP D".

IH NB OFF RAMP TO LAYTON AVE/124TH ST CLOSED
REFER TO SDD, "TRAFFIC CONTROL, EXIT RAMP CLOSURE".

IH 43 NB ON RAMP FROM CTH O NB CLOSED
REFER TO CONSTRUCTION DETAIL, "TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE".

IH 43

IH 43 NB ON RAMP (LOOP) FROM CTH O SB CLOSED
REFER TO "TRAFFIC CONTROL - FULL CLOSURE DETAIL - RAMP L".

GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "NIGHT TIME LANE CLOSURE: WAUKESHA COUNTY" AND "PAVING SEQUENCE".

CONSTRUCTION ACTIVITIES:

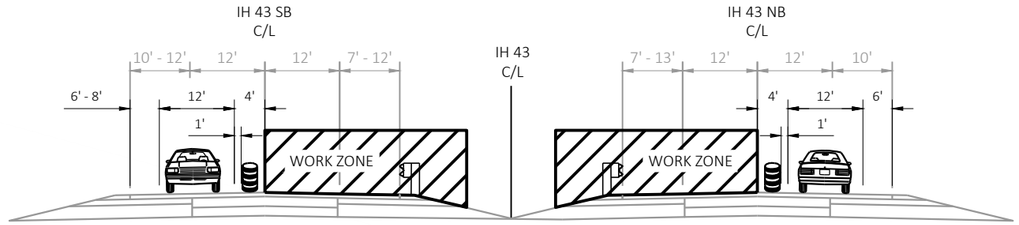
- STAGE 1A:
  BASE PATCHING ON THE INSIDE LANE & SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 2A:
  MILL AND PLACE LOWER LAYER OF HMA ON THE INSIDE LANE & SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 2D:
  PLACE UPPER LAYER OF HMA ON THE INSIDE LANE & SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 3A:
  GUARDRAIL REPLACEMENT ON THE INSIDE SHOULDER OF IH 43 (BOTH DIRECTIONS).

ALL WORK WILL BE OVERNIGHT ONLY.

TRAFFIC:

IN THIS STAGE, THE INSIDE LANE AND SHOULDER ARE CLOSED AND THE OUTSIDE LANE IS OPEN TO TRAFFIC.

THE FOLLOWING RAMPS WILL BE CLOSED AS NEEDED:
- IH 43 NB ON RAMP (LOOP) FROM CTH O SB.
- IH 43 NB ON RAMP FROM CTH O NB.
- IH 43 NB OFF RAMP TO LAYTON AVE/124TH ST.
- IH 43 SB ON RAMP FROM LAYTON AVE/124TH ST.



TYPICAL SECTION
IH 43 - INSIDE HALF
(WAUKESHA COUNTY)

LEGEND

WORK AREA

XXX RAMP CLOSURE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 MILL & OVERLAY - INSIDE HALF OVERVIEW (WAUKESHA COUNTY)	SHEET 199	E

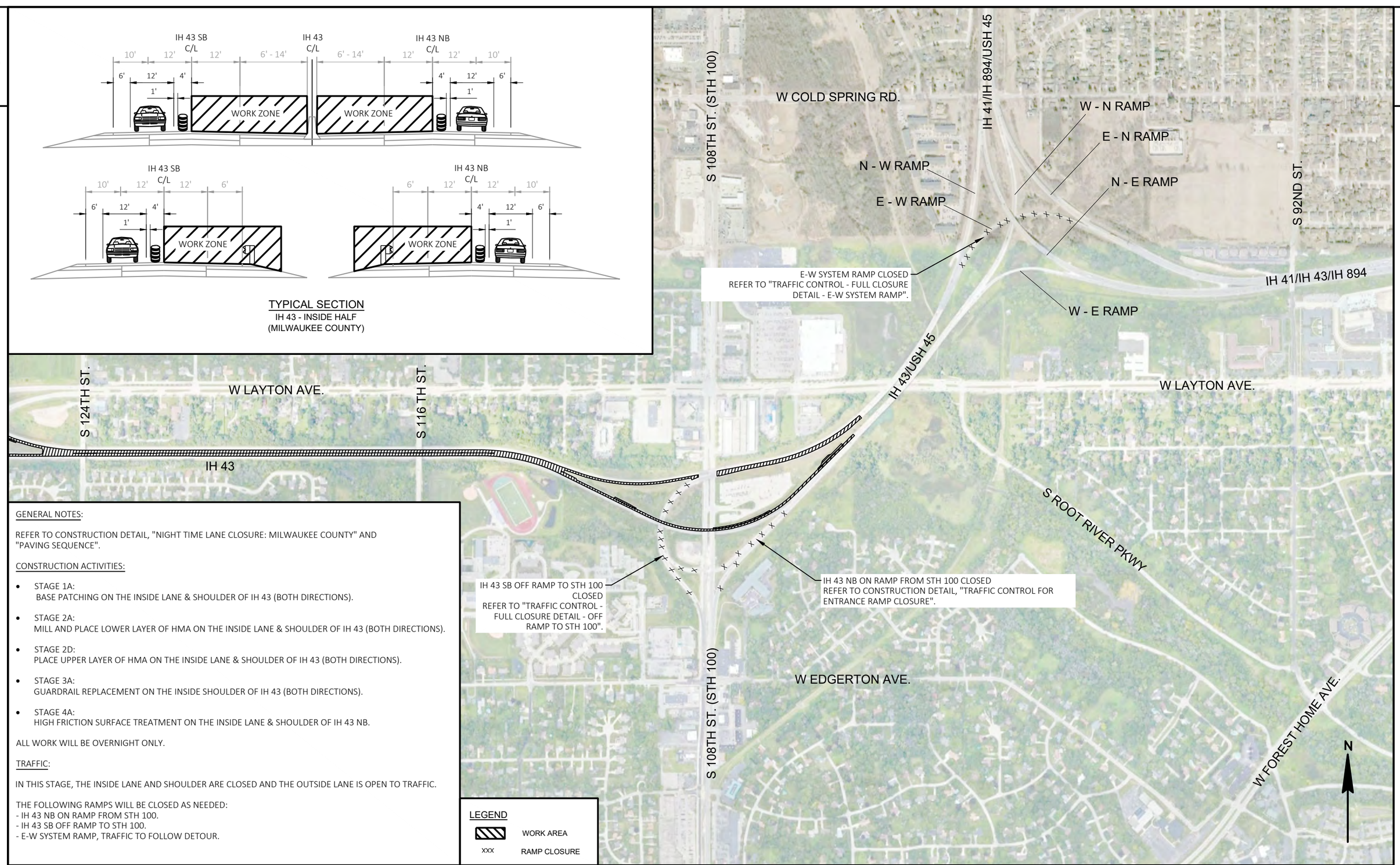
FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\025001-TC-INSIDE HALF-OVERVIEW.DWG
LAYOUT NAME - 1

PLOT DATE : 4/19/2021 9:46 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:800 FT

WISDOT/CADDS SHEET 42

2

TYPICAL SECTION
IH 43 - INSIDE HALF
(MILWAUKEE COUNTY)



GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "NIGHT TIME LANE CLOSURE: MILWAUKEE COUNTY" AND "PAVING SEQUENCE".

CONSTRUCTION ACTIVITIES:

- STAGE 1A:
  BASE PATCHING ON THE INSIDE LANE & SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 2A:
  MILL AND PLACE LOWER LAYER OF HMA ON THE INSIDE LANE & SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 2D:
  PLACE UPPER LAYER OF HMA ON THE INSIDE LANE & SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 3A:
  GUARDRAIL REPLACEMENT ON THE INSIDE SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 4A:
  HIGH FRICTION SURFACE TREATMENT ON THE INSIDE LANE & SHOULDER OF IH 43 NB.

ALL WORK WILL BE OVERNIGHT ONLY.

TRAFFIC:

IN THIS STAGE, THE INSIDE LANE AND SHOULDER ARE CLOSED AND THE OUTSIDE LANE IS OPEN TO TRAFFIC.

THE FOLLOWING RAMPS WILL BE CLOSED AS NEEDED:
- IH 43 NB ON RAMP FROM STH 100.
- IH 43 SB OFF RAMP TO STH 100.
- E-W SYSTEM RAMP, TRAFFIC TO FOLLOW DETOUR.

LEGEND

WORK AREA

XXX RAMP CLOSURE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 MILL & OVERLAY - INSIDE HALF OVERVIEW (MILWAUKEE COUNTY)	SHEET 200	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\025001-TC-INSIDE HALF-OVERVIEW.DWG
LAYOUT NAME - 2

PLOT DATE : 4/21/2021 9:16 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:800 FT

WISDOT/CADDS SHEET 42

2

2

N

S MOORLAND RD. (CTH O)

S SUNNY SLOPE RD.

S 124TH ST.

IH 43

W BELOIT RD.

W BELOIT RD.

IH 43 SB ON RAMP FROM LAYTON AVE/124TH ST CLOSED
REFER TO "TRAFFIC CONTROL - FULL CLOSURE DETAIL - RAMP D".

IH 43 SB OFF RAMP TO CTH O CLOSED
REFER TO SDD, "TRAFFIC CONTROL,
EXIT RAMP CLOSURE".

IH 43 NB ON RAMP FROM CTH O NB CLOSED
REFER TO CONSTRUCTION DETAIL, "TRAFFIC
CONTROL FOR ENTRANCE RAMP CLOSURE".

IH 43

IH 43 NB ON RAMP (LOOP) FROM
CTH O SB CLOSED
REFER TO "TRAFFIC CONTROL - FULL
CLOSURE DETAIL - RAMP L".

GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "NIGHT TIME LANE CLOSURE: WAUKESHA COUNTY" AND "PAVING SEQUENCE".

CONSTRUCTION ACTIVITIES:

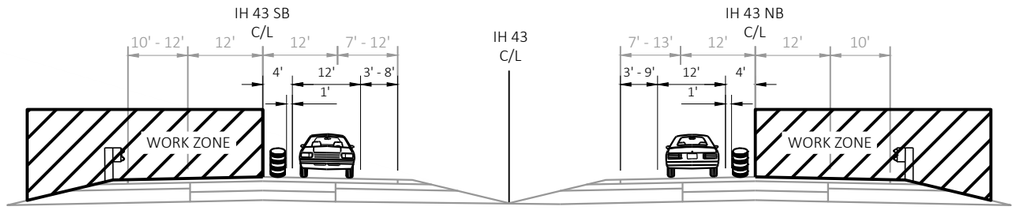
- STAGE 1B:
  BASE PATCHING ON THE OUTSIDE LANE & SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 2B:
  MILL AND PLACE LOWER LAYER OF HMA ON THE OUTSIDE LANE & SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 2C:
  PLACE UPPER LAYER OF HMA ON THE OUTSIDE LANE & SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 3B:
  GUARDRAIL REPLACEMENT ON THE OUTSIDE SHOULDER OF IH 43 (BOTH DIRECTIONS).

ALL WORK WILL BE OVERNIGHT WORK ONLY.

TRAFFIC:

IN THIS STAGE, THE OUTSIDE LANE AND SHOULDER ARE CLOSED AND THE INSIDE LANE IS OPEN TO TRAFFIC.

THE FOLLOWING RAMPS WILL BE CLOSED AS NEEDED:
- IH 43 NB ON RAMP (LOOP) FROM CTH O SB.
- IH 43 NB ON RAMP FROM CTH O NB.
- IH 43 SB OFF RAMP TO CRH O.
- IH 43 SB ON RAMP FROM LAYTON AVENUE/124TH ST.



TYPICAL SECTION
IH 43 - OUTSIDE HALF

LEGEND

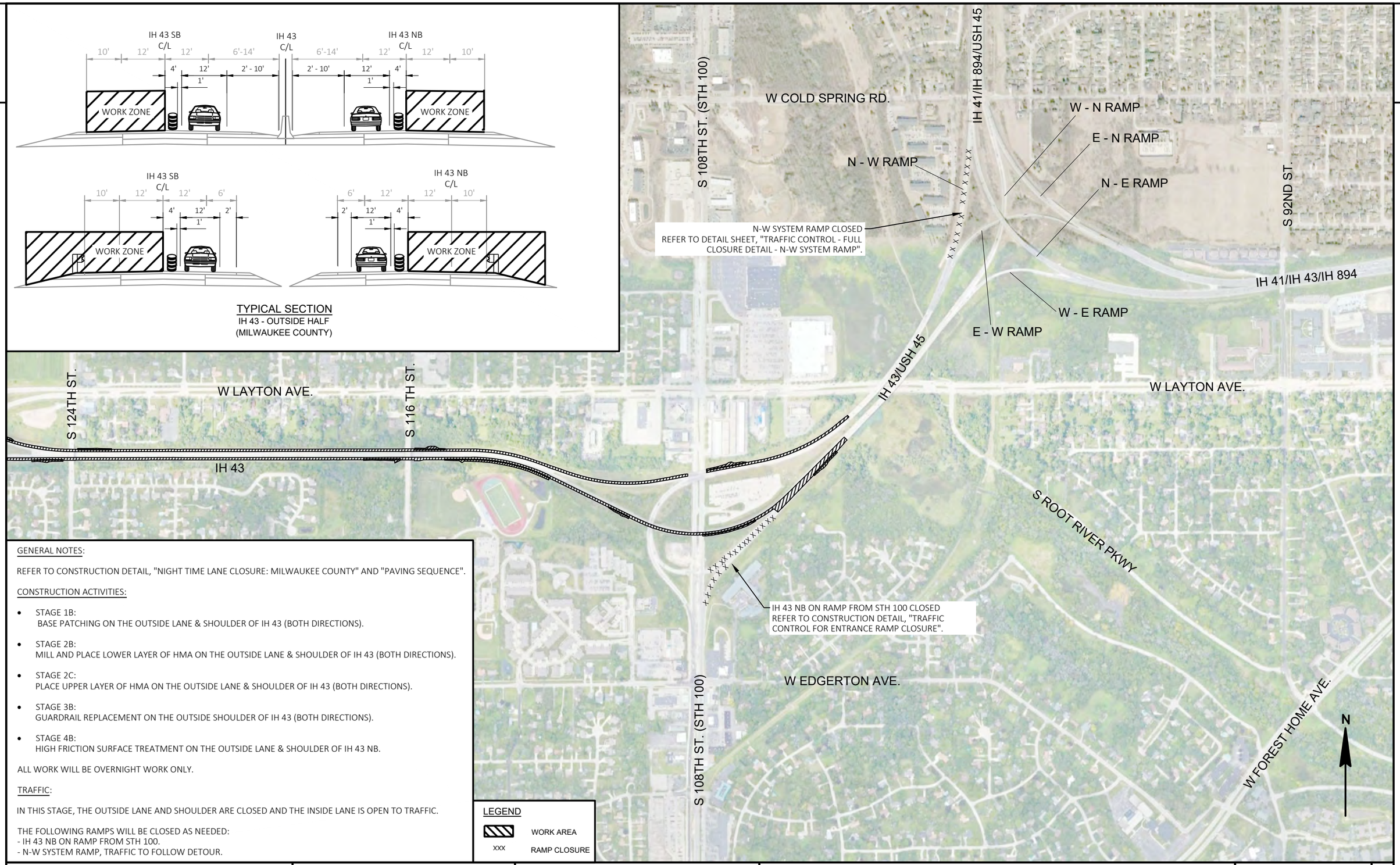
XXX WORK AREA

RAMP CLOSURE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 MILL & OVERLAY - OUTSIDE HALF OVERVIEW(WAUKESHA COUNTY)	SHEET 201	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\025001-TC-OUTSIDE HALF-OVERVIEW.DWG
LAYOUT NAME - 1
PLOT DATE : 4/19/2021 9:52 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:800 FT
WISDOT/CADDS SHEET 42

TYPICAL SECTION
IH 43 - OUTSIDE HALF
(MILWAUKEE COUNTY)



GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "NIGHT TIME LANE CLOSURE: MILWAUKEE COUNTY" AND "PAVING SEQUENCE".

CONSTRUCTION ACTIVITIES:

- STAGE 1B:
  BASE PATCHING ON THE OUTSIDE LANE & SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 2B:
  MILL AND PLACE LOWER LAYER OF HMA ON THE OUTSIDE LANE & SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 2C:
  PLACE UPPER LAYER OF HMA ON THE OUTSIDE LANE & SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 3B:
  GUARDRAIL REPLACEMENT ON THE OUTSIDE SHOULDER OF IH 43 (BOTH DIRECTIONS).
- STAGE 4B:
  HIGH FRICTION SURFACE TREATMENT ON THE OUTSIDE LANE & SHOULDER OF IH 43 NB.

ALL WORK WILL BE OVERNIGHT WORK ONLY.

TRAFFIC:

IN THIS STAGE, THE OUTSIDE LANE AND SHOULDER ARE CLOSED AND THE INSIDE LANE IS OPEN TO TRAFFIC.

THE FOLLOWING RAMPS WILL BE CLOSED AS NEEDED:
- IH 43 NB ON RAMP FROM STH 100.
- N-W SYSTEM RAMP, TRAFFIC TO FOLLOW DETOUR.

LEGEND
WORK AREA
XXX RAMP CLOSURE

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	TRAFFIC CONTROL - IH 43 MILL & OVERLAY-OUTSIDE HALF OVERVIEW(MILWAUKEE COUNTY)	SHEET 202	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\025001-TC-OUTSIDE HALF-OVERVIEW.DWG
LAYOUT NAME - 2
PLOT DATE : 4/21/2021 9:22 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:800 FT
WISDOT/CADDS SHEET 42

2

NOTES:

1. REFER TO DETAIL "TRAFFIC CONTROL - FULL CLOSURE DETAIL - IH 43 SB" FOR ADDITIONAL SIGNING.

2. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. SIGNS MAY BE MOUNTED ON EXISTING POSTS, LIGHTS, OR TEMPORARY SIGN SUPPORTS AS APPROVED BY THE ENGINEER.

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

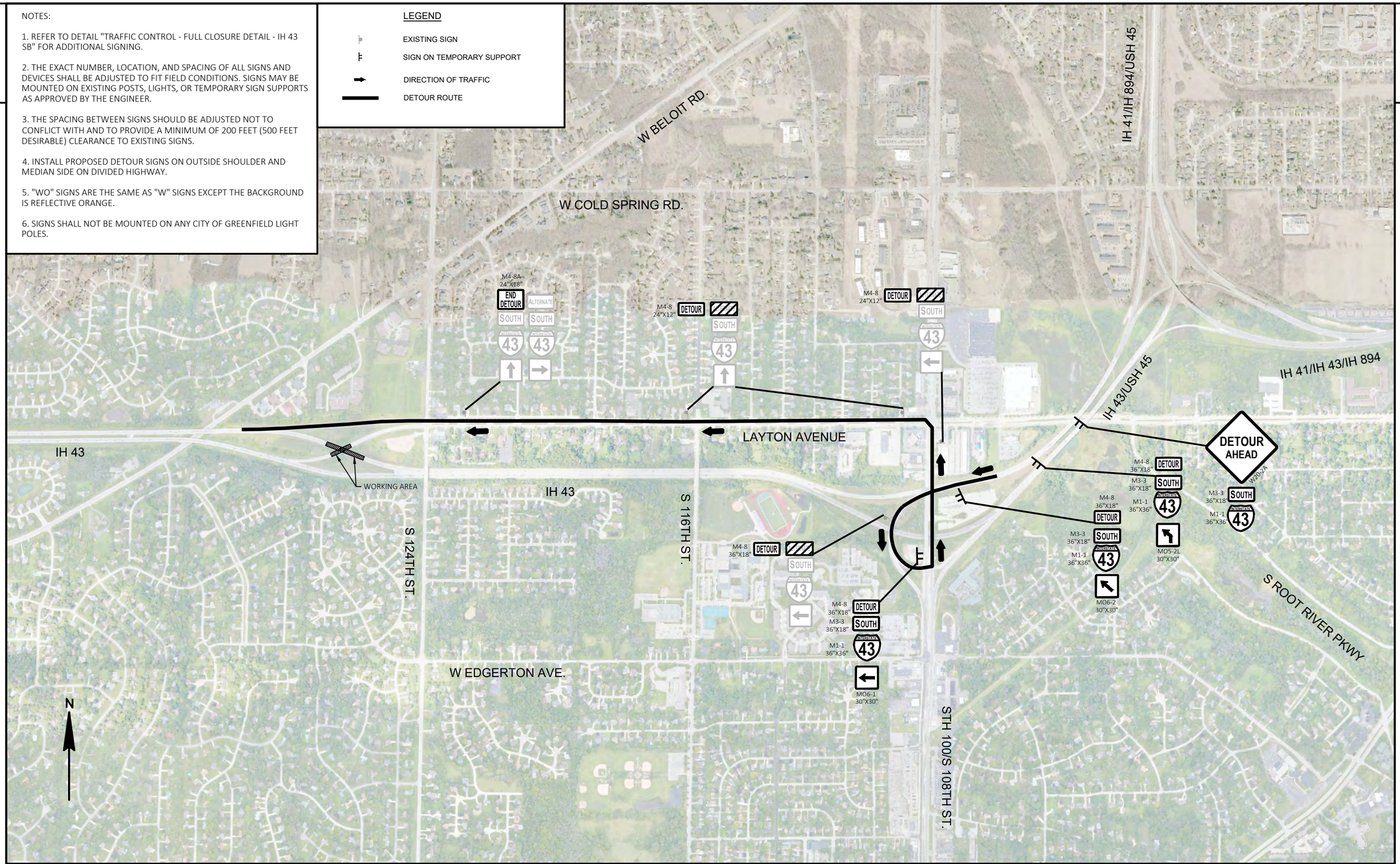
4. INSTALL PROPOSED DETOUR SIGNS ON OUTSIDE SHOULDER AND MEDIAN SIDE ON DIVIDED HIGHWAY.

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

6. SIGNS SHALL NOT BE MOUNTED ON ANY CITY OF GREENFIELD LIGHT POLES.

LEGEND

- EXISTING SIGN
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- DETOUR ROUTE



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	DETOUR PLAN - IH 43 SB CLOSURE	SHEET 203	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\027001_DT_IH 43 SB CLOSURE DETOUR.DWG
LAYOUT NAME - 027001

PLOT DATE : 2/4/2021 10:52 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN: 1000 FT

WISDOT/CADDS SHEET 42

NOTES:

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. SIGNS MAY BE MOUNTED ON EXISTING POSTS, LIGHTS, OR TEMPORARY SIGN SUPPORTS AS APPROVED BY THE ENGINEER.

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

3. INSTALL PROPOSED DETOUR SIGNS ON OUTSIDE SHOULDER AND MEDIAN SIDE ON DIVIDED HIGHWAY.

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

5. SIGNS SHALL NOT BE MOUNTED ON ANY CITY OF GREENFIELD LIGHT POLES.

LEGEND

- EXISTING SIGN
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- DETOUR ROUTE

W HOWARD AVE.
S 84TH ST.
IH 41/IH 894/USH 45
S 92ND ST.
W COLD SPRING RD.
W BELOIT RD.
WORKING AREA
IH 43/USH 45
IH 41/IH 43/IH 894
LAYTON AVENUE
IH 43
S 124TH ST.
W EDGERTON AVE.
S 116TH ST.
STH 100/S 108TH ST.
S ROOT RIVER PKWY
W FOREST HOME AVE.
76TH ST.
W GRANGE AVE.
N

M4-8A 24"X18" END DETOUR ALTERNATE SOUTH INTERSTATE 43
M4-8 24"X12" DETOUR SOUTH INTERSTATE 43
M4-8 36"X18" DETOUR SOUTH INTERSTATE 43 M3-3 36"X18" M1-1 36"X36" MO5-2R 30"X30"
DETOUR AHEAD W20-2A
M4-8 36"X18" DETOUR SOUTH INTERSTATE 43 M3-3 36"X18" M1-1 36"X36" MO6-1 30"X30"
M4-8 36"X18" DETOUR SOUTH INTERSTATE 43 M3-3 36"X18" M1-1 36"X36" MO5-1L 30"X30"
M4-8 36"X18" DETOUR SOUTH INTERSTATE 43 M3-3 36"X18" M1-1 36"X36" MO6-2 30"X30"
M4-8 24"X12" DETOUR SOUTH INTERSTATE 43 M3-3 24"X12" M1-1 24"X24" MO6-1 21"X21"
M4-8 24"X12" DETOUR SOUTH INTERSTATE 43 M3-3 24"X12" M1-1 24"X24" MO6-1 21"X21"
M4-8 24"X12" DETOUR SOUTH INTERSTATE 43 M3-3 24"X12" M1-1 24"X24" MO5-1R 21"X21"
M4-8 24"X12" DETOUR TO SOUTH INTERSTATE 43 TO NORTH INTERSTATE 41 TO WEST INTERSTATE 894 M3-3 24"X12" M1-1 24"X24" MO6-1 21"X21"

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	DETOUR PLAN - E - W RAMP CLOSURE	SHEET 204 E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\027001_DT_E-W RAMP DETOUR.DWG
LAYOUT NAME - 027001
PLOT DATE : 9/30/2020 10:57 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN: 1300 FT
WISDOT/CADDS SHEET 42

NOTES:

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. SIGNS MAY BE MOUNTED ON EXISTING POSTS, LIGHTS, OR TEMPORARY SIGN SUPPORTS AS APPROVED BY THE ENGINEER.

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

3. INSTALL PROPOSED DETOUR SIGNS ON OUTSIDE SHOULDER AND MEDIAN SIDE ON DIVIDED HIGHWAY.

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

5. SIGNS SHALL NOT BE MOUNTED ON ANY CITY OF GREENFIELD LIGHT POLES.

LEGEND

- EXISTING SIGN
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- DETOUR ROUTE

N

IH 41/IH 894/USH 45

STH 100/S 108TH ST.

W BELOIT RD.

W HOWARD AVE.

W COLD SPRING RD.

S 92ND ST/CTH N

S 84TH ST.

N-W RAMP CLOSED

IH 43/USH 45

IH 41/IH 43/IH 894

LAYTON AVENUE

IH 43

S 124TH ST.

S 116TH ST.

W EDGERTON AVE.

S ROOT RIVER PKWY

W FOREST HOME AVE.

76TH ST.

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	DETOUR PLAN - N - W RAMP CLOSURE	SHEET 205 E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\027001_DT_N-W RAMP DETOUR.DWG
LAYOUT NAME - 027001

PLOT DATE : 8/26/2021 4:05 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN: 1300 FT

WISDOT/CADDS SHEET 42

NOTES:

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. SIGNS MAY BE MOUNTED ON EXISTING POSTS, LIGHTS, OR TEMPORARY SIGN SUPPORTS AS APPROVED BY THE ENGINEER.

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

3. INSTALL PROPOSED DETOUR SIGNS ON OUTSIDE SHOULDER AND MEDIAN SIDE ON DIVIDED HIGHWAY.

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

5. SIGNS SHALL NOT BE MOUNTED ON ANY CITY OF GREENFIELD LIGHT POLES.

LEGEND

- EXISTING SIGN
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- DETOUR ROUTE

W HOWARD AVE.
IH 41/IH 894/USH 45
W COLD SPRING RD.
S 84TH ST.
WORKING AREA
IH 41/IH 43/IH 894
IH 43/USH 45
W BELOIT RD.
LAYTON AVENUE
IH 43
S 124TH ST.
S 116TH ST.
W EDGERTON AVE.
STH 100/S 108TH ST.
S ROOT RIVER PKWY
W FOREST HOME AVE.
76TH ST.
W GRANGE AVE.

M4-8 36"X18" DETOUR
M3-1 36"X18"
M3-3 36"X18" SOUTH NORTH EAST M3-2 36"X18"
INTERSTATE 41 43 894
M1-1 36"X36" M1-1 36"X36" M1-1A 45"X36"
M06-2 30"X30" M06-2 30"X30" M06-2 30"X30"

M4-8 24"X12" DETOUR
M4-8 24"X12" NORTH INTERSTATE 43

DETOUR AHEAD W20-2A

M4-8 36"X18" DETOUR
M3-1 36"X18"
M3-3 36"X18" SOUTH NORTH EAST M3-2 36"X18"
INTERSTATE 41 43 894
M1-1 36"X36" M1-1 36"X36" M1-1A 45"X36"
M05-2L 30"X30" M05-2L 30"X30" M05-2L 30"X30"

M4-8 24"X12" DETOUR
M3-1 24"X12"
M3-3 24"X12" SOUTH NORTH EAST M3-2 24"X12"
INTERSTATE 41 43 894
M1-1 24"X24" M1-1 24"X24" M1-1A 30"X24"
M06-1 21"X21" M06-1 21"X21" M06-1 21"X21"

M4-8A 24"X18" END DETOUR
SOUTH NORTH EAST
INTERSTATE 41 43 894

M4-8A 24"X18" END DETOUR
SOUTH NORTH EAST
INTERSTATE 41 43 894

N

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	DETOUR PLAN - W - E RAMP CLOSURE	SHEET 206 E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\027001_DT_W-E RAMP DETOUR.DWG
LAYOUT NAME - 027001
PLOT DATE : 7/28/2020 8:57 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN: 1300 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- DETOUR ROUTE

NOTES:

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. SIGNS MAY BE MOUNTED ON EXISTING POSTS, LIGHTS, OR TEMPORARY SIGN SUPPORTS AS APPROVED BY THE ENGINEER.

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

3. INSTALL PROPOSED DETOUR SIGNS ON OUTSIDE SHOULDER AND MEDIAN SIDE ON DIVIDED HIGHWAY.

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

5. SIGNS SHALL NOT BE MOUNTED ON ANY CITY OF GREENFIELD LIGHT POLES.

W COLD SPRING RD.

IH 41/IH 894/USH 45

S 92ND ST.

S 8TH ST.

IH 41/IH 43/IH 894

IH 43/USH 45

LAYTON AVENUE

LAYTON AVENUE

W FOREST HOME

N

M4-8A 24"X18" END DETOUR

NORTH SOUTH WEST
INTERSTATE 41 INTERSTATE 43 INTERSTATE 894

DETOUR AHEAD W20-2A

M3-1 36"X18" NORTH
M1-1 36"X36" INTERSTATE 41
M3-4 36"X18" WEST
M1-1A 45"X36" INTERSTATE 894

M4-8 36"X18" DETOUR
M3-1 36"X18" NORTH
M1-1 36"X36" INTERSTATE 41
M3-4 36"X18" WEST
M1-1A 45"X36" INTERSTATE 894
MO5-2R 30"X30"

M4-8 36"X18" DETOUR
M3-1 36"X18" NORTH
M1-1 36"X36" INTERSTATE 41
M3-4 36"X18" WEST
M1-1A 45"X36" INTERSTATE 894
M06-2 30"X30"

M4-8 36"X18" DETOUR
M3-1 36"X18" NORTH
M1-1 36"X36" INTERSTATE 41
M3-4 36"X18" WEST
M1-1A 45"X36" INTERSTATE 894
MO5-2R 30"X30"

M4-8 36"X18" DETOUR
M3-1 36"X18" NORTH
M1-1 36"X36" INTERSTATE 41
M3-4 36"X18" WEST
M1-1A 45"X36" INTERSTATE 894
M06-2 30"X30"

M4-8 36"X18" DETOUR
M3-1 36"X18" NORTH
M1-1 36"X36" INTERSTATE 41
M3-4 36"X18" WEST
M1-1A 45"X36" INTERSTATE 894
MO5-1L 30"X30"

M4-8 36"X18" DETOUR
M3-1 36"X18" NORTH
M1-1 36"X36" INTERSTATE 41
M3-4 36"X18" WEST
M1-1A 45"X36" INTERSTATE 894
M06-1 30"X30"

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	DETOUR PLAN - W - N RAMP CLOSURE	SHEET 207	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\027001_DT_W-N RAMP DETOUR.DWG
LAYOUT NAME - 027001

PLOT DATE : 7/28/2020 9:09 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN: 600 FT

NOTES:

1. DETOUR ROUTE IN THIS SHEET WILL BE UTILIZING DURING LONG TERM CLOSURE OF IH 43 NB OFF RAMP TO LAYTON AVENUE.

2. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. SIGNS MAY BE MOUNTED ON EXISTING POSTS, LIGHTS, OR TEMPORARY SIGN SUPPORTS AS APPROVED BY THE ENGINEER.

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

4. INSTALL PROPOSED DETOUR SIGNS ON OUTSIDE SHOULDER AND MEDIAN SIDE ON DIVIDED HIGHWAY.

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

6. SIGNS SHALL NOT BE MOUNTED ON ANY CITY OF GREENFIELD LIGHT POLES.

LEGEND

- EXISTING SIGN
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- DETOUR ROUTE

N

W COLD SPRING RD

IH 41/IH 894/USH 45

S 84TH ST

S 92ND ST

S 108TH ST (STH 100)

S 124TH ST

BELOIT RD (CTH I)

LAYTON AVENUE

IH 43

WORKING AREA

W EDGERTON AVE

W GRANGE AVE

S 116TH ST

W FOREST HOME AVE (STH 24)

RAMP CLOSED AHEAD W20-53A
LAYTON AVE FMS 42"X30"
100 M1-6 36"X36"

TO LAYTON AVE FMS 42"X30"
100 M1-6 36"X36"
M06-1 30"X30"

MO4-5 36"X18"
TO LAYTON AVE FMS 42"X30"
100 M1-6 36"X36"
MO5-2R 30"X30"

MO4-5 36"X18"
TO LAYTON AVE FMS 42"X30"
100 M1-6 36"X36"
MO6-2 30"X30"

100 M1-6 24"X24"
MO6-4 21"X21"

MO4-5 24"X12"
TO 100 M1-6 24"X24"
MO6-1 21"X21"

MO4-5 36"X18"
TO LAYTON AVE FMS 42"X30"
100 M1-6 36"X36"
MO6-1 30"X30"

MO4-5 24"X12"
TO LAYTON AVE FMS 30"X24"
100 M1-6 24"X24"
MO5-1R 21"X21"

MO4-5 24"X12"
TO 100 FMS 30"X24"
M1-6 24"X24"
LAYTON AVE
MO6-1 21"X21"
MO6-4 21"X21"

EXIT 57

IH 43 SB
IH 43 NB

OVERSIZE LOADS RESTRICTED BEYOND NEXT EXIT
FMS 126"X54"

- PLACE SIGN PRIOR TO EXIT 57
- COVER THE EXISTING SIGN LOCATED PRIOR TO SUNNY SLOPE RD

S MOORLAND RD (CTH O)

1 IN:500 FT

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	DETOUR PLAN - IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A) CLOSURE	SHEET 208	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\027001_DT_IH 43 OFF RAMP TO LAYTON AVE (RAMP A).DWG
LAYOUT NAME - 027001

PLOT DATE : 7/14/2021 7:25 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN: 1200 FT

WISDOT/CADDS SHEET 42

NOTES:

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. SIGNS MAY BE MOUNTED ON EXISTING POSTS, LIGHTS, OR TEMPORARY SIGN SUPPORTS AS APPROVED BY THE ENGINEER.

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

3. INSTALL PROPOSED DETOUR SIGNS ON OUTSIDE SHOULDER AND MEDIAN SIDE ON DIVIDED HIGHWAY.

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

5. SIGNS SHALL NOT BE MOUNTED ON ANY CITY OF GREENFIELD LIGHT POLES.

LEGEND

- EXISTING SIGN
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- DETOUR ROUTE

RAMP CLOSED AHEAD W20-53A

M3-1 24"X12" NORTH
M1-1 24"X24" INTERSTATE 43

MO4-5 24"X12" TO
M3-1 24"X12" NORTH
M1-1 24"X24" INTERSTATE 43
MO5-2R 21"X21"

MO4-5 24"X12" TO NORTH SOUTH
INTERSTATE 43 INTERSTATE 43
MO6-2 21"X21"

MO4-5 24"X12" TO
M3-1 24"X12" NORTH
M1-1 24"X24" INTERSTATE 43
MO6-2 21"X21"
PLACE DETOUR SIGN AT THE MEDIAN

BELOIT RD
S CALHOUN RD
S MOORLAND RD
W GRANGE AVE
S Moorland Rd
NORTH
WORKING AREA
IH 43 NB ON RAMP (LOOP) CLOSED
IH 43
W SMALL RD
COLLEGE AVE (CTH HH)
S RACINE RD (CTH Y)
W NATIONAL AVE
S MARTIN RD

MO4-5 36"X18" TO
M3-1 36"X18" NORTH
M1-1 36"X36" INTERSTATE 43
MO6-1 30"X30"

MO4-5 36"X18" TO
M3-1 36"X18" NORTH
M1-1 36"X36" INTERSTATE 43
MO4-20L 36"X36" USE LEFT LANE

MO4-5 36"X18" TO
M3-1 36"X18" NORTH
M1-1 36"X36" INTERSTATE 43
MO6-2 30"X30"

MO4-5 36"X18" TO
M3-1 36"X18" NORTH
M1-1 36"X36" INTERSTATE 43
MO5-2R 30"X30"

END DETOUR M4-8A 24"X18"
NORTH
INTERSTATE 43

N

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	DETOUR PLAN - IH 43 NB ON RAMP (LOOP) FROM MOORLAND RD CLOSURE	SHEET 209	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\027001_DT_IH 43 ON RAMP (LOOP) FROM MOORLAND RD DETOUR._OPT2.DWG
LAYOUT NAME - 027001
PLOT DATE : 7/6/2021 3:49 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN: 1200 FT
WISDOT/CADDS SHEET 42

765SB N49° 00' 16"E 5535.79' 770SB R/L IH 43 SB 775SB N49° 00' 16"E 5535.79' 780SB 785SB 790SB

N49° 00' 16"E 5284.23' 765NB N49° 00' 16"E 5284.23' 770NB 775NB 780NB 785NB 790NB

R/L IH 43 NB

BEGIN PROJECT
STA. 780NB+00
X = 715443.03
Y = 139039.99

780L PT C31 N48° 59' 36"E 975.53' 785L N48° 59' 36"E 975.53' 790L N48° 13' 46"E 300.03' N48° 59' 3 600.00

3000 CP FENO 867.790
3040 CP 867.480
3607 mon Brass Cap 871.180
3500 CP 869.070

305SB 30NB

N31° 42' 29"E 402.76' PC C33

N31° 42' 29"E 402.76' PT C32

790

C3

R/L RAMP L
IH 43 NB ON RAMP (LOOP)
FROM CTH O SB

775L

C31

C32

R/L IH 43 NB ON RAMP
FROM CTH O NB

STA 761L+88.42 (RAMP L) =
STA 27SB+47.76, 11.84' LT (CTH O SB)
N = 139373.41
E = 716037.29

759L 25SB 25NB 785

PC C32

N0° 20' 01"E 199.31'

S2° 28' 25"W 610.30'

610.30' S2° 28' 25"W

PC C31

770L

STA 782+55.76 (IH 43 NB ON RAMP FROM CTH O NB) =
STA 22NB+50.24, 23.98' LT (CTH O NB)
N = 138874.73
E = 716122.22

R/L CTH O NB

R/L CTH O SB

20SB 20NB

N

R/L CTH O SB

R/L CTH O NB

790SB 795SB R/L IH 43 SB 800SB 805SB PC C2 810SB 815SB R/L IH 43 SB 820SB

790NB 795NB R/L IH 43 NB 800NB 805NB PC C1 810NB 815NB 820NB

790L N48° 13' 46"E 300.03' N48° 59' 36"E 600.00' 795L 800L N46° 55' 54"E 500.32' 805L PC C34 C34 810L N57° 44' 09"E 357.75' 815L PT C34

795 N48° 59' 36"E 350.00' 800 N48° 59' 36"E 600.00'

N31° 42' 29"E 402.76' PC C33 790

C33 PT C33

R/L IH 43 NB ON RAMP
FROM CTH O NB

STA 816L+02.65 (RAMP L) =
STA 816NB+06.24 , 23.04' LT (IH 43 NB)
N = 141293.01
E = 718246.31

R/L IH 43 NB

N

C31

PI STA = 760+77.52L
Y = 139484.205
X = 716042.073
DELTA = 226°31'11"
D = 18°28'57"
T = 721.20'
L = 1225.59'
R = 310.00'
PC STA = 767+98.72L
Y = 138763.676
X = 716010.945
PT STA = 780+24.31L
Y = 139010.992
X = 715497.830
BK = S02°28'25.4"W
AH = N48°59'36.4"E

C32

PI STA = 786+33.87
Y = 139252.828
X = 716124.425
DELTA = 31°22'28"
D = 9°00'00"
T = 178.79'
L = 348.60'
R = 636.62'
PC STA = 784+55.07
Y = 139074.039
X = 716123.384
PT STA = 788+03.68
Y = 139404.933
X = 716218.397
BK = N00°20'01.1"E
AH = N31°42'29.0"E

C33

PI STA = 793+54.15
Y = 139873.236
X = 716507.717
DELTA = 16°08'23"
D = 5°30'00"
T = 147.70'
L = 293.45'
R = 1041.74'
PC STA = 792+06.44
Y = 139747.580
X = 716430.086
PT STA = 794+99.89
Y = 139972.360
X = 716617.218
BK = N31°42'28.6"E
AH = N47°50'51.7"E

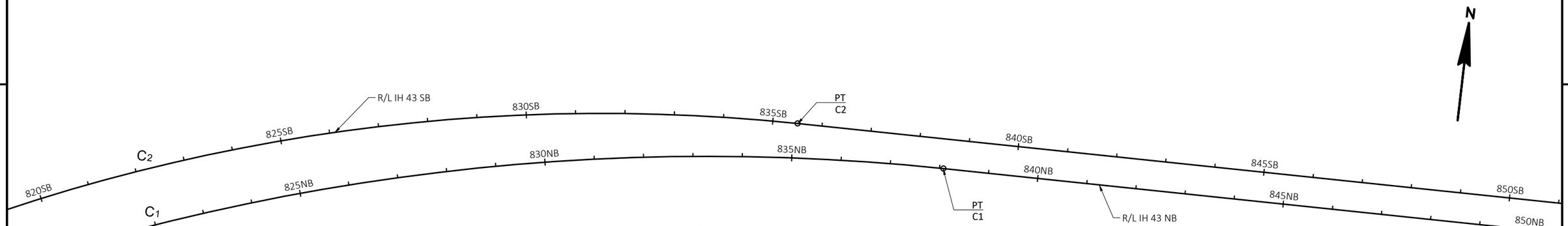
C34

PI STA = 809+11.62L
Y = 140921.860
X = 717661.996
DELTA = 8°24'47"
D = 1°15'36"
T = 334.48'
L = 667.75'
R = 4547.65'
PC STA = 805+77.14L
Y = 140702.394
X = 717409.588
PT STA = 812+44.90L
Y = 141102.035
X = 717943.798
BK = N48°59'36.6"E
AH = N57°24'23.4"E

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	ALIGNMENT PLAN	SHEET 210	E

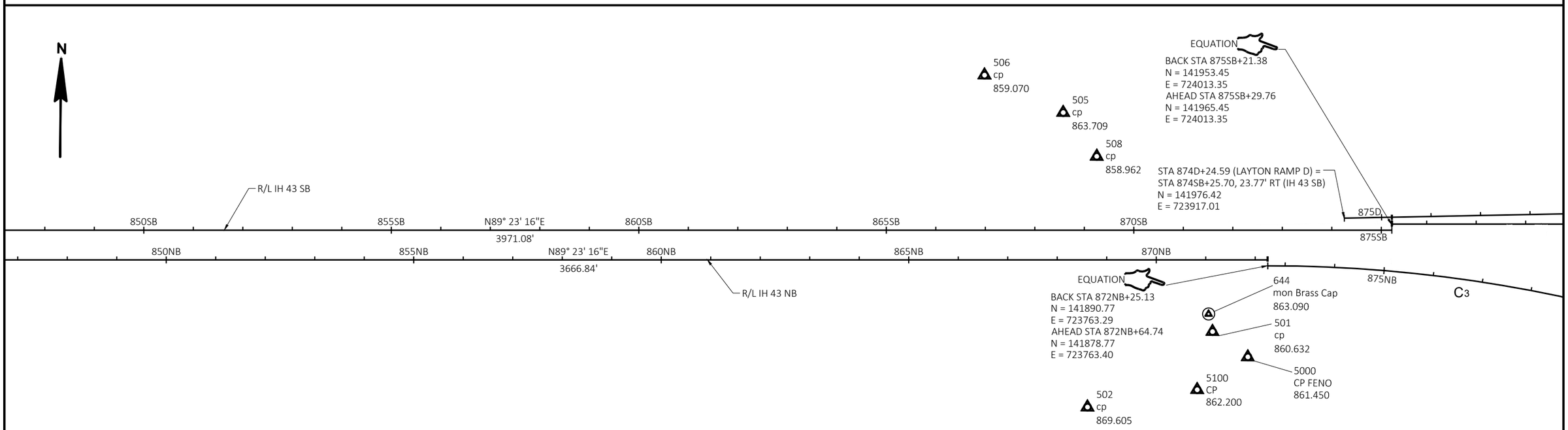
FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027201
PLOT DATE : 2/15/2021 10:56 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2



C1
PI STA = 822NB+62.56
Y = 141836.241
X = 718660.242
DELTA = 40°23'00"
D = 1°14'59"
T = 1686.05'
L = 3231.33'
R = 4584.59'
PC STA = 805NB+76.51
Y = 140730.190
X = 717387.681
PT STA = 838NB+07.84
Y = 141854.257
X = 720346.195
BK = N49°00'15.6"E
AH = N89°23'16.1"E

C2
PI STA = 822SB+62.57
Y = 141896.002
X = 718637.536
DELTA = 40°23'00"
D = 1°29'59"
T = 1405.04'
L = 2692.78'
R = 3820.50'
PC STA = 808SB+57.52
Y = 140974.291
X = 717577.067
PT STA = 835SB+50.30
Y = 141911.015
X = 720042.500
BK = N49°00'15.6"E
AH = N89°23'16.1"E



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	ALIGNMENT PLAN	SHEET 211	E

2

2

N

C3

PI STA = 876NB+53.18
Y = 141882.921
X = 724151.816
DELTA = 15°30'15"
D = 2°00'29"
T = 388.44'
L = 772.14'
R = 2853.43'
PC STA = 872NB+64.74
Y = 141878.770
X = 723763.395
PT STA = 880NB+36.88
Y = 141783.091
X = 724527.212
BK = N89°23'16.1"E
AH = S75°06'28.5"E

C4

PI STA = 888D+33.43
Y = 142019.643
X = 725325.188
DELTA = 3°31'32"
D = 0°30'13"
T = 350.11'
L = 700.00'
R = 11376.44'
PC STA = 884D+83.32
Y = 142008.901
X = 724975.243
PT STA = 891D+83.32
Y = 142051.883
X = 725673.811
BK = N88°14'30.5"E
AH = N84°42'58.9"E

C5

PI STA = 896D+88.06
Y = 142098.363
X = 726176.405
DELTA = 5°13'21"
D = 1°00'00"
T = 261.31'
L = 522.25'
R = 5729.58'
PC STA = 894D+26.75
Y = 142074.300
X = 725916.210
PT STA = 899D+49.00
Y = 142098.642
X = 726437.711
BK = N84°42'58.9"E
AH = N89°56'19.9"E

STA 874D+24.59 (LAYTON RAMP D) =
STA 874SB+25.70, 23.77' RT (IH 43 SB)
N = 141976.42
E = 723917.01

EQUATION
BACK STA 875SB+21.38
N = 141953.45
E = 724013.35
AHEAD STA 875SB+29.76
N = 141965.45
E = 724013.35

875D
875SB
N88° 14' 30"E
1058.73'
880D
880SB
R/L LAYTON RAMP D
PC C4
885D
885SB
C4
890D
PT C4
N84° 42' 59"E
243.43'
PC C5
895D
R/L LAYTON RAMP D
C5
PT C5
900D
N89° 56' 20"E
258.96'
STA 902D+07.97 (LAYTON RAMP D) =
STA 902A+93.72, 52.00' RT (LAYTON RAMP A)
N = 142098.92
E = 726696.67
R/L 124TH ST
N0° 45' 26"E
2656.04'
35
30
25
20

N89° 23' 16"E
1133.36'
PC C6
C6
890SB
PT C6
N63° 40' 45"E
345.21'
PC C9
895A
900A
LAYTON RAMP A
C9
PT C9
N89° 56' 20"E
70.59'
STA 902A+93.72 (LAYTON RAMP A) =
STA 902D+07.97, 52.00' RT (LAYTON RAMP D)
N = 142046.92
E = 726696.73

875NB
C3
R/L IH 43 NB
880NB
PT C3
STA 880A+36.88 (RAMP A) =
STA 880NB+37.25, 12.02' RT (IH 43 NB)
N = 141794.69
E = 724530.30
S76° 30' 33"E
522.53'
PC C8
885A
C8
885NB
S75° 06' 28"E
957.55'
1020
CP FENO
871.965
1000
CP FENO
875.525
1050
CP FENO
859.175
PT C8
S69° 08' 14"E
545.36'
1010
CP FENO
856.075
890A
1060
CP FENO
877.145
1030
CP FENO
879.175
2976
mon Brass Cap
883.260
1040
CP FENO
855.565
895SB
PC C7
C7
900SB
R/L IH 43 SB
STA 902SB+79.07 (IH 43 SB) =
STA 20+00, 27.23' RT (IH 43)
N = 141528.15
E = 726696.16
N0° 08' 44"E
2653.41'

EQUATION
BACK STA 872NB+25.13
N = 141890.77
E = 723763.29
AHEAD STA 872NB+64.74
N = 141878.77
E = 723763.40

890NB
PC C10
R/L IH 43 NB
C10
895NB
PT C10
N89° 56' 20"E
752.67'
900NB
R/L IH 43

EQUATION
BACK STA 902NB+42.64
N = 141474.03
E = 726695.28
AHEAD STA 20+00
N = 141500.81
E = 726695.30

STA 902NB+42.64 (IH 43 NB) =
STA 20+00, 26.78' LT (IH 43)
N = 141474.03
E = 726695.28

C6

PI STA = 886SB+97.48
Y = 141977.923
X = 725181.004
DELTA = 21°28'30"
D = 2°59'02"
T = 364.12'
L = 719.69'
R = 1920.15'
PC STA = 883SB+33.36
Y = 141974.032
X = 724816.907
PT STA = 890SB+53.05
Y = 141848.250
X = 725521.249
BK = N89°23'16.1"E
AH = S69°08'14.2"E

C7

PI STA = 899SB+53.21
Y = 141527.675
X = 726362.393
DELTA = 20°55'26"
D = 2°58'55"
T = 354.80'
L = 701.70'
R = 1921.46'
PC STA = 895SB+98.41
Y = 141654.030
X = 726030.853
PT STA = 903SB+00.11
Y = 141528.053
X = 726717.195
BK = S69°08'14.2"E
AH = N89°56'19.9"E

C8

PI STA = 889A+04.41
Y = 141592.300
X = 725373.888
DELTA = 39°48'43"
D = 6°00'49"
T = 345.00'
L = 662.02'
R = 952.76'
PC STA = 885A+59.41
Y = 141672.787
X = 725038.404
PT STA = 892A+21.43
Y = 141745.274
X = 725683.124
BK = S76°30'32.6"E
AH = N63°40'44.9"E

C9

PI STA = 899A+00.75
Y = 142046.486
X = 726292.021
DELTA = 26°15'35"
D = 4°00'00"
T = 334.11'
L = 656.49'
R = 1432.39'
PC STA = 895A+66.64
Y = 141898.341
X = 725992.546
PT STA = 902A+23.13
Y = 142046.843
X = 726626.135
BK = N63°40'44.9"E
AH = N89°56'19.9"E

C10

PI STA = 892NB+43.62
Y = 141472.961
X = 725693.416
DELTA = 14°57'12"
D = 3°01'03"
T = 249.19'
L = 495.54'
R = 1898.74'
PC STA = 889NB+94.43
Y = 141537.001
X = 725452.600
PT STA = 894NB+89.97
Y = 141473.227
X = 725942.602
BK = S75°06'28.5"E
AH = N89°56'19.9"E

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	ALIGNMENT PLAN	SHEET 212	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027203
PLOT DATE : 3/10/2021 3:59 PM
PLOT BY : JOHANSEN, AMANDA A
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

N

STA 902SB+79.07 (IH 43 SB) =
STA 20+00, 27.23' RT (IH 43)
N = 141528.15
E = 726696.16

R/L IH 43

25 30 35 40 45 50

N89° 56' 37"E
3641.59'

2840
cp
818.401

2100
CP FENO
818.881

2839
cp
819.803

2200
CP
819.550

EQUATION
BACK STA 902NB+42.64
N = 141474.03
E = 726695.28
AHEAD STA 20+00.00
N = 141500.81
E = 726695.30

STA 902NB+42.64 (IH 43 NB) =
STA 20+00, 26.78' LT (IH 43)
N = 141474.03
E = 726695.28

EQUATION
BACK STA 63+92.00
N = 141336.11
E = 731061.45
AHEAD STA 63SB+93.79
N = 141360.35
E = 731073.12

2840
cp
818.401

2100
CP FENO
818.881

2839
cp
819.803

2774
CP
815.237

2841
cp
813.928

2200
CP
819.550

2000
CP FENO
818.330

2300
CP
814.960

R/L IH 43

PC
C11

55 60

C11

PT
C11

S70° 47' 31"E
355.30'

65SB

PC
C12

65NB

C12

70SB

R/L IH 43 SB

PT
C12

75SB

N79° 12' 29"E
914.38'

C14

375

N76° 12
3

EQUATION
BACK STA 63+92.00
N = 141336.11
E = 731061.45
AHEAD STA 63NB+90.58
N = 141321.94
E = 731055.51

S63° 47' 31"E
903.93'

70NB

R/L IH 43 NB

PC
C16

C15

75NB

C

R/L IH 43 SB OFF RAMP TO STH 100

370

C30

N

C11

PI STA = 60+23.50
Y = 141504.776
X = 730718.798
DELTA = 26°15'50"
D = 3°30'00"
T = 381.91'
L = 750.40'
R = 1637.02'
PC STA = 56+41.59
Y = 141504.400
X = 730336.889
PT STA = 63+91.99
Y = 141336.117
X = 731061.447
BK = N89°56'36.7"E
AH = S63°47'33.1"E

C12

PI STA = 69SB+84.52
Y = 141166.001
X = 731630.960
DELTA = 30°00'00"
D = 3°30'00"
T = 438.64'
L = 857.14'
R = 1637.02'
PC STA = 65SB+45.88
Y = 141310.313
X = 731216.741
PT STA = 74SB+03.02
Y = 141248.133
X = 732061.841
BK = S70°47'30.8"E
AH = N79°12'29.2"E

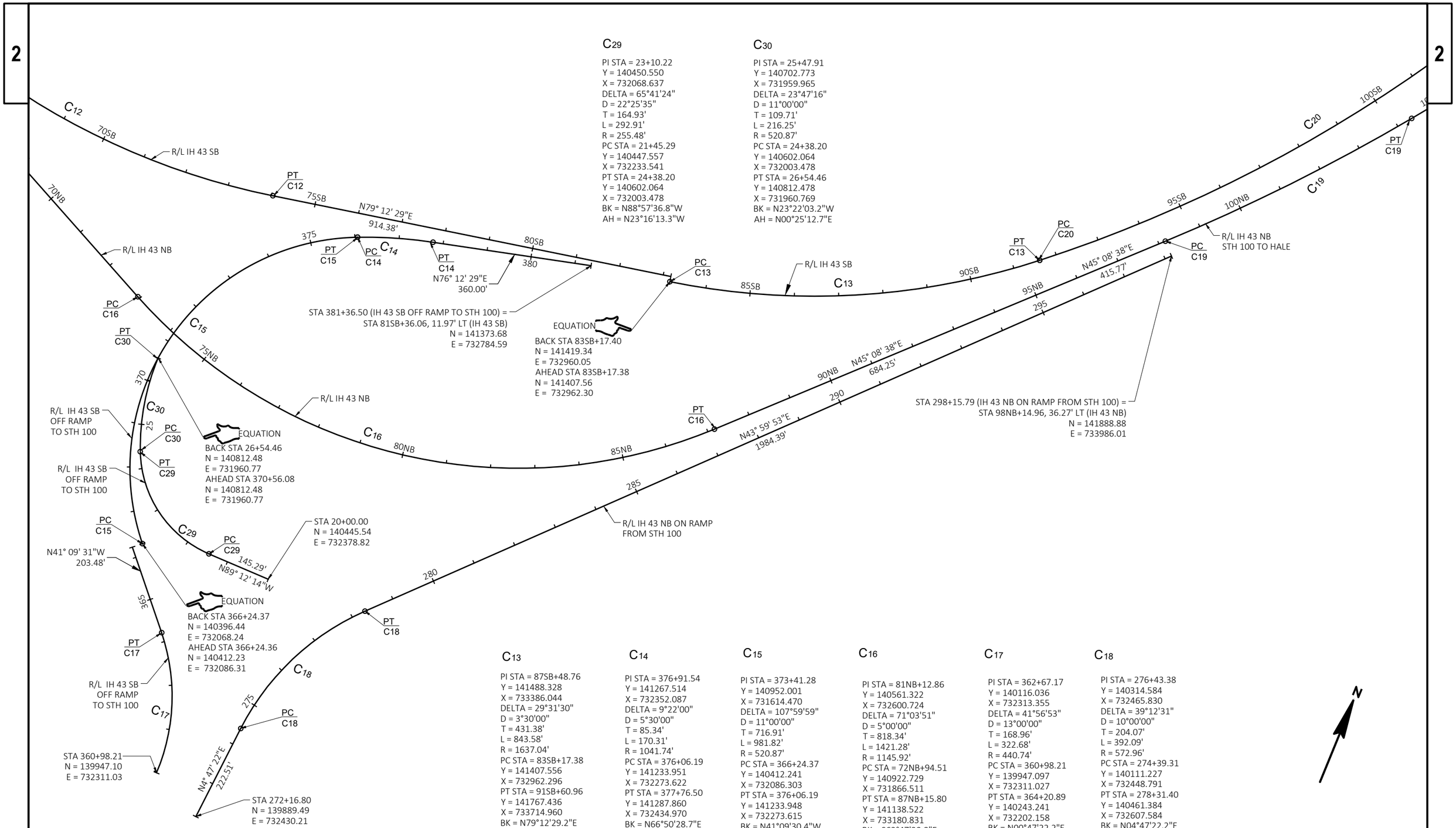
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	ALIGNMENT PLAN	SHEET 213	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027204

PLOT DATE : 2/17/2021 1:56 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2



C29

PI STA = 23+10.22
Y = 140450.550
X = 732068.637
DELTA = 65°41'24"
D = 22°25'35"
T = 164.93'
L = 292.91'
R = 255.48'
PC STA = 21+45.29
Y = 140447.557
X = 732233.541
PT STA = 24+38.20
Y = 140602.064
X = 732003.478
BK = N88°57'36.8"W
AH = N23°16'13.3"W

C30

PI STA = 25+47.91
Y = 140702.773
X = 731959.965
DELTA = 23°47'16"
D = 11°00'00"
T = 109.71'
L = 216.25'
R = 520.87'
PC STA = 24+38.20
Y = 140602.064
X = 732003.478
PT STA = 26+54.46
Y = 140812.478
X = 731960.769
BK = N23°22'03.2"W
AH = N00°25'12.7"E

C13

PI STA = 87SB+48.76
Y = 141488.328
X = 733386.044
DELTA = 29°31'30"
D = 3°30'00"
T = 431.38'
L = 843.58'
R = 1637.04'
PC STA = 83SB+17.38
Y = 141407.556
X = 732962.296
PT STA = 91SB+60.96
Y = 141767.436
X = 733714.960
BK = N79°12'29.2"E
AH = N49°40'59.2"E

C14

PI STA = 376+91.54
Y = 141267.514
X = 732352.087
DELTA = 9°22'00"
D = 5°30'00"
T = 85.34'
L = 170.31'
R = 1041.74'
PC STA = 376+06.19
Y = 141233.951
X = 732273.622
PT STA = 377+76.50
Y = 141287.860
X = 732434.970
BK = N66°50'28.7"E
AH = N76°12'29.2"E

C15

PI STA = 373+41.28
Y = 140952.001
X = 731614.470
DELTA = 107°59'59"
D = 11°00'00"
T = 716.91'
L = 981.82'
R = 520.87'
PC STA = 366+24.37
Y = 140412.241
X = 732086.303
PT STA = 376+06.19
Y = 141233.948
X = 732273.615
BK = N41°09'30.4"W
AH = N66°50'28.7"E

C16

PI STA = 81NB+12.86
Y = 140561.322
X = 732600.724
DELTA = 71°03'51"
D = 5°00'00"
T = 818.34'
L = 1421.28'
R = 1145.92'
PC STA = 72NB+94.51
Y = 140922.729
X = 731866.511
PT STA = 87NB+15.80
Y = 141138.522
X = 733180.831
BK = S63°47'30.8"E
AH = N45°08'38.2"E

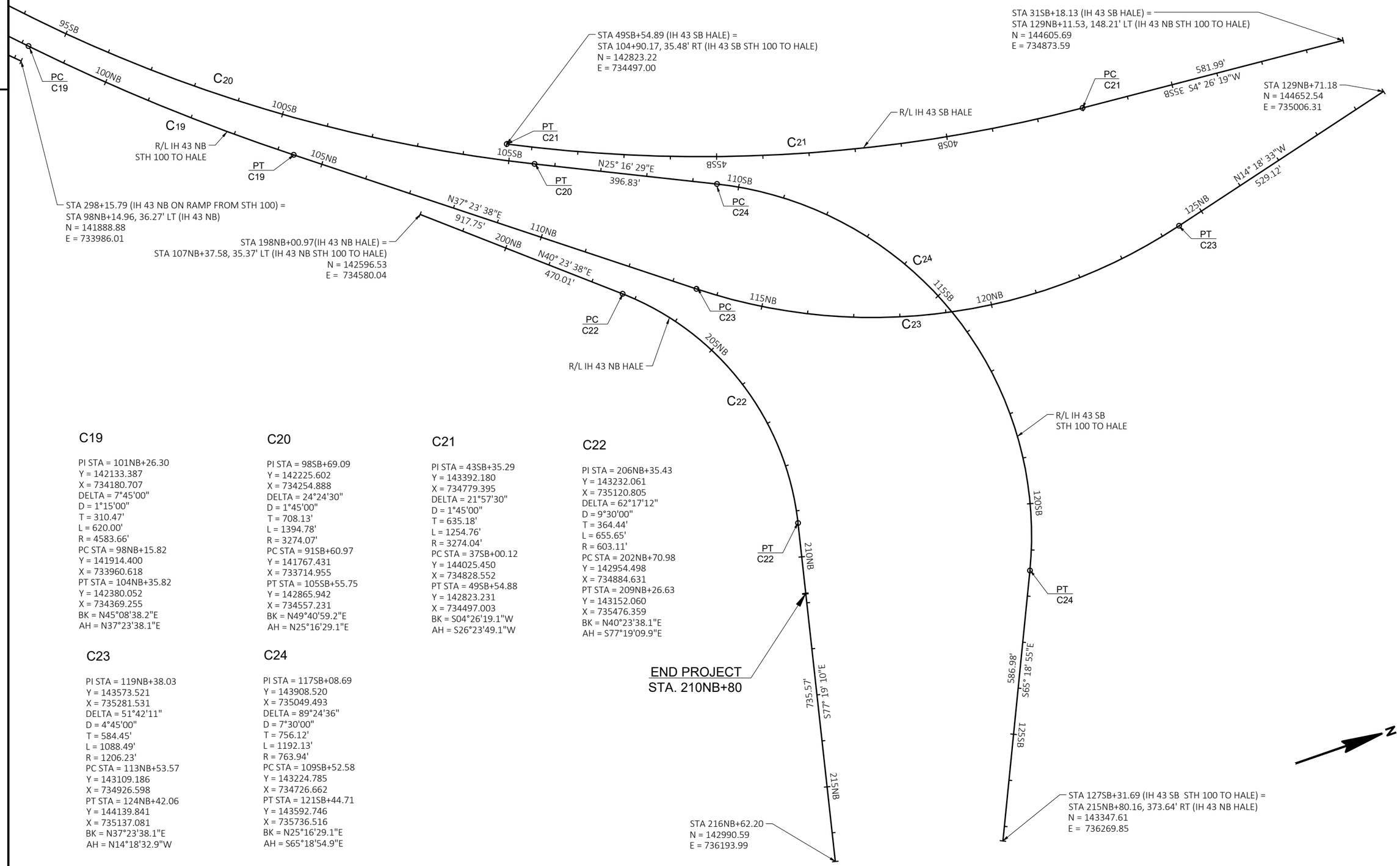
C17

PI STA = 362+67.17
Y = 140116.036
X = 732313.355
DELTA = 41°56'53"
D = 13°00'00"
T = 168.96'
L = 322.68'
R = 440.74'
PC STA = 360+98.21
Y = 139947.097
X = 732311.027
PT STA = 364+20.89
Y = 140243.241
X = 732202.158
BK = N00°47'22.2"E
AH = N41°09'30.8"W

C18

PI STA = 276+43.38
Y = 140314.584
X = 732465.830
DELTA = 39°12'31"
D = 10°00'00"
T = 204.07'
L = 392.09'
R = 572.96'
PC STA = 274+39.31
Y = 140111.227
X = 732448.791
PT STA = 278+31.40
Y = 140461.384
X = 732607.584
BK = N04°47'22.2"E
AH = N43°59'53.2"E

2



C19

PI STA = 101NB+26.30
Y = 142133.387
X = 734180.707
DELTA = 7°45'00"
D = 1°15'00"
T = 310.47'
L = 620.00'
R = 4583.66'
PC STA = 98NB+15.82
Y = 141914.400
X = 733960.618
PT STA = 104NB+35.82
Y = 142380.052
X = 734369.255
BK = N45°08'38.2"E
AH = N37°23'38.1"E

C20

PI STA = 98SB+69.09
Y = 142225.602
X = 734254.888
DELTA = 24°24'30"
D = 1°45'00"
T = 708.13'
L = 1394.78'
R = 3274.07'
PC STA = 91SB+60.97
Y = 141767.431
X = 733714.955
PT STA = 105SB+55.75
Y = 142865.942
X = 734557.231
BK = N49°40'59.2"E
AH = N25°16'29.1"E

C21

PI STA = 43SB+35.29
Y = 143392.180
X = 734779.395
DELTA = 21°57'30"
D = 1°45'00"
T = 635.18'
L = 1254.76'
R = 3274.04'
PC STA = 37SB+00.12
Y = 144025.450
X = 734828.552
PT STA = 49SB+54.88
Y = 142823.231
X = 734497.003
BK = S04°26'19.1"W
AH = S26°23'49.1"W

C22

PI STA = 206NB+35.43
Y = 143232.061
X = 735120.805
DELTA = 62°17'12"
D = 9°30'00"
T = 364.44'
L = 655.65'
R = 603.11'
PC STA = 202NB+70.98
Y = 142954.498
X = 734884.631
PT STA = 209NB+26.63
Y = 143152.060
X = 735476.359
BK = N40°23'38.1"E
AH = S77°19'09.9"E

C23

PI STA = 119NB+38.03
Y = 143573.521
X = 735281.531
DELTA = 51°42'11"
D = 4°45'00"
T = 584.45'
L = 1088.49'
R = 1206.23'
PC STA = 113NB+53.57
Y = 143109.186
X = 734926.598
PT STA = 124NB+42.06
Y = 144139.841
X = 735137.081
BK = N37°23'38.1"E
AH = N14°18'32.9"W

C24

PI STA = 117SB+08.69
Y = 143908.520
X = 735049.493
DELTA = 89°24'36"
D = 7°30'00"
T = 756.12'
L = 1192.13'
R = 763.94'
PC STA = 109SB+52.58
Y = 143224.785
X = 734726.662
PT STA = 121SB+44.71
Y = 143592.746
X = 735736.516
BK = N25°16'29.1"E
AH = S65°18'54.9"E

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	ALIGNMENT PLAN	SHEET 215	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027206
PLOT DATE : 2/15/2021 11:16 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

C25

PI STA = 32SB+59.81
Y = 139882.878
X = 716029.995
DELTA = 20°35'27"
D = 22°55'06"
T = 45.41'
L = 89.84'
R = 250.00'
PC STA = 32SB+14.40
Y = 139838.831
X = 716041.045
PT STA = 33SB+04.24
Y = 139920.224
X = 716004.160
BK = N14°05'00.5"W
AH = N34°40'27.6"W

C26

PI STA = 33SB+99.75
Y = 139998.772
X = 715949.823
DELTA = 76°58'13"
D = 52°19'30"
T = 87.05'
L = 147.10'
R = 109.50'
PC STA = 33SB+12.70
Y = 139927.179
X = 715999.348
PT STA = 34SB+59.80
Y = 140063.164
X = 716008.406
BK = N34°40'27.6"W
AH = N42°17'45.2"E

C27

PI STA = 34NB+00.43
Y = 139982.020
X = 716229.437
DELTA = 79°02'49"
D = 53°03'06"
T = 89.10'
L = 149.00'
R = 108.00'
PC STA = 33NB+11.32
Y = 139916.353
X = 716169.212
PT STA = 34NB+60.32
Y = 140053.625
X = 716176.408
BK = N42°31'27.6"E
AH = N36°31'21.4"W

C28

PI STA = 32NB+71.26
Y = 139886.689
X = 716142.007
DELTA = 10°30'21"
D = 15°44'26"
T = 33.47'
L = 66.74'
R = 364.00'
PC STA = 32NB+37.80
Y = 139858.314
X = 716124.264
PT STA = 33NB+04.54
Y = 139911.353
X = 716164.627
BK = N32°01'06.5"E
AH = N42°31'27.6"E

R/L IH 43 SB
R/L IH 43 NB
R/L CTH O SB
R/L CTH O NB
R/L RAMP L
IH 43 NB ON RAMP (LOOP)
FROM CTH O SB
R/L IH 43 NB ON RAMP
FROM CTH O NB

775SB 780SB 785SB 790SB 795SB 800SB
775NB 780NB 785NB 790NB 795NB 800NB
775L 780L 785L 790L 795L 800L
30SB 30NB 35SB 35NB 40SB 40NB 25SB 25NB 20SB 20NB

N49° 00' 16"E 5535.79'
N48° 59' 36"E 975.53'
N48° 59' 36"E 975.53'
N48° 13' 46"E 300.03'
N48° 59' 36"E 600.00'
N48° 59' 36"E 350.00'
N48° 59' 36"E 600.00'
N46° 5 500
N42° 17' 45"E 63.66'
N10° 04' 11"W 59.08'
N36° 31' 21"W 38.39'
N34° 40' 28"W 8.46'
N31° 42' 29"E 402.76'
N31° 42' 29"E 402.76'
S2° 28' 25"W 610.30'
S2° 28' 25"W 610.30'
N0° 20' 01"E 199.31'

PT C26
PC C26
PT C25
PC C25
PC C28
PT C28
PC C27
PT C27

C25 C26 C27 C28 C31 C32 C33

3100 CP FENO 869.530
3200 CP 870.870
3400 CP 865.780
3000 CP FENO 867.790
3040 CP 867.480
3607 mon Brass Cap 871.180
3500 CP 869.070

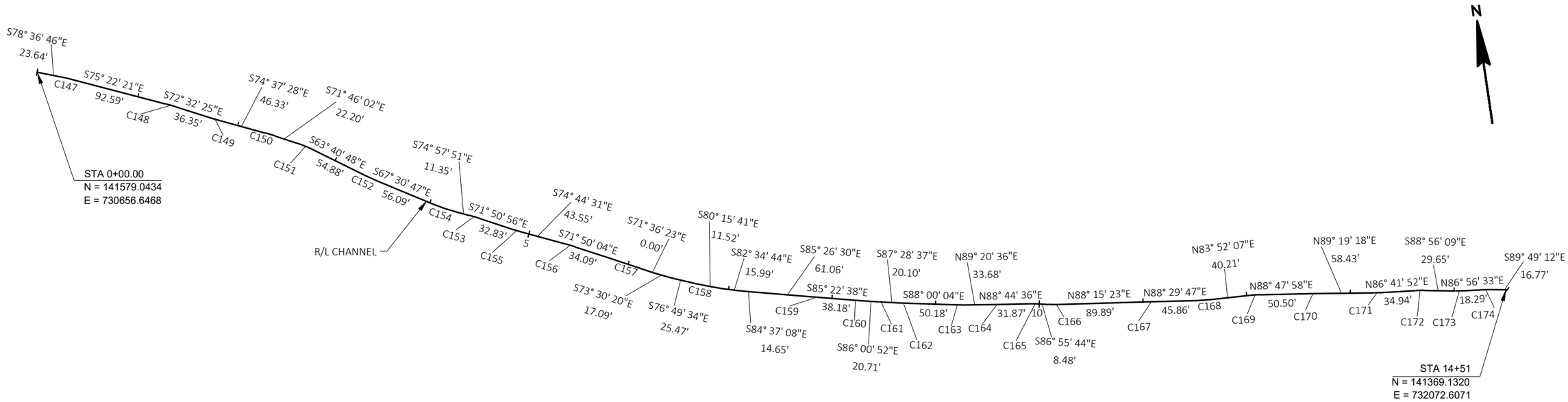
STA 761L+88.42 (RAMP L) =
STA 27SB+47.76, 11.84' LT (CTH O SB)
N = 139373.41
E = 716037.29

STA 782+55.76 (IH 43 NB ON RAMP FROM CTH O NB) =
STA 22NB+50.24, 23.98' LT (CTH O NB)
N = 138874.73
E = 716122.22

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	ALIGNMENT PLAN	SHEET 216	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 027207
PLOT DATE : 2/15/2021 11:18 AM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

2



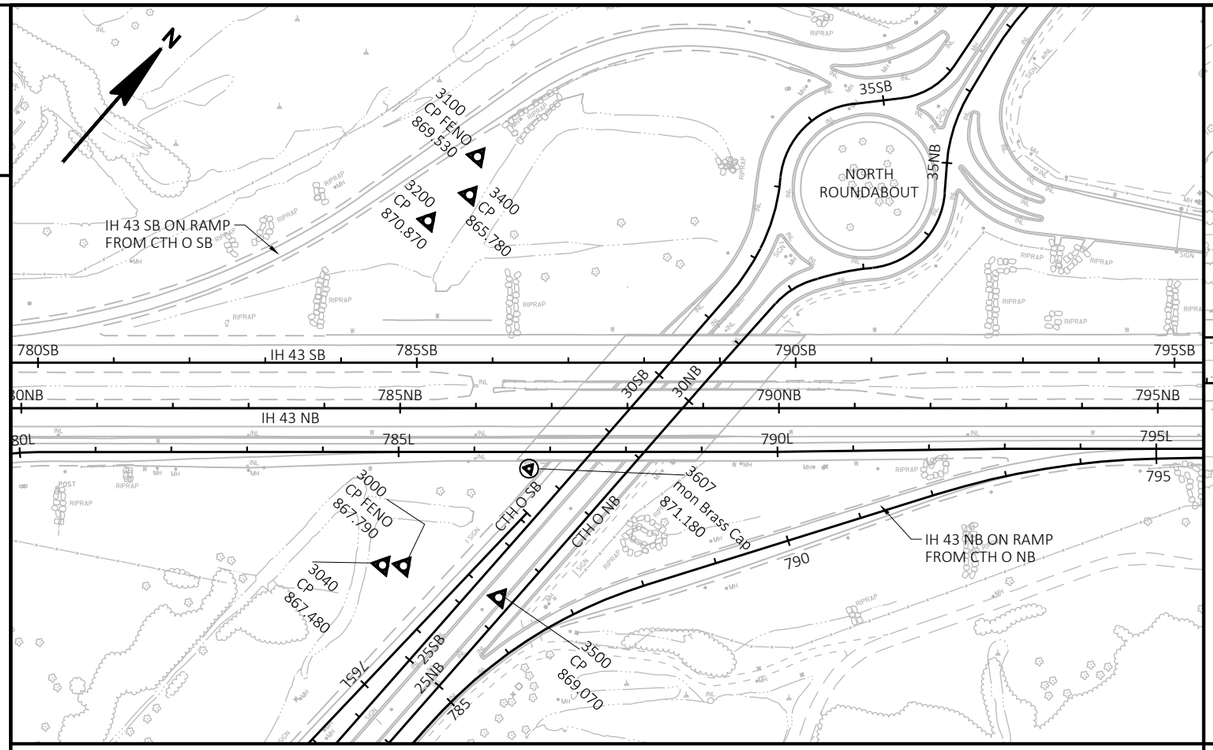
CURVE TABLE

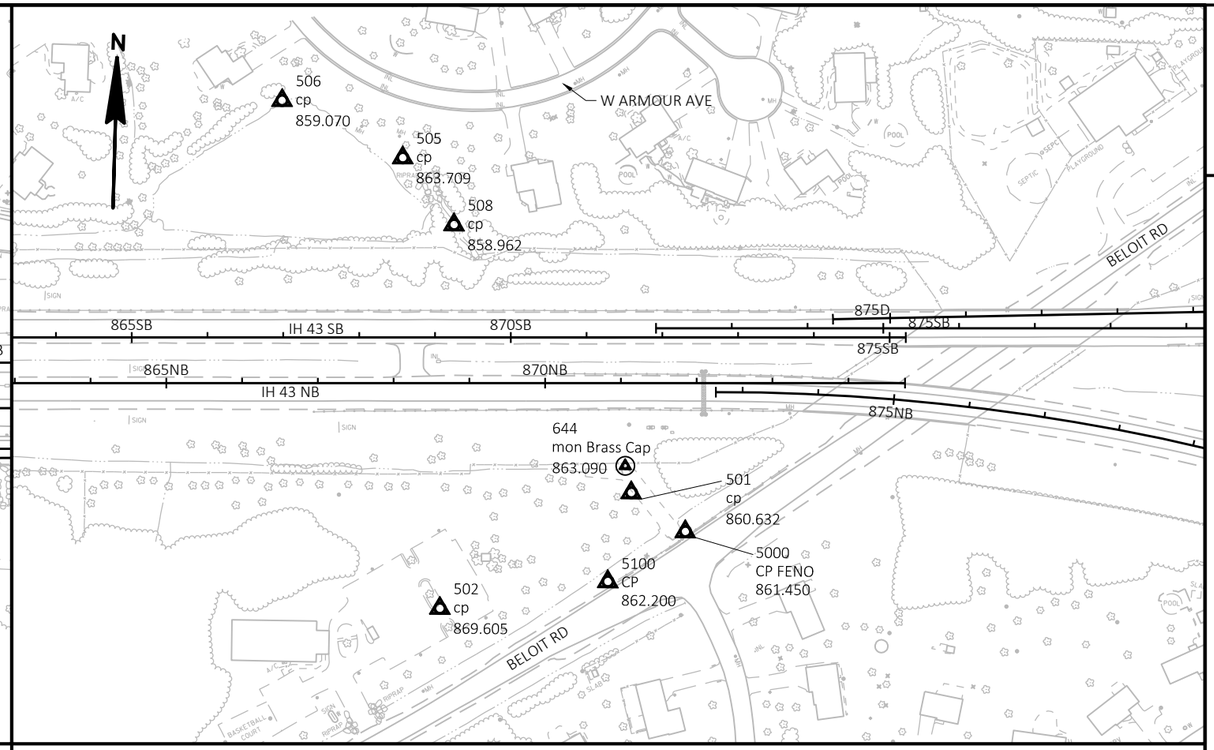
CURVE	PI	PI X COORDINATE	PI Y COORDINATE	Δ	D	T	L	R	PC	PT
C147	0+29.30	730685.37'	141573.26'	3°14'25"	28°38'52"	5.66	11.31	200.00	0+23.64	0+34.95
C148	1+32.49	730785.21'	141547.20'	2°49'56"	28°38'52"	4.94	9.89	200.00	1+27.54	1+37.43
C149	1+77.41	730828.08'	141533.72'	2°05'03"	28°38'52"	3.64	7.28	200.00	1+73.78	1+81.05
C150	2+32.37	730881.06'	141519.15'	2°51'26"	28°38'52"	4.99	9.97	200.00	2+27.38	2+37.36
C151	2+68.47	730915.36'	141507.85'	8°05'14"	45°25'03"	8.92	17.81	126.15	2+59.56	2+77.36
C152	3+38.93	730978.54'	141476.60'	3°49'59"	28°38'52"	6.69	13.38	200.00	3+32.24	3+45.62
C153	4+44.50	731077.37'	141439.87'	3°06'55"	28°38'52"	5.44	10.87	200.00	4+39.06	4+49.94
C154	4+14.73	731048.58'	141447.61'	7°27'04"	28°38'52"	13.02	26.01	200.00	4+01.71	4+27.72
C155	4+87.82	731118.53'	141426.38'	2°53'35"	28°38'52"	5.05	10.10	200.00	4+82.77	4+92.87
C156	5+41.49	731170.31'	141412.25'	2°54'28"	28°38'52"	5.08	10.15	200.00	5+36.42	5+46.57
C157	6+02.83	731228.59'	141393.13'	0°13'41"	0°30'51"	22.17	44.35	11141.69	5+80.65	6+25.00
C158	6+74.86	731297.93'	141373.81'	3°26'07"	23°33'21"	7.29	14.58	243.24	6+67.56	6+82.15
C159	7+85.43	731407.84'	141362.33'	0°03'51"	51°25'07"	0.06	0.13	111.43	7+85.37	7+85.49
C160	8+24.29	731446.57'	141359.20'	0°38'14"	51°25'07"	0.62	1.24	111.43	8+23.67	8+24.91

CURVE TABLE

CURVE	PI	PI X COORDINATE	PI Y COORDINATE	Δ	D	T	L	R	PC	PT
C161	8+47.04	731469.27'	141357.62'	1°27'45"	51°25'07"	1.42	2.84	111.43	8+45.62	8+48.46
C162	8+69.08	731491.28'	141356.65'	0°31'27"	51°25'07"	0.51	1.02	111.43	8+68.57	8+69.58
C163	9+22.35	731544.52'	141354.79'	2°39'20"	51°25'07"	2.58	5.16	111.43	9+19.77	9+24.93
C164	9+59.19	731581.37'	141355.21'	0°36'00"	51°25'07"	0.58	1.17	111.43	9+58.61	9+59.78
C165	9+95.86	731618.02'	141356.02'	4°19'40"	51°25'07"	4.21	8.42	111.43	9+91.65	10+00.06
C166	10+13.23	731635.37'	141355.09'	4°48'53"	51°25'07"	4.68	9.36	111.43	10+08.54	10+17.91
C167	11+08.04	731730.14'	141357.97'	0°14'24"	51°25'07"	0.23	0.47	111.43	11+07.80	11+08.27
C168	11+58.63	731780.72'	141359.30'	4°37'40"	51°25'07"	4.50	9.00	111.43	11+54.13	11+63.13
C169	12+08.13	731829.94'	141364.59'	4°55'51"	51°25'07"	4.80	9.59	111.43	12+03.34	12+12.93
C170	12+63.94	731885.74'	141365.76'	0°31'20"	51°25'07"	0.51	1.02	111.43	12+63.43	12+64.44
C171	13+25.43	731947.23'	141366.48'	2°37'26"	51°25'07"	2.55	5.10	111.43	13+22.88	13+27.98
C172	13+67.17	731988.90'	141368.89'	4°21'59"	51°25'07"	4.25	8.49	111.43	13+62.92	13+71.41
C173	14+05.07	732026.80'	141368.18'	4°07'18"	51°25'07"	4.01	8.02	111.43	14+01.06	14+09.08
C174	14+30.52	732052.22'	141369.54'	3°14'15"	51°25'07"	3.15	6.30	111.43	14+27.37	14+33.67

NOTES:
CURVES NUMBERS ON THIS SHEET START FROM 147 TO 174





CP3000
ALUM. CAP FENO MON.
SET APPROX. 50' WEST OF CTH O SB (LOOP RAMP ENTRANCE) AND APPROX. 135' SOUTH OF IH 43 NB (LOOP RAMP).
STA. 763L+51.38
OFFSET 70.09' RT
N = 139213.6240
E = 715960.2240
EL = 867.7900

CP3040
ALUM. CAP FENO MON.
SET APPROX. 70' WEST OF CTH O SB (LOOP RAMP ENTRANCE) AND APPROX. 135' SOUTH OF IH 43 NB (LOOP RAMP).
STA. 763L+69.78
OFFSET 90.94' RT
N = 139196.1420
E = 715938.6030
EL = 867.4800

CP3100
ALUM. CAP FENO MON.
SET APPROX. 235' NORTH SIDE OF IH 43 SB AND APPROX. 25' EAST OF IH 43 SB ON RAMP FROM CTH O SB.
STA. 785SB+79.84
OFFSET 271.71' LT
N = 139685.2050
E = 715679.7250
EL = 869.5300

CP3200
ALUM. CAP FENO MON.
SET APPROX. 150' NORTH OF IH 43 SB AND APPROX. 55' EAST OF IH 43 SB ON RAMP FROM CTH O SB.
STA. 785SB+14.46
OFFSET 186.95' LT
N = 139578.3350
E = 715685.9760
EL = 870.8700

CP3400
ALUM. CAP FENO MON.
SET APPEOX. 185' NORTH OF IH 43 SB AND APPROX. 55' EAST OF IH 43 SB ON RAMP FROM CTH O SB.
STA. 785SB+69.59
OFFSET 221.32' LT
N = 139640.4470
E = 715705.0450
EL = 865.7800

CP3500
ALUM. CAP FENO MON.
SET APPROX 5' WEST OF CTH O NB AND APPROX. 600' SOUTH OF NORTH MOORLAND ROUNDABOUT.
STA. 26NB+39.57
OFFSET 17.864' LT
N = 139264.5460
E = 716082.6290
EL = 869.0700

CP3607
MON. BRASS CAP
SET APPROX. 15' WEST SIDE OF CTH O SB AND APPROX. 485' SOUTH OF MOORLAND ROUNDABOUT.
STA. 27SB+93.66
OFFSET 48.22' LT
N = 139418.9250
E = 716001.1010
EL = 871.1800

CP501
ALUM. CAP FENO MON.
SET APPROX. 110' SOUTH OF IH 43 NB AND APPROX. 150' WEST OF BELOIT RD.
STA. 871NB+13.42
OFFSET 144.93' RT
N = 141744.6590
E = 723653.1320
EL = 860.6320

CP502
ALUM. CAP FENO MON.
SET APPROX. 260' SOUTH OF IH 43 NB AND APPROX. 170' WEST OF BELOIT RD.
STA. 868NB+60.95
OFFSET 287.39' RT
N = 141589.5030
E = 723402.3030
EL = 869.6050

CP505
ALUM. CAP FENO MON.
SET APPROX. 200' NORTH OF IH 43 SB AND APPROX. 1085' WEST OF BELOIT RD.
STA. 868SB+57.49
OFFSET 237.10' LT
N = 142183.4360
E = 723346.9630
EL = 863.7090

CP506
ALUM. CAP FENO MON.
SET APPROX. 275' NORTH OF IH 43 SB AND APPROX. 1350' WEST OF BELOIT RD.
STA. 866SB+98.31
OFFSET 312.76' LT
N = 142257.3940
E = 723186.9880
EL = 859.0700

CP508
ALUM. CAP FENO MON.
SET APPROX. 110' NORTH OF IH 43 SB AND APPROX. 885' WEST OF BELOIT RD.
STA. 869SB+25.20
OFFSET 148.73' LT
N = 142095.7930
E = 723415.6120
EL = 858.9620

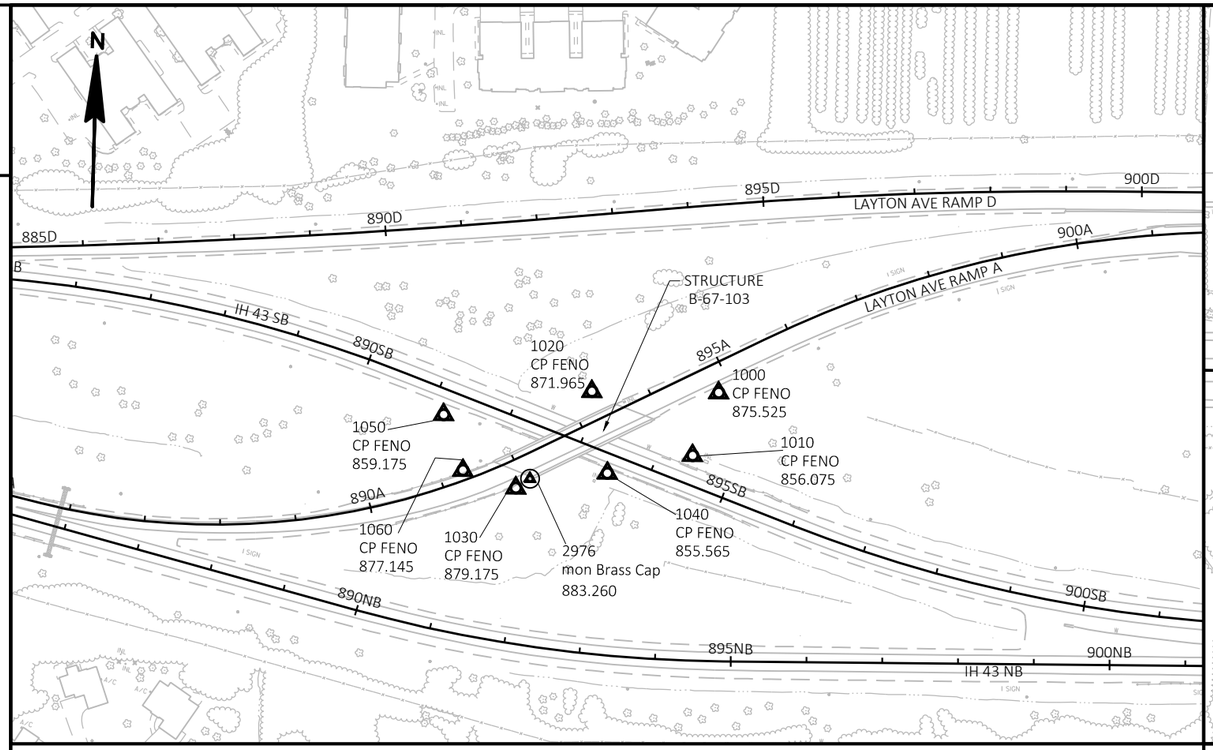
CP644
MON. BRASS CAP
SET APPROX. 75' SOUTH OF IH 43 NB AND APPROX. 210' WEST OF BELOIT RD.
STA. 871NB+05.58
OFFSET 109.41 RT
N = 141780.0920
E = 723644.9120
EL = 863.0900

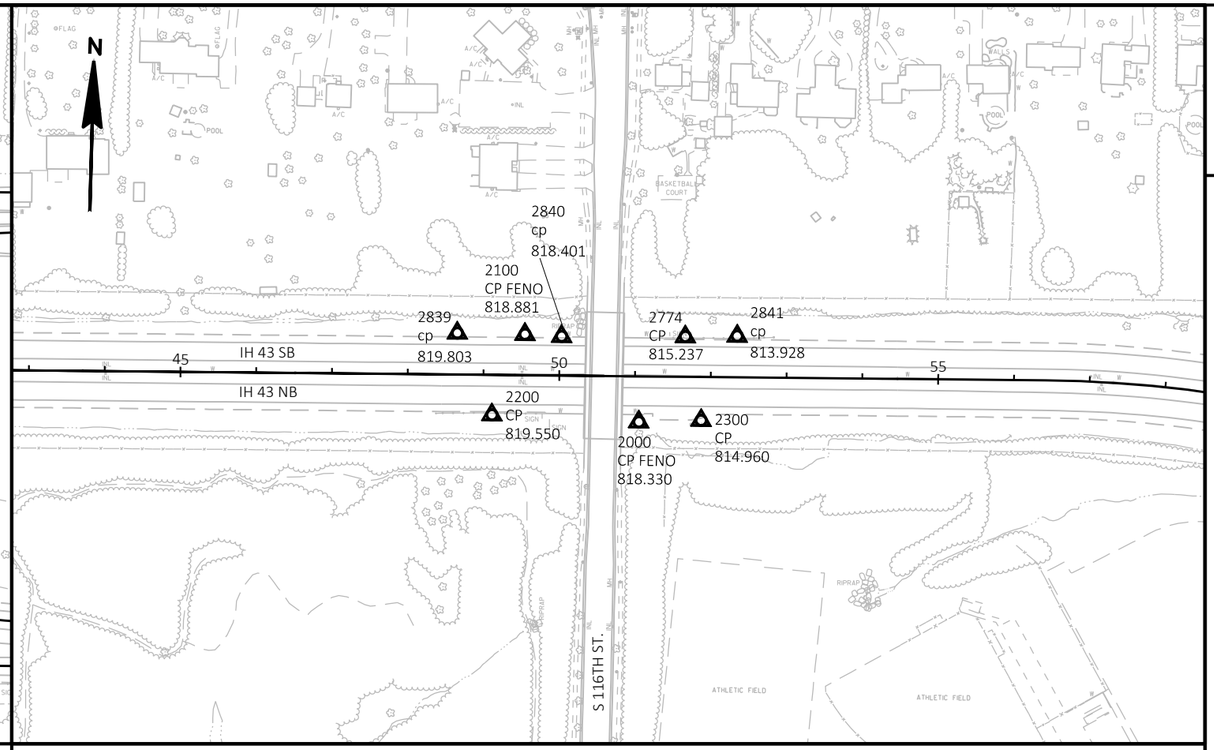
CP5000
ALUM. CAP FENO MON.
SET APPROX. 160' SOUTH OF IH 43 NB AND APPROX. 10' WEST OF BELOIT RD.
STA. 871NB+84.74
OFFSET 196.20' RT
N = 141694.1490
E = 723724.9940
EL = 861.4500

CP5100
ALUM. CAP FENO MON.
SET APPROX. 225' SOUTH OF IH 43 NB AND APPROX. 15' WEST OF BELOIT RD.
STA. 870NB+82.52
OFFSET 262.22' RT
N = 141627.0450
E = 723623.4900
EL = 862.2000

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	ALIGNMENT PLAN - SURVEY CONTROL	SHEET 218	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\027201_CP.DWG
LAYOUT NAME - 027201_CP (1)
PLOT DATE : 2/22/2021 12:40 PM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42





CP1000
ALUM. CAP FENO MON.
SET APPROX. 10' EAST OF LAYTON RAMP A AND APPROX. 10' WEST OF 124TH ST.
STA. 894A+81.93
OFFSET 36.87 RT
N = 141827.7372
E = 725932.9723
EL = 875.5250

CP1010
ALUM. CAP FENO MON.
SET APPROX. 15' NORTH OF IH 43 SB AND APPROX. 775' WEST OF 124TH ST.
STA. 894SB+43.31
OFFSET 37.56' LT
N = 141744.3650
E = 725899.3000
EL = 856.0750

CP1020
ALUM. CAP FENO MON.
SET APPROX. 45' NORTH OF IH 43 SB AND APPROX. 45' WEST OF 124TH ST.
STA. 893A+31.82
OFFSET 37.05' LT
N = 141827.4310
E = 725765.6440
EL = 871.9650

CP1030
ALUM. CAP FENO MON.
SET APPROX. 70' SOUTH OF IH 43 SB AND APPROX. 1010' WEST OF 124TH ST.
STA. 891A+97.35
OFFSET 34.70' RT
N = 141699.0830
E = 725666.5810
EL = 879.1750

CP1040
ALUM. CAP FENO MON.
SET APPROX. 5' SOUTH OF IH 43 SB AND APPROX. 890' WEST OF 124TH ST.
STA. 893SB+47.29
OFFSET 25.24' RT
N = 141719.8790
E = 725787.2060
EL = 855.5650

CP1050
ALUM. CAP FENO MON.
SET APPROX. 15' SOUTH OF IH 43 SB AND APPROX. 1105' WEST OF 124TH ST.
STA. 891SB+17.93
OFFSET 32.48' RT
N = 141794.7920
E = 725570.3130
EL = 859.1750

CP1060
ALUM. CAP FENO MON.
SET APPROX. 70' SOUTH OF IH 43 SB AND APPROX. 1080' WEST OF 124TH ST.
STA. 891A+31.93
OFFSET 13.00' LT
N = 141721.5570
E = 725596.5130
EL = 877.1450

CP2976
MON BRASS CAP
SET APPROX AT SOUTH EAST CORNER OF STRUCTURE B-67-103 AND APPROX. 990' WEST OF 124TH ST.
STA. 892A+08.51
OFFSET 31.24' RT
N = 141711.4420
E = 725684.9810
EL = 883.2600

CP2000
ALUM. CAP FENO MON.
SET APPROX. 10' SOUTH OF IH 43 NB AND APPROX. 25' EAST OF 116TH ST, APPROX. 25'
STA. 51+05.38
OFFSET 60.26' RT
N = 141443.6140
E = 729800.7330
EL = 818.3300

CP2100
ALUM. CAP FENO MON.
SET APPROX. 5' NORTH OF IH 43 SB AND APPROX. 80' WEST OF 116TH ST.
STA. 49+54.15
OFFSET 53.83' LT
N = 141557.5500
E = 729649.3910
EL = 818.8810

CP2200
ALUM. CAP FENO MON.
SET APPROX. 5' SOUTH OF IH 43 NB AND APPROX. 5' WEST OF 116TH ST.
STA. 49+11.42
OFFSET 52.67' RT
N = 141451.0100
E = 729606.7680
EL = 819.5500

CP2300
ALUM. CAP FENO MON.
SET APPROX. 5' SOUTH OF IH 43 NB AND APPROX. 5' EAST OF 116TH ST.
STA. 51+87.65
OFFSET 57.43' RT
N = 141446.5210
E = 729883.0070
EL = 814.9600

CP2774
ALUM. CAP FENO MON.
SET APPROX. 5' NORTH OF IH 43 SB AND APPROX. 80' EAST OF 116TH ST.
STA. 51+65.81
OFFSET 52.81' LT
N = 141556.7390
E = 729861.0590
EL = 815.2370

CP2839
ALUM. CAP FENO MON.
SET APPROX. 5' NORTH OF IH 43 SB AND APPROX. 170' WEST OF 116TH ST.
STA. 48+64.82
OFFSET 54.69' LT
N = 141558.3200
E = 729560.0620
EL = 819.8030

CP2840
ALUM. CAP FENO MON.
SET APPROX. 5' NORTH OF IH 43 SB AND APPROX. 30' WEST OF 116TH ST.
STA. 50+02.52
OFFSET 51.60' LT
N = 141555.3680
E = 729697.7670
EL = 818.4010

CP2841
ALUM. CAP FENO MON.
SET APPROX. 5' NORTH OF IH 43 SB AND APPROX. 5' EAST OF 116TH ST.
STA. 52+34.18
OFFSET 54.26' LT
N = 141558.2600
E = 729929.4230
EL = 813.9280

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	ALIGNMENT PLAN - SURVEY CONTROL	SHEET 219	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\027201_CP.DWG
LAYOUT NAME - 027201_CP (2)
PLOT DATE : 2/17/2021 9:47 PM
PLOT BY : ABU AJWA, MUNTHER J
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

Estimate Of Quantities

1090-08-71

Line	Item	Item Description	Unit	Total	Qty
0002	108.4400	CPM Progress Schedule	EACH	1.000	1.000
0004	201.0105	Clearing	STA	2.000	2.000
0006	201.0205	Grubbing	STA	2.000	2.000
0008	203.0220	Removing Structure (structure) 01. B-67-103	EACH	1.000	1.000
0010	203.0220	Removing Structure (structure) 02. B-67-295	EACH	1.000	1.000
0012	203.0220	Removing Structure (structure) 03. C-67-13	EACH	1.000	1.000
0014	203.0220	Removing Structure (structure) 04. C-67-21	EACH	1.000	1.000
0016	203.0330	Debris Containment (structure) 01. B-67-103	EACH	1.000	1.000
0018	204.0100	Removing Concrete Pavement	SY	2,780.000	2,780.000
0020	204.0105	Removing Pavement Butt Joints	SY	1,302.000	1,302.000
0022	204.0120	Removing Asphaltic Surface Milling	SY	199,893.000	199,893.000
0024	204.0126.S	Removing Asphaltic Longitudinal Notched Wedge Joint Milling	LF	30,440.000	30,440.000
0026	204.0155	Removing Concrete Sidewalk	SY	86.000	86.000
0028	204.0157	Removing Concrete Barrier	LF	450.000	450.000
0030	204.0165	Removing Guardrail	LF	9,830.000	9,830.000
0032	204.0170	Removing Fence	LF	131.000	131.000
0034	204.0195	Removing Concrete Bases	EACH	3.000	3.000
0036	204.0220	Removing Inlets	EACH	1.000	1.000
0038	204.0280	Sealing Pipes	EACH	1.000	1.000
0040	204.9060.S	Removing (item description) 01. Traffic Signals IH 43 NB/SB Ramps/W Layton Ave & S 124th St	EACH	1.000	1.000
0042	204.9180.S	Removing (item description) 01. Concrete Channel	SY	1,340.000	1,340.000
0044	205.0100	Excavation Common	CY	4,315.000	4,315.000
0046	206.1000	Excavation for Structures Bridges (structure) 01. B-67-103	LS	1.000	1.000
0048	206.2000	Excavation for Structures Culverts (structure) 01. C-67-13	LS	1.000	1.000
0050	206.2000	Excavation for Structures Culverts (structure) 02. C-67-21	LS	1.000	1.000
0052	206.5000	Cofferdams (structure) 01. C-67-13	LS	1.000	1.000
0054	206.5000	Cofferdams (structure) 02. C-67-21	LS	1.000	1.000
0056	208.0100	Borrow	CY	293.000	293.000
0058	210.1500	Backfill Structure Type A	TON	28.000	28.000
0060	210.2500	Backfill Structure Type B	TON	120.000	120.000
0062	211.0200	Prepare Foundation for Concrete Pavement (project) 01. 1090-08-71	LS	1.000	1.000
0064	213.0100	Finishing Roadway (project) 01. 1090-08-71	EACH	1.000	1.000
0066	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,115.000	3,115.000
0068	305.0500	Shaping Shoulders	STA	52.000	52.000
0070	390.0403	Base Patching Concrete Shes	SY	30,516.000	30,516.000
0072	415.0120	Concrete Pavement 12-Inch	SY	125.000	125.000
0074	415.0410	Concrete Pavement Approach Slab	SY	296.000	296.000
0076	415.1120	Concrete Pavement HES 12-Inch	SY	1,099.000	1,099.000
0078	415.1410	Concrete Pavement Approach Slab HES	SY	1,327.000	1,327.000
0080	416.0610	Drilled Tie Bars	EACH	6,112.000	6,112.000
0082	416.0620	Drilled Dowel Bars	EACH	7,577.000	7,577.000
0084	416.1010	Concrete Surface Drains	CY	17.000	17.000
0086	455.0605	Tack Coat	GAL	21,513.000	21,513.000
0088	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0090	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0092	460.0115.S	HMA Pavement Test Strips Volumetrics	EACH	1.000	1.000
0094	460.0120.S	HMA Pavement Test Strips Density	EACH	1.000	1.000
0096	460.2000	Incentive Density HMA Pavement	DOL	6,820.000	6,820.000

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Line	Item	Item Description	Unit	Total	Qty
0098	460.2005	Incentive Density PWL HMA Pavement	DOL	10,990.000	10,990.000
0100	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	12,470.000	12,470.000
0102	460.2010	Incentive Air Voids HMA Pavement	DOL	12,580.000	12,580.000
0104	460.7423	HMA Pavement 3 HT 58-28 H	TON	17,576.000	17,576.000
0106	460.7424	HMA Pavement 4 HT 58-28 H	TON	11,295.000	11,295.000
0108	460.8624	HMA Pavement 4 SMA 58-28 V	TON	10,653.000	10,653.000
0110	460.9000.S	Material Transfer Vehicle	EACH	1.000	1.000
0112	465.0110	Asphaltic Surface Patching	TON	487.000	487.000
0114	465.0400	Asphaltic Shoulder Rumble Strips	LF	39,234.000	39,234.000
0116	465.0450	Asphaltic Intersection Rumble Strips	SY	53.000	53.000
0118	492.2020.S	Cleaning and Sealing Cracks and Joints with Hot-Applied Sealant	MI	0.100	0.100
0120	502.0100	Concrete Masonry Bridges	CY	287.000	287.000
0122	502.3200	Protective Surface Treatment	SY	15.000	15.000
0124	502.3210	Pigmented Surface Sealer	SY	196.000	196.000
0126	502.4205	Adhesive Anchors No. 5 Bar	EACH	394.000	394.000
0128	504.0100	Concrete Masonry Culverts	CY	11.000	11.000
0130	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	67,020.000	67,020.000
0132	506.4000	Steel Diaphragms (structure) 01. B-67-103	EACH	12.000	12.000
0134	509.1500	Concrete Surface Repair	SF	655.000	655.000
0136	509.5100.S	Polymer Overlay	SY	1,589.000	1,589.000
0138	509.9020.S	Epoxy Crack Sealing	LF	200.000	200.000
0140	511.1200	Temporary Shoring (structure) 01. C-67-13	SF	155.000	155.000
0142	511.1200	Temporary Shoring (structure) 02. C-67-21	SF	325.000	325.000
0144	516.0500	Rubberized Membrane Waterproofing	SY	13.000	13.000
0146	531.1100	Concrete Masonry Ancillary Structures Type NS	CY	8.400	8.400
0148	531.1140	Steel Reinforcement HS Ancillary Structures Type NS	LB	1,260.000	1,260.000
0150	531.2024	Drilling Shaft 24-Inch	LF	70.000	70.000
0152	601.0205	Concrete Gutter 24-Inch	LF	916.000	916.000
0154	601.0452	Concrete Curb & Gutter Integral 30-Inch Type D	LF	109.000	109.000
0156	601.0600	Concrete Curb Pedestrian	LF	11.000	11.000
0158	602.0410	Concrete Sidewalk 5-Inch	SF	606.000	606.000
0160	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	60.000	60.000
0162	604.0400	Slope Paving Concrete	SY	15.000	15.000
0164	606.0100	Riprap Light	CY	14.000	14.000
0166	606.0200	Riprap Medium	CY	3,099.000	3,099.000
0168	611.8115	Adjusting Inlet Covers	EACH	17.000	17.000
0170	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	10.000	10.000
0172	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	4.000	4.000
0174	614.0397	Guardrail Mow Strip Emulsified Asphalt	SY	15.000	15.000
0176	614.0950	Replacing Guardrail Posts and Blocks	EACH	5.000	5.000
0178	614.0951	Replacing Guardrail Rail and Hardware	LF	46.000	46.000
0180	614.0952	Replacing Guardrail Reflectors	EACH	5.000	5.000
0182	614.2300	MGS Guardrail 3	LF	7,618.000	7,618.000
0184	614.2500	MGS Thrie Beam Transition	LF	994.000	994.000
0186	614.2610	MGS Guardrail Terminal EAT	EACH	31.000	31.000
0188	614.2620	MGS Guardrail Terminal Type 2	EACH	15.000	15.000
0190	616.0208	Fence Chain Link 8-FT	LF	131.000	131.000
0192	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1090-08-71	EACH	1.000	1.000
0194	619.1000	Mobilization	EACH	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0196	620.0300	Concrete Median Sloped Nose	SF	39.000	39.000
0198	625.0100	Topsoil	SY	7,541.000	7,541.000
0200	628.1504	Silt Fence	LF	8,043.000	8,043.000
0202	628.1520	Silt Fence Maintenance	LF	8,043.000	8,043.000
0204	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0206	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0208	628.2004	Erosion Mat Class I Type B	SY	7,485.000	7,485.000
0210	628.7005	Inlet Protection Type A	EACH	1.000	1.000
0212	628.7010	Inlet Protection Type B	EACH	33.000	33.000
0214	628.7015	Inlet Protection Type C	EACH	25.000	25.000
0216	628.7020	Inlet Protection Type D	EACH	49.000	49.000
0218	629.0210	Fertilizer Type B	CWT	5.000	5.000
0220	630.0120	Seeding Mixture No. 20	LB	4.000	4.000
0222	630.0170	Seeding Mixture No. 70	LB	26.000	26.000
0224	630.0200	Seeding Temporary	LB	50.000	50.000
0226	630.0400	Seeding Nurse Crop	LB	53.000	53.000
0228	630.0500	Seed Water	MGAL	168.000	168.000
0230	631.0300	Sod Water	MGAL	1.000	1.000
0232	631.1000	Sod Lawn	SY	56.000	56.000
0234	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	62.000	62.000
0236	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	4.000	4.000
0238	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	1.000	1.000
0240	635.0200	Sign Supports Structural Steel HS	LB	5,600.000	5,600.000
0242	635.0300	Sign Supports Replacing Base Connection Bolts	EACH	16.000	16.000
0244	637.1220	Signs Type I Reflective SH	SF	3,943.000	3,943.000
0246	637.1230	Signs Type I Reflective F	SF	40.000	40.000
0248	637.2230	Signs Type II Reflective F	SF	107.000	107.000
0250	638.2102	Moving Signs Type II	EACH	58.000	58.000
0252	638.2601	Removing Signs Type I	EACH	29.000	29.000
0254	638.3000	Removing Small Sign Supports	EACH	53.000	53.000
0256	638.3100	Removing Structural Steel Sign Supports	EACH	4.000	4.000
0258	643.0300	Traffic Control Drums	DAY	83,019.000	83,019.000
0260	643.0410	Traffic Control Barricades Type II	DAY	40.000	40.000
0262	643.0420	Traffic Control Barricades Type III	DAY	7,416.000	7,416.000
0264	643.0705	Traffic Control Warning Lights Type A	DAY	14,873.000	14,873.000
0266	643.0715	Traffic Control Warning Lights Type C	DAY	6,048.000	6,048.000
0268	643.0800	Traffic Control Arrow Boards	DAY	608.000	608.000
0270	643.0900	Traffic Control Signs	DAY	23,596.000	23,596.000
0272	643.0920	Traffic Control Covering Signs Type II	EACH	551.000	551.000
0274	643.1000	Traffic Control Signs Fixed Message	SF	105.000	105.000
0276	643.1050	Traffic Control Signs PCMS	DAY	340.000	340.000
0278	643.1070	Traffic Control Cones 42-Inch	DAY	979.000	979.000
0280	643.4100.S	Traffic Control Interim Lane Closure	EACH	206.000	206.000
0282	643.5000	Traffic Control	EACH	1.000	1.000
0284	644.1410	Temporary Pedestrian Surface Asphalt	SF	373.000	373.000
0286	644.1420	Temporary Pedestrian Surface Plywood	SF	73.000	73.000
0288	644.1601	Temporary Pedestrian Curb Ramp	DAY	36.000	36.000
0290	644.1810	Temporary Pedestrian Barricade	LF	199.000	199.000
0292	645.0120	Geotextile Type HR	SY	6,198.000	6,198.000

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Line	Item	Item Description	Unit	Total	Qty
0294	645.0130	Geotextile Type R	SY	190.000	190.000
0296	646.1020	Marking Line Epoxy 4-Inch	LF	46,706.000	46,706.000
0298	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	68,755.000	68,755.000
0300	646.1546.S	Marking Replace Line Contrast Wet Reflective Epoxy 4-Inch	LF	3,209.000	3,209.000
0302	646.1555	Marking Line Grooved Contrast Permanent Tape 4-Inch	LF	7,661.000	7,661.000
0304	646.3020	Marking Line Epoxy 8-Inch	LF	2,518.000	2,518.000
0306	646.3546.S	Marking Replace Line Contrast Wet Reflective Epoxy 8-Inch	LF	481.000	481.000
0308	646.3555	Marking Line Grooved Contrast Permanent Tape 8-Inch	LF	5,811.000	5,811.000
0310	646.5020	Marking Arrow Epoxy	EACH	34.000	34.000
0312	646.5120	Marking Word Epoxy	EACH	7.000	7.000
0314	646.5220	Marking Symbol Epoxy	EACH	2.000	2.000
0316	646.6120	Marking Stop Line Epoxy 18-Inch	LF	196.000	196.000
0318	646.6320	Marking Dotted Extension Epoxy 18-Inch	LF	94.000	94.000
0320	646.7120	Marking Diagonal Epoxy 12-Inch	LF	5,215.000	5,215.000
0322	646.7220	Marking Chevron Epoxy 24-Inch	LF	1,320.000	1,320.000
0324	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	281.000	281.000
0326	646.7520	Marking Crosswalk Epoxy Block Style 24-Inch	LF	108.000	108.000
0328	646.8120	Marking Curb Epoxy	LF	82.000	82.000
0330	646.8220	Marking Island Nose Epoxy	EACH	1.000	1.000
0332	646.9000	Marking Removal Line 4-Inch	LF	9,446.000	9,446.000
0334	646.9055	Marking Removal Line Grooved Contrast Permanent Tape 4-Inch	LF	1,283.000	1,283.000
0336	646.9100	Marking Removal Line 8-Inch	LF	943.000	943.000
0338	646.9200	Marking Removal Line Wide	LF	81.000	81.000
0340	649.0105	Temporary Marking Line Paint 4-Inch	LF	165,300.000	165,300.000
0342	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	28,546.000	28,546.000
0344	649.0205	Temporary Marking Line Paint 8-Inch	LF	14,322.000	14,322.000
0346	649.0505	Temporary Marking Arrow Paint	EACH	26.000	26.000
0348	649.0605	Temporary Marking Word Paint	EACH	2.000	2.000
0350	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	49.000	49.000
0352	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	296.000	296.000
0354	652.0615	Conduit Special 3-Inch	LF	648.000	648.000
0356	653.0140	Pull Boxes Steel 24x42-Inch	EACH	10.000	10.000
0358	653.0905	Removing Pull Boxes	EACH	9.000	9.000
0360	654.0101	Concrete Bases Type 1	EACH	3.000	3.000
0362	655.0230	Cable Traffic Signal 5-14 AWG	LF	925.000	925.000
0364	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	3,351.000	3,351.000
0366	655.0535	Electrical Wire Traffic Signals 2 AWG	LF	2,700.000	2,700.000
0368	657.0100	Pedestal Bases	EACH	3.000	3.000
0370	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	3.000	3.000
0372	658.0171	Traffic Signal Face 1S 12-Inch	EACH	6.000	6.000
0374	658.5069	Signal Mounting Hardware (location) 01. IH 43 NB/SB Ramps/W Layton Ave & S 124th St	LS	1.000	1.000
0376	670.0100	Field System Integrator	LS	1.000	1.000
0378	670.0200	ITS Documentation	LS	1.000	1.000
0380	674.0300	Remove Cable	LF	930.000	930.000
0382	678.0006	Install Fiber Optic Cable Outdoor Plant 6-CT	LF	900.000	900.000
0384	678.0400	Fiber Optic Termination	EACH	2.000	2.000
0386	678.0500	Communication System Testing	LS	1.000	1.000
0388	690.0150	Sawing Asphalt	LF	311.000	311.000

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Line	Item	Item Description	Unit	Total	Qty
0390	690.0250	Sawing Concrete	LF	17,174.000	17,174.000
0392	715.0502	Incentive Strength Concrete Structures	DOL	3,198.000	3,198.000
0394	715.0603	Incentive Strength Concrete Barrier	DOL	225.000	225.000
0396	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	730.000	730.000
0398	740.0440	Incentive IRI Ride	DOL	5,900.000	5,900.000
0400	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 784NB+50	EACH	1.000	1.000
0402	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 02. 869SB+50	EACH	1.000	1.000
0404	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	4,200.000	4,200.000
0406	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	17,280.000	17,280.000
0408	SPV.0060	Special 01. Survey Project 1090-08-71	EACH	1.000	1.000
0410	SPV.0060	Special 02. Traffic Control Close-Open Freeway Entrance Ramp	EACH	301.000	301.000
0412	SPV.0060	Special 03. Traffic Control Close-Open Freeway to Freeway System Ramp	EACH	65.000	65.000
0414	SPV.0060	Special 04. Traffic Control Full Freeway Closure	EACH	6.000	6.000
0416	SPV.0060	Special 05. Traffic Control Local Road Lane Closures	EACH	129.000	129.000
0418	SPV.0060	Special 06. Mobilizations Emergency Pavement Repair	EACH	1.000	1.000
0420	SPV.0060	Special 07. Field Facilities Office Space	EACH	1.000	1.000
0422	SPV.0060	Special 20. Remove Electronic Blank Out Sign	EACH	1.000	1.000
0424	SPV.0060	Special 21. Install Overheight Warning System DMS	EACH	1.000	1.000
0426	SPV.0060	Special 22. Install Fiber Optic Media Converter	EACH	1.000	1.000
0428	SPV.0060	Special 30. Trnspt & Install SF Traffic Signal Cabinet IH 43 NB/SB Ramps/Layton & 124th	EACH	1.000	1.000
0430	SPV.0060	Special 40. Strapping C-67-13	EACH	2.000	2.000
0432	SPV.0060	Special 41. Strapping C-67-21	EACH	2.000	2.000
0434	SPV.0060	Special 50. Adjusting Water Boxes	EACH	1.000	1.000
0436	SPV.0075	Special 01. Pavement Cleanup Project 1090-08-71	HRS	100.000	100.000
0438	SPV.0090	Special 01. Concrete Median Barrier	LF	450.000	450.000
0440	SPV.0090	Special 02. Heavy Duty Silt Fence	LF	3,053.000	3,053.000
0442	SPV.0090	Special 03. Marking Contrast Epoxy 4-Inch	LF	944.000	944.000
0444	SPV.0090	Special 04. Marking Contrast Epoxy 8-Inch	LF	10,473.000	10,473.000
0446	SPV.0090	Special 06. Cured-in-Place Pipe Liner (CIPP), 36-Inch	LF	273.000	273.000
0448	SPV.0165	Special 40. Fiber Wrap Reinforcing Non-Structural	SF	40.000	40.000
0450	SPV.0165	Special 41. Prestressed Girder Surface Repair	SF	38.000	38.000
0452	SPV.0165	Special 42. Removing Loose Concrete	SF	2,680.000	2,680.000
0454	SPV.0180	Special 01. Removing Asphaltic Surface Milling Special	SY	2,560.000	2,560.000
0456	SPV.0180	Special 02. Resin Binder High Friction Surface Treatment Modified	SY	20,217.000	20,217.000
0458	SPV.0195	Special 01. HMA Longitudinal Joint Repair	TON	1,270.000	1,270.000

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CLEARING AND GRUBBING ITEMS

CATEGORY	ROADWAY	STATION	TO	STATION	OFFSET	201.0105 CLEARING STA	201.0205 GRUBBING STA
1000	IH 43	869+00	-	870+00	LT	1	1
	LAYTON AVE - RAMP A	891A+50	-	892A+50	LT	1	1
		TOTAL				2	2

REMOVING STORM SEWER

CATEGORY	ROADWAY	STATION	TO	STATION	OFFSET	204.0220 REMOVING INLETS EACH	204.0280 SEALING PIPES EACH
1000	LAYTON AVE - RAMP A	893A+25			LT	1	1

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REMOVING CONCRETE ITEMS

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0155 REMOVING CONCRETE SIDEWALK SY	204.9180.S.01 REMOVING CONCRETE CHANNEL SY	COMMENTS
1000	1A	INT OF LAYTON AVE & 124TH ST	29+89	-	30+01	RT	9	--	
	1B	INT OF LAYTON AVE & 124TH ST	29+42	-	29+59	RT	16	--	
			30+44	-	30+60	RT	20	--	
		UNDISTRIBUTED					3	--	SIDEWALK REMOVAL FOR SIGNAL WORK
		STAGE 1B TOTAL (LOCAL ROADS)					40	--	
	1B	IH 43	59+43	-	74SB+43	LT	--	1,340	
	2	MOORLAND RD ROUNDABOUT	34NB+44	-	34NB+57	RT	14	--	
			34NB+65	-	34NB+73	RT	4	--	
			35NB+21	-	35NB+60	RT	20	--	
		STAGE 2 TOTAL					38	--	
		TOTAL					86	1,340	

CONCRETE BARRIER REPAIRS

CATEGORY	ROADWAY	STATION	TO	STATION	OFFSET	204.0157 REMOVING CONCRETE BARRIER LF	**509.1500 CONCRETE SURFACE REPAIR SF	SPV.0090.01 CONCRETE MEDIAN BARRIER LF
1000	IH 43 (MEDIAN)	901NB+50	-	65NB+00	RT/LT	450	500	450
	TOTAL					450	500	450

**QUANTITIES SHOWN ELSEWHERE

REMOVING ASPHALTIC LONGITUDINAL NOTCHED WEDGE JOINT MILLING

CATEGORY	LOCATION	STATION	TO	STATION	204.0126.S REMOVING ASPHALTIC LONGITUDINAL NOTCHED WEDGE JOINT MILLING LF
1000	IH 43 NB	821NB+00	-	94NB+70	15,330
	IH 43 SB	820SB+00	-	92SB+50	15,110
	TOTAL				30,440

REMOVING PAVEMENT

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0105 REMOVING PAVEMENT BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	204.0110 REMOVING CONCRETE PAVEMENT SY	SPV.0180.01 REMOVING ASPHALTIC SURFACE MILLING SPECIAL SY	COMMENTS
1000	1	LAYTON AVE - RAMP A	887A+45	-	902A+36	RT/LT	66	4,791	296	--	
	1A	IH 43	786NB+33	-	790NB+21	RT/LT	--	--	498	--	IH 43 APPROACH WORK - NB
			786SB+74	-	790SB+70	RT/LT	--	--	611	--	IH 43 APPROACH WORK - SB
	STAGE 1A TOTAL						--	--	1,109	--	
	1B	IH 43	786NB+33	-	790NB+21	RT	--	--	417	--	IH 43 APPROACH WORK - NB
			786SB+74	-	790SB+70	LT	--	--	465	--	IH 43 APPROACH WORK - SB
	1B	MOORLAND RD - RAMP L	786L+06	-	789L+70	RT/LT	--	--	434	--	APPROACH WORK
	STAGE 1B TOTAL						--	--	1,316	--	
	2A	IH 43	780NB+00	-	902+43NB	RT/LT	281	49,091	--	183	WAUKESHA COUNTY
			20+00	-	94NB+69	RT	26	18,768	--	752	MILWAUKEE COUNTY - NB
			20+00	-	92SB+51	LT	138	21,143	--	346	MILWAUKEE COUNTY - SB
	2A	IH 43 OFF RAMP TO STH 100	362+94	-	376+51	RT/LT	245	6,837	--	--	
	2A	W-N (USH 45 NB)	110NB+39	-	118NB+79	LT	--	3,190	--	--	
	2A	E-W (IH 43 SB)	110SB+46	-	119SB+07	RT/LT	--	1,381	--	--	
	STAGE 2A TOTAL						690	100,410	--	1,281	
	2B	IH 43	780SB+89	-	902SB+78	RT/LT	270	44,014	--	175	WAUKESHA COUNTY
			20+00	-	94NB+69	RT	51	20,738	--	813	MILWAUKEE COUNTY - NB
			20+00	-	92SB+51	LT	85	17,006	--	291	MILWAUKEE COUNTY - SB
	2B	LAYTON AVE - RAMP D	885D+16	-	901D+49	RT/LT	51	5,446	--	--	
	2B	IH 43 ON RAMP TO STH 100	275+98	-	285+63	RT/LT	89	6,429	--	--	
	2B	W-E (IH 43 NB)	202NB+65	-	210NB+80	RT/LT	--	1,059	--	--	
	STAGE 2B TOTAL						546	94,692	--	1,279	
	1A	LAYTON AVE & 124TH ST	29+85	-	30+04	RT	--	--	35	--	
	1B	LAYTON AVE & 124TH ST	29+50	-	30+50	RT	--	--	23	--	
	TOTAL						1,302	199,893	2,780	2,560	

REMOVING GUARDRAIL

WAUKESHA COUNTY

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0165 REMOVING GUARDRAIL LF
1000	1	LAYTON AVE - RAMP A	884A+39	-	886A+18	LT	179
			890A+13	-	892A+03	RT	195
			889A+93	-	891A+74	LT	179
	STAGE 1 TOTAL						553
	3A	IH 43 NB	786NB+19	-	786NB+94	LT	76
			789NB+74	-	790NB+82	LT	107
			845NB+19	-	848NB+50	LT	328
			869NB+98	-	873NB+81	LT	383
	3A	IH 43 SB	786SB+15	-	787SB+22	RT	107
			789SB+60	-	790SB+80	RT	120
			848SB+30	-	851SB+65	RT	335
			891SB+94	-	895SB+47	RT	354
	STAGE 3A SUBTOTAL						1,809
	3B	IH 43 NB	807NB+90	-	819NB+08	RT	1,108
			843NB+81	-	844NB+71	RT	89
			852NB+25	-	853NB+72	RT	146
			866NB+93	-	873NB+26	RT	633
			884NB+02	-	886NB+18	RT	216
			900NB+36	-	901NB+69	RT	133
	3B	IH 43 SB	852SB+26	-	853SB+16	LT	90
			863SB+28	-	874SB+25	LT	1,097
			878SB+75	-	879SB+96	RT	121
			894SB+03	-	896SB+14	LT	210
	3B	LAYTON AVE - RAMP D	879D+56	-	880D+69	LT	113
	STAGE 3B SUBTOTAL						3,957
	WAUKESHA CO SUBTOTAL						6,319

MILWAUKEE COUNTY

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0165 REMOVING GUARDRAIL LF
1000	3A	IH 43 NB	70NB+64	-	71NB+36	LT	72
			78NB+90	-	84NB+30	LT	537
	3A	H 43 NB / USH 45 NB	91NB+49	-	93NB+19	LT	170
	3A	IH 43 SB OFF RAMP TO STH 100	367+93	-	370+44	RT	243
			367+91	-	370+56	LT	283
			373+37	-	374+14	LT	84
	3A	W-N (USH 45 NB)	116+54	-	117+35	RT	83
			116+52	-	117+35	LT	82
	STAGE 3A SUBTOTAL						1,554
	3B	IH 43 NB	48+37	-	49+82	RT	145
			58+21	-	63+78	RT	540
			71NB+25	-	71NB+96	RT	71
			78NB+90	-	83NB+50	RT	474
	3B	H 43 NB / USH 45 NB	91NB+61	-	93NB+19	RT	158
	3B	IH 43 SB	20+80	-	22+01	LT	121
			51+38	-	52+84	LT	146
			78SB+46	-	80SB+66	LT	220
	3B	W-E (IH 43 NB)	203NB+53	-	204NB+33	LT	83
	STAGE 3B SUBTOTAL						1,957
	MILWAUKEE CO SUBTOTAL						3,511

TOTAL 9,830

GUARDRAIL REPAIRS

CATEGORY	ROADWAY	STATION	TO	STATION	OFFSET	614.0950 REPLACING GUARDRAIL POSTS AND BLOCKS EACH	614.0951 REPLACING GUARDRAIL RAIL AND HARDWARE LF	614.0952 REPLACING GUARDRAIL REFLECTORS EACH
1000	IH 43 NB	803NB+49	-	804NB+95	LT	1	14	--
	IH 43 SB	794SB+76	-	795SB+46	LT	2	--	--
		807SB+28	-	807SB+98	RT		14	
	MOORLAND RD - RAMP L	794L+88	-	795L+59	RT	1	9	--
	UNDISTRIBUTED					1	9	5
	TOTAL					5	46	5

SAWING

CATEGORY	STAGE	ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
1000	1	LAYTON AVE - RAMP A	891A+60	30.5' RT	-	891A+59	7.5' LT	--	38
			891A+74	8.5' LT	-	892A+13	31.2' RT	--	55
			893A+54	8.0' LT	-	893A+89	31.1' RT	--	54
			894A+05	7.5' LT	-	894A+04	29.6' RT	--	37
	STAGE 1 TOTAL							--	184
	1B	MOORLAND RD - RAMP L	786L+06	11.9' RT	-	786L+07	18.4' LT	--	30
			786L+55	11.8' RT	-	786L+82	18.8' LT	--	40
			788L+92	11.7' RT	-	789L+19	19.3' LT	--	41
			789L+70	12.0' RT	-	789L+69	20.1' LT	--	32
	STAGE 1B TOTAL							--	144
	2A	IH 43 NB	780NB+00	11.3' LT				12	--
			786NB+34	12.6' RT				-	12
			786NB+66	24.2' LT				-	25
			786NB+95	18.8' LT	-	787NB+30	18.3 LT	--	35
			787NB+03	12.1' RT	-	787NB+30	18.3 LT	--	41
			789NB+40	12.7' RT	-	789NB+73	25.2 LT	--	49
			790NB+20	24.1' LT	-	790NB+21	12.6 RT	--	37
			804NB+96	24.4' LT				25	--
			809NB+01	24.7' LT				25	--
			821NB+05	11.6' RT				11	--
	2A	IH 43 SB	780SB+90	12.8' RT				13	--
			786SB+74	24.0' RT	-	786SB+74	10.6 LT	--	35
			787SB+22	24.7' RT	-	787SB+53	10.0 LT	--	46
			789SB+60	24.7' RT	-	789SB+90	10.5 LT	--	47
			790SB+70	24.2' RT	-	790SB+70	11.1 LT	--	35
			807SB+29	30.4' RT				31	--
			819SB+97	13.3' LT				12	--
	2A	E-W RAMP (IH 43 SB)	110+46	22.6' LT	-	110+48	6.2' RT	29	--
			111+55	18.1' LT				11	--
			111+56	0.4' LT	-	111+56	6.4' RT	7	--
	STAGE 2A TOTAL							174	361

SAWING CONTINUED

CATEGORY	STAGE	ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
1000	2B	IH 43 NB	786NB+34	25.1' RT				--	25
			786NB+92	24.7' RT				--	33
			789NB+29	24.8' RT				--	32
			790NB+21	25.2' RT				--	25
			799NB+00	33.1' RT				19	--
			803NB+32	25.3' RT				3	--
			807NB+94	41.0' RT				10	--
			821NB+05	17.9' RT				13	--
		IH 94 SB	780SB+89	29.3' LT				12	--
			783SB+79	29.7' LT				12	--
			786SB+74	23.8' LT				--	26
			787SB+64	23.5' LT				--	36
			790SB+02	23.9' LT				--	36
			790SB+70	24.2' LT				--	26
			794SB+78	29.5' LT				12	--
			799SB+34	50.6' LT				5	--
			801SB+48	25.1' LT				4	--
			817SB+04	30.2' LT				13	--
			819SB+97	24.9' LT					
	2B	W-E RAMP (IH 43 NB)	203+44	15.3' LT				7	--
			210+80	8.6' RT	-	210+80	18.5' LT	27	--
	STAGE 2B TOTAL							137	239
	1A	LAYTON AVE & 124TH ST	29+85	30+04				--	81
	1B	LAYTON AVE & 124TH ST	29+50	30+46				--	64
	1A/1B	UNDISTRIBUTED (BASE PATCHING)						--	16,100
	TOTAL							311	17,174

STAGE	FROM/TO STATION	LOCATION	205.0100 EXCAVATION COMMON CUT (2)	205.0100 EXCAVATION COMMON EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (6) FACTOR 1.25	MASS ORDINATE +/- (7)	WASTE	208.0100 BORROW	COMMENT
STAGE 1	891+00 TO 891+50	LAYTON AVE - RAMP A	21	0	20	1	4	5	-4		4	DECK REPLACEMENT
	894+50 TO 896+00	LAYTON AVE - RAMP A	59	0	56	3	0	0	3	3		DECK REPLACEMENT
	893+25	LAYTON AVE - RAMP A	7	0	0	7	0	0	7	7		FLUME & RIPRAP
	883+21 TO 884+90	LAYTON AVE - RAMP A	13	0	6	7	1	1	6	6		BEAM GUARD EAT
	888+72 TO 890+43	LAYTON AVE - RAMP A	23	0	12	11	37	46	-35		35	BEAM GUARD EAT
	888+99 TO 890+62	LAYTON AVE - RAMP A	25	0	10	15	49	61	-46		46	BEAM GUARD EAT
STAGE 1 SUBTOTAL			148	0	104	44	91	114	-70	16	86	
STAGE 1A	65+46 TO 66+90	IH 43 NB (MEDIAN)	25	0	0	25	2	3	23	23		ADDED GUTTER
	66+90 TO 67+03	IH 43 NB (MEDIAN)	1	0	0	1	0	0	1	1		FLUME & RIPRAP
STAGE 1A SUBTOTAL			26	0	0	26	2	3	24	24		
STAGE 1B	65+30 TO 67+40	IH 43 SB	27	0	0	27	21	26	1	1		ADDED GUTTER
	66+31		4	0	0	4	0	0	4	4		FLUME & RIPRAP
	83+40 TO 89+60	IH 43 SB	82	0	0	82	11	14	68	68		ADDED GUTTER
	85+47		5	0	0	5	0	0	5	5		FLUME & RIPRAP
	87+53		5	0	0	5	0	0	5	5		FLUME & RIPRAP
	89+63		6	0	0	6	0	0	6	6		FLUME & RIPRAP
	00+03 TO 14+50	CHANNEL	3,303	0	149	3,154	76	95	3,059	3,059		CHANNEL
STAGE 1B SUBTOTAL			3,432	0	149	3,283	108	135	3,148	3,148	0	
STAGE 3A	784+87 TO 786+55	IH 43 NB	105	0	22	83	0	0	83	83		BEAM GUARD EAT
	790+30 TO 791+98	IH 43 SB	56	0	19	37	0	0	37	37		BEAM GUARD EAT
	844+43 TO 846+11	IH 43 NB	31	0	16	15	4	5	10	10		BEAM GUARD EAT
	850+70 TO 852+39	IH 43 SB	27	0	15	12	0	0	12	12		BEAM GUARD EAT
	868+80 TO 870+48	IH 43 NB	32	0	18	14	2	3	12	12		BEAM GUARD EAT
	879+46 TO 881+14	IH 43 SB	25	0	14	11	5	6	5	5		BEAM GUARD EAT
	894+99 TO 896+66	IH 43 SB	12	0	13	-1	3	4	-5		5	BEAM GUARD EAT
	69+27 TO 70+96	IH 43 NB	15	0	6	9	0	0	9	9		BEAM GUARD EAT
	90+30 TO 91+99	IH 43 NB	17	0	7	10	45	56	-46		46	BEAM GUARD EAT
	115+27 TO 116+96	US 45 NB (W-N RAMP)	9	0	0	9	0	0	9	9		BEAM GUARD EAT
	115+34 TO 116+97	US 45 NB (W-N RAMP)	10	0	0	10	33	41	-31		31	BEAM GUARD EAT
	373+71 TO 375+29	IH 43 SB OFF RAMP TO STH 100	14	0	10	4	14	18	-14		14	BEAM GUARD EAT
STAGE 3A SUBTOTAL			353	0	140	213	106	133	81	176	96	
STAGE 3B	842+63 TO 844+31	IH 43 NB	23	0	20	3	1	1	2	2		BEAM GUARD EAT
	851+11 TO 852+80	IH 43 NB	27	0	20	7	15	19	-12		12	BEAM GUARD EAT
	852+66 TO 854+34	IH 43 SB	32	0	20	12	18	23	-11		11	BEAM GUARD EAT
	865+75 TO 867+43	IH 43 NB	27	0	19	8	20	25	-17		17	BEAM GUARD EAT
	880+17 TO 881+85	LAYTON AVE - RAMP D	28	0	10	18	10	13	6	6		BEAM GUARD EAT
	882+84 TO 884+52	IH 43 NB	34	0	21	13	6	8	6	6		BEAM GUARD EAT
	895+64 TO 897+34	IH 43 SB	31	0	21	10	7	9	1	1		BEAM GUARD EAT
	899+12 TO 900+80	IH 43 NB	11	0	10	1	6	8	-7		7	BEAM GUARD EAT
	21+93 TO 23+61	IH 43 SB	14	0	9	5	0	0	5	5		BEAM GUARD EAT
	46+75 TO 48+43	IH 43 NB	15	0	9	6	0	0	6	6		BEAM GUARD EAT
	52+25 TO 53+93	IH 43 SB	20	0	9	11	23	29	-18		18	BEAM GUARD EAT
	54+14 TO 55+82	IH 43 NB	11	0	9	2	4	5	-3		3	BEAM GUARD EAT
	69+88 TO 71+56	IH 43 NB	22	0	10	12	3	4	8	8		BEAM GUARD EAT
	80+15 TO 81+83	IH 43 SB	30	0	10	20	48	60	-40		40	BEAM GUARD EAT
	203+30 TO 203+95	IH 43 NB (W-E RAMP)	9	0	4	5	0	0	5	5		BEAM GUARD EAT
	290+42 TO 292+10	IH 43 NB/US 45 NB	22	0	12	10	12	15	-5		5	BEAM GUARD EAT
STAGE 3B SUBTOTAL			356	0	213	143	173	216	-73	38	112	
GRAND TOTAL			4,315	0	606	3,709	480	600	3,109	3,402	293	
TOTAL COMMON EXC			4,315									

NOTES:

(1) EXCAVATION COMMON IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(3) EBS EXCAVATION TO BE BACKFILLED WITH CUT MATERIAL.

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(6) EXPANDED FILL FACTOR = 1.25
EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR

(7) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

(8) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

BASE AGGREGATE ITEMS

CATEGORY	ROADWAY	STATION	TO	STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0500 SHAPING SHOULDERS STA
1000	IH 43 (INSIDE SHOULDERS)	780NB+00		20+00	684	6
		780SB+89		20+00	712	6
		20+00		94NB+69	65	4
		20+00		92SB+51	26	--
	IH 43 (OUTSIDE SHOULDERS)	780NB+00		20+00	309	10
		780SB+89		20+00	241	6
		20+00		94NB+69	168	8
		20+00		92SB+51	147	6
	LAYTON AVE - RAMP D	879D+57		901D+49	318	--
	LAYTON AVE - RAMP A	887A+44		902A+36	250	4
	IH 43 NB ON RAMP FROM STH 100	276+01		285+72	55	--
	IH 43 SB OFF RAMP TO STH 100	362+96		375+90	68	2
	W-N RAMP (USH 45 NB)	115+27		117+09	47	--
	W-E RAMP (IH 43 NB)	203+29		210+80	12	--
	MOORLAND RD ROUNDABOUT	34+43		35+60	7	--
	INT OF LAYTON AVE & 124TH ST	29+42		30+60	8	--
	TOTAL				3,115	52

FOR INFORMATION ONLY	
AGGREGATE UNIT WEIGHTS USED	
Base Aggregate Dense 3/4-Inch	2.1 TON/CY

HIGH FRICTION SURFACE TREATMENT

CATEGORY	STAGE	LOCATION	STATION	TO	STATION	OFFSET	SPV.0180.02 RESIN BINDER HIGH FRICTION SURFACE TREATMENT MODIFIED SY
1000	4A	IH 43 NB	56NB+42	-	87NB+16	RT/LT	5,962
		IH 43 OFF RAMP TO STH 100	366+24	-	376+48	RT/LT	3,994
	STAGE 4A TOTAL						9,956
	4B	IH 43 NB	56NB+42	-	87NB+16	RT	6,169
	2	MOORLAND ROUNDABOUT	32+24 (NB)	-	36+16 (NB)	RT/LT	4,092
	TOTAL						20,217

ASPHALTIC SHOULDER RUMBLE STRIPS

CATEGORY	LOCATION	STATION	TO	STATION	OFFSET	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	465.0450 ASPHALTIC INTERSECTION RUMBLE STRIPS SY
1000	IH 43 NB	780NB+00	-	786NB+62	LT	662	--
		790NB+21	-	804NB+98	LT	1,478	--
		807NB+93	-	873NB+95	RT	6,562	--
		809NB+02	-	874NB+25	LT	6,484	--
		876NB+13	-	902NB+43	RT	2,630	--
		876NB+39	-	878NB+04	LT	166	--
		887NB+66	-	902NB+43	LT	1,469	--
	IH 43 SB	780SB+90	-	783SB+73	LT	283	--
		780SB+90	-	786SB+73	RT	583	--
		790SB+70	-	804SB+81	RT	1,411	--
		794SB+79	-	799SB+41	LT	463	--
		807SB+28	-	875SB+29	RT	6,787	--
		817SB+04	-	875SB+67	LT	5,871	--
		877SB+74	-	902SB+80	RT	2,506	--
		878SB+18	-	879SB+92	LT	175	--
		885SB+74	-	902SB+80	LT	1,704	--
	LAYTON AVE - RAMP A	895A+00	-	901A+00		--	53
	TOTAL					39,234	53

TIE BARS & DOWEL BARS

CATEGORY	ROADWAY	STATION	TO	STATION	OFFSET	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	COMMENTS
1000	IH 43 NB	786NB+34	-	790NB+22	RT	16	59	MOORLAND APPROACH SLABS
		821NB+00	-	94NB+69	RT/LT	2,139	2,750	BASE PATCHING
		65NB+46	-	67NB+00	RT	62	2	ADDED GUTTER
	IH 43 SB	783SB+74	-	790SB+70	LT	--	59	MOORLAND APPROACH SLABS
		820SB+00	-	92SB+51	RT/LT	2,240	2,880	BASE PATCHING
		65SB+30	-	67SB+40	LT	82	2	ADDED GUTTER
		83SB+40	-	89SB+66	LT	243	2	ADDED GUTTER
	MOORLAND RD - RAMP L	786L+06	-	789L+70	RT/LT	--	50	APPROACH SLABS
	LAYTON AVE - RAMP A	891A+45	-	894A+19	RT/LT	--	59	APPROACH SLABS
		887A+45	-	902A+37	RT/LT	349	449	BASE PATCHING
	LAYTON AVE - RAMP D	885D+15	-	901D+48	RT/LT	390	502	BASE PATCHING
	US 45 (W-N RAMP)	110+39	-	118+79	RT/LT	335	430	BASE PATCHING
	IH 43 NB (W-E RAMP)	202+65	-	210+80	RT/LT	111	143	BASE PATCHING
	IH 43 SB (E-W RAMP)	110+46	-	119+07	RT/LT	145	186	BASE PATCHING
	INT OF LAYTON AVE & 124TH ST	29+59	-	30+42	RT	--	4	TEMPORARY CURB RAMPS
	TOTAL					6,112	7,577	

CONCRETE PAVEMENT ITEMS

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	390.0403 BASE PATCHING CONCRETE SHES SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	415.1410 CONCRETE PAVEMENT APPROACH SLAB HES SY	415.0120 CONCRETE PAVEMENT 12-INCH SY	415.1120 CONCRETE PAVEMENT HES 12-INCH SY
1000	1	LAYTON AVE - RAMP A	887A+45		894A+04	RT/LT	666	296	--	125	--
	1A	IH 43 NB	786NB+33	-	790NB+21	RT/LT	--	--	324	--	175
			821NB+00	-	899NB+00	RT/LT	2,037	--	--	--	--
			899NB+00	-	20+00	LT	267	--	--	--	--
			20+00	-	94+69	RT/LT	4,034	--	--	--	--
	1A	IH 43 SB	786SB+73	-	790SB+70	RT/LT	--	--	323	--	288
			820SB+00	-	899SB+00	RT/LT	2,148	--	--	--	--
			899SB+00	-	20+00	RT/LT	275	--	--	--	--
			20+00	-	92SB+51	RT/LT	4,206	--	--	--	--
	1A	IH 43 SB OFF RAMP TO STH 100	362+94		376+38	RT/LT	1,416	--	--	--	--
	1A	W-N RAMP (USH 45 NB)	110+39		118+79	LT	638	--	--	--	--
	1A	E-W RAMP (IH 43 SB)	110+46		119+07	RT/LT	276	--	--	--	--
	STAGE 1A TOTAL						15,297	--	647	--	463
	1B	IH 43 NB	786NB+34		790NB+22	RT/LT	--	--	236	--	181
			821NB+00		899NB+00	RT	2,043	--	--	--	--
			899NB+00		20+00	RT	196	--	--	--	--
			20+00		94NB+69	RT	4,294	--	--	--	--
	1B	IH 43 SB	786SB+74		790SB+70	RT/LT	--	--	248	--	217
			820SB+00		899SB+00	LT	2,124	--	--	--	--
			899+00 SB		20+00	LT	193	--	--	--	--
			20+00		92+51 SB	LT	3,443	--	--	--	--
	1B	MOORLAND RD - RAMP L	786L+07		789L+70	RT/LT	--	--	195	--	239
	1B	LAYTON AVE - RAMP D	885D+15		901D+49	RT	744	--	--	--	--
	1B	IH 43 NB ON RAMP FROM STH 100	276+02		285+63	RT/LT	1,303	--	--	--	--
	1B	W-E RAMP (IH 43 NB)	202+65		210+80	RT/LT	212	--	--	--	--
	STAGE 1B TOTAL						14,552	--	680	--	637
	TOTAL						30,516	296	1,327	125	1,099

FIXED MESSAGE SIGNS

CATEGORY	LOCATION	SIZE	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	NOTES
1000	IH 43 NB PRIOR TO MOORLAND RD (RAMP A DETOUR)	54"x126"	47	"OVERSIZE LOADS RESTRICTED BEYOND NEXT EXIT"
	RAMP A DETOUR	30"x24"	40	"LAYTON AVE"
	RAMP A DETOUR	42"x30"	18	"LAYTON AVE"
	TOTAL		105	

PREPARE FOUNDATION FOR CONCRETE PAVEMENT
(FOR INFORMATION ONLY)

CATEGORY	ROADWAY	STATION	TO	STATION
1000	IH 43 NB	786+33	-	787+34
		789+19	-	790+21
	IH 43 SB	786+74	-	787+75
		789+60	-	790+70
	MOORLAND RD - RAMP L	786L+06	-	786L+81
		788L+92	-	789L+70
	LAYTON AVE - RAMP A	891A+44	-	892A+13
		893A+54	-	894A+19

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ASPHALTIC ITEMS

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	455.0605 TACK COAT GAL	460.7423 HMA PAVEMENT 3 HT 58-28 H TON	460.7424 HMA PAVEMENT 4 HT 58-28 H TON	460.8624 HMA PAVEMENT 4 SMA 58-28 V TON	COMMENTS
1000	1	LAYTON AVE - RAMP A	887A+45	-	902A+37	RT/LT	568	596	137	326	
	2A	IH 43	780NB+00	-	20+00	RT/LT	1,288	2,318	--	--	WAUKESHA COUNTY - NB
			780SB+89	-	20+00	RT/LT	1,319	2,374	--	--	WAUKESHA COUNTY - SB
			20+00	-	94NB+69	RT/LT	665	1,198	--	--	MILWAUKEE COUNTY - NB
			20+00	-	92SB+51	RT/LT	821	1,478	--	--	MILWAUKEE COUNTY - SB
	2A	IH 43 SB OFF RAMP TO STH 100	362+94	-	376+51	RT/LT	306	551	--	--	
	2A	W - N (USH 45 NB)	110+39	-	118+79	RT/LT	223	--	313	--	
	2A	E - W (IH 43 SB)	110+46	-	119+07	RT/LT	97	--	135	--	
	STAGE 2A TOTAL						4,719	7,919	448	--	
	2B	IH 43	780NB+00	-	20+00	RT	1,397	2,515	--	--	WAUKESHA COUNTY - NB
			780SB+89	-	20+00	LT	1,384	2,492	--	--	WAUKESHA COUNTY - SB
			20+00	-	94NB+69	RT	896	1,613	--	--	MILWAUKEE COUNTY - NB
			20+00	-	92SB+51	LT	657	1,183	--	--	MILWAUKEE COUNTY - SB
	2B	LAYTON AVE - RAMP D	885D+15	-	901D+48	RT/LT	385	693	--	--	
	2B	IH 43 NB ON RAMP FROM STH 10	275+99	-	285+52	RT/LT	315	567	--	--	
	2B	W - E (IH 43 NB)	202+65	-	210+80	RT/LT	74	--	104	--	
	STAGE 2B TOTAL						5,108	9,061	104	--	
	2C	IH 43	780NB+00	-	20+00	RT	1,172	--	1,186	1,054	WAUKESHA COUNTY - NB
			780SB+89	-	20+00	LT	1,145	--	1,104	1,091	WAUKESHA COUNTY - SB
			20+00	-	94NB+69	RT	1,256	--	1,109	1,254	MILWAUKEE COUNTY - NB
			20+00	-	92SB+51	LT	1,028	--	1,006	920	MILWAUKEE COUNTY - SB
	2C	IH 43 SB OFF RAMP TO STH 100	362+94	-	376+51	RT/LT	408	--	342	428	
	2C	W - N (USH 45 NB)	110+39	-	118+79	RT/LT	160	--	--	313	
	2C	E - W (IH 43 SB)	110+46	-	119+07	RT/LT	69	--	--	135	
	STAGE 2C TOTAL						5,239	--	4,748	5,195	
	2D	IH 43	780NB+00	-	20+00	RT/LT	1,339	--	1,445	1,041	WAUKESHA COUNTY - NB
			780SB+89	-	20+00	RT/LT	1,386	--	1,469	1,100	WAUKESHA COUNTY - SB
			20+00	-	94NB+69	RT/LT	1,222	--	1,344	932	MILWAUKEE COUNTY - NB
			20+00	-	92SB+51	RT/LT	1,237	--	1,172	1,149	MILWAUKEE COUNTY - SB
	2D	LAYTON AVE - RAMP D	885D+15	-	901D+48	RT/LT	275	--	174	365	
	2D	IH 43 NB ON RAMP FROM STH 10	275+99	-	285+52	RT/LT	366	--	255	441	
	2D	W - E (IH 43 NB)	202+65	-	210+80	RT/LT	53	--	--	104	
	STAGE 2D TOTAL						5,878	--	5,858	5,131	
	TOTAL						21,513	17,576	11,295	10,653	

FOR INFORMATION ONLY

MATERIAL UNIT WEIGHTS USED	
HMA Pavement	112 LB/(SY*IN)

HMA LONGITUDINAL JOINT REPAIR & PATCHING

CATEGORY	LOCATION	STATION	TO	STATION	465.0110 ASPHALTIC SURFACE PATCHING TON	SPV.0195.01 HMA LONGITUDINAL JOINT REPAIR TON
1000	IH 43 NB	821NB+00	-	94NB+70	--	640
	IH 43 SB	820SB+00	-	92SB+50	--	630
	UNDISTRIBUTED				487	--
	TOTAL				487	1,270

SMA PAVEMENT

CATEGORY	PROJECT	MIX TYPE	460.0115.S HMA PAVEMENT TEST STRIP VOLUMETRICS EACH	460.0120.S HMA PAVEMENT TEST STRIP DENSITY EACH
1000	1090-08-71	4 SMA 58-28 H	1	1

GUARDRAIL MOW STRIP EMULSIFIED ASPHALT

CATEGORY	LOCATION	STATION	TO	STATION	OFFSET	614.0397 GUARDRAIL MOW STRIP EMULSIFIED ASPHALT SY
1000	IH 43	786NB+00	-	786NB+30	LT	15

HMA PAVEMENT PERCENT WITHIN LIMITS (PWL)

CATEGORY	PROJECT	MIX TYPE	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH
1000	1090-08-71	3 HT 58-28 H	1	1

THE FOLLOWING ACCEPTANCE CRITERIA ARE APPLICABLE FOR THIS PROJECT:

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: MIXTURE ACCEPTANCE	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	821+00 TO 94+69 (NB) 820+00 TO 92+51 (SB)	LOWER LAYER	REINFORCED CONCRETE PAVEMENT OR ASPHALTIC PAVEMENT	3 HT 58-28 H	10,990	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
RAMPS (DRIVING LANES)	VARIES	LOWER LAYER	ASPHALTIC CONCRETE PAVEMENT	3 HT 58-28 H	1,590	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005

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CONCRETE SIDEWALK

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF
1000	1A	INT OF LAYTON AVE & 124TH ST	29+90	-	30+01	RT	51	20
	1B	INT OF LAYTON AVE & 124TH ST	29+42	-	29+59	RT	107	10
			30+42	-	30+60	RT	142	10
		UNDISTRIBUTED (SIGNAL WORK)					25	--
	STAGE 1B TOTAL						275	20
	2	MOORLAND RD ROUNDABOUT	34+43	-	34+56	RT	96	10
			34+65	-	34+73	RT	35	--
			35+24	-	35+60	RT	150	10
	STAGE 2 TOTAL						281	20
	TOTAL						606	60

FENCING

CATEGORY	ROADWAY	STATION	TO	STATION	OFFSET	204.0170 REMOVING FENCE LF	616.0208 FENCE CHAIN LINK 8-FT LF
1000	IH 43	869SB+03	-	870SB+28	LT	131	131

SEALING CRACKS AND JOINTS

CATEGORY	ROADWAY	STATION	OFFSET	CRACK LENGTH	492.2020.S CLEANING AND SEALING CRACKS AND JOINTS WITH HOT-APPLIED SEALANT MI
1000	MOORLAND RD - RAMP L (R-67-87)	783L+00	RT	305	0.058
	MOORLAND RD AT I-43 (R-67-80)	29NB+00	RT	5	0.001
	TOTAL				0.1

CONCRETE ITEMS

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	416.1010 CONCRETE SURFACE DRAINS CY	601.0205 CONCRETE GUTTER 24-INCH LF	601.0452 CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE D LF	601.0600 CONCRETE CURB PEDESTRIAN LF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	**645.0130 GEOTEXTILE FABRIC TYPE R SY
1000	1	LAYTON AVE - RAMP A		893A+66		LT	5	--	--	--	--	43
	1A	IH 43	65NB+46	-	67NB+00	LT	1	144	--	--	--	6
	1B	IH 43	65SB+30	-	67SB+40	LT	2	194	--	--	--	18
			83SB+40	-	89SB+65	LT	9	578	--	--	--	82
	STAGE 1B TOTAL (IH 43)						11	772	--	--	--	100
	1A	INT OF LAYTON AVE & 124TH ST	29+85	-	30+04	RT	--	--	63	11	39	--
	1B	INT OF LAYTON AVE & 124TH ST	29+50	-	29+61	RT	--	--	24	--	--	--
			30+40	-	30+50	RT	--	--	22	--	--	--
	STAGE 1B TOTAL (LOCAL ROADS)						--	--	46	--	--	--
	TOTAL						17	916	109	11	39	148

**QUANTITIES SHOWN ELSEWHERE

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BEAM GUARD

CATEGORY	STAGE	ROADWAY	STATION		TO STATION	OFFSET	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH
1000										
WAUKESHA COUNTY	1	LAYTON RAMP A	884A+39	-	886A+18	LT	126	--	1	1
			890A+13	-	892A+03	RT	103	39.4	1	--
			889A+93	-	891A+74	LT	86	39.4	1	--
	STAGE 1 TOTAL						315	79	3	1
	3A	IH 43 (NB)	786NB+19	-	786NB+94	LT	--	39.4	1	--
			789NB+74	-	790NB+82	LT	101	6	--	1
			845NB+19	-	848NB+50	LT	277	--	1	1
			869NB+98	-	873NB+81	LT	290	39.4	1	--
	3A	IH 43 (SB)	786SB+15	-	787SB+22	RT	101	6	--	1
			789SB+60	-	790SB+80	RT	25	39.4	1	--
			848SB+30	-	851SB+65	RT	284	--	1	1
			879SB+70	-	880SB+80	RT	29	39.4	1	--
			891SB+94	-	895SB+47	RT	300	--	1	1
	STAGE 3A SUBTOTAL						1,407	170	7	5
	3B	IH 43 (NB)	807NB+90	-	819NB+08	RT	1,102	6.0	--	1
			843NB+81	-	844NB+71	RT	--	39.4	1	--
			852NB+25	-	853NB+72	RT	93	--	1	1
			866NB+93	-	873NB+26	RT	541	39.4	1	--
			884NB+02	-	886NB+18	RT	163	--	1	1
			900NB+36	-	901NB+69	RT	41	39.4	1	--
	3B	IH 43 (SB)	852SB+26	-	853SB+16	LT	--	39.4	1	--
			863SB+28	-	874SB+25	LT	1,091	6	--	1
			894SB+03	-	896SB+14	LT	118	39.4	1	--
	3B	LAYTON RAMP D	879D+56	-	880D+69	LT	21	39.4	1	--
	STAGE 3B SUBTOTAL						3,169	248	8	4
	WAUKESHA COUNTY SUBTOTAL						4,891	497	18	10

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BEAM GUARD CONTINUED

CATEGORY	STAGE	ROADWAY	STATION		TO STATION	OFFSET	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH
1000										
MILWAUKEE COUNTY	3A	IH 43 (NB)	70NB+64	-	71NB+36	LT	--	39.4	1	--
			78NB+90	-	84NB+30	LT	531	6	--	1
	3A	H 43 (NB) / USH 45 (NB)	91NB+49	-	93NB+19	LT	78	39.4	1	--
	3A	OFF RAMP TO STH 100	367+93	-	370+44	RT	237	6	--	1
			367+91	-	370+56	LT	277	6	--	1
			373+37	-	374+14	LT	--	39.4	1	--
	3A	W-N (USH 45 NB)	116+54	-	117+35	RT	--	39.4	1	--
			116+52	-	117+35	LT	--	39.4	1	--
STAGE 3A SUBTOTAL							1,123	215	5	3
	3B	IH 43 (NB)	48+02	-	49+82	RT	88	39.4	1	--
			55+41	-	63+78	RT	751	--	1	1
			71NB+25	-	71NB+96	RT	--	39.4	1	--
			78NB+90	-	83NB+50	RT	468	6	--	1
	3B	IH 43 (SB)	20+80	-	22+34	LT	52	39.4	1	--
			51+38	-	52+84	LT	54	39.4	1	--
			78SB+46	-	80SB+66	LT	127	39.4	1	--
	3B	H 43 (NB) / USH 45 (NB)	91NB+61	-	93NB+19	RT	65	39.4	1	--
	3B	W-E (IH 43 NB)	203+53	-	204+33	LT	--	39.4	1	--
STAGE 3B SUBTOTAL							1,605	282	8	2
MILWAUKEE COUNTY SUBTOTAL							2,727	497	13	5
TOTAL							7,618	994	31	15

EROSION CONTROL ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	OFFSET	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2004 EROSION MAT CLASS I TYPE B SY	SPV.0090.02 HEAVY DUTY SILT FENCE LF
1000	IH 43 NB (INSIDE)	780NB+00	-	95NB+00	LT	204	204	--	--	476	789
	IH 43 NB (OUTSIDE)	780NB+00	-	95NB+00	RT	1,061	1,061	--	--	781	808
	IH 43 SB (INSIDE)	780SB+90	-	92SB+50	RT	435	435	--	--	160	205
	IH 43 SB (OUTSIDE)	780SB+90	-	92SB+50	LT	2,018	2,018	--	--	2,650	640
	ON RAMP FROM CTH O NB	793+50	-	795+50	RT	198	198	--	--	15	--
	LAYTON AVE - RAMP A	883A+00	-	896A+00	RT/LT	1,646	1,646	--	--	1,354	--
	LAYTON AVE - RAMP D	880D+00	-	882D+00	LT	225	225	--	--	137	--
	IH 43 SB OFF RAMP TO STH 100	373+50	-	375+30	LT	206	206	--	--	161	--
	US 45 (W-N RAMP)	115NB+00	-	117NB+10	RT/LT	441	441	--	--	218	--
	IH 43 NB (W-E RAMP)	203NB+50	-	204NB+00	LT	--	--	--	--	28	--
	MOORLAND RD ROUNDABOUT	34+43	-	35+60	RT	--	--	--	--	8	--
	INT OF LAYTON AVE & 124TH ST	29+29	-	30+77	RT	--	--	--	--	2	--
	UNDISTRIBUTED					1,609	1,609	2	2	1,495	611
	TOTAL					8,043	8,043	2	2	7,485	3,053

RESTORATION ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	OFFSET	625.0100 TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0170 SEEDING MIXTURE NO. 70 LB	630.0200 SEEDING TEMPORARY LB	630.0400 SEEDING NURSE CROP LB	630.0500 SEED WATER MGAL	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
1000	IH 43 NB (INSIDE)	780NB+00	-	95NB+00	LT	476	0.30	1.9	1.5	--	2.9	10.7	--	--
	IH 43 NB (OUTSIDE)	780NB+00	-	95NB+00	RT	781	0.49	0.8	2.7	--	5.4	17.5	--	--
	IH 43 SB (INSIDE)	780SB+90	-	92SB+50	RT	160	0.10	0.0	0.6	--	1.2	3.6	--	--
	IH 43 SB (OUTSIDE)	780SB+90	-	92SB+50	LT	2,650	1.67	0.0	9.5	--	19.1	59.4	--	--
	ON RAMP FROM CTH O NB	793+50	-	795+50	RT	15	0.01	0.4	--	--	--	0.3	--	--
	LAYTON AVE - RAMP A	883A+00	-	896A+00	RT/LT	1,354	0.85	--	4.9	--	9.7	30.3	--	--
	LAYTON AVE - RAMP D	880D+00	-	882D+00	LT	137	0.09	--	0.5	--	1.0	3.1	--	--
	IH 43 SB OFF RAMP TO STH 100	373+50	-	375+30	LT	161	0.10	--	0.6	--	1.2	3.6	--	--
	US 45 (W-N RAMP)	115NB+00	-	117NB+10	RT/LT	218	0.14	--	0.8	--	1.6	4.9	--	--
	IH 43 NB (W-E RAMP)	203NB+50	-	204NB+00	LT	28	0.02	--	0.1	--	0.2	0.6	--	--
	MOORLAND RD ROUNDABOUT	34+43	-	35+60	RT	8	0.005	0.2	--	--	--	0.2	--	--
	INT OF LAYTON AVE & 124TH ST	29+29	-	30+77	RT	57	0.001	--	0.01	--	0.01	0.0	1	56
	UNDISTRIBUTED					1,495	1	1	5	50	11	33		
	TOTAL					7,541	5	4	26	50	53	168	1	56

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INLET PROTECTION

CATEGORY	LOCATION	STATION	TO	STATION	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7020 INLET PROTECTION TYPE D EACH
1000	IH 43 (WAUKESHA CO)	780NB+00	-	20+00	--	8	--	--
	IH 43 (MILWAUKEE CO)	20+00	-	111NB+00	--	4	--	20
	MOORLAND RD - RAMP L	786L+00			--	1	--	--
	MOORLAND RD ROUNDABOUT	32NB+00	-	36NB+00	--	--	20	--
	SUNNY SLOPE RD				--	2	--	--
	INT OF LAYTON AVE & 124TH ST	29+00	-	31+00	1	7	--	1
	IH 43 SB OFF RAMP TO STH 100	362+00	-	376+00	--	--	--	4
	IH 43 NB ON RAMP FROM STH 100	280+30			--	--	--	1
	IH 43 SB (E-W RAMP)	109SB+00	-	120SB+00	--	2	--	5
	US 45 (W-N RAMP)	111NB+00	-	118NB+79	--	--	--	4
	IH 43 NB (W-E RAMP)	203NB+00	-	210NB+80	--	2	--	4
	UNDISTRIBUTED				--	7	5	10
	TOTAL				1	33	25	49

RIPRAP ITEMS

CATEGORY	LOCATION	STATION	OFFSET	606.0100 RIPRAP LIGHT CY	**606.0200 RIPRAP MEDIUM CY	**645.012 GEOTEXTILE TYPE HR SY	**645.0130 GEOTEXTILE TYPE R SY	COMMENT
1000	LAYTON AVE - RAMP A	894A+04	94' LT	3	--	--	8	FLUME
	IH 43 NB	67NB+05	16' LT	1	--	--	2	FLUME
	IH 43 SB	66SB+26	82' LT	3	--	--	8	FLUME
		85SB+75	109' LT	3	--	--	8	FLUME
		87SB+77	99' LT	3	--	--	8	FLUME
		89SB+95	124' LT	3	--	--	8	FLUME
	CHANNEL	0+00 TO 14+51, LT		--	3,093	6,185	--	
	TOTAL			14	3,093	6,185	42	

**QUANTITIES SHOWN ELSEWHERE

CULVERT PIPE

CATEGORY	ROADWAY	STATION	TO	STATION	OFFSET	INLET ELEV	DISCH ELEV	SLOPE (%)	611.8115 ADJUSTING INLET COVERS EACH	SPV.0090.06 CURED-IN-PLACE PIPE LINER (CIPP) 36-INCH LF
1000	IH 43 NB AT 116TH ST	49+74	-	51+29	RT	810.93	809.13	1.10	--	145
	IH 43 SB AT 116TH ST	49+99	-	51+38	LT	811.23	808.63	1.77	--	128
	IH 43	21+00	-	64+00	RT/LT	--	--	--	17	--
	TOTAL								17	273

ADJUSTING WATER BOXES

CATEGORY	LOCATION	STATION	OFFSET	SPV.0060.07 ADJUSTING WATER BOXES EACH
8000	INT OF LAYTON AVE & 124TH ST	30+52	44.4' RT	1

PAVEMENT MARKING ITEMS

CATEGORY	LOCATION	STATION		TO	STATION	646.1020 MARKING LINE EPOXY 4-INCH WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH WHITE LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH YELLOW LF	646.1546.S MARKING REPLACE LINE CONTRAST WET REFLECTIVE EPOXY 4-INCH 12.5 FT LINE 37.5 FT SKIP WHITE LF	646.1555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH 12.5 FT LINE 37.5 FT SKIP WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH 6 FT LINE 3 FT SKIP WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH 6 FT LINE 3 FT SKIP WHITE LF	646.3546.S MARKING REPLACE LINE CONTRAST WET REFLECTIVE EPOXY 8-INCH WHITE LF	646.3555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH 3 FT LINE 9 FT SKIP WHITE LF	646.3555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH 3 FT LINE 12 FT SKIP WHITE LF	SPV.0090.03 MARKING CONTRAST EPOXY 4-INCH 12.5 FT LINE 37.5 FT SKIP WHITE LF	SPV.0090.04 MARKING CONTRAST EPOXY 8-INCH 3 FT LINE 9 FT SKIP WHITE LF	SPV.0090.04 MARKING CONTRAST EPOXY 8-INCH 3 FT LINE 9 FT SKIP WHITE LF
1000	IH 43 NB (WAUKESHA CO)	780NB+00	-		20+00	3,659	4,169	8,023	7,679	1,046	2,004	--	--	--	355	90	--	--	860	72
	IH 43 SB (WAUKESHA CO)	774SB+75	-		20+00	3,638	4,607	7,657	8,189	1,163	2,038	--	--	--	533	--	--	--	1,475	189
	IH 43 NB (MILWAUKEE CO)	20+00	-		107NB+48	4,137	4,348	3,910	4,395	325	1,100	--	--	--	485	66	--	763	420	273
	IH 43 SB (MILWAUKEE CO)	20+00	-		104SB+82	1,231	1,390	6,885	7,059	600	1,769	--	--	--	197	330	--	44	173	--
	MOORLAND RD & RAMPS (NORTH)	774SB+75	-		802SB+19	3,484	2,440	--	--	--	--	1,978	540	--	--	--	--	100	995	--
	MOORLAND RAMPS (SOUTH)	767L+94	-		804+01	4,105	3,671	126	126	--	--	--	--	--	--	--	--	--	4,218	
	SUNNY SLOPE RD					351	351	--	--	--	--	--	--	--	--	--	--	--	--	--
	LAYTON AVE - RAMP A	884A+49	-		902A+62	177	178	1,258	1,599	--	263	--	--	--	490	--	--	38	--	--
	LAYTON AVE - RAMP D	880D+32	-		901D+49	--	--	2,117	1,565	--	75	--	--	--	540	--	--	--	--	--
	SB OFF RAMP TO STH 100	361+33	-		379+03	1,142	1,340	574	569	--	--	--	--	--	182	21	--	--	1,033	183
	NB ON RAMP FROM STH 100	274+13	-		292+01	--	--	2,030	1,150	--	300	--	--	--	1,635	9	--	--	--	--
	NB HALE (W-N & W-E RAMPS)	107NB+48	-		210NB+80	815	823	999	1,111	75	113	--	--	--	803	--	75	--	582	--
	SB HALE (E-W RAMP)	104SB+82	-		119SB+07	85	565	874	860	--	--	--	--	481	--	--	--	--	--	--
		SUBTOTAL				22,824	23,882	34,453	34,302	3,209	7,661	1,978	540	481	5,220	516	75	944	9,756	717
		TOTAL				46,706		68,755		3,209	7,661	2,518		481	5,811			944	10,473	

PAVEMENT MARKING ITEMS CONTINUED

CATEGORY	LOCATION	STATION		STATION	646.5020 MARKING ARROW EPOXY (TYPE 1) WHITE EACH	646.5020 (TYPE 2) WHITE EACH	646.5020 (TYPE 3) WHITE EACH	646.5020 (TYPE 3R) WHITE EACH	646.5020 (TYPE 4) WHITE EACH	646.5020 (TYPE 5) WHITE EACH	646.5120 MARKING WORD EPOXY WHITE EACH	646.5220 MARKING SYMBOL EPOXY WHITE EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE LF	646.6320 MARKING DOTTED EXTENSION EPOXY 18-INCH WHITE LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH WHITE LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH YELLOW LF	646.7220 MARKING CHEVRON EPOXY 24-INCH WHITE LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH WHITE LF	646.7520 MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH WHITE LF	646.8120 MARKING CURB EPOXY YELLOW LF	646.8220 MARKING ISLAND NOSE EPOXY YELLOW EACH
1000	IH 43 NB (WAUKESHA CO)	780NB+00	-	20+00	--	--	--	--	2	--	--	--	--	--	--	218	--	--	--	--	--
	IH 43 SB (WAUKESHA CO)	774SB+75	-	20+00	--	--	--	--	--	--	--	--	--	--	--	262	--	--	--	--	--
	IH 43 NB (MILWAUKEE CO)	20+00	-	107NB+48	--	--	--	--	--	--	--	--	--	--	900	1,007	--	--	--	--	--
	IH 43 SB (MILWAUKEE CO)	20+00	-	104SB+82	--	2	1	--	--	--	--	--	--	--	1,016	988	--	--	--	--	--
	MOORLAND RD & RAMPS (NORTH)	774SB+75	-	802SB+19	5	7	3	3	--	--	6	--	--	94	289	50	164	--	84	--	--
	MOORLAND RAMPS (SOUTH)	767L+94	-	804+01	--	--	--	--	--	--	--	--	50	--	220	--	--	--	24	--	--
	LAYTON AVE - RAMP A	884A+49	-	902A+62	--	2	--	--	2	--	1	--	46	--	--	--	113	--	--	82	1
	LAYTON AVE - RAMP D	880D+32	-	901D+49	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--
	LAYTON AVE	29+60	-	30+41	--	--	--	--	--	--	--	--	36	--	--	--	--	129	--	--	--
	SB OFF RAMP TO STH 100	361+33	-	379+03	--	4	--	--	1	--	--	--	16	--	--	--	523	60	--	--	--
	NB ON RAMP FROM STH 100	274+13	-	292+01	--	--	--	--	--	--	--	2	48	--	53	--	--	92	--	--	--
	NB HALE (W-N & W-E RAMPS)	107NB+48	-	210NB+80	--	--	--	--	--	--	--	--	--	--	93	83	520	--	--	--	--
	SB HALE (E-W RAMP)	104SB+82	-	119SB+07	--	--	--	--	--	--	--	--	--	--	26	10	--	--	--	--	--
		SUBTOTAL			5	15	4	3	5	2	7	2	196	94	2,597	2,618	1,320	281	108	82	1
		TOTAL					34				7	2	196	94	5,215		1,320	281	108	82	1

TRAFFIC CONTROL

CATEGORY	STAGE	LOCATION	STAGE DURATION DAYS	643.0300 TRAFFIC CONTROL DRUMS *EACH	643.0300 TRAFFIC CONTROL DRUMS DAYS	643.0410 TRAFFIC CONTROL BARRICADES TYPE II *EACH	643.0410 TRAFFIC CONTROL BARRICADES TYPE II DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III *EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A *EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C *EACH	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS	643.0800 TRAFFIC CONTROL ARROW BOARDS *EACH	643.0800 TRAFFIC CONTROL ARROW BOARDS DAYS	643.0900 TRAFFIC CONTROL SIGNS *EACH	643.0900 TRAFFIC CONTROL SIGNS DAYS	643.0900 TRAFFIC CONTROL SIGNS (DETOUR) *EACH	643.0900 TRAFFIC CONTROL SIGNS (DETOUR) DAYS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II NUMBER OF SIGNS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II NUMBER OF CYCLES	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS *EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAYS	643.1070 TRAFFIC CONTROL CONES 42-INCH *EACH	643.1070 TRAFFIC CONTROL CONES 42-INCH DAYS
1000	IH 43 NB OFF RAMP TO LAYTON AVE/124TH ST																									
	1	LAYTON AVE - RAMP A	75	57	4,275	--	--	4	300	8	600	--	--	--	--	13	975	35	2,625	3	1	3	1	75	--	--
		IH 43 SB FULL CLOSURE	5	199	995	--	--	17	85	34	170	14	70	2	10	36	180	56	280	--	--	--	5	25	--	--
	2	LAYTON AVE - RAMP A	2	57	114	--	--	4	8	8	16	--	--	--	--	13	26	35	70	3	1	3	1	2	--	--
	SUBTOTAL				5,384		--		393		786		70		10		1,181		2,975			6		102		--
	IH 43 AND RAMPS																									
	1A	IH 43 NB (BASE PATCHING)	20	387	7,730	--	--	34	680	68	1,360	31	620	3	50	75	1,490	--	--	2	20	40	--	--	--	--
		IH 43 SB (BASE PATCHING)	20	347	6,940	--	--	35	700	70	1,400	13	260	2	30	65	1,290	21	410	4	20	80	2	40	--	--
		IH 43 (GUTTER WORK)	1	12	12	--	--	--	--	--	--	--	--	1	1	8	8	--	--	--	--	--	--	--	--	--
		IH 43 (APPROACH SLAB AT MOORLAND)	9	159	1,431	--	--	9	81	18	162	52	468	4	36	80	720	--	--	--	--	--	--	--	51	459
		IH 43 SB OFF RAMP TO STH 100	5	99	495	--	--	12	60	24	120	20	100	1	5	21	105	--	--	1	5	5	--	--	--	--
		E-W RAMP	1	113	113	--	--	10	10	20	20	15	15	2	2	25	25	41	41	4	1	4	4	4	--	--
		W-N RAMP	2	147	294	--	--	11	22	22	44	28	56	3	6	24	48	42	84	2	2	4	4	8	--	--
	STAGE 1A TOTAL				17,015		--		1,553		3,106		1,519		130		3,686		535			133		52		459
	1B	IH 43 NB (BASE PATCHING)	20	344	6,880	--	--	31	620	62	1,240	31	620	3	50	68	1,360	--	--	2	20	30	--	--	--	--
		IH 43 SB (BASE PATCHING)	20	372	7,440	--	--	29	580	58	1,160	13	250	3	50	62	1,240	21	410	4	20	70	1	10	--	--
		IH 43 (APPROACH SLAB AT MOORLAND)	6	208	1,248	--	--	23	138	46	276	52	312	4	24	78	468	--	--	1	6	6	--	--	54	324
		IH 43 (STORM SEWER WORK)	5	24	120	--	--	--	--	--	--	--	--	2	10	16	80	--	--	--	--	--	--	--	--	--
		IH 43 (GUTTER WORK)	2	34	68	--	--	--	--	--	--	--	--	1	2	8	16	--	--	--	--	--	--	--	--	--
		IH 43 (CHANNEL WORK)	10	25	250	--	--	--	--	--	--	--	--	1	10	8	80	--	--	--	--	--	--	--	--	--
		MOORLAND RD - RAMP L (B-67-295)	3	190	570	--	--	20	60	40	120	14	42	1	3	36	108	30	90	3	3	9	--	--	--	--
		LAYTON AVE - RAMP D	3	98	294	--	--	15	45	30	90	11	33	1	3	31	93	--	--	--	--	--	--	--	--	--
		IH 43 NB ON RAMP FROM STH 100	5	25	125	--	--	7	35	14	70	--	--	--	--	26	130	--	--	--	--	--	--	--	--	--
		W-E RAMP	1	86	86	--	--	6	6	12	12	--	--	--	--	15	15	50	50	2	1	2	2	2	--	--
		C-67-013	1	11	11	--	--	--	--	--	--	--	--	--	--	5	5	--	--	--	--	--	--	--	--	--
		C-67-021	1	11	11	--	--	--	--	--	--	--	--	1	1	8	8	--	--	--	--	--	--	--	--	--
	STAGE 1B TOTAL				17,103		--		1,484		2,968		1,257		153		3,603		550			117		12		324
	2A	IH 43 NB	4	387	1,546	--	--	34	136	68	272	31	124	3	10	75	298	--	--	2	4	8	--	--	--	--
		IH 43 SB	4	347	1,388	--	--	35	140	70	280	13	52	2	6	65	258	21	82	4	4	16	2	8	--	--
		IH 43 SB OFF RAMP TO STH 100	1	99	99	--	--	12	12	24	24	20	20	1	1	21	21	--	--	1	1	1	--	--	--	--
		E-W RAMP	1	113	113	--	--	10	10	20	20	15	15	2	2	25	25	41	41	4	1	4	4	4	--	--
		W-N RAMP	1	147	147	--	--	11	11	22	22	28	28	3	3	24	24	42	42	2	1	2	4	4	--	--
	STAGE 2A TOTAL				3,293		--		309		618		239		22		626		165			31		16		--

TRAFFIC CONTROL CONTINUED

CATEGORY	STAGE	LOCATION	STAGE DURATION DAYS	643.0300 TRAFFIC CONTROL DRUMS *EACH	643.0300 TRAFFIC CONTROL DRUMS DAYS	643.0410 TRAFFIC CONTROL BARRICADES TYPE II *EACH	643.0410 TRAFFIC CONTROL BARRICADES TYPE II DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III *EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A *EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C *EACH	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS	643.0800 TRAFFIC CONTROL ARROW BOARDS *EACH	643.0800 TRAFFIC CONTROL ARROW BOARDS DAYS	643.0900 TRAFFIC CONTROL SIGNS *EACH	643.0900 TRAFFIC CONTROL SIGNS DAYS	643.0900 TRAFFIC CONTROL SIGNS (DETOUR) *EACH	643.0900 TRAFFIC CONTROL SIGNS (DETOUR) DAYS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II NUMBER OF SIGNS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II NUMBER OF CYCLES	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS *EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAYS	643.1070 TRAFFIC CONTROL CONES 42-INCH *EACH	643.1070 TRAFFIC CONTROL CONES 42-INCH DAYS
1000	2B	IH 43 NB	4	344	1,376	--	--	31	124	62	248	31	124	3	10	68	272	--	--	2	4	6	--	--	--	--
		IH 43 SB	4	372	1,488	--	--	29	116	58	232	13	50	3	10	62	248	21	82	4	4	14	1	2	--	--
		LAYTON AVE - RAMP D	1	98	98	--	--	15	15	30	30	11	11	1	1	31	31	--	--	--	--	--	--	--	--	--
		IH 43 NB ON RAMP FROM STH 100	1	25	25	--	--	7	7	14	14	--	--	--	--	26	26	--	--	--	--	--	--	--	--	--
		W-E RAMP	1	86	86	--	--	6	6	12	12	--	--	--	--	15	15	50	50	2	1	2	2	2	--	--
	STAGE 2B TOTAL				3,073		--		268		536		185		21		592		132			22		4		--
	2C	IH 43 NB	4	344	1,376	--	--	31	124	62	248	31	124	3	10	68	272	--	--	2	4	6	--	--	--	--
		IH 43 SB	3	372	1,116	--	--	29	87	58	174	13	38	3	8	62	186	21	62	4	3	11	1	2	--	--
		LAYTON AVE - RAMP D	1	98	98	--	--	15	15	30	30	11	11	1	1	31	31	--	--	--	--	--	--	--	--	--
		IH 43 NB ON RAMP FROM STH 100	1	25	25	--	--	7	7	14	14	--	--	--	--	26	26	--	--	--	--	--	--	--	--	--
		W-E RAMP	1	86	86	--	--	6	6	12	12	--	--	--	--	15	15	50	50	2	1	2	2	2	--	--
	STAGE 2C TOTAL				2,701		--		239		478		173		19		530		112			19		4		--
	2D	IH 43 NB	4	387	1,546	--	--	34	136	68	272	31	124	3	10	75	298	--	--	2	4	8	--	--	--	--
		IH 43 SB	4	347	1,388	--	--	35	140	70	280	13	52	2	6	65	258	21	82	4	4	16	2	8	--	--
		IH 43 SB OFF RAMP TO STH 100	1	99	99	--	--	12	12	24	24	20	20	1	1	21	21	--	--	1	1	1	--	--	--	--
		E-W RAMP	1	113	113	--	--	10	10	20	20	15	15	2	2	25	25	41	41	4	1	4	4	4	--	--
		W-N RAMP	1	147	147	--	--	11	11	22	22	28	28	3	3	24	24	42	42	2	1	2	4	4	--	--
	STAGE 2D TOTAL				3,293		--		309		618		239		22		626		165			31		16		--
	3A	IH 43 NB	6	387	2,319	--	--	34	204	68	408	31	186	3	15	75	447	--	--	2	6	12	--	--	--	--
		IH 43 SB	4	347	1,388	--	--	35	140	70	280	13	52	2	6	65	258	21	82	4	4	16	2	8	--	--
		IH 43 SB OFF RAMP TO STH 100	2	99	198	--	--	12	24	24	48	20	40	1	2	21	42	--	--	1	2	2	--	--	--	--
		W-N RAMP	1	147	147	--	--	11	11	22	22	28	28	3	3	24	24	42	42	2	1	2	4	4	--	--
	STAGE 3A TOTAL				4,052		--		379		758		306		26		771		124			32		12		--
	3B	IH 43 NB	10	344	3,440	--	--	31	310	62	620	31	310	3	25	68	680	--	--	2	10	15	--	--	--	--
		IH 43 SB	6	372	2,232	--	--	29	174	58	348	13	75	3	15	62	372	21	123	4	6	21	1	3	--	--
		LAYTON AVE - RAMP D	1	98	98	--	--	15	15	30	30	11	11	1	1	31	31	--	--	--	--	--	--	--	--	--
		IH 43 NB ON RAMP FROM STH 100	1	25	25	--	--	7	7	14	14	--	--	--	--	26	26	--	--	--	--	--	--	--	--	--
		W-E RAMP	1	86	86	--	--	6	6	12	12	--	--	--	--	15	15	50	50	2	1	2	2	2	--	--
		IH 43 NB ON RAMP FROM CTH O (MOORLAND RD	1	21	21	--	--	3	3	6	6	--	--	--	--	7	7	--	--	--	--	--	--	--	--	--
	STAGE 3B TOTAL				5,902		--		515		1,030		396		41		1,131		173			38		5		--

TRAFFIC CONTROL CONTINUED

CATEGORY	STAGE	LOCATION	STAGE DURATION	643.0300 TRAFFIC CONTROL DRUMS		643.0410 TRAFFIC CONTROL BARRICADES TYPE II		643.0420 TRAFFIC CONTROL BARRICADES TYPE III		643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C		643.0800 TRAFFIC CONTROL ARROW BOARDS		643.0900 TRAFFIC CONTROL SIGNS		643.0900 TRAFFIC CONTROL SIGNS (DETOUR)		643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II NUMBER OF SIGNS	643.0920 NUMBER OF CYCLES	643.0920 EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS		643.1070 TRAFFIC CONTROL CONES 42-INCH	
			DAYS	*EACH	DAYS	*EACH	DAYS	*EACH	DAYS	*EACH	DAYS	*EACH	DAYS	*EACH	DAYS	*EACH	DAYS	*EACH	DAYS				*EACH	DAYS	*EACH	DAYS
1000	4A	IH 43 NB	1	64	64	--	--	4	4	8	8	18	18	2	2	16	16	--	--	--	--	--	--	--	--	--	--
		IH 43 SB OFF RAMP TO STH 100	1	99	99	--	--	12	12	24	24	20	20	1	1	21	21	--	--	1	1	1	--	--	--	--
	STAGE 4A TOTAL				163		--		16		32		38		3		37		--			1		--		--
	4B	IH 43 NB	1	64	64	--	--	4	4	8	8	18	18	2	2	16	16	--	--	--	--	--	--	--	--	--
	5A	IH 43 NB	1	387	387	--	--	34	34	68	68	31	31	3	3	75	75	--	--	2	1	2	--	--	--	--
		IH 43 SB	1	347	347	--	--	35	35	70	70	13	13	2	2	65	65	21	21	4	1	4	2	2	--	--
	STAGE 5A TOTAL				734		--		69		138		44		4		139		21			6		2		--
	5B	IH 43 NB	1	344	344	--	--	31	31	62	62	31	31	3	3	68	68	--	--	2	1	2	--	--	--	--
		IH 43 SB	1	372	372	--	--	29	29	58	58	13	13	3	3	62	62	21	21	4	1	4	1	1	--	--
	STAGE 5B TOTAL				716		--		60		120		44		5		130		21			5		1		--
	SUBTOTAL				58,109		--		5,205		10,410		4,457		448		11,887		1,997			434		123		783
	LOCAL ROADS																									
	1A	INT OF LAYTON AVE & 124TH ST	10	64	640	--	--	5	50	10	100	--	--	--	--	16	160	--	--	--	--	--	--	--	--	--
	1B	INT OF LAYTON AVE & 124TH ST	15	78	1,170	2	30	8	120	18	270	10	150	1	15	25	375	--	--	--	--	--	--	--	--	--
	2	NORTH MOORLAND RD ROUNDABOUT	1	375	375	2	2	42	42	86	86	49	49	7	7	85	85	--	--	1	1	1	5	29	--	--
		B-67-359 (SUNNY SLOPE RD)	2	20	40	--	--	21	42	42	84	--	--	--	--	24	48	--	--	--	--	--	4	18	--	--
		B-40-303 (IH 43 SB OVER STH 100) - STAGE 1	1	412	412	--	--	36	36	72	72	56	56	3	3	96	96	--	--	--	--	--	--	--	--	--
		B-40-303 (IH 43 SB OVER STH 100) - STAGE 2	1	286	286	--	--	45	45	90	90	56	56	4	4	73	73	--	--	--	--	--	--	--	--	--
	STAGE 2 TOTAL				1,113		2		165		332		161		14		302		--			1		47		--
	SUBTOTAL				2,923		32		335		702		311		29		837		--			1		47		--
	UNDISTRIBUTED				16,604		8		1,483		2,975		1,210		122		3,476		1,243			110		68		196
	SUBTOTAL				83,019		40		7,416		14,873		6,048		608		17,381		6,214			551		340		979
	TOTAL				83,019		40		7,416		14,873		6,048		608		23,596					551		340		979

*FOR INFORMATION ONLY

TEMPORARY PAVEMENT MARKING ITEMS

CATEGORY	STAGE	LOCATION	STATION	TO	STATION	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH WHITE LF	649.0150 WHITE (CROSSWALK) LF	649.0150 YELLOW LF	649.0150 12.5 FT LINE 37.5 FT SKIP WHITE LF	646.9000 MARKING REMOVAL LINE 4-INCH WHITE LF	646.9000 YELLOW LF	646.9055 MARKING REMOVAL LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH 12.5 FT LINE 37.5 FT SKIP WHITE LF	646.9100 MARKING REMOVAL LINE 8-INCH WHITE LF	646.9200 MARKING REMOVAL LINE WIDE WHITE LF	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH WHITE LF	649.0105 YELLOW LF	649.0105 12.5 FT LINE 37.5 FT SKIP WHITE LF	649.0205 TEMPORARY MARKING LINE PAINT 8-INCH WHITE 3 FT LINE 9 FT SKIP LF	649.0205 WHITE 6 FT LINE 3 FT SKIP LF	649.0505 TEMPORARY MARKING ARROW PAINT WHITE EACH	649.0605 TEMPORARY MARKING WORD PAINT WHITE EACH
1000	1	LAYTON AVE - RAMP A	881NB+00	-	885NB+74	474	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1A	IH 43 (APPROACH WORK - INSIDE)	772NB+26	-	796NB+90	4,059	--	2,463	213	2,464	2,464	616	--	--	--	--	--	--	--	--	--	--
			780SB+00	-	804SB+88	4,090	--	2,489	213	1,757	2,488	622	731	81	--	--	--	--	--	--	--	--
	STAGE 1A TOTAL					8,149	--	4,952	425	4,221	4,952	1,238	731	81	--	--	--	--	--	--	--	--
	1B	IH 43 (APPROACH WORK - OUTSIDE)	771NB+02	-	797NB+08	4,266	--	2,606	225	96	142	36	46	--	--	--	--	--	--	--	--	--
			779SB+65	-	804SB+33	4,103	--	2,468	200	--	35	9	35	--	--	--	--	--	--	--	--	--
	STAGE 1B TOTAL					8,369	--	5,074	425	96	177	45	81	--	--	--	--	--	--	--	--	--
	1A	INT OF LAYTON AVE & 124TH ST	29+58	-	30+44	--	171	--	--	--	--	--	131	--	--	--	--	--	--	--	--	--
	1B	INT OF LAYTON AVE & 124TH ST	29+62	-	30+40	--	229	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2	NORTH MOORLAND RD ROUNDABOUT	33NB+50	-	36NB+50	--	278	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	UNDISTRIBUTED					--	--	--	--	--	--	--	--	--	75,620	76,430	13,250	12,370	1,460	492	26	2
	SUBTOTAL					16,992	678	10,026	850	4,317	5,129	1,283	943	81	75,620	76,430	13,250	12,370	1,460	492	26	2
	TOTAL					28,546				9,446		1,283	943	81	165,300			14,322			26	2

TRAFFIC CONTROL (PEDESTRIAN ACCOMMODATIONS)

CATEGORY	STAGE	LOCATION	644.1410 TEMPORARY PEDESTRIAN SURFACE ASPHALT SF	644.1420 TEMPORARY PEDESTRIAN SURFACE PLYWOOD SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF
1000	1B	INT OF LAYTON AVE & 124TH ST	373	--	30	140
	2	NORTH MOORLAND RD ROUNDABOUT	--	73	6	59
	TOTAL		373	73	36	199

