PROJECT ID WITH: N/A

2652-05-70

COUNTY MILWAUKEE

WKE MARCH 2025

ORDER OF SHEETS

TOTAL SHEETS = 90

DESIGN DESIGNATION

A.D.T. (CURRENT)	=	15,800
A.D.T. (2045)	=	17,530
D.H.V.	=	N/A
D.	=	N/A
T.	=	N/A
DESIGN SPEED	=	30 MPH
ESALS	=	N/A

CONVENTIONAL SYMBOLS

PLAN

COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
CORPORATE OR CITY LIMITS
PROPERTY LINE (P.L.)
STANDARD BENCH MARK
EXISTING RIGHT OF WAY LINE (R/W)
SLOPE INTERCEPT
PROPOSED SEWER LATERAL (SIZE)
REFERENCE LINE
COMBUSTIBLE FLUIDS (CAUTION)
RAILROADS
FENCE (TYPE)
CATCH BASIN OR INLET EXISTING PROPOSED

PROFILE

GRADE LINE
ORIGINAL GROUND
GRADE ELEVATION 95.36

UTILITIES

CITY UNDERGROUND CONDUIT	CUC
ELECTRIC	E
FIBER OPTIC	FO
GAS	G
SANITARY SEWER	SAN
STORM SEWER	STO
TELEPHONE	T
WATER	W
TRAFFIC & ELECTRICAL SERVICES	TE&ES
MILWAUKEE METRO SEWERAGE DIST	MMSD
FIRE & POLICE CALL BOX	
LIGHT POLE	
POWER POLE	
TELEPHONE OR TELEGRAPH POLE	
TRAFFIC SIGNAL	
TRAFFIC SIGNAL CONTROL BOX	
HYDRANT	
GAS OR WATER GATE VALVE	
MANHOLES - SEWER / UTILITY (TYPE)	
TREES - EXISTING / TO BE REMOVED	

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

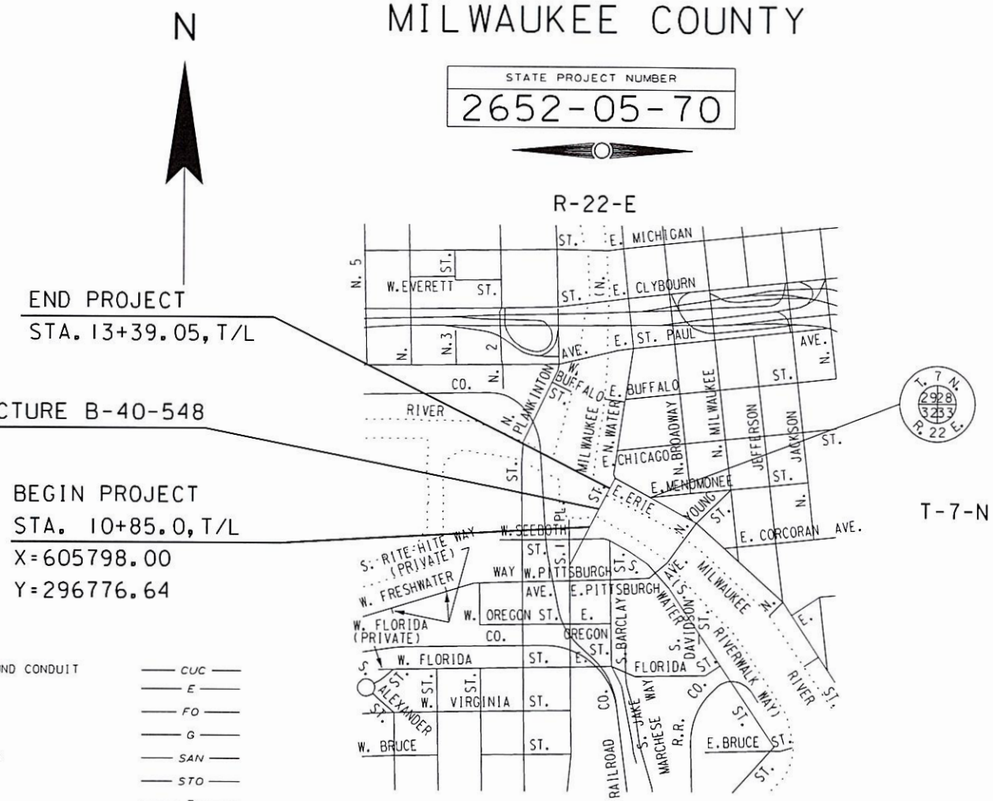
C MILWAUKEE, WATER ST

MILWAUKEE RIVER BRIDGE B40-548

LOCAL STREET

MILWAUKEE COUNTY

STATE PROJECT NUMBER
2652-05-70



LAYOUT

URBAN SCALE 1" = 1/2 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.048 MI. (URBAN)

POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), MILWAUKEE COUNTY, NAD 83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE CITY OF MILWAUKEE DATUM.

TO CONVERT ELEVATIONS SHOWN ON THIS PLAN TO NATIONAL GEODEDIC VERTICAL DATUM OF 1929, ADD 580.603 TO ELEVATIONS SHOWN ON THIS PLAN.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2652-05-70	WISC 2025315	1

Accepted For
City of Milwaukee
10/15/2024 (Date)
Commissioner of Public Works

Original Plans Prepared By

WISCONSIN
KEVIN J. MUHS
46391-6
MILWAUKEE, WI
PROFESSIONAL ENGINEER

10/9/2024 (Date)
City Engineer

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CITY OF MILWAUKEE
Designer	CITY OF MILWAUKEE
Project Manager	GREGORY HAFEMAN
Region Examiner	
Region Supervisor	AMY TAETSCH

APPROVED FOR THE DEPARTMENT

DATE: 10/16/2024
(Signature)

E

FILE NAME: W:\STR\B0101\2025 REHAB PROJECT\APPROACH\TITLE.DGN

REVISED DATE: 09-12-2024 BY SLB

GENERAL NOTES

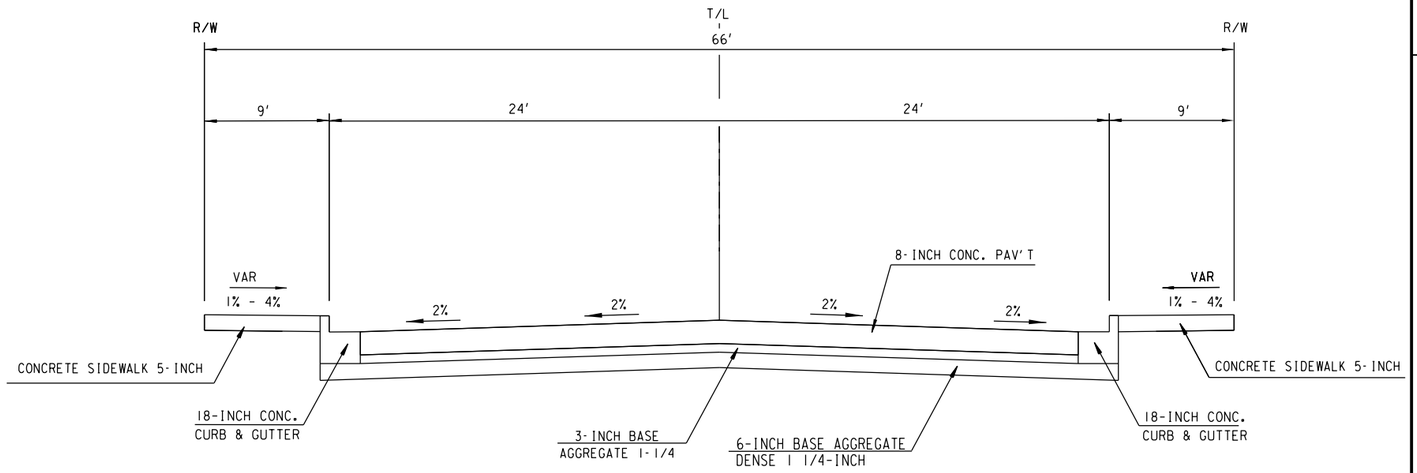
1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE.
   THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

2. THESE PLANS SHOW UTILITY FACILITIES EXISTING AT THE TIME OF THE ORIGINAL SURVEY IN OCTOBER OF 2023. CONTRACTOR IS ENCOURAGED TO CONTACT CITY OF MILWAUKEE PLANNING PERMIT SECTION AT (414) 286-2487 TO IDENTIFY ANY UTILITY FACILITIES INSTALLED AFTER THIS DATE.

3. TRAFFIC CONTROL DEVICES ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE ENGINEER.

STANDARD ABBREVIATIONS

ASPH.	- ASPHALT
B.M.	- BENCH MARK
CTR.	- CENTER
C/L	- CENTER LINE
COMB.	- COMBINED
CONC.	- CONCRETE
C.W.	- CONCRETE WALK
COR.	- CORNER
C	- CURB
EB	- EAST BOUND
ELEV.	- ELEVATION
ENT.	- ENTRANCE
EXIST.	- EXISTING
F	- FLANGE
G	- GUTTER, OR GAS
HYD.	- HYDRANT
LT.	- LEFT
MMSD	- MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
PGL	- PROFILE GRADE LINE
P/L.	- PROPERTY LINE
R OR RAD.	- RADIUS
RET.	- RETAINING
RT.	- RIGHT
R/W	- RIGHT OF WAY
TEL	- AMERITECH
TES	- TRAFFIC ENGINEERING, AND ELECTRICAL SERVICES
T/L	- TRANSIT LINE
WB	- WEST BOUND
WEP	- WISCONSIN ELECTRIC POWER



TYPICAL EXISTING SECTION
N WATER STREET
(LOOKING NORTH)
STA 10+85.00 - STA 11+00
STA 13+24.05 - STA 13+39.05

ORDER OF SECTION 2 SHEETS
GENERAL NOTES
UTILITY CONTACTS
PROJECT OVERVIEW
PAVEMENT MARKING
TRAFFIC CONTROL
ALIGNMENT PLAN

UTILITY CONTACTS

CITY OF MILWAUKEE, CUC
KAREN ROGNEY
841 N. BROADWAY
MILWAUKEE, WI 53202
PHONE: 414-286-3243
EMAIL: KROGNEY@MILWAUKEE.GOV

CITY OF MILWAUKEE, SEWERS
ROBERT SELEEN
841 N. BROADWAY
MILWAUKEE, WI 53202
PHONE: 414-286-2465
EMAIL: RSELEE@MILWAUKEE.GOV

CITY OF MILWAUKEE, WATER WORKS
JOSH IWEN
841 N. BROADWAY, ROOM 409
MILWAUKEE, WI 53202
PHONE: 414-286-3640
EMAIL:JOSHUA.IWEN@MILWAUKEE.GOV

MIDWEST FIBER NETWORKS
SHEILA BONNIWELL
REMOTE OFFICE
PHONE: 414-672-2729
EMAIL: SBONNIWELL@MIDWESTFIBERNETWORKS.COM

MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
MICHAEL LEE
260 W. SEEBOTH STREET
MILWAUKEE, WI 53204-1446
PHONE: 414-272-5100
EMAIL: MLEE@MMSD.COM

TDS METROCOM
Richard Trgovec
525 JUNCTION ROAD
MADISON, WI 53717
EMAIL: RICHARD.TRGOVEC@TDSTELECOM.COM

WE ENERGIES – ALL CORRESPONDENCE
SYDNEY BATCHELOR
500 S. 116TH ST.
WEST ALLIS, WI 53214
PHONE: 414-221-5617
EMAIL: WE-UTILITY-RELOCATIONS@WE-ENERGIES.COM

WINDSTREAM
LORI KETTER
969 WAUBE LANE
OSHKOSH, WI 54904
PHONE: 920-410-6902
EMAIL: LORI.KETTER@WINDSTREAM.COM

OTHER CONTACTS

CITY OF MILWAUKEE, STREET LIGHTING
LISA HICKMAN
841 N. BROADWAY
MILWAUKEE, WI. 53202
PHONE: 414-286-3270
EMAIL: LHICKM@ MILWAUKEE.GOV

CITY OF MILWAUKEE, STRUCTURE SECTION
JONATHAN THOMAS, P.E.
841 NORTH BROADWAY, ROOM 902
MILWAUKEE, WI 53202
PHONE: 414-286-0463
EMAIL: JDTHOMA@MILWAUKEE.GOV

CITY OF MILWAUKEE, TRAFFIC SIGNALS
SCOTT REINBACHER
841 NORTH BROADWAY
MILWAUKEE, WI 53202
PHONE: 414-286-3232
EMAIL: SREINB@MILWAUKEE.GOV

CITY OF MILWAUKEE, UTILITY COORDINATOR
MOHAMMAD O. ABULUGHOD
CONSTRUCTION UTILITY COORDINATOR
841 NORTH BROADWAY, RM 710
DIRECT LINE: 414-708-0645
EMAIL: MABULU@MILWAUKEE.GOV

MILWAUKEE COUNTY TRANSIT SYSTEM
ARMOND SENSABAUGH
1942 N. 17TH ST.
MILWAUKEE, WI 53205
PHONE: 414-343-1728
EMAIL: ASENSABAUGH@MCTS.ORG

DAVID LOCHER
TRANSPORTATION MANAGER (BUS STOPS)
1942 N 17TH ST
MILWAUKEE, WI 53205
PHONE: 414-343-1727

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
ROB MERRY
CHIEF SURVEYOR
P.O. BOX 1607
WAUKESHA, WI 53187-4289
PHONE: 262-953-4289

ANDY TRAEGER
W239 N1812 ROCKWOOD DRIVE
WAUKESHA, WI 53187
PHONE: 262-547-6721
EMAIL: :ATRAEGER@SEWRPC.ORG

WISCONSIN DEPT. OF NATURAL RESOURCES
RYAN PAPPAS
1027 W. SAINT PAUL AVENUE
MILWAUKEE, WI 53233
PHONE: 414-750-7495
EMAIL:RYAN.PAPPAS@WISCONSIN.GOV

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

2

STATE PROJECT NUMBER 2652-05-70	HWY: N WATER ST	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SCALE FEET 0' 100'	SHEET NO: 4	E

FILENAME: W:\STR\B0101\2025 REHAB PROJECT\APPROACH\OVERVIEW.DGN

REVISED DATE: 08-28-2024 EM

2

US ARMY CORPS CONCRETE MONUMENT
WITH BRASS CAP (NO #)
@ SOUTH END, WEST SIDE BRIDGE
CAP ELEV. = 15.39

CITY STANDARD #1101 ARMY
CORP MON (1947)
ELEV. = 6.50

US ARMY CORPS CONCRETE MONUMENT
WITH BRASS CAP #B7-1
@ NORTH END, WEST SIDE BRIDGE
CAP ELEV. = 15.29

N

AREA 1 - HAZMAT SOILS - PAH CONTAMINATION
1 - 3 FT BELOW GROUND SURFACE
FROM CENTER LINE TO PROJECT LIMITS LEFT
STA. 10+00 - STA. 11+00

AREA 1 - HAZMAT SOILS - PETROLEUM & METAL
CONTAMINATION EXCAVATION 30 TONS (17.5 CY)

AREA 2 - HAZMAT SOILS - PETROLEUM & METAL
CONTAMINATION EXCAVATION 31 TONS (18 CY)

AREA 2 - HAZMAT SOILS - PAH CONTAMINATION
1 - 3 FT BELOW GROUND SURFACE
FROM CENTER LINE TO PROJECT LIMITS LEFT
STA. 13+25 - STA. 14+25

428-0210-110
100 - 106 E. SEEBOTH ST.

392-0232-0
BLD COR 111.20
105 N. WATER ST.

R/W
P/L
SEAWALL
CONC CURB
CONC SLOPE
SEA WALL
ROLL FACE CURB
BEGIN ROLL FACE
ARM BOX
TOP
ALP
2.67' ENT
FLOOR
MONUMENT
SECTION LINE
APEX WEST STEEL BELOW DECK
APEX EAST STEEL BELOW DECK
WATER ELV
HWM
OHWM
3' ENT
WALL MOUNTED STAND PIPE
CLP
WEP
TES
WAT
SOUTH BDP
NORTH END BRIDGE
NORTH EDGE
ASPHALT
TRACK ZONE
CRACK
SEE BRIDGE ID B-40-548
MIS
VAULT
CUC
CONC CURB PLANTER
CONC RAMP
428-0608 THRU 428-0741
130 S. WATER ST.
159.15
TOP WALL
CSM 7834
3.35' ENT
OPERATION TOWER
397-8007
BRIDGE HOUSE
TRANSFORMER PAD
WOOD DECK W/FENCE RAIL
102-106 N. WATER ST.
126.50
397-0561 THRU 397-0643
NOS

+50 10 +50 11 +50 12 +50 13 +50 14 +50

BEGIN PROJECT
STA. 10+85.00 T/L

END PROJECT
STA. 13+39.05 T/L

LEGEND

EXCAVATED HAZMAT SOILS

HAZMAT SOILS WITHIN VICINITY

STATE PROJECT NUMBER 2652-05-70	HWY: N WATER ST	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS- HAZMAT SOILS	SCALE FEET 0' 40'	SHEET NO: 5	E

FILENAME: W:\STR\B0101\2025 REHAB PROJECT\APPROACH\CONTAMINATION\9-15.DGN

REVISED DATE: 08-28-2024 EM

END PROJECT
STA. 13+39.05

BEGIN PROJECT
STA. 10+85, T/L

E. ERIE ST.

S. WATER ST.

N. WATER ST.

N

Ⓐ PAVEMENT MARKING EPOXY, 4-INCH WHITE (10' DASH, 30' GAP)
Ⓑ PAVEMENT MARKING EPOXY, 4-INCH DOUBLE YELLOW
Ⓒ PAVEMENT MARKING EPOXY STOPLINE, 24-INCH WHITE

STATE PROJECT NUMBER 2652-05-70	HWY: N. WATER ST.	COUNTY: MILWAUKEE	PAVEMENT MARKING	SCALE FEET 0' 60'	SHEET NO: 6	E

FILENAME: W:\STR\B0101\2025 REHAB PROJECT\TRAFFIC & PAVEMARK\2652-05-70 - WATER ST BRIDGE - PAVEMARK.DGN

REVISED DATE: 08-29-2024 BY CP

STAGE I

G20-2
END ROAD WORK
36"X18"

RAILROAD
SOO LINE

S. IST ST.

350' 350' 500' 180'

WO20-1A ROAD WORK AHEAD 36"X36"
PLACE AT SOUTHEAST CORNER OF S. 2ND ST. & W. PITTSBURGH AVE.

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

SIDEWALK CLOSED
30"X24"
R9-9

WO1-4R
36"X36"

WO20-5A LEFT LANE CLOSED AHEAD 36"X36"

WO20-1A ROAD WORK AHEAD 36"X36"

WO4-2L
36"X36"

WO1-6R
24"X48"

R11-2L
LANE CLOSED
48"X30"

E. OREGON ST.

E. PITTSBURGH AVE. (STH 32)

S. WATER ST.

S. BARCLAY ST.

LEGEND

- DRUMS W/LIGHTS 30' SPACING
- TUBULAR MARKERS 25' SPACING
- TYPE III BARRICADES
- TYPE III BARRICADES W/ SIGN
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE
- WORK AREA
- DIRECTION OF TRAFFIC
- (A) TEMPOARY REMOVABLE TAPE, 4" WHITE
- (B) TEMPORARY REMOVABLE TAPE, 4" DOUBLE YELLOW

NOTE: DO NOT PLACE ANY ITEMS WITHIN 50 FEET OF RAILROAD RIGHT-OF-WAY

SHEET 1 OF 2

STATE PROJECT NUMBER 2652-05-70	HWY: N. WATER ST.	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE I	SCALE FEET 0' 80'	SHEET NO: 7	E

FILENAME: W:\STR\B0101\2025 REHAB PROJECT\TRAFFIC & PAVEMARK\2652-05-70 - WATER ST BRIDGE - TRAFFIC - STAGE I.DGN

REVISED DATE: 08-28-2024 BY CP

STAGE I

N.

WATER ST.

E. ERIE ST.

E. CHICAGO ST.

BUFFALO ST.

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

WO1-6L
24"X48"

120'
90'
170'
80'
60'
350'
350'
350'

SIDEWALK CLOSED
30"X24"
R9-9

R11-2L
LANE CLOSED
48"X30"

R11-2L
LANE CLOSED
48"X30"

WO20-1A
ROAD WORK AHEAD
36"X36"

WO20-1A
ROAD WORK AHEAD
36"X36"

WO20-1A
ROAD WORK AHEAD
36"X36"

WO4-2R
36"X36"

WO20-5A
RIGHT LANE CLOSED AHEAD
36"X36"

WO20-1A
ROAD WORK AHEAD
36"X36"

G20-2
END ROAD WORK
36"X18"

WO20-1A
ROAD WORK AHEAD
36"X36"

LEGEND

- DRUMS W/LIGHTS 30' SPACING
- TUBULAR MARKERS 25' SPACING
- TYPE III BARRICADES
- TYPE III BARRICADES W/ SIGN
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE
- WORK AREA
- DIRECTION OF TRAFFIC
- (A) TEMPOARY REMOVABLE TAPE, 4" WHITE
- (B) TEMPORARY REMOVABLE TAPE, 4" DOUBLE YELLOW

NOTE: DO NOT PLACE ANY ITEMS WITHIN 50 FEET OF RAILROAD RIGHT-OF-WAY

SHEET 2 OF 2

STATE PROJECT NUMBER 2652-05-70	HWY: N. WATER ST.	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE I	SCALE FEET 0' 80'	SHEET NO: 8	E

FILENAME: W:\STR\BO101\2025 REHAB PROJECT\TRAFFIC & PAVEMARK\2652-05-70 - WATER ST BRIDGE - TRAFFIC - STAGE I.DGN

REVISED DATE: 08-28-2024 BY CP

STAGE 2

G20-2
END ROAD WORK
36"X18"

WO20-1A
ROAD WORK AHEAD
36"X36"

PLACE AT SOUTHEAST CORNER OF S. 2ND ST. & W. PITTSBURGH AVE.

350' 350' 350' 90' 30'
90'

PLACE PCMS WARNING OF TRAFFIC PATTERN CHANGE A MINIMUM OF 7 BUSINESS DAYS PRIOR TO N. WATER ST. TRAFFIC SWITCH.

WO20-1A
ROAD WORK AHEAD
36"x36"

WO20-5A
RIGHT LANE CLOSED AHEAD
36"x36"

WO4-2R
30"X30"

WO1-6L
24"X48"

R3-20R
BEGIN RIGHT TURN LANE
24"x36"

R11-2L
LANE CLOSED
48"x30"

WO1-4L
36"X36"

R11-2L
LANE CLOSED
48"x30"

WO20-1A
ROAD WORK AHEAD
36"X36"

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

WO1-6L
24"X48"

SIDEWALK CLOSED
30"X24"
R9-9

S. IST ST.
S. IST PL.
E. OREGON ST.
E. PITTSBURGH AVE. (STH 32)
S. WATER ST.
S. BARCLAY ST.
S. BARCLAY ST.

LEGEND

- DRUMS W/LIGHTS 30' SPACING
- TUBULAR MARKERS 25' SPACING
- TYPE III BARRICADES
- TYPE III BARRICADES W/ SIGN
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE
- WORK AREA
- DIRECTION OF TRAFFIC
- (A) TEMPOARY REMOVABLE TAPE, 4" WHITE
- (B) TEMPORARY REMOVABLE TAPE, 4" DOUBLE YELLOW

NOTE: DO NOT PLACE ANY ITEMS WITHIN 50 FEET OF RAILROAD RIGHT-OF-WAY

SHEET 1 OF 2

STATE PROJECT NUMBER 2652-05-70	HWY: N. WATER ST.	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SCALE FEET 0' 80'	SHEET NO: 9	E

FILENAME: W:\STR\B0101\2025 REHAB PROJECT\TRAFFIC & PAVEMARK\2652-05-70 - WATER ST BRIDGE - TRAFFIC - STAGE 2.DGN

REVISED DATE: 08-28-2024 BY CP

STAGE 2

SIDEWALK CLOSED

30"X24"
R9-9

W01-4R
36"X36"

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

R11-2L
LANE CLOSED
48"x30"

W04-2L
36"X36"

W20-55A
LEFT LANE CLOSED AHEAD
36"X36"

W20-1A
ROAD WORK AHEAD
36"X36"

PLACE PCMS WARNING OF TRAFFIC PATTERN CHANGE A MINIMUM OF 7 BUSINESS DAYS PRIOR TO N. WATER ST. TRAFFIC SWITCH.

G20-2
END ROAD WORK
36"X18"

W20-1A
ROAD WORK AHEAD
36"X36"

W20-1A
ROAD WORK AHEAD
36"X36

WATER

E. ERIE ST.

CHICAGO ST.

E. BUFFALO ST.

120'
90'
180'
350'
350'
350'
50'

LEGEND

- DRUMS W/LIGHTS 30' SPACING
- TUBULAR MARKERS 25' SPACING
- TYPE III BARRICADES
- TYPE III BARRICADES W/ SIGN
- SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE
- WORK AREA
- DIRECTION OF TRAFFIC
- (A) TEMPOARY REMOVABLE TAPE, 4" WHITE
- (B) TEMPORARY REMOVABLE TAPE, 4" DOUBLE YELLOW

NOTE: DO NOT PLACE ANY ITEMS WITHIN 50 FEET OF RAILROAD RIGHT-OF-WAY

SHEET 2 OF 2

STATE PROJECT NUMBER 2652-05-70	HWY: N. WATER ST.	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2	SCALE FEET 0' 80'	SHEET NO: 10	E

FILENAME: W:\STR\B0101\2025 REHAB PROJECT\TRAFFIC & PAVEMARK\2652-05-70 - WATER ST BRIDGE - TRAFFIC - STAGE 2.DGN

REVISED DATE: 08-28-2024 BY CP

LEGEND

TYPE III BARRICADES

TYPE III BARRICADES W/ SIGN

SIGNS BANDED TO TRAFFIC CONTROL DEVICE OR POLE

WORK AREA

DETOUR ROUTE

PCMS

NOTE:

ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS SHALL BE BANDED TO EXISTING UTILITY POLES UNLESS OTHERWISE NOTED.

LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

PLACE "ROAD CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER.

SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

DO NOT PLACE ANY ITEMS WITHIN 50 FEET OF RAILROAD RIGHT-OF-WAY

W020-3A ROAD CLOSED AHEAD 36"X36"

PLACE PCMS WARNING OF TRAFFIC PATTERN CHANGE A MINIMUM OF 7 BUSINESS DAYS PRIOR TO N. WATER ST. BRIDGE CLOSURE.

W020-2A DETOUR AHEAD 36"X36"

DETOUR 24"X12" M04-8
SOUTH 24"X12" M3-1
N WATER ST W016-8P 8"X37"
21"X21" M06-1L

END DETOUR 24"X18" M4-8A

DETOUR 24"X12" M04-8
NORTH 24"X12" M3-1
N WATER ST W016-8P 8"X37"
21"X21" M06-1R

R11-2B BRIDGE OUT 48"X30"

R11-6B BRIDGE OUT AHEAD LOCAL TRAFFIC ONLY 60"X80"

PLACE PCMS WARNING OF TRAFFIC PATTERN CHANGE A MINIMUM OF 7 BUSINESS DAYS PRIOR TO N. WATER ST. BRIDGE CLOSURE.

W. ST. PAUL AVE. · E. ST. PAUL AVE. · N. 3RD ST. · N. 2ND ST. · N. TEL A PHILLIPS AVE. · N. BROADWAY · N. WATER ST. · N. MILWAUKEE ST. · N. JEFFERSON ST. · N. JACKSON ST. · N. VAN BUREN ST. · W. BUFFALO ST. · E. BUFFALO ST. · N. PLANKINTON AVE. · 300' LINE RAILROAD · W. CHICAGO ST. · E. CHICAGO ST. · E. ERIE ST. · E. MENOMONEE ST. · N. YOUNG ST. (STH 32) · E. CORCORAN ST. · N. HARBOR DR. · W. SEEBOTH ST. · E. SEEBOTH ST. · S. 1ST PL. · S. 1ST ST. · S. WATER ST. · BARCLAY ST. · W. PITTSBURGH AVE. · E. PITTSBURGH AVE. (STH 32) · W. FRESHWATER WAY · S. 3RD ST. · S. 2ND ST. · W. OREGON ST. · E. OREGON ST. · SOO LINE RAILROAD · W. FLORIDA ST. · E. FLORIDA ST. · E. SUMMERFEST PL. · N. JACKSON ST. · E. ERIE ST. · I-794

STATE PROJECT NUMBER 2652-05-70	HWY: N. WATER ST.	COUNTY: MILWAUKEE	DETOUR - STAGE 3	SCALE FEET 0' 300'	SHEET NO: 11	E

FILENAME: W:\STR\B0101\2025 REHAB PROJECT\TRAFFIC & PAVEMARK\PRINT\2652-05-70 - WATER ST BRIDGE - DETOUR AA.DGN

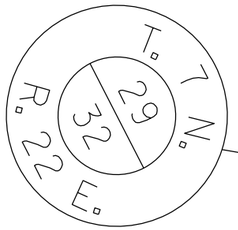
REVISED DATE: 08-29-2024 BY CP

STATE PROJECT NUMBER 2652-05-70	HWY: N. WATER ST.	COUNTY: MILWAUKEE	PED & BIKE DETOUR - STAGES 3	SCALE FEET 0' 150'	SHEET NO: 12	E

FILENAME: W:\STR\BO101\2025 REHAB PROJECT\TRAFFIC & PAVEMARK\PRINT\2652-05-70 - WATER ST BRIDGE - PED & BIKE DETOUR-PRINT.DGN

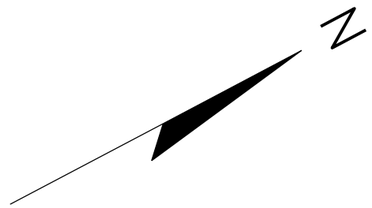
REVISED DATE: 08-29-2024 BY CP

2



TOWNSHIP 6 NORTH, RANGE 22 EAST
MILWAUKEE COUNTY, WISCONSIN
CONCRETE MONUMENT W/ SEWRPC BRASS CAP
SECTION CORNER COORDINATE REFERENCED TO
WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS),
MILWAUKEE COUNTY

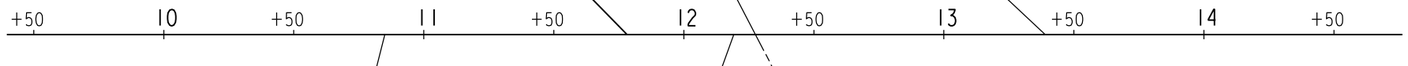
(Y) NORTH: 296,915.13
(X) EAST: 603,650.77



QTR. SEC. LINE

TRANSIT LINE & C/L OF NORTH WATER STREET
OVER MILWAUKEE RIVER

END PROJECT
STA. 13+39.05, T/L



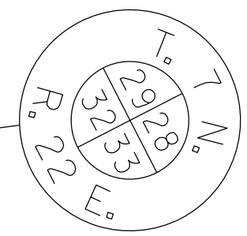
BEGIN PROJECT
STA. 10+85.0, T/L
X=605798.00
Y=296776.64

N88°52'29"E
2644.56'

BRIDGE ID B-40-548

TOWNSHIP 6 NORTH, RANGE 22 EAST
MILWAUKEE COUNTY, WISCONSIN
CONCRETE MONUMENT W/ SEWRPC BRASS CAP
SECTION CORNER COORDINATE REFERENCED TO
WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS),
MILWAUKEE COUNTY

(Y) NORTH: 296,900.30
(X) EAST: 606,295.31



STATE PROJECT NUMBER 2652-05-70	HWY: N WATER ST	COUNTY: MILWAUKEE	ALIGNMENT	SCALE FEET 0' 60'	SHEET NO: 13	E

FILENAME: W:\STR\B0101\2025 REHAB PROJECT\APPROACH\ALIGNMENT.DGN

REVISED DATE: 08-28-2024 EM

Estimate Of Quantities

2652-05-70

Line	Item	Item Description	Unit	Total	Qty
0002	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 001. B-40-548	EACH	1.000	1.000
0004	204.0100	Removing Concrete Pavement	SY	161.000	161.000
0006	205.0100	Excavation Common	CY	32.000	32.000
0008	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	61.000	61.000
0010	206.1001	Excavation for Structures Bridges (structure) 001. B-40-548	EACH	1.000	1.000
0012	210.1500	Backfill Structure Type A	TON	172.000	172.000
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	65.000	65.000
0016	415.0410	Concrete Pavement Approach Slab	SY	161.000	161.000
0018	416.0620	Drilled Dowel Bars	EACH	96.000	96.000
0020	502.2000	Compression Joint Sealer Preformed Elastomeric (width) 1 1/4-Inch	LF	120.000	120.000
0022	502.3200	Protective Surface Treatment	SY	404.000	404.000
0024	502.3215	Protective Surface Treatment Reseal	SY	142.000	142.000
0026	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	1,050.000	1,050.000
0028	506.0605	Structural Steel HS	LB	470.000	470.000
0030	509.0301	Preparation Decks Type 1	SY	3.000	3.000
0032	509.0302	Preparation Decks Type 2	SY	2.000	2.000
0034	509.0310.S	Sawing Pavement Deck Preparation Areas	LF	60.000	60.000
0036	509.1000	Joint Repair	SY	28.000	28.000
0038	509.1200	Curb Repair	LF	9.000	9.000
0040	509.1500	Concrete Surface Repair	SF	148.000	148.000
0042	509.2100.S	Concrete Masonry Deck Repair	CY	9.000	9.000
0044	509.9020.S	Epoxy Crack Sealing	LF	535.000	535.000
0046	509.9025.S	Epoxy Injection Crack Repair	LF	199.000	199.000
0048	509.9026.S	Cored Holes 2-Inch Diameter	EACH	4.000	4.000
0050	516.0500	Rubberized Membrane Waterproofing	SY	34.000	34.000
0052	517.0901.S	Preparation and Coating of Top Flanges (structure) 001. B-40-548	EACH	1.000	1.000
0054	517.1801.S	Structure Repainting Recycled Abrasive (structure) 001. B-40-548	EACH	1.000	1.000
0056	517.4501.S	Negative Pressure Containment and Collection of Waste Materials (structure) 001. B-40-548	EACH	1.000	1.000
0058	517.6001.S	Portable Decontamination Facility	EACH	1.000	1.000
0060	619.1000	Mobilization	EACH	1.000	1.000
0062	628.7015	Inlet Protection Type C	EACH	1.000	1.000
0064	642.5201	Field Office Type C	EACH	1.000	1.000
0066	643.0300	Traffic Control Drums	DAY	3,380.000	3,380.000
0068	643.0420	Traffic Control Barricades Type III	DAY	2,208.000	2,208.000
0070	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	51.000	51.000
0072	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	51.000	51.000
0074	643.0705	Traffic Control Warning Lights Type A	DAY	2,208.000	2,208.000
0076	643.0715	Traffic Control Warning Lights Type C	DAY	3,380.000	3,380.000
0078	643.0900	Traffic Control Signs	DAY	5,048.000	5,048.000
0080	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0082	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	9,890.000	9,890.000
0084	643.5000	Traffic Control	EACH	1.000	1.000
0086	646.1020	Marking Line Epoxy 4-Inch	LF	650.000	650.000
0088	646.9000	Marking Removal Line 4-Inch	LF	650.000	650.000
0090	650.6501	Construction Staking Structure Layout (structure) 001. B-40-548	EACH	1.000	1.000
0092	690.0250	Sawing Concrete	LF	156.000	156.000
0094	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	800.000	800.000
0096	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	3,600.000	3,600.000

2652-05-70

Line	Item	Item Description	Unit	Total	Qty
0098	SPV.0060	Special 001. Adjusting Sanitary Manhole	EACH	1.000	1.000
0100	SPV.0060	Special 002. Adjusting Water Valve Boxes	EACH	1.000	1.000
0102	SPV.0060	Special 553. Expansion Joints at Rear Break	EACH	2.000	2.000
0104	SPV.0060	Special 560. Heel Block Refurbishment	EACH	1.000	1.000
0106	SPV.0060	Special 561. Traffic Gates Replacement	EACH	4.000	4.000
0108	SPV.0060	Special 562. Bridge Electrical Work	EACH	1.000	1.000
0110	SPV.0060	Special 563. Centerlock Adjustments	EACH	1.000	1.000
0112	SPV.0060	Special 565. Anchor Assemblies Traffic Gates	EACH	4.000	4.000
0114	SPV.0060	Special 597. Protecting Utilities	EACH	1.000	1.000
0116	SPV.0090	Special 540. Urethane Injection Crack Repair	LF	20.000	20.000
0118	SPV.0090	Special 706. Marking Stop Line Epoxy 24-Inch	LF	46.000	46.000
0120	SPV.0165	Special 501. Removing and Reinstalling Metal Plates for Bike Lanes	SF	909.000	909.000
0122	SPV.0165	Special 502. Fiberglass Sidewalk Floor Plates	SF	1,928.000	1,928.000
0124	SPV.0165	Special 596. Power Washing	SF	7,129.000	7,129.000

REMOVALS

CATEGORY 0010

ITEM NO.	204.0100
	REMOVING CONCRETE PAVEMENT
LOCATION	SY
N. WATER STREET	161
PROJECT TOTAL	161

EXCAVATION COMMON

CATEGORY 0010

ITEM NO.	ITEM NO.	205.0100
		EXCAVATION COMMON
LOCATION		CY
N. WATER STREET		32
PROJECT TOTAL		32

EXCAVATION CONTAMINATED SOILS

CATEGORY 0010

ITEM NO.			205.0501.S EXCAVATION, HAULING AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL
LOCATION	STATION TO	STATION	TON
N. WATER STREET	10+00	11+00	30
N. WATER STREET	13+25	14+25	31
PROJECT TOTAL			61

BASE AGGREGATE

CATEGORY 0010

ITEM NO.	305.0120
	BASE AGGREGATE DENSE 1-1/4 INCH
LOCATION	TON
N. WATER STREET	65
PROJECT TOTAL	65

ROADWAY CONSTRUCTION ITEMS

CATEGORY 0010

ITEM NO.	415.0410	416.0620
	CONCRETE PAVEMENT APPROACH SLAB	DRILLED DOWEL BARS
LOCATION	SY	EACH
N. WATER STREET	161	96
PROJECT TOTAL	161	96

MOBILIZATION

CATEGORY 0010

ITEM NO.	619.1000
	MOBILIZATION
LOCATION	EACH
PROJECT 2652-05-70	1
TOTAL	1

EROSION CONTROL

CATEGORY 0010

ITEM NO.	628.7015
	INLET PROTECTION TYPE C
LOCATION	EACH
N. WATER STREET	1
TOTAL	1

FIELD OFFICE

CATEGORY 0010

ITEM NO.	642.5201
	FIELD OFFICE TYPE C
LOCATION	EACH
PROJECT 2652-05-70	1
TOTAL	1

SAWING CONCRETE

CATEGORY 0010

ITEM NO.	690.0250
	SAWING CONCRETE
LOCATION	LF
N. WATER STREET	156
PROJECT TOTAL	156

ADJUSTING SANITARY MANHOLE

CATEGORY 0030

ITEM NO.	SPV0060.001
	ADJUSTING SANITARY MANHOLE
LOCATION	EACH
N. WATER STREET	1
PROJECT TOTAL	1

ADJUSTING WATER VALVE BOXES

CATEGORY 0030

ITEM NO.	SPV0060.002
	ADJUSTING WATER VALVE BOXES
LOCATION	EACH
N. WATER STREET	1
PROJECT TOTAL	1

3

TRAFFIC CONTROL ITEMS

CATEGORY 0010															
ITEM NO.		643.0300		643.0420		643.0500	643.0600	643.0705		643.0715		643.0900		643.3150	
		TRAFFIC CONTROL DRUMS		CONTROL BARRICADES TYPE III		TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	TRAFFIC CONTROL WARNING LIGHTS TYPE A		TRAFFIC CONTROL WARNING LIGHTS TYPE C		TRAFFIC CONTROL SIGNS		TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH	
LOCATION	DAYS	EACH	DAY	EACH	DAY	EACH	EACH	EACH	DAY	EACH	DAY	EACH	DAY	(WHITE) LF	(YELLOW) LF
STAGE 1	26	83	2158	19	494	17	17	19	494	83	2158	44	1144	964	4272
STAGE 2	26	47	1222	29	754	34	34	29	754	47	1222	44	1144	1326	3328
STAGE 3	40	-	-	24	960	-	-	24	960	-	-	69	2760	-	-
PROJECT TOTAL			3,380		2,208	51	51		2,208		3,380		5,048	9,890	

TRAFFIC CONTROL SIGNS PCMS

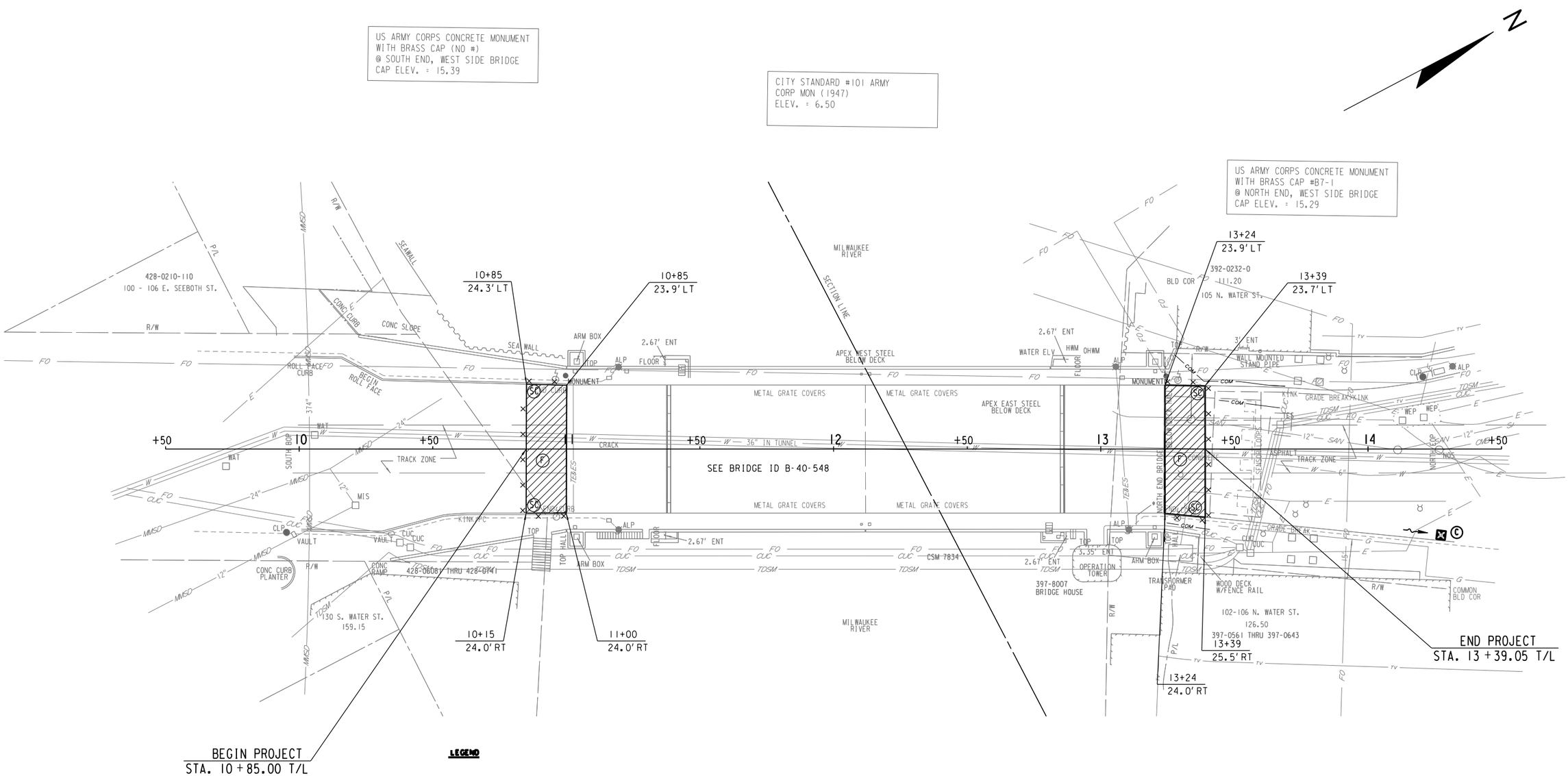
CATEGORY 0010 ITEM NO.	643.1050 TRAFFIC CONTROL SIGNS PCMS	
LOCATION	EACH	DAY
PROJECT 2652-05-70	2	7
TOTAL	14	

TRAFFIC CONTROL

CATEGORY 0010 ITEM NO.	643.5000 TRAFFIC CONTROL
LOCATION	EACH
N. WATER STREET	1
TOTAL	1

PAVEMENT MARKING

CATEGORY 0010 ITEM NO.	646.1020		464.9000	SPV.0090.706
	MARKING LINE EPOXY 4-INCH		MARKING REMOVAL LINE 4-INCH	MARKING STOP LINE EPOXY 24-INCH
LOCATION	(WHITE) LF	(YELLOW) LF	LF	(WHITE) LF
N WATER STREET	140	510	650	46
PROJECT TOTAL	650		650	46



ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE CITY OF MILWAUKEE DATUM.

TO CONVERT ELEVATIONS SHOWN ON THIS PLAN TO NATIONAL GEODEDIC VERTICAL DATUM OF 1929, ADD 580.603 TO ELEVATIONS SHOWN ON THIS PLAN.

STATE PROJECT NUMBER 2652-05-70	HWY: N WATER ST	COUNTY: MILWAUKEE	PLAN	SCALE FEET 0' 40'	SHEET NO: 18	E

FILENAME: W:\STR\B0101\2025 REHAB PROJECT\APPROACH\9-15.DGN

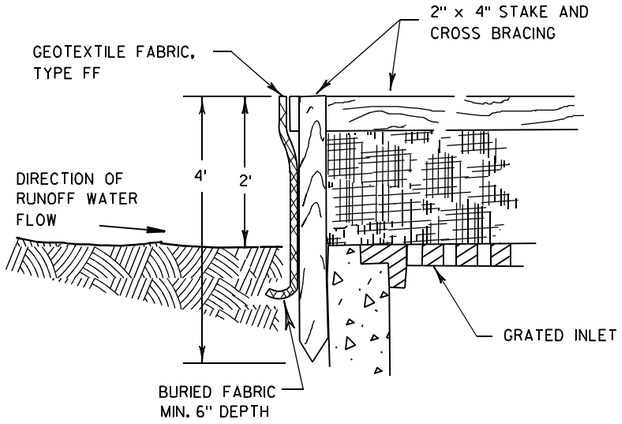
REVISED DATE: 08-28-2024 EM

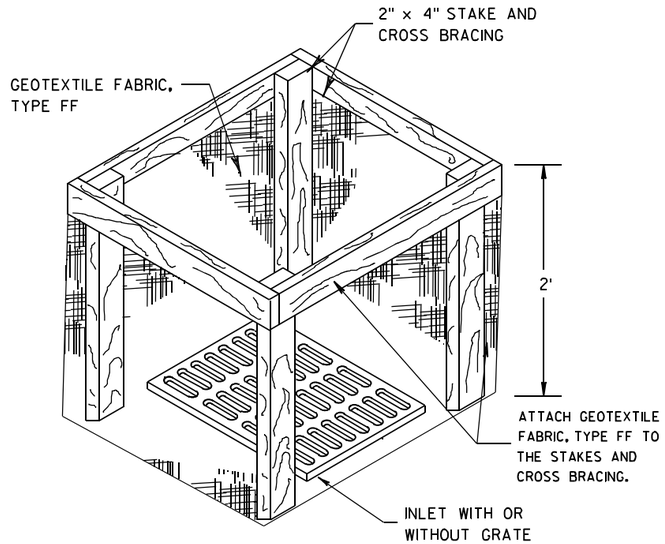
Standard Detail Drawing List

08E10-02	INLET PROTECTION TYPE A, B, C AND D
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C13-11	URBAN DOWELED CONCRETE PAVEMENT
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C11-10A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-13A	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D30-09K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

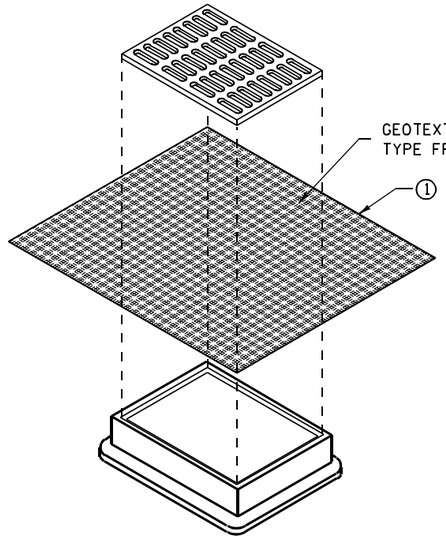
6

6



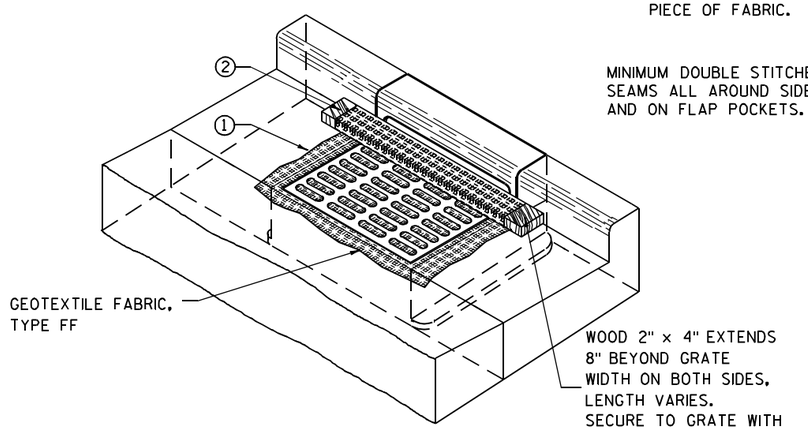


INLET PROTECTION, TYPE A

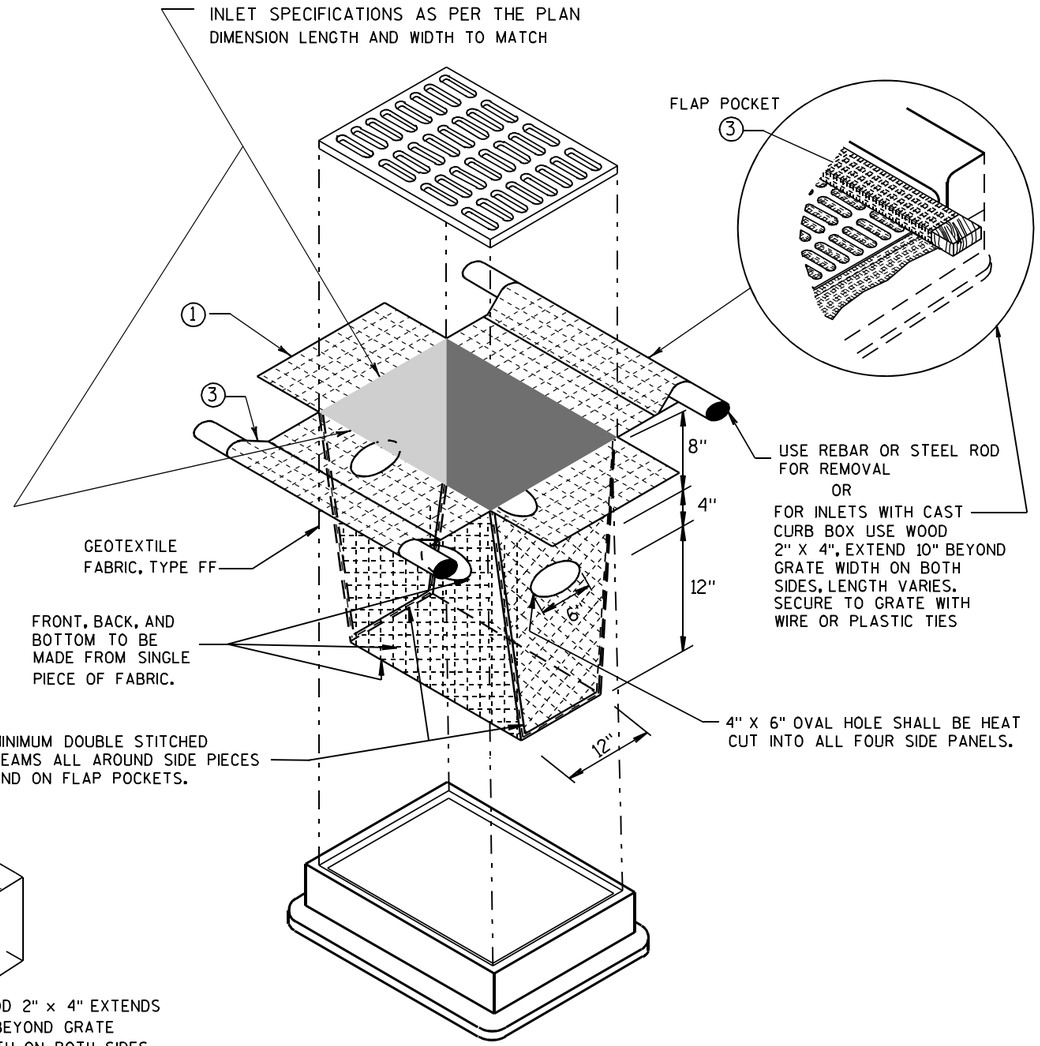


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

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

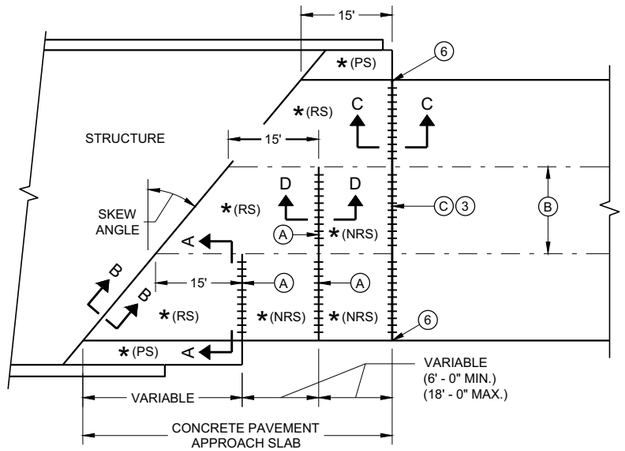
FHWA

6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



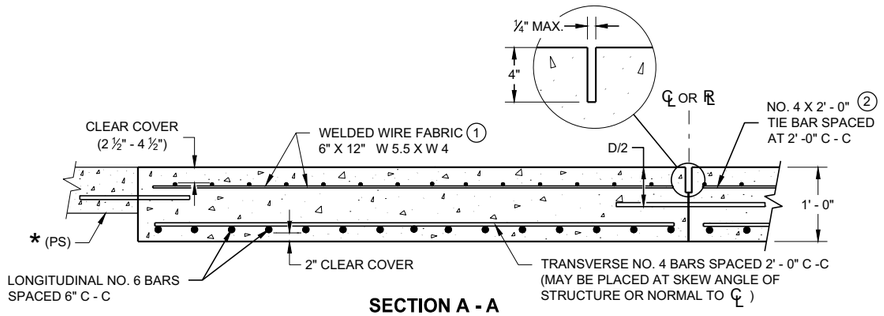
SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)

* (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

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.