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TRAFFIC CONTROL - CLOSURES

CATEGORY	STAGE	LOCATION	643.4100.S TRAFFIC CONTROL INTERIM LANE CLOSURE EACH	SPV.0060.02 TRAFFIC CONTROL CLOSE-OPEN FREEWAY ENTRANCE RAMP EACH	SPV.0060.03 TRAFFIC CONTROL CLOSE-OPEN FREEWAY TO FREEWAY SYSTEM RAMP EACH	SPV.0060.04 TRAFFIC CONTROL FULL FREEWAY CLOSURE EACH	SPV.0060.05 TRAFFIC CONTROL LOCAL ROAD LANE CLOSURES EACH
1000	1	LAYTON AVE - RAMP A	--	75	--	5	--
	2	LAYTON AVE - RAMP A	--	2	--	--	--
	1A	IH 43	48	40	13	--	10
	1B	IH 43	45	40	11	--	10
	2A	IH 43	12	12	8	--	3
	2B	IH 43	13	18	4	--	4
	2C	IH 43	7	10	3	--	2
	2D	IH 43	8	8	4	--	2
	3A	IH 43	10	20	3	--	3
	3B	IH 43	16	11	4	--	5
	4A	IH 43	1	--	--	--	--
	4B	IH 43	1	--	--	--	--
	5A	IH 43	2	2	1	--	1
	5B	IH 43	2	2	1	--	1
	1A	INT OF LAYTON AVE & 124TH ST	--	--	--	--	20
	1B	INT OF LAYTON AVE & 124TH ST	--	--	--	--	30
	2	NORTH MOORLAND RD ROUNDABOUT	--	1	--	--	4
		B-67-359 (SUNNY SLOPE RD)	--	--	--	--	4
		B-40-303 (IH 43 SB OVER STH 100) - STAGE 1	--	--	--	--	2
		B-40-303 (IH 43 SB OVER STH 100) - STAGE 2	--	--	--	--	2
UNDISTRIBUTED			41	60	13	1	26
TOTAL			206	301	65	6	129

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SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X 6"X18' [EA]	634.0622 POSTS WOOD 4"X6"X22' [EA]	634.0814 POSTS TUBULAR STEEL 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W x H [FT.] x [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STR STEEL SIGN SUPPORTS [EA]	531.1100 CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS [CY]	531.1140 STEEL REINF HS ANCILLARY STRUCTURES TYPE NS [LBS]	531.2024 DRILLING SHAFT 24-INCH [EST.LF]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONNECTION BOLTS [EA]
1	E4-1A	I	[O] MOORLAND RD [A]	-- x --	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	22 x 7.5	165.000	--	1	--	--	--	--	--	2
1A	E1-5P	I	EXIT 57	-- x --	--	--	--	--	--	--	--	--	1	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
2	W4-2R	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
3	--	I	NORTH MOORLAND RD M4-20L [LA]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-275 I-BEAMS INCIDENTAL	8 x 5	40.00	--	1	--	--	--	--	--	--
4	--	I	SOUTH MOORLAND RD ROCK RIDGE RD [A] M4-20R	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-275 I-BEAMS INCIDENTAL	9 x 6	54.00	--	1	--	--	--	--	--	--
5	--	I	MOORLAND RD ROCK RIDGE [A] RD	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-272 I-BEAMS INCIDENTAL	8 x 5.5	44.00	--	1	--	--	--	--	--	--
6	E6-54A	I	MOORLAND RD [A]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-272 I-BEAMS INCIDENTAL	11 x 4.5	49.50	--	1	--	--	--	--	--	--
7	D16-1R	I	NORTH IH 43 ONLY [RA]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-272 I-BEAMS INCIDENTAL	3 x 6	18.00	--	1	--	--	--	--	--	--
8	D16-1R	I	NORTH IH 43 ONLY [RA]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-272 I-BEAMS INCIDENTAL	3 x 6	18.00	--	1	--	--	--	--	--	--
9	D10-5	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
10	D10-5	II	--	-- x --	--	--	--	--	--	--	--	1	9	--	-- x --	--	--	--	--	--	--	--	--	--
11	W5-52L	II	--	-- x --	--	--	--	1	1	--	--	1	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
12	W5-52L	II	--	-- x --	--	--	--	1	1	--	--	1	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
13	R6-1L	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
14	R5-1	II	--	-- x --	--	--	--	--	--	--	--	1	13	--	-- x --	--	--	--	--	--	--	--	--	--
15	R5-1A	II	--	-- x --	--	--	--	--	--	--	--	1	13	3 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
16	R1-2	II	--	-- x --	--	--	--	1	--	--	1	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
17	R6-2R	II	--	-- x --	--	--	--	--	--	--	--	1	16	--	-- x --	--	--	--	--	--	--	--	--	--
18	W11-2	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
19	W16-7L	II	--	-- x --	--	--	--	--	--	--	--	1	18	--	-- x --	--	--	--	--	--	--	--	--	--
20	E6-54	I	SOUTH MOORLAND RD [LA]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-967 I-BEAMS INCIDENTAL	8 x 4.5	36.00	--	1	--	--	--	--	--	--
21	E6-54	I	NORTH MOORLAND RD BELOIT RD WEST [RA]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-967 I-BEAMS INCIDENTAL	8 x 5.5	44.00	--	1	--	--	--	--	--	--
22	E6-54	I	NORTH MOORLAND RD BELOIT RD EAST [RA]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-967 I-BEAMS INCIDENTAL	8 x 5.5	44.00	--	1	--	--	--	--	--	--
23	E6-51	I	MOORLAND RD [A] [A]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-271 I-BEAMS INCIDENTAL	15 x 3.5	52.50	--	1	--	--	--	--	--	--
24	--	I	NORTH IH 43 [DA]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-271 I-BEAMS INCIDENTAL	4 x 5	20.00	20.00	1	--	--	--	--	--	--
25	D16-1	I	NORTH IH 43 [A]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-271 I-BEAMS INCIDENTAL	4 x 5	20.00	20.00	1	--	--	--	--	--	--
26	M1-94	II	HWY I BELOIT RD	-- x --	--	--	--	2	2	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
27	W5-52L	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
28	W4-2R	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
29	E6-1	I	[O] MOORLAND RD EXIT [TA] ONLY	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-310 I-BEAMS INCIDENTAL	15 x 9.5	142.50	--	1	--	--	--	--	--	--
29A	E1-5P	--	EXIT 57	-- x --	--	--	--	--	--	--	--	--	29A	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--

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SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X 6"X18' [EA]	634.0622 POSTS WOOD 4"X6"X22' [EA]	634.0814 POSTS TUBULAR STEEL 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W x H [FT.] x [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STR STEEL SIGN SUPPORTS [EA]	531.1100 CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS [CY]	531.1140 STEEL REINF HS ANCILLARY STRUCTURES TYPE NS [LBS]	531.2024 DRILLING SHAFT 24-INCH [EST.LF]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONNECTION BOLTS [EA]
30	E9-1	I	GREENFIELD NEXT 4 EXITS	-- x --	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	11 x 4.5	49.50	--	1	--	--	--	--	--	2
31	E3-1	I	PARK & RIDE CRASH INVESTIGATION SITE EXIT 57	-- x --	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	12 x 13	156.00	--	1	--	--	--	--	--	2
32	J3-1	II	--	-- x --	--	--	--	1	--	2	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
33	E6-51	I	TO [100] LAYTON AVE 1 MILE USE LEFT LANE	-- x --	--	--	--	--	--	--	--	--	--	PLACE 20 FT DOWNSTREAM OF EXISTING SIGN	15 x 12.5	187.50	--	1	2	2.4	360	20	1600	--
33A	E1-5BP	I	LEFT EXIT 59	-- x --	--	--	--	--	--	--	--	--	33	--	9 x 4	36.00	--	--	--	--	--	--	--	--
34	--	I	OVERSIZE LOADS RESTRICTED BEYOND NEXT EXIT	-- x --	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	12 x 4.5	54.00	--	1	--	--	--	--	--	2
35	E1-1A	I	[O] MOORLAND RD 3/4 MILE	-- x --	--	--	--	--	--	--	--	--	--	PLACE 20 FT UPSTREAM OF EXISTING SIGN	19 x 10	190.00	--	1	--	2.4	360	20	1600	--
35A	E1-5P	I	EXIT 57	-- x --	--	--	--	--	--	--	--	--	35	--	9 x 2.5	22.50	--	--	--	--	--	--	--	--
36	D10-5	II	MILE 58.2	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
37	E9-1	I	HALES CORNERS NEXT LEFT	-- x --	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	14 x 4.5	63.00	--	1	--	--	--	--	--	2
38	E9-1	I	MUSKEGO NEW BERLIN NEXT 2 EXITS	-- x --	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	12 x 6.5	78.00	--	--	--	--	--	--	--	2
39	E3-1	I	PARK & RIDE CRASH INVESTIGATION SITE LEFT EXIT 59	-- x --	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	12 x 13	156.00	--	1	--	--	--	--	--	2
40	R2-1	II	--	-- x --	--	--	--	2	2	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
41	J3-1	II	--	-- x --	--	--	--	1	--	2	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
42	D10-5	II	MILE 58.6	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
43	M1-94	II	HWY I BELOIT RD	-- x --	--	--	--	2	2	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
44	W5-52R	II	--	-- x --	--	--	--	1	1	--	--	1	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
45	W5-52L	II	--	-- x --	--	--	--	1	1	--	--	1	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
46	E6-1	I	TO [100] LAYTON AVE EXIT [TL] ONLY	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-22 I-BEAMS INCIDENTAL	15 x 10.5	157.50	--	1	--	--	--	--	--	--
46A	E1-5BP	I	LEFT EXIT 59	-- x --	--	--	--	--	--	--	--	--	46	--	9 x 4	36.00	--	--	--	--	--	--	--	--
47	D10-5	II	MILE 58.8	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
48	W13-2	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
49	W5-52L	II	--	-- x --	--	--	--	1	1	--	--	1	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
50	E6-51	I	[43] MILWAUKEE [DA] [DA]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-67-22 I-BEAMS INCIDENTAL	17 x 10	170.00	--	--	--	--	--	--	--	--
51	W5-52R	II	--	-- x --	--	--	--	1	1	--	--	1	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
52	W3-5	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
53	W3-5	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
54	W3-1	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
55	W5-52L	II	--	-- x --	--	--	--	1	1	--	--	1	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
56	W5-52R	II	--	-- x --	--	--	--	1	1	--	--	1	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
57	W5-52L	II	--	-- x --	--	--	--	1	1	--	--	1	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
58	W3-1	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
59	W3-1	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
60	W5-52R	II	--	-- x --	--	--	--	1	1	--	--	1	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
61	D10-5	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
62	R1-1	II	--	-- x --	--	--	--	--	--	--	--	1	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
63	R1-1	II	--	-- x --	--	--	--	--	--	--	--	1	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
64	R4-7	II	--	-- x --	--	--	--	--	--	--	--	1	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
65	R4-7	II	--	-- x --	--	--	--	--	--	--	--	1	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X 6"X18' [EA]	634.0622 POSTS WOOD 4"X6"X22' [EA]	634.0814 POSTS TUBULAR STEEL 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STR STEEL SIGN SUPPORTS [EA]	531.1100 CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS [CY]	531.1140 STEEL REINF HS ANCILLARY STRUCTURES TYPE NS [LBS]	531.2024 DRILLING SHAFT 24-INCH [EST.LF]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONNECTION BOLTS [EA]
66	R1-1	II	--	-- x --	--	--	--	--	--	--	--	1	--	MOUNT ON SIGNAL POLE	-- x --	--	--	--	--	--	--	--	--	--
67	NOT USED	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
68	I2-2	II	WAUKESHA CO	-- x --	--	--	--	2	2	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
69	I2-3A	II	CITY OF NEW BERLIN	-- x --	--	--	--	--	--	--	--	1	68	--	-- x --	--	--	--	--	--	--	--	--	--
70	I2-2	II	MILWAUKEE CO	-- x --	--	--	--	2	2	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
71	I1-3A	II	CITY OF MILWAUKEE	-- x --	--	--	--	--	--	--	--	1	70	--	-- x --	--	--	--	--	--	--	--	--	--
72	M1-94	II	116TH ST	-- x --	--	--	--	2	2	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
73	--	I	NORTH SOUTH EAST NORTH [41][894][45] [41][894][43] BOTH LANES USE RIGHT LANE 1 1/4 MILES	-- x --	--	--	--	--	--	--	--	--	--	PLACE 20 FT UPSTREAM OF EXISTING USE LARGEST MASH UNIT BEAMS	31 x 12	372.00	--	1	2	3.6	540	30	2400	--
73A	E1-5BP	I	LEFT EXIT 61	-- x --	--	--	--	--	--	--	--	--	73	--	8 x 4	32.00	--	--	--	--	--	--	--	--
74	M1-94	II	116TH ST	-- x --	--	--	--	2	2	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
75	J2-2	II	--	-- x --	--	--	--	2	2	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
76	R3-8LR	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
77	W1-2L(3)	II	--	36 x 36	--	9.000	--	--	1	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
78	W13-1(3)	II	35 MPH	24 x 24	--	4.000	--	--	--	--	--	--	77	--	-- x --	--	--	--	--	--	--	--	--	--
79	R2-1	II	--	-- x --	--	--	--	1	1	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
80	D16-1R	I	SOUTH [45] [100] ONLY [RA]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-40-916 I-BEAMS INCIDENTAL	7 x 6	42.00	--	1	--	--	--	--	--	--
81	D16-1L	II	NORTH [100] ONLY [LA]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-40-916 I-BEAMS INCIDENTAL	3 x 6	18.00	--	1	--	--	--	--	--	--
82	W5-52R	II	--	-- x --	--	--	--	1	1	--	--	1	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
83	M1-94	II	--	-- x --	--	--	--	2	2	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
84	E6-1	I	[45] [100] 108TH ST [TL] EXIT ONLY [TL]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-40-350 I-BEAMS INCIDENTAL MAINTAIN 18'-3" VERT CLEARANCE	17 x 11	187.00	--	1	--	--	--	--	--	--
84A	E1-5BP	I	LEFT EXIT 60	-- x --	--	--	--	--	--	--	--	--	84	--	9 x 4	36.00	--	--	--	--	--	--	--	--
85	E6-51	I	[43] SOUTH BELOIT [DA] [DA]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-40-350 I-BEAMS INCIDENTAL	17 x 10	170.00	--	--	--	--	--	--	--	--
86	W13-2C(MOD)	II	35 MPH [LEFT ARROW]	48 x 90	--	30.000	--	--	2	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--
87	J2-1	II	--	-- x --	--	--	--	1	2	--	--	1	--	--	-- x --	--	--	--	--	--	--	--	--	--
88	--	I	PARK & RIDE CRASH INVESTIGATION SITE EXIT 57	-- x --	--	--	--	--	--	--	--	--	--	REUSE STEEL POSTS	12 x 13	156.00	--	1	--	--	--	--	--	2
89	E6-51	I	[45] [100] [43] SOUTH 108TH ST BELOIT EXIT [A] ONLY [A] [A]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-40-811 I-BEAMS INCIDENTAL	33 x 10.5	346.50	--	1	--	--	--	--	--	--
89A	E1-5BP	I	LEFT EXIT 60	-- x --	--	--	--	--	--	--	--	--	89	--	9 x 4	36.00	--	--	--	--	--	--	--	--
90	W5-52R	II	--	-- x --	--	--	--	1	1	--	--	1	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
91	E6-51	I	[45] [100] [43] SOUTH 108TH ST BELOIT 1/2 MILE EXIT [A] ONLY [A] [A]	-- x --	--	--	--	--	--	--	--	--	--	INSTALL ON S-40-21 I-BEAMS INCIDENTAL	33 x 11	363.00	--	1	--	--	--	--	--	--
91A	E1-5BP	I	LEFT EXIT 60	-- x --	--	--	--	--	--	--	--	--	91	--	9 x 4	36.00	--	--	--	--	--	--	--	--
92	W5-52L	II	--	-- x --	--	--	--	1	1	--	--	1	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
93	W1-8(3)	II	--	24 x 30	--	5.000	--	--	1	--	--	--	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
94	W1-8(3)	II	--	24 x 30	--	5.000	--	--	1	--	--	--	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--
95	W1-8(3)	II	--	24 x 30	--	5.000	--	--	1	--	--	--	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X 6"X18' [EA]	634.0622 POSTS WOOD 4"X6"X22' [EA]	634.0814 POSTS TUBULAR STEEL 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	637.1230 SIGNS TYPE I REFLC F [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STR STEEL SIGN SUPPORTS [EA]	531.1100 CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS [CY]	531.1140 STEEL REINF HS ANCILLARY STRUCTURES TYPE NS [LBS]	531.2024 DRILLING SHAFT 24-INCH [EST.LF]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONNECTION BOLTS [EA]
96	W1-8(3)	II	--	24 x 30	--	5.000	--	--	1	--	--	--	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--
97	W1-8(3)	II	--	24 x 30	--	5.000	--	--	1	--	--	--	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--
98	W1-8(3)	II	--	24 x 30	--	5.000	--	--	1	--	--	--	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--
99	W1-8(3)	II	--	24 x 30	--	5.000	--	--	1	--	--	--	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--
100	W1-8(3)	II	--	24 x 30	--	5.000	--	--	1	--	--	--	--	4 FT MOUNT HEIGHT	-- x --	--	--	--	--	--	--	--	--
101	E13-1P(2S)	II	35 MPH	72 x 24	--	12.000	--	--	--	--	--	--	--	INSTALL BELOW EXISTING SIGN	-- x --	--	--	--	--	--	--	--	--
102	W5-54	II	--	-- x --	--	--	--	--	--	--	--	1	101	--	-- x --	--	--	--	--	--	--	--	--
103	W5-54	II	--	-- x --	--	--	--	--	--	--	--	1	101	--	-- x --	--	--	--	--	--	--	--	--
104	E13-1P(2S)	II	35 MPH	72 x 24	--	12.000	--	--	--	--	--	--	--	INSTALL BELOW EXISTING SIGN-SHEET 16	-- x --	--	--	--	--	--	--	--	--
--	--	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	-- x --	--	--	--	--	--	--	--	--
TOTALS					0.000	107.000	0	53	62	4	1	58				3943.000	40.000	29	4	8.4	1260	70	5600	16

SHEET 4 OF 4

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA/MILWAUKEE	MISCELLANEOUS QUANTITIES – PERMANENT SIGNING	SHEET:	E

FTMS BASES, POLES, CABINETS, AND EQUIPMENT

CATEGORY	ROADWAY	ITEM ID.	LINEAR DISTANCE	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF	655.0535 ELECTRICAL WIRE TRAFFIC SIGNALS 2 AWG LF	674.0300 REMOVE CABLE LF	678.0006 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT LF	678.0400 FIBER OPTIC TERMINATION EACH	SPV.0060.20 REMOVE ELECTRONIC BLANK OUT SIGN EACH	SPV.0060.21 INSTALL OVERHEIGHT WARNING SYSTEM DMS EACH	SPV.0060.22 INSTALL FIBER OPTIC MEDIA CONVERTER EACH
1300	IH 43										
		EX-S-67-408	--	50	150	--	50	--	1	1	1
		EX-S-67-408 - EXPBSS05	10	10	30	10	10	--	--	--	--
		EXPBSS05 - EXPBSS04	265	265	795	265	265	--	--	--	--
		EXPBSS04 - EXPBSS02	430	430	1290	430	430	--	--	--	--
		EXPBSS02 - EXPBSS03	60	--	--	60	--	--	--	--	--
		EXPBSS03 - EXDPSS02	10	--	--	10	--	--	--	--	--
		EXPBSS02 - EXPSPSS01	10	--	--	10	--	--	--	--	--
		EXPBSS02 - EXPBSS01	135	135	405	135	135	--	--	--	--
		EXPBSS01 - EX-CB-CCTV-67-0087	10	10	30	10	10	2	--	--	1
		TOTALS		900	2700	930	900	2	1	1	2

MISCELLANEOUS ITEMS

CATEGORY	ROADWAY	670.0100 FIELD SYSTEM INTEGRATOR LS	670.0200 ITS DOCUMENTATION LS	678.0500 COMMUNICATION SYSTEM TESTING LS
1300	IH 43			
	PROJECT	1	1	1
	TOTALS	1	1	1

IH 43 NB/SB RAMPS/W LAYTON AVE & S 124TH ST
MILWAUKEE COUNTY
CATEGORY 1500
F40-0463

STATE FURNISHED MATERIALS SUMMARY

EACH	DESCRIPTION
1	TRAFFIC SIGNAL CABINET

REMOVING CONCRETE BASES

SIGNAL BASE NO.	204.0195 REMOVING CONCRETE BASES EACH
SB2	1
SB3	1
SB4	1
TOTAL	3

REMOVING TRAFFIC SIGNALS

LOCATION	204.9060.S.01 REMOVING TRAFFIC SIGNALS EACH
IH 43 NB/SB RAMPS/W LAYTON AVE & S 124TH ST	1
TOTAL	1

CONDUIT

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.	652.0615 CONDUIT SPECIAL 3-INCH L.F.
CB1	PB1	--	54	--
PB1	PB2	--	--	96
PB2	PB3	--	--	82
PB3	PB4	--	72	--
PB4	PB5	--	--	118
PB5	PB6	--	76	--
PB6	PB7	--	--	116
PB7	PB8	--	--	94
PB8	PB9	--	94	--
PB9	PB10	--	--	112
PB10	CB1	--	--	30
PB1	SB1	5	--	--
PB2	SB2	4	--	--
PB5	SB3	20	--	--
PB7	SB4	20	--	--
TOTAL		49	296	648

PULL BOXES

PULL BOX NO.	LOCATION^	653.0140 PULL BOXES STEEL 24x42-INCH EACH
PB1	30+45.5, 56.2'RT	1
PB2	29+96.9, 56.9'RT	1
PB3	29+55.5, 54.7'RT	1
PB4	29+32.4, 26.9'RT	1
PB5	29+31.2, 32.5'LT	1
PB6	29+46.4, 67.0'LT	1
PB7	30+03.7, 67.4'LT	1
PB8	30+50.9, 68.2'LT	1
PB9	30+69.3, 31.6'LT	1
PB10	30+70.0, 24.7'RT	1
	TOTAL	10

^ FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

3

3

REMOVING PULL BOXES

PULL BOX NO.		653.0905 REMOVING PULL BOXES EACH
PB1		1
PB2		1
PB3		1
PB4		1
PB5		1
PB6		1
PB7		1
PB8		1
PB9		1
	TOTAL	9

CONCRETE BASES

SIGNAL BASE NO.	LOCATION^		654.0101 CONCRETE BASES TYPE 1 EACH
SB2	29+94.9, 53.5'RT		1
SB3	29+44.9, 47.1'LT		1
SB4	30+04.0, 47.0'LT		1
		TOTAL	3

^ FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO		655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.
CB1	SB1		70
CB1	SB2		132
CB1	SB3		329
CB1	SB4		268
SB1	HEAD 4		21
SB2	HEAD 3		21
SB2	HEAD 5		21
SB3	HEAD 1		21
SB4	HEAD 2		21
SB4	HEAD 6		21
		TOTAL	925

TRAFFIC SIGNAL CABLE AND WIRE

FROM	TO		655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.
CB1	SB1		140
SB1	SB2		206
SB2	SB3		472
SB3	SB4		394
SB4	CB1		536
PB1	SB1		28
PB2	SB2		27
PB3	SB2		83
PB4	SB3		117
PB5	SB3		43
PB6	SB3		96
PB7	SB4		43
PB8	SB4		105
PB9	CB1		116
PB10	CB1		45
		TOTAL	2451

IH 43 NB/SB RAMPS/W LAYTON AVE & S 124TH ST
MILWAUKEE COUNTY
CATEGORY 1500
F40-0463

POLES

SIGNAL BASE NO.		657.0100 PEDESTAL BASES EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH
SB2		1	1
SB3		1	1
SB4		1	1
	TOTAL	3	3

FACES

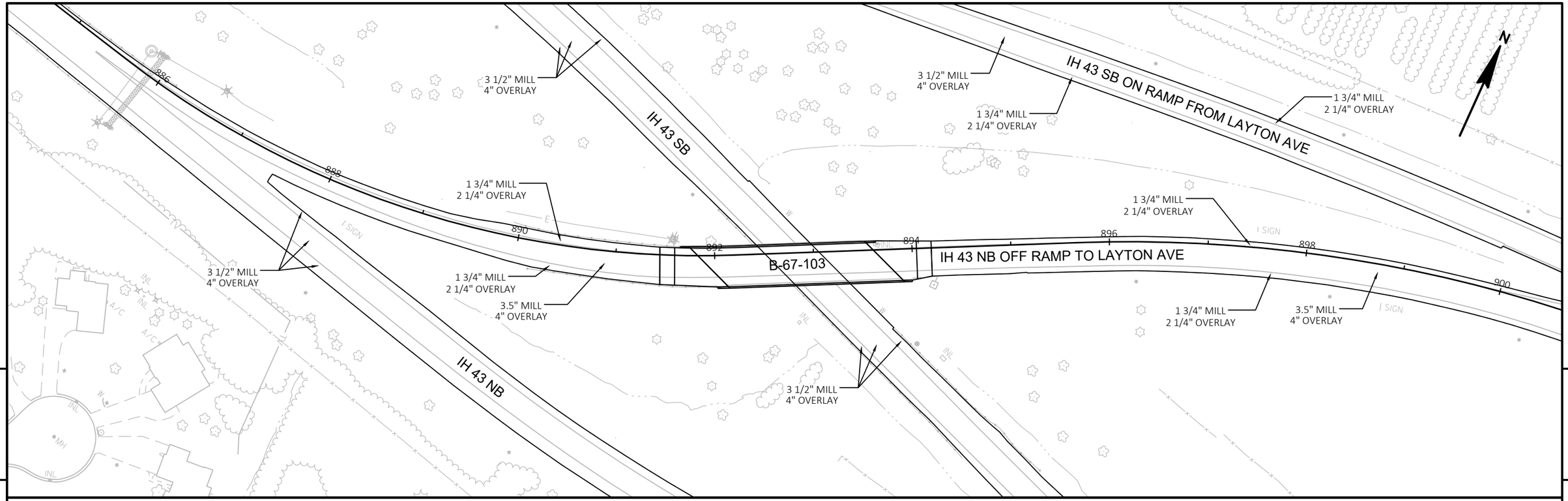
SIGNAL HEAD NO.	SIGNAL BASE NO.		658.0171 TRAFFIC SIGNAL FACE 1S 12-INCH EACH	INCIDENTAL BACKPLATES SIGNAL FACE 1 SECTION 12-INCH EACH
1	SB3		1	1
2	SB4		1	1
3	SB2		1	1
4	SB1		1	1
5	SB2		1	1
6	SB4		1	1
		TOTAL	6	6

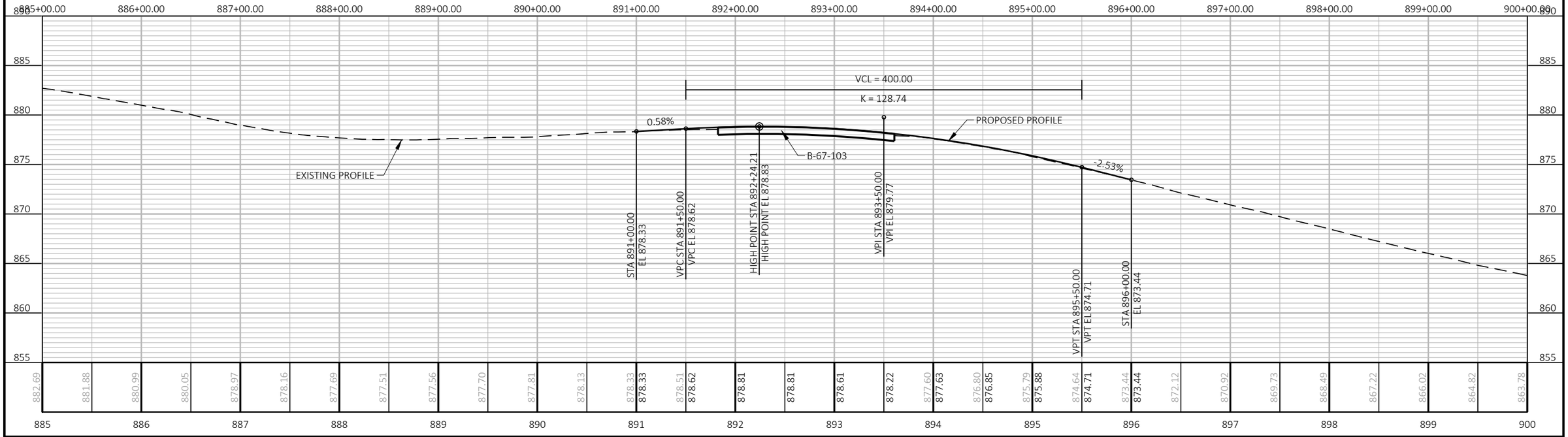
SIGNAL MOUNTING HARDWARE

LOCATION		658.5069.01 SIGNAL MOUNTING HARDWARE L.S.
IH 43 NB/SB RAMPS/W LAYTON AVE & S 124TH ST		1
	TOTAL	1

TRANSPORT AND INSTALL
STATE FURNISHED TRAFFIC SIGNAL CABINET

LOCATION		SPV.0060.30 TRNSPT & INSTALL SF TRAFFIC SIGNAL CABINET EACH
IH 43 NB/SB RAMPS/W LAYTON AVE & S 124TH ST		1
	TOTAL	1

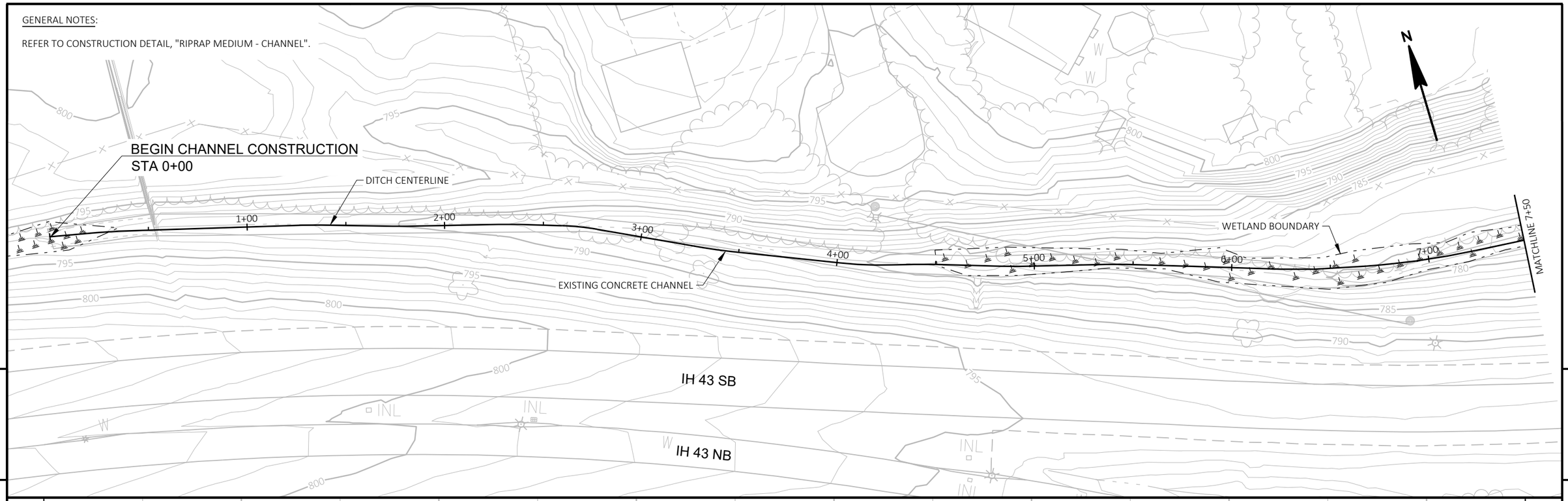


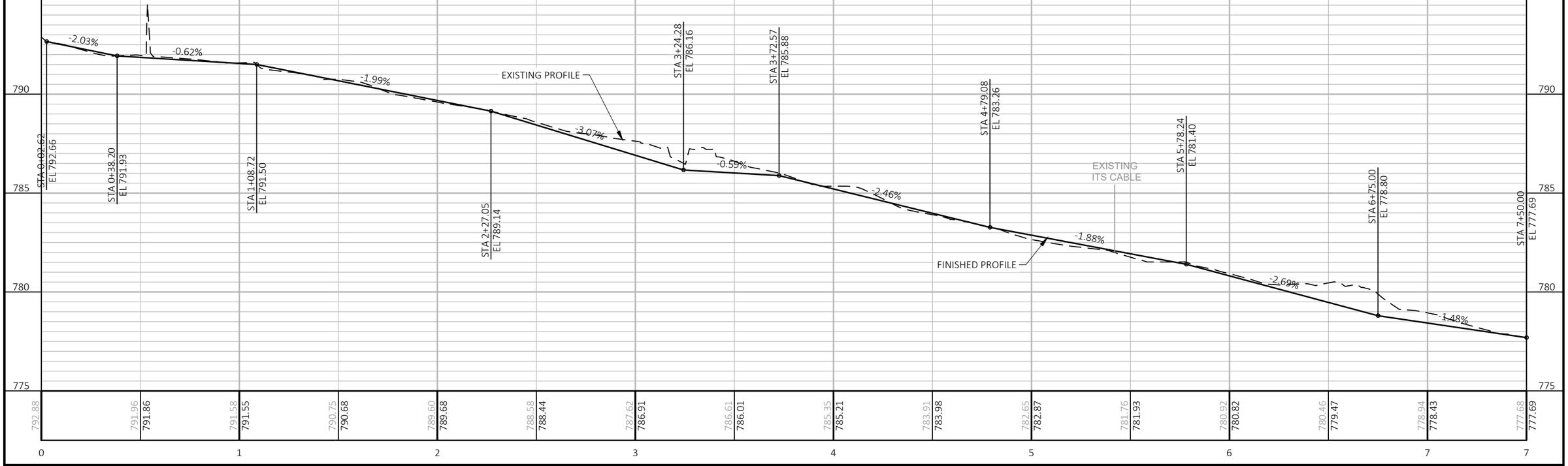


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN AND PROFILE: IH 43 NB OFF RAMP TO LAYTON AVE	SHEET 252	E

GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "RIPRAP MEDIUM - CHANNEL".





PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN AND PROFILE: CHANNEL	SHEET 253	E

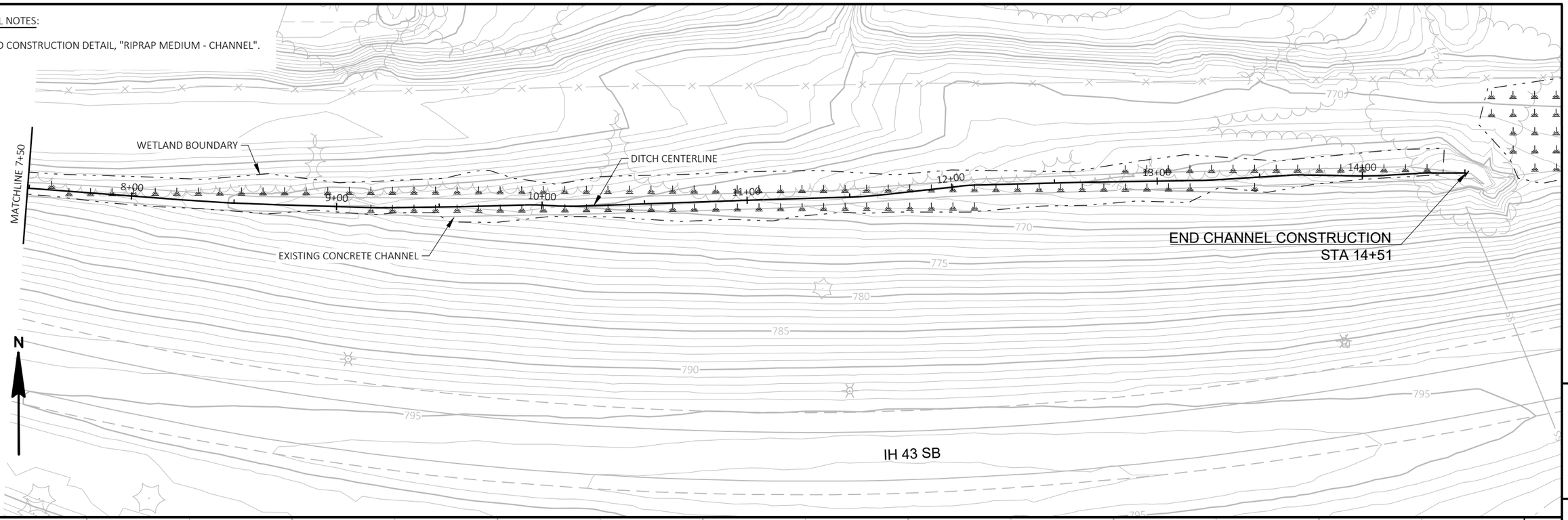
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LAYOUT NAME - 022101

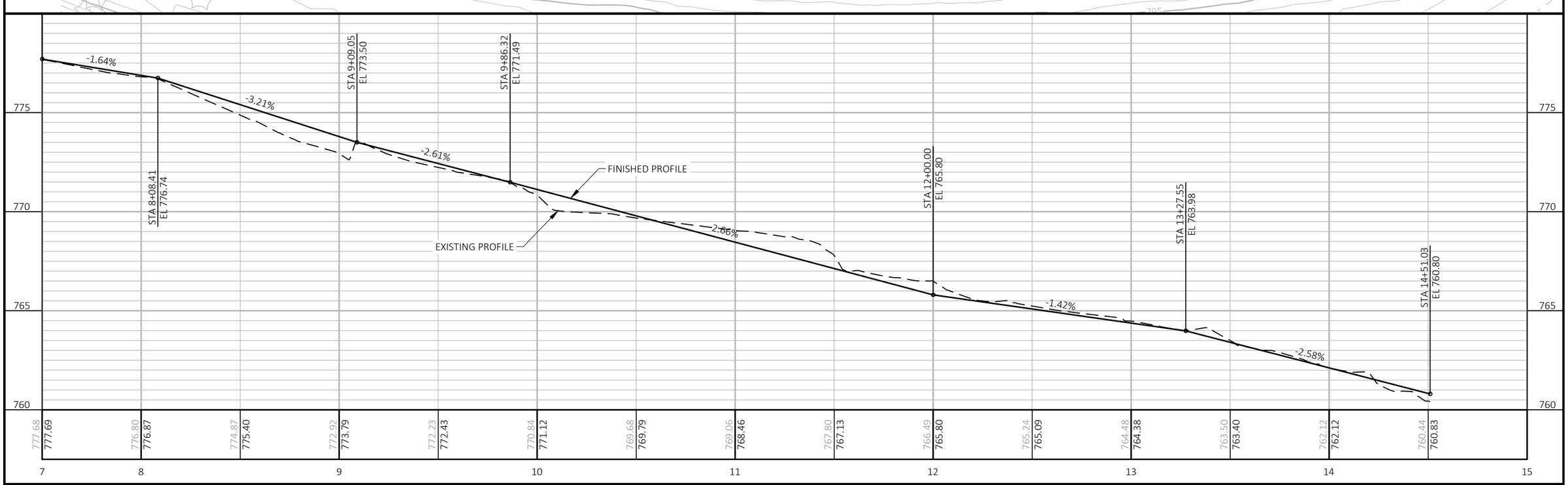
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WISDOT/CADDS SHEET 44

GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "RIPRAP MEDIUM - CHANNEL".





PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	PLAN AND PROFILE: CHANNEL	SHEET 254	E

Standard Detail Drawing List

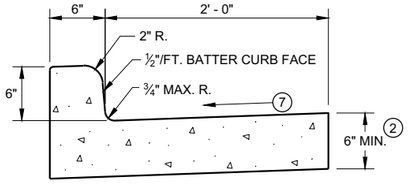
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D16-11	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
11A01-06	MAINTENANCE CROSSOVER FOR FREEWAYS
11B02-02	CONCRETE MEDIAN NOSE
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13B02-09B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-12A	RURAL DOWELED CONCRETE PAVEMENT
13C11-12B	RURAL DOWELED CONCRETE PAVEMENT
13C14-07A	BASE PATCHING CONCRETE
13C14-07B	BASE PATCHING CONCRETE
13C14-07C	BASE PATCHING CONCRETE
13C19-03	HMA LONGITUDINAL JOINTS
14B28-04A	GUARDRAIL MOW STRIP
14B28-04B	GUARDRAIL MOW STRIP
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-02A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-08D	ON RAMP LANE CLOSURE
15C02-08E	OFF RAMP LANE CLOSURE
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C07-15A	PAVEMENT MARKING SYMBOLS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS

6

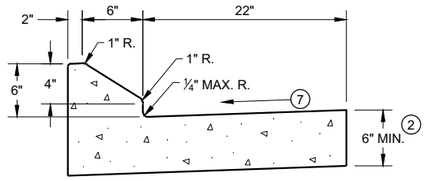
Standard Detail Drawing List

15C07-15D	ROUNDABOUT ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C31-03A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-03B	PAVEMENT MARKING MAJOR SPLIT FREEWAY TO FREEWAY
15C31-03C	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15C31-04A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-04B	PAVEMENT MARKING MAJOR SPLIT FREEWAY TO FREEWAY
15C31-04C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-09A	TRAFFIC CONTROL, LANE CLOSURE
15D12-09B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D16-04	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-05A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D22-04	TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D23-06A	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D23-06B	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-06A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-06B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-06C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D40-02A	TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D40-02B	TRAFFIC CONTROL, FULL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER
15D40-02C	TRAFFIC CONTROL, PARTIAL LANE SHIFT NON-FREEWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D40-02D	TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER
15D41-01	TRAFFIC CONTROL, MULTIPLE LANE SHIFT, MULTILANE DIVIDED ROAD
15D49-01	TRAFFIC CONTROL, SYSTEM RAMP CLOSURE
15D50-01A	TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
15D50-01B	TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT

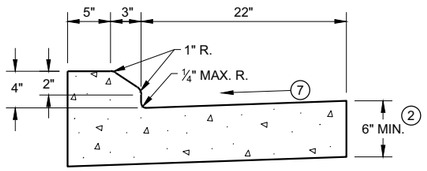
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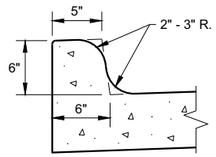
TYPES A (1) & D



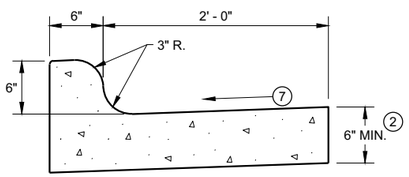
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

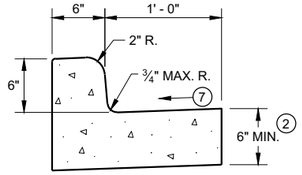


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



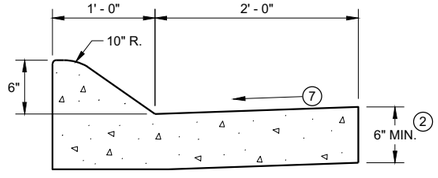
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

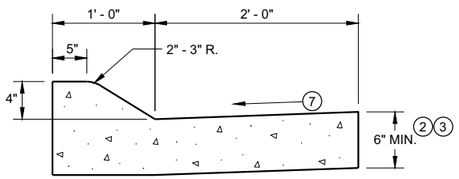


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

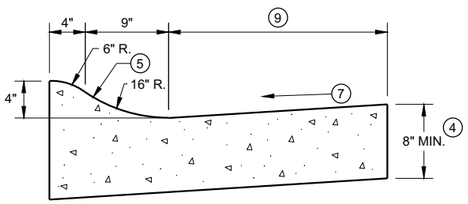


6" SLOPED CURB TYPES A (1) & D



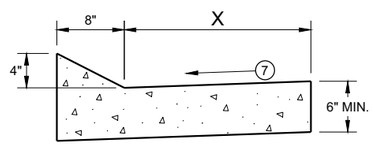
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

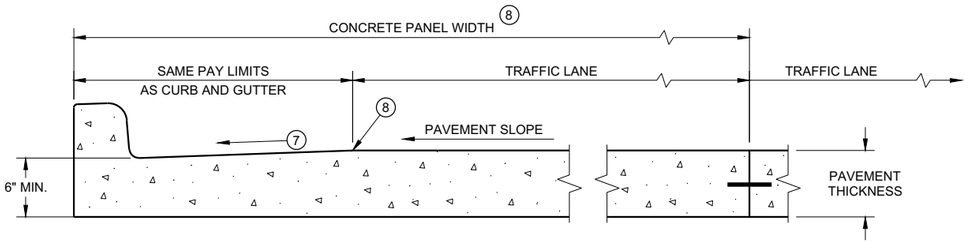


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

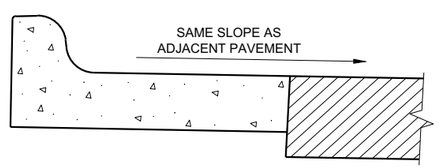
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

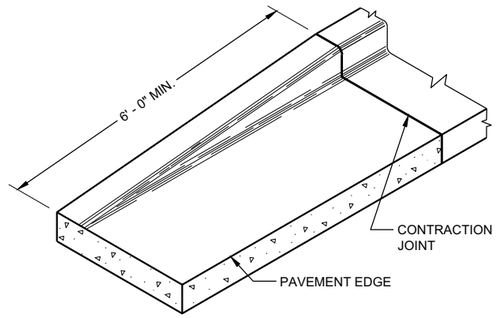
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

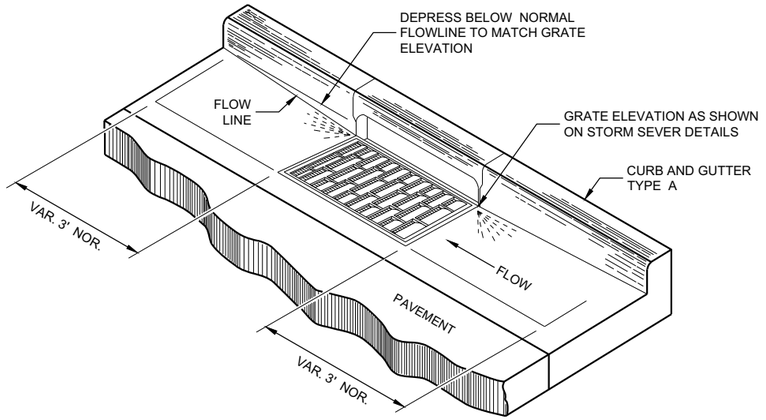
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D01 - 22a
SDD 08D01 - 22a



END SECTIONCURB AND GUTTER



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

GENERAL NOTES

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

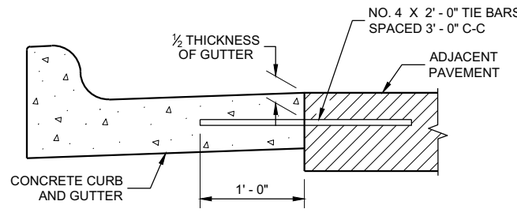
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

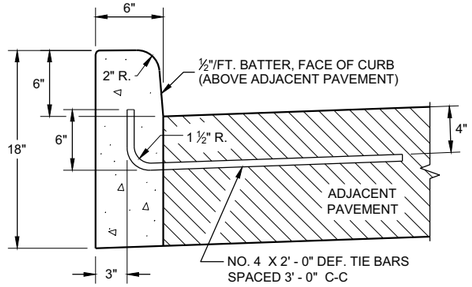
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

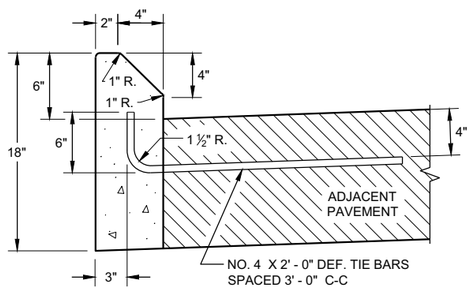
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

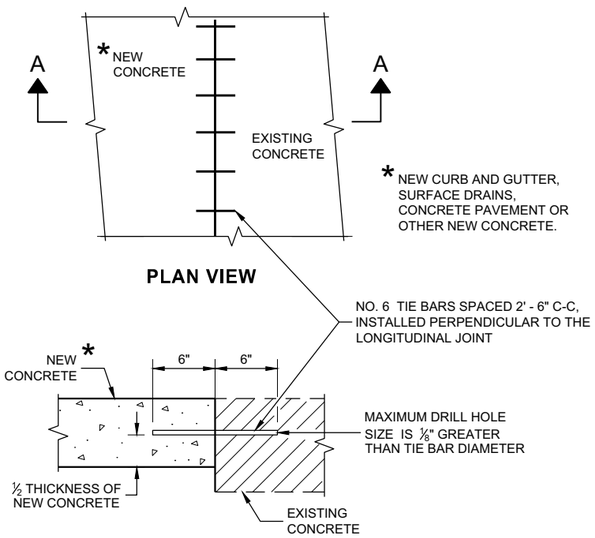


TYPES A (1) & D



TYPES G (1) & J

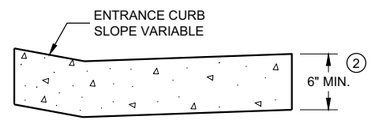
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

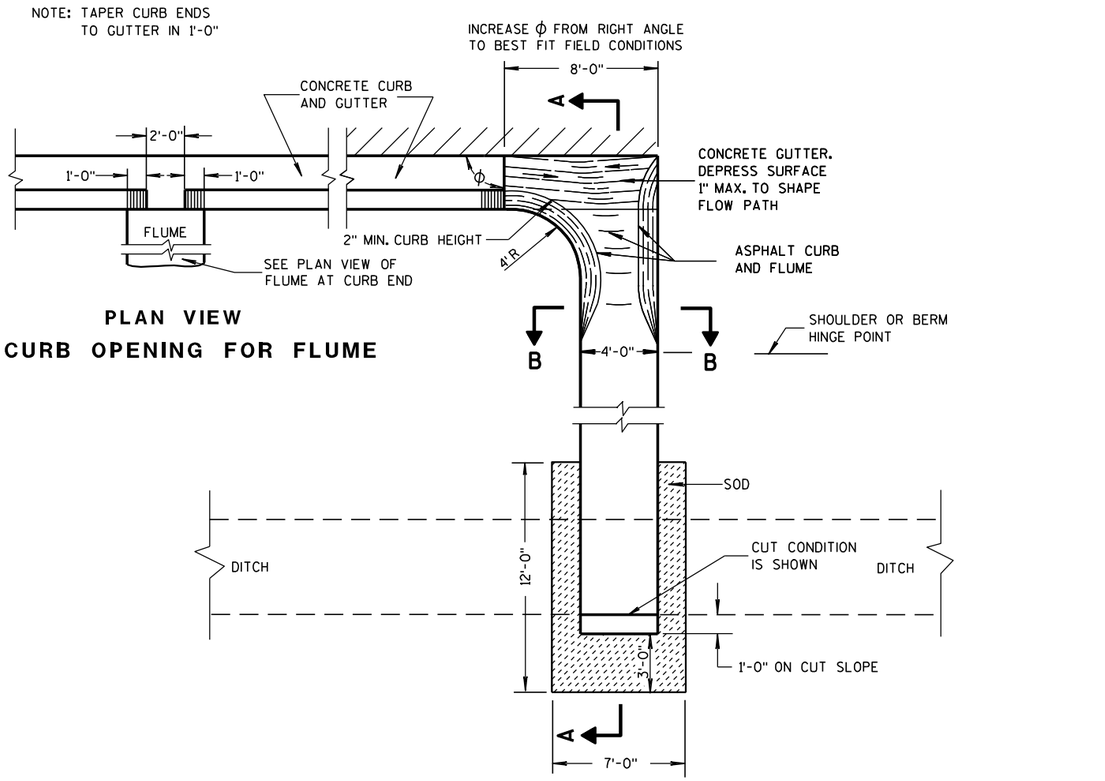
APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

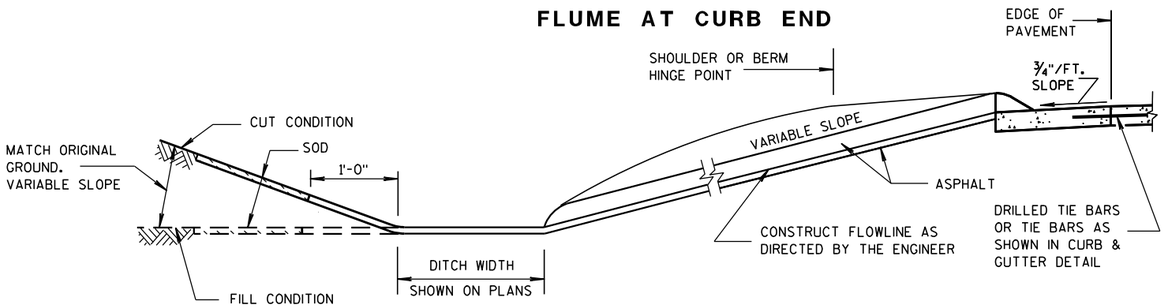
SDD08D01 - 22b

ASPHALTIC FLUME

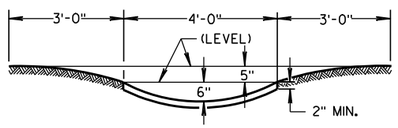


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

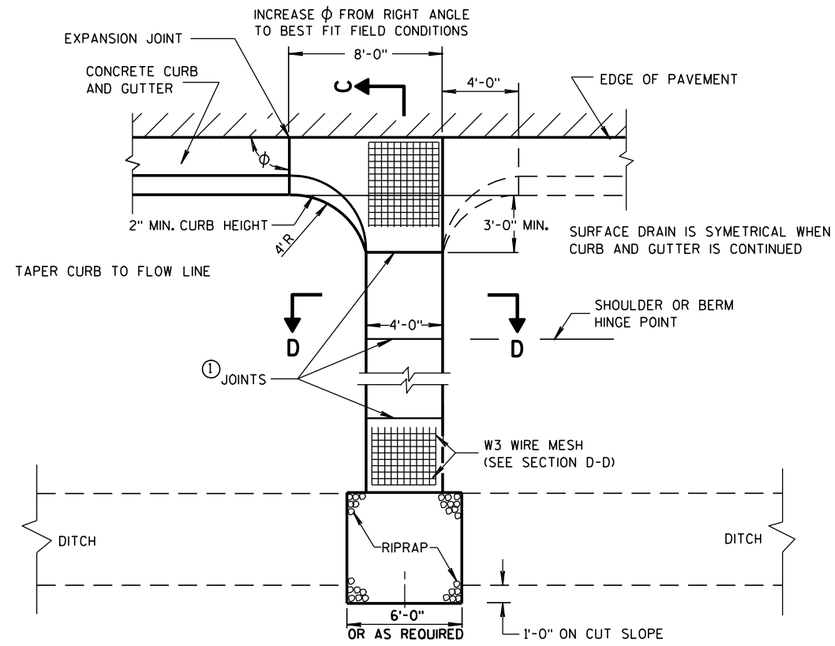
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

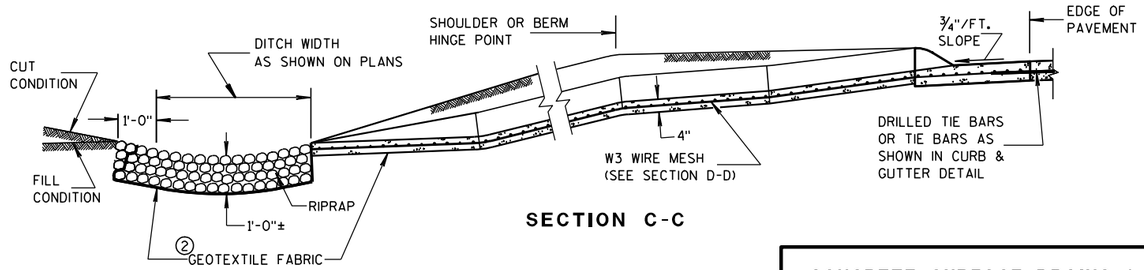
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

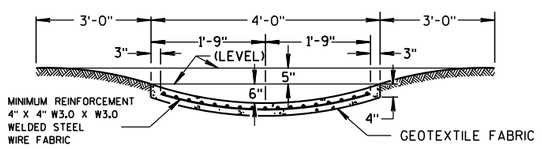
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

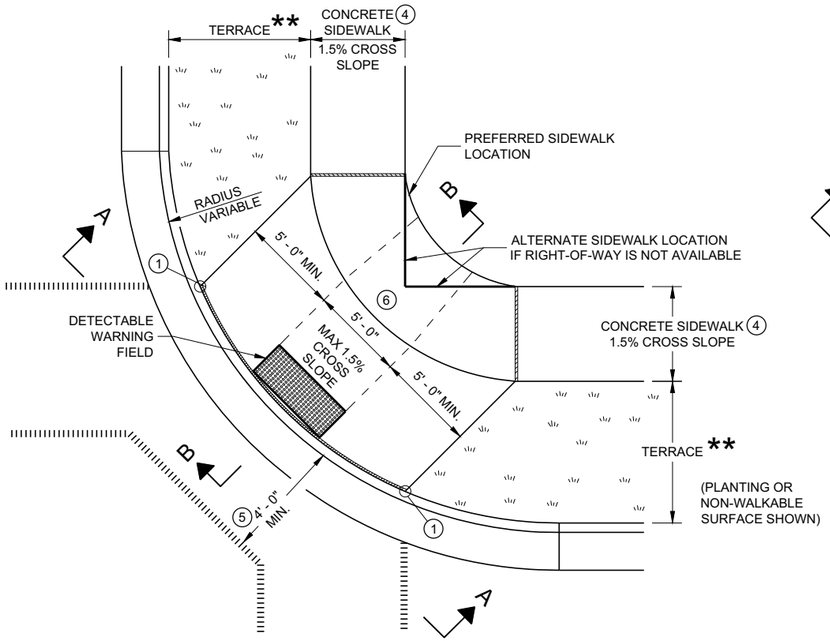
APPROVED
9-4-08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
259
MENT
FHWA

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S.D.D. 8 D 4-5

6

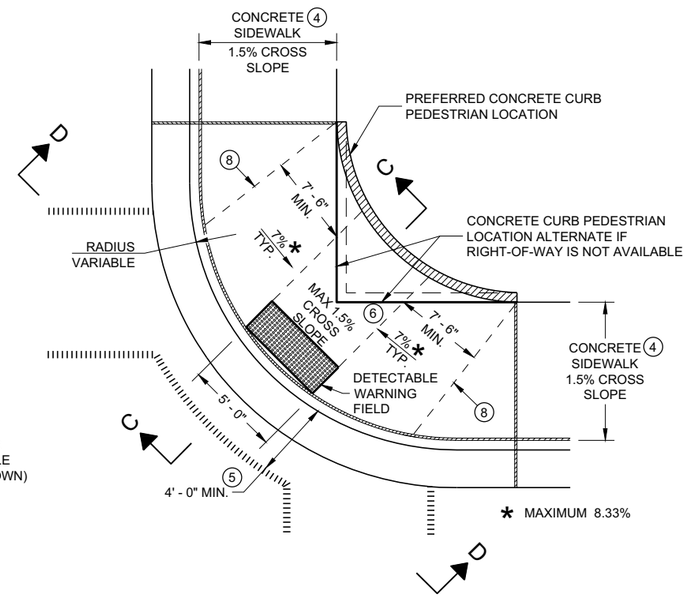
S.D.D. 8 D 4-5



PLAN VIEW

CURB RAMP TYPE 1

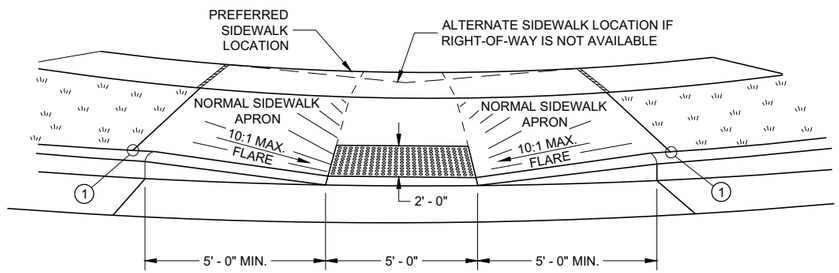
(CENTER OF CORNER RADIUS)



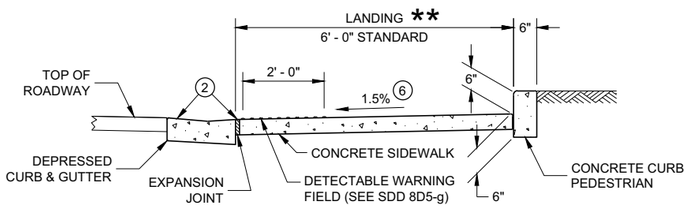
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

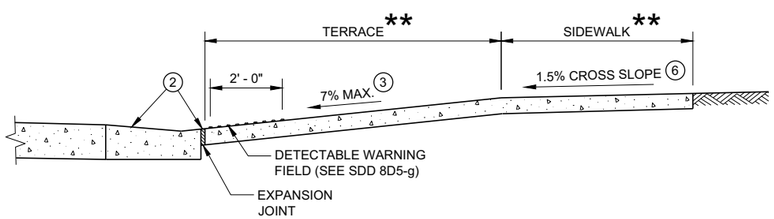


VIEW A - A FOR TYPE 1

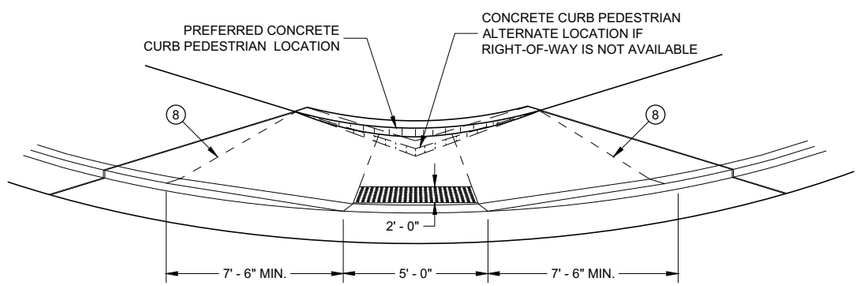


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

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

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

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

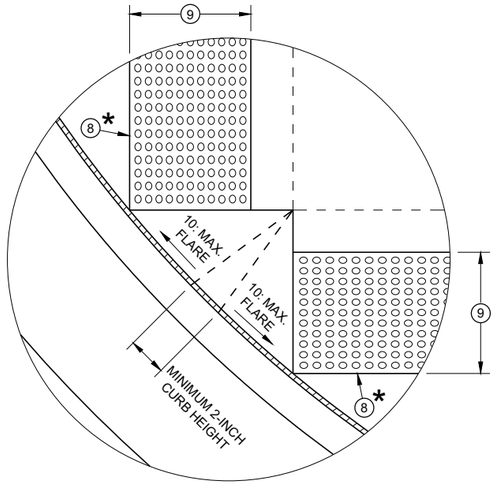
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

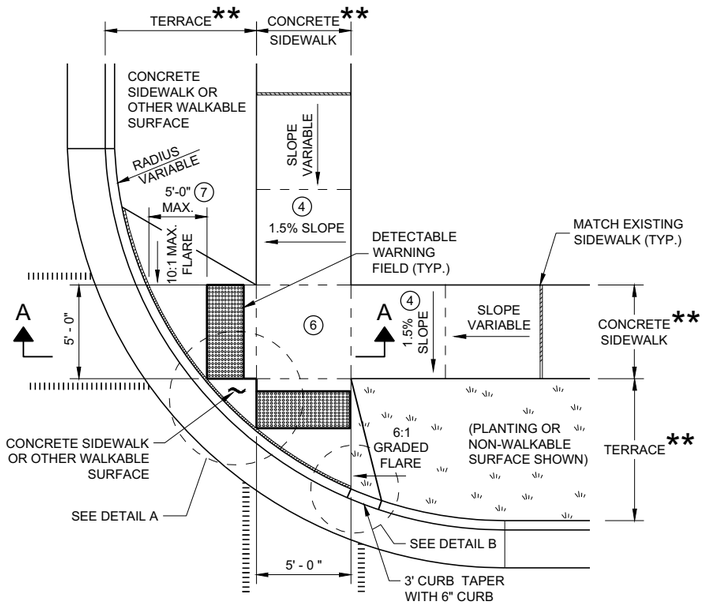
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 08D05 - 20a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

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

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

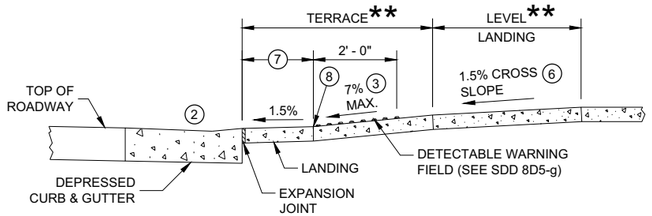
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

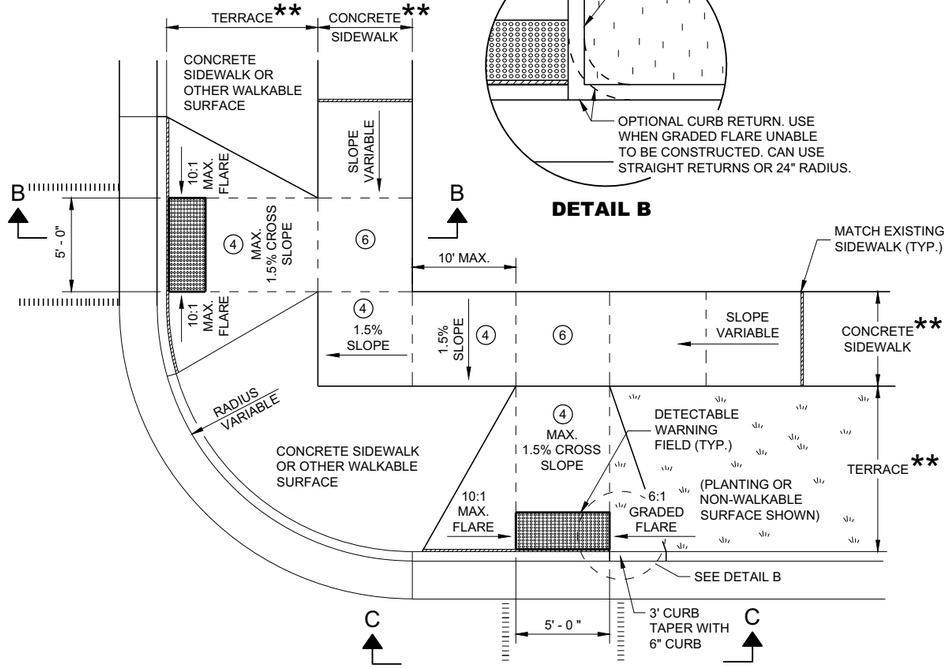
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



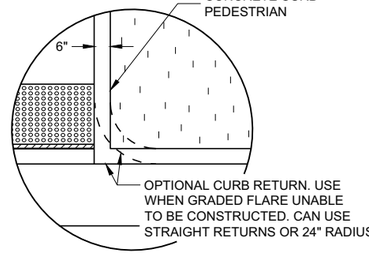
SECTION A - A FOR TYPE 2

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

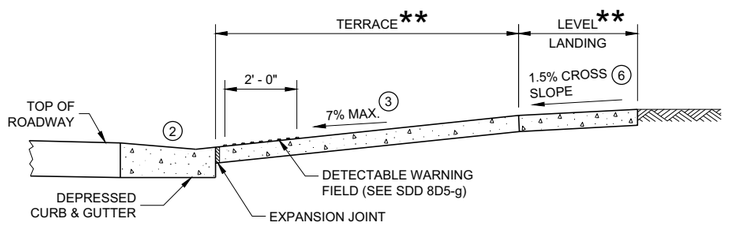
** WIDTH SHOWN ELSEWHERE IN THE PLANS



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



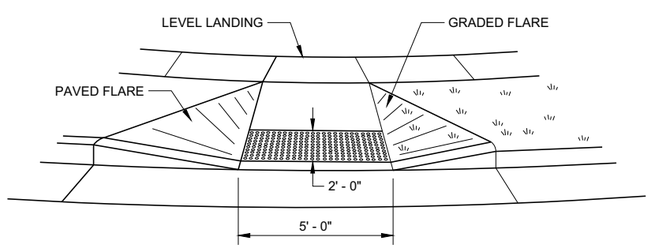
DETAIL B



SECTION B - B FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



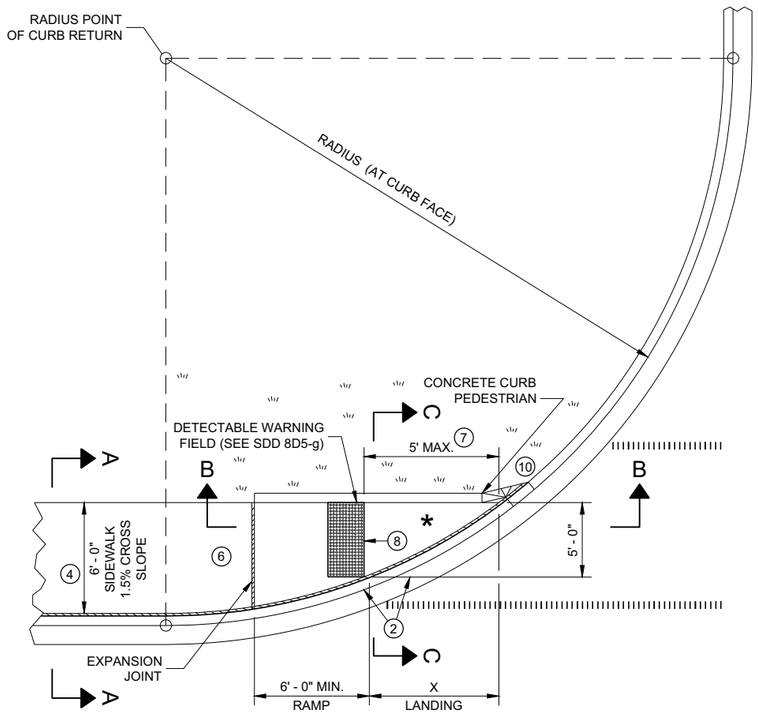
VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 08D05 - 20b

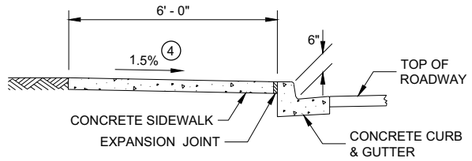


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

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

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

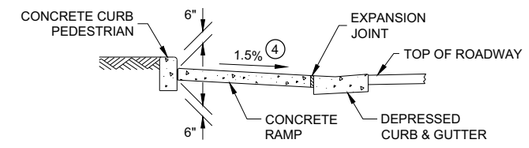
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

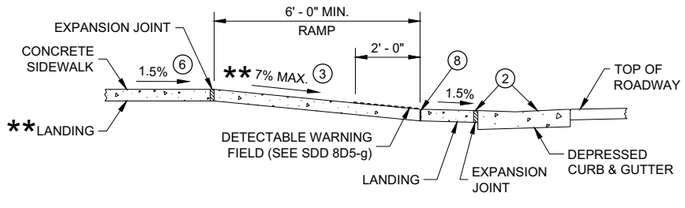
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



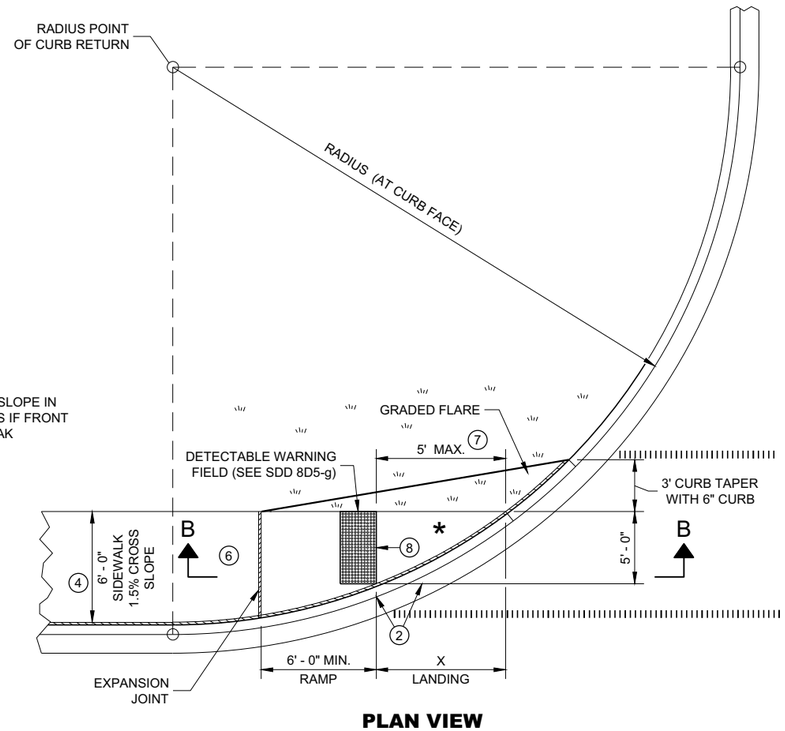
SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

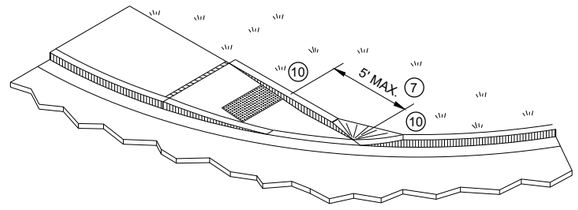
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

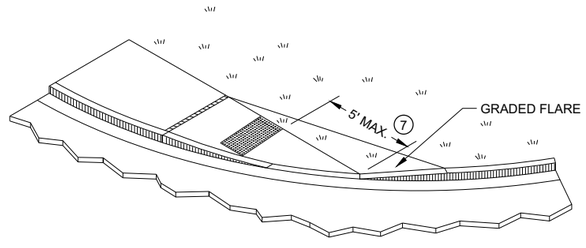


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



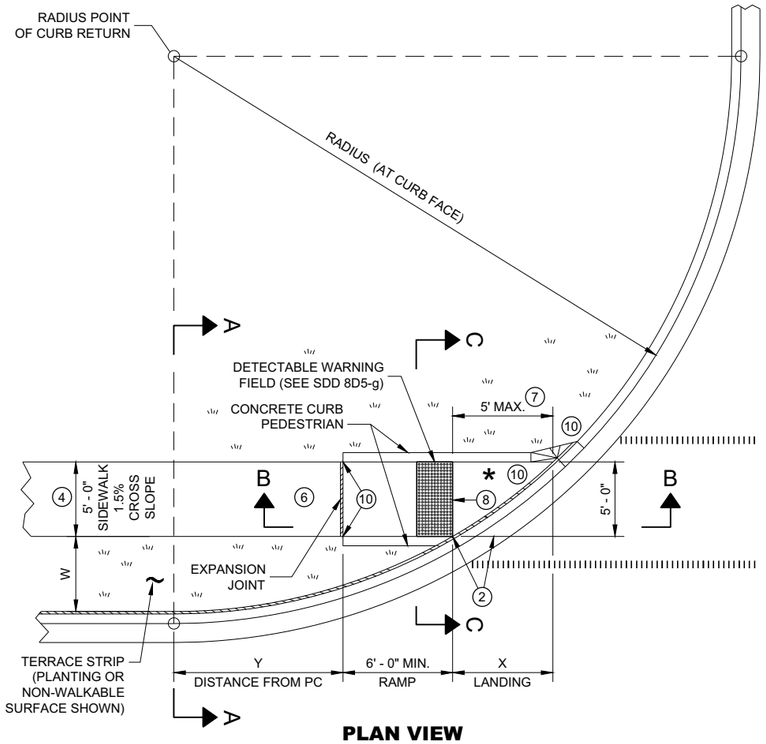
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 08D05 - 20c



PLAN VIEW

CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

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

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

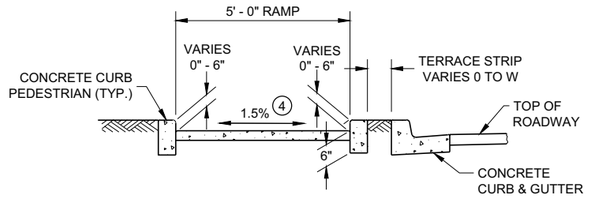
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

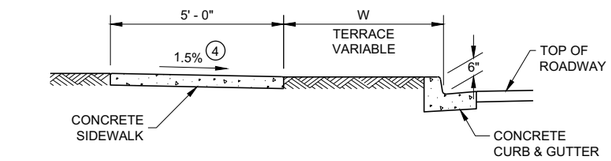
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

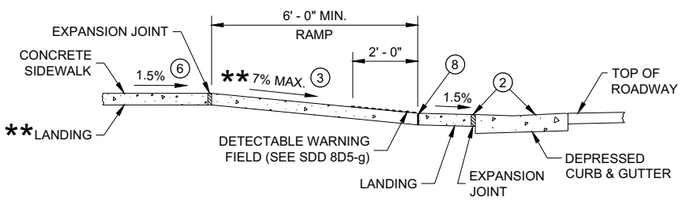
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



SECTION C - C FOR TYPE 4B



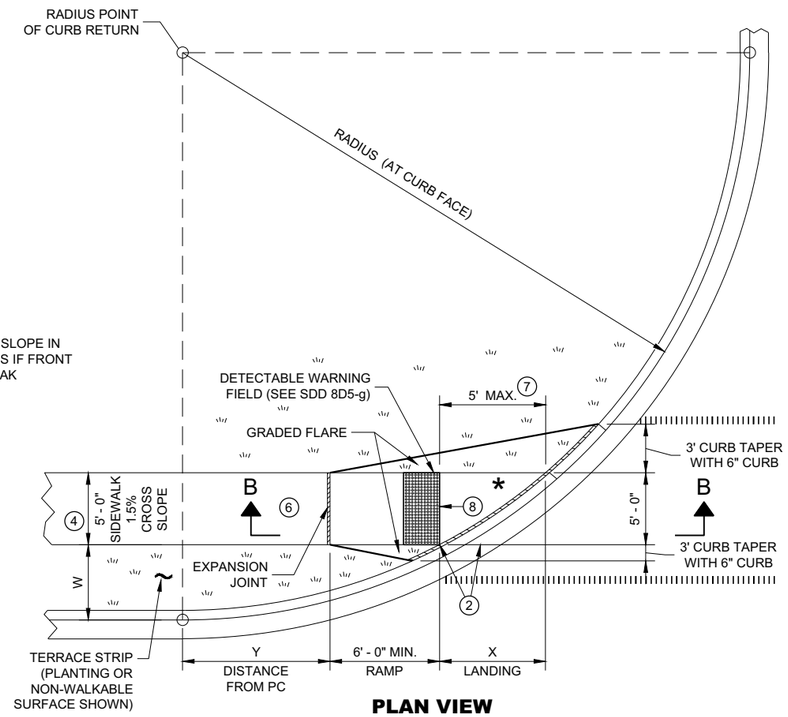
SECTION A - A FOR TYPE 4B



SECTION B - B FOR TYPE 4B AND TYPE 4B1

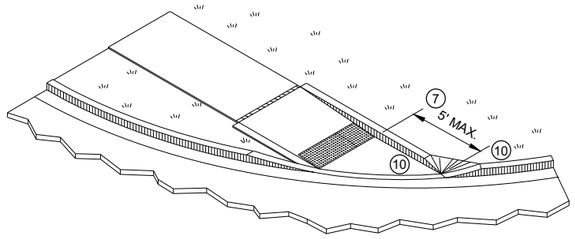
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

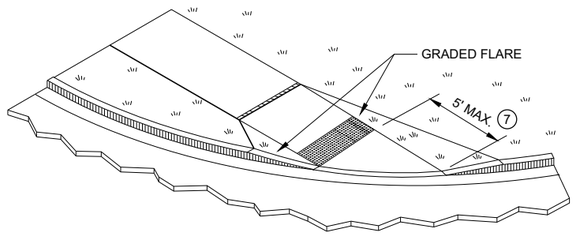


PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



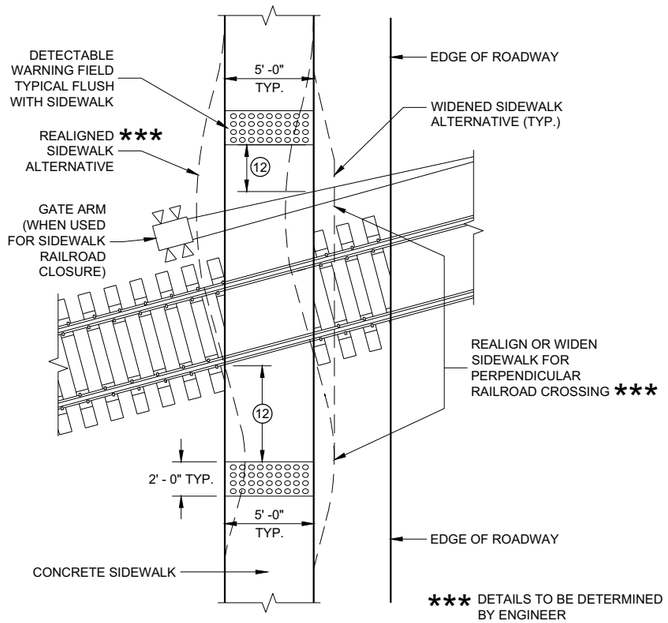
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

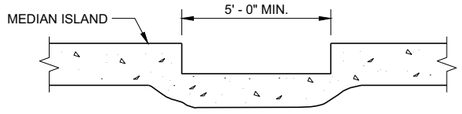
6

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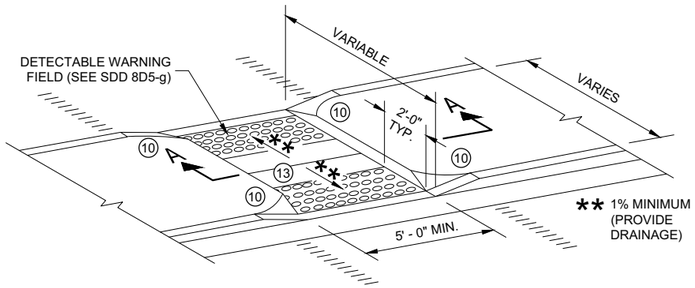


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

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

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

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

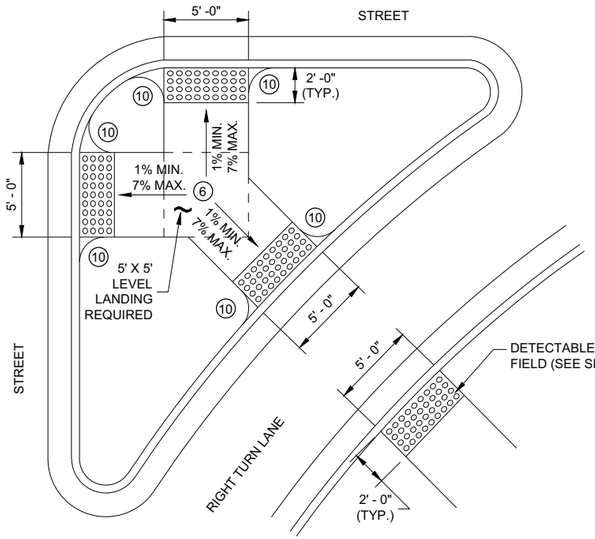
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

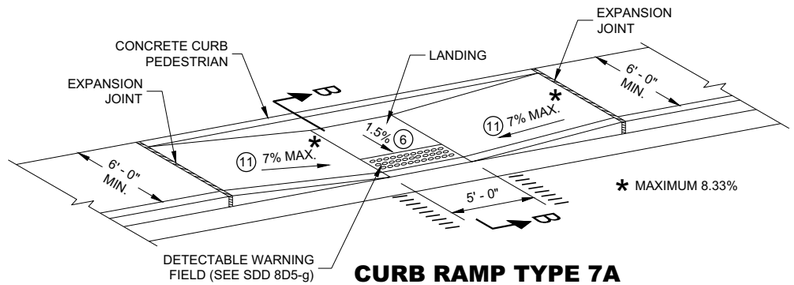
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

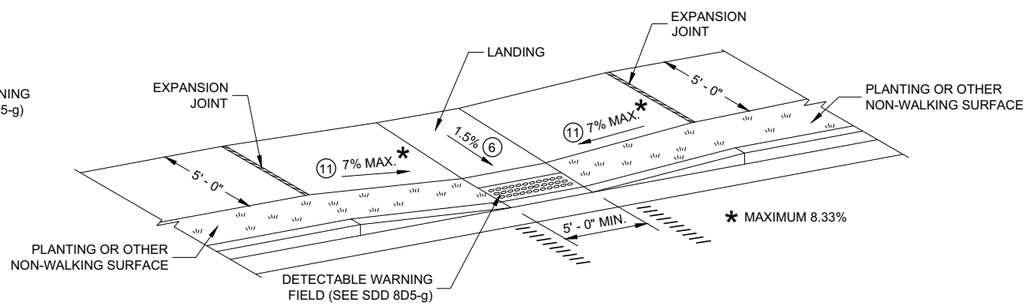
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 7A

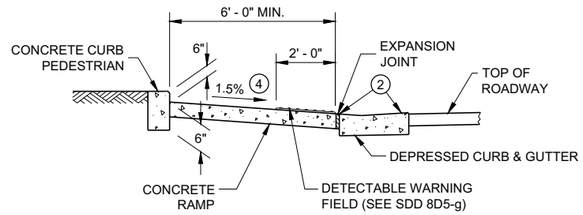
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

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



SECTION B - B FOR TYPE 7A

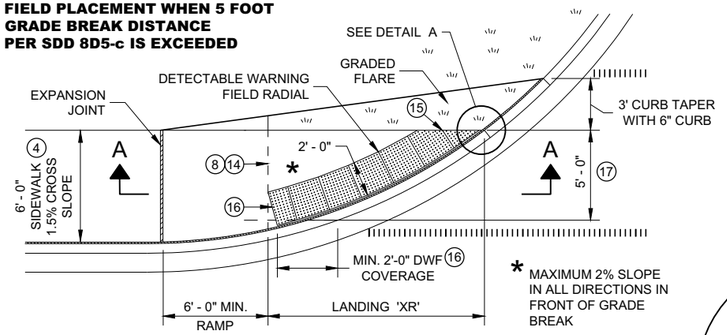
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

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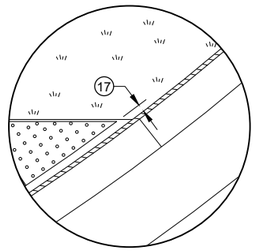
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



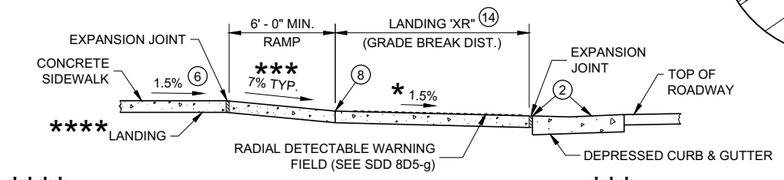
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

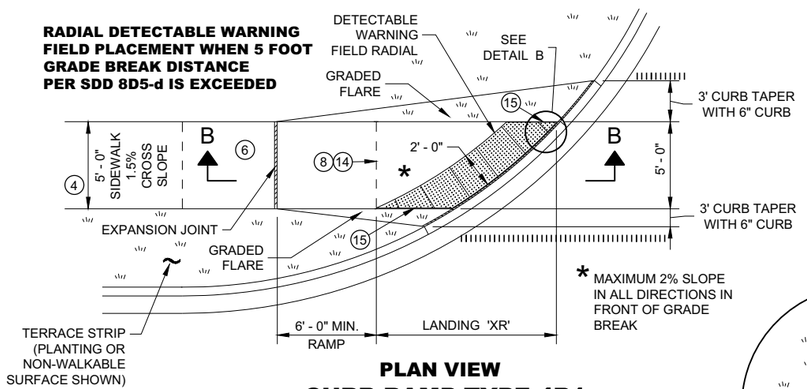


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

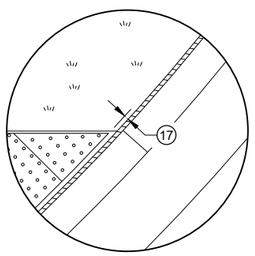
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



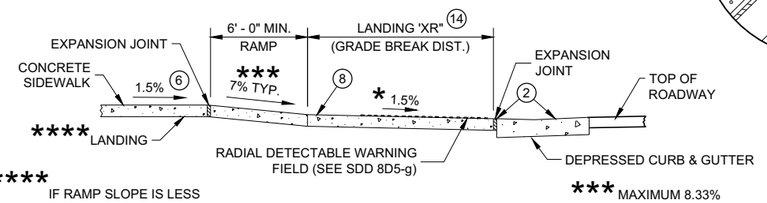
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

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

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

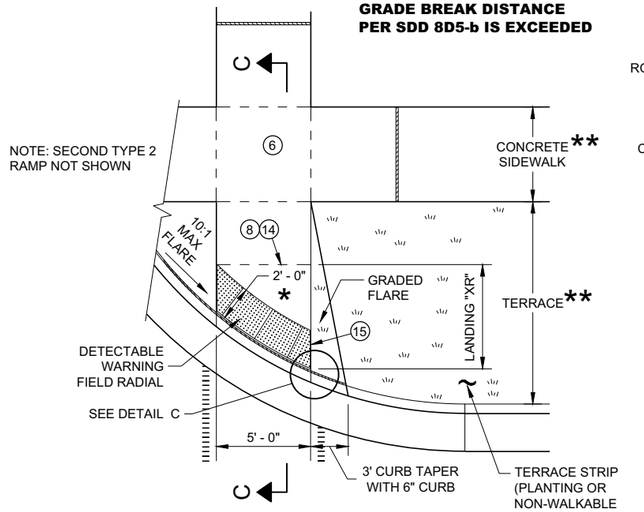
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

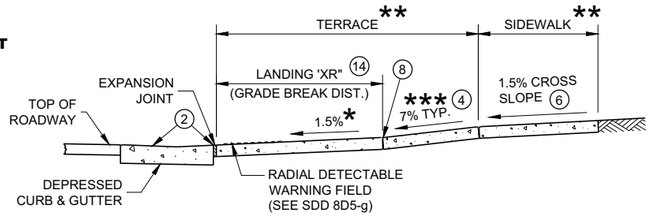


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

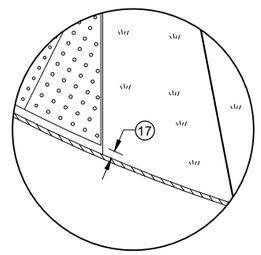


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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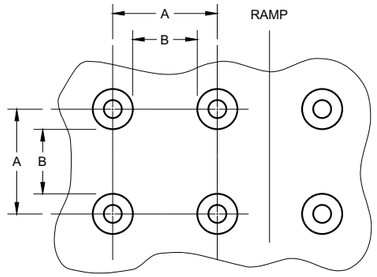
SDD 08D05 - 20f

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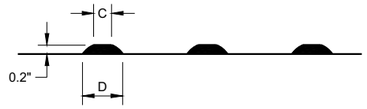
SDD 08D05 - 20f

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

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

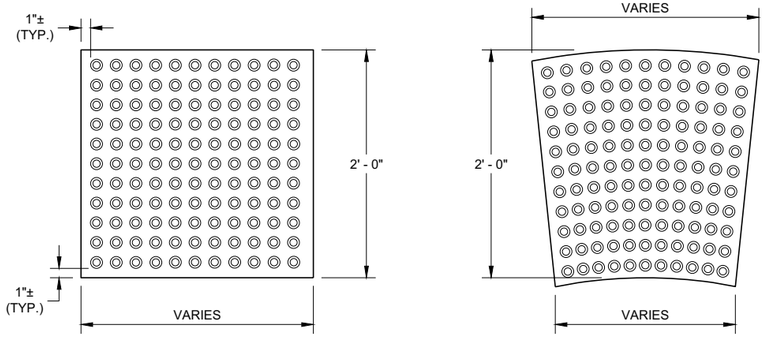


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

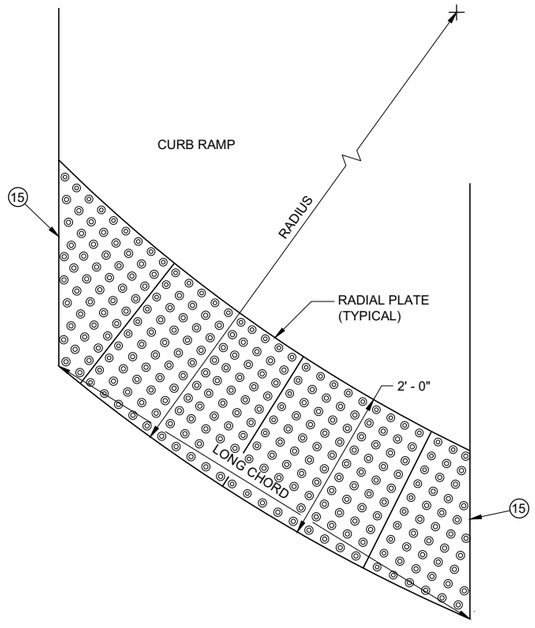
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

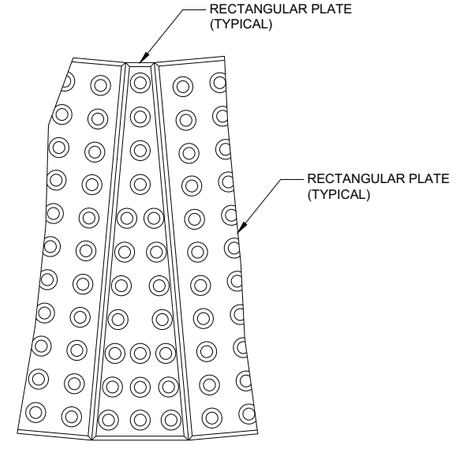
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

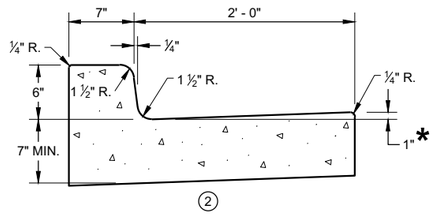
CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

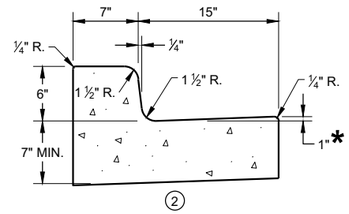
FHWA

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SDD 08D05 - 20g

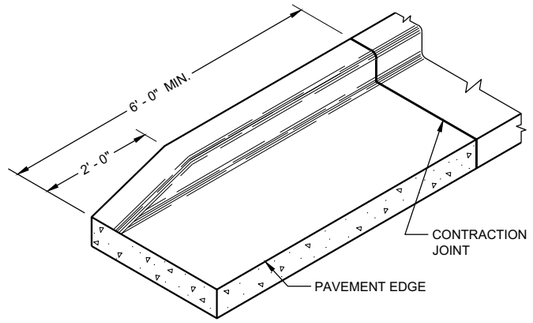


CONCRETE CURB AND GUTTER 31" ①

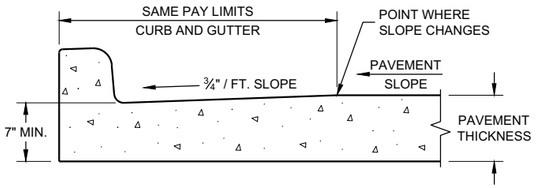
*TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



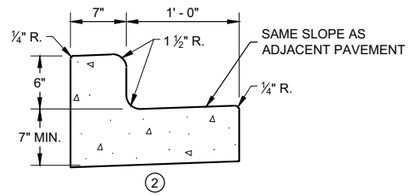
CONCRETE CURB AND GUTTER 22" ①



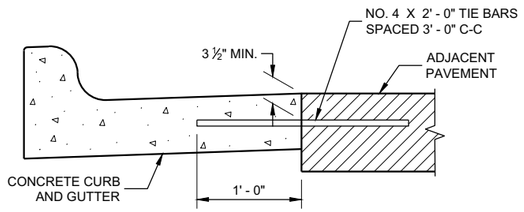
END SECTIONCURB AND GUTTER



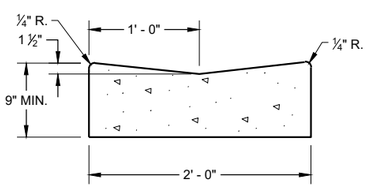
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



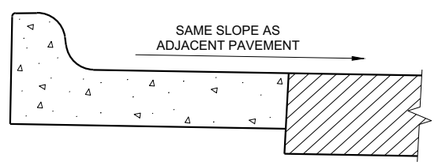
CONCRETE CURB AND GUTTER 19" ①



TYPICAL TIE BAR LOCATION ①



CONCRETE GUTTER 24" ①



HIGH SIDE SECTION ③

(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

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

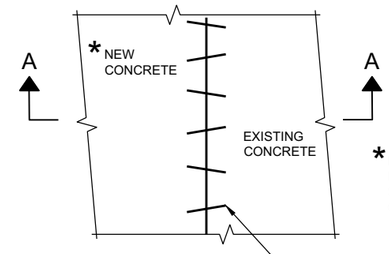
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUITED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

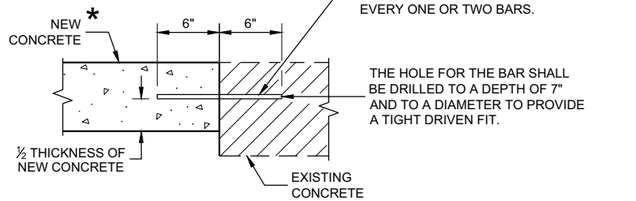
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLANS



PLAN VIEW

* EXISTING AND NEW CONCRETE MAY BE CURB AND GUTTER, SURFACE DRAINS, PAVEMENT OR OTHER CONCRETE STRUCTURE.



SECTION A - A

PAVEMENT TIES

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

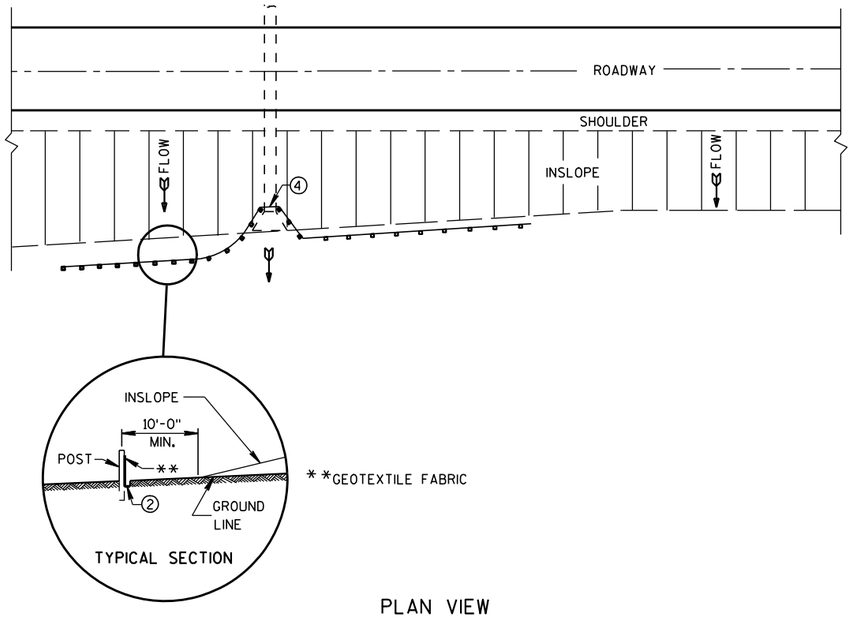
(For Optional use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

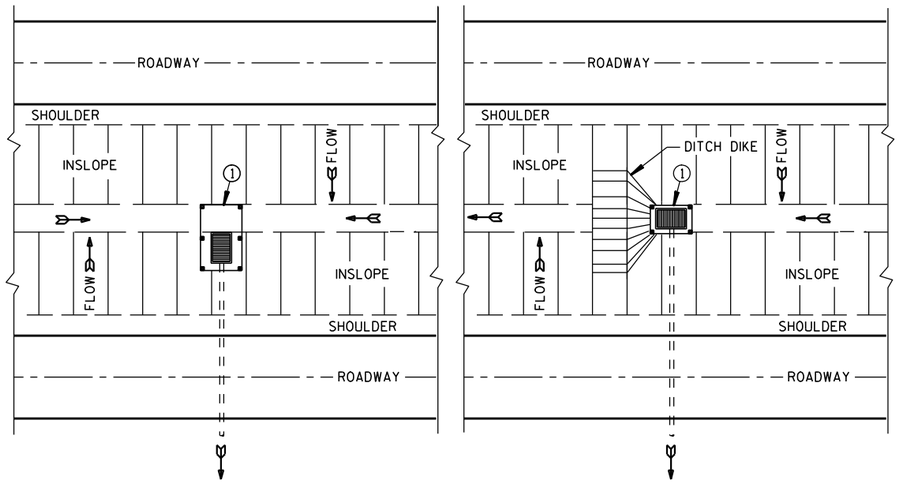
6

SDD 08D16 - 11



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



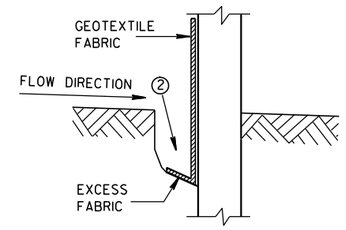
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

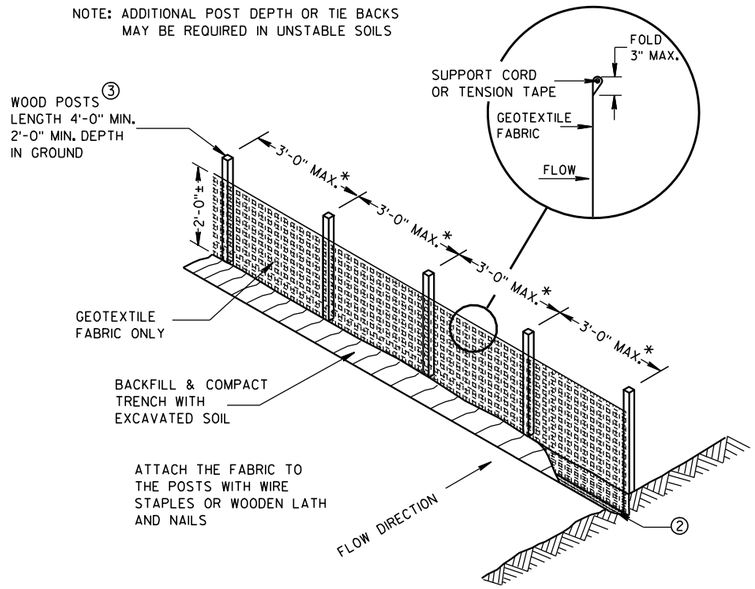
GENERAL NOTES

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

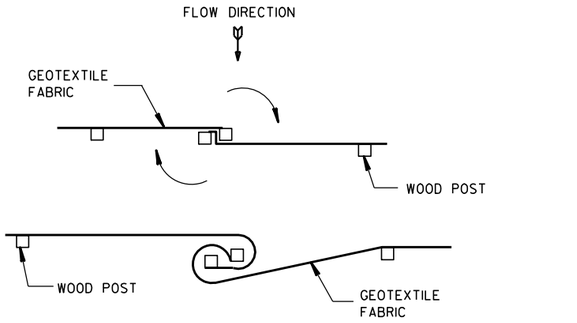
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



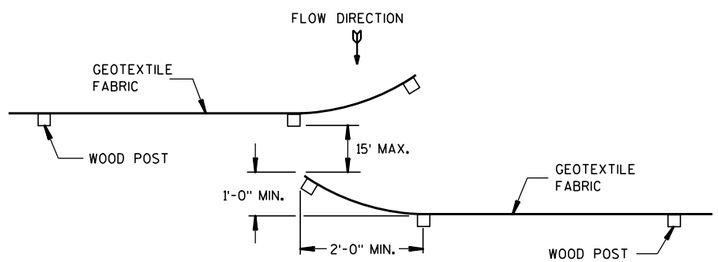
TRENCH DETAIL



SILT FENCE

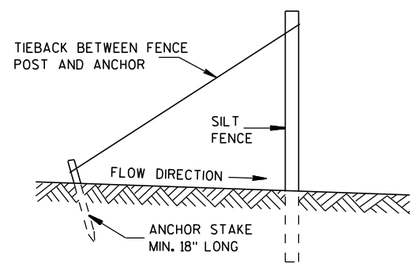


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

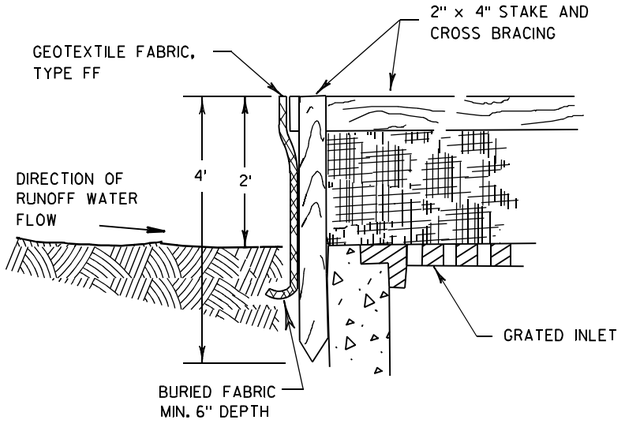
APPROVED
4-29-05
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

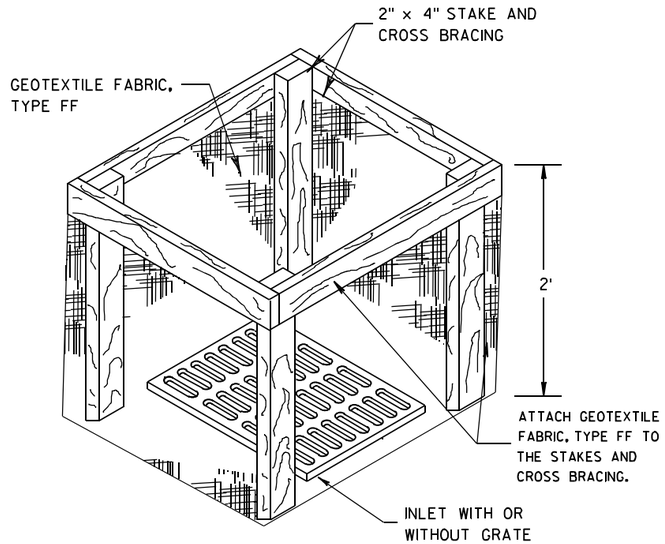
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S.D.D. 8 E 9-6

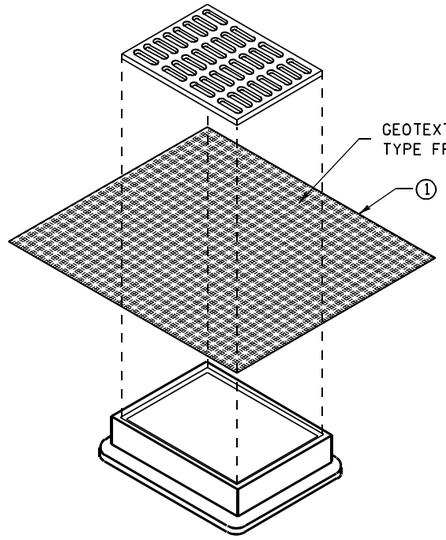
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S.D.D. 8 E 9-6



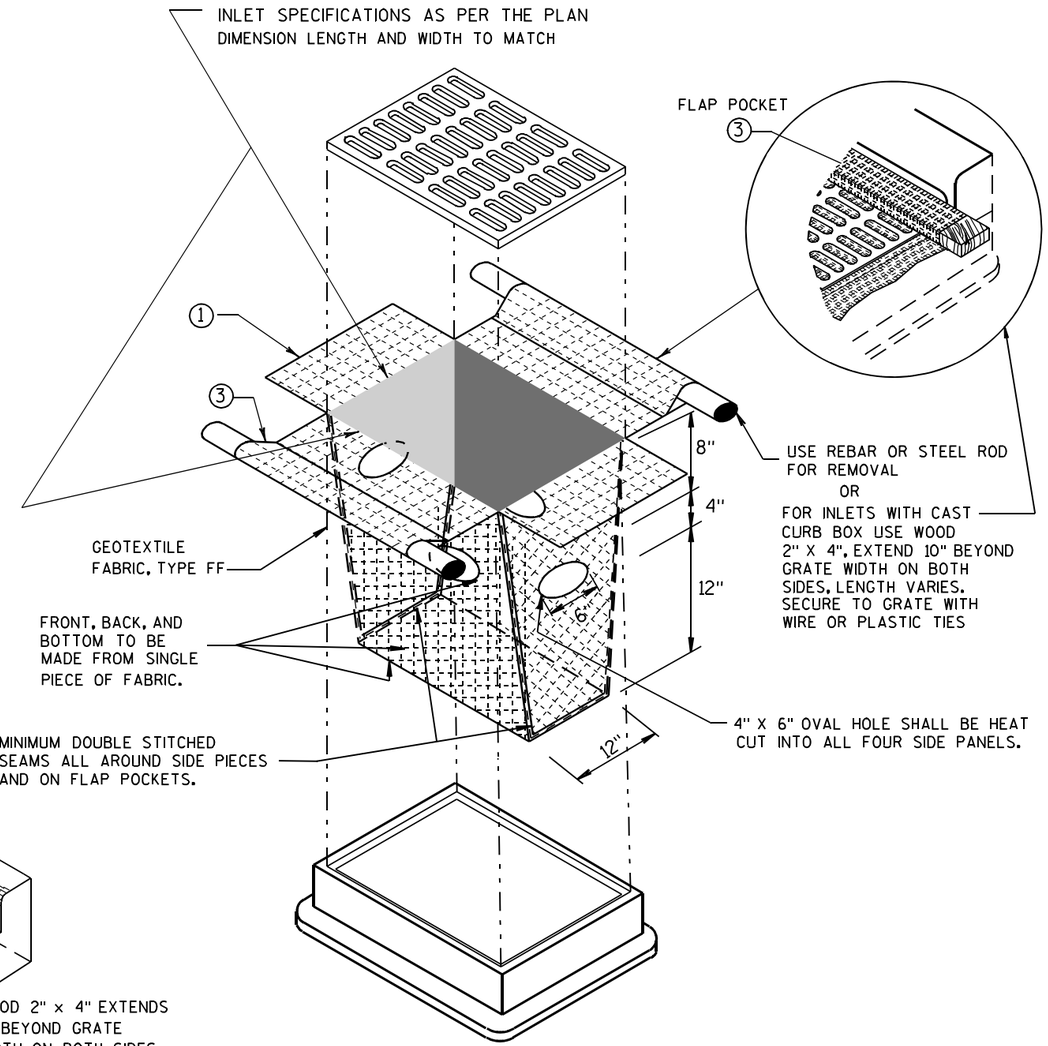


INLET PROTECTION, TYPE A



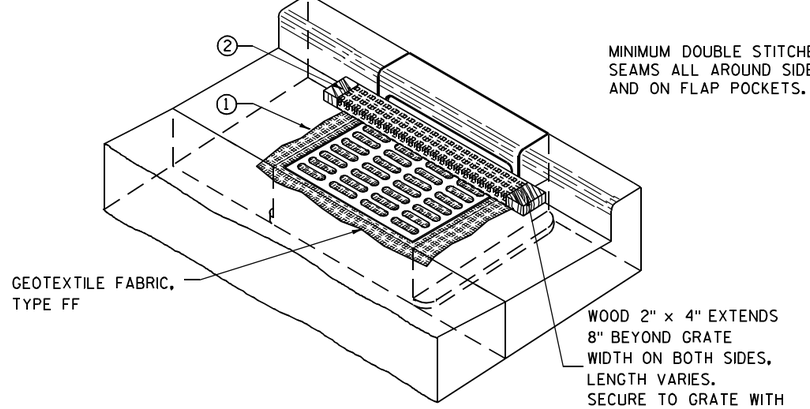
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

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.

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 A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

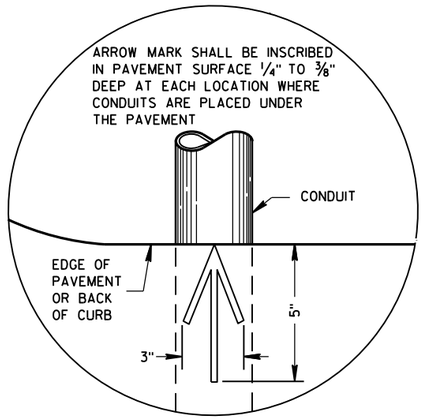
FHWA

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S.D.D. 8 E 10-2

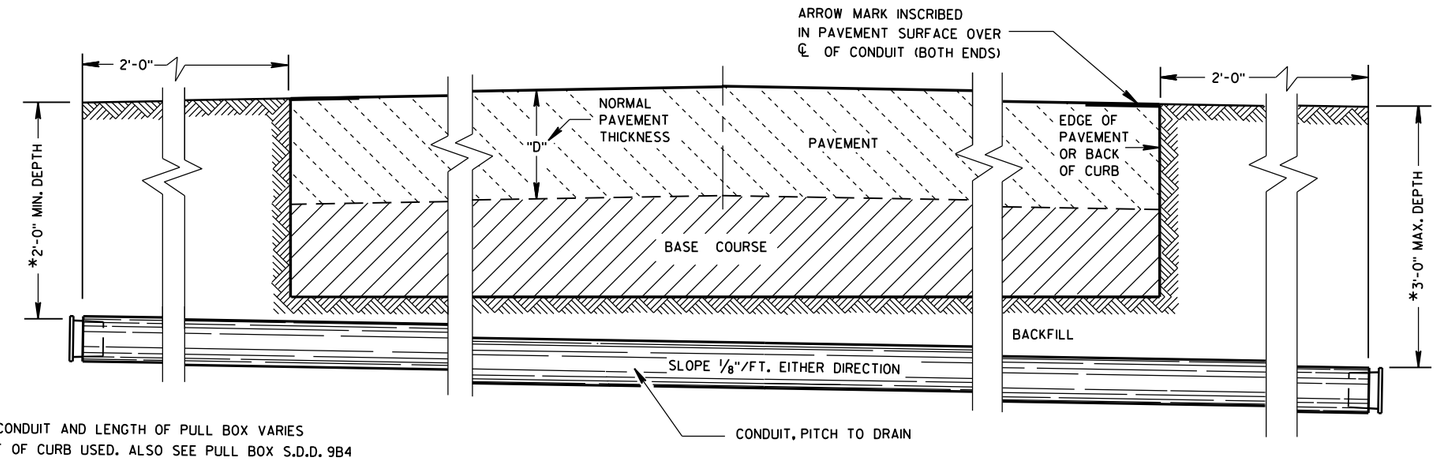
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S.D.D. 8 E 10-2



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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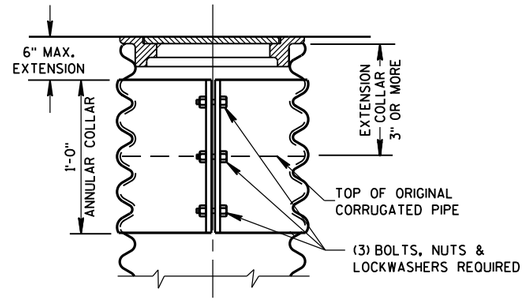
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

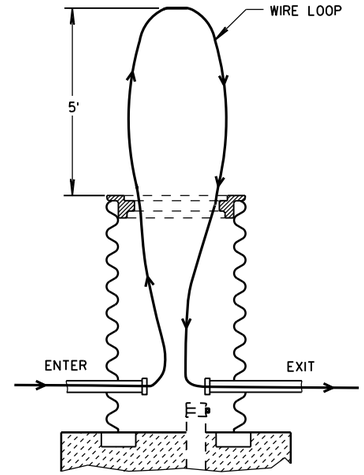
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

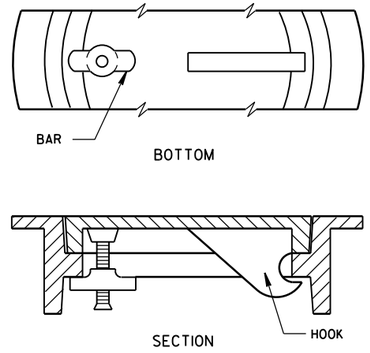
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

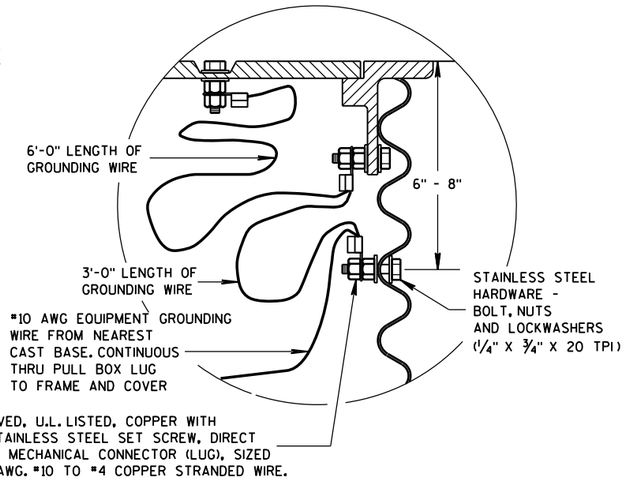


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

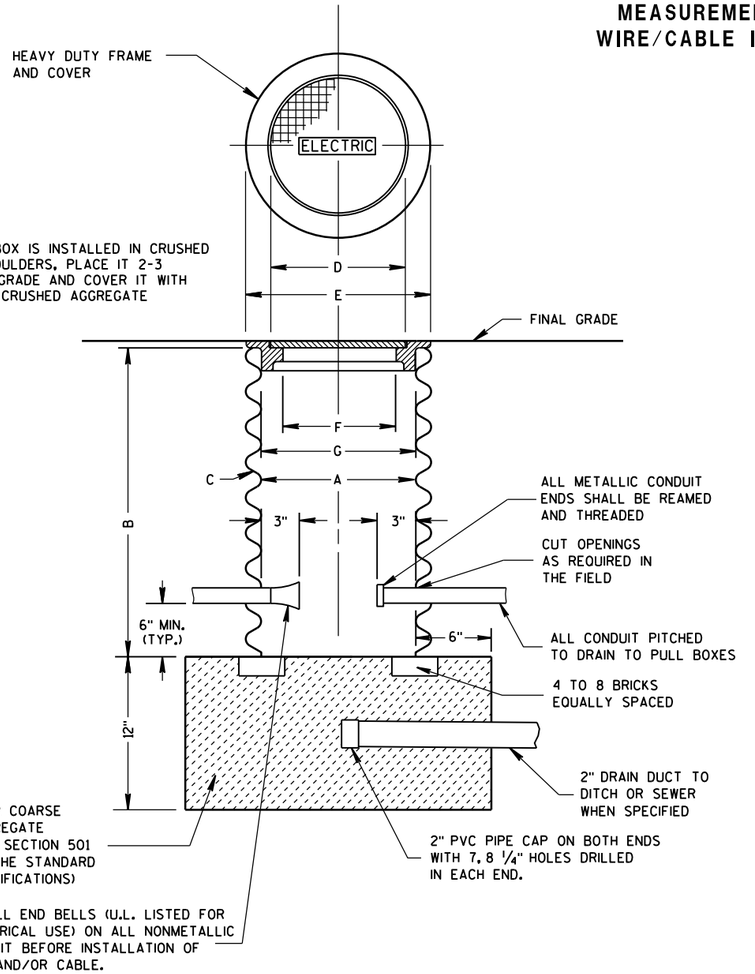


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

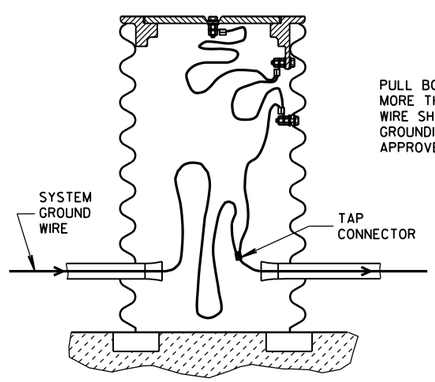
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

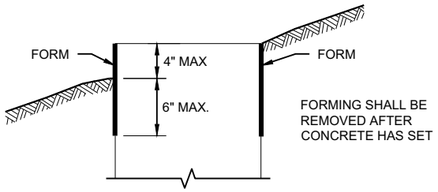
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL 271
FHWA

6

S.D.D. 9 B 4-11

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

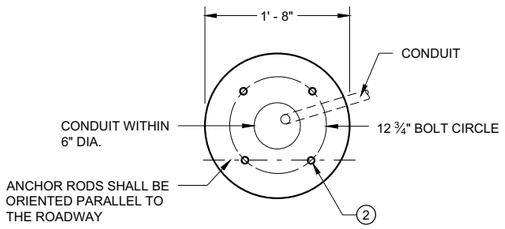
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

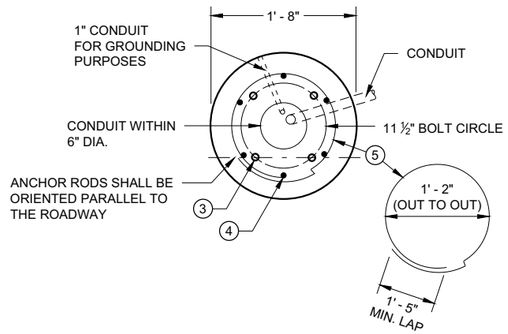
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

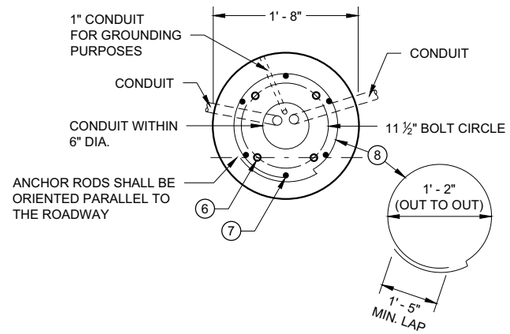
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

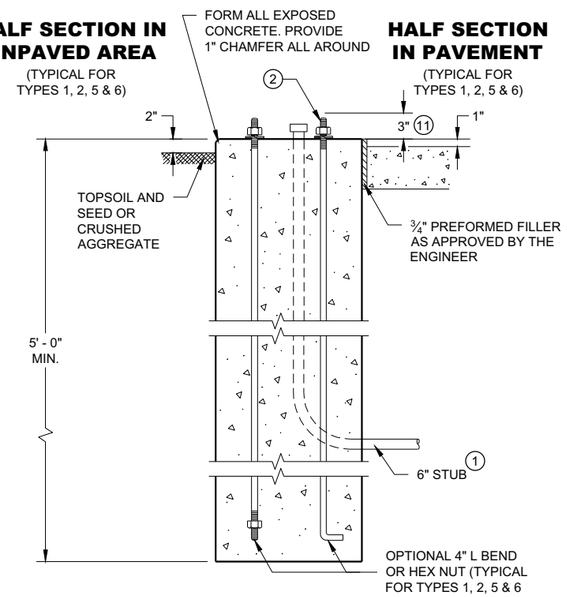
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

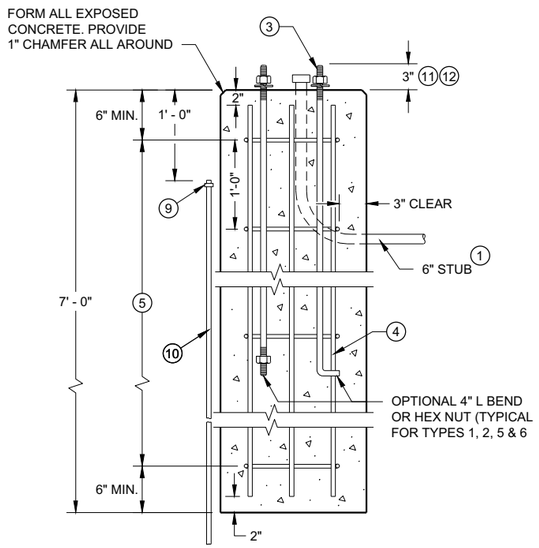
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

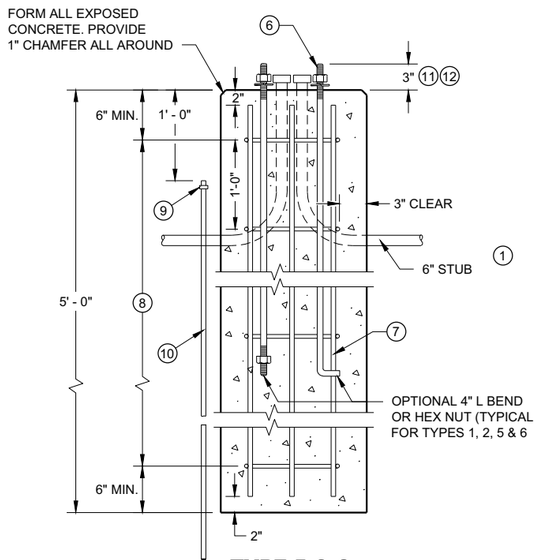
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 272
FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

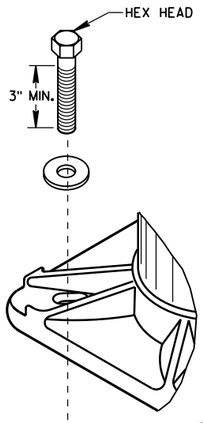
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

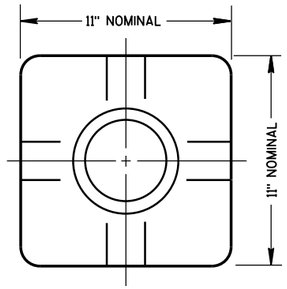
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

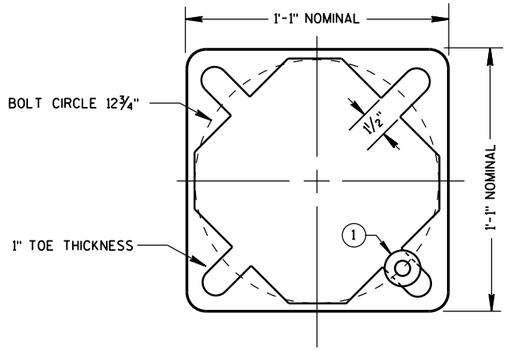
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

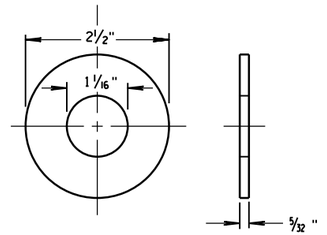




TOP VIEW
(PEDESTAL BASE)

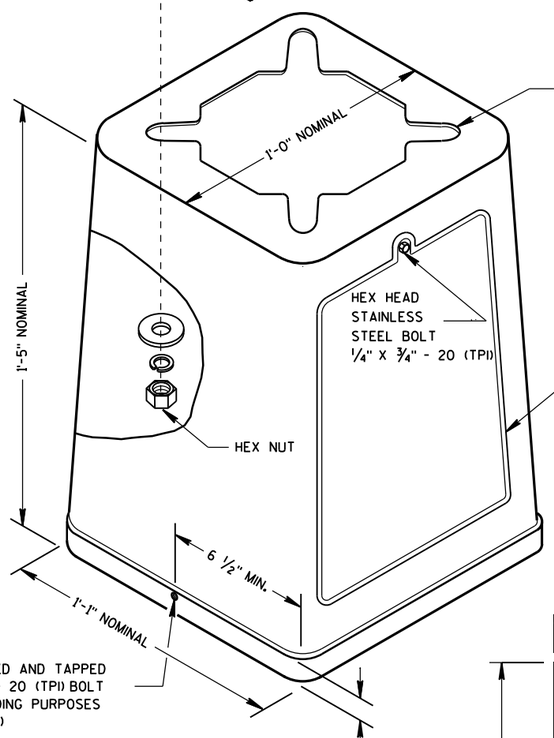


BOTTOM VIEW
(PEDESTAL BASE)

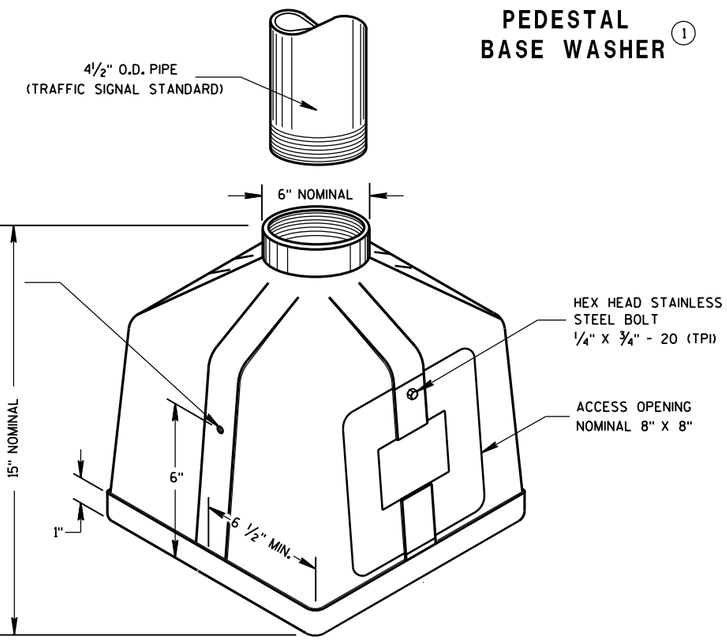


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

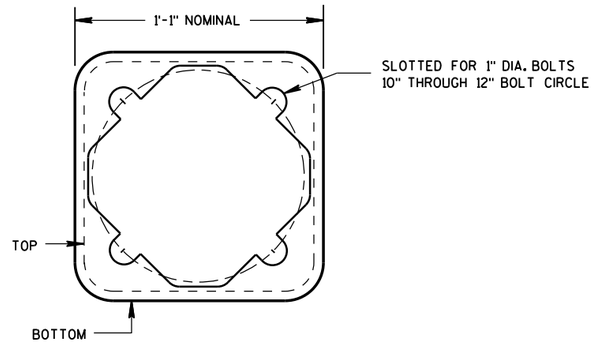


ISOMETRIC VIEW

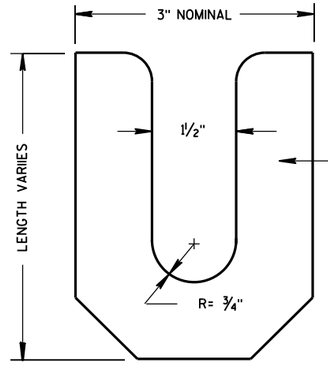


ISOMETRIC VIEW

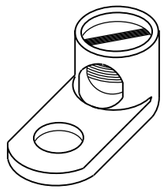
PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)



LEVELING SHIM



TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

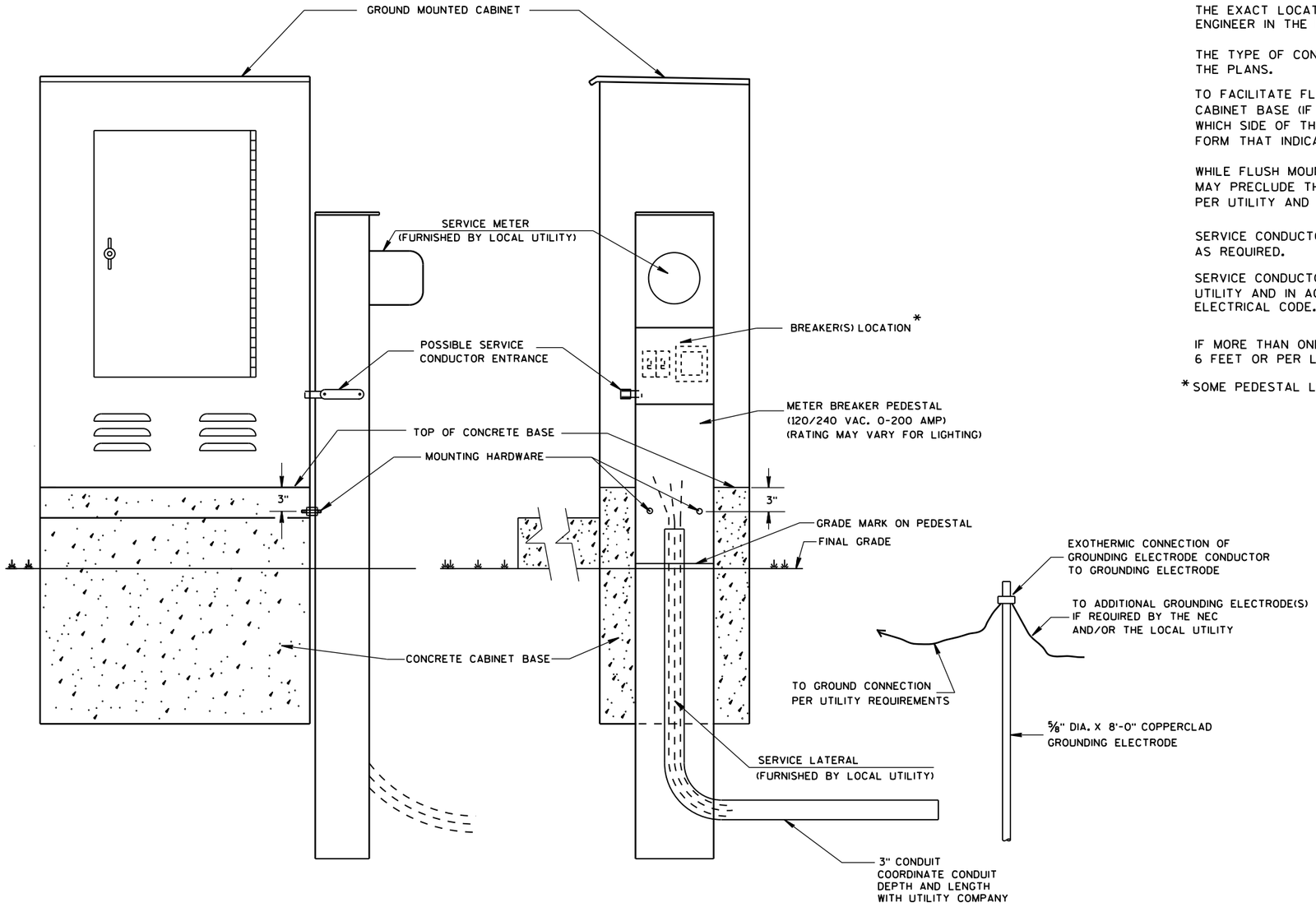
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 3-4

6

S.D.D. 9 C 3-4



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

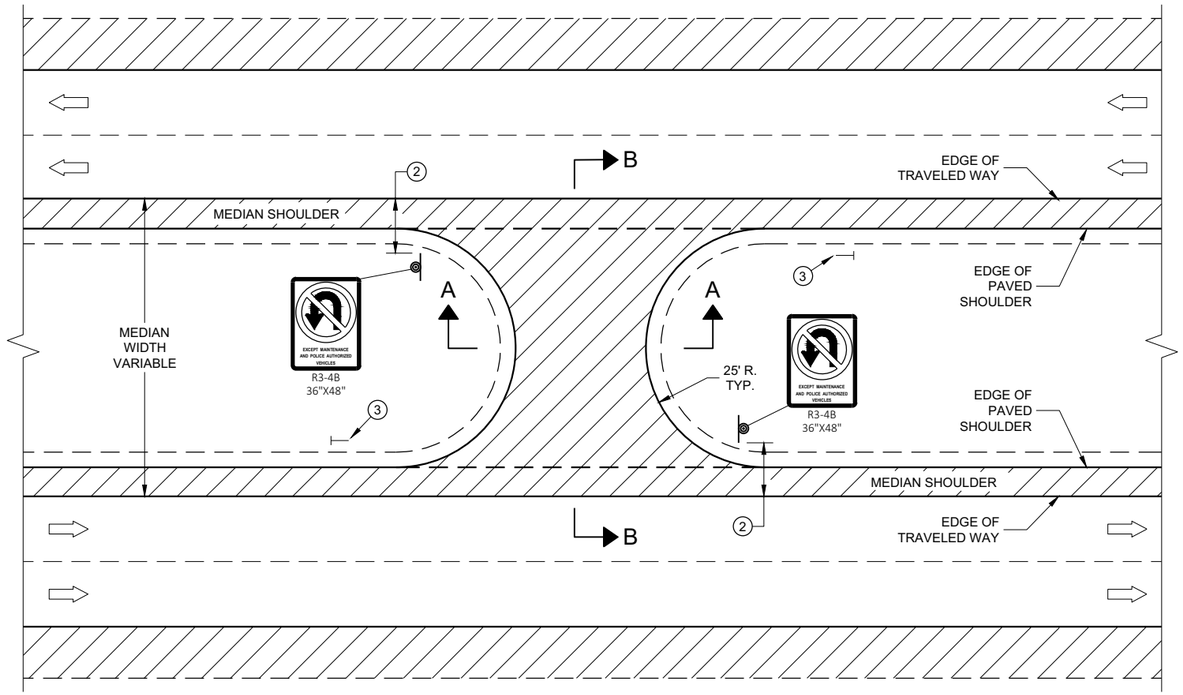
*SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

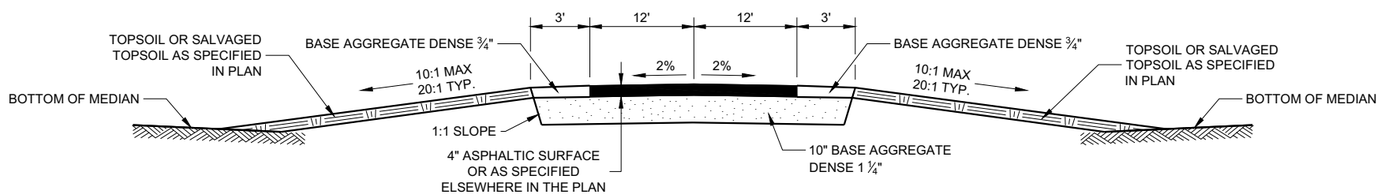
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

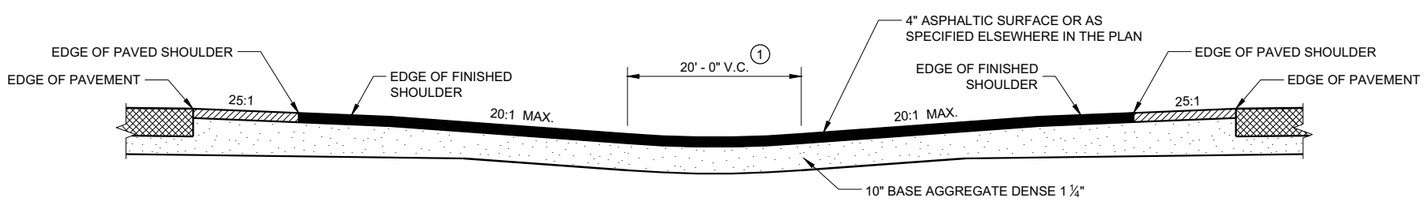
6
S.D.D. 9 D 1-5



PLAN VIEW



SECTION A-A



SECTION B-B

GENERAL NOTES

1. ADJUST VERTICAL CURVE LOCATION LATERALLY TO MAINTAIN 20:1 MAX.
2. SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.
3. INSTALL DELINEATOR. SEE STANDARD DETAIL DRAWING 15A4.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR
- DIRECTION OF TRAFFIC

MAINTENANCE CROSSOVER FOR FREEWAYS

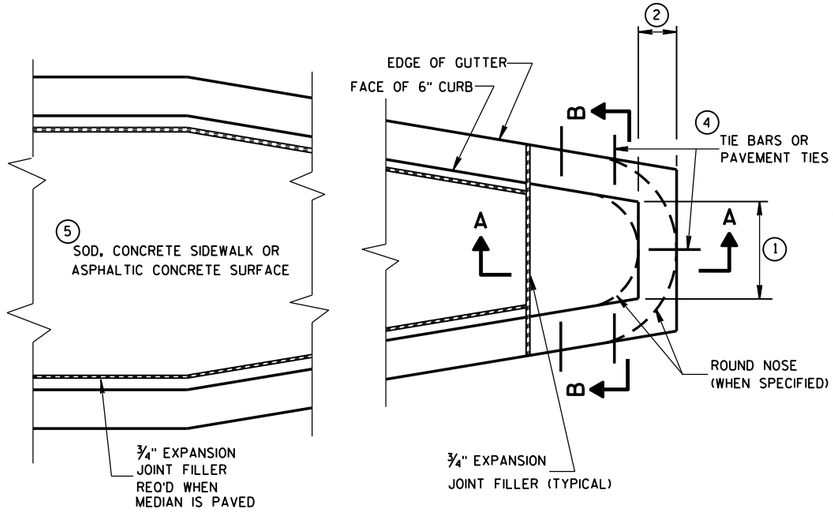
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

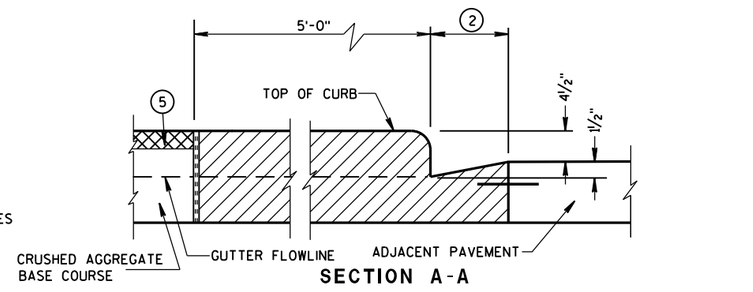
APPROVED
November 2019
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6
SDD 11A01 - 06





CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

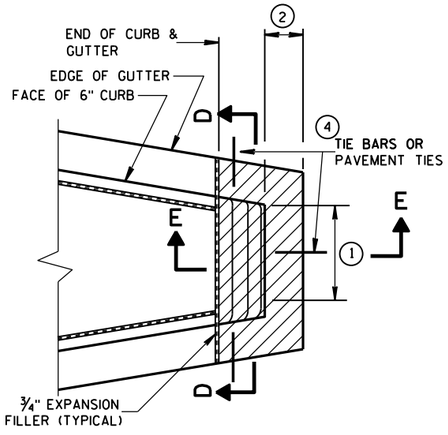
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

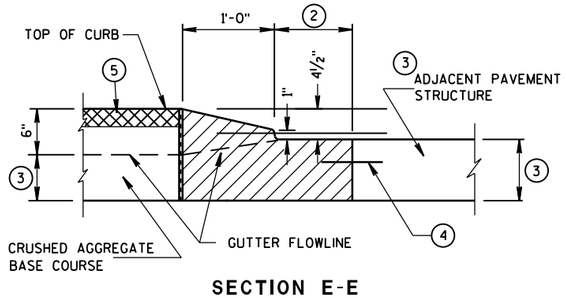
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

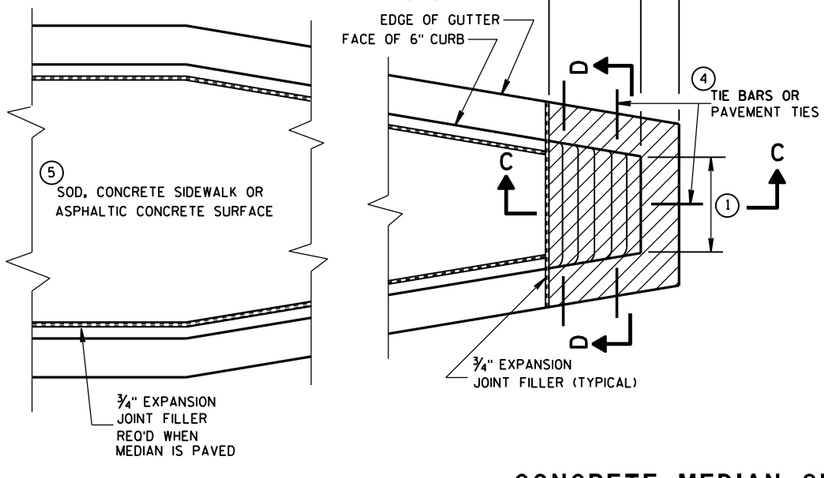
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

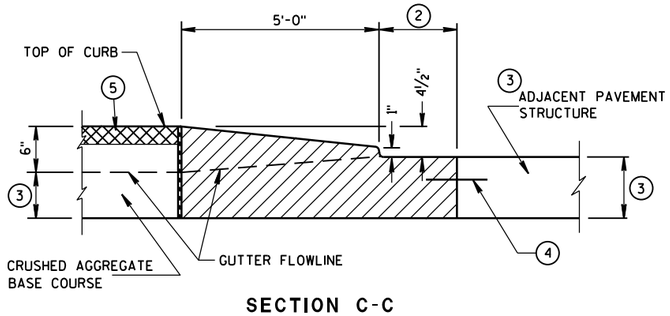




SECTION E-E

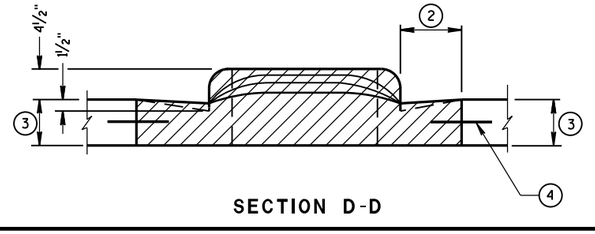
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

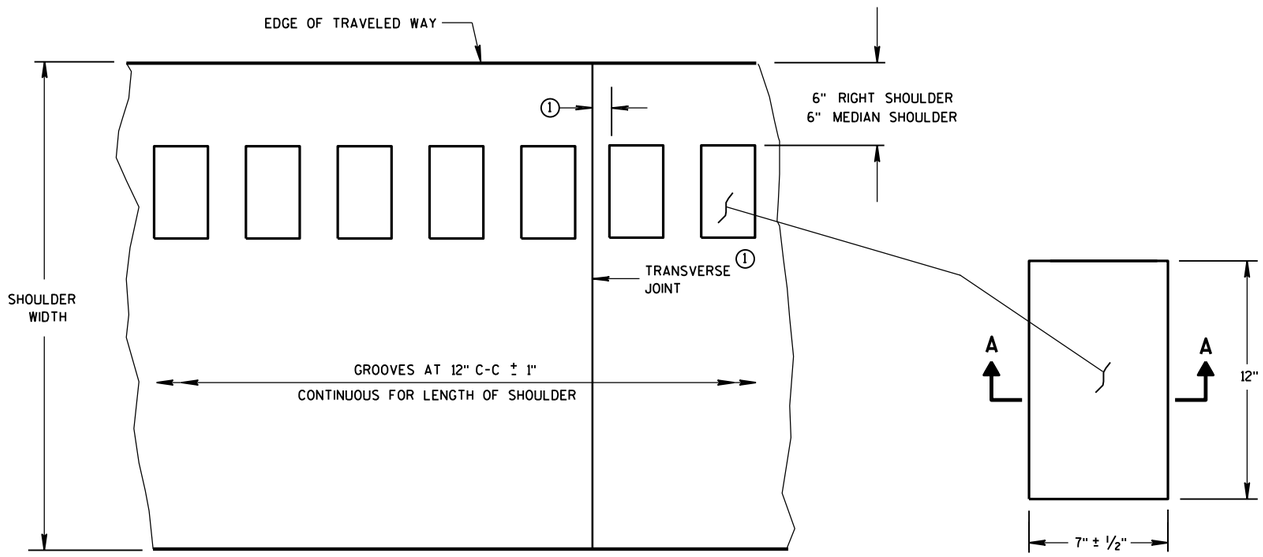
FHWA

6

S.D.D. 11 B 2-2

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S.D.D. 11 B 2-2



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

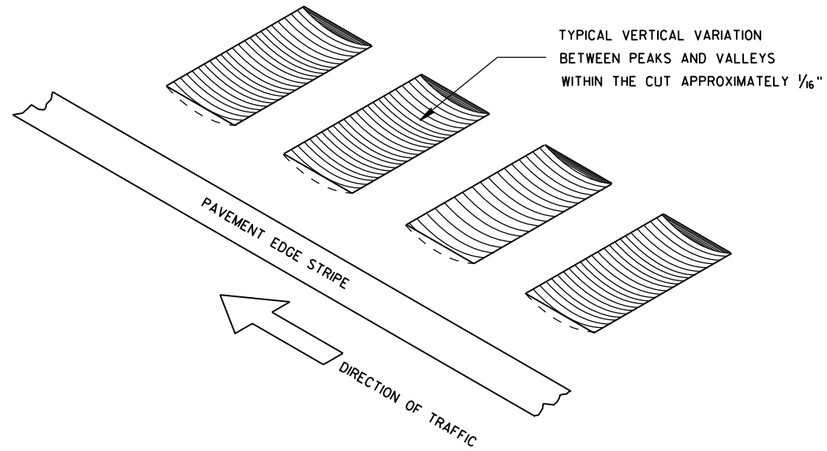
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

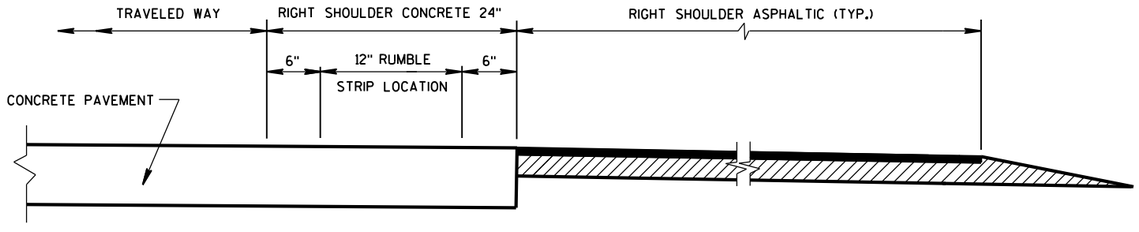
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

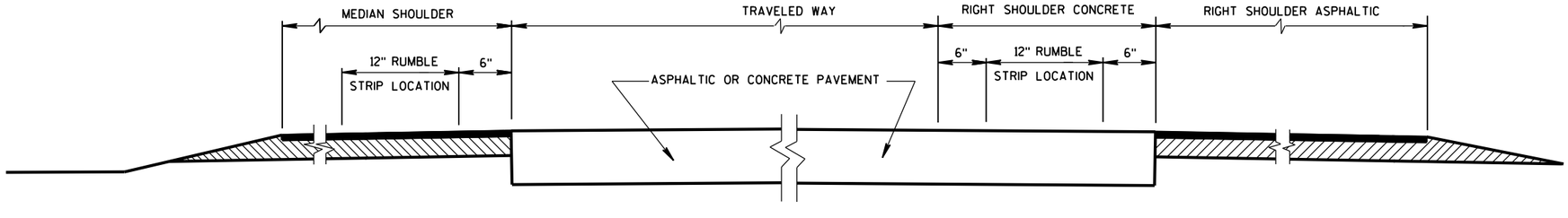
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



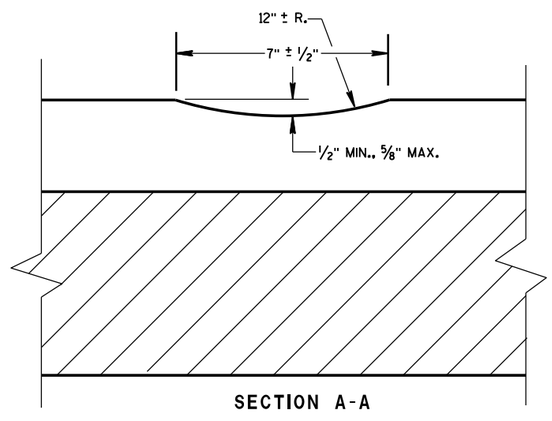
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

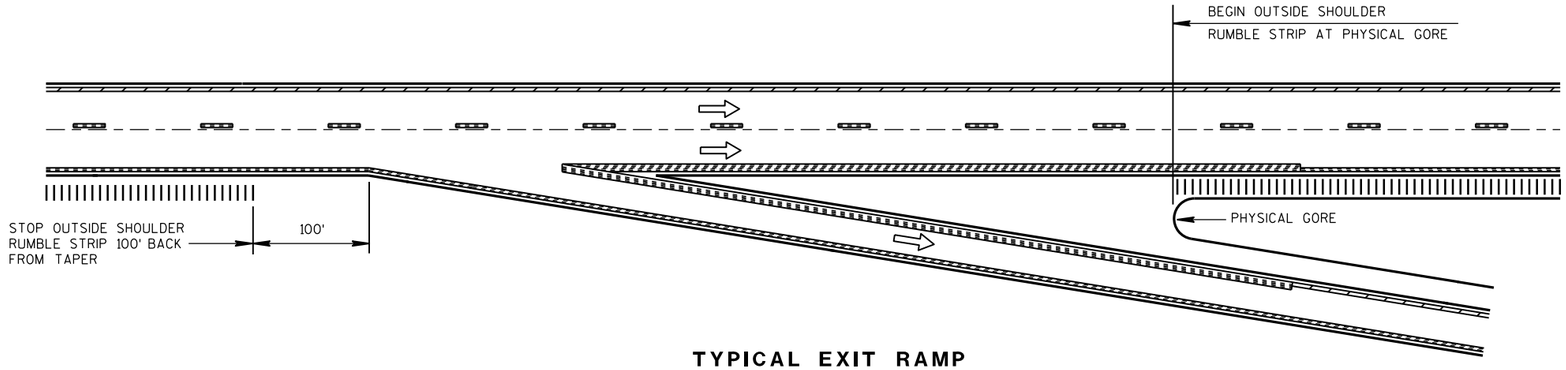
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 A 5-5a

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S.D.D. 13 A 5-5a



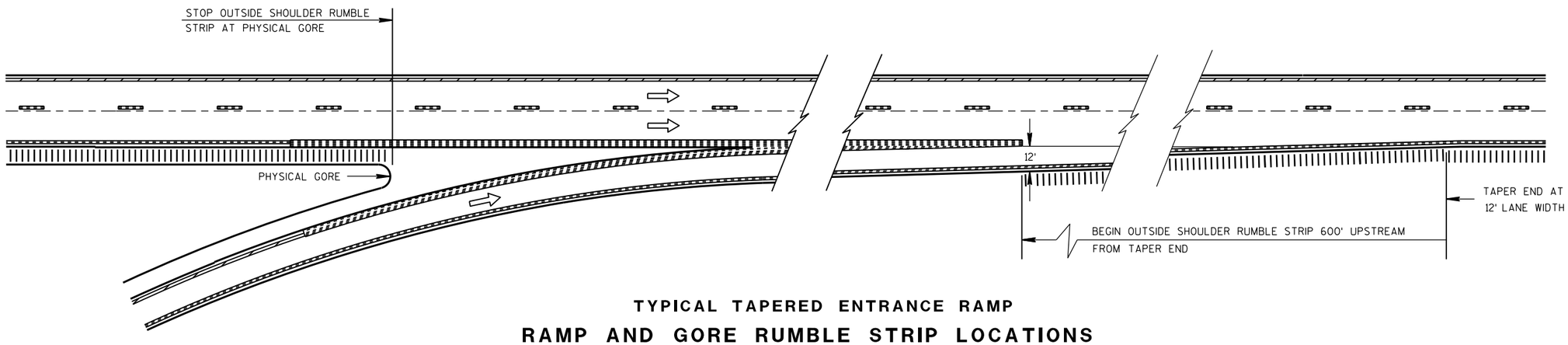
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

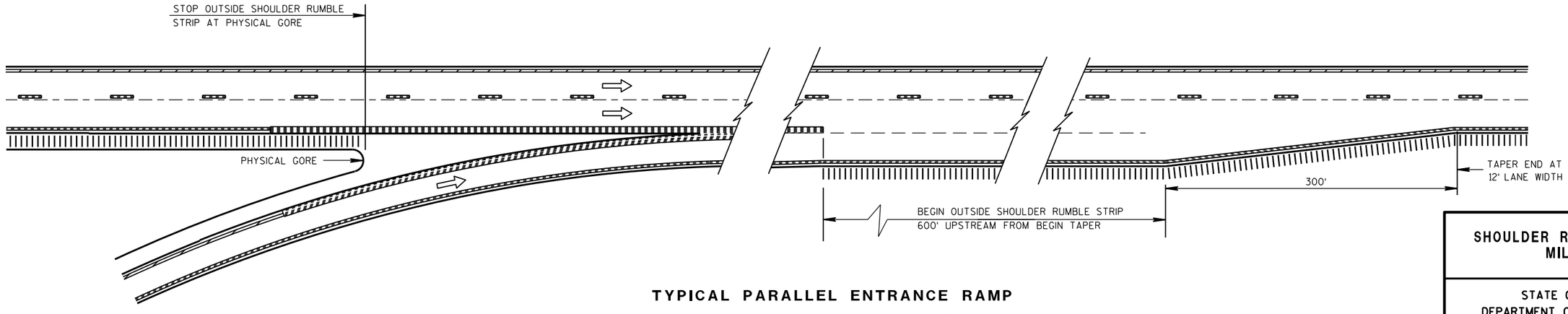
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

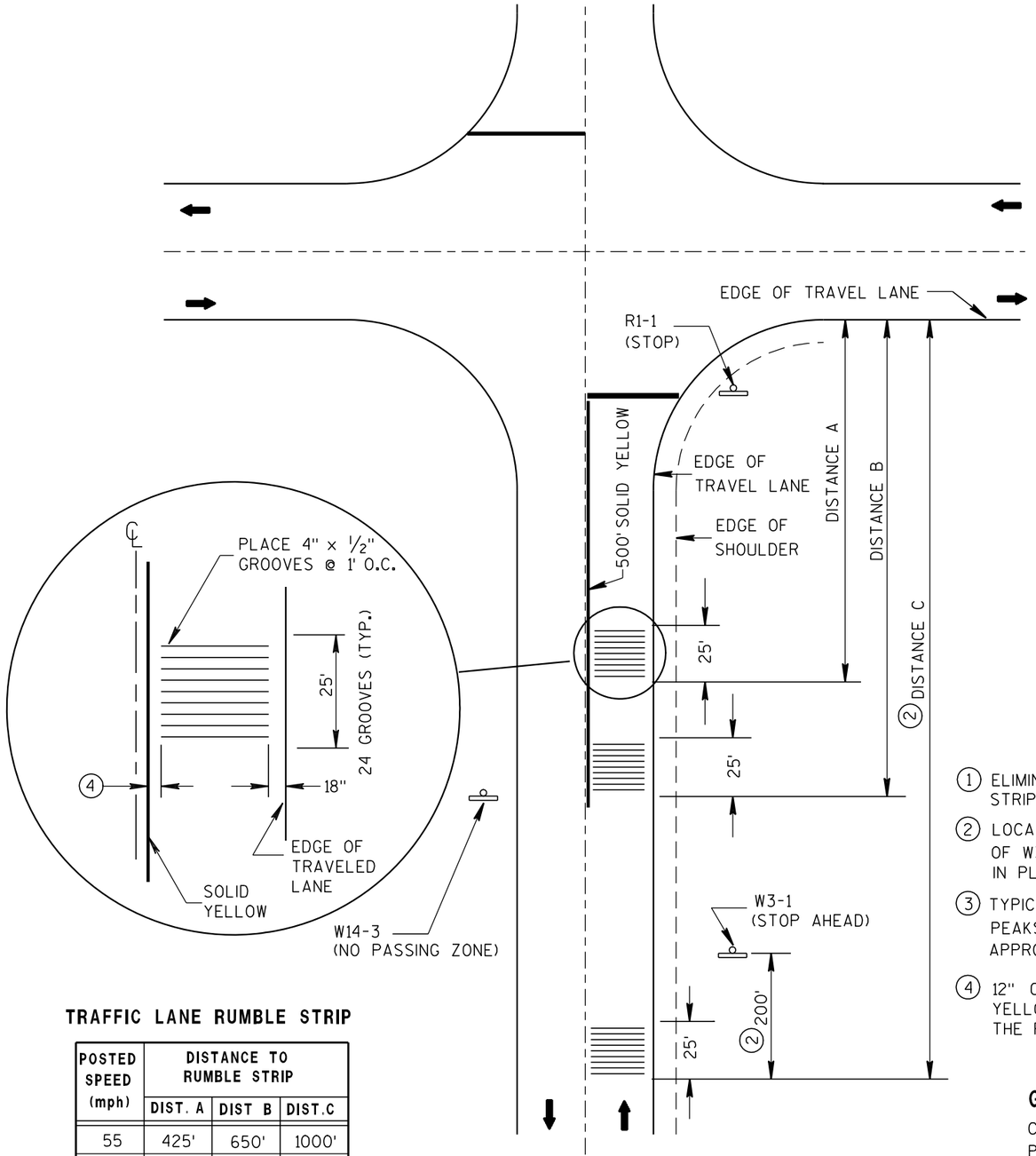
FHWA

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S.D.D. 13 A 5-5b

6

S.D.D. 13 A 5-5b



ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

PLAN VIEW

RUMBLE STRIP LOCATION

TRAFFIC LANE RUMBLE STRIP

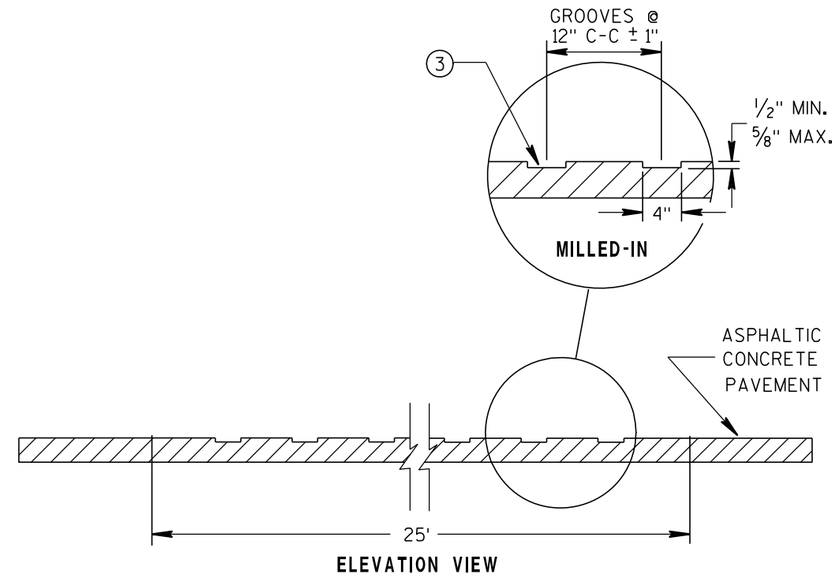
POSTED SPEED (mph)	DISTANCE TO RUMBLE STRIP		
	DIST. A	DIST B	DIST.C
55	425'	650'	1000'
50	325'	450'	800'
45	275'	400'	650'
40	225'	(1)	550'
35	175'	(1)	475'
≤ 30	125'	(1)	425'

(1) ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.

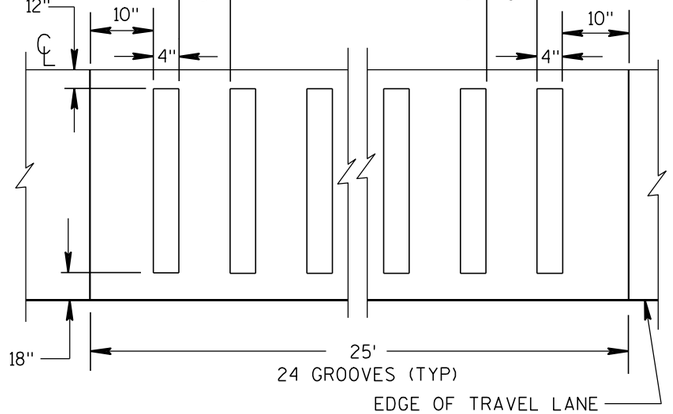
(2) LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.

(3) TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY 1/16"

(4) 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.



ELEVATION VIEW



PLAN VIEW

ASPHALTIC PAVEMENT MILLED-IN

GENERAL NOTES

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

ASPHALTIC RUMBLE STRIPS AT INTERSECTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/17/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS | 279
ENGINEER

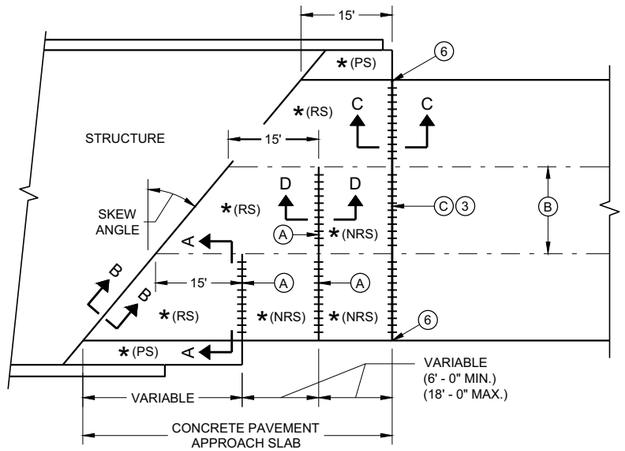
FHWA

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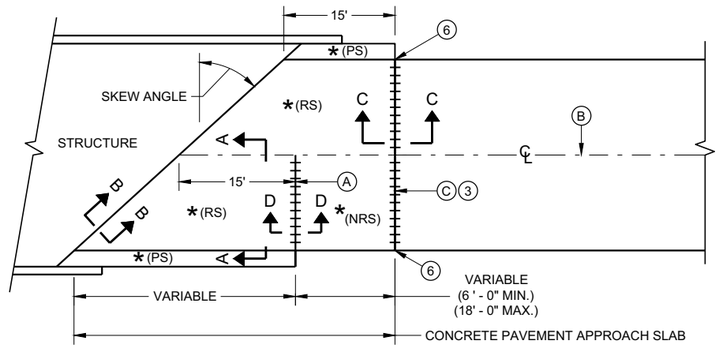
S.D.D. 13 A 8-1

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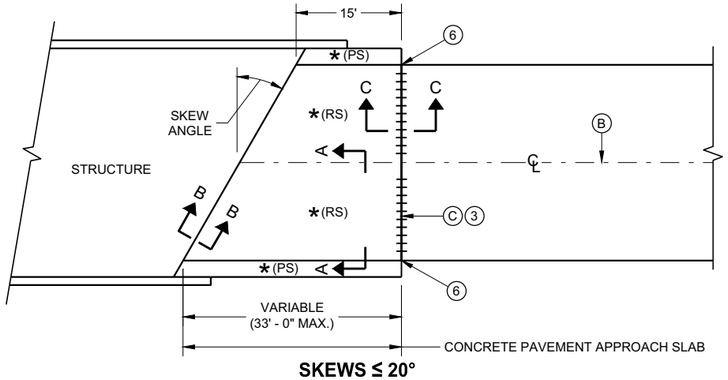
S.D.D. 13 A 8-1



SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

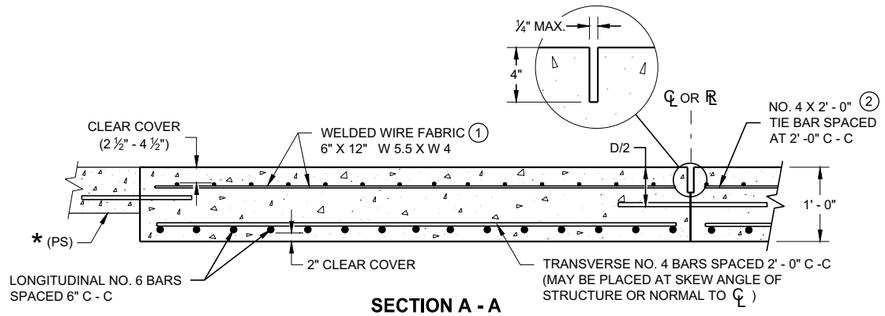
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

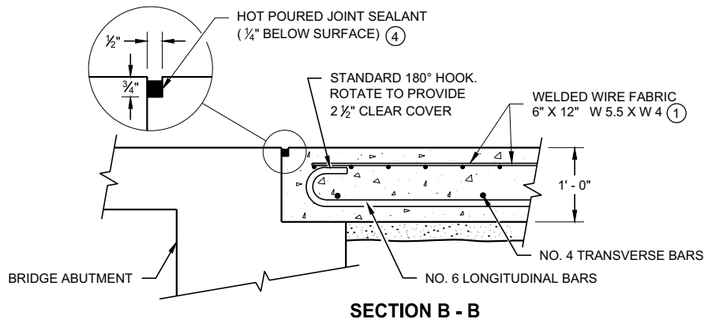
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

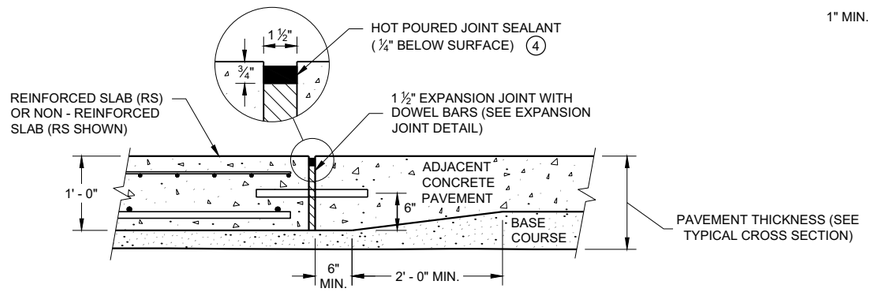
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

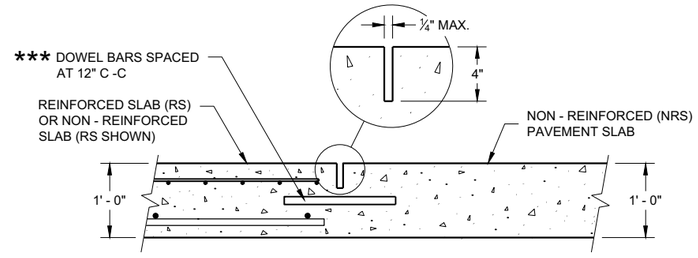
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

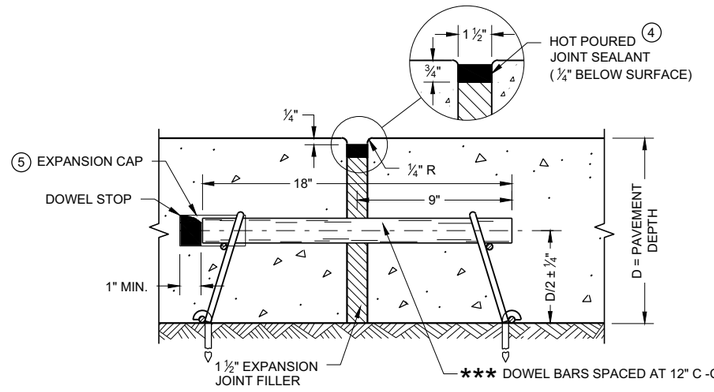
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



SECTION D - D
CONTRACTION JOINT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

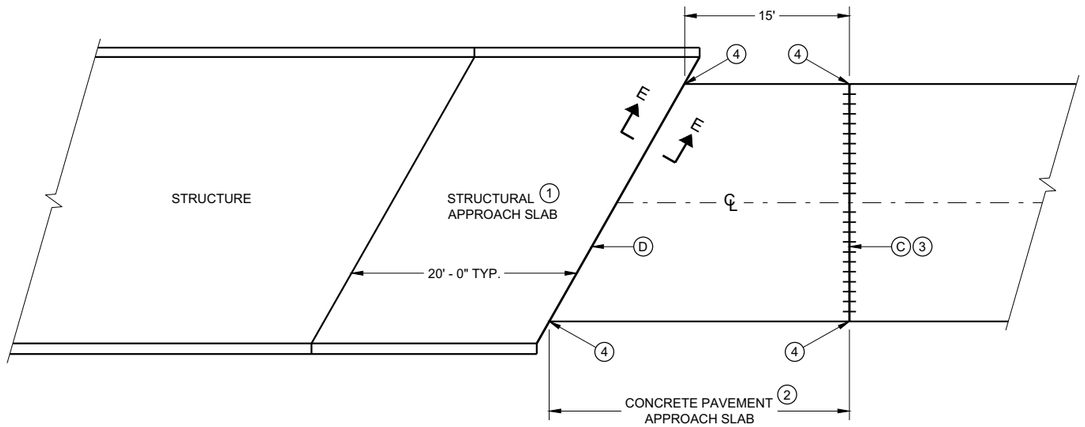
APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVISOR

FHWA

6

SDD 13B02 - 09a



BRIDGE APPROACHES

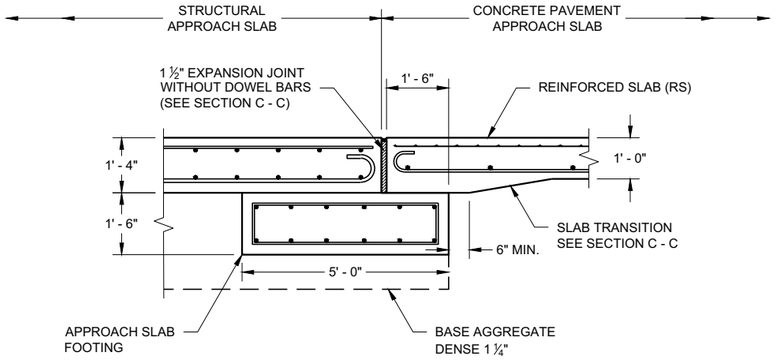
GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

1. SEE BRIDGE PLAN.
2. CONFORM TO SDD 13B02 SHEET A FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS
3. DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.
4. EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

C. 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞.

D. 1 ½" EXPANSION JOINT (NO DOWELS)



SECTION E - E
FOOTING DETAIL
STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

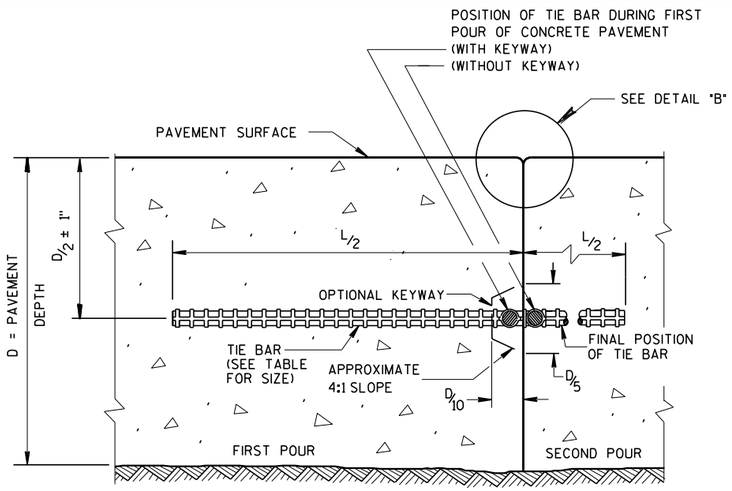
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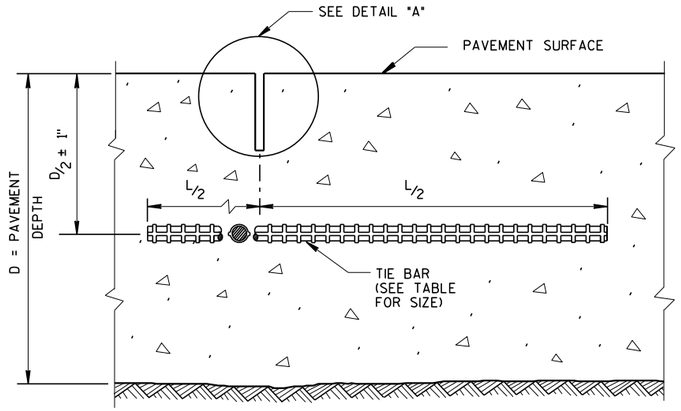
SDD 13B02 - 09b

6

SDD 13B02 - 09b



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

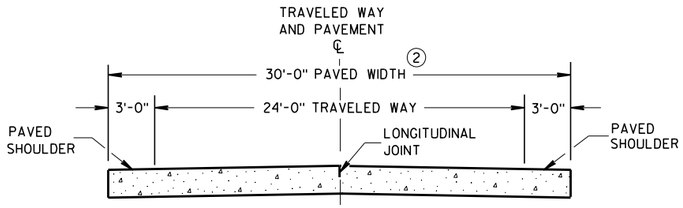
APPROVED
March 2018
DATE
/S/ Peter Kemp PE
PAVEMENT SUPE
FHWA

6

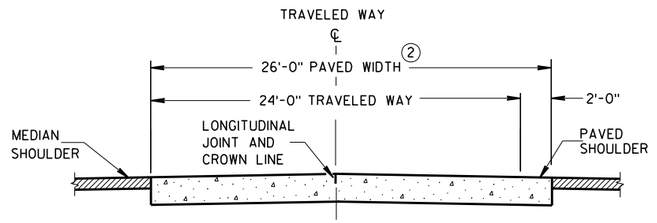
S.D.D. 13 C 1-19

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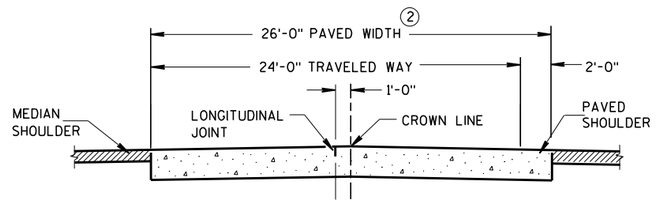
S.D.D. 13 C 1-19



SECTION A-A
TWO-LANE TWO-WAY HIGHWAY ①



SECTION B-B



ALTERNATIVE SECTION B-B
①
DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

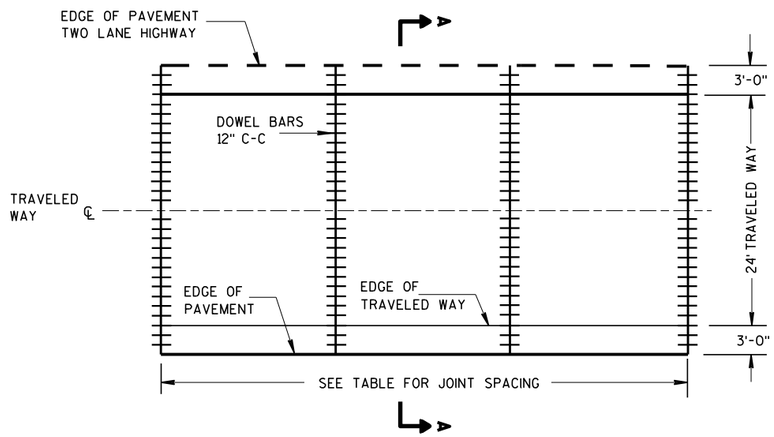
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

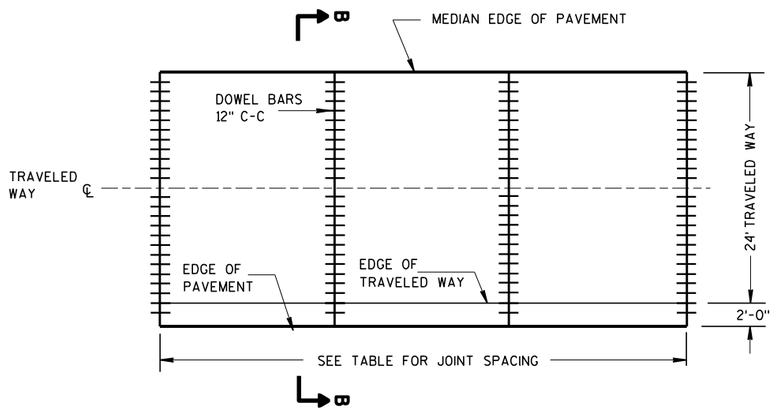
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY



CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

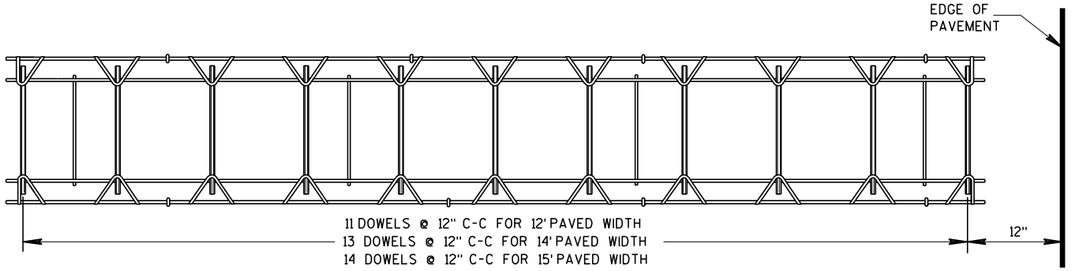
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

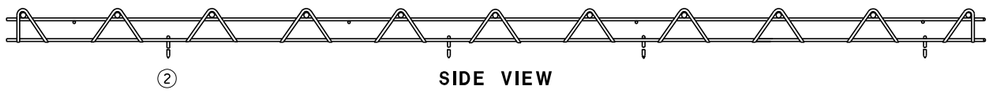
S.D.D. 13 C 11-12a

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S.D.D. 13 C 11-12a



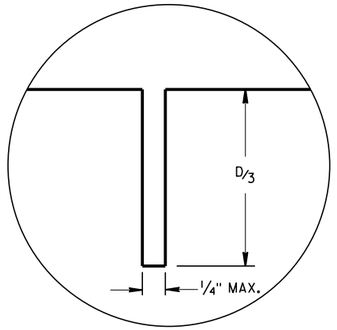
PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

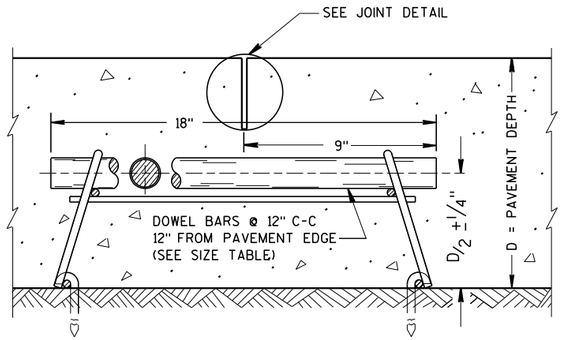
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

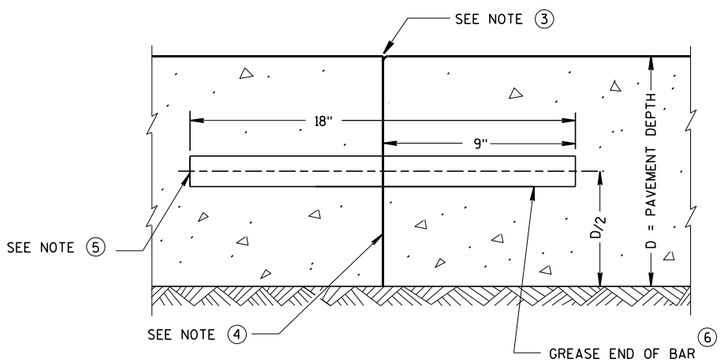
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

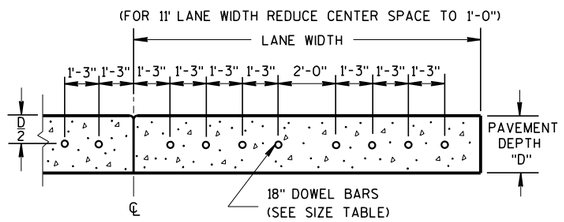
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUP
FHWA

6

S.D.D. 13 C 11-12b

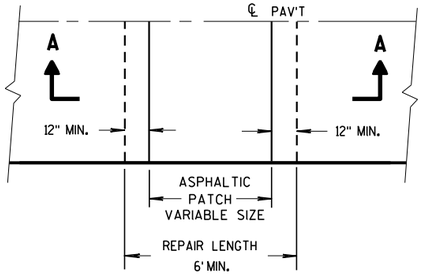
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

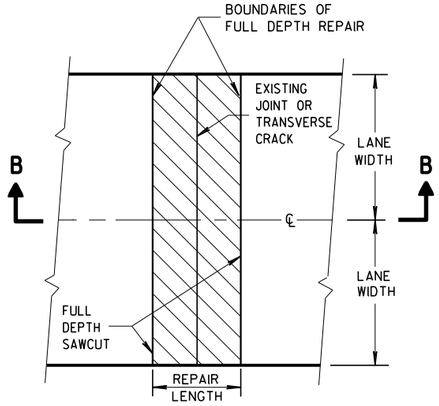
PROVIDE 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

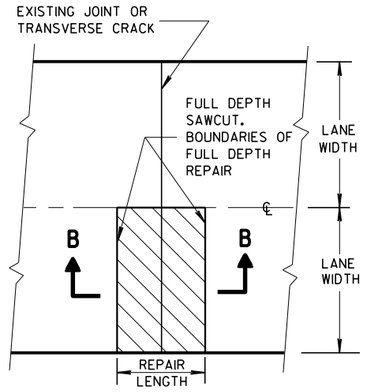
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

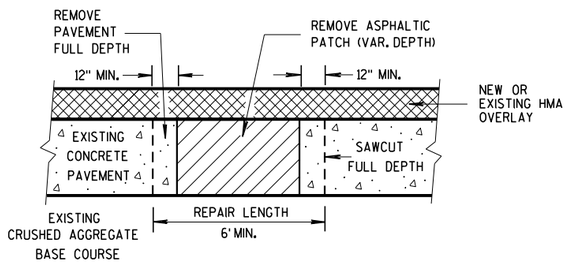


PLAN VIEW
(DOUBLE LANE REPAIR)



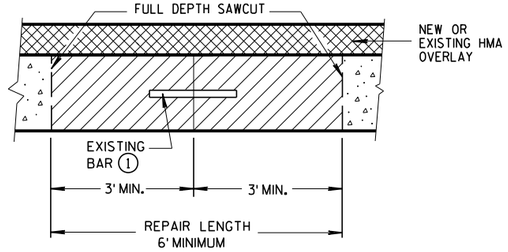
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

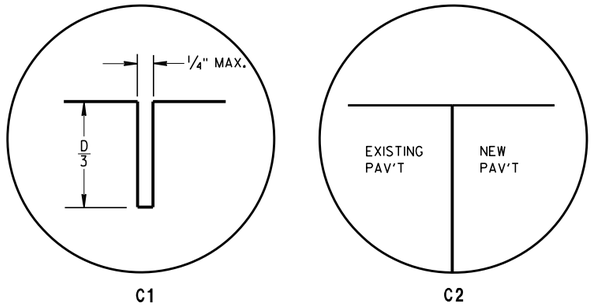
CONCRETE REMOVAL

BASE PATCHING CONCRETE

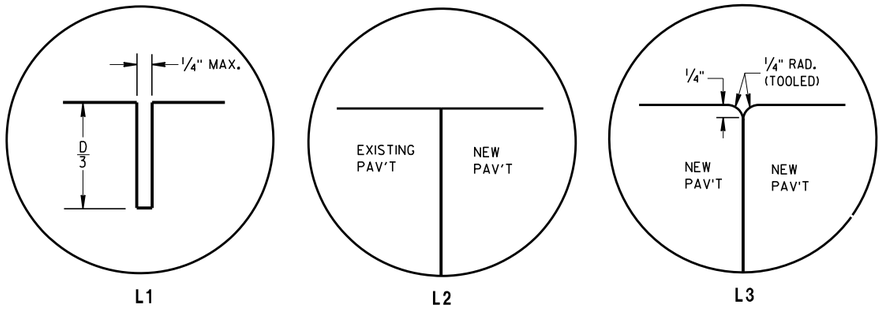
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 13 C 14-7a

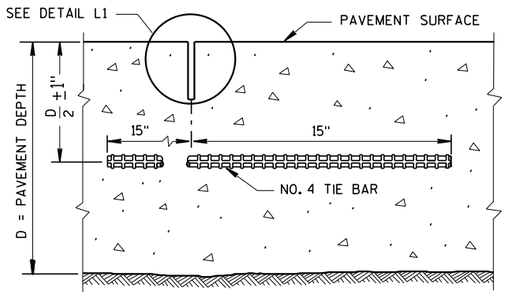
S.D.D. 13 C 14-7a



TRANSVERSE JOINTS

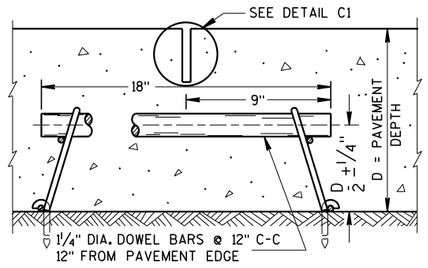


LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT



SECTION F-F

CONTRACTION JOINT

GENERAL NOTES

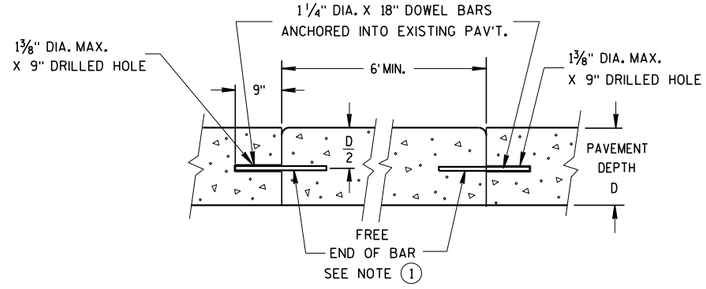
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE BASE PATCHES OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

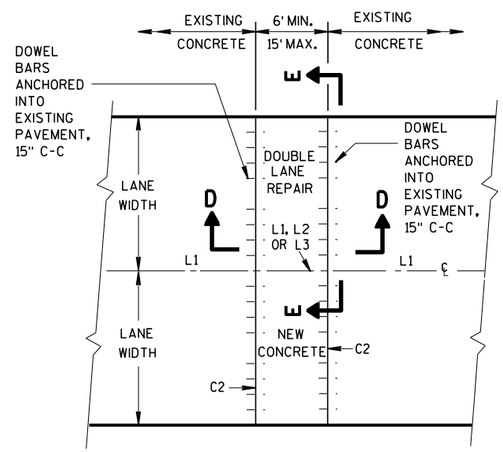
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

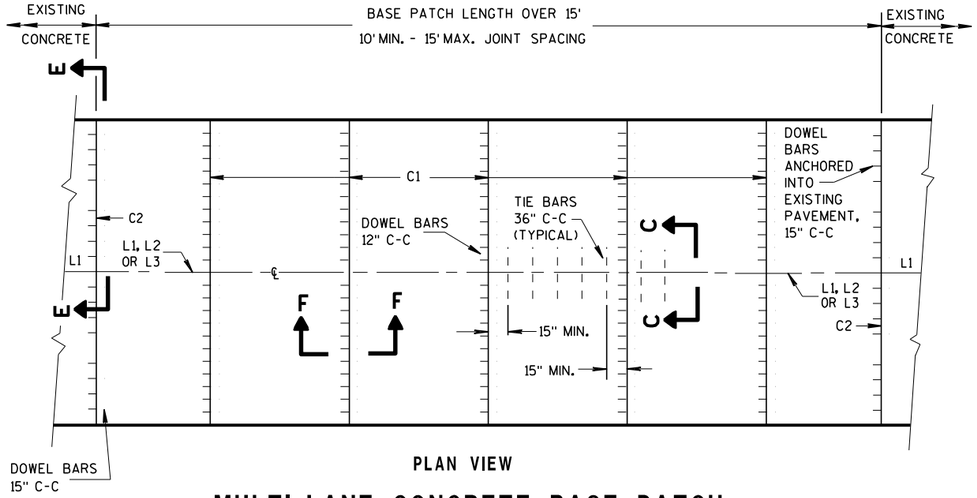


SECTION D-D



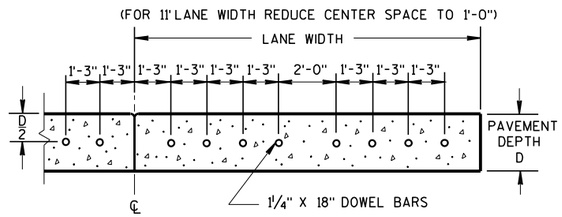
PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

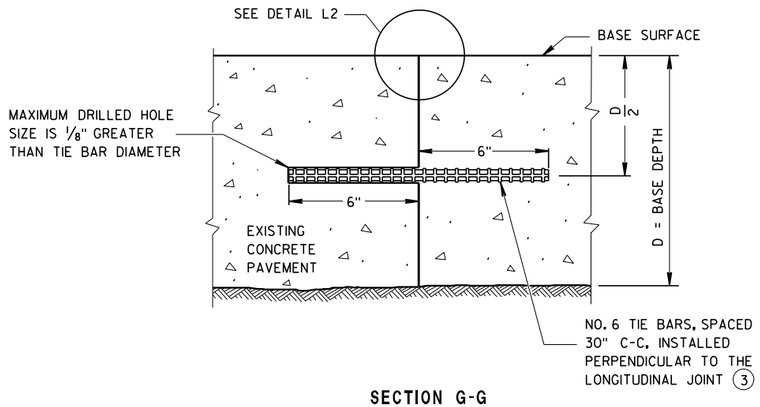


SECTION E-E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT

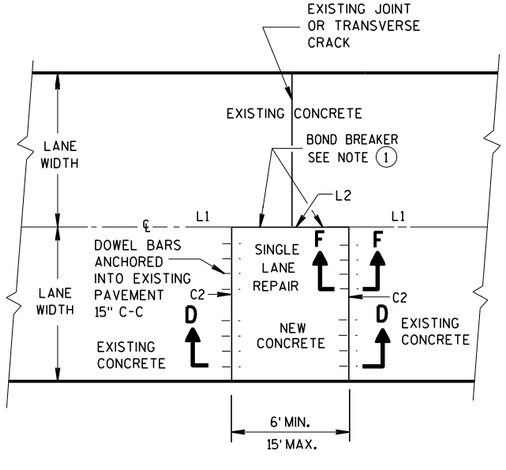
BASE PATCHING CONCRETE

6
S.D.D. 13 C 14-7b



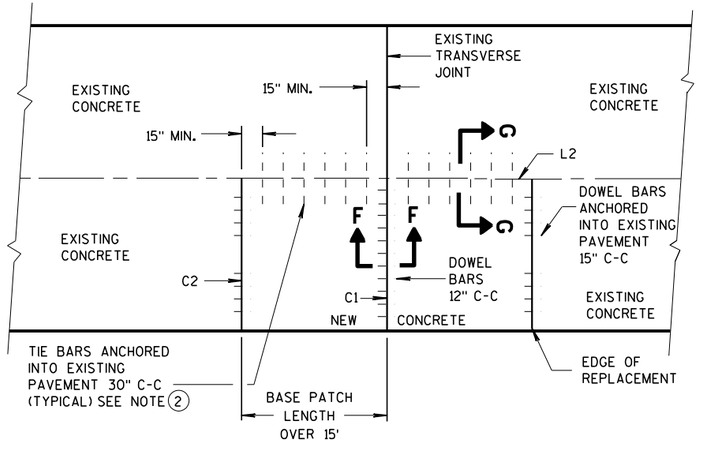
SECTION G-G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE BASE PATCHES UP TO 15 FEET IN LENGTH.

(2) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, DRILLED TIE BARS MAY BE INSTALLED ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

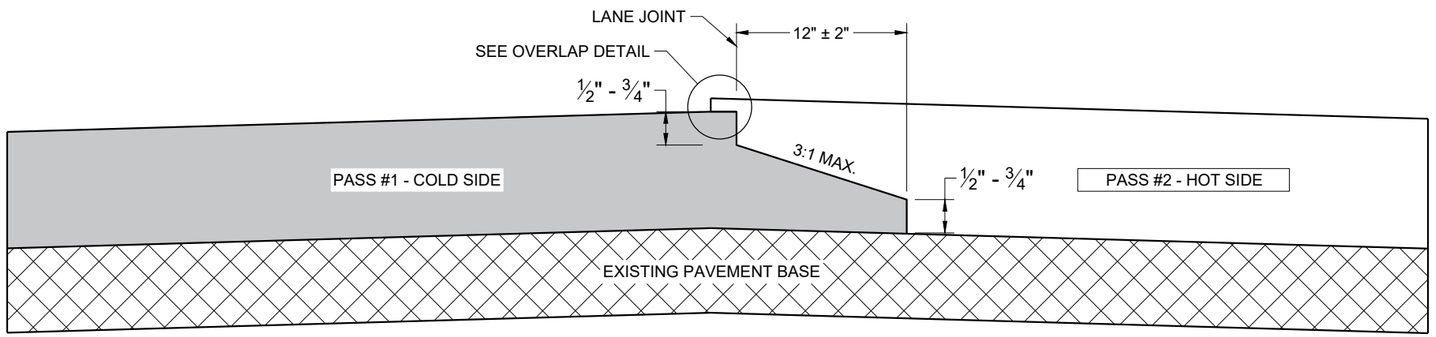
(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

BASE PATCHING CONCRETE

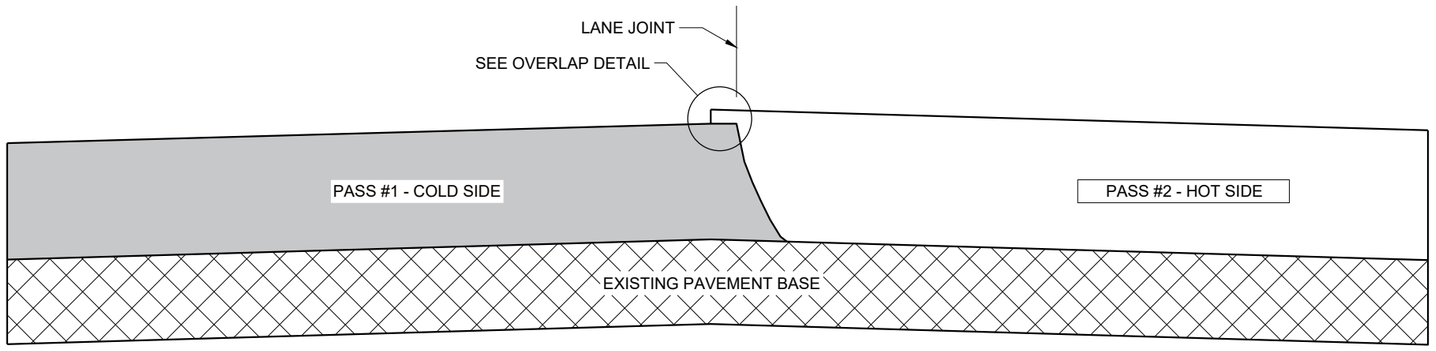
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPERVISOR
FHWA

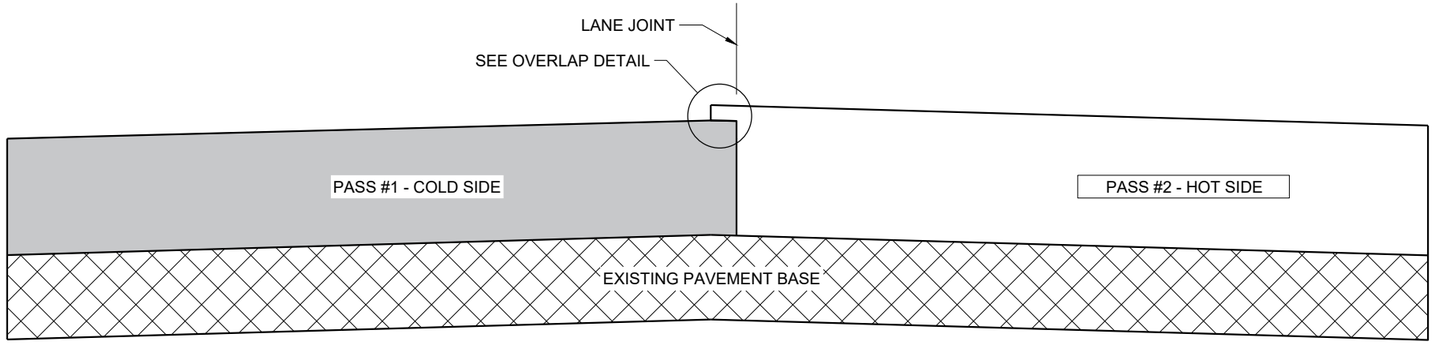
6
S.D.D. 13 C 14-7c



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

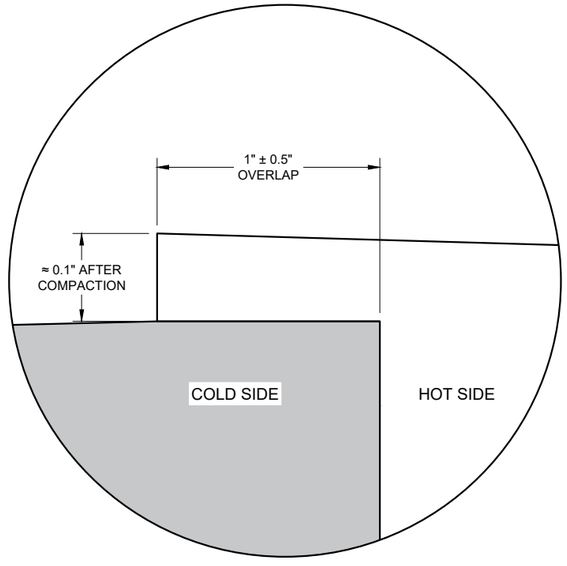
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Steven Hefel HMA PAVEMENT ENGIN

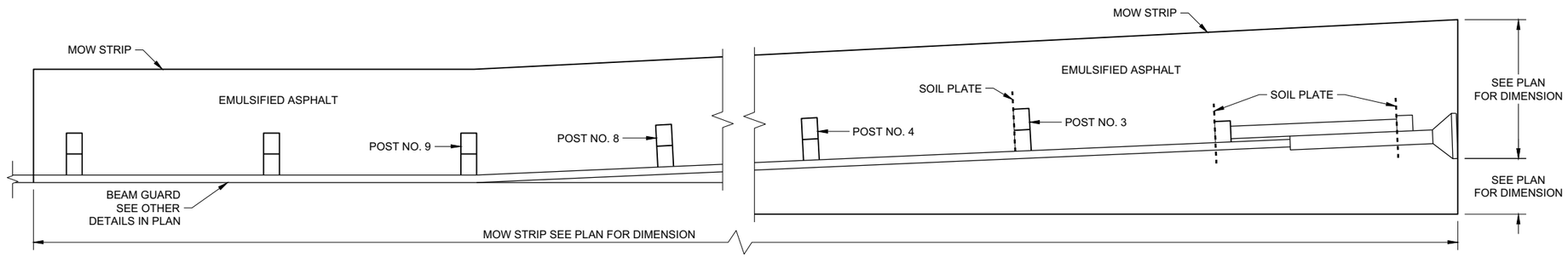
FHWA

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SDD 13C19 - 03

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SDD 13C19 - 03



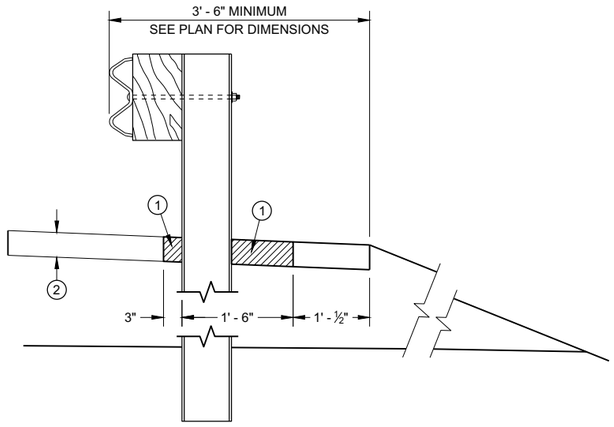
PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABSORBING TERMINAL

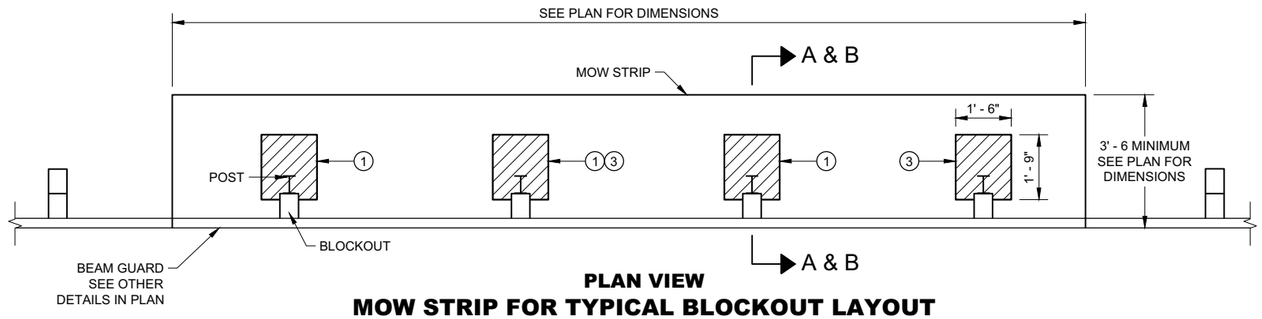
GENERAL NOTES

ONLY USE STEEL POSTS IN CONCRETE AND ASPHALT MOW STRIPS.

1. CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.
2. DEPTH OF MOW STRIP:
   ASPHALT - 4"
   CONCRETE - 4"
   EMULSIFIED ASPHALT - 1" OR LESS
3. FOR EMULSIFIED ASPHALT, MOW STRIP STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS)

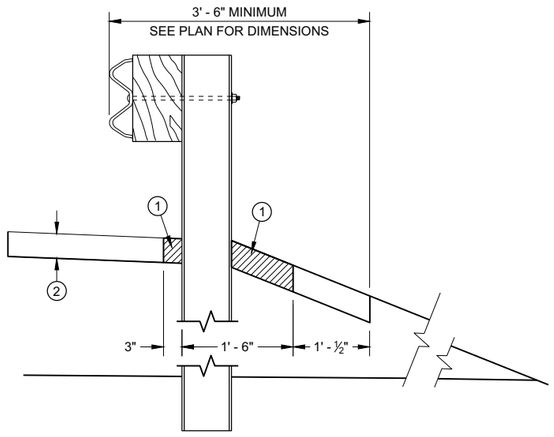


SECTION A - A

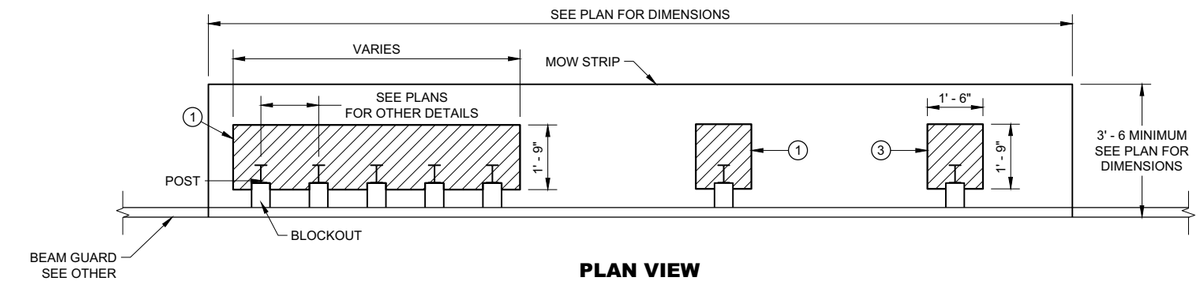


PLAN VIEW

MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT

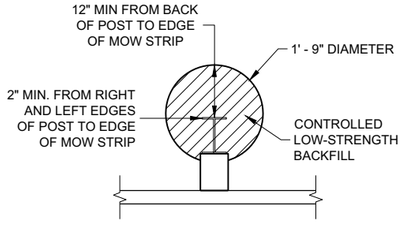


SECTION B - B

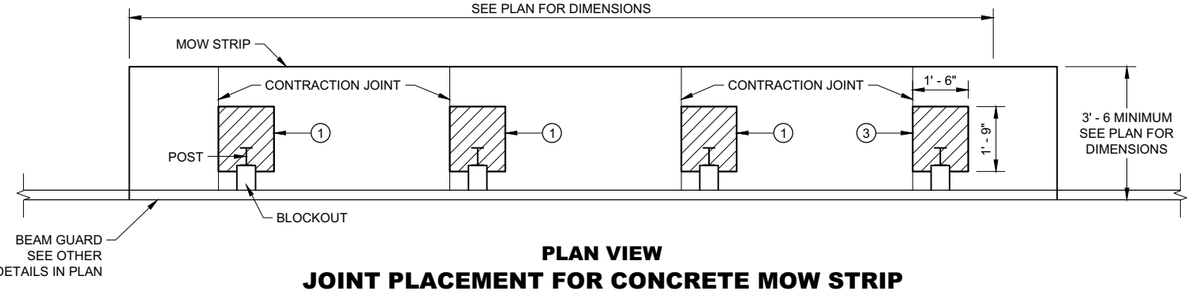


PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



ALTERNATIVE HMA MOW STRIP DESIGN



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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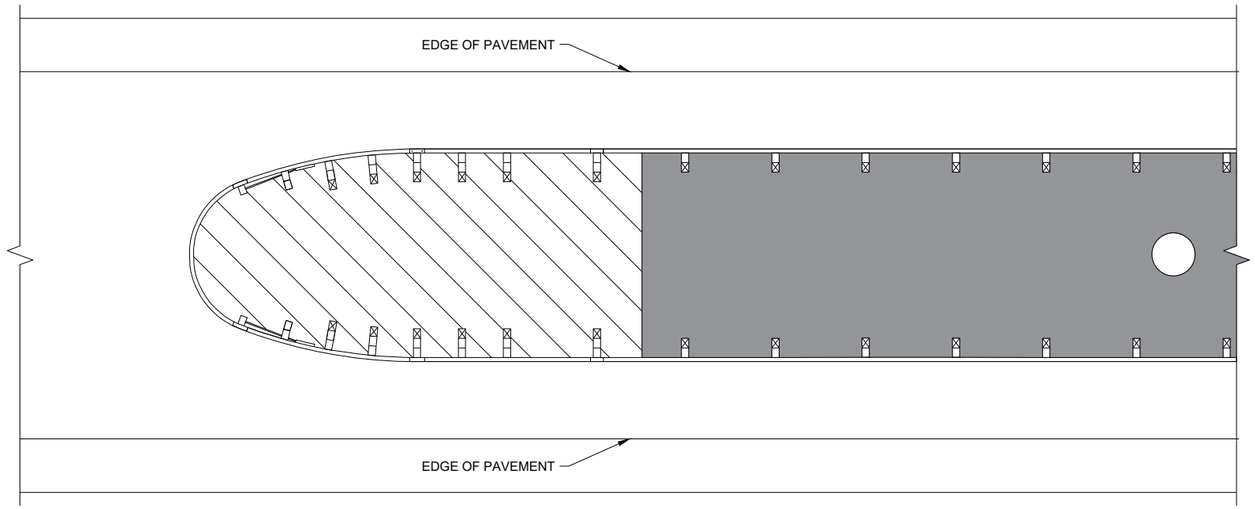
LEGEND

CONCRETE, ASPHALT, OR EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

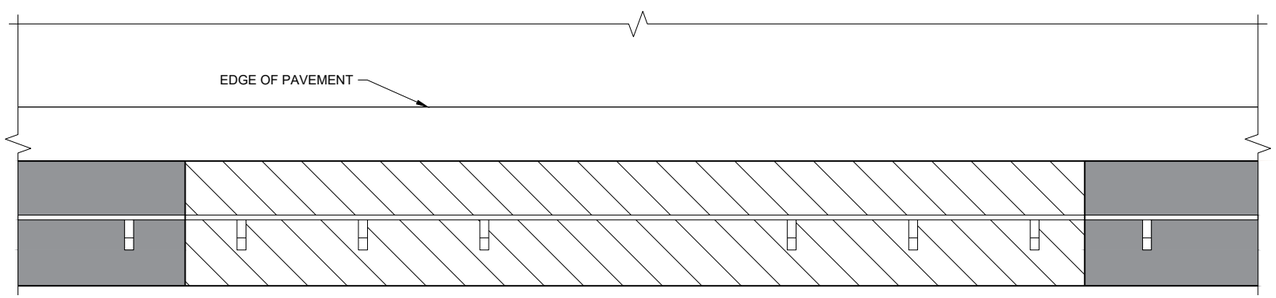
EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

GENERAL NOTES

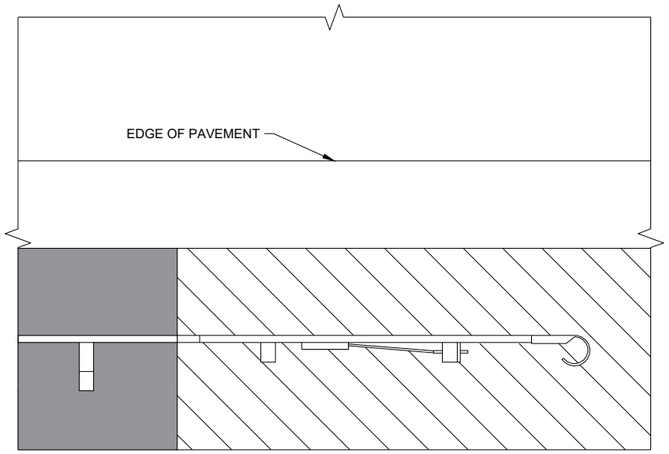
EXISTING THRIE BEAM BULLNOSES MAY HAVE WOOD POSTS. NEW THRIE BEAM BULLNOSE WILL HAVE STEEL POSTS.



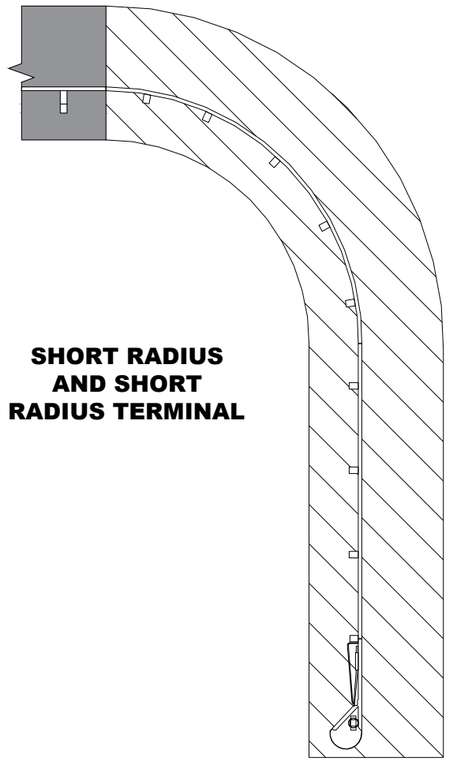
THRIE BEAM BULLNOSE



LONG - SPAN



TYPE 2 TERMINAL



SHORT RADIUS AND SHORT RADIUS TERMINAL

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

290

6

SDD 14B28 - 04b

6

SDD 14B28 - 04b

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

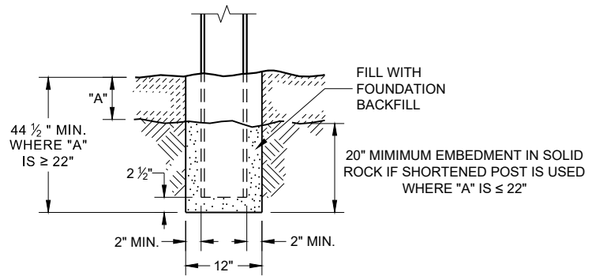
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

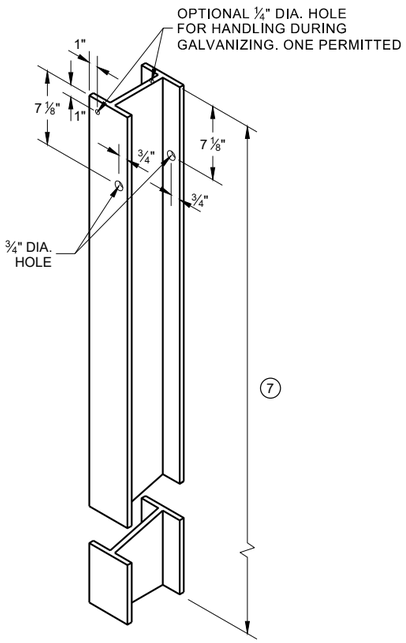
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

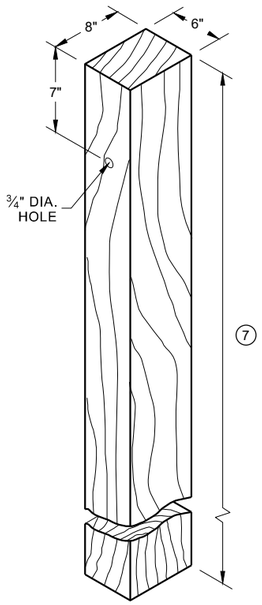
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



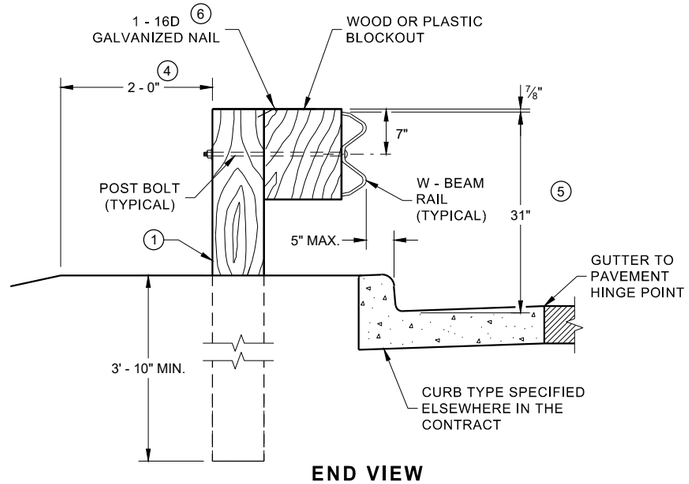
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



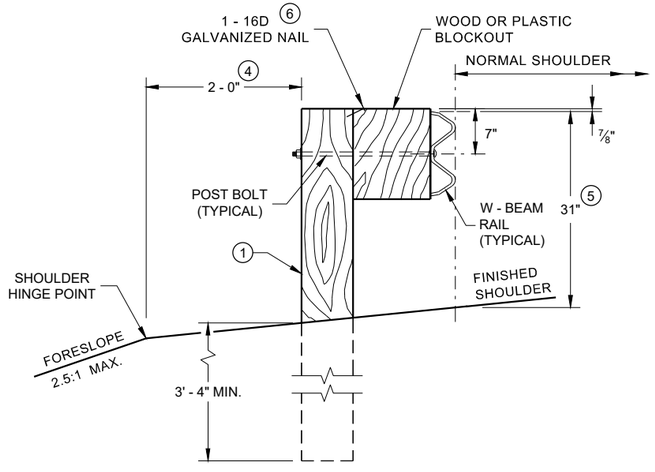
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



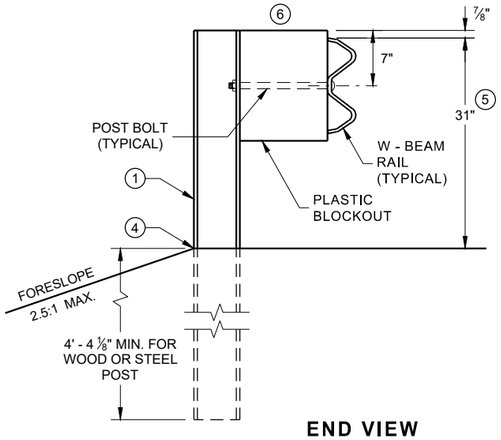
WOOD POST (6" X 8") NOMINAL (1)



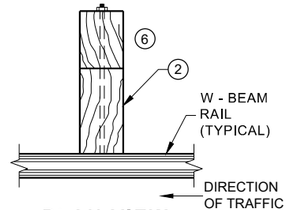
END VIEW
LOCATED ALONG A CURBED ROADWAY



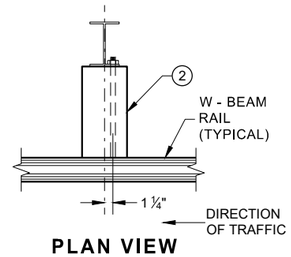
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



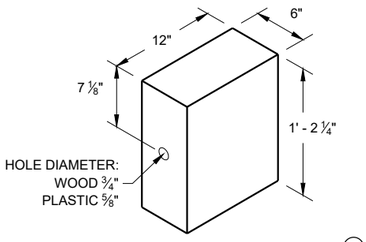
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

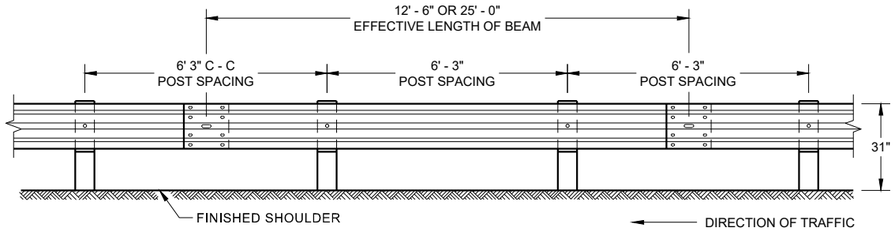
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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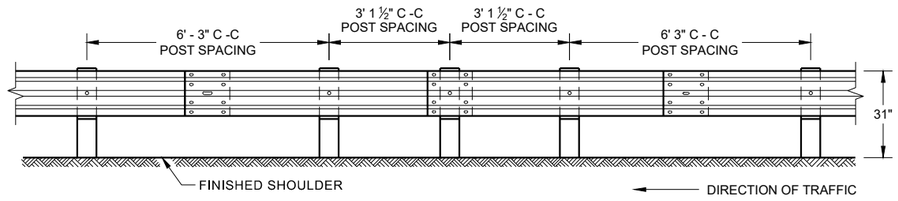
SDD 14B42 - 07a

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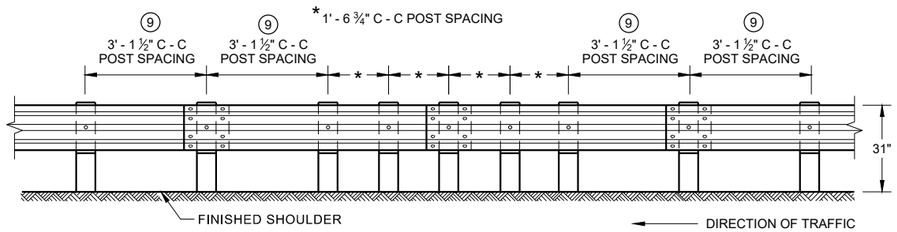
SDD 14B42 - 07a



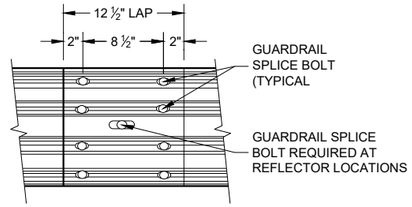
FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

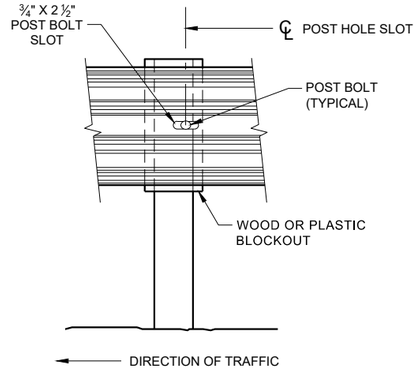
GENERAL NOTES

(8) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

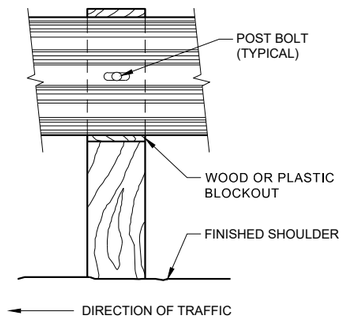
(9) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

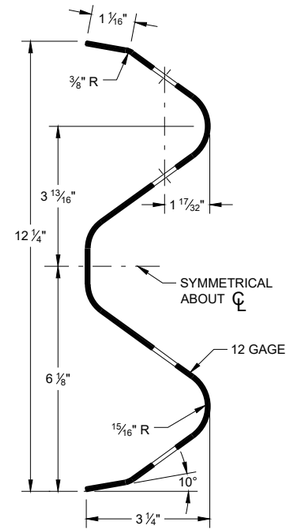
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



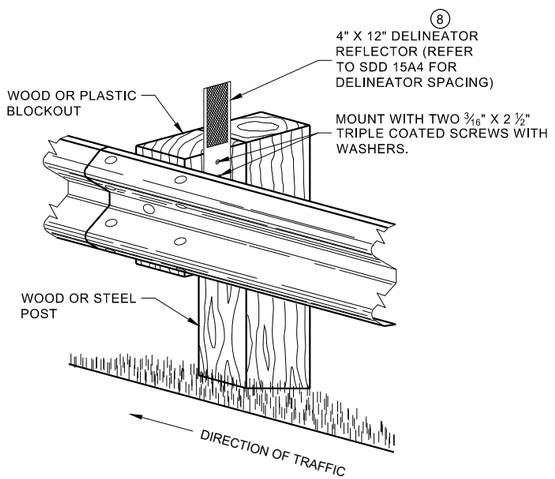
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



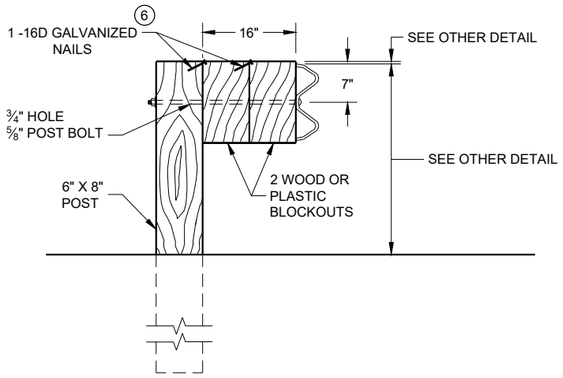
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b

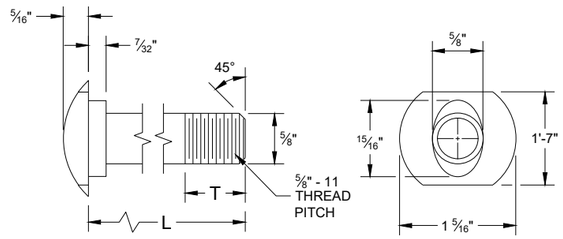


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

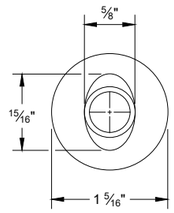
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

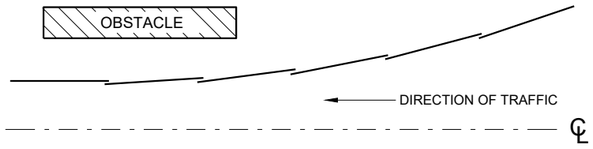


POST BOLT TABLE

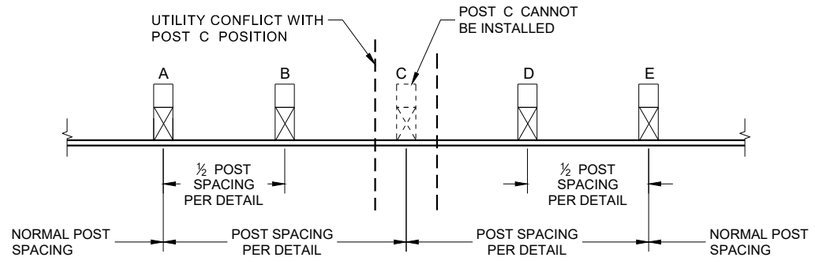
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



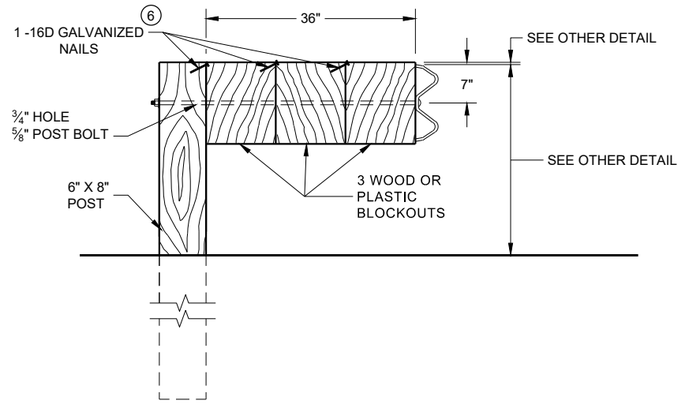
ALTERNATE BOLT HEAD



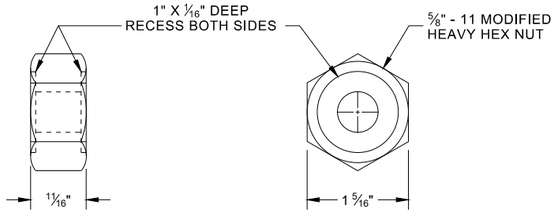
PLAN VIEW
BEAM LAPPING DETAIL



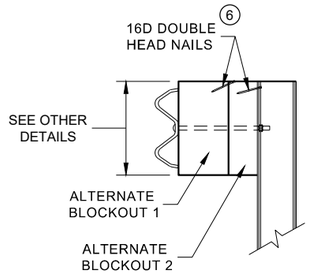
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



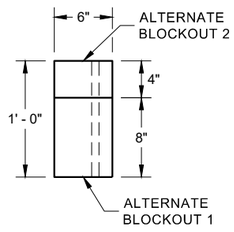
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

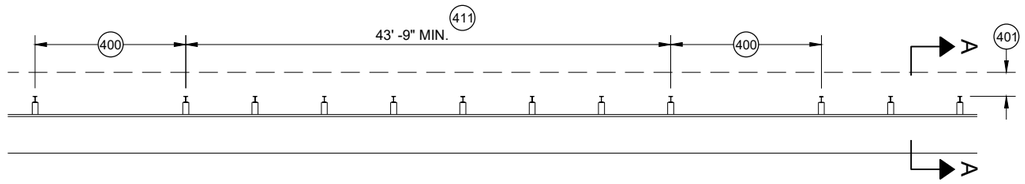
ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

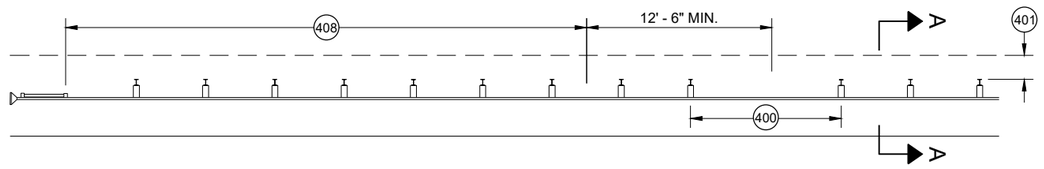
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

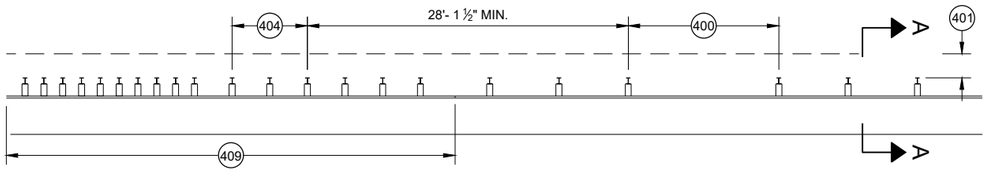
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



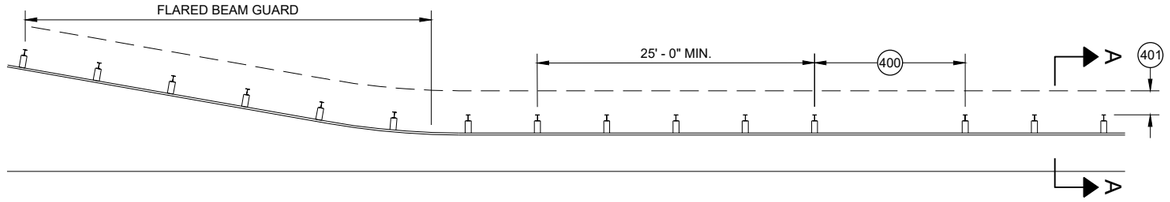
MISSING POST IN MGS GUARDRAIL



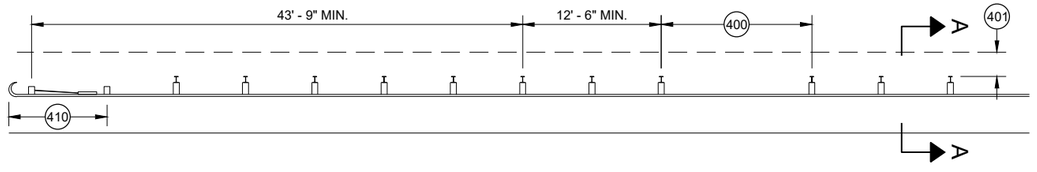
MISSING POST IN MGS GUARDRAIL NEAR EAT



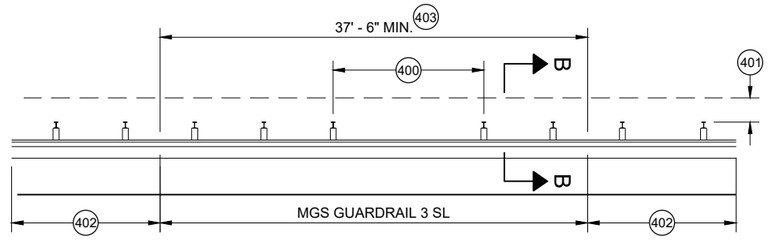
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

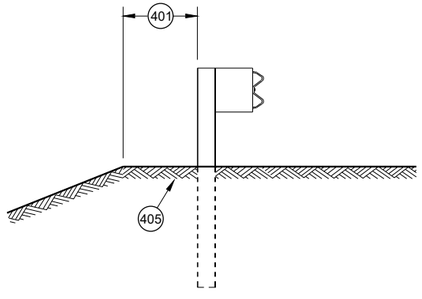


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

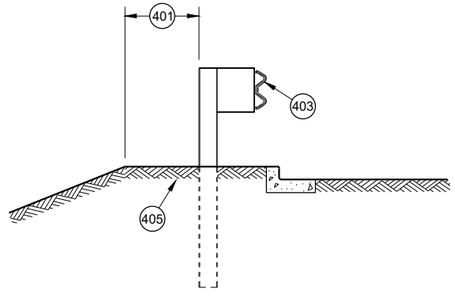


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

6

SDD 14B42 - 07d

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

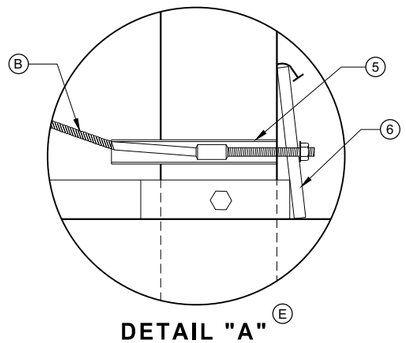
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

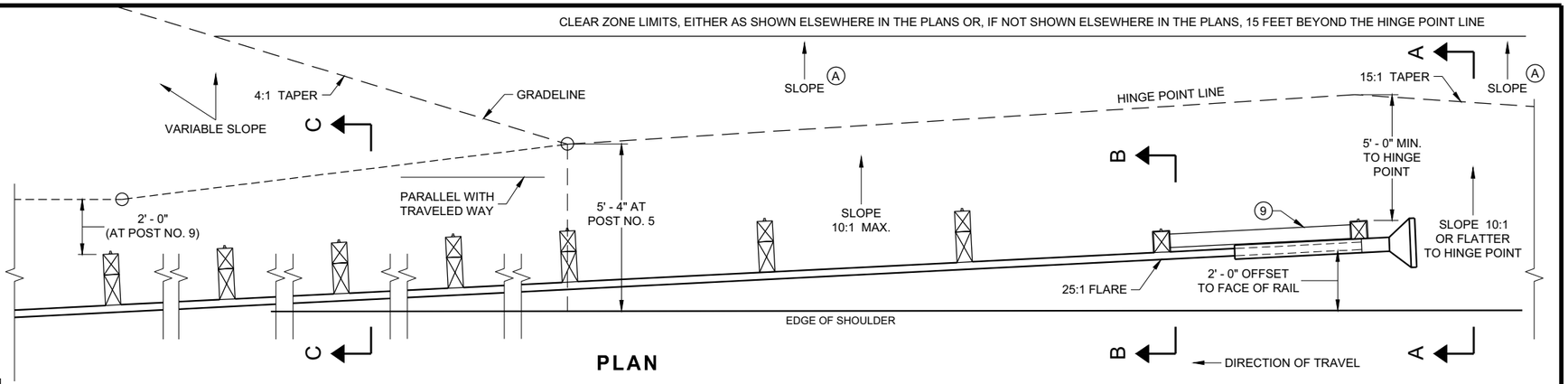
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

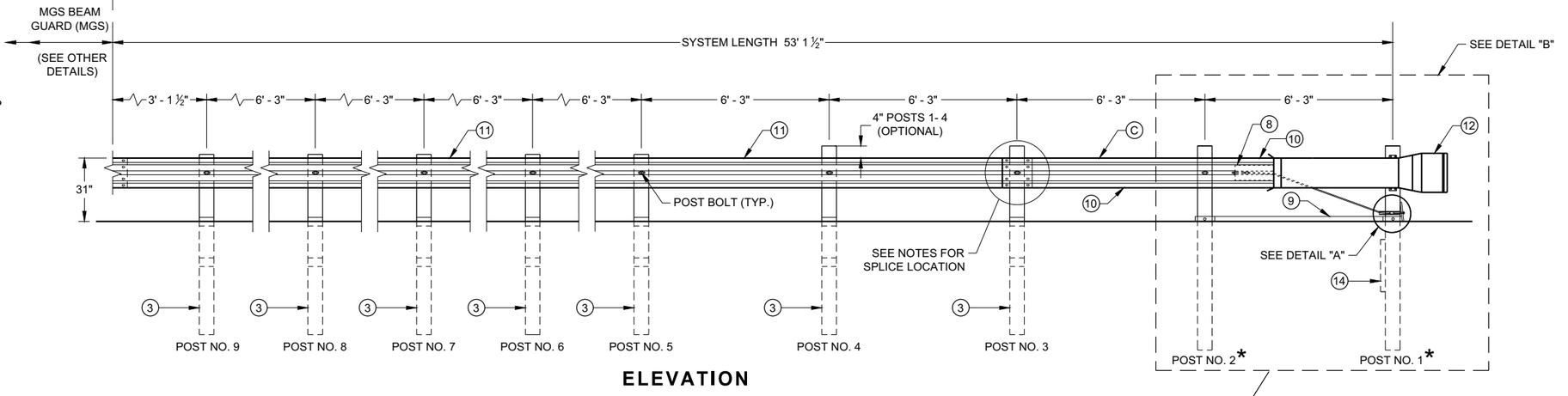
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



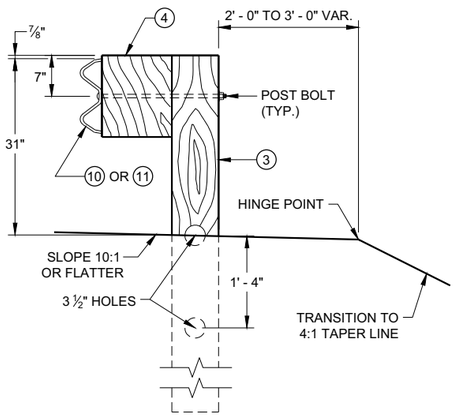
DETAIL "A" (E)



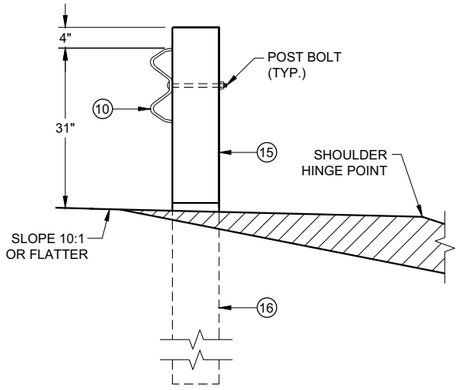
PLAN



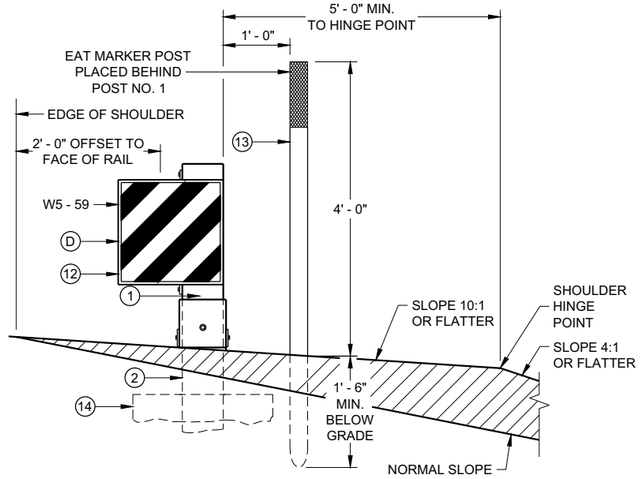
ELEVATION



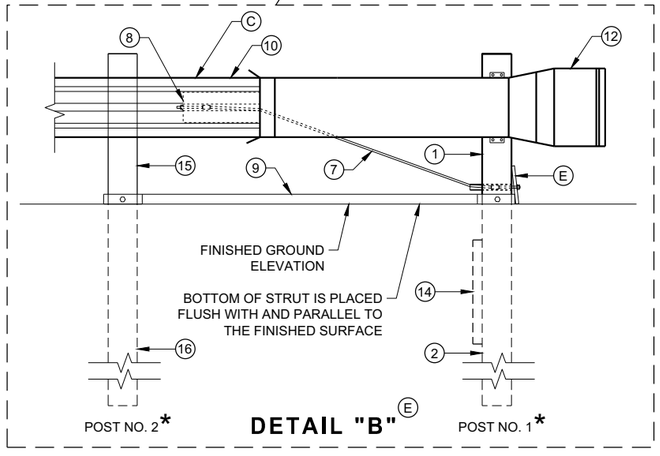
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

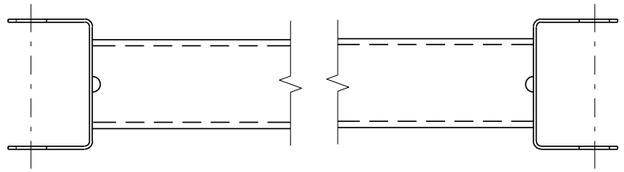
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B44 - 04a

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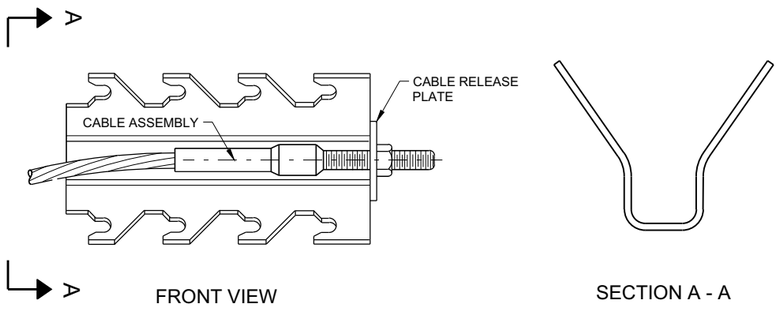
SDD 14B44 - 04a



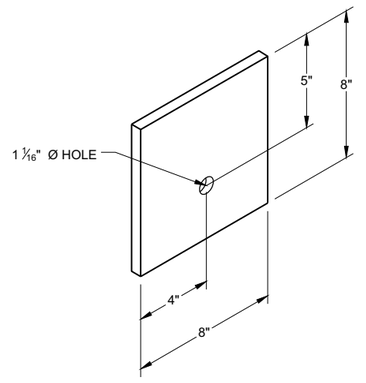
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

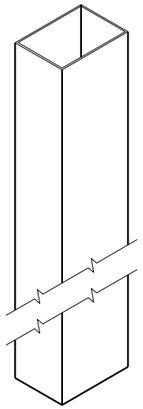
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SDD 14B44 - 04b

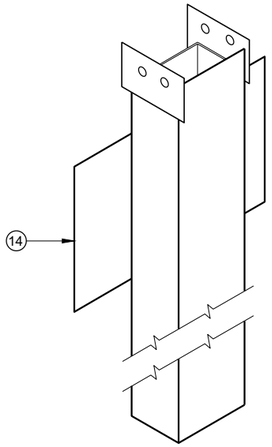
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

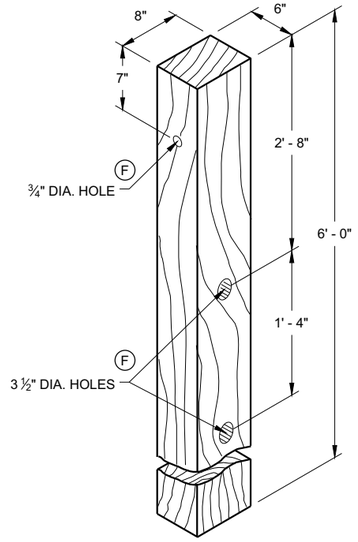
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



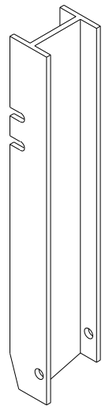
UPPER POST NO. 1 (1) (E)



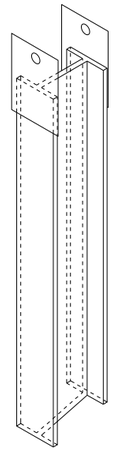
LOWER POST NO. 1 (2) (E)



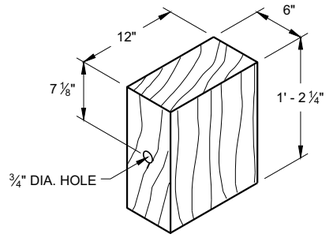
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



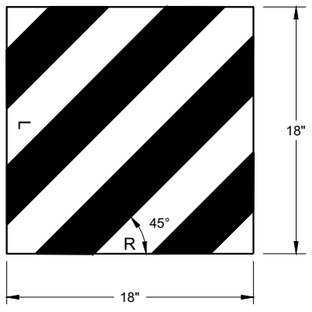
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

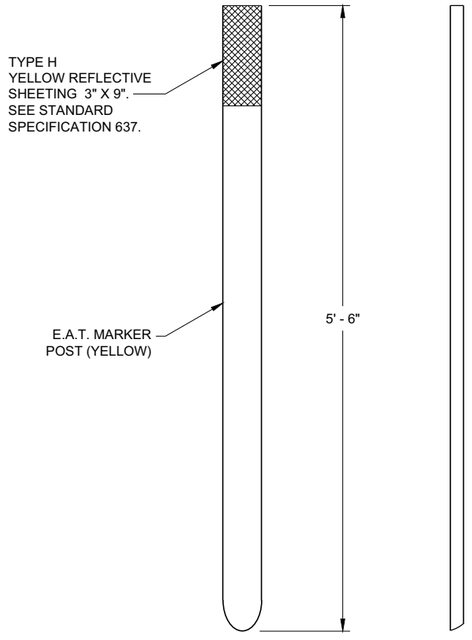


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



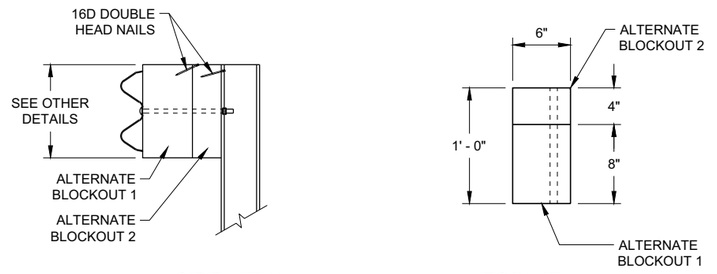
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

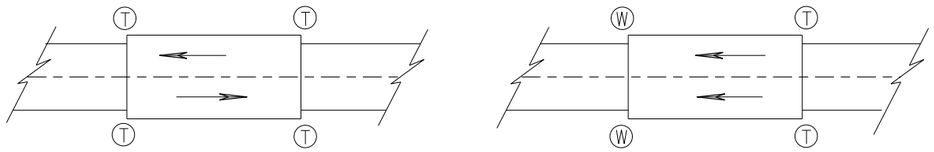
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

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SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

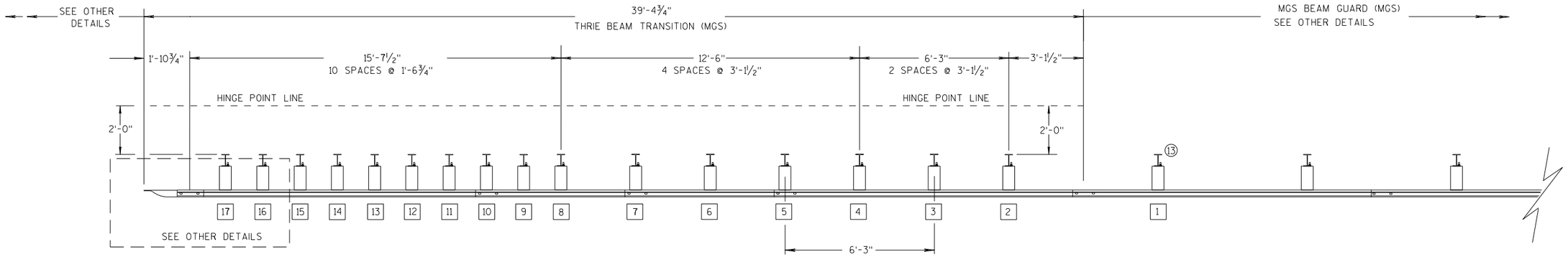
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

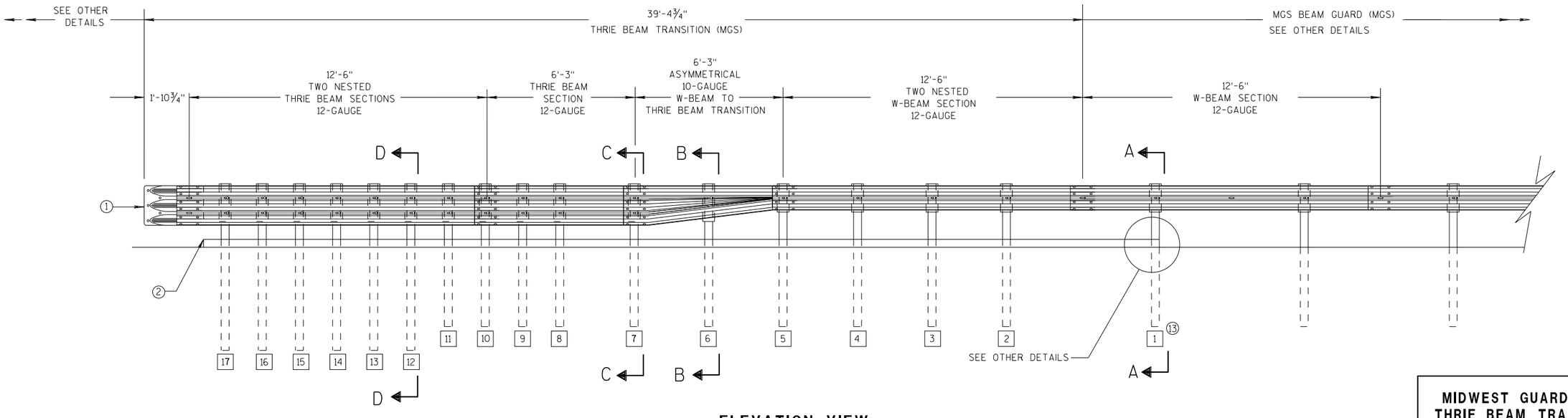
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 298

6

S.D.D. 14 B 45-5a

6

S.D.D. 14 B 45-5a

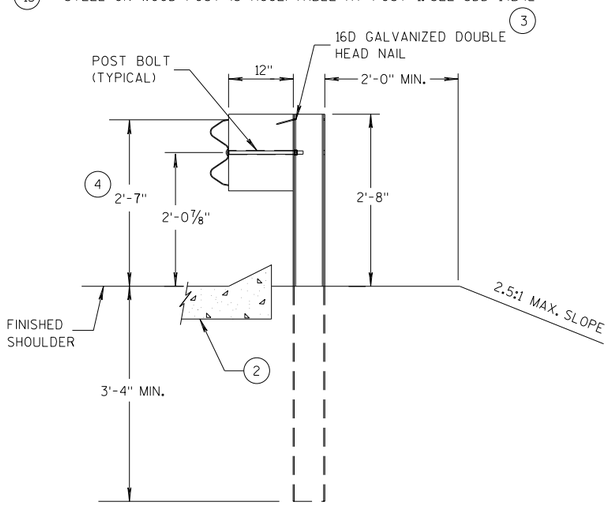
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

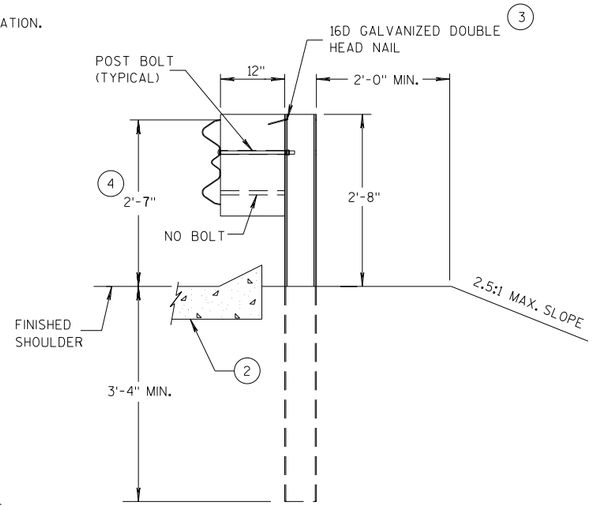
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



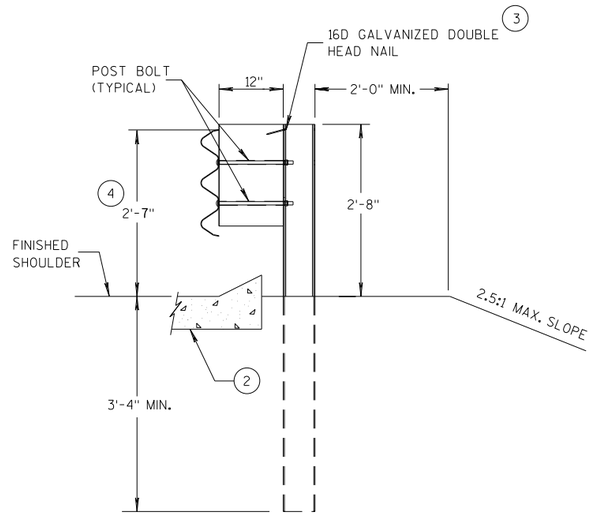
SECTION A-A (13)

POSTS 1-5



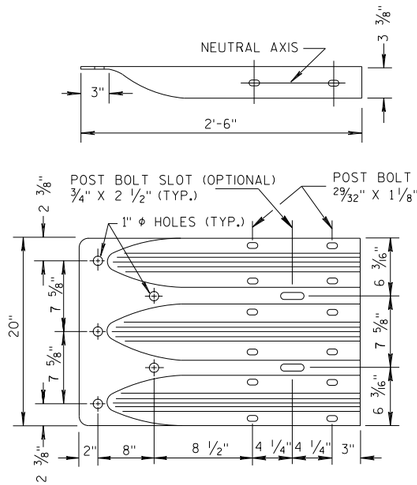
SECTION B-B

POST 6

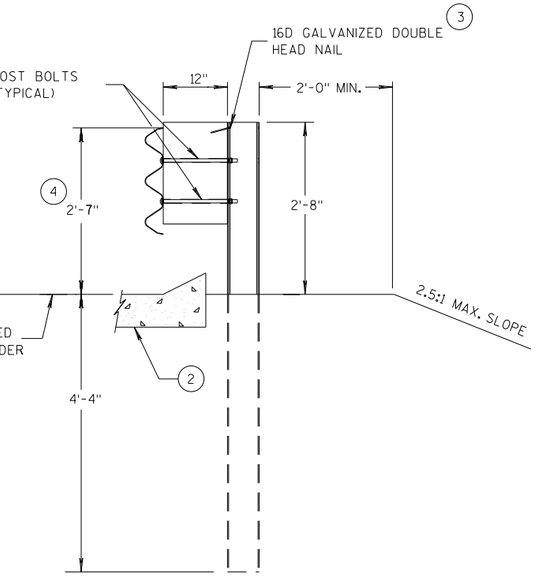


SECTION C-C

POSTS 7-11

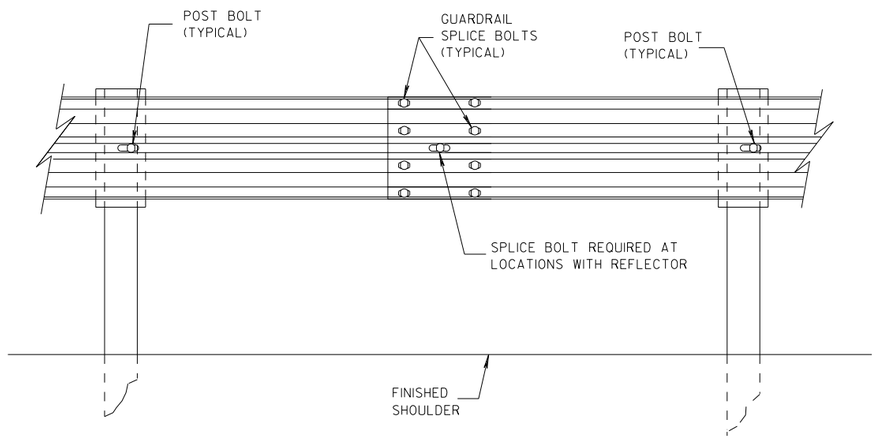


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

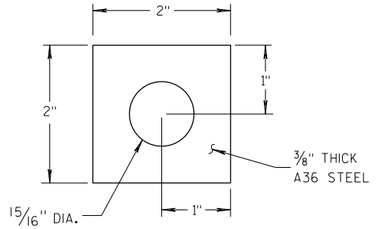
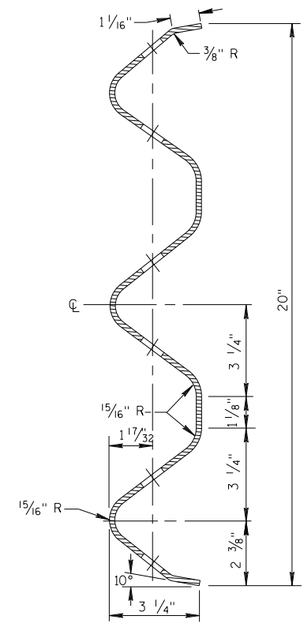


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

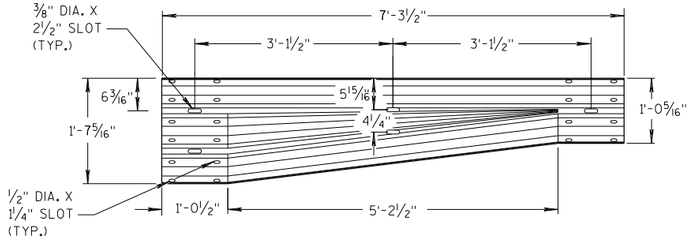
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 299

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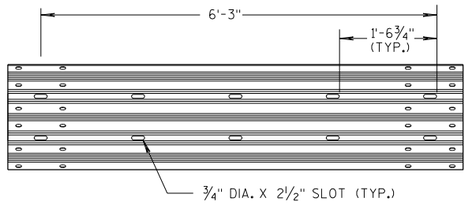
S.D.D. 14 B 45-5b

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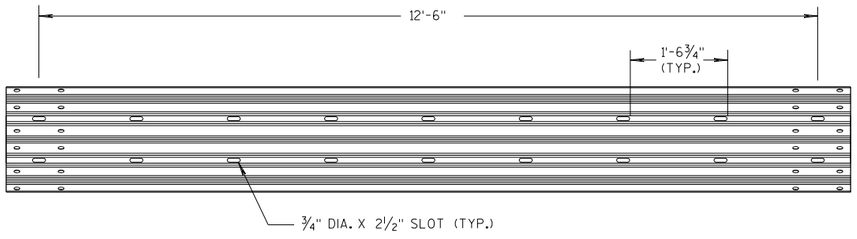
S.D.D. 14 B 45-5b



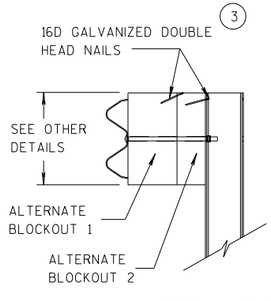
W-BEAM TO THRIE BEAM TRANSITION SECTION



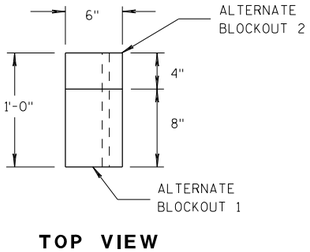
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

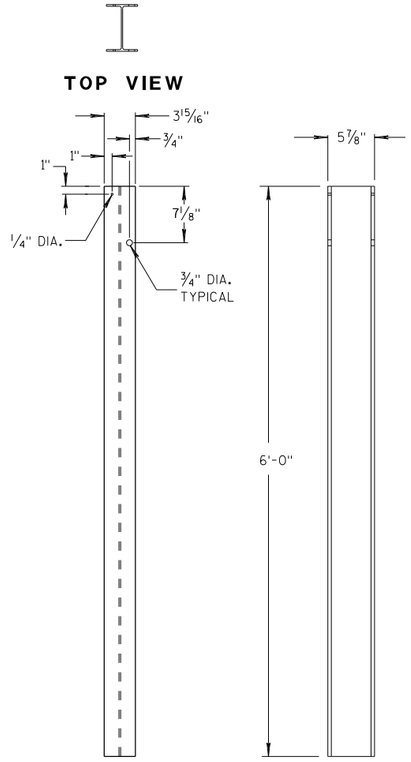


SIDE VIEW



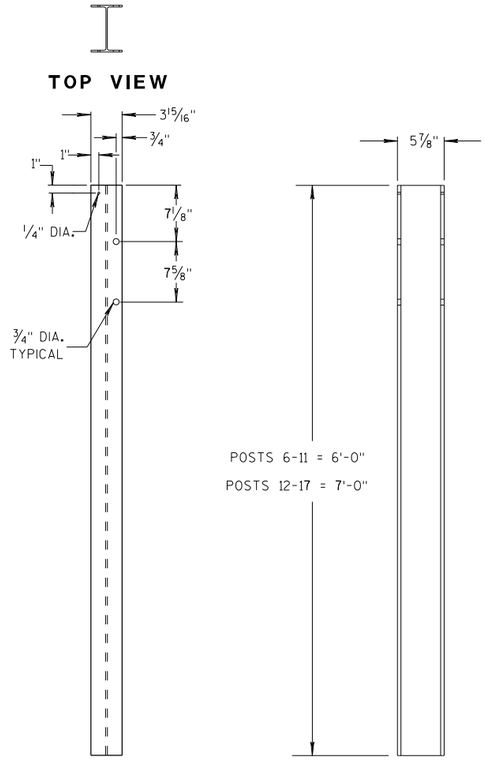
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



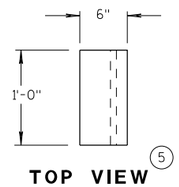
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

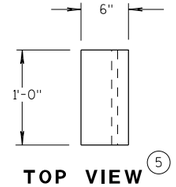


FRONT VIEW SIDE VIEW

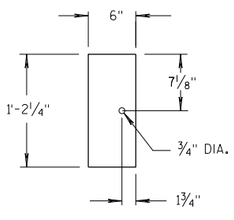
STEEL POSTS 6-17



TOP VIEW (5)

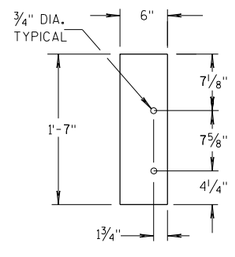


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

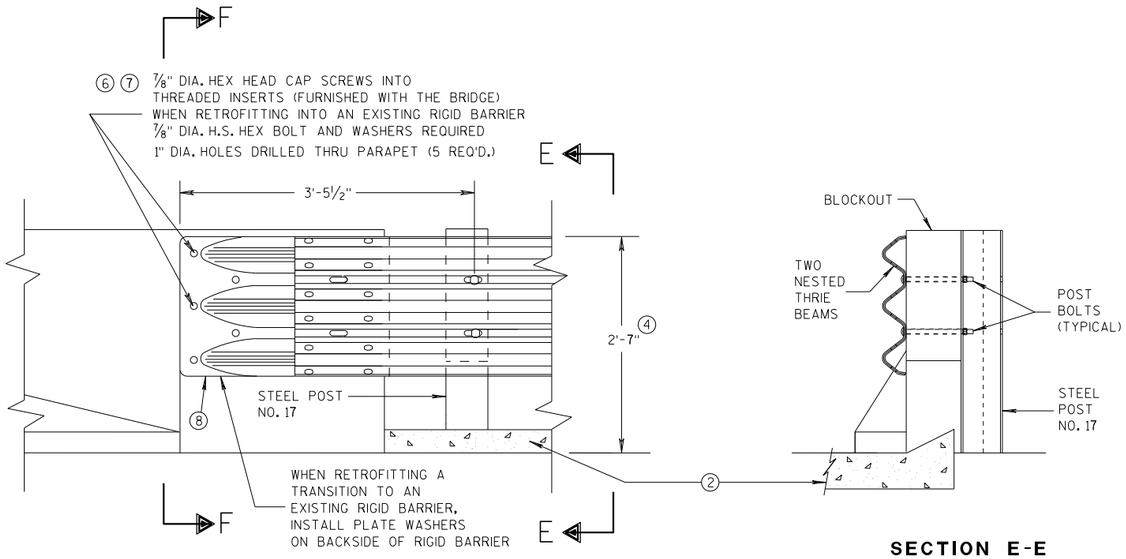
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 300

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S.D.D. 14 B 45-5c

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S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

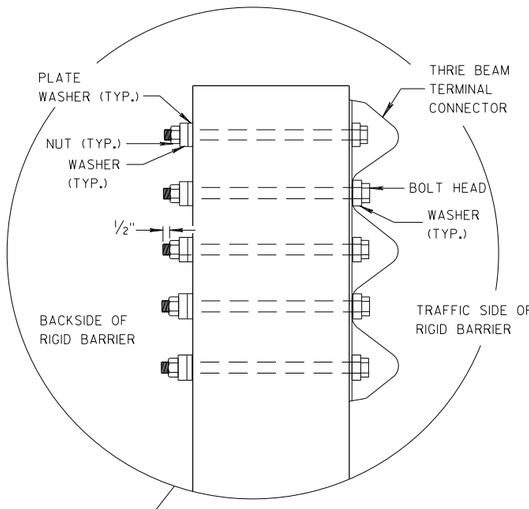
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

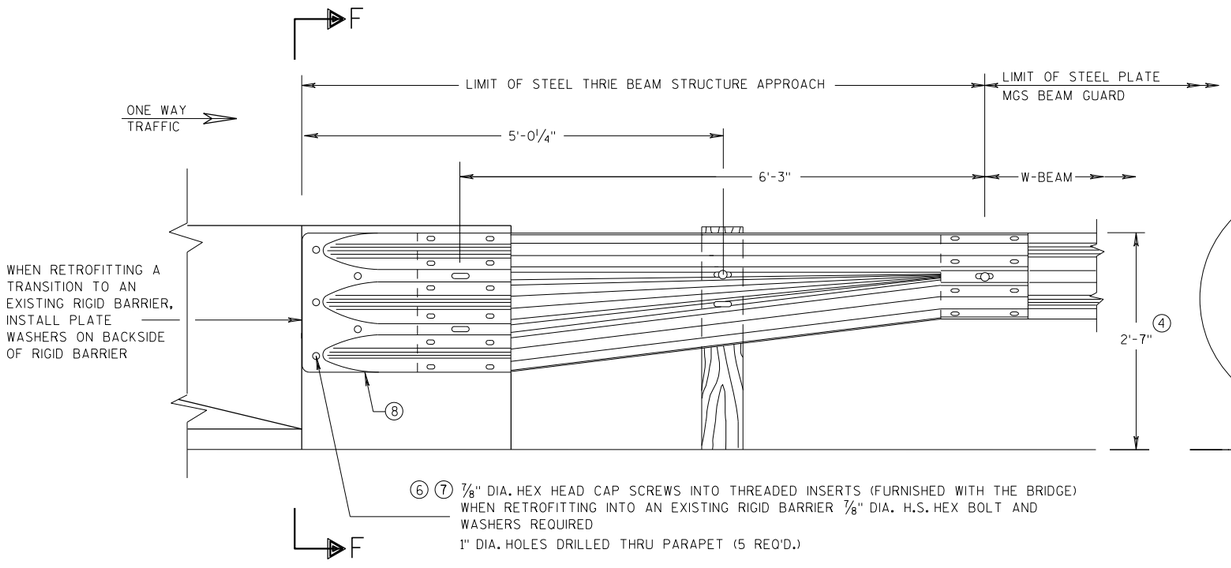
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

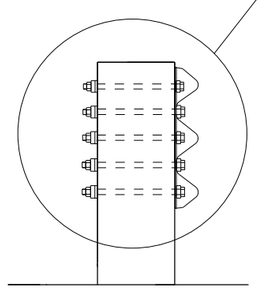
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

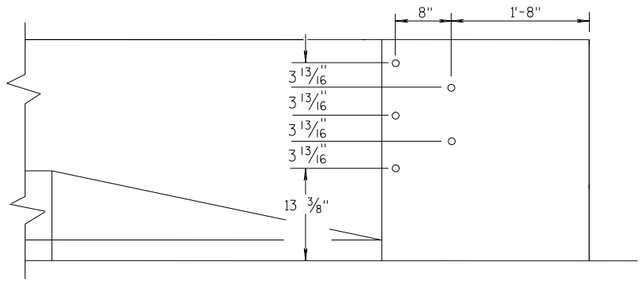




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D[illegible] UNIT SUPERVIS[illegible]
FHWA

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S.D.D. 14 B 45-5d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

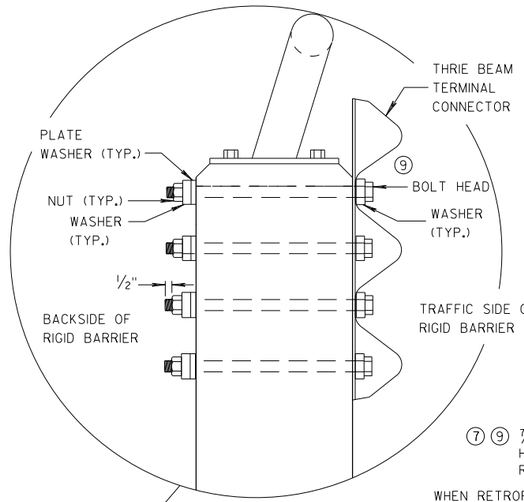
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

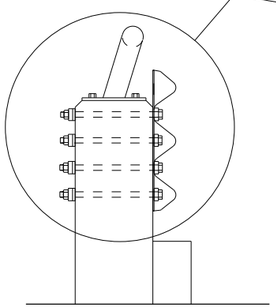
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

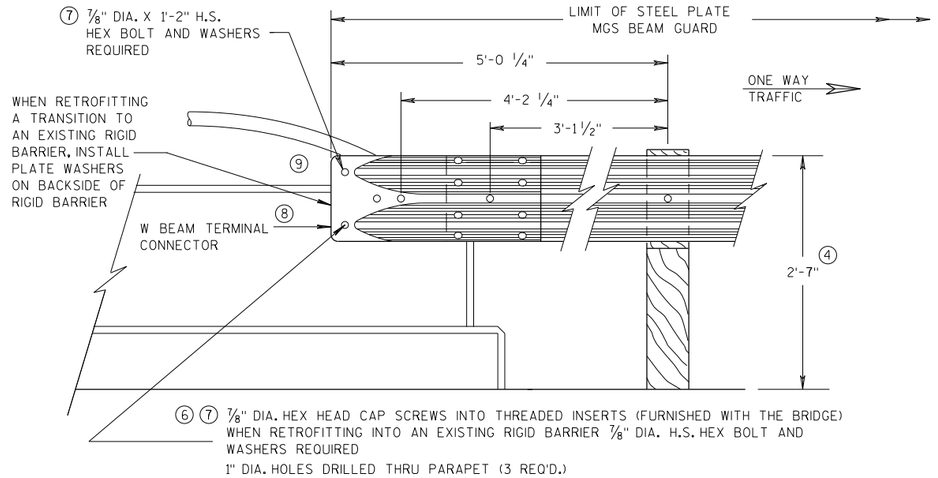
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





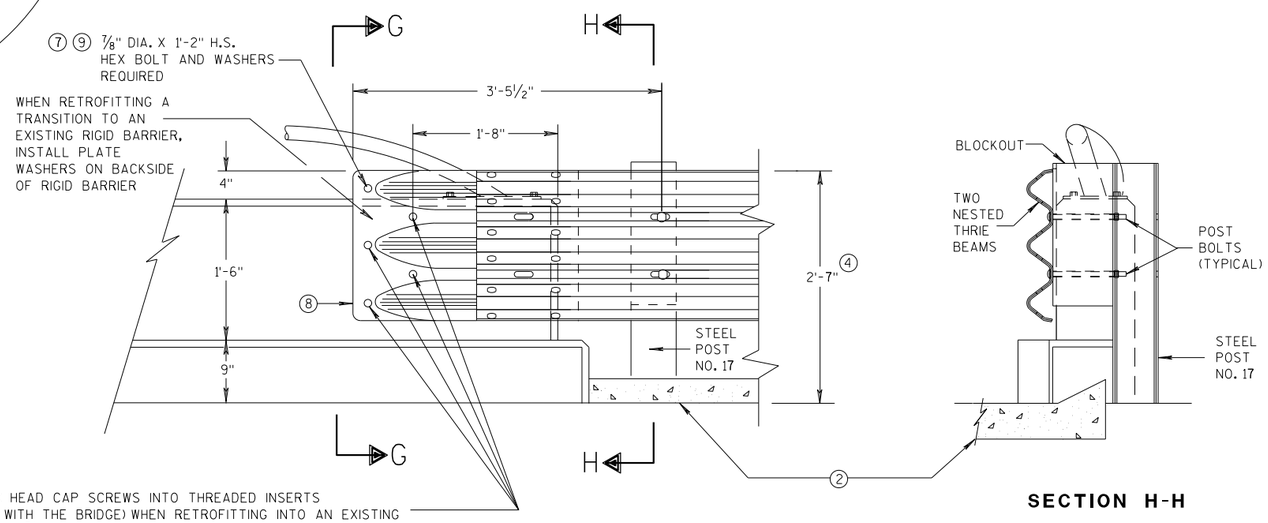
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVI

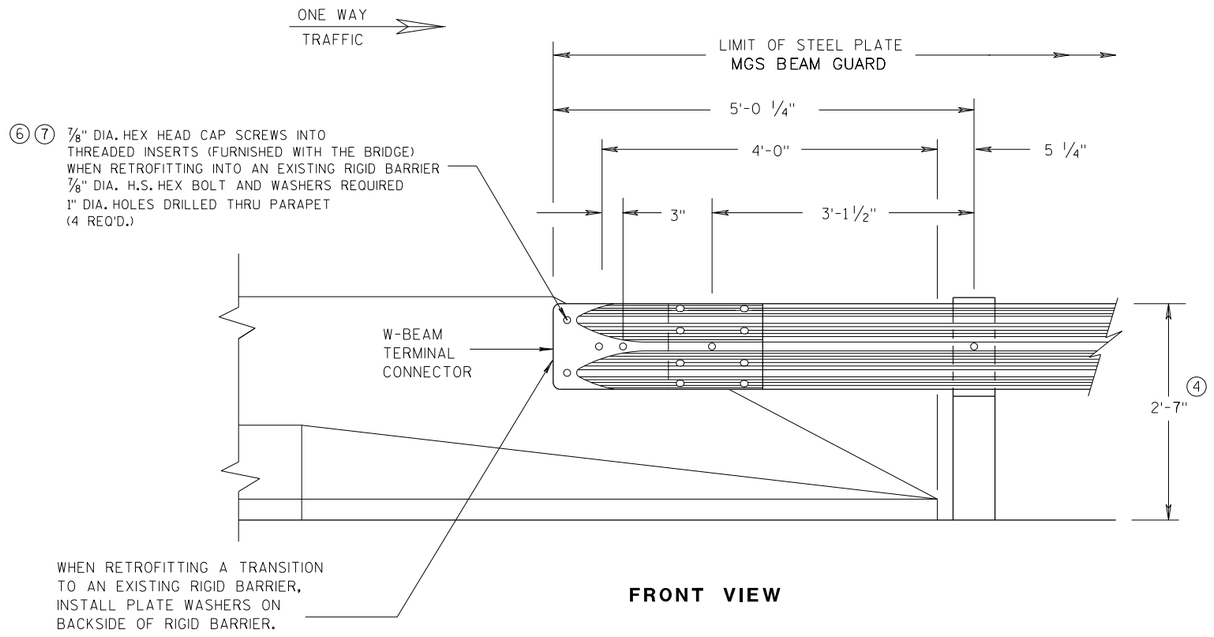
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S.D.D. 14 B 45-5e

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S.D.D. 14 B 45-5e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

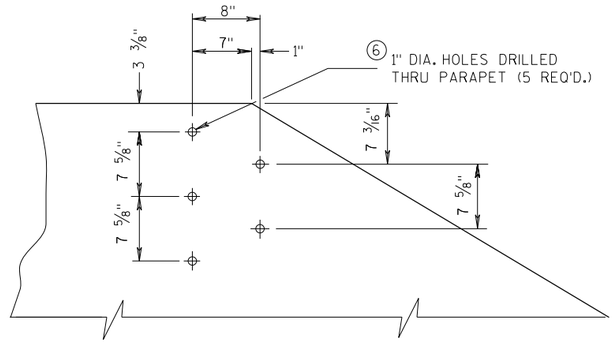
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

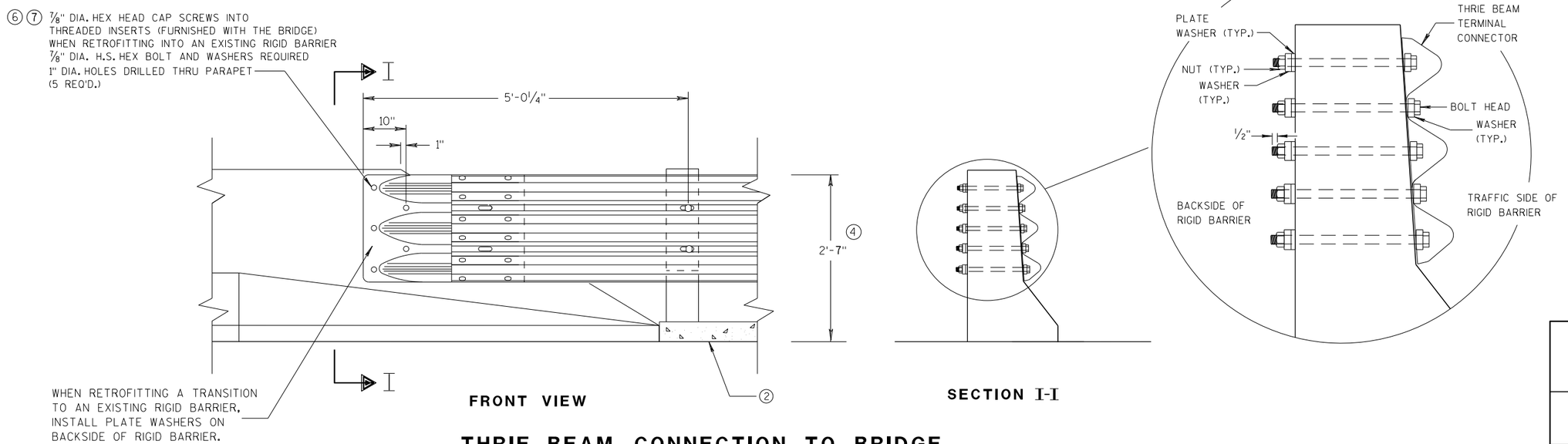
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW

SECTION I-I

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

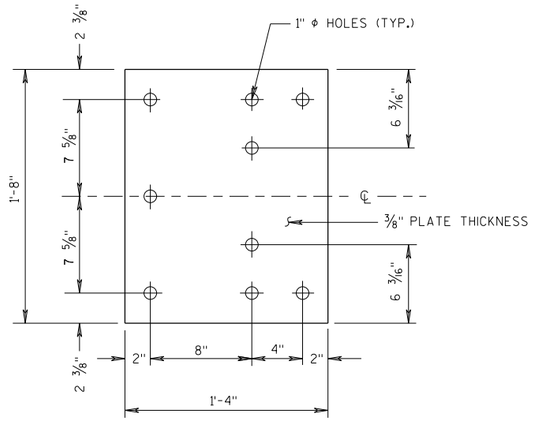
APPROVED
07/2018 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS [illegible] UNIT SUPERVI[illegible]ENT
FHWA

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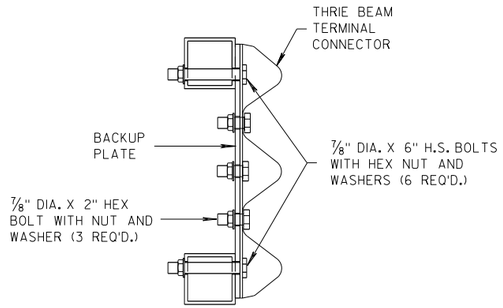
S.D.D. 14 B 45-5f

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S.D.D. 14 B 45-5f



BACK-UP PLATE DETAIL

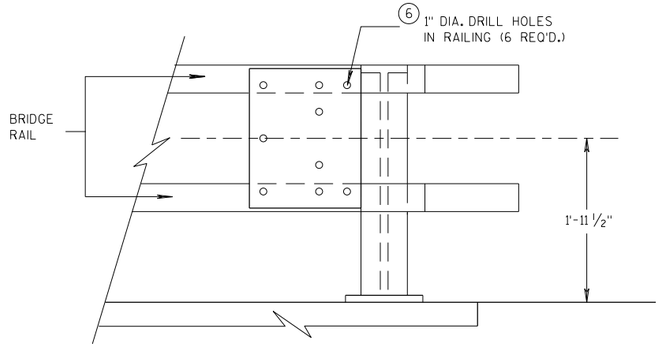


SECTION J-J

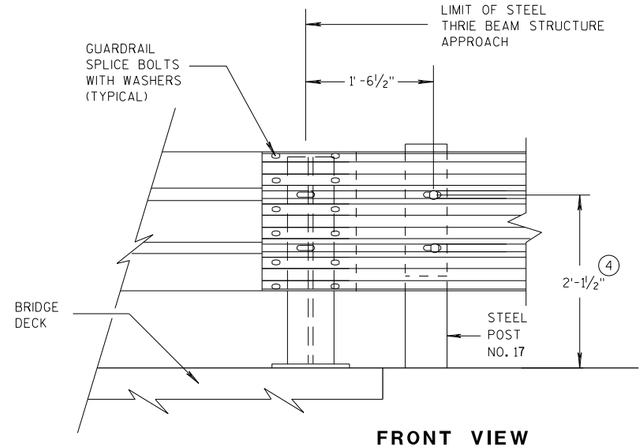
GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(6) DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

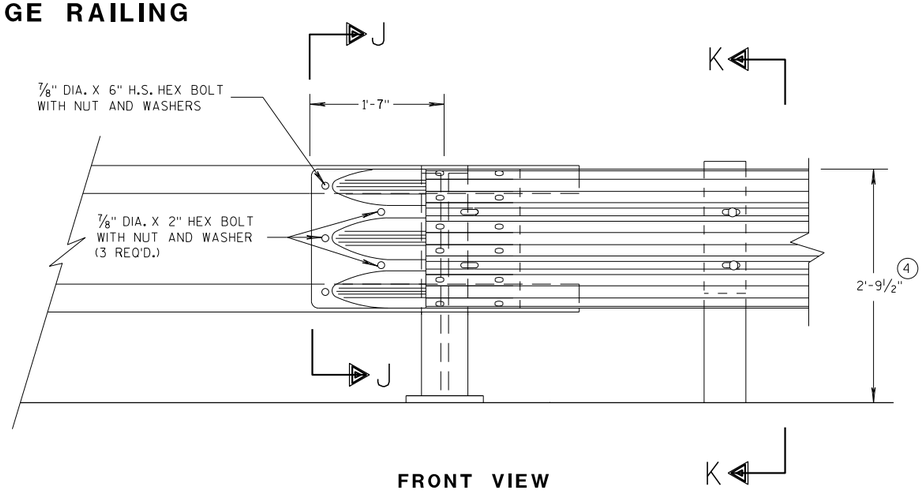


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

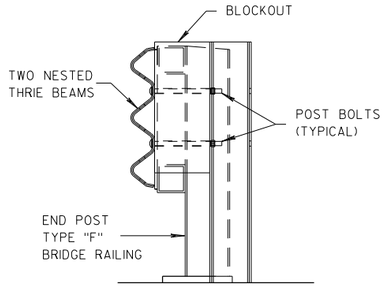


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE
/S/ Rodney Taylor 304 — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

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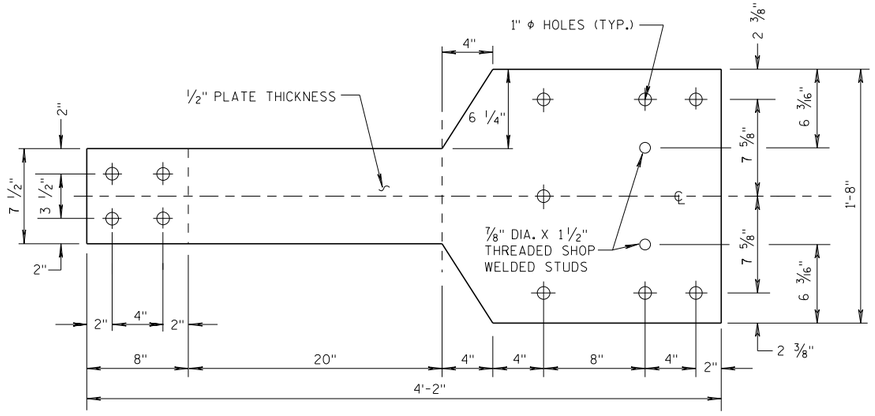
S.D.D. 14 B 45-5g

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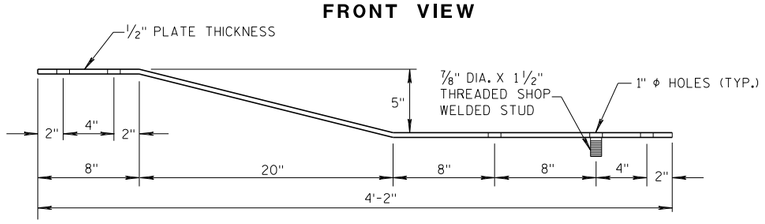
S.D.D. 14 B 45-5g

GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

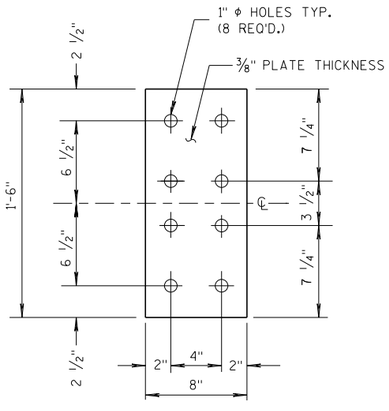


FRONT VIEW



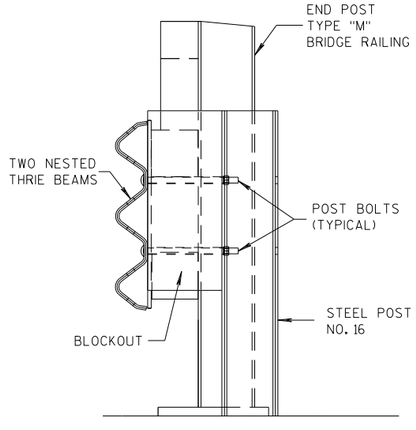
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

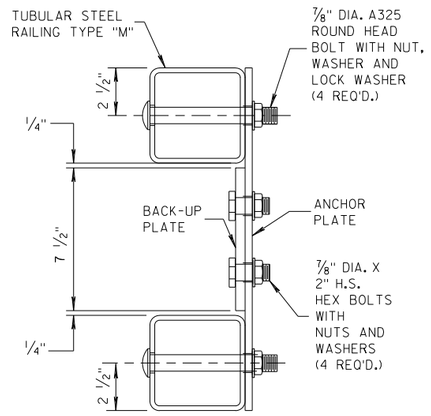


FRONT VIEW

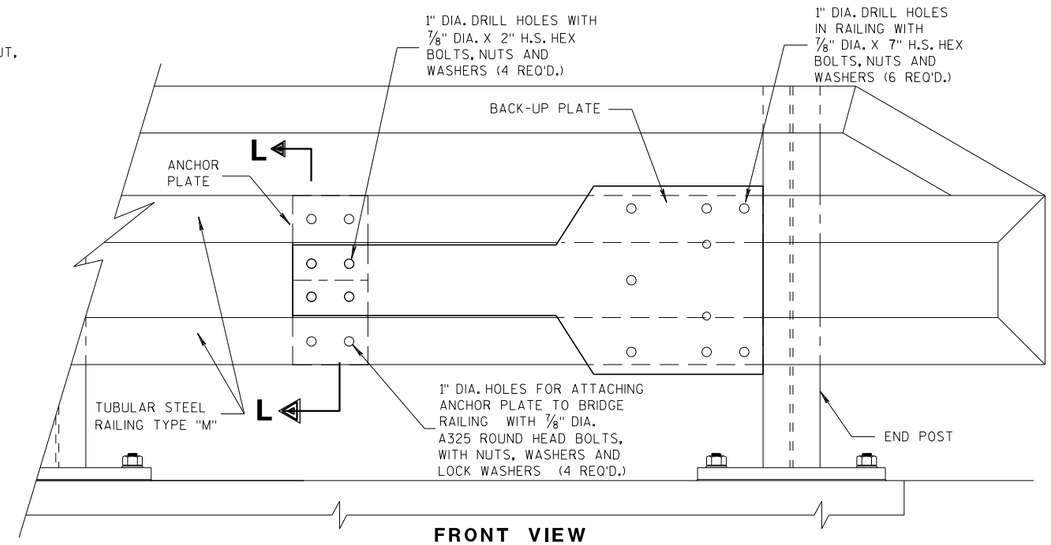
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

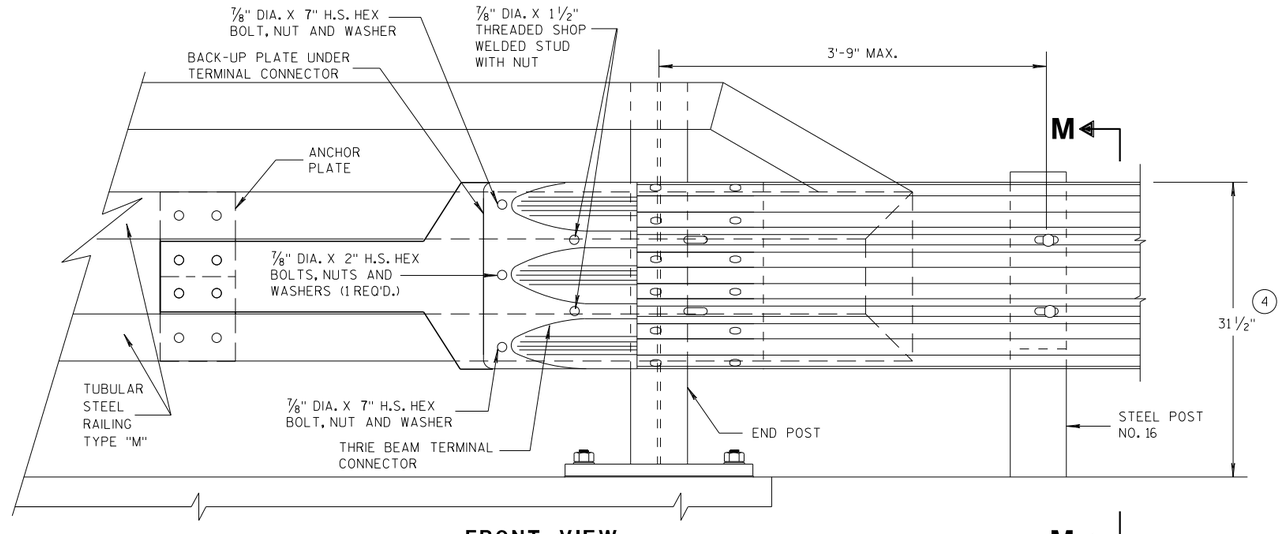


SECTION L-L

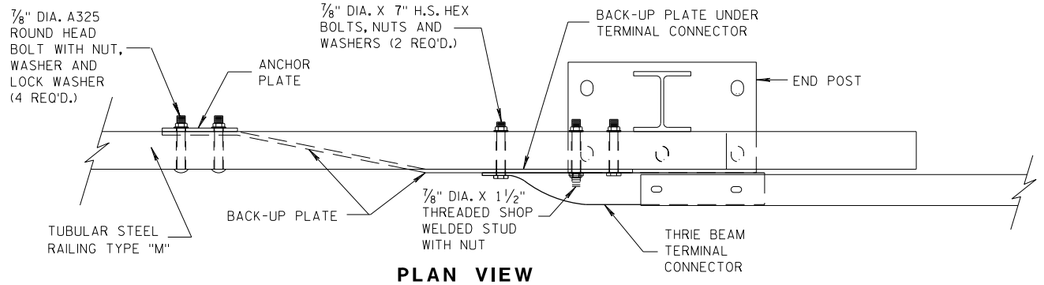


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

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S.D.D. 14 B 45-5h

6

S.D.D. 14 B 45-5h

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

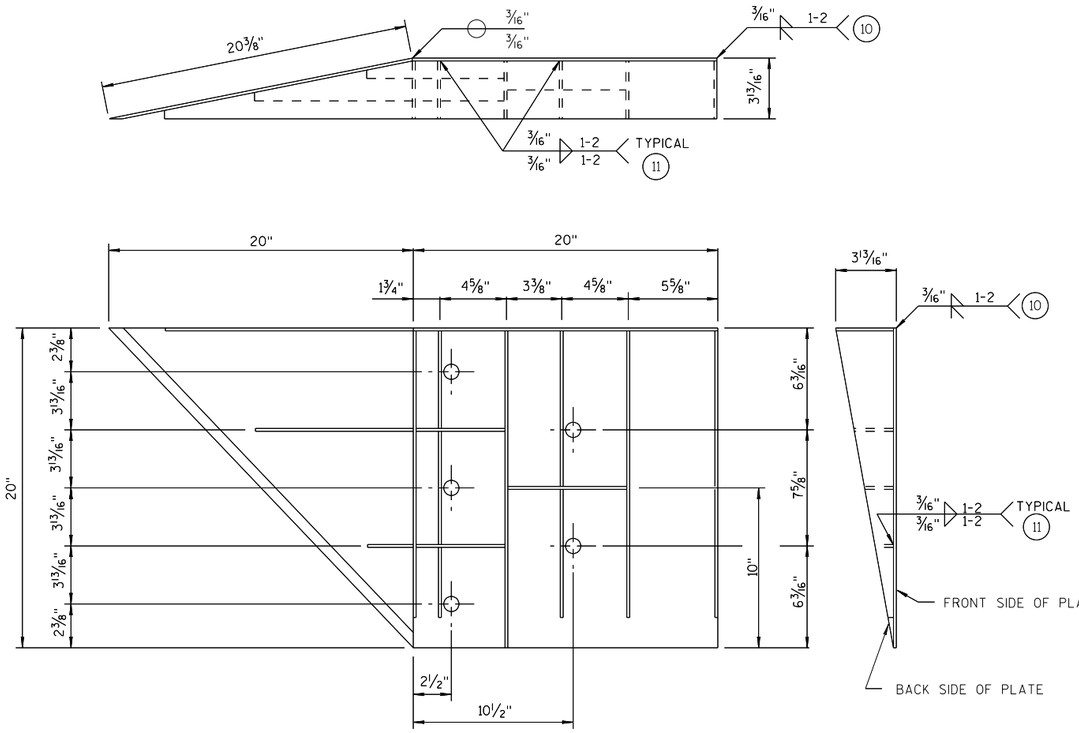
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

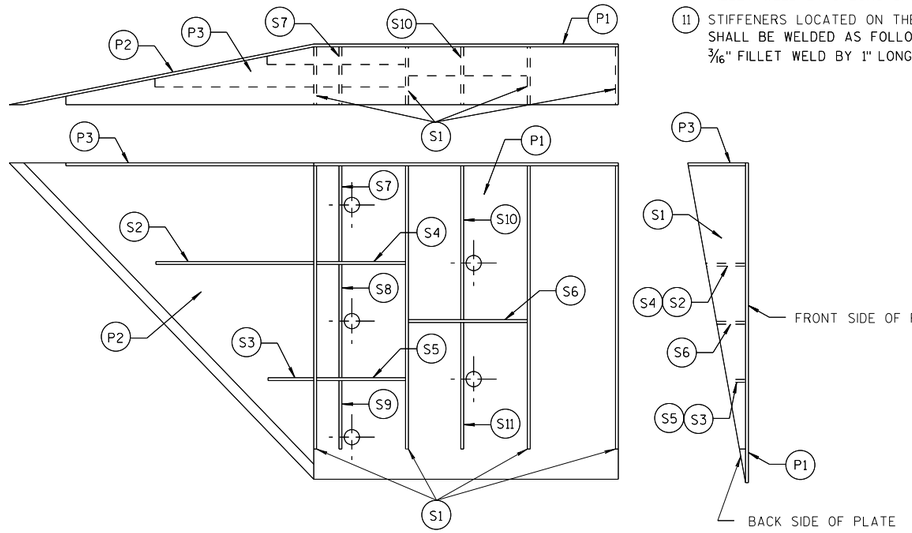


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

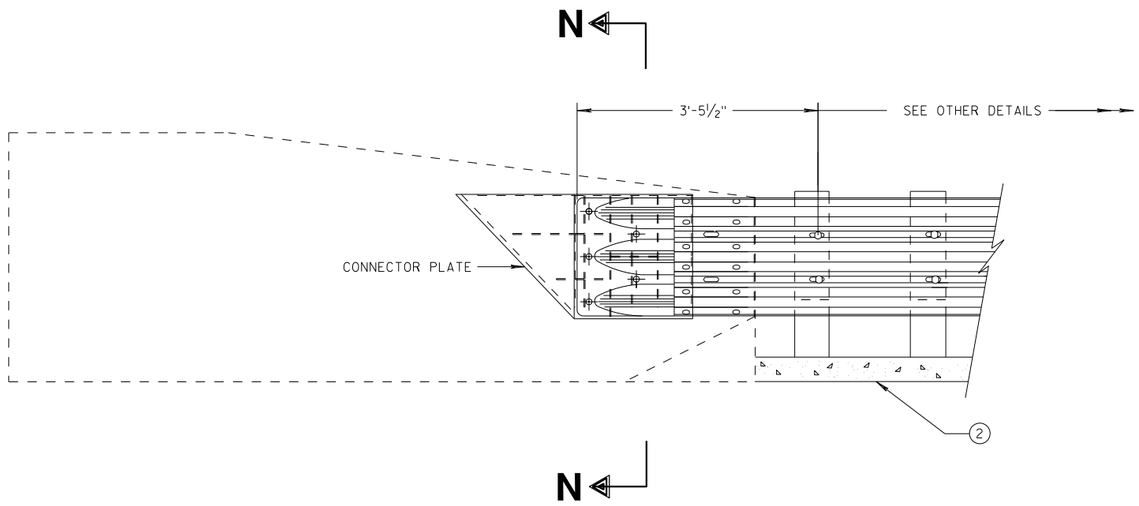
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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7/2018
DATE
FHWA

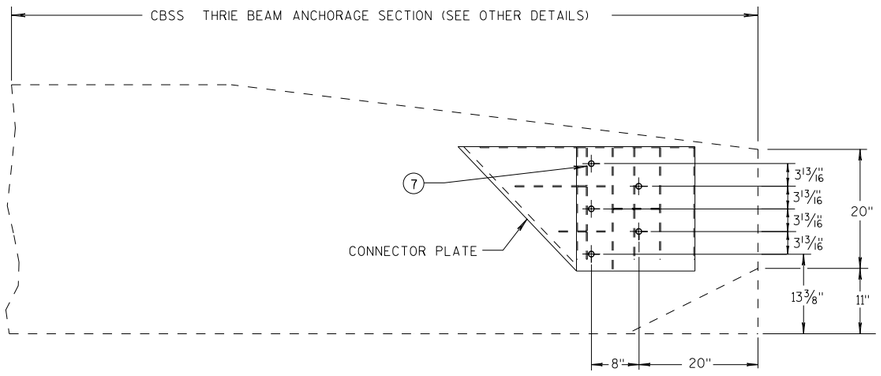
/S/ Rodney Taylor
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THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



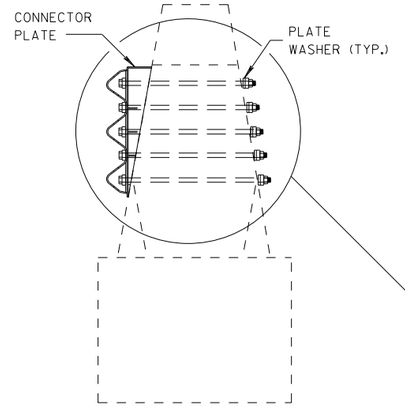
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

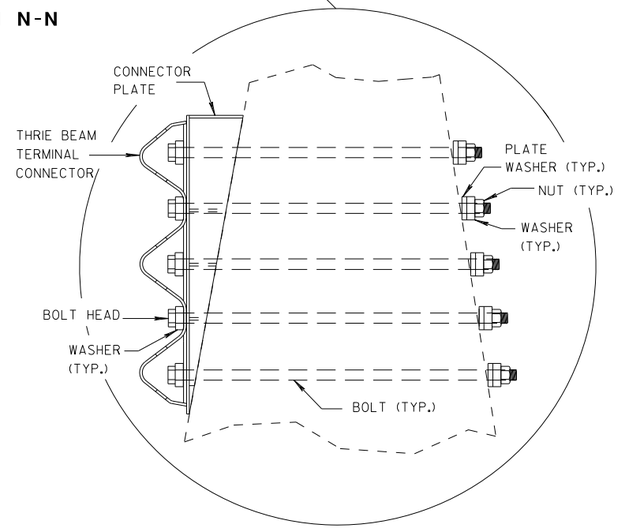
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

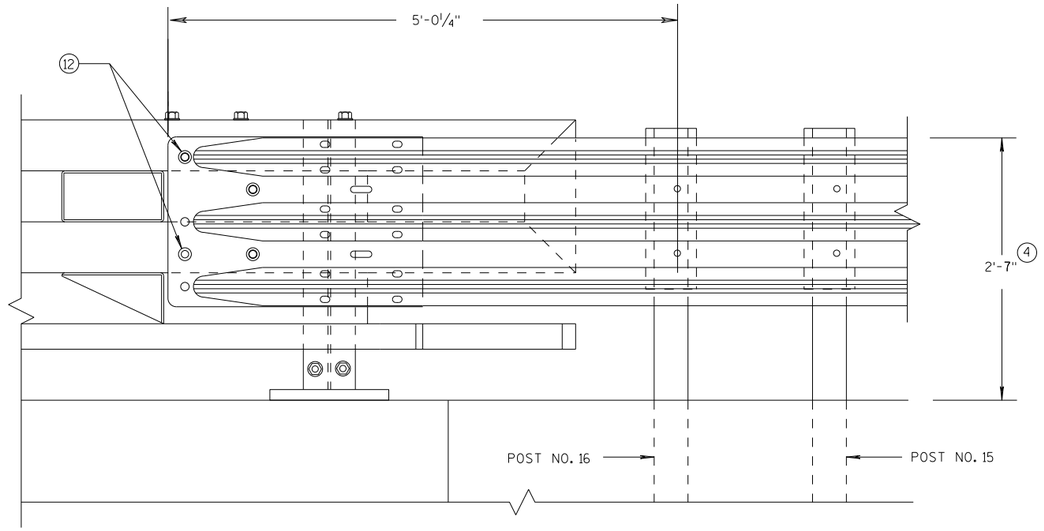
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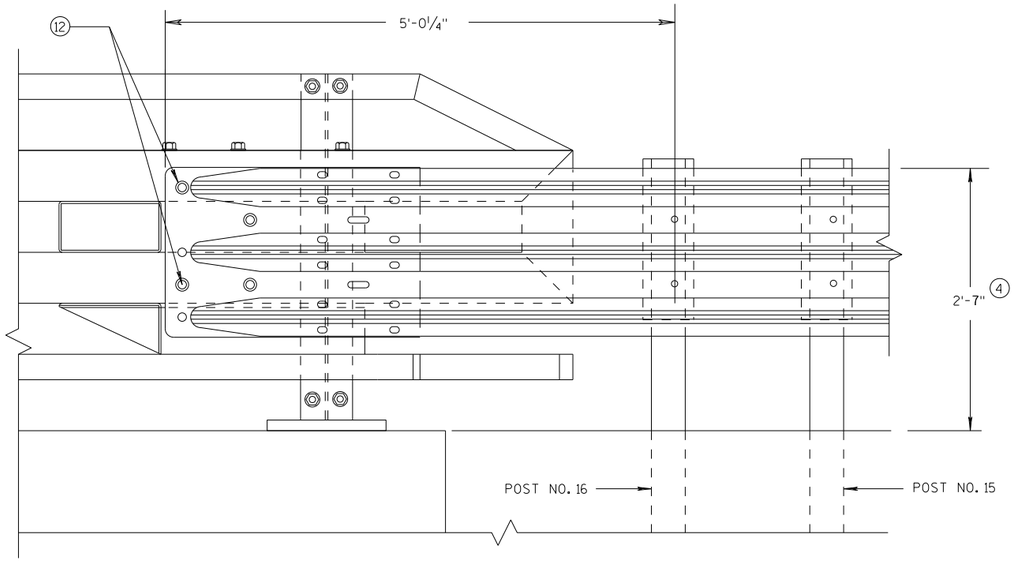
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S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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7/2018
DATE
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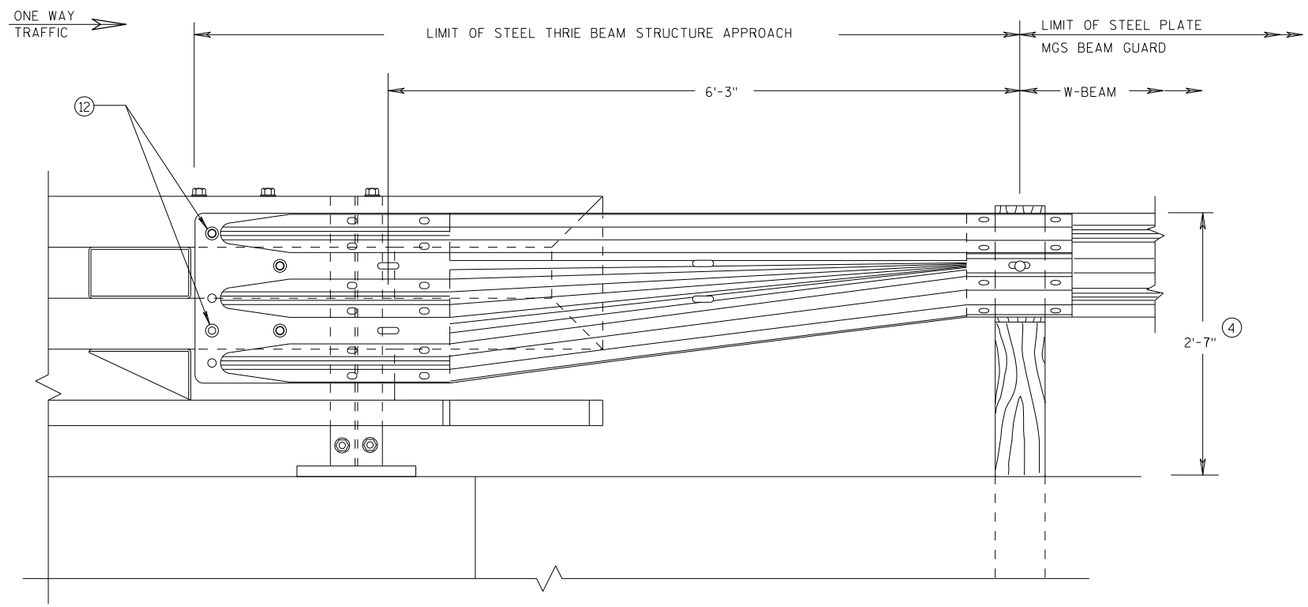
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S.D.D. 14 B 45-5k



FRONT VIEW

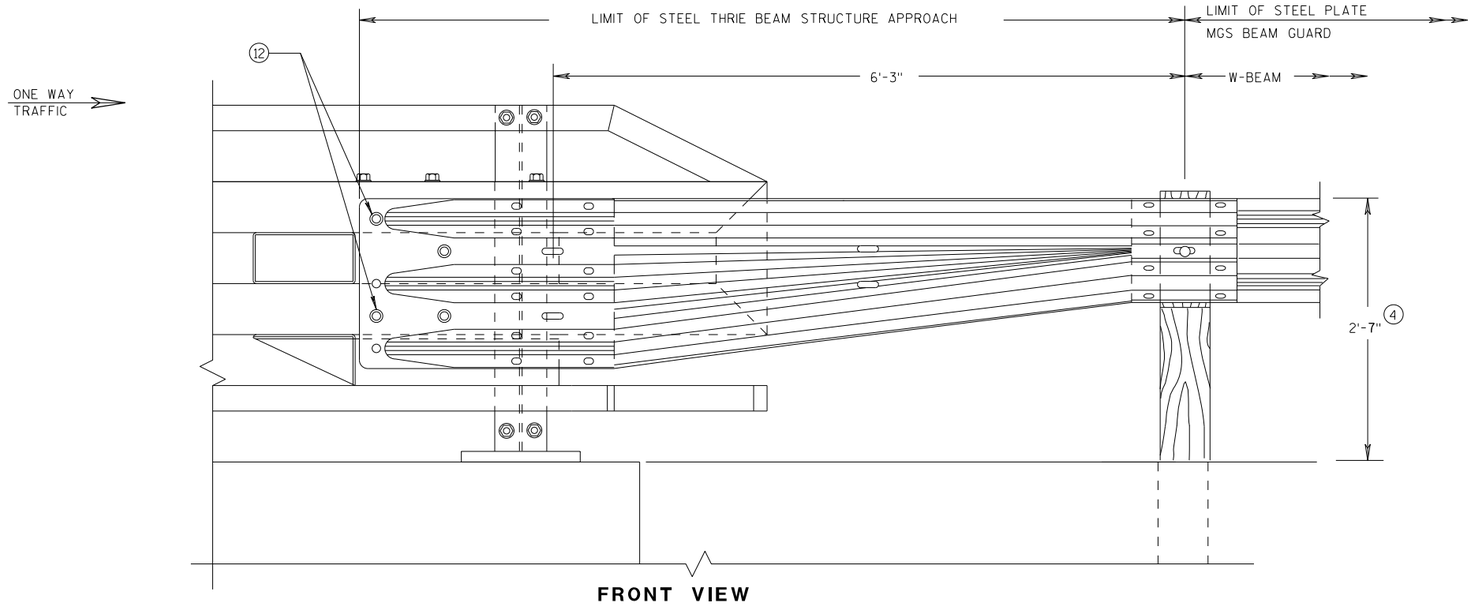
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

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

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

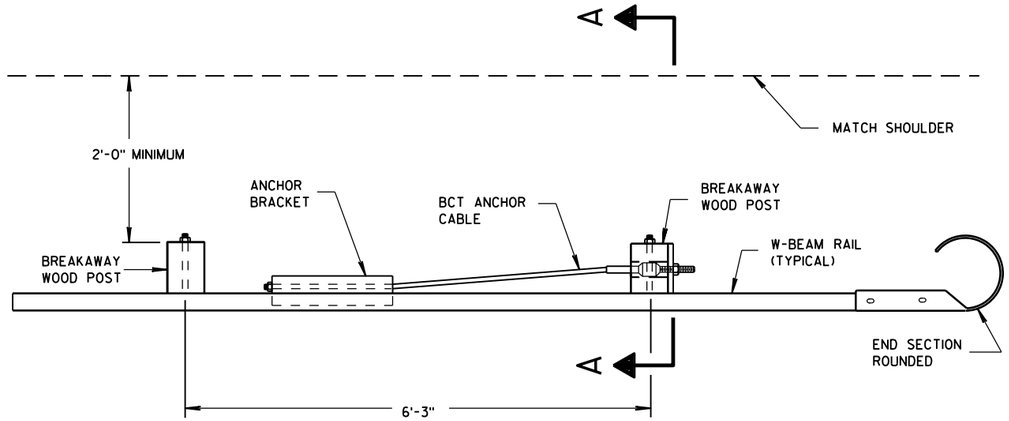
APPROVED
7/2018 DATE
/S/ Rodney Taylor
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FHWA

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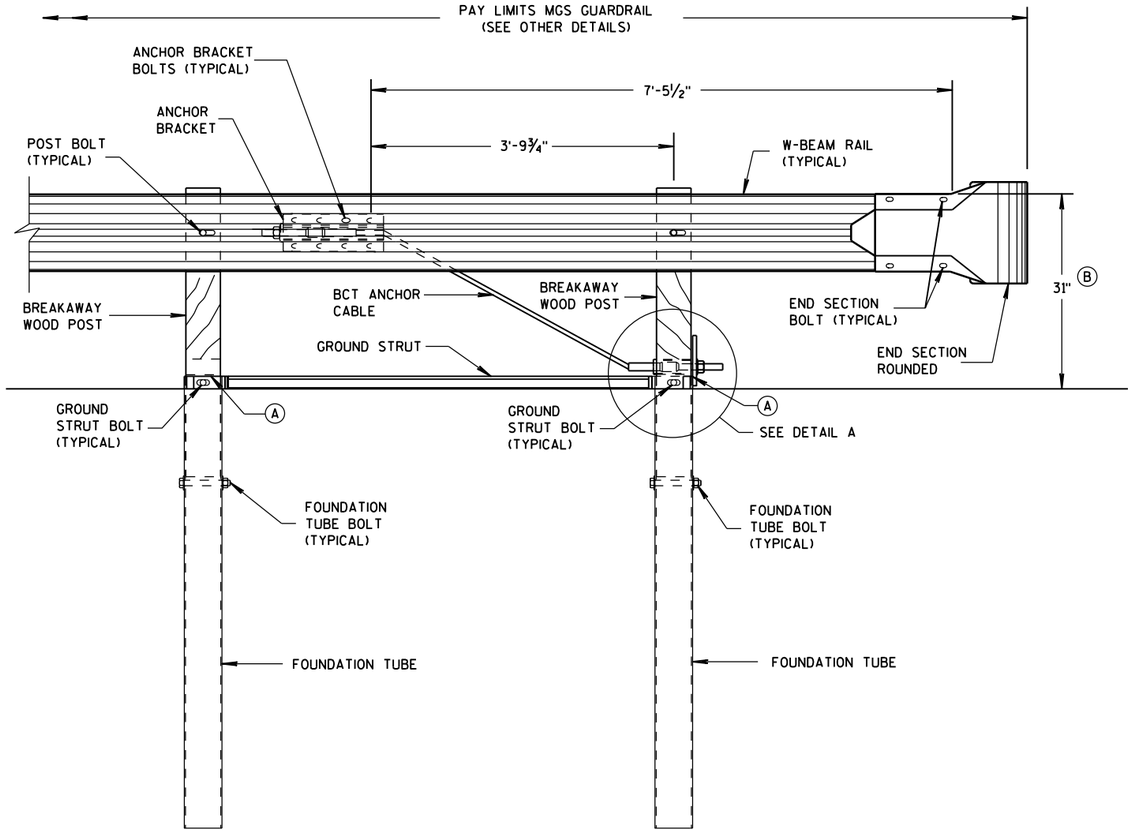
S.D.D. 14 B 45-5L

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S.D.D. 14 B 45-5L

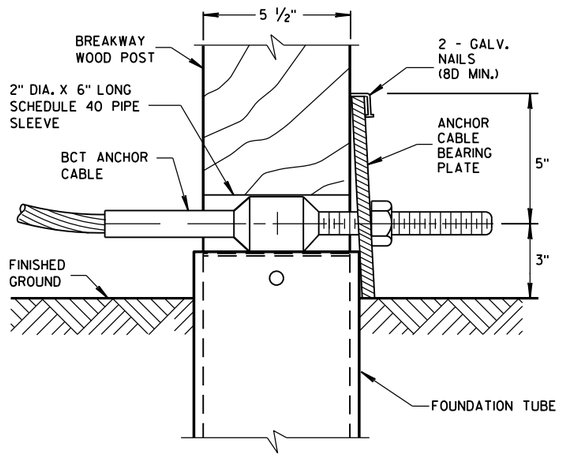


PLAN VIEW



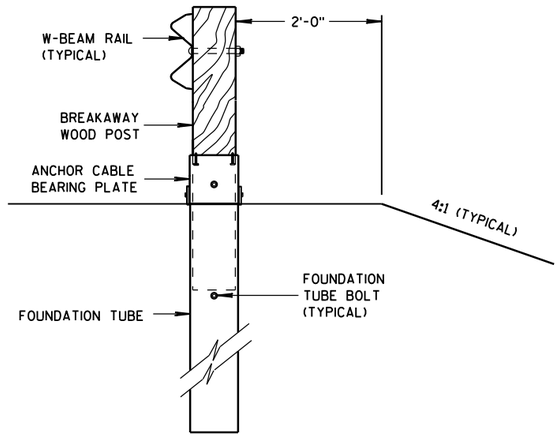
FRONT VIEW

END RAIL DETAIL



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.



SECTION A-A

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

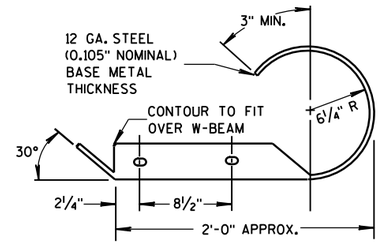
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A ⅝" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅝" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

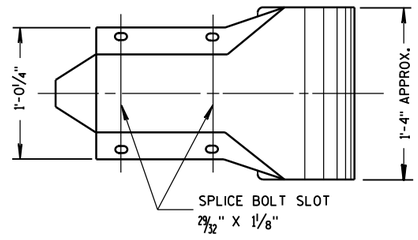
W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".



PLAN VIEW



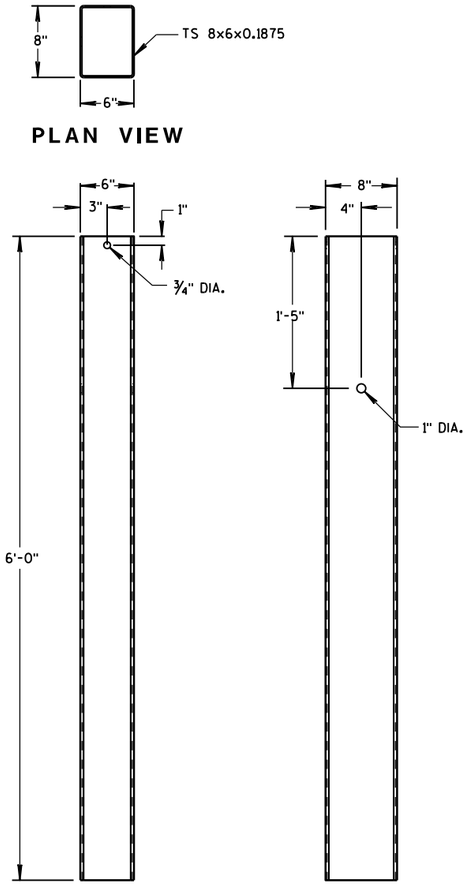
FRONT VIEW

W BEAM END SECTION ROUNDED

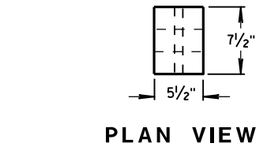
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

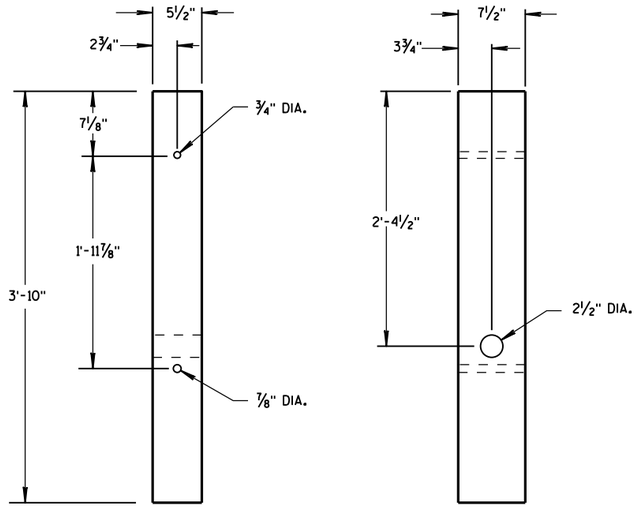
STATE OF WISCONSIN
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FOUNDATION TUBE

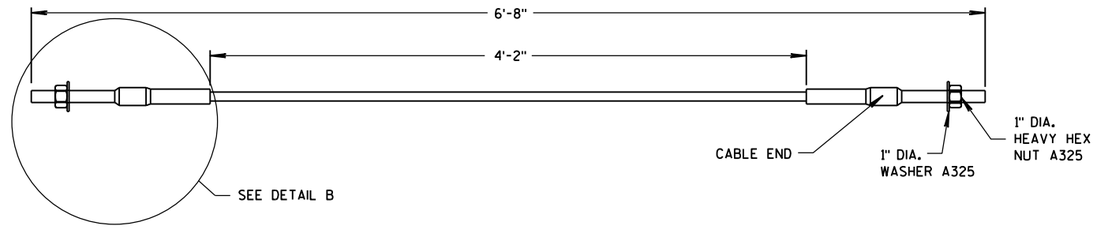




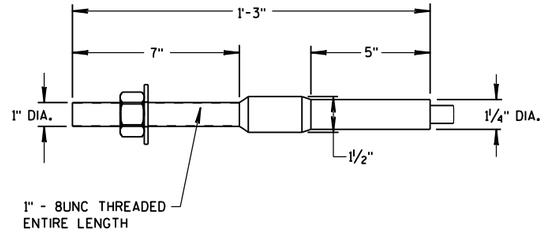
BREAKAWAY WOOD POST

GENERAL NOTES

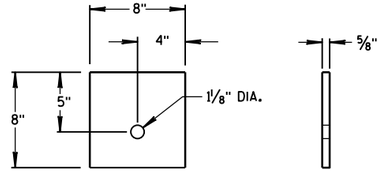
BCT ANCHOR CABLE IS A ¾" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. TREADED STUD SHALL CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.



BCT ANCHOR CABLE



DETAIL B



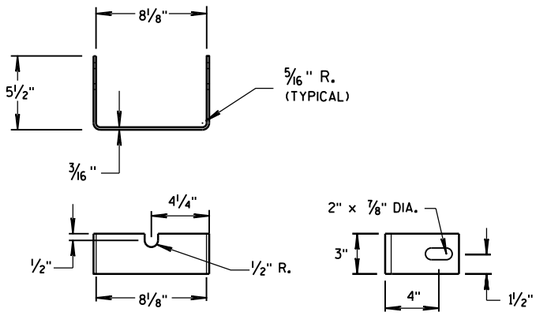
ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

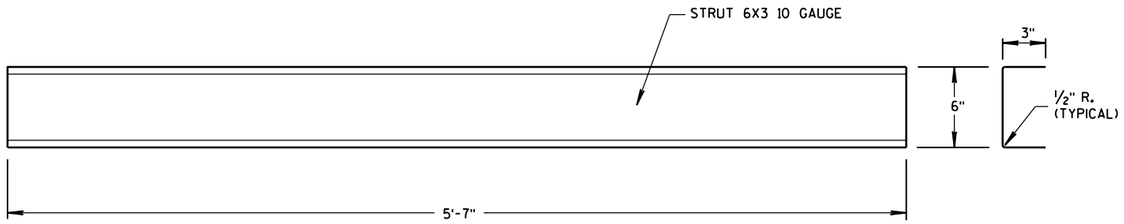
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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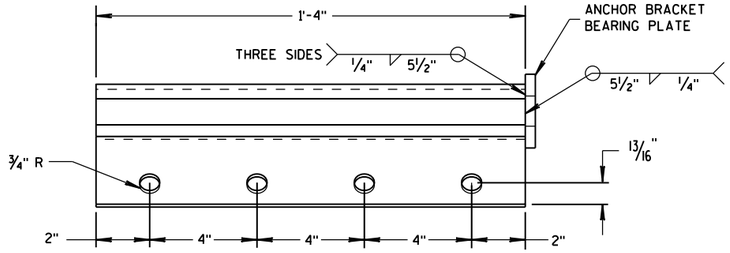
S.D.D. 14 B 47-2b

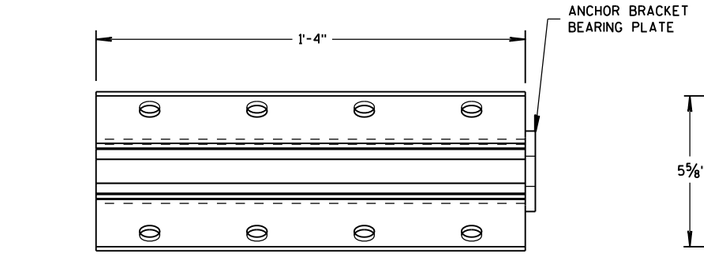


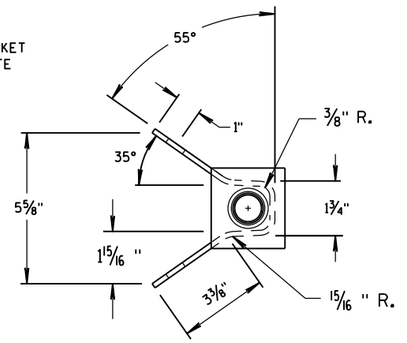
YOKE DETAIL



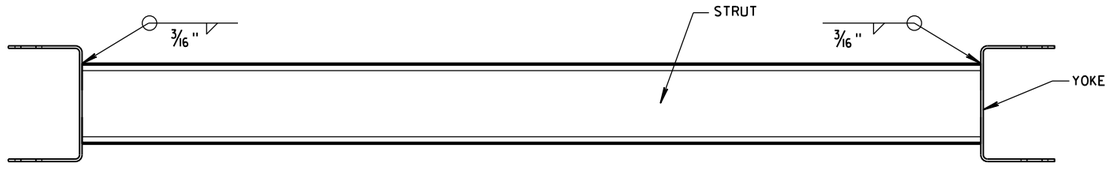
STRUT DETAIL



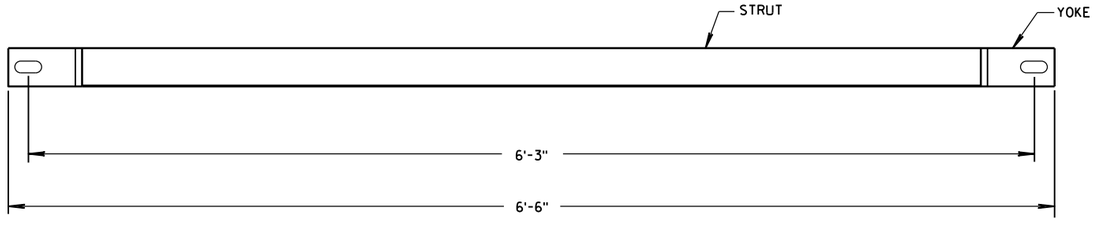




ANCHOR BRACKET

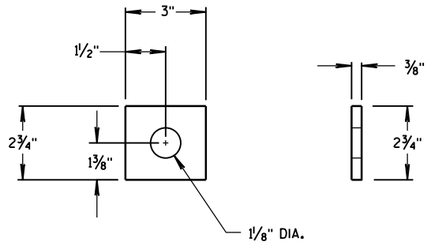


PLAN VIEW



FRONT VIEW

GROUND STRUT DETAIL



ANCHOR BRACKET BEARING PLATE

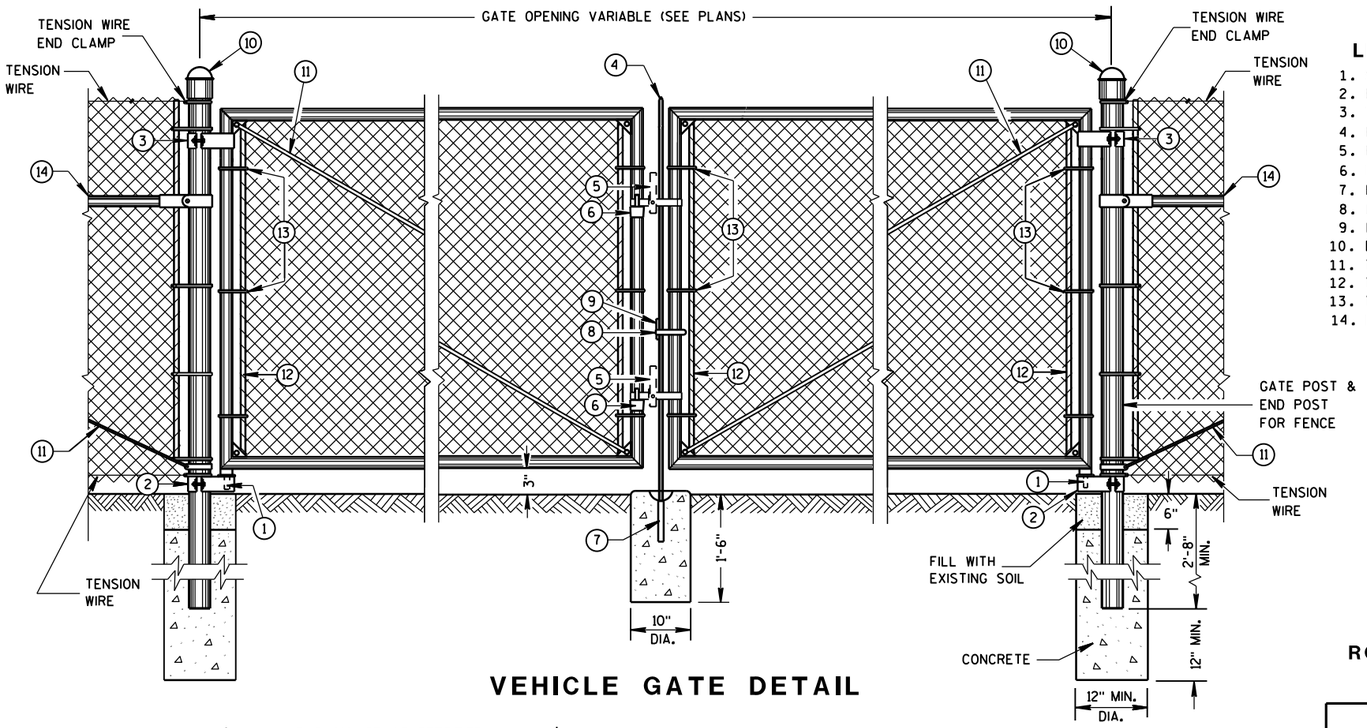
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

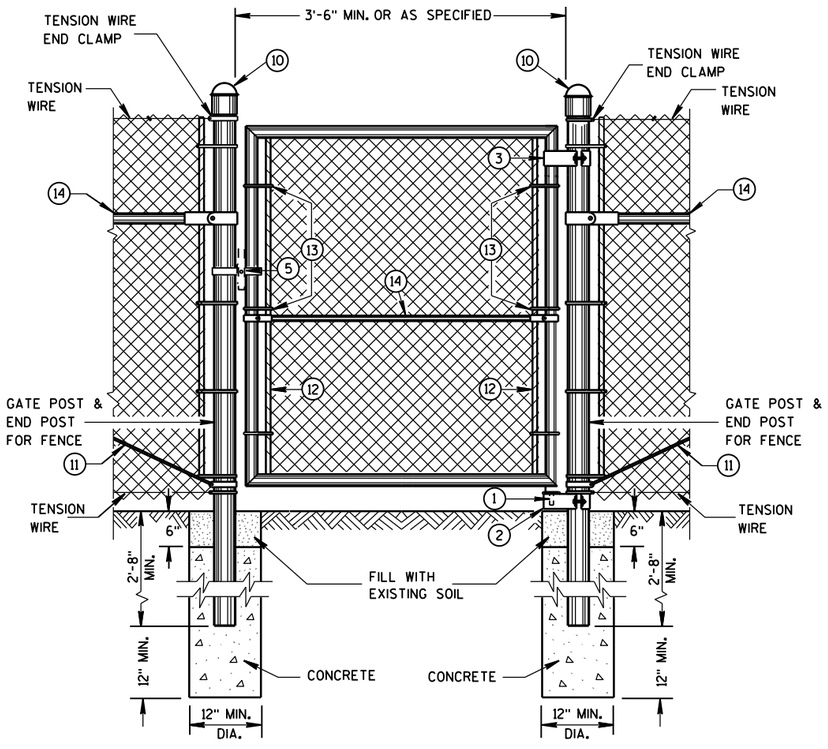
APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 14 B 47-2c



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

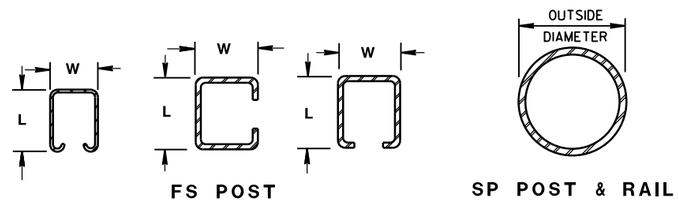
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



CROSS SECTIONS OF POSTS AND RAILS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

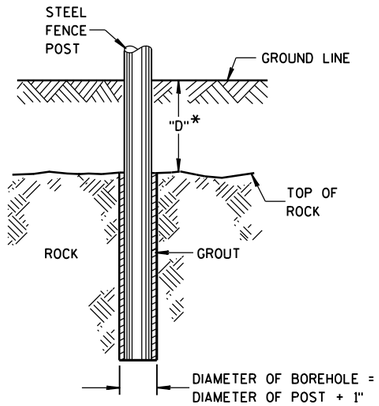
** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

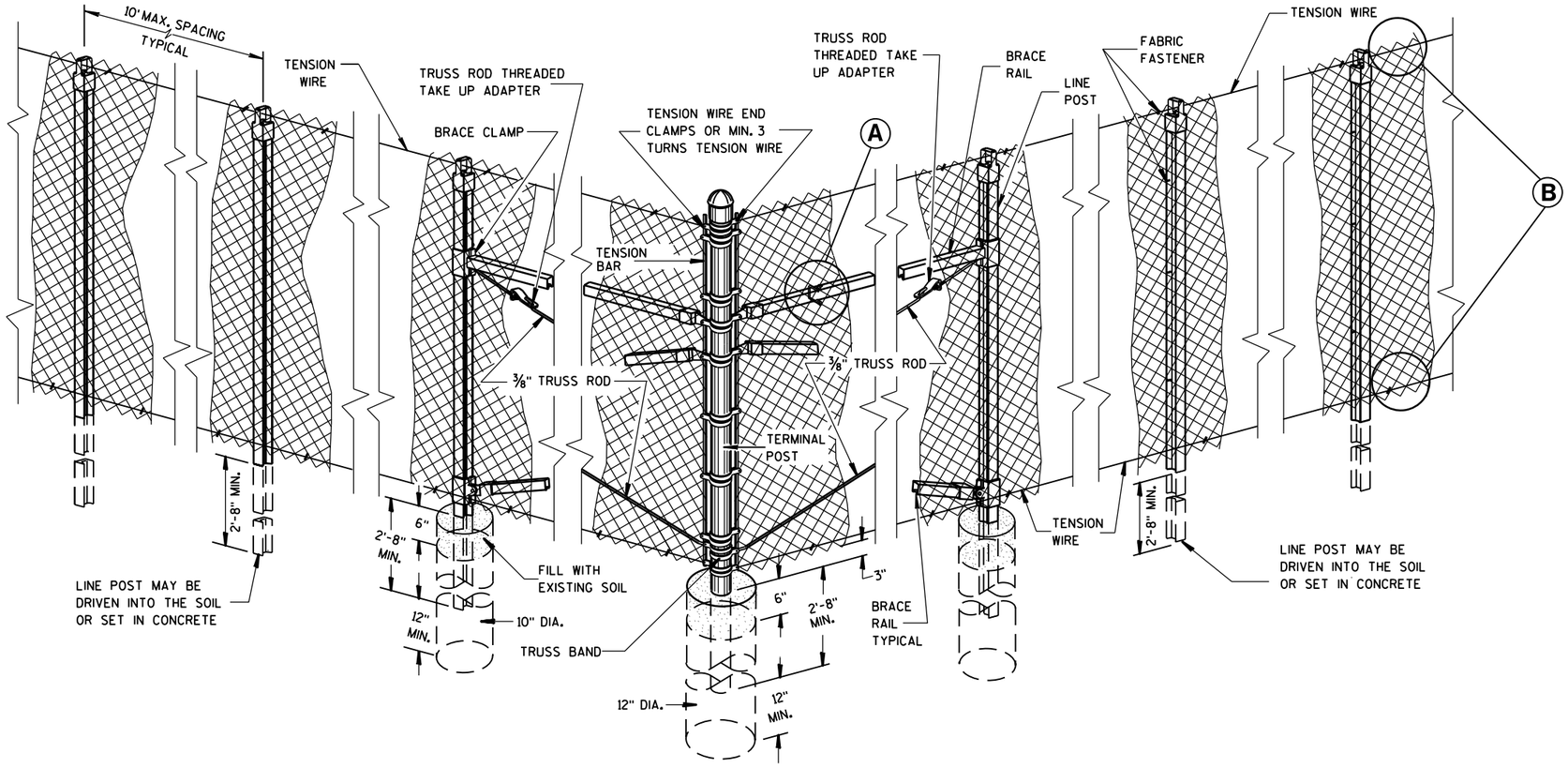
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S.D.D. 15 B 3-15a

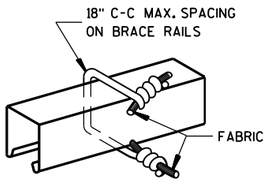


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



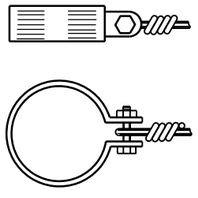
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



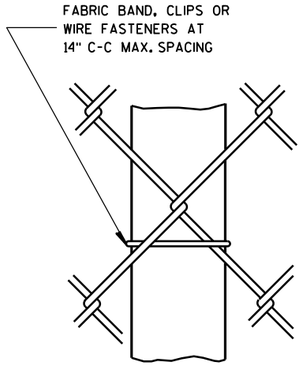
BRACE RAIL

FABRIC FASTENER

Ⓐ



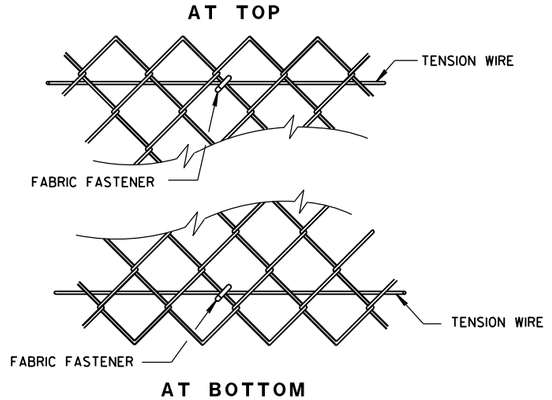
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

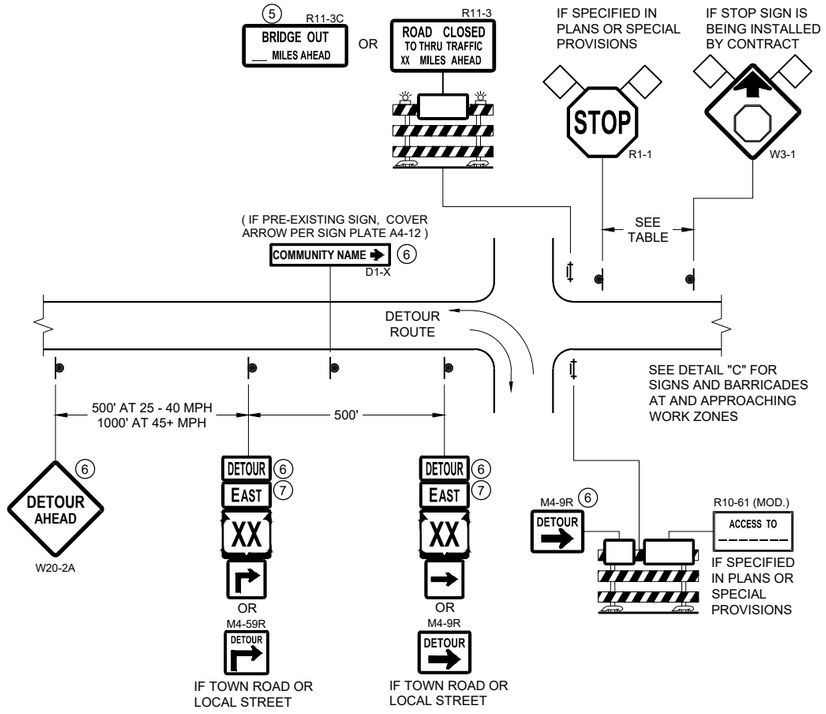
APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 15 B 3-15b

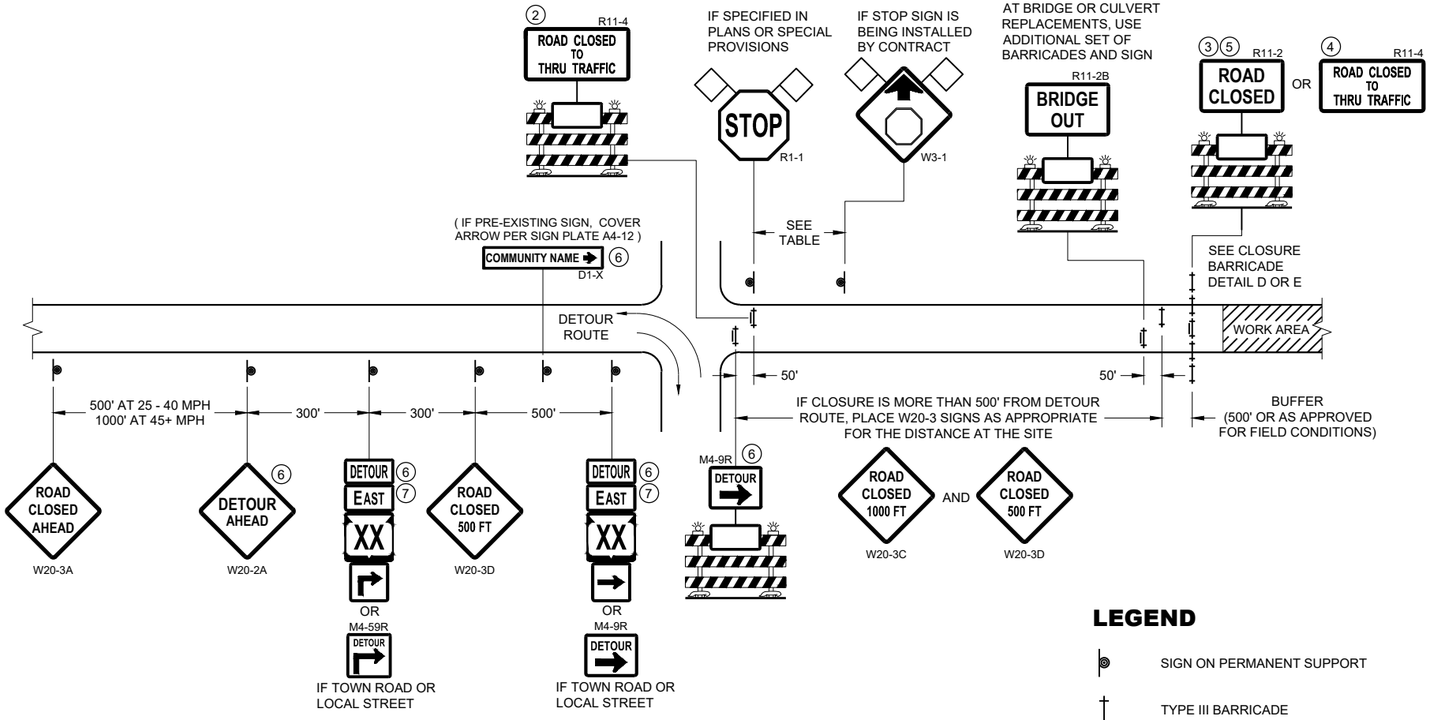
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S.D.D. 15 B 3-15b



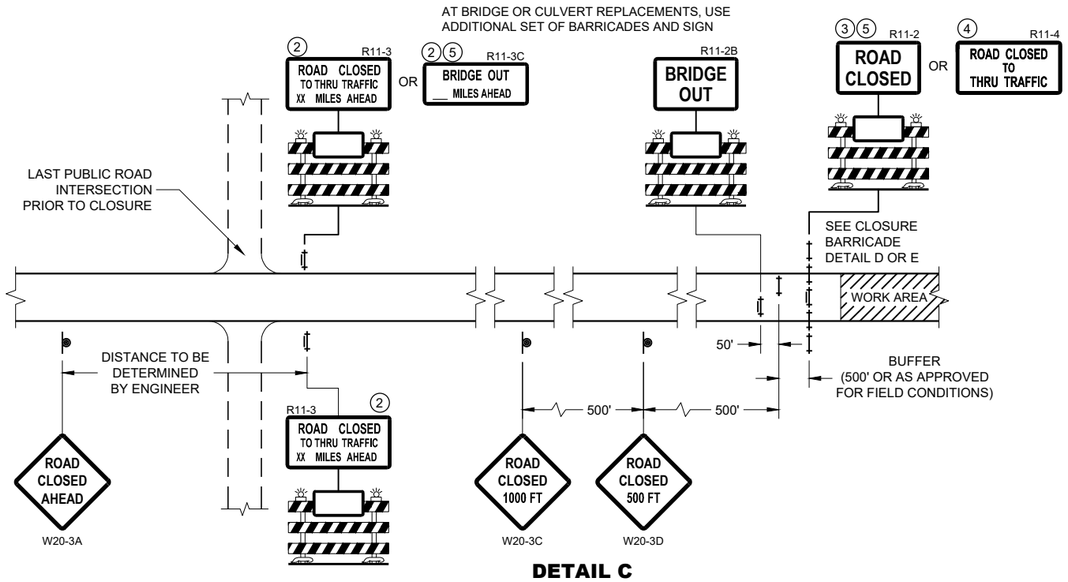
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

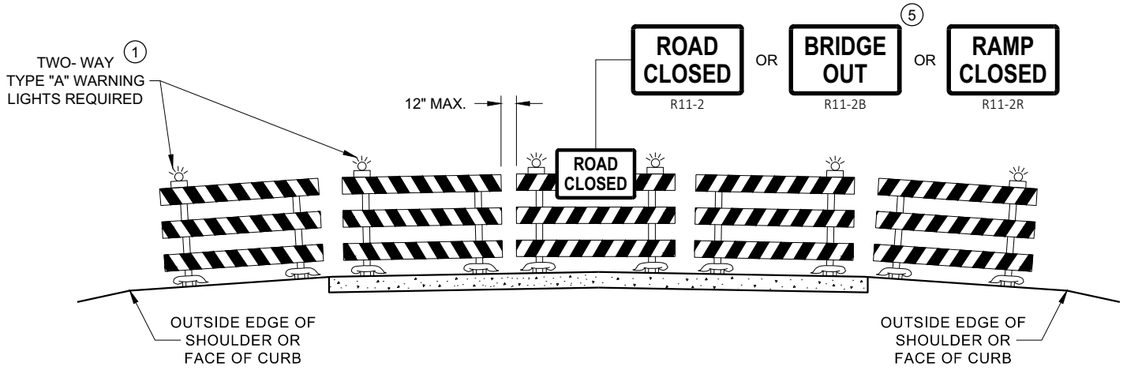
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

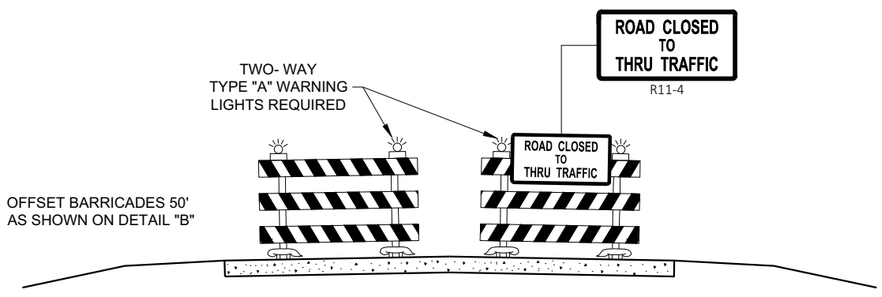
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SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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SDD 15C02 - 08b

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

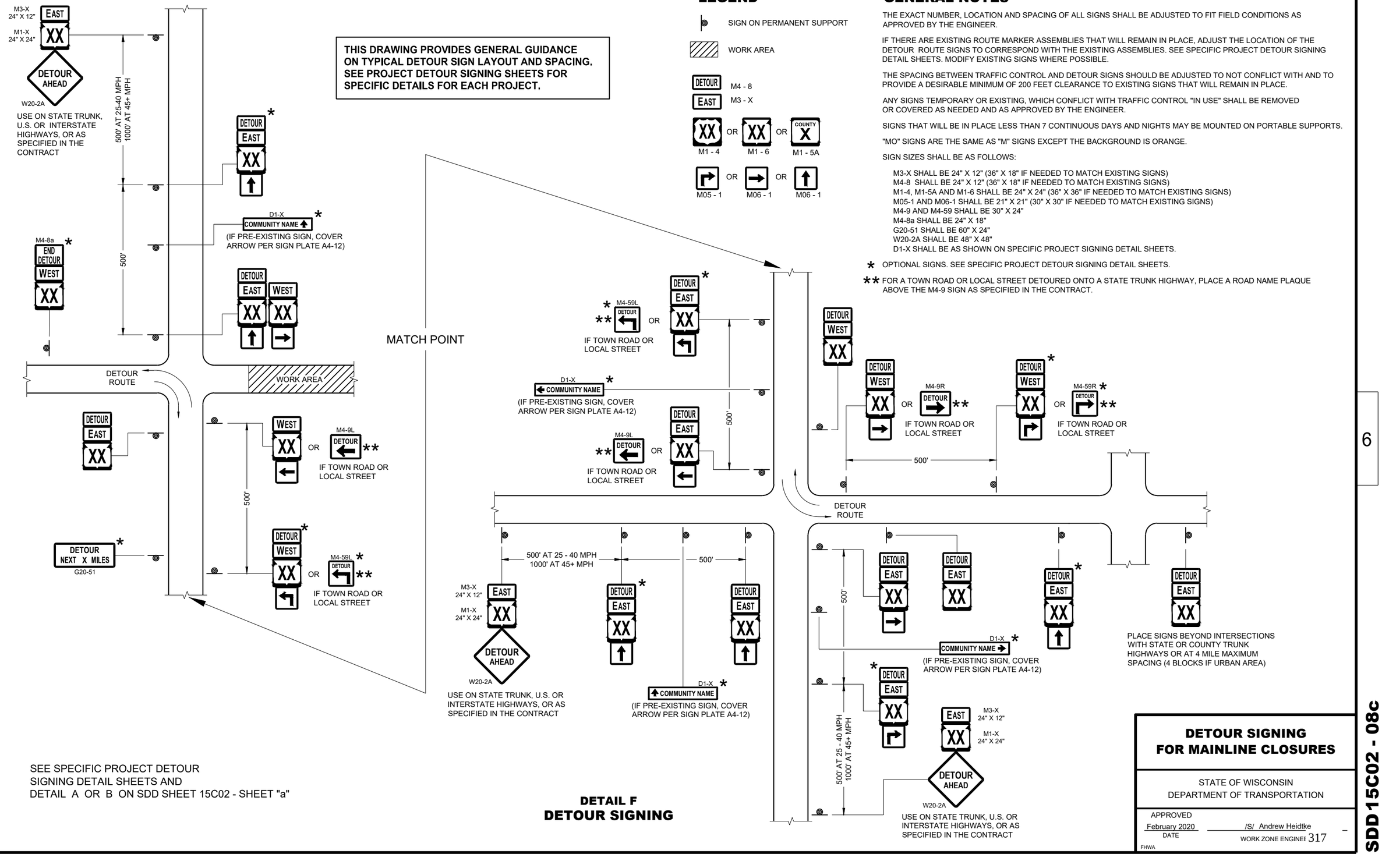
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

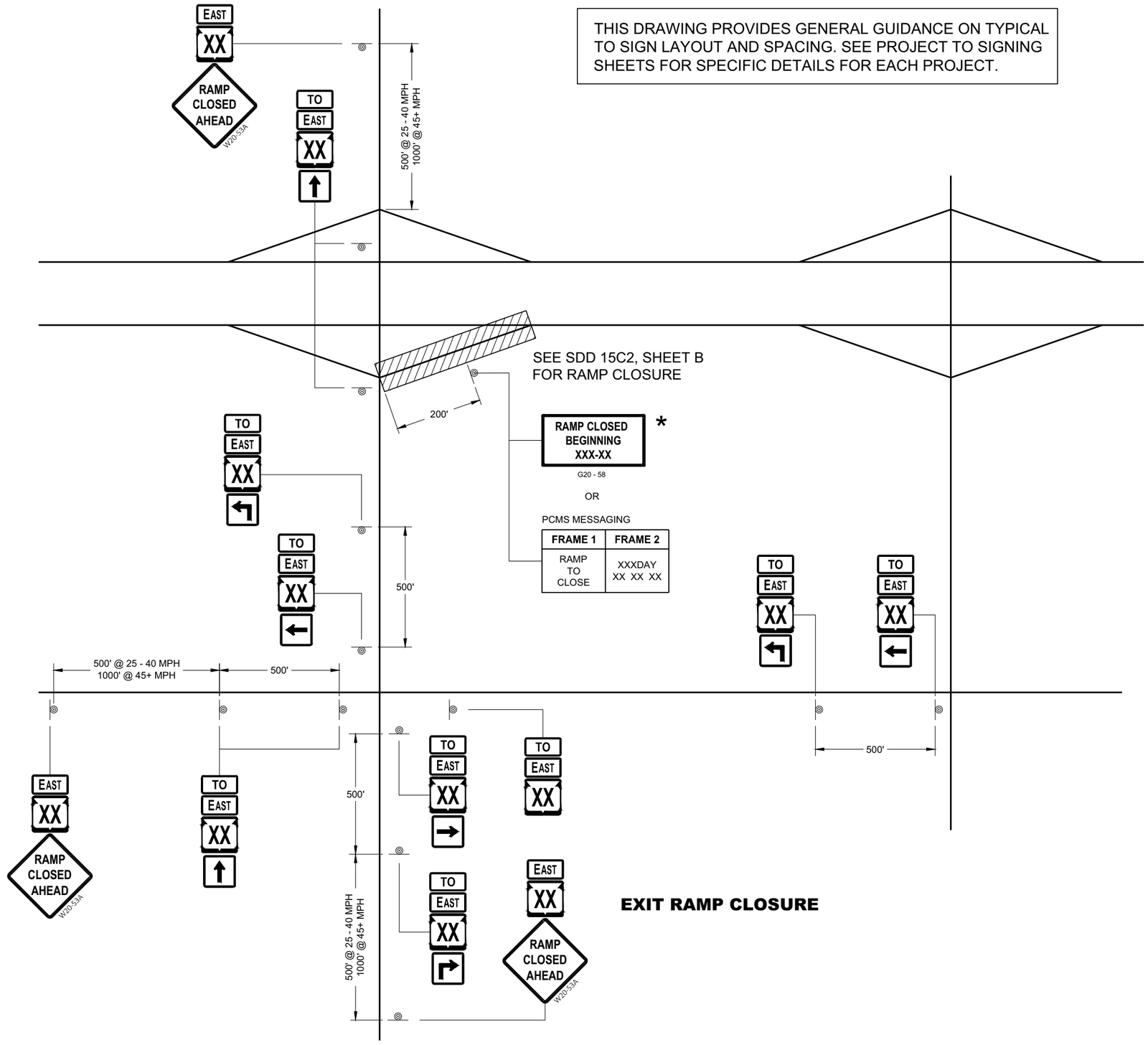
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08c

SDD 15C02 - 08c

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

LEGEND

SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

EXIT RAMP CLOSURE

ON RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

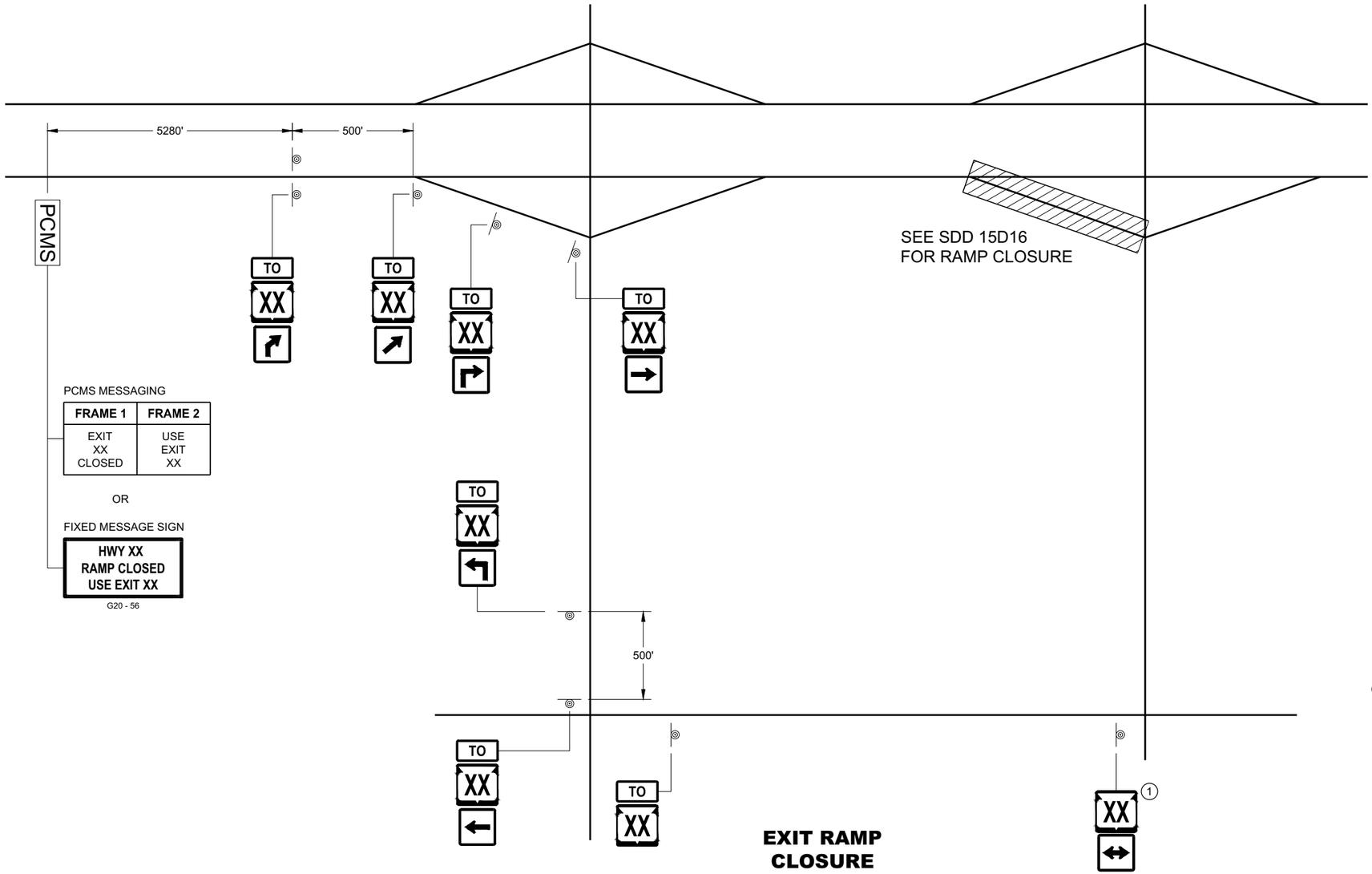
APPROVED
February 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

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SDD 15C02 - 08d

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

EXIT RAMP CLOSURE

LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

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

M05 - 1 OR M05 - 2 OR M06 - 1 OR M06 - 2 OR M06 - 4

GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE "TO" MO-4 ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 4, M1 - 5A, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

(1) ONLY ADD IF THERE ARE NO EXISTING ROUTE MARKERS FOR THE INTERSECTING ROADWAY.

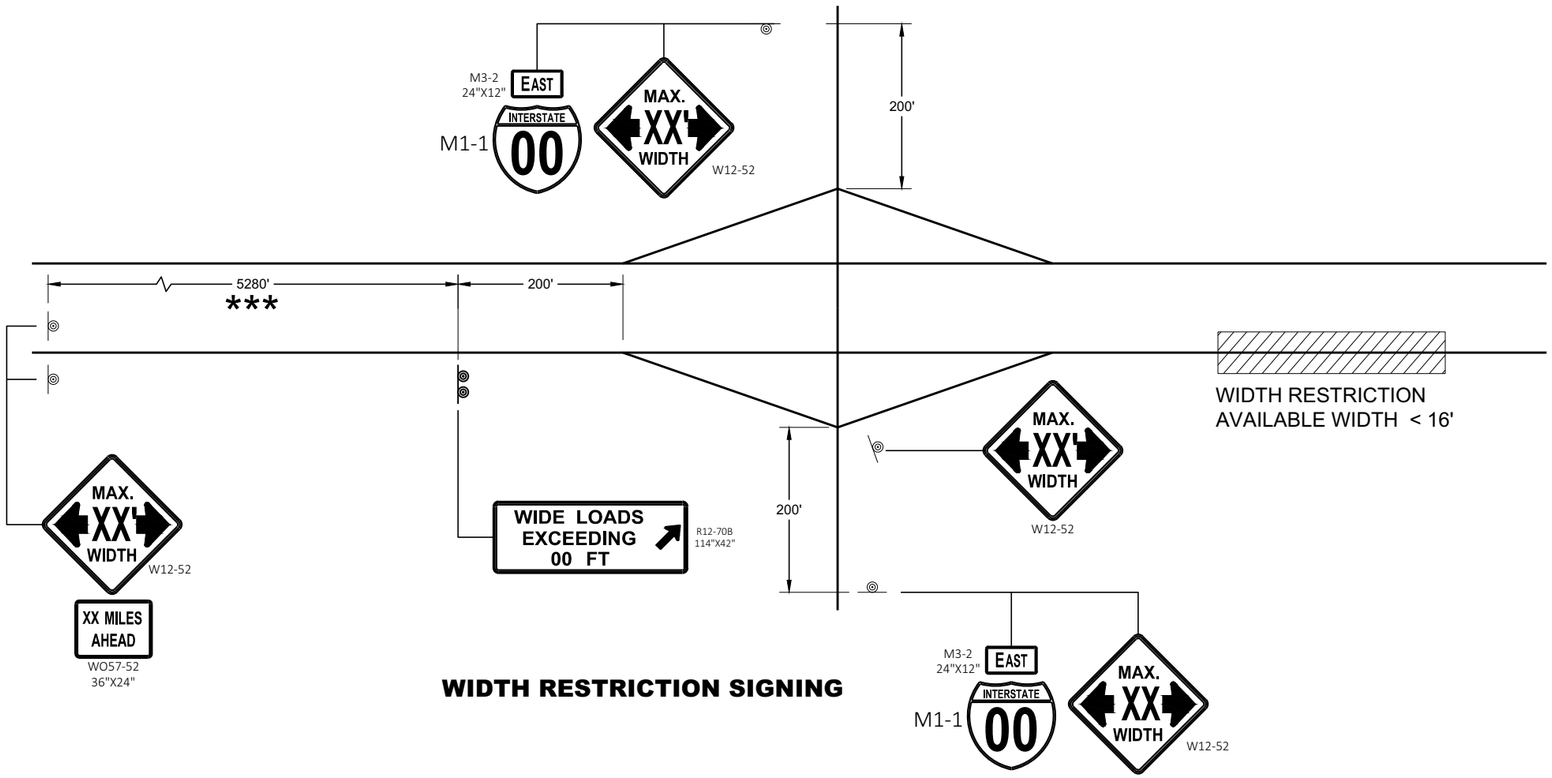
OFF RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

SDD 15C02 - 08e

SDD 15C02 - 08e



WIDTH RESTRICTION SIGNING

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.

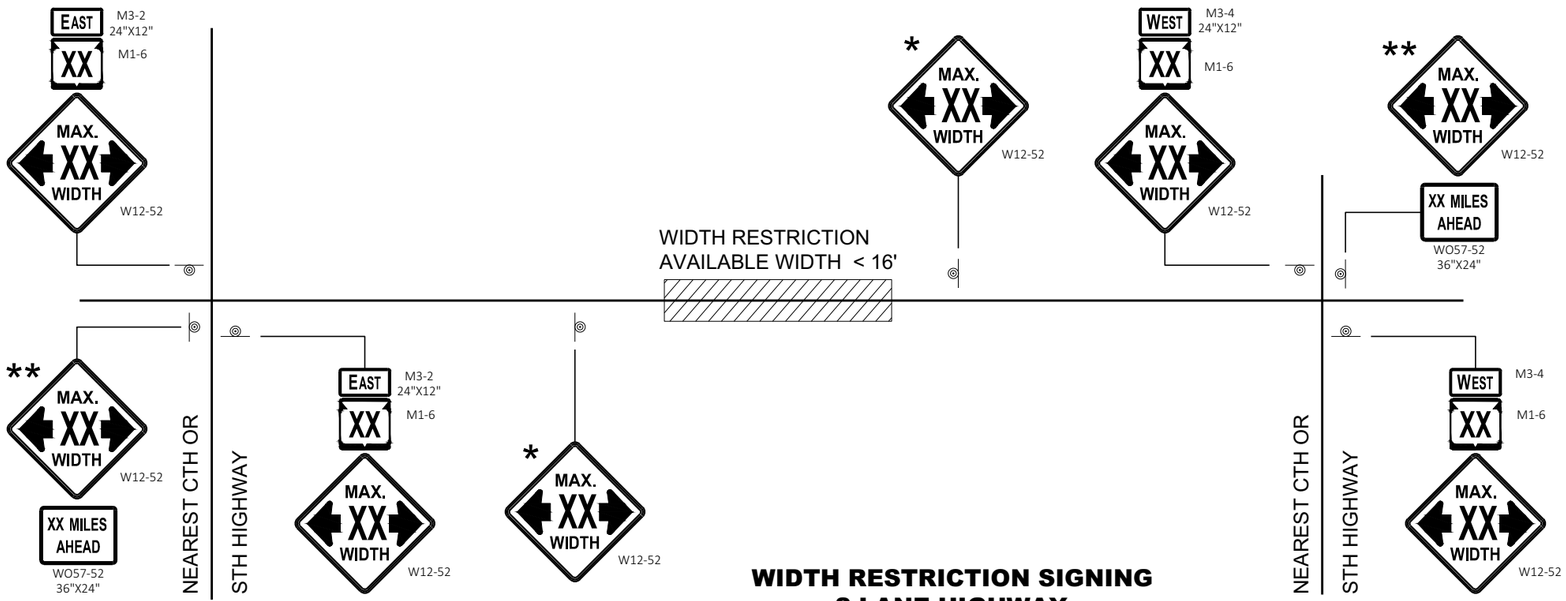
* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.



WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE 320

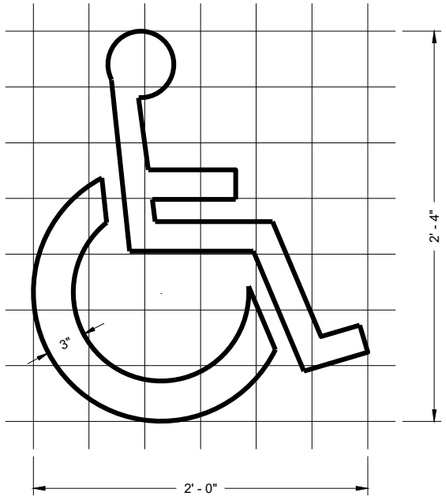
FHWA

6

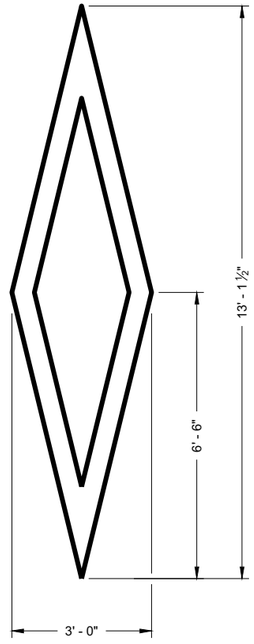
SDD 15C02 - 08f

GENERAL NOTES

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



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

PAVEMENT MARKING SYMBOLS

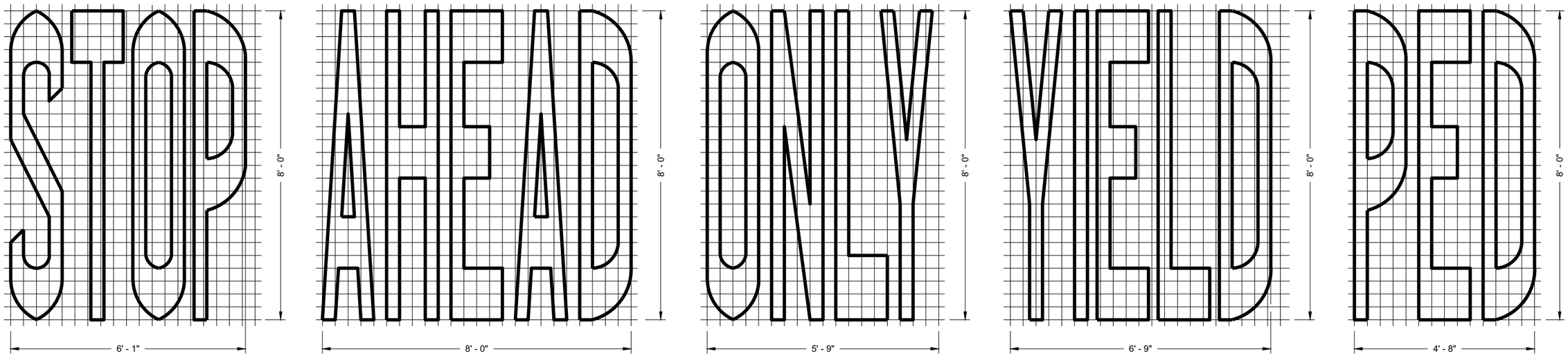
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

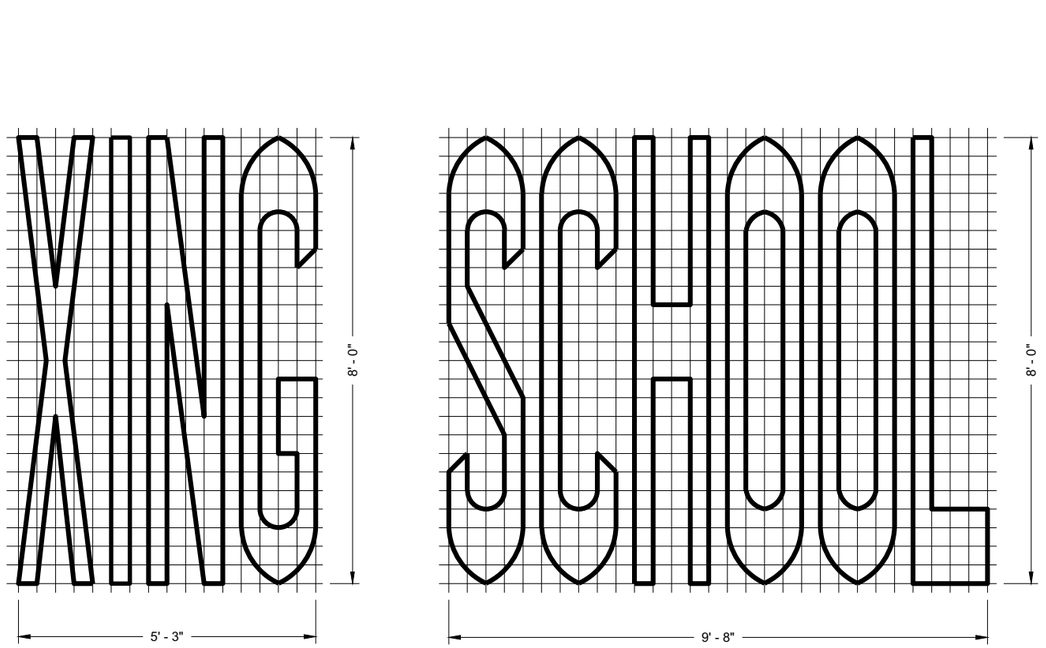
APPROVED

November 2019
DATE

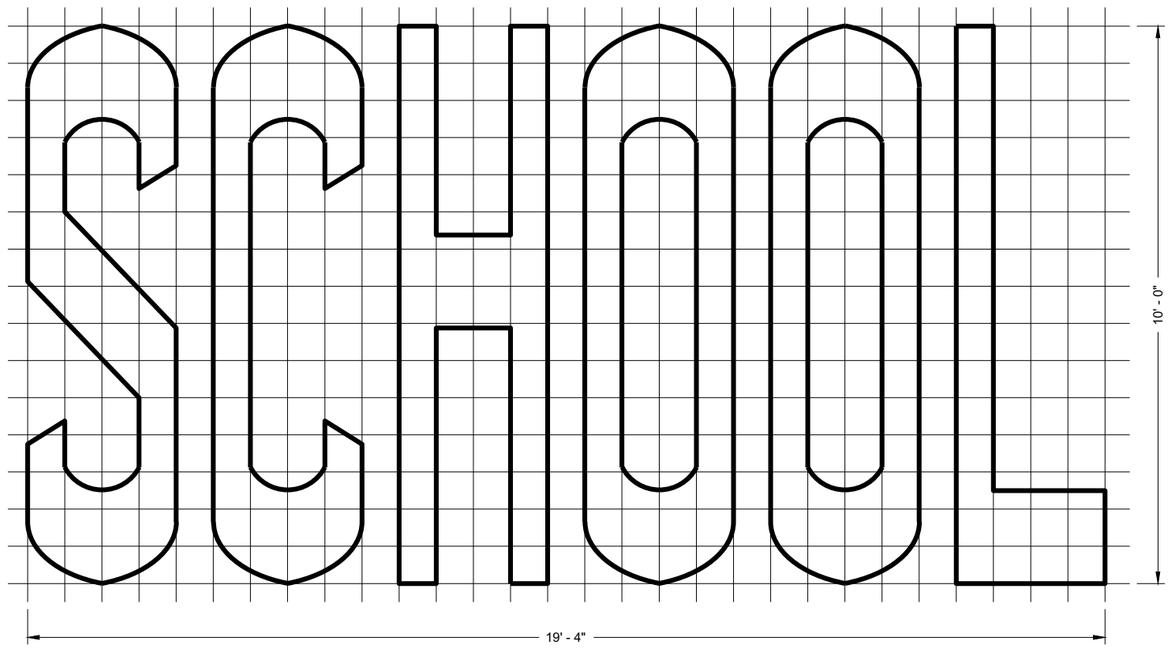
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

FHWA





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

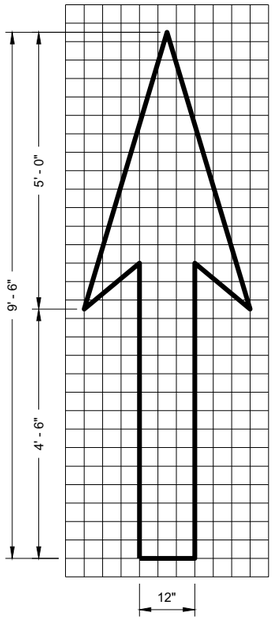
/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

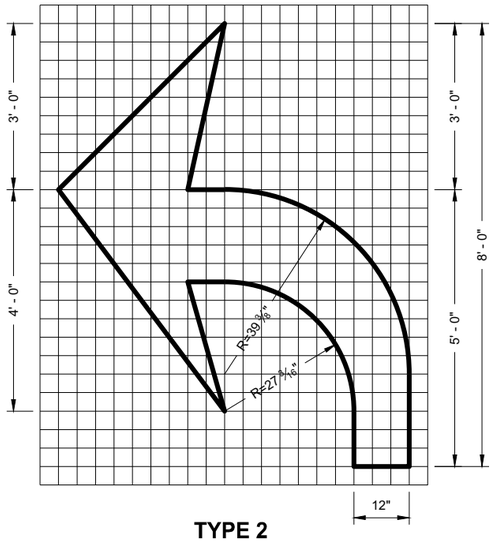
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SDD 15C07 - 15b

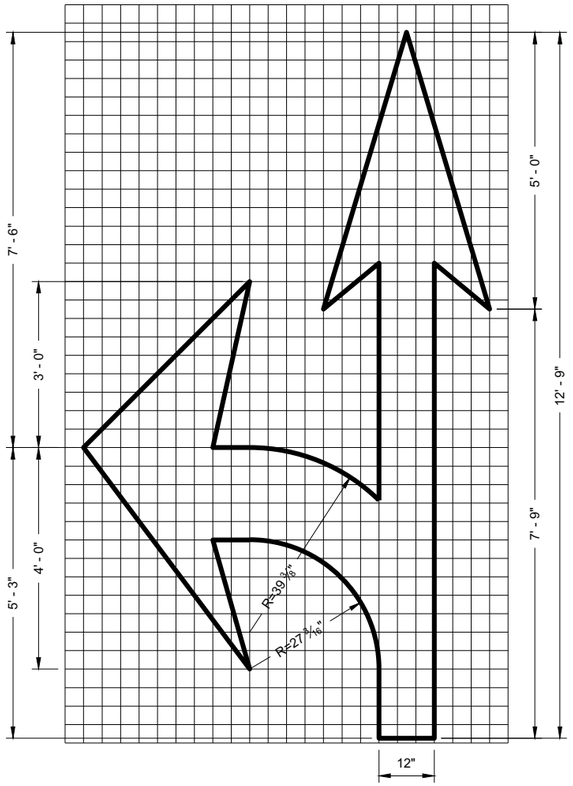
SDD 15C07 - 15b



TYPE 1



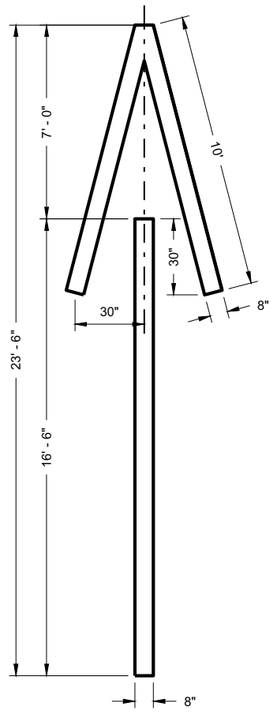
TYPE 2



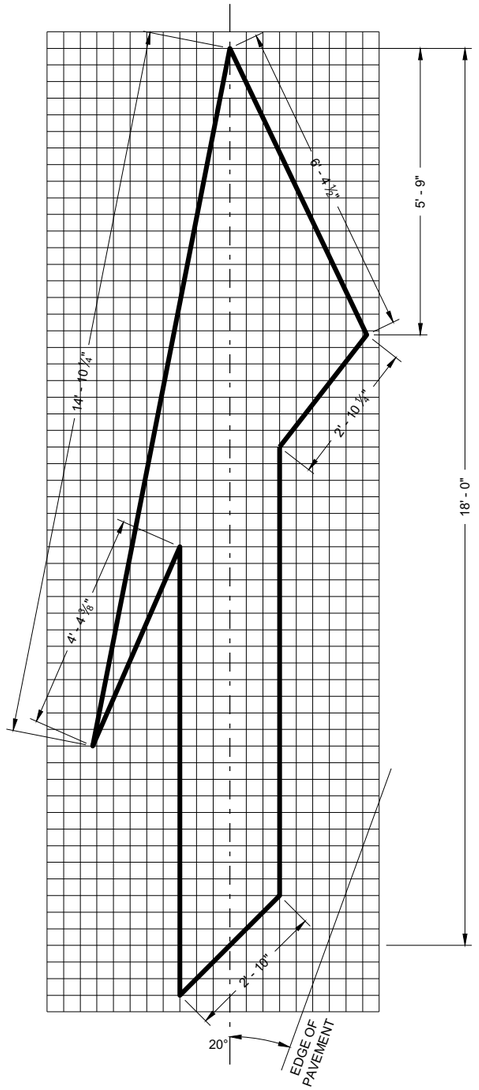
TYPE 3

GENERAL NOTES

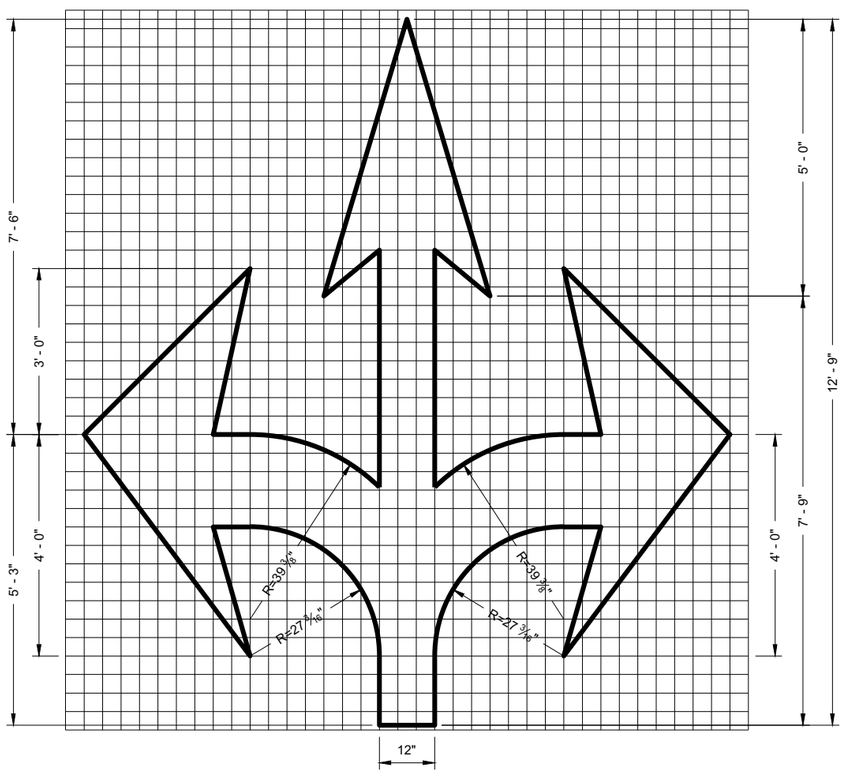
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



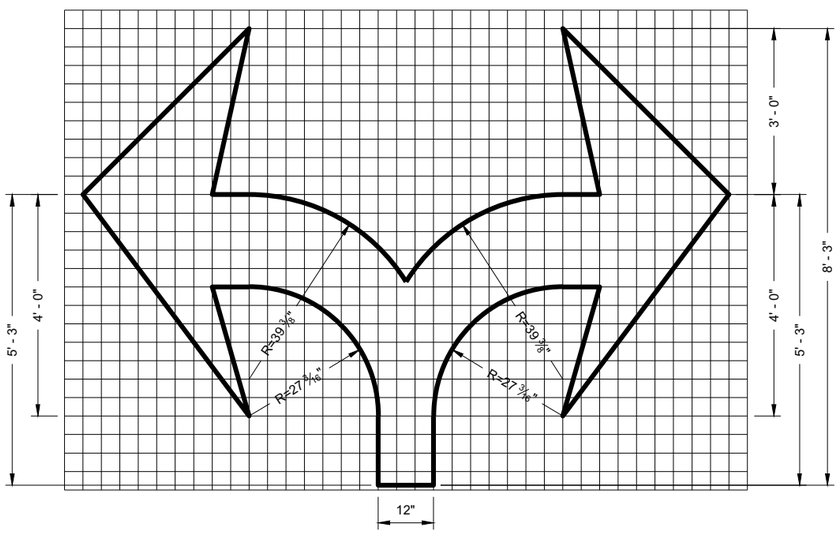
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

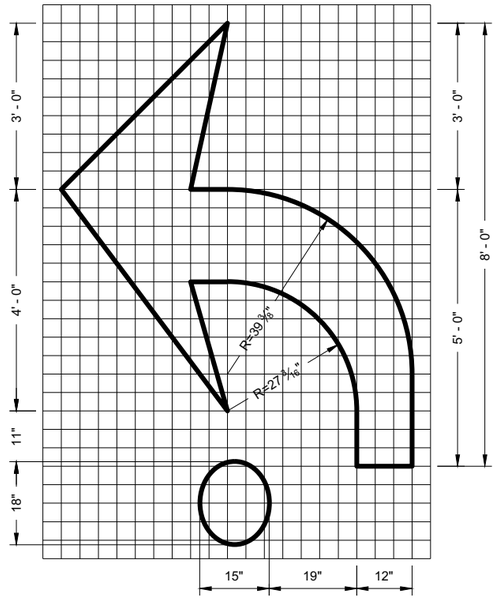
SDD 15C07 - 15c

6

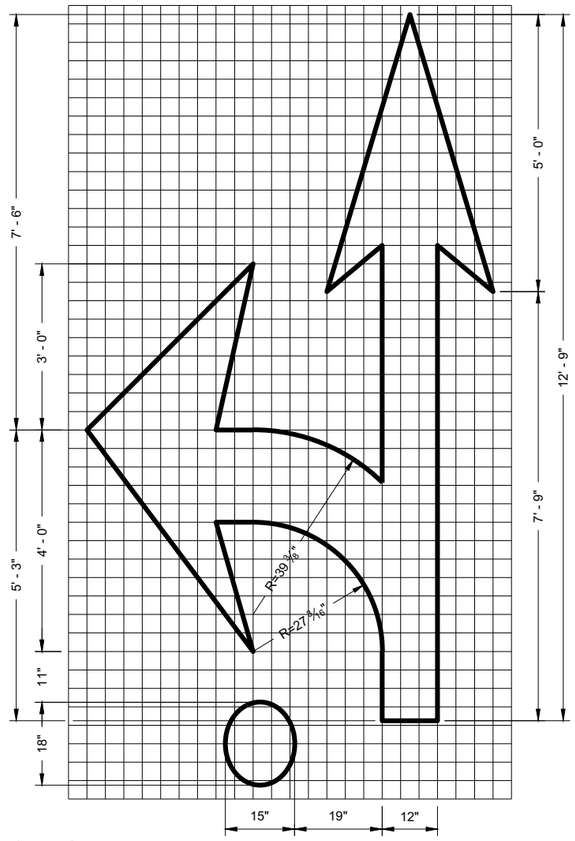
SDD 15C07 - 15c

GENERAL NOTES

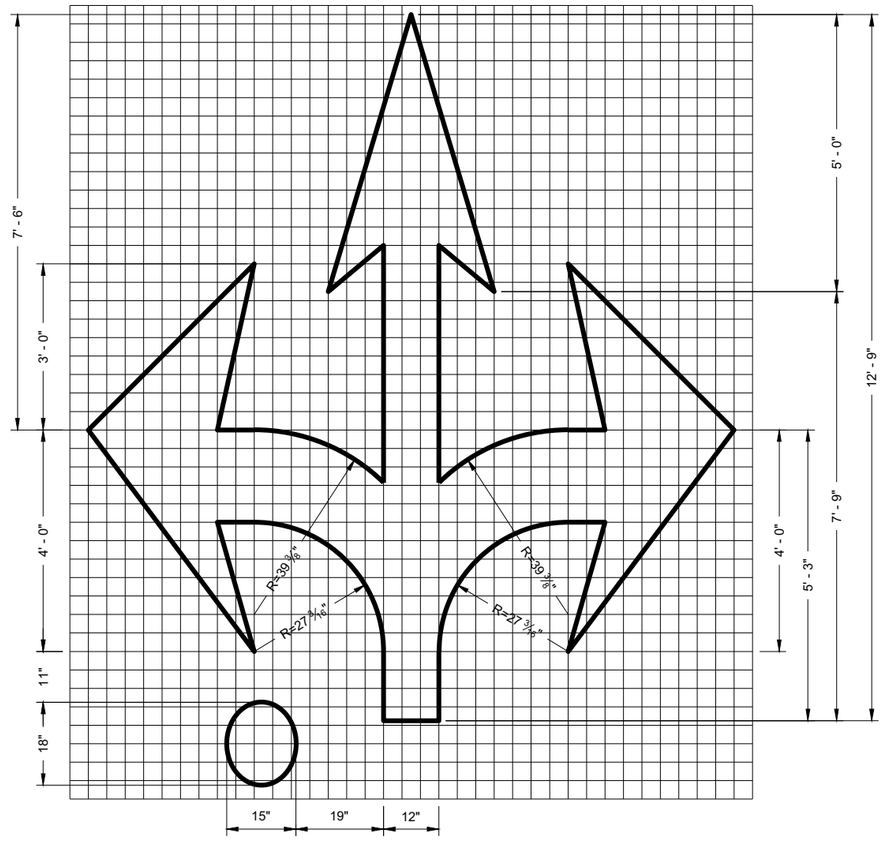
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



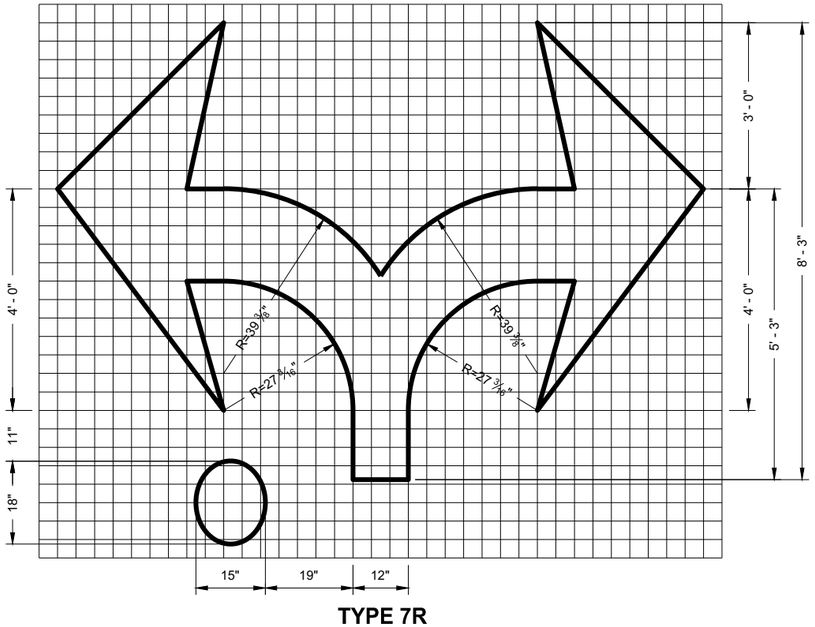
TYPE 2R



TYPE 3R



TYPE 6R



TYPE 7R

ROUNDABOUT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

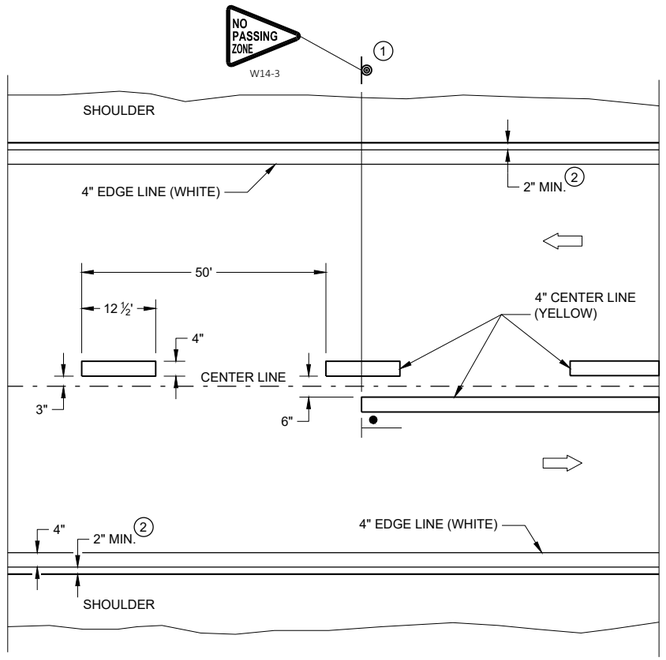
FHWA

6

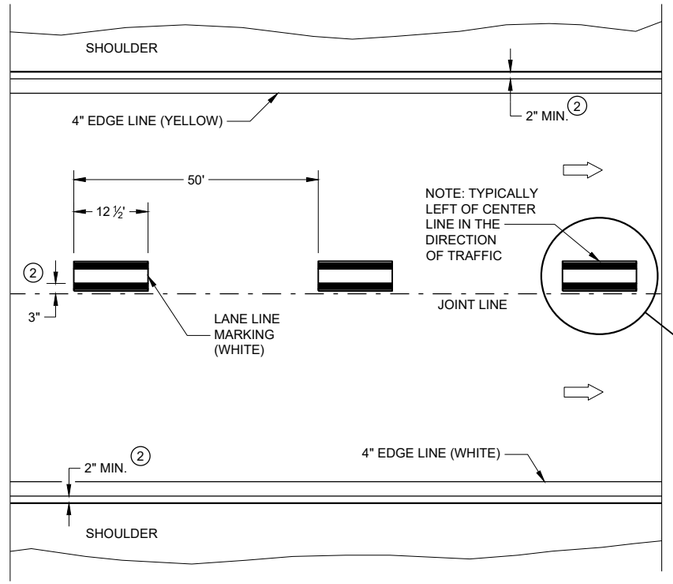
SDD 15C07 - 15d

6

SDD15C07 - 15d

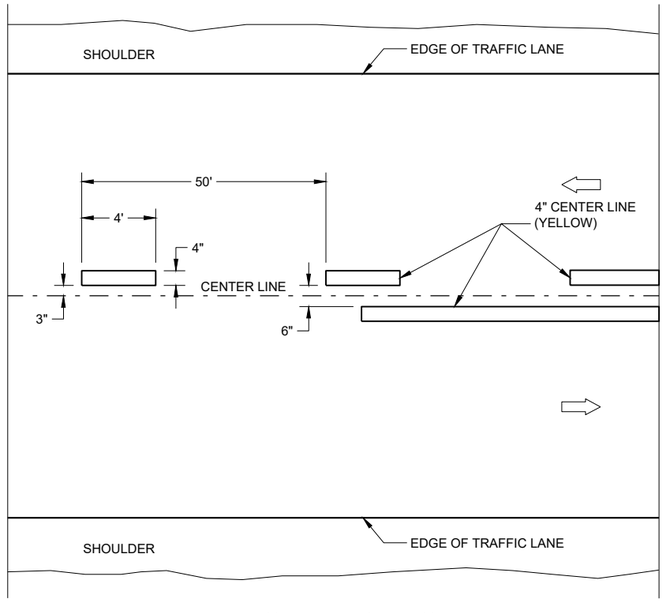


TWO WAY TRAFFIC

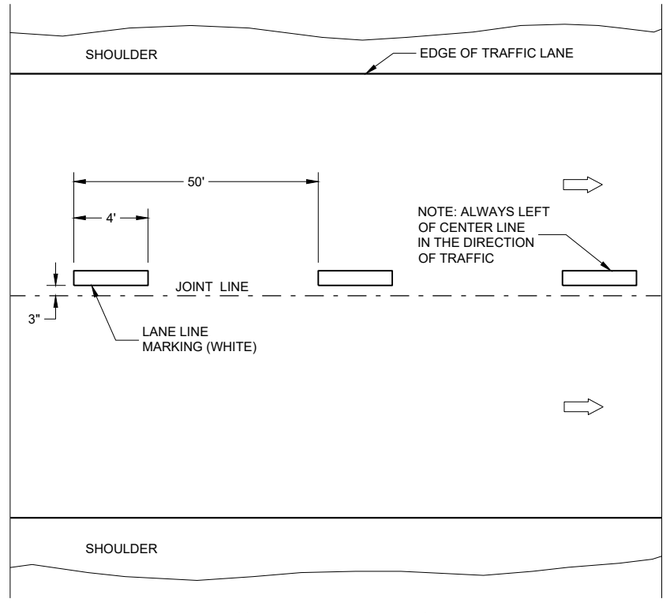


ONE WAY TRAFFIC

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.

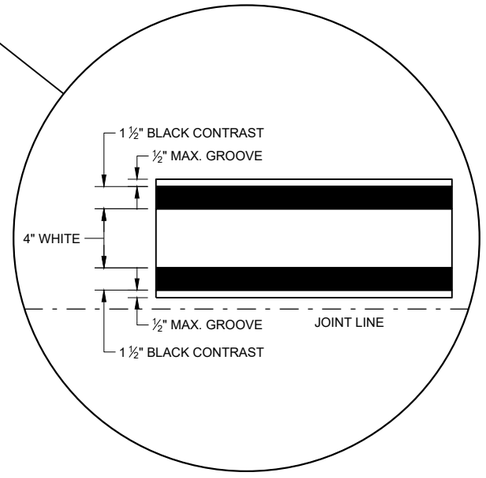
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

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 M ENGINEER

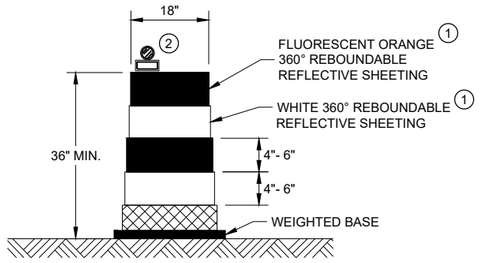
FHWA

SDD 15C08 - 20a

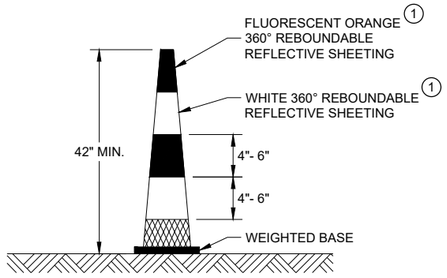
SDD 15C08 - 20a

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.

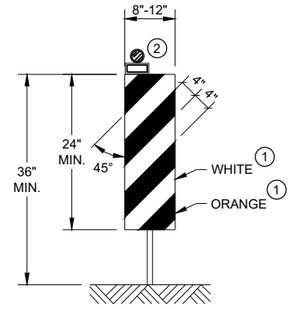


DRUM



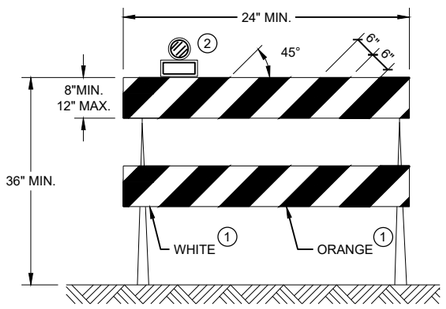
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



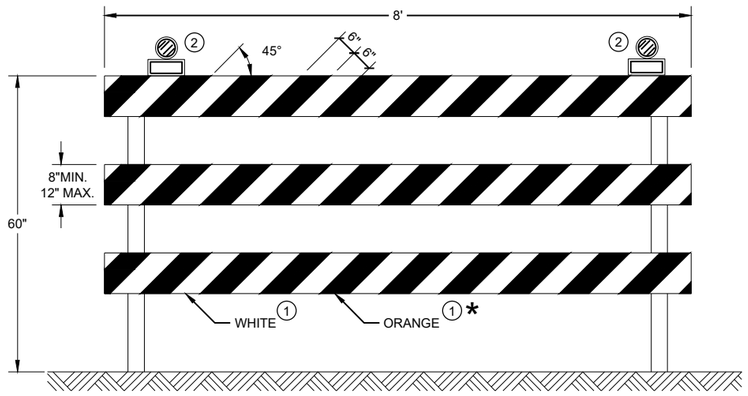
VERTICAL PANEL

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.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

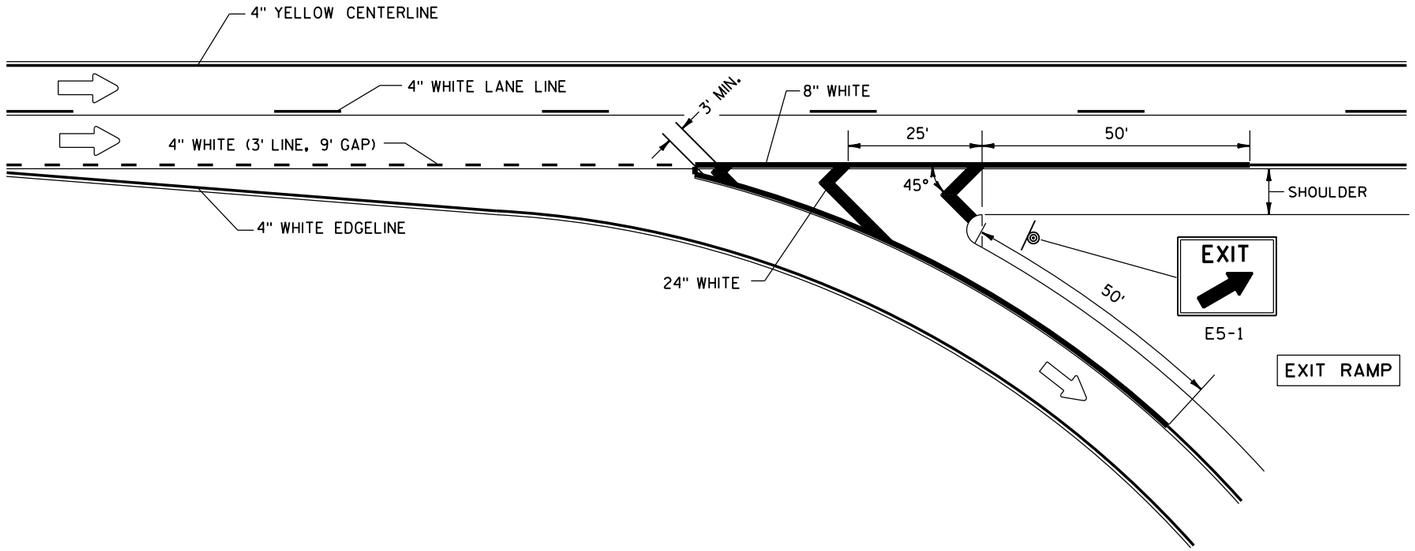
FHWA

6

SDD 15C11 - 09b

6

SDD 15C11 - 09b



PAVEMENT MARKING FOR EXIT RAMP

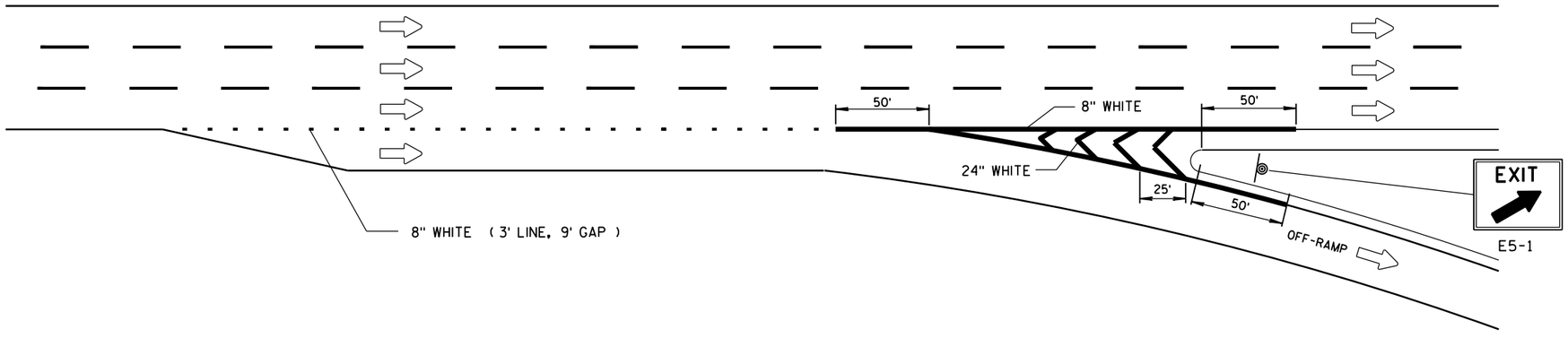
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

DIRECTION OF TRAVEL

SIGN ON PERMANENT SUPPORT



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT-RAMP

6

S.D.D. 15 C 31-3a

PAVEMENT MARKING (RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 C 31-3a

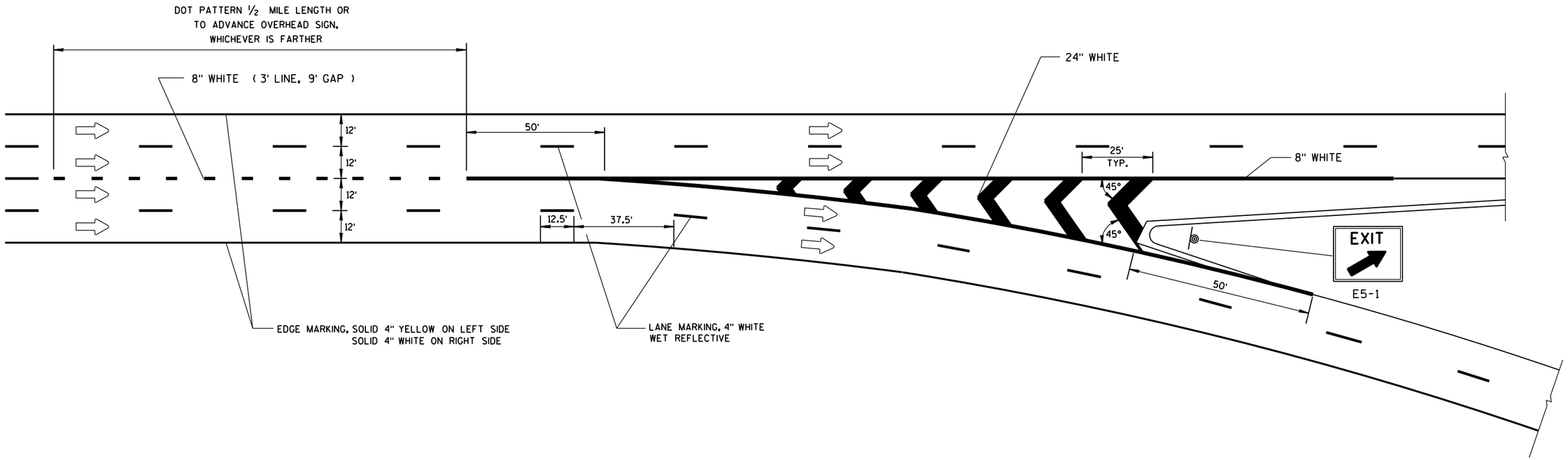
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

DIRECTION OF TRAVEL

SIGN ON PERMANENT SUPPORT



6

6

S.D.D. 15 C 31-3b

S.D.D. 15 C 31-3b

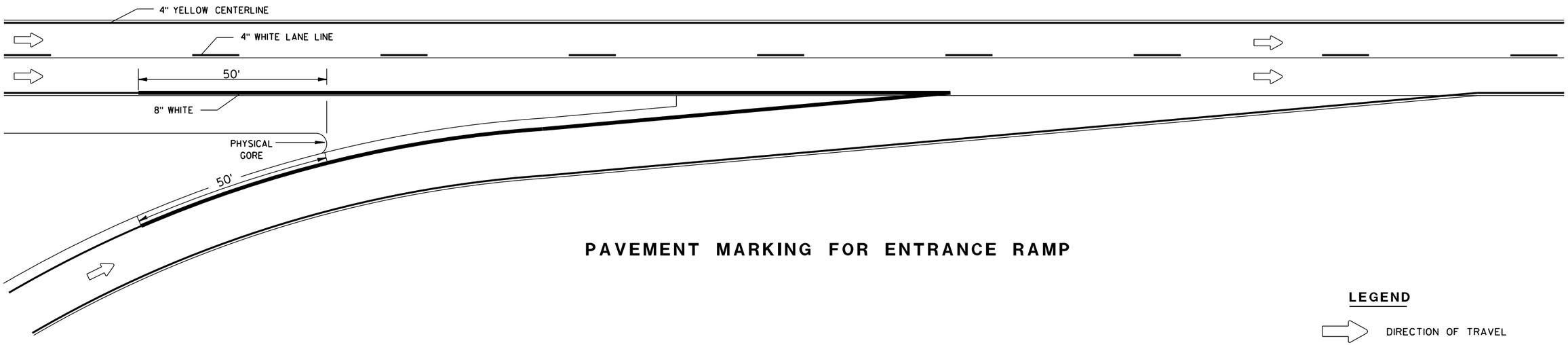
PAVEMENT MARKING
MAJOR SPLIT
FREEWAY TO FREEWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

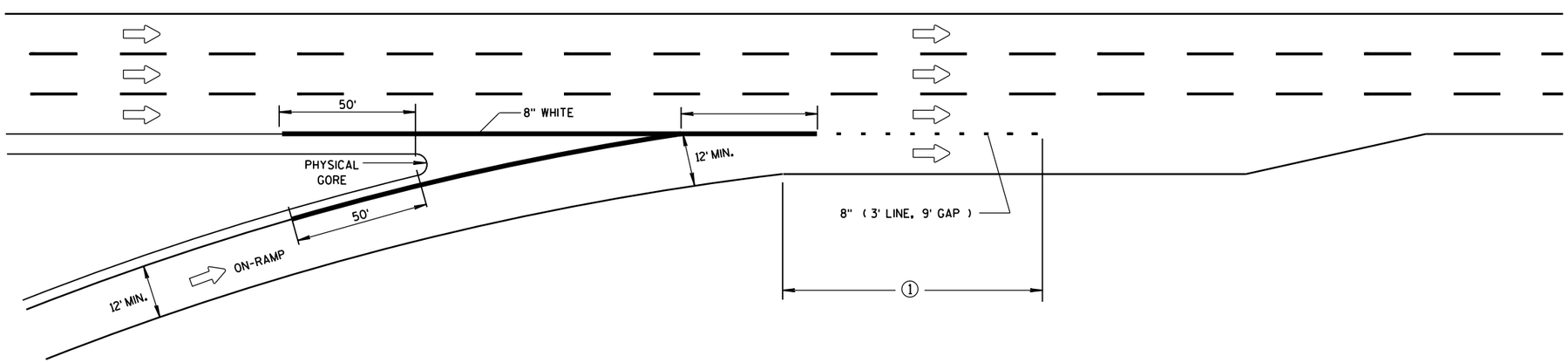
① ½ LENGTH OF FULL WIDTH ACCELERATION LANE.



PAVEMENT MARKING FOR ENTRANCE RAMP

LEGEND

DIRECTION OF TRAVEL



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP

PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

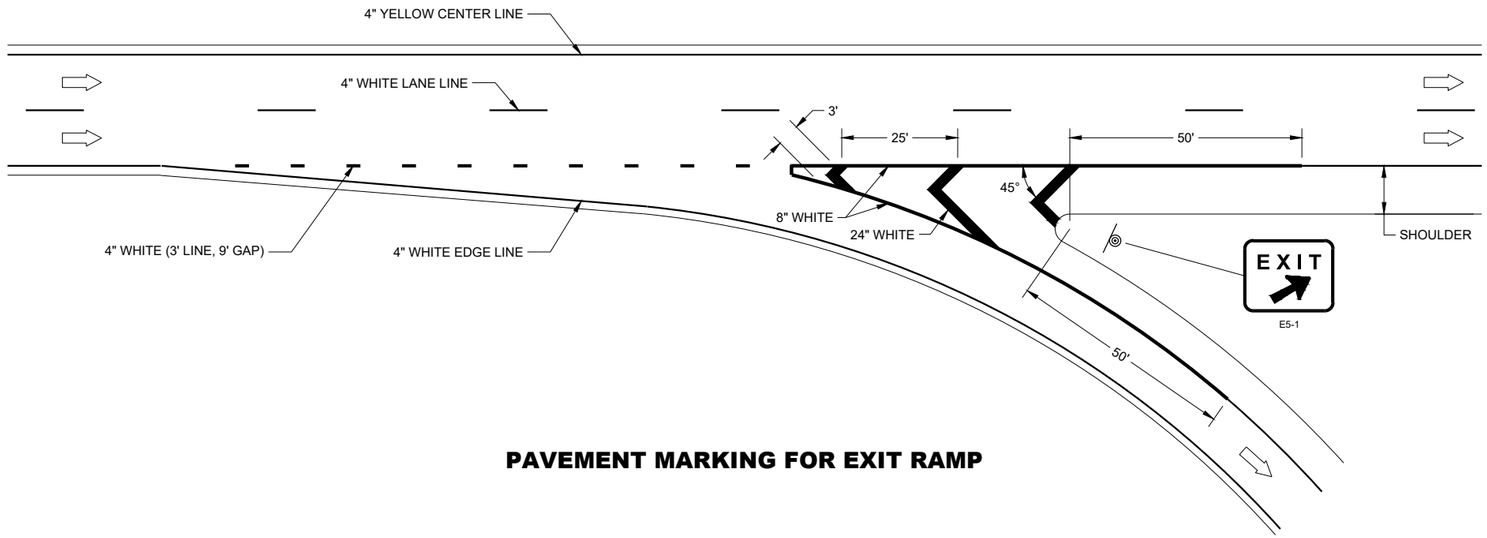
FHWA

6

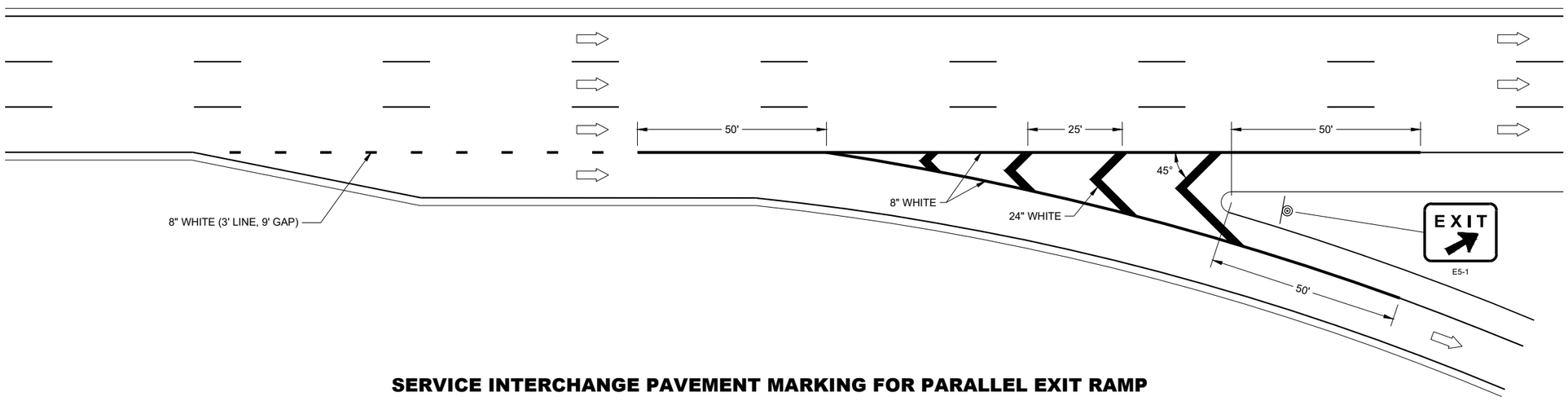
S.D.D. 15 C 31-3c

6

S.D.D. 15 C 31-3c



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL

6

SDD 15C31 - 04a

PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C31 - 04a

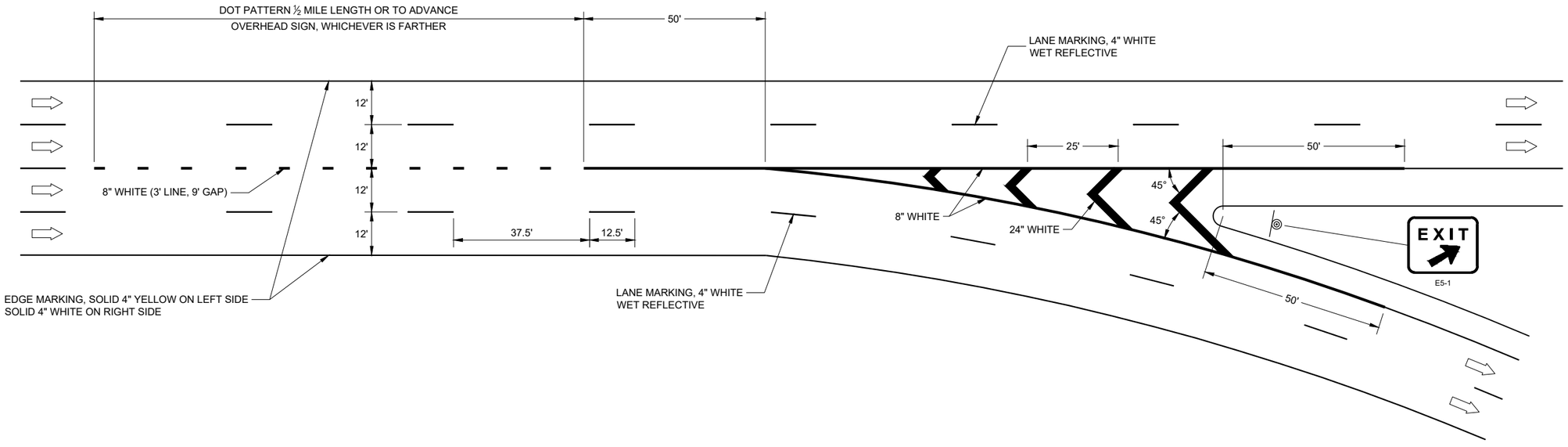
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL



PAVEMENT MARKING, MAJOR SPLIT FREEWAY TO FREEWAY

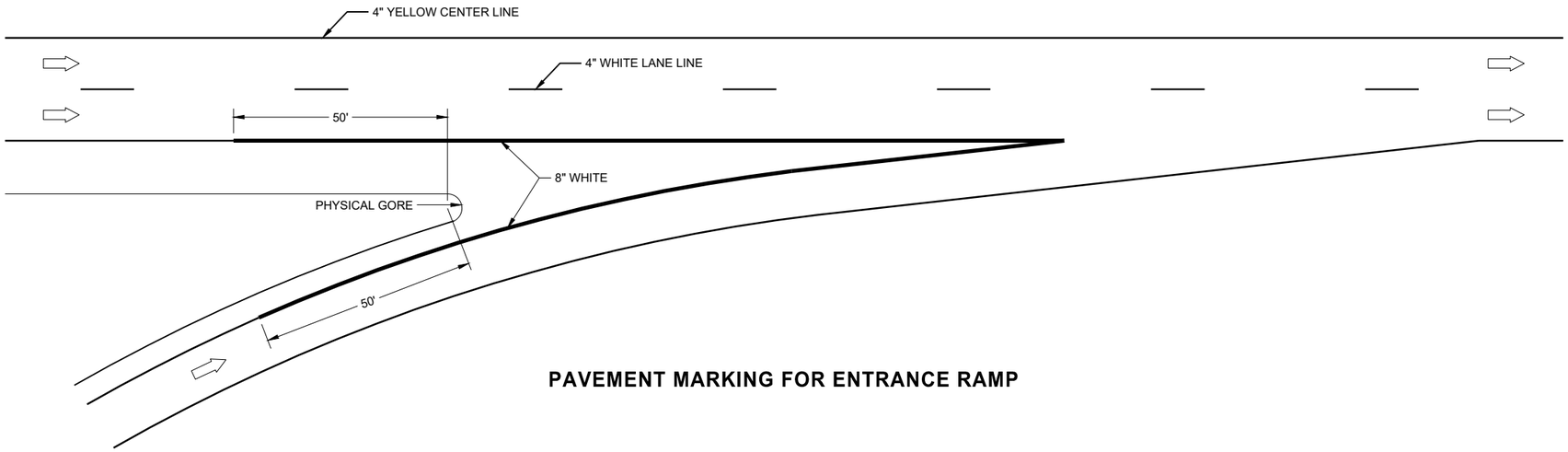
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C31 - 04b

6

SDD 15C31 - 04b



PAVEMENT MARKING FOR ENTRANCE RAMP

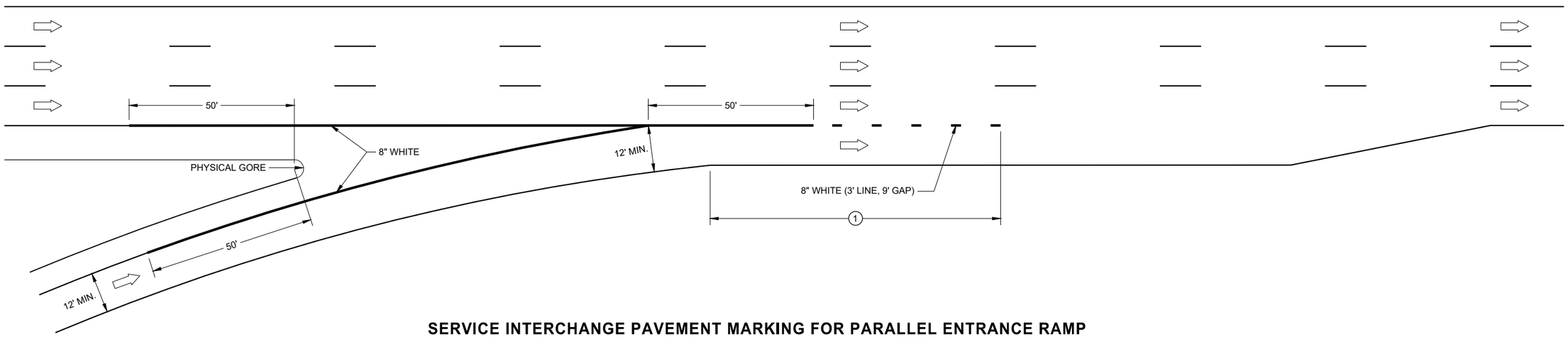
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

(1) ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

LEGEND

DIRECTION OF TRAVEL



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

6

SDD 14C31 - 04c

PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

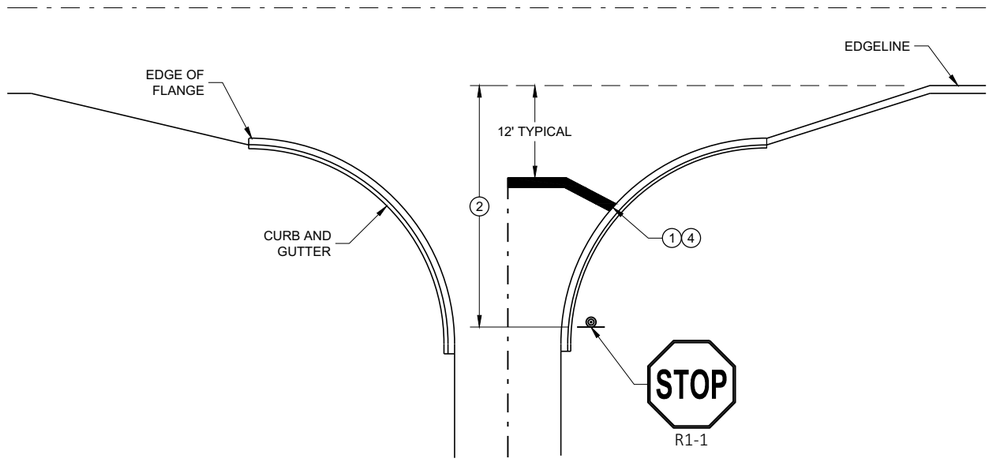
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SDD 14C31 - 04c

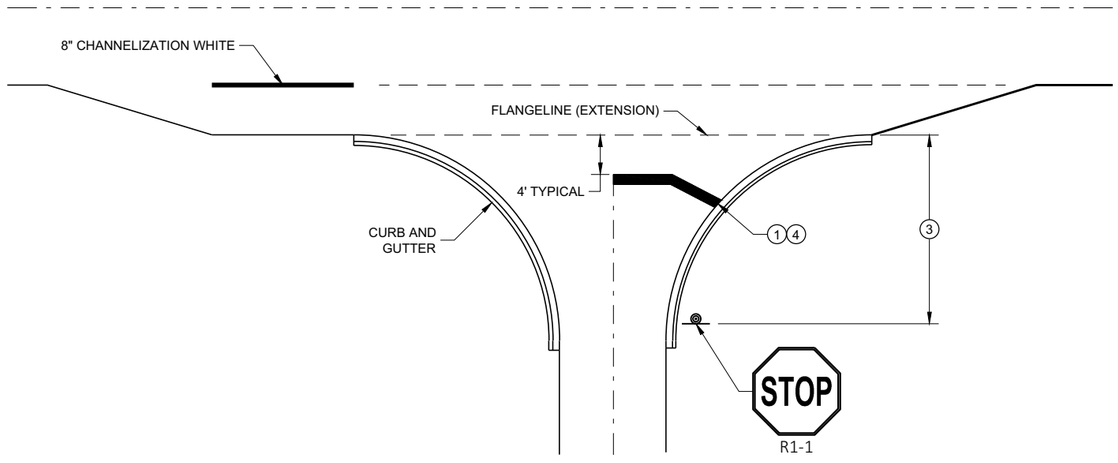
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

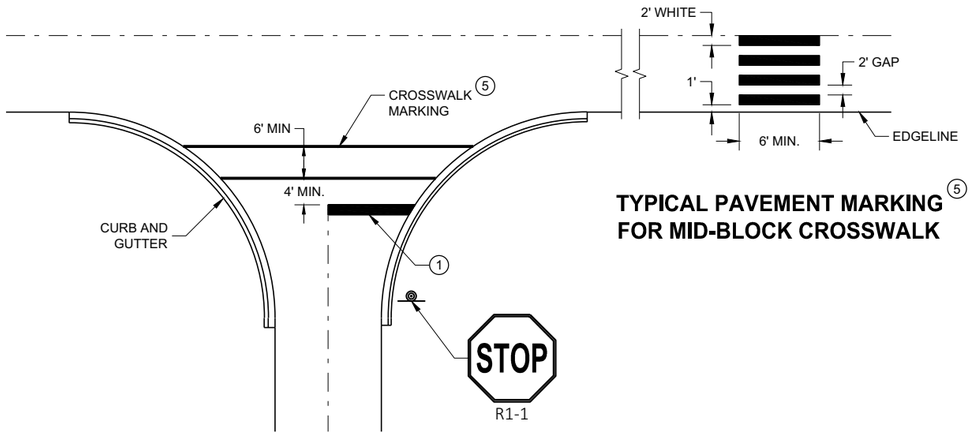
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

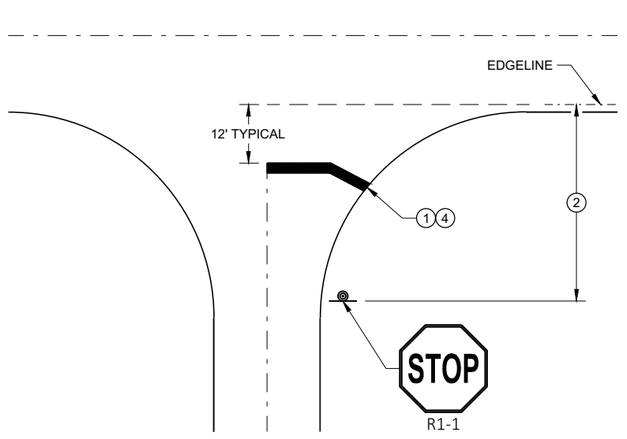


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING 5 FOR MID-BLOCK CROSSWALK



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6

SDD 15C33 - 04

6

SDD 15C33 - 04

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.

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.

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.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

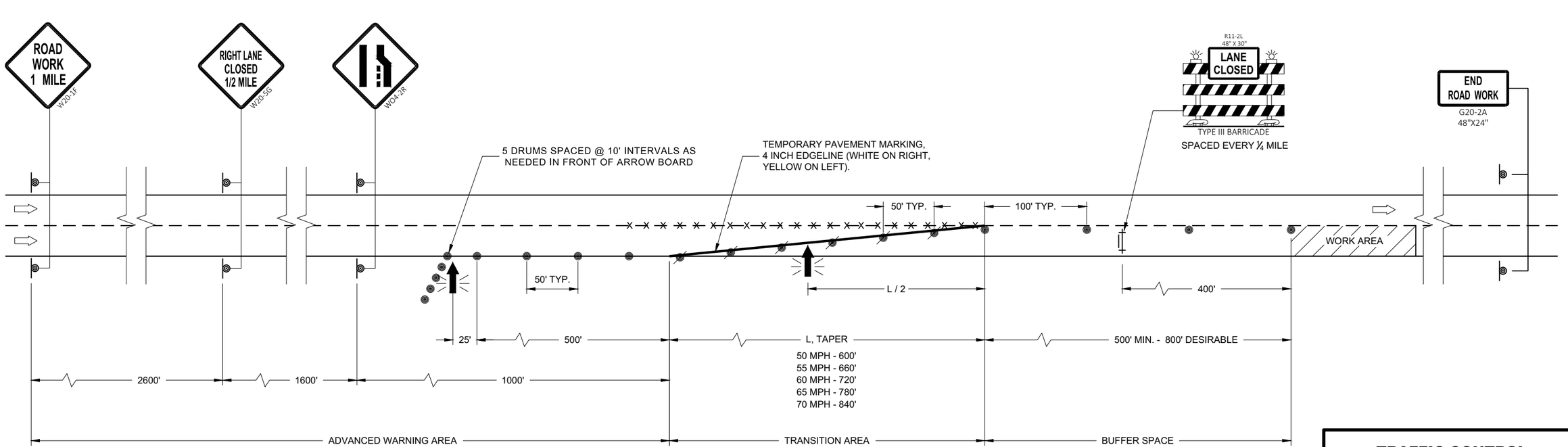
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D12 - 09a

6

SDD 15D12 - 09a

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.

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

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

"WO" SIGNS ARE THE SAME AS "W" SIGNS 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.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

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.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

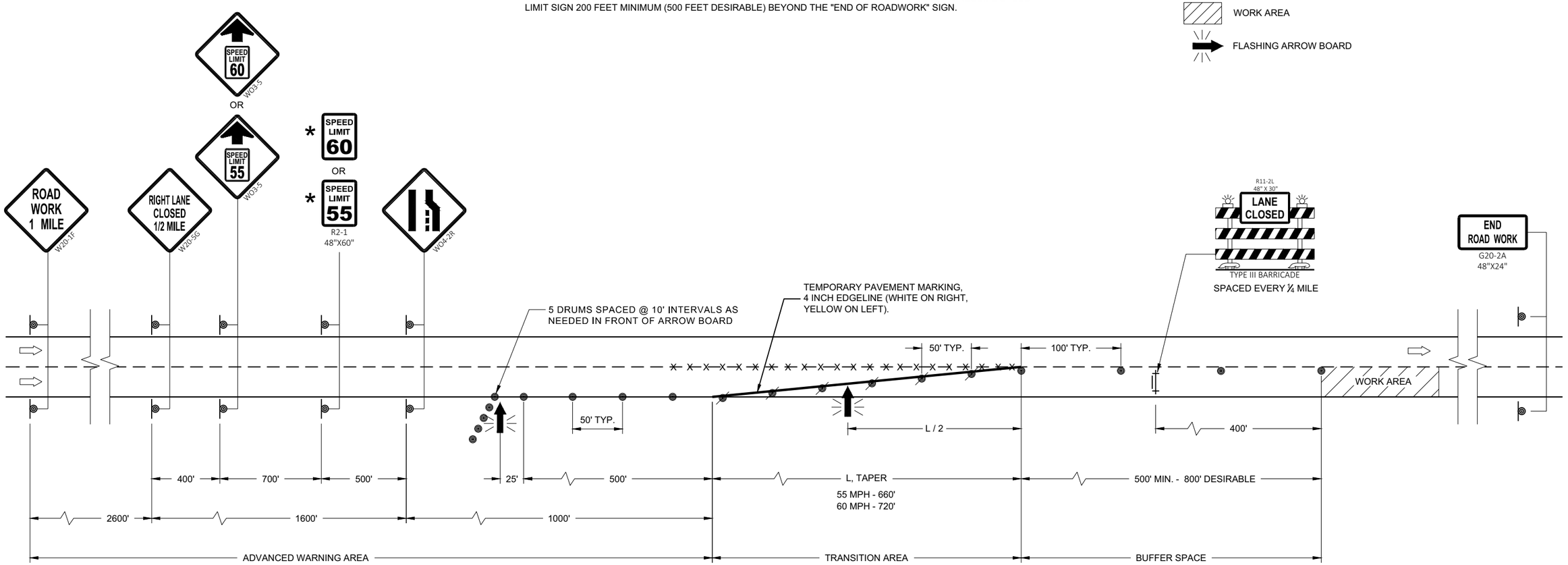
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D12 - 09b

6
SDD 15D12 - 09b

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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

THE SPACING BETWEEN 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 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

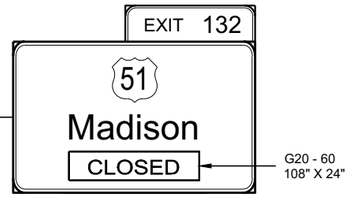
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

* W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



OR

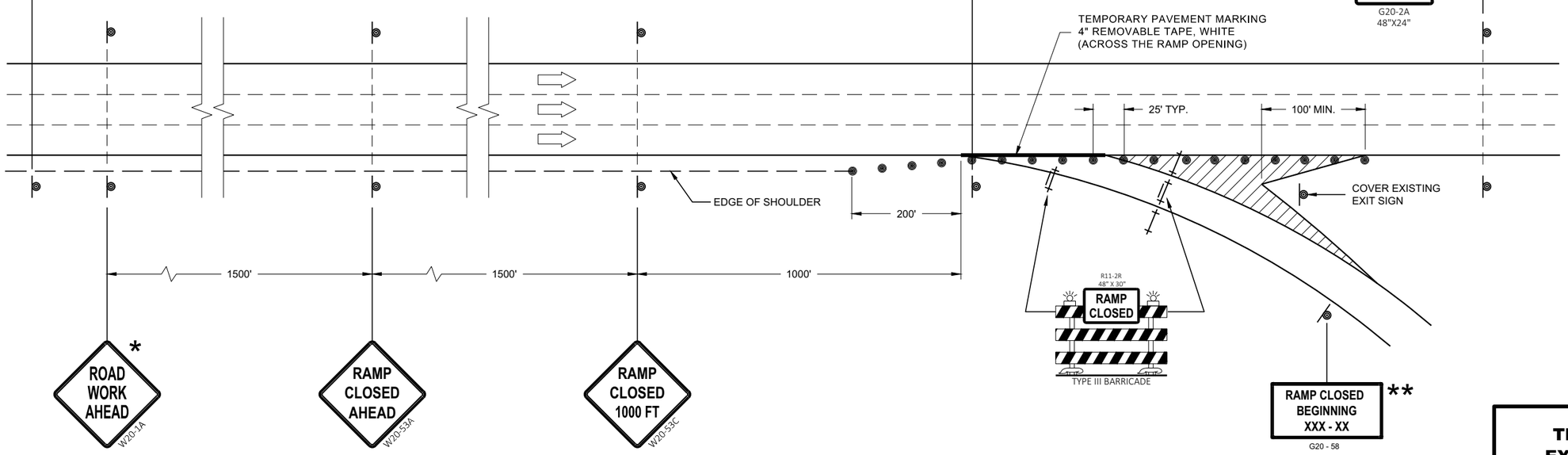


PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)

G20 - 61
120 ' X 30"



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 15D16 - 04

6
SDD 15D16 - 04

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

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.

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 REGIONAL 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.

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 TEMPORARY SUPPORTS.

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

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.

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.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

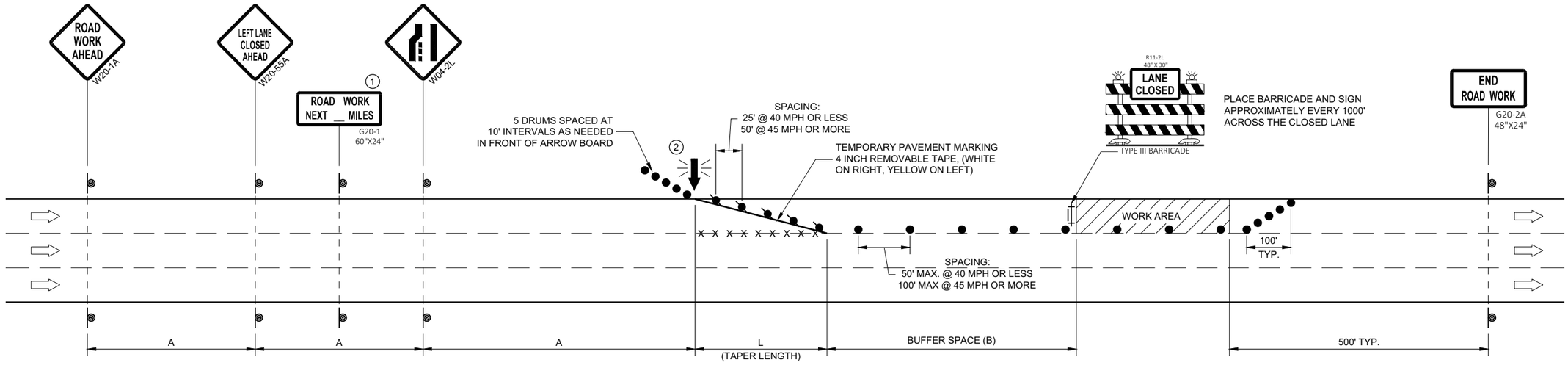
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

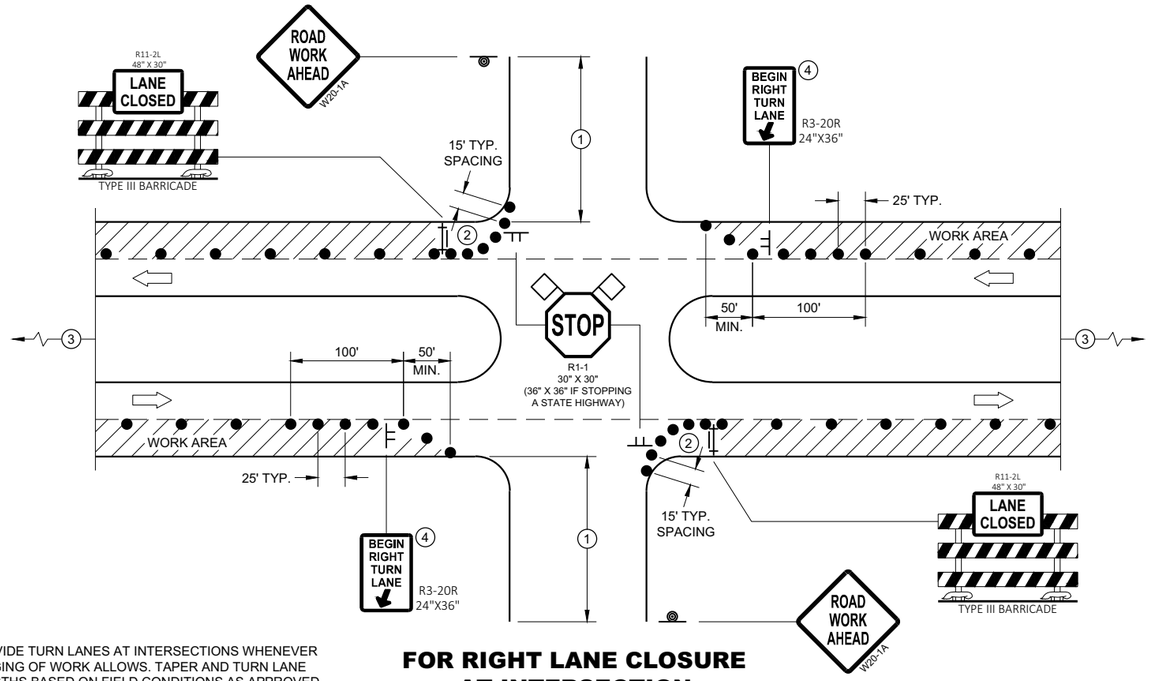
TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

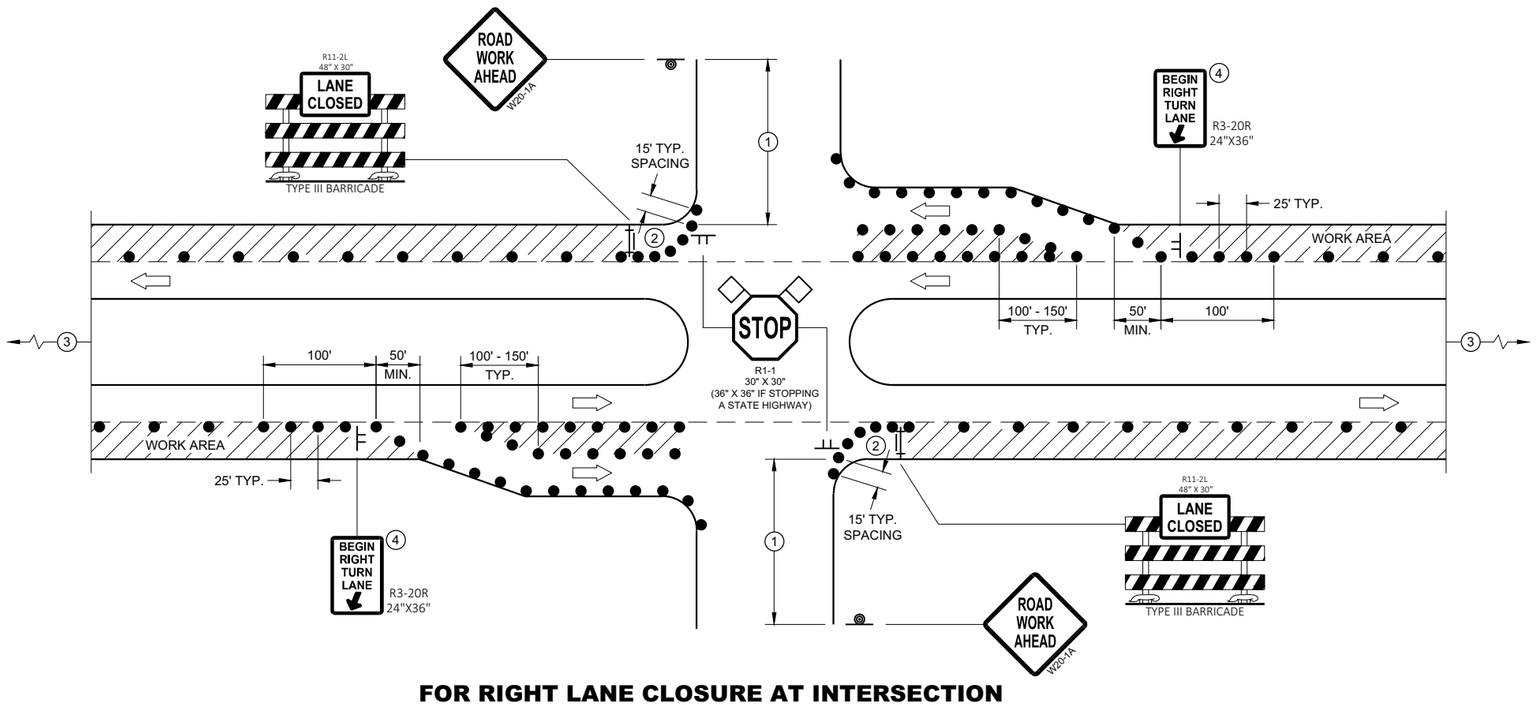
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SDD15D20 - 05a



FOR RIGHT LANE CLOSURE AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

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.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

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

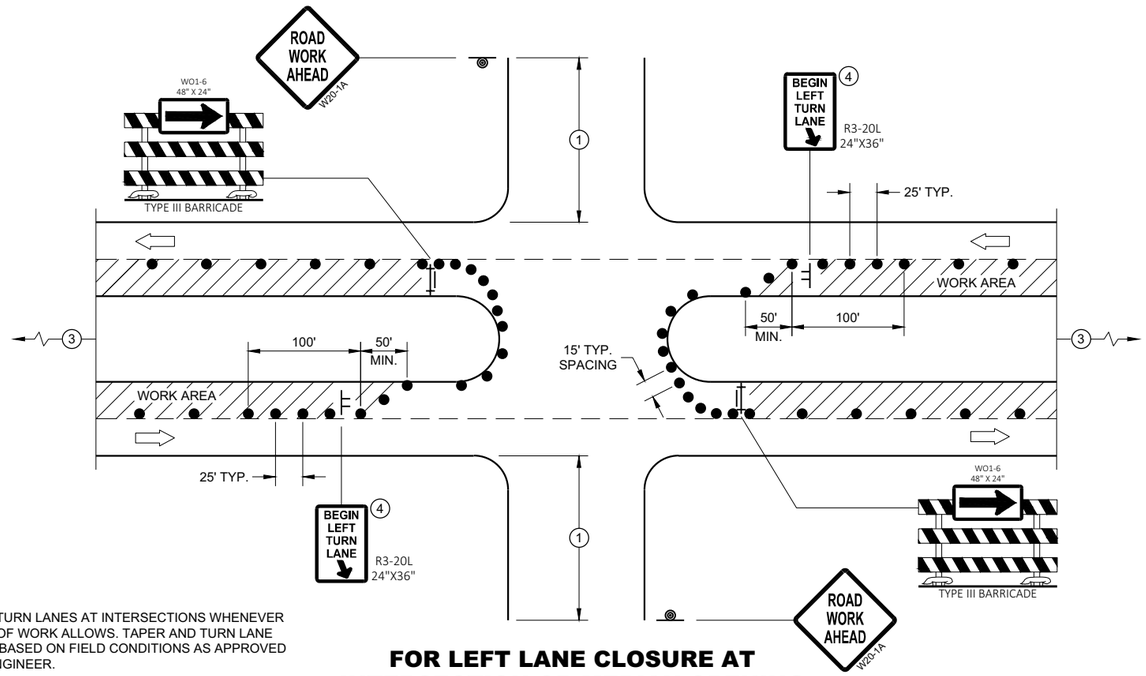
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D21 - 07a

6

SDD 15D21 - 07a



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

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.

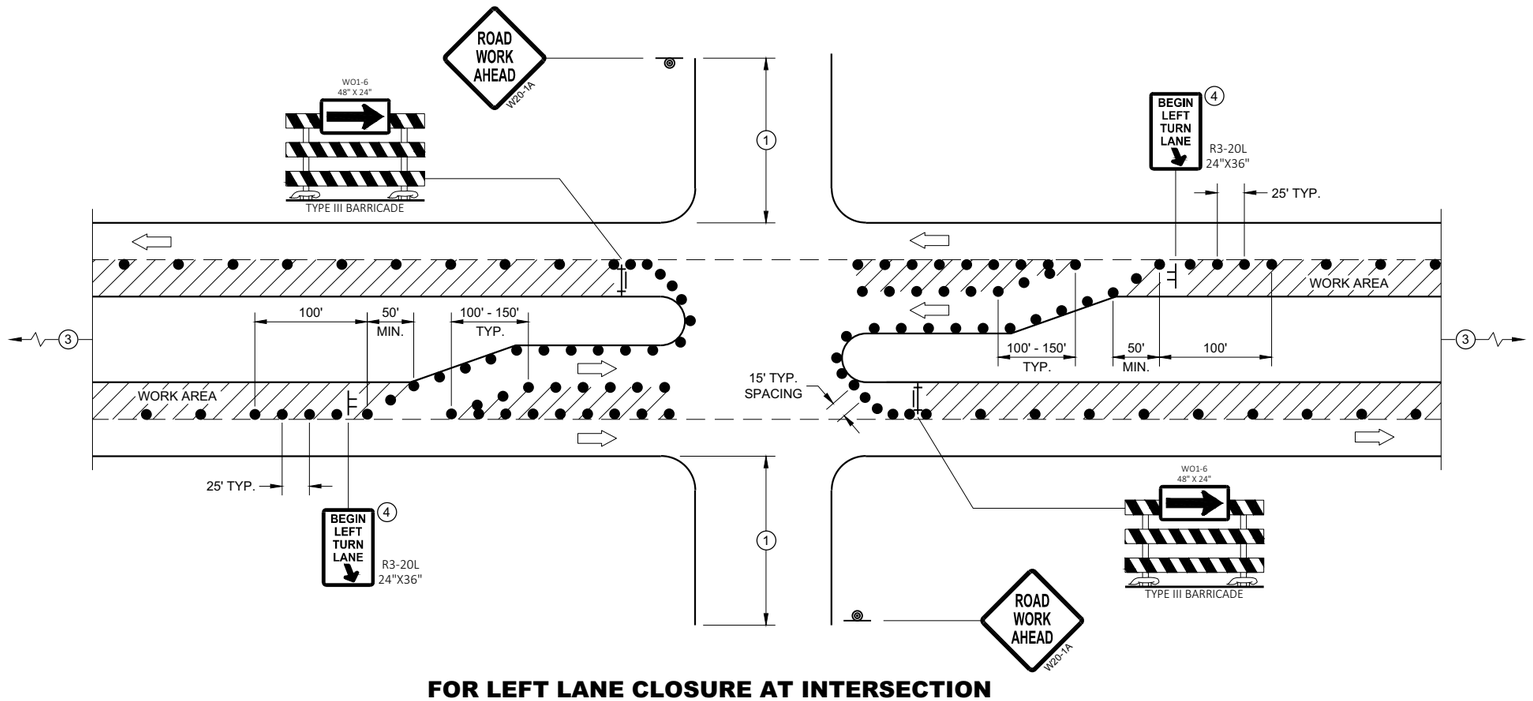
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(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.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

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
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D21 - 07b

6

SDD 15D21 - 07b

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45 MPH, USE SDD 15D14.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES.
FOR CLOSING LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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 REGIONAL 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.

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 TEMPORARY SUPPORTS.

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.

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.

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.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

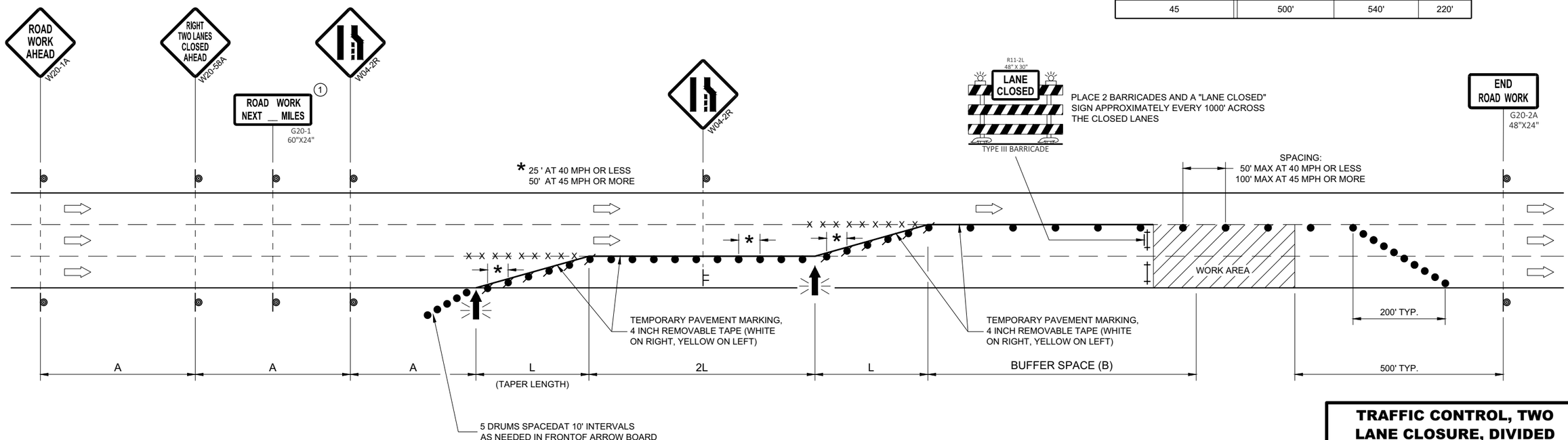
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'



TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

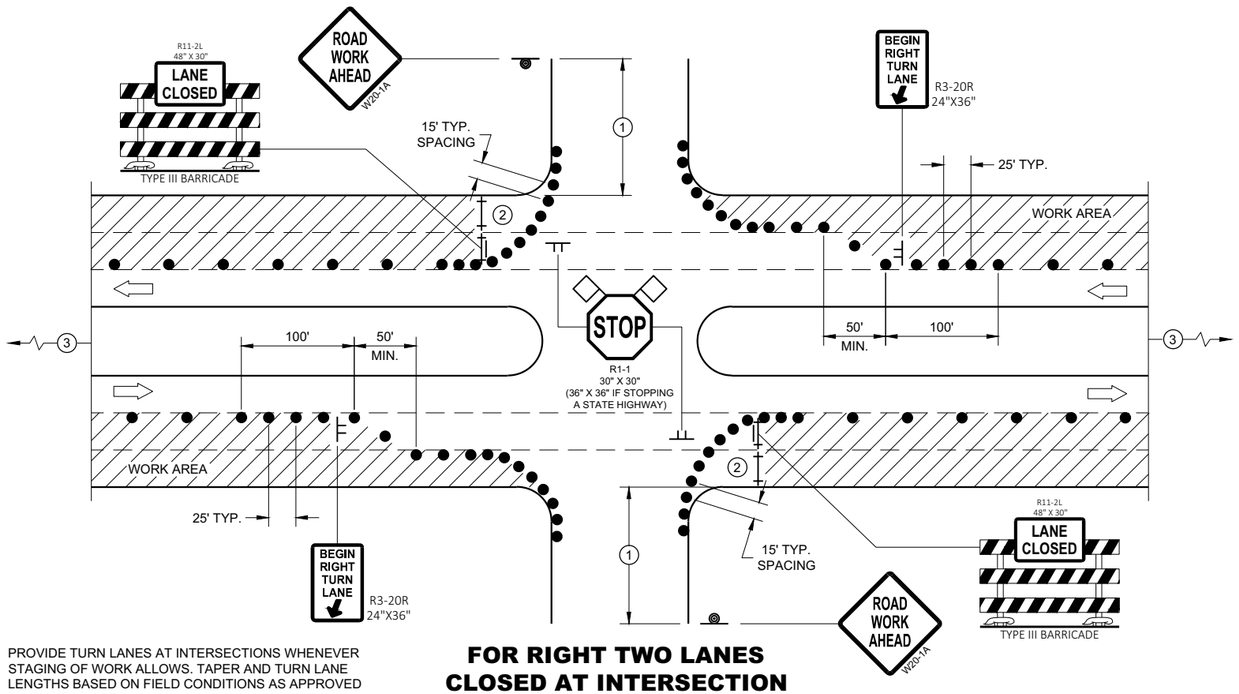
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

6

SDD 15D22 - 04



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT TWO LANES CLOSED AT INTERSECTION

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.

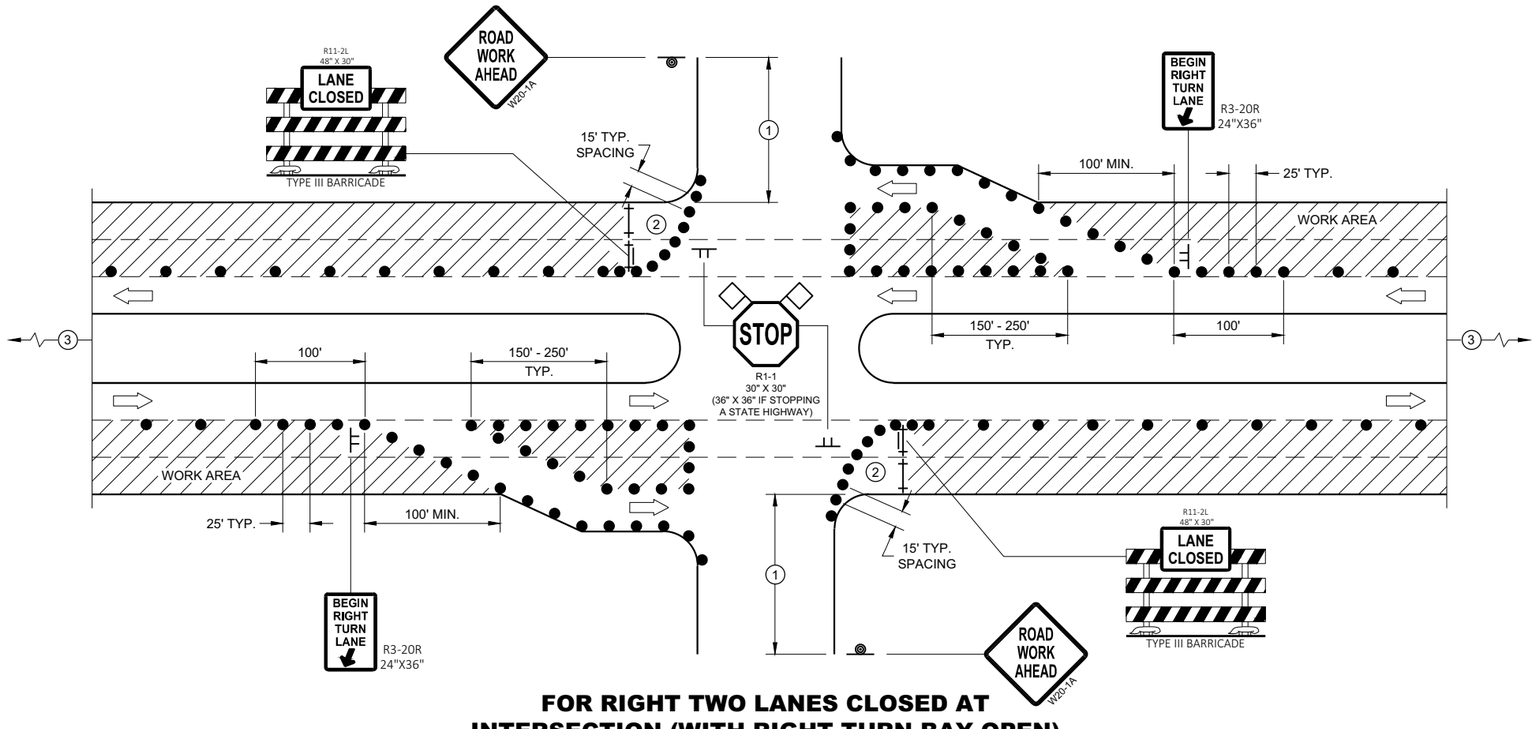
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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.



FOR RIGHT TWO LANES CLOSED AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

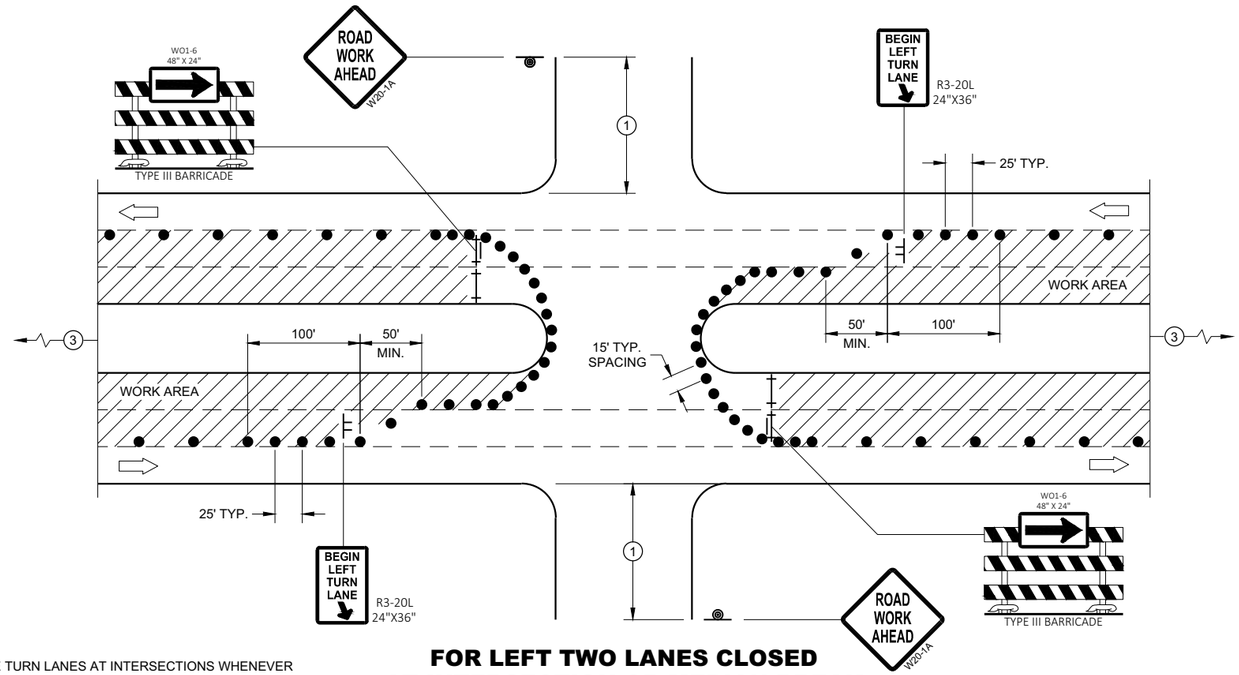
- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN TWO RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

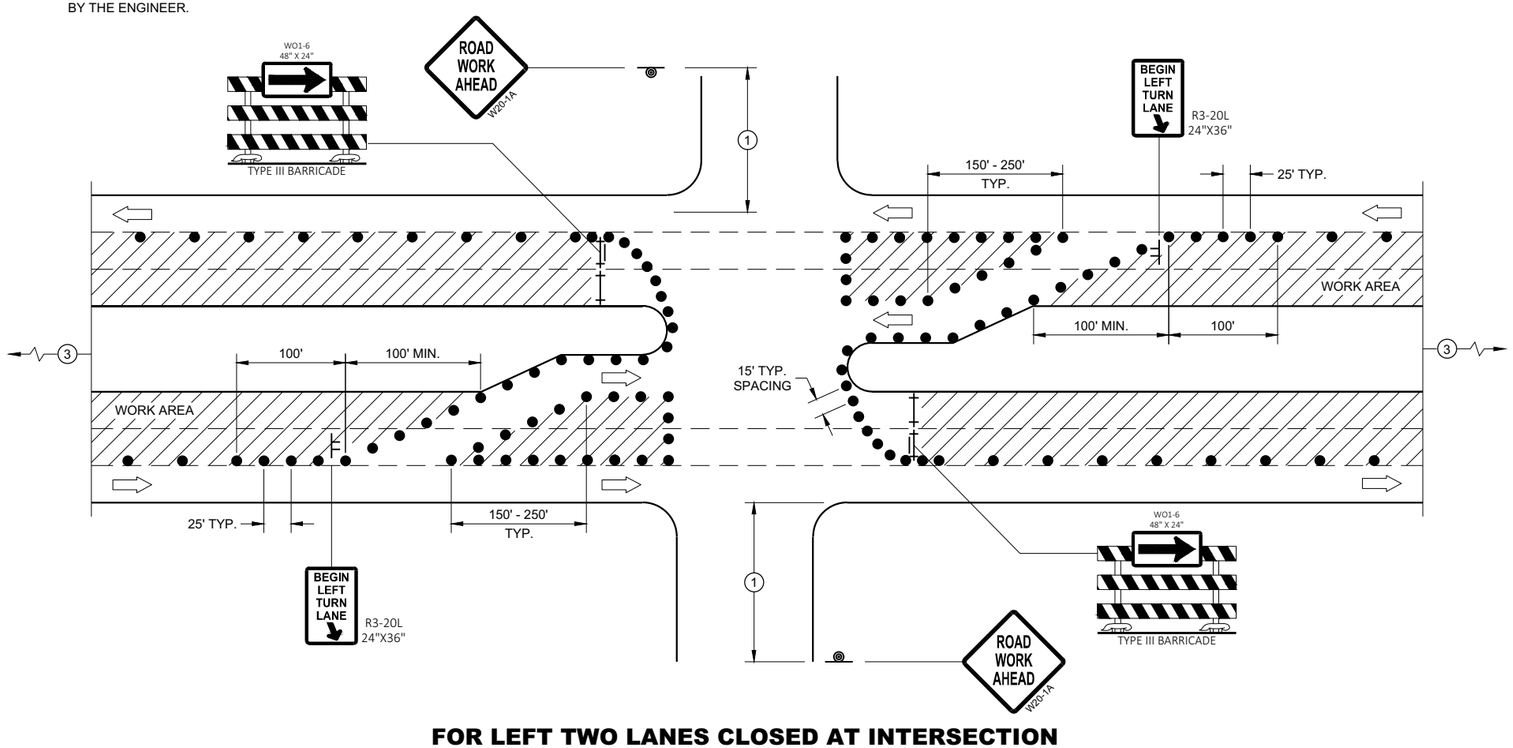
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SDD 15D23 - 06a
SDD15D23 - 06a



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK (WITH LEFT TURN BAY OPEN)

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
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN TWO LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 — DATE
/S/ Amdrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15D23 - 06b

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

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

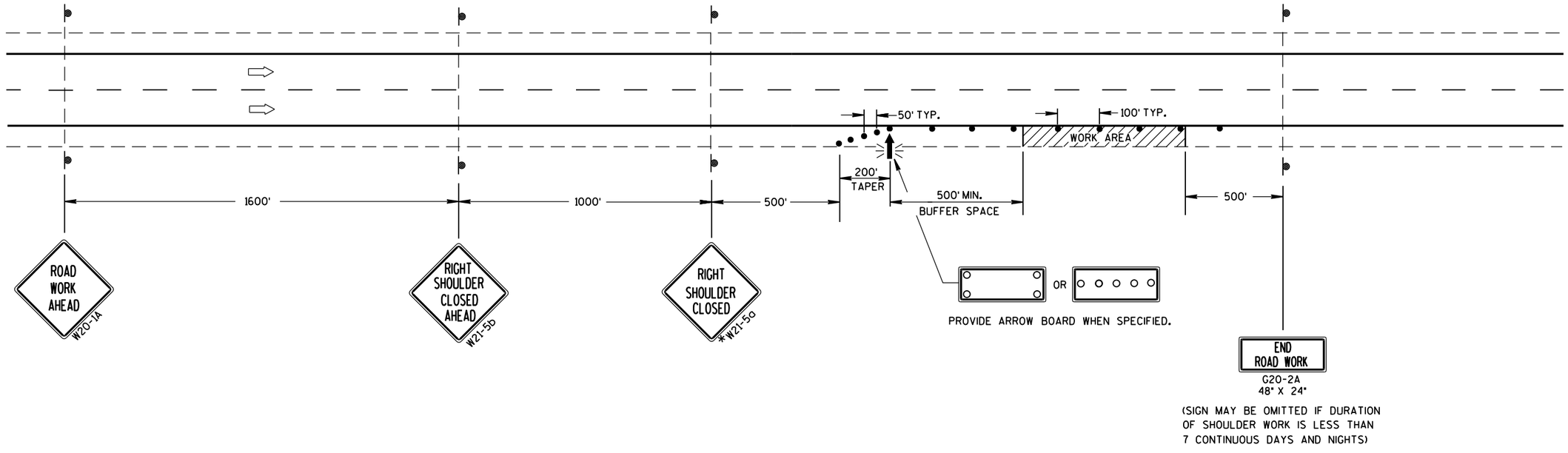
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

WHEN A 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.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

6

S.D.D. 15 D 27-3

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

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

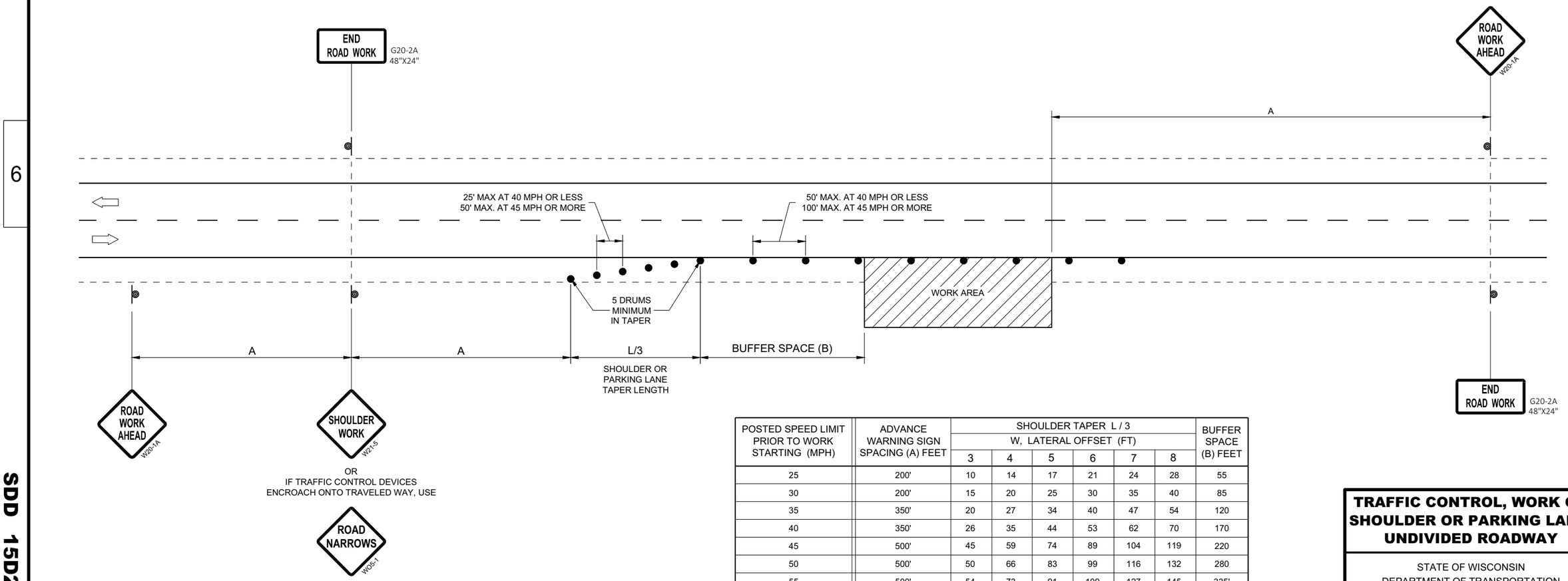
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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 PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

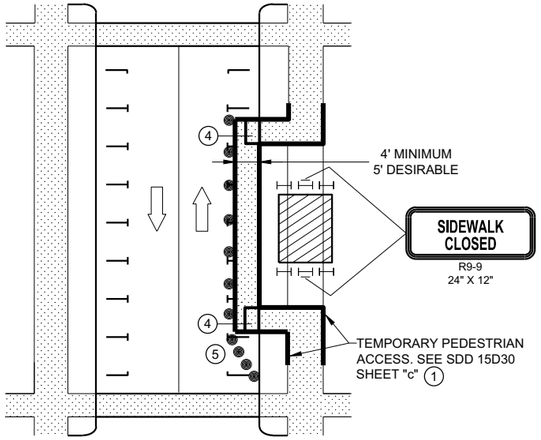
/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

6

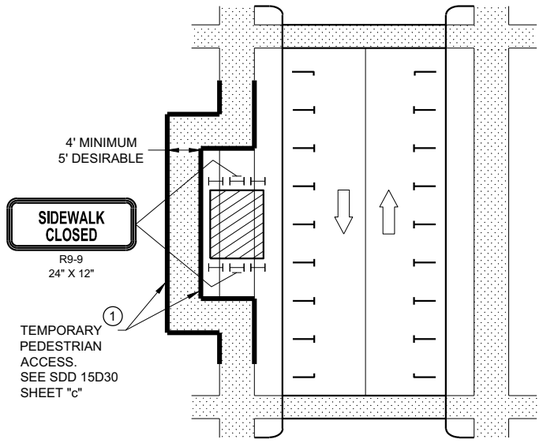
SDD 15D28 - 04

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

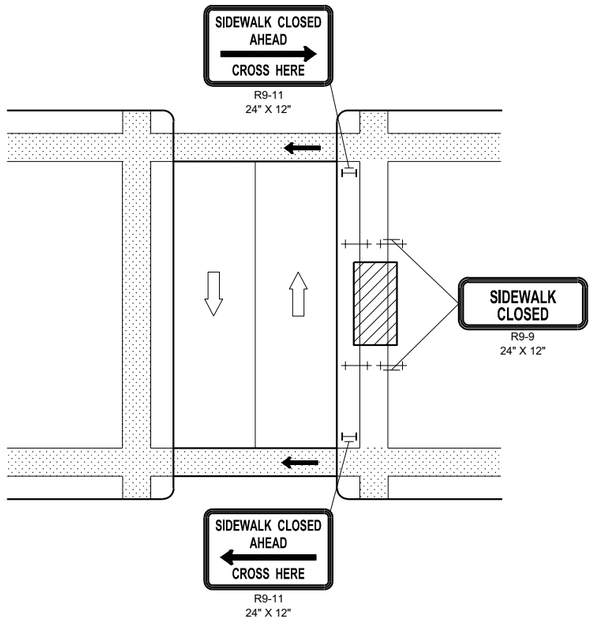


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

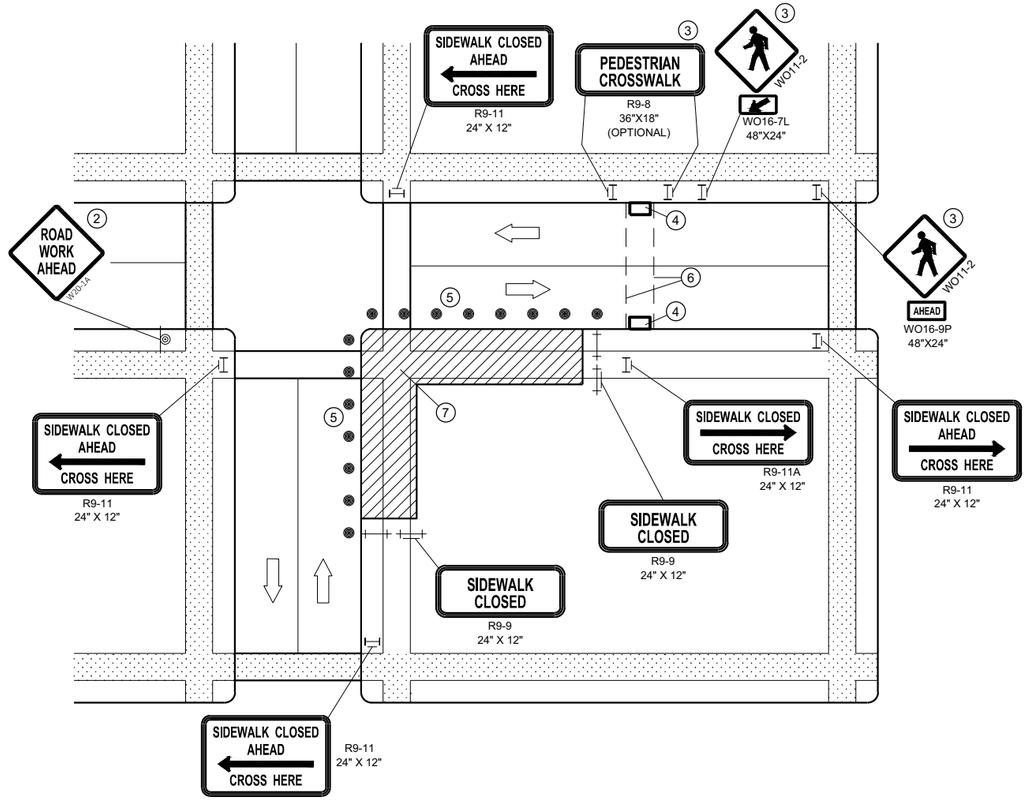
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

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

FOR NIGHTIME CLOSURE, USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEK LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE

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

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND WO11-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15D30 SHEET "b'.

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

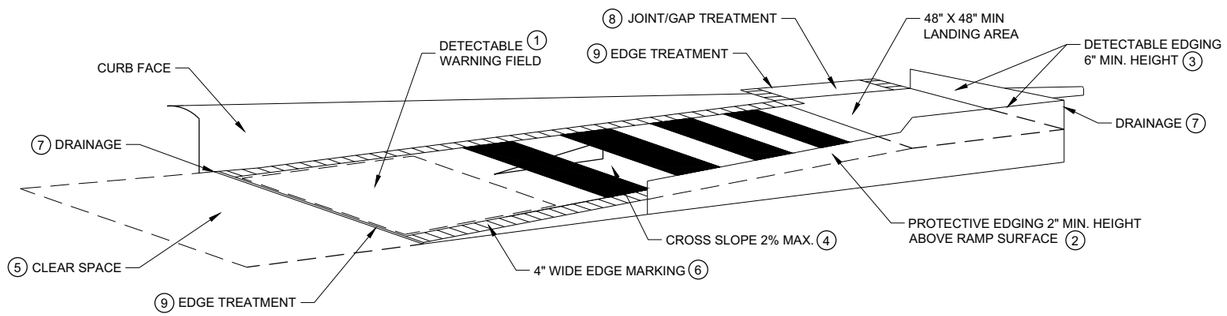
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

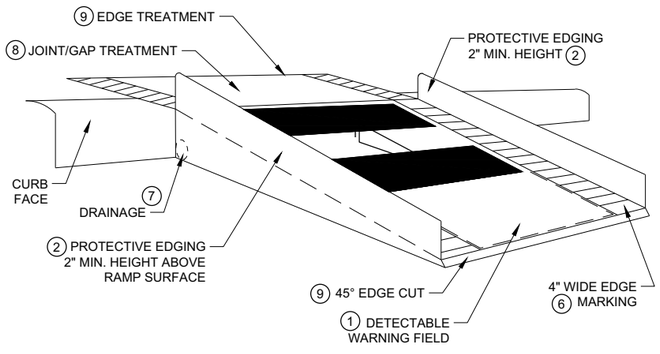
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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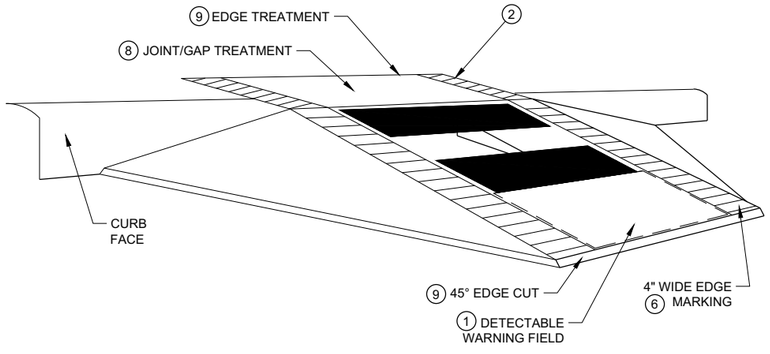
SDD15D30 - 06a



TEMPORARY CURB RAMP PARALLEL TO CURB



WITH PROTECTIVE EDGE



WITH SIDE APRON

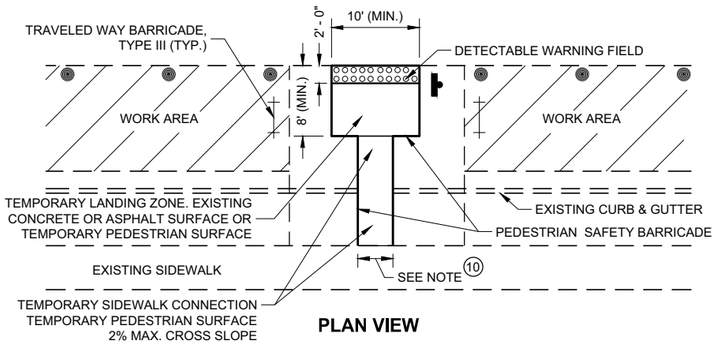
TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

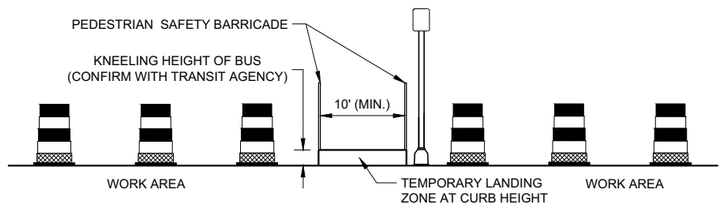
NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

1. CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 08D05, SHEET "e".
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
5. CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
6. THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
7. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.
9. CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES SHALL BE VERTICAL UP TO ¼" HIGH AND BEVELED AT 1:2 BETWEEN ¼" AND ½".
10. 5" WIDE MIN. WITH PEDESTRIAN SAFETY BARRICADE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY BARRICADE.



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

LEGEND

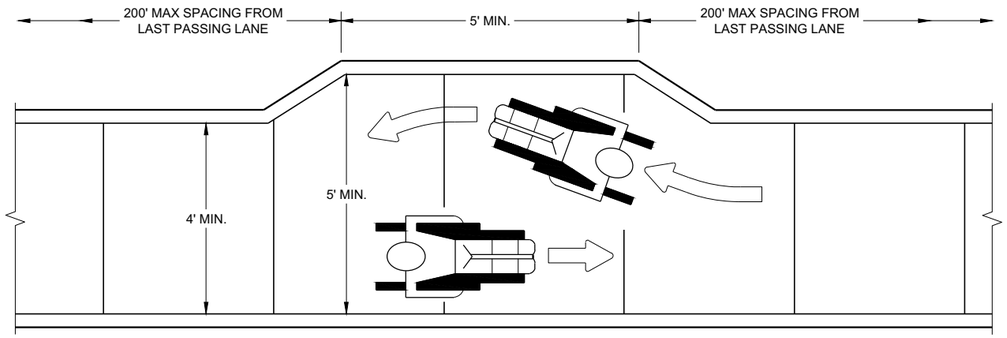
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- WORK AREA

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

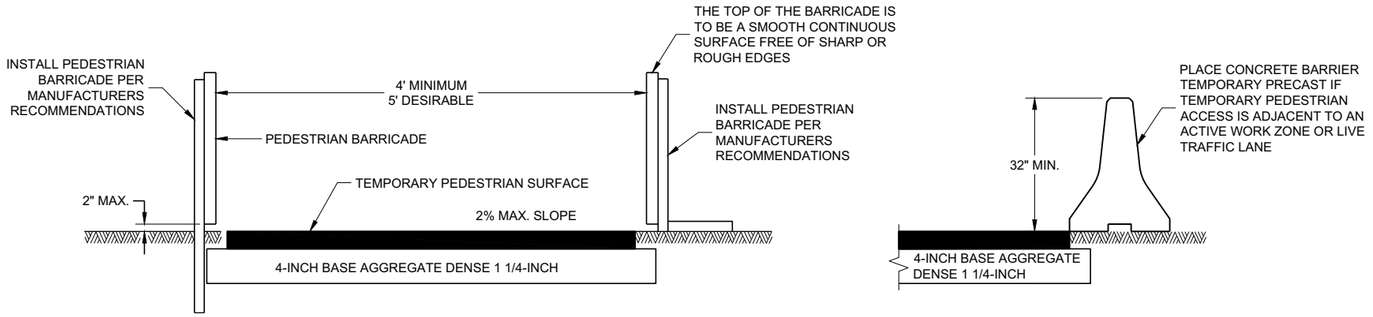
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15D30 - 06b

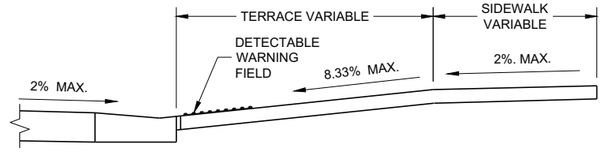
SDD 15D30 - 06b



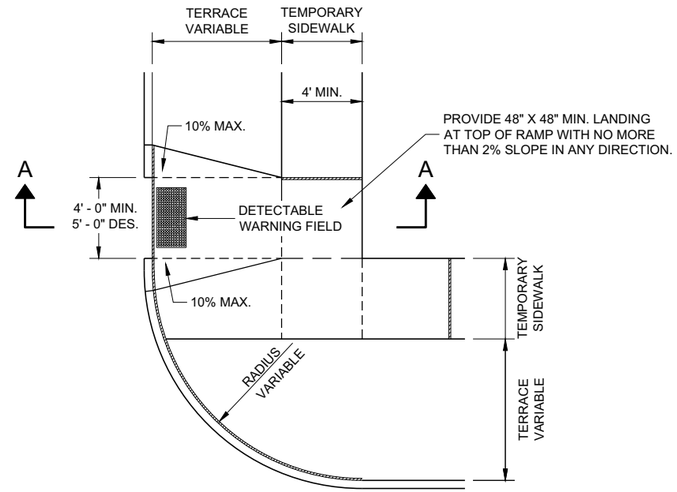
NARROW SIDEWALK PASSING DETAIL



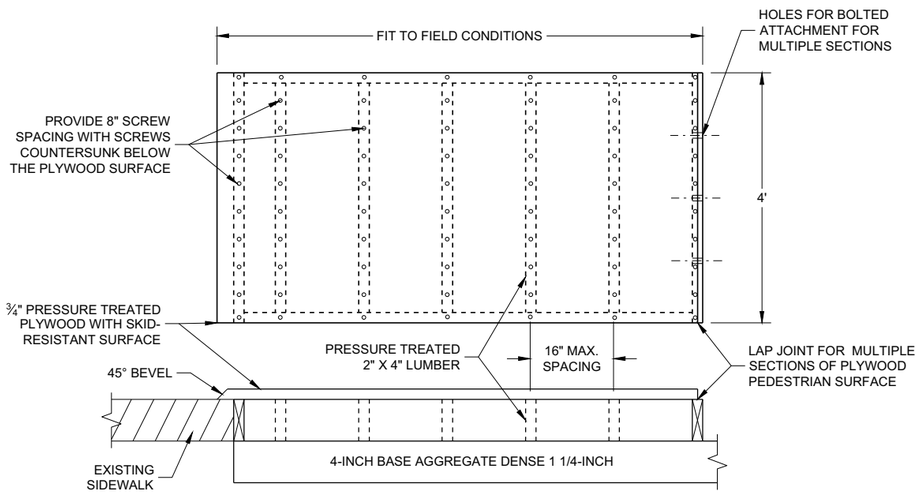
TEMPORARY PEDESTRIAN ACCESS



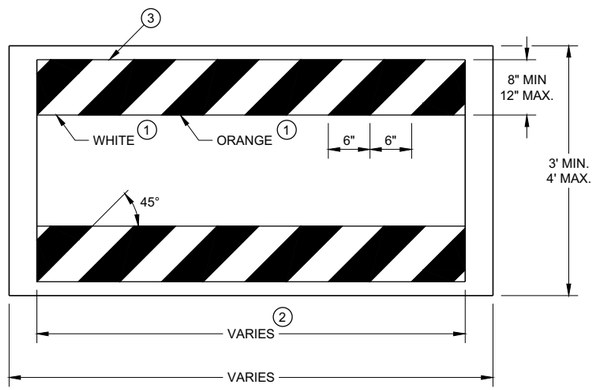
SECTION A - A



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



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



TEMPORARY PEDESTRIAN BARRICADE *

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
3. PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6
SDD 15D30 - 06c

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE "A" WARNING LIGHT (FLASHING)

DIRECTION OF TRAFFIC

WORK AREA

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

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 DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" 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 AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

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.

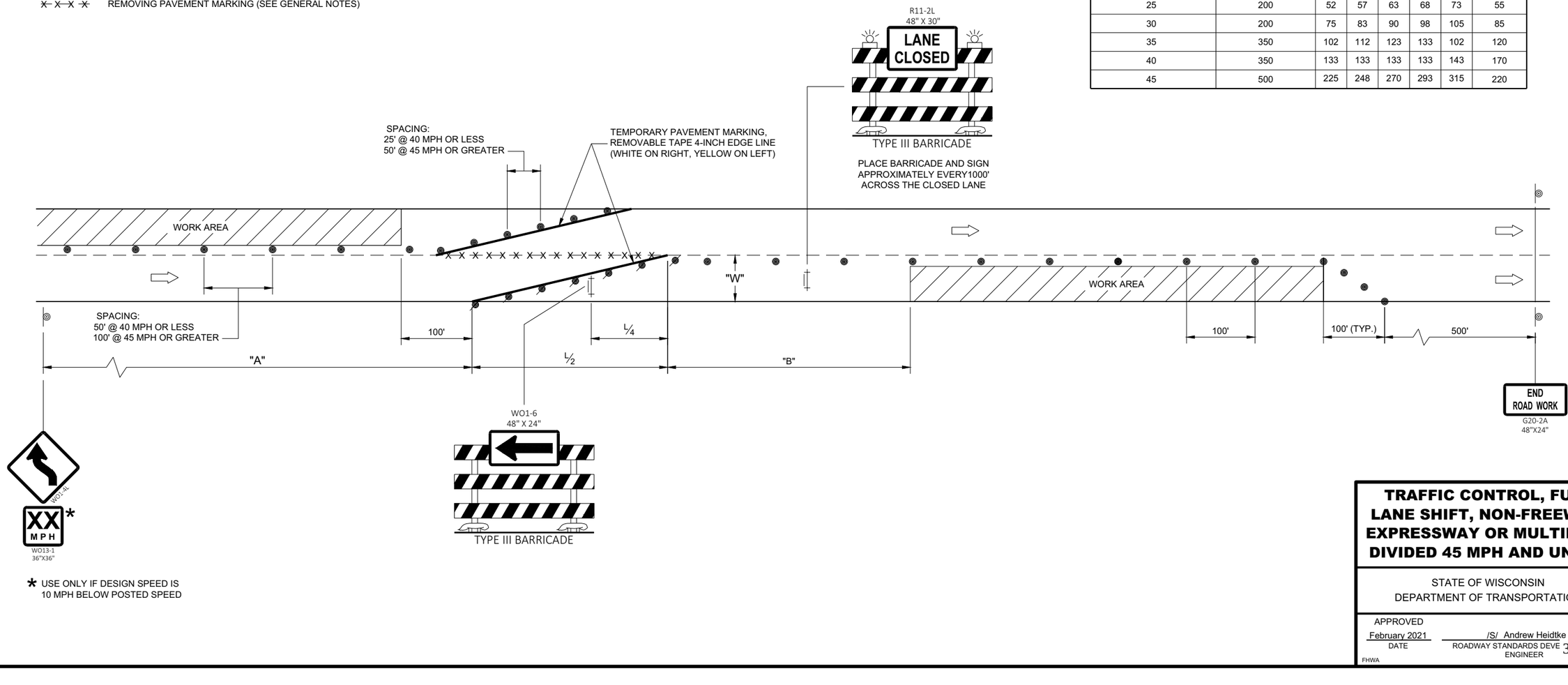
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L 1/2 W, LATERAL OFFSET (FT)					BUFFER SPACE (B) FEET
		10	11	12	13	14	
25	200	52	57	63	68	73	55
30	200	75	83	90	98	105	85
35	350	102	112	123	133	102	120
40	350	133	133	133	133	143	170
45	500	225	248	270	293	315	220



* USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED

TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D40 - 02a

6

SDD 15D40 - 02a

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE "A" WARNING LIGHT (FLASHING)

DIRECTION OF TRAFFIC

WORK AREA

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

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.

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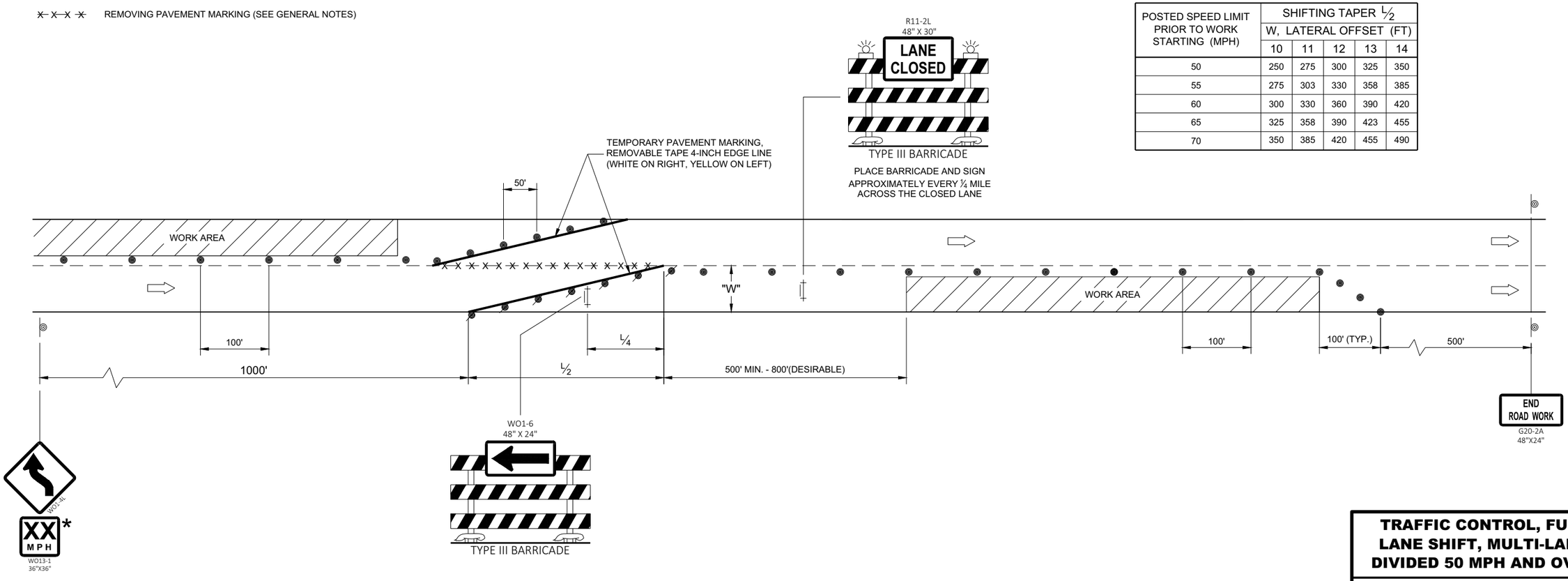
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POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L½ W, LATERAL OFFSET (FT)				
	10	11	12	13	14
50	250	275	300	325	350
55	275	303	330	358	385
60	300	330	360	390	420
65	325	358	390	423	455
70	350	385	420	455	490



TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D40 - 02b

SDD 15D40 - 02b

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVE PAVEMENT MARKING

GENERAL NOTES

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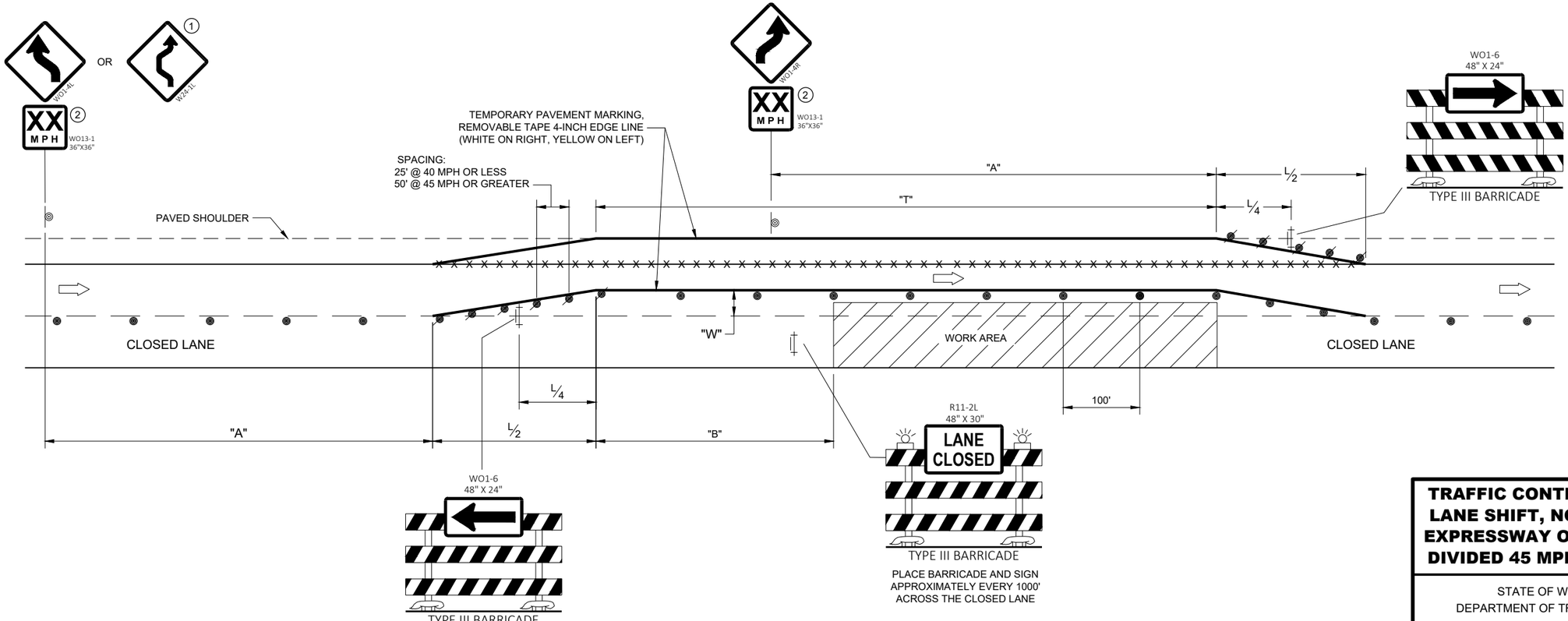
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(1) USE ONLY WHEN T<600', OMIT WO1-4R.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)									BUFFER SPACE (B) FEET
		1	2	3	4	5	6	7	8	9	
25	200	5	10	16	21	26	31	36	42	47	55
30	200	8	15	23	30	38	45	53	60	68	85
35	350	10	20	31	41	51	61	71	82	92	120
40	350	13	27	40	53	67	80	93	107	120	170
45	500	23	45	68	90	113	135	158	180	203	220



TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D40 - 02c

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVE PAVEMENT MARKING

GENERAL NOTES

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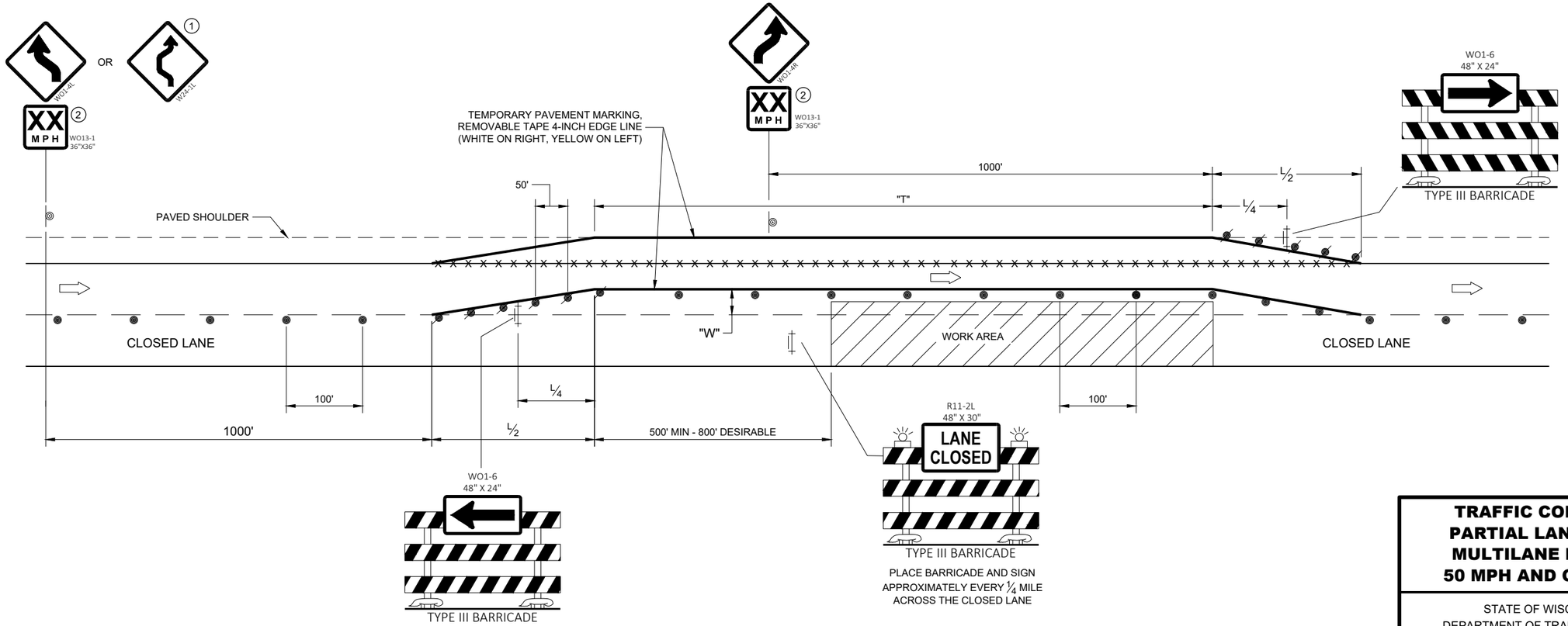
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(1) USE ONLY WHEN T<600', OMIT WO1-4R.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)								
	1	2	3	4	5	6	7	8	9
50	25	50	75	100	125	150	175	200	225
55	28	55	83	110	138	165	193	220	248
60	30	60	90	120	150	180	210	240	270
65	33	65	98	130	163	195	228	260	293
70	35	70	105	140	175	210	245	280	315



PLACE BARRICADE AND SIGN APPROXIMATELY EVERY 1/4 MILE ACROSS THE CLOSED LANE

TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 15D40 - 02d

6
SDD 15D40 - 02d

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

CONCRETE BARRIER TEMPORARY PRECAST

TYPE "A" WARNING LIGHT (FLASHING)

WORK AREA

L, TAPER LENGTH (MPH)							
SPEED (MPH)	W, LATERAL OFFSET (FT)						
	10	11	12	13	14	15	16
45	450	495	540	585	630	675	720
50	500	550	600	650	700	750	800
55	550	605	660	715	770	825	880
60	600	660	720	780	840	900	960
65	650	715	780	845	910	975	1040
70	700	770	840	910	980	1050	1120



OR



LOCATED 3000 FEET BEYOND THE "ROAD WORK 1 MILE" (W20-1F) SIGN



R2-1
48"X60"

OR



R2-1
48"X60"

(BLACK AND WHITE) LOCATED 700 FEET BEYOND THE W03-5 SIGN

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 3 MILES.

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 DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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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.

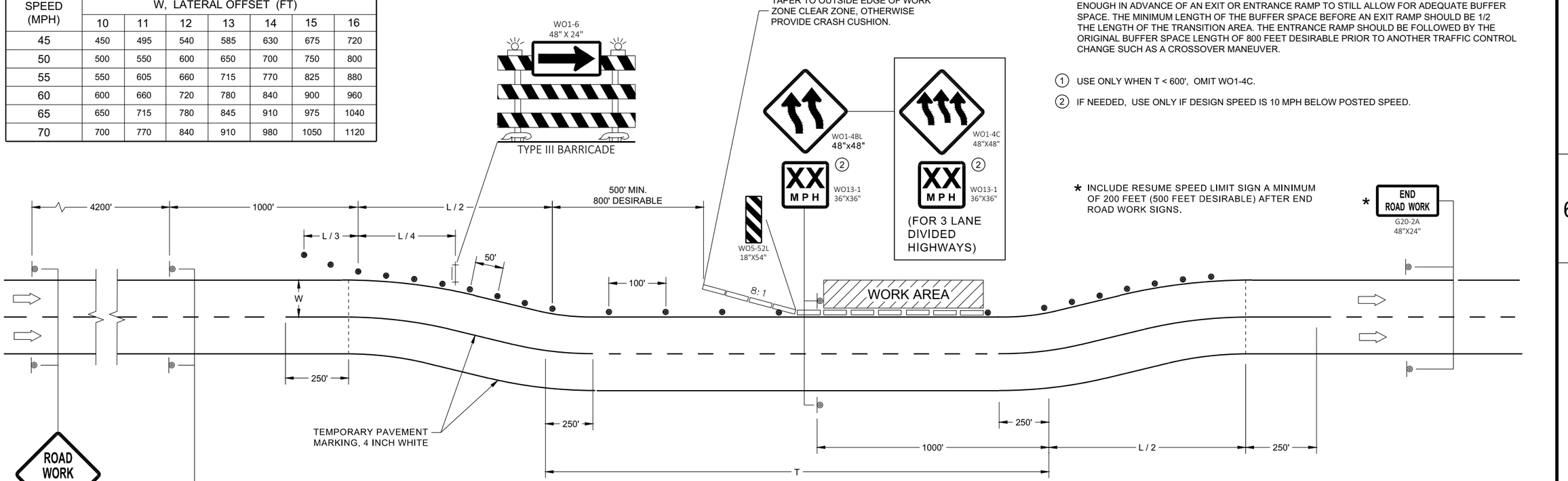
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(1) USE ONLY WHEN T < 600', OMIT WO1-4C.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.



MULTIPLE LANE SHIFT MULTILANE DIVIDED ROAD

TRAFFIC CONTROL
MULTIPLE LANE SHIFT
MULTILANE DIVIDED ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D41 - 01

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS, INCLUDING PCMS 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.

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

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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.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

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

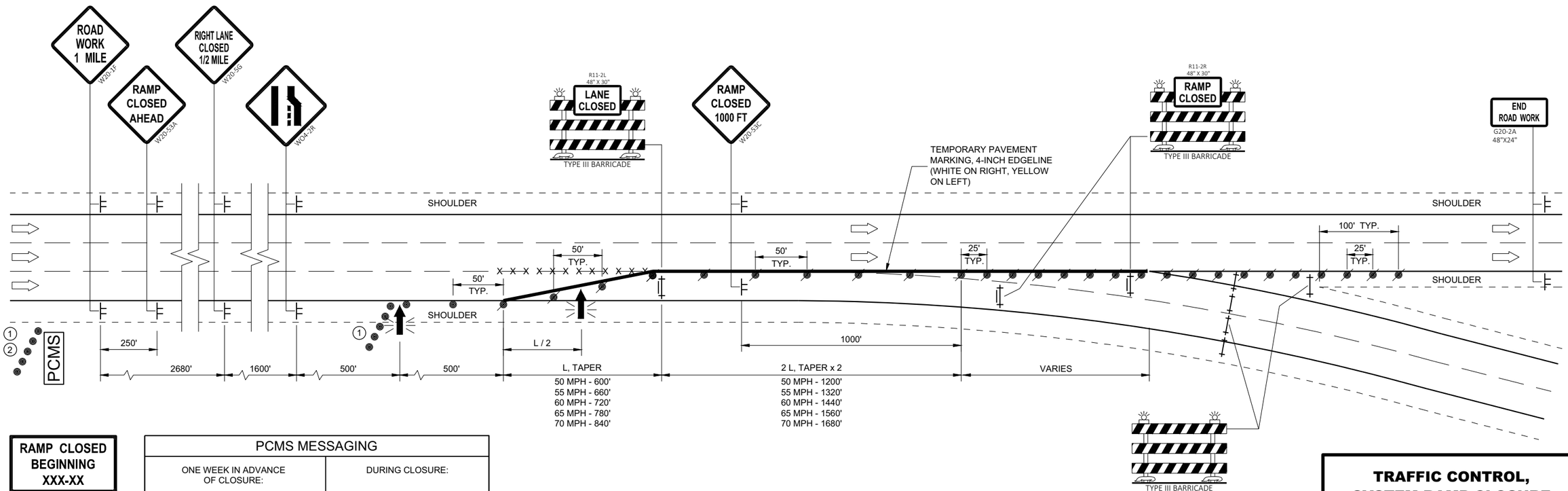
REMOVE ALL ARROW BOARDS AND DEVICES BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS.

REFER TO SDD 15C2 FOR SETTING DETOUR SIGNAGE.

ADD FREEWAY SHIELD AND DIRECTION IF APPLICABLE. COVER EXISTING RAMP AND LANE SIGNS IF APPLICABLE.

(1) 5 DRUMS SPACED AT 10 FOOT INTERVALS.

(2) DURING THE PRE-WARNING PERIOD, PLACE THE PCMS AT THE SYSTEM RAMP THAT IS TO BE CLOSED. DURING CLOSURE PERIOD, PLACE PCMS OR FMS AT LAST AVAILABLE EXIT IN ADVANCE OF SYSTEM RAMP CLOSURE. IF DYNAMIC MESSAGE SIGNS (DMS) ARE AVAILABLE, COORDINATE POTENTIAL SIGN MESSAGES WITH THE TRAFFIC MANAGEMENT CENTER (TMC).



SEE SDD 15C2 (SHEET "b"), DETAIL "D" "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" PLACE BARRICADES TO FULLY SEAL OFF ROAD

RAMP CLOSED BEGINNING XXX-XX
G20-58

PCMS MESSAGING

ONE WEEK IN ADVANCE OF CLOSURE:

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

DURING CLOSURE:

FRAME 1	FRAME 2
HWY XX RAMP CLOSED	USE ALT ROUTE

TRAFFIC CONTROL, SYSTEM RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D49 - 01

6

SDD 15D49 - 01

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					
		3	4	5	6	7	8
25	200	10	14	17	21	24	28
30	200	15	20	25	30	35	40
35	350	20	27	34	40	47	54
40	350	26	35	44	53	62	70
45	500	45	59	74	89	104	119
50	500	50	66	83	99	116	132
55	500	54	73	91	109	127	145

GENERAL NOTES

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

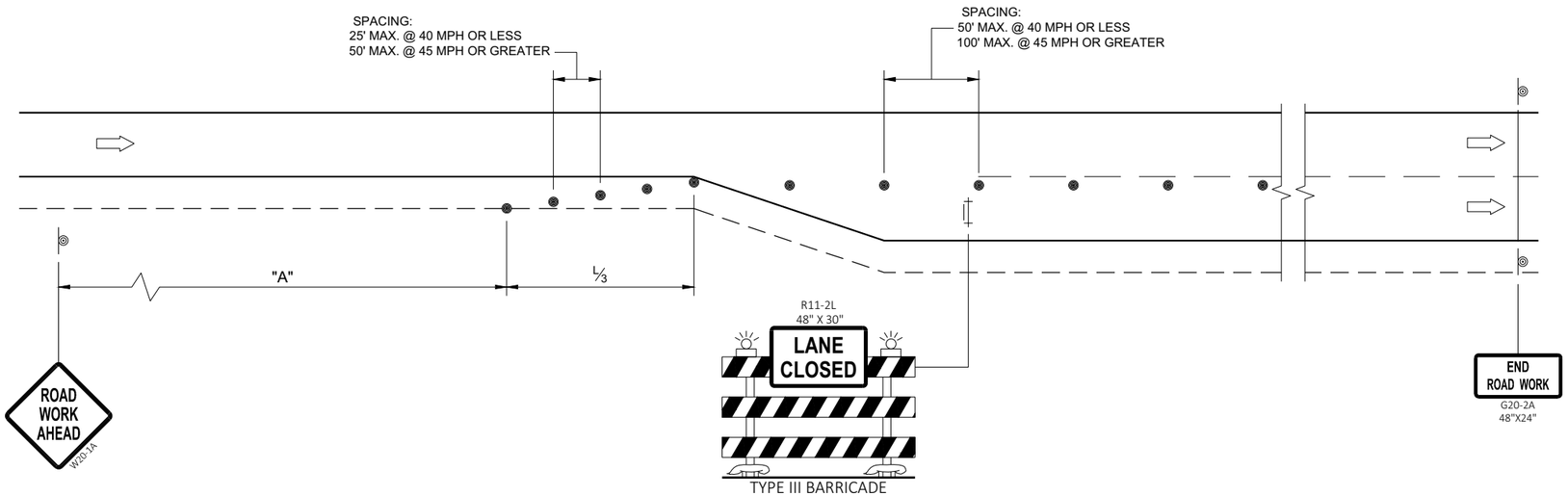
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND 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 SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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



PLACE BARRICADE AND SIGN APPROXIMATELY EVERY 1000' ACROSS THE CLOSED LANE

ADDED LANE CLOSURE WITHOUT LANE SHIFT

TRAFFIC CONTROL
ADDED LANE CLOSURE
WITHOUT LANE SHIFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D50 - 01a

6

SDD 15D50 - 01a

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER (L/2) FEET
25	200	60
30	200	90
35	350	120
40	350	160
45	500	270
50	500	300
55	500	330

GENERAL NOTES

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

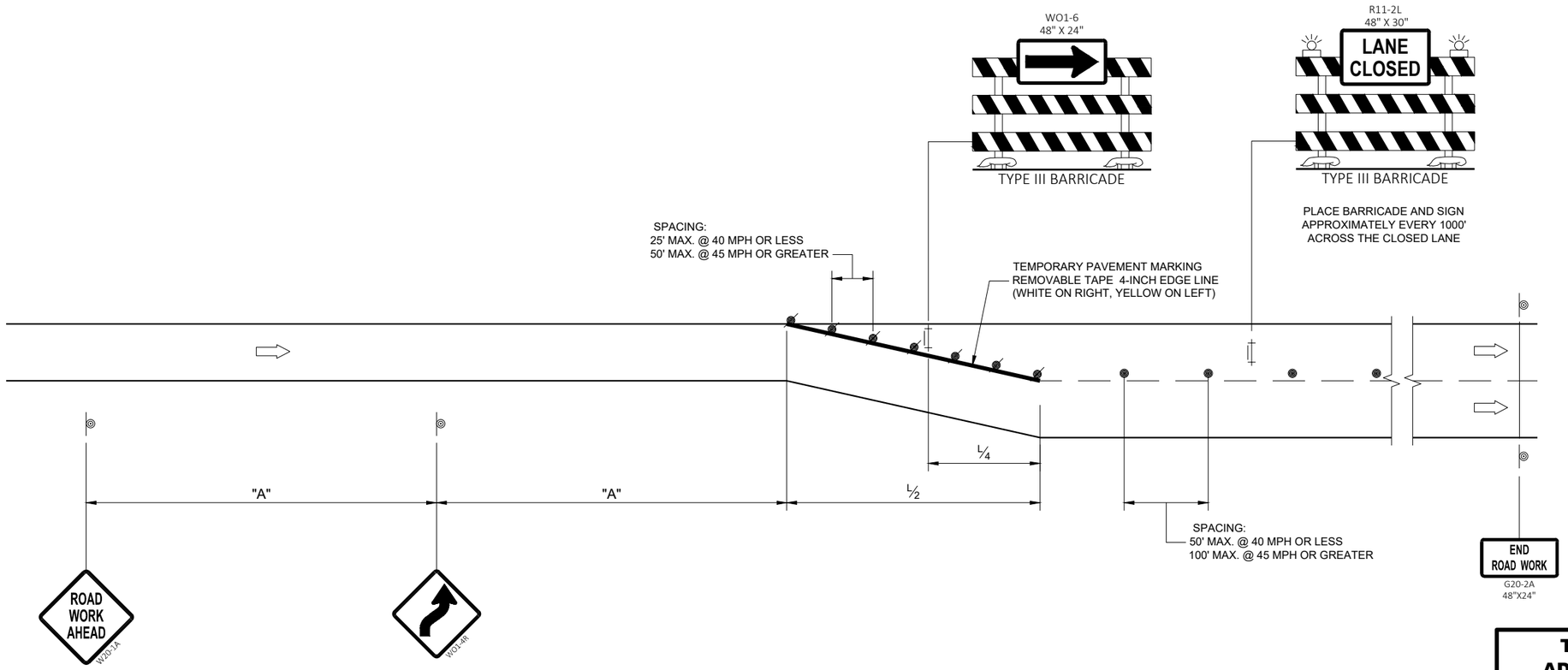
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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 SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR FOUR CONTINUOUS DAYS AND NIGHTS.



ADDED LANE CLOSURE WITH LANE SHIFT

TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

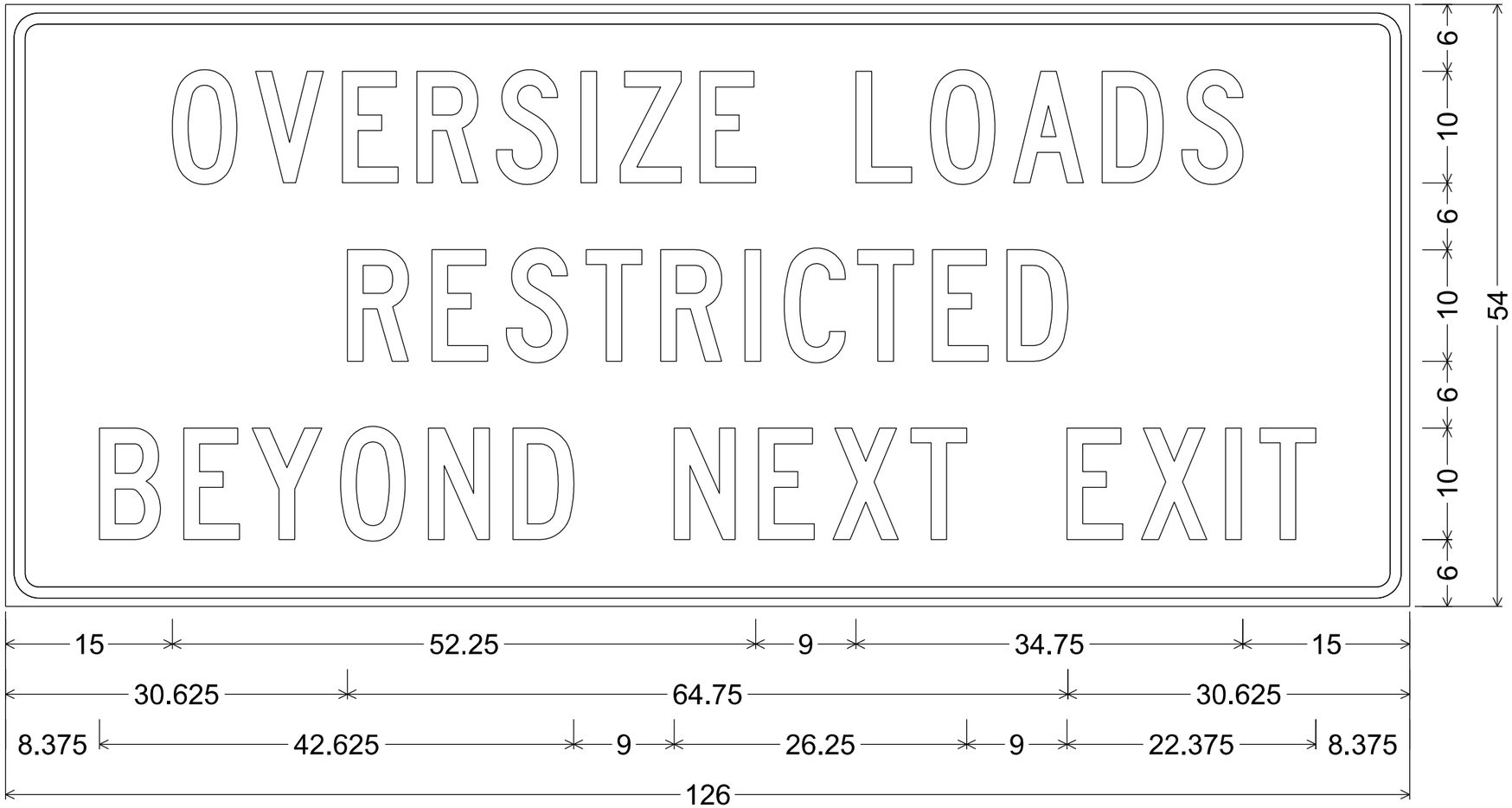
APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
355
FHWA

6

SDD15D50 - 01b

NOTES

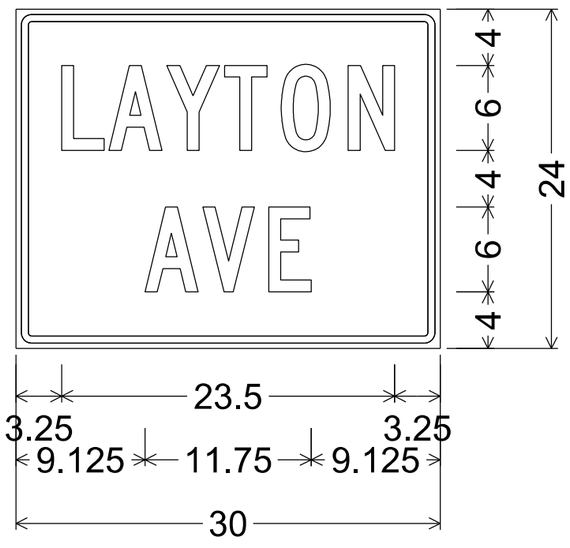
1. Fixed Message Signs Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C



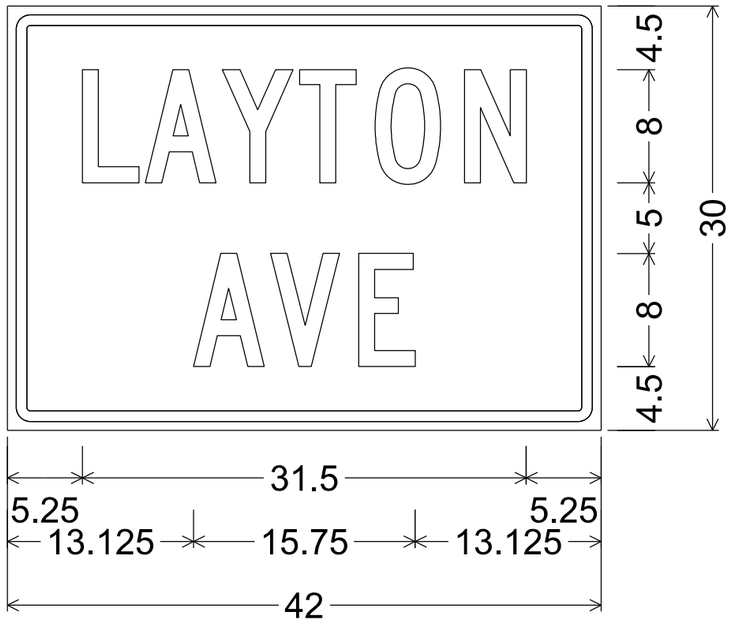
3.000" Radius, 1.000" Border, 0.750" Indent

NOTES

1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C



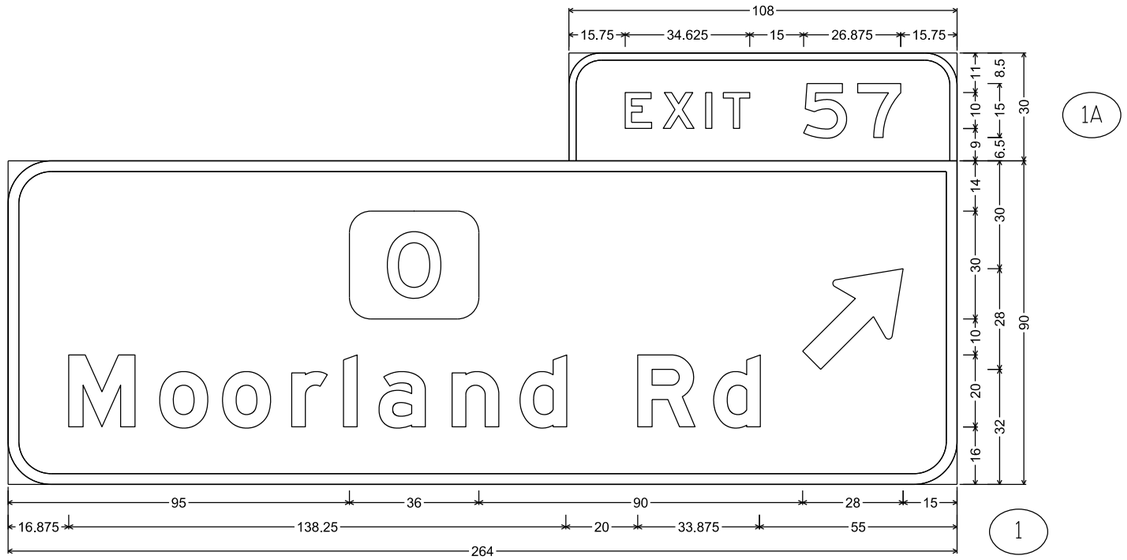
1.125" Radius, 0.500" Border, 0.375" Indent



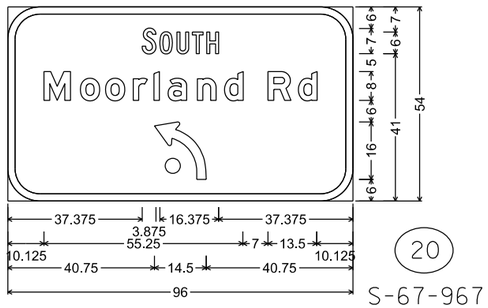
1.625" Radius, 0.750" Border, 0.625" Indent

7

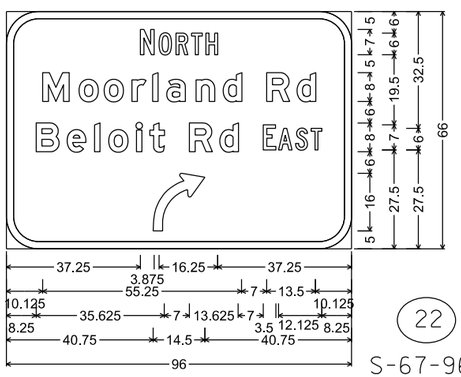
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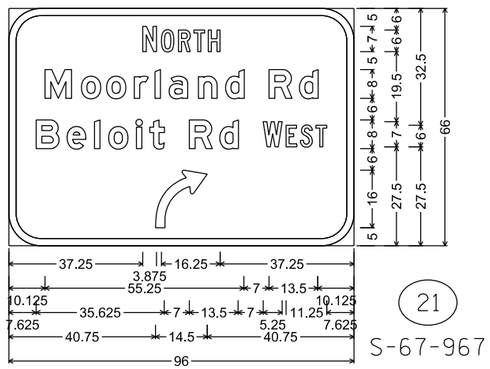
E1-5P; 9.000" Radius, 2.000" Border
E4-1A; 12.000" Radius, 3.000" Border



E6-54; 9.000" Radius, 2.000" Border
"SOUTH", C



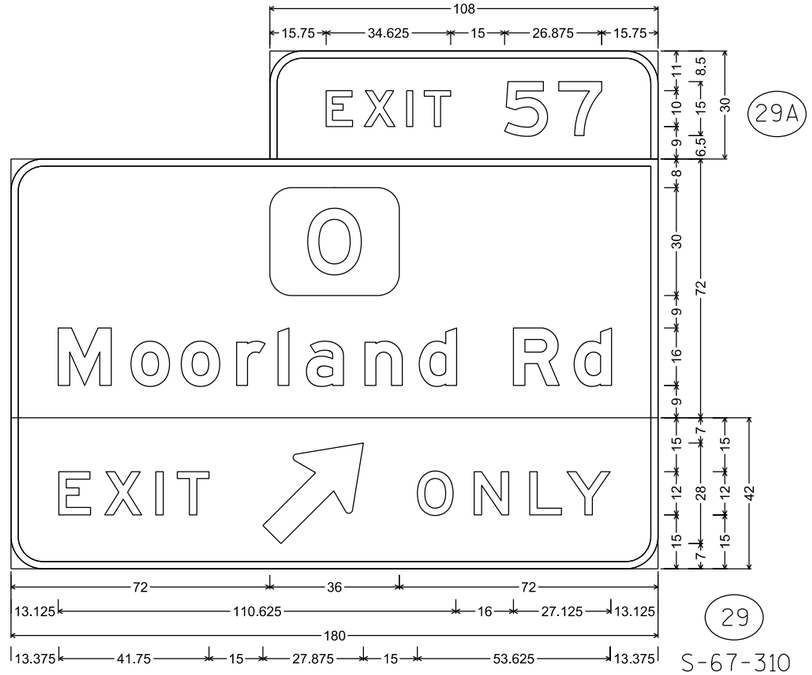
E6-54; 9.000" Radius, 2.000" Border
"NORTH", C; "EAST", C



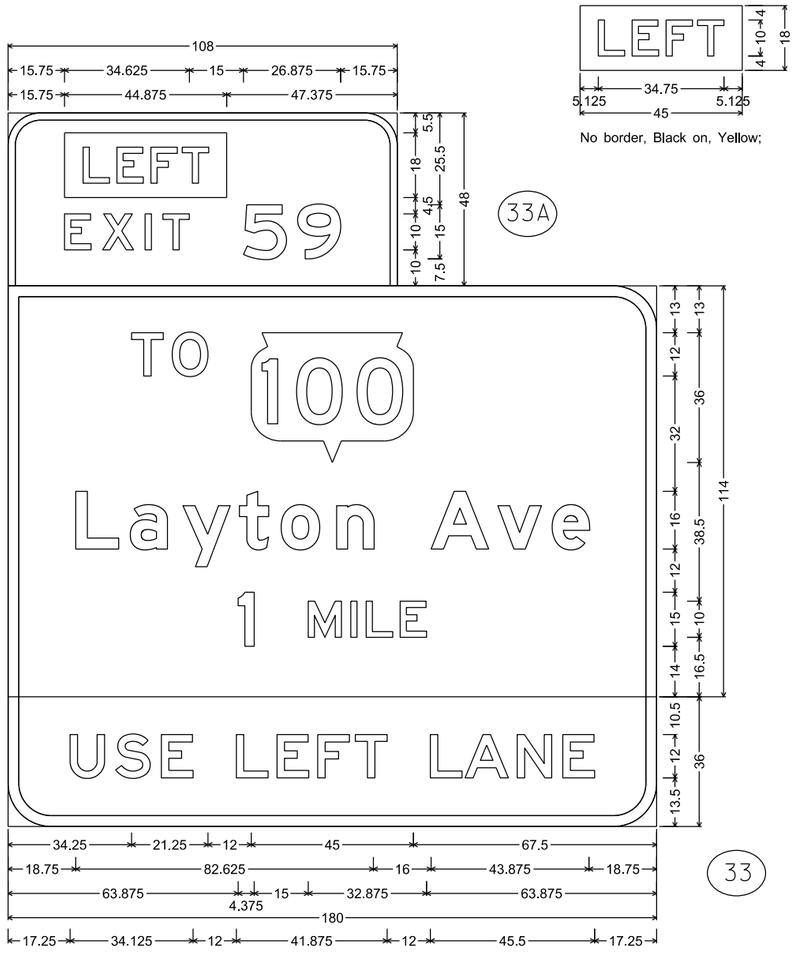
E6-54; 9.000" Radius, 2.000" Border
"NORTH", C; "WEST", C

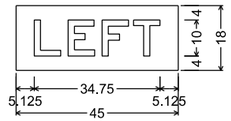
NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E, or as noted.
4. Exit Only Panel on Yellow Type F Reflective Sheeting with Black Non-Reflective Message



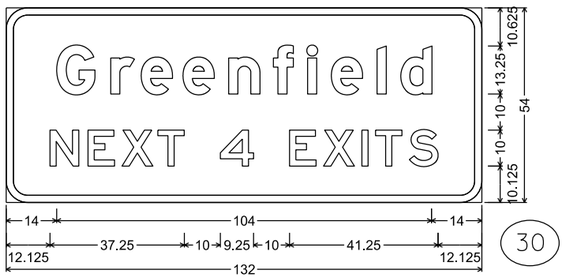
E1-5P; 9.000" Radius, 2.000" Border
E6-1; 9.000" Radius, 2.000" Border
E11-1D; 9.000" Radius, 2.000" Border, Black on, Yellow





No border, Black on, Yellow;

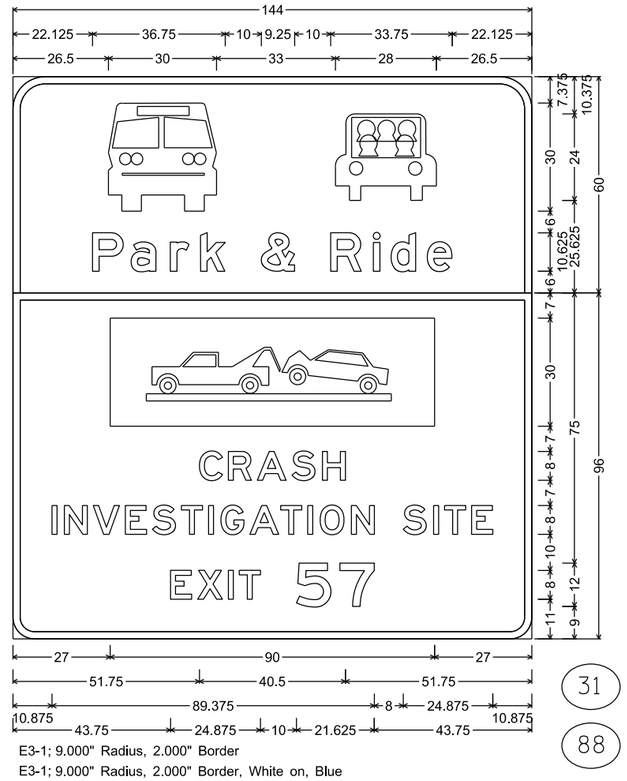
E1-5BP; 9.000" Radius, 2.000" Border
E6-51; 12.000" Radius, 3.000" Border
E11-1; 12.000" Radius, 3.000" Border, Black on, Yellow



E9-1; 6.000" Radius, 2.000" Border

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green except as noted
   Message - White
3. Message Series - E Modified except all CAP words Series E
4. Use Left Lane Panel and Left Plaque on Yellow Type F Reflective Sheeting with Black Non-Reflective Message



E3-1; 9.000" Radius, 2.000" Border
E3-1; 9.000" Radius, 2.000" Border, White on, Blue

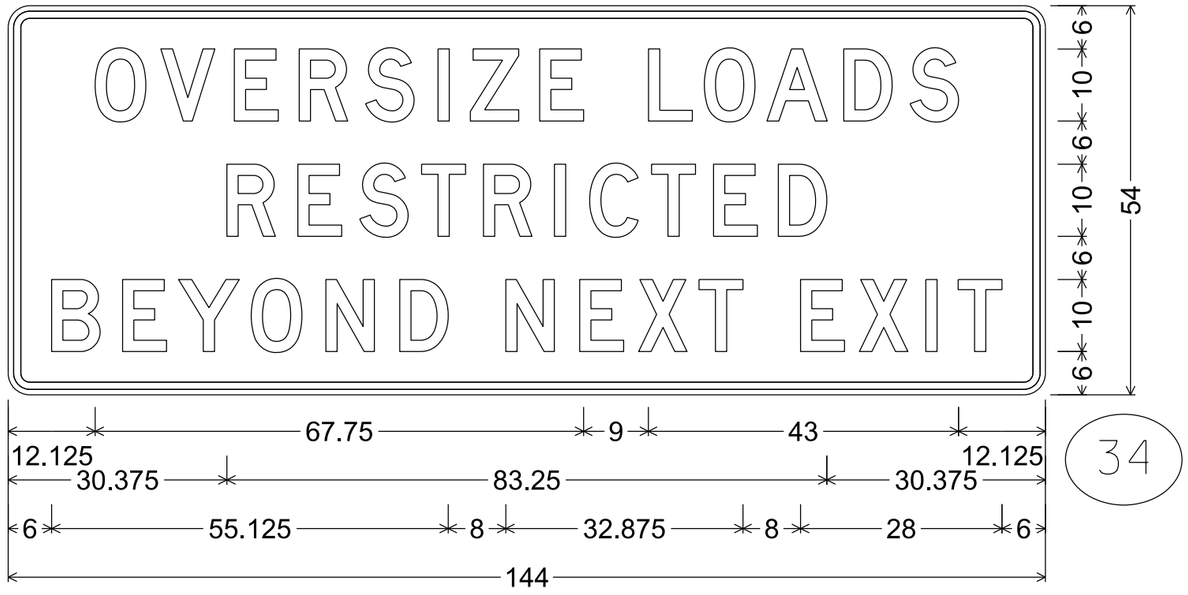
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7

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 359	E

NOTES

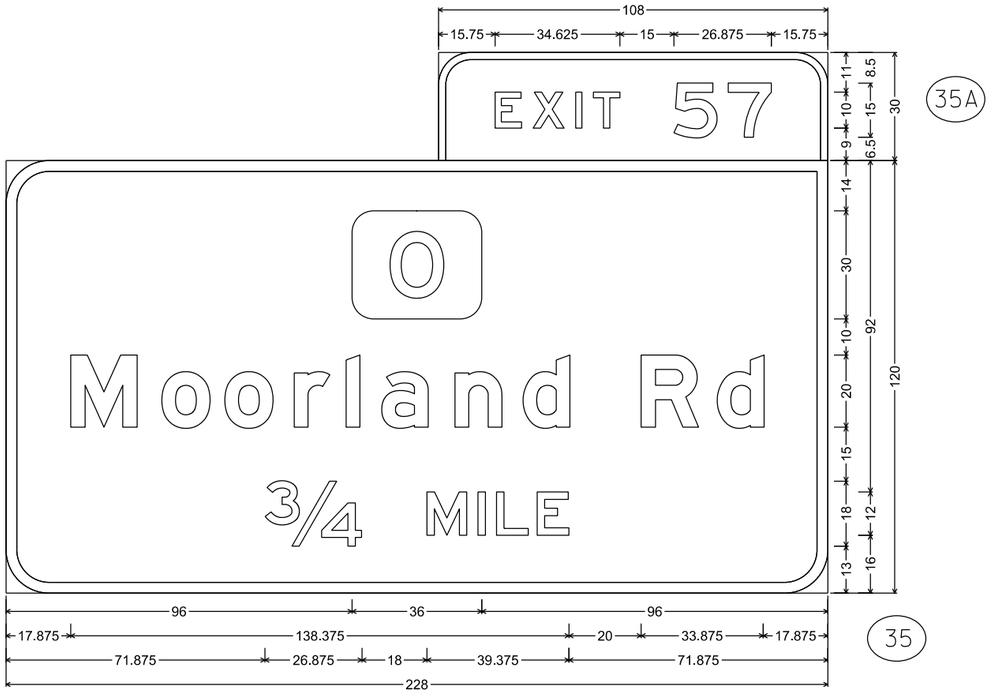
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



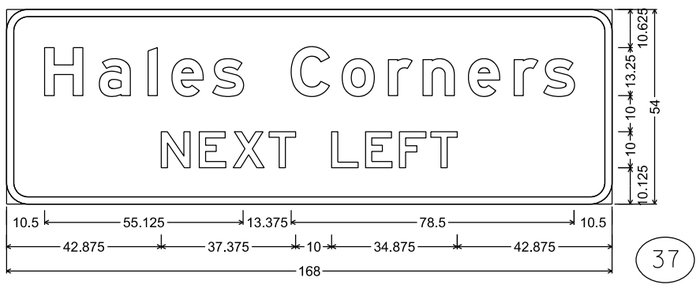
3.000" Radius, 1.000" Border

NOTES

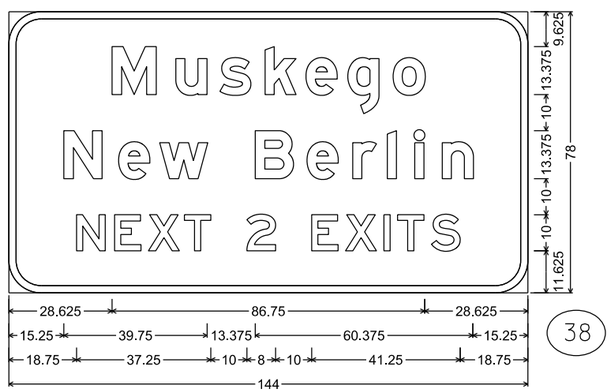
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green except as noted
   Message - White
3. Message Series - E Modified except all CAP words Series E
4. Left Plaque on Yellow Type F Reflective Sheeting with Black Non-Reflective Message



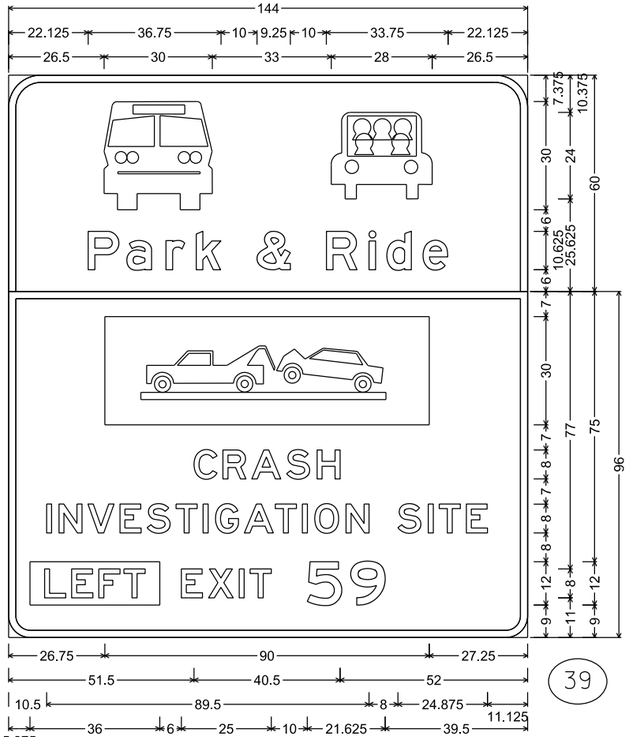
E1-5P; 9.000" Radius, 2.000" Border
E1-1A; 12.000" Radius, 3.000" Border



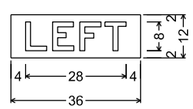
E9-1; 6.000" Radius, 2.000" Border



E9-1; 9.000" Radius, 2.000" Border



E3-1; 9.000" Radius, 2.000" Border, White on, Green;
E3-1; 9.000" Radius, 2.000" Border, White on, Blue

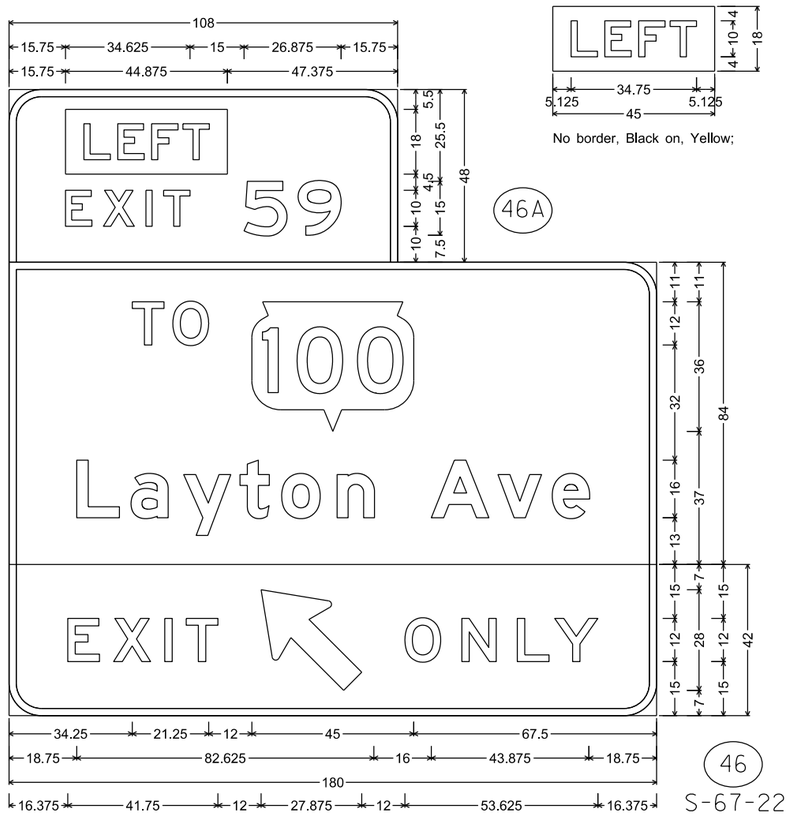


No border, Black on, Yellow;
"LEFT", E;

7

7

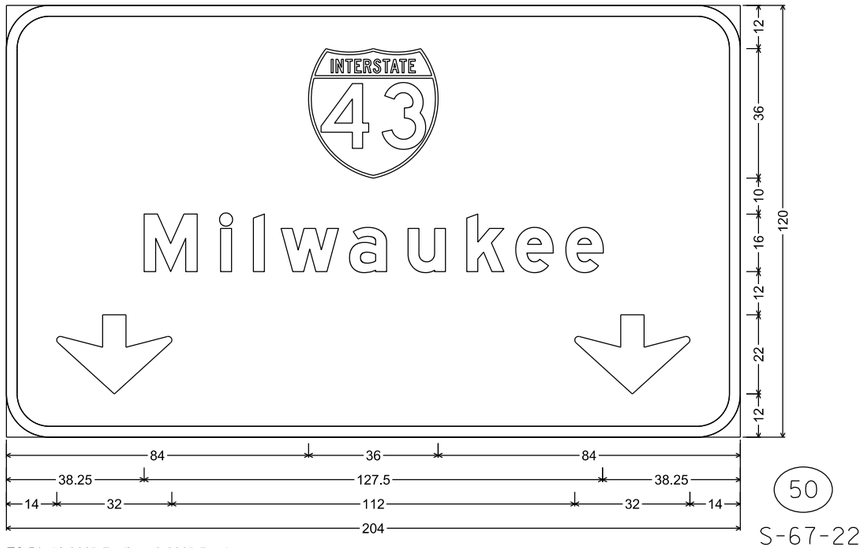
PROJECT NO:1090-08-71	HWY: IH 43	COUNTY:WAUKESHA	PERMANENT SIGNING	SHEET NO: 361	E



E1-5BP; 9.000" Radius, 2.000" Border
E6-1; 9.000" Radius, 2.000" Border
E11-1D; 9.000" Radius, 2.000" Border, Black on, Yellow

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E
4. Exit Only Panel and Left Plaque on Yellow Type F Reflective Sheeting with Black Non-Reflective Message

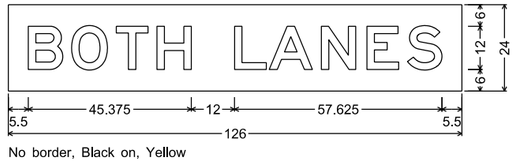


E6-51; 12.000" Radius, 3.000" Border

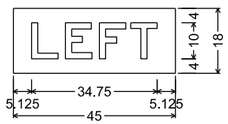
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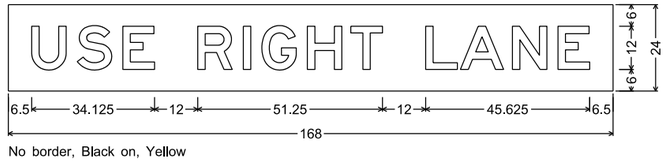
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 362	E



No border, Black on, Yellow



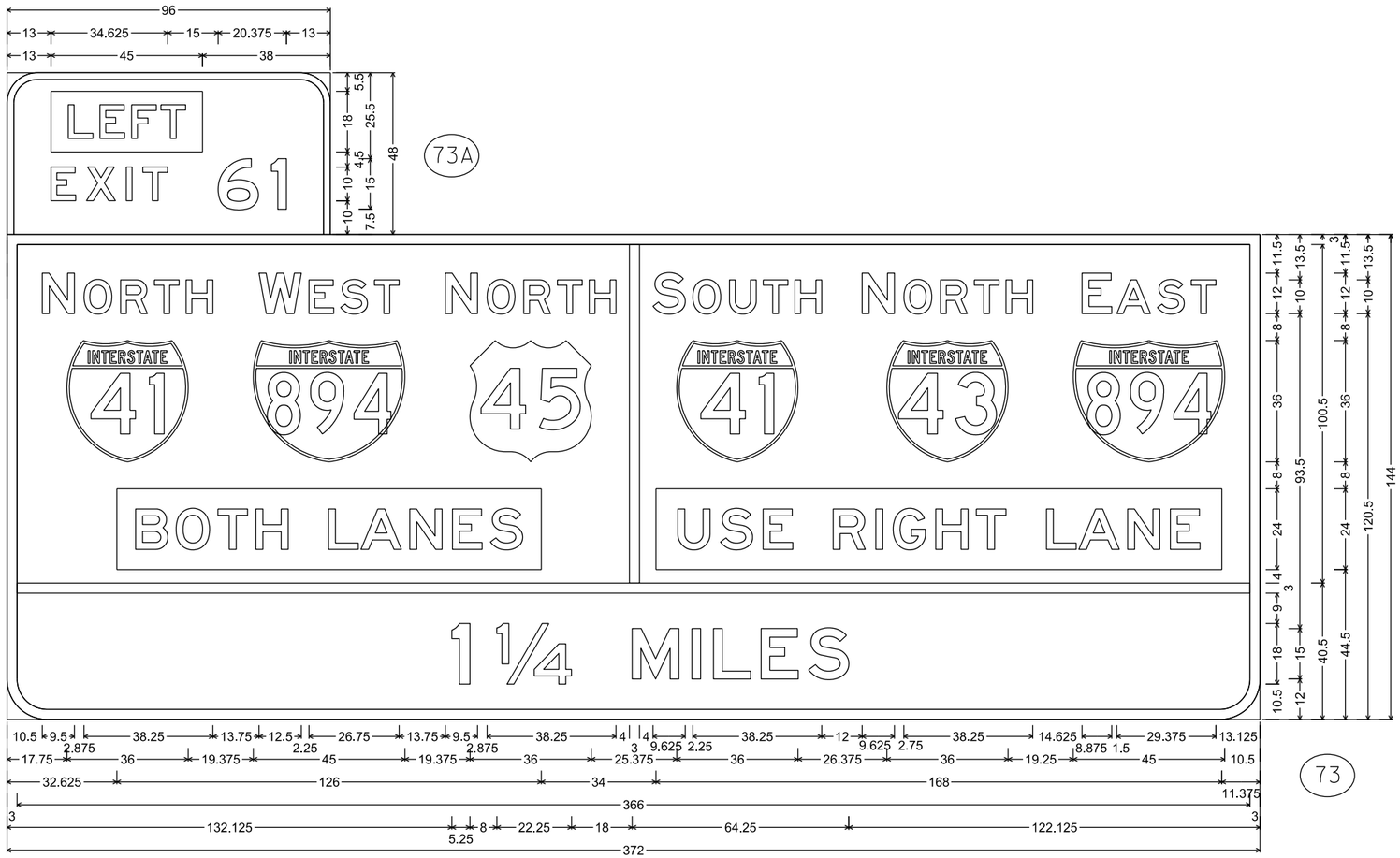
No border, Black on, Yellow

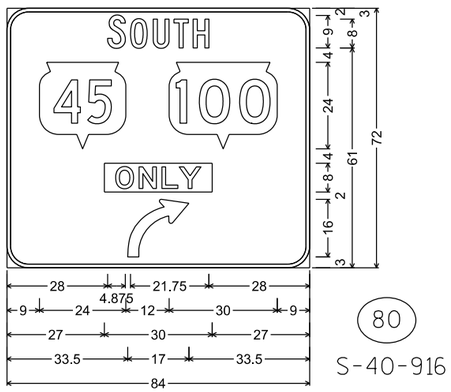


No border, Black on, Yellow

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E
4. Both Lanes, Use Right Lane and Left Plaque on Yellow Type F Reflective Sheeting with Black Non-Reflective Message

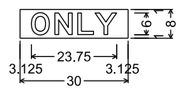




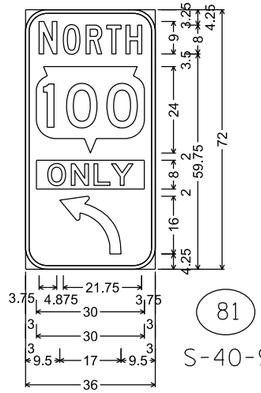
80

S-40-916

D16-1R; 6.000" Radius, 1.000" Border
"SOUTH", C;



No border, White on, Fluorescent yellow
"ONLY" Black, E



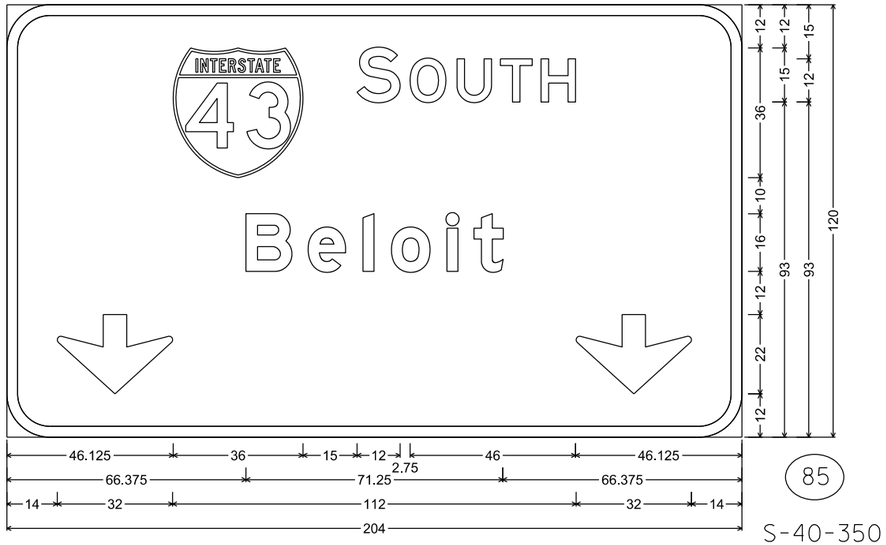
81

S-40-916

D16-1L; 6.000" Radius, 1.000" Border
"NORTH", C;

NOTES

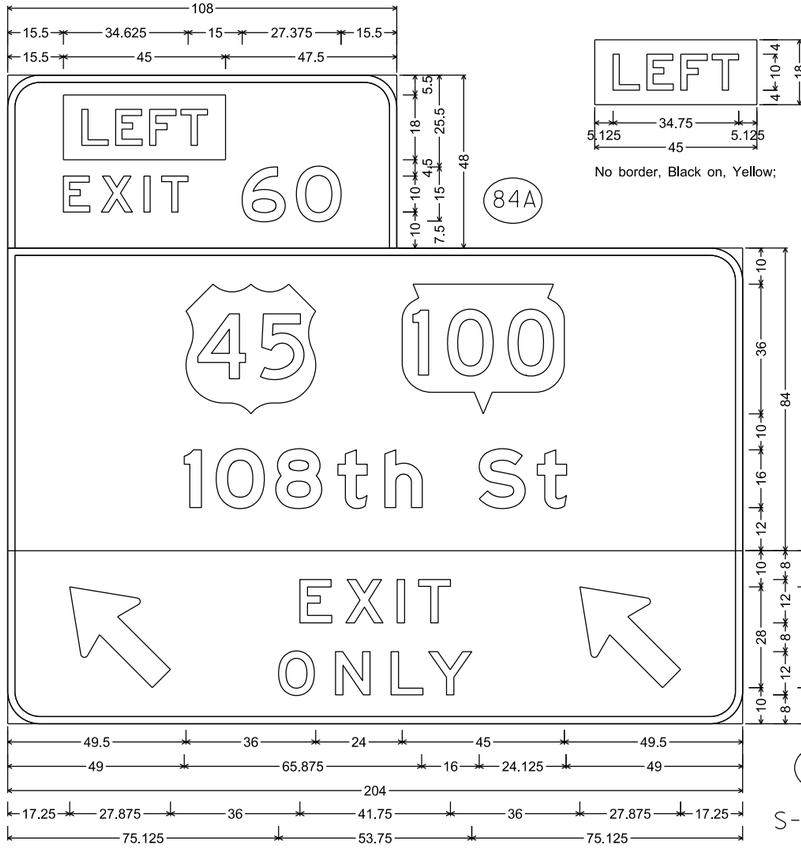
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E or as noted.
4. Exit Only Panel, Only and Left Plaque on Yellow Type F Reflective Sheeting with Black Non-Reflective Message



85

S-40-350

E6-51; 12.000" Radius, 3.000" Border



84

S-40-350

No border, Black on, Yellow;

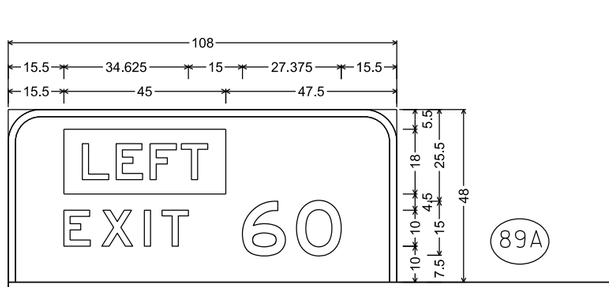
E1-5BP; 9.000" Radius, 2.000" Border
E6-1; 9.000" Radius, 2.000" Border
E11-1E; 9.000" Radius, 2.000" Border, Black on, Yellow

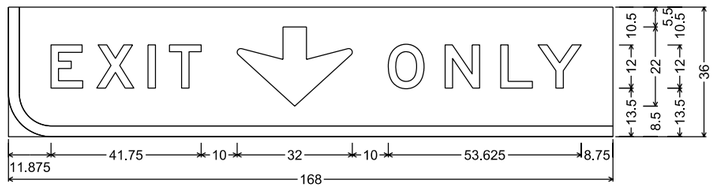
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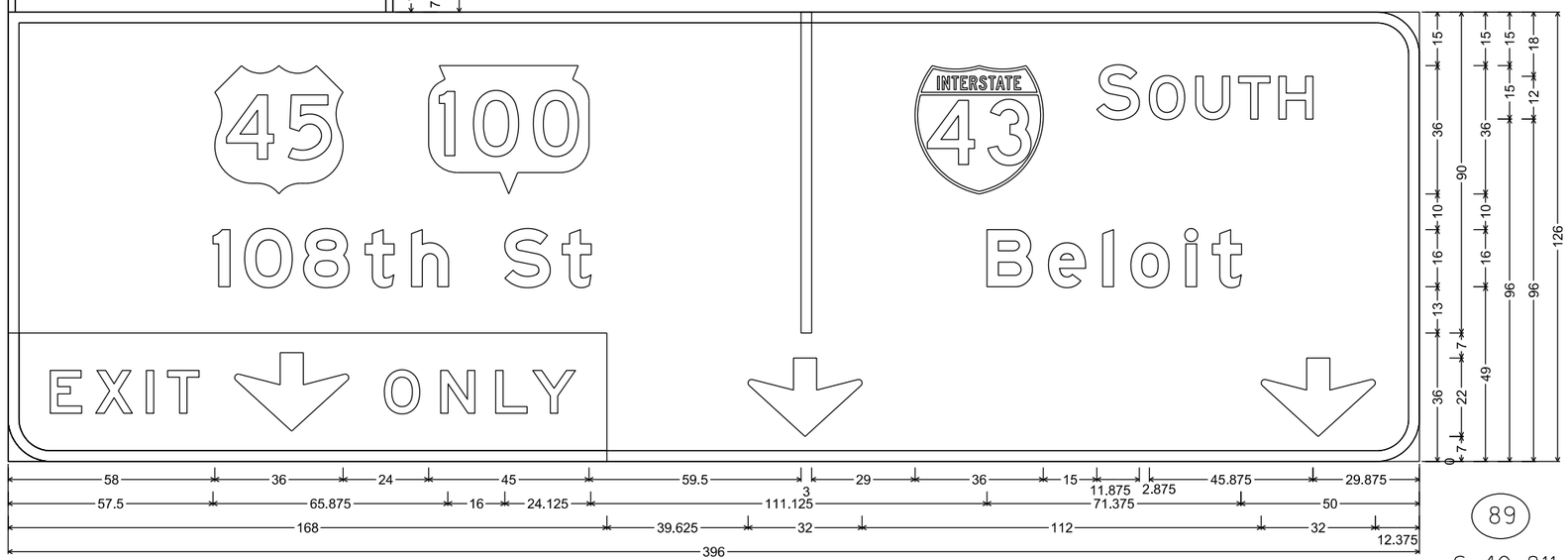
NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E
4. Exit Only Panel and Left Plaque on Yellow Type F Reflective Sheeting with Black Non-Reflective Message





E11-1; 12.000" Radius, 3.000" Border, Black on, Yellow

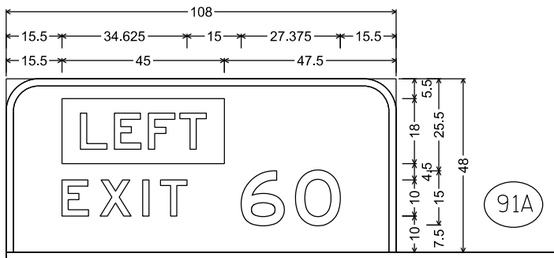


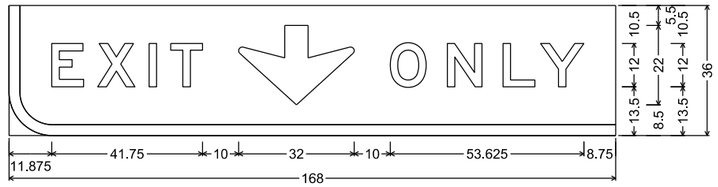
E1-5BP; 9.000" Radius, 2.000" Border
E6-51; 12.000" Radius, 3.000" Border

S-40-811

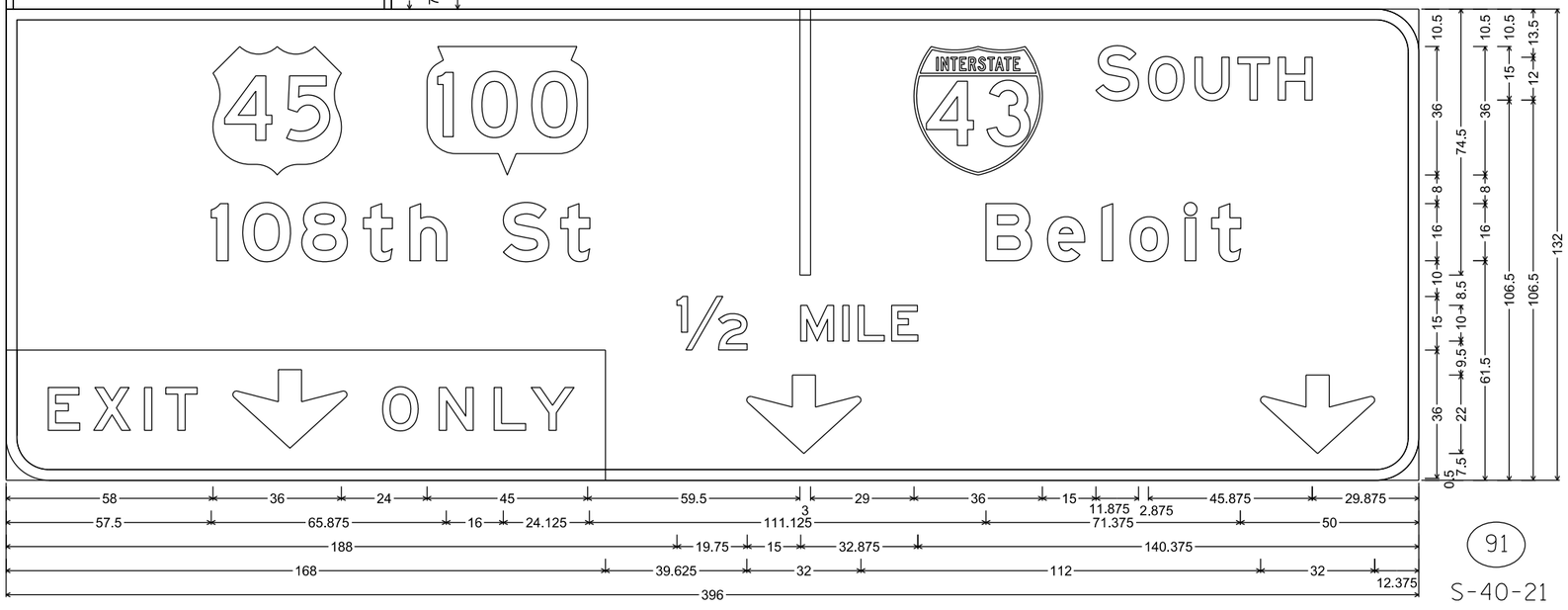
NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E
4. Exit Only Panel and Left Plaque on Yellow Type F Reflective Sheeting with Black Non-Reflective Message





E11-1; 12.000" Radius, 3.000" Border, Black on, Yellow

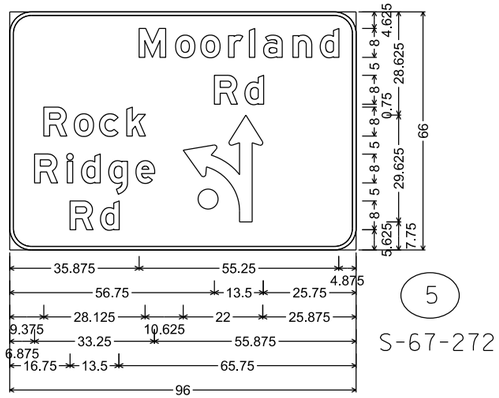


S-40-21

E1-5BP; 9.000" Radius, 2.000" Border
E6-51; 12.000" Radius, 3.000" Border

NOTES

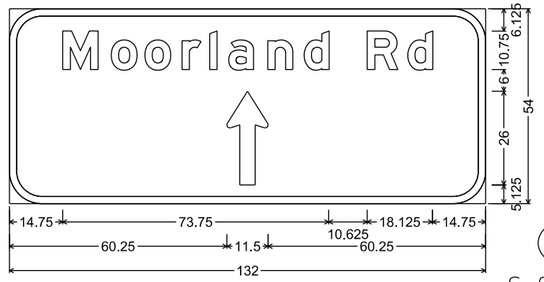
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E or as noted.
4. Only Plaque on Yellow Type F Reflective Sheeting with Black Non-Reflective Message
5. R3-54L and R3-54R used on sign number 3 and 4.