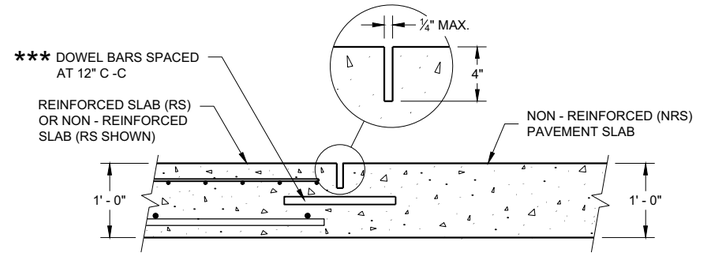
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

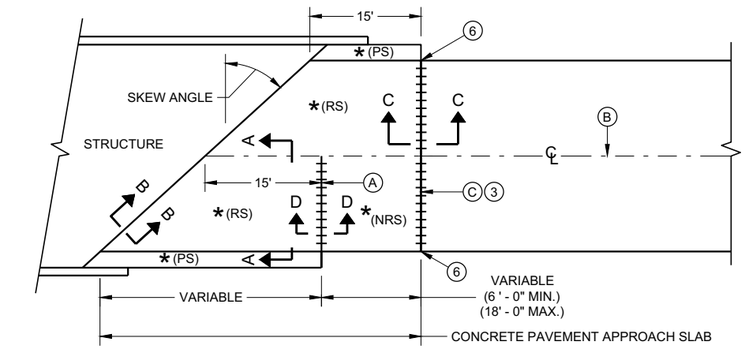
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

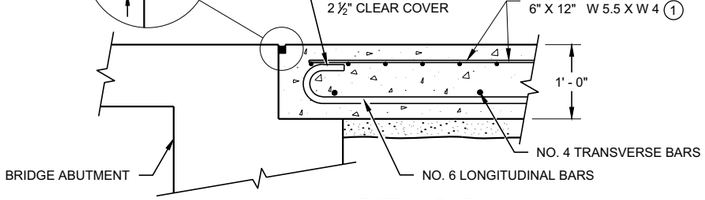
(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



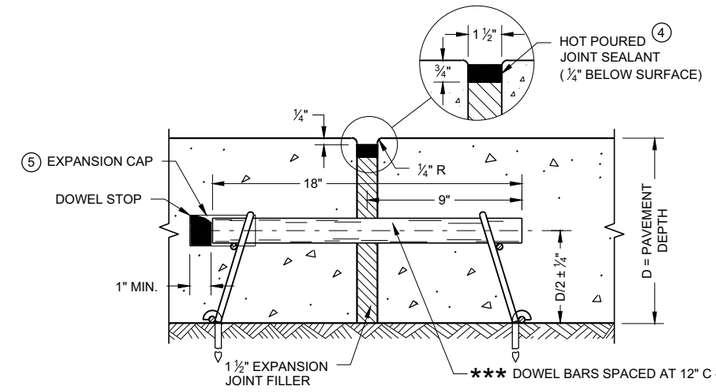
SECTION D - D
CONTRACTION JOINT



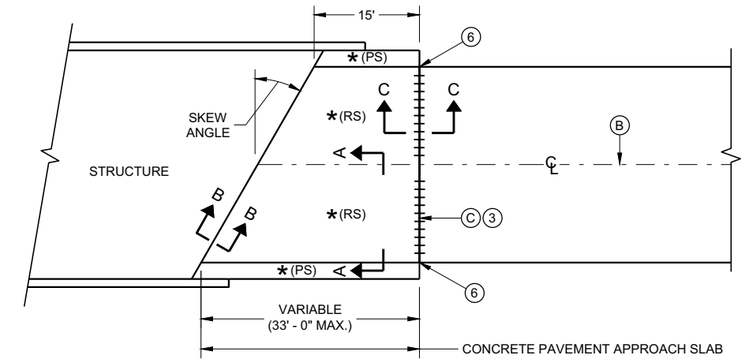
SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT

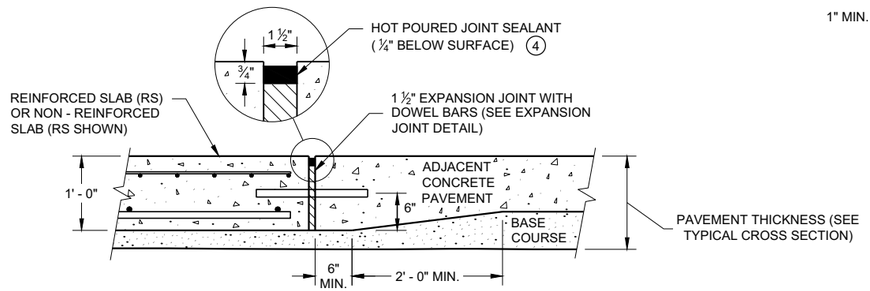


EXPANSION JOINT DETAIL



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

APPROACH SLAB AND ADJACENT PAVEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

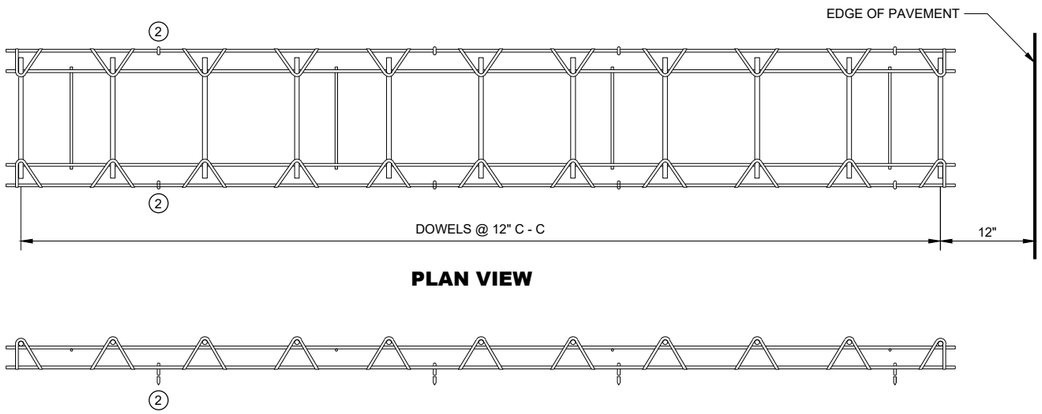
APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVIS

FHWA

6

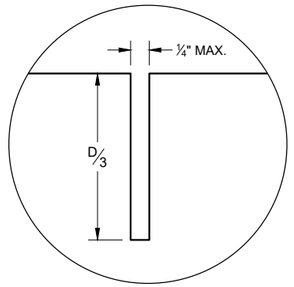
SDD 13B02 - 09a



PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY (1)



JOINT DETAIL

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 FROM 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 THE CONTRACTION JOINTS.

(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 CONSTRUCTION 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.

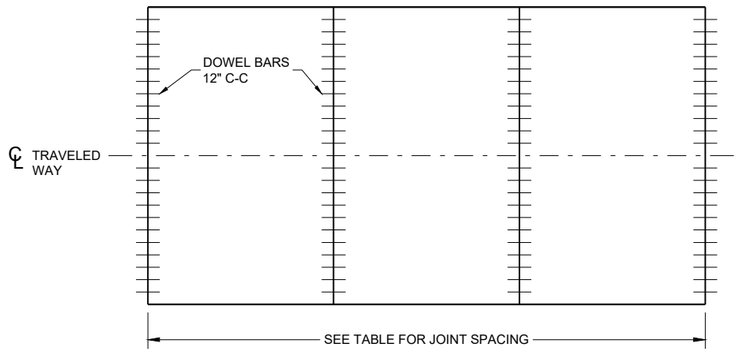
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

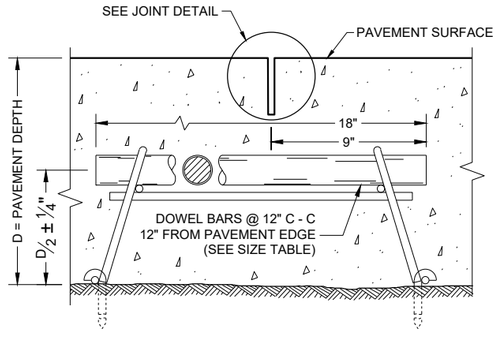
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED 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 AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



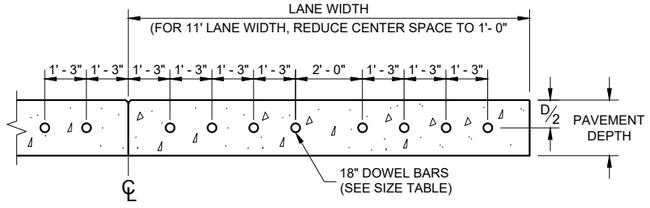
CONTRACTION JOINT LOCATIONS



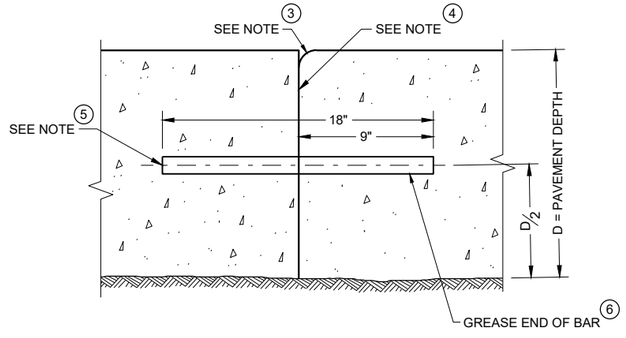
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8" & ABOVE	1 ¼"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



TRANSVERSE CONSTRUCTION JOINT

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

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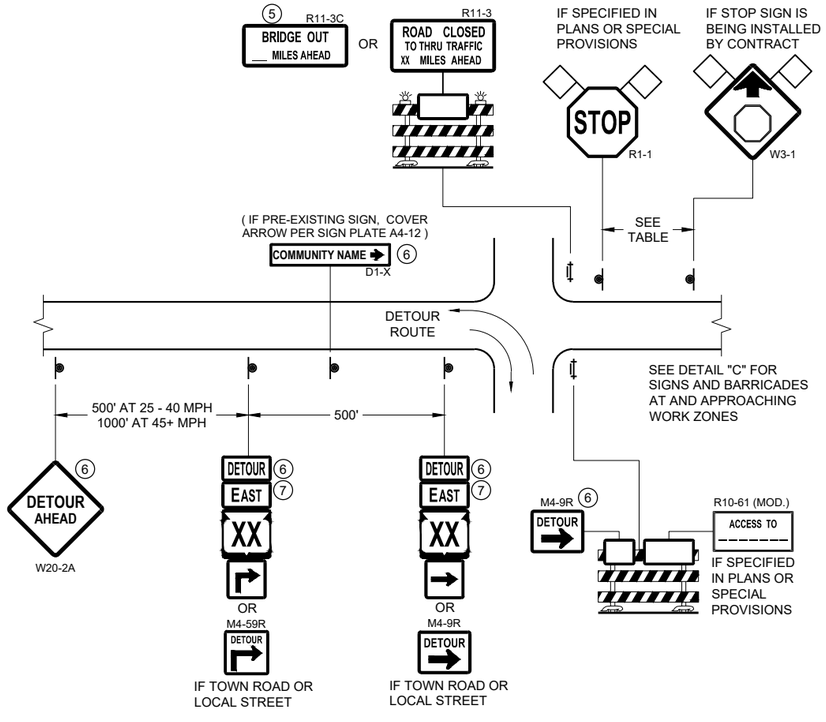
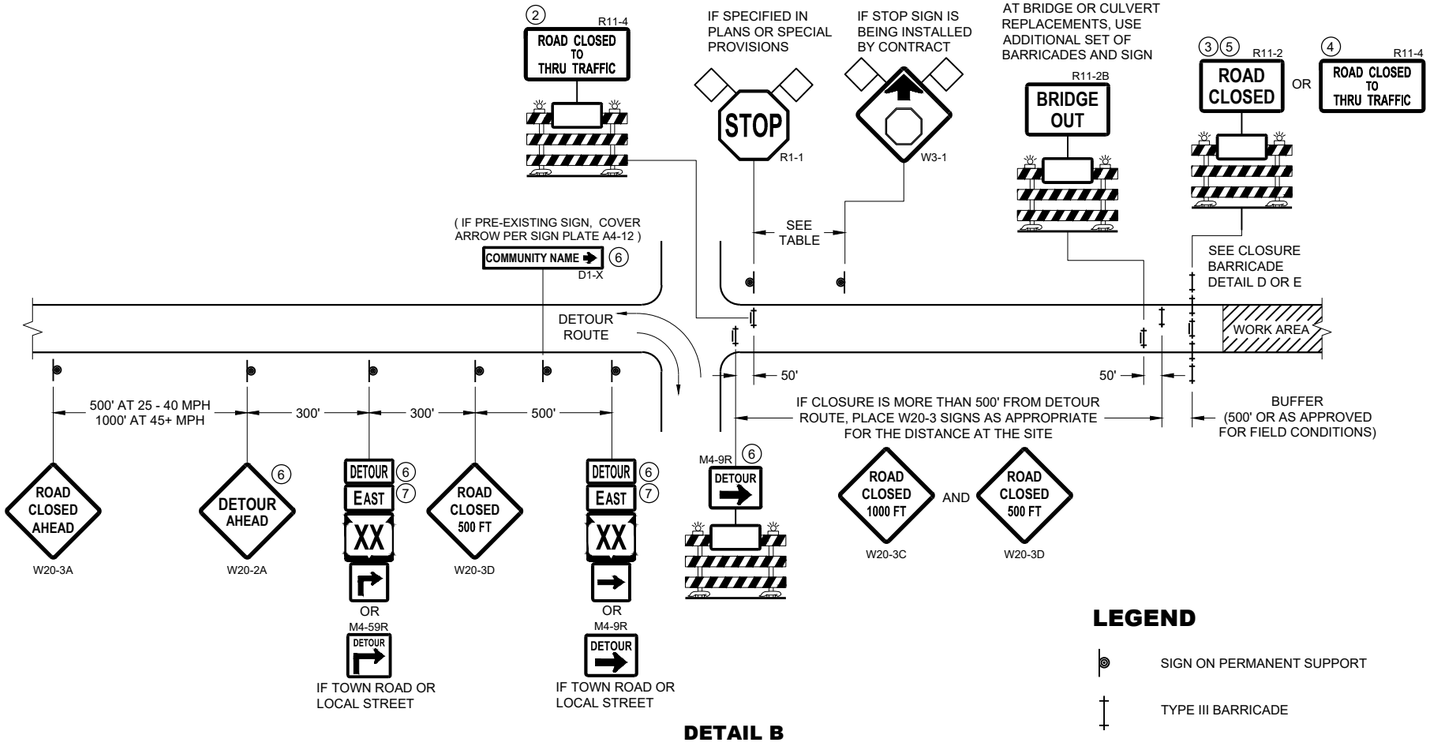
SDD 13C13 - 11



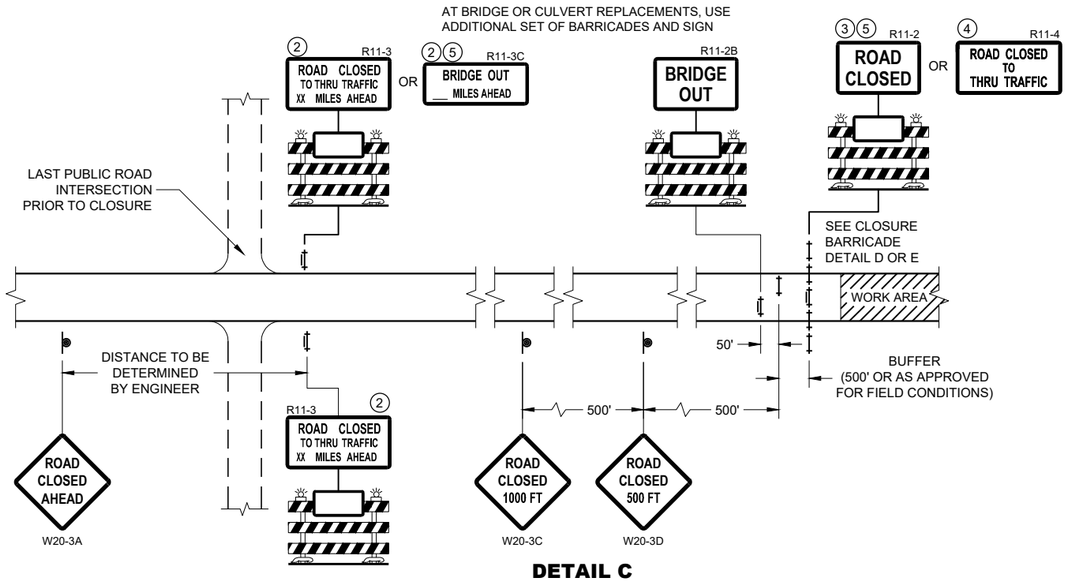
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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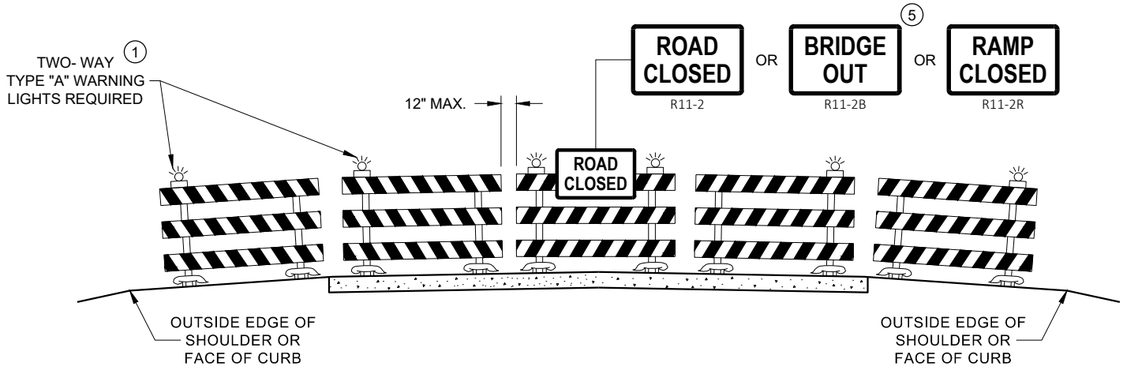
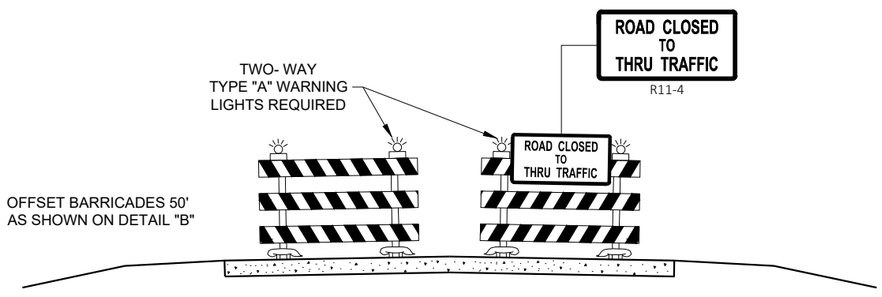
SDD 15C02 - 09a

SDD 15C02 - 09a



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
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 09b

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SDD 15C02 - 09b

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.

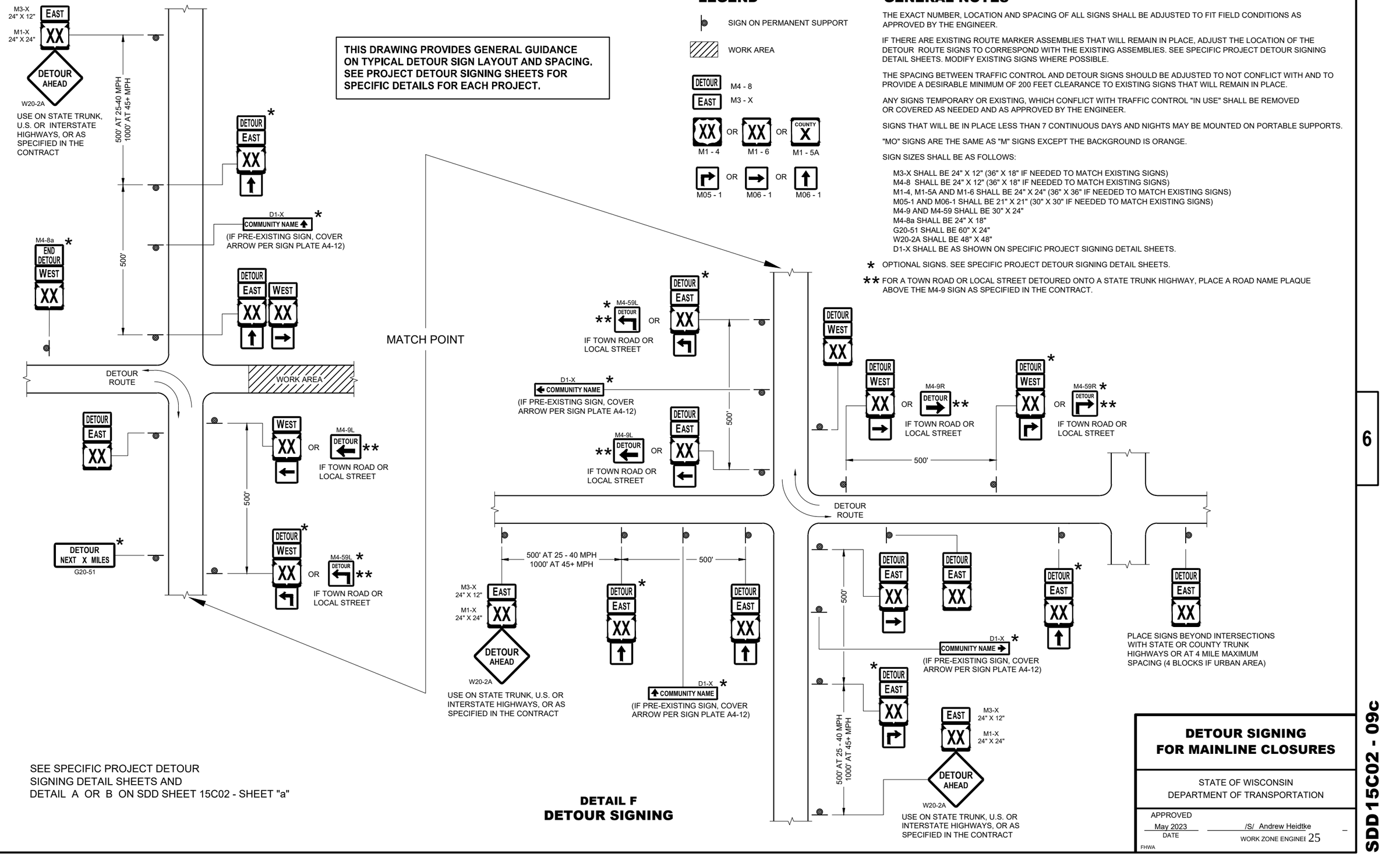
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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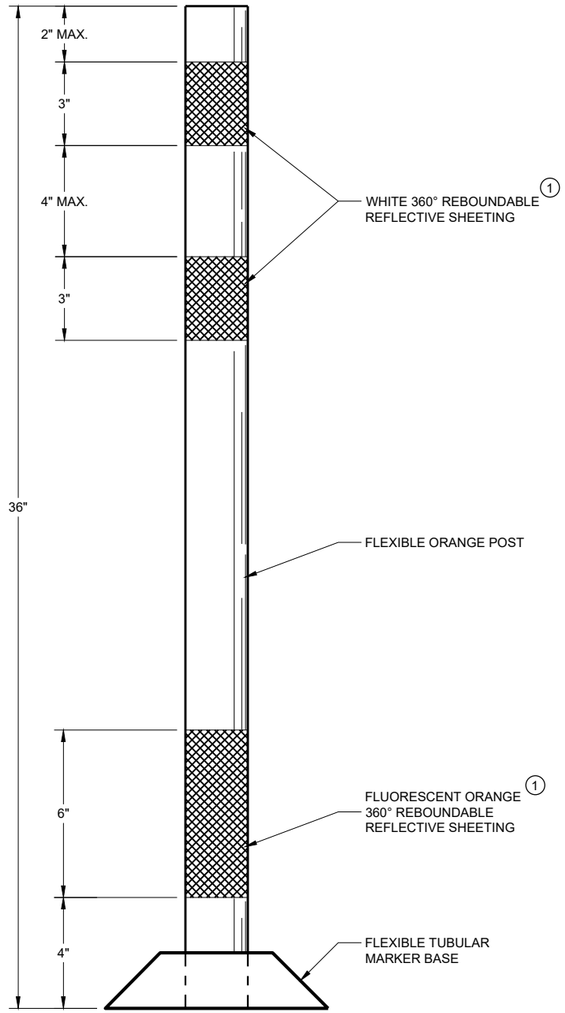
SDD 15C02 - 09c



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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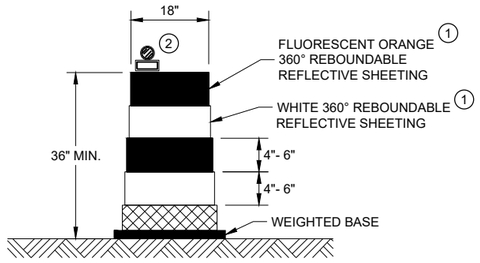
SDD 15C11 - 10a

SDD 15C11 - 10a

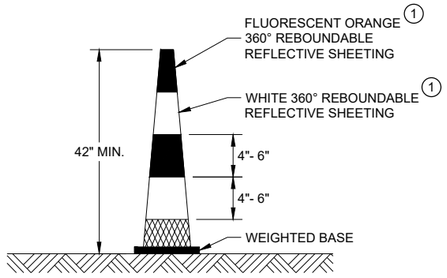
GENERAL NOTES

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

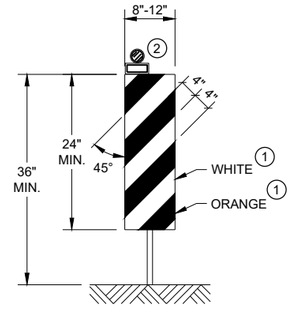
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

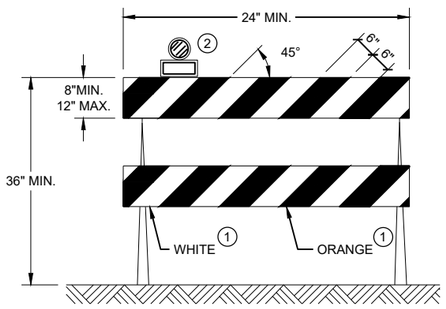
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



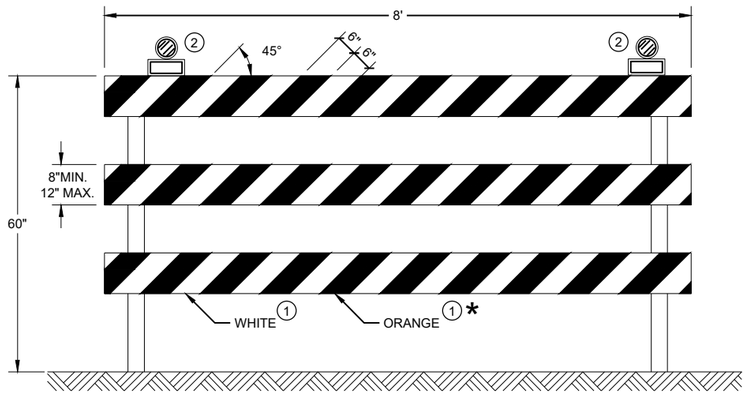
VERTICAL PANEL

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
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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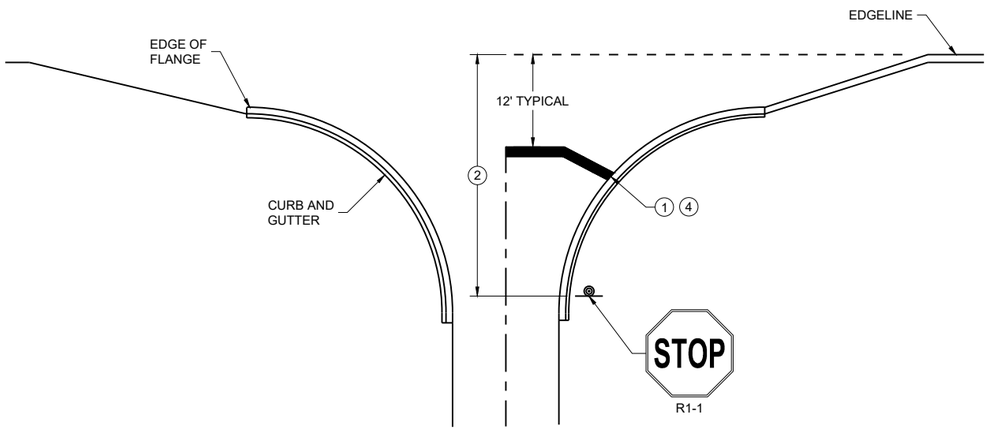
SDD 15C11 - 10b
SDD 15C11 - 10b

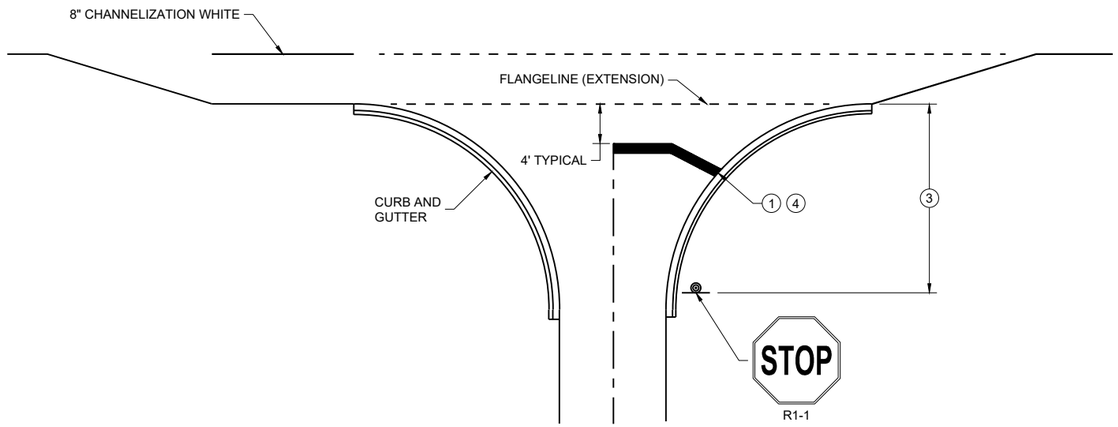
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

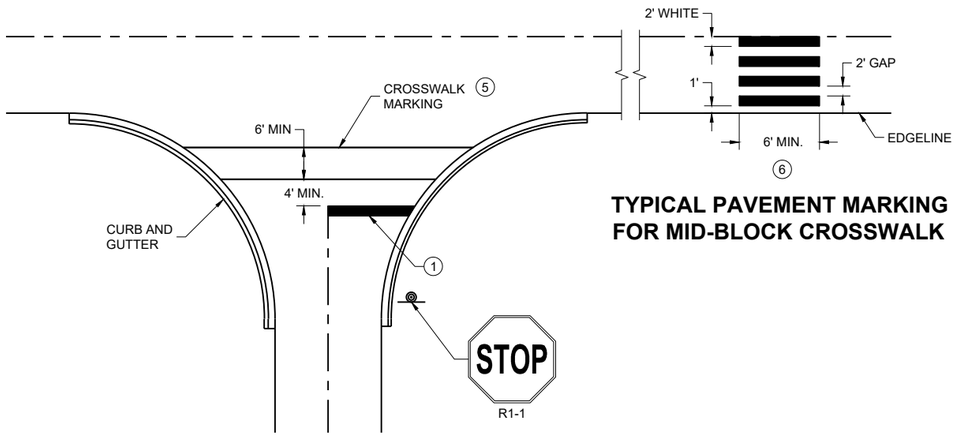
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE 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.
6. POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

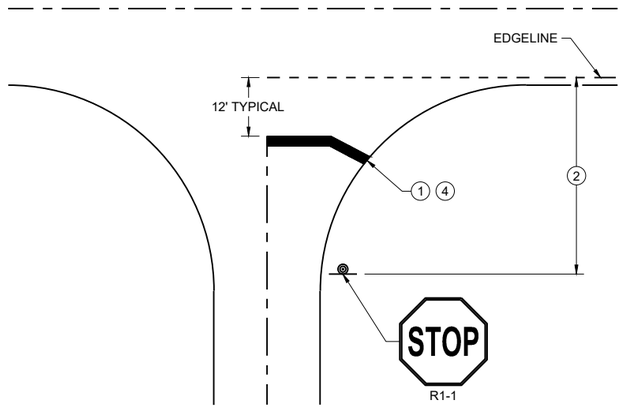


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK (5)

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

March 2024 — DATE

/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

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SDD 15C33-05

SDD 15C33-05

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 AND PLACE TEMPORARY PAVEMENT MARKING LINE 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.

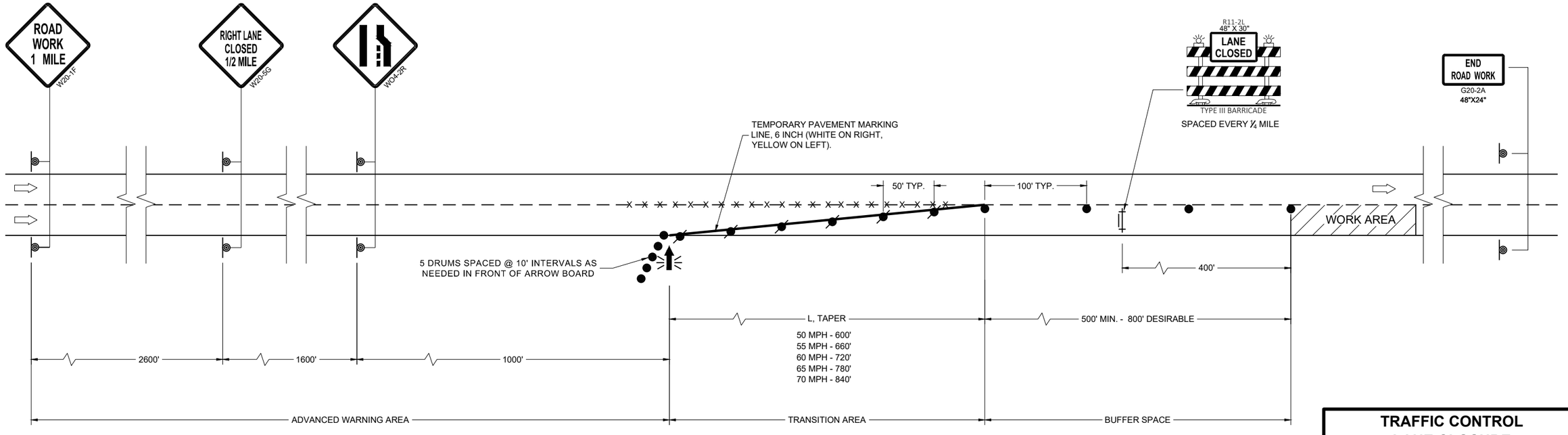
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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
March 2024
DATE

/S/ Andrew Heidtke
Work Zone Engineer

FHWA

6

SDD 15D12-13a

6

SDD 15D12-13a

LEGEND

SIGN ON PERMANENT SUPPORT

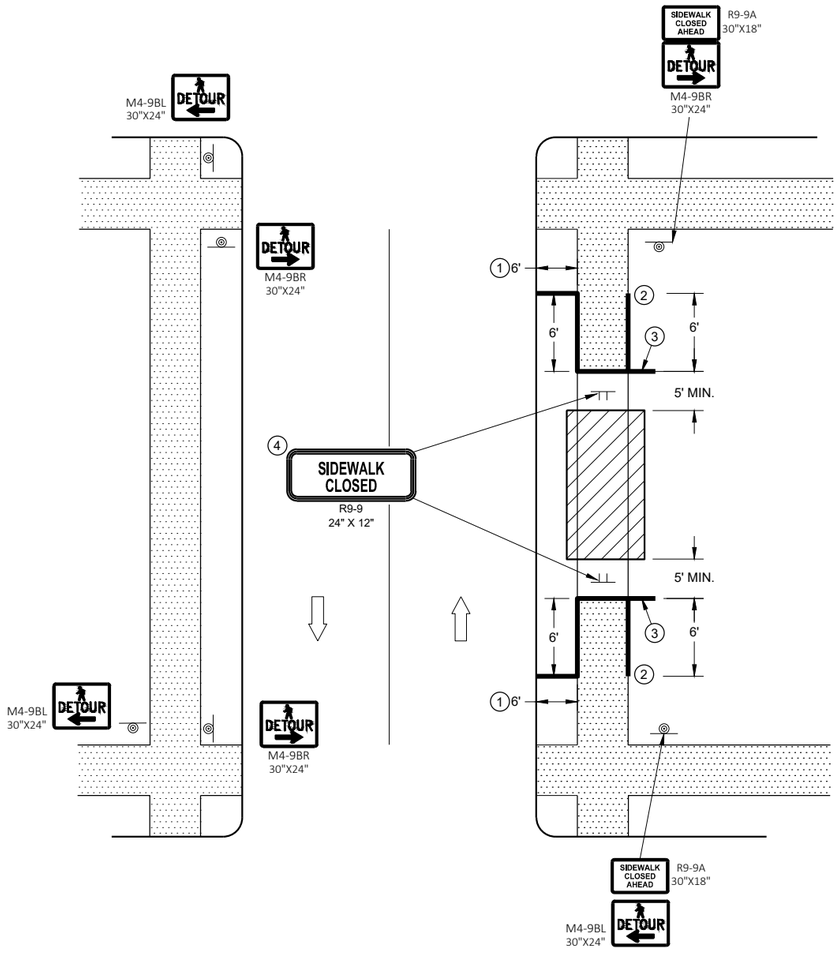
SIGN ON TEMPORARY SUPPORT

UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

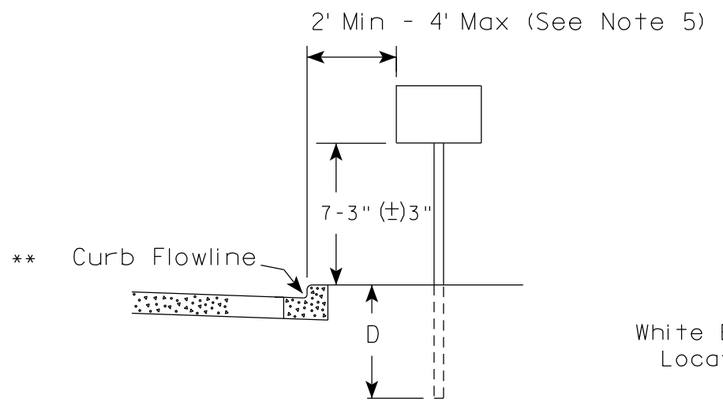
SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

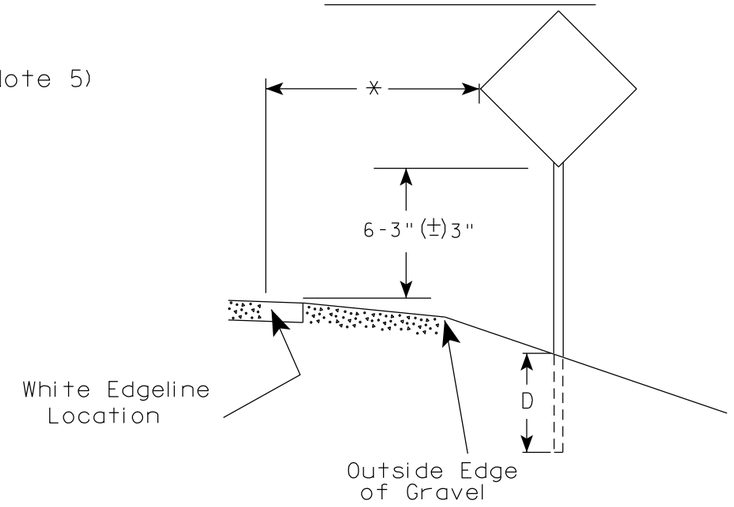
1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

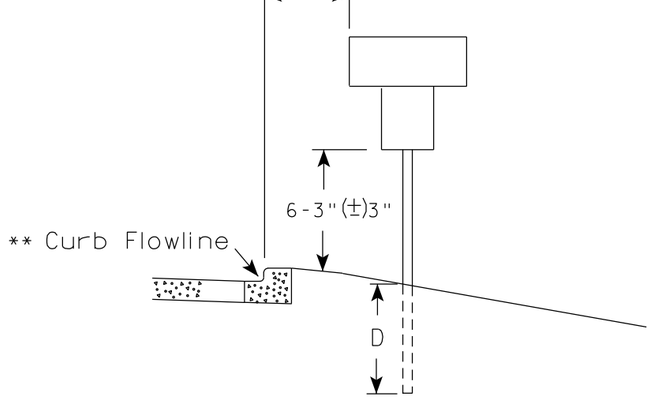
SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

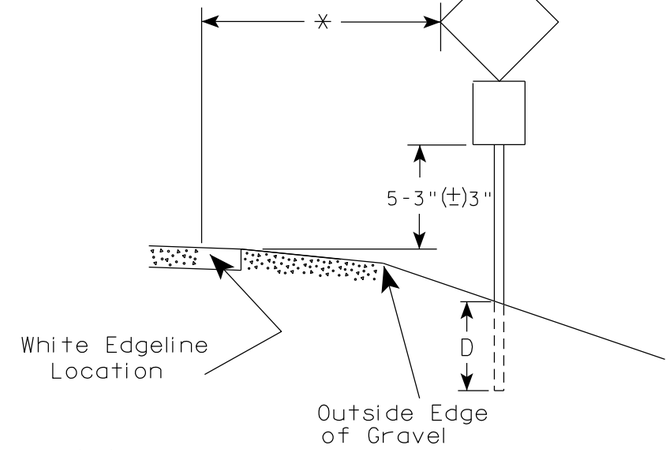
URBAN AREA



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" (±) 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".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

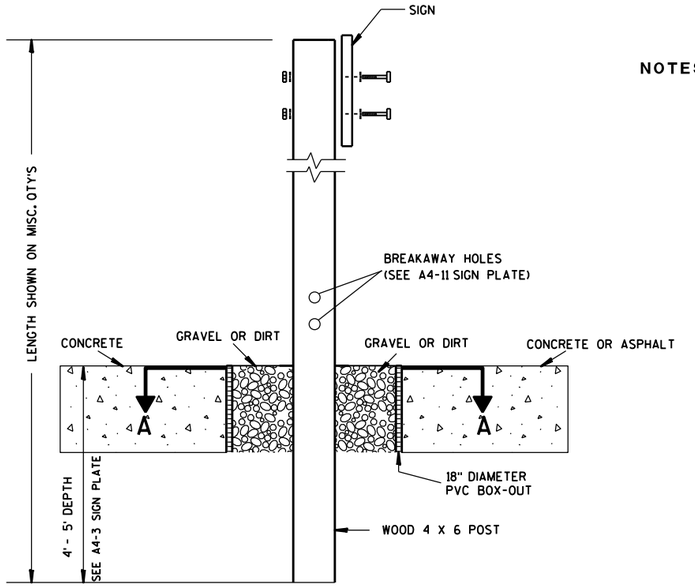
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

7

7

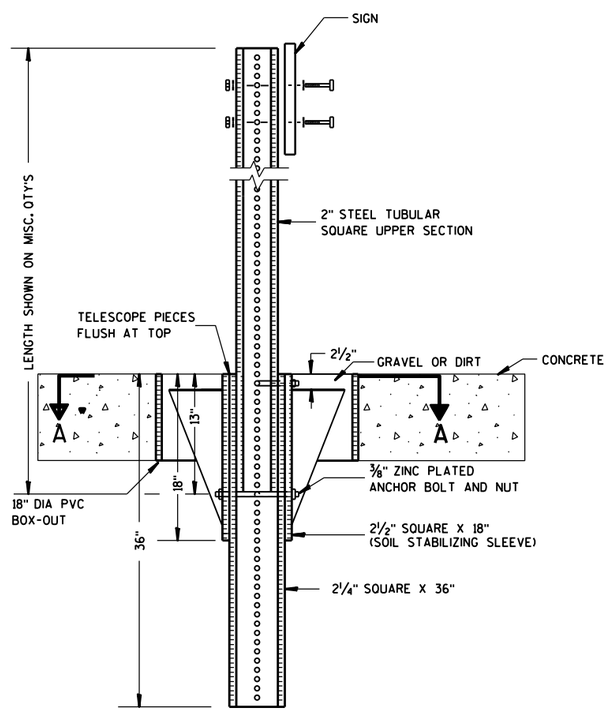
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 31	E



ELEVATION VIEW

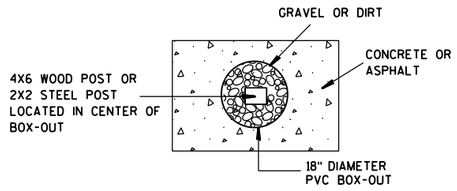
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

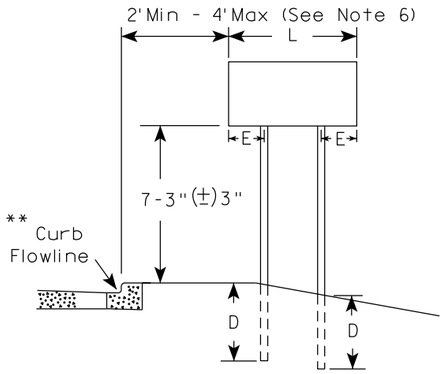
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

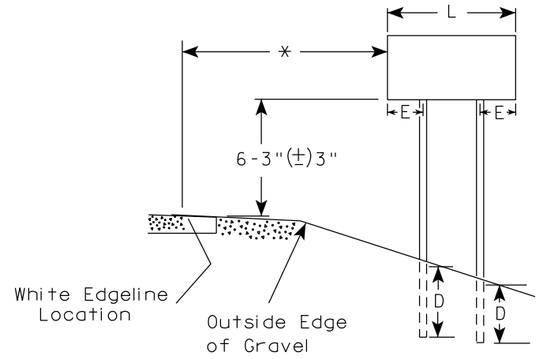
DATE 1/27/14 PLATE NO. A4-3B.1

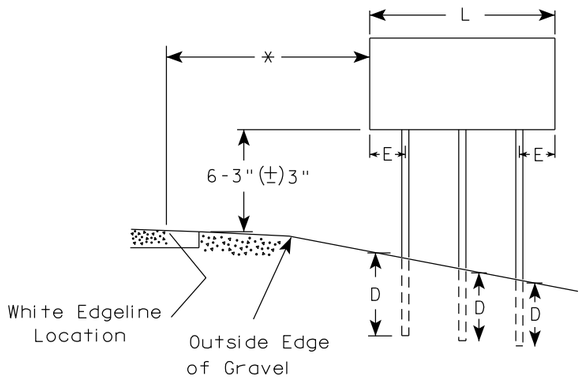
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