5

S-67-272

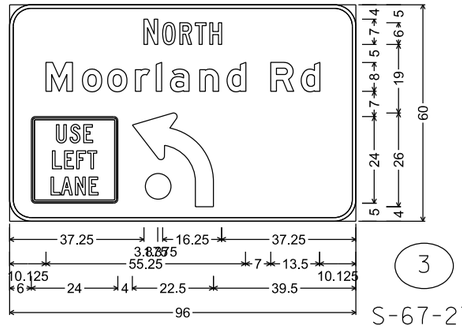
6.000" Radius, 1.000" Border



6

S-67-272

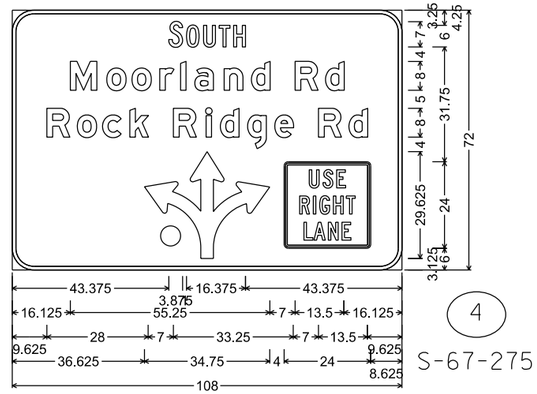
E6-54A; 9.000" Radius, 2.000" Border



3

S-67-275

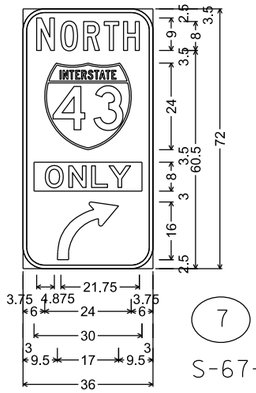
6.000" Radius, 1.000" Border,
"NORTH", C



4

S-67-275

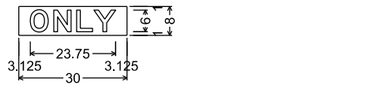
6.000" Radius, 1.000" Border,
"SOUTH", C



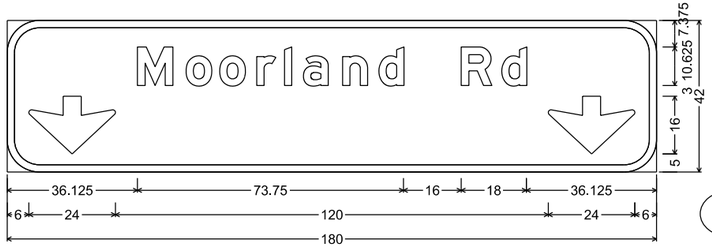
7 8

S-67-272

D16-1R; 6.000" Radius, 1.000" Border (Quantity 2)
"NORTH", C;



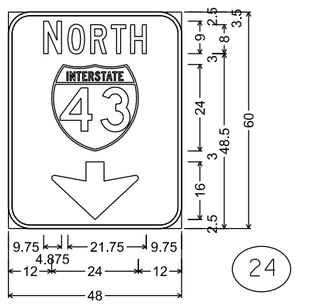
No border, White on, Fluorescent yellow



23

S-67-271

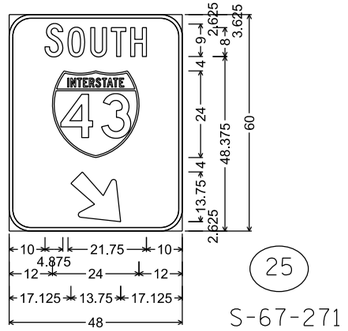
E6-51; 9.000" Radius, 2.000" Border



24

S-67-271

6.000" Radius, 1.000" Border
"NORTH", C

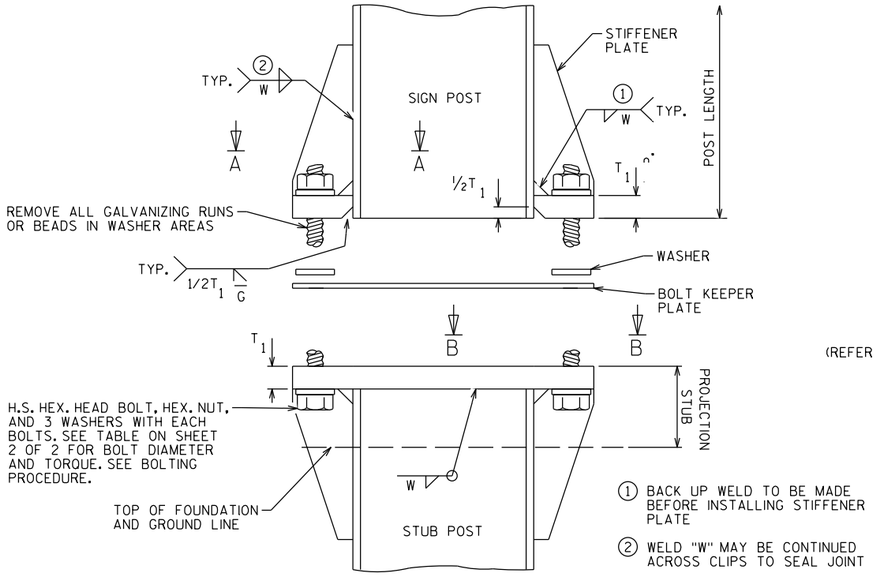


25

S-67-271

D16-1; 6.000" Radius, 1.000" Border
"SOUTH", C

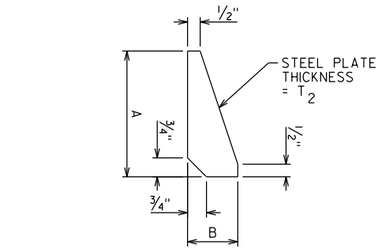
PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA	PERMANENT SIGNING	SHEET NO: 367	E



① BACK UP WELD TO BE MADE BEFORE INSTALLING STIFFENER PLATE

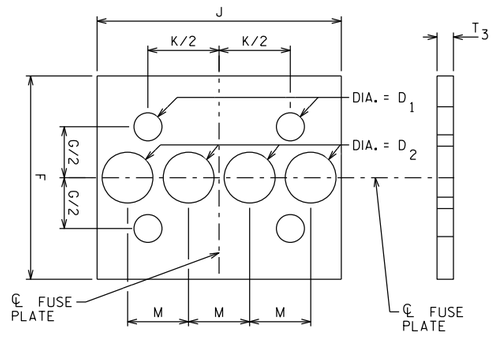
② WELD "W" MAY BE CONTINUED ACROSS CLIPS TO SEAL JOINT

SIGN POST & STUB POST ELEVATION



STIFFENER PLATE DETAIL

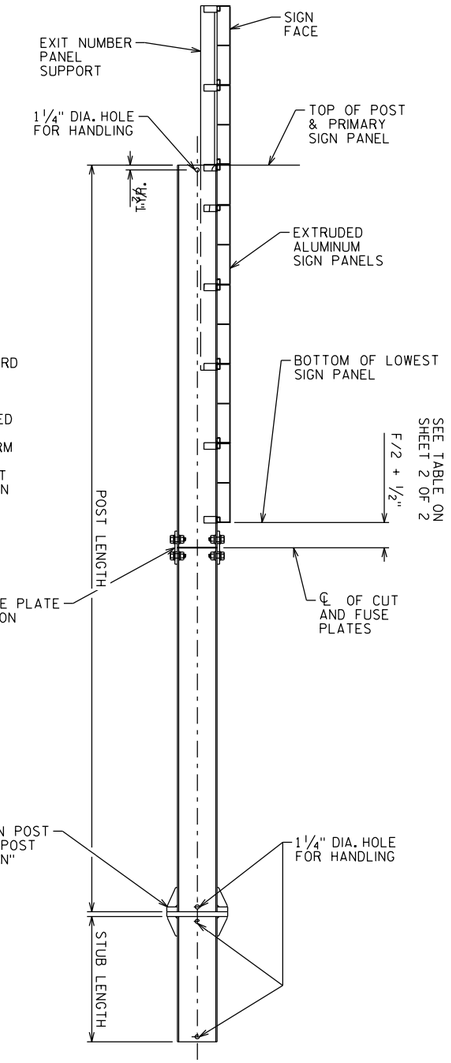
(REFER TO TABLE ON SHEET 2 OF 2 FOR DIMENSIONS)



PERFORMATED FUSE PLATE DETAIL

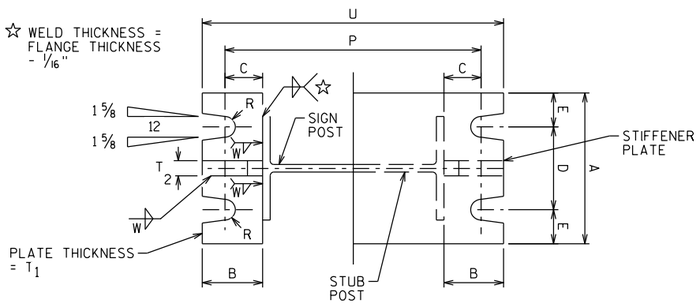
USE H.S. HEX HEAD BOLTS, HEX HEAD NUT AND FLAT WASHER UNDER NUT. INSTALL BOLTS PER THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION SECTION 506.3.12.3.

ALL HOLES SHALL BE DRILLED, SUB-PUNCHED AND REAMED. ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS. HOWEVER, FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE PERMITTED. STEEL FUSE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36. ASTM A572 GRADE 50 OR ASTM A588 MAY BE SUBSTITUTED FOR A36 AT THE OPTION OF THE FABRICATOR. MILL TEST REPORTS SHALL BE SUBMITTED FOR FUSE PLATES. STEEL USED SHALL HAVE AN ULTIMATE TENSILE STRENGTH NOT TO EXCEED 80 KSI.



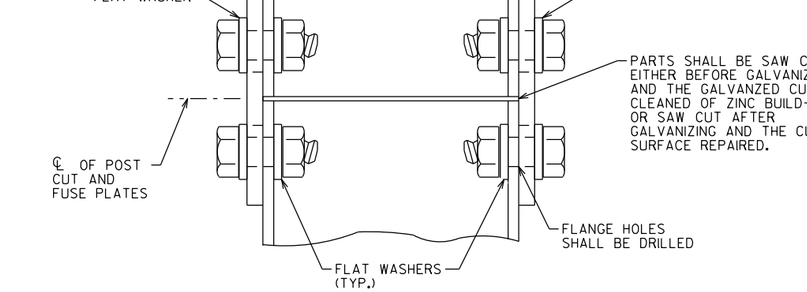
POST DETAIL

☆ WELD THICKNESS = FLANGE THICKNESS - 1/16"

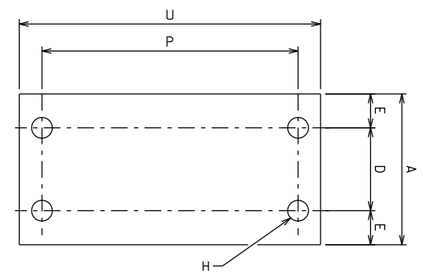


SECTION A-A

SECTION B-B



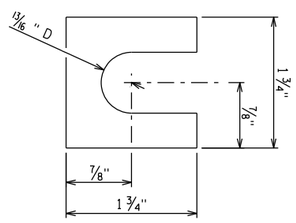
FUSE PLATE CONNECTION DETAIL



H = BOLT DIA. + 1/8"

BOLT KEEPER PLATE DETAIL

30 GA GALVANIZED SHEET STEEL



SHIM DETAIL

FURNISH TWO .012"± THICK AND TWO .032"± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM B36.

BOLTING PROCEDURE FOR BASE CONNECTION

1. ASSEMBLE SIGN POST, BOLT KEEPER PLATE, AND STUB POST WITH BOLTS AND THREE FLAT WASHERS PER BOLT AS SHOWN.
2. SHIM AS REQUIRED TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING, LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS.
5. LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PERSCRIBED TORQUE. (SEE TABLE FOR PERSCRIBED TORQUE). DO NOT OVER-TIGHTEN.
6. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY	PLANS CK'D.

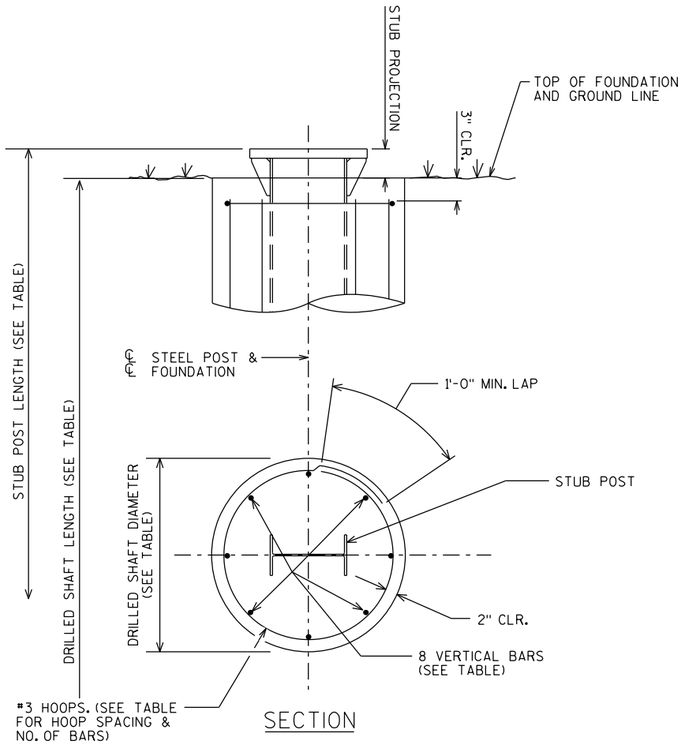
CONNECTION & FOUNDATION DETAILS 1 OF 2

SHEET A3-1.20

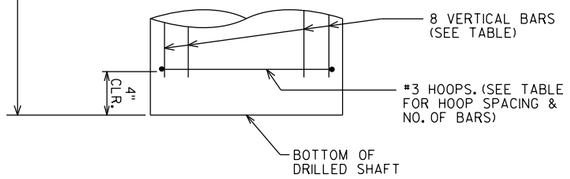
368

7

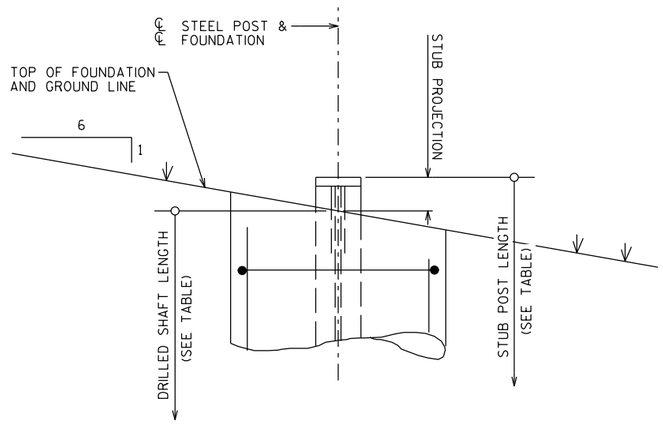
7



SECTION



FOUNDATION DETAIL



SHAFT PLACEMENT

FOUNDATION DATA TABLE

POST SHAPE	STUB LENGTH	STUB PROJECTION	DRILLED SHAFT DIAMETER	DRILLED SHAFT LENGTH	VERTICAL BARS		HOOPS		CONCRETE VOLUME ◆	TOTAL REINF. WEIGHT ◆
					SIZE	LENGTH	MAX SPA.	NO.		
W6X15	2'-6"	3"	24"	6'-6"	#5	5'-11"	10"	9	0.8 CY	71 LB
W8X18	2'-6"	3"	24"	7'-6"	#6	6'-11"	12"	8	0.9 CY	102 LB
W8X21	3'-0"	2½"	24"	8'-0"	#6	7'-5"	12"	9	1.0 CY	110 LB
W10X22	3'-0"	2½"	24"	8'-6"	#7	7'-11"	12"	9	1.0 CY	151 LB
W12X26	3'-0"	2½"	24"	10'-0"	#7	9'-5"	12"	11	1.2 CY	180 LB

◆ QUANTITIES SHOWN ARE FOR ONE DRILLED SHAFT

BASE CONNECTION & FUSE PLATE DATA TABLE

POST SHAPE	WEIGHT PER FOOT	BASE CONNECTION DATA: BOLT SIZE & TORQUE	A	B	C	D	E	T1	T2	W	R	BOLT KEEPER PLATE DATA: P	U	PERFORATED FUSE PLATE DATA: F	G	J	K	M	D1	D2	T3	BOLT DIA.	WGT. EA. LBS	BOLT LENGTH	V ◪
W6X15	15 LB	⅝" DIA. X 4" 36 TO 38 FT-LB	5"	2"	1¼"	2¾"	1⅛"	1¼"	½"	¼"	11/32"	8½"	10"	5"	2½"	6"	3½"	1½"	11/16"	1¼"	⅜"	⅝"	2.4	2	73.0 LB
W8X18	18 LB											10⅝"	12⅛"	5"	2½"	5¼"	2¾"	1¼"	11/16"	1 1/16"	⅜"	⅝"	2.0	2	83.0 LB
W8X21	21 LB	¾" DIA. X 4¾" 62 TO 63 FT-LB	6"	2¼"	1⅜"	3½"	1¼"	1½"	¾"	5/16"	13/32"	11"	12¾"	5½"	2½"	5¼"	2¾"	1¼"	13/16"	1"	½"	¾"	3.1	2¼"	124.0 LB
W10X22	22 LB											12⅞"	14⅝"	6"	3"	5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾"	3.9	2¼"	134.0 LB
W12X26	26 LB											15"	16¾"	6"	3"	6½"	3½"	1⅝"	13/16"	1 5/16"	½"	¾"	4.5	2¼"	152.0 LB

◪ TOTAL STRUCTURAL CARBON STEEL WEIGHT FOR ONE POST = V + (POST LENGTH X POST WEIGHT PER FOOT)

"V" INCLUDES STUB POST, BASE PLATES, STIFFENER PLATES, PERFORATED FUSE PLATES, BOLTS, NUTS, AND WASHERS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

MATERIALS SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506, UNLESS NOTED OTHERWISE.

FABRICATION SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506.

ALL POST, POST STUBS & ATTACHMENTS SHALL BE ASTM A709 GRADE 50, GALVANIZED IN ACCORDANCE WITH ASTM A123.

THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST, FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.

H.S. BOLTS, WASHERS, & NUTS SHALL BE A325 GALVANIZED.

FOUNDATION MATERIAL PROPERTIES

CONCRETE MASONRY	F'C = 3,500 P.S.I.
BAR STEEL REINFORCEMENT (UNCOATED), GRADE 60	FY = 60,000 P.S.I.

DESIGN DATA

DESIGN CONFORMS TO AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS 1ST EDITION 2015 (WITH 2017 & 2018 INTERIM REVISIONS).

DEAD LOADS (DL):

- STEEL POST SELF WEIGHT
- SIGN PANEL WEIGHT = 3 PSF

WIND LOADS (WL):

WIND LOADS WERE APPLIED TO THE PROJECTED AREAS OF THE SIGN PANELS AND THE STEEL SIGN POSTS.

- BASIC WIND SPEED = 76 MPH
- MEAN RECURRANCE INTERVAL (MRI) = 10 YEARS
- HEIGHT & EXPOSURE FACTOR = 1.00
- DIRECTIONALITY FACTOR = 0.85
- GUST EFFECT FACTOR = 1.14

WIND LOAD CASES:

- WL CASE 1: 1.0 X NORMAL WIND
- WL CASE 2: 1.0 X TRANSVERSE WIND
- WL CASE 3: 0.75 X NORMAL WIND + 0.75 X TRANSVERSE WIND

LOAD COMBINATIONS:

LOAD COMBINATION	TYPE	DL FACTOR	WL FACTOR
STRENGTH I	GRAVITY	1.25	-
EXTREME I	WIND	1.10	1.0
		0.9	1.0
SERVICE I	DEFLECTION	1.0	1.0

FOUNDATION DESIGN DATA

THE FOUNDATION DESIGN ASSUMED COHESIONLESS SOILS (LOOSE SAND) ABOVE THE WATER TABLE WITH THE FOLLOWING PROPERTIES:

- SOIL UNIT WEIGHT = 115 PCF
- ANGLE OF INTERNAL FRICTION = 24 DEGREES
- SOIL MODULUS PARAMETER = 25 LB/IN3

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY | PLANS CK'D.

CONNECTION & FOUNDATION DETAILS 2 OF 2

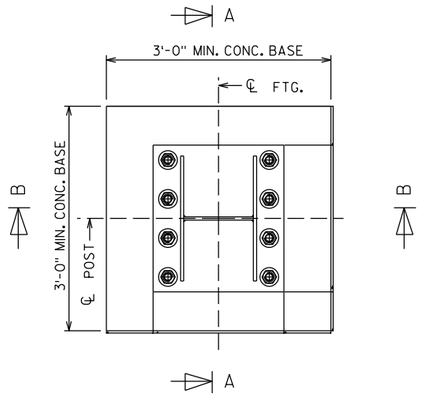
SHEET A3-1.20

369

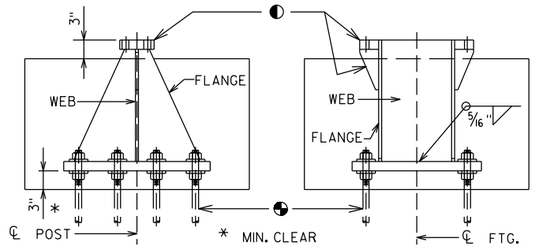
7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A31.DGN PLOT DATE : 3-MAR-2020 PLOT BY : dotc4c

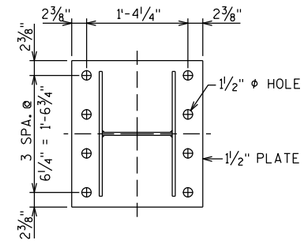
STUB AND ADHESIVE ANCHOR DETAILS



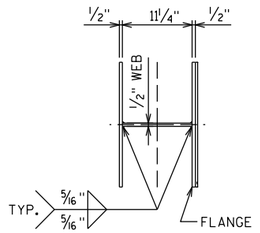
STUB SECTION



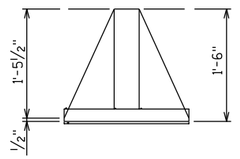
SECTION A-A SECTION B-B



BASE PLATE



STUB



FLANGE

◐ SEE BASE CONNECTION DETAILS ON "CONNECTIONS & FOUNDATION DETAILS" SHEETS.

◔ ADHESIVE ANCHORS 1¼-INCHES. ALLOWABLE PULL OUT CAPACITY = 15 KIPS. EMBED 1'-3" INTO ROCK.

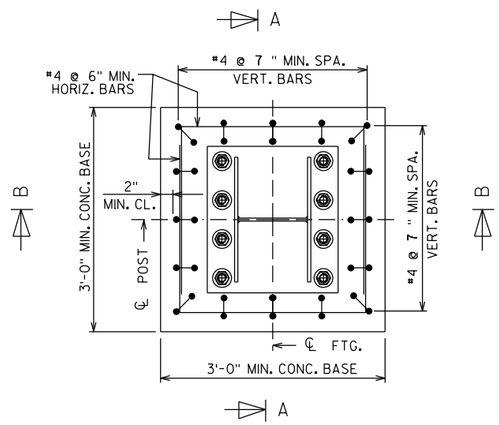
GENERAL NOTES:

QUANTITIES PER BASE:
REINFORCING STEEL = 62 LB
CONCRETE = 0.6 CY
STRUCTURAL STEEL = 335 LB

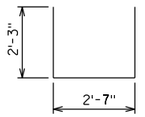
ALL MATERIALS, EXCEPT FOR ANCHOR ROD, NUTS, AND WASHERS, SHALL BE ASTM A709 GRADE 50. ALL MATERIALS TO BE GALVANIZED AFTER FABRICATION.

IF ROCK IS ENCOUNTERED PRIOR TO REACHING THE MINIMUM DRILLED SHAFT EMBEDMENT DEPTH DEFINED ON THE FOUNDATION DATA TABLE OF THE "CONNECTIONS & FOUNDATION DETAILS 2 OF 2" SHEET, THE CONTRACTOR SHALL INSTALL A TEST ADHESIVE ANCHOR AND DETERMINE THE PULL-OUT CAPACITY. IF THE FIELD TEST RESULTS IN A PULL-OUT CAPACITY GREATER THAN OR EQUAL TO 15 KIPS, THE CONTRACTOR MAY INSTALL THE ALTERNATE CONCRETE BASE AND BREAK-WAY STUB PER THE DETAILS ON THIS SHEET.

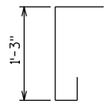
CONCRETE BASE DETAILS



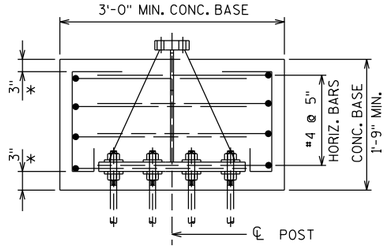
CONCRETE BASE PLAN



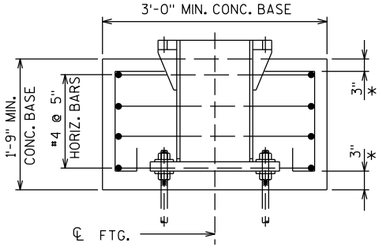
HORIZONTAL BAR
8 BARS @ 6'-11" LENGTH



VERTICAL BARS
16 BARS @ 2'-4" LENGTH
MAY BE PLACED IN SKEW
FOR CLEARANCE NEED



SECTION A-A



SECTION B-B

* MIN. CLEAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

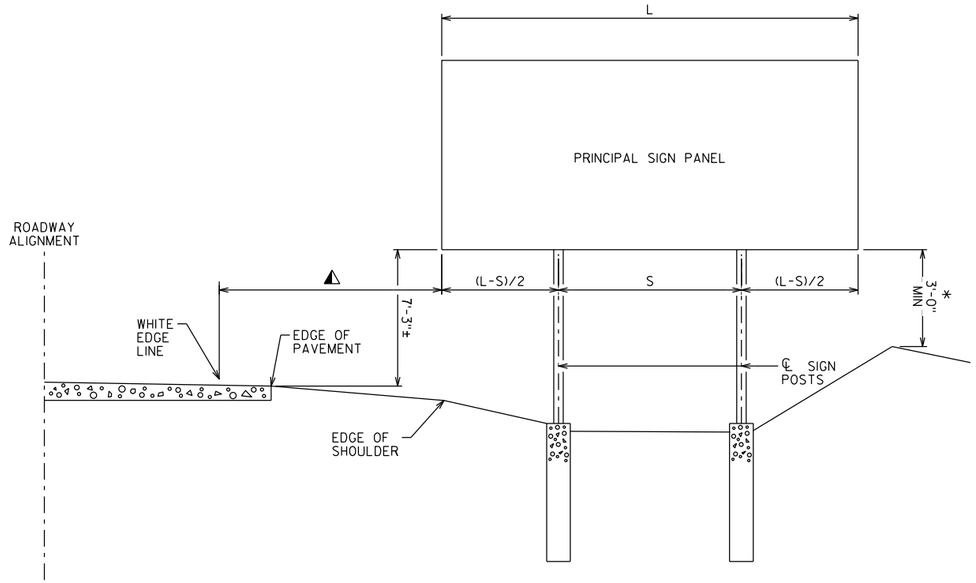
DRAWN BY | PLANS CK'D.

ALTERNATE BREAK-AWAY BASE ON ROCK

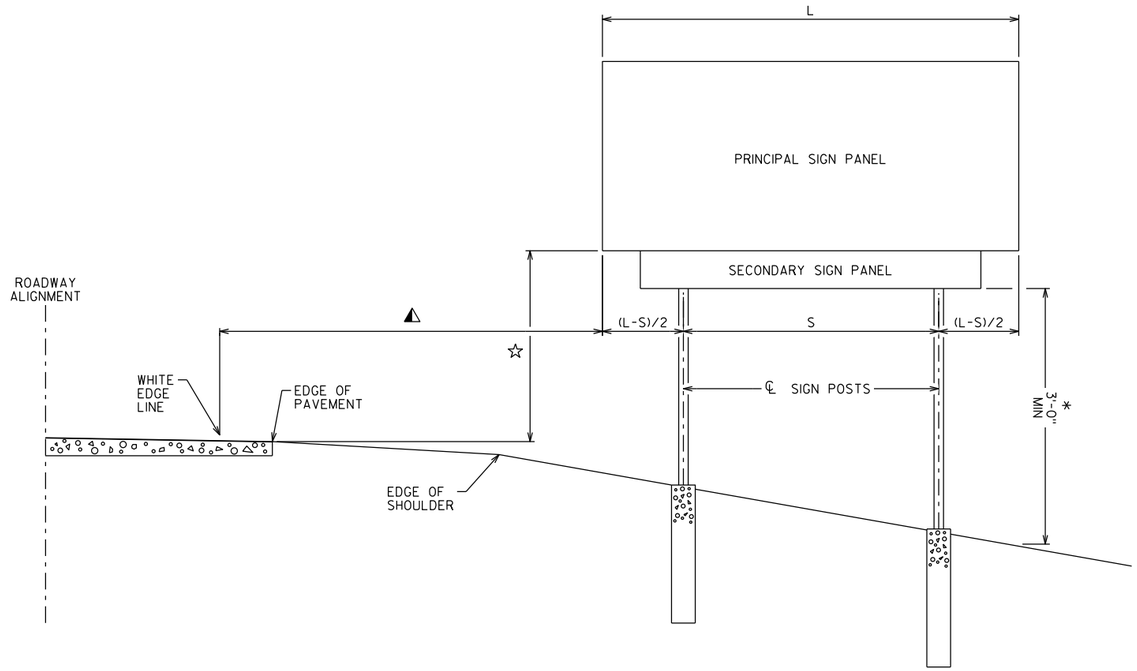
SHEET A3-1M.2

370

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A31M.DGN PLOT DATE : 9-SEPT-2019 PLOT BY : dotc4c



INSTALLATION WITHOUT SECONDARY SIGN



INSTALLATION WITH SECONDARY SIGN

TYPE 1 SIGN INSTALLATION NOTES:

FOR A 2-POST INSTALLATION, "S" EQUALS 3L/5, BUT SHALL NOT BE LESS THAN 6'-0".

FOR A 3-POST INSTALLATION, "S" EQUALS 5L/7, BUT SHALL NOT BE LESS THAN 12'-0". THE SPACING BETWEEN ANY TWO POSTS SHALL NOT BE LESS THAN 6'-0".

◭ UNLESS NOTED IN THE PLANS, THE SIGN OFFSET DISTANCE SHALL BE A MINIMUM OF 17'-6" FROM THE WHITE EDGE LINE, DESIRABLE 30'-0".

THE ± TOLERANCE SHOWN ON THIS SHEETS IS 3".

THE VERTICAL SIGN HEIGHT CLEARANCES SHOWN ON THIS SHEET ARE MEASURED FROM THE BOTTOM OF THE SIGN PANEL TO THE NEAR EDGE OF PAVEMENT.

☆ THE VERTICAL CLEARANCE SHALL BE 8'-3"± WHEN THE SECONDARY SIGN HEIGHT IS 3'-0" OR LESS. FOR SECONDARY SIGN HEIGHTS LARGER THAN 3'-0", THE VERTICAL CLEARANCE TO THE BOTTOM OF THE SECONDARY SIGN PANEL SHALL BE 5'-3"±.

* THE VERTICAL SIGN GROUND CLEARANCE ON RIGHT END OF SIGN SHALL BE A MINIMUM OF 3'-0"±.

POST LENGTHS SHOWN IN THE MISCELLANEOUS QUANTITIES ARE ESTIMATED LENGTHS. THE CONTRACTOR SHALL VERIFY POST LENGTHS AT THE TIME OF FINAL GRADING.

REFER TO THE TRAFFIC ENGINEERING OPERATIONS AND SAFETY MANUAL FOR FURTHER GUIDANCE ON MINIMUM VERTICAL CLEARANCE REQUIREMENTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

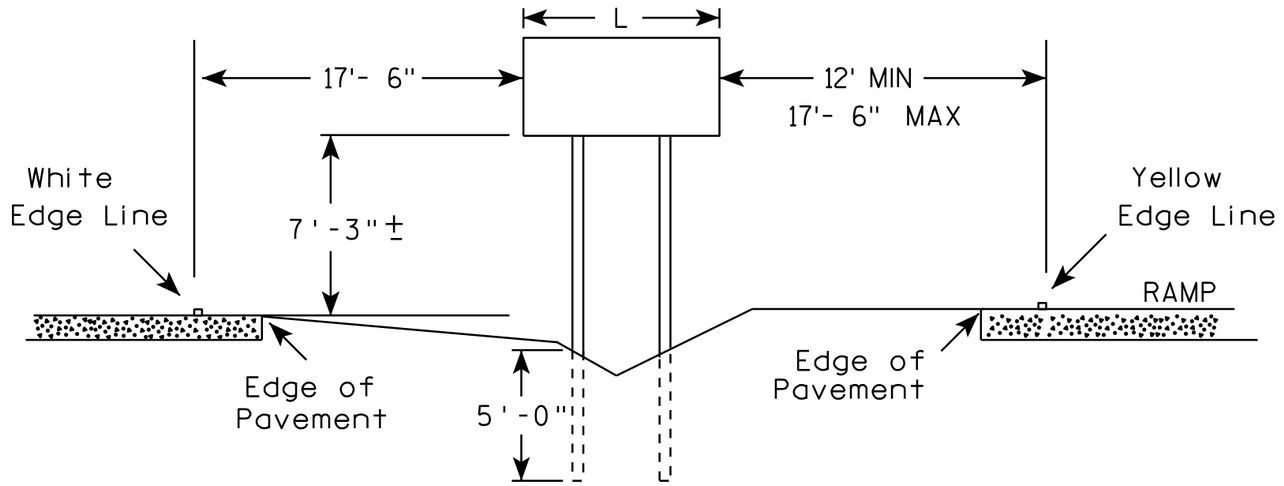
STRUCTURE BTO TYPE I SIGNS

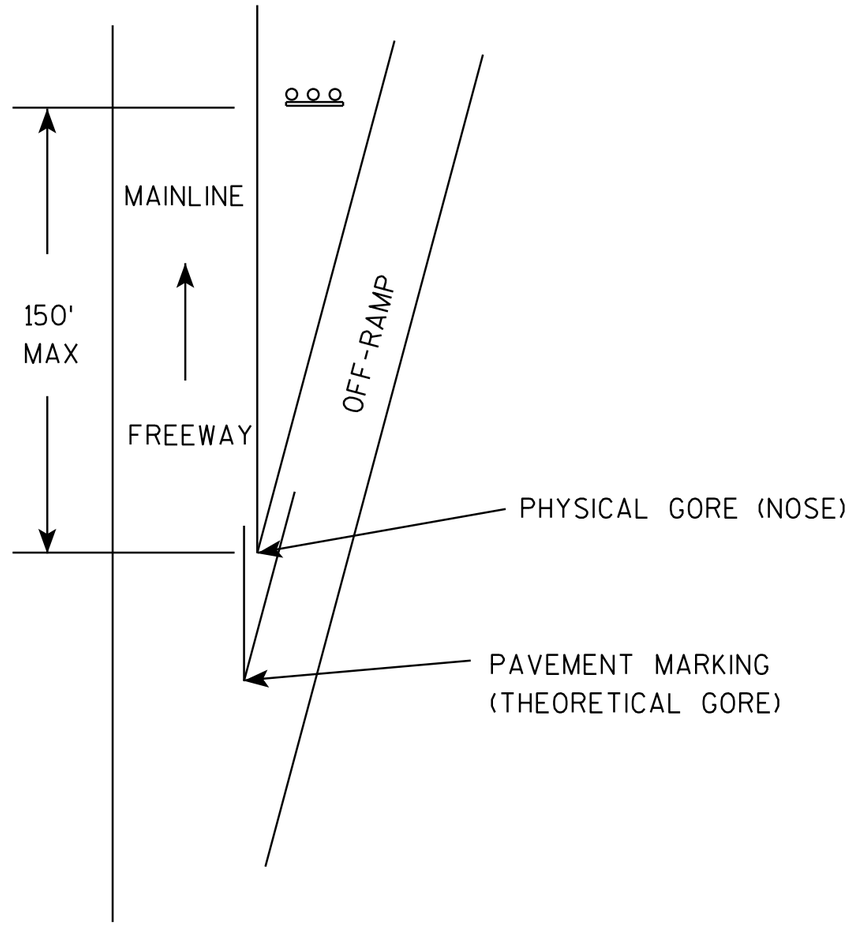
DRAWN BY | PLANS CK'D.

TYPICAL TYPE I SIGN INSTALLATION

SHEET A4-1.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 371	E





GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 10 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

7

7

TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

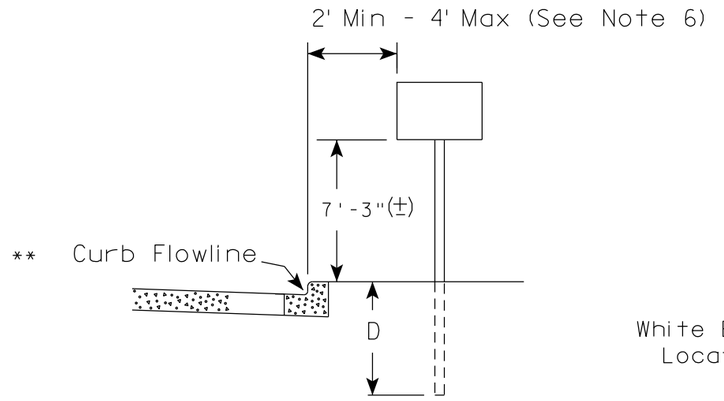
DATE 2/06/14 PLA... A4-2.3

PROJECT NO: | SHEET NO: E

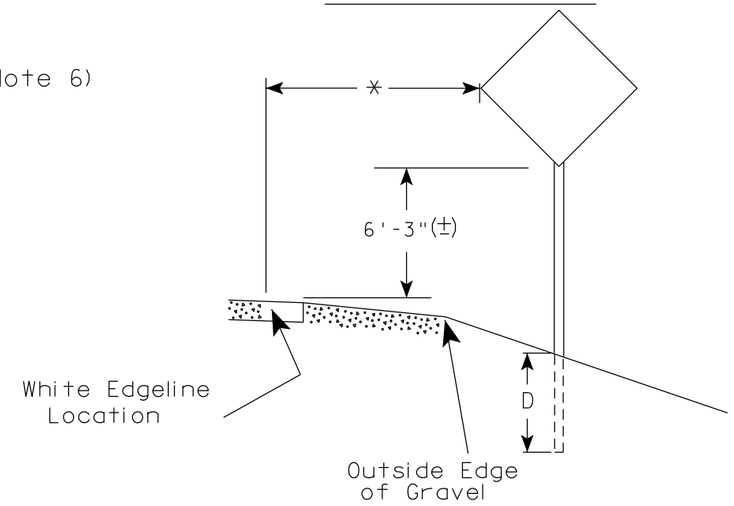
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A42.DGN PLOT DATE : 06-FEB-2014 12:36 PLOT BY : mscsja

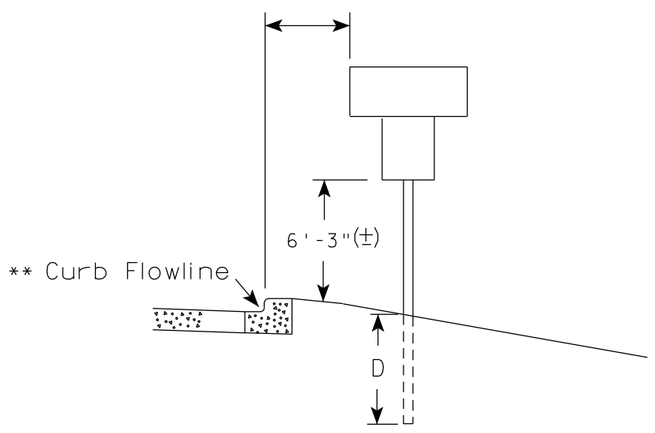
WISDOT/CADDS SHEET 42

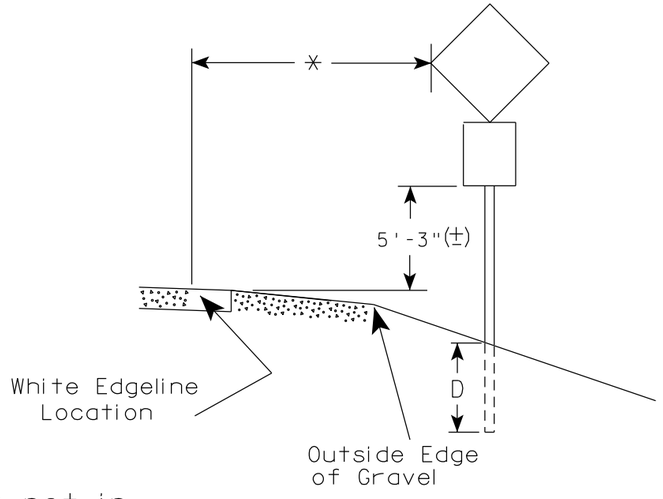
URBAN AREA



RURAL AREA (See Note 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. Offset of signs is measured from the flow line.

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

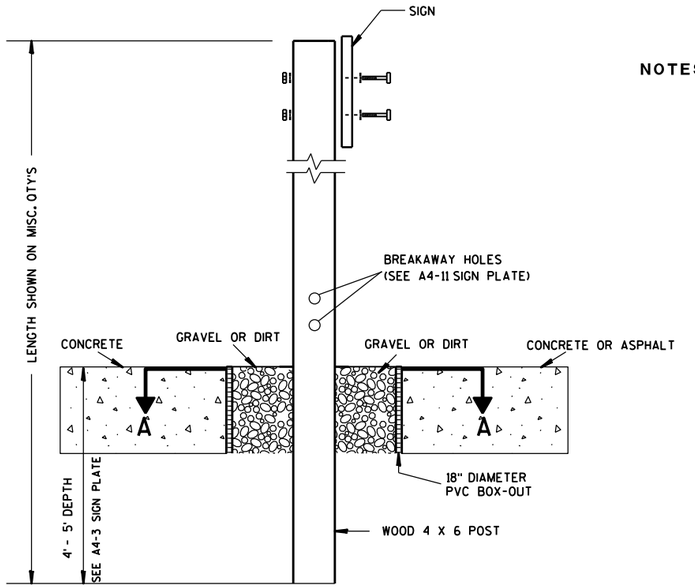
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

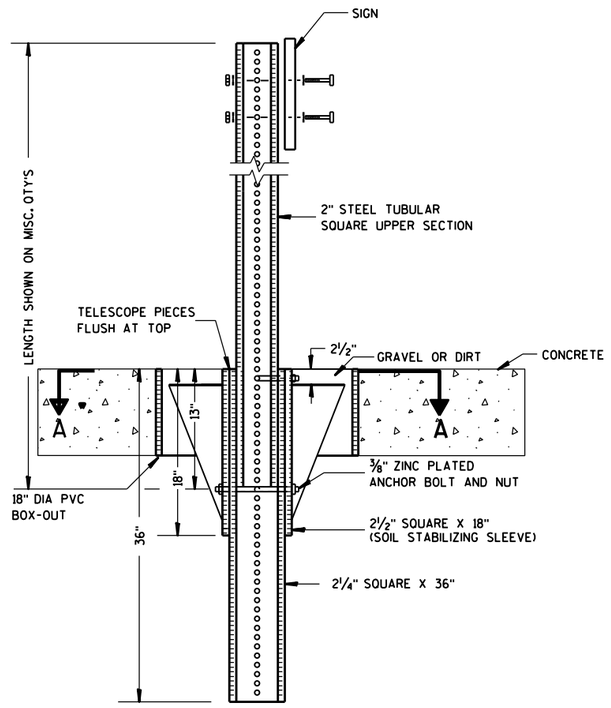
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 373	E



ELEVATION VIEW

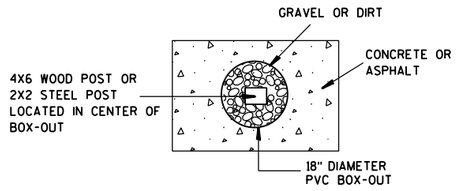
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

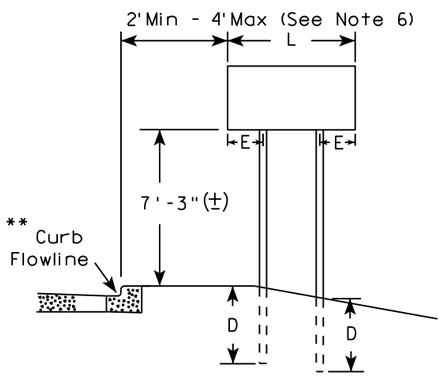
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

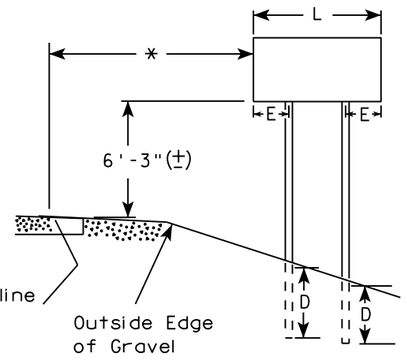
DATE 1/27/14 PLATE NO. A4-3B.1

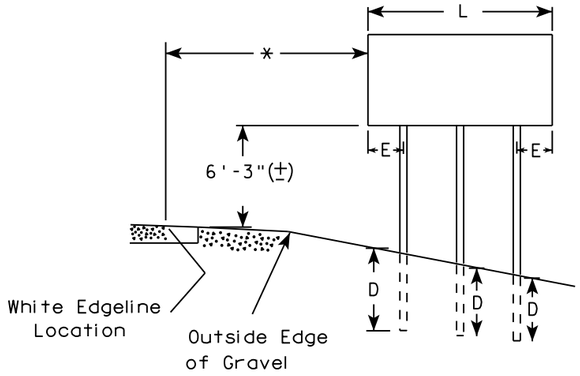
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

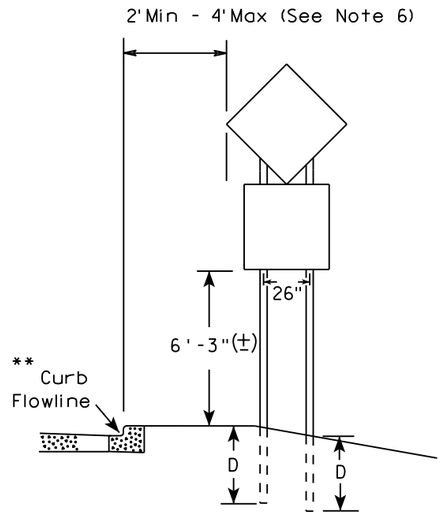
URBAN AREA



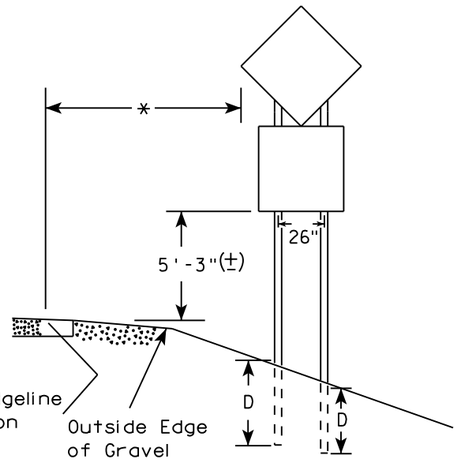
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

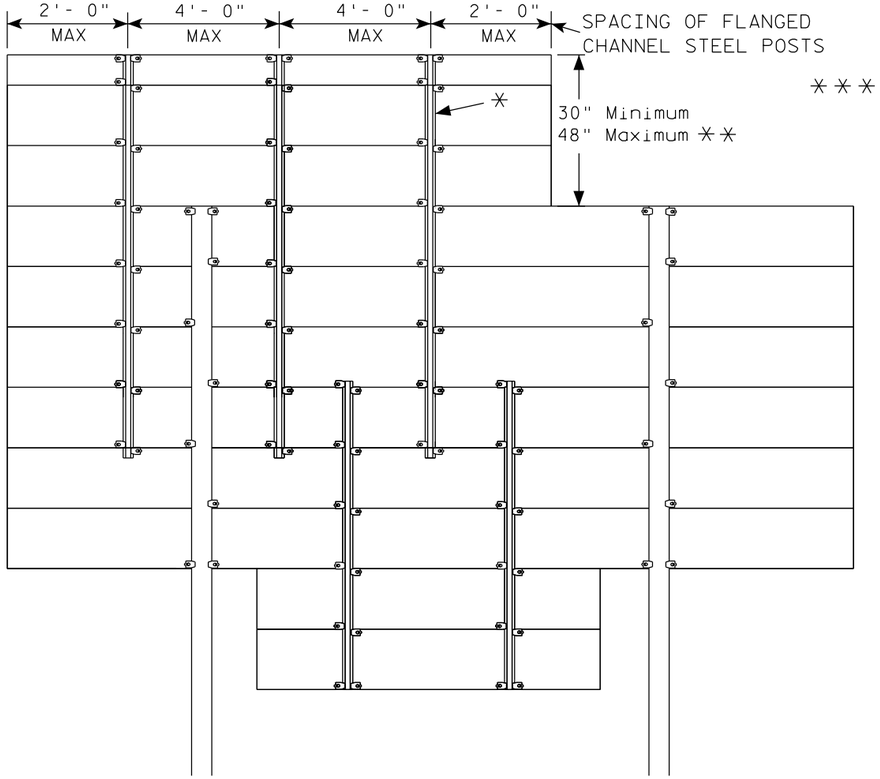
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 375	E

GROUND MOUNTED SIGN



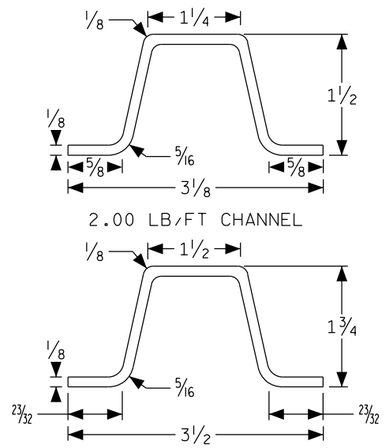
⁑=2.00 lb/ft AND 4.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

⁑⁑=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

⁑⁑⁑ THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 15 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 15 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAILS

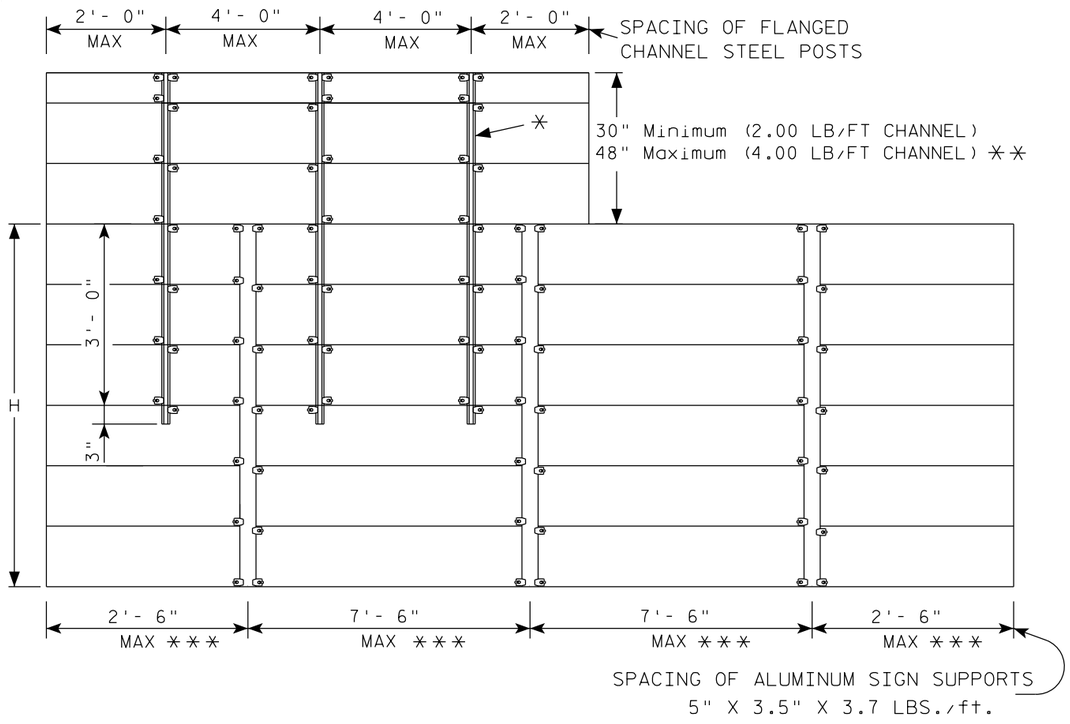
NOT TO SCALE



2.00 LB/FT CHANNEL

4.00 LB/FT CHANNEL

SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

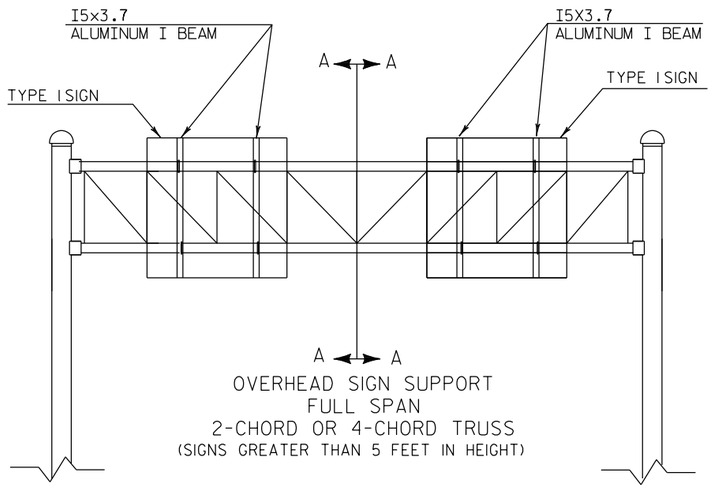
   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

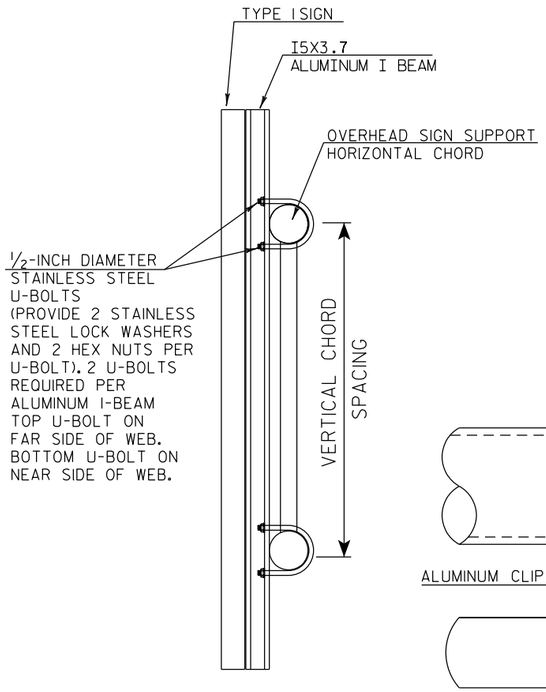
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

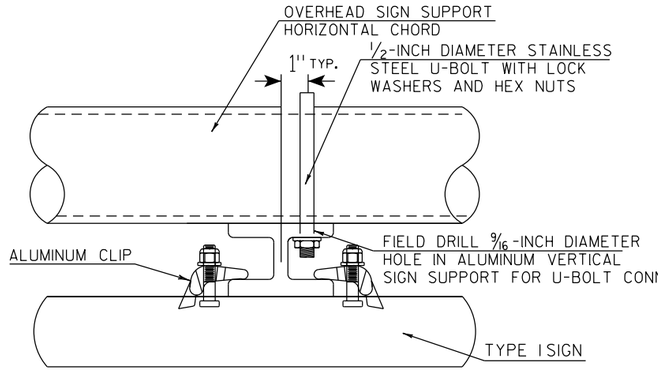
DATE 1/07/20 PLATE NO. A4-6.12



OVERHEAD SIGN SUPPORT
FULL SPAN
2-CHORD OR 4-CHORD TRUSS
(SIGNS GREATER THAN 5 FEET IN HEIGHT)



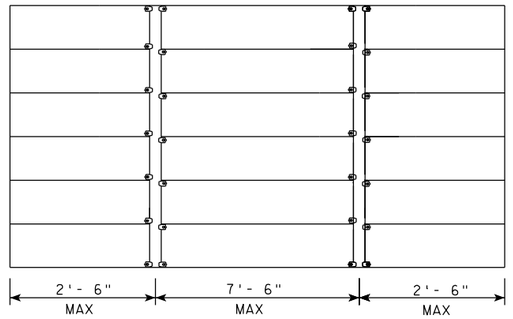
CUT SECTION A-A



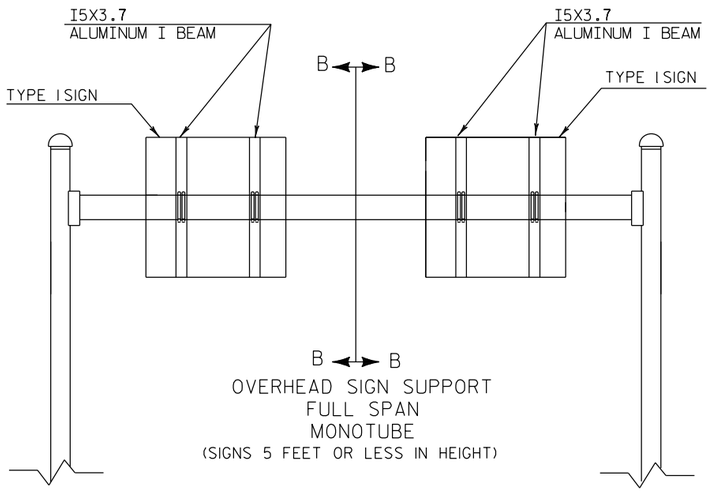
TYPICAL SIGN CONNECTION FOR
2-CHORD OR 4-CHORD TRUSS
PLAN VIEW

GENERAL NOTES

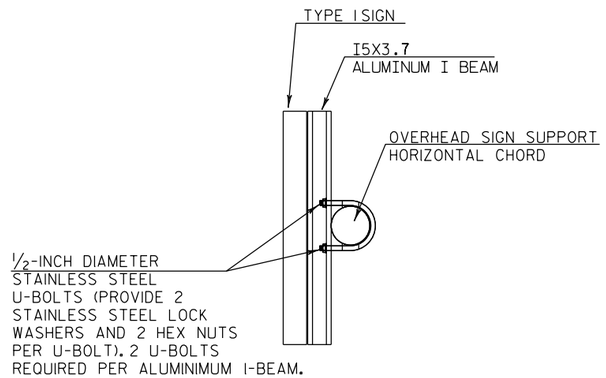
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE CLIPS ON EVERY EXTRUDED PANEL JOINT PER SIGN PLATE A4-6.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. MINIMUM NUMBER OF BRACKETS PER SIGN IS TWO. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
   STAINLESS STEEL U-BOLTS AND LOCKWASHERS ASTM 304.
   STAINLESS STEEL HEX NUTS ASTM A276.
   ALUMINUM I-BEAMS ARE 6061-T6.
9. SLOTTED HOLES IN I-BEAMS ARE NOT ALLOWED



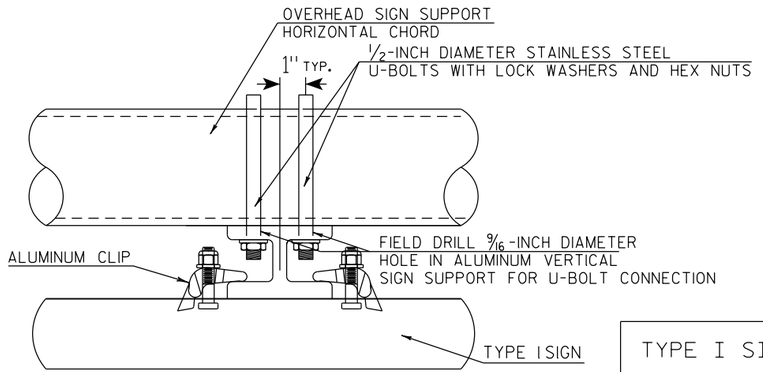
SPACING OF I5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT



OVERHEAD SIGN SUPPORT
FULL SPAN
MONOTUBE
(SIGNS 5 FEET OR LESS IN HEIGHT)



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
MONOTUBE
PLAN VIEW

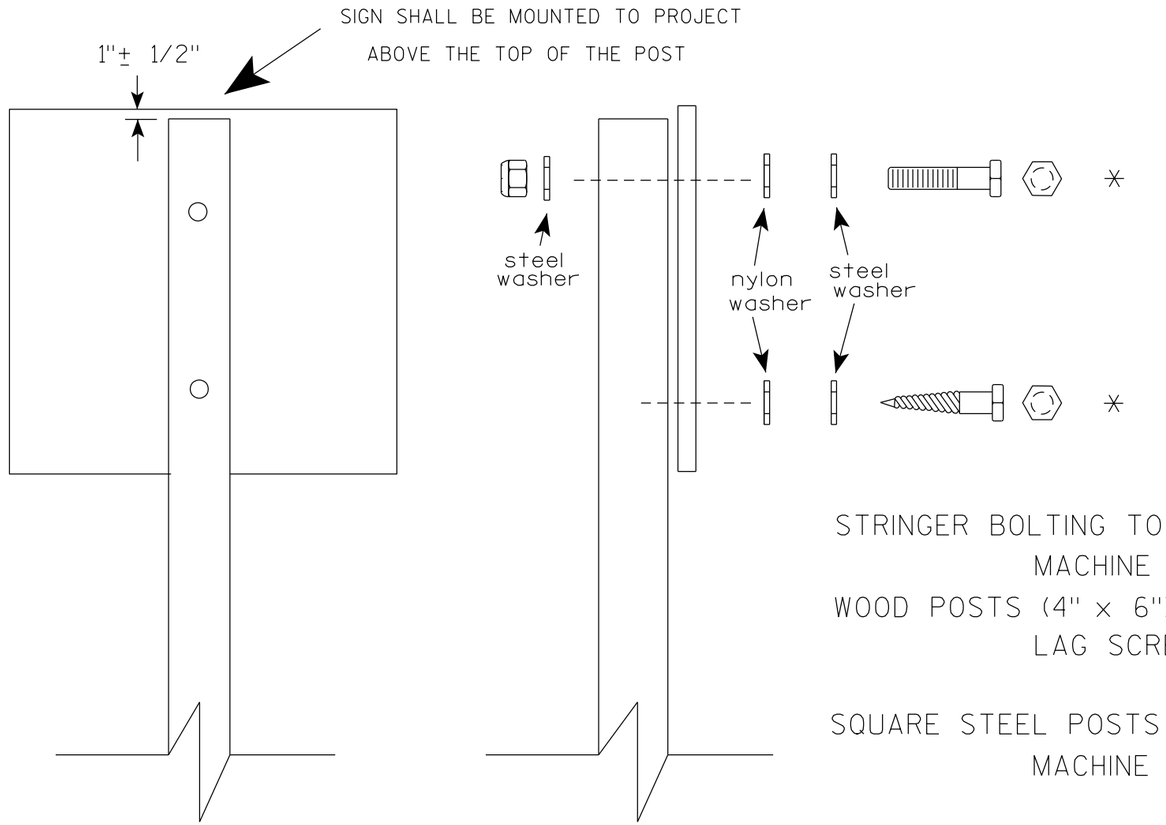
TYPE I SIGN CONNECTION
TO OVERHEAD SIGN SUPPORT

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-7A.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 377	E



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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

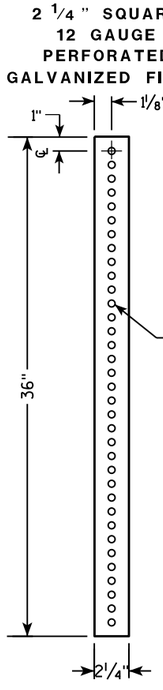
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

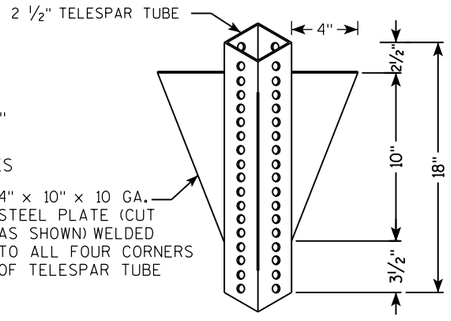
SHEET NO: 378 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

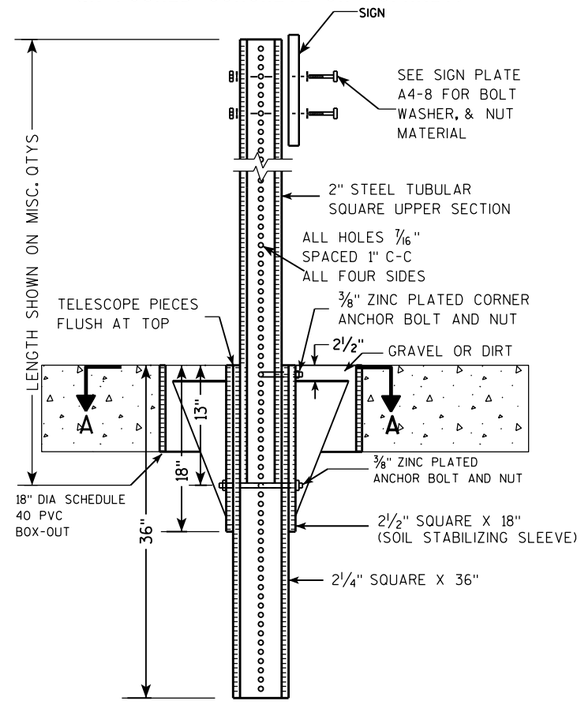
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



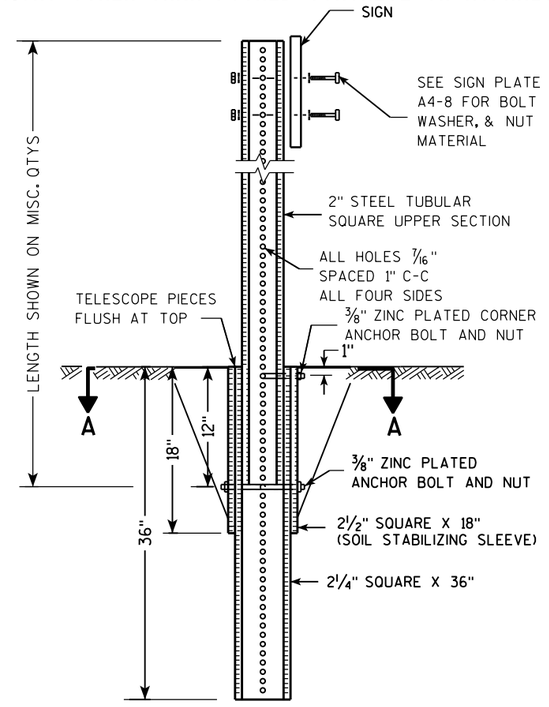
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

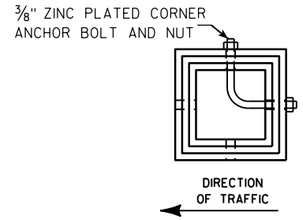


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

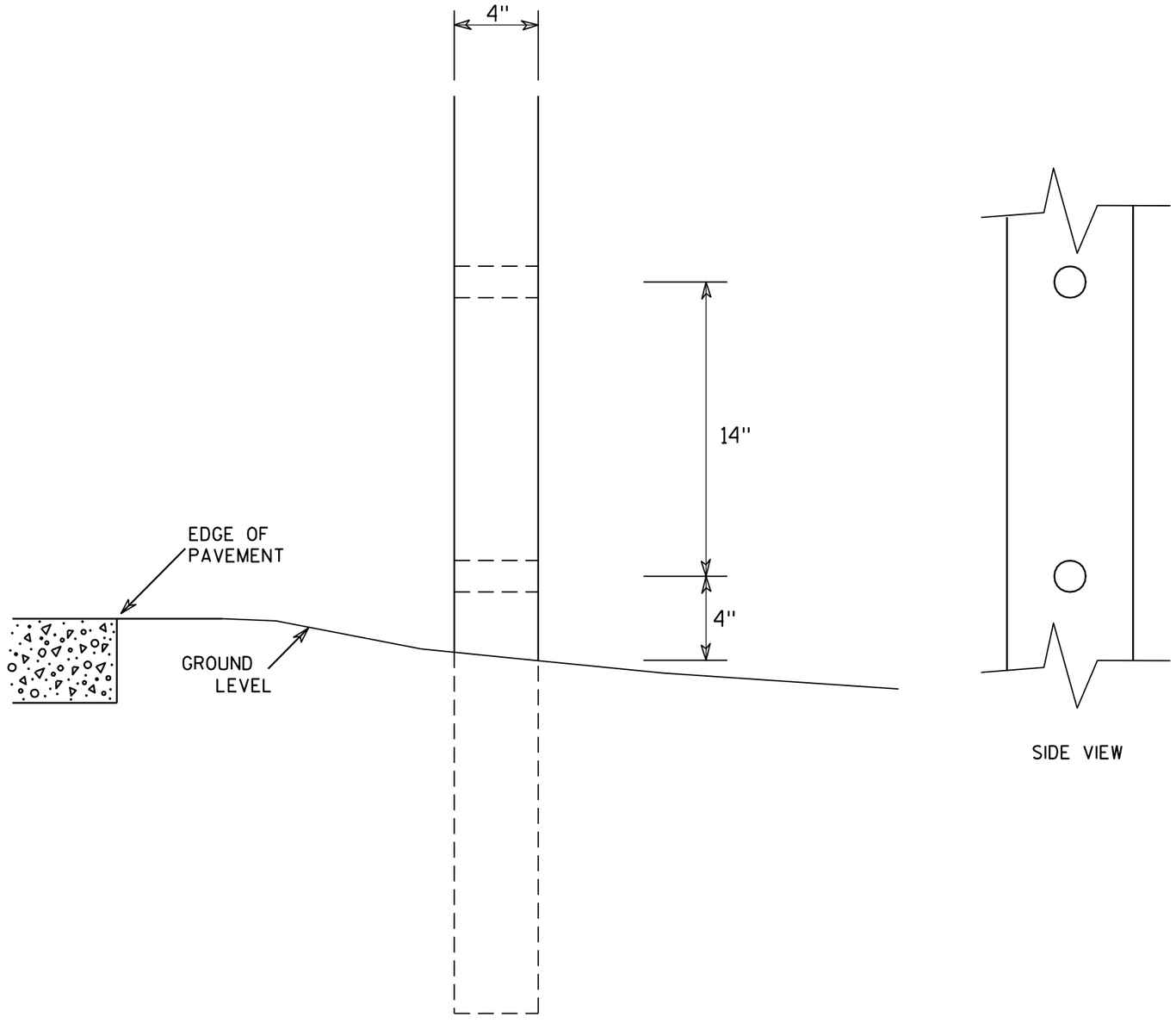
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 379 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

7

7

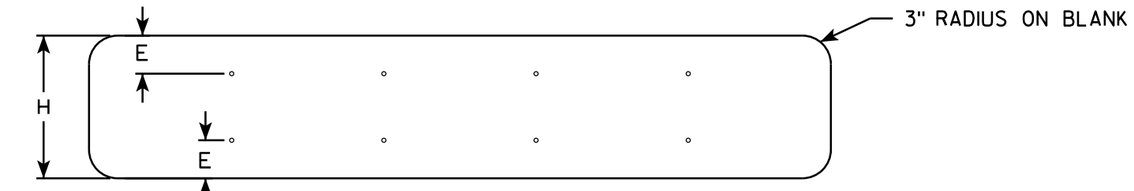
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

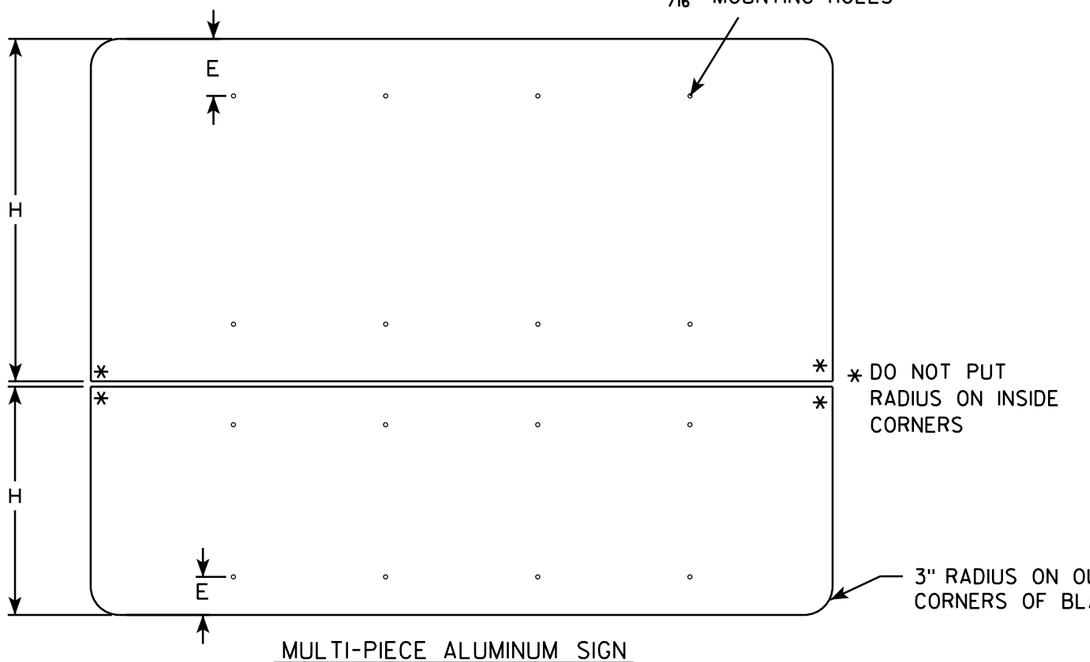
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 380	E



SINGLE PIECE ALUMINUM SIGN

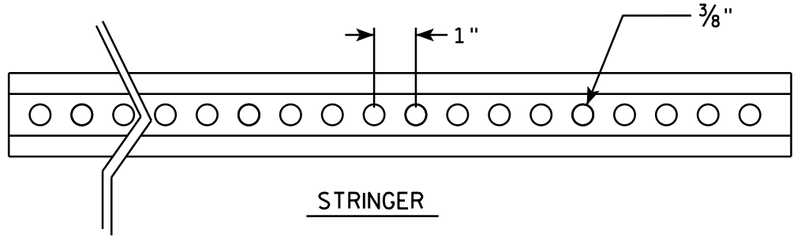


MULTI-PIECE ALUMINUM SIGN

GENERAL NOTES

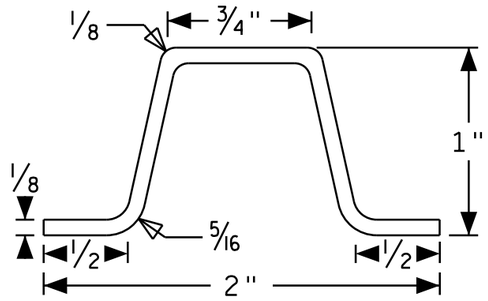
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

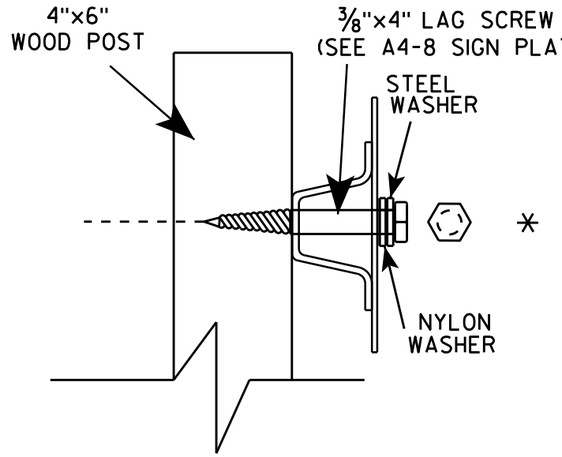


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

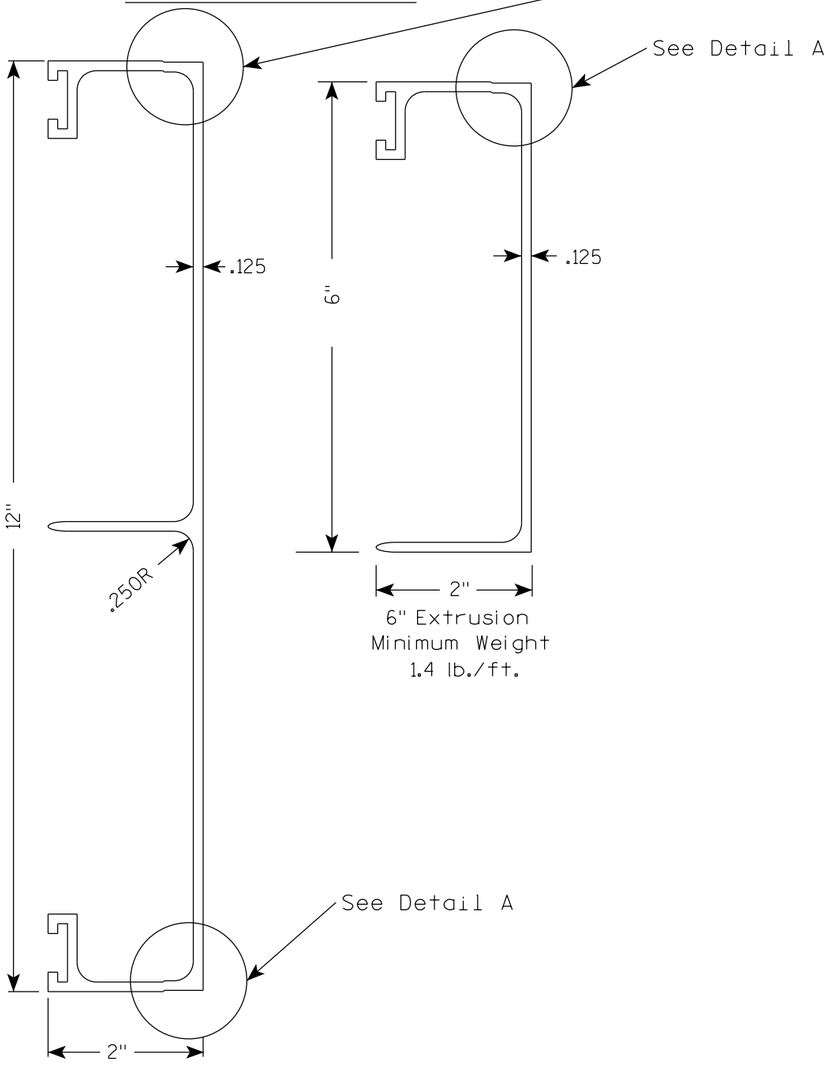
DATE 4/26/16 PLATE NO A4-18.1

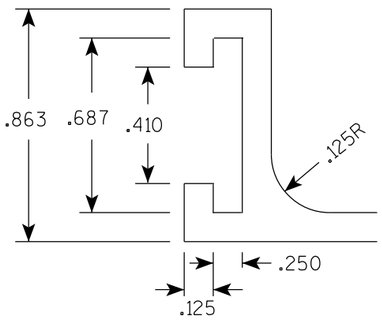
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

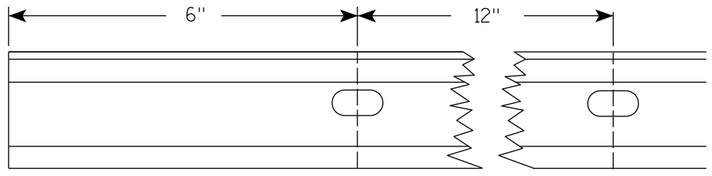
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000

WISDOT/CADDS SHEET 42

Extruded Shape







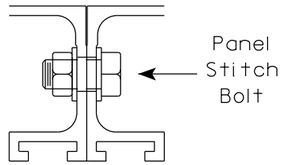
Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

Hardware

STITCH BOLT, WASHER & NUT

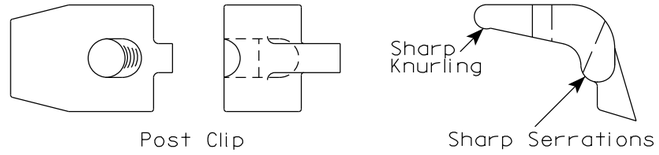
The hardware includes:

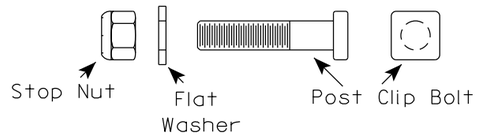
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

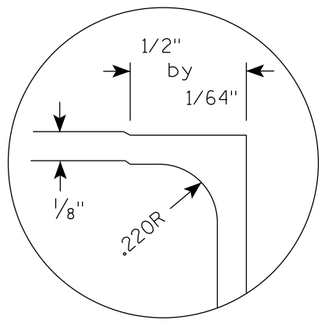
Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.



DETAIL A (EDGE WRAP JOINT)

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

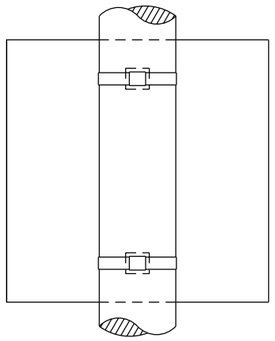
DATE 1/07/20 PLATE NO. A5-2.10

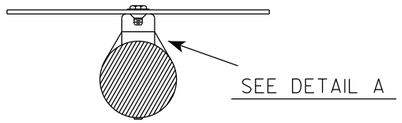
PROJECT NO:

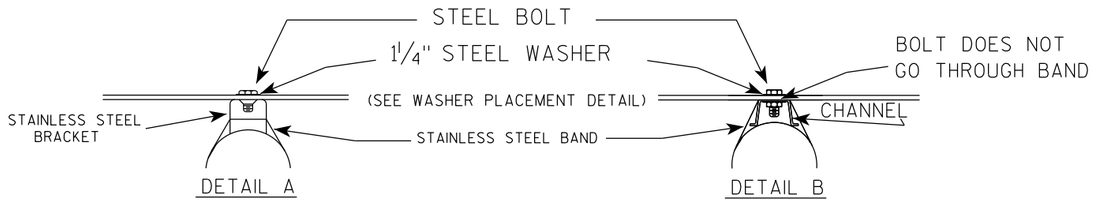
SHEET NO: 382 E

BANDING

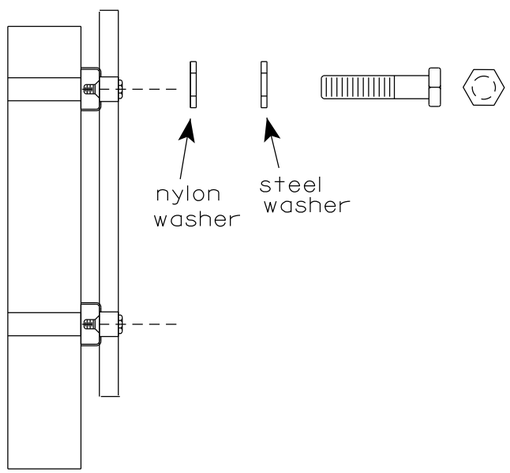
SINGLE SIGN







WASHER PLACEMENT

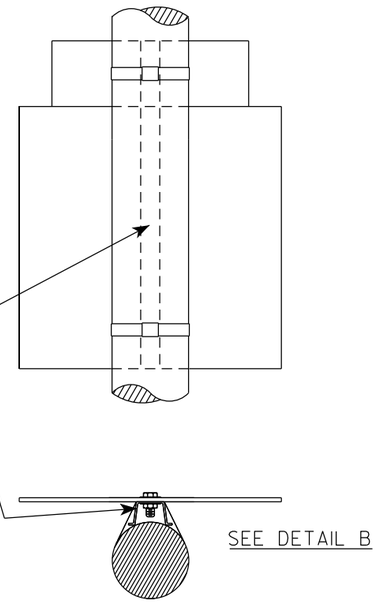


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

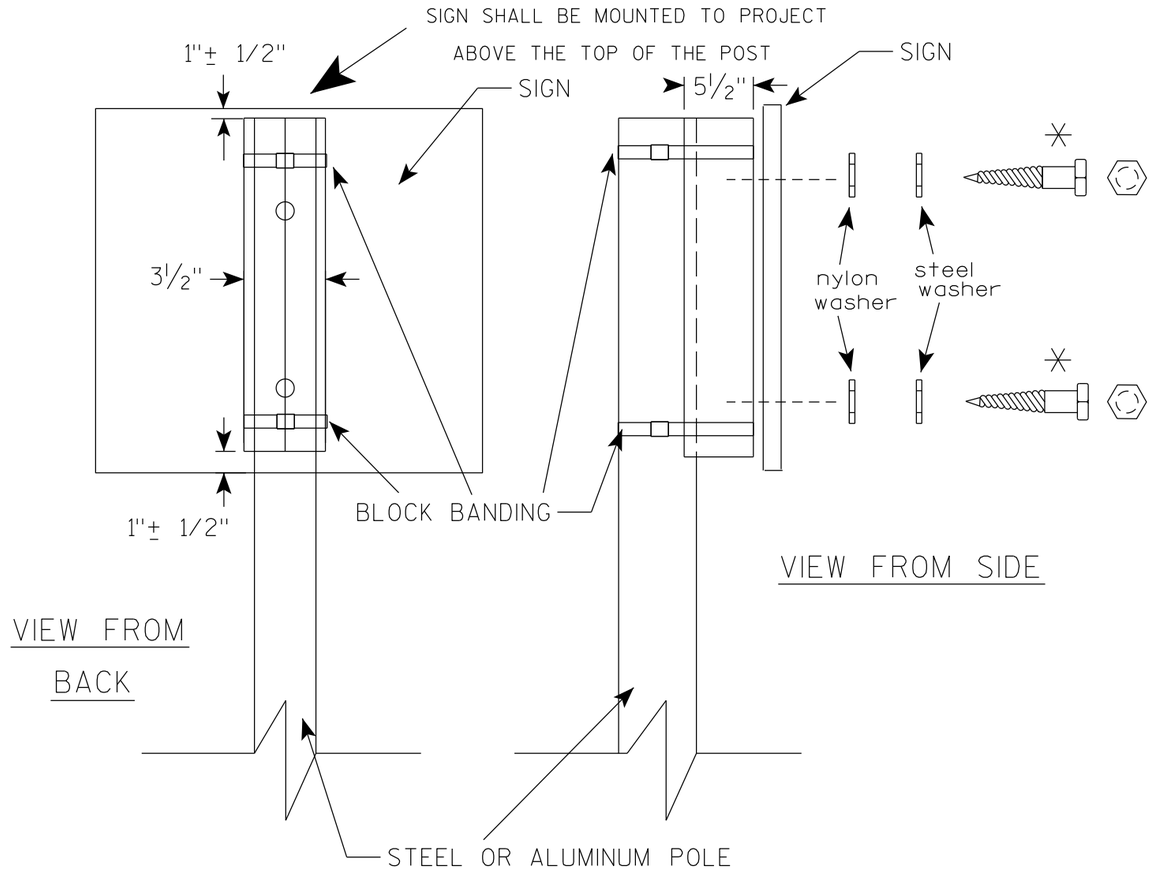
DATE 6/10/19 PLATE NO. A5-9.4

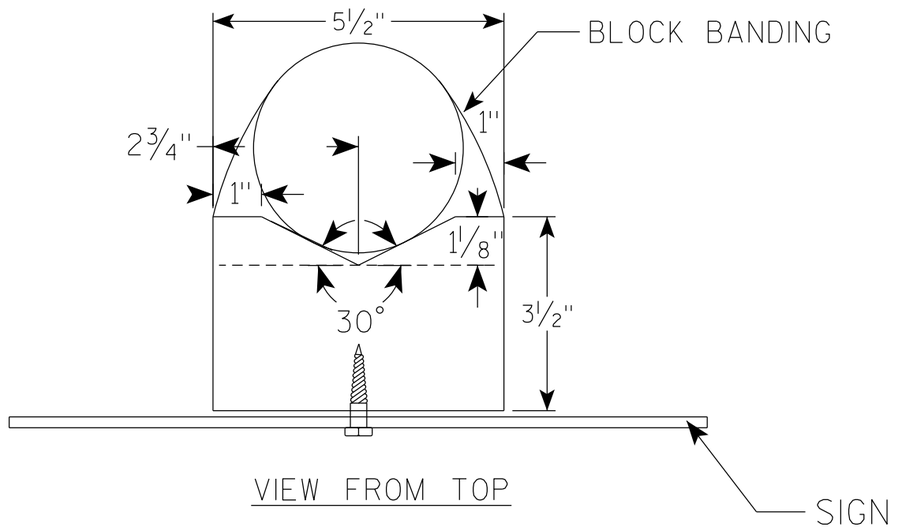
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 383	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

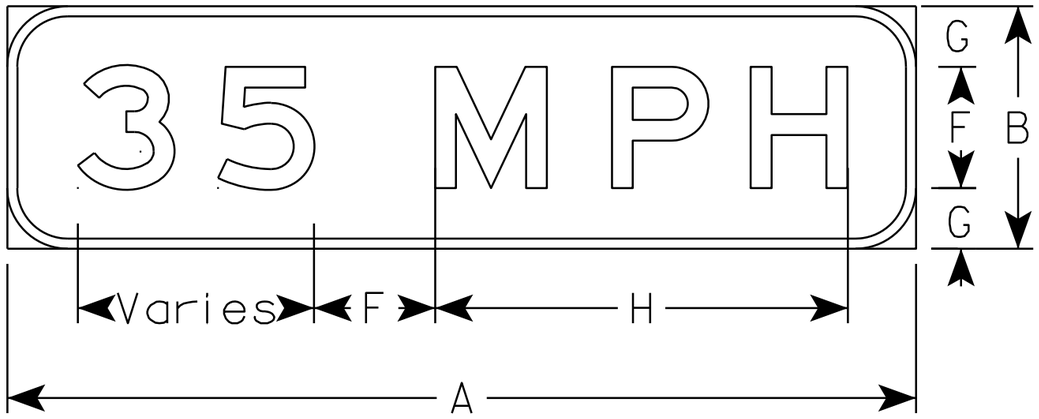
DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO: | SHEET NO: 384 | E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A510.dgn PLOT DATE : 10-JUN 2019 4:15 PLOT BY : mscj9h

WISDOT/CADDS SHEET 42

7 7



E13-1P

NOTES

1. Panel is - Type F reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E
4. The panel shown on this plate is for use with E5-1A.
5. Width, Radius and Border thickness shall match the E5-1A.
6. Substitute appropriate numerals and adjust placement to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	VARIES	24				12	6	40 7/8																			VARIES
2M																											
3																											
4																											
5																											

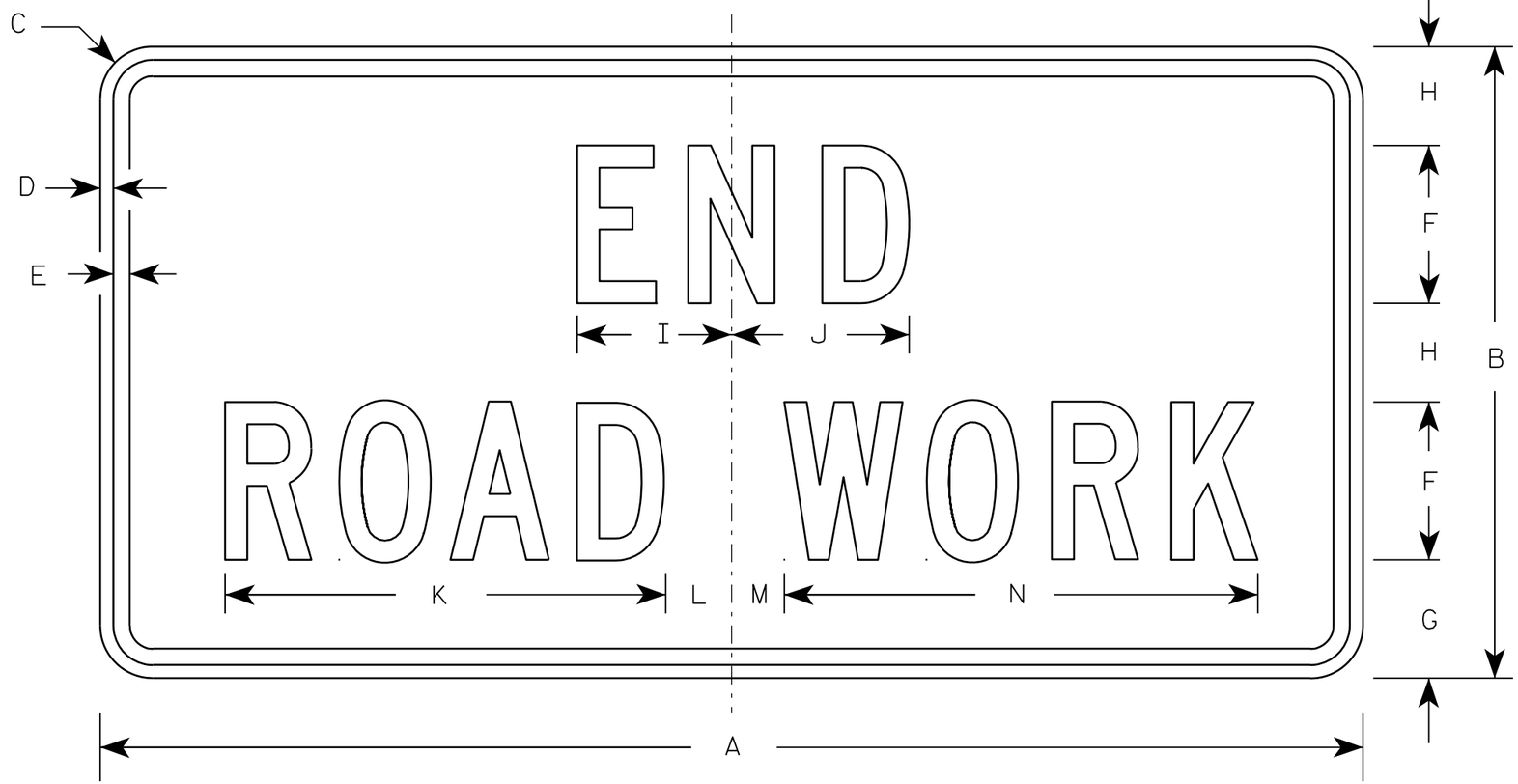
STANDARD SIGN
E13-1P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/5/2012 PLATE NO. E13-1P.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 385	E



G20-2A

NOTES

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

Metric equivalent for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 386	E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E
4. Material shall be .040 aluminmum



G20-60

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	108	24				12	6	14 7/8	78 1/4																		18.0
5																											

STANDARD SIGN
G20-60

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/15 PLATE NO G20-60.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\G2060.DGN PLOT DATE : 13-MAY-2015 08:46 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 20.431338:1.000000
WISDOT/CADDS SHEET 42

NOTES

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



G20-61

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	120	30	6		2	12	9	21	78 1/4	20 3/4																	25.0
5																											

STANDARD SIGN
G20-61

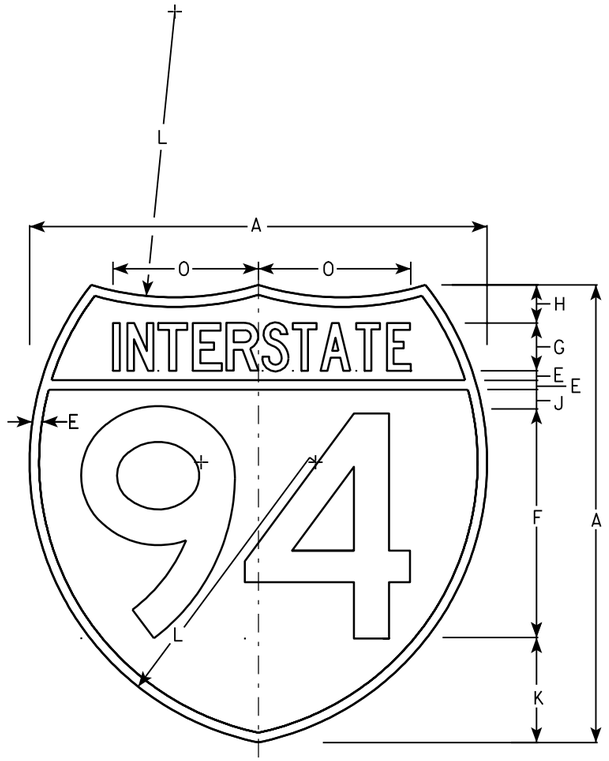
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

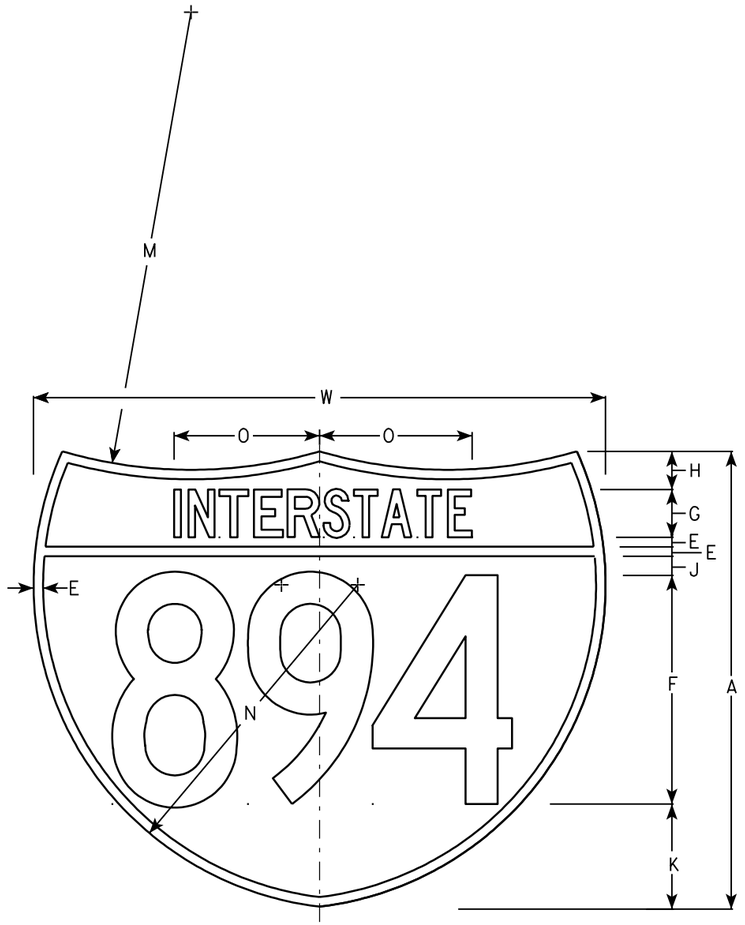
DATE 5/07/15 PLATE NO G20-61.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\G2061.DGN PLOT DATE : 07-MAY-2015 13:47 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 20.431338:1.000000 WISDOT/CADDS SHEET 42



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

7

7

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

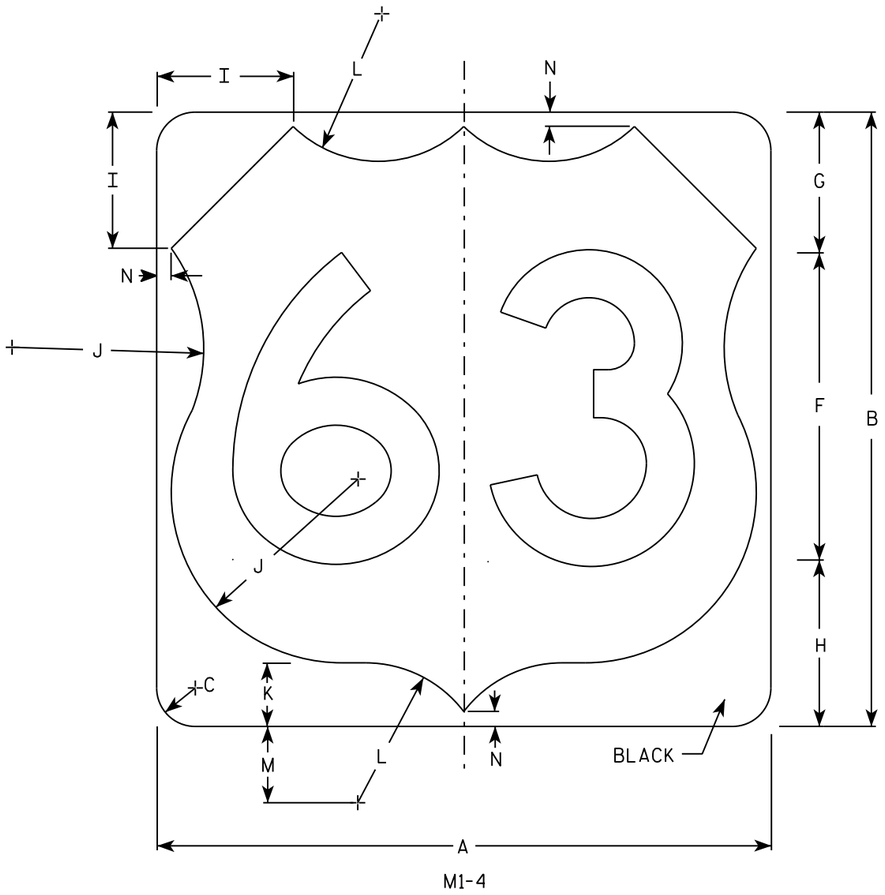
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

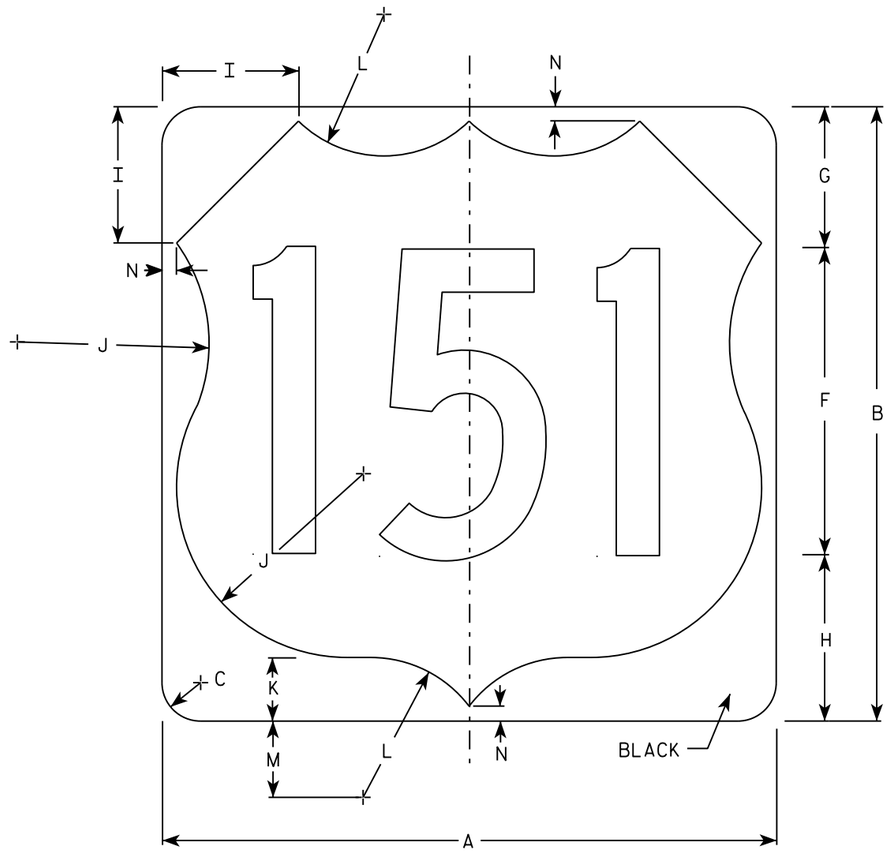
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 389	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



M1-4



M1-4

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

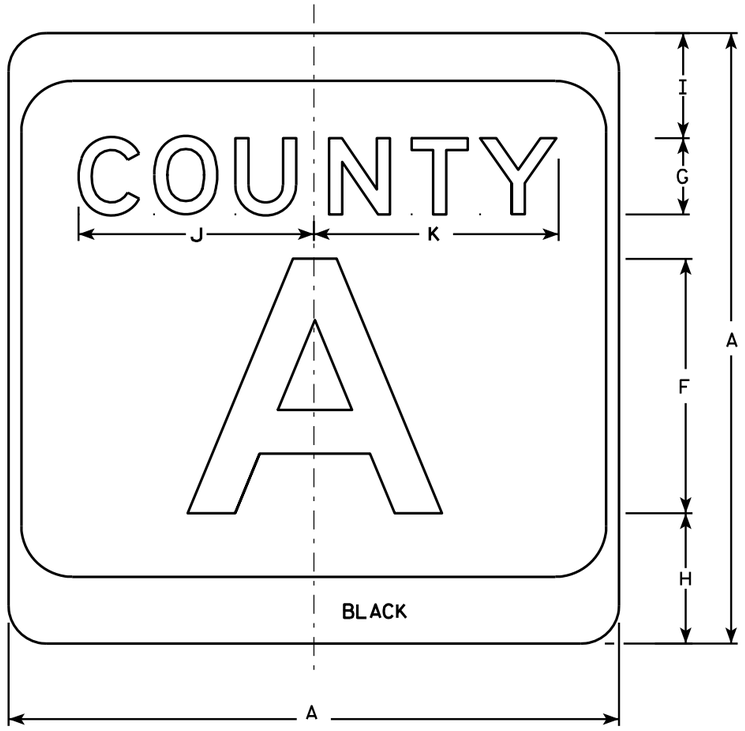
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

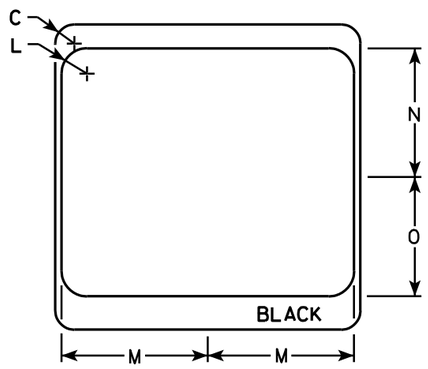
APPROVED Matthew R Rauch
for State Traffic Engineer

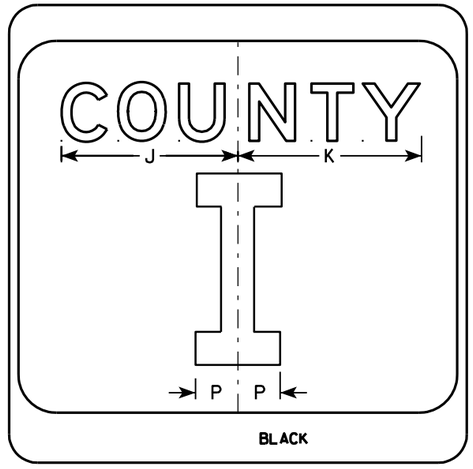
DATE 3/16/18 PLATE NO. M1-4.10

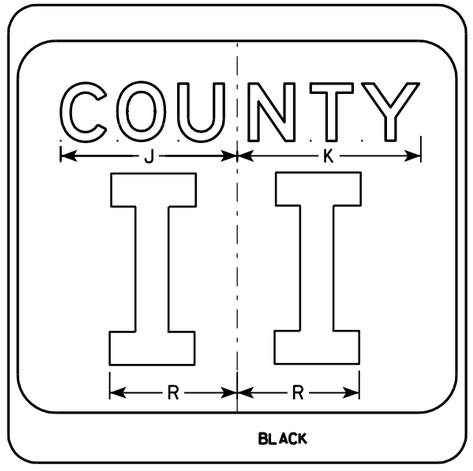
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 390	E



M1-5A







NOTES

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

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

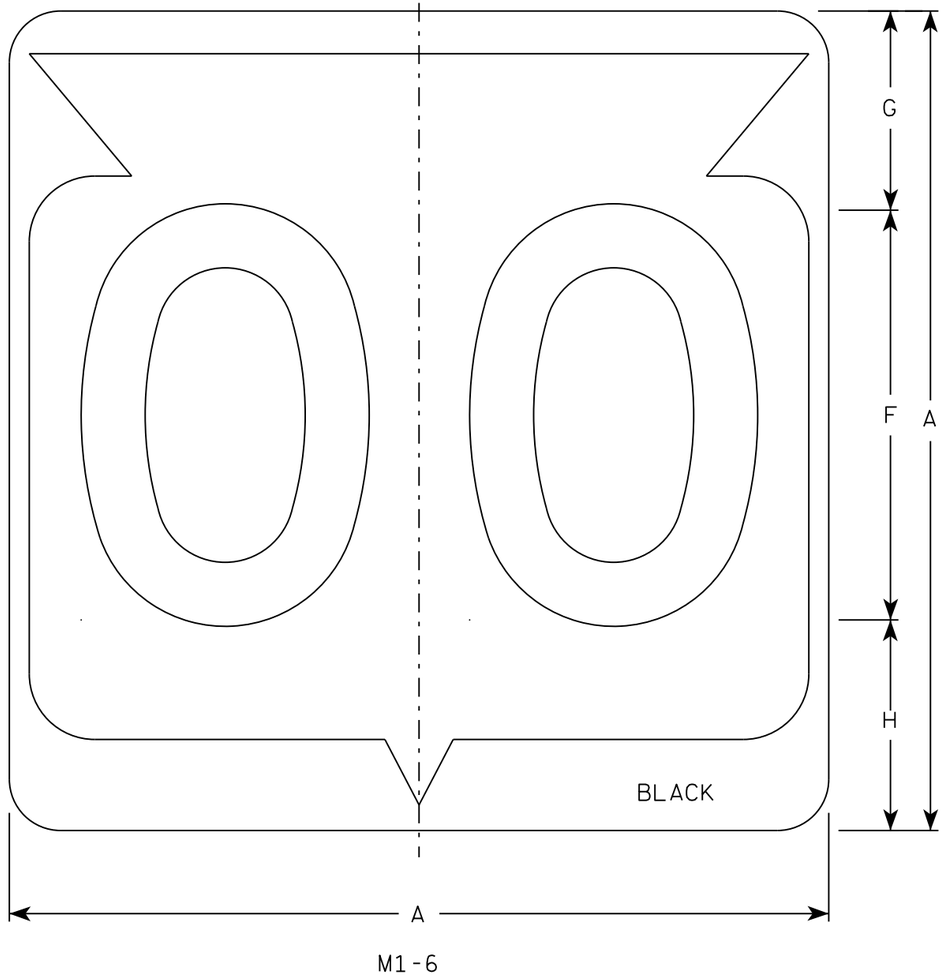
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

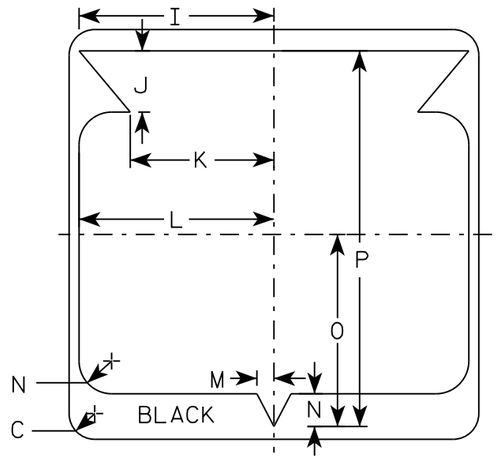
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 391 | E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



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

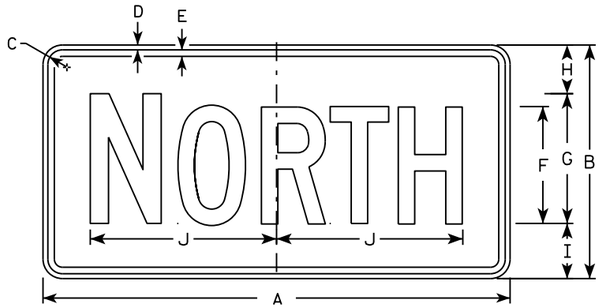
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

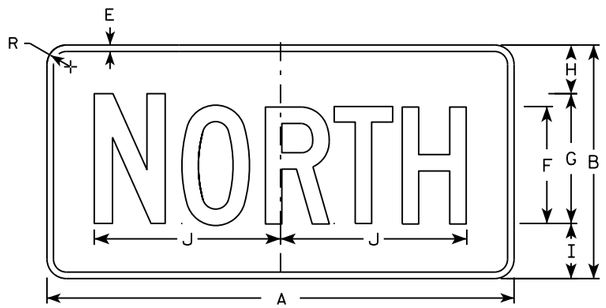
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 392	E



M3-1
MM3-1
MP3-1



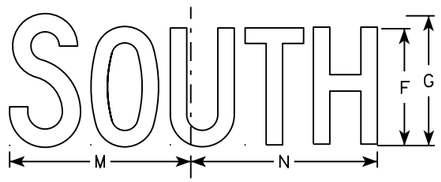
MB3-1
MK3-1
MN3-1



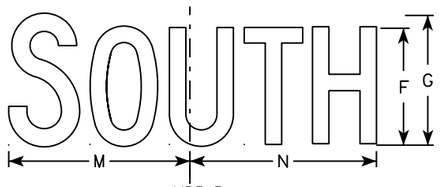
M3-2
MM3-2
MP3-2



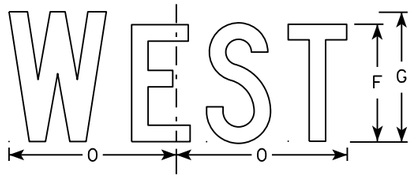
MB3-2
MK3-2
MN3-2



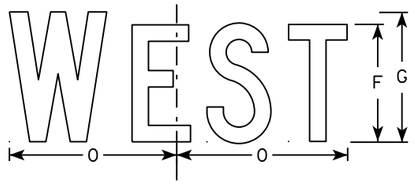
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

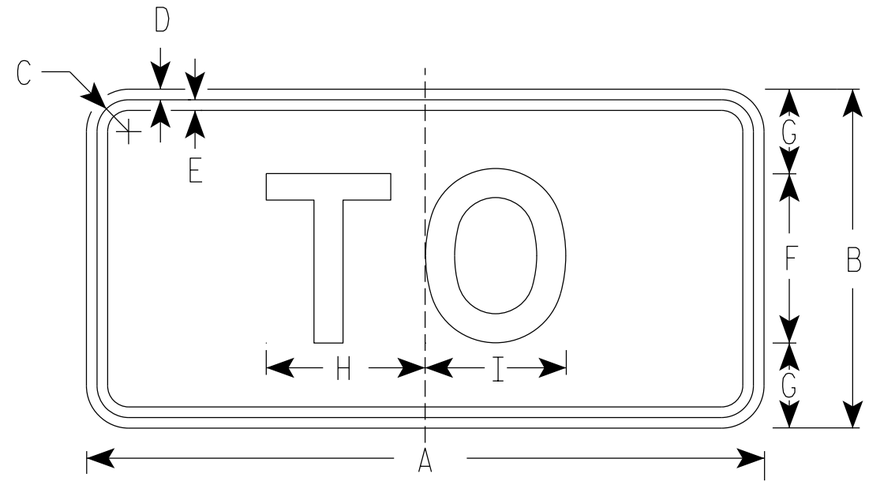
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

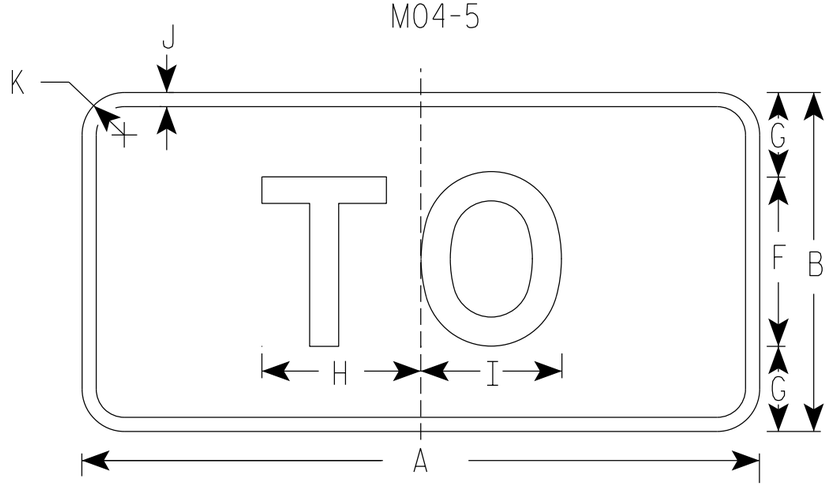
DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-5
MM4-5
MP4-5
M04-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   M04-5 Background - Orange Type F Reflective
   Message - Black

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

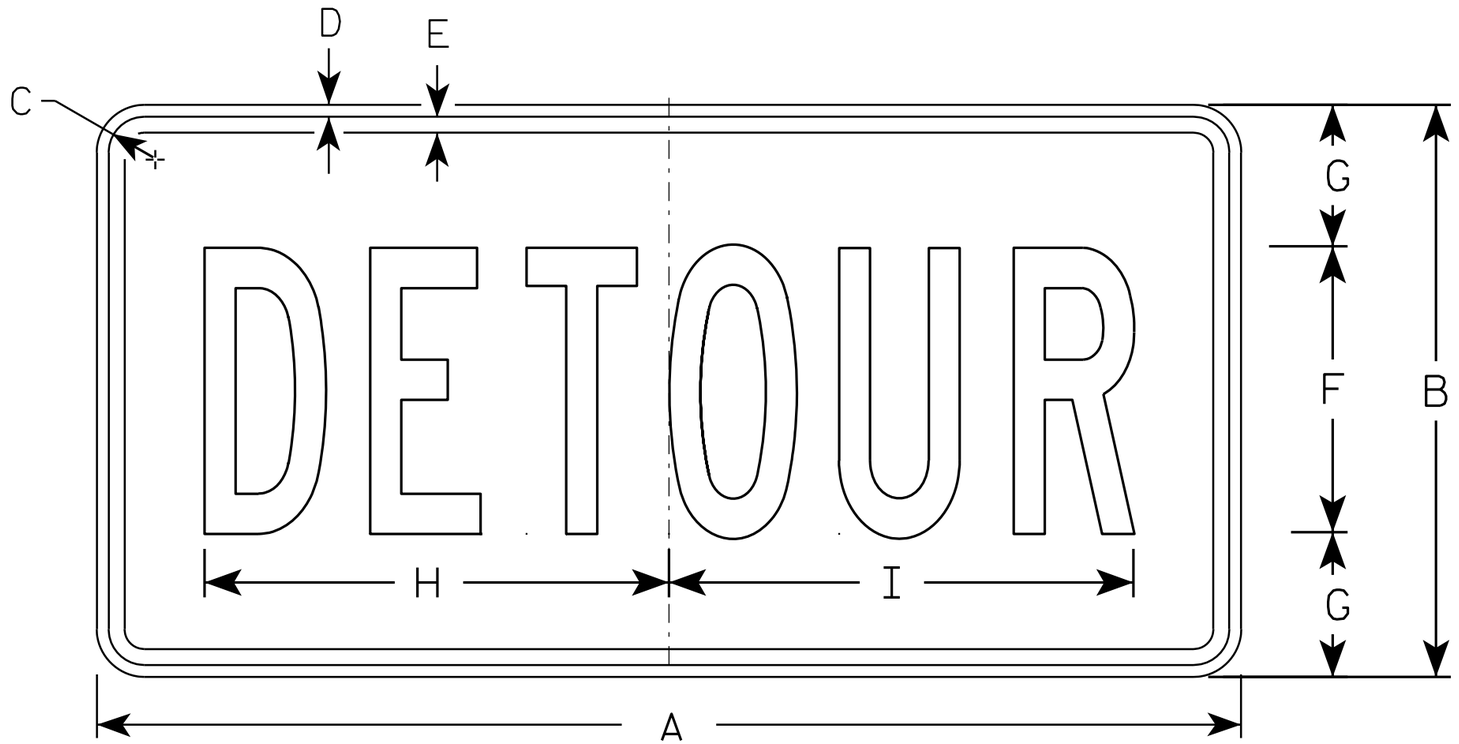
STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/7/19 PLATE NO. M4-5.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 394 | E



M4-8

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

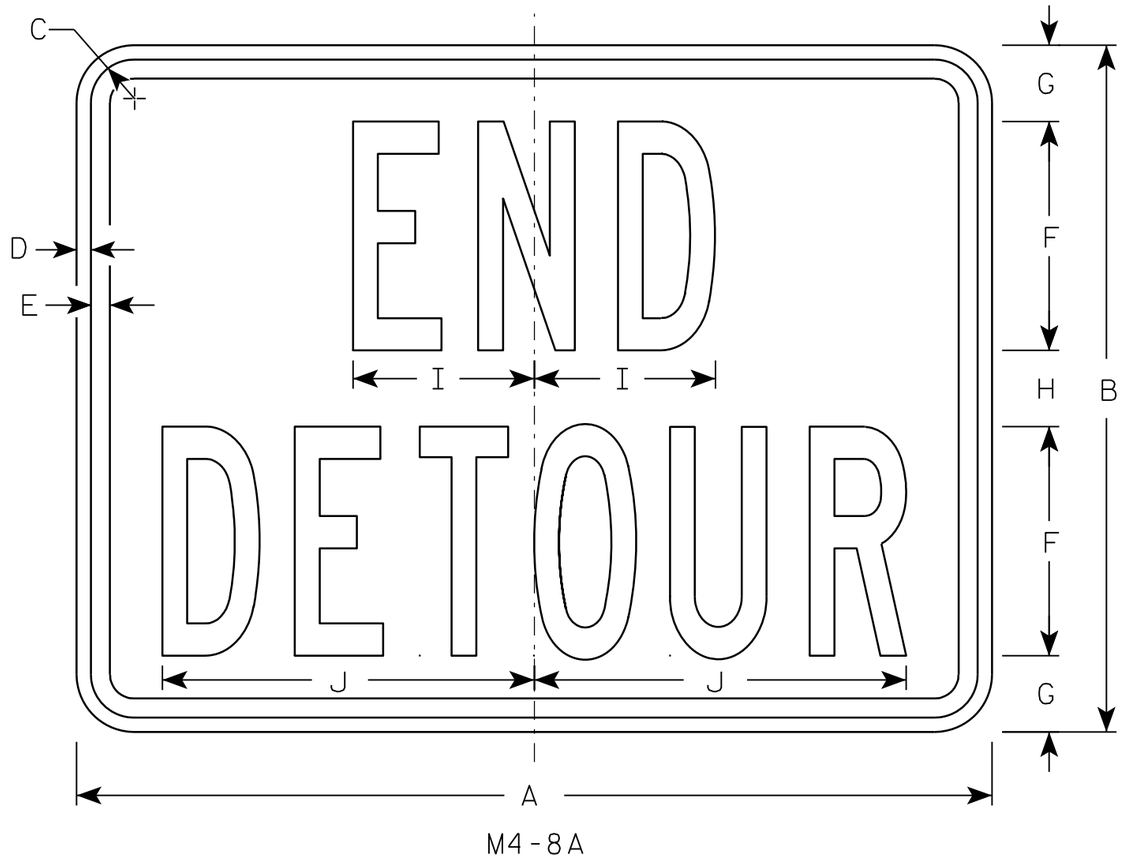
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 395	E



M4-8A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

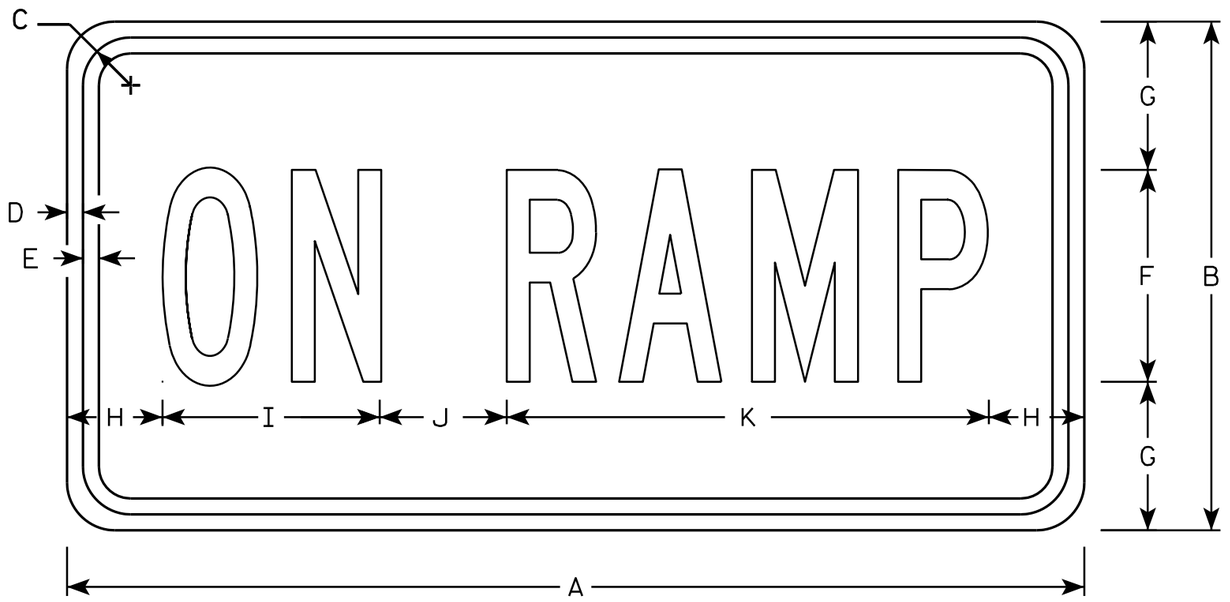
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 396	E



M4-10

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	5	3 1/2	2 1/4	5 1/8	3	11 3/8																2.0
3	36	18	1 1/8	3/8	1/2	8	5	2 1/4	8 1/4	5	18 1/4																4.5
4																											
5																											

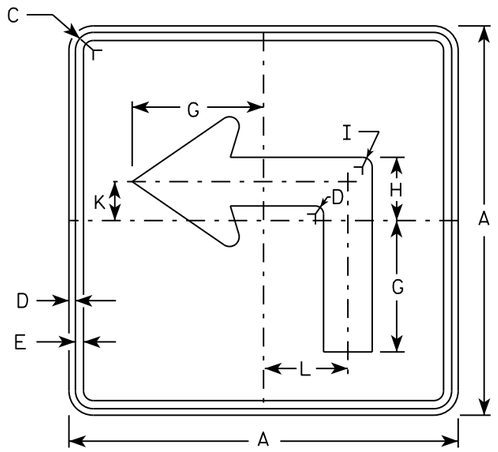
STANDARD SIGN
M4-10

WISCONSIN DEPT OF TRANSPORTATION

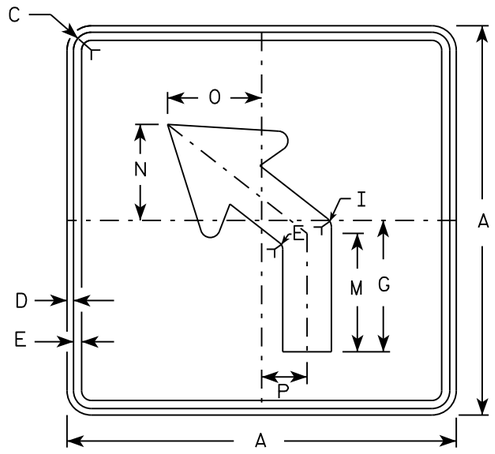
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-10.2

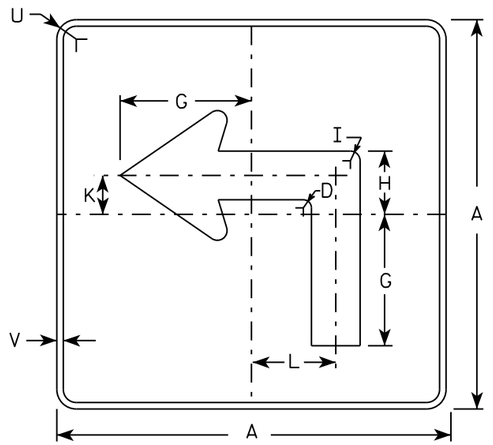
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 397	E



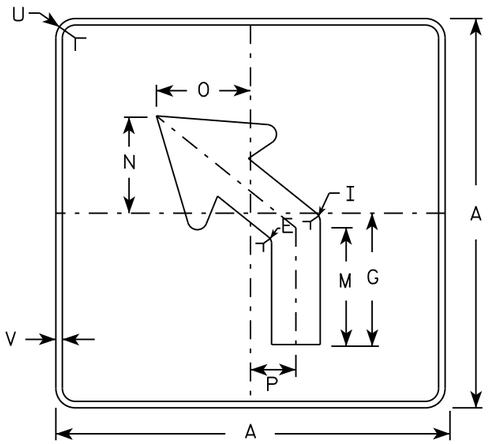
M5-1L
MM5-1L
MO5-1L
MP5-1L



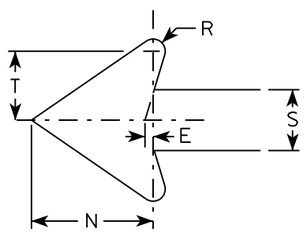
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

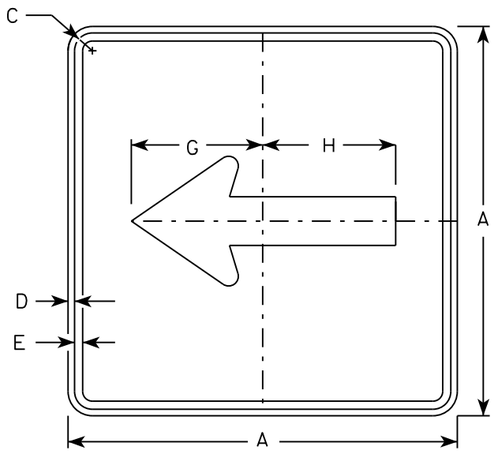
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

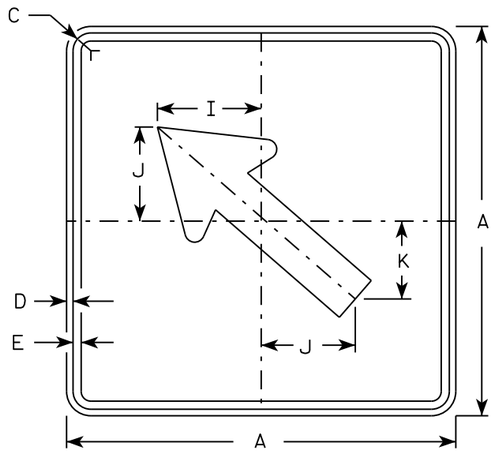
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



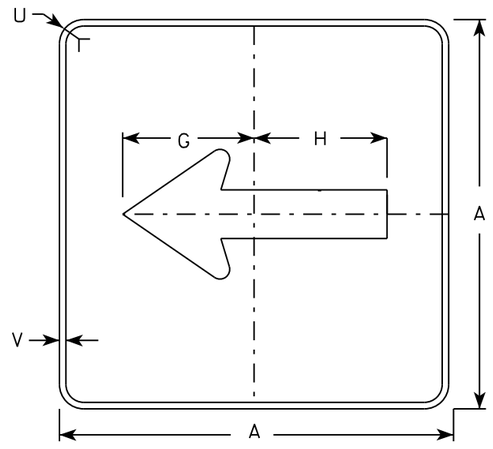
M6-1
MM6-1
MO6-1
MP6-1



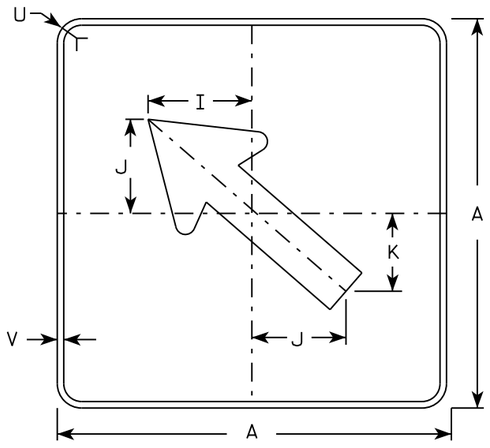
M6-2
MM6-2
MO6-2
MP6-2

NOTES

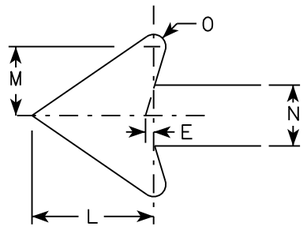
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



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



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



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

STANDARD SIGN
M6-1 & M6-2
SERIES

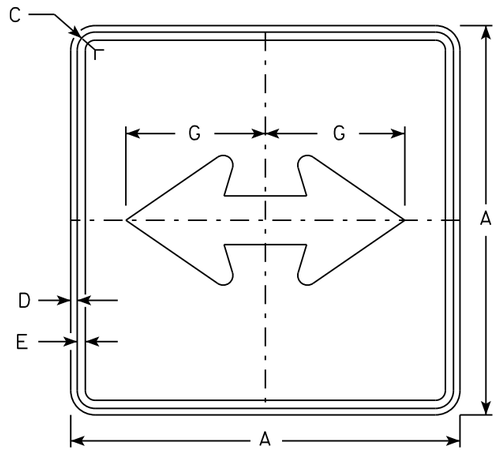
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

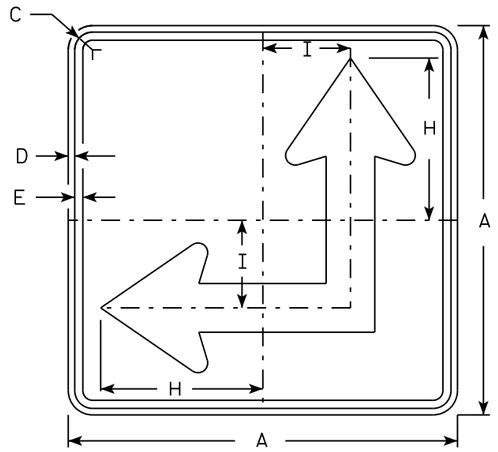
DATE 10/15/15 PLATE 399 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



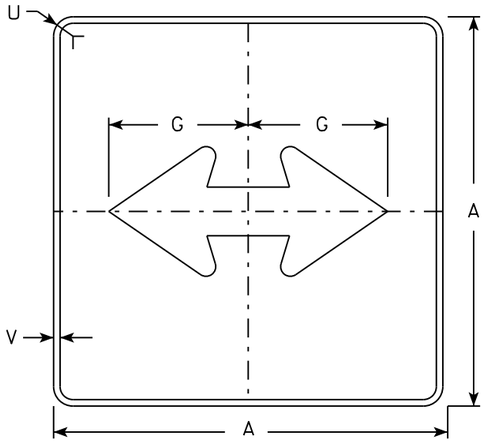
M6-4
MM6-4
MO6-4
MP6-4



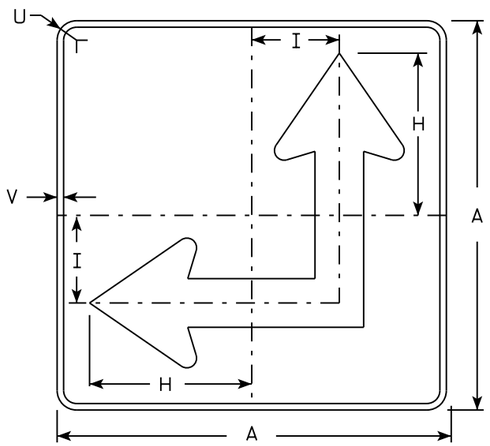
M6-6
MM6-6
MO6-6
MP6-6

NOTES

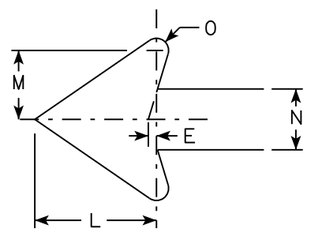
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



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

STANDARD SIGN
M6-4 & M6-6
SERIES

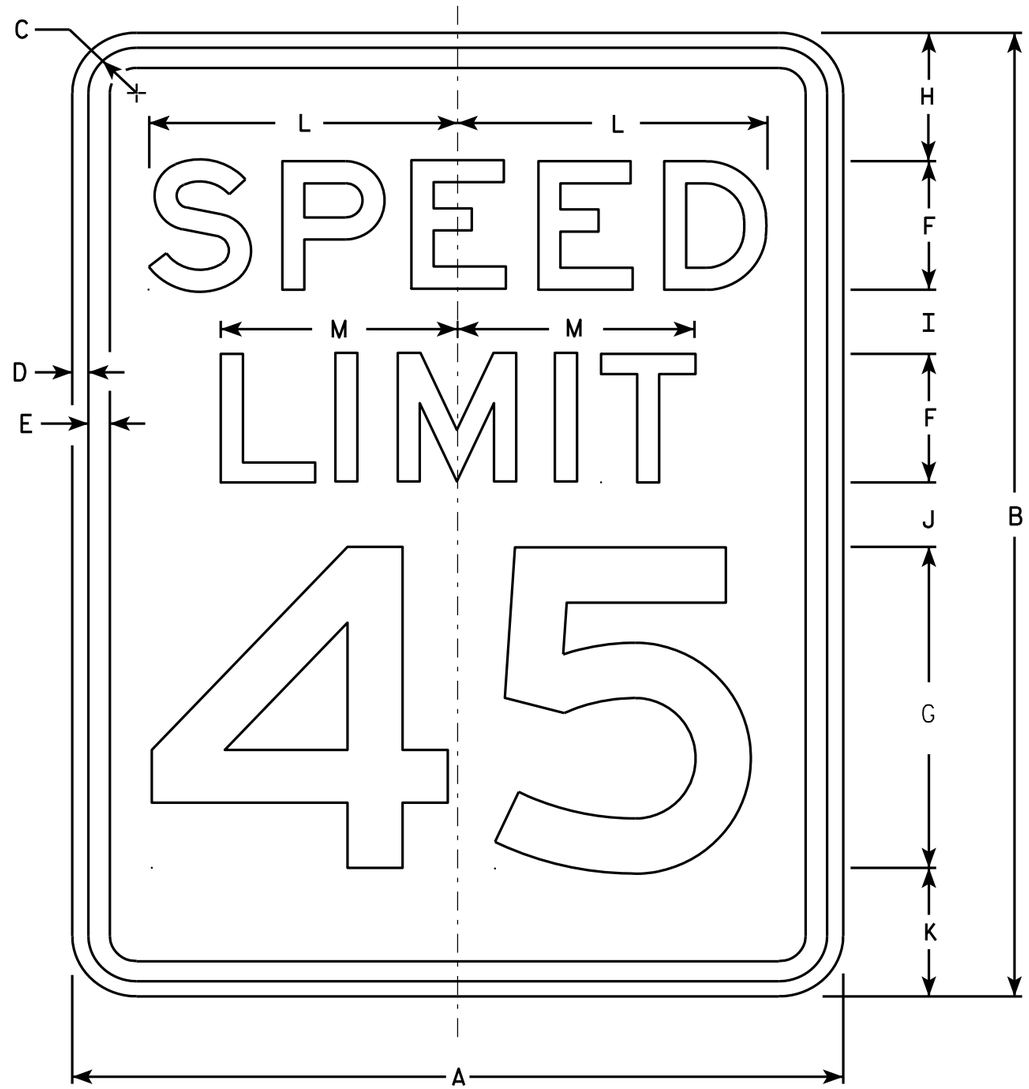
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 400 M6-4.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



R2-1

NOTES

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

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

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

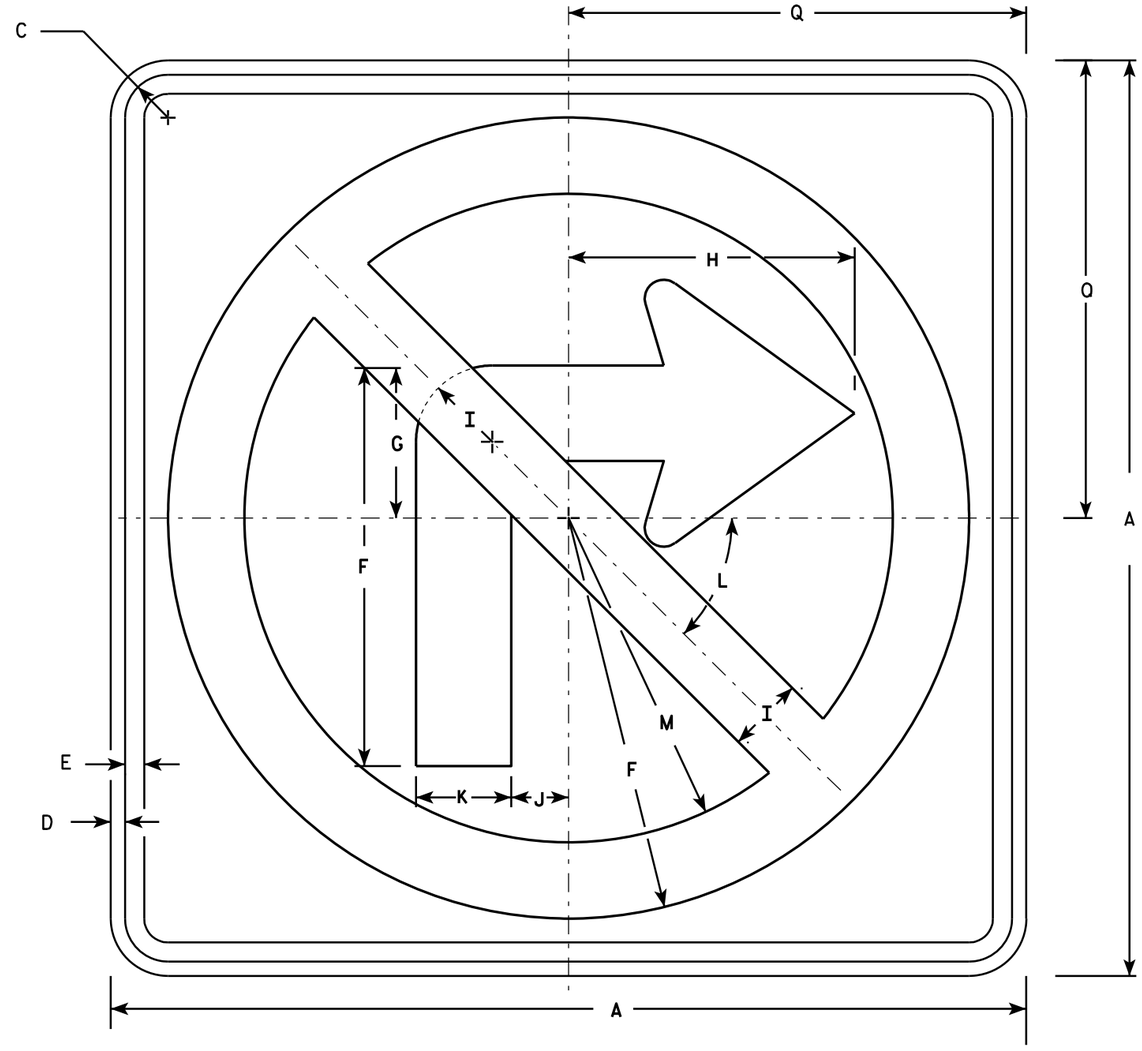
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 401 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000

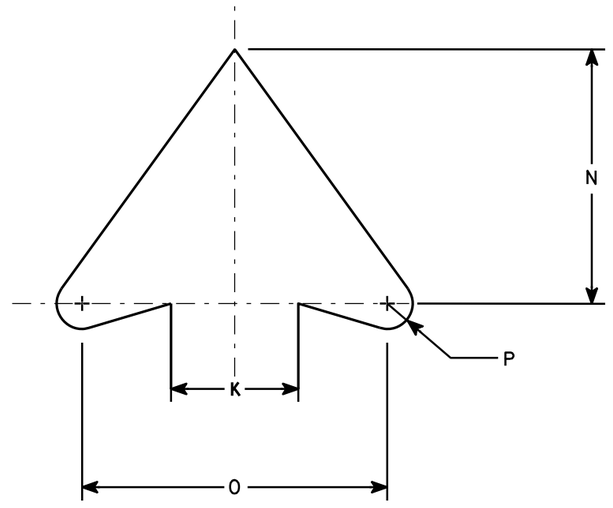
WISDOT/CADDS SHEET 42



R3-1

NOTES

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



ARROW DETAIL

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

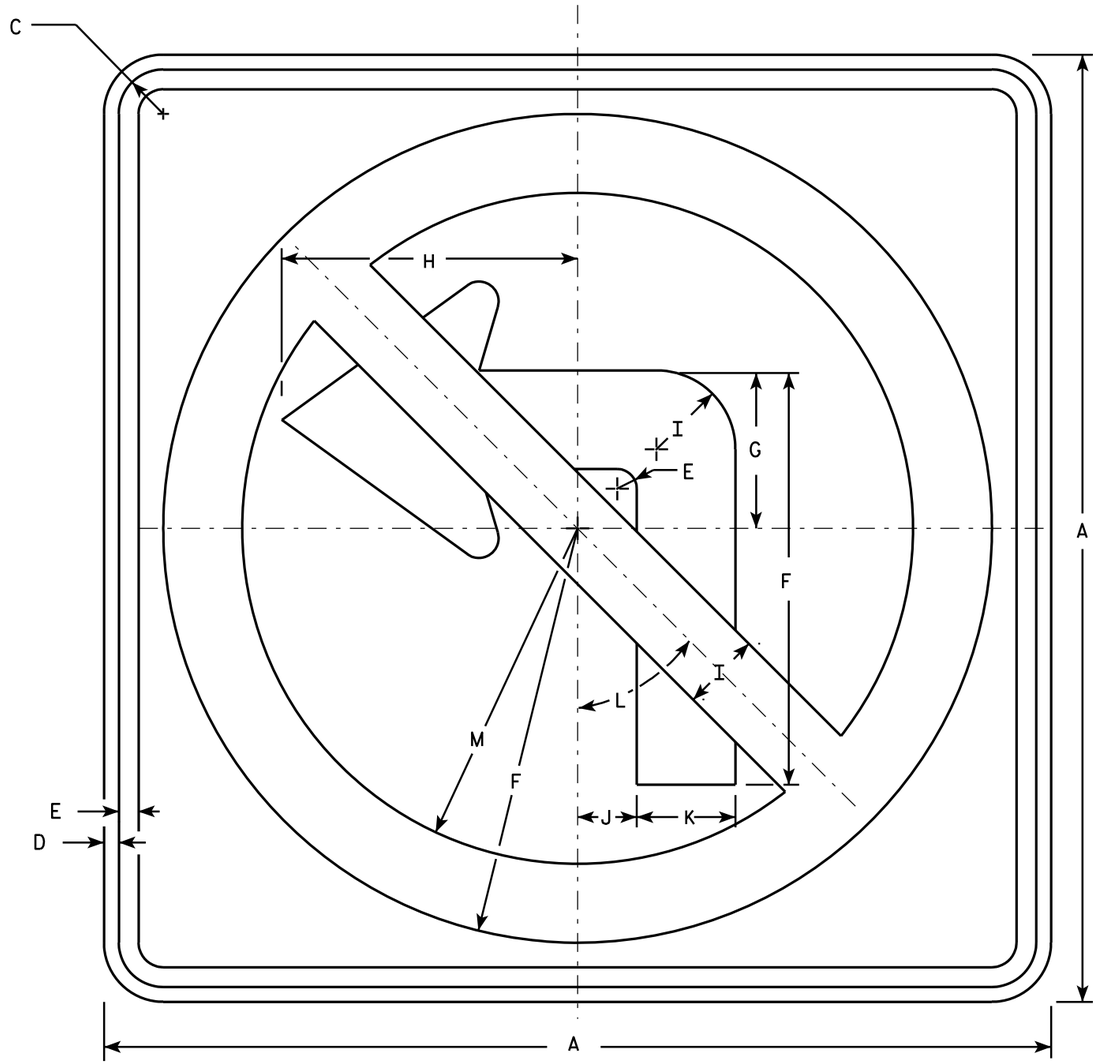
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

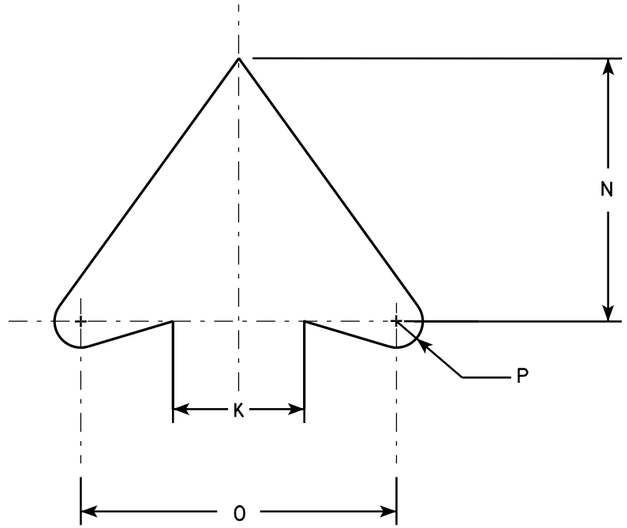
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 402	E



R3-2

NOTES

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



ARROW DETAIL

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

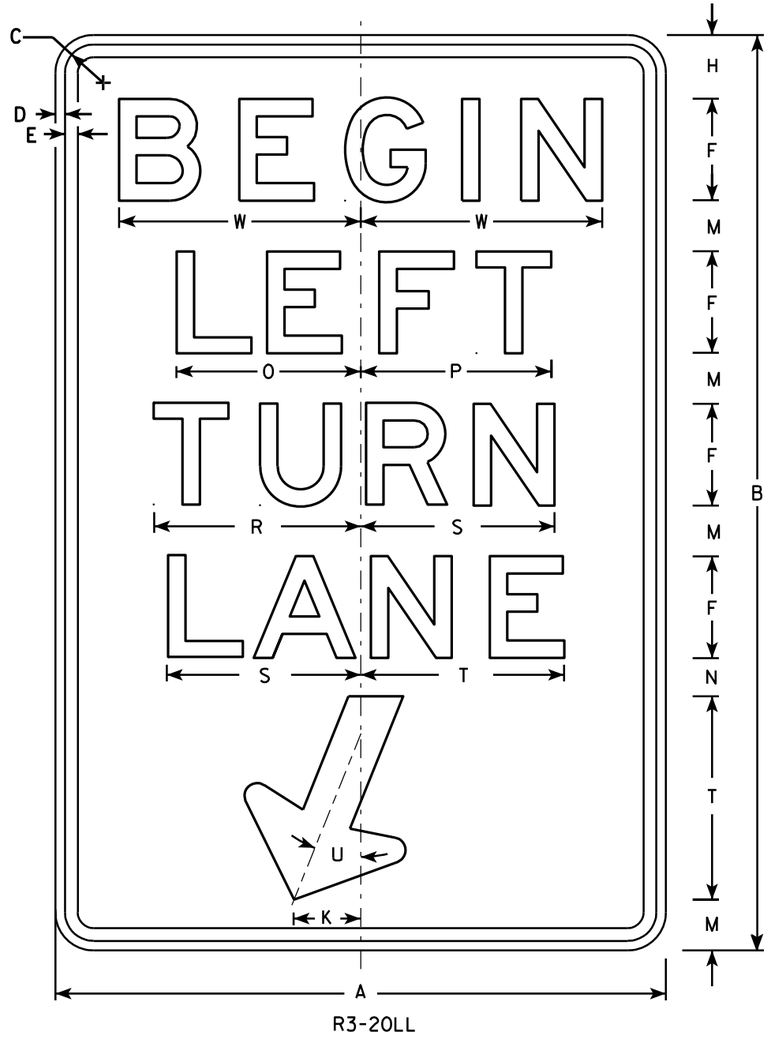
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

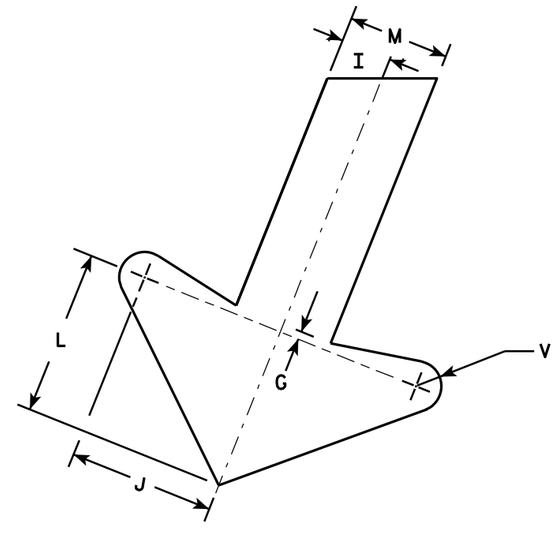
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 403	E



R3-20LL

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20LL

WISCONSIN DEPT OF TRANSPORTATION

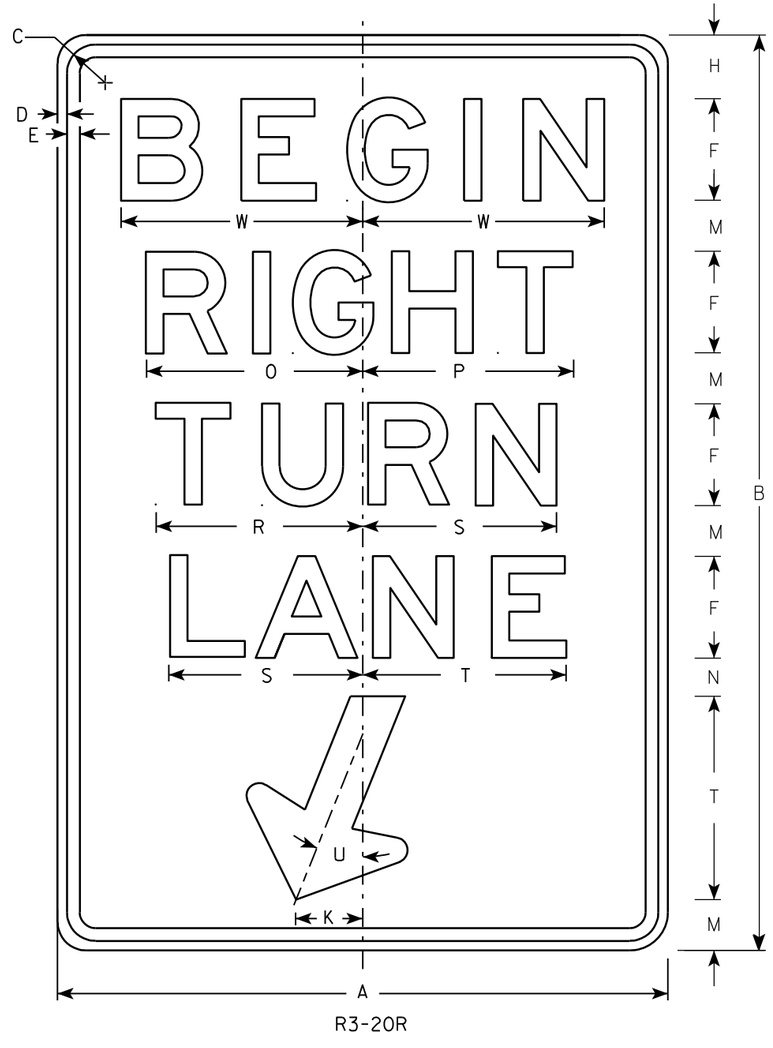
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20LL.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 404	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R320LL.DGN PLOT DATE : 15-OCT-2010 14:38 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

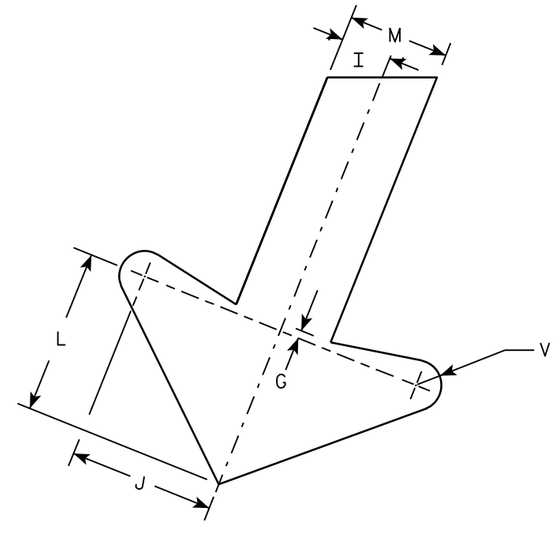
WISDOT/CADDS SHEET 42



R3-20R

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

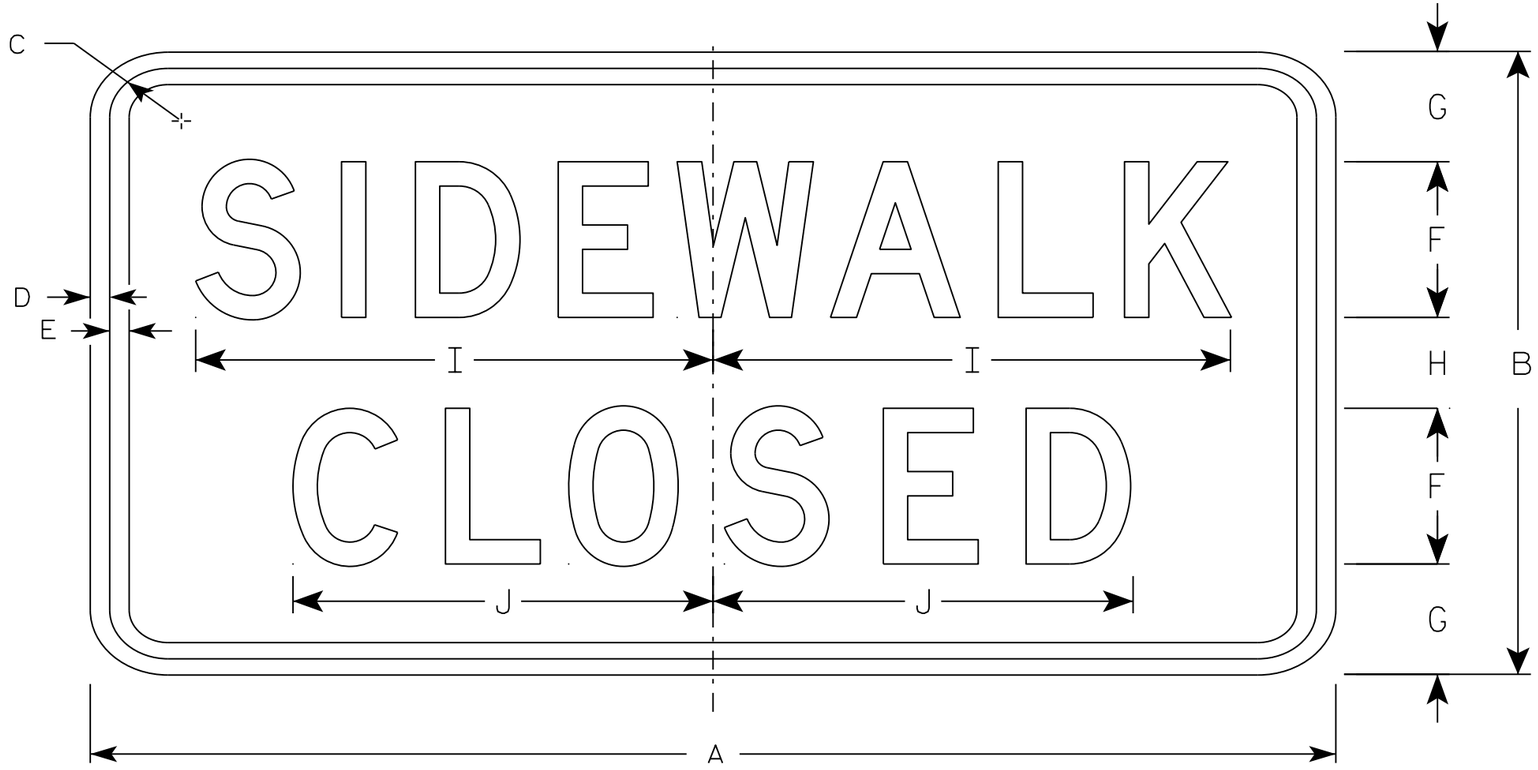
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 405 | E



R9-9

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

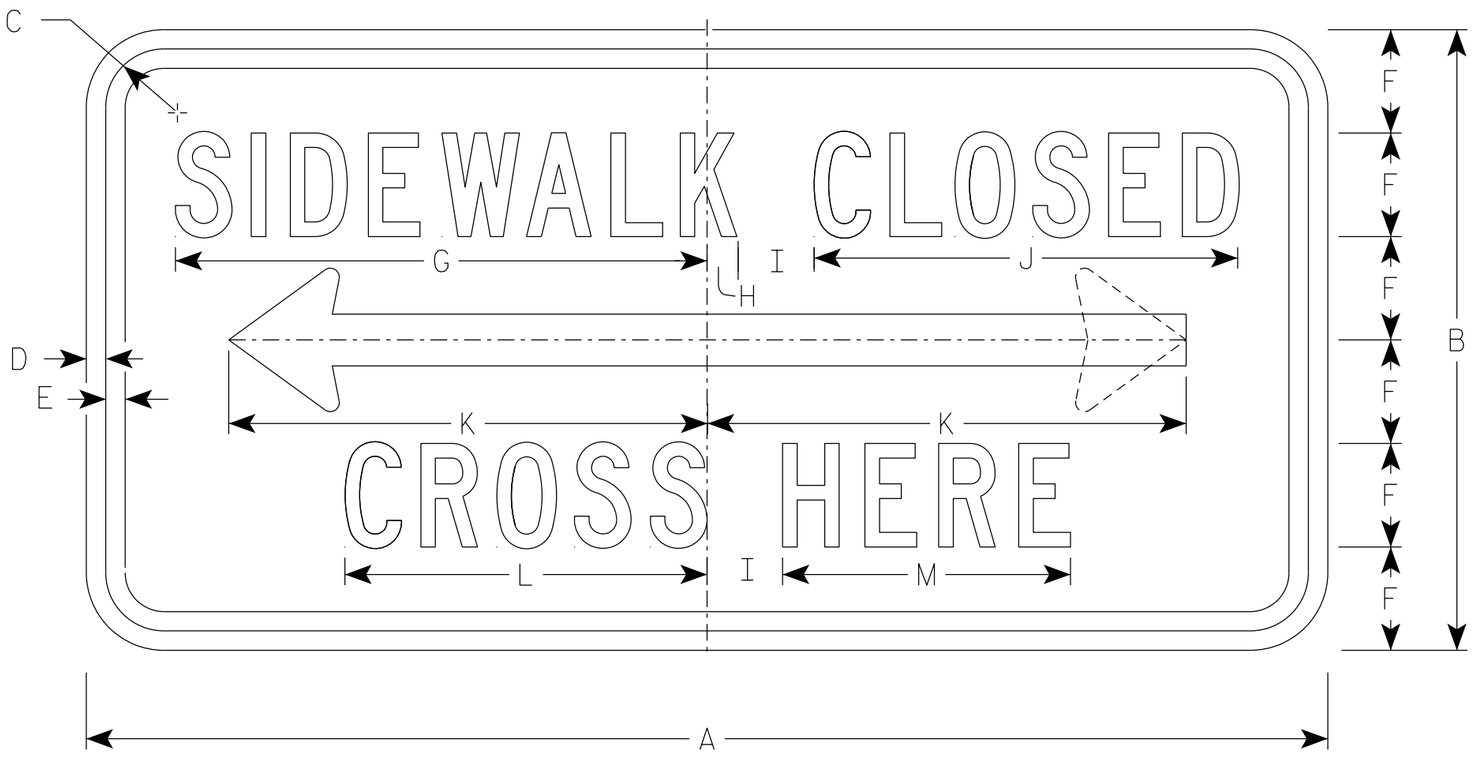
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 406 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

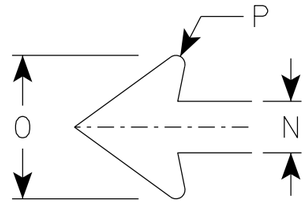
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-11A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for paths and Trails.
6. R9-11AD (double arrow)
   R9-11AL (left arrow)
   R9-11AR (right arrow)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	2	10 1/4	5/8	1 1/2	8 1/4	9 1/4	7	5 5/8	1	2 3/4	1/8											2.0
2M	24	12	1 1/8	3/8	3/8	2	10 1/4	5/8	1 1/2	8 1/4	9 1/4	7	5 5/8	1	2 3/4	1/8											2.0
3	30	15	1 1/8	3/8	1/2	2 1/2	12 3/4	1/2	2	10 1/4	12 3/8	8 5/8	6 3/4	1 1/4	3 5/8	1/4											3.125
4																											
5																											

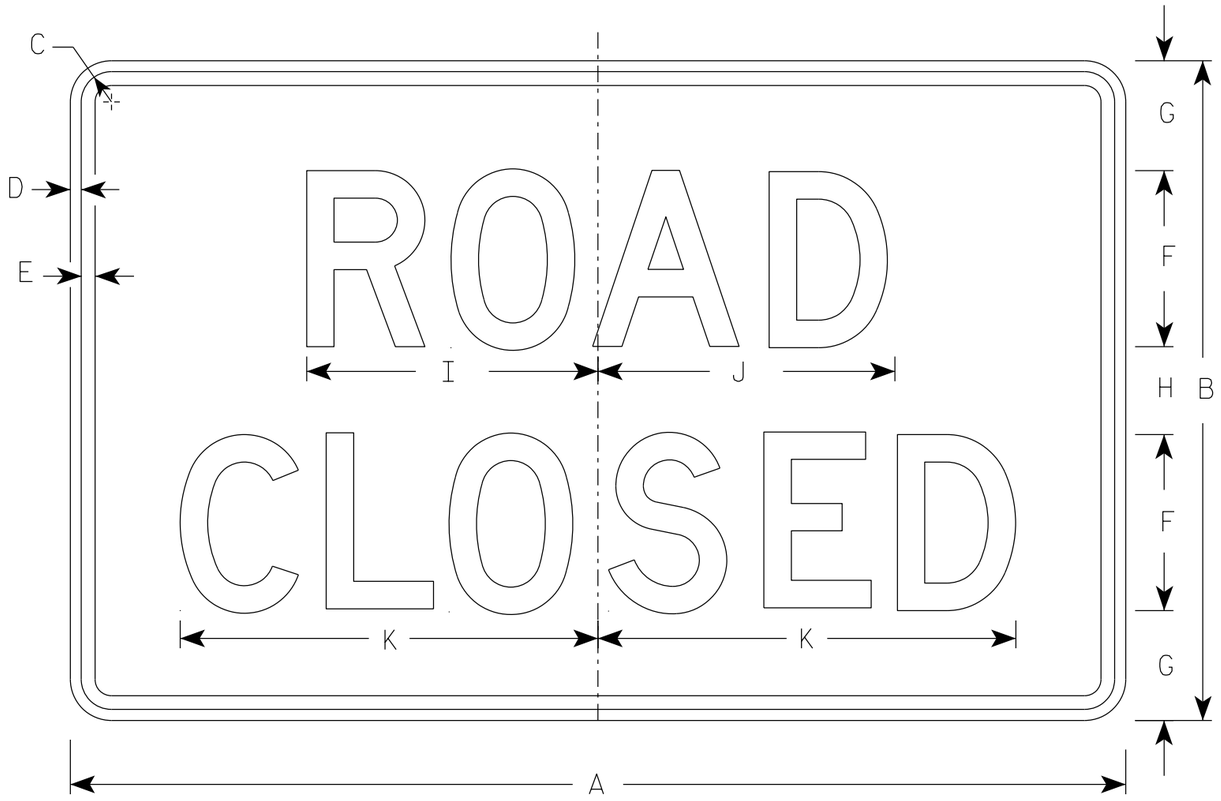
STANDARD SIGN
R9-11A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2021 PLATE NO. R9-11A.5

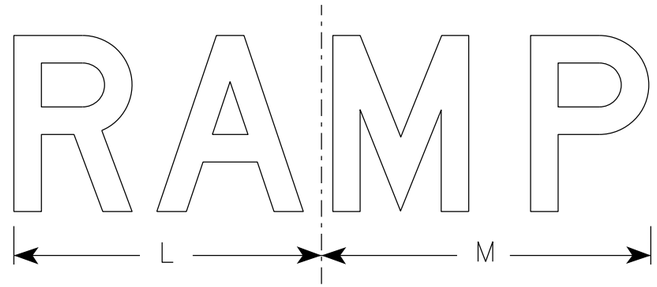
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 407 | E



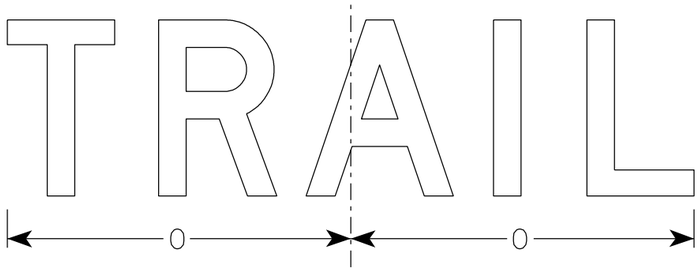
R11-2

NOTES

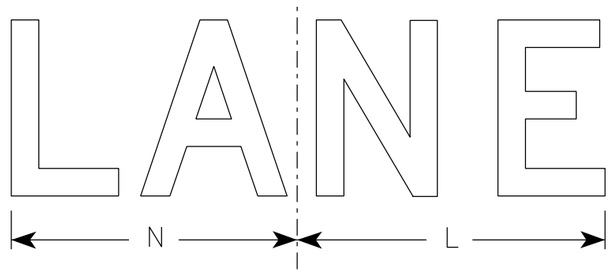
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the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



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

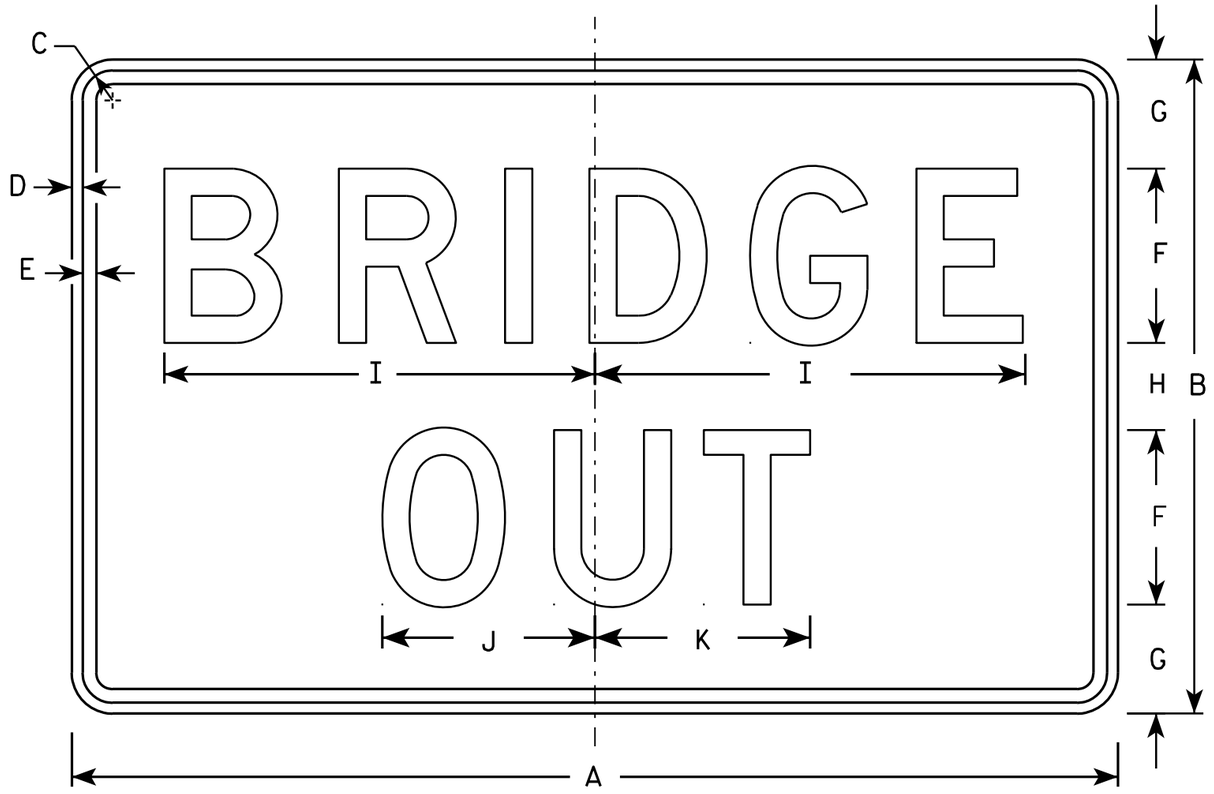
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 408	E



R11-2B

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

STANDARD SIGN
R11-2B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2B.2

PROJECT NO:

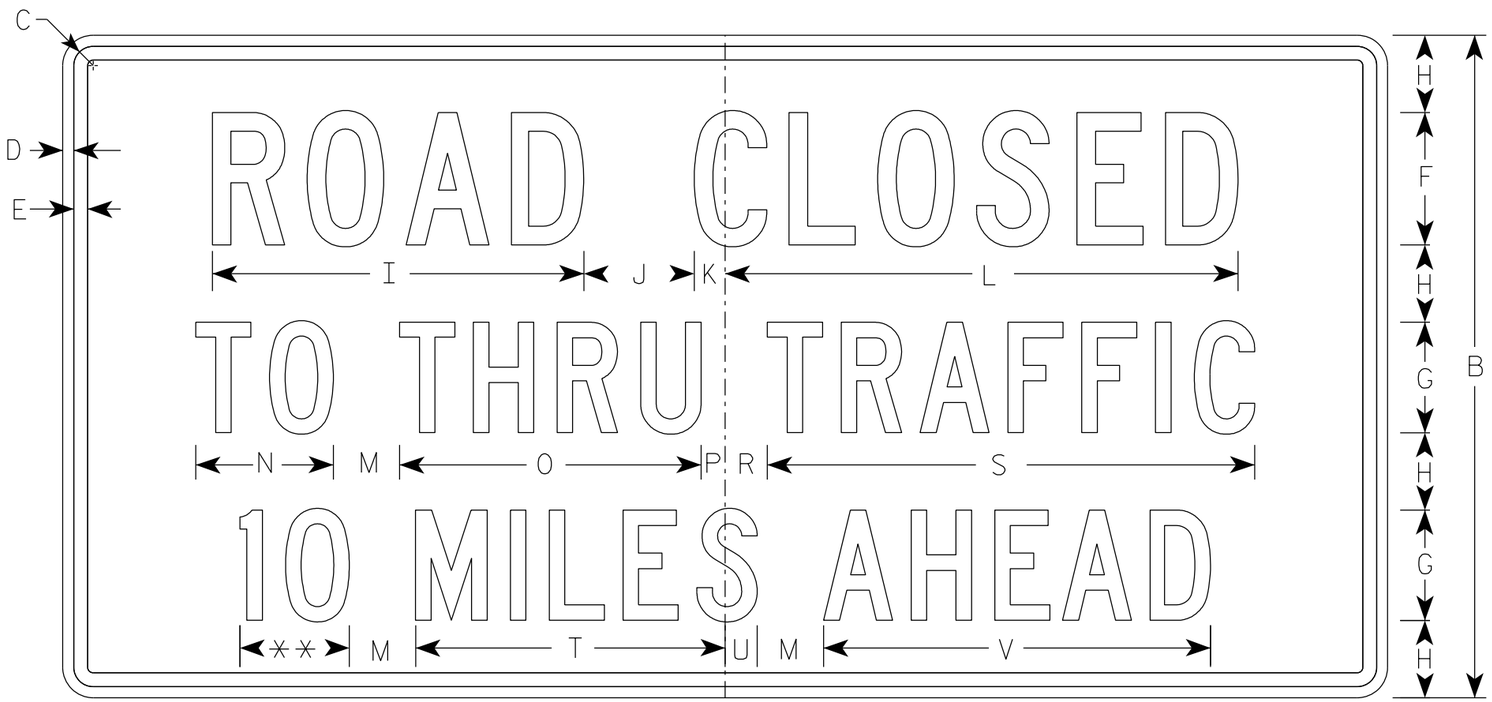
SHEET NO: 409 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112B.DGN PLOT DATE : 01-APR-2011 14:23 PLOT BY : mscj9h

WISDOT/CADDS SHEET 42

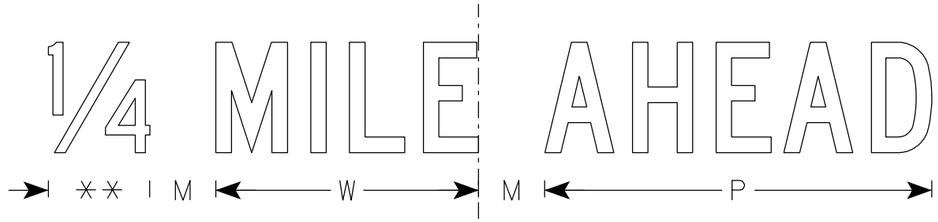
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



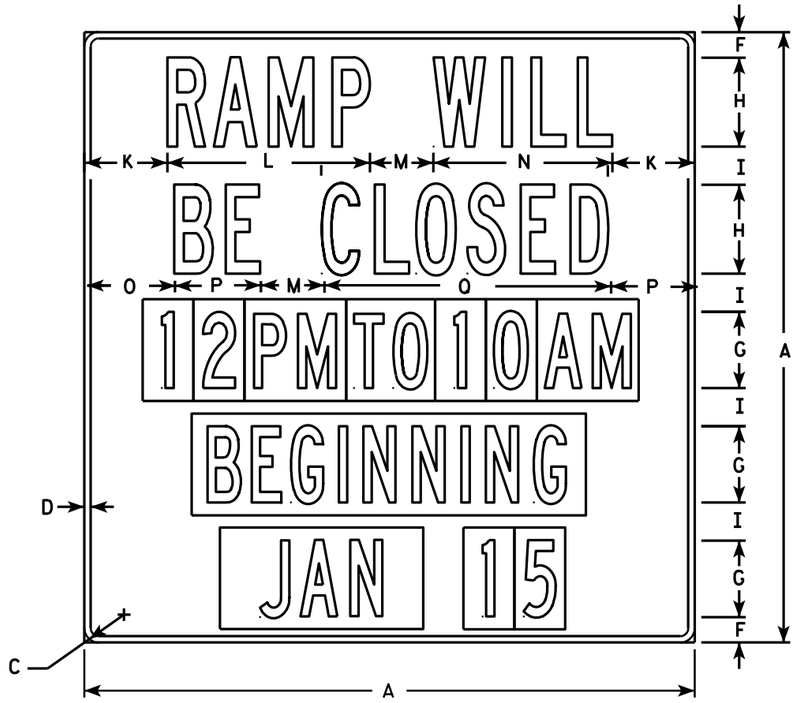
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/4	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

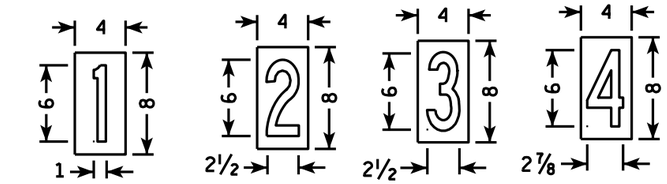
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 6/14/2021 PLATE NO. R11-3.9

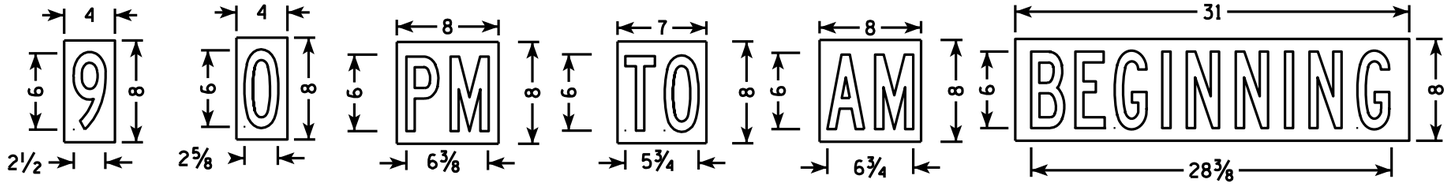
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 410	E

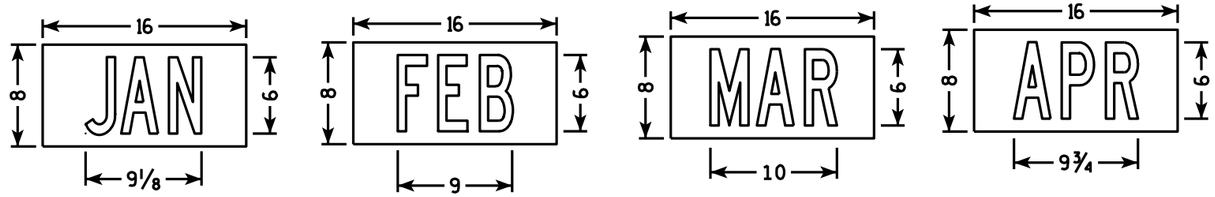


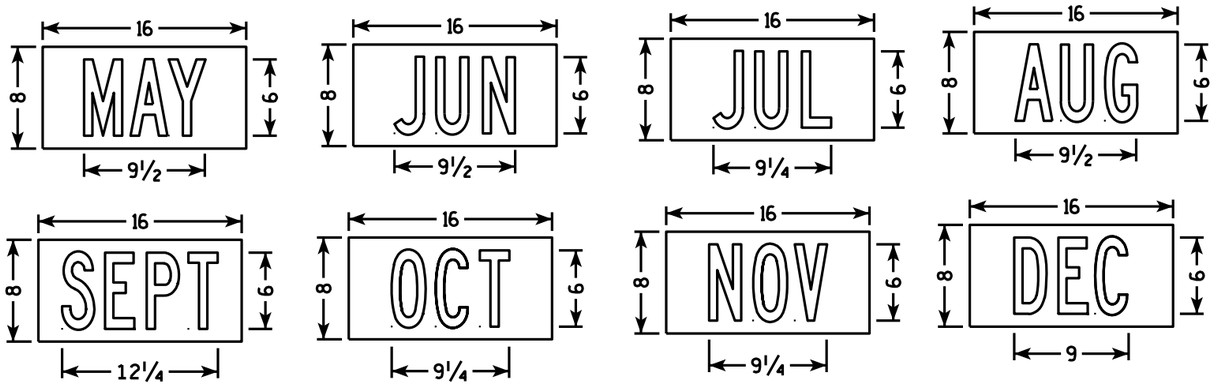


NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - B
4. Message plaques consist of Type H Reflective sheeting with the appropriate non-reflective black message applied to .040 aluminum and screwed to the base sign.









SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
2M	48		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
3																											
4																											
5																											

STANDARD SIGN
R11-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-51.4

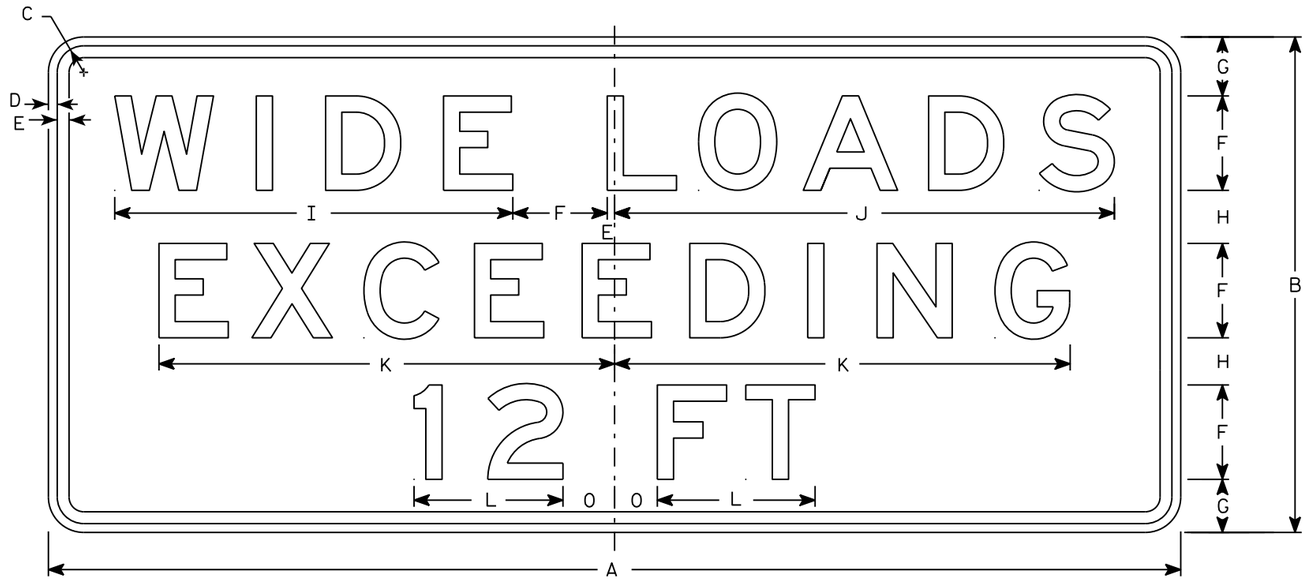
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 411	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R1151.DGN PLOT DATE : 01-APR-2011 14:07 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000

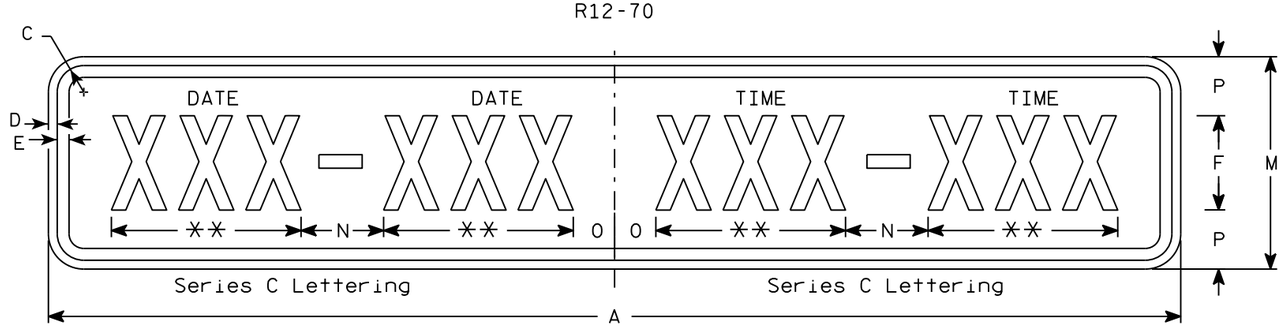
WISDOT/CADDS SHEET 42

7

7



R12-70



R12-70C

NOTES

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

** Substitute appropriate message, optically center message

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	R12-70 Area sq. ft.	R12-70C Area sq. ft.
1																												
2S	66	36	2 1/4	1/2	5/8	6	4	5	20 7/8	28 3/8	24 5/8	8 1/8	12	6	3	3											16.5	5.5
2M	66	36	2 1/4	1/2	5/8	6	4	5	20 7/8	28 3/8	24 5/8	8 1/8	12	6	3	3											16.5	5.5
3																												
4	96	42	2 1/4	3/4	1	8	5	4	34	42	39	13	18	7	3 1/2	5											36.0	12.0
5	96	42	2 1/4	3/4	1	8	5	4	34	42	39	13	18	7	3 1/2	5											36.0	12.0

TYPICAL SIGN
R12-70

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

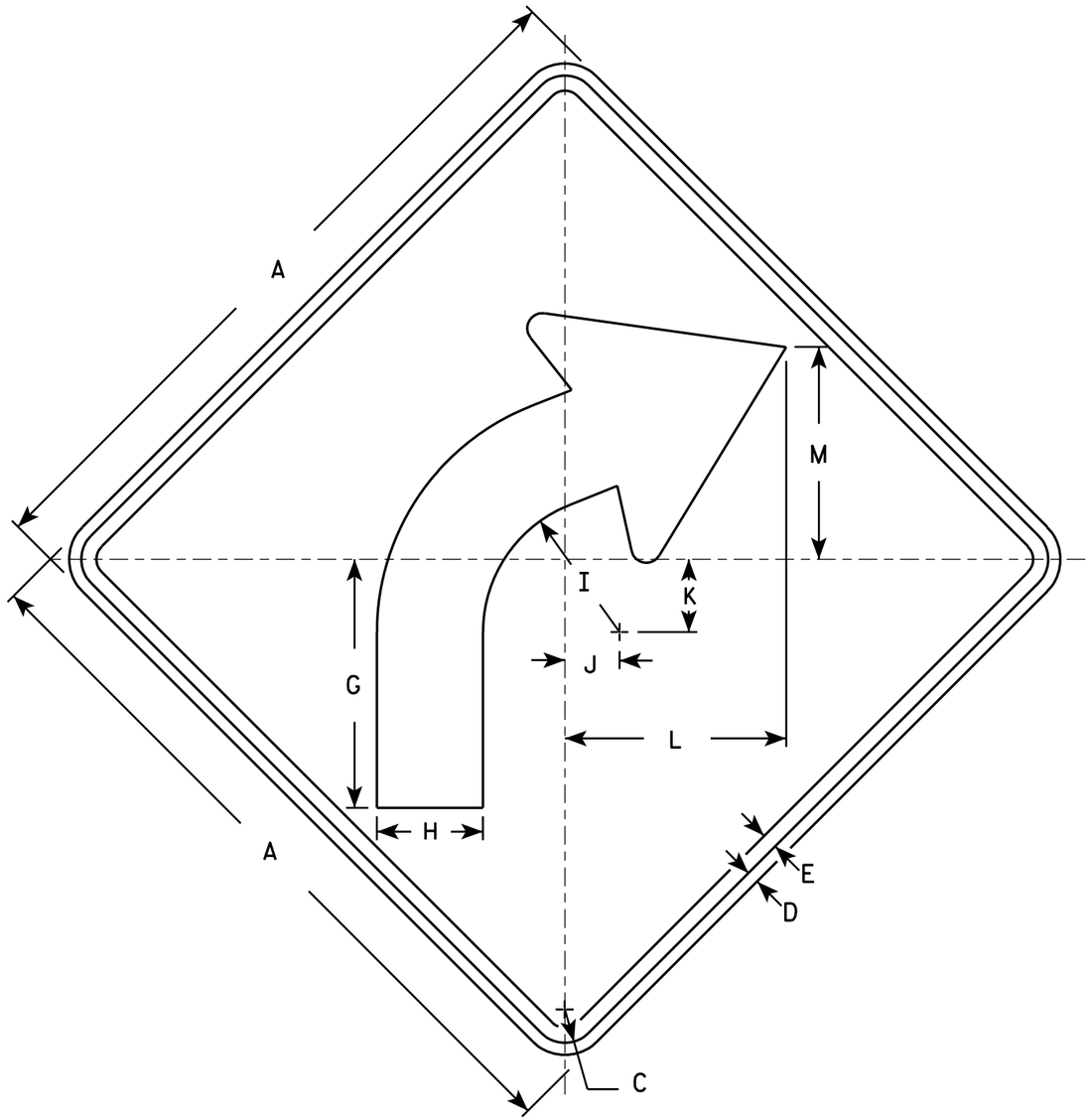
DATE 11/5/15 PLATE NO R12-70.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

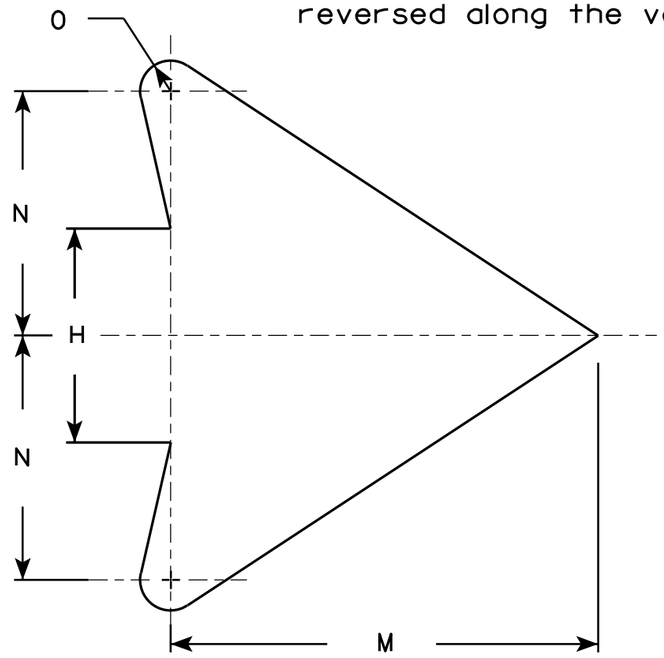
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R1270.DGN PLOT DATE : 01-DEC-2015 18:09 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 12.842555:1.000000

NOTES

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



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

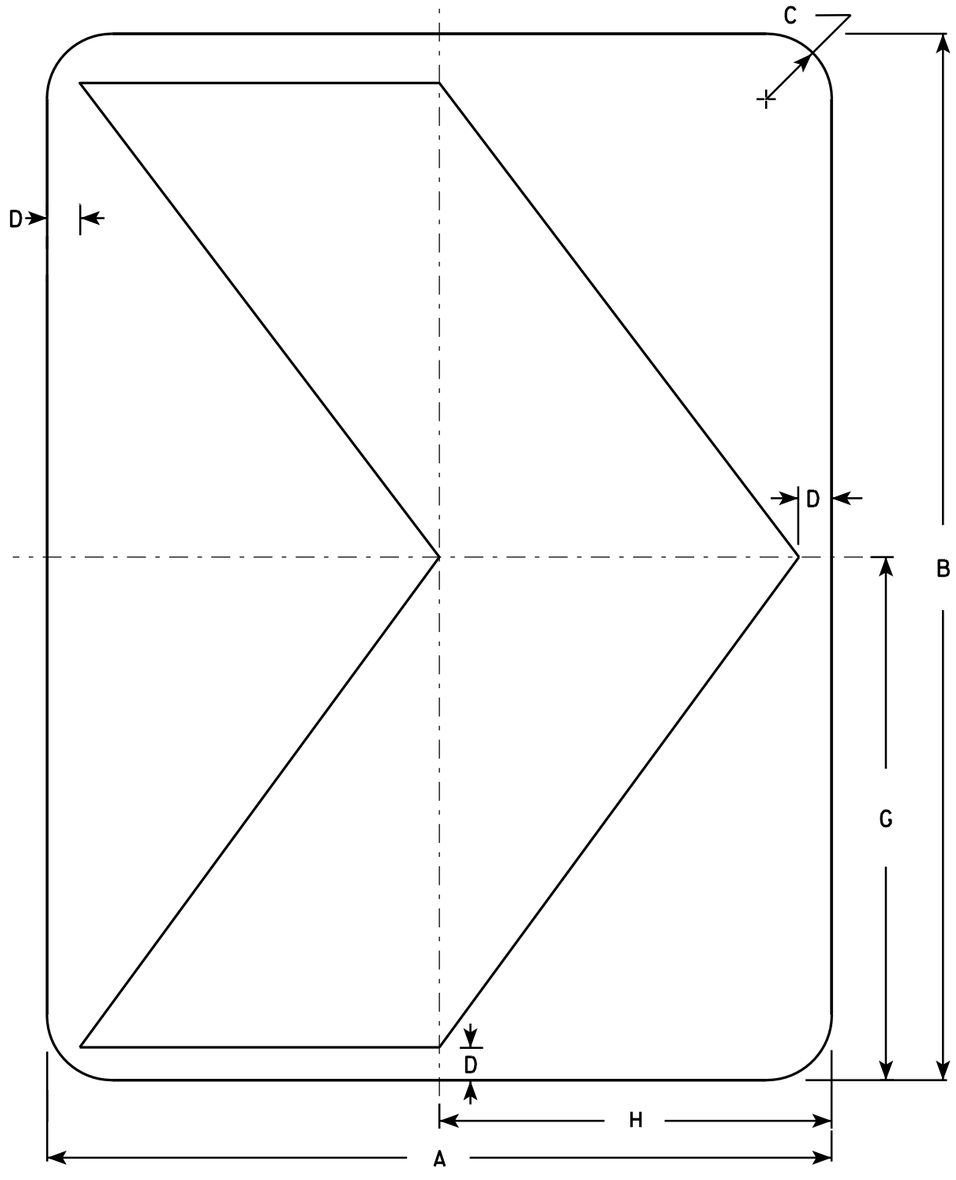
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 413	E



NOTES

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

W1-8

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 ½	½			9	6																			1.5
2S	18	24	1 ½	¾			12	9																			3.0
2M	18	24	1 ½	¾			12	9																			3.0
3	24	30	1 ½	1			15	12																			5.0
4	30	36	1 ⅞	1 ¼			18	15																			7.5
5	36	48	2 ¼	1 ½			24	18																			12.0

STANDARD SIGN
W1-8

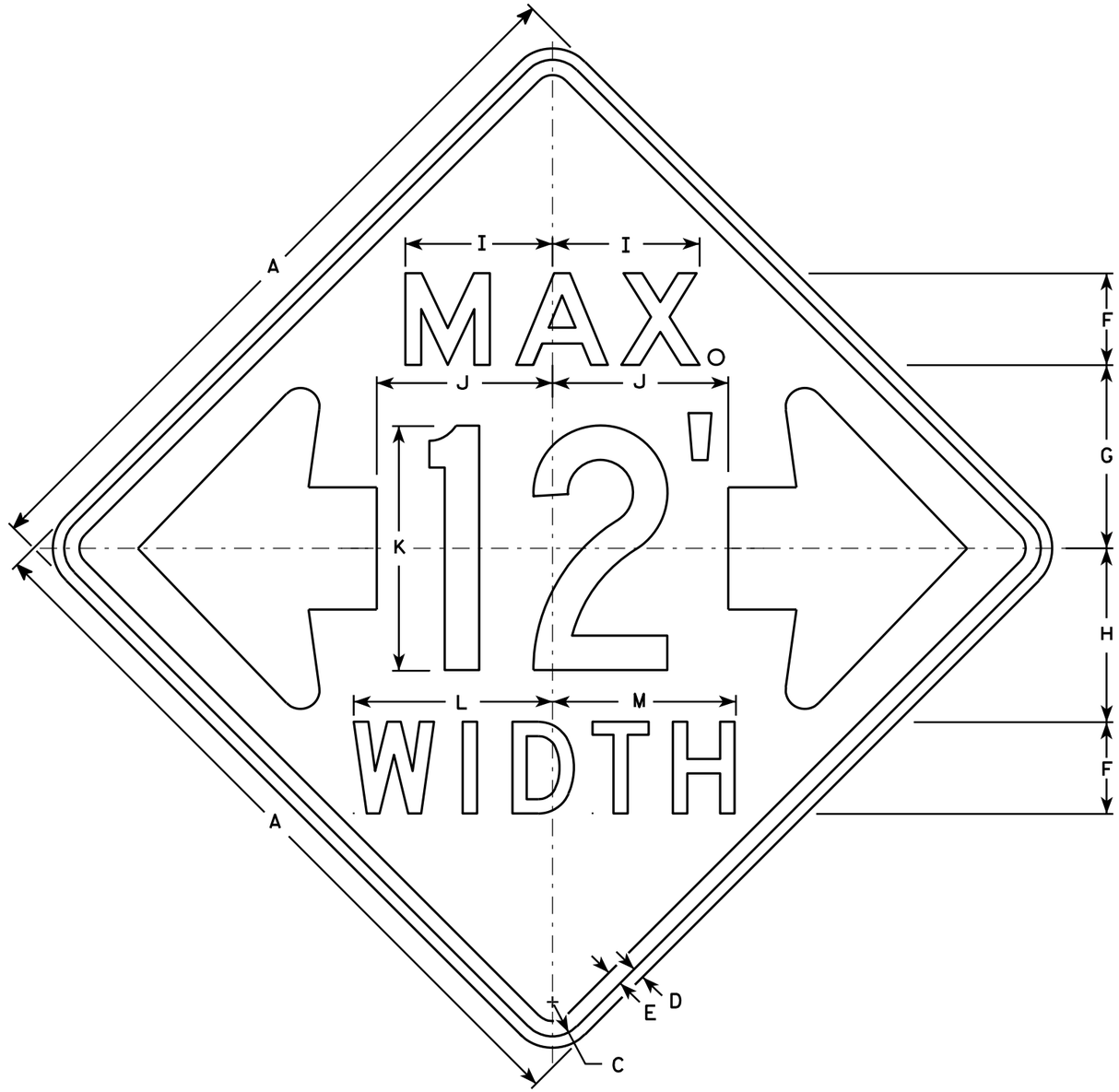
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-8.6

PROJECT NO:

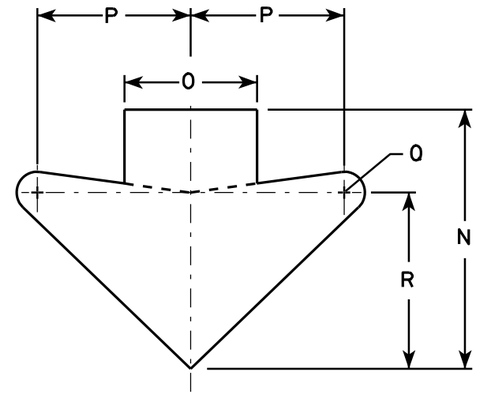
SHEET NO: 414 E



W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

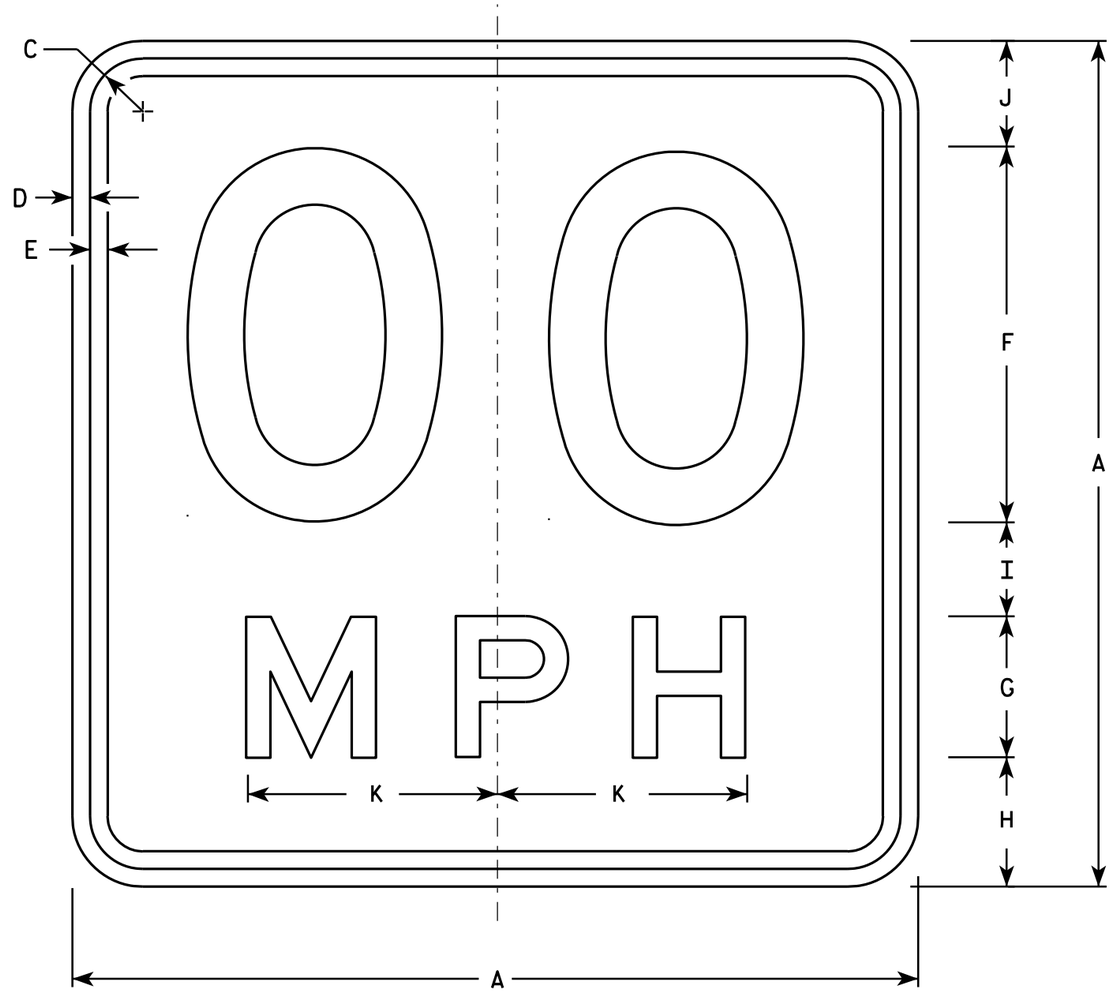
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 415 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000
WISDOT/CADDS SHEET 42



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

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

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

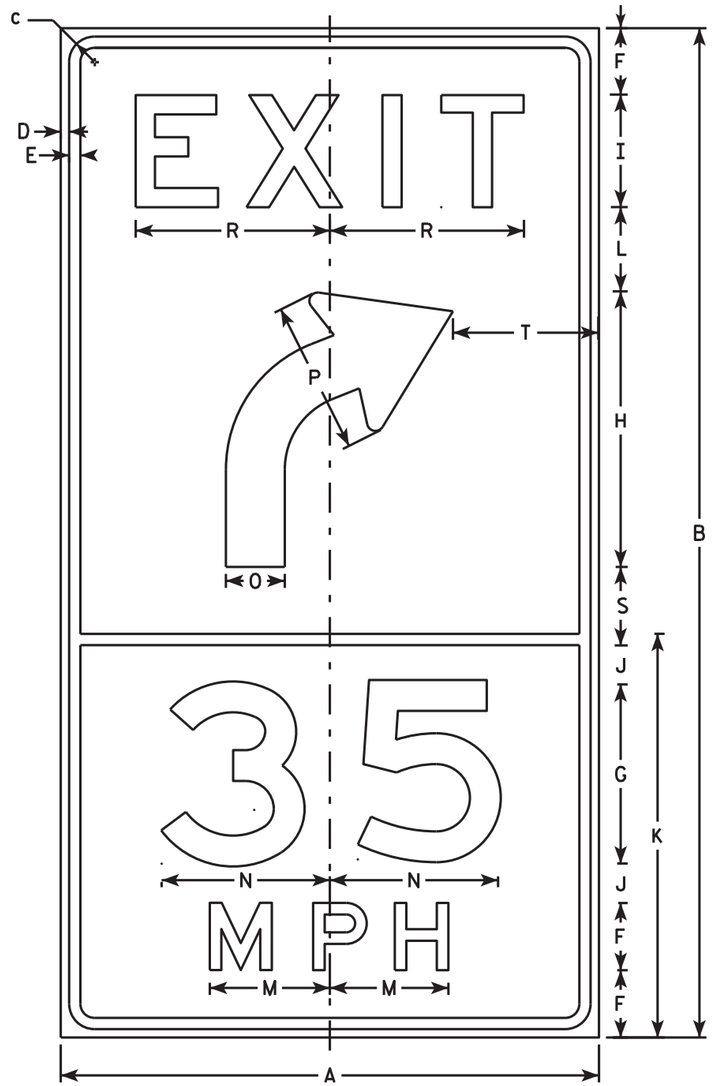
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 416 | E



W13-2C

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	90	2 1/4	3/4	1	6	16	24 5/8	10	3 1/2	36	7 1/2	10 3/4	15	5 1/4	13 5/8	12	17 3/8	7	13							30
2M	48	90	2 1/4	3/4	1	6	16	24 5/8	10	3 1/2	36	7 1/2	10 3/4	15	5 1/4	13 5/8	12	17 3/8	7	13							30
3																											
4																											
5																											

STANDARD SIGN
W13-2C

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

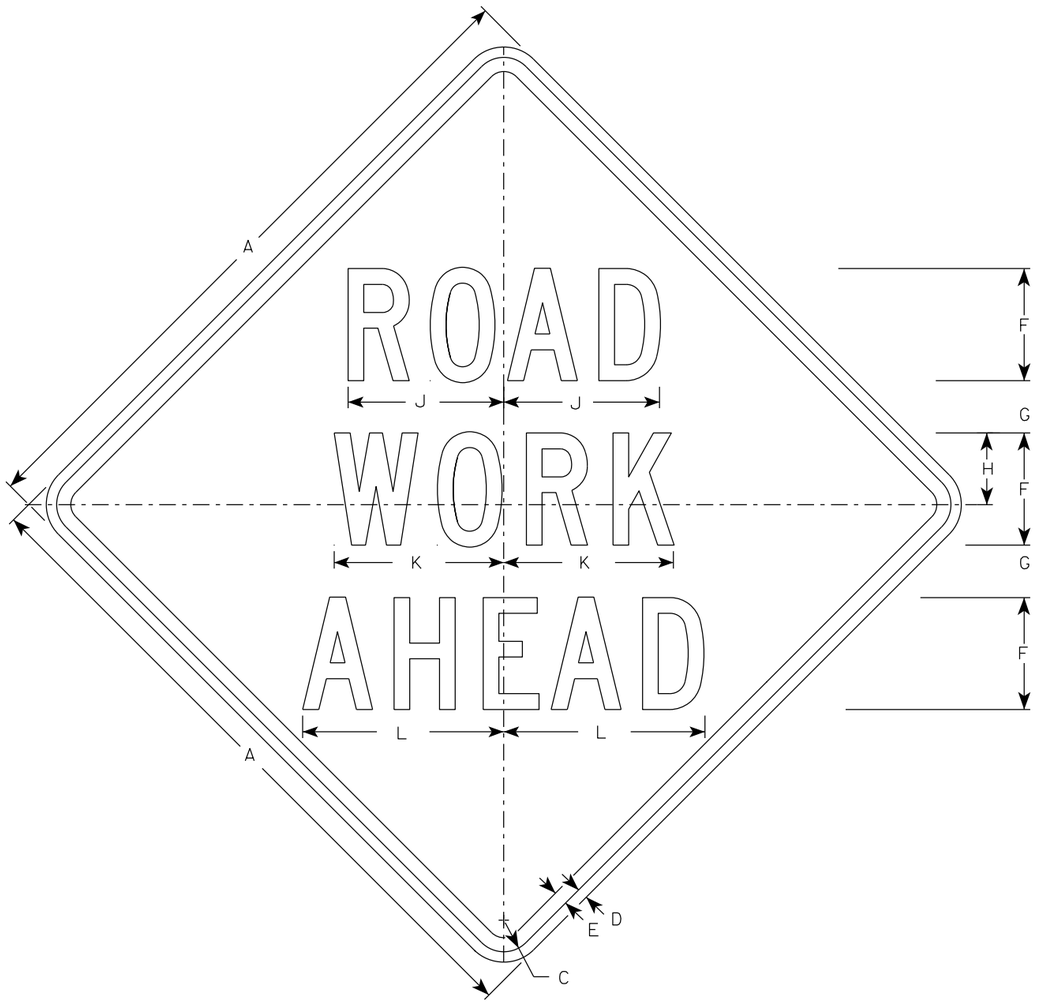
DATE 12/12/13 PLATE NO. W13-2C.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO. 417 | E

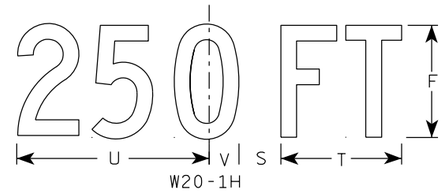
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W132C.DGN PLOT DATE : 13-DEC-2013 09:02 PLOT BY : ss...plotuser...ss PLOT NAME : PLOT SCALE : 21.526189:1.000000 WISDOT/CADDS SHEET 42

NOTES

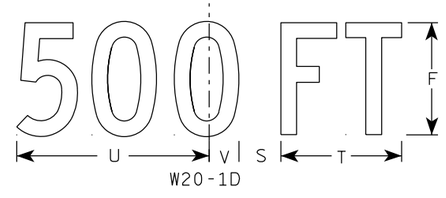
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



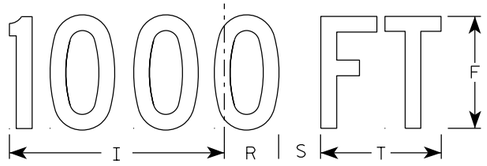
W20-1A



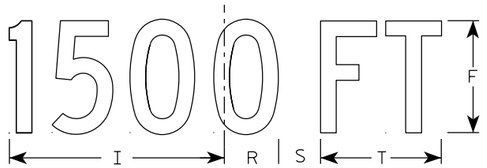
W20-1H



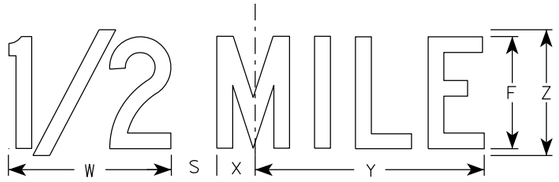
W20-1D



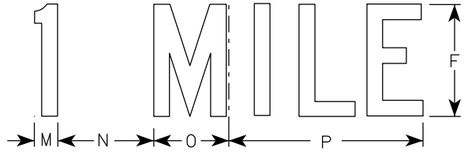
W20-1C



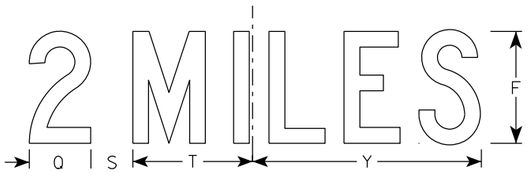
W20-1B



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

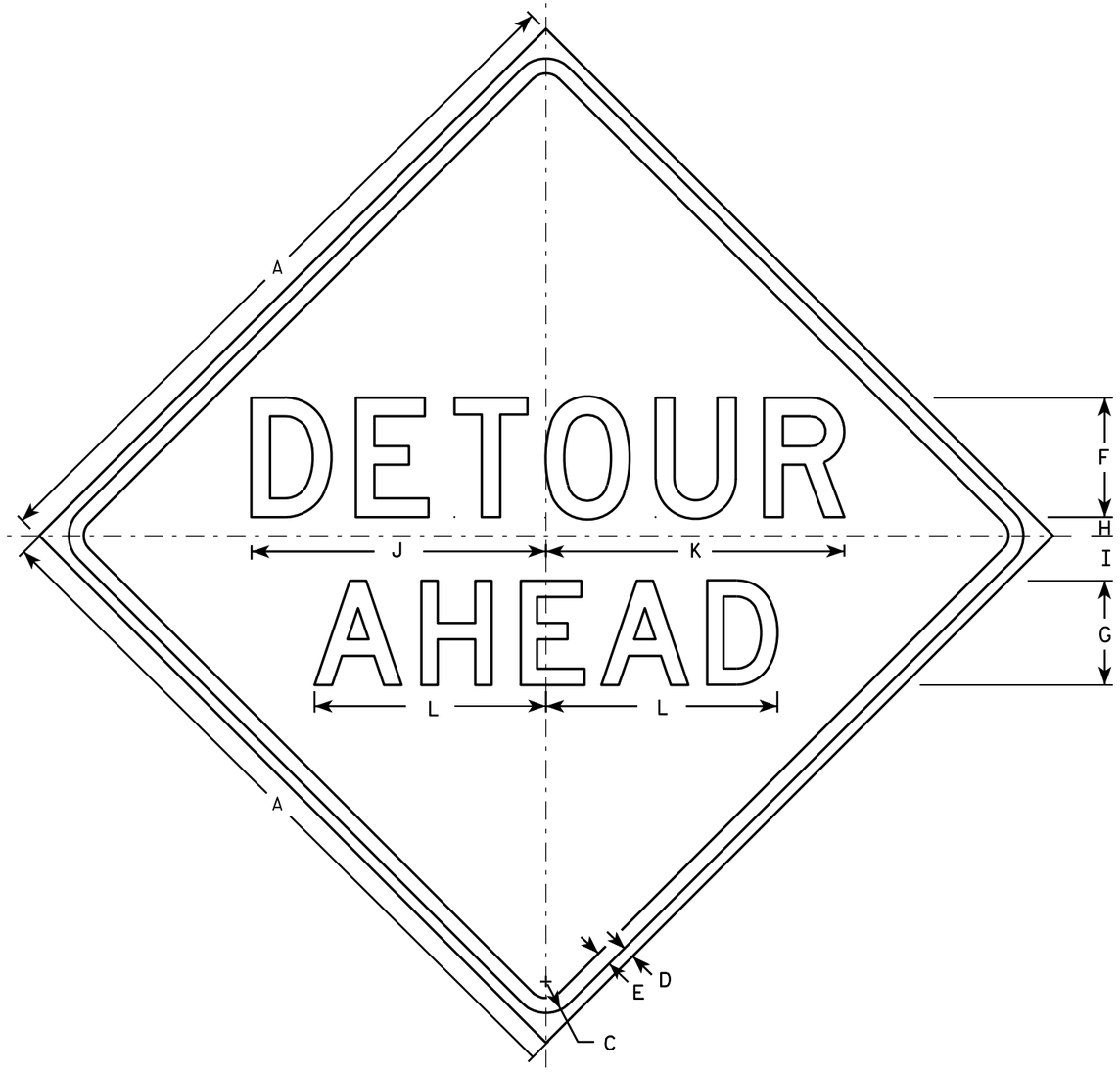
SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

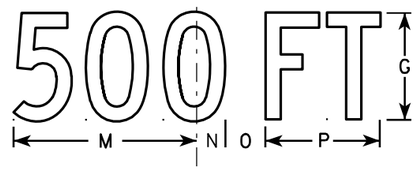
WISDOT/CADDS SHEET 42

7

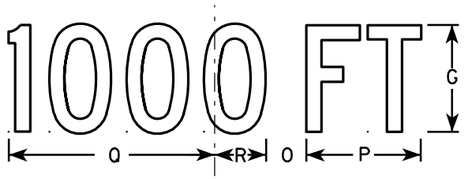
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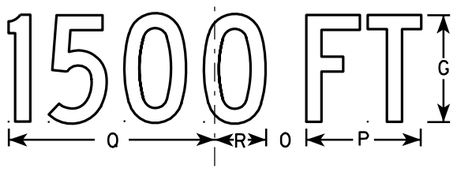
W20-2A



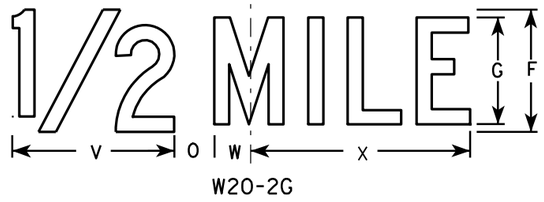
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

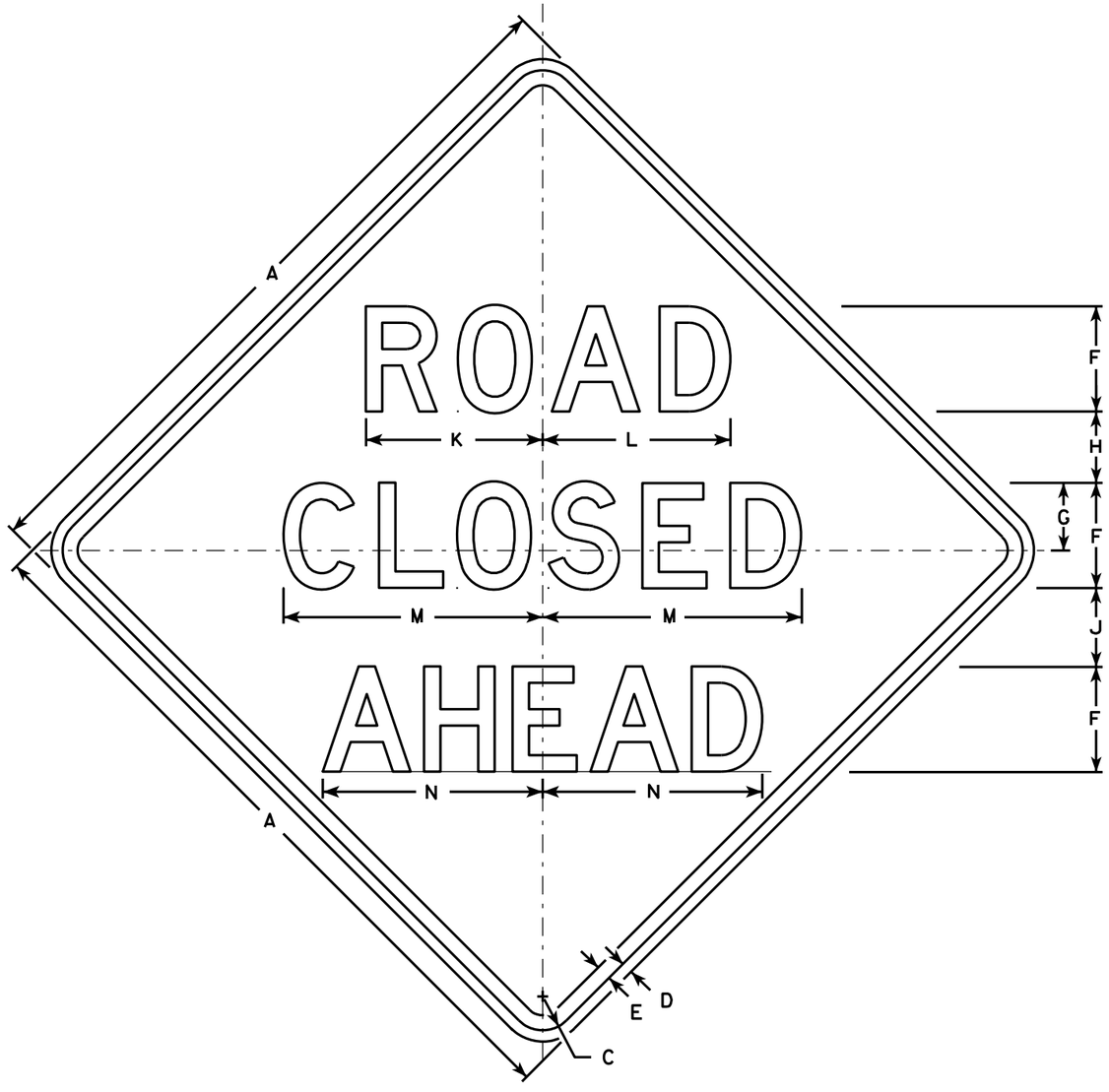
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

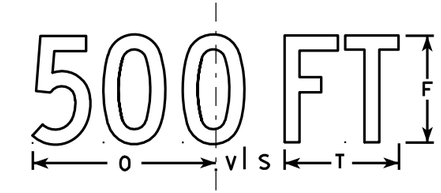
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

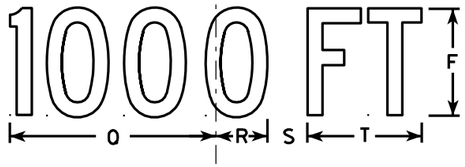
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 419 | E



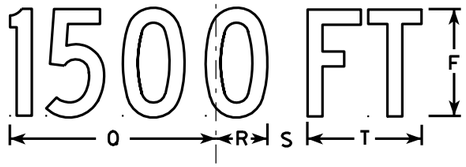
W20-3A



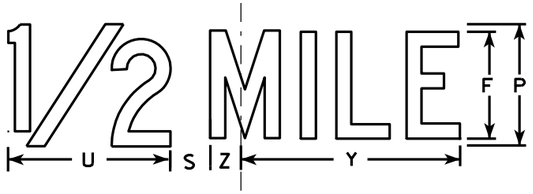
W20-3D



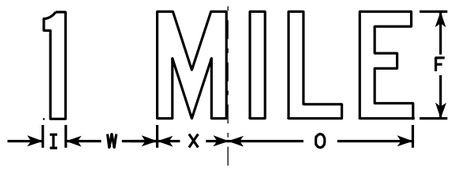
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 420 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000

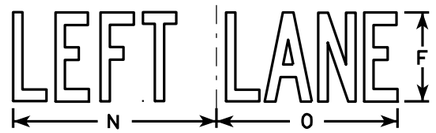
WISDOT/CADDS SHEET 42

7

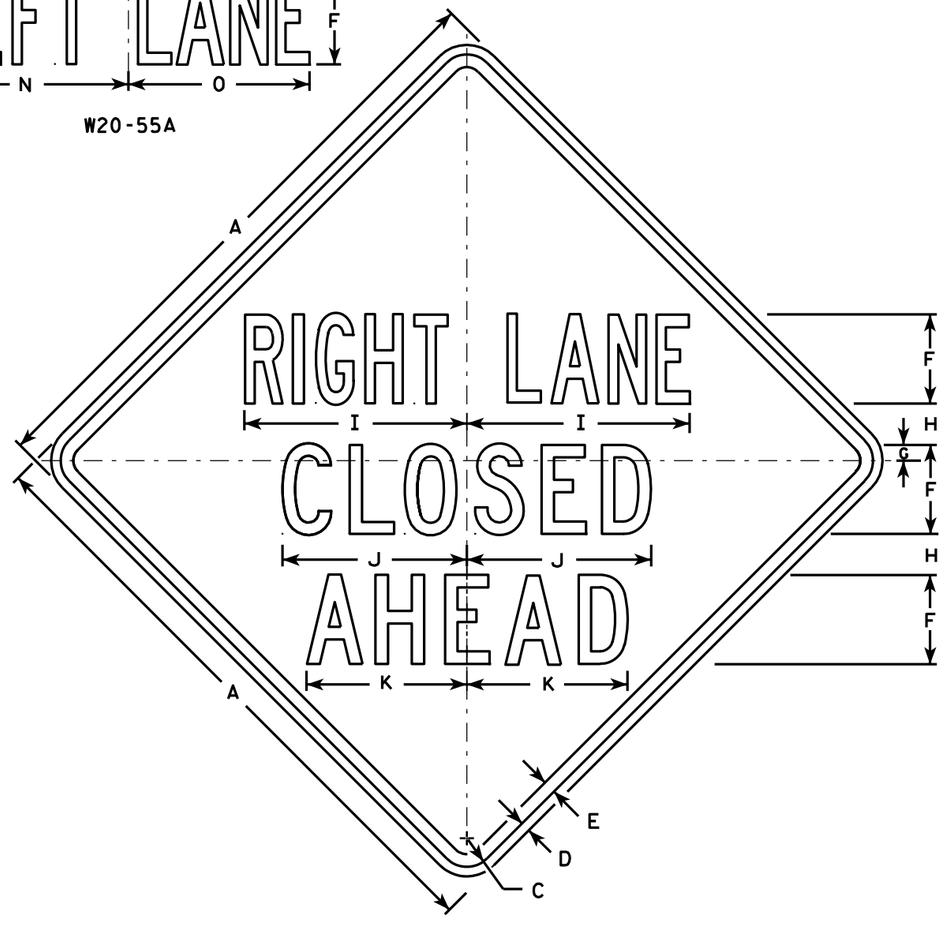
7



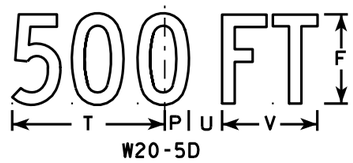
W20-56A



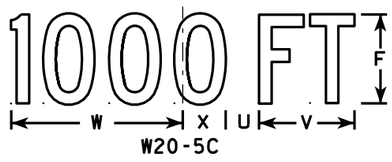
W20-55A



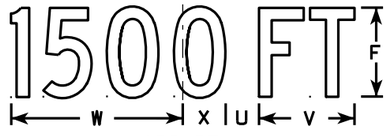
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

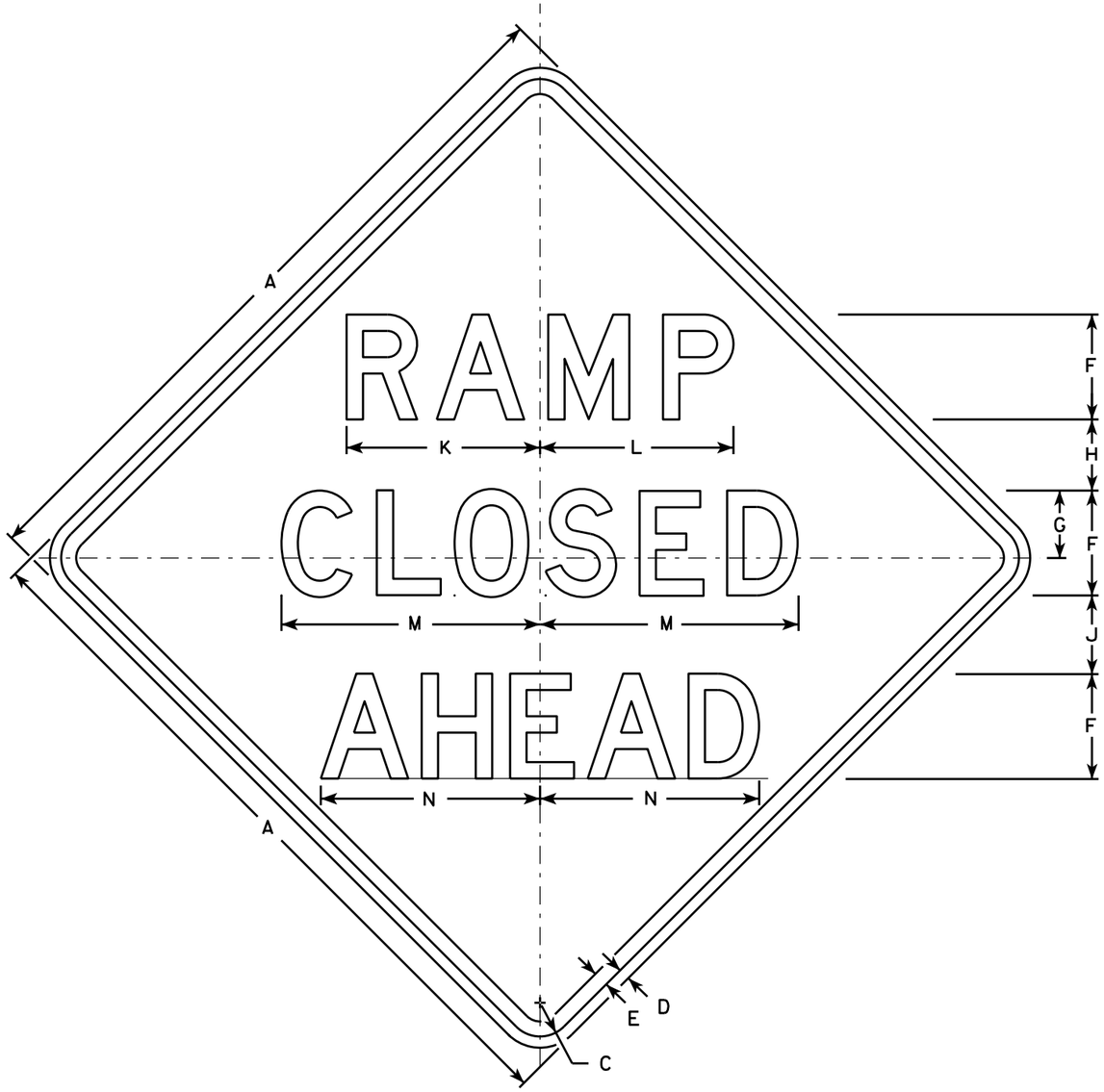
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

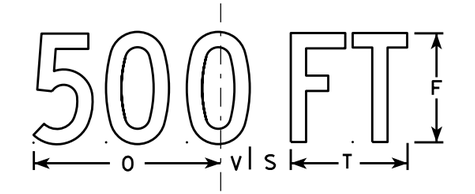
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 421 | E

7

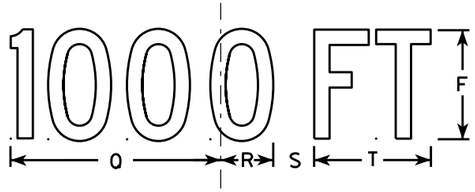
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



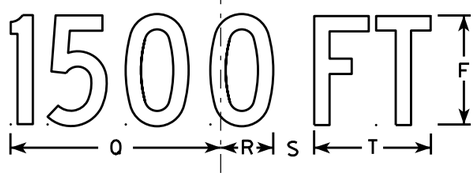
W20-53A



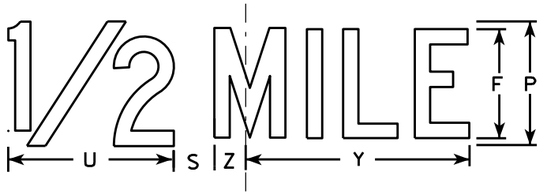
W20-53D



W20-53C



W20-53B



W20-53G



W20-53F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	9 1/4	9 1/4	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-53A,B,C,D,F,G

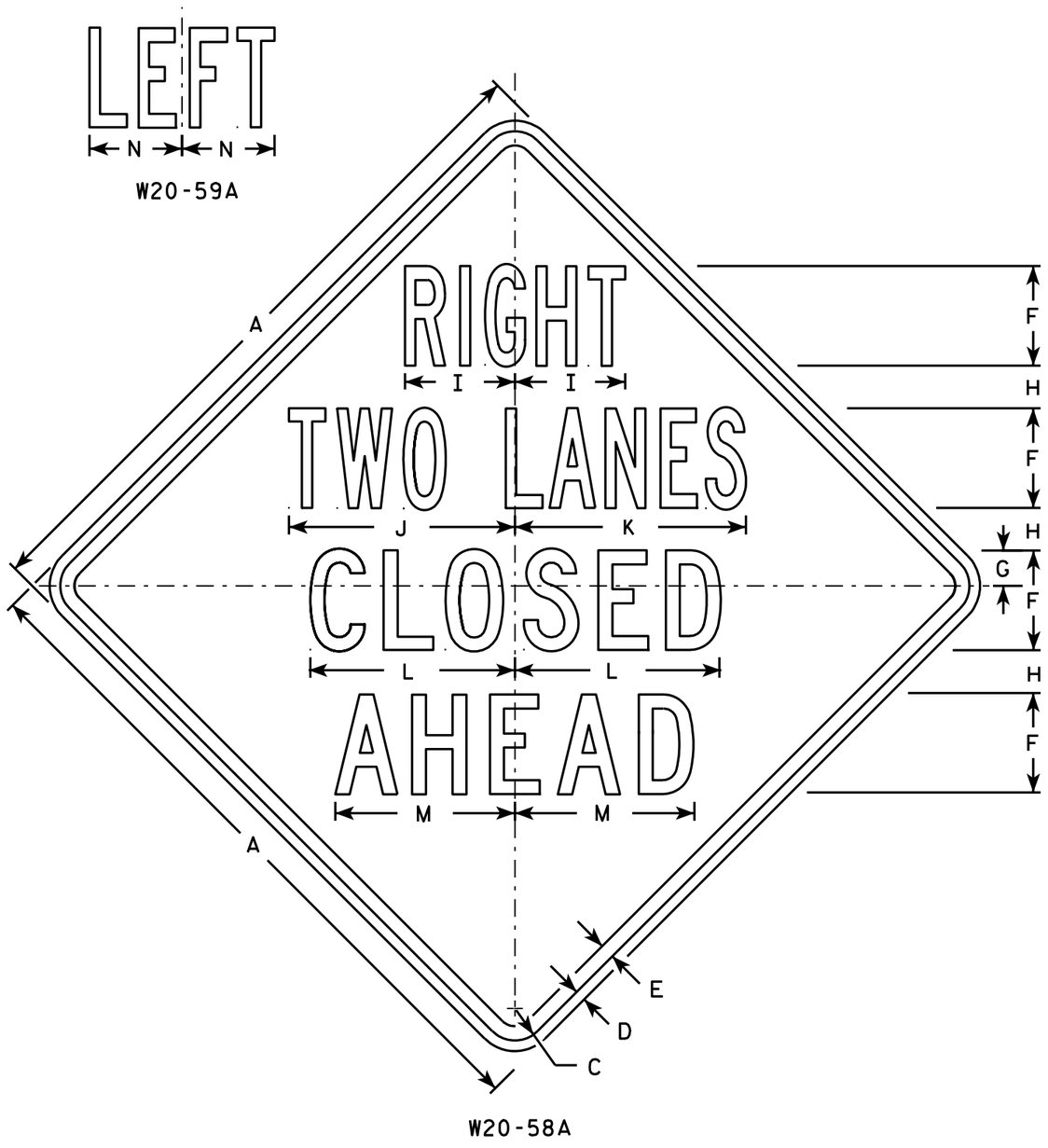
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

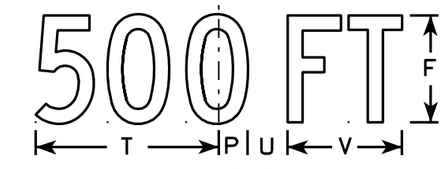
DATE 5/27/15 PLATE NO. W20-53.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

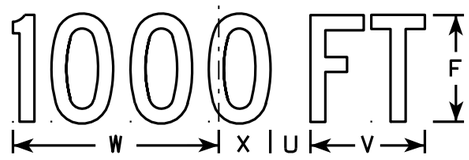
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 27-MAY-2015 19:40 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.729210:1.000000
WISDOT/CADDS SHEET 42



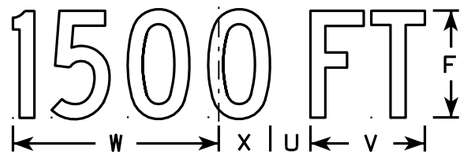
W20-58A



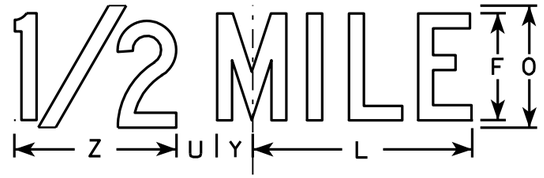
W20-58D



W20-58C



W20-58B



W20-58G



W20-58F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 & 2 Series B.
   Lines 3 & 4 Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	1 7/8	2 1/4	5 7/8	11 7/8	12 1/8	10 3/4	9 1/2	4 7/8	6	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48		2 1/4	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48		2 1/4	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48		2 1/4	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48		2 1/4	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48		2 1/4	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

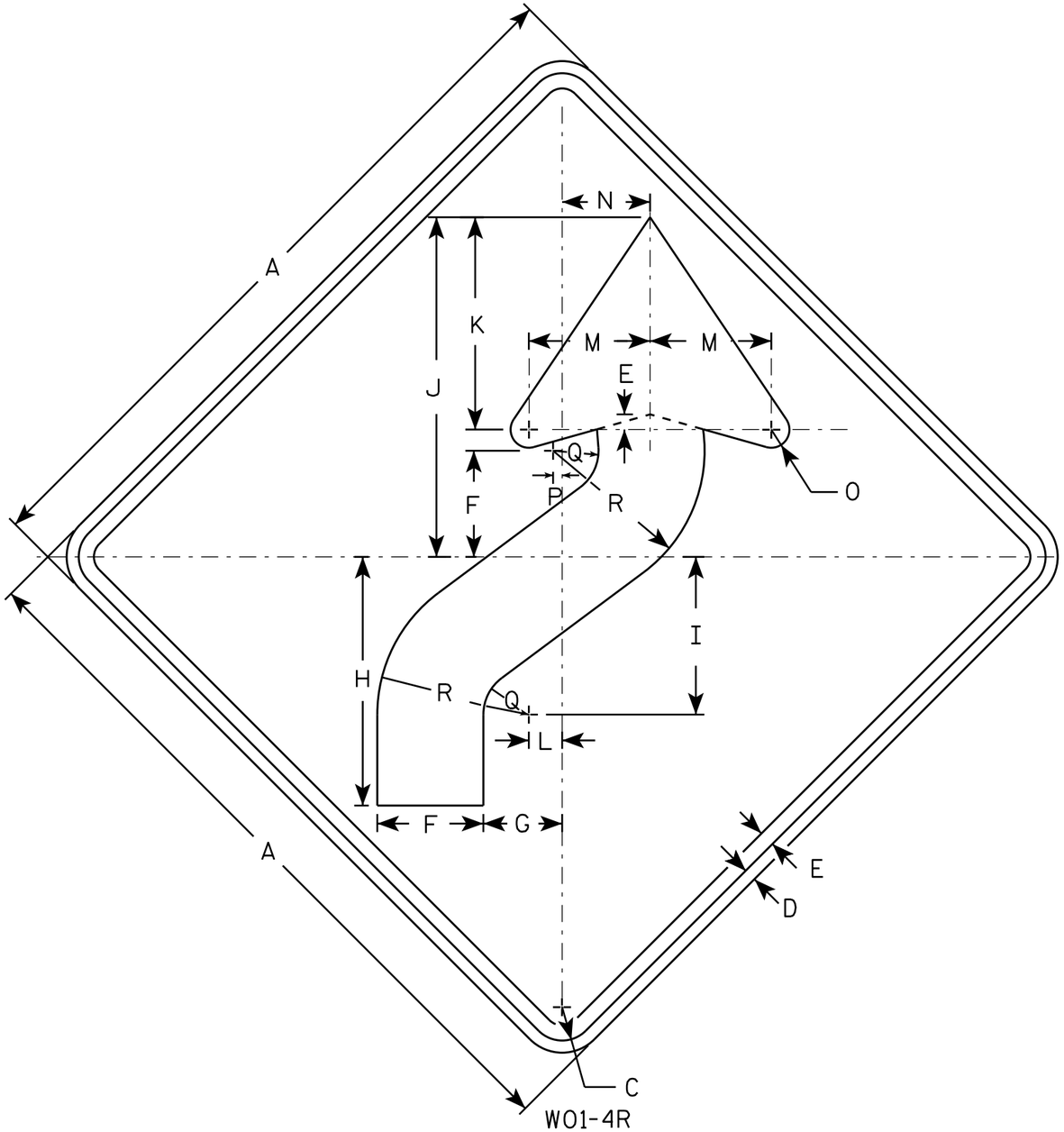
STANDARD SIGN
W20-58A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-58.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 423	E



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

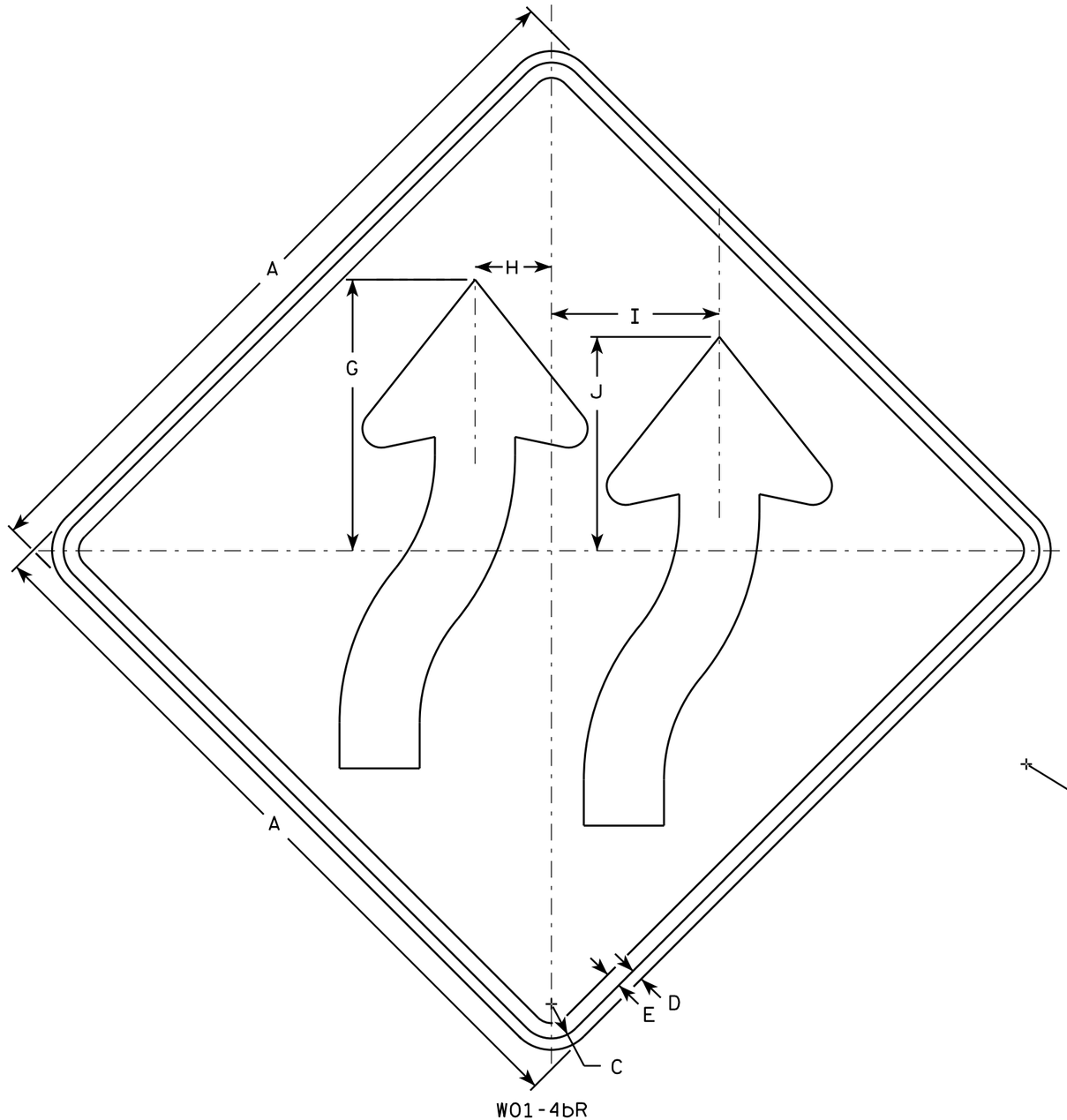
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

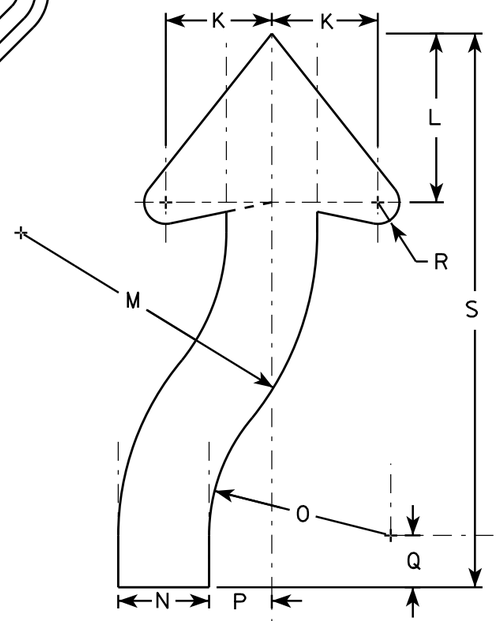
DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42



W01-4bR



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4bL is the same as W014-bR exept arrows are reversed along the vertical centerline

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		13 3/8	3 3/4	8 1/4	10 1/2	4 5/8	7 3/8	12 7/8	3 7/8	7 7/8	2 3/4	2 1/4	7/8	24								9.0
2S	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
2M	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
3	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
4	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
5	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0

STANDARD SIGN
W01-4b

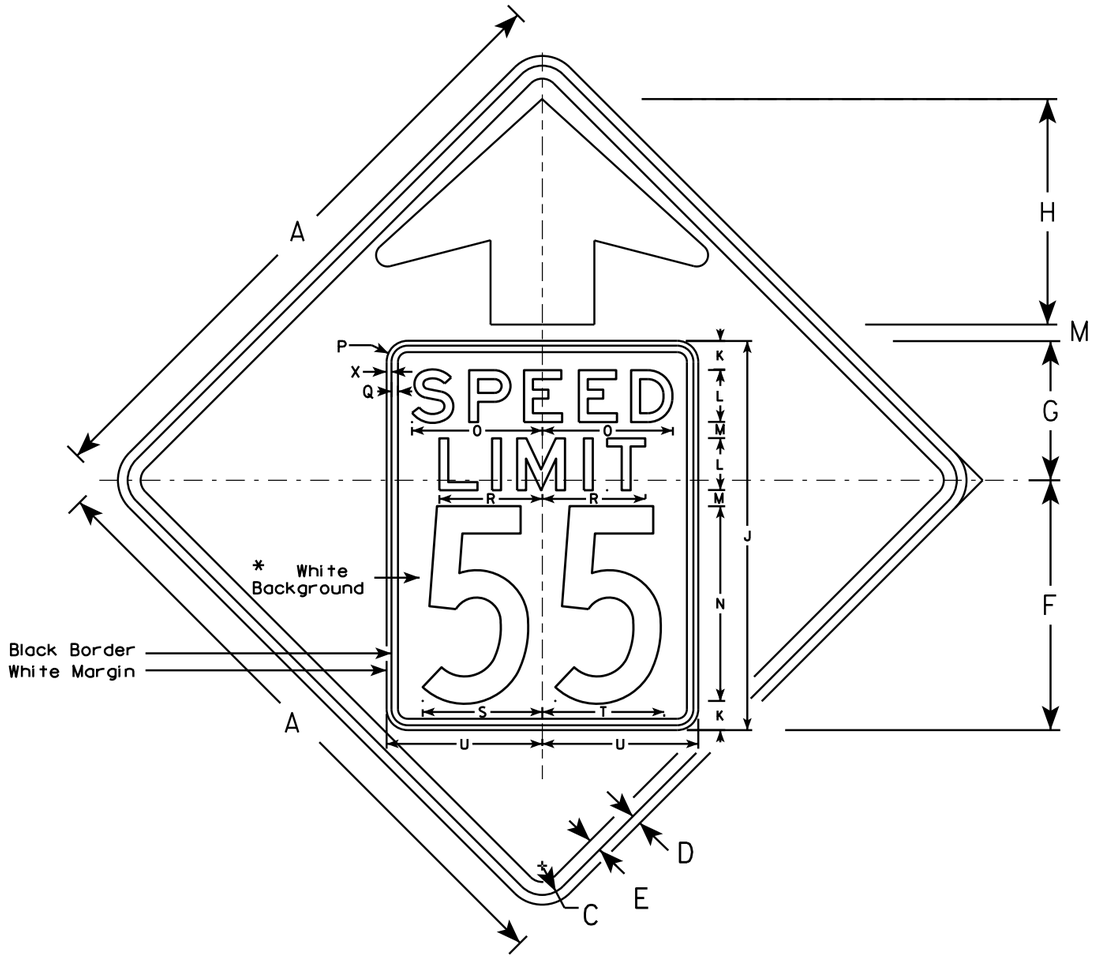
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-4b.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014B.DGN PLOT DATE : 28-FEB-2014 11:36 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 8.756290:1.000000
WISDOT/CADDS SHEET 42

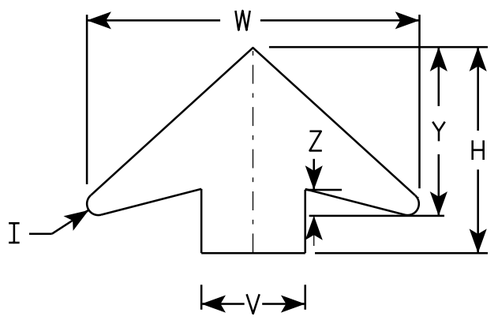


W03-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - ORANGE*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2S	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
2M	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
3	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W03-5

WISCONSIN DEPT OF TRANSPORTATION

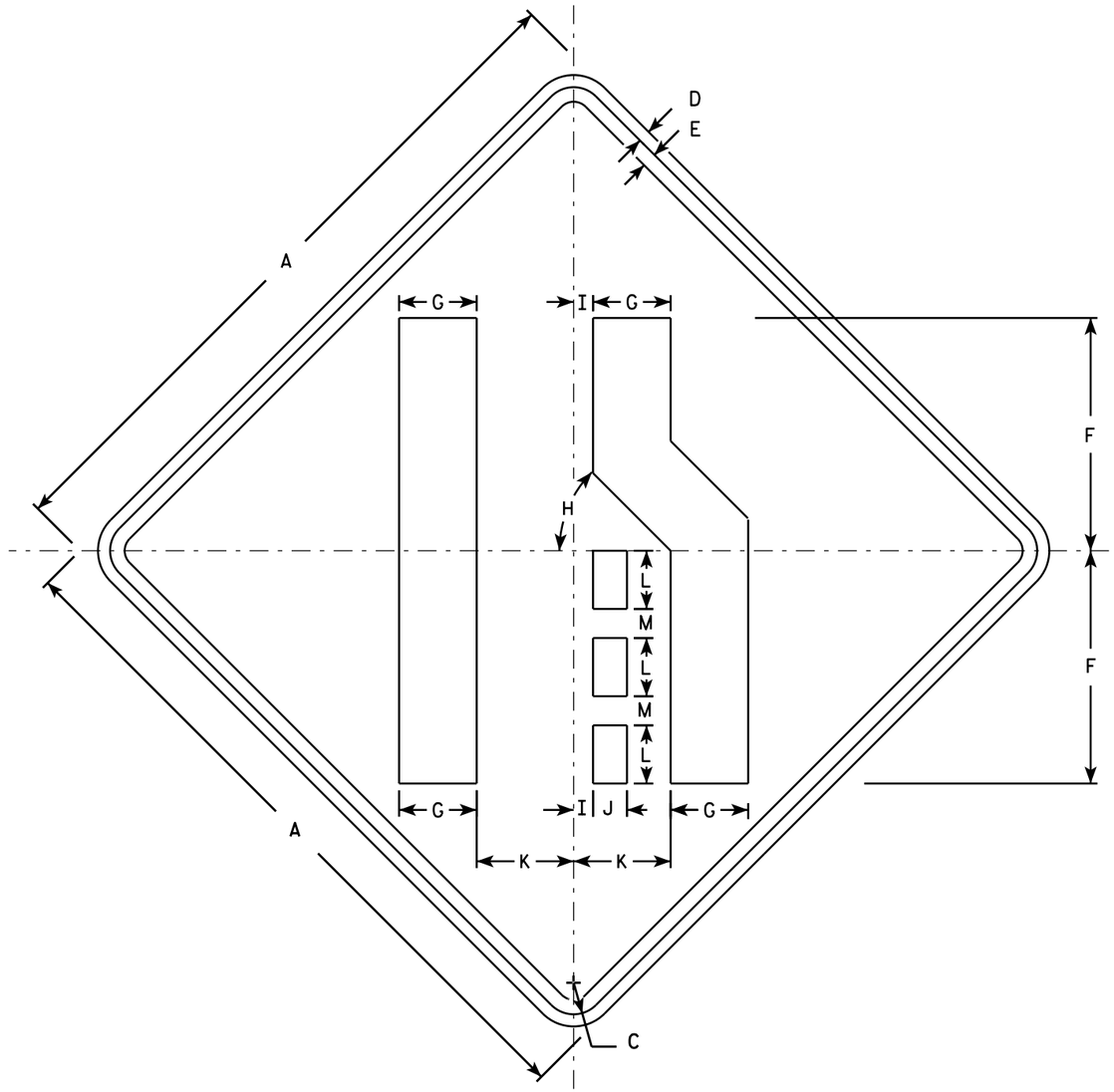
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-5.1

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W035.DGN PLOT DATE : 20-NOV-2013 11:32 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

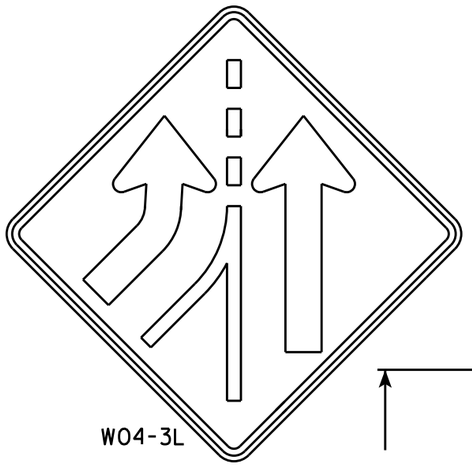
WISCONSIN DEPT OF TRANSPORTATION

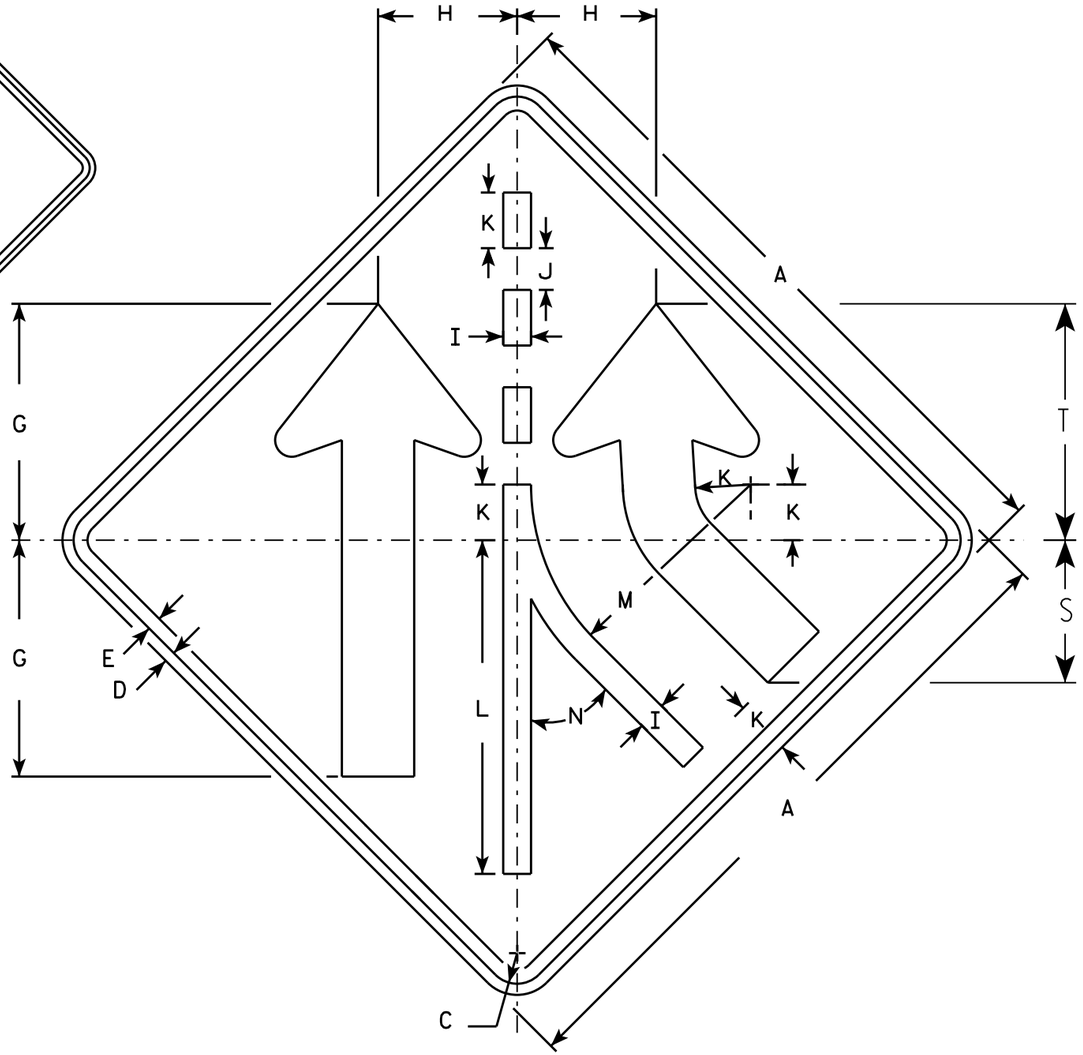
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 427 W04-2.1

PROJECT NO:

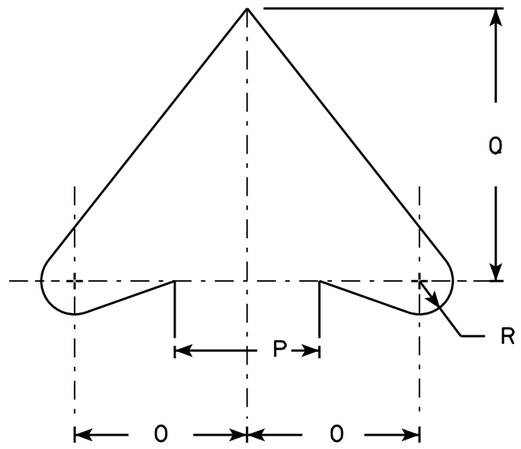
SHEET NO: E





NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-3 L is the same as W04-3 R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

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

STANDARD SIGN

W0433

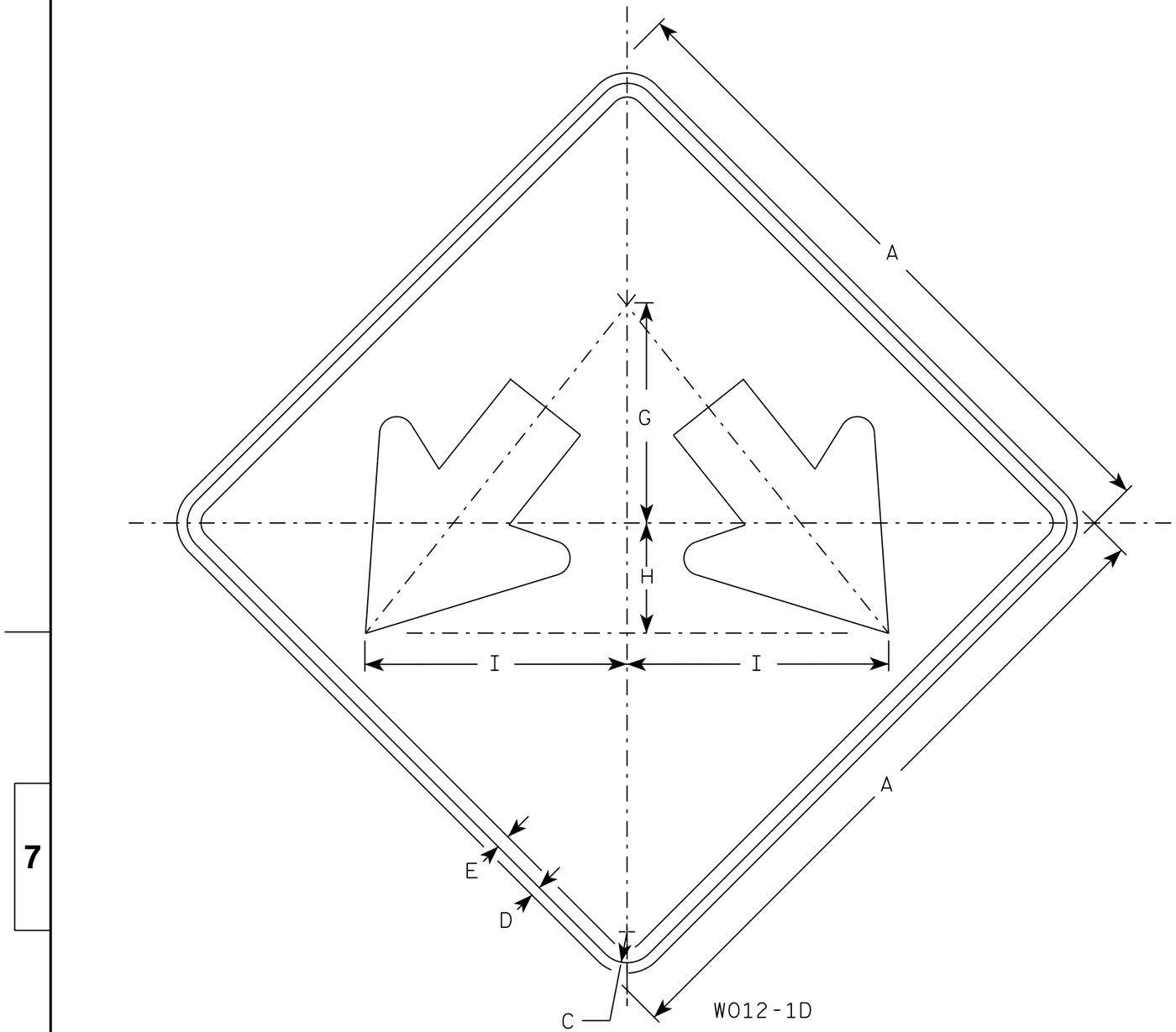
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W04-3.1

PROJECT NO:

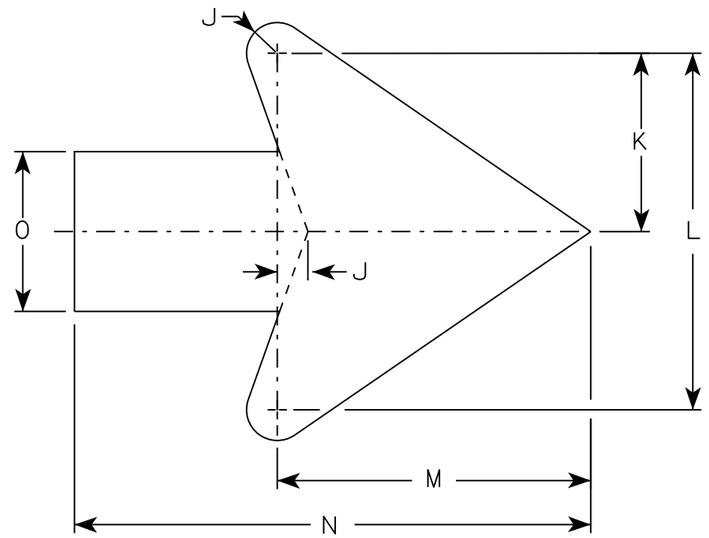
SHEET NO: E



W012-1D

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0

STANDARD SIGN
W012-1D

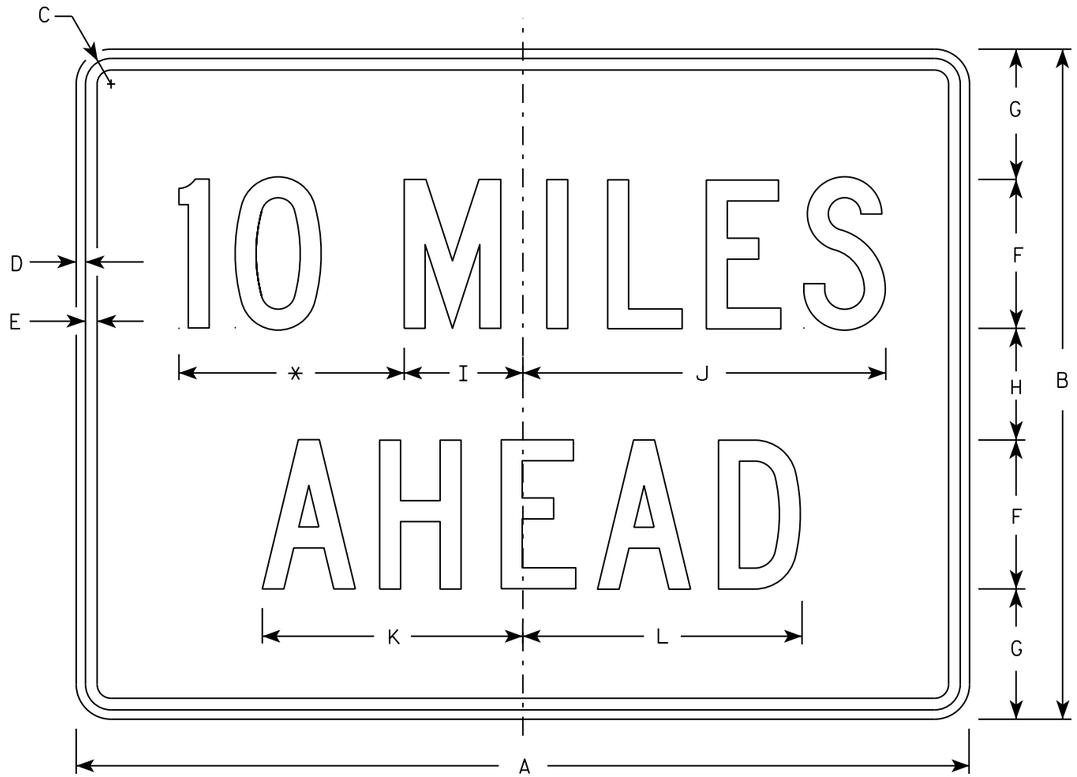
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

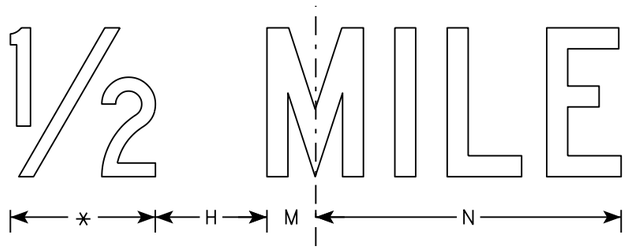
DATE 7/28/16 PLATE NO W012-1D.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W0121D.DGN PLOT DATE : 11-AUG-2016 11:28 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.621375:1.000000



W057-52



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

STANDARD SIGN
W057-52

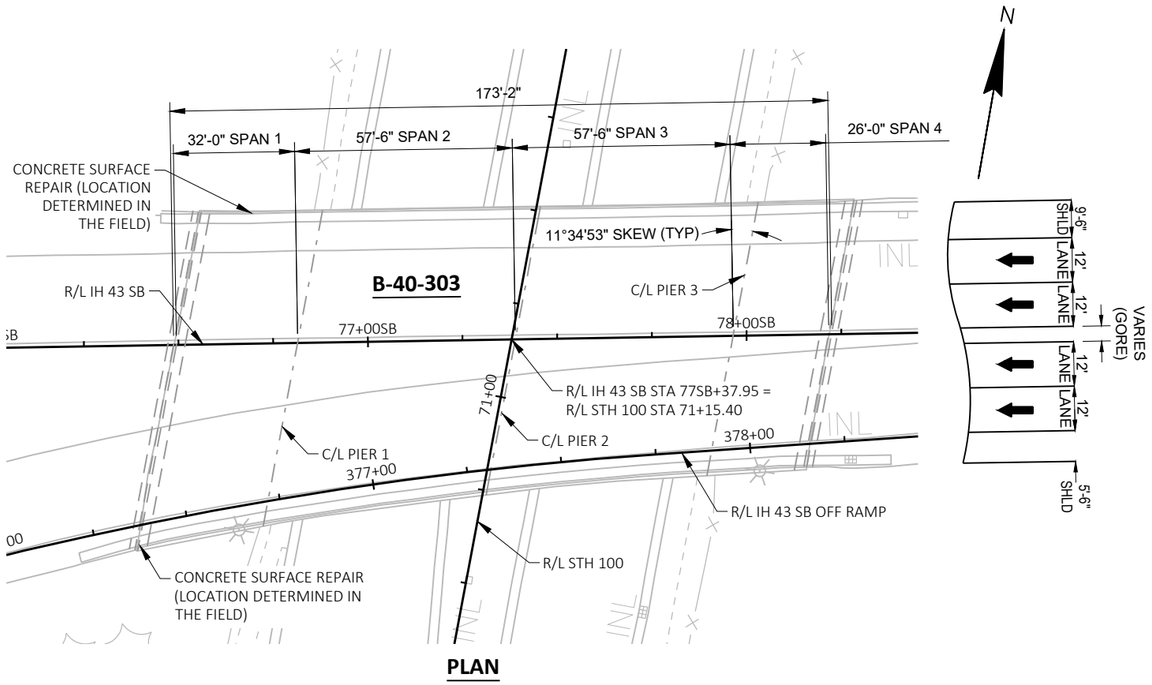
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

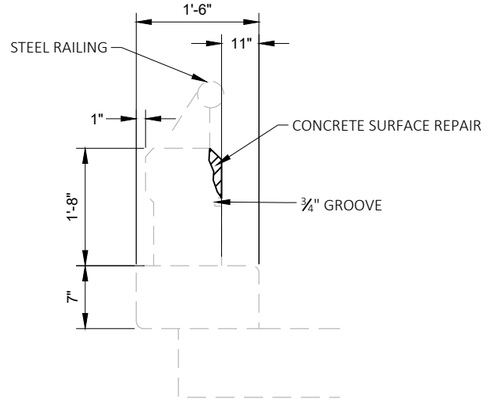
DATE 3/21/17 PLATE NO. W057-52.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 430	E

STATE PROJECT NUMBER
1090-08-71



PLAN



PARAPET - SECTION

DESIGN DATA

LIVE LOAD:
DESIGN RATING: HS-20
INVENTORY RATING: HS-20
OPERATIONAL RATING: HS-33
WISCONSIN STANDARD PERMIT VEHICLE LOAD (WIS-SPV): 250 KIPS

NOTES

DRAWINGS SHALL NOT BE SCALED.

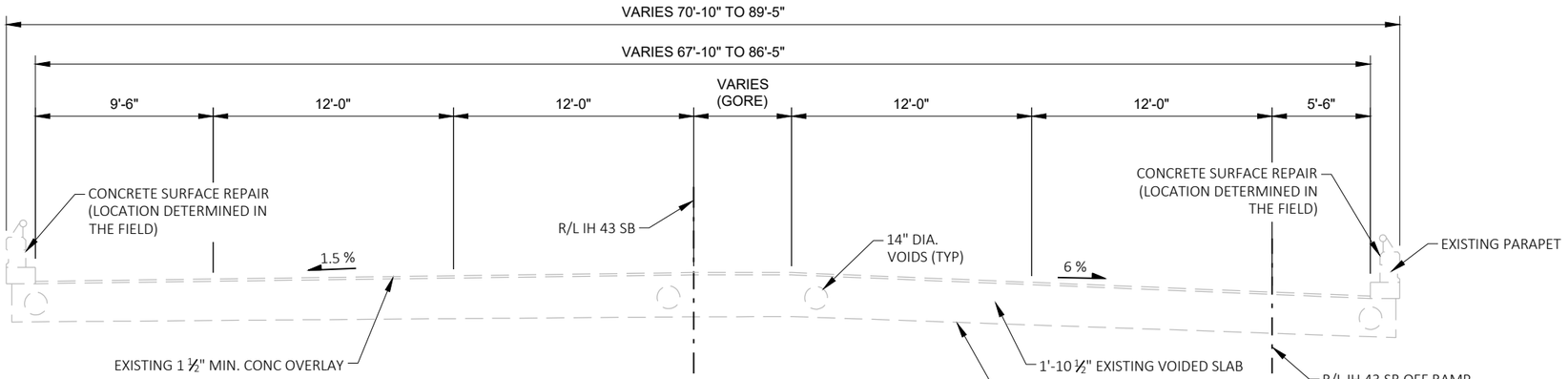
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT.

THE CONTRACTOR MUST PROTECT THE EXISTING REINFORCEMENT STEEL THAT REMAINS DURING DEMOLITION. REPLACEMENT OF COMPONENTS DAMAGED DURING THE REMOVAL OF THE EXISTING CONCRETE WILL BE THE CONTRACTORS RESPONSIBILITY AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.

CONCRETE SURFACE REPAIR QUANTITIES TO BE DETERMINED IN THE FIELD AT THE DIRECTION OF THE FIELD ENGINEER.

THE LOCATION OF "REMOVING LOOSE CONCRETE" ON THE UNDERSIDE OF THE DECK SHALL BE DETERMINED BY THE FIELD ENGINEER.



SECTION THRU ROADWAY - LOOKING EAST

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTAL
509.1500	CONCRETE SURFACE REPAIR	SF	25
SPV.0165	REMOVING LOOSE CONCRETE	SF	2680

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ SDR 11/03/21
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-303

IH 43 SB/USH 45 SB OVER STH 100/S 108TH ST

COUNTY	TOWN
MILWAUKEE	GREENFIELD

DESIGN SPEC. REHABILATATION N/A

DESIGNED BY REGION	DESIGNED CK'D REGION	DRAWN BY REGION	PLANS CK'D REGION

REMOVE LOOSE CONCRETE & PARAPET REPAIR

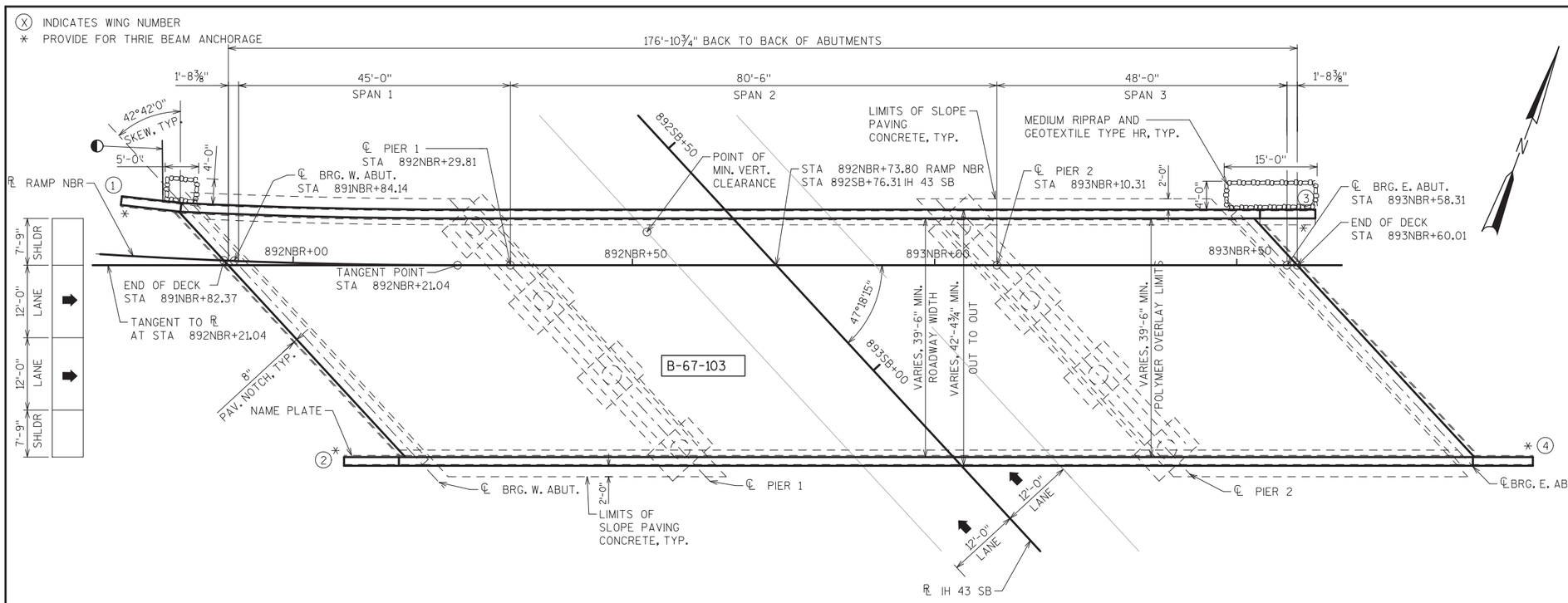
SHEET 1 OF 1
431

8

8

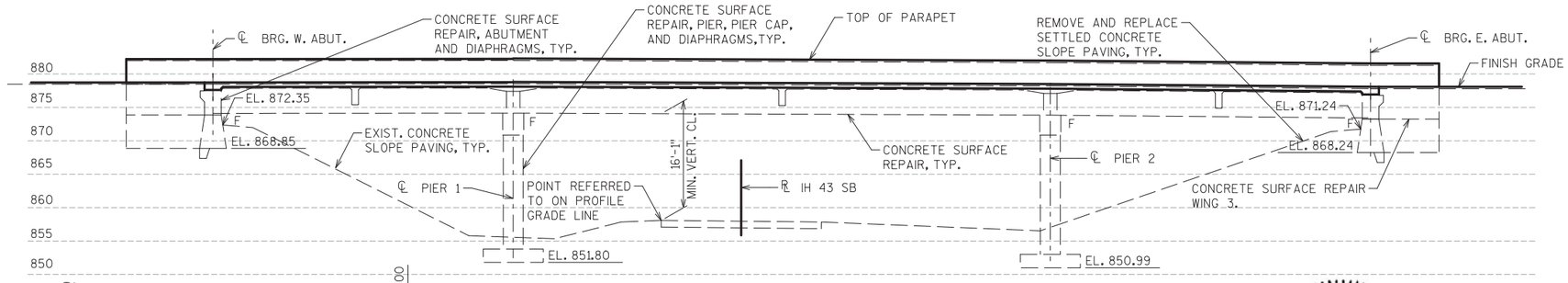
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DATE: 7/28/2021 2:34:05 PM Plotted by: bthengan PEN TABLE: V8_STRUCTURAL_REV.TBL

STATE PROJECT NUMBER
1090-08-71



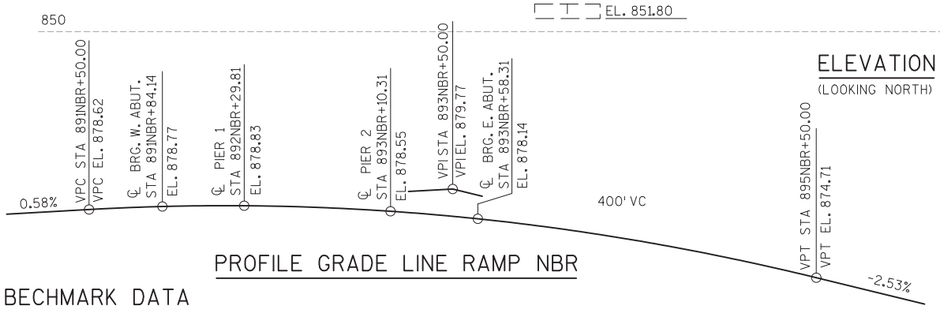
PLAN

(3 SPAN 45" PRESTRESSED GIRDER BRIDGE)

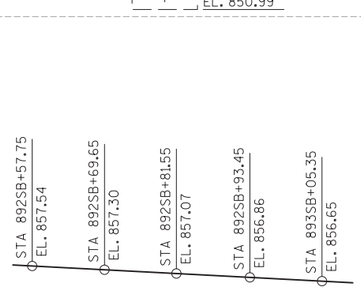


ELEVATION

(LOOKING NORTH)



PROFILE GRADE LINE RAMP NBR



PROFILE GRADE LINE IH-43 SB

(BASED ON FIELD SURVEY)

BECHMARK DATA

NO.	STATION	DESCRIPTION	ELEVATION
CP1030	891NBR+87.36, 34.86' RT	SURVEY MONUMENT WITH AL. CAP	879.175
CP1060	891NBR+32.04, 12.96' LT	SURVEY MONUMENT WITH AL. CAP	877.145

◐ EXTEND EXISTING 6" UNPERFORATED PIPE UNDERDRAIN AT WING 1 10 FEET FROM THE FACE OF WING. SLOPE MIN. 0.5% AND PROVIDE RODENT SHIELD AT OPEN END.

DESIGN DATA

LIVE LOAD

DESIGN LOAD: HS20
INVENTORY RATING: HS15
OPERATIONAL RATING: HS40
WISCONSIN STANDARD PERMIT VEHICLE LOAD (WIS-SPV):.....240 KIPS
RATING INCLUDES 5 PSF FOR WEIGHT OF POLYMER OVERLAY

MATERIAL PROPERTIES

CONCRETE MASONRY
SUPERSTRUCTURE..... f'c = 4,000 psi
ALL OTHER .....f'c = 3,500 psi

BAR STEEL REINFORCEMENT, GRADE 60 ..... fy = 60,000 psi

CURVE DATA

(℄ RAMP NBR)
P.I. STA 889NBR+04.41
DELTA = 40°
D = 6°02'03"
T = 345.00'
L = 662.02'
R = 952.76'

TRAFFIC DATA

RAMP NBR

A.D.T. (2019) = 5,600
A.D.T. (2038) = 6,720
R.D.S. = 40 MPH

IH 43 SB

A.D.T. (2019) = 29,900
A.D.T. (2038) = 43,200
R.D.S. = 75 MPH

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. TYPICAL SECTION AND GENERAL NOTES
3. WING WALL DETAILS
4. SUPERSTRUCUTURE (1 OF 2)
5. SUPERSTRUCUTURE (2 OF 2)
6. DECK ELEVATIONS
7. INTERMEDIATE STEEL DIAPHRAGM
8. SINGLE SLOPE PARAPET 42SS
9. SLOPE PAVING CONCRETE

WISCONSIN
BABU D. THENGANAKUNNEL
E-35905
MILWAUKEE, WI
PROFESSIONAL ENGINEER
8-2-2021

STRUCTURE DESIGN CONTACTS

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

CONSULTANT CONTACT:
YAN NENAYDYKH
(414) 292-4599

NO.	DATE	REVISION	BY

BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity
10501 W. Research Drive • Milwaukee, WI 53226
Phone: (414) 771-3390 Fax: (414) 771-4490

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ SDR 08/11/21
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-67-103

NB OFF-RAMP TO 124TH STREET

COUNTY	CITY
WAUKESHA	NEW BERLIN

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BDT	YNN	TAL	CSL

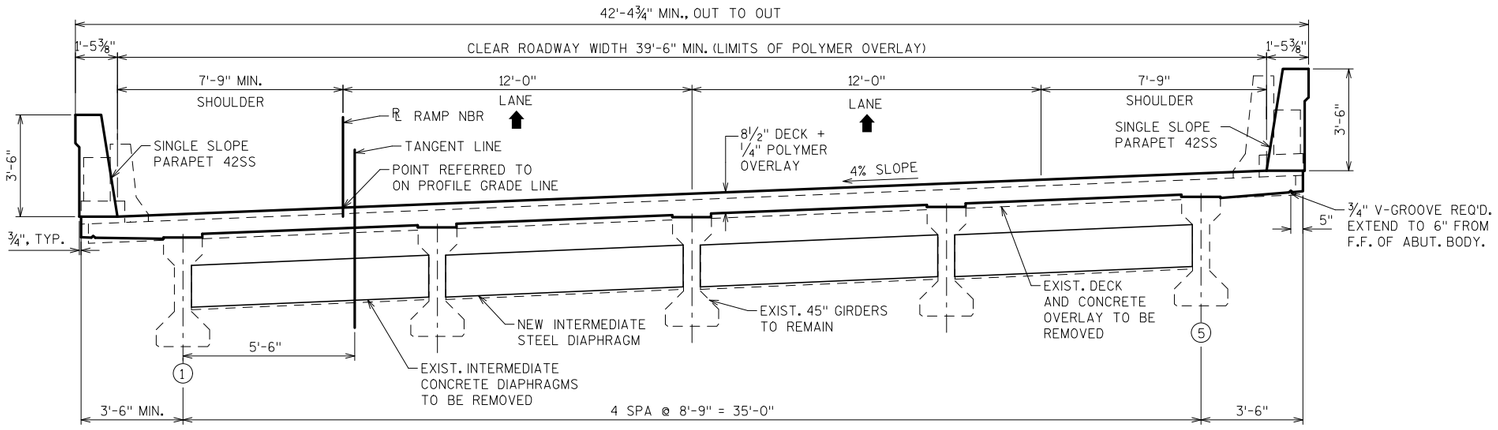
GENERAL PLAN AND ELEVATION

SHEET 1 OF 9
432

I.D. 1090-08-01 APR 2021

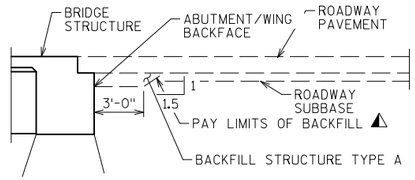
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DATE: 7/28/2021 2:34:35 PM Plotted by: bthengon PEN TABLE: V8_STRUCTURAL_REV.TBL



TYPICAL SECTION

(LOOKING EAST)



⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

TYPICAL SECTION THRU ABUTMENT/WING

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEMS	UNIT	WEST ABUTMENT	PIER 1	PIER 2	EAST ABUTMENT	SUPER	TOTAL
203.0220	REMOVING STRUCTURE B-67-103	EACH	-	-	-	-	-	1
203.0330	DEBRIS CONTAINMENT STRUCTURE B-67-103	EACH	-	-	-	-	-	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-67-103	LS	-	-	-	-	-	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	14	-	-	14	-	28
502.0100	CONCRETE MASONRY BRIDGES	CY	4	-	-	4	278	286
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	-	-	-	15	15
502.3210	PIGMENTED SURFACE SEALER	SY	9	-	-	9	175	193
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	58	-	-	56	280	394
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2760	-	-	2760	60160	65680
506.4000	STEEL DIAPHRAGMS B-67-103	EACH	-	-	-	-	12	12
509.1500	CONCRETE SURFACE REPAIR	SF	15	25	40	10	-	90
509.5100.S	POLYMER OVERLAY	SY	-	-	-	-	776	776
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	3	-	-	3	-	6
604.0400	SLOPE PAVING CONCRETE	SY	2	-	-	13	-	15
606.0200	RIPRAP MEDIUM	CY	2	-	-	4	-	6
612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	10	-	-	-	-	10
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2	-	-	2	-	4
645.0120	GEOTEXTILE TYPE HR	SY	3	-	-	10	-	13
SPV.0165.40	FIBER WRAP REINFORCING NON-STRUCTURAL	SF	-	-	-	-	40	40
SPV.0165.41	PRESTRESSED GIRDER SURFACE REPAIR	SF	-	-	-	-	38	38
	NON BID ITEMS							
	NAME PLATE	EACH						1
	FILLER	SIZE						½"

ALL ITEMS ARE CATEGORY 2010

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

ALL DIMENSIONS ARE IN FEET AND INCHES.

ELEVATIONS ARE REFERENCED TO THE NAVD 88 (2012) DATUM.

ALL NEW BAR STEEL REINFORCEMENT SHALL BE EPOXY COATED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE 3/4 INCH UNLESS OTHERWISE NOTED.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK. EXISTING BARS SHALL BE CLEANED AND STRAIGHTENED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL CONCRETE REMOVAL LIMITS SHALL BE DEFINED BY A 1 INCH DEEP SAWCUT, EXCEPT FOR PRESTRESSED GIRDERS, WHERE THE SAW CUT SHALL BE ½ INCH DEEP.

VARIATIONS TO THE NEW GRADE LINE OVER 1/4 INCH MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.

THE UPPER LIMIT OF "EXCAVATION FOR STRUCTURES BRIDGES B-67-103" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACKFACE OF ABUTMENT AND WINGS, ALL VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A TO THE ELEVATION AND SECTION EXISTING PRIOR TO EXCAVATION.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. THE NEW NAME PLATE SHALL SHOW THE ORIGINAL CONSTRUCTION YEAR. ORIGINAL CONSTRUCTION YEAR IS 1969

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE SIDES OF PAVING NOTCH.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE TOP AND INSIDE FACES OF PARAPETS.

APPLY POLYMER OVERLAY OVER THE NEW DECK. SEE SPECIAL PROVISIONS FOR REQUIRED CONCRETE CURE TIME PRIOR TO APPLYING POLYMER OVERLAY.

SHOTBLASTING, DECK SURFACE PREPARATIONS, AND TRANSITIONAL AREAS ARE INCLUDED IN THE BID ITEM, "POLYMER OVERLAY".

PROFILE GRADE LINE ELEVATIONS ARE AT THE TOP OF THE 1/4 INCH POLYMER OVERLAY. POLYMER OVERLAY IS NOT INCLUDED IN THE 8½ INCH DECK THICKNESS.

EXISTING STRUCTURE B-67-103 IS A 3-SPAN 45" PRESTRESSED CONCRETE GIRDER BRIDGE WITH AN OVERALL LENGTH OF 176.9 FEET AND AN OVERALL WIDTH OF 42.4 FEET. THE EXISTING DECK, DECK OVERLAY, PARAPETS, PART OF WING WALLS, CONCRETE INTERMEDIATE DIAPHRAGMS, AND PART OF SLOPE PAVING SHALL BE REMOVED AND REPLACED IN THIS CONTRACT. EXISTING GIRDERS AND SUBSTRUCTURE UNITS SHALL REMAIN IN PLACE.

PLANS OF THE EXISTING BRIDGE ARE ON FILE AND ARE AVAILABLE FOR INSPECTION AT THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHEAST REGION.

THE HAUNCH CONCRETE QUANTITY IS BASED ON AN AVERAGE HAUNCH SHOWN ON SHEET "DECK ELEVATIONS".

CONCRETE SURFACE REPAIR, PRESTRESSED GIRDER SURFACE REPAIR, AND SLOPE PAVING REQUIRED IN AREAS DESIGNATED BY THE FIELD ENGINEER. QUANTITIES SHOWN ARE APPROXIMATE AND UNDISTRIBUTED.

SUBMIT A REMOVAL PLAN TO THE ENGINEER FOR APPROVAL.

MONITOR SAWCUTTING OF EXISTING BRIDGE DECK AND BLADE DEPTH SO THAT EXISTING UNDERLYING GIRDERS ARE NOT DAMAGED. EXERCISE CARE NOT TO DAMAGE THE TOP FLANGES OF GIRDERS WITH DEMOLITION EQUIPMENT. DO NOT DAMAGE EXISTING GIRDER STIRRUPS EMBEDDED IN EXISTING DECK.

ANY EXCAVATION REQUIRED TO INSTALL THE PIPE UNDERDRAIN IS INCIDENTAL TO THE BID ITEM " PIPE UNDERDRAIN UNPERFORATED 6-INCH".

STATE PROJECT NUMBER
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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-103

DRAWN BY TAL | PLANS CK'D. CSL

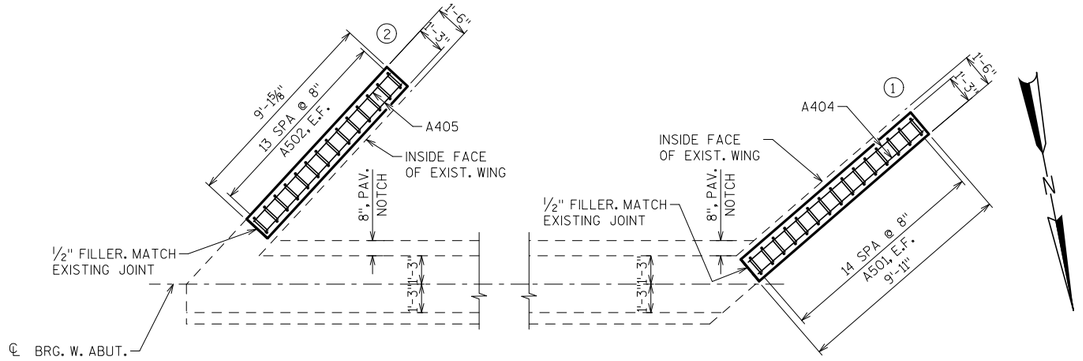
TYPICAL SECTION AND GENERAL NOTES

SHEET 2 OF 9

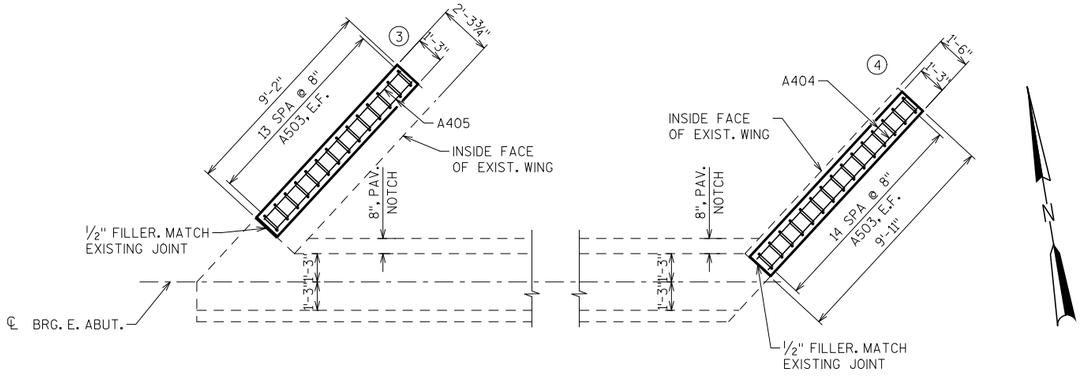
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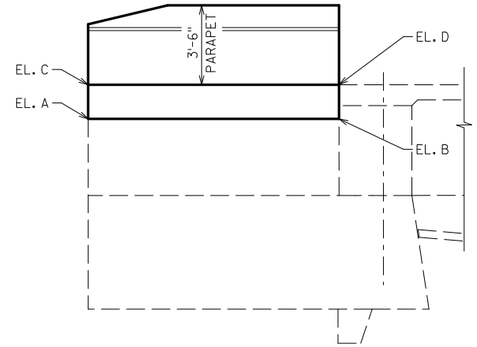
STATE PROJECT NUMBER
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WEST ABUTMENT WINGS



EAST ABUTMENT WINGS



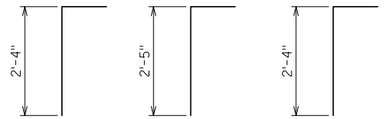
WING ELEVATION

(LOOKING AT OUTSIDE FACE)

WINGS 2 AND 3 SHOWN, WINGS 1 AND 4 OPPOSITE.

BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
A501	X	30	3'-0"	X	-	WING 1 VERTICAL
A502	X	28	3'-1"	X	-	WING 2 VERTICAL
A503	X	58	3'-0"	X	-	WING 3 & 4 VERTICAL
A404	X	12	9'-6"	-	-	WING 1 & 4 HORIZONTAL
A405	X	12	8'-10"	-	-	WING 2 & 3 HORIZONTAL



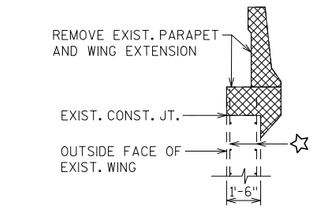
A501 A502 A503

BENDING DIAGRAM

WING ELEVATIONS

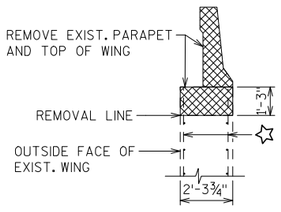
WING	EL. A	EL. B	EL. C	EL. D
1	876.77	876.92	878.38	878.44
2	878.47	878.49	880.09	880.09
3	876.30	876.33	877.81	877.91
4	877.39	877.46	878.91	879.04

NOTE: ELEVATIONS "A" AND "B" ARE BASED ON FIELD SURVEY



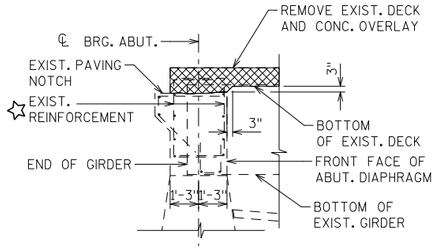
SECTION THRU WINGS 1, 2, AND 4

(SHOWING REMOVAL)



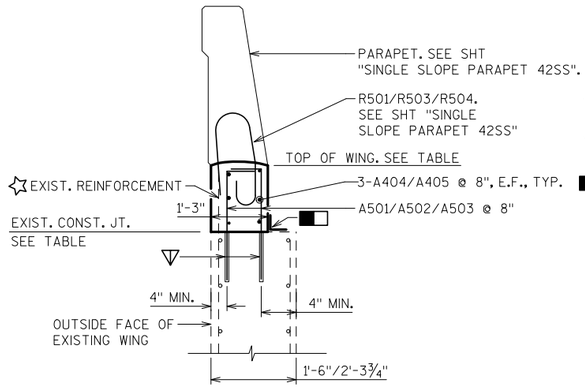
SECTION THRU WING 3

(SHOWING REMOVAL)



SECTION THRU ABUTMENT

(SHOWING REMOVAL)



TYPICAL SECTION THRU WING

LEGEND

- ☆ SALVAGE EXISTING BARS AND INCORPORATE FULL LENGTH INTO NEW WORK.
- ▽ ADHESIVE ANCHORS NO.5 BAR. EMBED MIN. 1'-0" IN CONCRETE. MIN. EDGE DISTANCE = 4".
- ■ 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL JOINTS ON BACK FACE OF WING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-103

DRAWN BY: TAL | PLANS CK'D.: CSL

WING WALL DETAILS

SHEET 3 OF 9

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FILE NAME: X:\BMI.3582E WO +5 IH 43 Bridges\5.Design\04.Structures.Bridges\dgns\04.Structures_Bridges\dgns\current plans\B-67-103\s03_wing wall details.dgn
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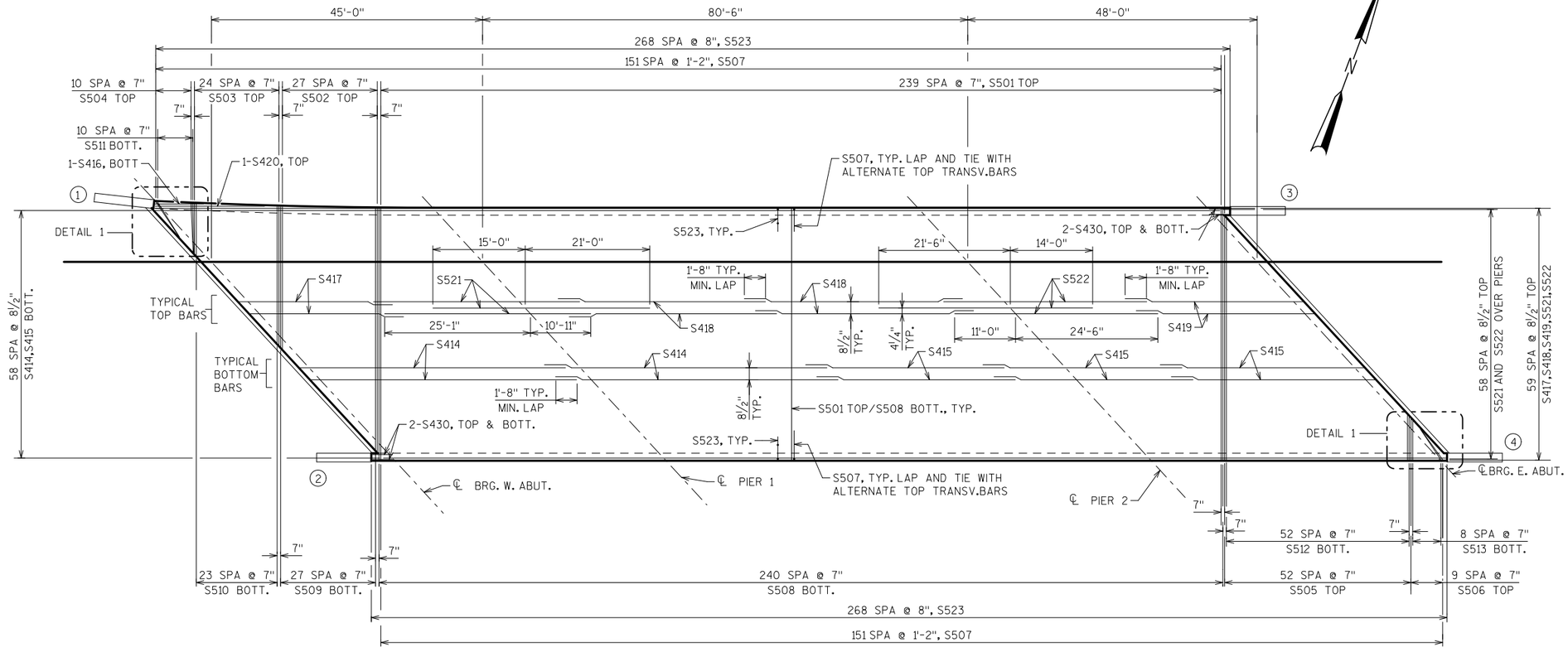
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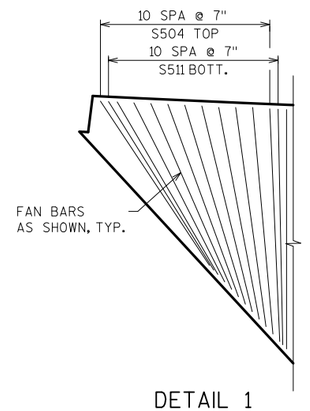
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STATE PROJECT NUMBER

1090-08-71



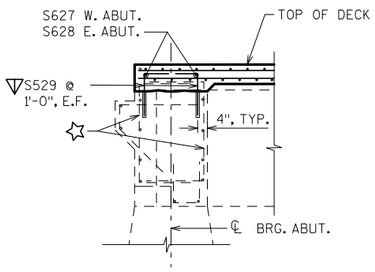
PLAN



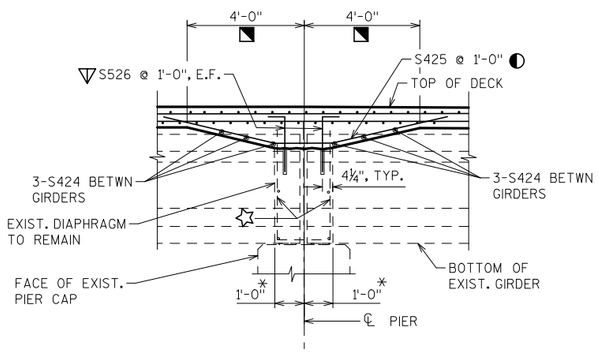
DETAIL 1

(NORTHWEST CORNER SHOWN, SOUTHEAST CORNER SIMILAR)

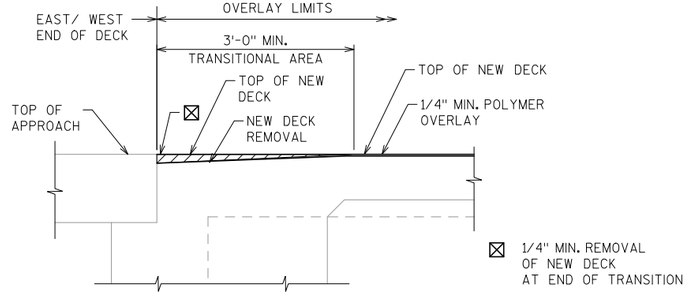
NOTE: LONGITUDINAL BARS NOT SHOWN FOR CLARITY.



SECTION THRU ABUT. DIAPHRAGM



SECTION THRU PIER DIAPHRAGM



SECTION THRU ABUTMENT TRANSITIONAL AREA ON DECK

(REMOVAL AND OVERLAY THICKNESS NOT TO SCALE)
NOTE: TRANSITIONAL AREA REQUIRED WHEN APPROACH PAVEMENT HAS BEEN PLACED PRIOR TO OVERLAY PLACEMENT

LEGEND

- ◥ DIMENSION IS TAKEN PARALLEL TO GIRDER
- * DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNIT.
- ◐ BARS PLACED PARALLEL TO GIRDERS, SPACING PERPENDICULAR TO ℄ GIRDERS.
- ☆ SALVAGE EXISTING BARS AND INCORPORATE INTO NEW WORK.
- ▽ ADHESIVE ANCHORS NO.5 BAR. EMBED MIN. 1'-0" IN CONCRETE. MIN. EDGE DISTANCE = 4".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-103

DRAWN BY	TAL	PLANS CK'D.	CSL

SUPERSTRUCTURE (1 OF 2)

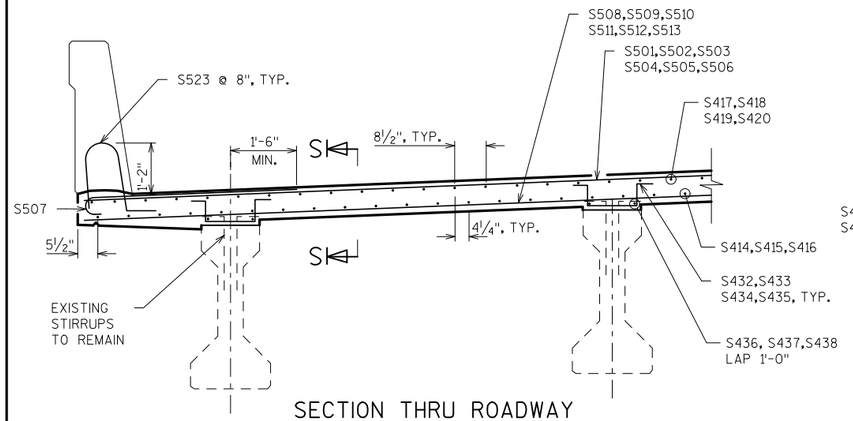
SHEET 4 OF 9

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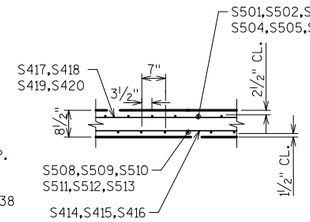
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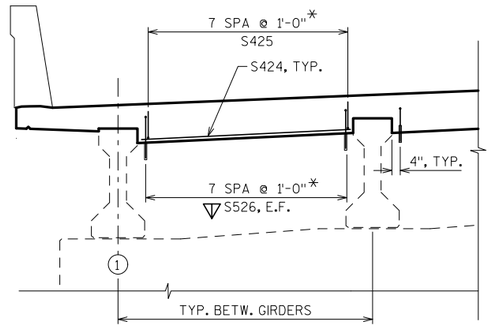
STATE PROJECT NUMBER
1090-08-71



SECTION THRU ROADWAY

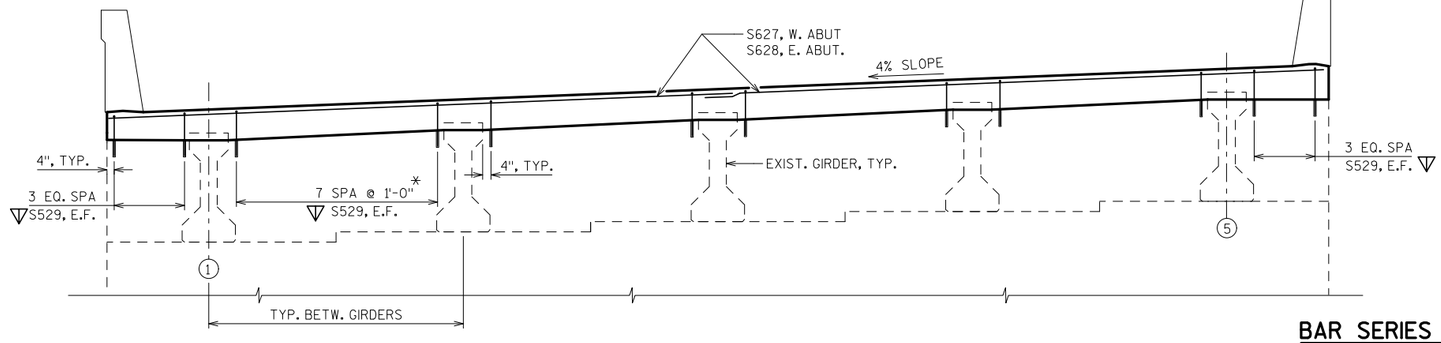


SECTION S-S



SECTION THRU PIER DIAPHRAGM

(LOOKING EAST, SHOWING HAUNCH REINFORCEMENT)



SECTION THRU ABUTMENT DIAPHRAGM

(LOOKING EAST, SHOWING DIAPHRAGM REINFORCEMENT)

HAT BAR QUANTITY

SPAN	GIRDER	0 PT.- 0.25 PT.		0.25 PT.- 0.50 PT.		0.50 PT.- 0.75 PT.		0.75 PT.- 1.00 PT.	
		MARK	QTY	MARK	QTY	MARK	QTY	MARK	QTY
1	1	S434	14	S433	11	S433	13	S435	22
	2	S433	14	S433	11	S433	13	S434	22
	3	S434	14	S433	11	S433	13	S434	22
	4	S434	14	S434	11	S434	13	S435	22
	5	S435	14	S434	11	S434	13	S434	22
2	1	S433	38	S433	22	S433	22	S434	38
	2	S433	38	S432	22	S433	22	S435	38
	3	S434	38	S432	22	S432	22	S435	38
	4	S434	38	S433	22	S434	22	S435	38
	5	S434	38	S433	22	S433	22	S434	38
3	1	S435	24	S434	13	S435	13	S435	15
	2	S435	24	S434	13	S434	13	S434	15
	3	S435	24	S435	13	S434	13	S435	15
	4	S435	24	S434	13	S434	13	S435	15
	5	S435	24	S434	13	S433	13	S434	15

NOTE: HAT BAR SAPCING SHALL NOT EXCEED SPACING OF EXISTING GIRDER STIRRUPS OR 1'-0", WHICHEVER IS LOWER.

LEGEND

* PLACE BARS PARALLEL TO GIRDERS, SPACING MEASURED PERPENDICULAR TO ℄ GIDERS.

▽ ADHESIVE ANCHORS NO.5 BAR. EMBED MIN. 1'-0" IN CONCRETE. MIN. EDGE DISTANCE = 4".

BILL OF BARS

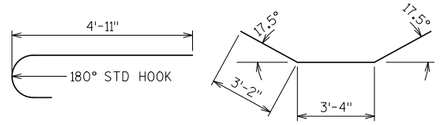
BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES ⚠	LOCATION
S501	X	240	41'-8"	-	-	DECK TOP TRANSVERSE
S502	X	28	31'-11"	-	X	DECK TOP TRANSVERSE
S503	X	25	15'-7"	-	X	DECK TOP TRANSVERSE
S504	X	11	7'-5"	-	X	DECK TOP TRANSVERSE
S505	X	53	23'-10"	-	X	DECK TOP TRANSVERSE
S506	X	10	6'-5"	-	X	DECK TOP TRANSVERSE
S507	X	304	5'-7"	X	-	DECK TOP TRANSV. AT OVERHANG
S508	X	241	41'-8"	-	-	DECK BOTT. TRANSVERSE
S509	X	28	31'-7"	-	X	DECK BOTT. TRANSVERSE
S510	X	24	15'-6"	-	X	DECK BOTT. TRANSVERSE
S511	X	11	7'-5"	-	X	DECK BOTT. TRANSVERSE
S512	X	53	23'-6"	-	X	DECK BOTT. TRANSVERSE
S513	X	9	6'-3"	-	X	DECK BOTT. TRANSVERSE
S414	X	118	45'-0"	-	-	DECK BOTT. LONGIT.
S415	X	177	31'-1"	-	-	DECK BOTT. LONGIT.
S416	X	1	16'-2"	-	-	DECK BOTT. LONGIT.
S417	X	60	23'-1"	-	-	DECK TOP LONGIT.
S418	X	120	31'-10"	-	-	DECK TOP LONGIT.
S419	X	60	26'-8"	-	-	DECK TOP LONGIT.
S420	X	1	8'-1"	-	-	DECK TOP LONGIT.
S521	X	119	36'-0"	-	-	DECK TOP LONGIT.OVER PIER 1
S522	X	119	35'-6"	-	-	DECK TOP LONGIT.OVER PIER 2
S523	X	538	4'-5"	X	-	PARAPET VERTICAL
S424	X	48	9'-9"	-	-	TRANSV. AT PIER DIAPHRAGM
S425	X	64	9'-8"	X	-	LONGIT. AT PIER DIAPHRAGM
S526	X	128	2'-9"	X	-	VERTICAL OVER PIER DIAPHRAGM
S627	X	4	30'-3"	-	-	TOP BAR OVER W. ABUT. DIAPHRGM
S628	X	4	29'-10"	-	-	TOP BAR OVER E. ABUT. DIAPHRAGM
S529	X	160	2'-6"	X	-	VERTICAL OVER ABUT. DIAPHRAGM
S430	X	8	3'-6"	-	-	LONGIT. BARS AT NE AND SW CORNERS
						NOT USED
S432	X	66	3'-0"	X	-	HAT BARS OVER GIRDERS
S433	X	307	3'-1"	X	-	HAT BARS OVER GIRDERS
S434	X	489	3'-2"	X	-	HAT BARS OVER GIRDERS
S435	X	363	3'-3"	X	-	HAT BARS OVER GIRDERS
S436	X	20	23'-4"	-	-	LONGIT. OVER GIRDERS, SPAN 1
S437	X	40	21'-4"	-	-	LONGIT. OVER GIRDERS, SPAN 2
S438	X	20	24'-9"	-	-	LONGIT. OVER GIRDERS, SPAN 3

⚠ LENGTH SHOWN FOR BAR IS ONLY AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

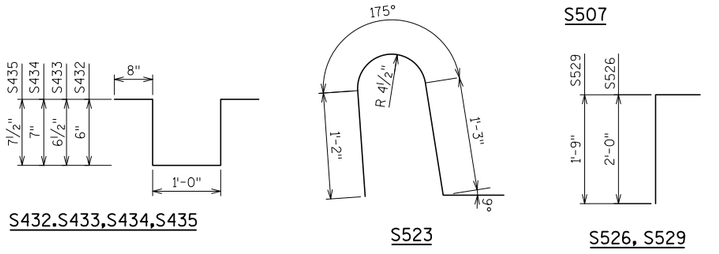
BAR SERIES TABLE

BAR MARK	NO. REQ'D	LENGTH
S502	1 SERIES OF 28	23'-8" TO 40'-3"
S503	1 SERIES OF 25	8'-3" TO 22'-11"
S504	1 SERIES OF 11	6'-9" TO 8'-0"
S505	1 SERIES OF 53	7'-5" TO 40'-3"
S506	1 SERIES OF 10	6'-0" TO 6'-9"
S509	1 SERIES OF 28	23'-2" TO 40'-0"
S510	1 SERIES OF 24	8'-6" TO 22'-7"
S511	1 SERIES OF 11	6'-10" TO 8'-0"
S512	1 SERIES OF 53	7'-1" TO 39'-11"
S513	1 SERIES OF 9	6'-2" TO 6'-5"

BUNDLE AND TAG EACH SERIES SEPARATELY



S507 S425



S432.S433,S434,S435 S523 S526, S529

BENDING DIAGRAM

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-103

DRAWN BY TAL | PLANS CK'D. CSL

SUPERSTRUCTURE (2 OF 2)

SHEET 5 OF 9

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FILE NAME: X:\BMI-3582E WO #5 IH 43 Bridges\5_Designs\04_Structures_Bridges\dcs\current plans\B-67-103+05_ superstructure 2.dgn
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STATE PROJECT NUMBER
1090-08-71

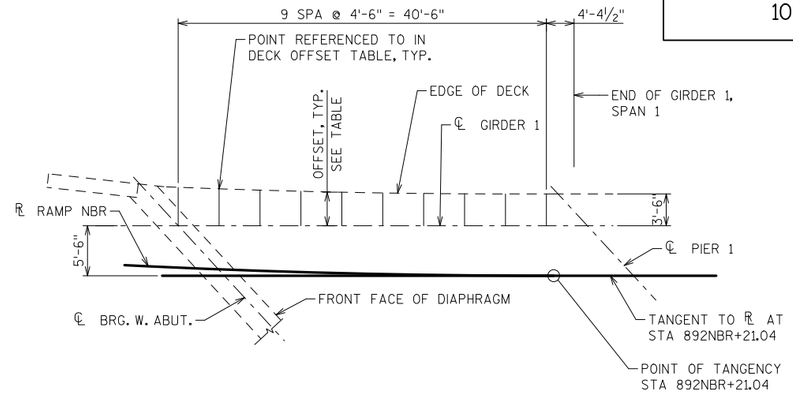
TOP OF DECK ELEVATIONS*

GIRDER	℄ BRG. W. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 1
NORTH EDGE/FLOWLINE	SEE TABLE OF DECK OFFSETS FOR EDGE OF DECK ELEVATIONS										
G1	878.55	878.56	878.57	878.58	878.58	878.59	878.59	878.59	878.60	878.60	878.60
PGL	878.75	878.77	878.78	878.79	878.80	878.81	878.81	878.82	878.82	878.82	878.82
G2	878.92	878.93	878.93	878.94	878.94	878.94	878.95	878.95	878.95	878.95	878.95
G3	879.28	879.28	879.29	879.29	879.30	879.30	879.30	879.30	879.30	879.29	879.29
G4	879.64	879.64	879.64	879.65	879.65	879.65	879.65	879.64	879.64	879.63	879.63
G5	879.99	880.00	880.00	880.00	880.00	880.00	879.99	879.99	879.98	879.97	879.96
SOUTH EDGE/FLOWLINE	880.09	880.09	880.09	880.09	880.09	880.08	880.08	880.07	880.06	880.05	880.04

GIRDER	℄ PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 2
NORTH EDGE/FLOWLINE	878.51	878.51	878.50	878.49	878.47	878.45	878.43	878.39	878.36	878.32	878.27
G1	878.60	878.60	878.59	878.58	878.56	878.54	878.51	878.48	878.44	878.39	878.35
PGL	878.82	878.81	878.80	878.79	878.77	878.74	878.71	878.67	878.63	878.59	878.53
G2	878.95	878.94	878.93	878.91	878.89	878.86	878.83	878.79	878.74	878.70	878.64
G3	879.29	879.28	879.26	879.24	879.21	879.18	879.14	879.09	879.05	878.99	878.94
G4	879.63	879.61	879.59	879.56	879.53	879.49	879.44	879.40	879.34	879.29	879.22
G5	879.96	879.94	879.91	879.88	879.84	879.79	879.75	879.69	879.63	879.57	879.50
SOUTH EDGE/FLOWLINE	880.04	880.02	879.99	879.96	879.92	879.87	879.82	879.77	879.71	879.64	879.57

GIRDER	℄ PIER 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. E. ABUT.
NORTH EDGE/FLOWLINE	878.27	878.24	878.21	878.17	878.14	878.10	878.06	878.02	877.98	877.93	877.89
G1	878.35	878.32	878.28	878.25	878.21	878.17	878.13	878.09	878.05	878.00	877.96
PGL	878.53	878.50	878.47	878.43	878.39	878.35	878.31	878.27	878.22	878.17	878.12
G2	878.64	878.61	878.57	878.54	878.50	878.46	878.41	878.37	878.32	878.27	878.22
G3	878.94	878.90	878.86	878.82	878.78	878.73	878.69	878.64	878.59	878.54	878.48
G4	879.22	879.18	879.14	879.10	879.05	879.00	878.95	878.90	878.85	878.80	878.74
G5	879.50	879.46	879.42	879.37	879.32	879.27	879.22	879.16	879.11	879.05	878.99
SOUTH EDGE/FLOWLINE	879.57	879.53	879.49	879.44	879.39	879.34	879.28	879.23	879.17	879.11	879.05

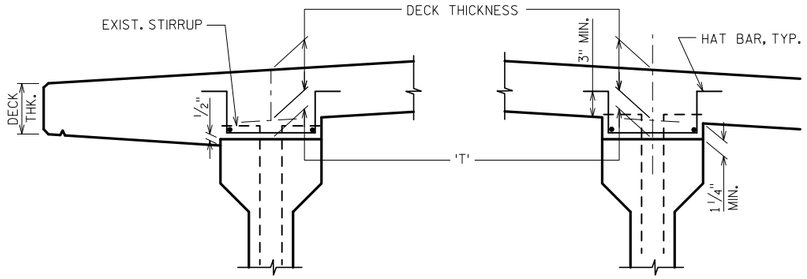
* ELEVATIONS GIVEN ARE BEFORE PLACING THE POLYMER OVERLAY



DECK OFFSET DIAGRAM

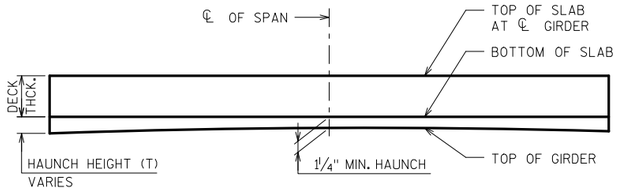
TABLE OF DECK OFFSETS

	℄ BRG. W. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
OFFSET (FT)	4.40	4.22	4.05	3.79	3.91	3.69	3.61	3.55	3.52	3.50
ELEVATION	878.43	878.44	878.46	878.47	878.48	878.49	878.50	878.50	878.51	878.51

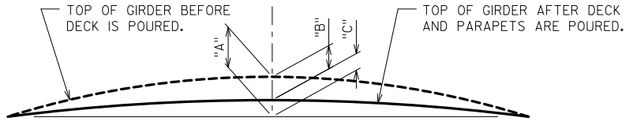


EXTERIOR GIRDER DETAIL

INTERIOR GIRDER DETAIL

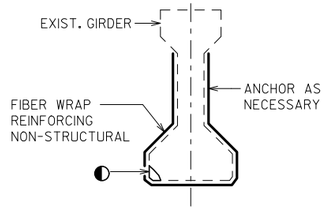


ELEVATION



CAMBER & DEFLECTION DIAGRAM

* "A" = PRESTRESS CAMBER
* "B" = DEAD LOAD DEFLECTION
* "C" = RESIDUAL CAMBER



FIBER WRAP REINFORCEMENT NON-STRUCTURAL

SEE SHEET 7 FOR LOCATION

FIBER WRAP REINFORCEMENT TO BE APPLIED AFTER THE FULL DEAD LOAD IS APPLIED TO THE GIRDER.

◐ REPAIR EDGE OF GIRDER. PAID SEPARATELY UNDER THE BID ITEM " PRESTRESSED GIRDER SURFACE REPAIR"

DECK HAUNCH DETAIL

IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ¼".

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS

= HAUNCH HEIGHT 'T'

NOTE:
AN AVERAGE HAUNCH 'T' OF 4.5"
WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES"

DEAD LOAD DEFLECTION (IN)

SPAN	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
1	0	0	⅛	⅛	⅛	⅛	⅛	0	0
2	½	1	1¼"	1½"	1⅝"	1½"	1¼"	1	½
3	0	0	⅛	⅛	¼	⅛	⅛	0	0

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-103

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DECK ELEVATIONS

SHEET 6 OF 9

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FILE NAME: X:\BMI-3582E WO #5 IH 43 Bridges\5_Design\04_Structures_Bridges\cds\current plans\B-67-103\s06_ deck elevations.dgn
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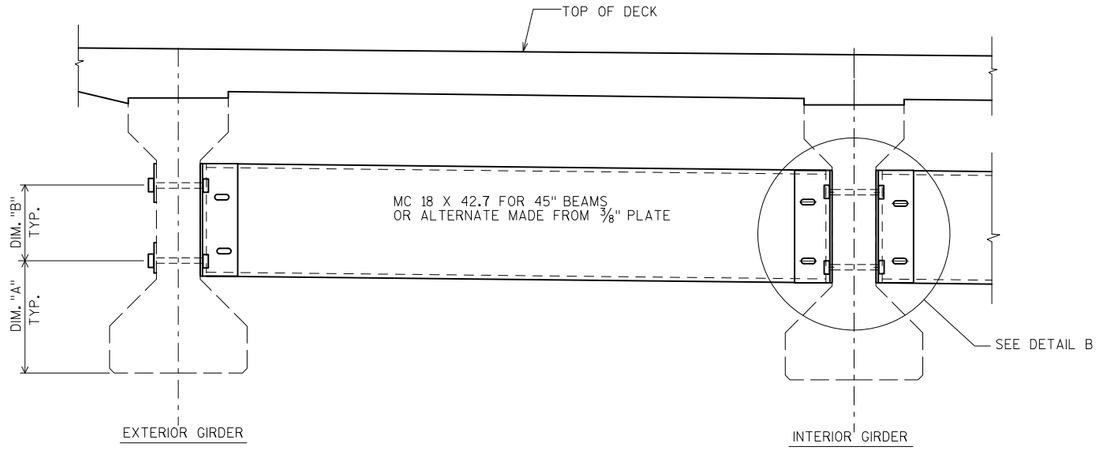
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STATE PROJECT NUMBER
1090-08-71

TABLE

GIRDER HEIGHT	DIM. "A"	DIM. "B"	DIM. "L"	* DIM. "X"
28"	1'-0 7/8"	5 7/8"	9 1/2"	2 1/4"
36"	1'-2 7/8"	9 7/8"	1'-1 1/2"	3 1/4"
45"	1'-5 3/8"	1'-1 7/8"	1'-5 1/2"	2 1/4"
45W"	1'-9 1/8"	8 7/8"	1'-0 1/2"	2 3/4"
54"	1'-7 7/8"	1'-5 7/8"	1'-9 1/2"	4 1/4"
54W"	1'-9 1/8"	1'-5 7/8"	1'-9 1/2"	4 1/4"



NOTES

ALL DIAPHRAGM MATERIAL SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-67-103", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

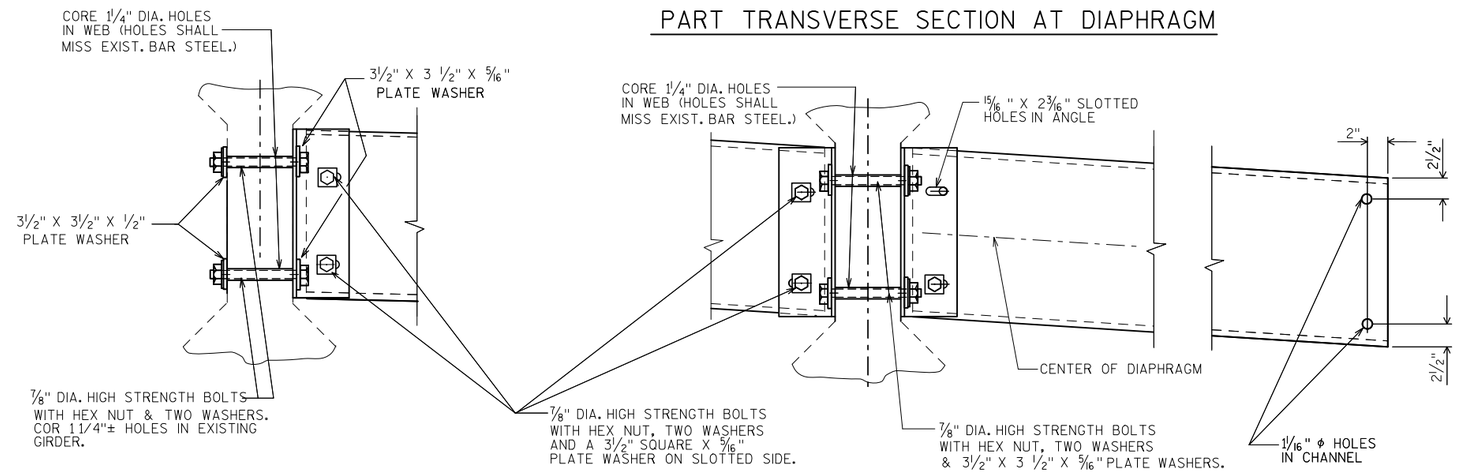
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

COST OF DRILLING HOLES IN EXISTING GIRDERS FOR DIAPHRAGM CONNECTION IS INCLUDED IN THE BID ITEM " STEEL DIAPHRAGMS B-67-103".

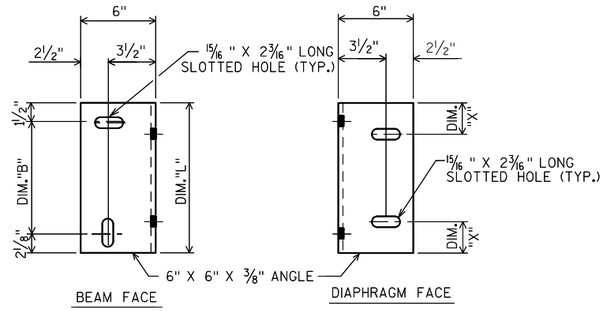
PART TRANSVERSE SECTION AT DIAPHRAGM



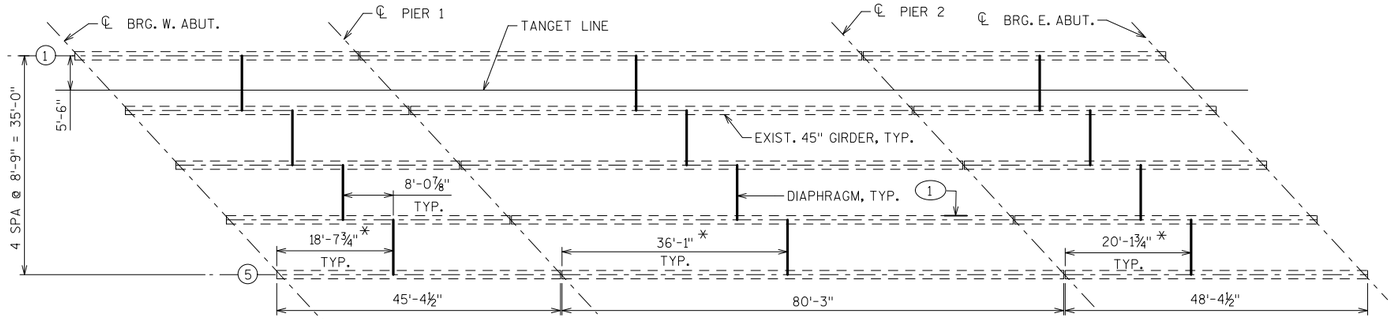
(FOR EXTERIOR GIRS. & STAGGERED DIAPHRAGMS)

(FOR CONTINUOUS LINE OF DIAPHRAGMS)

DETAIL B



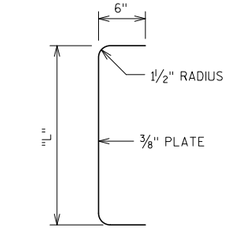
DIAPHRAGM SUPPORT



FRAMING PLAN

* DIMENSION IS FROM END OF GIRDER

(1) FIBER WRAP NON-STRUCTURAL. SEE DETAIL ON SHEET 6.



SECTION THRU ALTERNATE DIAPHRAGM

*DIM "X" = 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM

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STRUCTURE B-67-103

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INTERMEDIATE STEEL DIAPHRAGM

SHEET 7 OF 9

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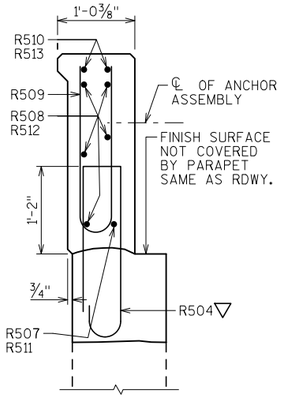
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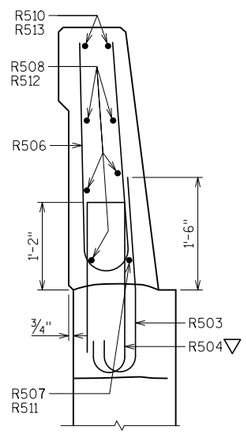
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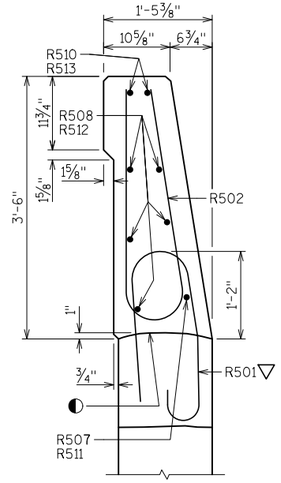
STATE PROJECT NUMBER
1090-08-71



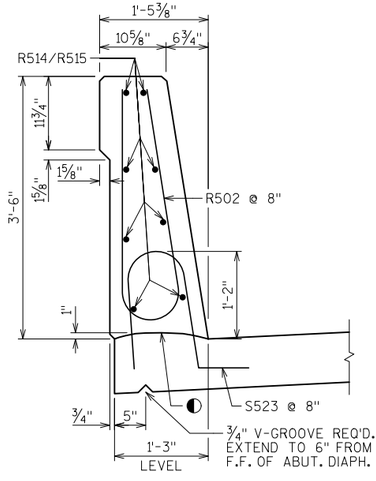
SECTION A-A



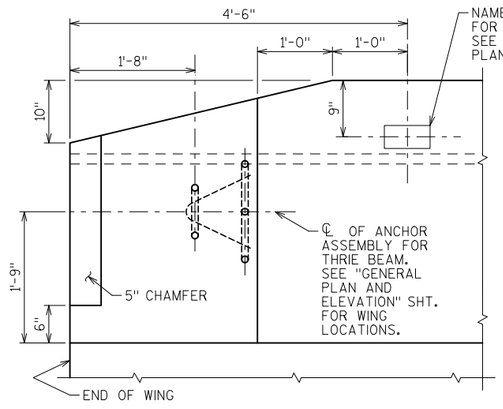
SECTION B-B



SECTION C-C



SECTION THRU PARAPET ON DECK



PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

BILL OF BARS

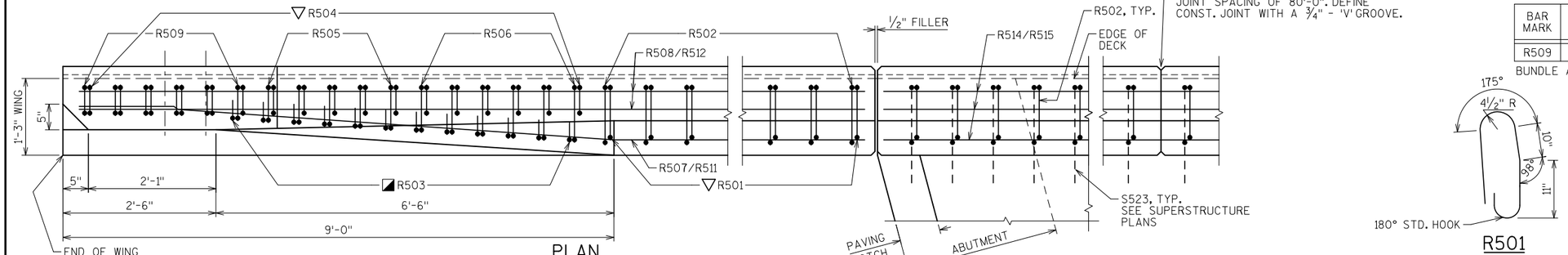
BAR MARK	COAT	NO. WING 1	WING 2	WING 3	WING 4	NO. SUPER	LENGTH	BENT	BAR SERIES ⚠	LOCATION
R501	X	2	-	-	2	-	5'-2"	X	-	PARAPET VERT
R502	X	2			2	535	6'-8"	X	-	PARAPET VERT
R503	X	12	12	12	12	-	3'-0"	X	-	PARAPET VERT
R504	X	17	17	17	17	-	4'-7"	X	-	PARAPET VERT
R505	X	5	5	5	5	-	6'-5"	X	-	PARAPET VERT
R506	X	6	6	6	6	-	6'-6"	X	-	PARAPET VERT
R507	X	1	-	-	1	-	9'-7"	X	-	PPT. HORIZ. WINGS 1 AND 4
R508	X	5	-	-	5	-	9'-7"	-	-	PPT. HORIZ. WINGS 1 AND 4
R509	X	6	6	6	6	-	5'-5"	X	X	PARAPET VERT.
R510	X	2	-	-	2	-	9'-8"	X	-	PPT. HORIZ. WINGS 1 AND 4
R511	X	-	1	1	-	-	8'-10"	X	-	PPT. HORIZ. WINGS 2 AND 3
R512	X	-	5	5	-	-	8'-9"	-	-	PPT.HORIZ. WINGS 2 AND 3
R513	X	-	2	2	-	-	8'-10"	X	-	PPT. HORIZ. WINGS 2 AND 3
R514	X	-	-	-	-	32	45'-11"	-	-	HORIZ. SUPER, N. PPT.
R515	X	-	-	-	-	32	45'-8"	-	-	HORIZ. SUPER, S. PPT.

⚠ LENGTH SHOWN FOR BAR IS ONLY AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

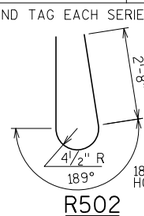
BAR MARK	NO. REQ'D	LENGTH
R509	4 SERIES OF 6	4'-9" TO 6'-1"

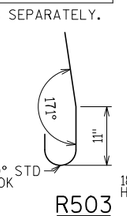
BUNDLE AND TAG EACH SERIES SEPARATELY.

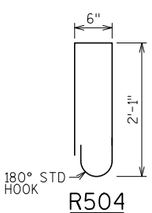


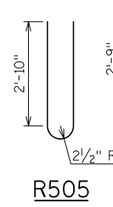
PLAN

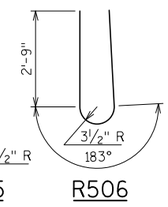
NORTHWEST CORNER (WING 1) SHOWN, OTHERS SIMILAR

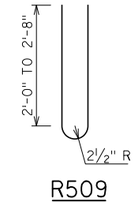


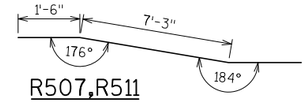


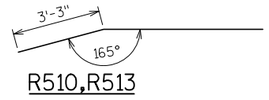












INSIDE ELEVATION

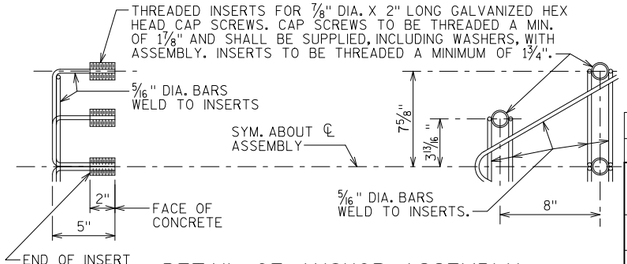
NORTHWEST CORNER (WING 1) SHOWN, OTHERS SIMILAR

* REQUIRED FOR WINGS 1 & 4 ONLY.

◐ CONST. JOINT - STRIKE OFF AS SHOWN

◪ R503 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

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STRUCTURE B-67-103

DRAWN BY	TAL	PLANS CK'D.	CSL

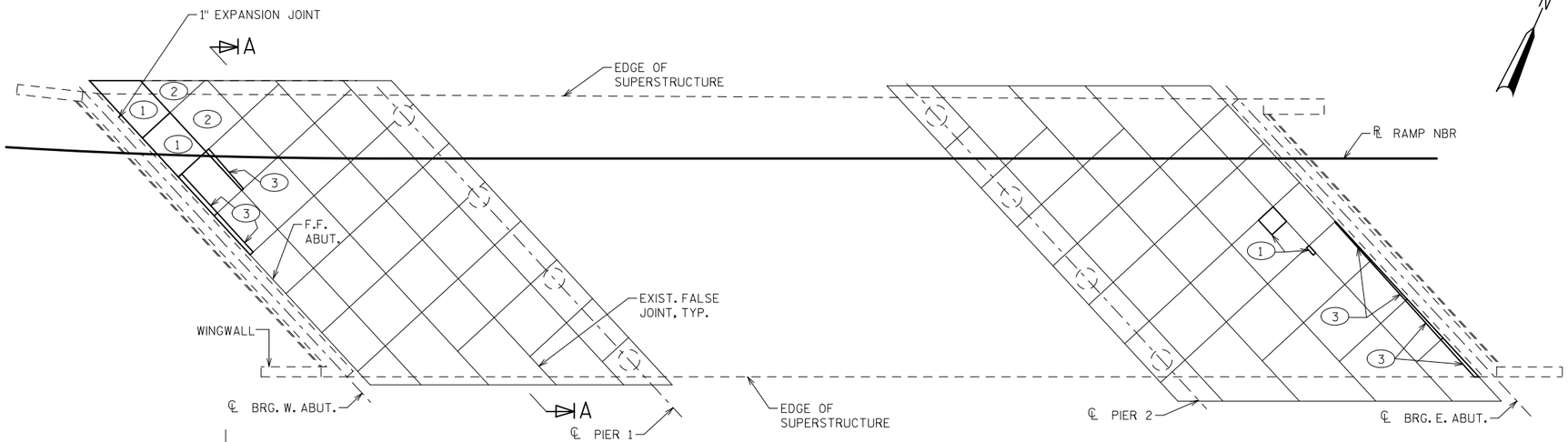
SINGLE SLOPE PARAPET 42SS

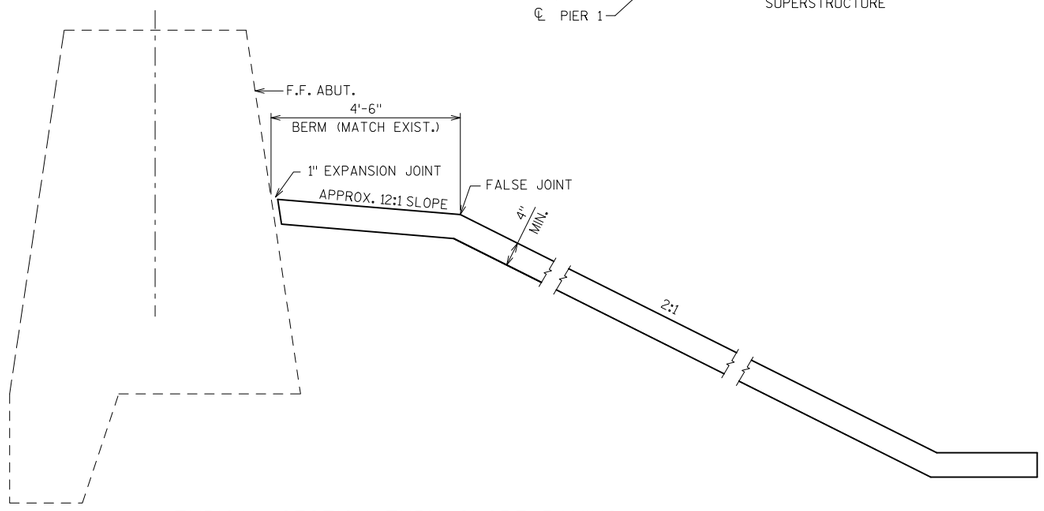
SHEET 8 OF 9

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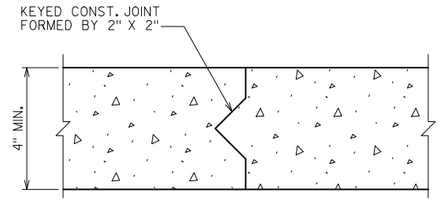
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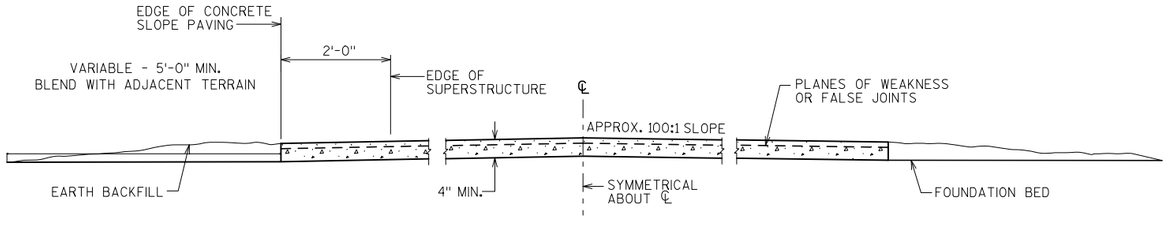




TYPICAL SECTION THRU SLOPE PAVING



CONSTRUCTION JOINT



SECTION A-A

NOTES

JOINT PATTERN OF NEW SLOPE PAVING PANELS TO MATCH EXISTING.

FORM PLANES OF WEAKNESS OR FALSE JOINTS IN THE CONCRETE BY SCORING THE FINISHED SURFACE AT LEAST ½" DEEP WITH A JOINT TOOL.

ALL EXCAVATION, GRADING, AND BACKFILL REQUIRED TO INSTALL THE SLOPE PAVING IS INCIDENTAL TO THE BID ITEM "SLOPE PAVING CONCRETE".

LEGEND

(1) REMOVE AND REPLACE EXISTING SLOPE PAVING PANELS WITHIN THE LIMITS SHOWN

(2) FILL THE VOID UNDER EXISTING PANELS WITH CONCRETE. COST INCIDENTAL TO THE BID ITEM" SLOPE PAVING CONCRETE".

(3) PLACE SLOPE PAVING IN THE GAP BETWEEN EXISTING SLOPE PAVING PANELS OR BETWEEN EXISTING SLOPE PAVING PANEL AND ABUTMENT. REMOVE EXISTING FILLER AND PLACE TIGHT TO THE FACE OF ABUTMENT. WORK MEASURED UNDER THE BID ITEM "SLOPE PAVING CONCRETE"

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STRUCTURE B-67-103

DRAWN BY	TAL	PLANS CK'D.	CSL

SLOPE PAVING

SHEET 9 OF 9

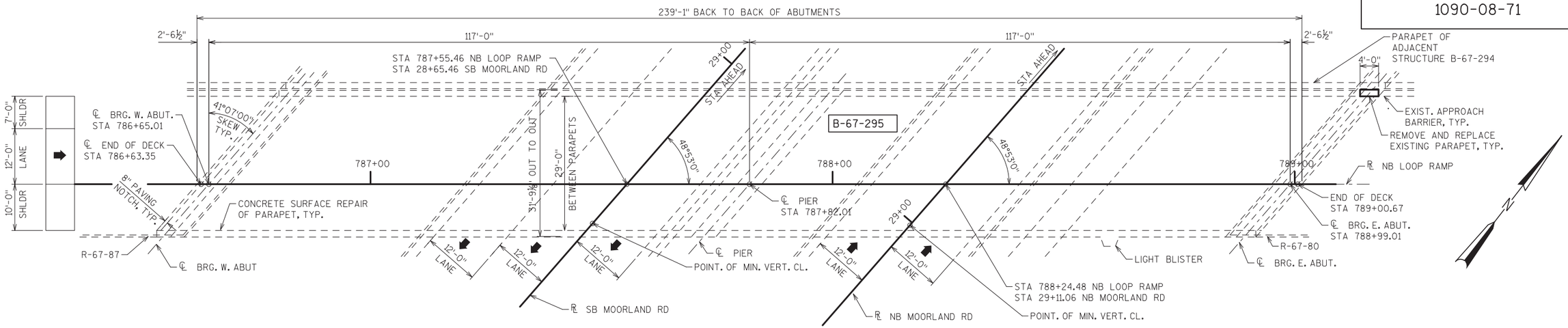
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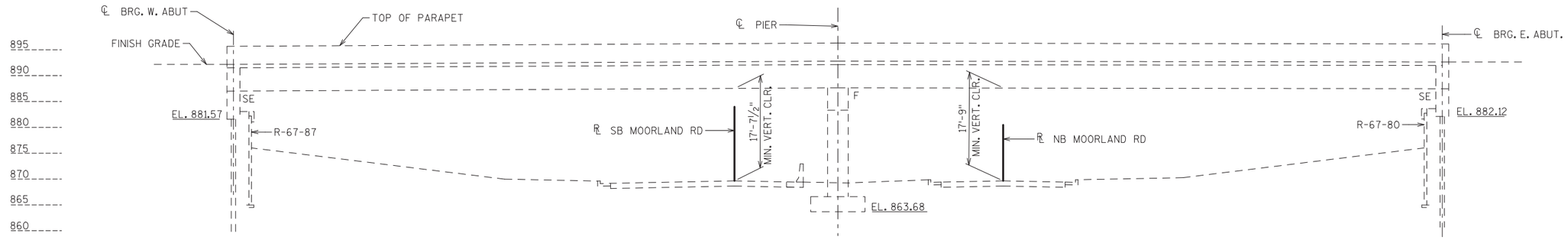
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DATE: 7/28/2021 2:37:50 PM Plotted by: bthengan PEN TABLE: V8_STRUCTURAL_REV.TBL

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PLAN

2-SPAN 54W" PRESTRESSED CONCRETE GIRDER BRIDGE



ELEVATION

(LOOKING NORTH)

DESIGN DATA

LIVE LOAD

DESIGN LOAD: HS25 (TAKEN FROM HSI 7/20/2020)
INVENTORY RATING: HS16 (TAKEN FROM HSI 7/20/2020
OPERATIONAL RATING: HS29 (TAKEN FROM HSI 7/20/2020)
WISCONSIN STANDARD PERMIT VEHICLE LOAD
(WIS-SPV): 250 KIPS (TAKEN FROM HSI 7/20/2020)

MATERIAL PROPERTIES

CONCRETE MASONRY
PARAPET..... f'c = 4,000 psi
ALL OTHER ...f'c = 3,500 psi

BAR STEEL REINFORCEMENT, GRADE 60 ..... fy = 60,000 psi

TRAFFIC DATA

NB LOOP RAMP

A.D.T. (2018) = 7,600
A.D.T. (2026) = 13,750
R.D.S. = 50 MPH

MOORLAND ROAD

A.D.T. (2018) = 33,500
A.D.T. (2026) = 48,380
R.D.S. = 40 MPH

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. TYPICAL SECTION AND GENERAL NOTES
3. PARAPET TYPE 'HF' MODIFIED

WISCONSIN
BABU D. THENGANAKUNNEL
E-35905
MILWAUKEE, WI
PROFESSIONAL ENGINEER
7-29-2021

STRUCTURE DESIGN CONTACTS

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

CONSULTANT CONTACT:
YAN NENAYDYKH
(414) 292-4599

NO.	DATE	REVISION	BY

BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity
10501 W. Research Drive • Milwaukee, WI 53226
Phone: (414) 771-3390 Fax: (414) 771-4490

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 11/03/21
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-67-295

NB LOOP RAMP OVER MOORLAND ROAD

COUNTY	CITY
WAUKESHA	NEW BERLIN

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BDT	YNN	TAL	CSL

GENERAL PLAN AND ELEVATION

SHEET 1 OF 3

441

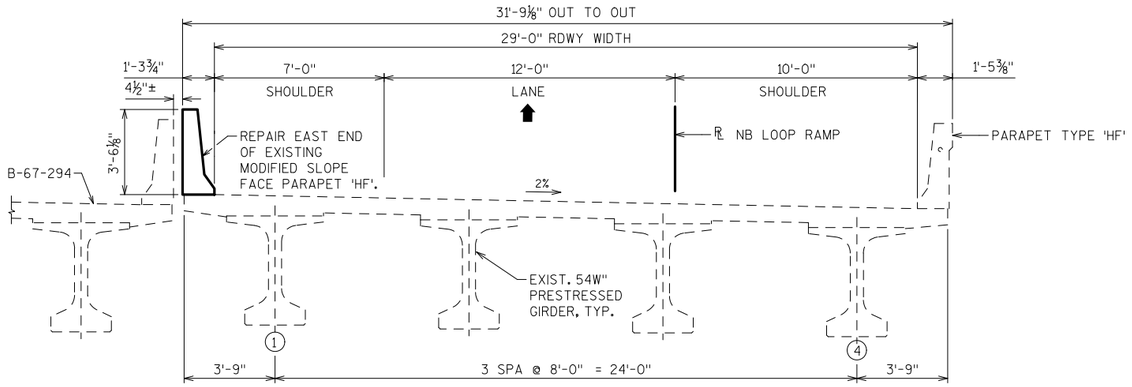
I.D. 1090-08-01 APR 2021

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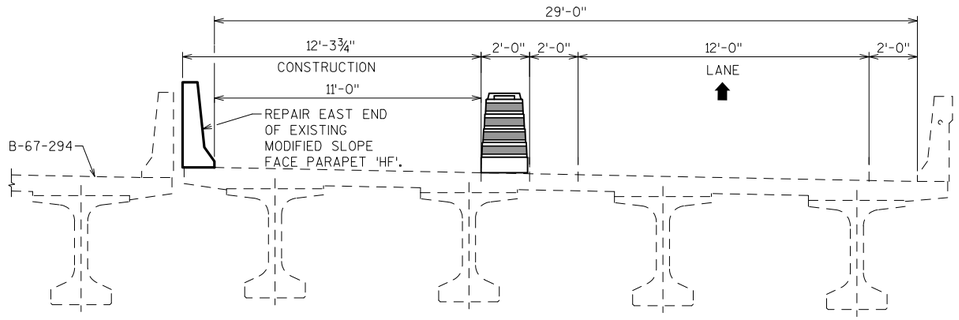
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DATE: 7/29/2021 3:11:21 PM Plotted by: bthengan PEN TABLE: V8_STRUCTURAL_REV.TBL



TYPICAL SECTION THRU NB LOOP RAMP

(LOOKING EAST)



CONSTRUCTION STAGING

(LOOKING EAST)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

ALL DIMENSIONS ARE IN FEET AND INCHES.

ELEVATIONS ARE REFERENCED TO THE NAVD 88 (2012) DATUM.

ALL NEW BAR STEEL REINFORCEMENT SHALL BE EPOXY COATED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE 3/4 INCH UNLESS OTHERWISE NOTED.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK. EXISTING BARS SHALL BE CLEANED AND STRAIGHTENED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL CONCRETE REMOVAL LIMITS SHALL BE DEFINED BY A 1 INCH DEEP SAWCUT.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO TOP AND INSIDE FACES OF PARAPETS.

PART OF EXISTING PARAPET SHALL BE REMOVED AND REPLACED IN THIS CONTRACT.

PLANS OF THE EXISTING BRIDGE ARE ON FILE AND ARE AVAILABLE FOR INSPECTION AT THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHEAST REGION.

UNDER THE BID ITEM "REMOVING STRUCTURE B-67-295" REMOVE THE EAST END OF NORTH PARAPET FOR THE LENGTH SHOWN ON PLANS.

CONCRETE SURFACE REPAIR REQUIRED IN AREAS DESIGNATED BY THE FIELD ENGINEER. QUANTITIES SHOWN ARE APPROXIMATE AND UNDISTRIBUTED.

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEMS	UNIT	TOTAL
203.0220	REMOVING STRUCTURE B-67-295	EACH	1
502.0100	CONCRETE MASONRY BRIDGES	CY	1
502.3210	PIGMENTED SURFACE SEALER	SY	3
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	40
509.1500	CONCRETE SURFACE REPAIR	SF	15
	NON BID ITEMS		
	FILLER	SIZE	1"

ALL ITEMS ARE CATEGORY 2020

NO.	DATE	REVISION	BY

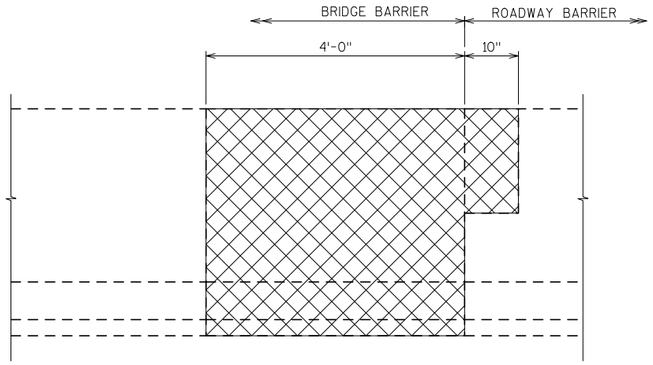
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-295

DRAWN BY BDT | PLANS CK'D. CSL

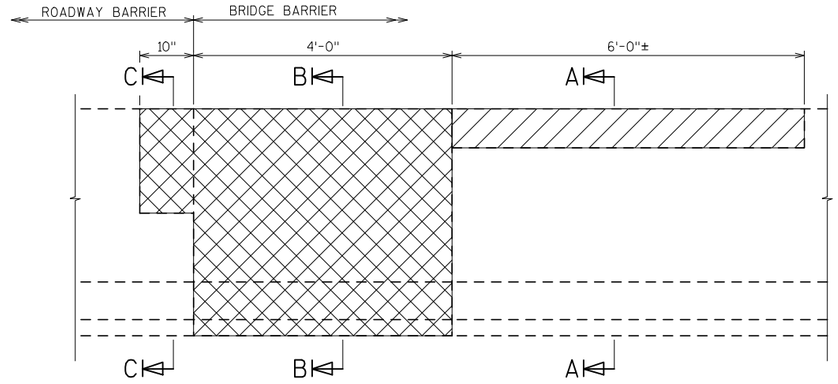
TYPICAL SECTION AND GENERAL NOTES

STATE PROJECT NUMBER
1090-08-71



PARAPET INSIDE ELEVATION

(LOOKING AT FRONT FACE, SHOWING REMOVAL)

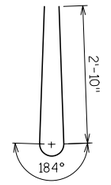


PARAPET OUTSIDE ELEVATION

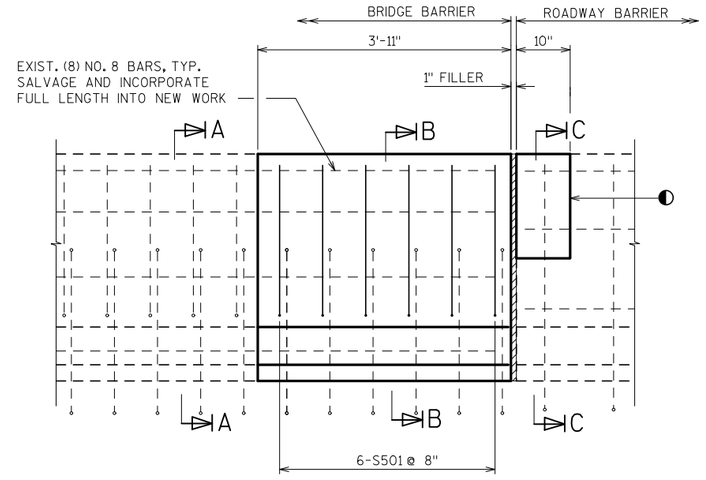
(LOOKING AT BACK FACE, SHOWING REMOVAL)

BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES	LOCATION
S501	X	6	6'-6"	X		PARAPET VERTICAL



S501



PARAPET INSIDE ELEVATION

(LOOKING AT FRONT FACE)

BENDING DIAGRAM

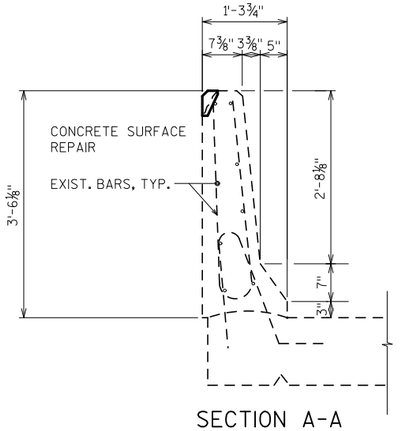
LEGEND

REMOVE FULL THICKNESS OF PARAPET FOR REPLACEMENT

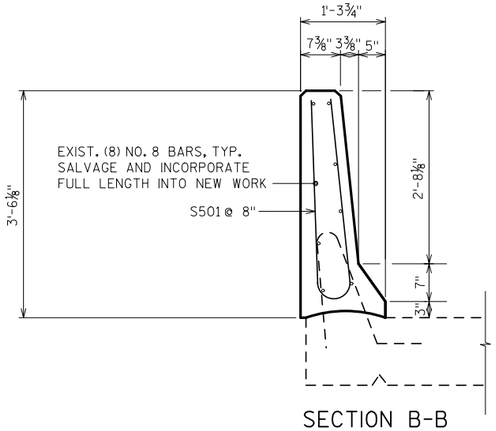
REMOVE PARTIAL THICKNESS OF PARAPET FOR CONCRETE SURFACE REPAIR

◐ ALL WORK ON THE ROADWAY BARRIER WITHIN THE LIMITS SHOWN ON THIS SHEET WILL BE PAID FOR UNDER THE APPLICABLE BID ITEMS FOR THE BRIDGE WORK.

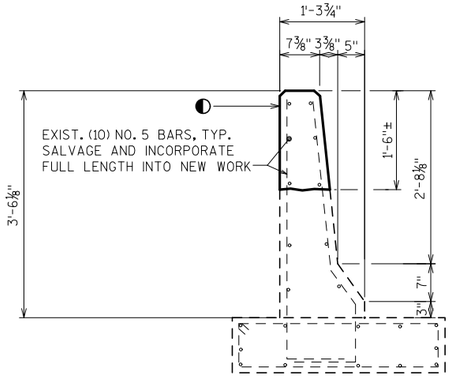
⚠ SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF 1" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS SEALER (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).



SECTION A-A



SECTION B-B



SECTION C-C

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-295

DRAWN BY	BDT	PLANS CK'D.	CSL

PARAPET TYPE 'HF' MODIFIED

SHEET 3 OF 3

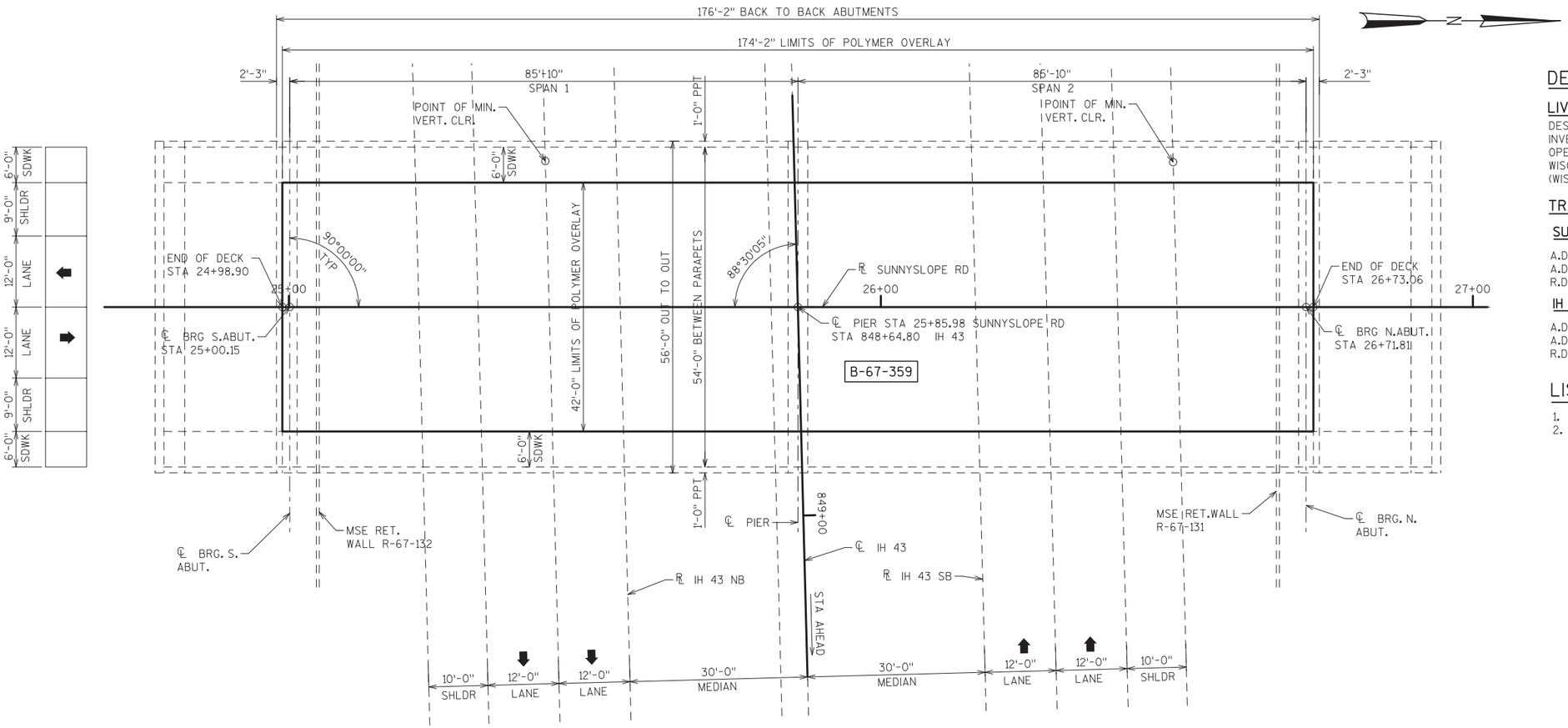
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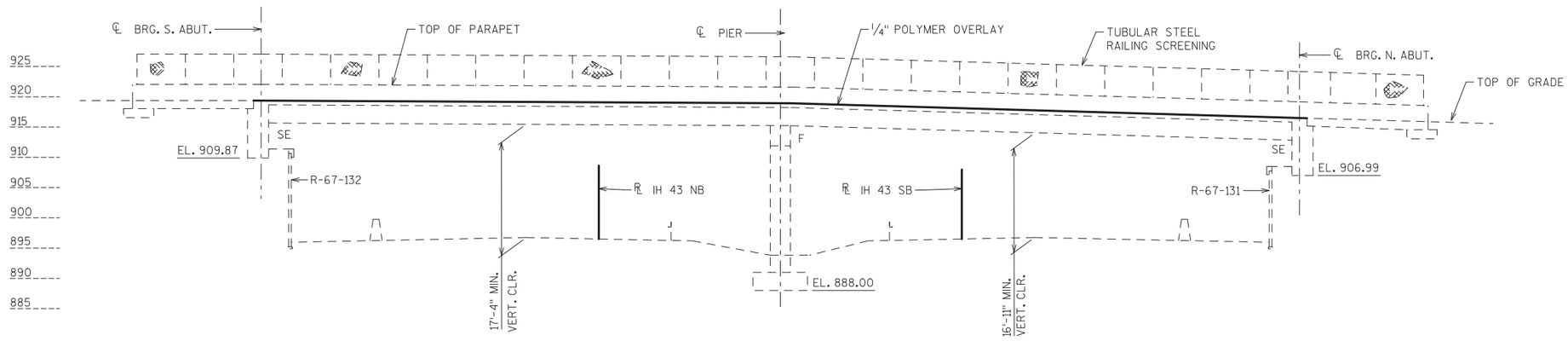
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STATE PROJECT NUMBER
1090-08-71



PLAN

(POLYMER OVERLAY- 2 SPAN 36W" PRESTRESSED GIRDER STRUCTURE)



ELEVATION

(LOOKING WEST

DESIGN DATA

LIVE LOAD

DESIGN LOAD: HL93
INVENTORY RATING FACTOR : 1.1
OPERATIONAL RATING FACTOR: HS 1.42
WISCONSIN STANDARD PERMIT VEHICLE LOAD (WIS-SPV):.....250 KIPS

TRAFFIC DATA

SUNNYSLOPE ROAD

A.D.T. (2018) = 8,600
A.D.T. (2040) = 14,000
R.D.S. = 40 MPH

IH 43

A.D.T. (2019) = 59,800
A.D.T. (2040) = 84,200
R.D.S. = 75 MPH

LIST OF DRAWINGS

1. POLYMER OVERLAY
2. TYPICAL SECTION AND GENERAL NOTES

WISCONSIN
BABU D. THENGANAKUNNEL
E-35905
MILWAUKEE, WI
PROFESSIONAL ENGINEER

7-29-2021

STRUCTURE DESIGN CONTACTS

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

CONSULTANT CONTACT:
YAN NENAYDYKH
(414) 292-4599

NO.	DATE	REVISION	BY

BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity
10501 W. Research Drive • Milwaukee, WI 53226
Phone: (414) 771-3390 Fax: (414) 771-4490

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 08/24/21
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-67-359

SUNNYSLOPE RD OVER IH 43

COUNTY	CITY
WAUKESHA	NEW BERLIN

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BDT	YNN	TAL	CSL

POLYMER OVERLAY

SHEET 1 OF 2

444

I.D. 1090-08-01 APR 2021

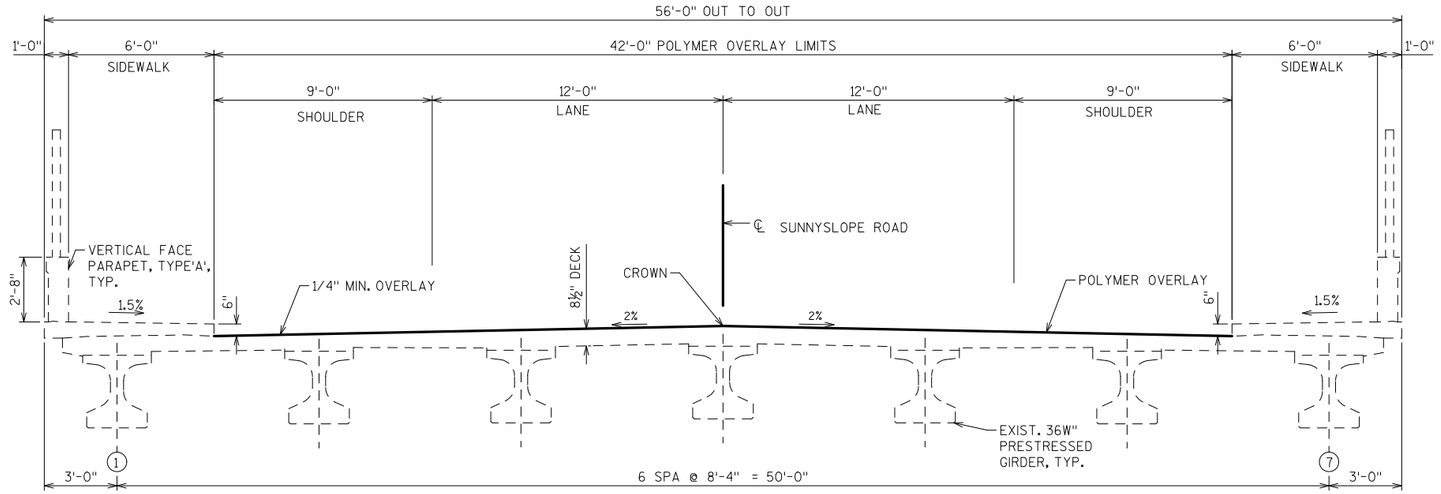
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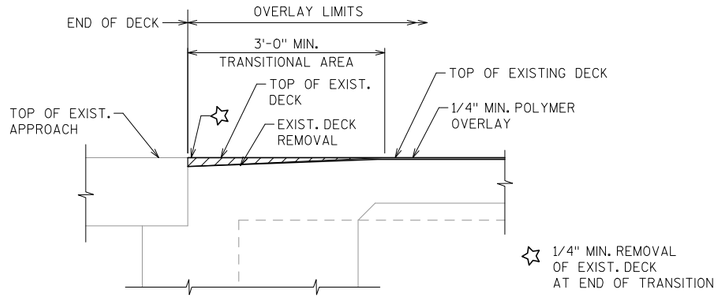
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STATE PROJECT NUMBER
1090-08-71



TYPICAL SECTION THRU SUNNYSLOPE ROAD

(LOOKING NORTH)



SECTION THRU ABUTMENT TRANSITIONAL AREA ON DECK

(REMOVAL AND OVERLAY THICKNESS NOT TO SCALE)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

ALL DIMENSIONS ARE IN FEET AND INCHES.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

APPLY POLYMER OVERLAY OVER THE EXISTING DECK.

PLANS OF THE EXISTING BRIDGE ARE ON FILE AND ARE AVAILABLE FOR INSPECTION AT THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHEAST REGION.

SHOT BLASTING, DECK SURFACE PREPARATIONS, AND TRANSITIONAL AREAS ARE INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEMS	UNIT	TOTAL
509.5100.S	POLYMER OVERLAY	SY	813

ALL ITEMS ARE CATEGORY 2030

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-67-359

DRAWN BY BDT | PLANS CK'D. CSL

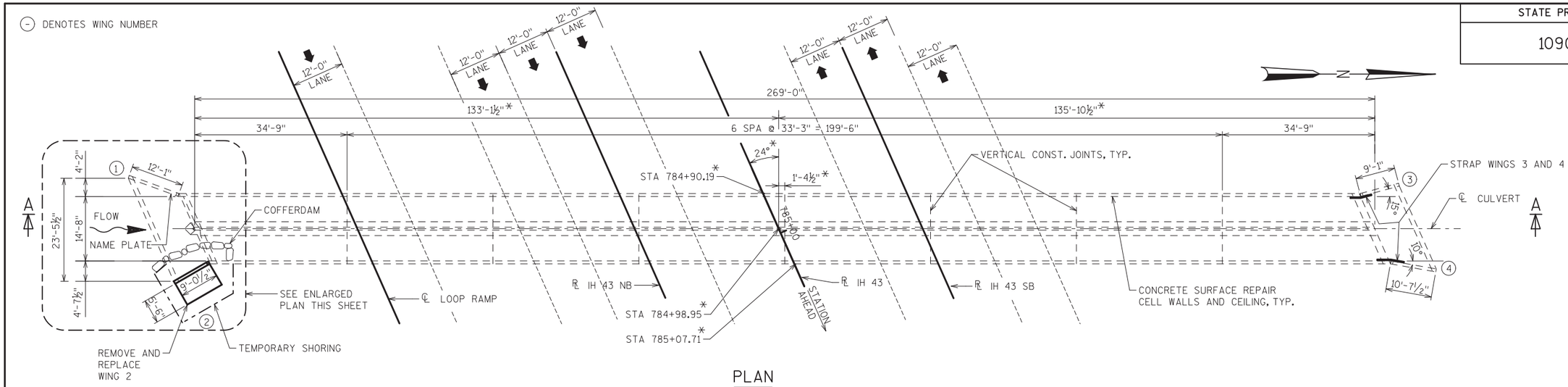
TYPICAL SECTION AND GENERAL NOTES

SHEET 2 OF 2

445

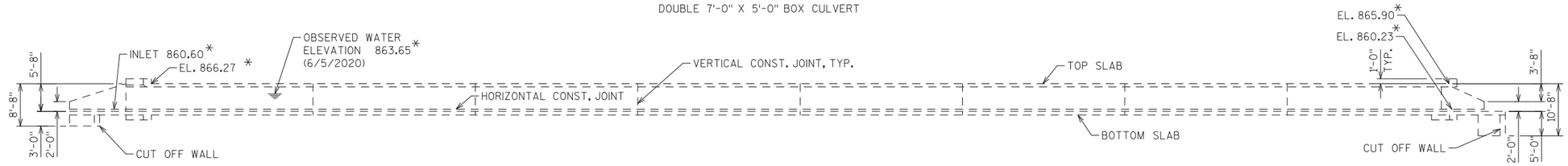
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STATE PROJECT NUMBER
1090-08-71

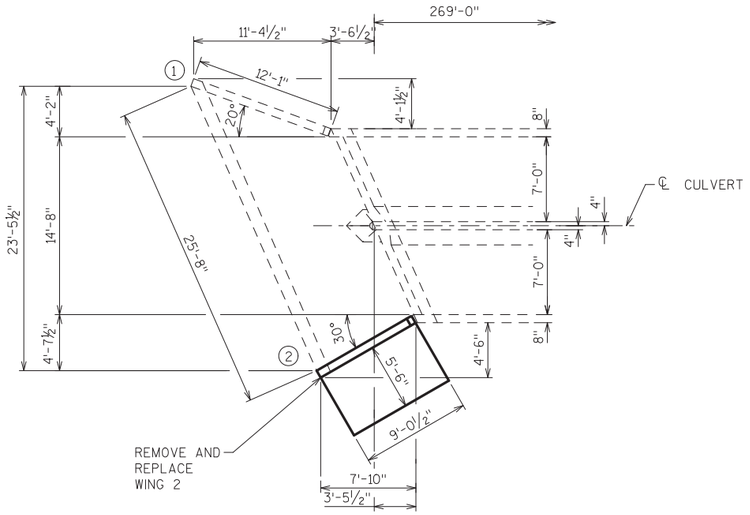


PLAN

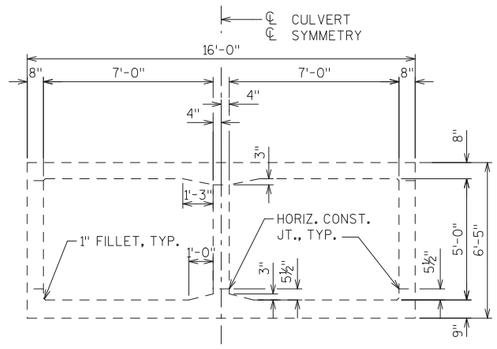
DOUBLE 7'-0" X 5'-0" BOX CULVERT



SECTION A-A



ENLARGED PLAN AT INLET



SECTION THRU BOX

(LOOKING NORTH)

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. ESTIMATE OF QUANTITIES
3. WING DETAILS
4. WING STRAPPING

DESIGN DATA

LIVE LOAD

INVENTORY RATING FACTOR: 1.0
OPERATING RATING FACTOR: 1.67
WISCONSIN STANDARD PERMIT VEHICLE : 190 KIPS

MATERIAL PROPERTIES

CONCRETE MASONRY..... f'c = 3,500 psi
BAR STEEL REINFORCEMENT, GRADE 60 ..... fy = 60,000 psi

TRAFFIC DATA

IH 43

A.D.T. (2015) = 73,200
RDS = 75 MPH

WISCONSIN
BABU D. THENGANAKUNNEL
E-35905
MILWAUKEE, WI
PROFESSIONAL ENGINEER
7.29.2021

LEGEND

* APPROXIMATE DIMENSIONS BASED ON FIELD SURVEY

STRUCTURE DESIGN CONTACTS

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

CONSULTANT CONTACT:
YAN NENAYDYKH
(414) 292-4599

NO.	DATE	REVISION	BY

BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity
10501 W. Research Drive • Milwaukee, WI 53226
Phone: (414) 771-3390 Fax: (414) 771-4490

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ SDR 08/23/21
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE C-67-13

IH 43 OVER UNKNOWN WATERWAY

COUNTY	CITY
WAUKESHA	NEW BERLIN

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BDT	YNN	TAL	CSL

GENERAL PLAN AND ELEVATION

SHEET 1 OF 4

446

I.D. 1090-08-01 APR 2021

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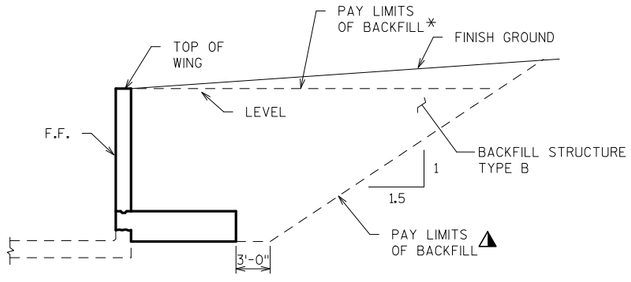
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STATE PROJECT NUMBER
1090-08-71

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEMS	UNIT	TOTAL
203.0220	REMOVING STRUCTURE C-67-13	EACH	1
206.2000	EXCAVATION FOR STRUCTURES CULVERTS C-67-13	LS	1
206.5000	COFFERDAMS C-67-13	LS	1
210.2500	BACKFILL STRUCTURE TYPE B	TON	36
504.0100	CONCRETE MASONRY CULVERTS	CY	3
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	370
509.1500	CONCRETE SURFACE REPAIR	SF	20
509.9020.S	EPOXY CRACK SEALING	LF	110
511.1200	TEMPORARY SHORING C-67-13	SF	155
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	2
SPV.0060.40	STRAPPING C-67-13	EACH	2
	NON BID ITEMS		
	NAME PLATE	EACH	1
	FILLER	SIZE	1/2"

ALL ITEMS ARE CATEGORY 4000



STRUCTURE BACKFILL LIMITS

* AT THE EXPOSED BOX, THE UPPER LIMIT OF STRUCTURE BACKFILL SHALL BE MIN. 1'-0" ABOVE THE TOP OF BOX.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

ALL DIMENSIONS ARE IN FEET AND INCHES.

ELEVATIONS ARE REFERENCED TO THE NAVD 88 (2012) DATUM.

ALL NEW BAR STEEL REINFORCEMENT SHALL BE EPOXY COATED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE 3/4 INCH UNLESS OTHERWISE NOTED.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK. EXISTING BARS SHALL BE CLEANED AND STRAIGHTENED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS, UNLESS SHOWN OTHERWISE.

ALL CONCRETE REMOVAL LIMITS SHALL BE DEFINED BY A 1 INCH DEEP SAWCUT.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. THE NEW NAME PLATE SHALL SHOW THE ORIGINAL CONSTRUCTION YEAR. ORIGINAL CONSTRUCTION YEAR IS 1968. ATTACH THE NAMEPLATE TO EXISTING CONCRETE USING RESIN ANCHORS.

EXISTING WING 2 SHALL BE REMOVED AND REPLACED IN THIS CONTRACT. EXISTING WING 2 HAS TIPPED OVER AND IS BURIED IN THE SILT IN THE CHANNEL. EXISTING WINGS 3 AND 4 SHALL BE STRAPPED.

PLANS OF THE EXISTING BRIDGE ARE ON FILE AND ARE AVAILABLE FOR INSPECTION AT THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHEAST REGION.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

WITHIN THE LENGTH OF THE WING ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE ELEVATION AND SECTION EXISTED PRIOR TO EXCAVATION.

CONCRETE SURFACE REPAIR AND EPOXY CRACK SEALING REQUIRED IN AREAS DESIGNATED BY THE FIELD ENGINEER. QUANTITIES SHOWN ARE APPROXIMATE AND UNDISTRIBUTED.

LEGEND

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-67-13

DRAWN BY BDT | PLANS CK'D. CSL

ESTIMATE OF QUANTITIES

SHEET 2 OF 4

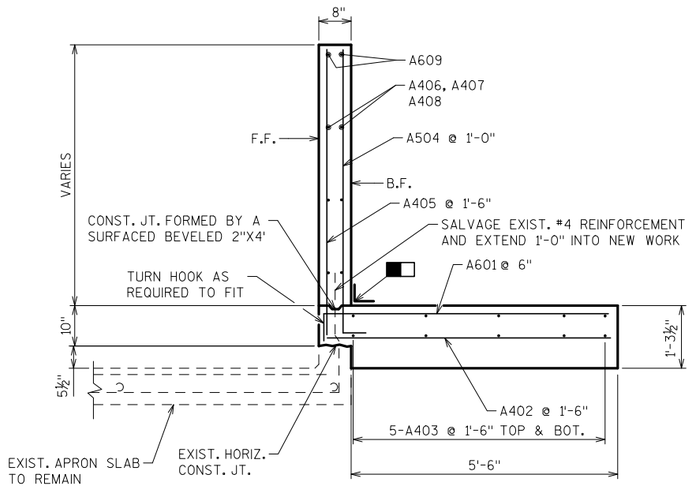
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SECTION THRU WING 2

(LOOKING NORTHWEST,
SHOWING REINFORCEMENT)

BILL OF BARS

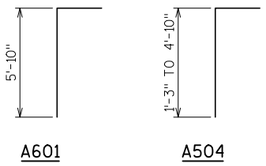
BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES ⚠	LOCATION
A601	X	18	6'-8"	X	-	FOOTING TOP TRANSVERSE
A402	X	7	5'-10"	-	-	FOOTING BOT. TRANSVERSE
A403	X	10	8'-8"	-	-	FOOTING LONGIT., TOP & BOTT.
A504	X	10	3'-9"	X	X	STEM VERTICAL, B.F.
A405	X	7	3'-0"	-	X	STEM VERTICAL, F.F.
A406	X	2	8'-8"	-	-	STEM HORIZ. E.F.
A407	X	2	6'-3"	-	-	STEM HORIZ. E.F.
A408	X	2	2'-9"	-	-	STEM HORIZ. E.F.
A609	X	2	9'-4"	-	-	STEM TOP

⚠ LENGTH SHOWN FOR BAR IS ONLY AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

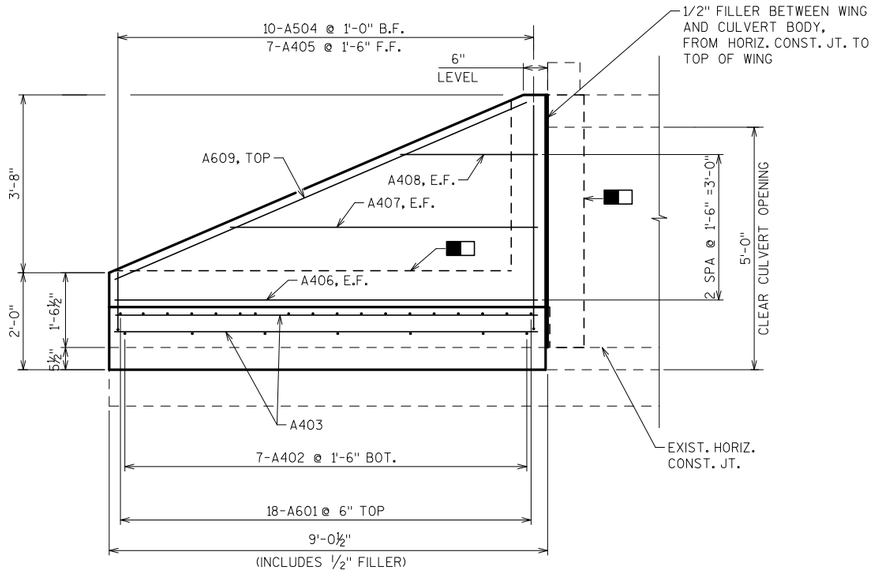
BAR SERIES TABLE

BAR MARK	NO. REQ'D	LENGTH
A504	1 SERIES OF 10	2'-0" TO 5'-6"
A405	1 SERIES OF 7	1'-3" TO 4'-10"

BUNDLE AND TAG EACH SERIES SEPARATELY



BENDING DIAGRAM



WING ELEVATION

(LOOKING AT BACK FACE)

LEGEND

18" RUBBERIZED MEMBRANE WATERPROOFING WITHIN LIMITS SHOWN.

F.F.- FRONT FACE
B.F.- BACK FACE
E.F. - EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-67-13

DRAWN BY BDT | PLANS CK'D. CSL

WING DETAILS

SHEET 3 OF 4

448

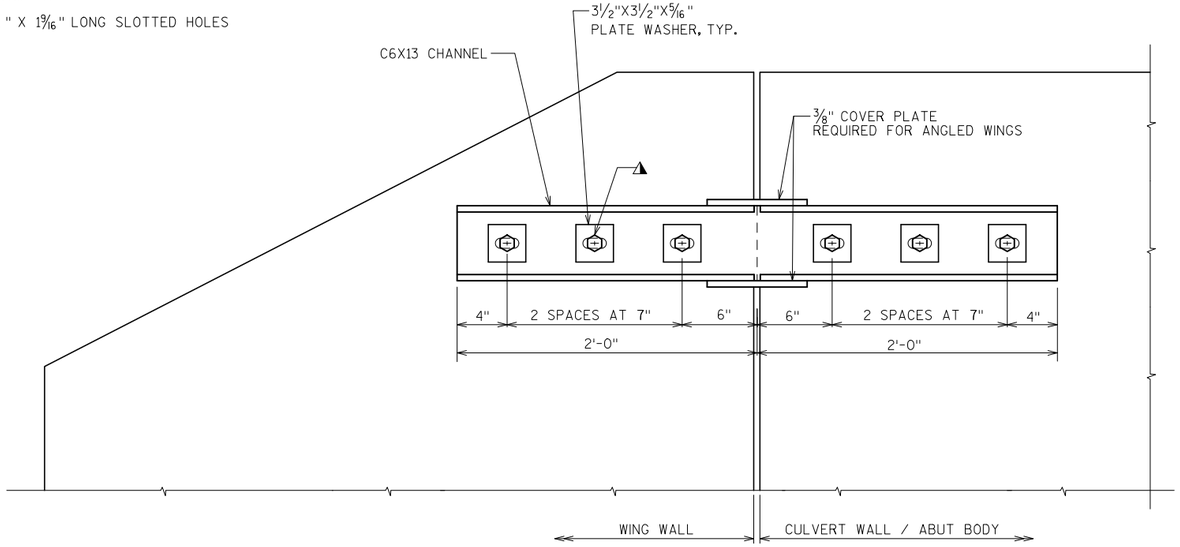
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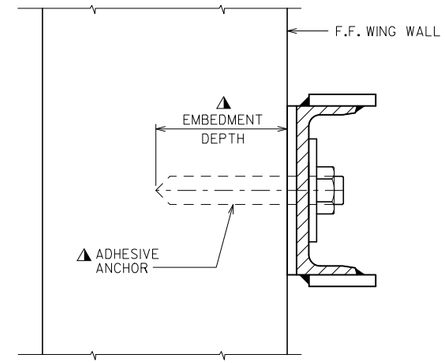
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STATE PROJECT NUMBER
1090-08-71

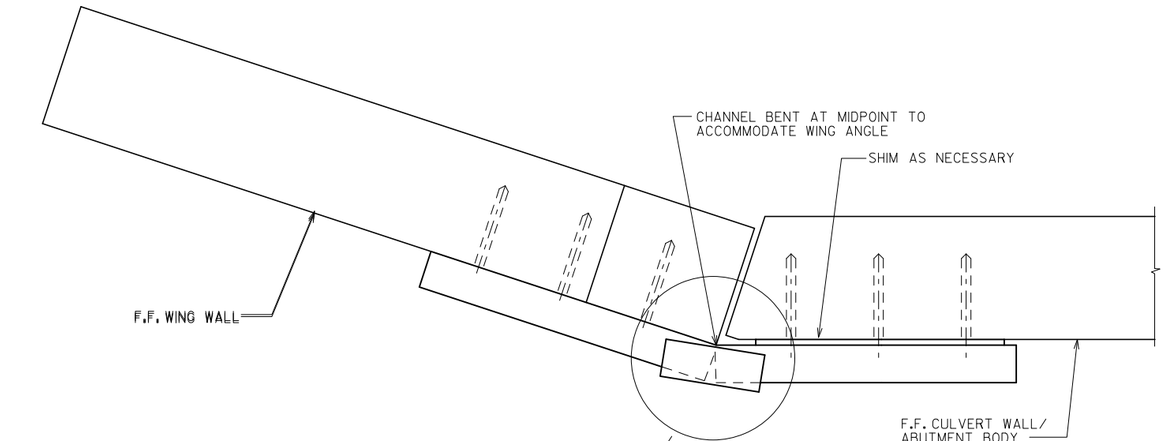
⚠ ADHESIVE ANCHORS 5/8-INCH.
EMBED 5" IN CONCRETE.
SEE DETAIL "A"

USE 11/16 " X 1 3/16 " LONG SLOTTED HOLES

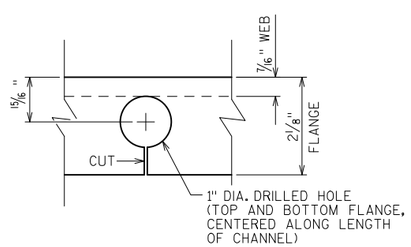




DETAIL "A"
SECTION THRU CHANNEL



PLAN



CHANNEL NOTCH DETAIL
FOR USE WITH ANGLED WINGS ONLY

NOTES

BID ITEM SHALL BE "STRAPPING C-67-13" WHICH INCLUDES ALL ITEMS SHOWN.

ALL PROVIDED STEEL MATERIAL SHALL CONFORM TO ASTM A36.

ALL STRUCTURAL STEEL SHOWN SHALL BE GALVANIZED. THREADED RODS, MASONRY ANCHORS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C.

CUTTING AND DRILLING OF CHANNEL SHALL BE DONE IN FABRICATION SHOP, PRIOR TO GALVANIZING.

IF WELDING COVER PLATE IN FIELD, PRIOR TO WELDING, REMOVE GALVANIZING FROM AREA TO BE WELDED. TOUCH UP WITH PAINT ALL AREAS LACKING GALVANIZING WHEN COMPLETE.

CAULK AROUND PERIMETER OF CHANNEL AND FILL PORTION OF HOLE AROUND ANCHOR BOLT AND SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.

PROVIDE WING STRAPPING FOR WINGS 3 AND 4.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-67-13

DRAWN BY	BDT	PLANS CK'D.	CSL

WING STRAPPING

SHEET 4 OF 4

449

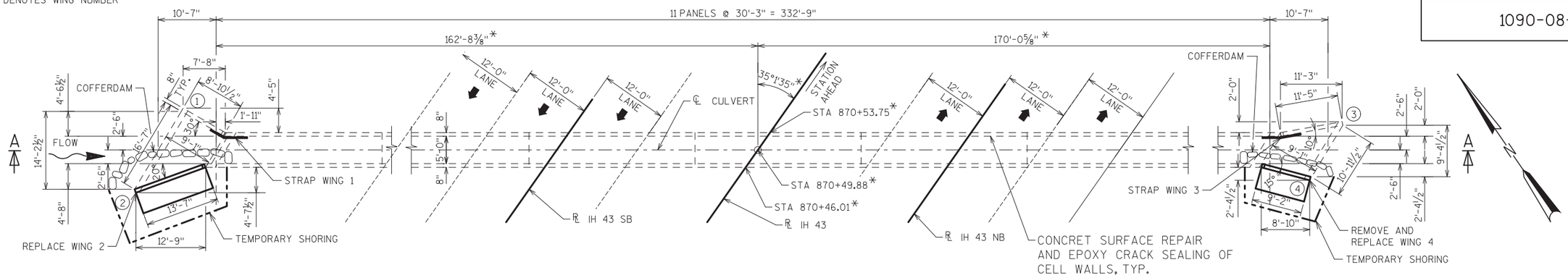
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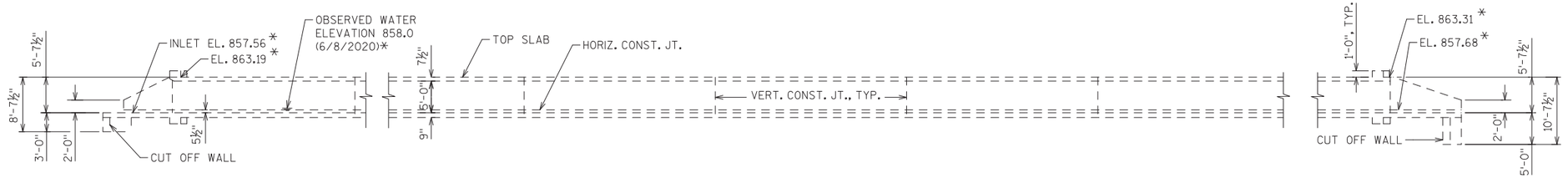
STATE PROJECT NUMBER
1090-08-71

(-) DENOTES WING NUMBER

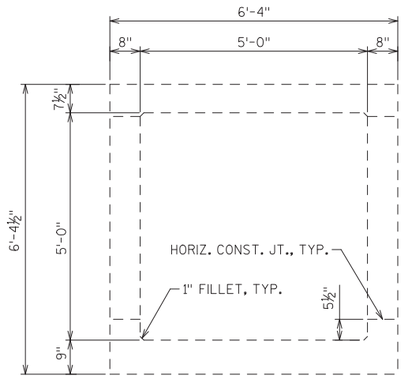


PLAN

SINGLE CELL 5'X5' BOX CULVERT



SECTION A-A



SECTION THRU BOX

(LOOKING EAST)

LIST OF DRAWINGS

1. GENERAL PLAN AND ELEVATION
2. ESTIMATE OF QUANTITIES
3. WING 2 DETAILS
4. WING 4 DETAILS
5. WING STRAPPING

DESIGN DATA

LIVE LOAD

INVENTORY RATING FACTOR: 1.0
OPERATING RATING FACTOR: 1.67
WISCONSIN STANDARD PERMIT VEHICLE : 190 KIPS

MATERIAL PROPERTIES

CONCRETE MASONRY..... f'c = 3,500 psi
BAR STEEL REINFORCEMENT, GRADE 60 ..... fy = 60,000 psi

TRAFFIC DATA

IH 43

A.D.T. (2015) = 73,200
RDS = 75 MPH

WISCONSIN
BABU D. THENGANAKUNNEL
E-35905
MILWAUKEE, WI
PROFESSIONAL ENGINEER

7-29-2021

LEGEND

* APPROXIMATE DIMENSIONS BASED ON FIELD SURVEY

STRUCTURE DESIGN CONTACTS

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

CONSULTANT CONTACT:
YAN NENAYDYKH
(414) 292-4599

NO.	DATE	REVISION	BY

BLOOM COMPANIES, LLC
Infrastructure Innovation and Ingenuity
10501 W. Research Drive • Milwaukee, WI 53226
Phone: (414) 771-3390 Fax: (414) 771-4490

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 08/23/21
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE C-67-21

IH 43 OVER DRAINAGE WAY

COUNTY	CITY
WAUKESHA	NEW BERLIN

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BDT	YNN	TAL	CSL

GENERAL PLAN AND ELEVATION

SHEET 1 OF 5

450

I.D. 1090-08-01 APR 2021

FILE NAME: X:\BMI-3582E WO #5 IH 43 Bridges\5.Design\04_Structures_Bridges\dgn\current plans\C-67-21x01_general plan.dgn
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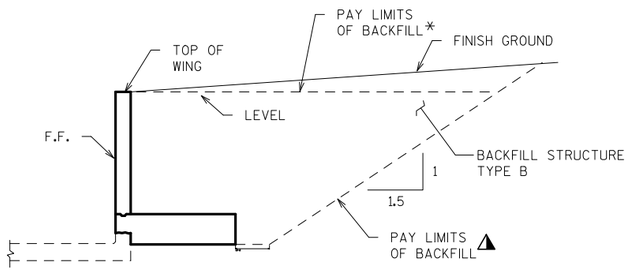
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STATE PROJECT NUMBER
1090-08-71

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEMS	UNIT	TOTAL
203.0220	REMOVING STRUCTURE C-67-21	EACH	1
206.2000	EXCAVATION FOR STRUCTURES CULVERTS C-67-21	LS	1
206.5000	COFFERDAMS C-67-21	LS	1
210.2500	BACKFILL STRUCTURE TYPE B	TON	84
504.0100	CONCRETE MASONRY CULVERTS	CY	8
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	930
509.1500	CONCRETE SURFACE REPAIR	SF	5
509.9020.S	EPOXY CRACK SEALING	LF	90
511.1200	TEMPORARY SHORING C-67-21	SF	325
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	5
SPV.0060.41	STRAPPING C-67-21	EACH	2
	NON BID ITEMS		
	FILLER	SIZE	1/2"

ALL ITEMS ARE CATEGORY 4010



STRUCTURE BACKFILL LIMITS

* AT THE EXPOSED BOX, THE UPPER LIMIT OF STRUCTURE BACKFILL SHALL BE MIN. 1'-0" ABOVE THE TOP OF BOX.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

ALL DIMENSIONS ARE IN FEET AND INCHES.

ELEVATIONS ARE REFERENCED TO THE NAVD 88 (2012) DATUM.

ALL NEW BAR STEEL REINFORCEMENT SHALL BE EPOXY COATED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE 3/4 INCH UNLESS OTHERWISE NOTED.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK. EXISTING BARS SHALL BE CLEANED AND STRAIGHTENED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS, UNLESS SHOWN OTHERWISE.

ALL CONCRETE REMOVAL LIMITS SHALL BE DEFINED BY A 1 INCH DEEP SAWCUT.

EXISTING WING 2 AND WING 4 SHALL BE REPLACED IN THIS CONTRACT. EXISTING WING 2 HAS FAILED AND HAS BEEN REMOVED. EXISTING WING 4 SHALL BE REMOVED. EXISTING WINGS 1 AND 3 SHALL BE STRAPPED.

PLANS OF THE EXISTING BRIDGE ARE ON FILE AND ARE AVAILABLE FOR INSPECTION AT THE WISCONSIN DEPARTMENT OF TRANSPORTATION, SOUTHEAST REGION.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

WITHIN THE LENGTH OF THE WINGS ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE ELEVATION AND SECTION EXISTED PRIOR TO EXCAVATION.

CONCRETE SURFACE REPAIR AND EPOXY CRACK SEALING REQUIRED IN AREAS DESIGNATED BY THE FIELD ENGINEER. QUANTITIES SHOWN ARE APPROXIMATE AND UNDISTRIBUTED.

LEGEND

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-67-21

DRAWN BY BDT | PLANS CK'D. CSL

ESTIMATE OF QUANTITIES

SHEET 2 OF 5

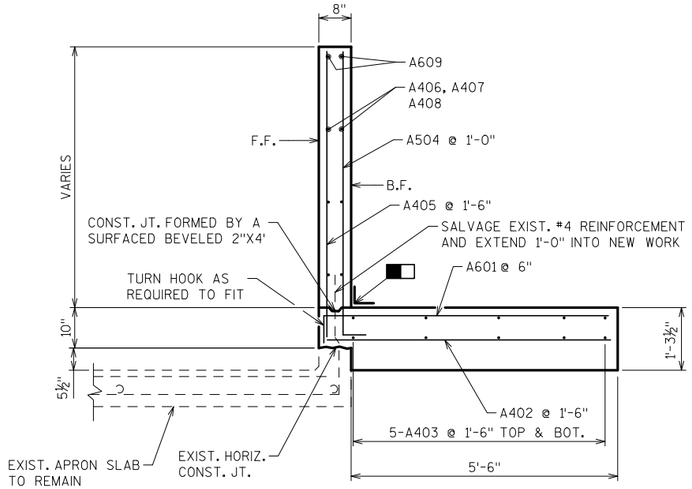
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DATE: 3/18/2021 11:33:18 AM Plotted by: bthengan PEN TABLE: V8_STRUCTURAL_REV.TBL



SECTION THRU WING 2

(LOOKING EAST,
SHOWING REINFORCEMENT)

BILL OF BARS

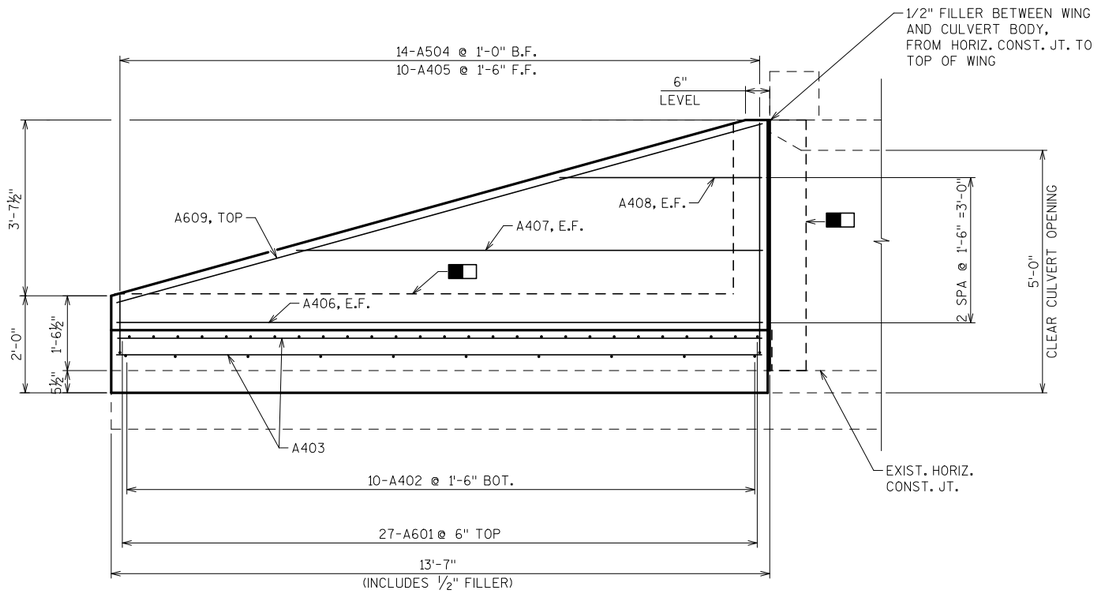
BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES ⚠	LOCATION
A601	X	27	6'-8"	X	-	FOOTING TOP TRANSVERSE
A402	X	10	5'-10"	-	-	FOOTING BOT. TRANSVERSE
A403	X	10	13'-3"	-	-	FOOTING LONGIT., TOP & BOTT.
A504	X	14	3'-9"	X	X	STEM VERTICAL, B.F.
A405	X	10	3'-0"	-	X	STEM VERTICAL, F.F.
A406	X	2	13'-3"	-	-	STEM HORIZ. E.F.
A407	X	2	9'-4"	-	-	STEM HORIZ. E.F.
A408	X	2	3'-11"	-	-	STEM HORIZ. E.F.
A609	X	2	13'-8"	-	-	STEM TOP

⚠ LENGTH SHOWN FOR BAR IS ONLY AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

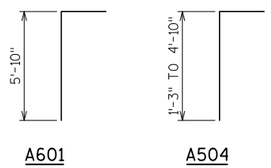
BAR MARK	NO. REQ'D	LENGTH
A504	1 SERIES OF 14	2'-0" TO 5'-6"
A405	1 SERIES OF 10	1'-3" TO 4'-10"

BUNDLE AND TAG EACH SERIES SEPARATELY



WING 2 ELEVATION

(LOOKING AT BACK FACE)



BENDING DIAGRAM

LEGEND

18" RUBBERIZED MEMBRANE WATERPROOFING WITHIN LIMITS SHOWN.

F.F.- FRONT FACE
B.F.- BACK FACE
E.F. - EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-67-21

DRAWN BY BDT | PLANS CK'D. CSL

WING 2 DETAILS

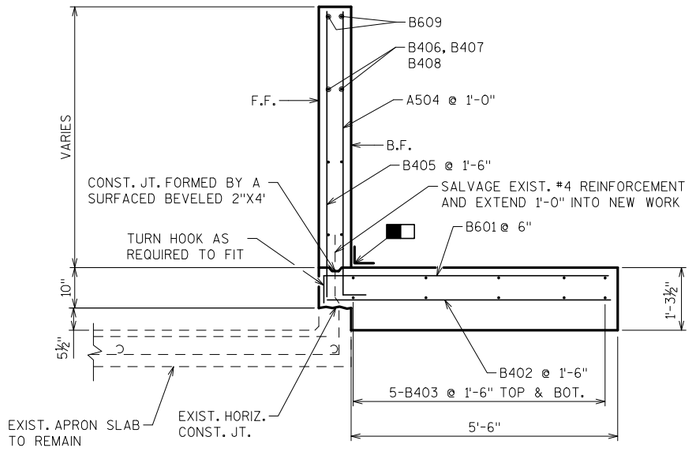
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DATE: 3/18/2021 11:33:41 AM Plotted by: bthengan PEN TABLE: V8_STRUCTURAL_REV.TBL



SECTION THRU WING 4

(LOOKING SOUTHEAST,
SHOWING REINFORCEMENT)

BILL OF BARS

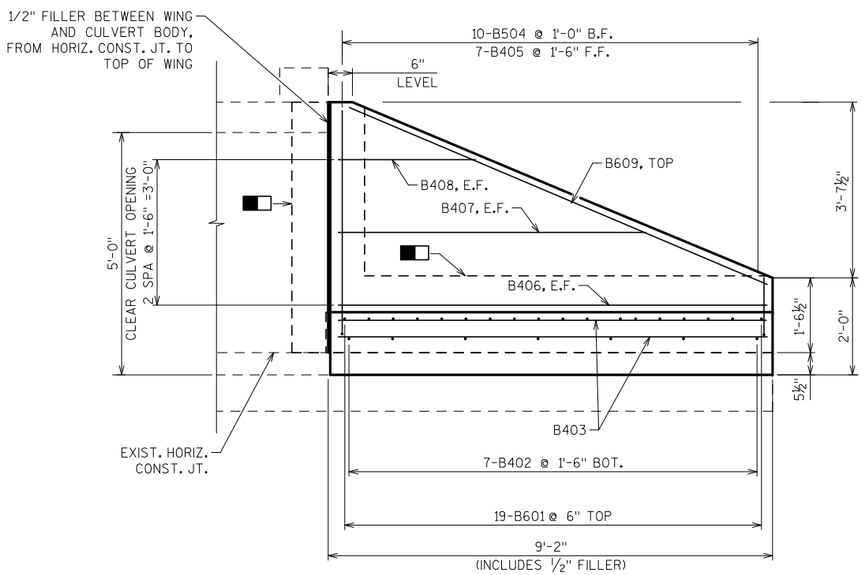
BAR MARK	COAT	NO.	LENGTH	BENT	BAR SERIES ⚠	LOCATION
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B403	X	10	8'-10"	-	-	FOOTING LONGIT., TOP & BOTT.
A504	X	10	3'-9"	X	X	STEM VERTICAL, B.F.
A405	X	7	3'-0"	-	X	STEM VERTICAL, F.F.
B406	X	2	8'-10"	-	-	STEM HORIZ. E.F.
B407	X	2	6'-2"	-	-	STEM HORIZ. E.F.
B408	X	2	2'-8"	-	-	STEM HORIZ. E.F.
B609	X	2	9'-6"	-	-	STEM TOP

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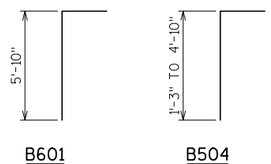
BAR MARK	NO. REQ'D	LENGTH
B504	1 SERIES OF 10	2'-0" TO 5'-6"
B405	1 SERIES OF 7	1'-3" TO 4'-10"

BUNDLE AND TAG EACH SERIES SEPARATELY



WING 4 ELEVATION

(LOOKING AT BACK FACE)



BENDING DIAGRAM

LEGEND

18" RUBBERIZED MEMBRANE WATERPROOFING WITHIN LIMITS SHOWN.

F.F.- FRONT FACE
B.F.- BACK FACE
E.F. - EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-67-21

DRAWN BY BDT | PLANS CK'D. CSL

WING 4 DETAILS

SHEET 4 OF 5

453

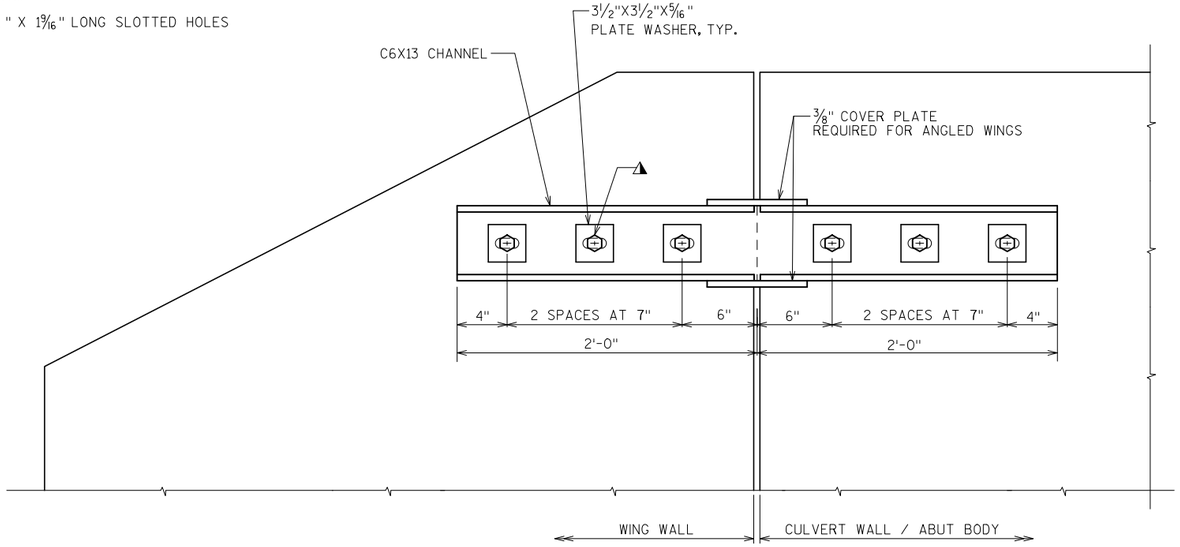
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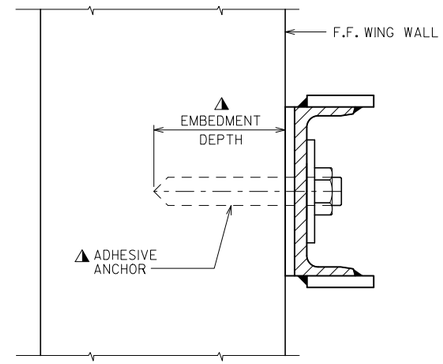
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STATE PROJECT NUMBER
1090-08-71

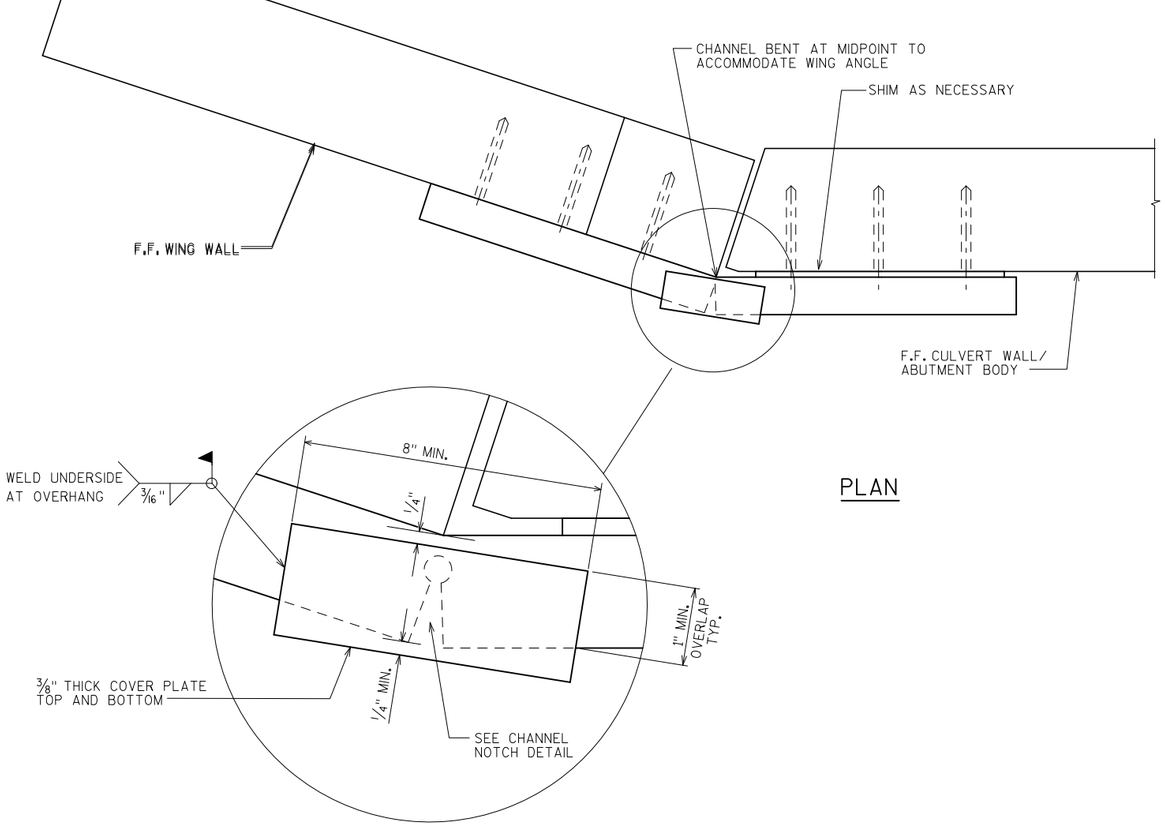
⚠ ADHESIVE ANCHORS 5/8-INCH. EMBED 5" IN CONCRETE. SEE DETAIL "A"

USE 11/16 " X 1 3/16 " LONG SLOTTED HOLES

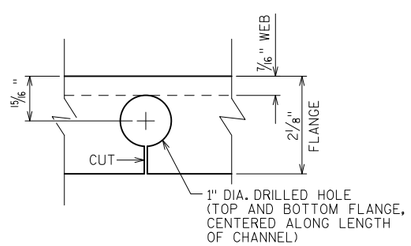




DETAIL "A"
SECTION THRU CHANNEL



PLAN



CHANNEL NOTCH DETAIL
FOR USE WITH ANGLED WINGS ONLY

NOTES

BID ITEM SHALL BE "STRAPPING C-67-13" WHICH INCLUDES ALL ITEMS SHOWN.

ALL PROVIDED STEEL MATERIAL SHALL CONFORM TO ASTM A36.

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CAULK AROUND PERIMETER OF CHANNEL AND FILL PORTION OF HOLE AROUND ANCHOR BOLT AND SHIM WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.

PROVIDE WING STRAPPING FOR WINGS 1 AND 3.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-67-21

DRAWN BY	BDT	PLANS CK'D.	CSL

WING STRAPPING

SHEET 5 OF 5

454

8

8

FILE NAME: X:\BMI-35826 WO #5 IH 43 Bridges\5.Design\04.Structures_Bridges\cds\current plans\C-67-21\05_wingstrap.dgn
DATE: 3/18/2021 11:34:04 AM Plotted by: bthengon PEN TABLE: V8_STRUCTURAL_REV.TBL

BEAM GUARD EAT - IH 43 NB (MEDIAN) - STA 786

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
784+86.65	78486.65	0.00	4.48	0.00	0	0	0	0	0
785+00	78500.00	13.35	4.70	0.00	2	0	2	0	2
785+50	78550.00	50.00	14.86	0.00	18	0	20	0	20
786+00	78600.00	50.00	24.69	0.00	37	0	57	0	57
786+05.079	78605.08	5.08	24.75	0.00	5	0	62	0	62
786+30.079	78630.08	25.00	23.68	0.00	22	0	84	0	84
786+50	78650.00	19.92	23.21	0.00	17	0	101	0	101
786+55.079	78655.08	5.08	23.18	0.00	4	0	105	0	105

BEAM GUARD EAT - IH 43 SB (MEDIAN) - STA 791

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
790+29.645	79029.64	0.00	28.77	0.00	0	0	0	0	0
790+50	79050.00	20.36	27.56	0.00	21	0	21	0	21
790+54.664	79054.66	4.66	27.38	0.00	5	0	26	0	26
790+79.89	79079.89	25.23	2.64	0.00	14	0	40	0	40
791+00	79100.00	20.11	3.66	0.00	2	0	42	0	42
791+50	79150.00	50.00	4.43	0.00	7	0	49	0	49
791+97.981	79197.98	47.98	2.94	0.00	7	0	56	0	56

BEAM GUARD EAT - IH 43 NB - STA 844

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
842+62.784	84262.78	0.00	2.81	0.04	0	0	0	0	0
843+00	84300.00	37.22	4.35	0.02	5	0	5	0	5
843+50	84350.00	50.00	3.97	0.31	8	0	13	0	13
843+81.226	84381.23	31.23	2.81	0.58	4	1	17	1	16
844+00	84400.00	18.77	3.39	0.28	2	0	19	1	18
844+06.225	84406.23	6.23	3.51	0.16	1	0	20	1	19
844+31.223	84431.22	25.00	3.84	0.00	3	0	23	1	22

BEAM GUARD EAT - IH 43 NB (MEDIAN) - STA 845

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
844+42.943	84442.94	0.00	3.68	0.02	0	0	0	0	0
844+50	84450.00	7.06	3.90	0.02	1	0	1	0	1
845+00	84500.00	50.00	5.42	0.20	9	0	10	0	10
845+50	84550.00	50.00	6.90	2.32	11	2	21	3	19
845+61.371	84561.37	11.37	5.40	2.47	3	1	24	4	20
845+86.382	84586.38	25.01	4.15	0.04	4	1	28	5	23
846+00	84600.00	13.62	3.45	0.11	2	0	30	5	25
846+11.377	84611.38	11.38	3.62	0.09	1	0	31	5	26

BEAM GUARD EAT - IH 43 SB (MEDIAN) - STA 851+50

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
850+70.167	85070.17	0.00	4.15	0.01	0	0	0	0	0
850+95.167	85095.17	25.00	3.59	0.12	4	0	4	0	4
851+00	85100.00	4.83	3.55	0.22	1	0	5	0	5
851+20.175	85120.18	20.18	4.11	0.19	3	0	8	0	8
851+50	85150.00	29.82	4.39	0.16	5	0	13	0	13
852+00	85200.00	50.00	4.15	0.12	8	0	21	0	21
852+38.605	85238.61	38.61	4.67	0.23	6	0	27	0	27

BEAM GUARD EAT - IH 43 NB - STA 852

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
851+11.233	85111.23	0.00	3.99	0.02	0	0	0	0	0
851+50	85150.00	38.77	3.89	0.92	6	1	6	1	5
852+00	85200.00	50.00	4.54	3.80	8	4	14	6	8
852+29.834	85229.83	29.83	4.72	4.06	5	4	19	11	8
852+50	85250.00	20.17	4.47	3.70	3	3	22	15	7
852+54.673	85254.67	4.67	4.56	3.68	1	1	23	16	7
852+79.673	85279.67	25.00	4.51	0.69	4	2	27	19	8

BEAM GUARD EAT - IH 43 SB - STA 853

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
852+65.674	85265.67	0.00	5.53	0.92	0	0	0	0	0
852+90.676	85290.68	25.00	5.36	4.82	5	3	5	4	1
853+00	85300.00	9.32	5.67	4.88	2	2	7	6	1
853+15.443	85315.44	15.44	5.91	5.16	3	3	10	10	0
853+50	85350.00	34.56	5.17	1.98	7	5	17	16	1
854+00	85400.00	50.00	4.96	0.57	9	2	26	19	7
854+34.114	85434.11	34.11	4.78	4.09	6	3	32	23	10

BEAM GUARD EAT - IH 43 NB - STA 867

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
865+74.925	86574.93	0.00	4.34	1.95	0	0	0	0	0
866+00	86600.00	25.07	4.36	2.24	4	2	4	3	2
866+50	86650.00	50.00	4.59	3.50	8	5	12	9	3
866+93.363	86693.36	43.36	4.34	5.62	7	7	19	18	2
867+00	86700.00	6.64	4.38	5.64	1	1	20	19	1
867+18.365	86718.36	18.36	4.39	4.04	3	3	23	23	1
867+43.365	86743.37	25.00	4.46	0.97	4	2	27	25	2

BEAM GUARD EAT - IH 43 NB (MEDIAN) - STA 870

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
868+80.36	86880.36	0.00	3.86	0.00	0	0	0	0	0
869+00	86900.00	19.64	4.10	0.01	3	0	3	0	3
869+50	86950.00	50.00	5.53	0.03	9	0	12	0	12
869+98.455	86998.45	48.45	5.78	1.33	10	1	22	1	21
870+00	87000.00	1.55	5.73	1.31	0	0	22	1	21
870+23.475	87023.47	23.47	5.30	0.82	5	1	27	3	25
870+48.495	87048.49	25.02	4.88	0.20	5	0	32	3	30

BEAM GUARD EAT - IH 43 SB - STA 880

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
879+45.805	87945.81	0.00	2.94	3.84	0	0	0	0	0
879+50	87950.00	4.19	3.06	3.83	0	1	0	1	-1
879+70.817	87970.82	20.82	4.03	2.10	3	2	3	4	-1
879+95.829	87995.83	25.01	6.01	0.68	5	1	8	5	3
880+00	88000.00	4.17	5.40	0.71	1	0	9	5	4
880+50	88050.00	50.00	3.16	0.00	8	1	17	6	11
881+00	88100.00	50.00	3.26	0.15	6	0	23	6	17
881+14.228	88114.23	14.23	3.21	0.02	2	0	25	6	19

BEAM GUARD EAT - IH 43 SB ON RAMP FROM LAYTON AVE (RAMP D) - STA 881

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
880+16.986	88016.99	0.00	3.30	2.93	0	0	0	0	0
880+41.891	88041.89	24.91	3.74	2.66	3	3	3	4	-1
880+50	88050.00	8.11	4.01	2.28	1	1	4	5	-1
880+66.869	88066.87	16.87	5.81	1.57	3	1	7	6	1
881+00	88100.00	33.13	4.56	2.70	6	3	13	10	3
881+50	88150.00	50.00	5.25	0.00	9	2	22	13	10
881+85.242	88185.24	35.24	4.20	0.00	6	0	28	13	16

BEAM GUARD EAT - IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A) - STA 884 LT

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
883+21.089	88321.09	0.00	1.47	0.07	0	0	0	0	0
883+50	88350.00	28.91	1.86	0.02	2	0	2	0	2
884+00	88400.00	50.00	2.13	0.29	4	0	6	0	6
884+39.491	88439.49	39.49	2.13	1.21	3	1	9	1	8
884+50	88450.00	10.51	2.21	0.84	1	0	10	1	9
884+64.522	88464.52	14.52	2.04	0.22	1	0	11	1	10
884+89.528	88489.53	25.01	1.92	0.56	2	0	13	1	12

BEAM GUARD EAT - IH 43 NB - STA 884 RT

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
882+83.726	88283.73	0.00	3.98	5.71	0	0	0	0	0
883+00	88300.00	16.27	3.85	3.47	2	3	2	4	-2
883+50	88350.00	50.00	4.78	0.15	8	3	10	8	3
884+00	88400.00	50.00	6.42	0.27	10	0	20	8	13
884+02.285	88402.29	2.29	6.63	0.35	1	0	21	8	14
884+27.151	88427.15	24.87	7.54	0.00	7	0	28	8	21
884+50	88450.00	22.85	5.81	0.37	6	0	34	8	27
884+52.16	88452.16	2.16	6.01	0.06	0	0	34	8	27

BEAM GUARD EAT - IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A) - STA 890 LT

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
888+72.096	88872.10	0.00	2.35	3.17	0	0	0	0	0
889+00	88900.00	27.90	1.96	8.99	2	6	2	8	-6
889+50	88950.00	50.00	2.90	8.52	5	16	7	28	-21
889+92.232	88992.23	42.23	5.11	4.00	6	10	13	40	-27
890+00	89000.00	7.77	7.07	2.66	2	1	15	41	-26
890+17.576	89017.58	17.58	5.22	3.42	4	2	19	44	-25
890+42.848	89042.85	25.27	3.12	0.44	4	2	23	46	-23

BEAM GUARD EAT - IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A) - STA 890 RT

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
888+98.605	88898.60	0.00	3.65	15.48	0	0	0	0	0
889+00	88900.00	1.40	3.70	15.45	0	1	0	1	-1
889+50	88950.00	50.00	4.63	10.06	8	24	8	31	-23
890+00	89000.00	50.00	3.61	8.13	8	17	16	53	-37
890+13.489	89013.49	13.49	4.83	6.62	2	4	18	58	-40
890+37.662	89037.66	24.17	3.86	0.00	4	3	22	61	-39
890+50	89050.00	12.34	3.13	0.05	2	0	24	61	-37
890+61.72	89061.72	11.72	2.29	0.04	1	0	25	61	-36

BEAM GUARD EAT - IH 43 SB - STA 895+50

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
894+98.773	89498.77	0.00	1.25	0.58	0	0	0	0	0
895+00	89500.00	1.23	1.21	0.64	0	0	0	0	0
895+23.749	89523.75	23.75	1.63	1.48	1	1	1	1	0
895+48.629	89548.63	24.88	2.08	1.34	2	1	3	3	1
895+50	89550.00	1.37	2.35	1.12	0	0	3	3	1
896+00	89600.00	50.00	2.19	0.00	4	1	7	4	3
896+50	89650.00	50.00	2.07	0.01	4	0	11	4	7
896+66.359	89666.36	16.36	1.03	0.09	1	0	12	4	8

BEAM GUARD EAT - IH 43 SB - STA 896

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
895+64.158	89564.16	0.00	4.55	0.06	0	0	0	0	0
895+87.363	89587.36	23.21	6.99	1.28	5	1	5	1	4
896+00	89600.00	12.64	6.58	2.16	3	1	8	3	6
896+14.358	89614.36	14.36	6.61	1.91	4	1	12	4	8
896+50	89650.00	35.64	4.18	1.40	7	2	19	6	13
897+00	89700.00	50.00	4.56	0.44	8	2	27	9	18
897+34.294	89734.29	34.29	2.17	0.00	4	0	31	9	22

BEAM GUARD EAT - IH 43 NB - STA 900

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
899+11.726	89911.73	0.00	3.25	0.05	0	0	0	0	0
899+50	89950.00	38.27	1.28	0.16	3	0	3	0	3
900+00	90000.00	50.00	1.18	1.61	2	2	5	3	3
900+30.172	90030.17	30.17	2.23	3.05	2	3	7	6	1
900+50	90050.00	19.83	2.15	0.44	2	1	9	8	2
900+55.169	90055.17	5.17	2.15	0.26	0	0	9	8	2
900+80.182	90080.18	25.01	1.24	0.37	2	0	11	8	4

BEAM GUARD EAT - IH 43 SB - STA 22

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
21+93.4	2193.40	0.00	2.21	0.02	0	0	0	0	0
22+00	2200.00	6.60	2.53	0.00	1	0	1	0	1
22+17.997	2218.00	18.00	2.20	0.00	2	0	3	0	3
22+43.013	2243.01	25.02	2.02	0.00	2	0	5	0	5
22+50	2250.00	6.99	2.05	0.00	1	0	6	0	6
23+00	2300.00	50.00	2.07	0.00	4	0	10	0	10
23+50	2350.00	50.00	1.61	0.00	3	0	13	0	13
23+61.417	2361.42	11.42	1.86	0.00	1	0	14	0	14

BEAM GUARD EAT - IH 43 NB - STA 48

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
46+74.761	4674.76	0.00	1.47	0.01	0	0	0	0	0
47+00	4700.00	25.24	1.70	0.01	1	0	1	0	1
47+50	4750.00	50.00	2.43	0.01	4	0	5	0	5
47+93.203	4793.20	43.20	2.35	0.00	4	0	9	0	9
48+00	4800.00	6.80	2.61	0.00	1	0	10	0	10
48+18.179	4818.18	18.18	3.00	0.01	2	0	12	0	12
48+43.198	4843.20	25.02	2.61	0.01	3	0	15	0	15

BEAM GUARD EAT - IH 43 SB - STA 53

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
52+24.866	5224.87	0.00	1.30	0.18	0	0	0	0	0
52+49.871	5249.87	25.01	3.20	3.86	2	2	2	3	-1
52+50	5250.00	0.13	3.20	3.92	0	0	2	3	-1
52+74.877	5274.88	24.88	3.47	10.72	3	7	5	11	-6
53+00	5300.00	25.12	4.09	6.11	4	8	9	21	-12
53+50	5350.00	50.00	3.00	0.06	7	6	16	29	-13
53+93.304	5393.30	43.30	2.27	0.00	4	0	20	29	-9

BEAM GUARD EAT - IH 43 NB - STA 58

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
54+13.764	5413.76	0.00	1.70	0.02	0	0	0	0	0
54+50	5450.00	36.24	1.28	0.03	2	0	2	0	2
55+00	5500.00	50.00	1.99	0.01	3	0	5	0	5
55+32.237	5532.24	32.24	3.12	0.01	3	0	8	0	8
55+50	5550.00	17.76	2.05	3.06	2	1	10	1	9
55+57.237	5557.24	7.24	1.61	5.21	0	1	10	3	8
55+82.244	5582.24	25.01	0.61	0.15	1	2	11	5	6

BEAM GUARD EAT - IH 43 NB - STA 70+50

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
69+27.383	6927.38	0.00	1.18	0.00	0	0	0	0	0
69+50	6950.00	22.62	2.29	0.00	1	0	1	0	1
70+00	7000.00	50.00	3.01	0.26	5	0	6	0	6
70+45.823	7045.82	45.82	2.99	0.23	5	0	11	0	11
70+50	7050.00	4.18	2.61	0.00	0	0	11	0	11
70+70.823	7070.82	20.82	1.76	0.10	2	0	13	0	13
70+95.823	7095.82	25.00	3.05	0.24	2	0	15	0	15

BEAM GUARD EAT - IH 43 NB - STA 71

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
69+87.803	6987.80	0.00	0.62	0.16	0	0	0	0	0
70+00	7000.00	12.20	0.65	0.28	0	0	0	0	0
70+50	7050.00	50.00	3.68	0.04	4	0	4	0	4
71+00	7100.00	50.00	4.62	3.12	8	3	12	4	8
71+06.214	7106.21	6.21	5.39	0.00	1	0	13	4	9
71+31.181	7131.18	24.97	6.03	0.00	5	0	18	4	14
71+50	7150.00	18.82	3.24	0.00	3	0	21	4	17
71+56.234	7156.23	6.23	2.77	0.00	1	0	22	4	18

BEAM GUARD EAT - IH 43 SB - STA 81

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
80+14.982	8014.98	0.00	3.11	0.89	0	0	0	0	0
80+39.989	8039.99	25.01	4.12	27.44	3	13	3	16	-13
80+50	8050.00	10.01	4.43	23.90	2	10	5	29	-24
80+64.944	8064.94	14.94	6.15	20.17	3	12	8	44	-36
81+00	8100.00	35.06	7.34	0.00	9	13	17	60	-43
81+50	8150.00	50.00	3.43	0.03	10	0	27	60	-33
81+83.417	8183.42	33.42	1.61	0.00	3	0	30	60	-30

BEAM GUARD EAT - IH 43 NB - STA 91+50

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
90+30.395	9030.39	0.00	1.26	0.00	0	0	0	0	0
90+50	9050.00	19.61	1.25	0.00	1	0	1	0	1
91+00	9100.00	50.00	3.06	6.49	4	6	5	8	-3
91+48.832	9148.83	48.83	3.62	18.03	6	22	11	35	-24
91+50	9150.00	1.17	3.63	17.35	0	1	11	36	-25
91+73.826	9173.83	23.83	3.78	9.07	3	12	14	51	-37
91+98.835	9198.83	25.01	2.57	0.54	3	4	17	56	-39

BEAM GUARD EAT - US 45 NB (W-N RAMP - HALE IC) - STA 116+50 LT

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
115+26.674	11526.67	0.00	0.01	0.00	0	0	0	0	0
115+50	11550.00	23.33	0.60	0.00	0	0	0	0	0
116+00	11600.00	50.00	1.56	0.00	2	0	2	0	2
116+45.19	11645.19	45.19	2.25	0.00	3	0	5	0	5
116+50	11650.00	4.81	2.35	0.00	0	0	5	0	5
116+70.389	11670.39	20.39	1.92	0.00	2	0	7	0	7
116+95.547	11695.55	25.16	1.46	0.00	2	0	9	0	9

BEAM GUARD EAT - US 45 NB (W-N RAMP - HALE IC) - STA 116+50 RT

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
115+34.013	11534.01	0.00	0.73	9.57	0	0	0	0	0
115+50	11550.00	15.99	0.99	12.25	1	6	1	8	-7
116+00	11600.00	50.00	1.70	8.49	2	19	3	31	-28
116+48.564	11648.56	48.56	3.01	0.53	4	8	7	41	-34
116+50	11650.00	1.44	3.14	0.10	0	0	7	41	-34
116+72.741	11672.74	22.74	1.70	0.00	2	0	9	41	-32
116+96.934	11696.93	24.19	1.13	0.00	1	0	10	41	-31

BEAM GUARD EAT - IH 43 NB (W-E RAMP - HALE IC) - STA 203

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
203+29.747	20329.75	0.00	1.00	0.00	0	0	0	0	0
203+46.333	20346.33	16.59	3.13	0.00	1	0	1	0	1
203+50	20350.00	3.67	3.33	0.00	0	0	1	0	1
203+70.537	20370.54	20.54	5.49	0.00	3	0	4	0	4
203+94.734	20394.73	24.20	6.36	0.00	5	0	9	0	9

BEAM GUARD EAT - IH 43 NB/US 45 NB - STA 291+50

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
290+41.771	29041.77	0.00	1.84	0.00	0	0	0	0	0
290+50	29050.00	8.23	1.91	0.05	1	0	1	0	1
291+00	29100.00	50.00	3.09	1.97	5	2	6	3	4
291+50	29150.00	50.00	5.03	3.52	8	5	14	9	5
291+60.209	29160.21	10.21	5.16	3.97	2	1	16	10	6
291+85.21	29185.21	25.00	2.29	2.21	3	3	19	14	5
292+00	29200.00	14.79	3.33	0.52	2	1	21	15	6
292+10.211	29210.21	10.21	3.74	0.07	1	0	22	15	7

BEAM GUARD EAT - IH 43 SB OFF RAMP TO STH 100 - STA 374

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
373+71.475	37371.47	0.00	2.04	3.73	0	0	0	0	0
373+94.866	37394.87	23.39	2.22	2.63	2	3	2	4	-2
374+00	37400.00	5.13	3.39	0.36	1	0	3	4	-1
374+18.082	37418.08	18.08	2.34	6.91	2	2	5	6	-1
374+50	37450.00	31.92	2.20	2.74	3	6	8	14	-6
375+00	37500.00	50.00	1.66	0.16	4	3	12	18	-6
375+28.522	37528.52	28.52	1.49	0.00	2	0	14	18	-4

ADDED GUTTER - IH 43 NB (MEDIAN)

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
65+45.72	6545.72	0.00	4.24	0.59	0	0	0	0	0
65+50	6550.00	4.28	4.36	0.74	1	0	1	0	1
66+00	6600.00	50.00	4.84	0.15	9	1	10	1	9
66+50	6650.00	50.00	4.70	0.55	9	1	19	3	17
66+89.978	6689.98	39.98	3.29	0.00	6	0	25	3	23

ADDED GUTTER - IH 43 SB

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
65+30	6530.00	0.00	3.28	3.72	0	0	0	0	0
65+50	6550.00	20.00	3.40	2.01	2	2	2	3	-1
66+00	6600.00	50.00	2.72	3.95	6	6	8	10	-2
66+50	6650.00	50.00	3.73	2.39	6	6	14	18	-4
67+00	6700.00	50.00	3.68	1.87	7	4	21	23	-2
67+40	6740.00	40.00	3.79	2.46	6	3	27	26	1

ADDED GUTTER - IH 43 SB

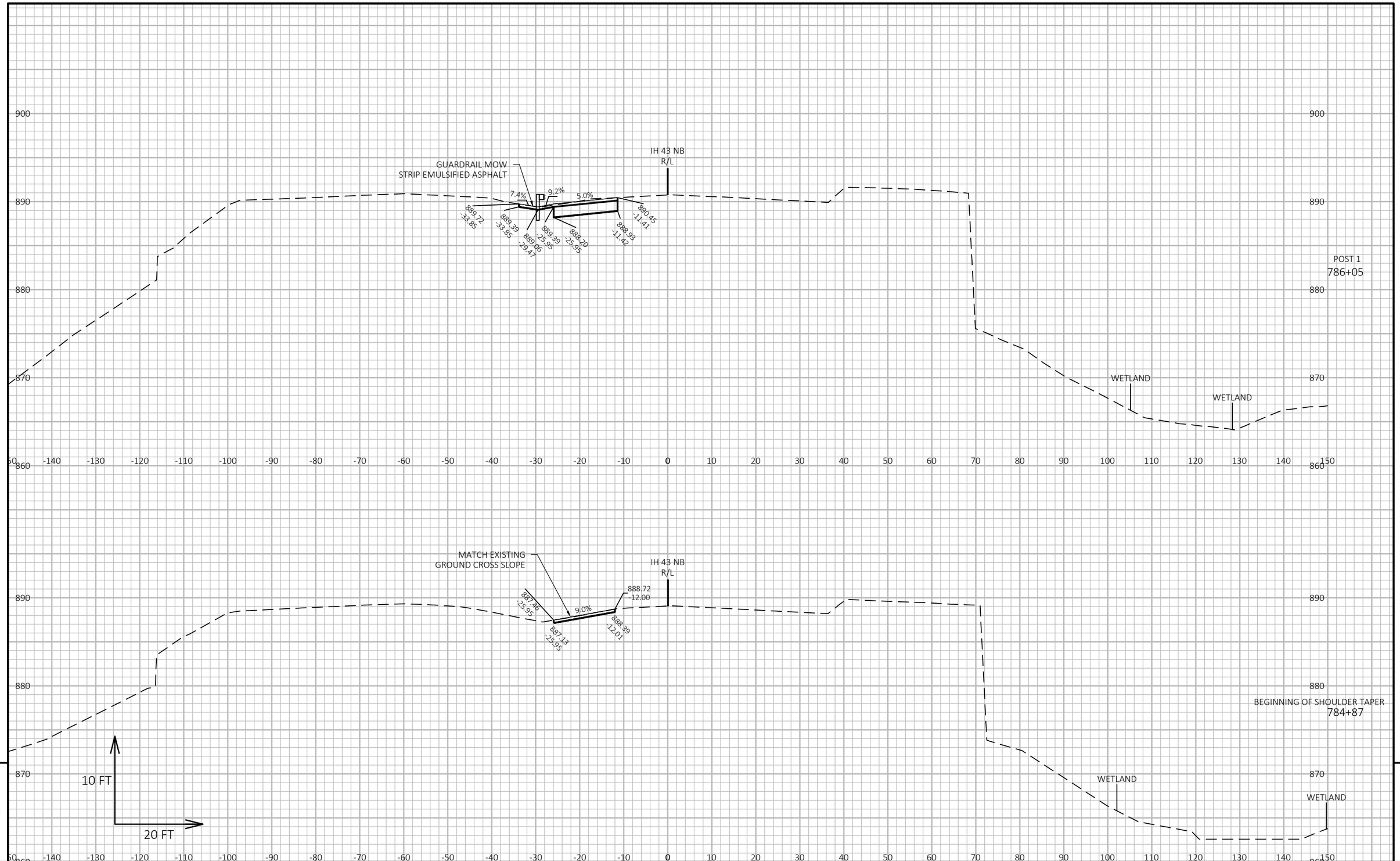
STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
83+40.014	8340.01	0.00	4.20	0.76	0	0	0	0	0
83+50	8350.00	9.99	4.26	0.51	2	0	2	0	2
84+00	8400.00	50.00	4.32	0.30	8	1	10	1	9
84+50	8450.00	50.00	4.50	0.22	8	0	18	1	17
85+00	8500.00	50.00	3.38	0.18	7	0	25	1	24
85+50	8550.00	50.00	3.21	0.26	6	0	31	1	30
86+00	8600.00	50.00	2.29	0.33	5	1	36	3	34
86+50	8650.00	50.00	2.31	0.37	4	1	40	4	36
87+00	8700.00	50.00	2.51	0.39	4	1	44	5	39
87+50	8750.00	50.00	3.87	0.57	6	1	50	6	44
88+00	8800.00	50.00	3.89	1.77	7	2	57	9	48
88+50	8850.00	50.00	3.94	0.79	7	2	64	11	53
89+00	8900.00	50.00	4.19	0.38	8	1	72	13	60
89+50	8950.00	50.00	4.32	0.28	8	1	80	14	66
89+59.94	8959.94	9.94	4.05	0.55	2	0	82	14	68

DECK REPLACEMENT - LAYTON AVE (RAMP A)

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
891+00	89100.00	0.00	13.81	0.03	0	0	0	0	0
891+50	89150.00	50.00	9.04	4.14	21	4	21	5	16
894+50	89450.00	0.00	11.52	0.02	0	0	0	0	0
895+00	89500.00	50.00	9.40	0.05	19	0	19	0	19
895+50	89550.00	50.00	9.88	0.13	18	0	37	0	37
896+00	89600.00	50.00	13.47	0.02	22	0	59	0	59

CHANNEL

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
00+03	3.00	0.00	73.48	0.00	0	0	0	0	0
00+50	50.00	47.00	54.55	0.72	111	1	111	1	110
01+00	100.00	50.00	58.59	0.00	105	1	216	3	214
01+50	150.00	50.00	62.08	0.00	112	0	328	3	326
02+00	200.00	50.00	61.85	0.00	115	0	443	3	441
02+50	250.00	50.00	70.21	0.00	122	0	565	3	563
03+00	300.00	50.00	62.20	0.00	123	0	688	3	686
03+50	350.00	50.00	57.07	0.00	110	0	798	3	796
04+00	400.00	50.00	59.47	0.00	108	0	906	3	904
04+50	450.00	50.00	57.54	0.00	108	0	1,014	3	1,012
05+00	500.00	50.00	56.64	0.00	106	0	1,120	3	1,118
05+50	550.00	50.00	62.75	0.00	111	0	1,231	3	1,229
06+00	600.00	50.00	65.24	0.00	119	0	1,350	3	1,348
06+50	650.00	50.00	77.23	6.26	132	6	1,482	10	1,472
07+00	700.00	50.00	73.76	11.61	140	17	1,622	31	1,591
07+50	750.00	50.00	59.52	0.00	123	11	1,745	45	1,700
08+00	800.00	50.00	64.10	0.00	114	0	1,859	45	1,814
08+50	850.00	50.00	51.98	0.00	107	0	1,966	45	1,921
09+00	900.00	50.00	44.19	0.00	89	0	2,055	45	2,010
09+50	950.00	50.00	56.33	0.00	93	0	2,148	45	2,103
10+00	1000.00	50.00	56.09	0.00	104	0	2,252	45	2,207
10+50	1050.00	50.00	56.55	0.00	104	0	2,356	45	2,311
11+00	1100.00	50.00	74.50	0.00	121	0	2,477	45	2,432
11+50	1150.00	50.00	71.58	0.00	135	0	2,612	45	2,567
12+00	1200.00	50.00	75.37	10.45	136	10	2,748	58	2,691
12+50	1250.00	50.00	57.88	9.91	123	19	2,871	81	2,790
13+00	1300.00	50.00	70.93	0.00	119	9	2,990	93	2,898
13+50	1350.00	50.00	69.32	0.00	130	0	3,120	93	3,028
14+00	1400.00	50.00	58.29	0.00	118	0	3,238	93	3,146
14+50	1450.00	50.00	11.92	1.63	65	2	3,303	95	3,208



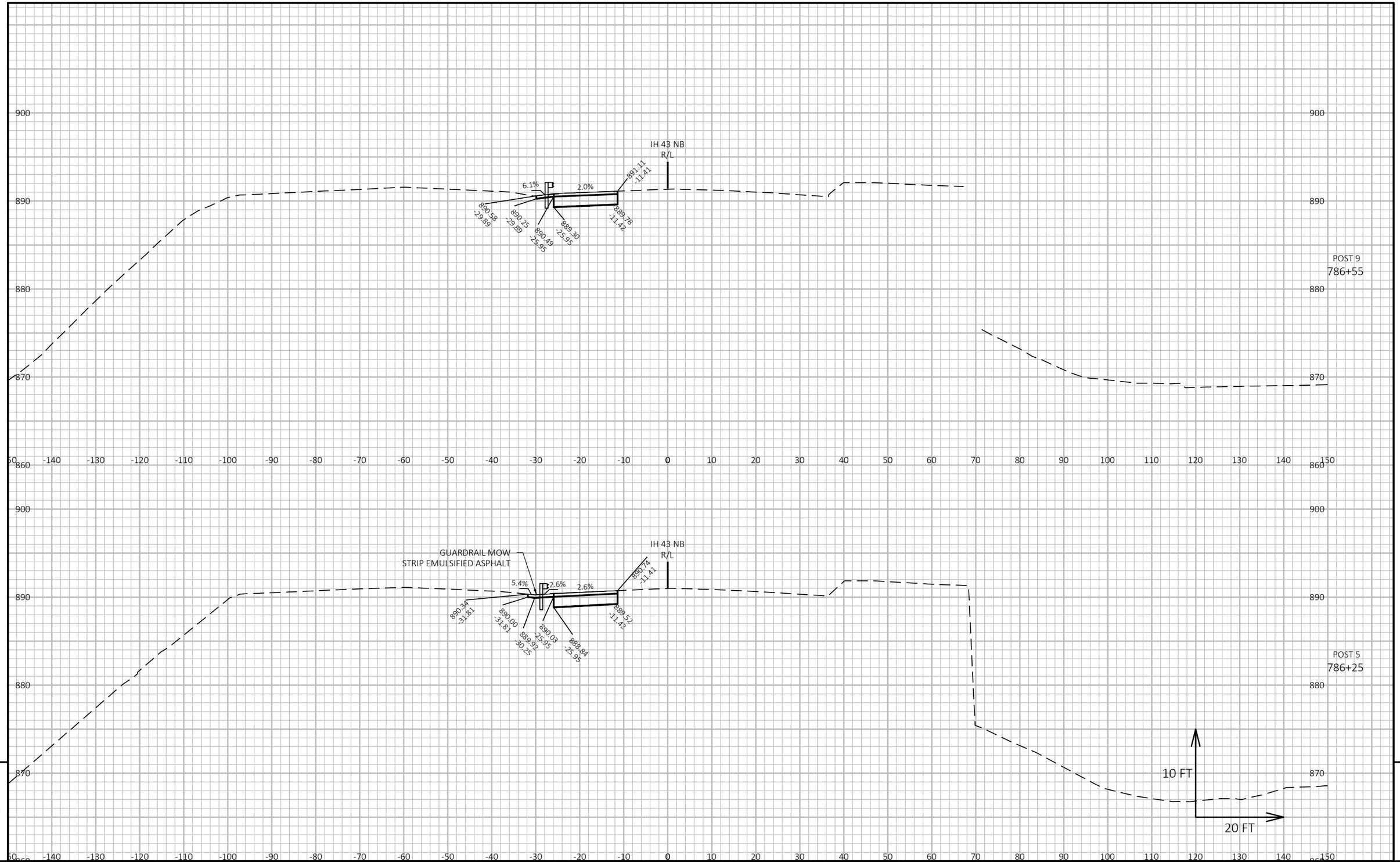
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB (MEDIAN)	SHEET 465	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 786 BG 1

PLOT DATE : 7/5/2021 8:26 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB (MEDIAN)	SHEET 466	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 786 BG 2

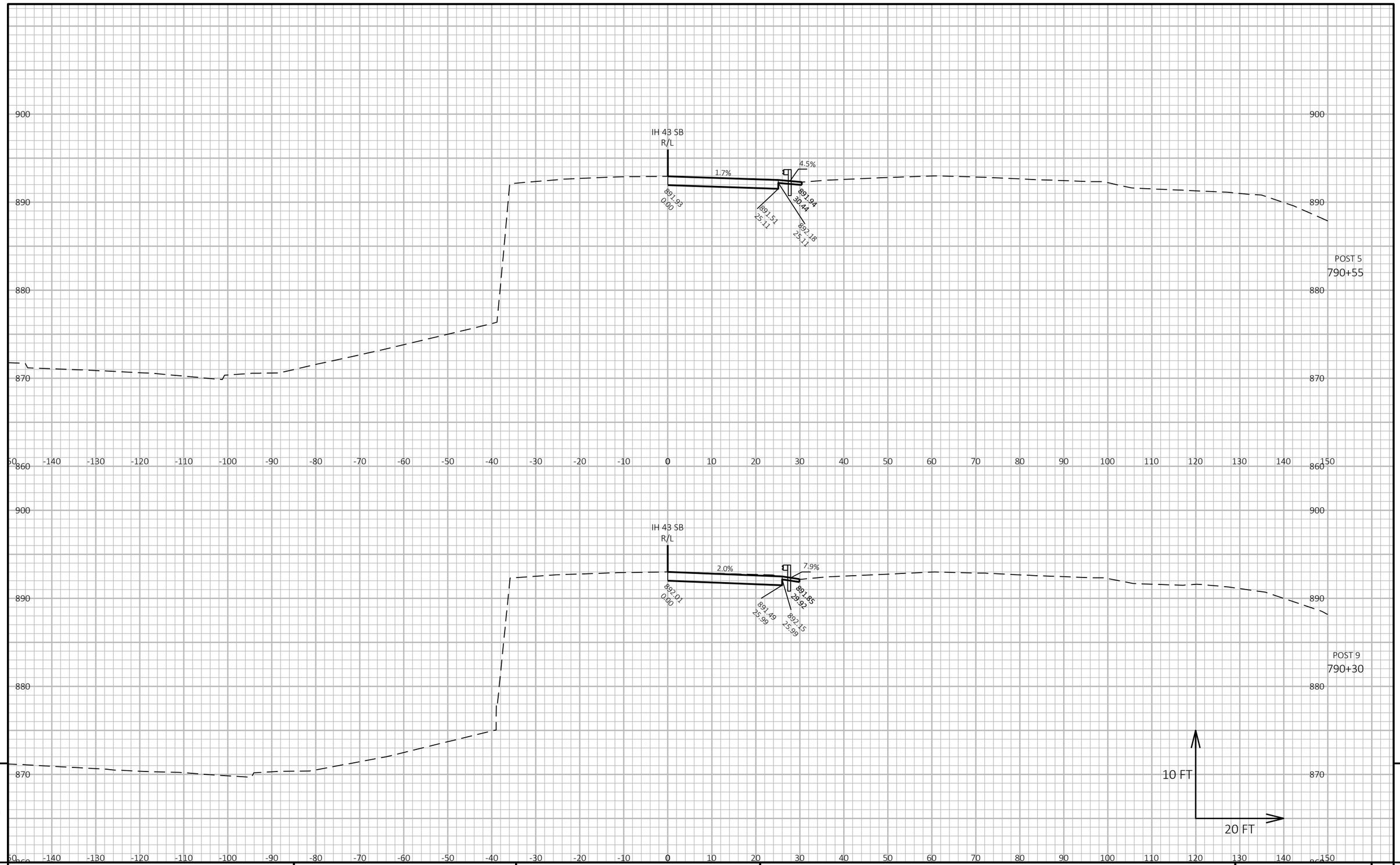
PLOT DATE : 7/5/2021 8:27 PM

PLOT BY : ABU AJWA, MUNTHER J

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

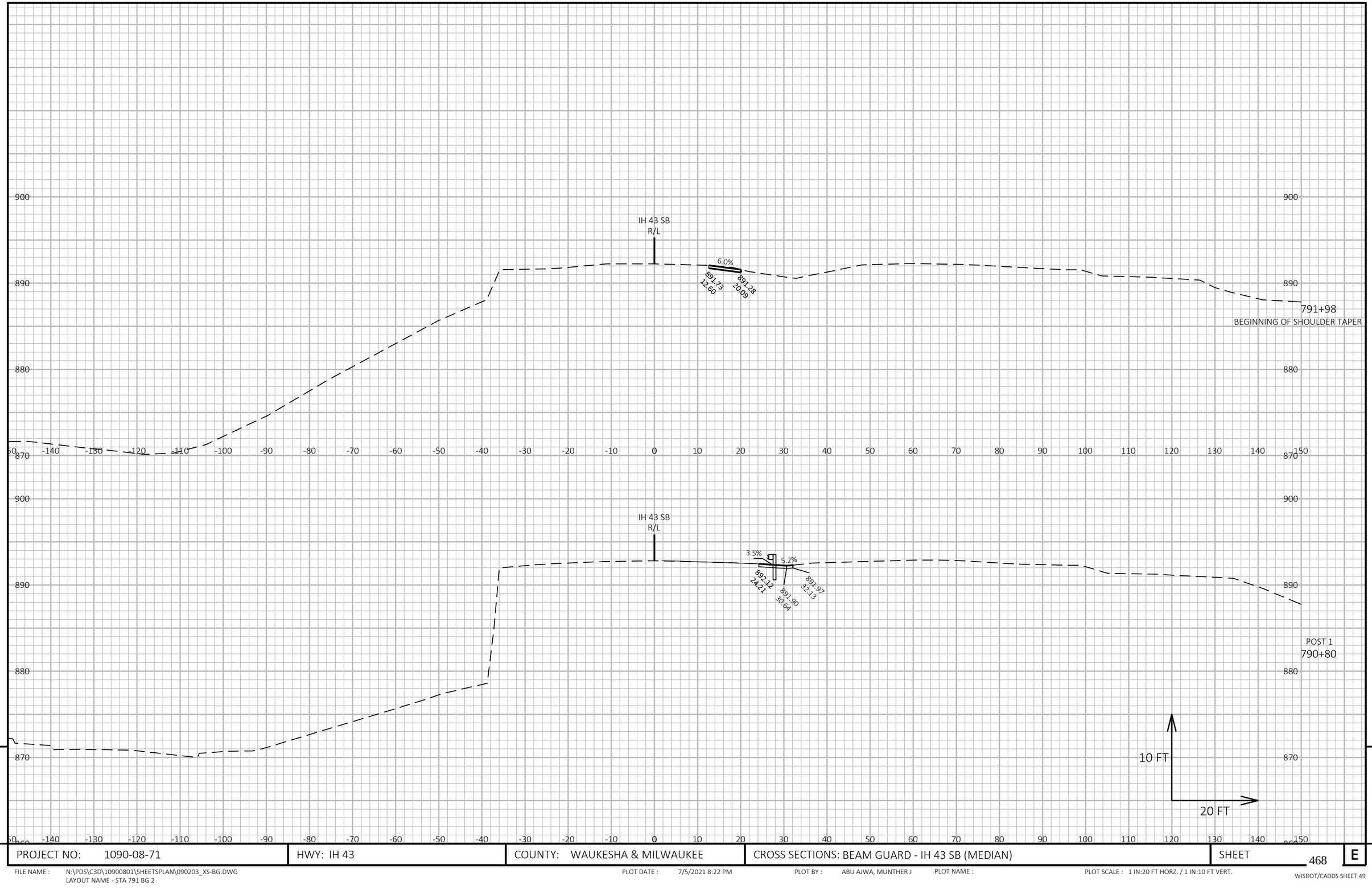


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB (MEDIAN)	SHEET 467	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 791 BG 1

PLOT DATE : 2/6/2021 11:11 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

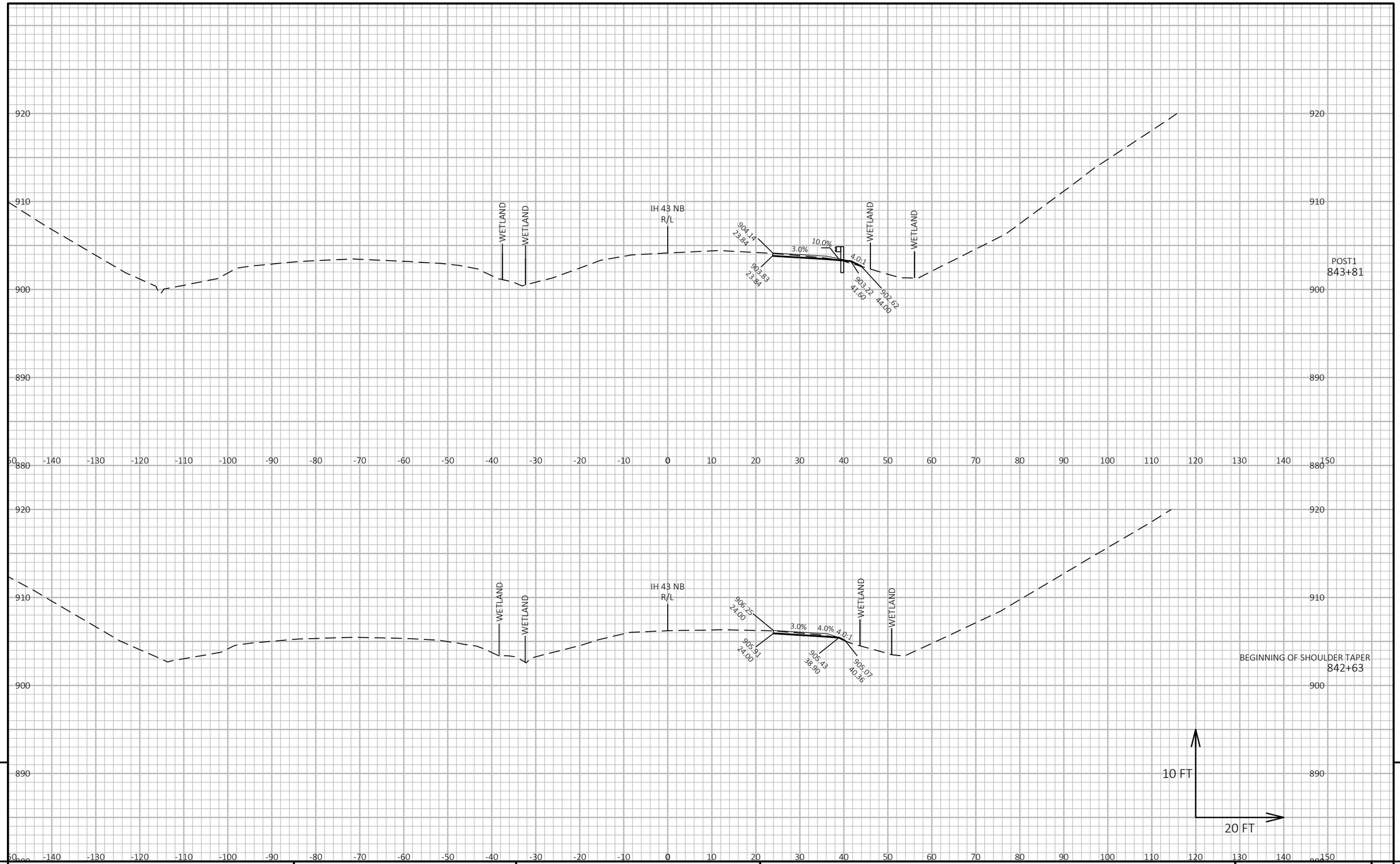


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB (MEDIAN)	SHEET 468	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 791 BG 2

PLOT DATE : 7/5/2021 8:22 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

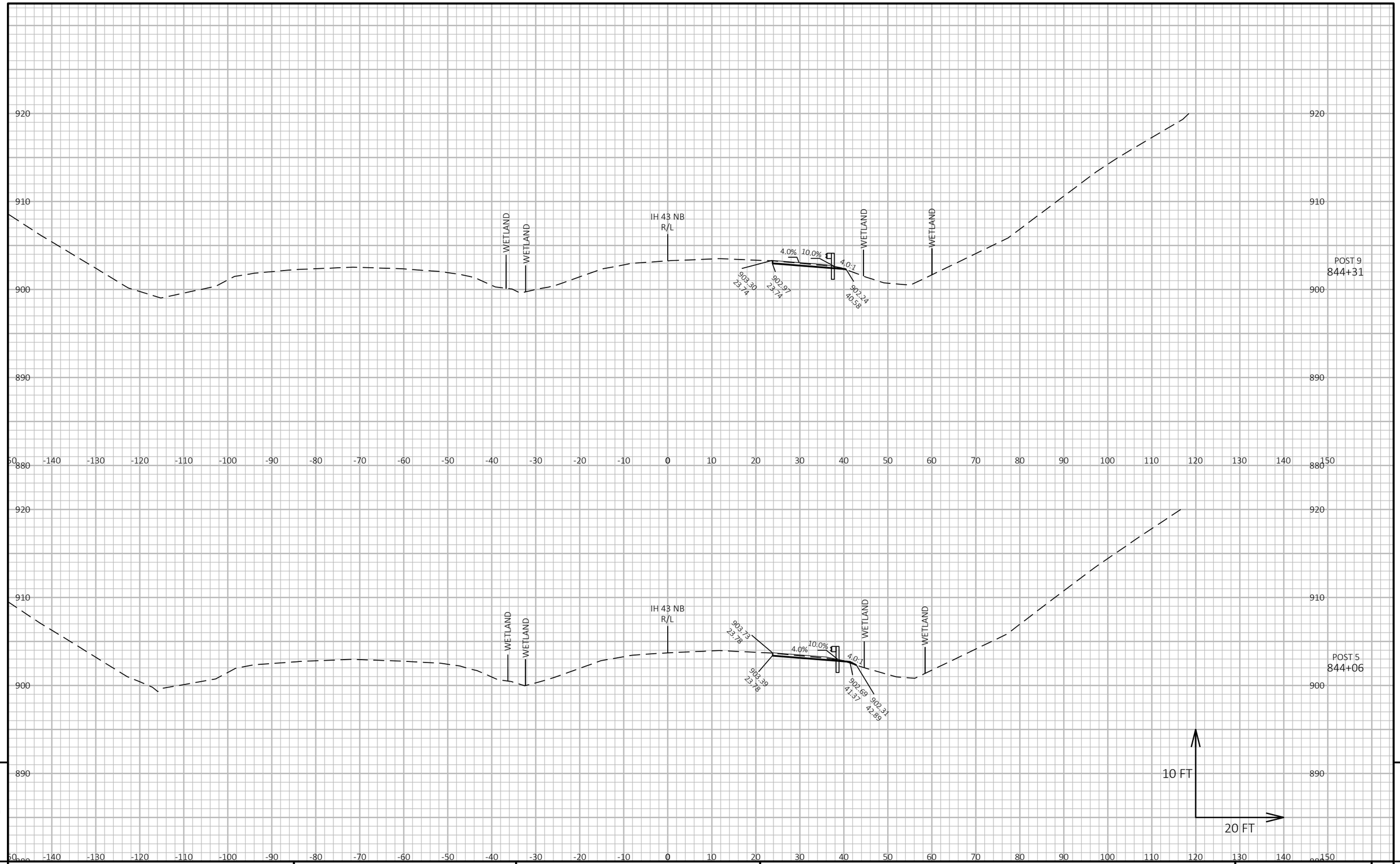


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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 469	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 844 BG 1

PLOT DATE : 9/21/2021 11:23 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

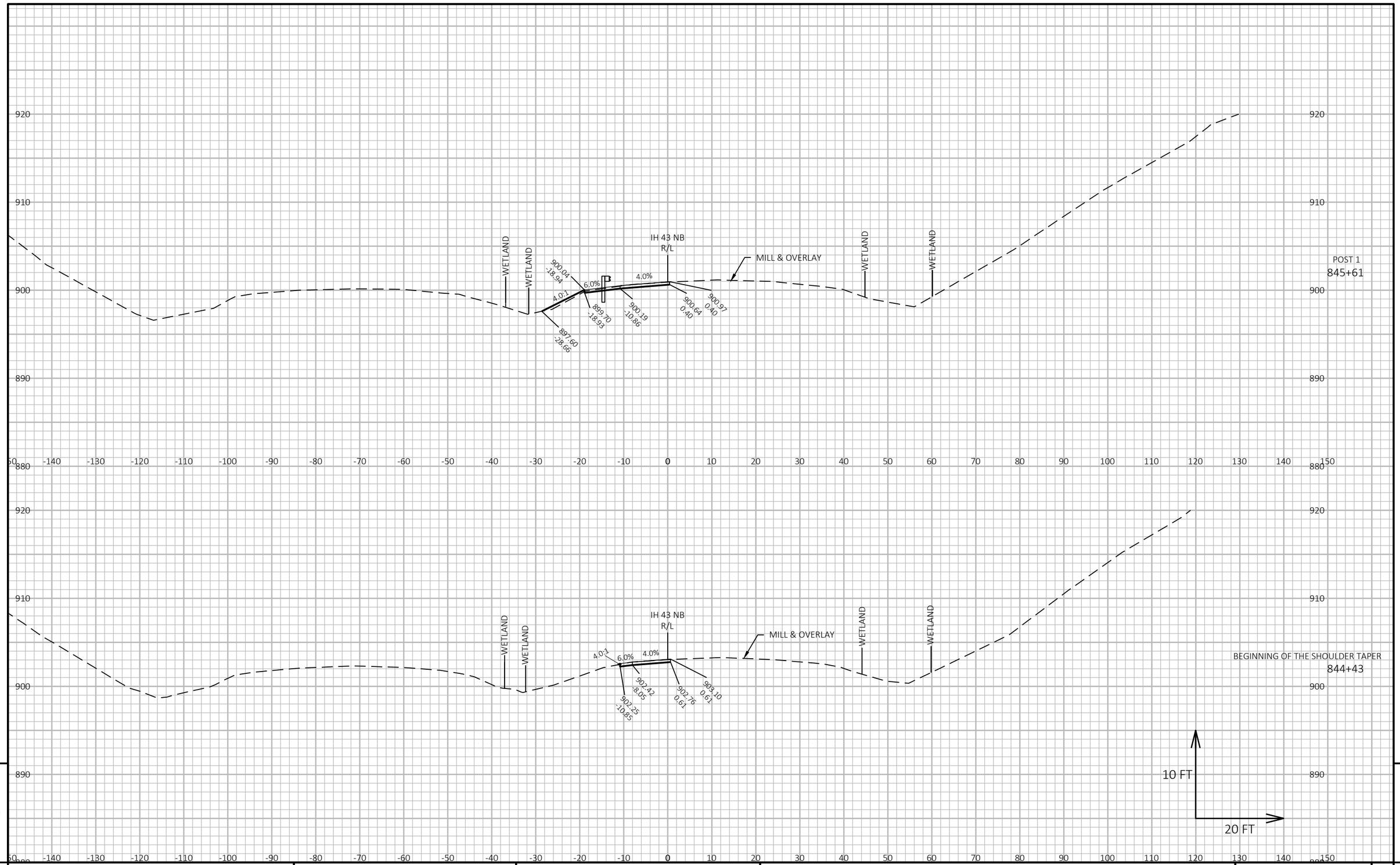
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 470	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 844 BG 2

PLOT DATE : 9/21/2021 11:25 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

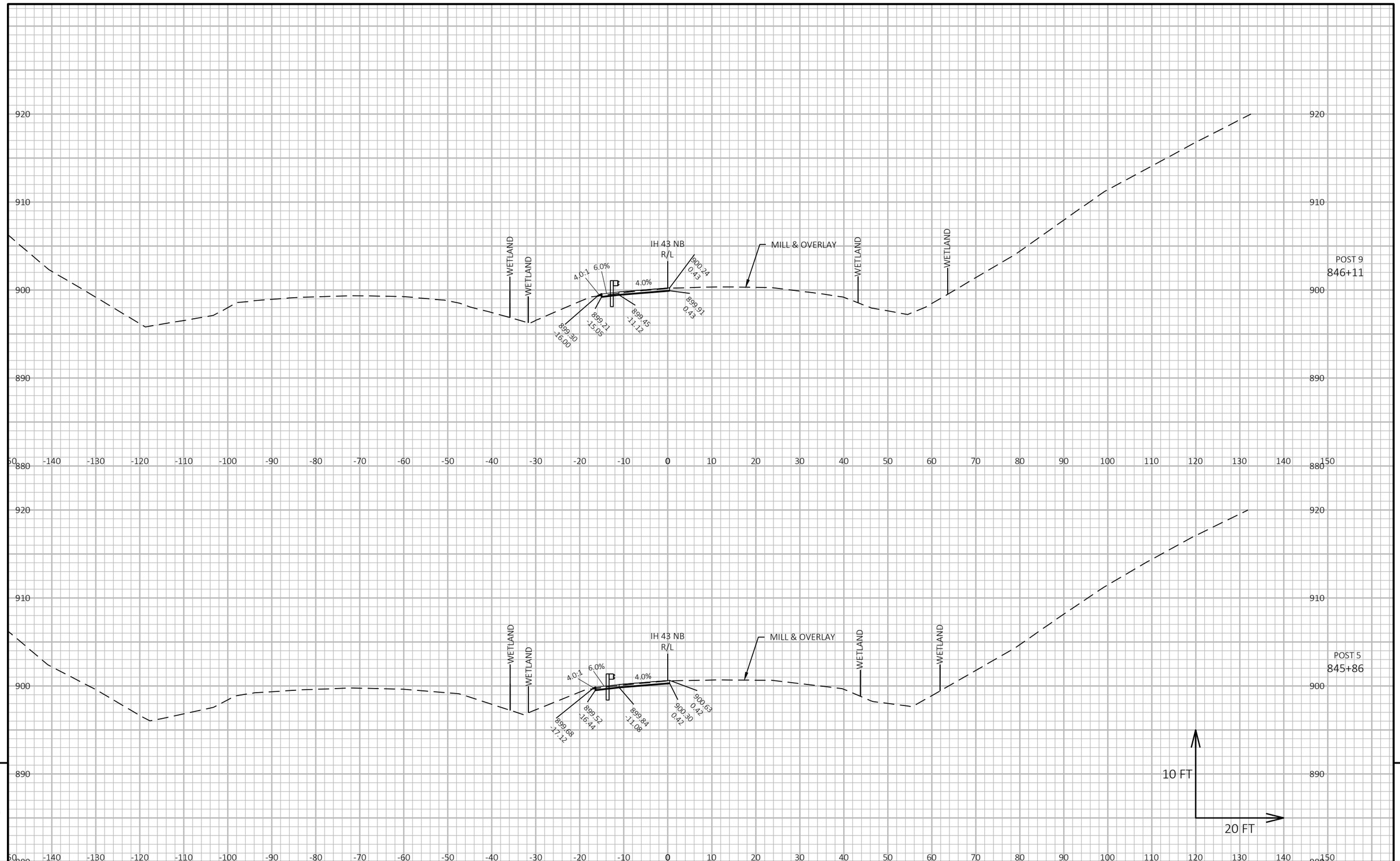


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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB (MEDIAN)	SHEET 471	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 845 BG 1

PLOT DATE : 9/23/2021 5:57 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



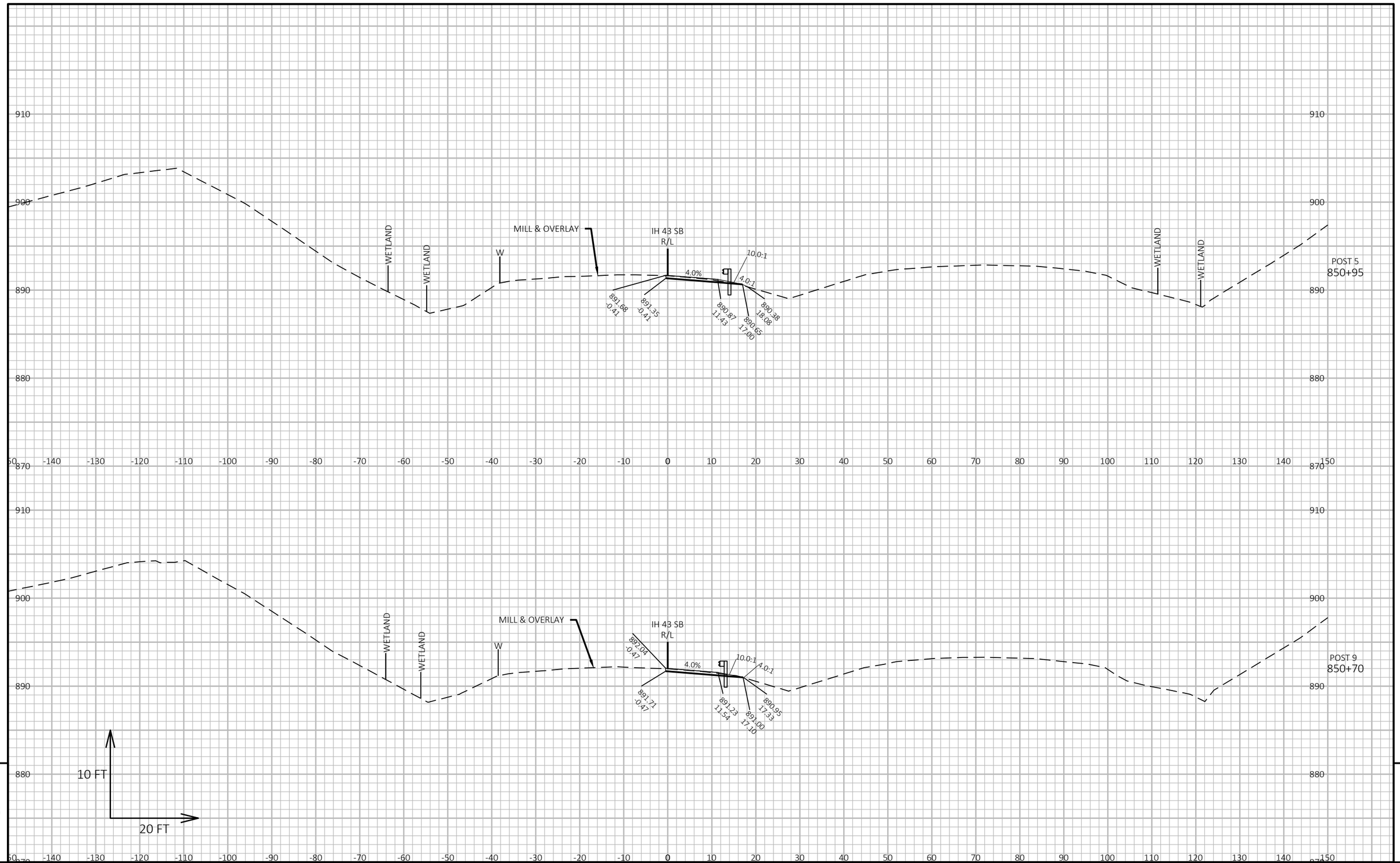
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB (MEDIAN)	SHEET 472	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 845 BG 2

PLOT DATE : 9/21/2021 11:29 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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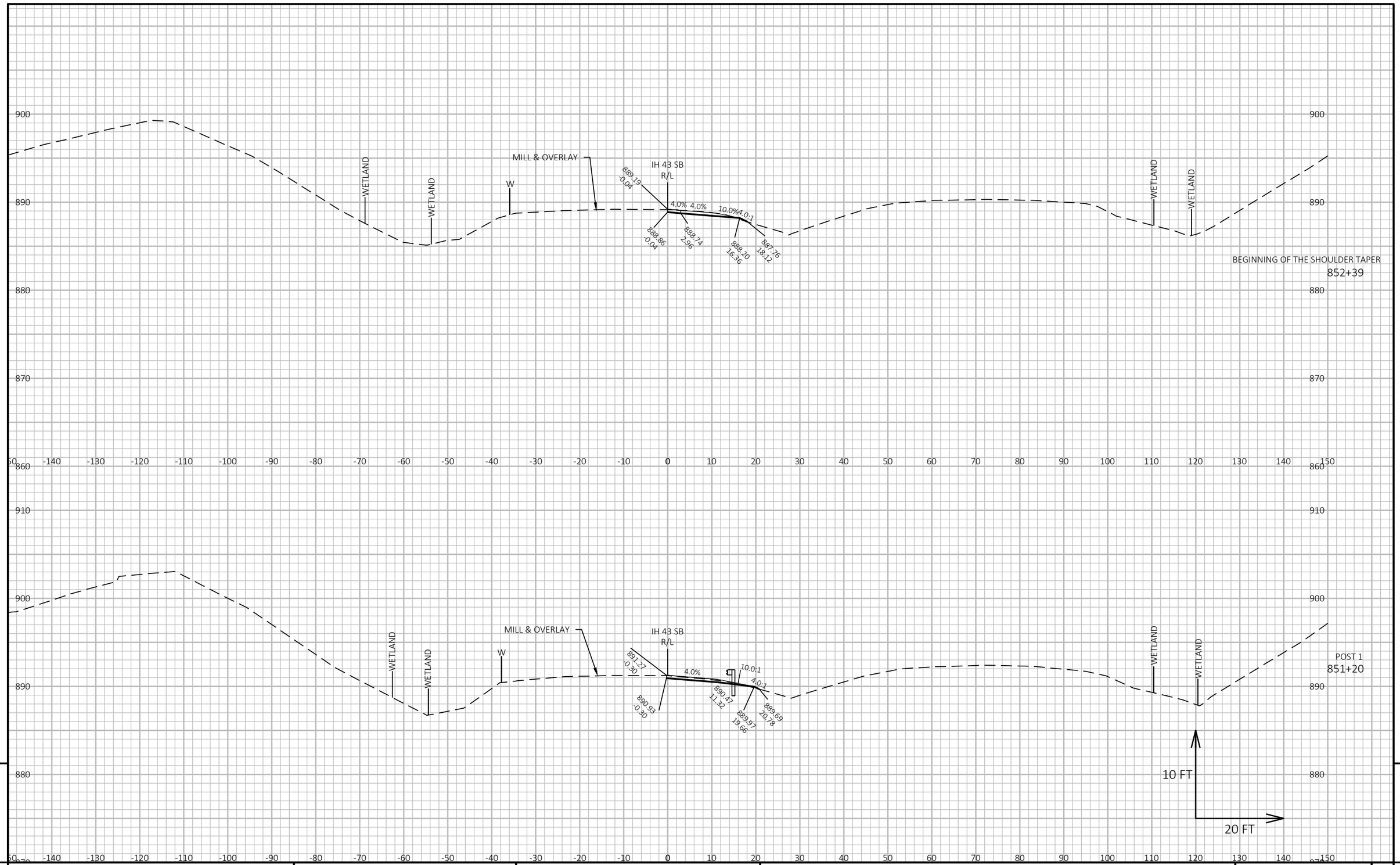
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB (MEDIAN)	SHEET 473	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 851+50 BG 1

PLOT DATE : 2/4/2021 3:22 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

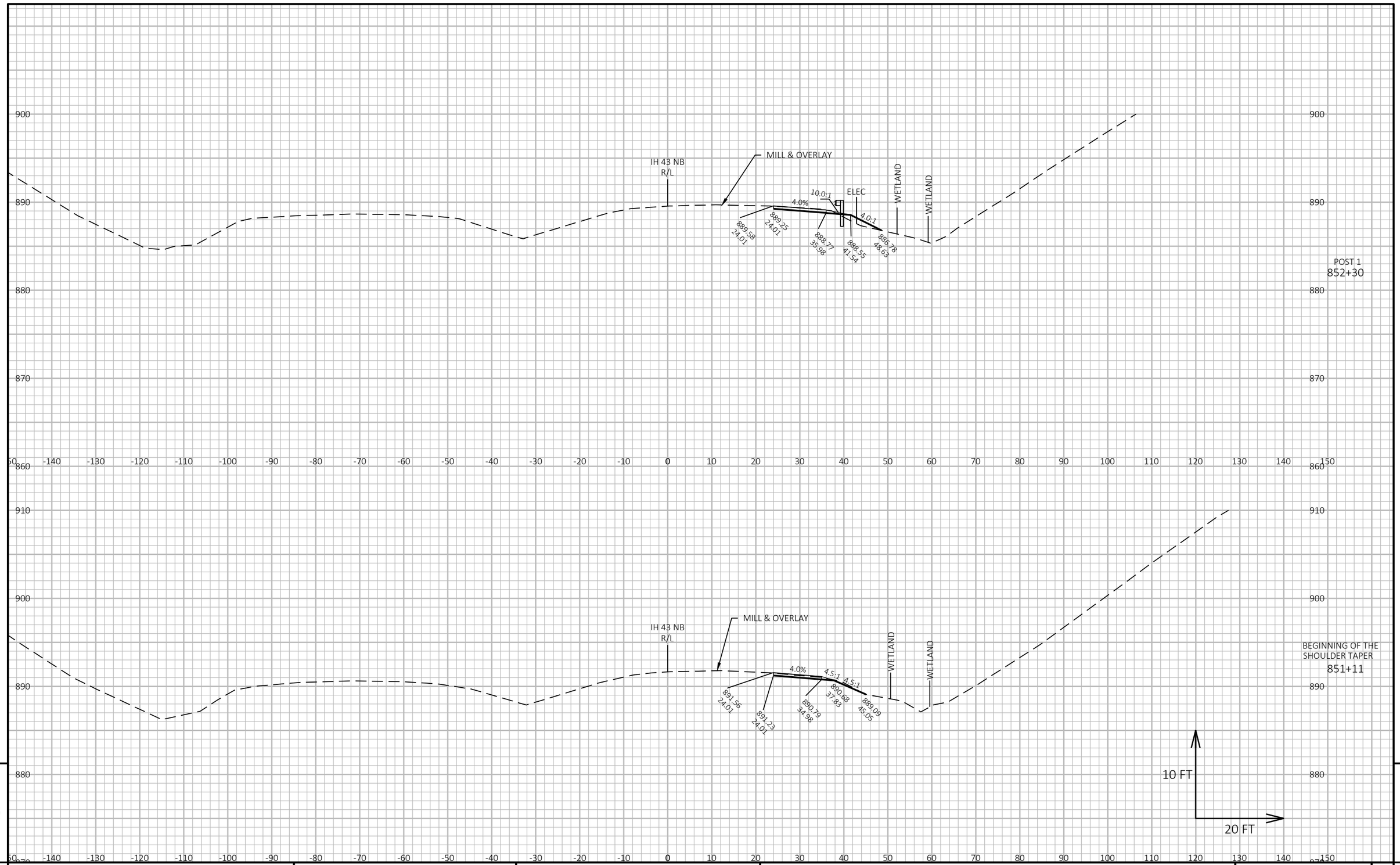


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB (MEDIAN)	SHEET 474	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 851+50 BG 2

PLOT DATE : 9/21/2021 11:40 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

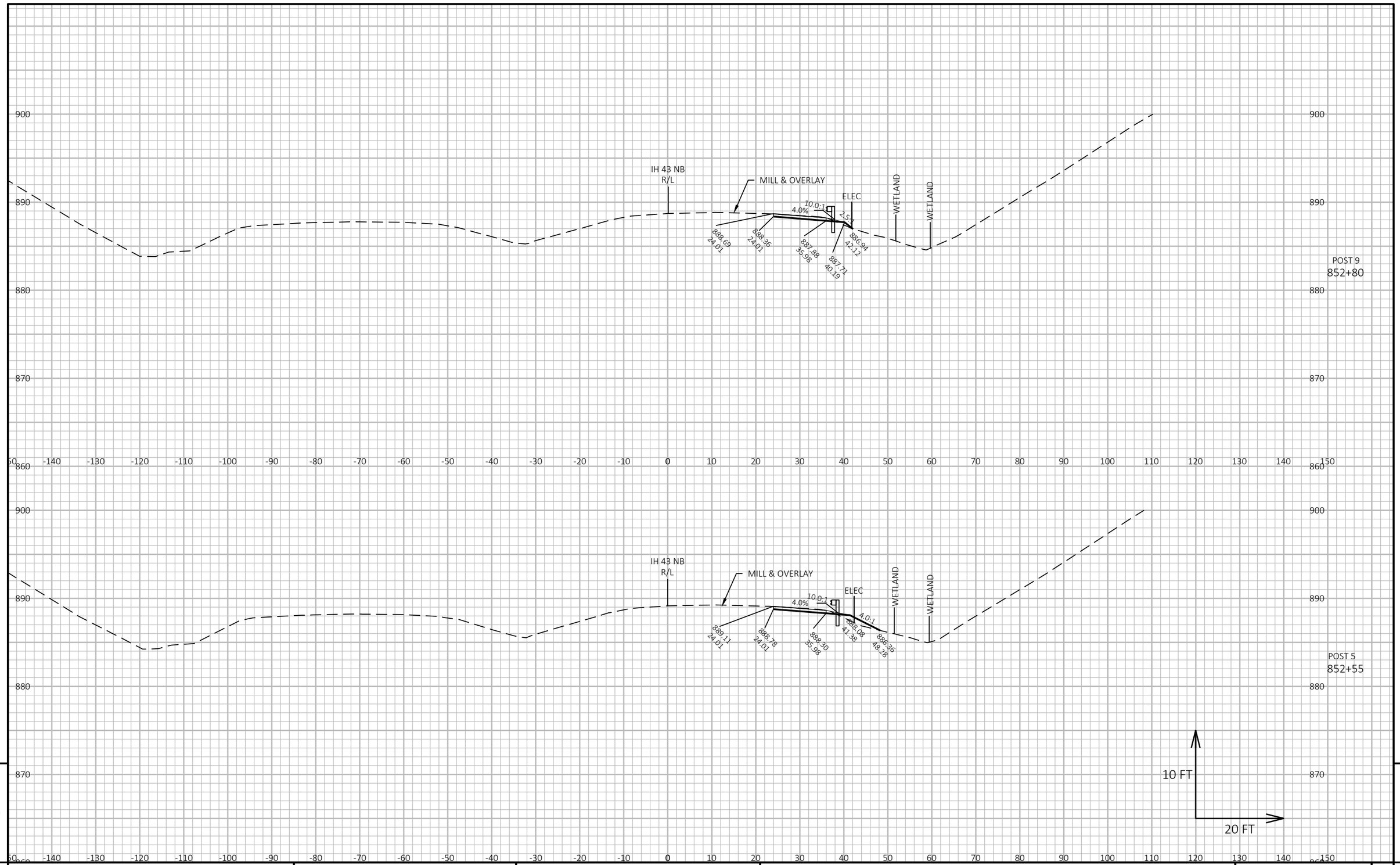


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 475	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 852 BG 1

PLOT DATE : 9/21/2021 11:43 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

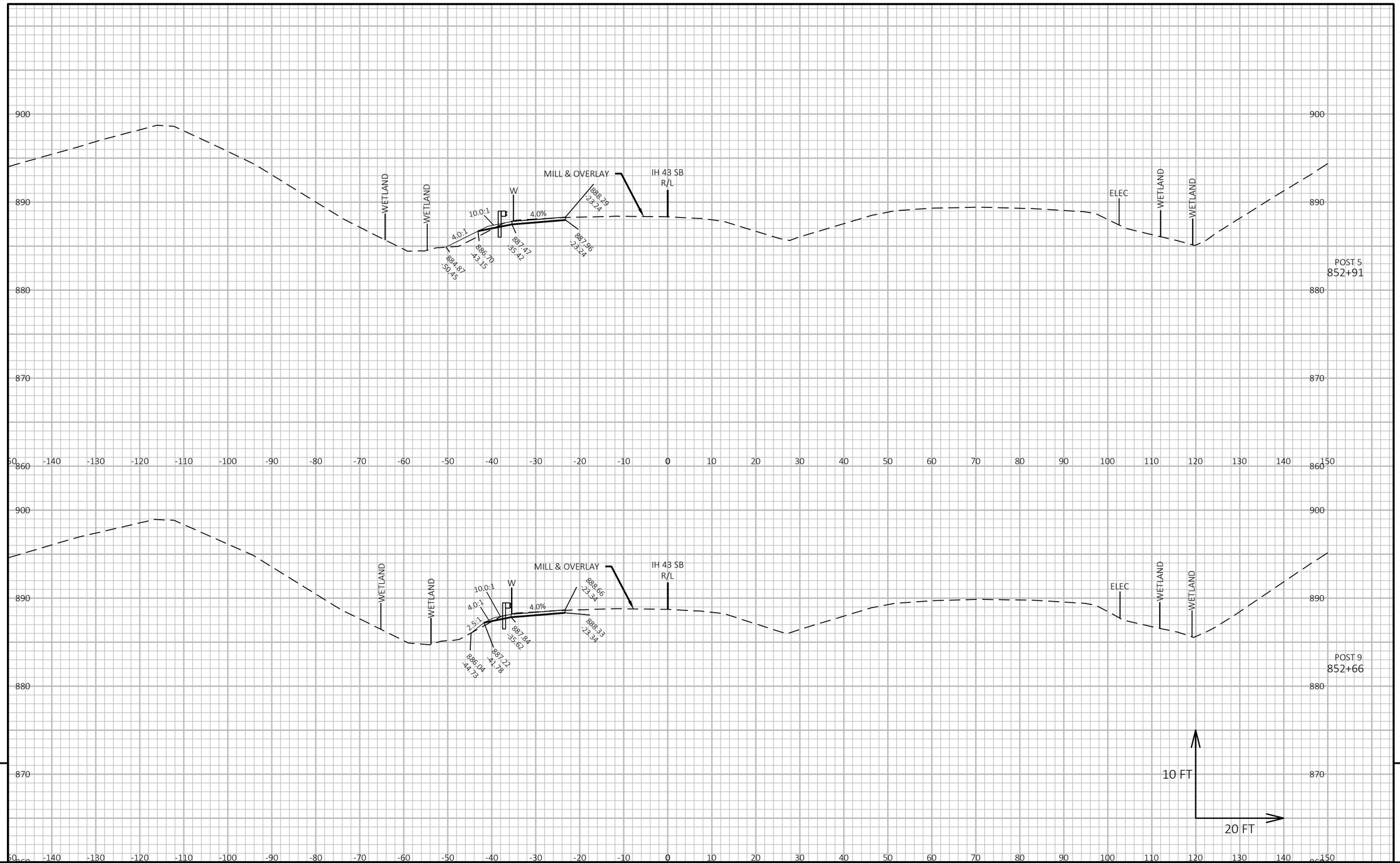
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 476	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 852 BG 2

PLOT DATE : 9/21/2021 11:45 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB	SHEET 477	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 853 BG 1

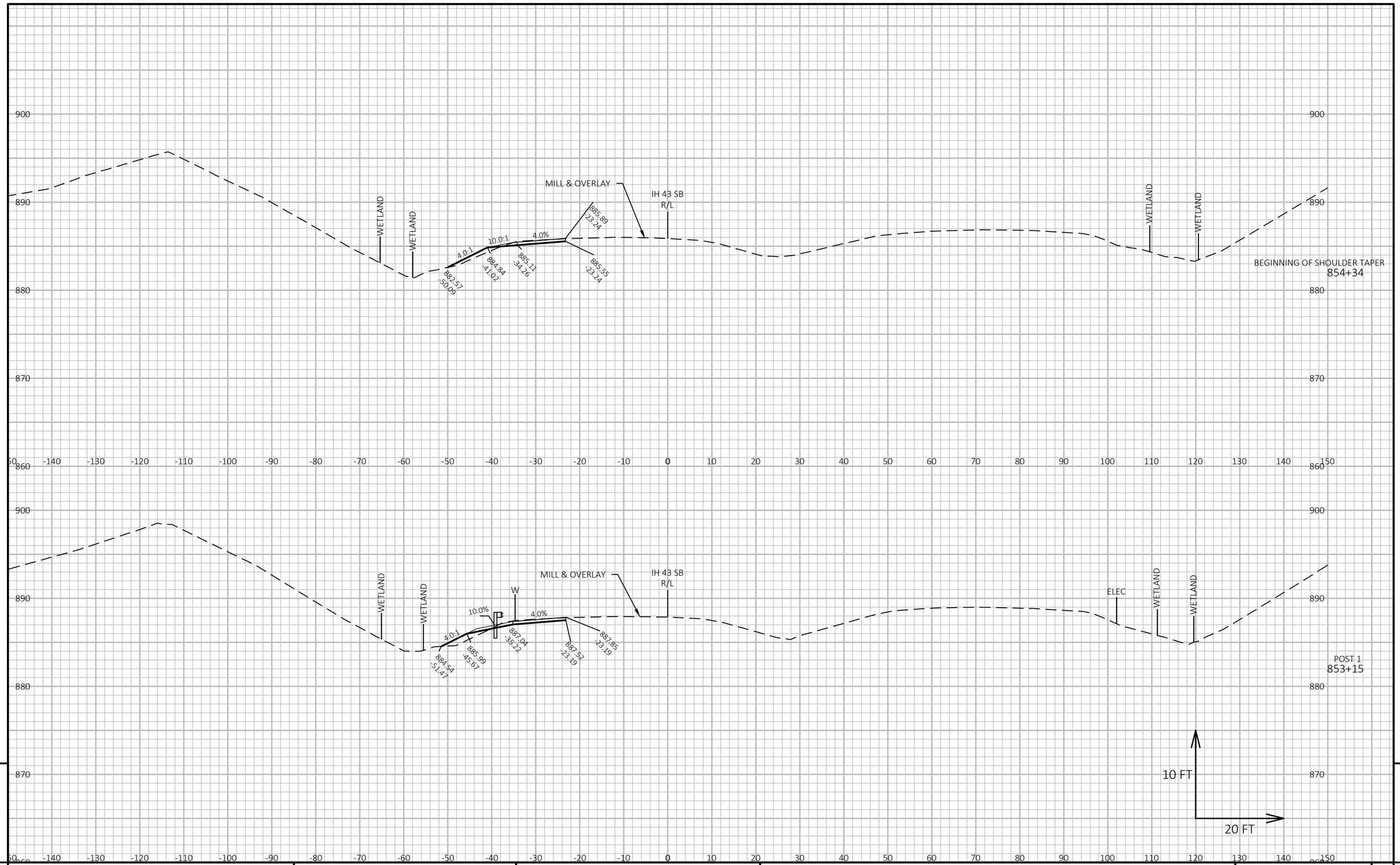
PLOT DATE : 2/4/2021 3:30 PM

PLOT BY : ABU AJWA, MUNTHER J

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



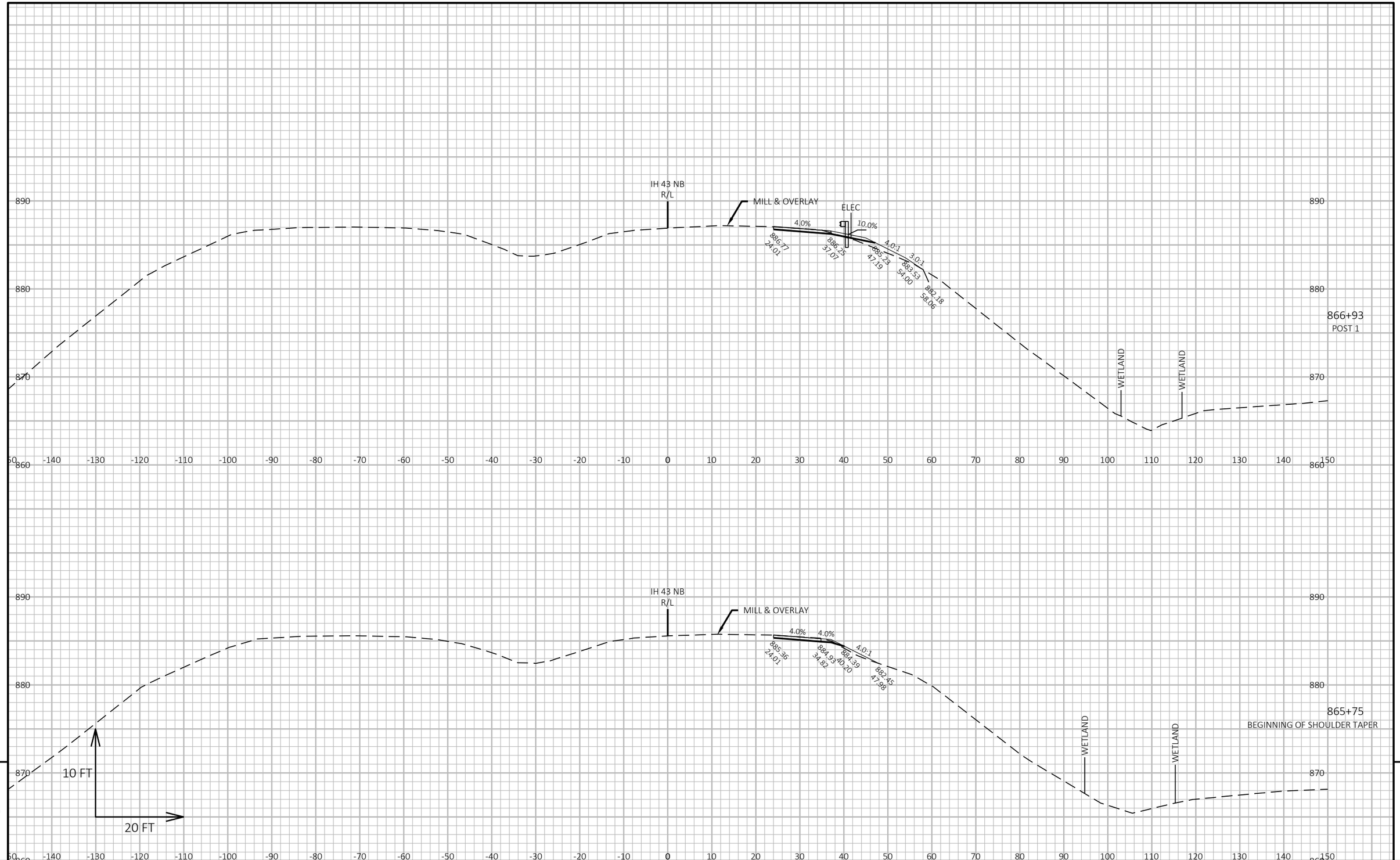
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9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB	SHEET 478	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 853 BG 2

PLOT DATE : 9/21/2021 12:42 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



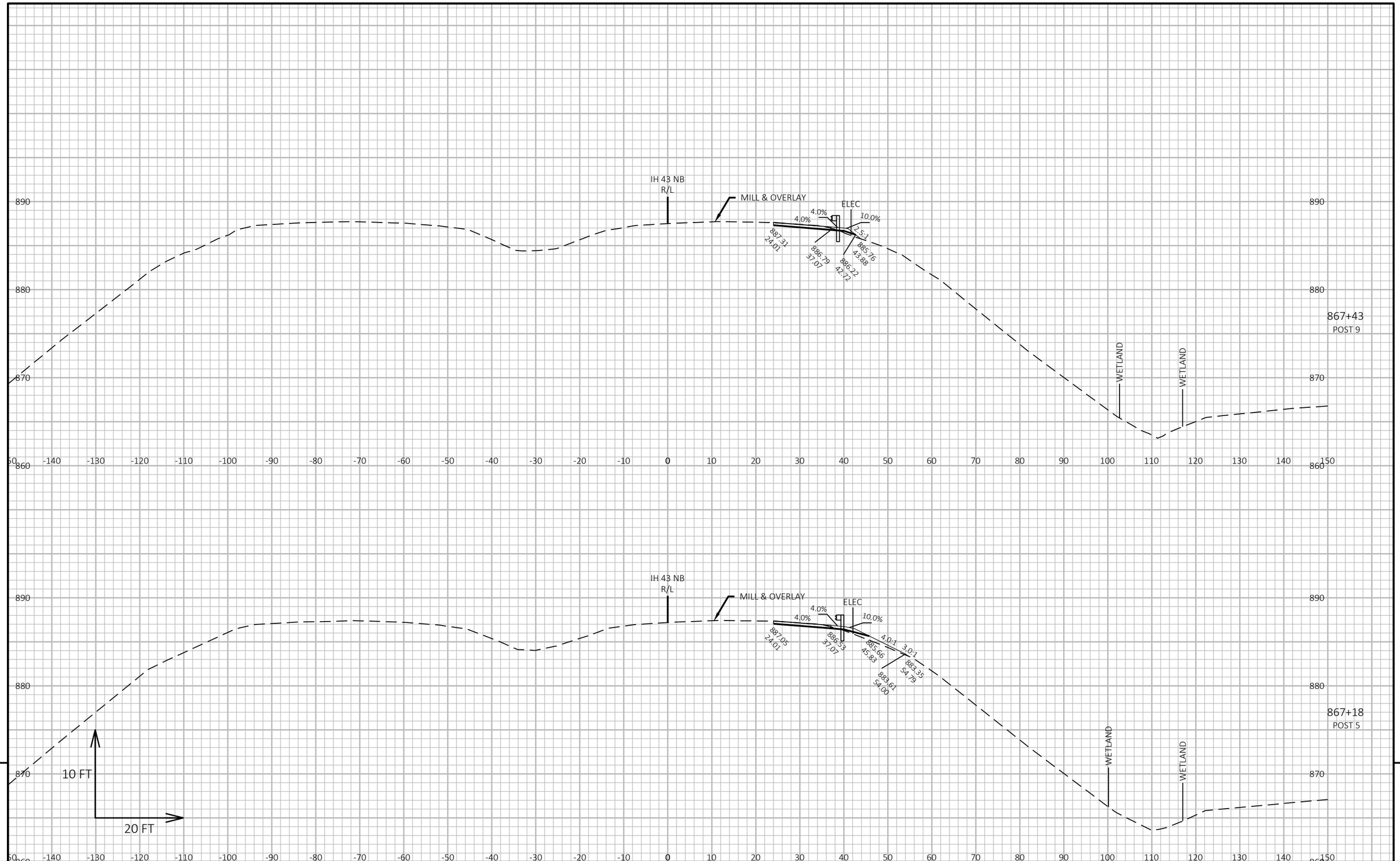
9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 479	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 867 BG 1

PLOT DATE : 2/6/2021 11:13 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 480	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 867 BG 2

PLOT DATE : 2/6/2021 11:14 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

10 FT

20 FT

900
890
880
870
860

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

ELEC

IH 43 NB
R/L

MILL & OVERLAY

ELEC

10.0%

3.0%

4.0:1

889.73
0.24

889.40
0.24

887.27
-25.65

888.28
-18.29

889.08
-10.23

POST 1
869+98

ELEC

IH 43 NB
R/L

MILL & OVERLAY

ELEC

6.0%

3.0%

888.50
-11.69

888.20
-11.57

888.28
-10.18

888.60
0.30

888.99
0.30

BEGINNING OF THE SHOULDER TAPER
868+80

WETLAND

WETLAND

EXISTING STORM SEWER LINE PARALLEL TO CROSS SECTIONS
STA 869+89 TO STA 869+90

9

9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB (MEDIAN)	SHEET 481	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 870 BG 1

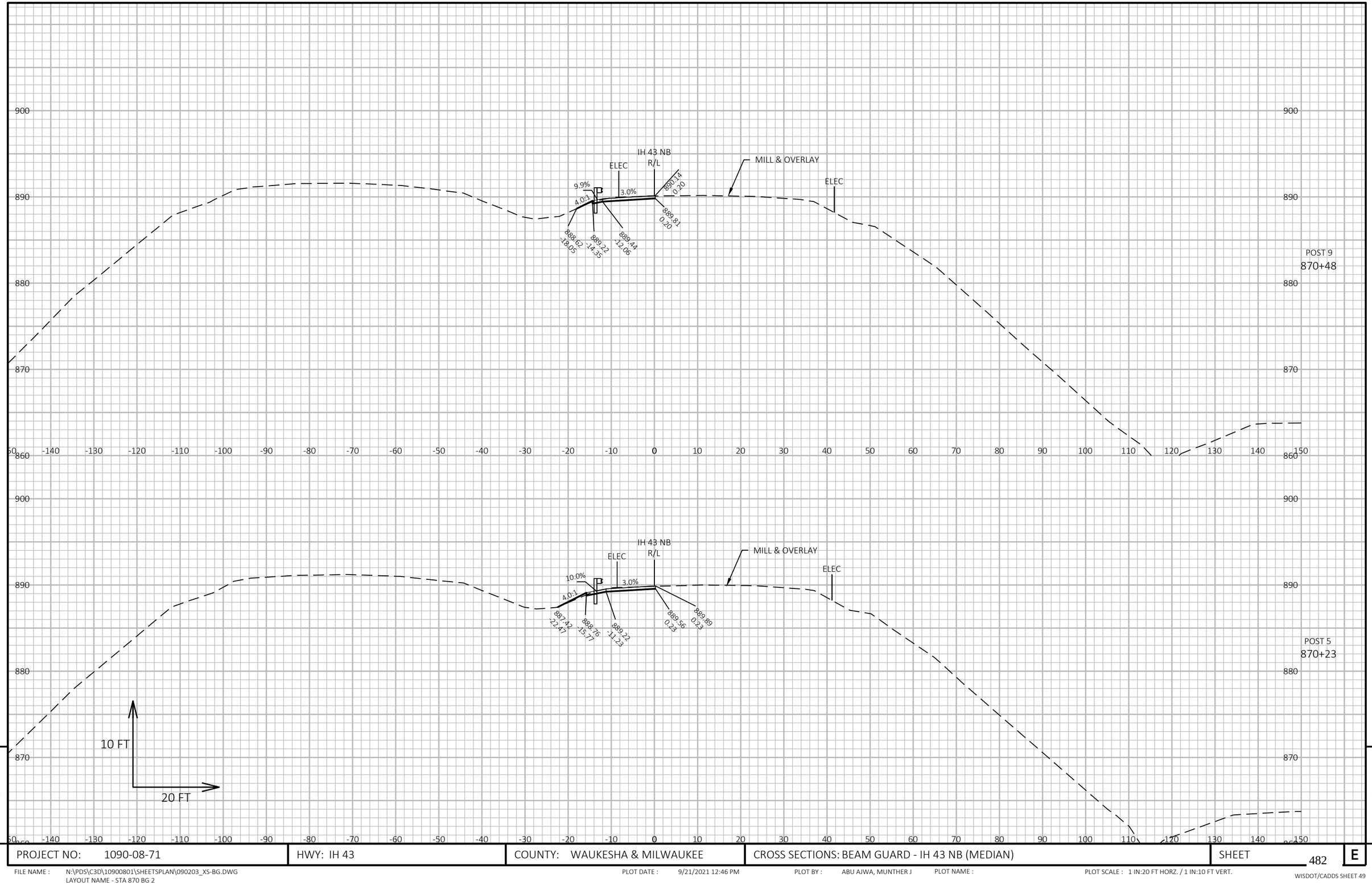
PLOT DATE : 9/21/2021 12:44 PM

PLOT BY : ABU AJWA, MUNTHER J

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



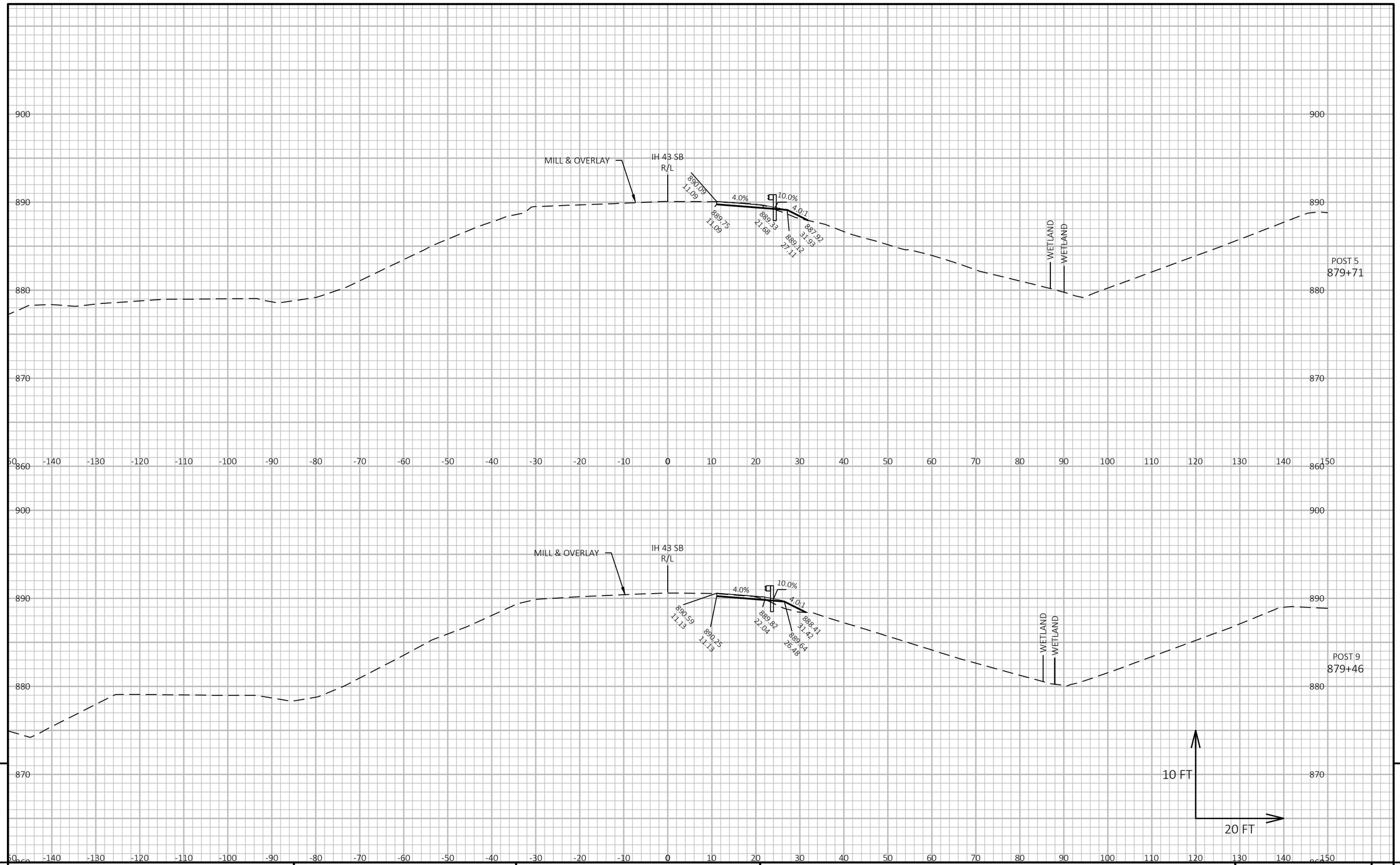
9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB (MEDIAN)	SHEET 482	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 870 BG 2

PLOT DATE : 9/21/2021 12:46 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

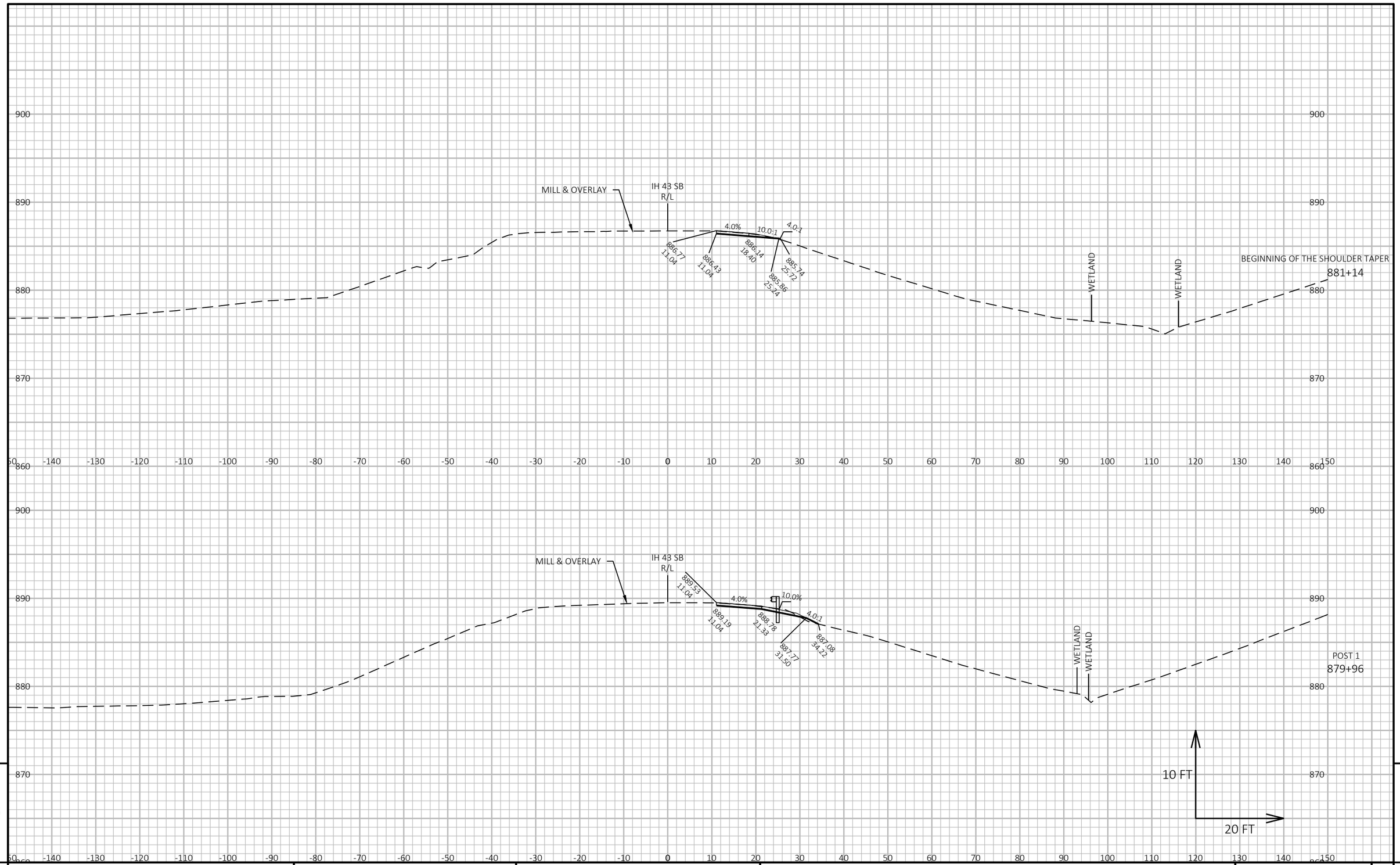
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB	SHEET 483	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 880 BG 1

PLOT DATE : 9/21/2021 12:48 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

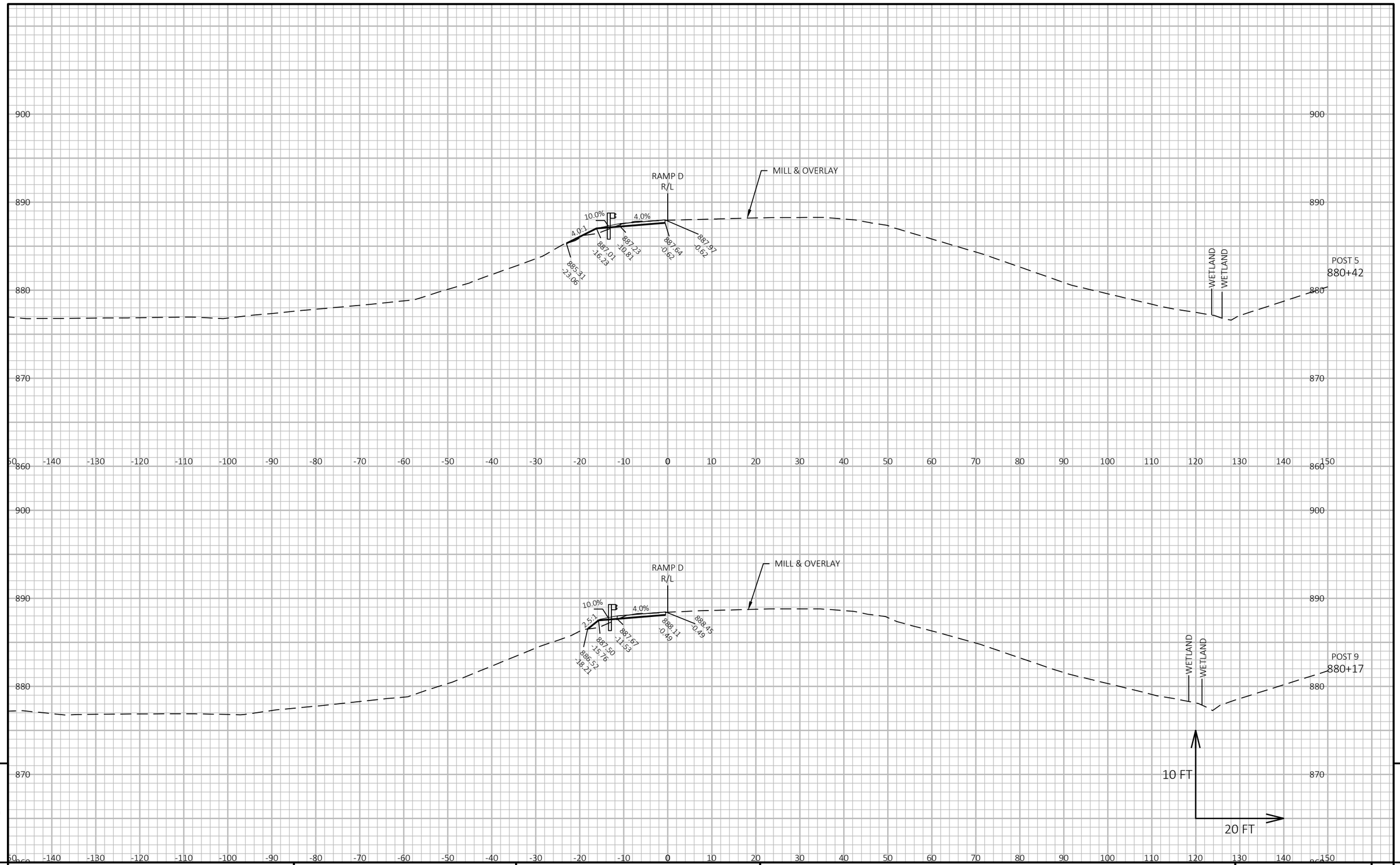
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB	SHEET 484	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 880 BG 2

PLOT DATE : 9/21/2021 12:50 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



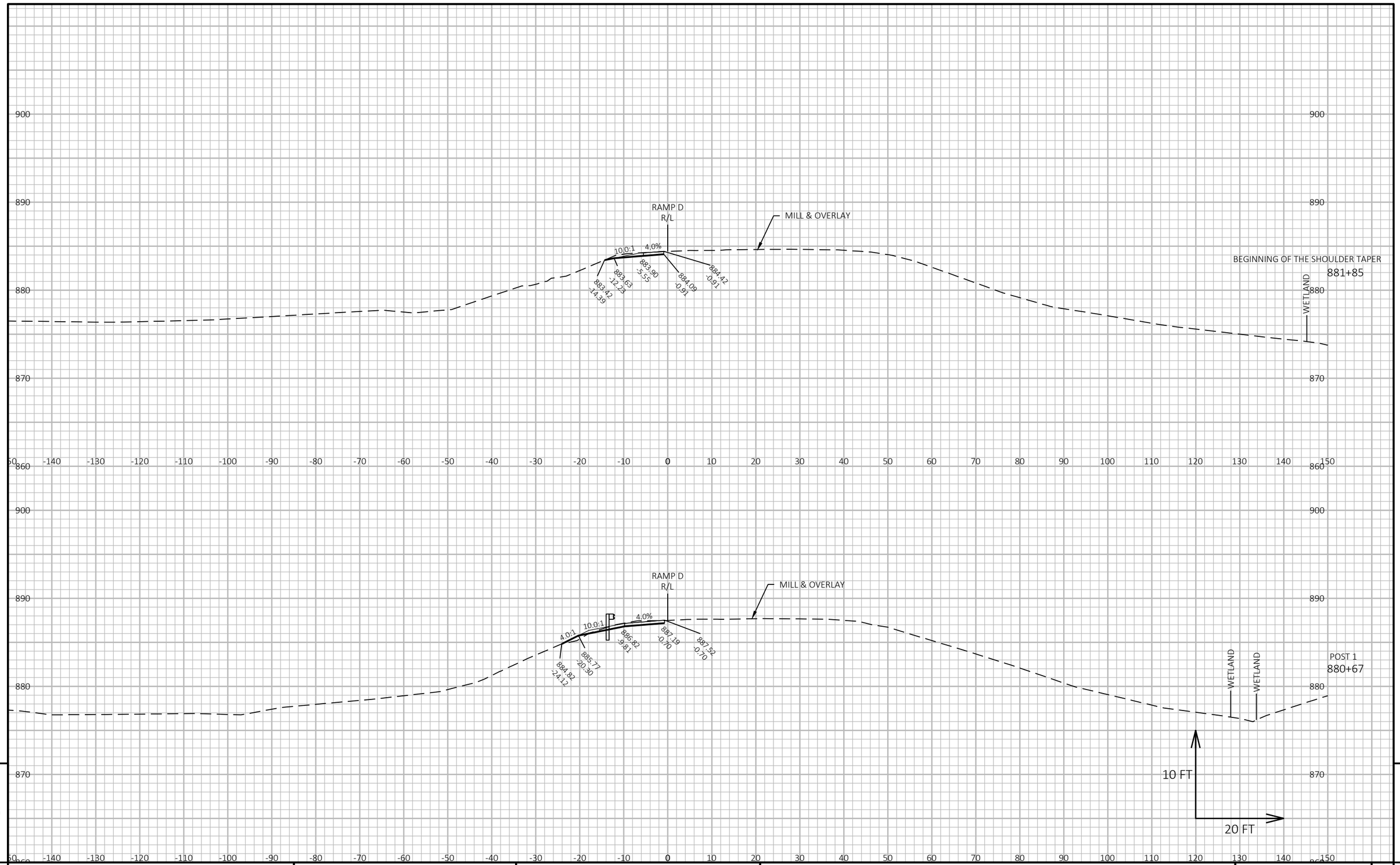
9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB ON RAMP FROM LAYTON AVE (RAMP D)	SHEET 485	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 881 BG 1

PLOT DATE : 9/21/2021 12:52 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

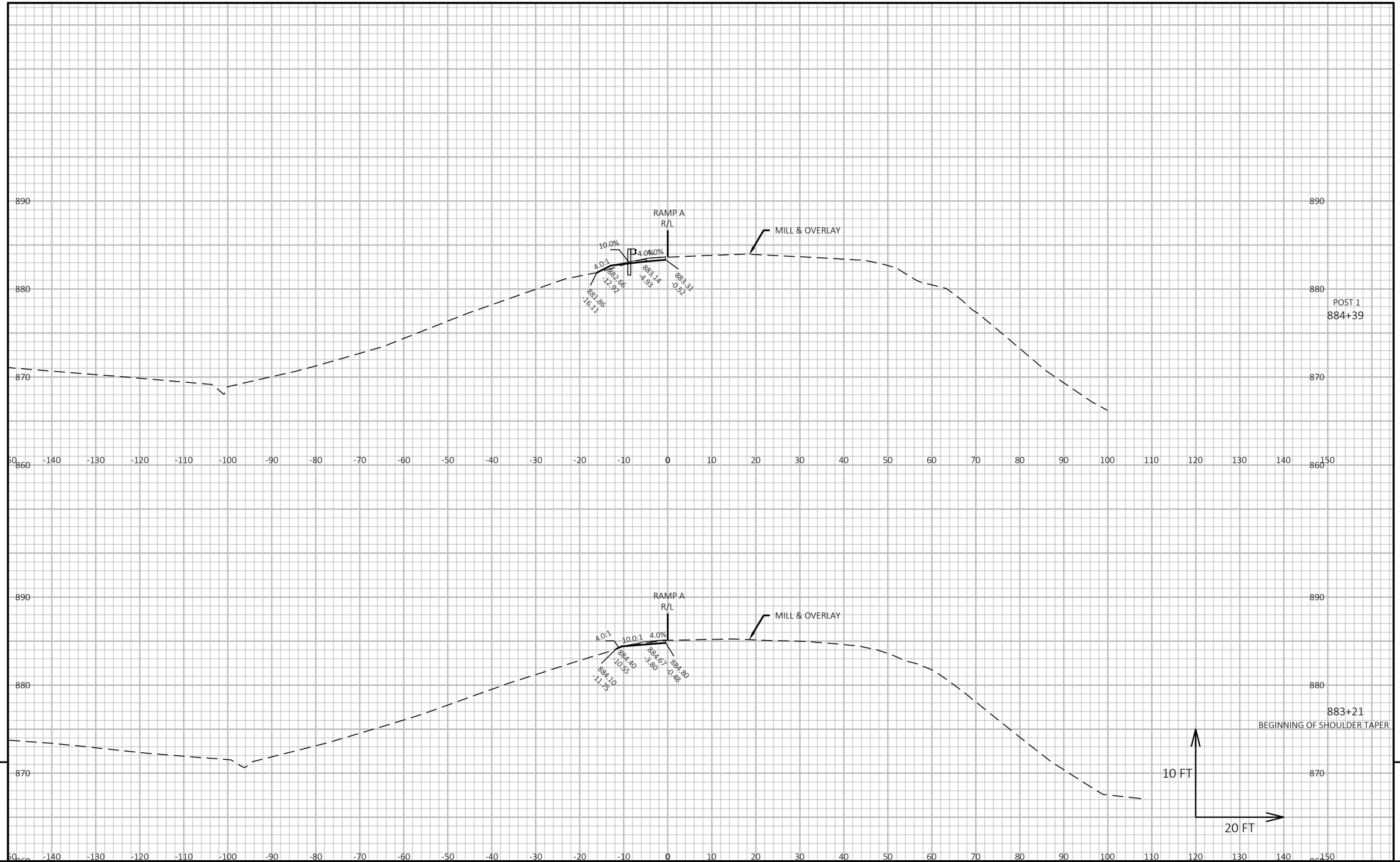


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB ON RAMP FROM LAYTON AVE (RAMP D)	SHEET 486	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 881 BG 2

PLOT DATE : 9/21/2021 12:54 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



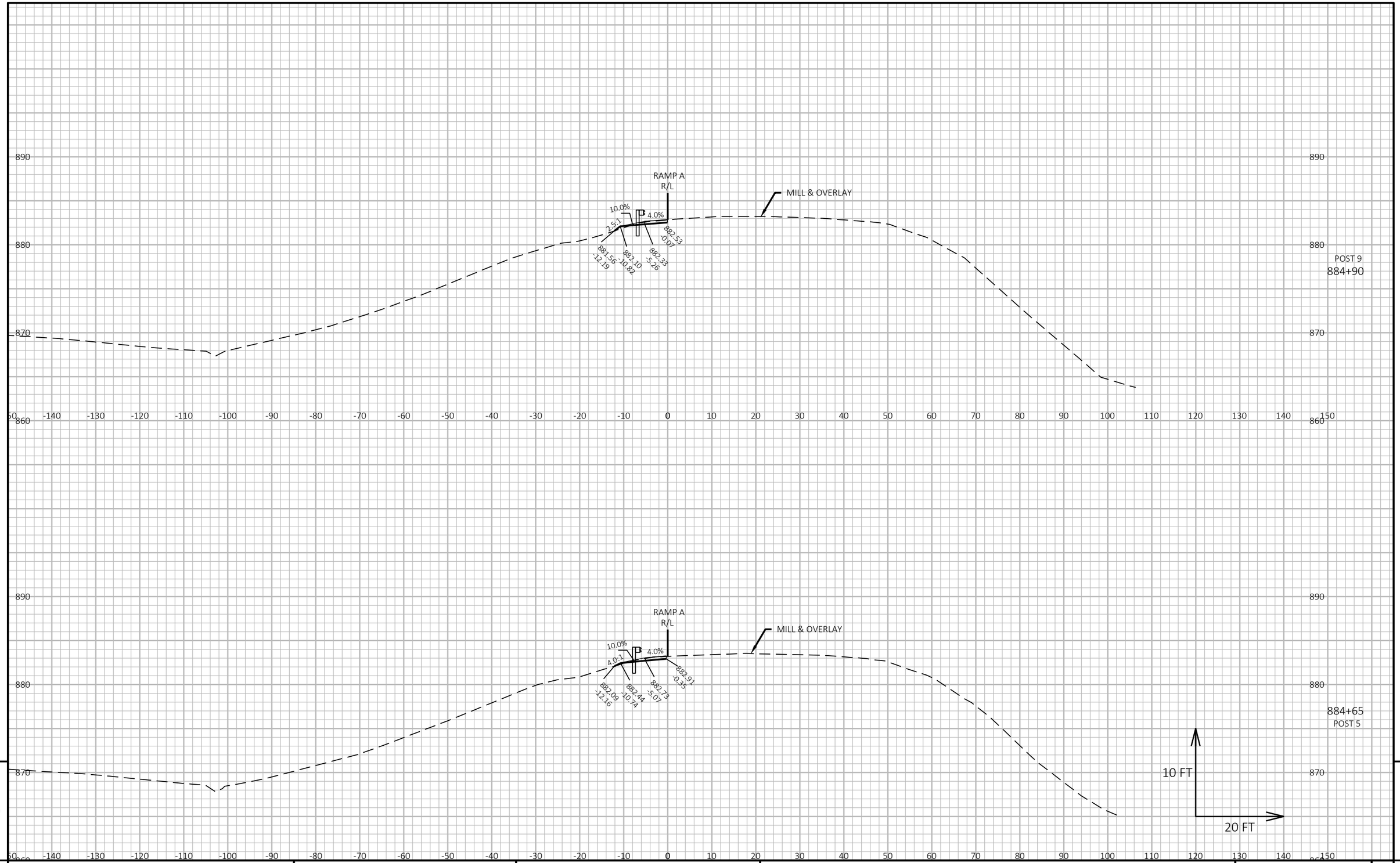
9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A)	SHEET 487	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 884 BG 1

PLOT DATE : 4/8/2021 11:59 AM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

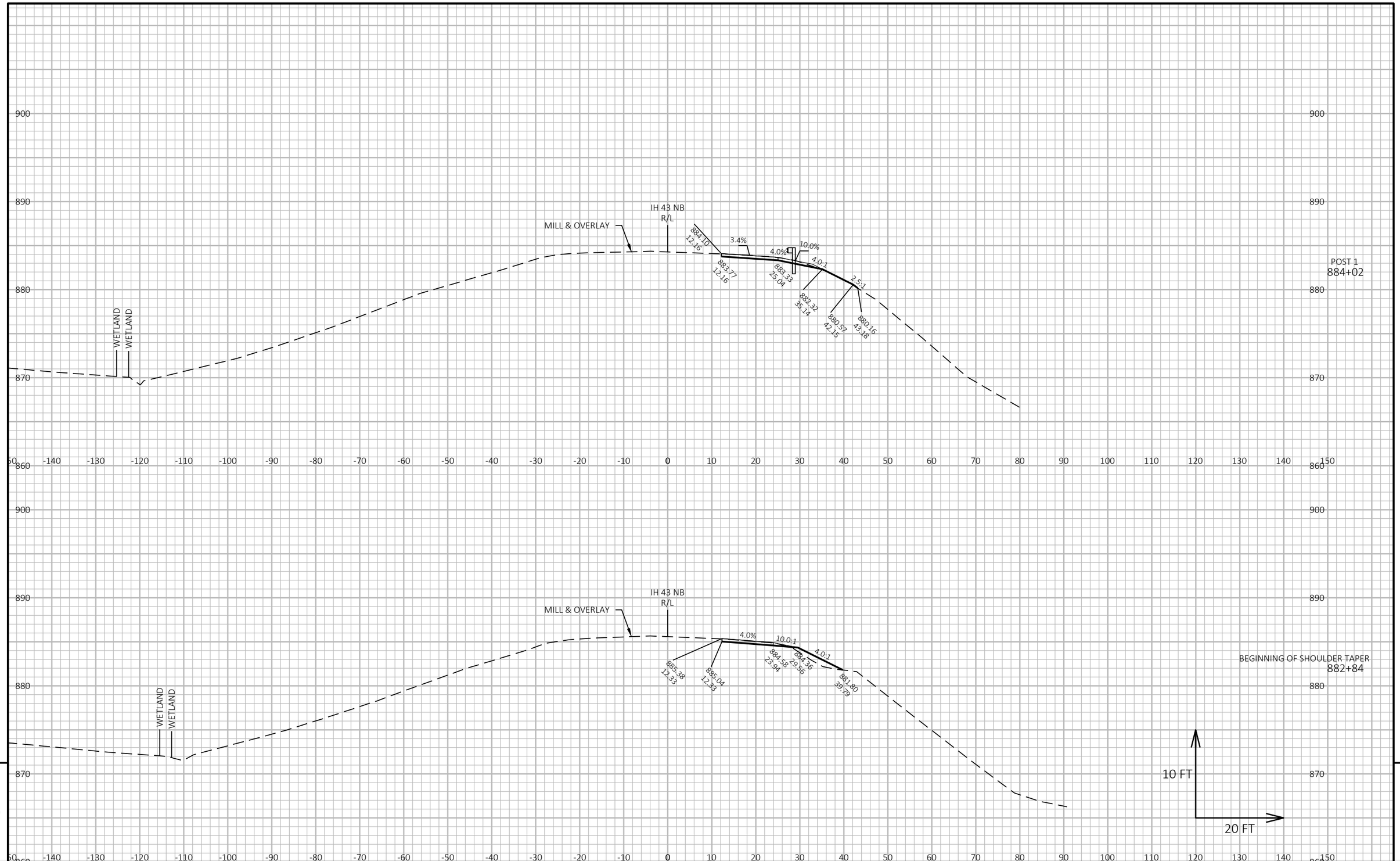
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A)	SHEET 488	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 884 BG 2

PLOT DATE : 4/8/2021 12:00 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

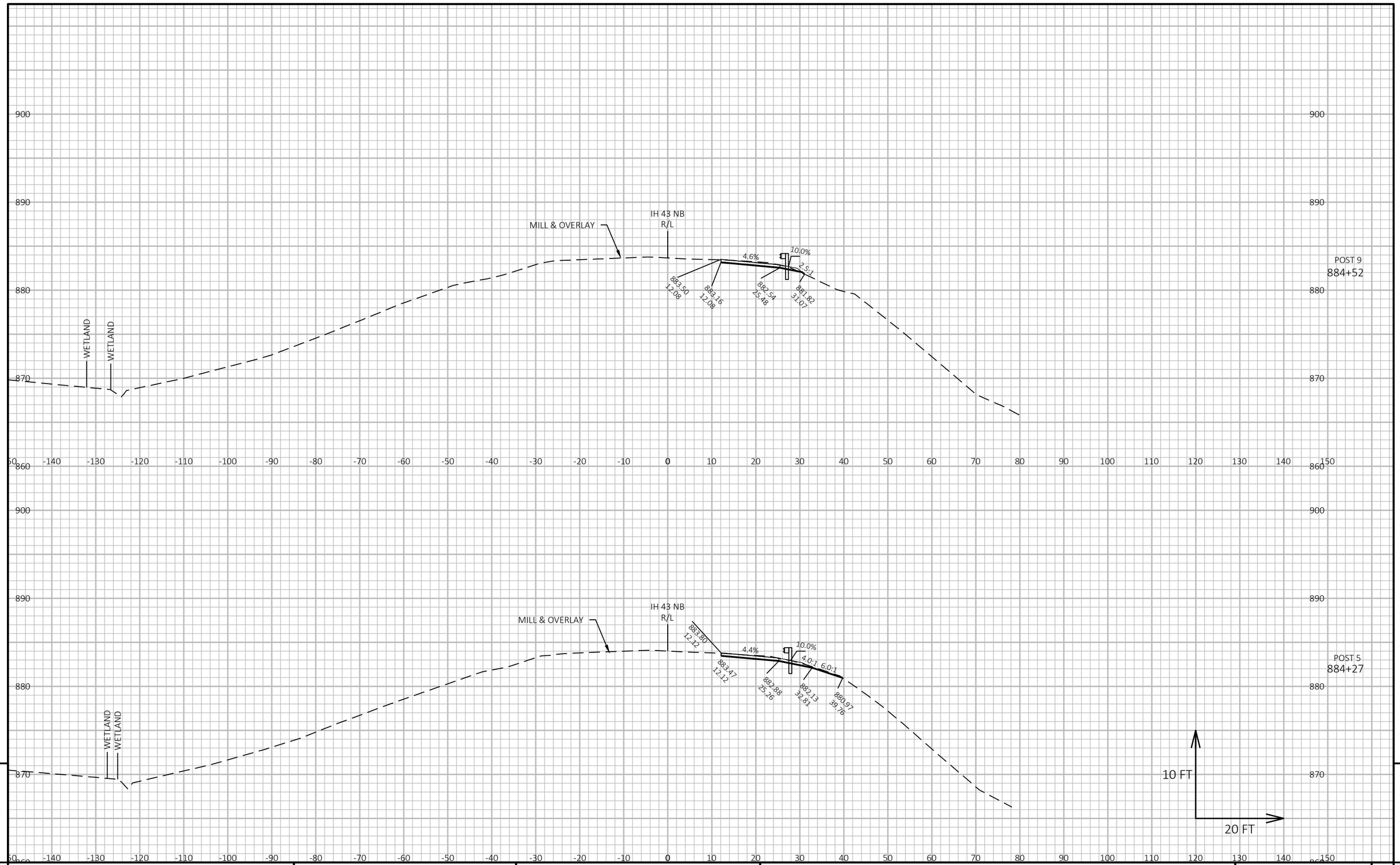
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 489	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 884 BG 1 (R)

PLOT DATE : 9/21/2021 12:56 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



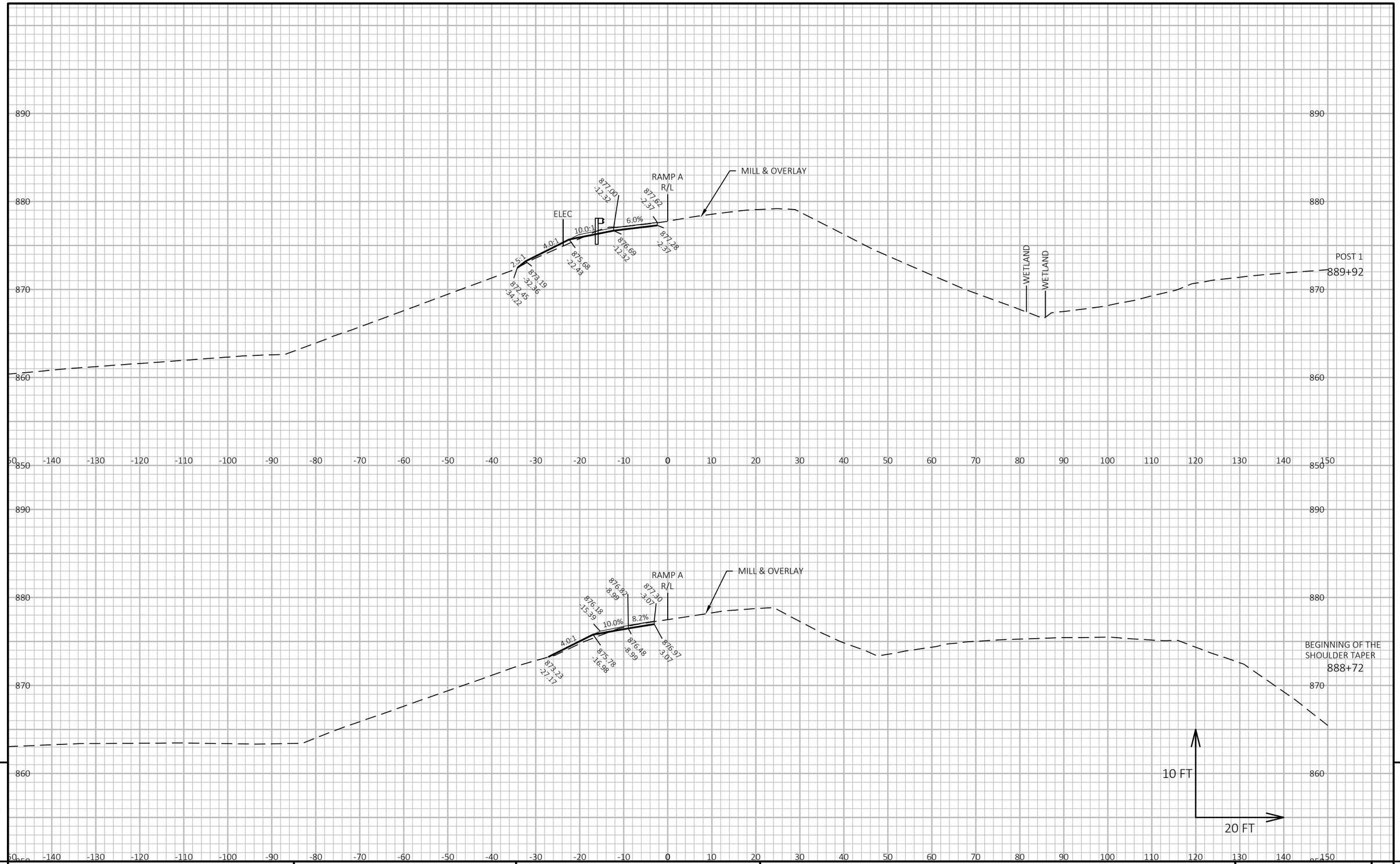
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 490	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 884 BG 2 (R)

PLOT DATE : 9/21/2021 12:58 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

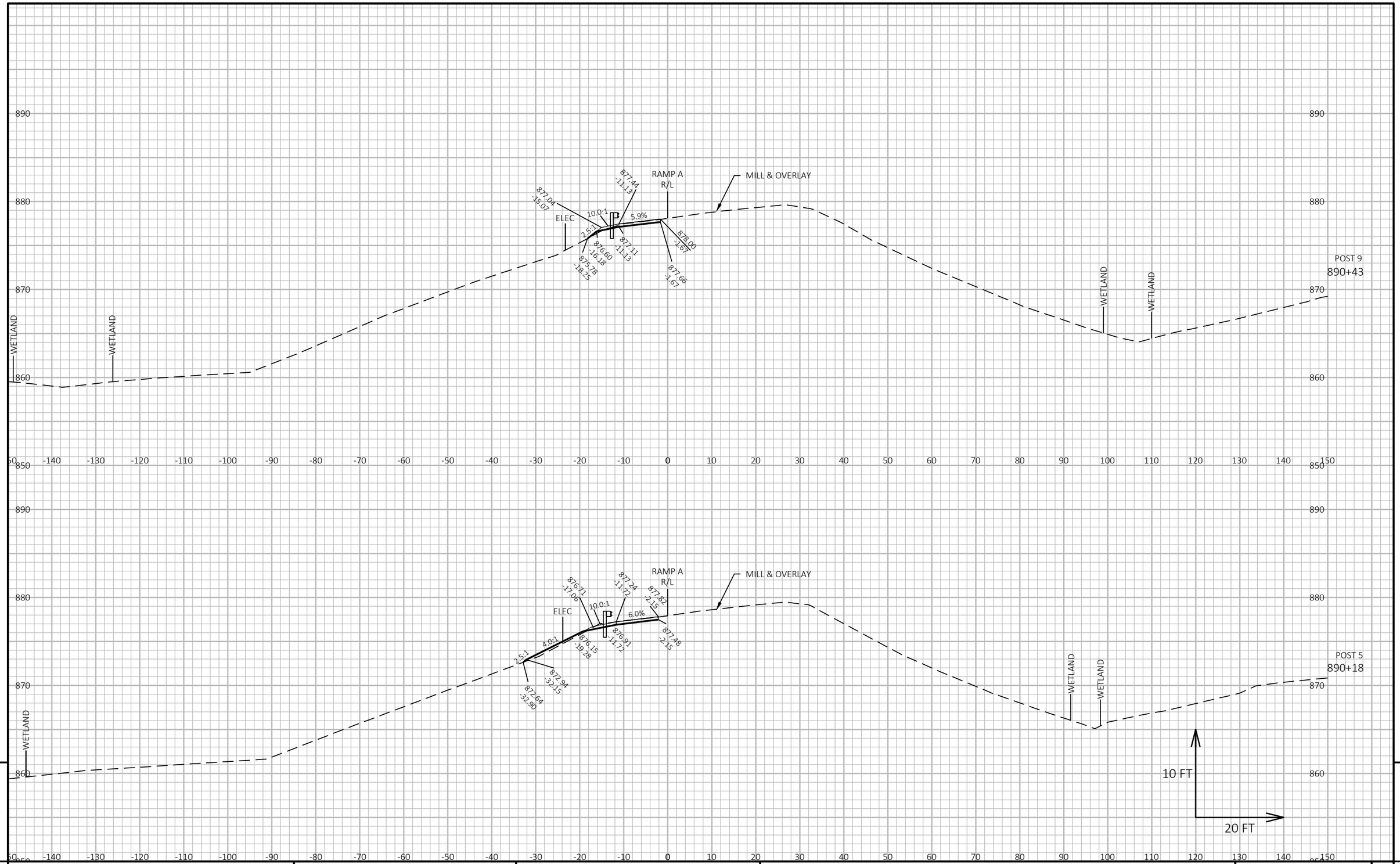


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A)	SHEET 491 E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 890 BG 1 (L)

PLOT DATE : 9/21/2021 1:00 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

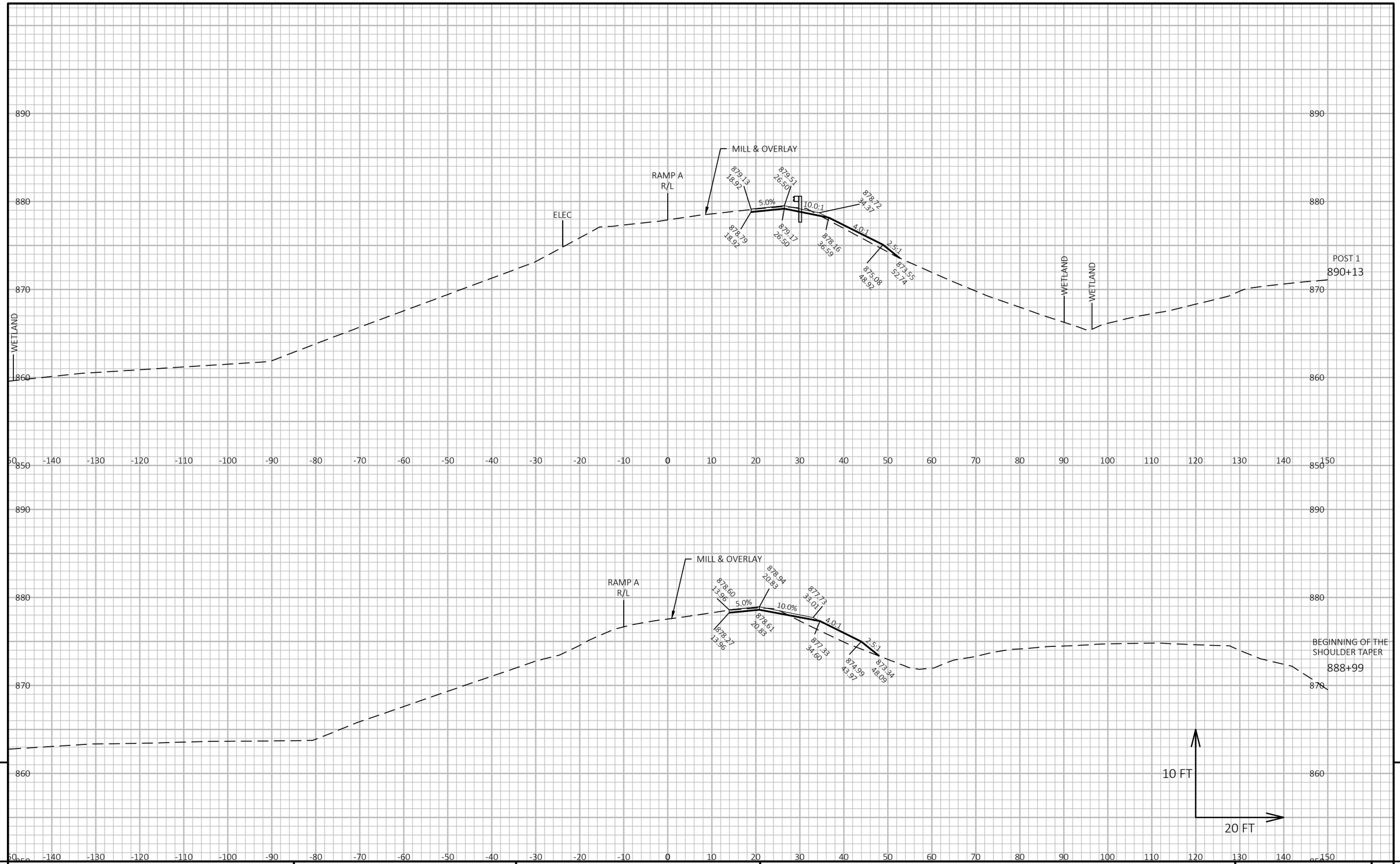


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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A)	SHEET 492	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 890 BG 2 (L)

PLOT DATE : 9/21/2021 1:02 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

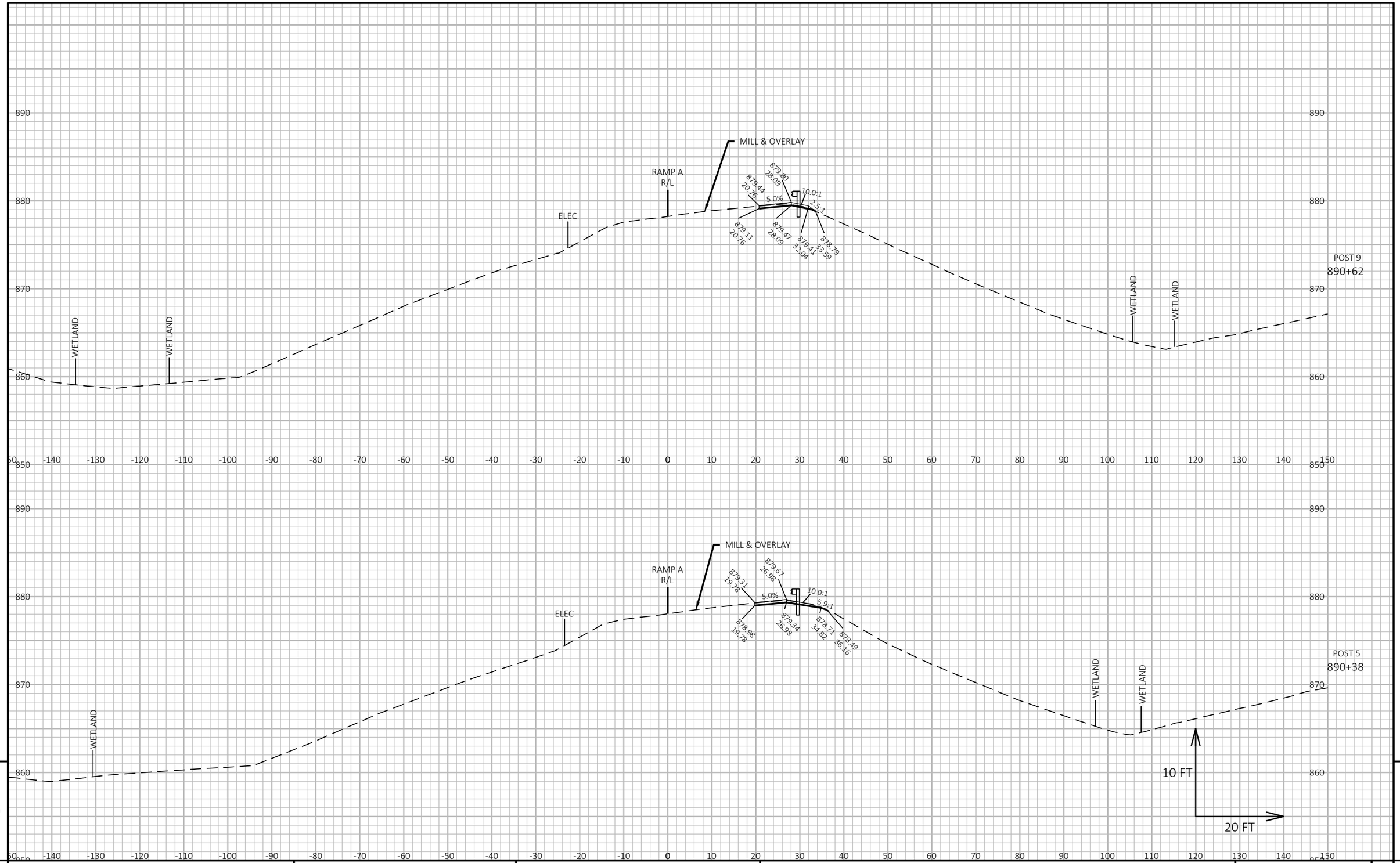


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A)	SHEET 493	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 890 BG 1 (R)

PLOT DATE : 9/21/2021 1:04 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

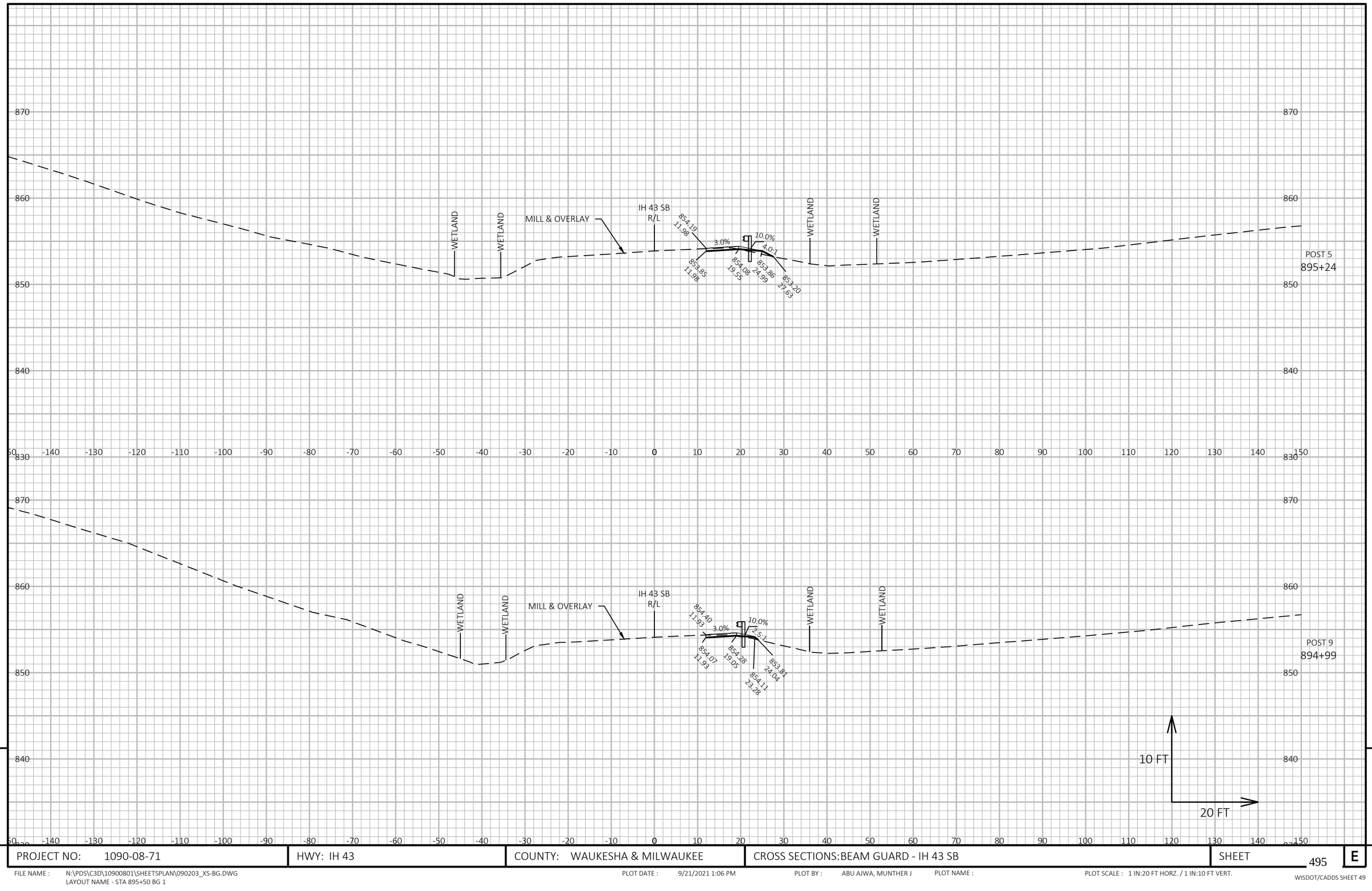
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB OFF RAMP TO LAYTON AVE (RAMP A)	SHEET 494	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 890 BG 2 (R)

PLOT DATE : 4/8/2021 12:29 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS:BEAM GUARD - IH 43 SB	SHEET 495	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 895+50 BG 1

PLOT DATE : 9/21/2021 1:06 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

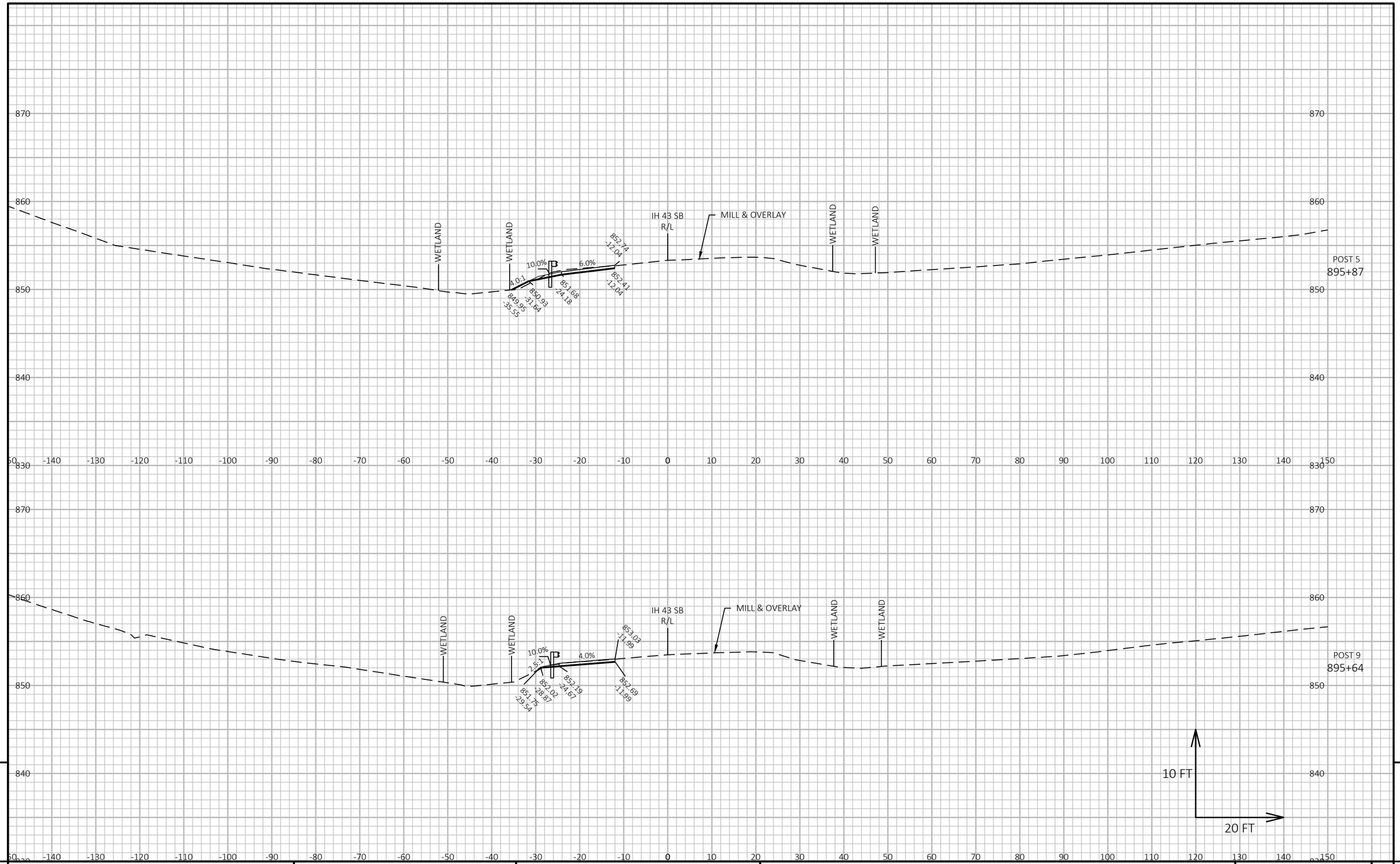


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB	SHEET 496	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 895+50 BG 2

PLOT DATE : 9/21/2021 1:08 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB	SHEET 497	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 896+00 BG 1

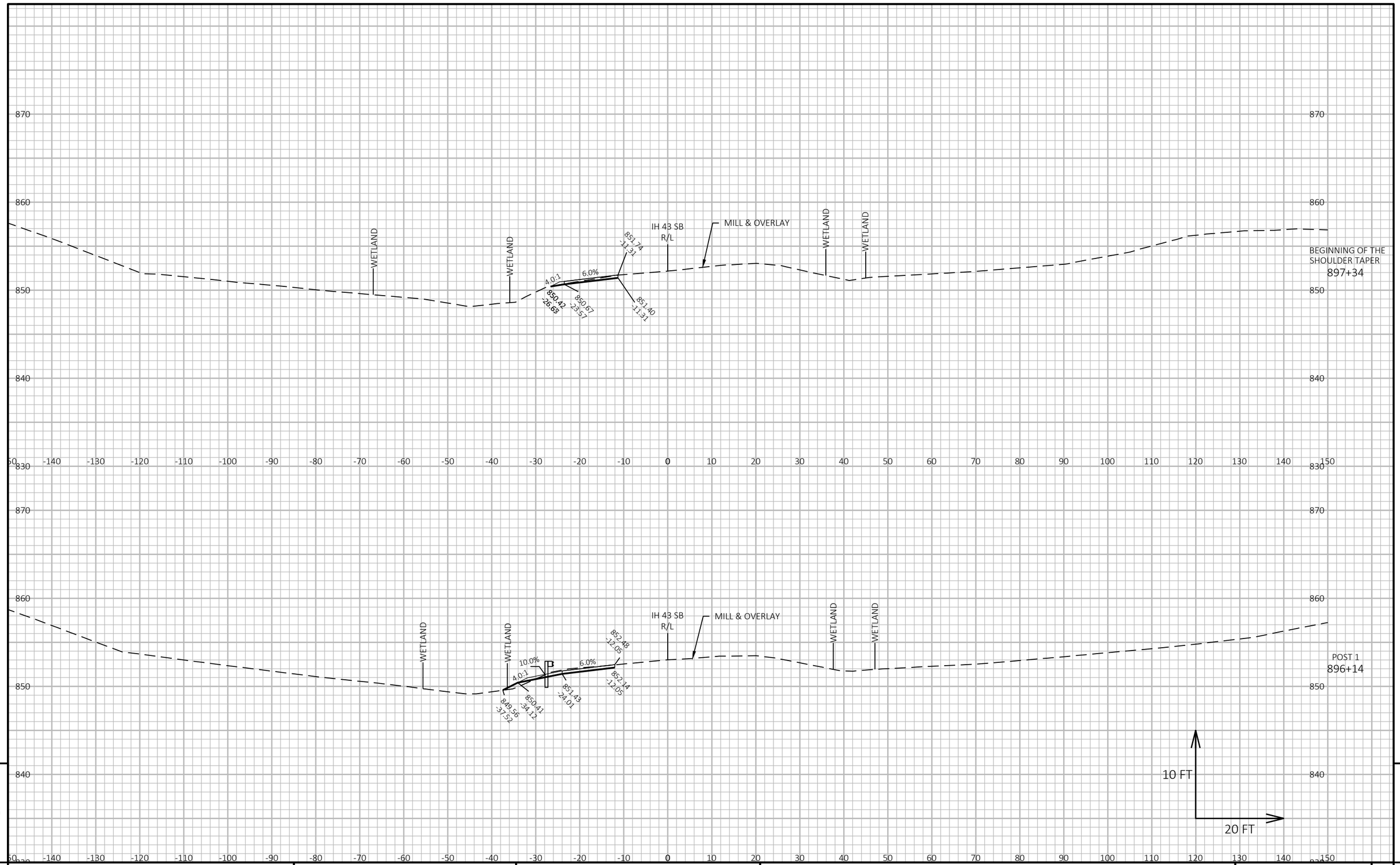
PLOT DATE : 9/21/2021 1:10 PM

PLOT BY : ABU AJWA, MUNTHER J

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

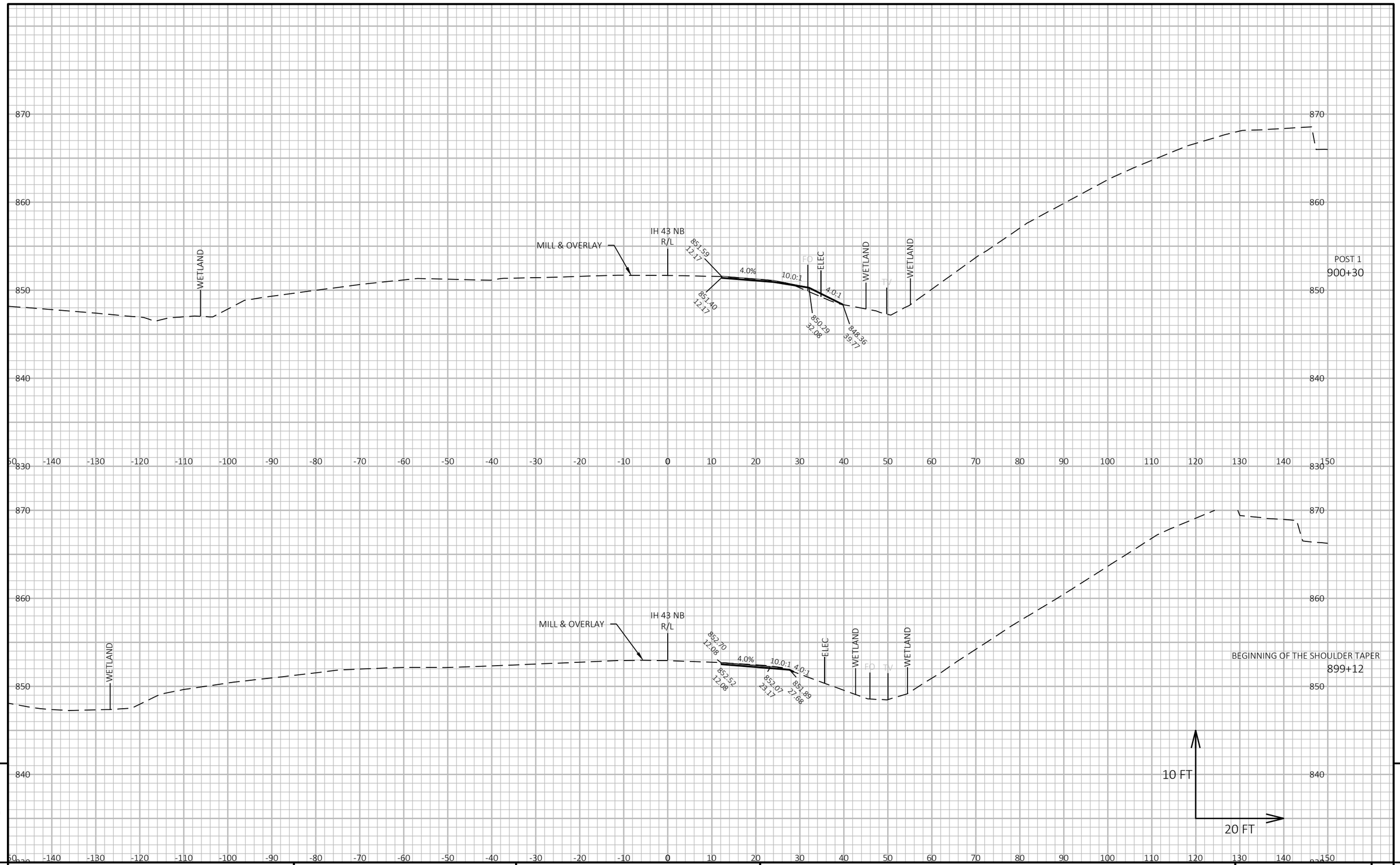


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB	SHEET 498	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 896+00 BG 2