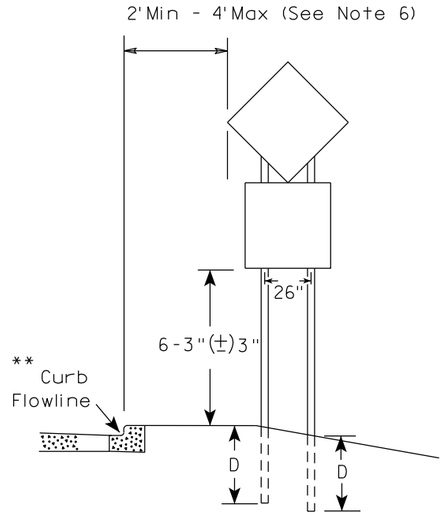
URBAN AREA



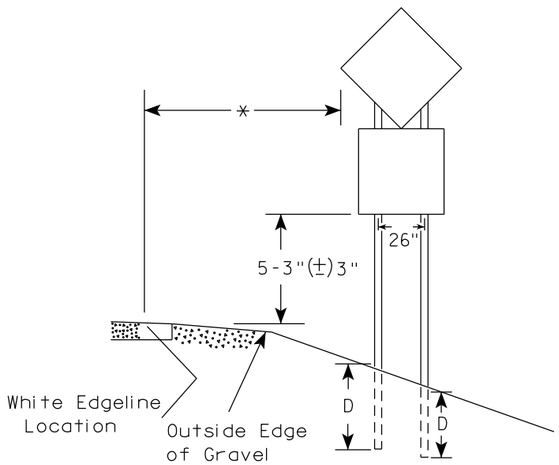
RURAL AREA (See Note 3)







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" (±) 3" or 6'-3" (±) 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" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 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" (±) 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'

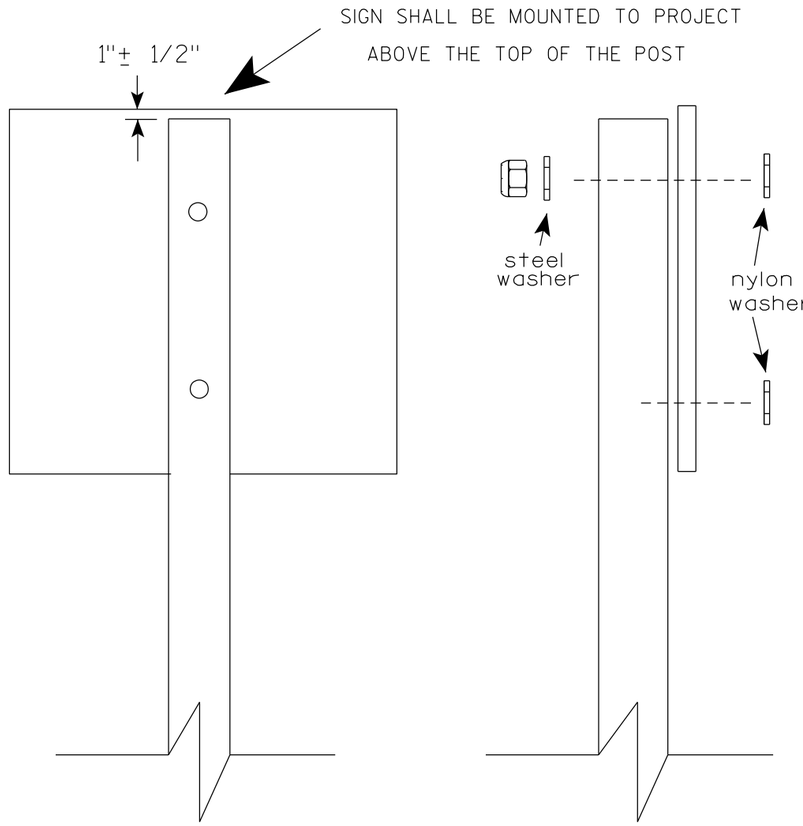
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

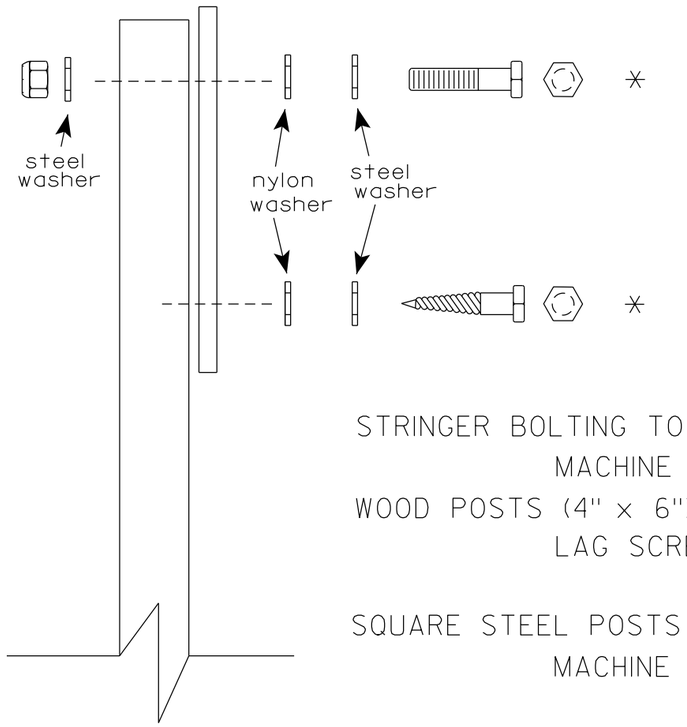
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 33	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

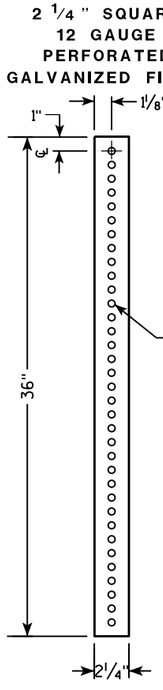
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

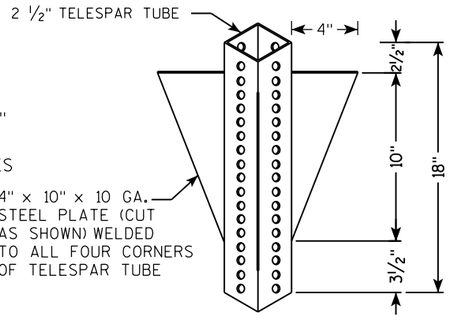
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

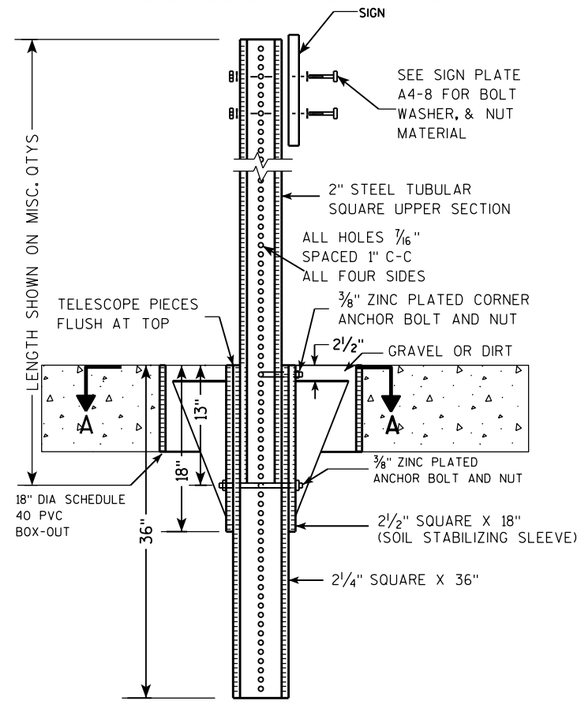
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



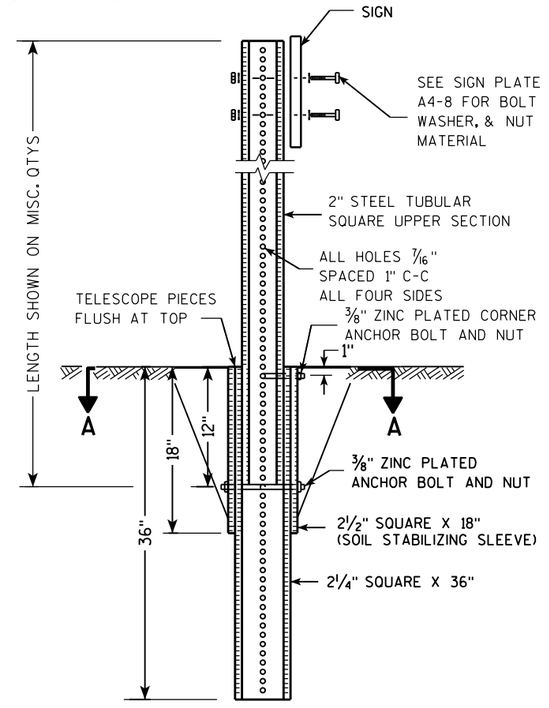
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

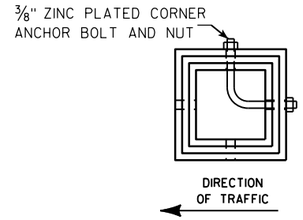


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

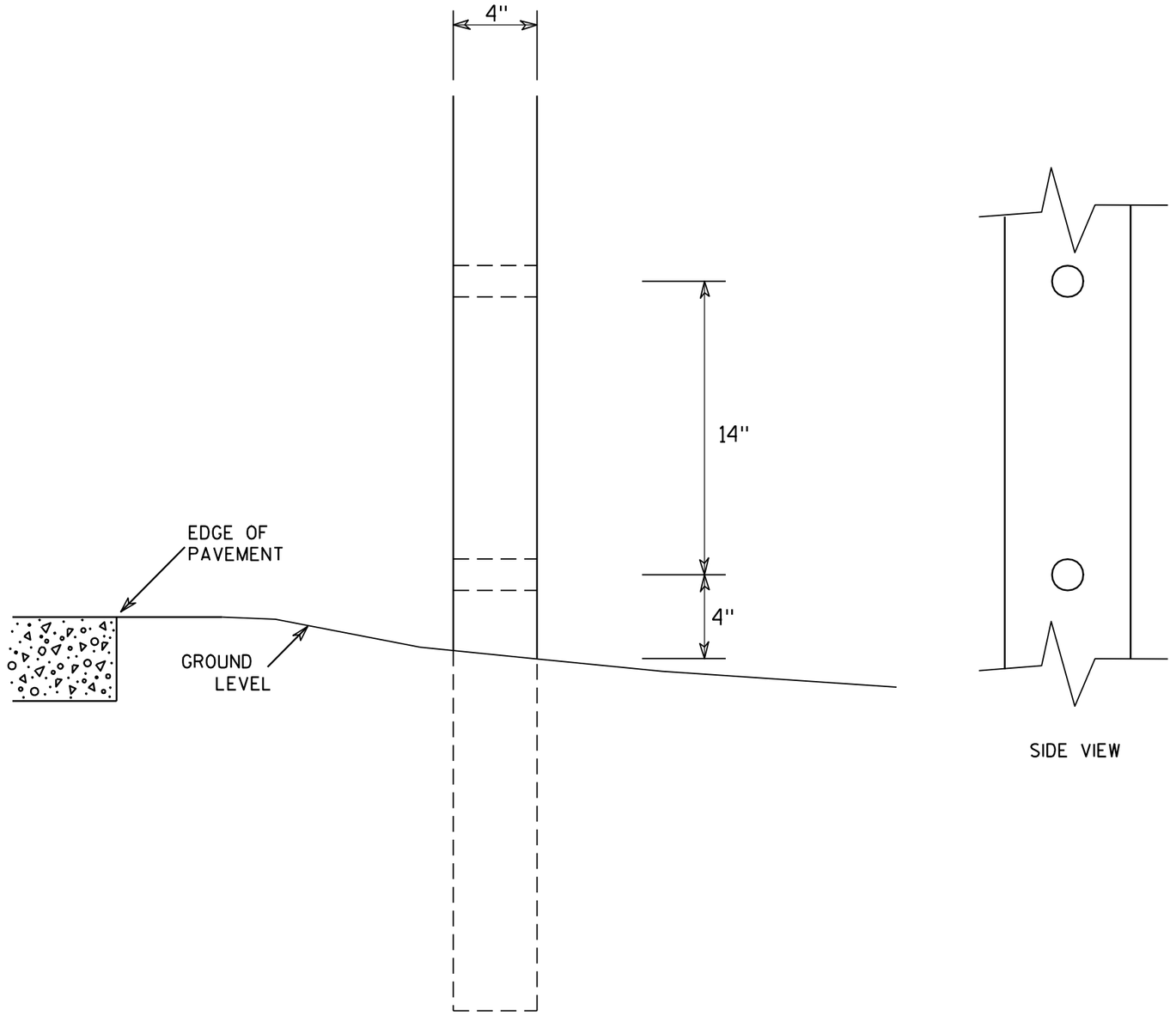
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 35 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

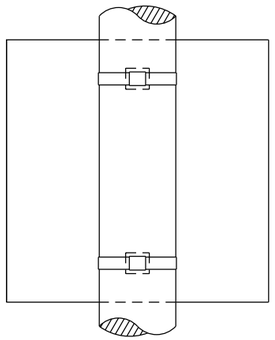
APPROVED Chester J Spang for State Traffic Engineer

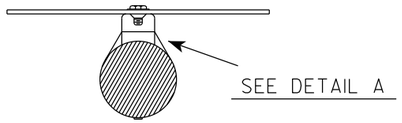
DATE 3/27/97 PLATE NO. A4-11.2

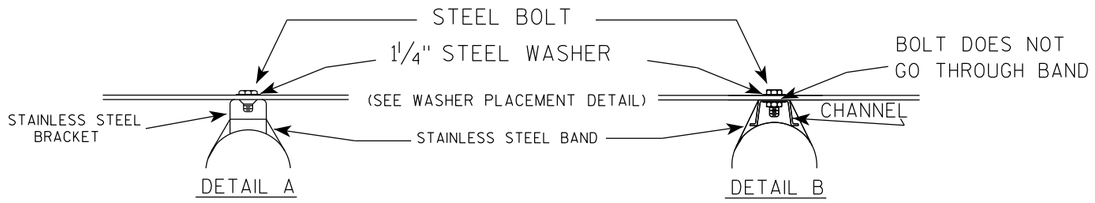
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 36	E

BANDING

SINGLE SIGN



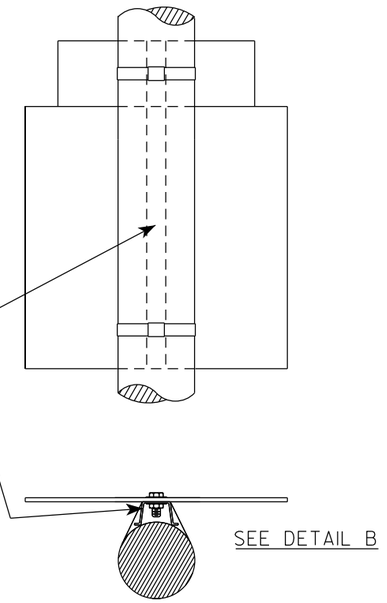




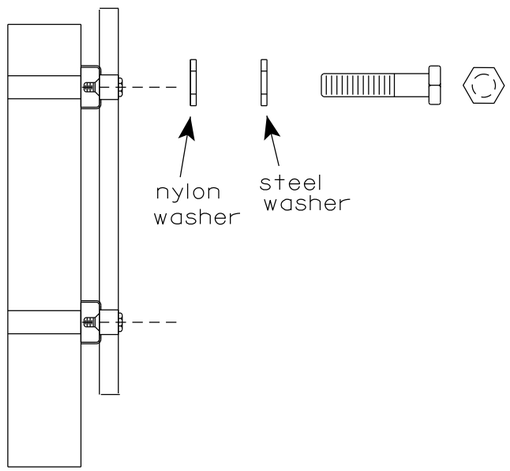
GENERAL NOTES

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



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

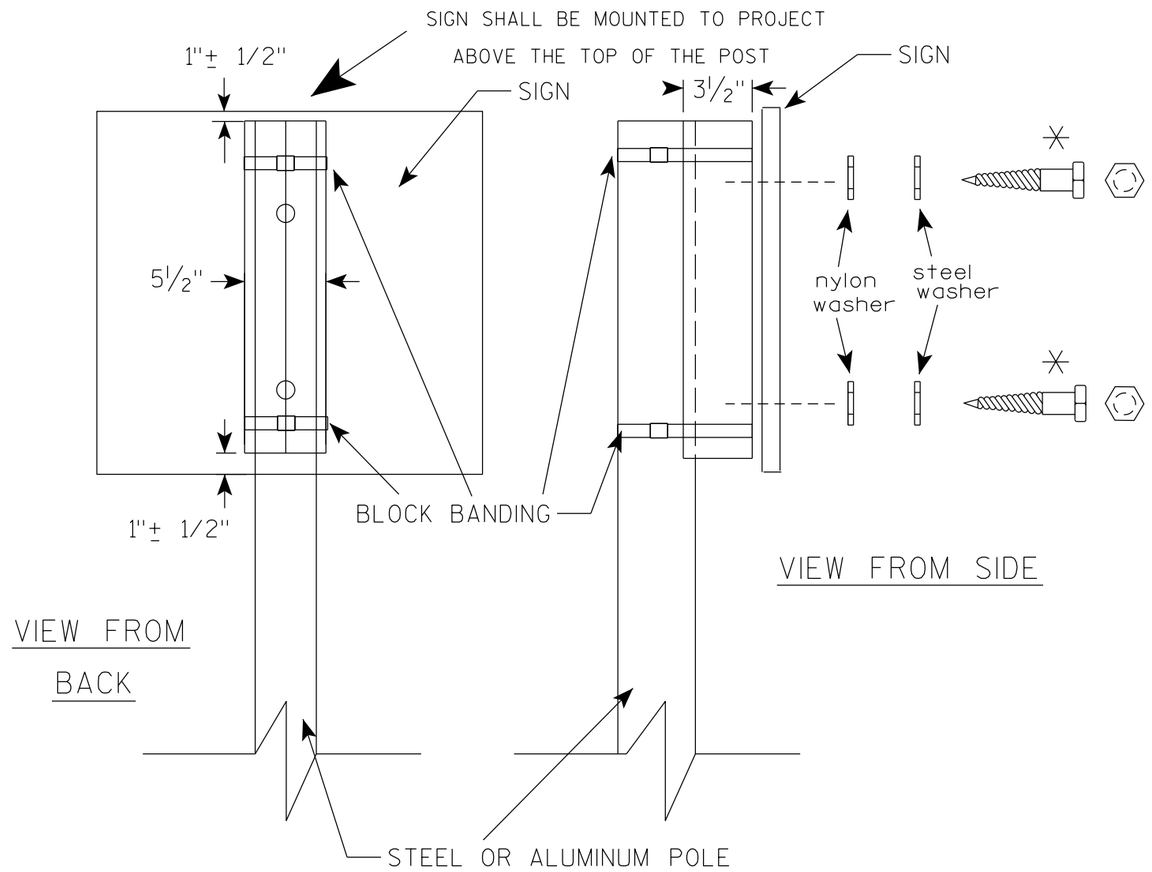
WISCONSIN DEPT OF TRANSPORTATION

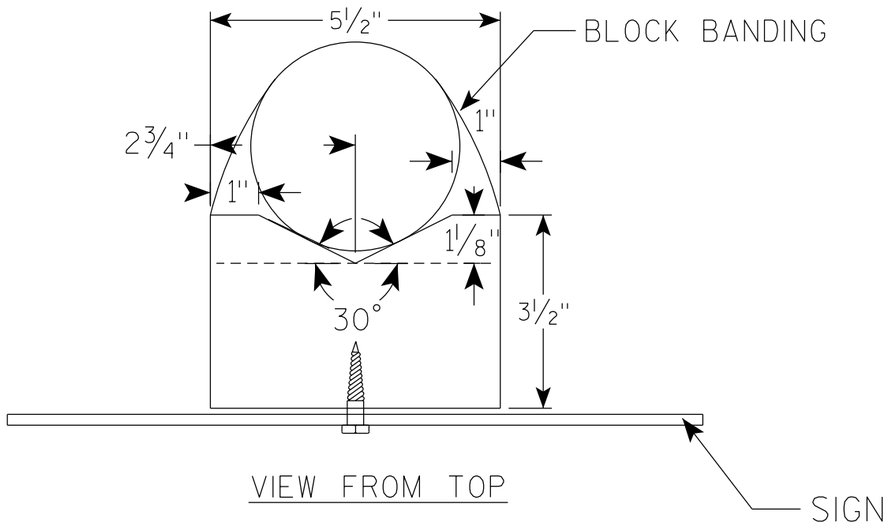
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 37	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





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)

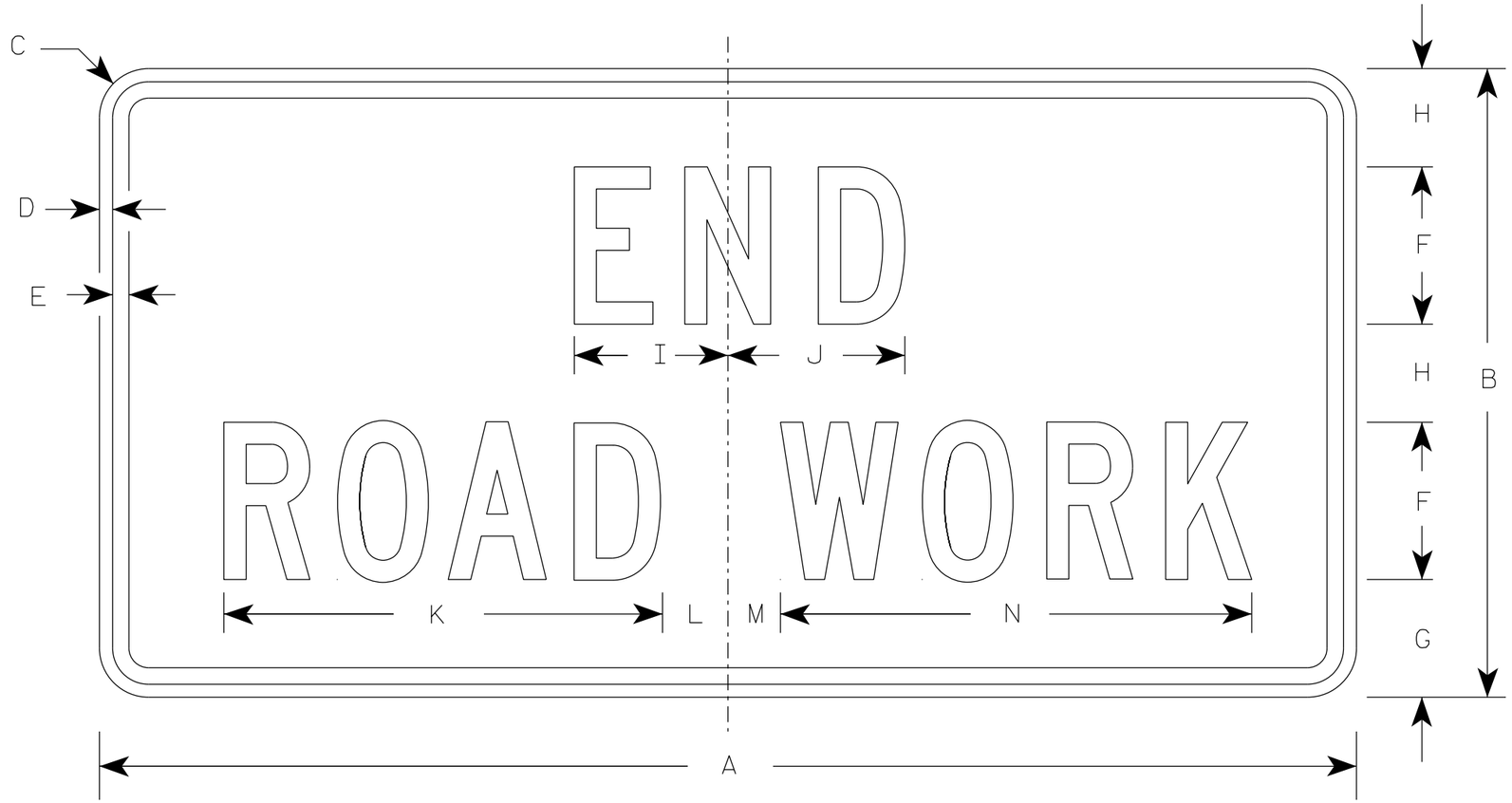
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 38 E



G20-2A

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.

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 1/2	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
2	48	24	1 7/8	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
2M	48	24	1 7/8	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
3	48	24	1 7/8	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
4	48	24	1 7/8	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
5	48	24	1 7/8	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

STANDARD SIGN

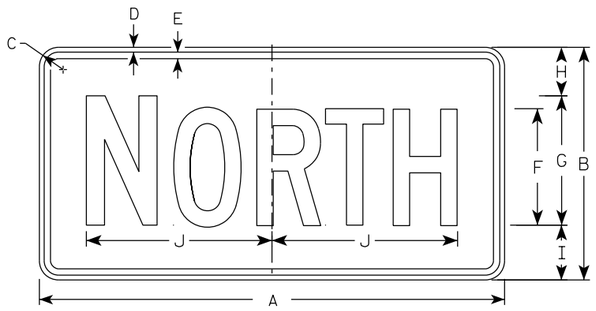
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

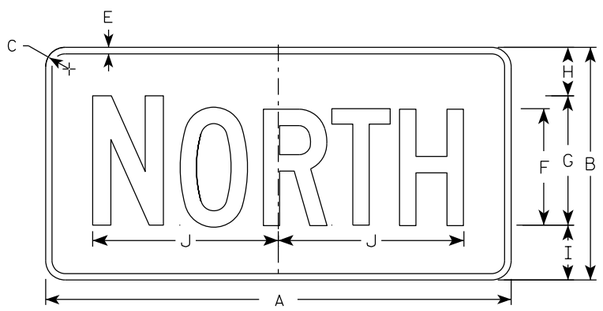
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

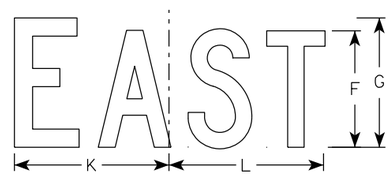
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 39 E



M3-1
MM3-1
MP3-1

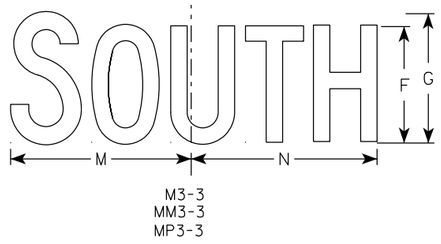


MB3-1
MK3-1
MN3-1

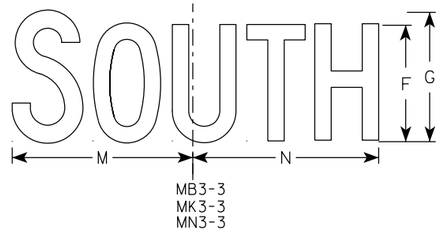


M3-2
MM3-2
MP3-2

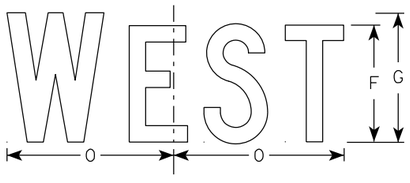
MB3-2
MK3-2
MN3-2



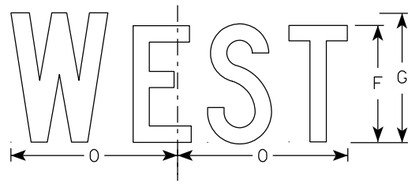
M3-3
MM3-3
MP3-3



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 Reflective
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																											
2S	24	12	1 1/2	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												2.00
2M	24	12	1 1/2	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												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

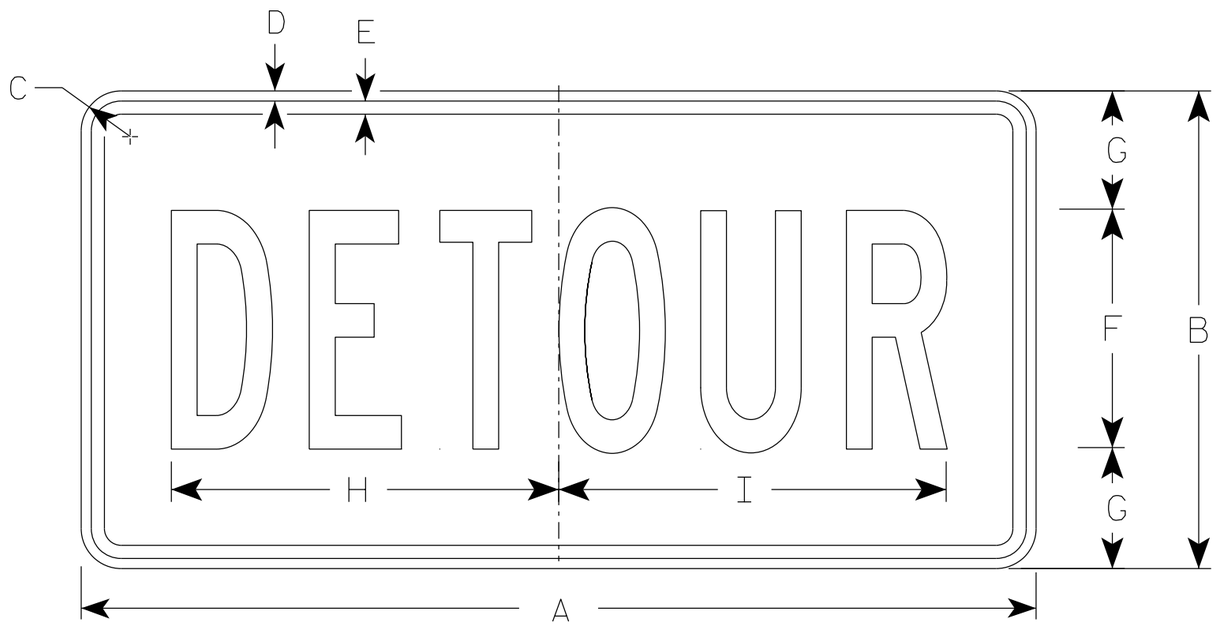
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 40 | E

NOTES

1. Sign is Type II - Type F Reflective
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.



M4-8

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																											
2	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
2M	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5

STANDARD SIGN
M4-8

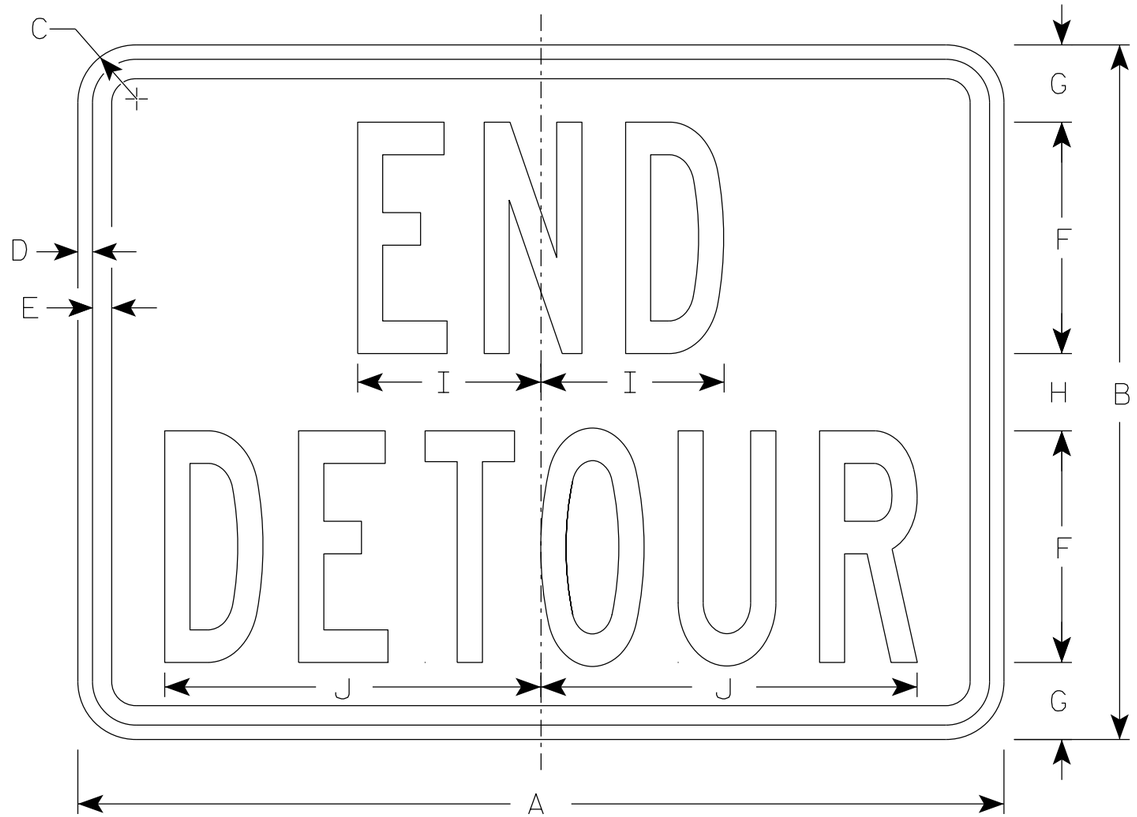
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M48.dgn PLOT DATE : 9-FEB 2023 7:38 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



M4-8A

NOTES

1. Sign is Type II - Type F Reflective
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 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
2M	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
3	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
4	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
5	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0

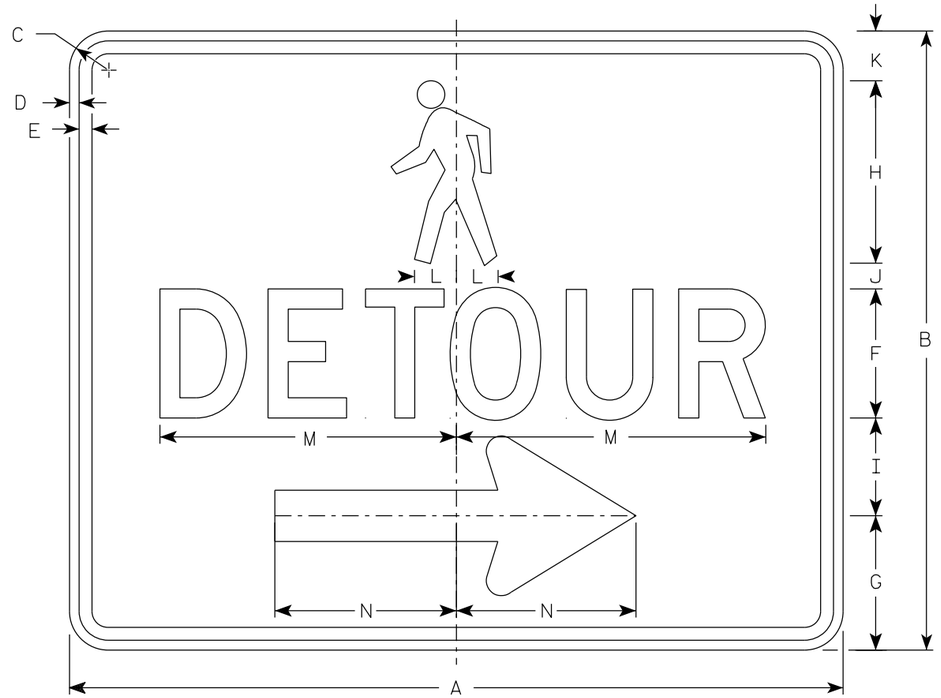
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

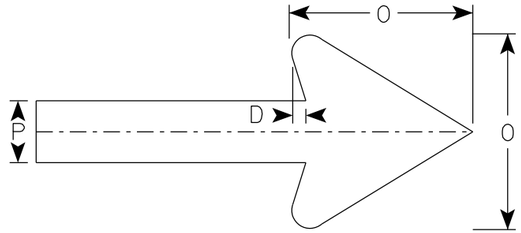
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 42 | E



M4-9BR

NOTES

1. Sign is Type II-Type F Reflective
2. Color:
   Background - Orange
   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. M4-9BL is the same as M4-9BR except the arrow is reversed.



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	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
2M	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
3																											
4																											
5																											

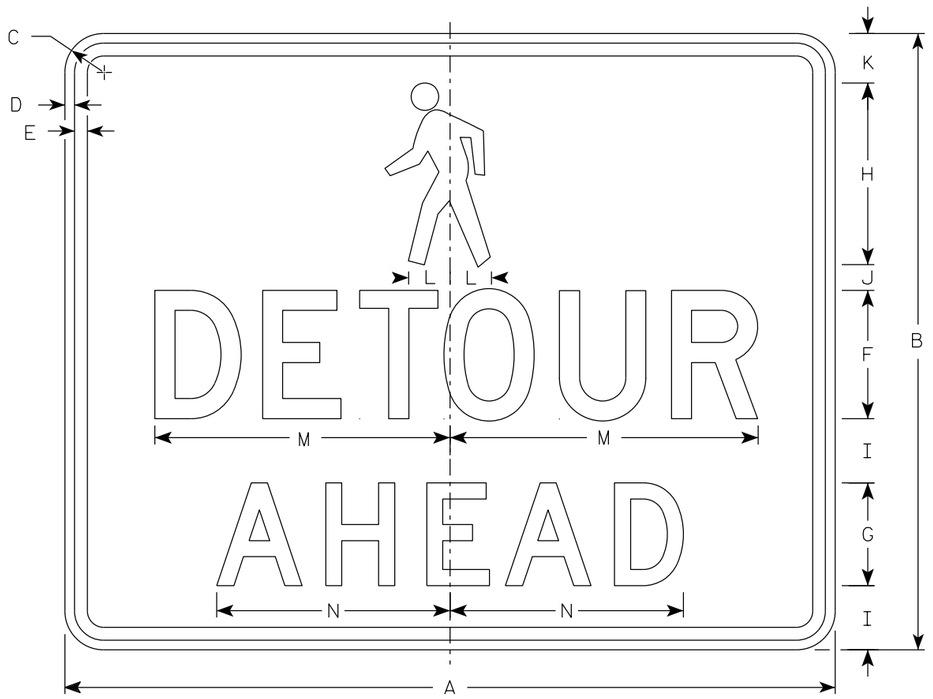
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9B.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 43 | E



M4-9BA

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   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.

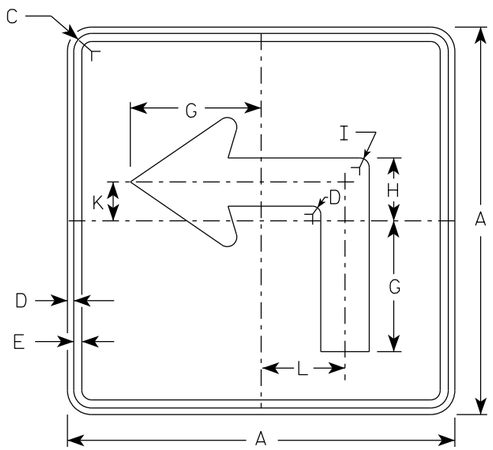
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	5	4	7 1/8	2 1/2	1	1 7/8	1 5/8	11 3/4	9 1/8													5.0
2M	30	24	1 1/2	3/8	1/2	5	4	7 1/8	2 1/2	1	1 7/8	1 5/8	11 3/4	9 1/8													5.0
3																											
4																											
5																											

STANDARD SIGN
M4-9BA

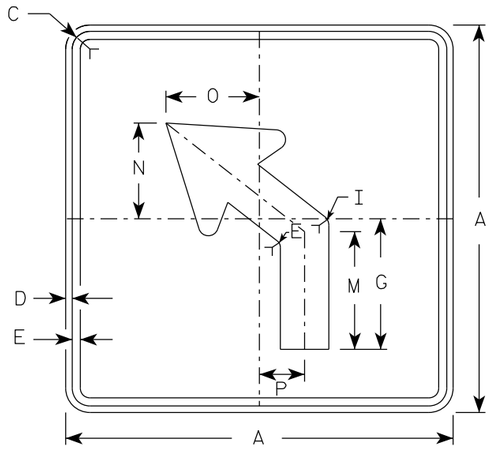
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 2/9/2023 PLATE NO. M4-9BA.3

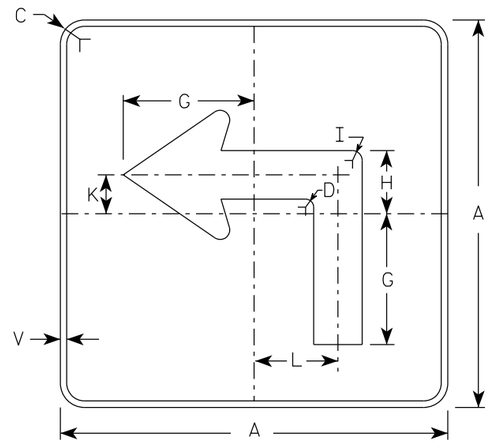
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 44 | E



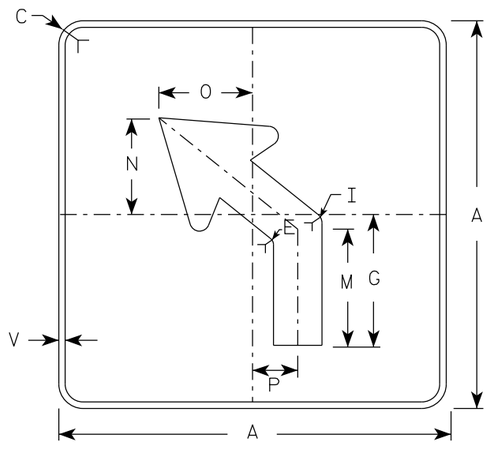
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

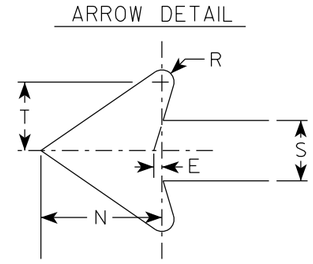


MB5-2L
MK5-2L
MN5-2L
MR5-2L

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
   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.

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	21		1 1/2	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		1/2					3.06
2M	21		1 1/2	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		1/2					3.06
3	30		1 7/8	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		1/2					6.25
4	30		1 7/8	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		1/2					6.25
5	30		1 7/8	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		1/2					6.25

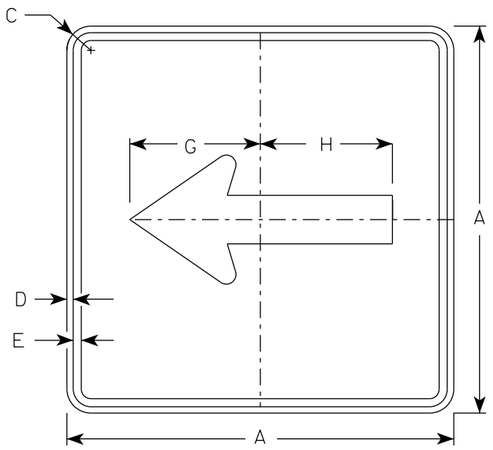
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

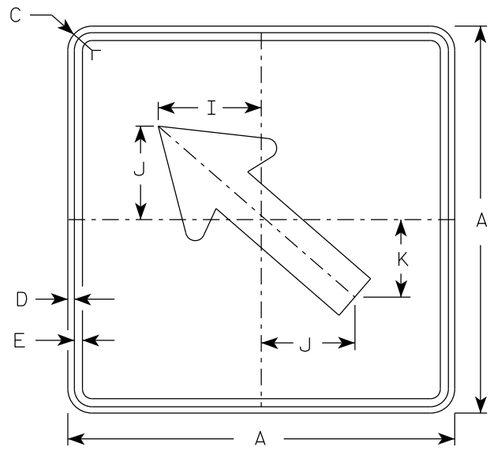
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

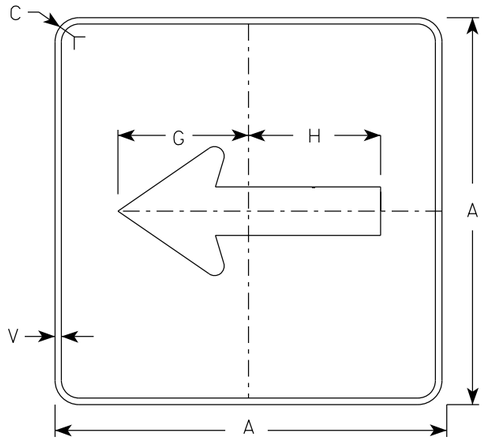
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 45 | E



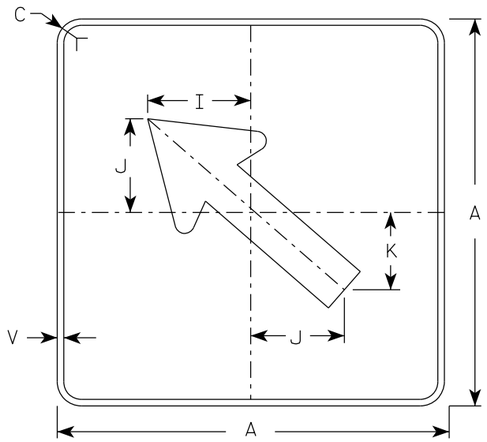
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

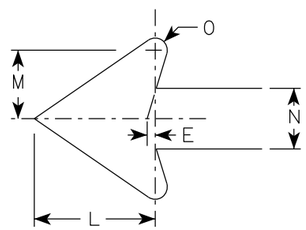


MB6-2
MK6-2
MN6-2
MR6-2

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. 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

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	21		1 1/2	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							1/2					3.06
2M	21		1 1/2	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							1/2					3.06
3	30		1 7/8	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							1/2					6.25
4	30		1 7/8	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							1/2					6.25
5	30		1 7/8	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							1/2					6.25

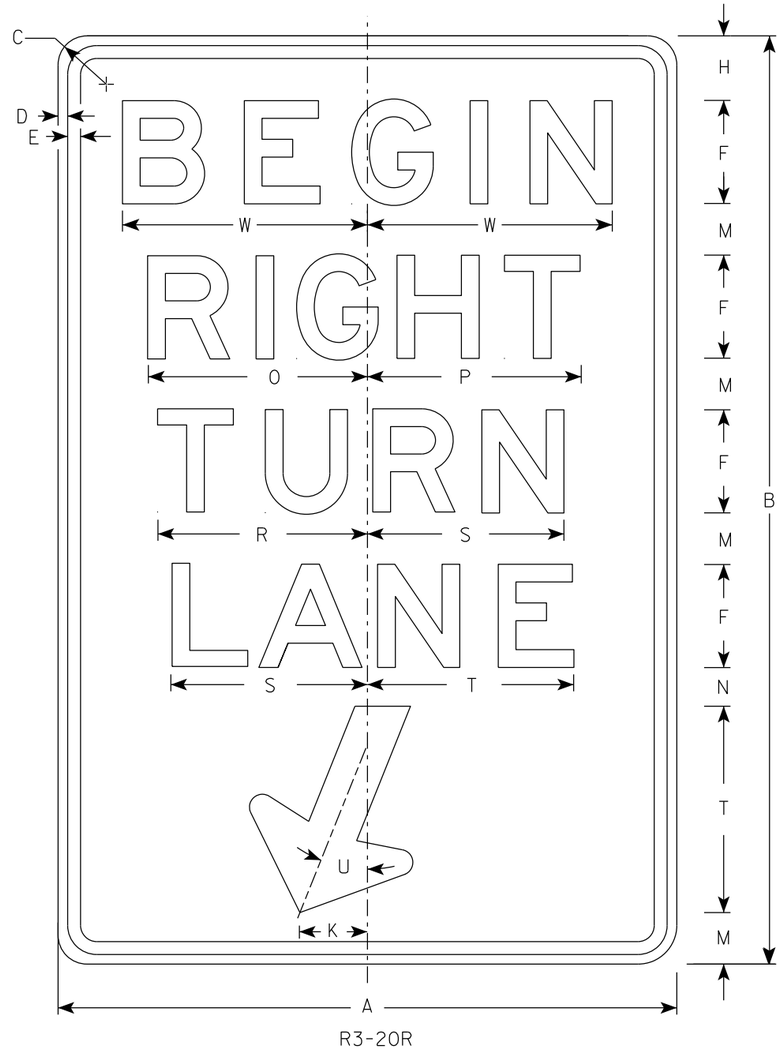
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

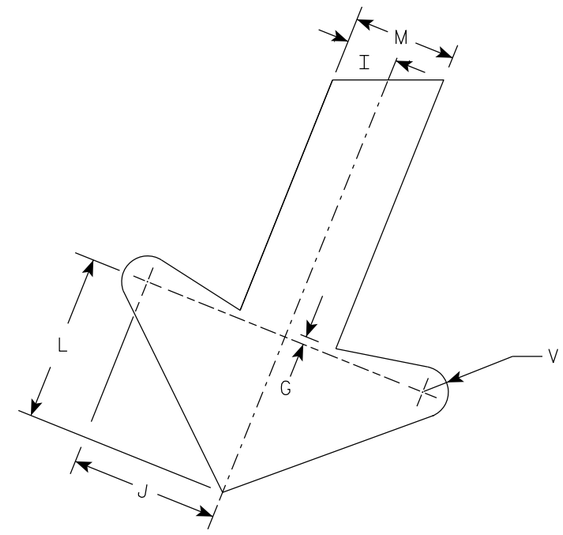
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 46 | E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E



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 1/2	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 1/2	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 7/8	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																											

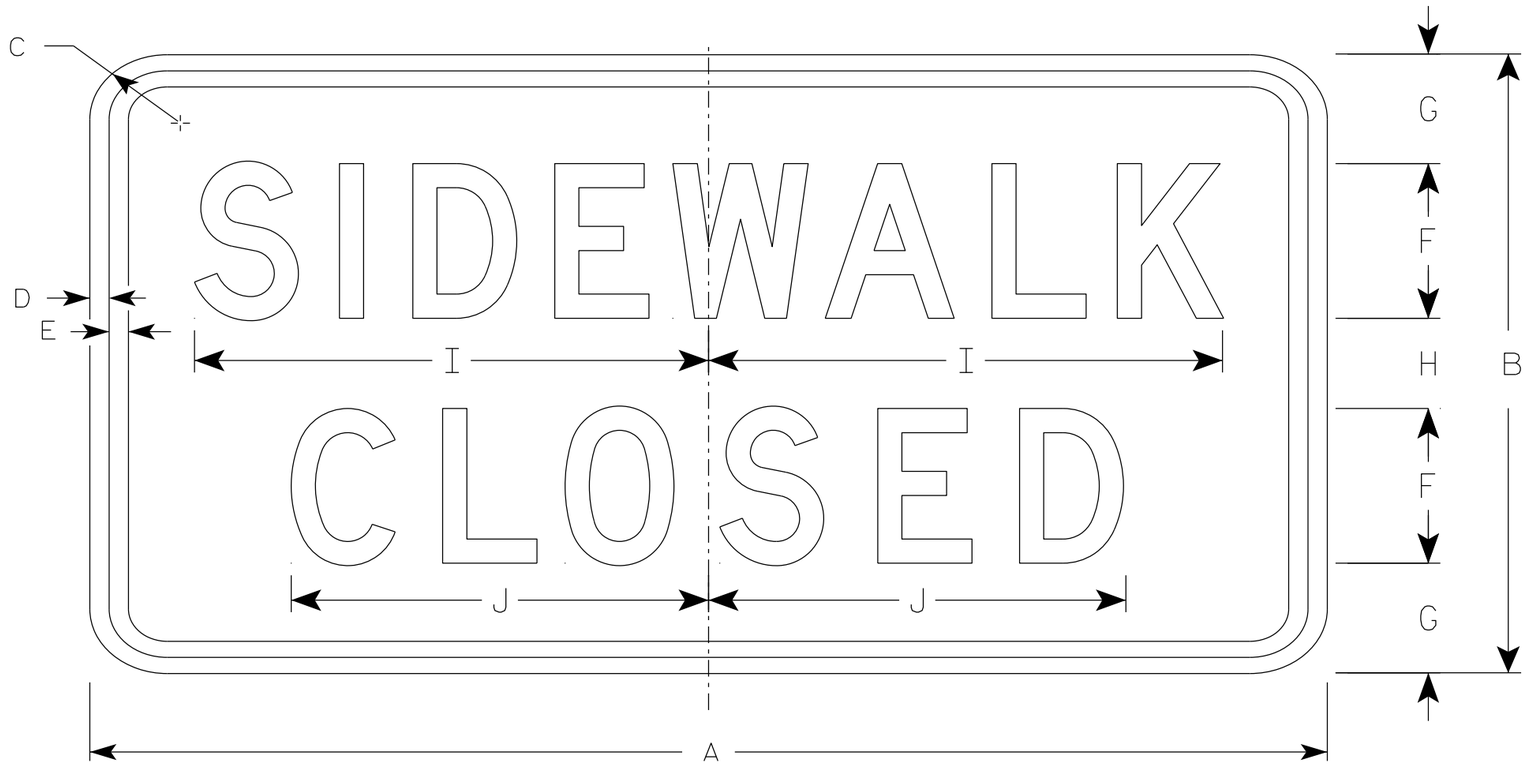
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-20R.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 47 | E



R9-9

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. 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 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
2M	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
3	30	18	1 ½	½	½	4	3 ½	3	12 ½	10 ¼																	3.75
4																											
5																											

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

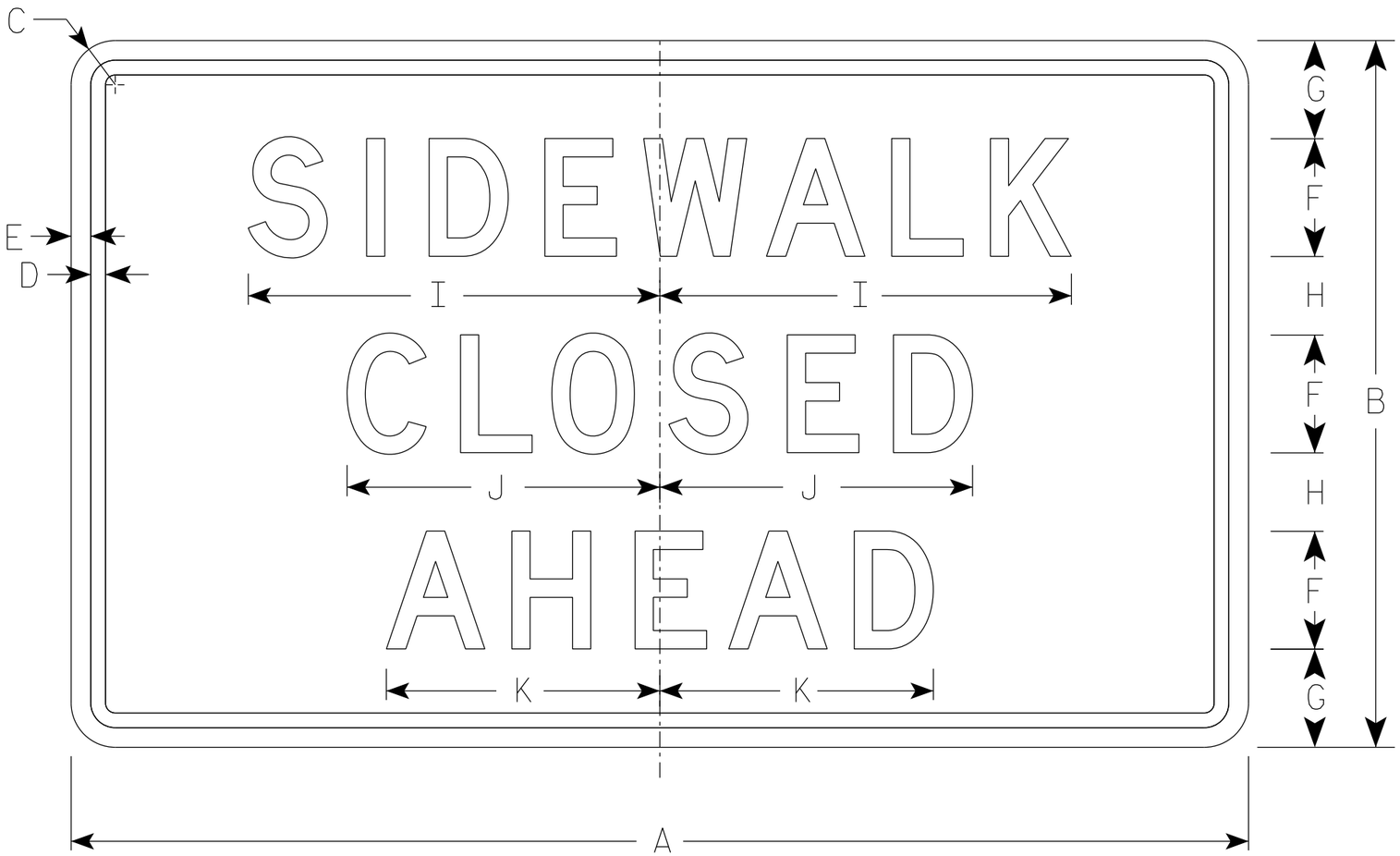
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 48 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



R9-9A

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	30	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
2M	30	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
3																											
4																											
5																											

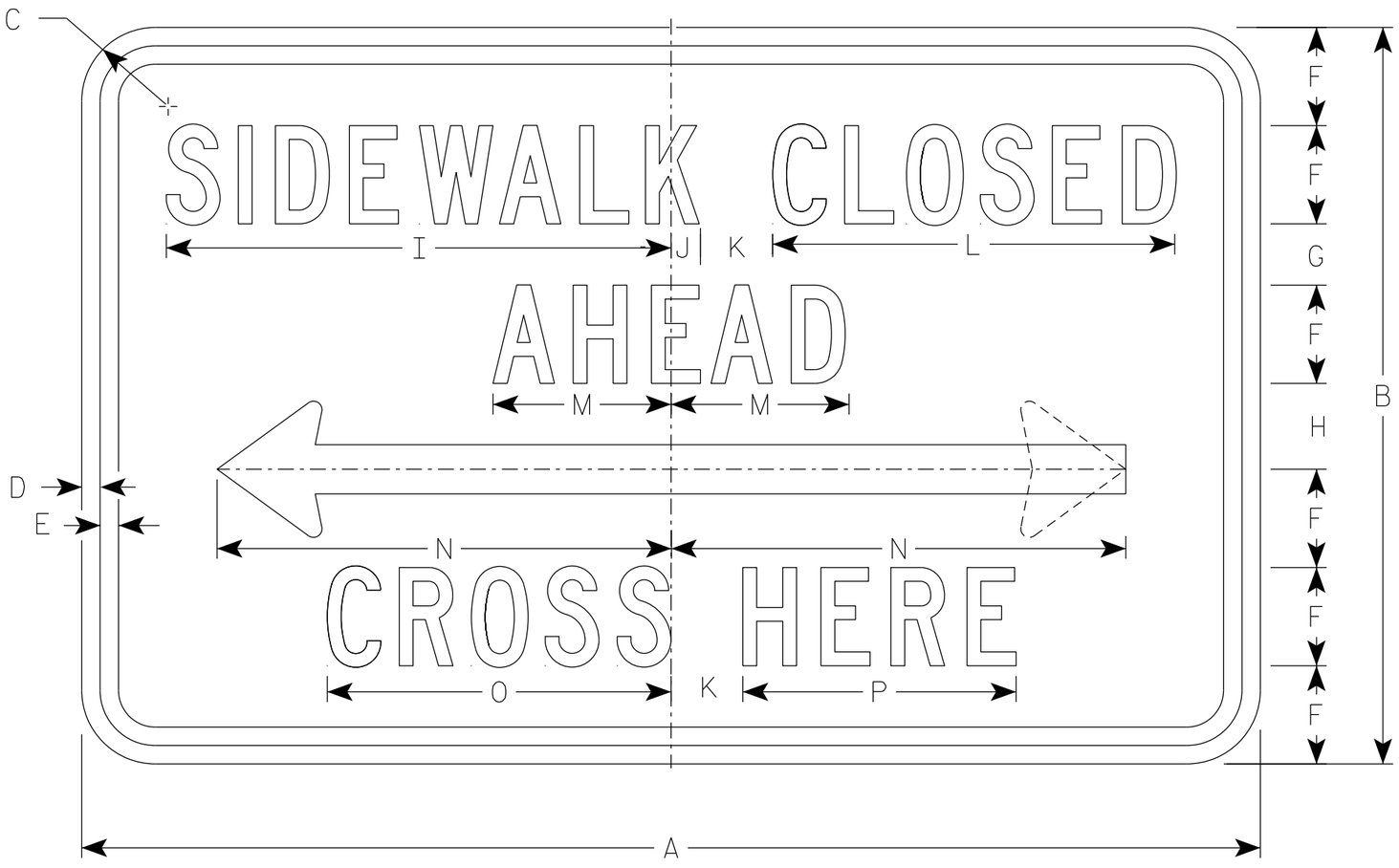
STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

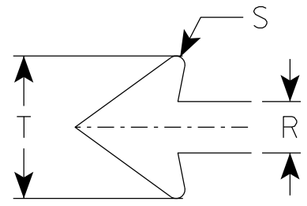
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9A.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 49 | E



R9-11



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C except Size 1 is Series D
4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.
5. R9-11 D (double arrow)
   R9-11 L (left arrow)
   R9-11 R (right arrow)

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 1/2	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2M	24	12	1 1/2	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
3	30	15	1 1/2	3/8	1/2	2	1 1/2	1 1/2	13	3/4	2	10 1/4	4 5/8	12 3/8	8 7/8	6 7/8		1 1/4	1/4	3 5/8							3.125
4																											
5																											

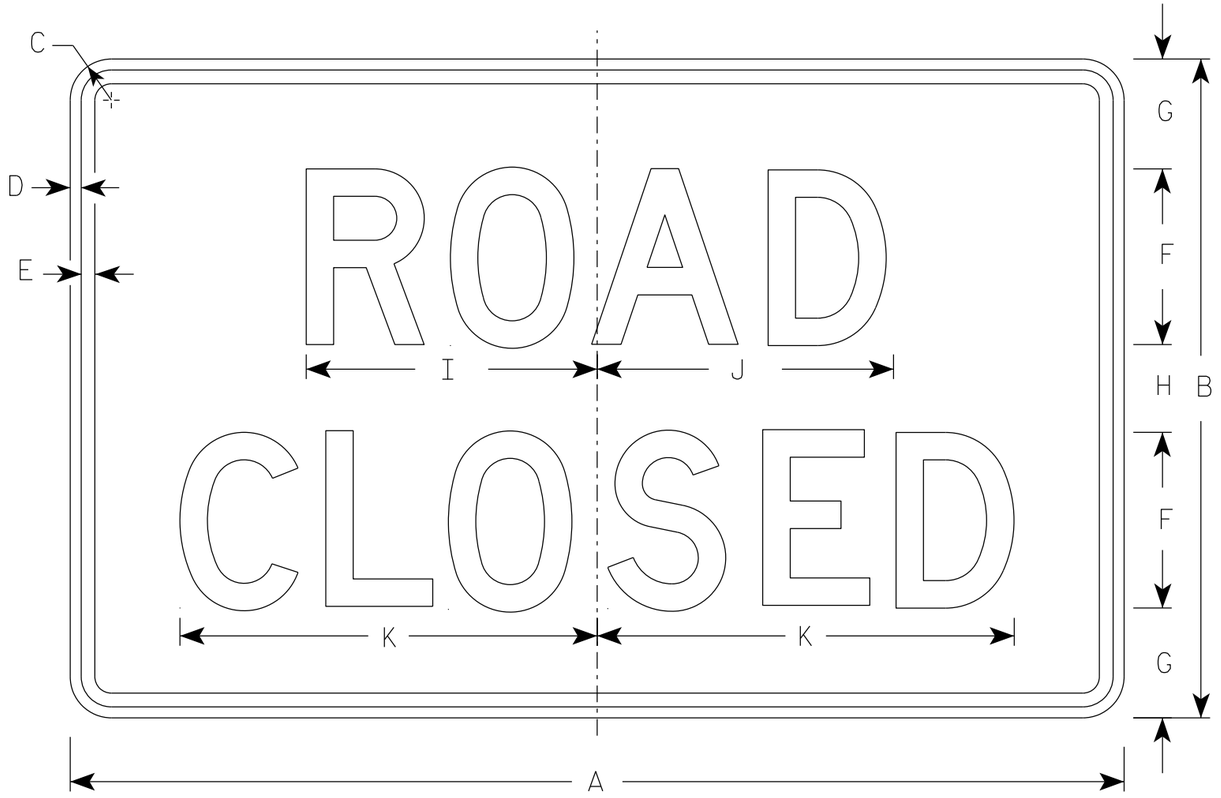
STANDARD SIGN
R9-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-11.5

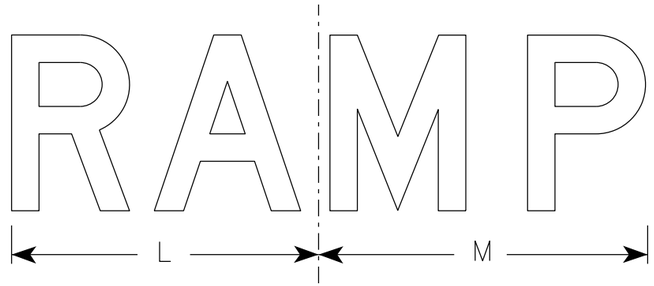
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 50 E



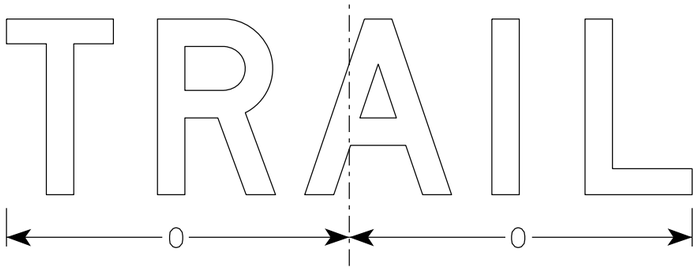
R11-2

NOTES

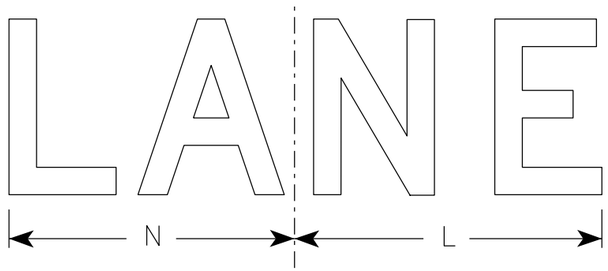
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the 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 7/8	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 7/8	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 7/8	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 7/8	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 7/8	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

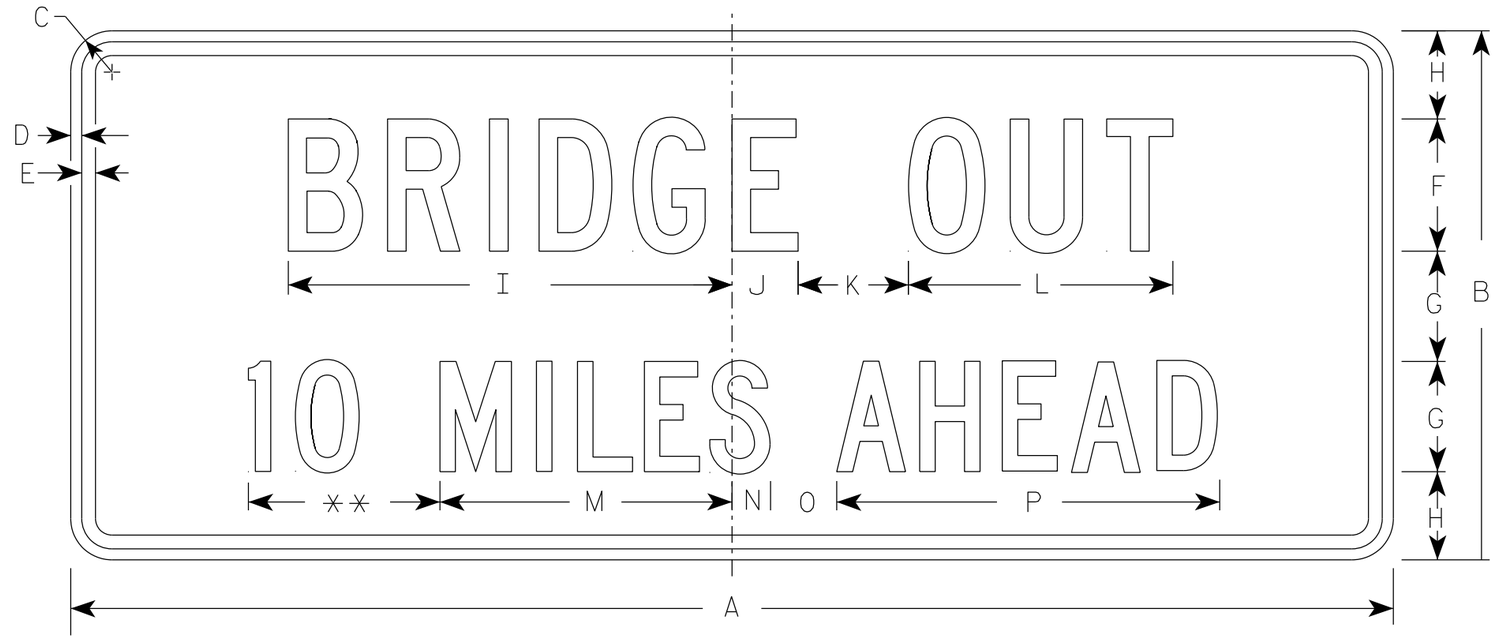
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

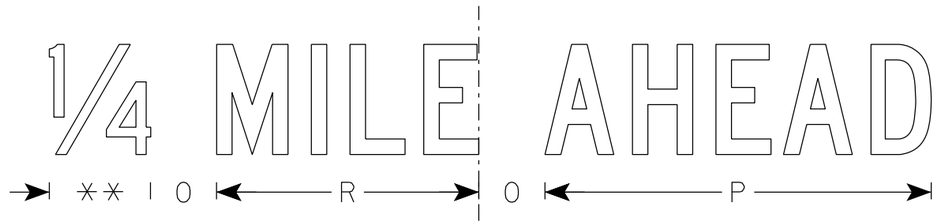
NOTES

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.



R11-3C

** 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	15	1 1/2	1/2	5/8	4	3	2 1/2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4		7 1/8									3.75
2S	60	24	1 7/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
2M	60	24	1 7/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
3																											
4																											
5																											

STANDARD SIGN
R11-3C

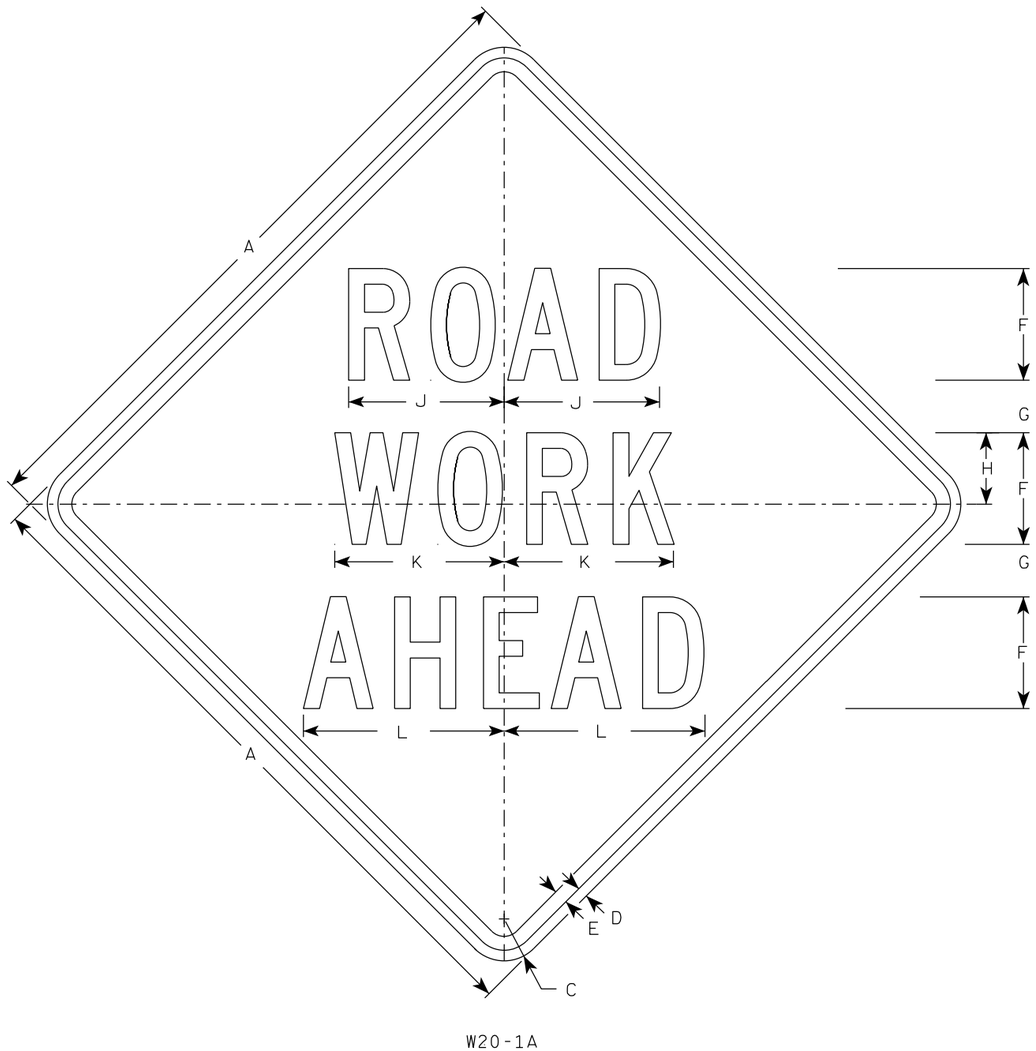
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

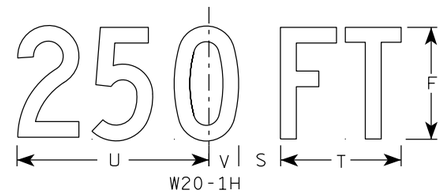
DATE 2/5/24 PLATE NO. R11-3C.4

PROJECT NO:

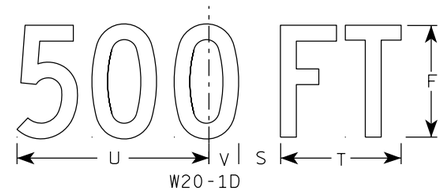
SHEET NO: 52 E



W20-1A



W20-1H



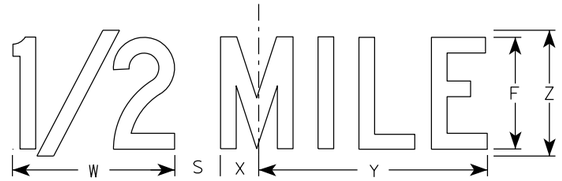
W20-1D

W20-1C

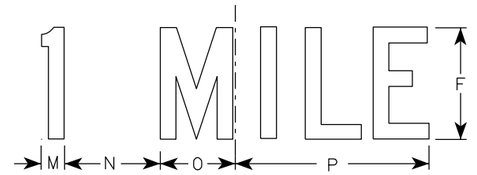
W20-1B

NOTES

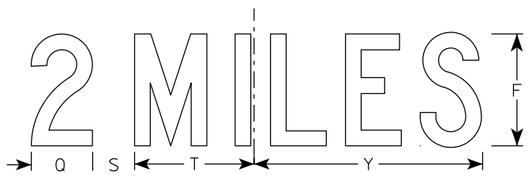
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



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		2 1/4	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		3	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		3	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		3	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		3	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		3	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

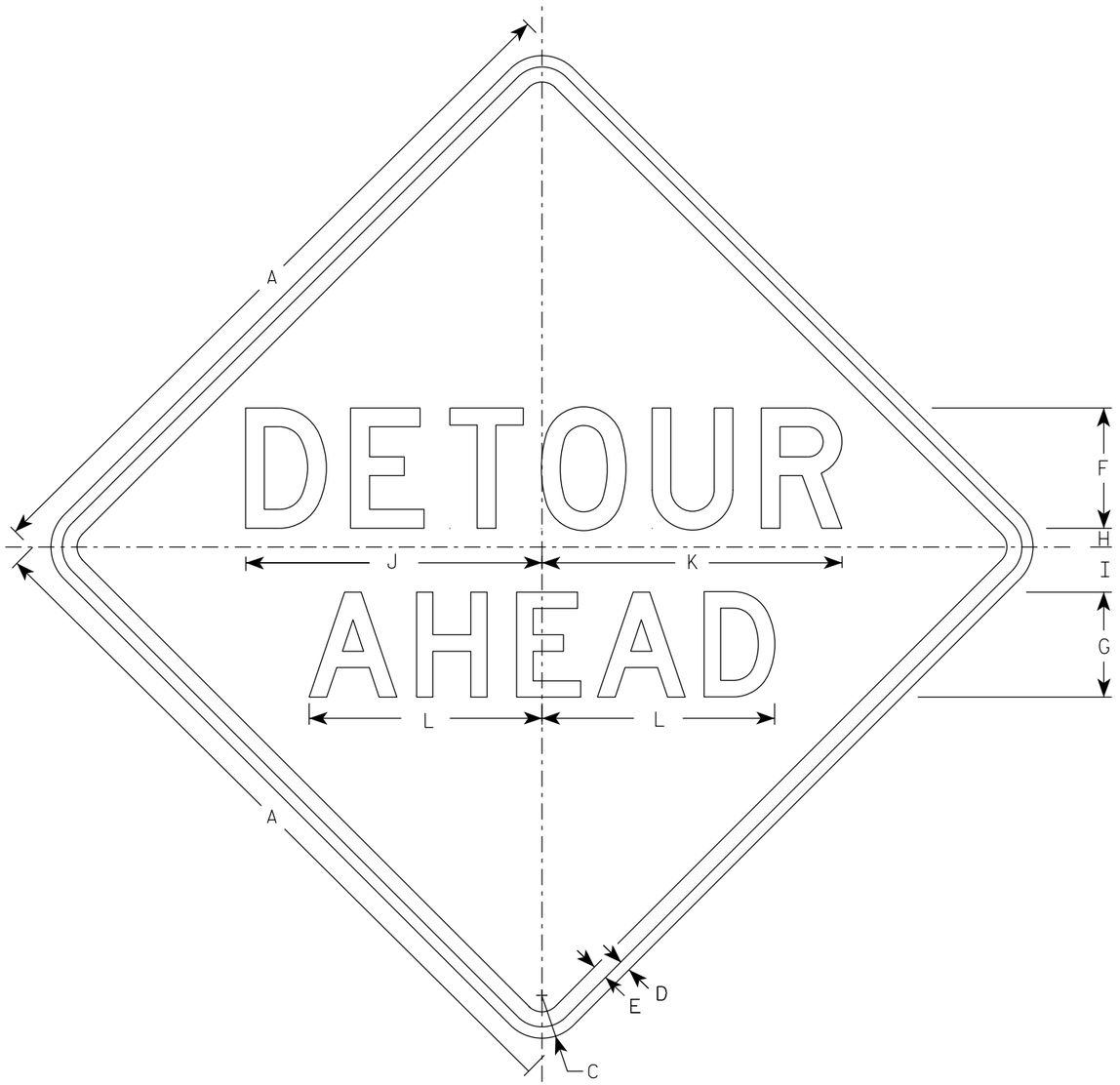
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

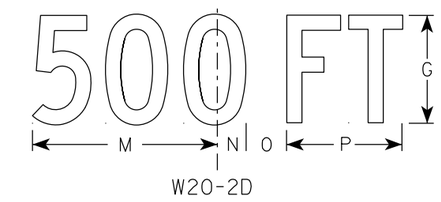
DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

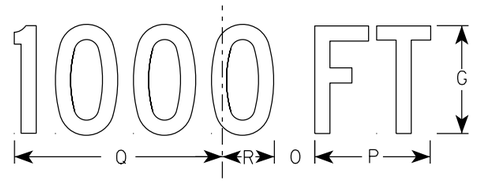
SHEET NO: 53 E



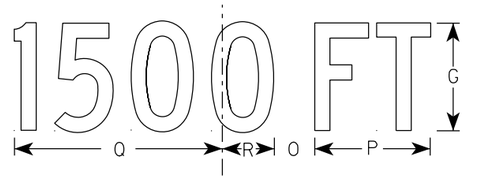
W20-2A



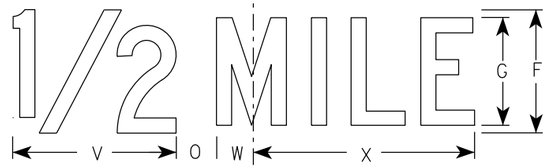
W20-2D



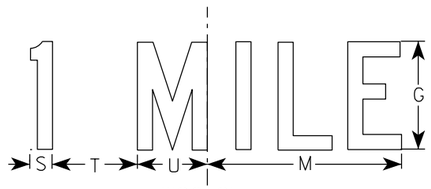
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective
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	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	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		3	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		3	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		3	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		3	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		3	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

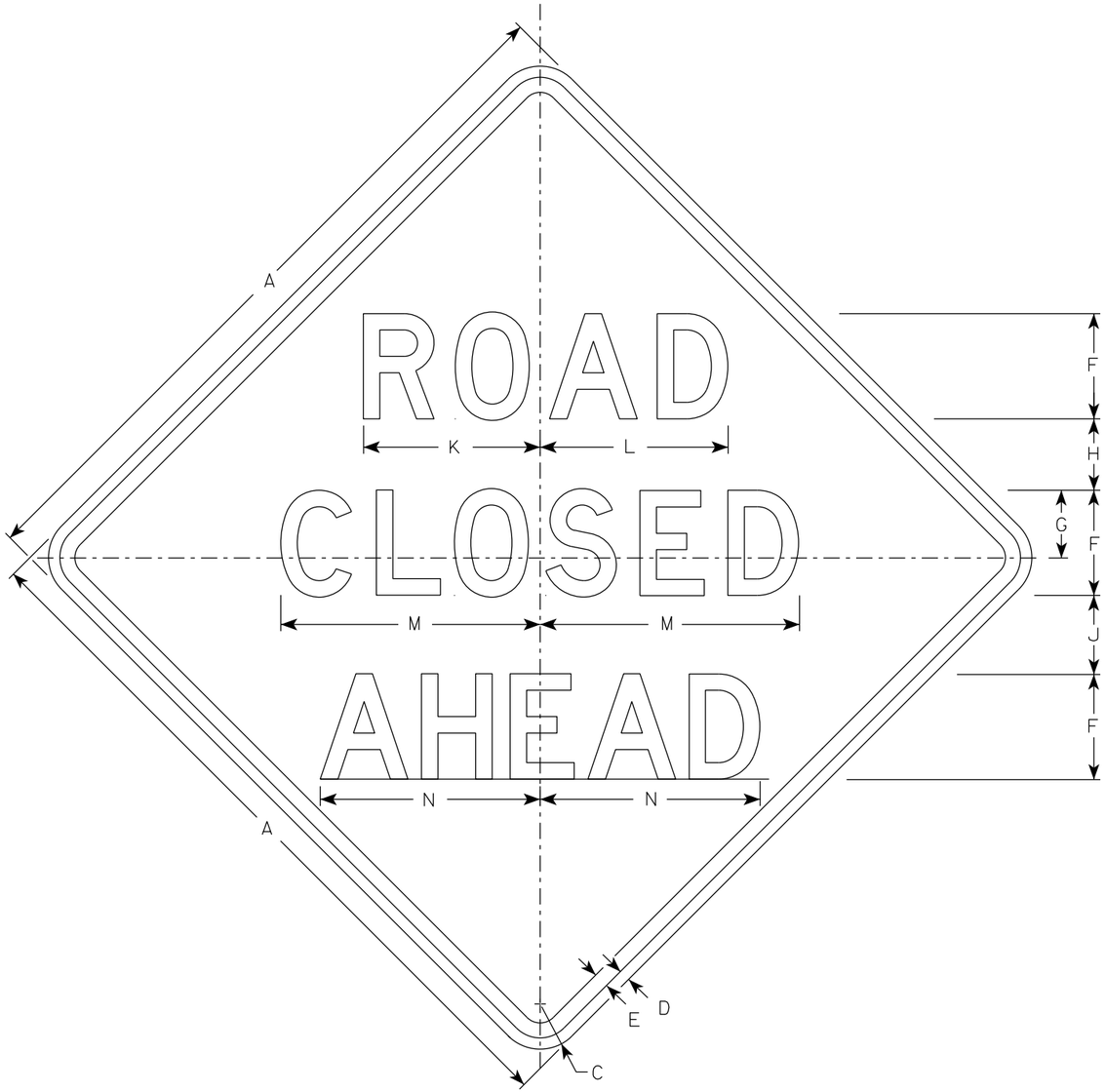
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

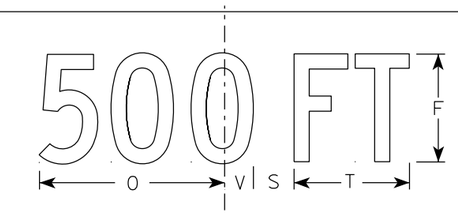
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

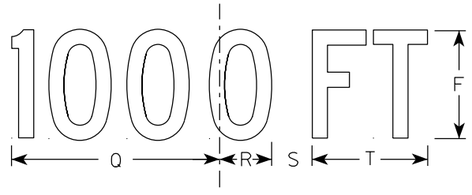
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



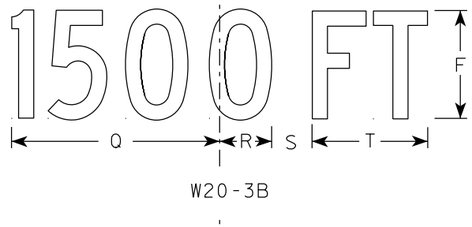
W20-3A



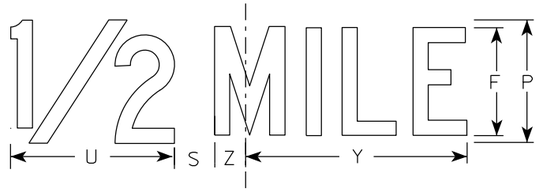
W20-3D



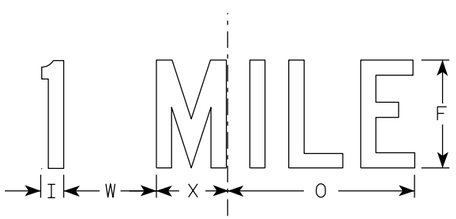
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective
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		2 1/4	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		3	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		3	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		3	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		3	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		3	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

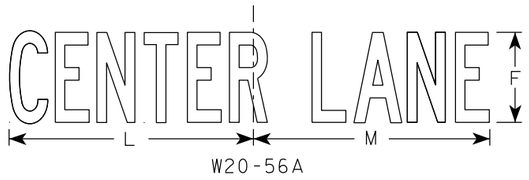
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

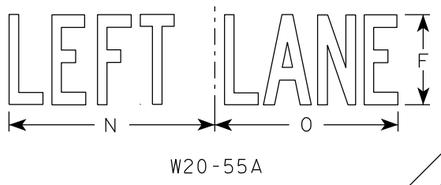
DATE 1/10/2024 PLATE NO. W20-3.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W203.DGN PLOT DATE : 10-JAN 2024 12:02 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

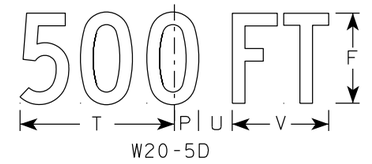


W20-56A

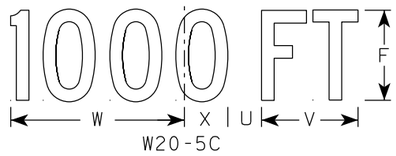


W20-55A

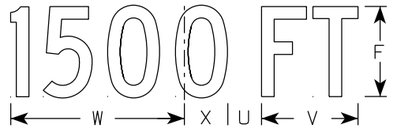
W20-5A



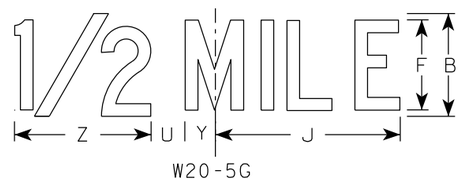
W20-5D



W20-5C



W20-5B



W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective
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	2 1/4	5/8	3/4	5	7/8	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 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	3	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	3	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	3	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	3	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	3	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

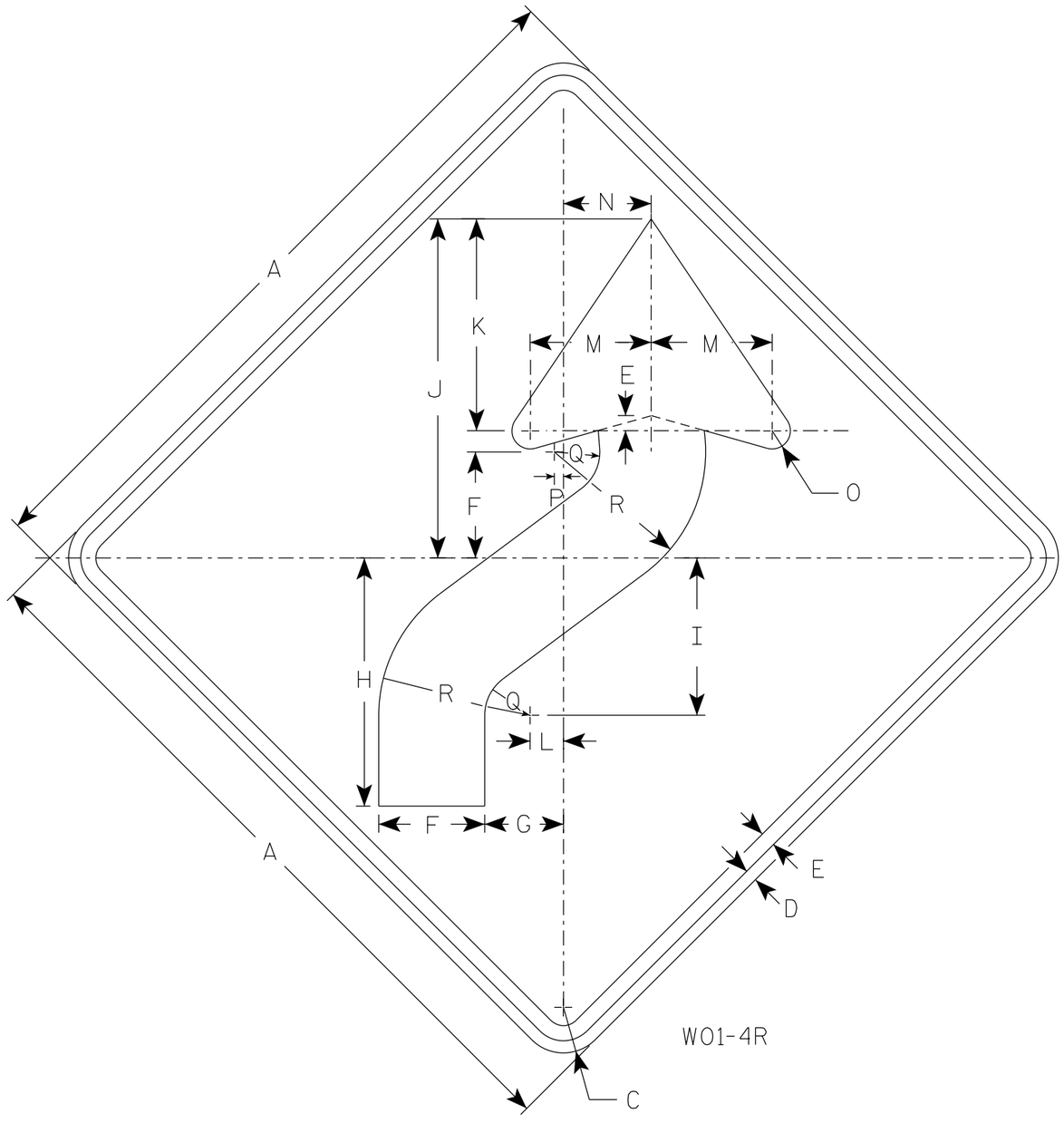
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 56 | E



WO1-4R

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.
4. WO1-4L is the same as WO1-4R 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		2 1/4	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		3	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		3	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		3	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		3	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		3	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

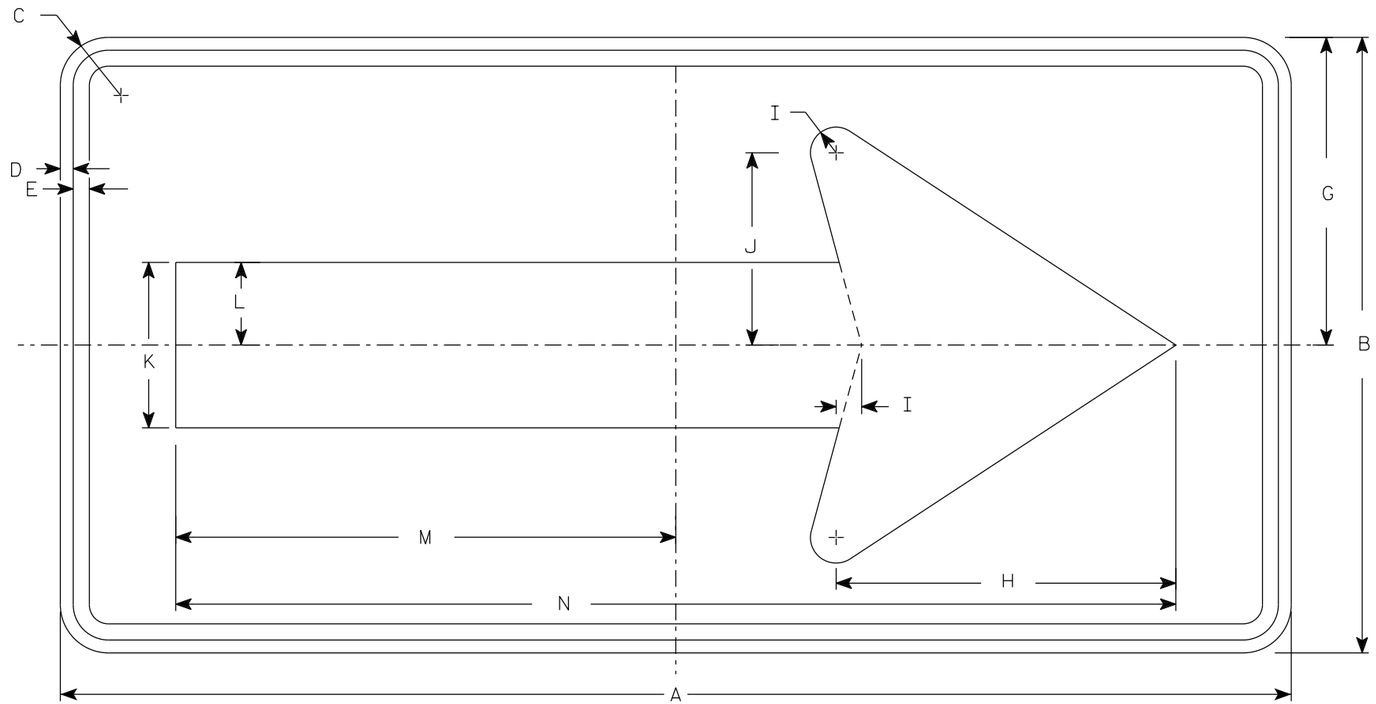
STANDARD SIGN
WO1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-4.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 57 | E



WO1-6

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.

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	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

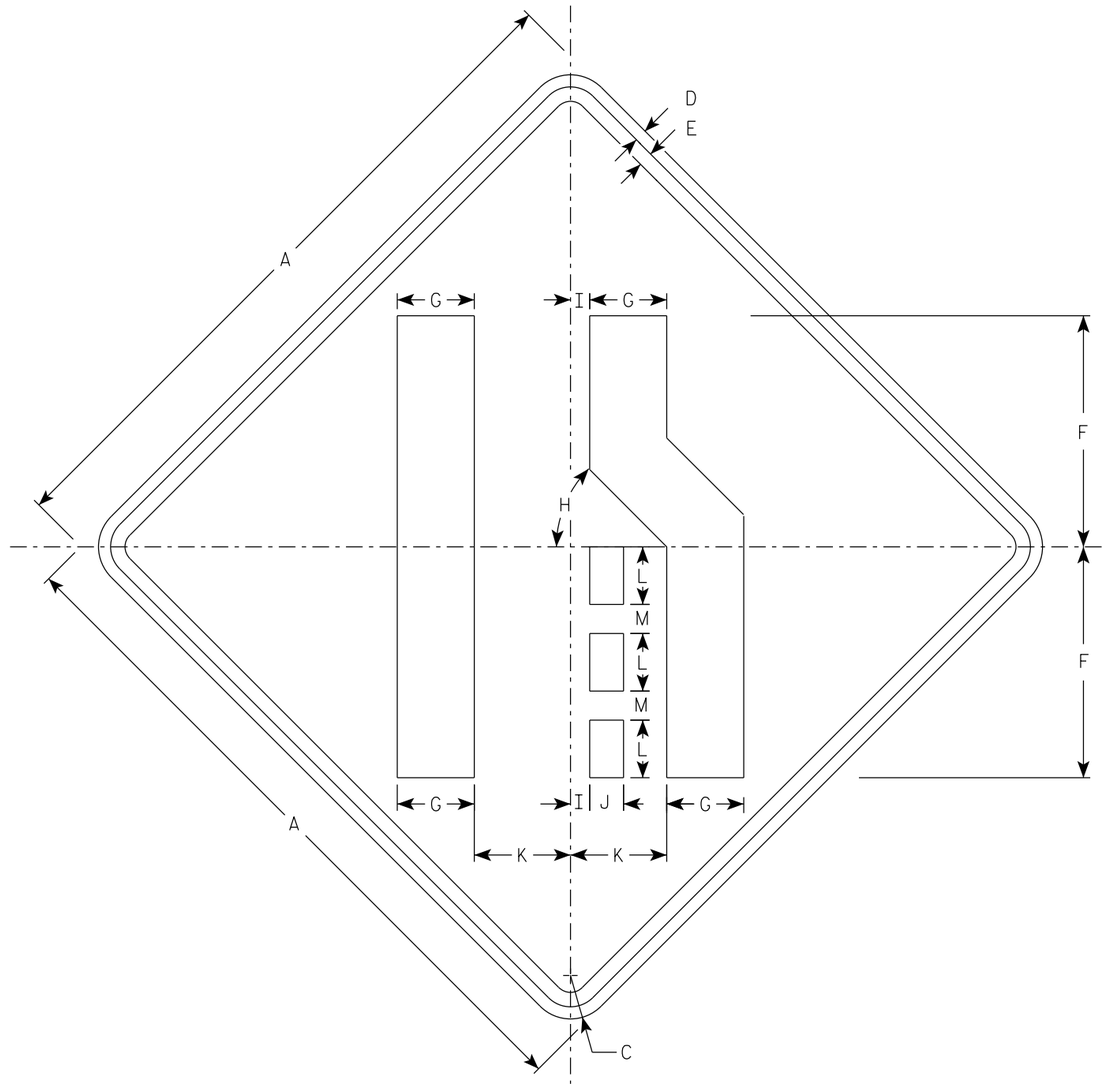
STANDARD SIGN
WO1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-6.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



W04-2R

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.
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		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		3	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 1/25/2024 PLATE NO. W04-2.2

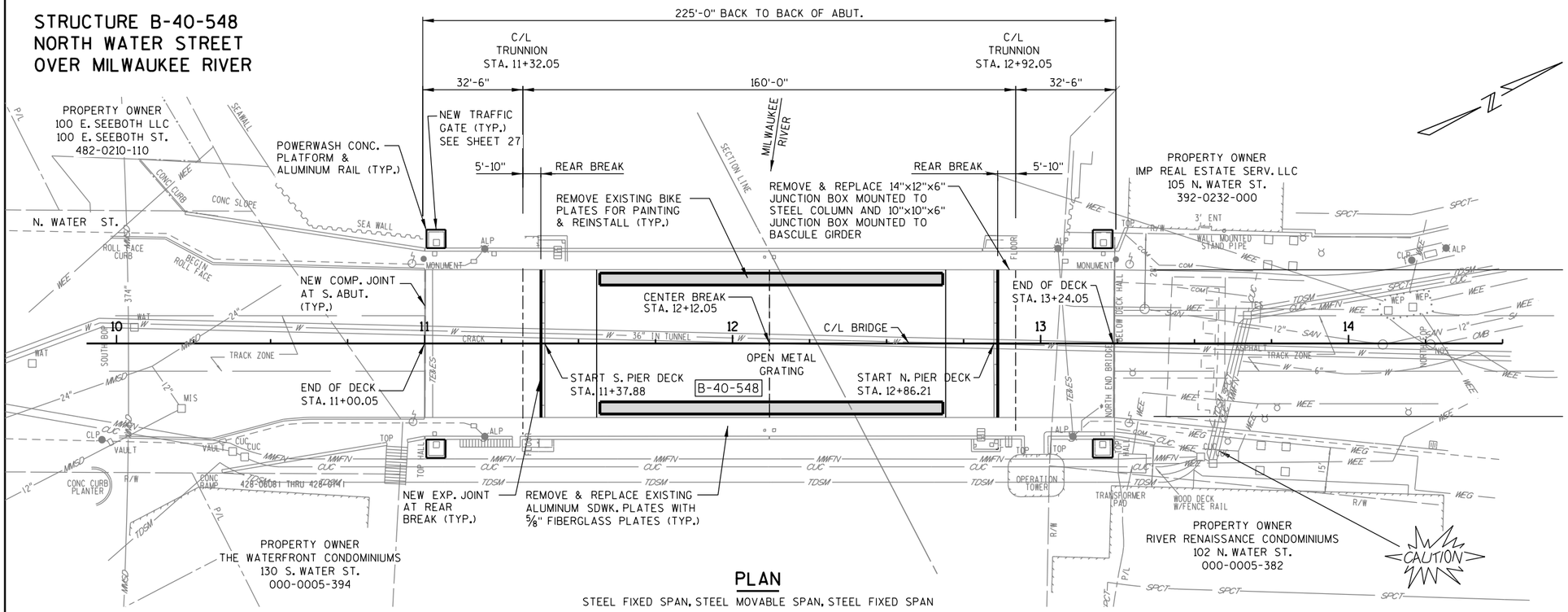
PROJECT NO:

SHEET NO: 59 E

STRUCTURE B-40-548
NORTH WATER STREET
OVER MILWAUKEE RIVER

STATE PROJECT NUMBER

2652-05-70



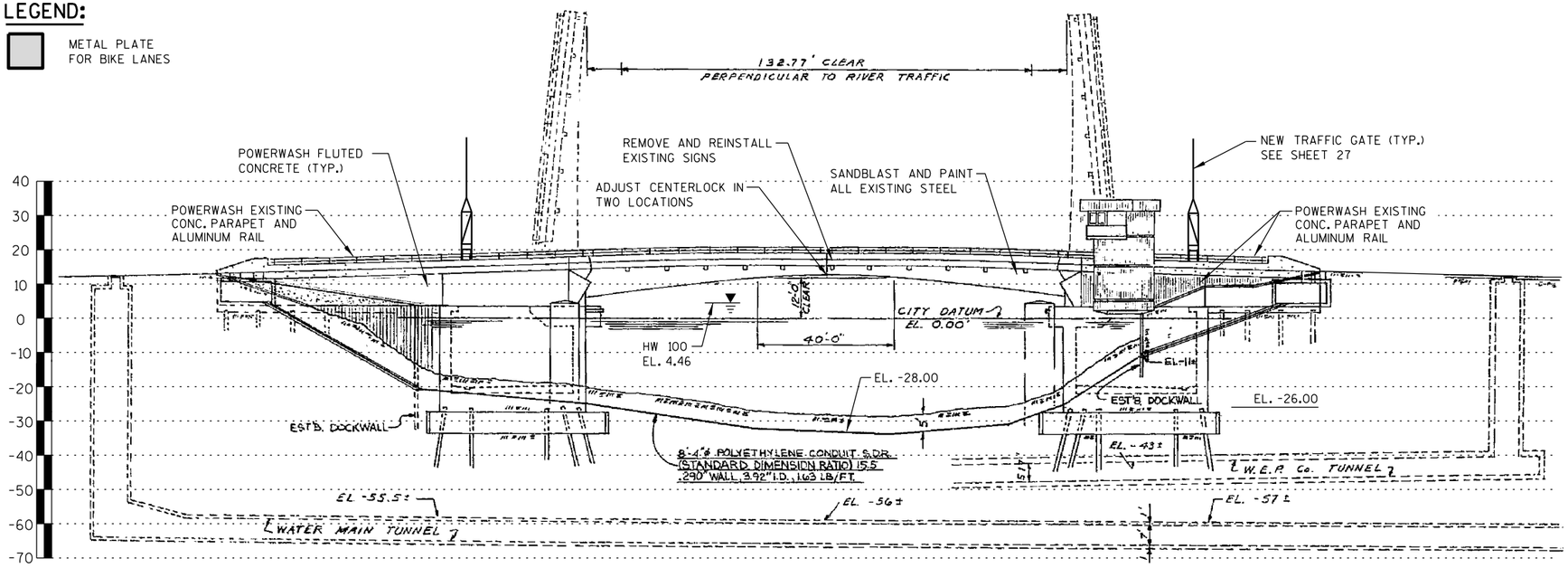
PLAN

STEEL FIXED SPAN, STEEL MOVABLE SPAN, STEEL FIXED SPAN

LIST OF DRAWINGS:

LEGEND:

METAL PLATE FOR BIKE LANES



EAST ELEVATION

LOOKING WEST

BENCH MARK:
TRANSIT LINE IS THE CENTER LINE OF THE WATER ST. BRIDGE BASED ON SPLITS
STATION 10+00 IS THE SOUTH BEGINNING OF PROJECT
(100' SOUTH OF SOUTH END BRIDGE)

WISDOT BRIDGE OFFICE CONTACT:
AARON BONK 608-261-0261

CITY OF MILWAUKEE CONTACT:
JONATHAN THOMAS 414-286-0463

NOTE:

NAVIGABLE WATERWAY SHALL REMAIN OPEN AND ONE LEAF OF BASCULE SPAN MUST BE OPERATIONAL AT ALL TIMES.

WISCONSIN
JONATHAN D. THOMAS
E-42372
MILWAUKEE, WI
PROFESSIONAL ENGINEER
2/13/2025

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
CITY OF MILWAUKEE
DEPARTMENT OF PUBLIC WORKS
INFRASTRUCTURE SERVICES DIVISION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 02/14/25
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-548

N. WATER ST. OVER MILWAUKEE RIVER

COUNTY	~~TOWN~~/CITY/~~VILLAGE~~
MILWAUKEE	MILWAUKEE

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
MJP	SSR	GJR	SSR

GENERAL PLAN

SHEET 1 OF 27
60

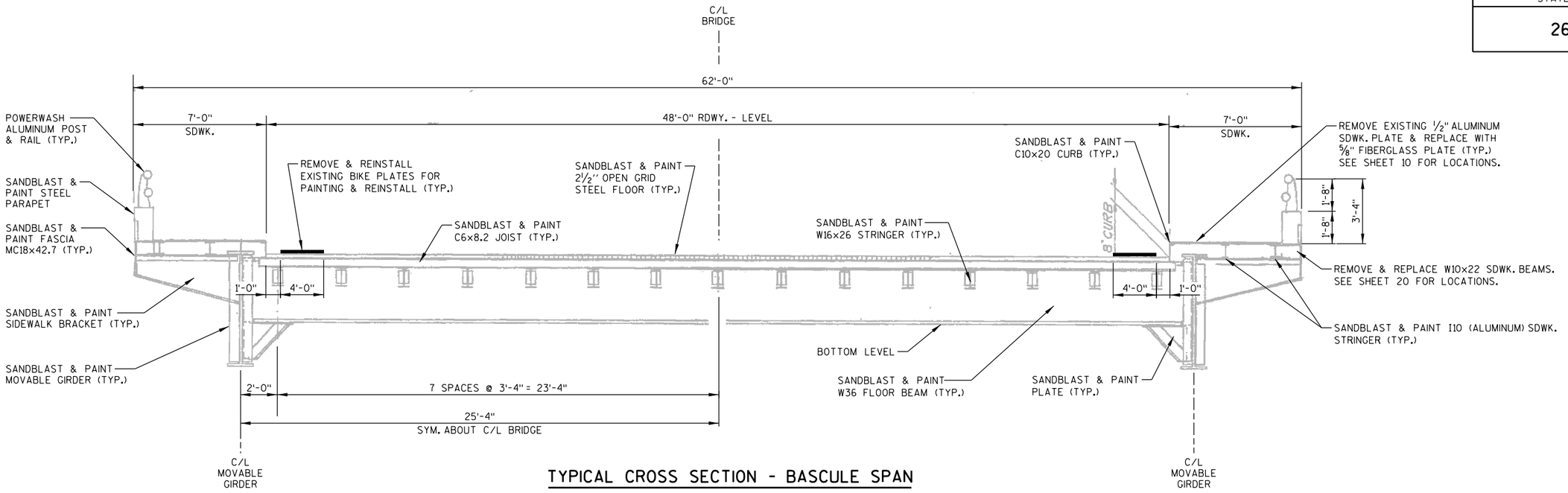
REVISED: 10/30/2024 GJR

8

8

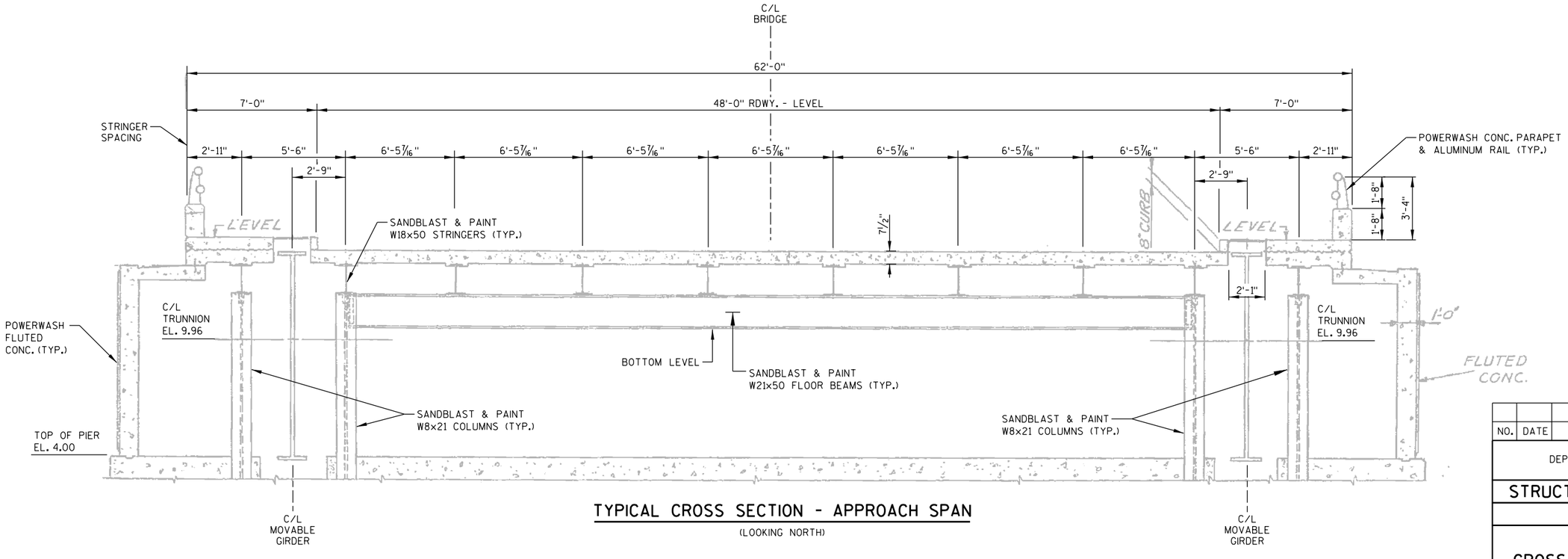
STATE PROJECT NUMBER

2652-05-70



TYPICAL CROSS SECTION - BASCULE SPAN

(LOOKING NORTH)



TYPICAL CROSS SECTION - APPROACH SPAN

(LOOKING NORTH)

REVISED: 08/06/2024 GJR

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-548

DRAWN BY MJP | PLANS CK'D. SSR

CROSS SECTIONS

SHEET 2 OF 27

61

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEM	UNIT	S. PIER WALL	S. PIER	N. PIER	N. PIER WALL	SUPER.	TOTAL
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS B-40-548	EACH					1	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-40-548	EACH					1	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	86			86		172
502.2000	COMPRESSION JOINT SEALER PREFORMED ELASTOMERIC 1 1/4-INCH	LF		60	60			120
502.3200	PROTECTIVE SURFACE TREATMENT	SY					404	404
502.3215	PROTECTIVE SURFACE TREATMENT RESEAL	SY					142	142
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB		525	525			1,050
506.0605	STRUCTURAL STEEL HS	LB					470	470
509.0301	PREPARATION DECKS TYPE 1	SY					3	3
509.0302	PREPARATION DECKS TYPE 2	SY					2	2
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF					60	60
509.1000	JOINT REPAIR	SY		14	14			28
509.1200	CURB REPAIR	LF					9	9
509.1500	CONCRETE SURFACE REPAIR	SF	51	68	13	16		148
509.2100.S	CONCRETE MASONRY DECK REPAIR	CY					9	9
509.9020.S	EPOXY CRACK SEALING	LF					535	535
509.9025.S	EPOXY INJECTION CRACK REPAIR	LF	39	69	22	69		199
509.9026.S	CORED HOLES 2-INCH DIAMETER	EACH	1	1	1	1		4
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	17			17		34
517.0901.S	PREPARATION AND COATING OF TOP FLANGES B-40-548	EACH					1	1
517.1801.S	STRUCTURE REPAINTING RECYCLED ABRASIVE B-40-548	EACH					1	1
517.4501.S	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-40-548	EACH					1	1
517.6001.S	PORTABLE DECONTAMINATION FACILITY	EACH					1	1
SPV.0060.553	EXPANSION JOINTS AT REAR BREAK	EACH					2	2
SPV.0060.560	HEEL BLOCK REFURBISHMENT	EACH					1	1
SPV.0060.561	TRAFFIC GATES REPLACEMENT	EACH					4	4
SPV.0060.562	BRIDGE ELECTRICAL WORK	EACH					1	1
SPV.0060.563	CENTERLOCK ADJUSTMENTS	EACH					1	1
SPV.0060.565	ANCHOR ASSEMBLIES TRAFFIC GATES	EACH					4	4
SPV.0060.597	PROTECTING UTILITIES	EACH					1	1
SPV.0090.540	URETHANE INJECTION CRACK REPAIR	LF					20	20
SPV.0165.501	REMOVING AND REINSTALLING METAL PLATES FOR BIKE LANES	SF					909	909
SPV.0165.502	FIBERGLASS SIDEWALK FLOOR PLATES	SF					1,928	1,928
SPV.0165.596	POWER WASHING	SF	885	1,353	2,170	216	2,505	7,129
	NON-BID ITEMS							
	FELT JOINT FILLER 1-INCH							
	NON-BITUMINOUS JOINT FILLER							

GENERAL NOTES

ALL STATIONS AND ELEVATIONS ARE IN FEET.

ELEVATIONS ARE REFERRED TO CITY OF MILWAUKEE DATUM = 580.60 NGVD.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

DRAWINGS SHALL NOT BE SCALED. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR DIMENSIONS ARE OUT TO OUT OF BAR.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK. UNLESS SPECIFIED OTHERWISE.

VARIATIONS FROM EXISTING PROFILE OVER 1/4" MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.

ALL EXISTING SUPERSTRUCTURE STEEL, SUBSTRUCTURE STEEL, MACHINERY STEEL, AND PIER ARCHITECTURAL STEEL SHALL BE SANDBLASTED AND PAINTED UNDER BID ITEMS 517.0901.S "PREPARATION AND COATING OF TOP FLANGES B-40-548", 517.1801.S "STRUCTURE REPAINTING RECYCLED ABRASIVE B-40-548", AND 517.4501.S "NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-40-548".

EXISTING CONDUITS AND JUNCTION BOXES SHALL BE REPLACED UNDER BID ITEM SPV.0060.562 "BRIDGE ELECTRICAL WORK".

PAINT FOR ALL STEEL TO MATCH AMS STANDARD NO. 595A COLOR NO. 20095.

CONCRETE REMOVALS SHALL BE DEFINED BY A 1-INCH DEEP SAWCUT.

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

ALL NEW OR EXISTING HOLES IN STEEL NOT BEING USED ARE TO BE FILLED WITH HIGH STRENGTH, GALVANIZED BOLTS PRIOR TO STRUCTURAL PAINTING.

AWS BRIDGE WELDING CODE D1.5 LATEST EDITION.

AWS STRUCTURAL WELDING CODE - STEEL D1.1 LATEST EDITION.

FOR BENT PLATES, CONFORM TO ASTM A143 TO PREVENT EMBRITTLEMENT CAUSED BY THE GALVANIZING PROCESS.

NEW STEEL SECTIONS SHALL BE GALVANIZED FOLLOWING ASTM A123.

NEW STEEL HARDWARE SHALL BE GALVANIZED FOLLOWING ASTM A153.

ALL FLAME CUT EDGES OF PLATES THAT WILL BE PAINTED SHALL BE GROUND OR PLANED TO REMOVE THE HARDENED SURFACE CAUSED BY THE FLAME. REMOVAL OF THIS SURFACE IS NECESSARY TO OBTAIN A PROPER BLASTED SURFACE FOR THE ADHESION OF THE PAINT.

AT CURB REPAIR REMOVE CONCRETE TO SOUND CONCRETE OR AT LEAST 1" BEHIND EXISTING REINFORCING STEEL.

CLEAN AND FILL EXISTING LONGITUDINAL AND TRANSVERSE CRACKS WITH PENETRATING EPOXY AS DIRECTED BY THE FIELD ENGINEER.

REQUIRED AS PART OF BID ITEM SPV.0060.562 "BRIDGE ELECTRICAL WORK":

REMOVE AND REPLACE 2" DIA. RIGID CONDUIT FEED CENTERLOCK LOCATED UNDER WEST SIDEWALK IN NORTH LEAF.

REMOVE AND REPLACE 1" DIA. RIGID CONDUIT IN UNDER SOUTH END OF NORTH LEAF.

REMOVE AND REPLACE 14"x12"x6" JUNCTION BOX MOUNTED TO STEEL COLUMN AT TRUNNION AT NORTH LEAF.

REMOVE AND REPLACE 9"x9"x6" JUNCTION BOX MOUNTED TO WEST BASCULE GIRDER AT TRUNNION AT NORTH LEAF.

REMOVE AND REPLACE EXISTING 2-2" AND 2-1 1/4" DIA. ELECTRICAL CONDUITS AND ASSOCIATED EXISTING BRACKETS LOCATED AT SOUTH PIER WALL.

REMOVE AND REPLACE EXISTING 1 1/2" DIA. PVC ELECTRICAL CONDUIT FEEDING LIGHTS AT TOP OF SOUTH PIER WALL.

EXISTING BRIDGE PLANS ARE ON FILE:
INFRASTRUCTURE SERVICES DIVISION, STRUCTURAL PLANNING & DESIGN
FRANK P. ZEIDLER MUNICIPAL BUILDING
841 N. BROADWAY, ROOM 907
MILWAUKEE, WI 53202
PHONE (414) 286-0463

STATE PROJECT NUMBER

2652-05-70

SCOPE OF WORK

SANDBLAST AND PAINT STEEL AT BASCULE SPANS AND PIT SPANS INCLUDING BUT NOT LIMITED TO GIRDERS, FLOORBEAMS, STRINGERS, COLUMNS AND TRUSSES AT PIERS PURLINS, GRATING, CHANNELS, LATERAL BRACING, DIAPHRAGMS AND GUSSET PLATES. (THIS WORK REQUIRES REMOVING EXISTING BIKE PLATES AND SIGNS AT BOTH SIDES OF BASCULE SPAN DURING PAINTING OPERATIONS AND REINSTALLING.)

INSTALL NEW TRAFFIC GATES.

CENTERLOCK MAINTENANCE.

REMOVE EXISTING 1/2" ALUMINUM SIDEWALK PLATES AND REPLACE WITH 5/8" FIBERGLASS PLATES.

POWER WASH CONCRETE PARAPETS AND ALUMINUM RAIL.

CONCRETE SURFACE REPAIRS AND EPOXY INJECTION AS SHOWN ON PLANS.

INSTALL NEW EXPANSION JOINTS AT REAR BREAKS.

DESIGN DATA

MATERIAL PROPERTIES

CONCRETE SUPERSTRUCTURE ... f'_C = 4,000 PSI
CONCRETE SUBSTRUCTURE ..... f'_C = 3,500 PSI
BAR STEEL REINFORCEMENT .... f_y = 60,000 PSI
STRUCTURAL STEEL ..... F_y = 50,000 PSI

LIVE LOAD

INVENTORY RATING: HS=14
OPERATING RATING: HS=24
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

TRAFFIC DATA

ADT (2023) = 15,778
ADT (2045) = 17,531
R.D.S. = 30 MPH

HYDRAULIC DATA

100 YEAR FREQUENCY		10 YEAR FREQUENCY
Q_{100}	= 26,700 C.F.S. (SEWRPC)	HW_{10} = EL. 3.22
VEL.$_{100}$	= 5.48 F.P.S. (SEWRPC)	
HW_{100}	= EL. 4.46	
WATERWAY AREA	= NA	
DRAINAGE AREA	= 872 SQ. MI.	
ROADWAY OVERTOPPING	= NA	
SCOUR CRITICAL CODE	= 8	

UTILITIES

EXISTING UTILITIES ARE TO BE KEPT IN SERVICE AND PROTECTED DURING THE REHABILITATION PROJECT. SEE PROJECT SPECIAL PROVISION FOR DETAILS ON UTILITY WORK.

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

REMOVE THE ABANDONED GREASE LINE UNDER EAST SIDE OF NORTH LEAF AT MOVABLE SPAN.

REPLACE AND REATTACH NEW UTILITY HANGER RODS IN CONFLICT WITH CONCRETE SURFACE REPAIR IN UNDERSIDE OF APPROACH CONCRETE DECK.

PROTECT EXISTING ELECTRICAL CONDUIT AT RAILING AT SOUTH PIER.

PROTECT UTILITIES AT SOUTH AND NORTH PIER WALLS AND IN UNDERSIDE OF SOUTH AND NORTH APPROACH CONCRETE DECKS.

PROTECT FURNACE HEATER LOCATED AT EAST SIDE OF NORTH PIER.

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TOTAL ESTIMATED QUANTITIES

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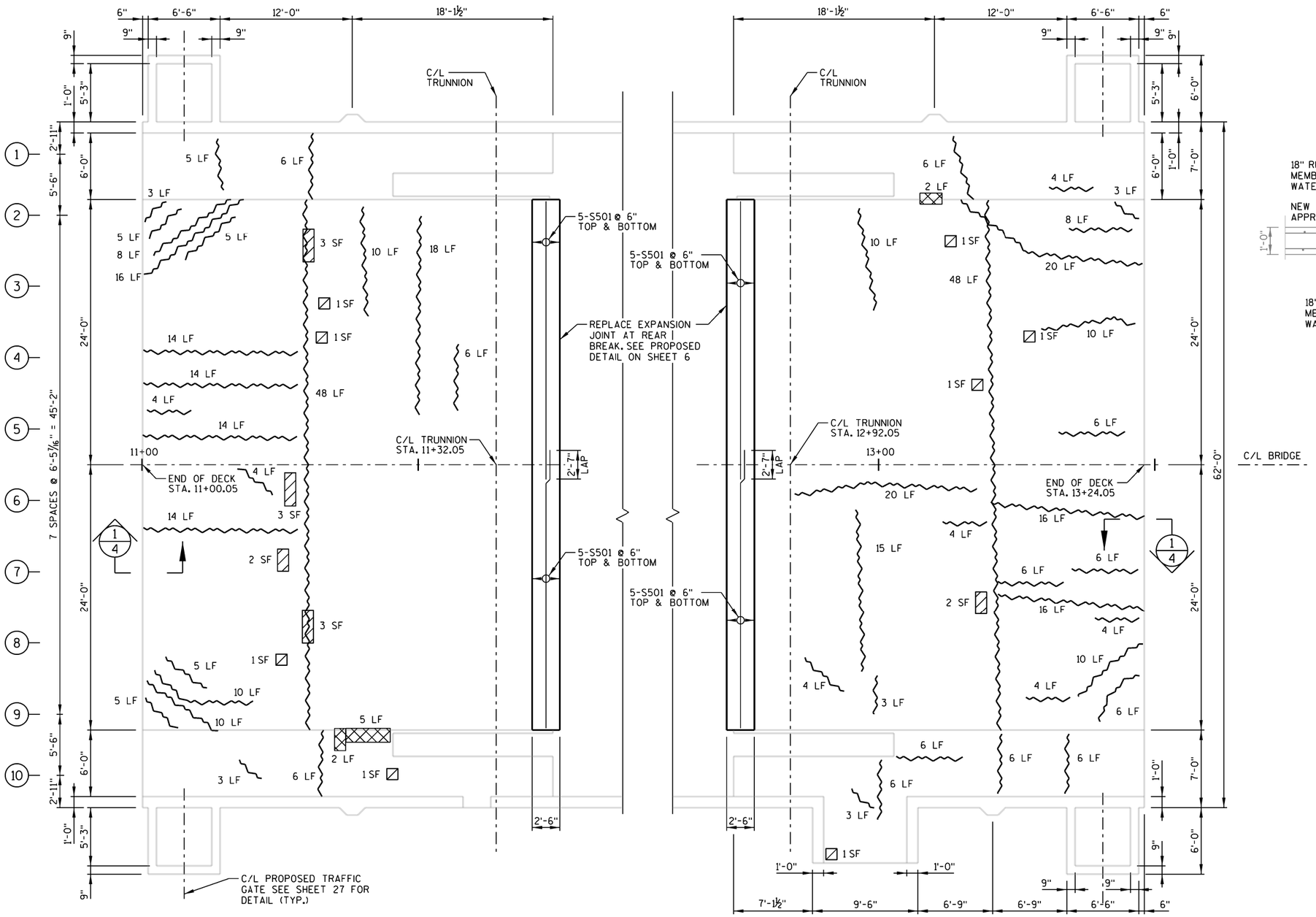
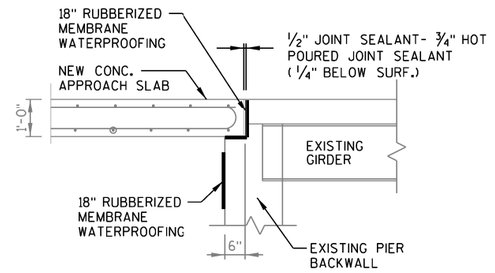
BILL OF BARS

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	LOCATION
S501	X	40	25'-2"		TRANSVERSE TOP AND BOTTOM SOUTH AND NORTH APPROACH DECK



SOUTH CONCRETE APPROACH - DECK PLAN

NORTH CONCRETE APPROACH - DECK PLAN



PAVING NOTCH SECTION 1/4

LEGEND:

- CONCRETE SURFACE REPAIR
- CURB REPAIR
- EPOXY CRACK SEALING

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SOUTH AND NORTH APPROACH DECK

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FILE NAME : W:\str\b0101\2025 Rehab Project\Plans\B0101_2025_04_SOUTH AND NORTH APPROACH DECK.dgn PLOT DATE : 2/13/2025 5:07:14 PM PLOT BY : grogal PLOT NAME : B0101_2025_04_SOUTH AND NORTH APPROACH DECK.dgn PLOT SCALE : 10:0.0000 ':" / in.

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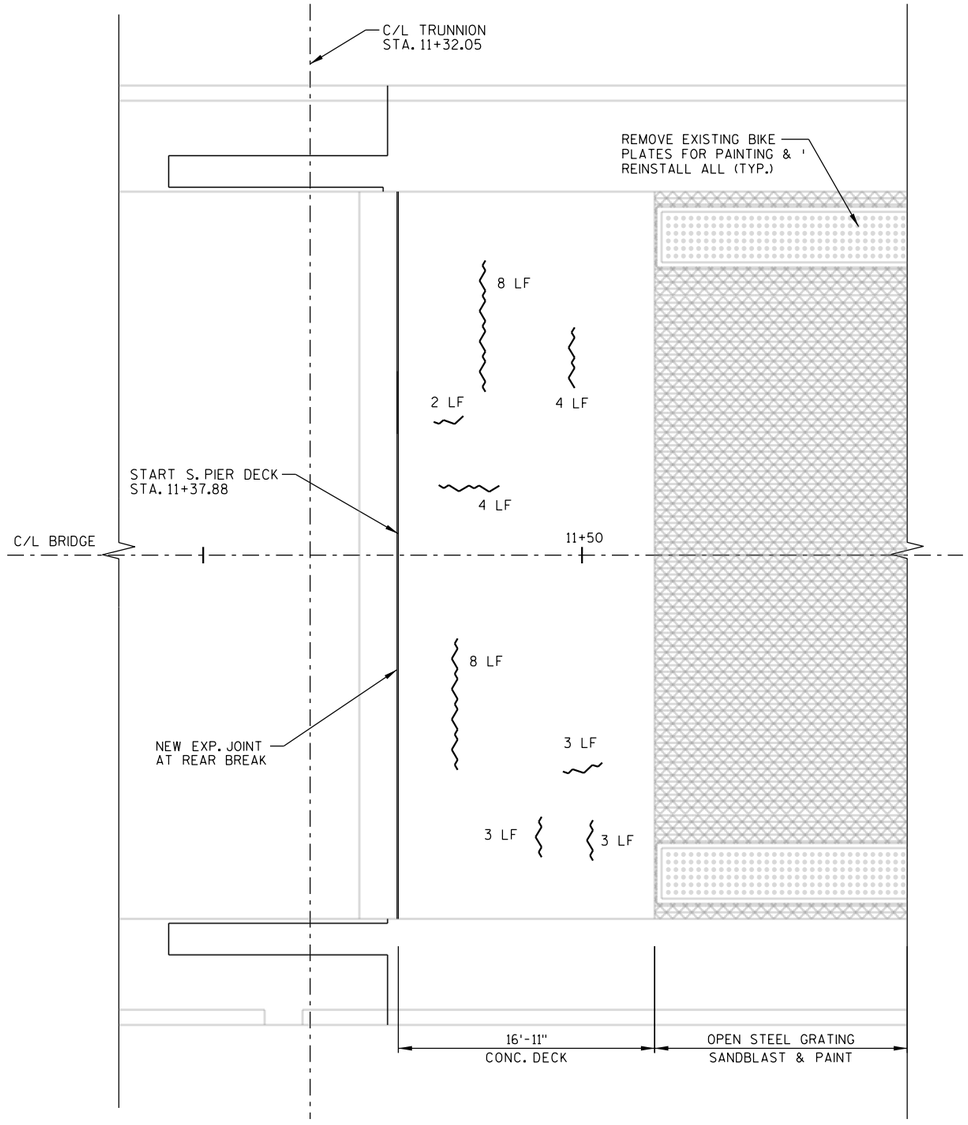
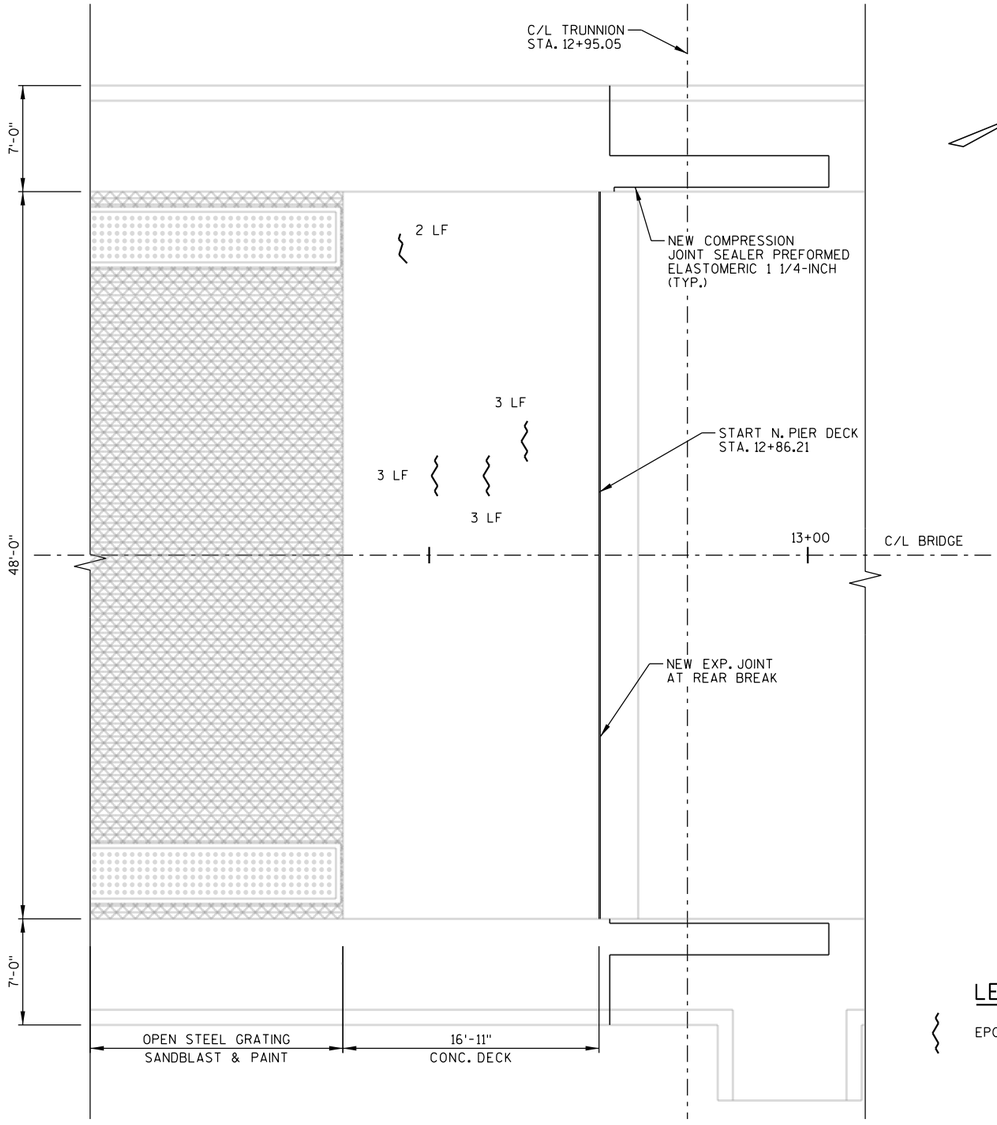


SOUTH CONCRETE DECK



NORTH CONCRETE DECK

LEGEND:

EPOXY CRACK SEALING

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SOUTH AND NORTH CONCRETE DECK

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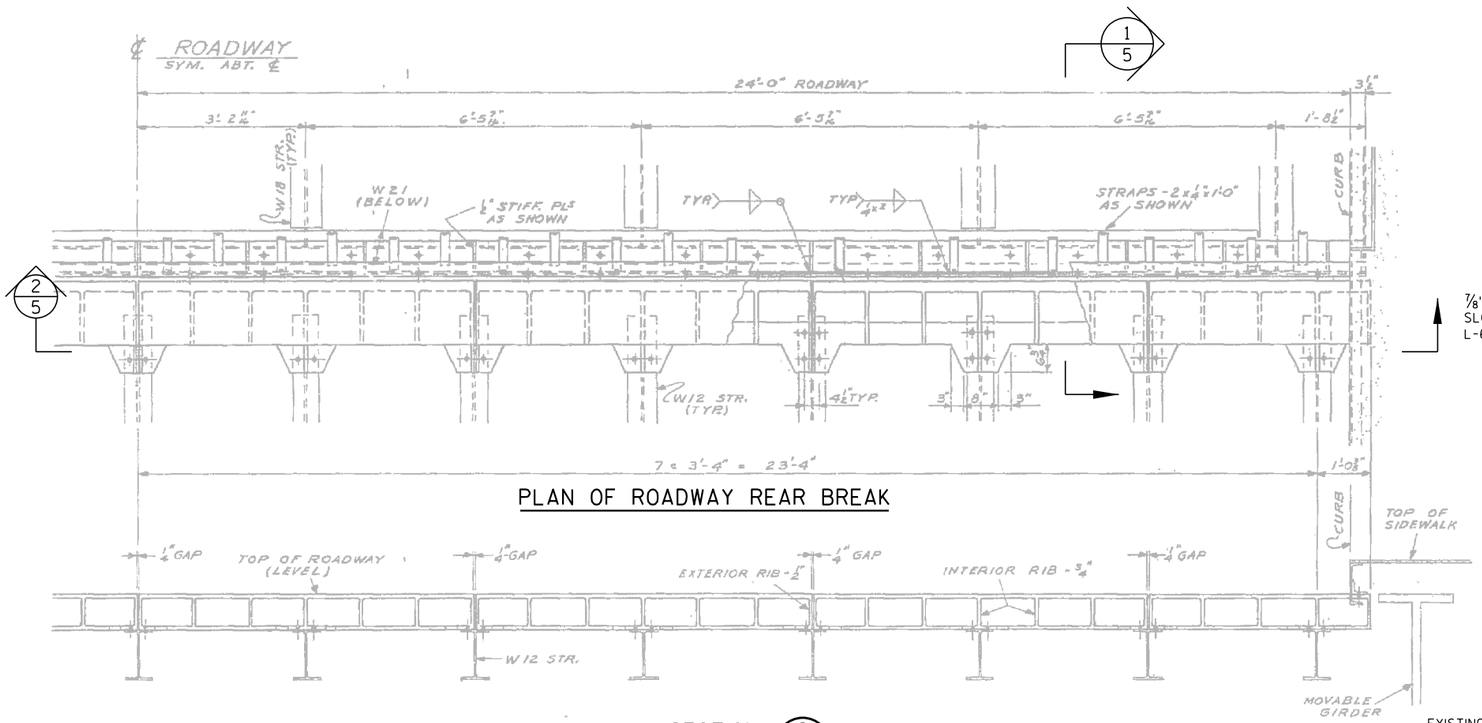
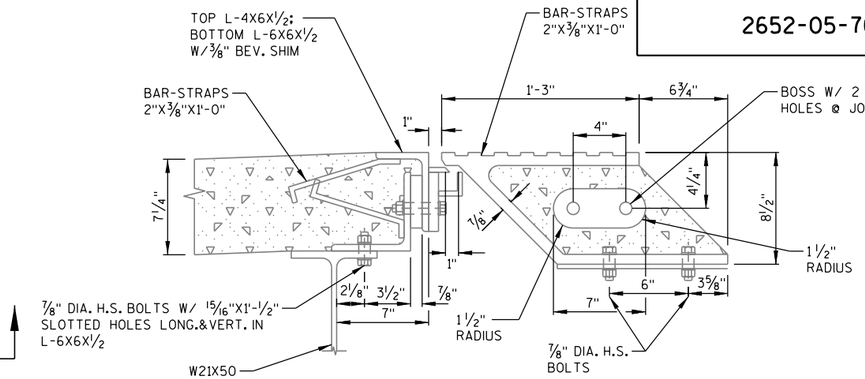
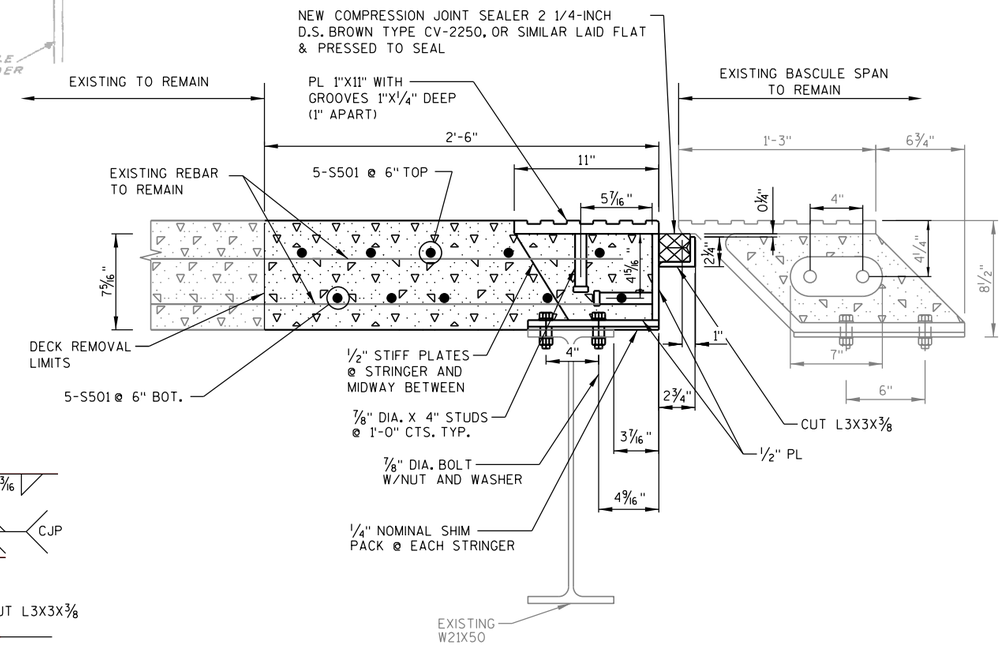


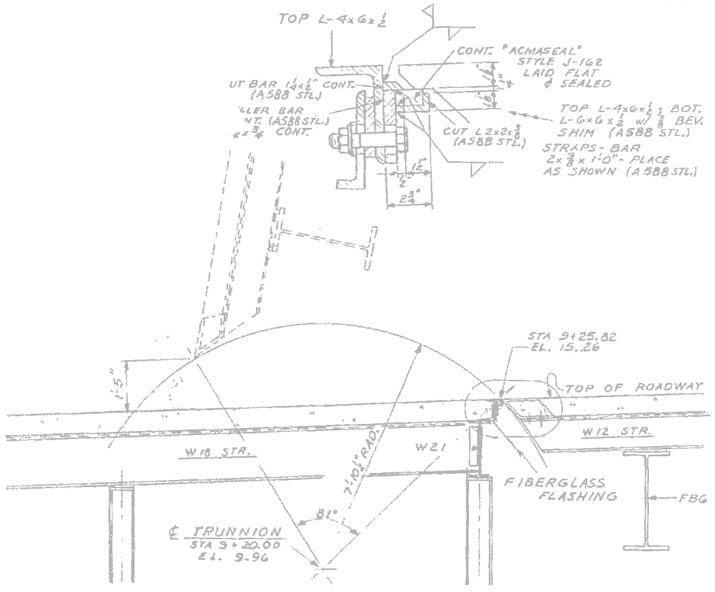
PLAN OF ROADWAY REAR BREAK



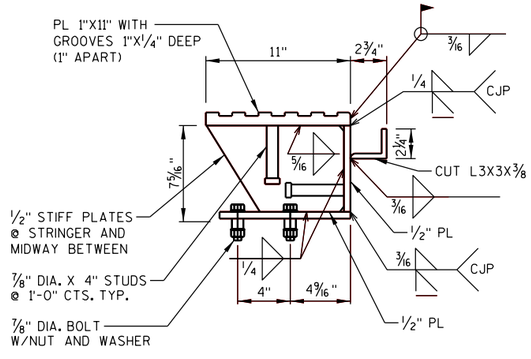
EXISTING REAR BREAK
EXPANSION JOINT DETAIL



PROPOSED REAR BREAK
EXPANSION JOINT DETAIL



SECTION 2/5



REAR BREAK WELD DETAIL

SECTION 1/5

NOTE:
SANDBLAST AND PAINT ALL EXISTING STEEL

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REAR BREAK EXPANSION JOINT DETAIL

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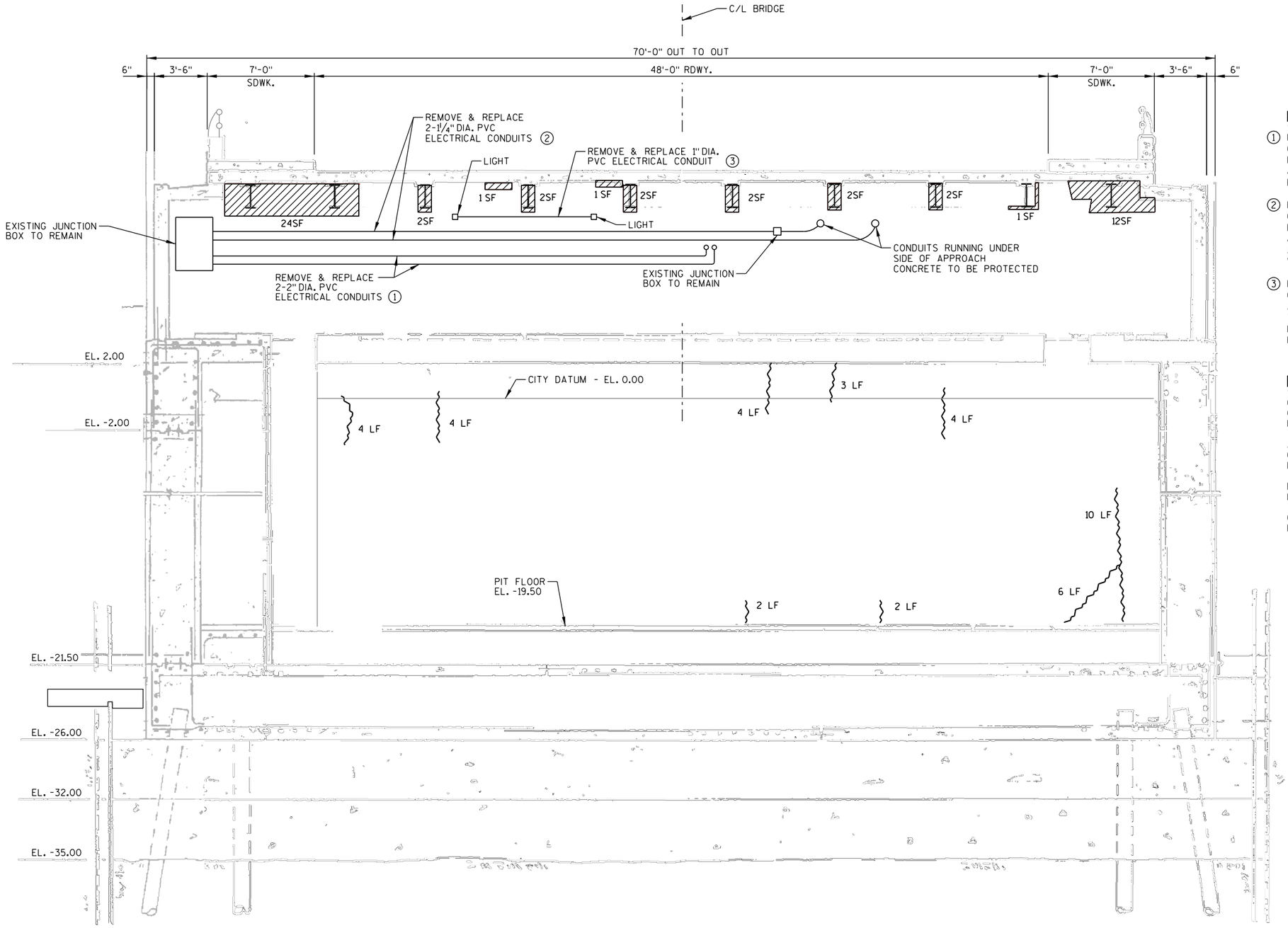

KEY:

(1) REMOVE EXISTING 2-2" DIA. PVC ELECTRICAL CONDUITS TO ALLOW CONCRETE SURFACE REPAIR. EXISTING WIRES TO BE PULLED BACK TO NEAREST JUNCTION BOX. INSTALL 2-2" DIA. CONDUITS ALONG EXISTING ROUTE. PULL AND TERMINATE ALL WIRES.

(2) REMOVE EXISTING 2-1¼" DIA. PVC ELECTRICAL CONDUITS TO ALLOW CONCRETE SURFACE REPAIR. EXISTING WIRES TO BE PULLED BACK TO NEAREST JUNCTION BOX. INSTALL 2-1¼" DIA. CONDUITS ALONG EXISTING ROUTE. PULL AND TERMINATE ALL WIRES.

(3) REMOVE EXISTING 1-1" DIA. PVC ELECTRICAL CONDUIT FEEDING LIGHTS AT PIER LEVEL TO ALLOW CONCRETE SURFACE REPAIR. EXISTING WIRES TO BE PULLED BACK TO NEAREST JUNCTION BOX. INSTALL 1-1" DIA. CONDUIT ALONG EXISTING ROUTE. PULL AND TERMINATE ALL WIRES.

NOTE:

CONDUITS MOUNTED TO STRINGERS ON UNDERSIDE OF THE APPROACH CONCRETE DECK TO REMAIN IN PLACE AND BE PROTECTED.

APPLY EPOXY INJECTION CRACK REPAIR ON ALL CRACKS AT EAST AND WEST PIER WALLS IN PIT LEVEL THAT ARE LARGER THAN 0.05" WIDE.

EXISTING CONDUITS SHALL BE REPLACED UNDER BID ITEM SPV.0060.562 "BRIDGE ELECTRICAL WORK".

CONTRACTOR TO MATCH CONDUIT MATERIAL TO EXISTING MATERIAL.

LEGEND:

CONCRETE SURFACE REPAIR

EPOXY INJECTION CRACK REPAIR

SOUTH PIER WALL ELEVATION

LOOKING SOUTH

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SOUTH PIER WALL ELEVATION

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FILE NAME : W:\str\b0101\2025 Rehab Project\Plans\B0101_2025_07_SOUTH PIER WALL ELEVATION.dgn PLOT DATE : 2/13/2025 5:07:18 PM PLOT BY : grogal PLOT NAME : B0101_2025_07_SOUTH PIER WALL ELEVATION.dgn

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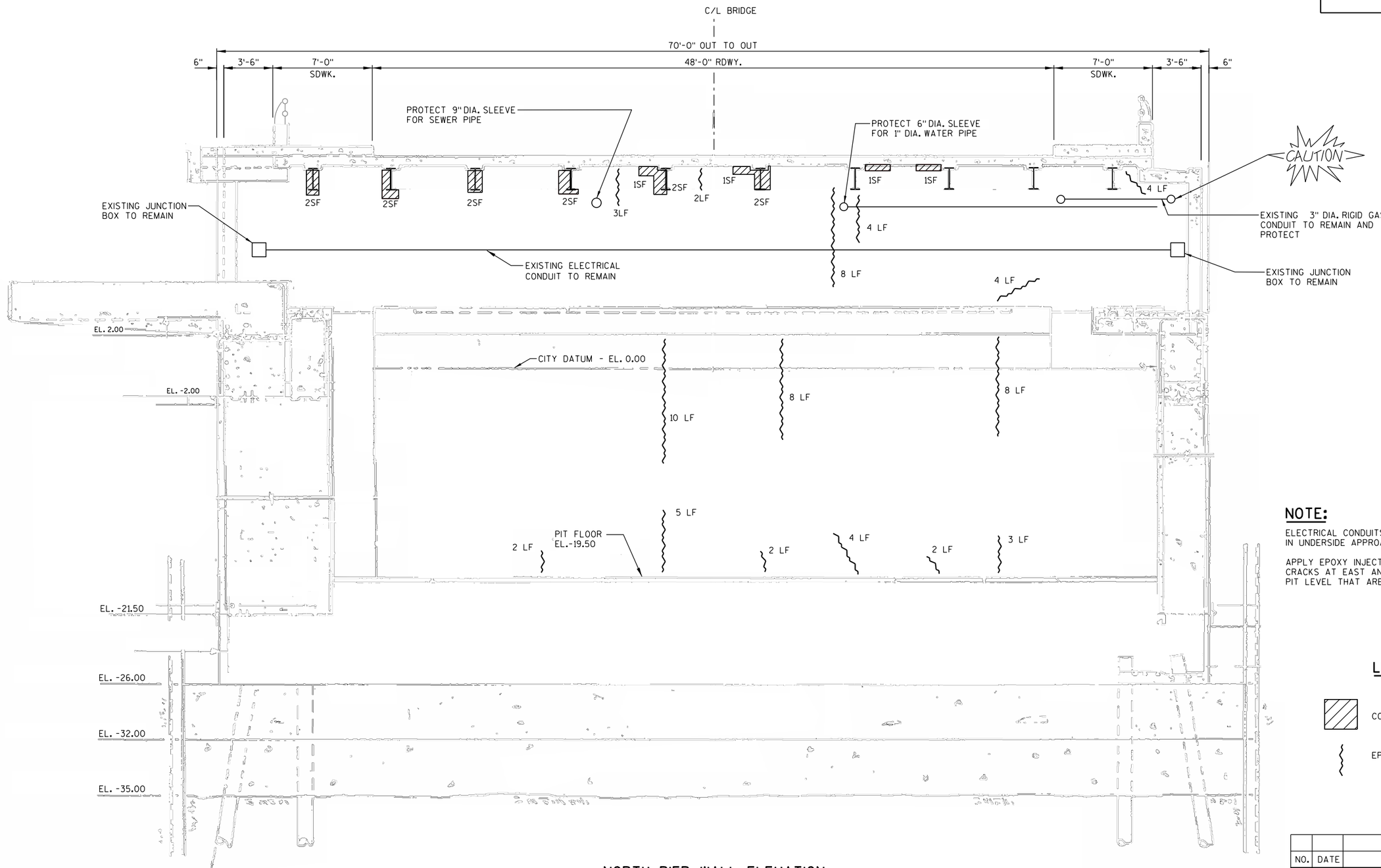

NOTE:

ELECTRICAL CONDUITS, SEWER AND WATER MAIN IN UNDERSIDE APPROACH DECK TO REMAIN.

APPLY EPOXY INJECTION CRACK REPAIR ON THE CRACKS AT EAST AND WEST PIER WALLS AT PIT LEVEL THAT ARE GREATER THAN 0.05" WIDE.

LEGEND:

CONCRETE SURFACE REPAIR

EPOXY INJECTION CRACK REPAIR

NORTH PIER WALL ELEVATION

(LOOKING NORTH)

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NORTH PIER WALL ELEVATION

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FILE NAME : W:\str\b0101\2025 Rehab Project\Plans\B0101_2025_08_NORTH PIER WALL ELEVATION.dgn PLOT DATE : 2/13/2025 5:07:25 PM PLOT BY : grogal PLOT NAME : B0101_2025_08_NORTH PIER WALL ELEVATION.dgn PLOT SCALE : 8:0.0000 ':" / in.

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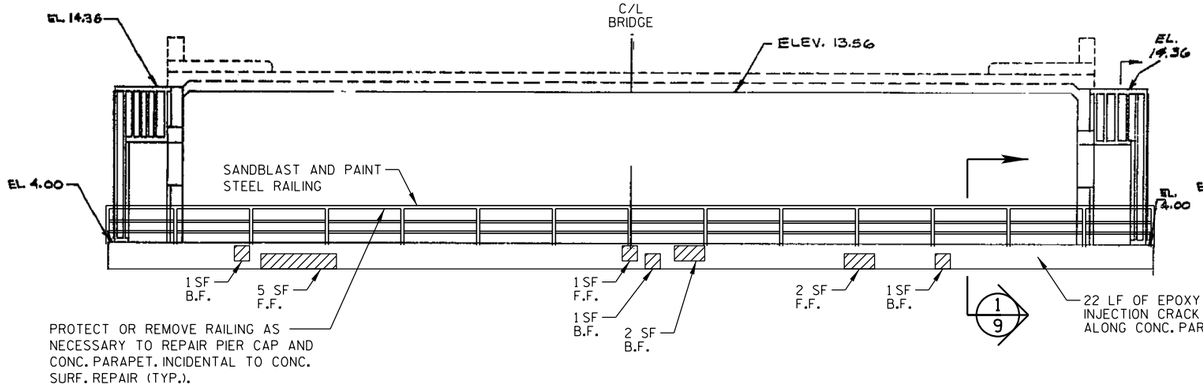
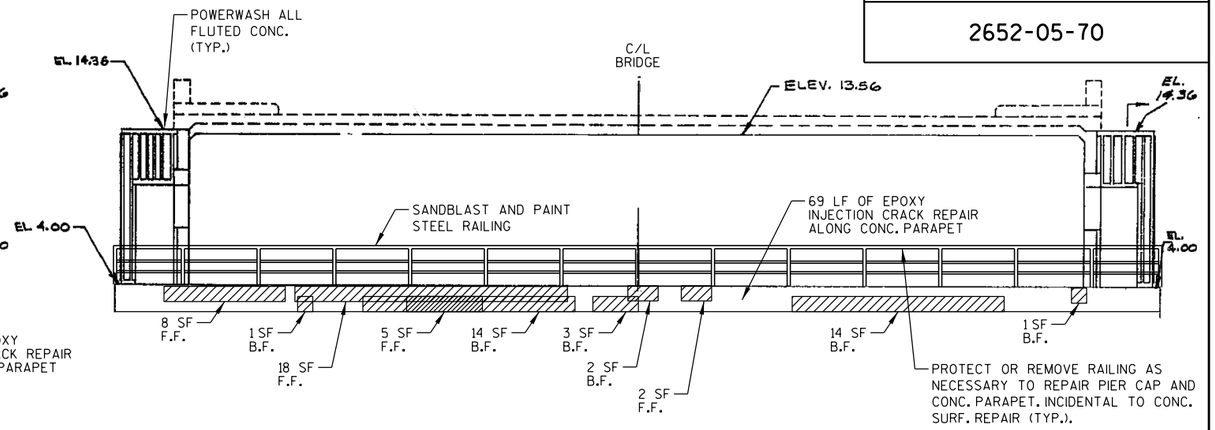
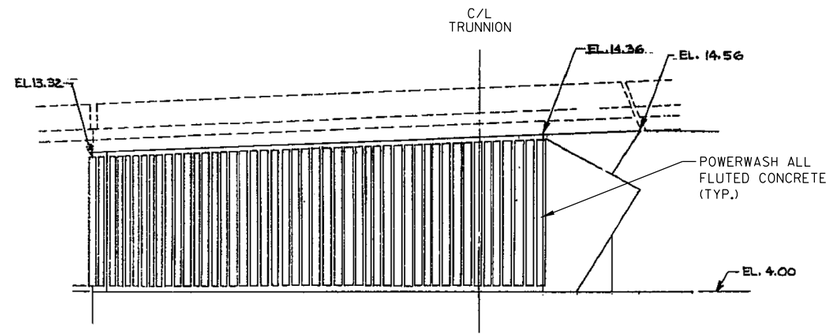


PIER 2 ELEVATION - LOOKING NORTH

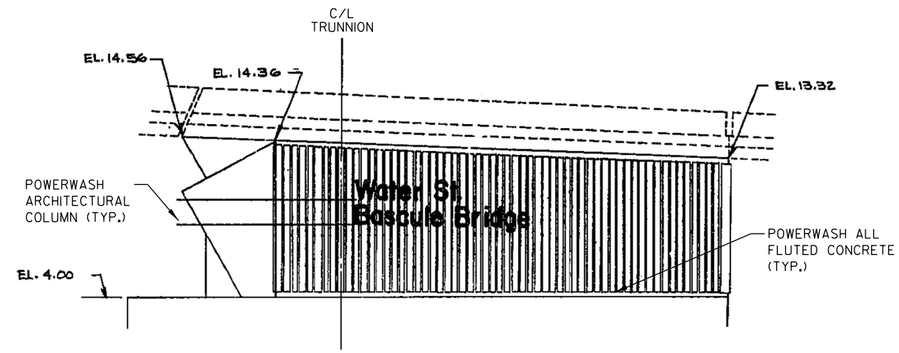


PIER 1 ELEVATION - LOOKING SOUTH



PIER 2 WEST ELEVATION

(EAST ELEVATION SIMILAR)



PIER 1 WEST ELEVATION

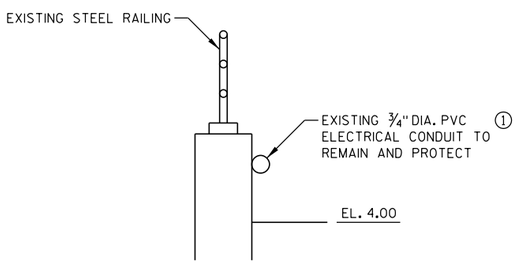
(EAST ELEVATION SIMILAR)

LEGEND:

CONCRETE SURFACE REPAIR

B.F. = BACK FACE

F.F. = FRONT FACE



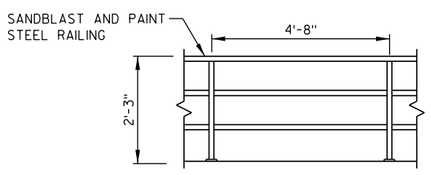
SECTION 1/9

AT KNEE WALL

NOTE:

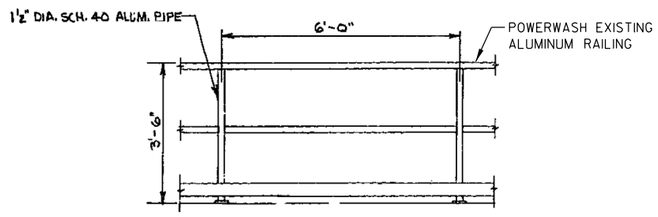
① EXISTING 3/4" DIA. PVC ELECTRICAL CONDUITS AT THE RAILING AT THE SOUTH PIERS TO REMAIN AND PROTECT.

REPLACE DAMAGED ANCHOR BOLTS AT BASE PLATES OF RAILING POSTS AT THE SOUTH AND NORTH PIERS.



STEEL RAILING DETAIL

AT PIERS



EXISTING ALUMINUM RAILING TYPE B

DETAIL AT COUNTERWEIGHT

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SOUTH AND NORTH PIER ELEVATION

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FILE NAME : W:\str\b0101\2025 Rehab Project\Plans\B0101_2025_09_SOUTH AND NORTH PIER ELEVATION.dgn PLOT DATE : 2/13/2025 5:07:33 PM PLOT BY : grogal PLOT NAME : B0101_2025_09_SOUTH AND NORTH PIER ELEVATION.dgn

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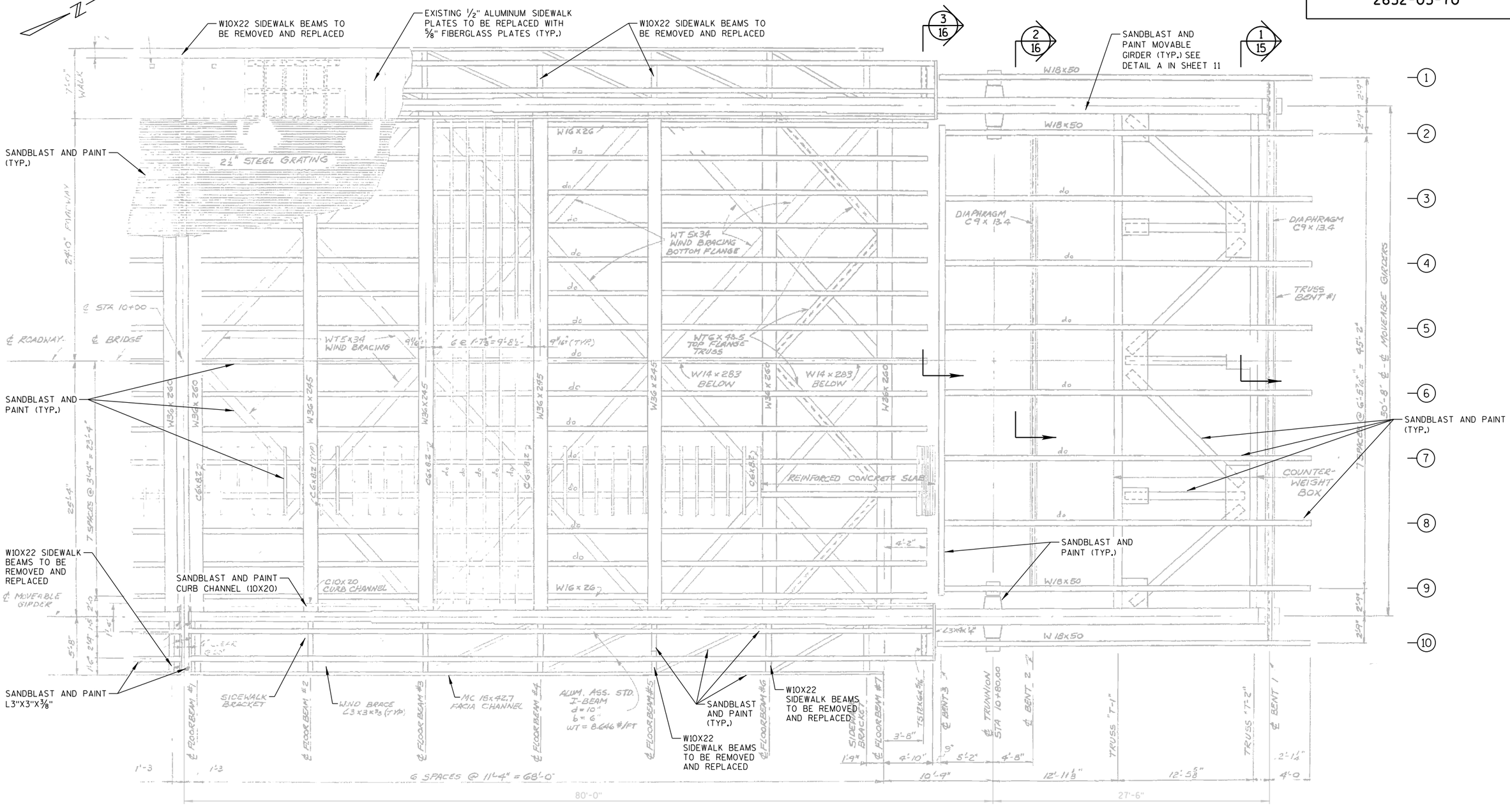

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NOTE:

SANDBLAST AND PAINT ALL STRUCTURAL STEEL MEMBERS.

W10X22 SIDEWALK BEAMS TO BE REMOVED AND REPLACED AT FLOOR BEAMS:

1, 2 AND 4-7 UNDERSIDE OF EAST SIDEWALK IN SOUTH LEAF.

1 AND 4 UNDERSIDE OF WEST SIDEWALK IN SOUTH LEAF.

STEEL FRAMING PLAN-NORTH LEAF

SOUTH LEAF OPPOSITE HAND

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FRAMING PLAN

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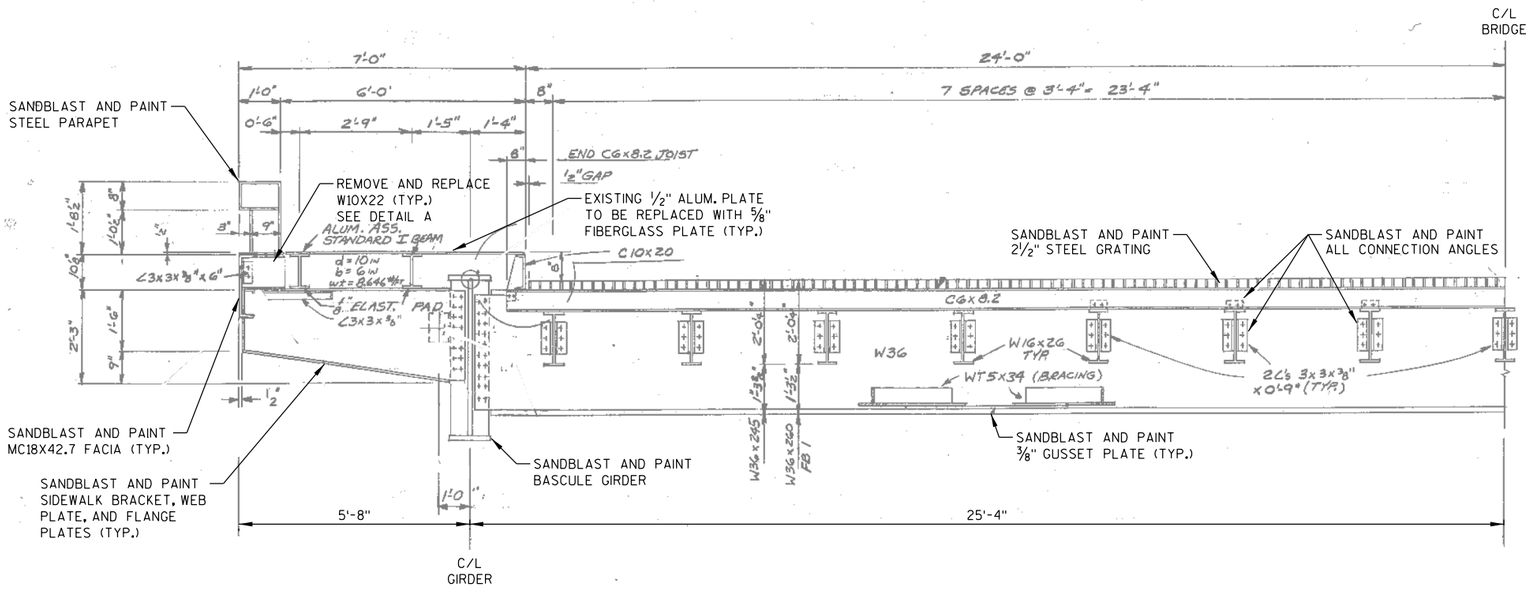
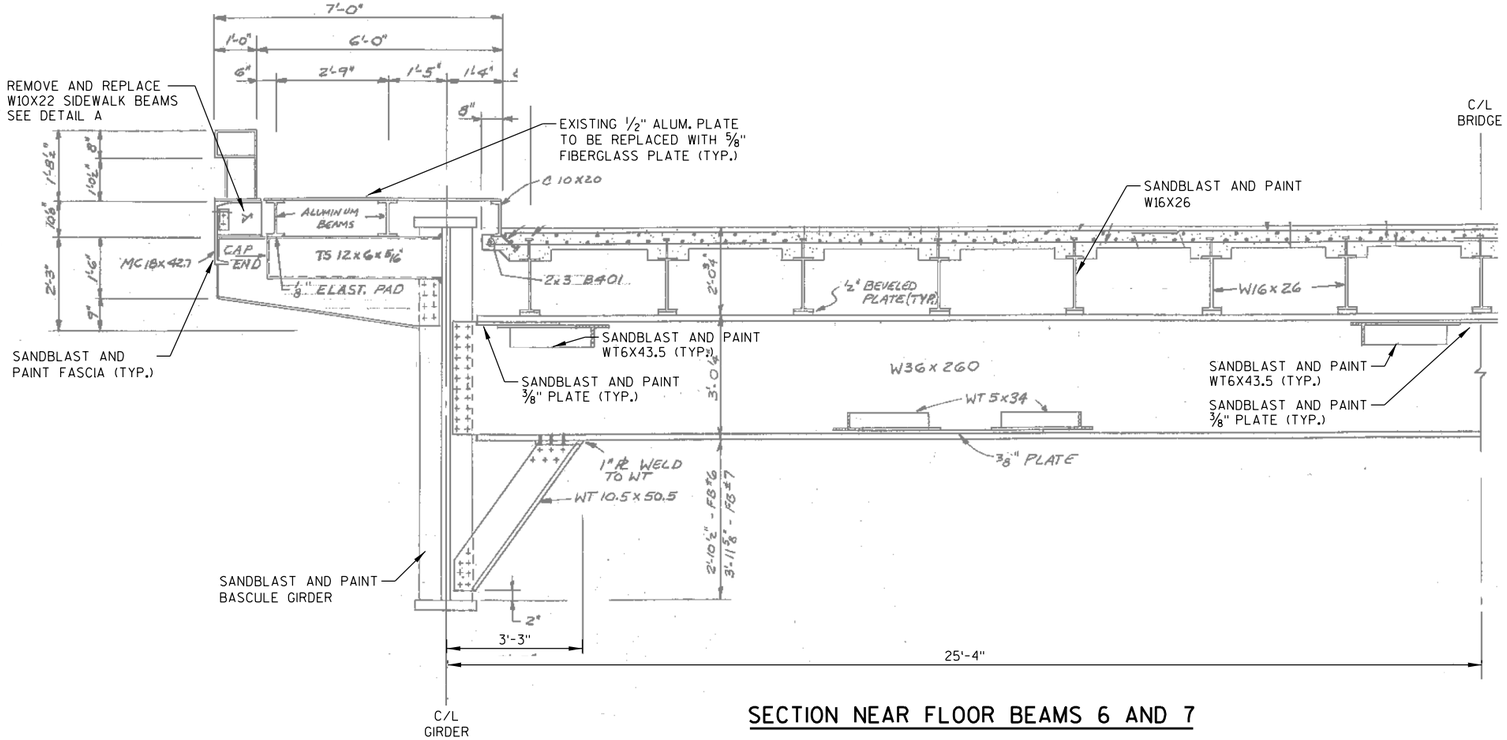
FILE NAME : W:\str\b0101\2025 Rehab Project\Plans\B0101_2025_10_FRAMING PLAN.dgn PLOT DATE : 2/13/2025 5:07:38 PM PLOT BY : grogal PLOT NAME : B0101_2025_10_FRAMING PLAN.dgn PLOT SCALE : 12:0.0000 ':" / in.



SECTION NEAR FLOOR BEAMS 1 THRU 5



SECTION NEAR FLOOR BEAMS 6 AND 7

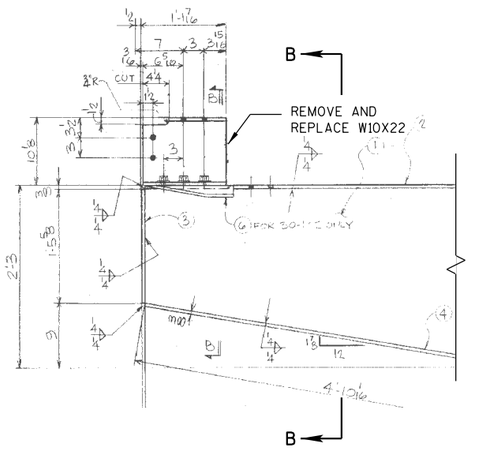
NOTE:

SANDBLAST AND PAINT ALL BASCULE SPAN STEEL.

REMOVE AND REPLACE W10X22 BEAMS IN UNDERSIDE OF SIDEWALKS IN MOVABLE SPAN AT LOCATIONS NOTED.

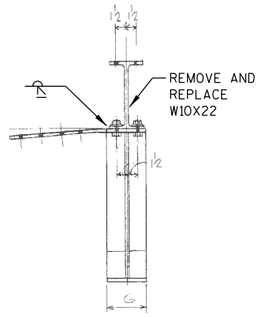
CONTRACTOR TO PROVIDE NEW HARDWARE FOR ALL CONNECTIONS TO NEW STEEL AND ANY LOCATION OF STEEL REMOVEL TO ALLOW INSTALLATION.

REMOVAL, REINSTALLATION, AND TEMPORARY SUPPORT OF ADJACENT STEEL TO FACILITATE REPLACEMENT OF SIDEWALK IS INCIDENTAL TO 506.0605 STRUCTURAL STEEL HS



DETAIL A

REMOVE AND REPLACE W10X22 SIDEWALK BEAMS



SECTION B-B

SOUTH LEAF
FLOOR BEAM 1 AT EAST END
FLOOR BEAM 2 AT EAST END
FLOOR BEAM 4 AT EAST END
FLOOR BEAM 5 AT EAST END
FLOOR BEAM 6 AT EAST END
FLOOR BEAM 7 AT EAST END
FLOOR BEAM 1 AT WEST END
FLOOR BEAM 4 AT WEST END

NORTH LEAF
FLOOR BEAM 1 AT WEST END
FLOOR BEAM 4 AT WEST END
FLOOR BEAM 5 AT WEST END
FLOOR BEAM 5 AT EAST END
FLOOR BEAM 6 AT EAST END

LOCATION OF W10X22 SIDEWALK BEAMS TO BE REPLACED

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FLOOR BEAMS CROSS SECTION

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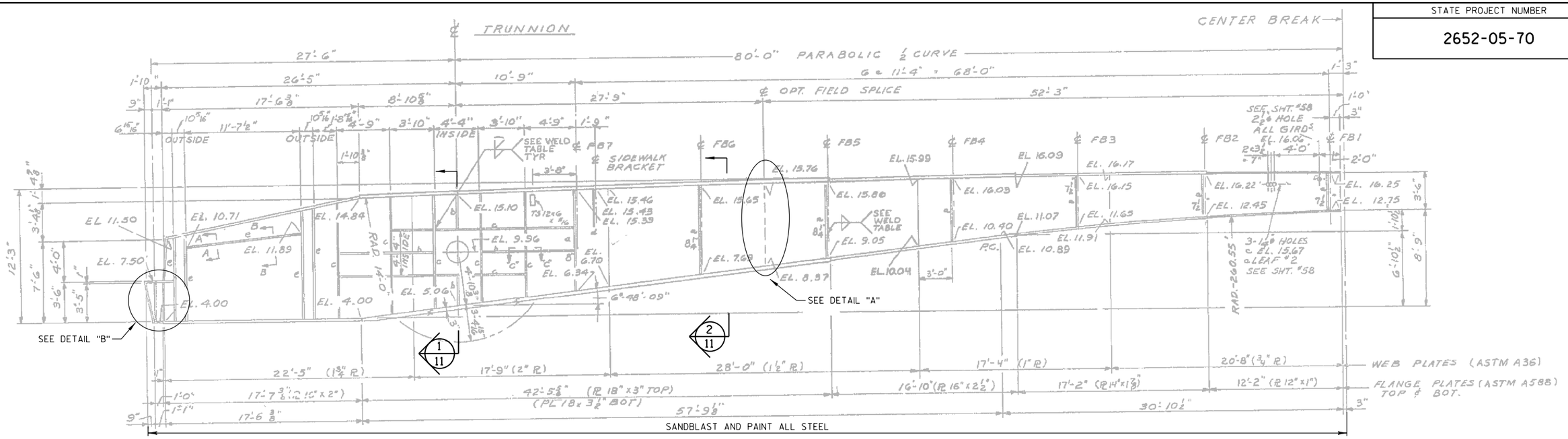
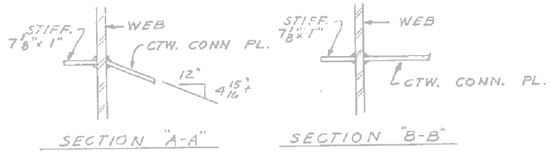
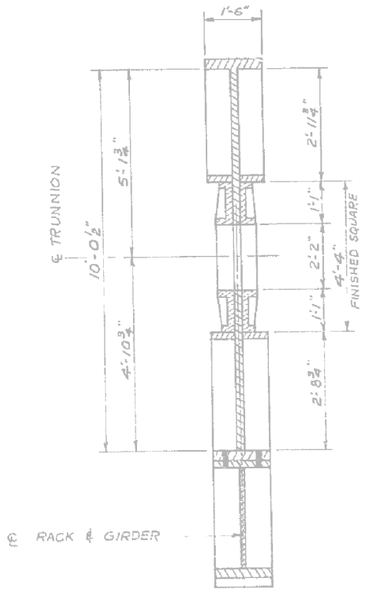


BASCULE GIRDER ELEVATION

LOOKING FROM C/L ROADWAY TO EAST OR WEST

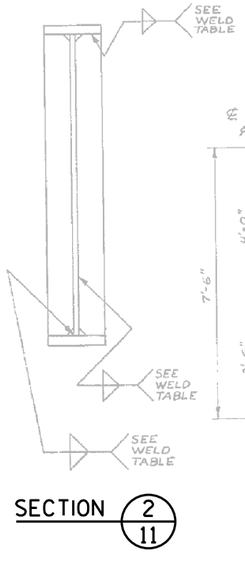


STIFFENER ℄ SIZE TABLE		
LOCATION	TYPE	PLATE SIZE WIDTH x THICKNESS
AT FLOORBEAMS	a	7⅞", 8¼" OR 8" x ¾"
AT ℄ TRUNNION (HOR & VERT.)	b	8" x 2"
LONG. & TRANS. @ TRUNNION	c	8⅛, 8⅞ x 1"
INTERMEDIATE	d	8" x ½"
COUNTERWEIGHT BOX	e	1" - SEE CTW. BOX DWGS.

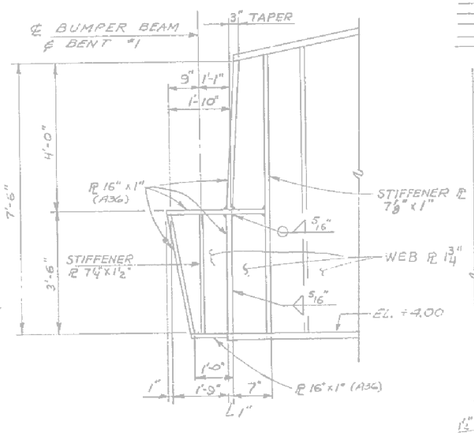


SECTION 1/11

SANDBLAST AND PAINT ALL MEMBERS

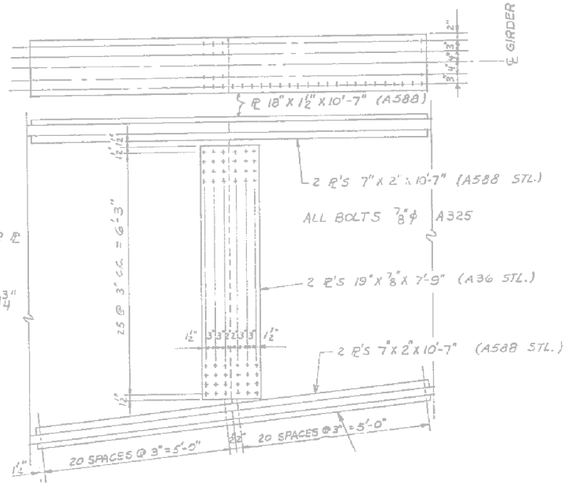


SECTION 2/11



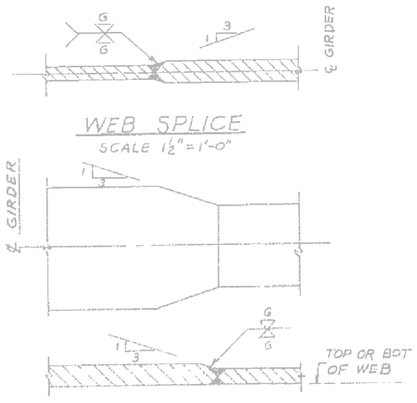
DETAIL B

SANDBLAST AND PAINT ALL STEEL



DETAIL A

SANDBLAST AND PAINT ALL STEEL



FLANGE SPLICE

NOTE:

SANDBLAST AND PAINT ALL BASCULE SPAN STEEL

PAINT NEW AND EXISTING CONDUIT ON OUTSIDE OF BASCULE GIRDER TO MATCH STEEL

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BASCULE GIRDER

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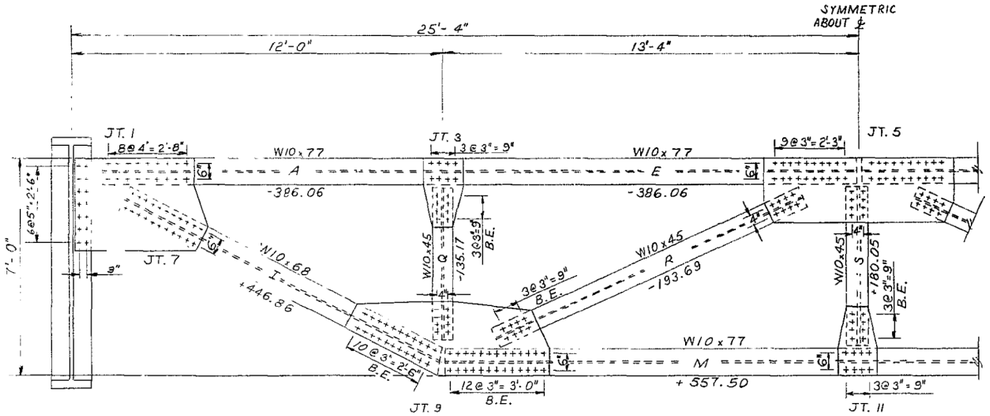
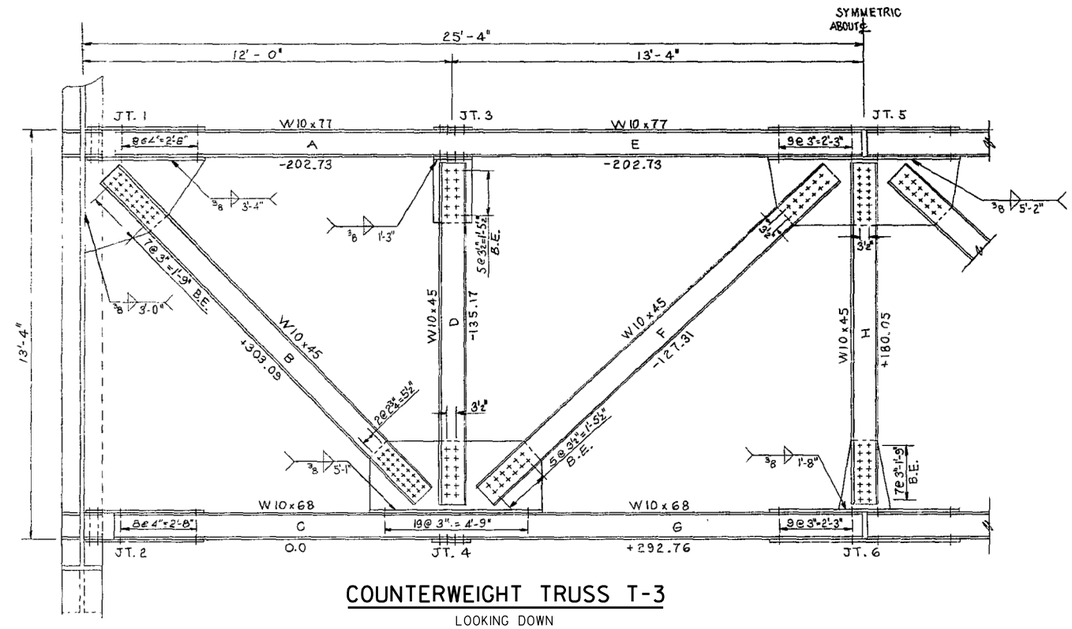


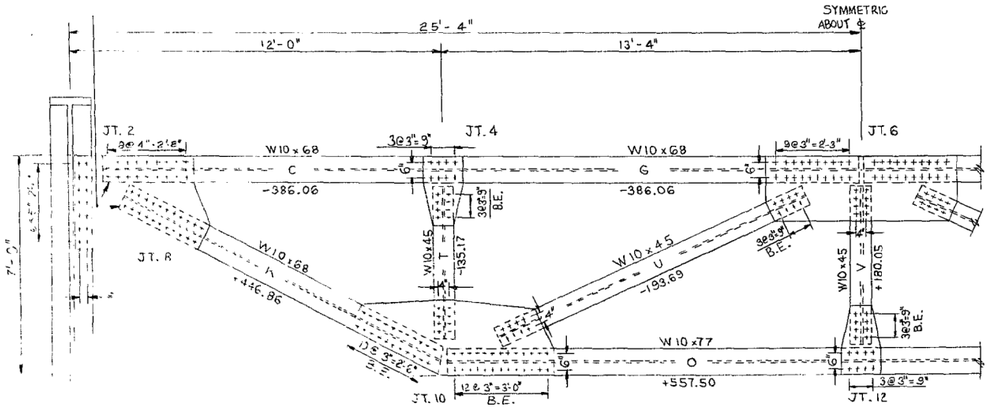
COUNTERWEIGHT TRUSS

LOOKING FROM TRUNNION
SANDBLAST AND PAINT ALL STEEL



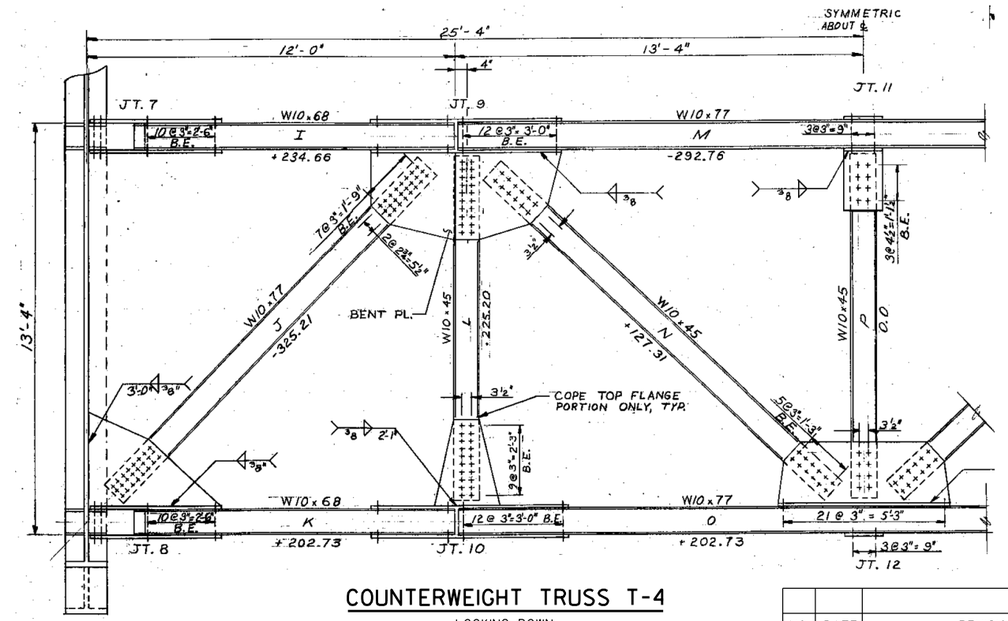
COUNTERWEIGHT TRUSS T-3

LOOKING DOWN
SANDBLAST AND PAINT ALL STEEL



COUNTERWEIGHT TRUSS

LOOKING TOWARD TRUNNION
SANDBLAST AND PAINT ALL STEEL



COUNTERWEIGHT TRUSS T-4

LOOKING DOWN
SANDBLAST AND PAINT ALL STEEL

NOTE:

SANDBLAST AND PAINT ALL STEEL INCLUDING ADDITION CASTINGS AT BOTTOM OF WEIGHT TRUSS.

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BASCULE SPAN COUNTERWEIGHT TRUSS

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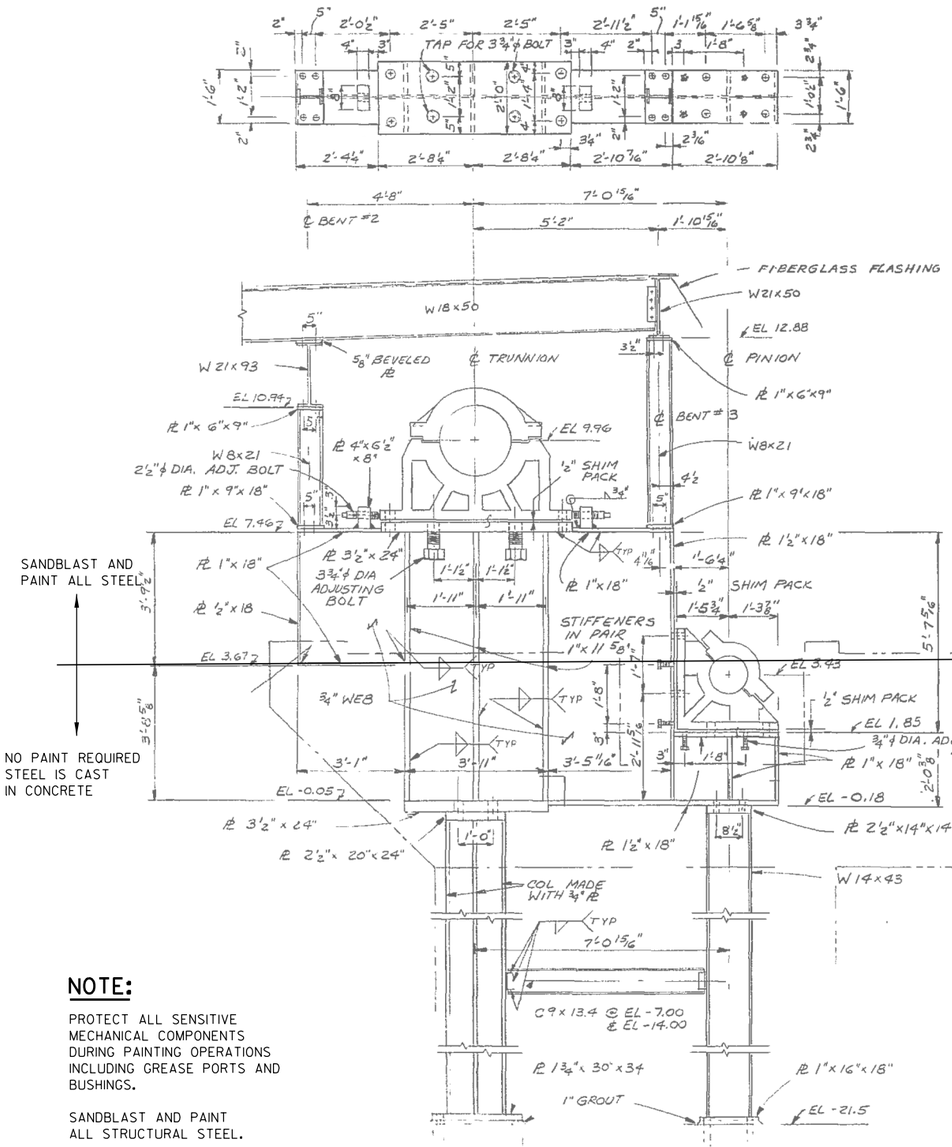
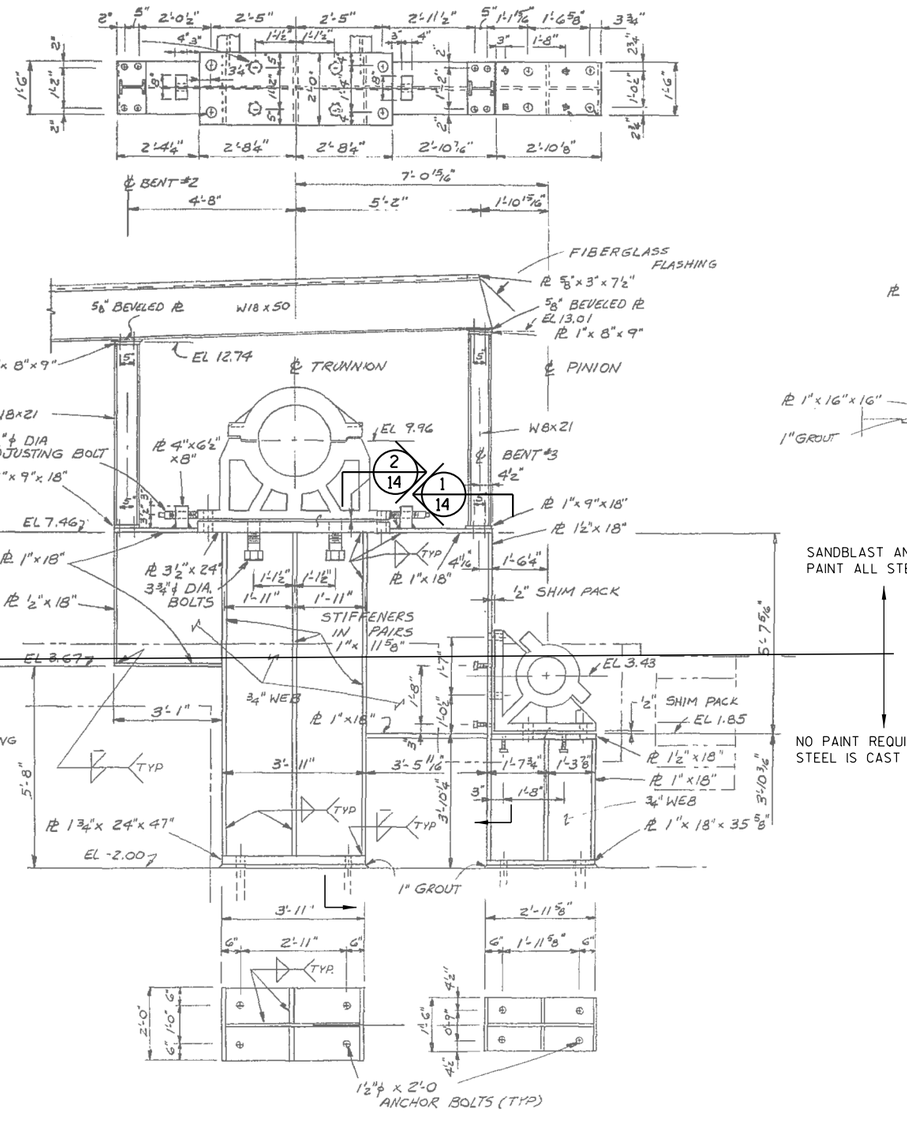


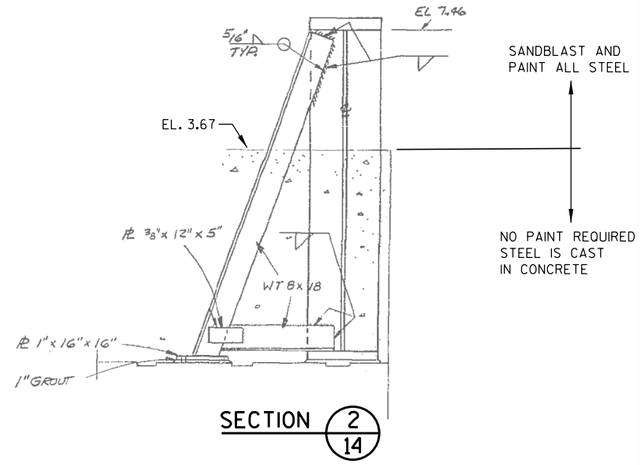
OUTSIDE LOADING GIRDER G1

SANDBLAST AND PAINT ALL STRUCTURAL STEEL

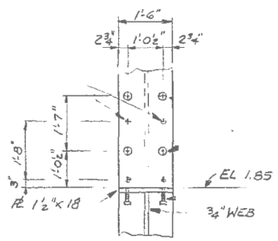


OUTSIDE LOADING GIRDER G2

SANDBLAST AND PAINT ALL STRUCTURAL STEEL



SECTION 2/14



SECTION 1/14

NOTE:

PROTECT ALL SENSITIVE MECHANICAL COMPONENTS DURING PAINTING OPERATIONS INCLUDING GREASE PORTS AND BUSHINGS.

SANDBLAST AND PAINT ALL STRUCTURAL STEEL.

PROTECT ALL THE UTILITIES LOCATED CLOSE TO THE STRUCTURAL STEE.

REMOVE ALL GREASE FROM STEEL PRIOR TO BLASTING AND PAINTING.

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PIER SPAN LOADING GIRDERS AND COLUMNS

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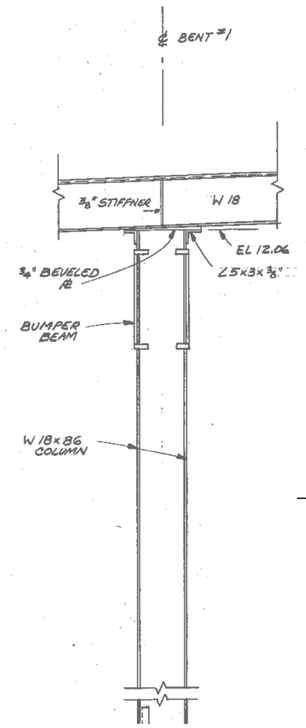
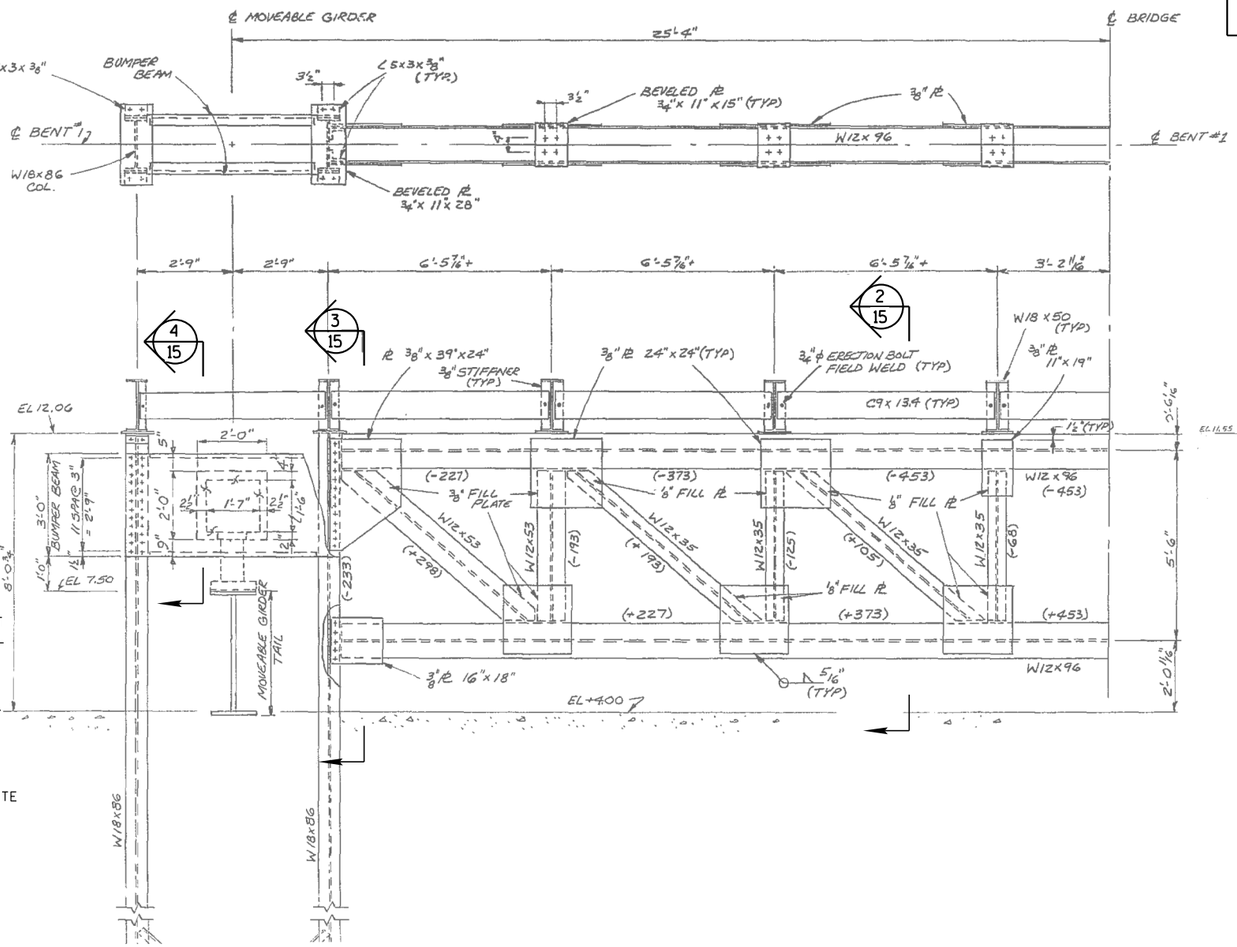
NOTE:

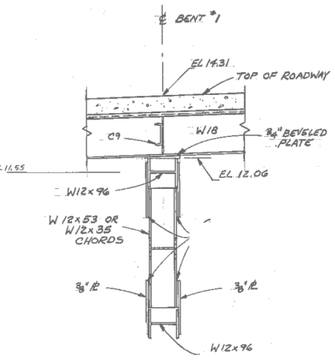
SANDBLAST AND PAINT
ALL STRUCTURAL STEET





SANDBLAST AND PAINT
ALL STRUCTURAL STEEL

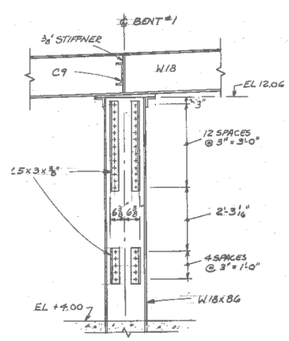
NO PAINT REQUIRED
STEEL CAST IN CONCRETE



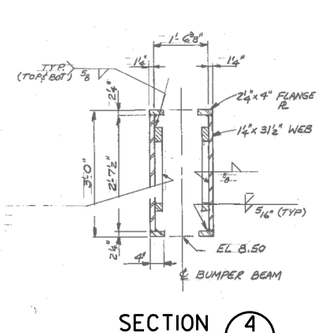
SECTION 2/15
SANDBLAST AND PAINT ALL STEEL

NORTH PIER LOOKING SOUTH AT BENT NO. 1 — 1/10

SOUTH PIER - LOOKING NORTH AT BENT NO. 1
SANDBLAST AND PAINT ALL STEEL



SECTION 3/15
SANDBLAST AND PAINT ALL STEEL



SECTION 4/15
SANDBLAST AND PAINT ALL STEEL

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PIER SPAN CROSS SECTION BENT 1

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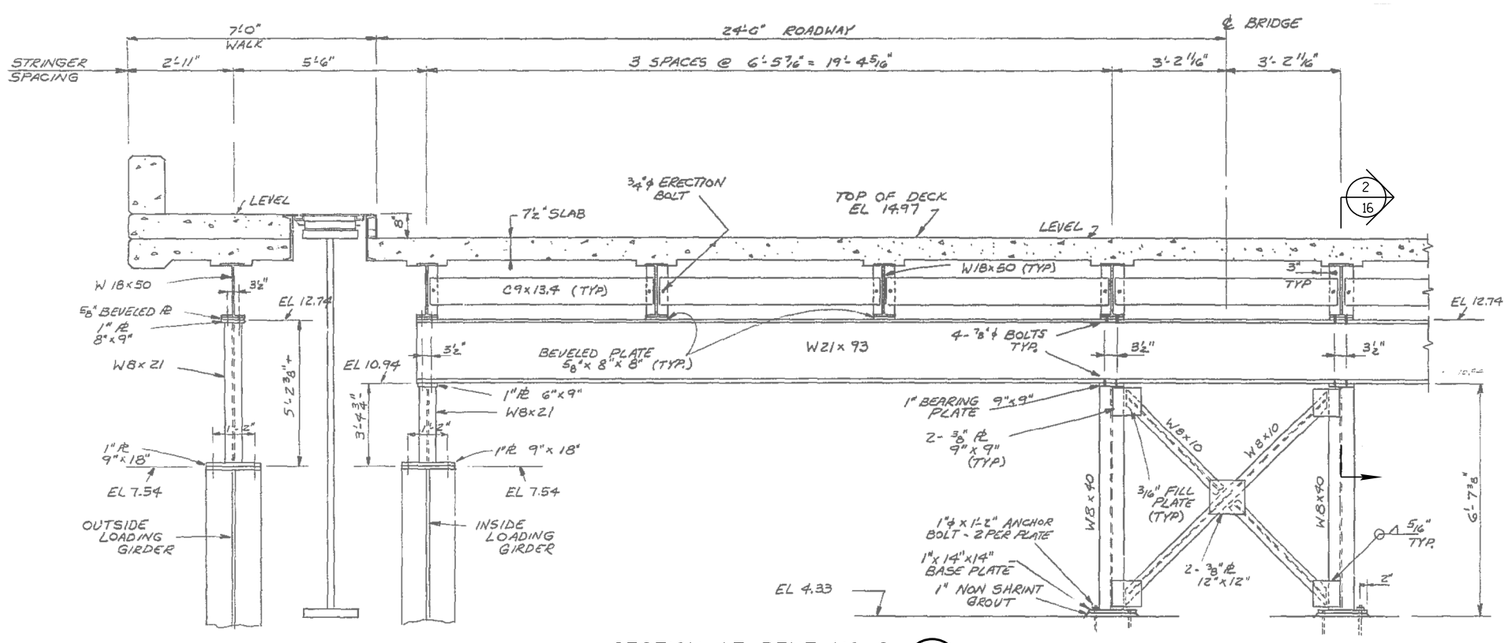
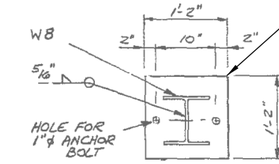


SECTION AT BENT NO. 2 (2/10)

SANDBLAST AND PAINT ALL STEEL

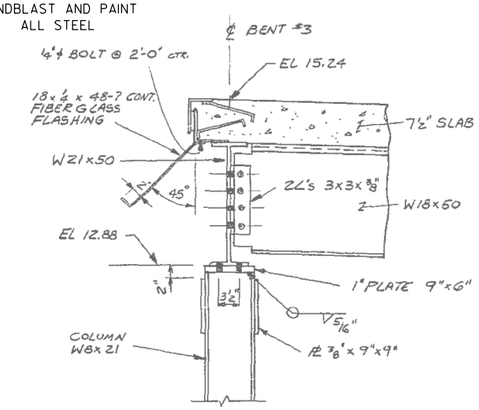


DETAIL A

SANDBLAST AND PAINT ALL STEEL

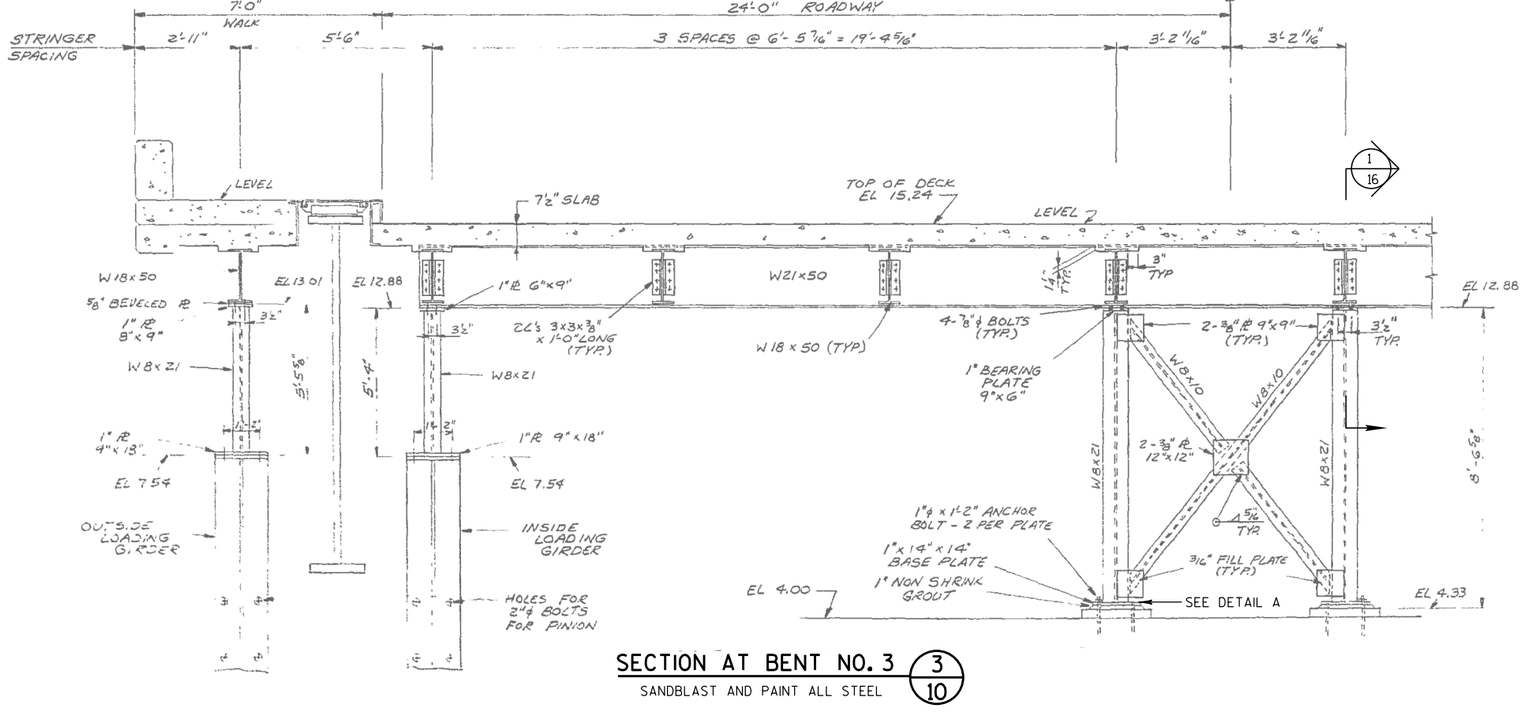
NOTE:

SANDBLAST AND PAINT ALL STRUCTRUAL STEEL



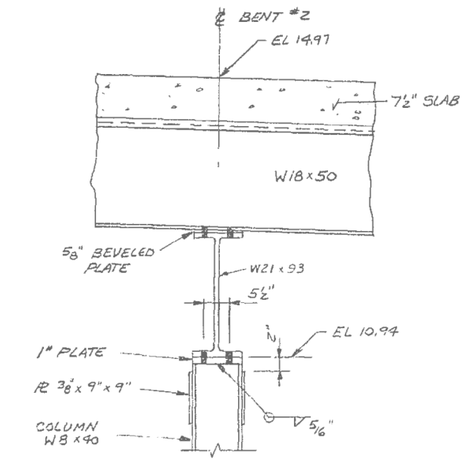
SECTION (1/16)

SANDBLAST AND PAINT ALL STRUCTURAL STEEL



SECTION AT BENT NO. 3 (3/10)

SANDBLAST AND PAINT ALL STEEL



SECTION (2/16)

SANDBLAST AND PAINT ALL STRUCTURAL STEEL

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PIER SPAN CROSS SECTION BENTS 2 AND 3

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FILE NAME : W:\str\b0101\2025 Rehab Project\Plans\B0101_2025_16_PIER SPAN CROSS SECTION BENT 2 AND 3.dgn PLOT DATE : 2/13/2025 5:08:01 PM PLOT BY : grogal PLOT NAME : B0101_2025_16_PIER SPAN CROSS SECTION BENT 2 AND 3.dgn PLOT SCALE : 12:0.0000 ':" / in.

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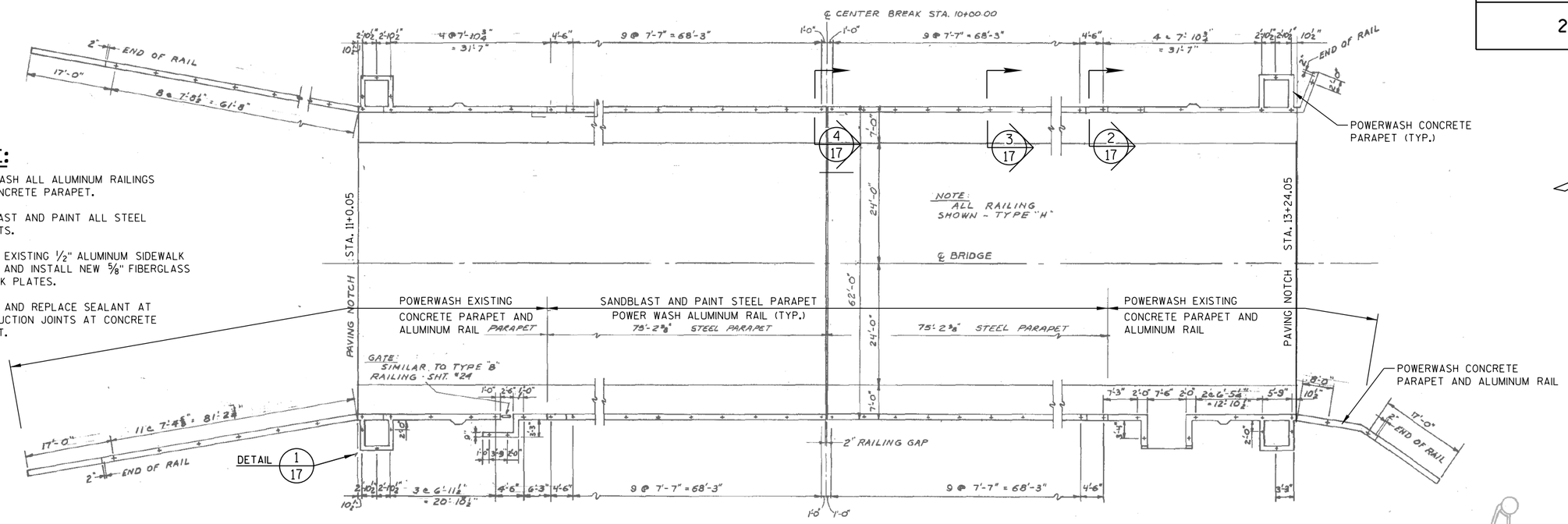
NOTE:

POWERWASH ALL ALUMINUM RAILINGS AND CONCRETE PARAPET.

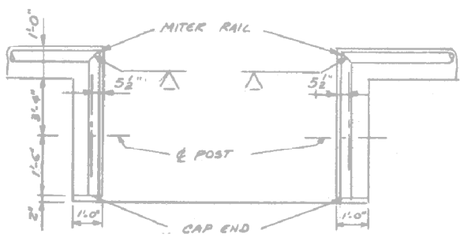
SANDBLAST AND PAINT ALL STEEL PARAPETS.

REMOVE EXISTING 1/2" ALUMINUM SIDEWALK PLATES AND INSTALL NEW 5/8" FIBERGLASS SIDEWALK PLATES.

REMOVE AND REPLACE SEALANT AT CONSTRUCTION JOINTS AT CONCRETE PARAPET.

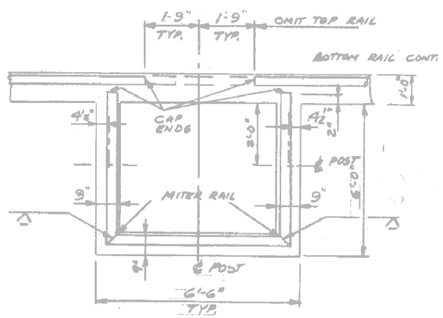


RAILING POST SPACING PLAN



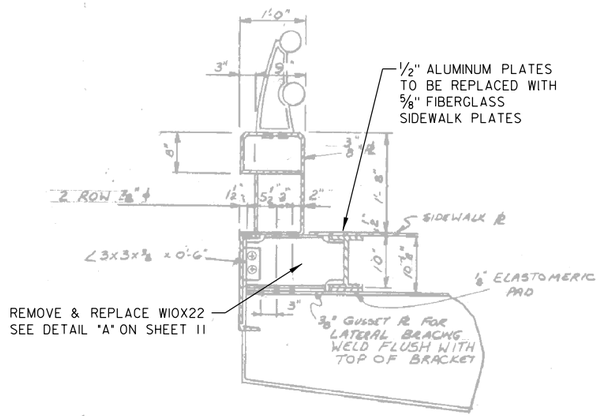
RAIL DETAIL AT BRIDGE HOUSE

POWERWASH ALUMINUM RAIL AND CONCRETE PARAPET



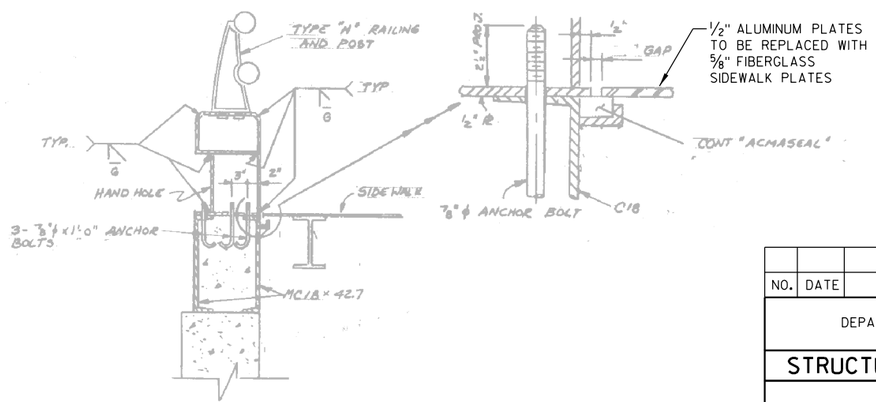
DETAIL 1/17

POWERWASH ALUMINUM RAIL



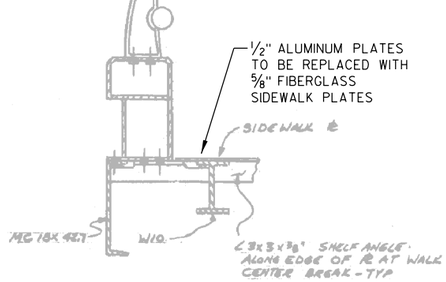
SIDEWALK BRACKET SEC. 2/17

SANDBLAST AND PAINT STEEL PARAPET POWERWASH ALUMINUM RAIL



REAR BREAK SEC. 3/17

SANDBLAST AND PAINT STEEL PARAPET POWERWASH ALUMINUM RAIL



CENTER BREAK SEC. 4/17

SANDBLAST AND PAINT STEEL PARAPET POWERWASH ALUMINUM RAIL

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RAILING AND PARAPET DETAIL

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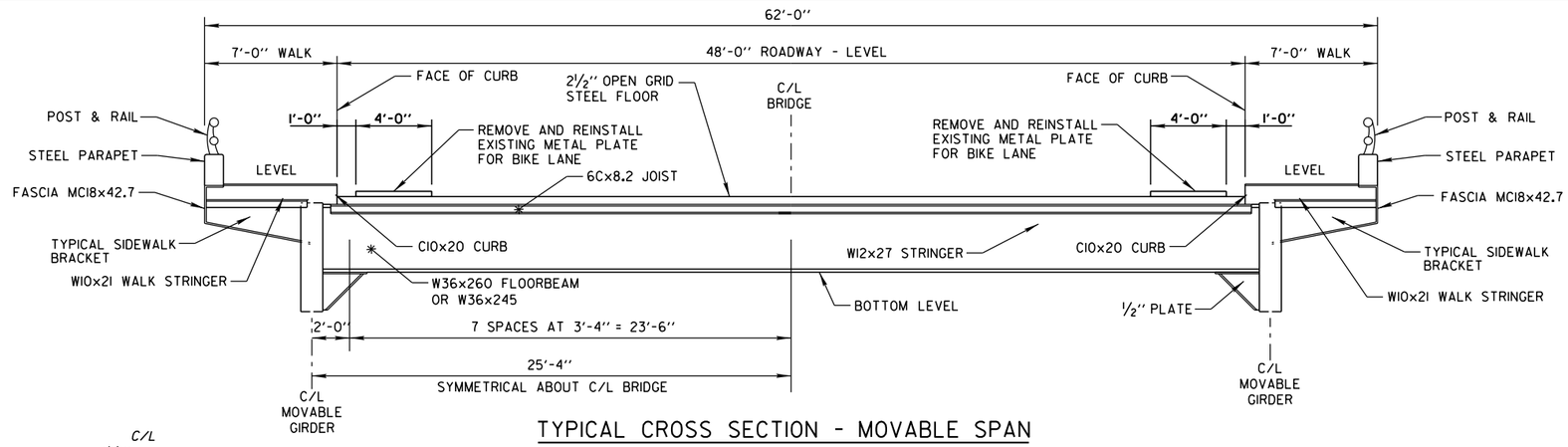
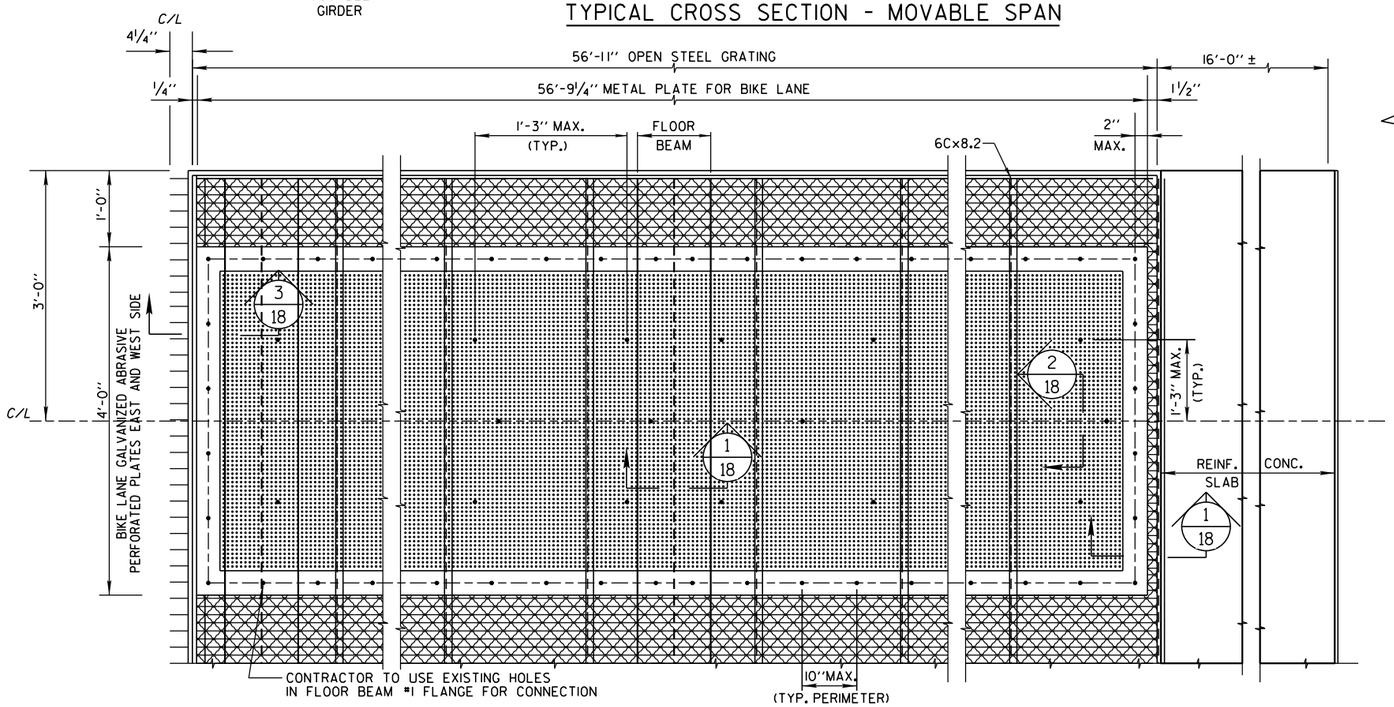
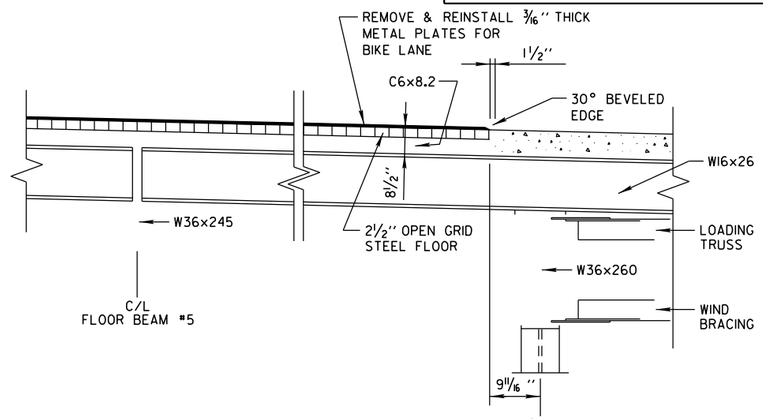
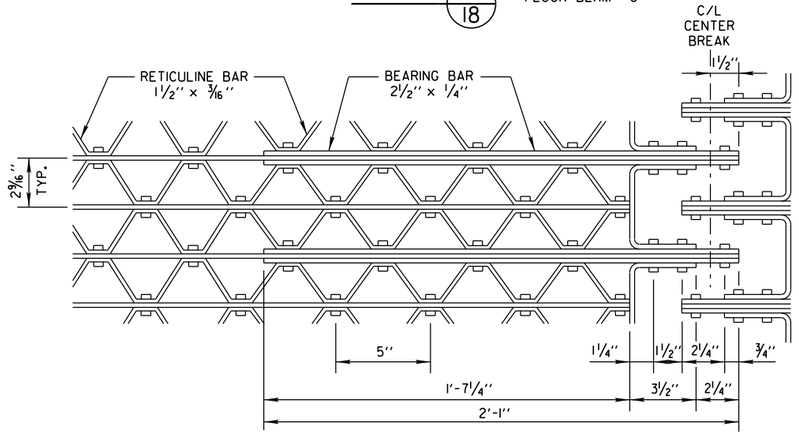


TYPICAL CROSS SECTION - MOVABLE SPAN



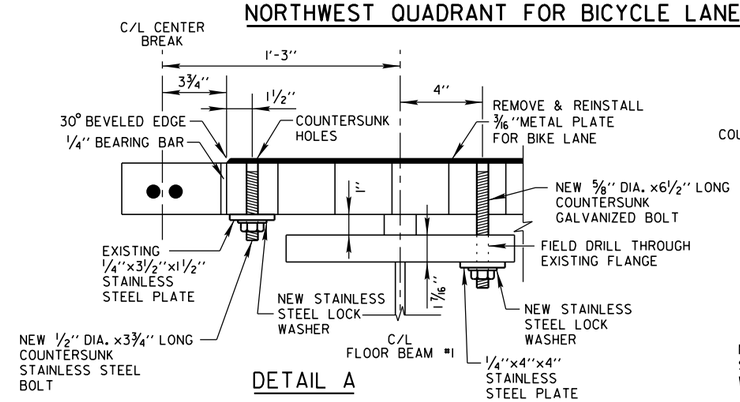


SECTION 1/18

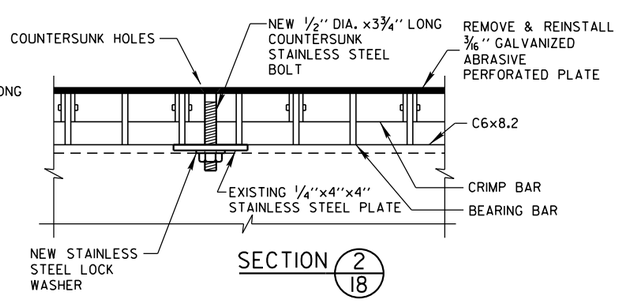


DETAIL OF CENTER BRAKE FOR STEEL GRATING

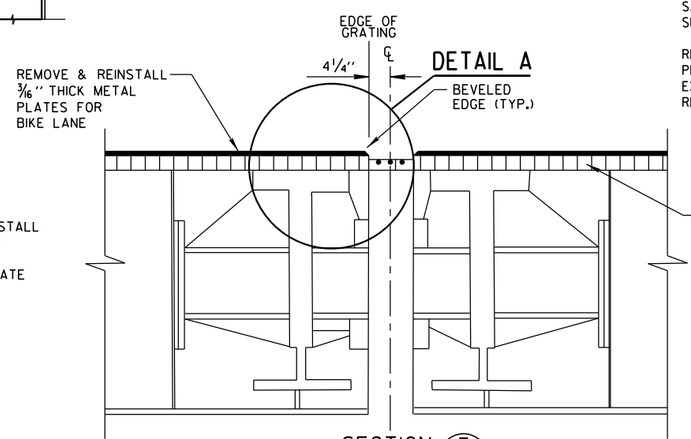
EXISTING METAL PLATES FOR BIKE LANES GENERAL SCHEME
NORTHWEST QUADRANT FOR BICYCLE LANE SHOWN, OTHER QUADRANTS SIMILAR



DETAIL A



SECTION 2/18



SECTION 3/18

NOTE: DIMENSIONS TO EDGE OF 2½" STEEL GRATING

NOTES:

REMOVE EXISTING METAL PLATES AND HARDWARE. SANDBLAST AND PAINT STEEL GRATING AND ALL SUPPORTING STEEL.

REINSTALL METAL PLATES AND HARDWARE. PROVIDE NEW NUTS, BOLTS, AND WASHERS. EXISTING STAINLESS STEEL PLATES CAN BE REUSED UNLESS DAMAGED OR MISSING.

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MJP	SSR

BIKE PLATES CONSTRUCTION DETAIL

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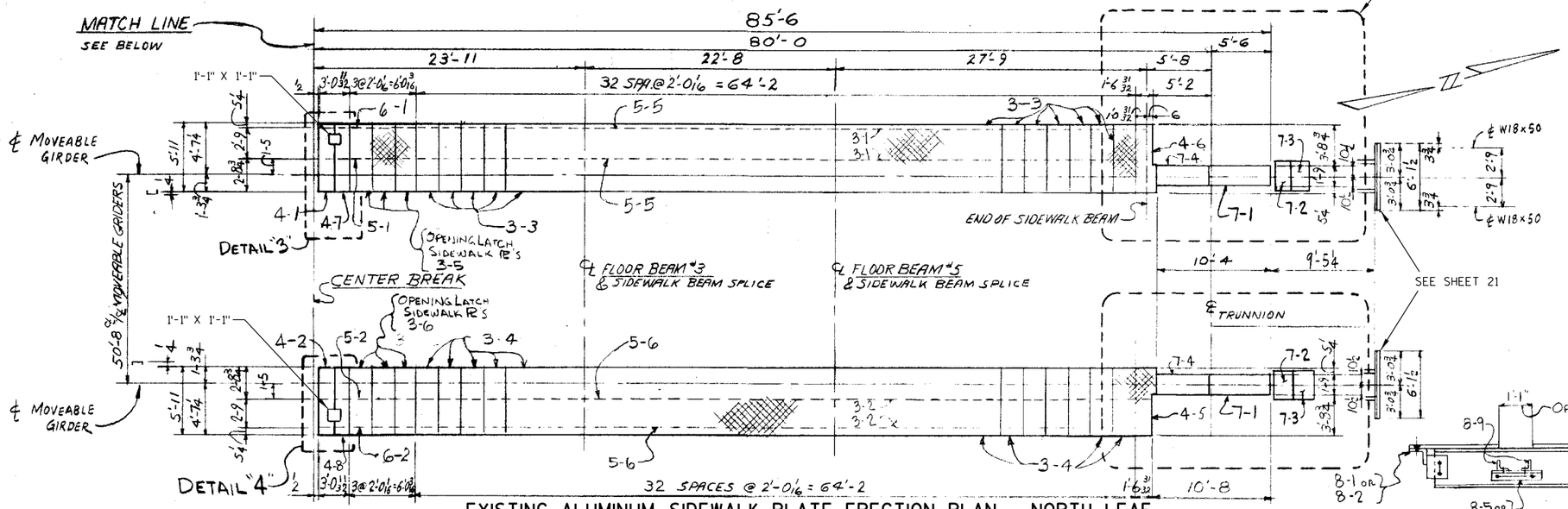
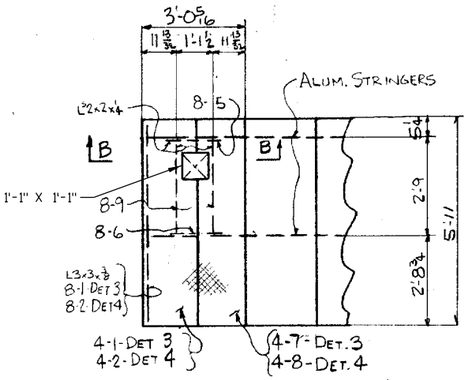


EXISTING ALUMINUM SIDEWALK PLATE ERECTION PLAN - NORTH LEAF

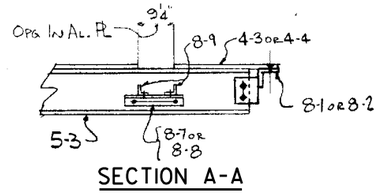
PROPOSED FIBERGLASS PLATES TO MATCH EXISTING LAYOUT



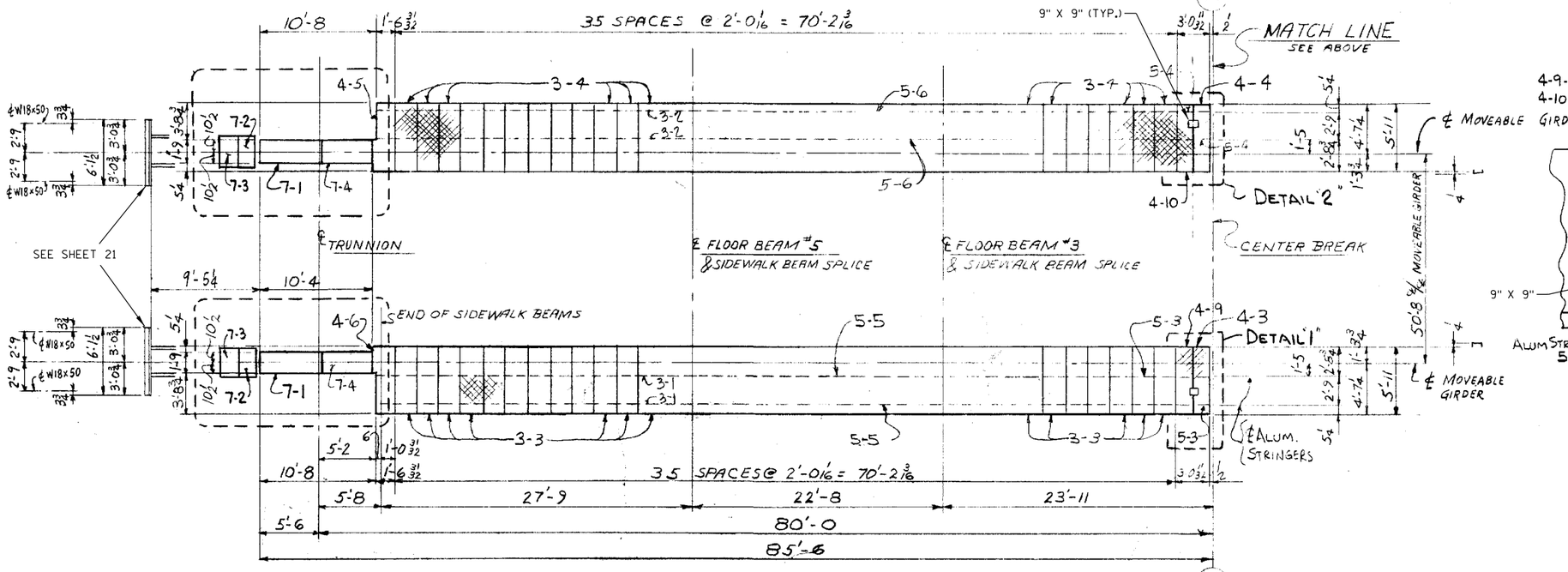
DETAIL 3 AS SHOWN

DETAIL 4 OPP HAND

SECTION B-B

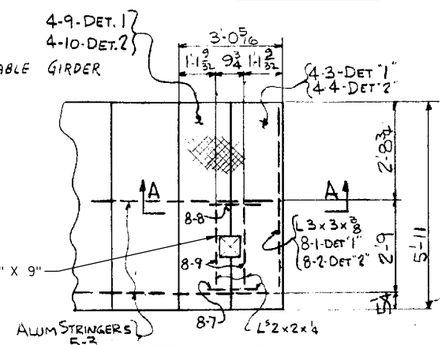


SECTION A-A



EXISTING ALUMINUM SIDEWALK PLATE ERECTION PLAN - SOUTH LEAF

PROPOSED FIBERGLASS PLATES TO MATCH EXISTING LAYOUT



DETAIL 1 AS SHOWN

DETAIL 2 OPP HAND

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LAYOUT OF FIBERGLASS SIDEWALK PLATES

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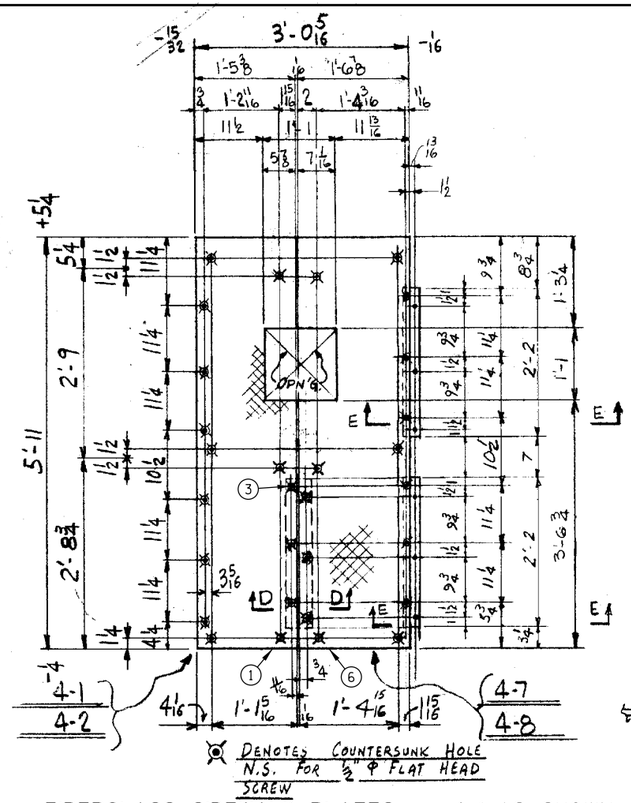
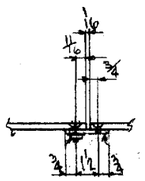
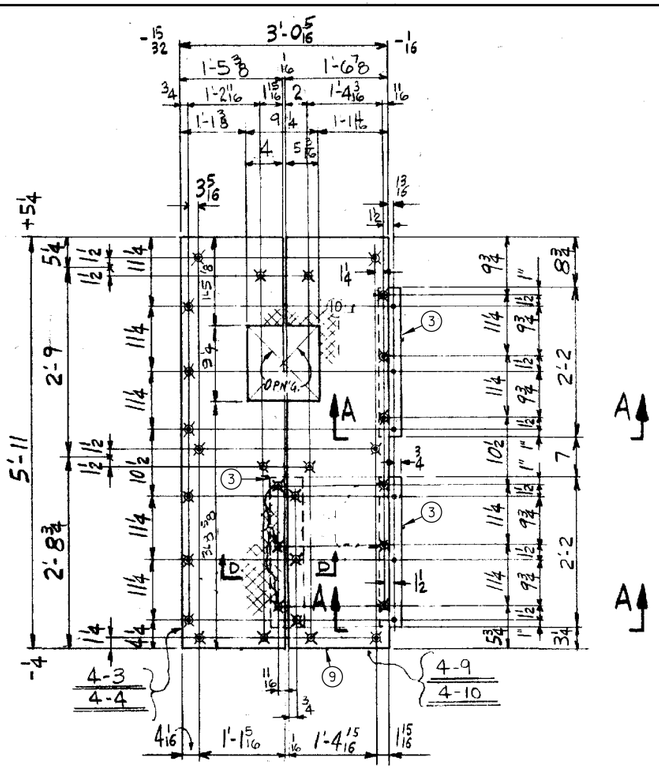


FIBERGLASS SIDEWALK PLATES -4-1-AS SHOWN

ONE-	do	-4-2-OPP HAND
ONE-	do	-4-7-AS SHOWN
ONE-	do	-4-8-OPP HAND

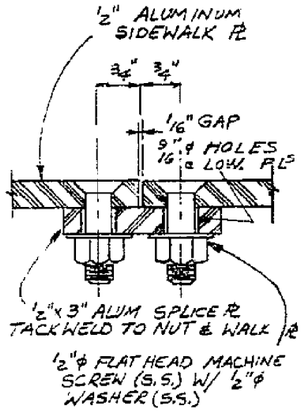


SECTION D-D

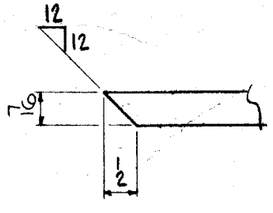


ONE-FIBERGLASS SIDEWALK PLATES -4-1-AS SHOWN

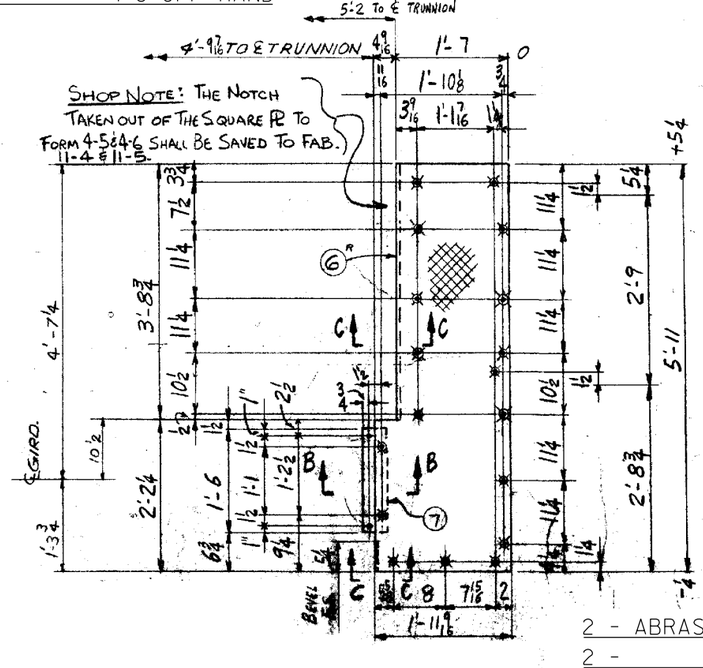
ONE-	do	-4-2-OPP HAND
ONE-	do	-4-7-AS SHOWN
ONE-	do	-4-8-OPP HAND



EXISTING ALUMINUM PLATE DETAIL

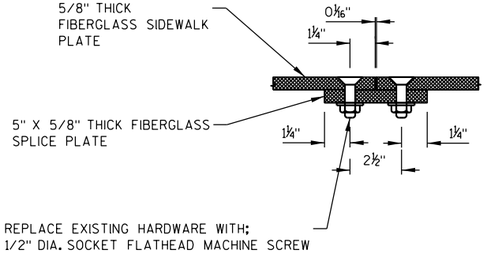


SECTION C-C

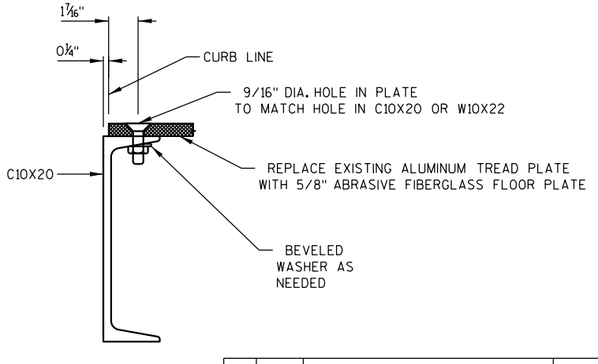


2 - ABRASIVE FIBERGLASS SIDEWALK PLATES 4-5 AS SHOWN

2 - do 4-6 OPP. HAND TO 4-5



PROPOSED SPLICE PLATE DETAIL



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-548

DRAWN BY JC | PLANS CK'D. SSR

FIBERGLASS SIDEWALK PLATE DETAILS

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STATE PROJECT NUMBER
2652-05-70

REVISED: 05/09/2024 SLB

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STATE PROJECT NUMBER

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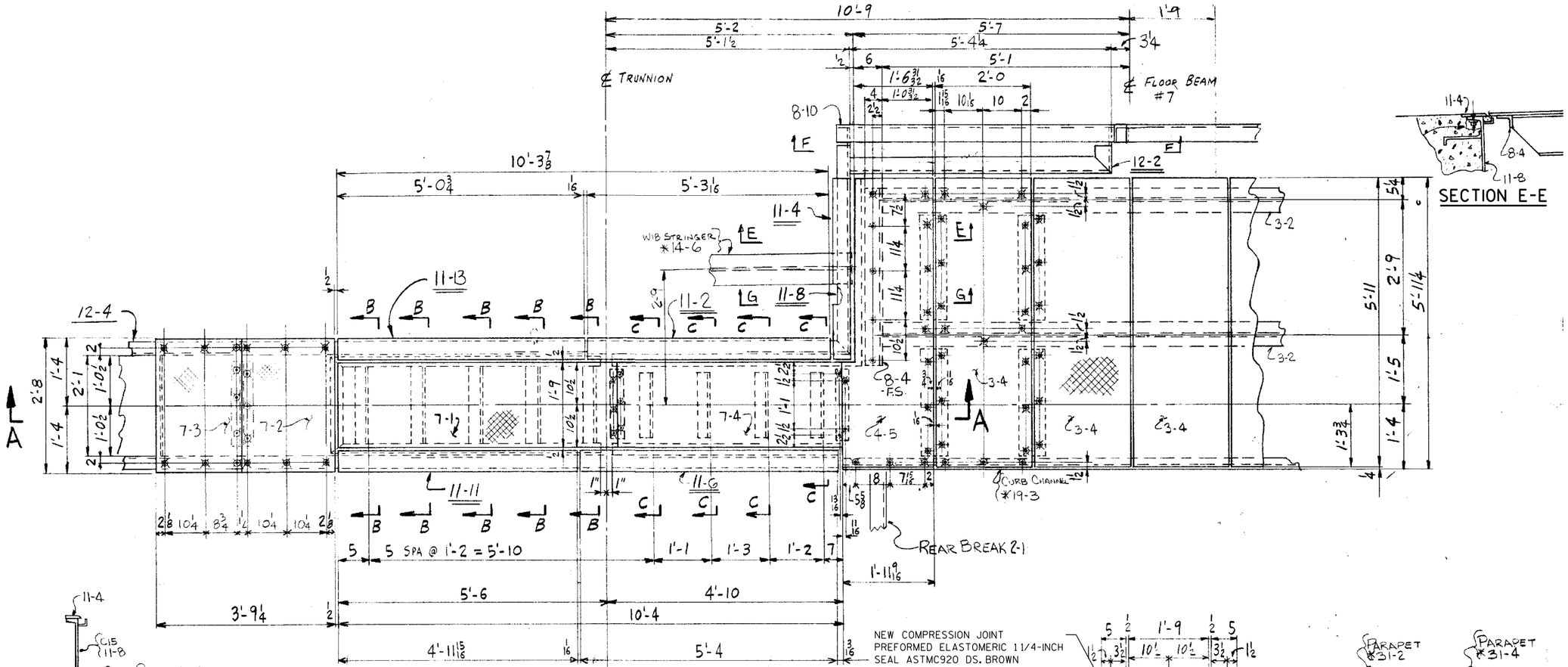

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-548

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FIBERGLASS SIDEWALK PLATES DETAIL-REAR BREAK

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80

REVISED: 05/09/2024 SLB

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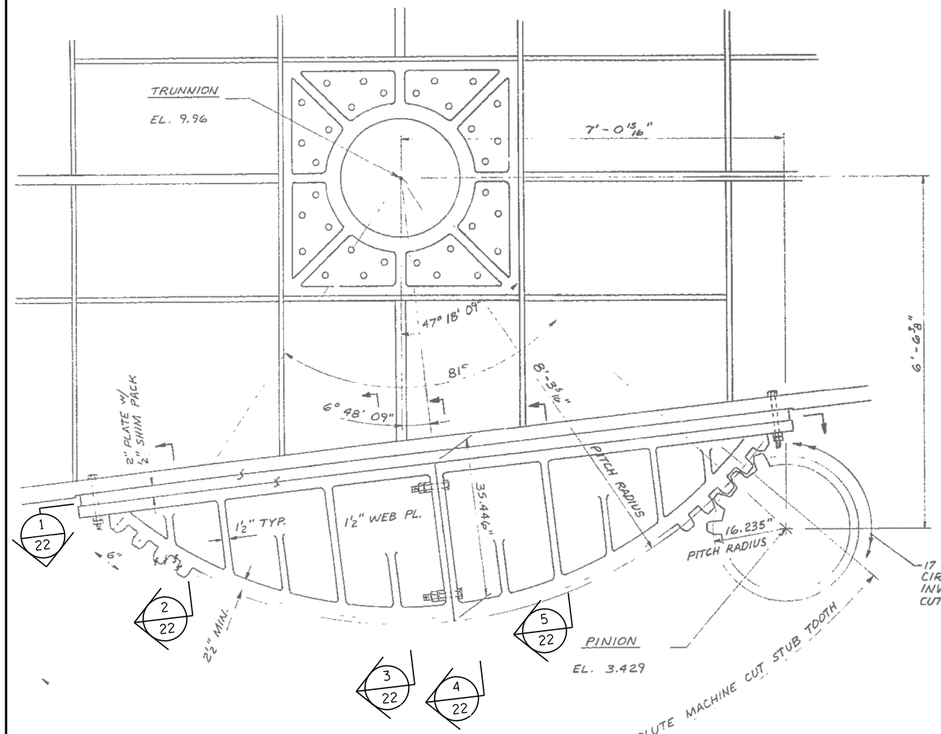
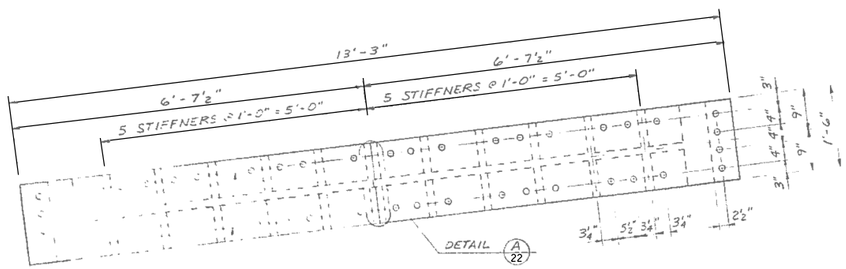
STATE PROJECT NUMBER

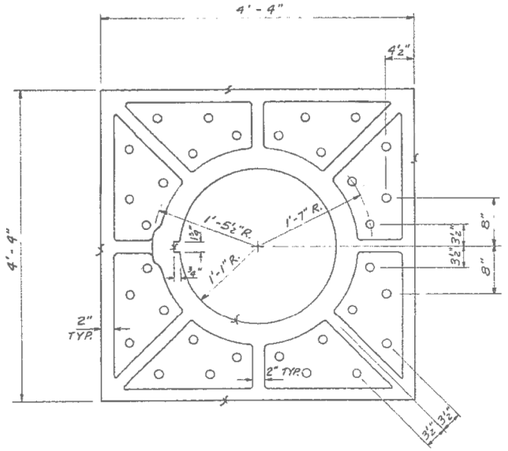
2652-05-70

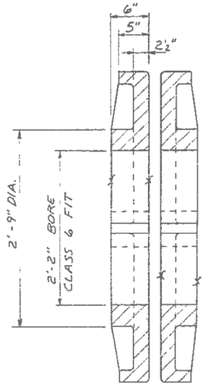


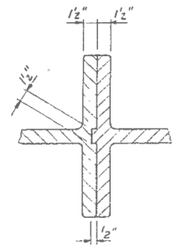
RACK ASSEMBLY



SECTION 1 22

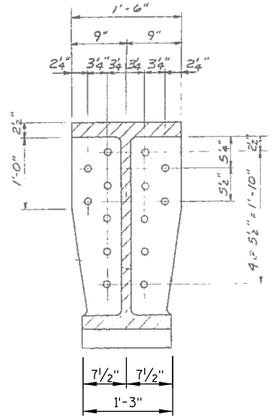




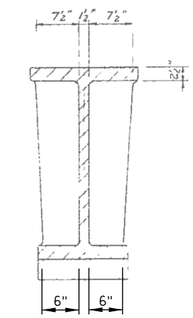


DETAIL A 22

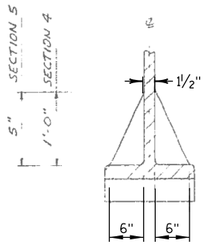
SPIDER CAST STEEL (8)



SECTION 2 22



SECTION 3 22



SECTION 4&5 22

NOTE:

SANDBLAST AND PAINT ALL STEEL INCLUDING MOVABLE GIRDER, TRUNNION SPIDER, TRUNNION RACK ASSEMBLY, PINION, PINION SHAFT.

REMOVE BLAST MEDIA AND PAINT OVERSPRAY BEFORE OPERATING THE BASCULE LEAF.

PROTECT ALL SENSITIVE MECHANICAL COMPONENTS DURING PAINTING OPERATIONS INCLUDING GREASE BRUSHINGS.

REMOVE GREASE FROM ALL SURFACES PRIOR TO SANDBLASTING AND PAINTING.

REVISED: 07/25/2024 BY SLB

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-548

DRAWN BY MJP | PLANS CK'D. SSR

MACHINERY RACK ASSEMBLY

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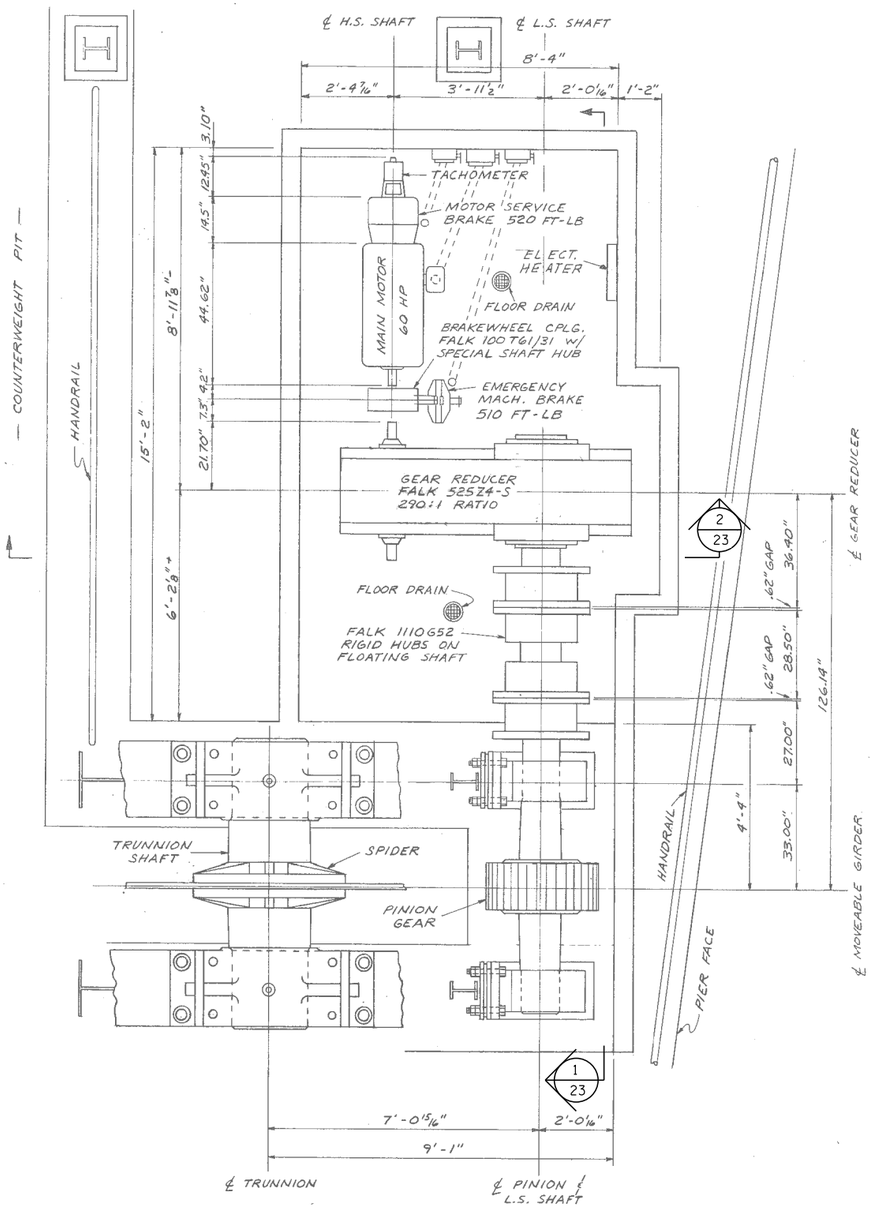
FILE NAME : W:\str\b0101\2025 Rehab Project\Plans\B0101_2025_22_MACHINERY RACK ASSEMBLY.dgn PLOT DATE : 2/13/2025 5:08:16 PM PLOT BY : grogal PLOT NAME : B0101_2025_22_MACHINERY RACK ASSEMBLY.dgn PLOT SCALE : 12:0.0000 ':' / in.

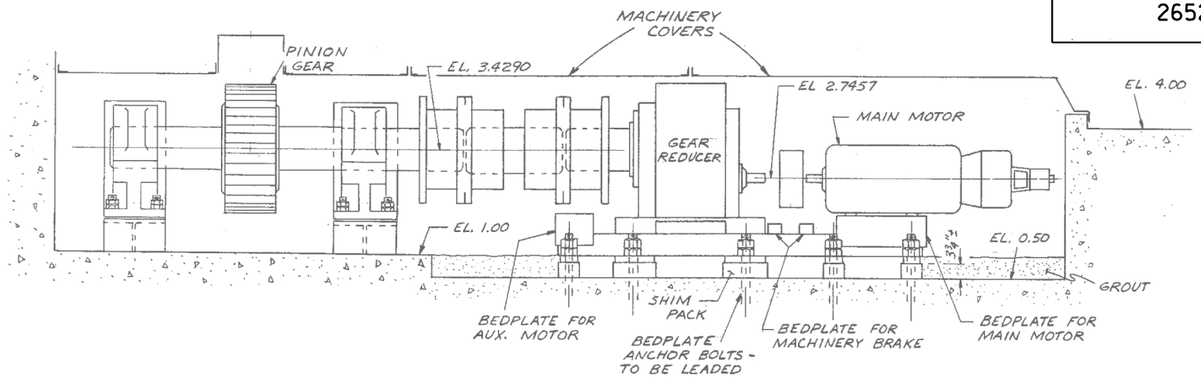
STATE PROJECT NUMBER

2652-05-70

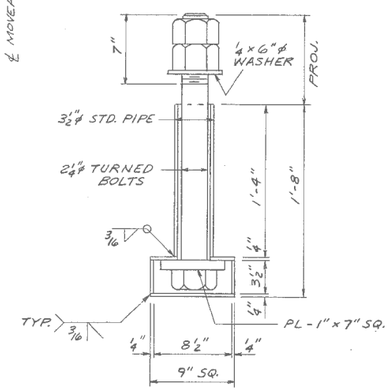


PLAN OF DRIVE MACHINERY

4 LAYOUTS SIMILAR



SECTION 1/23



BEDPLATE ANCHOR BOLTS

NOTES:

SANDBLAST AND PAINT ALL STEEL COMPONENTS AND MACHINERY COVERS FOR DRIVE MACHINERY AND HOUSING.

PROTECT MOTOR, GEAR TEETH, BRONZE COMPONENTS ETC. FROM DAMAGE FROM BLAST MEDIA, DETERGENT AND PAINT.

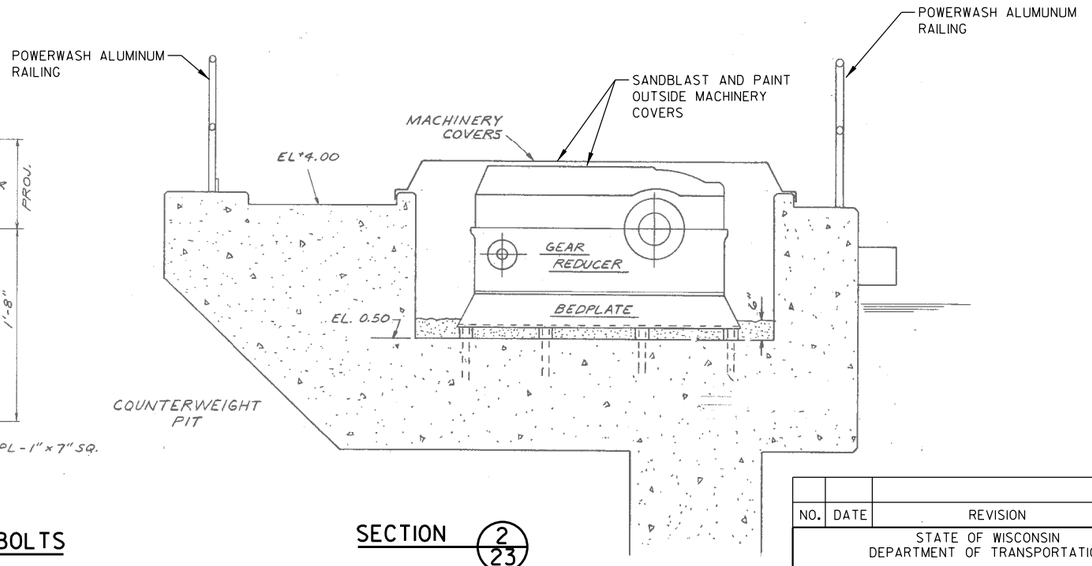
POWER TOOL CLEANING AND BRUSH PAINTING WILL BE REQUIRED FOR SENSETIVE COMPONENTS.

CLEAN ALL DEBRIS, BLAST MEDIA AND EXCESS PAINT BEFORE OPERATING BASCULE LEAF.

SANDBLAST AND PAINT TRUNNION SPIDER AND SHAFT AND RACK AND PINION ASSEMBLY.

PROECT ALL BRUSHINGS, BEARINGS AND MOVEABLE COMPONENTS.

REMOVE GREASE FROM ALL SURFACEES PRIOR TO SANDBLASTING AND PAINTING.



SECTION 2/23

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-548

DRAWN BY MJP | PLANS CK'D. SSR

MACHINERY LAYOUT

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REVISED: 4/18/2024 JC

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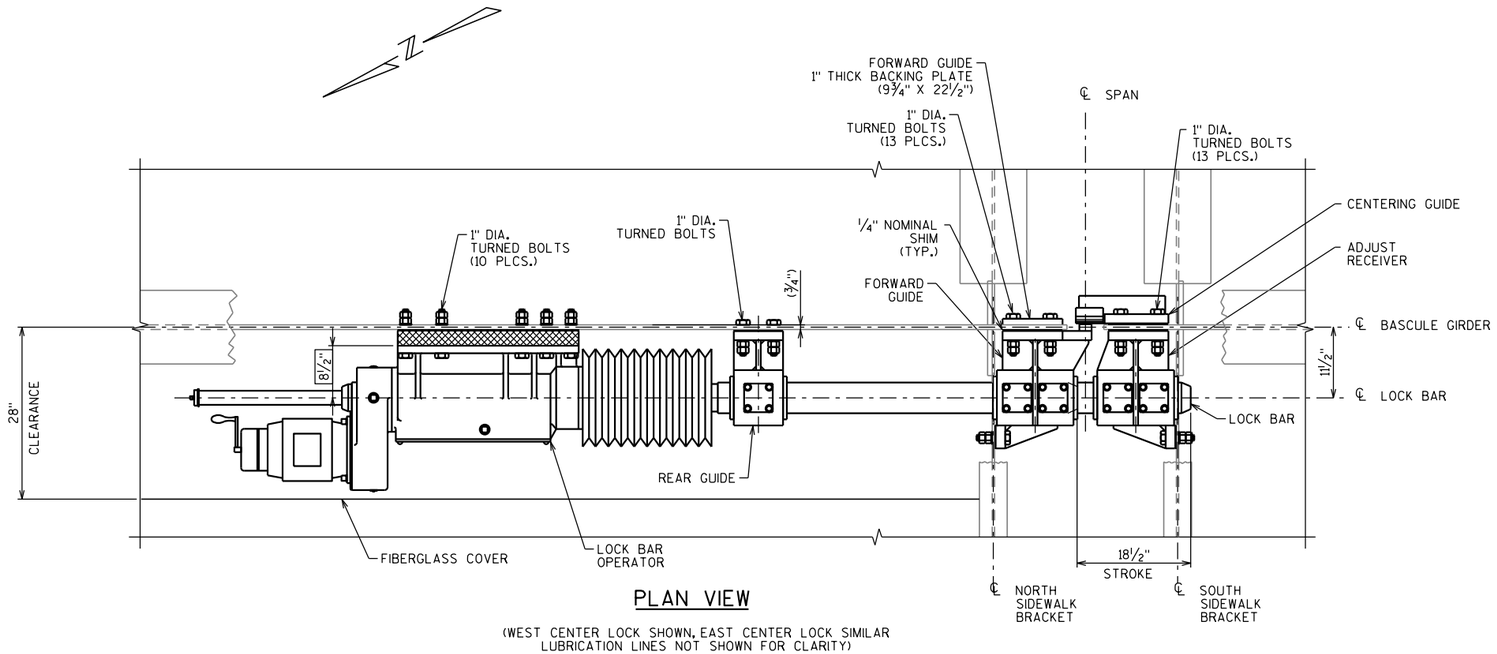


PLAN VIEW

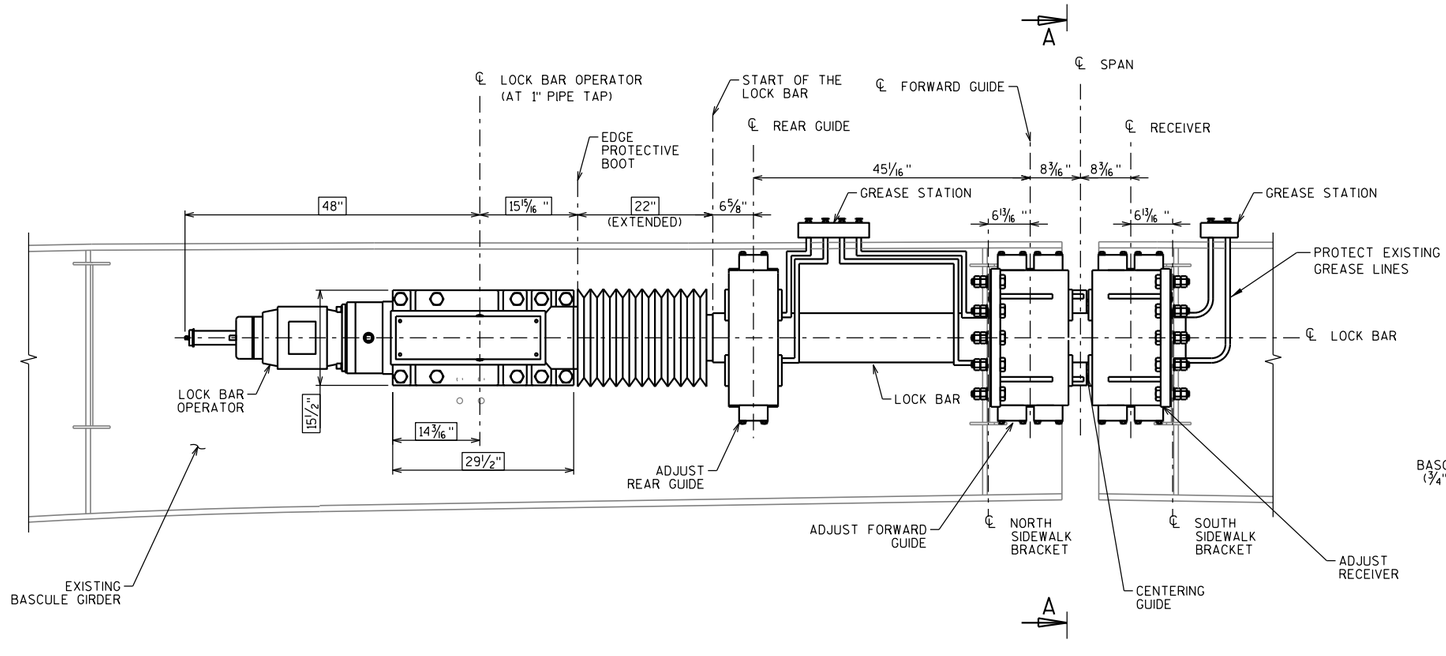
(WEST CENTER LOCK SHOWN, EAST CENTER LOCK SIMILAR
LUBRICATION LINES NOT SHOWN FOR CLARITY)

NOTES:

REMOVE AND REINSTALL LUBRICATION LINES AS NEEDED TO SANDBLAST AND PAINT ALL STEEL.

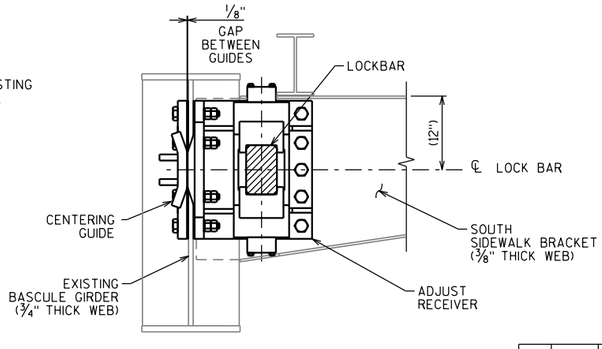
PERFORM CENTERLOCK MAINTENANCE ON REAR GUIDE, FORWARD GUIDE, AND RECEIVER.

REMOVE AND REPLACE 2" DIA. RIGID CONDUIT WITH WIRE TO C/L OF SPAN, LOCATED UNDERSIDE OF WEST SIDEWALK IN NORTH LEAF.



CENTER LOCK ASSEMBLY - ELEVATION VIEW

(WEST CENTER LOCK SHOWN, EAST CENTER LOCK SIMILAR)



SECTION A-A

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-548

DRAWN BY	MJP	PLANS CK'D.	SSR

MACHINERY
CENTERLOCK
MAINTENANCE

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REVISED: 07/25/2024 BY SLB

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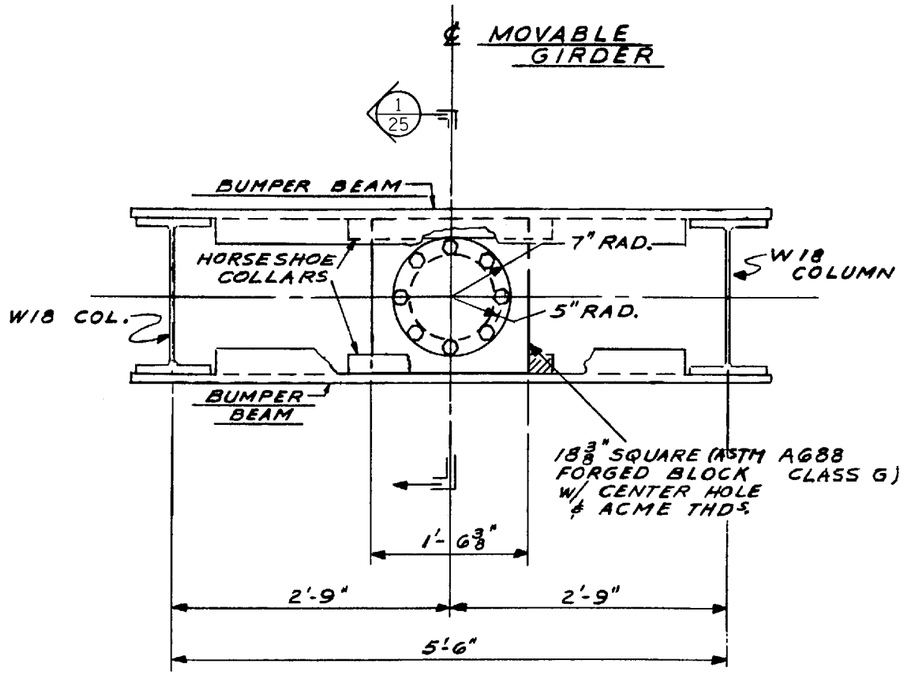
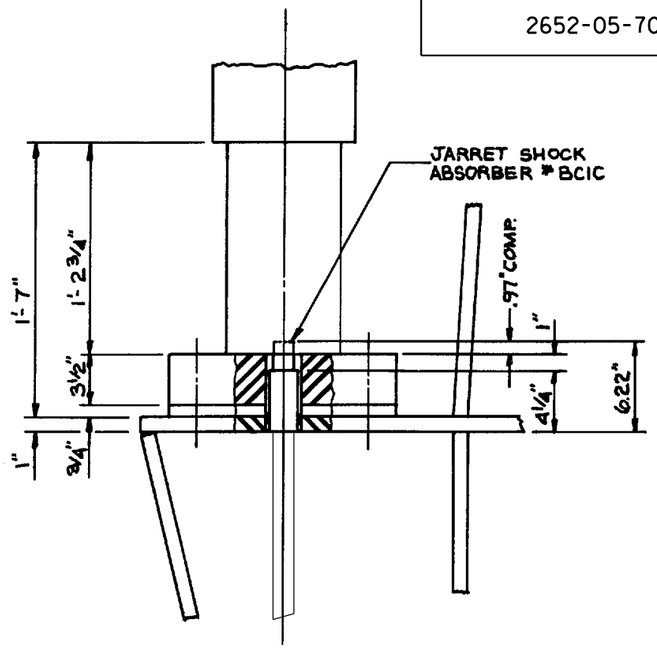
FILE NAME : W:\str\b0101\2025 Rehab Project\Plans\B0101_2025_24_MACHINERY CENTERLOCK LAYOUT.dgn PLOT DATE : 2/13/2025 5:08:24 PM PLOT BY : grogal PLOT NAME : B0101_2025_24_MACHINERY CENTERLOCK LAYOUT.dgn PLOT SCALE : 12:0.0000 ':" / in.

STATE PROJECT NUMBER

2652-05-70



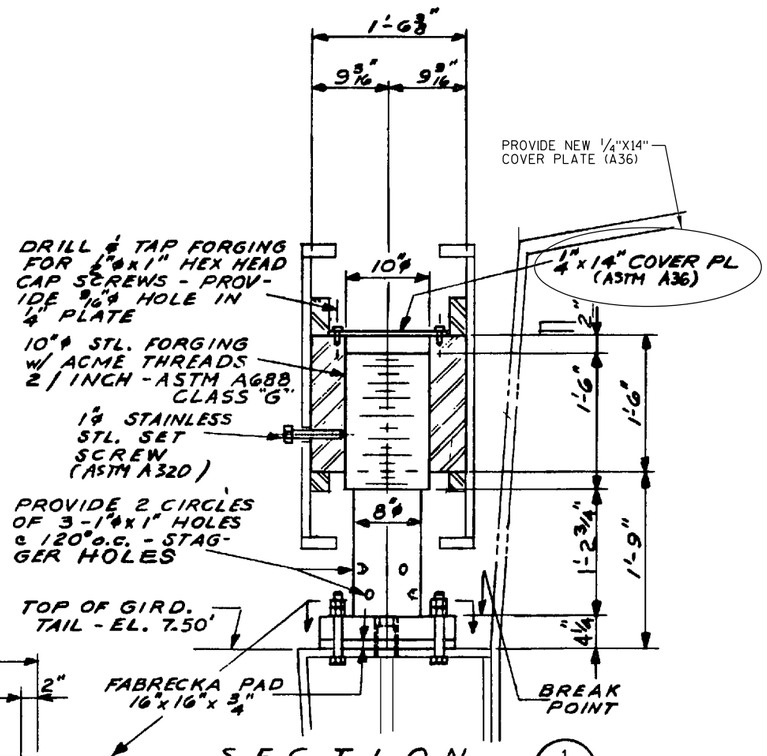
PLAN OF BUMPER BEAM



EXISTING JARRET SHOCK ABSORBER DETAIL

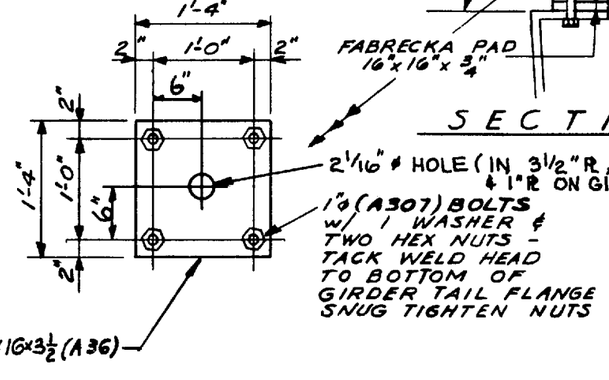
NOTE:

CONTRACTOR TO REFURBISH EXISTING HEEL BLOCK AND SHOCK ABSORBER AT FOUR LOCATIONS TO RESTORE FULL WORKING CAPACITY AND ADJUTMENT.



NOTE:

ADJUST BUMPER AFTER FULL DEAD LOAD INCLUDING COUNTERWEIGHT CONCRETE IS PLACED ON MOVABLE GIRDER. ADJUST UNTIL BOTH ROADWAY CURBS @ CENTER-BREAK ARE @ EL. 16.25 ℄ CENTER-LOCKS MATE. ALL BUMPERS MUST PRESS FIRMLY AGAINST MOVABLE GIRDER TAIL.



NO.	DATE	REVISION	BY

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STRUCTURE B-40-548

DRAWN BY	GJR	PLANS CK'D.	SSR

HEEL BLOCK REFURBISHMENT

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REVISED: 08/15/2024 BY GJR

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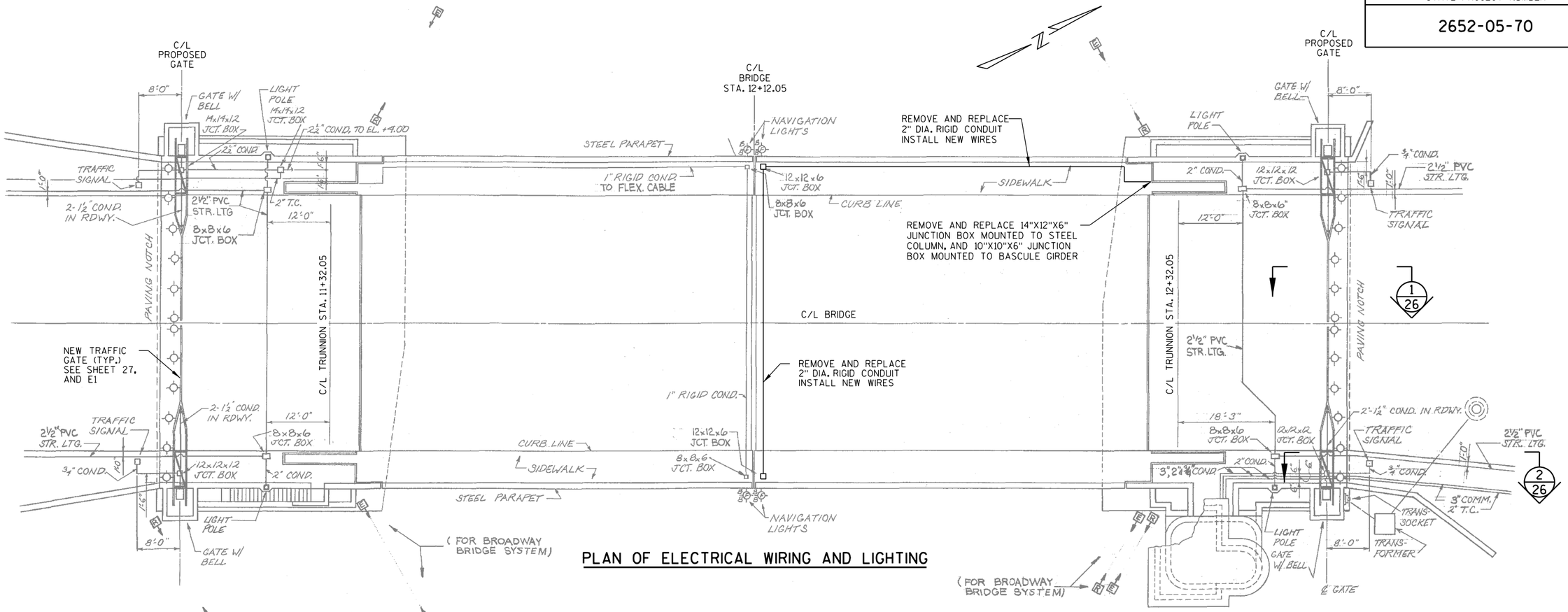
FILE NAME : W:\str\b0101\2025 Rehab Project\Plans\B0101_2025_25_HEEL BLOCK REFURBISHMENT.dgn PLOT DATE : 2/13/2025 5:08:24 PM PLOT BY : grogal PLOT NAME : B0101_2025_25_HEEL BLOCK REFURBISHMENT.dgn PLOT SCALE : 3:0.0000 ':" / in.

STATE PROJECT NUMBER

2652-05-70



PLAN OF ELECTRICAL WIRING AND LIGHTING

ELECTRICAL LEGEND

BREAKER PANEL — CIRCUIT — SWITCH NUMBER — TYPE FIXTURE

INDICATES LIGHTING FIXTURE

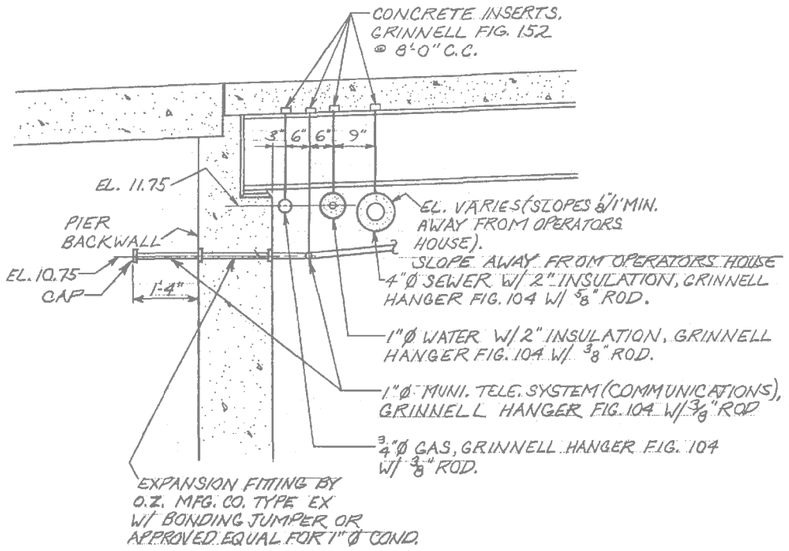
SWITCH NUMBER — INDICATES TOGGLE SWITCH-48" ABOVE FLOOR: NORMAL

BREAKER PANEL — CIRCUIT — INDICATES CONVENIENCE OUTLET-24" ABOVE FLOOR: NORMAL

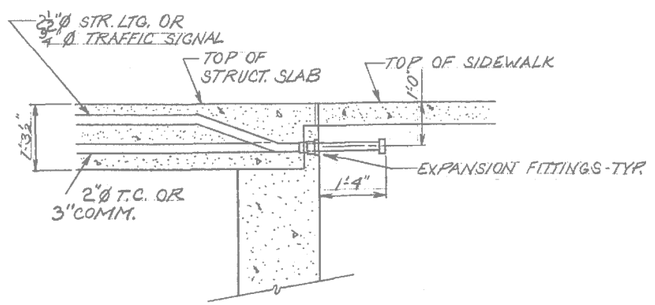
INDICATES ELECTRIC MOTOR

INDICATES DISCONNECT SWITCH OR JCT. BOX

AUX. CONTROLS PHOTO ELECTRIC SENSOR EMITTER (E) - RECEIVER (R)



TYPICAL SECTION 1/26



TYPICAL SECTION 2/26

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STRUCTURE B-40-548

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ELECTRICAL LAYOUT

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85

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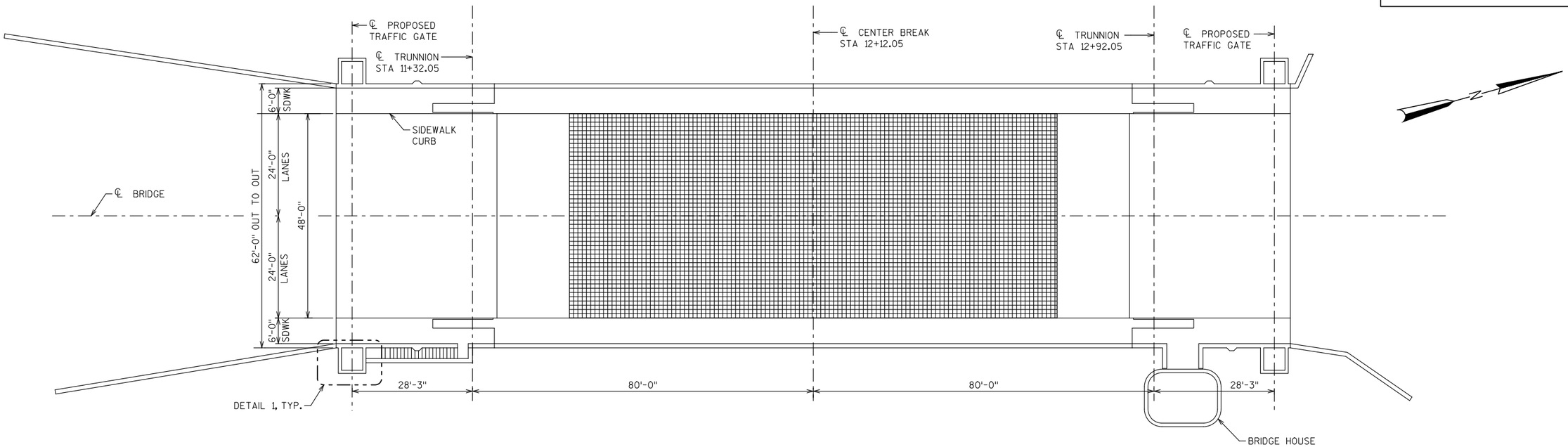
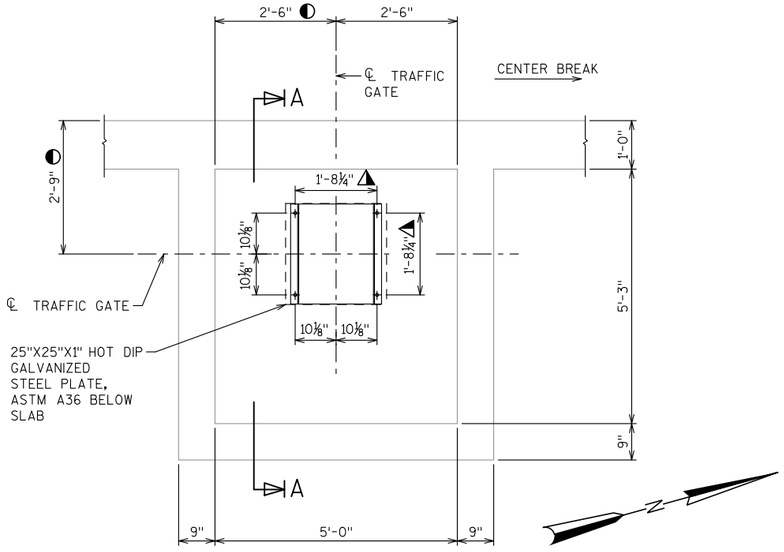


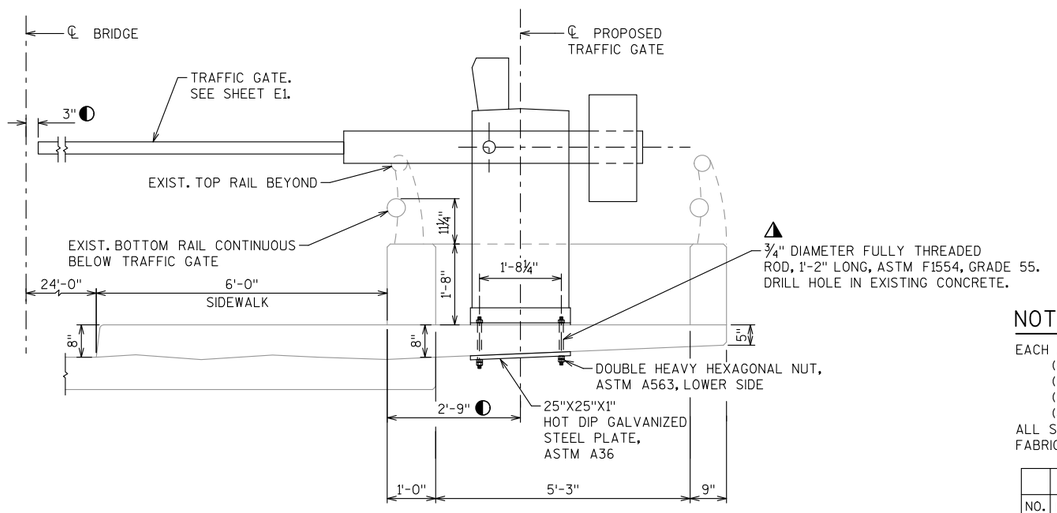
PLAN

(EXISTING BRIDGE)



DETAIL 1

(SOUTHWEST GATE SHOWN, OTHER GATES SIMILAR/OPPOSITE)



SECTION A-A

NOTES:

EACH ANCHOR ASSEMBLY TRAFFIC GATE CONSISTS OF:
- (4) ¾" DIA x 1'-2" LONG THREADED RODS
- (1) 25"X25"X1" STEEL PLATE
- (12) NUTS
- (8) WASHERS, ASTM F436

ALL STEEL ITEMS SHALL BE GALVANIZED AFTER FABRICATION

LEGEND

◐ THIS DIMENSION MAY BE INCREASED UP TO 3 INCHES TO AVOID CONFLICT WITH EXISTING ANCHOR BOLTS.

⚠ VERIFY DIMENSIONS AND ANCHOR BOLT DIAMTER WITH THE TRAFFIC GATE MANUFACTURER. INCORPORATE ACTUAL DIMENSIONS AND ANCHOR BOLT SIZE IN SHOP DRAWINGS.

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-548

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TRAFFIC GATE MOUNTING DETAILS

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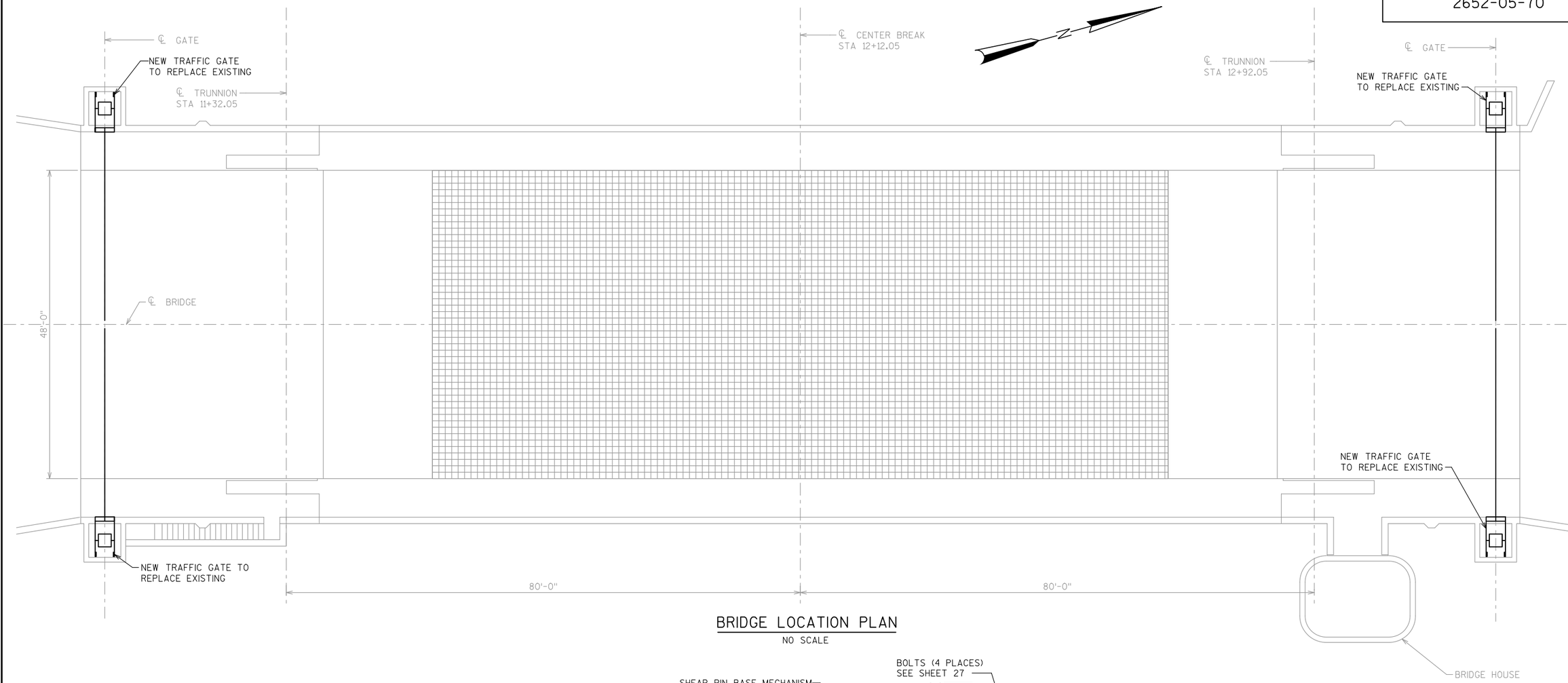
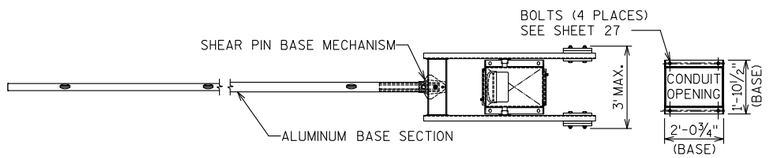


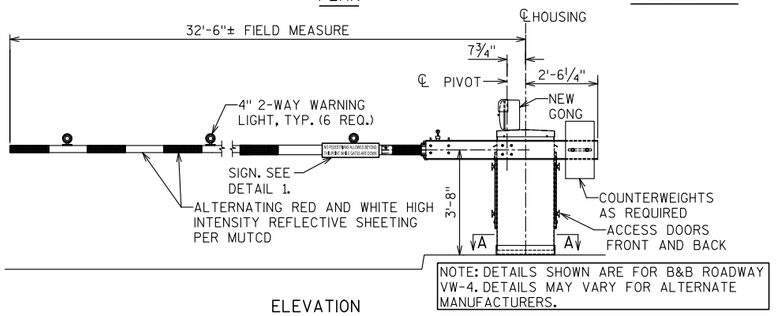
BRIDGE LOCATION PLAN

NO SCALE



PLAN

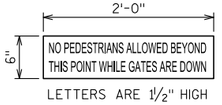
SECTION A-A



ELEVATION

TRAFFIC GATE

NO SCLAE (TYP. OF 4)



LETTERS ARE 1½" HIGH

DETAIL 1

NO SCALE

PEDESTRIAN SIGN (TYP. OF 4)

GENERAL NOTES

1. INSTALL 4 NEW TRAFFIC GATES TO REPLACE EXISTING.
2. SEE SHEET 27 FOR GATE MOUNTING DETAILS.
3. GATE WIRING TO BE REUSED AND RECONNECTED TO NEW TRAFFIC GATES.
3. VERIFY ALL EXISTING GATE WIRING IS FUNCTIONAL BEFORE DISCONNECTION. REPAIR AS REQUIRED.
4. MARK EXISTING WIRING BEFORE DISCONNECTION AND VERIFY IT CONFORMS TO THE EXISTING CONTROL SHOP PLANS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

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DRAWN BY	WH	PLANS CK'D.	BT

TRAFFIC GATES

SHEET E1 OF E2

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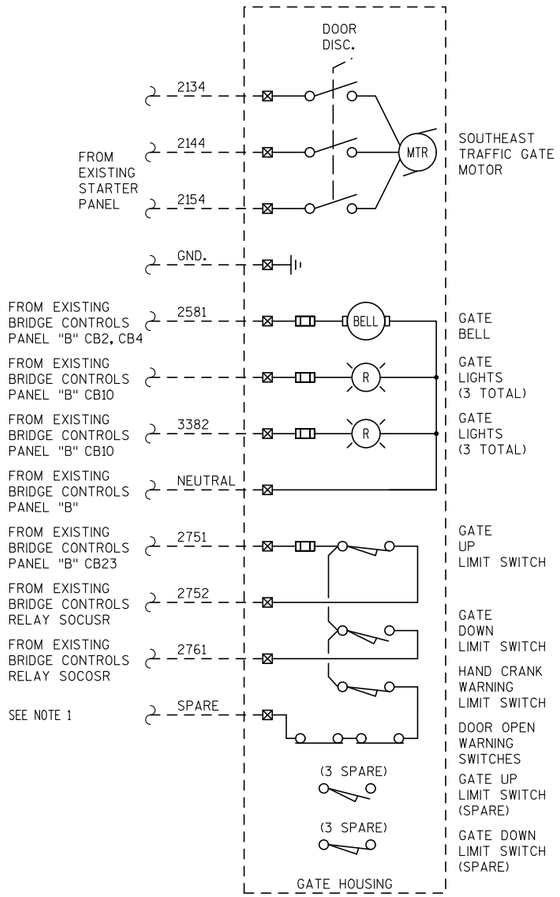
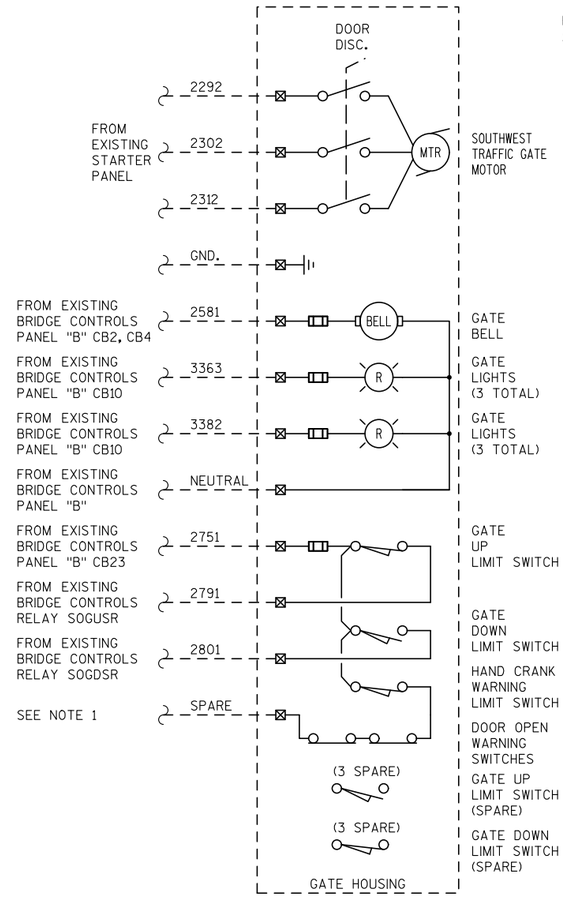
STATE PROJECT NUMBER

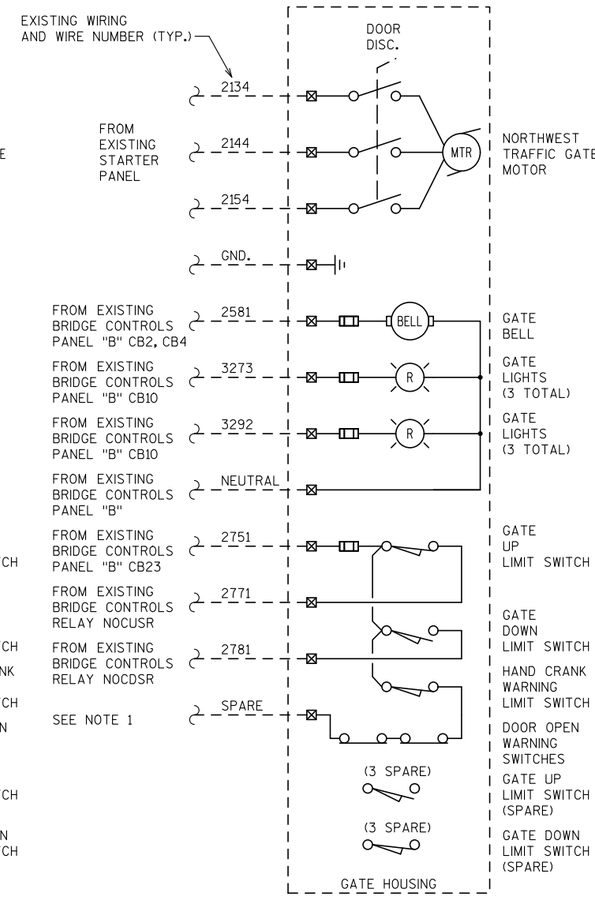
2652-05-70



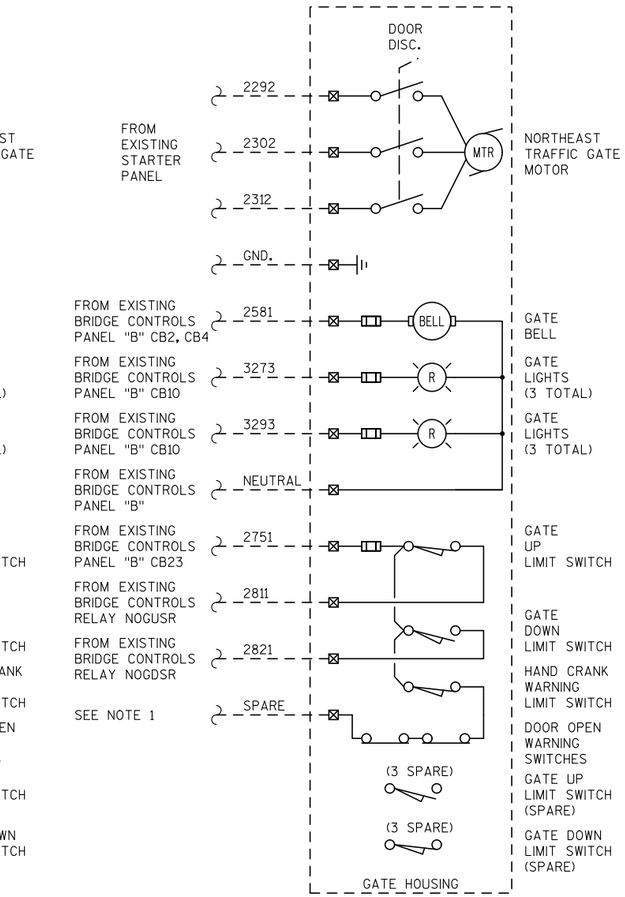
SOUTHEAST TRAFFIC GATE



SOUTHWEST TRAFFIC GATE

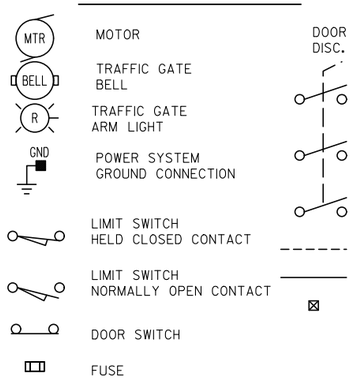


NORTHWEST TRAFFIC GATE



NORTHEAST TRAFFIC GATE

ELECTRICAL LEGEND



ELECTRICAL NOTES

1. PROVIDE MACHINE TOOL RELAY IN EXISTING CONTROL CABINET AND CONNECT RELAY COIL IN SERIES WITH THE HAND CRANK LIMIT AND DOOR OPEN SWITCHES. CONNECT NORMALLY OPEN RELAY CONTACT TO INTERRUPT MOTOR STARTER CONTROL POWER. SUBMIT PROPOSED SCHEMATIC FOR APPROVAL.
2. WIRE NUMBERS SHOWN ARE FROM THE EXISTING CONTROL SHOP PLANS FOR THE BRIDGE. THESE DRAWINGS ARE AVAILABLE FOR USE. CONTRACTOR TO FIELD VERIFY ALL EXISTING WIRING AND WIRE NUMBERS.
3. AT THE COMPLETION OF THE PROJECT, PROVIDE A FULL INTERLOCK CHECK OF THE BRIDGE WITH THE NEW TRAFFIC GATES. PROVIDE A WRITTEN INTERLOCK CHECKLIST FOR APPROVAL.
4. FIELD VERIFY ALL REQUIRED GATE DIMENSIONS ON THE BRIDGE BEFORE SHOP PLAN SUBMITTAL. THE NEW GATES MUST FIT IN THE EXISTING SPACE PROVIDED.
5. "PANEL "B" CB23" DENOTES THE CIRCUIT BREAKER THAT FEEDS THE EXISTING CONTROL DEVICES CONNECTED TO THIS CIRCUIT. SEE THE EXISTING CONTROL SHOP PLANS FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-548

DRAWN BY	WH	PLANS CK'D.	BT

TRAFFIC GATE WIRING

SHEET E2 OF E2

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Notes

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