PLOT DATE : 9/21/2021 1:12 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 499	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 900 BG 1

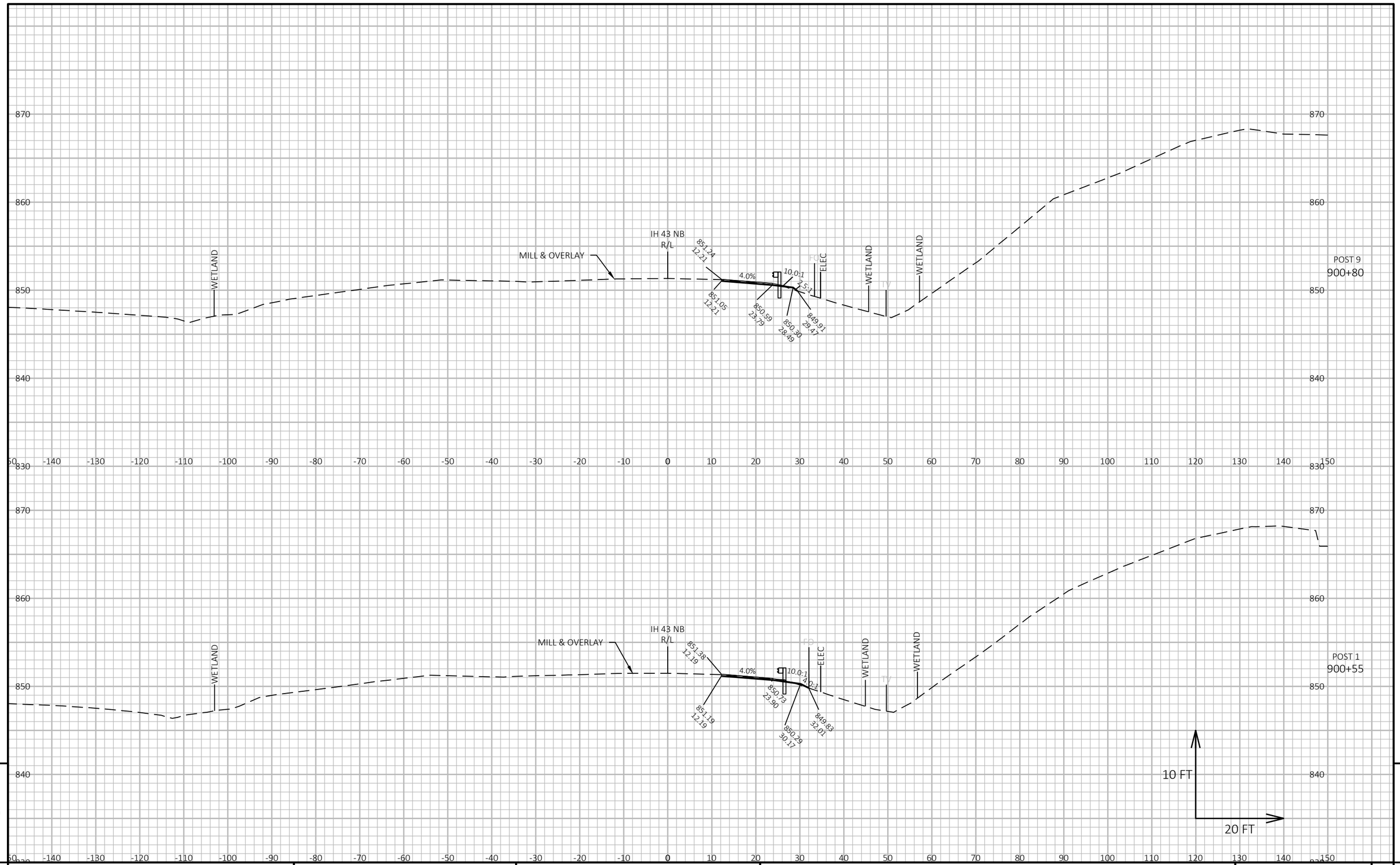
PLOT DATE : 9/21/2021 1:16 PM

PLOT BY : ABU AJWA, MUNTHER J

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

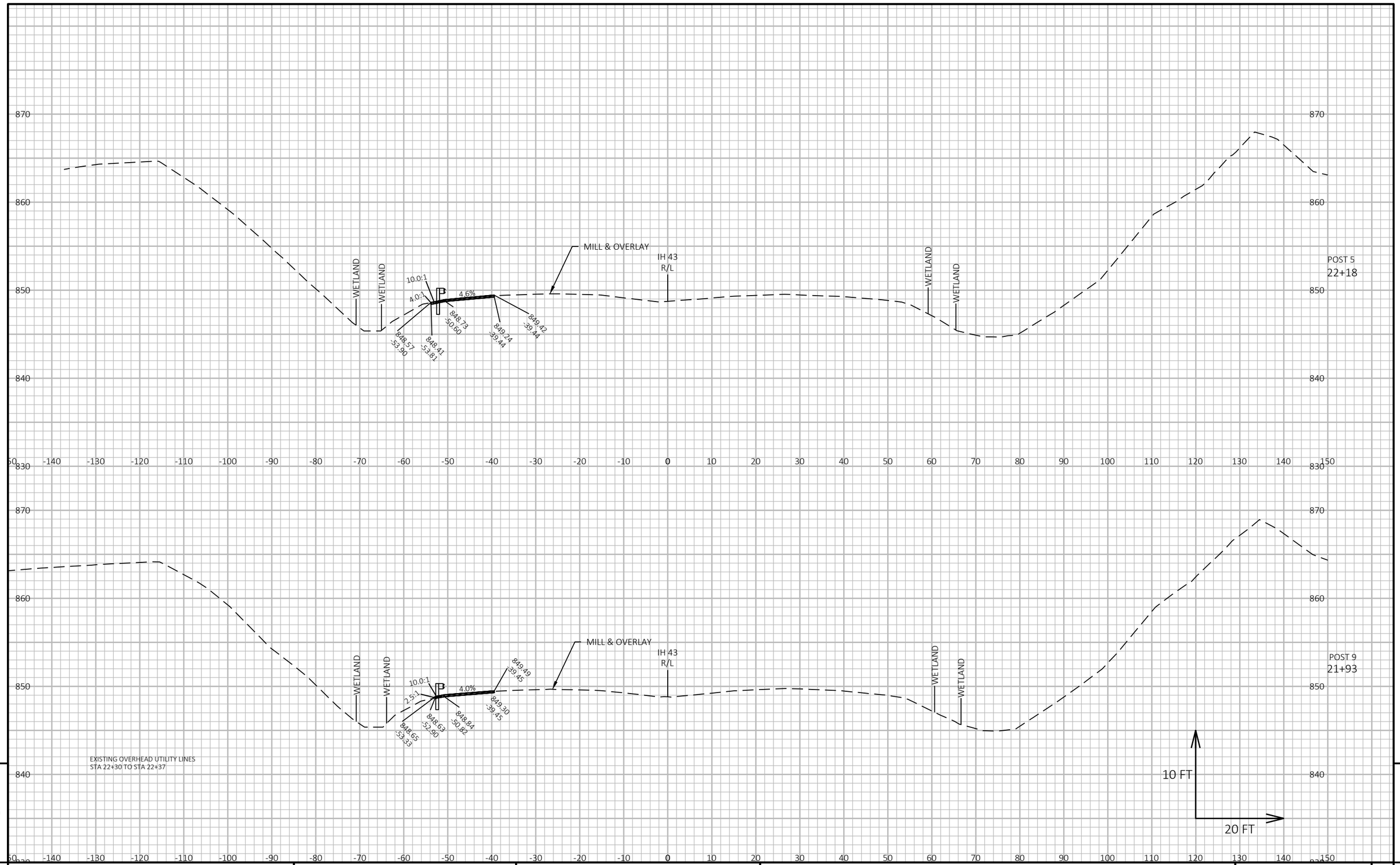


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 500	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG.DWG
LAYOUT NAME - STA 900 BG 2

PLOT DATE : 9/21/2021 1:19 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

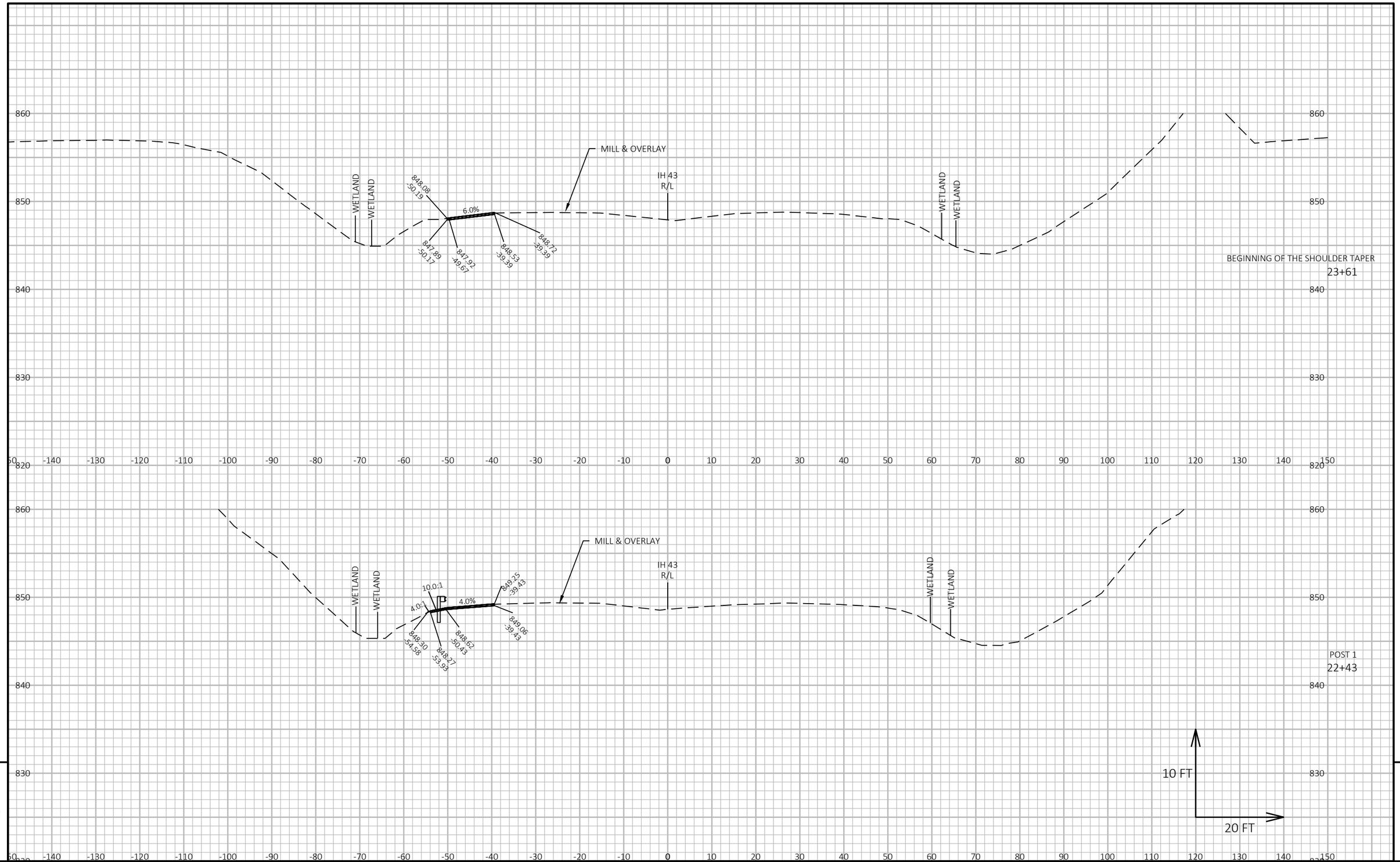


9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB	SHEET 501	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 22 BG 1

PLOT DATE : 9/21/2021 1:23 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB	SHEET 502	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 22 BG 2

PLOT DATE : 9/21/2021 1:26 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



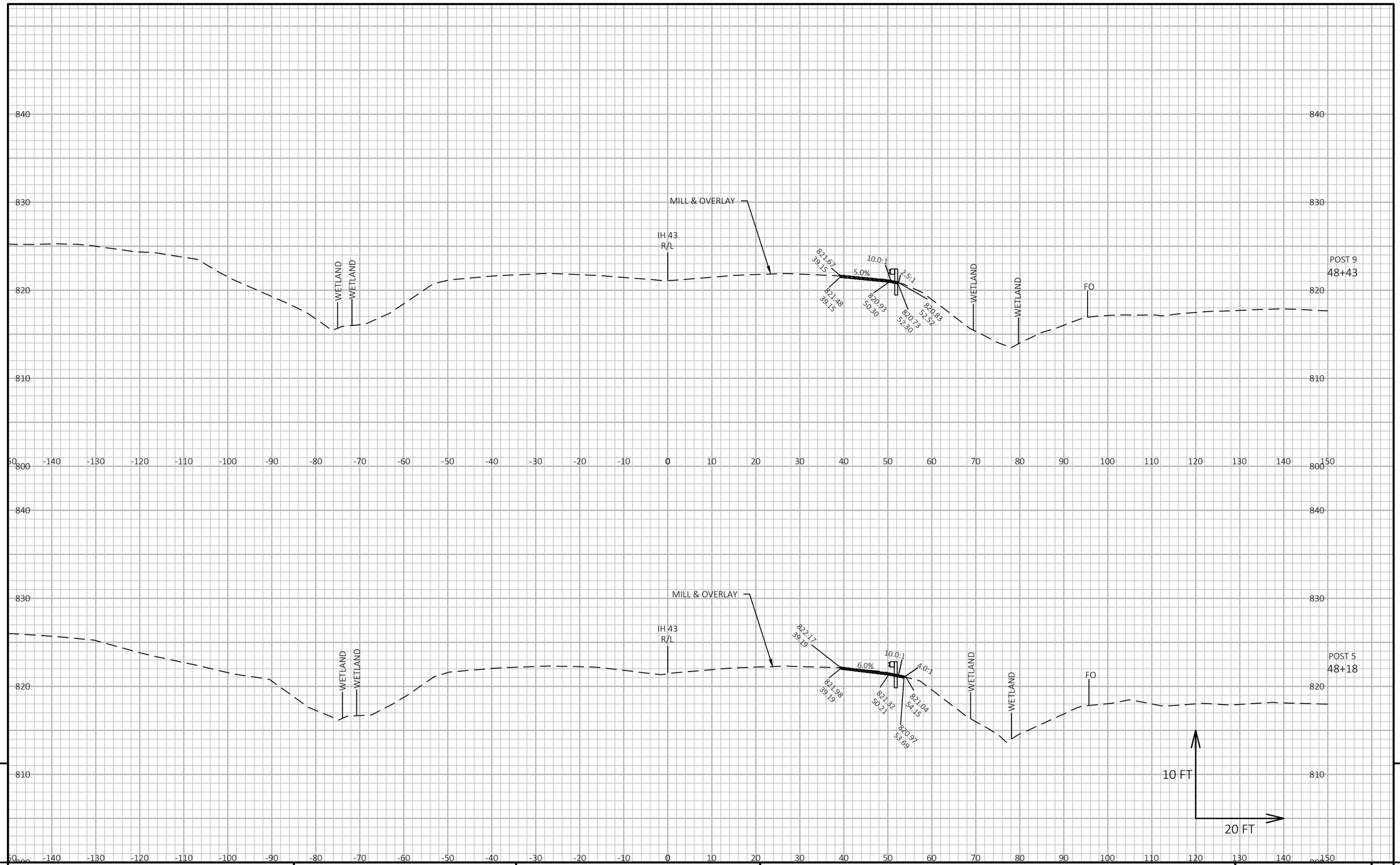
9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 503	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 48 BG 1

PLOT DATE : 9/21/2021 1:29 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

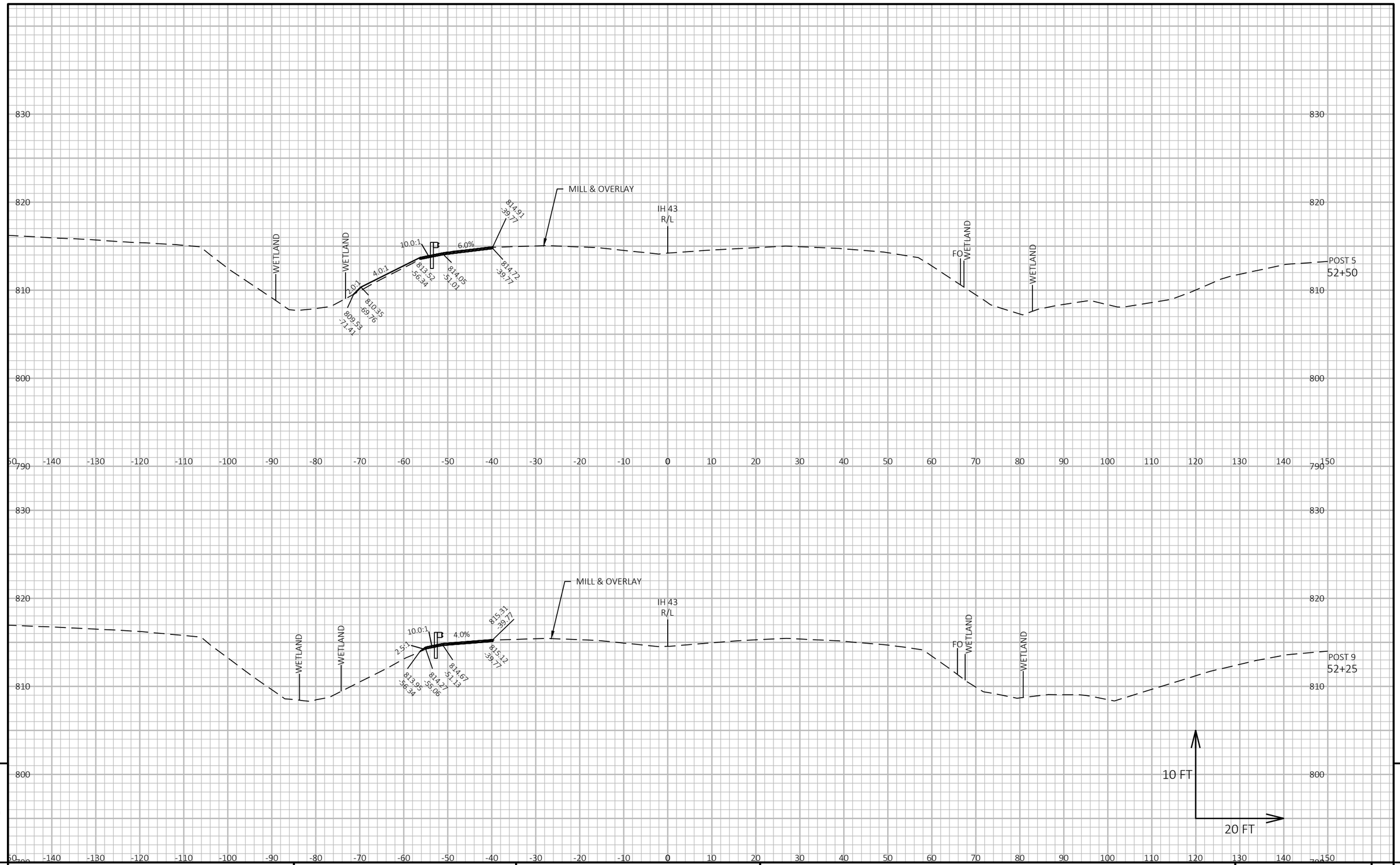


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 504	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 48 BG 2

PLOT DATE : 9/21/2021 1:32 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB	SHEET 505	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 53 BG 1

PLOT DATE : 9/21/2021 1:34 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

MILL & OVERLAY

IH 43
R/L

BEGINNING OF THE SHOULDER TAPER
53+93

WETLAND
WETLAND

10.0:1
9.6%
5.0%

812.29
39.63

811.45
-52.92

811.53
-50.37

811.60
-49.52

812.10
-39.63

MILL & OVERLAY

IH 43
R/L

WETLAND
WETLAND
WETLAND
FO

4.0:1
2.0:1

10.0%
6.0%

814.49
-39.78

814.30
-39.78

813.64
-50.89

812.85
-58.78

810.29
-69.77

807.87
-74.51

POST 1
52+75

10 FT
20 FT

9

9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB	SHEET 506	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 53 BG 2

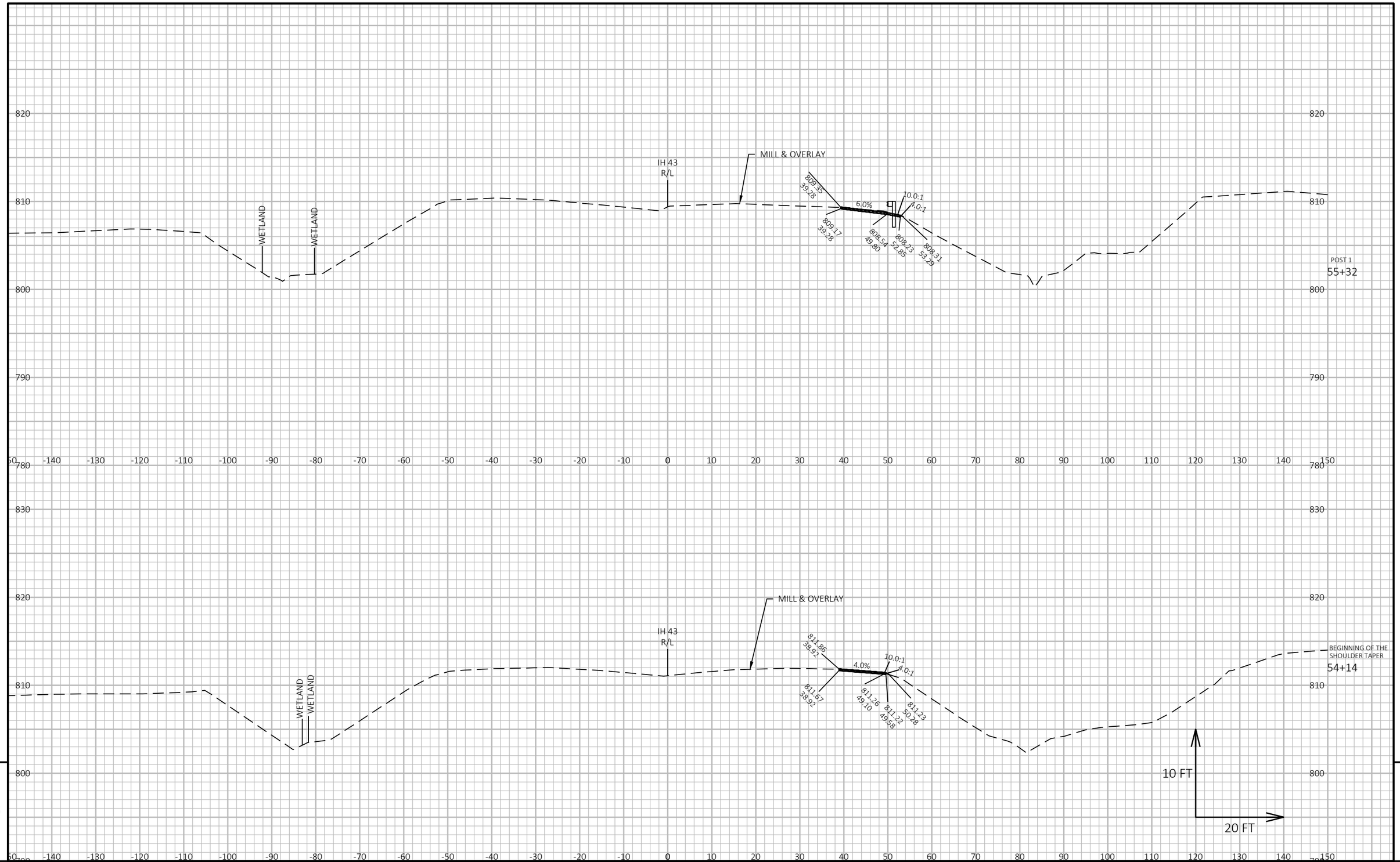
PLOT DATE : 9/21/2021 1:36 PM

PLOT BY : ABU AJWA, MUNTHER J

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 507	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 58 BG 1

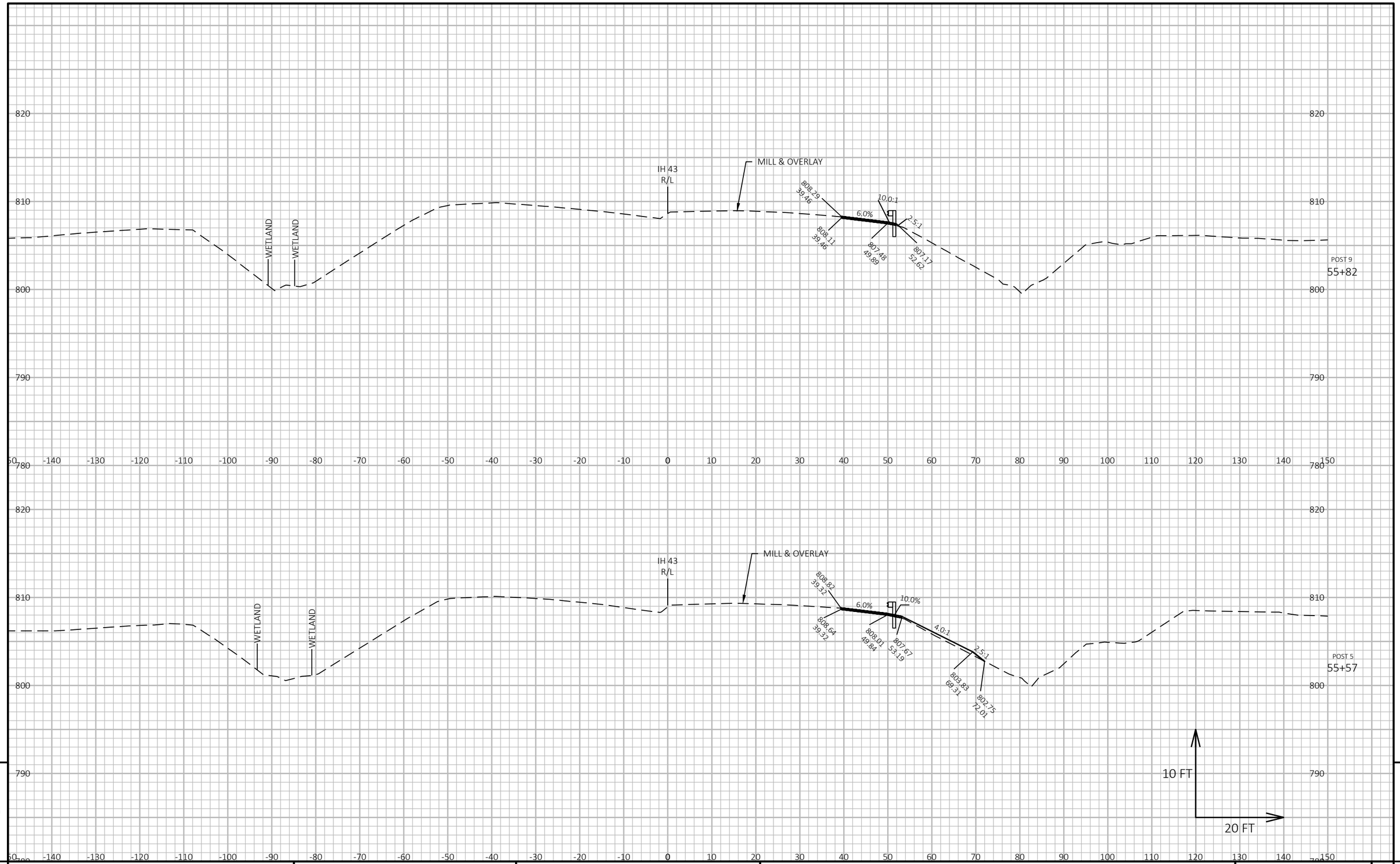
PLOT DATE : 9/21/2021 1:38 PM

PLOT BY : ABU AJWA, MUNTHER J

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 508	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 58 BG 2

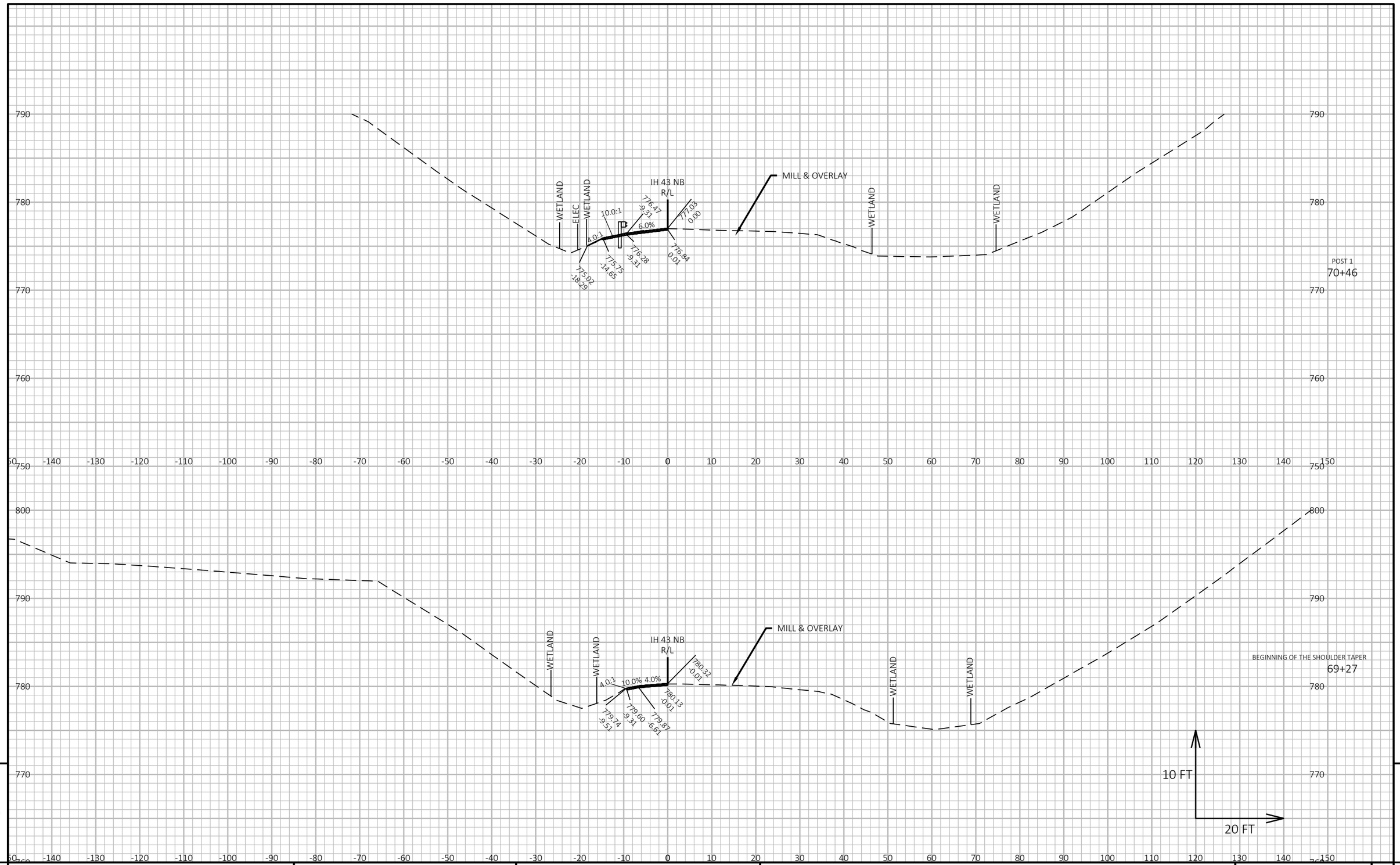
PLOT DATE : 9/21/2021 1:40 PM

PLOT BY : ABU AJWA, MUNTHER J

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 509	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 70+50 BG 1

PLOT DATE : 4/8/2021 1:58 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

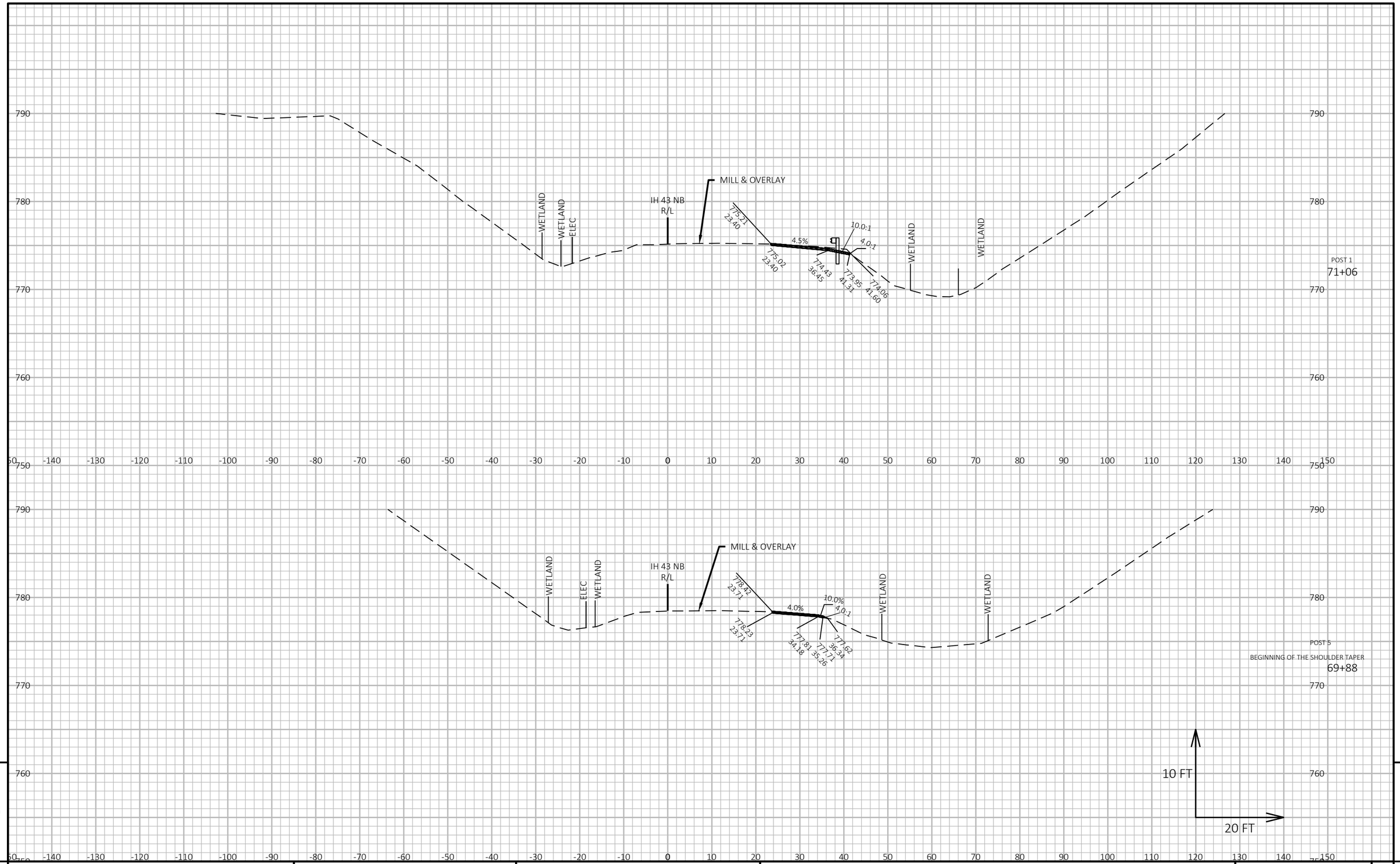


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS:BEAM GUARD - IH 43 NB	SHEET 510	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 70+50 BG 2

PLOT DATE : 4/8/2021 1:58 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

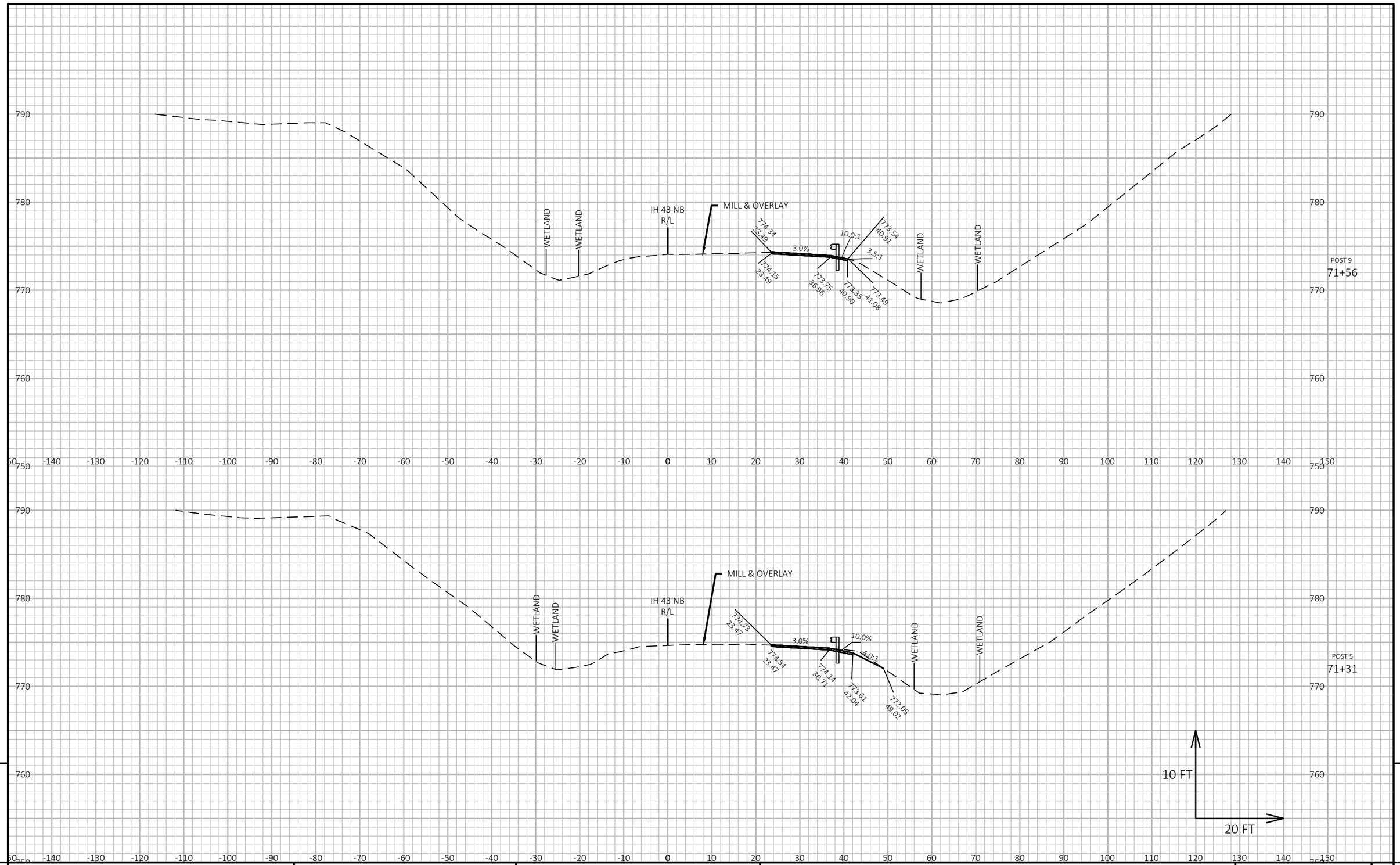


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 511	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 71 BG 1

PLOT DATE : 4/8/2021 3:24 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

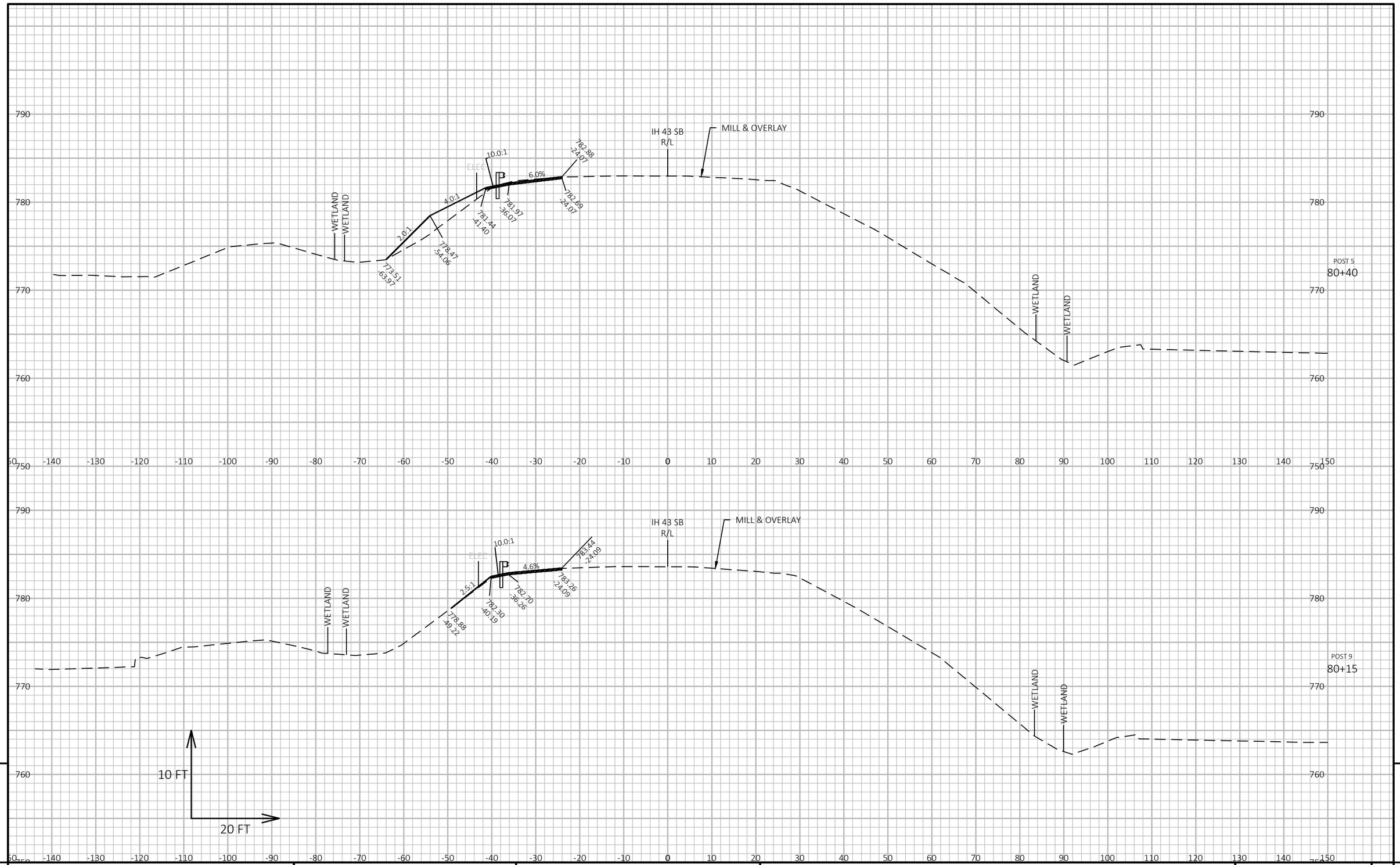


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS:BEAM GUARD - IH 43 NB	SHEET 512	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 71 BG 2

PLOT DATE : 4/8/2021 3:26 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



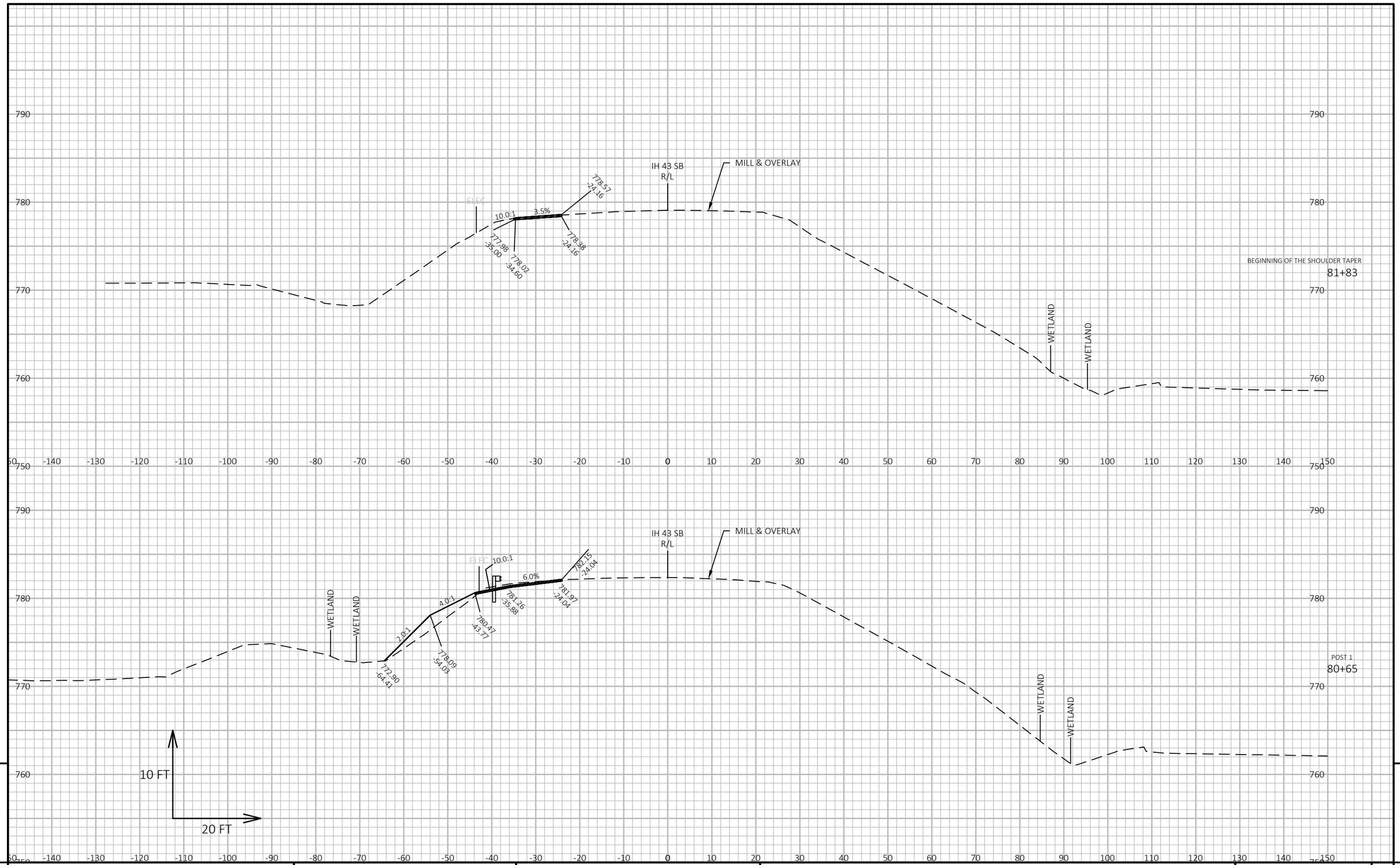
9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB	SHEET 513	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 81 BG 1

PLOT DATE : 9/21/2021 1:41 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

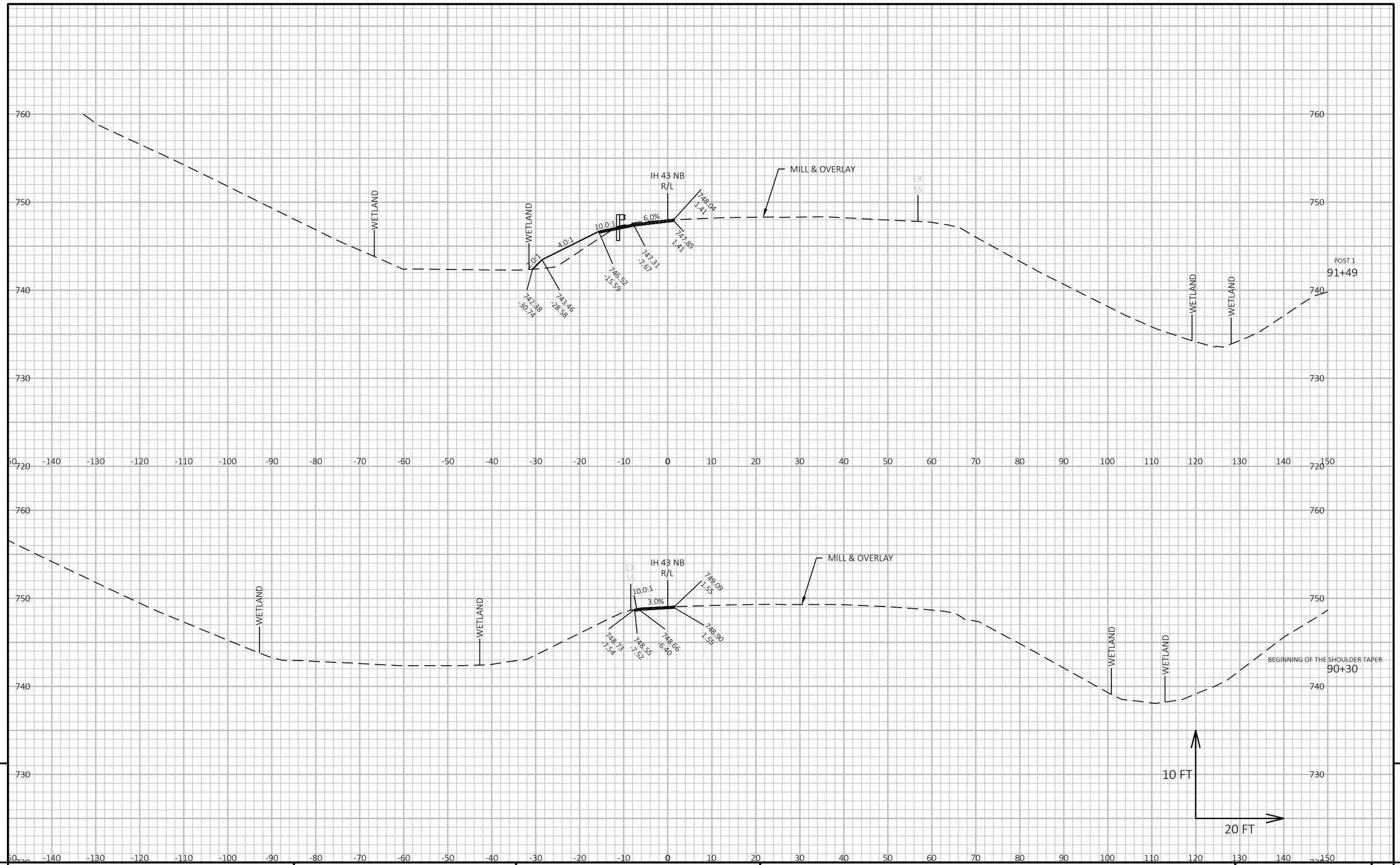


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS:BEAM GUARD - IH 43 SB	SHEET 514 E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 81 BG 2

PLOT DATE : 9/21/2021 1:43 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



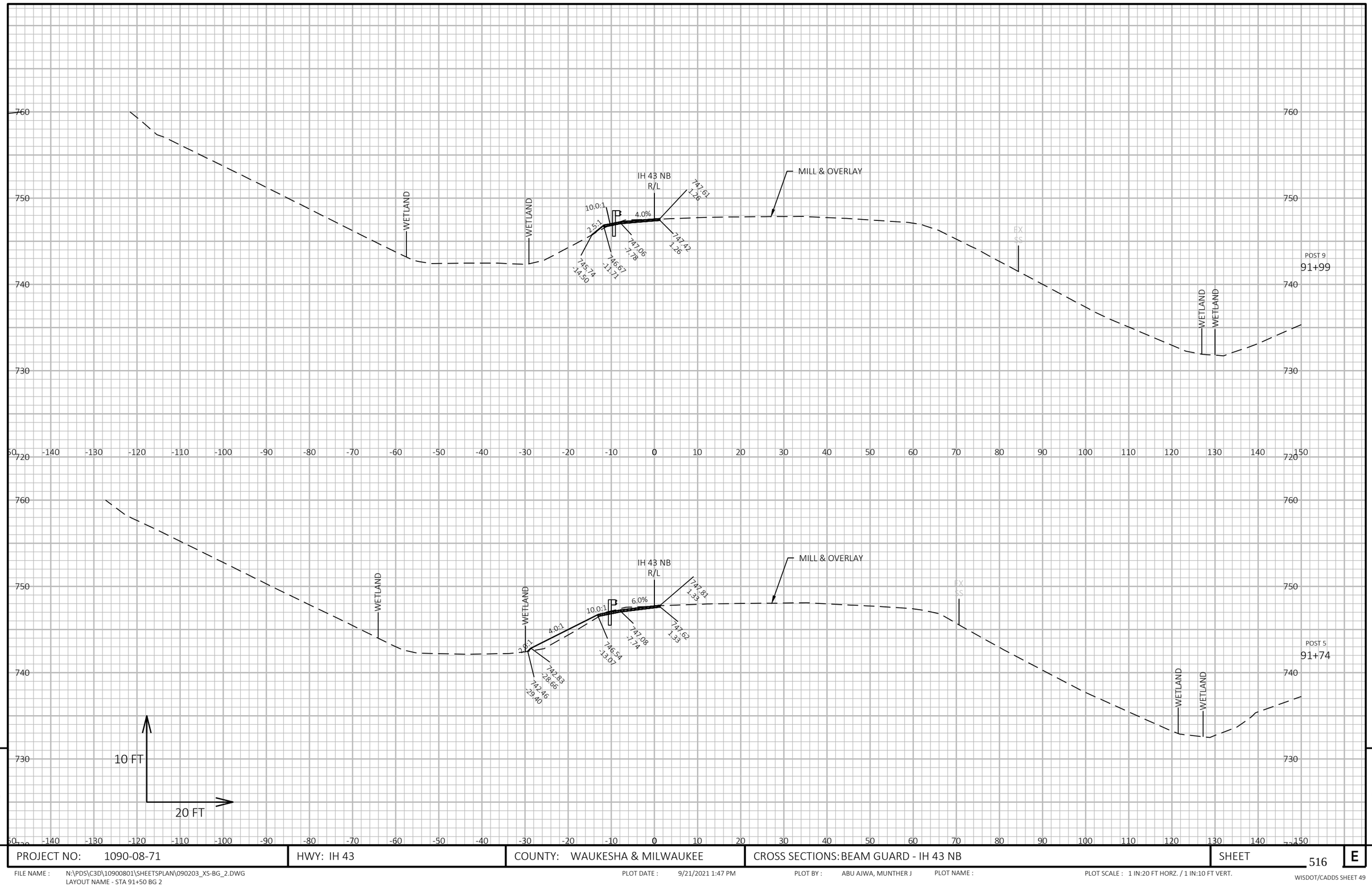
9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 515	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 91+50 BG 1

PLOT DATE : 9/21/2021 1:45 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

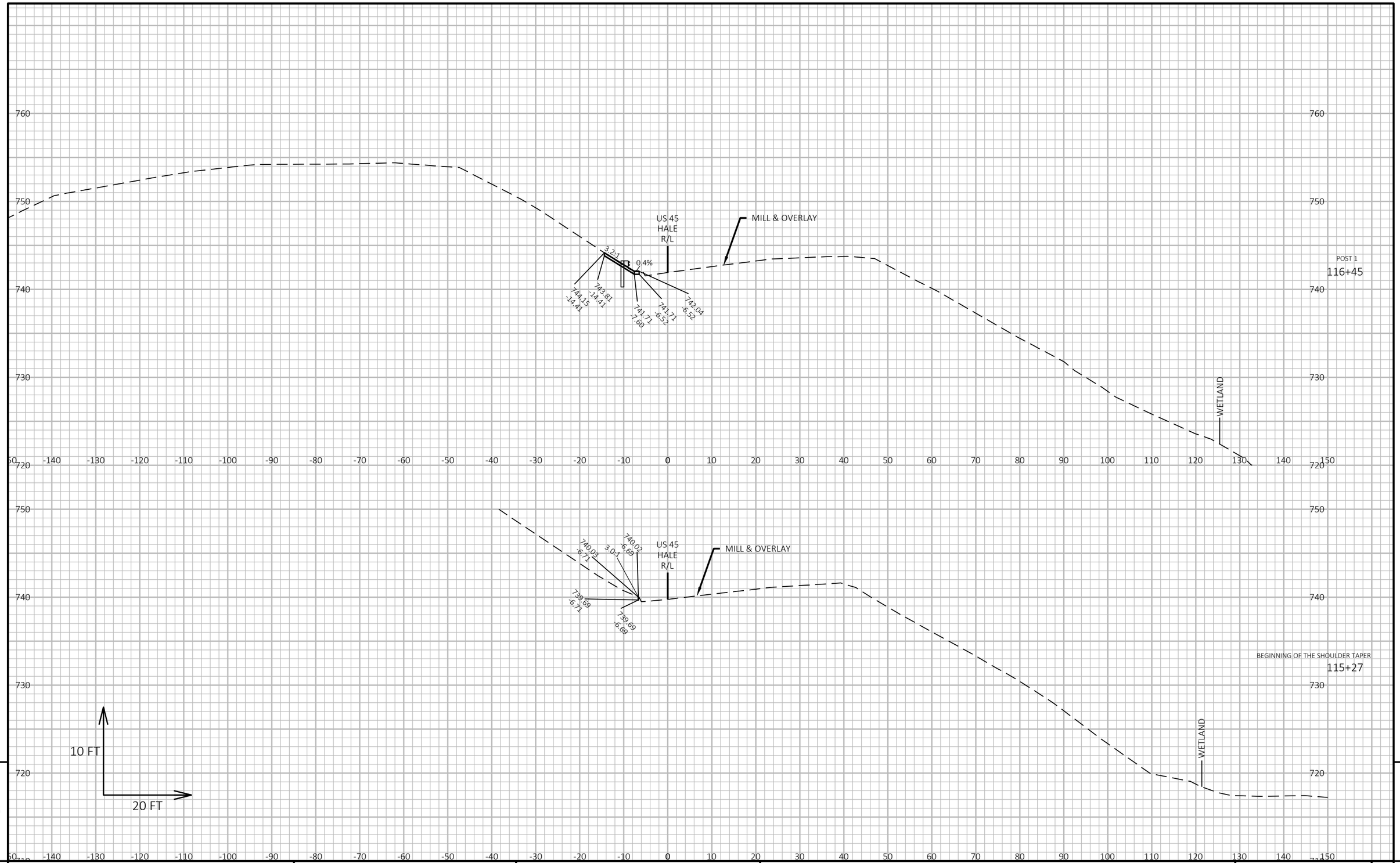


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB	SHEET 516	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 91+50 BG 2

PLOT DATE : 9/21/2021 1:47 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



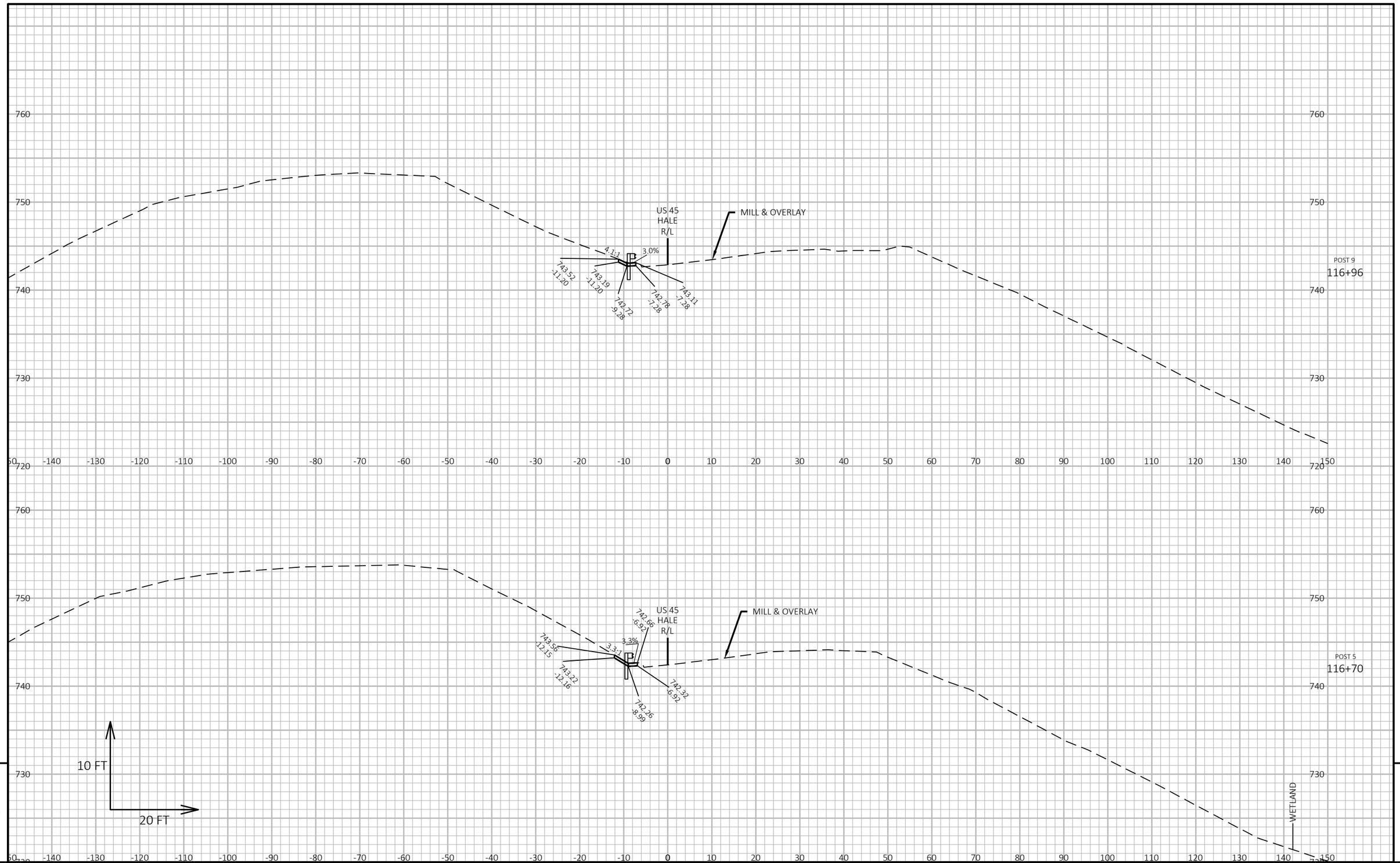
9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - US 45 NB (W-N RAMP - HALE IC)	SHEET 517	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 116+50 BG 1 (L)

PLOT DATE : 4/8/2021 3:51 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



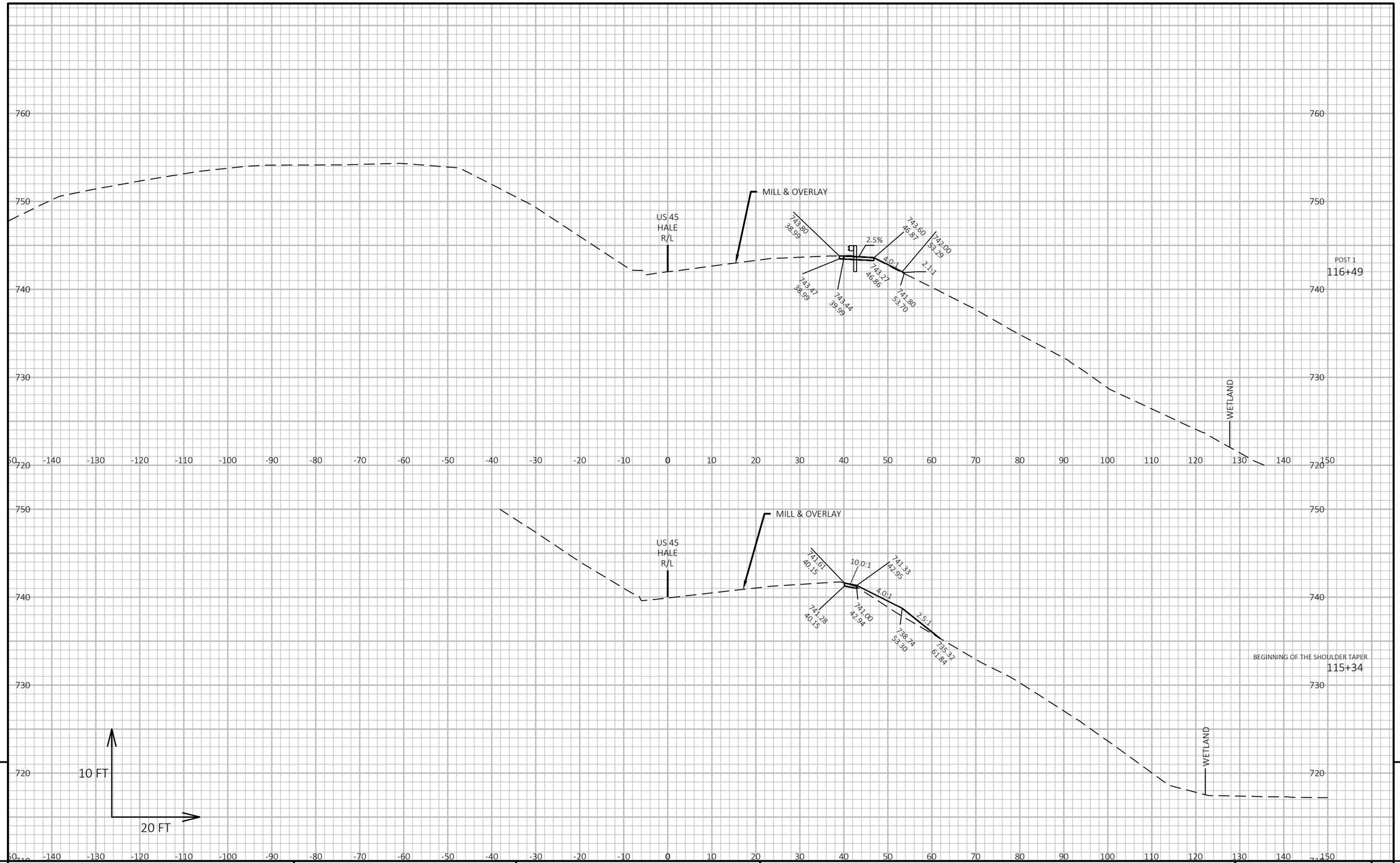
9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - US 45 NB (W-N RAMP - HALE IC)	SHEET 518	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 116+50 BG 2 (L)

PLOT DATE : 4/8/2021 3:52 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

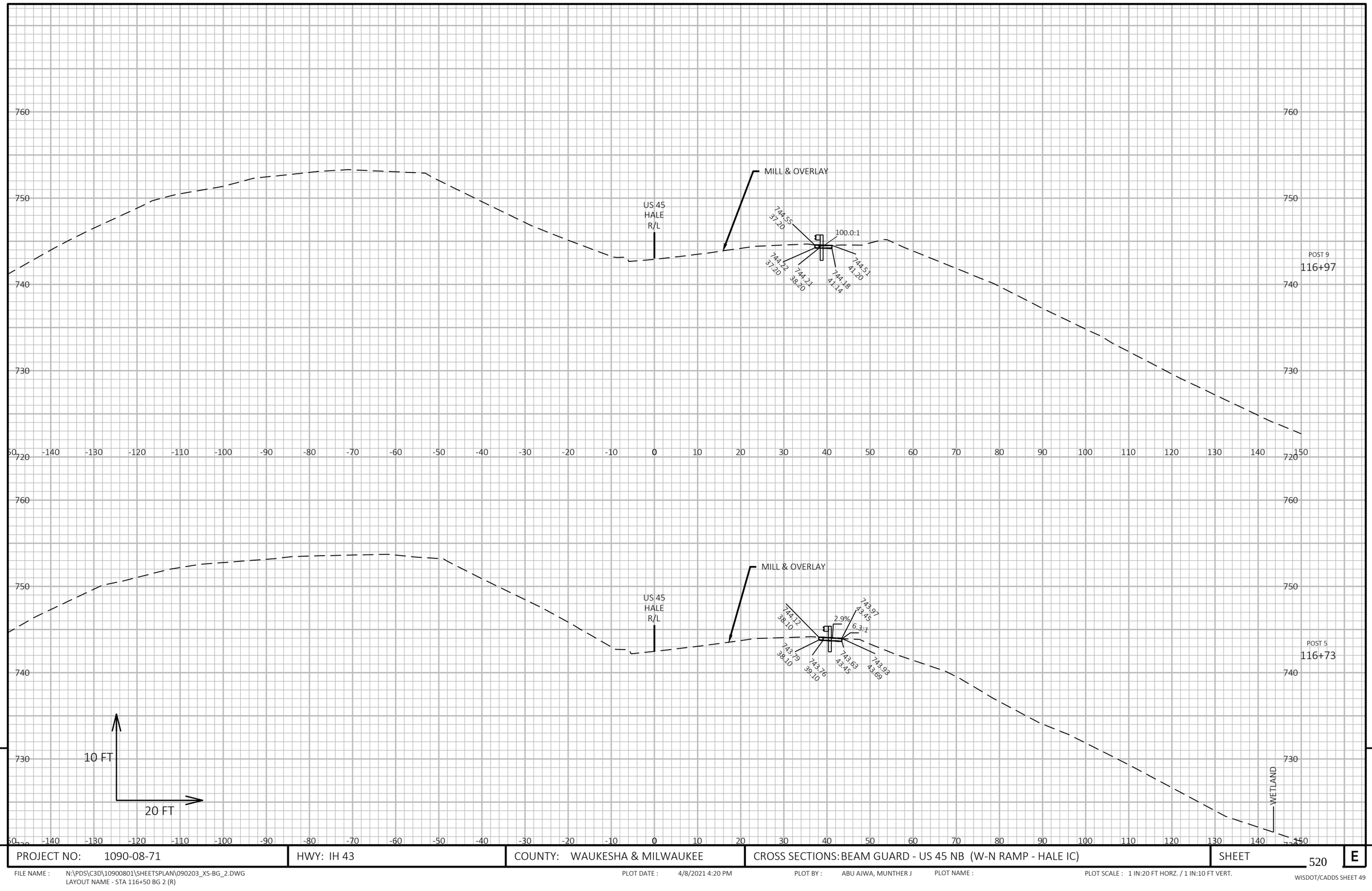


9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - US 45 NB (W-N RAMP - HALE IC)	SHEET 519	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 116+50 BG 1 (R)

PLOT DATE : 4/8/2021 4:18 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - US 45 NB (W-N RAMP - HALE IC)	SHEET 520	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 116+50 BG 2 (R)

PLOT DATE : 4/8/2021 4:20 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

MILL & OVERLAY

IH 43 NB
HALE
R/L

737.15
-25.14

6.0:1

8.0:1

736.15
-18.64

4.4%

736.86
-25.14

736.11
-20.05

735.85
-18.63

735.56
-12.00

735.85
-11.95

POST 1
203+46

10 FT

20 FT

WETLAND

WETLAND

EX
SS

736.80
-21.84

5.7:1

736.20
-18.42

736.51
-21.84

735.91
-18.43

IH 43 NB
HALE
R/L

EX
SS

BEGINNING OF THE SHOULDER TAPER
203+30

MILL & OVERLAY

OVERHEAD UTILITY LINE AT STA 203+25

WETLAND

WETLAND

9

9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB (W-E RAMP - HALE IC)	SHEET 521	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 203 BG 1

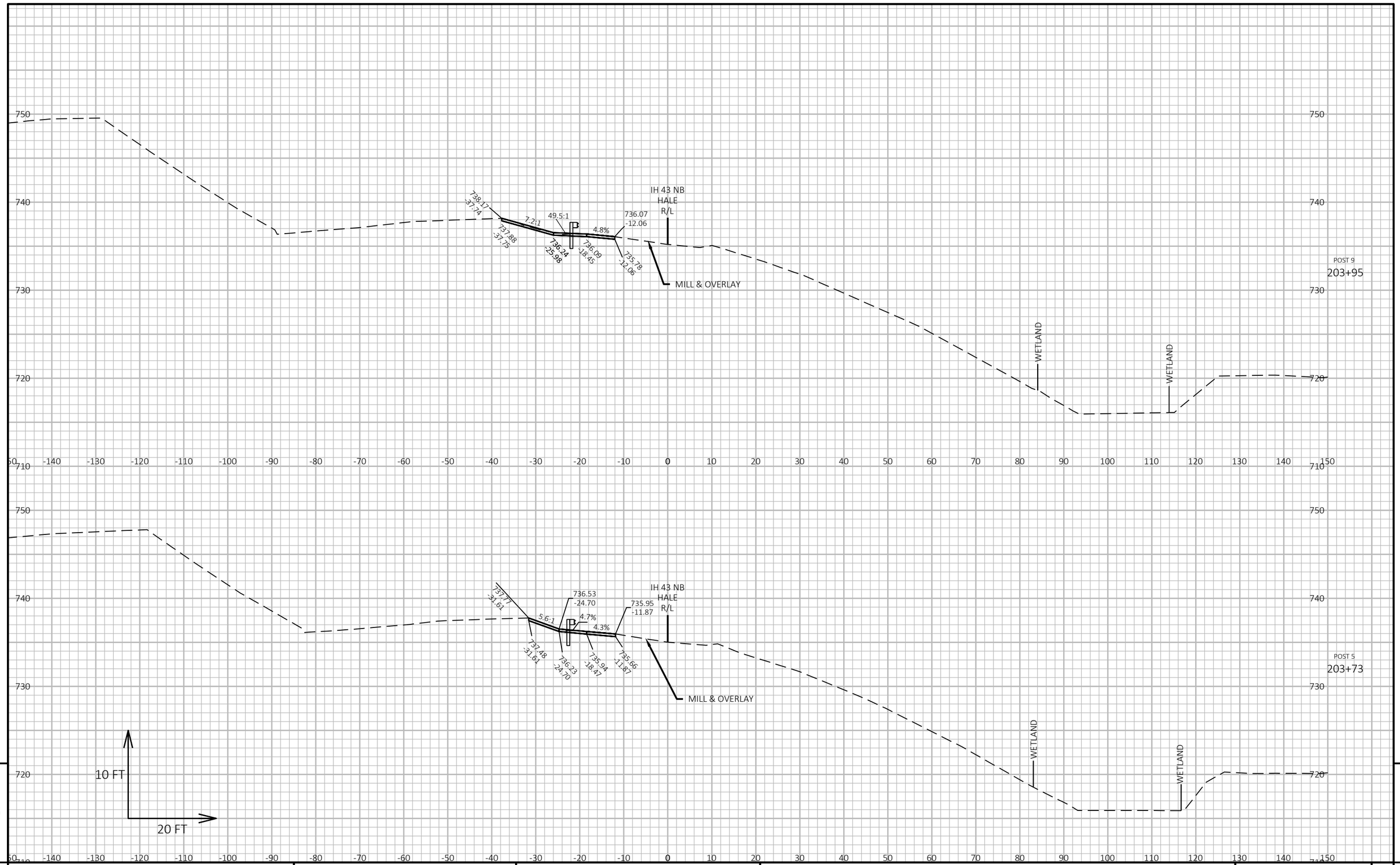
PLOT DATE : 4/8/2021 5:00 PM

PLOT BY : ABU AJWA, MUNTHER J

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



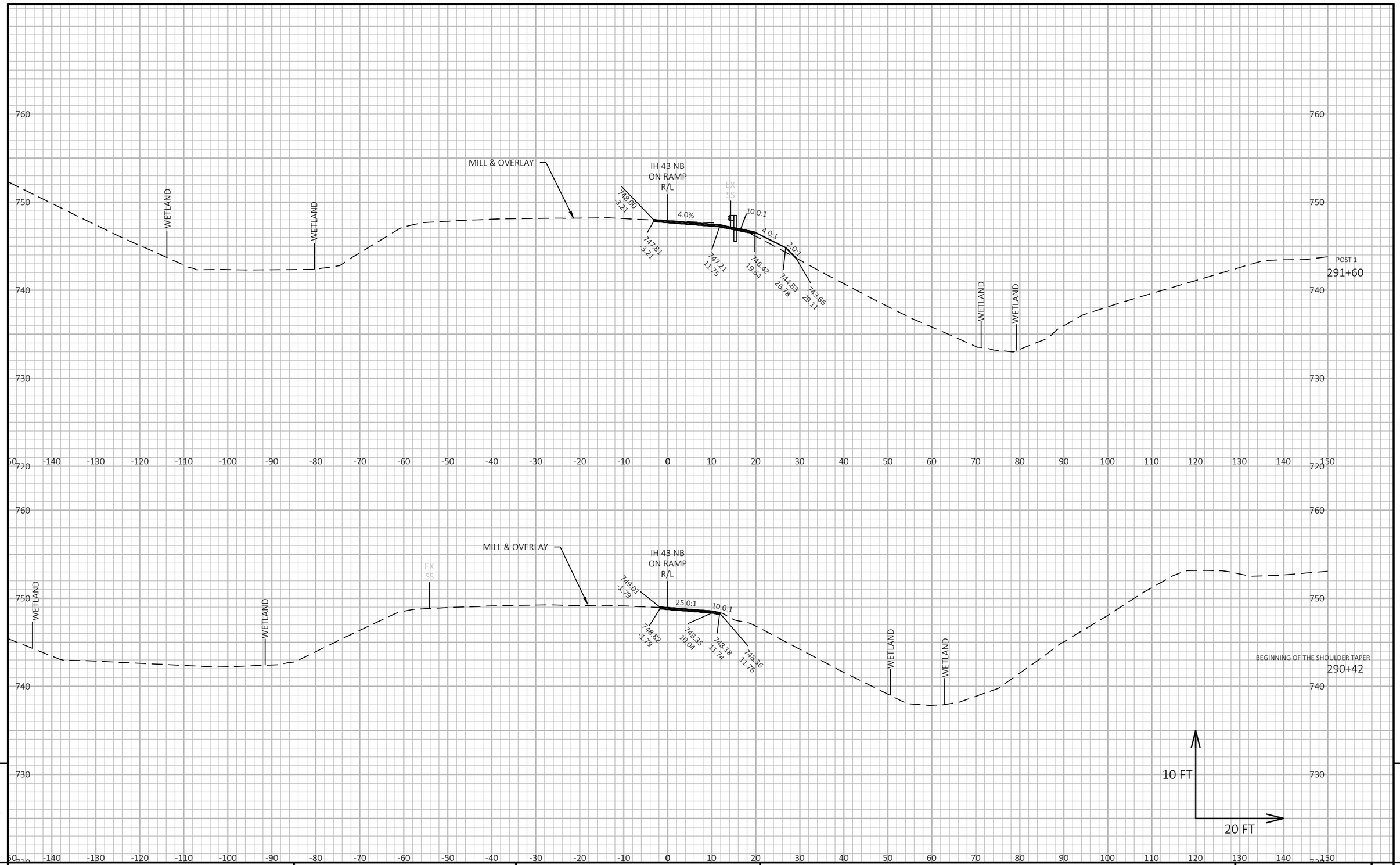
9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB (W-E RAMP - HALE IC)	SHEET 522	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 203 BG 2

PLOT DATE : 4/8/2021 5:02 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



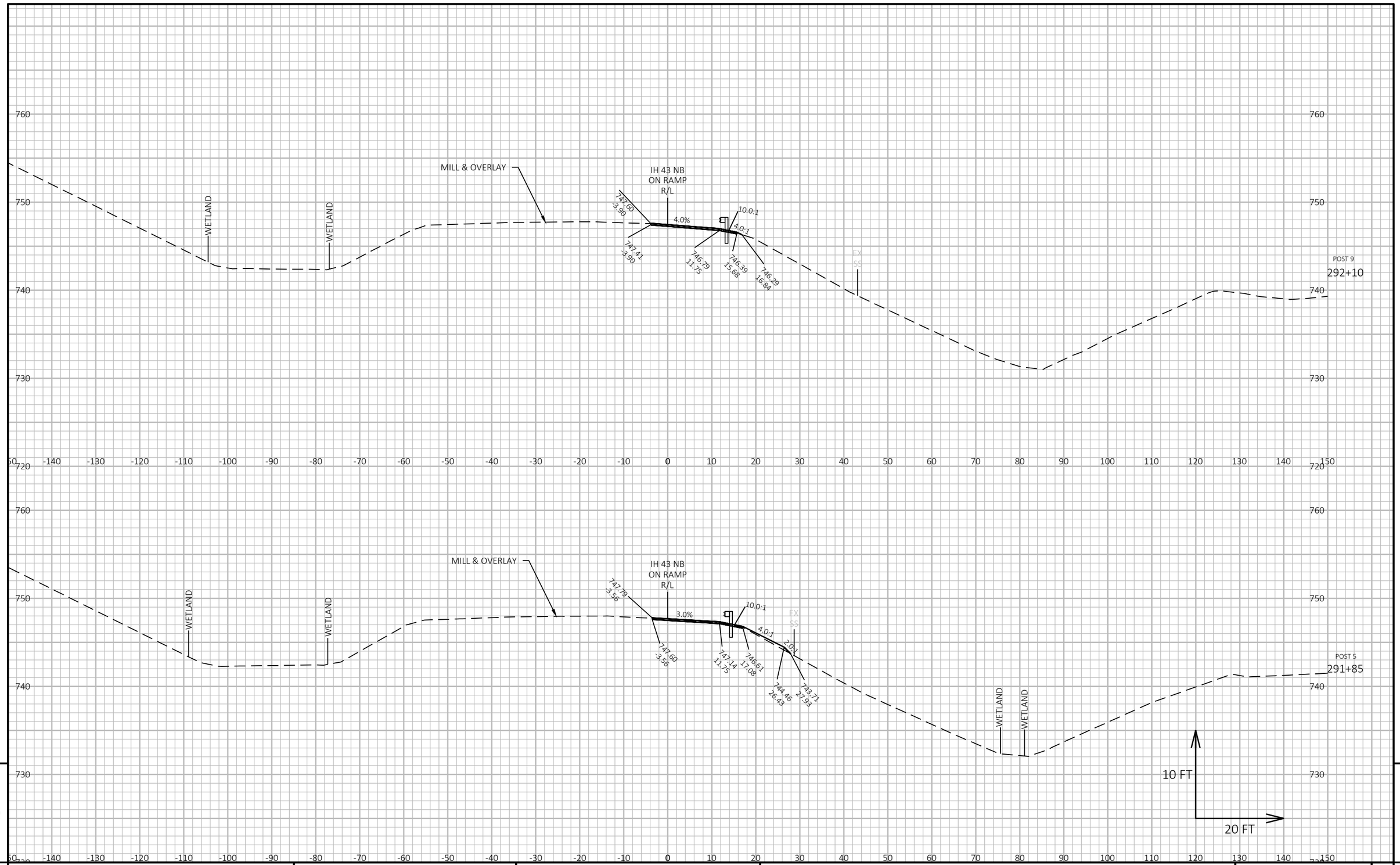
9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 NB/US 45 NB	SHEET 523	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 291+50 BG 1

PLOT DATE : 9/21/2021 1:49 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

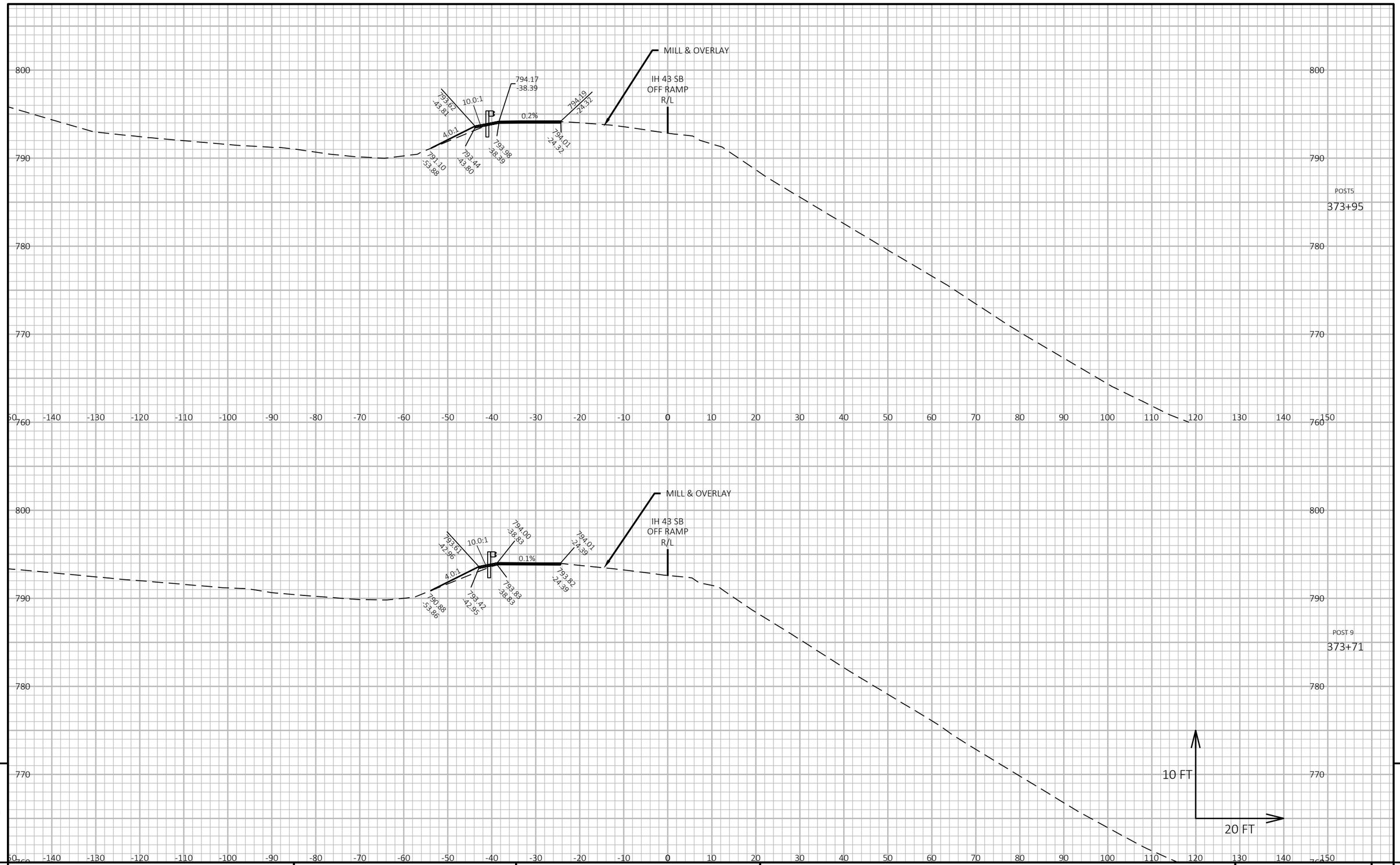
9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS:BEAM GUARD - IH 43 NB/US 45 NB	SHEET 524	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 291+50 BG 2

PLOT DATE : 9/21/2021 1:52 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

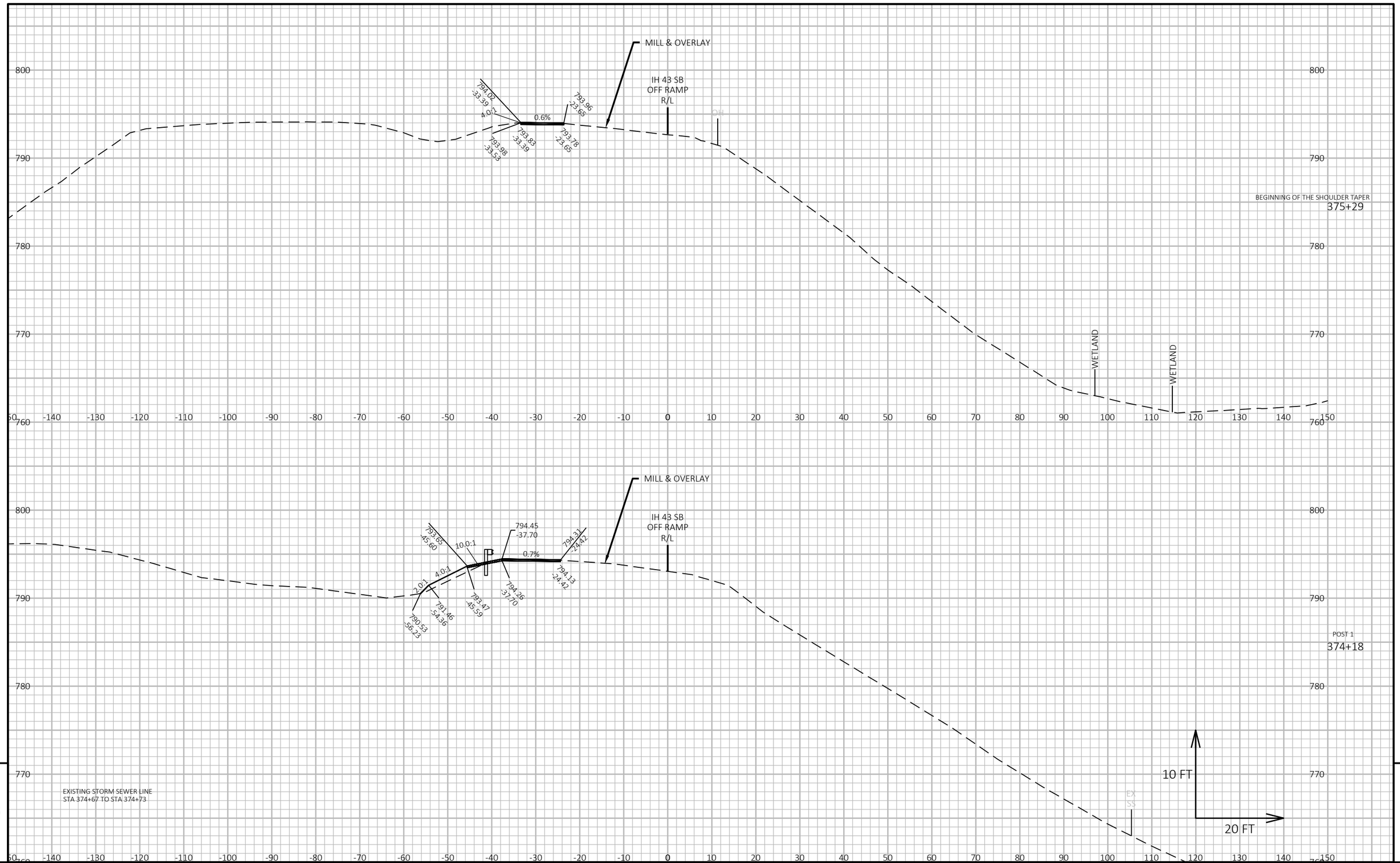
9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB OFF RAMP TO STH 100	SHEET 525	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 374 BG 1

PLOT DATE : 4/8/2021 9:47 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



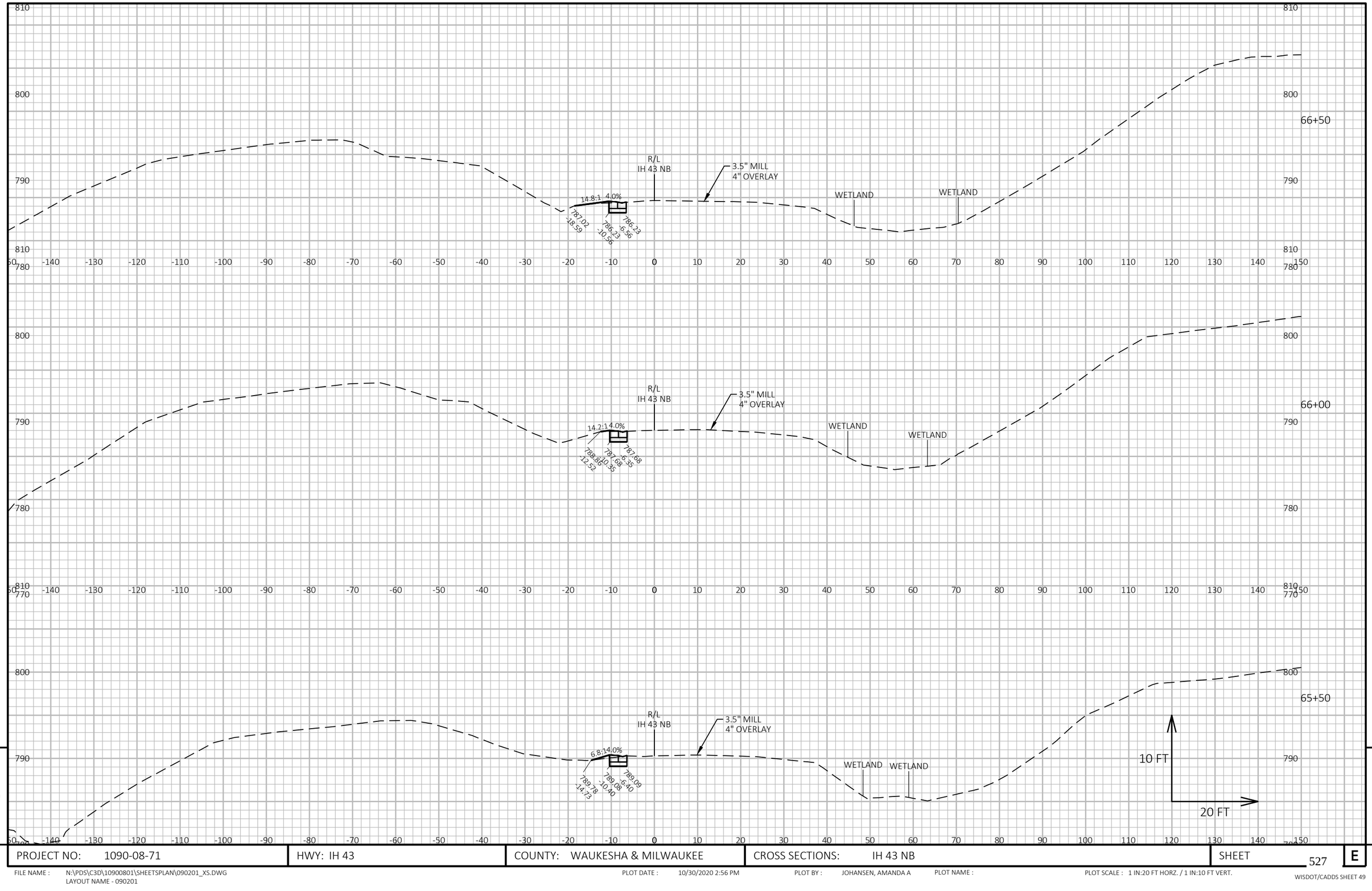
9 9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: BEAM GUARD - IH 43 SB OFF RAMP TO STH 100	SHEET 526	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090203_XS-BG_2.DWG
LAYOUT NAME - STA 374 BG 2

PLOT DATE : 4/8/2021 9:46 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



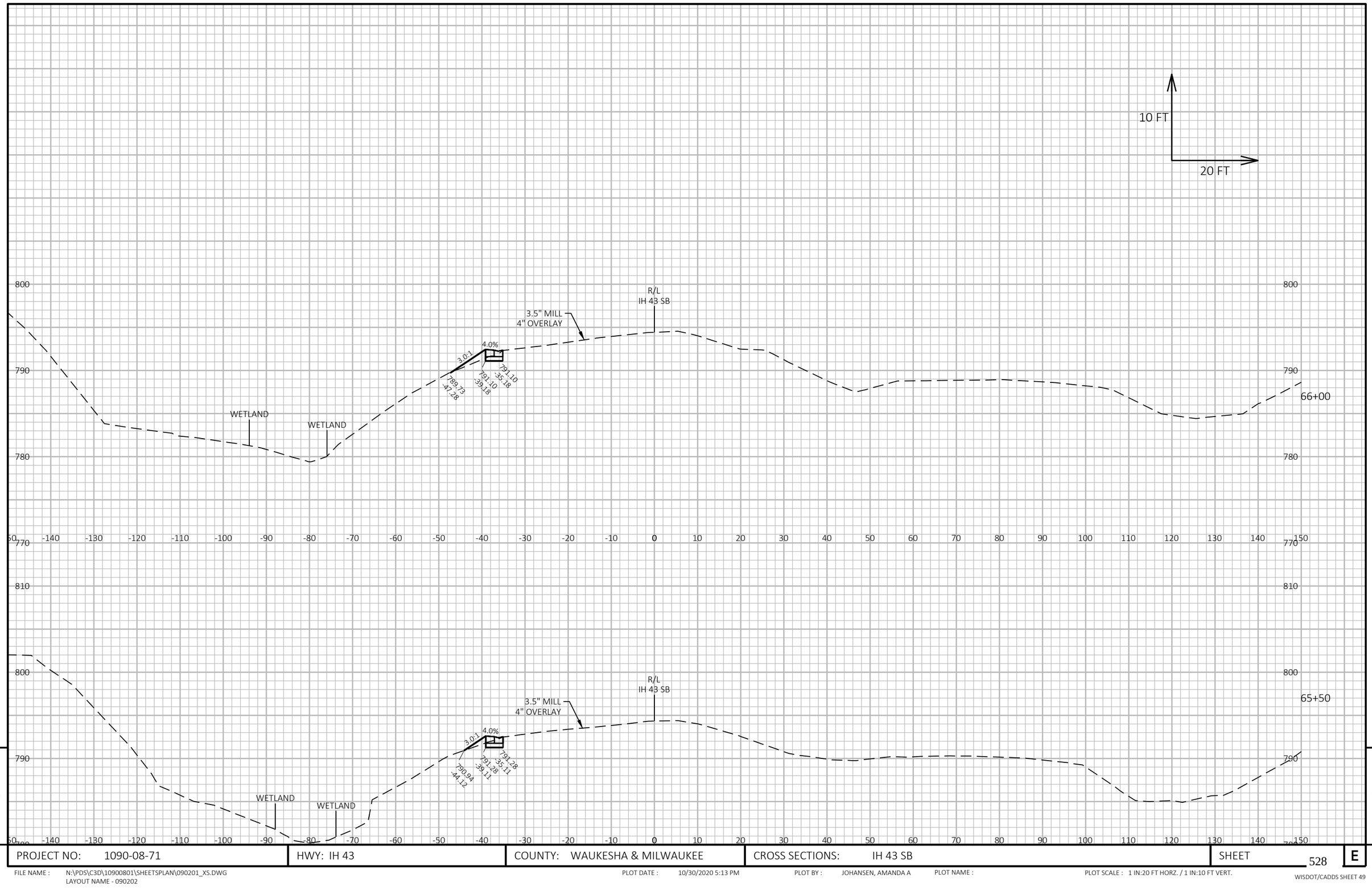
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9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: IH 43 NB	SHEET 527	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201

PLOT DATE : 10/30/2020 2:56 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

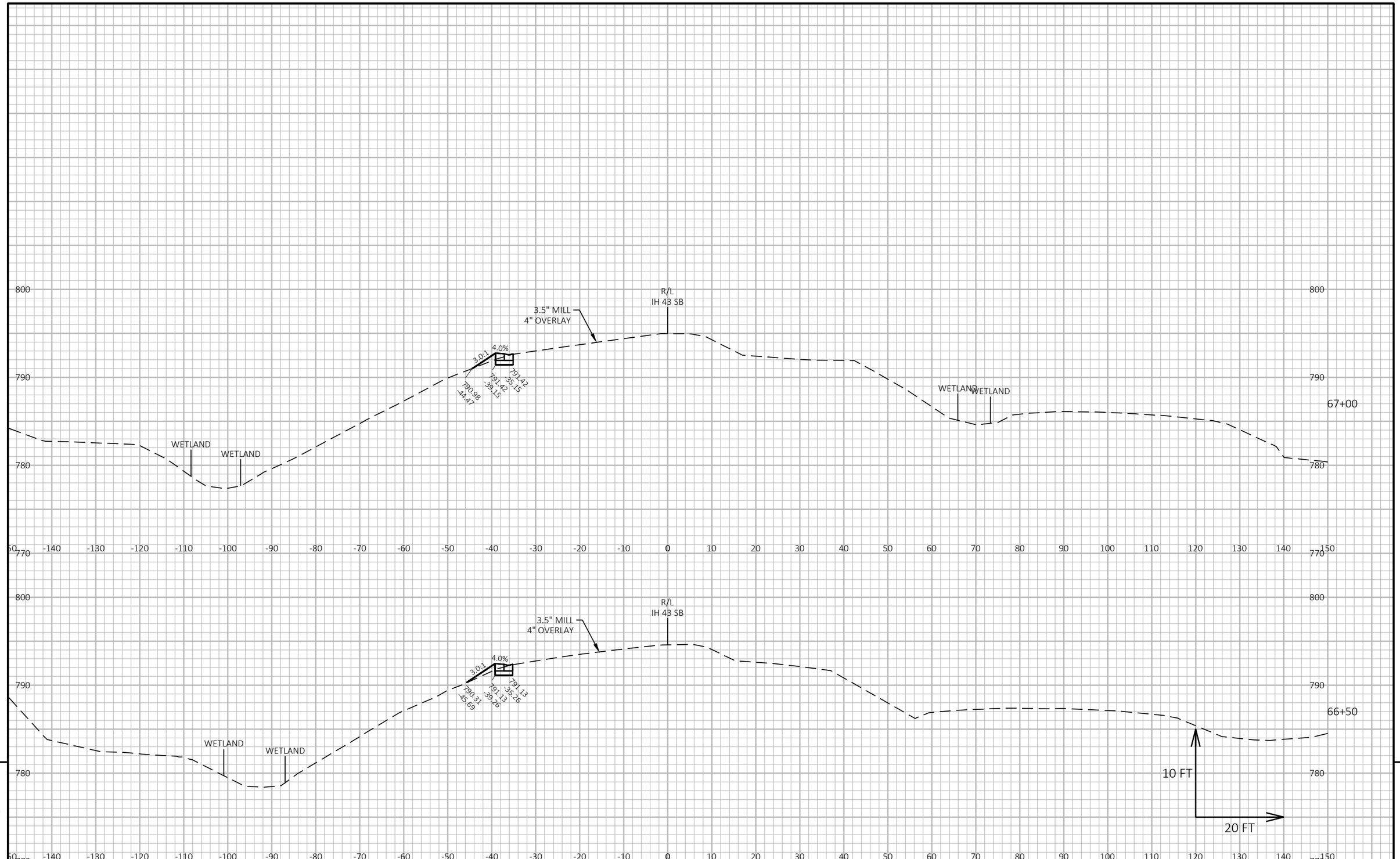
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: IH 43 SB	SHEET 528	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090202

PLOT DATE : 10/30/2020 5:13 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: IH 43 SB	SHEET 529	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090203

PLOT DATE : 10/30/2020 5:15 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

780
770
760
750
780
770
760
750

R/L
IH 43 SB

3.5" MILL
4" OVERLAY

4.0%
-3.0%

768.82
-46.96
768.82
-50.96
769.57
-52.72

84+00

WETLAND
WETLAND

-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

780
770
760
750

R/L
IH 43 SB

3.5" MILL
4" OVERLAY

4.0%
-3.0%

770.69
-46.88
770.69
-50.88
770.98
-53.98

83+50

10 FT
20 FT

WETLAND
WETLAND

-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

9

9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: IH 43 SB	SHEET 530	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090204

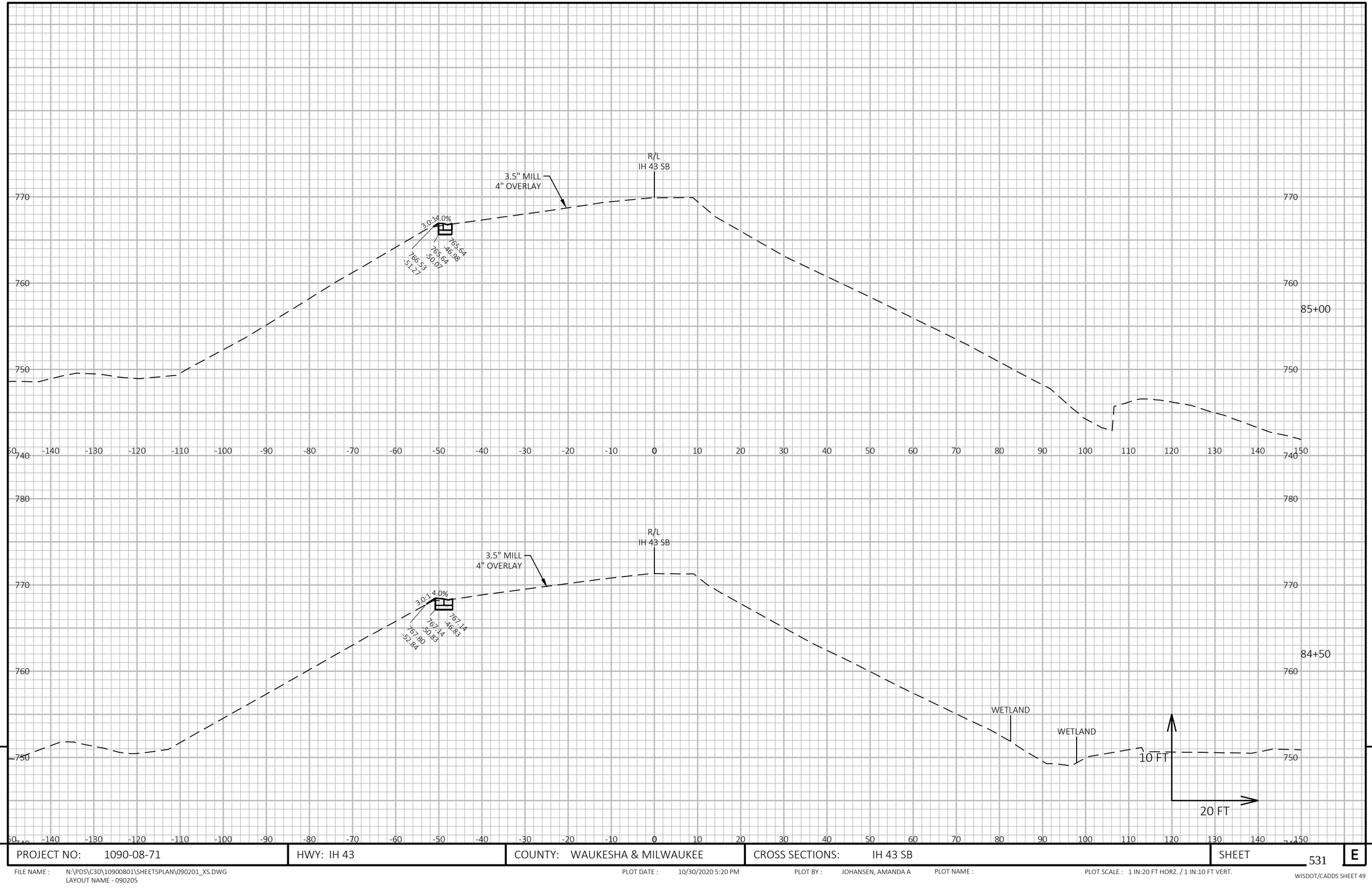
PLOT DATE : 10/30/2020 5:18 PM

PLOT BY : JOHANSEN, AMANDA A

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

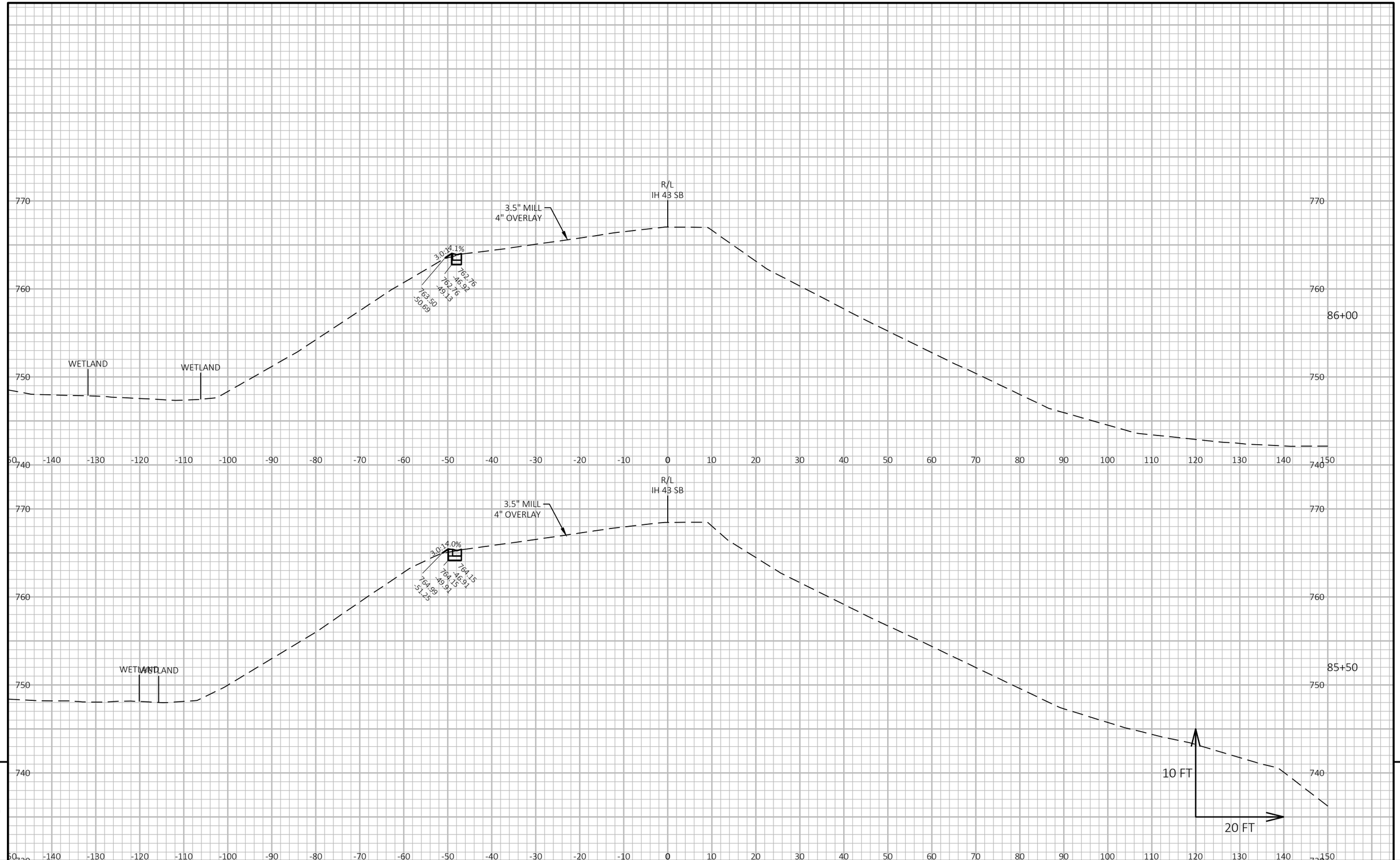
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: IH 43 SB	SHEET 531	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090205

PLOT DATE : 10/30/2020 5:20 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

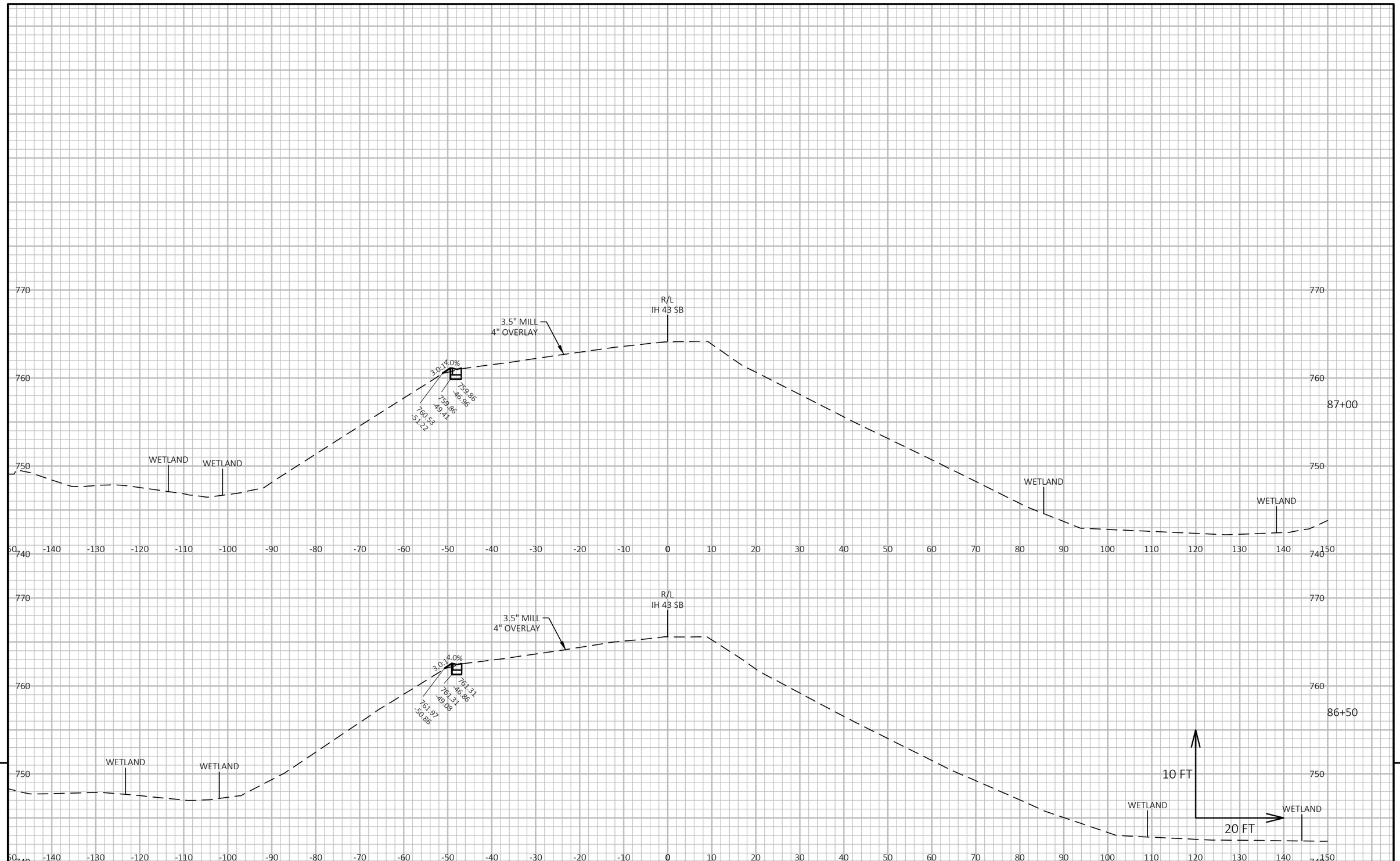


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: IH 43 SB	SHEET 532	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090206

PLOT DATE : 10/30/2020 5:23 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



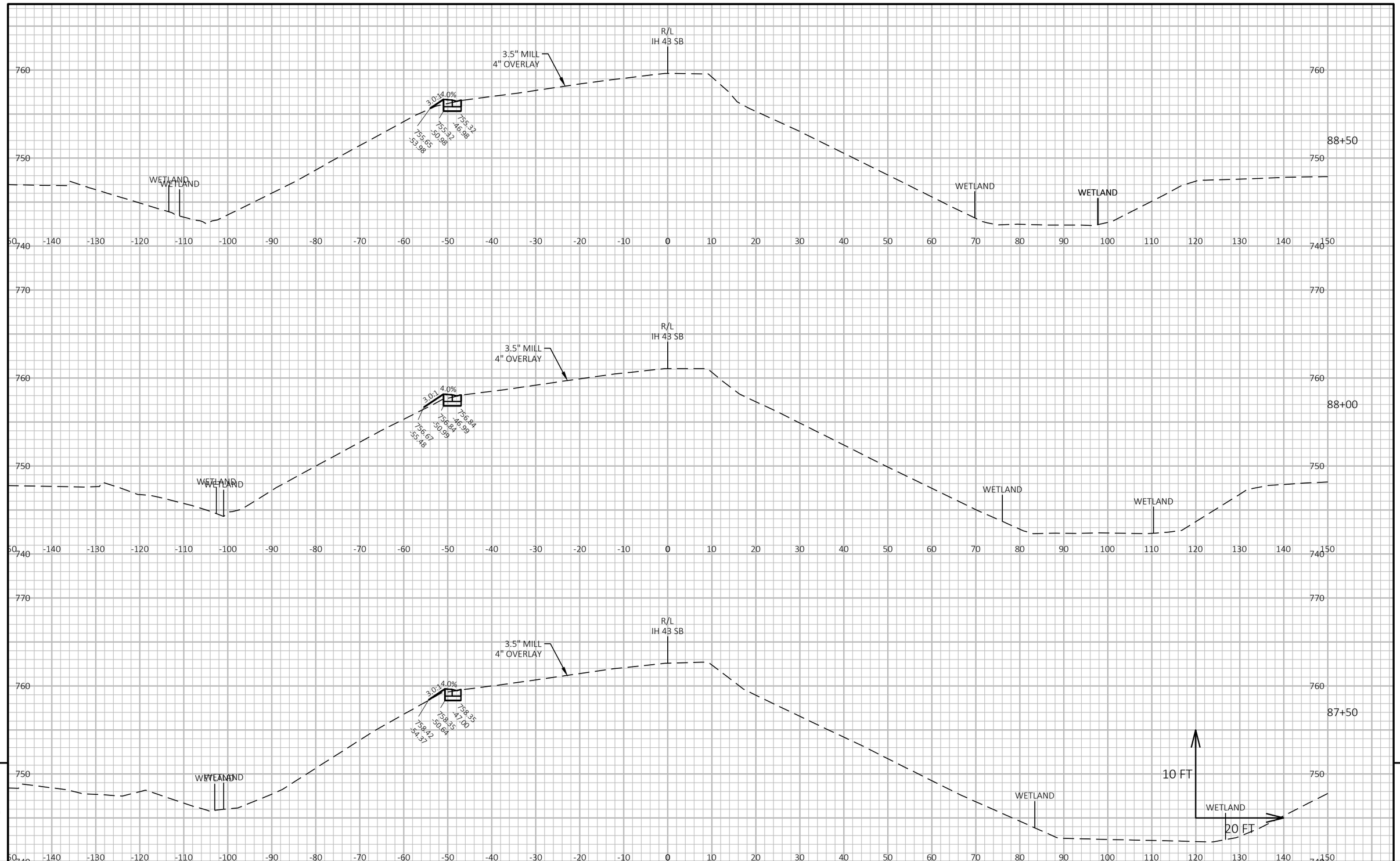
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: IH 43 SB	SHEET 533	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090207

PLOT DATE : 10/30/2020 5:26 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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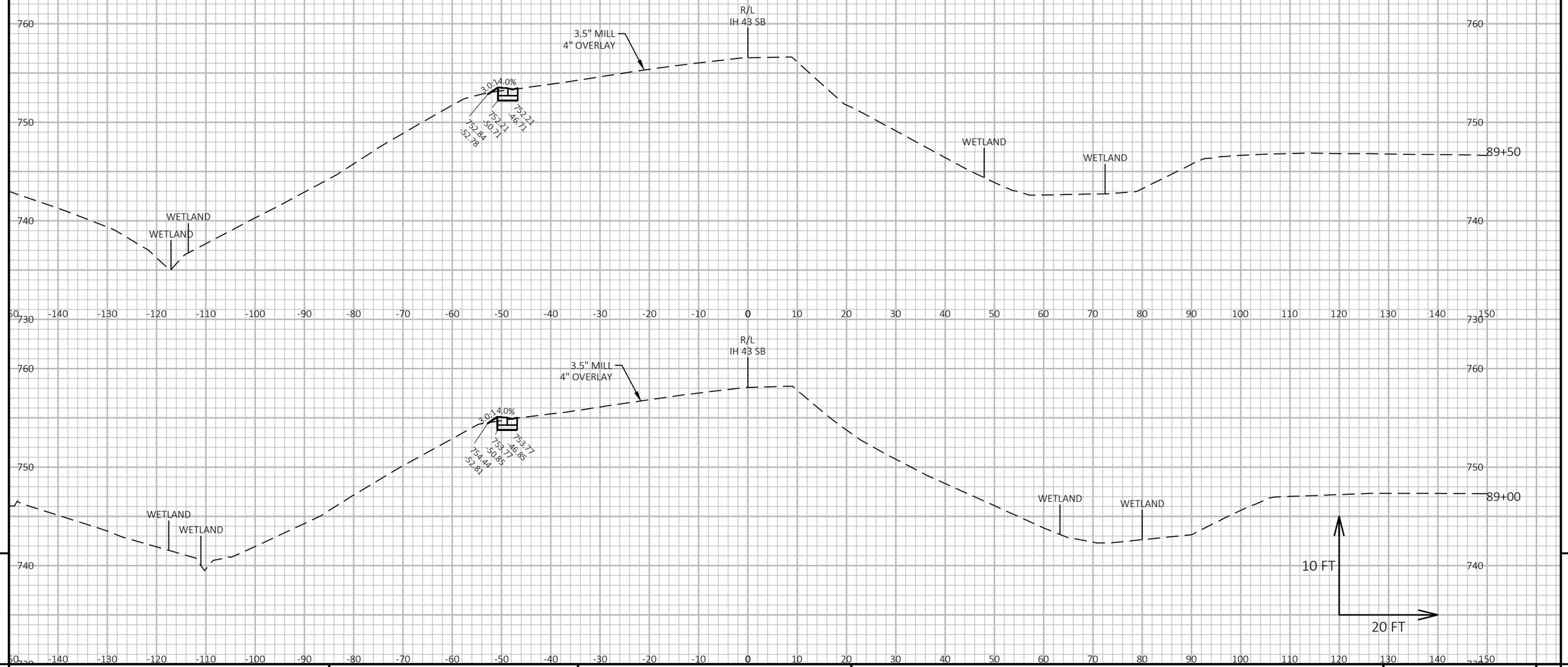
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: IH 43 SB	SHEET 534	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090208

PLOT DATE : 10/30/2020 5:28 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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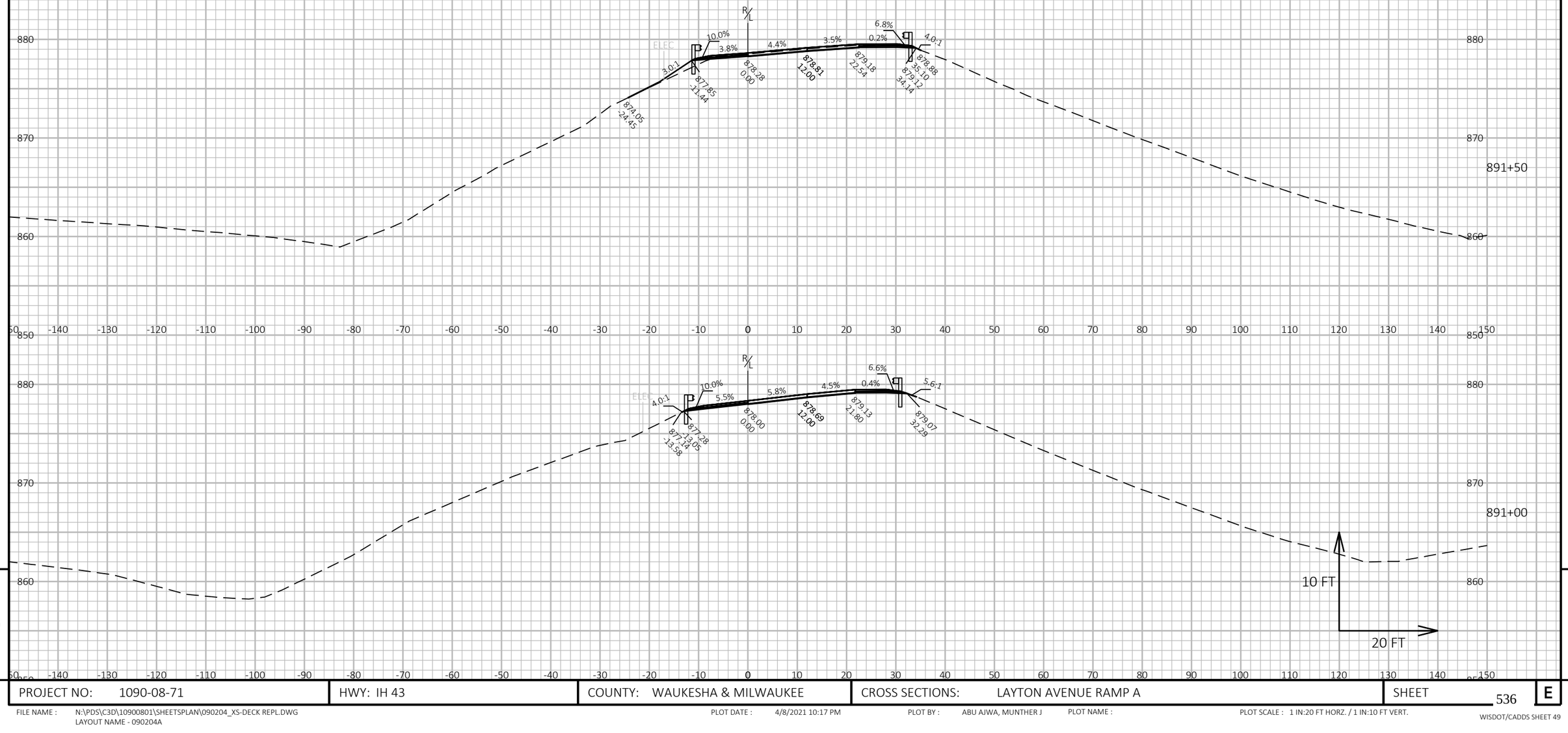
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: IH 43 SB	SHEET 535	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090209

PLOT DATE : 10/30/2020 5:31 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



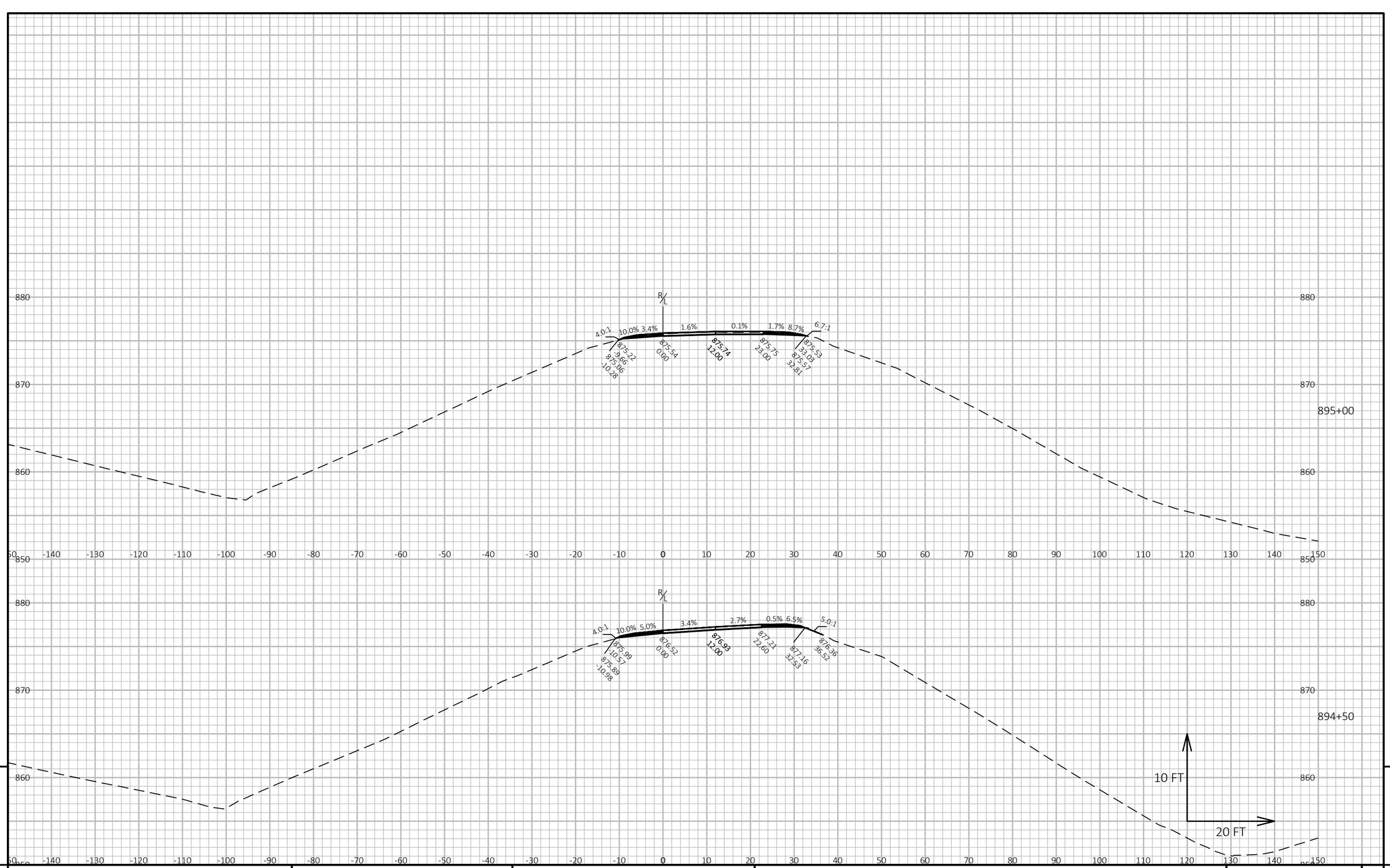
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: LAYTON AVENUE RAMP A	SHEET 536	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090204_XS-DECK REPL.DWG
LAYOUT NAME - 090204A

PLOT DATE : 4/8/2021 10:17 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

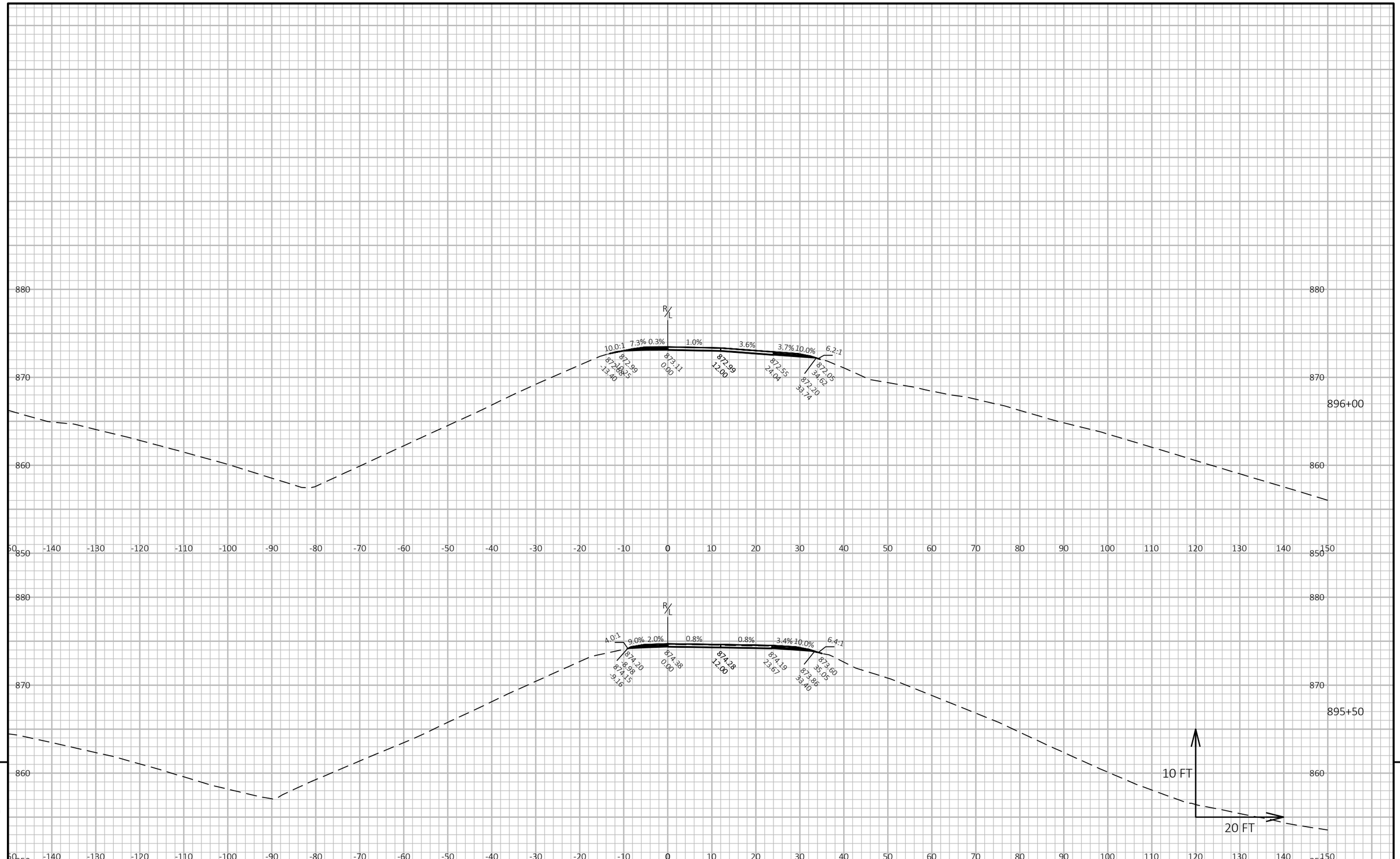


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: LAYTON AVENUE RAMP A	SHEET 537	E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090204_XS-DECK REPL.DWG
LAYOUT NAME - 090204B

PLOT DATE : 4/8/2021 10:17 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

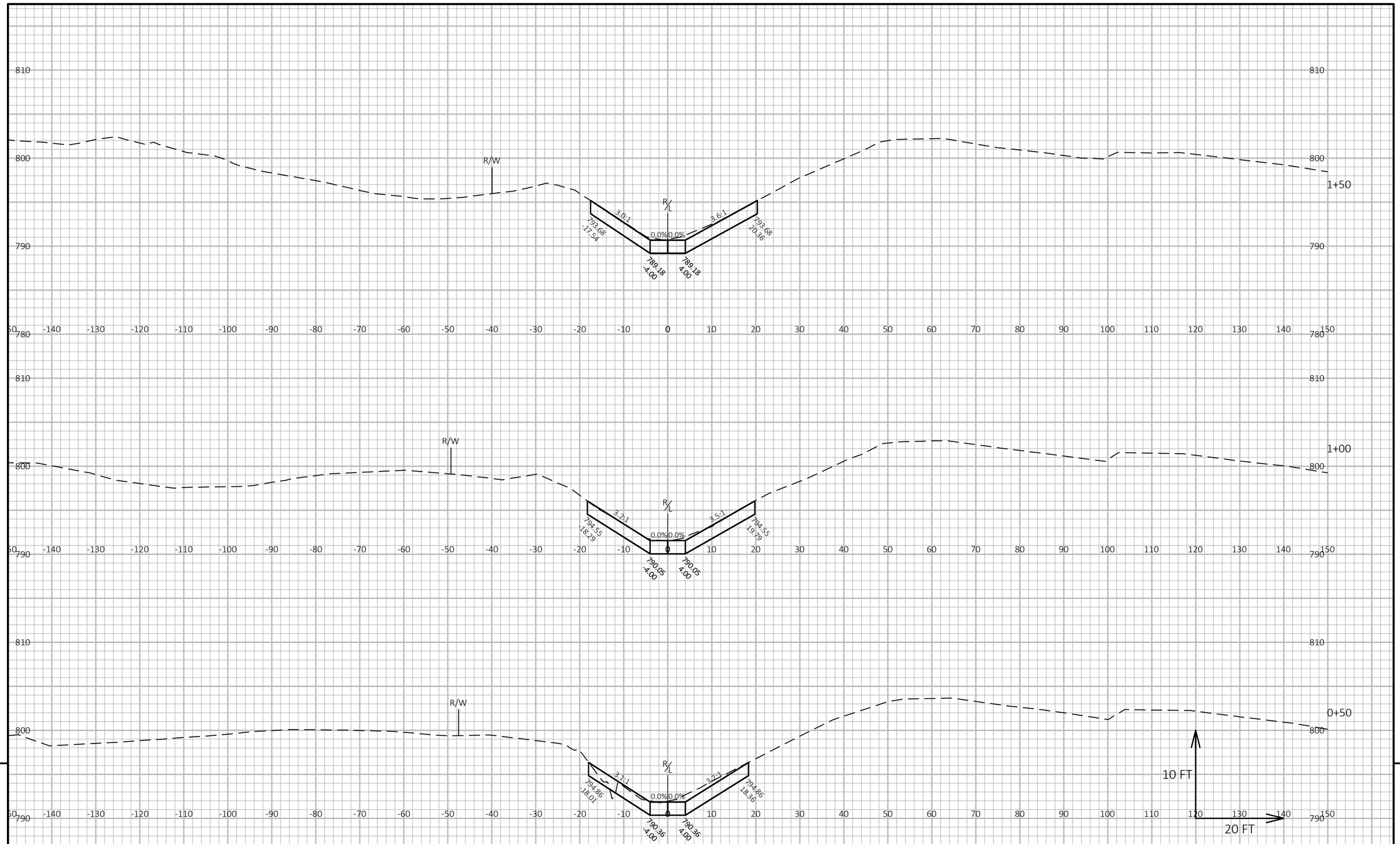
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: LAYTON AVENUE RAMP A	SHEET 538 E

FILE NAME : N:\PDS\C3D\10900801\SHEETSPLAN\090204_XS-DECK REPL.DWG
LAYOUT NAME - 090204C

PLOT DATE : 4/8/2021 10:18 PM PLOT BY : ABU AJWA, MUNTHER J PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

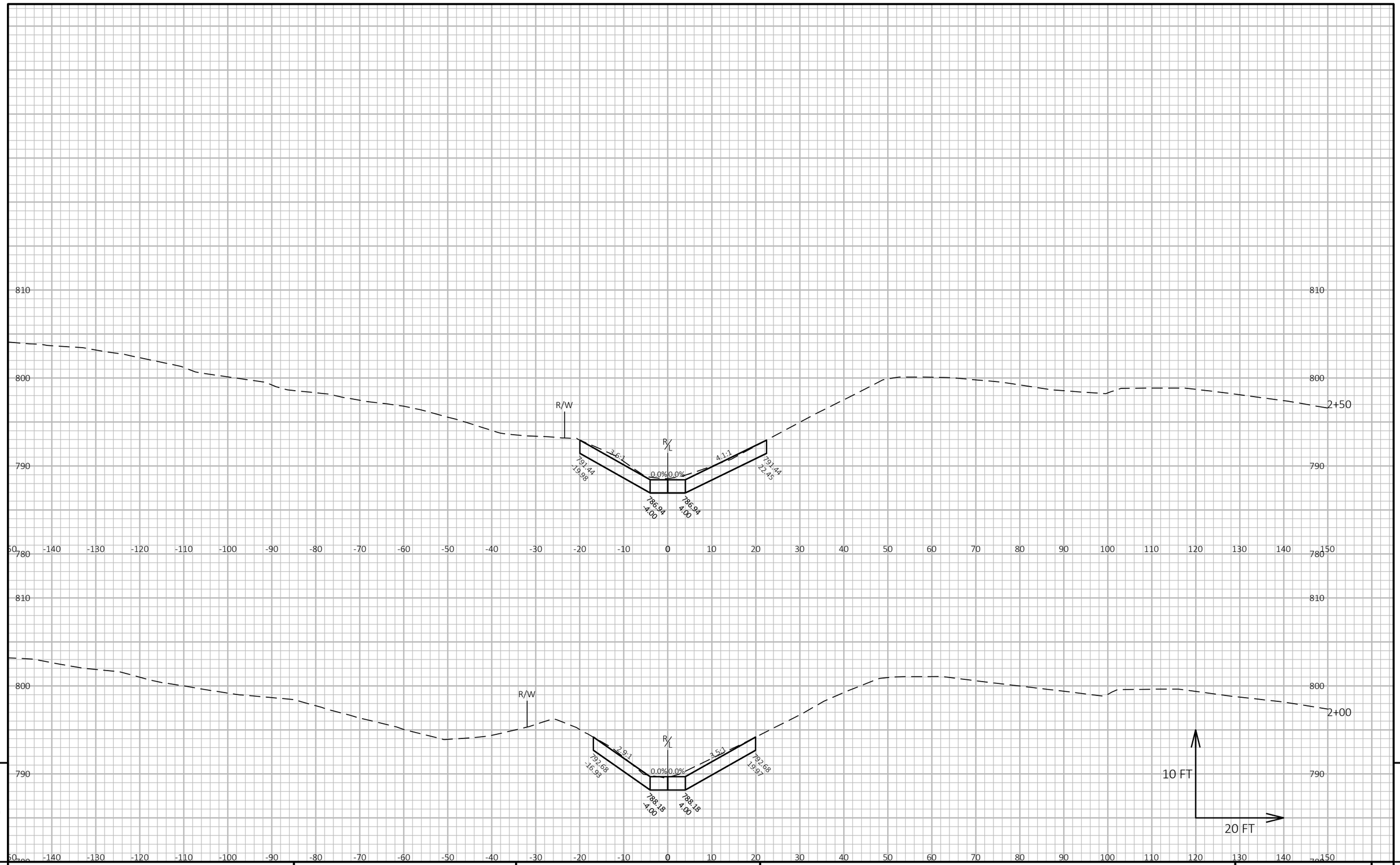


PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 539	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 1

PLOT DATE : 6/28/2021 3:26 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



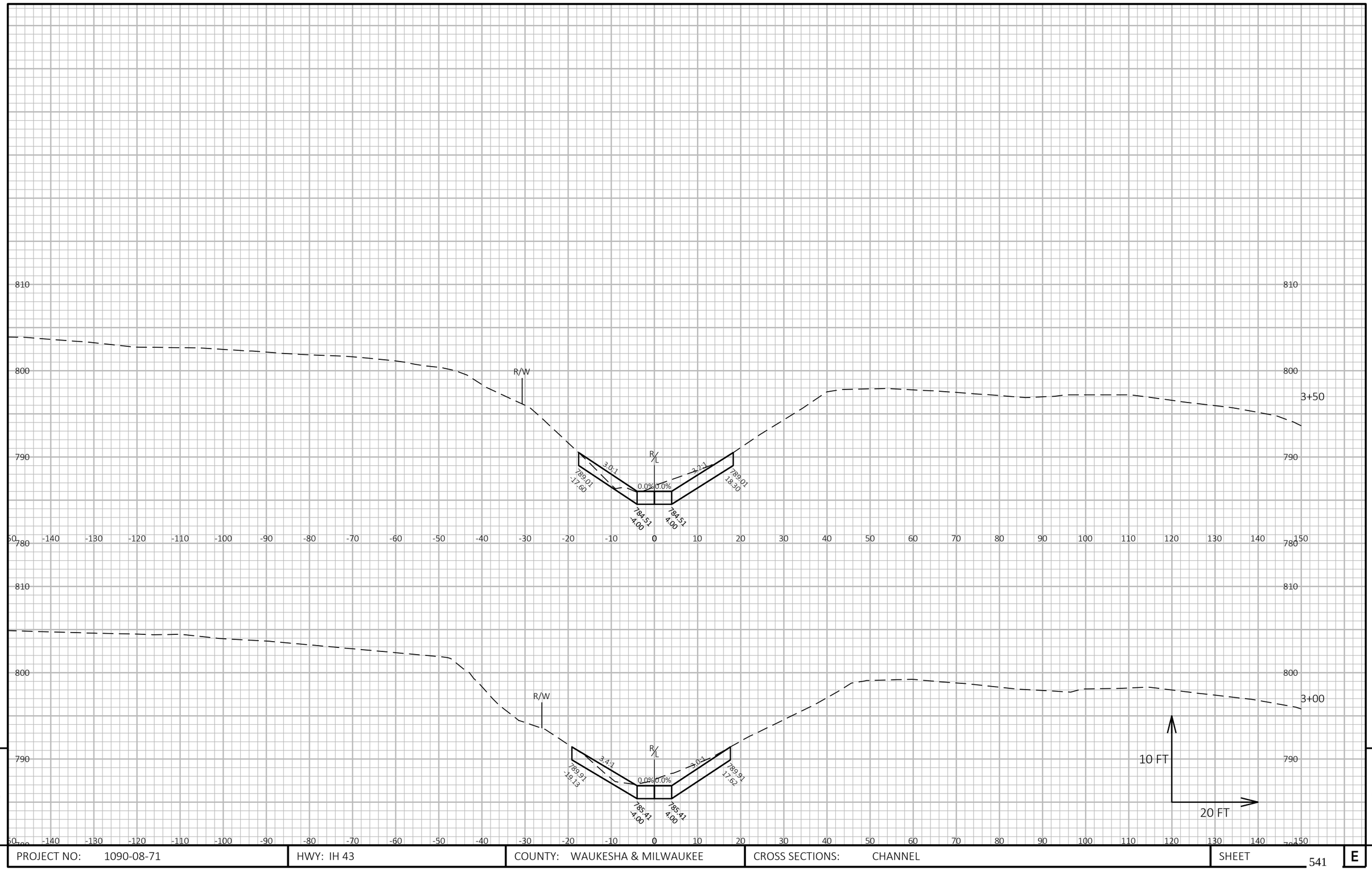
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 540	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 2

PLOT DATE : 6/28/2021 3:27 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 541	E

FILE NAME : \\WKERTOVFILPIO1\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 3

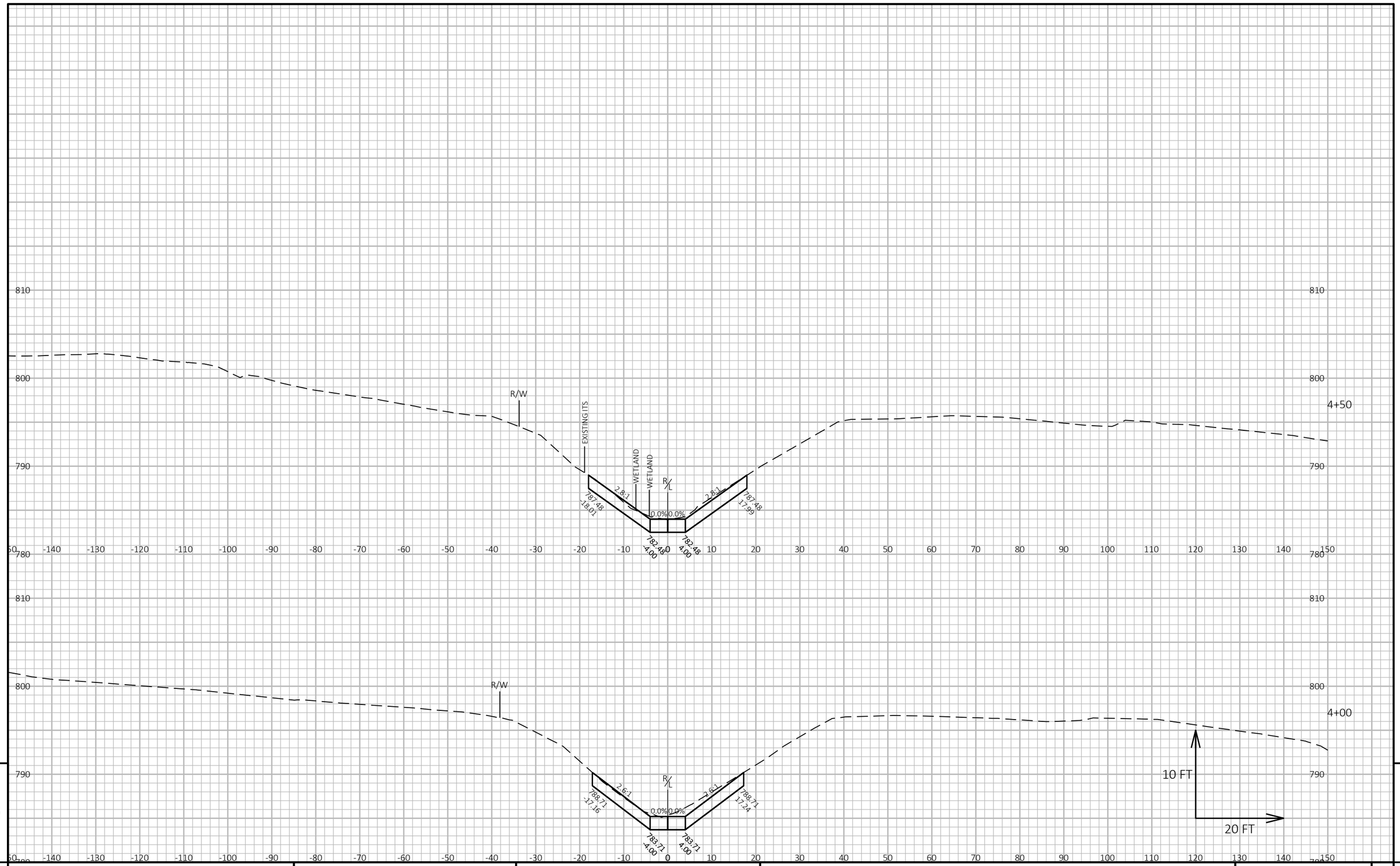
PLOT DATE : 6/28/2021 3:28 PM

PLOT BY : JOHANSEN, AMANDA A

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

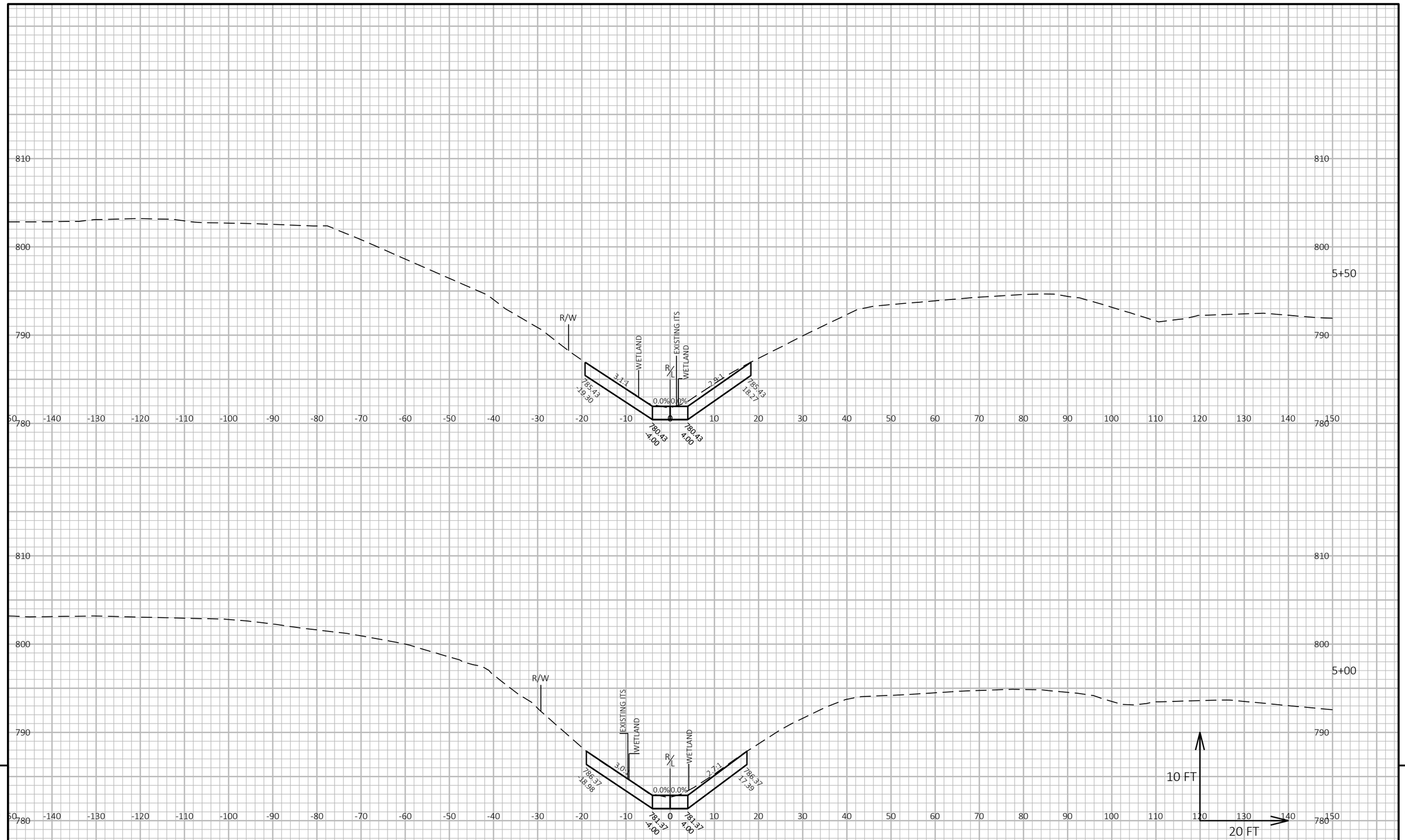
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 542	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 4

PLOT DATE : 6/28/2021 3:34 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



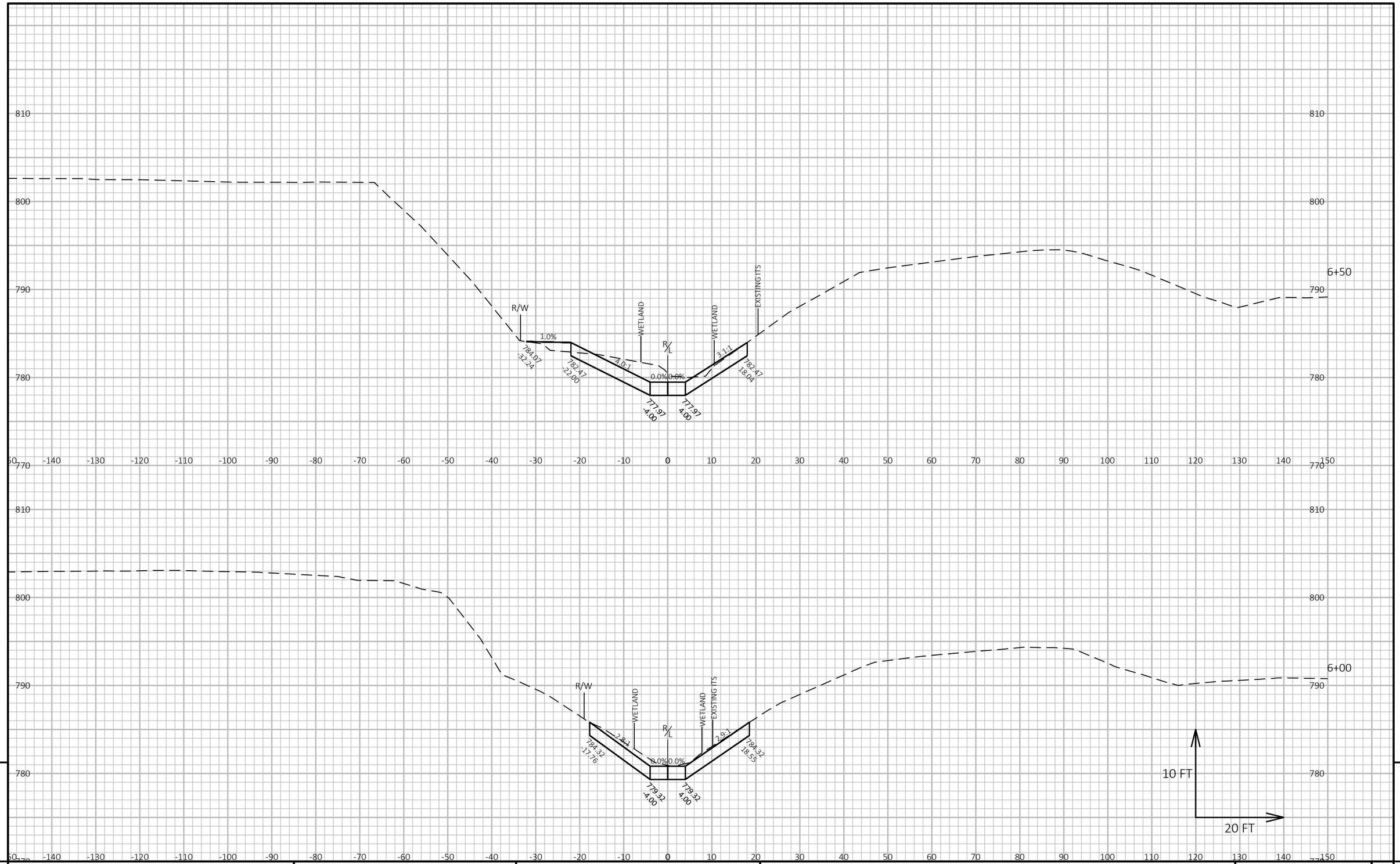
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 543	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 5

PLOT DATE : 6/28/2021 3:37 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

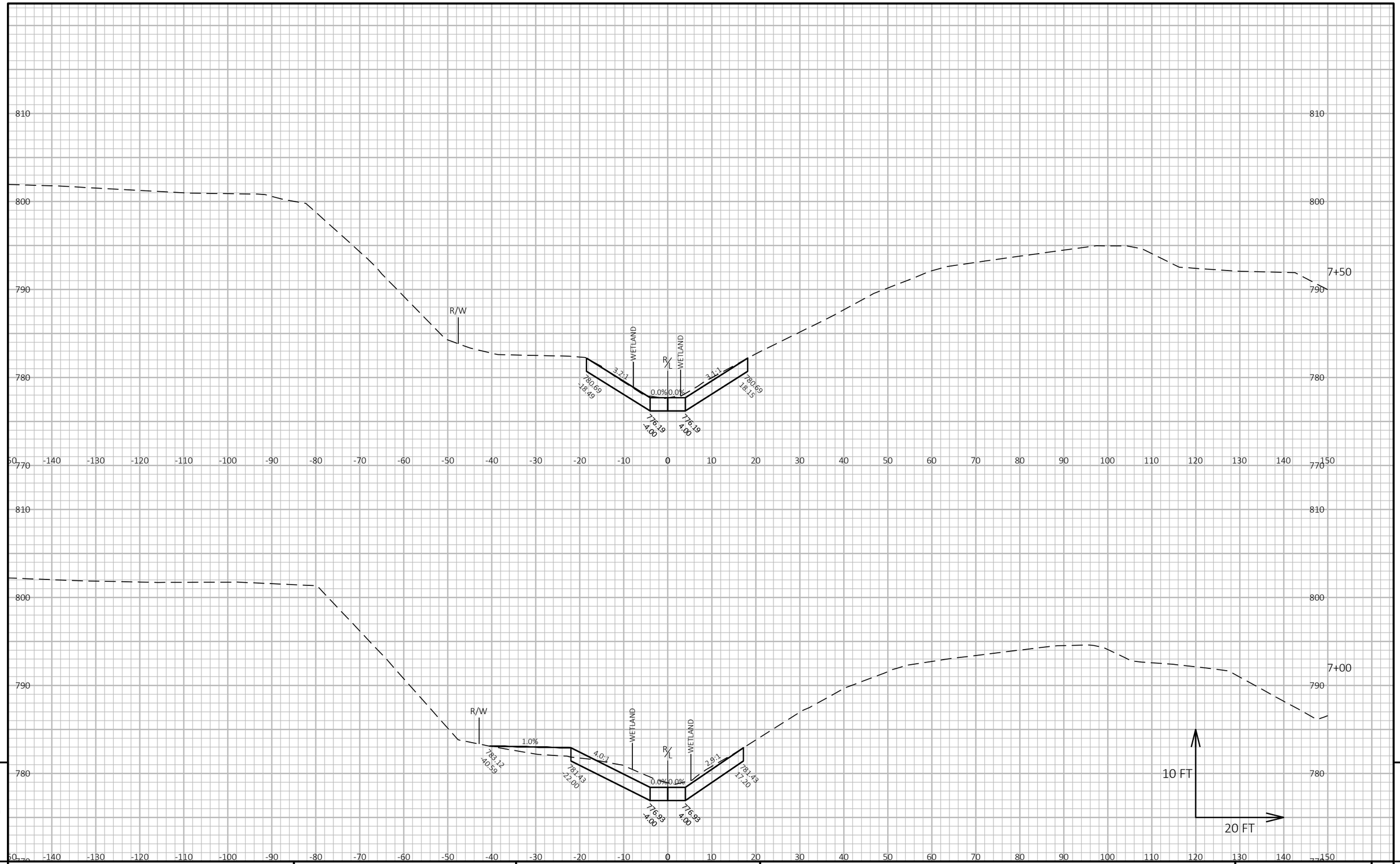
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 544	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 6

PLOT DATE : 6/28/2021 3:47 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



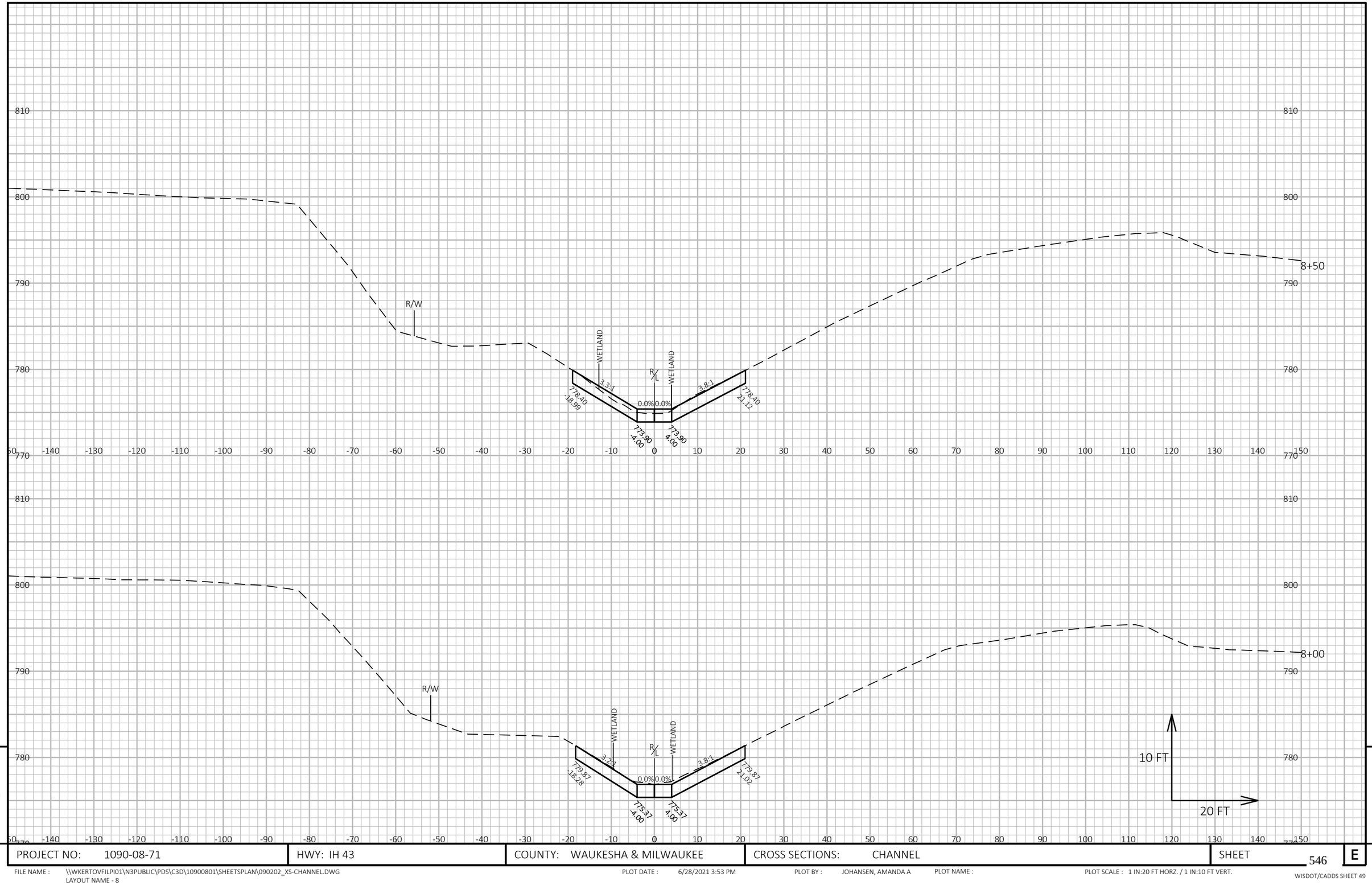
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 545	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 7

PLOT DATE : 6/28/2021 3:51 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

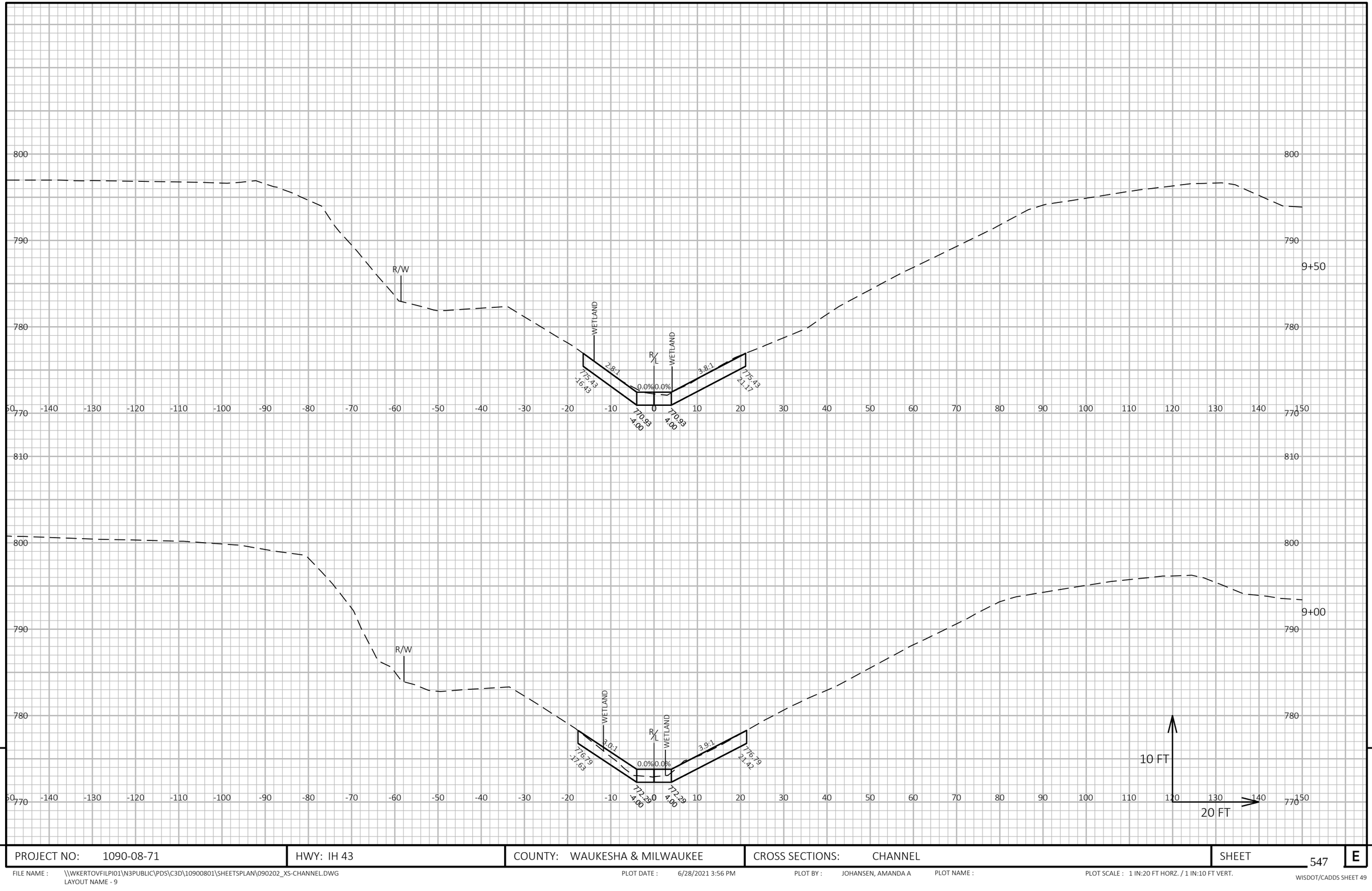
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 546	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 8

PLOT DATE : 6/28/2021 3:53 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



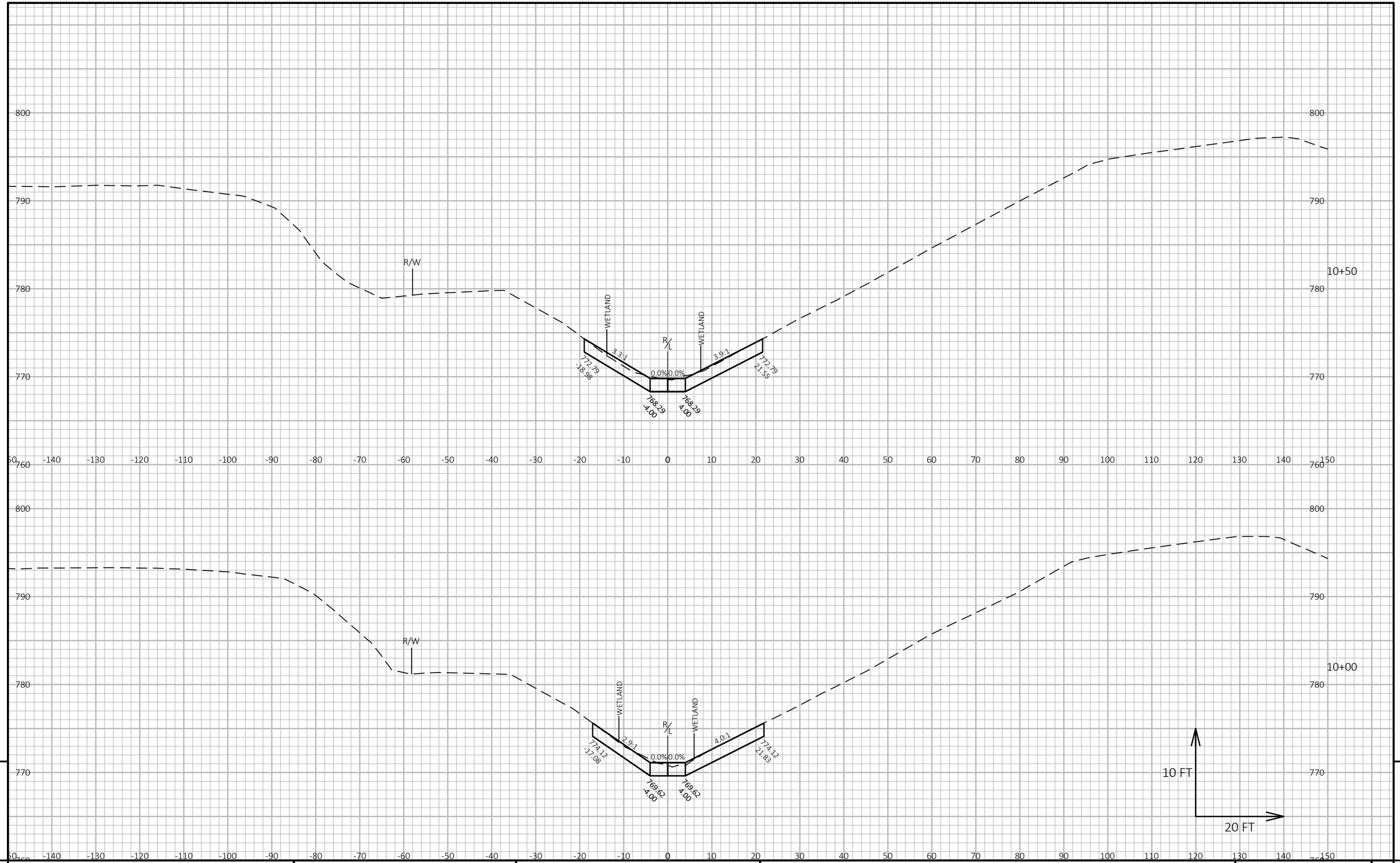
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 547	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 9

PLOT DATE : 6/28/2021 3:56 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

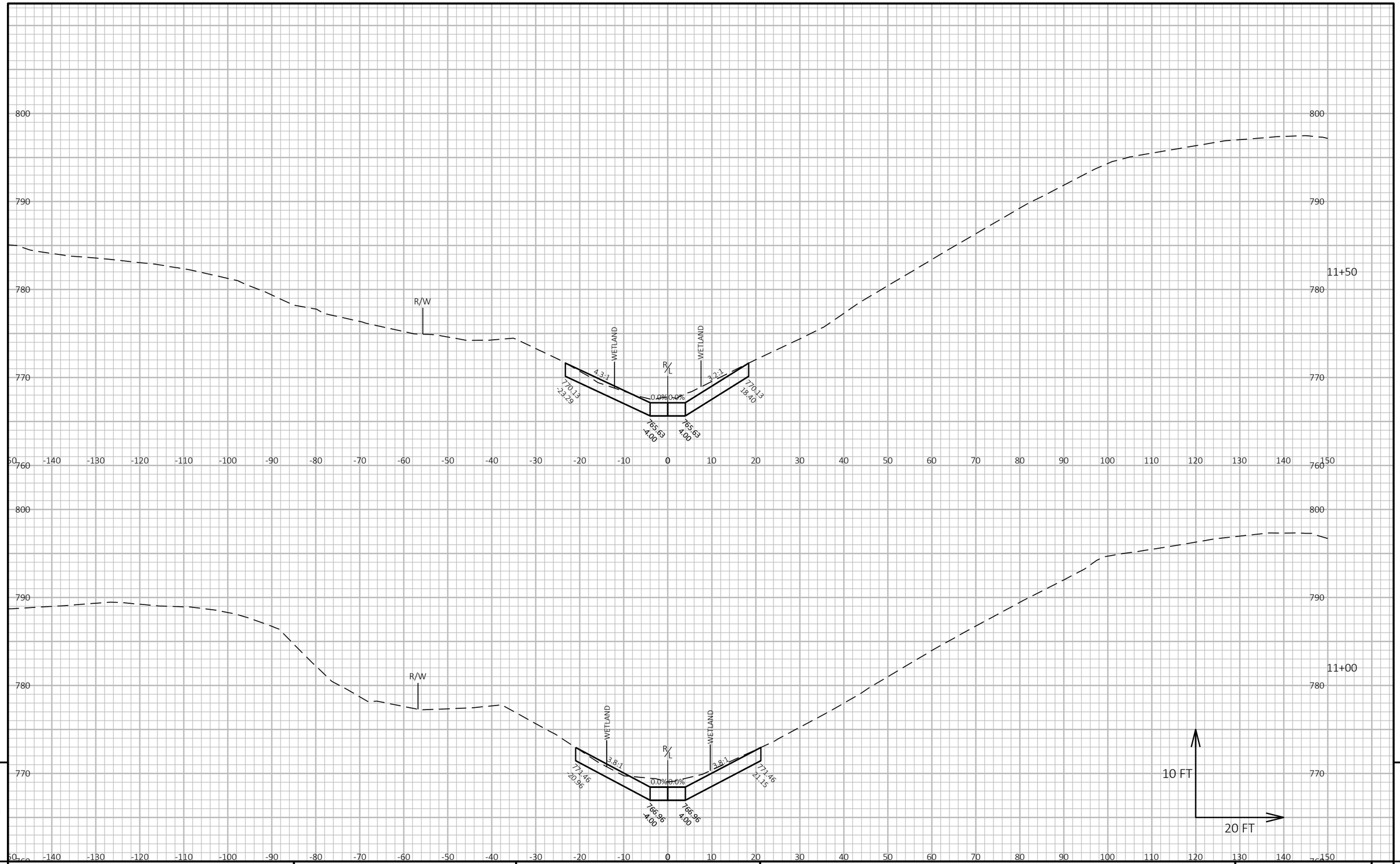
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 548	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 10

PLOT DATE : 6/28/2021 3:58 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



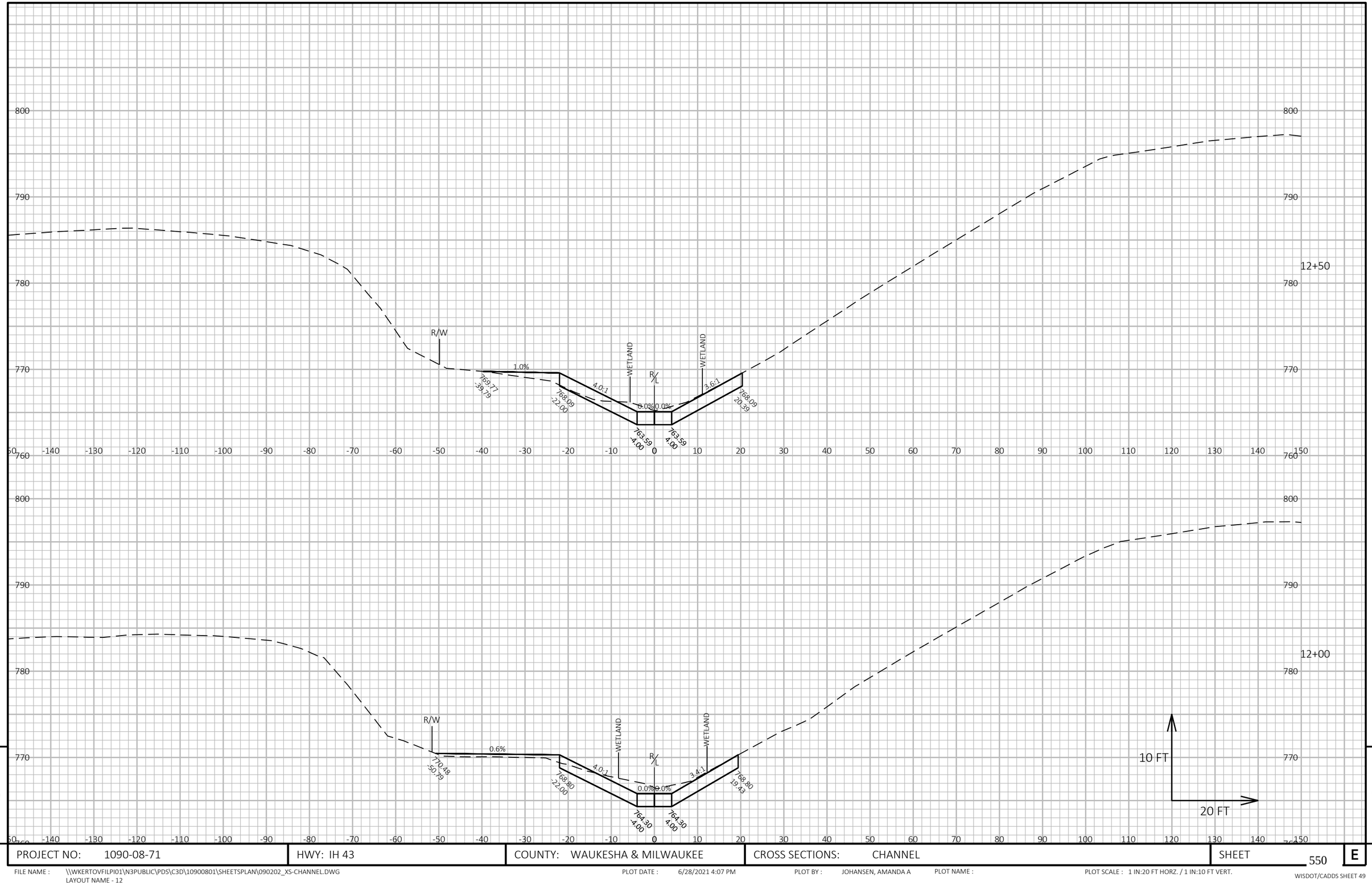
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 549	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 11

PLOT DATE : 6/28/2021 4:01 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

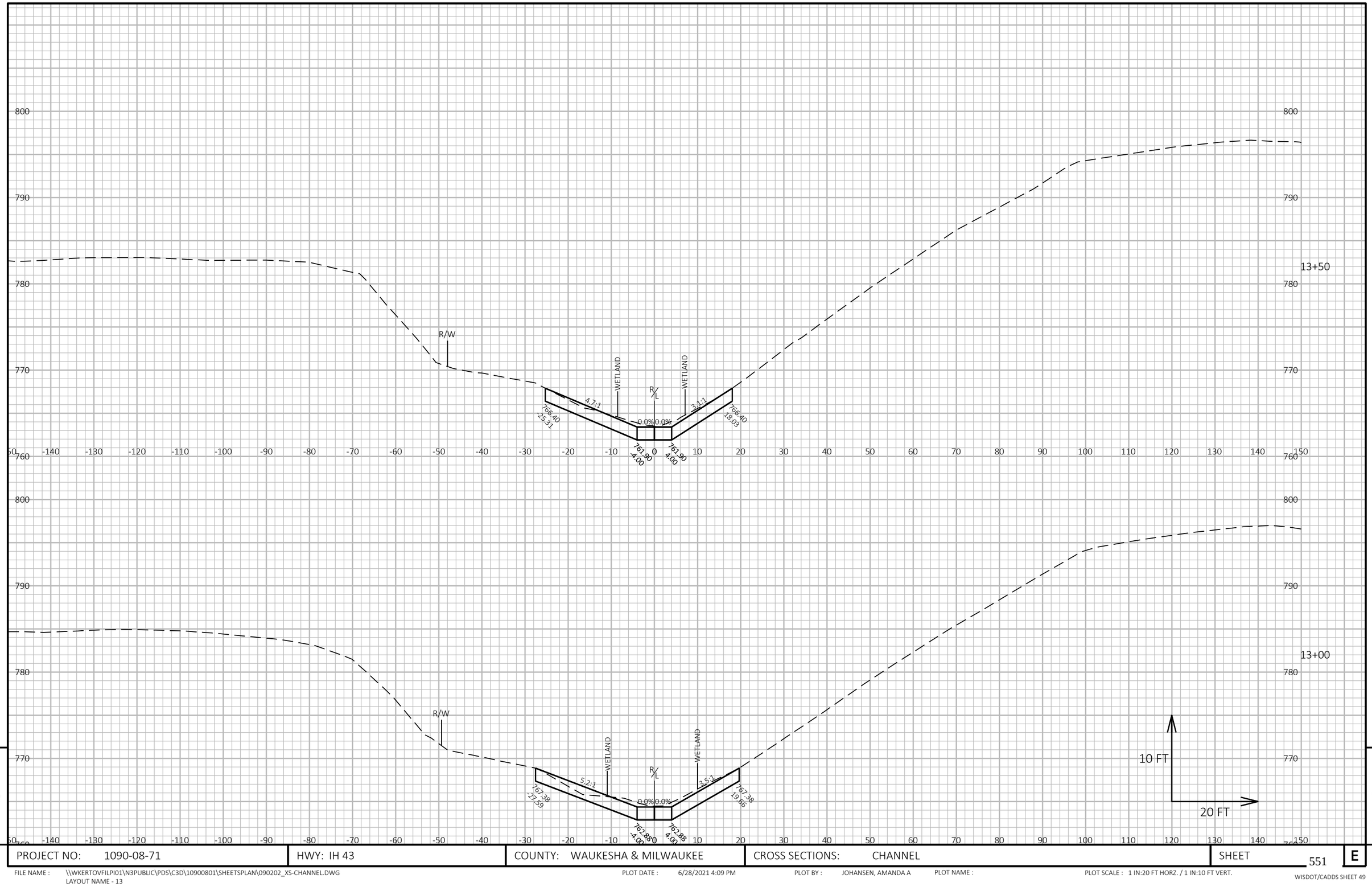
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 550	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 12

PLOT DATE : 6/28/2021 4:07 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

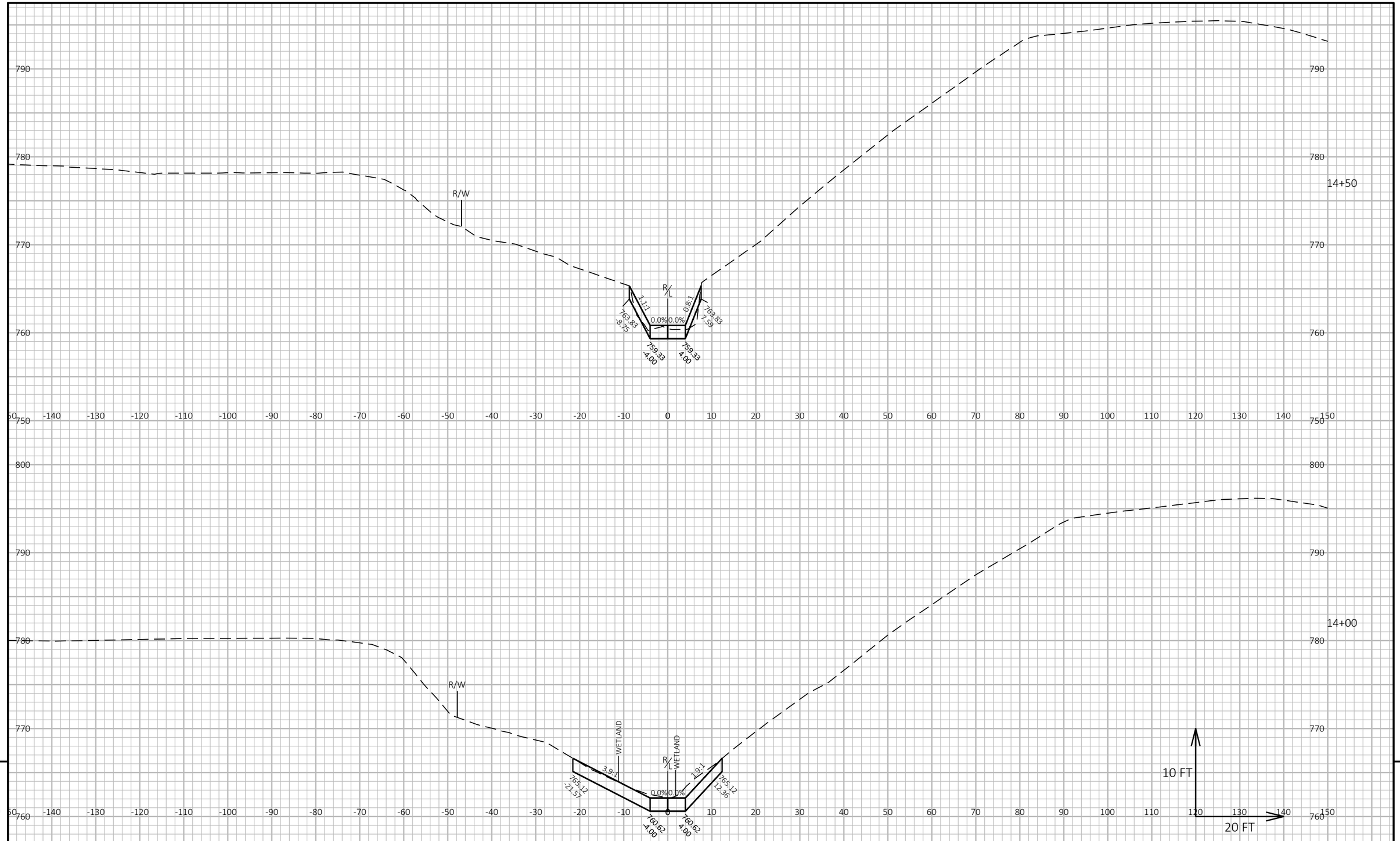
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PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 551	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 13

PLOT DATE : 6/28/2021 4:09 PM PLOT BY : JOHANSEN, AMANDA A PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1090-08-71	HWY: IH 43	COUNTY: WAUKESHA & MILWAUKEE	CROSS SECTIONS: CHANNEL	SHEET 552	E

FILE NAME : \\WKERTOVFILPI01\N3PUBLIC\PDS\C3D\10900801\SHEETSPLAN\090202_XS-CHANNEL.DWG
LAYOUT NAME - 14

PLOT DATE : 6/28/2021 4:12 PM

PLOT BY : JOHANSEN, AMANDA A

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov