WKE

DEC 2017

PROJECT ID: 2010-14-70

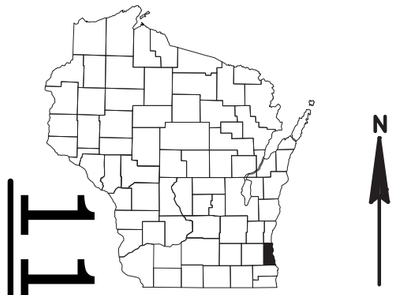
WITH:

COUNTY: MILWAUKEE

ORDER OF SHEETS

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

TOTAL SHEETS = 682



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

ZOO FREEWAY

SWAN BLVD TO BURLEIGH STREET

IH 41

MILWAUKEE COUNTY

STATE PROJECT NUMBER
2010-14-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2010-14-70	WISC 2018008	1

BRIDGES

B-40-135
B-40-136
B-40-138
B-40-139
B-40-259

SIGN STRUCTURES

S-40-798
S-40-799
S-40-871
S-40-872
S-40-873
S-40-969

DESIGN DESIGNATION		IH 41	NORTH AVENUE
A.A.D.T.	(2015) =	144,000	(2017) = 27,700
A.A.D.T.	(2035) =	180,630	(2037) = 30,300
D.H.V.	=		1,395
D.D.	=	50% EB / 50% WB	59% EB / 41% WB
T.	=	11.6%	5.3%
DESIGN SPEED	=	60 MPH	40 MPH
ESALS	=	31,835,300	2,379,800

CONVENTIONAL SYMBOLS

PLAN

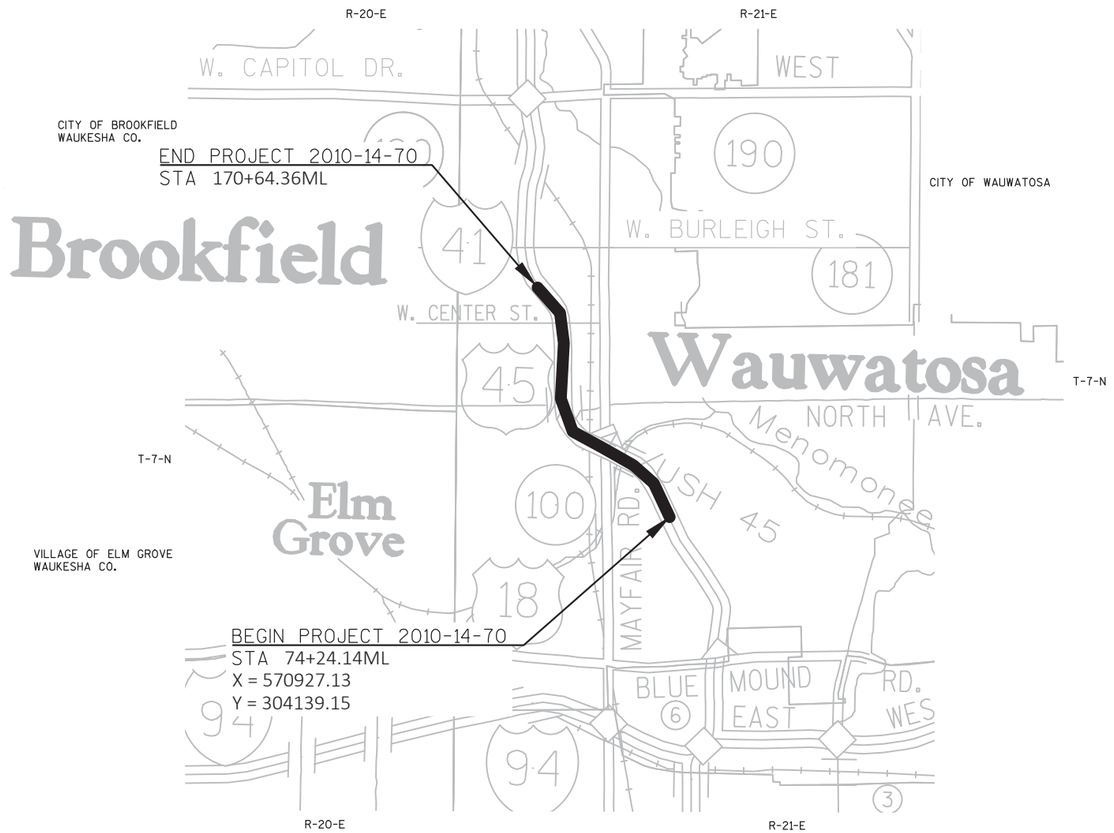
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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



LAYOUT

SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.826 MI.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, MILWAUKEE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES 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 NORTH AMERICAN VERTICAL DATUM NAVD88 (2007)

ORIGINAL PLANS PREPARED BY

ch2m:

MILWAUKEE, WISCONSIN

WISCONSIN
WILLIAM T. STOECK
35921-006
MILWAUKEE, WI
PROFESSIONAL ENGINEER

8-1-2017 (Date)

William Stoeck (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	
Designer	CH2M
Project Manager	CHRIS ZACHARIAS, P.E.
Regional Examiner	
Regional Supervisor	WILLIAM S. MOHR, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 8-1-2017 (Signature)

E

UTILITY CONTACTS

AT&T WISCONSIN
JAY BULANEK
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WAUKESHA, WI 53188
(262) 896-7669
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JB5175@ATT.COM

CHARTER COMMUNICATIONS
STEVEN CRAMER
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CELL: (414) 688-2385
STEVE.CRAMER@CHARTER.COM
WIS.ENGINEERING@CHARTER.COM

LEVEL 3 COMMUNICATIONS
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3235 INTERTECH DR
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BROOKFIELD, WI 53045
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BRAHIM.GADDOUR@LEVEL3.COM
RELO@LEVEL3.COM

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RTRGOVEC@MIDWESTFIBERNETWORKS.COM

MILWAUKEE COUNTY - SANITARY, WATER. ELECTRICAL, AND COMMUNICATIONS
KARL STAVE
633 W. WISCONSIN AVE.
SUITE 1000
MILWAUKEE, WI 53203
PHONE: (414) 278-4863
KARL.STAVE@MILWAUKEECOUNTYWI.GOV

MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
LARRY ANDERSON
260 W SEEBOTH ST
MILWAUKEE , WI 53204
PHONE: (414) 225-2241
LANDERSON@MMSD.COM

SPRINT COMMUNICATIONS
GERRY CRAIN
5600 N. RIVER ROAD
SUITE 200
ROSEMONT, IL 60018
PHONE: (847) 445-1869
GERRY.A.CRAIN@SPRINT.COM

TELEPORT COMMUNICATIONS AMERICA
C/O JENNIFER NAVARRO
NORTHWIND TECHNICAL SERVICES
6070 N FLINT RD
GLENDALE, WI 53209
PHONE: (414) 459-3564
J.NAVARRO@NORTHWINDTECH.COM

WAUWATOSA, CITY OF - LIGHTING
RANDY MICHELZ
11100 W WALNUT RD
WAUWATOSA, WI 53226
PHONE: (414) 471-8429
CELL: (414) 248-0987
RMICHELZ@WAUWATOSA.NET

WAUWATOSA, CITY OF - *SANITARY*
MIKE MAKI
7725 W NORTH AVE
WAUWATOSA, WI 53213
PHONE: (414) 479-8991
MMAKI@WAUWATOSA.NET

(CONTINUED ON NEXT SHEET)

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

WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

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

OTHER AGENCIES

CITY OF WAUWATOSA – CITY ENGINEER
WILLIAM WEHRLEY
7725 W NORTH AVE
WAUWATOSA, WI 53213
PHONE: (414) 479-8929
WWEHRLEY@WAUWATOSA.NET

MILWAUKEE COUNTY TRANSIT SYSTEM
MELANIE FLYNN
COORDINATOR OF STREET OPERATIONS
1942 N. 17TH STREET
MILWAUKEE, WI 53205
PHONE: (414) 343-1764
MFLYNN@MCTS.ORG

WAUWATOSA SCHOOL DISTRICT
MELISSA NETTESHEIM
MANAGER OF BUILDINGS AND GROUNDS
12121 W NORTH AVENUE
WAUWATOSA, WI 53226
PHONE: (414)773-1052
NEITESME@WAUWATOSA.K12.WI.US

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
MR. ROB MERRY
W239 N1812 ROCKWOOD DRIVE
P.O. BOX 1607
WAUKESHA, WI 53187-1607
PHONE: (262) 953-4289
CELL: (920) 912-1036
rmerry@sewrpc.org

UNION PACIFIC RAILROAD COMPANY
MR. JOHN VENICE
101 N. WACKER DRIVE, SUITE 1920
CHICAGO, IL 60606
PHONE: (312) 777-2043
JNVENICE@UP.COM

WAUWATOSA SCHOOL DISTRICT
KELLER RUSSELL
COMUNICATIONS COORDINATOR
12121 W NORTH AVENUE
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WAUWATOSA SCHOOL DISTRICT
PHIL ERTL
SUPERINTENDENT
12121 W NORTH AVENUE
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ERTLPH@WAUWATOSA.K12.WI.US

STATE AGENCIES

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
MICHAEL THOMPSON – DNR SERVICE CENTER
2300 N DR. MARTIN LUTHER KING JR. DRIVE
MILWAUKEE, WI 53212
PHONE: (414) 303-3408
MICHAELC.THOMPSON@WISCONSIN.GOV

WISCONSIN DEPARTMENT OF TRANSPORTATION
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WAUKESHA, WI 53187-0798
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CHRIS.ZACHARIAS@DOT.WI.GOV

WISCONSIN DEPARTMENT OF TRANSPORTATION
GREG BERRY – UTILITY CONSTRUCTION ENGINEER
141 NW BARSTOW STREET
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GREGORY.BERRY@DOT.WI.GOV

UTILITY CONTACTS (CONTINUED)

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WAUWATOSA, WI 53213
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DSIMPSON@WAUWATOSA.NET

WE ENERGIES - ELECTRICITY
SEND ALL CORRESPONDENCE TO:
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ROOM A299
333 WEST EVERETT ST
MILWAUKEE, WI 53203
PHONE: *(414) 221-5617*
LATROY.BRUMFIELD@WE-ENERGIES.COM

CONSTRUCTION FIELD CONTACT:
NICHOLAS WELCH
500 S. 116TH ST
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PHONE: *(414) 944-5765*
NICHOLAS.WELCH@WE-ENERGIES.COM

WE ENERGIES - GAS
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ROOM A299
333 WEST EVERETT ST
MILWAUKEE, WI 53203
PHONE: *(414) 221-5617*
LATROY.BRUMFIELD@WE-ENERGIES.COM
DAN.SANDE@WE-ENERGIES.COM

CONSTRUCTION FIELD CONTACT:
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500 S. 116TH ST
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NICHOLAS.ERNSTER@WE-ENERGIES.COM

WISCONSIN DEPARTMENT OF TRANSPORTATION - LIGHTING
ERIC PEREA
141 NW BARSTOW STREET
WAUKESHA, WI 53087-0798
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CELL: (414) 750-0935
ERIC.PEREA@DOT.WI.GOV

WISCONSIN DEPARTMENT OF TRANSPORTATION - STOC
JEFF MADSON
STE. 300
433 W. ST. PAUL AVE.
MILWAUKEE, WI 53203-3007
PHONE: *(414) 225-3723*
JEFFREY.MADSON@DOT.WI.GOV

CONSTRUCT HMA PAVEMENT WITH THE FOLLOWING LAYERS:

	PAVEMENT TYPE	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	NOMINAL MAXIMUM SIZE GRADATION
A	4 HT 58-28 H	1-3/4"	1-3/4" UPPER LAYER	12.5 MM
B	4 HT 58-28 H	11"	1-3/4" UPPER LAYER	12.5 MM
	3 HT 58-28 H		2-1/4" LOWER-LOWER LAYER	19.0 MM
	3 HT 58-28 H		3-1/2" LOWER-MIDDLE LAYER	19.0 MM
	3 HT 58-28 H		3-1/2" LOWER-LOWER LAYER	19.0 MM
C	4 HT 58-28 H	4"	1-3/4" UPPER LAYER	12.5 MM
	3 HT 58-28 H		2-1/4" LOWER-LOWER LAYER	19.0 MM
D	4 HT 58-28 H	4"	1-3/4" UPPER LAYER	12.5 MM
	3 HT 58-28 H		2-1/4" LOWER-LOWER LAYER	19.0 MM
E	4 LT 58-28 S	1-3/4"	1-3/4" UPPER LAYER	12.5 MM

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEWS
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLANS
PLAN DETAILS
FTMS PLAN
EROSION CONTROL
STORM SEWER
EXISTING UTILITY PLANS
PERMANENT SIGNING
LIGHTING PLANS
PAVEMENT MARKING
TRAFFIC CONTROL
STAGE CONSTRUCTION
ALIGNMENT LAYOUT

STANDARD ABBREVIATIONS

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

2

GENERAL NOTES

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

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

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.

NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY BY CONTRACTOR.

WHEN THE QUANTITY OF HMA PAVEMENT OR BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

THE QUANTITY OF TOPSOIL IS COMPUTED FROM MEASUREMENTS BETWEEN THE SUBGRADE SHOULDER POINTS AND THE SLOPE INTERCEPTS AS SHOWN ON THE CROSS SECTIONS PLUS 5 FEET FOR ROUNDING.

CURB HEIGHTS AT THE END OF CURB AND GUTTER SHALL BE TAPERED FROM 0 TO 4 INCHES OR 0 TO 6 INCHES IN 6 FEET.

CROSS SECTIONS SHOWN INCLUDE THE THICKNESS OF TOPSOIL SPECIAL WHERE REQUIRED. TOPSOIL SPECIAL SHALL BE REPLACED WITH 6-INCH TYPICAL DEPTH THROUGHOUT THE PROJECT.

A SAWED JOINT IS REQUIRED WHERE NEW HMA PAVEMENT MEETS EXISTING HMA PAVEMENT.

REMOVAL OF EROSION CONTROL DEVICES IS INCLUDED IN THE COST OF THEIR RESPECTIVE BID ITEMS.

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

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

EROSION CONTROL BMPS ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL BMPS SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQUIRED.

FERTILIZER SHALL NOT BE USED WITHIN 100' OF NAVIGABLE WATERWAYS OR WETLANDS.

CONTRACTOR MUST CONTACT THE PROJECT ENGINEER AND THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION (SEWRPC) (JOHN WASHBURN) AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

THE EXACT LOCATION OF EXCAVATION BELOW SUBGRADE (EBS) WILL BE DETERMINED BY THE ENGINEER.

A SOIL EXPANSION FACTOR OF 1.1 WAS USED TO GENERATE ESTIMATED EARTHWORK QUANTITIES. DUE TO POTENTIAL SOIL VARIABILITY, ACTUAL QUANTITIES MAY VARY. NO QUANTITY ADJUSTMENTS WILL BE MADE FOR DIFFERING SOIL EXPANSION FACTORS ENCOUNTERED IN THE FIELD.

2

CITY OF WAUWATOSA

UNION PACIFIC RAILROAD

S-40-799

105ML

100ML

STH 100/N. MAYFAIR ROAD

B-40-136
(EXISTING)

B-40-135
(EXISTING)

CANADIAN PACIFIC RAILWAY

UNDERWOOD CREEK

95ML

W. NORTH AVENUE

90ML

UNDERWOOD PARKWAY

85ML

R/L ML

80ML

SWAN BOULEVARD

75ML

IH 41/USH 45

BEGIN PROJECT 2010-14-70
STA 74+24.14ML

70ML

CITY OF WAUWATOSA

2

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SHEET 5	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\020201_PO.DWG
LAYOUT NAME - 01

PLOT DATE : 10/20/2017 3:46 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:300FT

WISDOT/CADDS SHEET 42

2

N

CITY OF WAUWATOSA

N. 116TH STREET

N. 115TH STREET

N. 114TH STREET

N. 113TH STREET

N. 112TH STREET

W. NORTH AVENUE

W. GARFIELD AVENUE

W. GILBERT AVENUE

W. MEINECKE AVENUE

W. CLARK STREET

W. CENTER STREET

S-40-969

B-40-259
(EXISTING)

R/L ML

B-40-138
(EXISTING)

B-40-139
(EXISTING)

S-40-871

S-40-873

S-40-798

S-40-799

IH 41/USH 45

105ML

110ML

115ML

120ML

125ML

130ML

135ML

140ML

145ML

150ML

UNION PACIFIC RAILROAD

CITY OF WAUWATOSA

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SHEET 6	E

2

2

CITY OF WAUWATOSA

W. CLARK STREET

W. CENTER STREET

N. 113TH STREET

N. 112TH STREET

N. 114TH STREET

W. LOCUST STREET

W. BURLEIGH STREET

IH 41/USH 45

END PROJECT 2010-14-70
STA 170+64.36ML

R/L ML

140ML

145ML

150ML

155ML

160ML

165ML

170ML

175ML

180ML

185ML

S-40-871

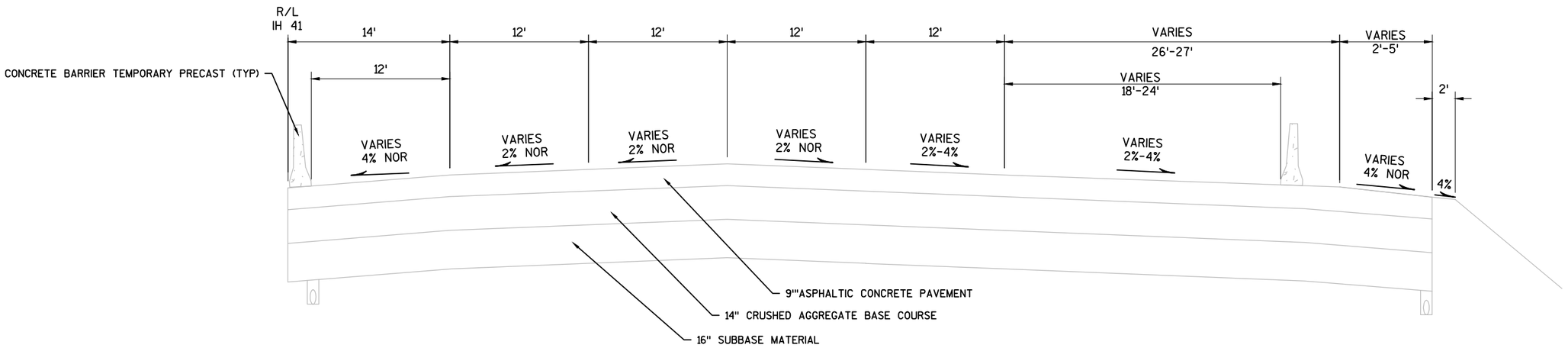
S-40-872

S-40-873

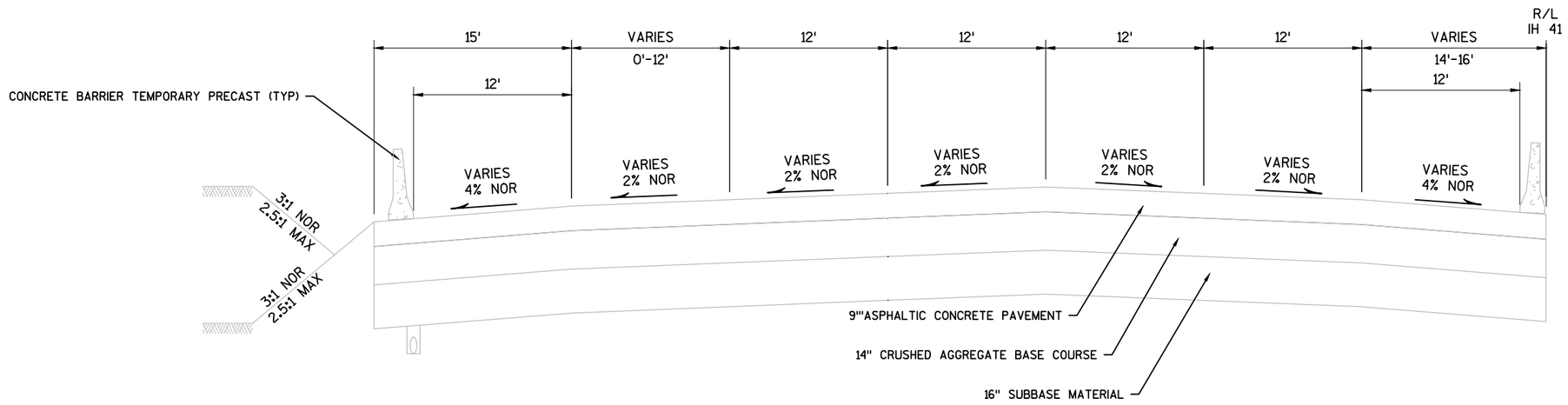
N

CITY OF WAUWATOSA

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SHEET 7	E



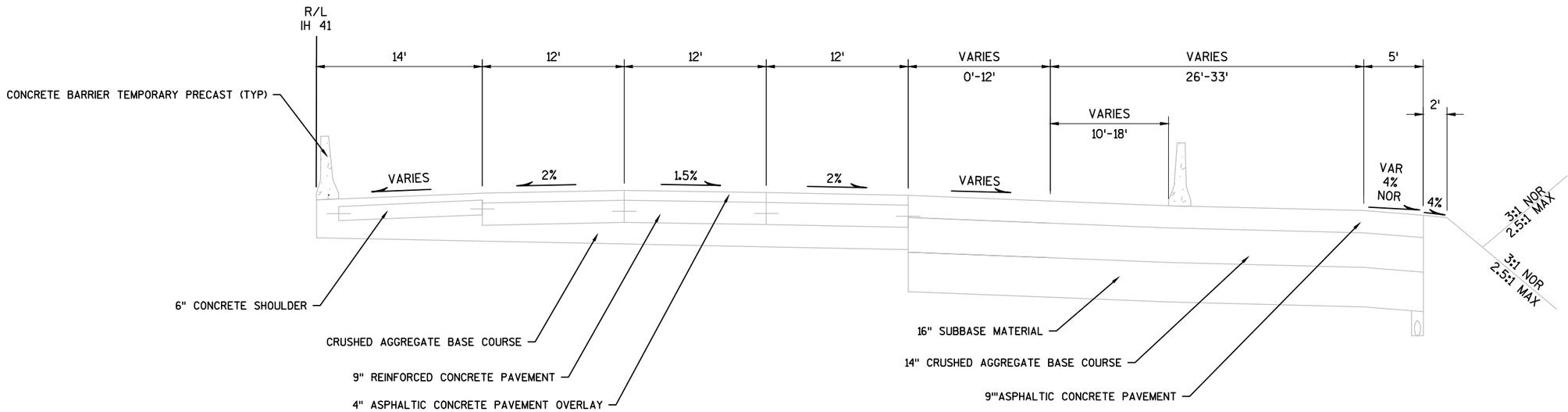
TYPICAL EXISTING SECTION
IH 41/USH 45 NB
STA 74+24.14ML TO 75+37.79ML



TYPICAL EXISTING SECTION
IH 41/USH 45 SB
STA 74+24.14ML TO 75+37.79ML

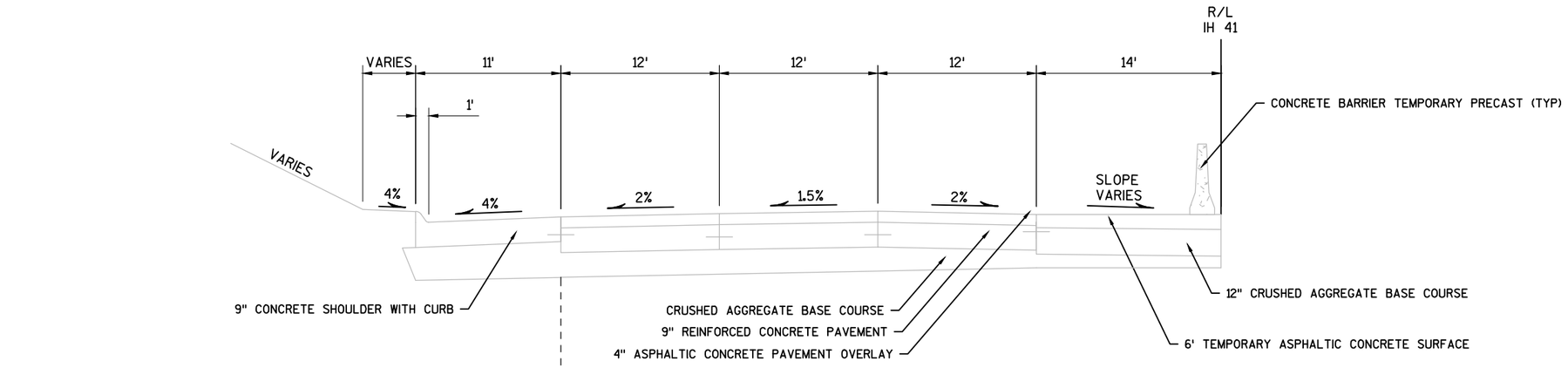
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 8	E

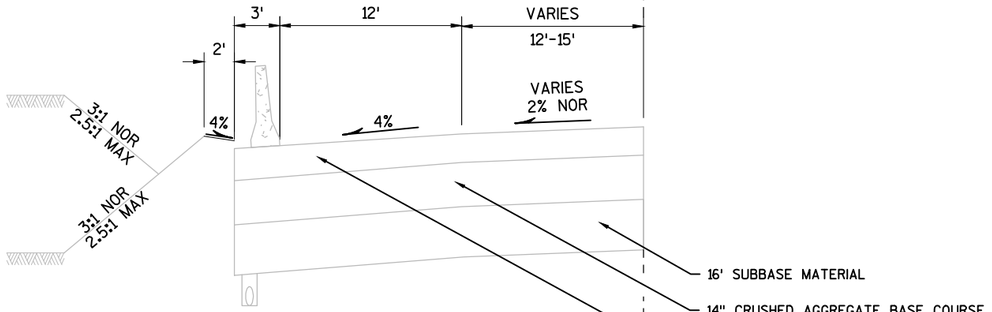
2



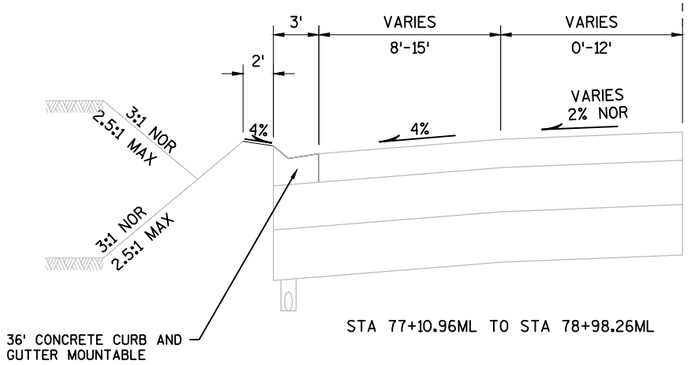
TYPICAL EXISTING SECTION
IH 41/USH 45 NB
STA 75+37.79ML TO STA 79+06.05ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 9	E





STA 75+37.79ML TO STA 77+10.96ML

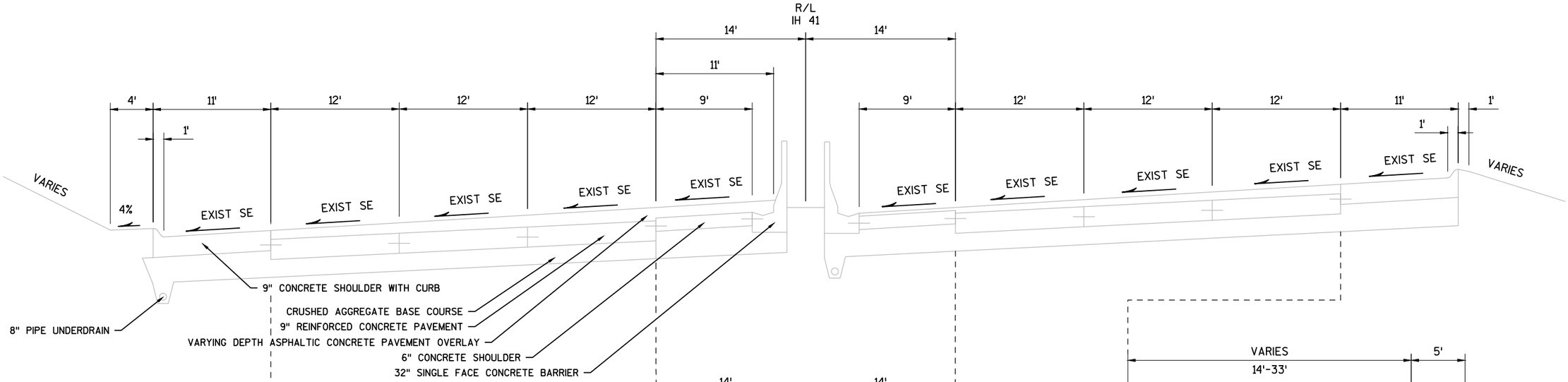


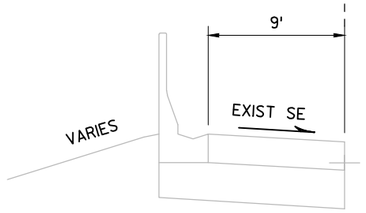
STA 77+10.96ML TO STA 78+98.26ML

TYPICAL EXISTING SECTION
IH 41/USH 45 SB
STA 75+37.79ML TO STA 79+06.05ML

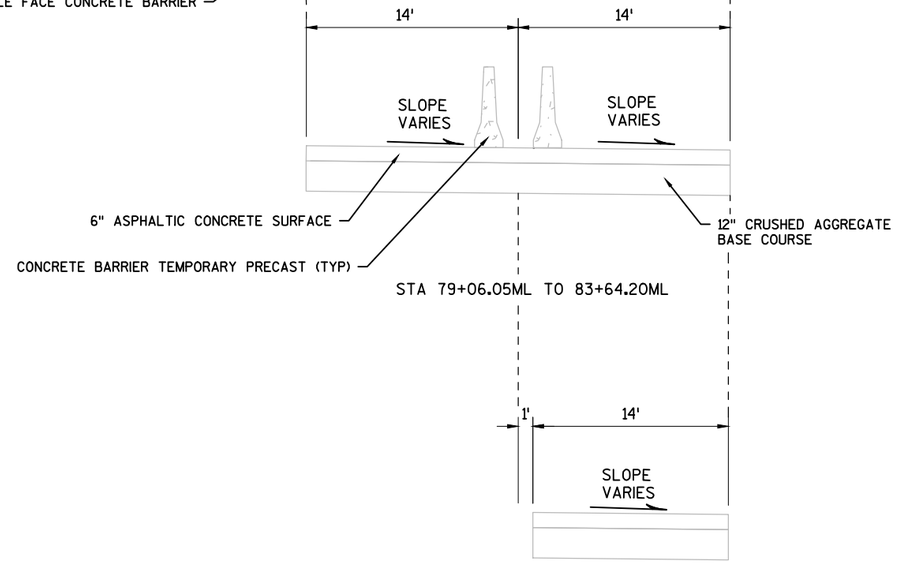
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 10	E

2



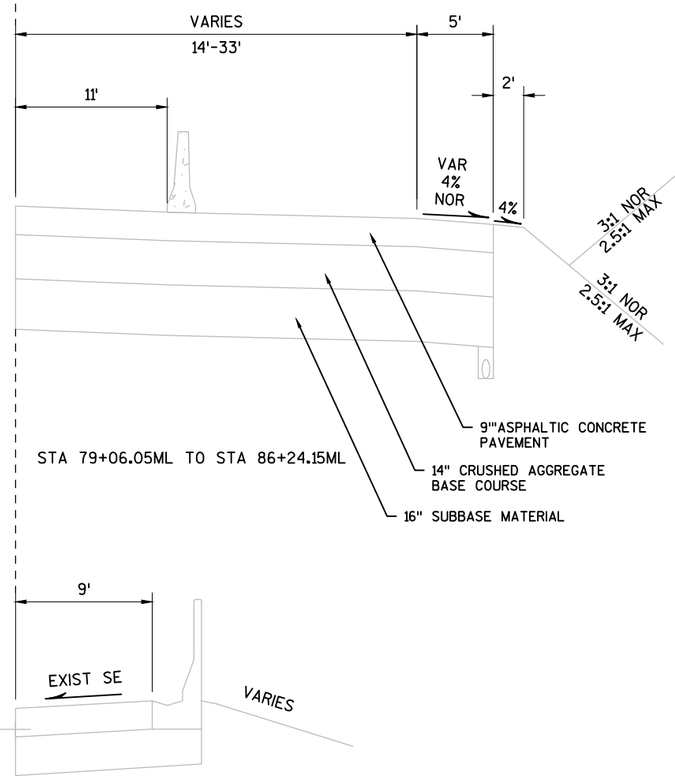


STA 91+37.17ML TO STA 91+56.70ML



STA 79+06.05ML TO 83+64.20ML

STA 83+64.20ML TO 86+38.20ML

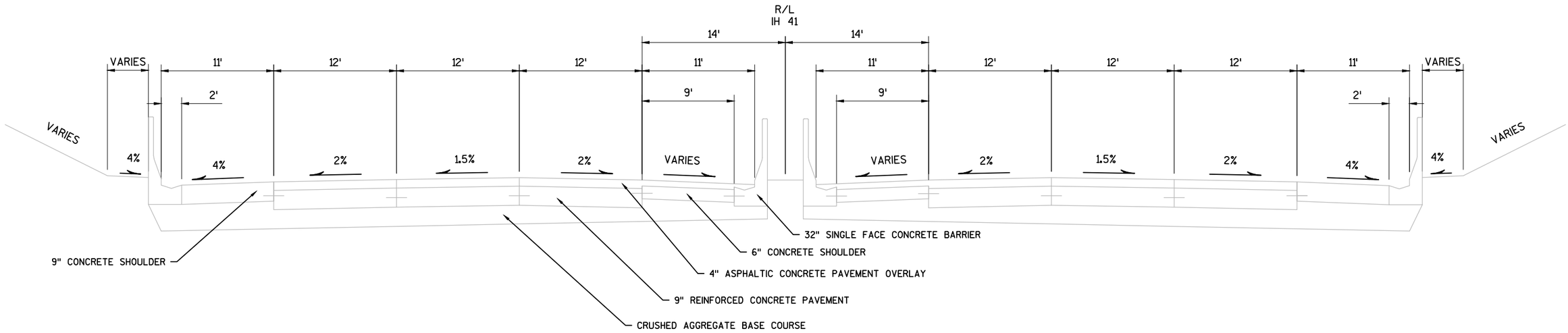


STA 79+06.05ML TO STA 86+24.15ML

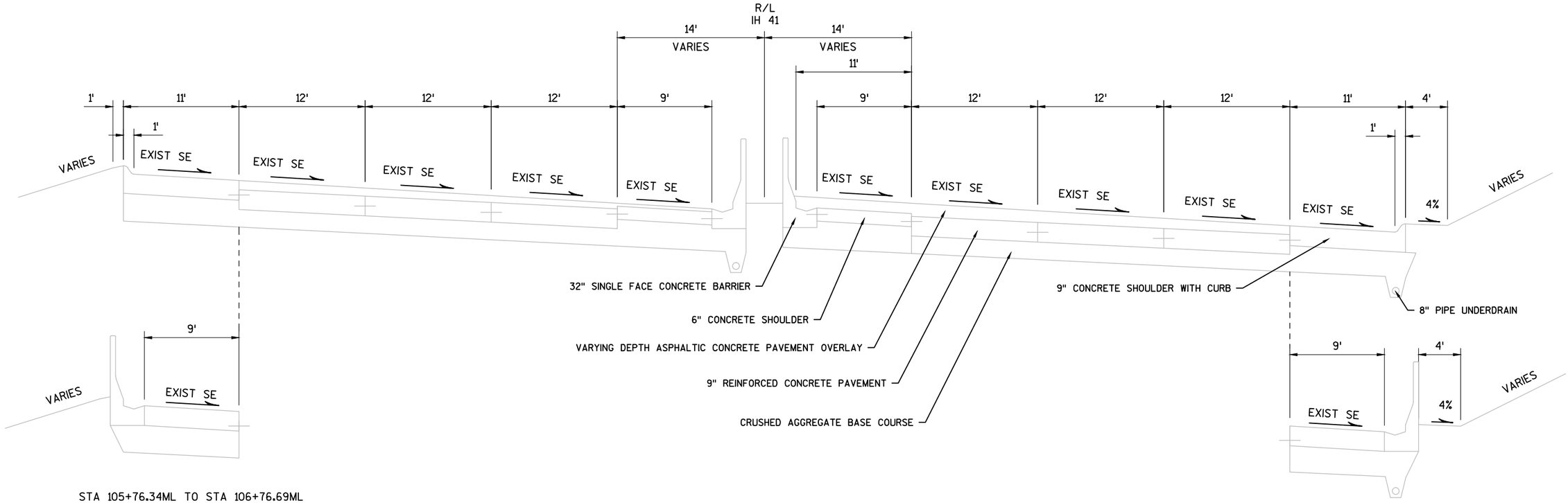
STA 89+83.16ML TO STA 91+56.70ML

TYPICAL EXISTING SUPERELEVATED SECTION
IH 41/USH 45
STA 79+06.05ML TO STA 91+56.70ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 11	E



TYPICAL EXISTING SECTION
IH 41/USH 45
STA 101+14.44ML TO STA 105+76.34ML



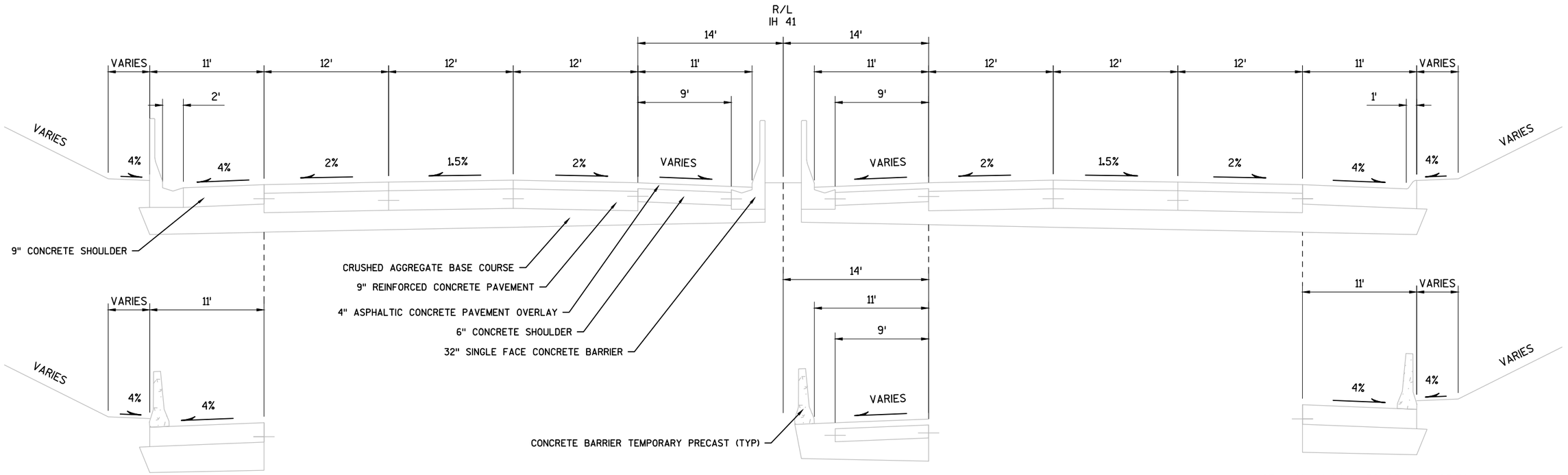
STA 105+76.34ML TO STA 106+76.69ML

TYPICAL EXISTING SUPERELEVATED SECTION
IH 41/USH 45
STA 105+76.34ML TO STA 122+17.20ML

STA 105+76.34ML TO STA 106+43.10ML
STA 120+97.97ML TO STA 122+17.20ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 12	E

2



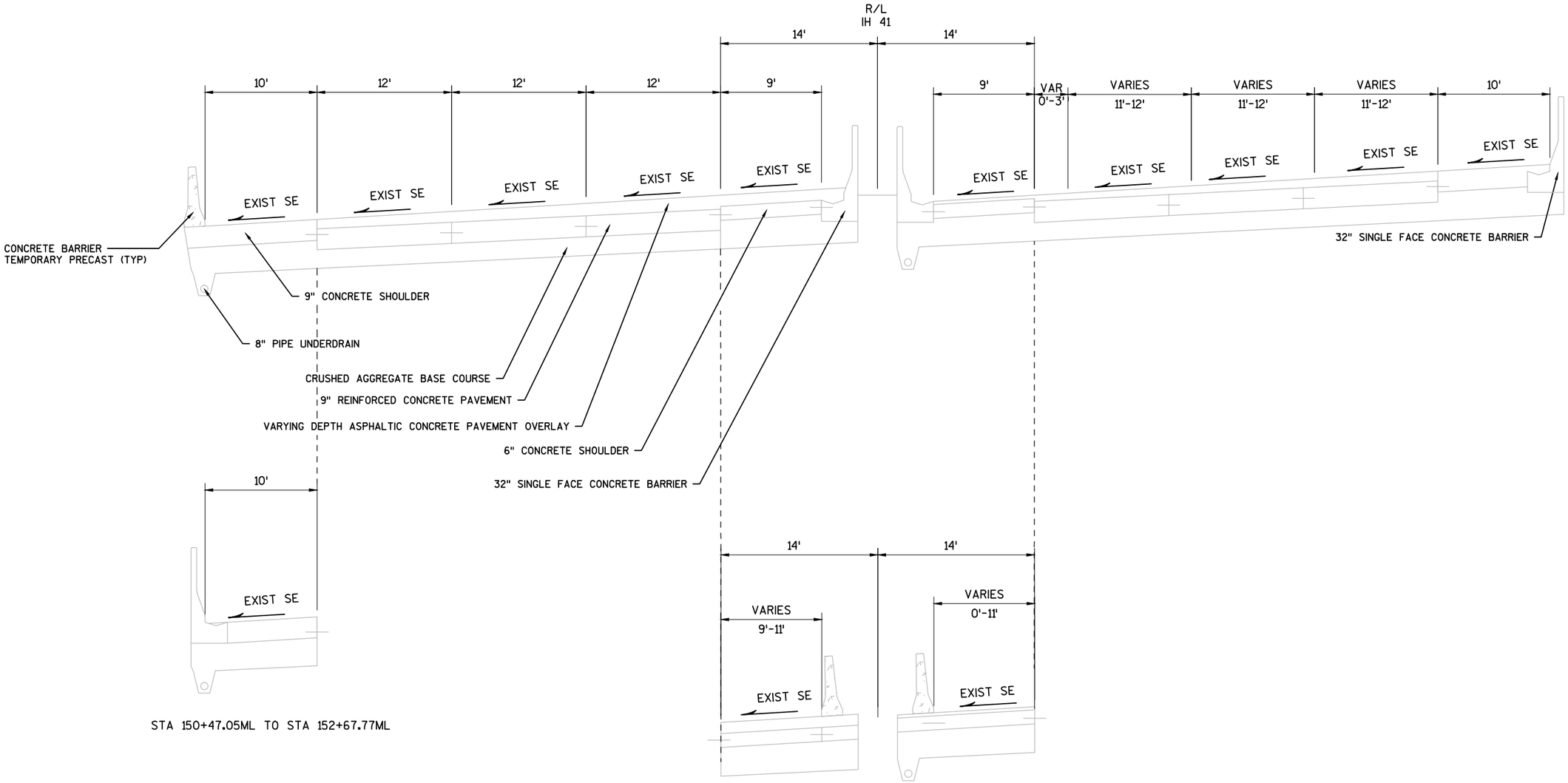
STA 139+31.36ML TO STA 148+67.70ML

STA 148+58.36ML TO STA 148+67.70ML

STA 142+40.24ML TO STA 148+67.70ML

TYPICAL EXISTING SECTION
IH 41/USH 45
STA 124+53.65ML TO STA 148+67.70ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 13	E

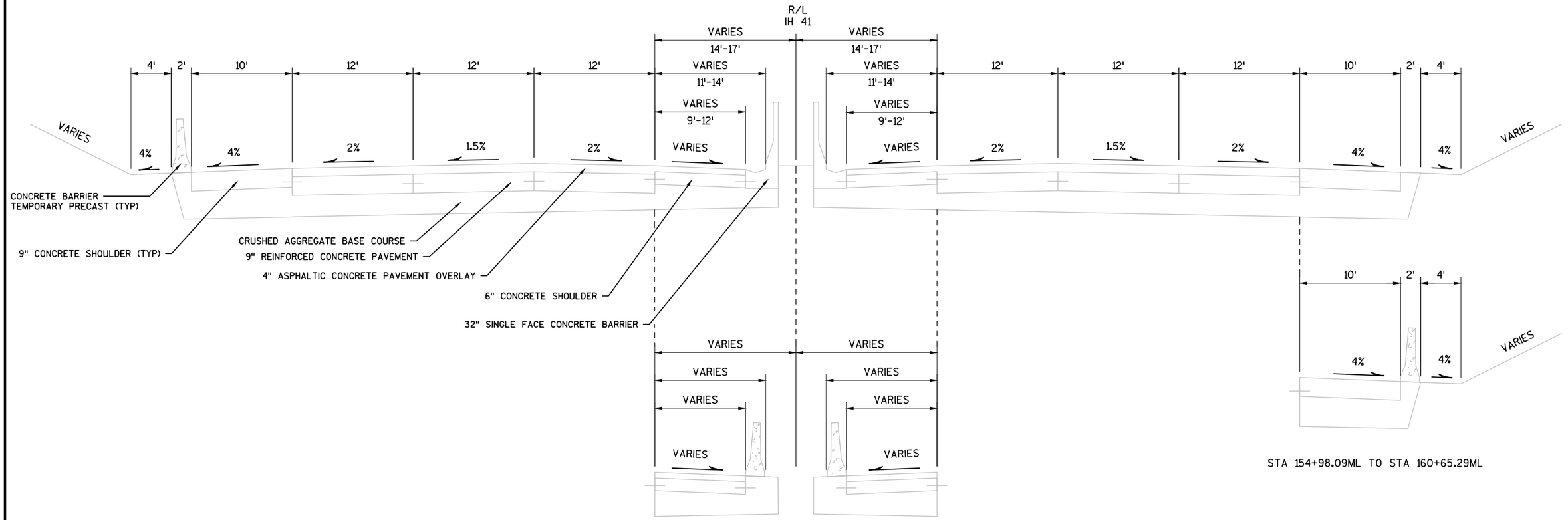


STA 150+47.05ML TO STA 152+67.77ML

STA 148+67.60ML TO STA 151+85.13ML

TYPICAL EXISTING SUPERELEVATED SECTION
IH 41/USH 45
STA 148+67.70ML TO STA 154+98.09ML

2

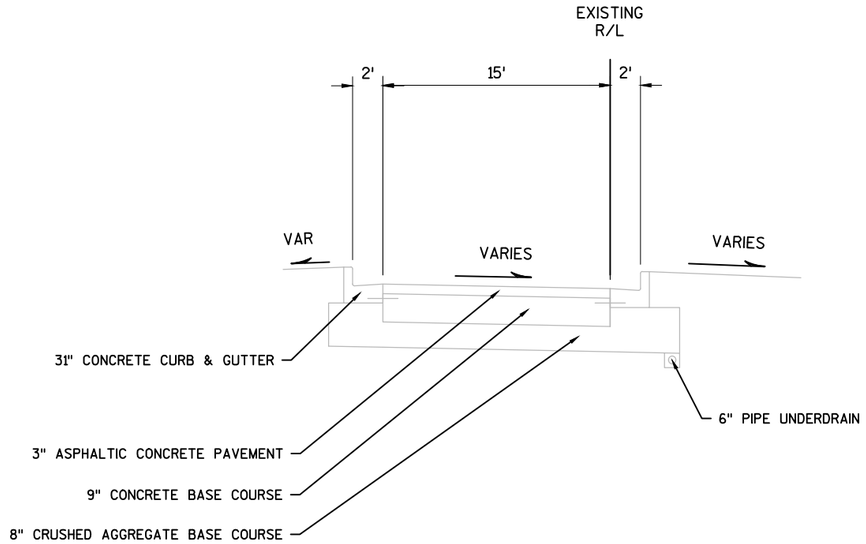


STA 158+02.97ML TO STA 159+42.72ML

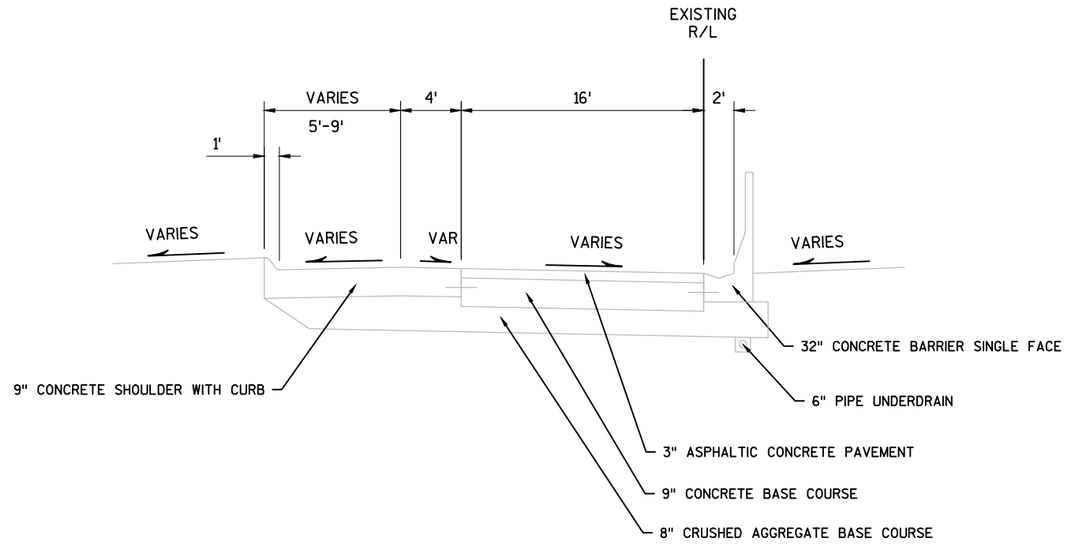
STA 154+98.09ML TO STA 160+65.29ML

TYPICAL EXISTING SECTION
IH 41/USH 45
STA 154+98.09ML TO STA 170+64.36ML

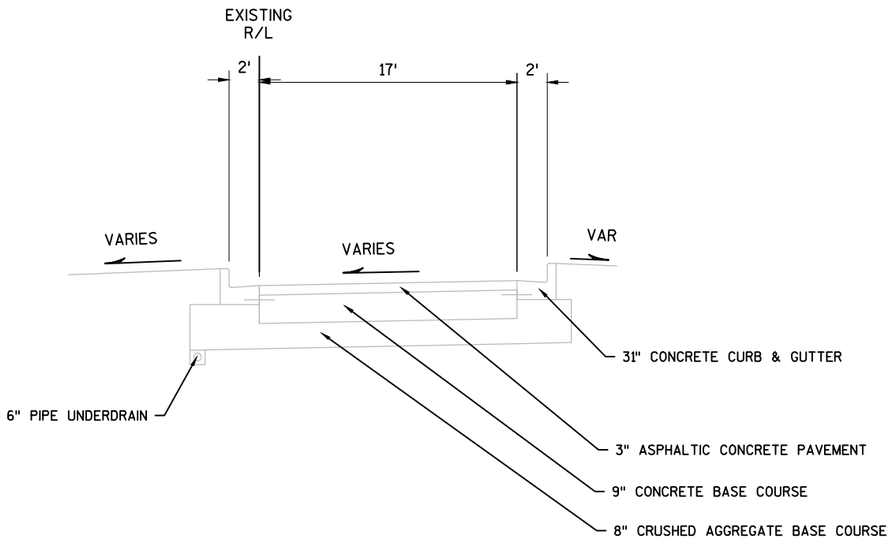
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 15	E



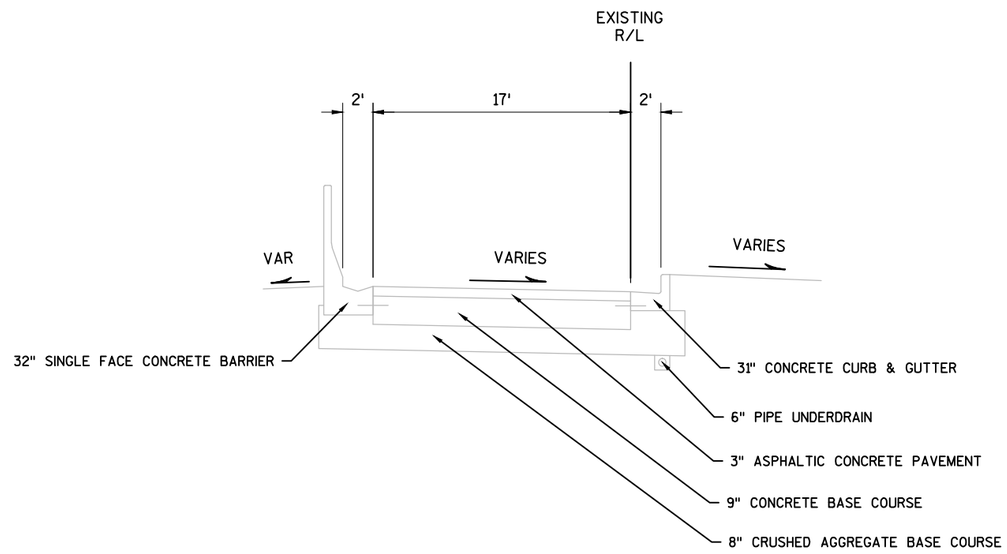
TYPICAL EXISTING SECTION
IH 41/USH 45 NB EXIT RAMP TO NB MAYFAIR ROAD 1-LANE SECTION



TYPICAL EXISTING SECTION
IH 41/USH 45 NB ENTRANCE RAMP FROM NORTH AVENUE 1-LANE SECTION

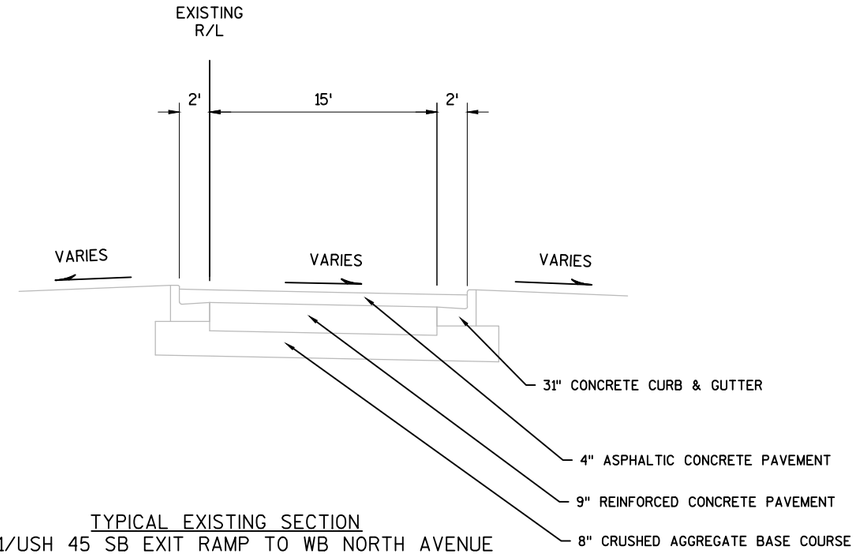


TYPICAL EXISTING SECTION
IH 41/USH 45 SB ENTRANCE RAMP FROM NORTH AVENUE 1-LANE SECTION

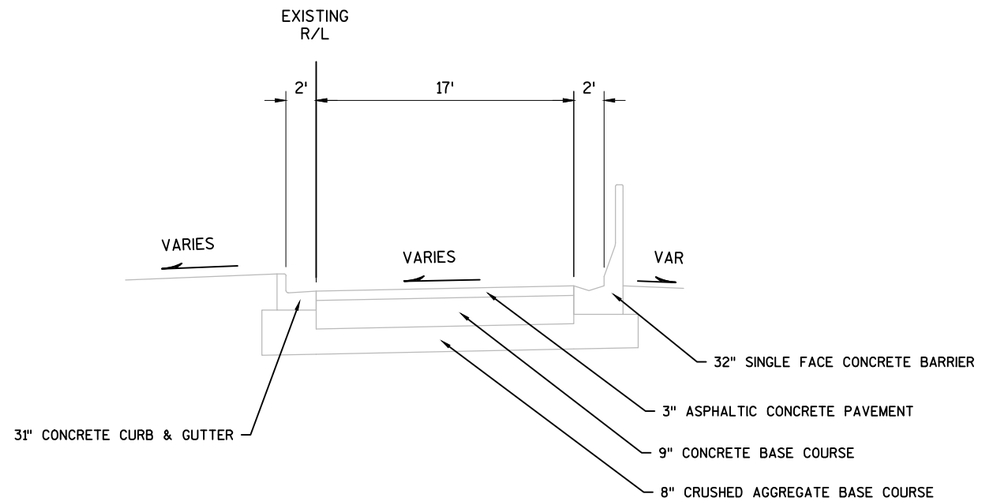


TYPICAL EXISTING SECTION
IH 41/USH 45 NB EXIT RAMP TO WB NORTH AVENUE 1-LANE SECTION

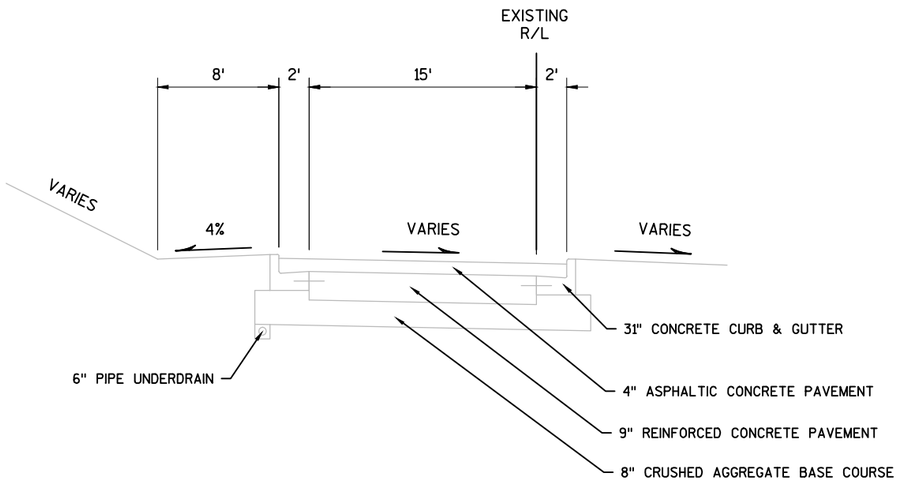
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 16	E



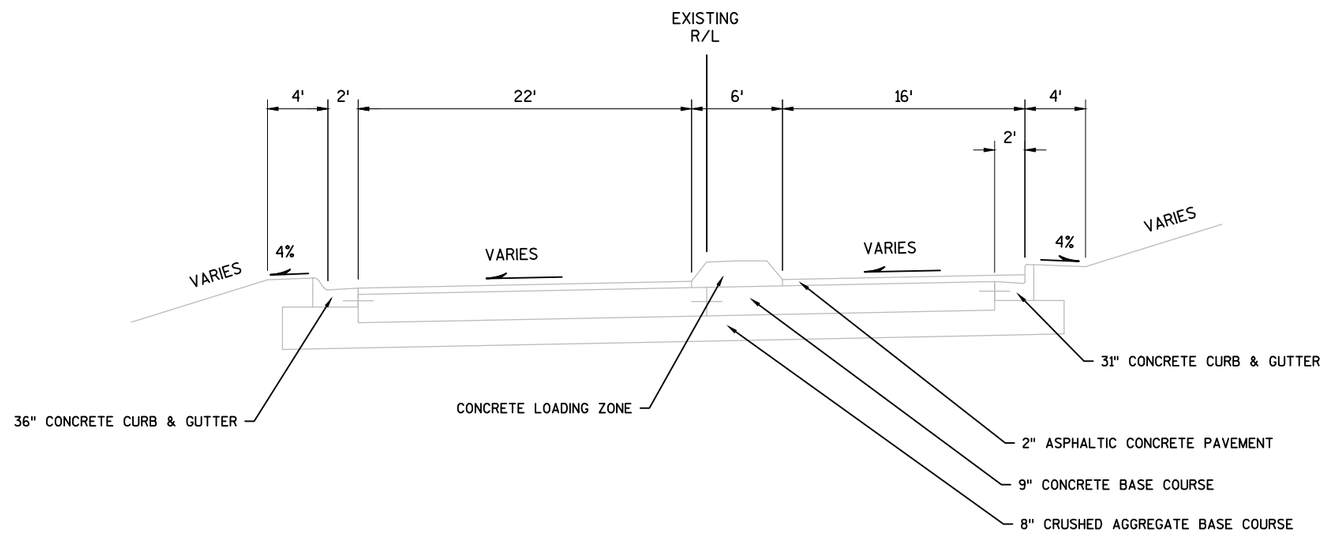
TYPICAL EXISTING SECTION
IH 41/USH 45 SB EXIT RAMP TO WB NORTH AVENUE
1-LANE SECTION



TYPICAL EXISTING SECTION
IH 41/USH 45 SB EXIT RAMP TO EB NORTH AVENUE
1-LANE SECTION

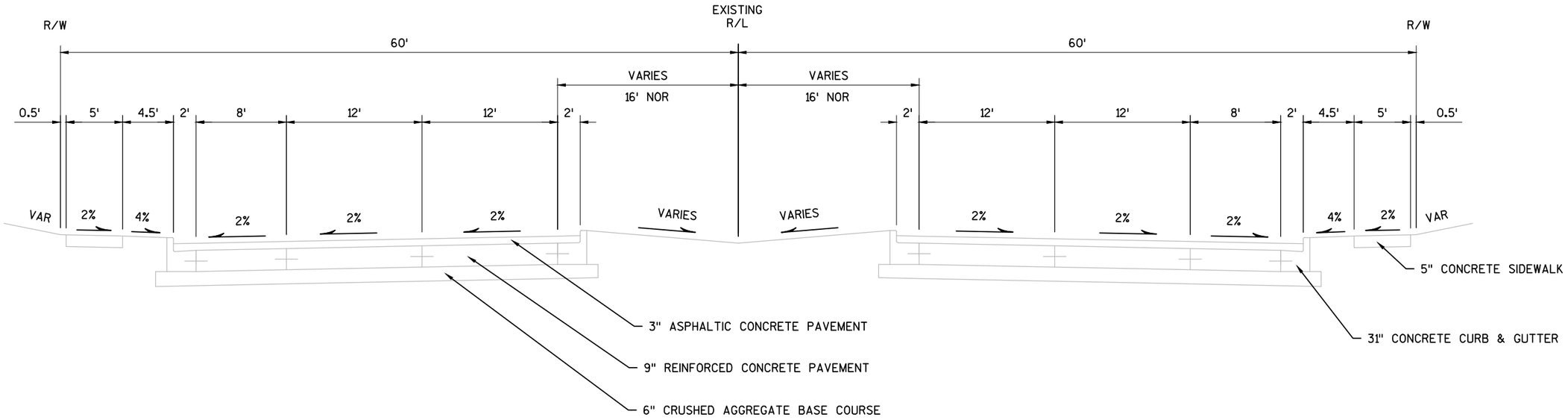


TYPICAL EXISTING SECTION
IH 41/USH 45 NB EXIT RAMP TO BURLEIGH STREET
1-LANE SECTION



TYPICAL EXISTING SECTION
IH 41/USH 45 SB ENTRANCE RAMP FROM BURLEIGH STREET
3-LANE SECTION

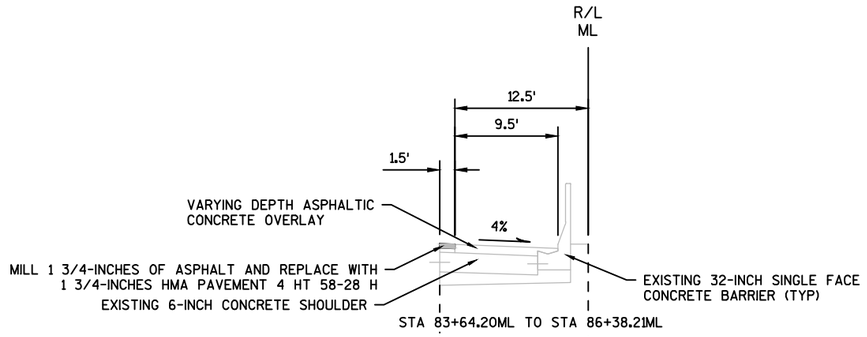
2



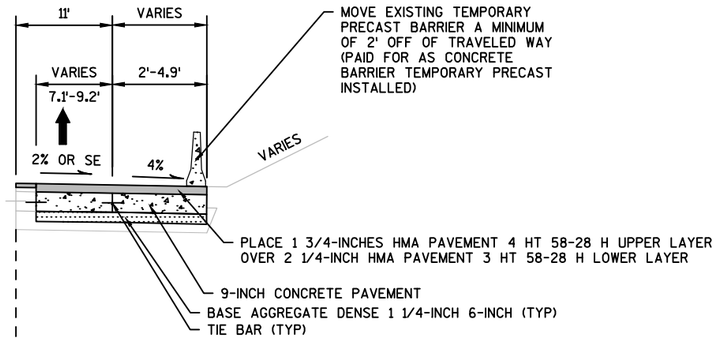
TYPICAL EXISTING SECTION
W. NORTH AVENUE
STA 105+87.52NO TO STA 117+57.16NO EASTBOUND
STA 105+87.49NO TO STA 118+84.28NO WESTBOUND

PROJECT NO:2010-14-70	HWY:IH 41	COUNTY:MILWAUKEE	TYPICAL SECTIONS	SHEET 18	E

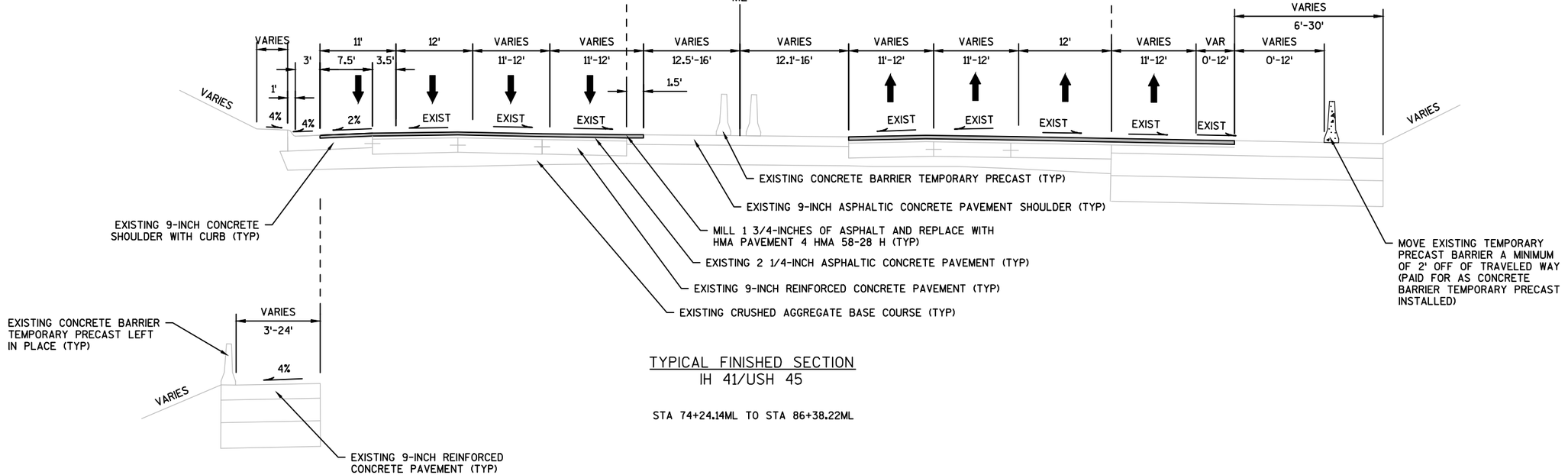
2



STA 83+64.20ML TO STA 86+38.21ML



STA 85+00.00ML TO STA 86+38.22ML



TYPICAL FINISHED SECTION
IH 41/USH 45

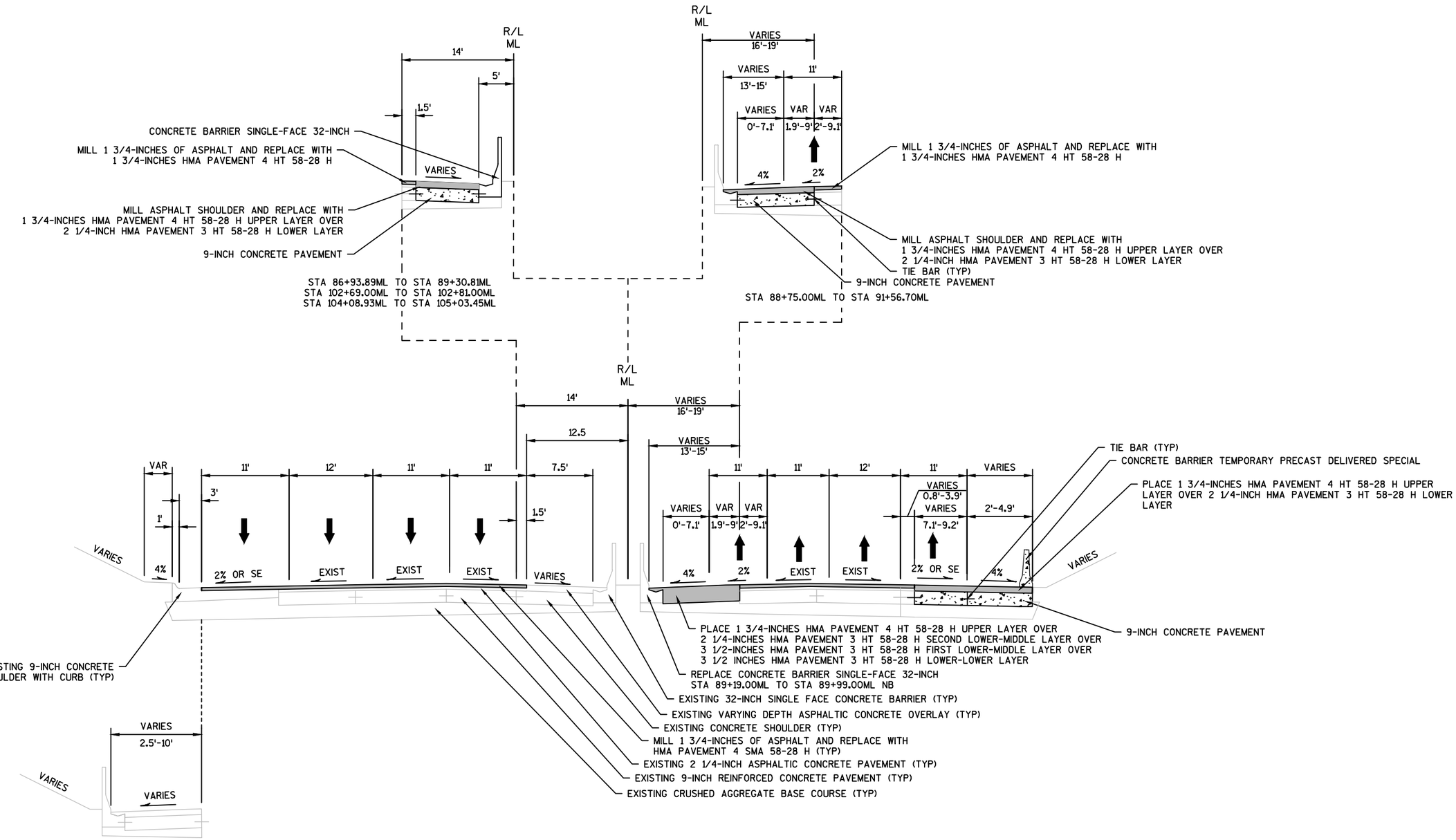
STA 74+24.14ML TO STA 86+38.22ML

STA 74+24.14ML TO STA 77+10.96ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 19	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\020401_TS.DWG
020401_TS - 01
PLOT DATE : 10/20/2017 3:47 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:15 FT
WISDOT/CADDS SHEET 42

2



TYPICAL FINISHED SECTION
IH 41/USH 45

STA 86+38.22ML TO STA 91+56.70ML NORTHBOUND
STA 86+38.22ML TO STA 105+03.45ML SOUTHBOUND

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 20	E

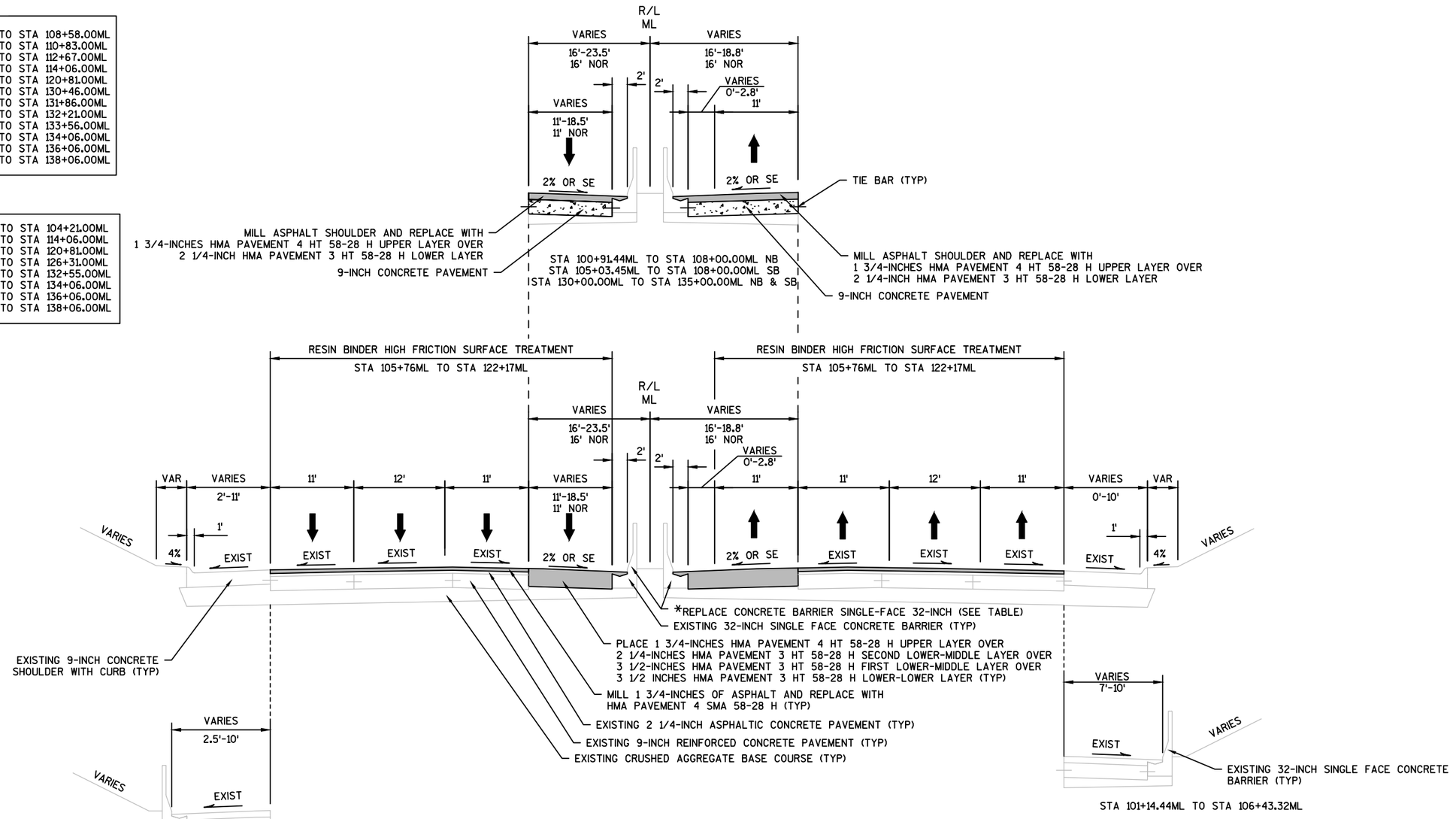
2

SOUTHBOUND*

STA 106+24.00ML TO STA 108+58.00ML
STA 109+60.00ML TO STA 110+83.00ML
STA 112+44.00ML TO STA 112+67.00ML
STA 113+94.00ML TO STA 114+06.00ML
STA 115+54.00ML TO STA 120+81.00ML
STA 128+94.00ML TO STA 130+46.00ML
STA 131+74.00ML TO STA 131+86.00ML
STA 132+09.00ML TO STA 132+21.00ML
STA 133+44.00ML TO STA 133+56.00ML
STA 133+94.00ML TO STA 134+06.00ML
STA 134+94.00ML TO STA 136+06.00ML
STA 137+94.00ML TO STA 138+06.00ML

NORTHBOUND*

STA 102+69.00ML TO STA 104+21.00ML
STA 113+94.00ML TO STA 114+06.00ML
STA 115+54.00ML TO STA 120+81.00ML
STA 125+37.00ML TO STA 126+31.00ML
STA 130+34.00ML TO STA 132+55.00ML
STA 132+90.00ML TO STA 134+06.00ML
STA 135+94.00ML TO STA 136+06.00ML
STA 137+41.00ML TO STA 138+06.00ML



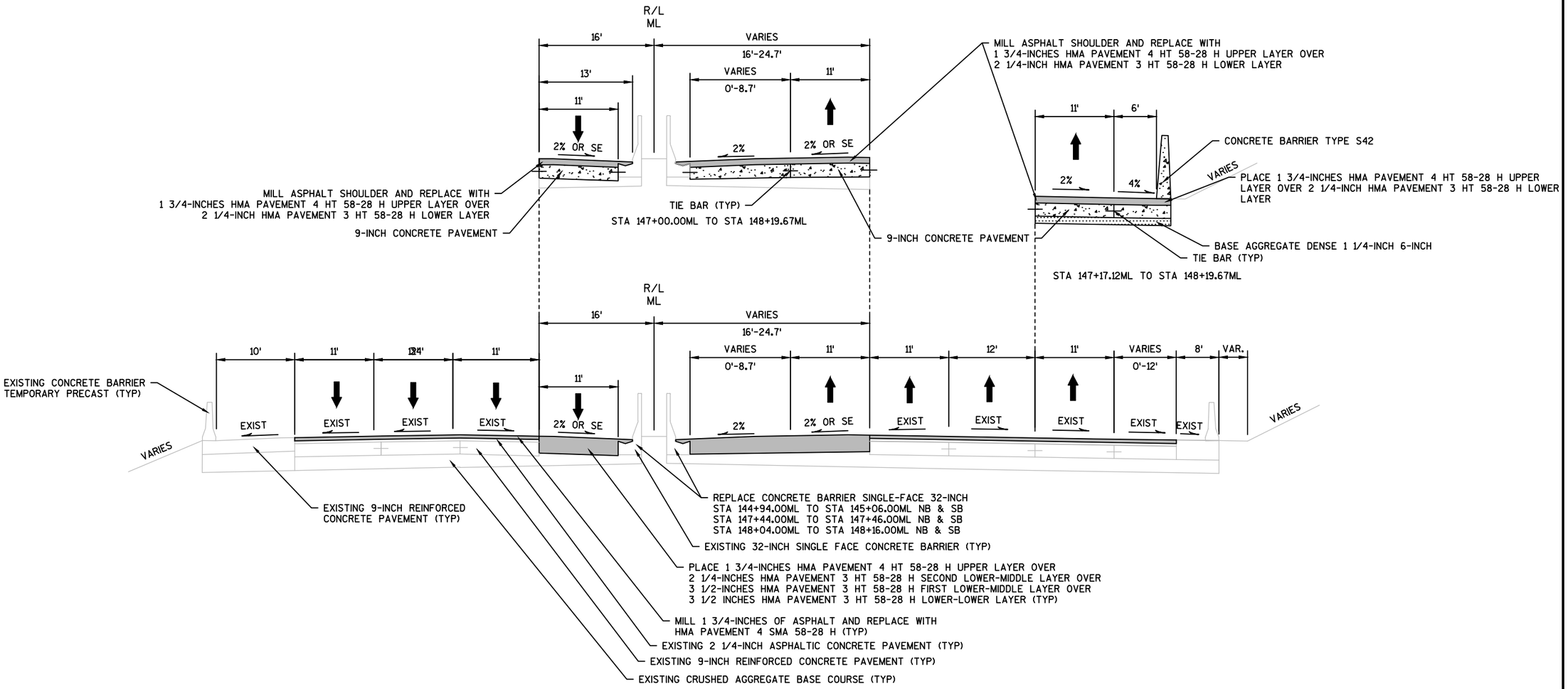
STA 101+14.44ML TO STA 106+43.32ML

STA 100+91.44ML TO STA 106+79.30ML
STA 124+53.65ML TO STA 128+90.18ML
STA 132+75.23ML TO STA 139+84.25ML

TYPICAL FINISHED SECTION
IH 41/USH 45

STA 100+91.44ML TO STA 122+17.20ML NORTHBOUND
STA 105+03.45ML TO STA 122+17.20ML SOUTHBOUND
STA 124+53.65ML TO STA 143+21.18ML NORTHBOUND & SOUTHBOUND

2

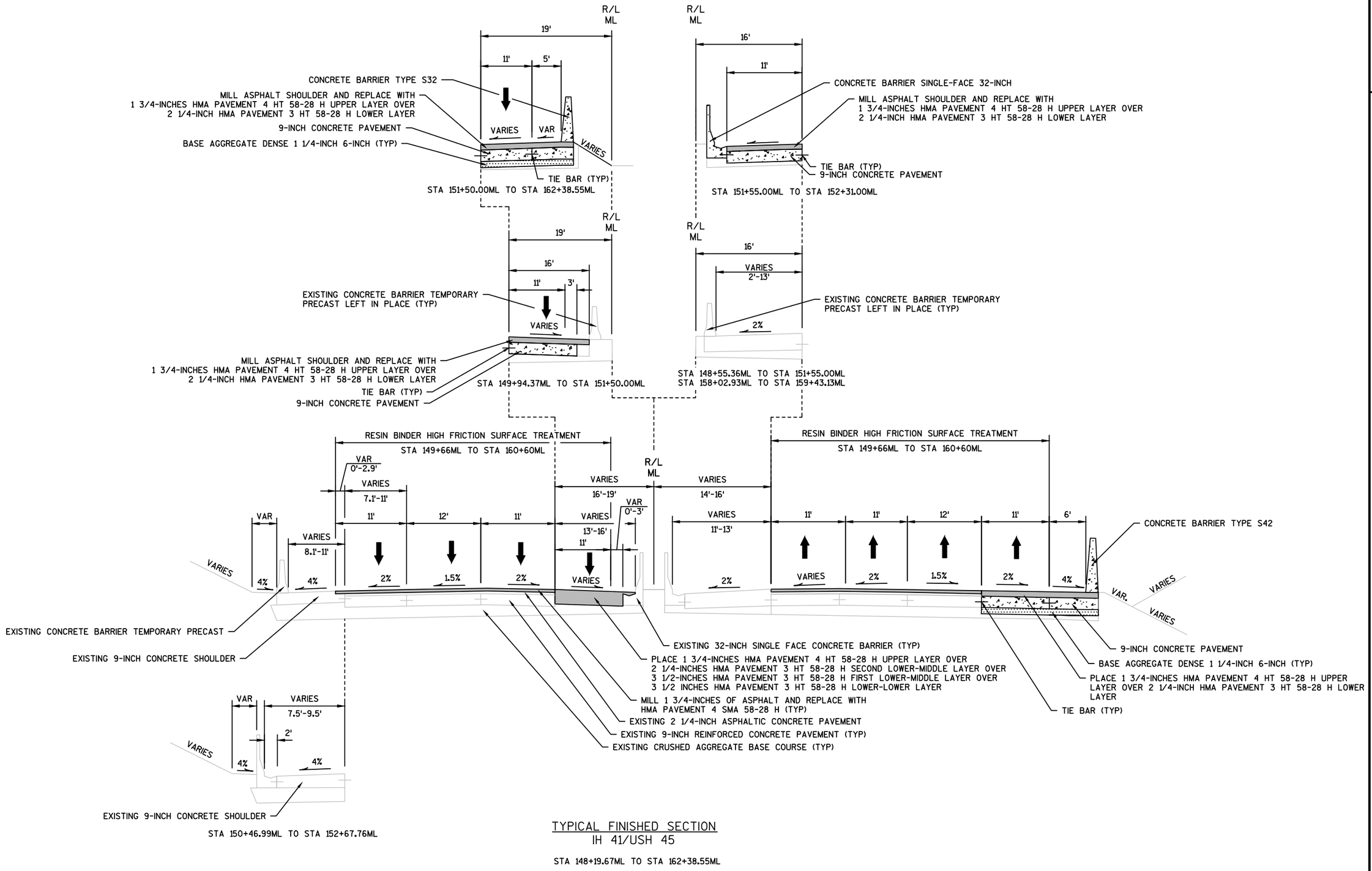


TYPICAL FINISHED SECTION
IH 41/USH 45

STA 143+21.18ML TO STA 148+19.67ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 22	E

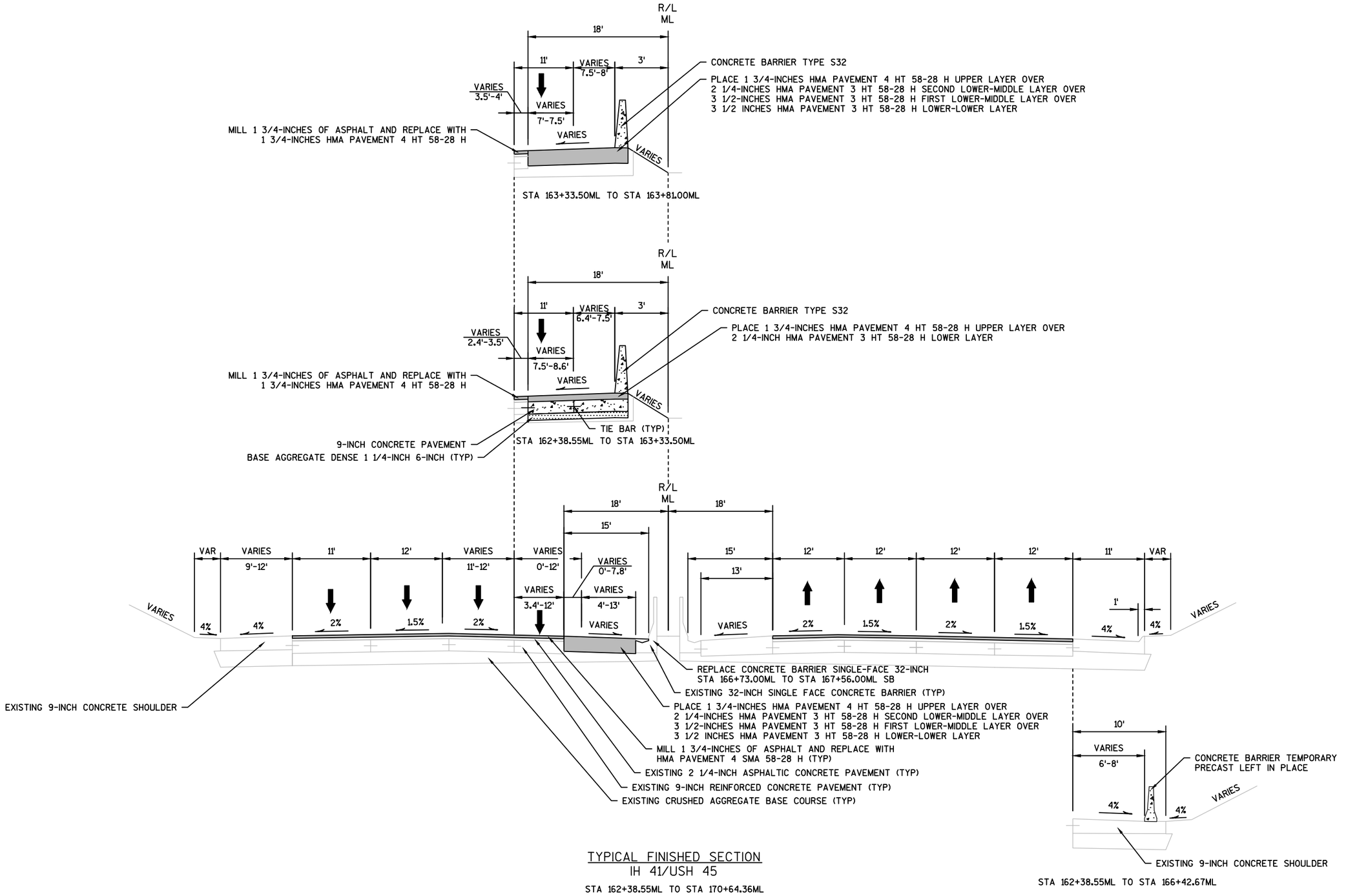
FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\020401_TS.DWG
020401_TS - 04
PLOT DATE : 10/20/2017 3:47 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:15 FT
WISDOT/CADDS SHEET 42



TYPICAL FINISHED SECTION
IH 41/USH 45

STA 148+19.67ML TO STA 162+38.55ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 23	E

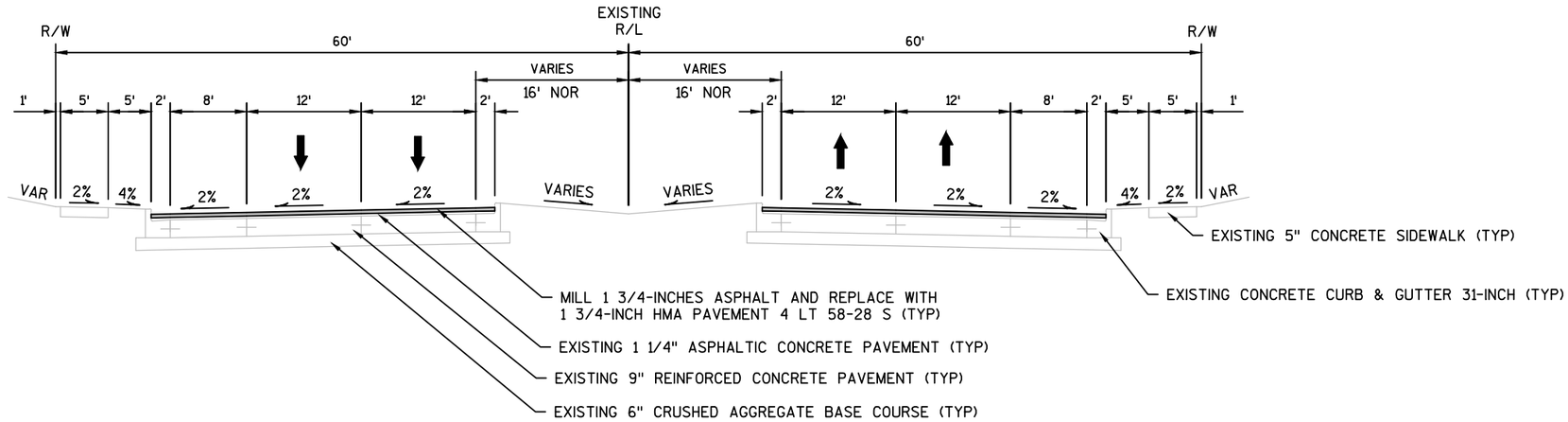


TYPICAL FINISHED SECTION
IH 41/USH 45

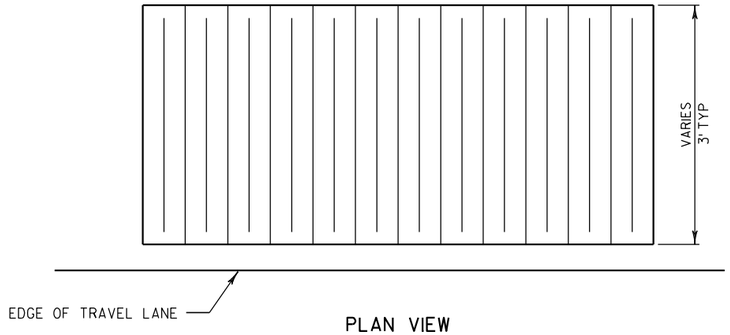
STA 162+38.55ML TO STA 170+64.36ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TYPICAL SECTIONS	SHEET 24	E

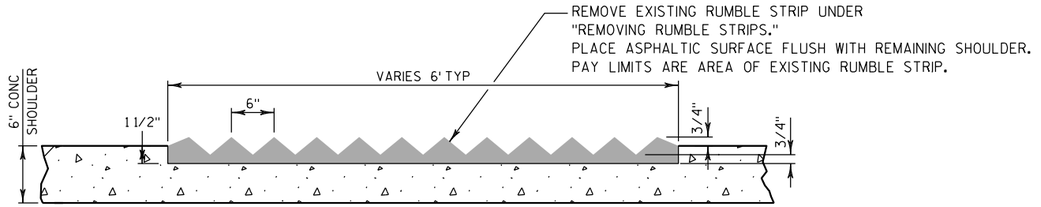
2



TYPICAL FINISHED SECTION
W. NORTH AVENUE
STA 105+87.52NO TO STA 117+57.16NO EASTBOUND
STA 105+87.49NO TO STA 118+84.28NO WESTBOUND



PLAN VIEW

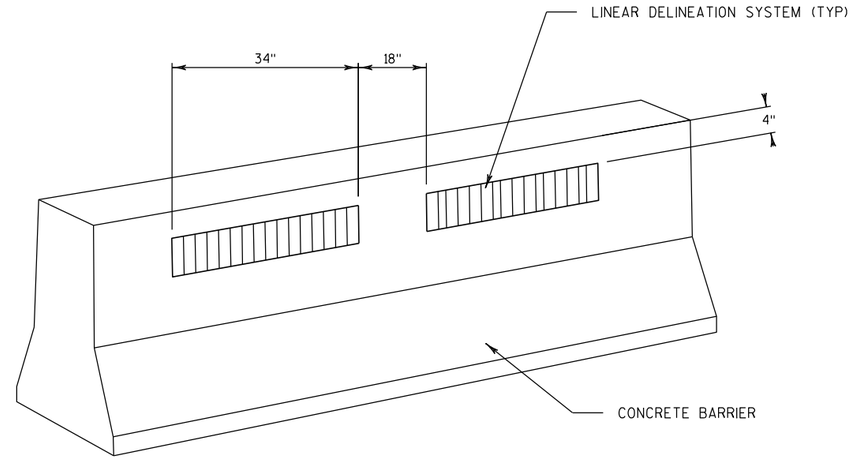


PROFILE VIEW

NOTE

RUMBLE STRIPS ARE LONGITUDINALLY SPACED 60' CENTER TO CENTER

REMOVING RUMBLE STRIPS



LINEAR DELINEATION SYSTEM FOR CONCRETE BARRIER

NORTHBOUND

99+06.05 TO 92+06.67 OUTSIDE SHOULDER
105+76.34 TO 124+45.49 MEDIAN BARRIER
149+65.80 TO 160+59.78 OUTSIDE SHOULDER
170+64.36 TO 179+34.18 MEDIAN BARRIER

SOUTHBOUND

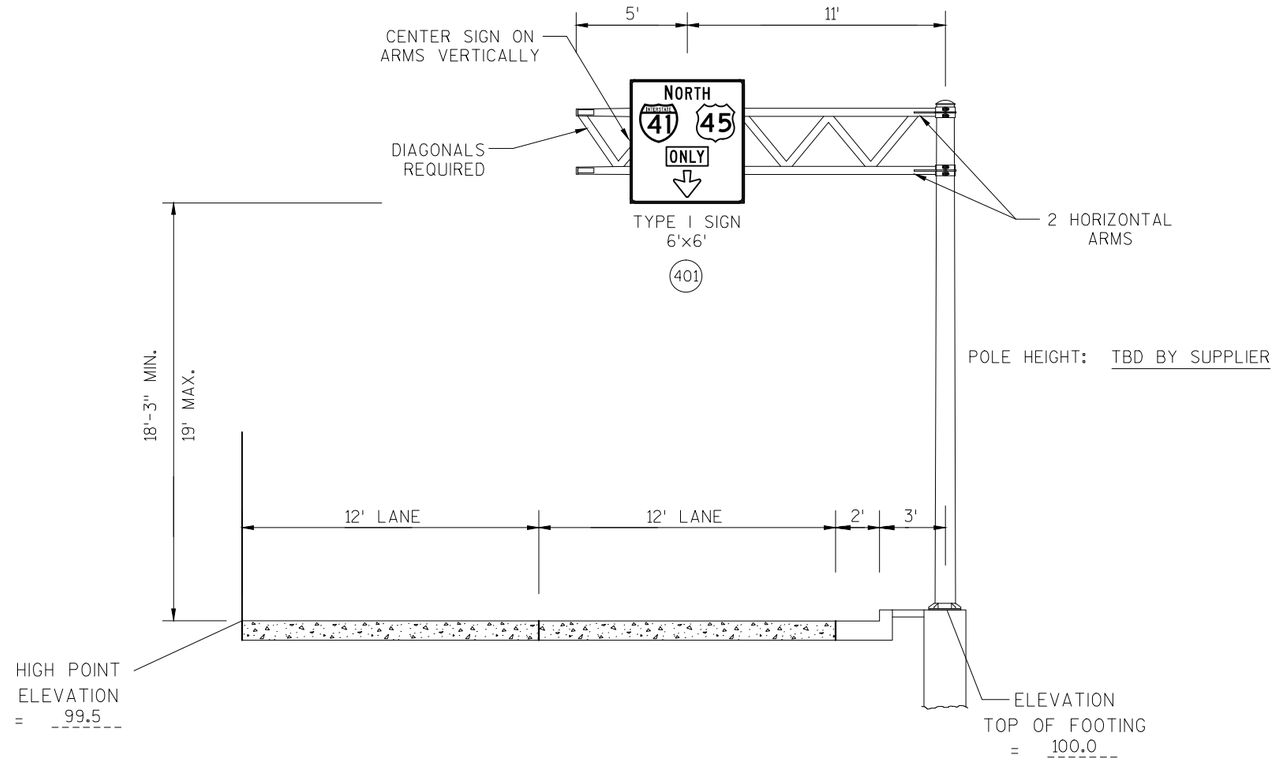
79+06.05 TO 92+06.67 MEDIAN BARRIER
105+76.34 TO 106+83.13 OUTSIDE SHOULDER
149+65.80 TO 160+59.78 MEDIAN BARRIER
172+57.79 TO 179+34.18 OUTSIDE SHOULDER

2

LEGEND

(X) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE



OVERHEAD SIGN SUPPORTS DETAIL
S-40-799
NORTH AVE WB ADVANCE SIGN
FOR NBENTRANCE RAMP TO IH 41
STATION 123+75

CONTRACTOR TO USE SDD, 36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

MOUNTING BRACKETS FOR SIGNS TO BE APPROVED FROM PRODUCT LIST FOR TYPE II SIGNS.

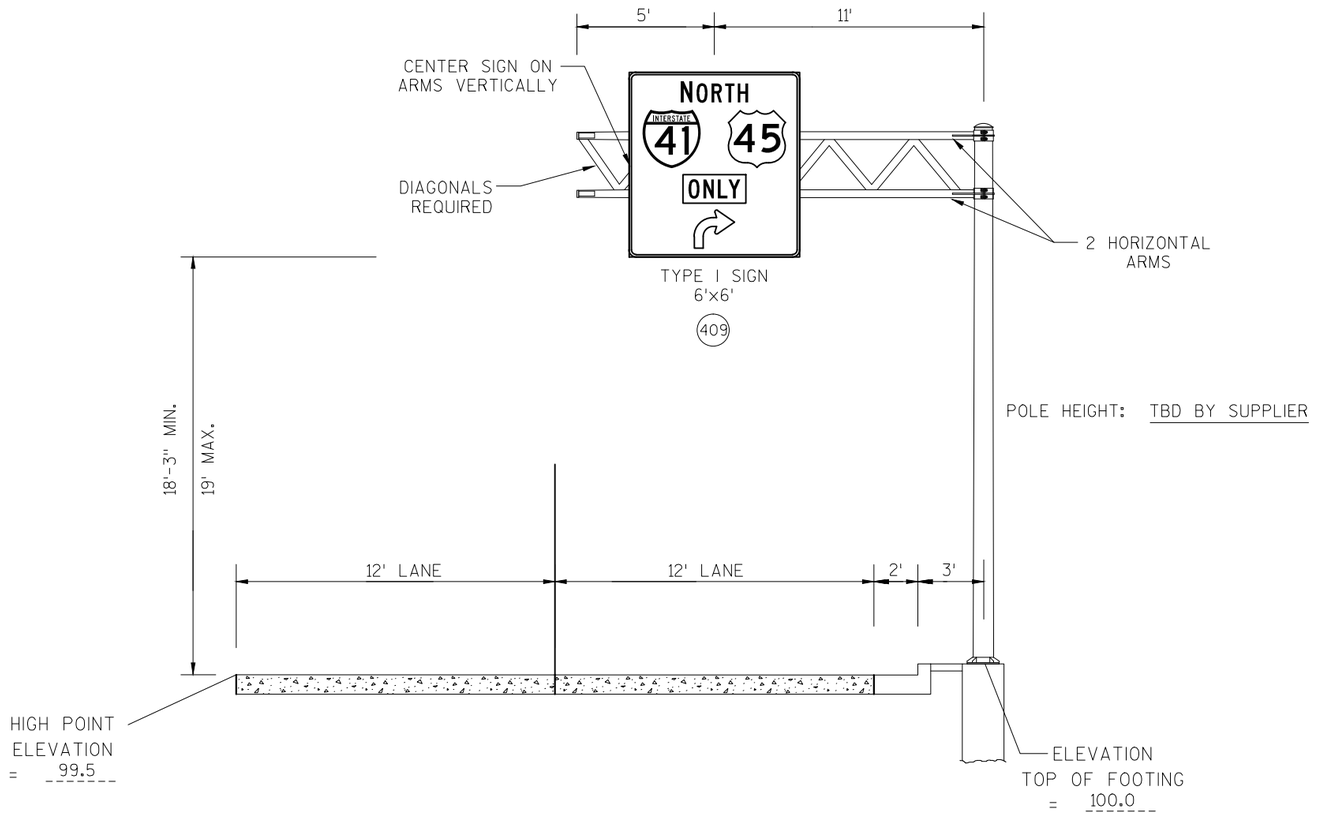
I BEAMS - I5X3.7 IBEAMS FOR MOUNTING SIGNS ARE INCIDENTAL TO TYPE I SIGNS.

2

LEGEND

(X) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE



OVERHEAD SIGN SUPPORTS DETAIL
S-40-798
NORTH AVE WB @ IH 41 NB ENTRANCE RAMP
STATION 119+50

NOTE, CONTRACTOR SHALL:

1. SUBMIT SHOP DRAWINGS OF OVERHEAD SIGN SUPPORT. FOOTING IS INCIDENTAL TO OVERHEAD SIGN SUPPORT, TO TOM HEYDEL WISDOT TRAFFIC OPS.
2. PROVIDE DESIGN CALCULATIONS.
3. SHOW SIGNS ON SHOP DRAWINGS.
4. I.D. PLAQUE INCIDENTAL TO OVERHEAD SIGN SUPPORT.
5. 6 ANCHOR RODS SHALL BE USED PER SDD 36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

CONTRACTOR TO USE SDD, 36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

MOUNTING BRACKETS FOR SIGNS TO BE APPROVED FROM PRODUCT LIST FOR TYPE II SIGNS.

I BEAMS - I5X3.7 IBEAMS FOR MOUNTING SIGNS ARE INCIDENTAL TO TYPE I SIGNS.

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	OVERHEAD SIGN SUPPORT S-40-798	SHEET 28	E

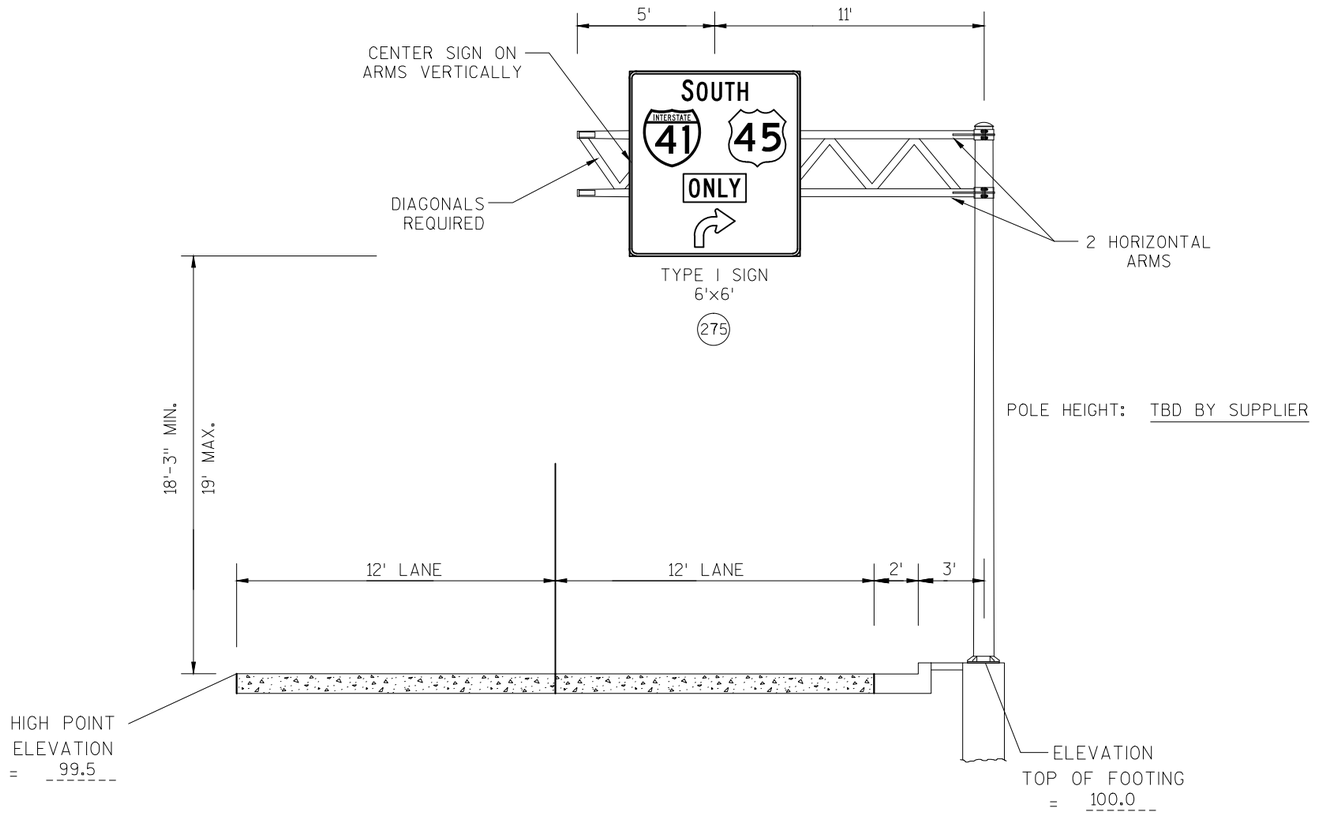
FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023401_PS.DWG
LAYOUT NAME - 023402_PS_2010-14-70
PLOT DATE : 6/19/2017 11:21 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

LEGEND

(X) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE



OVERHEAD SIGN SUPPORTS DETAIL
S-40-969
NORTH AVE EB @ SB ENTRANCE RAMP TO IH 41
STATION 105+50

CONTRACTOR TO USE SDD, 36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

MOUNTING BRACKETS FOR SIGNS TO BE APPROVED FROM PRODUCT LIST FOR TYPE II SIGNS.

I BEAMS - I5X3.7 IBEAMS FOR MOUNTING SIGNS ARE INCIDENTAL TO TYPE I SIGNS.

NOTE, CONTRACTOR SHALL:

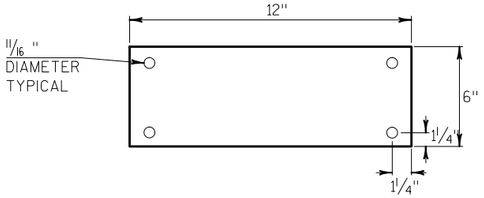
1. SUBMIT SHOP DRAWINGS OF OVERHEAD SIGN SUPPORT. FOOTING IS INCIDENTAL TO OVERHEAD SIGN SUPPORT, TO TOM HEYDEL WISDOT TRAFFIC OPS.
2. PROVIDE DESIGN CALCULATIONS.
3. SHOW SIGNS ON SHOP DRAWINGS.
4. I.D. PLAQUE INCIDENTAL TO OVERHEAD SIGN SUPPORT.
5. 6 ANCHOR RODS SHALL BE USED PER SDD 36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

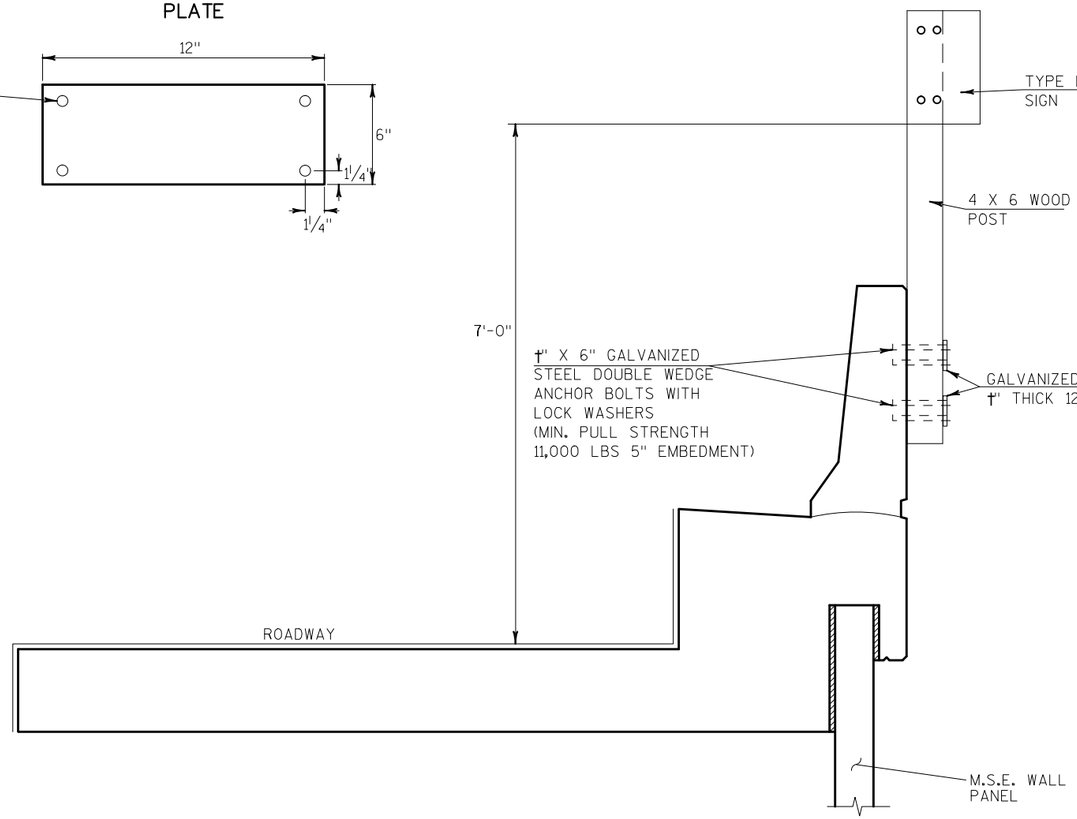
SHEET 3 OF 3

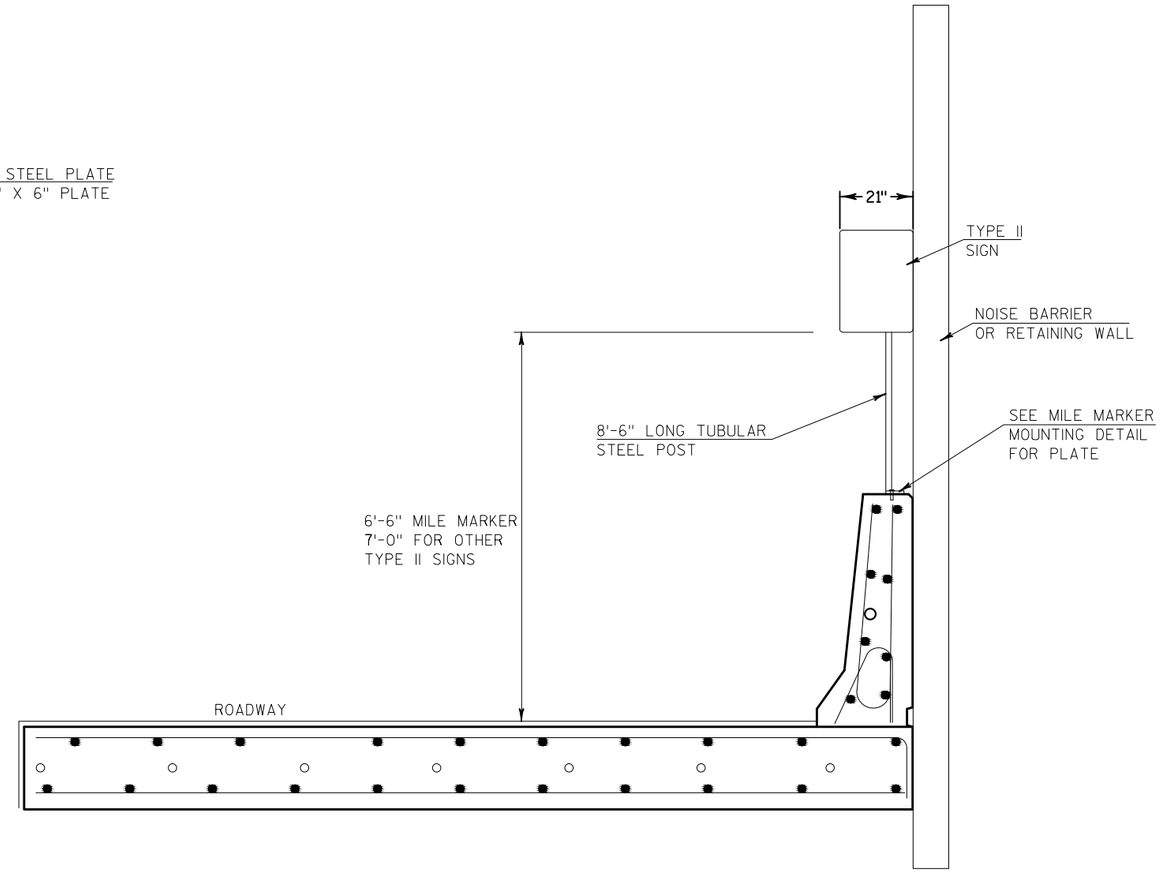
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	OVERHEAD SIGN SUPPORT S-40-969	SHEET 29	E

2

PLATE





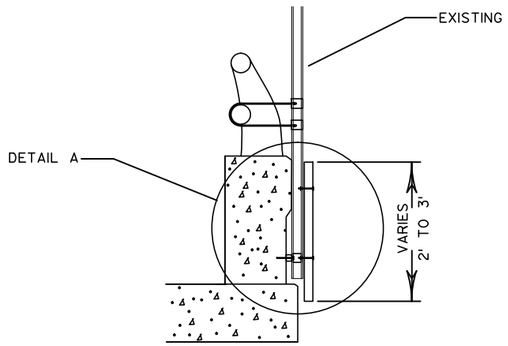


TYPE II SIGN AT NOISE WALL OR RETAINING WALL APPLICATION

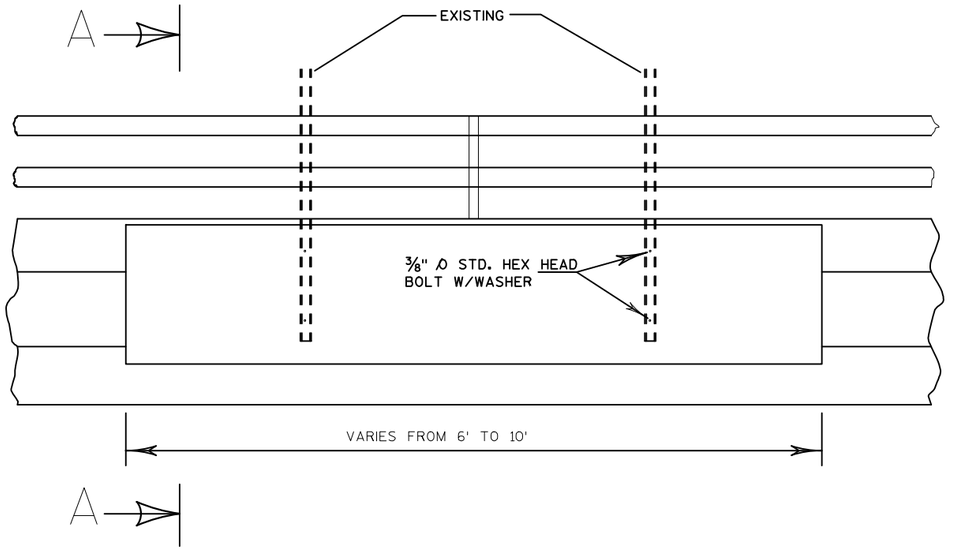
DETAIL 1 OF 10

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGN SUPPORTS SPECIAL MOUNTING	SHEET 30	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023401_PS.DWG
LAYOUT NAME - SPECIAL MOUNTING 01_2010-14-70
PLOT DATE : 6/19/2017 11:14 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

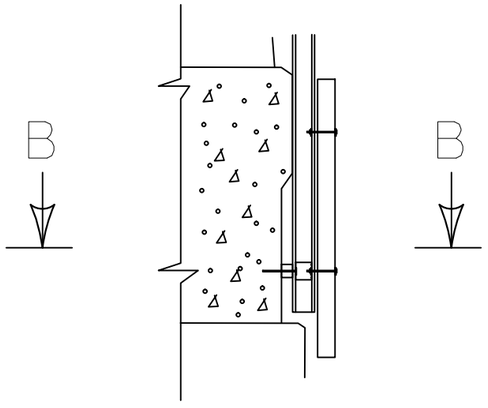


SECTION A-A
SIDE VIEW

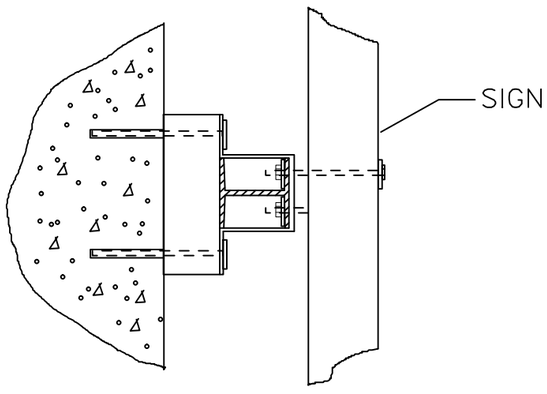


FRONT VIEW

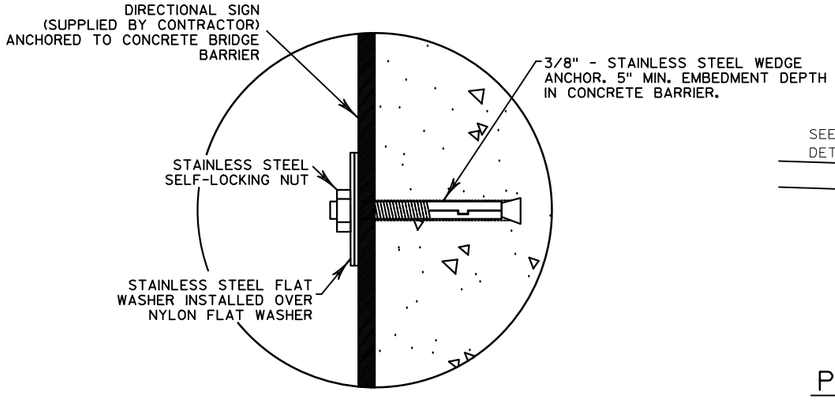
NOTES:
PROVIDE NEW BOLTS.
MOUNTING DETAIL COSTS ARE INCIDENTAL TO PAY ITEM "TYPE II SIGNS, REFLECTIVE".



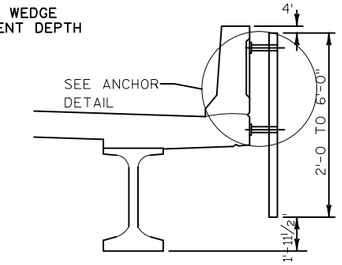
DETAIL A



SECTION B-B
TOP VIEW



ANCHOR DETAIL
N.T.S.

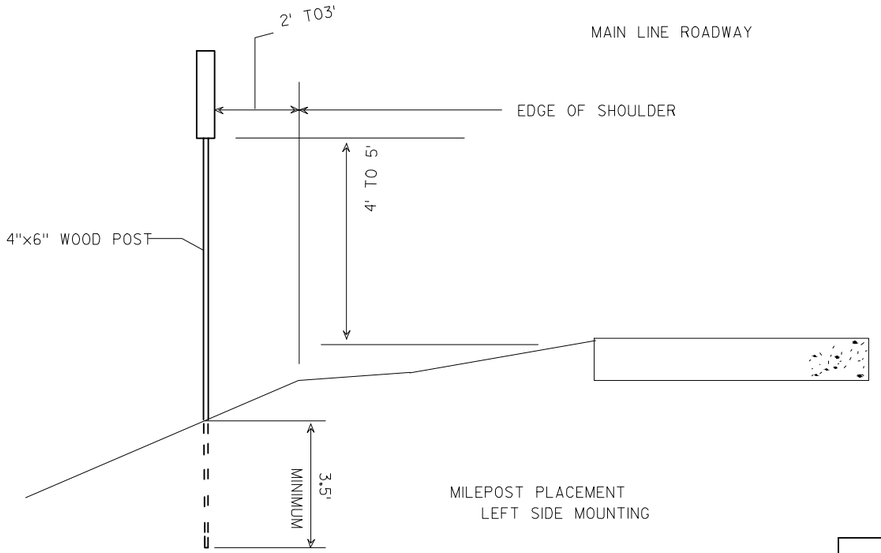


PARAPET OPTION
WITHOUT RAIL

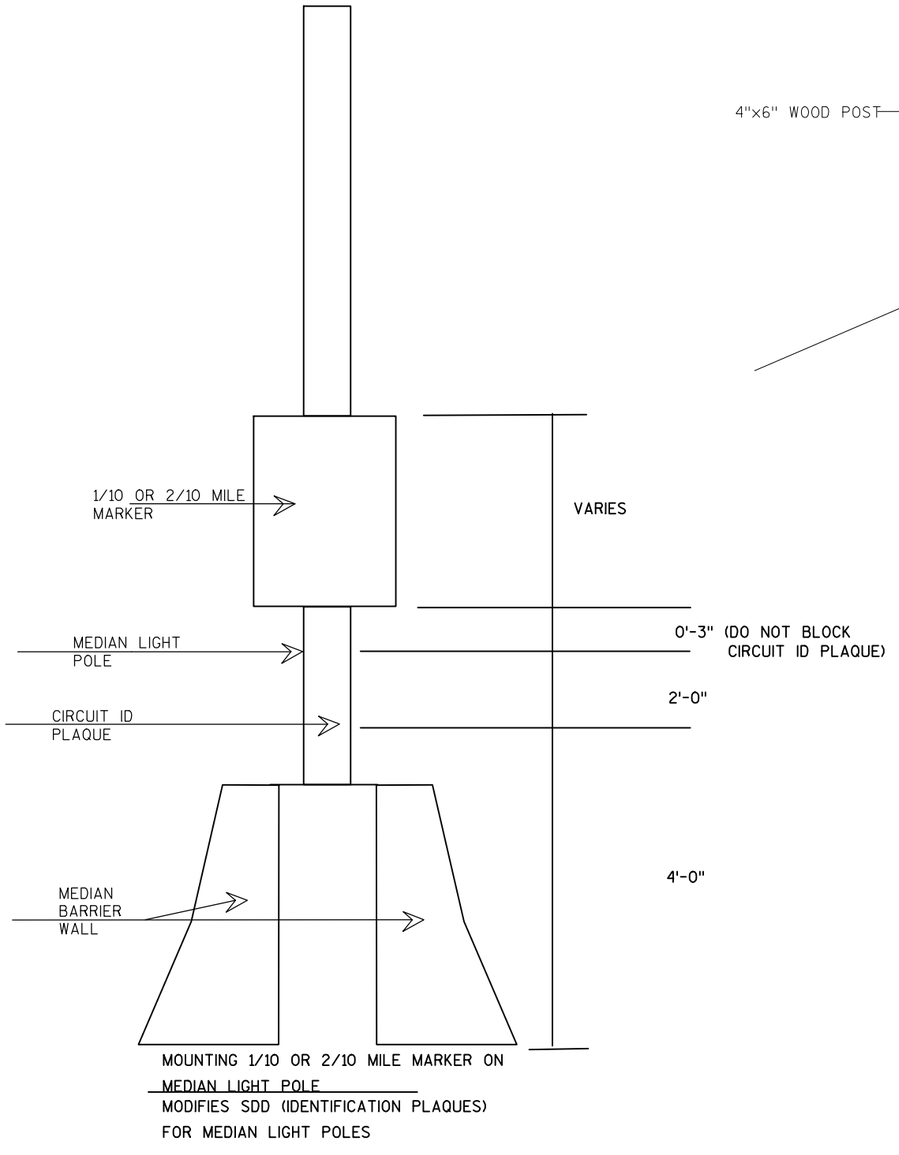
DETAIL 2 OF 10

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGN MOUNTING DETAIL ON BRIDGE	SHEET 31	E

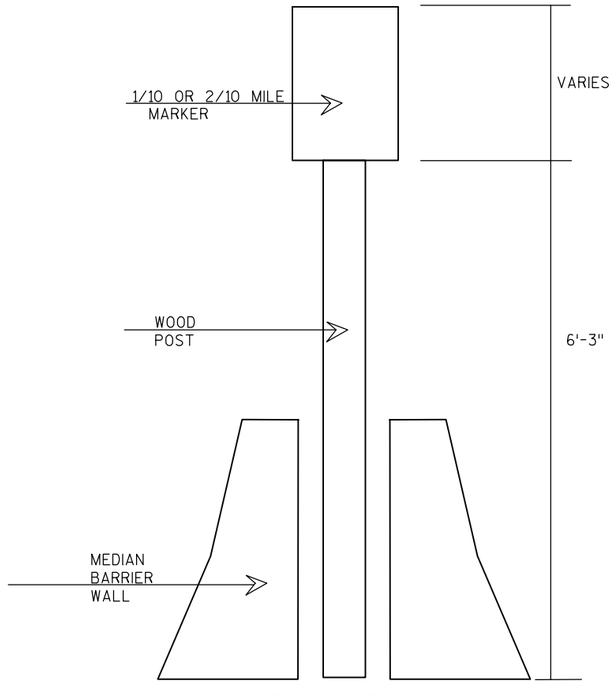
2



MILEPOST PLACEMENT
LEFT SIDE MOUNTING



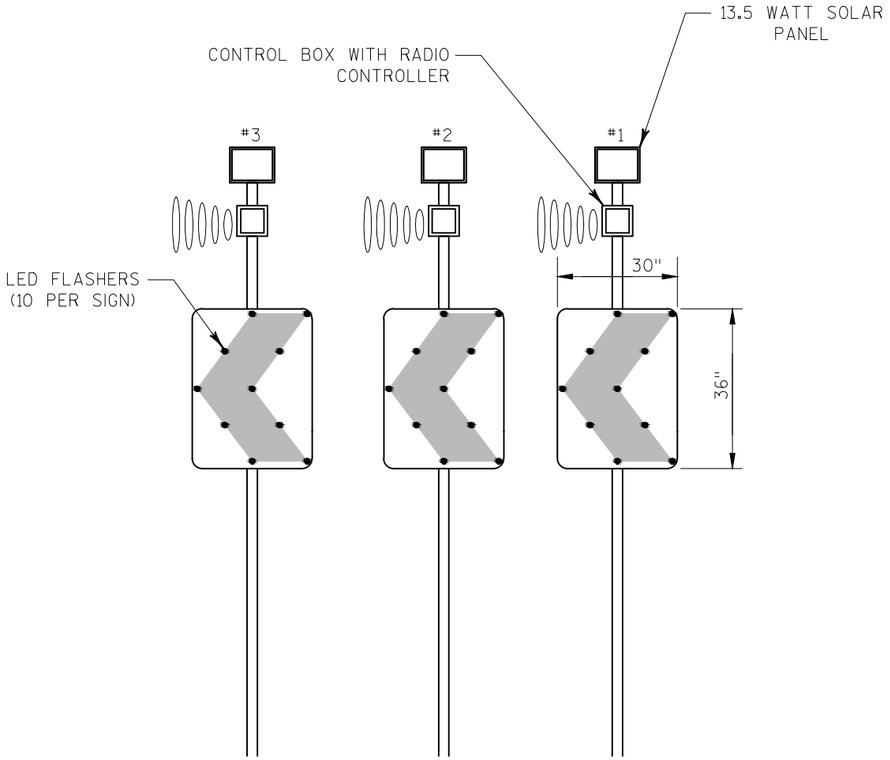
MOUNTING 1/10 OR 2/10 MILE MARKER ON MEDIAN LIGHT POLE
MODIFIES SDD (IDENTIFICATION PLAQUES) FOR MEDIAN LIGHT POLES



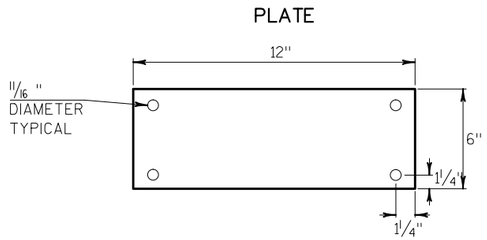
MOUNTING 1/10 OR 2/10 MILE MARKER, IN MEDIAN, ON A WOOD POST

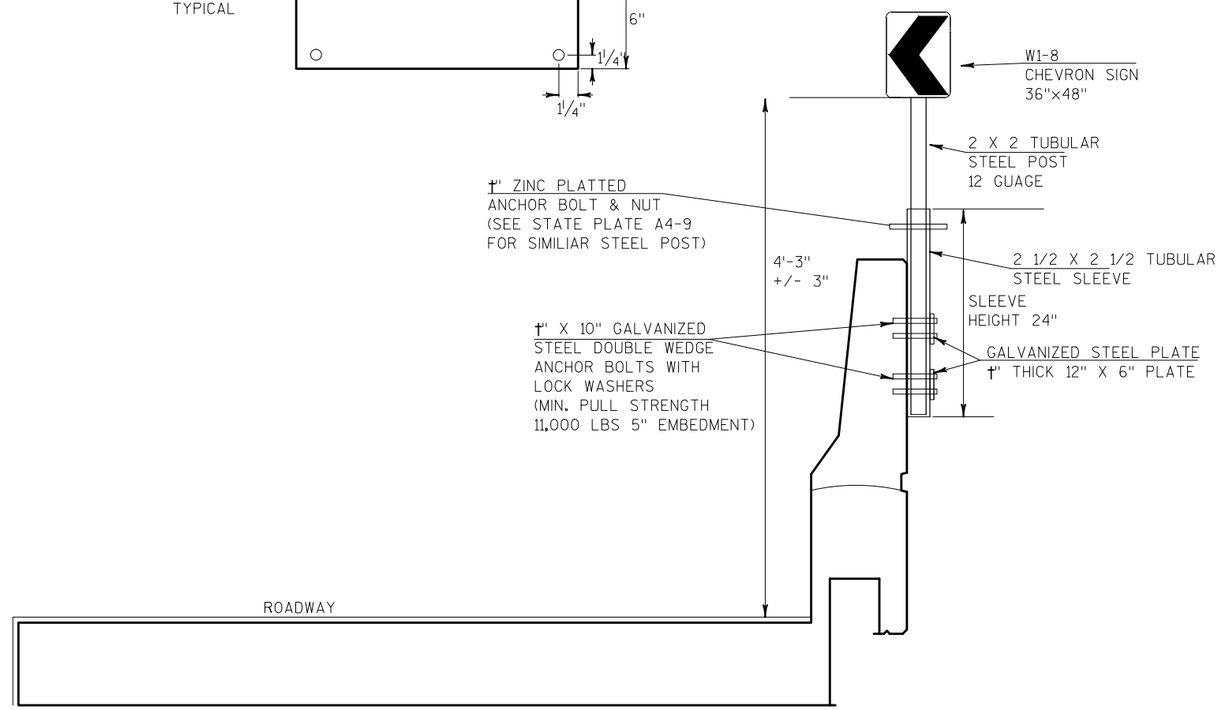
DETAIL 3 OF 10

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGN DETAILS - TYPE II SIGN	SHEET 32	E



DYNAMIC CHEVRON DETAIL

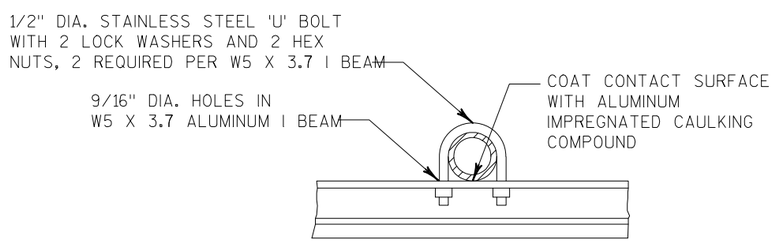




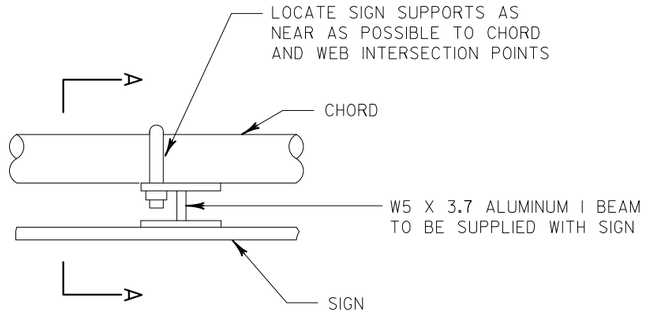
DETAIL 4 OF 10

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGN SUPPORTS CLEARANCE MARKER SPECIAL MOUNTING - TYPICAL	SHEET 33	E

2



SECTION A-A



TYPICAL SIGN CONNECTION

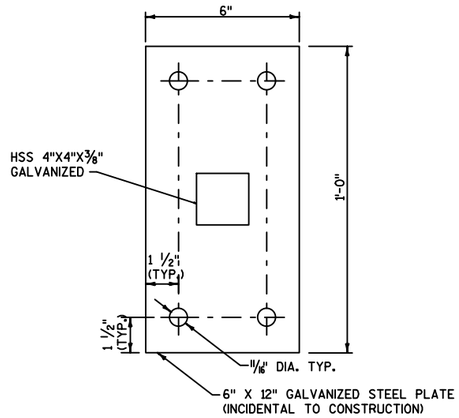
FOR USE WHEN MOUNTING SIGNS TO EXISTING SIGN BRIDGE TRUSS
INCIDENTAL TO OTHER SIGN ITEMS

DETAIL 5 OF 10

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CONSTRUCTION DETAILS	SHEET 34	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023401_PS.DWG
LAYOUT NAME - CONSTRUCTION DETAILS 5 2010-14-70
PLOT DATE : 6/19/2017 11:14 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

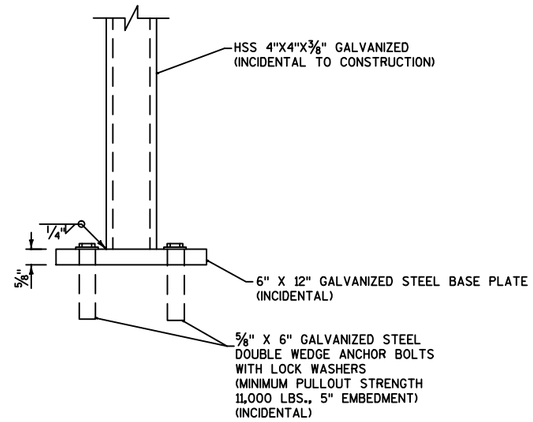
2



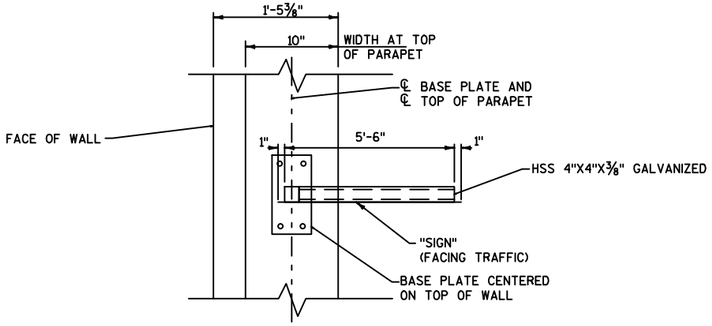
PLAN VIEW - BASE PLATE

NOTES:

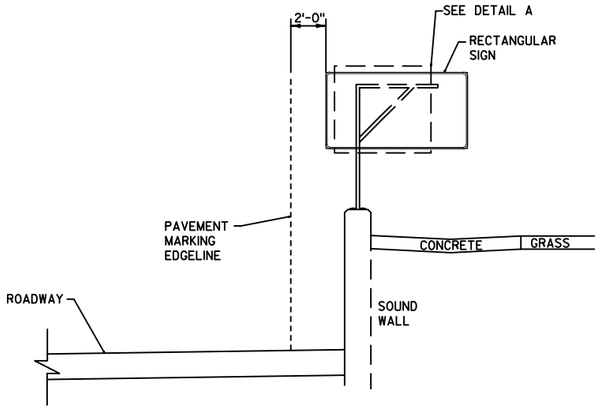
1. MOUNTING HARDWARE, FABRICATING, FURNISHING, AND INSTALLATION ARE INCIDENTAL.



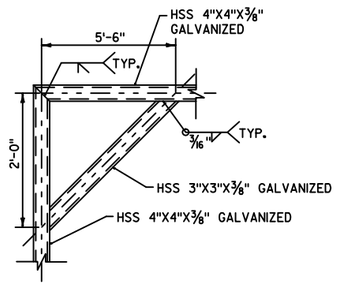
SIDE VIEW - SIGN POST & BASE PLATE



PLAN VIEW - OVERALL



SIDE VIEW - OVERALL



DETAIL A
SIGN NOT SHOWN FOR CLARITY

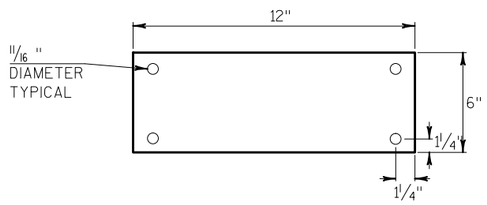
MOUNTING TRAFFIC SIGNS ON TOP OF WALL

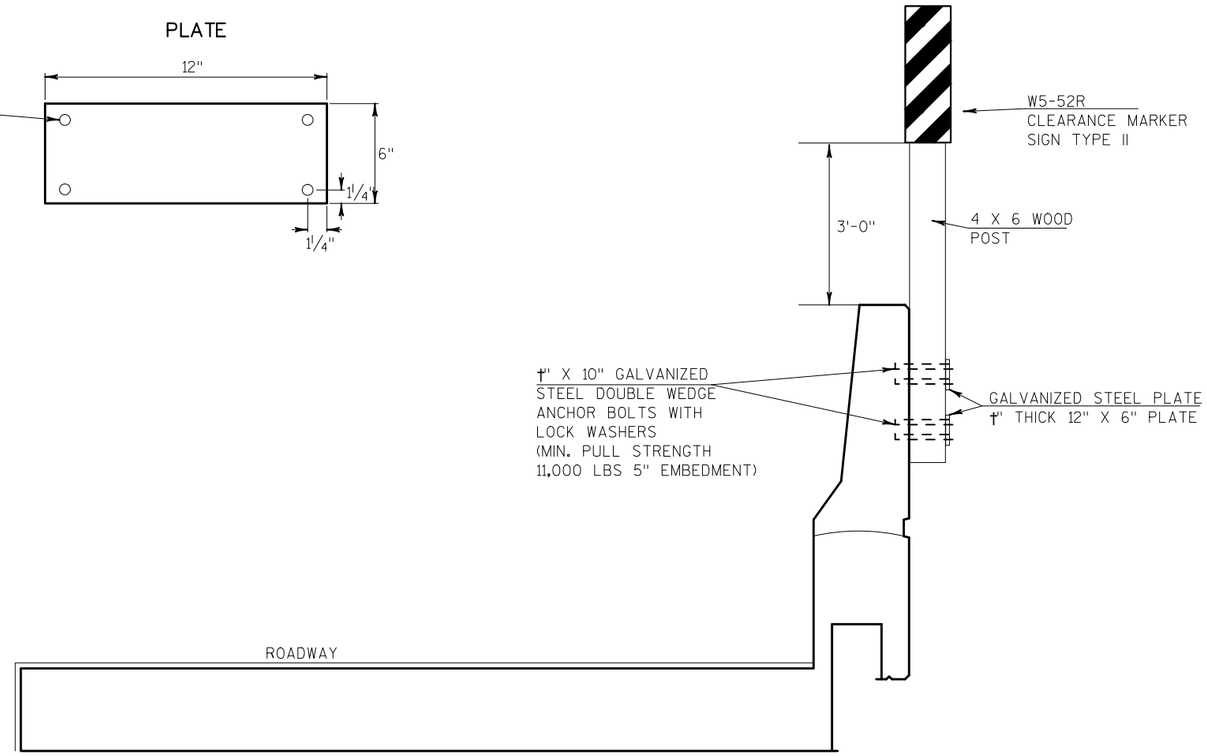
N.T.S.

DETAIL 6 OF 10

2

PLATE

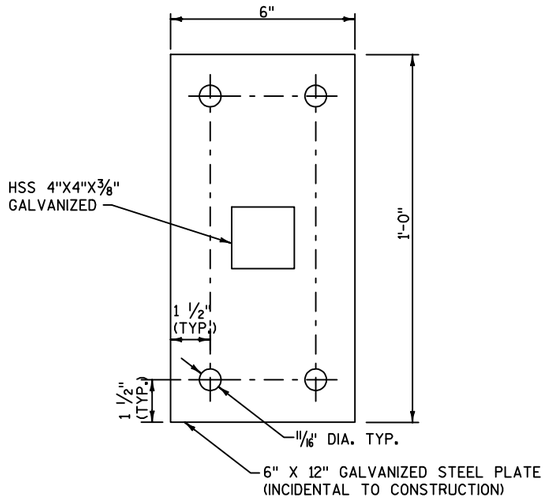




DETAIL 7 OF 10

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGN SUPPORT CLEARANCE MARKER SPECIAL MOUNTING - TYPICAL	SHEET 36	E

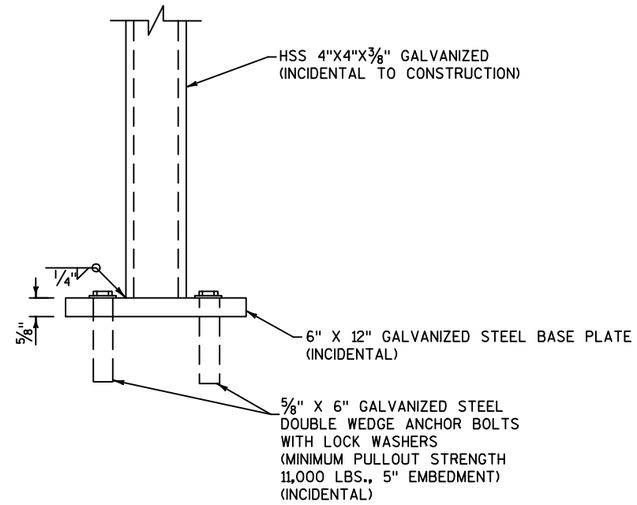
FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023401_PS.DWG
LAYOUT NAME - CLEARANCE SPECIAL MOUNTING 7 2010-14-70
PLOT DATE : 6/19/2017 11:14 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42



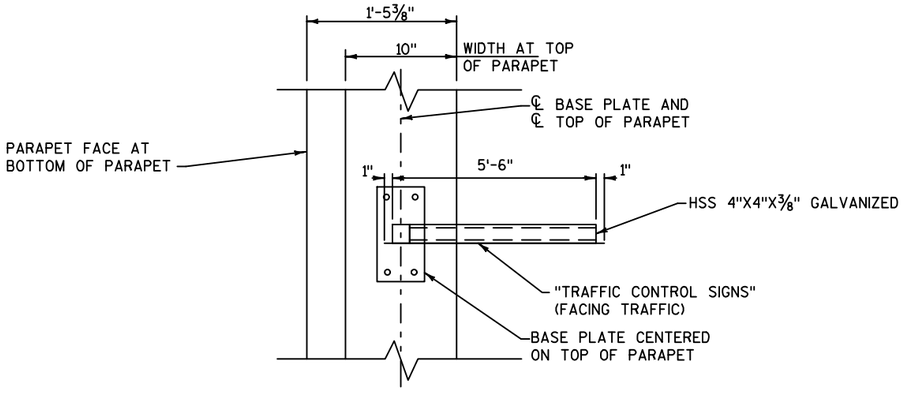
PLAN VIEW - BASE PLATE

NOTES:

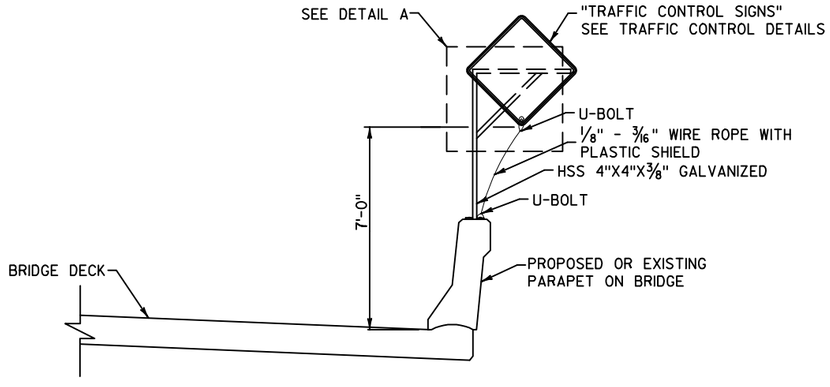
1. MOUNTING HARDWARE, FABRICATING, FURNISHING, AND INSTALLATION ARE INCIDENTAL.



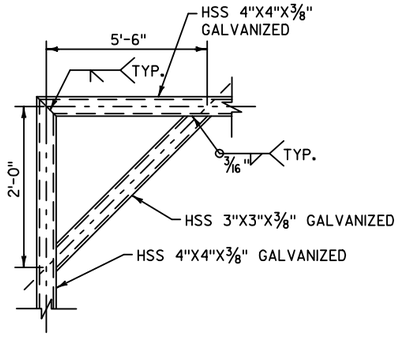
SIDE VIEW - SIGN POST & BASE PLATE



PLAN VIEW - OVERALL



SIDE VIEW - OVERALL



DETAIL A
SIGN NOT SHOWN FOR CLARITY

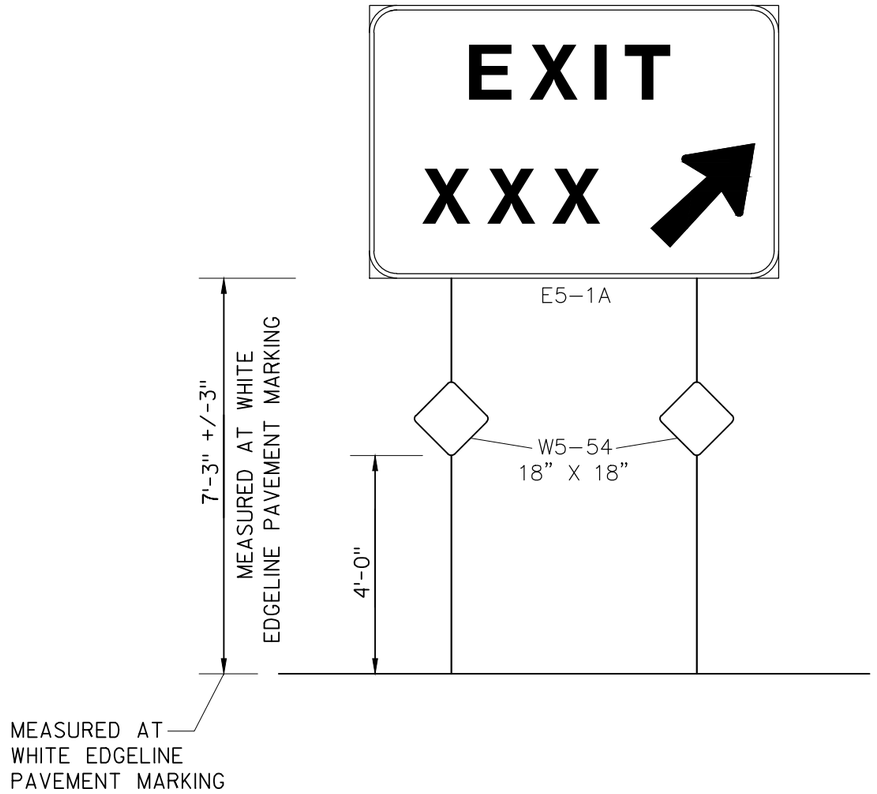
MOUNTING TRAFFIC SIGNS TO BRIDGE PARAPET - TOP

N.T.S.

DETAIL 8 OF 10

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TRAFFIC CONTROL DETAILS - TRAFFIC SIGN MOUNTING	SHEET 37	E

2



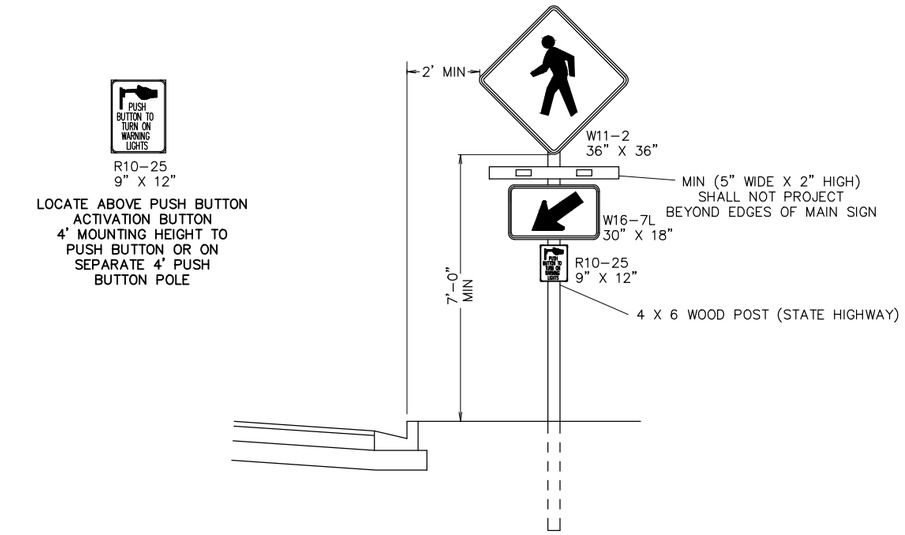
SEE STATE PLATE A4-2
FOR LOCATION LATERALLY
OF E5-1A SIGN.

EXIT GORE SIGN DETAIL

DETAIL 9 OF 10

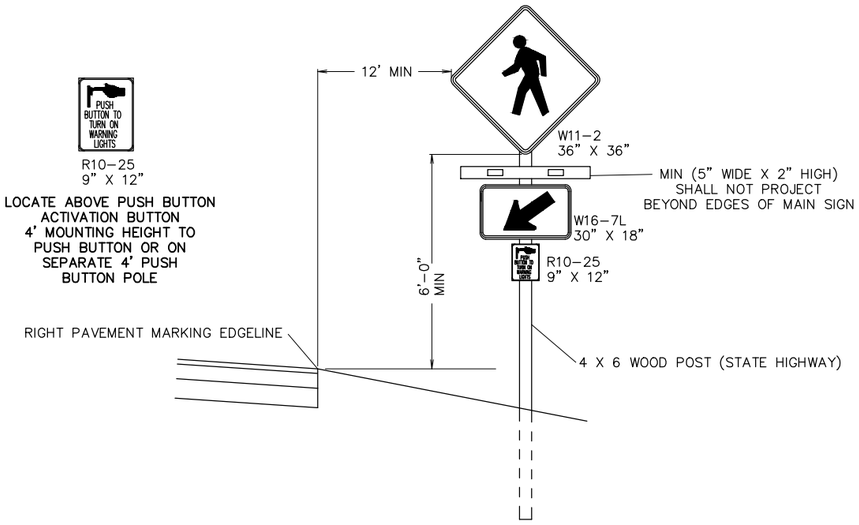
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EXIT GORE SIGN DETAIL	SHEET 38	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023401_PS.DWG
LAYOUT NAME - GORE SIGN 9 2010-14-70
PLOT DATE : 6/19/2017 11:14 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42



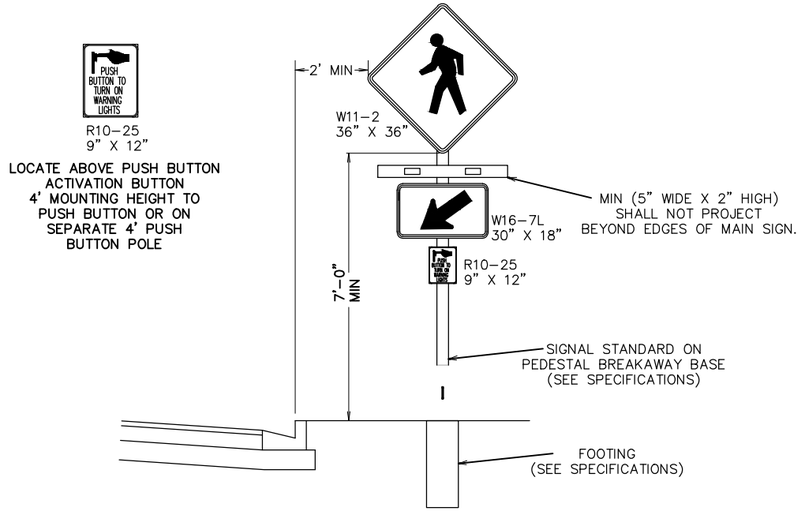
RAPID RECTANGULAR
FLASHING BEACON
URBAN LOCATION

FIGURE 1



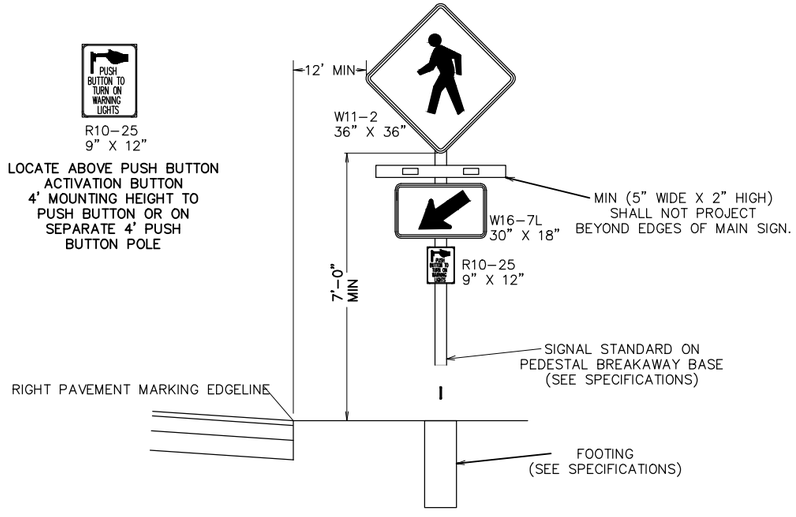
RAPID RECTANGULAR
FLASHING BEACON
RURAL LOCATION

FIGURE 2



RAPID RECTANGULAR
FLASHING BEACON
URBAN LOCATION

FIGURE 3



RAPID RECTANGULAR
FLASHING BEACON
RURAL LOCATION

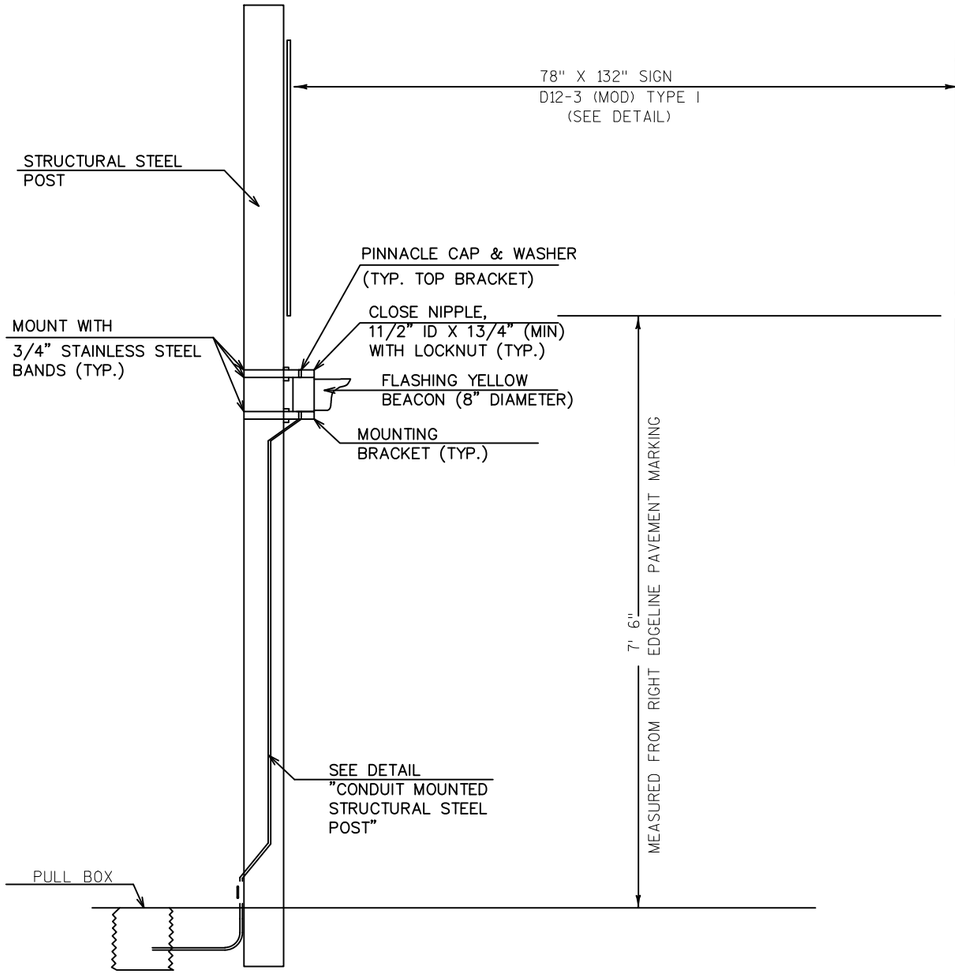
FIGURE 4

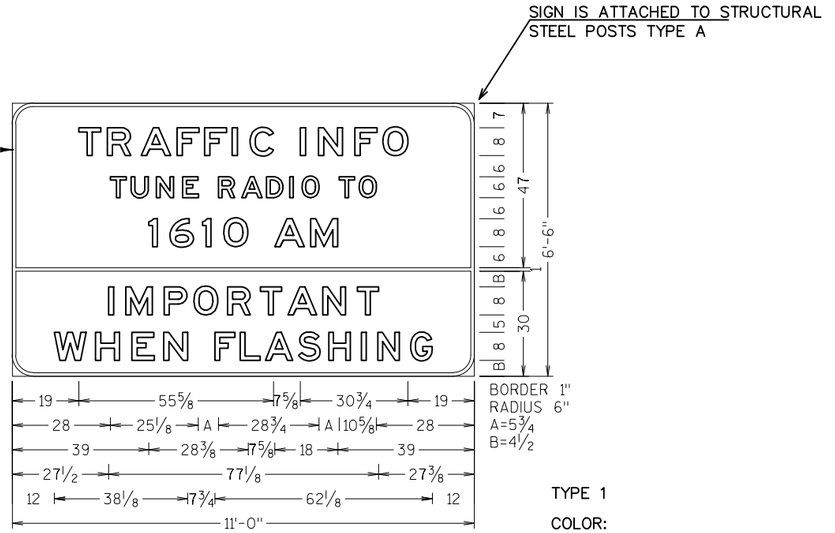
RECTANGULAR RAPID FLASHING BEACON

DETAIL 10 OF 10

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	FLASHER SIGNING ASSEMBLY	SHEET 39	E

2





TYPICAL DETAIL
HARS FLASHER ASSEMBLY
(NOT TO SCALE)

TYPE 1

COLOR:
BLUE BACKGROUND – TOP
WHITE MESSAGE – TOP
YELLOW BACKGROUND – BOTTOM
BLACK MESSAGE – BOTTOM

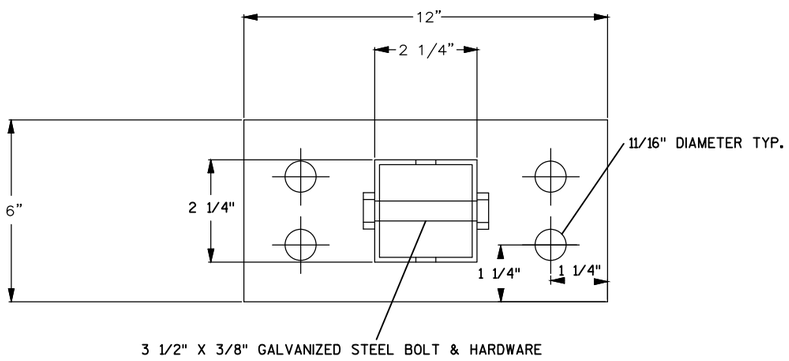
NOTES:

1. ALL SIGNS ARE TYPE 1 (EXCEPT AS NOTED) – TYPE SH REFLECTIVE–REFERENCE WIS DOT STANDARD SPECIFICATION FOR HIGHWAY AND STRUCTURE CONSTRUCTION" LATEST EDITION.
2. 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.
3. ALL CAP LETTERS ARE SERIES E MODIFIED. ALL UPPER AND LOWER CASE LETTERS ARE SERIES E MODIFIED.
4. SIGN NUMBERS SHOWN BY: ◯
5. DO NOT SCALE.

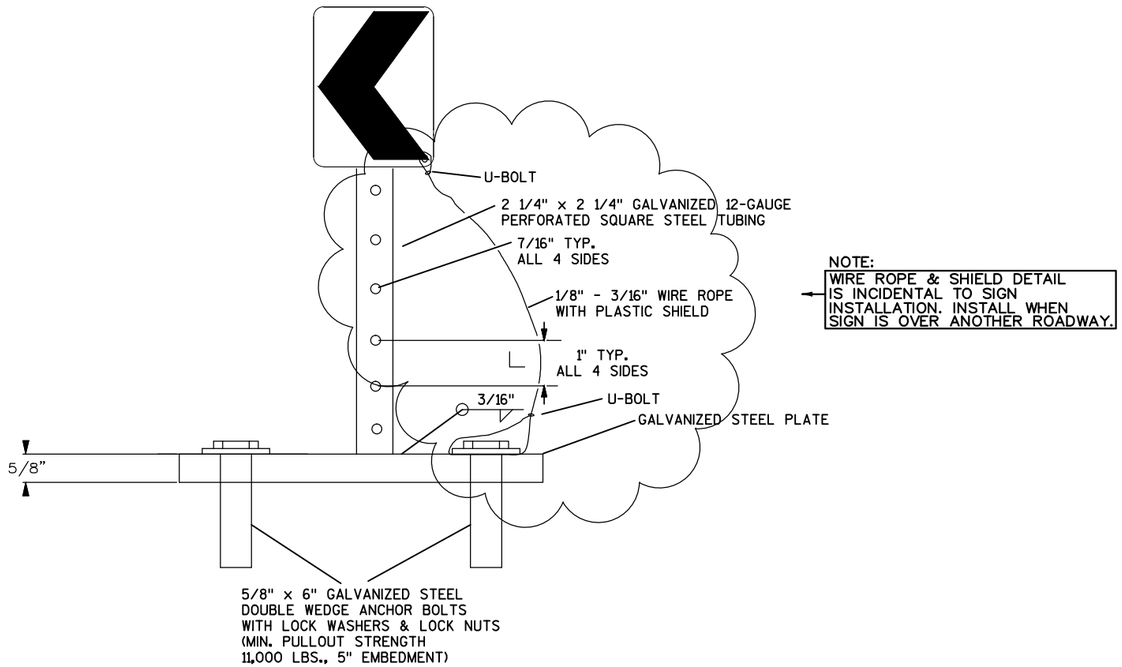
2

MOUNTING DETAILS FOR SIGNS MOUNTED TO MEDIAN BARRIER

BARRIER WALL SIGN BRACKET ASSEMBLY
NOT TO SCALE

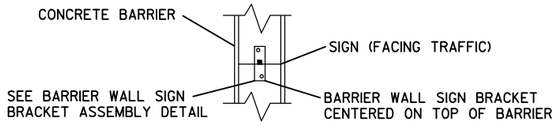


PLAN VIEW



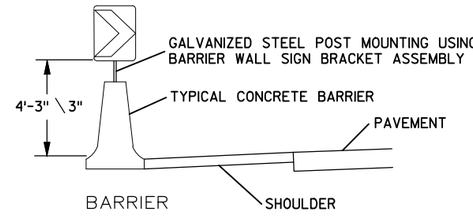
SIDE VIEW

TYPICAL SIGN PLACEMENT DETAILS



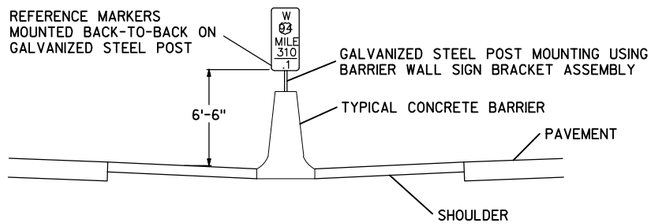
PLAN VIEW

MEDIAN BARRIER MOUNTING DETAIL



BARRIER

ALTERNATE SIGN MOUNTING DETAIL FOR REFERENCE MARKERS



SINGLE MEDIAN BARRIER

NOTES

1) ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION
2) ALL MATERIAL TO BE APPROVED BY ENGINEER BEFORE INSTALLATION
3) SEE SIGN PLATE A4-8 FOR BOLT REQUIREMENTS.

NOT TO SCALE

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGN MOUNTING DETAIL - WIRE CONNECTOR	SHEET 41	E

NOTES

1) ALL ITEMS ASSOCIATED WITH LIGHTING REMOVALS ARE SHOWN IN LIGHTING PLAN.

2) ALL ITEMS ASSOCIATED WITH FTMS REMOVALS ARE SHOWN IN FTMS PLAN.

3) ALL ITEMS ASSOCIATED WITH STORM SEWER REMOVALS ARE SHOWN IN STORM SEWER PLANS.

4) FOR ADDITIONAL UTILITY INFORMATION SEE EXISTING UTILITY PLAN.

5) THE LOCATION OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN INCLUDING BUILDING SERVICES AND LATERALS.

LEGEND

- REMOVING PAVEMENT
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING CONCRETE SURFACE PARTIAL DEPTH
- REMOVING CONCRETE SIDEWALK
- REMOVING CURB AND GUTTER
- X X X SAWING ASPHALT
- XXXX SAWING CONCRETE PAVEMENT
- REMOVING CONCRETE BARRIER
- SLOPE INTERCEPT
- REMOVING RUMBLE STRIP

2

2

MATCHLINE 59+00ML

IH 41/USH 45 SB

60ML 62ML 64ML 66ML 68ML 70ML 72ML 74ML

IH 41/USH 45 NB

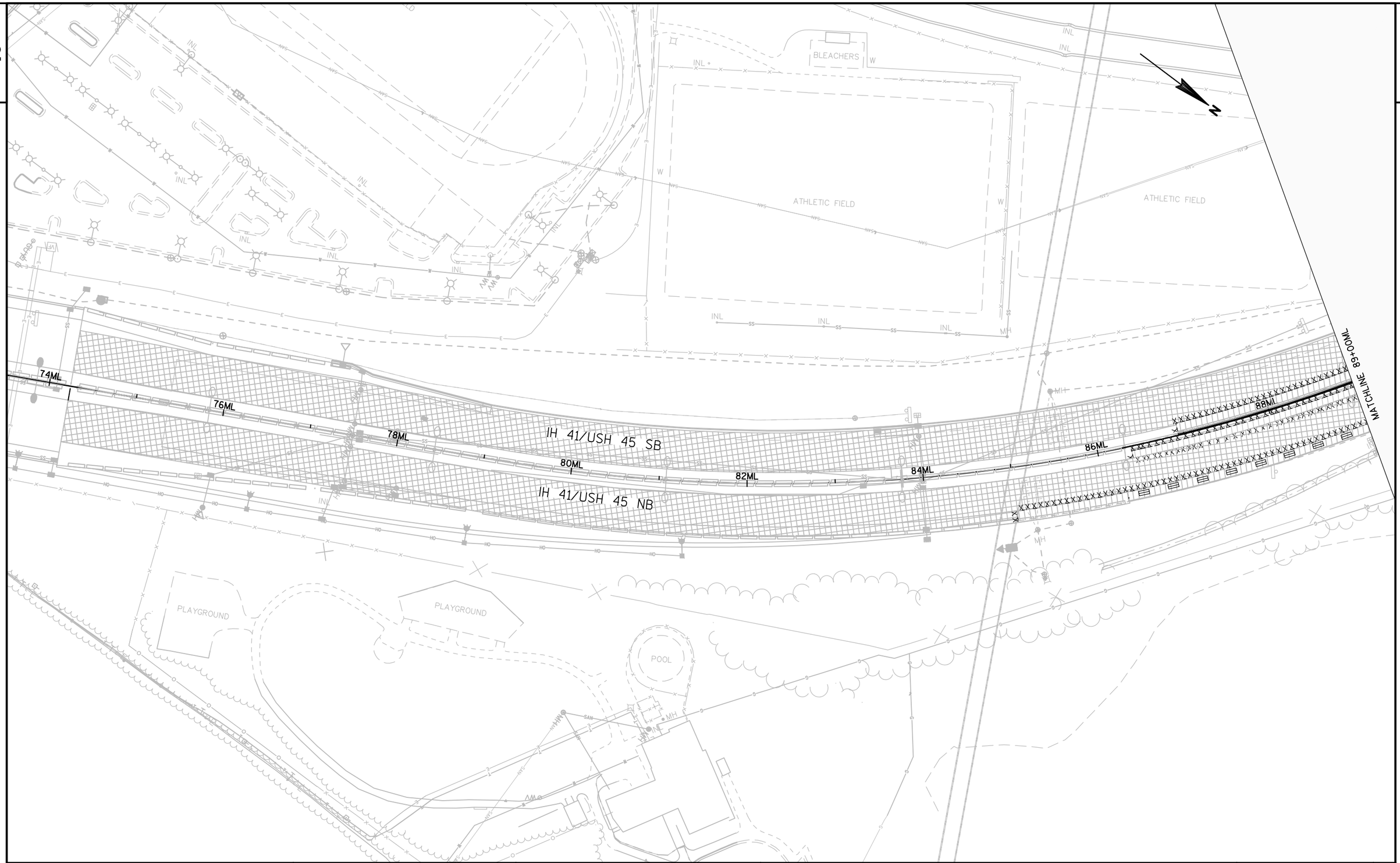
N. SWAN BOULEVARD

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	REMOVAL PLANS	SHEET 43	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 03

PLOT DATE : 10/20/2017 3:49 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	REMOVAL PLANS	SHEET 44	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 04

PLOT DATE : 10/20/2017 3:49 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

CANADIAN PACIFIC RAILWAY

UNDERWOOD PARKWAY

UNDERWOOD CREEK

STH 100/MAYFAIR ROAD

STH 100/MAYFAIR ROAD

IH 41/USH 45 SB

IH 41/USH 45 NB

MATCHLINE 89+00ML

90ML

92ML

94ML

96ML

98ML

100ML

102ML

MATCHLINE 104+00ML

N

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	REMOVAL PLANS	SHEET 45	E

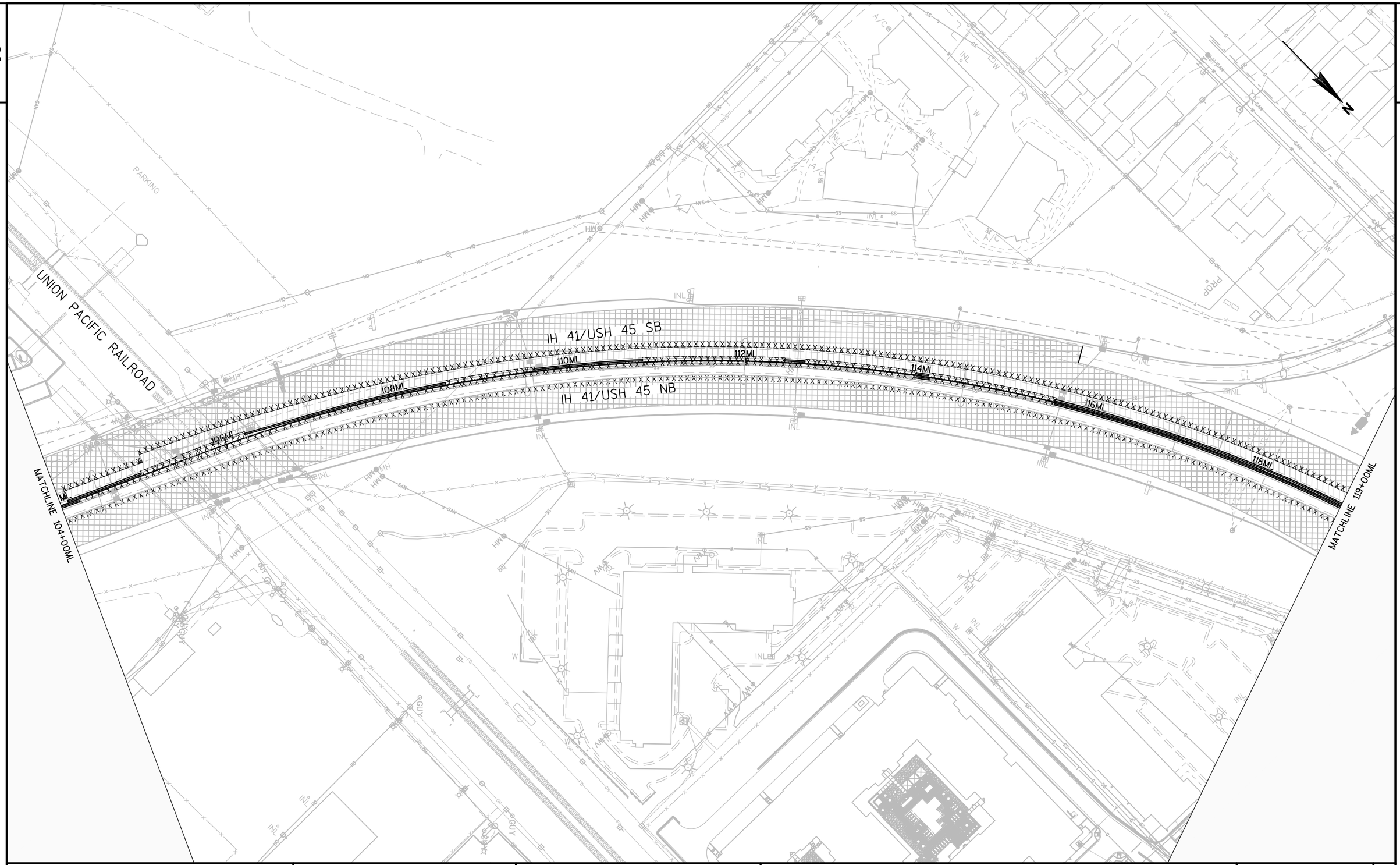
FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 05

PLOT DATE : 10/20/2017 3:49 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	REMOVAL PLANS	SHEET 46	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 06

PLOT DATE : 10/20/2017 3:49 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

W. NORTH AVENUE

W. MEINECKE AVENUE

N. 113TH STREET

N. 112TH STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

120ML

122ML

124ML

126ML

128ML

130ML

132ML

MATCHLINE 119+00ML

MATCHLINE 134+00ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	REMOVAL PLANS	SHEET 47	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 07

PLOT DATE : 10/20/2017 3:49 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

N. 113TH STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

N. 112TH STREET

MATCHLINE 134+00ML

MATCHLINE 149+00ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	REMOVAL PLANS	SHEET 48	E

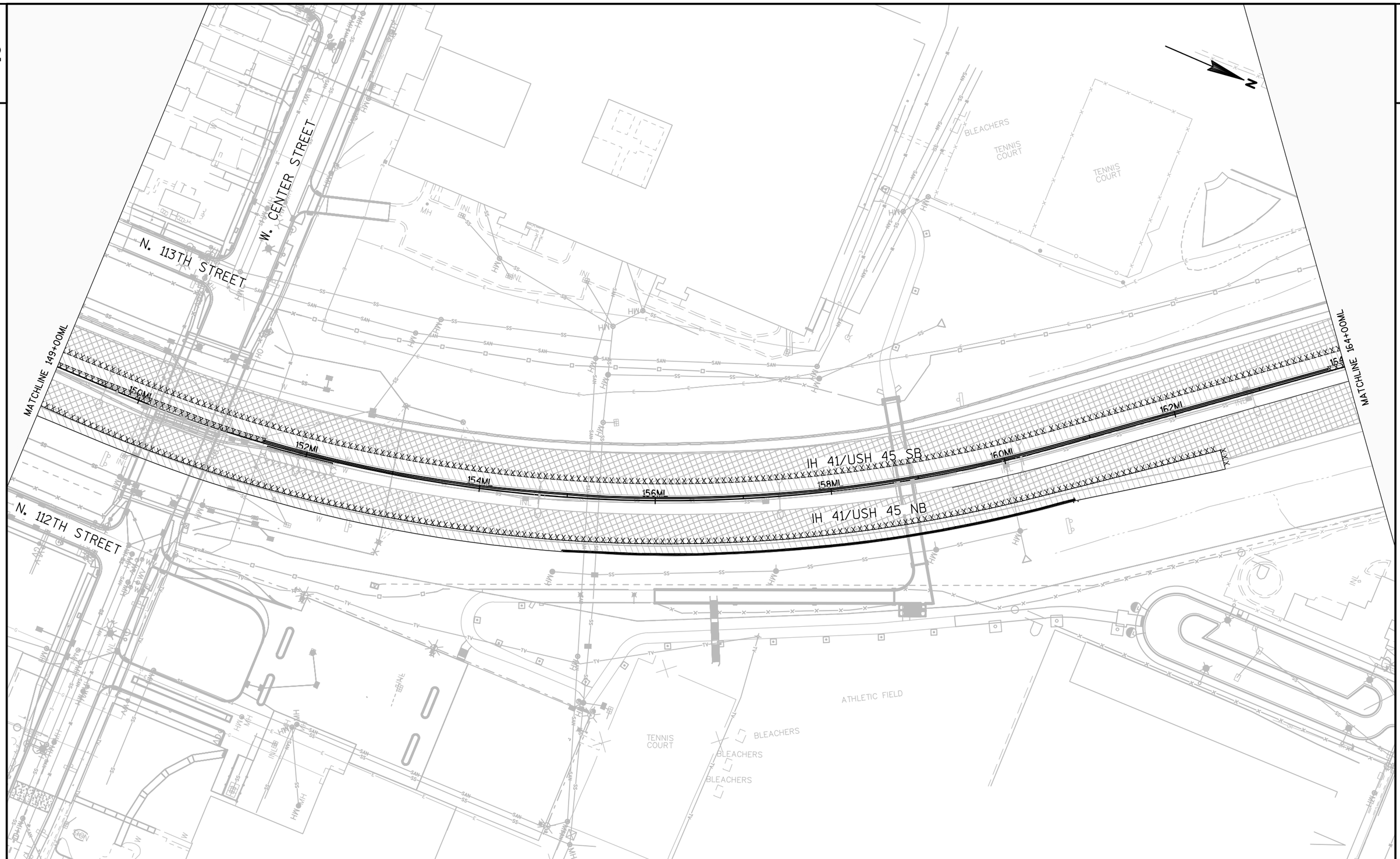
FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 08

PLOT DATE : 10/20/2017 3:50 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME :

PLOT SCALE : 1 IN:100 FT

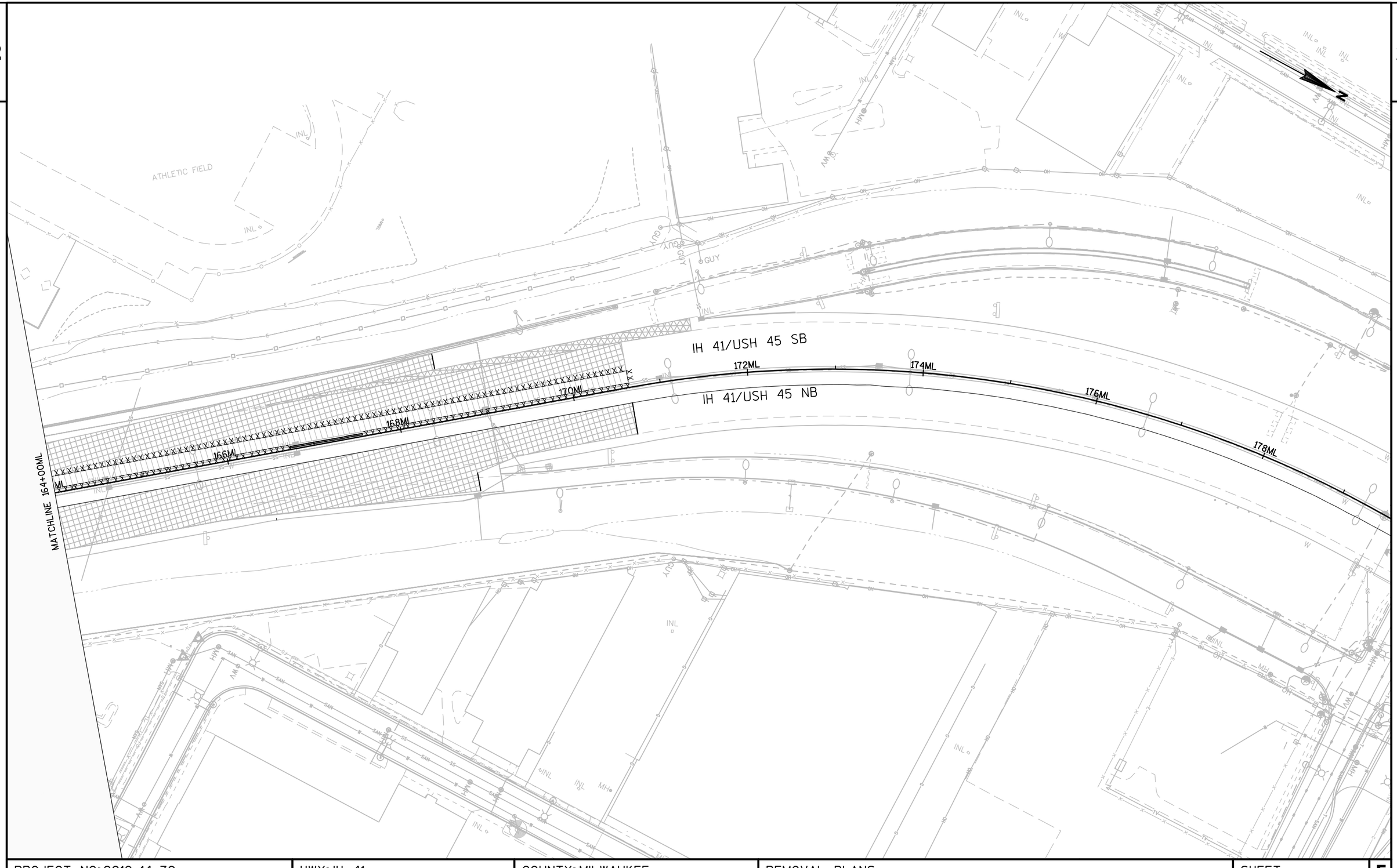
WISDOT/CADDS SHEET 42

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	REMOVAL PLANS	SHEET 49	E

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	REMOVAL PLANS	SHEET 50	E

2

2

W. NORTH AVENUE

106NO 108NO 110NO 112NO 114NO 116NO 118NO 120NO

IH 41/USH 45 SB

IH 41/USH 45 NB

124ML 125ML 128ML 129ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	REMOVAL PLANS	SHEET 51 E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021101_RM.DWG
LAYOUT NAME - 12

PLOT DATE : 10/20/2017 3:50 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

(A) HMA PAVEMENT 4 HMA 58-28 H, 1 3/4-INCH

(B) HMA PAVEMENT 4 HT 58-28 H, 1 3/4-INCH OVER
HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH OVER
HMA PAVEMENT 3 HT 58-28 H, 3 1/2-INCH OVER
HMA PAVEMENT 3 HT 58-28 H, 3 1/2-INCH

(C) HMA PAVEMENT 4 HT 58-28 H, 1 3/4-INCH OVER
HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH OVER
CONCRETE PAVEMENT 9-INCH NON-DOWELED

(D) HMA PAVEMENT 4 HT 58-28 H, 1 3/4-INCH OVER
HMA PAVEMENT 3 HT 58-28 H, 2 1/4-INCH OVER
CONCRETE PAVEMENT 9-INCH NON-DOWELED, OVER
BASE AGGREGATE DENSE, 6-INCH

(E) HMA PAVEMENT 4 LT 58-28 S, 1 3/4-INCH

(AGO2) BASE AGGREGATE DENSE 1 1/4-INCH

(CBO1) CONCRETE BARRIER TYPE S32

(CBO2) CONCRETE BARRIER TYPE S42

(CB32) CONCRETE BARRIER TEMPORARY PRECAST DELIVERED SPECIAL

(CB98) CONCRETE BARRIER SINGLE FACE 32-INCH

(BG15) MGS GUARDRAIL 3

(BG16) MGS THRIE BEAM TRANSITION

(BG17) MGS GUARDRAIL TERMINAL EAT

(BG18) MGS GUARDRAIL TERMINAL TYPE 2

(SWO1) SAWING ASPHALT

(SWO2) SAWING CONCRETE

(CGO1) CURB RAMP TYPE 1 MODIFIED

(CGO6) CURB RAMP TYPE 4B

(CG16) CONCRETE CURB AND GUTTER 31-INCH

(CMO7) CONCRETE SIDEWALK 5-INCH

● PROPOSED MANHOLE

■ PROPOSED INLET

NOTES

CURB AND GUTTER RADIUS AND ANGLE POINT OFFSETS ARE MEASURED TO FLANGE LINE, UNLESS OTHERWISE NOTED.

FULL WIDTH SIDEWALK DIMENSIONS AND TERRACE DIMENSIONS ARE MEASURED TO FACE OF CURB.

2

2

+24.14ML
64.00' LT
+24.14ML
52.00' LT
+24.14ML
40.00' LT
+24.14ML
28.00' LT
+24.14ML
16.00' LT

12'
12'
12'
12'
16'

IH 41/USH 45 SB

A
A
A
A

71ML
72ML
73ML
74ML
75ML
76ML
77

16'
+24.14ML
16.00' RT
+24.14ML
28.00' RT
+24.14ML
40.00' RT
+24.14ML
52.00' RT
+24.14ML
64.00' RT

12'
12'
12'
12'
12'

IH 41/USH 45 NB

A
A
A
A
A

MATCHLINE 77+00ML

HO
HO
HW
OH
OH
TE
E
E
T
T

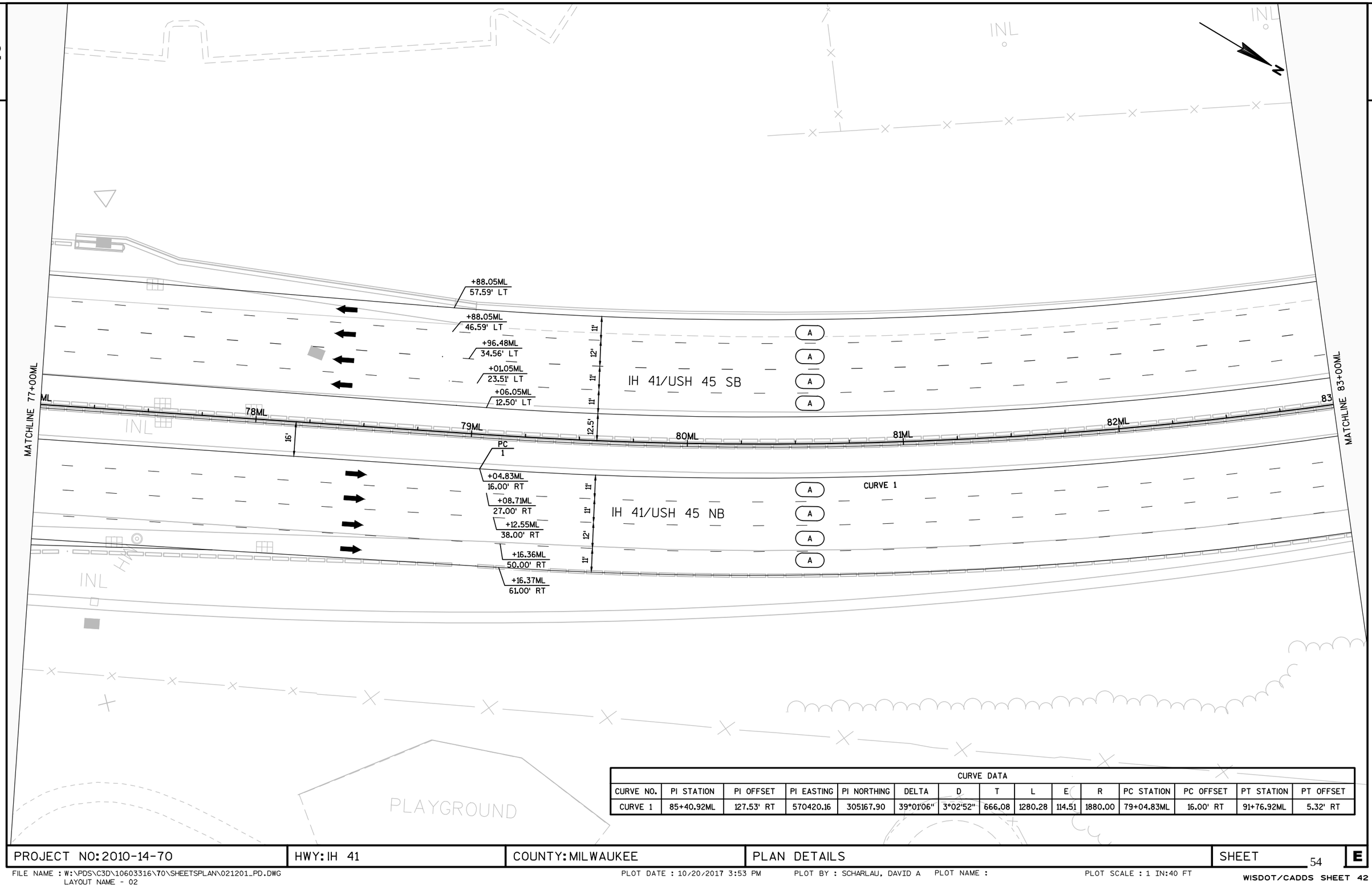
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 53	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 01

PLOT DATE : 10/20/2017 3:53 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

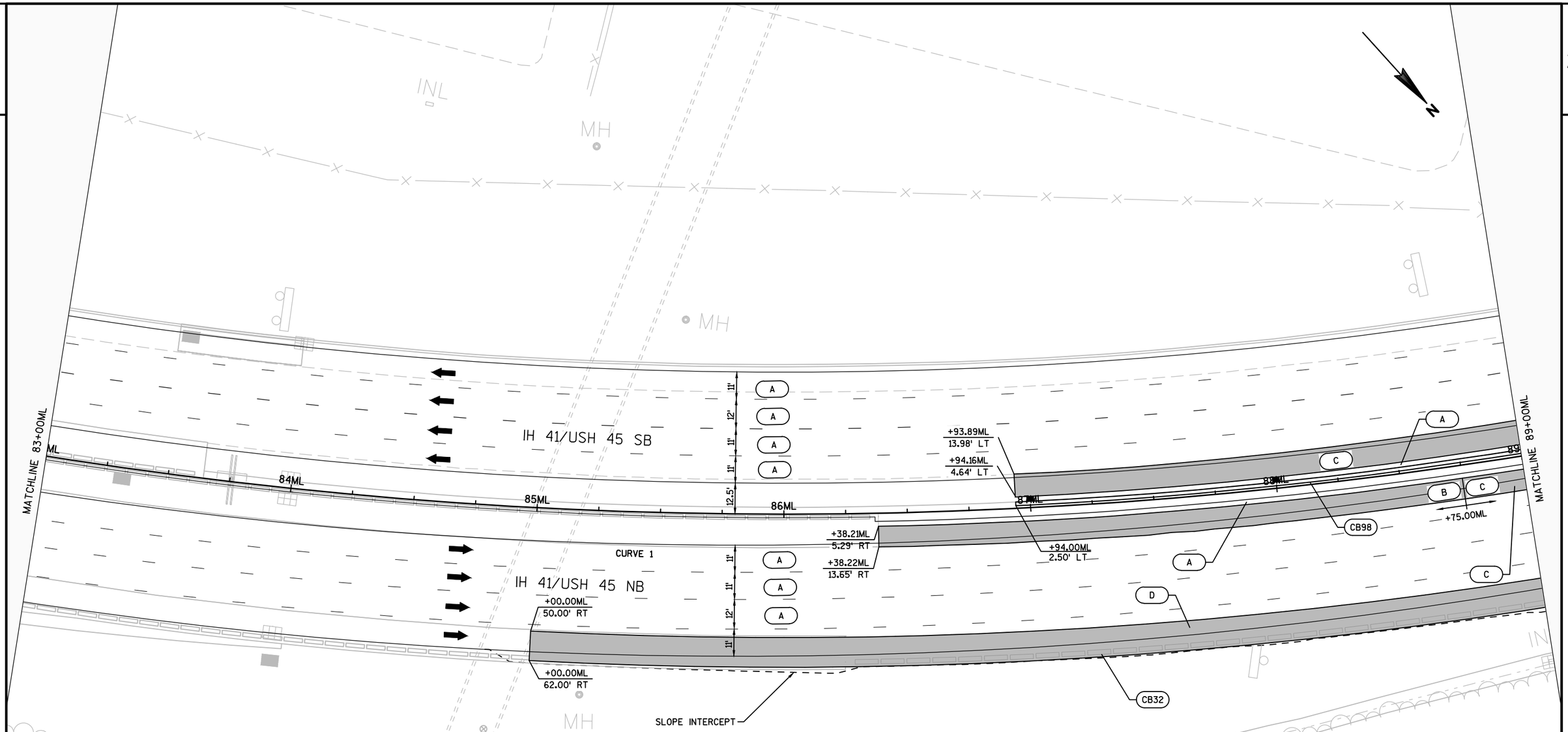
2



CURVE DATA

CURVE NO.	PI STATION	PI OFFSET	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC STATION	PC OFFSET	PT STATION	PT OFFSET
CURVE 1	85+40.92ML	127.53' RT	570420.16	305167.90	39°01'06"	3°02'52"	666.08	1280.28	114.51	1880.00	79+04.83ML	16.00' RT	91+76.92ML	5.32' RT

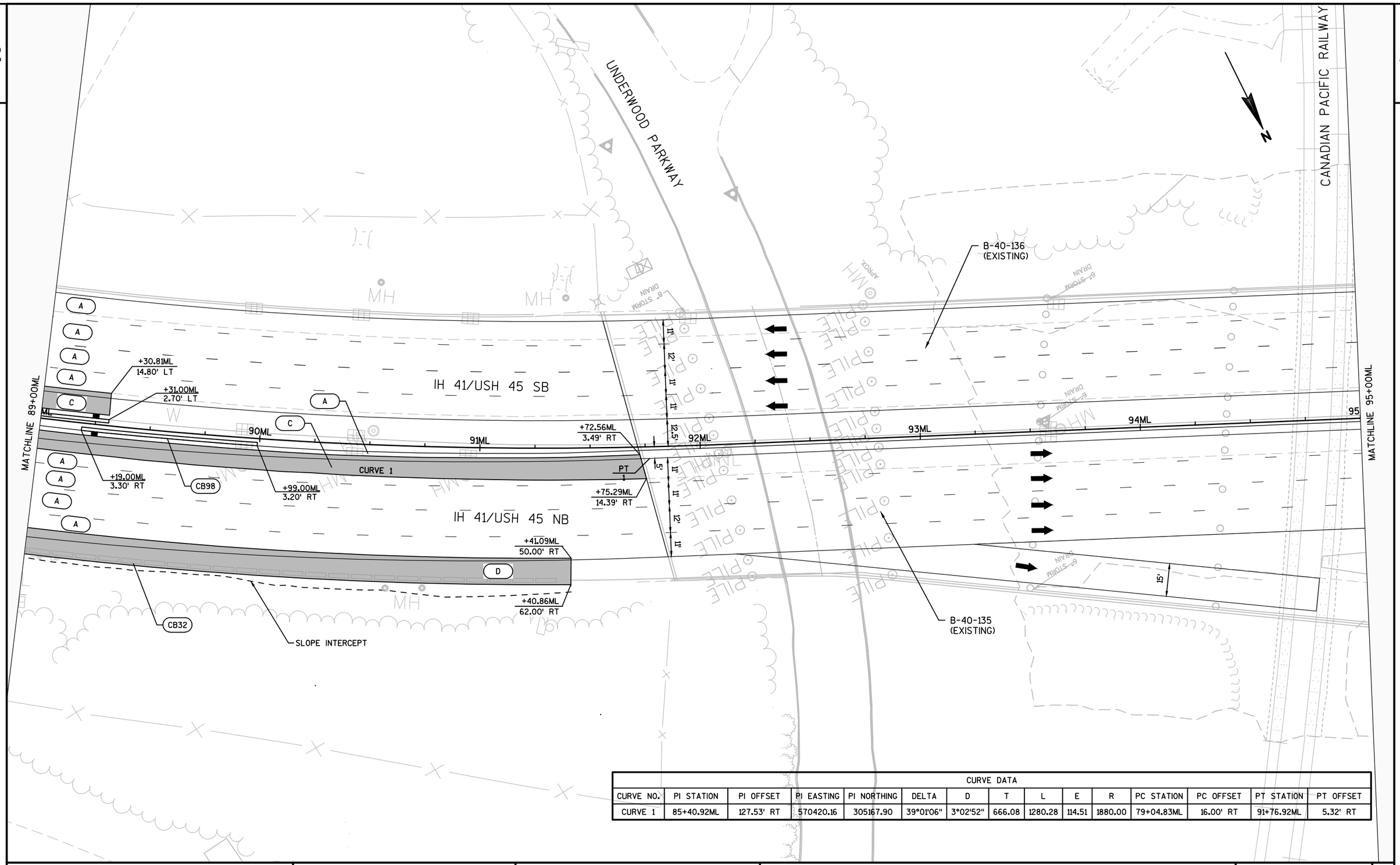
2



CURVE DATA														
CURVE NO.	PI STATION	PI OFFSET	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC STATION	PC OFFSET	PT STATION	PT OFFSET
CURVE 1	85+40.92ML	127.53' RT	570420.16	305167.90	39°01'06"	3°02'52"	666.08	1280.28	114.51	1880.00	79+04.83ML	16.00' RT	91+76.92ML	5.32' RT

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 55	E

2



CURVE DATA														
CURVE NO.	PI STATION	PI OFFSET	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC STATION	PC OFFSET	PT STATION	PT OFFSET
CURVE 1	85+40.92ML	127.53' RT	570420.16	305167.90	39°01'06"	3°02'52"	666.08	1280.28	114.51	1880.00	79+04.83ML	16.00' RT	91+76.92ML	5.32' RT

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 56	E

2

UNDERWOOD CREEK

STH 100/MAYFAIR ROAD NB

STH 100/MAYFAIR ROAD SB

B-40-136
(EXISTING)

IH 41/USH 45 SB

IH 41/USH 45 NB

B-40-135
(EXISTING)

MATCHLINE 95+00ML

96ML

97ML

98ML

99ML

100ML

MATCHLINE 101+00ML

+91.44ML
3.59' RT

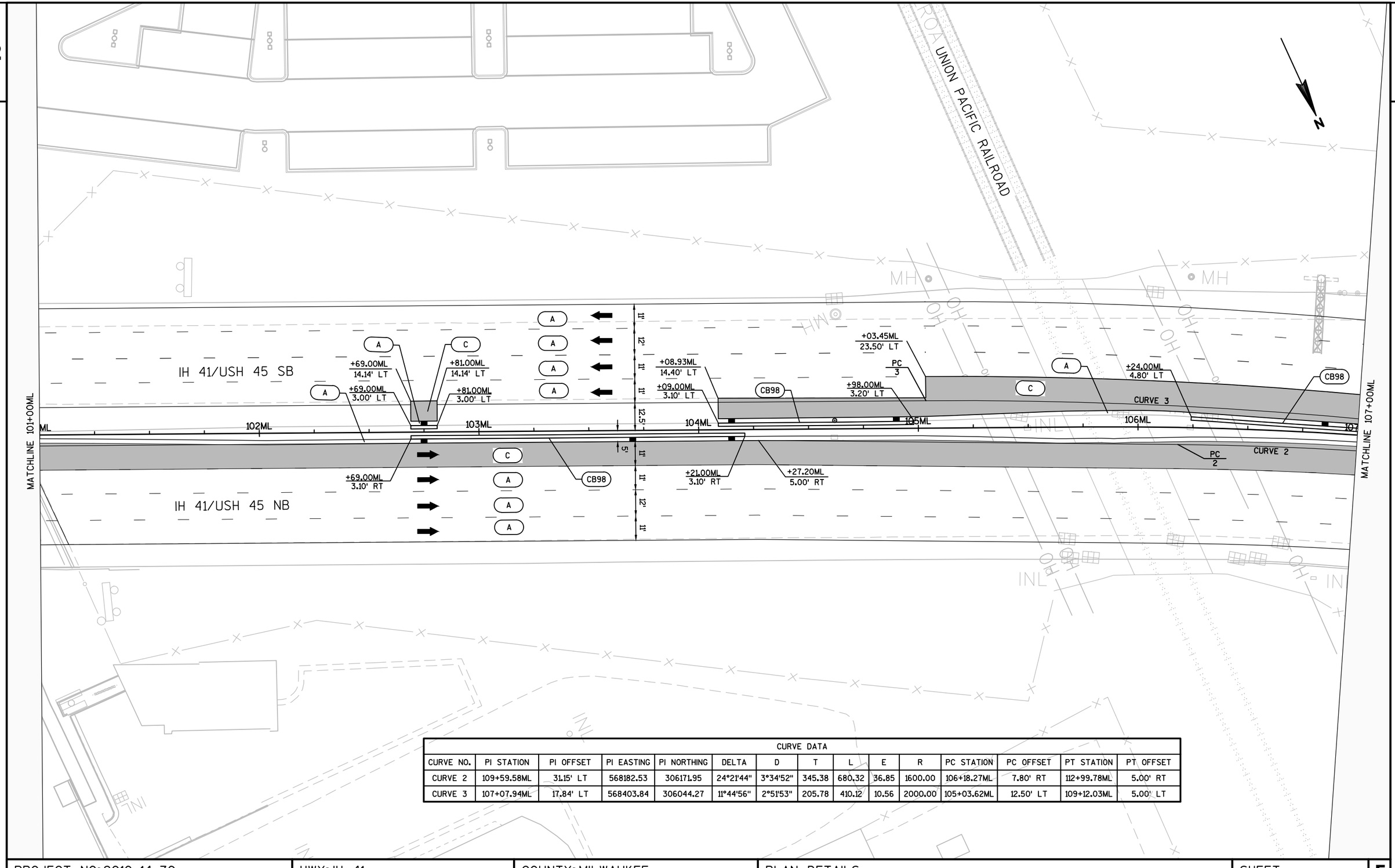
+97.16ML
16.00' RT

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 57	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 05

PLOT DATE : 10/20/2017 3:53 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:40 FT

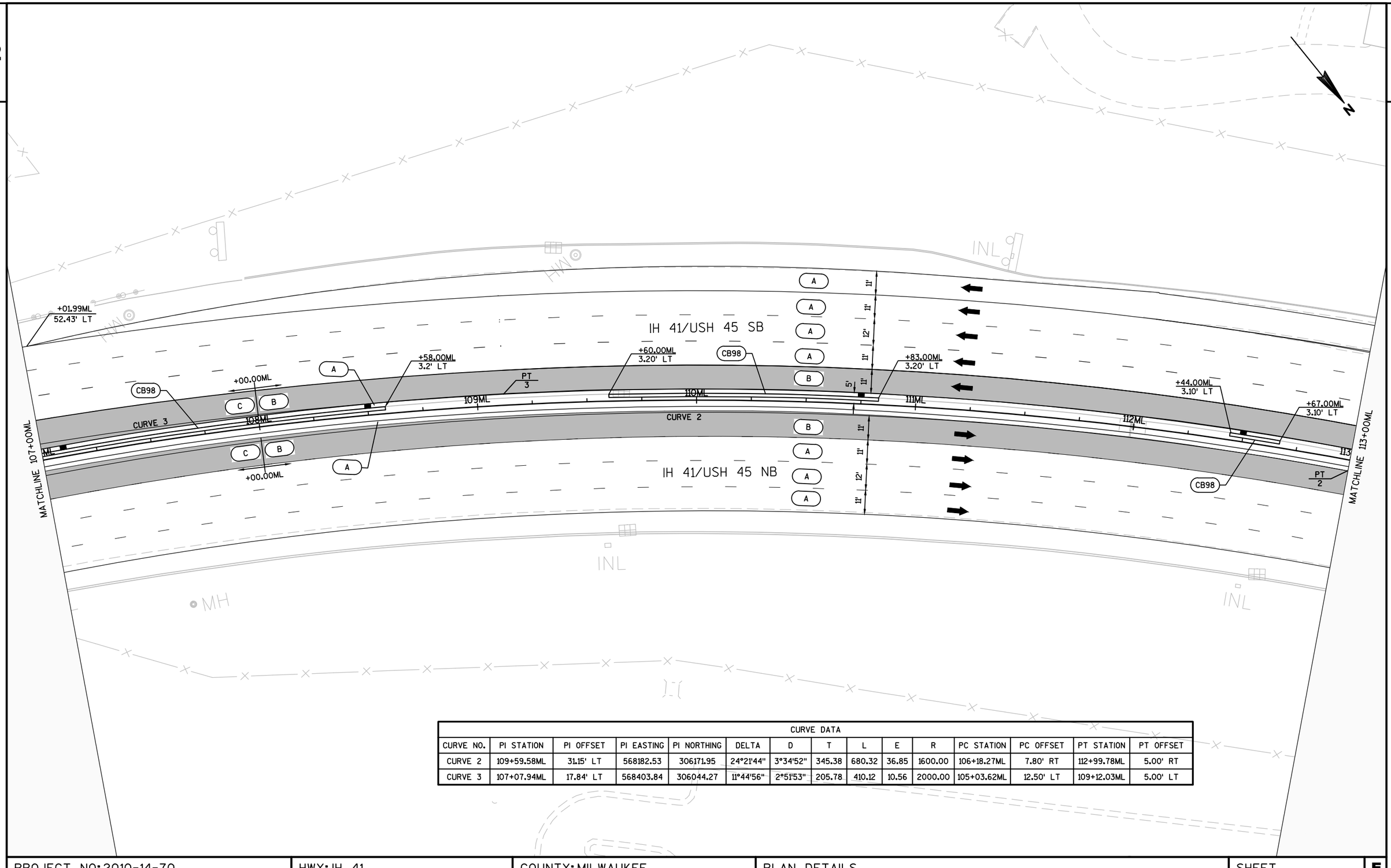
2



CURVE DATA

CURVE NO.	PI STATION	PI OFFSET	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC STATION	PC OFFSET	PT STATION	PT OFFSET
CURVE 2	109+59.58ML	31.15' LT	568182.53	306171.95	24°21'44"	3°34'52"	345.38	680.32	36.85	1600.00	106+18.27ML	7.80' RT	112+99.78ML	5.00' RT
CURVE 3	107+07.94ML	17.84' LT	568403.84	306044.27	11°44'56"	2°51'53"	205.78	410.12	10.56	2000.00	105+03.62ML	12.50' LT	109+12.03ML	5.00' LT

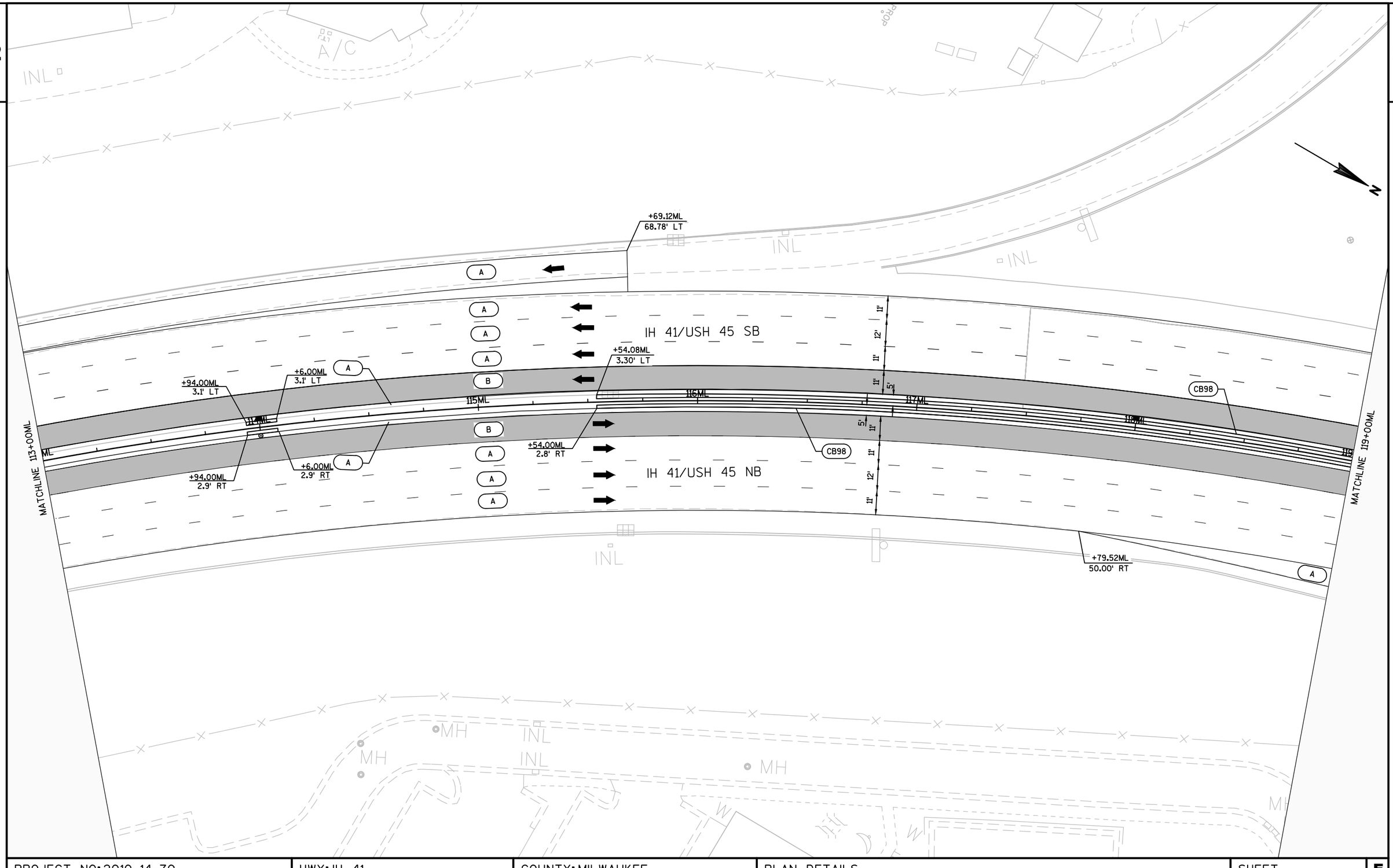
2



CURVE DATA														
CURVE NO.	PI STATION	PI OFFSET	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC STATION	PC OFFSET	PT STATION	PT OFFSET
CURVE 2	109+59.58ML	31.15' LT	568182.53	306171.95	24°21'44"	3°34'52"	345.38	680.32	36.85	1600.00	106+18.27ML	7.80' RT	112+99.78ML	5.00' RT
CURVE 3	107+07.94ML	17.84' LT	568403.84	306044.27	11°44'56"	2°51'53"	205.78	410.12	10.56	2000.00	105+03.62ML	12.50' LT	109+12.03ML	5.00' LT

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 59	E

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 60	E

2

IH 41/USH 45 SB

IH 41/USH 45 NB

MATCHLINE 119+00ML

MATCHLINE 125+00ML

CB98

120ML

121ML

122ML

123ML

124ML

125

+81.00ML
3.00' LT

+80.98ML
3.24' RT

+30.20ML
62.00' RT

+46.35ML
16.00' LT

+33.97ML
16.00' RT

+42.09ML
16.00' LT

+34.31ML
16.00' RT

11'
12'
11'
5'
11'
5'
11'
12'
11'
12'

A
A
A
B
B
A
A
A
A

MH
MH
MH
MH

SIGN
SIGN

B-40-138
(EXISTING)

B-40-139
(EXISTING)

110NO
110NO
112NO
113NO

W. NORTH AVENUE

N

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 61	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 09

PLOT DATE : 10/20/2017 3:54 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

TH ST

N. 113TH STREET

MH

MH

MH

MH

MH

MH

MH

SIGN

24"
SS

+58.66ML
62.00' LT

+29.41ML
50.00' LT

IH 41/USH 45 SB

IH 41/USH 45 NB

CB98

+94.00ML
3.1' LT

+00.00ML

+46.00ML
3.00' LT

+37.00ML
3.20' RT

+31.00ML
3.10' RT

+34.00ML
3.10' RT

+20.23ML
92.88' RT

MATCHLINE 125+00ML

MATCHLINE 131+00ML

126ML

127ML

128ML

130ML

12'
11'
12'
11'
5'

11'
5'
11'
12'
11'

WETLAND BOUNDARY

INL

INL

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 62	E

2

N. 113TH STREET

W. MEINECKE AVENUE

MH

N

+70.75ML
84.08' LT

+62.28ML
62.00' LT

A

IH 41/USH 45 SB

+74.00ML
3.0' LT

+86.00ML
3.1' LT

+21.00ML
3.3' LT

CB98

+44.00ML
3.8' LT

+56.00ML
3.8' LT

+94.00ML
3.2' LT

+6.00ML
3.2' LT

+94.00ML
3.3' LT

+00.00ML

C

B

CB98

+6.00ML
3.3' LT

12'
11'
12'
11'
5'

MATCHLINE 131+00ML

132ML

133ML

135ML

136ML

137

CB98

+9.00ML
3.2' LT

+55.00ML
3.3' RT

+90.00ML
3.8' RT

+6.00ML
3.3' RT

11'
5'
11'
12'
11'

+00.00ML

+94.00ML
3.1' RT

+6.00ML
3.1' RT

MATCHLINE 137+00ML

IH 41/USH 45 NB

MH

MH

MH

MH

12'

+56.04ML
62.17' RT

N. 112TH STREET

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 63	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 11

PLOT DATE : 10/20/2017 3:54 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N. 113TH STREET

INL

MH

N

W

+01.04ML
62.00' LT

+21.16ML
50.00' LT

IH 41/USH 45 SB

+94.00ML
3.20' LT

+6.00ML
3.20' LT

12'
11'
12'
11'
5'

A
A
A
A
B

MATCHLINE 137+00ML

137ML
138ML
139ML
140ML
141ML
142ML
143

MATCHLINE 143+00ML

+41.00ML
3.00' RT

CB98

+6.00ML
3.00' RT

5'
11'
11'
12'
11'
12'

B
A
A
A
A
A

IH 41/USH 45 NB

CC

S-40-871

N. 112TH STREET

MH

INL

INL

MH

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 64	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 12

PLOT DATE : 10/20/2017 3:54 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

MH

N. 113TH STREET

MH

MATCHLINE 143+00ML

MATCHLINE 149+00ML

IH 41/USH 45 SB

IH 41/USH 45 NB

+6.00ML
3.20' LT

+94.00ML
3.20' LT

+00.00ML

+44.00ML
3.10' LT

CB98

+56.00ML
3.10' LT

+4.00ML
3.20' LT

+08.15ML
5.00' LT

144ML

145ML

146ML

147ML

148ML

11'

12'

11'

11'

5'

+21.18ML
5.00' RT

+94.00ML
3.20' RT

CB98

+6.00ML
3.20' RT

5'

11'

12'

11'

+00.00ML

+44.00ML
3.20' RT

+56.00ML
3.20' RT

+16.00ML
3.2' LT

+16.00ML
3.30' RT

+19.73ML
13.70' RT

+4.00ML
3.30' RT

+17.49ML
45.92' RT

+20.58ML
62.00' RT

+17.12ML
64.92' RT

CB02

SLOPE INTERCEPT

MH

N. 112TH STREET

MH

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 65	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 13

PLOT DATE : 10/20/2017 3:54 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N. 113TH STREET

W. CENTER STREET

OMH

OH

W

IH 41/USH 45 SB

IH 41/USH 45 NB

MATCHLINE 149+00ML

MATCHLINE 155+00ML

+94.37ML
8.00' LT

+50.00ML
3.50' LT

+65.80ML
16.00' RT

+55.00ML
3.4' RT

+54.99ML
16.00' RT

+31.00ML
3.4' RT

+31.01ML
16.00' RT

150ML

151ML

152ML

153ML

154ML

155ML

11'

12'

11'

8'

16'

A

C

CB01

CB98

D

CB02

S-40-873

SLOPE INTERCEPT

N. 112TH STREET

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 66	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 14

PLOT DATE : 10/20/2017 3:55 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

WETLAND BOUNDARY

+50.13ML
53.00' LT

IH 41/USH 45 SB

IH 41/USH 45 NB

MATCHLINE 155+00ML

MATCHLINE 161+00ML

155ML

156ML

157ML

158ML

159ML

160ML

161ML

11'
12'
11'
11'
8'

16'
11'
11'
12'
11'
8'

A
A
A
C

A
A
A
D

D

CB01

CB02

+64.29ML
53.00' LT

+62.28ML
42.00' LT

+59.78ML
30.00' LT

+59.78ML
19.00' LT

+59.78ML
8.00' LT

+26.09ML
16.00' RT

+18.50ML
27.00' RT

+12.08ML
38.00' RT

+06.43ML
50.00' RT

+06.42ML
61.00' RT

SLOPE INTERCEPT

WETLAND BOUNDARY

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 67	E

2

MATCHLINE 161+00ML

MATCHLINE 167+00ML

+31.76ML
56.19' LT

11'

A

A

A

IH 41/USH 45 SB

CB01

+33.50ML

C

B

+81.00ML
3.2' LT

+73.00ML
3.40' LT

ML

162ML

163ML

164ML

165ML

166ML

167

18'

CB98

+54.16ML
18.00' RT

+97.70ML
30.00' RT

+34.34ML
42.00' RT

IH 41/USH 45 NB

12'

12'

12'

12'

8'

A

A

A

A

+38.55ML
53.50' RT

D

+66.56ML
54.00' RT

SLOPE INTERCEPT

D

CB02

8'

+38.32ML
73.26' RT

+66.56ML
66.00' RT

+66.56ML
74.00' RT

CB32

S-40-872

+42.67ML
76.00' RT

+84.51ML
66.00' RT

WETLAND BOUNDARY

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 68	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 16

PLOT DATE : 10/20/2017 3:55 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

WETLAND BOUNDARY

N

INL

+64.36ML
54.00' LT

A

+64.36ML
42.00' LT

+64.36ML
30.00' LT

+64.36ML
18.00' LT

+64.36ML
5.00' LT

+40.00ML
53.30' LT

12'
12'
12'
18'

IH 41/USH 45 SB

CB98

+56.00ML
3.3' LT

B

168ML
169ML
170ML
171ML
172ML
173ML

MATCHLINE 167+00ML

18'
12'
12'
12'

IH 41/USH 45 NB

+64.36ML
18.00' RT

+64.36ML
54.00' RT

WETLAND BOUNDARY

WETLAND BOUNDARY

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 69	E

2

2

N

N 114TH ST

N 113TH ST

W. NORTH AVENUE

CG16
CG06
CM07

CM07
CG22
CG01
CG16
CG06
CM07

E

105NO
106NO
107NO
108NO
109NO
110NO

24" SQ

FIELD TOPO NEEDED

S-40-969

SB IH41/STH45 ONRAMP

WETLAND BOUNDARY

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 70	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 20

PLOT DATE : 10/20/2017 3:55 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

W. NORTH AVENUE

E

E

E

E

110N0

111N0

112N0

113N0

114N0

115N0

116N0

12SWL

12AWL

12BWL

12CWL

24"
SQ

PILE

MH

INL

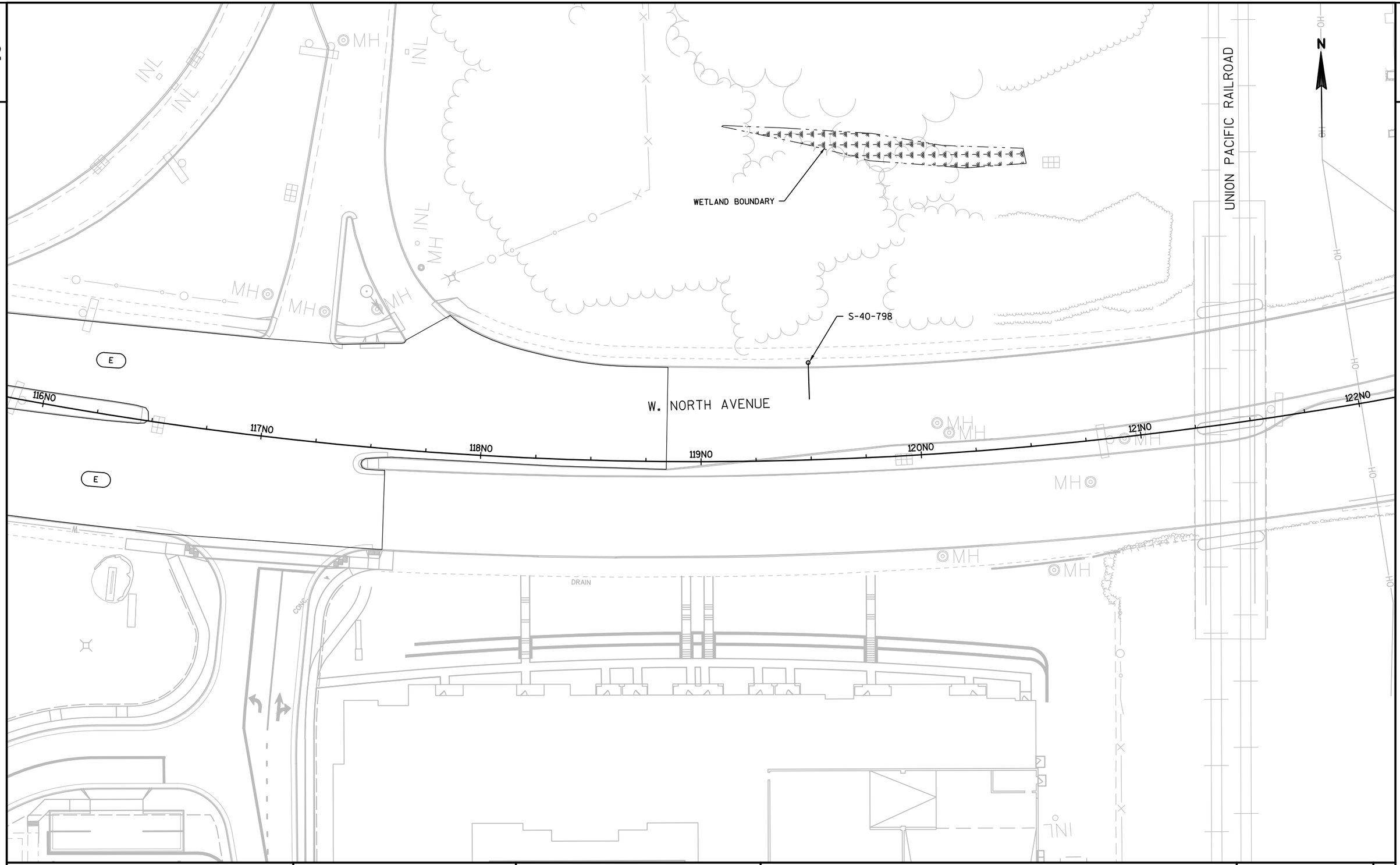
W

WALLS

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 71	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 21

PLOT DATE : 10/20/2017 3:55 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:40 FT



2

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS	SHEET 72	E

2

LEGEND	EXISTING	PROPOSED
FTMS CONVENTIONAL SYMBOLS		
JUNCTION BOX		
CCTV CAMERA AND POLE		
FTMS FIELD CABINET AND BASE		
POLE MOUNTED CABINET		
METER BREAKER PEDESTAL		
STEEL PULL BOX		
FTMS (ITS) CONDUIT		
BREAKER DISCONNECT BOX		
COMMUNICATIONS VAULT, TYPE 1		
VEHICLE DETECTION ZONE		

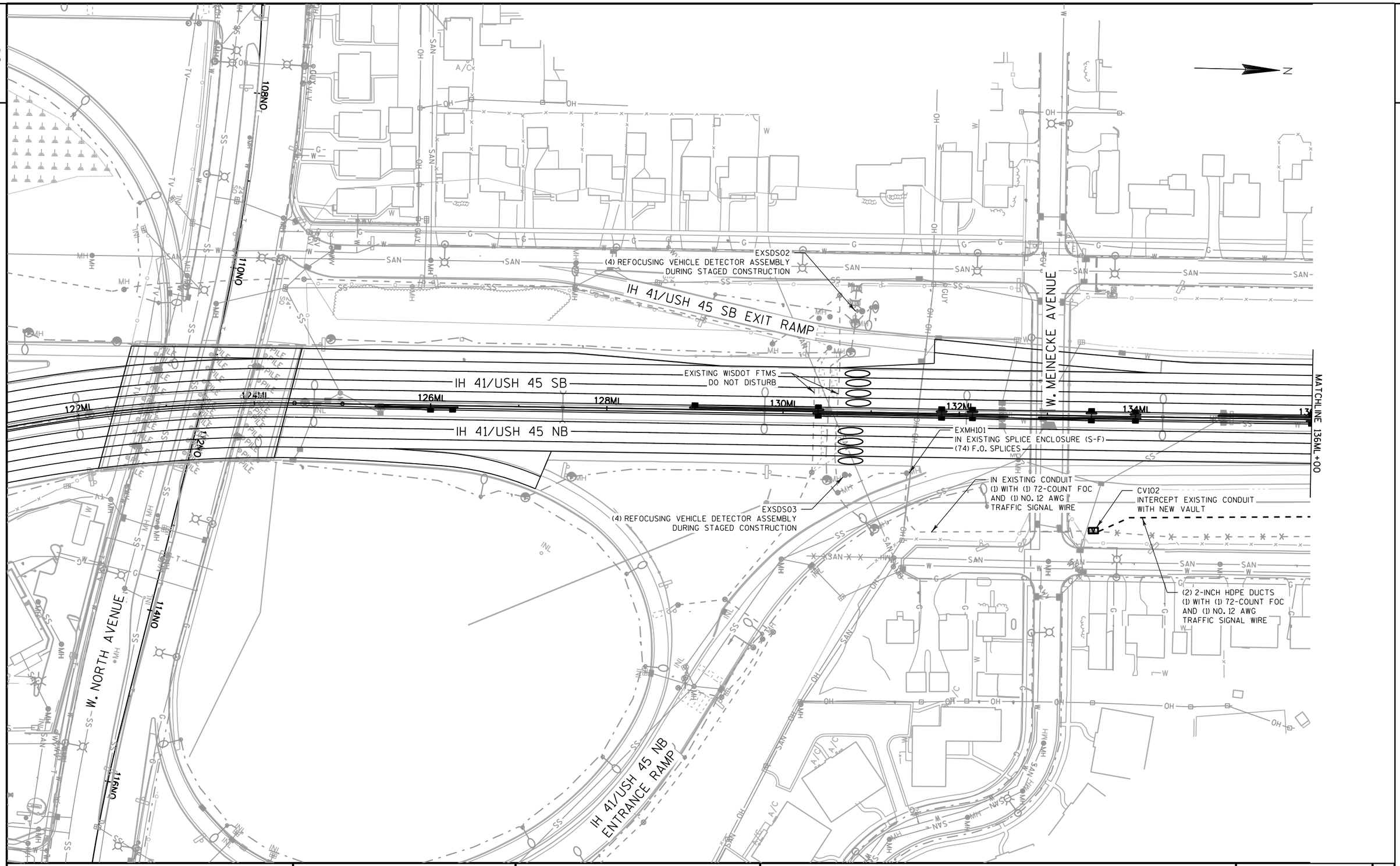
FTMS STANDARD ABBREVIATIONS

CB	CONTROLLER CABINET
CCTV	CLOSED CIRCUIT TELEVISION SITE
CV	COMMUNICATIONS VAULT
PB	PULL BOX
EX	EXISTING
S-F	STATE FURNISHED
MH	MANHOLE
DMS	DYNAMIC MESSAGE SIGN
RM	RAMP METER
LDLIC	LOOP DETECTOR LEAD IN CABLE
FOC	FIBER OPTIC CABLE
MD	MICROWAVE DETECTOR
CV	COMMUNICATIONS VAULT

FTMS GENERAL NOTES

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

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	FTMS DESIGN SHEETS	SHEET 74	E

2

N

W. CLARK STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

MATCHLINE 136ML +00

MATCHLINE 149ML +55

136ML

138ML

140ML

142ML

144ML

146ML

148ML

CV201

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC AND (1) NO. 12 AWG
TRAFFIC SIGNAL WIRE

(2) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC AND (1) NO. 12 AWG
TRAFFIC SIGNAL WIRE

W. CLARK STREET

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	FTMS DESIGN SHEETS	SHEET 75	E

2

2

W. CENTER STREET

MATCHLINE 149ML+55

EXCV301
INSTALL CONDUIT
INTO EXISTING ITEM

IN EXISTING CONDUIT
(1) WITH (1) 72-COUNT
FOC

152ML

EXCCTV-40-0040
(4) REFOCUSING VEHICLE DETECTOR ASSEMBLY
DURING STAGED CONSTRUCTION

IN EXISTING CONDUIT
(1) WITH (1) 72-COUNT FOC

IH 41/USH 45 SB

156ML

IH 41/USH 45 NB

158ML

160ML

162ML

MATCHLINE 164ML+00

EXPB301

IN EXISTING CONDUIT
(1) WITH (1) 6-COUNT FOC

EXCV303

IN EXISTING CONDUIT
(1) WITH (1) 72-COUNT FOC

(3) 2-INCH HDPE DUCTS
(1) WITH (1) 72-COUNT FOC
AND (1) NO. 12 AWG
TRAFFIC SIGNAL WIRE

EXCV302
(15) FO SPLICES
(1) FO SPLICE ENCLOSURE (S-F)

BLEACHERS

TENNIS COURT

TENNIS COURT

TENNIS COURT

ATHLETIC FIELD

BLEACHERS

BLEACHERS

BLEACHERS

N

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	FTMS DESIGN SHEETS	SHEET 76	E

2

2

IH 41/USH 45 SB ENTRANCE RAMP

IH 41/USH 45 SB

IH 41/USH 45 NB

IH 41/USH 45 NB EXIT RAMP

ATHLETIC FIELD

MATCHLINE 164ML+00

166ML

168ML

170ML

172ML

174ML

176ML

178ML

EXSDS01
(4) REFOCUSING VEHICLE DETECTOR ASSEMBLY
DURING STAGED CONSTRUCTION

IN EXISTING CONDUIT
(1) WITH (1) 72-COUNT FOC

EXISTING 72-COUNT FOC

EXMH401
IN EXISTING SPLICE ENCLOSURE
(74) F.O. SPLICES

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	FTMS DESIGN SHEETS	SHEET 77	E

FILE NAME : \\minw00\pmwork\Jobs\58432\techprod\Cadd\Final\20101470\cds\40_fm_20101470.dgn PLOT DATE : 10/13/2017 1:07:59 PM PLOT BY : mdonnelly PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

LEGEND

EROSION MAT URBAN CLASS I TYPE B
WITH SEEDING MIXTURE
NO. 20 FERTILIZER TYPE A

A INLET PROTECTION TYPE A

C INLET PROTECTION TYPE C

D INLET PROTECTION TYPE D

TEMPORARY DITCH CHECK

SILT FENCE

SURFACE WATER FLOW

SLOPE INTERCEPT

NOTES

DO NOT STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE THE SLOPE INTERCEPTS.

USE ROCK BAGS FOR INLET PROTECTION AROUND DRAINAGE STRUCTURE OPENINGS PRIOR TO CASTINGS BEING PLACED

2

2

MATCHLINE 59+00ML

IH 41/USH 45 SB

60ML 62ML 64ML 66ML 68ML 70ML 72ML 74ML

IH 41/USH 45 NB

N. SWAN BOULEVARD

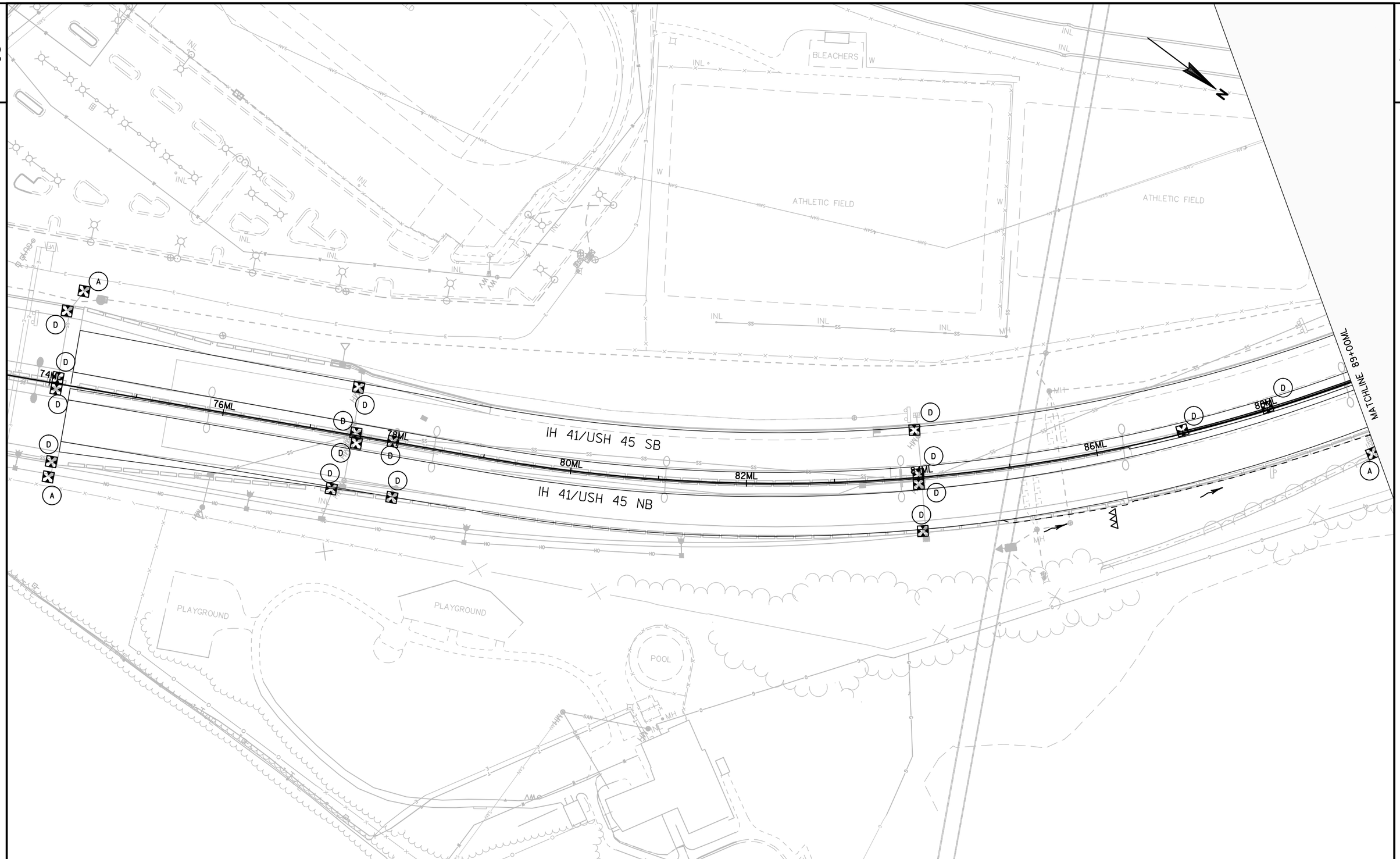
D D D D A

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 79	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 03

PLOT DATE : 10/20/2017 3:58 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 80	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 04

PLOT DATE : 10/20/2017 3:58 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

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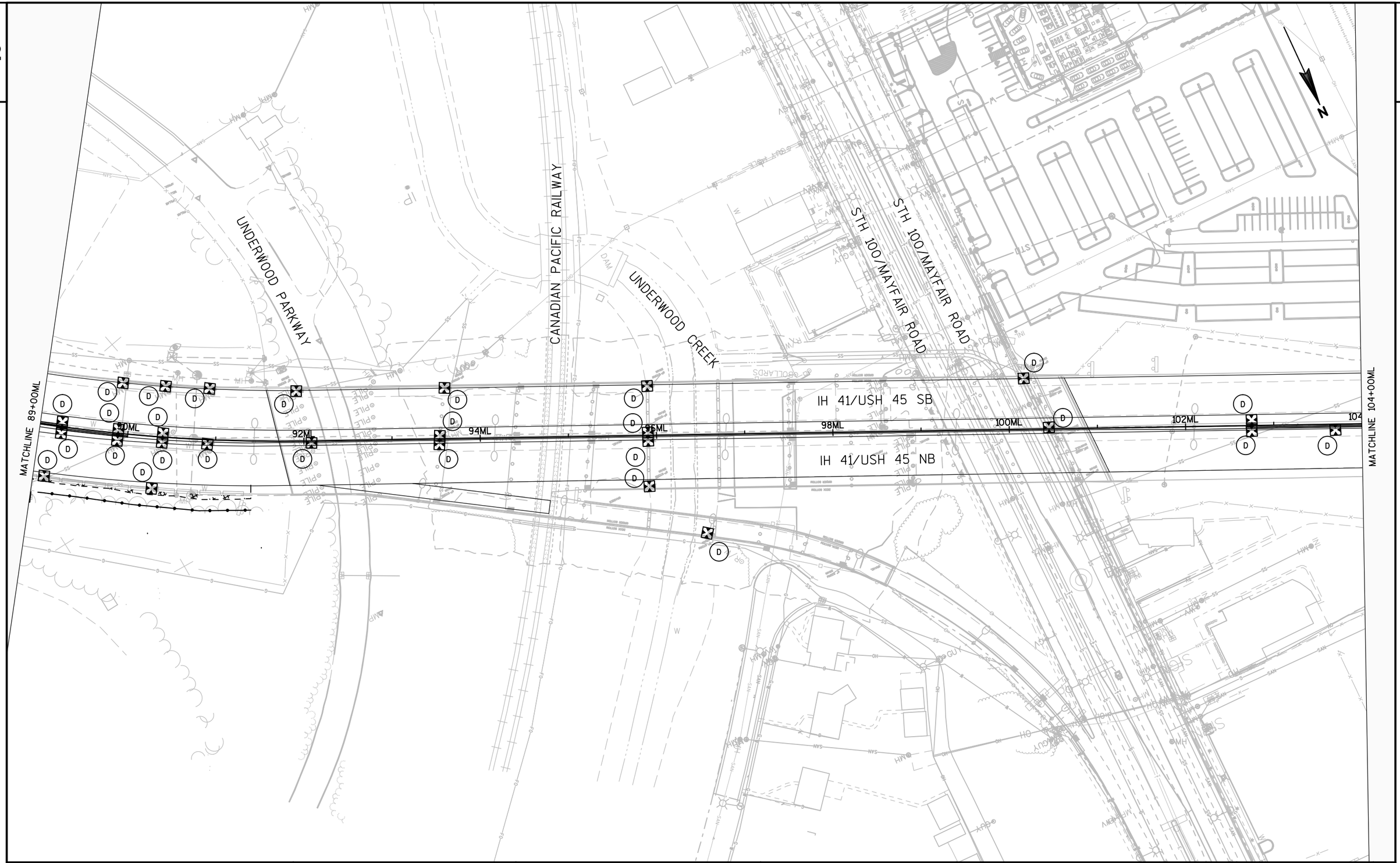


PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 81	E

2

2

IH 41/USH 45 SB

IH 41/USH 45 NB

UNION PACIFIC RAILROAD

MATCHLINE 104+00ML

MATCHLINE 119+00ML

108ML

110ML

112ML

114ML

116ML

PARKING

PROP

N

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 82	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 06

PLOT DATE : 10/20/2017 3:58 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

W. NORTH AVENUE

W. MEINECKE AVENUE

N. 113TH STREET

N. 112TH STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

108NO

110NO

112NO

114NO

116NO

120ML

122ML

124ML

126ML

128ML

130ML

132ML

WETLAND BOUNDARY

WETLAND BOUNDARY

WETLAND BOUNDARY

MATCHLINE 119+00ML

MATCHLINE 134+00ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 83	E

2

2

N. 113TH STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

N. 112TH STREET

MATCHLINE 134+00ML

MATCHLINE 149+00ML

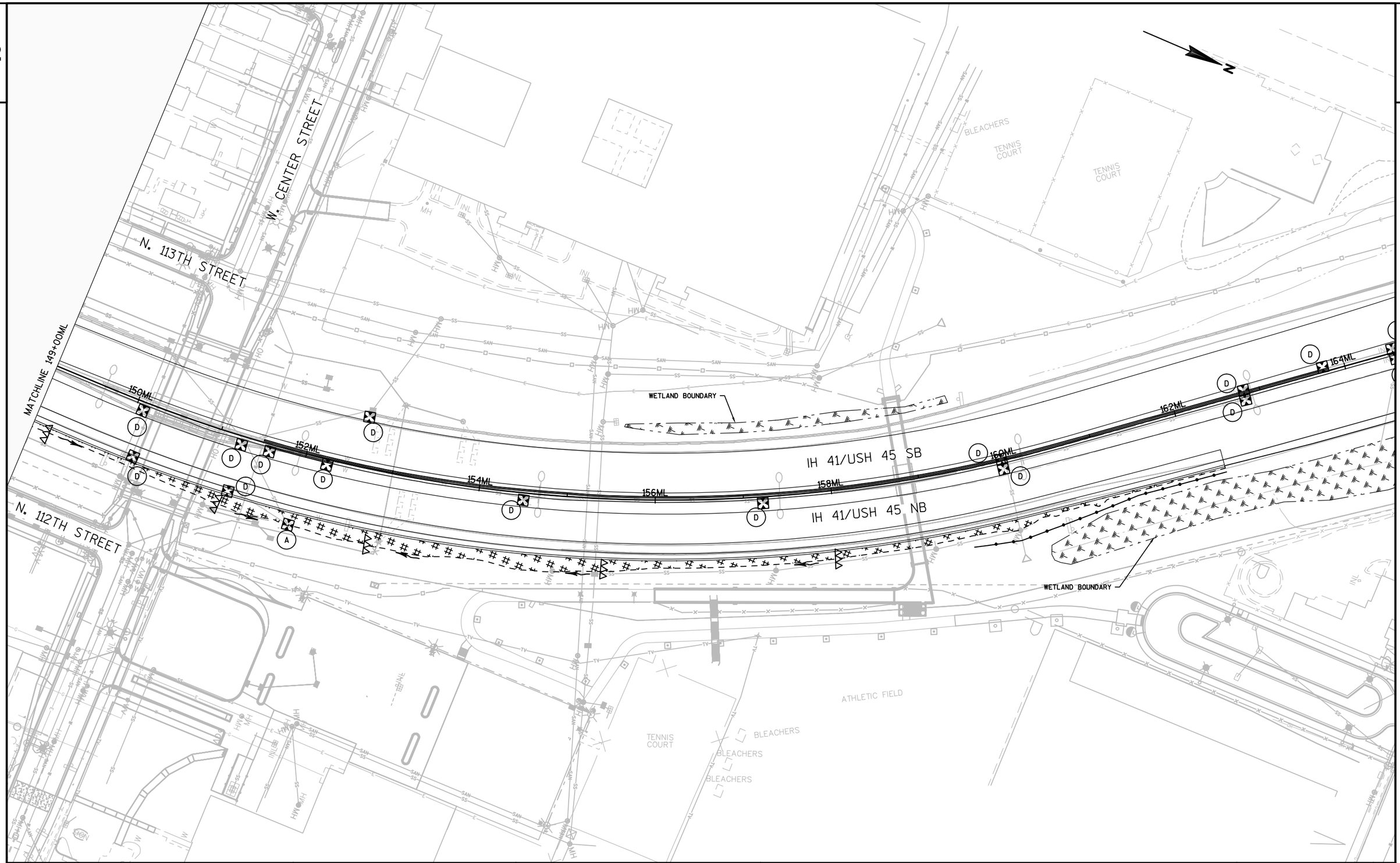
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 84	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 08

PLOT DATE : 10/20/2017 3:58 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 85	E

2

2

N

WETLAND BOUNDARY

ATHLETIC FIELD

GUY

IH 41/USH 45 SB

IH 41/USH 45 NB

164ML

166ML

168ML

170ML

172ML

174ML

176ML

178ML

WETLAND BOUNDARY

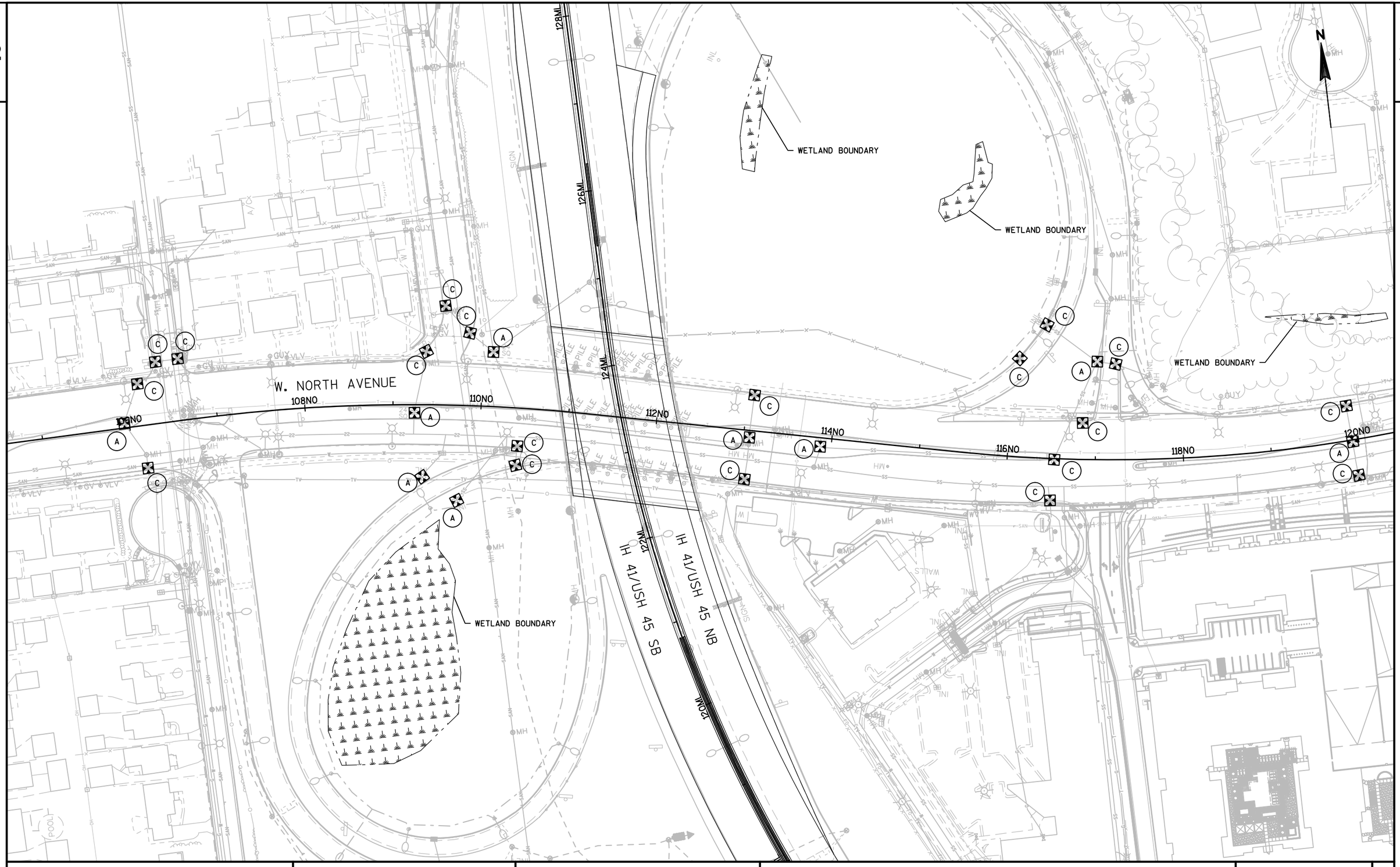
WETLAND BOUNDARY

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 86	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 10

PLOT DATE : 10/20/2017 3:59 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EROSION CONTROL	SHEET 87	E

GENERAL DRAINAGE NOTES

LOCATION OF STRUCTURES IN CURB AND GUTTER OR BARRIER SECTION REFER TO CURB AND GUTTER OR BARRIER FLOW LINE. LOCATION OF STRUCTURES NOT IN CURB AND GUTTER SECTION REFER TO CENTER OF STRUCTURE OR AS NOTED ON PLAN.

RIM ELEVATIONS ARE GIVEN AT FLOW LINE OF INLET OR AT CENTER OF MANHOLE. SEE STRUCTURE LOCATION DETAIL.

USE MONOLITHIC CONCRETE SHIMMING AS SHOWN ON PLANS FOR FINAL ADJUSTMENT OF DRAINAGE STRUCTURES LOCATED WITHIN THE FREEWAY CONCRETE PAVEMENT, CONCRETE SHOULDERS, CONCRETE CURB & GUTTER AND CONCRETE BARRIER WALL. IF THE ADJUSTMENT IS LESS THAN 4-INCHES, THE ENGINEER MAY CHOOSE TO DIRECT THE CONTRACTOR TO USE GRADE RINGS FOR ADJUSTMENTS FOR STORM SEWER STRUCTURES OUTSIDE THE FREEWAY CONCRETE PAVEMENT AND AT OTHER NON-FREEWAY LOCATIONS.

PLAN LENGTH REPRESENTS LENGTH OF PIPE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE AND IS USED FOR ESTIMATING. PIPE LENGTH REPRESENTS LENGTH OF PIPE MEASURED FROM INSIDE FACE OF STRUCTURE TO INSIDE FACE OF STRUCTURE AND IS USED TO COMPUTE PIPE SLOPE.

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

UTILITY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE. LOCATIONS SHOWN ARE TAKEN FROM EXISTING RECORDS AND BEST INFORMATION AVAILABLE FROM EXISTING PLANS. IT IS EXPECTED THAT THERE MAY BE DISCREPANCIES AND OMISSIONS IN THE LOCATION OF UTILITIES AND STRUCTURES SHOWN. VERIFY ALL LOCATIONS IN THE FIELD.

COORDINATE WITH DIGGERS HOTLINE TO FIELD LOCATE UTILITIES. SHEETING SHALL NOT GO THROUGH UTILITIES. ANY UTILITIES DAMAGED DUE TO CONTRACTOR ACTIVITIES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE COMPLETE SATISFACTION OF THE UTILITY FACILITY.

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

PROVIDE TEMPORARY POSITIVE DRAINAGE THROUGHOUT THE PROJECT DURING ALL PROJECT STAGES. PROVIDING TEMPORARY POSITIVE DRAINAGE IS INCIDENTAL TO CONSTRUCTION.

SUPPORTING UTILITIES DURING STORM SEWER CONSTRUCTION IS INCIDENTAL TO STORM SEWER PIPE AND/OR STORM SEWER STRUCTURE.

CONSTRUCTION AND REMOVAL OF TEMPORARY BULKHEAD IS CONSIDERED INCIDENTAL TO COST OF STORM SEWER PIPE OR STORM SEWER STRUCTURE WHEN A PIPE OR STRUCTURE IS CONSTRUCTED OR REMOVED IN MULTIPLE STAGES.

STORM SEWER LEGEND

EXISTING
(***) EXISTING DRAINAGE STRUCTURE

(***) PROPOSED DRAINAGE STRUCTURE

● PROPOSED MANHOLE

■ PROPOSED INLET / PROPOSED CATCH BASIN

P*** PROPOSED STORM SEWER PIPE

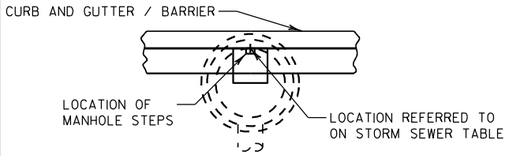
——SS—— EXISTING STORM SEWER PIPE PLAN VIEW

——◄—— PROPOSED STORM SEWER PIPE PLAN VIEW

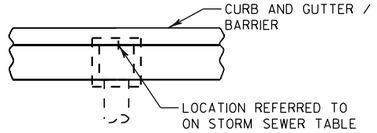
2

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STORM SEWER - CONSTRUCTION DETAILS	SHEET	E

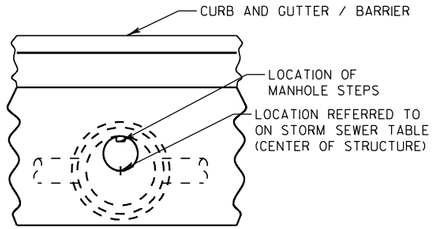
FILE NAME : W:\PDS\C3D\10603316\70\SheetsPlan\022400_ss.dgn PLOT DATE : 20-OCT-2017 15:32 PLOT BY : MSCD1S PLOT NAME : 022400_ss PLOT SCALE : 2:1
WISDOT/CADDS SHEET 42



MANHOLE WITH INLET COVER
IN CURB AND GUTTER / AT BARRIER



INLET IN CURB AND
GUTTER / AT BARRIER



MANHOLE NOT IN CURB AND
GUTTER / NOT AT BARRIER

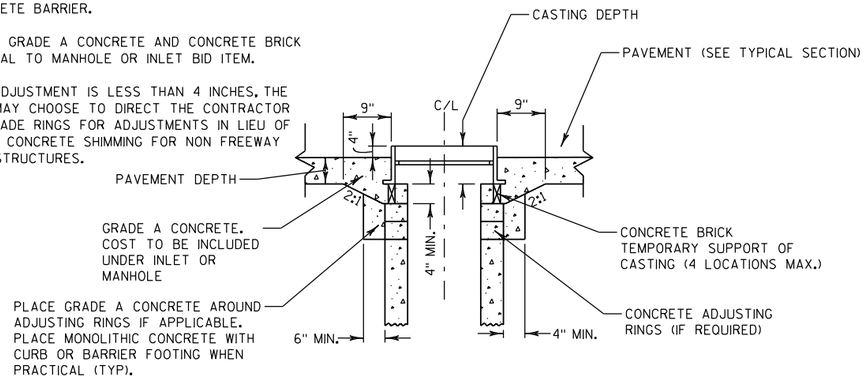
NOTE
1) LOCATION OF STRUCTURE MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
2) LOCATION AND SIZE OF STRUCTURE COVER OPENING DEPENDS ON TYPE OF CASTING. CASTING TYPES ARE SHOWN ON THE STORM SEWER TABLE.

STRUCTURE LOCATION DETAIL

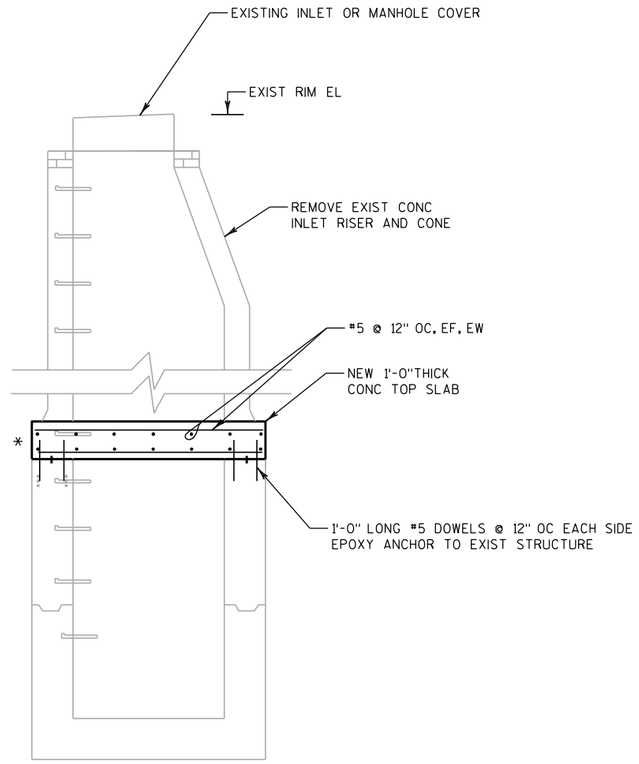
NOTE
1) MONOLITHIC CONCRETE SHIMMING TO BE PROVIDED FOR ALL PROPOSED COVERS LOCATED IN FREEWAY CONCRETE PAVEMENT, CONCRETE CURB & GUTTER, AND CONCRETE BARRIER.

2) COST OF GRADE A CONCRETE AND CONCRETE BRICK IS INCIDENTAL TO MANHOLE OR INLET BID ITEM.

3) IF THE ADJUSTMENT IS LESS THAN 4 INCHES, THE ENGINEER MAY CHOOSE TO DIRECT THE CONTRACTOR TO USE GRADE RINGS FOR ADJUSTMENTS IN LIEU OF MONOLITHIC CONCRETE SHIMMING FOR NON FREEWAY DRAINAGE STRUCTURES.



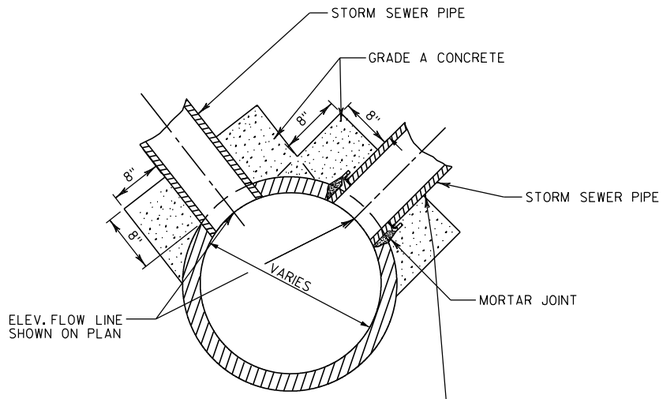
MONOLITHIC CONCRETE SHIMMING DETAIL



SECTION

*PLACE COVER 1-FT MIN. BELOW SUBGRADE

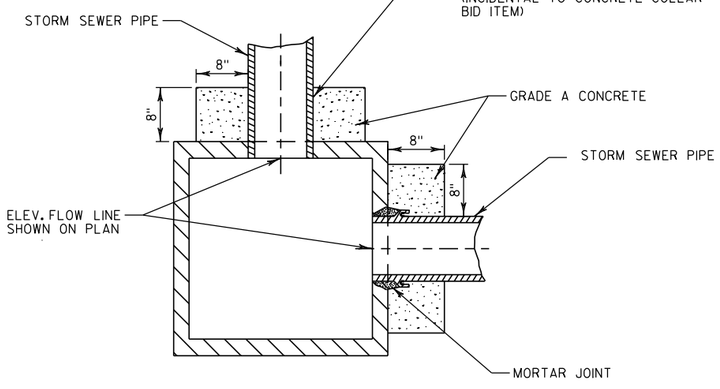
REMOVE AND CAP EXISTING DRAINAGE STRUCTURE



AT MANHOLE

INCIDENTAL TO NEW STRUCTURE AND NEW PIPE ITEMS

CLEAN PIPE AND STRUCTURE SURFACES AND APPLY BONDING AGENT PRIOR TO INSTALLING CONCRETE COLLAR (INCIDENTAL TO CONCRETE COLLAR BID ITEM)



AT STORM SEWER INLET

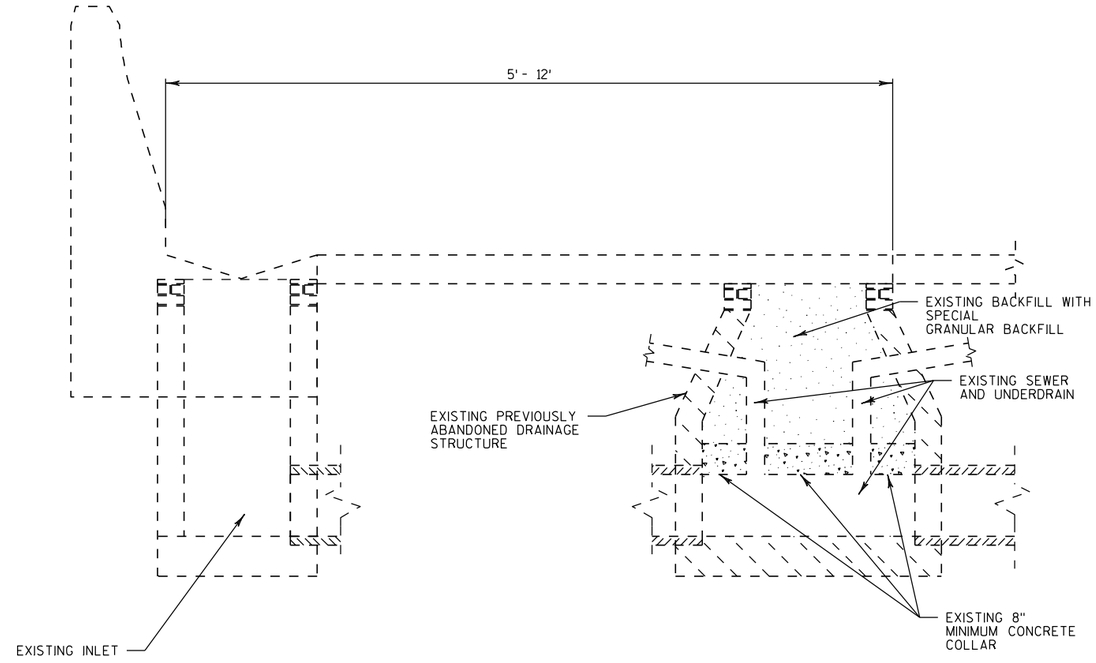
INCIDENTAL TO NEW STRUCTURE AND NEW PIPE ITEMS

NOTE

CONCRETE COLLAR TO BE PAID AS A BID ITEM WHEN CONNECTING AN EXISTING PIPE TO A NEW STRUCTURE.

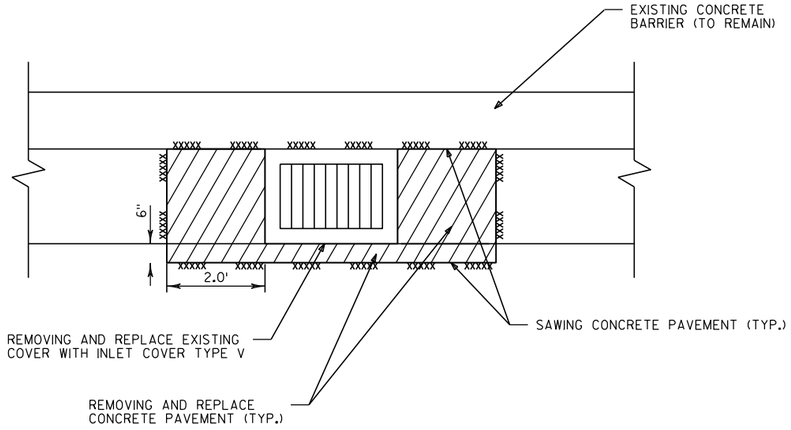
CONCRETE COLLAR DETAIL

FOR LOCATIONS SEE MISCELLANEOUS QUANTITIES SHEETS

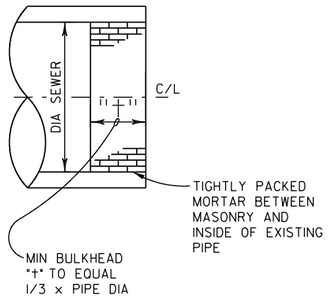


REMOVE EXISTING PREVIOUSLY ABANDONED DRAINAGE STRUCTURE

ITEM TO BE PAID FOR UNDER ITEMS "REMOVING INLETS" AND "REMOVING MANHOLES"
FOR LOCATIONS SEE MISCELLANEOUS QUANTITIES SHEETS

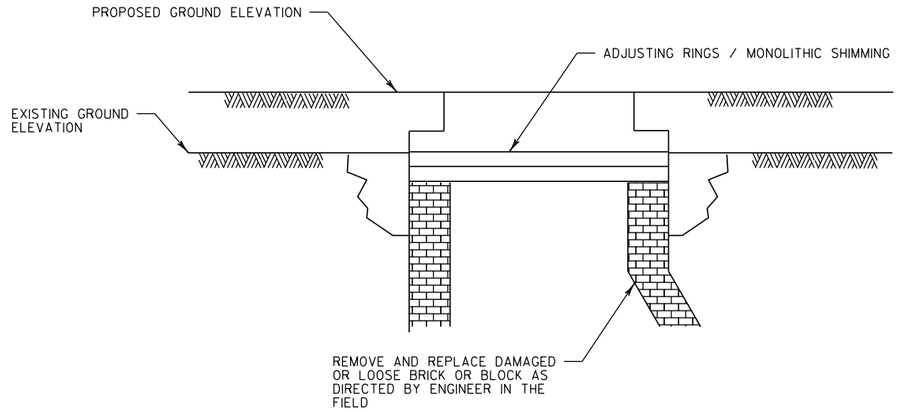


INLET COVER REPLACEMENT DETAIL



BULKHEAD PIPE MASONRY

ITEM TO BE PAID FOR UNDER ITEM "SEALING PIPES"

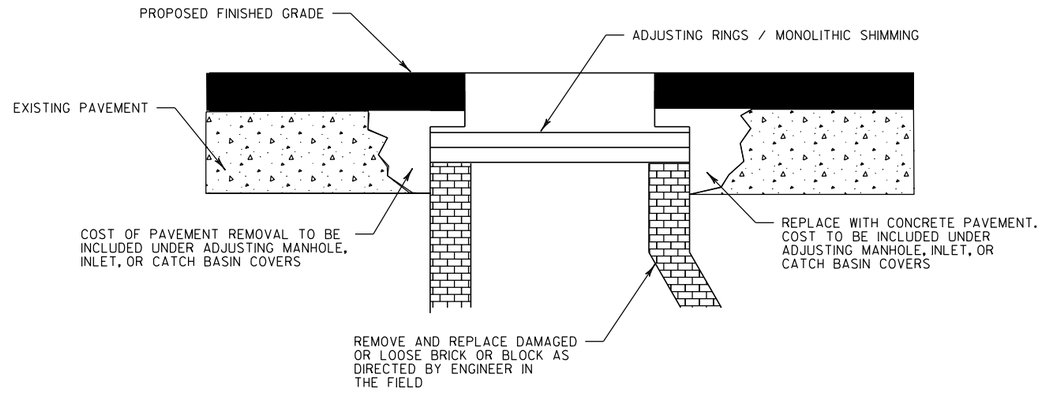


NON-PAVED LOCATION

NOTES

1. IF EXISTING PAVEMENT REMOVAL IS NOT SHOWN IN THE REMOVAL PLANS AND A SAWCUT IS REQUIRED THE SAWCUT IS CONSIDERED INCIDENTAL TO ADJUSTING MANHOLE OR INLET COVERS.

2. ADJUST CHIMNEY WITH PROPER SIZE CONCRETE ADJUSTING RINGS (SIZE OF OPENING OF CONCRETE ADJUSTING RING TO BE DETERMINED BY SIZE OF OPENING IN FRAME) OR MONOLITHIC CONCRETE SHIMMING AND REINSTALL EXISTING FRAME AND LID TO FINISHED GRADE. BACKFILL AND OTHER WORK TO BE DONE IN ACCORDANCE WITH ITEM ADJUSTING INLET COVERS.



PAVED LOCATION

ADJUSTING MANHOLE OR INLET COVERS

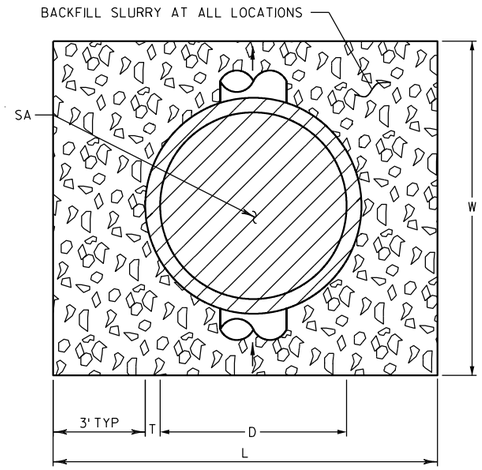
2

BACKFILL SLURRY STRUCTURES (FOR INFORMATION ONLY)

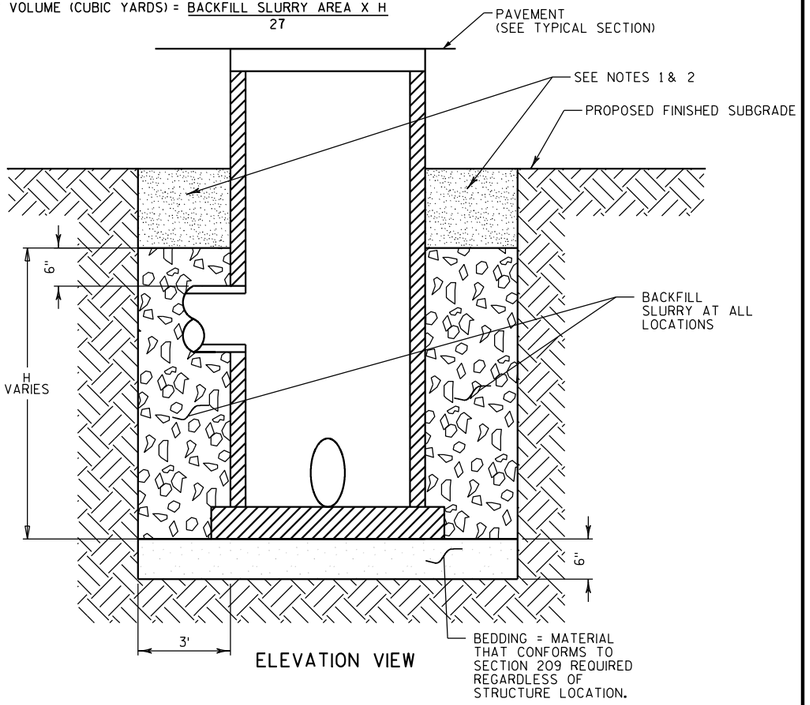
DESCRIPTION	DIAMETER / STR LENGTH D FT	RECTANGULAR STR WIDTH RW FT	WALL THICKNESS T INCH	STRUCTURE EXCAVATION LENGTH L FT	STRUCTURE EXCAVATION WIDTH W FT	STRUCTURE EXCAVATION AREA SF	STRUCTURE AREA SA SF	BACKFILL SLURRY AREA SF
INLETS 2x2.5-FT	2	2.5	5	8.83	9.33	82	9	73
INLETS 2x3-FT	2	3	5	8.83	9.83	87	11	76
INLETS MEDIAN 1 GRATE	2.5	2.5	8	9.83	9.83	97	15	82
INLETS MEDIAN 2 GRATE	2.5	5.33	8	9.83	12.66	125	26	99
INLETS 3-FT DIAMETER	3	---	4	9.67	9.67	93	11	83
MANHOLES 3-FT DIAMETER	3	---	4	9.67	9.67	93	11	83
INLETS 4-FT DIAMETER	4	---	5	10.83	10.83	117	18	99
MANHOLES 4-FT DIAMETER	4	---	5	10.83	10.83	117	18	99
MANHOLES 5-FT DIAMETER	5	---	6	12.00	12.00	144	28	116
MANHOLES 6-FT DIAMETER	6	---	7	13.17	13.17	173	40	133
MANHOLES 7-FT DIAMETER	7	---	8	14.33	14.33	205	55	151
MANHOLES 8-FT DIAMETER	8	---	9	15.50	15.50	240	71	169
MANHOLES 9-FT DIAMETER	9	---	10	16.67	16.67	278	89	188
MANHOLES 10-FT DIAMETER	10	---	11	17.83	17.83	318	110	208
SPV STRUCTURE SOUTHWEST CORE POND OUTLET STORM SEWER STRUCTURE	12	---	12	20.00	20.00	400	154	246
	10	---	11	17.83	17.83	318	110	208

H = UP TO 6" ABOVE THE TOP OF THE HIGHEST PIPE IN THE STRUCTURE

BACKFILL SLURRY VOLUME (CUBIC YARDS) = $\frac{\text{BACKFILL SLURRY AREA X H}}{27}$



PLAN VIEW



ELEVATION VIEW

NOTES

(1) IF THE STRUCTURE IS OUTSIDE THE TRAVELED WAY INCLUSIVE OF SHOULDERS AND AUXILIARY LANES, NATIVE BACKFILL MAY BE USED ABOVE BACKFILL SLURRY AND SHALL CONFORM TO SECTION 209.

(2) IF THE STRUCTURE IS WITHIN THE TRAVELED WAY INCLUSIVE OF SHOULDERS AND AUXILIARY LANES, BACKFILL ABOVE BACKFILL SLURRY SHALL CONFORM TO SECTION 209.

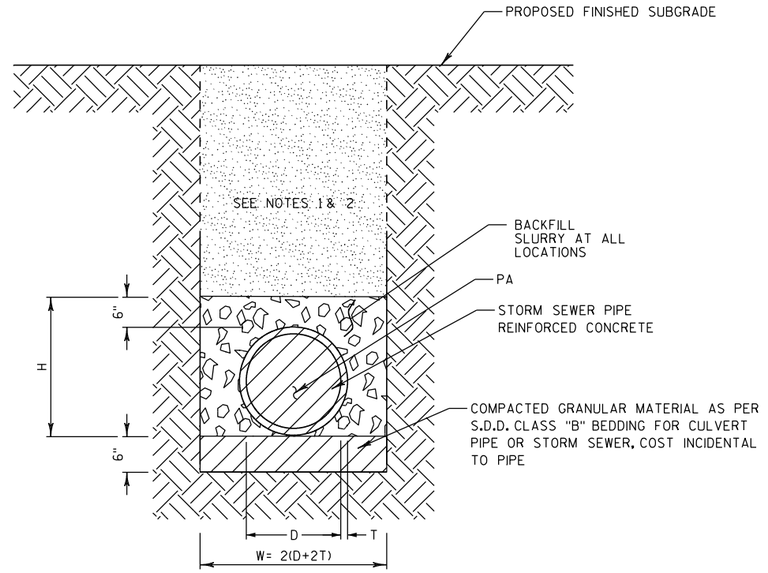
(3) WHEN TEMPORARY SUBGRADE IS HIGHER THAN PROPOSED FINISHED SUBGRADE, PROVIDE GRANULAR BACKFILL AT ALL LOCATIONS. COST FOR GRANULAR BACKFILL IS CONSIDERED INCIDENTAL TO CONSTRUCTION.

BACKFILL SLURRY DETAIL - STORM SEWER STRUCTURES

BACKFILL SLURRY TRENCHES (FOR INFORMATION ONLY)

PIPE DIAMETER D INCHES	Wall Thickness T Inches	Trench Width W FT	Height of Pipe Zone H (From pipe bottom to 6" above top of pipe) SF	Area of Pipe Zone SF	Area of Pipe PA SF	Backfill Slurry Area SF
12	2.00	2.67	1.83	4.89	1.40	3.49
15	2.25	3.25	2.13	6.91	2.07	4.83
18	2.50	3.83	2.42	9.26	2.89	6.38
24	3.00	5.00	3.00	15.00	4.91	10.09
30	3.50	6.17	3.58	22.10	7.47	14.63
36	4.00	7.33	4.17	30.56	10.56	20.00
42	4.50	8.50	4.75	40.38	14.19	26.19
48	5.00	9.67	5.33	51.56	18.35	33.21
54	6.25	11.08	6.04	66.96	24.12	42.84
60	6.75	12.25	6.63	81.16	29.46	51.69
66	7.25	13.42	7.21	96.71	35.34	61.37

BACKFILL SLURRY VOLUME (CUBIC YARDS) = $\frac{\text{(PIPE ZONE AREA - PIPE AREA) X PIPE PLAN LENGTH}}{27}$



NOTES

(1) IF THE PIPE IS OUTSIDE THE TRAVELED WAY INCLUSIVE OF SHOULDERS AND AUXILIARY LANES, NATIVE BACKFILL MAY BE USED ABOVE BACKFILL SLURRY AND SHALL CONFORM TO SECTION 209.

(2) IF THE PIPE IS WITHIN THE TRAVELED WAY INCLUSIVE OF SHOULDERS AND AUXILIARY LANES, BACKFILL ABOVE BACKFILL SLURRY SHALL CONFORM TO SECTION 209.

(3) WHEN TEMPORARY SUBGRADE IS HIGHER THAN PROPOSED FINISHED SUBGRADE, PROVIDE GRANULAR BACKFILL AT ALL LOCATIONS. COST FOR GRANULAR BACKFILL IS CONSIDERED INCIDENTAL TO CONSTRUCTION.

BACKFILL SLURRY DETAIL - STORM SEWER TRENCH

2

ATHLETIC FIELD

ATHLETIC FIELD

UNDERWOOD PARKWAY

CANADIAN PACIFIC RAILWAY

UNDERWOOD CREEK

IH 41/USH 45 SB

IH 41/USH 45 NB

84ML

86ML

88ML

90ML

92ML

94ML

96ML

98ML

201

202

203

204

P201

P202

P203

P204

EXISTING 205

EXISTING 206

EXISTING 207

EXISTING 208

EXISTING 209

EXISTING 210

EXISTING 301

EXISTING 302

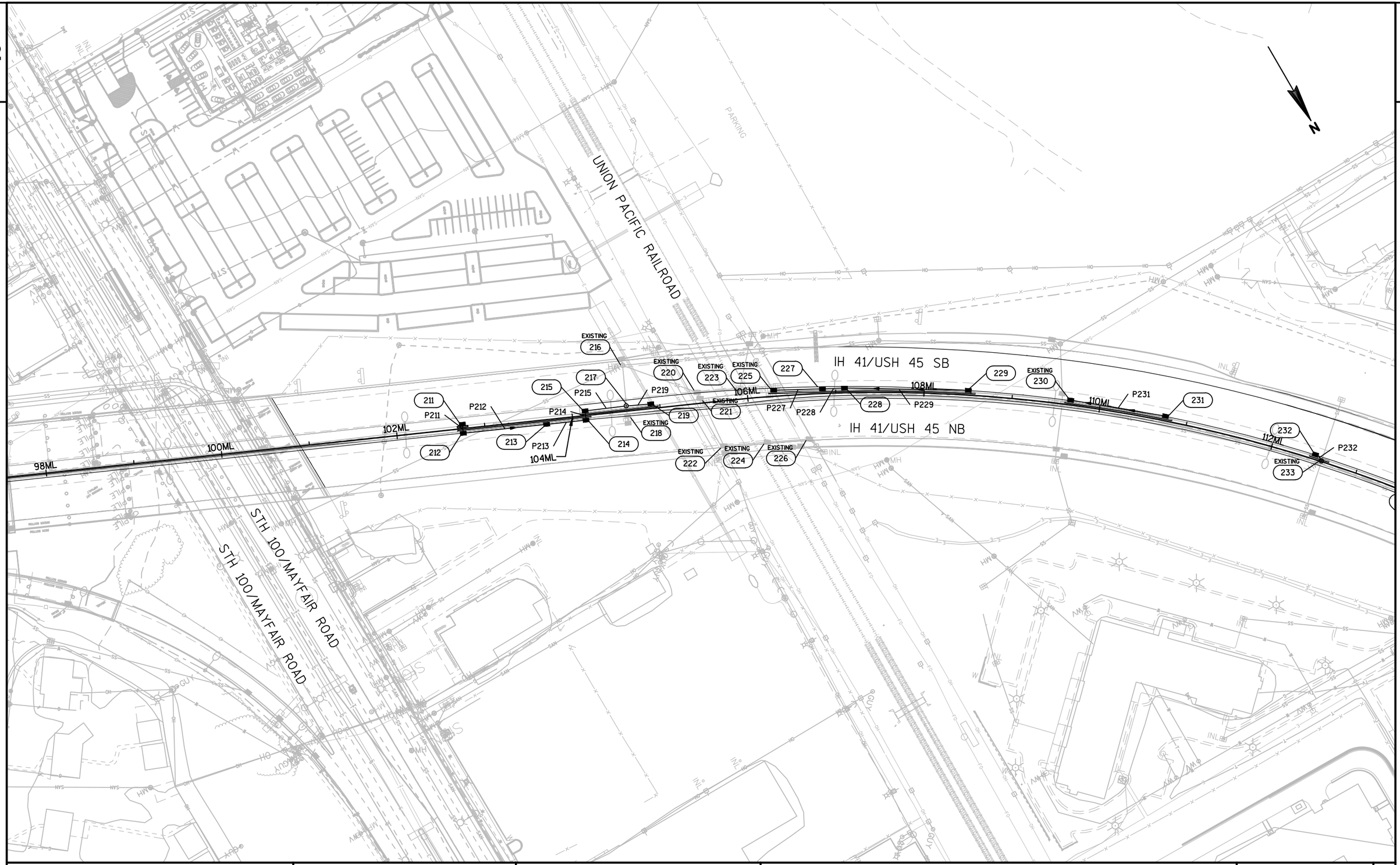
N

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STORM SEWER	SHEET 93	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 01

PLOT DATE : 10/20/2017 4:01 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STORM SEWER	SHEET 94	E

2

2

IH 41/USH 45 SB

IH 41/USH 45 NB

W. NORTH AVENUE

114ML

116ML

118ML

120ML

122ML

124ML

126ML

128ML

234

235

236

237

238

239

240

241

242

243

244

245

P232

P234

P238

P239

P244

P245

EXISTING

SIGN

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STORM SEWER	SHEET 95	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 03

PLOT DATE : 10/20/2017 4:01 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

N. 113TH STREET

W. MEINECKE AVENUE

N. 113TH STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

128MI 130MI 132MI 134MI 136MI 138MI 140MI 142MI

246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274

P246 P247 P248 P249 P250 P251 P252 P261 P262 P263 P264 P267 P271 P272

EXISTING

CAUTION

N. 112TH STREET

N. 112TH STREET

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STORM SEWER	SHEET 96	E

2

N. 113TH STREET

W. CENTER STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

N. 112TH STREET

144ML
146ML
148ML
150ML
152ML
154ML
156ML
158ML

275 P275 276 277 278 279 P279 280 281 P281 282 283 284 285 286 P287 287 295 296 P296 297 P298 298 P299 299 300

EXISTING

TENNIS COURT

BLEACHERS

BLEACHERS

BLEACHERS

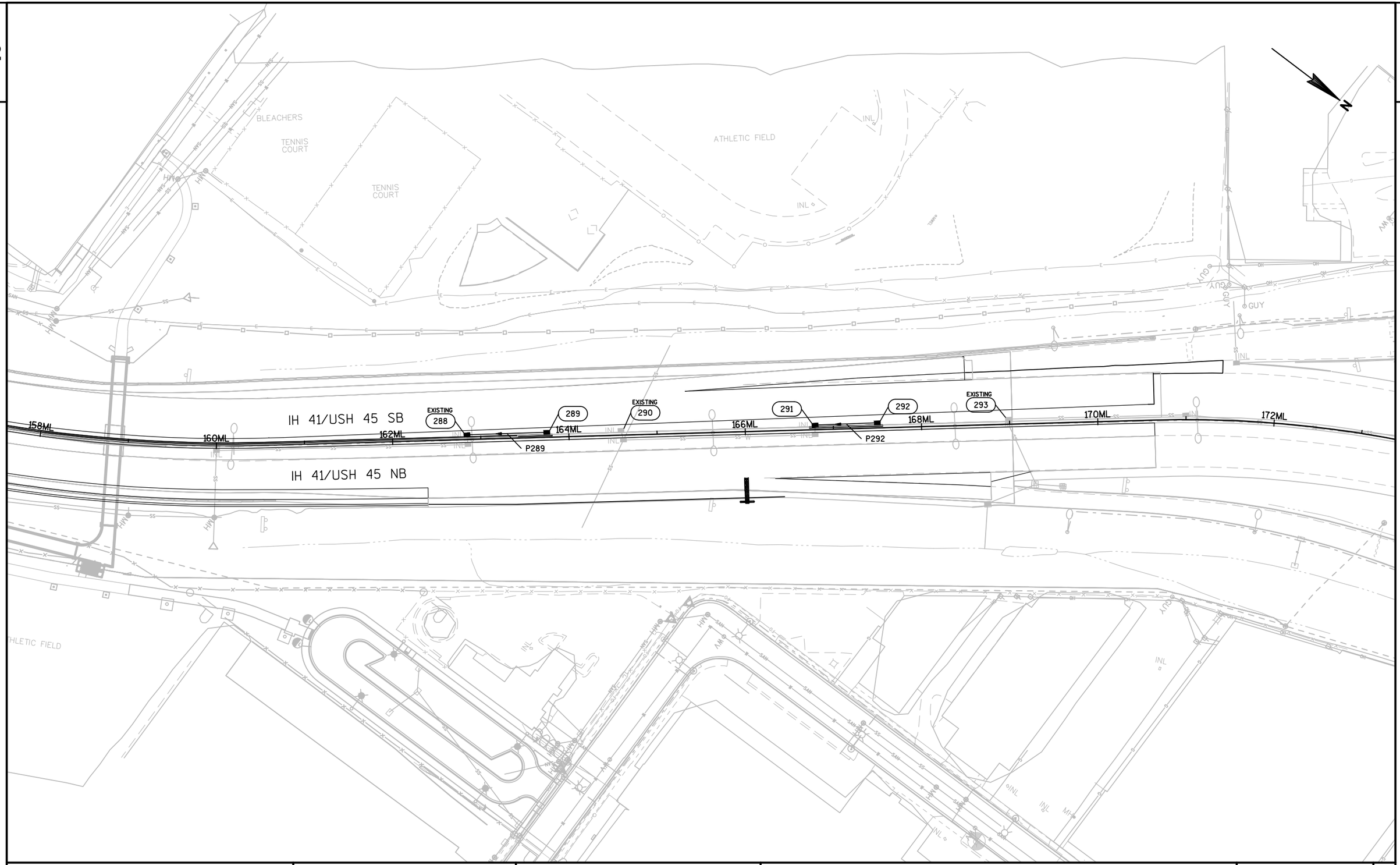
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STORM SEWER	SHEET 97	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 05

PLOT DATE : 10/20/2017 4:02 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



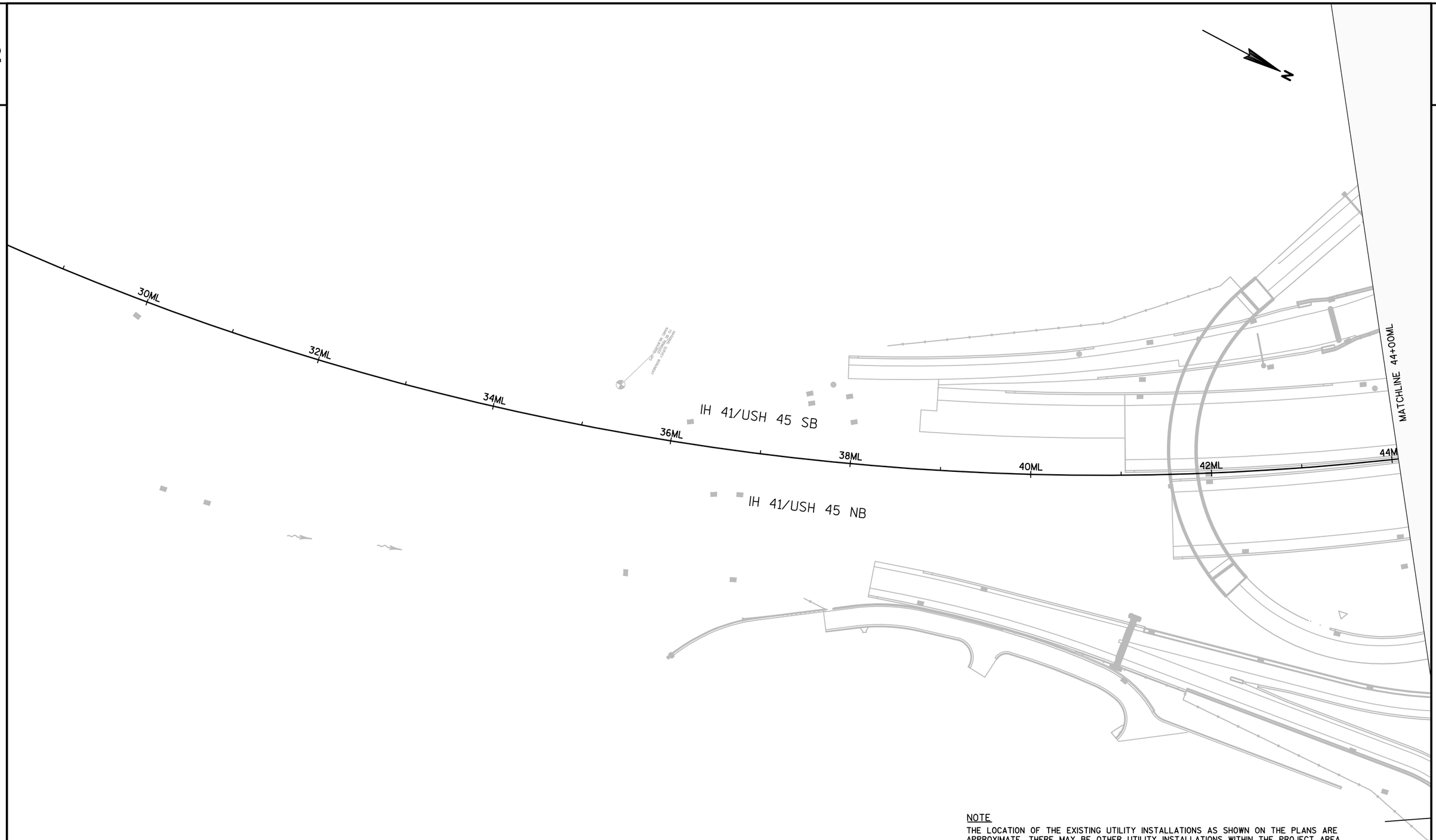
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STORM SEWER	SHEET 98	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 06

PLOT DATE : 10/20/2017 4:02 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2



NOTE

THE LOCATION OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN INCLUDING BUILDING SERVICES AND LATERALS.

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EXISTING UTILITY PLANS	SHEET 99	E

2

2

N

IH 41/USH 45 SB

46ML 48ML 50ML 52ML 54ML 56ML 58ML

IH 41/USH 45 NB

MATCHLINE 59+00ML

W. WATERTOWN PLANK ROAD

NOTE

THE LOCATION OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN INCLUDING BUILDING SERVICES AND LATERALS.

ON OF
E. THER

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EXISTING UTILITY PLANS	SHEET 100	E

2

MATCHLINE STA 59+00ML

IH 41/USH 45 SB

IH 41/USH 45 NB

60ML 62ML 64ML 66ML 68ML 70ML 72ML 74ML

N. SWAN BOULEVARD

NOTE

THE LOCATION OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN INCLUDING BUILDING SERVICES AND LATERALS.

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EXISTING UTILITY PLANS	SHEET 101	E

2

2

IH 41/USH 45 SB

IH 41/USH 45 NB

74ML

76ML

78ML

80ML

82ML

84ML

86ML

88ML

MATCHLINE 89+00ML

BLEACHERS

ATHLETIC FIELD

ATHLETIC FIELD

PLAYGROUND

PLAYGROUND

POOL

NOTE

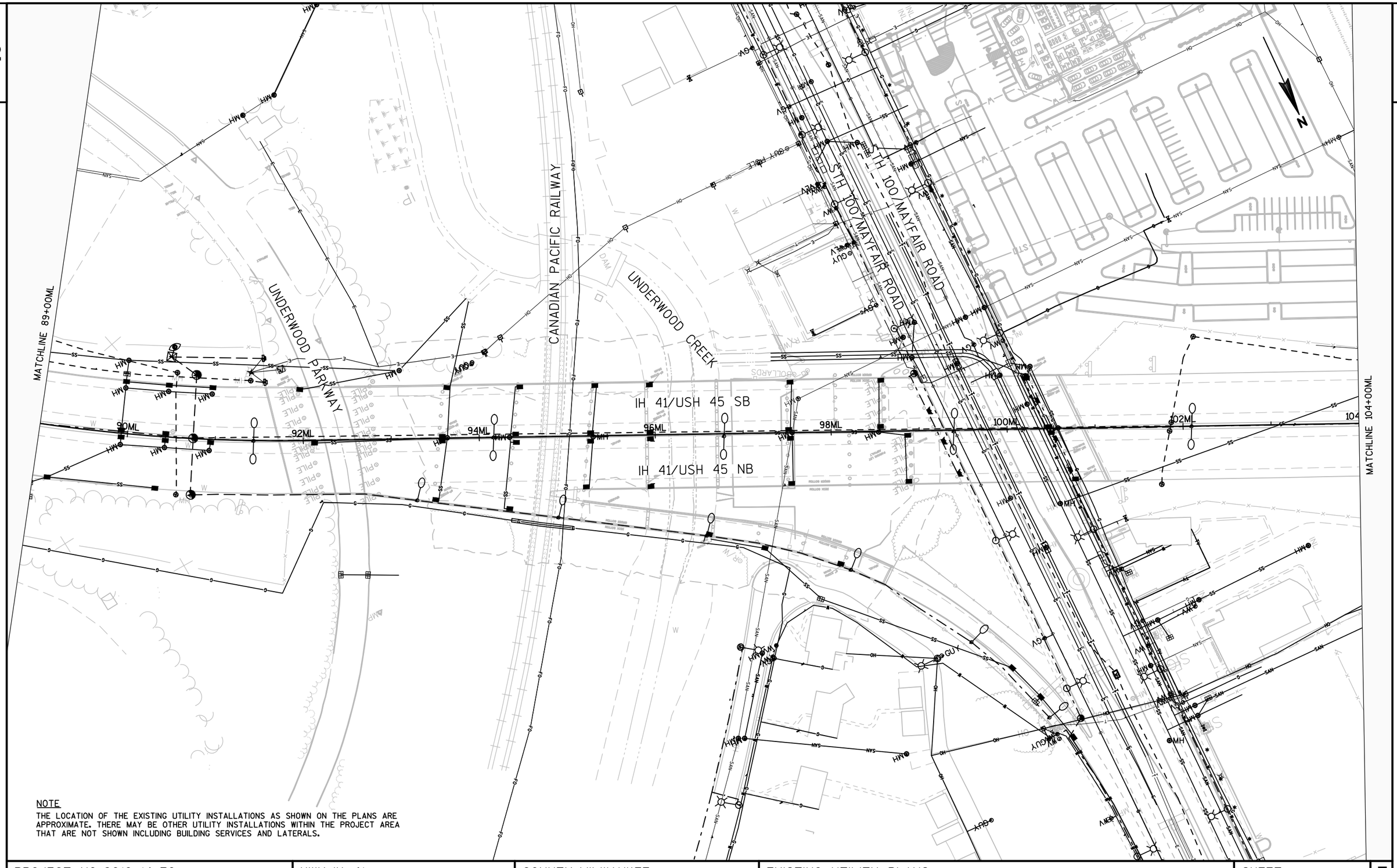
THE LOCATION OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN INCLUDING BUILDING SERVICES AND LATERALS.

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EXISTING UTILITY PLANS	SHEET 102	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\023001_UP.DWG
LAYOUT NAME - 04

PLOT DATE : 10/20/2017 4:04 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

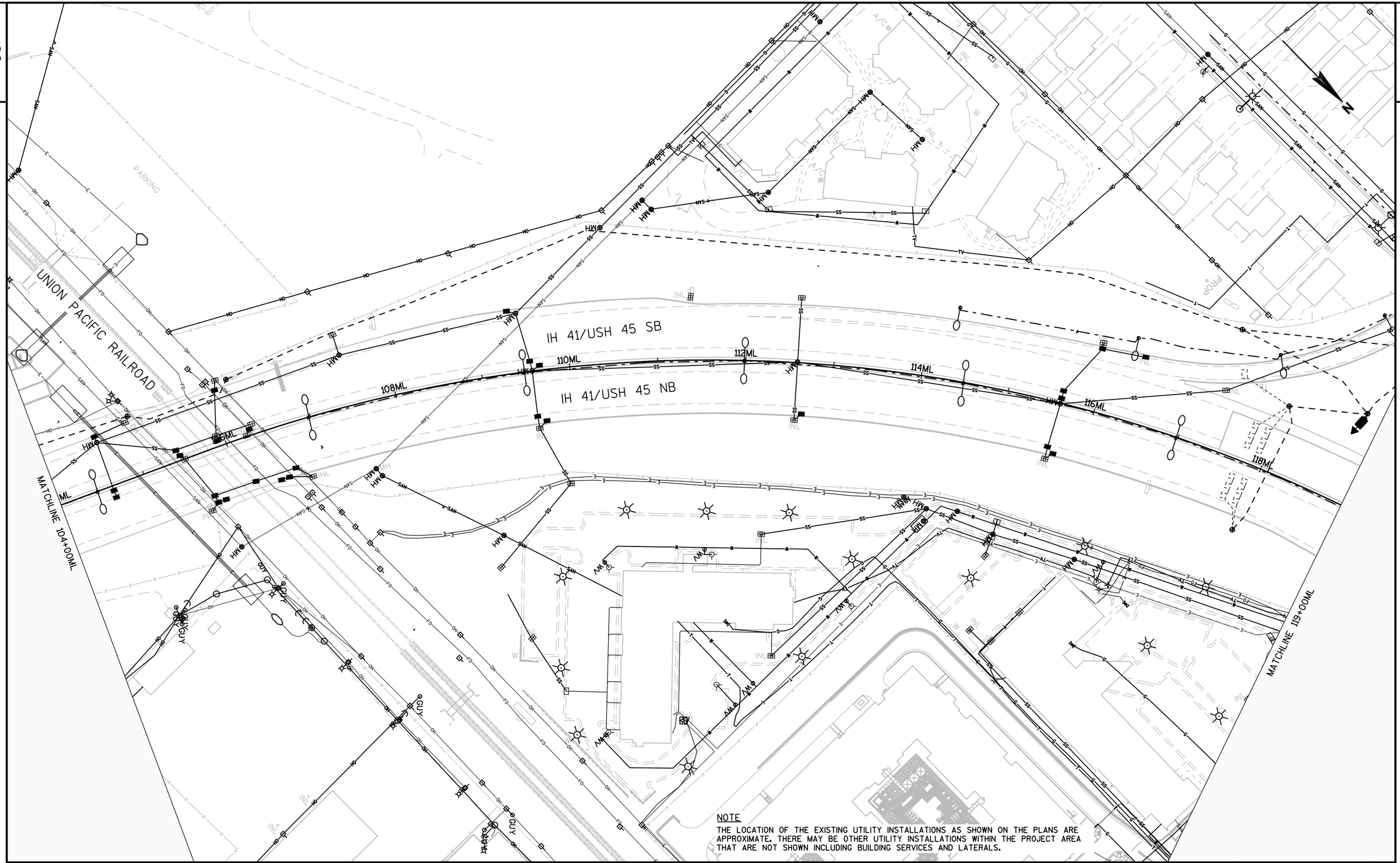


NOTE

THE LOCATION OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN INCLUDING BUILDING SERVICES AND LATERALS.

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EXISTING UTILITY PLANS	SHEET 103	E

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EXISTING UTILITY PLANS	SHEET 104	E

NOTE

THE LOCATION OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN INCLUDING BUILDING SERVICES AND LATERALS.

W. NORTH AVENUE

N. 113TH STREET

W. MEINECKE AVENUE

N. 112TH STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

MATCHLINE 134+00ML

MATCHLINE 191+00ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EXISTING UTILITY PLANS	SHEET 105	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\023001_UP.DWG
LAYOUT NAME - 07

PLOT DATE : 10/20/2017 4:05 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

MATCHLINE 134+00ML

MATCHLINE 149+00ML

N. 113TH STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

N. 112TH STREET

136ML

138ML

140ML

142ML

144ML

146ML

148ML

NOTE

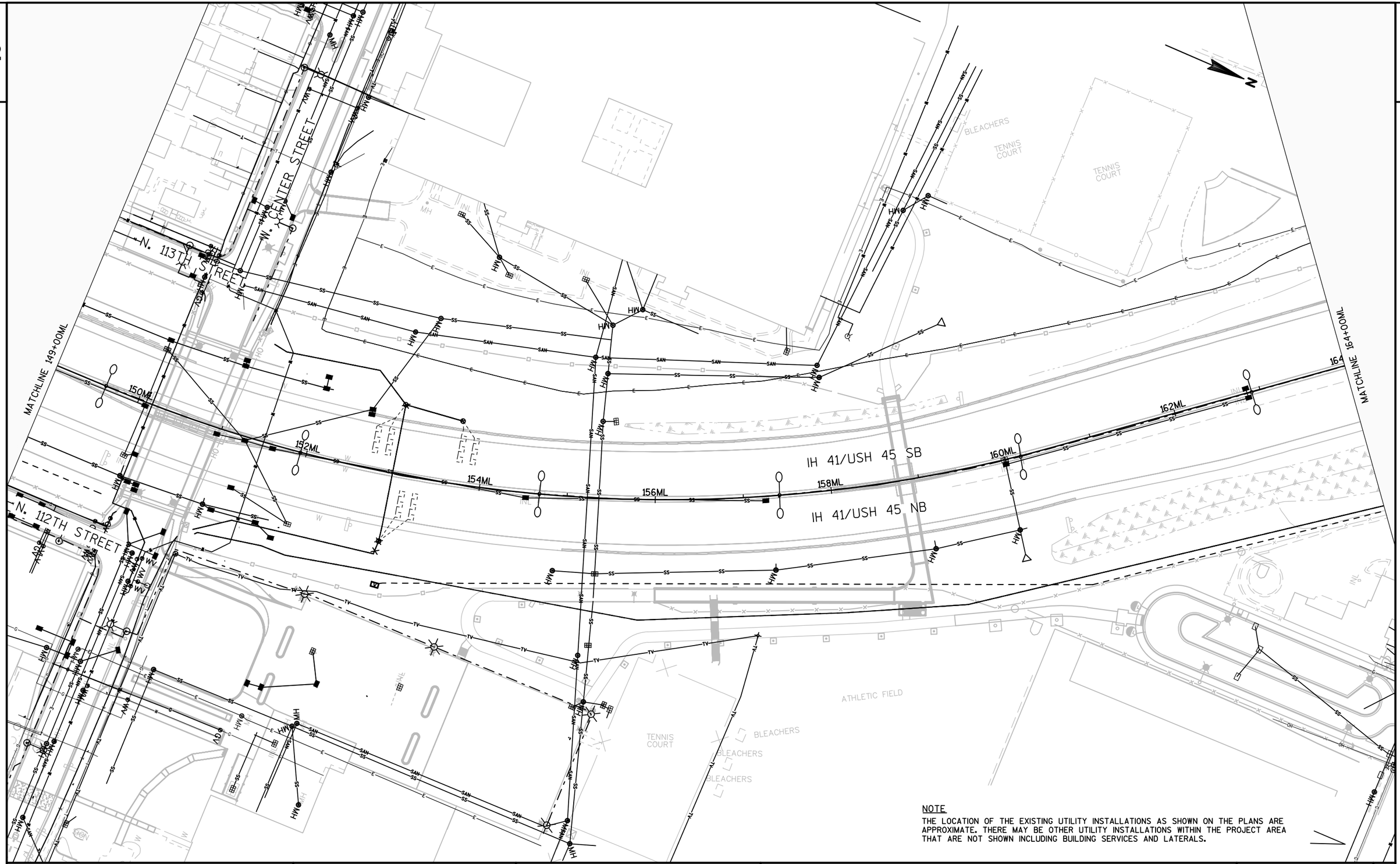
THE LOCATION OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN INCLUDING BUILDING SERVICES AND LATERALS.

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EXISTING UTILITY PLANS	SHEET 106	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\023001_UP.DWG
LAYOUT NAME - 08

PLOT DATE : 10/20/2017 4:05 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



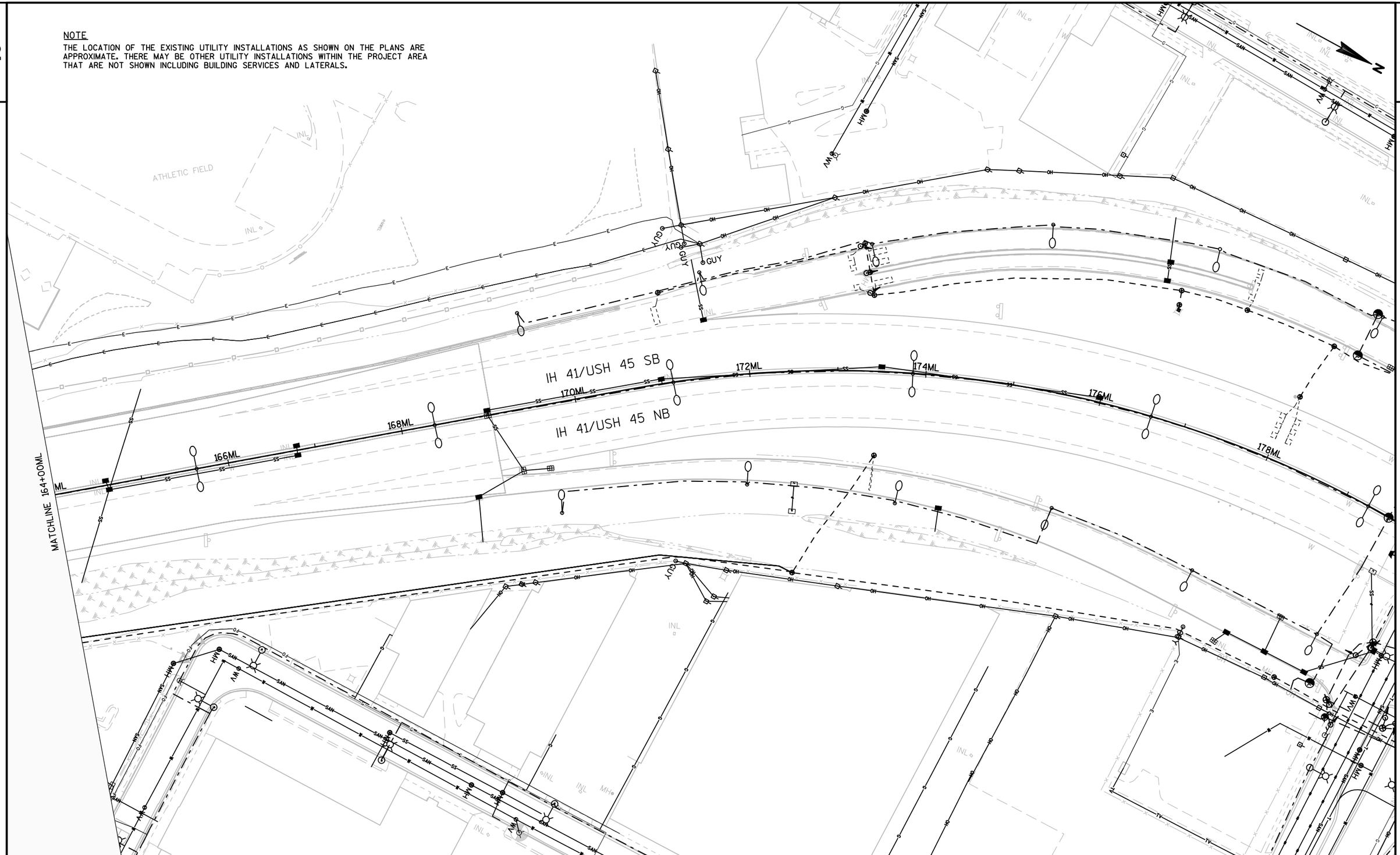
NOTE

THE LOCATION OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN INCLUDING BUILDING SERVICES AND LATERALS.

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EXISTING UTILITY PLANS	SHEET 107	E

NOTE

THE LOCATION OF THE EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN INCLUDING BUILDING SERVICES AND LATERALS.



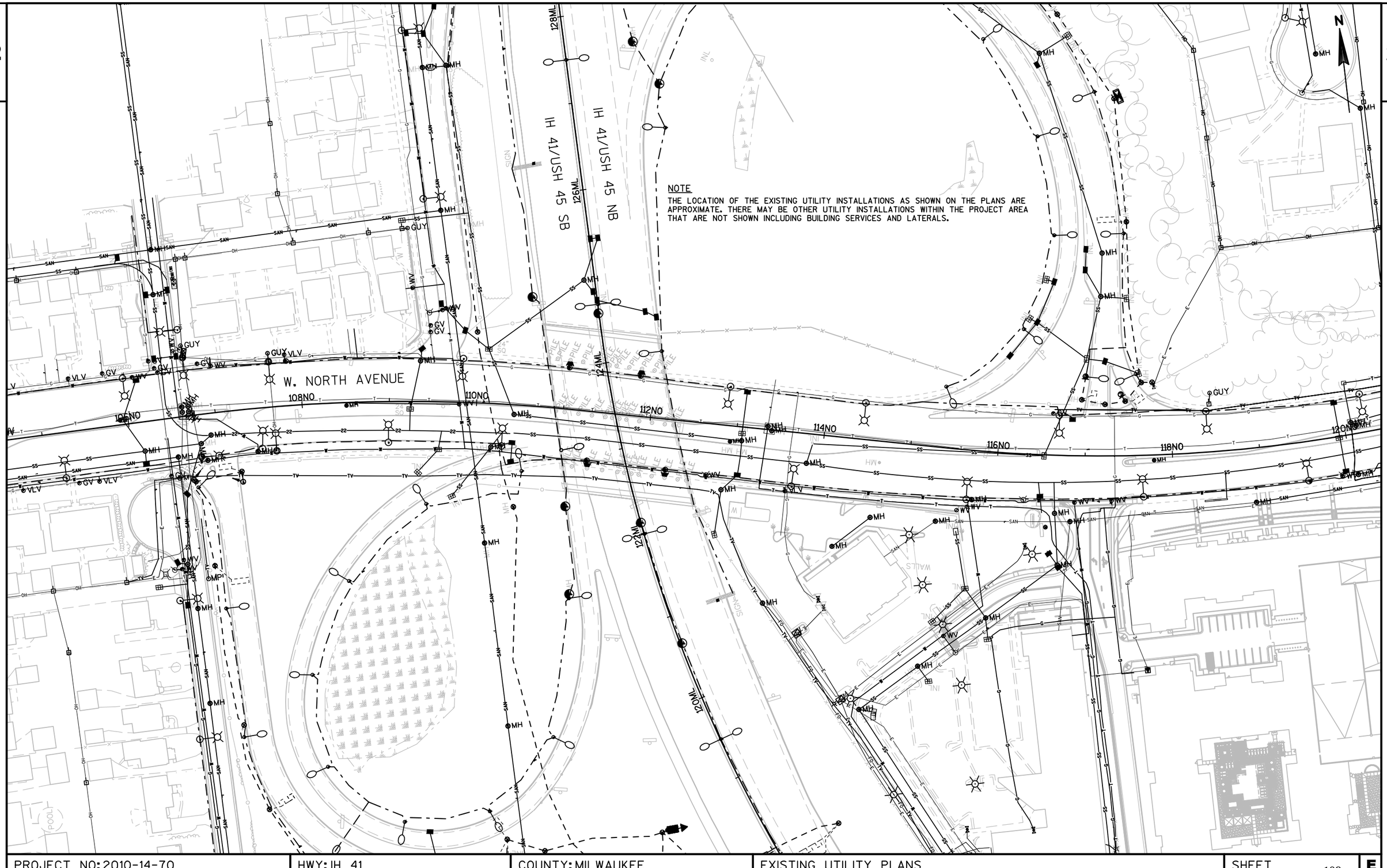
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EXISTING UTILITY PLANS	SHEET 108	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\023001_UP.DWG
LAYOUT NAME - 10

PLOT DATE : 10/20/2017 4:05 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	EXISTING UTILITY PLANS	SHEET 109 E

2

EXIT 40 A-B
Watertown Plk Rd
EXIT ONLY

TYPE I SIGN
E6-1
ESTR

1R

TRAFFIC INFO
TUNE RADIO TO
1610 AM
IMPORTANT
WHEN FLASHING

TYPE I SIGN
MOVE
(SEE PERMANENT
SIGN PLAN)
REMOVE STEEL
POSTS

OVERHEAD EXISTING
SIGN BRIDGE
TO REMAIN

2R

ATHLETIC FIELD

Milwaukee Regional
Medical Center
Medical College
of Wisconsin
EXIT 40 A-B
HOSPITAL

TYPE I SIGN
MOVE
(SEE PERMANENT
SIGN PLAN)
REMOVE STEEL
POSTS

3R

PARK & RIDE
Sheriffs
Substation
EXIT 40 A-B

TYPE I SIGN
MOVE
(SEE PERMANENT
SIGN PLAN)
REMOVE STEEL
POSTS

72ML
74ML
76ML
78ML
80ML
82ML
84ML
86ML

IH 41/USH 45 SB

IH 41/USH 45 NB

6R

REMOVE

SWAN BLVD

4R

RIDESHARE
INFORMATION
www.rideshare.wi.gov

REMOVE

PLAYGROUND

NORTH 41 45 MILE 41 .4
REMOVE

SOUTH 41 45 MILE 41 .4
REMOVE

5R

POOL

SHEET 1 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 110	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023101_PS

PLOT DATE : 6/20/2017 9:26 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

UNDERWOOD PKWY NORTH

HWY 100 / N. MAYFAIR ROAD

IH 41/USH 45 SB

IH 41/USH 45 NB

86ML 88ML 90ML 92ML 94ML 96ML 98ML 100ML

16R
RIGHT LANE MUST EXIT
REMOVE

8R
12'-0"
REMOVE

17R
NO PARKING ANY TIME
REMOVE

7R
EXIT 35 M.P.H.
REMOVE

9R
EXIT 42A
100 NORTH
Mayfair Rd
North Ave EAST
TYPE I SIGN AND STEEL POST
REMOVE

10R
12'-0"
REMOVE
ON UNDERWOOD PKWY BRIDGE
W12-2

11R
12'-0"
REMOVE

12R
NORTH 41 45 MILE 41 .6
REMOVE
SOUTH 41 45 MILE 41 .6
REMOVE

13R
EXIT 42A
REMOVE

14R
REMOVE

15R
AHEAD
REMOVE

SHEET 2 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 111	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023102_PS

PLOT DATE : 6/20/2017 9:26 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

EXITS 38 A-B

41 | 894 | 45 — BYPASS Chicago AHEAD

94 — Milwaukee Madison RIGHT

2 MILES

MOVE TYPE I SIGN SEE PERMANENT SIGNING PLAN

CRASH INVESTIGATION SITE EXIT 40

REMOVE TYPE I SIGN AND STEEL POST

27R

28R

Mayfair Rd Hwy 100

D1-1(MOD)

REMOVE STEEL POSTS

213R

EXIT 40 A-B

Watertown Plk Rd 3/4 MILE

EXIT ONLY

TYPE I SIGN ESTR

S-40-792 2 CHORD OVERHEAD SIGN SUPPORT

25R

SOUTH 41 | SOUTH 41 | SOUTH 45

J4-3 REMOVE

IH 41/USH 45 SB

IH 41/USH 45 NB

100ML 102ML 104ML 106ML 108ML 110ML 112ML 114ML

SPEED LIMIT 55

29R

REMOVE ON LIGHT POLE

21R

NORTH 41 | 45 MILE 41 .8 | SOUTH 41 | 45 MILE 41 .8

REMOVE REMOVE D10-5A REMOVE ON LIGHT POLE

22R

EXIT 42 B

North Ave West ½ MILE

REMOVE TYPE I SIGN & STEEL POSTS

18R

19R

REMOVE

20R

REMOVE

REMOVE

HWY 100 / N. MAYFAIR ROAD

UNION PACIFIC RAILROAD

23R

North Ave WEST	1/4
Burleigh St	1
Capitol Dr	2 1/4

TYPE I SIGN REMOVE SIGN ON S-40-234 SIGN BRIDGE TO REMAIN

24R

NORTH 41 | 45 MILE 42 .0 | SOUTH 41 | 45 MILE 42 0

REMOVE REMOVE D10-5A REMOVE ON LIGHT POLE

SHEET 3 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 112 E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023103_PS

PLOT DATE : 6/20/2017 9:27 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

40R
RIGHT LANE SIGNAL
REMOVE
STOP HERE ON RED
REMOVE

41R
LEFT LANE SIGNAL
REMOVE
STOP HERE ON RED
REMOVE

39R
REMOVE

38R
REMOVE

RAMP 25 M.P.H.
43R
REMOVE ON LIGHT POLE

36R 37R
REMOVE

255R
EXIT 42B
REMOVE

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED
42R
R5-57
ON LIGHT POLE

35R
WRONG WAY
REMOVE ON LIGHT POLE

W. NORTH AVE.

116ML
118ML
120ML
122ML
124ML
126ML
128ML
114ML

S-40-354

IH 41/USH 45 SB
IH 41/USH 45 NB

32R
EXIT 42 B
North Ave WEST
TYPE I SIGN
REMOVE SIGN
ON S-40-378
SIGN BRIDGE
TO REMAIN

33R
North Ave
2300 NORTH
D1-1(MOD)
REMOVE

31R
EXIT
25 MPH
REMOVE

30R
ALTERNATE
94
REMOVE

34R
EXIT
42B
REMOVE

SHEET 4 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 113	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023104_PS

PLOT DATE : 6/20/2017 9:27 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

62R STOP REMOVE

61R NO PARKING REMOVE

S-40-354 TO REMAIN

EXIT 42 A
North Ave EAST
Mayfair Rd
63R
TYPE I SIGN REMOVE

59R ONE WAY REMOVE

60R ONE WAY REMOVE

58R REMOVE

57R REMOVE

120ML 122ML 124ML 126ML 128ML 130ML 132ML

IH 41/USH 45 SB

IH 41/USH 45 NB

118ML

48R NORTH 41 45 MILE 42 .2 REMOVE
SOUTH 41 45 MILE 42 .2 REMOVE
ON LIGHT POLE

EXIT 25 MPH 214R REMOVE

EXIT 42B 257R REMOVE

51R REMOVE

49R REMOVE

50R REMOVE

52R REMOVE

S-40-281

DO NOT ENTER REMOVE
ON LIGHT POLE
PART OF 47R

NO TURNS 47R REMOVE
ON LIGHT POLE

56R STOP HERE ON RED REMOVE
ON SIGNAL POLE

53R CENTER LANE SIGNAL REMOVE
54R RIGHT LANE SIGNAL REMOVE
ON MAST ARM

55R STOP HERE ON RED REMOVE
ON SIGNAL POLE

WRONG WAY 45R REMOVE

WRONG WAY 46R REMOVE

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED 44R REMOVE
ON LIGHT POLE

256R REMOVE

NORTH AVE.

8 POST

N

SHEET 5 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 114 E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023105_PS

PLOT DATE : 6/20/2017 9:27 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

82R REMOVE

81R SPEED LIMIT 25 REMOVE ON LIGHT POLE

80R REMOVE ON LIGHT POLE

78R EXIT 42 A North Ave Mayfair Rd 1/2 MILE

77R EXIT 42 B North Ave WEST

TYPE I SIGNS REMOVE

72R SPEED LIMIT 25 REMOVE

73R RIDESHARE INFO CALL 272-RIDE REMOVE

71R STOP REMOVE

STREET NAME SIGN BY OTHERS (CITY)

W. CLARK ST.

NOTE: CONSTRUCTION ENDS HERE

79R 246R 247R 248R STOP REMOVE ALL WAY REMOVE

74R 75R NO PARKING REMOVE NO DOGS ALLOWED MOVE SEE PERMANENT SIGN PLAN

S-40-355

70R NO PARKING REMOVE NO DOGS ALLOWED MOVE SEE PERMANENT SIGN PLAN

REMOVE

2 HOUR HOUR PARKING ESTR

IH 41/USH 45 SB

130ML 132ML 134ML 136ML 138ML 140ML 142ML

IH 41/USH 45 NB

76R NORTH 41 45 MILE 42 .4 REMOVE SOUTH 41 45 MILE 42 .4 REMOVE ON LIGHT POLE

69R SPEED LIMIT 55 REMOVE ON LIGHT POLE

83R 84R Meinecke Ave D1-1 MOD ON BRIDGE

STREET NAME SIGN BY OTHERS (CITY)

W. MEINECKE AVE.

64R NO THRU TRAFFIC REMOVE

65R SPEED LIMIT 25 REMOVE NO PARKING REMOVE PART OF 65R

66R NORTH 41 NORTH 41 NORTH 45 J4-3 REMOVE

EXIT 43 Burleigh St 1/2 MILE 67R TYPE I SIGN AND STEEL POST REMOVE

68R SPEED LIMIT 55 REMOVE

SHEET 6 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 115	E

2

2

N. 114TH ST.

CENTER STREET

92R
DETOUR
EAST
INTERSTATE
94
SECOND
RIGHT
REMOVE

2 HOUR
HOUR
PARKING
R7-5-D
ESTR

NO
PARKING
ANY
TIME
R7-1-D
NO
DOGS
ALLOWED
ESTR

STOP
R1-1
ESTR

STREET
STREET NAME
SIGN BY
OTHERS
(CITY)

144ML
146ML
148ML
150ML
152ML
154ML
156ML
158ML

S-40-235

IH 41/USH 45 SB

IH 41/USH 45 NB

91R
EXIT 42 B
North Ave
WEST
NEXT RIGHT
REMOVE
TYPE I SIGN
& STEEL POSTS

87R
88R
CENTER ST
2700 NORTH
D1-1 MOD
ON BRIDGE
REMOVE

90R
NORTH
41
45
MILE
42
.8
REMOVE
SOUTH
41
45
MILE
42
.8
REMOVE

TENNIS
COURT
BLEACHERS
BLEACHERS

85R
NORTH
41
45
MILE
42
.6
REMOVE
SOUTH
41
45
MILE
42
.6
REMOVE

86R
Mount Mary
University
EXIT 43
MOVE
TYPE I SIGN
SEE PERMANENT SIGN PLAN
REMOVE
STEEL POST

89R
Burleigh St 1/4
Capitol Dr 1 1/2
Hampton Ave 2 1/2
REMOVE
TYPE I SIGN

SHEET 7 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 116	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023107_PS

PLOT DATE : 6/20/2017 9:28 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

BLEACHERS

TENNIS COURT

TENNIS COURT

ATHLETIC FIELD

102R

North Ave 1/2
Watertown Plk Rd 1 3/4
Wisconsin Ave 2 1/4

E8-1 TYPE I SIGN
S-40-236
REMOVE

103R

SOUTH 41 | SOUTH 45 | SOUTH 41

J4-3
REMOVE

101R

NORTH 41 45 MILE 43 0 | SOUTH 41 45 MILE 43 0

REMOVE REMOVE
ON LIGHT POLE

99R 100R

REMOVE

IH 41/USH 45 SB

IH 41/USH 45 NB

160ML 162ML 164ML 166ML 168ML 170ML 172ML

S-40-236

94R

EXIT 43
Burleigh St

TYPE I SIGN
AND STEEL POST
REMOVE

96R

REMOVE
ON LIGHT
POLE

95R

REMOVE

93R

HOSPITAL
EXIT 43

TYPE I SIGN
REMOVE STEEL POST
MOVE TYPE I SIGN
SEE PERMANENT SIGN PLAN

W. LOCUST ST.

N. 114TH ST.

98R

EXIT 43

REMOVE

REMOVE REMOVE
PART OF
98R

97R

REMOVE

SHEET 8 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 117	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023108_PS

PLOT DATE : 6/20/2017 9:29 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

105R
RIGHT LANE SIGNAL
STOP HERE ON RED
REMOVE ON SIGNAL POLE

249R
CENTER LANE SIGNAL
STOP HERE ON RED
REMOVE ON SIGNAL POLE

118R
RIDESHARE INFO CALL 272-RIDE
REMOVE ON LIGHT POLE

117R
PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC AND BICYCLES PROHIBITED
REMOVE ON LIGHT POLE

252R
YIELD
REMOVE

115R 251R
RAMP METERED WHEN FLASHING
REMOVE ON SIGNAL POLE

119R
EXIT 42A-B
North Ave
Mayfair Rd
3/4 MILE
TYPE I SIGN AND STEEL POST REMOVE

116R
LEFT LANE
BUSES MOTORCYCLES AND 2 OR MORE OCCUPANT CAR POOLS ONLY
REMOVE

114R
REMOVE

S-40-400

178ML 180ML 182ML 184ML 186ML 188ML
IH 41/USH 45 SB

176ML 174ML
IH 41/USH 45 NB

107R
ONLY ONLY
REMOVE

110R
WRONG WAY
REMOVE ON LIGHT POLE

111R 112R
STOP
REMOVE ON SIGNAL POLE

104R
LEFT LANE SIGNAL
STOP HERE ON RED
REMOVE ON SIGNAL POLE

106R
Burleigh St
WEST EAST
REMOVE

108R
H
REMOVE

109R
DO NOT ENTER
REMOVE

113R
REMOVE

WATER TOWER
DO NOT ENTER
REMOVE PART OF 111R

W. BURLEIGH ST.

SHEET 9 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 118	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023109_PS

PLOT DATE : 6/20/2017 9:29 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

NO SIGNS ON THIS SHEET

IH 41/USH 45 SB

188ML 190ML 192ML 194ML 196ML 198ML 200ML 202ML

IH 41/USH 45 NB

WATER TOWER

SHEET 10 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 119	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023110_PS

PLOT DATE : 6/20/2017 9:29 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

N. 118TH STREET

W. NORTH AVENUE

W. NORTH AVENUE

NO SIGNS ON THIS SHEET

SHEET 11 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 120	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023111_PS

PLOT DATE : 6/20/2017 9:30 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

N. 117TH STREET

N. 116TH STREET

W. NORTH AVENUE

W. NORTH AVENUE

135R

136R

JCT

45

137R

ON LIGHT POLE

SHEET 12 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 121	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023112_PS

PLOT DATE : 6/20/2017 9:31 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

N. 115TH STREET

N. 114TH STREET

W. NORTH AVENUE

W. NORTH AVENUE

155R

RIGHT LANE MUST TURN RIGHT

REMOVE

SOUTH INTERSTATE 41 | NORTH 45 | SOUTH 45 | SOUTH 41

ESTR ON LIGHT POLE

156R

SOUTH INTERSTATE 41

REMOVE

157R

SOUTH 45

REMOVE

158R

YIELD

REMOVE

159R 160R

RAMP METERED WHEN FLASHING

REMOVE ON SIGNAL POLE

SHEET 13 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 122	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023113_PS

PLOT DATE : 6/20/2017 9:31 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

N. 113TH STREET

W. NORTH AVENUE

W. NORTH AVENUE

SOUTH 41 SOUTH 45 174R

REMOVE

176R ONE WAY

REMOVE

SOUTH 41 SOUTH 45 180R

REMOVE

NORTH 45 NORTH 41 173R

REMOVE

NORTH 41 NORTH 45 178R

REMOVE
ON BRIDGE
COLUMN

124ML

122ML

IH 41/USH 45 SB

IH 41/USH 45 NB

24" SQ

MH

INL

HW

SIGN

SHEET 14 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 123	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023114_PS

PLOT DATE : 6/20/2017 9:31 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

195R
WRONG WAY
REMOVE ON LIGHT POLE

196R
NO TURNS
REMOVE ON LIGHT POLE

DO NOT ENTER
REMOVE ON LIGHT POLE PART OF 196R

194R
WRONG WAY
REMOVE

RAMP METERED WHEN FLASHING
192R 193R
REMOVE ON SIGNAL POLE

191R
YIELD
REMOVE ON LIGHT POLE

190R
NORTH INTERSTATE 41 NORTH 45
ON LIGHT POLE

189R
REMOVE

188R
REMOVE

186R
NORTH INTERSTATE 41 NORTH 45
REMOVE

W. NORTH AVENUE

N

SHEET 15 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 124	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023115_PS

PLOT DATE : 6/20/2017 9:31 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

W. NORTH AVENUE

W. NORTH AVENUE

UNION PACIFIC RAILROAD

210R
RIGHT LANE MUST TURN RIGHT
REMOVE ON LIGHT POLE

254R
SOUTH INTERSTATE 41 45
REMOVE

209R
NORTH INTERSTATE 41 NORTH 45
REMOVE ON LIGHT POLE

208R
SOUTH INTERSTATE 41 USE LEFT LANE
SOUTH 45 USE LEFT LANE
NORTH 45 NORTH INTERSTATE 41
REMOVE

207R
NORTH INTERSTATE 41 USE RIGHT LANE
NORTH 45 USE RIGHT LANE
REMOVE

206R
JCT 45 NO PARKING ANY TIME
JCT INTERSTATE 41
REMOVE

197R
14'-4"
LOW CLEARANCE
REMOVE

198R
14'-4"
LOW CLEARANCE
ANYTIME
REMOVE
2 HR PARKING 8AM - 6PM, EXCEPT SUN HOLIDAY
CITY SIGN REMOVE ON LIGHT POLE

SHEET 16 OF 16

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	SIGNING REMOVAL PLAN	SHEET 125	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023101_SP.DWG
LAYOUT NAME - 023116_PS

PLOT DATE : 6/20/2017 9:32 AM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

EXIT 40 A-B
Watertown Plk Rd
EXIT ONLY
ESTR
S-40-65 EXISTING SIGN
BRIDGE TO REMAIN

CRASH
INVESTIGATION SITE
EXIT 40 A-B
TYPE I SIGN
NEW STEEL POSTS
D4-52
49

15
TRAFFIC INFO
TUNE RADIO TO
1610 AM
IMPORTANT
WHEN FLASHING
MOVE
NEW STEEL POSTS
SEE FTMS FOR
ELECTRICAL

EXISTING
S-40-233
BUTTERFLY
SIGN BRIDGE

PC: 79+06.05

IH 41/USH 45 SB
IH 41/USH 45 NB

72ML 74ML 75 76ML 78ML 80ML 82ML 84ML 85 86ML

SWAN BLVD.

NORTH 41 45 MILE 41 .0
SOUTH 41 45 MILE 41 .0
D10-5A (5)
PLACE AT
STA. 60ML+00
1 2

NORTH 41 45 MILE 41 .2
SOUTH 41 45 MILE 41 .2
D10-5A (5)
5 6

3
RIDESHARE
INFORMATION
www.rideshare.wi.gov
D12-2B(5)

SPEED LIMIT 55
R2-1 (5)
4

NORTH 41 45 MILE 41 .4
SOUTH 41 45 MILE 41 .4
D10-5A (5)
8 9

SPEED LIMIT 55
R2-1 (5)
10

NORTH 41 13
41
45
JV4-1

14
ALTERNATE
94
J3-1 (5)
ON UPRIGHT OF
SIGN BRIDGE

RIGHT LANE
MUST EXIT
435
R3-33-R (5)

434
Watertown Plk Rd 1/4
18 Bluemound Rd 1
94 894 1 1/2
E8-1
S-40-233
SOUTHBOUND

100 Mayfair Rd 1/4
North Ave 3/4
Burleigh St 1 1/2
433
E8-1
S-40-233
NORTHBOUND

SHEET 1 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 126	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023201_PS
PLOT DATE : 10/13/2017 11:55 AM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

UNDERWOOD PKWY NORTH

ATHLETIC FIELD

HWY 100 / N. MAYFAIR ROAD

IH 41/USH 45 SB

IH 41/USH 45 NB

85 86ML 88ML 90ML 92ML 94ML 95 96ML 98ML 100ML

PT: 92+06.67

27
Milwaukee Regional Medical Center
Medical College of Wisconsin
EXIT 40 A-B
MOVE

26
PARK & RIDE
Sheriffs Substation
EXIT 40 A-B
MOVE

28 29 30
12'-0"
W12-2(2S)

416
Mayfair Rd
Hwy 100
M1-94
MOUNT ON SIDE OF WALL
SEE SPECIAL MOUNTING DETAIL

23 24 25
W1-8 (4)
4' HEIGHT BLINKER CHEVRON

NOTE: MOUNT ON SIDE OF BRIDGE. SEE SPECIAL MOUNTING DETAIL SHEET 2 OF 12

NOTE: GROUND MOUNTED

(SEE SHEET 3)

18A
EXIT
25
MPH
W13-2D (5)

NORTH 41 45 MILE 41 .6
SOUTH 41 45 MILE 41 .6
D10-5A (5)
ON LIGHT POLE
16 17

437
RIGHT LANE MUST EXIT
R3-33-R (5)
TYPE II

EXIT 42 A
436A
100 NORTH
Mayfair Rd
North Ave EAST
436
TYPE I
STEEL POSTS

19
EXIT
42A
E5-1A (MOD)
TYPE II SIGNS

19A
25 MPH
E13-1P (MOD)

20
12'-0"
W12-2(2S)

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 2 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 127	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023202_PS
PLOT DATE : 10/23/2017 1:05 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

EXITS 38 A-B

41 894 45 — BYPASS Chicago AHEAD

94 — Milwaukee Madison RIGHT

2 MILES

50

EXIT 40 A-B
Watertown Plk Rd
3/4 MILE
EXIT ONLY
TYPE I SIGN
ESTR

456
GREEN BLANK
COVER PLAQUE
20'x3' SH SHEETING

46
SOUTH 41 SOUTH 41 SOUTH 45
J4-3 (5)

51
Mayfair Rd
Hwy 100
D1-2 (5)

MOVE TYPE I SIGN
NEW STEEL POSTS
EXISTING S-40-792
2 CHORD OVERHEAD
SIGN SUPPORT

IH 41/USH 45 SB

IH 41/USH 45 NB

102ML 104ML 105 106ML 108ML 110ML 112ML 114ML 115

SPEED LIMIT 55
44
R2-1 (5)
(SOUTHBOUND)
ON LIGHT POLE

NORTH 41 45 MILE 41 .8
SOUTH 41 45 MILE 41 .8
D10-5A (5)
ON LIGHT POLE
42 43

33
W1-8 (4)
4' HEIGHT
BLINKER
CHEVRON

ON LIGHT POLE

W4-3R (2S)
40 41

37
R9-3-A(2S)

EXIT 42B
438A
North Ave
WEST
1/2 MILE
438
E1-1A
TYPE I SIGN
ON STEEL POSTS

HWY 100 / N. MAYFAIR ROAD

UNION PACIFIC RAILROAD

45
North Ave WEST 1/4
Burleigh St 1
100 Capitol Dr 2 1/4
E8-1
TYPE I SIGN
EXISTING SIGN BRIDGE
S-40-234

NORTH 41 45 MILE 42 .0
SOUTH 41 45 MILE 42 .0
D10-5A (5)
ON LIGHT POLE
47 48

SHEET 3 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 128 E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023203_PS

PLOT DATE : 10/16/2017 8:25 AM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

67 W11-2(2M) (RRFB) RECTANGLE RAPID FLASH BEAM

68 AHEAD W16-9P(2M) ON LIGHT POLE

83 W1-6 (2S) ON LIGHT POLE

82 YIELD TO BIKE LANE AHEAD ON LIGHT POLE

81 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED R5-57 (3) ON LIGHT POLE

89 STOP R1-12(S)

78 WRONG WAY R5-1A (3) ON LIGHT POLE

80 NO TURNS R3-3 (2S)

79 W4-3L (2S)

84 STOP HERE ON RED R10-6(2M)

84A RIGHT LANE SIGNAL R10-65-R (2S)

86 LEFT LANE SIGNAL R10-65-L (2S)

86A STOP HERE ON RED R10-6 (MOD)

88 FORM SINGLE LINE R3-58(2S) ON LIGHT POLE

87 W4-2L (2S)

70 W4-1R (5)

72 73 74 75 76 77 W1-8 (4) 4' HEIGHT BLINKER CHEVRON SEE SPECIAL MOUNTING DETAIL SHEET 6 OF 12 BACK OF WALL

71 WRONG WAY R5-1A (3) ON LIGHT POLE

SEE SHEET 14 FOR SIGNS AT CROSSING

65 66 DO NOT ENTER R5-1C (3) TRIM TO OCTAGON SHAPE

61 W11-2(2M)

62 W16-7L (2M)

59 ONE WAY R6-2-L(2S)

63 64 STOP R1-1(3)

W. NORTH AVE.

104+00 105+00 106+00 107+00 108+00 120+00 121+00 122+00 123+00 124+00 124+45.49 PT

118ML 116ML 114ML 115 120ML 122ML 124ML 125 126ML 128ML

TH 41/USH 45 SB

IH 41/USH 45 NB

439 EXIT 42B E5-1A(5)

439A 25 MPH E13-1P

52A EXIT 42B

52 North Ave WEST EXIT 20 MPH EXIT ONLY

TYPE I SIGN ON EXISTING CANTILEVER SIGN BRIDGE S-40-378

EXISTING S-40-378

53 EXIT 20 MPH W13-2B (5) ON S-40-978 UPRIGHT

54 55 NORTH 41 45 MILE 42 .2 SOUTH 41 45 MILE 42 .2 D10-5A (5)

56 North Ave 2300 NORTH M1-94 (5) MODIFIED

58 North Ave 2300 NORTH M1-94 (5) MODIFIED

57 EXIT 42B E5-1B (5)

57A 20 MPH E13-1P

SHEET 4 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 129	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023204_PS

PLOT DATE : 10/13/2017 11:57 AM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

60A EXIT 42 A
100 Mayfair Rd
North Ave EAST
EXIT ONLY

PI: 124+45.49

TYPE I SIGN ON S-40-354

EXISTING CANTILEVER SIGN BRIDGE S-40-354

440 EXIT P 25 MPH — W13-3A (5) ON UPRIGHT OF SIGN BRIDGE

60 · 90 W11-2(2M) (RRFB) RECTANGLE RAPID FLASH BEAM · 91 W16-7R(2S) · 92 R10-25(2S)

93 W11-2(2M) (RRFB) RECTANGLE RAPID FLASH BEAM · 94 W16-7L(2M) · 95 R10-25(2S) ON LIGHT POLE

97 DO NOT ENTER R5-1 (3)

98 NO TURNS R3-3 (2S)

96 W4-1L(5) ON LIGHT POLE

101 102 103 104 105 106 107 W1-8 (4) 4' HEIGHT BLINKER CHEVRON SEE SPECIAL DETAIL SHEET 6 OF 12

100 YEILD TO BIKE LANE AHEAD ON LIGHT POLE

SEE SHEET 15 FOR PED RAMP SIGNS

116 PEDESTRIANS BICYCLES NON-MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED R5-57 (3)

99 WRONG WAY R5-1A (3) ON LIGHT POLE

115 W1-6 (2S) ON LIGHT POLE

122 NO PARKING R7-1-D(2S)

118 W3-1 (2S)

123 SPEED LIMIT 25 R2-1 (5)

117 W4-3R (2S)

418 W1-6 (2S)

108 W11-2(2M) (RRFB) RECTANGLE RAPID FLASH BEAM AHEAD · 109 W16-9P(2M) ON LIGHT POLE

114 W4-2R(2S) ON LIGHT POLE

110 LEFT LANE SIGNAL R10-65-L(MODX2M)

111 STOP HERE ON RED R10-6(MOD) ON SIGNAL POLE

113 STOP HERE ON RED R10-6(2M) ON SIGNAL POLE

453 CENTER LANE SIGNAL R10-65-C EXISTING OVERHEAD S-40-281

452 RIGHT LANE SIGNAL R10-65-R

IH 41/USH 45 SB

IH 41/USH 45 NB

NORTH AVE.

SHEET 5 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 130	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023205_PS

PLOT DATE : 10/13/2017 11:57 AM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

441 EXIT 42B — E5-1B (5)

148 W6-3 (2S) ON LIGHT POLE

W5-54S(2M) W5-54S(2M)

STOP 144 145 146 147 — R1-1(2S) ALL WAY — R1-3-P (2S) — 144A 145A 146A 147A

419 SPEED LIMIT 25 — R2-1 (5)

130A EXIT 42A — 130 North Ave Mayfair Rd 1/2 MILE

129A EXIT 42B — 129 North Ave WEST EXIT ONLY

143 NO PARKING ANY TIME — R7-1-D (2S) — NO DOGS ALLOWED — MOVE BY OTHERS (CITY)

142 SPEED LIMIT 25 — R2-1(2S) ON LIGHT POLE

NO PARKING ANY TIME — R7-1-D (2S) — NO DOGS ALLOWED — MOVE BY OTHERS (CITY)

141 STOP — R1-1(3)

W. CLARK ST.

NA ST ME STR — STREET NAME SIGN BY OTHERS (CITY)

140 W1-7 (2S)

2 HOUR HOUR PARKING — ESTR

EXISTING SIGN BRIDGE S-40-355 TO REMAIN

IH 41/USH 45 SB

IH 41/USH 45 NB

130ML 132ML 134ML 135 136ML 138ML 140ML 142ML

Meinecke Ave — MI-94(5) ON BRIDGE — 132 133

124 MERGING TRAFFIC AHEAD TYPE II

451 RIGHT LANE MUST EXIT — R3-33-R

134 135 136 W5-56(2S) 4' HEIGHT

138 NO THRU TRAFFIC — R5-54(2S)

137 SPEED LIMIT 25 — R2-1(2S) — NO PARKING ANY TIME — R7-1-D (2S)

W. MEINECKE AVE.

NA ST ME STR — STREET NAME SIGN BY OTHERS (CITY)

NOTE: THIS IS AN UNCONTROLLED INTERSECTION (EXISTING CONDITION)

112TH ST

454 W4-2R (5)

NORTH 41 45 MILE 42 .4 — SOUTH 41 45 MILE 42 .4 — D10-5A (5) ON LIGHT POLE — 125 126

127A EXIT 43 — 127 Burleigh St 1/2 MILE EXIT ONLY

128 THIS LANE ENDS — W9-62 (5)

TYPE I SIGNS ON SIGN BRIDGE S-40-871

S-40-871 NEW SIGN BRIDGE STATION 139ML+00

414 NORTH 41 CHRISTIANA — NORTH 41 — NORTH 45 — J4-3(5)

W. CLARK ST.

SHEET 6 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 131	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023206_PS

PLOT DATE : 10/13/2017 11:57 AM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

N. 114TH ST.

CENTER STREET

113TH ST

112TH ST

TH 41/USH 45 SB

IH 41/USH 45 NB

144ML 145 146ML 148ML 150ML 152ML 154ML 155 156ML 158ML

S-40-873

EXIT 42B
North Ave
WEST
NEXT RIGHT
442A
442
TYPE I SIGN
ON STEEL POSTS

2 HOUR HOUR PARKING
R7-6-D
ESTR

NO DOGS ALLOWED
ESTR

STOP
R1-1
ESTR

PC: 149+63.60

163
RIDESHARE
INFORMATION
www.rideshare.wi.gov
D12-2B(5)

158 SPEED LIMIT 55
R2-1 (5)
ON LIGHT POLE
(SOUTHBOUND)

160 SPEED LIMIT 55
R2-1 (5)

159
SOUTH 41 SOUTH 41 SOUTH 45
J4-3 (5)

EXISTING BUTTERFLY
SIGN BRIDGE S-40-235

Center St
2700 North
MI-94 (MOD)
ON BRIDGE
ESTR

153 SPEED LIMIT 55
420 R2-1 (5)

149
Mount Mary University
EXIT 43
MOVE TYPE I SIGN
NEW STEEL POST

150 SPEED LIMIT 55
R2-1 (5)

NORTH 41 45 MILE 42 .6
SOUTH 41 45 MILE 42 .6
D10-5A (5)
ON LIGHT POLE
151 152

155
RIGHT LANE
MUST EXIT
R3-33-R (5)

154A EXIT 43
154 Burleigh St
1/4 MILE
EXIT ONLY
TYPE I SIGNS
ON NEW SIGN
BRIDGE
S-40-873

443
Burleigh St 1/4
190 Capitol Dr 1 1/2
EE Hampton Ave 2 1/2
E8-1
TYPE I SIGN
(NORTHBOUND)

NORTH 41 45 MILE 42 .8
SOUTH 41 45 MILE 42 .8
D10-5A (5)
ON LIGHT POLE
156 157

BLEACHERS

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SHEET 7 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 132	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023207_PS

PLOT DATE : 10/13/2017 11:58 AM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

181

North Ave - Mayfair Rd 1/4
Watertown Plk Rd 1 1/2
18 Bluemound Rd 2 1/2

TYPE I SIGN ON EXISTING BUTTERFLY SIGN BRIDGE S-40-236 (SOUTHBOUND)

421 FORM SINGLE LINE
R3-58(2S) ON LIGHT POLE

455 W4-3L(2S) ON LIGHT POLE

444 178 W4-2L(2S)

PT: 160+59.78

PC: 170+64.36

IH 41/USH 45 SB

IH 41/USH 45 NB

160ML 162ML 164ML 165 166ML 168ML 170ML 172ML

S-40-872
STA 166+ML+00

167 168 W1-2R (5) ON LIGHT POLE IN MEDIAN WOOD POST OUTSIDE SHOULD

NORTH 41 45 MILE 43.0
SOUTH 41 45 MILE 43.0
D10-5A (5)
169 170

171 EXIT 43 E5-1A (5)
172 W5-54 (2M) 173

174 W3-3(2S) ON LIGHT POLE

EXISTING BUTTERFLY SIGN BRIDGE S-40-236

HOSPITAL EXIT 43 165
E10-6(1)
TYPE I SIGNS ON STEEL POSTS

EXIT 43 166A
Burleigh St 166
EXIT ONLY
TYPE I SIGNS ON SIGN BRIDGE S-40-872

W. LOCUST ST.

N. 114TH ST.

TENNIS COURT

ATHLETIC FIELD

SHEET 8 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 133	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023208_PS

PLOT DATE : 10/13/2017 11:58 AM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

199 RIDESHARE INFO CALL 1-800-455-POOL D12-2A (2)

201 LEFT LANE BUSES MOTORCYCLES AND 2 OR MORE OCCUPANT CAR POOLS ONLY R3-51-L (2S)

198 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED R5-57 (3) ON LIGHT POLE

197 YIELD R1-2(2S)

195 W11-2 (2S)

196 W16-7L (2S)

194 SOUTH INTERSTATE 41 45 J3-1 (2S)

192 193 RAMP METERED WHEN FLASHING W3-8 ON SIGNAL POLE

207A RIGHT LANE SIGNAL R10-65-R

445 CENTER LANE SIGNAL R10-65-C

207 STOP HERE ON RED R10-6 (2M) ON SIGNAL POLE

446 STOP HERE ON RED R10-6 (MOD) (2M) ON SIGNAL POLE

203 W4-3R(5)

202 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED R5-57 (3)

PT: 176+34.19

178ML 180ML 182ML 184ML 185 186ML

IH 41/USH 45 SB

IH 41/USH 45 NB

176ML 175 174ML 172ML

204 205 ONLY ONLY R3-8-P (2S)

206A LEFT LANE SIGNAL R10-65-L

206 STOP HERE ON RED R10-6 (MOD)(2M) ON SIGNAL POLE

184 185 WRONG WAY R5-1A (3) ON LIGHT POLE

182 Burleigh St WEST EAST D1-1 (MOD)

183 H D9-2 (2S) MB6-1 (2S)

186 187 STOP R1-1F (3) ON SIGNAL POLE

W. BURLEIGH ST.

188 189 DO NOT ENTER R5-1C (3) TRIM OCTAGON SHAPE

190 191 WRONG WAY R5-1A(2S) ON SIGNAL POLE 3' HEIGHT

200A EXIT 42 A-B

200 North Ave Mayfair Rd 3/4 MILE

TYPE I SIGN ON STEEL POSTS

SHEET 9 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 134 E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023209_PS

PLOT DATE : 10/13/2017 11:59 AM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME :

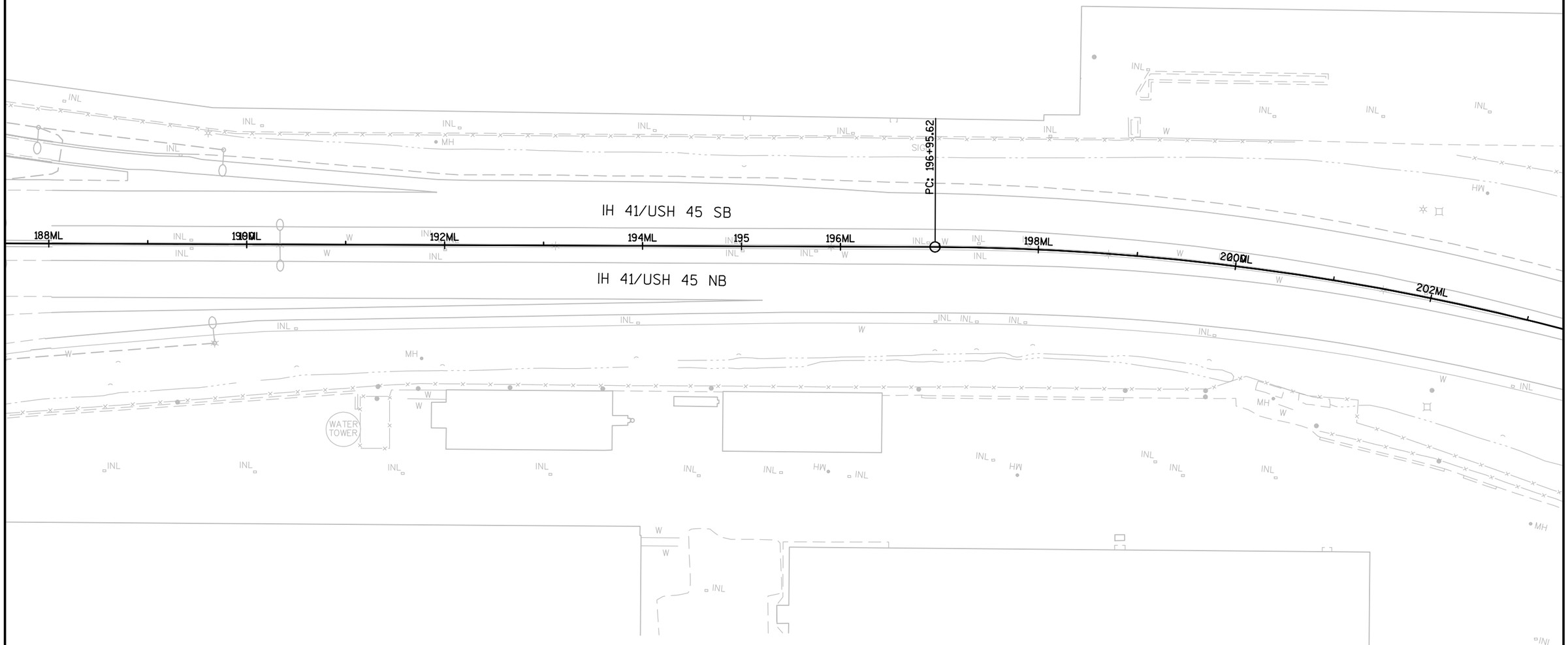
PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

NO SIGNS ON THIS SHEET

N



SHEET 10 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 135	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023210_PS

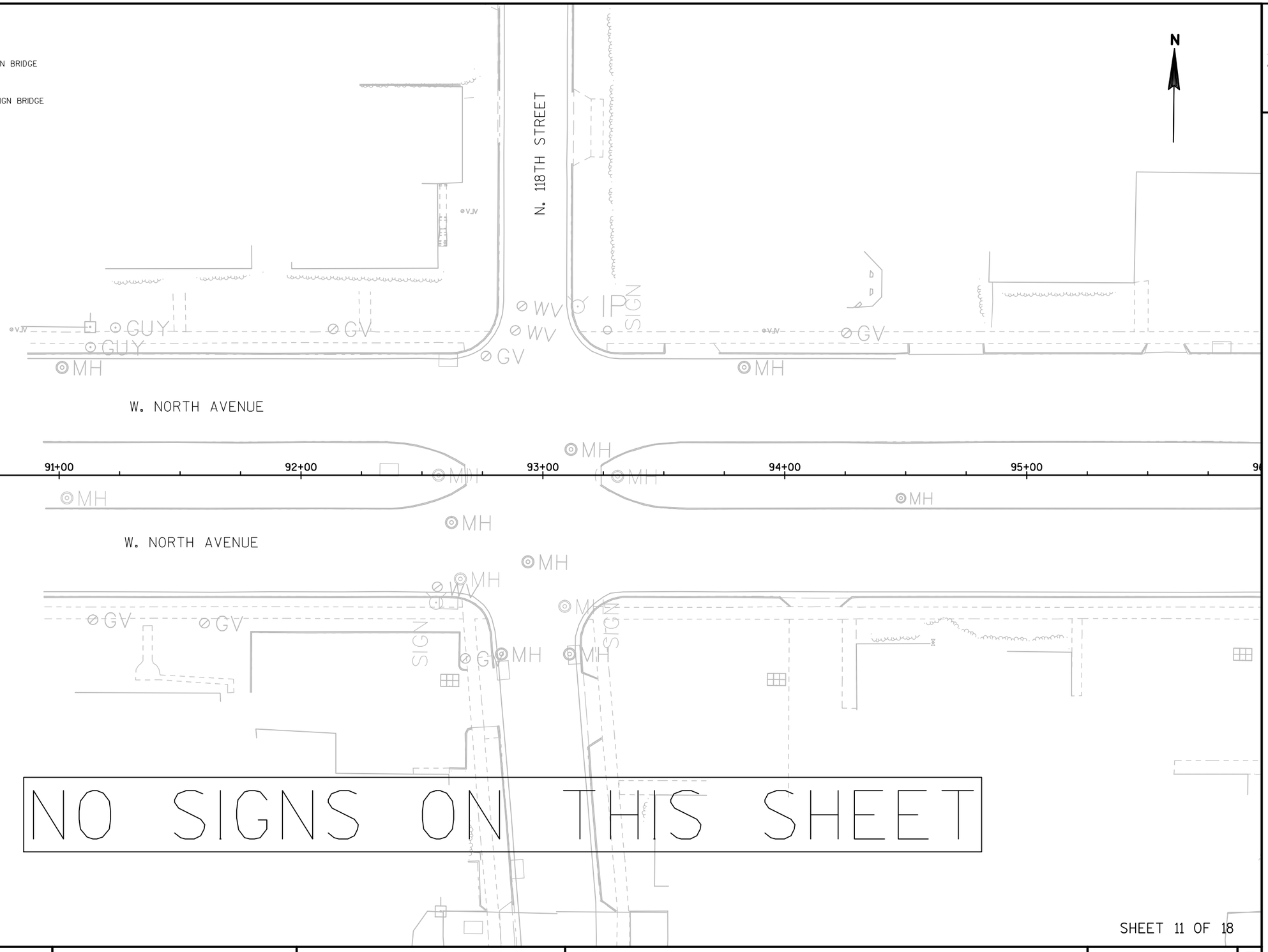
PLOT DATE : 10/13/2017 11:59 AM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



NO SIGNS ON THIS SHEET

SHEET 11 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 136	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023211_PS

PLOT DATE : 10/13/2017 11:59 AM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

SEE SHEET 12A

N

N. 117TH STREET

N. 116TH STREET

W. NORTH AVENUE

96+00 97+00 98+00 99+00 100+00 101+00

JCT INTERSTATE 41 239 / 45 J1-1 (2S)

JCT INTERSTATE 41 235 / 45 J1-1 (2S)

228 R5-2(2S)

229 NO PARKING ANY TIME R7-1-D (2S)

ON LIGHT POLE

SHEET 12 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 137	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023212_PS

PLOT DATE : 10/13/2017 12:00 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- INDICATES SIGN SIZE

N

NO SIGNS ON THIS SHEET

W. NORTH AVENUE

98+00

99+00

100+00

101+00

N. 116TH STREET

W. NORTH AVENUE

SHEET 12A OF 18

(2S)

2

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 138	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023212A_PS

PLOT DATE : 10/13/2017 12:00 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

NOTE:
WISDOT MAINTAINS BETWEEN THE RAMPS - ACCORDINGLY 4x6 WOOD POSTS USED. PARKING SIGNS WILL BE TUBULAR STEEL POSTS.

N. 115TH STREET

N. 114TH STREET

W. NORTH AVENUE

312 NORTH 41 45 USE LEFT LANE — JV2-1 (2S)

290 Fond du Lac West Bend — D1-2

102+00 103+00 104+00 105+00 106+00 107+00

447 RIGHT LANE MUST TURN RIGHT — R3-7-R (3)

275 SOUTH 41 45 ONLY — TYPE I SIGNS ON OVERHEAD SIGN SUPPORT S-40-969

S-40-969 STA. 105+50

281 W11-2(2M) (RRFB) RECTANGLE RAPID FLASH BEAM

282 W16-7R(2S)

283 R10-25(2S)

288 W12-1D(2S) 4' HEIGHT

285 RAMP CLOSED USE ALT ROUTE — R11-54-F (2S)

311 SOUTH 41 45 USE RIGHT LANE — JV2-1 (2S)

SOUTH 41 NORTH 45 SOUTH 45 SOUTH 41 — ESTR

276 RAMP CLOSED USE ALT ROUTE — R11-54-F (2S)

277 Milwaukee Madison Beloit — D1-3

315 316 317 W5-56(2S) 4' HEIGHT

284 YIELD — R1-2 (3)

286 287 RAMP METERED WHEN FLASHING — W3-8(2S) ON SIGNAL POLE SEE FTMS PLAN

278 W11-2(2M) (RRFB) RECTANGLE RAPID FLASH BEAM

279 W16-7L (2S)

280 R10-25(2S)

SHEET 13 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 139 E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023213_PS

PLOT DATE : 10/23/2017 1:06 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

N. 113TH STREET

SEE SHEET 4 FOR RAMP SIGNS

347 DO NOT ENTER R5-1 (2S)

341 R3-1 (2S)

342 NO PARKING R7-1-D(2S)

PT: 124+45.49

124ML

125

449 SOUTH 41 SOUTH 45 J2-2(2S)

344 SOUTH 41 45 JV23-1 (2S) ON SIGNAL POLE

413 NORTH AVE WEST

340 ONE WAY R6-2-R(2S)

NORTH 41 45 332 JV22-1 (2S)

MILWAUKEE MADISON BELOIT 339 D1-3

333 FOND DU LAC WEST BEND D1-2

W. NORTH AVENUE

108+00 109+00 110+00 111+00 112+00 113+00

343 RAMP CLOSED USE ALT ROUTE R11-54-F (2S)

320 W4-3R(2M)

NORTH 41 USE LEFT LANE NORTH 45 USE RIGHT LANE J3-2(2S)

321 W11-2(2M) (RRFB) RECTANGLE RAPID FLASH BEAM W16-7R(2S) 322 323 R10-25(2S)

324 W11-2(2M) (RRFB) RECTANGLE RAPID FLASH BEAM W16-7L (2M) 325 326 R10-25(2S)

329 BIKE LANE R3-17(2S) IN SIDEWALK

124ML

IH 41/USH 45 SB

IH 41/USH 45 NB

SHEET 14 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 140	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023214_PS

PLOT DATE : 10/13/2017 12:01 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME :

PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

W. NORTH AVENUE

114+00 115+00 116+00 117+00 118+00 119+00

348 RAMP CLOSED USE ALT ROUTE R11-54-F (2S)

383 NO PARKING ANY TIME R7-1-D(2S)

382 W4-1R(2S) ON SIGNAL POLE

381 ONE WAY R6-2-L(2M)

378 379 RAMP METERED WHEN FLASHING W3-8(2S)

370 RAMP CLOSED USE ALT ROUTE R11-54-F (2S)

380 YIELD R1-2 (3)

373 376 W11-2(2M) (RRFB) RECTANGLE RAPID FLASH BEAM W16-7L (2M)

374 377 372 375 R10-25(2S)

371 RAMP CLOSED USE ALT ROUTE R11-54-F (2S)

417 Fond Du Lac West Bend D1-2

NORTH 41 NORTH 45 450 JV3-2 (2S)

385 NORTH 41 45 JV3-1 (2S)

SHEET 15 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 141	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023215_PS

PLOT DATE : 10/13/2017 12:02 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

NOTE:
CONNECTED TO
RRFB @ SIGN #373

410 — RIGHT LANE MUST TURN RIGHT — R3-7-R (3)

409 — NORTH NORTH 41 45 ONLY
TYPE I SIGNS ON CANTILEVER SIGN SUPPORT S-40-798

S-40-798
STA. 119+50

406 — SOUTH INTERSTATE 41 45 USE LEFT LANE — JV22-1 (2S)

407 — W11-2(2M) (RRFB) RECTANGLE RAPID FLASH BEAM AHEAD W16-9P(2M)

408

401 — NORTH NORTH 41 45 ONLY
TYPE I SIGNS ON CANTILEVER SIGN SUPPORT S-40-799

S40-799
STA. 123+75

402 — SOUTH INTERSTATE 41 45 USE LEFT LANE — JV22-1 (2S)

398 — RIGHT LANE MUST TURN RIGHT — R3-7-R (3)

397 — JCT INTERSTATE 41 45 — JI-1 (2S)

120+00 121+00 122+00 123+00 124+00 125+00

W. NORTH AVENUE

W. NORTH AVENUE

UNION PACIFIC RAILROAD

SHEET 16 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 142	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023216_PS

PLOT DATE : 10/13/2017 12:02 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

HWY 100 / N. MAYFAIR ROAD

NO SIGNS ON THIS SHEET

W. NORTH AVENUE

125+00 126+00 127+00 128+00 129+00 130+00 131+0

W. NORTH AVENUE

HWY 100 / N. MAYFAIR ROAD

SIGN

SIGNS

SHEET 17 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 143	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023217_PS

PLOT DATE : 10/13/2017 12:03 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

NO SIGNS ON THIS SHEET

N

W. BURLEIGH STREET

W, BURLEIGH STREET

SHEET 18 OF 18

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET 144	E

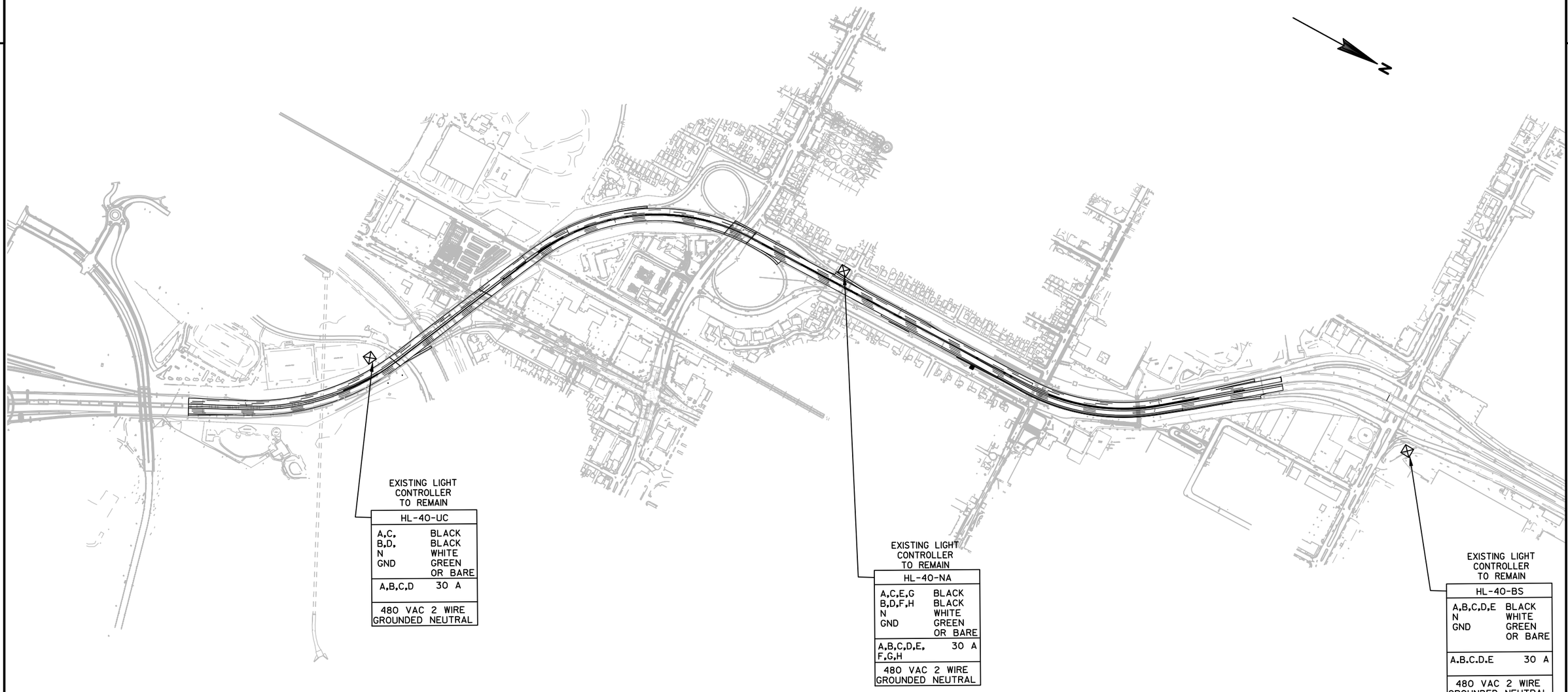
FILE NAME : W:\PDS\C3D\CAD\10603316\70\SIGN\023201_SP.DWG
LAYOUT NAME - 023218_PS

PLOT DATE : 10/13/2017 12:03 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



EXISTING LIGHT CONTROLLER TO REMAIN

HL-40-UC	
A,C, B,D, N GND	BLACK BLACK WHITE GREEN OR BARE
A,B,C,D	30 A
480 VAC 2 WIRE GROUNDED NEUTRAL	

EXISTING LIGHT CONTROLLER TO REMAIN

HL-40-NA	
A,C,E,G B,D,F,H N GND	BLACK BLACK WHITE GREEN OR BARE
A,B,C,D,E, F,G,H	30 A
480 VAC 2 WIRE GROUNDED NEUTRAL	

EXISTING LIGHT CONTROLLER TO REMAIN

HL-40-BS	
A,B,C,D,E N GND	BLACK WHITE GREEN OR BARE
A.B.C.D.E	30 A
480 VAC 2 WIRE GROUNDED NEUTRAL	

SHEET 1 OF 1

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PROJECT OVERVIEW - LIGHTING	SHEET 145	E

2

GENERAL NOTES

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

LOCATIONS OF THE PVC CONDUITS ARE IDENTIFIED IN THE PLANS WHERE THEY ARE REQUIRED. APPROPRIATE ADJUSTMENT ON CONDUIT LOCATIONS MAY BE MADE IF THE FIELD CONDITIONS ARE SUCH THAT THE CONDUIT CANNOT BE INSTALLED AT THE SPECIFIED LOCATIONS. FIELD MARK EACH CONDUIT LOCATION IN RED.

THE TRENCH SHALL NOT BE BACK FILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL CONDUITS SHALL BE CAPPED OR PLUGGED WITH ENGINEER APPROVED FITTINGS IMMEDIATELY AFTER INSTALLATION.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR IMMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON ALL CONDUITS.

PRIOR TO CONDUIT ACCEPTANCE, ALL CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND BE CAPPED WITH THE APPROPRIATE CAST PLASTIC CAP WHICH FITS SNUGGLY ON THE CONDUIT, BUT EASILY REMOVED IN THE FUTURE. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.

CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX–TO–PULL BOX OR JUNCTION BOX OR BASE–TO–BASE, ETC.) UNLESS OTHERWISE NOTED ON PLANS.

PULL ROPE (3/8–INCH NYLON) SHALL BE INSTALLED IN ALL NEW CONDUITS.

CONTRACTOR SHALL SUPPLY AS–BUILT DRAWING FOR ALL THE WORK BEING DONE.

INSTALLATION OF LATERAL UNDERGROUND CONDUIT UNDER PAVEMENT SHALL BE INSTALLED MINIMUM 30 INCHES BELOW PROPOSED GRADE. CONDUIT LATERALS SHALL BE TRENCHED UNDER PAVEMENT BEFORE PAVEMENT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ROADWAY CONSTRUCTION FOR CONDUIT LATERALS INSTALLATION.

PITCH ALL CONDUITS TOWARD PULL BOXES. INSTALL A 2" DRAIN DUCT TO STORM SEWER OR DRAIN SUMP AS REQUIRED FOR DRAINAGE. THE 2" DRAIN DUCT OR SUMP IS INCIDENTAL TO THE PULL BOX BID ITEM AND IS NOT SHOWN.

THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE, IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

HAND DIGGING MAY BE REQUIRED FOR LOCATIONS ADJACENT TO EXISTING GAS AND POWER LINES. HAND EXCAVATION SHOULD BE ANTICIPATED & WILL BE CONSIDERED INCIDENTAL TO THE CONCRETE BASES BID ITEM. COORDINATE ALL WORK NEAR GAS LINE WITH WE ENERGIES.

EXISTING CONDUIT AND CID NO LONGER BEING USED IS ABANDONED IN PLACE. THE CONTRACTOR MAY REMOVE ABANDONED WIRING AT THE CONTRACTOR'S EXPENSE. ABANDONED PULL BOX REMOVAL IS INCIDENTAL TO THE ROAD CONSTRUCTION.

ALL UNDERGROUND WIRING AND CONDUIT FOR POLES BEING REMOVED IS ABANDONED IN PLACE UNLESS NOTED OTHERWISE. CONTRACTOR MAY SALVAGE ABANDONED WIRING AT HIS OWN EXPENSE.

IF CID CONTAINS PHASE CONDUCTOR(S) THAT WILL NOT BE USED FOR FURTHER POLES, I.E. AT THE END OF A CIRCUIT, DO NOT ENERGIZE THE CONDUCTOR(S) LEAVING THE LAST POLE THE PHASE WAS UTILIZED. REMOVE EXCESS CONDUCTOR(S) IN ALL SUBSEQUENT POLES.

SEAL THE ENDS OF ALL CID RACEWAY WITH A UL RECOGNIZED CONDUIT SEALANT. PROVIDE A 1#2" NYLON ROPE EXTENDING BEYOND THE PLUG TO ASSIST IN REMOVING THE PLUG IN THE FUTURE.

SEE DETAIL "CONDUIT DETAILS AT STRUCTURE PARAPET TO ROADWAY BARRIER INTERFACE" WHEN CONDUIT EXITS TO GRADE FROM A BRIDGE PARAPET OR RETAINING WALL. RIGID METALLIC CONDUIT IN CONCRETE BARRIER IS INCIDENTAL TO THE RIGID NONMETALLIC CONDUIT.

PROVIDE MINIMUM CABLE SLACK AS NOTED BELOW:

PULL BOXES:	5–FT ONE WAY IN OR OUT
EMBEDDED JUNCTION BOXES:	3–FT
DISTRIBUTION CENTER/LOAD CENTER:	10–FT

STAGING NOTES

MAINTAIN LIGHTING AT ALL TIMES DURING CONSTRUCTION USING EXISTING LIGHTING, PROPOSED TEMPORARY, FINAL LIGHTING OR COMBINATIONS.

DO NOT REMOVE EXISTING LIGHTING UNTIL THE NEW OR TEMPORARY LIGHTING IS OPERATIONAL. REFER TO DRAWINGS FOR STAGING INFORMATION.

MAINTAINING SYSTEM CONTINUITY SHALL BE INCIDENTAL TO THE "REMOVE EXISTING STREET LIGHTS" BID ITEM.

DUE TO THE PHASING OF CONSTRUCTION SOME FINAL LIGHTING UNITS MAY BE ORPHANED UNTIL A LATER STAGE IS COMPLETE. IT IS AT THE DISCRETION OF THE CONTRACTOR TO SCHEDULE
THESE ITEMS. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF THE PLACEMENT OF RACEWAY THAT SPANS TWO DIFFERENT PHASES OF CONSTRUCTION.

TEMPORARY OR FINAL LIGHTING MUST ILLUMINATE AN AREA BEFORE EXISTING LIGHTING UNITS IN AN AREA CAN BE REMOVED. THE SCHEDULING OF REMOVAL IS AT THE DISCRETION OF THE
CONTRACTOR WITH THE PROVISION THAT LIGHTING OF THE ROADWAY IS PROVIDED AT ALL TIMES.

COORDINATE POLE REMOVAL WITH TRAFFIC CONTROL.

LEGEND – LIGHTING REMOVALS

XYYZ — EXISTING SINGLE ARM FREEWAY LIGHTING UNIT
X – CIRCUIT
YY – DISTRIBUTION CENTER
Z – POLE/LUMINAIRE ID NUMBER

XYYZ / XYYZ — EXISTING TWIN ARM FREEWAY LIGHTING UNIT
X – CIRCUIT
YY – DISTRIBUTION CENTER
Z – POLE/LUMINAIRE ID NUMBER

DISTRIBUTION CENTER
TRANSFORMER
ELECTRIC METER SOCKET
EXISTING PULLBOX
EXISTING UDL (UNDER DECK LIGHTING)

LEGEND – TEMPORARY LIGHTING

LIGHTING CONTROL CABINET

V, W / T–XYYZ — FLOOD LIGHT ON WOOD POLE
V – STATION, W – OFFSET
T – TEMPORARY LIGHTING
X – CIRCUIT, YY – DISTRIBUTION CENTER,
Z – POLE NUMBER

V, W / WP–XX–Y — WOOD POLE
V – STATION, W – OFFSET
WP – WOOD POLE
XX – DISTRIBUTION CENTER
Y – POLE NUMBER

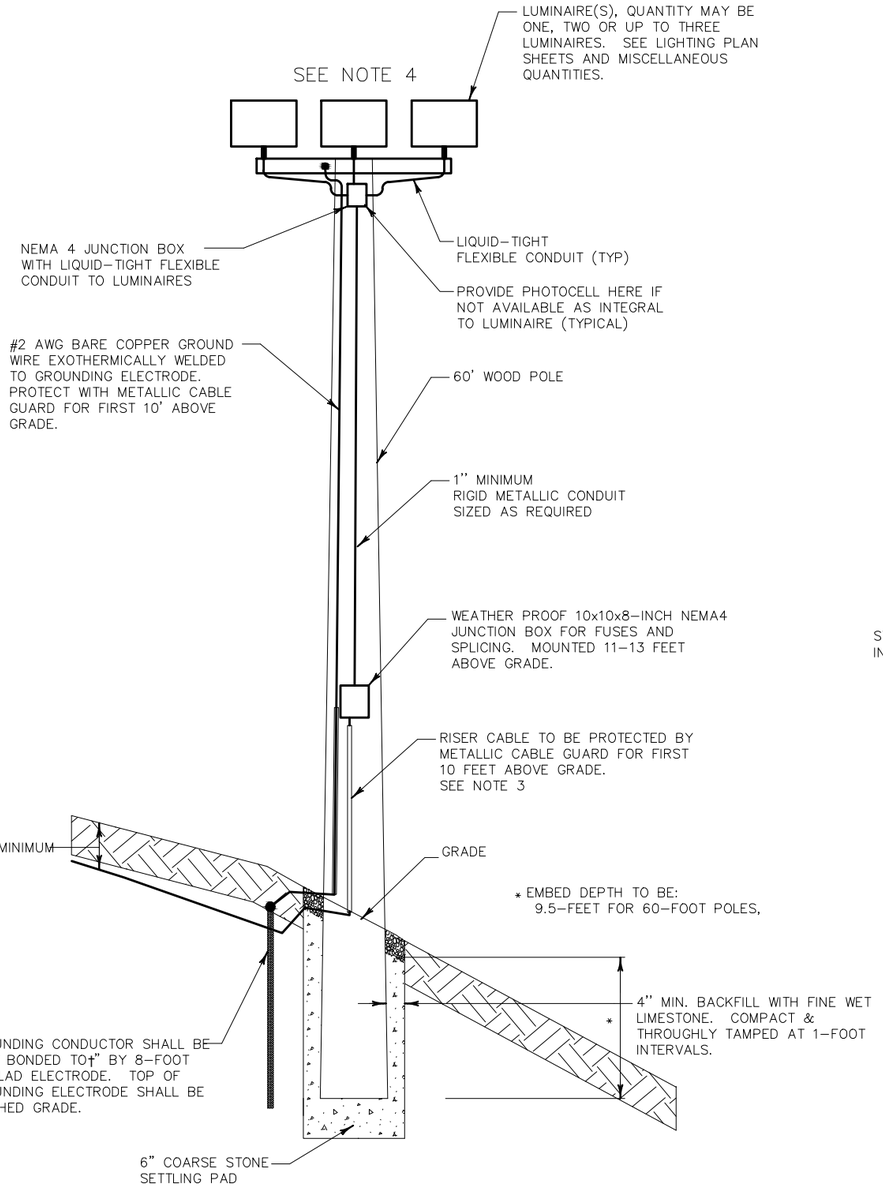
V, W / T–PB–XX–YY — PULL BOX, 24" x 36"
V – STATION, W – OFFSET
T – TEMPORARY
PB – PULLBOX
XX – DISTRIBUTION CENTER
YY – PULLBOX NUMBER

EXISTING SINGLE ARM LOCAL LIGHTING UNIT
EXISTING SINGLE ARM FREEWAY LIGHTING UNIT
EXISTING TWIN ARM FREEWAY LIGHTING UNIT
—OH— OVERHEAD CABLE (AERIAL ALUMINUM)
CONDUIT, 2" UNLESS OTHERWISE NOTED

LEGEND – FINAL LIGHTING

CONDUIT, 2" UNLESS OTHERWISE NOTED
PROPOSED TWIN ARM FREEWAY LIGHTING UNIT
LIGHTING CONTROL CABINET
PULL BOX 24" x 42"
ELECTRIC METER SOCKET

2

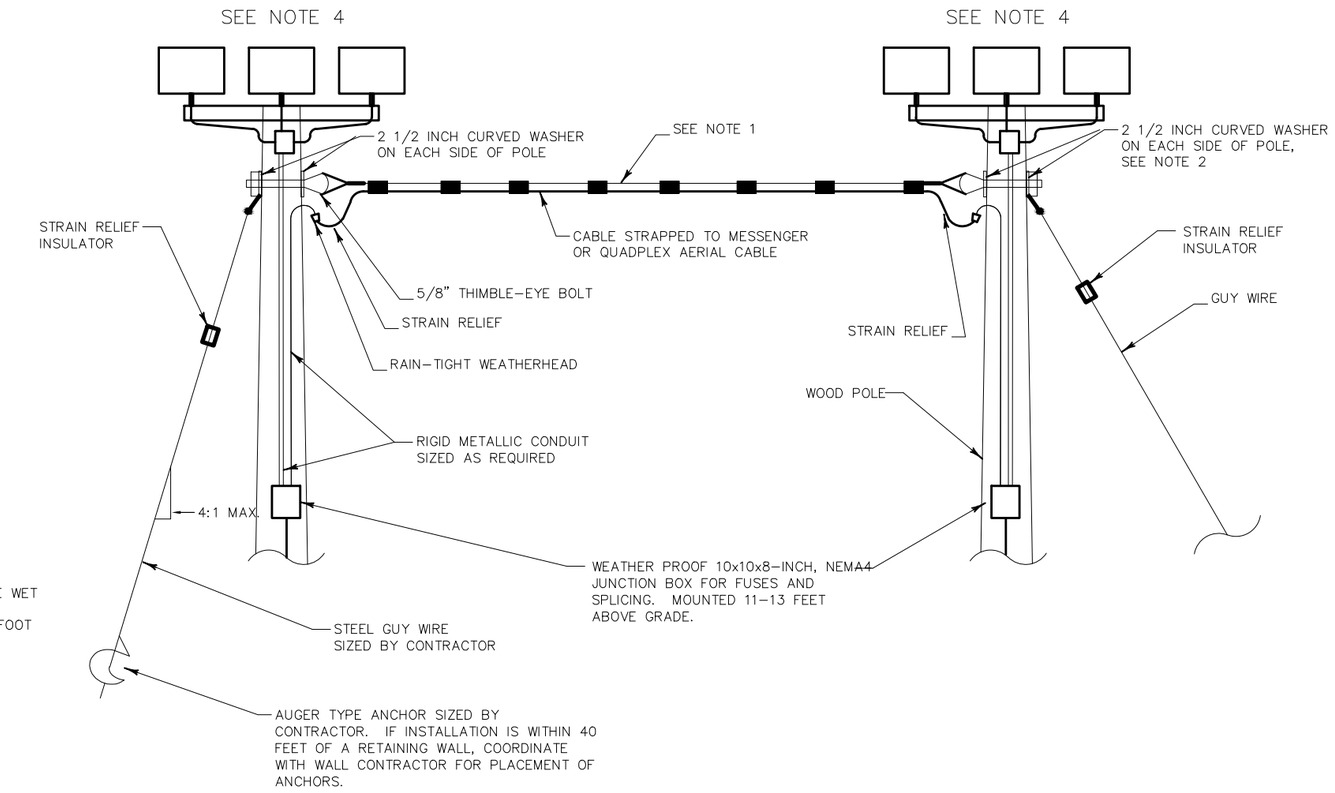


WOODEN POLE INSTALLATION DETAIL

SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
NTS

NOTES

1. MINIMUM CLEARANCE AT CENTER OF SPAN: 20-FT. ABOVE ROADWAY OR GRADE.
2. CONSTRUCT DEAD ENDS WITH SECONDARY RACK, CLEVISES, OR OTHER APPROVED METHOD.
3. SECURELY BAND OR CLAMP RISERS TO POLES. USE METALLIC CABLE GUARD TO PROTECT RISERS FOR 10-FEET ABOVE GRADE.
4. FOR CLARITY, LIGHTNING PROTECTION NOT SHOWN IN ITS ENTIRETY. PROVIDE AIR TERMINAL PROTRUDING 18" ABOVE HIGHEST FIXTURE WITH #2 AWG DOWN CONDUCTOR TO A† X 8-FOOT COPPER CLAD ELECTRODE FOR LIGHTNING PROTECTION. DOWN CONDUCTOR MAY TRAVEL ONLY IN A DOWNWARD DIRECTION UNTIL IT IS CONNECTED TO THE GROUNDING ELECTRODE. LIGHTNING PROTECTION GROUNDING ELECTRODE TO BE BONDED TO EQUIPMENT GROUNDING ELECTRODE WITH BARE, SOLID #2 COPPER CONDUCTOR; EXOTHERMIC WELD LOWER, MECHANICAL ON UPPER END.
5. LUMINAIRES AND AERIAL CABLES ARE SEPARATE BID ITEMS AND ARE NOT PART OF THE BID ITEM "WOOD POLE LIGHTING 60-FOOT. THE REMAINING ITEMS SHOWN ARE INCIDENTAL TO BID ITEM "POLES WOOD 60-FT.



OVERHEAD WIRE DETAIL

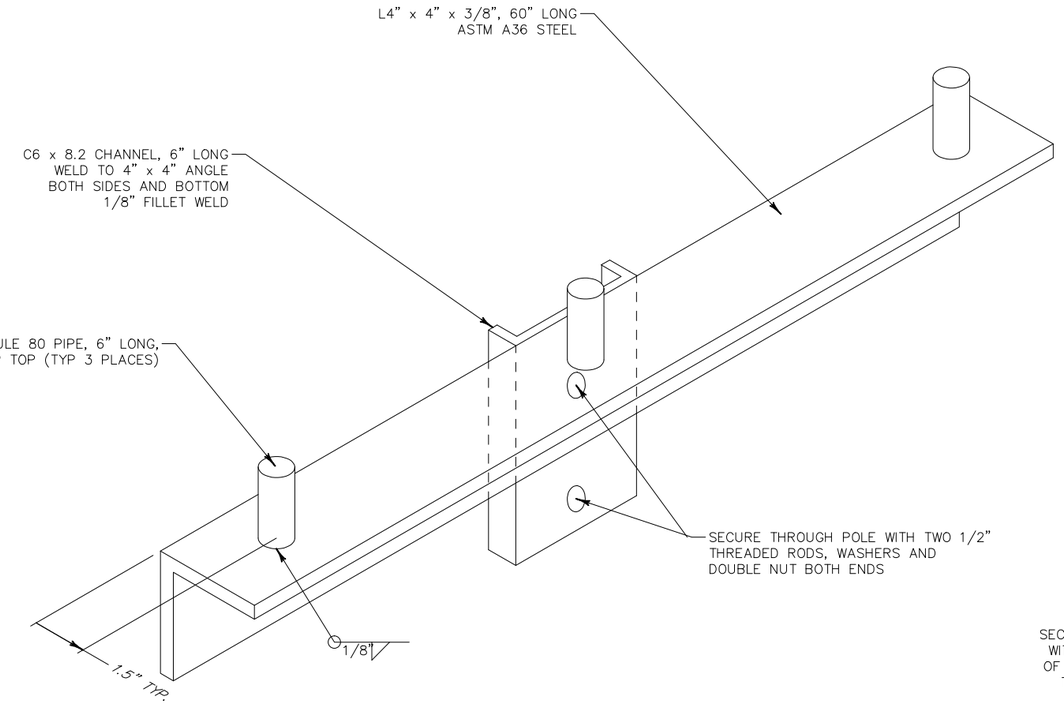
SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
NTS

SHEET 1 OF 4

PROJECT NO: 2010-14-70	HWY: USH 41	COUNTY: MILWAUKEE	LIGHTING PLAN - DETAIL	SHEET 147	E

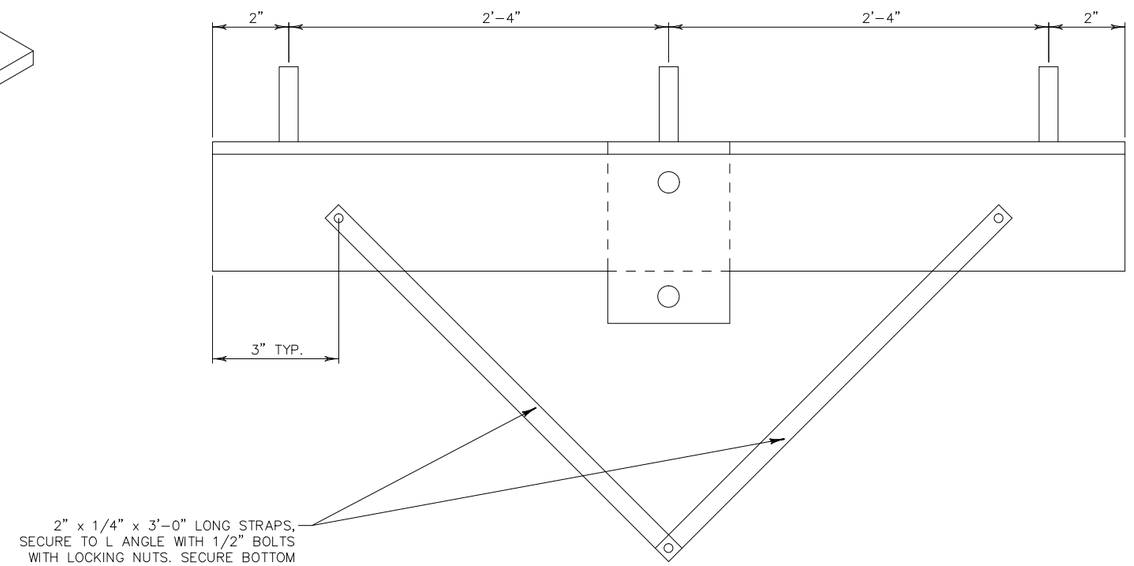
NOTES

1. HOT DIP GALVANIZE AFTER FABRICATION.
2. POLE WITH 2 OR 3 LUMINAIRES TO USE BRACKET AS SHOWN. PROVIDE ONLY THE CENTER PORTION WITH 4" L ANGLE, 6" LONG FOR A SINGLE FIXTURE.



ISOMETRIC VIEW

STRAPS NOT SHOWN FOR CLARITY



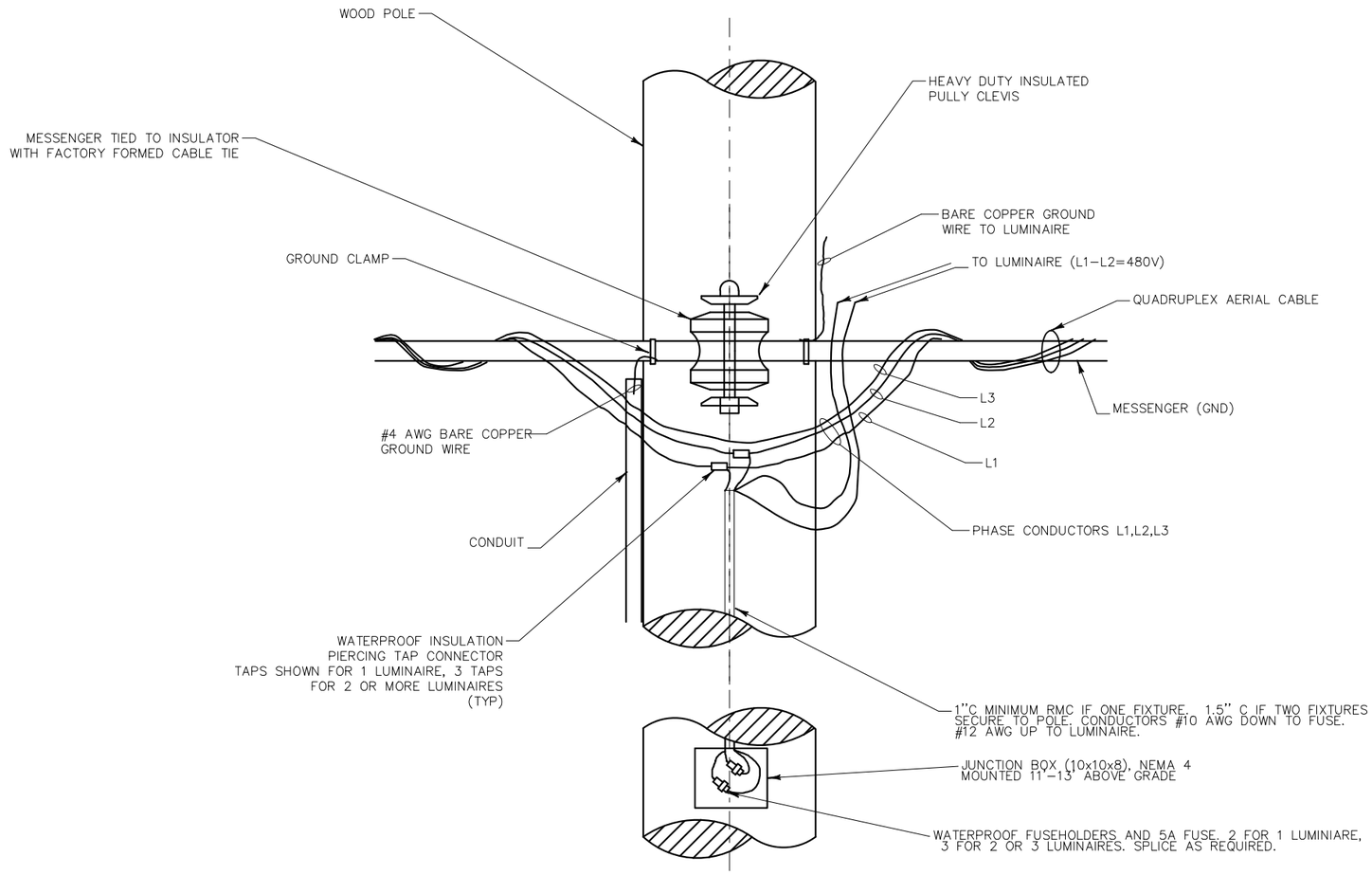
FRONT VIEW

FLOODLIGHT MOUNTING BRACKET

NTS

NOTES

1. IF TWO OR MORE CABLES ON A POLE ARE FOR THE SAME CIRCUIT, CONNECT THE EQUIPMENT GROUNDING CONDUCTOR AND GROUNDED CONDUCTOR (NEUTRAL) AT EACH POLE.
2. TAPS, CONDUIT, JUNCTION BOX, INSULATIOR, CLEVIS FUSE HOLDERS, WIRING TO/FROM JUNCTION BOX AND TO LUMINAIRE ARE PART OF THE BID ITEM "WOOD POLE LIGHTING 60-FOOT".



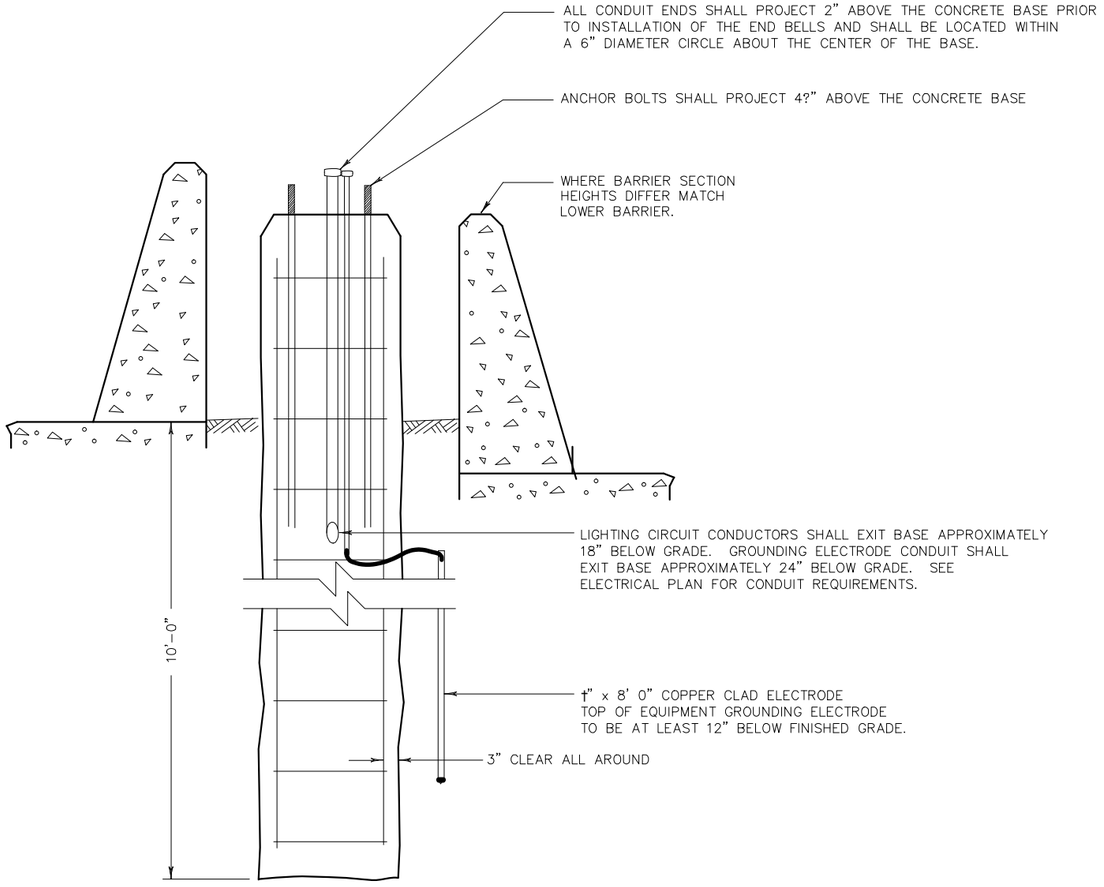
OVERHEAD CABLE SPLICE AT WOOD POLE-TEMPORARY 480V FIXTURES WIRED PHASE-PHASE

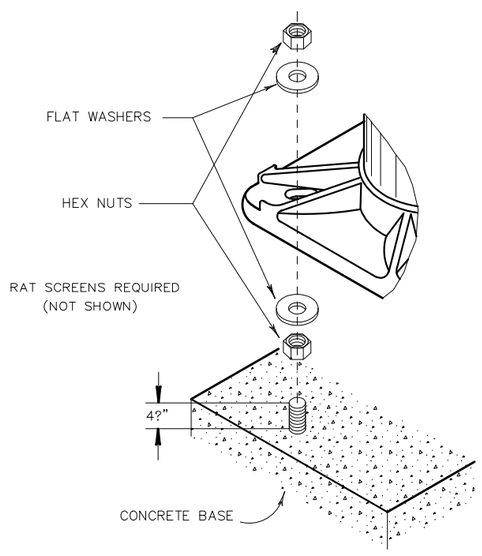
NTS

GENERAL NOTES

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

DETAILS OF CONSTRUCTION WITH THE EXCEPTION OF HEIGHT ABOVE GRADE AND CONDUIT SIZE SHALL BE AS DEFINED IN THE STANDARD DETAIL FOR TYPE 8 BASE.





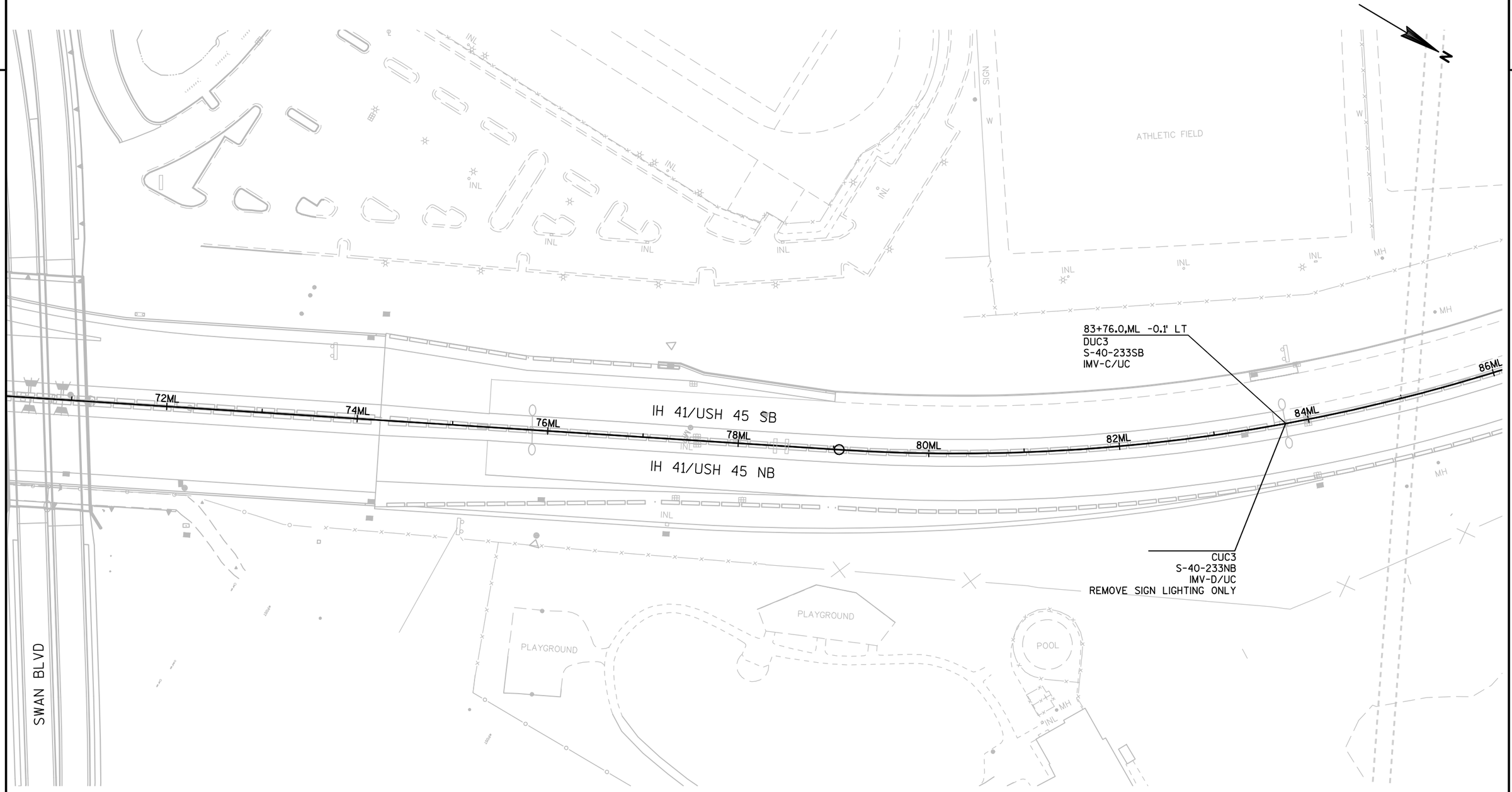
CONCRETE BASE, TYPE "B"

(1" ANCHOR RODS, 15" BOLT CIRCLE, 4?" PROJECTION)

SHEET 4 OF 4

PROJECT NO: 2010-14-70	HWY: USH 41	COUNTY: MILWAUKEE	LIGHTING PLAN - DETAIL	SHEET 150	E

2



SHEET 1 OF 9

PROJECT NO: 2010-14-70	HWY: IH-41	COUNTY: MILWAUKEE	REMOVAL LIGHTING PLAN	SHEET 151	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023501_LP.DWG
LAYOUT NAME - 023501_LP

PLOT DATE : 8/29/2017 2:26 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

UNDERWOOD PKWY NORTH

HWY 100 / N. MAYFAIR ROAD

IH 41/USH 45 SB

IH 41/USH 45 NB

ATHLETIC FIELD

86ML

88ML

90ML

92ML

94ML

96ML

98ML

100ML

88+92.1,ML 0.2' RT
DUC1

90+42.8,ML 94.6' LT
HL-40-UC

90+52.7,ML 7.30' LT
EX. LPB-UC-1

90+52.4,ML 6.3' LT
EX. LPB-UC-2

CUC1

90+60.0,ML 63.6' RT
EX. LPB-UC-3

SHEET 2 OF 9

PROJECT NO: 2010-14-70	HWY: IH-41	COUNTY: MILWAUKEE	REMOVAL LIGHTING PLAN	SHEET 152	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023501_LP.DWG
LAYOUT NAME - 023502_LP

PLOT DATE : 8/29/2017 2:26 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

104+44.5,ML 0.4' RT
BUC6

106+98.3,ML 0.0'
GNA

111+99.5,ML -0.1' LT
GNA3

IH 41/USH 45 SB

IH 41/USH 45 NB

100ML

102ML

104ML

106ML

108ML

110ML

112ML

114ML

AUC6

HNA1

HNA3
S-40-234
IMV-H/NA
REMOVE SIGN LIGHTING ONLY

UNION PACIFIC RAILROAD

HWY 100 / N. MAYFAIR ROAD

SHEET 3 OF 9

PROJECT NO: 2010-14-70	HWY: IH-41	COUNTY: MILWAUKEE	REMOVAL LIGHTING PLAN	SHEET 153	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023501_LP.DWG
LAYOUT NAME - 023503_LP

PLOT DATE : 8/29/2017 2:27 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

W. NORTH AVE.

119+48.0,ML 0.3' RT
HNA6

120+52.6,ML -0.9'LT
EX. LPB-NA-12

116+98.1,ML 0.1' RT
GNA5

126+34.5,ML -75.6' LT

129+79.1,ML 0.2' RT

114ML
116ML
118ML
120ML
122ML
124ML
126ML
128ML

HNA5

GNA6

IH 41/USH 45 SB

IH 41/USH 45 NB

121+00.9,ML 76.5' RT
S-40-378
IMV-E
REMOVE SIGN LIGHTING ONLY

SHEET 4 OF 9

PROJECT NO: 2010-14-70	HWY: IH-41	COUNTY: MILWAUKEE	REMOVAL LIGHTING PLAN	SHEET 154	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023501_LP.DWG
LAYOUT NAME - 023504_LP

PLOT DATE : 8/29/2017 2:27 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

119+48.0,ML 0.3' RT
HNA6

120+52.6,ML -0.9'LT
LPB-NA-12

126+34.5,ML -75.6' LT
S-40-354
MV-C/NA
REMOVE SIGN LIGHTING ONLY

129+79.1,ML 0.2' RT
HNA10

HL-40-NA

ENA32

116+98.1,ML 0.1' RT
GNA5

118ML

120ML

122ML

124ML

126ML

128ML

130ML

132ML

IH 41/USH 45 SB

IH 41/USH 45 NB

130+69.2,ML 1.2' RT
EX. LPB-NA-3

EX. LPB-NA-4

GNA6

HNA5

GNA10

BNA3

121+00.9,ML 76.5' RT
S-40-378
IMV-E
REMOVE SIGN LIGHTING ONLY

NORTH AVE.

POST

WALLS

INL

MH

SIGN

A/C

N

SHEET 5 OF 9

PROJECT NO: 2010-14-70	HWY: IH-41	COUNTY: MILWAUKEE	REMOVAL LIGHTING PLAN	SHEET 155	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023501_LP.DWG
LAYOUT NAME - 023505_LP

PLOT DATE : 8/29/2017 2:27 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

132+08.2,ML -0.1' LT
ANA3

HL-40-NA

EX. LPB-NA-1

ENA32

EX. LPB-NA-2

137+76.1,ML -75.4' LT
S-40-355
2MV-A/B/NA
REMOVE SIGN LIGHTING ONLY

130+69.2,ML 1.2' RT
EX. LPB-NA-3

EX. LPB-NA-4

BNA3

W. CLARK ST.

W. MEINECKE AVE.

IH 41/USH 45 SB

IH 41/USH 45 NB

132ML 134ML 136ML 138ML 140ML 142ML

SHEET 6 OF 9

PROJECT NO: 2010-14-70	HWY: IH-41	COUNTY: MILWAUKEE	REMOVAL LIGHTING PLAN	SHEET 156	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023501_LP.DWG
LAYOUT NAME - 023506_LP

PLOT DATE : 8/29/2017 2:27 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N. 114TH ST.

CENTER STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

144ML

146ML

148ML

150ML

152ML

154ML

156ML

158ML

151+93.1,ML 0.0' LT
CBS11

154+67.5,ML -0.1' LT
DBS10

157+41.5,ML -0.1' LT
CBS9

DBS9

DBS11

CBS10
S-40-235
IMV-CBS
REMOVE SIGN LIGHTING
AND LIGHTING UNIT

TENNIS COURT

BLEACHERS

BLEACHERS

BLEACHERS

SHEET 7 OF 9

PROJECT NO: 2010-14-70	HWY: IH-41	COUNTY: MILWAUKEE	REMOVAL LIGHTING PLAN	SHEET 157	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023501_LP.DWG
LAYOUT NAME - 023507_LP

PLOT DATE : 8/29/2017 2:27 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

BLEACHERS

TENNIS COURT

TENNIS COURT

ATHLETIC FIELD

160+18.6,ML 0.4' RT
DBS8

162+90.6,ML 0.8' RT
CBS7

IH 41/USH 45 SB

IH 41/USH 45 NB

160ML

162ML

164ML

166ML

168ML

170ML

172ML

DBS7

CBS8S-40-235
IMV-C/BS
REMOVE SIGN LIGHTING
AND LIGHTING UNIT

W. LOCUST ST.

SIGN

SIGN

INL

SHEET 8 OF 9

PROJECT NO: 2010-14-70	HWY: IH-41	COUNTY: MILWAUKEE	REMOVAL LIGHTING PLAN	SHEET 158	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023501_LP.DWG
LAYOUT NAME - 023508_LP

PLOT DATE : 8/29/2017 2:27 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

IH 41/USH 45 SB

IH 41/USH 45 NB

174ML

176ML

178ML

180ML

182ML

184ML

186ML

188ML

W. BURLEIGH ST.

181+97.4, 228.6' RT
HL-40-BS

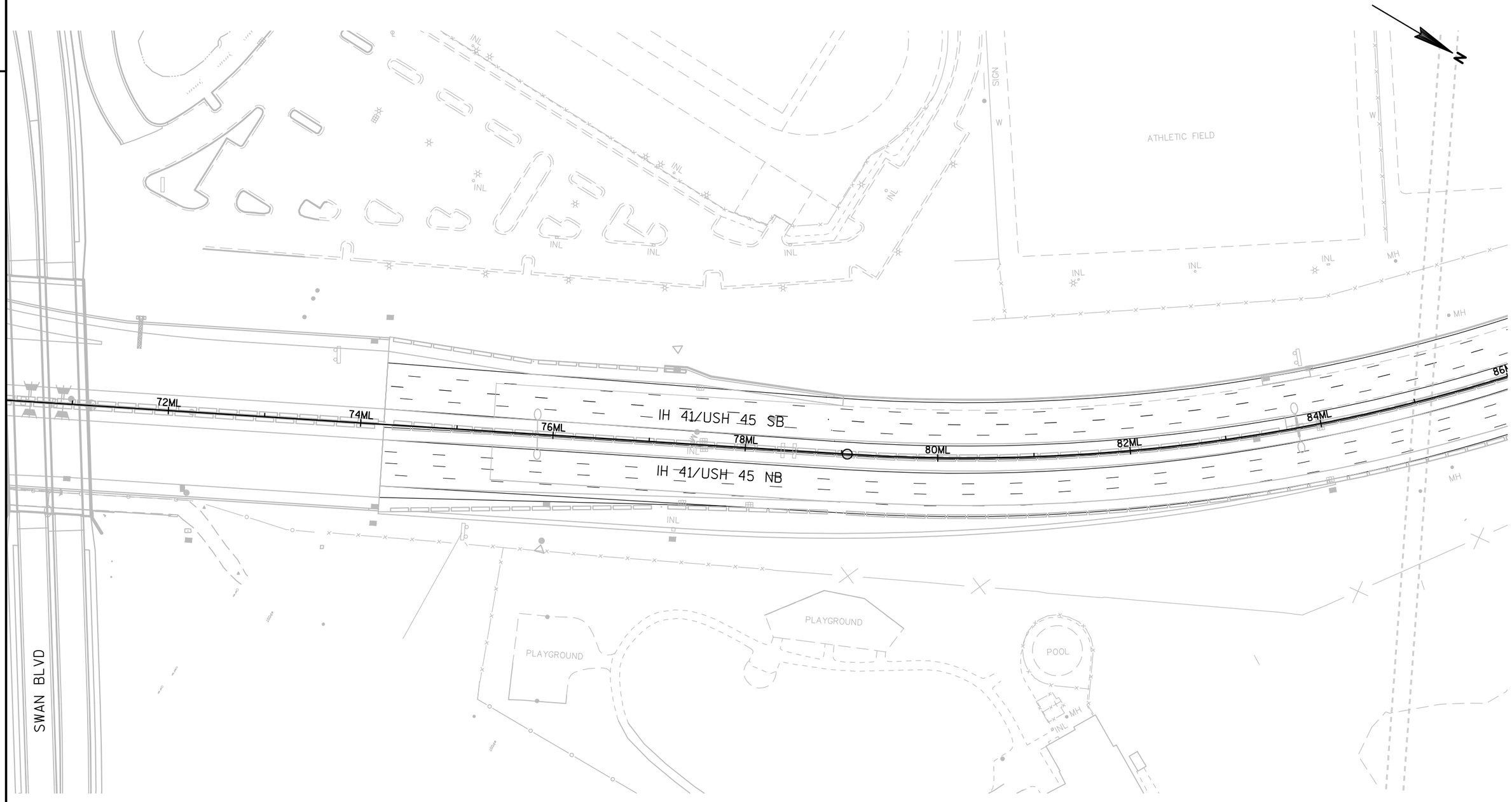
WATER TOWER

FOR INFORMATION ONLY

SHEET 9 OF 9

PROJECT NO: 2010-14-70	HWY: IH-41	COUNTY: MILWAUKEE	LIGHTING REMOVAL PLAN	SHEET 159	E

2



FOR INFORMATION ONLY

SHEET 1 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TEMPORARY LIGHTING PLAN	SHEET 160	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023701_LP.DWG
LAYOUT NAME - 023701_LP

PLOT DATE : 8/29/2017 2:37 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

UNDERWOOD PKWY NORTH

HWY 100 / N. MAYFAIR ROAD

IH 41/USH 45 SB

IH 41/USH 45 NB

#3 C
#4 C,N,D,GND
TOP OF POLE

#4 AL QUDRUPLEX
C,N,D,GND AERIAL

90+42.5,ML -93.5' LT

#3 C
#4 C,N,D,GND
TOP OF POLE

86+30.6,ML -80.6' LT
WP-UC-2

88+91.6,ML -79.0' LT
T-CUC-1

91+13.8,ML -71.6' LT
WP-UC-1

#4 AL QUDRUPLEX
A,N,B,GND AERIAL

OH

86ML

88ML

90ML

92ML

94ML

96ML

98ML

100ML

EX. LPB-UC-1

EX. LPB-UC-2

EX. LPB-UC-3

91+43.3,ML 0.8' RT
BUC1
EXISTING TO REMAIN

86+30.5,ML 0.0' LT
DUC2
EXISTING TO REMAIN

ATHLETIC FIELD

CUC2

AUC1

SHEET 2 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TEMPORARY LIGHTING PLAN	SHEET 161	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023701_LP.DWG
LAYOUT NAME - 023702_LP

PLOT DATE : 8/29/2017 2:38 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

102+07.0,ML -71.1' LT
WP-UC-3

#6 AL TRIPLEX
A,N,GND AERIAL

HO

104+42.1,ML -74.4' LT
T-AUC-1

107+64.7,ML -81.7' LT
T-DNA-6

109+54.9,ML -87.0' LT
T-DNA-5

111+45.2,ML -78.3' LT
T-DNA-4

113+36.0,ML -82.1' LT
T-DNA-3

#6 AL TRIPLEX
D,N,GND AERIAL

DNA27
EXISTING
TO REMAIN

OH

OH

OH

IH 41/USH 45 SB

IH 41/USH 45 NB

100ML

102ML

104ML

106ML

108ML

110ML

112ML

114ML

#6 AL TRIPLEX
A,N,GND AERIAL

102+08.0,ML -0.3' LT
AUC5/BUC5
EXISTING TO REMAIN

UNION PACIFIC RAILROAD

HWY 100 / N. MAYFAIR ROAD

SIGN

SHEET 3 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TEMPORARY LIGHTING PLAN	SHEET 162 E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023701_LP.DWG
LAYOUT NAME - 023703_LP

PLOT DATE : 8/29/2017 2:38 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

#6 AL TRIPLEX
D,N,GND AERIAL

117+74.0,ML -129.1' LT
DNA16
EXISTING TO REMAIN

117+74.8,ML -75.8' LT
T-DNA-1

#6 AL TRIPLEX
D,N,GND AERIAL

120+71.7,ML -77.4' LT
T-DNA-2

T-GNA-3
124+86.3,ML -84.1' LT

127+15.2,ML -80.9' LT
T-GNA-2

W. NORTH AVE.

IH 41/USH 45 SB

IH 41/USH 45 NB

114ML
116ML
118ML
120ML
122ML
124ML
126ML
128ML

OH

126+58.2,ML 103.3' RT
ENA9
EXISTING TO REMAIN

GNA9/HNA9
127+43.3,ML 0.0'

SHEET 4 OF 9

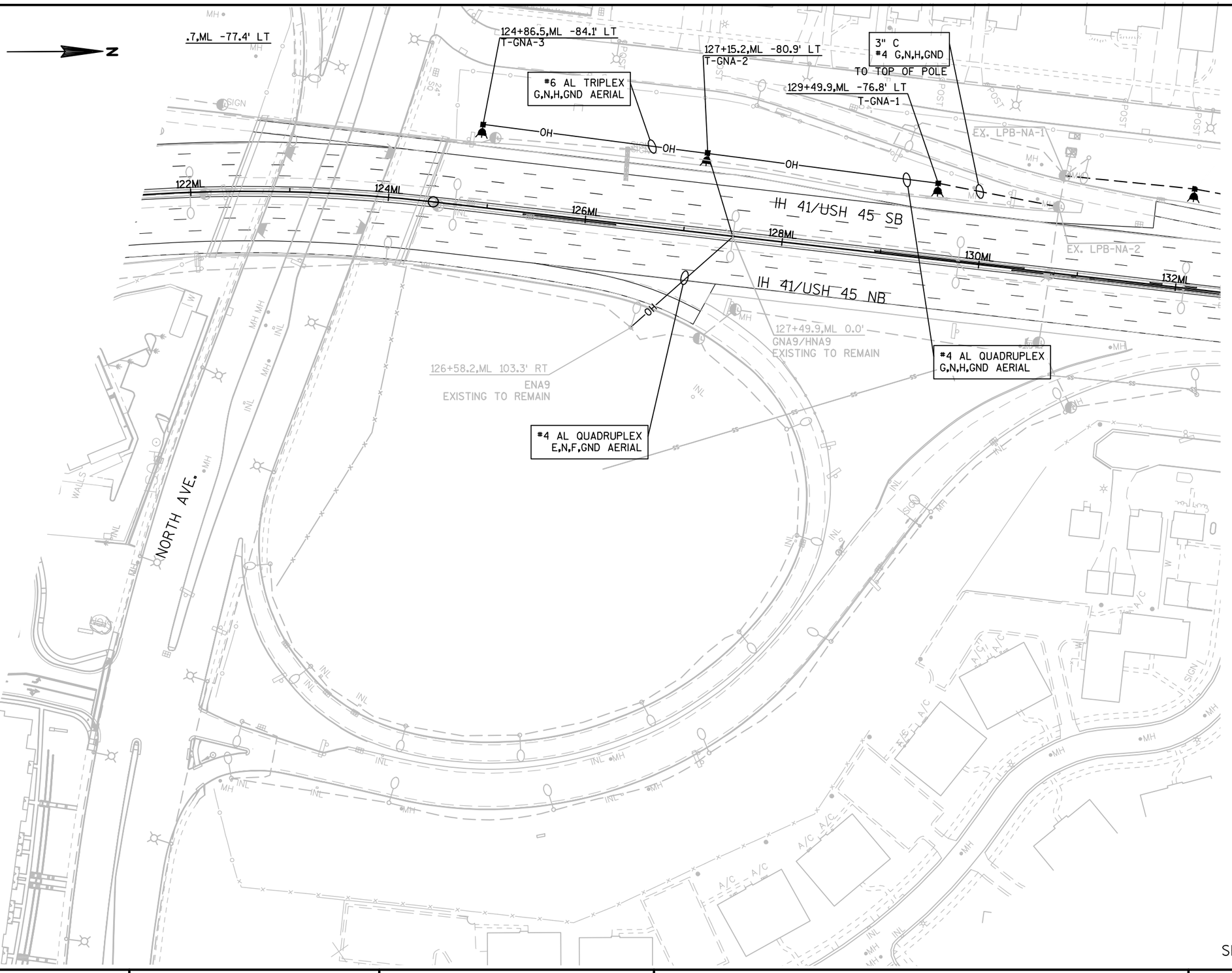
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TEMPORARY LIGHTING PLAN	SHEET 163	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023701_LP.DWG
LAYOUT NAME - 023704_LP

PLOT DATE : 8/29/2017 2:38 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



SHEET 5 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TEMPORARY LIGHTING PLAN	SHEET 164	E

2

N

132+08.1,ML -100.8' LT
T-ANA-1

3" C
#4 A,N,B,GND
TO TOP OF POLE

#6 AL QUADRUPLEX
A,N,B,GND AERIAL

134+31.1,ML -85.1' LT
T-ANA-2

136+61.5,ML -82.5' LT
T-ANA-3

139+21.4,ML -80.1' LT
T-ANA-4

W. CLARK ST.

EX. LPB-NA-1

EX. LPB-NA-2

OH

134+30.8,ML 0.0' LT
BNA4

IH 41/USH 45 SB

130ML 132ML 134ML 136ML 138ML 140ML 142ML

IH 41/USH 45 NB

ANA4

139+19.8,ML -0.1' LT
BNA6/ANA6
EXISTING TO REMAIN

W. MEINECKE AVE.

W. CLARK ST.

SHEET 6 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TEMPORARY LIGHTING PLAN	SHEET 165	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023701_LP.DWG
LAYOUT NAME - 023706_LP

PLOT DATE : 8/29/2017 2:38 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N. 114TH ST.

CENTER STREET

N

158+22.6,ML -80.4' LT
WP-BS-3

#6 AL TRIPLEX
C,N,,GND AERIAL

157+41.5,ML -81.1' LT
T-CBS-4

154+67.5,ML -78.4' LT
T-CBS-5

152+22.4,ML -77.5' LT
T-CBS-6

OH

144ML

146ML

148ML

150ML

152ML

154ML

156ML

158ML

TH 41/USH 45 SB

IH 41/USH 45 NB

TENNIS COURT

BLEACHERS

SHEET 7 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TEMPORARY LIGHTING PLAN	SHEET 166	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023701_LP.DWG
LAYOUT NAME - 023707_LP

PLOT DATE : 8/29/2017 2:38 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

3" C
#4 C,N,GND

159+45.1,ML -84.5' LT
WP-BS-2

#6 AL TRIPLEX
C,N,GND AERIAL

160+18.7,ML -88.4' LT
T-CBS-3

162+89.2,ML -91.1' LT
T-CBS-2

#6 AL TRIPLEX
C,N,GND AERIAL

165+58.6,ML -93.3' LT
T-CBS-1

#6 AL TRIPLEX
C,N,GND AERIAL

168+32.6,ML -96.1' LT
WP-BS-1

168+37.6,ML -0.2' LT
CBS5

DBS5
EXISTING TO REMAIN

OH

IH 41/USH 45 SB

IH 41/USH 45 NB

160ML
162ML
164ML
166ML
168ML
170ML
172ML

BLEACHERS
TENNIS COURT
TENNIS COURT
ATHLETIC FIELD
INL
SIGN
SIGN
W. LOCUST ST.
LD
MH

SHEET 8 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TEMPORARY LIGHTING PLAN	SHEET 167	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023701_LP.DWG
LAYOUT NAME - 023708_LP

PLOT DATE : 8/29/2017 2:38 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

174ML

176ML

178ML

180ML

182ML

184ML

186ML

188ML

IH 41/USH 45 SB

IH 41/USH 45 NB

W. BURLEIGH ST.

WATER TOWER

FOR INFORMATION ONLY

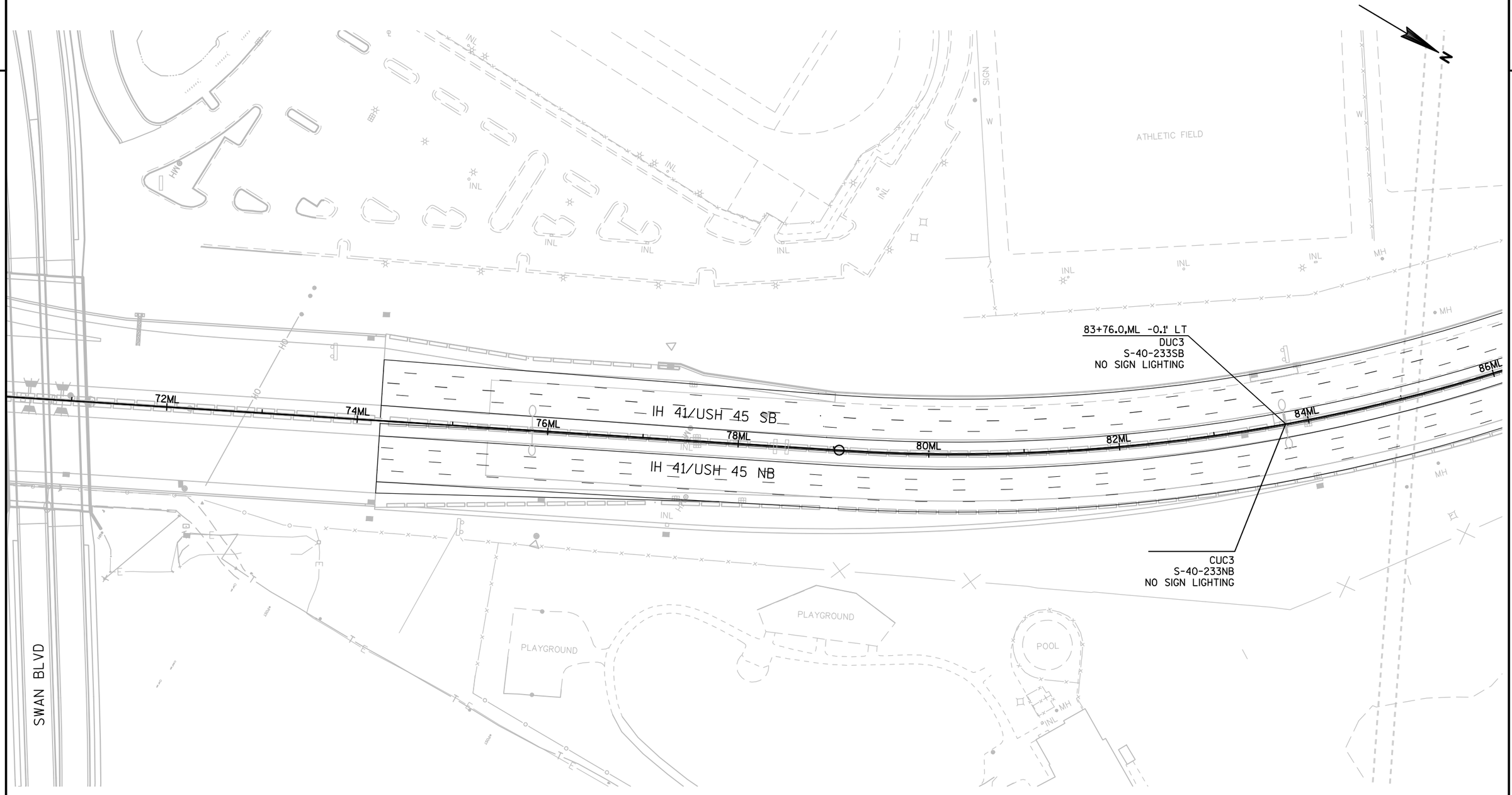
SHEET 9 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TEMPORARY LIGHTING PLAN	SHEET 168	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023701_LP.DWG
LAYOUT NAME - 023709_LP

PLOT DATE : 8/29/2017 2:39 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



SHEET 1 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PROPOSED LIGHTING PLAN	SHEET 169	E

2

UNDERWOOD PKWY NORTH

HWY 100 / N. MAYFAIR ROAD

ATHLETIC FIELD

86+30.6,ML -0.2' LT
CUC2

88+92.1,ML 0.2' RT
DUC1

91+43.5,ML 0.8' RT
AUC1

HL-40-UC

EX-LPB-UC-1

#6-2-6 C,N,D

86ML

88ML

90ML

92ML

94ML

96ML

98ML

100ML

TH 41/USH 45 SB

IH 41/USH 45 NB

DUC2

CUC1
LIGHTING UNIT
SALVAGED

BUC1

*4-1-4 A,N,B

EX-LPB-UC-2

EX-LPB-UC-3

SHEET 2 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PROPOSED LIGHTING PLAN	SHEET 170	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023601_LP.DWG
LAYOUT NAME - 023602_LP

PLOT DATE : 8/29/2017 2:54 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

104+44.5,ML 0.4' RT
BUC6

106+98.3,ML 0.0'
GNA1

109+48.9,ML -0.1' LT
HNA2

#4-1-4 G,N,H

111+99.5,ML -0.1' LT
GNA3

102+07.7,ML 0.2' RT
AUC5

IH 41/USH 45 SB

IH 41/USH 45 NB

100ML

102ML

104ML

106ML

108ML

110ML

112ML

114ML

#4-1-4 A,N,B

AUC6
LIGHTING UNIT
SALVAGED

HNA1
LIGHTING UNIT
SALVAGED

HNA3
S-40-234
NO SIGN
LIGHTING

BUC5

GNA2

UNION PACIFIC RAILROAD

HWY 100 / N. MAYFAIR ROAD

SHEET 3 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PROPOSED LIGHTING PLAN	SHEET 171	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023601_LP.DWG
LAYOUT NAME - 023603_LP

PLOT DATE : 8/29/2017 2:54 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

W. NORTH AVE.

IH 41/USH 45 SB

IH 41/USH 45 NB

119+48.0,ML 0.3' RT
HNA6

120+52.6,ML -0.9' LT
LPB-NA-12

121+99.5,ML 0.7' RT
GNA7/HNA7

116+98.1,ML 0.1' RT
GNA5

114+48.7,ML -0.6' LT
HNA4

129+67.4,ML 0.1' RT
HNA8

S-40-354
NO SIGN LIGHTING

#4-1-4 G,N,H

#4-1-4 G,N,H

HNA5
LIGHTING UNIT
SALVAGED

GNA6
LIGHTING UNIT
SALVAGED

S-40-378
NO SIGN
LIGHTING

114ML
116ML
118ML
120ML
122ML
124ML
126ML
128ML

GNA4

GNA8

HNA9/GNA9

SHEET 4 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PROPOSED LIGHTING PLAN	SHEET 172	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023601_LP.DWG
LAYOUT NAME - 023604_LP

PLOT DATE : 8/29/2017 2:55 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

119+48.0,ML 0.3' RT
HNA6

120+52.6,ML 0.9' LT
LPB-NA-12

122+00.0,ML 0.7' RT
GNA7/HNA7

126+34.5ML -75.6' LT
S-40-354
NO SIGN LIGHTING

127+49.7,ML 0.2' RT
GNA9

129+79.1,ML 0.2' RT
HNA10

130+72.0,ML 2.0' RT
LPB-NA-3

116+98.1,ML 0.1' RT
GNA5

118ML

120ML

122ML

124ML

126ML

128ML

130ML

132ML

IH 41/USH 45 SB

IH 41/USH 45 NB

#4-1-4 G,N,H

GNA6
LIGHTING UNIT
SALVAGED

S-40-378
NO SIGN
LIGHTING

124+67.6,ML 0.7' RT
GNA8/HNA8

HNA9

HNA5
LIGHTING UNIT
SALVAGED

GNA10
LIGHTING UNIT
SALVAGED

#4-1-4 G,N,H

#6-2-6 A,N,B

BNA3
LIGHTING UNIT
SALVAGED

NORTH AVE.

POST

N

SHEET 5 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PROPOSED LIGHTING PLAN	SHEET 173	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023601_LP.DWG
LAYOUT NAME - 023605_LP

PLOT DATE : 8/29/2017 2:55 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

W. CLARK ST.

W. MEINECKE AVE.

W. CLARK ST.

IH 41/USH 45 SB

IH 41/USH 45 NB

132+08.2,ML -0.1' LT
ANA3

134+31.1,ML -0.8'LT
BNA4

136+60.3,ML 0.0' LT
ANA5

137+76.1,ML -75.4' LT
S-40-355
NO SIGN LIGHTING

139+20.0,ML 0.0' LT
BNA6

130+72.3,ML 1.6' RT
LPB-NA-3

#6-2-6 A,N,B

132ML 134ML 136ML 138ML 140ML 142ML

BNA3 ANA4 BNA5 ANA6

HL-40-NA
EX. LPB-NA-1
EX. LPB-NA-2

SHEET 6 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PROPOSED LIGHTING PLAN	SHEET 174	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023601_LP.DWG
LAYOUT NAME - 023606_LP

PLOT DATE : 8/29/2017 2:55 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N. 114TH ST.

CENTER STREET

N

TH 41/USH 45 SB

IH 41/USH 45 NB

144ML

146ML

148ML

150ML

152ML

154ML

156ML

158ML

144+39.5,ML -0.3'LT
BNA8

146+99.8,ML -.06'LT
ANA9

149+60.2,ML 0.1' RT
8NA10

151+93.1,ML 0.0' LT
CBS11

154+67.5,ML -0.1' LT
DBS10

157+41.5,ML -0.1' LT
CBS9

*6-2-6 A,N,B

*6-2-6 C,N,D

DBS11
LIGHTING UNIT
SALVAGED

CBS10
S-40-235
LIGHTING UNIT SALVAGED
NO SIGN LIGHTING

CBS10
LIGHTING UNIT
SALVAGED

ANA9

BNA9

ANA10

TENNIS COURT

BLEACHERS

BLEACHERS

BLEACHERS

SHEET 7 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PROPOSED LIGHTING PLAN	SHEET 175	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023601_LP.DWG
LAYOUT NAME - 023607_LP

PLOT DATE : 8/29/2017 2:55 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

160+18.6,ML 0.4' RT
DBS8

162+90.6,ML 0.8' RT
CBS7

IH 41/USH 45 SB

IH 41/USH 45 NB

160ML
162ML
164ML
166ML
168ML
170ML
172ML

*6-2-6 C,N,D

DBS5
DBS6
CBS5
CBS6

DBS7
LIGHTING UNIT
SALVAGED

CBS8
S-40-235
NO SIGN LIGHTING
LIGHTING UNIT SALVAGED

BLEACHERS
TENNIS COURT
TENNIS COURT
ATHLETIC FIELD
C FIELD
W. LOCUST ST.
INL
SIGN
MH

SHEET 8 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PROPOSED LIGHTING PLAN	SHEET 176	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023601_LP.DWG
LAYOUT NAME - 023608_LP

PLOT DATE : 8/29/2017 2:55 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

IH 41/USH 45 SB

IH 41/USH 45 NB

174ML

176ML

178ML

180ML

182ML

184ML

186ML

188ML

W. BURLEIGH ST.

WATER TOWER

181+97.4, 228.6' RT
HL-40-BS

FOR INFORMATION ONLY

SHEET 9 OF 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PROPOSED LIGHTING PLAN	SHEET 177	E

FILE NAME : W:\PDS\C3D\CAD\10603316\70\LTG\023601_LP.DWG
LAYOUT NAME - 023609_LP

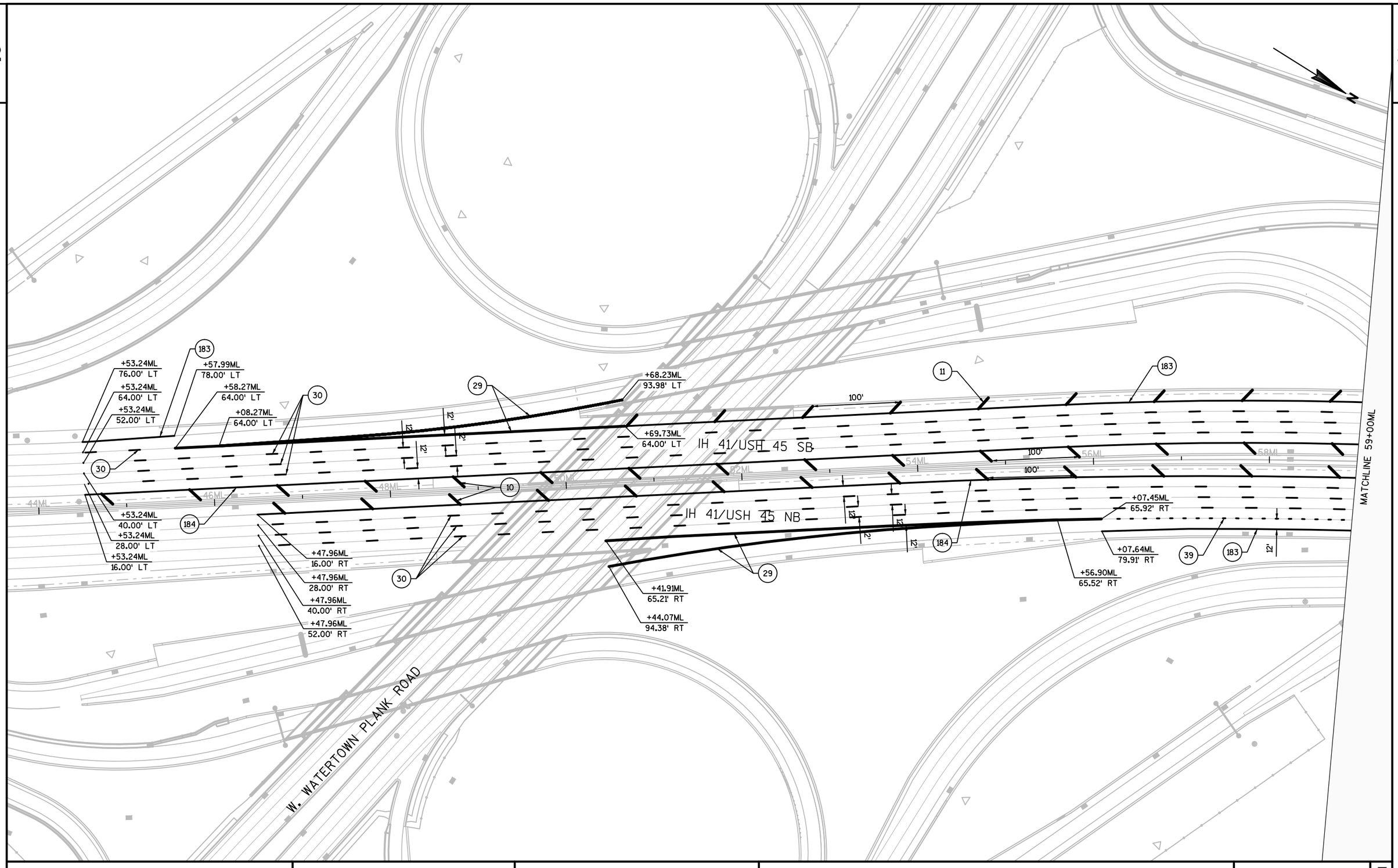
PLOT DATE : 8/29/2017 2:55 PM PLOT BY : WAGNER, SCOTT H PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

	2	MARKING LINE EPOXY 4-INCH (WHITE)
	3	MARKIN LINE EPOXY 4-INCH (DASHED PATTERN WHITE) (12.5 FT LINE 37.5 FT SKIP)
	5	MARKING LINE EPOXY 8-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
	6	MARKING LINE EPOXY 8-INCH (WHITE)
	7	MARKING STOP LINE EPOXY 18-INCH (WHITE)
	11	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
	14	MARKING WORDS EPOXY (WHITE)
	16	MARKING ARROW EPOXY (TYPE 2 WHITE)
	19	MARKING ARROW EPOXY (TYPE 5 WHITE)
	29	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE)
	30	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
	57	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (DOT PATTERN WHITE) (3 FT LINE 9 FT SKIP)
	183	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
	184	MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW)
	230	CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 2 WHITE)
	231	CONTRAST EPOXY SPECIAL MARKING ARROW (TYPE 5 WHITE)
	233	MARKING CHEVRON EPOXY 24-INCH (WHITE)

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 179	E

2

MATCHLINE 59+00ML

MATCHLINE 74+00ML

IH 41/USH 45 SB

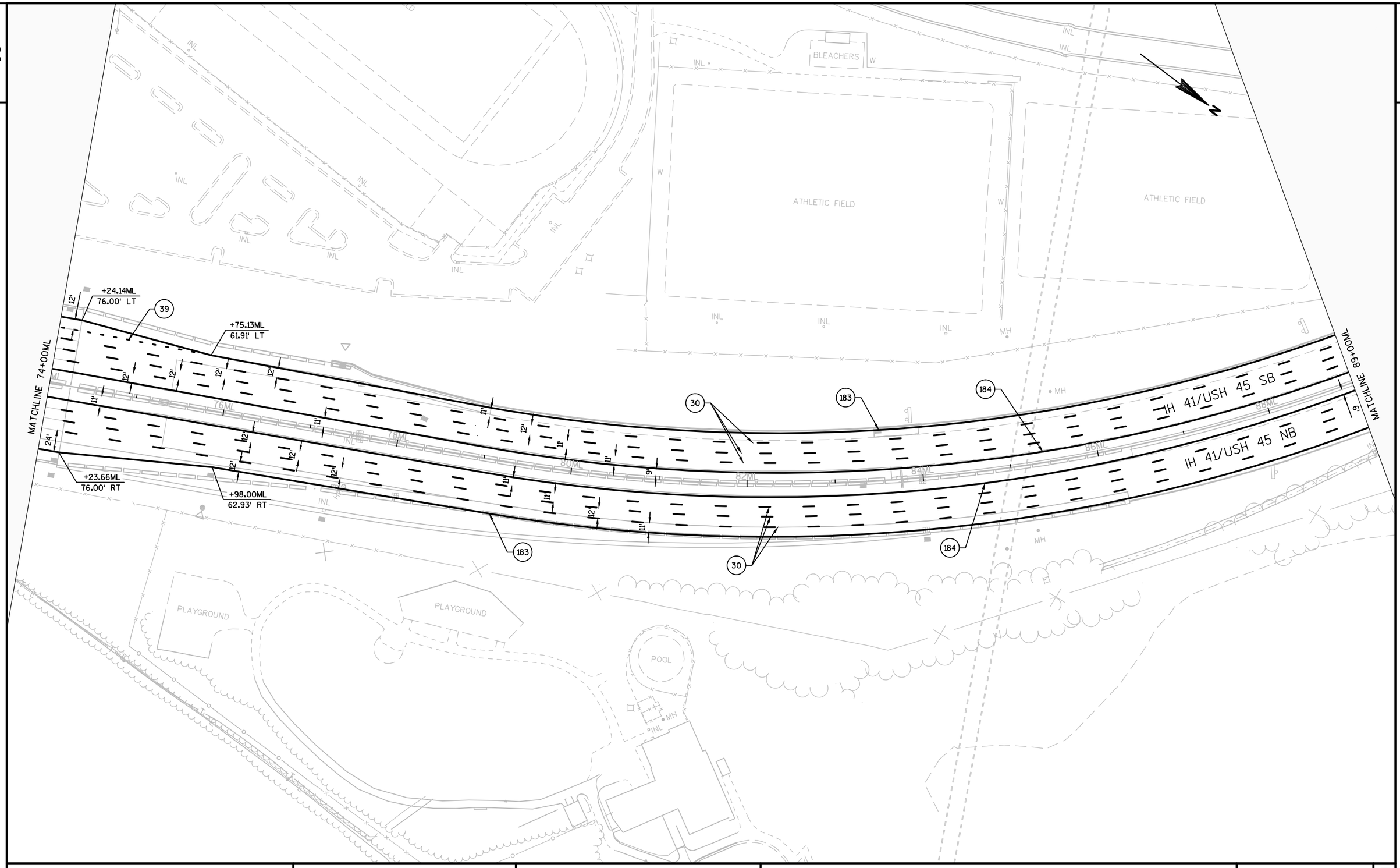
IH 41/USH 45 NB

N. SWAN BOULEVARD

+30.87ML
95.14' LT
+31.44ML
64.00' LT
+63.84ML
64.11' LT
+15.94ML
76.67' LT
+15.56ML
64.00' LT
+59.30ML
66.32' RT
+59.36ML
78.32' RT
+23.00ML
64.00' RT
+23.87ML
90.52' RT
+44.55ML
64.00' RT
+94.55ML
64.00' RT
+94.83ML
78.00' RT
+09.18ML
64.00' RT

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 180	E

2

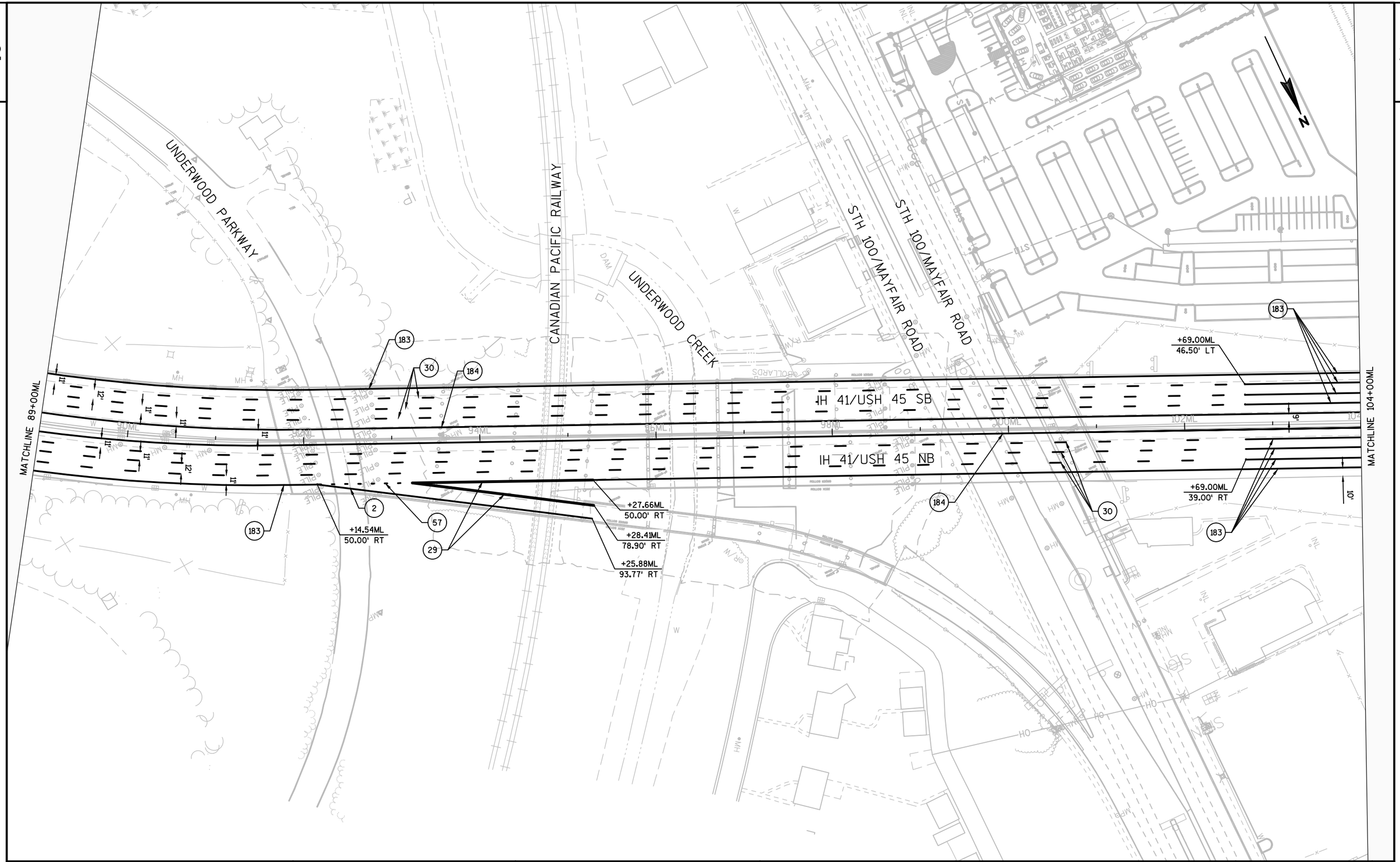


PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 181	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 04

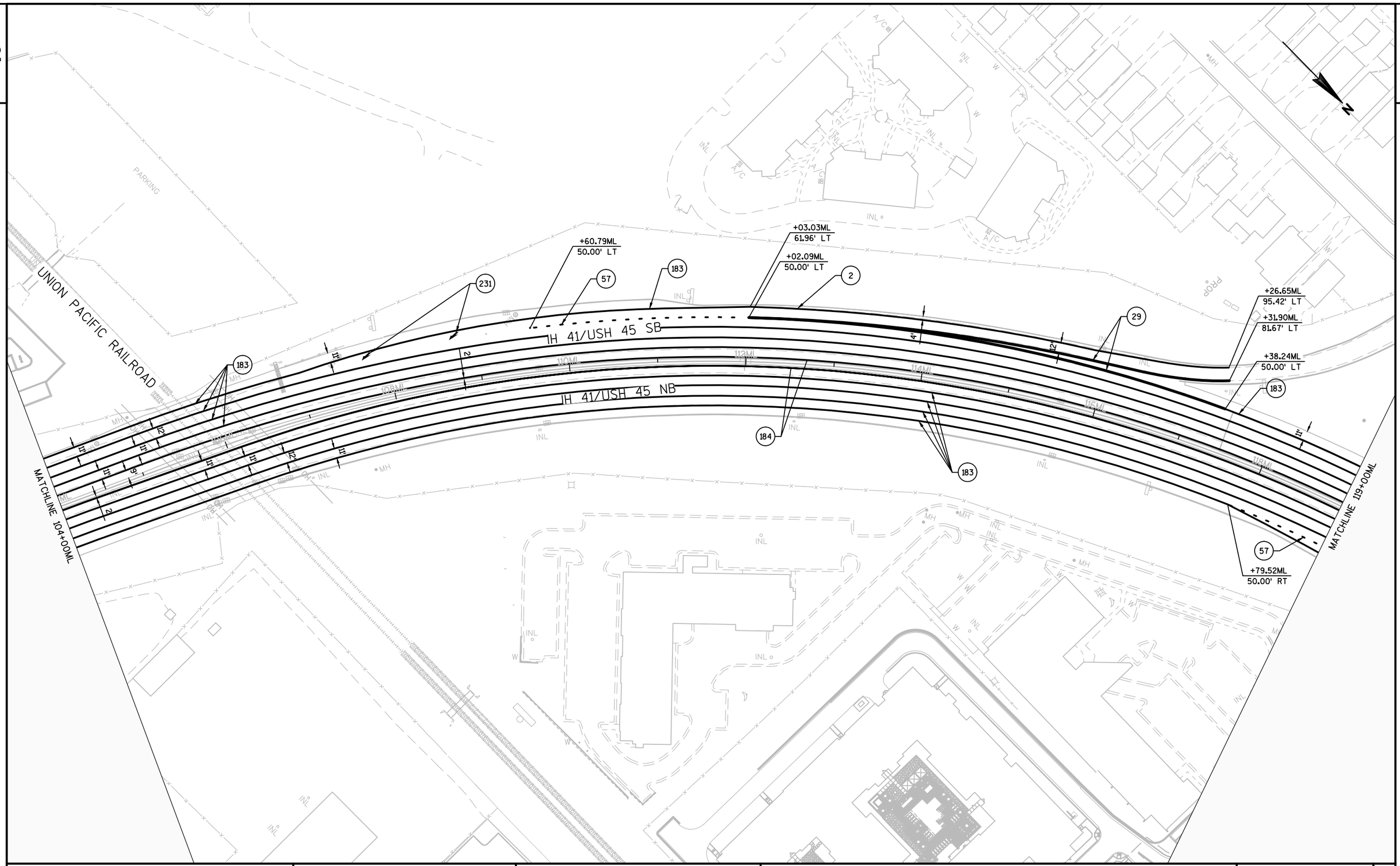
PLOT DATE : 10/20/2017 5:00 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 182	E

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 183	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 06

PLOT DATE : 10/20/2017 5:01 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

TAB NUMBER

W. NORTH AVENUE

W. MEINECKE AVENUE

N. 113TH STREET

N. 112TH STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

+44.26ML 49.92' LT
+75.99ML 84.46' LT
+75.99ML 72.30' LT
+75.99ML 50.00' LT
+53.01ML 62.00' LT
+50.43ML 39.00' LT
+58.66ML 62.00' LT
+29.41ML 50.00' LT
+54.38ML 49.61' LT
+01.75ML 91.18' LT
+00.79ML 76.21' LT
+99.33ML 49.64' LT
+65.46ML 65.79' RT
+54.17ML 50.00' RT
+70.68ML 49.41' RT
+50.00ML 39.00' RT
+37.77ML 49.47' RT
+25.93ML 79.00' RT
+20.23ML 92.88' RT
+87.11ML 50.00' RT
+61.98ML 77.46' RT
+66.91ML 91.63' RT

MATCHLINE 119+00ML

MATCHLINE 134+00ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 184	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 07

PLOT DATE : 10/20/2017 5:01 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

N. 113TH STREET

+15.90ML
50.00' LT

+62.28ML
62.00' LT

+00.92ML
61.74' LT

+21.16ML
50.00' LT

2 183 57 29 30 184

MATCHLINE 134+00ML

MATCHLINE 149+00ML

136ML 138ML 140ML 142ML 144ML 146ML 148ML

5' 12' 11' 11' 12' 11' 11'

IH 41/USH 45 SB

IH 41/USH 45 NB

11' 12' 11' 11' 2' 12'

+64.38ML
50.00' RT

+64.50ML
62.00' RT

+62.73ML
39.00' RT

+14.38ML
50.00' RT

+76.00ML
61.53' RT

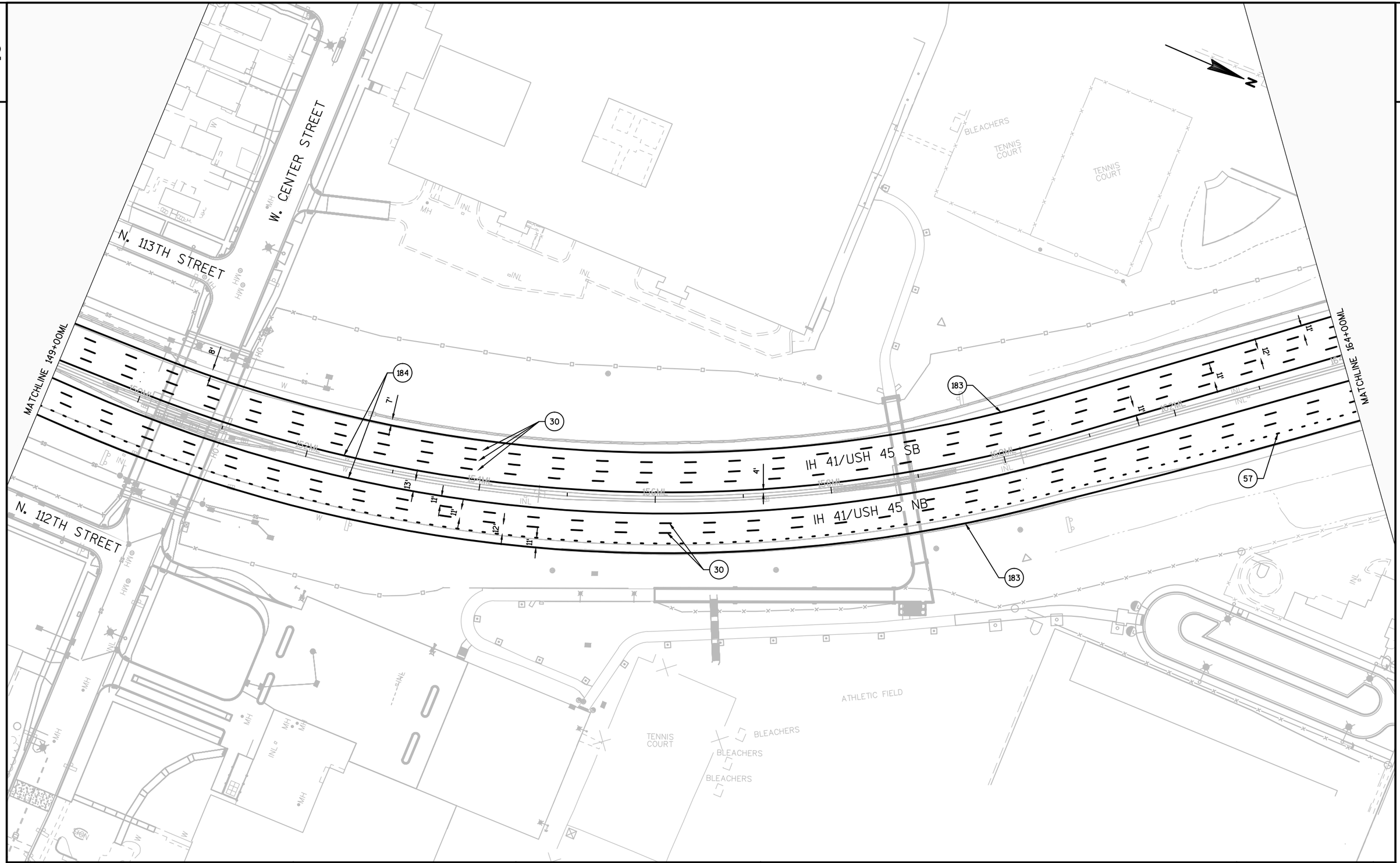
+24.70ML
50.07' RT

29 2 57 183 231 230 30

N. 112TH STREET

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 185	E

2

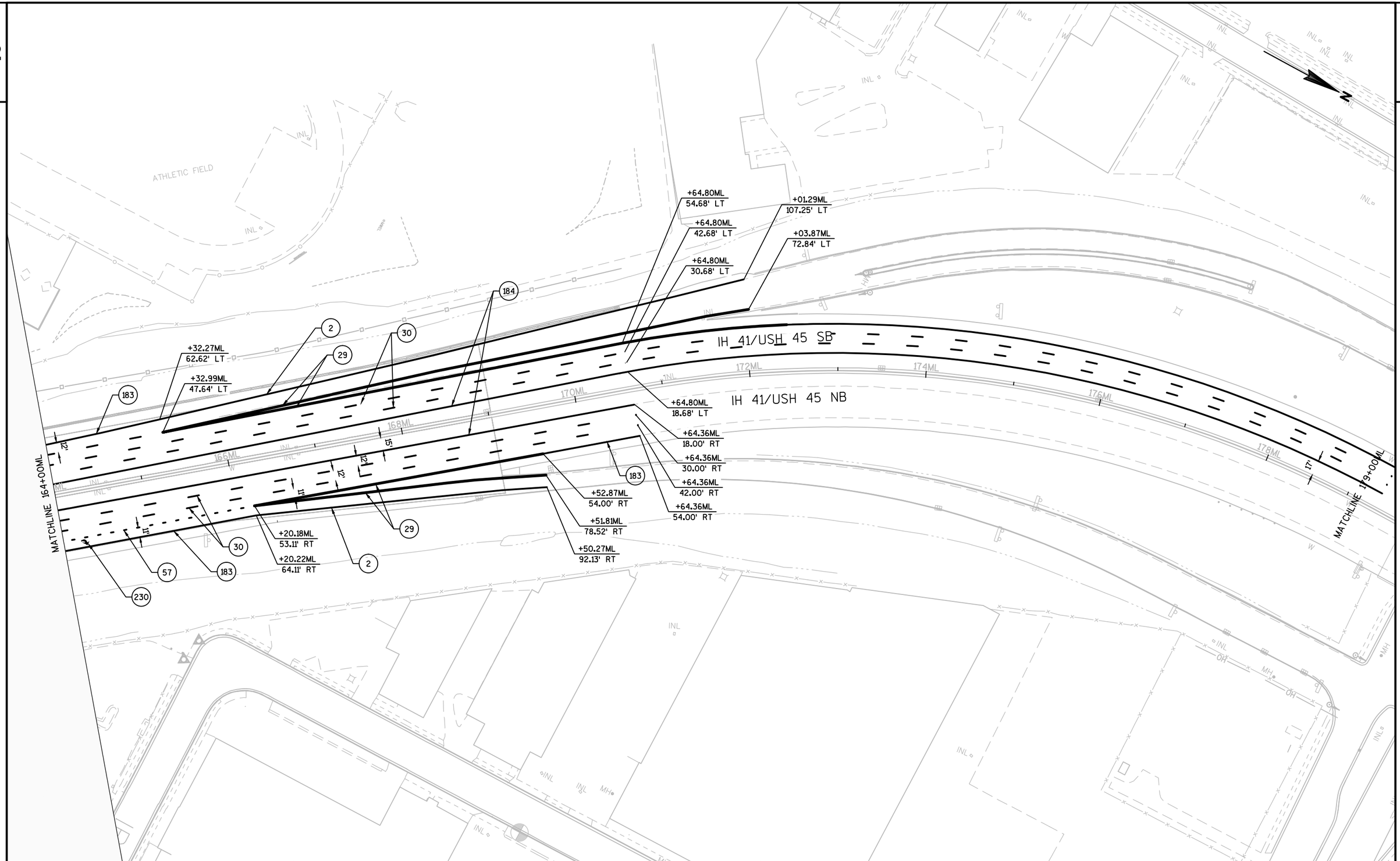


PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 09

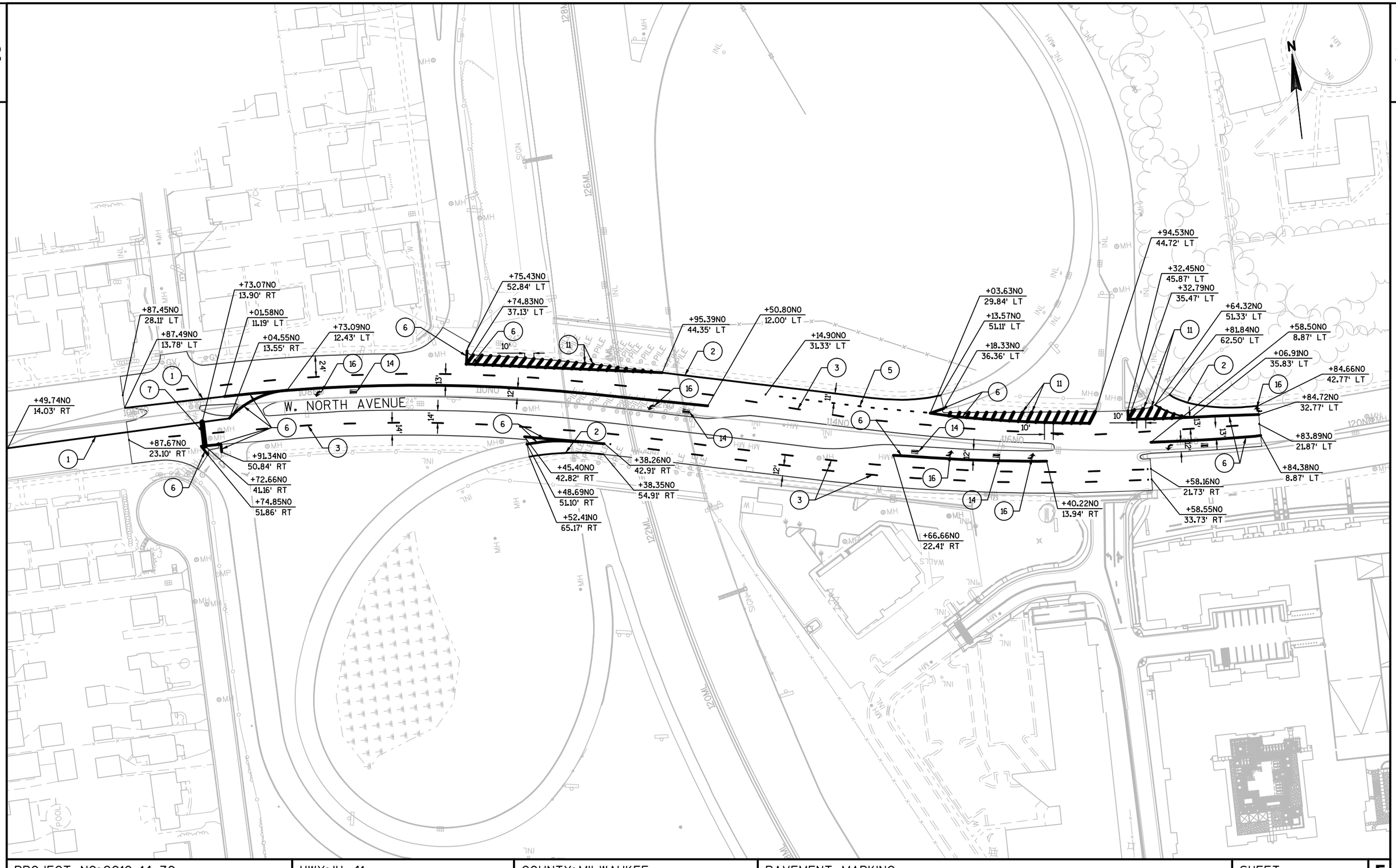
PLOT DATE : 10/20/2017 5:01 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 187	E

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PAVEMENT MARKING	SHEET 188	E

2

GENERAL NOTES FOR TRAFFIC CONTROL

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

2) A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER. FLAGGING IS NOT PERMITTED ON FREEWAY LANES.

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

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

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

6) ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.

7) DIMENSIONS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE FACE OF BARRIER ADJACENT TO TRAFFIC.

8) WORK AREAS SHOWN MAY NOT ILLUSTRATE ALL REMOVALS. SEE REMOVAL SHEETS FOR ADDITIONAL INFORMATION.

9) ALL TRAFFIC CONTROL SIGNS LOCATED IN MEDIANS SHALL BE MOUNTED ON CONCRETE BARRIER UNLESS OTHERWISE NOTED, SEE TRAFFIC CONTROL DETAILS.

10) WHEN A SEGMENT OF THE PROJECT IS NOT SHOWN ON THE STAGING PLANS, USE THE SAME TRAFFIC CONTROL AS THE PREVIOUS STAGE FOR THAT SEGMENT.

11) TRAFFIC CONTROL DRUM SPACING SHALL BE 50' UNLESS OTHERWISE NOTED.

12) 16" X 16" ORANGE FLAGS SHALL BE INCIDENTAL TO TRAFFIC CONTROL SIGN BID ITEM.

13) TEMPORARY RAISED PAVEMENT MARKERS WHERE SHOWN SHALL BE PLACED AS WEATHER PERMITS OR AS DIRECTED BY THE ENGINEER.

14) INSTALL PROPOSED TRAFFIC CONTROL SIGNS ON BOTH OUTSIDE SHOULDER AND MEDIAN SIDE OF ALL DIVIDED ROADWAYS.

15) CONCRETE BARRIER TEMPORARY PRECAST SHALL BE ANCHORED AS DEFINED IN STANDARD DETAIL DRAWING "CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"".

LEGEND

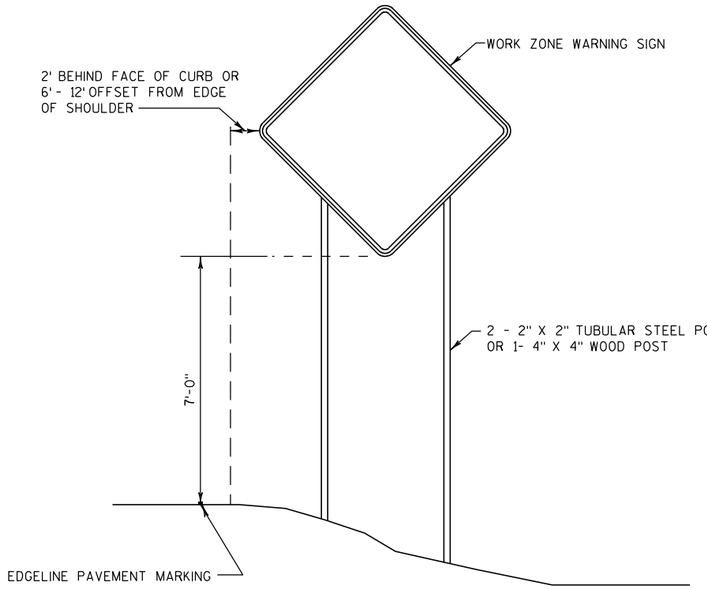
- TRAFFIC CONTROL BARRICADE TYPE III WITH LIGHTS TYPE A
- TRAFFIC CONTROL BARRICADE TYPE III WITH LIGHTS TYPE A AND ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FIXED MESSAGE SIGN GROUND MOUNT
- TRAFFIC CONTROL ARROW BOARD
- CC — CRASH CUSHION TEMPORARY
- CC — CRASH CUSHION TEMPORARY PLACED IN PRIOR STAGE
- PCMS — TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE
- FLAGS, 16" X 16" MIN., (ORANGE)
- GLARE SCREEN TEMPORARY
- TRAFFIC CONTROL DRUM WITH LIGHT TYPE C
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER PLACED IN PRIOR STAGE
- CONCRETE BARRIER TEMPORARY PRECAST (CBTP)
- CONCRETE BARRIER TEMPORARY PRECAST PLACED IN PRIOR STAGE
- TRAFFIC FLOW ARROW
- WORK ZONE THIS STAGE
- TEMPORARY PAVEMENT
- WORK BY OTHERS

2

TEMPORARY PAVEMENT MARKING LEGEND

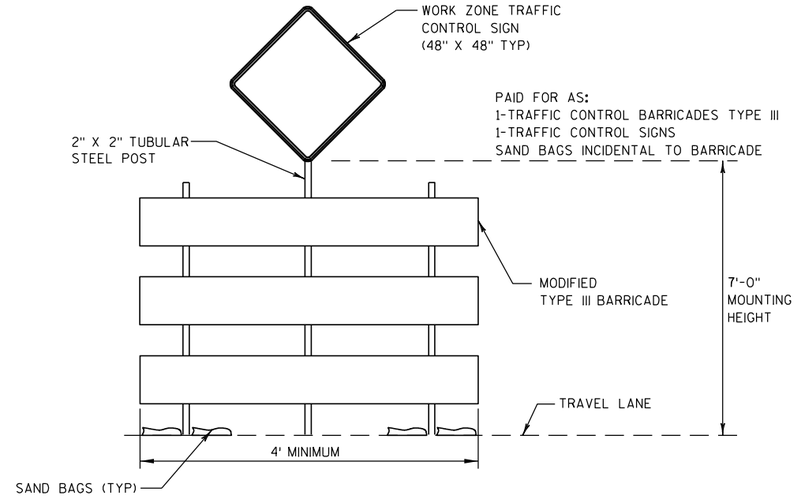
- (163) TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)
- (164) TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)
- (165) TEMPORARY PAVEMENT MARKING PAINT 8-INCH (WHITE)
- (166) TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE) (12.5 FT LINE 37.5 FT SKIP)
- (167) TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE) (3 FT LINE 9 FT SKIP)
- (P) PERMANENT PAVEMENT MARKING, SEE PACEMENT MARKING PLAN
- ▶ TEMPORARY RAISED PAVEMENT MARKERS (ONE-WAY REFLECTOR)

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TRAFFIC CONTROL - NOTES AND LEGENDS	SHEET	E

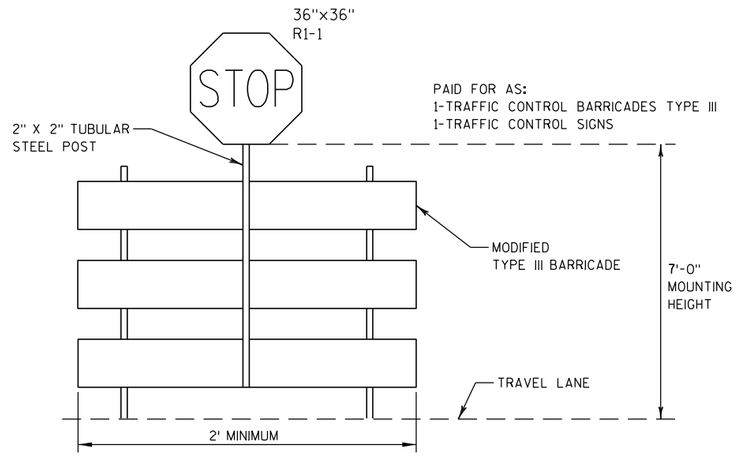


TYPICAL TEMPORARY TRAFFIC CONTROL SIGN
MOUNTING ON FIXED SUPPORT

LONG TERM
7 DAYS OR MORE



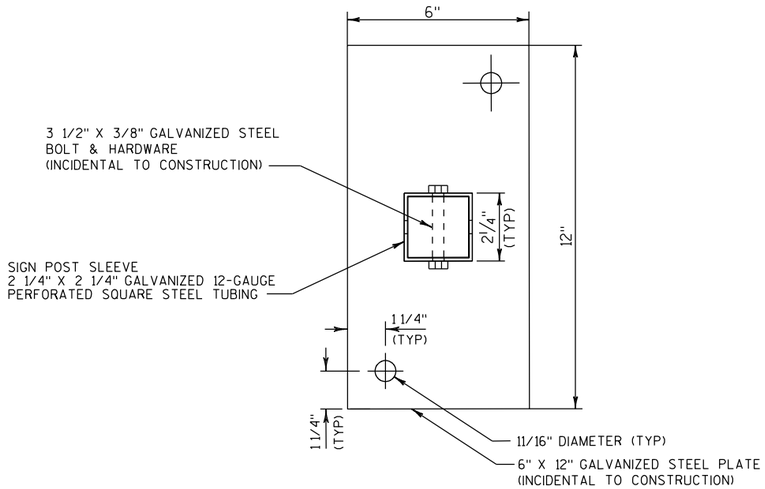
TYPICAL TEMPORARY TRAFFIC CONTROL DETAIL
MOUNTING ON TEMPORARY SUPPORT



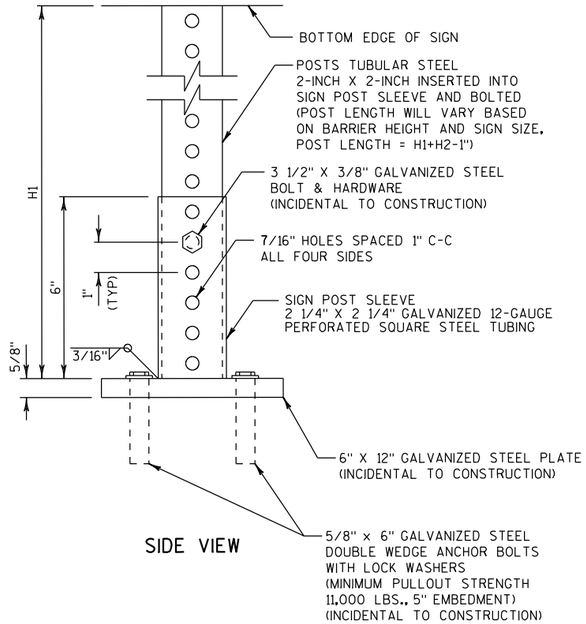
TEMPORARY STOP SIGN

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TRAFFIC CONTROL - CONSTRUCTION DETAIL	SHEET	E

2

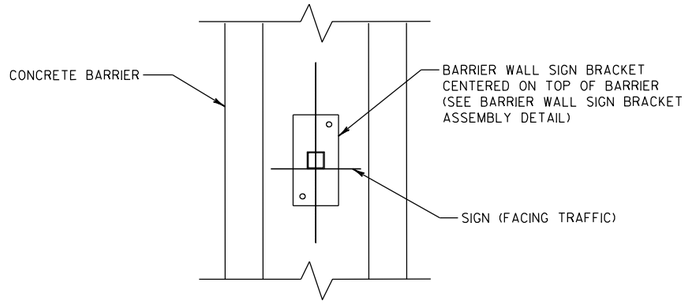


PLAN VIEW

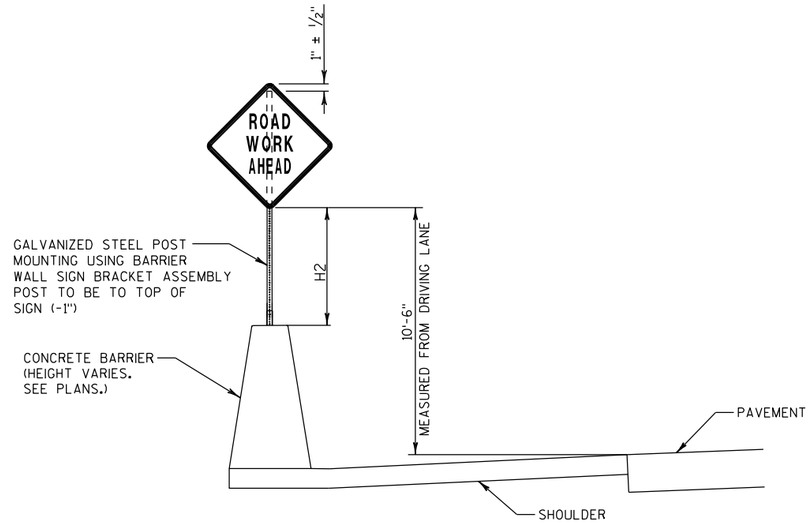


SIDE VIEW

BARRIER WALL SIGN BRACKET ASSEMBLY DETAIL



PLAN VIEW



SIDE VIEW

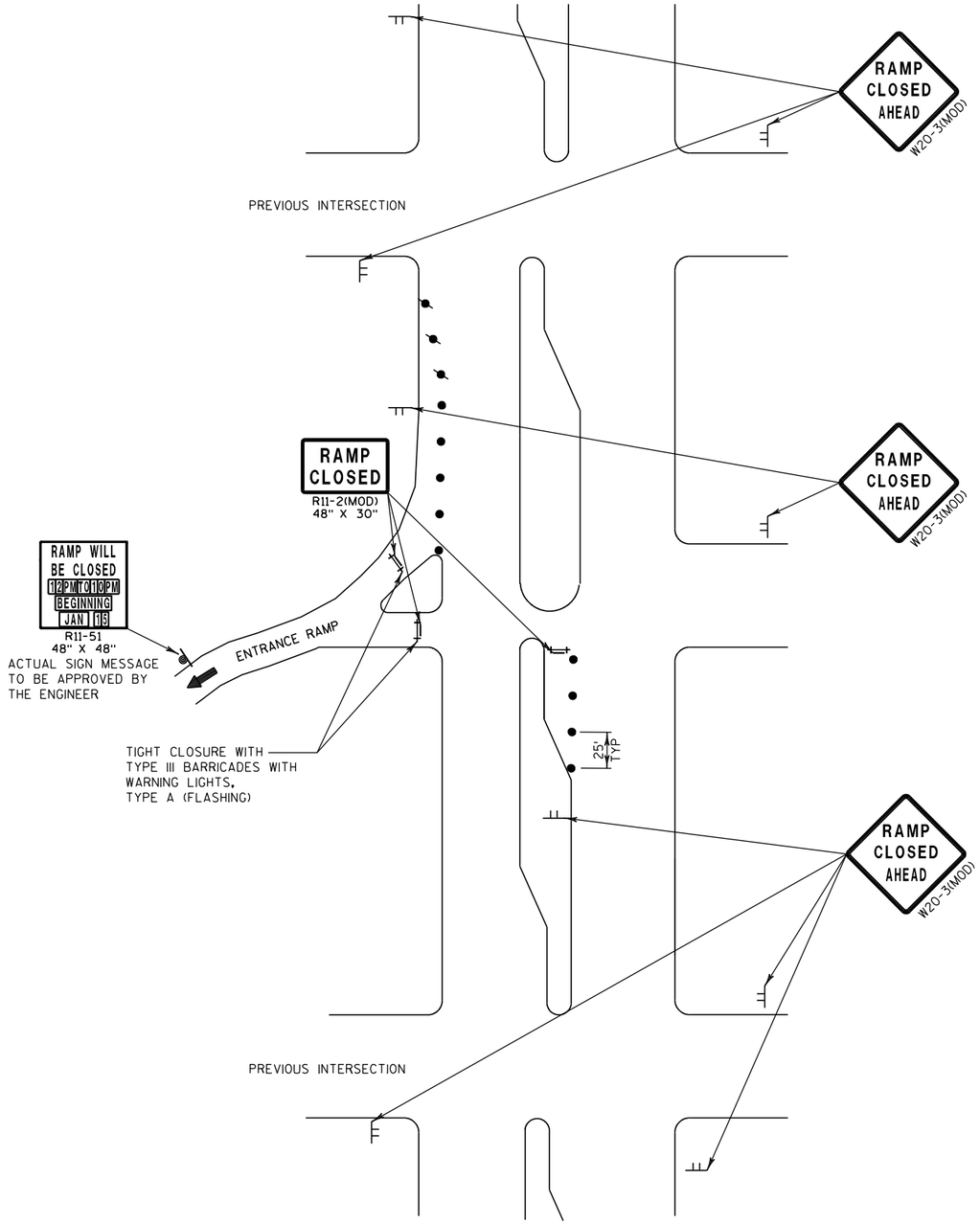
MEDIAN BARRIER MOUNTING DETAIL

MOUNTING SIGNS TO MEDIAN BARRIER

NOT TO SCALE

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TRAFFIC CONTROL - CONSTRUCTION DETAIL	SHEET	E

2



NOTES

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

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

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

LEGEND

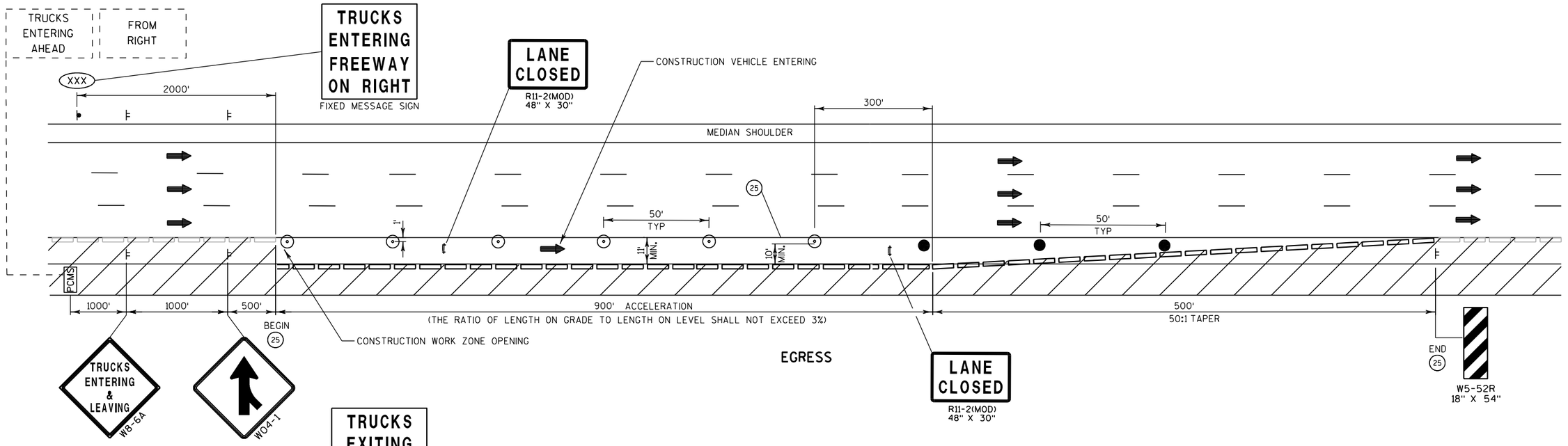
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH LIGHT TYPE C
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL III BARRICADE
- TRAFFIC CONTROL III BARRICADE WITH LIGHT TYPE A AND ATTACHED SIGN
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

(SHORT TERM ONLY)

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TRAFFIC CONTROL - CONSTRUCTION DETAIL	SHEET	E

2



LEGEND

- DIRECTION OF TRAFFIC
- WORK ZONE
- CC — CRASH CUSHION TEMPORARY
- CONCRETE BARRIER TEMPORARY PRECAST
- EXISTING CONCRETE BARRIER TEMPORARY PRECAST
- TRAFFIC CONTROL TUBULAR MARKERS*
- TRAFFIC CONTROL DRUMS (USED WHEN EGRESS/INGRESS NOT IN USE)
- 25 — TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH (WHITE, SOLID) (USE YELLOW, SOLID FOR MEDIAN INGRESS/EGRESS)
- SIGN ON TEMPORARY SUPPORT
- SIGN MOUNTED ON PERMANENT POST(S)
- TRAFFIC CONTROL BARRICADE TYPE III W/ SIGN (USED WHEN INGRESS/EGRESS NOT IN USE)
- PCMS — TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE
- XXX — FIXED MESSAGE SIGN

* COLOR OF TUBULAR MARKER POSTS SHALL BE WHITE IF PLACED ADJACENT TO A LANE LINE OR RIGHT EDGELINE.

WORK ZONE INGRESS/EGRESS

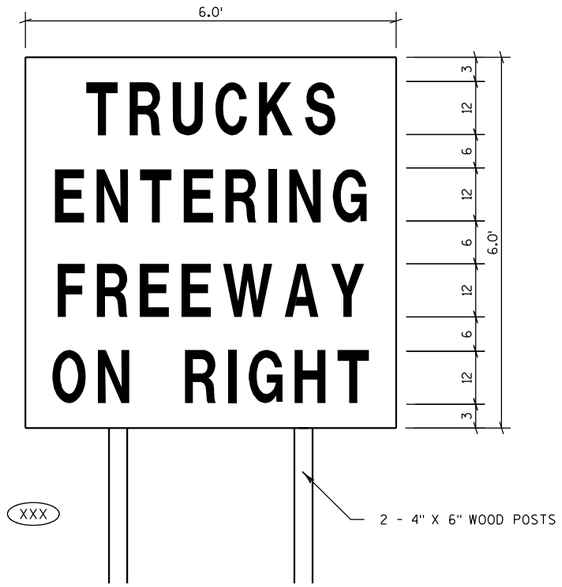
POSTED SPEEDS 55 MPH OR LESS

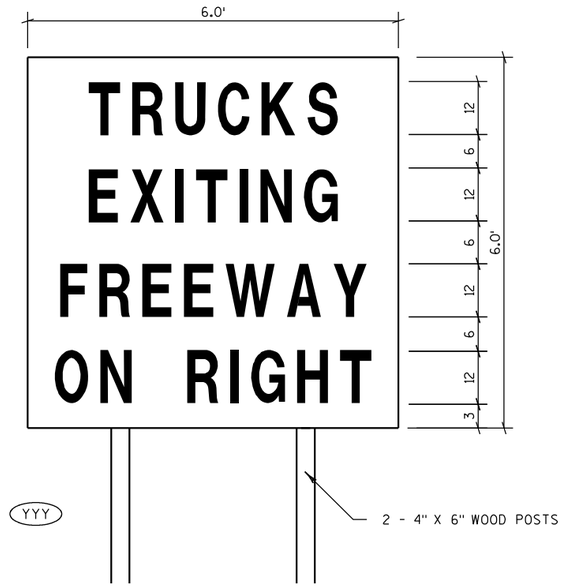
NOTES

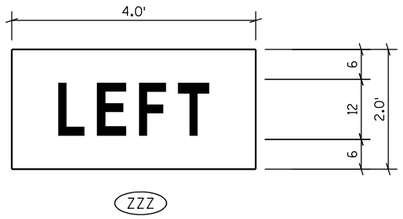
1. RIGHT LANE ACCESS SHOWN (MEDIAN LANE ACCESS SIMILAR).
2. WORK ZONE INGRESS/EGRESS LOCATIONS SHALL BE APPROVED BY THE ENGINEER. LOCATIONS FOR WORK ZONE ACCESS TO/FROM THE FREEWAY SHALL NOT BE USED FOR INGRESS AND EGRESS AT THE SAME TIME.
3. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
4. FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS MAY HAVE A WARNING LIGHT, TYPE C (STEADY BURN).
5. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
6. ALL WARNING SIGNS FOR LONG TERM OPERATIONS SHALL BE NON-FLUORESCENT DIAMOND GRADE SHEETING. TYPE A LIGHTS AND FLAGS ARE NOT REQUIRED.
7. TRUCKS SHALL USE FLASHING YELLOW BEACON WHEN ENTERING LIVE TRAFFIC.
8. FREE FLOW TRAFFIC LANES SHALL BE A MINIMUM WIDTH OF ELEVEN FEET AND ACCOMMODATE A ONE FOOT SHY DISTANCE FROM TRAFFIC CONTROL DEVICES.
9. ITEMS ON THIS SHEET TO BE PAID USING STANDARD BID ITEMS.

111015

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TRAFFIC CONTROL - CONSTRUCTION DETAIL	SHEET	E







FIXED MESSAGE SIGNS

WORK ZONE INGRESS/EGRESS

NOTES

1. AFTER SIGNS HAVE BEEN LOCATED IN THE FIELD, BUT BEFORE INSTALLATION, THE SIGNING AND MARKING SUPERVISOR SHALL VERIFY EACH SIGN LOCATION.
2. ALL SIGNS TO BE MOUNTED ON WOODEN POST SUPPORTS (4"x6"). THE NUMBER OF POSTS REQUIRED FOR EACH LAYOUT IS SHOWN. STEEL POSTS (2"X2") MAY BE USED FOR SIGNS ON SURFACE STREETS. SIGNS WHERE NO POSTS ARE SHOWN TO BE MOUNTED ON EXISTING SIGNS. FOR SIGNS MOUNTED ON POSTS, USE POSTS FROM FHWA LIST OF ACCEPTED BREAKAWAY SIGN SUPPORTS.
3. SIGNS ON THIS SHEET TO BE PAID UNDER THE ITEM "TRAFFIC CONTROL SIGNS FIXED MESSAGE".
4. SIGNS SHALL BE BLACK NON-REFLECTIVE MESSAGE ON ORANGE TYPE F REFLECTIVE BACKGROUND UNLESS OTHERWISE NOTED.
5. ALL SIGNS SHALL HAVE CAPITAL LETTERS AND NUMERALS: 12" AND 8" CAPS SHALL BE SERIES "D", 6" CAPS SHALL BE SERIES "C" UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO MANUFACTURING.
7. SIGN BASE MATERIAL SHALL BE ACCORDING TO SECTION 637.2.1.2..
8. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

(XXX) = FIXED MESSAGE SIGN NUMBER

111015

2

N

116TH STREET

115TH STREET

114TH STREET

IH 41/USH 45

UPRR

MAYFAIR ROAD

NORTH AVENUE

RAMP NOA

RAMP NOB

RAMP NOC

RAMP NOG

ROAD WORK AHEAD W20-1-A

ROAD WORK AHEAD W20-1-A

ROAD WORK AHEAD W20-1-A

SEE STAGING PLAN IH 41/USH 45 FOR ADDITIONAL TRAFFIC CONTROL

EXISTING BARRICADES REMAIN

END ROAD WORK G20-2A 48"X24"

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)

R3-2 24"X24"

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)

RAMP CLOSED R11-2-R 48"X30"

25' TYP

180' TAPER

LANE CLOSED R11-2-L 48"X30"

RAMP CLOSED R11-2-R 48"X30"

TRAFFIC CONTROL DRUMS

RAMP CLOSED R11-2-R 48"X30"

R3-2 24"X24"

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)

RAMP CLOSED R11-2-R 48"X30"

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)

180' LANE DROP

W04-2R

W01-6 48"X24"

RAMP CLOSED AHEAD W20-53A

RIGHT LANE CLOSED AHEAD W20-5-A

RAMP CLOSED AHEAD W20-53A

RAMP CLOSED AHEAD W20-53A1

ROAD WORK AHEAD W20-1-A

500'

END ROAD WORK G20-2A 48"X24"

500' 500' 500'

ROAD WORK AHEAD W20-1-A

RIGHT LANE CLOSED AHEAD W20-5-A

W04-2R

RAMP CLOSED AHEAD W20-53A

RAMP CLOSED AHEAD W20-53A

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TRAFFIC CONTROL - NORTH AVENUE RAMP CLOSURE DETAIL	SHEET 195	E

2

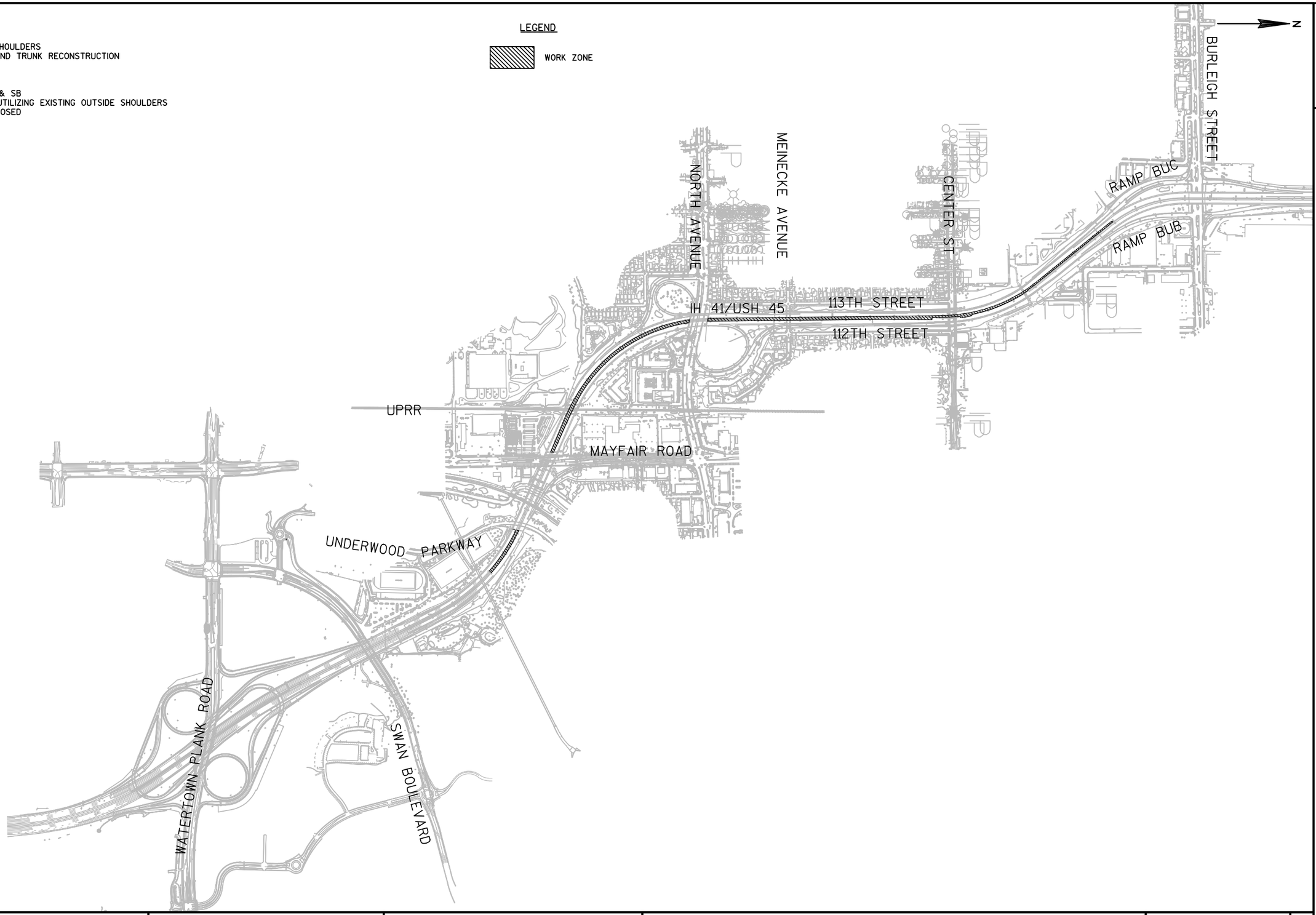
STAGE 1

CONSTRUCTION:
- RECONSTRUCTION OF MEDIAN SHOULDERS
- MEDIAN STORM SEWER INLET AND TRUNK RECONSTRUCTION
- BARRIER RECONSTRUCTION

TRAFFIC:
- 3 LANES MAINTAINED FOR NB & SB
- TRAFFIC MOVED TO OUTSIDE, UTILIZING EXISTING OUTSIDE SHOULDERS
- ALL NORTH AVENUE RAMPS CLOSED

LEGEND

WORK ZONE



2

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TRAFFIC CONTROL STAGE 1 OVERVIEW	SHEET 196	E

2

2

W. WATERTOWN PLANK ROAD

IH 41/USH 45 SB

IH 41/USH 45 NB

46ML 48ML 50ML 52ML 54ML 56ML 58ML

MATCHLINE 44+00ML

MATCHLINE 59+00ML

ROAD WORK AHEAD W20-1-A

ROAD WORK AHEAD W20-1-A

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 1 CONSTRUCTION	SHEET 197	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026102_S1.DWG
LAYOUT NAME - 05

PLOT DATE : 10/20/2017 6:56 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

MATCHLINE 59+00ML

MATCHLINE 74+00ML

END ROAD WORK
G20-2A
48"X24"

IH 41/USH 45 SB

60ML 62ML 64ML 66ML 68ML 70ML 72ML 74

IH 41/USH 45 NB

200' LANE WIDTH TRANSITION

+00.00ML
28.00' RT

+00.00ML
31.00' RT

36'

33'

164 163 166

ROAD WORK AHEAD *
W20-1-A

* FINES DOUBLE IN WORK ZONES
Give 'em a BRAKE SLOW DOWN
$200 MINIMUM
W21-62
96"X48"
W21-62-P
96"X12"

MAX. 11' WIDTH
W12-52
EACH LANE
W12-52P
48"X36

N. SWAN BOULEVARD

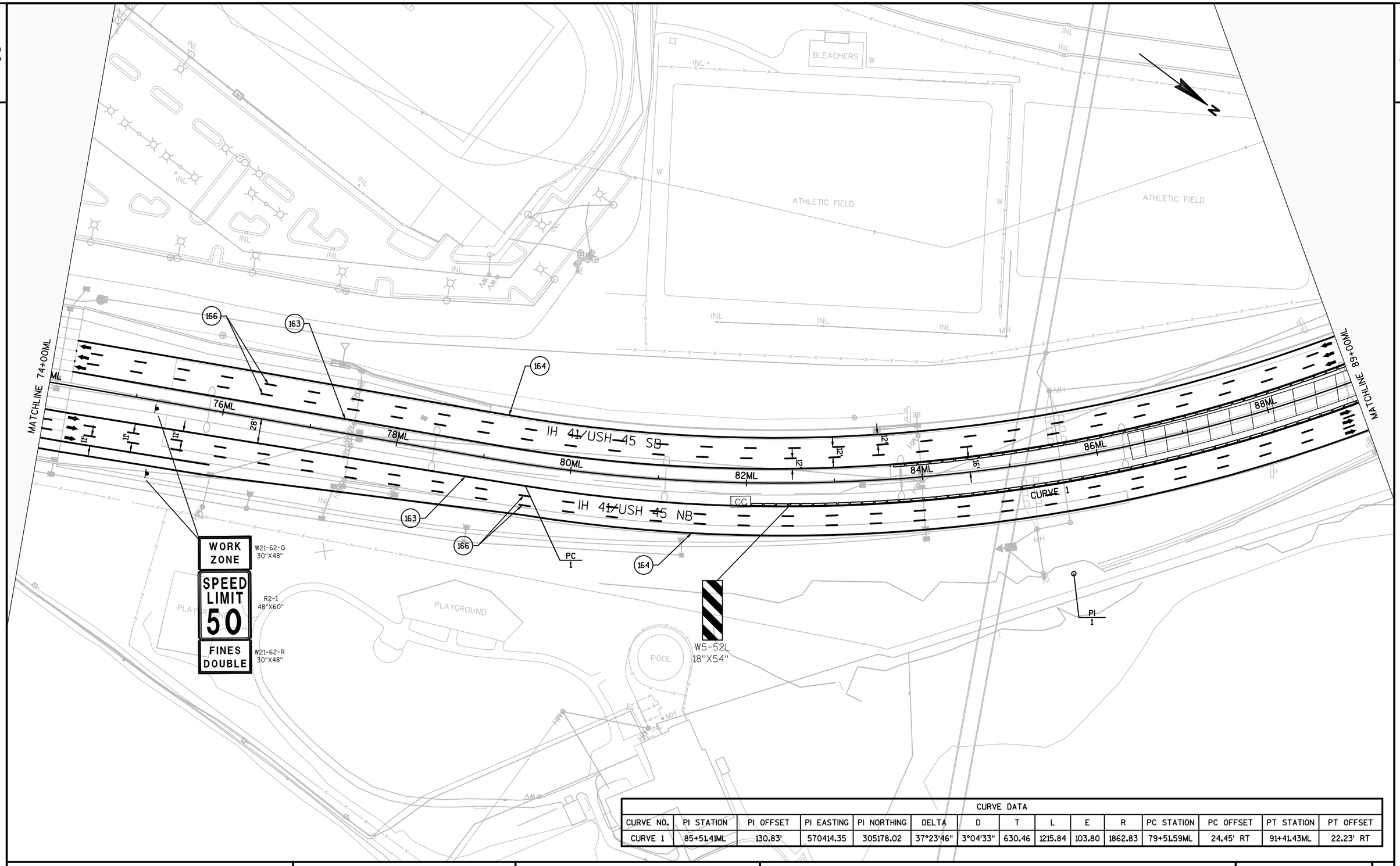
*COORDINATE ADVANCE SIGNS WITH ADJACENT PROJECT 1060-33-81

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 1 CONSTRUCTION	SHEET 198	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026102_S1.DWG
LAYOUT NAME - 06

PLOT DATE : 10/20/2017 6:56 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

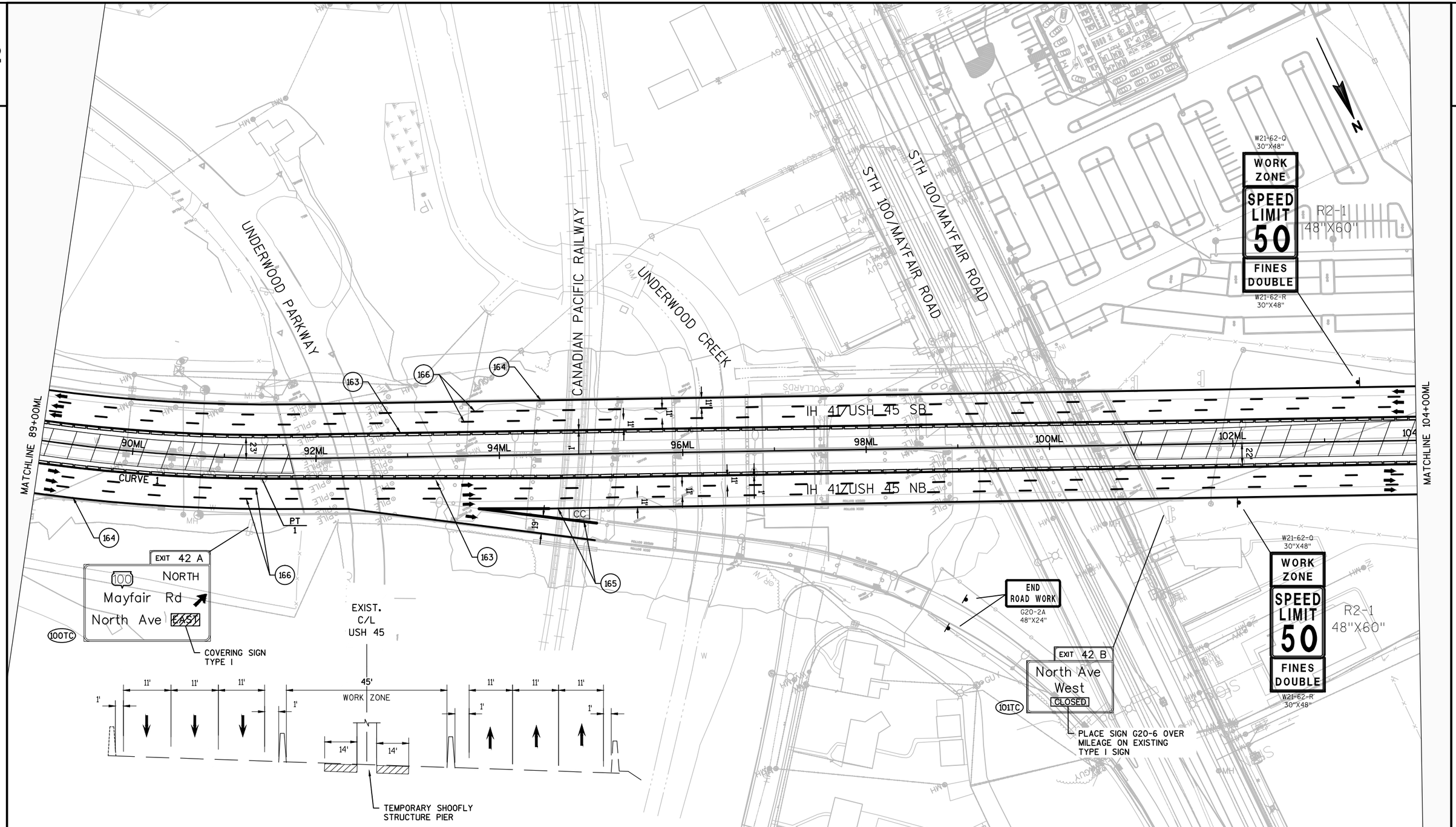


CURVE DATA

CURVE NO.	PI STATION	PI OFFSET	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC STATION	PC OFFSET	PT STATION	PT OFFSET
CURVE 1	85+51.41ML	130.83'	570414.35	305178.02	37°23'46"	3°04'33"	630.46	1215.84	103.80	1862.83	79+51.59ML	24.45' RT	91+41.43ML	22.23' RT

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 1 CONSTRUCTION	SHEET 199	E

2



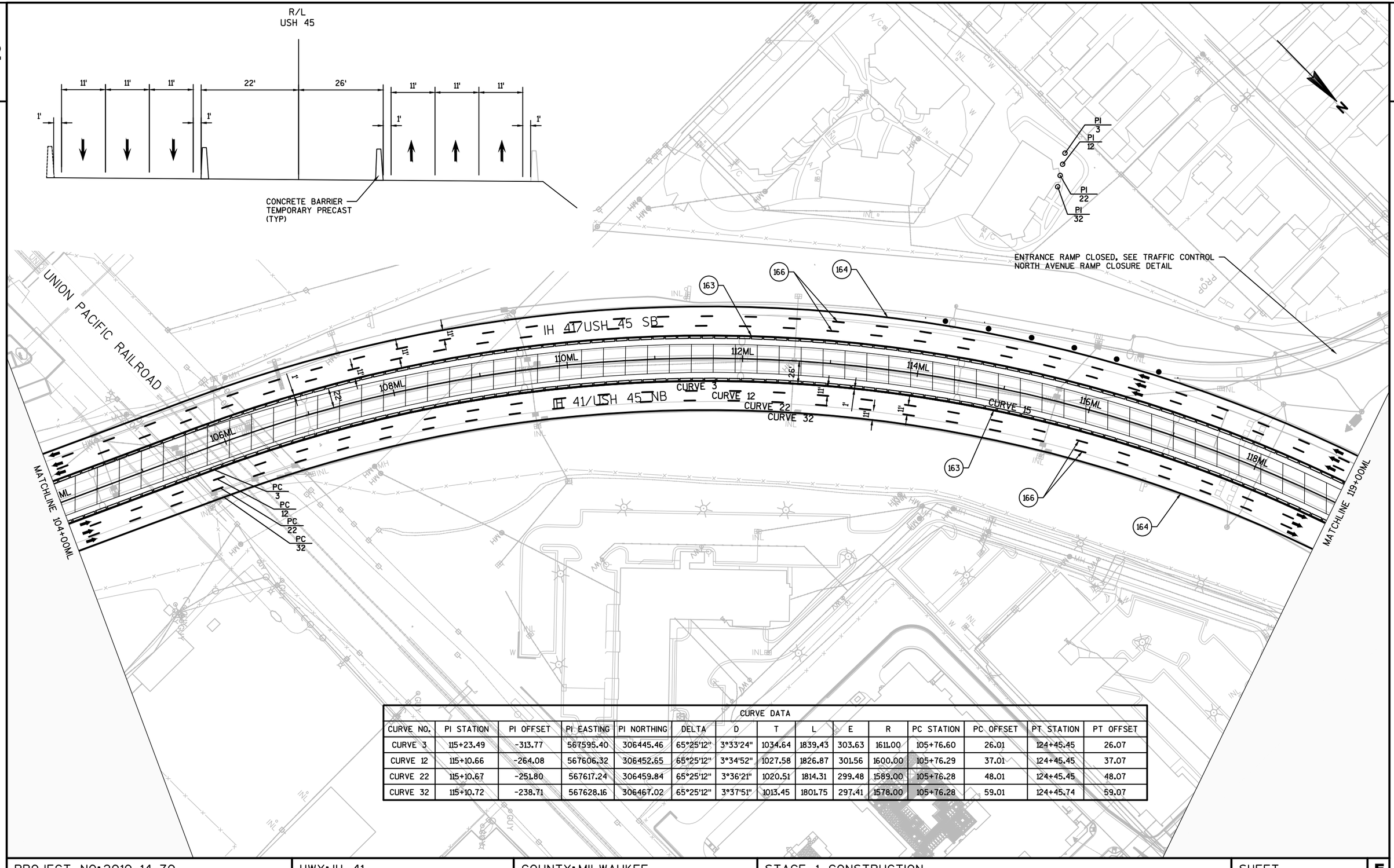
STAGE 1 - IH 41/USH 45

CURVE DATA

CURVE NO.	PI STATION	PI OFFSET	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC STATION	PC OFFSET	PT STATION	PT OFFSET
CURVE 1	85+51.41ML	130.83'	570414.35	305178.02	37°23'46"	3°04'33"	630.46	1215.84	103.80	1862.83	79+51.59ML	24.45' RT	91+41.43ML	22.23' RT

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 1 CONSTRUCTION	SHEET 200	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026102_S1.DWG
LAYOUT NAME - 08
PLOT DATE : 10/20/2017 6:57 PM
PLOT BY : SCHARLAU, DAVID A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



CURVE DATA

CURVE NO.	PI STATION	PI OFFSET	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC STATION	PC OFFSET	PT STATION	PT OFFSET
CURVE 3	115+23.49	-313.77	567595.40	306445.46	65°25'12"	3°33'24"	1034.64	1839.43	303.63	1611.00	105+76.60	26.01	124+45.45	26.07
CURVE 12	115+10.66	-264.08	567606.32	306452.65	65°25'12"	3°34'52"	1027.58	1826.87	301.56	1600.00	105+76.29	37.01	124+45.45	37.07
CURVE 22	115+10.67	-251.80	567617.24	306459.84	65°25'12"	3°36'21"	1020.51	1814.31	299.48	1589.00	105+76.28	48.01	124+45.45	48.07
CURVE 32	115+10.72	-238.71	567628.16	306467.02	65°25'12"	3°37'51"	1013.45	1801.75	297.41	1578.00	105+76.28	59.01	124+45.74	59.07

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 1 CONSTRUCTION	SHEET 201	E

2

N

W. NORTH AVENUE

W. MEINECKE AVENUE

N. 113TH STREET

N. 112TH STREET

MATCHLINE 119+00ML

MATCHLINE 134+00ML

SEE SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL TRAFFIC CONTROL

RAMP CLOSED
R11-2-R
48"X30"

SEE SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL TRAFFIC CONTROL

RAMP CLOSED
R11-2-R
48"X30"

RAMP CLOSED
R11-2-R
48"X30"

RAMP CLOSED
R11-2-R
48"X30"

IH 41/USH 45 SB

IH 41/USH 45 NB

120ML

122ML

124ML

126ML

128ML

130ML

132ML

134

CURVE 3

CURVE 12

CURVE 22

CURVE 32

PT 3

PT 12

PT 22

PT 32

164

166

163

167

SEE SDD "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL TRAFFIC CONTROL

SEE STAGE 1 CONSTRUCTION - NORTH AVENUE

ENTRANCE RAMP CLOSED, SEE TRAFFIC CONTROL NORTH AVENUE RAMP CLOSURE DETAIL

CURVE DATA

CURVE NO.	PI STATION	PI OFFSET	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC STATION	PC OFFSET	PT STATION	PT OFFSET
CURVE 3	115+23.49	-313.77	567595.40	306445.46	65°25'12"	3°33'24"	1034.64	1839.43	303.63	1611.00	105+76.60	26.01	124+45.45	26.07
CURVE 12	115+10.66	-264.08	567606.32	306452.65	65°25'12"	3°34'52"	1027.58	1826.87	301.56	1600.00	105+76.29	37.01	124+45.45	37.07
CURVE 22	115+10.67	-251.80	567617.24	306459.84	65°25'12"	3°36'21"	1020.51	1814.31	299.48	1589.00	105+76.28	48.01	124+45.45	48.07
CURVE 32	115+10.72	-238.71	567628.16	306467.02	65°25'12"	3°37'51"	1013.45	1801.75	297.41	1578.00	105+76.28	59.01	124+45.74	59.07

2

N

W21-62-Q
30"X48"
WORK ZONE
SPEED LIMIT 50
FINES DOUBLE
W21-62-R
30"X48"
R2-1
48"X60"

N. 113TH STREET

164 166 163

TH 41/USH 45 SB

TH 41/USH 45 NB

MATCHLINE 134+00ML

136ML 138ML 140ML 142ML 144ML 146ML 148ML

MATCHLINE 149+00ML

11' 11' 11' 11' 1' 23'

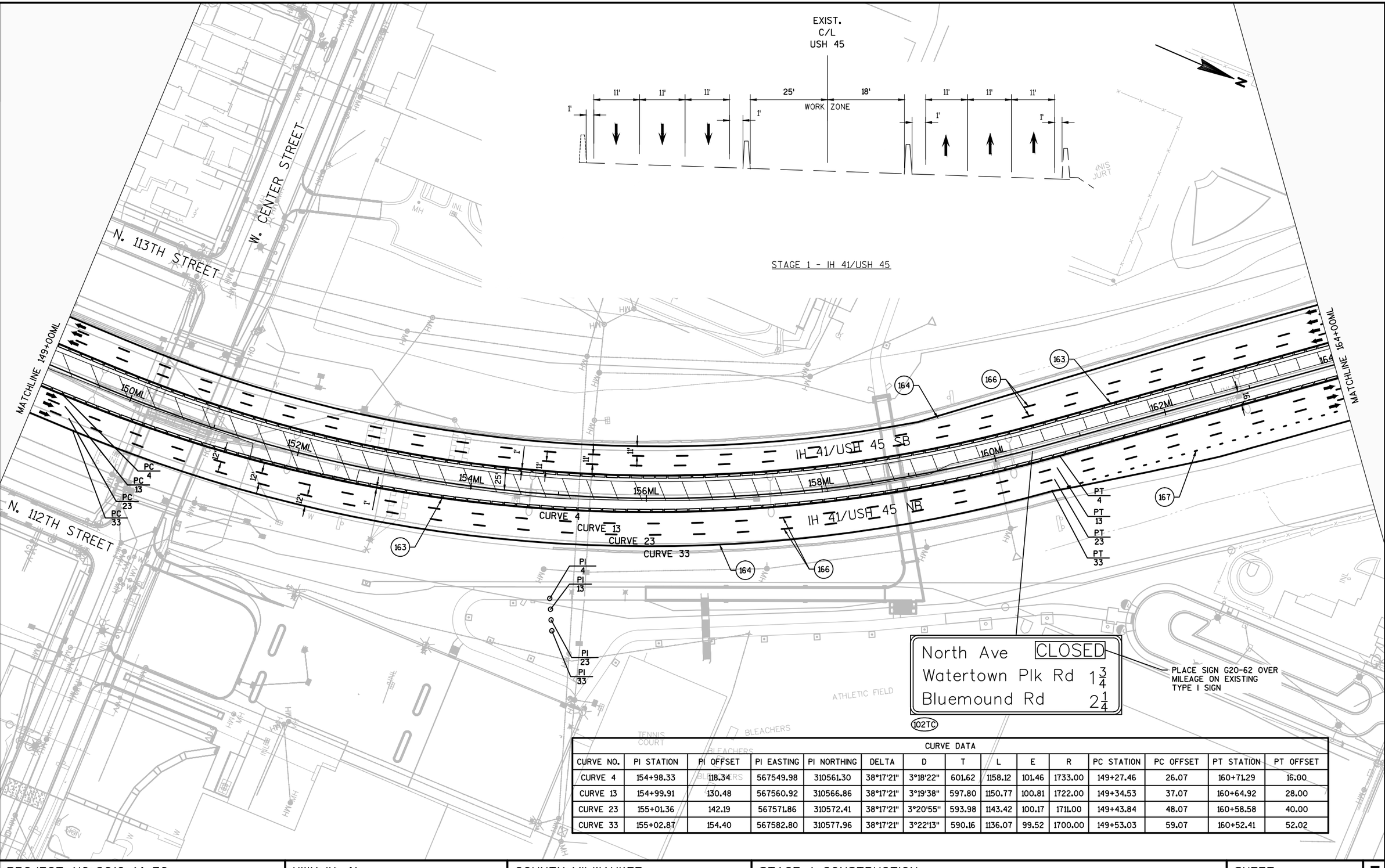
164 166 163

W21-62-Q
30"X48"
WORK ZONE
SPEED LIMIT 50
FINES DOUBLE
W21-62-R
30"X48"
R2-1
48"X60"

N. 112TH STREET

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 1 CONSTRUCTION	SHEET 203	E

2



CURVE DATA

CURVE NO.	PI STATION	PI OFFSET	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC STATION	PC OFFSET	PT STATION	PT OFFSET
CURVE 4	154+98.33	118.34	567549.98	310561.30	38°17'21"	3°18'22"	601.62	1158.12	101.46	1733.00	149+27.46	26.07	160+71.29	16.00
CURVE 13	154+99.91	130.48	567560.92	310566.86	38°17'21"	3°19'38"	597.80	1150.77	100.81	1722.00	149+34.53	37.07	160+64.92	28.00
CURVE 23	155+01.36	142.19	567571.86	310572.41	38°17'21"	3°20'55"	593.98	1143.42	100.17	1711.00	149+43.84	48.07	160+58.58	40.00
CURVE 33	155+02.87	154.40	567582.80	310577.96	38°17'21"	3°22'13"	590.16	1136.07	99.52	1700.00	149+53.03	59.07	160+52.41	52.02

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 1 CONSTRUCTION	SHEET 204	E

CURVE DATA														
CURVE NO.	PI STATION	PI OFFSET	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC STATION	PC OFFSET	PT STATION	PT OFFSET
CURVE 5	174+14.76	-100.01	566236.03	312121.61	38°55'17"	4°26'42"	455.46	875.63	78.10	1289.00	170+53.64	-26.00	179+14.70	-17.00
CURVE 41	174+85.77	-112.19	566224.03	312118.96	38°55'17"	4°24'14"	459.71	883.78	78.83	1301.00	170+54.88	-37.00	179+16.62	-29.00
CURVE 42	174+87.24	-124.38	566212.03	312116.31	38°55'17"	4°21'49"	463.95	891.93	79.56	1313.00	170+56.11	-48.00	179+18.05	-41.00
CURVE 43	174+88.68	-136.56	566200.03	312113.66	38°55'17"	4°19'27"	468.19	900.08	80.28	1325.00	170+57.35	-59.00	179+19.68	-53.00

2

ATHLETIC FIELD

EXIT 42 B
North Ave
West
CLOSED
103TC

PLACE SIGN G20-6 OVER MILEAGE ON EXISTING TYPE I SIGN

W04-5R

ROAD WORK AHEAD
W20-1-A

PI 43
PI 42
PI 41
PI 5

PC 43
PC 42
PC 41
PC 5

IH 41/USH 45 SB
IH 41/USH 45 NB

CURVE 43
CURVE 42
CURVE 41
CURVE 5

164ML
166ML
168ML
170ML
172ML
174ML
176ML
178ML

MATCHLINE 164+00ML

MATCHLINE 179+00ML

END ROAD WORK
G20-2A
48"X24"

W21-62-Q
30"X48"
WORK ZONE
SPEED LIMIT 50
FINES DOUBLE
W21-62-R
30"X48"

R2-1
48"X60"

ROAD WORK 1500 FT
W20-1-B

ROAD WORK 1/2 MILE
W20-1-C

FINES DOUBLE IN WORK ZONES
Give 'em BRAKE SLOW DOWN
$200 MINIMUM
W21-62-P
96"X12"

SPEED LIMIT 50
W3-5
W21-62
96"X48"

ROAD WORK 1 MILE
W20-1-F

1500'
1140'
700'
600'
500'
1890'

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 1 CONSTRUCTION	SHEET 205	E

2

N

MATCHLINE 179+00ML

W. BURLEIGH STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

180ML 182ML 184ML 186ML 188ML 190ML 192ML 194ML

MAX. 11' WIDTH
W12-52

EACH LANE
W12-52P
48"X36

LANE NARROWS AHEAD
W20-1(MOD)

END ROAD WORK
G20-2A
48"X24"

PT 43 — CURVE 43
PT 42 — CURVE 42
PT 41 — CURVE 41
PT 5 — CURVE 5

164
166
163

SB IH 41/USH 45 LEFT SHOULDER CLOSED, SEE SDD "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH" FOR REQUIRED TRAFFIC CONTROL

Capitol Dr	$\frac{1}{4}$
Burleigh St	$1\frac{1}{4}$
North Ave	CLOSED

104TC

PLACE SIGN G20-62 OVER MILEAGE ON EXISTING TYPE I SIGN

Burleigh St	$\frac{1}{4}$
North Ave	CLOSED
Watertown Plk Rd	$2\frac{1}{2}$

104TC

PLACE SIGN G20-62 OVER MILEAGE ON EXISTING TYPE I SIGN

RAMPS TO NORTH AVE CLOSED AHEAD USE BURLEIGH

114

INSTALL FIXED MESSAGE SIGN 100' SOUTH OF ADVANCED BURLEIGH MEDIAN SIGN

CURVE DATA

CURVE NO.	PI STATION	PI OFFSET	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC STATION	PC OFFSET	PT STATION	PT OFFSET
CURVE 5	174+14.76	-100.01	566236.03	312121.61	38°55'17"	4°26'42"	455.46	875.63	78.10	1289.00	170+53.64	-26.00	179+14.70	-17.00
CURVE 41	174+85.77	-112.19	566224.03	312118.96	38°55'17"	4°24'14"	459.71	883.78	78.83	1301.00	170+54.88	-37.00	179+16.62	-29.00
CURVE 42	174+87.24	-124.38	566212.03	312116.31	38°55'17"	4°21'49"	463.95	891.93	79.56	1313.00	170+56.11	-48.00	179+18.05	-41.00
CURVE 43	174+88.68	-136.56	566200.03	312113.66	38°55'17"	4°19'27"	468.19	900.08	80.28	1325.00	170+57.35	-59.00	179+19.68	-53.00

2

CONSTRUCTION
MILL AND OVERLAY EXISTING ASPHALT SURFACE BETWEEN RAMP TERMINALS

RECONSTRUCT CURB RAMPS TO MEET A.D.A. STANDARDS

TRAFFIC
SEE S.D.D. 15C5: 'TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC' FOR ADVANCED WARNING SIGN PLACEMENT

NORTH AVE SHALL BE PAVED DURING NIGHTTIME HOURS, MAINTAIN ONE LANE OPEN TO TRAFFIC IN EACH DIRECTION DURING CONSTRUCTION OPERATIONS

CURB RAMP REPLACEMENT MAY TAKE PLACE DURING DAYTIME OFF PEAK HOURS WITH A SINGLE LANE CLOSURE.

TRAFFIC CONTROL DEVICES SHALL BE OUT OF THE ROADWAY DURING PEAK HOURS

PEDESTRIAN
DO NOT PERFORM SIDEWALK WORK ON TO BOTH SIDES OF ROADWAY AT THE SAME TIME

MAINTAIN SIDEWALK ACCESS ON ONE SIDE OF NORTH AVENUE AT ALL TIMES

UTILIZE PEDESTRIAN DETOUR SIGNS DURING CURB RAMP CONSTRUCTION

N

N. 114TH STREET

N. 113TH STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

W. NORTH AVENUE

N. 115TH STREET

LOCATE AT 116TH STREET/NORTH AVENUE INTERSECTION

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
SIZE

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
48"X24"

LOCATE AT 116TH STREET/
NORTH AVENUE INTERSECTION

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
48"X24"

MAINTAIN ACCESS TO DRIVEWAY AT ALL TIMES

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
SIZE

2

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 1 CONSTRUCTION - NORTH AVENUE	SHEET	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026103_S1.DWG
LAYOUT NAME - 01
PLOT DATE : 10/20/2017 6:20 PM
PLOT BY : SCHARLAU, DAVID A
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

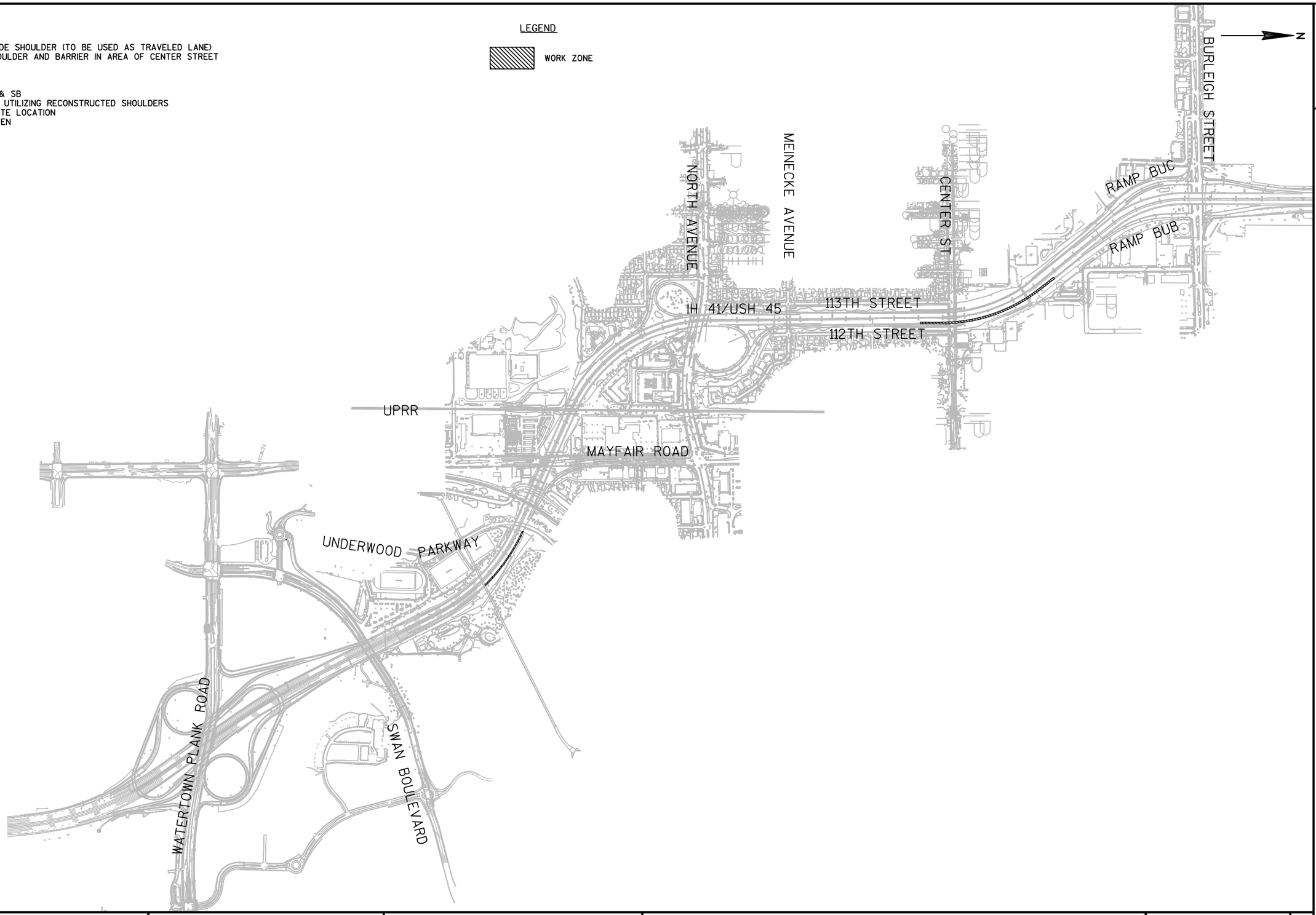
STAGE 2A

CONSTRUCTION:
- RECONSTRUCTION OF NB OUTSIDE SHOULDER (TO BE USED AS TRAVELED LANE) AND ADDITION OF OUTSIDE SHOULDER AND BARRIER IN AREA OF CENTER STREET
- CONSTRUCT S-40-871/872/873

TRAFFIC:
- 3 LANES MAINTAINED FOR NB & SB
- NB TRAFFIC MOVED TO INSIDE, UTILIZING RECONSTRUCTED SHOULDERS
- SB TRAFFIC MOVED TO ULTIMATE LOCATION
- ALL NORTH AVENUE RAMPS OPEN

LEGEND

WORK ZONE



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TRAFFIC CONTROL STAGE 2A OVERVIEW	SHEET 208	E

2

2

W. WATERTOWN PLANK ROAD

IH 41/USH 45 SB

MATCHLINE 44+00ML

46ML

48ML

50ML

52ML

54ML

56ML

58ML

1H 41/USH 45 NB

MATCHLINE 59+00ML

ROAD WORK AHEAD W20-1-A

ROAD WORK AHEAD W20-1-A

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 2A CONSTRUCTION	SHEET 209	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026202_S2A.DWG
LAYOUT NAME - 05

PLOT DATE : 10/20/2017 6:25 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

END
ROAD WORK
G20-2A
48"X24"

IH 41/USH 45 SB

IH 41/USH 45 NB

60ML 62ML 64ML 66ML 68ML 70ML 72ML 74

MATCHLINE 59+00ML

MATCHLINE 74+00ML

SWAN BOULEVARD

2

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 2A CONSTRUCTION	SHEET 210	E

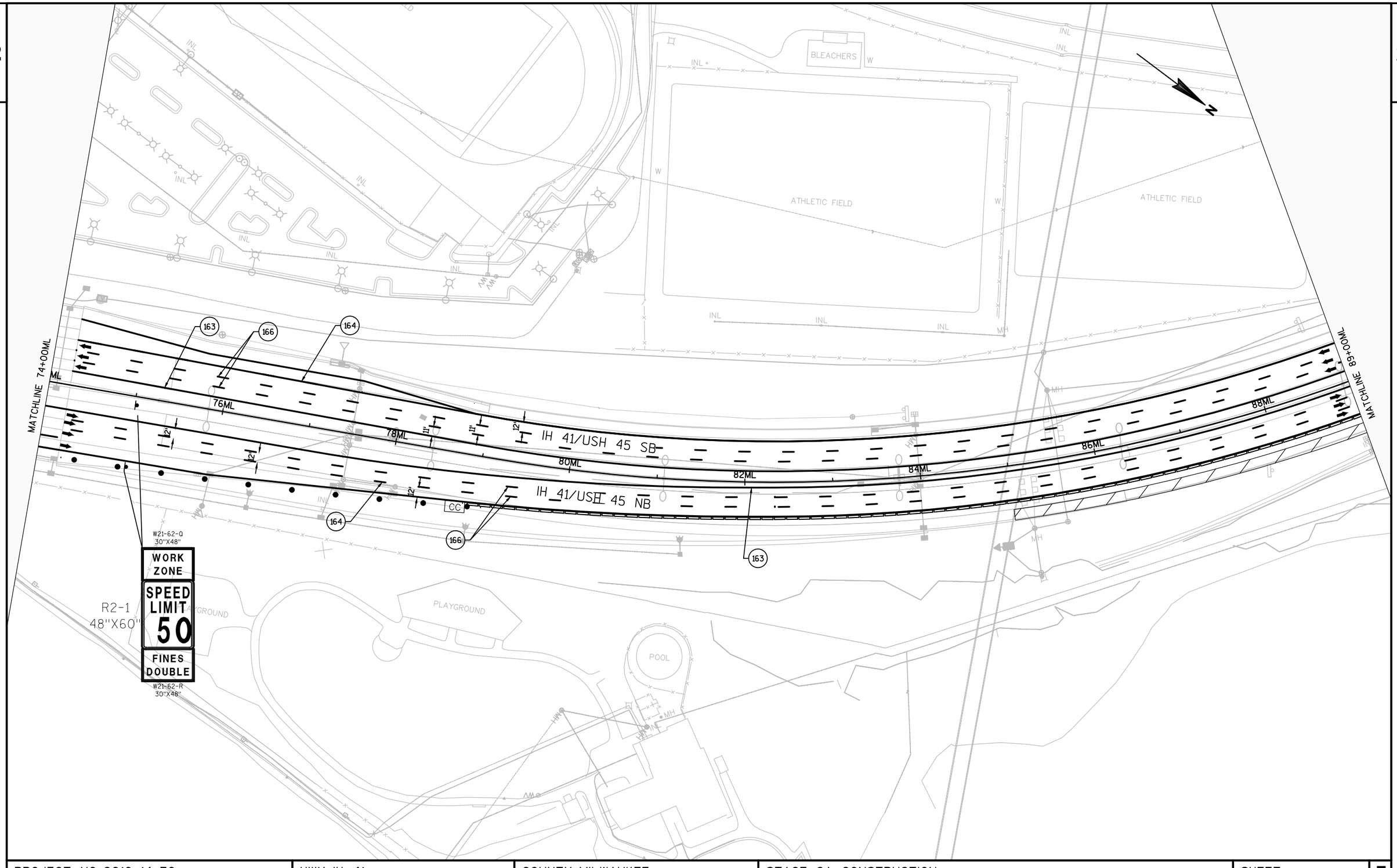
FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026202_S2A.DWG
LAYOUT NAME - 06

PLOT DATE : 10/20/2017 6:25 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

D
WORK

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 2A CONSTRUCTION	SHEET 211	E

2

2

MATCHLINE 89+00ML

MATCHLINE 104+00ML

UNDERWOOD PARKWAY

CANADIAN PACIFIC RAILWAY

UNDERWOOD CREEK

STH 100/MAYFAIR ROAD

STH 100/MAYFAIR ROAD

IH 41/USH 45 SB

IH 41/USH 45 NB

90ML

92ML

94ML

96ML

98ML

100ML

102ML

104

163

164

166

167

165

CC

W21-62-O
30"X48"

WORK ZONE
SPEED LIMIT
50
FINES DOUBLE

R2-1
48"X60"

W21-62-R
30"X48"

END ROAD WORK
G20-2A
48"X24"

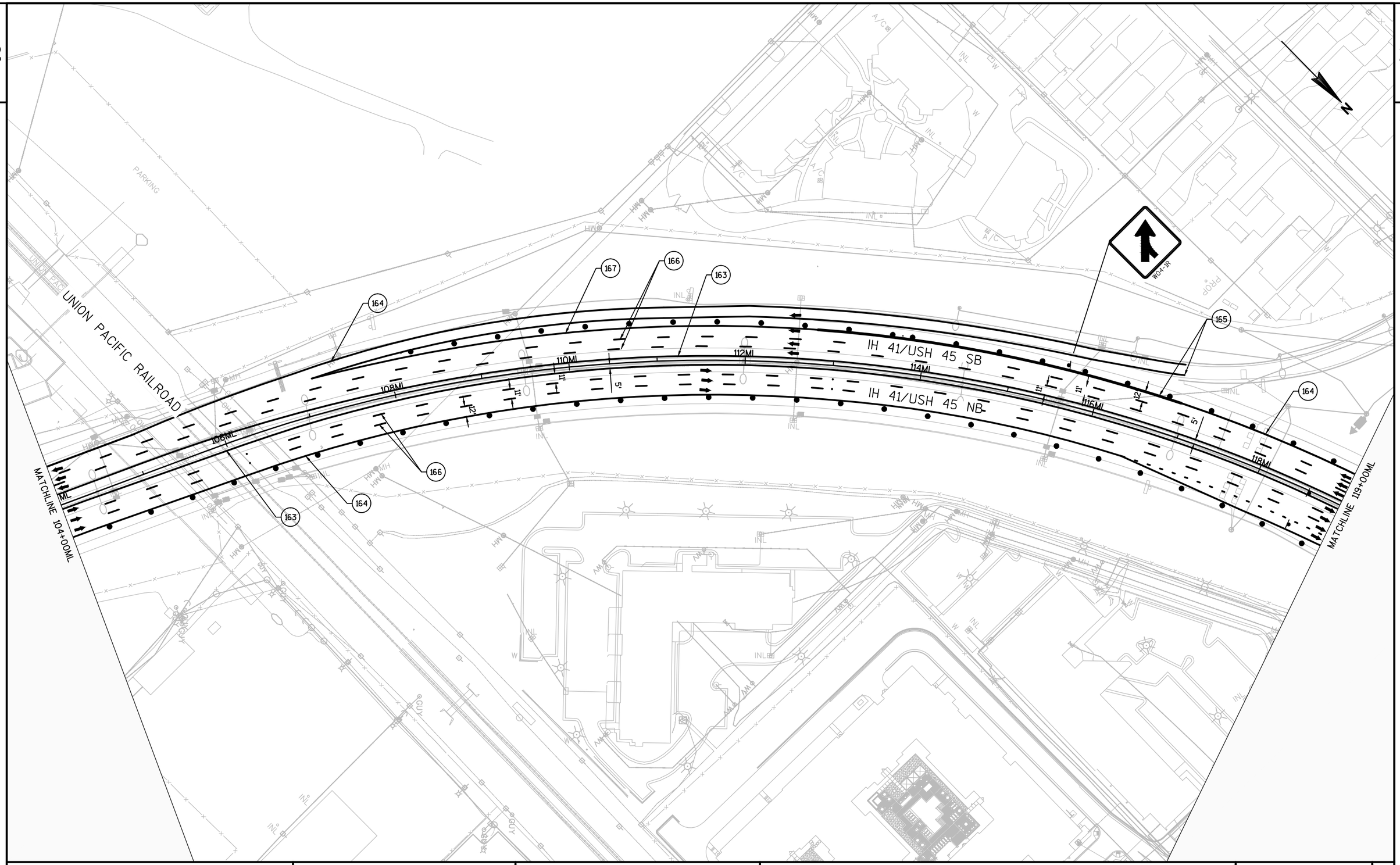
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 2A CONSTRUCTION	SHEET 212	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026202_S2A.DWG
LAYOUT NAME - 08

PLOT DATE : 10/20/2017 6:26 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 2A CONSTRUCTION	SHEET 213	E

2

2

N

W. NORTH AVENUE

W. MEINECKE AVENUE

N. 113TH STREET

N. 112TH STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

MATCHLINE 119+00ML

MATCHLINE 134+00ML

120ML

122ML

124ML

126ML

128ML

130ML

132ML

164

165

166

167

163

W04-1R

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 2A CONSTRUCTION	SHEET 214	E

2

2

N

N. 113TH STREET

W21-62-Q
30"X48"
WORK ZONE
SPEED LIMIT 50
FINES DOUBLE
W21-62-R
30"X48"

R2-1
48"X60"

165 167 164 163 166

IH 41/USH 45 SB

IH 41/USH 45 NB

136MI 138MI 140MI 142MI 144MI 146MI 148MI

5' 11' 11' 12' 12' 11' 11' 5'

CC

MATCHLINE 134+00ML

MATCHLINE 149+00ML

+00.00ML
10.00' RT

N. 112TH STREET

R2-1
48"X60"

W21-62-Q
30"X48"
WORK ZONE
SPEED LIMIT 50
FINES DOUBLE
W21-62-R
30"X48"

163 166 164

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 2A CONSTRUCTION	SHEET 215	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026202_S2A.DWG
LAYOUT NAME - 11

PLOT DATE : 10/20/2017 6:28 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

CURVE DATA														
CURVE NO.	PI STATION	PI OFFSET	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC STATION	PC OFFSET	PT STATION	PT OFFSET
CURVE 1	155+26.66ML	138.07' RT	567544.05	310566.26	38°51'28"	3°28'09"	582.53	1120.05	99.72	1651.52	149+49.45ML	14.42' RT	160+59.78ML	14.50' RT

N. 113TH STREET
W. CENTER STREET
N. 112TH STREET
MATCHLINE 149+00ML
MATCHLINE 164+00ML
IH 41/USH 45 SB
IH 41/USH 45 NB
CURVE 1
PC 1
PI 1
PT 1
150ML
152ML
154ML
156ML
158ML
160ML
162ML
163
164
166
167
BLEACHERS
TENNIS COURT
ATHLETIC FIELD

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 2A CONSTRUCTION	SHEET 216 E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026202_S2A.DWG
LAYOUT NAME - 12

PLOT DATE : 10/20/2017 6:28 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

ATHLETIC FIELD

IH 41/USH 45 SB

IH 41/USH 45 NB

MATCHLINE 164+00ML

MATCHLINE 179+00ML

164ML 166ML 168ML 170ML 172ML 174ML 176ML 178ML

164 165 166 167 163 P

W4-4R

ROAD WORK AHEAD W20-1-A

END ROAD WORK G20-2A 48"X24"

W21-62-Q 30"X48"
WORK ZONE
SPEED LIMIT 50
FINES DOUBLE
W21-62-R 30"X48"

R2-1 48"X60"

ROAD WORK 1/2 MILE W20-1-G

SPEED LIMIT 50 W3-5

ROAD WORK 1500 FT W20-1-B

FINES DOUBLE IN WORK ZONES
Give 'em a BRAKE SLOW DOWN
$200 MINIMUM
W21-62-P 96"X12"

W21-62 96"X48"

ROAD WORK 1 MILE W20-1-F

1500' 1140' 700' 600' 500' 1890'

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 2A CONSTRUCTION	SHEET 217	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026202_S2A.DWG
LAYOUT NAME - 13

PLOT DATE : 10/20/2017 6:29 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

P

18

36

MATCHLINE 179+00ML

180ML

182ML

184ML

186ML

188ML

190ML

192ML

194ML

IH 41/USH 45 SB

IH 41/USH 45 NB

W. BURLEIGH STREET

END
ROAD WORK
G20-2A
48"X24"

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 2A CONSTRUCTION	SHEET 218	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026202_S2A.DWG
LAYOUT NAME - 14

PLOT DATE : 10/20/2017 6:29 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

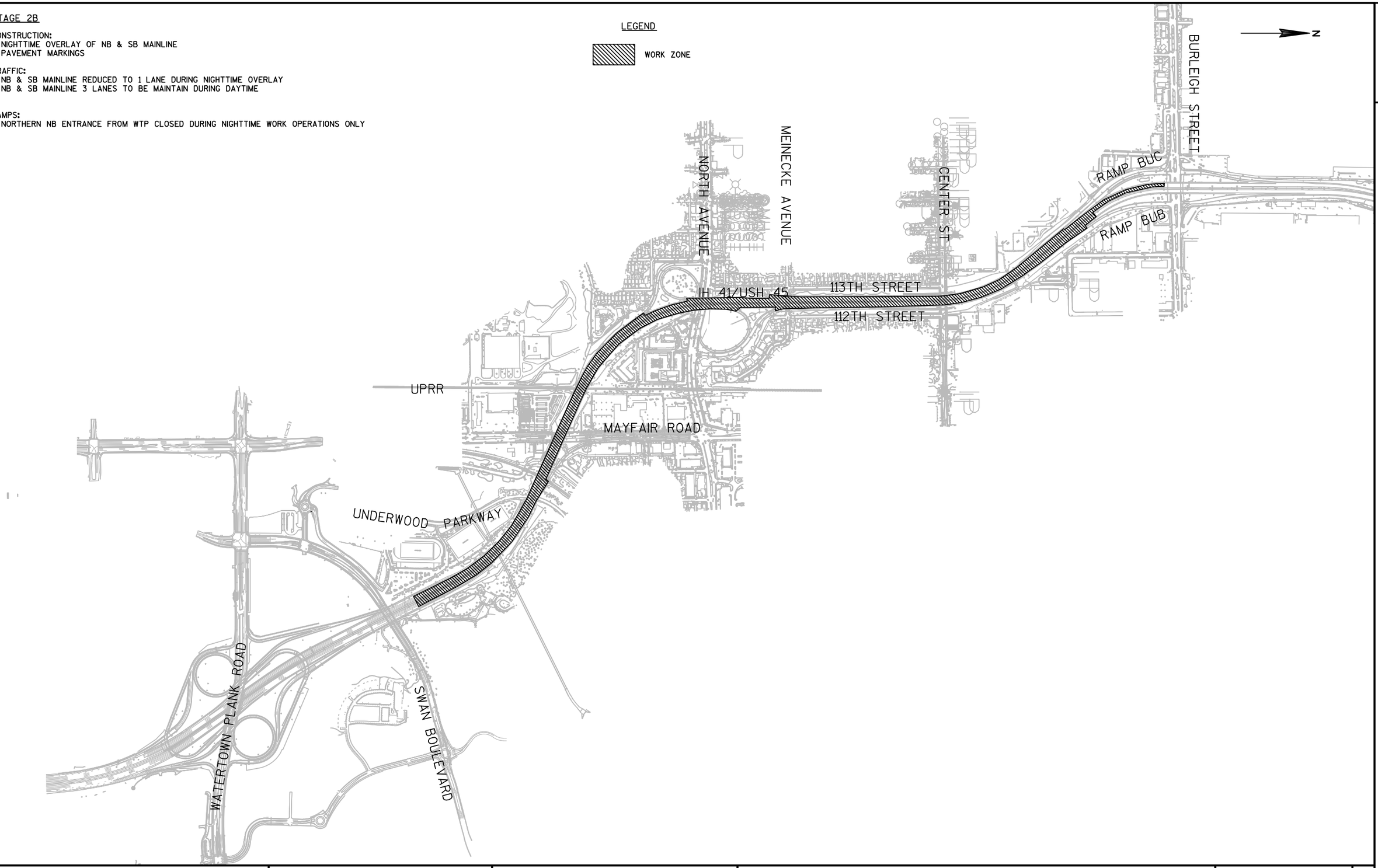
2

STAGE 2B

CONSTRUCTION:
- NIGHTTIME OVERLAY OF NB & SB MAINLINE
- PAVEMENT MARKINGS

TRAFFIC:
- NB & SB MAINLINE REDUCED TO 1 LANE DURING NIGHTTIME OVERLAY
- NB & SB MAINLINE 3 LANES TO BE MAINTAIN DURING DAYTIME

RAMPS:
- NORTHERN NB ENTRANCE FROM WTP CLOSED DURING NIGHTTIME WORK OPERATIONS ONLY



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TRAFFIC CONTROL STAGE 2B OVERVIEW	SHEET 219	E

NOTES

- STATION 74ML+24 TO STATION 134ML+00 REMAINS UNDER STAGE 2A CONSTRUCTION TRAFFIC CONTROL AND STAGE 2B CONSTRUCTION TRAFFIC CONTROL MATCHES AT STATION 134ML+00 AND CONTINUES TO STATION 170ML+64
- SEE SDD "TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)" FOR TRAFFIC CONTROL REQUIRED TO CLOSE LANES FOR NIGHTTIME WORK

N

N. 113TH STREET

IH 41/USH 45 SB

IH 41/USH 45 NB

N. 112TH STREET

MATCHLINE 134+00ML

MATCHLINE 149+00ML

134ML 136ML 138ML 140ML 142ML 144ML 146ML 148ML

11' 11' 12'

163 166 164

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 2B CONSTRUCTION	SHEET 220

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026204_S2B.DWG
LAYOUT NAME - 08

PLOT DATE : 10/20/2017 6:33 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N. 113TH STREET

W. CENTER STREET

N. 112TH STREET

MATCHLINE 149+00ML

MATCHLINE 164+00ML

150ML

152ML

154ML

156ML

158ML

160ML

162ML

164

11'

11'

12'

16'

IH 41/USH 45 SB

IH 41/USH 45 NB

163

166

164

BLEACHERS

TENNIS COURT

TENNIS COURT

ATHLETIC FIELD

TENNIS COURT

BLEACHERS

BLEACHERS

BLEACHERS

N

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 2B CONSTRUCTION	SHEET 221	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026204_S2B.DWG
LAYOUT NAME - 09

PLOT DATE : 10/20/2017 6:33 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

IH 41/USH 45 SB

IH 41/USH 45 NB

166ML

168ML

170ML

172ML

174ML

176ML

178ML

MATCHLINE 164+00ML

MATCHLINE 179+00ML

163

164

165

166

ATHLETIC FIELD

GUY

INL

MH

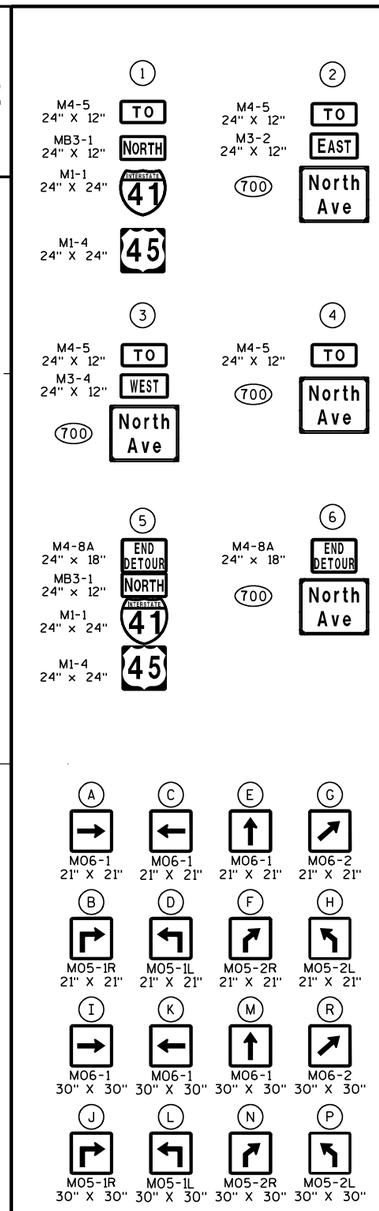
HW

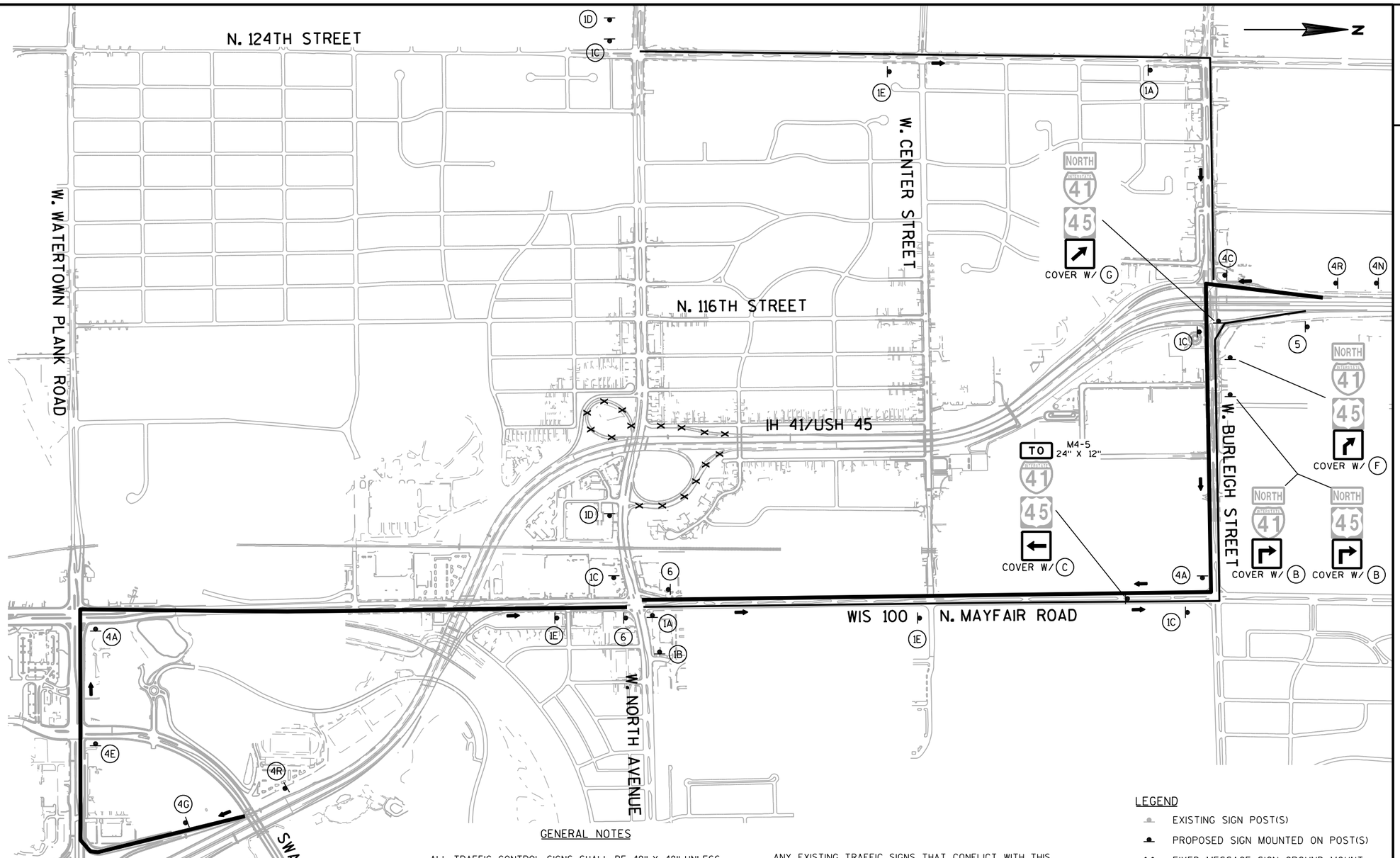
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	STAGE 2B CONSTRUCTION	SHEET 222	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\026204_S2B.DWG
LAYOUT NAME - 10

PLOT DATE : 10/20/2017 6:34 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42





GENERAL NOTES

ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN THE PLAN.

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

ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS DETOUR SHALL BE COVERED AS DIRECTED BY THE ENGINEER.

DETOUR SIGNS SHALL BE COVERED OR REMOVED WHEN DETOUR IS NOT IN USE OR AS DIRECTED BY THE ENGINEER.

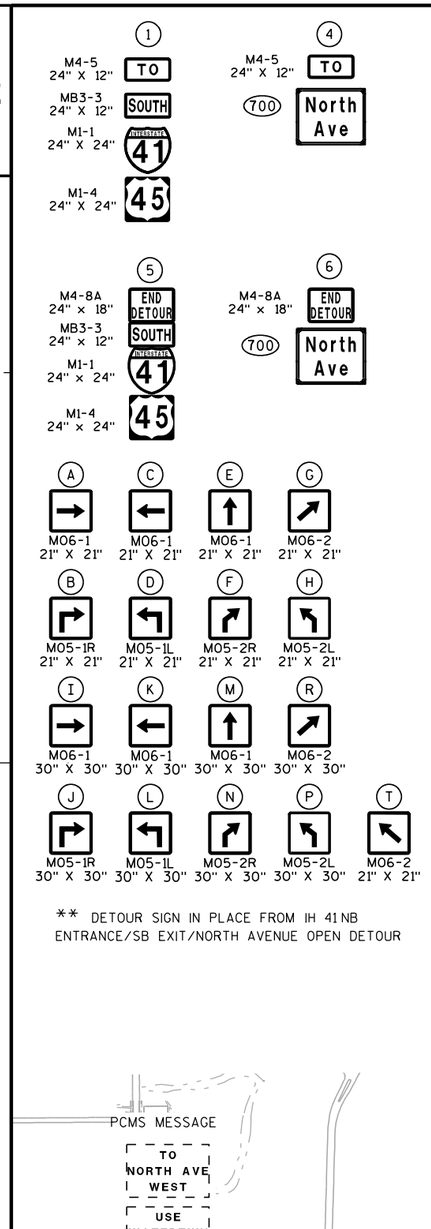
INSTALL PROPOSED DETOUR SIGNS ON OUTSIDE SHOULDER AND MEDIAN SIDE ON DIVIDED ROADWAY.

UNCOVERING EXISTING SIGNS PAID FOR UNDER "TRAFFIC CONTROL DETOUR" ITEM.

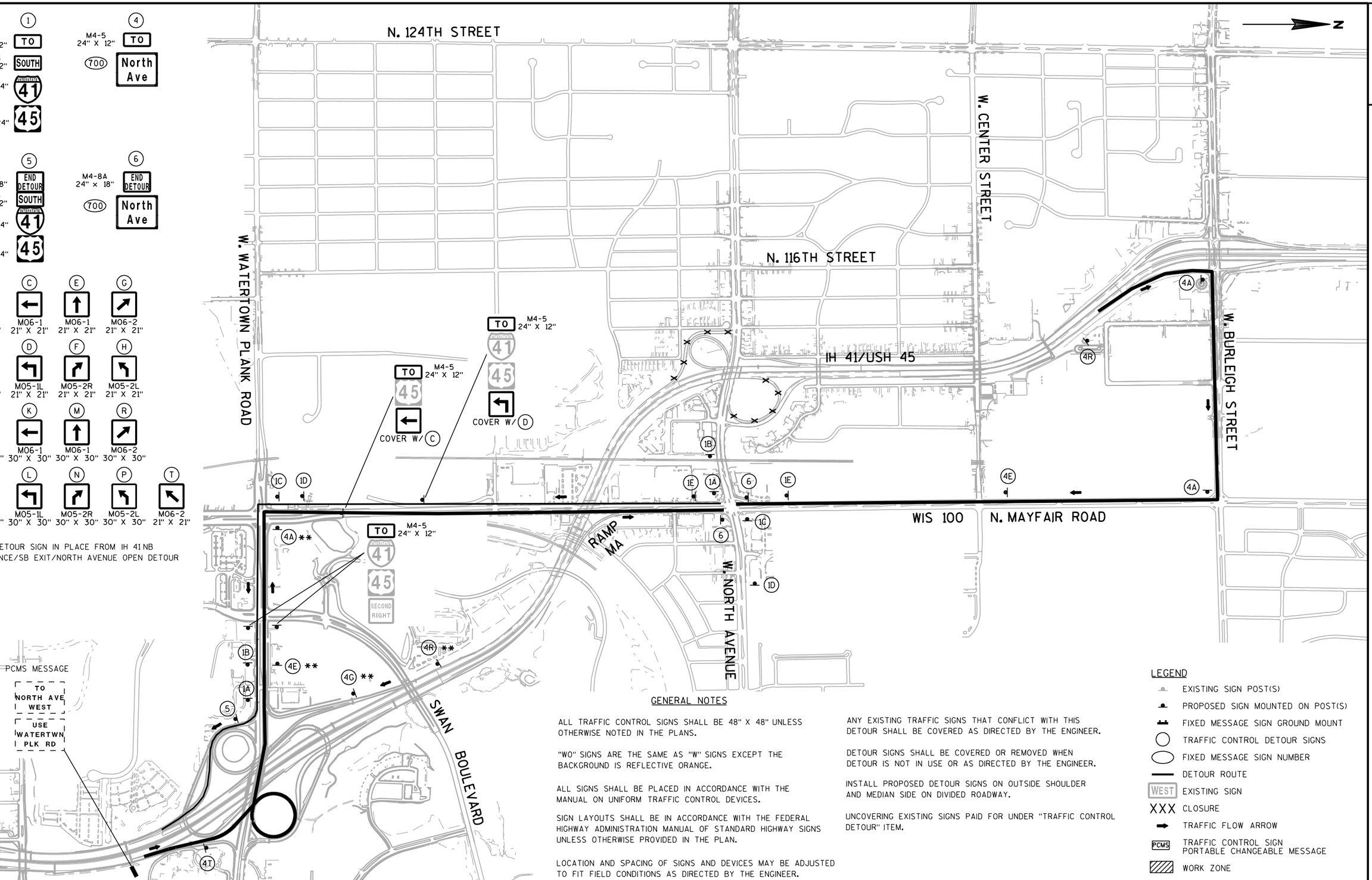
LEGEND

- EXISTING SIGN POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- FIXED MESSAGE SIGN GROUND MOUNT
- TRAFFIC CONTROL DETOUR SIGNS
- FIXED MESSAGE SIGN NUMBER
- DETOUR ROUTE
- WEST EXISTING SIGN
- XXX CLOSURE
- TRAFFIC FLOW ARROW
- PCMS TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE
- WORK ZONE

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	DETOUR PLAN - NORTH AVENUE IH 41 NB ENTRANCE/SB EXIT	SHEET	E



** DETOUR SIGN IN PLACE FROM IH 41 NB ENTRANCE/SB EXIT/NORTH AVENUE OPEN DETOUR



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SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS UNLESS OTHERWISE PROVIDED IN THE PLAN.

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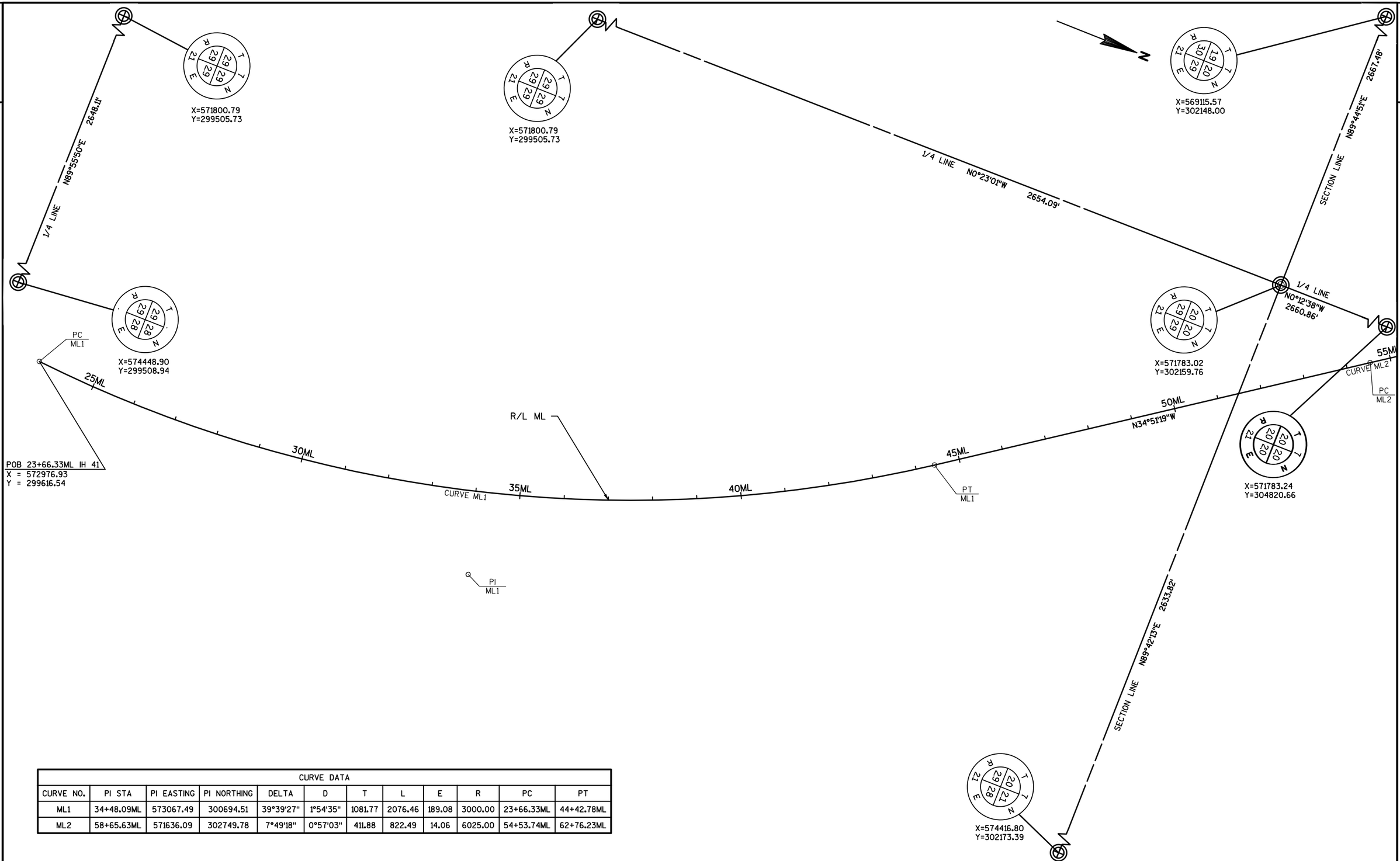
UNCOVERING EXISTING SIGNS PAID FOR UNDER "TRAFFIC CONTROL DETOUR" ITEM.

LEGEND

- EXISTING SIGN POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- FIXED MESSAGE SIGN GROUND MOUNT
- TRAFFIC CONTROL DETOUR SIGNS
- FIXED MESSAGE SIGN NUMBER
- DETOUR ROUTE
- WEST EXISTING SIGN
- XXX CLOSURE
- TRAFFIC FLOW ARROW
- PCMS TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE
- WORK ZONE

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	DETOUR PLAN - NORTH AVENUE IH 41 NB EXIT/SB ENTRANCE	SHEET	E

2



CURVE DATA											
CURVE NO.	PI STA	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC	PT
ML1	34+48.09ML	573067.49	300694.51	39°39'27"	1°54'35"	1081.77	2076.46	189.08	3000.00	23+66.33ML	44+42.78ML
ML2	58+65.63ML	571636.09	302749.78	7°49'18"	0°57'03"	411.88	822.49	14.06	6025.00	54+53.74ML	62+76.23ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT	SHEET 225	E

2

CURVE DATA											
CURVE NO.	PI STA	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC	PT
ML3	85+82.71ML	570400.54	305171.14	39°01'06"	3°00'00"	676.66	1300.61	116.33	1909.86	79+06.05ML	92+06.67ML

X=569115.57
Y=302148.00

SECTION LINE N89°44'51"E 2667.48'

X=571783.02
Y=302159.76

X=569081.94
Y=304800.15

R/L ML

PI ML2

CURVE ML2

55ML

60ML

65ML

70ML

N27°02'02"W

75ML

80ML

CURVE ML3

PC ML2

PT ML2

PC ML3

1/4 LINE N0°12'38"W 2660.86'

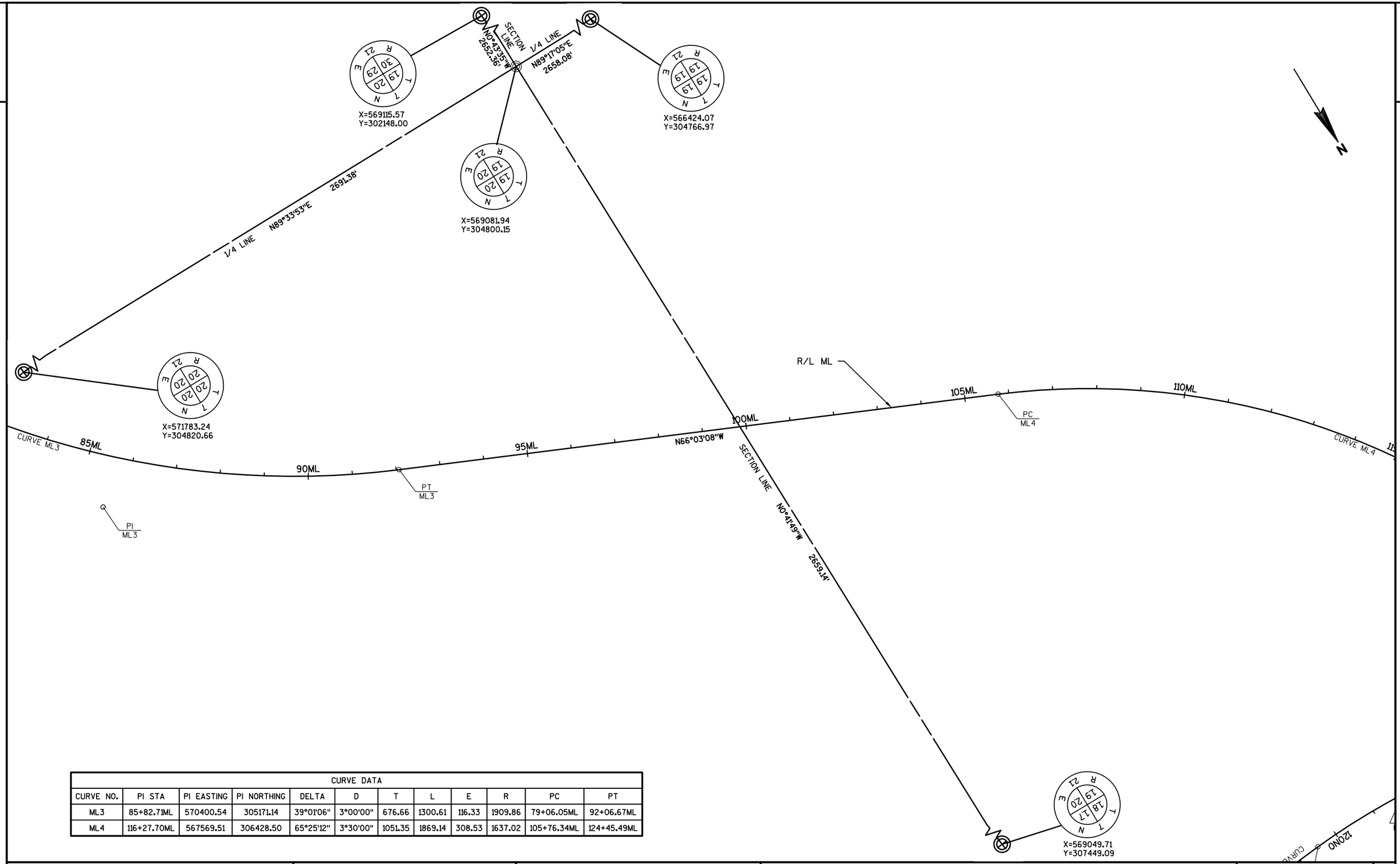
1/4 LINE N89°33'53"E 2691.38'

X=571783.24
Y=304820.66

CURVE DATA											
CURVE NO.	PI STA	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC	PT
ML2	58+65.63ML	571636.09	302749.78	7°49'18"	0°57'03"	411.88	822.49	14.06	6025.00	54+53.74ML	62+76.23ML
ML3	85+82.71ML	570400.54	305171.14	39°01'06"	3°00'00"	676.66	1300.61	116.33	1909.86	79+06.05ML	92+06.67ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT	SHEET 226	E

2

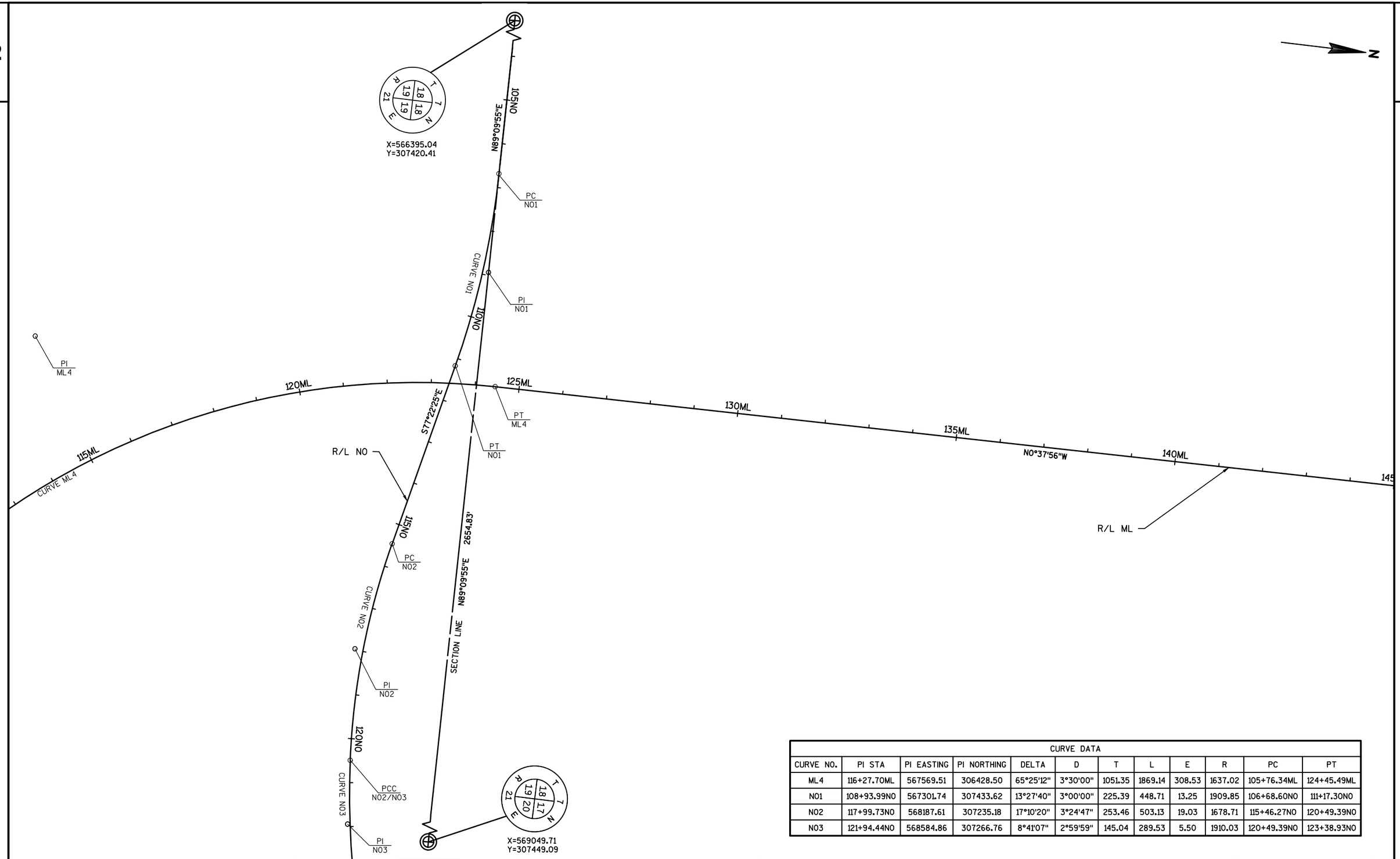


CURVE DATA											
CURVE NO.	PI STA	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC	PT
ML3	85+82.71ML	570400.54	305171.14	39°01'06"	3°00'00"	676.66	1300.61	116.33	1909.86	79+06.05ML	92+06.67ML
ML4	116+27.70ML	567569.51	306428.50	65°25'12"	3°30'00"	1051.35	1869.14	308.53	1637.02	105+76.34ML	124+45.49ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT	SHEET 227	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 03
PLOT DATE : 10/20/2017 4:13 PM
PLOT BY : SCHARLAU, DAVID A
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2



CURVE DATA											
CURVE NO.	PI STA	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC	PT
ML4	116+27.70ML	567569.51	306428.50	65°25'12"	3°30'00"	1051.35	1869.14	308.53	1637.02	105+76.34ML	124+45.49ML
NO1	108+93.99NO	567301.74	307433.62	13°27'40"	3°00'00"	225.39	448.71	13.25	1909.85	106+68.60NO	111+17.30NO
NO2	117+99.73NO	568187.61	307235.18	17°10'20"	3°24'47"	253.46	503.13	19.03	1678.71	115+46.27NO	120+49.39NO
NO3	121+94.44NO	568584.86	307266.76	8°41'07"	2°59'59"	145.04	289.53	5.50	1910.03	120+49.39NO	123+38.93NO

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT	SHEET 228	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 04

PLOT DATE : 10/20/2017 4:13 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

2

N

X=566370.68
Y=310073.92

1/4 LINE N89°02'49"E 2645.54'

1/4 LINE N0°32'24"W 2650.79'

145ML

150ML

PC
ML5

155ML
CURVE ML5

160ML

PT
ML5

165ML
N38°55'17"W

170ML

PC
ML6

CURVE ML6

175ML

PI
ML6

PI
ML5

R/L ML

X=566345.70
Y=312724.59

X=569015.98
Y=310107.93

CURVE DATA											
CURVE NO.	PI STA	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC	PT
ML5	155+34.10ML	567523.83	310568.22	38°17'21"	3°30'00"	568.30	1093.98	95.84	1637.02	149+65.80ML	160+59.78ML
ML6	175+17.02ML	566251.28	312144.10	39°08'32"	4°30'00"	452.66	869.83	78.07	1273.24	170+64.36ML	179+34.19ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT	SHEET 229	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 05

PLOT DATE : 10/20/2017 4:13 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

N

X=564007.20
Y=312683.67

SECTION LINE N88°59'51"E 2348.86'

PI ML6

PT ML6

175ML

180ML

185ML

190ML

195ML

PC ML7

200ML

PI ML7

PT ML7

CURVE ML6

CURVE ML7

1/4 LINE N0°32'24"W 2650.79'

N0°13'15"E

1/4 LINE N0°25'35"E 2682.72'

N15°55'27"E

X=566370.68
Y=310073.92

X=566345.70
Y=312724.59

X=566365.66
Y=315407.24

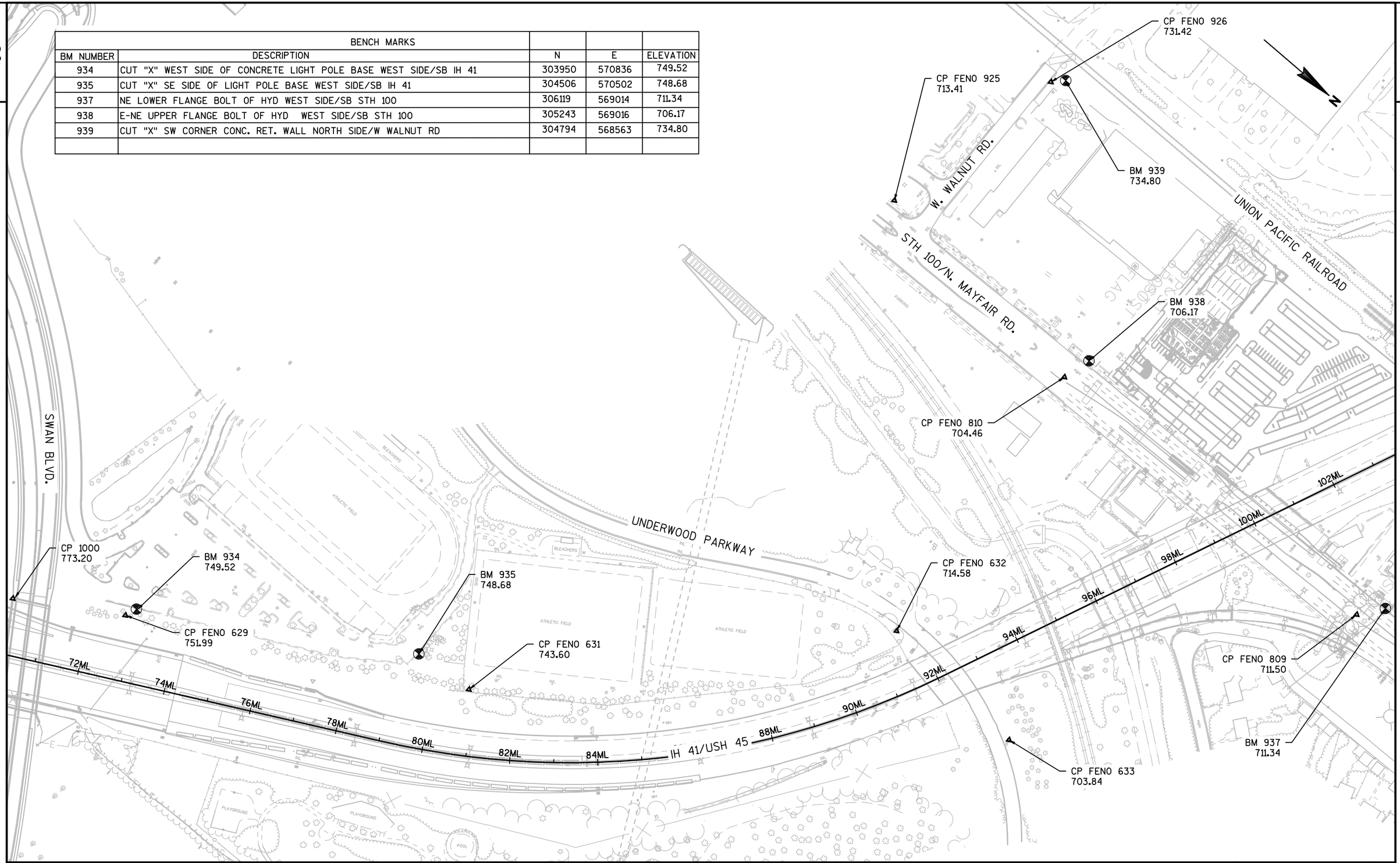
SECTION LINE N88°52'16"E 2647.79'

X=568993.16
Y=312788.76

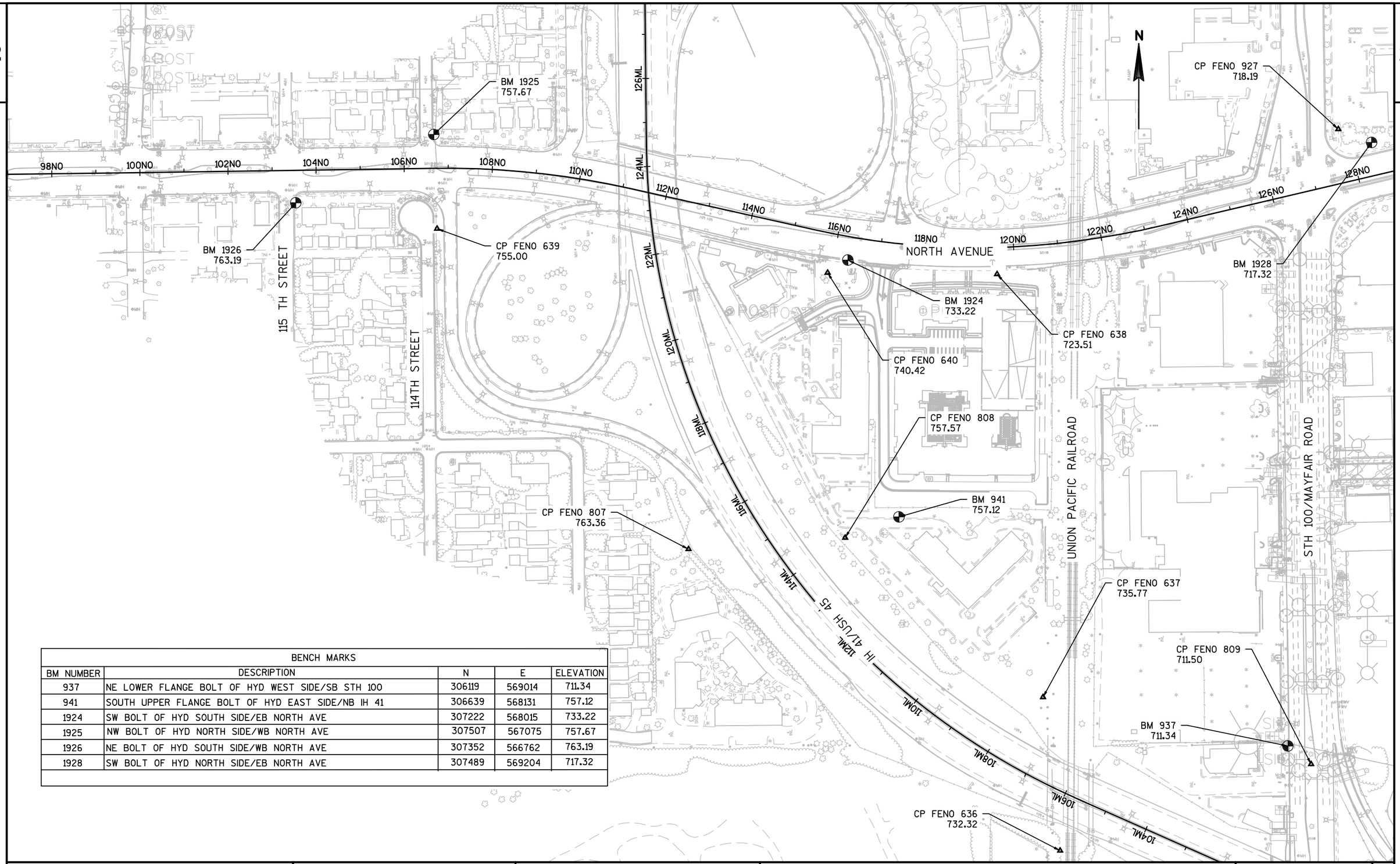
CURVE DATA											
CURVE NO.	PI STA	PI EASTING	PI NORTHING	DELTA	D	T	L	E	R	PC	PT
ML6	175+17.02ML	566251.28	312144.10	39°08'32"	4°30'00"	452.66	869.83	78.07	1273.24	170+64.36ML	179+34.19ML
ML7	200+46.78ML	566261.16	314709.33	15°42'12"	2°15'00"	351.17	697.93	24.10	2546.48	196+95.62ML	203+93.54ML

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT	SHEET 230	E

BENCH MARKS				
BM NUMBER	DESCRIPTION	N	E	ELEVATION
934	CUT "X" WEST SIDE OF CONCRETE LIGHT POLE BASE WEST SIDE/SB IH 41	303950	570836	749.52
935	CUT "X" SE SIDE OF LIGHT POLE BASE WEST SIDE/SB IH 41	304506	570502	748.68
937	NE LOWER FLANGE BOLT OF HYD WEST SIDE/SB STH 100	306119	569014	711.34
938	E-NE UPPER FLANGE BOLT OF HYD WEST SIDE/SB STH 100	305243	569016	706.17
939	CUT "X" SW CORNER CONC. RET. WALL NORTH SIDE/W WALNUT RD	304794	568563	734.80

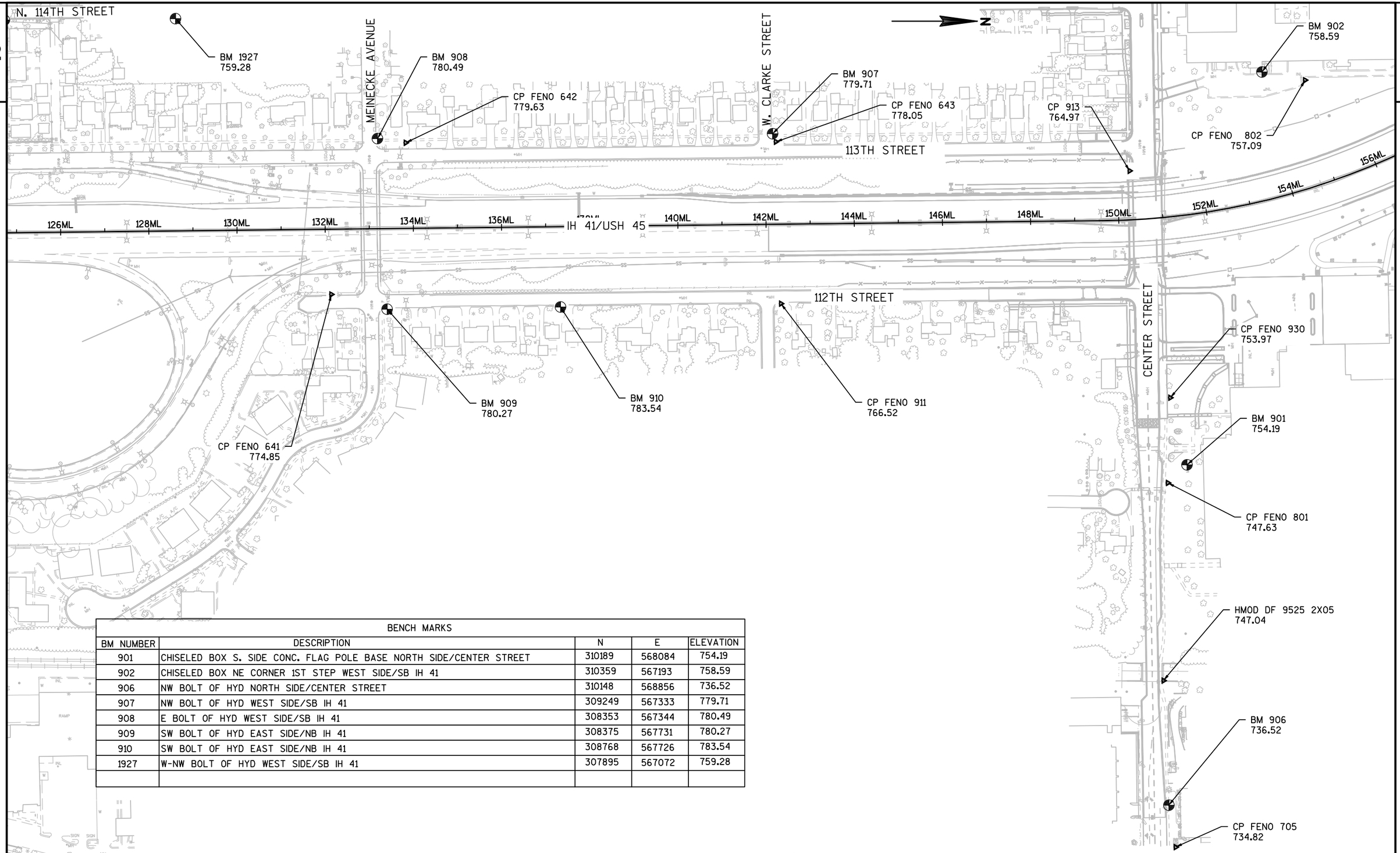


PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT - SURVEY CONTROL OVERVIEW	SHEET 231	E



BENCH MARKS				
BM NUMBER	DESCRIPTION	N	E	ELEVATION
937	NE LOWER FLANGE BOLT OF HYD WEST SIDE/SB STH 100	306119	569014	711.34
941	SOUTH UPPER FLANGE BOLT OF HYD EAST SIDE/NB IH 41	306639	568131	757.12
1924	SW BOLT OF HYD SOUTH SIDE/EB NORTH AVE	307222	568015	733.22
1925	NW BOLT OF HYD NORTH SIDE/WB NORTH AVE	307507	567075	757.67
1926	NE BOLT OF HYD SOUTH SIDE/WB NORTH AVE	307352	566762	763.19
1928	SW BOLT OF HYD NORTH SIDE/EB NORTH AVE	307489	569204	717.32

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT - SURVEY CONTROL OVERVIEW	SHEET 232	E

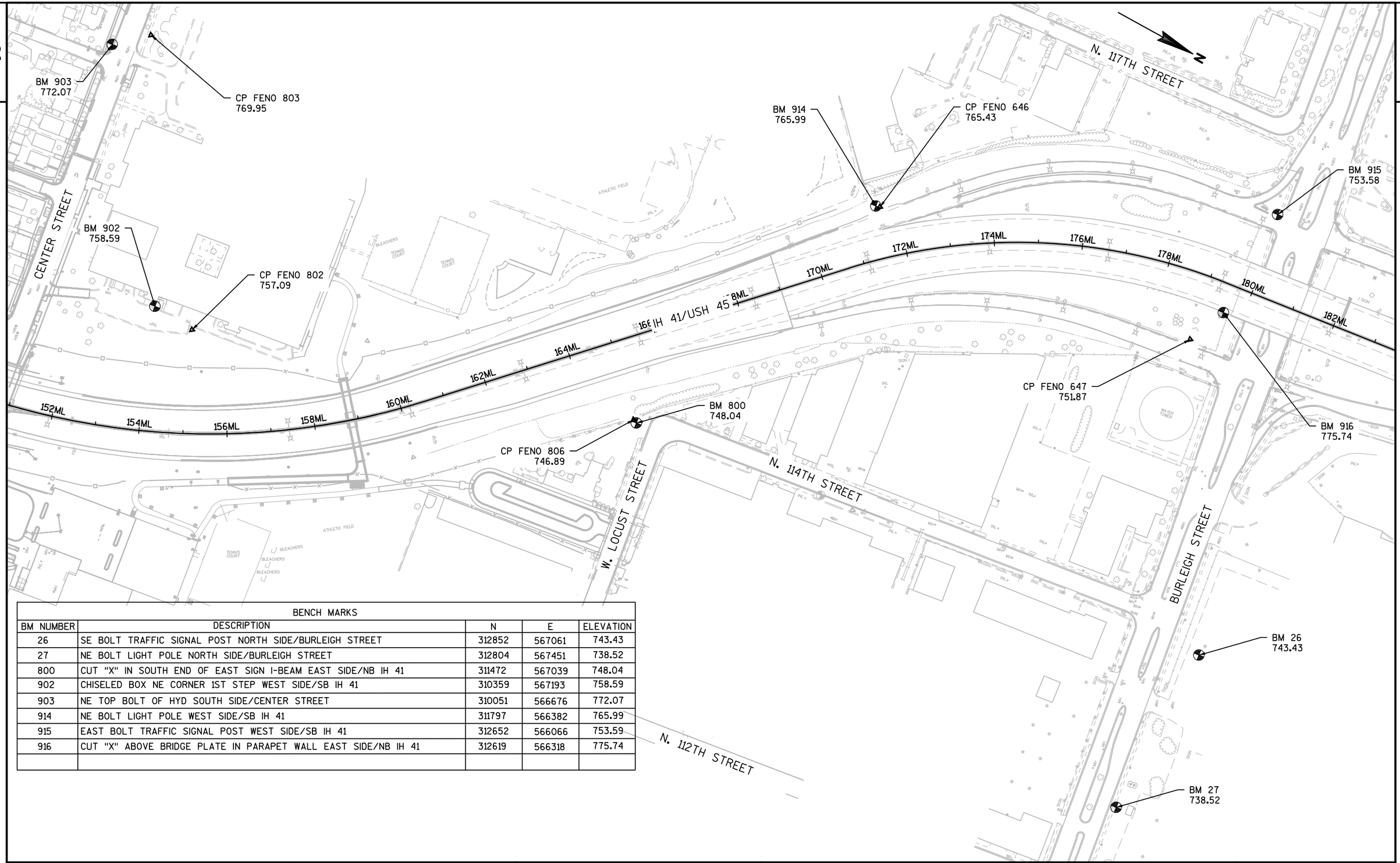


BENCH MARKS				
BM NUMBER	DESCRIPTION	N	E	ELEVATION
901	CHISELED BOX S. SIDE CONC. FLAG POLE BASE NORTH SIDE/CENTER STREET	310189	568084	754.19
902	CHISELED BOX NE CORNER 1ST STEP WEST SIDE/SB IH 41	310359	567193	758.59
906	NW BOLT OF HYD NORTH SIDE/CENTER STREET	310148	568856	736.52
907	NW BOLT OF HYD WEST SIDE/SB IH 41	309249	567333	779.71
908	E BOLT OF HYD WEST SIDE/SB IH 41	308353	567344	780.49
909	SW BOLT OF HYD EAST SIDE/NB IH 41	308375	567731	780.27
910	SW BOLT OF HYD EAST SIDE/NB IH 41	308768	567726	783.54
1927	W-NW BOLT OF HYD WEST SIDE/SB IH 41	307895	567072	759.28

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT - SURVEY CONTROL OVERVIEW	SHEET 233 E

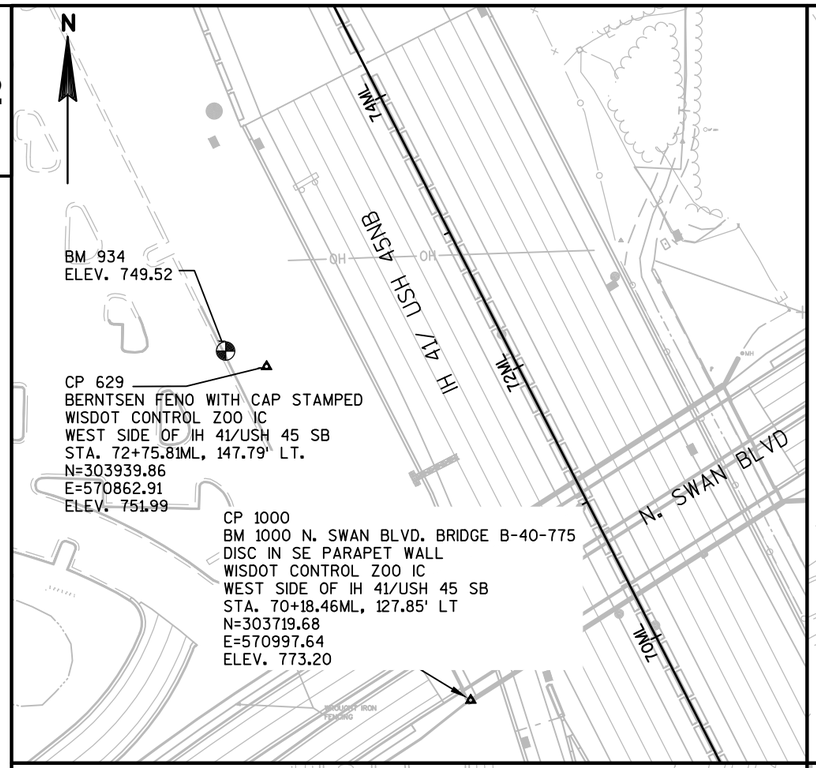
FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\027250_AD_CP.DWG
LAYOUT NAME - 03_AD_CP
PLOT DATE : 10/20/2017 4:16 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : **********

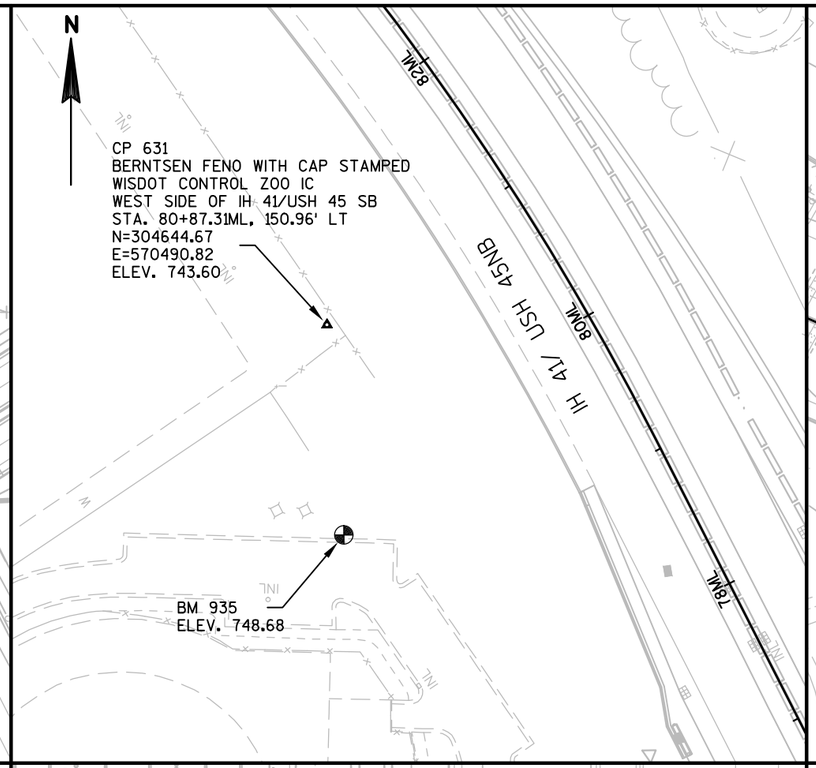
2

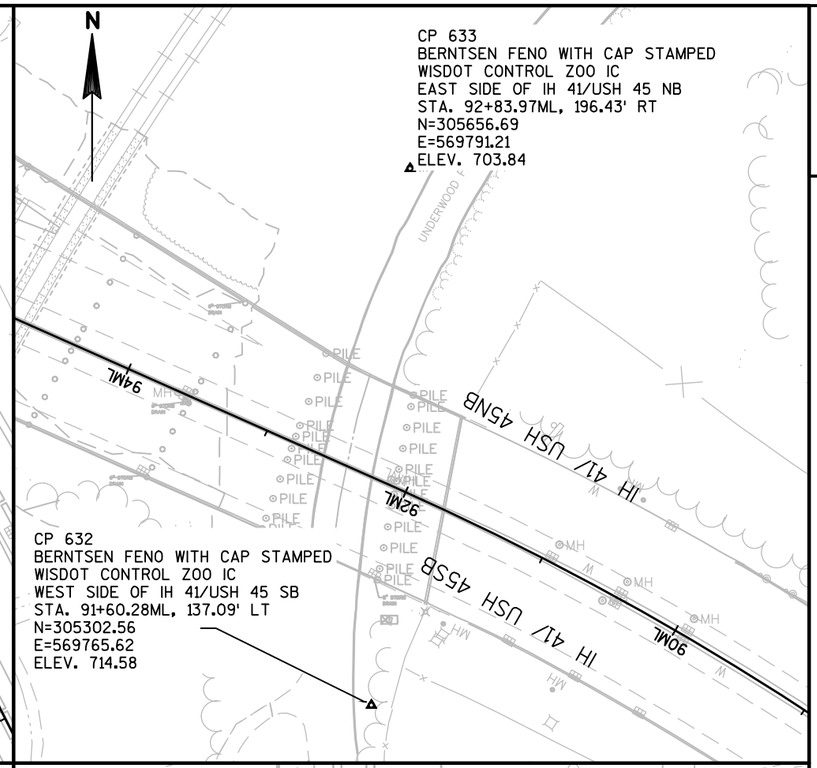


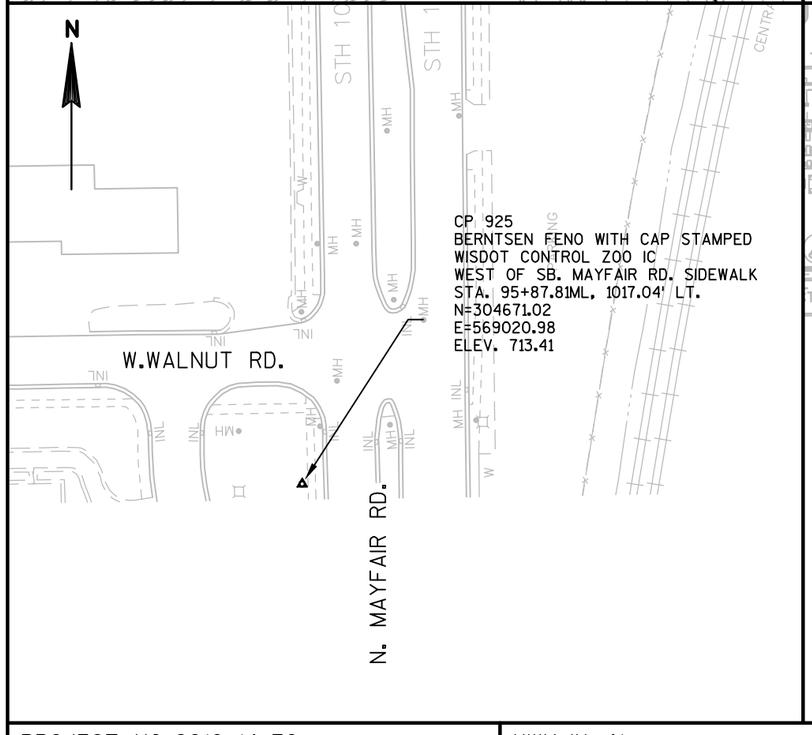
BENCH MARKS				
BM NUMBER	DESCRIPTION	N	E	ELEVATION
26	SE BOLT TRAFFIC SIGNAL POST NORTH SIDE/BURLEIGH STREET	312852	567061	743.43
27	NE BOLT LIGHT POLE NORTH SIDE/BURLEIGH STREET	312804	567451	738.52
800	CUT "X" IN SOUTH END OF EAST SIGN I-BEAM EAST SIDE/NB IH 41	311472	567039	748.04
902	CHISELED BOX NE CORNER 1ST STEP WEST SIDE/SB IH 41	310359	567193	758.59
903	NE TOP BOLT OF HYD SOUTH SIDE/CENTER STREET	310051	566676	772.07
914	NE BOLT LIGHT POLE WEST SIDE/SB IH 41	311797	566382	765.99
915	EAST BOLT TRAFFIC SIGNAL POST WEST SIDE/SB IH 41	312652	566066	753.59
916	CUT "X" ABOVE BRIDGE PLATE IN PARAPET WALL EAST SIDE/NB IH 41	312619	566318	775.74

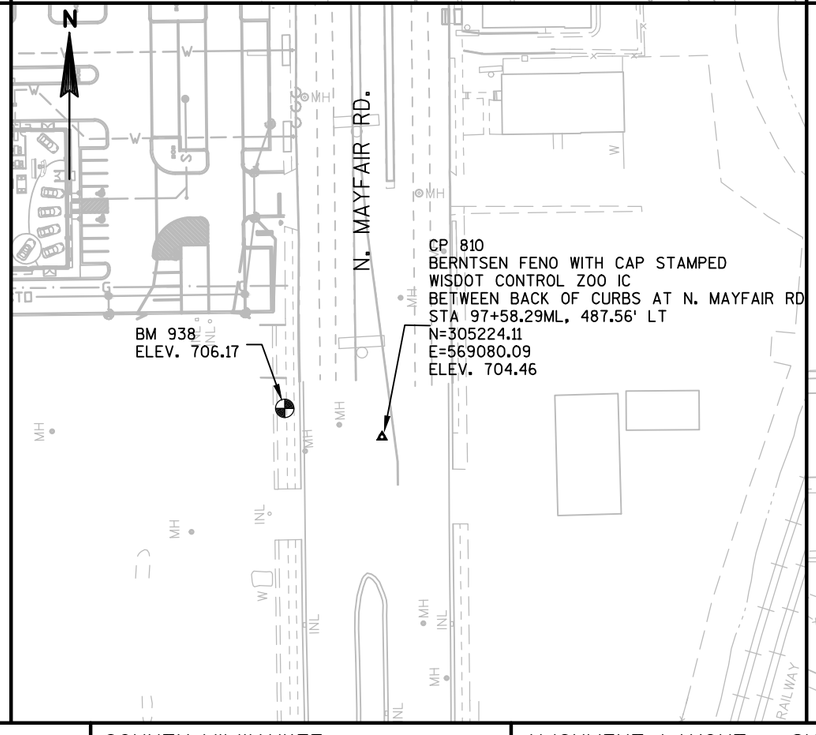
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT - SURVEY CONTROL OVERVIEW	SHEET 234	E

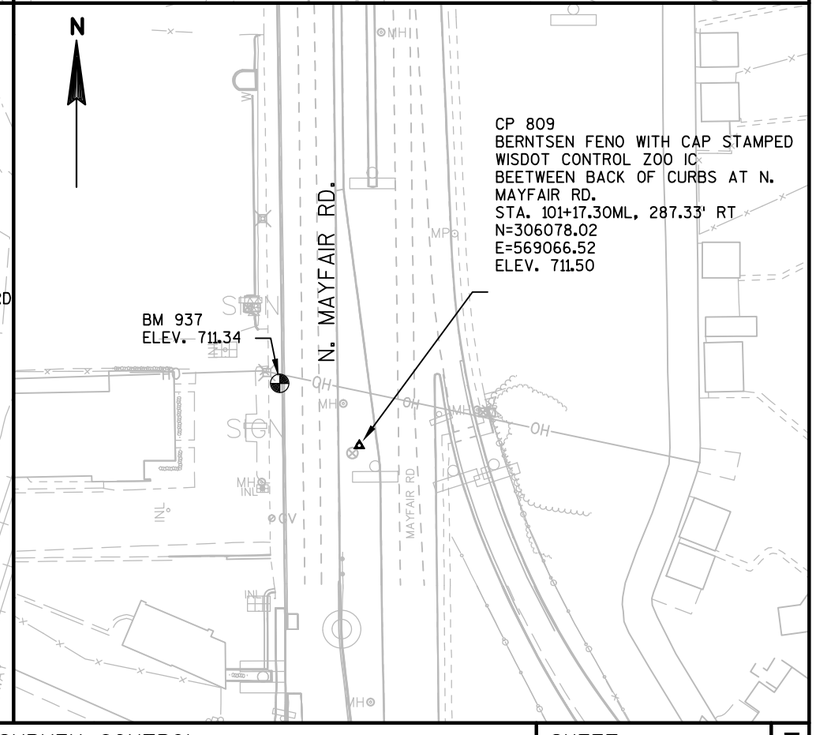












PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT - SURVEY CONTROL	SHEET 235	E

2

N

CP 637
BERNTSEN FENO WITH CAP STAMPED
WISDOT CONTROL ZOO IC
EAST SIDE OF IH 41/USH 41 NB
STA. 107+53.89ML, 170.51' RT
N=306229.90
E=568458.00
ELEV. 735.77

IH 41/ USH 45 SB

108ML

106ML

UNION PACIFIC RAILROAD

IH 41/ USH 45 NB

104ML

CP 636
BERNTSEN FENO WITH CAP STAMPED
WISDOT CONTROL ZOO IC
WEST SIDE OF IH 41/USH 45 SB
STA. 105+58.24ML, 123.49' LT
N=305881.55
E=568496.78
ELEV. 732.32

N

CP 808
BERNTSEN FENO WITH CAP STAMPED
WISDOT CONTROL ZOO IC
EAST SIDE OF IH 41/USH 45 NB
STA. 113+95.67ML, 144.56' RT
N=306591.87
E=568008.81
ELEV. 757.57

116ML

USH 45

IH 41/ USH 45 SB

IH 41/ USH 45 NB

BM 941
ELEV. 757.12

CP 807
BERNTSEN FENO WITH CAP STAMPED
WISDOT CONTROL ZOO IC
WEST SIDE OF IH 41/USH 45 SB
STA. 115+73.45ML, 164.32' LT
N=306565.97
E=567653.28
ELEV. 763.36

112ML

N

W NORTH AVE

104NO

NORTH AVENUE

106NO

108NO

N. 114TH STREET

BM 1925
ELEV. 757.67

N. 115TH STREET

BM 1926
ELEV. 763.19

CP 639
BERNTSEN FENO WITH CAP STAMPED
WISDOT CONTROL ZOO IC
SOUTH SIDE OF NORTH AVENUE
STA. 106+73.13NO, 137.18' RT
N=307293.23
E=567082.58
ELEV. 755.00

N

STH 100/MAYFAIR ROAD

CP 927
BERNTSEN FENO WITH CAP STAMPED
WISDOT CONTROL ZOO IC
EAST SODE OF STH 100/N. MAYFAIR RD.
STA. 127+80.64NO, 121.61' LT
N=307519.44
E=569128.21
ELEV. 718.19

BM 1928
ELEV. 717.32

130NO

128NO

NORTH AVENUE

126NO

N

CP 638
BERNTSEN FENO WITH CAP STAMPED
WISDOT CONTROL ZOO IC
SOUTH SIDE OF NORTH AVENUE
STA. 119+60.98NO, 60.62' RT
N=307189.98
E=568353.61
ELEV. 723.51

116NO

W NORTH AVE

NORTH AVENUE

120NO

BM 1924
ELEV. 733.22

CP 640
BERNTSEN FENO WITH CAP STAMPED
WISDOT CONTROL ZOO IC
SOUTH SIDE OF NORTH AVENUE
STA. 115+93.05NO, 89.26' RT
N=307193.38
E=567968.98
ELEV. 740.42

N

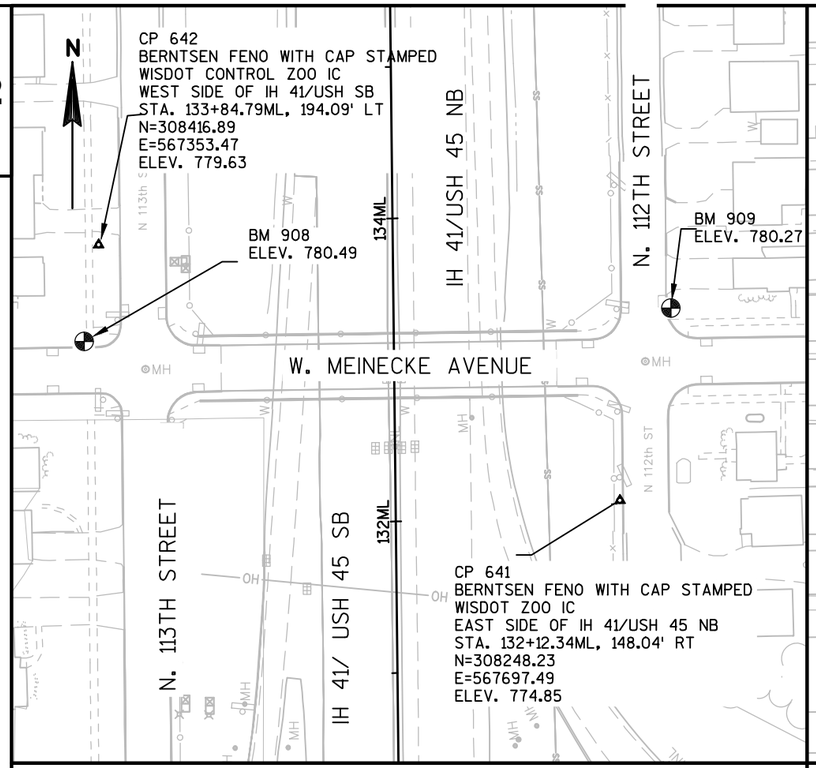
BM 1927
ELEV. 759.28

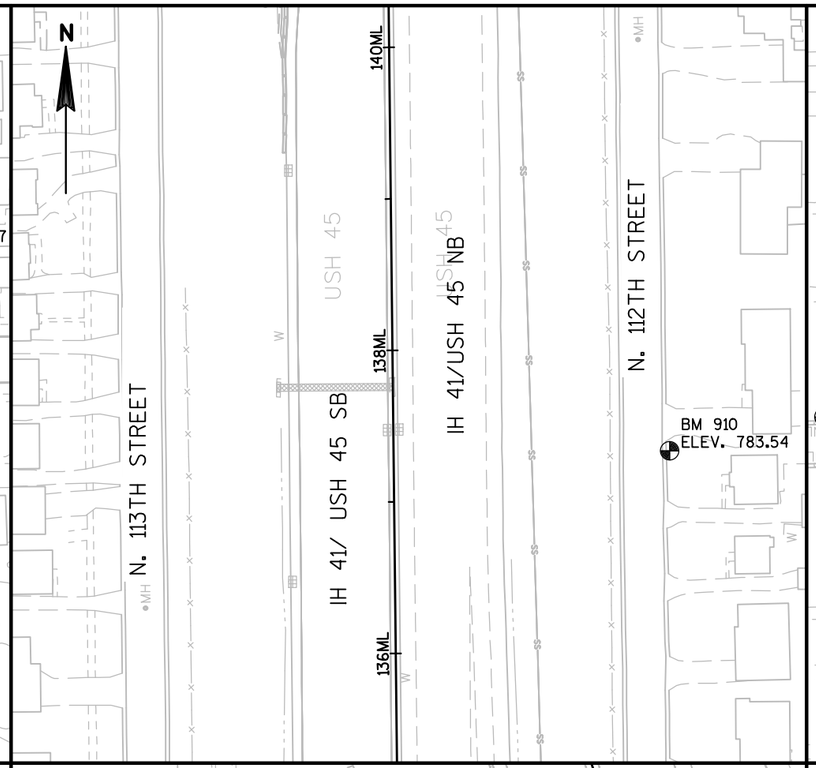
N. 113TH STREET

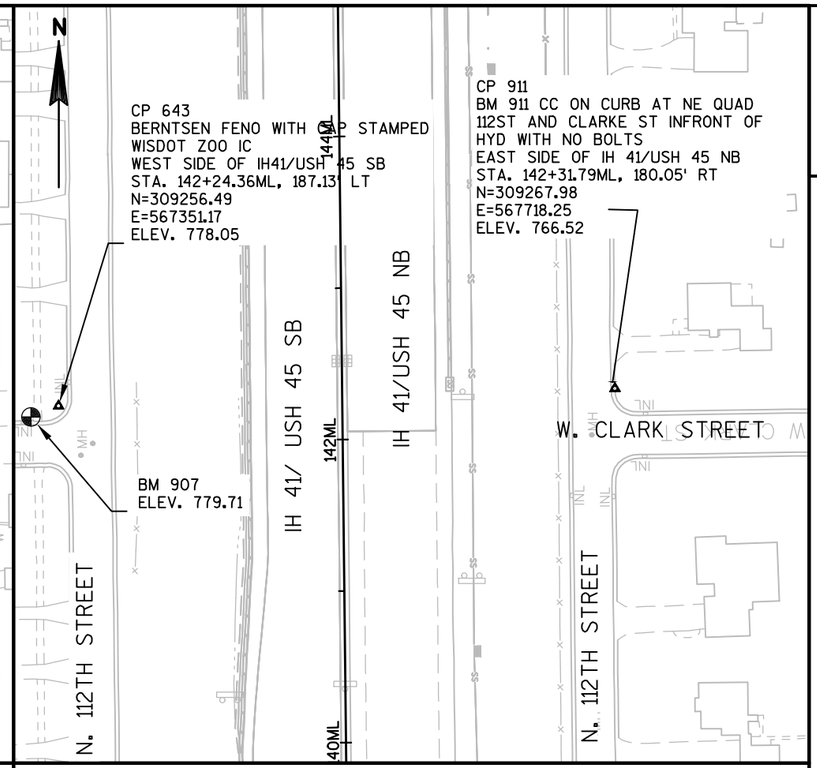
N. 114TH STREET

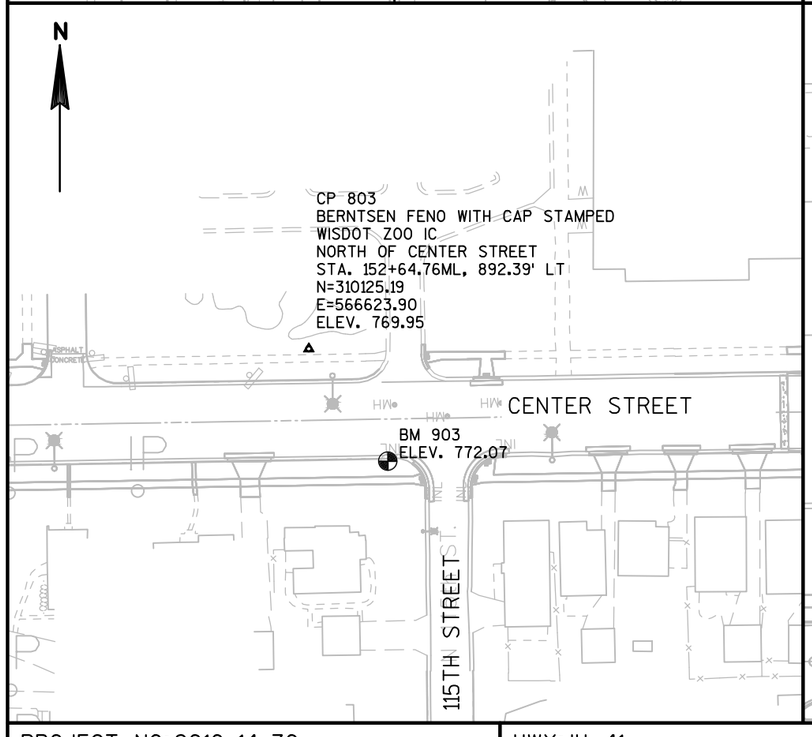
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT - SURVEY CONTROL	SHEET 236 E

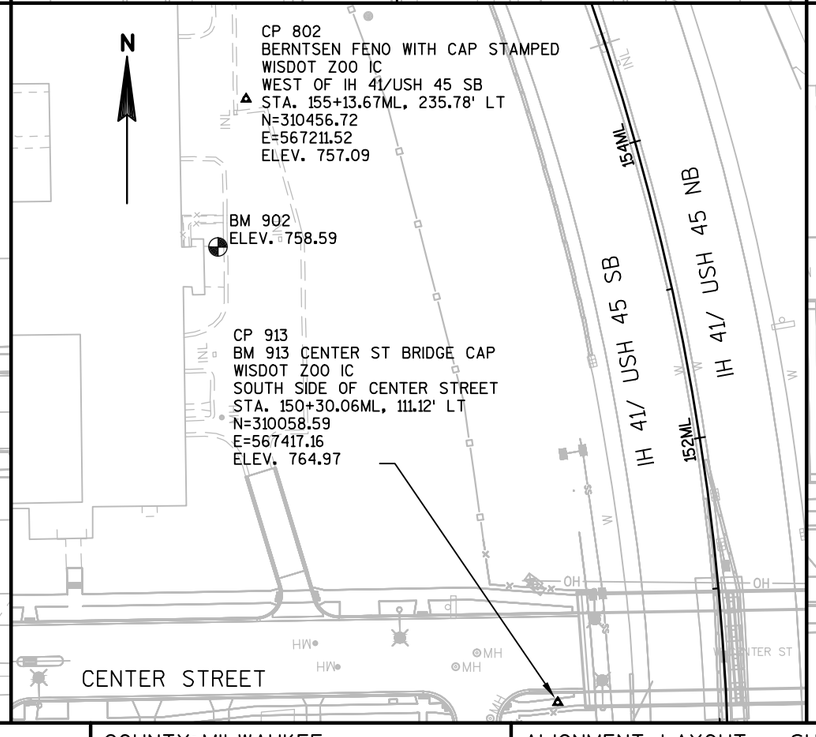
2

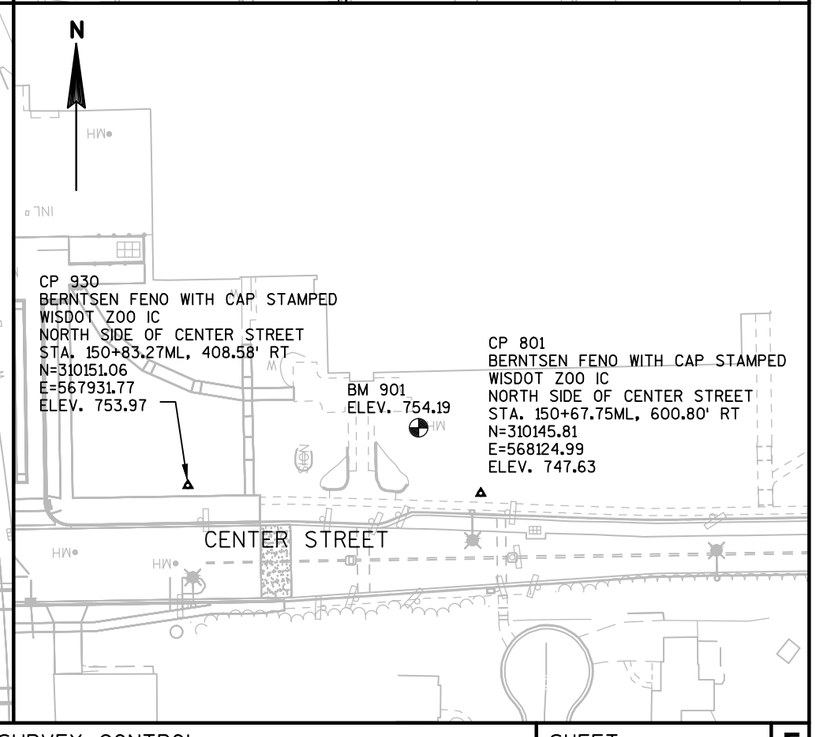




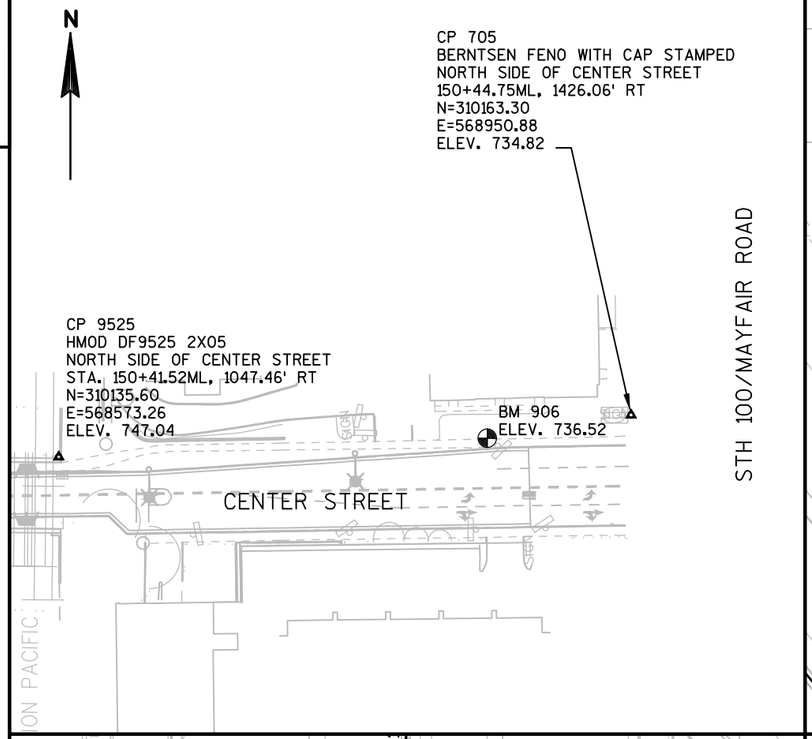


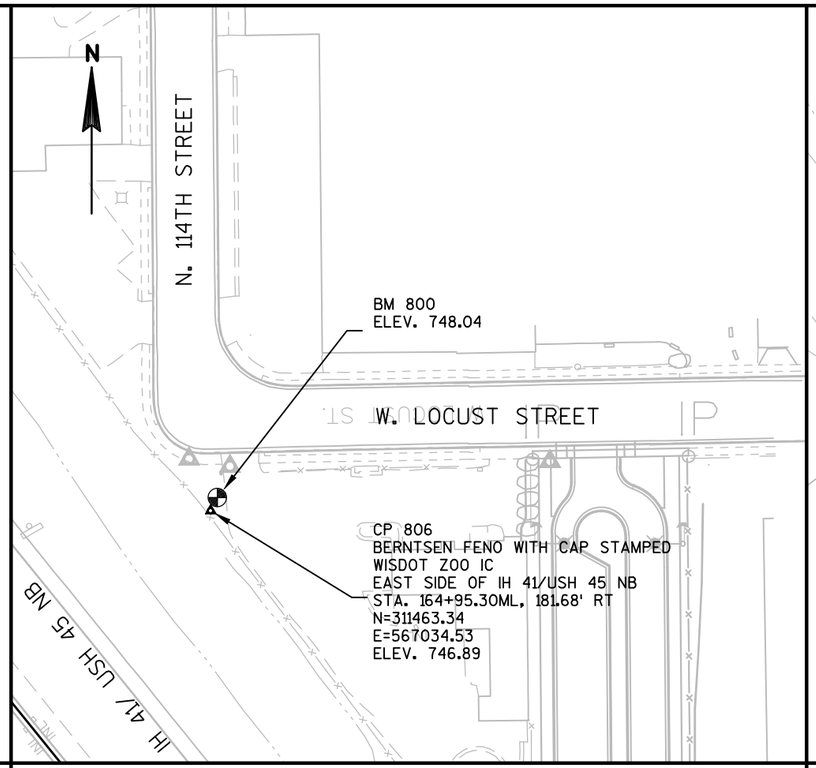


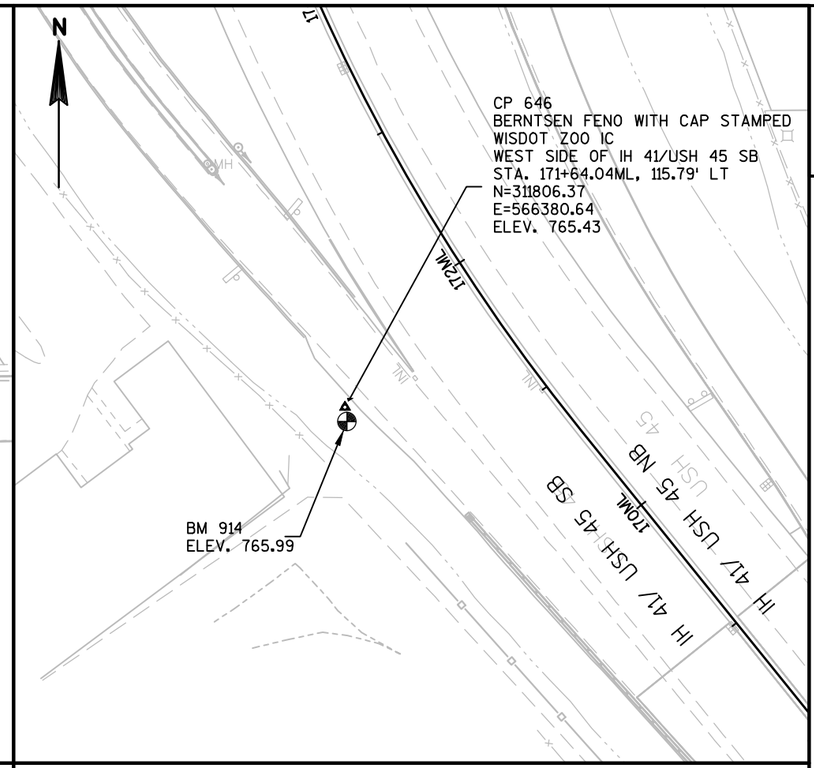


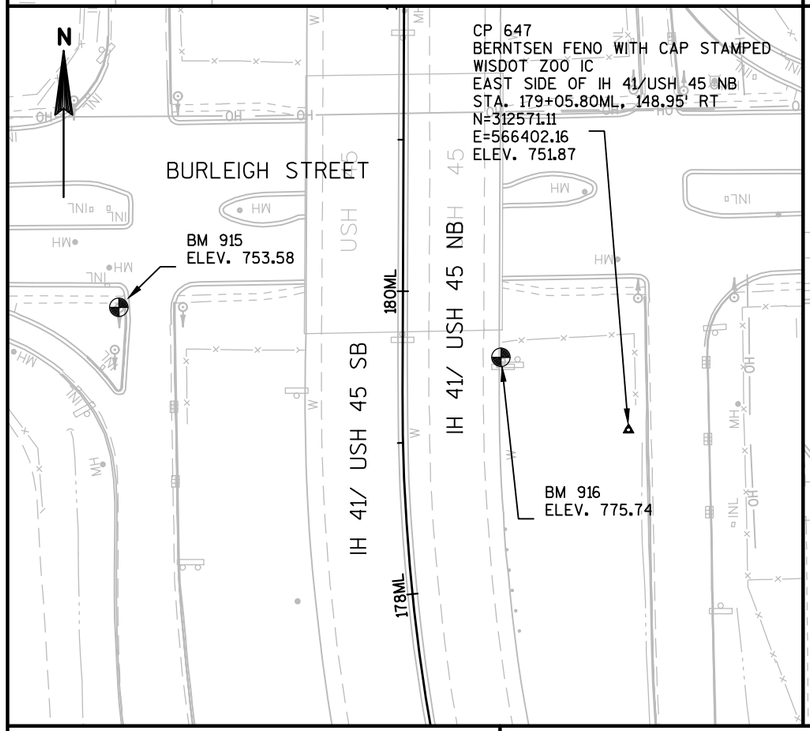


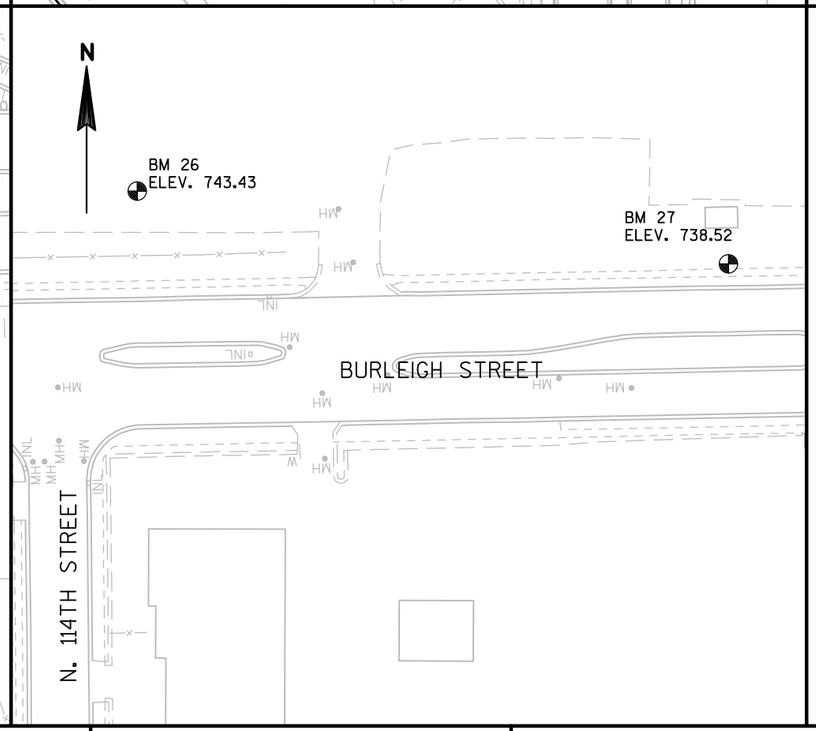
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT - SURVEY CONTROL	SHEET 237	E











PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT LAYOUT - SURVEY CONTROL	SHEET 238	E

2010-14-70

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Pavement	SY	18,384.000	18,384.000
0004	204.0109.S	Removing Concrete Surface Partial Depth	SF	464.000	464.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	105,673.000	105,673.000
0008	204.0150	Removing Curb & Gutter	LF	69.000	69.000
0010	204.0155	Removing Concrete Sidewalk	SY	71.000	71.000
0012	204.0157	Removing Concrete Barrier	LF	5,083.000	5,083.000
0014	204.0165	Removing Guardrail	LF	75.000	75.000
0016	204.0195	Removing Concrete Bases	EACH	10.000	10.000
0018	204.0210	Removing Manholes	EACH	1.000	1.000
0020	204.0220	Removing Inlets	EACH	6.000	6.000
0022	204.0245	Removing Storm Sewer (size) 0001. 12-Inch	LF	33.000	33.000
0024	204.0280	Sealing Pipes	EACH	2.000	2.000
0026	204.9060.S	Removing (item description) 1001. Sign Lighting	EACH	7.000	7.000
0028	204.9060.S	Removing (item description) 1002. Poles Wood 60-FT	EACH	6.000	6.000
0030	204.9060.S	Removing (item description) 1003. Poles Wood 60-FT and Floodlights	EACH	21.000	21.000
0032	204.9090.S	Removing (item description) 0001. Concrete Barrier Precast	LF	145.000	145.000
0034	204.9180.S	Removing (item description) 0001. Rumble Strips	SY	54.000	54.000
0036	205.0100	Excavation Common	CY	7,422.000	7,422.000
0038	213.0100	Finishing Roadway (project) 01. 2010-14-70	EACH	1.000	1.000
0040	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,737.000	2,737.000
0042	390.0403	Base Patching Concrete Shes	SY	3,813.000	3,813.000
0044	415.0090	Concrete Pavement 9-Inch	SY	10,115.000	10,115.000
0046	416.0610	Drilled Tie Bars	EACH	8,020.000	8,020.000
0048	416.0620	Drilled Dowel Bars	EACH	7,648.000	7,648.000
0050	440.4410	Incentive IRI Ride	DOL	29,040.000	29,040.000
0052	455.0605	Tack Coat **P**	GAL	9,067.000	9,067.000
0054	460.2000	Incentive Density HMA Pavement	DOL	10,982.000	10,982.000
0056	460.5224	HMA Pavement 4 LT 58-28 S	TON	1,146.000	1,146.000
0058	460.7423	HMA Pavement 3 HT 58-28 H	TON	6,362.000	6,362.000
0060	460.7424	HMA Pavement 4 HT 58-28 H	TON	9,651.000	9,651.000
0062	509.0301	Preparation Decks Type 1	SY	440.000	440.000
0064	509.0302	Preparation Decks Type 2	SY	180.000	180.000
0066	509.1500	Concrete Surface Repair	SF	1,080.000	1,080.000
0068	509.2000	Full-Depth Deck Repair	SY	3.000	3.000
0070	520.8000	Concrete Collars for Pipe	EACH	28.000	28.000
0072	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	69.000	69.000
0074	601.0600	Concrete Curb Pedestrian	LF	15.000	15.000
0076	602.0410	Concrete Sidewalk 5-Inch	SF	640.000	640.000

2010-14-70

Line	Item	Item Description	Unit	Total	Qty
0078	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	50.000	50.000
0080	603.0105	Concrete Barrier Single-Faced 32-Inch	LF	3,091.000	3,091.000
0082	603.1132	Concrete Barrier Type S32	LF	1,231.000	1,231.000
0084	603.1142	Concrete Barrier Type S42	LF	1,521.000	1,521.000
0086	603.8000	Concrete Barrier Temporary Precast Delivered	LF	20,663.000	20,663.000
0088	603.8125	Concrete Barrier Temporary Precast Installed	LF	22,424.000	22,424.000
0090	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	2,703.000	2,703.000
0092	611.0420	Reconstructing Manholes	EACH	2.000	2.000
0094	611.0430	Reconstructing Inlets	EACH	14.000	14.000
0096	611.0555	Manhole Covers Type Q	EACH	7.000	7.000
0098	611.0654	Inlet Covers Type V	EACH	80.000	80.000
0100	611.2003	Manholes 3-FT Diameter	EACH	4.000	4.000
0102	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0104	611.3004	Inlets 4-FT Diameter	EACH	1.000	1.000
0106	611.3220	Inlets 2x2-FT	EACH	47.000	47.000
0108	614.0905	Crash Cushions Temporary	EACH	5.000	5.000
0110	614.2300	MGS Guardrail 3	LF	133.000	133.000
0112	614.2610	MGS Guardrail Terminal EAT	EACH	1.000	1.000
0114	614.2620	MGS Guardrail Terminal Type 2	EACH	1.000	1.000
0116	619.1000	Mobilization	EACH	1.000	1.000
0118	623.0200	Dust Control Surface Treatment	SY	5,987.000	5,987.000
0120	624.0100	Water	MGAL	54.000	54.000
0122	627.0200	Mulching	SY	1,985.000	1,985.000
0124	628.1504	Silt Fence	LF	654.000	654.000
0126	628.1520	Silt Fence Maintenance	LF	654.000	654.000
0128	628.1905	Mobilizations Erosion Control	EACH	15.000	15.000
0130	628.1910	Mobilizations Emergency Erosion Control	EACH	8.000	8.000
0132	628.2008	Erosion Mat Urban Class I Type B	SY	2,243.000	2,243.000
0134	628.7005	Inlet Protection Type A	EACH	21.000	21.000
0136	628.7015	Inlet Protection Type C	EACH	29.000	29.000
0138	628.7020	Inlet Protection Type D	EACH	168.000	168.000
0140	628.7504	Temporary Ditch Checks	LF	7.000	7.000
0142	628.7560	Tracking Pads	EACH	2.000	2.000
0144	628.7570	Rock Bags	EACH	970.000	970.000
0146	629.0210	Fertilizer Type B	CWT	2.000	2.000
0148	630.0120	Seeding Mixture No. 20	LB	54.000	54.000
0150	630.0200	Seeding Temporary	LB	54.000	54.000
0152	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	98.000	98.000
0154	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	1.000	1.000

2010-14-70

Line	Item	Item Description	Unit	Total	Qty
0156	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	47.000	47.000
0158	634.0624	Posts Wood 4x6-Inch X 24-FT	EACH	1.000	1.000
0160	634.0816	Posts Tubular Steel 2x2-Inch X 16-FT	EACH	49.000	49.000
0162	635.0200	Sign Supports Structural Steel HS	LB	11,800.000	11,800.000
0164	635.0300	Sign Supports Replacing Base Connection Bolts	EACH	2.000	2.000
0166	636.0100	Sign Supports Concrete Masonry	CY	57.700	57.700
0168	636.0500	Sign Supports Steel Reinforcement	LB	1,272.000	1,272.000
0170	636.1500	Sign Supports Steel Coated Reinforcement HS	LB	4,855.000	4,855.000
0172	637.1220	Signs Type I Reflective SH	SF	3,185.500	3,185.500
0174	637.1230	Signs Type I Reflective F	SF	45.000	45.000
0176	637.2210	Signs Type II Reflective H	SF	1,922.875	1,922.875
0178	637.2215	Signs Type II Reflective H Folding	SF	82.380	82.380
0180	637.2230	Signs Type II Reflective F	SF	760.750	760.750
0182	638.2101	Moving Signs Type I	EACH	10.000	10.000
0184	638.2102	Moving Signs Type II	EACH	3.000	3.000
0186	638.2601	Removing Signs Type I	EACH	16.000	16.000
0188	638.2602	Removing Signs Type II	EACH	138.000	138.000
0190	638.3000	Removing Small Sign Supports	EACH	104.000	104.000
0192	638.3100	Removing Structural Steel Sign Supports	EACH	27.000	27.000
0194	638.3215	Revising Signs Type I Non-Removeable	EACH	1.000	1.000
0196	641.1200	Sign Bridge Cantilevered (structure) 0001. S-40-871	LS	1.000	1.000
0198	641.1200	Sign Bridge Cantilevered (structure) 0002. S-40-872	LS	1.000	1.000
0200	641.1200	Sign Bridge Cantilevered (structure) 0003. S-40-873	LS	1.000	1.000
0202	641.8100	Overhead Sign Support (structure) 0004. S-40-799	LS	1.000	1.000
0204	641.8100	Overhead Sign Support (structure) 0005. S-40-798	LS	1.000	1.000
0206	641.8100	Overhead Sign Support (structure) 0006. S-40-969	LS	1.000	1.000
0208	643.0300	Traffic Control Drums	DAY	35,120.000	35,120.000
0210	643.0410	Traffic Control Barricades Type II	DAY	32.000	32.000
0212	643.0420	Traffic Control Barricades Type III	DAY	4,264.000	4,264.000
0214	643.0705	Traffic Control Warning Lights Type A	DAY	8,118.000	8,118.000
0216	643.0715	Traffic Control Warning Lights Type C	DAY	5,234.000	5,234.000
0218	643.0800	Traffic Control Arrow Boards	DAY	1,000.000	1,000.000
0220	643.0900	Traffic Control Signs	DAY	24,820.000	24,820.000
0222	643.0910	Traffic Control Covering Signs Type I	EACH	6.000	6.000
0224	643.1000	Traffic Control Signs Fixed Message	SF	515.000	515.000
0226	643.1050	Traffic Control Signs PCMS	DAY	1,002.000	1,002.000
0228	643.5000	Traffic Control 0001. 2010-14-70	EACH	1.000	1.000
0230	646.1020	Marking Line Epoxy 4-Inch **P**	LF	7,830.000	7,830.000
0232	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch **P**	LF	61,361.000	61,361.000
0234	646.1545	Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch	LF	15,929.000	15,929.000

2010-14-70

Line	Item	Item Description	Unit	Total	Qty
		P			
0236	646.3020	Marking Line Epoxy 8-Inch **P**	LF	1,858.000	1,858.000
0238	646.3545	Marking Line Grooved Wet Ref Contrast Epoxy 8-Inch **P**	LF	9,968.000	9,968.000
0240	646.5020	Marking Arrow Epoxy	EACH	11.000	11.000
0242	646.5120	Marking Word Epoxy	EACH	2.000	2.000
0244	646.6120	Marking Stop Line Epoxy 18-Inch	LF	27.000	27.000
0246	646.7120	Marking Diagonal Epoxy 12-Inch	LF	2,301.000	2,301.000
0248	646.7220	Marking Chevron Epoxy 24-Inch	LF	868.000	868.000
0250	646.9000	Marking Removal Line 4-Inch	LF	77,688.000	77,688.000
0252	646.9100	Marking Removal Line 8-Inch	LF	9,845.000	9,845.000
0254	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	121,471.000	121,471.000
0256	649.0802	Temporary Pavement Marking Paint 8-Inch	LF	8,715.000	8,715.000
0258	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	5,370.000	5,370.000
0260	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	760.000	760.000
0262	652.0700.S	Install Conduit into Existing Item	EACH	1.000	1.000
0264	653.0140	Pull Boxes Steel 24x42-Inch	EACH	2.000	2.000
0266	653.0905	Removing Pull Boxes	EACH	2.000	2.000
0268	655.0510	Electrical Wire Traffic Signals 12 AWG	LF	1,910.000	1,910.000
0270	655.0610	Electrical Wire Lighting 12 AWG	LF	4,104.000	4,104.000
0272	655.0625	Electrical Wire Lighting 6 AWG	LF	8,080.000	8,080.000
0274	655.0630	Electrical Wire Lighting 4 AWG	LF	9,520.000	9,520.000
0276	655.0635	Electrical Wire Lighting 2 AWG	LF	3,700.000	3,700.000
0278	655.0640	Electrical Wire Lighting 1 AWG	LF	2,470.000	2,470.000
0280	670.0100	Field System Integrator	LS	1.000	1.000
0282	670.0200	ITS Documentation	LS	1.000	1.000
0284	671.0122	Conduit HDPE 2-Duct 2-Inch	LF	775.000	775.000
0286	671.0132	Conduit HDPE 3-Duct 2-Inch	LF	880.000	880.000
0288	673.0105	Communication Vault Type 1	EACH	2.000	2.000
0290	678.0006	Install Fiber Optic Cable Outdoor Plant 6-CT	LF	110.000	110.000
0292	678.0072	Install Fiber Optic Cable Outdoor Plant 72-CT	LF	4,790.000	4,790.000
0294	678.0300	Fiber Optic Splice	EACH	187.000	187.000
0296	678.0500	Communication System Testing	LS	1.000	1.000
0298	690.0150	Sawing Asphalt	LF	583.000	583.000
0300	690.0250	Sawing Concrete	LF	40,537.000	40,537.000
0302	715.0415	Incentive Strength Concrete Pavement	DOL	3,035.000	3,035.000
0304	715.0502	Incentive Strength Concrete Structures	DOL	240.000	240.000
0306	801.0117	Railroad Flagging Reimbursment	DOL	5,000.000	5,000.000
0308	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	3,000.000	3,000.000
0310	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	45,000.000	45,000.000

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Line	Item	Item Description	Unit	Total	Qty
0312	SPV.0035	Special 0001. EBS Excavation	CY	371.000	371.000
0314	SPV.0035	Special 0002. EBS Backfill	CY	371.000	371.000
0316	SPV.0035	Special 8001. Backfill Slurry	CY	702.000	702.000
0318	SPV.0045	Special 0401. Portable Speed Trailer	DAY	340.000	340.000
0320	SPV.0060	Special 0001. Baseline CPM Progress Schedule	EACH	1.000	1.000
0322	SPV.0060	Special 0002. Monthly CPM Progress Schedule Updates	EACH	6.000	6.000
0324	SPV.0060	Special 0003. Pavement Marking Contrast Epoxy Special Marking Arrow, Type 2	EACH	2.000	2.000
0326	SPV.0060	Special 0004. Pavement Marking Contrast Epoxy Special Marking Arrow, Type 5	EACH	4.000	4.000
0328	SPV.0060	Special 0400. Traffic Control Close-Open Freeway Entrance Ramp	EACH	40.000	40.000
0330	SPV.0060	Special 0401. Traffic Control Interim Freeway Lane Closure	EACH	290.000	290.000
0332	SPV.0060	Special 0402. Traffic Control Local Road Lane Closures	EACH	32.000	32.000
0334	SPV.0060	Special 0403. Mobilizations Emergency Pavement Repair	EACH	10.000	10.000
0336	SPV.0060	Special 0404. Linear Delineation System	EACH	1,947.000	1,947.000
0338	SPV.0060	Special 1001. Lamp Disposal High Intensity Discharge	EACH	54.000	54.000
0340	SPV.0060	Special 1002. Lighting Units Salvaged	EACH	12.000	12.000
0342	SPV.0060	Special 1003. Poles Wood 60-FT	EACH	6.000	6.000
0344	SPV.0060	Special 1004. Wood Pole Lighting 60-FT	EACH	21.000	21.000
0346	SPV.0060	Special 1005. Luminaires Utility HPS 1000 Watts Floodlight	EACH	21.000	21.000
0348	SPV.0060	Special 1006. Concrete Bases Type B	EACH	10.000	10.000
0350	SPV.0060	Special 2001. Salvage Solar Powered HAR Sign Flasher Assembly	EACH	1.000	1.000
0352	SPV.0060	Special 2002. Install Salvaged Solar Powered HAR Sign Flasher Assembly	EACH	1.000	1.000
0354	SPV.0060	Special 2003. Refocusing Vehicle Detector Assembly	EACH	20.000	20.000
0356	SPV.0060	Special 4010. Embedded Galvanic Anodes	EACH	630.000	630.000
0358	SPV.0060	Special 4020. Clean Inlets and Downspouts	EACH	16.000	16.000
0360	SPV.0060	Special 6001. Sign Support Special Mounting	EACH	20.000	20.000
0362	SPV.0060	Special 8001. Remove and Cap Existing Drainage SS Structure	EACH	14.000	14.000
0364	SPV.0075	Special 0001. Pavement Cleanup Project ID 2010-14-70	HRS	50.000	50.000
0366	SPV.0075	Special 4500. Obstructions Sign Supports Concrete Masonry	HRS	3.000	3.000
0368	SPV.0090	Special 0002. Concrete Barrier Temporary Precast Delivered Special	LF	922.000	922.000
0370	SPV.0090	Special 0003. Maintain Concrete Barrier Temporary	LF	5,293.000	5,293.000

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Line	Item	Item Description	Unit	Total	Qty
		Precast			
0372	SPV.0090	Special 0004. Maintain and Remove Concrete Barrier Temporary Precast	LF	703.000	703.000
0374	SPV.0090	Special 1001. Cable Aerial Aluminum 6 AWG Quadruplex	LF	570.000	570.000
0376	SPV.0090	Special 1002. Cable Aerial Aluminum 6 AWG Triplex	LF	3,310.000	3,310.000
0378	SPV.0090	Special 1003. Cable Aerial Aluminum 4 AWG Quadruplex	LF	1,000.000	1,000.000
0380	SPV.0090	Special 2001. Multicell Conduit and Cable Adjustment	LF	20.000	20.000
0382	SPV.0090	Special 4010. Expansion Joint Seal System	LF	342.000	342.000
0384	SPV.0090	Special 4020. Roadway Joint Sliding Plate Sealant	LF	60.000	60.000
0386	SPV.0090	Special 4030. Sawing Pavement Deck Preparation Areas	LF	1,500.000	1,500.000
0388	SPV.0105	Special 0001. Survey Project ID 2010-14-70	LS	1.000	1.000
0390	SPV.0105	Special 1001. Maintenance of Lighting Systems	LS	1.000	1.000
0392	SPV.0105	Special 4010. Sidewalk Joint Sliding Plate Repair	LS	1.000	1.000
0394	SPV.0105	Special 4020. Pedestrian Screening Repair	LS	1.000	1.000
0396	SPV.0105	Special 6001. RRFB System Right Advanced SB exit ramp to North Ave	LS	1.000	1.000
0398	SPV.0105	Special 6002. RRFB System Station Right NB exit ramp at North Ave	LS	1.000	1.000
0400	SPV.0105	Special 6003. RRFB System Left NB exit ramp at North Ave	LS	1.000	1.000
0402	SPV.0105	Special 6004. RRFB System Right Advance NB exit ramp at North Ave	LS	1.000	1.000
0404	SPV.0105	Special 6005. RRFB System Right SB exit ramp at North Ave	LS	1.000	1.000
0406	SPV.0105	Special 6006. RRFB System Left SB exit ramp at North Ave	LS	1.000	1.000
0408	SPV.0105	Special 6007. RRFB System Station Right NB entrance ramp from North Ave	LS	1.000	1.000
0410	SPV.0105	Special 6008. RRFB System Left NB entrance ramp from North Ave	LS	1.000	1.000
0412	SPV.0105	Special 6009. RRFB System Right at North Ave WB approaching ramp	LS	1.000	1.000
0414	SPV.0105	Special 6010. RRFB System Right North Ave EB at 41 North Ramp	LS	1.000	1.000
0416	SPV.0105	Special 6011. RRFB System Left North Ave EB at 41 North Ramp	LS	1.000	1.000
0418	SPV.0105	Special 6012. Chevron Solar Powered Sign System Assembly Ramp NB to EB	LS	1.000	1.000
0420	SPV.0105	Special 6013. Chevron Solar Powered Sign System Assembly Ramp NB to WB	LS	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0422	SPV.0105	Special 6014. Chevron Solar Powered Sign System Assembly Ramp SB to EB	LS	1.000	1.000
0424	SPV.0120	Special 0001. Seeding Water	MGAL	36.000	36.000
0426	SPV.0180	Special 0002. Resin Binder High Friction Surface Treatment	SY	16,410.000	16,410.000
0428	SPV.0180	Special 0003. Topsoil Special	SY	1,985.000	1,985.000
0430	SPV.0180	Special 4010. Fast Set Deck Patching	SY	440.000	440.000

REMOVING PAVEMENT

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0100 REMOVING PAVEMENT SY	204.0209.S REMOVING CONCRETE SURFACE PARTIAL DEPTH SY
		MAINLINE						
1000	1	IH 41/USH 45 NB						
			86ML+38	-	91ML+57	RT	534	--
			101ML+14	-	122ML+17	RT	2,687	--
			124ML+54	-	148ML+20	RT	3,114	--
			151ML+55	-	152ML+31	RT	95	--
		IH 41/USH 45 SB						
			86ML+94	-	89ML+31	LT	253	--
			102ML+69	-	102ML+81	LT	12	--
			104ML+09	-	122ML+17	LT	2,325	--
			124ML+54	-	170ML+64	LT	6,163	--
		SUBTOTAL					15,183	--
	2	**MAINLINE**						
		IH 41/USH 45 NB						
			85ML+00	-	91ML+41	RT	804	--
			147ML+17	-	162ML+38	RT	2,397	--
		IH 41/USH 45 SB						
			104ML+75	-	106ML+28	LT	--	60
			166ML+75	-	171ML+40	LT	--	404
		SUBTOTAL					3,201	464
		TOTAL					18,384	464

REMOVING CURB AND GUTTER

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0150 REMOVING CURB & GUTTER LF
1000	1	**LOCAL ROADS**					
		NORTH AVE WB					
			106NO+26	-	106NO+33	LT	11
			106NO+69	-	106NO+75	LT	11
			109NO+39	-	109NO+48	LT	15
			109NO+76	-	109NO+79	LT	9
		NORTH AVE EB					
			106NO+38	-	106NO+59	RT	23
		TOTAL					69

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
1000	1	**MAINLINE**					
		IH 41/USH 45 NB					
			86ML+38	-	91ML+57	RT	650
			101ML+14	-	122ML+17	RT	3,162
			124ML+54	-	148ML+20	RT	3,644
			151ML+55	-	152ML+31	RT	106
		IH 41/USH 45 SB					
			86ML+94	-	89ML+31	LT	305
			102ML+69	-	102ML+81	LT	15
			104ML+09	-	122ML+17	LT	2,734
			124ML+54	-	170ML+64	LT	7,213
		LOCAL ROADS					
		NORTH AVENUE					
			105NO+87	-	118NO+84	RT/LT	11,684
		SUBTOTAL					29,513
1000	2	**MAINLINE**					
		IH 41/USH 45 NB					
			74ML+24	-	91ML+57	RT	8,468
			101ML+14	-	122ML+17	RT	8,339
			124ML+54		170ML+64	RT	20,515
		IH 41/USH 45 SB					
			74ML+24	-	91ML+57	LT	8,618
			101ML+14	-	122ML+17	LT	9,981
			124ML+54	-	170ML+64	LT	20,239
		SUBTOTAL					76,160
		TOTAL					105,673

REMOVING CONCRETE BARRIER

CATEGORY	STAGE	ROADWAY	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	204.0157 REMOVING CONCRETE BARRIER LF
1000	1	**MAINLINE**					
		IH 41/USH 45 NB					
			89ML+19	3.3' RT	89ML+99	3.2' RT	80
			102ML+69	3.1' RT	104ML+21	3.1' RT	152
			113ML+94	2.9' RT	114ML+06	2.9' RT	12
			115ML+54	2.8' RT	120ML+81	2.8' RT	527
			125ML+37	3.2' RT	126ML+31	3.1' RT	94
			130ML+34	3.1' RT	132ML+55	3.3' RT	221
			132ML+90	3.8' RT	134ML+06	3.3' RT	116
			135ML+94	3.1' RT	136ML+06	3.1' RT	12
			137ML+41	3.0' RT	138ML+06	3.0' RT	65
			144ML+94	3.2' RT	145ML+06	3.2' RT	12
			147ML+44	3.2' RT	147ML+56	3.2' RT	12
			148ML+04	3.3' RT	148ML+16	3.3' RT	12
			151ML+85	3.4' RT	152ML+31	3.4' RT	46
		IH 41/USH 45 SB					
			86ML+94	2.5' LT	89ML+31	2.7' LT	237
			102ML+69	3.0' LT	102ML+81	3.0' LT	12
			104ML+09	3.1' LT	104ML+98	3.2' LT	89
			106ML+24	4.8' LT	108ML+58	3.2' LT	234
			109ML+60	3.2' LT	110ML+83	3.2' LT	123
			112ML+44	3.3' LT	112ML+67	3.2' LT	23
			113ML+94	3.1' LT	114ML+06	3.1' LT	12
			115ML+54	2.9' LT	120ML+81	3.0' LT	527
			128ML+94	3.1' LT	130ML+46	3.0' LT	152
			131ML+74	3.0' LT	131ML+86	3.1' LT	12
			132ML+09	3.2' LT	132ML+21	3.3' LT	12
			133ML+44	3.8' LT	133ML+56	3.8' LT	12
			133ML+94	3.2' LT	134ML+06	3.3' LT	12
			134ML+94	3.3' LT	136ML+06	3.3 LT	112
			137ML+94	3.2' LT	138ML+06	3.2' LT	12
			144ML+94	3.2' LT	145ML+06	3.2' LT	12
			147ML+44	3.1' LT	147ML+56	3.1' LT	12
			148ML+04	3.2' LT	148ML+16	3.2' LT	12
			151ML+60	4.0' LT	163ML+81	3.2' LT	1,221
			166ML+73	3.4' LT	167ML+56	3.3' LT	83
		SUBTOTAL					4,282
1000	2	**MAINLINE**					
		IH 41/USH 45 NB					
			89ML+70	60.0' RT	91ML+41	60.0' RT	171
			148ML+68	63.5' RT	154ML+98	61.0' RT	630
		SUBTOTAL					801
		TOTAL					5,083

REMOVING CONCRETE SIDEWALK

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.0155 REMOVING CONCRETE SIDEWALK SY
1000	1	**LOCAL ROADS**					
		NORTH AVE WB					
			106NO+06	-	106NO+32	LT	13
			106NO+69	-	106NO+85	LT	7
			109NO+25	-	109NO+48	LT	20
			109NO+76	-	109NO+91	LT	8
		NORTH AVE EB					
			106NO+20	-	106NO+60	RT	23
		TOTAL					71

REMOVING GUARDRAIL

CATEGORY	STAGE	ROADWAY	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	204.0165 REMOVING GUARDRAIL LF
		MAINLINE					
1000	1						
		IH 41/SH 45					
			89ML+03	63.0' RT	89ML+73	60.0' RT	75
		SUBTOTAL					75
		TOTAL					75

EARTHWORK SUMMARY

Division	From/To Station	Location	205.0100 Excavation Common (CY) (1)	SPV. 0035.0001 EBS Excavation (CY) (3)	Salvaged/ Unusable Pavement Material (CY)	Available Material (4)	SPV. 0035.0002 EBS Backfill (CY) (3)	Unexpanded Fill (5)	Expanded Fill (5)	Mass Ordinate +/- (6)	Waste	Borrow	Comment:
			Cut (2)				Factor 1.00		Factor 1.10			Item 208.0100	
1		MAINLINE											
	86ML+50 - 91ML+41	IH 41/USH 45 NB	166	8	107	59	8	0	0	59	59	0	
	100ML+97 - 122ML+34	IH 41/USH 45 NB	822	41	741	80	41	0	0	80	80	0	
	124ML+34 - 148ML+20	IH 41/USH 45 NB	1,000	50	954	46	50	0	0	46	46	0	
	151ML+55 - 152ML+31	IH 41/USH 45 NB	28	1	25	3	1	0	0	3	3	0	
	86ML+94 - 89ML+31	IH 41/USH 45 SB	86	4	59	26	4	0	0	26	26	0	
	104ML+09 - 122ML+43	IH 41/USH 45 SB	712	36	653	59	36	0	0	59	59	0	
	124ML+42 - 147ML+00	IH 41/USH 45 SB	868	43	782	86	43	0	0	86	86	0	
	147ML+00 - 170ML+64	IH 41/USH 45 SB	1,617	81	961	656	81	10	11	645	645	0	
Division 1 Subtotal Stage 1			5,298	265	4,283	1,016	265	10	11	1,005	1,005	0	
2		MAINLINE											
	85ML+00 - 91ML+84	IH 41/USH 45 NB Outside Widening	381	19	167	214	19	17	18	196	196	0	
	147ML+17 - 162ML+38	IH 41/USH 45 NB Outside Widening	1,743	87	561	1,181	87	174	192	989	989	0	
Division 2 Subtotal Stage 2			2,124	106	729	1,395	106	191	210	1,185	1,185	0	
Total			7,422	371	5,011	2,411	371	201	221	2,190	2,190	0	

NOTES:

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Asphalt Milling volume not included in Excavation Common, all reconstruct sections including pacement removal included in Excavation Common
3) EBS Excavation SPV.00350100 (CY) to be backfilled with EBS Backfill SPV.0035.0101 (CY). EBS Excavation volume assumed as 5% of excavation common volume
   All EBS Excavation to be wasted offsite. EBS Backfill Factor = 1.00.
   Actual extents and depths of EBS Excavation will be determined by the engineer in the field.
4) Available Material = Cut - Salvaged/Unusuable Pavement Material
5) Expanded Fill. Factor = 1.10 Expanded Fill = Unexpanded Fill * Fill Factor
6) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

REMOVING RUMBLE STRIPS

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	204.9180.S REMOVING RUMBLE STRIPS SY
1000	1	**MAINLINE**					
		IH 41/USH 45 NB					
			87ML+00	-	91ML+75	RT	24
			101ML+00	-	103ML+00	RT	7
			131ML+50	-	136ML+75	RT	23
		TOTAL					54

BASE PATCHING

CATEGORY	LOCATION	390.0403 BASE PATCHING CONCRETE SHES SY
1000	**MAINLINE**	
	IH 41/USH 45 NB	1,869
	IH 41/USH 45 SB	1,944
	TOTAL	3,813

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BASE AGGREGATE ITEMS

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	305.0120 BASE AGGREGATE DENSE 1 1/4 INCH TON
1000	1	**MAINLINE**				
		IH 41/USH 45 SB				
			151ML+50	-	163ML+33	599
		UNDISTRIBUTED				530
		SUBTOTAL				1,129
1000	2	**MAINLINE**				
		IH 41/USH 45 NB				
			86ML+24	-	91ML+86	292
			147ML+17	-	162ML+38	1,104
		UNDISTRIBUTED				212
		SUBTOTAL				1,608
		TOTAL				2737

DRILLED BAR ITEMS

CATEGORY	STAGE	LOCATION	STATION	TO	STATION	OFFSET	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
1000	1	**MAINLINE**						
		IH 41/USH 45 NB						
			88ML+75	-	89ML+19	RT	33	--
			89ML+19	-	89ML+99	RT	27	--
			89ML+99	-	91ML+57	RT	109	--
			100ML+92	-	102ML+69	RT	122	--
			102ML+69	-	104ML+21	RT	51	--
			104ML+21	-	108ML+00	RT	257	--
			130ML+00	-	130ML+34	RT	27	--
			130ML+34	-	132ML+55	RT	74	--
			132ML+55	-	132ML+90	RT	23	--
			132ML+90	-	134ML+06	RT	39	--
			134ML+06	-	135ML+00	RT	67	--
			147ML+00	-	152ML+31	RT	362	--
		IH 41 USH 45 SB						
			86ML+94	-	89ML+31	LT	87	--
			102ML+69	-	102ML+81	LT	12	--
			104ML+09	-	104ML+98	LT	34	--
			104ML+98	-	106ML+24	LT	84	--
			106ML+24	-	108ML+00	LT	63	--
			130ML+00	-	130ML+46	LT	19	--
			130ML+46	-	135ML+00	LT	307	--
			147ML+00	-	151ML+50	LT	304	--
			151ML50	-	163ML+33	LT	398	--
		SUBTOTAL					2,499	--
	2	**MAINLINE**						
		IH 41/USH 45 NB						
			85ML+00	-	91ML+41	RT	224	--
			147ML+17	-	162ML+39	RT	517	--
			CONCRETE BASE PATCHING				2,340	3,744
		IH 41 USH 45 SB						
			CONCRETE BASE PATCHING				2,440	3,904
		SUBTOTAL					5,521	7,648
		TOTAL					8,020	7,648

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SAWING

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
		MAINLINE						
1000	1	IH 41/USH 45 NB						
			86ML+38	-	91ML+57	RT	--	1,037
			101ML+14	-	122ML+17	RT	--	3,586
			124ML+54	-	148ML+20	RT	--	4,324
			151ML+55	-	152ML+31	RT	--	98
		IH 41/USH 45 SB						
			86ML+94	-	89ML+31	LT	--	254
			102ML+69	-	122ML+17	LT	--	2,777
			124ML+54	-	170ML+64	LT	--	7,754
		LOCAL ROADS						
		NORTH AVE EB						
			105NO+87	-	117NO+59	RT	252	--
		NORTH AVE WB						
			105NO+87	-	118NO+85	LT	216	--
		SUBTOTAL					468	19,830
		MAINLINE						
1000	2	IH 41/USH 45 NB						
			74ML+24	-	91ML+41	RT	13	680
			124ML+54	-	170ML+58	RT	115	1,595
		IH 41/USH 45 SB						
			102ML+69	-	122ML+17	LT	19	--
			124ML+54	-	170ML+58	LT	54	--
		SUBTOTAL					115	2,275
		UNDISTRIBUTED					--	18,432
		TOTAL					583	40,537

CONCRETE ITEMS

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	415.0090 CONCRETE PAVEMENT 9-INCH SY	715.0415 INCENTIVE STRENGTH CONCRETE PAVEMENT DOL
		MAINLINE					
1000	1	IH 41/USH 45 NB					
			88ML+75	-	91ML+57	307	92
			100ML+91	-	108ML+00	911	273
			130ML+00	-	135ML+00	598	179
			147ML+00	-	148ML+20	245	74
			151ML+55	-	152ML+31	90	27
		IH 41/USH 45 SB					
			86ML+94	-	89ML+31	251	75
			102ML+69	-	102ML+81	12	4
			104ML+09	-	108ML+00	559	168
			130ML+00	-	135ML+00	593	178
			147ML+00	-	163ML+33	2,360	708
		SUBTOTAL				5,926	1,778
		MAINLINE					
1000	2	IH 41/USH 45 NB					
			85ML+00	-	91ML+57	877	263
			147ML+17	-	162ML+38	3,312	994
						--	--
		SUBTOTAL				4,189	1,257
		TOTAL				10,115	3,035

ASPHALTIC ITEMS

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	455.0605 TACK COAT GAL	460.2000 INCENTIVE DENSITY HMA PAVEMENT DOL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	460.7423 HMA PAVEMENT 3 HT 58-28 H TON	460.7424 HMA PAVEMENT 4 HT 58-28 H TON
		MAINLINE								
1000	1	IH 41/USH 45 NB								
			86ML+38	-	88ML+75	56	97	--	124	28
			88ML+75	-	91ML+57	51	52	--	46	36
			100ML+91	-	108ML+00	150	154	--	135	105
			108ML+00	-	122ML+17	417	746	--	960	205
			124ML+54	-	130ML+00	161	287	--	370	79
			130ML+00	-	135ML+00	98	100	--	88	69
			135ML+00	-	147ML+00	370	664	--	855	182
			147ML+00	-	148ML+20	40	41	--	36	28
			151ML+55	-	152ML+31	13	13	--	11	9
		IH 41/USH 45 SB								
			86ML+94	-	89ML+31	35	36	--	32	25
			102ML+69	-	102ML+81	2	2	--	2	1
			104ML+09	-	108ML+00	97	99	--	83	71
			108ML+00	-	122ML+17	413	739	--	952	203
			124ML+54	-	130ML+00	160	286	--	369	78
			130ML+00	-	135ML+00	97	99	--	87	68
			135ML+00	-	147ML+00	336	602	--	776	164
			147ML+00	-	163ML+33	344	353	--	310	241
			163ML+33	-	170ML+64	287	489	--	598	166
1000	1	**LOCAL ROADS**								
		NORTH AVENUE								
			105NO+87	-	118NO+84	9	733	1,146	--	--
		SUBTOTAL				3,136	5,592	1,146	5,834	1,758
		MAINLINE								
1000	2	IH 41/USH 45 NB								
			74ML+24	-	91ML+57	719	660	--	111	921
			101ML+14	-	122ML+17	584	523	--	--	817
			124ML+54		170ML+64	1,911	1,772	--	417	2,351
		IH 41/USH 45 SB								
			74ML+24	-	91ML+57	602	540	--	--	843
			101ML+14	-	122ML+17	699	626	--	--	978
			124ML+54	-	179ML+34	1,416	1,269	--	--	1,983
		SUBTOTAL				5,931	5,389	--	528	7,893
		UNDISTRIBUTED				--	--	--	--	--
		TOTAL				9,067	10,982	1,146	6,362	9,651

QMP RIDE: INCENTIVE IRI RIDE

CATEGORY	ROADWAY	STATION	TO	STATION	440.4410 DOL
1000	**MAINLINE**				
	IH 41/USH 45 NB				
		74ML+24	-	91ML+57	2,640
		105ML+76	-	122M+17	4,640
		124ML+54	-	169ML+03	7,040
		169ML+03	-	170ML+64	240
	IH 41/USH 45 SB				
		74ML+24	-	91ML+57	2,640
		105ML+76	-	122M+17	4,640
		124ML+54	-	168ML+50	6,960
		168ML+50	-	170ML+64	240
	TOTAL				29,040

CONCRETE CURB AND GUTTER

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF
1000	1	**LOCAL ROADS**					
		NORTH AVE WB					
			106NO+26	-	106NO+33	LT	11
			106NO+69	-	106NO+75	LT	11
			109NO+39	-	109NO+48	LT	15
			109NO+76	-	109NO+79	LT	9
		NORTH AVE EB					
			106NO+38	-	106NO+59	RT	23
		TOTAL					69

CONCRETE CURB PEDESTRIAN

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	601.0600 CONCRETE CURB PEDESTRIAN LF
1000	1	**LOCAL ROADS**					
		NORTH AVE WB					
			109NO+32	-	109NO+38	LT	15
		TOTAL					15

CONCRETE SIDEWALK

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	OFFSET	602.0410 CONCRETE SIDEWALK 5-INCH SF
1000	1	**LOCAL ROADS**					
		NORTH AVE WB					
			106NO+06	-	106NO+32	LT	126
			106NO+69	-	106NO+85	LT	75
			109NO+25	-	109NO+48	LT	216
			109NO+76	-	109NO+91	LT	76
		NORTH AVE EB					
			106NO+20	-	106NO+54	RT	147
		TOTAL					640

CONCRETE BARRIER ITEMS

CATEGORY	STAGE	LOCATION	STATION	TO	STATION	OFFSET	603.0105 CONCRETE BARRIER SINGLE-FACE 32-INCH LF	603.1132 CONCRETE BARRIER TYPE S32 LF	603.1142 CONCRETE BARRIER TYPE S42 LF
1000	1	**MAINLINE**							
		IH 41/USH 45 NB							
			89ML+19	3.3' RT	89ML+99	3.2' RT	80	--	--
			102ML+69	3.1' RT	104ML+21	3.1' RT	152	--	--
			113ML+94	2.9' RT	114ML+06	2.9' RT	12	--	--
			115ML+54	2.8' RT	120ML+81	2.8' RT	527	--	--
			125ML+37	3.2' RT	126ML+31	3.1' RT	94	--	--
			130ML+34	3.1' RT	132ML+55	3.3' RT	221	--	--
			132ML+90	3.8' RT	134ML+06	3.3' RT	116	--	--
			135ML+94	3.1' RT	136ML+06	3.1' RT	12	--	--
			137ML+41	3.0' RT	138ML+06	3.0' RT	65	--	--
			144ML+94	3.2' RT	145ML+06	3.2' RT	12	--	--
			147ML+44	3.2' RT	147ML+56	3.2' RT	12	--	--
			148ML+04	3.3' RT	148ML+16	3.3' RT	12	--	--
			151ML+55	3.4' RT	152ML+31	3.4' RT	76	--	--
		IH 41/USH 45 SB							
			86ML+94	2.5' LT	89ML+31	2.7' LT	237	--	--
			102ML+69	3.0' LT	102ML+81	3.0' LT	12	--	--
			104ML+09	3.1' LT	104ML+98	3.2' LT	89	--	--
			106ML+24	4.8' LT	108ML+58	3.2' LT	234	--	--
			109ML+60	3.2' LT	110ML+83	3.2' LT	123	--	--
			112ML+44	3.3' LT	112ML+67	3.2' LT	23	--	--
			113ML+94	3.1' LT	114ML+06	3.1' LT	12	--	--
			115ML+54	2.9' LT	120ML+81	3.0' LT	527	--	--
			128ML+94	3.1' LT	130ML+46	3.0' LT	152	--	--
			131ML+74	3.0' LT	131ML+86	3.1' LT	12	--	--
			132ML+09	3.2' LT	132ML+21	3.3' LT	12	--	--
			133ML+44	3.8' LT	133ML+56	3.8' LT	12	--	--
			133ML+94	3.2' LT	134ML+06	3.3' LT	12	--	--
			134ML+94	3.3' LT	136ML+06	3.3 LT	112	--	--
			137ML+94	3.2' LT	138ML+06	3.2' LT	12	--	--
			144ML+94	3.2' LT	145ML+06	3.2' LT	12	--	--
			147ML+44	3.1' LT	147ML+56	3.1' LT	12	--	--
			148ML+04	3.2' LT	148ML+16	3.2' LT	12	--	--
			151ML+50	4.0' LT	163ML+81	3.2' LT	--	1,231	--
			166ML+73	3.4' LT	167ML+56	3.3' LT	83	--	--
		SUBTOTAL					3,091	1,231	--
1000	2	**MAINLINE**							
		IH 41/USH 45 NB							
			147ML+17	65.0' RT	162ML+38	73.0' RT	--	--	1,521
		SUBTOTAL					--	--	1,521
		TOTAL					3,091	1,231	1,521

DETECTABLE WARNING FIELD

CATEGORY	STAGE	LOCATION	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF
1000	1	**LOCAL ROADS**	
		NORTH AVE	50
		TOTAL	50

RESIN BINDER HIGH FRICTION SURFACE TREATMENT

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	SPV.0180.0002 RESIN BINDER HIGH FRICTION SURFACE TREATMENT SY
		MAINLINE				
1000	2	IH 41/USH 45 NB	105ML+76	-	122ML+17	8,205
		IH 41/USH 45 SB	105ML+76	-	122ML+17	8,205
		TOTAL				16,410

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TEMPORARY CONCRETE BARRIER ITEMS

CATEGORY	STAGE	LOCATION	STATION	TO	STATION	OFFSET	603.8125 * CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	204.9090.S.0001 REMOVING CONCRETE BARRIER PRECAST LF	SPV.0090.0002 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED SPECIAL LF	SPV.0090.0003 MAINTAIN CONCRETE BARRIER TEMPORARY PRECAST LF	SPV.0090.0004 MAINTAIN AND REMOVE CONCRETE BARRIER TEMPORARY PRECAST LF
1000	1	**MAINLINE**									
		IH 41/USH 45 NB									
			74ML+24	-	86ML+38	3' RT	--	--	--	1,214	--
			148ML+50	-	151ML+55	5' RT	--	--	--	305	--
			151ML+55	-	152ML+00	3' RT	--	--	--	45	
			158ML+00	-	159ML+45	3' RT	--	--	--	145	--
		IH 41/USH 45 SB									
			74ML+24	-	83ML+64	3' LT	--	--	--	940	--
			149ML+55	-	151ML+50	3' LT	--	--	--	195	--
			158ML+00	-	159ML+45	3' LT	--	145	--	--	--
		SUBTOTAL					--	145	--	1,630	--
1000	2	**MAINLINE**									
		IH 41/USH 45 NB									
			74ML+24	-	85ML+00	60' RT	--	--	--	1,076	--
			85ML+00	-	86ML+24	60' RT	124	--	--	124	--
			86ML+24	-	91ML+41	60' RT	517	--	517	--	--
			142ML+40	-	147ML+17	60' RT	--	--	--	478	--
			147ML+17	-	148ML+68	60' RT	--	--	--	--	151
			154ML+98	-	160ML+50	60' RT	--	--	--	--	552
			162ML+38	-	166ML+43	70' RT	405	--	405	--	--
		IH 41/USH 45 SB									
			74ML+24	-	77ML+24	70' RT	--	--	--	300	--
			145ML+50	-	150ML+50	60' RT	--	--	--	500	--
			152ML+70	-	161ML+00	60' RT	--	--	--	830	--
			167ML+15	-	170ML+70	70' RT	--	--	--	355	--
		SUBTOTAL					1,046	--	922	3,663	703
		TOTAL					1,046	145	922	5,293	703

* ADDITONAL QUANTITIES SHOWN ELSEWHERE

STORM SEWER ITEMS

STRUCTURE NUMBER	STRUCTURESTAGE	STATION	OFFSET (FT)	611.2003 MANHOLES 3-FT DIAMETER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2X2-FT EACH	611.0555 MANHOLE COVERS TYPE Q EACH	611.0654 INLET COVERS TYPE V EACH	SPV.0060.8001 REMOVE AND CAP EXISTING DRAINAGE SS STRUCTURE EACH	611.0420 RECONSTRUCTING MANHOLES EACH	611.0430 RECONSTRUCTING INLETS EACH	204.0210 REMOVING MANHOLES EACH	204.0220 REMOVING INLETS EACH
200	1	77+98	13.2'	--	--	--	--	--	--	1	--	--	--	--
201	1	87+00	5.0'	--	--	--	1	--	1	--	--	--	--	--
202	1	88+00	5.0'	--	--	--	1	--	1	--	--	--	--	--
203	1	89+25	5.0'	--	--	--	1	--	1	--	--	--	--	--
204	1	89+25	5.0'	--	--	--	1	--	1	--	--	--	--	--
205	1	89+93	5.0'	--	--	--	--	--	1	--	--	1	--	--
206	1	89+93	12.9'	--	--	--	--	--	--	1	--	--	--	--
207	1	90+43	5.0'	--	--	--	--	--	1	--	--	--	--	--
208	1	90+43	12.3'	--	--	--	--	--	--	1	--	--	--	--
209	1	90+95	4.6'	--	--	--	--	--	1	--	--	--	--	--
210	1	90+94	12.7'	--	--	--	--	--	--	1	--	--	--	--
211	1	102+75	5.0'	--	--	--	1	--	1	--	--	--	--	--
212	1	102+75	5.0'	--	--	--	1	--	1	--	--	--	--	--
213	1	103+70	5.0'	--	--	--	1	--	1	--	--	--	--	--
214	1	104+15	5.0'	--	--	--	1	--	1	--	--	--	--	--
215	1	104+15	5.0'	--	--	--	1	--	1	--	--	--	--	--
216	2	104+63	52.1'	--	--	--	--	--	--	1	--	--	--	--
217	1	104+62	6.0'	1	--	--	--	1	--	--	--	--	--	--
218	1	106+62	4.8'	--	--	--	--	--	1	--	--	--	--	--
219	1	104+90	5.0'	--	--	--	1	--	1	--	--	--	--	--
220	1	105+43	13.0'	--	--	--	--	--	--	1	--	--	--	--
221	1	105+46	6.5'	--	--	--	--	--	1	--	--	--	--	--
222	2	105+67	49.5'	--	--	--	--	--	--	1	--	--	--	--
223	1	105+92	7.5'	--	--	--	--	--	1	--	--	--	--	--
224	2	106+18	49.4'	--	--	--	--	--	--	1	--	--	--	--
225	1	106+30	6.7'	--	--	--	--	--	1	--	--	1	--	--
226	2	106+67	49.4'	--	--	--	--	--	--	1	--	--	--	--
227	1	106+85	5.1'	--	--	--	1	--	1	--	--	--	--	--
228	1	107+10	5.0'	--	--	--	1	--	1	--	--	--	--	--
229	1	108+50	5.0'	--	--	--	1	--	1	--	--	--	--	--
230	1	109+66	5.0'	--	--	--	--	--	1	--	--	1	--	--
231	1	110+75	5.0'	--	--	--	1	--	1	--	--	--	--	--
232	1	112+50	5.2'	--	--	--	1	--	1	--	--	--	--	--
233	1	112+59	.7'	--	--	--	--	1	--	--	1	--	--	--

STORM SEWER ITEMS

STRUCTURE NUMBER	STRUCTURESTAGE	STATION	OFFSET (FT)	611.2003 MANHOLES 3-FT DIAMETER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2X2-FT EACH	611.0555 MANHOLE COVERS TYPE Q EACH	611.0654 INLET COVERS TYPE V EACH	SPV.0060.8001 REMOVE AND CAP EXISTING DRAINAGE SS STRUCTURE EACH	611.0420 RECONSTRUCTING MANHOLES EACH	611.0430 RECONSTRUCTING INLETS EACH	204.0210 REMOVING MANHOLES EACH	204.0220 REMOVING INLETS EACH
234	1	114+00	5.0'	--	--	--	1	--	1	--	--	--	--	--
235	1	114+00	6.9'	--	1	--	--	1	--	--	--	--	--	--
236	1	115+60	5.0'	--	--	--	--	--	1	--	--	--	--	--
237	1	115+61	.8'	--	--	--	--	1	--	--	1	--	--	--
238	1	118+00	5.0'	--	--	--	1	--	1	--	--	--	--	--
239	1	120+75	5.0'	--	--	--	1	--	1	--	--	--	--	--
240	1	124+83	5.0'	--	--	--	--	--	1	--	--	--	--	--
241	1	124+97	12.2'	--	--	--	--	--	--	1	--	--	--	--
242	1	125+43	1.0'	--	--	--	--	--	1	--	--	1	--	--
243	1	125+43	11.0'	--	--	--	--	--	1	--	--	--	--	--
244	1	126+00	5.0'	--	--	--	1	--	1	--	--	--	--	--
245	1	126+25	5.0'	--	--	--	1	--	1	--	--	--	--	--
246	1	129+00	5.0'	--	--	--	1	--	1	--	--	--	--	--
247	1	130+40	5.0'	--	--	--	1	--	1	--	--	--	--	--
248	1	130+40	5.0'	--	--	--	1	--	1	--	--	--	--	--
249	1	131+80	5.0'	--	--	--	1	--	1	--	--	--	--	--
250	1	131+80	5.0'	--	--	--	1	--	1	--	--	--	--	--
251	1	132+15	5.0'	--	--	--	1	--	1	--	--	--	--	--
252	1	132+15	5.0'	--	--	--	1	--	1	--	--	--	--	--
253	1	132+48	13.0'	--	--	--	--	--	--	1	--	--	--	--
254	1	132+48	5.5'	--	--	--	--	--	1	--	--	--	--	--
255	1	132+48	5.5'	--	--	--	--	--	1	--	--	1	--	--
256	1	132+48	13.0'	--	--	--	--	--	--	1	--	--	--	--
257	1	132+99	13.0'	--	--	--	--	--	--	1	--	--	--	--
258	1	132+95	5.0'	--	--	--	--	--	1	--	--	--	--	--
259	1	132+95	4.8'	--	--	--	--	--	1	--	--	1	--	--
260	1	132+98	12.5'	--	--	--	--	--	--	1	--	--	--	--
261	1	133+50	5.7'	--	--	--	1	--	1	--	--	--	--	--
262	1	133+50	5.2'	--	--	--	1	--	1	--	--	--	--	--
263	1	134+00	5.2'	--	--	--	1	--	1	--	--	--	--	--
264	1	134+00	5.1'	--	--	--	1	--	1	--	--	--	--	--
265	1	135+00	5.2'	--	--	--	1	--	1	--	--	--	--	1
266	1	135+00	5.1'	--	--	--	--	--	1	--	--	--	--	--
267	1	136+00	5.0'	--	--	--	1	--	1	--	--	--	--	--
268	1	136+00	5.0'	--	--	--	1	--	1	--	--	--	--	--
269	1	137+47	5.2'	--	--	--	--	--	1	--	--	--	--	--
270	1	137+47	5.0'	--	--	--	--	--	1	--	--	1	--	--
271	1	138+00	5.1'	--	--	--	1	--	1	--	--	--	--	--
272	1	138+00	5.0'	--	--	--	1	--	1	--	--	--	--	--
273	1	142+50	5.0'	--	--	--	--	--	1	--	--	--	--	--
274	1	142+50	5.0'	--	--	--	--	--	1	--	--	--	--	--

STORM SEWER ITEMS

STRUCTURE NUMBER	STRUCTURE	STATION	OFFSET (FT)	611.2003 MANHOLES 3-FT DIAMETER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2X2-FT EACH	611.0555 MANHOLE COVERS TYPE Q EACH	611.0654 INLET COVERS TYPE V EACH	SPV.0060.8001 REMOVE AND CAP EXISTING DRAINAGE SS STRUCTURE EACH	611.0420 RECONSTRUCTING MANHOLES EACH	611.0430 RECONSTRUCTING INLETS EACH	204.0210 REMOVING MANHOLES EACH	204.0220 REMOVING INLETS EACH
275	1	145+00	5.0'	--	--	--	1	--	1	--	--	--	--	--
276	1	145+00	5.7'	1	--	--	--	1	--	--	--	--	--	--
277	1	145+50	5.1'	--	--	--	--	--	1	--	--	--	--	--
278	1	145+50	5.1'	--	--	--	--	--	1	--	--	--	--	--
279	1	147+50	5.0'	--	--	--	1	--	1	--	--	--	--	--
280	1	147+50	5.7'	1	--	--	--	1	--	--	--	--	--	--
281	1	148+10	5.0'	--	--	--	1	--	1	--	--	--	--	--
282	1	148+10	5.7'	1	--	--	--	1	--	--	--	--	--	--
283	1	148+49	5.1'	--	--	--	--	--	1	--	--	--	--	--
284	2	150+07	62.5'	--	--	--	--	--	1	--	--	--	--	--
285	2	151+30	58.5'	--	--	--	--	--	--	--	--	--	--	1
286	1	151+62	5.6'	--	--	--	--	--	1	--	--	1	--	--
287	1	152+25	5.5'	--	--	--	1	--	1	--	--	--	--	--
288	1	162+85	5.0'	--	--	--	--	--	1	--	--	1	--	--
289	1	163+75	5.0'	--	--	--	1	--	1	--	--	--	--	--
290	1	164+60	5.0'	--	--	--	--	--	1	--	--	--	--	--
291	1	166+80	5.0'	--	--	--	1	--	1	--	--	--	--	1
292	1	167+50	5.0'	--	--	--	1	--	1	--	--	--	--	--
293	1	168+99	5.0'	--	--	--	--	--	1	--	--	--	--	--
294	1	171+00	5.0'	--	--	--	--	--	1	--	--	--	--	--
295	2	150+54	66.0'	--	--	--	1	--	1	--	--	--	--	--
296	2	150+95	66.0'	--	--	--	1	--	1	--	--	--	--	--
297	2	151+84	65.0'	--	--	1	--	--	1	--	--	--	--	--
298	2	152+25	66.0'	--	--	--	1	--	1	--	--	--	--	--
299	2	153+25	66.0'	--	--	--	1	--	1	--	--	--	--	--
300	2	150+18	58.0'	--	--	--	--	--	--	--	--	--	--	1
301	2	89+16	59.0'	--	--	--	--	--	1	--	--	--	--	--
302	2	90+35	59.0'	--	--	--	--	--	1	--	--	--	--	--
UNIDSTRIBUTED												5	1	2
TOTALS				4	1	1	47	7	80	14	2	14	1	6

GENERAL NOTES

1) STATIONS AND OFFSETS ARE TO THE FLANGE LINE OF INLET STRUCTURES AND TO THE CENTER OF MANHOLE STRUCTURES UNLESS OTHERWISE NOTED.
2) PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES.
3) RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE MANHOLE COVER FOR MANHOLES UNLESS OTHERWISE NOTED.
4) STRUCTURE DEPTH = RIM ELEVATION - INVERT - CASTING HEIGHT ADJUSTMENT
   CASTING HEIGHT = 0.83 FT FOR TYPE V; 0.83 FT FOR TYPE Q
   ADJUSTMENT (RINGS) = 0.25 FOR ALL COVERS EXCEPT TYPE MS COVERS
5) CONCRETE COLLARS ARE INCIDENTAL TO STORM SEWER.

STORM SEWER ITEMS

STRUCTURE NUMBER	STRUCTURESTAGE	STATION	STRUCTURE DEPTH (FT)	RIM OR FLANGE ELEV	PIPE NUMBER	TO STR	INLET ELEV	DISCH ELEV	SLOPE	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	520.8000 CONCRETE COLLARS FOR PIPE EACH	204.0245 REMOVING STORM SEWER 12-INCH LF	204.0280 SEALING PIPES EACH	SPV.0035.8001 BACKFILL SLURRY (PIPE) CY	SPV.0035.8001 BACKFILL SLURRY (STRUCTURE) CY
200	1	77+98	--	--	--	--	--	--	--	--	--	--	--	--	0.0
201	1	87+00	2.92	728.10	P201	202	724.10	722.60	1.50%	100	--	--	--	12.9	5.4
202	1	88+00	2.83	726.51	P202	203	722.60	720.70	1.52%	125	--	--	--	16.2	5.4
203	1	89+25	2.92	724.70	P203	204	720.70	720.55	1.50%	10	--	--	--	1.3	5.4
204	1	89+25	2.11	723.74	P204	205	720.55	719.50	1.54%	68	--	--	--	8.8	5.4
205	1	89+93	--	723.20	--	--	--	--	--	--	1	--	--	--	2.7
206	1	89+93	--	--	--	--	--	--	--	--	--	--	--	--	0.0
207	1	90+43	--	723.03	--	--	--	--	--	--	--	--	--	--	0.0
208	1	90+43	--	--	--	--	--	--	--	--	--	--	--	--	0.0
209	1	90+95	--	723.39	--	--	--	--	--	--	--	--	--	--	0.0
210	1	90+94	--	--	--	--	--	--	--	--	--	--	--	--	0.0
211	1	102+75	1.98	718.16	P211	212	715.10	714.80	3.00%	10	--	--	--	1.3	5.4
212	1	102+75	2.24	718.12	P212	213	714.80	711.80	3.16%	95	--	--	--	12.3	5.4
213	1	103+70	2.68	715.56	P213	214	711.80	710.40	3.11%	45	--	--	--	5.8	5.4
214	1	104+15	3.08	714.56	P214	215	710.40	710.25	1.50%	10	--	--	--	1.3	5.4
215	1	104+15	3.08	714.41	P215	217	710.25	709.70	1.17%	47	--	--	--	6.1	5.4
216	2	104+63	--	--	--	--	--	--	--	--	--	--	--	--	0.0
217	1	104+62	4.38	713.54	--	--	--	--	--	--	2	--	--	--	7.7
218	1	106+62	--	713.68	--	--	--	--	--	--	--	--	--	--	0.0
219	1	104+90	2.01	713.09	P219	217	710.00	709.70	1.11%	27	--	--	--	3.5	5.4
220	1	105+43	--	--	--	--	--	--	--	--	--	--	--	--	0.0
221	1	105+46	--	712.44	--	--	--	--	--	--	--	--	--	--	0.0
222	2	105+67	--	--	--	--	--	--	--	--	--	--	--	--	0.0
223	1	105+92	--	712.30	--	--	--	--	--	--	--	--	--	--	0.0
224	2	106+18	--	--	--	--	--	--	--	--	--	--	--	--	0.0
225	1	106+30	--	712.51	--	--	--	--	--	--	1	--	--	--	3.4
226	2	106+67	--	--	--	--	--	--	--	--	--	--	--	--	0.0
227	1	106+85	2.45	713.03	P227	225	709.50	708.65	1.55%	55	--	--	--	7.1	5.4
228	1	107+10	2.25	713.33	P228	227	710.00	709.50	2.00%	25	--	--	--	3.2	5.4
229	1	108+50	2.37	716.25	P229	228	712.80	710.00	2.00%	140	--	--	--	18.1	5.4
230	1	109+66	--	719.93	--	--	--	--	--	--	1	--	--	--	3.4
231	1	110+75	1.91	723.49	P231	230	720.50	716.90	3.27%	110	--	--	--	14.2	5.4
232	1	112+50	3.22	729.30	P232	233	725.00	724.80	2.00%	10	--	--	--	1.3	5.4
233	1	112+59	--	729.76	--	--	--	--	--	--	1	--	--	--	5.6

STORM SEWER ITEMS

STRUCTURE NUMBER	STRUCTURESTAGE	STATION	STRUCTURE DEPTH (FT)	RIM OR FLANGE ELEV	PIPE NUMBER	TO STR	INLET ELEV	DISCH ELEV	SLOPE	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	520.8000 CONCRETE COLLARS FOR PIPE EACH	204.0245 REMOVING STORM SEWER 12-INCH LF	204.0280 SEALING PIPES EACH	SPV.0035.8001 BACKFILL SLURRY (PIPE) CY	SPV.0035.8001 BACKFILL SLURRY (STRUCTURE) CY
234	1	114+00	3.24	734.32	P234	235	730.00	729.85	1.25%	12	--	--	--	1.6	5.4
235	1	114+00	8.57	734.75	--	--	--	--	--	--	2	--	--	--	11.0
236	1	115+60	--	739.50	--	--	--	--	--	--	--	--	--	--	0.0
237	1	115+61	--	739.95	--	--	--	--	--	--	1	--	--	--	5.6
238	1	118+00	2.03	747.36	P238	237	744.25	736.32	3.30%	240	--	--	--	31.0	5.4
239	1	120+75	2.14	756.42	P239	238	753.20	744.25	3.25%	275	--	--	--	35.5	5.4
240	1	124+83	--	768.32	--	--	--	--	--	--	--	--	--	--	0.0
241	1	124+97	--	--	--	--	--	--	--	--	--	--	--	--	0.0
242	1	125+43	--	769.22	--	--	--	--	--	--	1	--	--	--	4.1
243	1	125+43	--	769.24	--	--	--	--	--	--	--	--	--	--	0.0
244	1	126+00	5.53	769.66	P244	242	763.05	762.50	1.00%	55	--	--	--	7.1	5.4
245	1	126+25	5.45	769.83	P245	244	763.30	763.05	1.00%	25	--	--	--	3.2	5.4
246	1	129+00	5.88	768.16	P246	247	761.20	758.40	2.00%	140	--	--	--	18.1	5.4
247	1	130+40	5.18	764.66	P247	248	758.40	758.20	2.00%	10	--	--	--	1.3	5.4
248	1	130+40	5.45	764.73	P248	250	758.20	755.40	2.00%	140	--	--	--	18.1	5.4
249	1	131+80	5.15	761.83	P249	250	755.60	755.40	2.00%	10	--	--	--	1.3	5.4
250	1	131+80	5.30	761.78	P250	252	755.40	754.70	2.00%	35	--	--	--	4.5	5.4
251	1	132+15	5.42	761.40	P251	252	754.90	754.70	2.00%	10	--	--	--	1.3	5.4
252	1	132+15	5.60	761.38	P252	255	754.70	754.00	2.00%	35	--	--	--	4.5	5.4
253	1	132+48	--	--	--	--	--	--	--	--	--	--	--	--	0.0
254	1	132+48	--	760.90	--	--	--	--	--	--	--	--	--	--	0.0
255	1	132+48	--	761.00	--	--	--	--	--	--	1	--	--	--	0.0
256	1	132+48	--	--	--	--	--	--	--	--	--	--	--	--	0.0
257	1	132+99	--	--	--	--	--	--	--	--	--	--	--	--	0.0
258	1	132+95	--	760.90	--	--	--	--	--	--	--	--	--	--	0.0
259	1	132+95	--	760.80	--	--	--	--	--	--	1	--	--	--	0.0
260	1	132+98	--	--	--	--	--	--	--	--	--	--	--	--	0.0
261	1	133+50	2.09	761.27	P261	262	758.10	757.95	1.50%	10	--	--	--	1.3	5.4
262	1	133+50	2.21	761.24	P262	259	757.95	757.55	0.73%	55	--	--	--	7.1	5.4
263	1	134+00	1.92	761.43	P263	264	758.43	758.35	0.80%	10	--	--	--	1.3	5.4
264	1	134+00	2.09	761.52	P264	262	758.35	757.95	0.80%	50	--	--	--	6.5	5.4
265	1	135+00	2.58	761.84	P265	--	--	--	--	5	1	--	--	0.6	4.1
266	1	135+00	--	761.83	--	--	--	--	--	--	--	--	--	--	0.0
267	1	136+00	1.92	762.40	P267	265	759.40	758.45	0.95%	100	--	--	--	12.9	5.4
268	1	136+00	2.20	762.43	--	--	--	--	--	--	2	--	--	--	5.4
269	1	137+47	--	763.34	--	--	--	--	--	--	--	--	--	--	0.0
270	1	137+47	--	763.22	--	--	--	--	--	--	--	--	--	--	4.1
271	1	138+00	1.98	763.64	P271	272	760.58	760.47	1.00%	11	--	--	--	1.4	5.4
272	1	138+00	1.94	763.49	P272	270	760.47	760.11	0.69%	52	2	--	--	6.7	5.4
273	1	142+50	--	761.47	--	--	--	--	--	--	--	--	--	--	0.0
274	1	142+50	--	761.41	--	--	--	--	--	--	--	--	--	--	0.0

STORM SEWER ITEMS

STRUCTURE NUMBER	STRUCTURESTAGE	STATION	STRUCTURE DEPTH (FT)	RIM OR FLANGE ELEV	PIPE NUMBER	TO STR	INLET ELEV	DISCH ELEV	SLOPE	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	520.8000 CONCRETE COLLARS FOR PIPE EACH	204.0245 REMOVING STORM SEWER 12-INCH LF	204.0280 SEALING PIPES EACH	SPV.0035.8001 BACKFILL SLURRY (PIPE) CY	SPV.0035.8001 BACKFILL SLURRY (STRUCTURE) CY
275	1	145+00	3.50	755.12	P275	276	750.54	749.89	5.91%	11	--	--	--	1.4	5.4
276	1	145+00	4.09	755.06	--	--	--	--	--	--	2	--	--	--	9.2
277	1	145+50	--	753.84	--	--	--	--	--	--	--	--	--	--	0.0
278	1	145+50	--	753.81	--	--	--	--	--	--	--	--	--	--	0.0
279	1	147+50	3.25	748.63	P279	280	744.30	743.65	5.91%	11	--	--	--	1.4	5.4
280	1	147+50	4.10	748.83	--	--	--	--	--	--	2	--	--	--	9.2
281	1	148+10	3.27	747.25	P281	282	742.90	742.25	5.91%	11	--	--	--	1.4	5.4
282	1	148+10	3.94	747.27	--	--	--	--	--	--	2	--	--	--	9.2
283	1	148+49	--	746.68	--	--	--	--	--	--	--	--	--	--	0.0
284	2	150+07	--	745.11	--	--	--	--	--	--	--	--	--	--	0.0
285	2	151+30	--	--	P285	--	--	--	--	--	--	25	1	--	0.0
286	1	151+62	--	742.58	--	--	--	--	--	--	1	--	--	--	4.1
287	1	152+25	2.01	742.89	P287	286	739.80	739.50	0.46%	65	--	--	--	8.4	5.4
288	1	162+85	--	751.97	--	--	--	--	--	--	1	--	--	--	4.1
289	1	163+75	2.38	752.61	P289	288	749.15	748.50	0.72%	90	--	--	--	11.6	5.4
290	1	164+60	--	753.10	--	--	--	--	--	--	--	--	--	--	0.0
291	1	166+80	2.86	755.06	--	--	--	--	--	5	1	--	--	0.6	4.1
292	1	167+50	2.74	755.92	P292	291	752.10	751.20	1.29%	70	--	--	--	9.0	5.4
293	1	168+99	--	758.30	--	--	--	--	--	--	--	--	--	--	0.0
294	1	171+00	--	761.55	--	--	--	--	--	--	--	--	--	--	0.0
295	2	150+54	1.97	744.90	P295	296	741.85	740.90	5.28%	43	--	--	--	5.6	5.4
296	2	150+95	2.73	744.71	P296	297	740.90	740.45	1.22%	93	--	--	--	12.0	5.4
297	2	151+84	5.86	744.94	--	286	--	--	--	--	2	--	--	--	18.3
298	2	152+25	2.24	745.12	P298	297	741.80	741.35	2.14%	43	--	--	--	5.6	5.4
299	2	153+25	1.97	745.95	P299	298	742.90	741.80	6.47%	104	--	--	--	13.4	5.4
300	2	150+18	--	--	P300	284	--	--	--	--	--	8	1	--	0.0
301	2	89+16	--	728.08	--	--	--	--	--	--	--	--	--	--	0.0
302	2	90+35	--	727.05	--	--	--	--	--	--	--	--	--	--	0.0
UNIDSTRIBUTED															
TOTALS										2,703	28	33	2	349	353

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CPM SCHEDULE ITEMS

CATEGORY	LOCATION	SPV.0060.0001 BASELINE CPM PROGRESS SCHEDULE EACH	SPV.0060.0002 MONTHLY CPM PROGRESS SCHEDULE UPDATES EACH
1000	UNDISTRIBUTED	1	6
	TOTAL	1	6

MOBILIZATIONS EMERGENCY PAVEMENT REPAIR

CATEGORY	LOCATION	SPV.0060.0403 MOBILIZATIONS EMERGENCY PAVEMENT REPAIR EACH
1000	UNDISTRIBUTED	10
	TOTAL	10

LINEAR DELINEATION SYSTEM

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	SPV.0060.0404 LINEAR DELINEATION SYSTEM EACH
1000		**MAINLINE**				
	1	IH 41/USH 45 NB				
			105+76	-	124+46	430
			170+64	-	179+34	200
	1	IH 41/USH 45 SB				
			79+06	-	92+07	298
			149+65	-	160+60	252
		SUBTOTAL				1180
	2	IH 41/USH 45 NB				
			99+06	-	92+07	312
			149+65	-	160+60	263
	2	IH 41/USH 45 SB				
			105+76	-	106+83	28
			172+57	-	179+34	164
		SUBTOTAL				767
		TOTAL				1947

PAVEMENT CLEANUP

CATEGORY	LOCATION	SPV.0075.0001 PAVEMENT CLEANUP PROJECT ID 2010-1470 HRS
1000	ID 2010-14-70	50
	TOTAL	50

SURVEY PROJECT

CATEGORY	ROADWAY	SPV.0105.0001 SURVEY PROJECT ID 2010-14-70 LS
1000	ID 2010-14-70	1
	TOTAL	1

DUST CONTROL SURFACE TREATMENT

CATEGORY	STAGE	LOCATION	623.0200 DUST CONTROL SURFACE TREATMENT SY
1000	1	ID 2010-14-70	5,987
		TOTAL	5,987

BEAM GUARD ITEMS

CATEGORY	STAGE	ROADWAY	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	614.2300 MGS GUARDRAIL 3 LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH
1000	1	**MAINLINE** IH 41/USH 45 NB	137ML+33	74' RT	139ML+15	72' RT	133	1	1
		TOTAL					133	1	1

MOBILIZATION

CATEGORY	LOCATION	619.1000 EACH
1000	ID 2010-14-70	1
	TOTAL	1

WATER

CATEGORY	STAGE	LOCATION	624.0100 MGAL
1000	ALL	ID 2010-14-70	54
		TOTAL	54

EROSION CONTROL ITEMS

CATEGORY	STAGE	LOCATION	STATION	TO	STATION	OFFSET	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.7560 TRACKING PADS EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7570 ROCK BAGS EACH
		MAINLINE												
1000	1	IH 41/USH 45 NB												
			74ML+24	-	179ML+34		--	--	--	--	--	--	--	330
		IH 41/USH 45 SB												
			74ML+24	-	179ML+34		--	--	--	--	--	--	--	460
		SUBTOTAL					--	--	--	--	--	--	--	790
	2	IH 41/USH 45 NB												
			85ML+00	-	91ML+50		245	245	--	--	216	--	1	30
			91ML+50	-	147ML+17		--	--	--	--	--	--	--	40
			147ML+17	-	162ML+39		300	300	--	--	1,654	--	5	80
		SUBTOTAL					545	545	--	--	1,869	--	6	150
		UNDISTRIBUTED					109	109	15	8	374	2	1	30
		TOTAL					654	654	15	8	2,243	2	7	970

RESTORATION ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0200 SEEDING TEMPORARY LB	SPV.0120.0001 SEEDING WATER MGAL	SPV.0180.0200 TOPSOIL SPECIAL SY
	MAINLINE									
1000	IH 41/USH 45 SB									
		85ML+00	-	91ML+50	216	.1	6	6	4	216
		147ML+17	-	162ML+39	1,654	1.0	45	45	30	1,654
	SUBTOTAL				1,654	1	45	45	30	1,654
	UNDISTRIBUTED				331	1	9	9	6	331
	TOTAL				1,985	2	54	54	36	1,985

INLET PROTECTION

CATEGORY	STAGE	LOCATION	STATION	TO	STATION	628.7005 TYPE A EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH
		MAINLINE						
1000	1	IH 41/USH 45 NB						
			74ML+24	-	89ML+00	2	--	8
			89ML+00	-	104ML+00	--	--	12
			104ML+00	-	119ML+00	3	--	13
			119ML+00	-	134ML+00	2	--	16
			134ML+00	-	149ML+00	--	--	7
			149ML+00	-	164ML+00	--	--	8
			164ML+00	-	179ML+34	--	--	4
		IH 41/USH 45 SB						
			74ML+24	-	89ML+00	1	--	8
			89ML+00	-	104ML+00	--	--	14
			104ML+00	-	119ML+00	1	--	21
			119ML+00	-	134ML+00	--	--	16
			134ML+00	-	149ML+00	--	--	12
			149ML+00	-	164ML+00	--	--	4
			164ML+00	-	179ML+34	--	--	8
		LOCAL ROADS						
		NORTH AVE EB						
			105NO+88	-	117NO+57	5	7	--
		NORTH AVE WB						
			105NO+88	-	118NO+84	4	12	--
		SUBTOTAL				18	19	151
1000	2	**MAINLINE**						
		IH 41/USH 45 NB						
			85ML+00	-	91ML+50	--	--	2
			147ML+17	-	162ML+38	1	--	2
		SUBTOTAL				1	--	2
		UNDISTRIBUTED				2	10	15
		TOTAL				21	29	168

3

PAVEMENT MARKING ITEMS

CATEGORY	LOCATION	STATION	TO	STATION	646.1020 MARKING LINE EPOXY 4-INCH WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF	646.1020 MARKING LINE EPOXY 4-INCH 12.5 FT LINE, 37.5 FT SKIP WHITE LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH WHITE LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH YELLOW LF	646.3020 MARKING LINE EPOXY 8-INCH 3 FT LINE, 9FT SKIP WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH 3 FT LINE, 9FT SKIP WHITE LF	646.1545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH 12.5 FT LINE, 37.5 SKIP WHITE LF	646.1545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH 3 FT LINE, 9 FT SKIP WHITE LF	646.3545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH 3 FT LINE, 9 FT SKIP WHITE LF	646.3545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH 3 FT LINE, 9 FT SKIP WHITE LF	646.5020 MARKING ARROW EPOXY TYPE 2 WHITE EACH	646.5020 MARKING ARROW EPOXY TYPE 5 WHITE EACH	646.5120 MARKING WORDS EPOXY WHITE EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH YELLOW LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH WHITE LF	646.7220 MARKING CHEVRON EPOXY 24-INCH WHITE LF	SPV.0060.0003 PAVEMENT MARKING CONTRAST EPOXY SPECIAL MARKING ARROW TYPE 2 WHITE EACH	SPV.0060.0004 PAVEMENT MARKING CONTRAST EPOXY SPECIAL MARKING ARROW TYPE 5 WHITE EACH
	MAINLINE																							
1000	IH 41/USH 45 NB																							
		46ML+48	-	74ML+24	--	--	--	1,244	2,774	--	--	2,082	--	2,220	166	--	--	--	--	472	--	--	--	--
		74ML+24	-	91ML+57	--	--	--	1,800	1,800	--	--	1,350	--	--	--	--	2	--	--	--	--	--	--	--
		91ML+57	-	122ML+17	300	--	--	6,700	3,000	--	--	1,273	125	400	--	--	--	--	--	--	--	--	--	--
		122ML+17	-	151ML+02	650	--	--	5,493	2,700	--	--	867	488	1,300	--	--	--	--	--	--	--	200	1	2
		151ML+02	-	170ML+64	350	--	--	1,800	2,150	--	--	1,025	400	700	--	--	--	--	--	--	--	--	1	--
	IH 41/USH 45 SB														--									
		44ML+53	-	74ML+24	--	--	--	2,184	2,973	--	--	2,255	--	1,492	52	--	--	--	--	506	323	68	--	--
		74ML+24	-	91ML+57	--	--	--	1,700	1,700	--	--	1,500	--	--	38	--	--	--	--	--	--	--	--	--
		91ML+57	-	124ML+54	3,035	--	--	9,050	3,350	--	--	652	62	1,700	--	--	--	--	--	--	--	300	--	2
		124ML+54	-	151ML+02	1,188	--	--	3,352	2,550	--	--	1,840	300	600	--	--	--	--	--	--	--	300	--	--
		151ML+02	-	179ML+34	650	--	--	2,091	2,950	--	--	1,710	--	1,300	--	--	--	--	--	--	--	--	--	--
	LOCAL ROADS																							
	NORTH AVE EB																							
		105NO+87	-	117NO+58	93	270	450	--	--	--	401	--	--	--	--	2	--	2	27	--	--	--	--	--
	NORTH AVE WB																							
		105NO+87	-	118NO+84	410	114	320	--	--	190	1,267	--	--	--	--	4	3	--	--	--	1,000	--	--	--
	SUBTOTALS				6,676	384	770	35,414	25,947	190	1,668	14,554	1,375	# 9,712	256	6	5	2	27	978	1,323	868	2	4
	TOTALS				7,830			61,361		1,858		15,929		9,968		11		2	27	2,301		868	2	4

3

TEMPORARY CONCRETE BARRIER ITEMS

CATEGORY	STAGE	LOCATION	STATION	TO	STATION	OFFSET	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 * CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF
1000	1	**MAINLINE**						
		IH 41/USH 45 NB						
			81ML+73	-	86ML+35	23.0' RT	462	462
			86ML+35	-	170ML+64	14.0' RT	8,429	8,429
		IH 41/USH 45 SB						
			83ML+61	-	176ML+28	16.8' LT	8,967	8,967
		SUBTOTAL					17,858	17,858
1000	2	**MAINLINE**						
		IH 41/USH 45 NB						
			79ML+00	-	86ML+25	62.0' RT	--	725
			86ML+25	-	91ML+90	49.0' RT	565	565
			140ML+00	-	162ML+39	49.0' RT	2,240	2,230
			147ML+17	-	161ML+00	65.0' RT	--	--
		SUBTOTAL					2,805	3,520
		TOTAL					20,663	21,378

* ADDITONAL QUANTITIES SHOWN ELSEWHERE

3

TEMPORARY CRASH CUSHION

CATEGORY	STAGE	LOCATION	614.0905 CRASH CUSHION TEMPORARY EACH	BACK WIDTH FT	OBJECT MARKING PATTERN	CRASH TEST LEVEL	DIRECTION OF TRAVEL	TRAFFIC LOCATION	CRASH CUSHION SHIELDS
1000	1	**IH 41/USH 45 NB**							
		82ML+00, 8' RT	1	2	OM-3L (W5-5 8L SIGN PLATE)	TL-3	UNIDIRECTIONAL	RIGHT	TEMPORARY CONCRETE BARRIER IN MEDIAN
		95ML+00, 65' RT	1	2	OM-3C (W5-5 8M SIGN PLATE)	TL-3	UNIDIRECTIONAL	L AND R	TEMPORARY CONCRETE BARRIER GORE
		IH 41/USH 45 SB							
		176ML+25, 8' LT	1	2	OM-3L (W5-5 8L SIGN PLATE)	TL-3	UNIDIRECTIONAL	RIGHT	TEMPORARY CONCRETE BARRIER IN MEDIAN
	2	**IH 41/USH 45 NB**							
		78ML+80, 60' RT	1	2	OM-3R (W5-5 8R SIGN PLATE)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY CONCRETE BARRIER ON SHOULDER
		95ML+00, 65' RT	EXIST	2	OM-3C (W5-5 8M SIGN PLATE)	TL-3	UNIDIRECTIONAL	L AND R	TEMPORARY CONCRETE BARRIER GORE
		140ML+00, 55' RT	1	2	OM-3R (W5-5 8R SIGN PLATE)	TL-3	UNIDIRECTIONAL	LEFT	TEMPORARY CONCRETE BARRIER ON SHOULDER
		TOTAL	5						

3

TRAFFIC CONTROL

CATEGORY	ROADWAY	643.5000 TRAFFIC CONTROL 2010-14-70 EACH
1000	**2010-14-70**	1
	TOTAL	1

TRAFFIC CONTROL CLOSURE ITEMS

CATEGORY	ROADWAY	SPV.0060.0400 TRAFFIC CONTROL CLOSE-OPEN FREEWAY ENTRANCE RAMP EACH	SPV. 0060.0401 TRAFFIC CONTROL INTERIM FREEWAY LANE CLOSURE EACH	SPV. 0060.0402 TRAFFIC CONTROL LOCAL ROAD LANE CLOSURES EACH
1000	VARIOUS	40	290	32
	TOTAL	40	290	32

TEMPORARY GUIDE SIGNING

CATEGORY	STAGE	LOCATION	SIGN NO.	SIGN SIZE W X H FT X FT	634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH	634.0624 POSTS WOOD 4X6-INCH X 24-FT EACH	638.2101* MOVING SIGNS TYPE I EACH	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	NOTES
1000	1	IH 41/USH 45	100TC	-	--	--	--	1	
		IH 41/USH 45	101TC	-	1	1	1	--	
		IH 41/USH 45	102TC						
			G20-60	-	--	--	--	--	CLOSED
		IH 41/USH 45	103TC						
			G20-62	-	--	--	--	--	CLOSED
		IH 41/USH 45	104TC						
			G20-60	-	--	--	--	--	CLOSED
		SUBTOTAL			1	1	1	1	
		UNDISTRIBUTED			--	--	3	5	
		TOTALS			1	1	4	6	

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

TRAFFIC CONTROL SIGNS FIXED MESSAGE

CATEGORY	STAGE	LOCATION	SIGN NO.	NUMBER REQUIRED	SIGN SIZE W X H FT X FT	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	SIGN MESSAGE
		PROJECT ID 2010-14-70					
1,000	1						
		IH41/USH45		1	10.5 X 4.5	47	NORTH AVE RAMPS CLOSED USE EXIT 43
	DETOUR						
		VARIOUS		14	2.5 X 2.0	70	NORTH AVE
		TRUCKS ENTERING/EXITING SIGNS		8	6' X 6'	288	
		EMERGENCY ACCESS SIGNS		8	2' X 3.75'	60	
		UNDISTRIBUTED				50	
		TOTALS				515	

TRAFFIC CONTROL ITEMS

CATEGORY	STAGE	LOCATION	STAGE DURATION	643.0300 TRAFFIC CONTROL DRUMS		643.0410 TRAFFIC CONTROL BARRICADES TYPE II		643.0420 TRAFFIC CONTROL BARRICADES TYPE III		643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C		643.0800 TRAFFIC CONTROL ARROW BOARDS		643.0900 TRAFFIC CONTROL SIGNS		643.1050 TRAFFIC CONTROL SIGNS PCMS	
			DAYS	EACH*	DAY	EACH*	DAY	EACH*	DAY	EACH*	DAY	EACH*	DAY	EACH*	DAY	EACH*	DAY	EACH*	DAY
1000	1	**MAINLINE**																	
		IH 41/USH 45 NB	90	20	1,800	--	--	8	720	16	1,440	8	720	4	360	24	2,160	3	270
		IH 41/USH 45 SB	90	25	2,250	--	--	12	1,080	24	2,160	--	--	2	180	24	2,160	3	270
		LOCAL ROADS																	
		NORTH AVE	4	80	320	8	32	8	32	16	64	16	64	4	16	32	128	2	8
		DETOURS																	
		NORTH AVE RAMP CLOSURE	90	91	8,190	--	--	12	1,080	20	1,800	13	1,170	--	--	31	2,790	--	--
		NORTH AVE IH 41 NB ENTRANCE/SB EXIT	90	--	--	--	--	--	--	--	--	--	--	--	--	88	7,920	--	--
		NORTH AVE IH 41 NB EXIT/SB ENTRANCE	90	--	--	--	--	--	--	--	--	--	--	--	--	71	6,390	--	--
		SUBTOTALS			12,560		32		2,912		5,464		1,954		556		21,548		548
1000	2A	**MAINLINE**																	
		IH 41/USH 45 NB	52	150	7,800	--	--	7	364	14	728	25	1,300	4	208	24	1,248	4	208
		IH 41/USH 45 SB	52	150	7,800		--	12	624	24	1248	20	1,040	2	104	24	1,248	2	104
		SUBTOTAL			15,600		--		988		1,976		2,340		312		2,496		312
1000	2B	**MAINLINE**																	
		IH 41/USH 45 NB	12	180	2,160			10	120	20	240	25	300	4	48	24	288	4	48
		IH 41/USH 45 SB	12	150	1,800			12	144	24	288	20	240	2	24	24	288	2	24
		SUBTOTAL			3,960		--		264		528		540		72		576		72
		UNDISTRIBUTED			3,000		--		100		150		400		60		200		70
		TOTAL			35,120		32		4,264		8,118		5,234		1,000		24,820		1,002

*FOR INFORMATION ONLY

TRAFFIC CONTROL PAVEMENT MARKING

CATEGORY	STAGE	LOCATION	STATION	TO	STATION	649.0402 TEMPORARY MARKING LINE PAINT 4-INCH DASHED WHITE[1] LF	649.0402 TEMPORARY MARKING LINE PAINT 4-INCH DOT WHITE[2] LF	649.0402 TEMPORARY MARKING LINE PAINT 4-INCH WHITE LF	649.0402 TEMPORARY MARKING LINE PAINT 4-INCH YELLOW LF	649.0802 TEMPORARY MARKING LINE PAINT 8-INCH DOT WHITE[2] LF	649.0802 TEMPORARY MARKING LINE PAINT 8-INCH WHITE LF	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF
1000	1	**MAINLINE**											
		IH 41/USH 45 NB											
			70ML+00	-	74ML+24	200	100	400	400	--	800	1,000	--
			74ML+24	-	170ML+64	4,825	138	9,650	9,650	--	900	14,475	900
		IH 41/USH 45 SB											
			74ML+24	-	170ML+64	4,875	63	9,750	9,750	--	800	14,625	1,300
			170ML+64	-	179ML+34	400	--	800	800	--	200	1,800	200
		SUBTOTAL				10,300	301	20,600	20,600	--	2,700	31,900	2,400
1000	2	**MAINLINE**											
		IH 41/USH 45 NB											
			74ML+24	-	170ML+64	10,050	275	16,150	12,700	--	2,850	27,250	3,575
		IH 41/USH 45 SB											
			74ML+24	-	170ML+64	4,825	325	9,900	9,650	--	2,750	14,838	3,400
		SUBTOTALS				14,875	600	26,050	22,350	--	5,600	42,088	6,975
		UNDISTRIBUTED				1,260	50	2,335	2,150	--	415	3,700	470
		SUBTOTAL				1,260	50	2,335	2,150	--	415	3,700	470
		TOTAL					121,471				8,715	77,688	9,845

[1] DASHED WHITE = 12.5-FT DASH, 37.5-FT SKIP
[2] DOT PATTERN WHITE = 3-FT LINE, 9-FT SKIP

PORTABLE SPEED TRAILER

CATEGORY	STAGE	LOCATION	SPV.0045.0401 PORTABLE SPEED TRAILER DAY
1000	1	**MAINLINE**	
		IH 41/USH 45 NB	90
		IH 41/USH 45 SB	90
		SUBTOTAL	180
1000	2	**MAINLINE**	
		IH 41/USH 45 NB	64
		IH 41/USH 45 SB	64
		SUBTOTAL	128
		UNDISTRIBUTED	32
		TOTAL	340

3

MISCELLANEOUS ITEMS

CATEGORY	ROADWAY	ITEM ID.	LOCATION	SPV.0060.2001 SALVAGE SOLAR POWERED HAR SIGN FLASHER ASSEMBLY EACH	SPV.0060.2002 INSTALL SALVAGED SOLAR POWERED HAR SIGN FLASHER ASSEMBLY EACH	SPV.0060.2003 REFOCUSING VEHICLE DETECTOR ASSEMBLY EACH
1000	IH 41/USH 45					
		EXISTING HAR (SIGN 15)	84ML+00, 72' LT	1	--	--
		REINSTALLED HAR (SIGN 15)	82ML+00, 72' LT	--	1	--
		EXSDS01	178ML+00, 78' LT	--	--	4
		EXCCTV-40-0040	151ML+59, 133' RT	--	--	4
		EXSDS02	130ML+88, 115' LT	--	--	4
		EXSDS03	130ML+71, 71' RT	--	--	4
		EXCCTV-40-0039	118ML+87, 99' LT	--	--	4
		TOTALS	TOTALS	1	1	20

FTMS UNDERGROUND EACH ITEMS

CATEGORY	ROADWAY	ITEM ID	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH	673.0105 COMMUNICATION VAULT TYPE 1 EACH	678.0300 FIBER OPTIC SPLICE EACH
1000	IH 41 / USH 45				
		EXMH101	--	--	74
		CV102	--	1	--
		CV201	--	1	--
		EXCV302	1	--	15
		EXMH401	--	--	74
		UNDISTRIBUTED			24
		TOTALS	1	2	187

3

FTMS CONDUIT, WIRE, AND CABLE

CATEGORY	ROADWAY	ITEM ID	LINEAR DISTANCE	655.0510 ELECTRICAL WIRE TRAFFIC SIGNALS 12 AWG LF	671.0122 CONDUIT HDPE 2-DUCT 2-INCH LF	671.0132 CONDUIT HDPE 3-DUCT 2-INCH LF	678.0006 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT LF	678.0072 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 72-CT LF	SPV.0090.2001 MULTICELL CONDUIT AND CABLE ADJUSTMENT LF
1000	IH 41 / USH 45								
		EXMH101 - CV102	225	235	--	--	--	325	--
		CV102 - CV201	775	785	775	--	--	875	--
		CV201 - EXCV301	880	890	--	880	--	980	--
		EXCV301 - EXCV302	130	--	--	--	--	230	--
		EXCV302 - EXCV303	210	--	--	--	--	310	--
		EXCV302 - EXPB301	30	--	--	--	80	--	--
		EXPB301 - EXCCTV-40-0040	20	--	--	--	30	--	--
		EXCV303 - EXMH401	1,970	--	--	--	--	2,070	--
		UNDISTRIBUTED	--	--	--	--	--	--	20
		TOTALS		1,910	775	880	110	4,790	20

LUMP SUM ITEMS

CATEGORY	ROADWAY	670.0100 FIELD SYSTEM INTEGRATOR LS	670.0200 ITS DOCUMENTATION LS	678.0500 COMMUNICATION SYSTEM TESTING LS
1000	IH 41 / USH 45			
	PROJECT	1	1	1
	TOTALS	1	1	1

TYPE I & TYPE II SIGN REMOVAL **IH 41 2010-14-70**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2601 REM SIGNS TYPE I [EA]	638.3100 REM STR STEEL SIGN SUP [EA]	REMARKS / NEW SIGN LOCATION
1R	NONE	TRAFFIC INFO TUNE RADIO TO 1610 AM			1	2	SEE FTMS PLANS FOR ELECTRICAL REMOVAL
2R	NONE	MILWAUKEE REGIONAL MED CTR			1	2	
3R	NONE	PARK AND RIDE AND SHERIFF'S SUBSTATION				2	REMOVE STEEL POSTS - SIGN IS BEING MOVED. SEE PERMANENT SIGN PLAN QTYS
4R	D12-2B		1	2			
5R	D10-5A		1				ON LIGHT POLE. BACK TO BACK SIGNS IS ONE PAY ITEM
6R	W4-2		1	1			
7R	W13-2		1	1			
8R	W12-2		1	1			
9R	E4-1A				1	2	
10R	W12-2		1	1			
11R	W12-2		1	1			
12R	D10-5A		1				ON LIGHT POLE. BACK TO BACK SIGNS IS ONE PAY ITEM
13R	E5-1A		1	2			
14R	W11-2		1	1			W16-9 IS PART OF REMOVAL
15R	W11-2		1	1			W16-9 IS PART OF REMOVAL
16R	NONE	RIGHT LANE MUST EXIT	1	2			
17R	R7-1D		1	1			
18R	W4-3L		1	1			
19R	W4-3L		1	1			
20R	W11-2		1	1			PLAQUE IS PART OF REMOVAL
21R	D10-5A		1				BACK TO BACK ON ONE POLE IS ONE PAY ITEM. ON LIGHT POLE
22R	E1-1A				1	2	
23R	E8-1				1		ON SIGN BRIDGE S-40-234
24R	D10-5A		1				ON LIGHT POLE. BACK TO BACK SIGNS IS ONE PAY ITEM

TYPE I & TYPE II SIGN REMOVAL **IH 41 2010-14-70**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2601 REM SIGNS TYPE I [EA]	638.3100 REM STR STEEL SIGN SUP [EA]	REMARKS / NEW SIGN LOCATION
25R	J4-3		1	2			
26R	NOT USED						
27R	NONE	CRASH INVESTIGATION SITE			1	2	
28R	D1-1		1	2			
29R	R2-1		1				BACK TO BACK SIGNS ON LIGHT POLE
30R	J4-1		1	1			
31R	W13-2B		1	1			
32R	E6-1				1		SIGN BRIDGE S-40-378
33R	D1-1		1	2			
34R	E5-1A		1	2			
35R	R5-1A		1				ON LIGHT POLE
36R	W1-6		1	1			
37R	W1-6		1	1			
38R	W4-1		1	1			
39R	W4-2L		1	1			
40R	R10-65R		1				ON SIGNAL POLE. R10-6 IS PART OF SAME ITEM
41R	R10-65L		1				ON SIGNAL POLE. R10-6 IS PART OF SAME ITEM
42R	R5-57		1				ON LIGHT POLE
43R	W13-2		1				ON LIGHT POLE
44R	R5-57		1				ON LIGHT POLE
45R	R5-1A		1				ON LIGHT POLE
46R	R5-1A		1	1			
47R	R3-3		1				ON LIGHT POLE
48R	D10-5A		1				ON LIGHT POLE. BACK TO BACK SIGNS ONE PAY ITEM
49R	W5-52		1	1			

TYPE I & TYPE II SIGN REMOVAL **IH 41 2010-14-70**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2601 REM SIGNS TYPE I [EA]	638.3100 REM STR STEEL SIGN SUP [EA]	REMARKS / NEW SIGN LOCATION
50R	W1-6		1	1			
51R	W4-1		1	1			
52R	W4-2L		1	1			
53R	R10-65C		1				ON S-40-281
54R	R10-65R		1				ON S-40-281
55R	R10-6		1				ON SIGNAL POLE
56R	R10-6		1				ON SIGNAL POLE
57R	W4-1		1	1			
58R	W3-1		1	1			
59R	R6-2L		1	1			
60R	R6-2R		1	1			
61R	R7-1D		1	1			
62R	R1-1		1	1			
63R	E6-1				1		ON SIGN BRIDGE S-40-354
64R	R5-54		1	1			
65R	R2-1		1	1			
66R	J4-3		1	2			
67R	E1-1A				1	2	
68R	R2-1		1	1			
69R	R2-1		1				ON LIGHT POLE
70R	W1-7		1	1			OTHER SIGNS ON SAME POST PART OF SAME PAY ITEM
71R	R1-1		1	1			
72R	R2-1		1	1			
73R	D12-2		1	2			

TYPE I & TYPE II SIGN REMOVAL **IH 41 2010-14-70**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2601 REM SIGNS TYPE I [EA]	638.3100 REM STR STEEL SIGN SUP [EA]	REMARKS / NEW SIGN LOCATION
74R	R7-1D		1	1			NO DOGS ALLOWED SIGN IS A MOVE SIGN - SEE PERMANENT SIGN PLAN
75R	R7-1D		1	1			NO DOGS ALLOWED SIGN IS A MOVE SIGN - SEE PERMANENT SIGN PLAN
76R	D10-5A		1				ON LIGHT POLE. BACK TO BACK SIGNS ONE PAY ITEM
77R	E6-1				1		ON SIGN BRIDGE S-40-355
78R	E6-51				1		ON SIGN BRIDGE S-40-355
79R	R1-1		1	1			
80R	W6-3		1				LIGHT POLE
81R	R2-1		1				LIGHT POLE
82R	R1-2		1	1			
83R	D1-1		1				ON BRIDGE
84R	D1-1		1				ON BRIDGE
85R	D10-5A		1				ON LIGHT POLE. BACK TO BACK SIGNS ONE PAY ITEM
86R	NONE	MOUNT MARY UNIVERSITY				2	sheet 7. sign is moved. See pemanent signing qtys
87R	D1-1		1				ON BRIDGE
88R	D1-1		1				ON BRIDGE
89R	E8-1				1		ON SIGN BRIDGE S-40-235
90R	D10-5A		1				ON LIGHT POLE. BACK TO BACK SIGNS ONE PAY ITEM
91R	E6-51				1	2	
92R	J4-1		1	1			
93R	NONE	HOSPITAL EXIT 43				2	MOVE SIGN . NEW STEEL POSTS - SEE PERM SIGN QTYS
94R	E4-1A				1	2	
95R	W1-2R		1	1			
96R	W1-2R		1				ON LIGHT POLE
97R	W3-3		1				ON LIGHT POLE

TYPE I & TYPE II SIGN REMOVAL **IH 41 2010-14-70**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2601 REM SIGNS TYPE I [EA]	638.3100 REM STR STEEL SIGN SUP [EA]	REMARKS / NEW SIGN LOCATION
98R	E5-1A		1	2			
99R	W4-2R		1	1			
100R	W4-2R		1	1			
101R	D10-5A		1				ON LIGHT POLE. BACK TO BACK SIGNS ONE PAY ITEM
102R	E8-1				1		ON SIGN BRIDGE S-40-236
103R	J4-1		1	3			
104R	R10-65L		1				ON SIGNAL POLE . OTHER SIGN ON SAME POST SAME PAY ITEM
105R	R10-65R		1				ON SIGNAL POLE . OTHER SIGN ON SAME POST SAME PAY ITEM
106R	D1-60		1	2			
107R	R3-8P		1	2			
108R	D9-2		1	1			
109R	R5-1		1	1			
110R	R5-1A		1				LIGHT POLE
111R	R1-1		1				ON SIGNAL POLE
112R	R1-1		1				ON SIGNAL POLE
113R	W12-1D		1	1			
114R	W4-1		1	1			
115R	W3-8		1				ON SIGNAL POLE
116R	R3-51L		1	2			
117R	R5-57		1				ON LIGHT POLE
118R	D12-2		1	2			
119R	E1-1A				1	2	ON LIGHT POLE
120R	NOT USED						
121R	NOT USED						
122R	NOT USED						

TYPE I & TYPE II SIGN REMOVAL **IH 41 2010-14-70**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2601 REM SIGNS TYPE I [EA]	638.3100 REM STR STEEL SIGN SUP [EA]	REMARKS / NEW SIGN LOCATION
123R	not used						
124R	NOT USED						
125R	NOT USED						
126R	NOT USED						
127R	NOT USED						
128R	NOT USED						
129R	NOT USED						
130R	NOT USED						
131R	NOT USED						
132R	NOT USED						
133R	NOT USED						
134R	NOT USED						
135R	NOT USED						
136R	NOT USED						
137R	J1-1		1				ON LIGHT POLE
138R	NOT USED						
139R	NOT USED						
140R	NOT USED						
141R	NOT USED						
142R	NOT USED						
143R	NOT USED						
144R	NOT USED						
145R	NOT USED						
146R	NOT USED						
147R	NOT USED						

TYPE I & TYPE II SIGN REMOVAL **IH 41 2010-14-70**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2601 REM SIGNS TYPE I [EA]	638.3100 REM STR STEEL SIGN SUP [EA]	REMARKS / NEW SIGN LOCATION
148R	NOT USED						
149R	NOT USED						
150R	NOT USED						
151R	NOT USED						
152R	NOT USED						
153R	NOT USED						
154R	NOT USED						
155R	R3-7R		1	1			
156R	J3-1		1	1			
157R	J3-1		1	1			
158R	R1-2		1				ON LIGHT POLE
159R	W3-8		1				ON SIGNAL POLE
160R	W3-8		1				ON SIGNAL POLE
161R	NOT USED						
162R	NOT USED						
163R	NOT USED						
164R	NOT USED						
165R	NOT USED						
166R	NOT USED						
167R	NOT USED						
168R	NOT USED						
169R	NOT USED						
170R	NOT USED						
171R	NOT USED						
172R	NOT USED						

TYPE I & TYPE II SIGN REMOVAL **IH 41 2010-14-70**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2601 REM SIGNS TYPE I [EA]	638.3100 REM STR STEEL SIGN SUP [EA]	REMARKS / NEW SIGN LOCATION
173R	J3-2		1	1			
174R	J3-2		1	1			
175R	NOT USED						
176R	R6-2R		1	1			
177R	NOT USED						
178R	J2-2		1				ON BRIDGE COLUMN
179R	NOT USED						
180R	J2-2		1	1			
181R	NOT USED						
182R	NOT USED						
183R	NOT USED						
184R	NOT USED						
185R	NOT USED						
186R	J3-2		1	1			
187R	NOT USED						
188R	W3-1		1	1			
189R	W12-1D		1	1			
190R	J3-2		1				ON LIGHT POLE
191R	R2-1		1				ON LIGHT POLE
192R	W3-8		1				ON SIGNAL POLE
193R	W3-8		1				ON SIGNAL POLE
194R	R5-1A		1	1			
195R	R3-3		1				ON LIGHT POLE
196R	R3-3		1				ON LIGHT POLE BACK TO BACK WITH R5-1 . ONE PAY ITEM
197R	W12-2		1	1			

TYPE I & TYPE II SIGN REMOVAL **IH 41 2010-14-70**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2601 REM SIGNS TYPE I [EA]	638.3100 REM STR STEEL SIGN SUP [EA]	REMARKS / NEW SIGN LOCATION
198R	W12-2		1	1			
199R	NOT USED						
200R	NOT USED						
201R	NOT USED						
202R	NOT USED						
203R	NOT USED						
204R	NOT USED						
205R	NOT USED						
206R	J1-2		1	1			
207R	J2-2		1	1			
208R	J2-4		1	2			
209R	W12-2		1				ON LIGHT POLE. OTHER SIGNS ON SAME POST. SAME PAY ITEM
210R	R3-7R		1				ON LIGHT POLE. OTHER SIGNS ON SAME POST. SAME PAY ITEM
211R	NOT USED						
212R	NOT USED						
213R	NOT USED	CHICAGO - MADISON - MILWAUKEE				3	REMOVE STEEL POSTS ,. SIGN IS MOVED PER PERM SIGN PLANS. Sheet 3
214R	W13-2B		1	1			
215R	NOT USED						
216R	NOT USED						
217R	NOT USED						
218R	NOT USED						
219R	NOT USED						
220R	NOT USED						
221R	NOT USED						
222R	NOT USED						

TYPE I & TYPE II SIGN REMOVAL **IH 41 2010-14-70**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2601 REM SIGNS TYPE I [EA]	638.3100 REM STR STEEL SIGN SUP [EA]	REMARKS / NEW SIGN LOCATION
223R	NOT USED						
224R	NOT USED						
225R	NOT USED						
226R	NOT USED						
227R	NOT USED						
228R	NOT USED						
229R	NOT USED						
230R	NOT USED						
231R	NOT USED						
232R	NOT USED						
233R	NOT USED						
234R	NOT USED						
235R	NOT USED						
236R	NOT USED						
237R	NOT USED						
238R	NOT USED						
239R	NOT USED						
240R	NOT USED						
241R	NOT USED						
242R	NOT USED						
243R	NOT USED						
244R	NOT USED						
245R	NOT USED						
246R	R1-1		1	1			
247R	R1-1		1	1			

TYPE I & TYPE II SIGN REMOVAL **IH 41 2010-14-70**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	638.2601 REM SIGNS TYPE I [EA]	638.3100 REM STR STEEL SIGN SUP [EA]	REMARKS / NEW SIGN LOCATION
248R	R1-1		1	1			
249R	R10-65C		1				ON SIGNAL POLE. OTHER SIGN ON SAME POST SAME PAY ITEM
250R	NOT USED						
251R	W3-8		1				ON SIGNAL POLE
252R	NOT USED						
253R	NOT USED						
254R	J3-1		1	1			
255R	E5-1A		1	2			sheet 4
256R	w1-6		1	1			sheet 5
257R	E5-1a		1	2			sheet 5
TOTALS			138	104	16	27	

TYPE I & II PERMANENT SIGNING

2010-14-70 IH 41 North leg resurfacing widening

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0622 POSTS WOOD 4" X 6" X 22' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W x H [FT.] x [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	637.1230 SIGNS TYPE I REFLECTIVE F [SF]	638.2101* MOVING SIGNS TYPE I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]	638.3215 REVISING SIGNS TYPE I NON-REMOVABLE [EA]	SPV.0060.6001 SIGN SUPPORT SPECIAL MOUNTING [EA]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR			
																									POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
1	D10-5A (5)	NORTH 41 45 MILE 41/0	21 X 72	10.500						1																	
2	D10-5A (5)	SOUTH 41 45 MILE 41/0	21 X 72	10.500							1																
3	D12-2B (5)		114 x 84	66.500					2																		
4	R2-1(5)	SPEED LIMIT 55	48 X 60	20.000						1		MOUNT ON TOP OF WALL															
5	D10-5A (5)	NORTH 41 45 MILE 41/2	21 X 72	10.500						1		MOUNT ON TOP OF WALL															
6	D10-5A (5)	SOUTH 41 45 MILE 41/2	21 X 72	10.500							5	MOUNT ON TOP OF WALL															
7	NOT USED																										
8	D10-5A (5)	SOUTH 41 45 MILE 41/4	21 X 72	10.500						1		MOUNT ON TOP OF WALL															
9	D10-5A (5)	NORTH 41 45 MILE 41/4	21 X 72	10.500							8	MOUNT ON TOP OF WALL															
10	R2-1(5)	SPEED LIMIT 55	48 X 60	20.000				2																			
11	NOT USED																										
12	NOT USED																										
13	JV4-1(5)		36 X 126	32.375					1																		
	MB3-1		36 X 18																								
	M1-1	IH 41	36 X 36																								
	M1-4	USH 41	36 X 36																								
	M1-4	USH 45	36 X 36																								
14	J3-1 (5)		36 X 84	21.000								ON UPRIGHT OF S-40-233															
	MB4-1		36 X 18																								
	M1-1	IH 94	36 X 36																								
	MB6-1		30 X 30																								
15	NONE	TRAFFIC INFO TUNE RADIO TO 1610 AM IMPORTANT MESSAGE WHEN FLASHING										MOVING TYPE I SIGN - REMOVAL OF POSTS ON REMOVAL PLAN. ELECTRICAL ON FTMS PLAN				1	A	1.2	68	600							
16	D10-5A(5)	SOUTH 41 45 41/6	21 X 72	10.500								MOUNT ON LIGHT POLE															
17	D10-5A(5)	NORTH 41 45 41/6	21 X 72	10.500								MOUNT ON LIGHT POLE															
18	NOT USED																										
18A	W13-2D (5)	25 MPH	48 X 90		30.000				2																		
19	E5-1A(5)	EXIT 42A (MODIFIED)	42 X 66	19.250					2																		
19A	E13-1P(MOD)	25 MPH	42 X 24		7.000						19	USE 8" CAP LETTERS															
20	W12-2(2S)		36 X 36		9.000					1																	
21	NOT USED																										
22	NOT USED																										
23	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT. BLINKER CHEVRON, SEE MISC QUANTITIES FOR BLINKER CHEVRONS													1		
24	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT. BLINKER CHEVRON, SEE MISC QUANTITIES FOR BLINKER CHEVRONS													1		
25	W1-8(4)		30 X 36		7.500			1				4 FOOT MOUNTING HEIGHT. BLINKER CHEVRON, SEE MISC QUANTITIES FOR BLINKER CHEVRONS															
26		PARK AND RIDE SHERIFF SUBSTATION										MOVE SIGN , REMOVAL OF STEEL POSTS - SEE REMOVAL QTYS				1	B	1.6	98	1000							
27	NONE	MILWAUKEE REGIONAL MEDICAL CENTER										MOVE SIGN , REMOVAL OF POSTS IN REMOVAL QTYS				1	D	1.8	112	1200							
28	W12-2(2S)		36 X 36		9.000					1																	
29	W12-2(2S)		36 X 36		9.000					1																	
30	W12-2(2S)		36 X 36		9.000					1																	
31	NOT USED																										
32	NOT USED																										
33	W1-8(4)		30 X 36		7.500			1				4 FOOT MOUNTING HEIGHT. BLINKER CHEVRON, SEE MISC QUANTITIES FOR BLINKER CHEVRONS															
34	NOT USED																										
35	NOT USED																										

* ADDTIONAL QUANTITIES SHOWN ELSEWHERE IN THE PLAN

SHEET 1 OF 12

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	MISCELLANEOUS QUANTITIES – PERMANENT SIGNING	SHEET: 281	E

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0622 POSTS WOOD 4" X 6" X 22' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W x H [FT.] x [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	637.1230 SIGNS TYPE I REFLECTIVE F [SF]	638.2101* MOVING SIGNS TYPE I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]	638.3215 REVISING SIGNS TYPE I NON-REMOVABLE [EA]	SPV.0060.6001 SIGN SUPPORT SPECIAL MOUNTING [EA]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR			
																								POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
36	NOT USED																										
37	R9-3A(2S)		24 X 24	4.000				1																			
38	NOT USED																										
39	NOT USED																										
40	W4-3R (2S)		36 X 36		9.000							LIGHT POLE															
41	W4-3R(2S)		36 X 36		9.000			1																			
42	D10-5A(5)	NORTH 41 45 MILE 41/8	21 X 72	10.500								LIGHT POLE															
43	D10-5A(5)	SOUTH 41 45 MILE 41/8	21 X 72	10.500								LIGHT POLE															
44	R2-1(5)	SPEED LIMIT 55	48 X 60	20.000								LIGHT POLE															
45	E8-1	NORTH AVE WEST 1/4 BURLEIGH ST 1 190- CAPITOL DR 2 1/4										MOUNT ON S-40-234 I BEAMS INCIDENTAL	20 X 7.5	150.00													
46	J4-3		108 X 36	27.000				2																			
	MB3-3		30 X 18																								
	M1-1	IH 41	36 X 36																								
	M3-3		30 X 18																								
	M1-4	USH 41	36 X 36																								
	M1-4	USH 45	36 X 36																								
47	D10-5A (5)	NORTH 41 45 MILE 42/0	21 X 72	10.500								LIGHT POLE															
48	D10-5A (5)	SOUTH 41 45 MILE 42/0	21 X 72	10.500								LIGHT POLE															
49	D4-52	CRASH INVESTIGATION SITE EXIT 40 A-B											13 X 10.5	136.50			B	1.6	98	1000							
50	NONE	41 894 45 BYPASS CHICAGO AHEAD 94 MILWAUKEE MADISON RIGHT										3 POSTS				1	D	2.7	168	1800							
51	M1-94	MAYFAIR RD HWY 100	84 X 36	21.000				2																			
52	E6-1	NORTH AVE WEST EXIT 20 MPH EXIT ONLY										MOUNT ON S-40-378 I BEAMS INCIDENTAL TO SIGN	14 10.5	147.00													
52A	E1-5P	EXIT 42B										MOUNT ON SIGN 52	10 X 2.5	25.00													
53	W13-2B(5)		48 X 90		30.000							MOUNT ON UPRIGHT OF S-40-378															
54	D10-5A(5)	SOUTH 41 45 MILE 42/2	21 X 72	10.500						1																	
55	D10-5A(5)	NORTH 41 45 MILE 42/2	21 X 72	10.500							54																
56	M1-94(5)	NORTH AVE, 2300 NORTH	78 X 30	16.250					2																		
57	E5-1B(5)	EXIT 42B (ARROW)	96 X 60	40.000					2																		
57A	E13-1P	20 MPH	96 X 24		16.000						57																
58	M1-94(5)	NORTH AVE, 2300 NORTH	78 X 30	16.250					2																		
59	R6-2L(2S)		24 X 30	5.000				1																			
60	E6-1	NORTH AVE EAST 100 MAYFAIR RD EXIT ONLY										MOUNT ON S-40-354 , I BEAMS INCIDENTAL	18 X 13	234.00													
60A			X								60		11 X 2.5	27.50													
61	W11-2(2M)		36 X 36		9.000			1																			
62	W16-7L (2M)		30 X 18		3.750						61																
63	R1-1(3)		36 X 36	7.460				1																			
64	R1-1(3)		36 X 36	7.460				1																			
65	R5-1C(3)		36 X 36	9.000							63	TRIM TO OCTAGON SHAPE															
66	R5-1C(3)		36 X 36	9.000							64	TRIM TO OCTAGON SHAPE															
67	W11-2(2M)		36 X 36		9.000							LIGHT POLE. RRFB - SEE OTHER QUANTITIES															
68	W16-9P(2M)		30 X 18		3.750						67																

* ADDTIONAL QUANTITIES SHOWN ELSEWHERE IN THE PLAN

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0622 POSTS WOOD 4" X 6" X 22' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	637.1230 SIGNS TYPE I REFLECTIVE F [SF]	638.2101* MOVING SIGNS TYPE I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]	638.3215 REVISING SIGNS TYPE I NON-REMOVABLE [EA]	SPV.0060.6001 SIGN SUPPORT SPECIAL MOUNTING [EA]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
69	R10-6 MOD	ARROW RIGHT	24 X 36	6.000								ON SIGNAL POLE															
70	NOT USED																										
71	R5-1A(3)		42 X 30	8.750								LIGHT POLE															
72	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT, BLINKER CHEVRONS - SEE SPECIAL QTYS AND SPECIAL DETAIL SHEET 5 OF 10											1				
73	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT, BLINKER CHEVRONS - SEE SPECIAL QTYS AND SPECIAL DETAIL SHEET 5 OF 10											1				
74	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT, BLINKER CHEVRONS - SEE SPECIAL QTYS AND SPECIAL DETAIL SHEET 5 OF 10											1				
75	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT, BLINKER CHEVRONS - SEE SPECIAL QTYS AND SPECIAL DETAIL SHEET 5 OF 10											1				
76	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT, BLINKER CHEVRONS - SEE SPECIAL QTYS AND SPECIAL DETAIL SHEET											1				
77	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT, BLINKER CHEVRONS - SEE SPECIAL QTYS AND SPECIAL DETAIL SHEET 5 OF 10											1				
78	R5-1A(3)		42 X 30	8.750				1																			
79	W4-3L(2S)		36 X 36		9.000			1																			
80	R3-3(2S)		36 X 36	9.000				1																			
81	R5-57(3)		36 X 36	9.000				1																			
82	NONE	YIELD TO BIKE LANE AHEAD	48 X 36	12.000							78																
83	W1-6(2S)		48 X 24		8.000																						
84	R10-6(2M)		24 X 36	6.000								ON SIGNAL POLE															
84A	R10-65R (2S)		24 X 30	5.000							84																
85	NOT USED																										
86	R10-65L (2S)		24 X 30	5.000								ON SIGNAL POLE															
87	W4-2L (2S)		36 X 36		9.000			1																			
88	R3-58(2S)		24 X 30	5.000								LIGHT POLE															
89	R1-1(2S)		30 X 30	5.180						1																	
90	W11-2(2M)		36 X 36		9.000							RRFB - SEE OTHER QUANTITIES FOR MOUNTING POLE															
91	W16-7L(2M)		30 X 18		3.750						90																
92	R10-25(2S)		9 X 12	0.750							90																
93	W11-2(2M)		36 X 36		9.000							LIGHT POLE - SEE RRFB QUANTITIES ELSEWHERE															
94	W16-7L(2M)		30 X 18		3.750						93																
95	R10-25(2S)		9 X 12	0.750							93																
96	W4-1L(2S)		36 X 36		9.000			1																			
97	R5-1(3)		36 X 36	9.000				1																			
98	R3-3(2S)		24 X 24	4.000							97																
99	R5-1A(3)		42 X 30	8.750				1																			
100	NONE	YIELD TO BIKE LANE AHEAD	48 X 36	12.000							99																
101	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT, BLINKER CHEVRONS - SEE SPECIAL QTYS AND SPECIAL DETAIL SHEET 5 OF 10											1				
102	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT, BLINKER CHEVRONS - SEE SPECIAL QTYS AND SPECIAL DETAIL SHEET 5 OF 10											1				
103	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT, BLINKER CHEVRONS - SEE SPECIAL QTYS AND SPECIAL DETAIL SHEET 5 OF 10											1				
104	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT, BLINKER CHEVRONS - SEE SPECIAL QTYS AND SPECIAL DETAIL SHEET 5 OF 10											1				
105	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT, BLINKER CHEVRONS - SEE SPECIAL QTYS AND SPECIAL DETAIL SHEET 5 OF 10											1				
106	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT, BLINKER CHEVRONS - SEE SPECIAL QTYS AND SPECIAL DETAIL SHEET 5 OF 10											1				
107	W1-8(4)		30 X 36		7.500					1		4 FOOT MOUNTING HEIGHT, BLINKER CHEVRONS - SEE SPECIAL QTYS AND SPECIAL DETAIL SHEET 5 OF 10											1				
108	W11-2 (2M)		36 X 36		9.000							SEE RRFB QTYS FOR SIGN SUPPORT															

* ADDTIONAL QUANTITIES SHOWN ELSEWHERE IN THE PLAN

3

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0622 POSTS WOOD 4" X 6" X 22' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W x H [FT.] x [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	637.1230 SIGNS TYPE I REFLECTIVE F [SF]	638.2101* MOVING SIGNS TYPE I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]	638.3215 REVISING SIGNS TYPE I NON-REMOVABLE [EA]	SPV.0060.6001 SIGN SUPPORT SPECIAL MOUNTING [EA]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
109	W16-9P(2M)		30 X 18		3.750						108																
110	R10-65L(MOD)(2M)		24 X 30	5.000								ON SIGNAL POLE															
111	R10-6(MOD)(2M)		24 X 36	6.000								ON SIGNAL POLE															
112	NOT USED																										
113	R10-6 (2M)		24 X 36	6.000								ON SIGNAL POLE															
114	W4-2R(2S)		36 X 36		9.000							LIGHT POLE															
115	W1-6(2S)		48 X 24		8.000			1																			
116	R5-57(3)		36 X 36	9.000								LIGHT POLE															
117	W4-3R(2S)		36 X 36		9.000			1																			
118	W3-1(2S)		36 X 36		9.000					1																	
119	NOT USED																										
120	NOT USED																										
121	NOT USED																										
122	R7-1D(2S)		18 X 24	3.000						1																	
123	R2-1(2S)	25 MPH	24 X 30	5.000						1																	
124	NONE	MERGING TRAFFIC AHEAD	66 X 48		22.000				2																		
125	D10-5A(5)	SOUTH 41 45 MILE 42/4	21 X 72	10.500								LIGHT POLE															
126	D10-5A(5)	NORTH 41 45 MILE 42/4	21 X 72	10.500								LIGHT POLE															
127	E6-51	BURLEIGH ST 1/2 MILE EXIT ONLY (DOWN ARROW)										S-40-871 SIGN BRIDGE I BEAMS INCIDENTAL	15 X 9	135.00													
127A	E1-5P	EXIT 43									127		9 X 2.5	22.50													
128	W9-62(5)											S-40-871 I BEAMS INCIDENTAL	6 X 7.5		45.00													
129	E6-1	NORTH AVE WEST TILT ARROW RIGHT										SIGN BRIDGE S-40-355 I BEAMS INCIDENTAL TO SIGN	14 X 9	126.00													
129A	E1-5P	EXIT 42B									129		10 X 2.5	25.00													
130	E6-1	NORTH AVE EAST MAYFAIR RD 1/2 MILE										SIGN BRIDGE S-40-355 I BEAMS INCIDENTAL TO SIGN	14 X 8	112.00													
130A	E1-5P	EXIT 42A									130		11 X 4	44.00													
131	NOT USED																							1			
132	M1-94	MEINECKE AVE	102 X 21	14.875								MOUNT ON BRIDGE												1			
133	M1-94	MEINECKE AVE	102 X 21	14.875								MOUNT ON BRIDGE												1			
134	W5-56(2S)		18 X 18	2.250				1				4 FOOT MOUNTING HEIGHT															
135	W5-56(2S)		18 X 18	2.250				1				4 FOOT MOUNTING HEIGHT															
136	W5-56(2S)		18 X 18	2.250				1				4 FOOT MOUNTING HEIGHT															
137	R2-1	25 MPH	24 X 30	5.000						1																	
138	R5-54(2S)		24 X 30	5.000						1																	
139	NOT USED																										
140	W1-7(2S)		48 X 24		8.000			1																			
141	R1-1(2S)		30 X 30	5.180						1																	
142	R2-1(2S)		24 X 30	5.000								LIGHT POLE															
143	R7-1D(2S)		18 X 24	3.000						1																	
144	R1-1(2S)		30 X 30	5.180						1																	
144A	R1-3P(2S)		18 X 6	0.750							144																
145	R1-1(2S)		30 X 30	5.180						1																	
145A	R1-3P(2S)		18 X 6	0.750							145																
146	R1-1(2S)		30 X 30	5.180						1																	
146A	R1-3P(2S)		18 X 6	0.750							146																
147	R1-1(2S)		30 X 30	5.180						1																	
147A	R1-3P(2S)		18 X 6	0.750							147																
148	W6-3(2S)		36 X 36		9.000							LIGHT POLE															
149	NONE	MOUNT MARY UNIVERSITY										MOVE SIGN - NEW STEEL POSTS REMOVAL OF EXISTING STEEL POSTS IN REMOVAL QTYS				1	A	1.2	68	600							

* ADDTIONAL QUANTITIES SHOWN ELSEWHERE IN THE PLAN

TYPE I & II PERMANENT SIGNING

2010-14-70 IH 41 North leg resurfacing widening

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0622 POSTS WOOD 4" X 6" X 22' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.] x H [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	637.1230 SIGNS TYPE I REFLECTIVE F [SF]	638.2101* MOVING SIGNS TYPE I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]	638.3215 REVISING SIGNS TYPE I NON-REMOVABLE [EA]	SPV.0060.6001 SIGN SUPPORT SPECIAL MOUNTING [EA]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
150	R2-1(5)	SPEED LIMIT 55	48 X 60	20.000				2																		
151	D10-5A(5)	SOUTH 41 45 MILE 42/6	21 X 72	10.500								LIGHT POLE														
152	D10-5A(5)	NORTH 41 45 MILE 42/6	21 X 72	10.500								LIGHT POLE														
153	R2-1(5)	SPEED LIMIT 55	48 X 60	20.000					2																	
154	E6-51	BURLEIGH ST										S-40-873	15 X 9	135.00												
		1/4 MILE										I BEAMS INCIDENTAL TO SIGN														
		EXIT ONLY (DOWN ARROW)																								
154A	E1-5P	EXIT 43									154		9 X 2.5	22.50												
155	R3-33R(5)		78 X 36	19.500				2																		
156	D10-5A (5)	NORTH 41 45 MILE 42/8	21 X 72	10.500								LIGHT POLE														
157	D10-5A (5)	SOUTH 41 45 MILE 42/8	21 X 72	10.500								LIGHT POLE														
158	R2-1(5)	SPEED LIMIT 55	48 X 60	20.000								LIGHT POLE														
159	J4-3(5)		108 X 54	40.500				2																		
	MB3-3		36 X 18																							
	M1-1	IH 41	36 X 36																							
	M3-3		36 X 18																							
	M1-4	USH 41	36 X 36																							
	M3-3		36 X 18																							
	M1-4	USH 45	36 X 36																							
160	R2-1(5)	SPEED LIMIT 55	48 X 60	20.000				2																		
161	NOT USED																									
162	NOT USED																									
163	D12-2B(5)		114 X 48	38.000					3																	
164	NOT USED																									
164A	NOT USED																									
165	E10-61	HOSPITAL EXIT 43										REMOVAL OF I BEAMS PART OF REMOVAL QTYS	12 X 4.5	54.00			A	1.2	68	600							
166	E6-1	BURLEIGH ST										S-40-872 SIGN BRIDGE	15 X 7	105.00												
		EXIT ONLY (TILT ARROW RIGHT)										I BEAMS INCIDENTAL TO SIGN														
166A	E1-5P	EXIT 43									166		9 X 2.5	22.50												
167	W1-2R(5)		48 X 48		16.000							LIGHT POLE														
168	W1-2R(5)		48 X 48		16.000				1																	
169	D10-5A(5)	NORTH 41 45 MILE 43/0	21 X 72	10.500						1																
170	D10-5A(5)	SOUTH 41 45 MILE 43/0	21 X 72	10.500							169															
171	E5-1A(5)	EXIT 43	72 X 60	30.000					2																	
172	W5-54(2M)		18 X 18		2.250						171															
173	W5-54(2M)		18 X 18		2.250						171															
174	W3-3(2S)		36 X 36		9.000							LIGHT POLE														
175	NOT USED																									
176	NOT USED																									
177	NOT USED																									
178	W4-2L(2S)		36 X 36		9.000			1																		
179	NOT USED																									
180	NOT USED																									
181	E8-1	NORTH AVE- MAYFAIR RD 1/4										MOUNT ON S-40-236	26 X 7.5	195.00												
		WATERTOWN PLK RD 1 1/2										I BEAMS INCIDENTAL TO SIGN														
		18 BLUEMOUND RD 2 1/2																								
182	D1-1(MOD)	BURLEIGH ST	6.5 X 2	13.000				2																		
		WEST - EAST WITH ARROWS																								
183	J3-1		24 X 45	7.500																						
	D9-2(2S)		24 X 24					1																		
	MB6-1(2S)		21 X 21																							
184	R5-1A(3)		42 X 24	7.000								LIGHT POLE														
185	R5-1A(3)		42 X 24	7.000							183															
186	R1-1F(3)		36 X 36			7.460						SIGNAL POLE														
187	R1-1F(3)		36 X 36			7.460						SIGNAL POLE														
188	R5-1C(3)		36 X 36	9.000							186	CLIPPED CORNERS														
189	R5-1C(3)		36 X 36	9.000							187	CLIPPED CORNERS														

* ADDTIONAL QUANTITIES SHOWN ELSEWHERE IN THE PLAN

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0622 POSTS WOOD 4" X 6" X 22' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W x H [FT.] x [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	637.1230 SIGNS TYPE I REFLECTIVE F [SF]	638.2101* MOVING SIGNS TYPE I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]	638.3215 REVISING SIGNS TYPE I NON-REMOVABLE [EA]	SPV.0060.6001 SIGN SUPPORT SPECIAL MOUNTING [EA]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
190	R5-1A(2S)		36 X 24	6.000							188																
191	R5-1A(2S)		36 X 24	6.000							189																
192	W3-8(2S)		48 X 48		16.000							ON SIGNAL POLE															
193	W3-8(2S)		48 X 48		16.000							ON SIGNAL POLE															
194	J3-1(2S)		24 X 81	13.500					1																		
	MB3-3		24 X 12																								
	M1-1	IH 41	24 X 24																								
	M1-4	USH 45	24 X 24																								
195	W11-2(2S)		30 X 30		6.250			1																			
196	W16-7L(2S)		24 X 12		2.000						195																
197	R1-2(2M)		48 X 42	7.000				1																			
198	R5-57(3)		36 X 36	9.000								LIGHT POLE															
199	D12-2A(2)		60 X 42	17.500				2																			
200	E1-1A	NORTH AVE- MAYFAIR RD 1/4 MAYFAIR RD 3/4 MILE										REMOVAL OF EXISTING STEEL POSTS IN REMOVA	17 X 9.5	161.50			B	1.6	98	1000							
200A	E1-5P	EXIT 42 A-B									200		13 x 2.5	32.50													
201	R3-51L(2S)		48 X 78	26.000					2																		
202	R5-57(3)		36 X 36	9.000					1																		
203	W4-3R(5)		48 X 48		16.000			1																			
204	R3-8P(2S)		54 X 30	11.250				2																			
205	R3-8P(2S)		54 X 30	11.250				2																			
206	R10-6 MOD(2M)	ARROW DOWN RIGHT	24 X 36	6.000				1																			
207	R10-6(2M)		24 X 36	6.000						1		MOUNT ON SIGNAL POLE												1			
207A	R10-65R		24 X 36	6.000								MOUNT ON SIGNAL POLE															
208	NOT USED																										
209	NOT USED																										
210	NOT USED																										
211	NOT USED																										
212	NOT USED																										
213	NOT USED																										
214	NOT USED																										
215	NOT USED																										
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217	NOT USED																										
218	NOT USED																										
219	NOT USED																										
220	NOT USED																										
220a	NOT USED																										
221	NOT USED																										
222	NOT USED																										
222A	NOT USED																										
223	NOT USED																										
224	NOT USED																										
225	NOT USED																										
226	NOT USED																										
227	NOT USED																										
228	NOT USED																										
229	NOT USED																										
230	NOT USED																										
231	NOT USED																										
232	NOT USED																										
233	NOT USED																										
234	NOT USED																										
235	J1-1(2S)		24 X 63	10.500				1																			
	MB2-1		21 X 15																								
	M1-1	IH 41	24 X 24																								
	M1-4	USH 45	24 X 24																								

* ADDTIONAL QUANTITIES SHOWN ELSEWHERE IN THE PLAN

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0622 POSTS WOOD 4" X 6" X 22' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W x H [FT.] x [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	637.1230 SIGNS TYPE I REFLECTIVE F [SF]	638.2101* MOVING SIGNS TYPE I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]	638.3215 REVISING SIGNS TYPE I NON-REMOVABLE [EA]	SPV.0060.6001 SIGN SUPPORT SPECIAL MOUNTING [EA]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR			
																									POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
236	R10-50(2S)		30 X 36	7.500								ON SIGNAL ARM . BRACKET INCIDENTAL																
237	NOT USED		30 X 30	6.250						1																		
237A	NOT USED	AT RAMP	30 X 12	2.500							237																	
238	NOT USED	N 116TH ST	72 X 18	9.000								MOUNT ON SIGNAL ARM. MOUNTING BRACKET INCIDENTAL																
239	J1-1(2S)		24 X 63	10.500				1																				
	MB2-1		21 X 15																									
	M1-1	IH 41	24 X 24																									
	M1-4	USH 45	24 X 24																									
240	NOT USED																											
241	NOT USED																											
242	NOT USED																											
243	NOT USED																											
244	NOT USED																											
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265	NOT USED																											
266	NOT USED																											
266A	NOT USED																											
267	NOT USED																											
268	NOT USED																											
268A	NOT USED																											
269	NOT USED																											
270	NOT USED																											
271	NOT USED																											
272	NOT USED																											
273	NOT USED																											
274	NOT USED																											
275	D16-1R	NORTH 41 45, ONLY, ARROW										s-40-969, I BEAMS INCIDENTAL	6 X 6	36.00													
276	R11-54F(2S)		48 X 30			10.000			2																			
277	D1-3	MILWAUKEE, MADISON BELOIT (ARROW RIGHT)	72 X 36	18.000							276																	
278	W11-2(2M)		36 X 36		9.000							SEE RRFB MISC QUANTITIES FOR POST. SHEET 10 OF 10 FOR MOUNTING																
279	W16-7L(2M)		30 X 18		3.750						278																	
280	R10-25(2S)		9 X 12	0.750							278																	
281	W11-2(2M)		36 X 36		9.000							SEE RRFB MISC QUANTITIES FOR POST. SHEET 10 OF 10 FOR MOUNTING																
282	W16-7R(2M)		30 X 18		3.750						281																	

* ADDTIONAL QUANTITIES SHOWN ELSEWHERE IN THE PLAN

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0622 POSTS WOOD 4" X 6" X 22' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W x H [FT.] x [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	637.1230 SIGNS TYPE I REFLECTIVE F [SF]	638.2101* MOVING SIGNS TYPE I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]	638.3215 REVISING SIGNS TYPE I NON-REMOVABLE [EA]	SPV.0060.6001 SIGN SUPPORT SPECIAL MOUNTING [EA]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
283	R10-25(2S)		9 X 12	0.750							281																
284	R1-2(3)		48 X 42	7.000				1																			
285	R11-54F(2S)		48 X 30			10.000		2																			
286	W3-8(2S)		48 X 48		16.000							ON SIGNAL POLE															
287	W3-8(2S)		48 X 48		16.000							ON SIGNAL POLE															
288	W12-1D(2S)		24 X 24		4.000			1				4 FOOT MOUNTING HEIGHT															
289	NOT USED																										
290	D1-2	FOND DU LAC, WEST BEND ARROW AHEAD	84 X 24	14.000				2																			
291	NOT USED																										
292	NOT USED																										
293	NOT USED																										
294	NOT USED																										
295	NOT USED																										
296	NOT USED																										
297	NOT USED																										
298	NOT USED																										
299	NOT USED																										
300	R5-2(2S)		24 X 24	4.000						1																	
301	R7-1D(2S)		18 X 24	3.000						1																	
302	NOT USED																										
303	NOT USED																										
304	NOT USED																										
305	NOT USED																										
306	NOT USED																										
307	NOT USED																										
308	NOT USED																										
309	NOT USED																										
310	NOT USED																										
311	JV2-1(2S)		24 X 84	14.000																							
	MB3-3		24 X 12																								
	M1-1	IH 41	24 X 24																								
	M1-4	USH 45	24 X 24																								
	MB4-20R		24 X 24																								
312	JV2-1(2S)		24 X 84	14.000					1																		
	MB3-1		24 X 12																								
	M1-1	IH 41	24 X 24																								
	M1-4	USH 45	24 X 24																								
	MB4-20L		24 X 24																								
313	S1-1(2S)		36 X 36		6.750					1																	
313A	R2-6P (2S)		24 X 18	3.000							313																
314	S16-9P(2S)		30 X 18		3.750						313																
315	W5-56(2S)		18 X 18	2.250				1				4 FOOT MOUNTING HEIGHT															
316	W5-56(2S)		18 X 18	2.250				1				4 FOOT MOUNTING HEIGHT															
317	W5-56(2S)		18 X 18	2.250				1				4 FOOT MOUNTING HEIGHT															
318	NOT USED																										
319	NOT USED																										
320	NOT USED																										
321	W11-2(2M)		36 X 36		9.000							RRFB MOUNTING SEE SHEET 10 OF 10 DETAILS AND RRFB QUANTITIES ELSEWHERE															
322	W16-7R(2M)		30 X 18		3.750						321																
323	R10-25(2S)		9 X 12	0.750							321																
324	W11-2(2M)		36 X 36		9.000							RRFB MOUNTIN SEE DETAIL SHEET 10 OF 10 DETAILS AND RRFB QUANTITIES ELSEWHERE														
325	W16-7L(2M)		30 X 18		3.750						324																
326	R10-25(2S)		9 X 12	0.750							324																
326A																											
327	NOT USED																										

* ADDTIONAL QUANTITIES SHOWN ELSEWHERE IN THE PLAN

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0622 POSTS WOOD 4" X 6" X 22' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W x H [FT.] x [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	637.1230 SIGNS TYPE I REFLECTIVE F [SF]	638.2101* MOVING SIGNS TYPE I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]	638.3215 REVISING SIGNS TYPE I NON-REMOVABLE [EA]	SPV.0060.6001 SIGN SUPPORT SPECIAL MOUNTING [EA]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR			
																								POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
328	NOT USED																										
329	NOT USED																										
330	NOT USED																										
331	NOT USED																										
332	JV22-1(2S)		24 X 81	13.500					1																		
	MB3-1		24 X 12																								
	M1-1	IH 41	24 X 24																								
	M1-4	USH 45	24 X 24																								
	MB5-1L		21 X 21																								
333	D1-2	FOND DU LAC, WEST BEND ARROW LEFT	84 X 24	14.000				2																			
334	R7-1D(2S)		18 X 24	3.000						1																	
335	NOT USED																										
336	NOT USED																										
337	NOT USED																										
338	NOT USED																										
339	D1-3	MILWAUKEE, MADISON, BELOIT ARROW LEFT	72 X 36	18.000				2																			
340	R6-2R(2S)		18 X 24	3.000				1																			
341	R3-1(2S)		24 X 24	4.000				1																			
342	NOT USED																										
343	R11-54F(2S)		48 X 30			10.000		2																			
344	JV23-1(2S)		24 X 81	13.500																							
	MB3-3		24 X 12																								
	M1-1	IH 41	24 X 24																								
	M1-4	USH 45	24 X 24																								
	MB6-1		21 X 21																								
345	NOT USED																										
346	NOT USED																										
347	R5-1(2S)		30 X 30	6.250							341																
348	R11-54F(2S)		48 X 30			10.000		2																			
349	NOT USED																										
350	NOT USED																										
351	NOT USED																										
352	NOT USED																										
353	NOT USED																										
354	NOT USED																										
355	NOT USED																										
356	NOT USED																										
357	NOT USED																										
358	NOT USED																										
359	NOT USED																										
360	NOT USED																										
361	NOT USED																										
362	NOT USED																										
363	NOT USED																										
364	NOT USED																										
365	NOT USED																										
366	W12-1D(2S)		24 X 24		4.000			1				4 FOOT MOUNTING HEIGHT															
367	NOT USED																										
368	NOT USED																										
369	NOT USED																										
370	R11-54F(2S)		48 X 30			10.000		2																			
371	R11-54F(2S)		48 X 30			10.000		2																			
372	R10-25(2S)		9 X 12	0.750							373																
373	W11-2(2M)		36 X 36		9.000							SEE RRFB MISC QTYS FOR POLE AND SHEET 10 OF 10 DETAILS															
374	W16-7L(2M)		30 X 18		3.750						373																
375	R10-25(2S)		9 X 12	0.750							376																

* ADDTIONAL QUANTITIES SHOWN ELSEWHERE IN THE PLAN

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0622 POSTS WOOD 4" X 6" X 22' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W x H [FT.] x [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	637.1230 SIGNS TYPE I REFLECTIVE F [SF]	638.2101* MOVING SIGNS TYPE I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]	638.3215 REVISING SIGNS TYPE I NON-REMOVABLE [EA]	SPV.0060.6001 SIGN SUPPORT SPECIAL MOUNTING [EA]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR			
																									POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
376	W11-2(2M)		36 X 36		9.000							SEE RRFB MISC QTYS FOR POLE AND SHEET 10 OF 10 DETAILS																
377	W16-7L (2M)		30 X 18		3.750						376																	
378																												
378A																												
379																												
380	R1-2(3)		48 X 42	7.000				1																				
381	R6-2L(2M)		30 X 36	7.500								ON SIGNAL POLE																
382	W4-1R(2S)		36 X 36		9.000							ON SIGNAL POLE																
383	R7-1D(2S)		18 X 24	3.000						1																		
384	NOT USED																											
385	JV3-1(2S)		24 X 81	13.500					1																			
	MB3-1		24 X 12																									
	M1-1	IH 41	24 X 24																									
	M1-4	USH 45	24 X 24																									
	MB6-1		21 X 21																									
386	NOT USED																											
387	NOT USED																											
388	NOT USED																											
389	R4-7(2S)		24 X 30	5.000						1																		
390	NOT USED																											
391	D1-65	MAYFAIR RD, NEXT SIGNAL	60 X 21	8.750						2																		
392	J3-2(2S)		48 X 57	19.000				1																				
	M3-1		24 X 12																									
	M1-6	STH 100	24 X 24																									
	M6-1		21 X 21																									
	M3-3		24 X 12																									
	M1-6	STH 100	24 X 24																									
	M6-1		21 X 21																									
393	NOT USED																											
394	NOT USED																											
395	NOT USED																											
396	NOT USED																											
397	J1-1(2S)		24 X 63	10.500				1																				
	MB2-1		21 X 15																									
	M1-1	IH 41	24 X 24																									
	M1-4	USH 45	24 X 24																									
398	R3-7R(3)		36 X 36	9.000							399																	
399	NOT USED																											
400	NOT USED																											
401	D16-1	NORTH 41 45 ONLY ARROW										ON OVERHEAD SIGN SUPPORT S-40-789 I BEAMS INCIDENTAL	6 X 6	36.00												
402	JV22-1(2S)		24 X 84	14.000								ON UPRIGHT OF S-40-799																
	MB3-3		24 X 12																									
	M1-1	IH 41	24 X 24																									
	M1-4	USH 45	24 X 24																									
	MB4-20L		24 X 24																									
403	NOT USED																											
404	NOT USED																											
405	NOT USED																											
406	JV22-1(2S)		24 X 84	14.000					1																			
	MB3-3		24 X 12																									
	M1-1	IH 41	24 X 24																									
	M1-4	USH 45	24 X 24																									
	MB4-20L		24 X 24																									
407	W11-2(2M)		36 X 36		9.000							SEE RRFB MISC QTYS FOR POST AND SHEET 10 OF 10 FOR MOUNTING																

* ADDTIONAL QUANTITIES SHOWN ELSEWHERE IN THE PLAN

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0622 POSTS WOOD 4" X 6" X 22' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W x H [FT.] x [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	637.1230 SIGNS TYPE I REFLECTIVE F [SF]	638.2101 MOVING SIGNS TYPE I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]	638.3215 REVISING SIGNS TYPE II NON-REMOVABLE [EA]	SPV.0060.6001 SIGN SUPPORT SPECIAL MOUNTING [EA]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR: POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
408	W16-9P(2M)		30 X 18		3.750						407																
409	D16-1R	NORTH 41 45 ONLY WITH DOWN ARROW										MOUNT ON S-40-799, I BEAMS INCIDENTAL	6 X 6	36.00													
410	R3-7R(3)		36 X 36	9.000						1																	
411	NOT USED																										
412	NOT USED																										
413	NONE	NORTH AVE WEST, ARROW RIGH	60 X 36	15.000				2																			
414	J4-1(5)		108 X 54	40.500				2																			
	MB3-1		36 X 18																								
	M1-1	IH 41	36 X 36																								
	M3-1		36 X 18																								
	M1-4	USH 41	36 X 36																								
	M3-1		36 X 18																								
	M1-4	USH 45	36 X 36																								
415	NOT USED																										
416	M1-94	MAYFAIR RD	84 X 36	21.000				1				SHEET 2 MOUNT ON SIDE OF WALL												1			
417	D1-2	FOND DU LAC, WEST BEND ARROW RIGHT	48 X 36	12.000				2				HANG OVER SIDEWALK , 7 FOOT MOUNTING HEIGHT															
418	W1-6(2S)		48 X 24		8.000			1				SHEET 5															
419	R2-1(2S)	25 MPH	24 X 30	5.000								LIGHT POLE. SHEET 6															
420	R2-1(5)	SPEED LIMIT 55	48 X 60	20.000				2																			
421	R3-58(2S)		24 X 30	5.000				1																			
422	S1-1(2S)		36 X 36		6.750							LIGHT POLE, SHEET 12															
422A	S16-7R(2S)		30 X 18		3.750						422																
423	NOT USED																										
423A	NOT USED																										
424	NOT USED																										
425	R1-1F(3)		36 X 36			7.460						SIGNAL POLE															
426	NOT USED																										
426A	NOT USED																										
427	NOT USED																										
428	NOT USED																										
429	NOT USED																										
430	NOT USED																										
431	NOT USED																										
432	NOT USED																										
433	E8-1	100 MAYFAIR RD 1/4 NORTH AVE 3/4 BURLEIGH ST										MOUNT ON S-40-233 , I BEAMS INCIDENTAL SHEET 1	19 x 7.5	142.50													
434	E8-1	WATERTOWN PLK RD 1/4 18 BLUEMOUND RD 1 94 894 1/1/2										MOUNT ON S-40-233, I BEAMS INCIDENTAL SHEET 1	22 x 7.5	165.00													
435	R3-33R(5)		78 X 36	19.500					2			SHEET 1															
436	E4-1A	100 NORTH MAYFAIR RD NORTH AVE EAST tilt arrow right										SHEET 2	25 x 11	275.00			B	1.6	98	1000							
436A	E1-5P	EXIT 42A									436		11 x 2.5	27.50													
437	R3-33R(5)		78 X 36	19.500					2			SHEET 2															
438	E1-1A	NORTH AVE WEST 1/2 MILE										SHEET 3	16 x 9	144.00			B	1.6	98	1000							
438A	E1-5P	EXIT 42B											10 x 2.5	25.00													
439	E5-1A (5)		96 X 60	40.000					3			SHEET 4															
439A	E13-1P	25 MPH	96 X 24		16.000						439																
440	W13-3A(5)	25 MPH	48 X 84	28.000								ON UPRIGHT OF SIGN BRIDGE S-40-354. SHEET 5															
441	E5-1B	EXIT 42B	96 X 60	40.000					2																		

3

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II REFLECTIVE F [SF]	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING [SF]	638.2102 MOVING SIGNS TYPE II [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	634.0622 POSTS WOOD 4" X 6" X 22' [EA]	634.0816 POSTS TUBULAR STEEL 2" X 2" X 16' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W x H [FT.] x [FT.]	637.1220 SIGNS TYPE I REFLECTIVE SH [SF]	637.1230 SIGNS TYPE I REFLECTIVE F [SF]	638.2101 MOVING SIGNS TYPE I [EA]	STEEL POST TYPE	636.0100 SIGN SUPPORTS CONCRETE MASONRY [CY]	636.0500 SIGN SUPPORTS STEEL REINF. [LBS]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]	635.0300 SIGN SUPPORTS REPLACING BASE CONN. BOLTS [EA]	638.3215 REVISING SIGNS TYPE II NON-REMOVABLE [EA]	SPV.0060.6001 SIGN SUPPORT SPECIAL MOUNTING [EA]	INFO ONLY-POST LENGTHS TO BE VERIFIED BY CONTRACTOR			
																									POST NO 1 LENGTH [FT]	POST NO 2 LENGTH [FT]	OFF SET DISTANCE [FT]	DIST BTWN POSTS "S" [FT]
441A	W5-54(2M)		18 X 18		2.250						441																	
441B	W5-54(2M)		18 X 18		2.250						441																	
442	NONE	NORTH AVE WEST NEXT RIGHT											16 x 8.5	136.00			B	1.6	98	1000								
442A	E1-5P	EXIT 42B									442		10 x 2.5	25.00														
443	E8-1	BURLEIGHT ST 1/4 190 CAPITOL DR 1 1/2 EE HAMPTON AVE 2 1/2										MOUNT ON S-40-235, I BEAMS INCIDENTAL	22 x 7.5	165.00														
445	R10-65C (2S)		24 X 30	5.000								MOUNT ON SIGNAL POLE																
446	R10-6(2M)(MOD)	ARROW DOWN RIGHT	24 X 36	6.000								MOUNT ON SIGNAL POLE																
447	R3-7R(3)		36 X 36	9.000						1																		
448	J3-2(2S)		48 X 60	20.000				2																				
	MB3-1		24 X 12																									
	M1-1	IH 41	24 X 24																									
	MB4-20L		24 X 24																									
	M1-1		24 X 12																									
	M1-4	USH 45	24 X 24																									
	M4-20L		24 X 24																									
449	J2-2(2S)		48 X 57	19.000				1																				
	MB3-3		24 X 12																									
	M1-1	IH 41	24 X 24																									
	MB5-1L		21 X 21																									
	M3-3		24 X 12																									
	M1-4	USH 45	24 X 24																									
	M5-1L		21 X 21																									
450	J3-2(2S)		48 X 57	19.000																								
	MB3-1		24 X 12																									
	M1-1	IH 41	24 X 24																									
	MB6-2		21 X 21																									
	M3-1		24 X 12																									
	M1-4	USH 45	24 X 24																									
	M6-2		21 X 21																									
451	R3-33R(5)		78 X 36	19.500					2																			
452	R10-65C		24 X 30	5.000								MOUNT ON S-40-281 EXISTING STRUCTURE, BRACKET INCIDENTAL. SHEET 5															
453	R10-65R		24 X 39	5.000								MOUNT ON S-40-281 EXISTING STRUCTURE, BRACKET INCIDENTAL, SHEET 5															
454	W4-2R(5)		48 X 48		16.000				1																			
455	W4-3L(2S)		36 X 36		9.000				2			LIGHT POLE. SHEET 8																
456		PLAQUE GREEN SH SHEETING										BLANK COVER PLAQUE	20 X 3	60.00								1						
UNDISTRIBUTED				--	--	--	3	5	--	--	--	--		--	--	1	--	--	200	1000	2		--	--	--	--	--	
TOTALS				1922.875	760.750	82.380	3	98	47	49	--	--		3185.500	45.000	6	--	17.7	1272	11800	2	1	20					

Rectangular Rapid Flash Beacon - MISC QUANTITIES						2010-14-70 IH 41 North Leg
LOCATION		Rectangular Rapid	Rectangular Rapid	Rectangular Rapid	Rectangular Rapid	Rectangular Rapid
		Flash Beacon	Flash Beacon	Flash Beacon	Flash Beacon	Flash Beacon
		(RRFB) System Right Advanced SB exit ramp to North Ave	(RRFB) System Station Right NB exit ramp at North Ave	(RRFB) System Left NB exit ramp at North Ave	(RRFB) System right advance NB exit ramp at North Ave	(RRFB) System right SB exit ramp at North Ave
		L.S	L.S	L.S	L.S	L.S
		SPV.0105.6001	SPV.0105.6002	SPV.0105.6003	SPV.0105.6004	SPV.0105.6005
right advance at SB exit ramp to North Ave		1				
Right NB exit ramp at North Ave			1			
Left NB exit ramp at North Ave				1		
right advance NB exit ramp to North Ave					1	
right SB exit Ramp at North Ave						1
TOTAL		1	1	1	1	1

Rectangular Rapid Flash Beacon - MISC QUANTITIES							2010-14-70 IH 41 North Leg
LOCATION		Rectangular Rapid	Rectangular Rapid	Rectangular Rapid	Rectangular Rapid	Rectangular Rapid	Rectangular Rapid
		Flash Beacon	Flash Beacon	Flash Beacon	Flash Beacon	Flash Beacon	Flash Beacon
		(RRFB) Systemleft SB exit ramp at North Ave	(RRFB) System Station right NB entrance ramp from North Ave	(RRFB) System left NB entrance ramp from North Ave	(RRFB) System right at North Ave WB approaching ramp	(RRFB System right North Ave EB at 41 North Ramp	(RRFB) System Left North Ave EB at 41 North Ramp
		L.S	L.S	L.S	L.S	L.S	L.S
		SPV.0105.6006	SPV.0105.6007	SPV.0105.6008	SPV.0105.6009	SPV.0105.6010	SPV.0105.6011
left SB exit ramp at North ave		1					
right NB entance ramp from North Ave			1				
left NB entrance ramp from North Ave				1			
right at north Ave WB approaching ramp					1		
right North Ave EB at 41 North Ramp						1	
left North Ave EB at 41 North Ramp							1
TOTAL		1	1	1	1	1	1

SHEET 1 OF 1

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	MISCELLANEOUS QUANTITIES - RECTANGLE RAPID FLASH BEACON	SHEET: 293	E

Chevron Solar powered system					2010-14-70
LOCATION		Chevron Solar Powered Sign	Chevron Solar Powered Sign	Chevron Solar Powered Sign	
		System Assembly	System Assembly	System Assembly	
		Ramp NB to EB	Ramp NB to WB	Ramp SB to EB	
		L.S	L.S	L.S	
		SPV.0105.6012	SPV.0105.6013	SPV.0105.6014	
Exit Ramp Northbound to Eastbound North Ave		1			
Exit Ramp Northbound to Westbound North Ave			1		
Exit Ramp Southbound to Eastbound North Ave				1	

3

3

SHEET 1 OF 1

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CHEVRON SOLAR POWERED QUANTITIES	SHEET: 294	E

OVERHEAD SIGN SUPPORTS - MISC QUANTITIES 2010-14-70

LOCATION	OVERHEAD SIGN SUPPORT STRUCTURE S-40-799 L.S. 641.8100.0004	OVERHEAD SIGN SUPPORT STRUCTURE S-40-798 L.S. 641.8100.0005	OVERHEAD SIGN SUPPORT STRUCTURE S-40-969 L.S. 641.8100.0006
NORTH AVE WB ADVANCE SIGN TO NB ENTRANCE RAMP	1		
NORTH AVE WB AT IH 41 NB ENTRANCE RAMP		1	
NORTH AVE EB AT SB ENTRANCE RAMP			1
TOTALS	1	1	1

SHEET 1 OF 1

3

LIGHTING - REMOVAL

204.0195	REMOVING CONCRETE BASES
204.9060.S.1001	REMOVING SIGN LIGHTING
653.0905	REMOVING PULL BOXES
SPV.0060.1001	LAMP DISPOSAL HIGH INTENSITY DISCHARGE*
SPV.0060.1002	LIGHTING UNITS SALVAGED

CATEGORY	STAGE	SYSTEM	DESCRIPTION	LOCATION	OFFSET	204.0195 REMOVING CONCRETE BASES	204.9060.S.1001 REMOVING SIGN LIGHTING	653.0905 REMOVING PULL BOXES	SPV.0060.1001* LAMP DISPOSAL HIGH INTENSITY DISCHARGE	SPV.0060.1002 LIGHTING UNITS SALVAGED	COMMENTS
						EACH	EACH	EACH	EACH	EACH	
1000	1	HL-40-UC	DUC3/CUC3	83ML+76.0	C/L	--	1	--	2	--	SIGN LIGHTING ONLY
			DUC1/CUC1	88ML+92.1	C/L	1	--	--	2	1	--
			BUC6/AUC6	104ML+44.5	C/L	1	--	--	2	1	--
		HL-40-NA	GNA1/HNA1	106ML+98.3	C/L	1	--	--	2	1	--
			GNA3/HNA3	111+99.5ML	C/L	--	1	--	1	--	SIGN LIGHTING ONLY
			GNA5/HNA5	116ML+98.1	C/L	1	--	--	2	1	--
			HNA6/GNA6	119ML+48.0	C/L	1	--	--	2	1	--
			EX. LPB-NA-12	120ML+52.6	C/L	--	--	1	--	--	--
			S-40-378	121ML+00.9	76.5' RT	--	1	--	1	--	SIGN LIGHTING ONLY
			S-40-354	126ML+34.5	75.6' LT	--	1	--	1	--	SIGN LIGHTING ONLY
			HNA10/GNA10	129ML+79.1	C/L	1	--	--	2	1	--
			EX. LPB-NA-3	130ML+69.2	C/L	--	--	1	--	--	--
			ANA3/BNA3	132ML+08.2	C/L	1	--	--	2	1	--
			S-40-355	137ML+76.1	C/L	--	1	--	2	--	SIGN LIGHTING ONLY
		HL-40-BS	CBS11/DBS11	151ML+93.1	C/L	1	--	--	2	1	--
			S-40-235 (DBS10/CBS10)	154ML+67.5	C/L	--	1	--	3	1	MOUNTED ON SIGN STRUCTURE
			CBS9/DBS9	157ML+41.5	C/L	1	--	--	2	1	--
			S-40-236 (DBS8/CBS8)	160ML+18.6	C/L	--	1	--	3	1	MOUNTED ON SIGN STRUCTURE
			DBS7/CBS7	162ML+90.6	C/L	1	--	--	2	1	--
1000	1				TOTAL	10	7	2	33	12	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

LIGHTING - TEMPORARY ITEMS

204.9060.S.1002 REMOVING POLES WOOD 60-FT
204.9060.S.1003 REMOVING POLES WOOD 60-FT AND FLOODLIGHTS
SPV.0060.1001 LAMP DISPOSAL HIGH INTENSITY DISCHARGE*
SPV.0060.1003 POLES WOOD 60-FT
SPV.0060.1004 WOOD POLE LIGHTING 60-FT
SPV.0060.1005 LUMINAIRES UTILITY HPS 1000 WATTS FLOODLIGHT

CATEGORY	STAGE	SYSTEM	DESCRIPTION	LOCATION	OFFSET	204.9060.S.1002 REMOVING POLES WOOD 60-FT	204.9060.S.1003 REMOVING POLES WOOD 60-FT AND FLOODLIGHTS	SPV.0060.1001* LAMP DISPOSAL HIGH INTENSITY DISCHARGE	SPV.0060.1003 POLES WOOD 60-FT	SPV.0060.1004 WOOD POLE LIGHTING 60-FT	SPV.0060.1005 LUMINAIRES UTILITY HPS 1000 WATTS FLOODLIGHT	COMMENTS
						EACH	EACH	EACH	EACH	EACH	EACH	
1000	STAGE 1/3	HL-40-UC	WP-UC-2	86ML+30.6	80.6' LT	1	--	--	1	--	--	--
			T-CUC-1	88ML+91.6	79.0' LT	--	1	1	--	1	1	--
			WP-UC-1	91ML+13.8	71.6' LT	1	--	--	1	--	--	--
			WP-UC-3	102ML+07.0	71.1' LT	1	--	--	1	--	--	--
			T-AUC-1	104ML+42.1	74.4' LT	--	1	1	--	1	1	--
		HL-40-NA	T-DNA-6	107ML+64.7	81.7' LT	--	1	1	--	1	1	--
			T-DNA-5	109ML+54.9	87.0' LT	--	1	1	--	1	1	--
			T-DNA-4	111ML+45.2	78.3' LT	--	1	1	--	1	1	--
			T-DNA-3	113ML+36.0	82.1' LT	--	1	1	--	1	1	--
			T-DNA-1	117ML+74.8	75.8' LT	--	1	1	--	1	1	--
			T-DNA-2	120ML+71.7	77.4' LT	--	1	1	--	1	1	--
			T-GNA-3	124ML+86.5	84.1' LT	--	1	1	--	1	1	--
			T-GNA-2	127ML+15.2	80.9' LT	--	1	1	--	1	1	--
			T-GNA-1	129ML+49.9	76.8' LT	--	1	1	--	1	1	--
			T-ANA-1	132ML+08.1	100.8' LT	--	1	1	--	1	1	--
			T-ANA-2	132ML+08.1	100.8' LT	--	1	1	--	1	1	--
			T-ANA-3	134ML+31.1	85.1' LT	--	1	1	--	1	1	--
			T-ANA-4	136ML+61.5	82.5' LT	--	1	1	--	1	1	--
		HL-40-BS	T-CBS-6	152ML+22.4	77.5' LT	--	1	1	--	1	1	--
			T-CBS-5	154ML+67.5	78.4' LT	--	1	1	--	1	1	--
			T-CBS-4	157ML+41.5	81.1' LT	--	1	1	--	1	1	--
			WP-BS-3	158ML+22.6	80.4' LT	1	--	--	1	--	--	--
			WP-BS-2	159ML+45.1	84.5' LT	1	--	--	1	--	--	--
			T-CBS-3	160ML+18.7	88.4' LT	--	1	1	--	1	1	--
			T-CBS-2	162ML+89.2	91.1' LT	--	1	1	--	1	1	--
			T-CBS-1	165ML+58.6	93.3' LT	--	1	1	--	1	1	--
			WP-BS-1	168ML+32.6	96.1' LT	1	--	--	1	--	--	--
1000	STAGE 1/3				TOTAL	6	21	21	6	21	21	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LIGHTING - TEMPORARY CONDUIT AND WIRES

652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
655.0625 ELECTRICAL WIRE LIGHTING 6 AWG*
655.0630 ELECTRICAL WIRE LIGHTING 4 AWG*
SPV.0090.1001 CABLE AERIAL ALUMINUM 6 AWG QUADRUPLEX
SPV.0090.1002 CABLE AERIAL ALUMINUM 6 AWG TRIPLEX
SPV.0090.1003 CABLE AERIAL ALUMINUM 4 AWG QUADRUPLEX

CATEGORY	STAGE	SYSTEM	FROM	TO	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	655.0625* ELECTRICAL WIRE LIGHTING 6 AWG	655.0630* ELECTRICAL WIRE LIGHTING 4 AWG	SPV.0090.1001 CABLE AERIAL ALUMINUM 6 AWG QUADRUPLEX	SPV.0090.1002 CABLE AERIAL ALUMINUM 6 AWG TRIPLEX	SPV.0090.1003 CABLE AERIAL ALUMINUM 4 AWG QUADRUPLEX	COMMENTS
					LF	LF	LF	LF	LF	LF	
1000	STAGE 1/3	HL-40-UC	HL-40-UC	EX. LPB-UC-1	--	--	160	--	--	--	USE EXISTING CONDUIT
			EX. LPB-UC-1	WP-UC-1	60	--	520	--	--	--	TO TOP OF POLE
			WP-UC-1	AUC1/BUC1	--	--	--	--	--	130	--
			AUC5/BUC5	WP-UC-3	--	--	--	--	130	--	--
			WP-UC-3	T-AUC-1	--	--	--	--	250	--	--
			EX. LPB-UC-1	T-CUC-1	150	--	840	--	--	--	TO TOP OF POLE
			T-CUC-1	WP-UC-2	--	--	--	--	--	250	--
			WP-UC-2	CUC2/DUC2	--	--	--	--	--	130	--
		HL-40-NA	T-DNA-6	T-DNA-5	--	--	--	--	200	--	--
			T-DNA-5	T-DNA-4	--	--	--	--	200	--	--
			T-DNA-4	T-DNA-3	--	--	--	--	200	--	--
			T-DNA-3	DNA27	--	--	--	--	100	--	
			DNA16	T-DNA-1	--	--	--	--	60	--	--
			T-DNA1	T-DNA-2	--	--	--	--	310	--	--
			T-GNA-3	T-GNA-2	--	--	--	--	240	--	--
			T-GNA-2	GNA9/HNA9	--	--	--	--	--	100	--
			GNA9/HNA9	ENA9	--	--	--	--	--	150	--
			T-GNA-2	T-GNA-1	--	--	--	--	--	240	--
			T-GNA-1	EX. LPB -NA-2	--	--	560	--	--	--	--
			EX. LPB -NA-2	EX. LPB-NA-1	--	--	180	--	--	--	USE EXISTING CONDUIT
			EX. LPB-NA-1	HL-40-NA	--	--	280	--	--	--	"
			EX. LPB-NA-1	T-ANA-1	150	--	800	--	--	--	TO TOP OF POLE
			T-ANA-1	T-ANA-2	250	--	1,240	--	--	--	"
			T-ANA-2	T-ANA-3	--	--	--	240	--	--	--
			T-ANA-3	T-ANA-4	--	--	--	250	--	--	--
			T-ANA-4	BNA4/ANA4	--	--	--	80	--	--	--
		HL-40-BS	T-CBS-6	T-CBS-5	--	--	--	--	230	--	--
			T-CBS-5	T-CBS-4	--	--	--	--	250	--	--
			T-CBS-4	WP-BS-3	--	--	--	--	130	--	--
			WP-BS-3	WP-BS-2	150	680	--	--	--	--	--
			WP-BS-2	T-CBS-3	--	--	--	--	130	--	--
			T-CBS-3	T-CBS-2	--	--	--	--	260	--	--
			T-CBS-2	T-CBS-1	--	--	--	--	260	--	--
			T-CBS-1	WP-BS-1	--	--	--	--	270	--	--
			WP-BS-1	DBS6/CBS6	--	--	--	--	90	--	--
1000	STAGE 1/3			TOTAL	760	680	4,580	570	3,310	1,000	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

LIGHTING - FINAL LIGHTING

653.0140 PULL BOXES STEEL 24X42-INCH
655.0610 ELECTRICAL WIRE LIGHTING 12 AWG
SPV.0060.1006 CONCRETE BASES TYPE B

CATEGORY	STAGE	SYSTEM	DESCRIPTION	LOCATION	OFFSET	653.0140 PULL BOXES STEEL 24X42-INCH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	SPV.0060.1006 CONCRETE BASES TYPE B	COMMENTS
						EACH	LF	EACH	
1000	STAGE 3	HL-40-UC	DUC1/CUC1	88ML+92.1	C/L	--	342	1	--
			BUC6/AUC6	104ML+44.5	C/L	--	342	1	--
		HL-40-NA	GNA1/HNA1	106ML+98.3	C/L	--	342	1	--
			GNA5/HNA5	116ML+98.1	C/L	--	342	1	--
			HNA6/GNA6	119ML+48.0	C/L	--	342	1	--
			LPB-NA-12	120ML+52.6	C/L	1	--	--	--
			HNA10/GNA10	129ML+79.1	C/L	--	342	1	--
			LPB-NA-3	130ML+72.0	C/L	1	--	--	--
			ANA3/BNA3	132ML+08.2	C/L	--	342	1	--
		HL-40-BS	CBS11/DBS11	151ML+93.1	C/L	--	342	1	--
			S-40-235 (DBS10/CBS10)	154ML+67.5	C/L	--	342	--	MOUNTED ON SIGN STRUCTURE
			CBS9/DBS9	157ML+41.5	C/L	--	342	1	--
			S-40-236 (DBS8/CBS8)	160ML+18.6	C/L	--	342	--	MOUNTED ON SIGN STRUCTURE
			DBS7/CBS7	162ML+90.6	C/L	--	342	1	--
1000	STAGE 3				TOTAL	2	4,104	10	

SHEET 4 OF 6

LIGHTING - CONDUIT AND WIRE

652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
655.0625 ELECTRICAL WIRE LIGHTING 6 AWG*
655.0630 ELECTRICAL WIRE LIGHTING 4 AWG*
655.0635 ELECTRICAL WIRE LIGHTING 2 AWG
655.0640 ELECTRICAL WIRE LIGHTING 1 AWG

CATEGORY	STAGE	SYSTEM	CIRCUIT	FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	655.0625* ELECTRICAL WIRE LIGHTING 6 AWG	655.0630* ELECTRICAL WIRE LIGHTING 4 AWG	655.0635 ELECTRICAL WIRE LIGHTING 2 AWG	655.0640 ELECTRICAL WIRE LIGHTING 1 AWG	COMMENTS
						LF	LF	LF	LF	LF	
1000	STAGE 3	HL-40-UC	A/N/B	HL-40-UC	EX. LPB-UC-1	--	60	60	30	30	USE EXISTING CONDUIT
				EX. LPB-UC-1	EX. LPB-UC-2	--	160	160	80	80	"
				EX. LPB-UC-2	AUC1/BUC1	--	--	200	--	100	"
				AUC5/BUC5	BUC6/AUC6	230	--	480	--	240	--
			C/N/D	EX. LPB-UC-2	DUC1/CUC1	150	320	--	160	--	--
				DUC1/CUC1	CUC2/DUC2	250	520	--	260	--	--
		HL-40-NA	G/N/H	GNA1/HNA1	HNA2/GNA2	240	--	500	--	250	--
				HNA2/GNA2	GNA3/HNA3	245	--	510	--	255	MOUNTED ON SIGN STRUCTURE
				HNA4/GNA4	GNA5/HNA5	240	--	500	--	250	--
				GNA5/HNA5	HNA6/GNA6	240	--	500	--	250	--
				HNA6/GNA6	LPB-NA-12	100	--	200	--	100	--
				LPB-NA-12	GNA7/HNA7	140	--	280	--	140	--
				HNA8/GNA8	GNA9/HNA9	275	--	570	--	285	--
				GNA9/HNA9	HNA10/GNA10	220	--	460	--	230	--
				HNA10/GNA10	LPB-NA-3	90	--	200	--	100	--
				LPB-NA-3	EX. LPB-NA-2	--	--	140	--	70	USE EXISTING CONDUIT
				EX. LPB-NA-2	EX. LPB-NA-1	--	--	80	--	40	"
				EX. LPB-NA-1	HL-40-NA	--	--	100	--	50	"
			A/N/B	HL-40-NA	EX. LPB-NA-1	--	100	--	50	--	USE EXISTING CONDUIT
				EX. LPB-NA-1	EX. LPB-NA-2	--	80	--	40	--	"
				EX. LPB-NA-2	ANA3/BNA3	80	180	--	90	--	--
				ANA3/BNA3	UDL A/B/N	80	180	--	90	--	MEINECKE AVE. BRIDGE UDL
				ANA3/BNA3	BNA4/ANA4	215	450	--	225	--	--
				BNA4/ANA4	ANA5/BNA5	220	460	--	230	--	--
				ANA5/BNA5	BNA6/ANA6	250	520	--	260	--	--
				BNA8/ANA8	ANA9/BNA9	250	520	--	260	--	--
				ANA9/BNA9	BNA10/ANA10	250	520	--	260	--	--
		HL-40-BS	C/N/D	CBS11/DBS11	DBS10/CBS10	270	560	--	280	--	MOUNTED ON SIGN STRUCTURE
				DBS10/CBS10	CBS9/DBS9	265	550	--	275	--	--
				CBS9/DBS9	DBS8/CBS8	270	560	--	280	--	MOUNTED ON SIGN STRUCTURE
				DBS8/CBS8	CBS7/DBS7	270	560	--	280	--	--
				CBS7/DBS7	DBS6/CBS6	265	550	--	275	--	--
				DBS6/CBS6	CBS5/DBS5	265	550	--	275	--	--
1000	STAGE 3				TOTAL	5,370	7,400	4,940	3,700	2,470	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LIGHTING - SYSTEMS

SPV.0105.1001 MAINTENANCE OF LIGHTING SYSTEMS

CATEGORY	DESCRIPTION / SYSTEM	LOCATION	SPV.0105.1001 MAINTENANCE OF LIGHTING SYSTEMS
			LS
1000	HL-40-UC, HL-40-NA, HL-40-BS	IH 41 / USH 45	1
1000		TOTAL	1

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
1060-33-26		
FEDERAL PROJECT NUMBER	4.1	
1060-33-26		

PLAT OF RIGHT-OF-WAY REQUIRED FOR

I-41 / USH 45
SWAN BLVD. TO BURLEIGH STREET
MILWAUKEE COUNTY

CONSTRUCTION PROJECT NUMBER

1060-33-84 1060-34-84 1060-34-85 1060-34-74
1060-33-83 1060-33-86 1060-35-85 1060-34-76

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	REEL	R.
ACRES	AC.	REFERENCE LINE	RL
AND OTHERS	ET.AL.	RELEASE OF RIGHTS	ROR
CENTERLINE	CL	REMAINING	REM.
CERTIFIED SURVEY MAP	CSM	RIGHT-OF-WAY	R/W
CORNER	COR.	SECTION	SEC.
DOCUMENT	DOC.	STATION	STA.
EASEMENT	EASE.	TEMPORARY LIMITED EASEMENT	TLE
IMAGE	I.	VOLUME	V.
HIGHWAY EASEMENT	H.E.	**CURVE DATA**	
LAND CONTRACT	LC	LONG CHORD	LCH
MONUMENT	MON.	LONG CHORD BEARING	LCB
PAGE	P.	RADIUS	R
PERMANENT LIMITED EASEMENT	PLE	DEGREE OF CURVE	D
PROPERTY LINE	PL	CENTRAL ANGLE OR DELTA	DELTA
RECORDED AS	(100')	LENGTH OF CURVE	L
		TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LP (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	●(SET)	PROPERTY LINE	
R/W STANDARD	▲(SET)	LOT & TIE LINES	
SIGN	SIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT	⊕	CORPORATE LIMITS	
SECTION CORNER SYMBOL	T N R E S W SEC	ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS RESTRICTED (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RWB20	QUARTER LINE	
PARCEL NUMBER	102	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

		NON COMPENSABLE	COMPENSABLE
WATER	W		
GAS	G		
TELEPHONE	T		
OVERHEAD	OH		
TRANSMISSION LINES ELECTRIC	E		
CABLE TELEVISION	TV		
FIBER OPTIC	FO		
SANITARY SEWER	SAN		
STORM SEWER	SS		
POWER POLE		○	●
TELEPHONE POLE		⌀	⌀
UTILITY PEDESTAL		⌑	⌑
ELECTRIC TOWER		⊠	

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MILWAUKEE COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL ¾" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

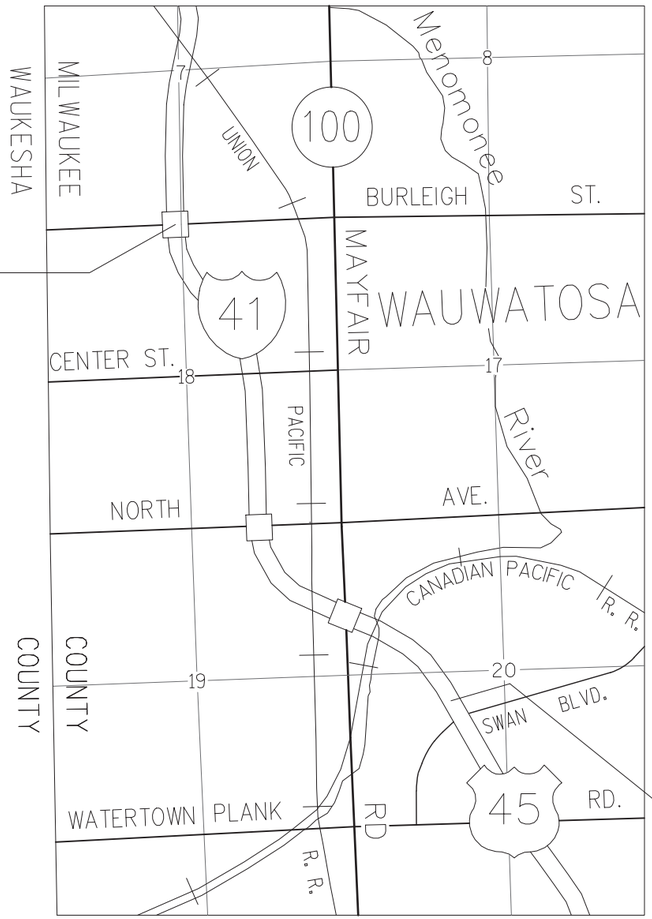
FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

END RELOCATION ORDER
SECTION LINE

STA 492+06.77

1.59' SOUTH AND 91.13' WEST
OF THE SOUTH CORNER OF
SECTION 7, T-7-N, R-21-E
Y=312723.00
X=566254.57

R-21-E



T-7-N

MILWAUKEE COUNTY

BEGIN RELOCATION ORDER

STA 384+00.00

1931.52' EAST AND 830.17' SOUTH
OF THE WEST CORNER OF
SECTION 20, T-7-N, R-21-E
Y=303969.98
X=571013.46

N

SCALE 0 .5MI. 1MI.

LAYOUT

TOTAL NET LENGTH OF CENTERLINE = 2.05 MI.

REVISION DATE
07-15-2014
09-24-2014
04-02-2015
06-11-2015
10-27-2016

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR THE DEPARTMENT

DATE: 11-07-2013 Robert D Dwyer (Signature)

E

FILE NAME : N:\PDS\C3D\ROW\10603326\RW\040401_RT.DWG PLOT DATE : 10/26/2016 8:31 AM PLOT BY : KRAUSE, PAUL H

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

SF = SQUARE FEET * DENOTES AREAS COMPUTED

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

4

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES	NEW	EXISTING	TOTAL	REMAINING ACRES	TEMP. ACRES	PERM. ACRES	PARCEL NUMBER
1	4.11	FELTON & MARIA BRAZIL	FEE	0.276	0.276	0.000	0.276	0.000	0.000	0.000	1
2	4.17	BRIAN E. & IRENE WALKER	FEE	0.224	0.224	0.000	0.224	0.000	0.000	0.000	2
3(3)	4.17	KENNETH R. & JANET L. DALLMANN	TLE	0.448	0.000	0.000	0.000	0.448	0.022	0.000	3(3)
4(3)	4.17	ADAM E. KLEIN	TLE	0.448	0.000	0.000	0.000	0.448	0.056	0.000	4(3)
5(3)	4.17	GREGORY J. & NICOLE K. WERRY	TLE	0.224	0.000	0.000	0.000	0.224	0.086	0.000	5(3)
6(3)	4.18	COURTNEY G. THOMEY	TLE	0.128	0.000	0.000	0.000	0.128	0.033	0.000	6(3)
7(3)	4.18	JOHN LYNCH	PLE, TLE	0.193	0.000	0.000	0.000	0.193	0.036	0.016	7(3)
8(3)	4.18	JOHN C. & TERESE M. BEAUCHAMP	TLE	0.193	0.000	0.000	0.000	0.193	0.035	0.000	8(3)
9(3)	4.18	MARIANO B. & NORALYN B. DAVID	TLE	0.128	0.000	0.000	0.000	0.128	0.024	0.000	9(3)
10(4)	4.18	KEVIN & MELINDA KROEGER	TLE	0.133	0.000	0.000	0.000	0.133	0.030	0.000	10(4)
11(4)	4.18	ARLEEN JEAN LEMMON	TLE	0.124	0.000	0.000	0.000	0.124	0.047	0.000	11(4)
12(4)	4.18	GIBSON REVOCABLE LIVING TRUST	TLE	0.122	0.000	0.000	0.000	0.122	0.017	0.000	12(4)
13(2)	4.19	SCHOOL DISTRICT OF WAUWATOSA	TLE	21.372	0.000	0.000	0.000	21.372	3.793	0.000	13(2)
14(2)	4.20	SCHOOL DISTRICT OF WAUWATOSA	TLE	34.918	0.000	0.000	0.000	34.918	2.949	0.000	14(2)
15(3)	4.10	DYNAMIS PROPERTIES LLC	FEE	0.386	0.386	0.000	0.386	0.000	0.000	0.000	15(3)
16(6)	4.14	WISCONSIN TELEPHONE COMPANY	FEE TLE	0.063	0.007	0.000	0.007	0.056	0.009	0.000	16(6)
17(6)	4.14	F&F ASSOCIATES LLC	FEE TLE	0.229	0.007	0.000	0.007	0.222	0.026	0.000	17(6)
18(5)	4.14	JOHN AND MARY FOX	FEE TLE	0.179	8 SF	0.000	8 SF	0.179	0.015	0.000	18(5)
19(5)	4.14	AJS INVESTMENTS LLC	FEE TLE	0.179	0.001	0.000	0.001	0.178	0.025	0.000	19(5)
20(5)	4.14	PATCH MARITAL TRUST	FEE TLE	0.124	8 SF	0.000	8 SF	0.124	0.020	0.000	20(5)
21(5)	4.14	STK LLC	TLE	0.234	0.000	0.000	0.000	0.234	0.020	0.000	21(5)
22(5)	4.14	J&K NORTH LLC	TLE	0.110	0.000	0.000	0.000	0.110	0.009	0.000	22(5)
23(5)	4.16	JUVENCIO & DEBORAH J. ESPARZA	TLE	0.121	0.000	0.000	0.000	0.121	0.017	0.000	23(5)
24(5)	4.16	JUVENCIO & DEBIE ESPARZA	TLE	0.121	0.000	0.000	0.000	0.121	0.015	0.000	24(5)
25(5)	4.16	IKAROS 6 LLC	TLE	0.121	0.000	0.000	0.000	0.121	0.015	0.000	25(5)
26(5)	4.16	RUETA LLC	TLE	0.183	0.000	0.000	0.000	0.183	0.023	0.000	26(5)
27(5)	4.16	GIUSEPPE & JOSEPHINE L. MILITELLO	TLE	0.183	0.000	0.000	0.000	0.183	0.024	0.000	27(5)
28(5)	4.16	SOMCHINTANA & MANU RATARASARN	TLE	0.162	0.000	0.000	0.000	0.162	0.020	0.000	28(5)
29(6)	4.16	JACQUELYNE PATRICIA COAKLEY 1997 REV. TRUST	TLE	0.110	0.000	0.000	0.000	0.110	0.009	0.000	29(6)
30(5)	4.16	THOMAS P. & DEBORAH J. MOERTL ET. AL.	TLE	0.220	0.000	0.000	0.000	0.220	0.024	0.000	30(5)
31(5)	4.16	MULTIPLE LISTING SERVICE INC.	FEE TLE	0.220	0.001	0.000	0.001	0.219	0.033	0.000	31(5)
32(5)	4.16	SHEILA A. FLEISCHER	TLE	0.117	0.000	0.000	0.000	0.117	0.002	0.000	32(5)
33(5)	4.16	TAMARA C. JONES	TLE	0.122	0.000	0.000	0.000	0.122	0.001	0.000	33(5)
34(5)	4.16	DEBORAH A. NEAL	TLE	0.117	0.000	0.000	0.000	0.117	0.002	0.000	34(5)
35(5)	4.16	REGIS P. & ELIZABETH A. DI GIACOMO	TLE	0.149	0.000	0.000	0.000	0.149	0.006	0.000	35(5)
36(5)	4.16	KAY A. CASPER	TLE	0.149	0.000	0.000	0.000	0.149	0.006	0.000	36(5)
37(5)	4.16	KATHLEEN A. SZUKALSKI	TLE	0.149	0.000	0.000	0.000	0.149	0.006	0.000	37(5)
38(5)	4.16	RYAN CEPICAN	TLE	0.149	0.000	0.000	0.000	0.149	0.003	0.000	38(5)
39(5)	4.16	GERALD WILLIAMSON	TLE	0.373	0.000	0.000	0.000	0.373	0.006	0.000	39(5)
40(5)	4.16	HAKAM SINGH	TLE	0.149	0.000	0.000	0.000	0.149	0.003	0.000	40(5)

SCHEDULE OF LANDS & INTERESTS REQUIRED

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SF = SQUARE FEET * DENOTES AREAS COMPUTED

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES		NEW	EXISTING	TOTAL	REMAINING ACRES	TEMP. ACRES	PERM. ACRES	PARCEL NUMBER
41(5)	4.16	LORRAINE L. POZAYT	TLE	0.125		0.000	0.000	0.000	0.125	0.005	0.000	41(5)
42(5)	4.16	RICHARD & LAUREN GIVENS	TLE	0.251		0.000	0.000	0.000	0.251	0.005	0.000	42(5)
43(5)	4.16	DAVID W. & NORMA I. BROADEN	TLE	0.251		0.000	0.000	0.000	0.251	0.005	0.000	43(5)
44(5)	4.16	ROBERT R. & CAROLE A. HOERIG	TLE	0.251		0.000	0.000	0.000	0.251	0.002	0.000	44(5)
45(5)	4.16	WANDA L. MORRISON	TLE	0.125		0.000	0.000	0.000	0.125	0.003	0.000	45(5)
46(5)	4.16	GREGORY A. & JOAN M. BLANEY	TLE	0.125		0.000	0.000	0.000	0.125	0.004	0.000	46(5)
47(5)	4.16, 4.18	DANIEL ANDERSON & APEU ACUIL	TLE	0.125		0.000	0.000	0.000	0.125	0.005	0.000	47(5)
48(5)	4.16	SG LLC	FEE TLE	0.331		0.001	0.000	0.001	0.330	0.042	0.000	48(5)
49(6)	4.16	DENNISL. & BARBARA L. WANLESS	TLE	0.386		0.000	0.000	0.000	0.386	0.032	0.000	49(6)
50(5)	4.18	MICHAEL A. & LINDA J. DOLHUN	TLE	0.125		0.000	0.000	0.000	0.125	0.005	0.000	50(5)
51(5)	4.18	JUDITH A. & PATRICIA J. ANDERSON	TLE	0.125		0.000	0.000	0.000	0.125	0.005	0.000	51(5)
52(5)	4.18	RONALD & CAROL H. SCHULLS	TLE	0.125		0.000	0.000	0.000	0.125	0.005	0.000	52(5)
53(5)	4.18	ROBERT E. & BEVERLY J. GRUDZINSKI	TLE	0.122		0.000	0.000	0.000	0.122	0.005	0.000	53(5)
54(5)	4.18	GERARD E. & ANN M. STEIN	TLE	0.179		0.000	0.000	0.000	0.179	0.007	0.000	54(5)
55(5)	4.18	JOSEPH E. & MICHELLE L. ROY	TLE	0.179		0.000	0.000	0.000	0.179	0.007	0.000	55(5)
56(5)	4.18	JILL JANKA	TLE	0.119		0.000	0.000	0.000	0.119	0.005	0.000	56(5)
57(5)	4.18	CARL & ELOISE SCHWARZ	TLE	0.119		0.000	0.000	0.000	0.119	0.003	0.000	57(5)
58(5)	4.21	RICKERT INDUSTRIES INC.	TLE	1.961		0.000	0.000	0.000	1.961	0..080	0.000	58(5)
59(5)	4.25, 4.26	CITY OF WAUWATOSA	TLE	19.265		0.000	0.000	0.000	19.265	7.500	0.000	59(5)
60(6)	4.11	RUSS DARROW WAUWATOSA REAL ESTATE LLC	FEE PLE TLE	4.848		0.163	0.000	0.163	4.685	0.960	0.183	60(6)
61(5)	4.11	G&I VIII P & S CENTER LLC	TLE	5.238		0.000	0.000	0.000	5.238	0.122	0.000	61(5)
62(5)	4.11, 4.12	UNION PACIFIC RAILROAD	HE TLE	VAST		0.996	0.000	0.996	VAST	4.525	0.000	62(5)
63(6)	4.15	MAYFAIR MANOR APARTMENTS LLC	TLE	3.040		0.000	0.000	0.000	3.040	0.133	0.000	63(6)
64(5)	4.15	STEPHEN GREEN	TLE	0.151		0.000	0.000	0.000	0.151	0.011	0.000	64(5)
65(5)	4.15	JUDITH S. KLAPAT	TLE	0.151		0.000	0.000	0.000	0.151	0.011	0.000	65(5)
66(5)	4.15	DELBERT A. SR. & EVA KOLBERG LIFE ESTATE	TLE	0.151		0.000	0.000	0.000	0.151	0.025	0.000	66(5)
67(6)	4.15	THOMAS J. & TIFFANY J. SMITH	TLE	0.151		0.000	0.000	0.000	0.151	0.039	0.000	67(6)
68(5)	4.15	STEVEN C. & SANDRA L. KANTIN	TLE	0.151		0.000	0.000	0.000	0.151	0.009	0.000	68(5)
69(5)	4.15	WILLIAM F. JR. & MARIA LOUISE SCHWARTZ	TLE	0.199		0.000	0.000	0.000	0.199	0.005	0.000	69(5)
70(5)	4.11	UNITED FOOD & COMMERCIAL WORKERS UNION	TLE	0.848		0.000	0.000	0.000	0.848	0.074	0.000	70(5)
71(5)	4.12	CHERYL A. DOHERTY	FEE TLE	0.994		0.020	0.000	0.020	0.974	0.143	0.000	71(5)
72(5)	4.12	CHERYL PENTLER DOHERTY REAL ESTATE TRUST	TLE	2.913		0.000	0.000	0.000	2.913	0.045	0.000	72(5)
73(6)	4.12, 4.13	BRE / ESA PROPERTIES LLC	FEE PLE TLE	3.922		0.350	0.000	0.350	3.572	1.007	0.622	73(6)
74(5)	4.12, 4.13	MAYFAIR PROPERTY PARTNERS LLC	FEE TLE	4.970		0.015	0.000	0.015	4.955	0.565	0.000	74(5)
75(6)	4.13	W2005 NEW CENTURY HOTEL PORTFOLIO LP	FEE PLE TLE	2.144		0.002	0.000	0.002	2.142	0.262	0.131	75(6)
76(5)	4.13	DENNY'S REALTY INC.	FEE PLE TLE	1.054		0.055	0.000	0.055	0.999	0.138	0.051	76(5)
77(6)	4.13	HIGHLANDS OF MAYFAIR CONDOMINIUM	PLE TLE	3.075	*	0.000	0.000	0.000	3.075	0.084	0.048	77(6)
78(5)	4.14	TIMOTHY C. & PAMELA M. LOSEY	TLE	0.138		0.000	0.000	0.000	0.138	0.006	0.000	78(5)
79(5)	4.14	MICHAEL T. GOLDSMITH	TLE	0.178		0.000	0.000	0.000	0.178	0.018	0.000	79(5)
80(5)	4.21	M.A.E. MOXY LLC	TLE	0.773		0.000	0.000	0.000	0.773	0.024	0.000	80(5)

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REVISION DATE
06-11-2015
07-15-2014
10-27-2016
09-24-2014
04-02-2015

DATE 11-07-2013 | HWY: I-41 / USH 45 | STATE R/W PROJECT NUMBER 1060-33-26 | PLAT SHEET 4.03

COUNTY: MILWAUKEE | CONSTRUCTION PROJECT NUMBER 1060-33-84, 1060-34-84, 1060-33-83, 1060-33-86, 1060-35-85, 1060-34-76

E

SCHEDULE OF LANDS & INTERESTS REQUIRED

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PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES		NEW	EXISTING	TOTAL	REMAINING ACRES	TEMP. ACRES	PERM. ACRES	PARCEL NUMBER
81(5)	4.21	BURLEIGH MOB JOINT VENTURE LLC	TLE	1.043		0.000	0.000	0.000	1.043	0.054	0.000	81(5)
82(6)	4.08, 4.09	WISCONSIN LUTHERAN COLLEGE CONFERENCE INC.	FEE TLE	26.129		0.093	0.000	0.093	26.036	0.614	0.000	82(6)
83(5)	4.08, 4.09, 4.10	MILWAUKEE COUNTY	HE TLE	52.607		0.200	0.000	0.200	52.607	0.445	0.000	83(5)
84(6)	4.09	MILWAUKEE COUNTY	HE TLE	4.242		0.011	0.000	0.011	4.242	0.023	0.000	84(6)
85(6)	4.09, 4.10, 4.27	MILWAUKEE COUNTY	HE TLE	4.195		0.225	0.000	0.225	4.195	2.566	0.000	85(6)
86(5)	4.10	SOO LINE RAILROAD	HE TLE	VAST		0.816	0.000	0.816	VAST	0.137	0.000	86(5)
87(5)	4.10	MMSD	HE TLE	8.050		0.186	0.000	0.186	8.050	0.223	0.000	87(5)
88(5)	4.10	SONSHINE 1826 LLC	TLE	0.816		0.000	0.000	0.000	0.816	0.109	0.000	88(5)
89(6)	4.10	THE 2100 LLC	TLE	1.416		0.000	0.000	0.000	1.416	0.026	0.000	89(6)
90(4)	4.18	ALEX J. GILGENBACH & KAYLA C. LEMEROND	TLE	0.157		0.000	0.000	0.000	0.157	0.015	0.000	90(4)
91(4)	4.18	ROBERT FRESE	TLE	0.188		0.000	0.000	0.000	0.188	0.004	0.000	91(4)
92(4)	4.18	MATTHEW A. KOWALSKI & KATIE M. CAMACHO	TLE	0.125		0.000	0.000	0.000	0.125	0.004	0.000	92(4)
93(4)	4.18	KRISTINE K. SCHMIDT	TLE	0.156		0.000	0.000	0.000	0.156	0.011	0.000	93(4)
94(4)	4.18	MICHAEL A. OTTO & TAMMY R. JOOST	TLE	0.145		0.000	0.000	0.000	0.145	0.011	0.000	94(4)
95(4)	4.18	EVELYN A. RESCH	TLE	0.142		0.000	0.000	0.000	0.142	0.011	0.000	95(4)
96(4)	4.18	GEORGE J. MARTINEK	TLE	0.119		0.000	0.000	0.000	0.119	0.009	0.000	96(4)
97(4)	4.18	MICHAEL A. SCHROEDER	TLE	0.119		0.000	0.000	0.000	0.119	0.009	0.000	97(4)
98(4)	4.23	CHARLES MORREALE	TLE	0.254		0.000	0.000	0.000	0.254	0.020	0.000	98(4)
99(4)	4.23	IVAN & PAULINE WERNER	TLE	0.269		0.000	0.000	0.000	0.269	0.021	0.000	99(4)
100(4)	4.23	12850 LLC	TLE	0.254		0.000	0.000	0.000	0.254	0.020	0.000	100(4)
101(4)	4.23	JOHN C. & SUSAN M. CUSATIS	TLE	0.415		0.000	0.000	0.000	0.415	0.006	0.000	101(4)
102(4)	4.23	ANSLEY A. GOODING & LISA V. MAESTAS-GOODING	TLE	0.354		0.000	0.000	0.000	0.354	0.038	0.000	102(4)
103(4)	4.23	TROY L. & MARY L. MOSBY	TLE	0.352		0.000	0.000	0.000	0.352	0.031	0.000	103(4)
104(4)	4.23	DOMINIC S. & CAROL P. ALIOTO	TLE	0.340		0.000	0.000	0.000	0.340	0.005	0.000	104(4)
105(4)	4.23	JOWELL GARCIA & MICHELLE DE LEON CRUZ	TLE	0.252		0.000	0.000	0.000	0.252	0.005	0.000	105(4)
106(4)	4.23	SEIDER REVOCABLE LIVING TRUST	TLE	0.255		0.000	0.000	0.000	0.255	0.005	0.000	106(4)
107(6)	4.17	JEFFREY L. SIVAK ET. AL	PLE TLE	0.469	*	0.000	0.000	0.000	0.469	0.005	0.072	107(6)
108(6)	4.17	FRENS JOINT REVOCABLE TRUST	FEE TLE	0.505	*	0.005	0.000	0.005	0.500	0.022	0.000	108(6)
109(6)	4.16	DENTAL ARTS ASSC. LLC	FEE TLE	0.254		0.001	0.000	0.001	0.253	0.054	0.000	109(6)
110(6)	4.14	NORTH AVENUE HOLDING COMPANY	TLE	0.248		0.000	0.000	0.000	0.248	0.026	0.000	110(6)
111(6)	4.14	PAGE NATIONAL INC.	TLE	0.234		0.000	0.000	0.000	0.234	0.012	0.000	111(6)
114(5)	4.20 4.21	SCHOOL DISTRICT OF WAUWATOSA	TLE	34.918		0.000	0.000	0.000	34.918	1.292	0.000	114(5)
116(6)	4.14	WISCONSIN TELEPHONE COMPANY	FEE TLE	0.056		0.001	0.000	0.001	0.055	0.019	0.000	116(6)
140(6)	4.16	HAKAM SINGH	TLE	0.149		0.000	0.000	0.000	0.149	0.014	0.000	140(6)
141(6)	4.16	LORRAINE L. POZAYT	TLE	0.125		0.000	0.000	0.000	0.125	0.010	0.000	141(6)

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REVISION DATE			
07-15-2014	06-11-2015	----------	----------
09-24-2014	10-27-2016	----------	----------
04-02-2015	----------	----------	----------

DATE 11-07-2013 | HWY: I-41 / USH 45 | STATE R/W PROJECT NUMBER 1060-33-26 | PLAT SHEET 4.04

COUNTY: MILWAUKEE | CONSTRUCTION PROJECT NUMBER 1060-33-84, 1060-34-84, 1060-33-83, 1060-33-86, 1060-35-85, 1060-34-85, 1060-34-74

E

SCHEDULE OF LANDS & INTERESTS REQUIRED

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PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL ACRES	NEW	EXISTING	TOTAL	REMAINING ACRES	TEMP. ACRES	PERM. ACRES	PARCEL NUMBER
214(4)	4.20 4.23	SCHOOL DISTRICT OF WAUWATOSA	TLE	34.918	0.000	0.000	0.000	34.918	0.031	0.000	214(4)
500(5)	4.08 - 4.21 4.23 4.25 - 4.26	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS	--	--	--	--	--	--	--	500(5)
501(5)	4.09 4.10 4.13	WE ENERGIES - GAS	RELEASE OF RIGHTS	--	--	--	--	--	--	--	501(5)
503(5)	4.10 - 4.21 4.23 4.25 4.26	AT&T WISCONSIN	RELEASE OF RIGHTS	--	--	--	--	--	--	--	503(5)
506(5)	4.09 4.11 - 4.13	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT	RELEASE OF RIGHTS	--	--	--	--	--	--	--	506(5)
507(5)	4.15	TIME WARNER CABLE	RELEASE OF RIGHTS	--	--	--	--	--	--	--	507(5)
508(5)	4.11 4.12	US SPRINT	RELEASE OF RIGHTS	--	--	--	--	--	--	--	508(5)
532(5)	4.10 4.13 4.18	WAUWATOSA WATER UTILITY	RELEASE OF RIGHTS	--	--	--	--	--	--	--	532(5)
533		ELIMINATED		--	--	--	--	--	--	--	533
534(5)	4.10 4.12 4.13 4.15 4.18 - 4.20	CITY OF WAUWATOSA	RELEASE OF RIGHTS	--	--	--	--	--	--	--	534(5)
UA 631(4)	4.10 - 4.21 4.23	CITY OF WAUWATOSA	UTILITY AGREEMENT	--	--	--	--	--	--	--	UA 631(4)
UA 632(4)	4.10 - 4.21 4.23	WAUWATOSA WATER UTILITY	UTILITY AGREEMENT	--	--	--	--	--	--	--	UA 632(4)

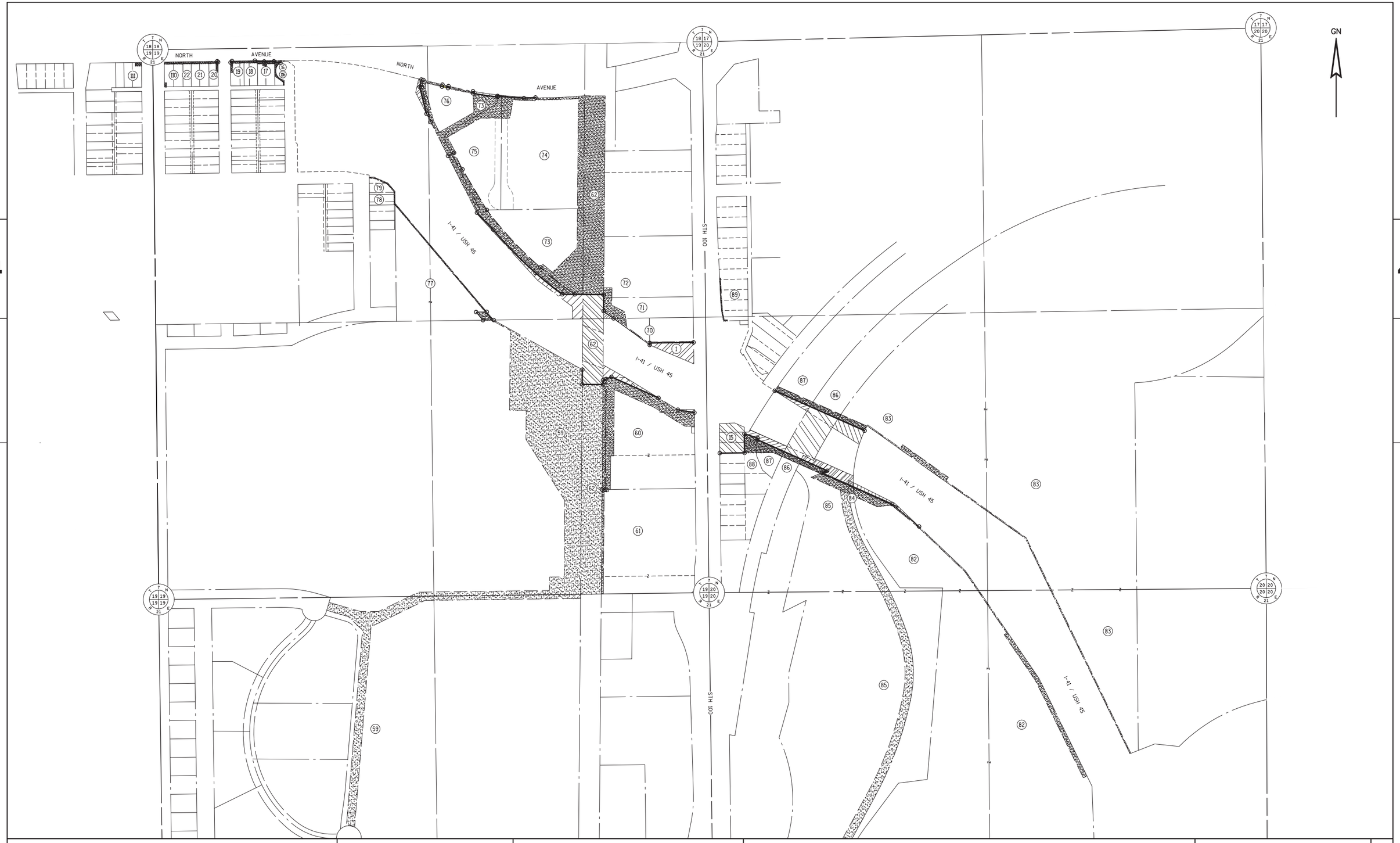
4

4

REVISION DATE

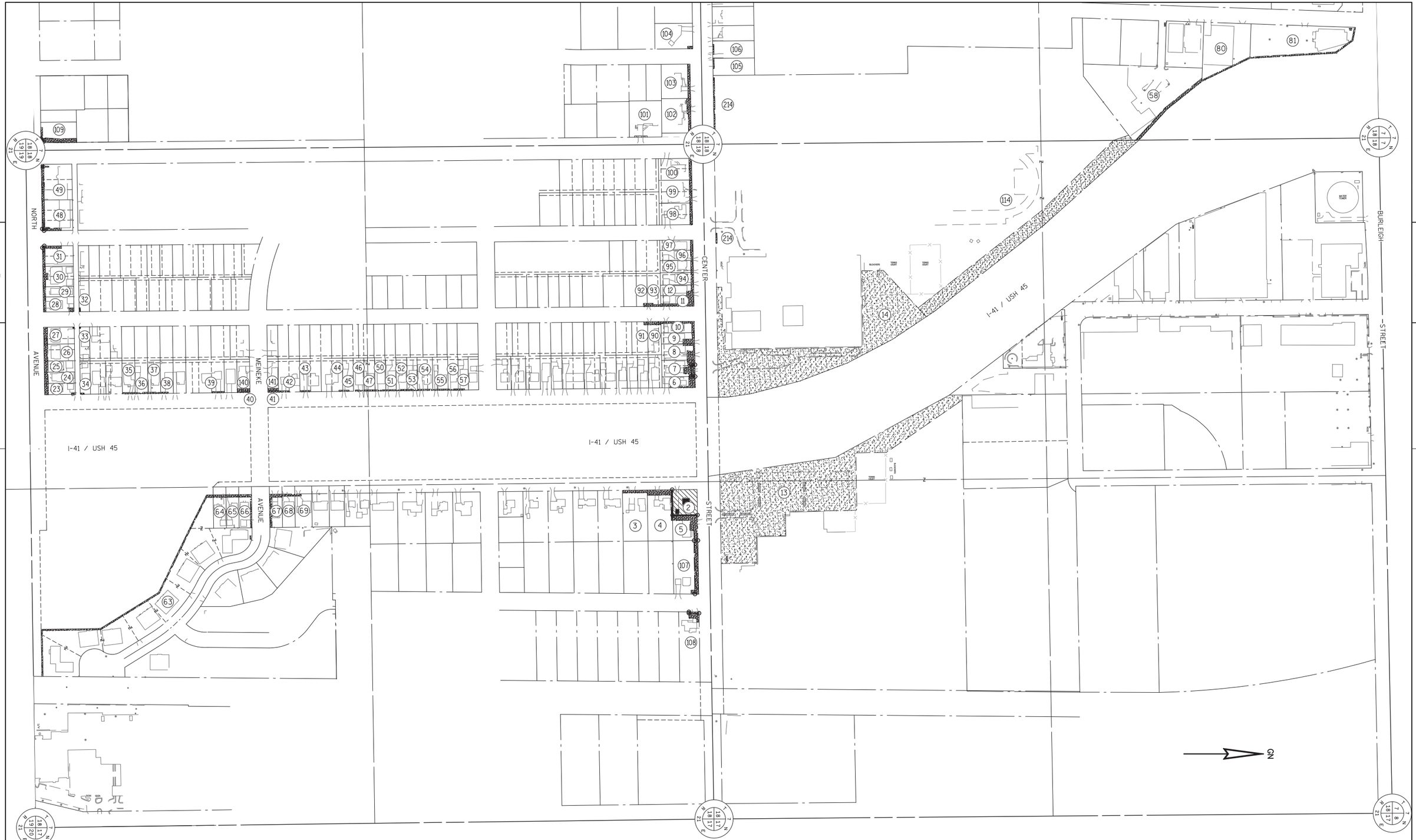
DATE 10-27-2016 | HWY: I-41 / USH 45 | STATE R/W PROJECT NUMBER 1060-33-26 | PLAT SHEET 4.05

COUNTY: MILWAUKEE | CONSTRUCTION PROJECT NUMBER 1060-33-84, 1060-34-84, 1060-33-83, 1060-33-86, 1060-35-85 | E



REVISION DATE 06-11-2015 07-15-2014 10-27-2016 09-24-2014 ---------- 04-02-2015 ----------	DATE 11-07-2013	HWY: I-41 / USH 45	STATE R/W PROJECT NUMBER 1060-33-26
	COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER 1060-33-84, 1060-33-86	PLAT SHEET 4.06

FILE NAME : N:\PDS\C3D\ROW\10603326\RW\040406_RL.DWG PLOT DATE : 10/26/2016 9:09 AM PLOT BY : KRAUSE, PAUL H PLOT NAME : PLOT SCALE : 1IN:425FT



4

REVISION DATE			
07-15-2014	06-11-2015 10-27-2016		
09-24-2014			
04-02-2015			

DATE 11-07-2013	HWY: I-41 / USH 45	STATE R/W PROJECT NUMBER 1060-33-26	PLAT SHEET 4.07
COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER 1060-33-83, 1060-34-84, 1060-35-85, 1060-33-84		E

FILE NAME : N:\PDS\C3D\ROW\10603326\RW\040407_RL.DWG PLOT DATE : 10/26/2016 9:10 AM PLOT BY : KRAUSE, PAUL H PLOT NAME : PLOT SCALE : 1" = 350'_XREF

4

SEE SHEET 4.09

1297.96

STA. 393+56.48 RL I-41 / USH 45

6.03'

SEE SHEET 4.09

5.54'

N89° 33' 53"E

1036.70'

7094
A Concrete Monument
w/ A Brass Cap
Y 304800.15
X 569081.94

7095
A Concrete Monument
w/ A Brass Cap
Y 304820.60
X 571773.24

NW1/4 - SW1/4

NE1/4 - SW1/4

CITY

OF

WAUWATOSA

(500) WE ENERGIES - ELECTRIC
DOC. 8763938 R. 5819 I. 1735
PCL. 82
DOC. 3845014 V. 4089 P. 56
PCL. 82, EXISTING RIGHTS IN R/W
DOC. 10261027
PCL. 82
DOC. 10261028
PCL. 83

RL I-41 / USH 45
PI STA = 397+48.50
Y = 305171.14
X = 570400.54
PC STA = 390+71.79
PT STA = 403+72.50
DELTA = 39°01'06"
D = 2°59'59"
T = 676.71'
L = 1300.71'
R = 1910.00'
LCH = 1275.72'
LCB = N46°32'35"W

S34° 22' 56"E
248.22'

PC: 390+71.79

626.82'

266.87'

1155.20'

876.27'

392

390

388

386

384

RL I-41 / USH 45
N27° 02' 02"W

525.56'

524.13'

S26° 12' 51"E

N25° 54' 59"W

N68° 33' 10"E

5.02'

DOC. 10261028

DOC. 10261027

DOC. 8763938

DOC. 3845014

20'

5'

10'

1/16 LINE

TLE FOR SLOPES & FENCE REPLACEMENT

TLE FOR SLOPES & FENCE REPLACEMENT

(84) MILWAUKEE COUNTY

CSM 7371
OUTLOT 1

(82) WISCONSIN LUTHERAN COLLEGE INC.

CSM 7371
R. 5772 I. 2982
DOC. 8730753
LOT 1

(83) MILWAUKEE COUNTY

STA.384+00.00 RL I-41 / USH 45
BEGIN PROJECT

7108
A Cast Iron Plug
In Concrete Pavement
Y 302159.76
X 571783.02

UNDERWOOD PARKWAY

GN

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MILWAUKEE COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	1100-01-23	VARIES	1969

PREVIOUS ACCESS CONTROL
1100-01-23

REVISION DATE			
10-27-2016			

SCALE, FEET
0 50 100

DATE 06-11-2015 | HWY: I-41 / USH 45 | STATE R/W PROJECT NUMBER 1060-33-26 | PLAT SHEET 4.08

COUNTY: MILWAUKEE | CONSTRUCTION PROJECT NUMBER 1060-33-84

E

DETAIL NOT TO SCALE

HIGHWAY EASEMENT

MATCHLINE

C1
L 45.29'
R 600.10'
LCH 45.28'
LCB S04° 00' 07"E

C2
L 44.85'
R 621.92'
LCH 44.85'
LCB S02° 55' 54"E

C3
L 22.06'
R 621.92'
LCH 22.06'
LCB N00° 09' 02"E

C4
L 21.07'
R 600.10'
LCH 21.06'
LCB S00° 50' 03"E

C5
L 32.01'
R 600.10'
LCH 32.00'
LCB S01° 41' 58"W

L1	141.86'	N66° 03' 08"W
L2	24.26'	N66° 03' 08"W
L3	201.24'	N66° 03' 08"W
L4	25.21'	N66° 03' 08"W
L5	24.36'	S63° 33' 42"E
L6	205.04'	N66° 01' 40"W

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MILWAUKEE COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	1100-01-23	VARIES	1969

PREVIOUS ACCESS CONTROL
1100-01-23

7082
A Cast Iron Plug
In Concrete Pavement
Y 307525.90
X 571746.94

T 7 N
R 1.7 1.7 E
2.0 2.0
2.1

GN

CSM 7371
OUTLOT 1

DOC. 4049212
DOC. 3918848

5.01'
S23° 56' 52"W
193.38'
170.51' TO RL
PT: 403+72.50
271.07'
N54° 33' 39"W
475.37'
402
400
398
396
394

1/16 LINE

SW1/4 - NW1/4

SE1/4 - NW1/4

RL I-41 / USH 45
PI STA = 397+48.50
Y = 305171.14
X = 570400.54
PC STA = 390+71.79
PT STA = 403+72.50
DELTA = 39°01'06"
D = 2°59'59"
T = 676.71'
L = 1300.71'
R = 1910.00'
LCH = 1275.72'
LCB = N46°32'35"W

83 MILWAUKEE COUNTY

TLE FOR SLOPES & FENCE REPLACEMENT

506 MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
DOC. 9751464
PCL. 82
DOC. 9378044
PCL. 83

501 WE ENERGIES - GAS
DOC. 4097071 R. 186 I. 1696
PCL. 83

500 WE ENERGIES - ELECTRIC
DOC. 4049212 R. 151 I. 845
PCL. 85

S63° 33' 42"E
204.93'
224.01'
122.25'
40'
N66° 03' 08"W
S84°00'36"W
70.13'
169.80'
163.09'
164.33'
N50°25'28"W
5'
DOC. 4097071

SEE SHEET 4.10

MATCHLINE STA. 403+82.57'

C7
L 280.40'
R 641.92'
LCH 278.18'
LCB N16° 31' 45"W

CL UNDERWOOD PARKWAY

N29° 01' 37"W
165.91'
20'
20'

85 MILWAUKEE COUNTY

TLE FOR ACCESS OVER UNDERWOOD PARKWAY

7094
A Concrete Monument
w/ A Brass Cap
Y 304800.15
X 569081.94

T 7 N
R 1.9 2.0 E
1.9 2.0
2.1

C6
L 71.34'
R 1648.18'
LCH 71.34'
LCB N27° 47' 13"W

84 MILWAUKEE COUNTY

401+00.00 (PRW6017)
106.68'

CSM 7371
R. 5772 I. 2982
DOC. 8730753
LOT 1

399+20.00 (PRW6052)
120.77'

310.02'
S46° 17' 37"E
310.72'
S34° 22' 56"E
626.82'
114.59'
110.70'

82 WISCONSIN LUTHERAN COLLEGE INC.

TLE FOR SLOPES & FENCE REPLACEMENT

FLOOD WATER EASEMENT MMSD DOC. 9751464

CSM 7371
OUTLOT 1

FLOOD WATER EASEMENT MMSD DOC. 9378044

938.55'
276.94'
1155.20'
280.60'
N25° 54' 59"W

POOL

7095
A Concrete Monument
w/ A Brass Cap
Y 304820.60
X 571773.24

T 7 N
R 2.0 2.0 E
2.0 2.0
2.1

850.65'
Z
447.31'
N89°33'53"E
Z
6.03'
2691.38' COR. TO COR
5.54'
N89° 33' 53"E
Z
1036.70'

STA.393+56.48 RL I-41 / USH 45

SEE SHEET 4.27

SEE SHEET 4.08

SEE SHEET 4.08

WAUWATOSA

REVISION DATE 10-27-2016	SCALE, FEET 0 50 100	DATE 06-11-2015	HWY: I-41 / USH 45	STATE R/W PROJECT NUMBER 1060-33-26	PLAT SHEET 4.09
		COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER 1060-33-84		E

FILE NAME : N:\PDS\C3D\ROW\10603326\RW\040409_RP.DWG PLOT DATE : 10/26/2016 11:23 AM PLOT BY : KRAUSE, PAUL H PLOT NAME : PLOT SCALE : 1:100_XREF

4

SEE SHEET 4.11

SEE SHEET 4.11

STA.585+07.40 RL STH 100

STA.411+51.40 RL I-41 / USH 45
STA.594+69.30 RL STH 100

STA. 611+66.54 RL STH 100

RL STH100 = SECTIONLINE
N00° 41' 49"W
1986.48'

7094
A Concrete Monument
w/ A Brass
Y 304805.55
X 569081.94

7095
A Concrete Monument
w/ A Brass
Y 304805.55
X 571173.24

7081
A Concrete Monument
w/ A Brass
Y 307459.09
X 569049.59

SEE DETAIL A

SEE SHEET 4.09

MATCHLINE STA. 403+82.57

MATCHLINE STA. 403+82.57

CITY OF WAUWATOSA

COUNTRY CLUB BLOCK 12

DYNAMIS (15)

CSM 3116
DOC. 5123772
R. 1034 I. 1181
PARCEL 2

CSM 3116
PARCEL 1

CSM 8153
DOC. 09745292
LOT 1

LOT 1
CSM 8703
(89) THE 2100

COUNTRY CLUB BLOCK 8

(88) SONSHINE

(87) MMSD

(86) SOO LINE RAILROAD

(85) MILWAUKEE COUNTY

(83) MILWAUKEE COUNTY

RAILROAD

RL I-41 / USH 45 410

SW1/4 - NW1/4

1/16 LINE

TLE FOR SLOPES AND STAGING

TLE FOR SLOPES & SIDEWALK

HIGHWAY EASEMENT

ACCESS EASE. DOC. 10045461

WISDOT STORM SEWER EASE. DOC. 5198848

DOC. 4049212

DOC. 4097071

DOC. 5647066
DOC. 1701092
DOC. 1536714
DOC. 5599611
DOC. 4278109

PRW6007
PRW6008
PRW6009
PRW6013
PRW6014
PRW6015
PRW6016
PRW6018
PRW6019

C1
L 2.04'
R 600.10'
LCH 2.04'
LCB S27° 17' 13"W

C2
L 25.02'
R 600.10'
LCH 25.02'
LCB S25° 59' 43"W

C3
L 70.92'
R 600.10'
LCH 70.88'
LCB S21° 24' 54"W

C4
L 48.94'
R 2144.20'
LCH 48.94'
LCB S32° 45' 48"W

C5
L 27.32'
R 2325.00'
LCH 27.32'
LCB S32° 27' 18"W

C6
L 10.00'
R 2144.20'
LCH 10.00'
LCB S27° 19' 39"W

C7
L 21.82'
R 2200.20'
LCH 21.82'
LCB S26° 54' 32"W

C8
L 28.94'
R 2325.00'
LCH 28.94'
LCB S26° 57' 11"W

C9
L 232.71'
R 2144.20'
LCH 232.60'
LCB S30° 18' 14"W

C10
L 251.39'
R 2325.00'
LCH 251.26'
LCB S29° 41' 39"W

C11
L 25.02'
R 2200.20'
LCH 25.02'
LCB S26° 17' 56"W

C12
L 25.02'
R 2325.00'
LCH 25.02'
LCB S26° 17' 18"W

C13
L 12.00'
R 2829.90'
LCH 12.00'
LCB S29° 38' 32"W

C14
L 235.41'
R 2829.90'
LCH 235.34'
LCB S32° 05' 42"W

L 25.43'
R 2829.90'
LCH 25.43'
LCB S34° 32' 02"W

L 25.32'
R 2325.00'
LCH 25.32'
LCB S33° 06' 13"W

L 25.37'
R 2144.20'
LCH 25.37'
LCB S33° 45' 22"W

(500) WE ENERGIES - ELECTRIC
DOC. 5647066 R. 1561 I. 150
PCL. 15
DOC. 4049212 R. 15 I. 845
PCL. 85, 87, 88
NO RECORDED EASEMENT
PCL. 85, 86
DOC. 1701092
PCL. 15
DOC. 1536714
PCL. 15

(503) AT&T WISCONSIN
DOC. 5647066 R. 1561 I. 150
PCL. 15
DOC. 1701092
PCL. 15
DOC. 1536714
PCL. 15

(501) WE ENERGIES - GAS
DOC. 4097071 R. 186 I. 1696
PCL. 83

(532) WAUWATOSA WATER UTILITY
DOC. 1701092
PCL. 15

(534) CITY OF WAUWATOSA
DOC. 1701092
PCL. 15
DOC. 5599611 R. 1510 I. 155
PCL. 15
DOC. 4278109 R. 327 I. 563
PCL. 15

UA 631 - CITY OF WAUWATOSA
UA 632 - WAUWATOSA WATER UTILITY

HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	1100-01-23	VARIES	1969
STH 100	2032-02-20	120'	2010
STH 100	U058 - 1(9)	120'	1957

PREVIOUS ACCESS CONTROL
1100-01-23

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MILWAUKEE COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

DETAIL A

REVISION DATE
04-02-2015
06-11-2015
10-27-2016

SCALE. FEET 0 50 100

DATE 09-24-2014 | HWY: I-41 / USH 45 | STATE R/W PROJECT NUMBER 1060-33-26 | PLAT SHEET 4.10

COUNTY: MILWAUKEE | CONSTRUCTION PROJECT NUMBER 1060-33-84

E

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MILWAUKEE COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

(500) WE ENERGIES - ELECTRIC
DOC. 3883521 R. 4145 P. 421
PCL. 1
DOC. 9772564, 9766476
PCL. 60
DOC. 4062459 R. 161 I. 1119
PCL. 60
DOC. 4060779 R. 160 I. 846
PCL. 60
DOC. 3560906
PCL. 60
DOC. 9772565, 9766475
PCL. 61
DOC. 09766480
PCL. 61
DOC. 09771077
PCL. 61
DOC. 3271506 D. 3254 I. 177
PCL. 61

(500) WE ENERGIES - ELECTRIC
NO RECORDED EASEMENT
PCL. 70
DOC. 3883520 R. 4145 I. 419
PCL. 70
DOC. 3909566 R. 4182 I. 498
PCL. 70, EXISTING RIGHTS IN R/W

(508) US SPRINT
DOC. 6463414 R. 2545 P. 1708
PCL. 62

(503) AT&T WISCONSIN
DOC. 3883521 R. 4145 P. 421
PCL. 1
DOC. 4060779 R. 160 I. 846
PCL. 60
DOC. 4062459 R. 161 I. 1119
PCL. 60
DOC. 3560906
PCL. 60
DOC. 3271506 D. 3254 I. 177
PCL. 61
DOC. 09766480
PCL. 61
DOC. 09771077
PCL. 61
DOC. 3883520 R. 4145 I. 419
PCL. 70
DOC. 3909566 R. 4182 I. 498
PCL. 70, EXISTING RIGHTS IN R/W

(506) MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
DOC. 3444956 D. 3507 P. 176
PCL. 60, EXISTING RIGHTS IN R/W
DOC. 3444957 D. 3507 P. 180
PCL. 60

UA 631 - CITY OF WAUWATOSA
UA 632 - WAUWATOSA WATER UTILITY

RL I-41/USH 45
PI STA = 427+95.81
Y = 306429.45
X = 567567.39
PC STA = 416+48.94
PT STA = 436+86.55
DELTA = 65°35'16"
D = 3°13'08"
T = 1146.86'
L = 2037.60'
R = 1780.00'
LCH = 1928.16'
LCB = N33°15'30"W

7093
A Concrete Monument w/ A Brass Cap
Y 304766.37
X 566424.07

7094
A Concrete Monument w/ A Brass Cap
Y 304800.15
X 569081.94

7081
A Concrete Monument w/ A Brass Cap
Y 307453.09
X 569049.59

CITY OF WAUWATOSA

SE1/4 - NE1/4

HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	1100-01-23	VARIES	1969
STH 100	2032-02-20	120'	2010
STH 100	U058 - 1(9)	120'	1957

PREVIOUS ACCESS CONTROL
1100-01-23

SEE SHEET 4.26
SEE SHEET 4.25
SEE SHEET 4.25
SEE SHEET 4.12
SEE SHEET 4.12
SEE SHEET 4.10
SEE SHEET 4.10
SEE SHEET 4.10

TLE FOR SLOPES & STAGING
HIGHWAY EASEMENT
1/16 LINE
1/16 LINE
RL UP RR
UNION PACIFIC RAILROAD
DOC 6463414 BLANKET
RL I-41 / USH 45
STA.49+96.62 RL UP RR
STA.417+53.52 RL I-41/USH 45
STA.51+09.73 RL UP RR
MMSD SEWER LINE DOC.3468063
MMSD DOC 3444956 15'
TLE FOR SLOPES & ACCESS
TLE FOR SLOPES
TLE FOR SLOPES & ACCESS
15' WIDE PLE FOR WALL
TLE FOR PAVEMENT REMOVAL
DOC 3883520 24' EASE.
35' ROAD EASE. DOC. 3766651
5' MSD EASE. DOC. 3883520
DOC 3909566 10' EASE.
DOC 09766480 15'
DOC 09771077 20'
DOC 3271506 BLANKET
DOC 4062459
DOC 4060779
DOC 3560906
DOC 9772564 & 9766476 8'
DOC 9772565 & 9766475 8'
DOC 3444957 15'
DOC 3883520
DOC 3909566
PRW6034 48+63.63 50.00'
PRW6033 47+92.47 50.00'
PRW6032 47+92.47 50.00'
PRW6012 416+34.59 145.00'
PRW6011 416+03.95 114.00'
PRW6010 413+55.27 114.00'
PRW6054 412+46.45 128.56'
PRW6053 411+67.50 108.79'
PRW6001 414+97.30 101.67'
PRW6002 415+01.47 110.76'
PRW6003 413+08.81 199.23'
PLE6964 42+85.33 50.00'
PLE6965 42+85.64 65.00'
PLE6966 48+19.46 65.00'
PC: 416+48.94
STA.585+07.40 RL STH 100
RL STH 100 = SECTION LINE
STA.411+51.40 RL I-41/USH 45
STA.594+69.30 RL STH 100
1329.57'
S00° 41' 49"E
N00° 41' 49"W
N89° 17' 05"E
N00° 27' 35"E
S00° 41' 49"E
S07° 16' 19"E
N66° 03' 08"W
N66° 53' 07"W
N89° 13' 30"E
N89° 17' 05"E
N89° 33' 25"W
N68° 25' 43"W
N58° 25' 43"W
N60° 28' 43"W
N53° 41' 29"W
N80° 06' 47"W
N68° 41' 05"E
N63° 35' 15"E
1013.05'
503.86'
491.23'
507.14'
533.82'
320.00'
1078.51' (1078.75')
869.73'
961.90'
1329.57'
100.02'
433.97'
223.34'
207.77'
177.09'
109.79'
81.40'
123.14'
187.93'
248.68'
216.67'
122.33'
223.59'
212.00'
231.71'
103.68'
120.87'
65.57'
42.15'
58.93'
48.62'
386.10'
74.03'
71.16'
20.97'
16.16'
27.43'
162.68'
10.90'
65.00'
80.00'
50'
60'
65'
100'
MH
FLAG
BRAZIL
UNITED FOOD
RUSS DARROW
G&I

REVISION DATE			
07-15-2014	10-27-2016		
09-24-2014			
04-02-2015			

SCALE, FEET
0 50 100

DATE 11-07-2013
COUNTY: MILWAUKEE

HWY: I-41 / USH 45
CONSTRUCTION PROJECT NUMBER 1060-33-84, 1060-33-86

STATE R/W PROJECT NUMBER 1060-33-26

PLAT SHEET 4.11

E

FILE NAME : N:\PDS\C3D\ROW\10603326\RW\040411_RP.DWG
PLOT DATE : 10/26/2016 2:02 PM PLOT BY : KRAUSE, PAUL H PLOT NAME : PLOT SCALE : 1:100_XREF

PI STA = 427+95.81
Y = 306429.45
X = 567567.39
PC STA = 416+48.94
PT STA = 436+86.55
DELTA = 65°35'16"
D = 3°13'08"
T = 1146.86'
L = 2037.60'
R = 1780.00'
LCH = 1928.16'
LCB = N33°15'30"W

C1
L 165.56'
R 1927.13'
LCH 165.51'
LCB S51° 11' 51"E

C2
L 211.83'
R 1892.13'
LCH 211.72'
LCB S51° 56' 37"E

C3
L 378.97'
R 1876.52'
LCH 378.32'
LCB S42° 58' 49"E

C4
L 60.00'
R 1872.13'
LCH 60.00'
LCB N49° 39' 04"W

C5
L 207.42'
R 1979.86'
LCH 207.33'
LCB N88° 18' 45"E

C6
L 237.65'
R 1969.86'
LCH 237.51'
LCB N87° 51' 54"E

HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	1100-01-23	VARIES	1969
STH 100	2032-02-20	120'	2010
STH 100	2030-00-22	VARIES	1983
STH 100	U058 - 1(9)	120'	1957
NORTH AVE.	2135-01-21 US0821 (4)	VARIES	1957
NORTH AVE.	U058 - 1(9)	VARIES	1957

PREVIOUS ACCESS CONTROL
1100-01-23

7080
A Concrete Monument w/ A Brass Cap
Y 307420.41
X 566395.04

T 7 N R 21 E: 18 17 / 19 20

MATCH LINE — SEE SHEET 4.13 — MATCH LINE — SEE SHEET 4.13

SEE SHEET 4.25 — SEE SHEET 4.11 — SEE SHEET 4.11

RL I-41 USH 45 — 420 — 426.39' — N42°23'15"W — 421+87.41 120.90' PRW6039 — N40°56'52"E 20.00' — 73 BRE/ESA — 421+87.44 155.90' PLE6956

N52° 59' 34"W — 210.22' — 100.66' — 60.81' — S89°32'25"E — 39.85' — 420+09.83 119.80' PRW6038 — S45°37'58"W — 419+55.36 154.01' PLE6955 — 190.00'

US SPRINT EASEMENT IN RAILROAD AT PARCEL 73 DOC.10282052

PLE WALL TIEBACKS AND MAINTENANCE

CSM 4333
DOC. 5625363
R. 1537 I. 40
PARCEL 2

CITY

US SPRINT EASEMENT IN RAILROAD AT PARCEL 74 DOC.10282052

74 AUTO HOLDING

N89° 09' 55"E — N00° 00' 00"E — 8' — DOC. 4475751 — TLE SLOPES — 5' — C5 — C6 — SIGN 10' — DOC. 4433849 — 10' — N89° 09' 55"E

TLE SLOPES ACCESS & SHOOFLY

N00°27'55"E — 59.90' — DOC 5701631 — 117.79' — 433.97' — 50.61' PL — 30' — 30.01' — N00° 27' 35"E — 532.52' — 544.83' — 414.45' — DOC. 4475751 — DOC 6463414 BLANKET — 50' — 50' — 50'

RL I-41 / USH 45
PI STA = 427+95.81
Y = 306429.45
X = 567567.39
PC STA = 416+48.94
PT STA = 436+86.55
DELTA = 65°35'16"
D = 3°13'08"
T = 1146.86'
L = 2037.60'
R = 1780.00'
LCH = 1928.16'
LCB = N33°15'30"W

C12
L 108.04
R 1984.86
LCH 108.02
LCB S87° 07' 47"E

C11
L 107.66
R 1974.86
LCH 107.65
LCB S85° 30' 03"E

C10
L 163.45'
R 1969.86'
LCH 163.40'
LCB S86° 18' 07"E

C9
L 20.11
R 1974.86
LCH 20.11
LCB S83° 38' 51"E

C8
L 20.11
R 1969.86
LCH 20.11
LCB S83° 37' 57"E

C7
L 119.23
R 1979.86
LCH 119.21
LCB S81° 38' 46"E

C6
L 119.74'
R 1969.86'
LCH 119.72'
LCB S81° 35' 55"E

C5
L 123.84
R 1979.86
LCH 123.82
LCB S78° 07' 44"E

C4
L 121.02
R 1969.86
LCH 121.00
LCB S78° 05' 49"E

C3
L 378.97'
R 1876.52'
LCH 378.32'
LCB S42° 58' 49"E

C2
L 291.61'
R 1911.52'
LCH 291.33'
LCB S44° 23' 43"E

HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	1100-01-23	VARIES	1969
USH 45	CSM 4333	VARIES	1983
USH 45	DOC. NO. 5622957	VARIES	1983
NORTH AVENUE	USO821 (4)	VARIES	1957

PREVIOUS ACCESS CONTROL
1100-01-23

503 AT&T WISCONSIN
DOC. 5588608 R. 1497 I. 1383
PCL. 74

501 WE ENERGIES - GAS
DOC. 5588608 R. 1497 I. 1383
PCL. 74
DOC. 7258471 R. 3870 I. 1006
PCL. 77

506 MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
DOC 3444955 V. 3507 P. 172
PCL. 77, EXISTING RIGHTS IN R/W
DOC. 7258471 R. 3870 I. 1006
PCL. 77

534 CITY OF WAUWATOSA
DOC. 5588608 R. 1497 I. 1383
PCL. 73, 74, 75
DOC. 5630986 R. 1543 I. 1472
PCL. 73, 75, 76
DOC. 5623728 R. 1535 I. 1102
PCL. 74
DOC. 4433849 R. 454 I. 780
PCL. 74
DOC. 7258471 R. 3870 I. 1006
PCL. 77
DOC. 5625363 R. 1537 I. 42
PCL. 73, 75, 76

500 WE ENERGIES - ELECTRIC
DOC. 5701631 R. 1621 I. 1697
PCL. 73
DOC. 5688890 R. 1607 I. 1250
PCL. 75
DOC. 5686332 R. 1605 I. 441
PCL. 76
DOC. 3542899 V. 3647 P. 560
PCL. 77
DOC. 3901899
PCL. 77
DOC. 7258471 R. 3870 I. 1006
PCL. 77

532 WAUWATOSA WATER UTILITY
DOC. 5630986 R. 1543 I. 1472
PCL. 73, 75
DOC. 5588608 R. 1497 I. 1383
PCL. 75
DOC. 5625363 R. 1537 I. 42
PCL. 73, 75

UA 631 CITY OF WAUWATOSA
UA 632 WAUWATOSA WATER UTILITY

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MILWAUKEE COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.
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FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

7080 A Concrete Monument w/ A Brass Cap X 567495.04 Y 307452.04

7081 A Concrete Monument w/ A Brass Cap X 569049.55 Y 305459.09

7094 A Concrete Monument w/ A Brass Cap X 569081.94 Y 304800.15

RL NORTH AVE.
PI STA = 117+99.73
Y = 307235.18
X = 568187.61
PC STA = 115+46.27
PT STA = 120+49.39
DELTA = 17°10'20"
D = 3°24'47"
T = 253.46'
L = 503.13'
R = 1678.71'
LCH = 501.25'
LCB = S85°57'35"E

REVISION DATE			
10-27-2016			

SCALE, FEET: 0 50 100

DATE 06-11-2015 | HWY: I-41 / USH 45 | STATE R/W PROJECT NUMBER 1060-33-26 | PLAT SHEET 4.13

COUNTY: MILWAUKEE | CONSTRUCTION PROJECT NUMBER 1060-33-84, 1060-34-76

E

FILE NAME : N:\PDS\C3D\ROW\10603326\RW\040413_RP.DWG | PLOT DATE : 11/28/2016 1:24 PM | PLOT BY : KRAUSE, PAUL H | PLOT NAME : | PLOT SCALE : 1:100_XREF

7080
A Concrete Monument
w/ A Brass Cap
Y 307420.41
X 566395.04

T 7 N
18 18
19 19
R 21 E

SEE SHEET 4.16

DETAILS NOT TO SCALE

5.65'
N45° 43' 51"W

9.90'
N44° 10' 46"E

SEE SHEET 4.16

98 100 102 104 106 108 110

RL NORTH AVE. = SECTION LINE

STA.99+87.19 RL NORTH AVE.

N89° 09' 55"E

PRW6027 102+97.97 60.00'

103+68.97 60.00' PRW6024

NORTH

60'

12.43'
83.00'
45.63'

PC: 106+68.60

L 503.84'
R 1849.86'
LCH 502.28'
LCB N83° 04' 18"W

CITY

PT: 111+17.30

AVENUE

7081
A Concrete Monument
w/ A Brass Cap
Y 307459.09
X 569049.59

T 7 N
18 17
19 20
R 21 E

MATCHLINE

SEE SHEET 4.13

RL NORTH AVE.
PI STA = 108+93.99
Y = 307433.62
X = 567301.74
PC STA = 106+68.60
PT STA = 111+17.30
DELTA = 13°27'40"
D = 3°00'00"
T = 225.39'
L = 448.71'
R = 1909.85'
LCH = 447.67'
LCB = S84°06'15"E

SIGN 10' NORTH AVE HOLD CO (110) J&K (22) STK (21) SIGN 10' 45' 64.00' 103+05.95 PRW6026

103+61.97 67.00' PRW6025

DOC. 1640785
6' DOC. 3998587
A/C PATCH (20)

TLE SLOPES | TLE SLOPES & DRIVE | TLE SLOPES

45' 40' 40' 45' 45'

10' 20' 6 5 4 3 2 1

55'

(19) AUS1 (18) FOX1 (17) F&F 10' 26' NO0° 37' 37"W 50' 5' (16) AT&T (116) C3 C2 C1

45' 20' 25' 40' 40' 43' 22.42'

DOC. 1640785

TLE SLOPES | TLE SLOPES & SIDEWALK | 20' 5'

N89°09'55"E

60'

26 25 24 23 22 21 20 19 18 17

POOL

BLOCK 1 | BLOCK 2

NO0° 37' 37"W

116TH STREET | 115TH STREET | 114TH STREET

55' | 60' | 60'

L 12.96'
R 45.02'
LCH 12.92'
LCB S74° 44' 33"W

L 19.48'
R 45.00'
LCH 19.33'
LCB S46° 06' 46"W

C1
L 6.27'
R 45.00'
LCH 6.26'
LCB S62° 30' 06"W

C2
L 84.62'
R 45.00'
LCH 72.69'
LCB S20° 09' 19"E

C3
L 8.85'
R 25.00'
LCH 8.80'
LCB N63° 53' 47"W

OF

DETAIL (79)

TLE FOR SLOPES AND FENCE REPLACEMENT

N89°09'55"E 22.50'
N66°50'17"W 73.77'
S40°35'41"E 52.03'
30' 5' 90' 45' 10' 15' S00°40'05"E

DETAIL NOT TO SCALE

(500) WE ENERGIES - ELECTRIC
DOC. 3998587 R. 62 I. 64
PCL. 21
DOC. 1640785
PCL. 17, 18, 21, 22, 79
DOC. 3868316 D. 4123 P. 114
PCL. 78, 79

(503) AT&T WISCONSIN
DOC. 3998587 R. 62 I. 64
PCL. 21
DOC. 1640785
PCL. 17, 18, 21, 22, 79
DOC. 3868316 D. 4123 P. 114
PCL. 78, 79

UA 631 - CITY OF WAUWATOSA
UA 632 - WAUWATOSA WATER UTILITY

NORTH AVENUE

NO0° 40' 05"W

STREET

GARFIELD AVE. 60'

MANOR

BLOCK 6

BLOCK 5

THAT PART OF VACATED WEST GARFIELD AVE.

79 GOLDSMITH

DOC. 3868316
DOC. 1640785

ENCROACHMENT

LOSEY 78

DOC. 3868316

113TH STREET

80'

GN

7093
A Concrete Monument
w/ A Brass Cap
Y 304766.97
X 566424.07

T 7 N
19 19
19 19
R 21 E

NW1/4 - NE1/4

WAUWATOSA

PREVIOUS ACCESS CONTROL
1100-01-23

NOTES:

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HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	1100-01-23	VARIES	1969
NORTH AVENUE	US0821 (4)	VARIES	1957
113TH STREET	NORTH AVENUE MANOR	80'	1928
114TH STREET	NORTH AVENUE MANOR	60'	1928
114TH STREET	1100-01-23	50'	1969
115TH STREET	NORTH AVENUE MANOR	60'	1928
116TH STREET	NORTH AVENUE MANOR	55'	1928
GARFIELD AVENUE	NORTH AVENUE MANOR	60'	1928

REVISION DATE			
10-27-2016			

SCALE. FEET
0 50 100

DATE 06-11-2015

COUNTY: MILWAUKEE

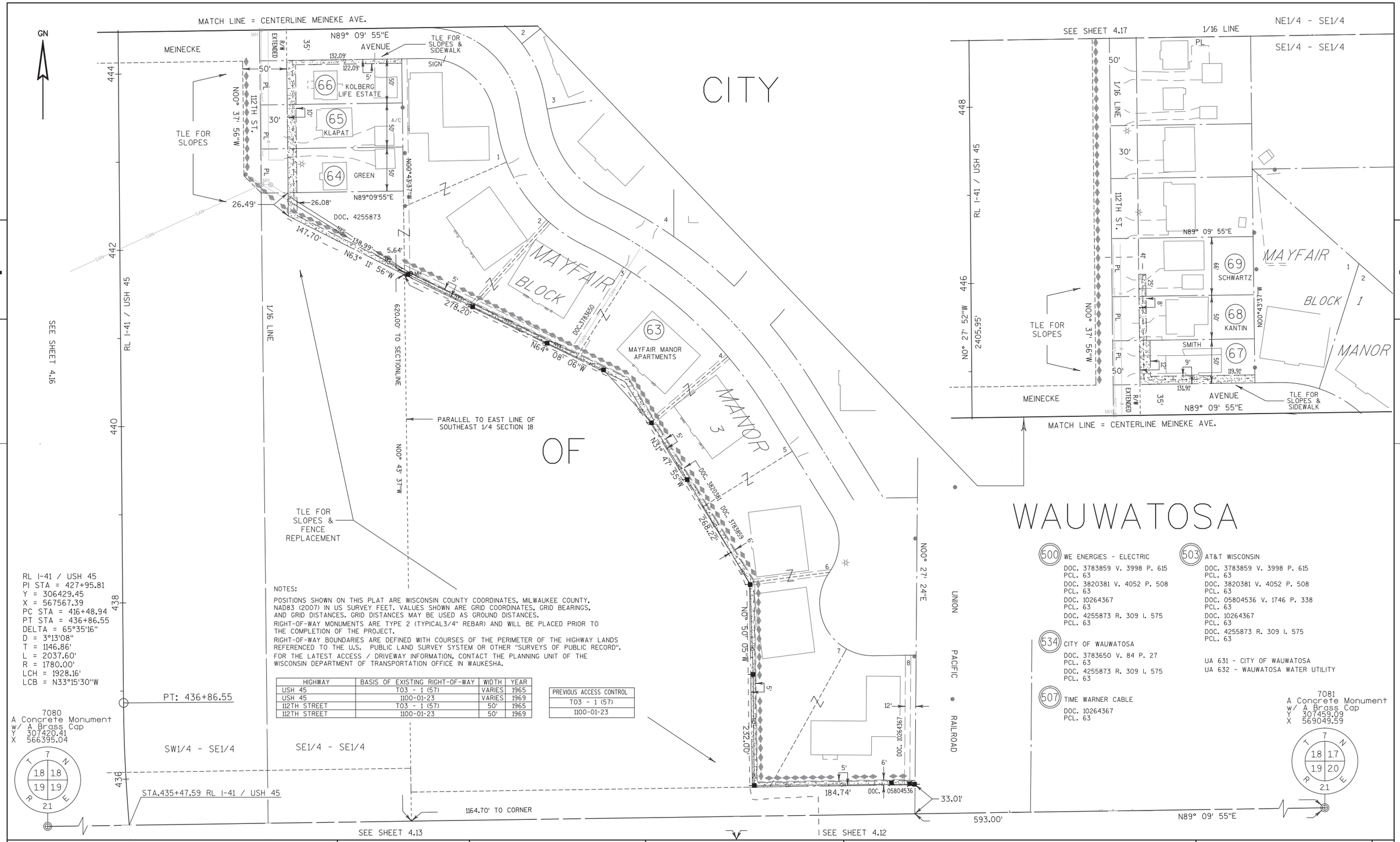
HWY: I-41 / USH 45

CONSTRUCTION PROJECT NUMBER 1060-33-84

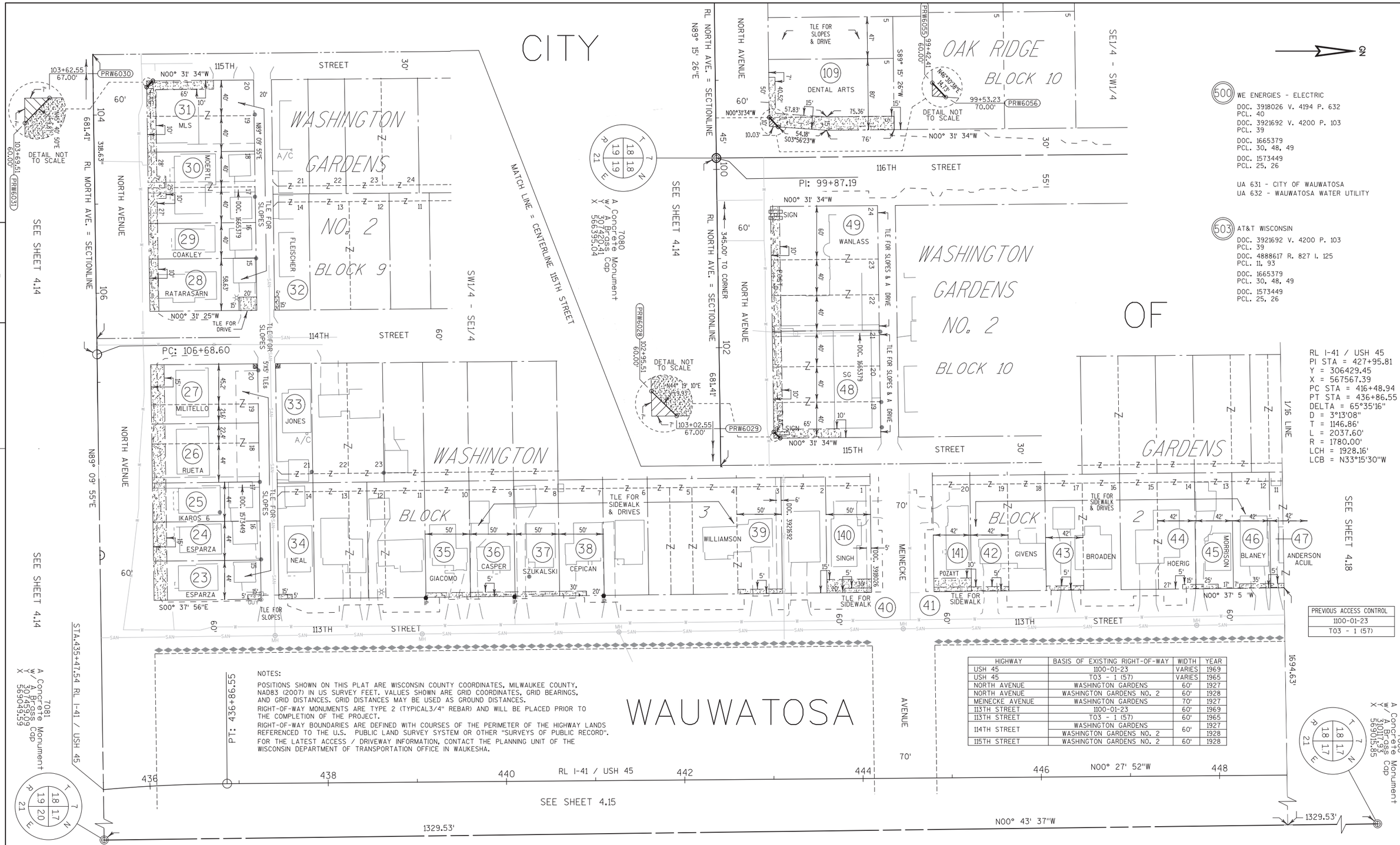
STATE R/W PROJECT NUMBER 1060-33-26

PLAT SHEET 4.14

E



REVISION DATE	SCALE, FEET	DATE 06-11-2015	HWY: I-41 / USH 45	STATE R/W PROJECT NUMBER 1060-33-26	PLAT SHEET 4.15
10-27-2016	0 50 100	COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER 1060-33-84		E



HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	1100-01-23	VARIES	1969
USH 45	TO3 - 1 (57)	VARIES	1965
NORTH AVENUE	WASHINGTON GARDENS	60'	1927
NORTH AVENUE	WASHINGTON GARDENS NO. 2	60'	1928
MEINECKE AVENUE	WASHINGTON GARDENS	70'	1927
113TH STREET	1100-01-23	60'	1969
113TH STREET	TO3 - 1 (57)	60'	1965
114TH STREET	WASHINGTON GARDENS	60'	1927
	WASHINGTON GARDENS NO. 2		1928
115TH STREET	WASHINGTON GARDENS NO. 2	60'	1928

REVISION DATE	SCALE: FEET	DATE 06-11-2015	HWY: I-41 / USH 45	STATE R/W PROJECT NUMBER 1060-33-26	PLAT SHEET 4.16	
10-27-2016	0 50 100	COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER 1060-33-84			E

SEE SHEET 4.18

HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	T03 - 1 (57)	290'	1965
112TH STREET	T03 - 1 (57)	50'	1965
CENTER STREET	FISHER'S WOODS DOC. 2132986	45'	1937
CLARKE STREET	FISHER'S WOODS DOC. 2132986	70'	1937

PREVIOUS ACCESS CONTROL
T03 - 1 (57)

SEE SHEET 4.18

7067
Manhole Rim
w/ 4 Chiseled Vs
Y 310073.92
X 566370.68

T 7 N, R 21 E, 18 18 18 18

STA.462+03.75 RL I-41 / USH 45
STA.20+14.00 RL CENTER ST.

450 452 RL I-41 / USH 45 454 456 N00° 27' 52"W 458 460 462

PC STA 460+62.50

N89° 02' 48"E (1353') 1353.10'

45' 20'

500 WE ENERGIES ELECTRIC
DOC. 3765058 V. 3971 P. 17
PCL. 5
DOC. 2167324
PCL. 5, 107

503 AT&T WISCONSIN
DOC. 2167324
PCL. 5, 107

UA 631 - CITY OF WAUWATOSA
UA 632 - WAUWATOSA WATER UTILITY

CITY OF WAUWATOSA

1/16 LINE

NW1/4 - SE1/4

NE1/4 - SE1/4

112TH STREET

50'

1/16 LINE

IP

PL

70'

CLARKE STREET

3 4

FISHER'S

BLOCK 3

2 1

5 6 7 8

10'

DOC. 2167324

WOODS

BLOCK 2

4 3 2 1

97.50' 97.50' 97.45' 97.45'

NO0° 37' 56"W 45'

10' 20'

460+62.83 (PRW6006) 186.36'

100' 100'

WALKER 2

CSM 3429 PARCEL 1

97.63'

5'

4 KLEIN

200'

3 DALLMANN

TLE FOR SLOPES & DRIVES

460+63.60 (PRW6005) 286.36'

N89° 05' 44"E 80'

CSM 3429 DOC. 5251717 PARCEL 2

461+50.92 (PRW6004) 287.29'

30' 40' 100'

15' 15' 40'

DOC. 3765058

NO0° 37' 56"W

5 WERRY

3'

24+03.47 45.00' (PLE6971)

PLE6972 24+03.38 60.00'

45'

15'

210.10'

S 1/2 LOT 1

N 1/2 LOT 1

PLE FOR WALL

SIVAK 107

TLE FOR SLOPES

15' 15'

CENTER STREET

25 RL CENTER ST. = QUARTERLINE

PLE6973 26+13.19 60.00'

70'

111TH STREET

NO0° 29' 26"E

PRW6049 26+82.58 85.00'

PRW6050 26+87.58 85.00'

40' 5' 20' 15' 35'

45'

26+88.59 45.00' (PRW6051)

29' 10' 35'

TLE FOR SLOPES & DRIVE

108 FRENS

S 1/2 LOT 1

N 1/2 LOT 1

BLOCK 1

4 3 2 1

1/16 LINE

7081
Y 307459.09
X 569049.59
w/ A Brass Cap
A Concrete Monument

T 7 N, R 21 E, 19 20 18 17

NOTES:

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626 628 1329.53' 630 632 NO0° 43' 37"W 634 636 638

RL STH 100 = SECTIONLINE

STA.34+96.15 RL CENTER ST.
STA.638+25.59 RL STH 100

7068
A Concrete Monument
w/ A Brass Cap
Y 310117.93
X 569015.85

T 7 N, R 21 E, 18 17 18 17

RL I-41 / USH 45
PI STA = 466+63.40
Y = 310553.03
X = 567533.95
PC STA = 460+92.50
PT STA = 471+91.27
DELTA = 38°23'14"
D = 3°29'37"
T = 570.90'
L = 1098.77'
R = 1640.00'
LCH = 1078.34'
LCB = N19°39'29"W

SEE SHEET 4.19

4

REVISION DATE			
07-15-2014	10-27-2016		
09-24-2014			
04-02-2015			

SCALE, FEET
0 50 100

DATE 11-07-2013	HWY: I-41 / USH 45	STATE R/W PROJECT NUMBER 1060-33-26	PLAT SHEET 4.17
COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER 1060-33-84, 1060-34-84, 1060-34-85		E

HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	T03 - 1 (57)	290'	1965
113TH STREET	T03 - 1 (57)	60'	1965
CENTER STREET	WASHINGTON GARDENS	45'	1927
	WASHINGTON GARDENS NO.2		1928
114TH STREET	WASHINGTON GARDENS	60'	1927
	WASHINGTON GARDENS NO.2		1928

PREVIOUS ACCESS CONTROL
T03 - 1 (57)

SEE SHEET 4.23

CL 115TH STREET
N00° 31' 34"W

115TH STREET

CITY OF WASHINGTON GARDENS NO. 2

NW1/4 - SE1/4

1/16 LINE

CLARKE STREET

CENTER STREET

N89° 02' 49"E

SEE SHEET 4.20

7067
A Manhole Rim
w/ 4 Chisled Vs
Y 310075.92
X 566370.68

T 7 N
R 21 E
18 18
18 18

BLOCK 8

BLOCK 7

TLE FOR SLOPES & SIDEWALK

TLE FOR SLOPES DRIVES & SIDEWALK

DOC. 1665379 & DOC. 4888617 VACATED ALLEY

DOC. 1665379 & DOC. 3775016 VACATED ALLEY

97 SCHROEDER 40'
96 MARTINEK 40' 10'
95 RESCH 40'
DOC. 3913724
94 OTTO 41'
12 GIBSON 41' 18' 24'
11 LEMMON 41.63' 10' 35.83'
92 KOWALSKI 42'
93 SCHMIDT 42.67'
12' 15' 22.67' 7' 20'
97'

114 116 118 120 122 124 126
60'
114TH STREET
NO°31'25"W

BLOCK 2

BLOCK 1

GARDENS

TLE FOR SIDEWALK & DRIVES

DOC. 3915769 5'

47 ANDERSON ACUIL 42'
50 DOLHUN 42' 5'
ANDERSON
51 42'
52 SCHULLS 42'
GRUDZINSKI
53 40.91'
STEIN
54 40'
55 ROY 20' 20' 5'
56 JANKA 40'
57 SCHWARZ 40' 25' 15'

113TH STREET

SEE SHEET 4.16

1/16 LINE

120'
10 KROEGER 15' 12' 20' 10' 37.5'
9 DAVID 42' 42.73' 43' 25' 35' 25'
91 FNMA 35'
90 LEMERONDI 36'
DOC. 3774485 & DOC. 3994799 VACATED ALLEY
8 BEAUCHAMP 43' 5'
7 LYNCH 43' 21.5' 30' 25' 5' 20' 12'
6 THOMEY 43' 30' 5' 25' 38'
100'
BENCH PLE FOR DRAINAGE

TLE FOR SLOPES & SIDEWALK

PLE6953 PLE6954 17+14.38 60.00' 17+14.46 45.00'
PLE6952 PLE6951 17+60.38 60.00' 17+60.46 45.00'

21 20 19 18 17 16 15 14 13 12 11 10 9 8 7

STA.15+14.36 RL CENTER ST.
STA.126+54.99 114TH ST.

16 RL CENTER ST. = QUARTER LINE 18

SEE SHEET 4.20

RL I-41 / USH 45
PI STA = 466+63.40
Y = 310553.03
X = 567533.95
PC STA = 460+92.50
PT STA = 471+91.27
DELTA = 38°23'14"
D = 3°29'37"
T = 570.90'
L = 1098.77'
R = 1640.00'
LCH = 1078.34'
LCB = N19°39'29"W

PC: 460+92.50

500 WE ENERGIES - ELECTRIC
DOC. 3943724 D. 4233 P. 70
PCL. 94
DOC. 3775016 D. 3985 P. 378
PCL. 94, 95
DOC. 4888617 R. 827 I. 125
PCL. 11, 93
DOC. 1665379
PCL. 11, 93, 94, 95
DOC. 1573449
PCL. 10, 90
DOC. 3994799 R. 54 I. 927
PCL. 10, 90

500 WE ENERGIES - ELECTRIC
DOC. 3915769 V. 4191 P. 403
PCL. 47
NO RECORDED EASEMENT
PCL. 95

503 AT&T WISCONSIN
DOC. 3775016 D. 3985 P. 378
PCL. 94, 95
DOC. 4888617 R. 827 I. 125
PCL. 11, 93
DOC. 1665379
PCL. 11, 93, 94, 95
DOC. 1573449
PCL. 10, 90
DOC. 3994799 R. 54 I. 927
PCL. 10, 90
NO RECORDED EASEMENT
PCL. 95

534 CITY OF WAUWATOSA
DOC. 3775016 D. 3985 P. 378
PCL. 94, 95
DOC. 4888617 R. 827 I. 125
PCL. 11, 93
DOC. 3994799 R. 54 I. 927
PCL. 10, 90

UA 631 - CITY OF WAUWATOSA
UA 632 - WAUWATOSA WATER UTILITY

532 WAUWATOSA WATER UTILITY
DOC. 3775016 D. 3985 P. 378
PCL. 94, 95
DOC. 4888617 R. 827 I. 125
PCL. 11, 93
DOC. 3994799 R. 54 I. 927
PCL. 10, 90

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MILWAUKEE COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

450 452 454 456 458 460
NO0° 27' 52"W
RL I-41 / USH 45

STA.462+03.75 RL I-41 / USH 45
STA.20+14.00 RL CENTER ST.

STA. 34+96.15 RL CENTER ST.

A Concrete Monument
w/ A Brass Cap
Y 310117.93
X 569015.85

T 7 N
R 21 E
18 17
18 17

WAUWATOSA

SEE SHEET 4.17

SEE SHEET 4.17

REVISION DATE			
04-02-2015			
06-11-2015			
10-27-2016			

SCALE, FEET
0 50 100

DATE 09-24-2014
COUNTY: MILWAUKEE

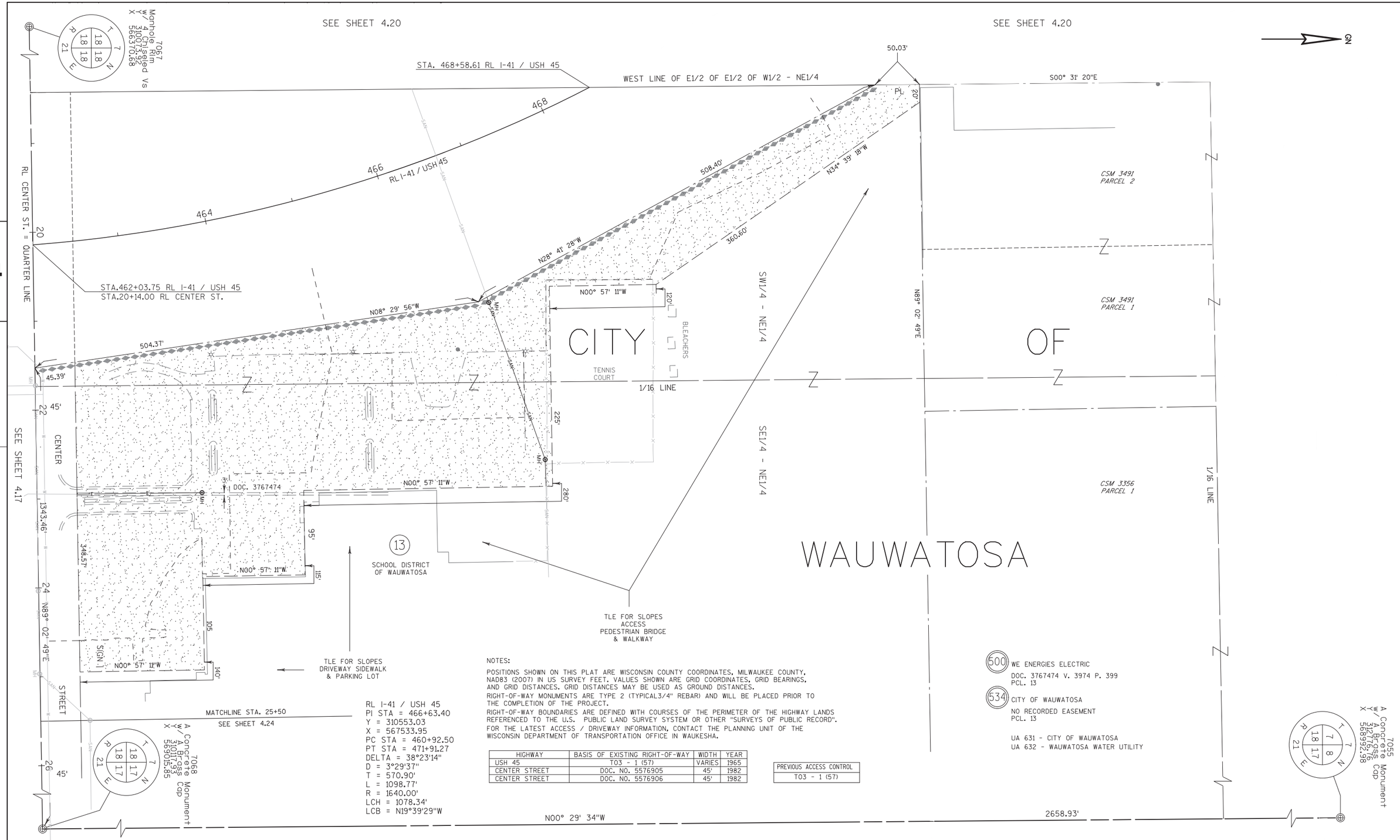
HWY: I-41 / USH 45
CONSTRUCTION PROJECT NUMBER 1060-33-84 1060-34-84 1060-35-85

STATE R/W PROJECT NUMBER 1060-33-26

PLAT SHEET 4.18

E

FILE NAME : N:\PDS\C3D\ROW\10603326\RW\040418_RP.DWG
PLOT DATE : 10/27/2016 1:28 PM
PLOT BY : KRAUSE, PAUL H
PLOT NAME :
PLOT SCALE : 1:50_XREF



RL I-41 / USH 45
PI STA = 466+63.40
Y = 310553.03
X = 567533.95
PC STA = 460+92.50
PT STA = 471+91.27
DELTA = 38°23'14"
D = 3°29'37"
T = 570.90'
L = 1098.77'
R = 1640.00'
LCH = 1078.34'
LCB = N19°39'29"W

NOTES:

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HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	T03 - 1 (57)	VARIES	1965
CENTER STREET	DOC. NO. 5576905	45'	1982
CENTER STREET	DOC. NO. 5576906	45'	1982

PREVIOUS ACCESS CONTROL
T03 - 1 (57)

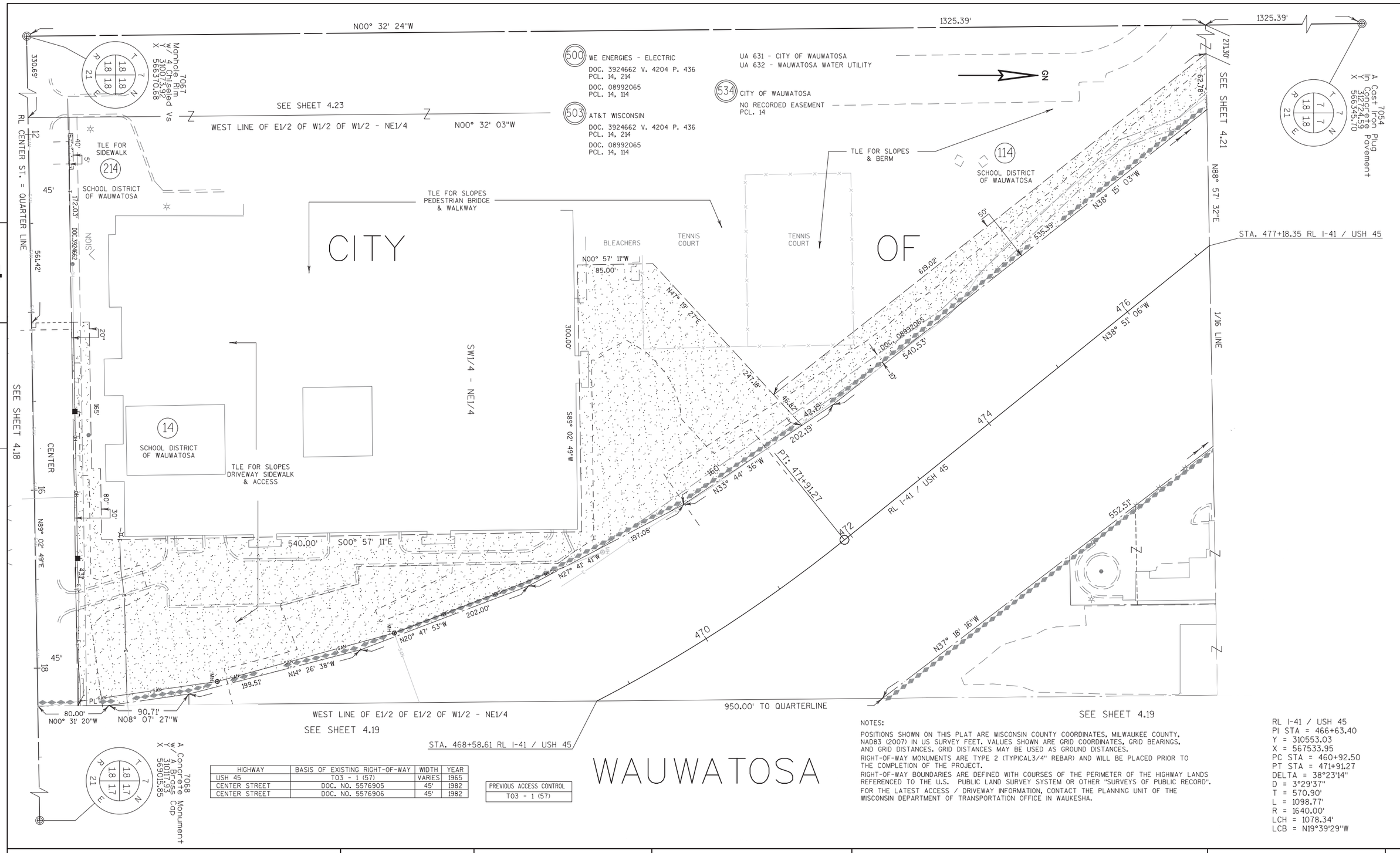
REVISION DATE	
09-24-2014	
04-02-2015	
06-11-2015	
10-27-2016	

SCALE, FEET 0 50 100

DATE 07-15-2014 | HWY: I-41 / USH 45 | STATE R/W PROJECT NUMBER 1060-33-26 | PLAT SHEET 4.19

COUNTY: MILWAUKEE | CONSTRUCTION PROJECT NUMBER 1060-33-83 1060-34-84 1060-33-84

E



HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	T03 - 1 (57)	VARIES	1965
CENTER STREET	DOC. NO. 5576905	45'	1982
CENTER STREET	DOC. NO. 5576906	45'	1982

PREVIOUS ACCESS CONTROL
T03 - 1 (57)

WAUWATOSA

NOTES:

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RL I-41 / USH 45
PI STA = 466+63.40
Y = 310553.03
X = 567533.95
PC STA = 460+92.50
PT STA = 471+91.27
DELTA = 38°23'14"
D = 3°29'37"
T = 570.90'
L = 1098.77'
R = 1640.00'
LCH = 1078.34'
LCB = N19°39'29"W

REVISION DATE			
09-24-2014	10-27-2016		
04-02-2015			
06-11-2015			

SCALE, FEET: 0 50 100

DATE 07-15-2014	HWY: I-41 / USH 45	STATE R/W PROJECT NUMBER 1060-33-26	PLAT SHEET 4.20
COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER 1060-33-83 1060-34-84 1060-33-84 1060-35-85, 1060-34-74		E

503 AT&T WISCONSIN
DOC. 4399975 R. 425 I. 1685 PCL. 58
DOC. 9523313 PCL. 80
DOC. 4384274 R. 412 I. 1148 PCL. 80
DOC. 4386869 R. 414 I. 1699 PCL. 81
DOC. 08992065 PCL. 114

500 WE ENERGIES - ELECTRIC
DOC. 4399975 R. 425 I. 1685 PCL. 58
DOC. 4947900 R. 880 I. 128 PCL. 58
DOC. 4384274 R. 412 I. 1148 PCL. 80
DOC. 4386869 R. 414 I. 1699 PCL. 81
DOC. 08992065 PCL. 114

UA 631 - CITY OF WAUWATOSA
UA 632 - WAUWATOSA WATER UTILITY

PREVIOUS ACCESS CONTROL
T03 - 1 (57)

NOTES:
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HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	T03 - 1 (57)	VARIES	1965
BURLEIGH STREET	T03 - 1 (57)	VARIES	1965

117TH STREET
PATCH'S INDUSTRIAL PARK DOC. 4390780 R. 47 I. 1786 LOT 3
PATCH'S INDUSTRIAL PARK LOT 2
PATCH'S INDUSTRIAL PARK LOT 1
PATCH'S INDUSTRIAL PARK LOT 4
80 M.A.E. MOXY
81 BURLEIGH MOB
58 RICKERT
114 SCHOOL DISTRICT OF WAUWATOSA
CITY OF WAUWATOSA
SEE SHEET 4.20
SIGN
Manhole Rim w/ 4 Chiseled Vs 7067 5663170.68
A Cast Monument Plug In Concrete Pavement 7054 312724.53 5663345.70

N88° 59' 51"E 194
80' 55' 60'
N01° 58' 00"E 5.06'
S79° 11' 56"E 52.72'
49.98'
95'
S88° 05' 35"E
Doc. 4386869 336.49'
5'
79.04'
N36° 19' 07"W 82.48'
N03° 25' 09"W 338.43'
Doc. 9523313
Doc. 4947900
Doc. 4384274 207.27'
N25° 45' 20"W 208.91'
8'
16'
N03° 25' 09"W 1.45'
5.02'
DETAIL NOT TO SCALE
TLE FOR SLOPES & FENCE REPLACEMENT
RL BURLEIGH ST. - SECTION LINE
383.00'
PT: 490+56.86
7.53'
5.64'
DETAIL NOT TO SCALE
Doc. 4399975 8' 187.41' 178.04' N38°41'50"W
10'
S52° 29' 31"W 170.67' N47°48'37"W 160.64'
TLE FOR SLOPES & FENCE REPLACEMENT
N18° 57' 45"W 63.20'
RL I-41 / USH 45
490
N00° 30' 04"W
492
198
STA.492+06.77 RL I-41 / USH 45
STA.197+60.56 BURLEIGH ST.
RL I-41 / USH 45
PI STA = 486+51.65
Y = 312134.93
X = 566259.71
PC STA = 482+13.49
PT STA = 490+56.86
DELTA = 38°21'02"
D = 4°32'50"
T = 438.17'
L = 843.37'
R = 1260.00'
LCH = 827.72'
LCB = N19°40'35"W
1325.39' 284.39' N00° 32' 24"W
318.74' TO USH 45 RL
622.26' TO USH 45 RL
STA.485+73.54 RL I-41 / USH 45
486
484
482
480
PC: 482+13.49
SW1/4 - NE1/4
NW1/4 - NE1/4
SE1/4 - NW1/4
NE1/4 - NW1/4
1/16 LINE
N88° 57' 32"E 271.30'
N88° 57' 32"E 262.78'
N44° 25' 45"W 501.94'
N41° 47' 09"W 501.94'
DOC. 08992065 10'
TLE FOR SLOPES, BERM, & FENCE REPLACEMENT
391.32'
N38° 15' 03"W 540.53'
N38° 51' 06"W
DETAILS NOT TO SCALE
11.39'
13.61'
N00° 32' 24"W
N38° 15' 03"W 5.15'
N41° 47' 09"W 501.94'
N38° 15' 03"W 540.53'
1/16 LINE
N00° 32' 03"W 187.00'
580.28'
N20° 41' 39"W
N36° 42' 00"W 560.60'
WATER TOWER
68'
200'
200
PRIVATE DRIVE
BURLEIGH ST.
N88° 52' 16"E 202
WAUWATOSA

REVISION DATE	SCALE: FEET	DATE 06-11-2015	HWY: I-41 / USH 45	STATE R/W PROJECT NUMBER 1060-33-26	PLAT SHEET 4.21	
10-27-2016	0 50 100	COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER 1060-33-84, 1060-34-74		SHEET 4.22 OMITTED	E

FILE NAME : N:\PDS\C3D\ROW\10603326\RW\040421_RP.DWG PLOT DATE : 10/27/2016 1:16 PM PLOT BY : KRAUSE, PAUL H PLOT NAME : PLOT SCALE : 1:100_XREF

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MILWAUKEE COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
CENTER STREET	OAK RIDGE	33'	1925
CENTER STREET	WASHINGTON GARDENS NO.2	45'	1928
CENTER STREET	DOC. 270359	33'	1947
CENTER STREET	CITY OF WAUWATOSA	45'	1962
115TH STREET	WASHINGTON GARDENS NO.2	60'	1928
116TH STREET	WASHINGTON GARDENS NO.2	55'	1928
116TH STREET	OAK RIDGE	30'	1925
117TH STREET	OAK RIDGE	60'	1925
118TH STREET			

CITY OF WAUWATOSA

UA 631 - CITY OF WAUWATOSA
UA 632 - WAUWATOSA WATER UTILITY

500 WE ENERGIES - ELECTRIC
NO RECORDED EASEMENT
PCL. 102, 214

503 AT&T WISCONSIN
NO RECORDED EASEMENT
PCL. 105, 106, 214

SE1/4 - NW1/4 | SW1/4 - NE1/4

7066
A Concrete Monument
w/ An Aluminum Cap
Y 310035.89
X 563960.63

7067
Manhole Rim
w/ 4 Chiseled Vs
Y 310073.92
X 566370.68

7068
A Concrete Monument
w/ A Brass Cap
Y 310117.93
X 569015.85

T 7 N
R 20 E | R 21 E
13 | 18
13 | 18

T 7 N
R 21 E
18 | 18
18 | 18

T 7 N
R 21 E
18 | 17
18 | 17

117TH PLACE

60'

45'

CENTER STREET

N89° 05' 45"E

RL CENTER ST. = QUARTER LINE

N89° 02' 49"E

67.69' | 67.00'

106 SEIDER

105 CRUZ

214 SCHOOL DISTRICT OF WAUWATOSA

N00° 32' 24"W

TLE FOR SIDEWALK

40' | 5' | 15' | 40' | 5' | 27'

8.47'

225.00'

5'

35.90'

NDS

WEST LINE OF E1/2 OF W1/2 OF W1/2 - NE1/4

N00° 32' 03"W

SEE SHEET 4.20

TLE FOR SLOPES & SIDEWALK

TLE FOR SLOPES DRIVE & SIDEWALK

20' | 10'

10' | 60' | 75' | 10'

POST

15'

103 MOSBY

102 GOODING

104 ALIOTO

60'

270'

135' | 135'

100'

45'

STA.8+50.59 RL CENTER ST.
STA.36+53.62 116TH ST.

100 12850 LLC

99 WERNER

MORREALE 98

40' | 45' | 45' | 45' | 45' | 40'

SEE SHEET 4.18

NE1/4 - SW1/4

NW1/4 - SE1/4

130'

55'

30'

57'

50'

20'

101 CUSATIS

TLE FOR DRIVE

N00° 31' 23"W

127'

142.50' | 142.50'

WASHINGTON GARDENS NO. 2

BLOCK 12

BLOCK 2

BLOCK 1

OAK RIDGE SUBDIVISION

118TH STREET

117TH STREET

RL 116TH ST. = QUARTER LINE

N00° 31' 34"W

CL 115TH STREET

N00° 30' 11"W

GN

4

4

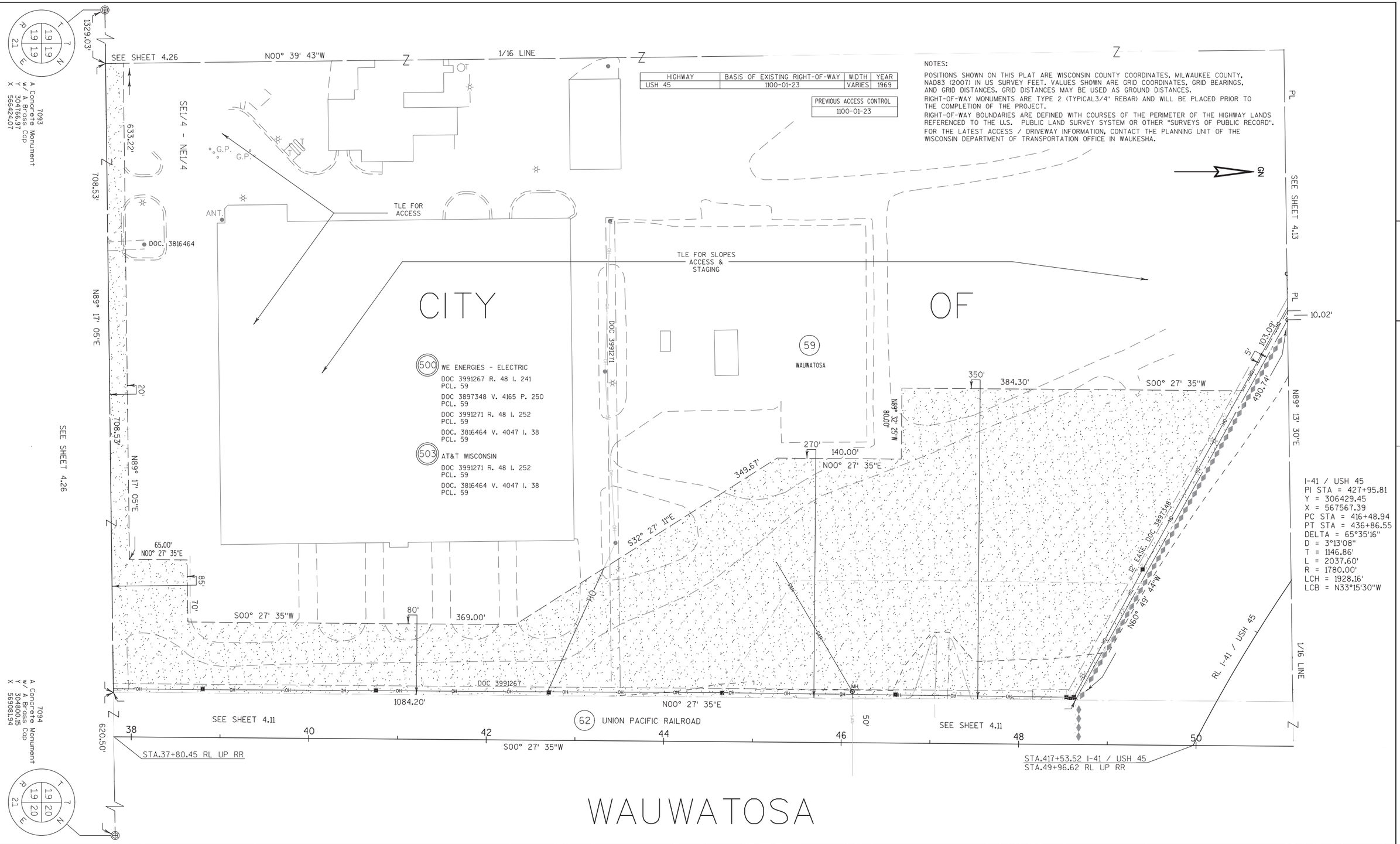
REVISION DATE			
06-11-2015			
10-27-2016			

SCALE. FEET
0 50 100

DATE 04-02-2015 | HWY: I-41 / USH 45 | STATE R/W PROJECT NUMBER 1060-33-26 | PLAT SHEET 4.23

COUNTY: MILWAUKEE | CONSTRUCTION PROJECT NUMBER 1060-35-85 | SHEET 4.24 OMITTED E

FILE NAME : N:\PDS\C3D\ROW\10603326\RW\040423_RP.DWG | PLOT DATE : 10/27/2016 1:23 PM | PLOT BY : KRAUSE, PAUL H | PLOT NAME : | PLOT SCALE : 1:100_XREF



NOTES:

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HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
USH 45	1100-01-23	VARIES	1969

PREVIOUS ACCESS CONTROL
1100-01-23

WAUWATOSA

REVISION DATE			
10-27-2016			

SCALE, FEET
0 50 100

DATE 06-11-2015	HWY: I-41 / USH 45	STATE R/W PROJECT NUMBER 1060-33-26	PLAT SHEET 4.25
COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER 1060-33-84		E

FILE NAME : N:\PDS\C3D\ROW\10603326\RW\040425_RP.DWG PLOT DATE : 10/27/2016 12:37 PM PLOT BY : KRAUSE, PAUL H PLOT NAME : PLOT SCALE : 1:100_XREF

4

7093
A Concrete Monument
w/ A Brass Cap
Y 304766.97
X 566424.07

T 7 N
R 21 E
19 | 19
19 | 19

NOTES:

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HIGHWAY	BASIS OF EXISTING RIGHT-OF-WAY	WIDTH	YEAR
WALNUT ROAD	DOC. NO. 4516347	90'	1970
WALNUT ROAD	CSM 8300	90'	2010
113TH STREET	CSM 8300		2010

GN

7094
A Concrete Monument
w/ A Brass Cap
Y 304800.15
X 569081.94

T 7 N
R 21 E
19 | 20
19 | 20

4

4

SW1/4 - NE1/4 | SE1/4 - NE1/4

NW1/4 - SE1/4 | NE1/4 - SE1/4

N00° 39' 43"W

SEE SHEET 4.25

N89° 17' 05"E
633.22'

20'

N89° 17' 05"E

S89°17'05"W

SEE SHEET 4.25

708.54'

620.50'

750.00'

20'

20'

WALNUT ROAD

WALNUT ROAD

N16° 07' 09"E
40.00'

108.31'

N73° 52' 51"W

N46° 23' 03"W
95.00'

290.79'

S64°05'06"W

DOC. 3816464

S00°27'35"W

DOC. 3991267

STA. 37+80.45 RL UP RR

90'

36

50'

50'

948.49'

970.70'

40'

948.49'

970.70'

40'

MATCHLINE

MATCHLINE

MATCHLINE

MATCHLINE

1/16 LINE

59
WAUWATOSA

59
WAUWATOSA

TLE FOR ACCESS

TLE FOR ACCESS

500 WE ENERGIES - ELECTRIC
DOC. 3991267 R. 48 I. 241
PCL. 59
DOC. 3816464 V. 4047 I. 38
PCL. 59

503 AT&T WISCONSIN
DOC. 3816464 V. 4047 I. 38
PCL. 59

N04°42'38"E

S04°42'38"W

N04°42'38"E

S04°42'38"W

L 40.84'
R 60.00'
LCH 40.05'
LCB N82° 17' 41"W

113TH STREET

RL UP RR

UNION PACIFIC RAILROAD

62

34

32

CITY OF WAUWATOSA

REVISION DATE			
10-27-2016			

SCALE. FEET
0 50 100

DATE 06-11-2015

HWY: I-41 / USH 45

STATE R/W PROJECT NUMBER 1060-33-26

PLAT SHEET 4.26

COUNTY: MILWAUKEE

CONSTRUCTION PROJECT NUMBER 1060-33-84

E

FILE NAME : N:\PDS\C3D\ROW\10603326\RW\040426_RP.DWG

PLOT DATE : 10/27/2016 12:15 PM PLOT BY : KRAUSE, PAUL H PLOT NAME : PLOT SCALE : 1:100_XREF

WISDOT/CAD

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MILWAUKEE COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICAL3/4" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

GN

7094
A Concrete Monument w/ A Brass Cap
Y 504800.15
X 563081.94

T 7 N
R 21 E
19 20
19 20

N89° 33' 53"E
850.65'

SEE SHEET 4.09

4

4

CITY OF WAUWATOSA

MATCH LINE

1/16 LINE

C2
261.00'
S28° 36' 20"W

CL UNDERWOOD PARKWAY

20'
20'

C3

C4

C5

85
MILWAUKEE COUNTY

C1
L 232.32'
R 217.16'
LCH 221.40'
LCB S24° 27' 31"E

C2
L 327.46'
R 821.02'
LCH 325.29'
LCB S17° 10' 46"W

C3
L 497.02'
R 1655.94'
LCH 495.16'
LCB S20° 00' 25"W

C4
L 317.66'
R 598.00'
LCH 313.94'
LCB S03° 48' 35"E

C5
L 216.30'
R 1648.18'
LCH 216.14'
LCB S22° 47' 14"E

TLE FOR ACCESS OVER UNDERWOOD PARKWAY

CSM 7371
OUTLOT 1

CSM 7371
R. 5772 I. 2982
DOC. 8730753
LOT 1

SIGN

85
MILWAUKEE COUNTY

C1
164.58'
S05° 45' 12"W

C2

CSM 7371
OUTLOT 1

MATCH LINE

1/16 LINE

SW1/4 - SW1/4

NW1/4 - SW1/4

1/16 LINE

PUBLIC RIGHT OF WAY

USH 45

I 41

7095
A Concrete Monument w/ A Brass Cap
Y 503625.80
X 571173.24

T 7 N
R 21 E
20 20
20 20

REVISION DATE	SCALE: FEET	DATE 10-27-2016	HWY: I-41 / USH 45	STATE R/W PROJECT NUMBER 1060-33-26	PLAT SHEET 4.27
	0 50 100	COUNTY: MILWAUKEE	CONSTRUCTION PROJECT NUMBER 1060-33-84		E

Standard Detail Drawing List

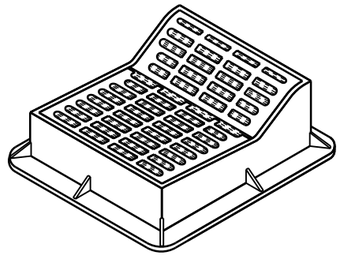
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-19	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-18A	CURB RAMPS TYPES 1 AND 1-A
08D05-18B	CURB RAMPS TYPES 2 AND 3
08D05-18C	CURB RAMPS TYPES 4A AND 4A1
08D05-18D	CURB RAMPS TYPE 4B AND 4B1
08D05-18E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D17-06	MANHOLES, MANHOLE & INLET COVERS
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09H09-01	COMMUNICATION VAULT
10A01-03	ELECTRICAL HANDHOLE WIRING
10A06-02	ELECTRICAL DETAILS GROUND MOUNT LIGHT POLES GROUNDED NEUTRAL SYSTEMS
10A09-02	ELECTRICAL DETAILS STRUCTURE MOUNT LIGHT POLES GROUNDED NEUTRAL SYSTEMS
10A12-02	ELECTRICAL DETAILS MEDIAN MOUNT LIGHT POLES GROUNDED NEUTRAL SYSTEMS
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C14-06A	BASE PATCHING CONCRETE
13C14-06B	BASE PATCHING CONCRETE
13C14-06C	BASE PATCHING CONCRETE
13C15-06A	CONCRETE BASE
13C15-06B	CONCRETE BASE
13C18-05A	CONCRETE PAVEMENT JOINTING
13C18-05B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-05C	CONCRETE PAVEMENT JOINT TYPES
13C18-05D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14B07-14A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B22-06A	CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE)
14B32-04A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-04B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-04C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-04D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-04E	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B42-04A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B47-02A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS

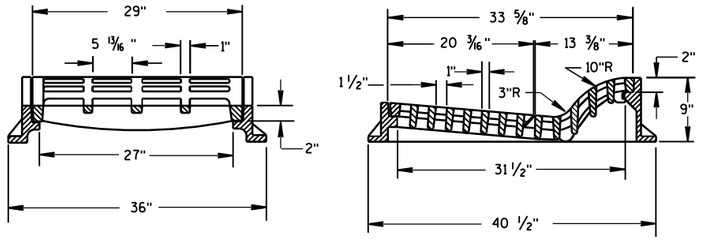
6

Standard Detail Drawing List

15C07-13B	PAVEMENT MARKING WORDS
15C07-13C	PAVEMENT MARKING ARROWS
15C07-13E	PAVEMENT MARKING FOR BIKE LANES
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15C08-17B	PAVEMENT MARKING (TURN LANES)
15C08-17C	PAVEMENT MARKING (ISLANDS)
15C24-04	36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE
15C31-02A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-02C	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D03-04	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER
15D12-06A	TRAFFIC CONTROL, LANE CLOSURE
15D12-06B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D14-03	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)
15D15-02	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-03A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-03B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-03C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-03D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-03E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D16-03	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D38-01A	TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS
15D38-01B	ATTACHMENT OF SIGNS TO POSTS

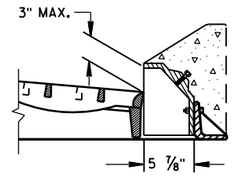
6





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

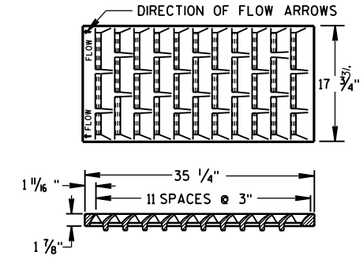
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

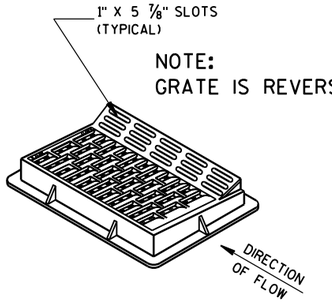
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

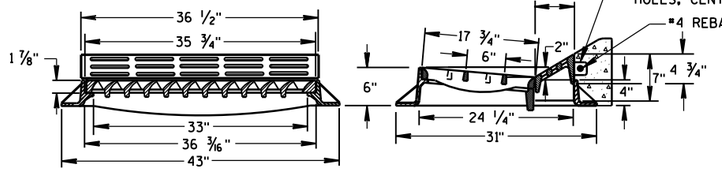
GENERAL NOTES

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

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



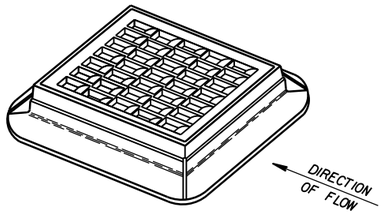


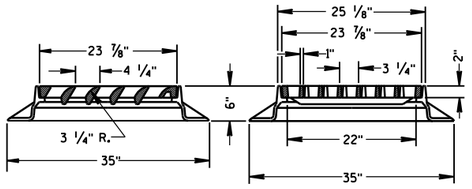


TYPE "HM"

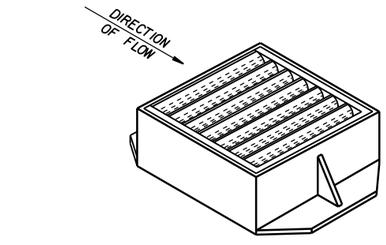
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

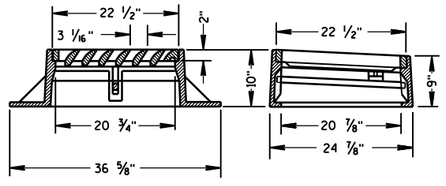
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



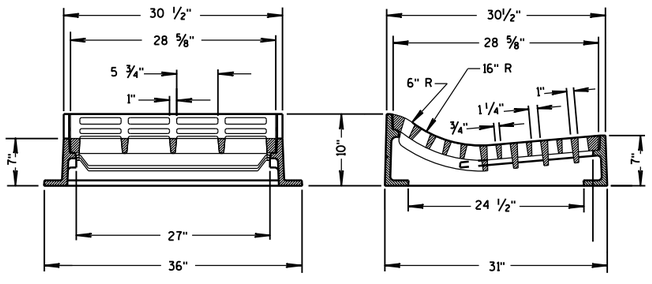


TYPE "S"



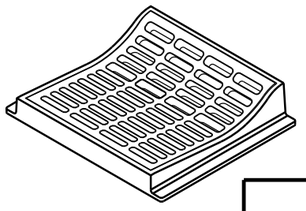


TYPE "V"



TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

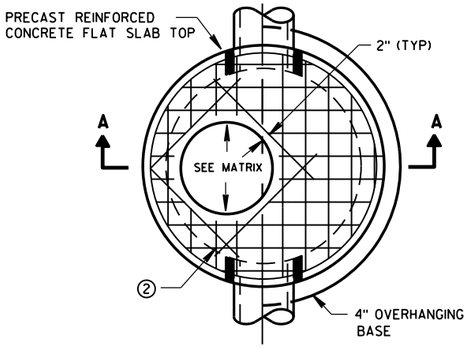
FHWA

6

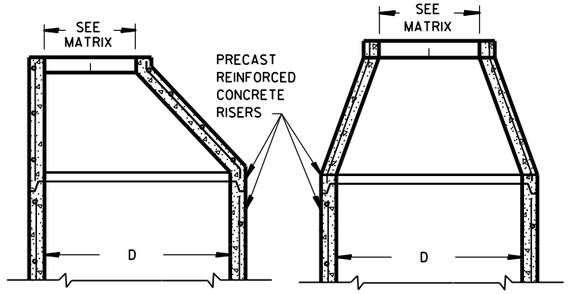
S.D.D. 8 A 5-19c

6

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

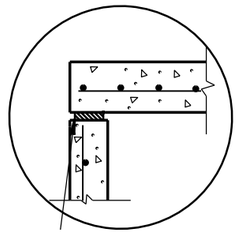


PLAN VIEW CIRCULAR OPENING

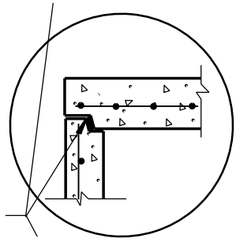


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

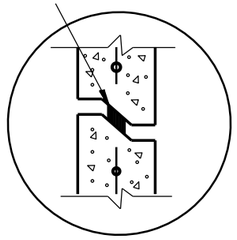


TOP WITH PLAIN END JOINT



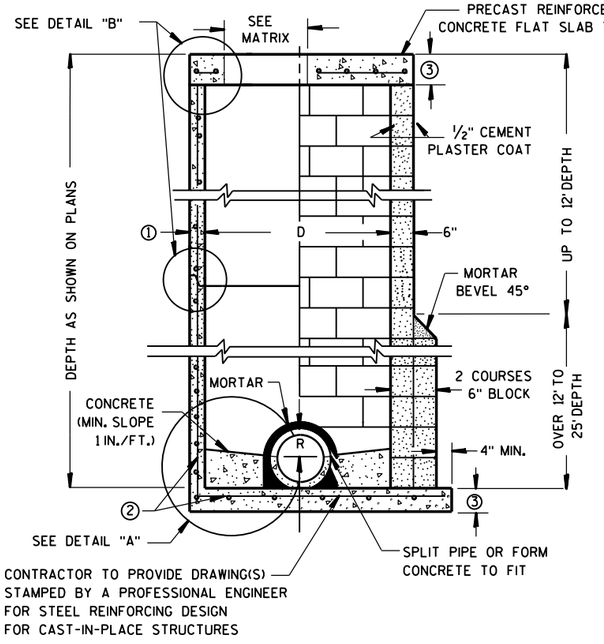
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



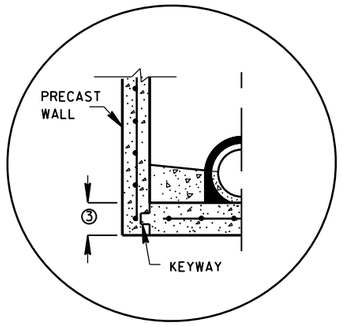
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

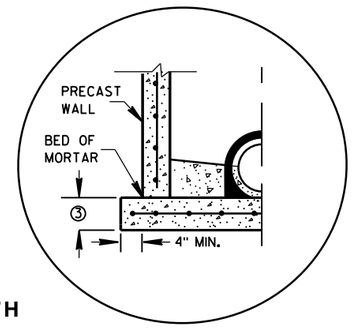


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

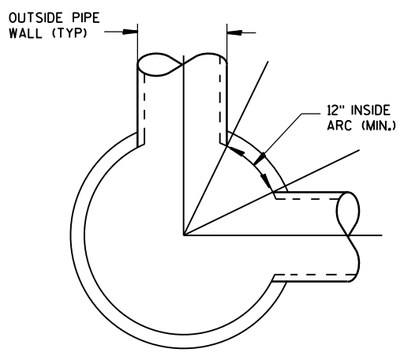


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

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DEPARTMENT OF TRANSPORTATION

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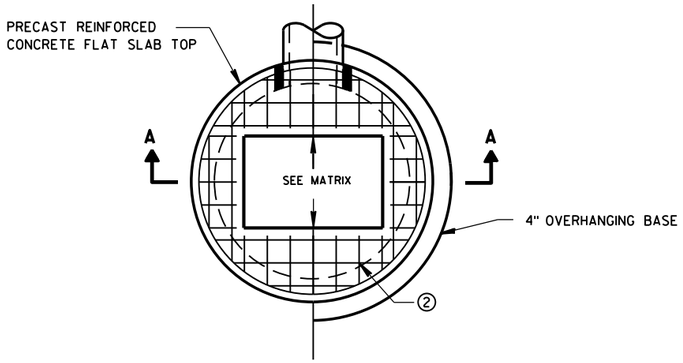
Sept., 2016
DATE

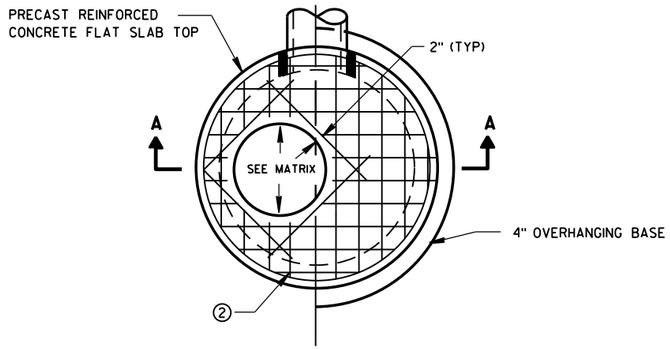
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV 330

FHWA

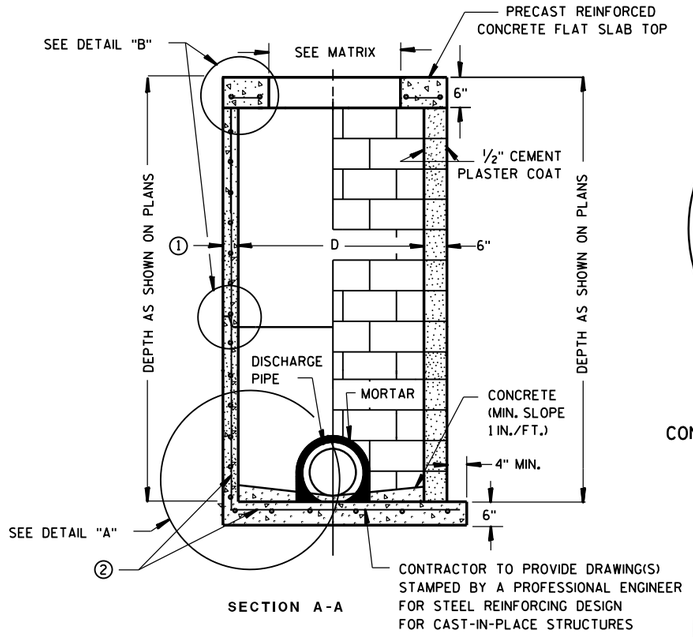
6
S.D.D. 8 B 9-2



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

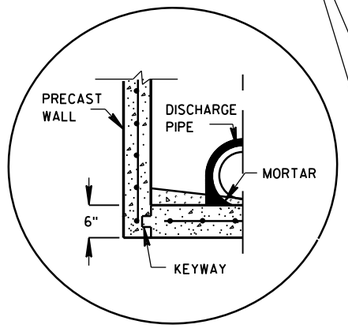


SECTION A-A

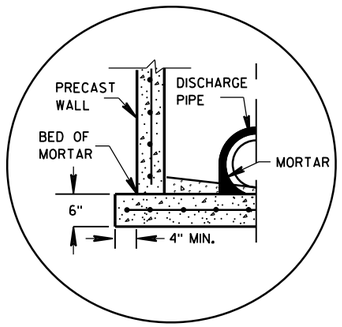
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

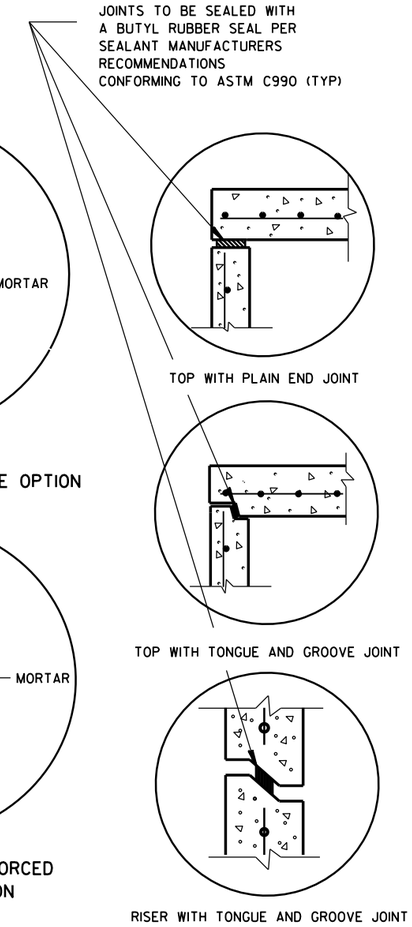


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



TOP WITH PLAIN END JOINT

TOP WITH TONGUE AND GROOVE JOINT

RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

GENERAL NOTES

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

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

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

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

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

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

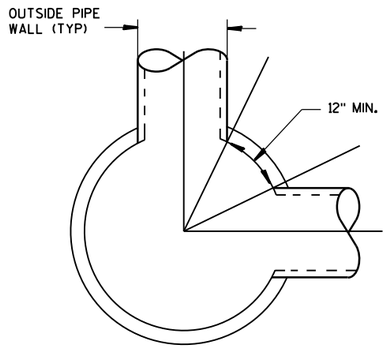
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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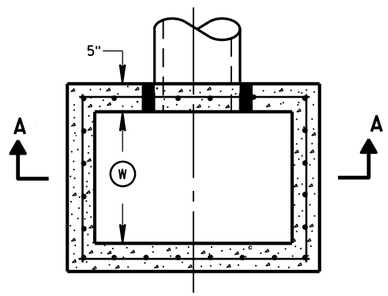
UNIT SUPERVI
FHWA

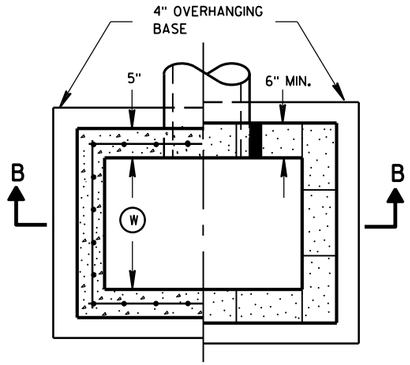
INLETS 3-FT AND 4-FT DIAMETER

6

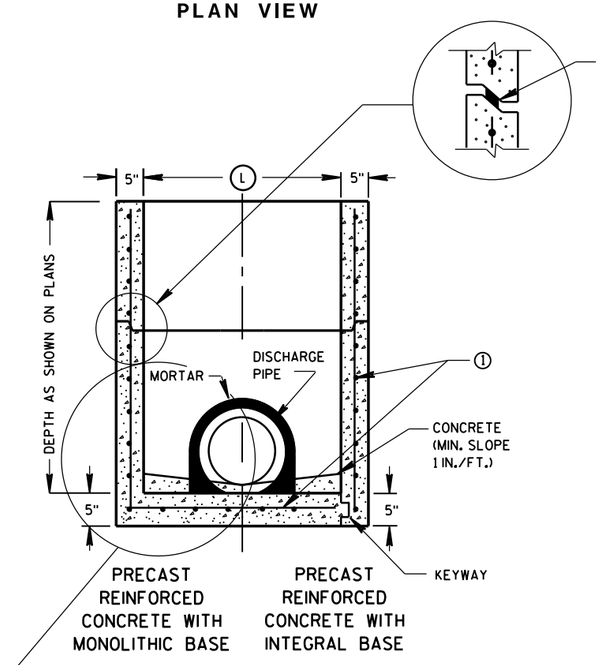
S.D.D. 8 C 6-2



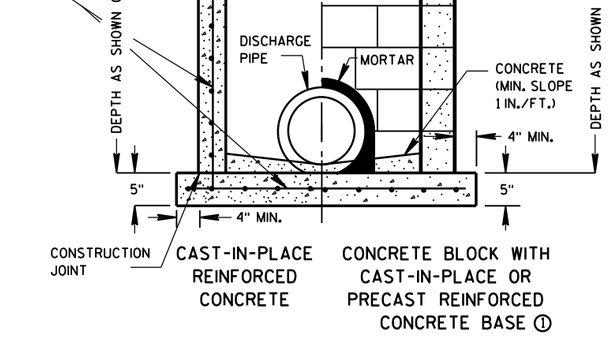
PLAN VIEW



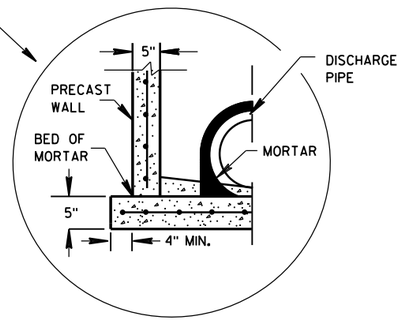
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

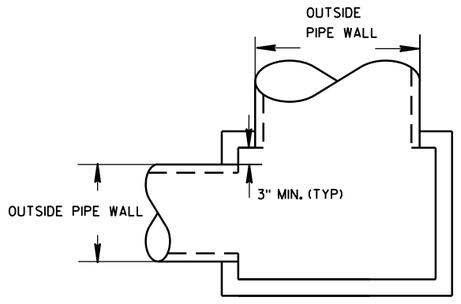
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

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

PIPE MATRIX

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



DETAIL "A"

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

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ROADWAY STANDARDS D IT UNIT SUPERVIS
FHWA

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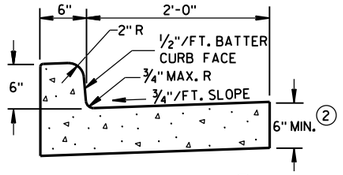
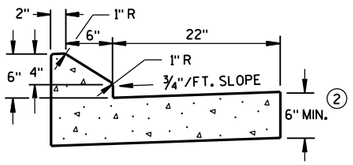
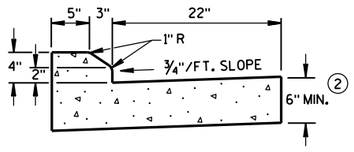


TYPES A & D ①

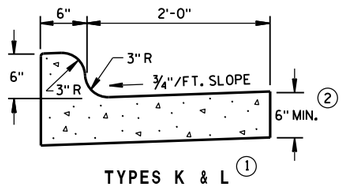


6" SLOPED CURB TYPES G & J ①

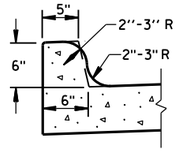


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

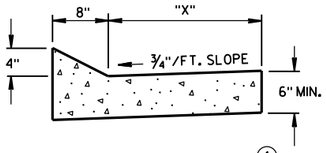


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

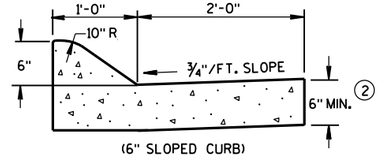
CONCRETE CURB & GUTTER 30"



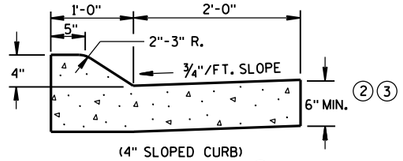
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

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

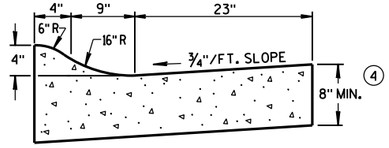


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ①⑤

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

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

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

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

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

① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

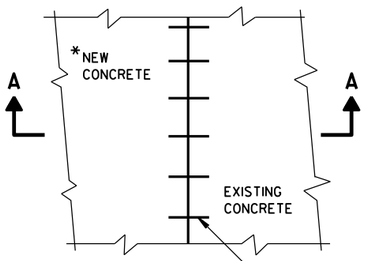
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

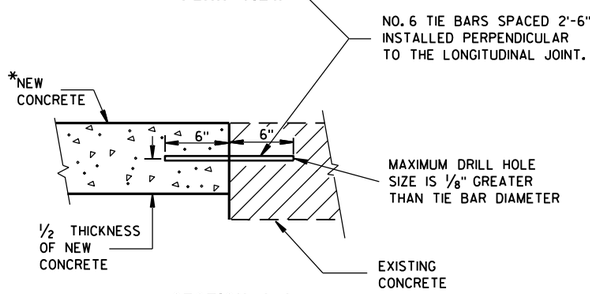
⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



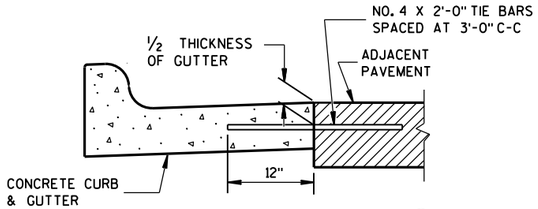
PLAN VIEW

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

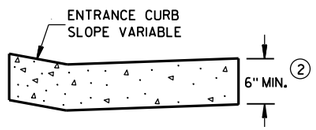


SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT

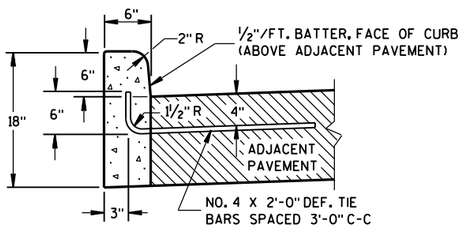


TYPICAL TIE BAR LOCATION ①

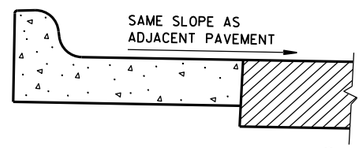


DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)

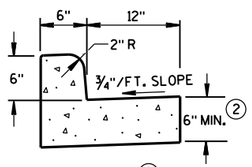


① TYPES A & D



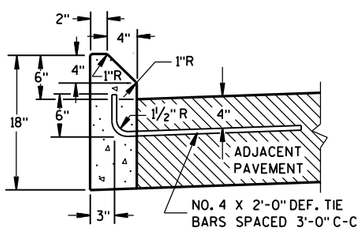
⑥ REVERSE SLOPE GUTTER

(TYPICAL FOR ALL CURB & GUTTER TYPES)



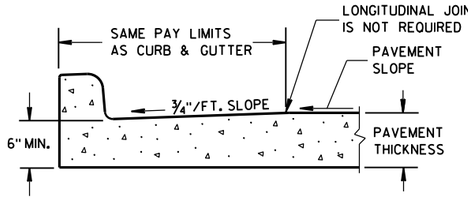
① TYPES A & D

CONCRETE CURB & GUTTER 18"

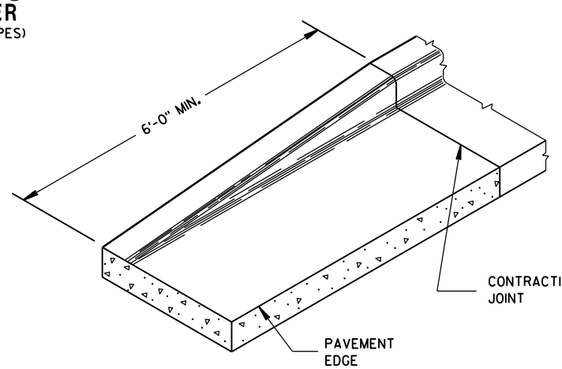


① TYPES G & J

CONCRETE CURB



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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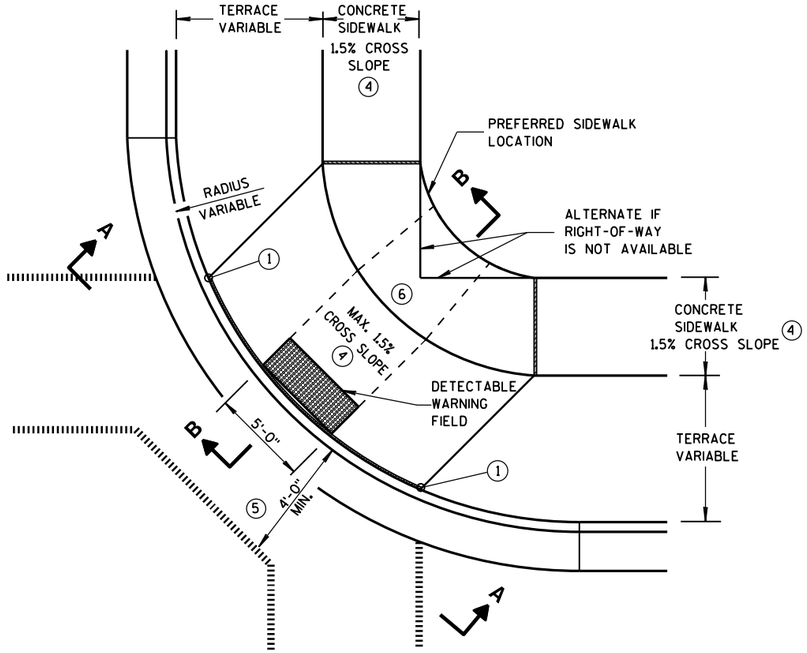
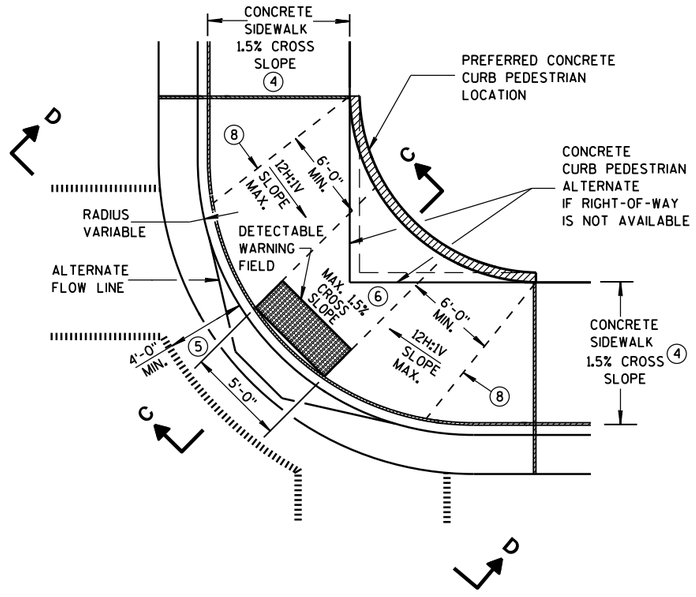


PLAN VIEW

TYPE 1 RAMP

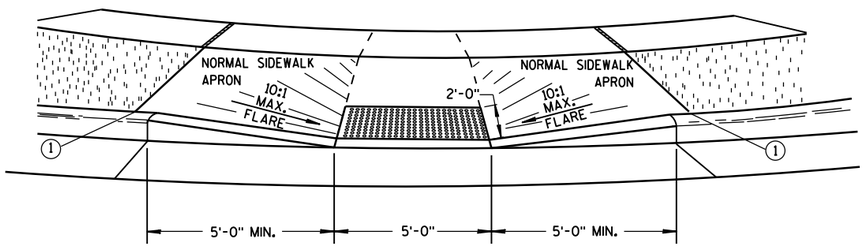
(CENTER OF CORNER RADIUS)



PLAN VIEW

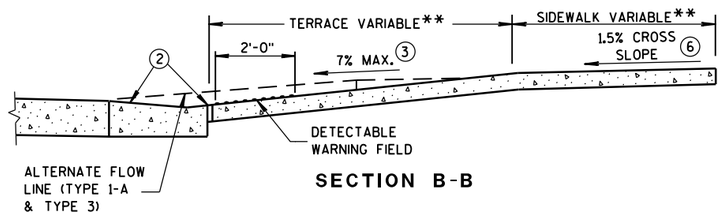
TYPE 1-A RAMP

(NO TERRACE)

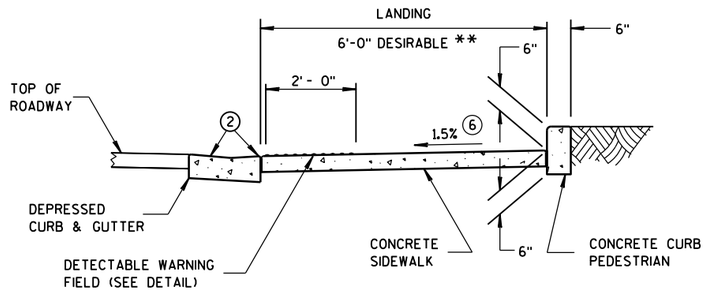


VIEW A-A

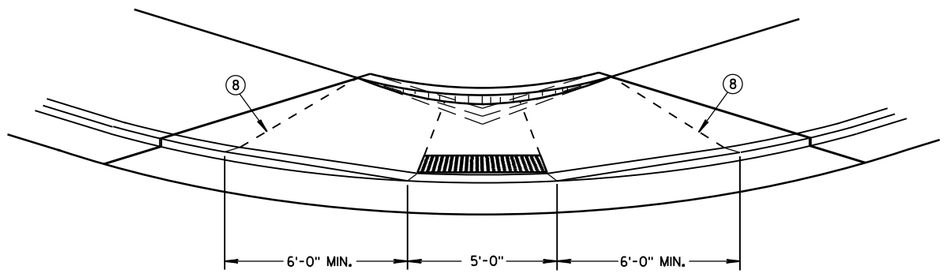
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

GENERAL NOTES

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

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

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

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

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

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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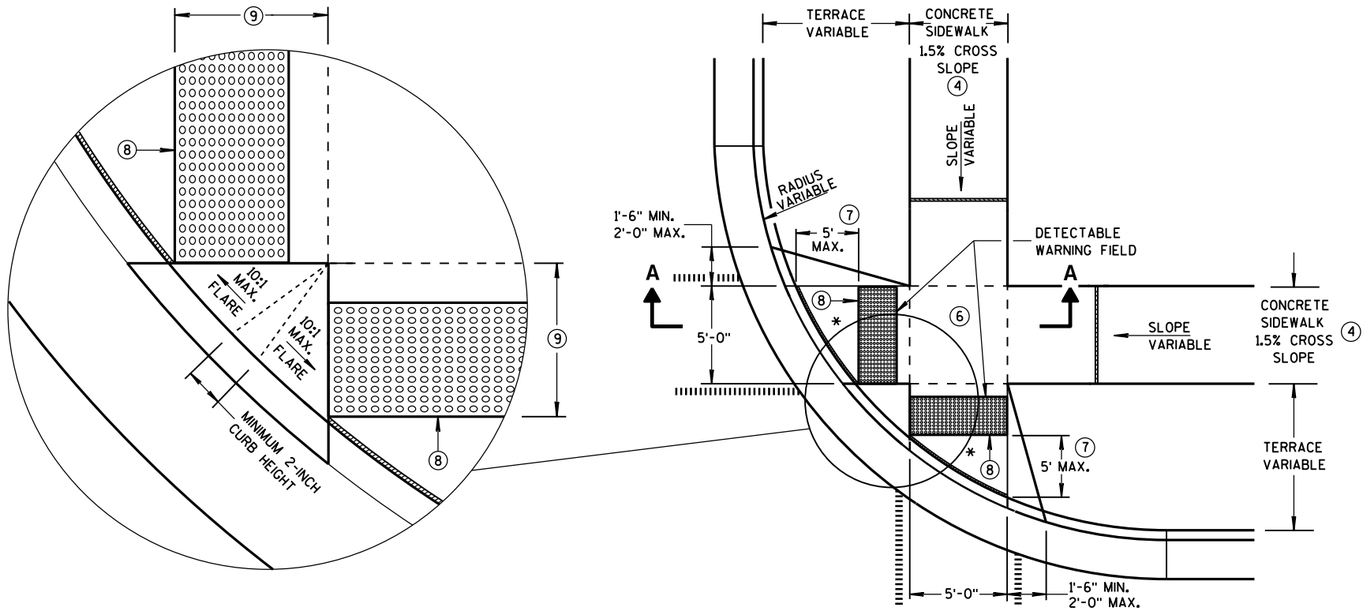
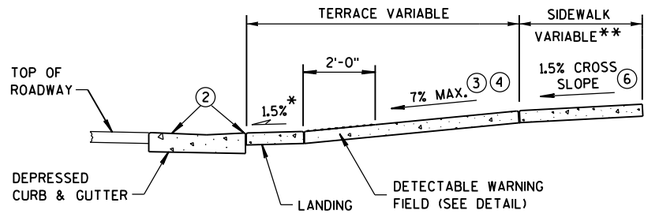


PLAN VIEW

TYPE 2 RAMP

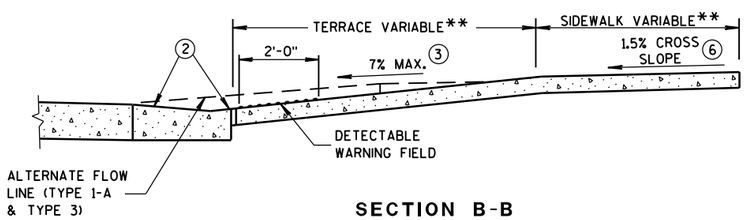
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

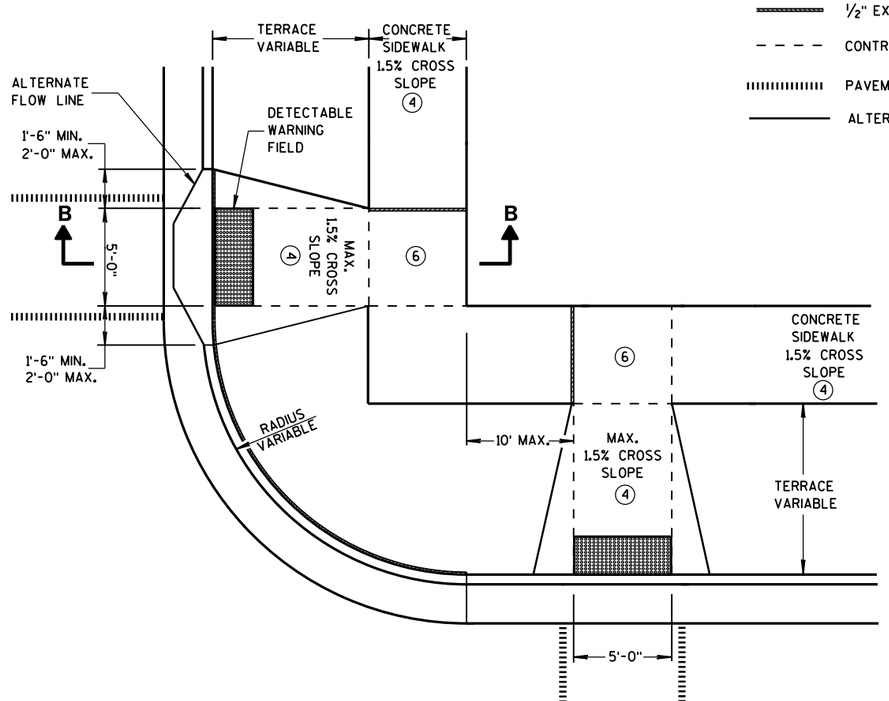
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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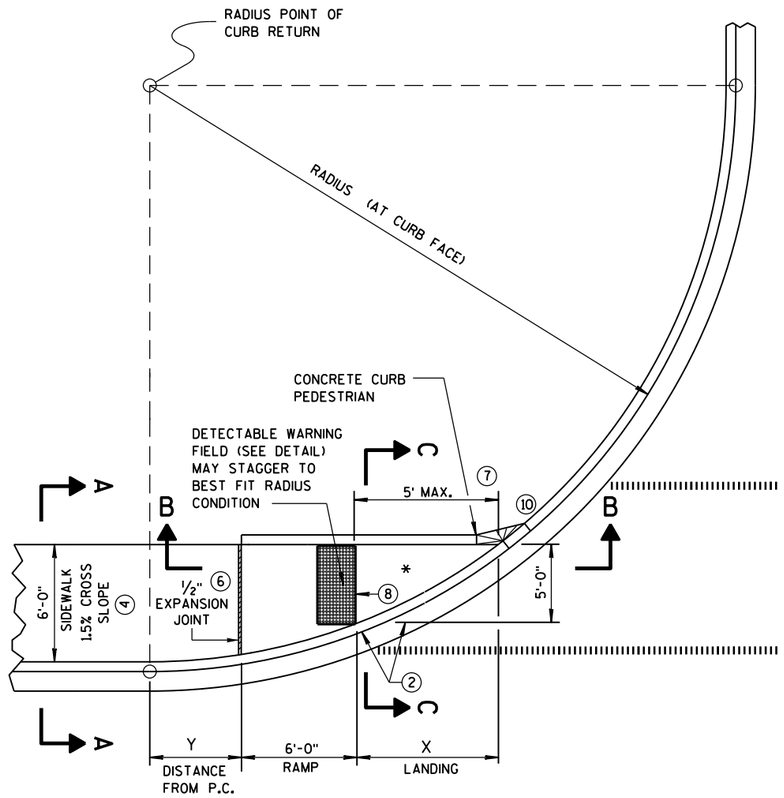
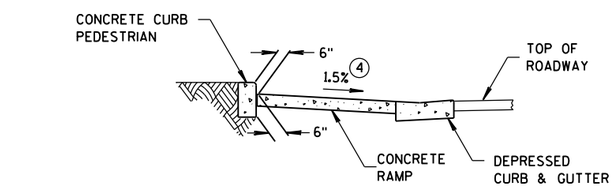


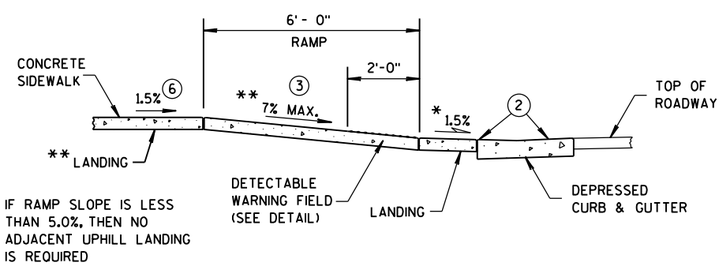
CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X	Y
20 FEET	7'-11"	0'-2"
30 FEET	10'-2¾"	1'-7½"
40 FEET	12'-1¼"	2'-10"
50 FEET	13'-8¾"	3'-10¾"
60 FEET	15'-2"	4'-10¼"

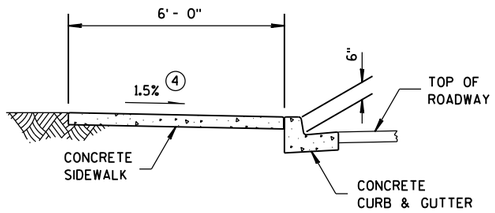
INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4A

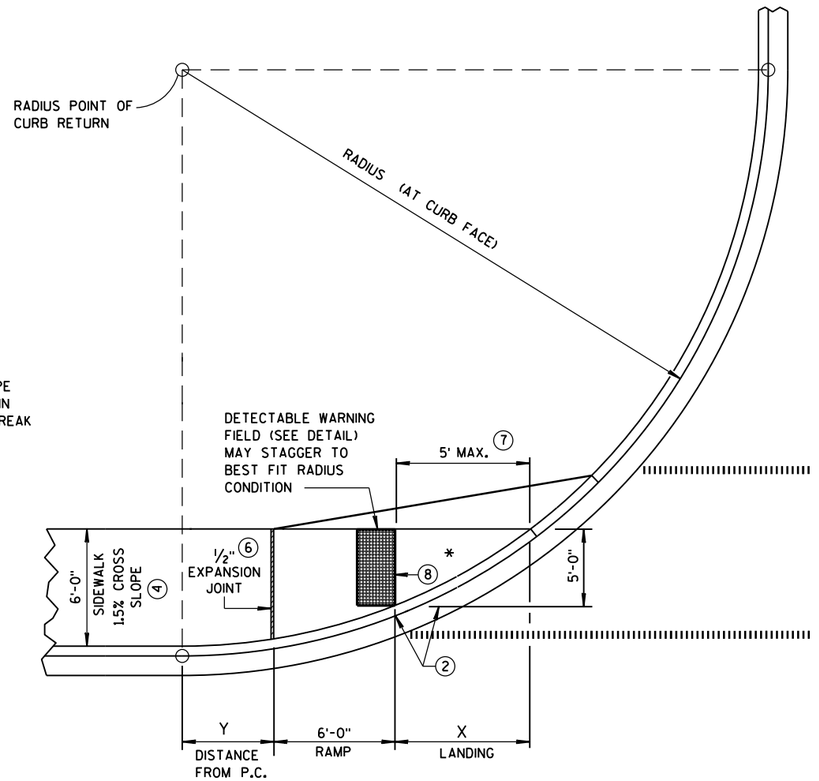


SECTION B-B FOR TYPE 4A



SECTION A-A FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

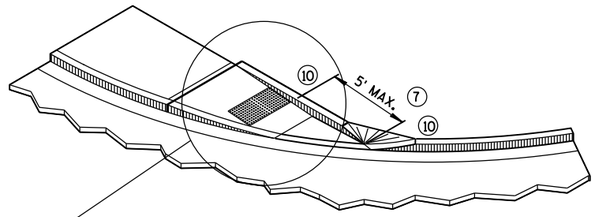
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

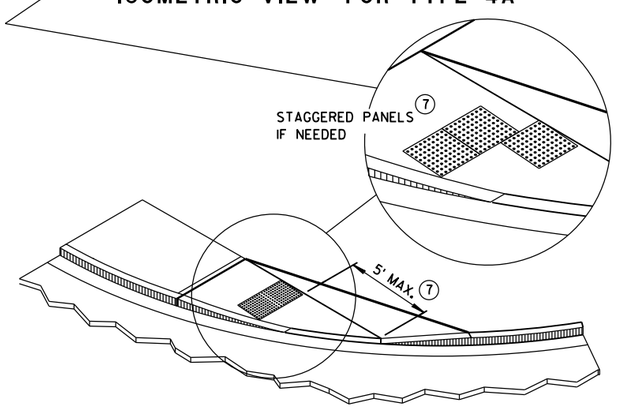
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

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



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 336

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S.D.D. 8 D 5-18c

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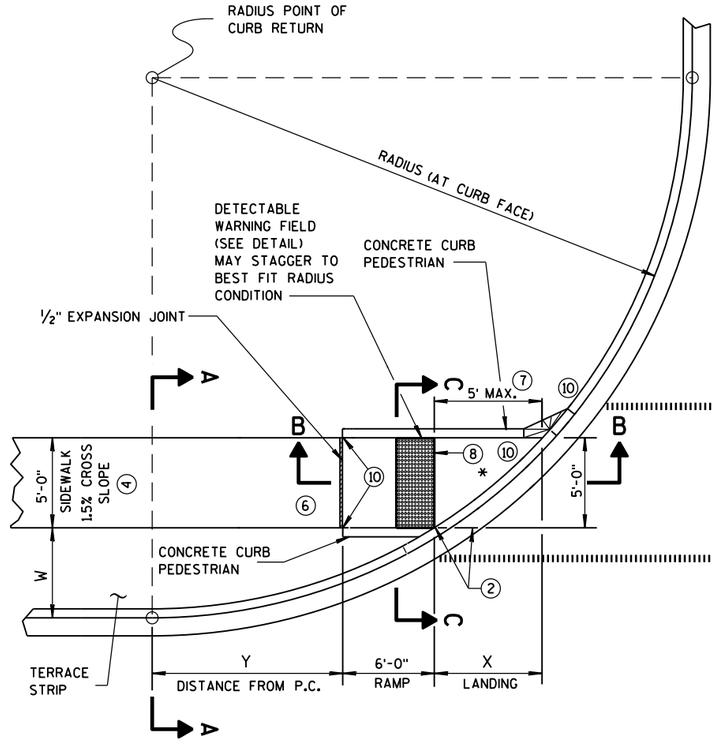
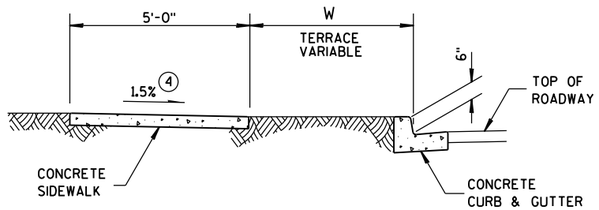
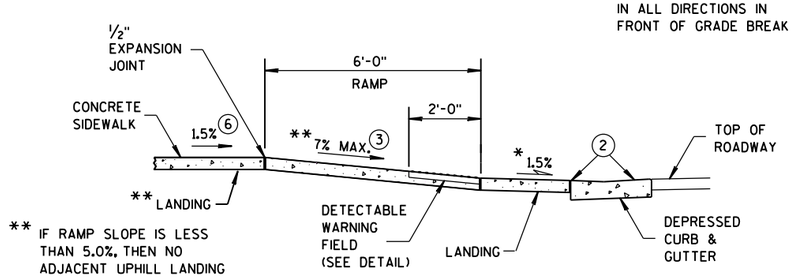


CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



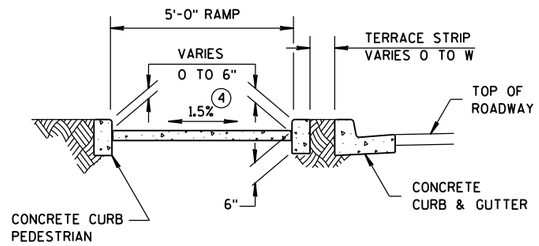
SECTION B-B FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-6¾"	3'-3"	8'-6¼"
30 FEET	7'-9¼"	5'-10½"	6'-9½"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"
40 FEET	9'-4"	7'-10"	8'-2¾"	10'-3"	7'-4¾"	12'-3¾"	6'-8½"	14'-1¼"	6'-1¾"	15'-8½"
50 FEET	10'-8"	9'-6½"	9'-5½"	12'-3¼"	8'-6½"	14'-7½"	7'-9¾"	16'-8¼"	7'-2½"	18'-6¼"
60 FEET	11'-10¼"	11'-0¾"	10'-6½"	14'-1¼"	9'-6½"	16'-8½"	8'-9¼"	18'-11¾"	8'-1½"	21'-0½"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

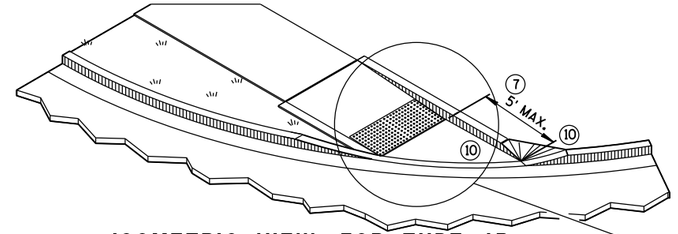
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

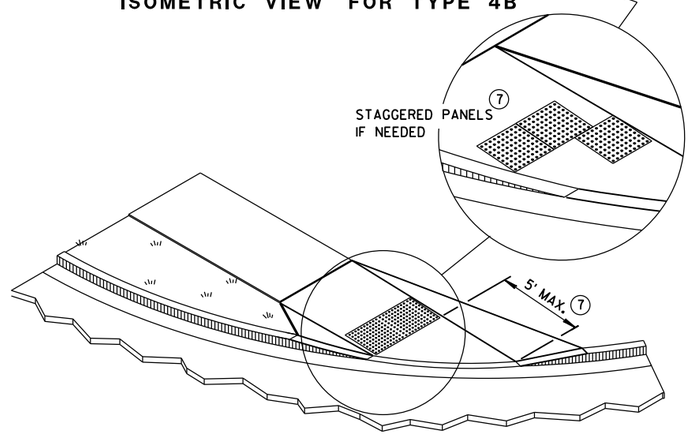
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

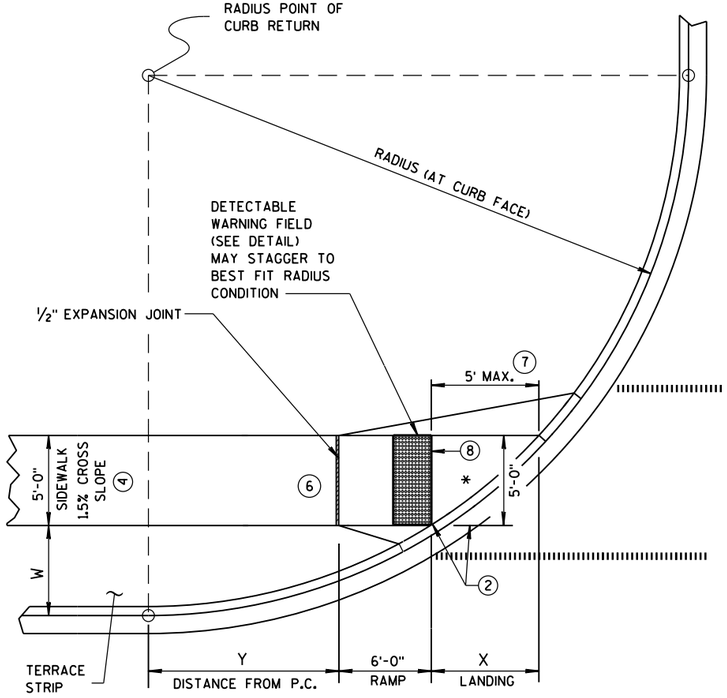
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1



CURB RAMP TYPE 4B1
PLAN VIEW

CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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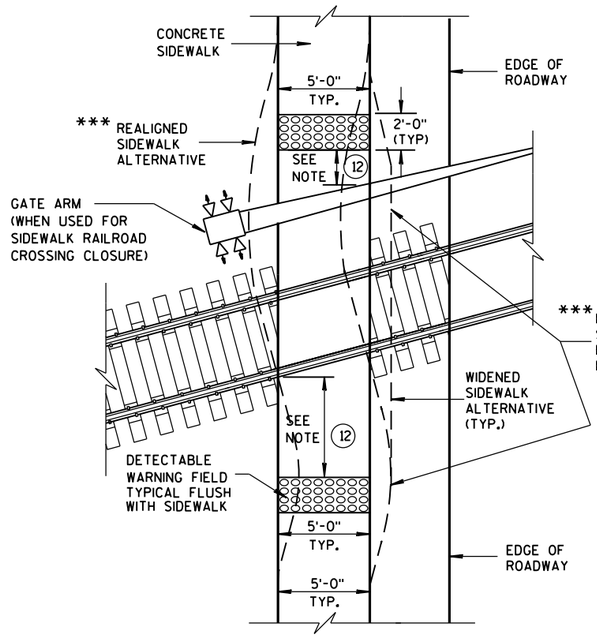
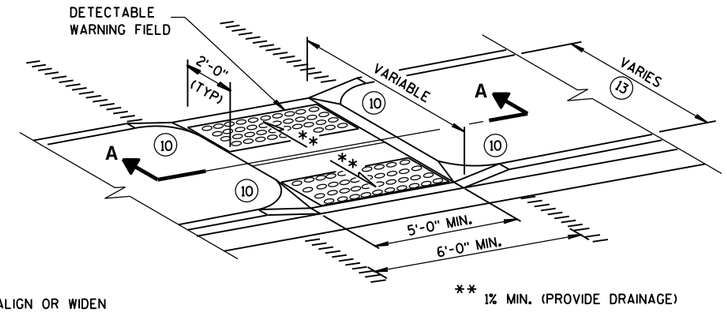
S.D.D. 8 D 5-18d



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

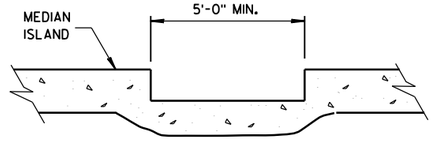
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

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

(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

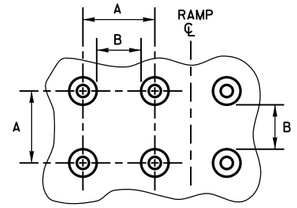
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



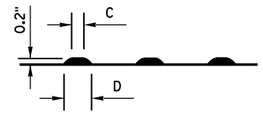
SECTION A-A

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

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

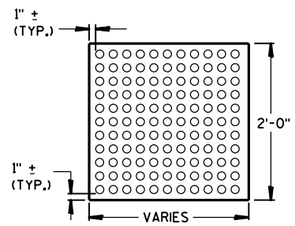


PLAN VIEW



ELEVATION VIEW

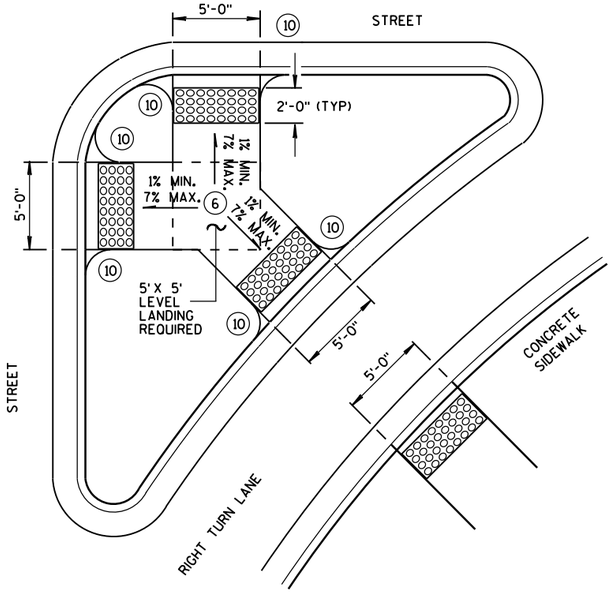
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



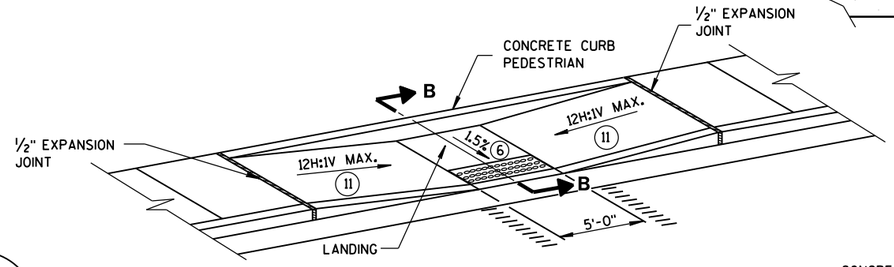
PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)

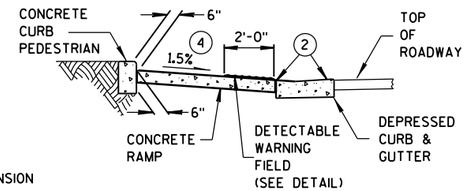
REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



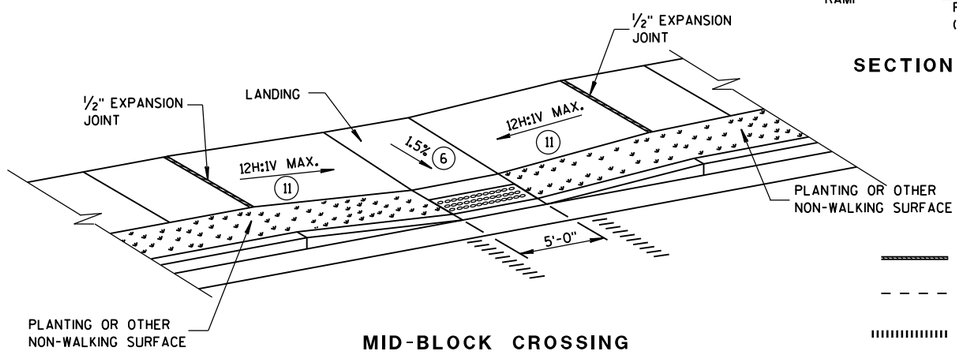
TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERV
FHWA

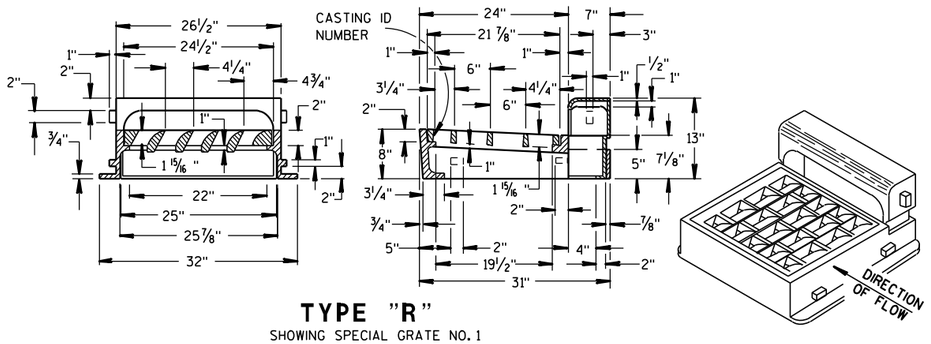
6

S.D.D. 8 D 5-18e

6

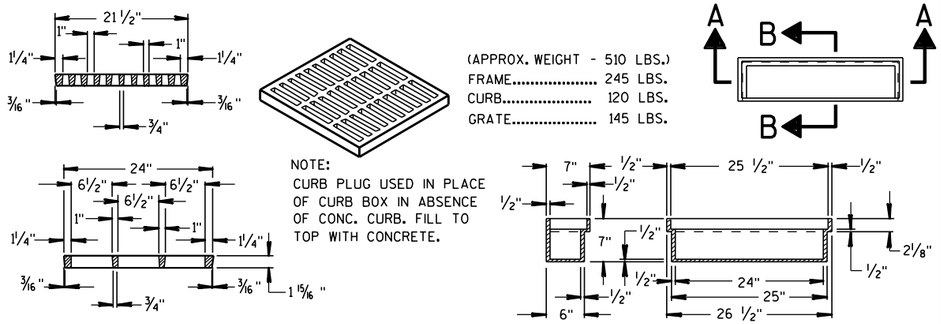
S.D.D. 8 D 5-18e

INLET COVERS



TYPE "R"

SHOWING SPECIAL GRATE NO. 1
(TO BE NOTED AS R-1 IN DRAINAGE TABLE)



(APPROX. WEIGHT - 510 LBS.)
FRAME..... 245 LBS.
CURB..... 120 LBS.
GRATE..... 145 LBS.

NOTE:
CURB PLUG USED IN PLACE OF CURB BOX IN ABSENCE OF CONC. CURB. FILL TO TOP WITH CONCRETE.

SECTION B-B SECTION A-A

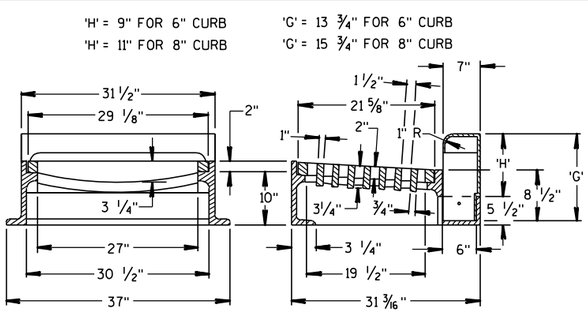
GRATE FOR TYPE "R" INLET COVER

(GRATE..... 150 LBS.)
(TO BE USED UNLESS OTHERWISE NOTED IN DRAINAGE TABLE)

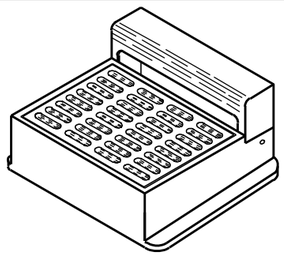
SPECIAL CURB PLUG "P"

(CURB PLUG..... 85 LBS.)
(TO BE NOTED AS R-P IN DRAINAGE TABLE)

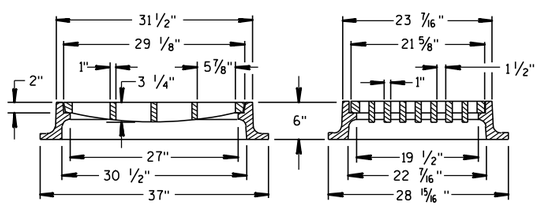
'H' = 9" FOR 6" CURB
'H' = 11" FOR 8" CURB
'G' = 13 3/4" FOR 6" CURB
'G' = 15 3/4" FOR 8" CURB



TYPE "W"



(APPROX. WEIGHT - 670 LBS.)
FRAME..... 350 LBS.
CURB BOX..... 135 LBS.
GRATE..... 185 LBS.



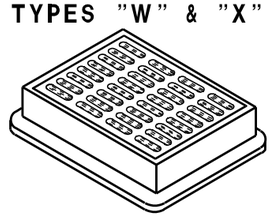
TYPE "X"

(APPROX. WEIGHT - 470 LBS.)

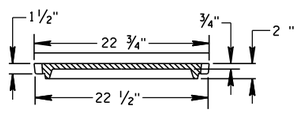
ALTERNATE GRATE

(FOR EXPRESSWAY RAMPS)

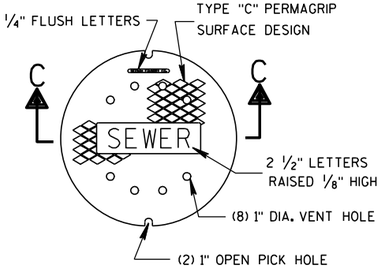
TYPES "W" & "X"

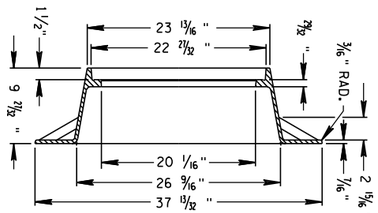


MANHOLE COVER



SECTION C-C





TYPE "Q"

(APPROX. WEIGHT - 290 LBS.)

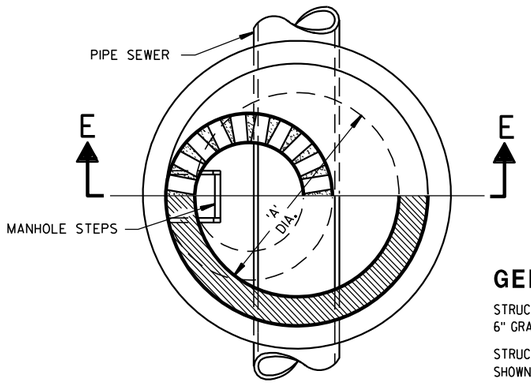
TABLE OF DIMENSIONS

TYPE	'A'	'B'	'C'
11	3'-6"	2'-8"	12" - 36"*
12	4'-0"	3'-8"	12" - 42"**
13	5'-0"	5'-8"	42" - 48"
14	6'-0"	7'-8"	54" - 60"

* 12" - 21" FOR PRECAST MANHOLES
** 12" - 24" FOR PRECAST MANHOLES

THE FIRST STEP SHALL BE PLACED 16" ABOVE THE BENCH.

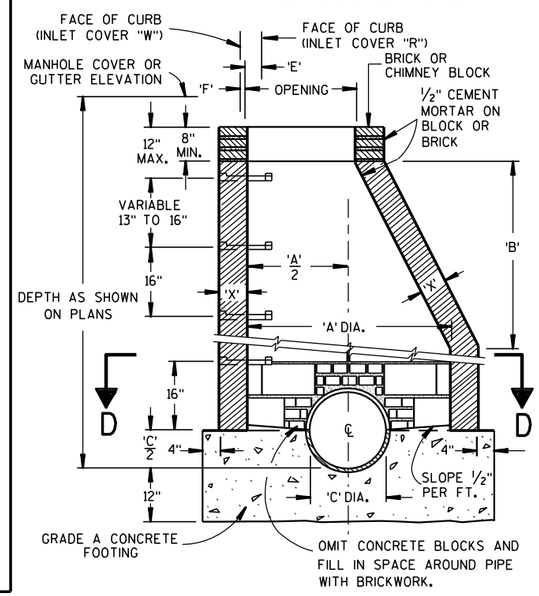
MANHOLE



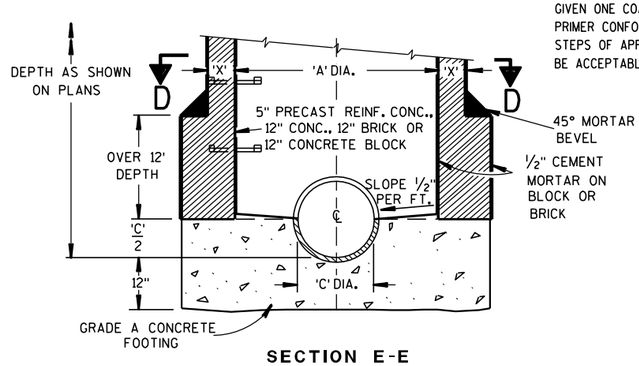
HALF SECTION D-D

TABLE OF OPENING DIMENSIONS

TYPE	COVER DESCRIPTION	OPENING	'E'	'F'
"O"	ROUND	2'-2" DIA.	—	—
"W"	CURB BOX	1'-8" X 2'-6"	—	1"
"X"	INLET	1'-10" X 2'-6"	—	—
"R"	CURB BOX	2'-0" X 2'-1"	4"	—



SECTION E-E



SECTION E-E

TYPES 11, 12, 13 & 14

GENERAL NOTES

STRUCTURE WALL THICKNESS 'X' TO BE 8" BRICK, 6" CONCRETE BLOCK, 6" GRADE A CONCRETE OR 5" PRECAST REINFORCED CONCRETE.

STRUCTURE FOOTINGS ARE TO BE GRADE A CONCRETE OF THE THICKNESS SHOWN IN THE DETAIL OR 5" PRECAST REINFORCED CONCRETE.

REINFORCEMENT FOR 5" PRECAST REINFORCED CONCRETE SHALL BE 6" X 6" W16 X W16 WELDED SREEL WIRE FABRIC AND SHALL BE EMBEDDED 2" CLEAR.

PRECAST INLET UNITS AND BASES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

PRECAST CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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

SET FRAME ELEVATION 0.03 FT. LOWER THAN ELEVATION INDICATED ON THE PLANS.

THE CONTRACTOR MAY FORM AND POUR MONOLITHIC CONCRETE INVERT PROVIDED THE PIPE ENDS ARE EXTENDED INTO THE M.H. AND NOT TERMINATED WITHIN THE M.H. WALLS.

MANHOLE STEPS

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH; 16 INCH C-C MAX. SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM WALL EMBEDMENT OF 3 INCHES IN PRECAST MANHOLE AND 6 INCHES IN 8 INCH BRICK OR 6 INCH BLOCK MANHOLE; TREAD OF STEP SHALL HAVE A NON-SKID SURFACE AND BE FLANKED BY CLEATS, WITH A MINIMUM OF 10 INCHES CLEAR BETWEEN CLEATS, TO PREVENT FOOT SLIPPING OFF THE EDGE CLEATS SHALL BE A MINIMUM OF 3/4 INCH HIGH BY 3/4 INCH WIDE HAVING A MINIMUM THICKNESS OF 5/8 INCH. STEPS SHALL BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 300 LBS. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCING BAR WILL BE ACCEPTABLE.

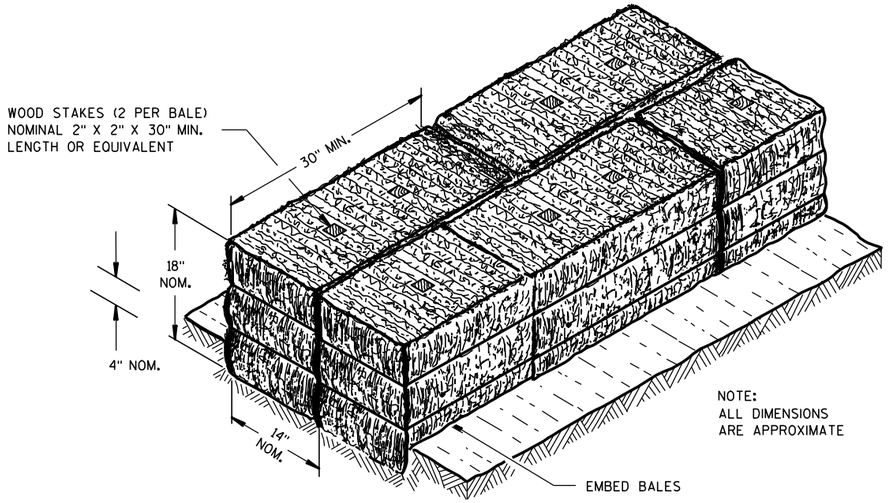
MANHOLES, MANHOLE & INLET COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

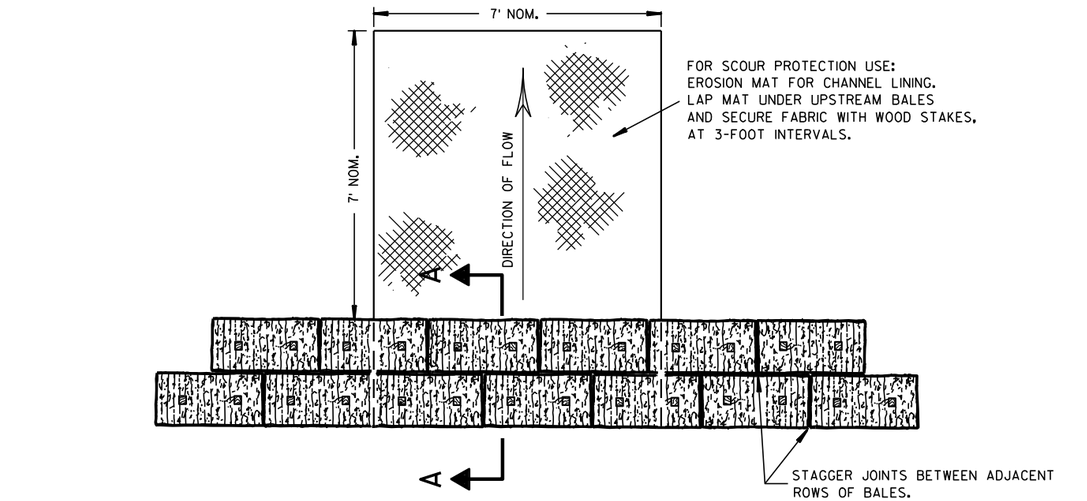
APPROVED
4/12/2011 — DATE
/S/ Jerry H. Zogg — ROADSIDE STANDARDS ENGINEER
FHWA

6

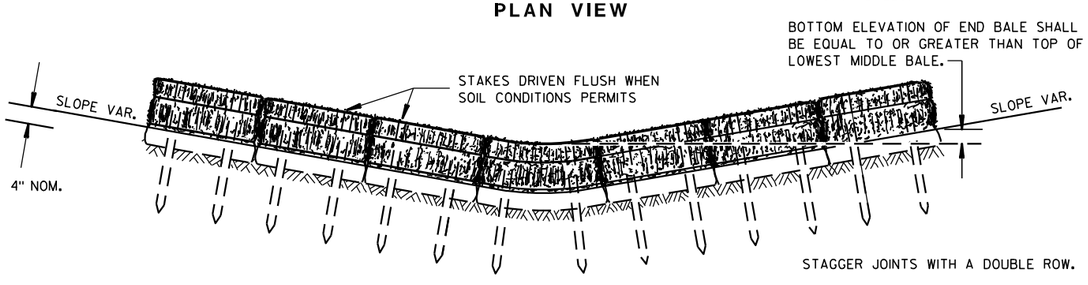
S.D.D. 8 D 17-6



SECTION A-A



PLAN VIEW



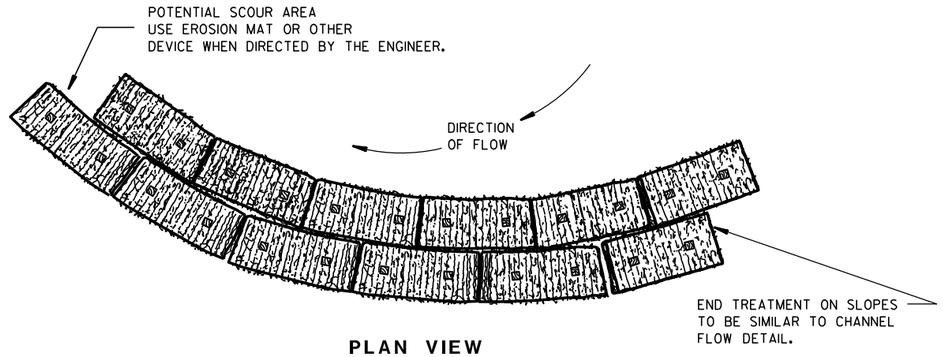
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

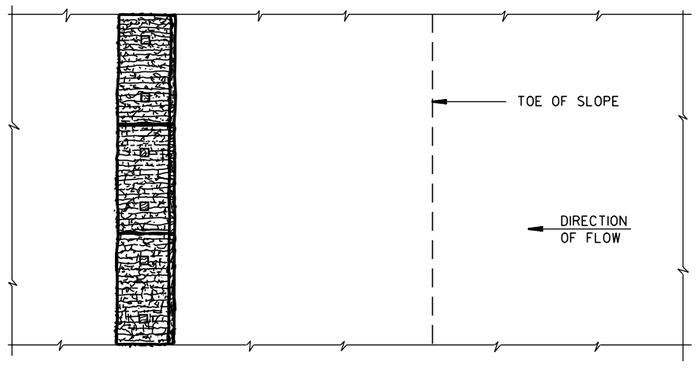
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

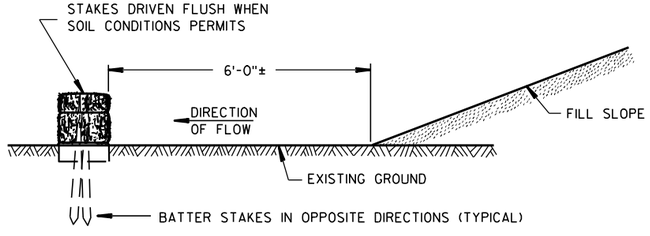


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

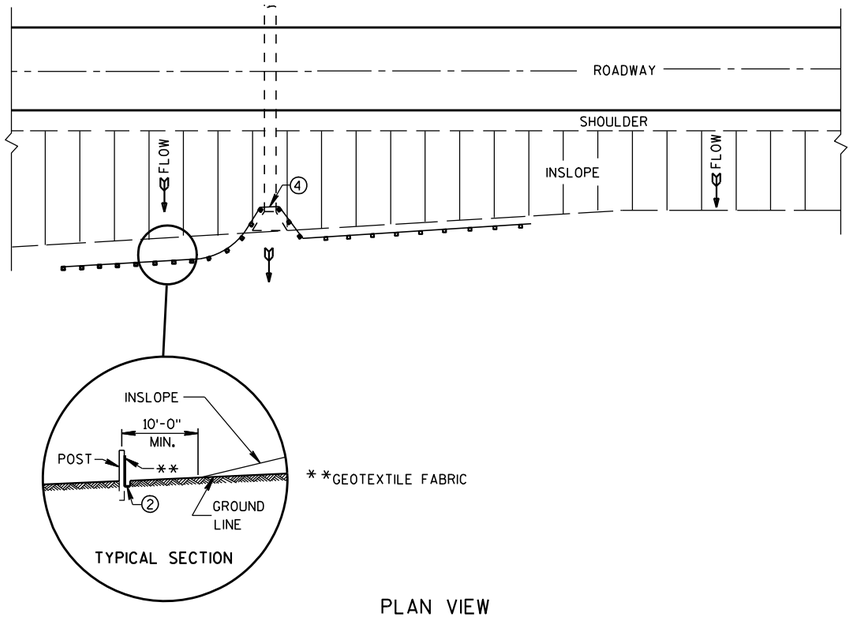
APPROVED
6/04/02 DATE
/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

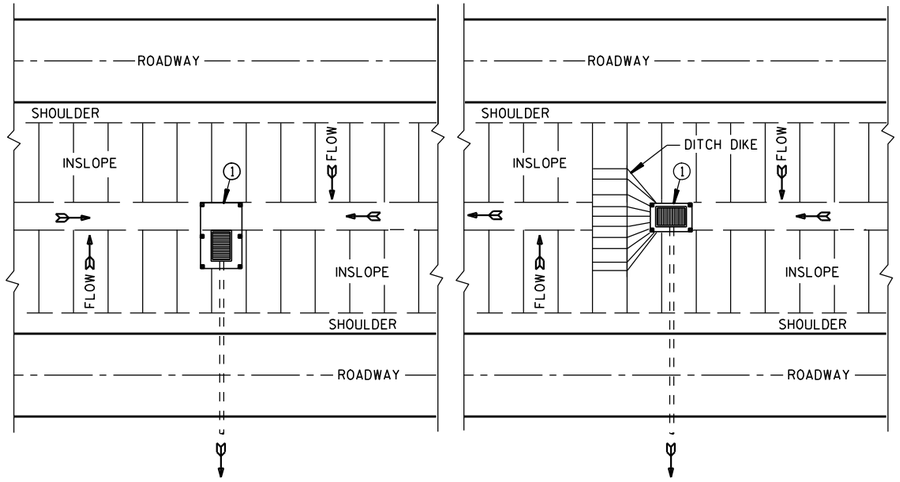
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



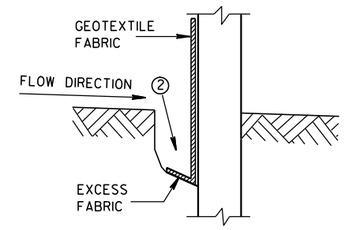
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

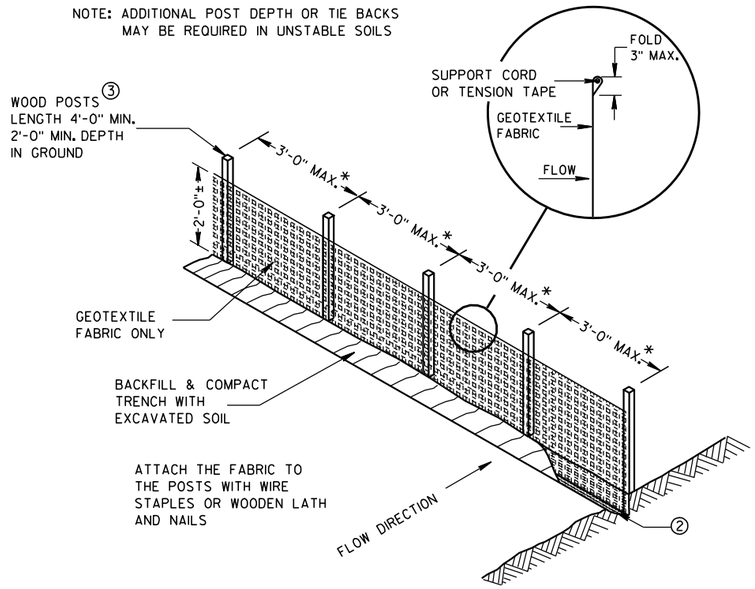
GENERAL NOTES

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

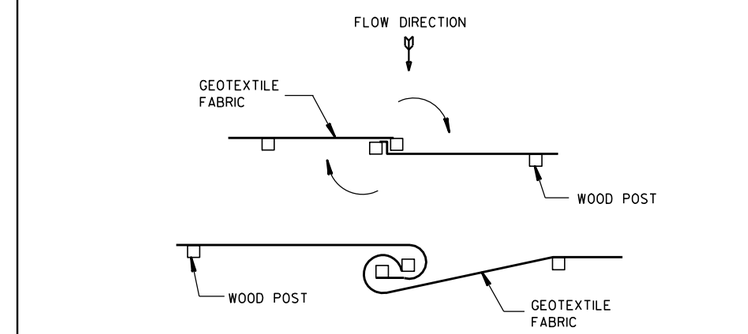
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



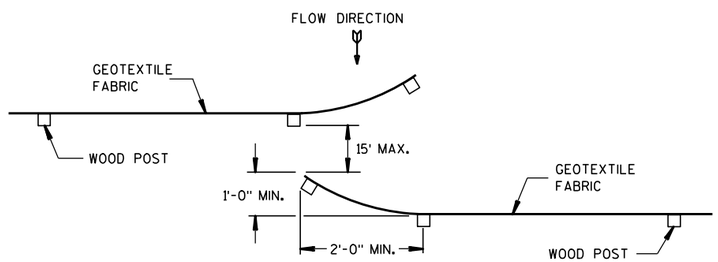
TRENCH DETAIL



SILT FENCE

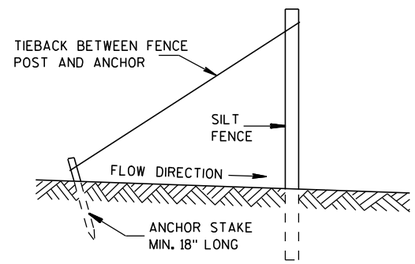


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

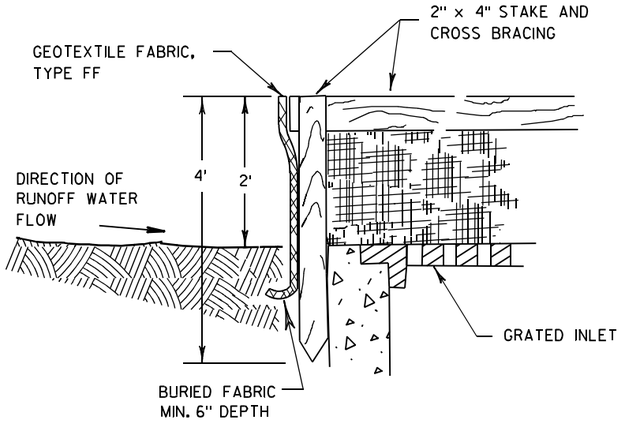
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

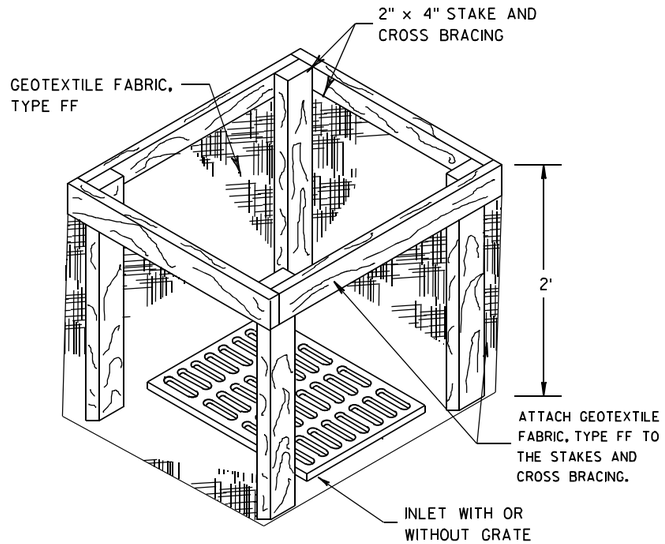
6

S.D.D. 8 E 9-6

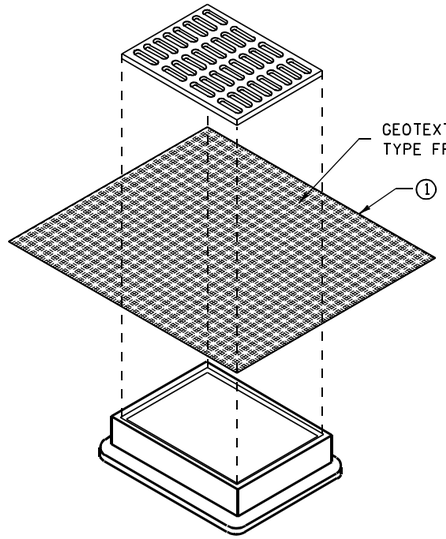
6

S.D.D. 8 E 9-6



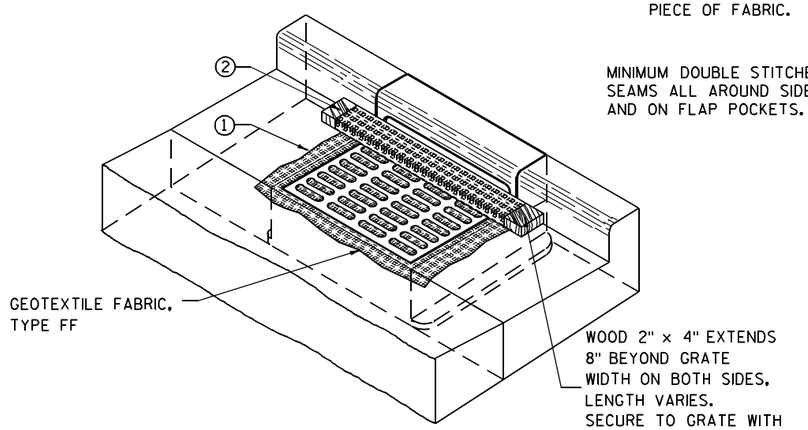


INLET PROTECTION, TYPE A

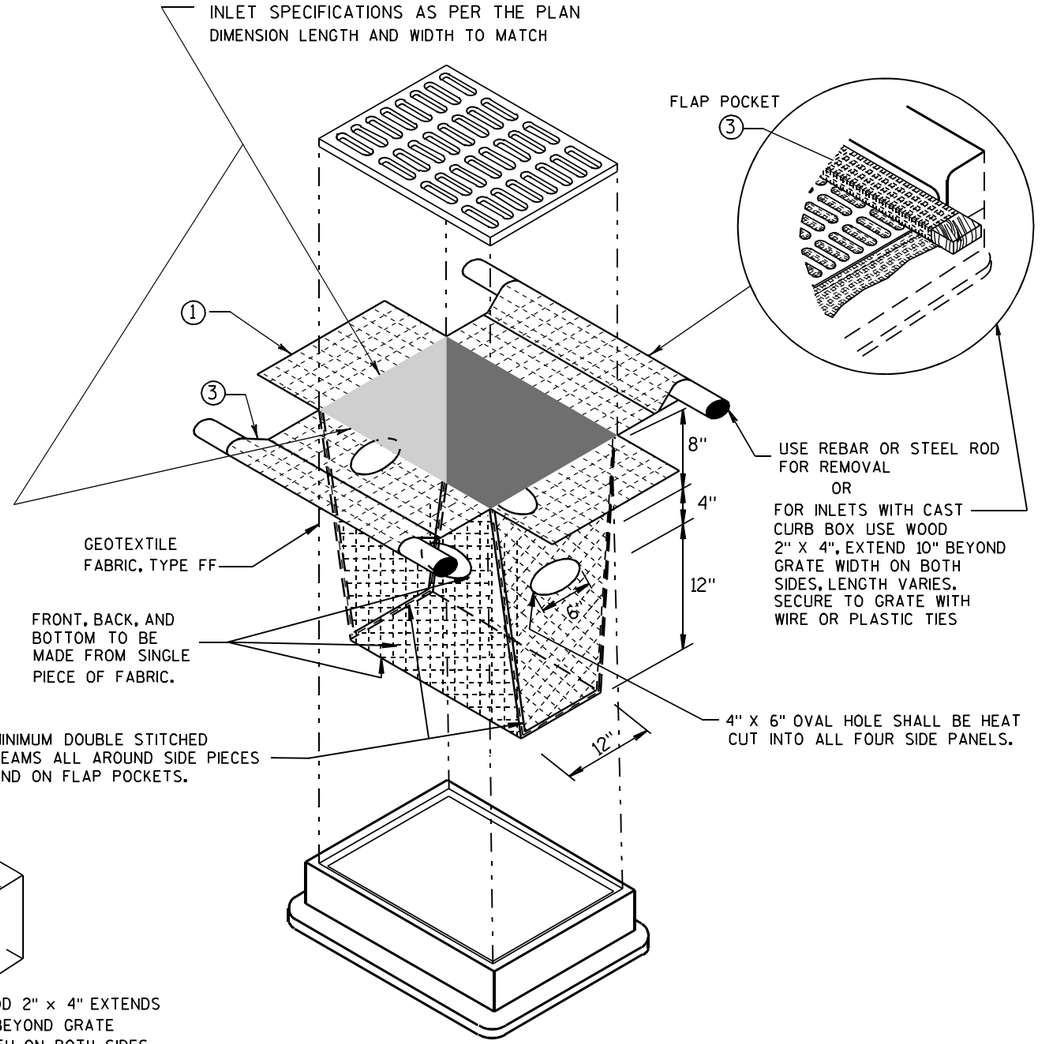


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE 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

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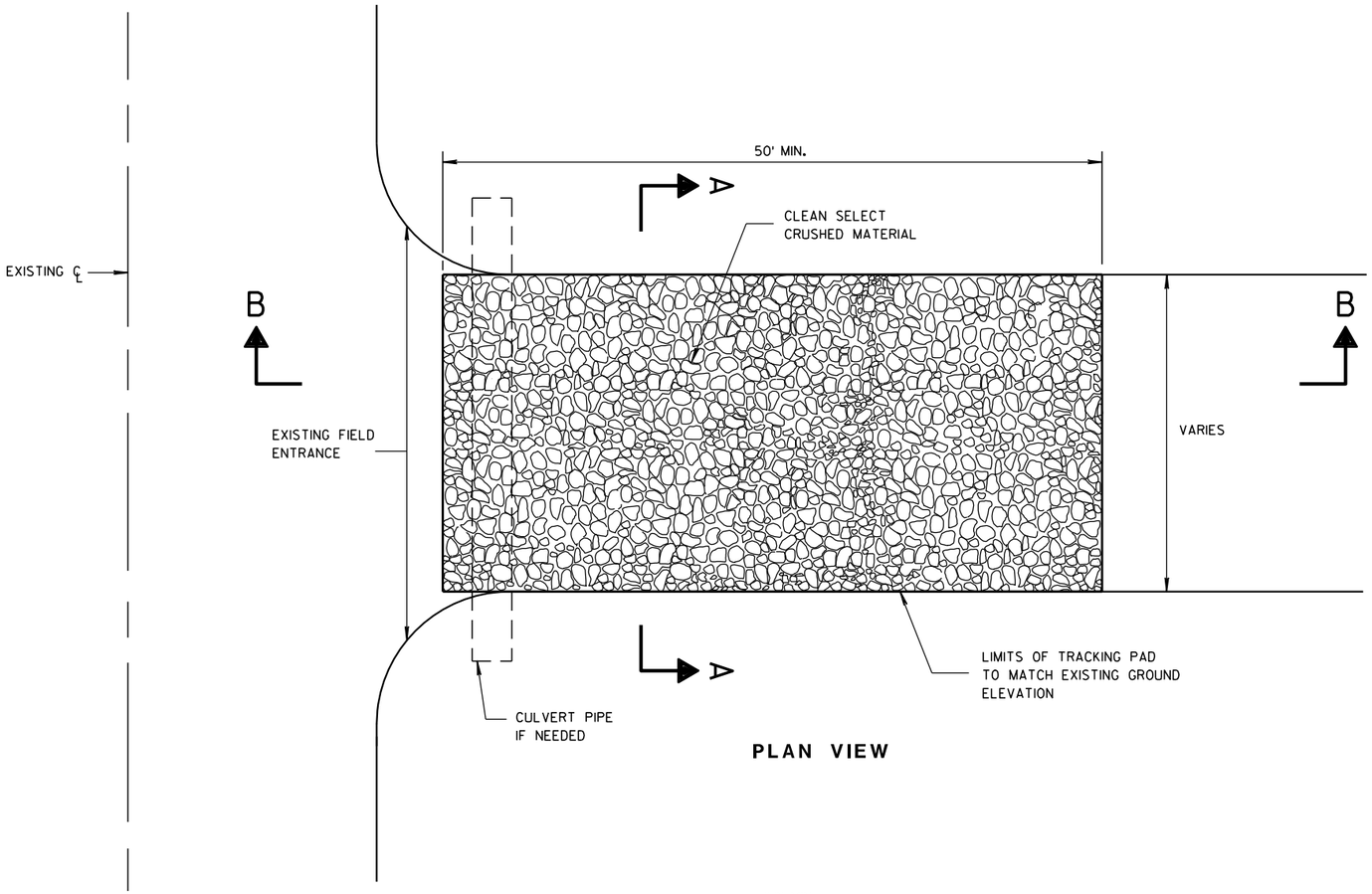
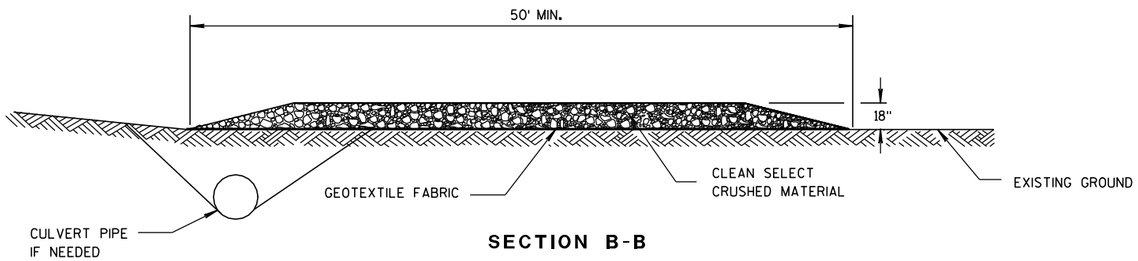
S.D.D. 8 E 10-2



PLAN VIEW



SECTION B-B

GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

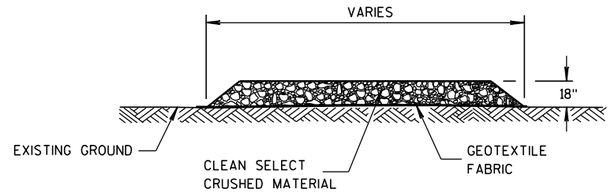
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

6

S.D.D. 8 E 14-1

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011 — DATE

/S/ Jerry H. Zoda — ROADWAY STANDARDS ENGINEER

343

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FHWA

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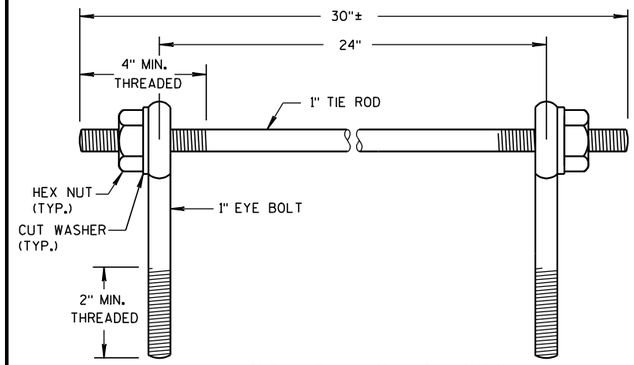
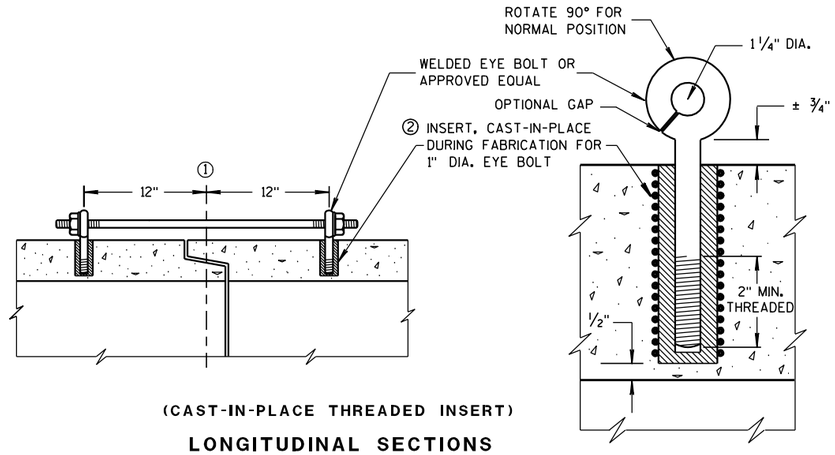
S.D.D. 8 E 14-1



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

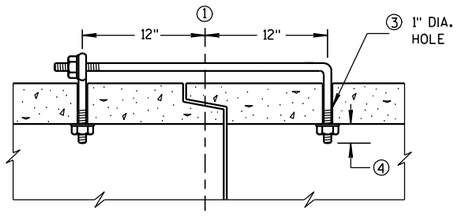
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

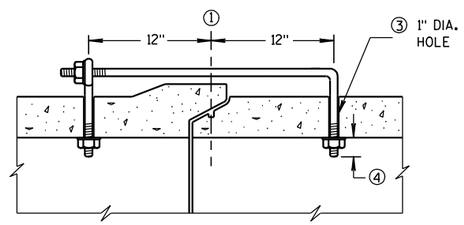
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

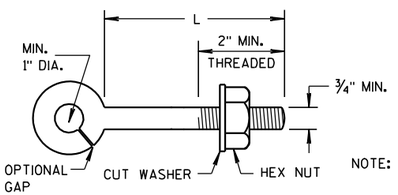


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

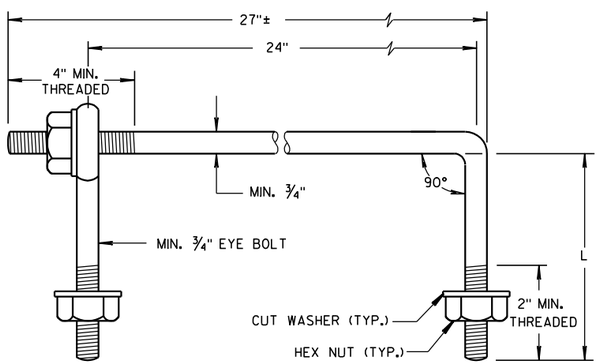
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

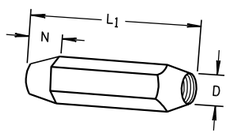
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



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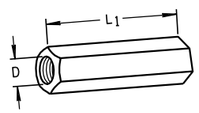
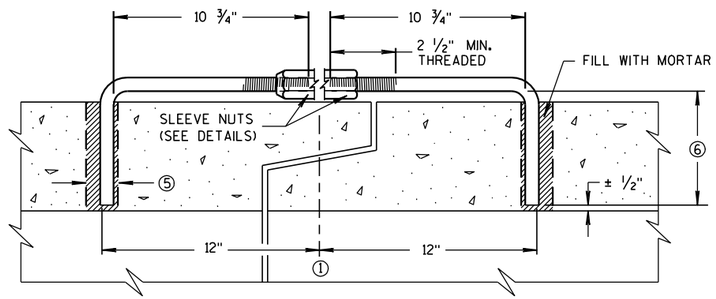


PLAIN

RIGHT AND LEFT THREADS

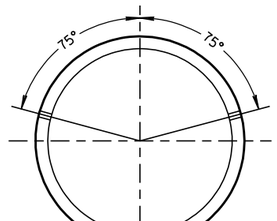
SLEEVE NUTS



LONGITUDINAL SECTION

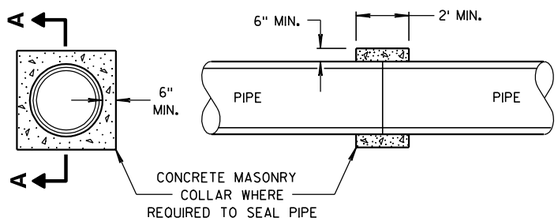
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 8 F 4-7

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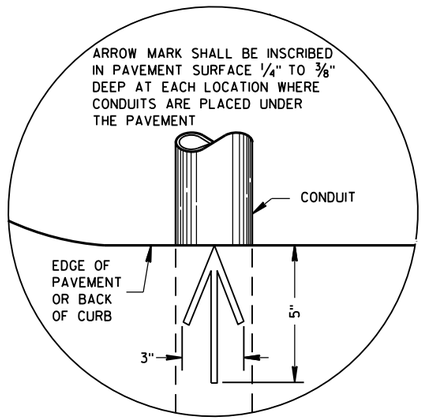
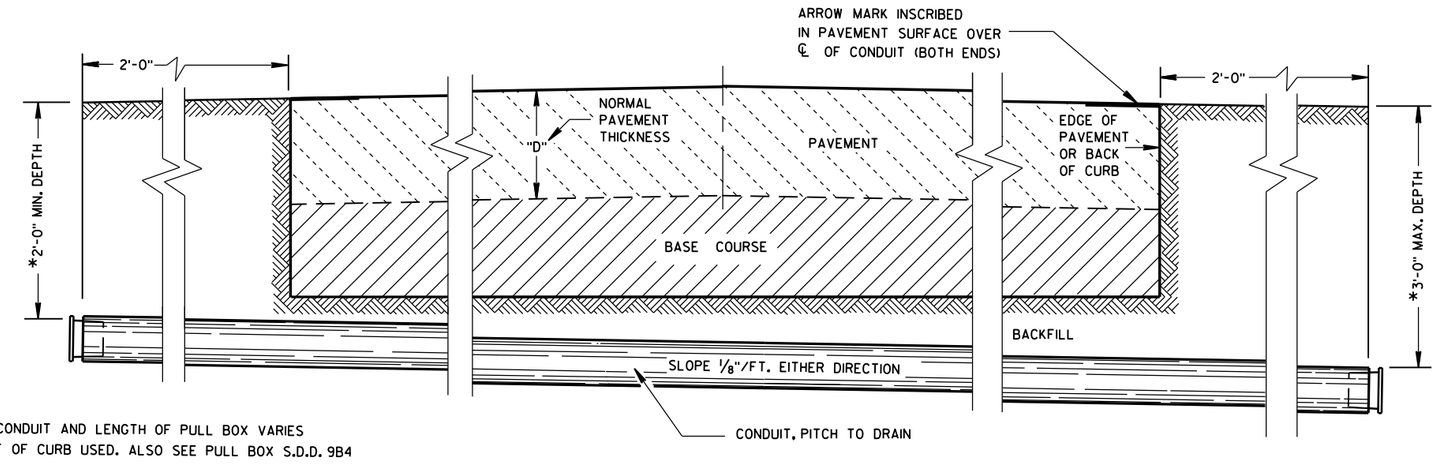
S.D.D. 8 F 4-7



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 345
FHWA

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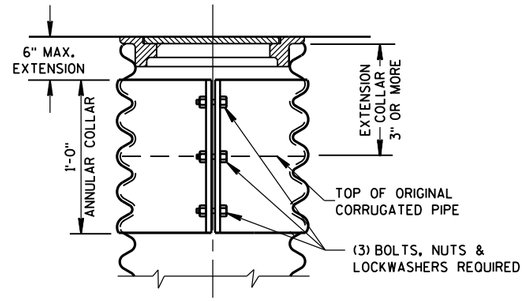
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

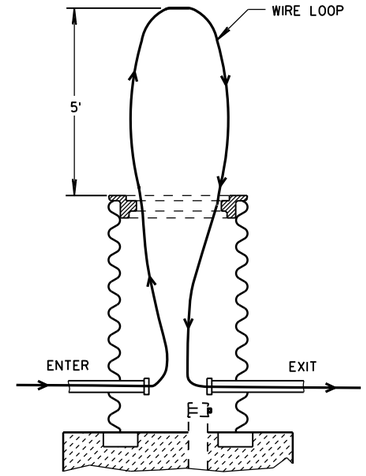
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

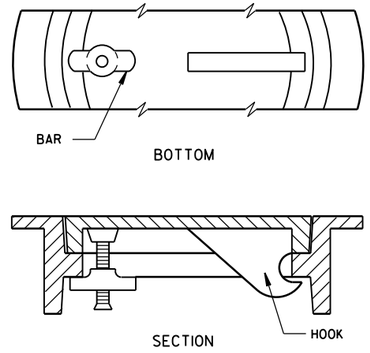
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

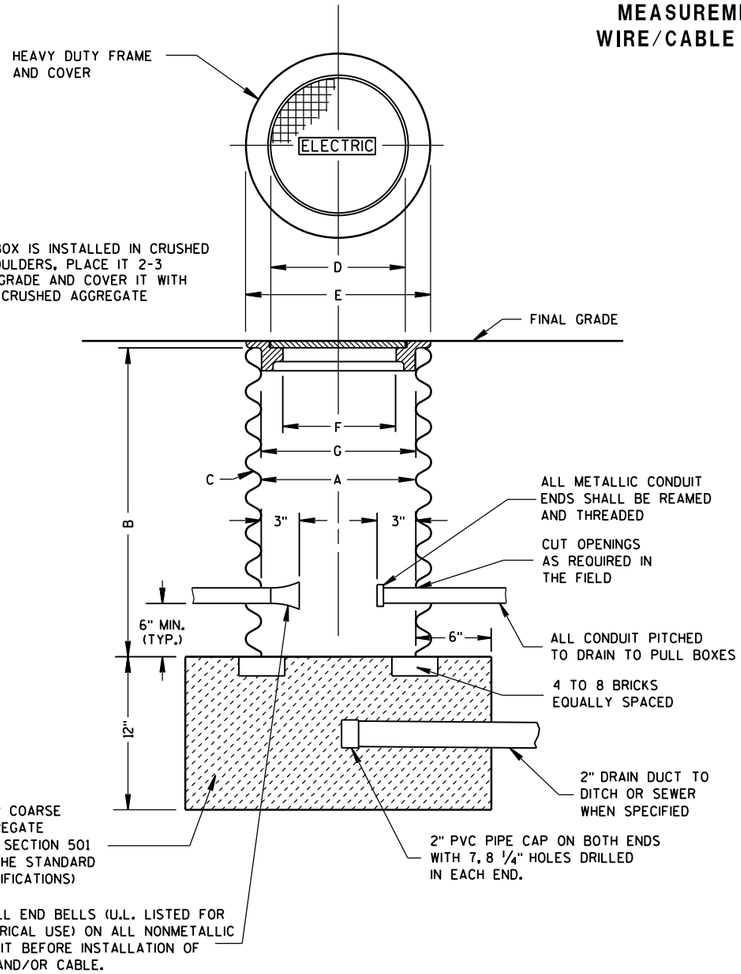


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



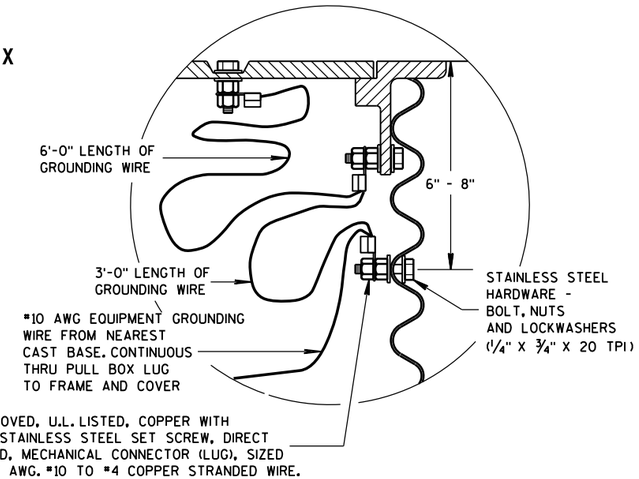
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

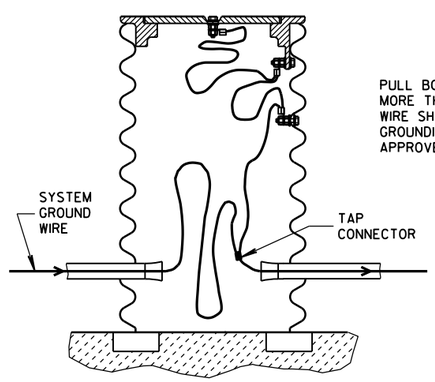


WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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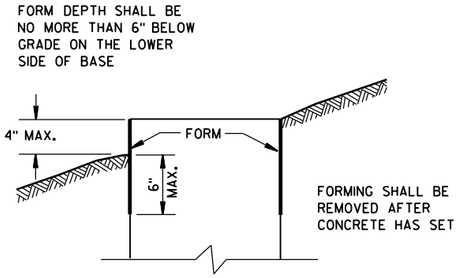


FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

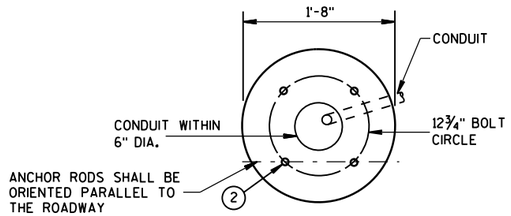
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

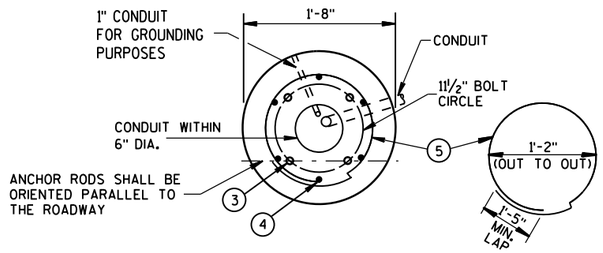
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

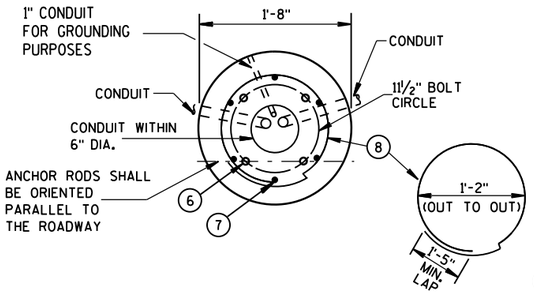
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

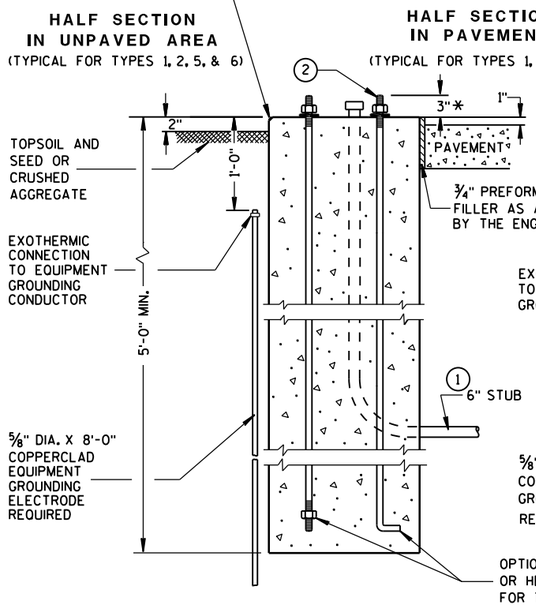
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

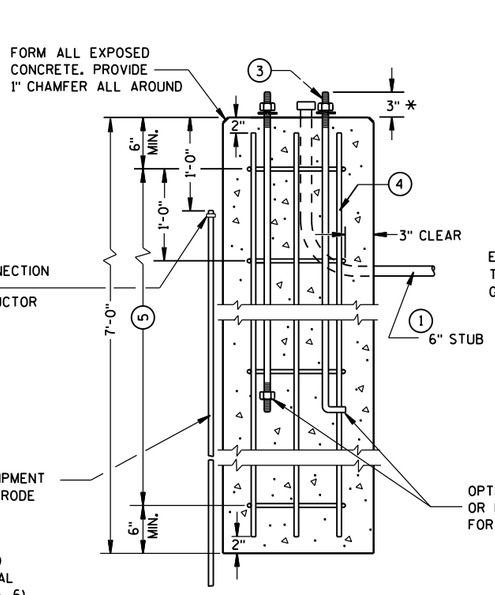
(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



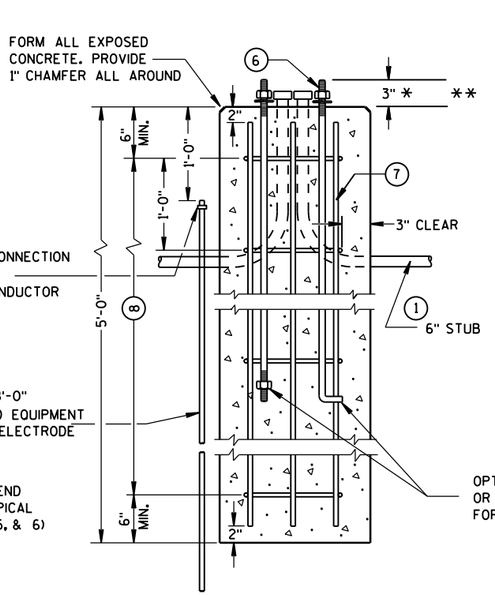








TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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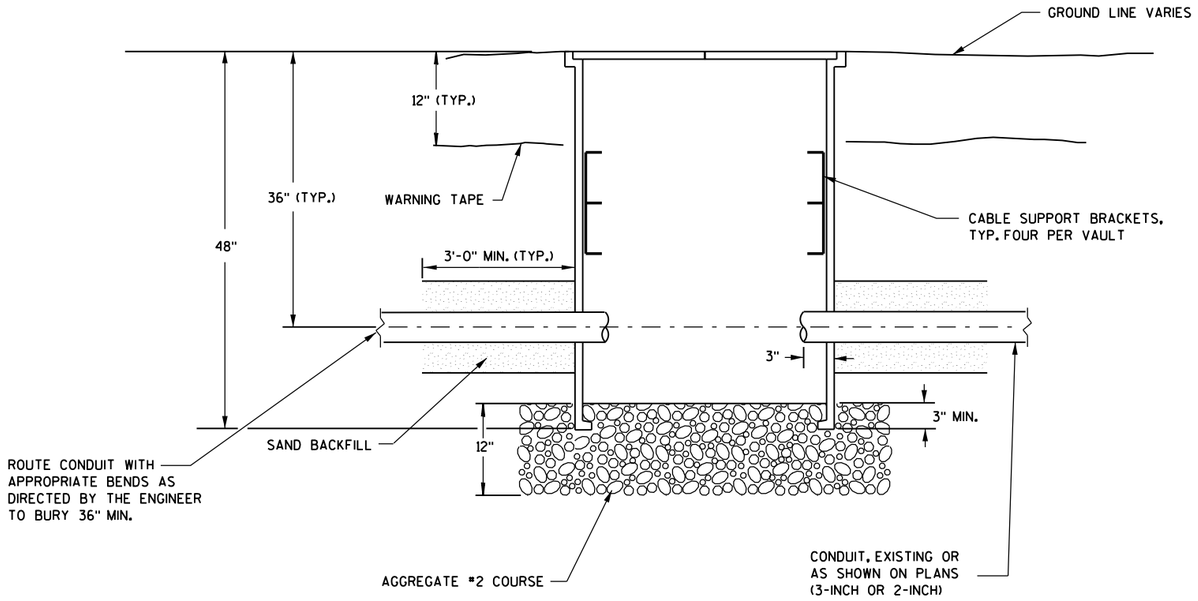
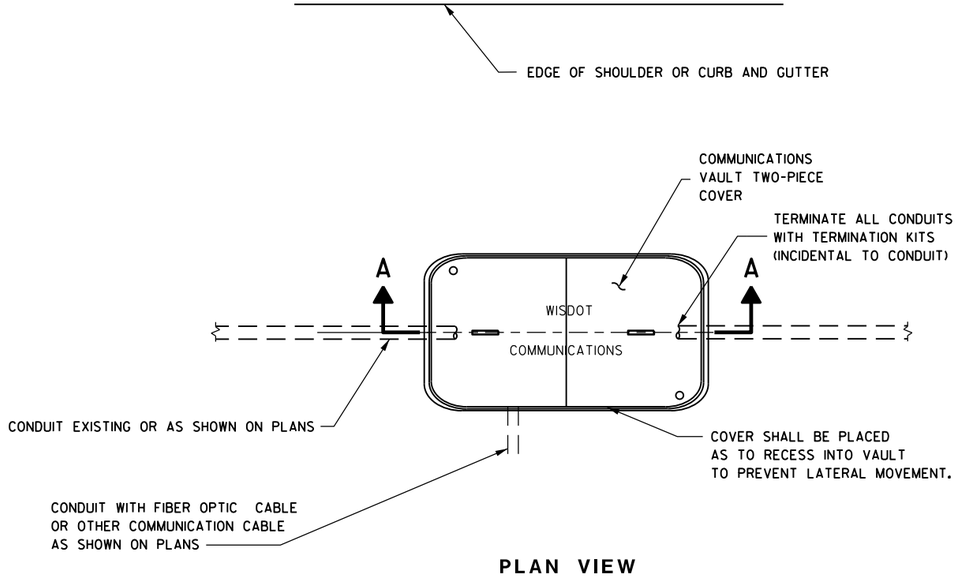


SECTION A-A



PLAN VIEW

COMMUNICATIONS VAULT

GENERAL NOTES

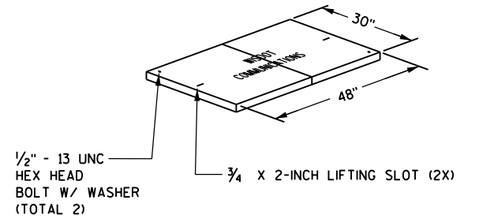
BOX SHALL HAVE AN OPEN BASE.

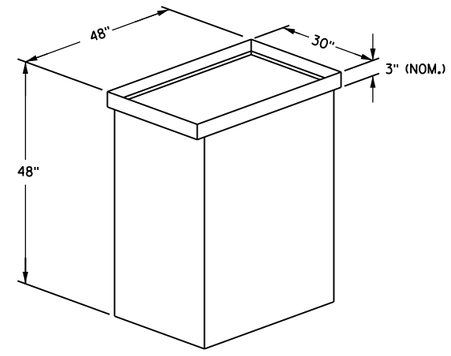
COVER SHALL BE DETECTABLE, AND HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.

ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.

VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.

FIELD PLACEMENT OF COMMUNICATIONS VAULTS SHALL BE AS DIRECTED BY THE ENGINEER.





ISOMETRIC VIEW

COMMUNICATION VAULT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept. 2014	/S/ Ahmet Demirbilek
DATE	STATE ELECTRICAL
FHWA	

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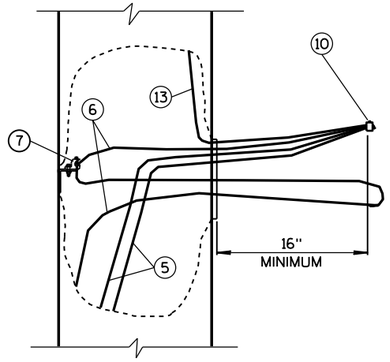
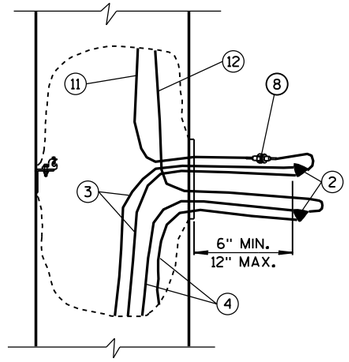
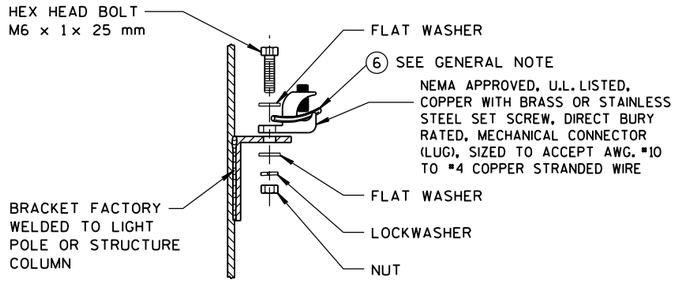


EQUIPMENT GROUNDING CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK (AND GROUNDED NEUTRAL SLACK IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES



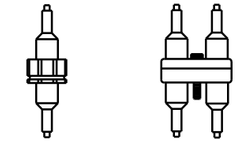
HANDHOLE GROUNDING LUG

(NUT, BOLT, WASHERS, AND LOCK WASHERS SHALL BE STAINLESS STEEL)

CONDUCTOR COLOR CODES

KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	*
4	GROUNDED LINE WIRE	WHITE
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	BARE
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING, USE BLACK FOR SINGLE LUMINAIRE POLES; BLACK AND RED FOR TWIN LUMINAIRE POLES.



1 POLE (1P) 2 POLE (2P)

FUSE ASSEMBLIES

GENERAL NOTES

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

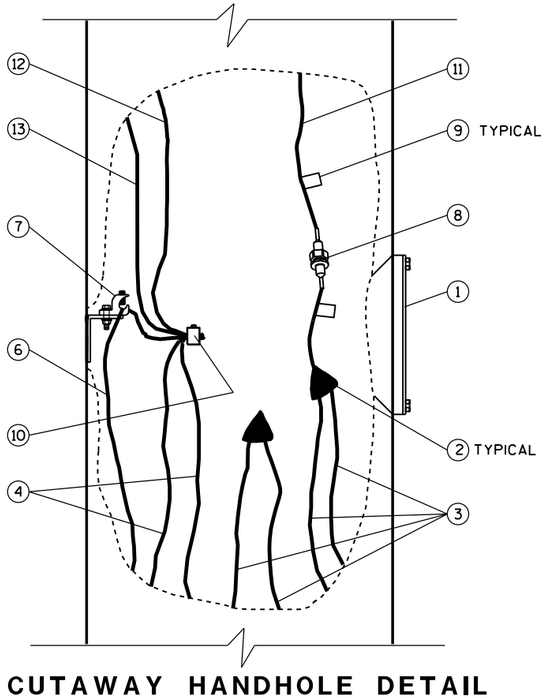
USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

THREE POLE WIRES ARE SHOWN FOR A SINGLE LUMINAIRE LIGHT POLE. THREE ADDITIONAL POLE WIRES REQUIRED FOR TWIN LUMINAIRE LIGHT POLES ARE OMITTED FROM THE DRAWING FOR CLARITY. IN THE TWIN POLE CASE, BUNDLE EACH SET OF THREE WIRES WITH A NYLON CABLE TIE.

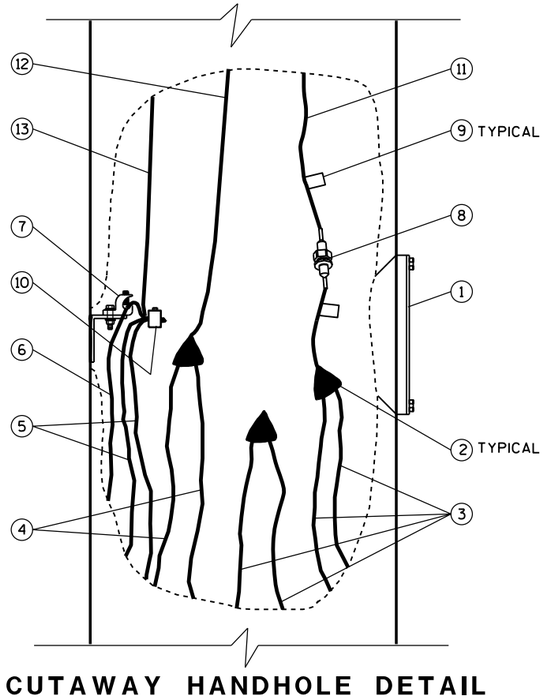
IN 3-PHASE SYSTEMS, THERE WILL BE ONE MORE UNGROUNDED LINE WIRE, WHICH IS OMITTED FROM THE DRAWING FOR CLARITY.

CIRCUIT TAGS SHALL BE INSTALLED ONLY WHERE REQUIRED IN THE SPECIAL PROVISIONS.



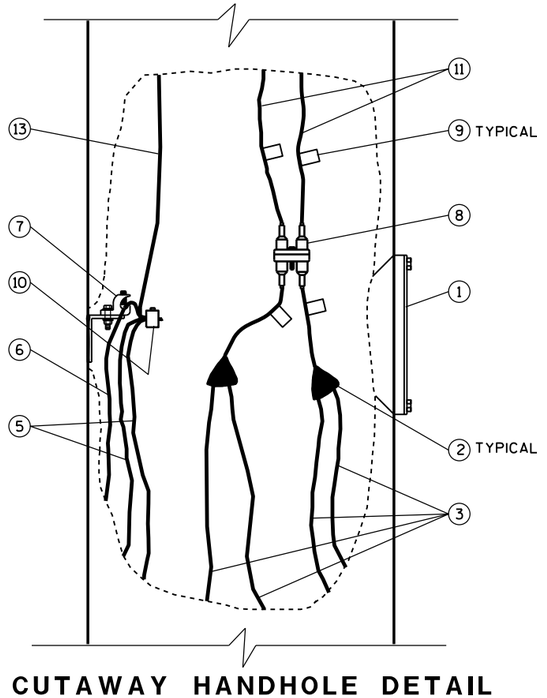
CUTAWAY HANDHOLE DETAIL

GROUNDED NEUTRAL SYSTEMS
1-Φ



CUTAWAY HANDHOLE DETAIL

ISOLATED NEUTRAL SYSTEMS
1-Φ SHOWN; 3-Φ WYE SIMILAR
(SEE GENERAL NOTE)



CUTAWAY HANDHOLE DETAIL

PHASE-TO-PHASE SYSTEMS
1-Φ SHOWN; 3-Φ DELTA SIMILAR
(SEE GENERAL NOTE)

NOTE: REQUIRED CONDUCTOR SLACK NOT SHOWN ON "CUTAWAY HAND HOLE" DETAILS FOR DRAWING CLARITY, SEE "TYPICAL CONDUCTOR SLACK AT HANDHOLES" ON THIS SHEET.

(1) HANDHOLE AND COVER
(2) INSULATED SPLICE
(3) UNGROUNDED LINE WIRE
(4) GROUNDED LINE WIRE
(5) SYSTEM GROUNDING LINE WIRE
(6) GROUNDING ELECTRODE CONDUCTOR
(7) HANDHOLE GROUNDING LUG
(8) FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
(9) CIRCUIT TAG (SEE GENERAL NOTE)
(10) REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
(11) UNGROUNDED POLE WIRE
(12) GROUNDED POLE WIRE
(13) EQUIPMENT GROUNDING POLE WIRE

ELECTRICAL HANDHOLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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GENERAL NOTES

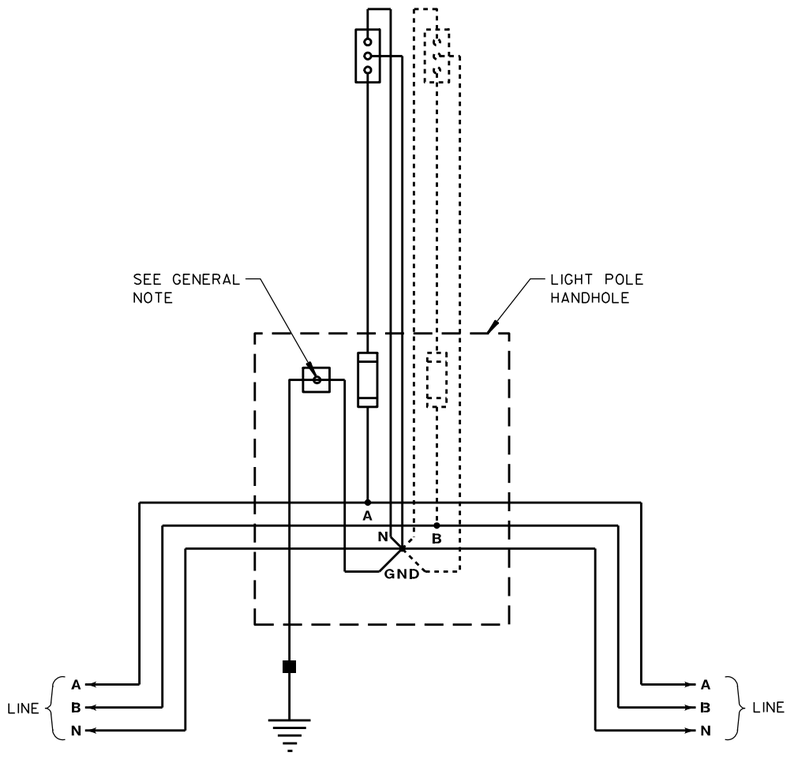
DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.



TYPICAL WIRING DIAGRAM
GROUNDED NEUTRAL SYSTEM
1-ϕ 240/480VAC 3 WIRE OR 480VAC 2 WIRE

HANDHOLE FUSE SCHEDULES

LINE VOLTAGE ϕ-GROUND	BALLAST WATTAGE 70-200 W	250-400 W
120 VAC	5 A	10 A
240 VAC	5 A	5 A
277 VAC	5 A	5 A
480 VAC	3 A	5 A

LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
ϕ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	SINGLE-POLE (1P) FUSE ASSEMBLY
	TWO-POLE (2P) FUSE ASSEMBLY
	UNFUSED LUMINAIRE
	EQUIPMENT GROUNDING ELECTRODE
	TERMINAL
	SPLICE
	CONDUCTOR
	EXOTHERMIC WELD

ELECTRICAL DETAILS
GROUND MOUNT LIGHT POLES
GROUNDED NEUTRAL SYSTEMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
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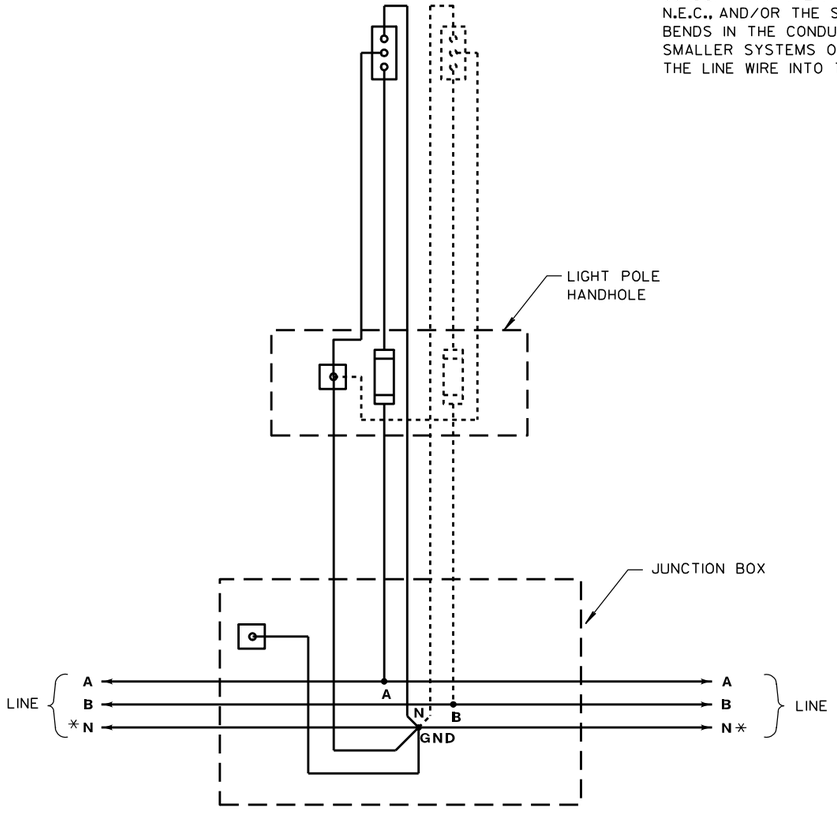
HANDHOLE FUSE SCHEDULES

LINE VOLTAGE ϕ-GROUND	BALLAST WATTAGE 70-200 W	250-400 W
120 VAC	5 A	10 A
240 VAC	5 A	5 A
277 VAC	5 A	5 A
480 VAC	3 A	5 A



* INCREASE NEUTRAL BY ONE SIZE FOR LENGTH OF STRUCTURE

TYPICAL WIRING DIAGRAM
GROUNDED NEUTRAL SYSTEM
1-ϕ 240/480VAC OR 3 WIRE OR 480VAC 2 WIRE

GENERAL NOTES

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

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

WIRE SIZE FROM THE JUNCTION BOX TO THE POLE HANDHOLE SHALL EQUAL THE SIZE OF THE POLE WIRE.

THE INTENT OF JUNCTION BOX SPLICES AS SHOWN IN THIS DETAIL IS FOR LIGHTING SYSTEMS WITH HEAVY LINE WIRE TOO LARGE TO PULL THROUGH THE CONDUIT INTO THE POLE HANDHOLE. DUE TO CONDUIT FILL REQUIREMENTS OF N.E.C., AND/OR THE STIFFNESS OF THE WIRE COMPARED TO THE NUMBER OF BENDS IN THE CONDUIT. IN CASES WHERE LINE WIRE IS LIGHTER, SUCH AS SMALLER SYSTEMS OR TOWARD THE FURTHEST END OF A LARGER SYSTEM, PULL THE LINE WIRE INTO THE POLE HANDHOLE FOR SPLICING.

LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
ϕ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	SINGLE-POLE (1P) FUSE ASSEMBLY
	TWO-POLE (2P) FUSE ASSEMBLY
	UNFUSED LUMINAIRE
	EQUIPMENT GROUNDING ELECTRODE
	TERMINAL
	SPLICE
	CONDUCTOR
	EXOTHERMIC WELD

ELECTRICAL DETAILS
STRUCTURE MOUNT LIGHT POLES
GROUNDED NEUTRAL SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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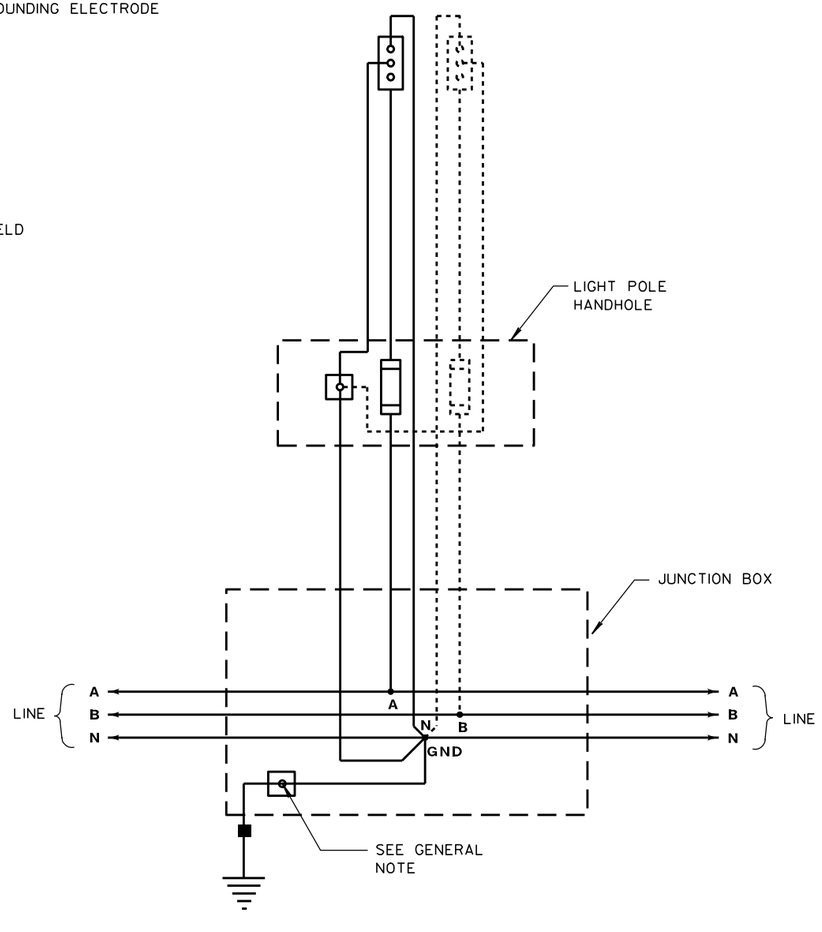
LEGEND

A, B, X, Y, Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
ϕ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	UNFUSED LUMINAIRE
	SINGLE POLE (1P) FUSE ASSEMBLY
	EQUIPMENT GROUNDING ELECTRODE
	TERMINAL
	SPLICE
	CONDUCTOR
	EXOTHERMIC WELD



TYPICAL WIRING DIAGRAM

GROUNDED NEUTRAL SYSTEM
1-ϕ 240/480VAC OR 3 WIRE OR 480VAC 2 WIRE

GENERAL NOTES

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

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

WIRE SIZE FROM THE JUNCTION BOX TO THE POLE HANDHOLE SHALL EQUAL THE SIZE OF THE POLE WIRE.

THE INTENT OF JUNCTION BOX SPLICES AS SHOWN IN THIS DETAIL IS FOR LIGHTING SYSTEMS WITH HEAVY LINE WIRE TOO LARGE TO PULL THROUGH THE CONDUIT INTO THE POLE HANDHOLE. DUE TO CONDUIT FILL REQUIREMENTS OF N.E.C., AND/OR THE STIFFNESS OF THE WIRE COMPARED TO THE NUMBER OF BENDS IN THE CONDUIT. IN CASES WHERE LINE WIRE IS LIGHTER, SUCH AS SMALLER SYSTEMS OR TOWARD THE FURTHEST END OF A LARGER SYSTEM, PULL THE LINE WIRE INTO THE POLE HANDHOLE FOR SPLICING.

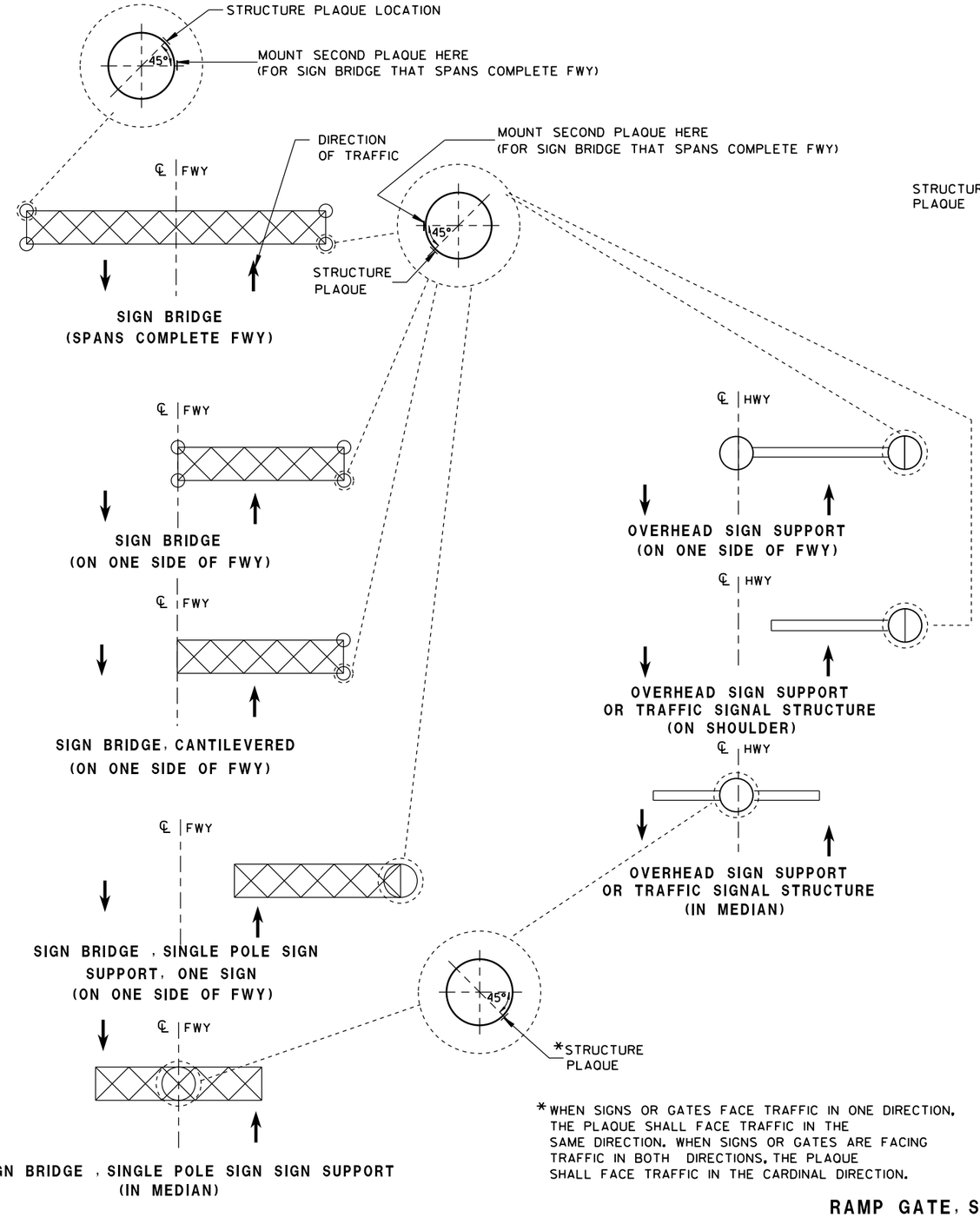
HANDHOLE FUSE SCHEDULES

LINE VOLTAGE ϕ-GROUND	BALLAST WATTAGE 150-200 W	BALLAST WATTAGE 250-400 W
240 VAC	5 A	5 A
277 VAC	5 A	5 A
480 VAC	3 A	5 A

ELECTRICAL DETAILS
MEDIAN MOUNT LIGHT POLES
GROUNDED NEUTRAL SYSTEMS

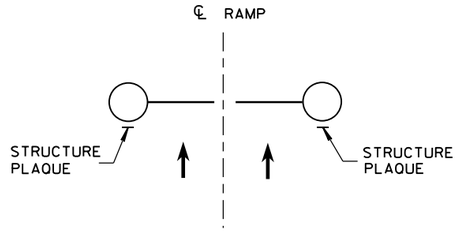
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/25/2010 — DATE
/S/ John Corbin — STATE ELECTRICAL ENGI 352 — HWYS
FHWA

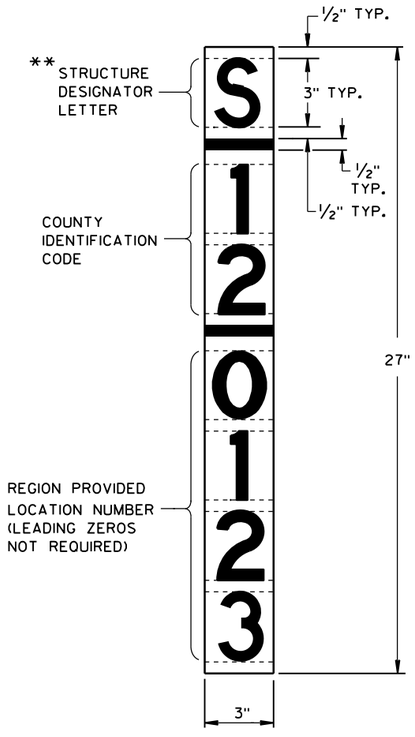


LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

* WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.



RAMP GATE
(ACROSS FWY ON-RAMP)



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

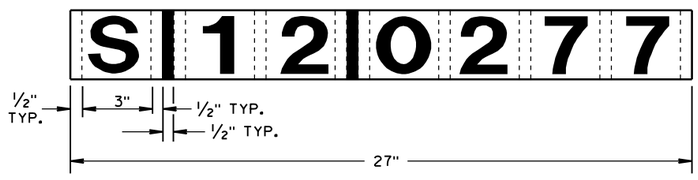
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 12 A 4-3

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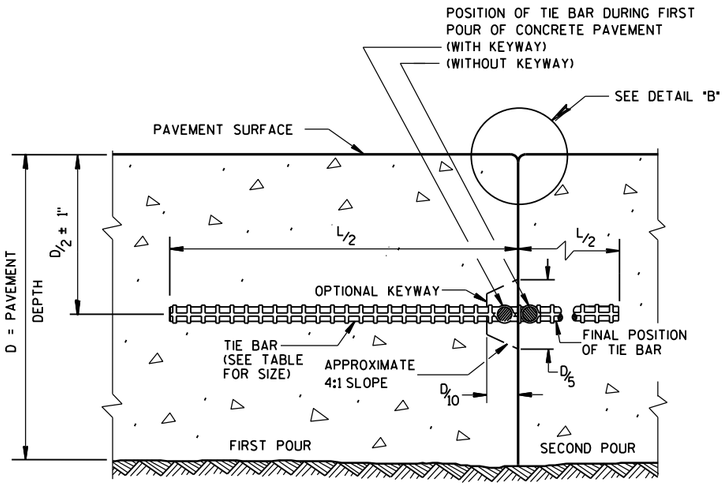
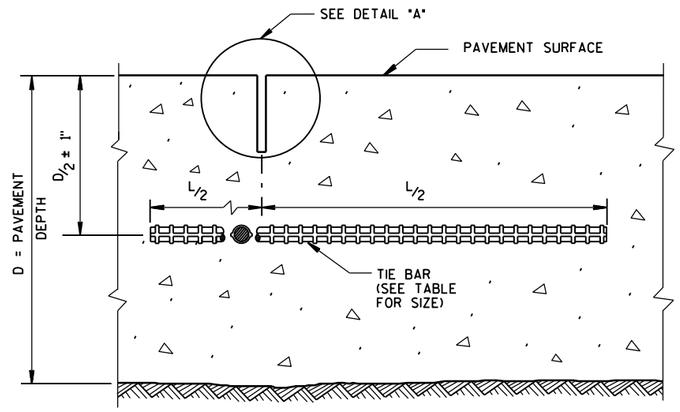
S.D.D. 12 A 4-3



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

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

DETAIL "A"

DETAIL "B"

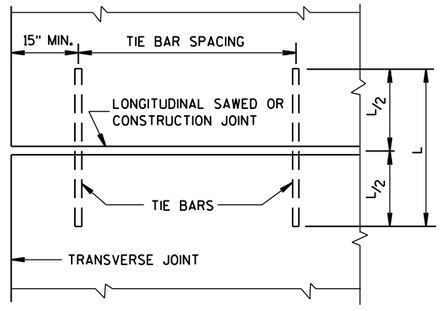
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

6

S.D.D. 13 C 1-18

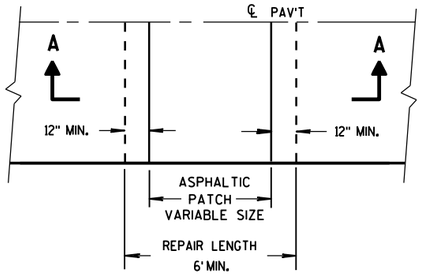
GENERAL NOTES

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

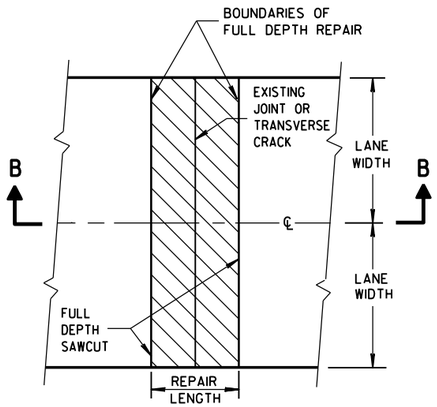
PROVIDE 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK.

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

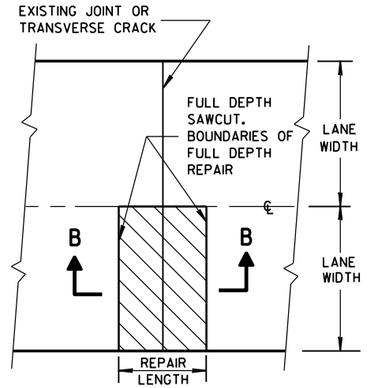
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

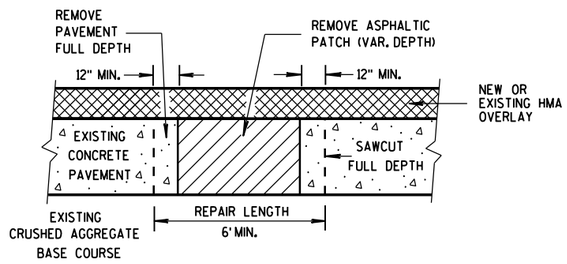


PLAN VIEW
(DOUBLE LANE REPAIR)



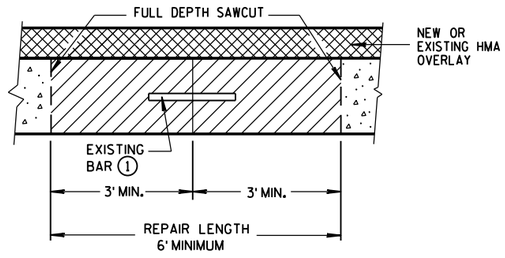
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

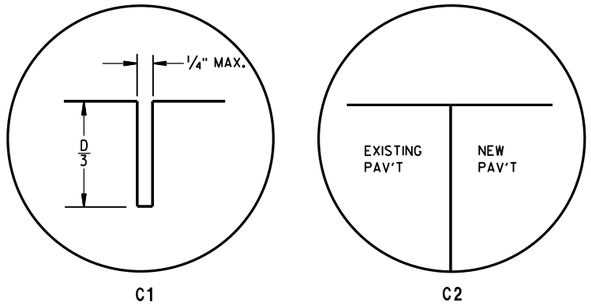
CONCRETE REMOVAL

BASE PATCHING CONCRETE

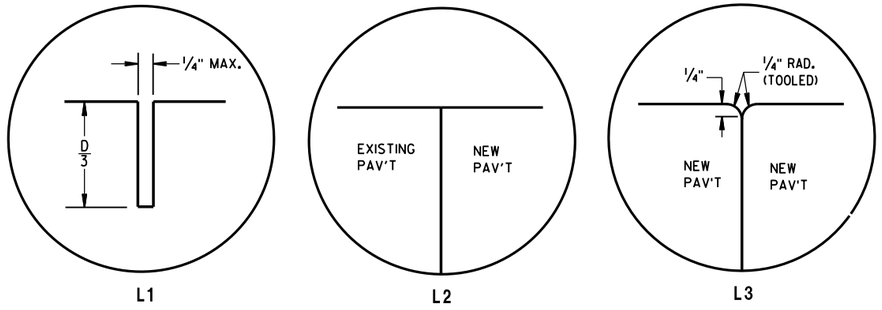
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

S.D.D. 13 C 14-6a

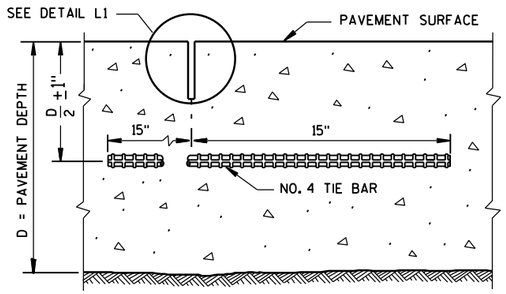
S.D.D. 13 C 14-6a



TRANSVERSE JOINTS

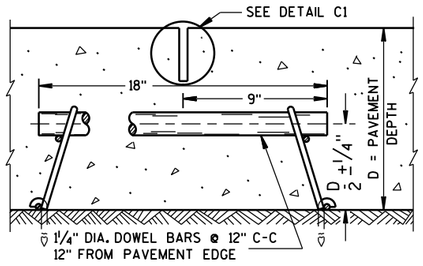


LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT



SECTION F-F

CONTRACTION JOINT

GENERAL NOTES

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

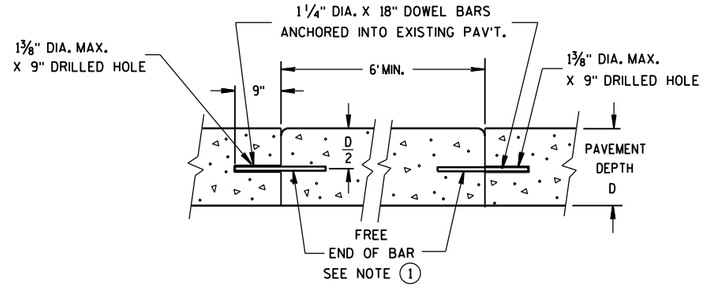
CONCRETE BASE PATCHES OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

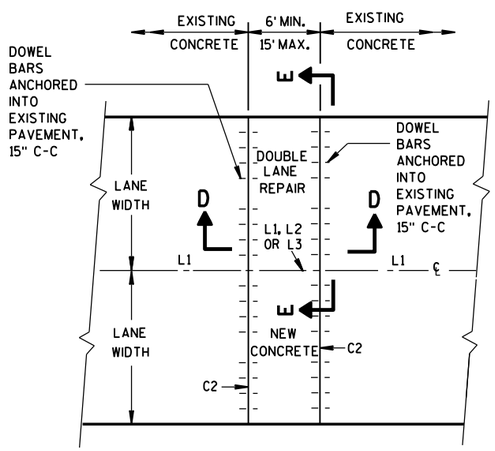
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

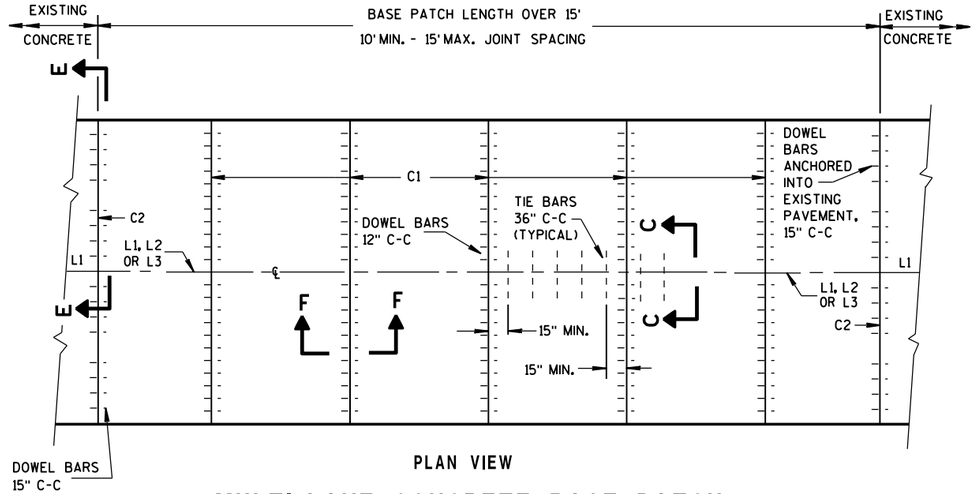


SECTION D-D



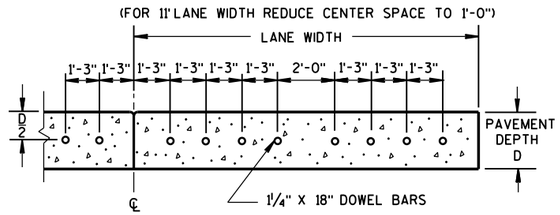
PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH



SECTION E-E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT

BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

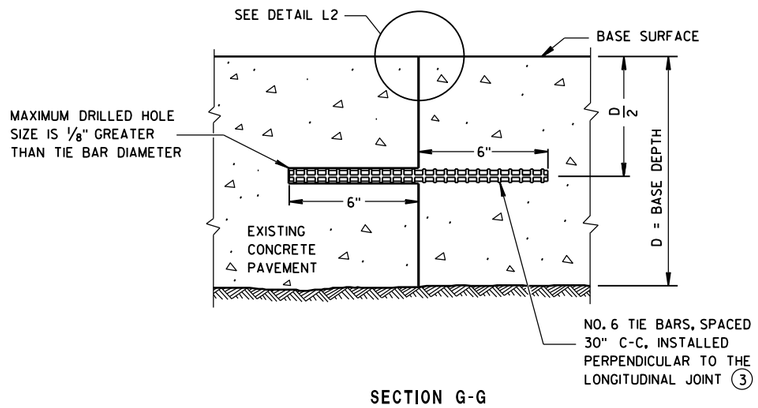
6
S.D.D. 13 C 14-6b

GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE BASE PATCHES UP TO 15 FEET IN LENGTH.

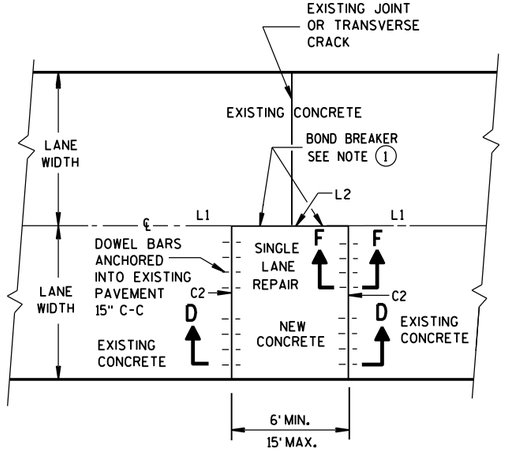
(2) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, DRILLED TIE BARS MAY BE INSTALLED ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



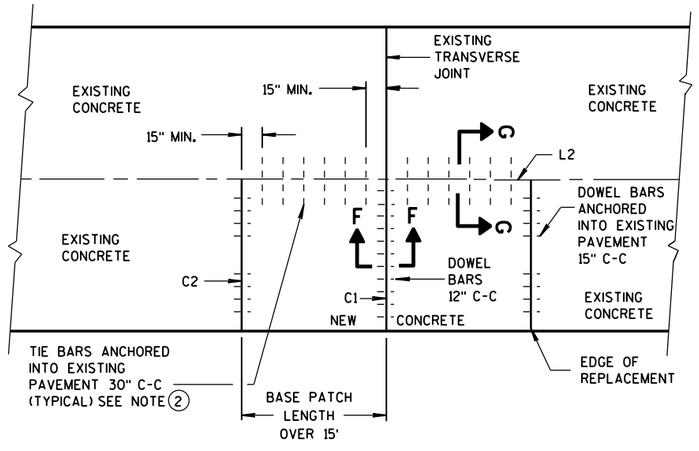
SECTION G-G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

BASE PATCHING CONCRETE

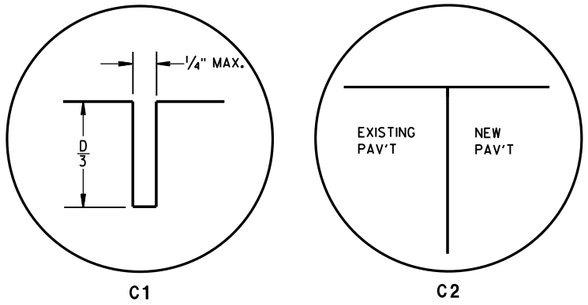
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

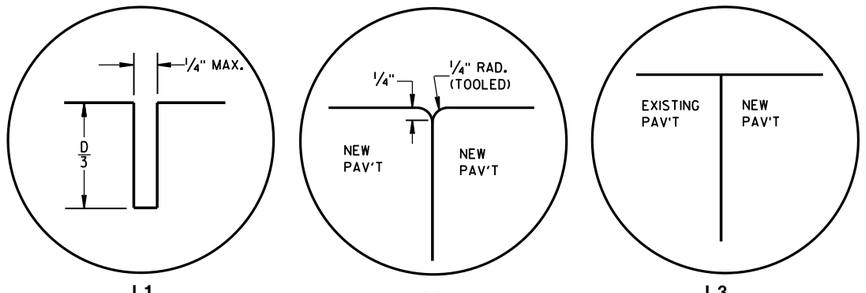
357

6

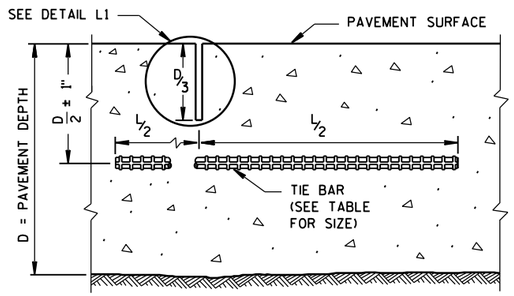
S.D.D. 13 C 14-6c



TRANSVERSE JOINTS

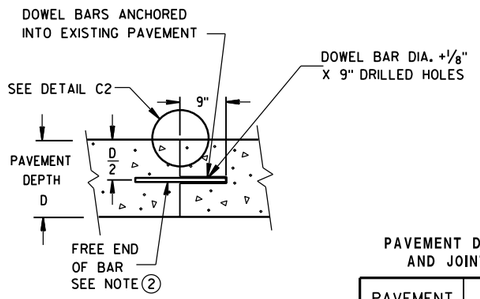


LONGITUDINAL JOINTS



SECTION C-C

SAWED JOINT



SECTION D-D

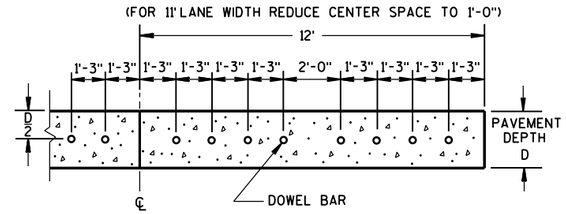
GENERAL NOTES

ANCHOR TIE BARS AND DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

(2) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.



SECTION E-E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

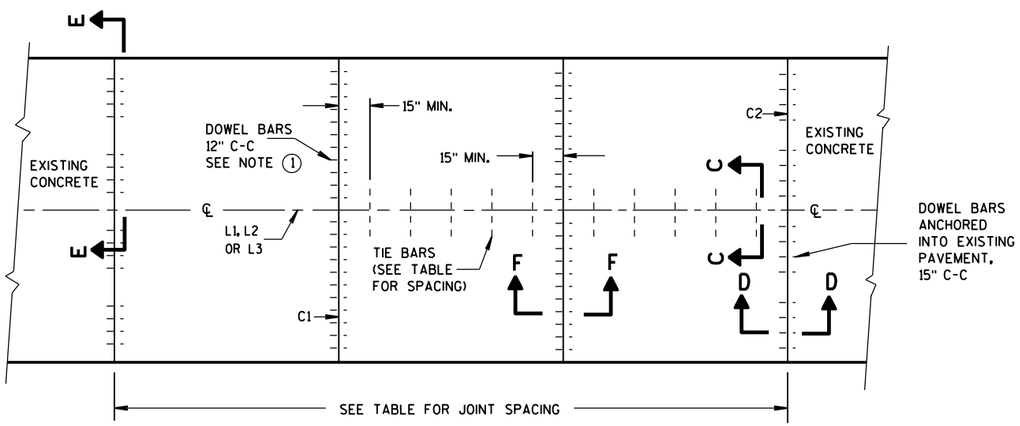
PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5½", 6, 6 ½"	NONE	12'
7, 7 ½"	1"	14'
8, 8 ½"	1 ¼"	15'
9, 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

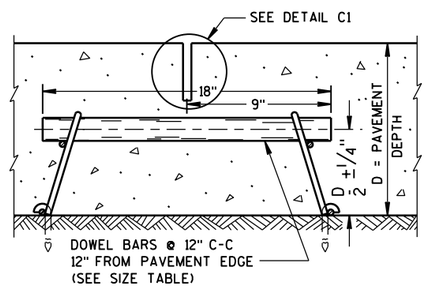
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW

CONCRETE BASE CONTRACTION JOINT LOCATIONS



SECTION F-F

CONTRACTION JOINT

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO 358

6

S.D.D. 13 C 15-6a

6

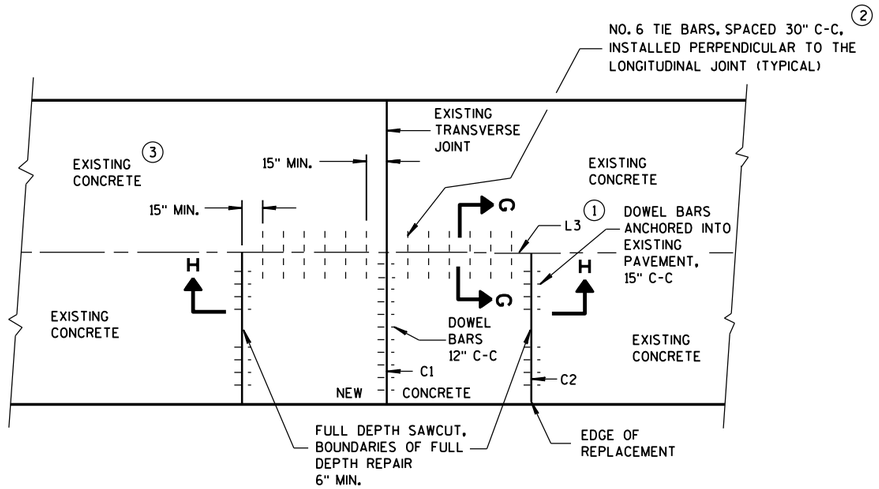
S.D.D. 13 C 15-6a

GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) AT THE LONGITUDINAL JOINT IN LIEU OF TIE BARS FOR SINGLE LANE CONCRETE BASE REPAIRS UP TO 15 FEET IN LENGTH.

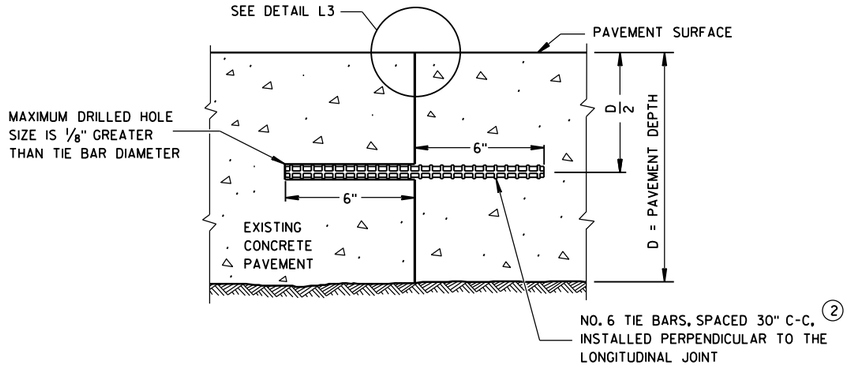
(2) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(3) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



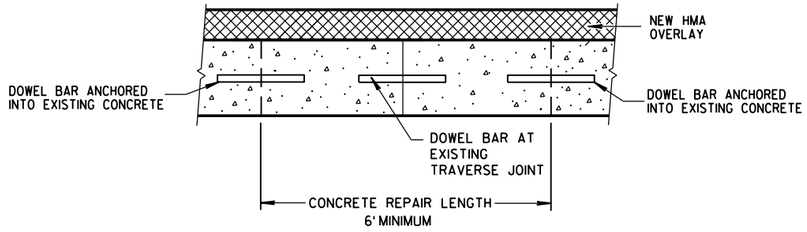
PLAN VIEW

SINGLE LANE CONCRETE BASE REPAIR



SECTION G-G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



SECTION H-H

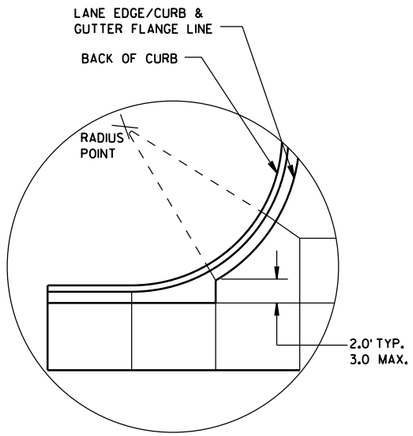
CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

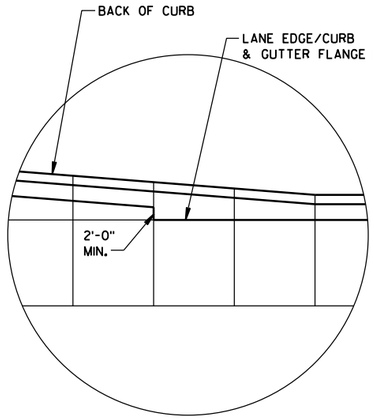
APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPEI
FHWA

6

S.D.D. 13 C 15-6b



DETAIL "A"



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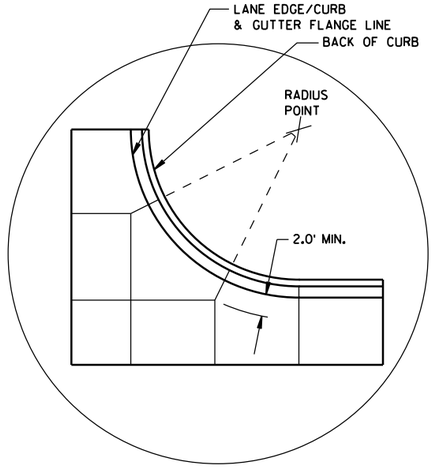

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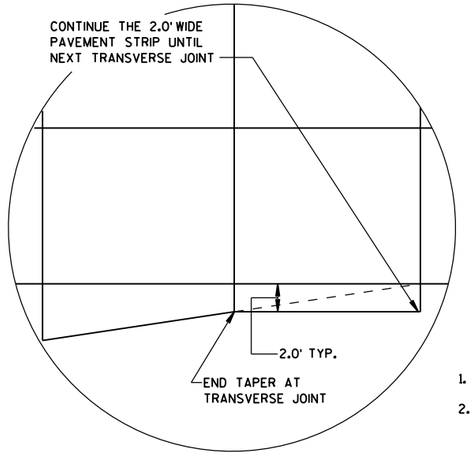


DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

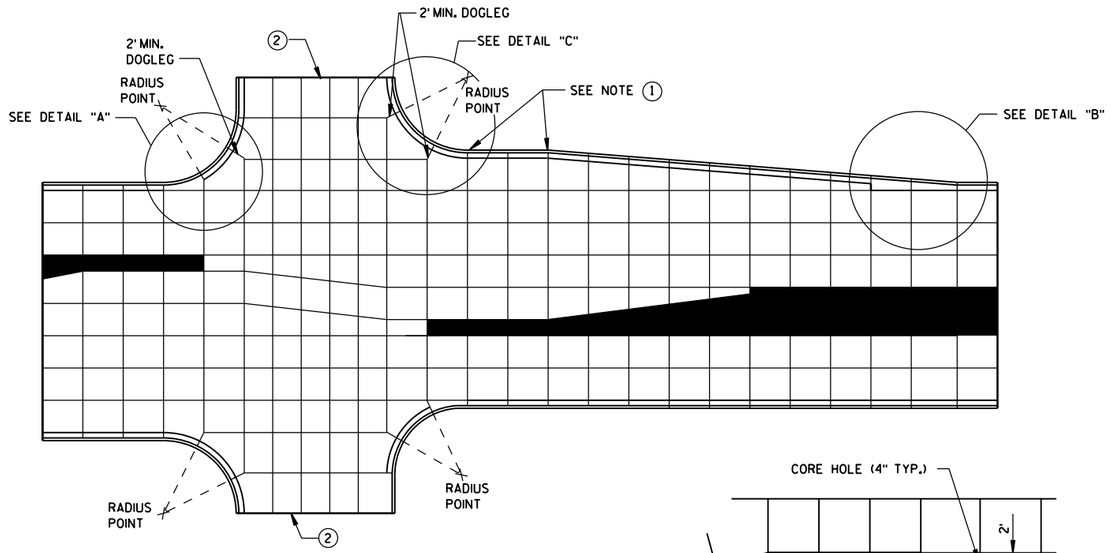
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

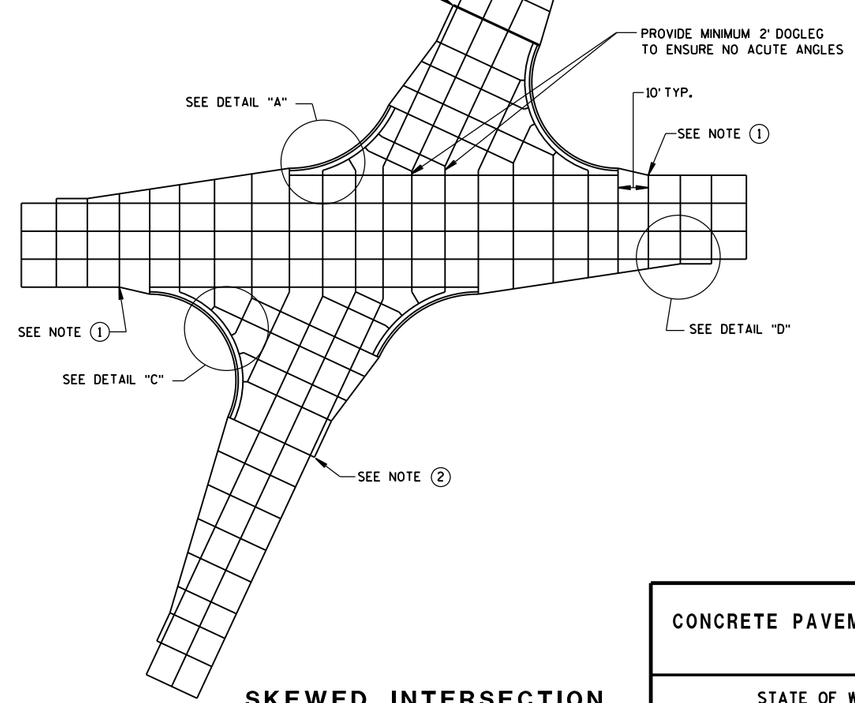
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



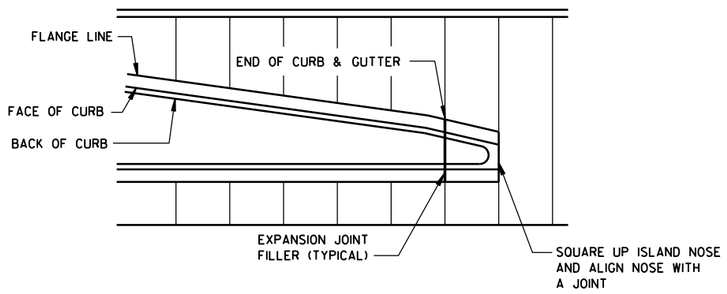
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

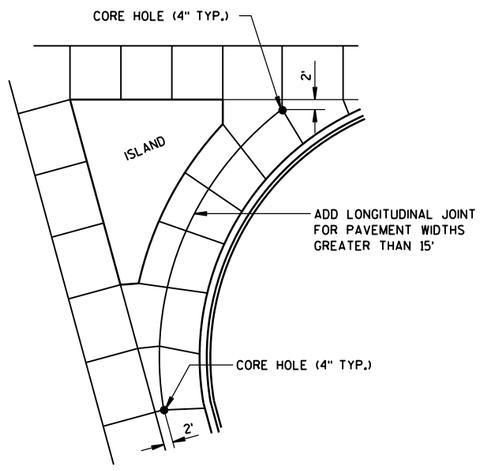
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 360

6

S.D.D. 13 C 18-5a

6

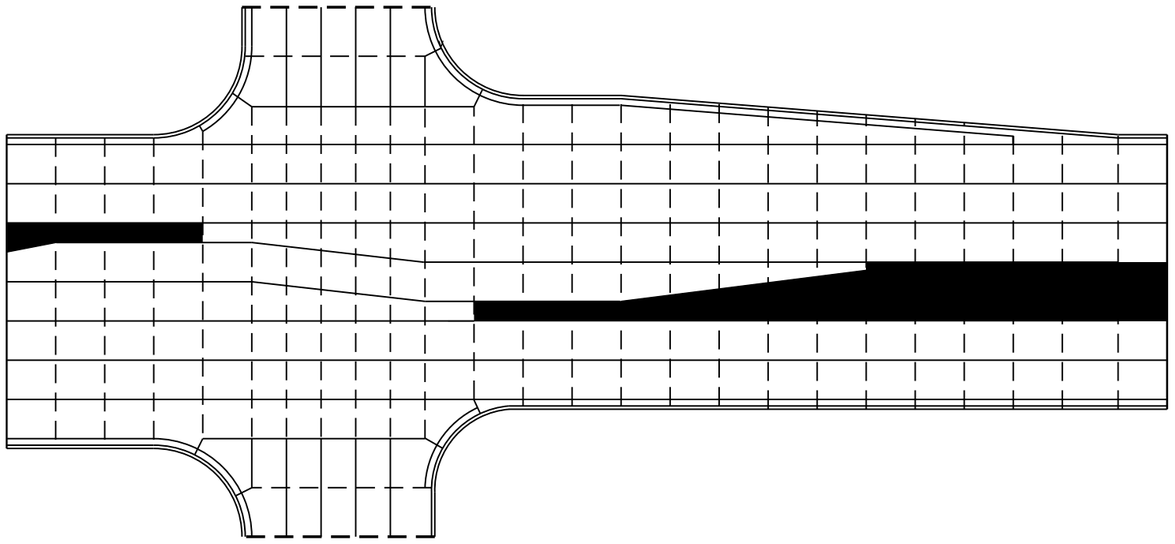
S.D.D. 13 C 18-5a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

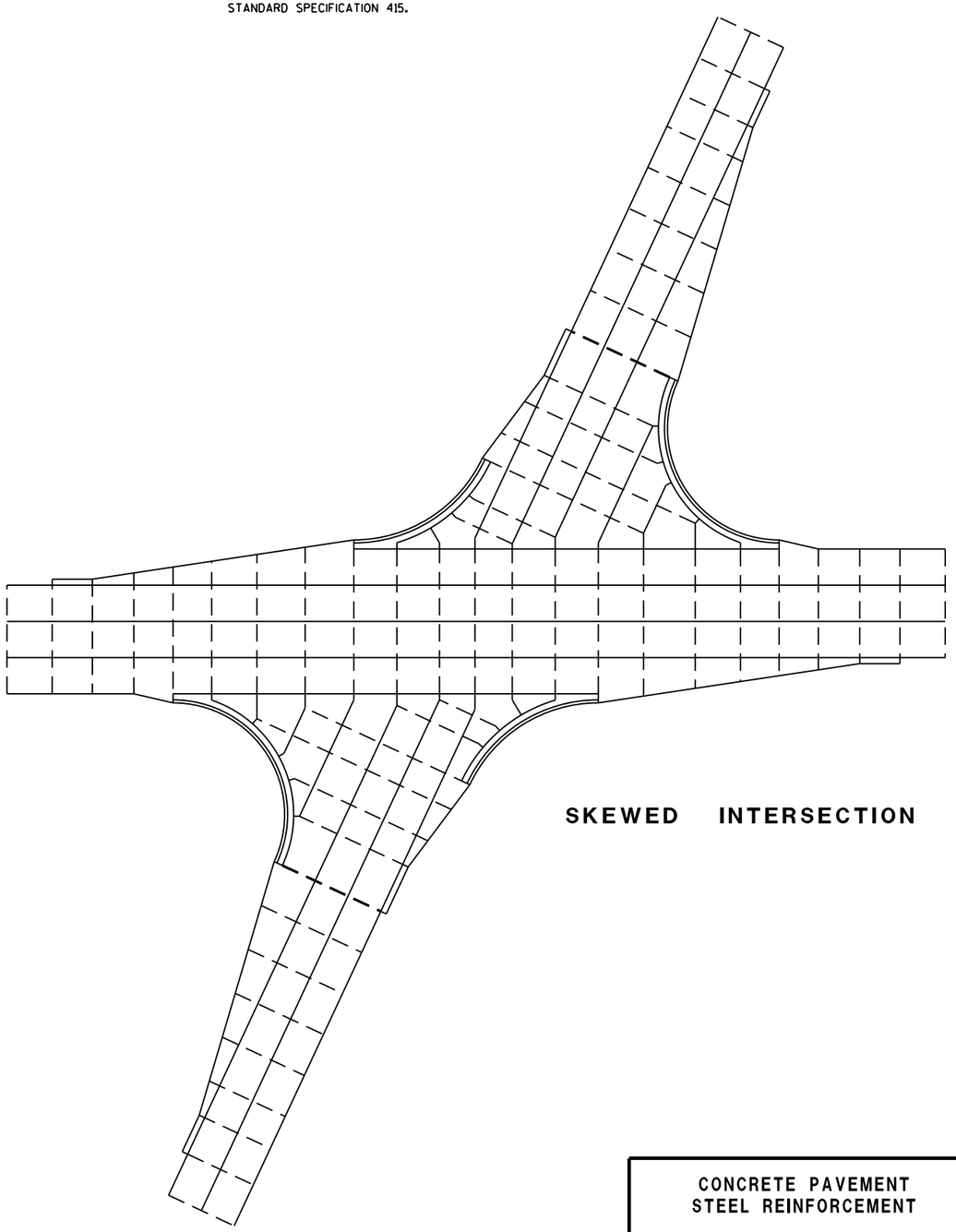
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

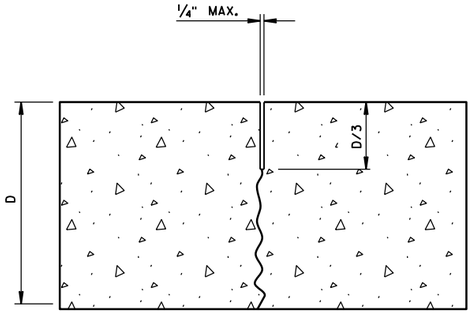
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

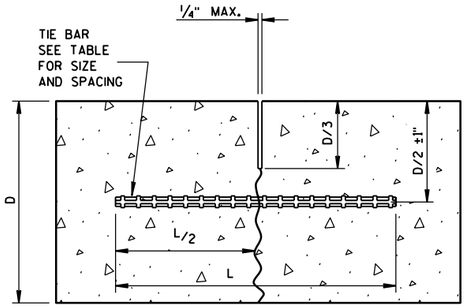
S.D.D. 13 C 18-5b

6

S.D.D. 13 C 18-5b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

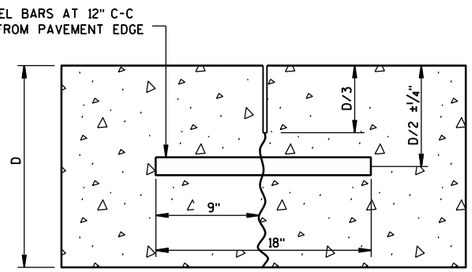
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

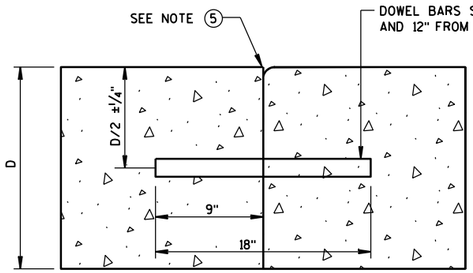
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



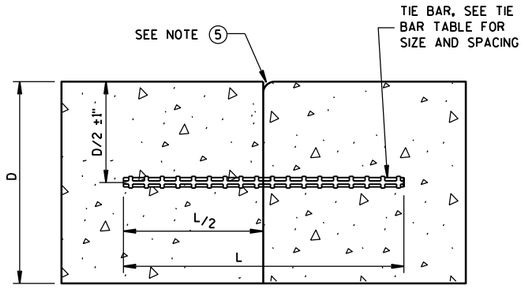
DOWELED-TRANSVERSE

CONTRACTION JOINTS

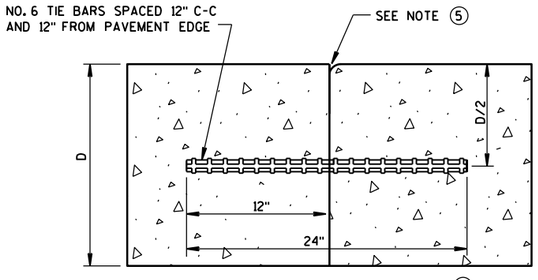
SEE NOTE (2)



DOWELED TRANSVERSE (3)

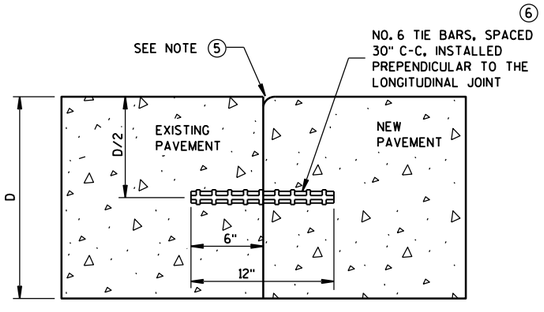


TIED LONGITUDINAL



TIED TRANSVERSE (3)

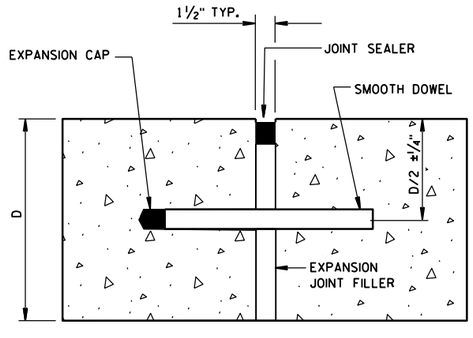
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

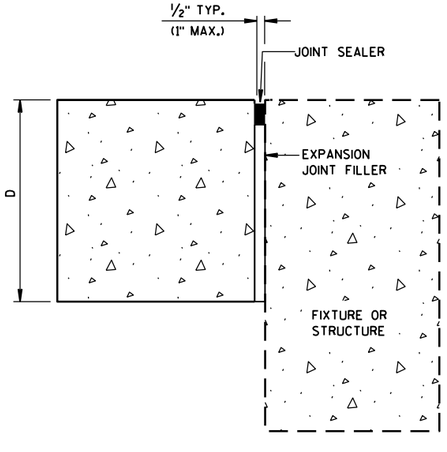
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

6

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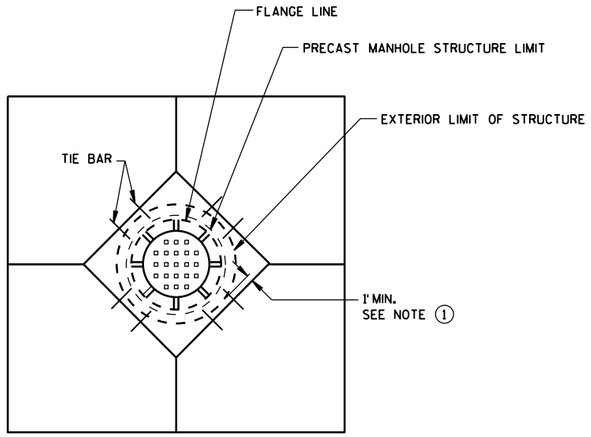
S.D.D. 13 C 18-5c

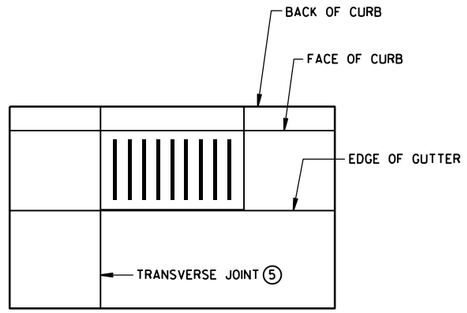
S.D.D. 13 C 18-5c

CONCRETE PAVEMENT
JOINT TYPES

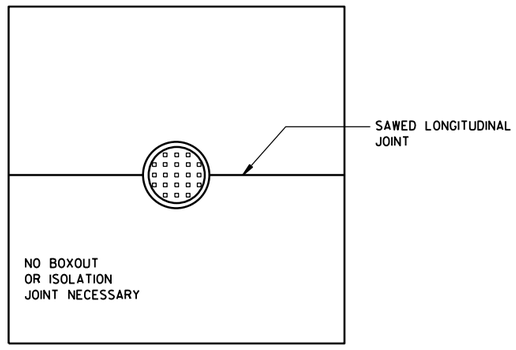
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



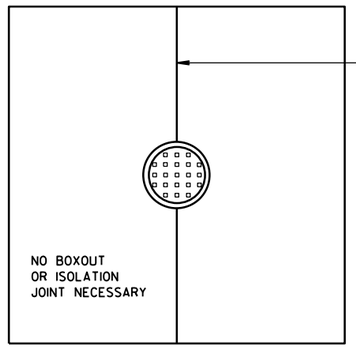
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



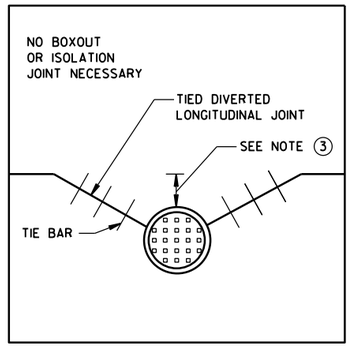
INLET WITH TRANSVERSE JOINT



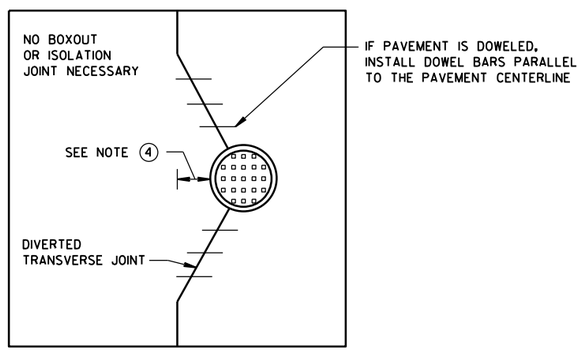
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

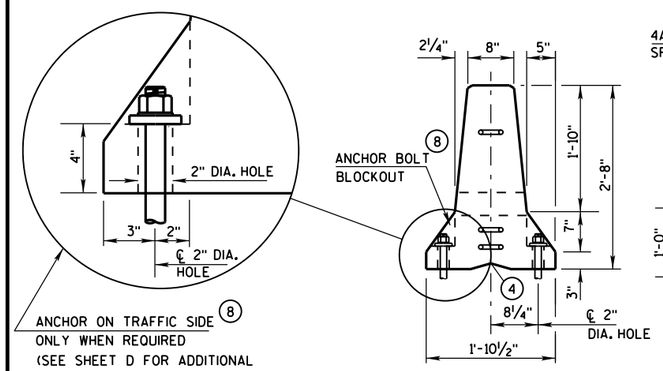
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

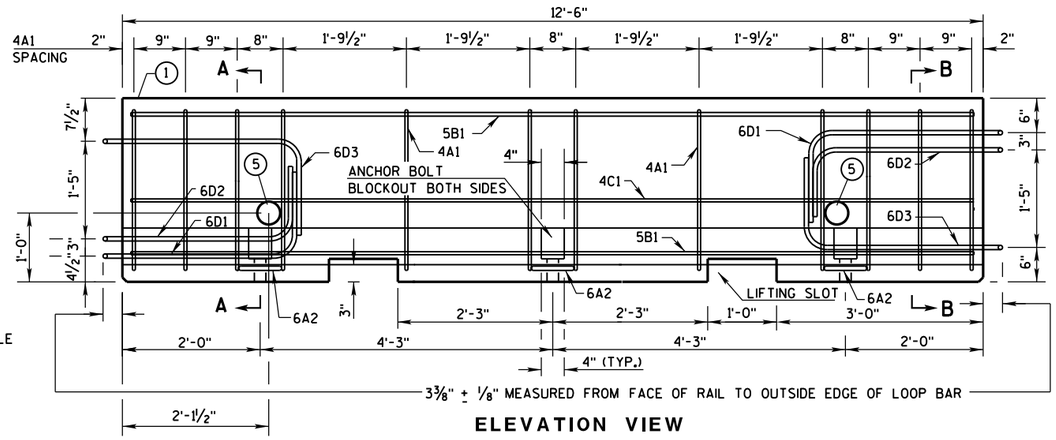
APPROVED
December, 2016 — /S/ Peter Kemp, P.E.
DATE — PAVEMENT SUPEF
FHWA

6

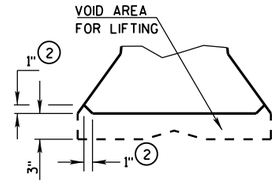
S.D.D. 13 C 18-5d



END VIEW



ELEVATION VIEW



DETAIL "B"
LIFTING SLOT DETAIL

GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(a) THRU 14B7-14(h).

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

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

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

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

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

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

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

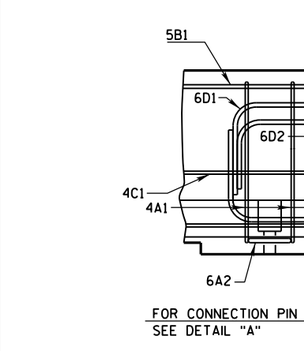
(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

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

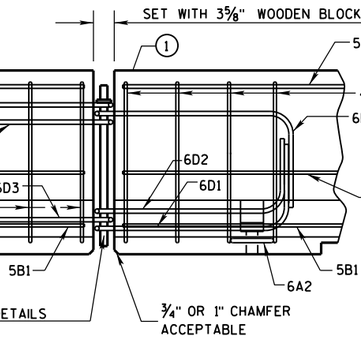
(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

(8) SEE SHEET D FOR ANCHORING CRITERIA.

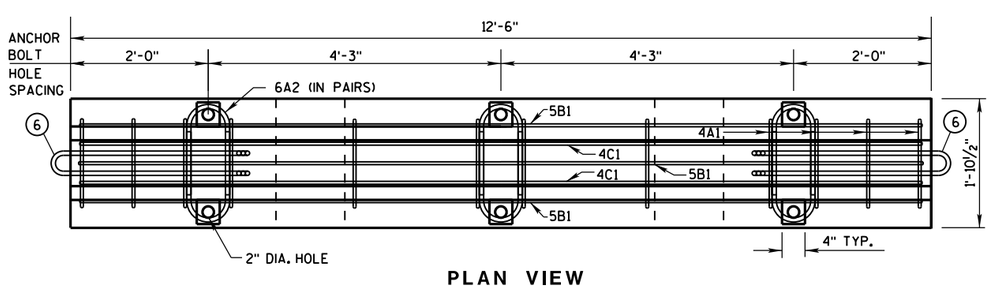
(9) 1" CHAMFER OPTIONAL.



SECTION A-A
(STIRRUP PLACEMENT)



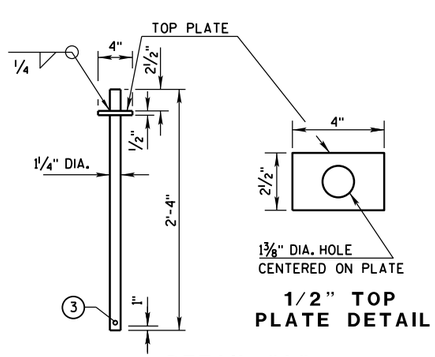
SECTION B-B
(STIRRUP PLACEMENT)



PLAN VIEW

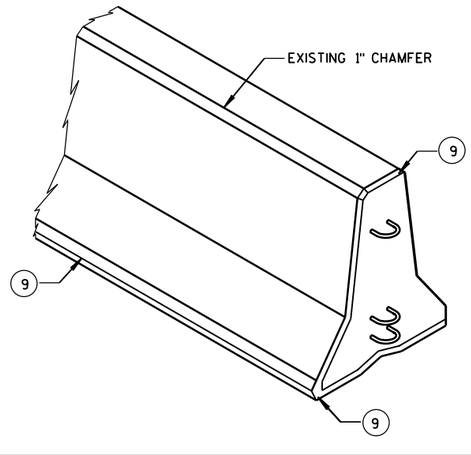
DETAILS OF BARRIER SECTION

DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

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



CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

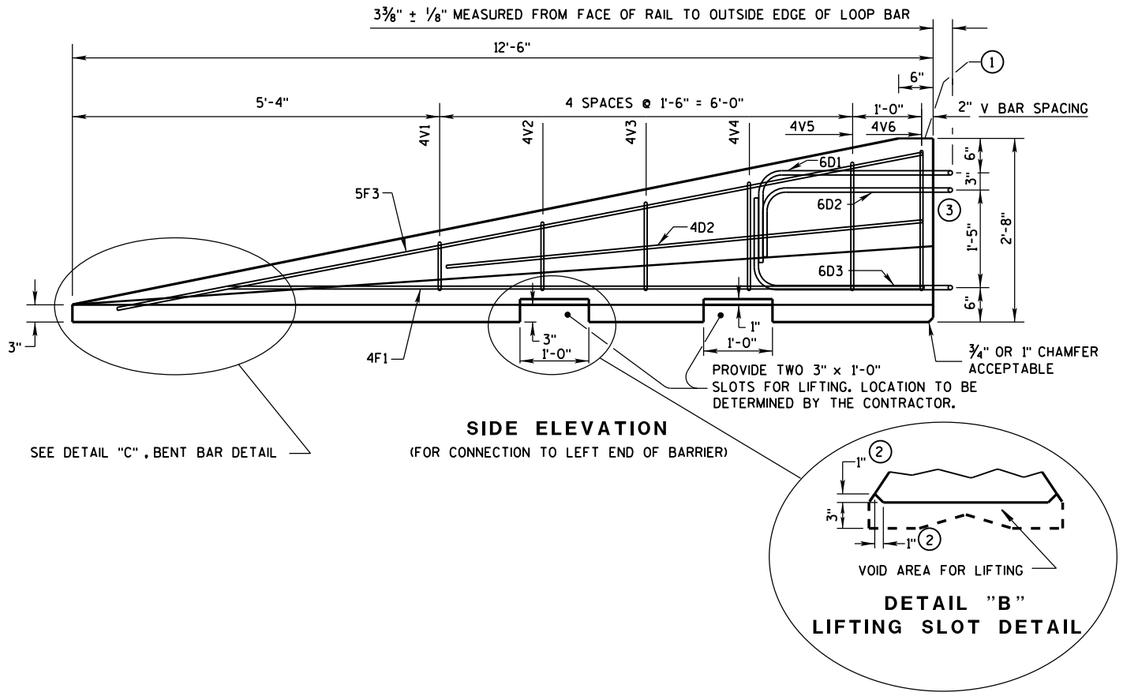
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 364

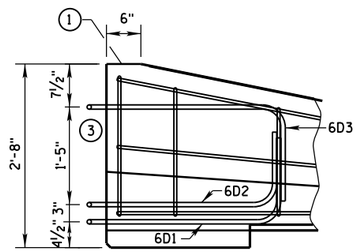
6

S.D.D. 14 B 7-14a

6

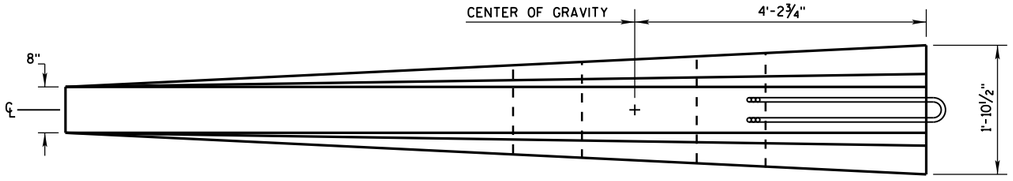
S.D.D. 14 B 7-14a

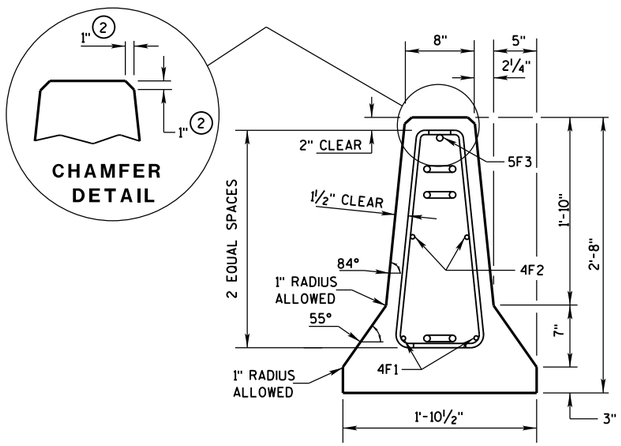


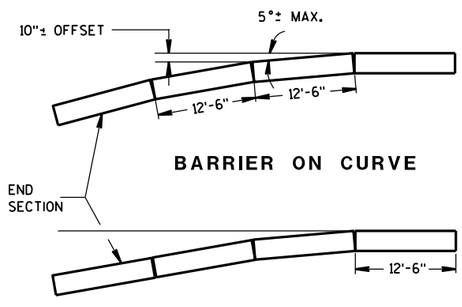


GENERAL NOTES

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







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

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

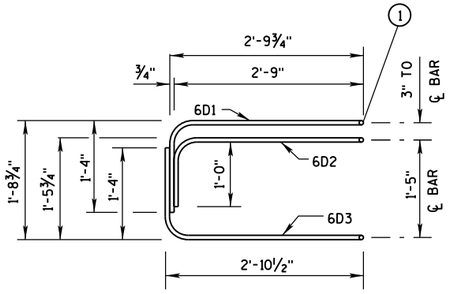
6

S.D.D. 14 B 7-14b

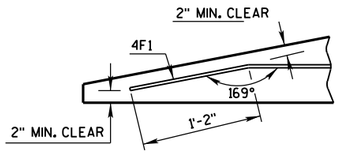
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

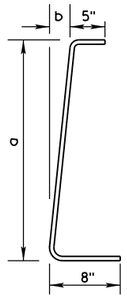
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

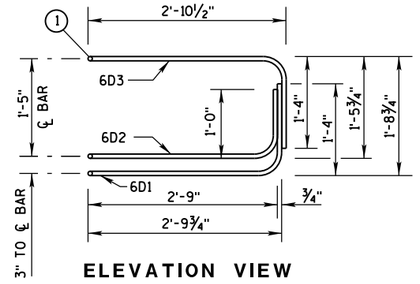
GENERAL NOTES

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

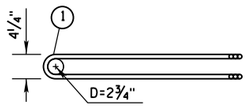
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

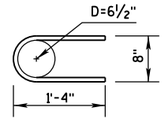
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



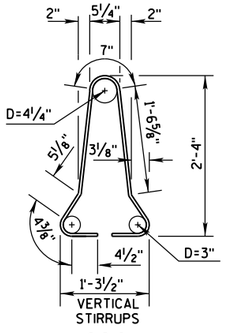
ELEVATION VIEW



PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



4A1

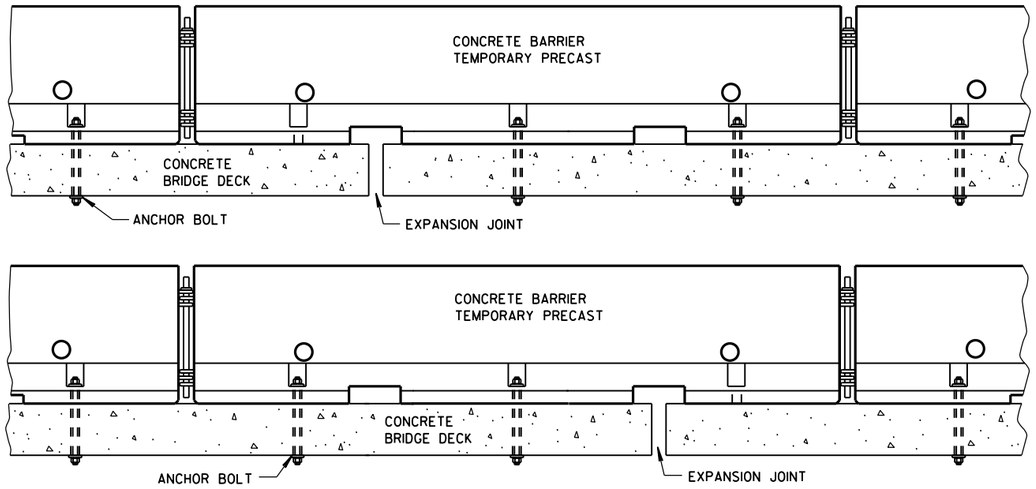
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

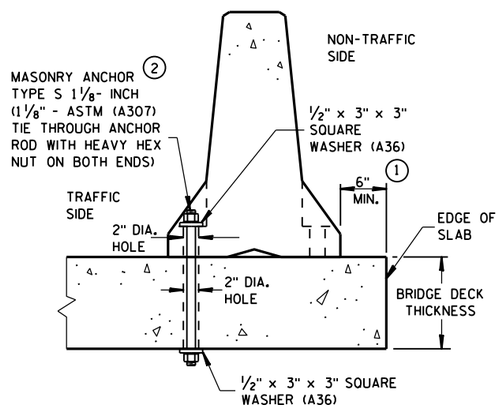
6

S.D.D. 14 B 7-14c



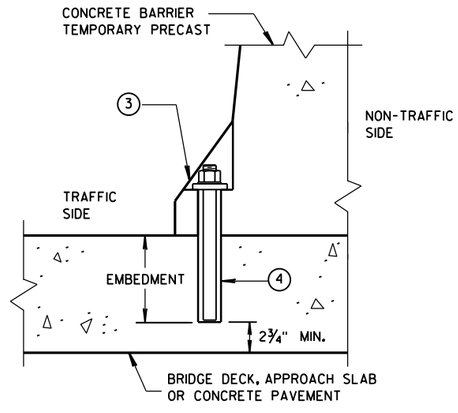
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

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



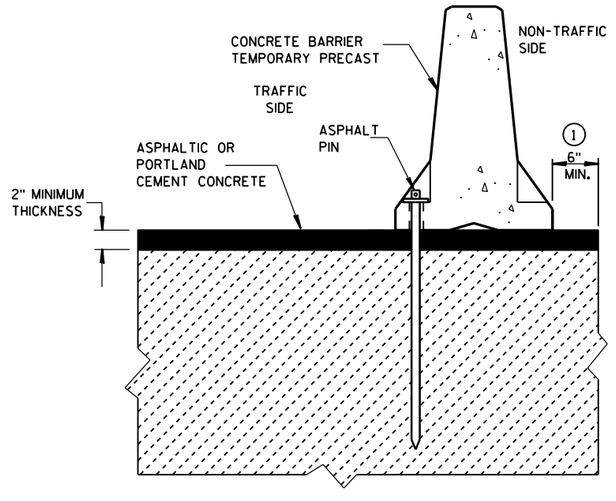
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



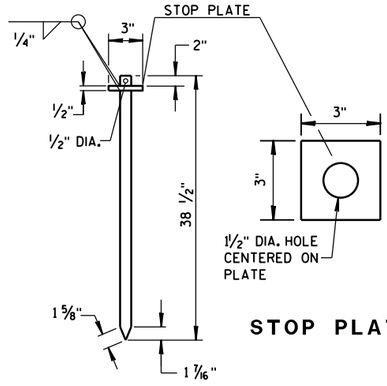
REMOVABLE ADHESIVE BONDED ANCHOR ② INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

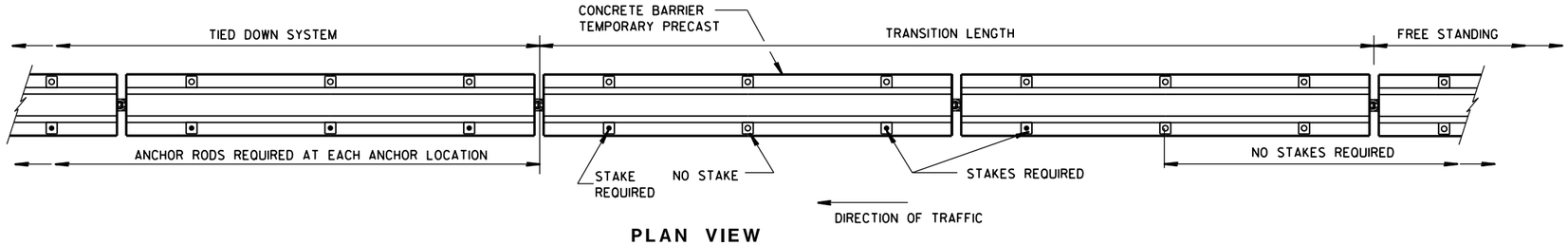
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

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

GENERAL NOTES

① CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALL ANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.

③ 1⅛" DIAMENTER A307 THREADED ROD, ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.

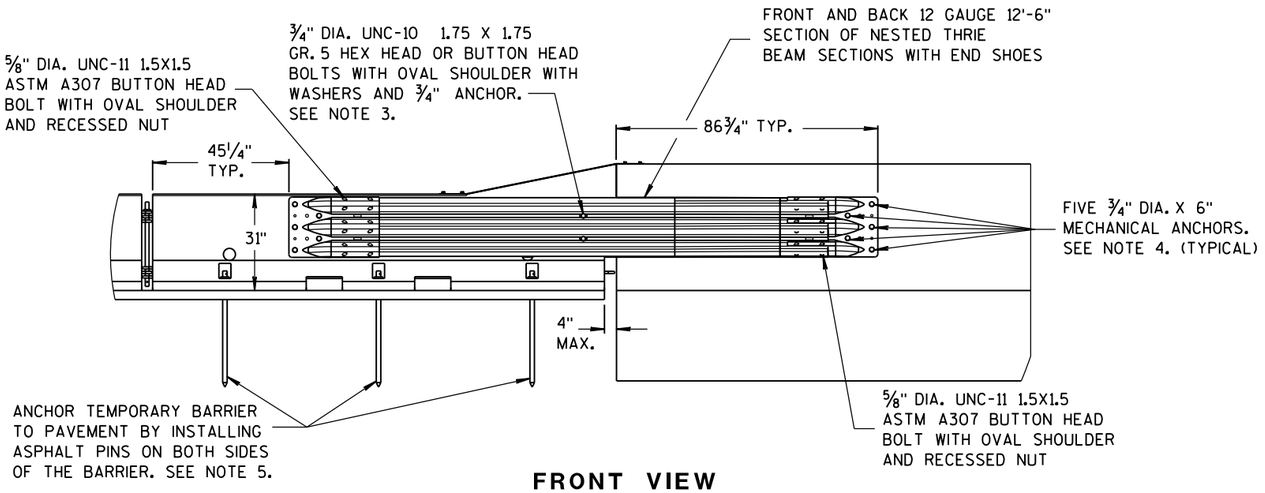
④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

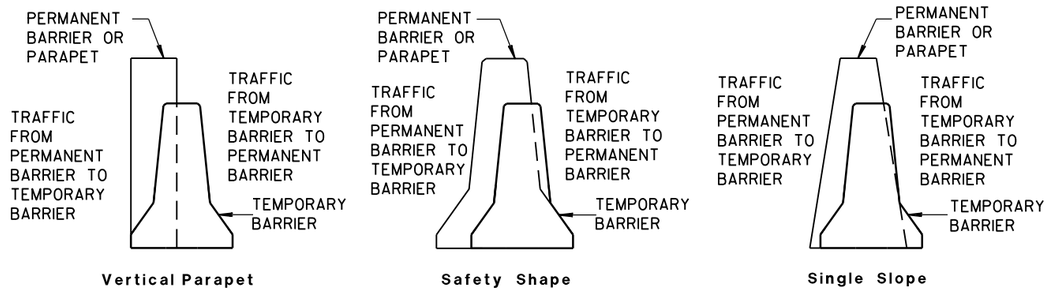
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-14d



FRONT VIEW



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

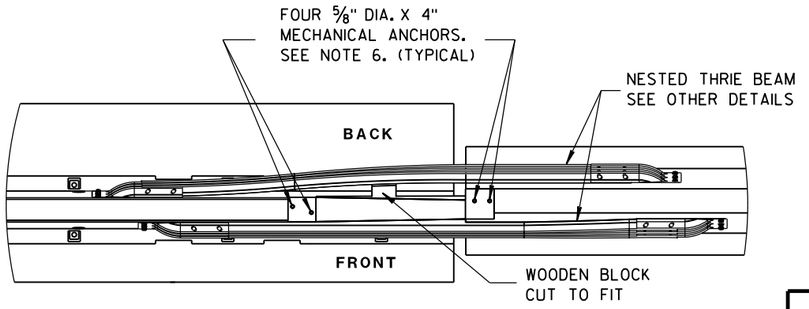
NOTES

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

1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15¼" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

BACK VIEW

FRONT VIEW



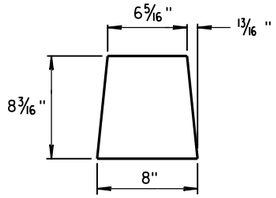
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

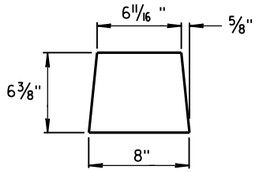
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

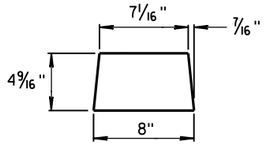
6
S.D.D. 14 B 7-14e



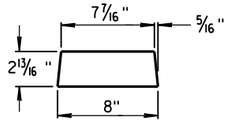
GUSSET 1



GUSSET 2

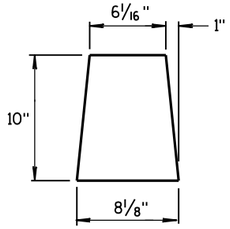


GUSSET 3

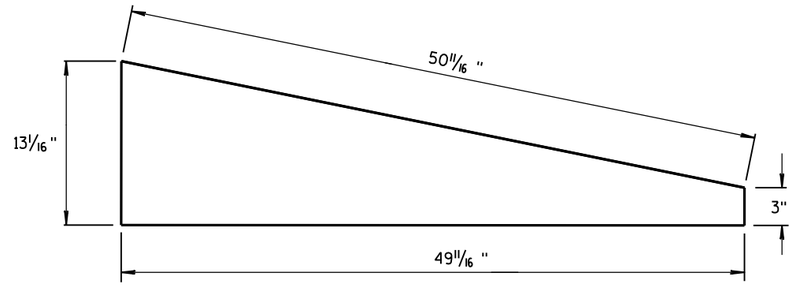


GUSSET 4

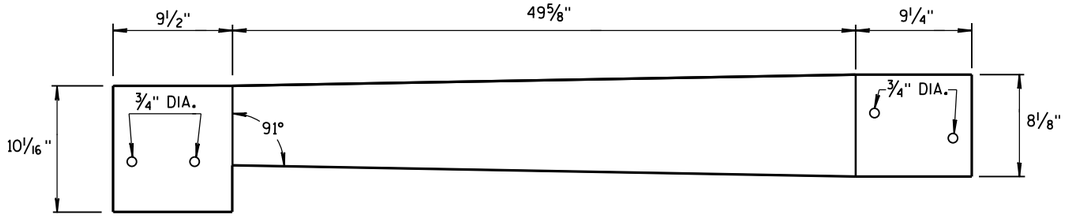
GUSSETS

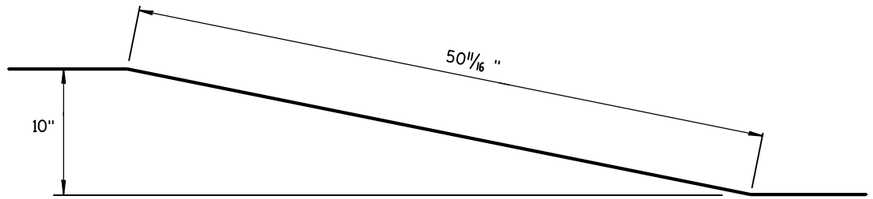


END PLATE



SIDE PLATE

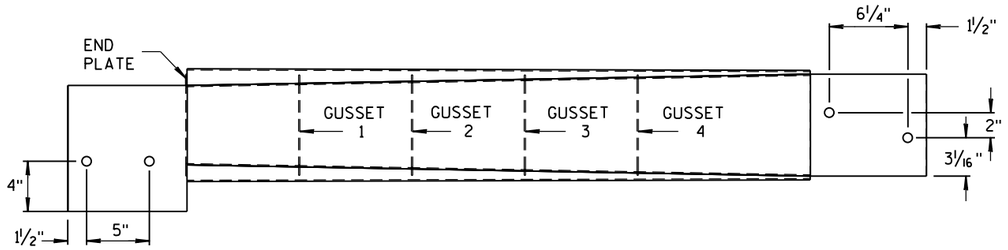


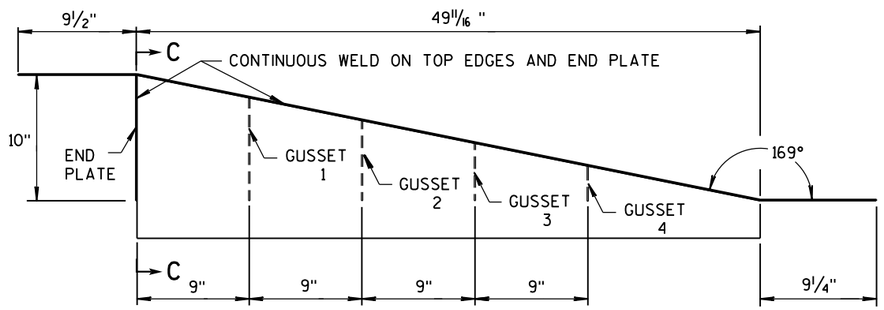


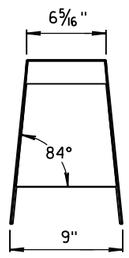
TOP PLATE

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

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







SECTION C-C

NOTES

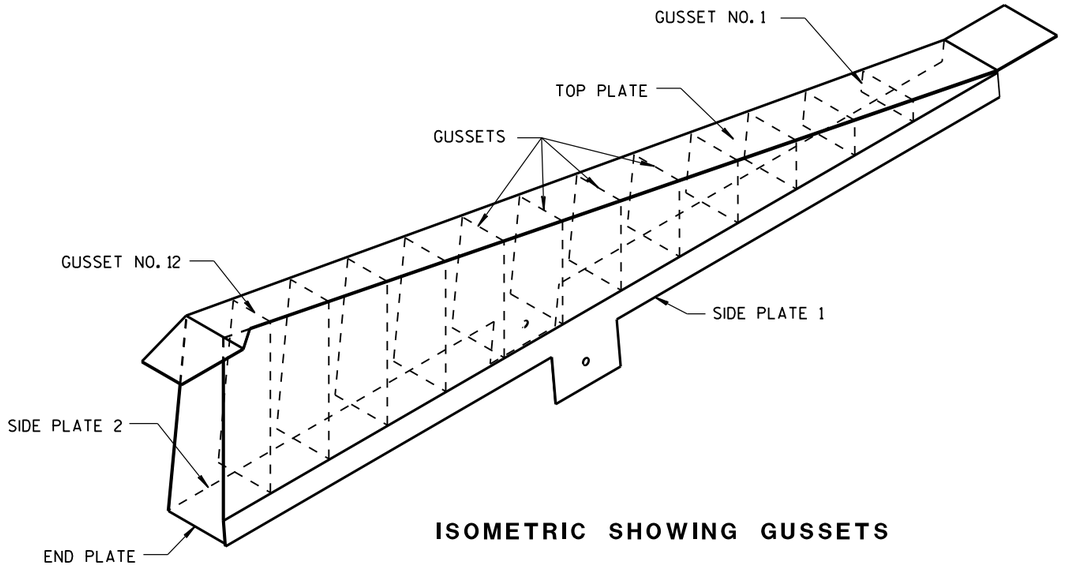
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

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

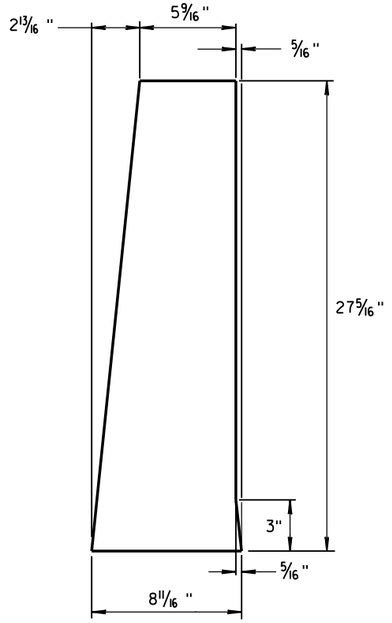
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-14f

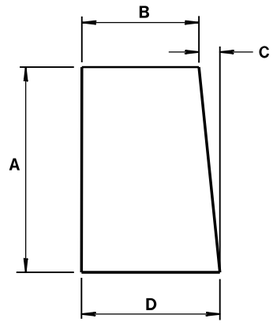


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



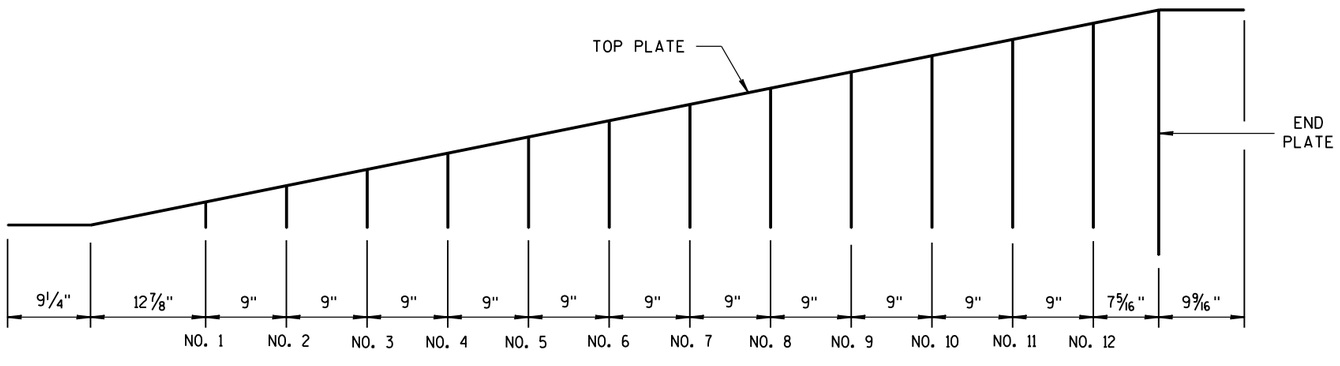
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

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

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

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



GUSSET LOCATION

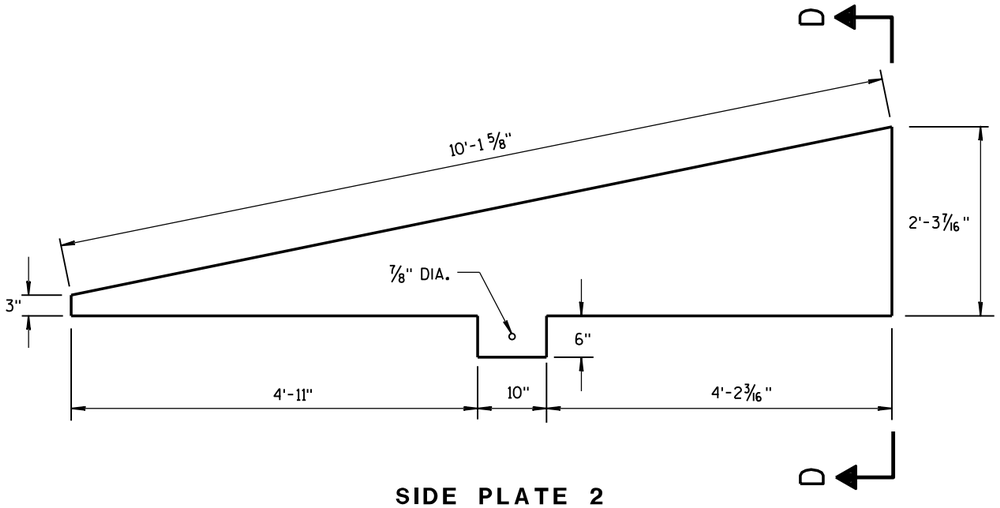
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

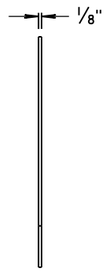
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

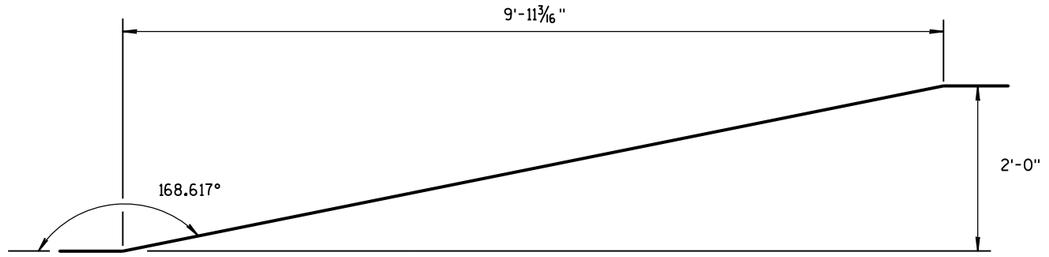
S.D.D. 14 B 7-14g



SIDE PLATE 2

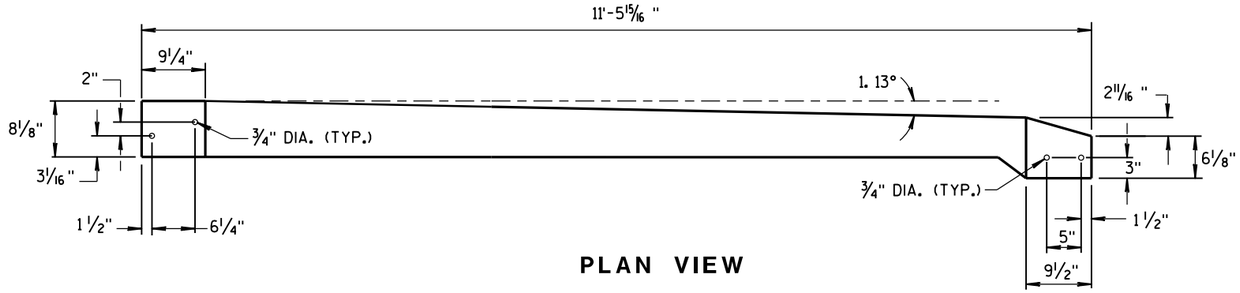


END VIEW



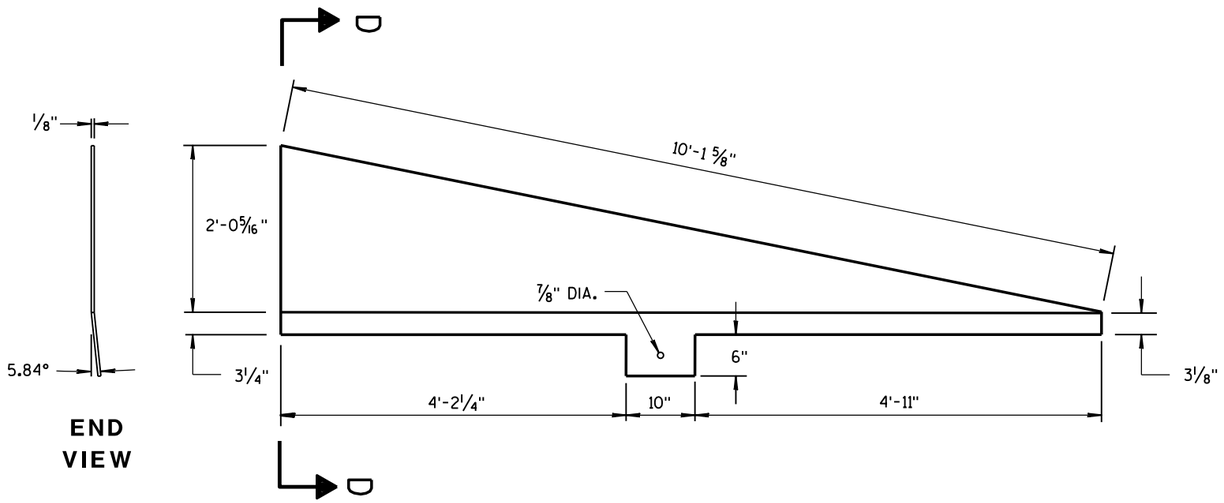
SIDE VIEW

TOP PLATE



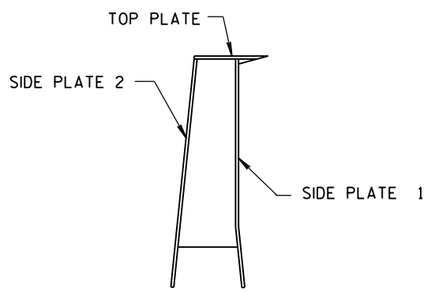
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

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

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

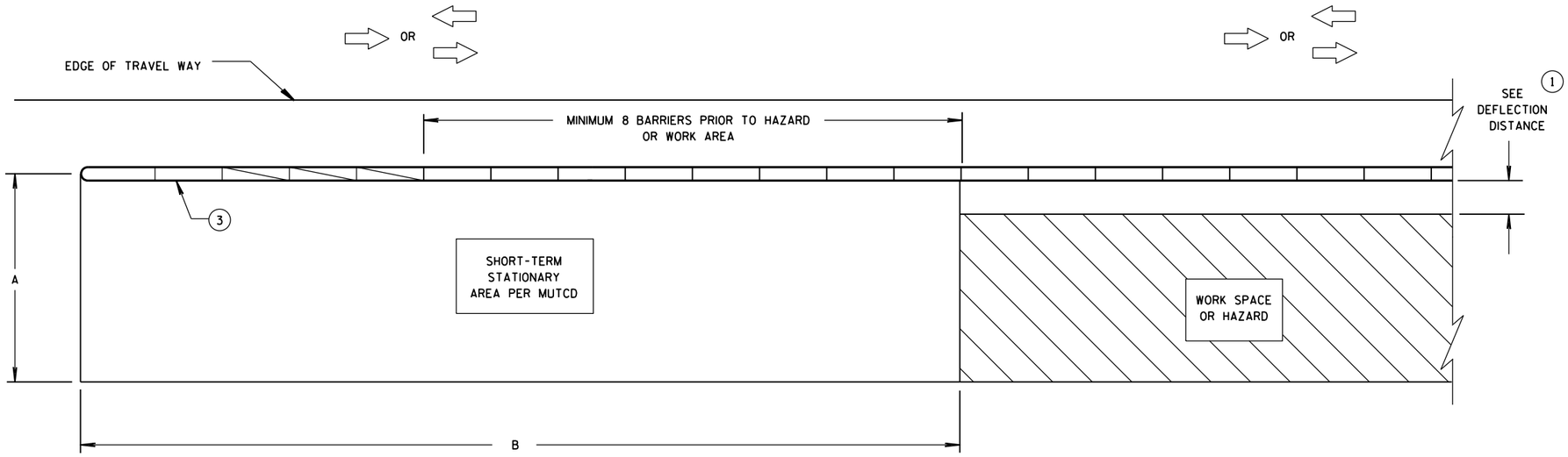
APPROVED
June 2014 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARD DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 B 7-14h

6

S.D.D. 14 B 7-14h



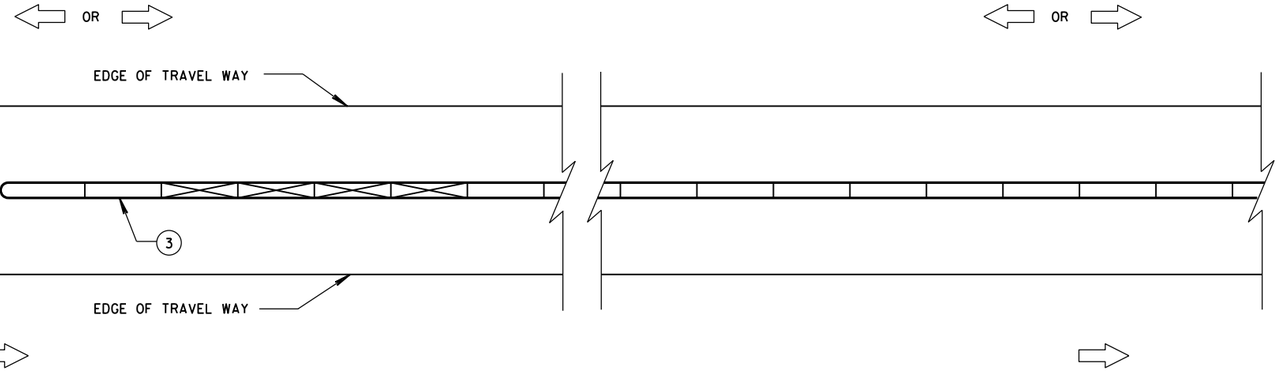
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

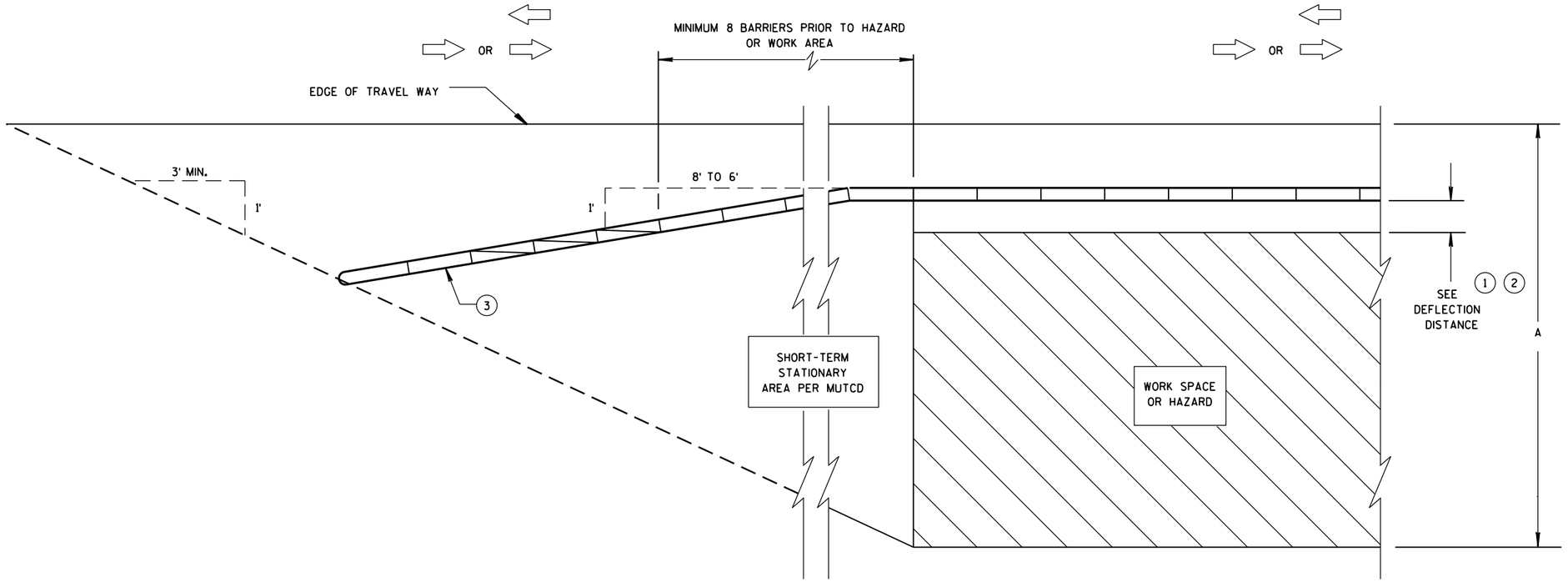
(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

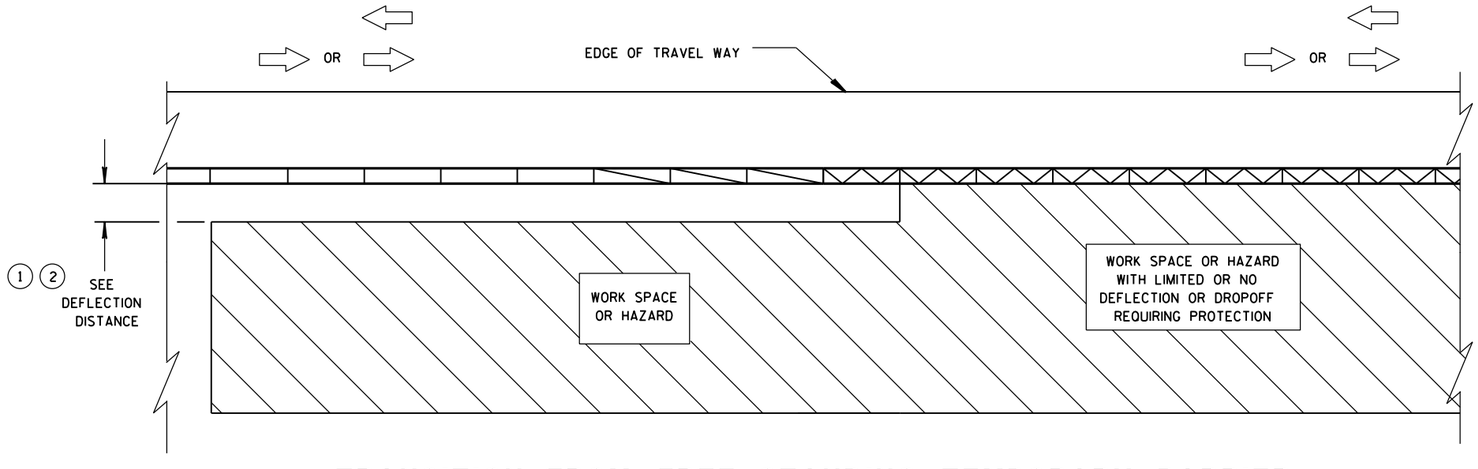
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 8-2a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 8-2b

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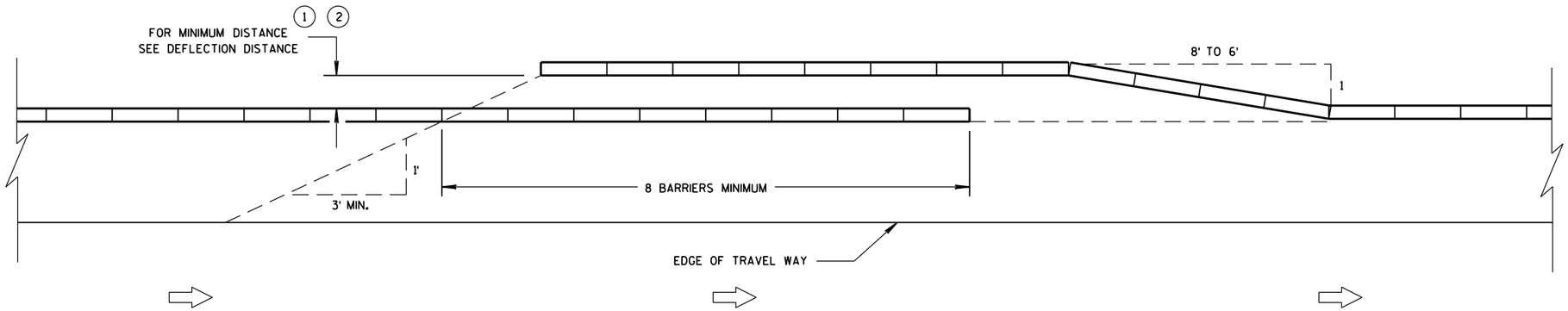
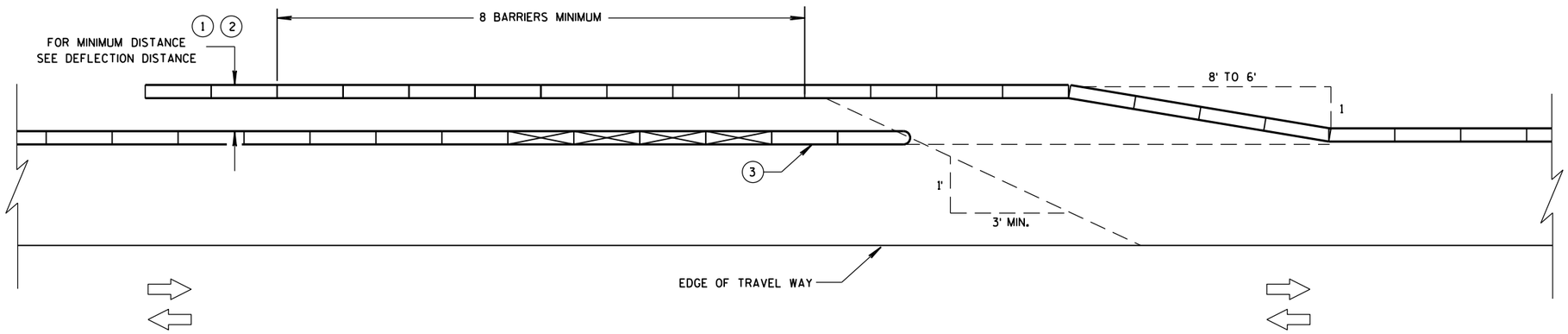
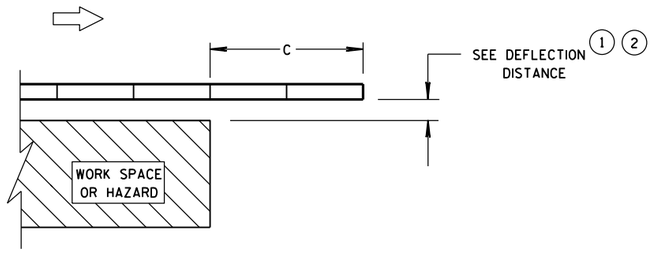
S.D.D. 14 B 8-2b



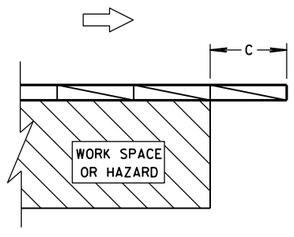
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

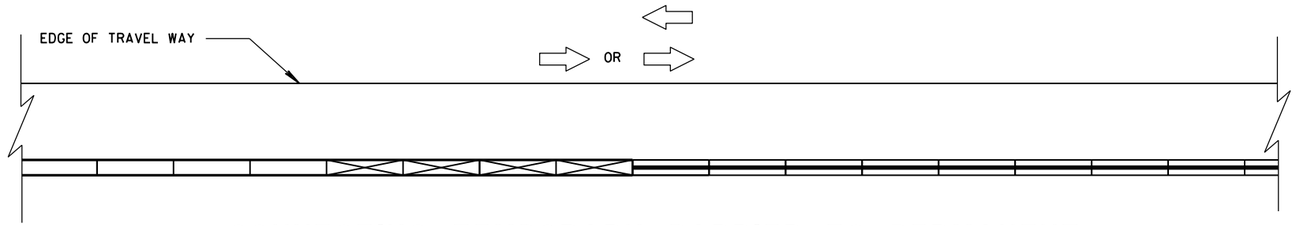
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

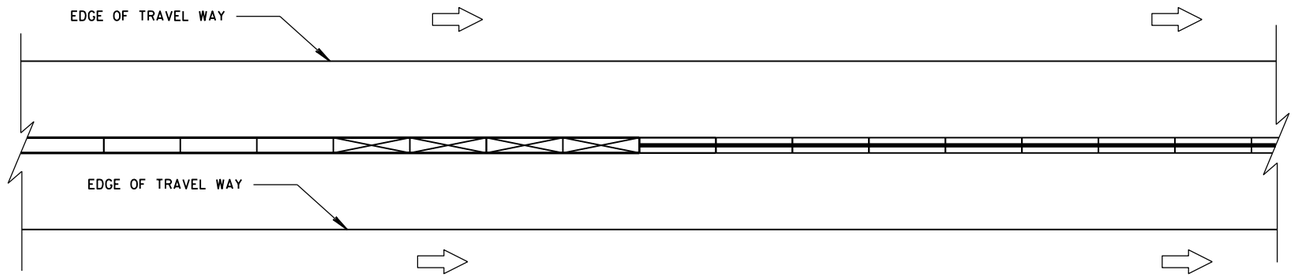
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 8-2c



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR
SAND BARREL ARRAY

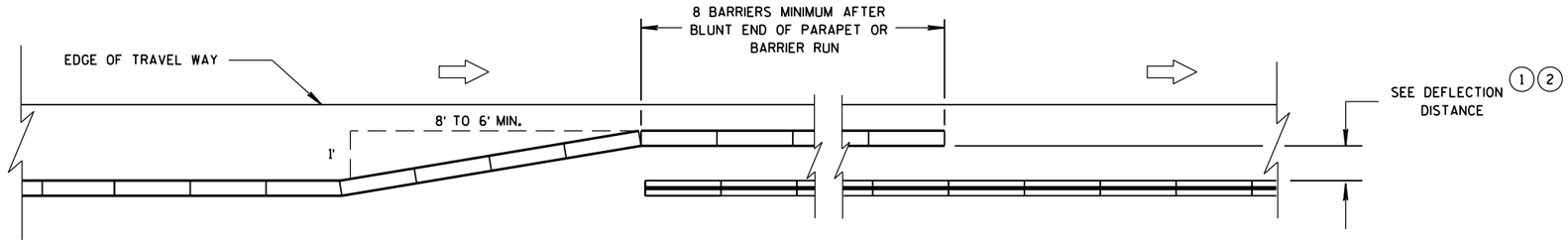
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

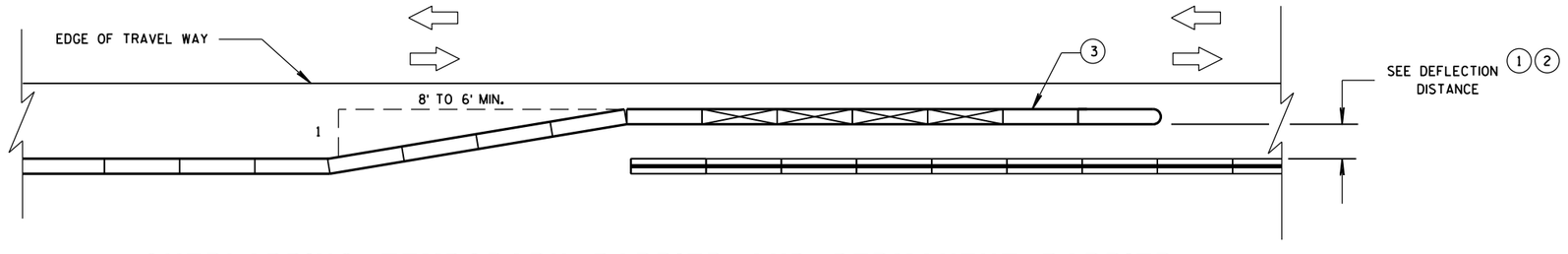
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER
OR CONCRETE PARAPET

FREE STANDING TEMPORARY
BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 8-2d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

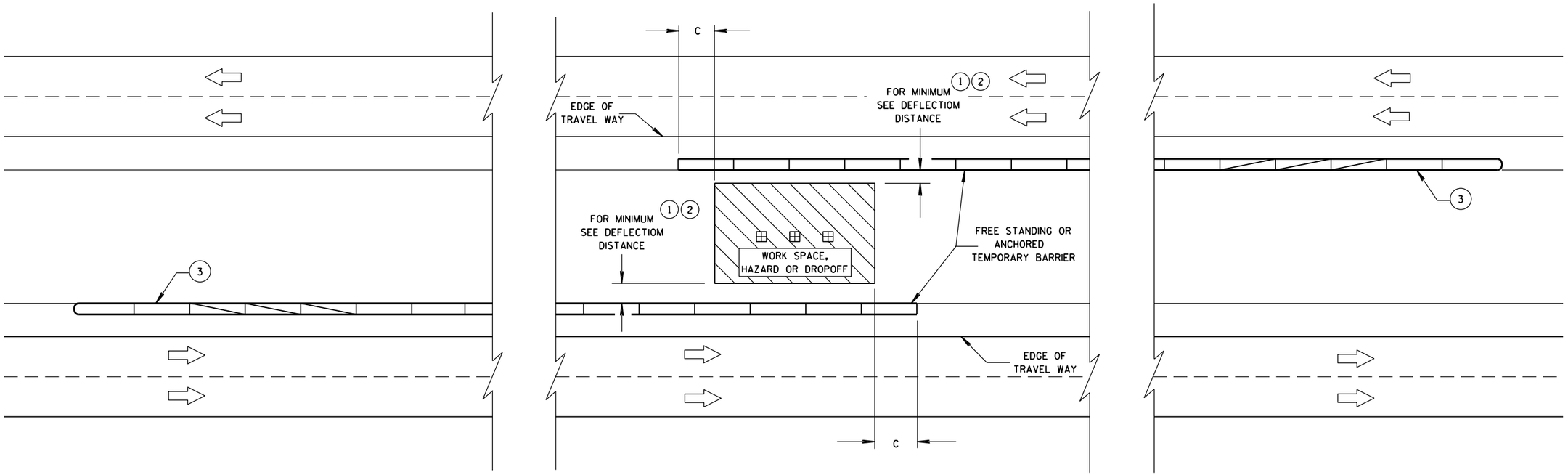
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



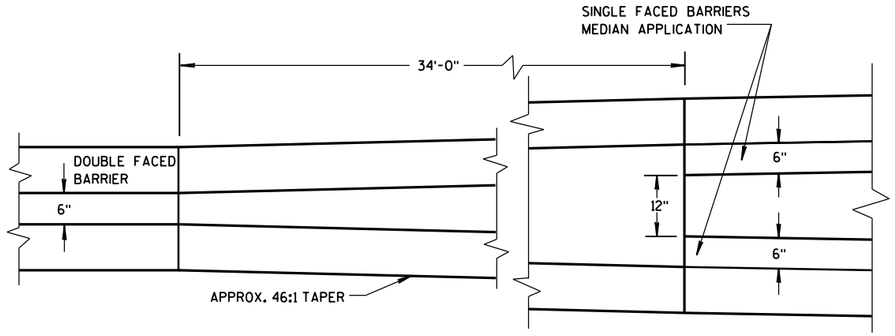
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINNER
FHWA

6

S.D.D. 14 B 8-2e



PLAN VIEW

TRANSITION DETAILS OF DOUBLE FACED TO SINGLE FACED CONCRETE MEDIAN BARRIER

(FOOTINGS ARE NOT SHOWN)

GENERAL NOTES

SPLICES OF LONGITUDINAL BARS SHALL BE MADE WITH BARS LAPPED AT LEAST 18-INCHES AND FIRMLY TIED OR FASTENED TOGETHER.

ALL BAR STEEL REINFORCEMENT SHALL CONFORM TO REQUIREMENTS OF AASHTO M31, GRADE 60.

(1) BARRIER SHALL BE INSTALLED ON A CONCRETE SHOULDER INSTEAD OF THE CONCRETE FOOTING WHEN SPECIFIED OR SHOWN ELSEWHERE IN CONTRACT.

(2) OPENINGS FOR DRAINAGE SHALL BE PLACED AT LOW POINTS OF VERTICAL CURVES OR WHERE DIRECTED BY THE ENGINEER.

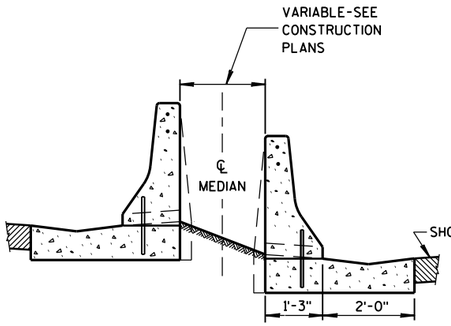
(3) 3/4-INCH BEVEL OR 1-INCH RADIUS (TYPICAL).

(4) NO. 4 BARS SHALL BE CONTINUED THROUGH CONSTRUCTION JOINTS.

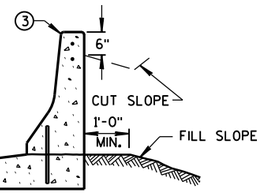
(5) EXPANSION JOINTS SHALL BE PLACED AT EXISTING EXPANSION JOINTS IN THE PAVEMENT AND AT STRUCTURES. SEE REINFORCEMENT AT BARRIER END DETAIL.

(6) SAWED CONTRACTION JOINTS SHALL BE PROVIDED ACROSS THE FULL WIDTH OF THE BARRIER FOOTING, AND IN FRONT, TOP AND BACK FACE OF THE BARRIER AT EXISTING PAVEMENT JOINTS AND AT UNIFORM INTERVALS BETWEEN WITH A MAXIMUM SPACING OF 25 FEET.

HIGH SIDE
CONCRETE BARRIER DETAIL

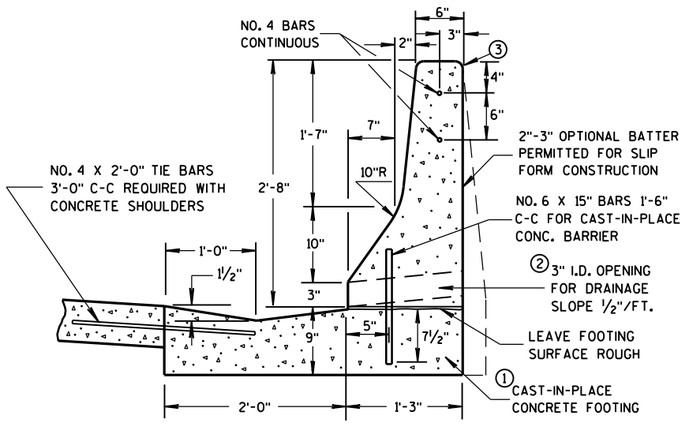


MEDIAN

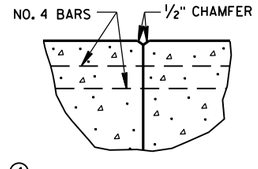


SHOULDER

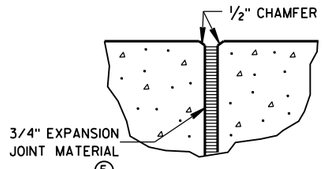
TYPICAL APPLICATIONS



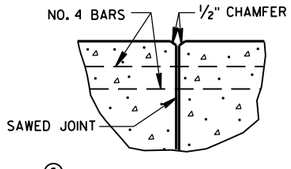
SECTION VIEW



4 CONSTRUCTION JOINT



5 EXPANSION JOINT



6 CONTRACTION JOINT

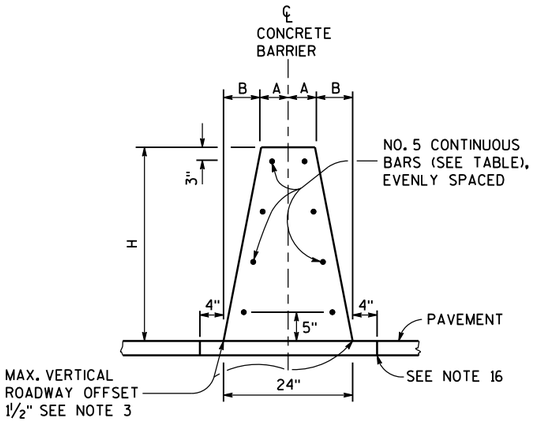
JOINT DETAILS

CONCRETE BARRIER,
SINGLE-FACED
(WITH ANCHORAGE)

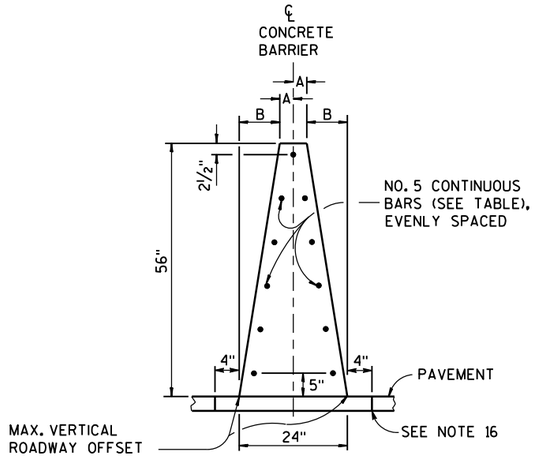
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

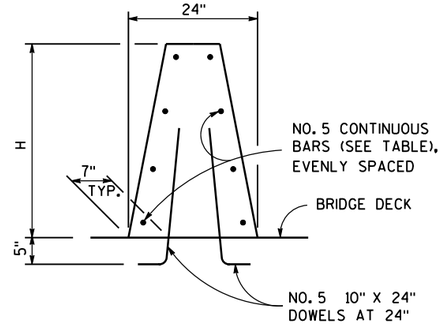
S.D.D. 14 B 22-6a



32-INCH, 36-INCH OR 42-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S32, TYPE S36, AND TYPE S42)



56-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S56)



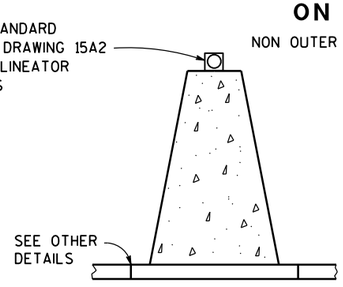
SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

NON OUTER PARAPET APPLICATION

GENERAL NOTES

1. WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.
2. EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK, AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OR ½" MINIMUM.
3. WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1½", USE TYPE A
4. PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.
5. EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED FOR ROADWAY OFFSETS LESS THAN 1'-0".
6. FOR TYPE S32, TYPE S36, TYPE S42, AND S56 MONOLITHIC FOOTING OR DOWELED FOOTING WITH 2-#8 x 8" @ 2'-0".
7. STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL 2 FEET. BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.
8. 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.
9. WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PLACE OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. EXPOSED STEEL INTO NEXT POURS REINFORCEMENT. LAPS TO BE FIRMLY TIED.
10. USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
11. 2" CLEAR COVER TYPICAL.
12. COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED. LAPS TO BE FIRMLY TIED.
13. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 NO ADDITIONAL VERTICAL STEEL NEEDED. IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A REQUIRES VERTICAL STEEL. SEE OTHER DETAIL.
14. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 DEPTH OF FOOTING 10". IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A MATCH TOTAL HEIGHT OF SINGLE SLOPE BARRIER RETAINING WALL.
15. FOR ALL BARRIER TYPES SHOWN, ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN ON DRAWING OR DETAILS SHOWN ON S.D.D. 14B33. ANCHORS INCIDENTAL TO CBSS.
16. CONCRETE PAD UNDER CBSS MAY BE PLACED INTEGRAL WITH BARRIER, PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED FULL DEPTH. CONCRETE PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6¼	5¾	8
42	5¼	6¾	10
56	3	9	11



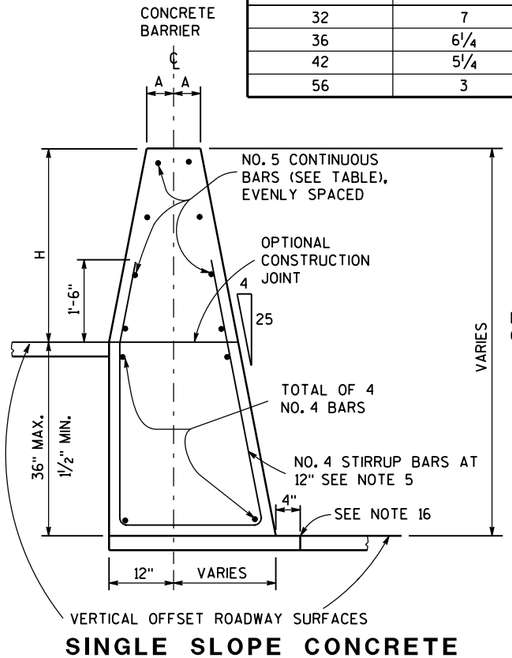
DELINEATION

DELINEATOR SPACING ON HORIZONTAL CURVES

RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

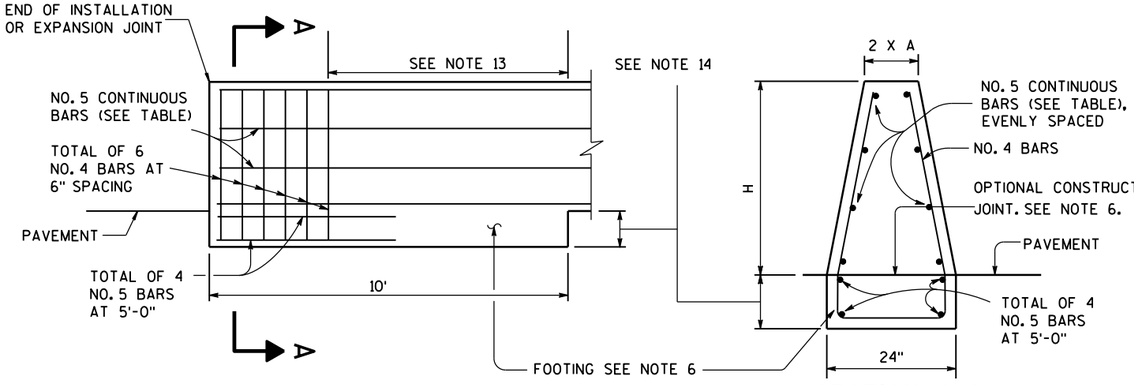
DELINEATOR SPACING ON RADIUS GREATER THAN 1000 FEET OR TANGENT SECTIONS

	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2	



SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)

(BETWEEN ADJACENT ROADWAYS)



END ANCHOR SINGLE SLOPE CONCRETE BARRIER

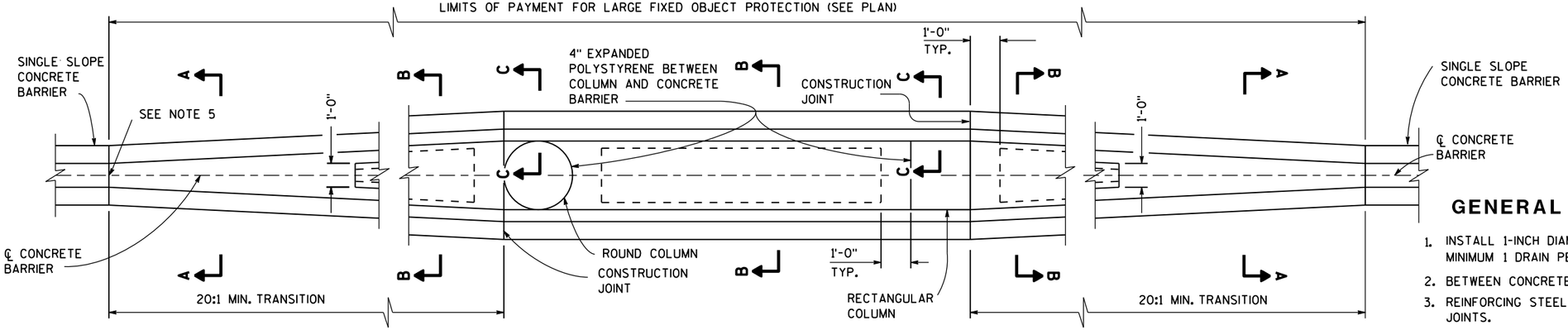
AT CONSTRUCTION JOINT

SECTION A-A

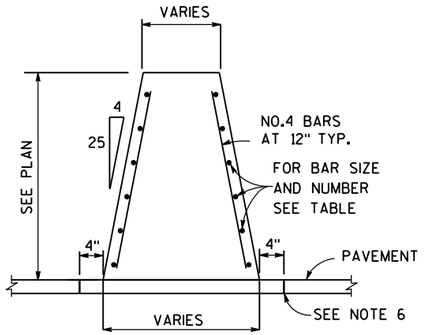
CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

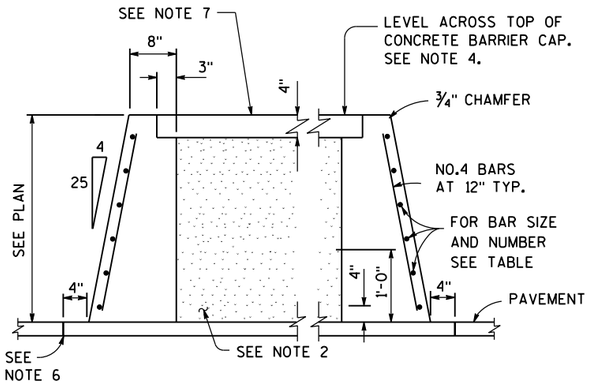
6
S.D.D. 14 B 32-4a



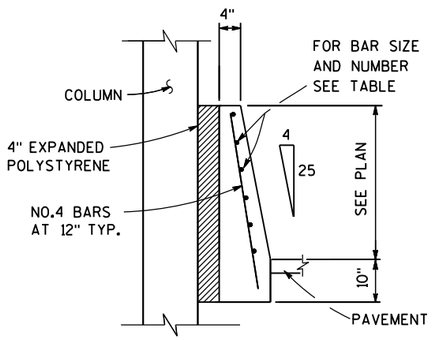
LARGE FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56



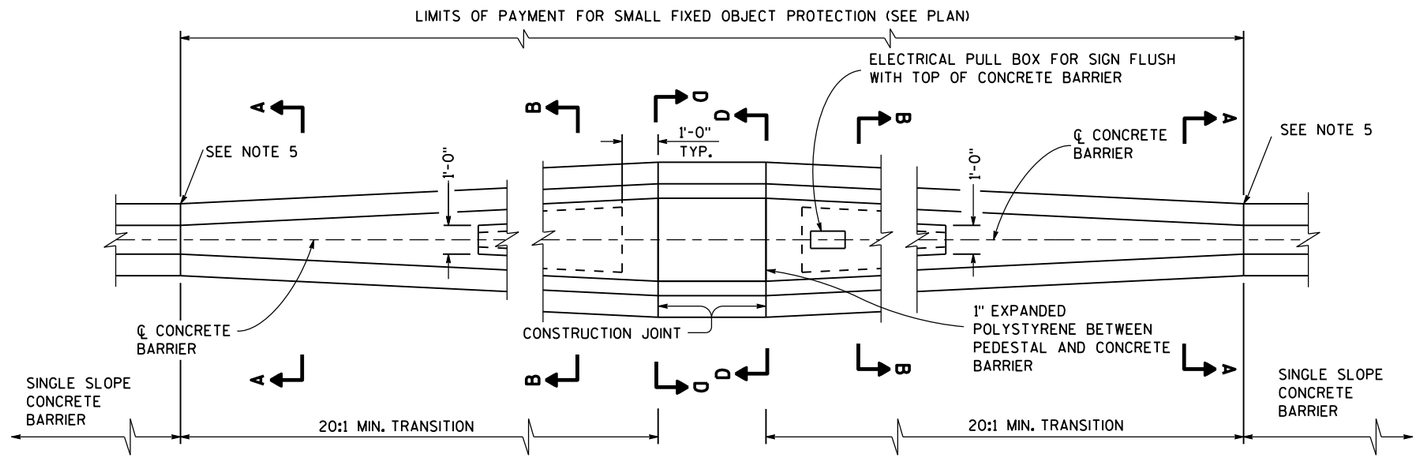
SECTION A-A



SECTION B-B



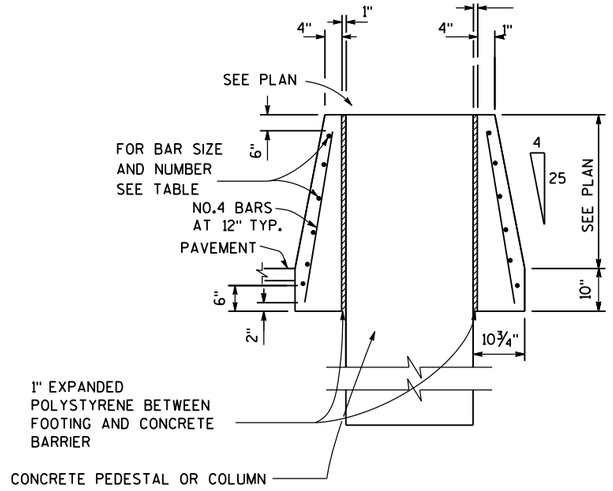
SECTION C-C



SMALL FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56

GENERAL NOTES

1. INSTALL 1-INCH DIAMETER DRAIN PIPE EVERY 20 FEET OF CROSS SECTION B-B. MINIMUM 1 DRAIN PER CAVITY.
2. BETWEEN CONCRETE BARRIER WALLS FILL WITH FOUNDATION BACKFILL.
3. REINFORCING STEEL SHALL EXTEND CONTINUOUS THROUGH CONSTRUCTION JOINTS.
4. ADJUST HEIGHT OF CONCRETE BARRIER WALL ON LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS TO PROVIDE LEVEL GRADE ACROSS TOP OF CONCRETE CAP.
5. IF FIXED OBJECT PROTECTION IS INSTALLED FIRST, USE COLD JOINTS. IF CBSS PLACED FIRST, USE EXPANSION JOINT.
6. CONCRETE PAD UNDER CBSS MAY BE PLACED INTEGRAL WITH BARRIER, PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED FULL DEPTH. SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. CONCRETE PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.
7. USE NO. 3 BAR SPACED 12 INCHES CENTER TO CENTER (PLACED IN EACH DIRECTION) OR EQUIVALENT WIRE MESH.



SECTION D-D

BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	9

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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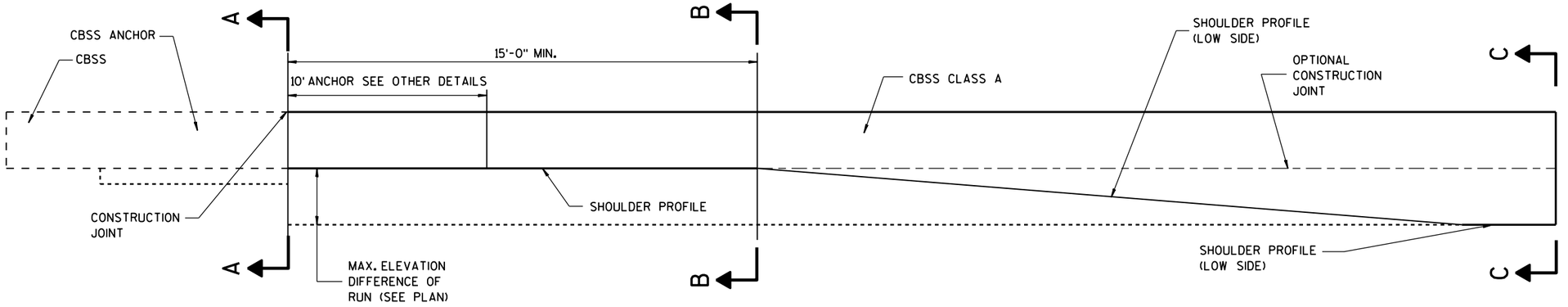
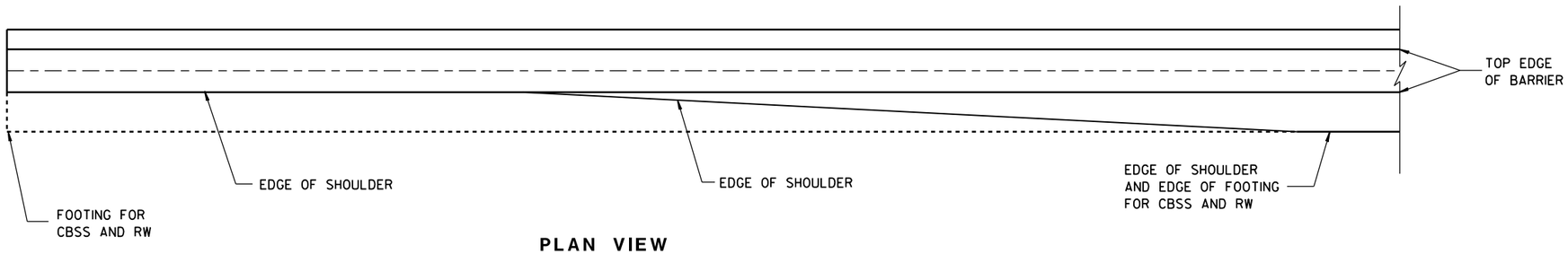
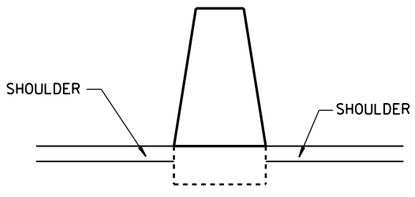


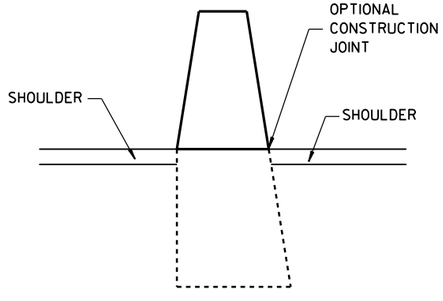
ELEVATION VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



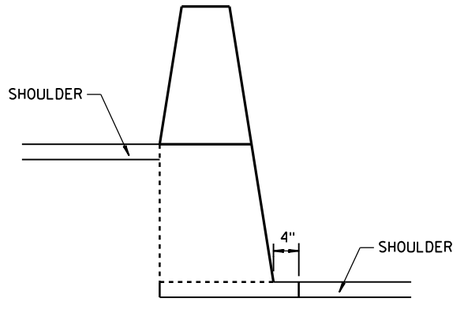
PLAN VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



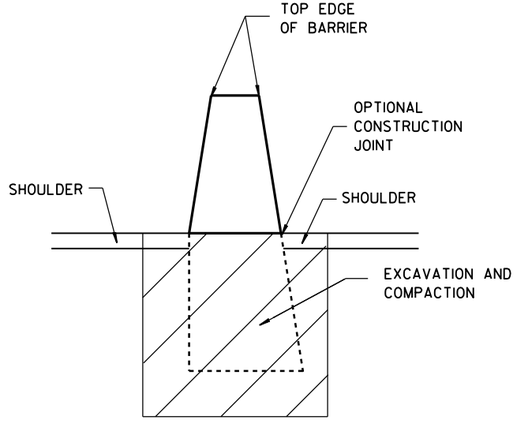
SECTION A-A



SECTION B-B



SECTION C-C

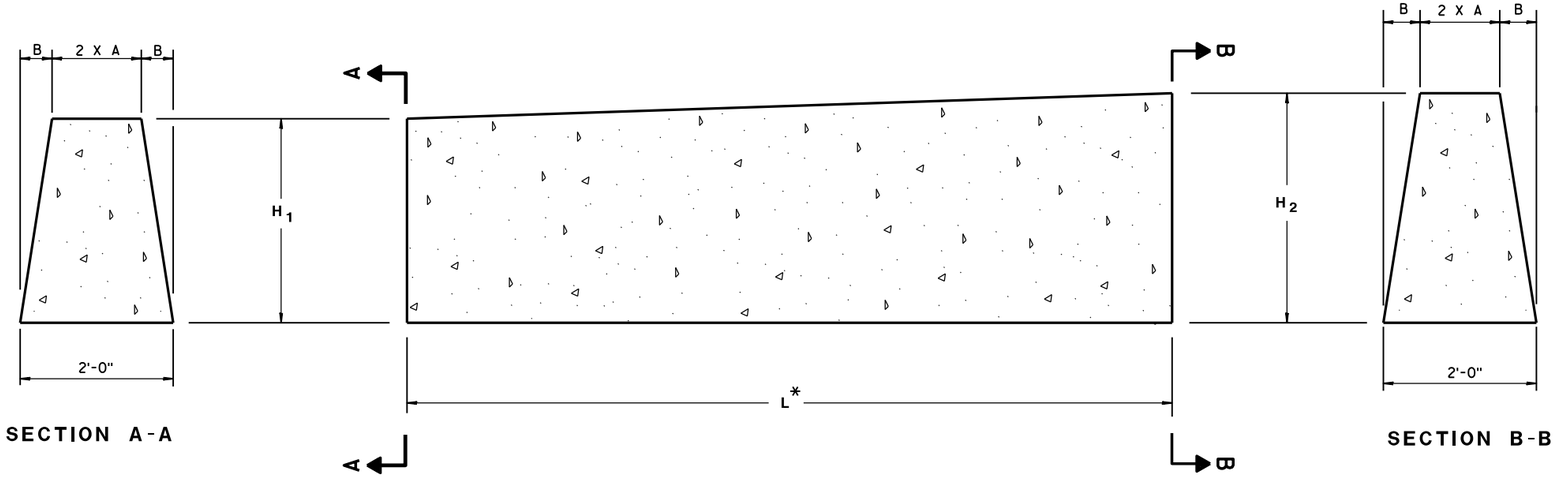


CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 32-4c



SECTION A-A

SECTION B-B

DOUBLE COLD JOINT HEIGHT TRANSITION

BARRIER DIMENSIONS

BARRIER HEIGHT INCHES	A INCHES	B INCHES
32	7	5
36	6 1/4	5 3/4
42	5 1/4	6 3/4
56	3	9

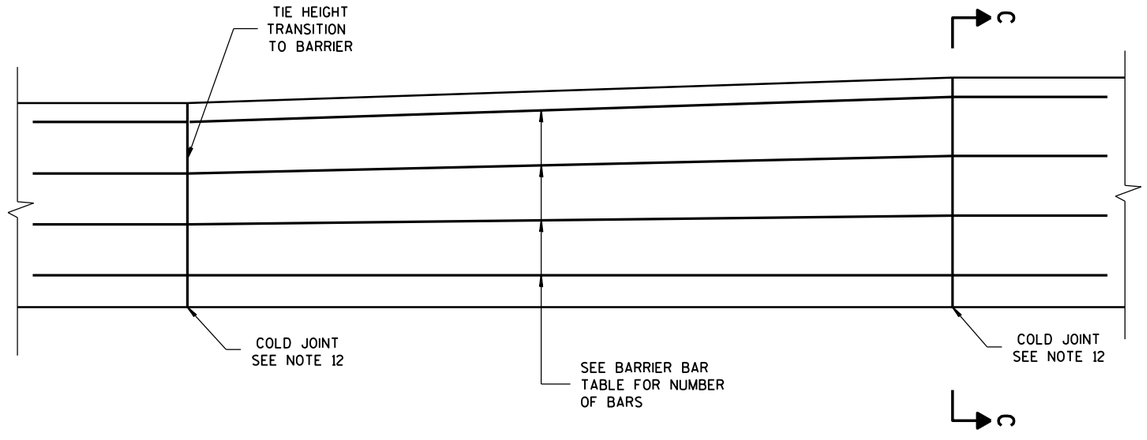
MULTIPLE HEIGHT TRANSITIONS MAY BE USED IN SEQUENCE TO GET TO APPROPRIATE HEIGHT.

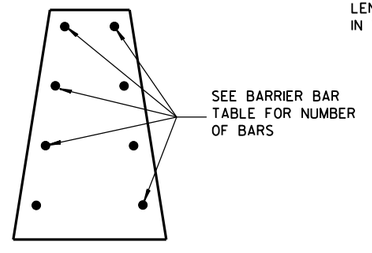
USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

BARRIER BARS

H_1	H_2	L*	NUMBER OF NO. 5 BARS
32"	36"	10'-0"	8
36"	42"	10'-6"	10
42"	56"	24'-6"	11

* LENGTH OF DOUBLE COLD JOINT INCLUDED IN THE TOTAL LENGTH OF CBSS.





SECTION C-C

STEEL REINFORCEMENT DETAIL

CONCRETE BARRIER SINGLE SLOPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

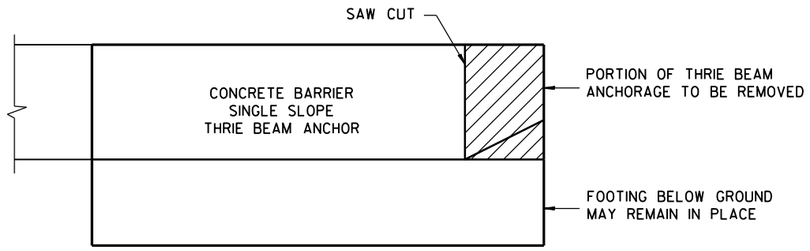
FHWA

6

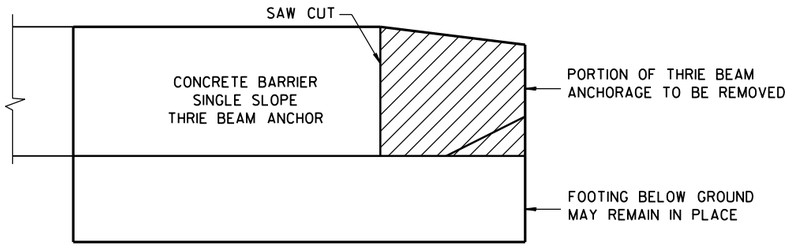
S.D.D. 14 B 32-4d

6

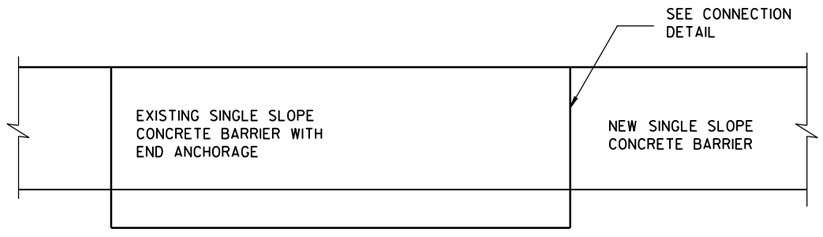
S.D.D. 14 B 32-4d



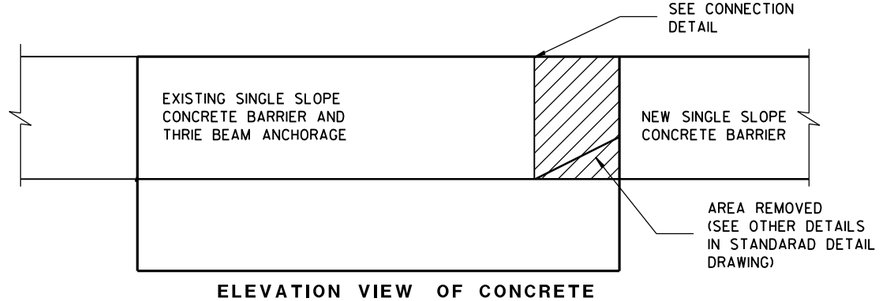
REMOVAL AREA OF
32" CONCRETE THRIE BEAM ANCHORAGE



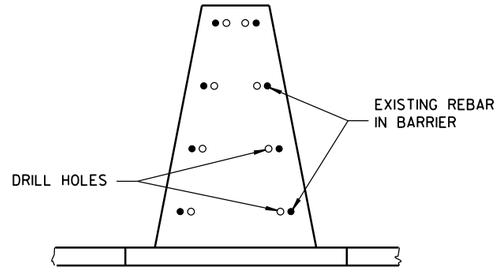
REMOVAL AREA OF CONCRETE THRIE BEAM
ANCHORAGE WITH HEIGHT GREATER THAN 32"



ELEVATION VIEW OF CONCRETE
BARRIER EXTENSION NEAR END ANCHORAGE



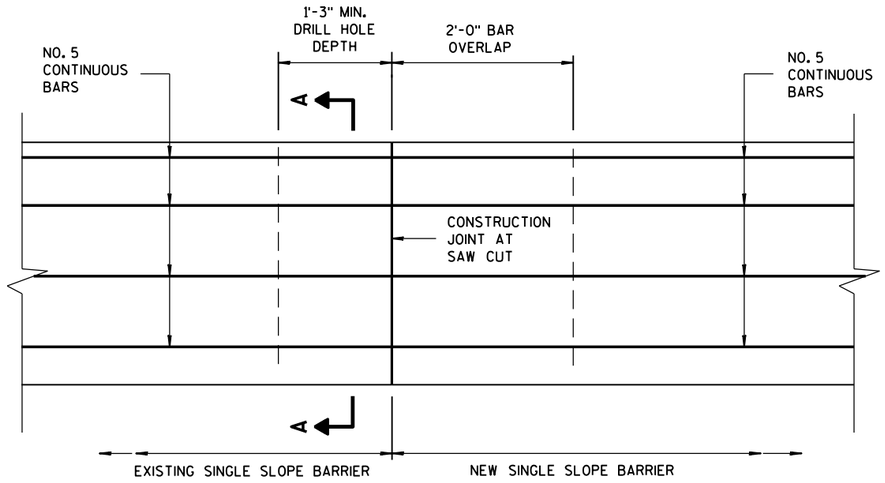
ELEVATION VIEW OF CONCRETE
BARRIER EXTENSION NEAR THRIE BEAM TERMINAL



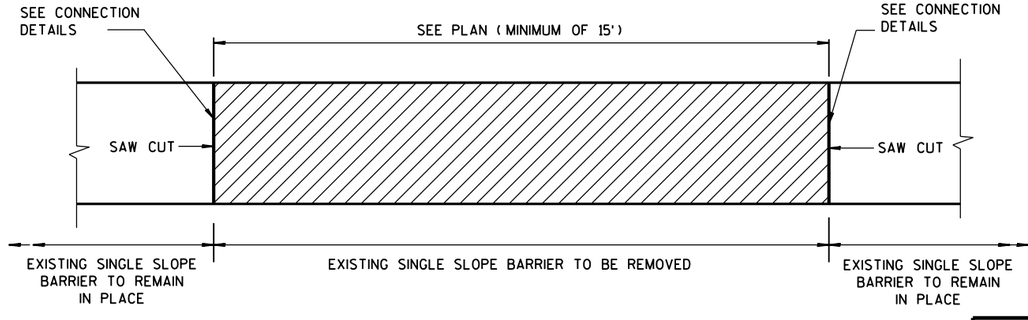
SECTION A-A

GENERAL NOTES

1. THE NUMBER OF DRILL HOLES IS EQUAL TO THE NUMBER OF REBAR IN BARRIER (SEE OTHER DETAILS).
2. MINIMUM DEPTH OF DRILL HOLES IS 1'-3".
3. DRILL HOLES TO BE A MINIMUM OF 4 INCHES FROM THE EDGE OF CONCRETE.
4. INSTALL EPOXY COATED NO. 5 BARS IN DRILL HOLES.
5. END ANCHORAGE MAY OR MAY NOT BE PRESENT ON EXISTING BARRIER.
6. REMOVE THRIE BEAM ANCHORAGE AS SHOWN.



CONNECTION OF EXISTING SINGLE SLOPE CONCRETE BARRIER TO
NEW SINGLE SLOPE CONCRETE BARRIER



ELEVATION FILE
BARRIER REMOVAL AND REPLACEMENT

CONCRETE BARRIER
SINGLE SLOPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

RETROFIT OR REPAIR SINGLE SLOPE CONCRETE BARRIER

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

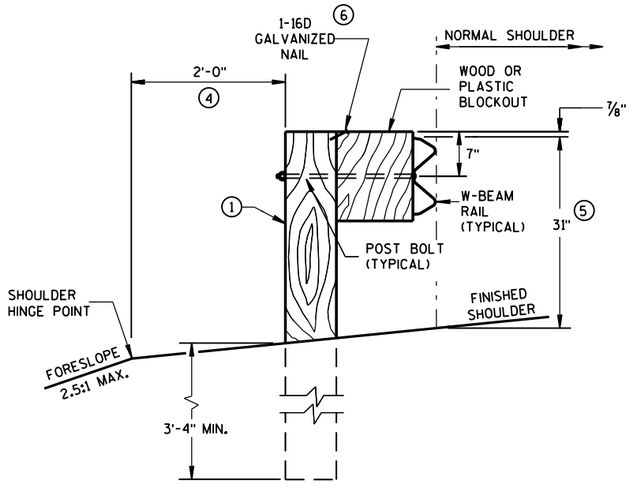
(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

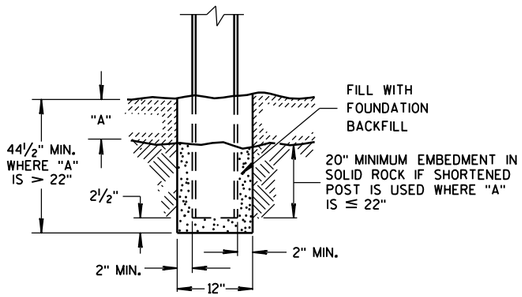
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



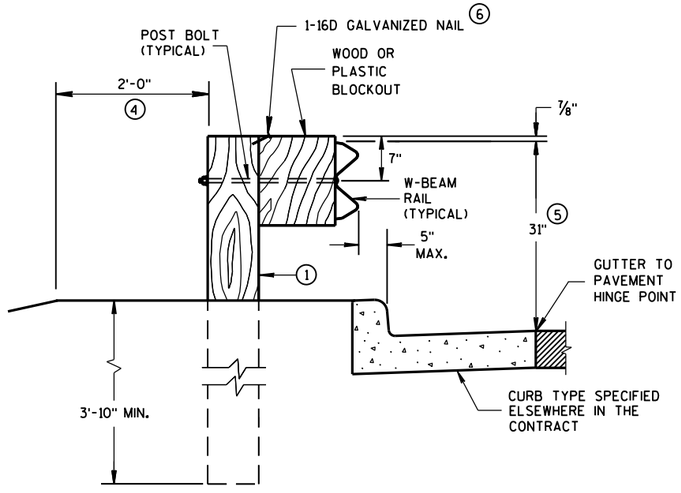
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



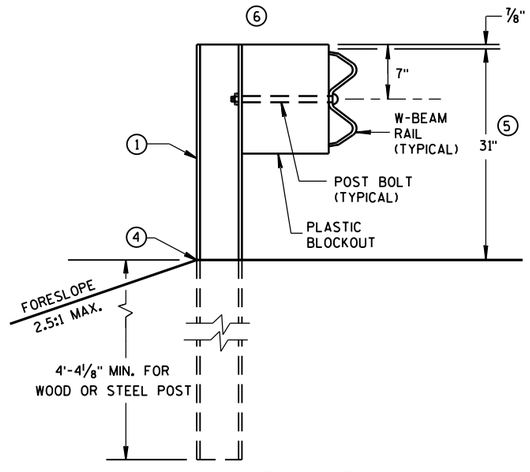
END VIEW

SETTING STEEL OR WOOD POST IN ROCK (3)



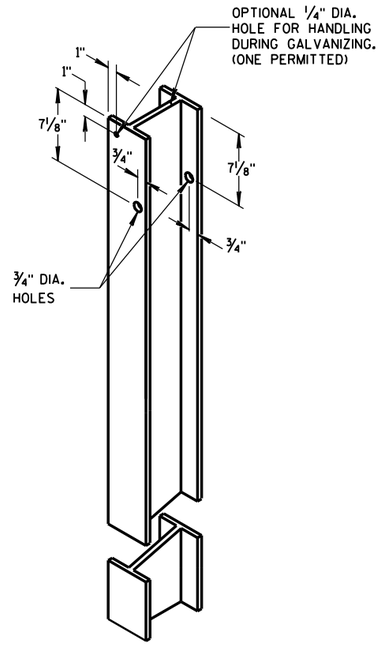
END VIEW

LOCATED ALONG A CURBED ROADWAY

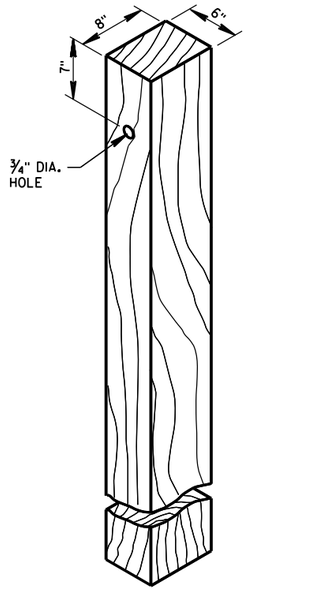


END VIEW

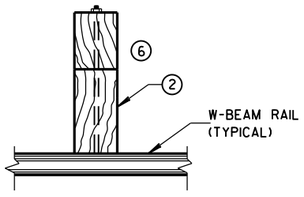
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



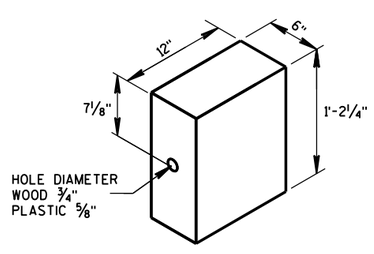
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) (1)



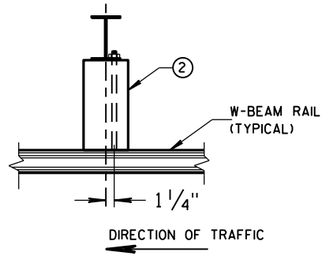
WOOD POST
(6" X 8") NOMINAL (1)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT (2)

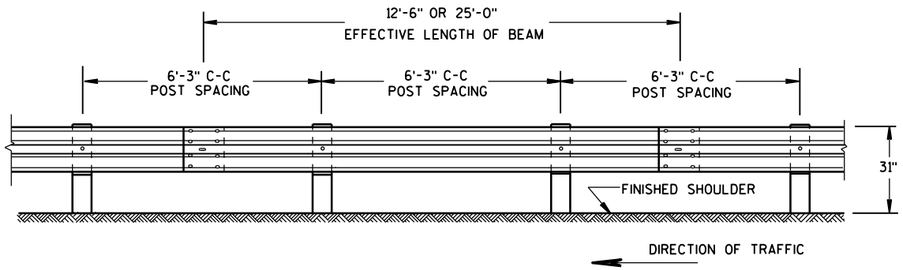


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

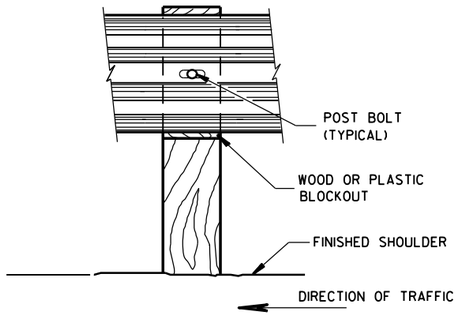
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 42-4a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



FRONT VIEW AT WOOD POST

⑦ PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

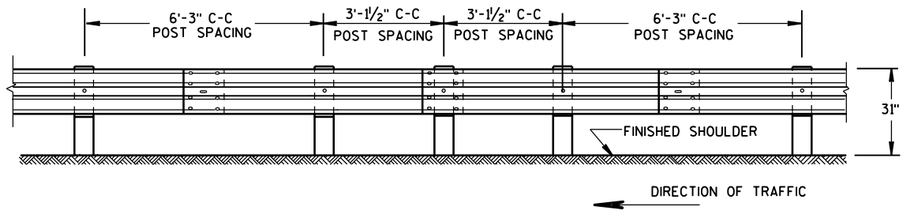
⑨ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

⑩ PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

⑪ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

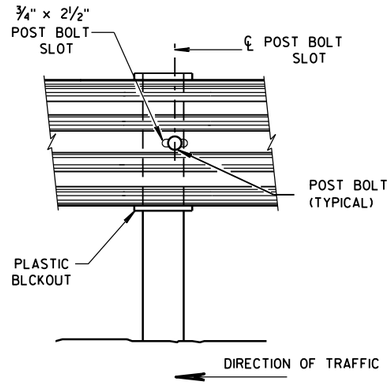
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

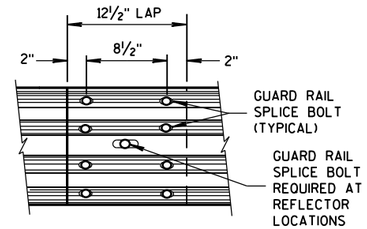


FRONT VIEW

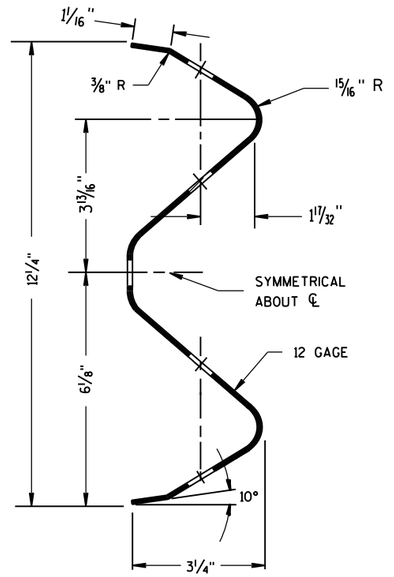
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



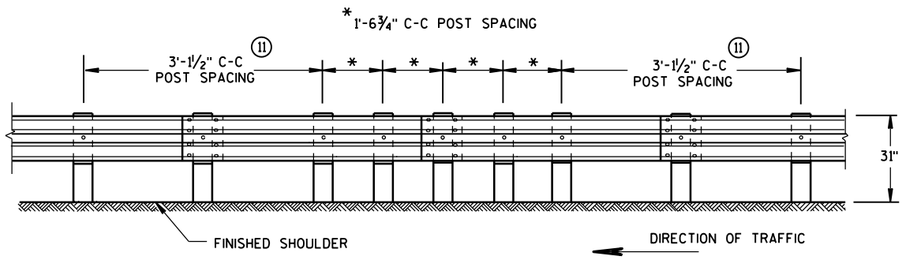
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

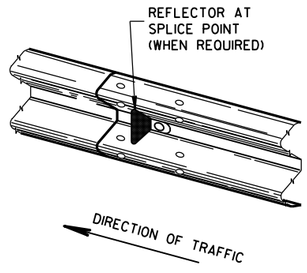


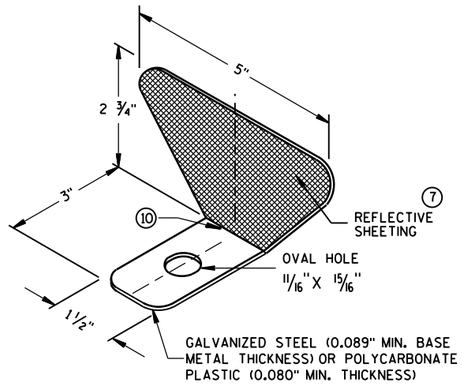
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





REFLECTOR SPACING ⑧

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 ⑨	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 ⑩	

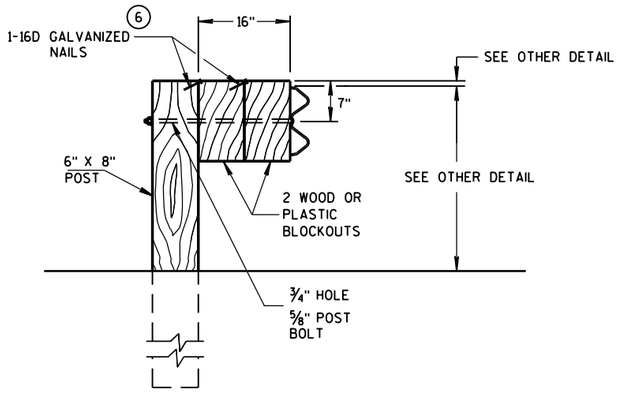
ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ⑦

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

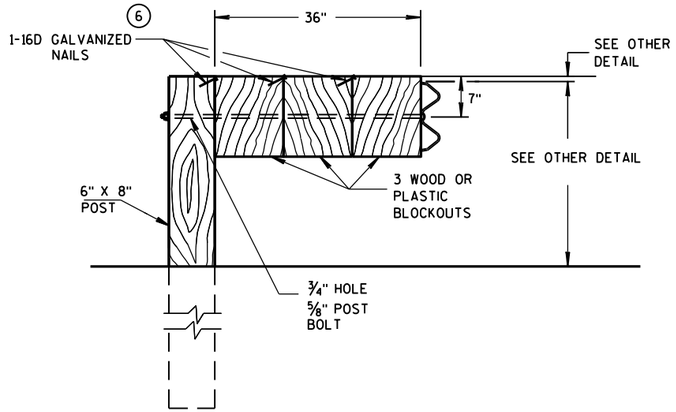
6

S.D.D. 14 B 42-4b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

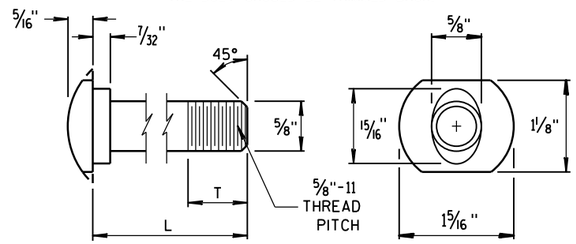


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

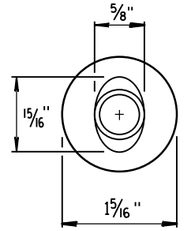
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

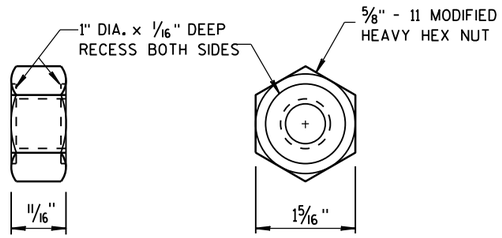


POST BOLT TABLE

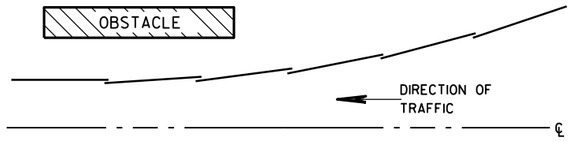
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

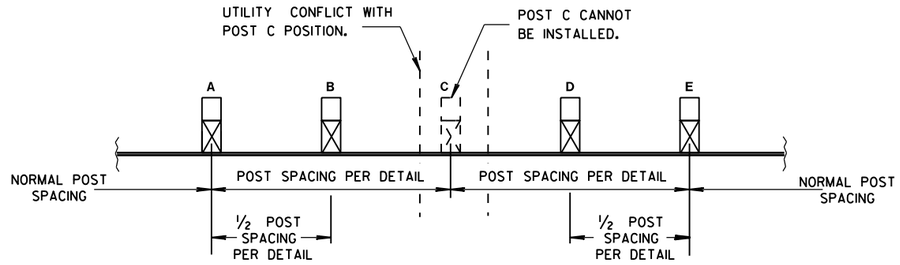


POST BOLT, SPLICE BOLT AND RECESS NUT

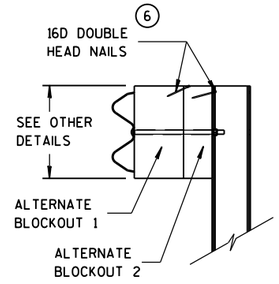


PLAN VIEW

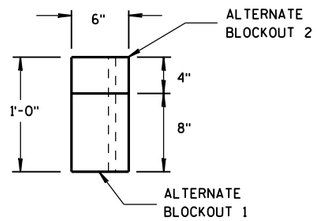
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

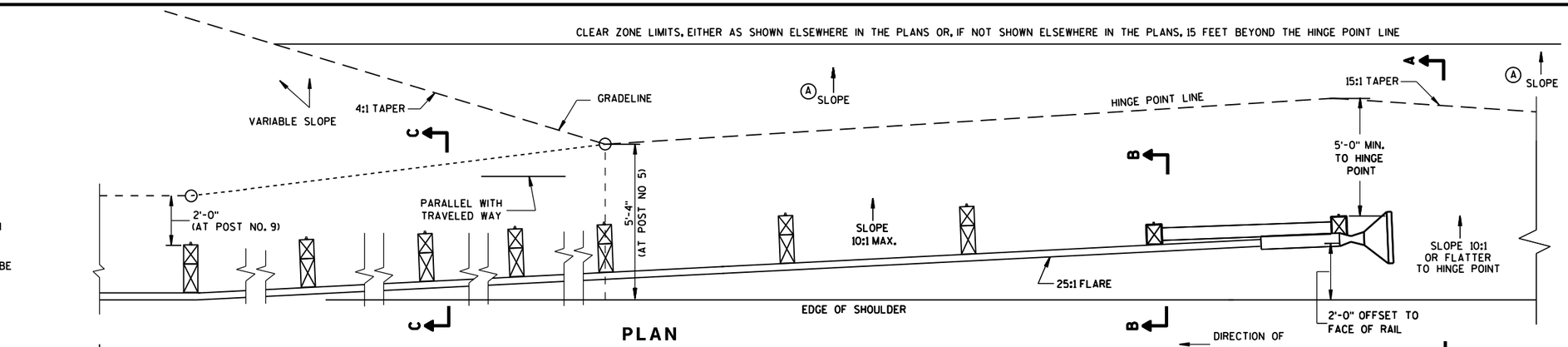
SEE SDD 14B42 FOR MORE INFORMATION.

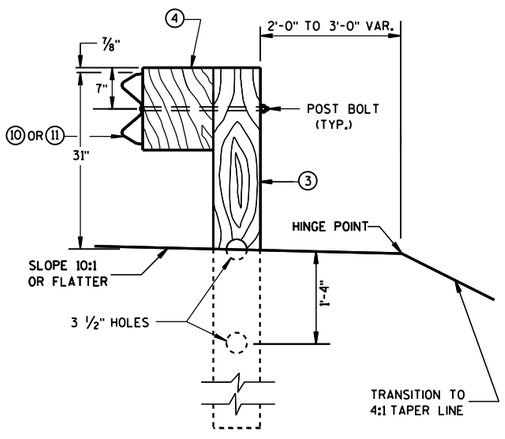
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

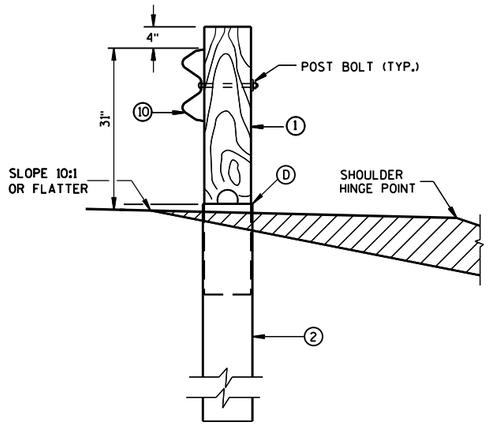
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.

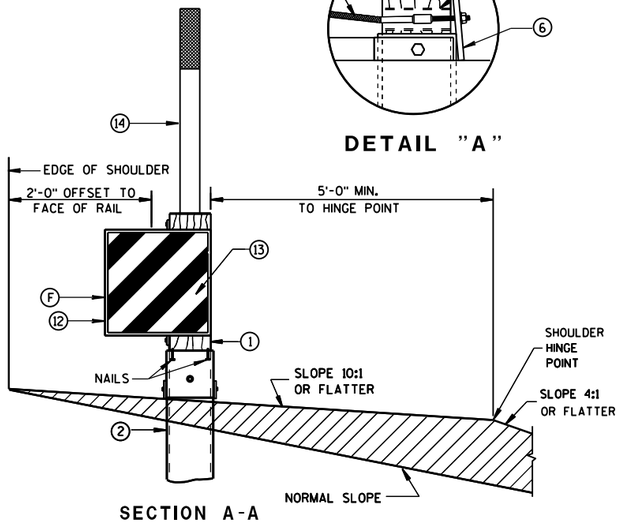




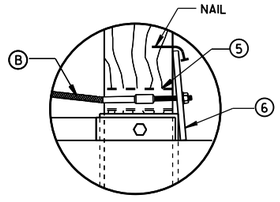
SECTION C-C
TYPICAL AT POST NOS. 3-9



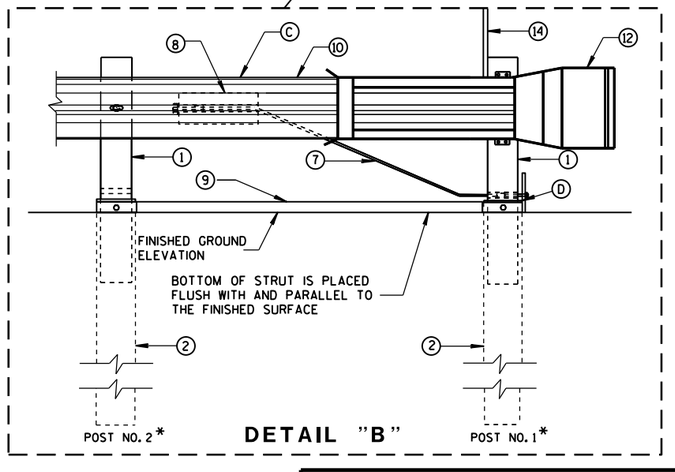
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



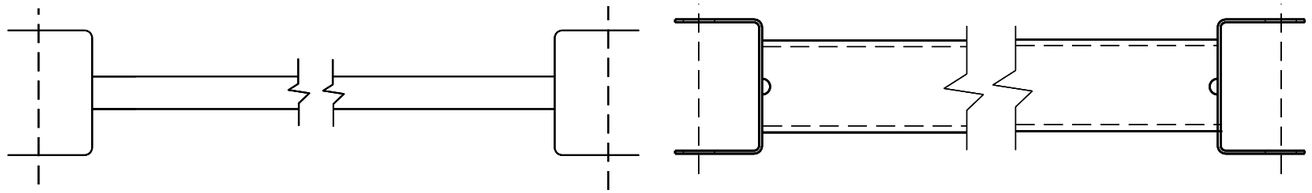
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

S.D.D. 14 B 44-2a

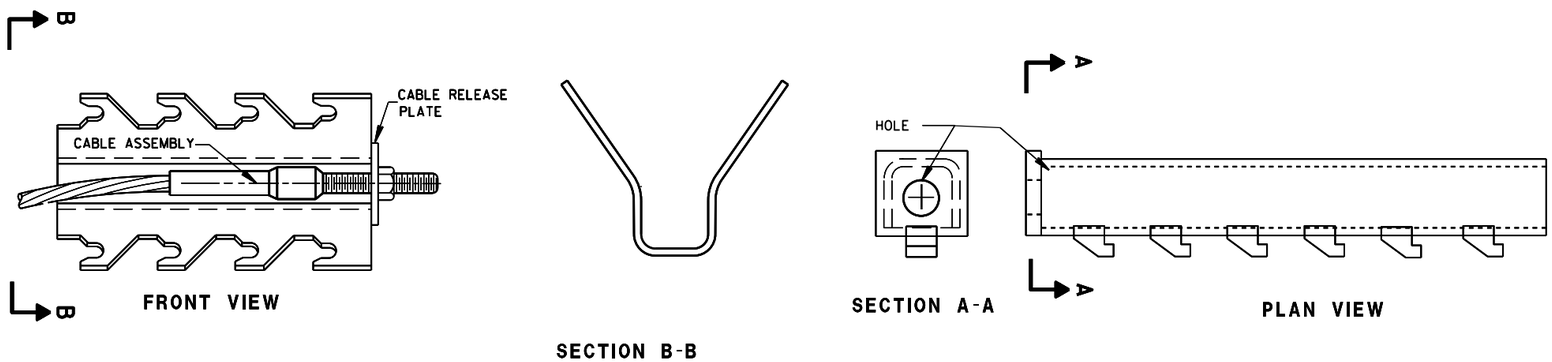
S.D.D. 14 B 44-2a



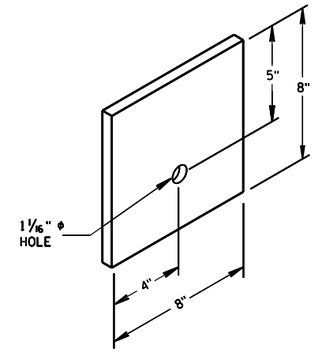
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



GENERIC ANCHOR CABLE BOX (8) (H)



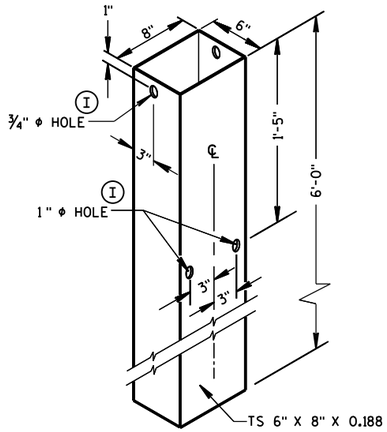
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

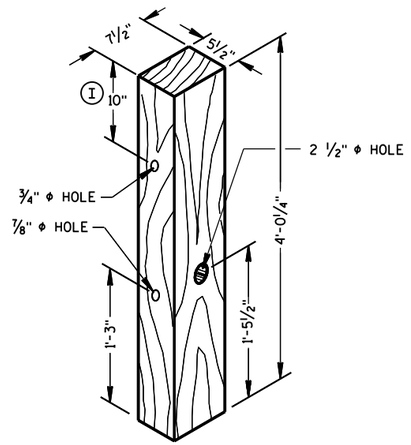
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

S.D.D. 14 B 44-2b

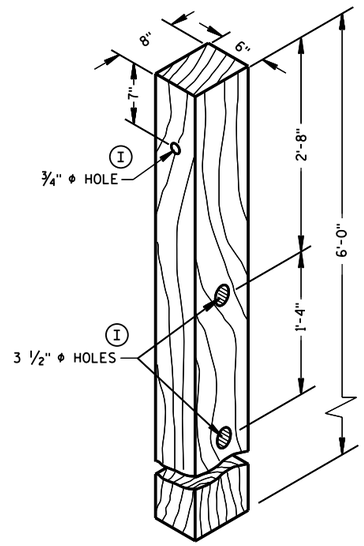


FOUNDATION TUBE (2)



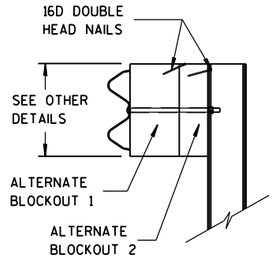
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

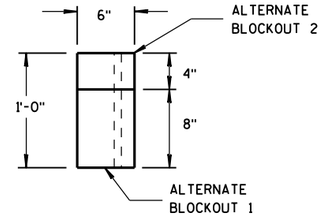


POSTS NUMBER 3-9

WOOD CRT POST (3)

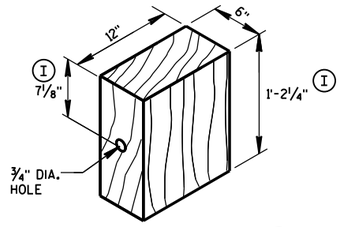


SIDE VIEW



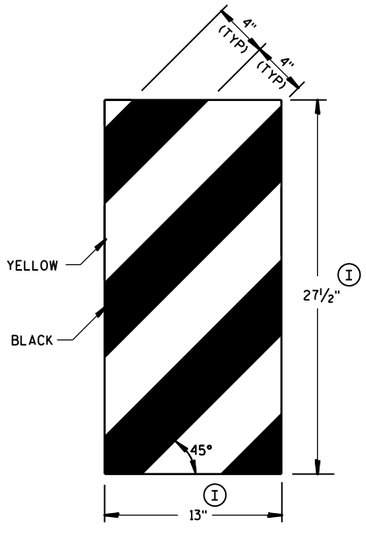
TOP VIEW

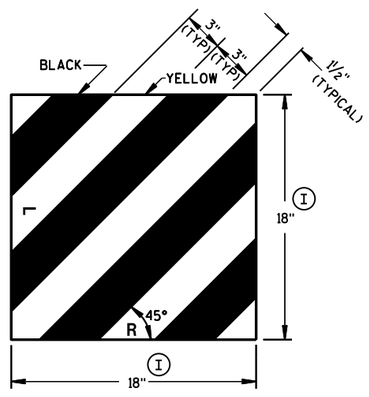
ALTERNATE WOOD BLOCKOUT DETAIL



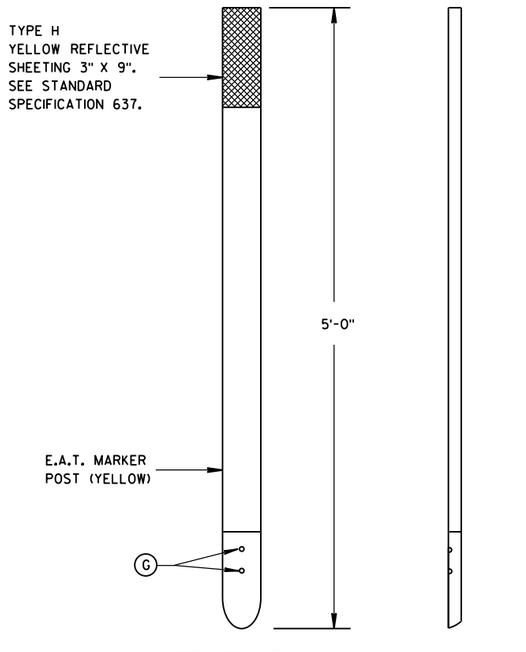
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





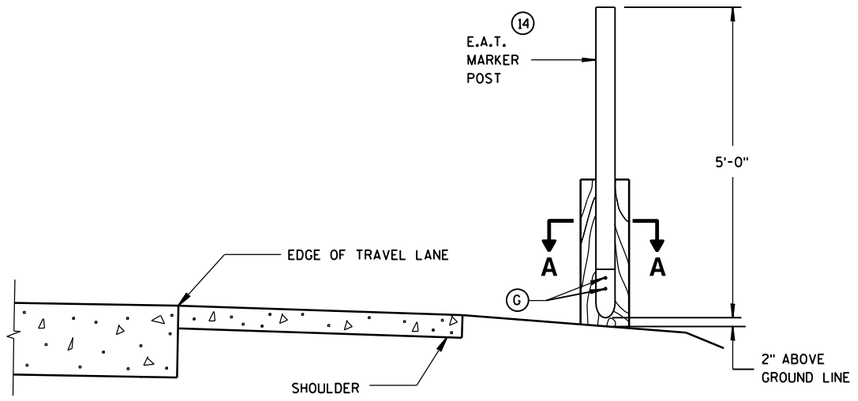
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

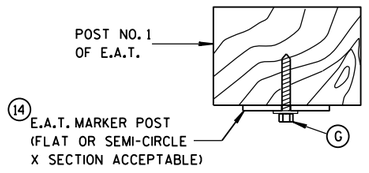
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

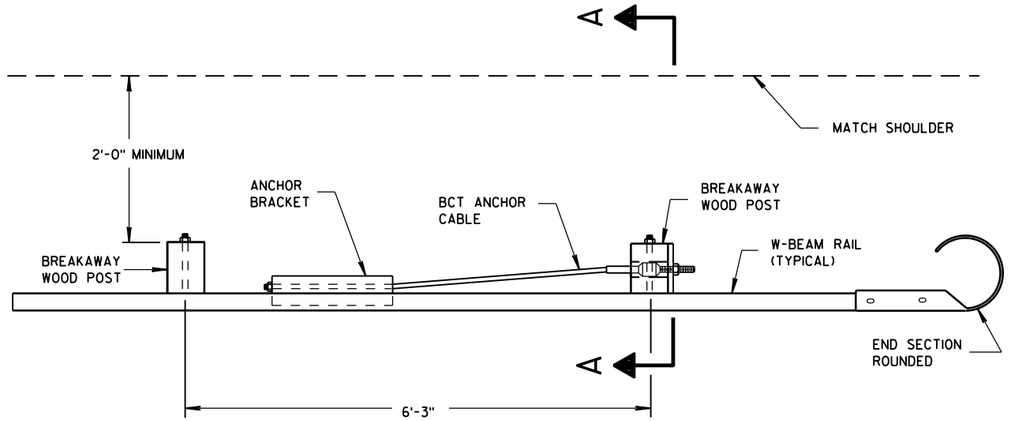
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

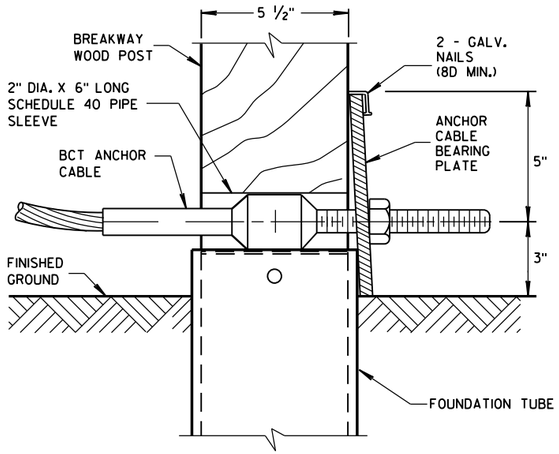
FHWA

6

S.D.D. 14 B 44-2c



PLAN VIEW



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

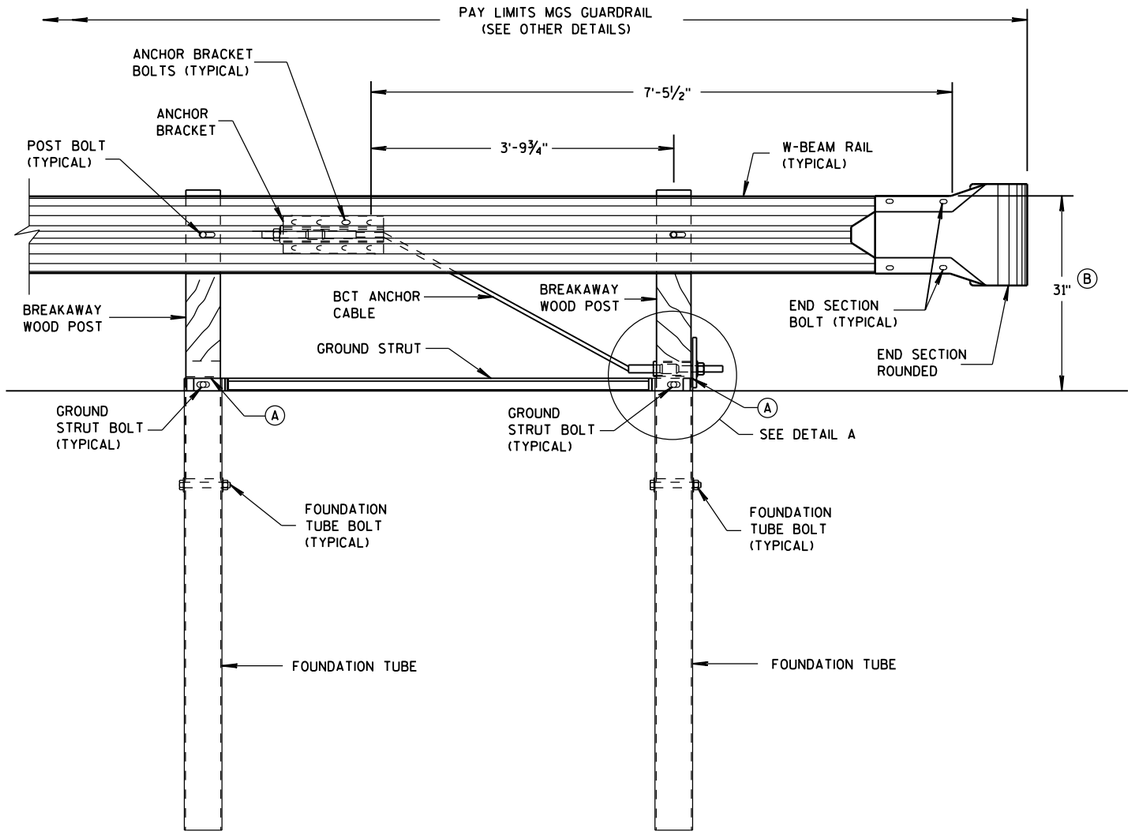
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A ⅝" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅝" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

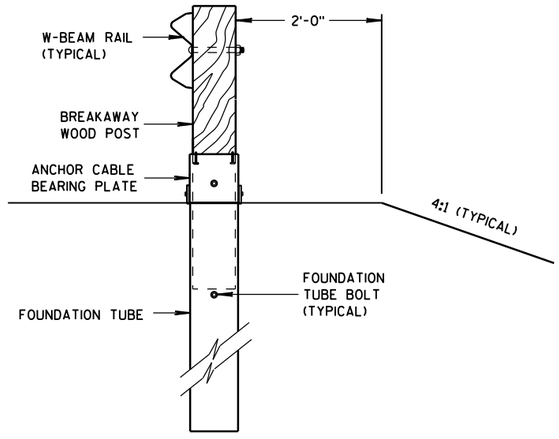
(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".

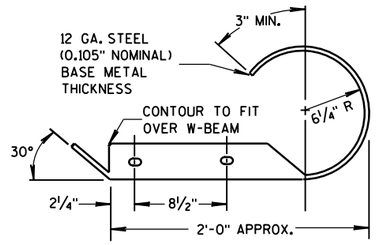


FRONT VIEW

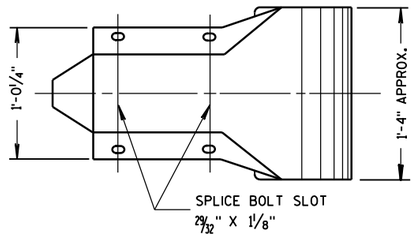
END RAIL DETAIL



SECTION A-A



PLAN VIEW



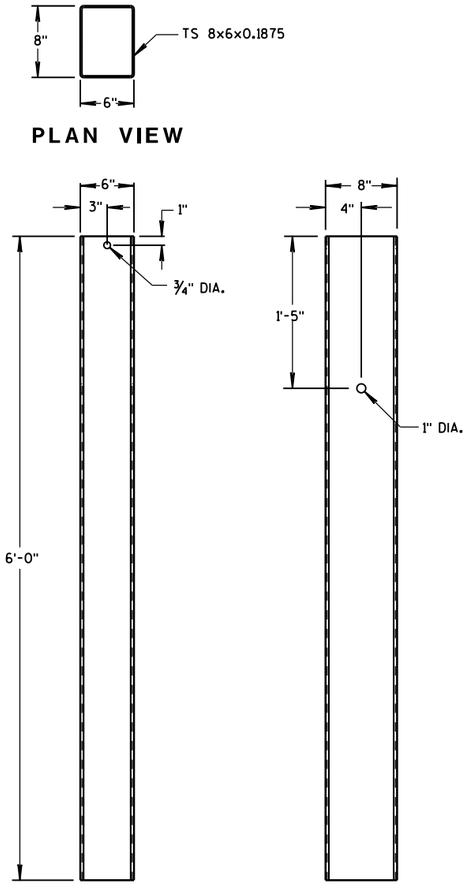
FRONT VIEW

W BEAM END SECTION ROUNDED

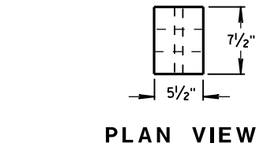
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

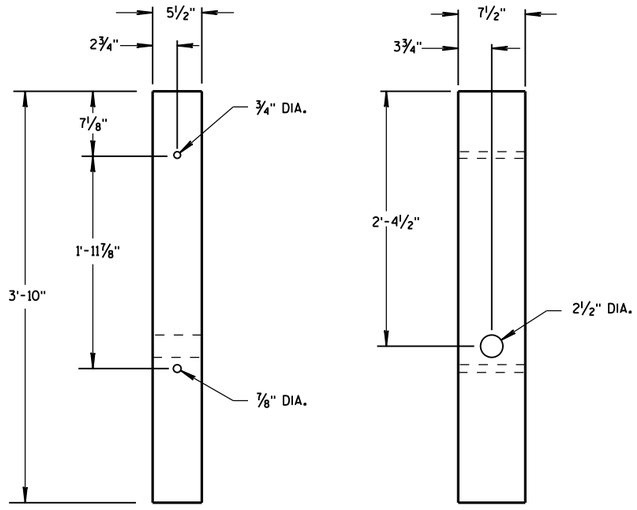
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 14 B 47-2a



FOUNDATION TUBE



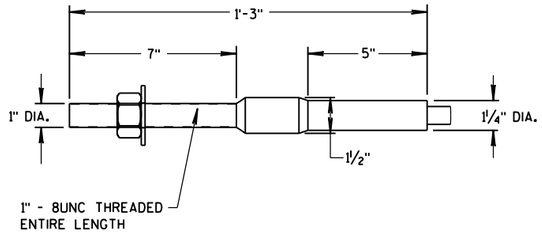


BREAKAWAY WOOD POST

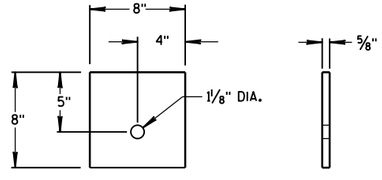
GENERAL NOTES

BCT ANCHOR CABLE IS A ¾" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. TREADED STUD SHALL CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.

BCT ANCHOR CABLE



DETAIL B



ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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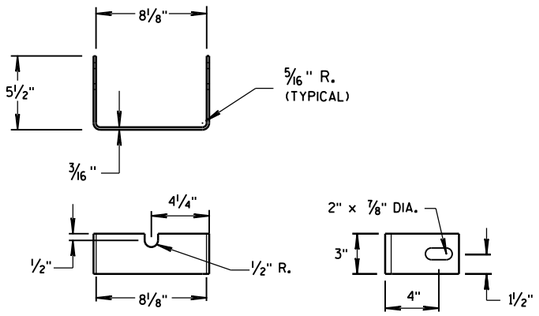
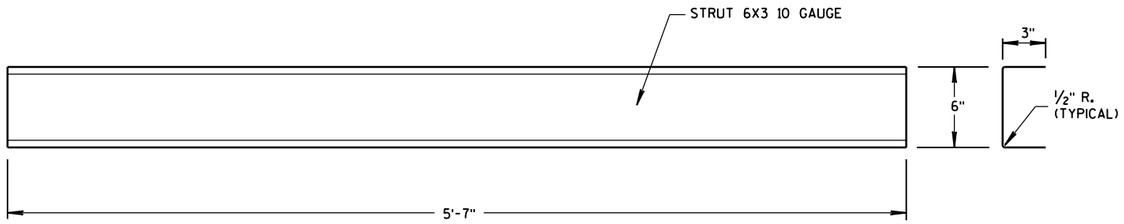
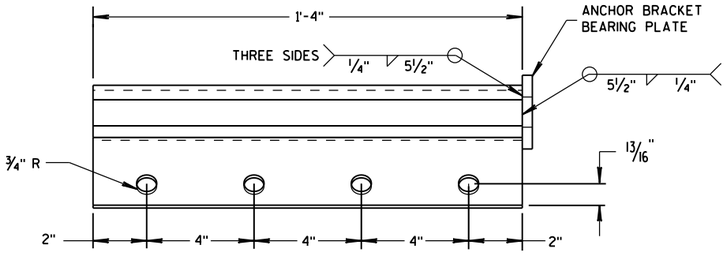
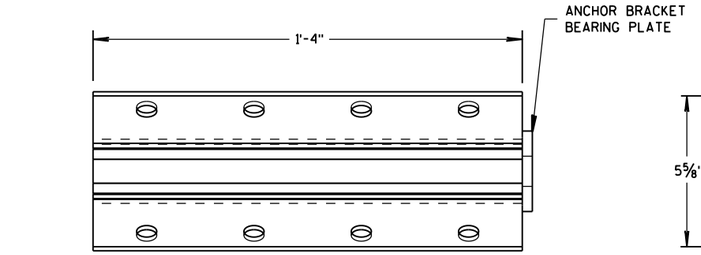


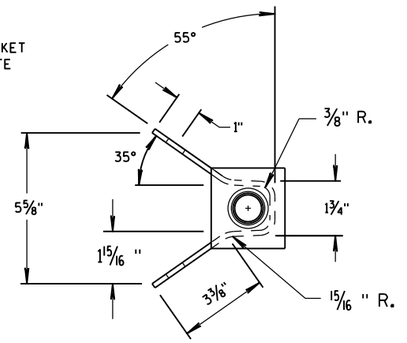
YOKE DETAIL



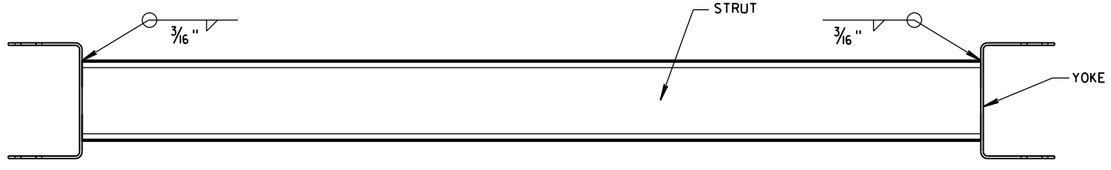
STRUT DETAIL



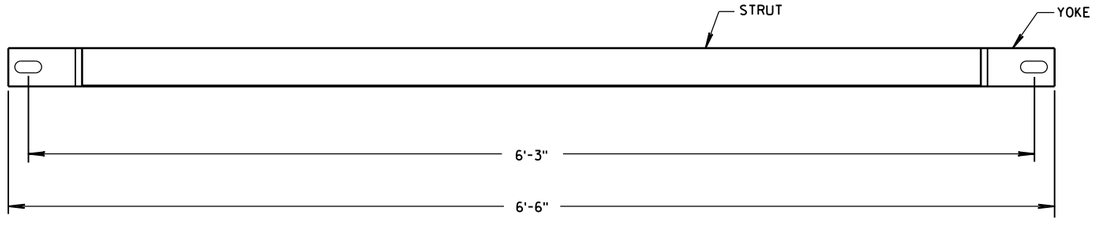




ANCHOR BRACKET

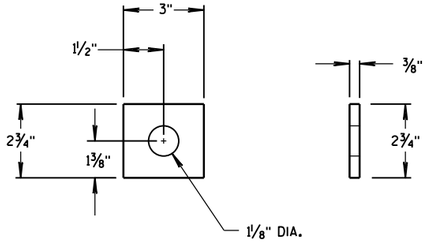


PLAN VIEW



FRONT VIEW

GROUND STRUT DETAIL



ANCHOR BRACKET BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

391

FHWA

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S.D.D. 14 B 47-2c

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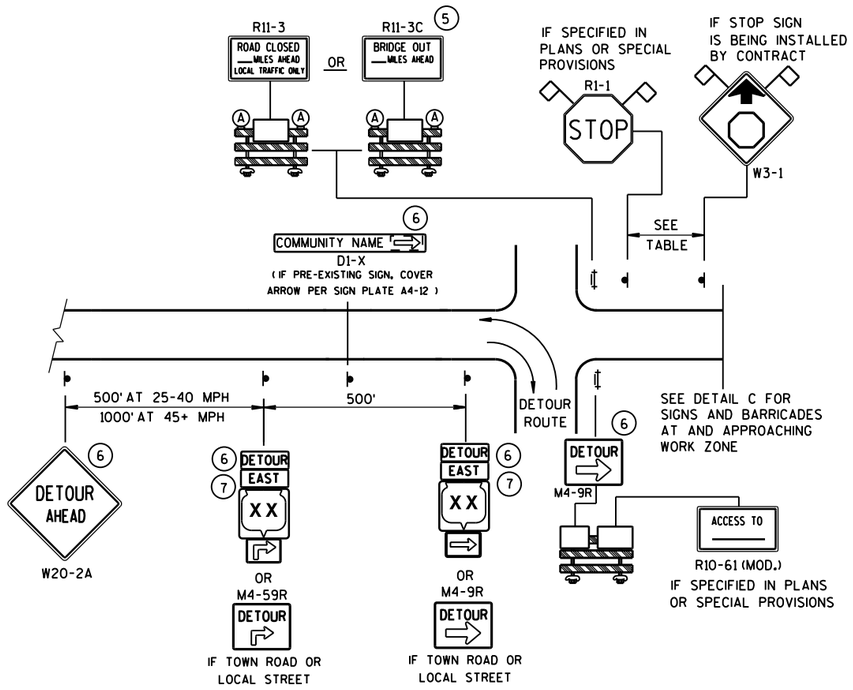
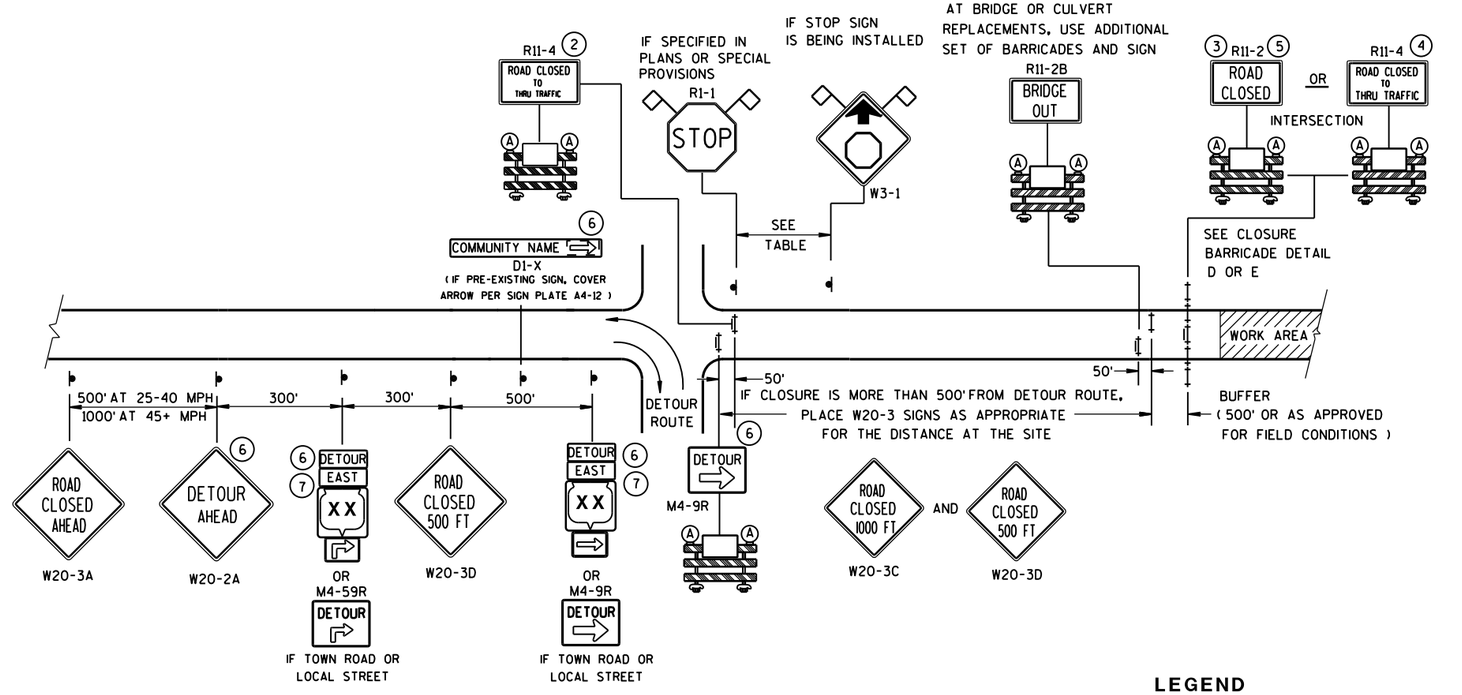
S.D.D. 14 B 47-2c



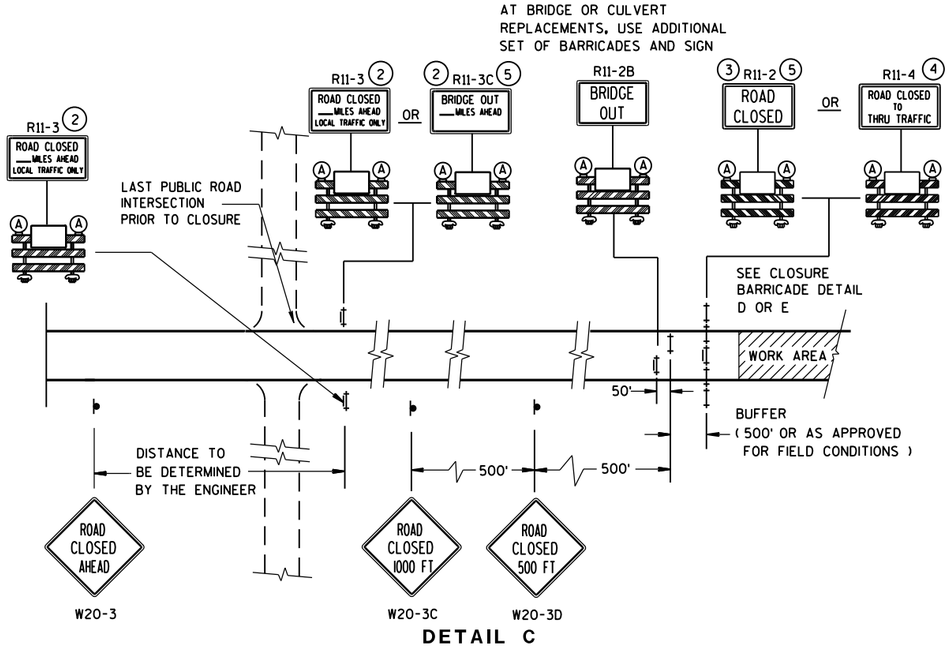
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN 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

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES (1) THROUGH (7)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

S.D.D. 15 C 2-6a

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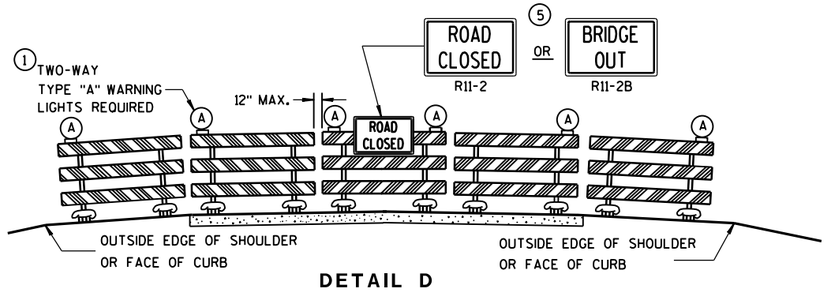
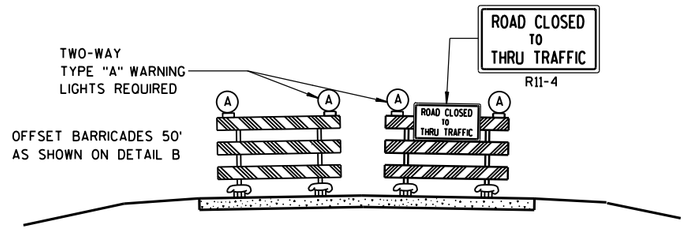


DETAIL D

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 BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE 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, 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". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI — FIC

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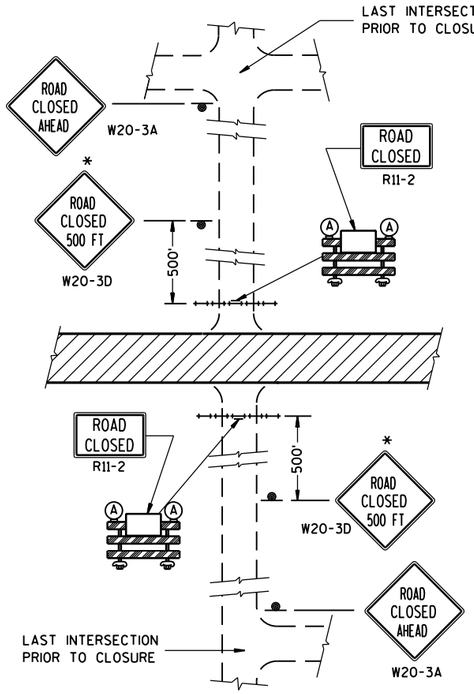
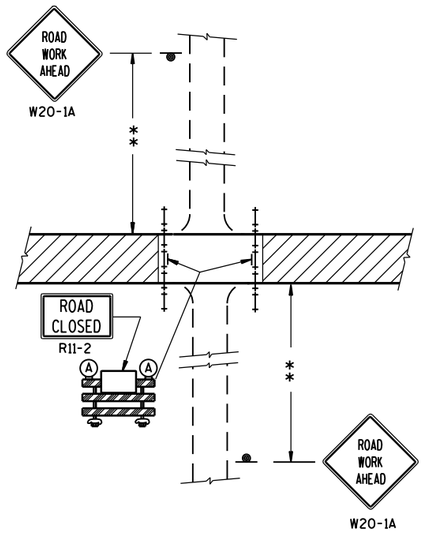
S.D.D. 15 C 2-6b



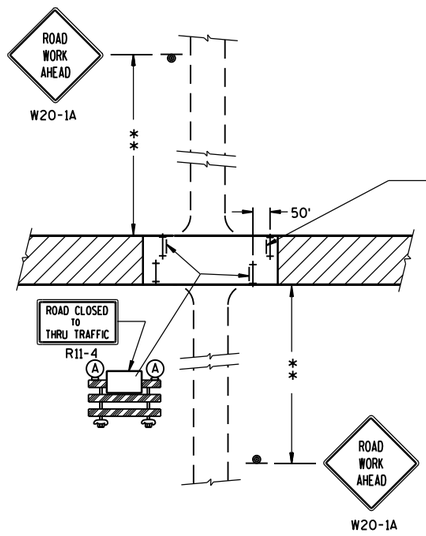
DETAIL 1

(NO ACCESS TO PROJECT)



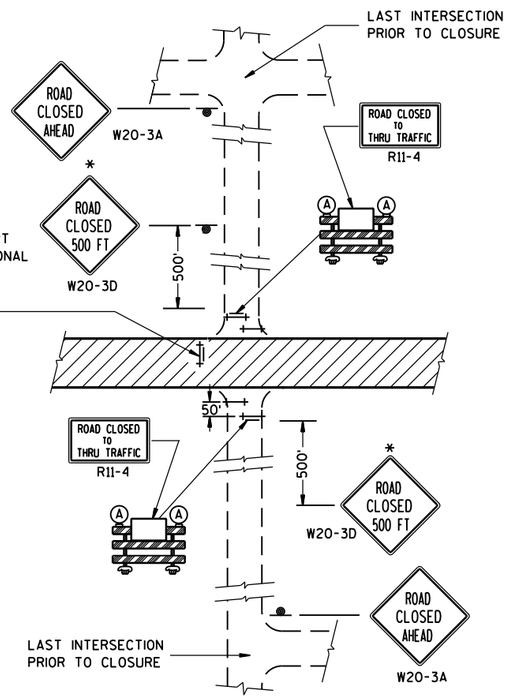
DETAIL 2

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



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO... SAFETY ENGI... — FHWA

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S.D.D. 15 C 3-3

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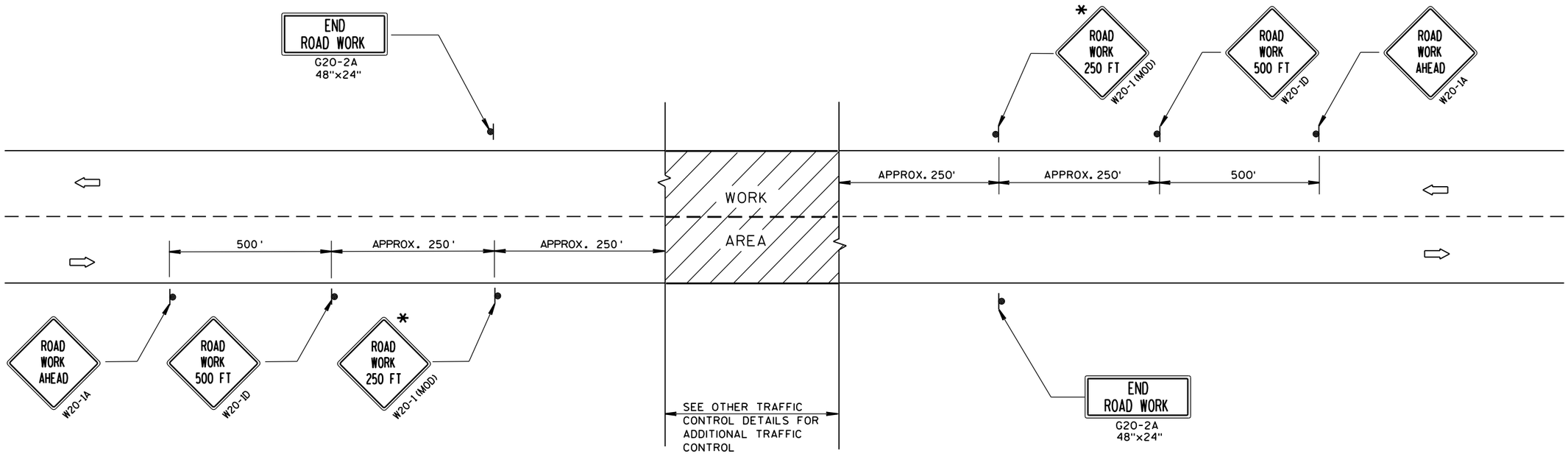
S.D.D. 15 C 3-3

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

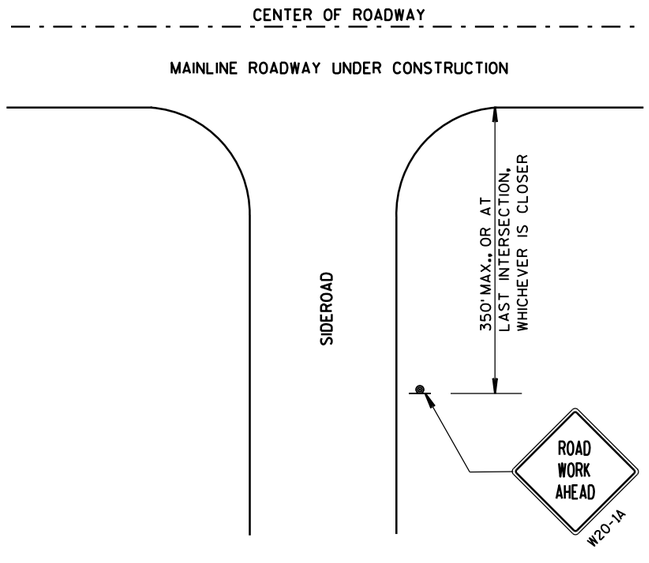
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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



LEGEND

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

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

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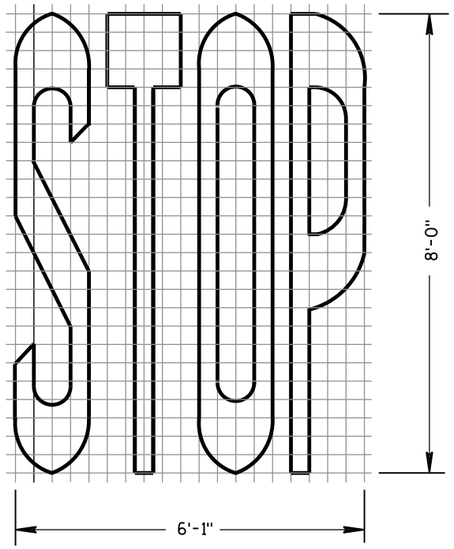
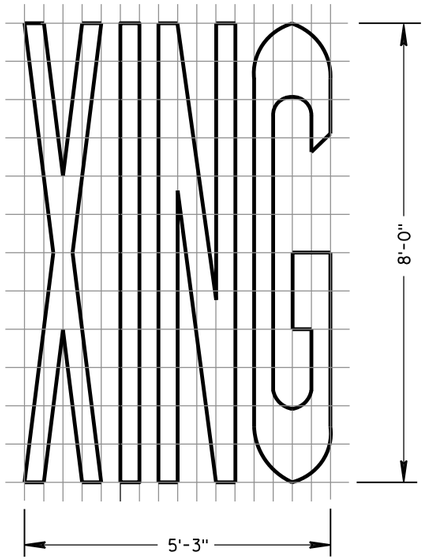
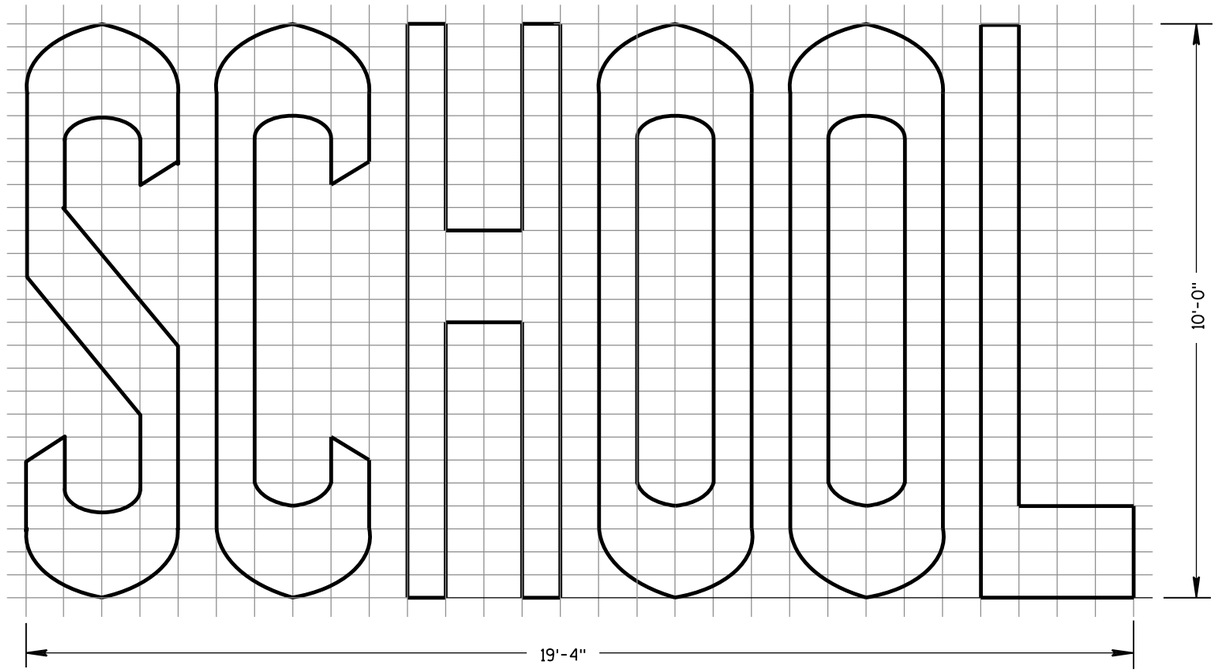
S.D.D. 15 C 5-3

GENERAL NOTES

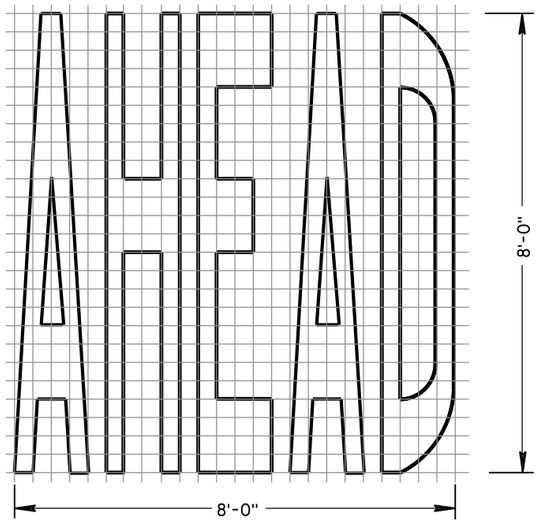
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

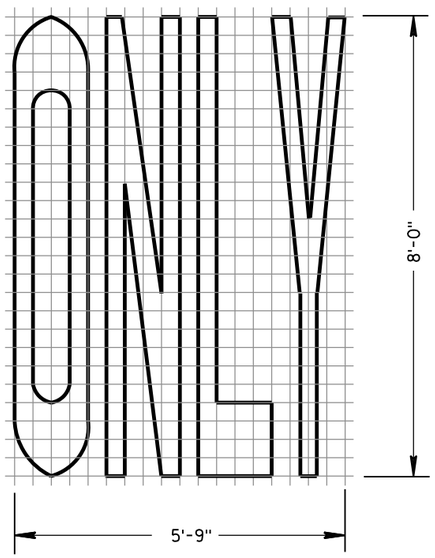


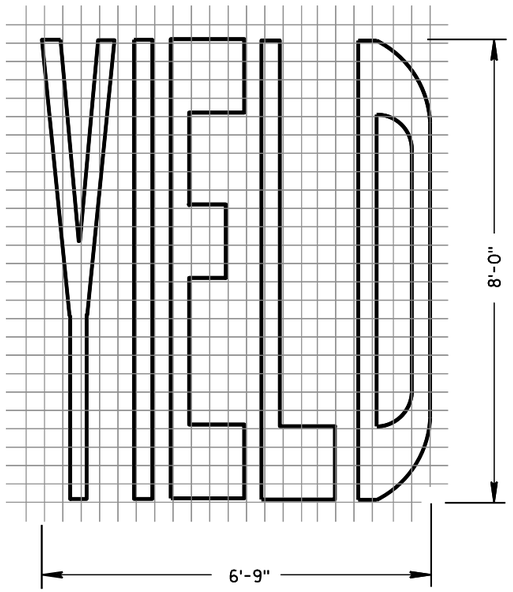


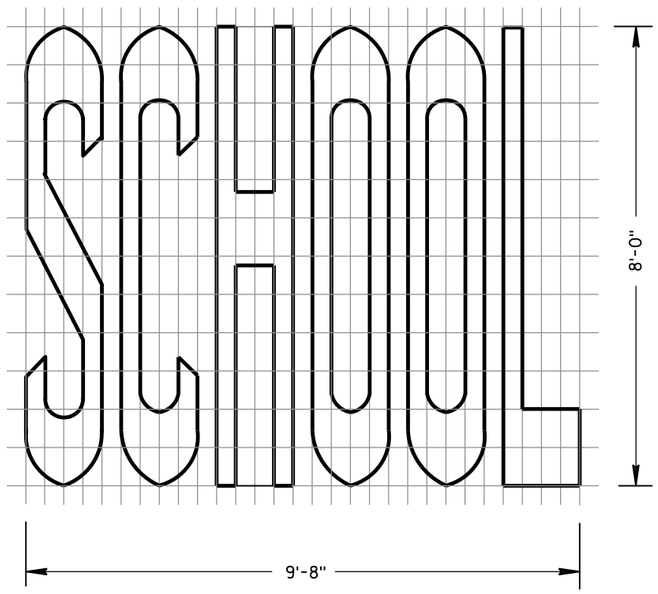


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-16	/S/ Matthew R. Rauch	
DATE	STATE SIGNING AND MARK	EER

FHWA

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S.D.D. 15 C 7-13b

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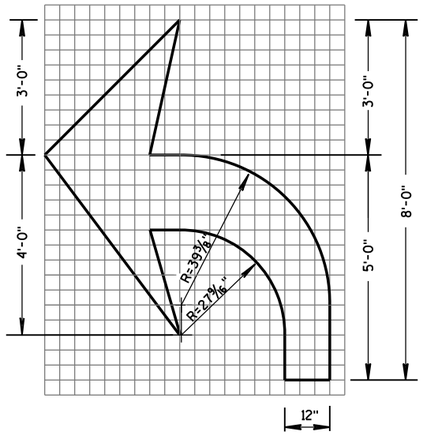
S.D.D. 15 C 7-13b

GENERAL NOTES

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



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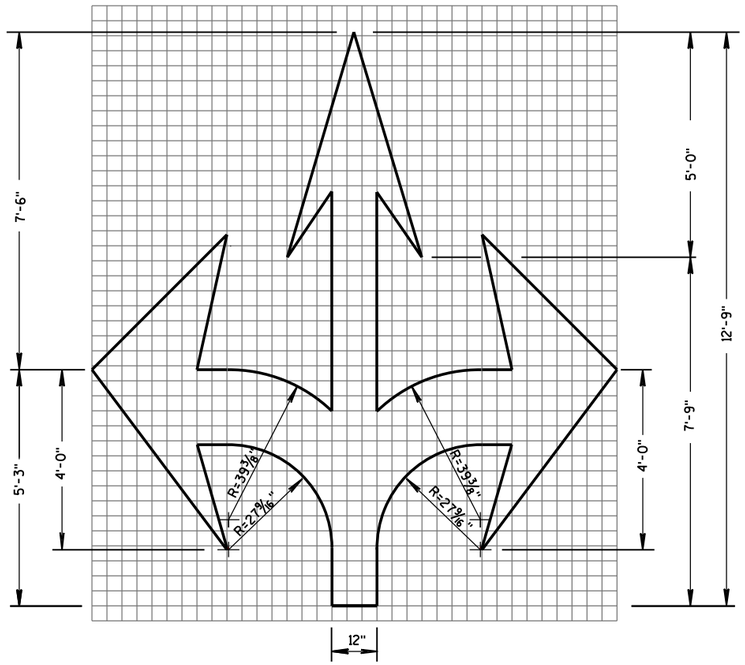

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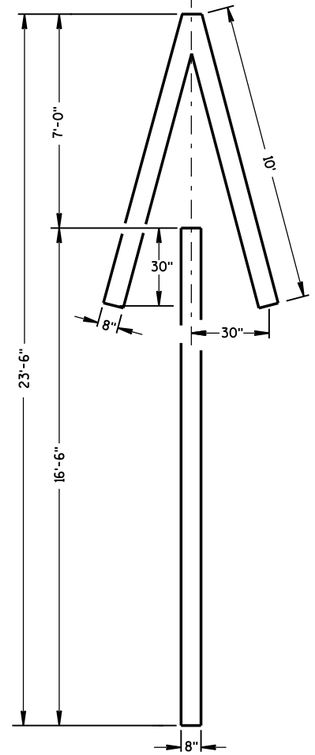

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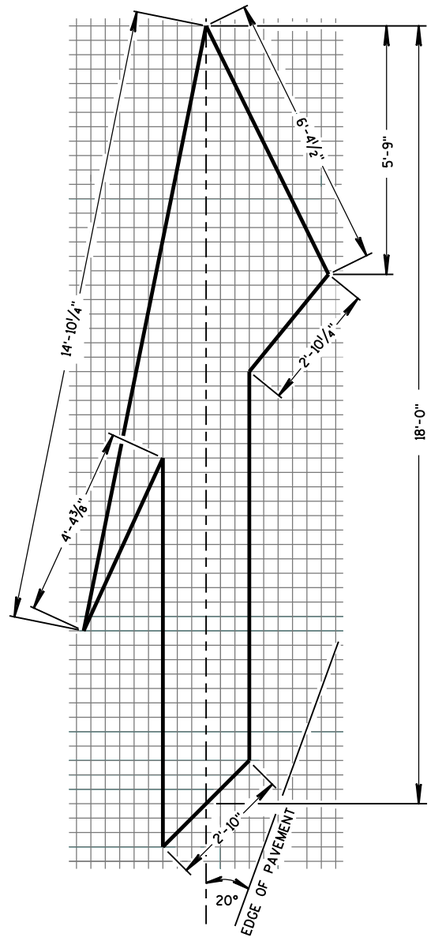
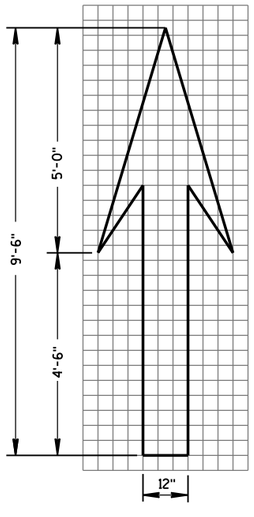
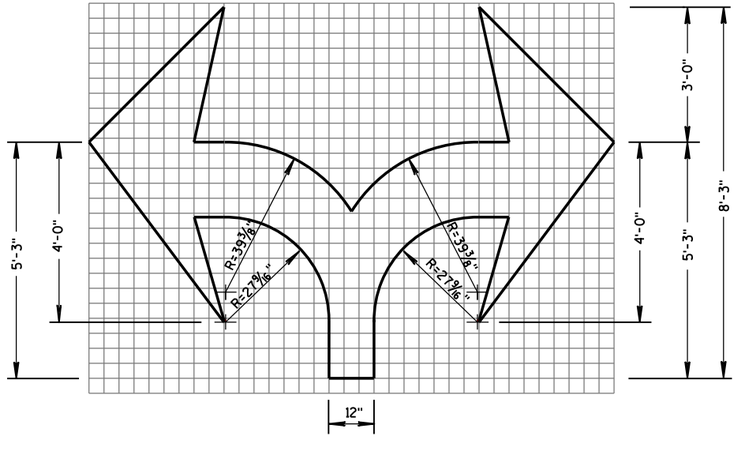


TYPE 5 LANE DROP ARROW



TYPE 1



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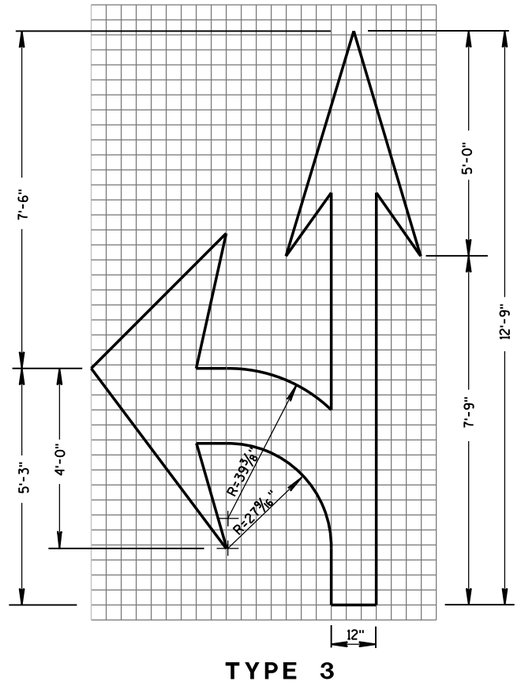

TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-18-16
DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR 397 NEER
FHWA

6

S.D.D. 15 C 7-13c

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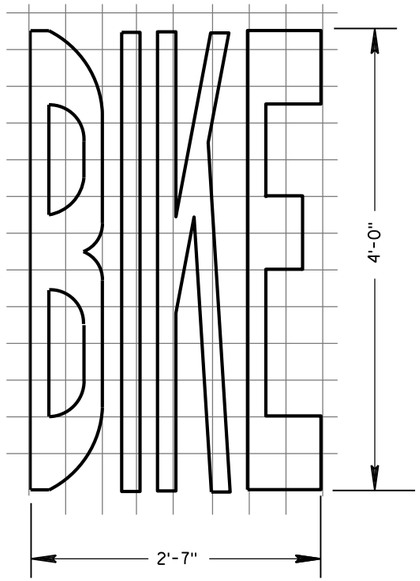
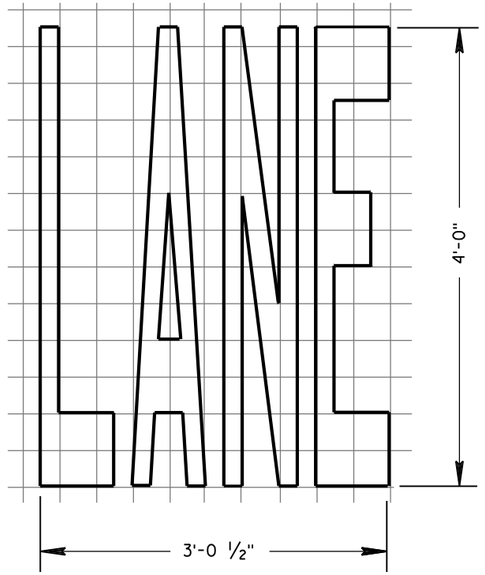
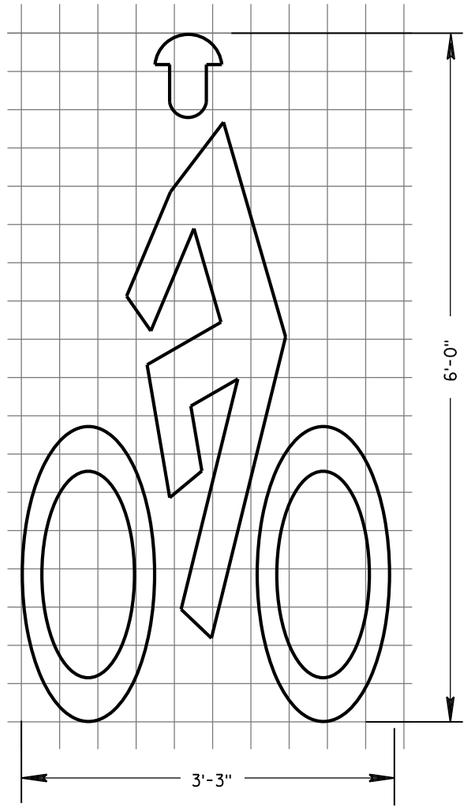
S.D.D. 15 C 7-13c

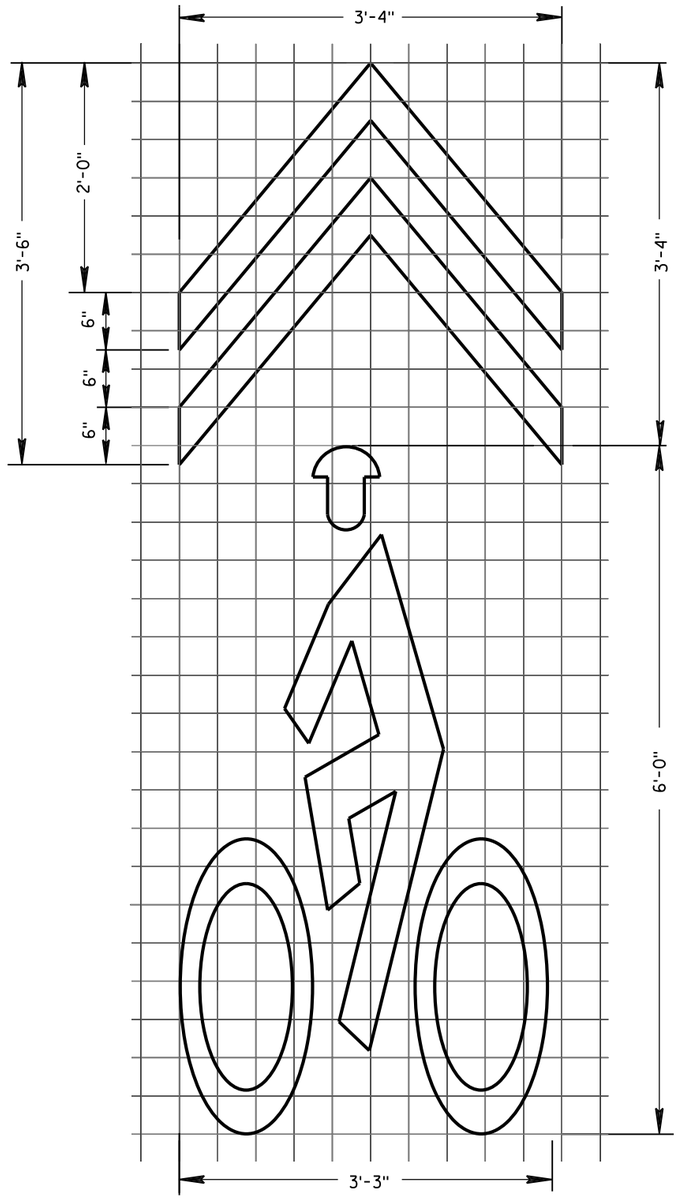




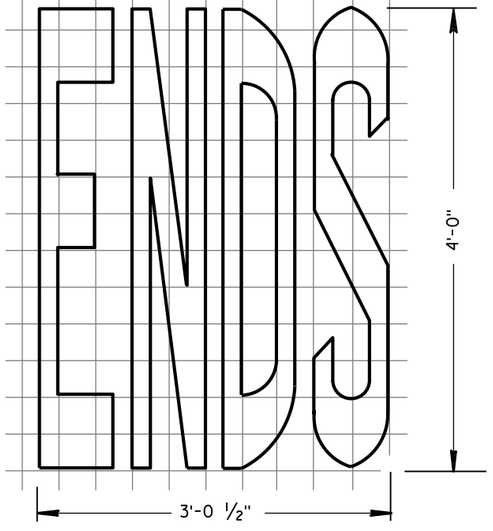
BIKE LANE WORDS



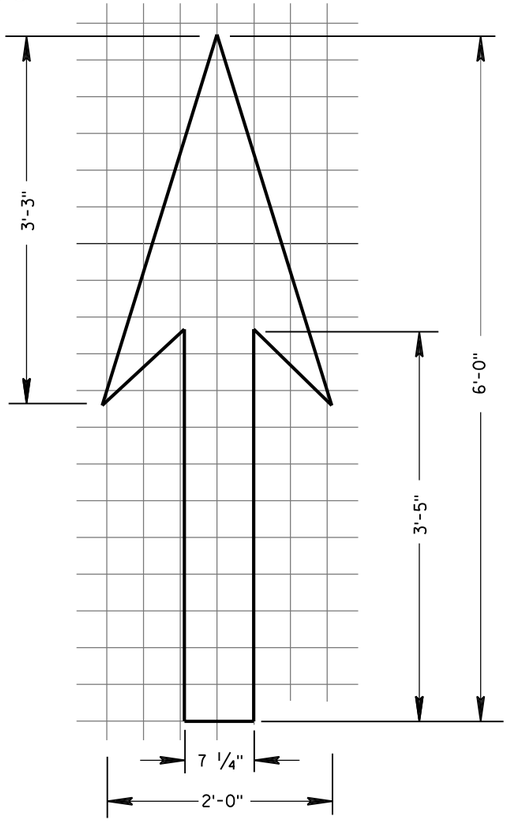
BIKE LANE SYMBOL



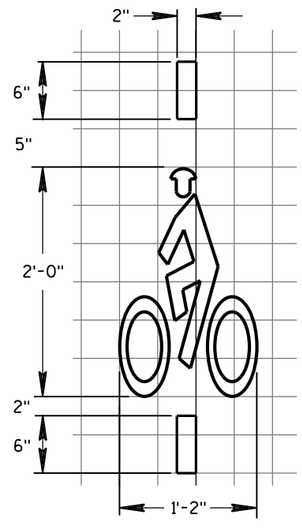
BIKE SYMBOL FOR SHARED LANE



BIKE LANE WORDS



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING

GENERAL NOTES

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

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARK ENGINEER

FHWA

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S.D.D. 15 C 7-13e

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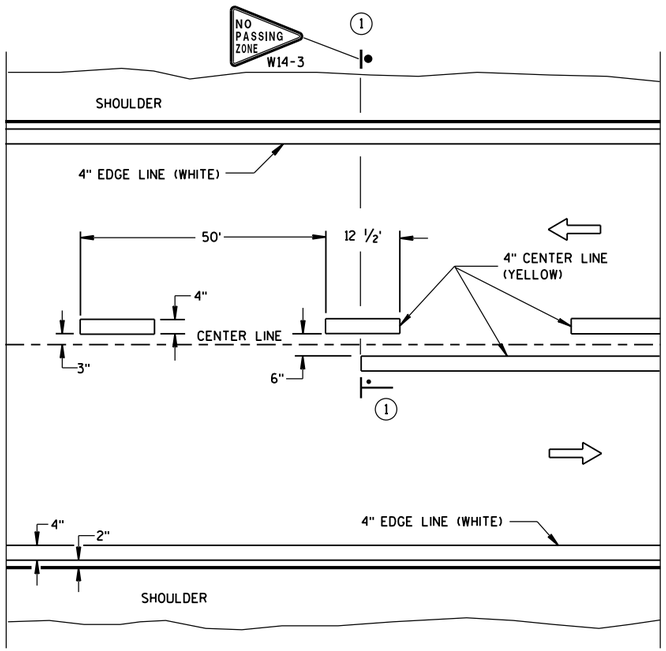
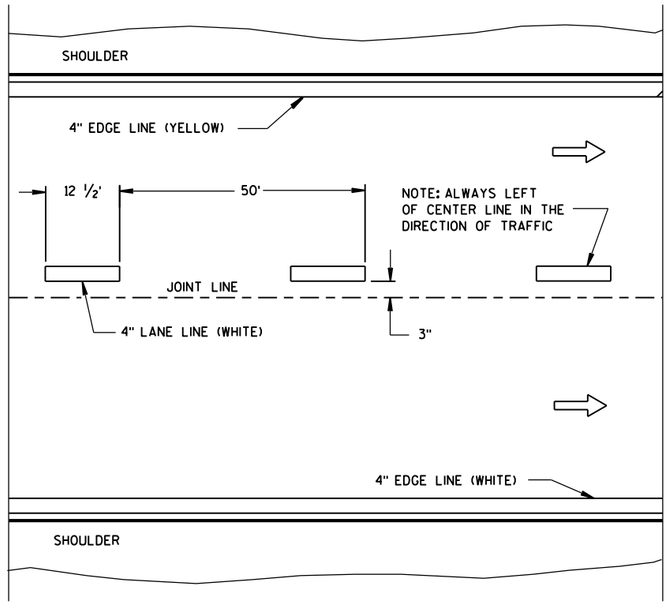
S.D.D. 15 C 7-13e



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

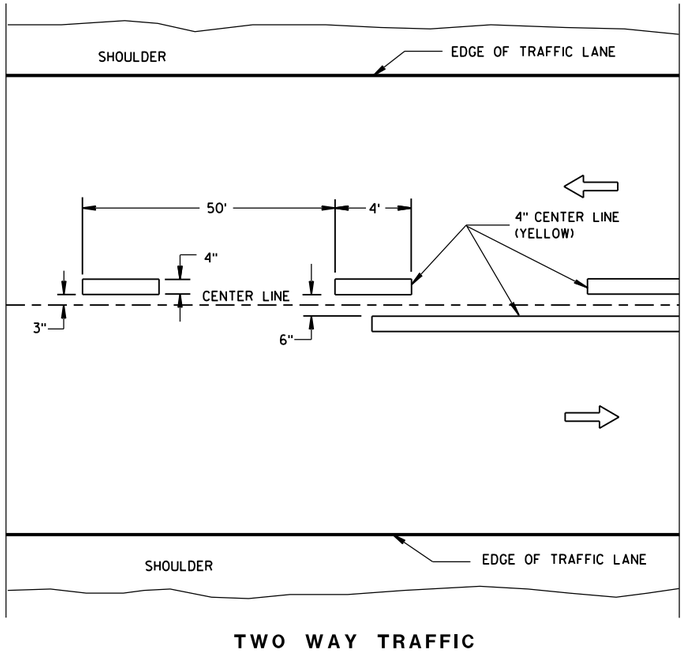
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

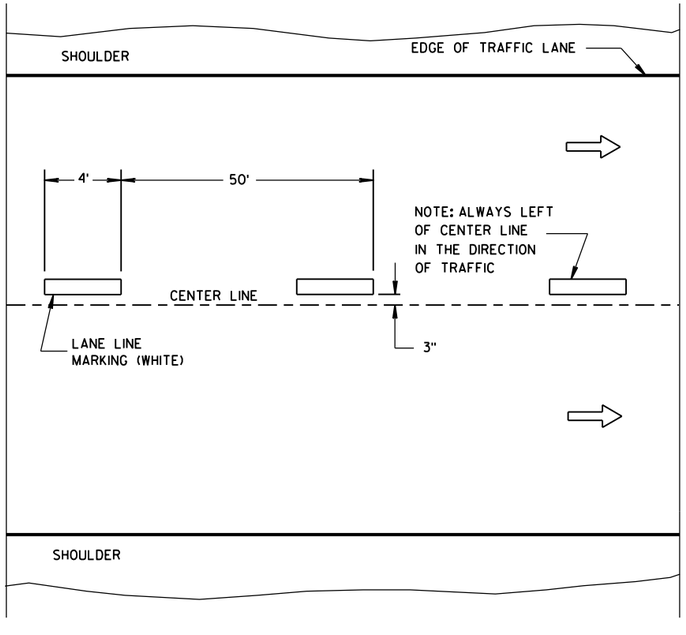
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept., 2016	/S/ Matthew R. Rauch
DATE	STATE SIGNING AND MAR 399 INEER
FHWA	

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S.D.D. 15 C 8-17a

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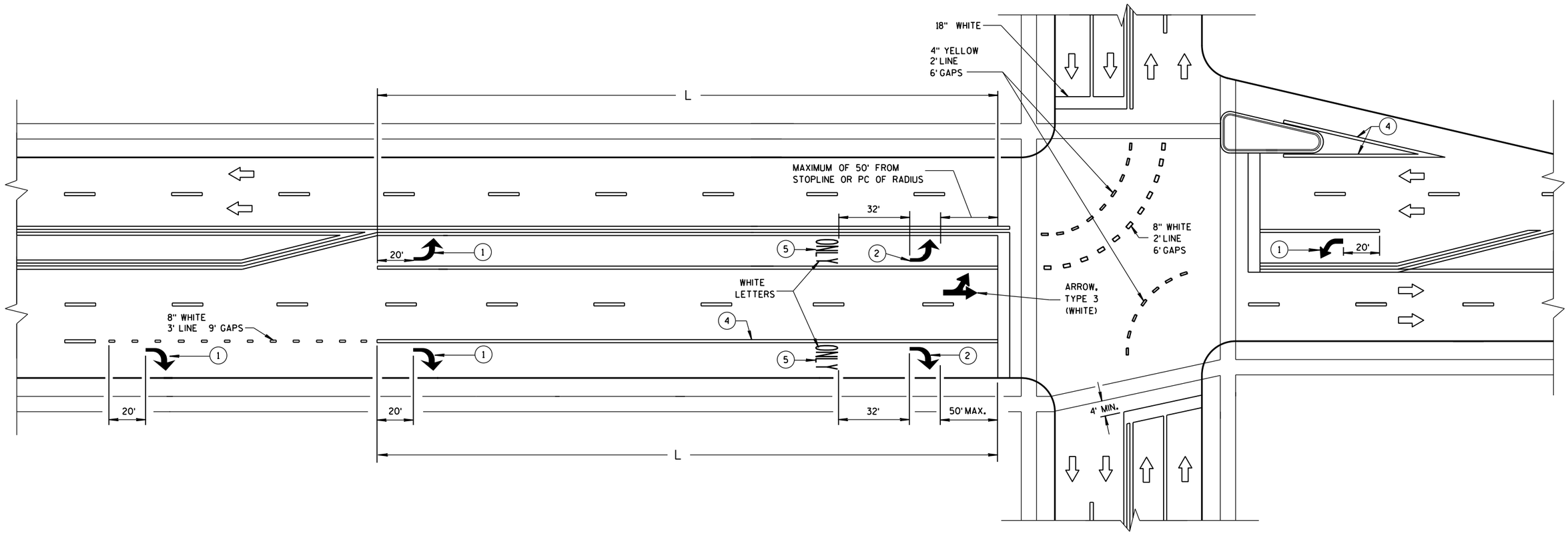
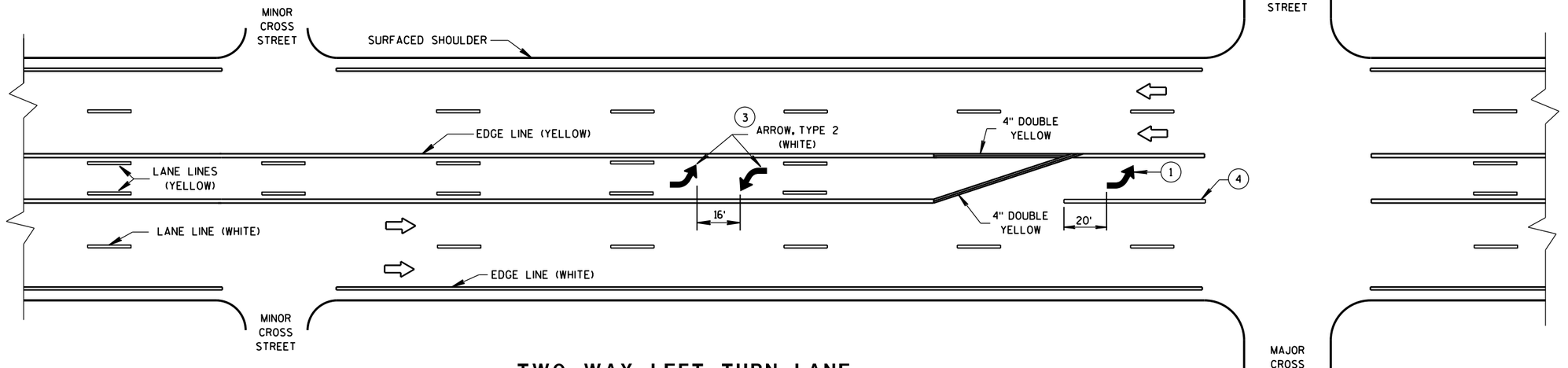
S.D.D. 15 C 8-17a





GENERAL NOTES

(1) REQUIRED ARROW, TYPE 2 (WHITE).

(2) REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.

(3) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(4) 8" WHITE

(5) REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

L = LENGTH OF TURN BAY

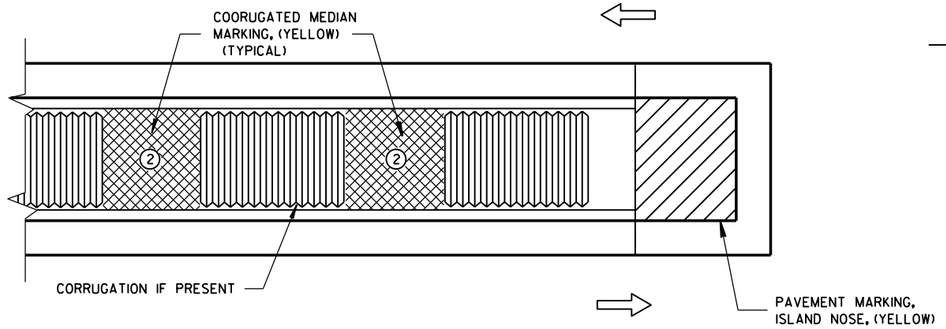
TWO WAY LEFT TURN LANE

PAVEMENT MARKING
(TURN LANES)

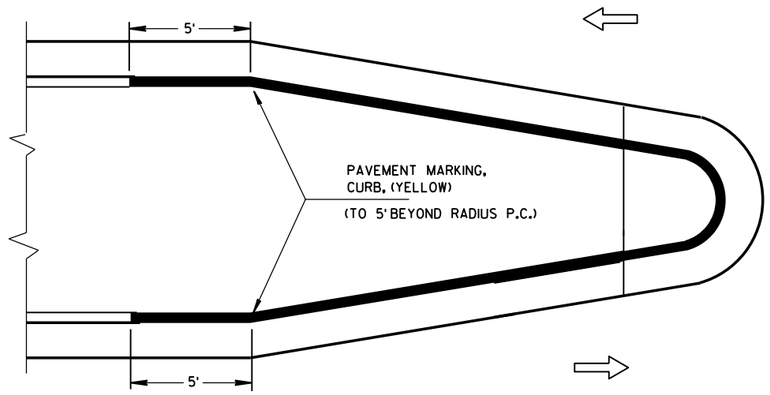
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

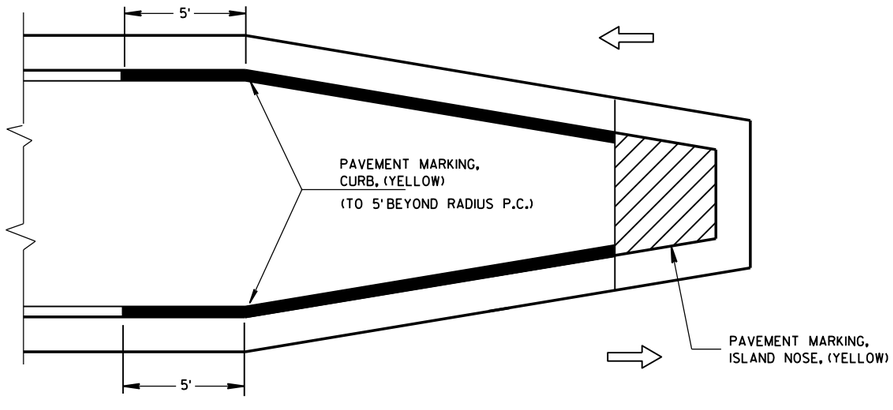
S.D.D. 15 C 8-17b



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

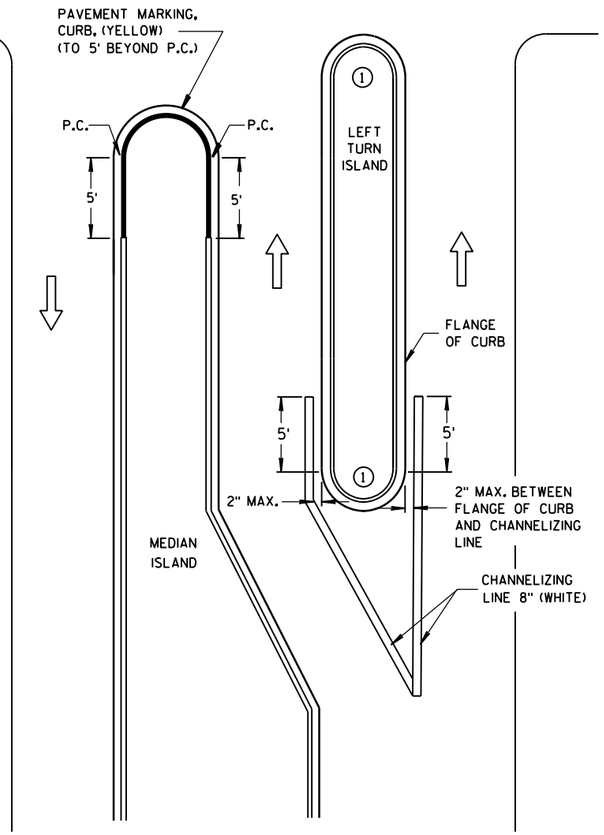


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

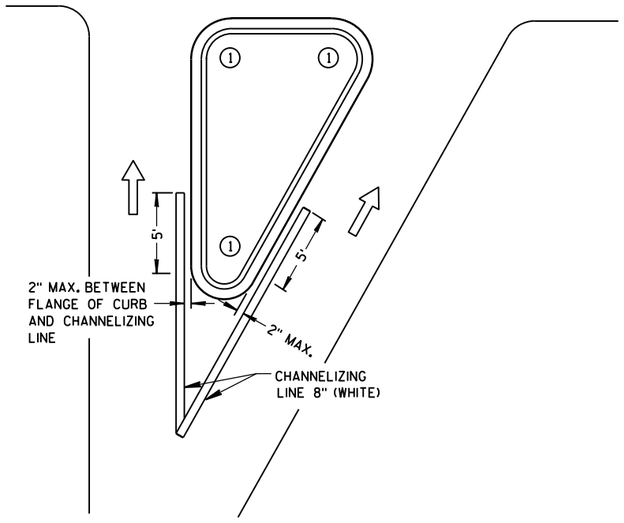


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

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

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 C 8-17c

GENERAL NOTES

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER FABRICATION DRAWING.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

SIGN SUPPORTS SHALL BE LOCATED NORMAL TO ROADWAY.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR CAGE TO BE ASSEMBLED USING TIE WIRES ONLY, NO WELDING.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACK FILLING AROUND THE BASE. ANY REQUIRED BACKFILL SHALL BE WELL COMPACTED IN LAYERS OF 1 FOOT OR LESS. COMPACTION SHALL BE BY MECHANICAL MEANS. CARE SHALL BE TAKEN SO NO DAMAGE OCCURS TO THE CONCRETE BASE DURING COMPACTION.

EXCAVATION OF MATERIALS NOT OCCUPIED BY CONCRETE SHALL BE MINIMIZED TO REDUCE DISTURBANCE OF THE SURROUNDING SOILS.

THE BOTTOM OF THE DRILLED HOLE SHALL BE FIRM AND THOROUGHLY CLEANED SO NO LOOSE OR COMPRESSIBLE MATERIALS ARE PRESENT AT THE TIME OF THE CONCRETE PLACEMENT.

IF THE DRILLED HOLE CONTAINS STANDING WATER, THE CONCRETE SHALL BE PLACED USING A TREMIE TO DISPLACE THE WATER.

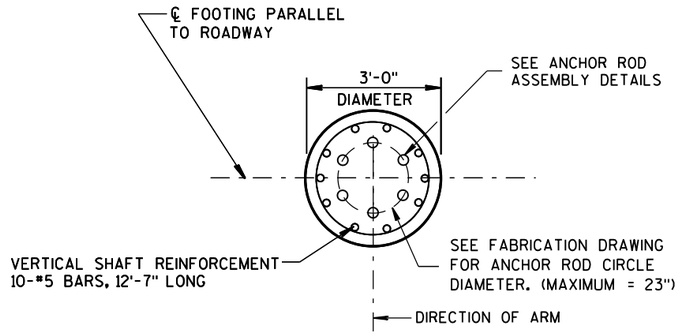
THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

FORM ALL EXPOSED CONCRETE CORNERS WITH ¾" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

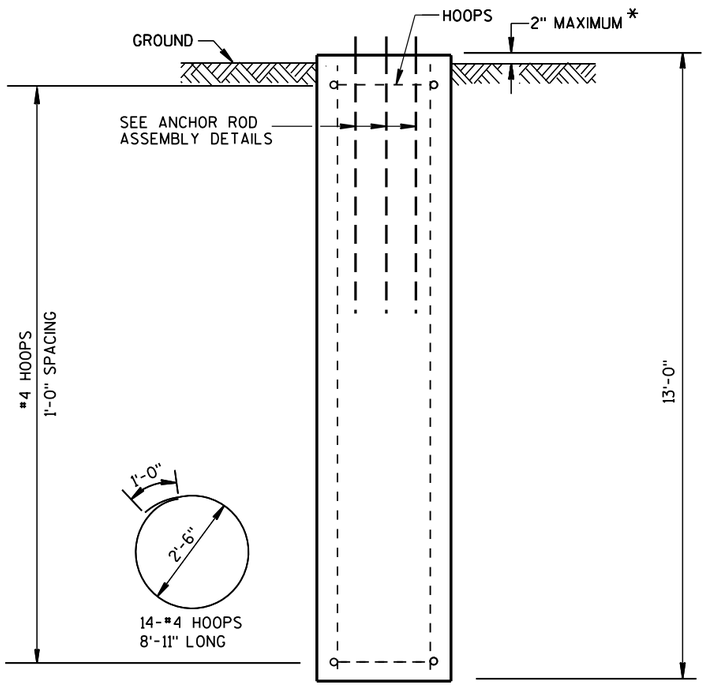
ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554, GRADE 55	fy=55,000 p.s.i.
ASTM A563A HEAVY HEX NUTS, AND ASTM F436 WASHERS.	
PLATES, ASTM A709, GRADE 36	fy=36,000 p.s.i.

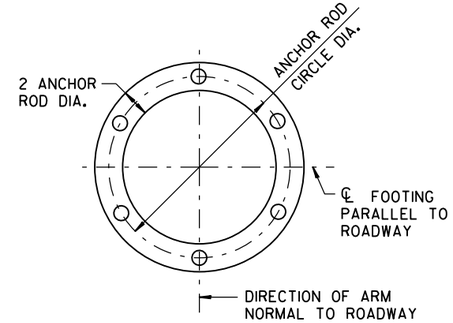
THIS FOOTING HAS BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 20 DEGREES (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 350 PSF (COHESIVE SOILS).



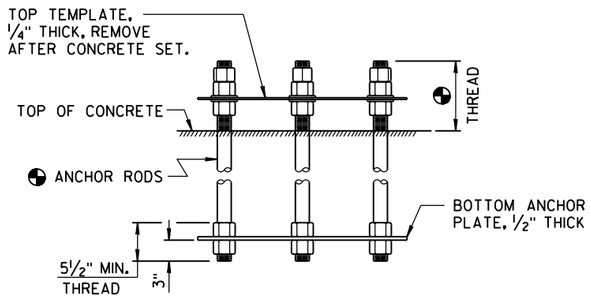
PLAN VIEW



ELEVATION VIEW



TOP TEMPLATE AND BOTTOM ANCHOR PLATE



ANCHOR ROD ASSEMBLY DETAILS

⊕ MINIMUM OF 6 ANCHOR RODS, EXACT NUMBER, SIZE, DIMENSION AND ORIENTATION AS SHOWN ON FABRICATION DRAWING.

* FOR OVERHEAD SIGN SUPPORTS THAT ARE INSTALLED ADJACENT TO SIDEWALKS, THE TOP OF THE BASE SHALL BE POURED FLUSH WITH THE GROUND.

CONCRETE - 3.4 C.Y. PER FOOTING
H.S. REINFORCEMENT - 215 LBS. PER FOOTING

36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Vu Thao — WIND LOADED STRU PROGRAM LEAD
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S.D.D. 15 C 24-4

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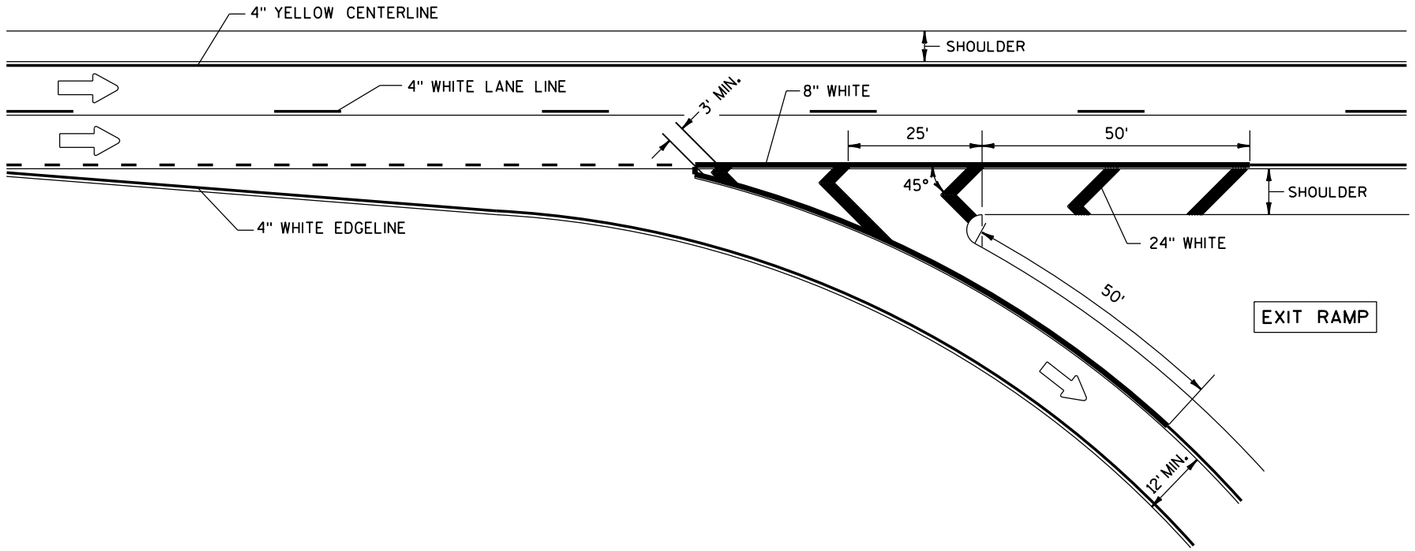
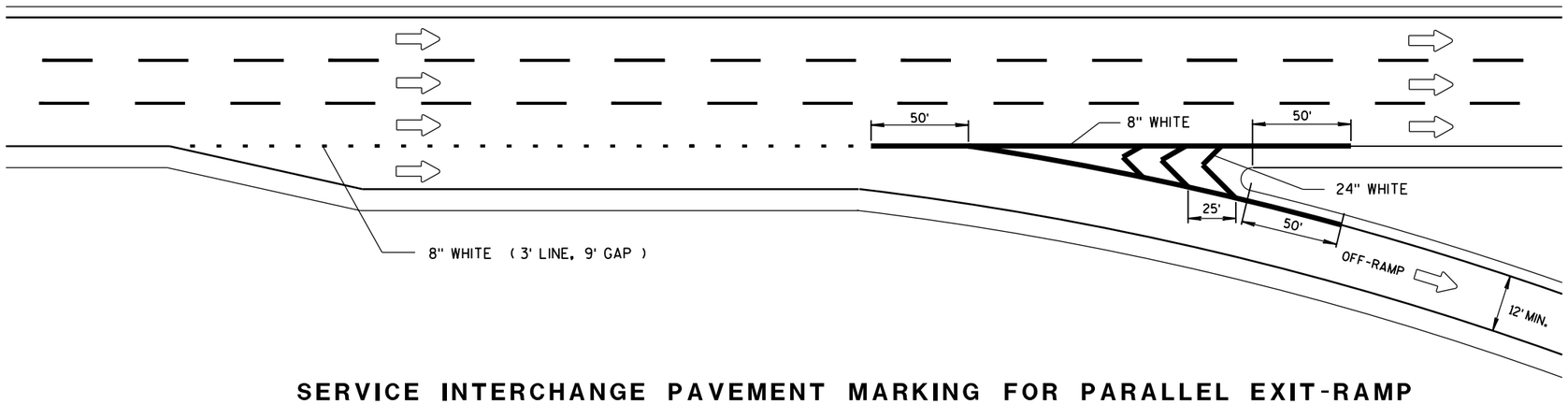
S.D.D. 15 C 24-4



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT-RAMP

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

DIRECTION OF TRAVEL

6

S.D.D. 15 C 31-2a

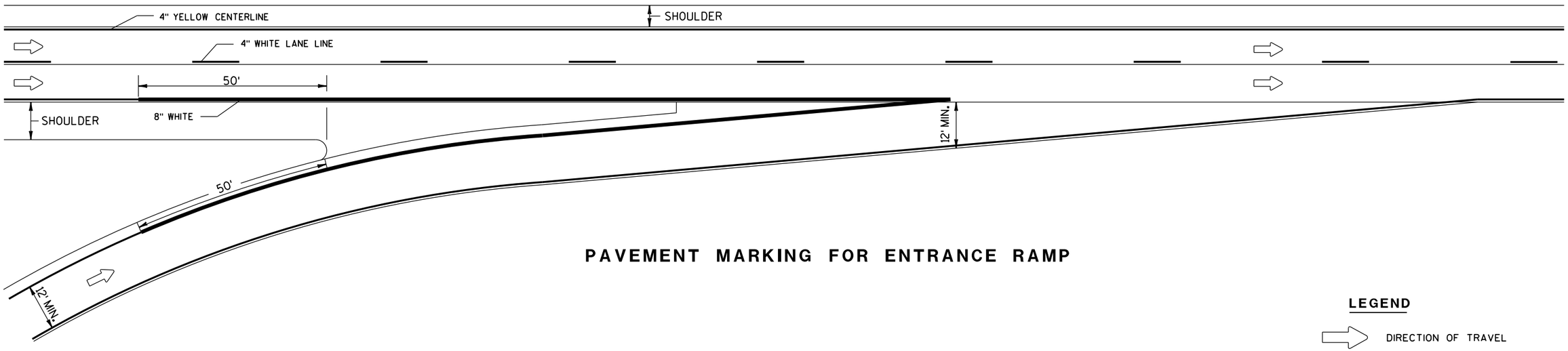
PAVEMENT MARKING
(RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

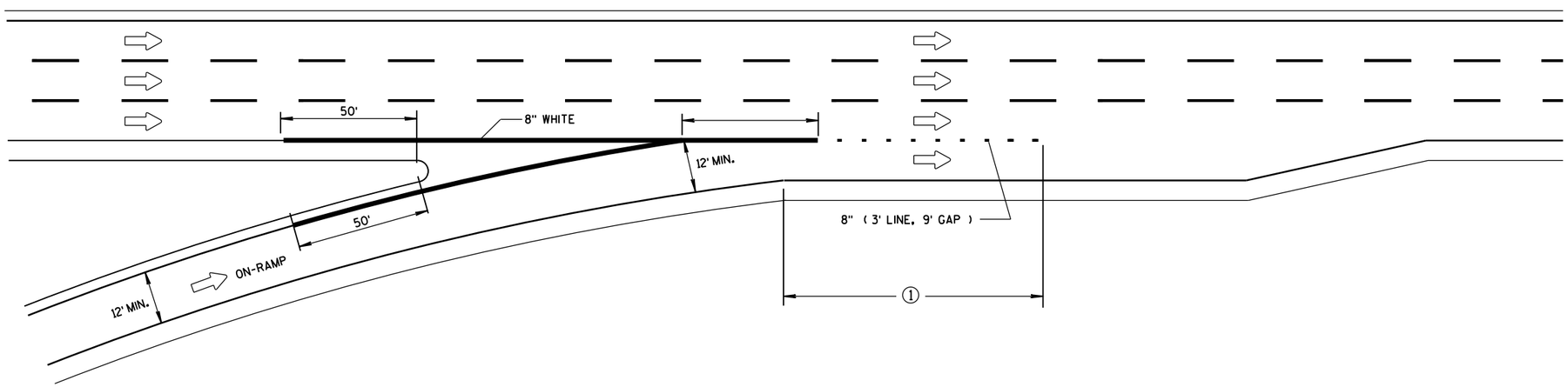
① ½ LENGTH OF FULL WIDTH ACCELERATION LANE.



PAVEMENT MARKING FOR ENTRANCE RAMP

LEGEND

DIRECTION OF TRAVEL



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP

PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 404 NEER

FHWA

6

S.D.D. 15 C 31-2c

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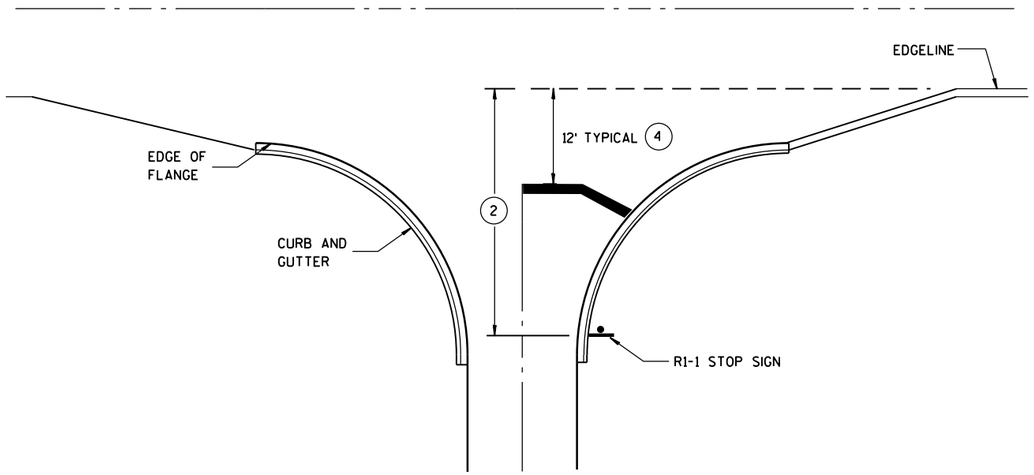
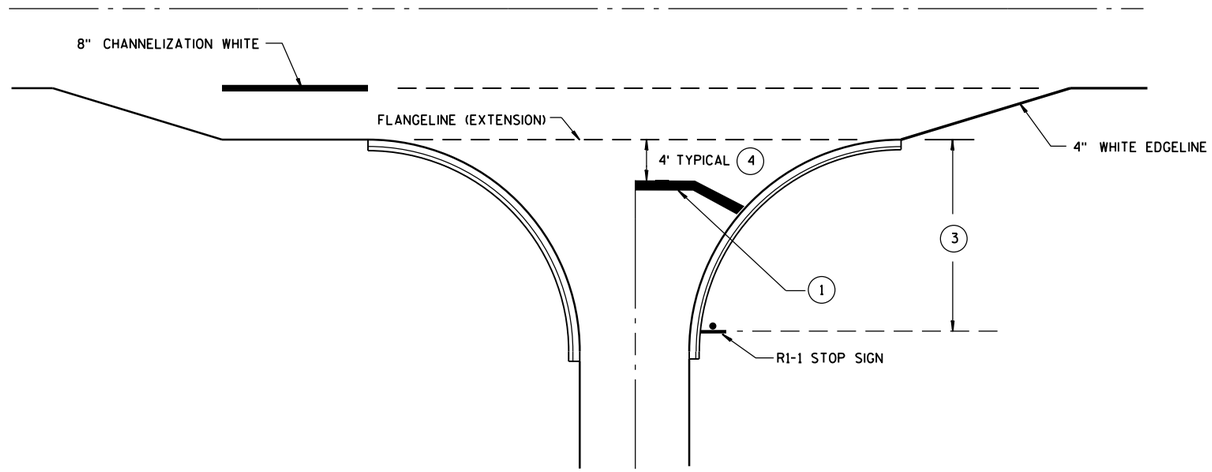
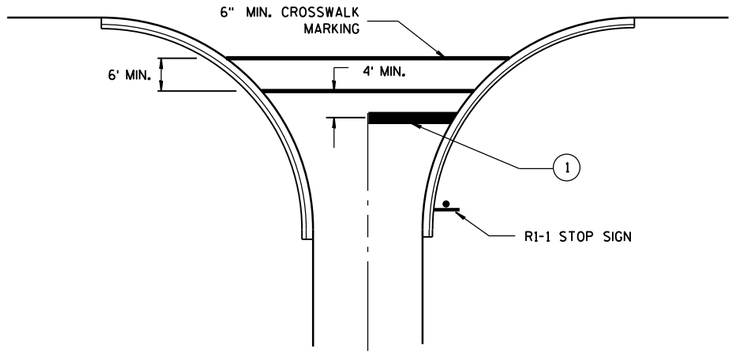
S.D.D. 15 C 31-2c



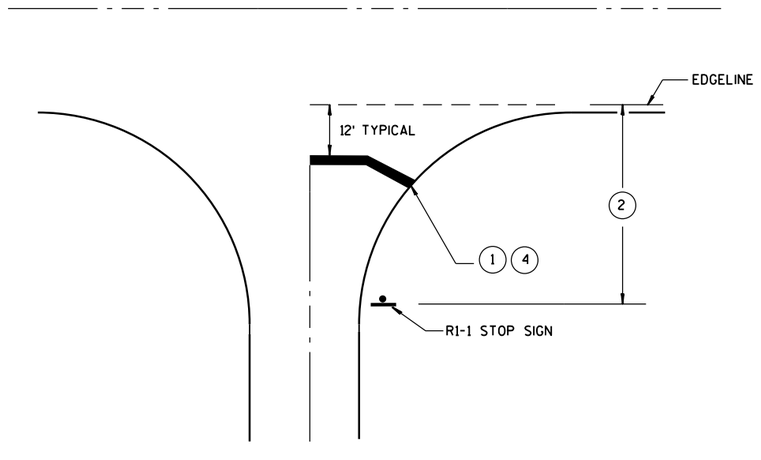
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 405 NEER

FHWA

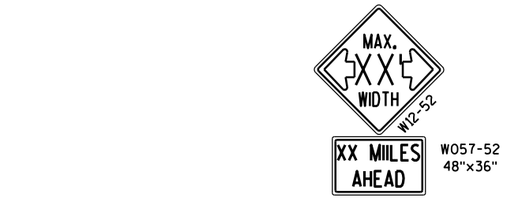
6

S.D.D. 15 C 33-2

LEGEND

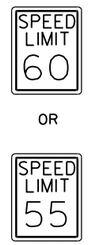
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- REMOVING PAVEMENT MARKING
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA

L, TAPER LENGTH (MPH)							
SPEED (MPH)	W, LATERAL OFFSET (FT)						
	10	11	12	13	14	15	16
45	450	495	540	585	630	675	720
50	500	550	600	650	700	750	800
55	550	605	660	715	770	825	880
60	600	660	720	780	840	900	960
65	650	715	780	845	910	975	1040
70	700	770	840	910	980	1050	1120



INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1 FOOT LESS THAN AVAILABLE WIDTH (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET).

LOCATED 2600 FEET IN ADVANCE OF R2-1 SIGN AND 500 FEET BEYOND THE "ROAD WORK 1 MILE" SIGN.



R2-1
48"x60"
(BLACK AND WHITE)
LOCATED 500 FEET BEYOND W20-5G SIGN.

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES.

* INCLUDE RESUME SPEED LIMIT SIGN A MINIMUM OF 200 FEET (500 FEET DESIRABLE) AFTER END ROAD WORK SIGNS.

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

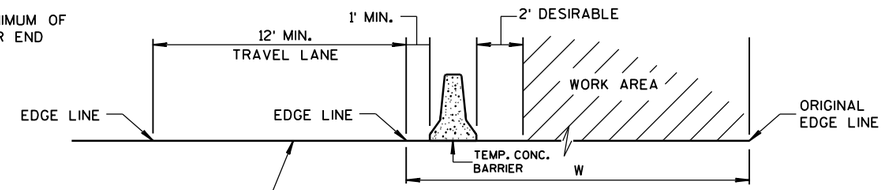
(1) CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUM TAPER.

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

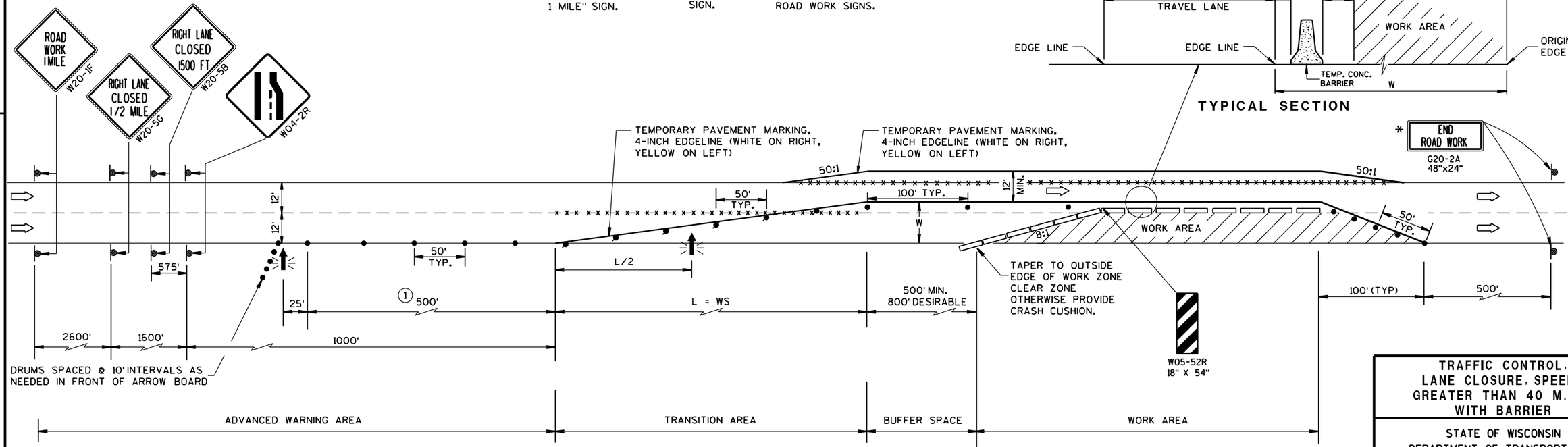
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.



TYPICAL SECTION



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZOI SAFETY ENGIN IC
FHWA

6

S.D.D. 15 D 3-4

6

S.D.D. 15 D 3-4

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

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

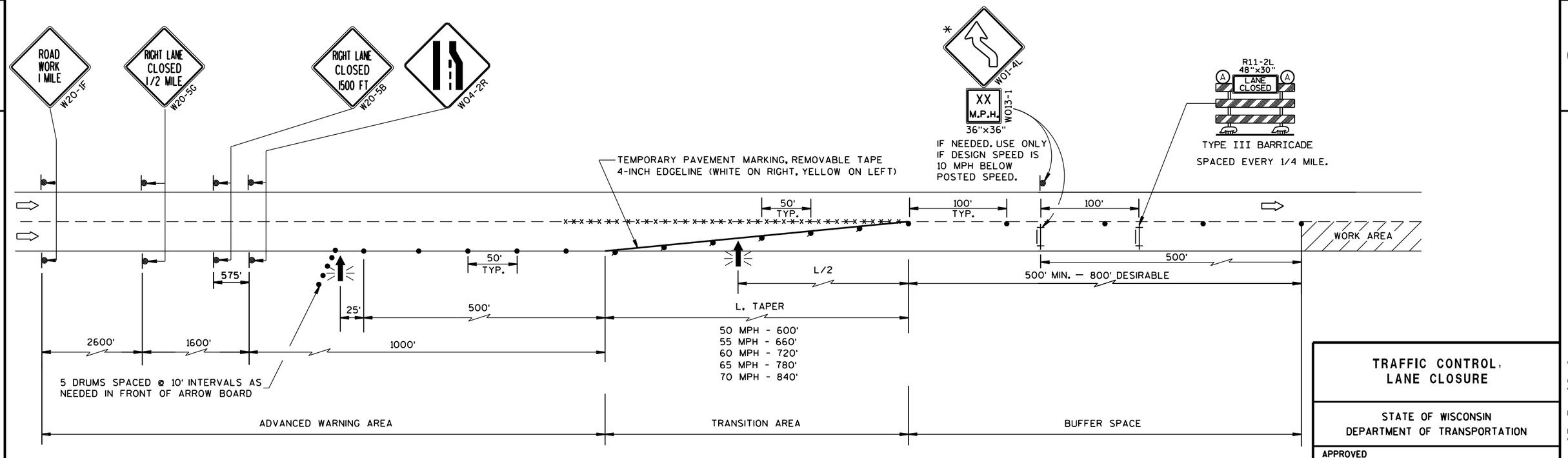
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

6

S.D.D. 15 D 12-6a

6

S.D.D. 15 D 12-6a

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"×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 AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

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

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

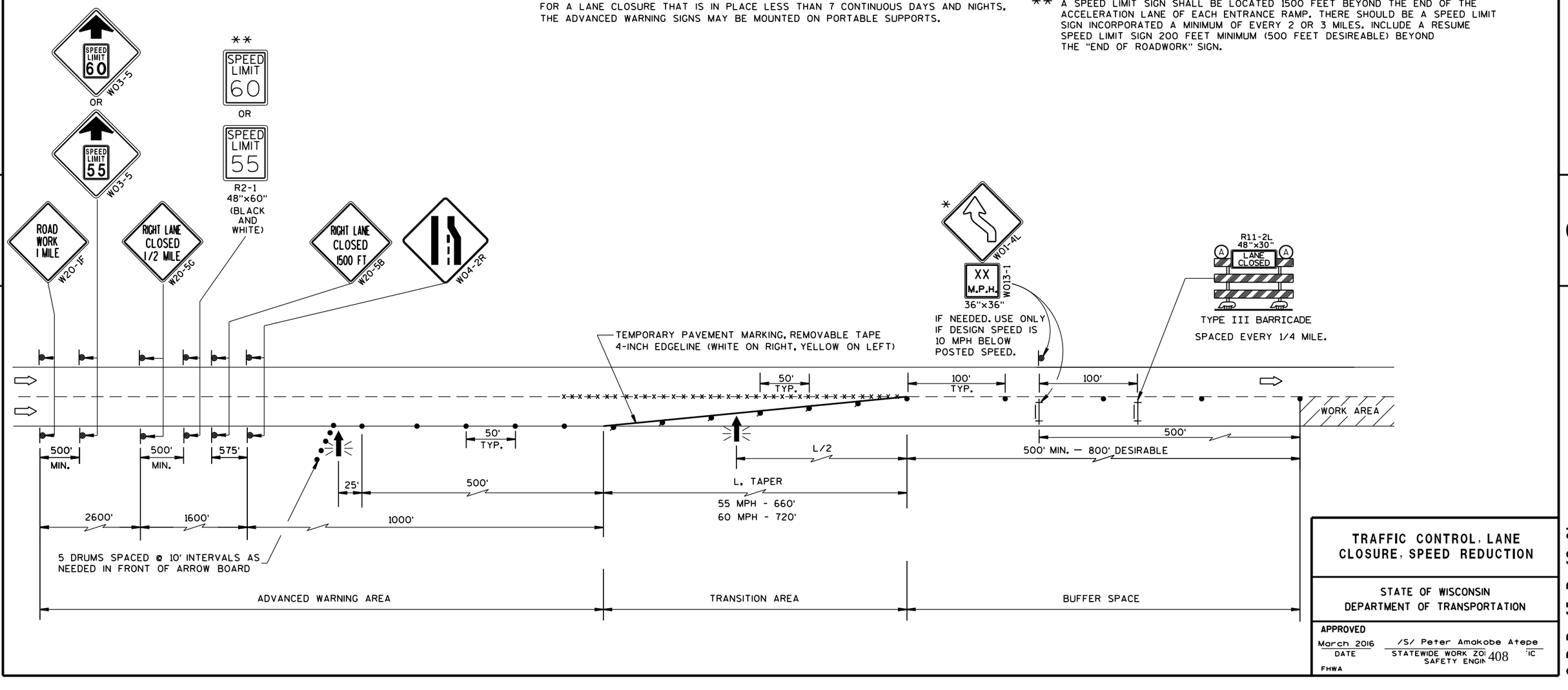
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

** A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.



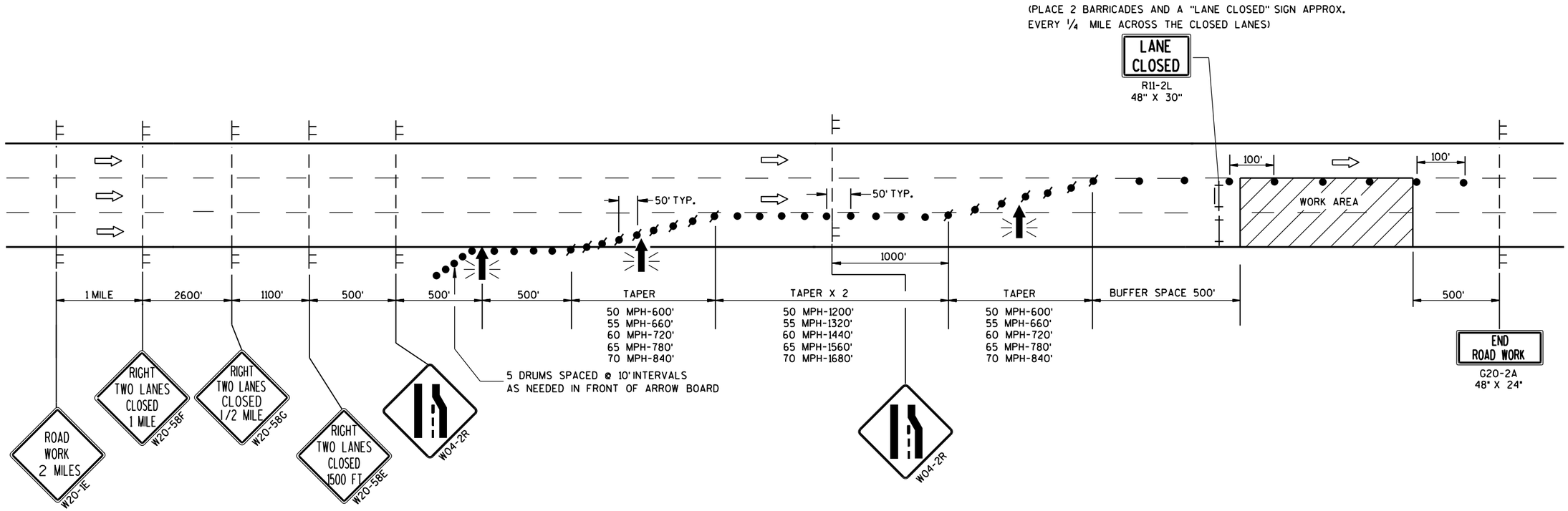
TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 D 12-6b



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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

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

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

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

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

W20-1E AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

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

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

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

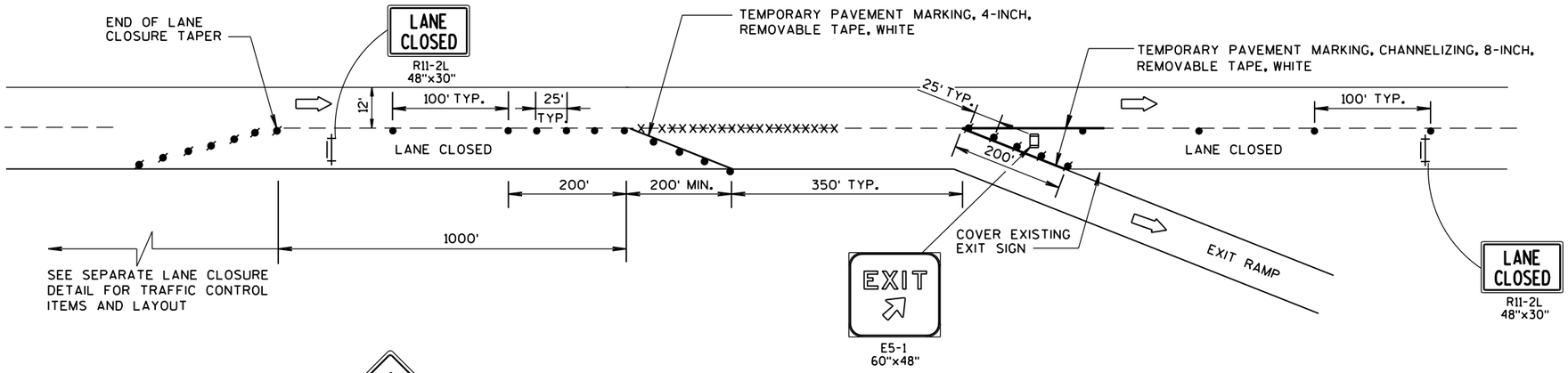
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT TERM (LESS THAN 24 HOURS)

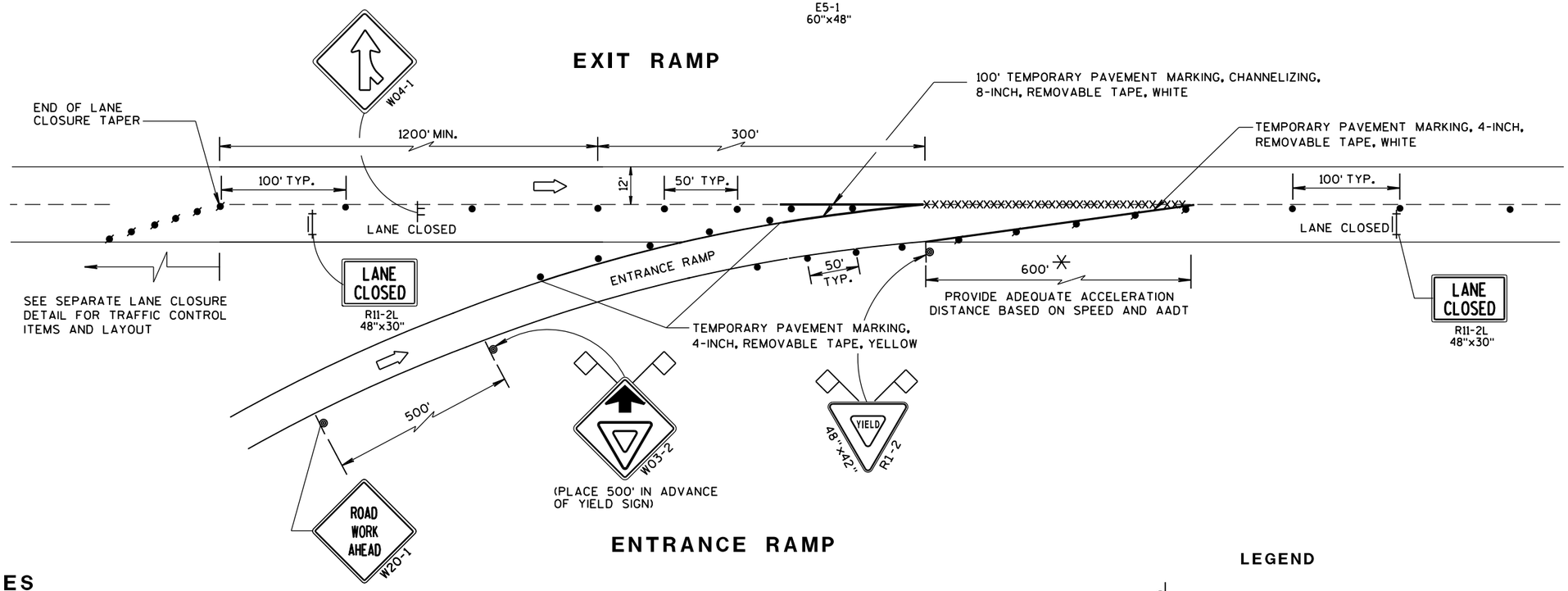
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 14, 2015 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6
S.D.D. 15 D 14-3



EXIT RAMP



ENTRANCE RAMP

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

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

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

* LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGS, 16" x 16" MIN., (ORANGE)
- DIRECTION OF TRAFFIC

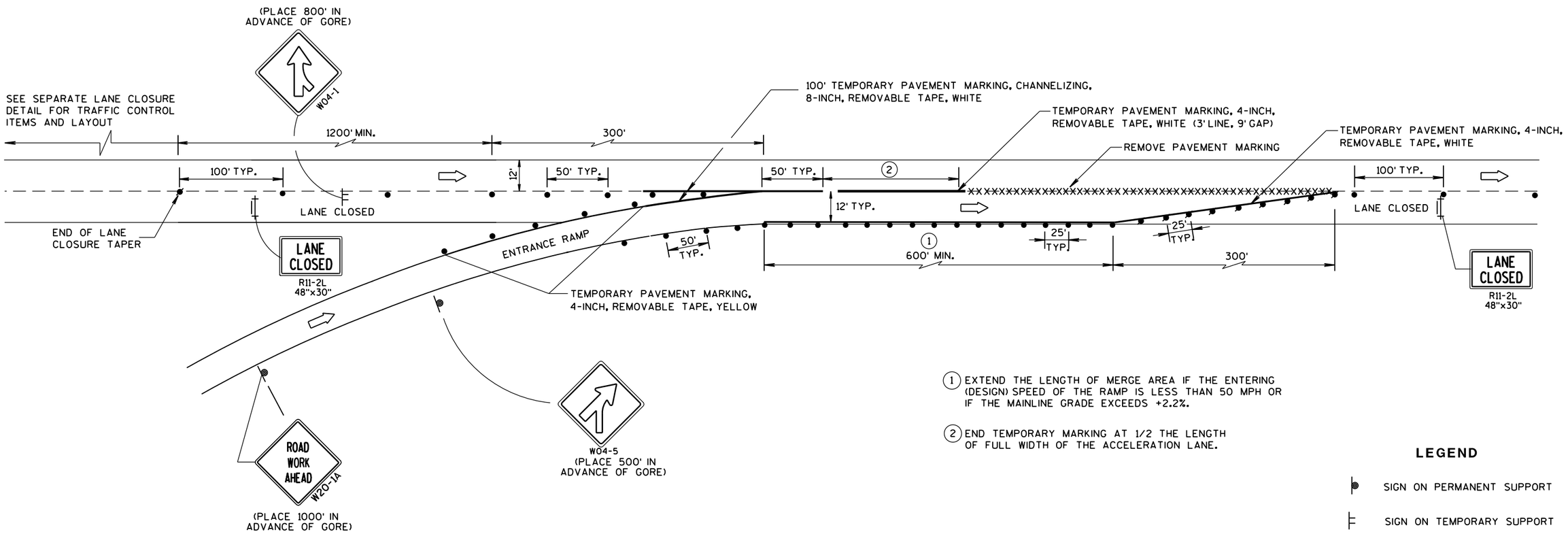
TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

6
S.D.D. 15 D 15-2

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE



1. EXTEND THE LENGTH OF MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS +2.2%.

2. END TEMPORARY MARKING AT 1/2 THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

PARALLEL ENTRANCE RAMP

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

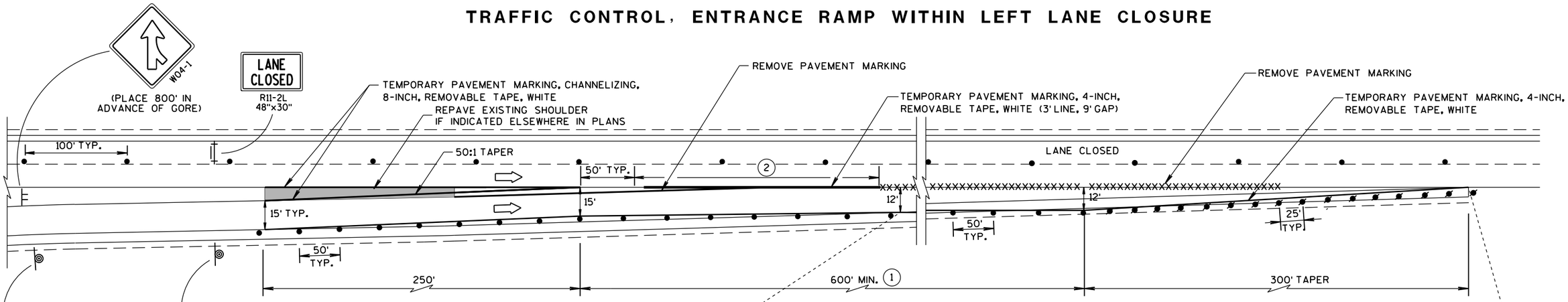
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017
DATE
/S/ Andrew Heldtke
WORK ZONE ENG
FHWA

6

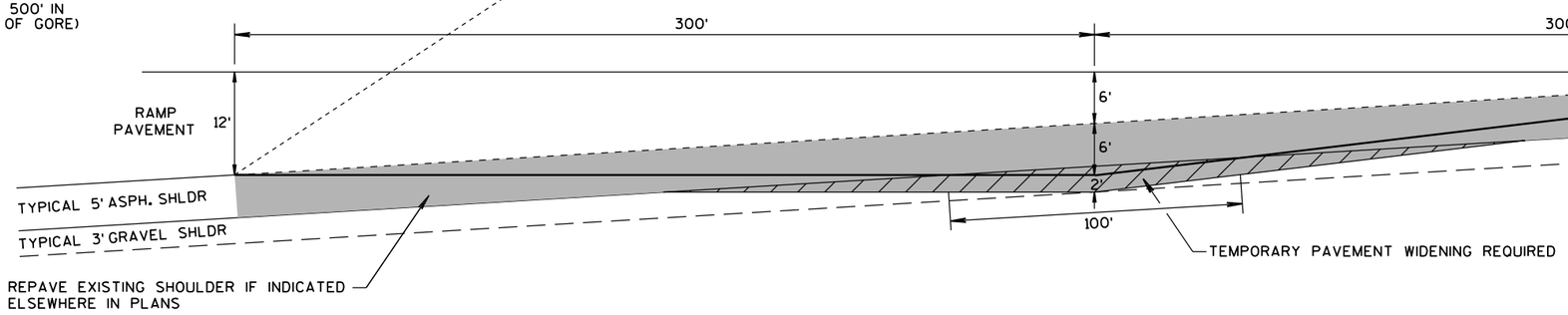
S.D.D. 15 D 15-3a

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LEFT LANE CLOSURE



(1) EXTEND THE LENGTH OF MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS +2.2%.

(2) END TEMPORARY MARKING AT 1/2 THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.



TEMPORARY PAVEMENT DETAIL

(EXISTING RAMP DIMENSIONS MAY VARY. ADJUST TEMPORARY PAVEMENT ACCORDINGLY)

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- XXXXX REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

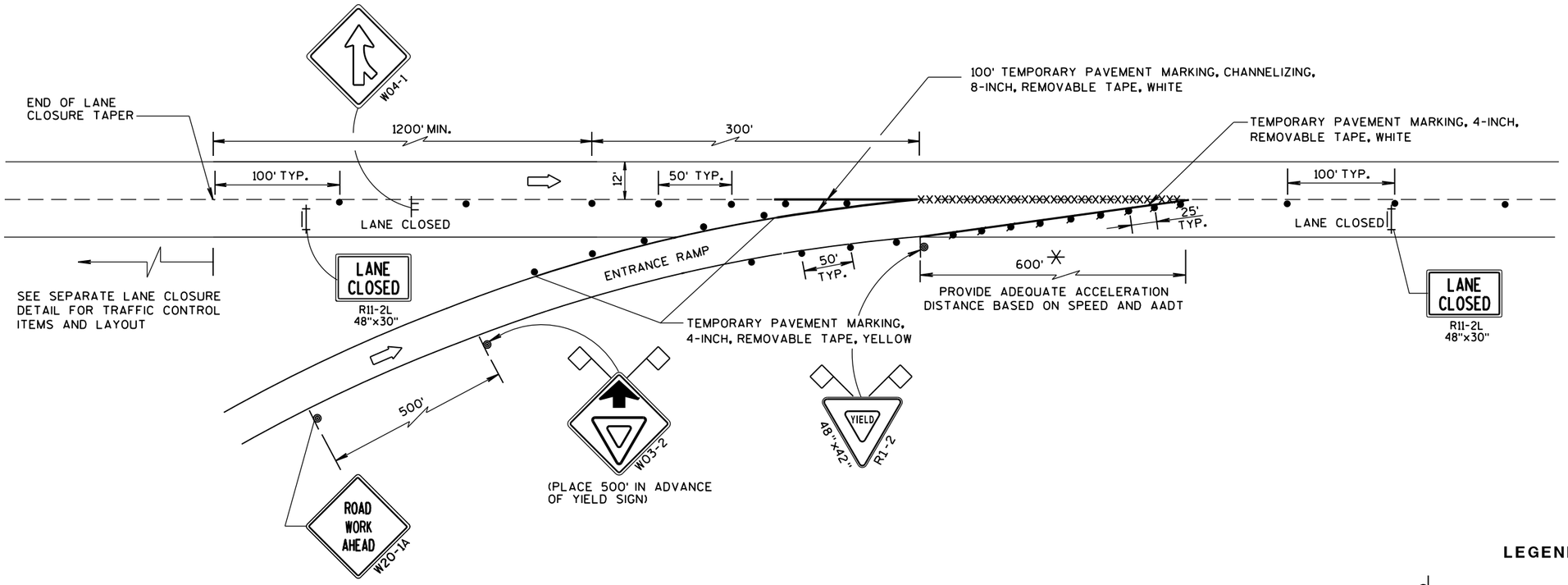
TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENG
FHWA

6

S.D.D. 15 D 15-3b



TAPERED ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGS, 16" x 16" MIN., (ORANGE)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

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

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

* CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Andrew Heidtke — WORK ZONE ENG
FHWA

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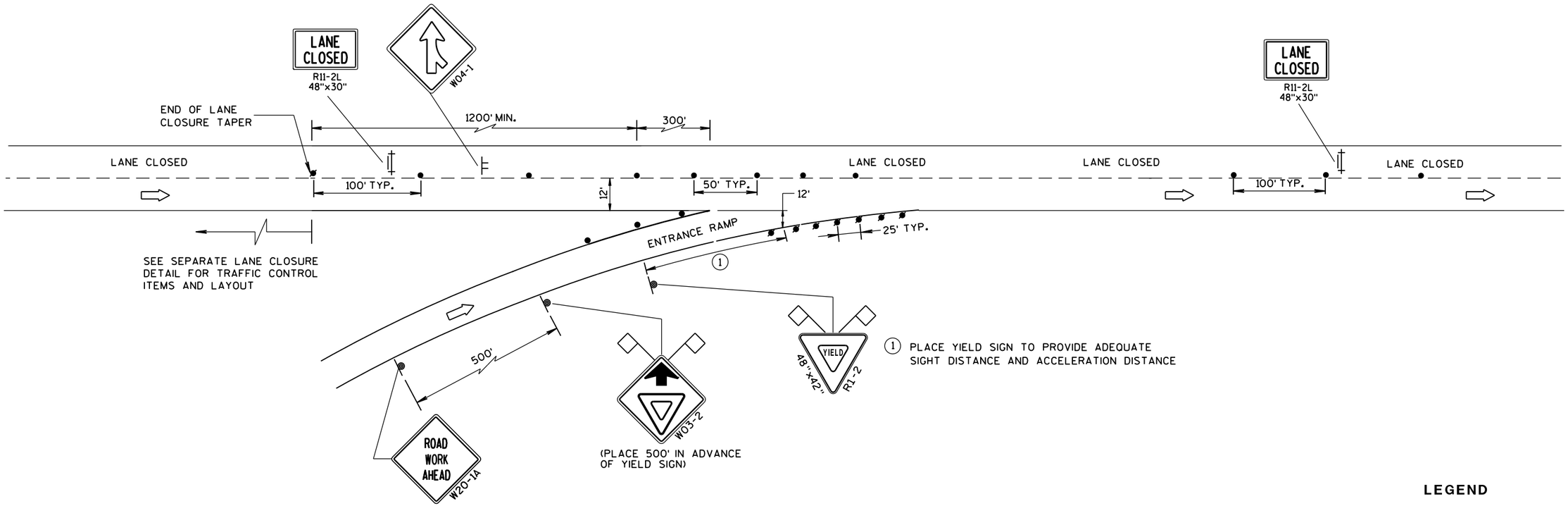

TAPERED ENTRANCE RAMP WITHIN LEFT LANE CLOSURE

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

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

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGS, 16" x 16" MIN., (ORANGE)
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Andrew Heidtke — WORK ZONE ENG
FHWA

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S.D.D. 15 D 15-3d

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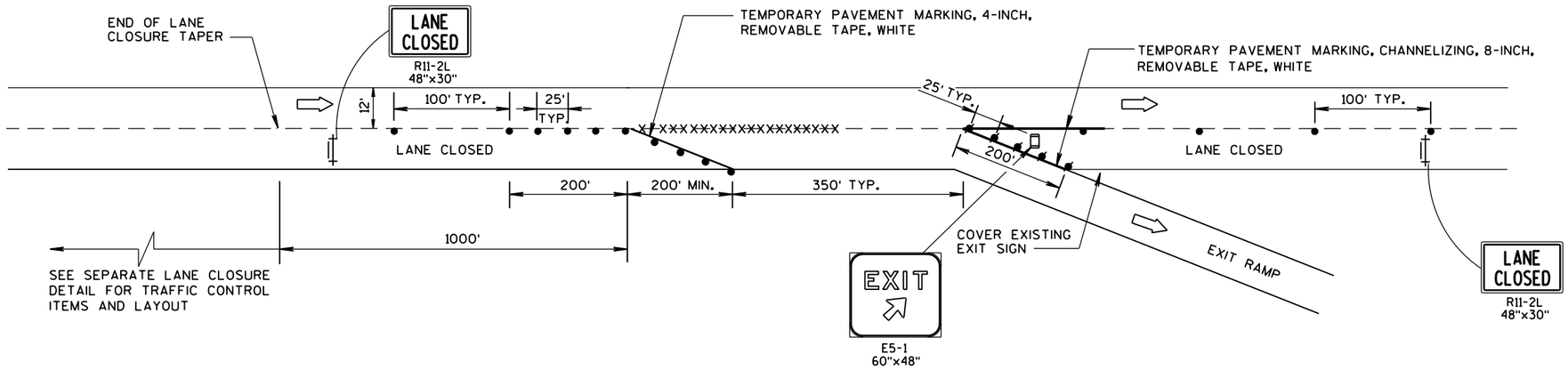

PARALLEL EXIT RAMP

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"W0" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

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

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- FLAGS, 16" x 16" MIN., (ORANGE)
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENG
FHWA

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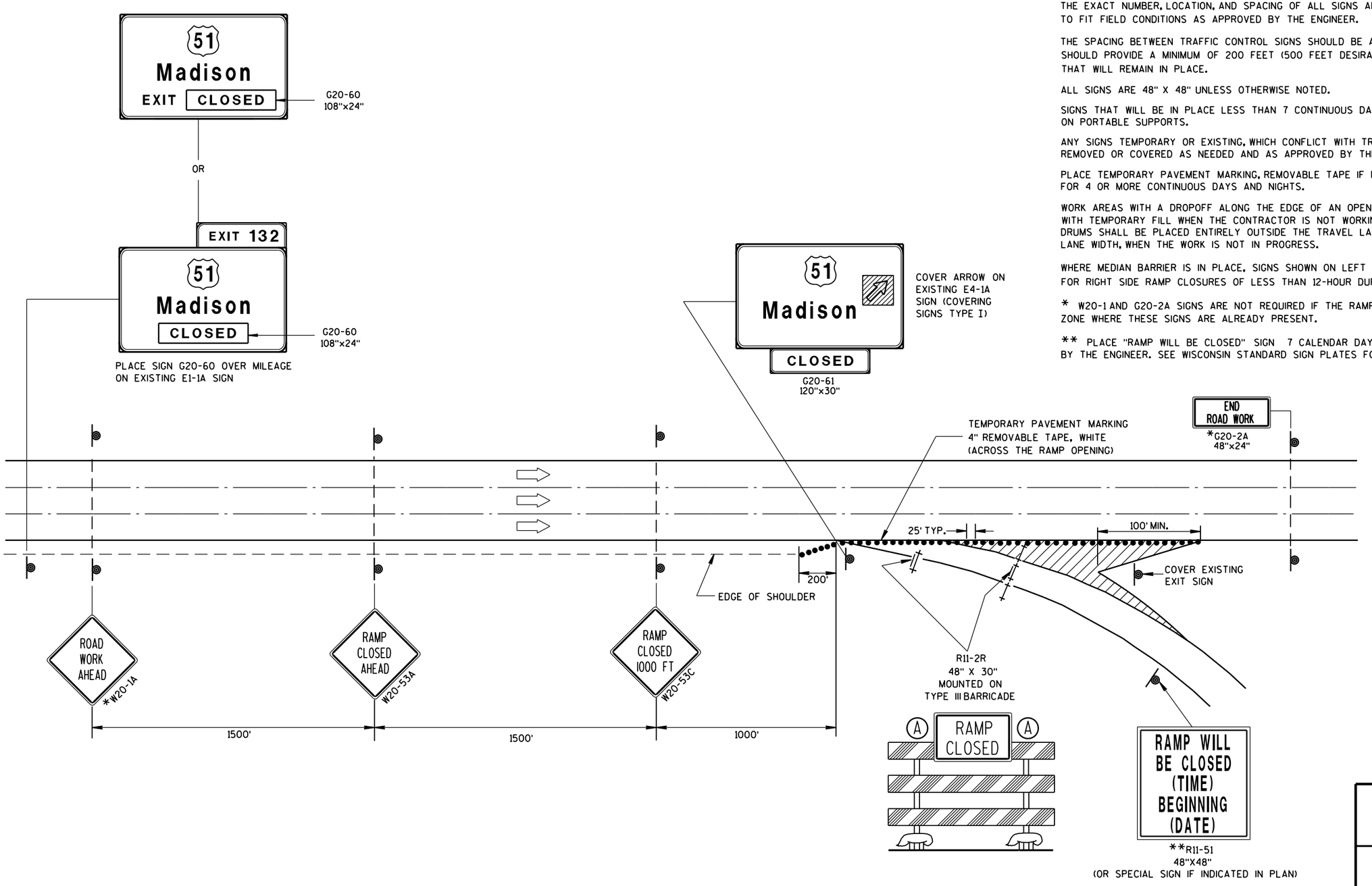

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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

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

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

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

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

PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

* W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** PLACE "RAMP WILL BE CLOSED" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI — FIC
FHWA

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LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

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

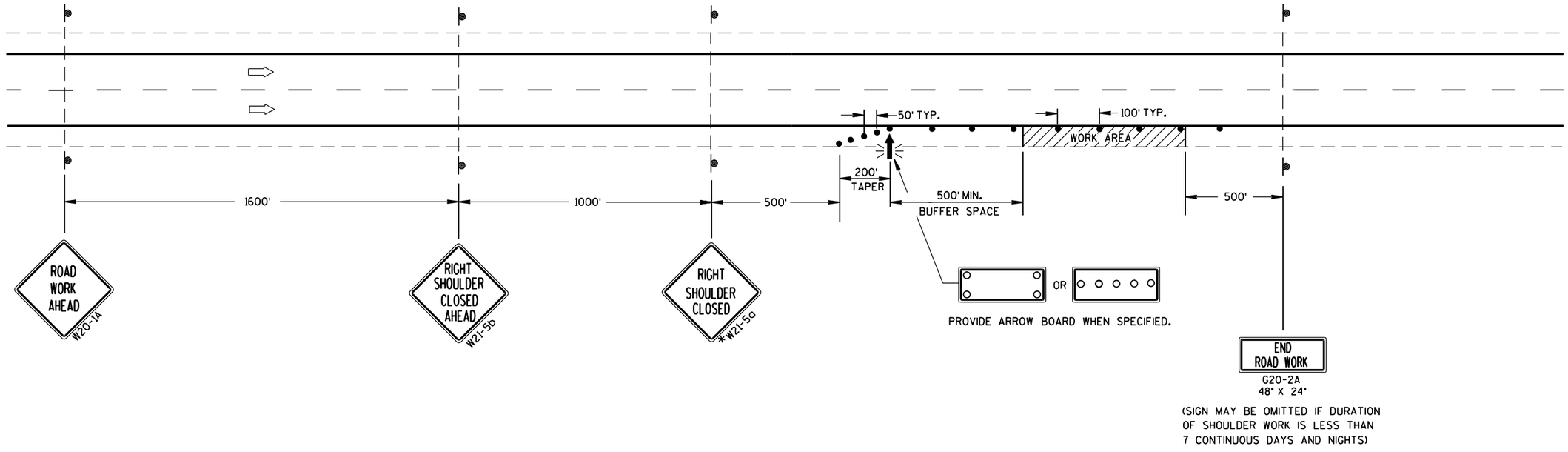
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

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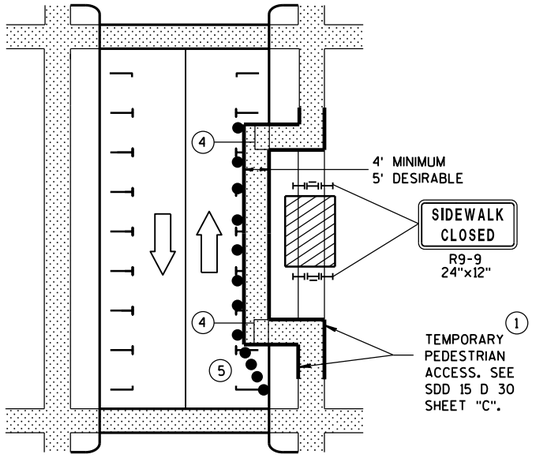
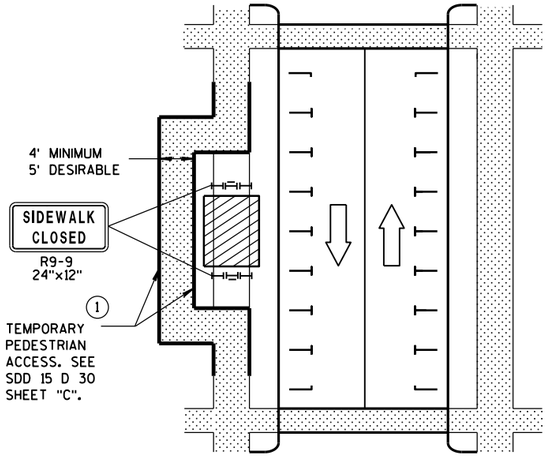
NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

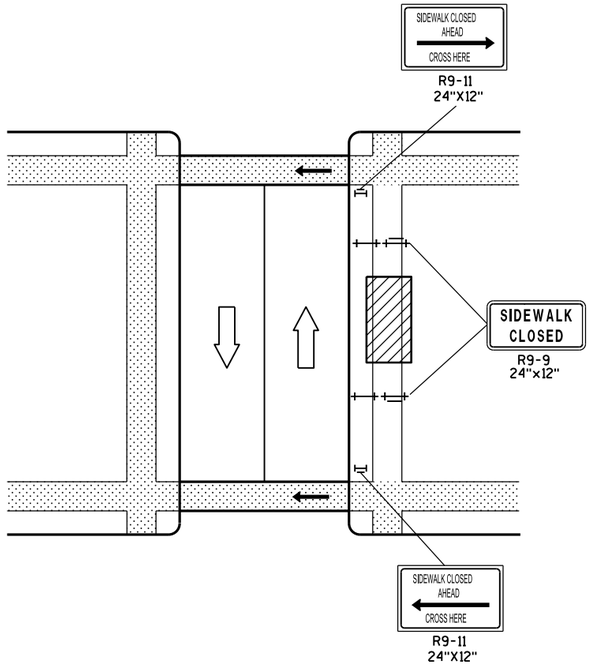


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

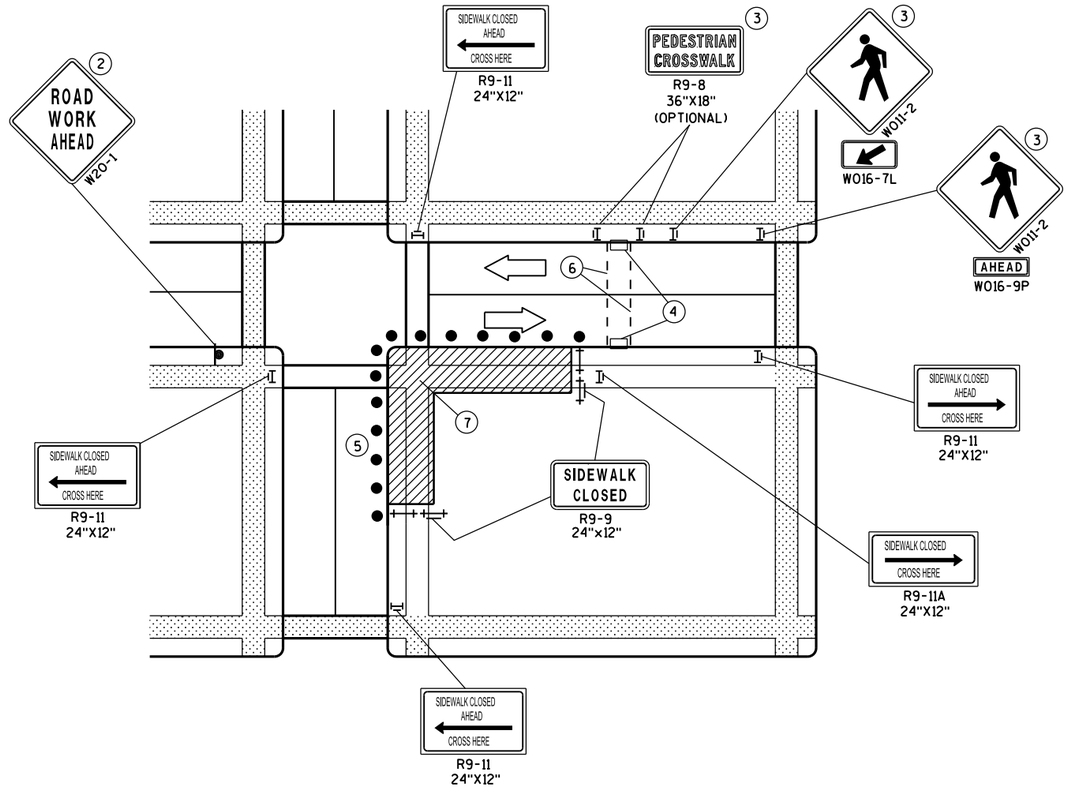
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

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

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

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

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 15 D 30-3a

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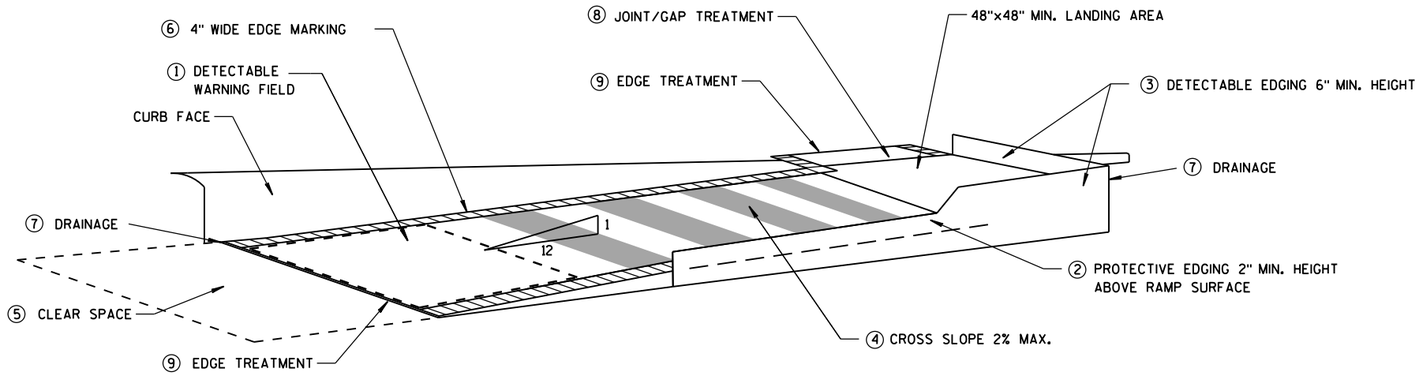


TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".

② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

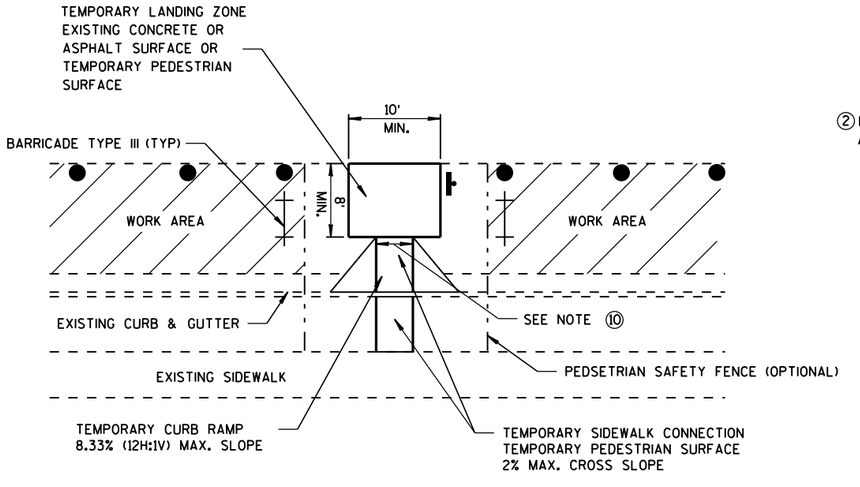
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

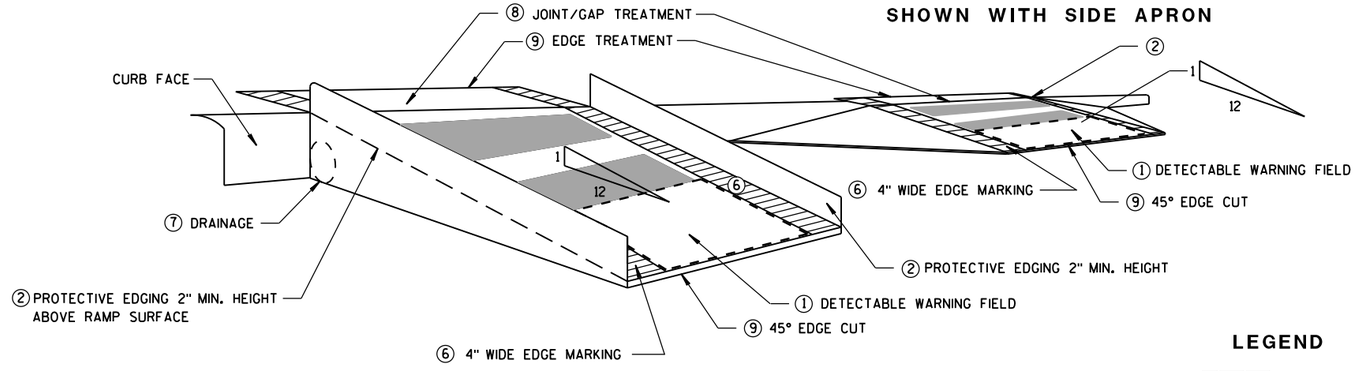
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

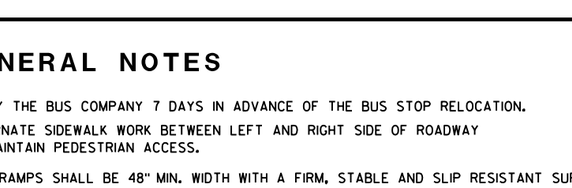
⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH PROTECTIVE EDGE



TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER

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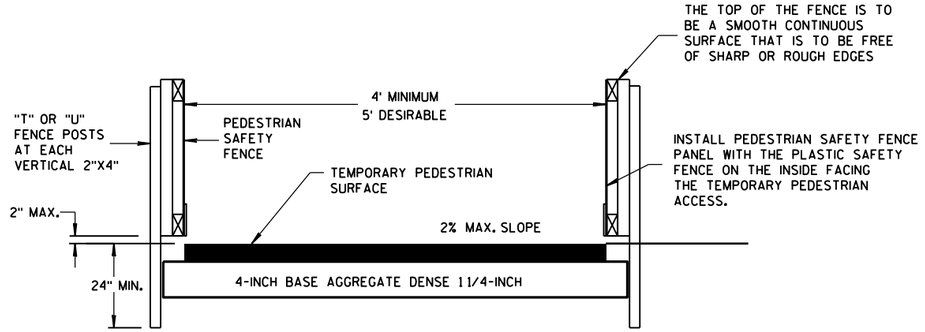
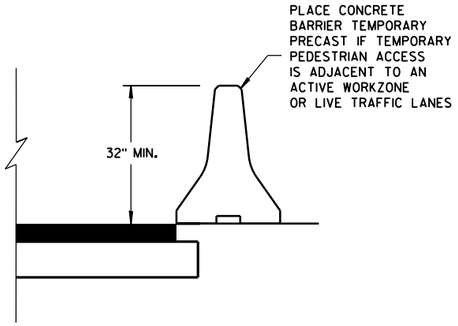
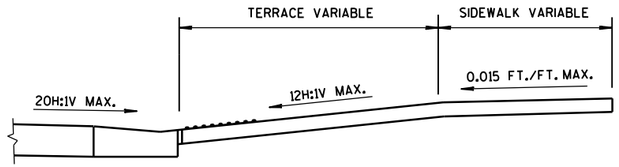




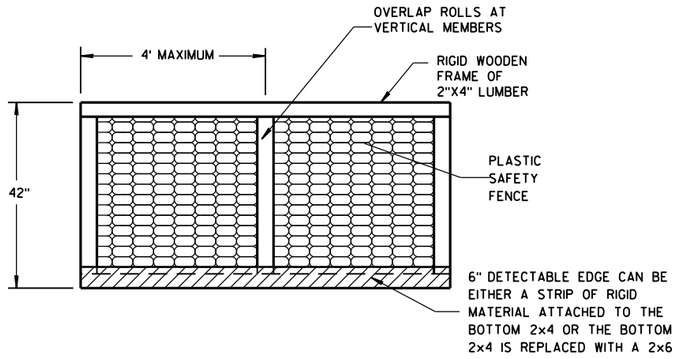
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

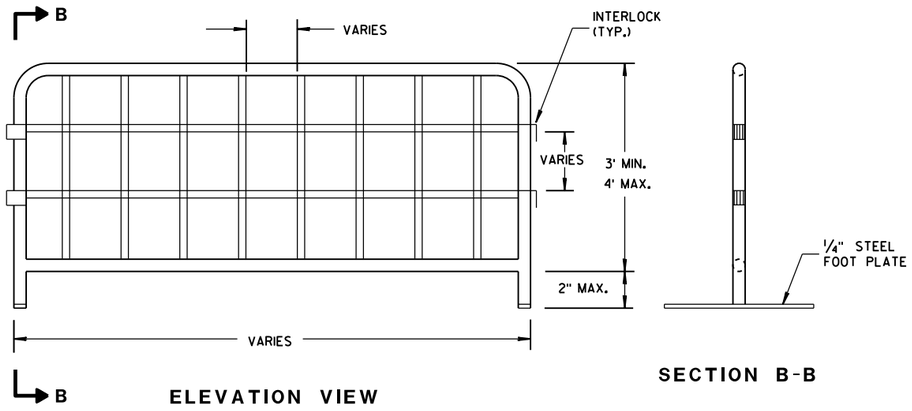
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



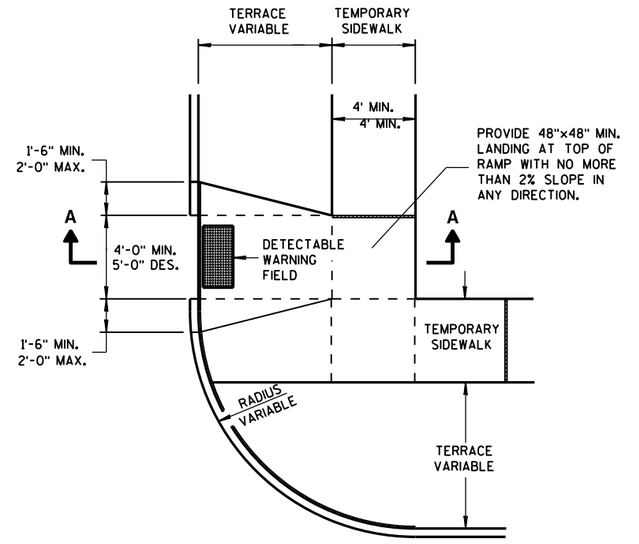
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

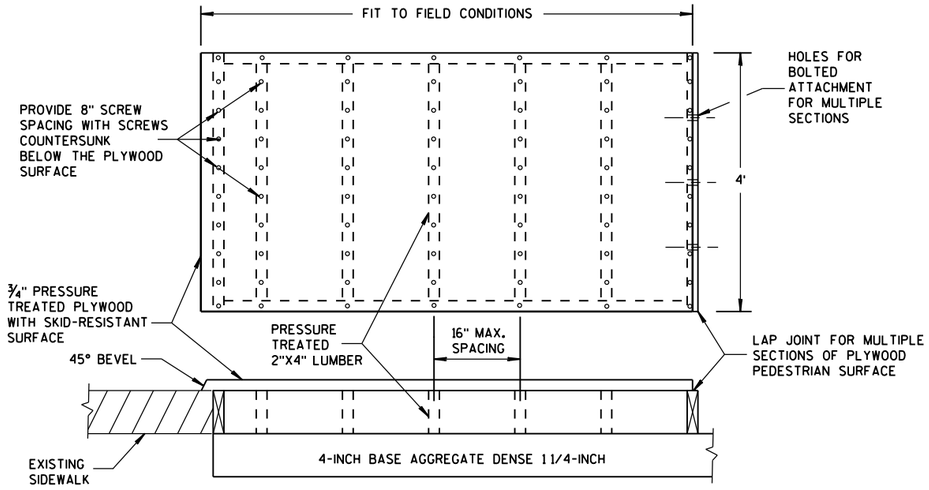
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



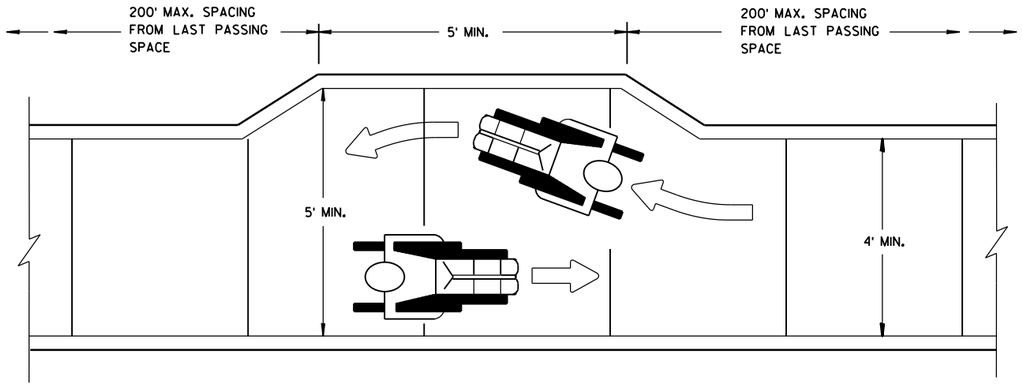
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

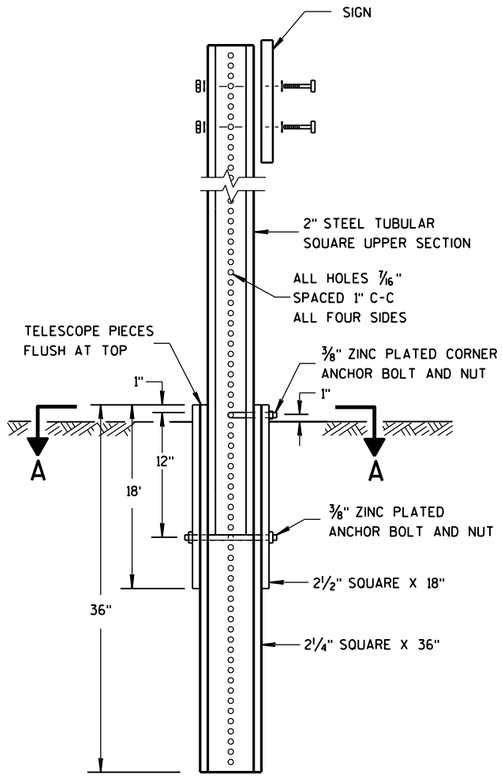
APPROVED
June 2016
DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON SAFETY ENGIN IC
FHWA

6

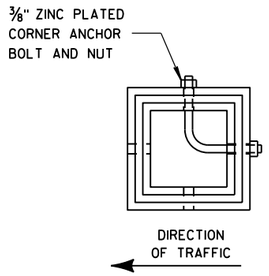
S.D.D. 15 D 30-3c

6

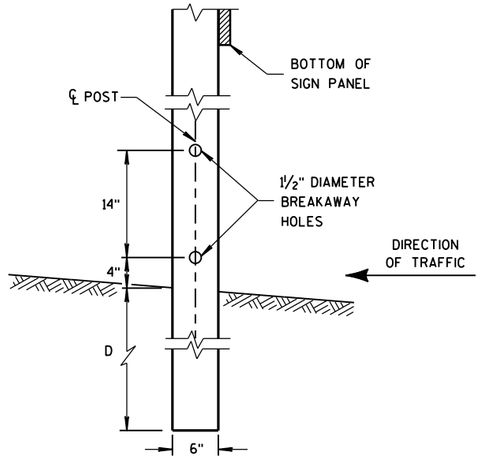
S.D.D. 15 D 30-3c



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



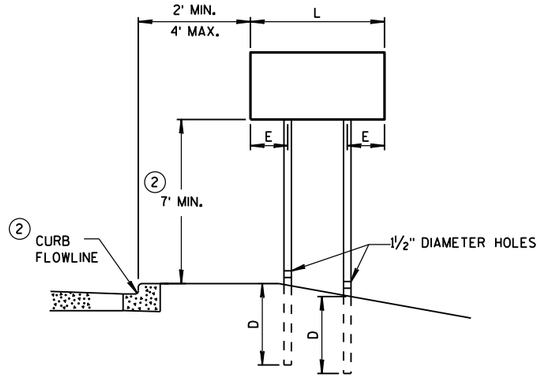
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

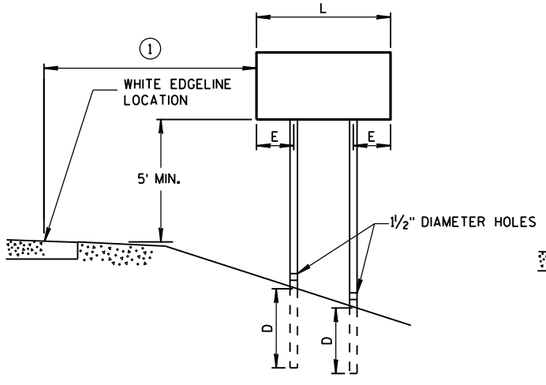
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

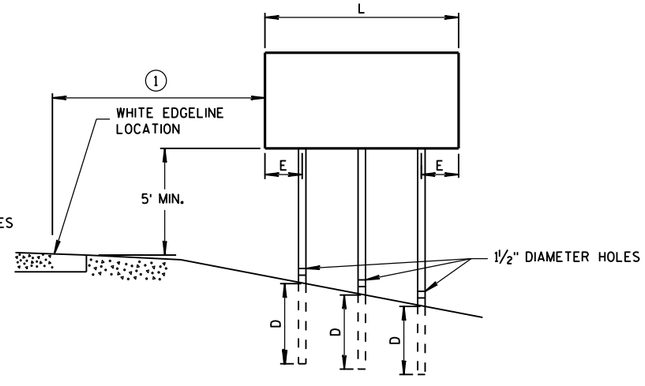
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

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

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

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

WOOD POST EMBEDMENT DEPTH

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

4" X 6" WOOD POST

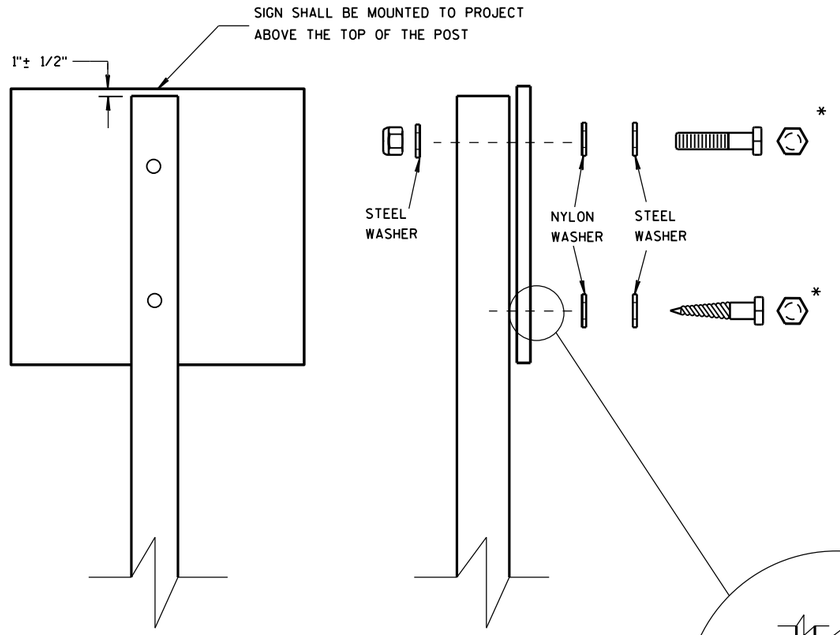
POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

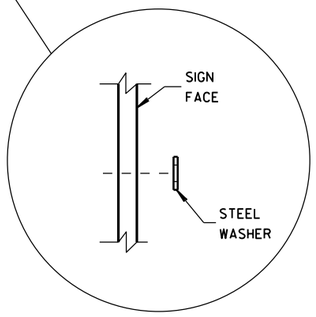
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

STATE OF WISCONSIN DEPARTMENT OF TRANSPO

6
S.D.D. 15 D 38-1a





WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

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

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

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

WASHERS (ALL POSTS) -

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

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

S.D.D. 15 D 38-1b

S.D.D. 15 D 38-1b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

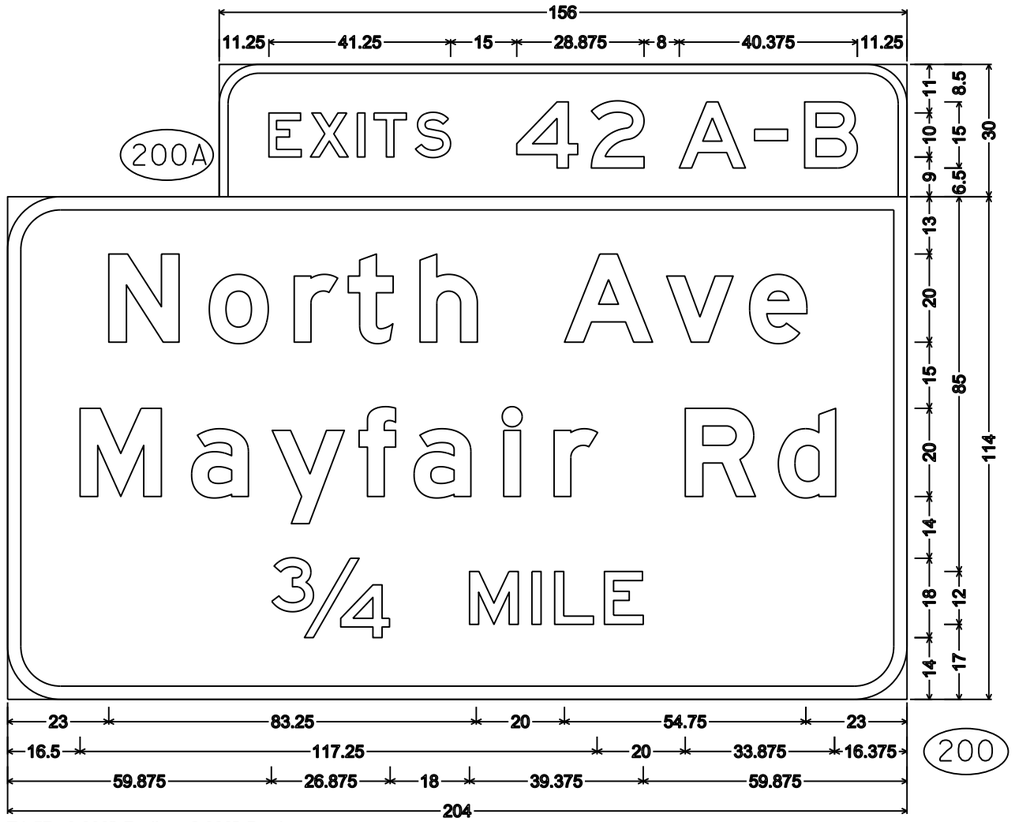
APPROVED

Feb. 2015 — DATE

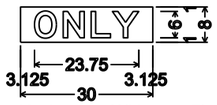
/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

SIGN



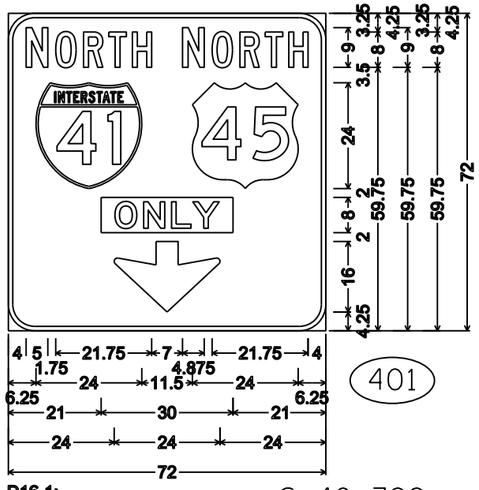
E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border



No border, White on Fluorescent yellow;
"ONLY" Black E;

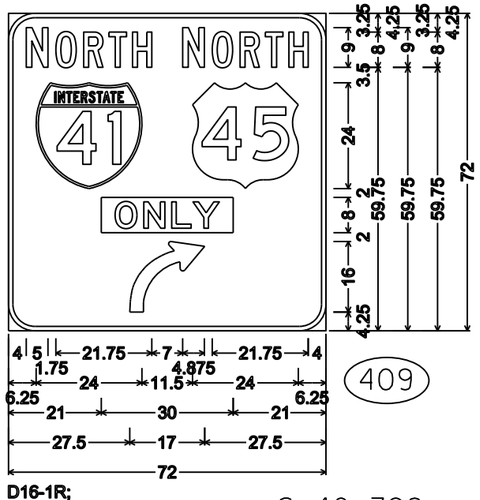
NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E or as noted
4. Exit Only Planel and Only Plaque are on Yellow Type F Reflective Sheeting with Black Non-Reflective Message
5. Only Plaques base material is .040" aluminum



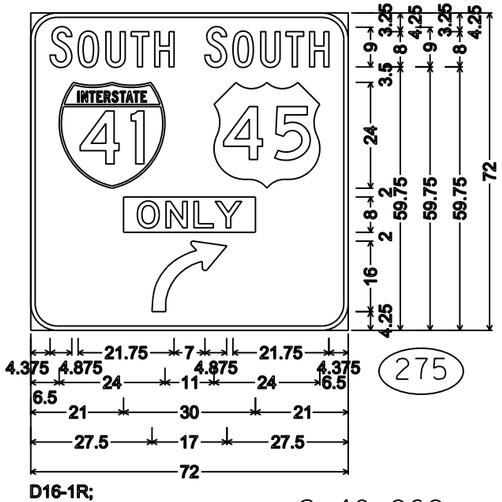
D16-1;
6.000" Radius, 1.000" Border,
"NORTH" C; "NORTH" C

S-40-799



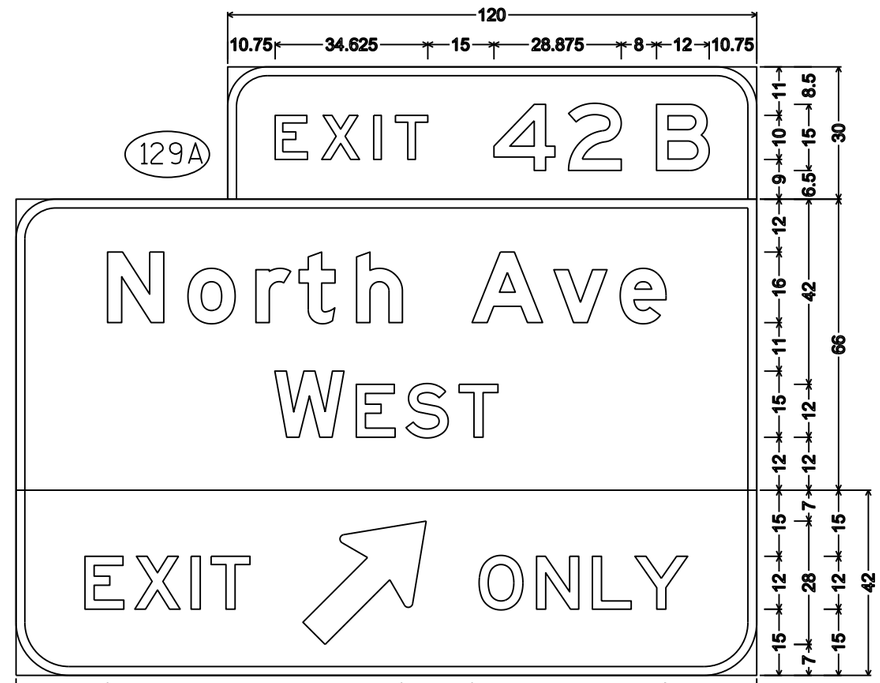
D16-1R;
6.000" Radius, 1.000" Border,
"NORTH" C; "NORTH" C

S-40-798



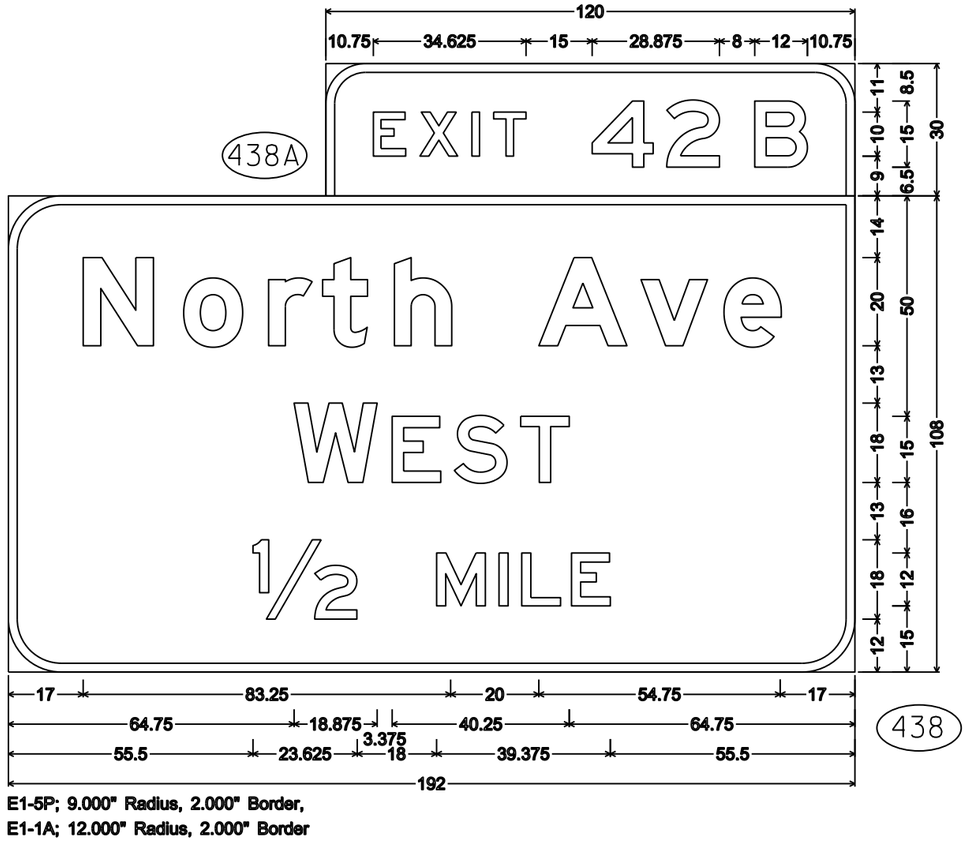
D16-1R;
6.000" Radius, 1.000" Border,
"SOUTH" C; "SOUTH" C

S-40-969



E1-5P; 9.000" Radius, 2.000" Border,
E6-1; 9.000" Radius, 2.000" Border,
E11-1D; 12.000" Radius, 2.000" Border, Black on Yellow

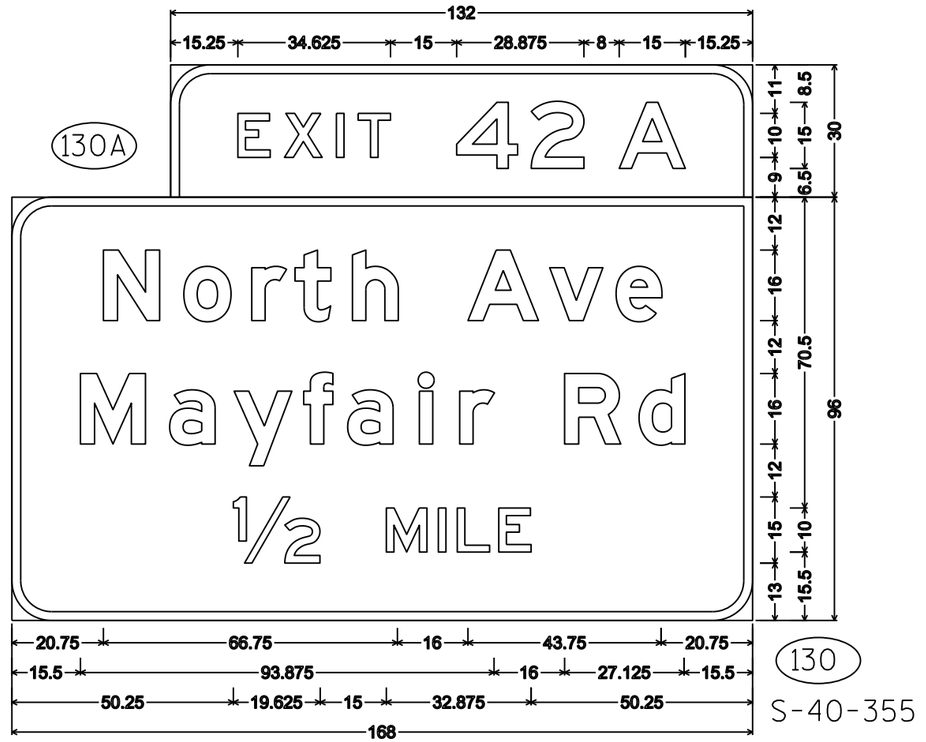
S-40-355



E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 2.000" Border

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



S-40-355

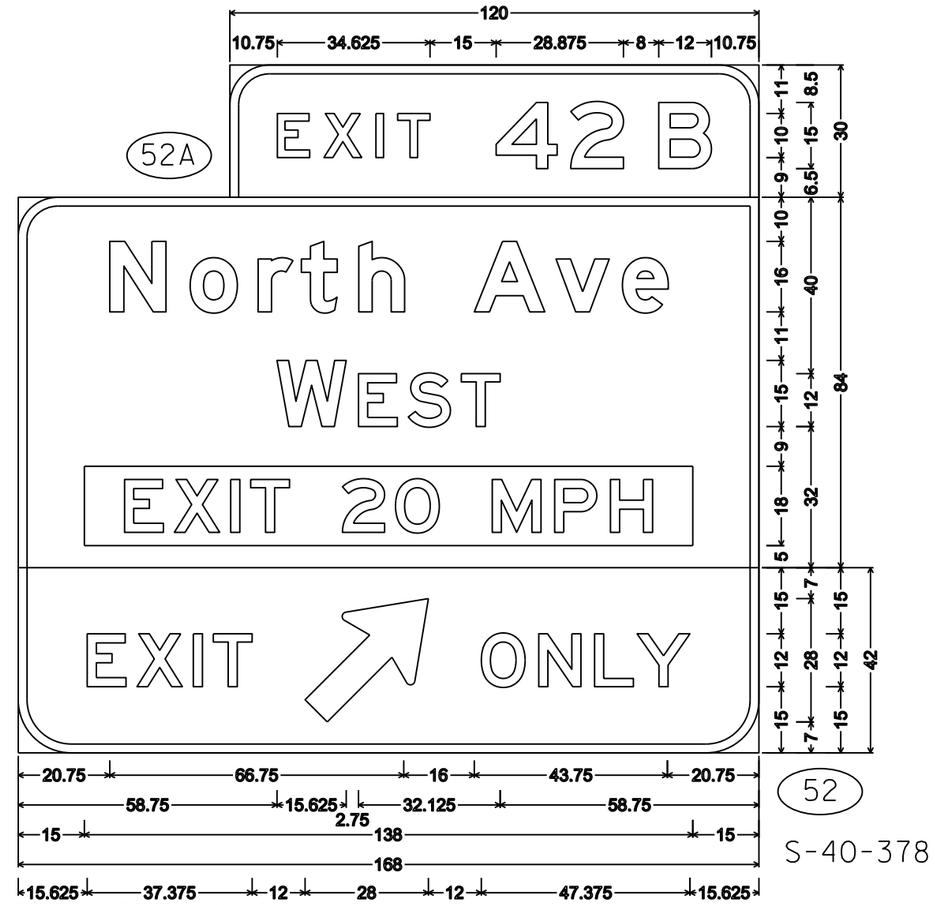
E1-5P; 9.000" Radius, 2.000" Border,
E6-51; 9.000" Radius, 2.000" Border

7

7

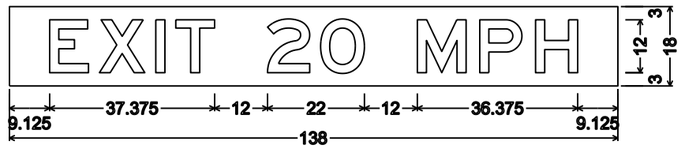
NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E
4. EXIT ONLY Panel on Yellow Type F Reflective Sheeting
   with Black Non-Reflective Message
5. Speed Plaque base material is .040" aluminum

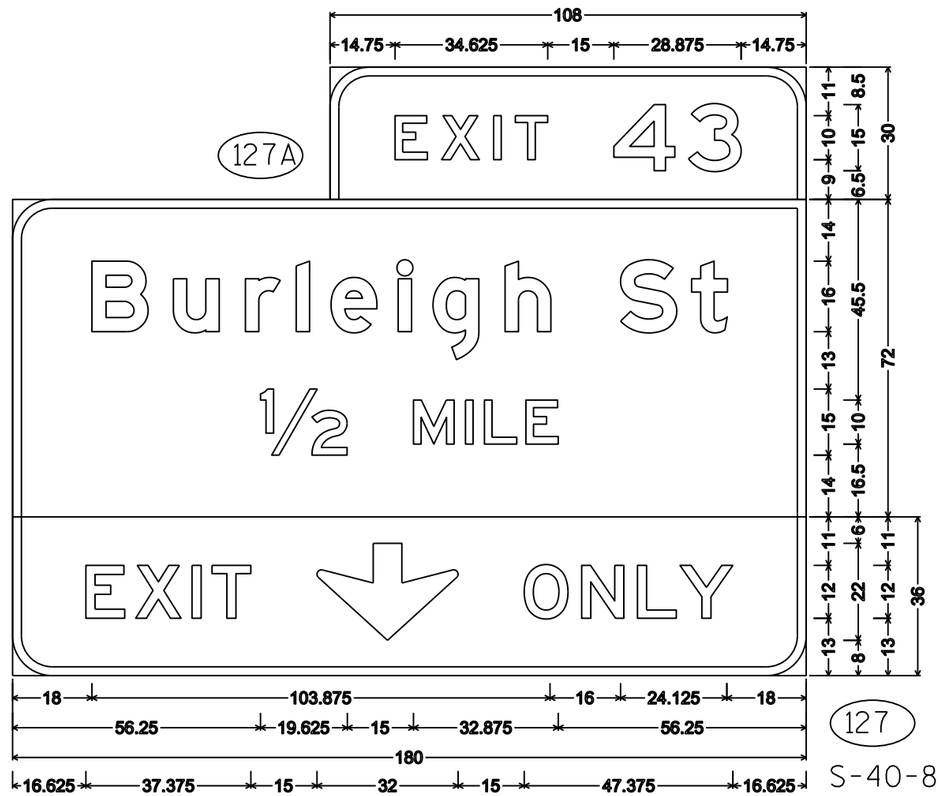


S-40-378

E1-5P; 9.000" Radius, 2.000" Border,
E6-1; 9.000" Radius, 2.000" Border,
E11-1D; 12.000" Radius, 2.000" Border, Black on Yellow



No border, Black on Yellow;
"EXIT" E; "20" E; "MPH" E;



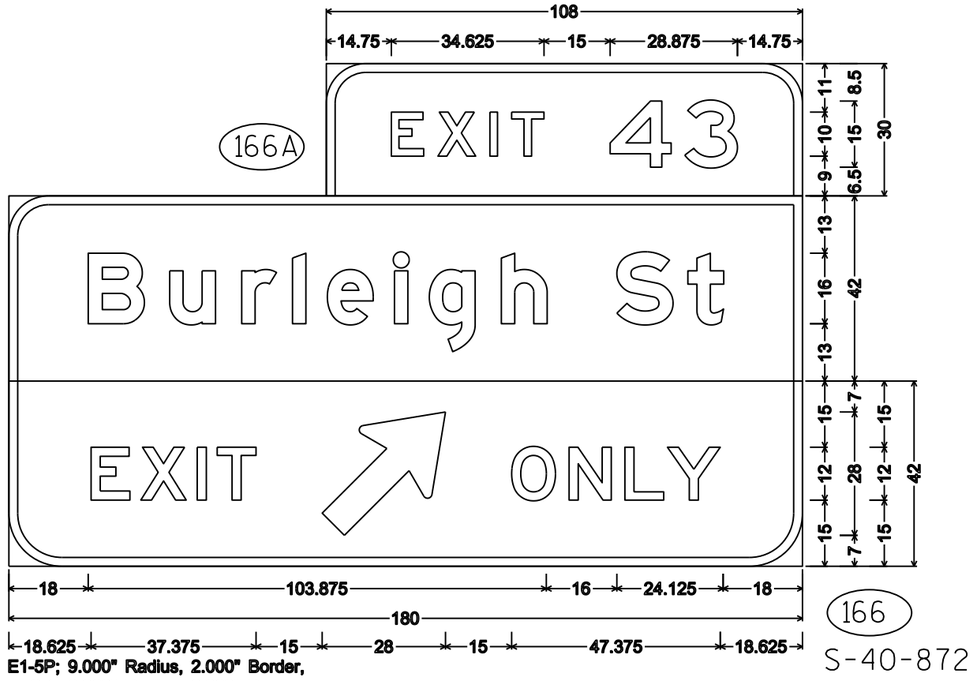
S-40-871

E1-5P; 9.000" Radius, 2.000" Border,
E6-51; 9.000" Radius, 2.000" Border,
E11-1; 9.000" Radius, 2.000" Border, Black on Yellow

7

7

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET NO: 425	E

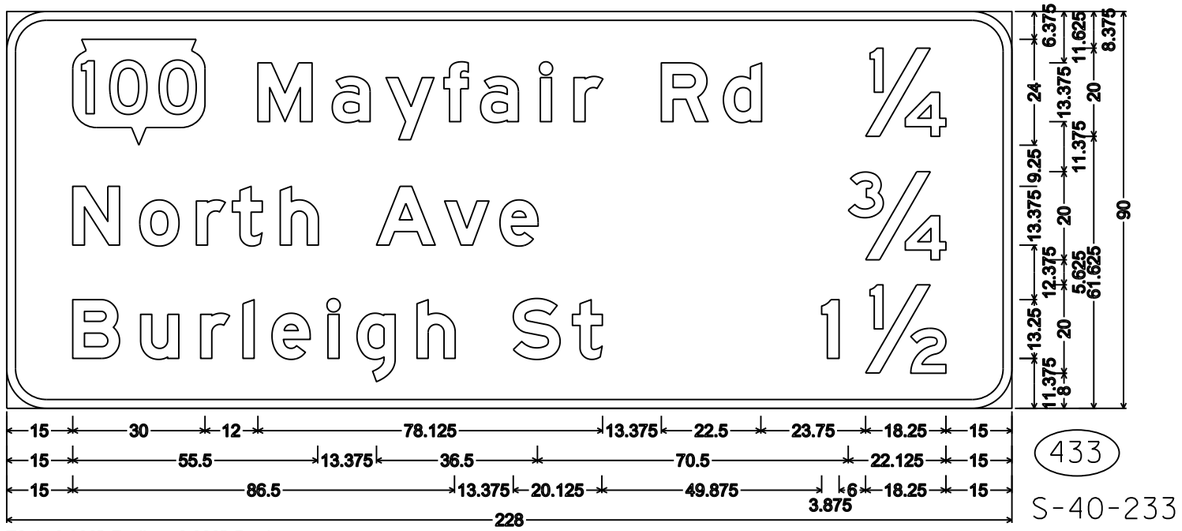


S-40-872

E1-5P; 9.000" Radius, 2.000" Border,
E6-1; 9.000" Radius, 2.000" Border,
E11-1D; 12.000" Radius, 2.000" Border, Black on Yellow

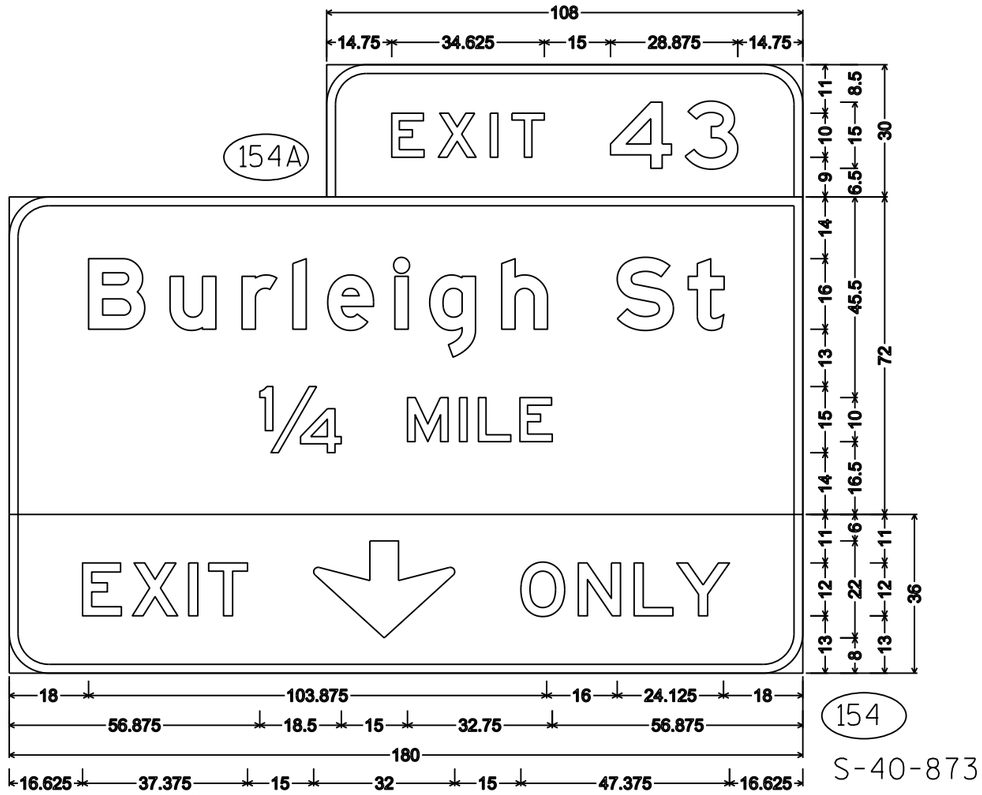
NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E
4. EXIT ONLY Panels on Yellow Type F Reflective Sheeting with Black Non-Reflective Message



S-40-233

E8-1; 9.000" Radius, 2.000" Border



S-40-873

E1-5P; 9.000" Radius, 2.000" Border,
E6-51; 9.000" Radius, 2.000" Border,
E11-1; 9.000" Radius, 2.000" Border, Black on Yellow;

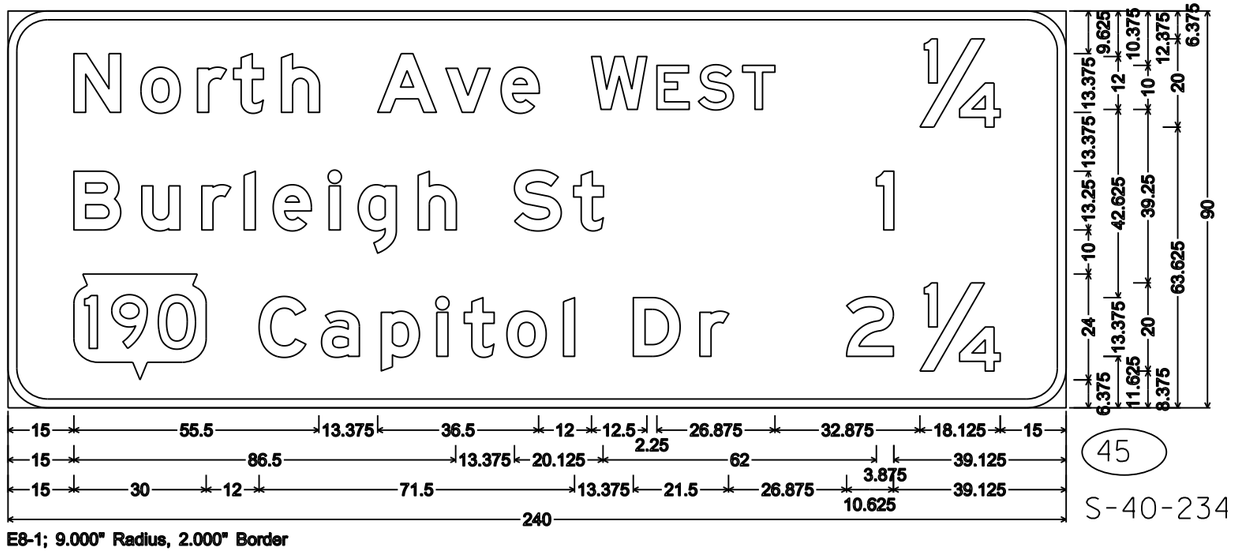
7

7

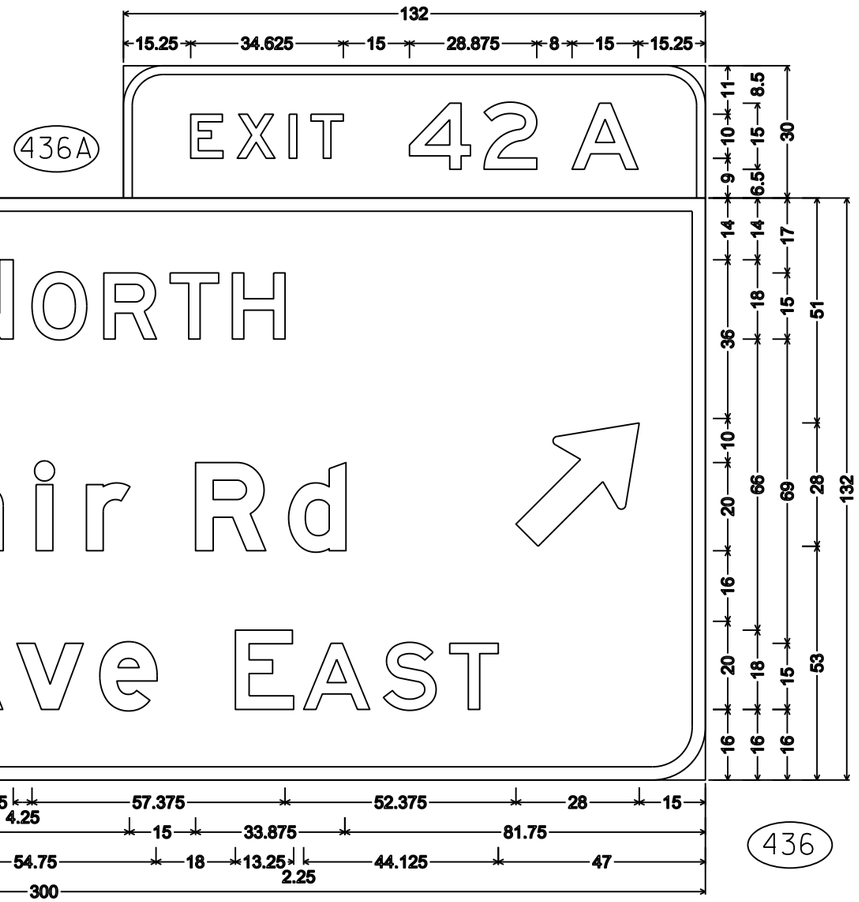
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET NO: 426	E

NOTES

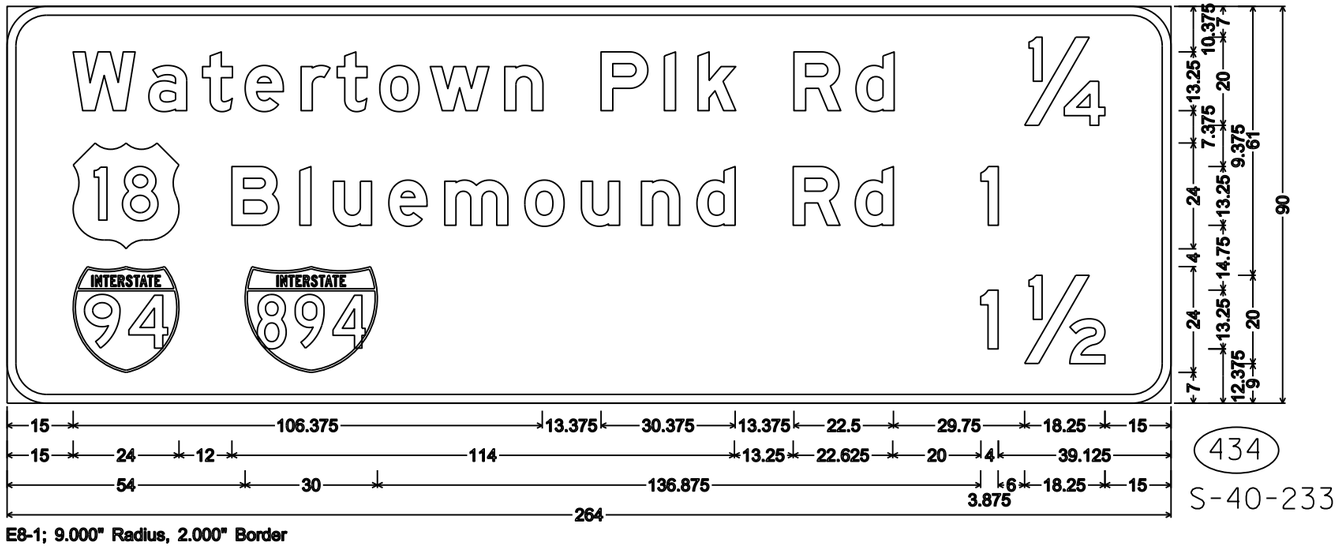
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



E8-1; 9.000" Radius, 2.000" Border



E1-5P; 9.000" Radius, 2.000" Border,
E4-1A; 12.000" Radius, 3.000" Border



434

S-40-233

E8-1; 9.000" Radius, 2.000" Border

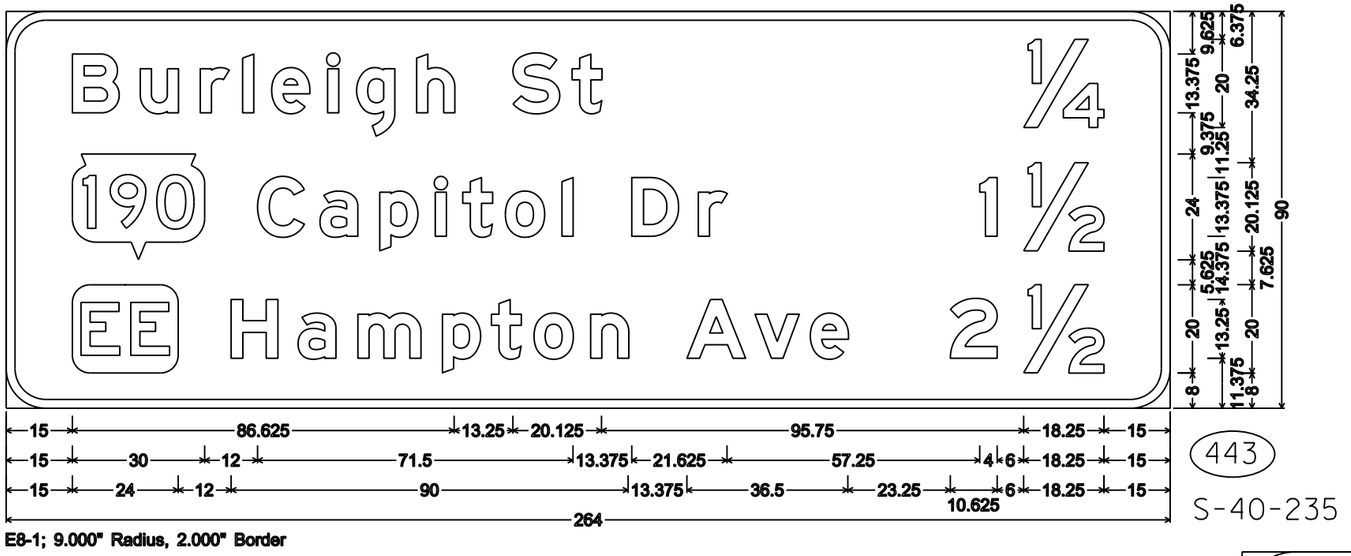
NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E

181

S-40-236

E8-1; 9.000" Radius, 2.000" Border



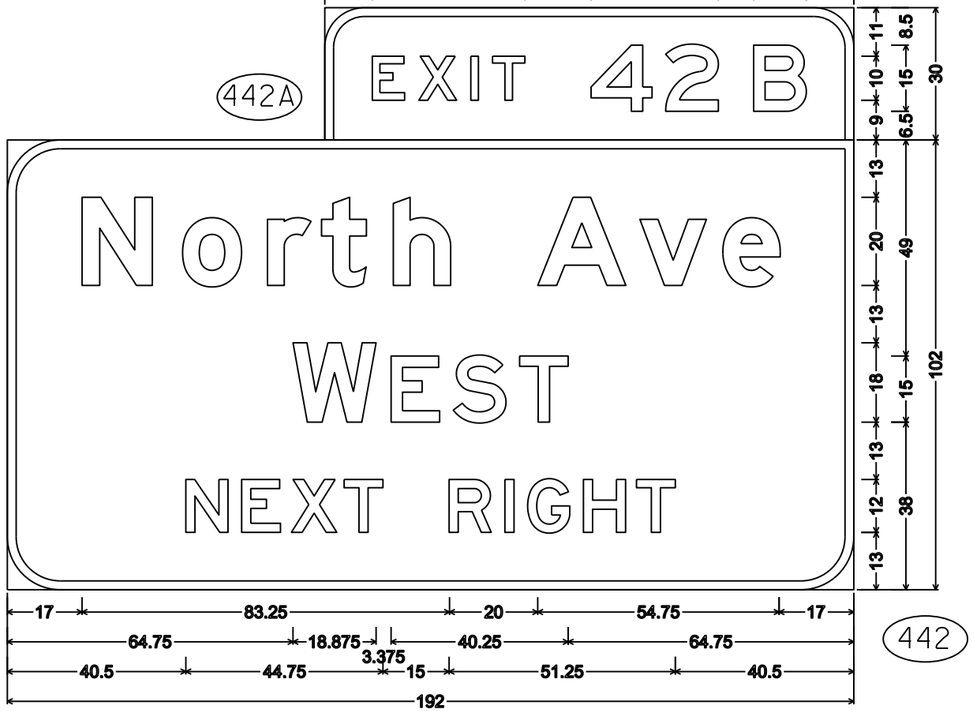
443

S-40-235

E8-1; 9.000" Radius, 2.000" Border

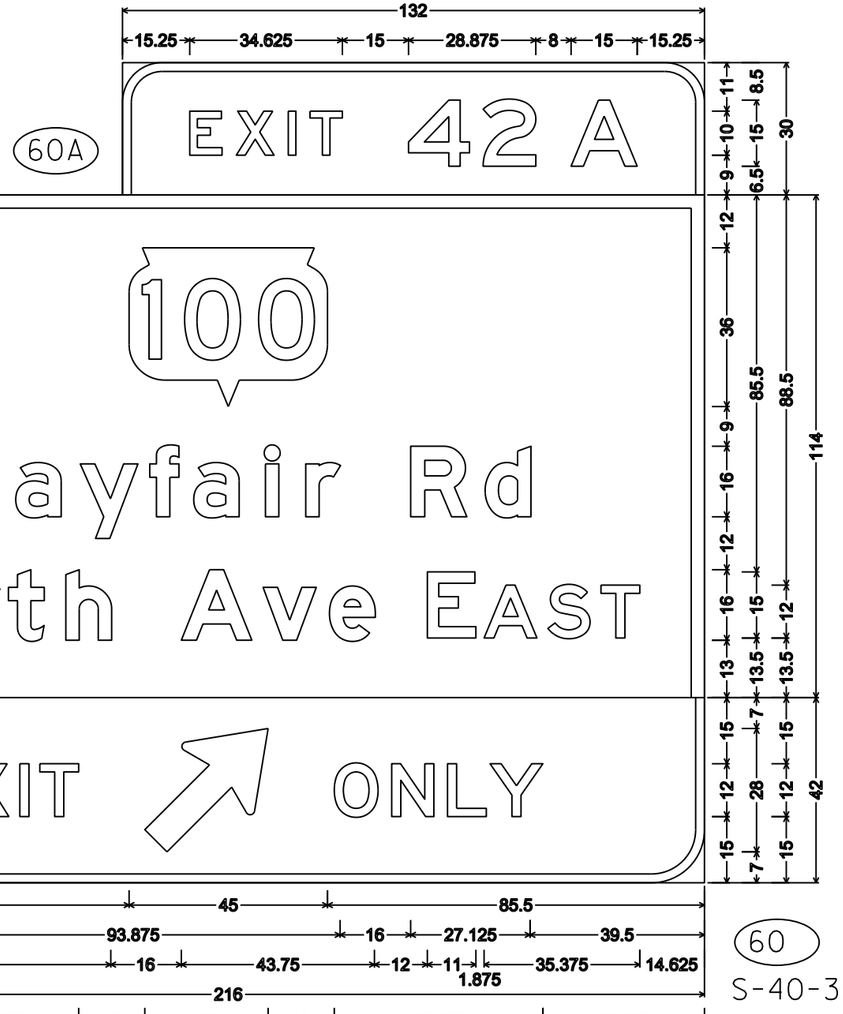
NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E
4. EXIT ONLY Panels on Yellow Type F Reflective Sheeting with Black Non-Reflective Message



442

E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 2.000" Border



60

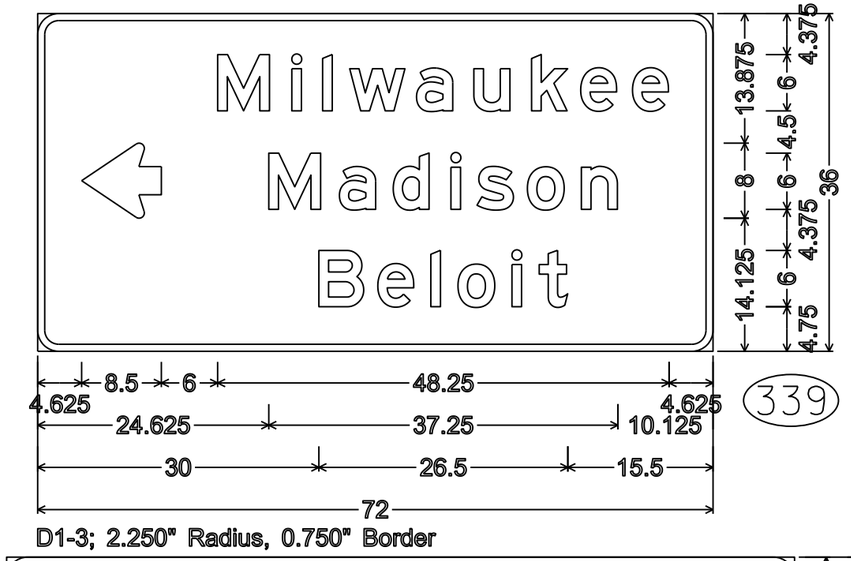
S-40-354

E1-5P; 9.000" Radius, 2.000" Border,
E6-1; 12.000" Radius, 3.000" Border,
E11-1D; 12.000" Radius, 2.000" Border, Black on Yellow

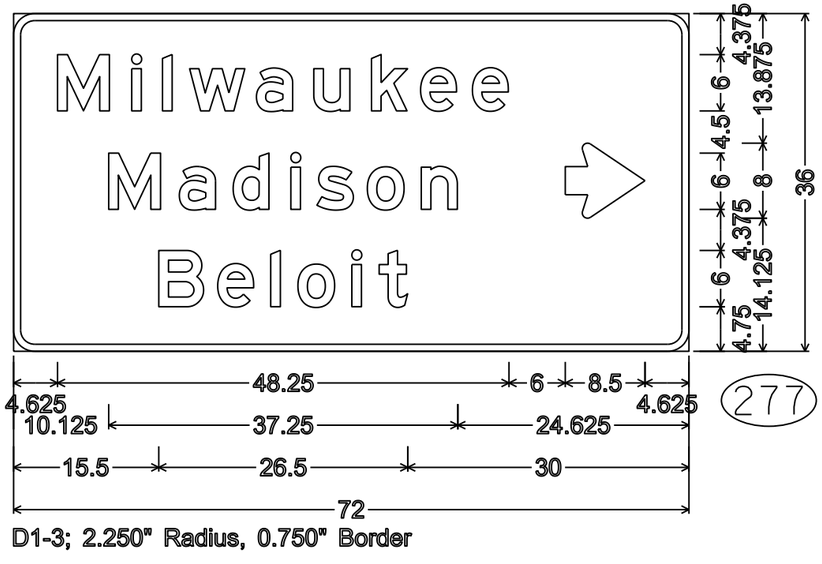
7

7

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	PERMANENT SIGNING	SHEET NO: 429	E



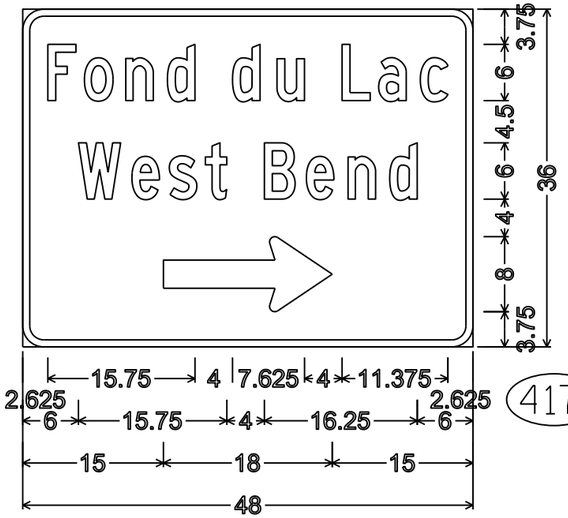
D1-3; 2.250" Radius, 0.750" Border



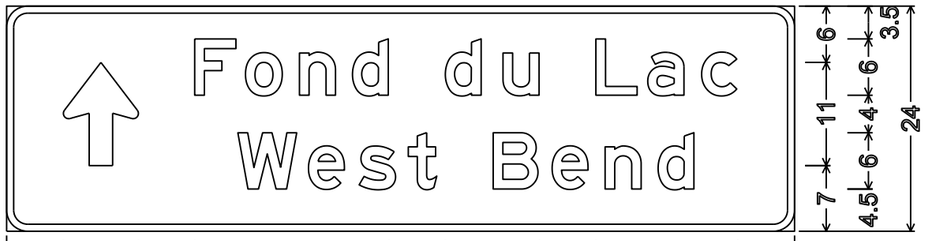
D1-3; 2.250" Radius, 0.750" Border

NOTES

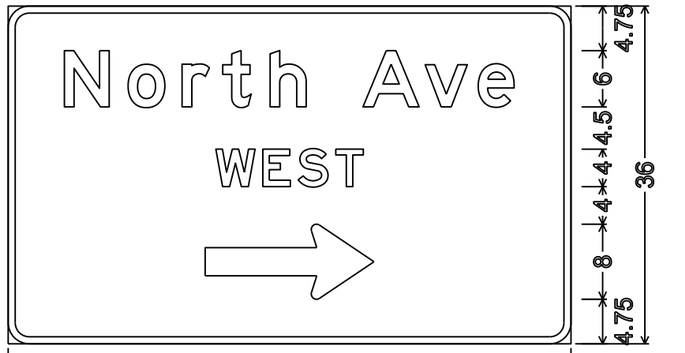
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



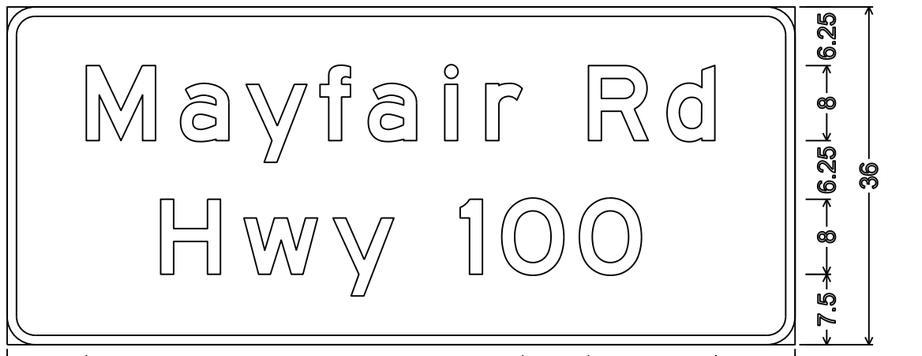
D1-2;
2.250" Radius, 0.750" Border,
"Fond" C; "du" C; "Lac" C; "West" C; "Bend" C



D1-2; 2.250" Radius, 0.750" Border



D1-2;
2.250" Radius, 0.750" Border



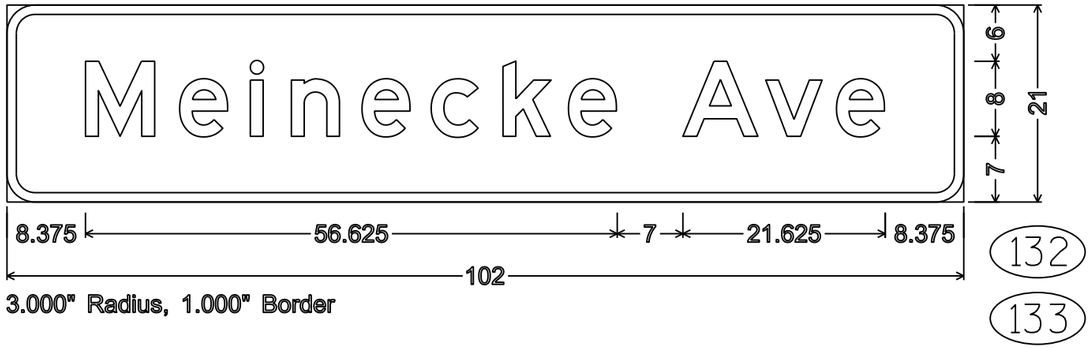
M1-94; 3.000" Radius, 1.000" Border

7

7

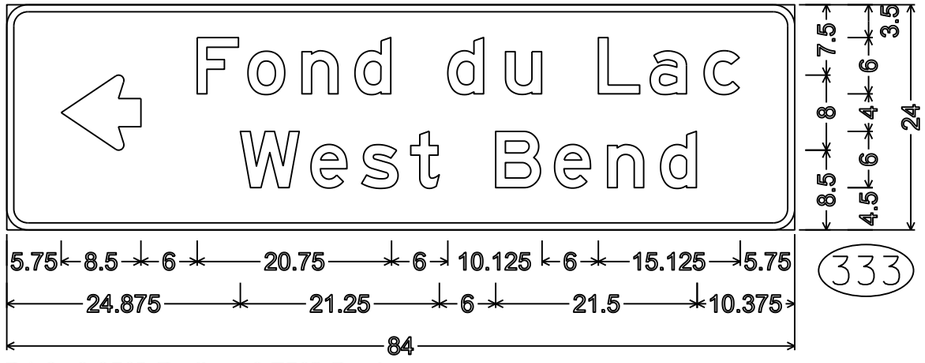
NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E

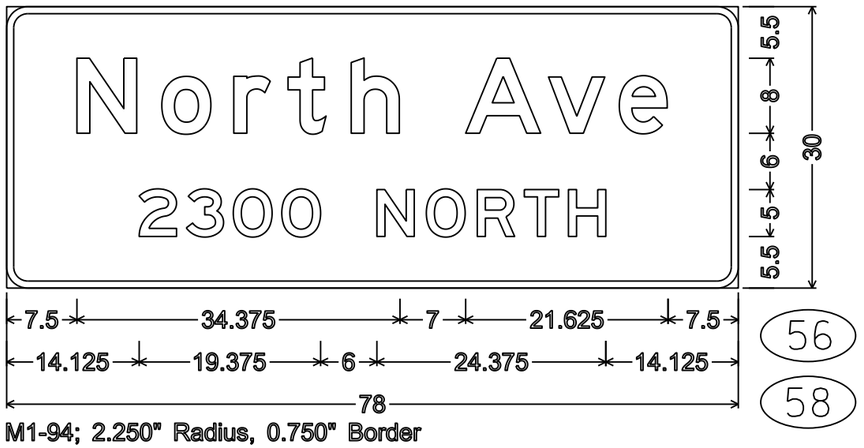


3.000" Radius, 1.000" Border

D1-60; 2.250" Radius, 0.750" Border



D1-2; 2.250" Radius, 0.750" Border



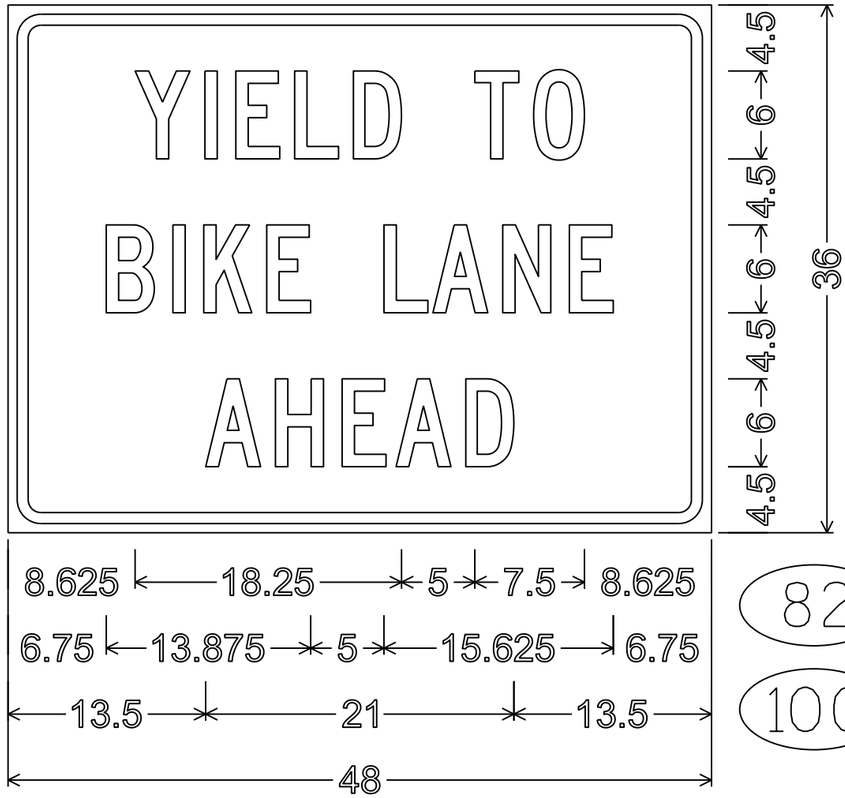
M1-94; 2.250" Radius, 0.750" Border

7

7

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - As noted



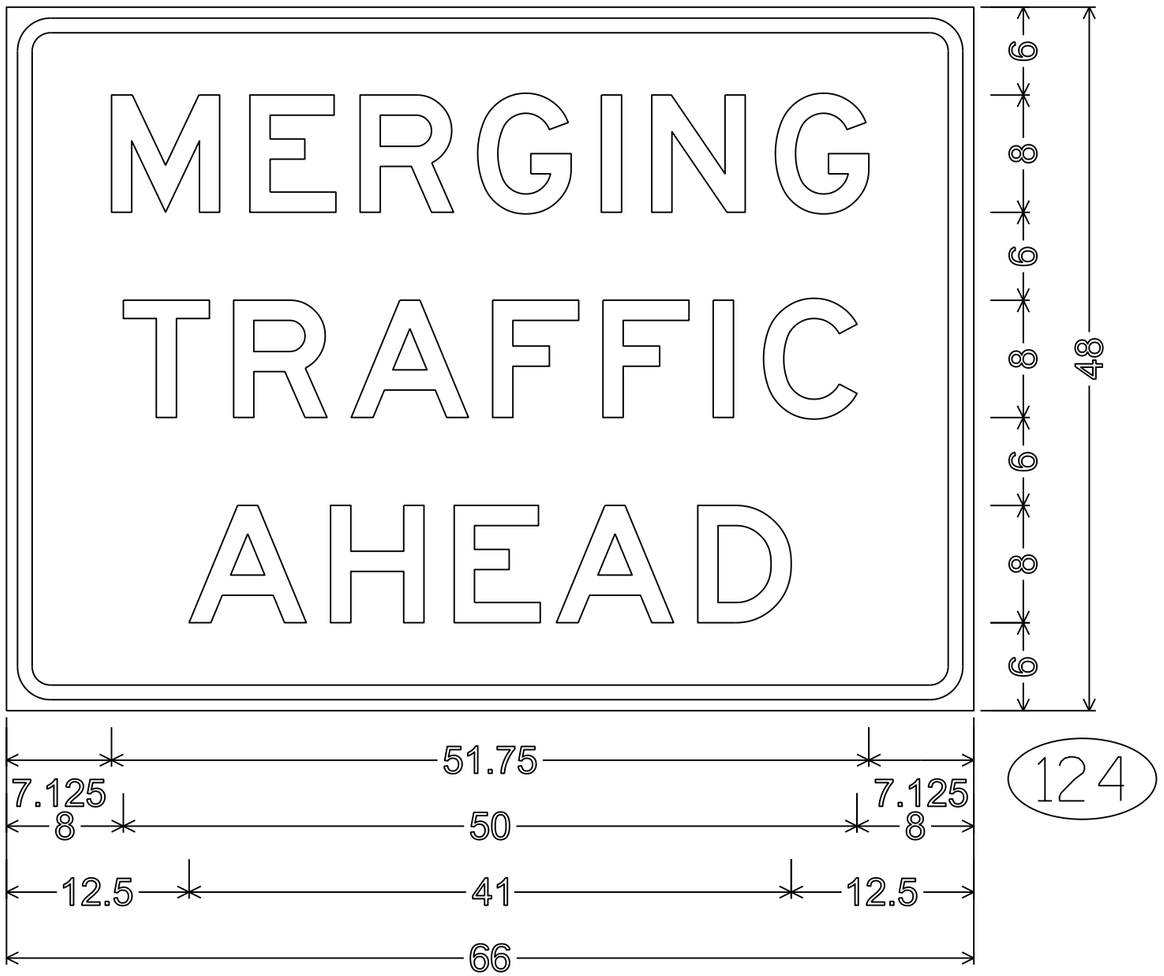
2.250" Radius, 0.750" Border, 0.625" Indent,
"YIELD" C; "TO" C; "BIKE" C
"LANE" C; "AHEAD" C;

7

7

NOTES

1. All Signs Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E



124

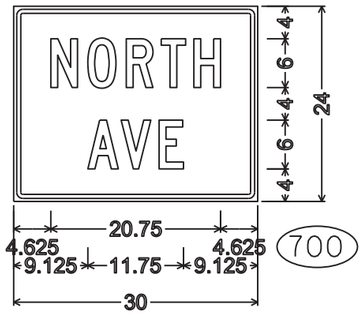
3.000" Radius, 1.000" Border, 0.750" Indent

7

7

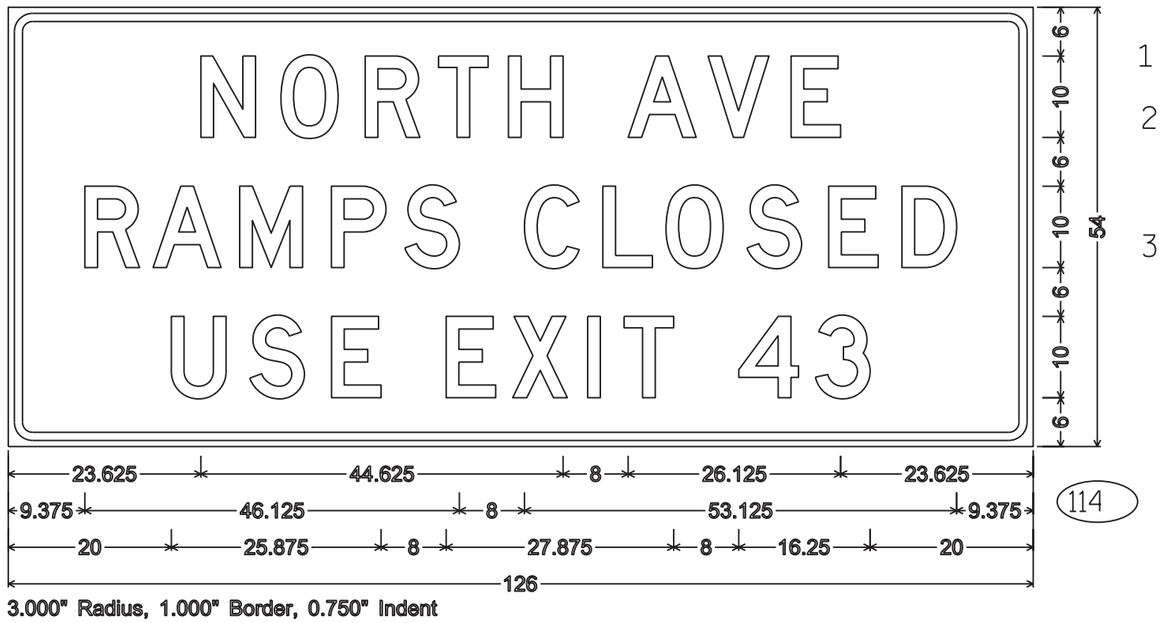
NOTES

1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C



1.125" Radius, 0.500" Border, 0.375" Indent

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TEMPORARY SIGNING	SHEET NO: 434	E



3.000" Radius, 1.000" Border, 0.750" Indent

NOTES

1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D

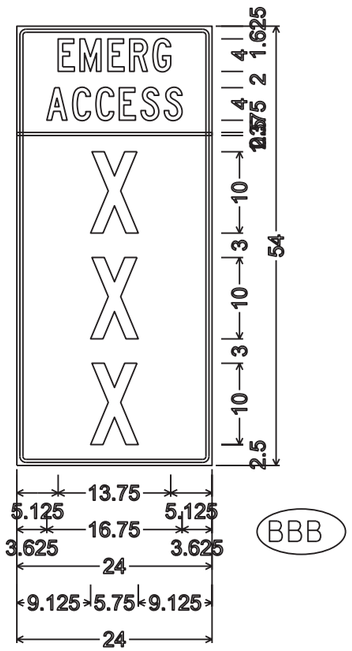
7

7

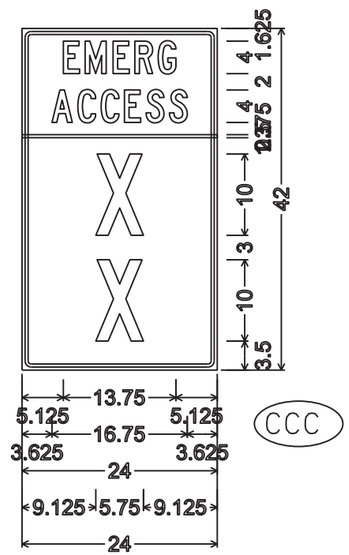
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	TEMPORARY SIGNING	SHEET NO: 435	E

NOTES

1. Fixed Message Type II Signs - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C except as noted



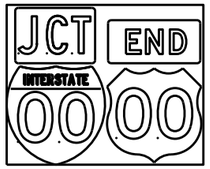
1.125" Radius, 0.375" Border, 0.375" Indent



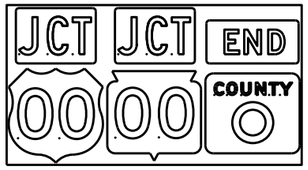
1.125" Radius, 0.375" Border, 0.375" Indent

TYPICAL ASSEMBLIES

J1-1

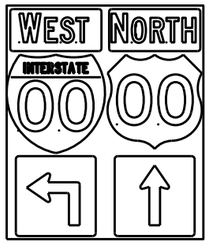


J1-2

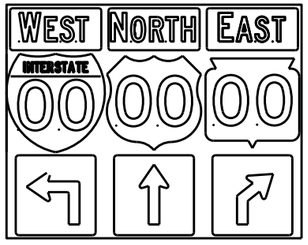


J1-3

J2-1



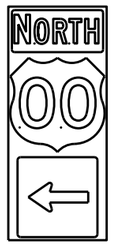
J2-2



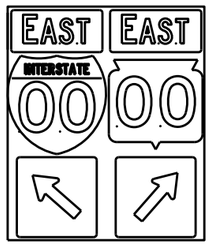
J2-3

JV

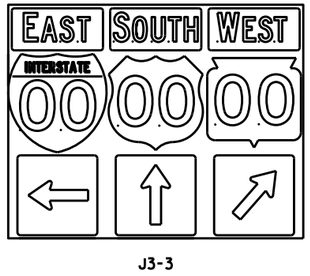
(Typical Vertical J-Assembly
See Note 10 and 11)



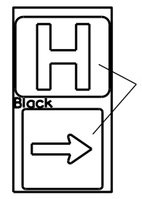
J3-1



J3-2



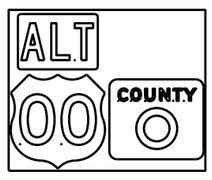
J3-3



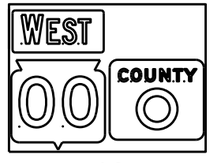
Blue Background

JH-1

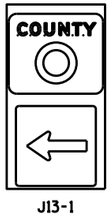
J4-1



J4-2



J4-2



J13-1

J12-1

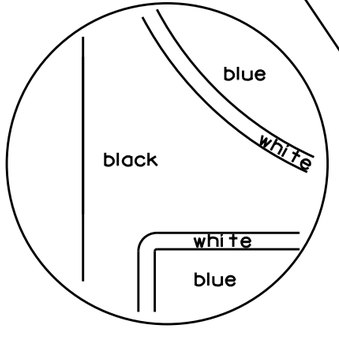
J32-1

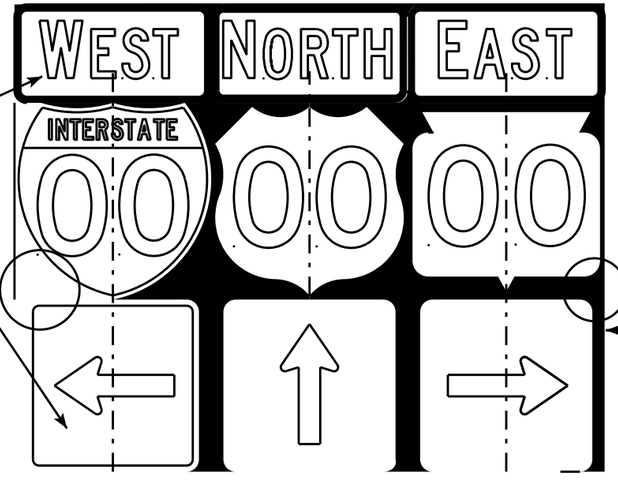
J33-1

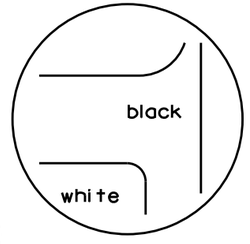
J23-1

J22-1

blue background
with interstate







black background

NOTES

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

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

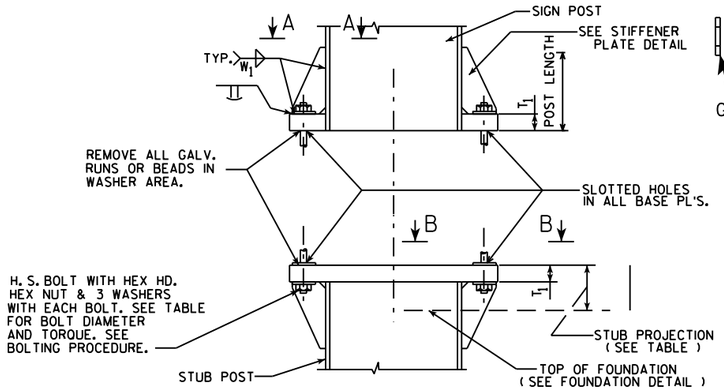
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

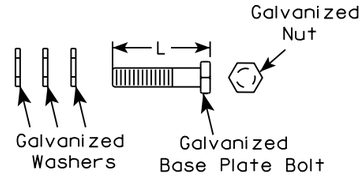
DATE 2/06/14 PL... A2-1S.8

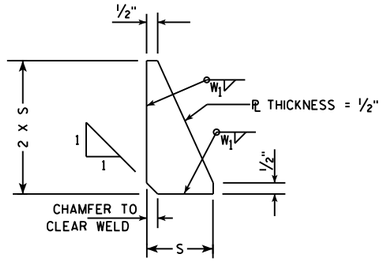
PROJECT NO: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :
WISDOT/CADDS SHEET 42



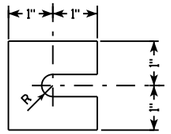
SIGN POST AND STUB POST ELEVATION





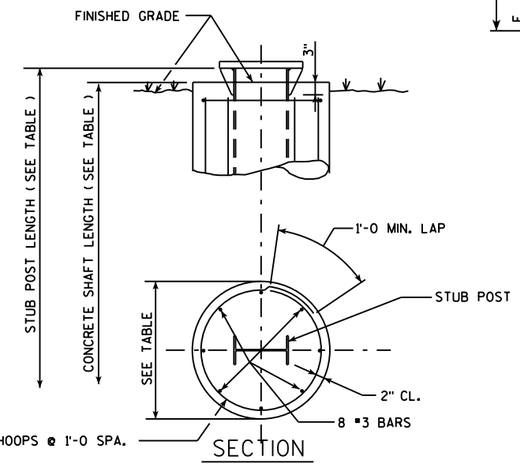
STIFFENER PLATE DETAIL

(SEE TABLE FOR DIMENSIONS)

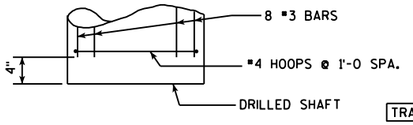


FURNISH 2 @ .012" ± THICK AND 2 @ .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M.- B36.

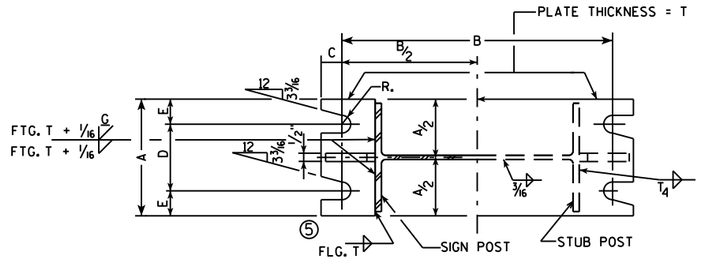
SHIM DETAIL



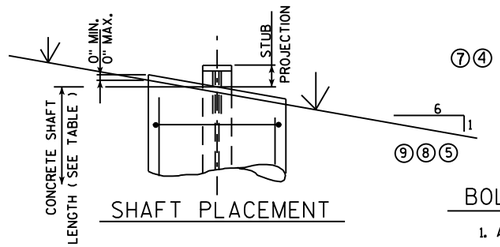
SECTION



FOUNDATION DETAIL



SECTION A-A SECTION B-B



SHAFT PLACEMENT

DESIGN DATA

WIND PRESSURE = 75 M.P.H.
WIND COMPONENTS - NORMAL = 1.0 TRANSVERSE = 0.0
ICE LOAD = 3 P.S.F.

GROUP LOADS	PERCENT OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD & WIND	140
3. DEAD, ICE & ½ WIND[Δ]	140

[Δ]25 P.S.F. MIN.

ALLOWABLE SOIL PRESSURE = 1½T / SQ. FT.
WIND LOAD WAS APPLIED TO THE AREA OF THE SIGN AND TO THE SUPPORTING MEMBERS.
ICE LOAD WAS APPLIED TO ONE FACE OF THE SIGN AND AROUND THE SURFACE OF THE SUPPORTING MEMBERS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DESIGN CONFORMS WITH A.A.S.H.T.O. SPECIFICATIONS 1985.
ALL POSTS, POST STUBS & ATTACHMENTS SHALL BE A.S.T.M. A709 GRADE 50, GALVANIZED IN ACCORDANCE WITH ASTM A123.
⑨ THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.
FURNISH STEEL BOLTS, NUTS, AND WASHERS IN ACCORDANCE WITH SECTION 635 OF THE STANDARD SPECIFICATIONS.

BOLTING PROCEDURE - BASE CONNECTION

1. ASSEMBLE SIGN POST TO STUB POST WITH BOLTS AND ONE OF THE FLAT WASHERS ON EACH BOLT BETW. PLATES.
2. SHIM AS REQ'D. TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. (SEE TABLE)
5. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

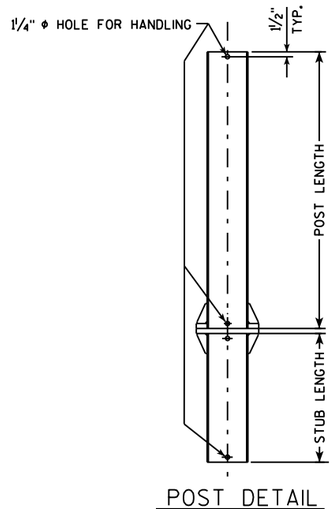
NOTE:
TIGHTEN THE HIGH STRENGTH BOLTS TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.

QUANTITIES FOR 1 FOOTING		
	CONC. MASONRY C.Y.	REINF. STEEL LBS.
A	0.6	34
B	0.8	49
C	0.9	50
D	0.9	56
E	1.0	62

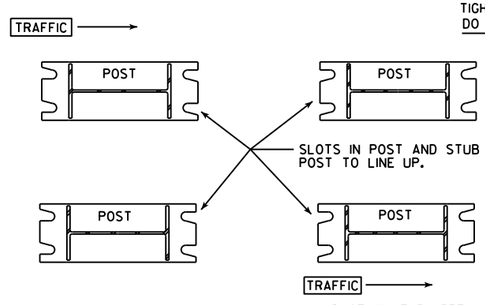
⑦

REINF.	TYPE	#3	#4
	A	8 @ 4'-5	5 @ 6'-3
	B	8 @ 6'-5	7 @ 6'-3
	C	8 @ 6'-11	7 @ 6'-3
	D	8 @ 7'-5	8 @ 6'-3
	E	8 @ 7'-11	9 @ 6'-3

⑦



POST DETAIL



POST SLOT ORIENTATION ⑦

L	X	TYPE	POST SIZE	WEIGHT PER FT	BASE CONNECTION DATA TABLE: BOLT SIZE & TORQUE	A	B	C	D	E	T_1	T_4	W_1	R	S	FOUNDATION DATA: STUB LENGTH	STUB PROJECTION	SHAFT DIAMETER	SHAFT LENGTH	② K
3 ¾	④	A	W10"X12.0	12.0 LBS	¾" ø @ 75"-FT.	5¼"	1'-0⅜"	⅞"	3½"	⅞"	1"	⅜"	5/16"	13/32"	2⅛"	3'-6	3"	2'-0 ø	5'-0	76.0" ④
4 ¾	④	B	W12"X16.0	16.0 LBS	⅞" ø @ 85"-FT.	5½"	1'-4¼"	1"	3½"	1"	1¼"	¼"	5/16"	15/32"	3"	5'-6	3"	2'-0 ø	7'-0	146.5" ④
5		C	W12"X19.0	19.0 LBS	⅞" ø @ 85"-FT.	5½"	1'-4¼"	1"	3½"	1"	1½"	5/16"	5/16"	15/32"	3"	6'-0	3"	2'-0 ø	7'-6	182.1"
5		D	W12"X22.0	22.0 LBS	⅞" ø @ 85"-FT.	5½"	1'-4¼"	1"	3½"	1"	1½"	⅜"	5/16"	15/32"	3"	6'-6	3"	2'-0 ø	8'-0	210.5"
5	③	E	W12"X26.0	26.0 LBS	1" ø @ 90"-FT.	7"	1'-4¼"	1¼"	4"	1½"	1½"	⅜"	5/16"	17/32"	3"	7'-0	3"	2'-0 ø	8'-6	293.0" ③

① ⑥ ①

STRUCTURAL CARBON STEEL PAY WTS. (1 POST) = K+ (POST LENGTH X POST WT.)
" K " INCLUDES STUB, BASE PLATES, STIFFS., BOLTS, AND WASHERS.

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/22/17 PLATE NO. A3-1.17

NO.	DATE	REVISION
⑩	1-21-14	LUBRICATION OF BASE BOLTS
⑨	4-26-11	REMOVE NON-GALVANIZED
⑧	10-30-96	NOT GALVANIZED/GALVANIZED
⑦	10-30-92	QUANT., A588 EXCEPT., ADD SLOT VIEW
⑥	8-24-87	BASE CONN. WELD
⑤	10-13-81	BASE CONN. WELD & FUSE & WASHERS
④	10-19-79	POST A & B, A572 GR. 50, & K
②	11-28-78	"K" ③ 4-23-79 TYPE "E"
①	5-4-78	T_1 . T_2 & W_1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

TYPE A, B, C, D, & E

CONST. SPEC. 2011	DRAWN BY JPH	PLANS CK'D.

FTG. & SIGN SUPPORT DETAILS GROUND MOUNT BREAK-AWAY SIGNS

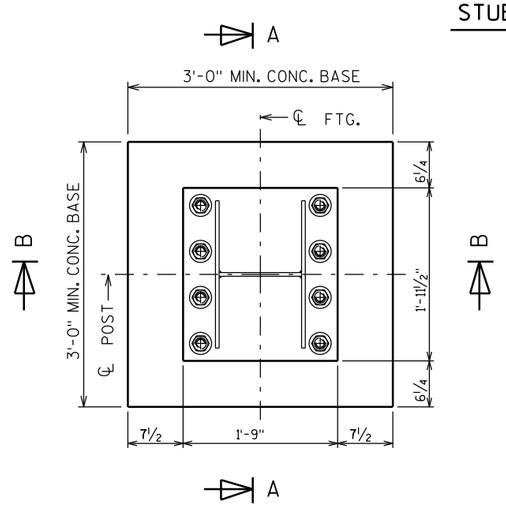
SHEET

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 438 | E

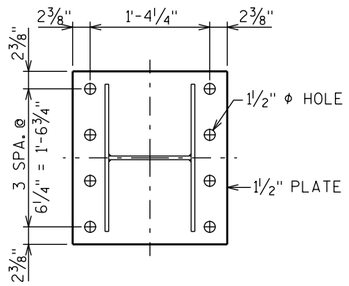
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A31.DGN PLOT DATE : 22-AUG-2017 09:41 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 5.415383:1.000000

WISDOT/CADDS SHEET 42

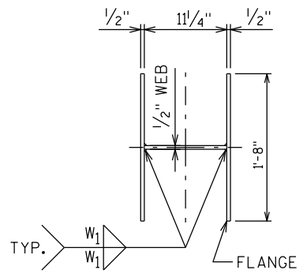
STUB AND MASONRY ANCHOR DETAILS



STUB SECTION



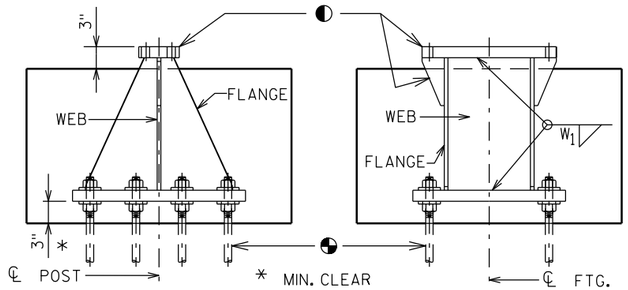
BASE PLATE



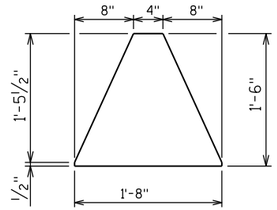
STUB

◐ SEE PLATE NO. A3-1 FOR DETAILS

◒ MASONRY ANCHORS TYPE S 1¼-INCHES (ADHESIVE). ALLOWABLE PULL OUT CAPACITY 14,995 KIPS. EMBED 1'-3" IN ROCK.



SECTION A SECTION B



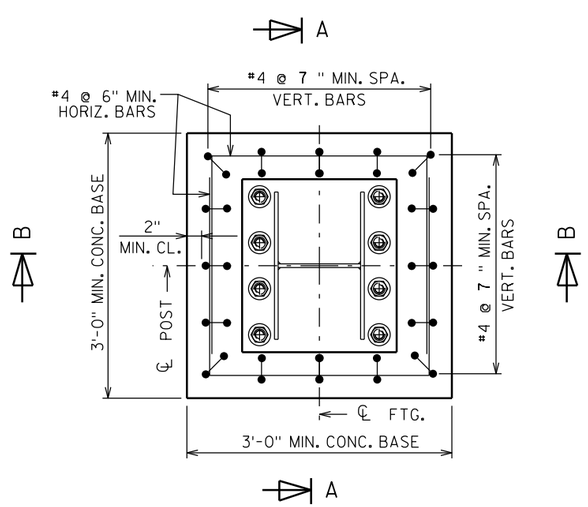
FLANGE

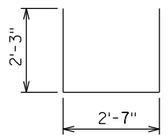
GENERAL NOTES

1. Quantities per Base:
   - REINFORCING BAR STEEL = 62 LBS
   - CONCRETE = 0.6 C.Y.
   - STEEL WEIGHT = 335 LBS
2. All materials, except anchor rod, nuts and washers, are to be A.S.T.M. A709 grade 50. All materials to be galvanized after fabrication.
3. If the contractor encounters rock before reaching the footing depth, per the A3-1 Sign Detail, determine the pull-out capacity of a test adhesive anchor installed in the rock. If the test result equals or exceeds the pull-out capacity of 14,995 KIPS, the contractor may install the breakaway stub for rock, according to this detail.

CONCRETE BASE AND REINFORCING STEEL DETAILS

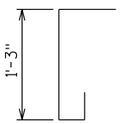
CONCRETE BASE SECTION





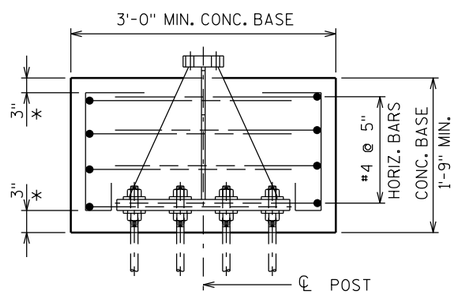
HORIZONTAL BAR

8 BARS @ 6'-11" LENGTH



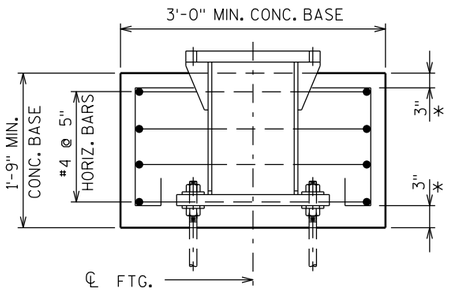
VERTICAL BARS

16 BARS @ 2'-4" LENGTH
MAY BE PLACED IN SKEW
FOR CLEARANCE NEED



SECTION A

* MIN. CLEAR



SECTION B

ALTERNATE BREAK-AWAY BASE ON ROCK
A3-1M

WISCONSIN DEPT OF TRANSPORTATION

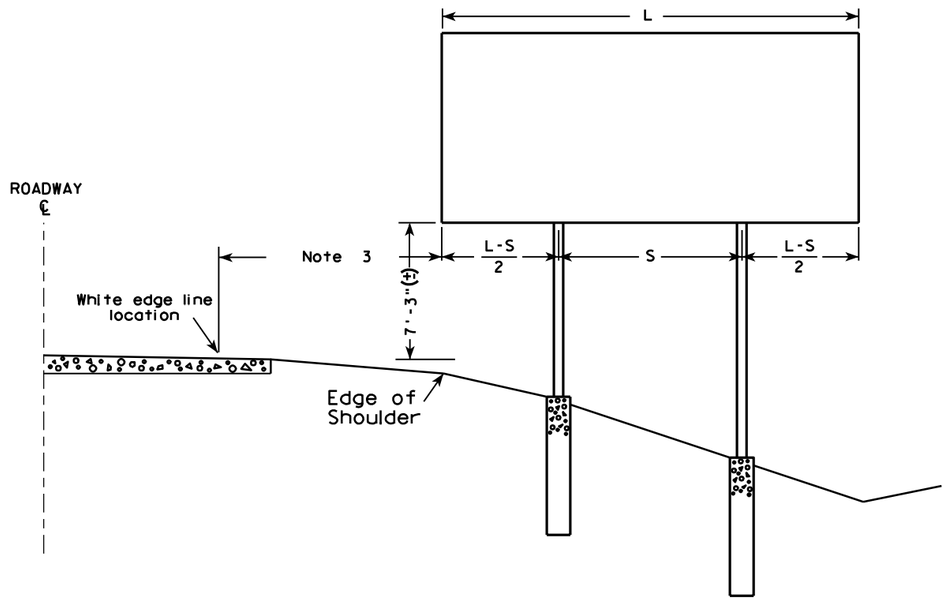
APPROVED Matthew R Rauch for State Traffic Engineer

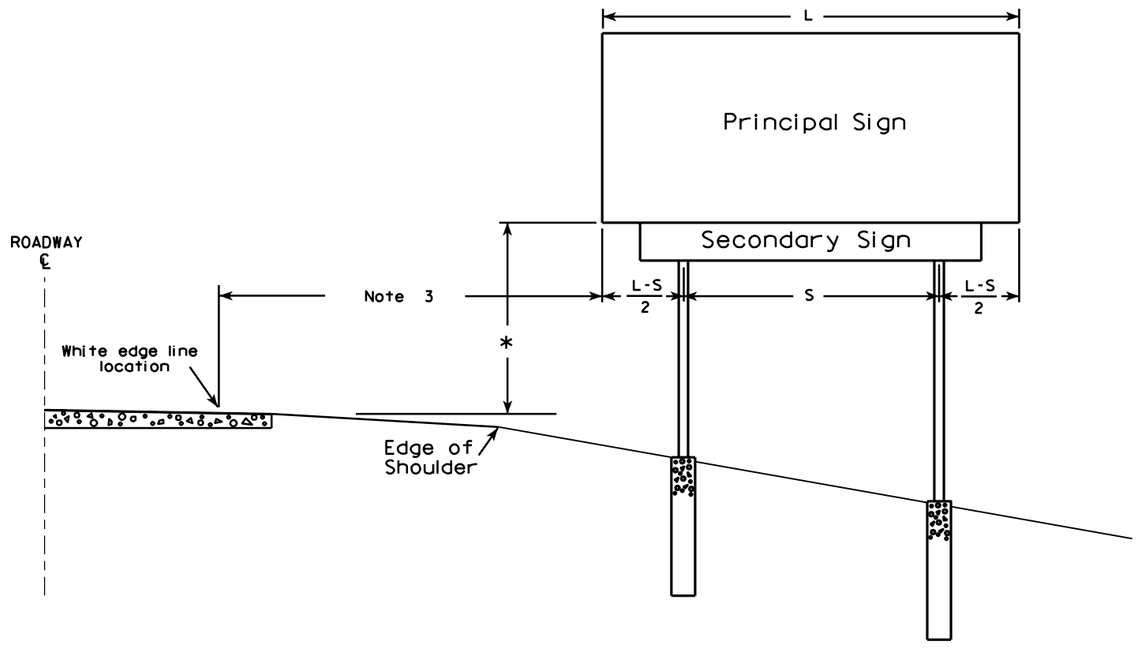
DATE 2/06/2014 PLATE A3-1M.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A31M.DGN PLOT DATE : 10-MAR-2014 15:16 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 1.556674:1.000000

WISDOT/CADDS SHEET 42





GENERAL NOTES

1. For a 2 post installation, S equals 3L/5, but shall not be less than 9 ft.
2. For a 3 post installation, S equals 5L/7, but shall not be less than 18 ft., and the space between any two posts shall not be less than 9 ft.
3. Unless noted in the plan, the sign offset distance shall be a minimum of 17'-6", desirable 30'-0".
4. The (±) tolerance shown on this sheet is 3 in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Post lengths shown in the miscellaneous quantities are estimated lengths. The contractor shall verify post lengths at the time of final grading.
7. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.

* Clearance is 8'-3"(±) when the secondary sign is 3 ft. or less in height. For secondary signs larger than 3 ft., the clearance to the bottom of the secondary sign shall be 5'-3"(±).

7

7

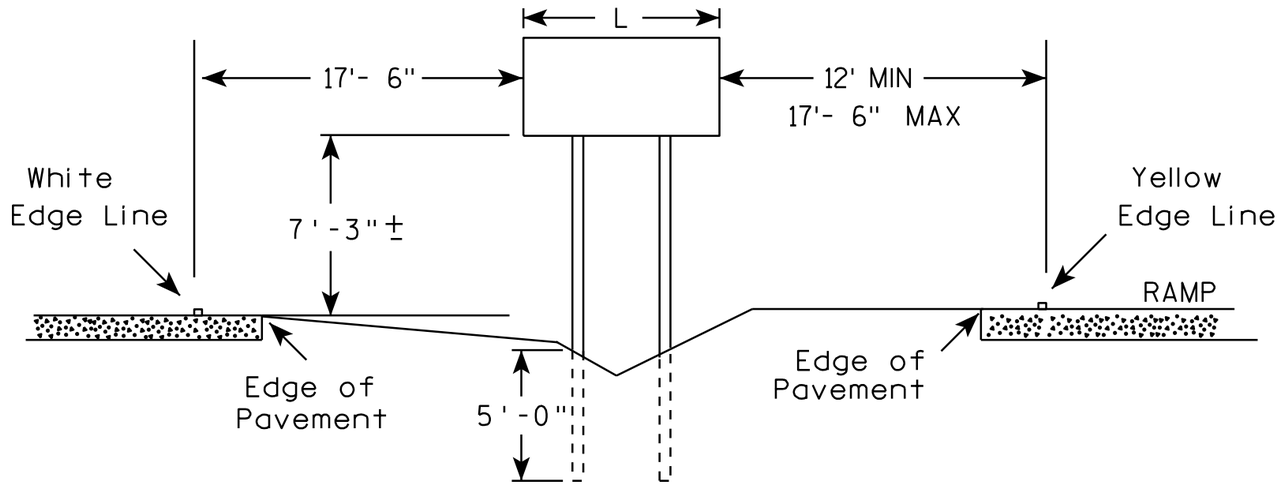
TYPICAL INSTALLATION
OF TYPE I SIGNS

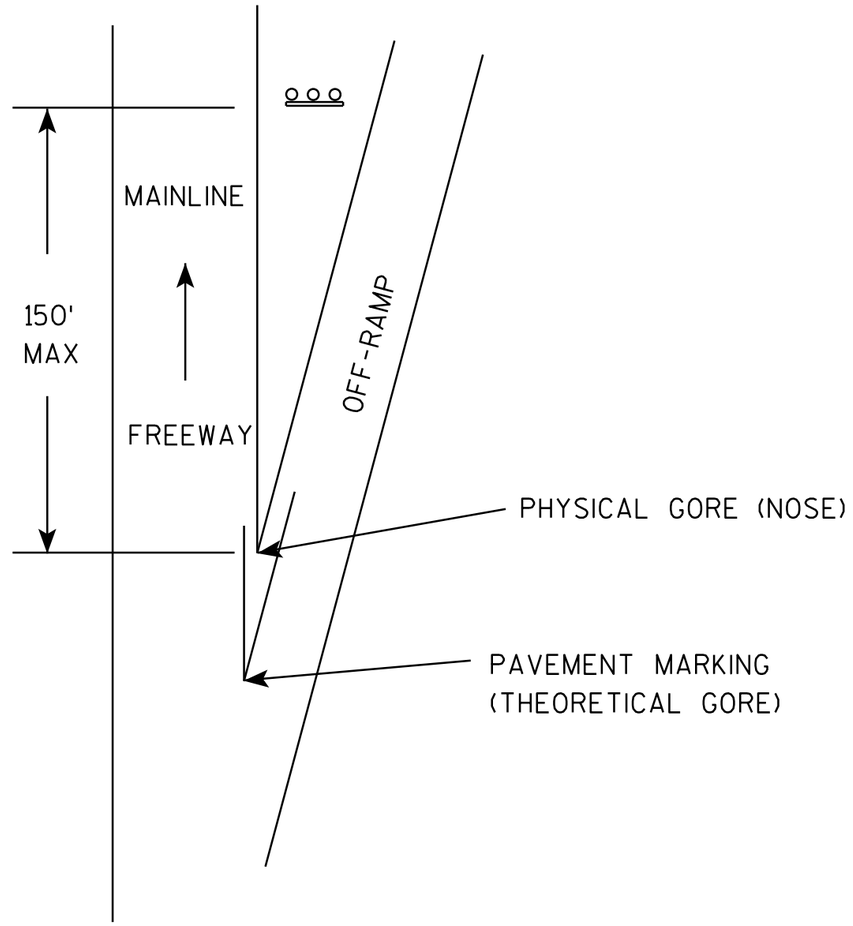
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/02/08 PLATE NO. A4-1.9

PROJECT NO:				SHEET NO: 440	E





GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 10 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

7

7

TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

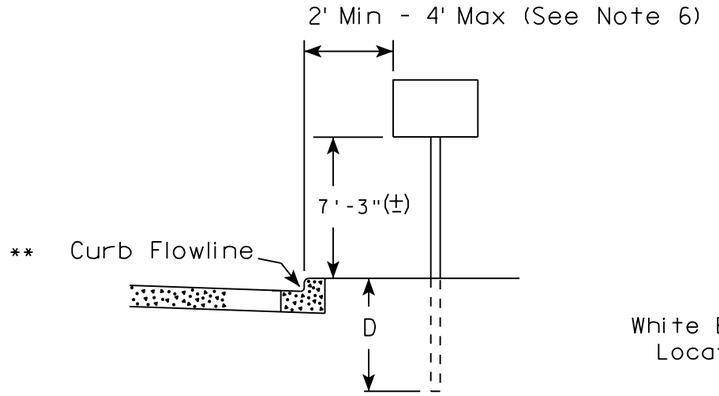
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

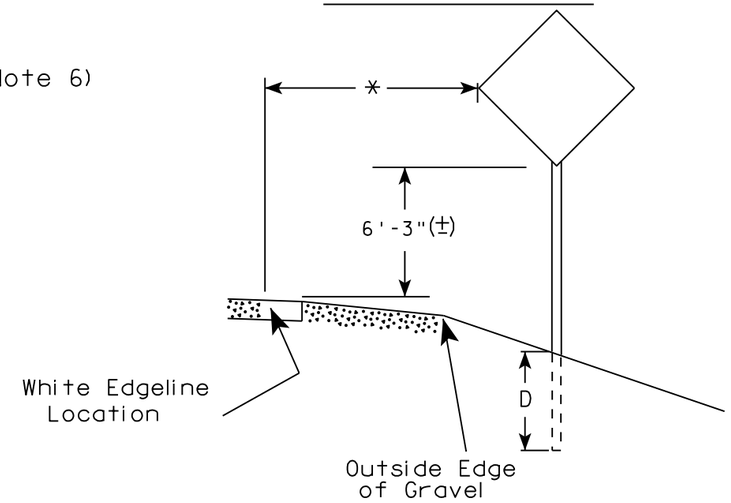
DATE 2/06/14 PLA 441 A4-2.3

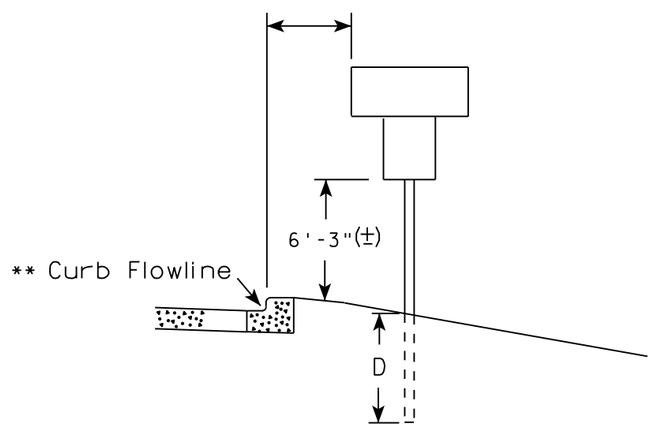
PROJECT NO: | SHEET NO: E

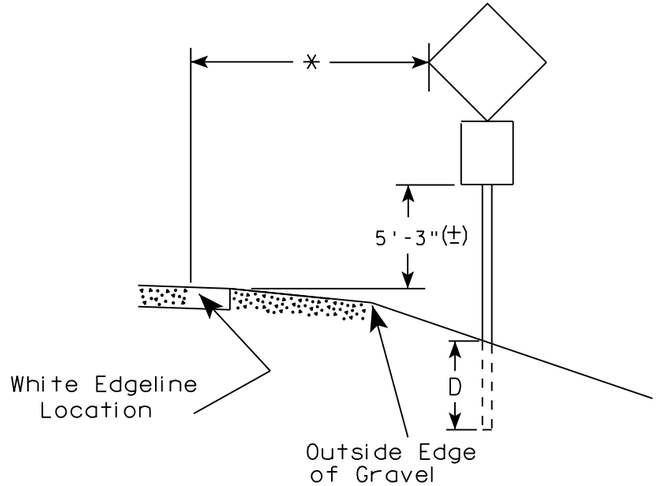
URBAN AREA



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 barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), 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" (±).

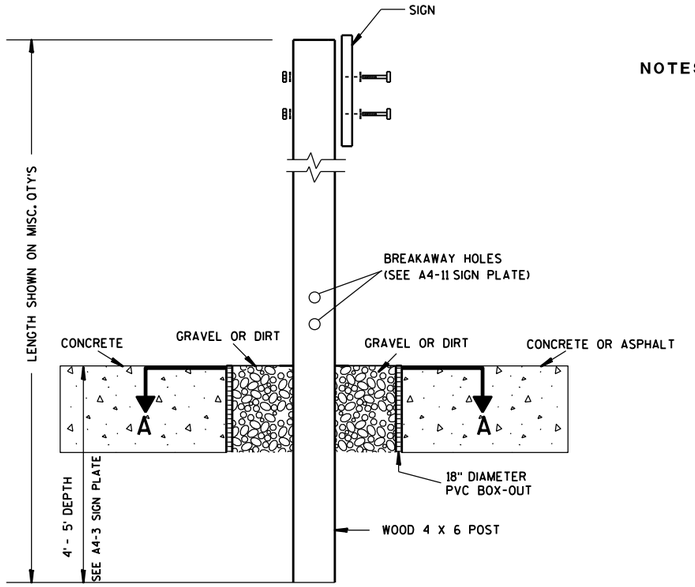
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

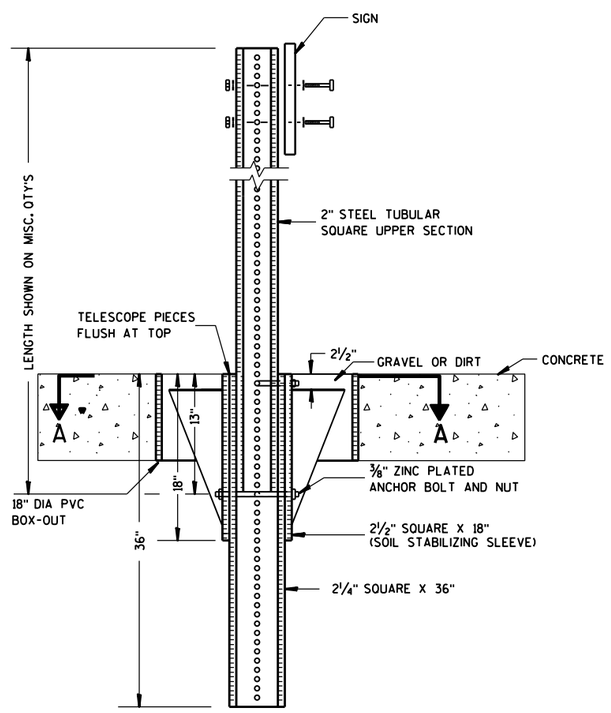
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 442	E



ELEVATION VIEW

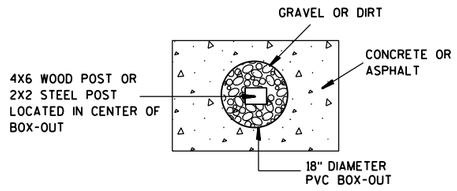
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

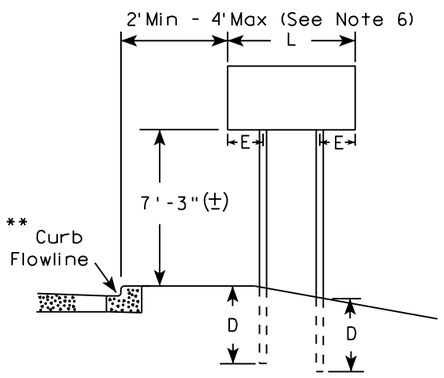
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

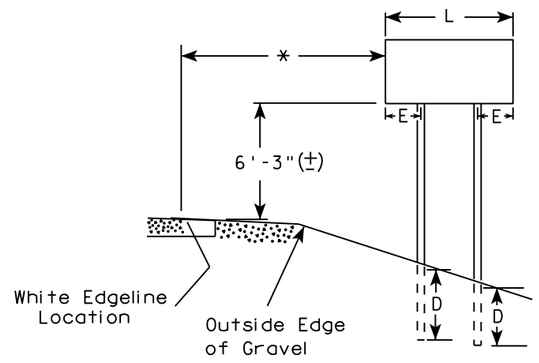
DATE 1/27/14 PLATE NO. A4-3B.1

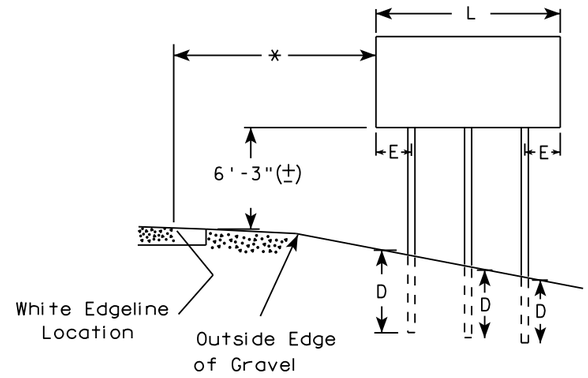
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

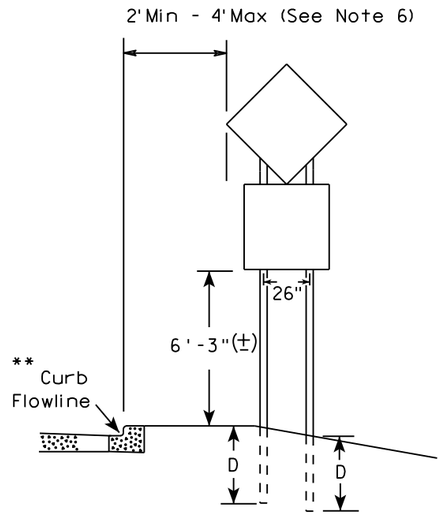
URBAN AREA



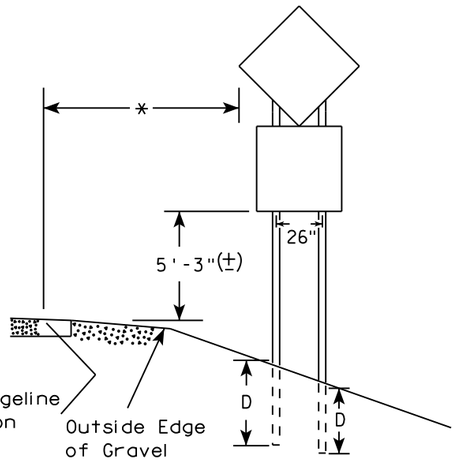
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

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

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

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

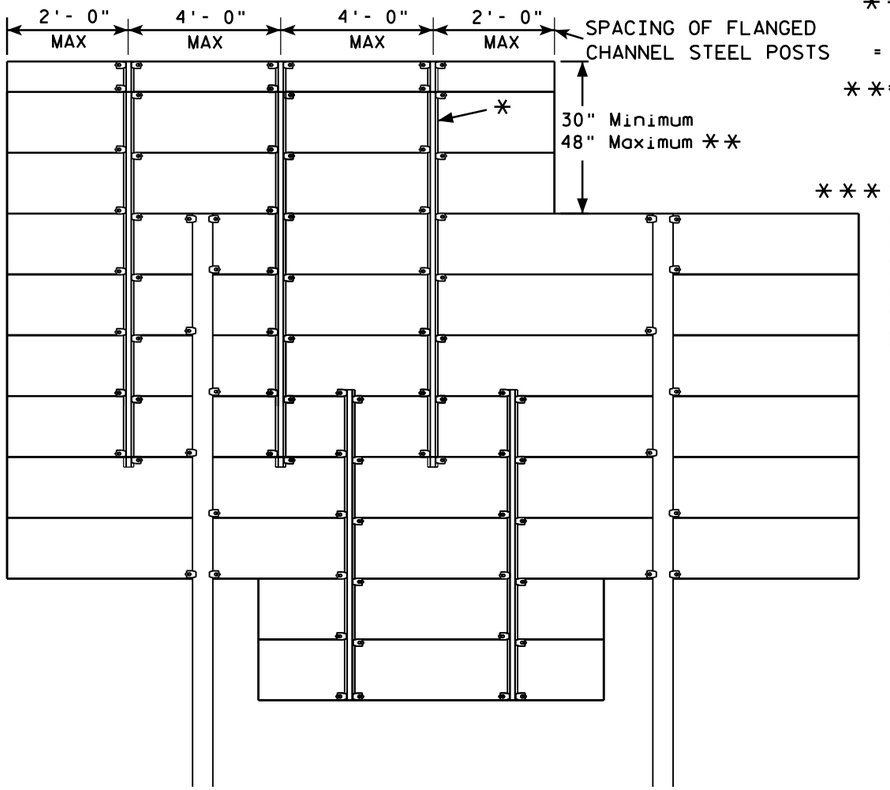
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 444	E

GROUND MOUNTED SIGN

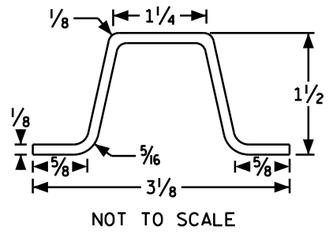


*=2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

**=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

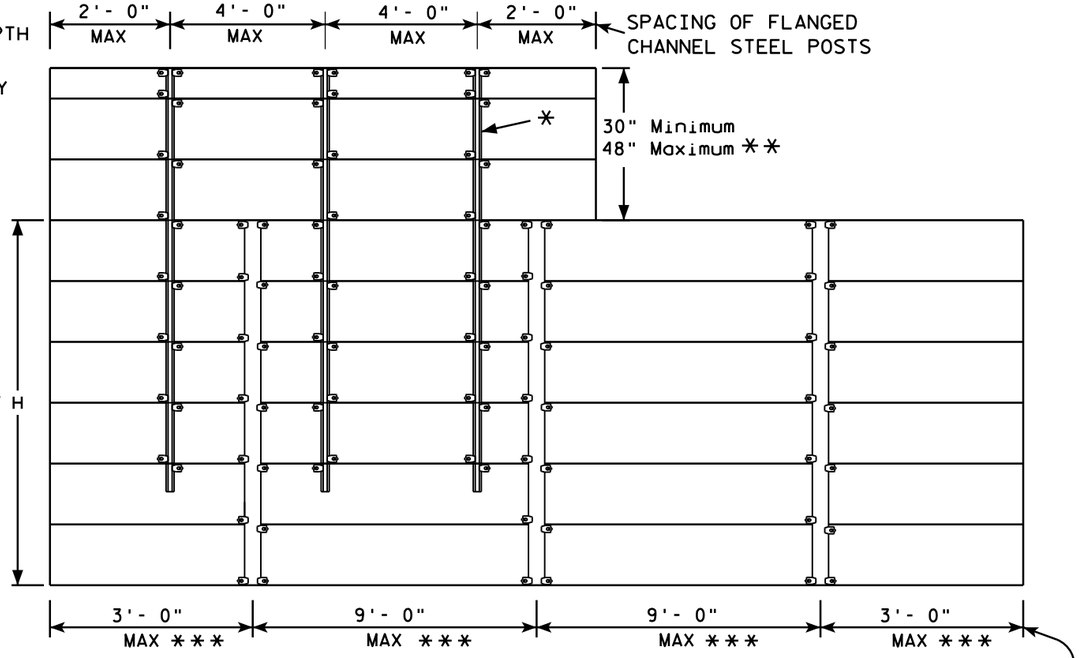
*** THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 16 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 16 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAIL



NOT TO SCALE

SIGN BRIDGE MOUNTED SIGN



SPACING OF ALUMINUM SIGN SUPPORTS
5" X 3.5" X 3.7 LBS./ft.

GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

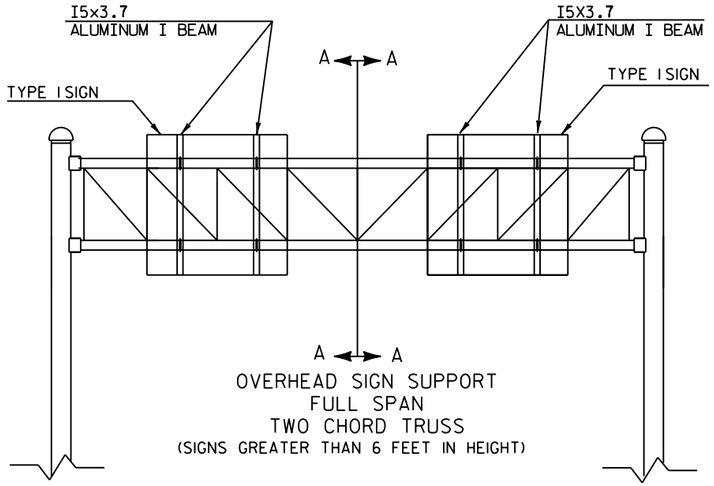
ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

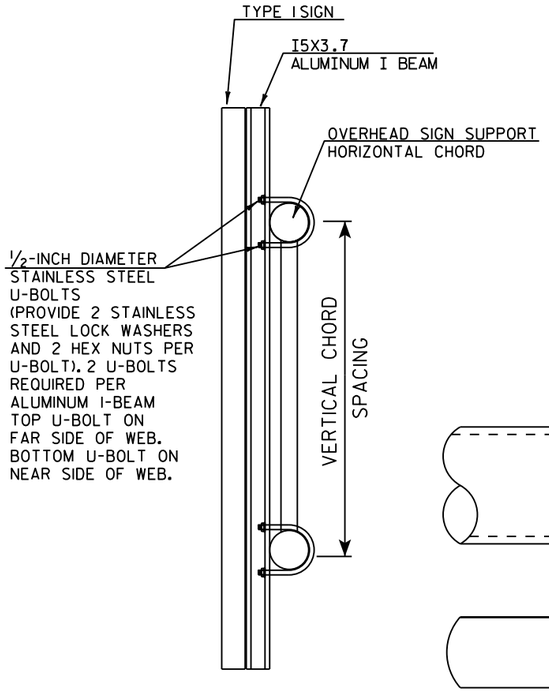
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/05/13 PLAT 445 A4-6.12

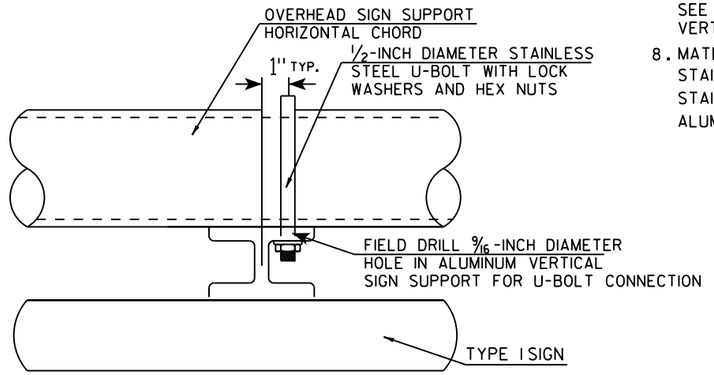
PROJECT NO: | SHEET NO: E



OVERHEAD SIGN SUPPORT
FULL SPAN
TWO CHORD TRUSS
(SIGNS GREATER THAN 6 FEET IN HEIGHT)



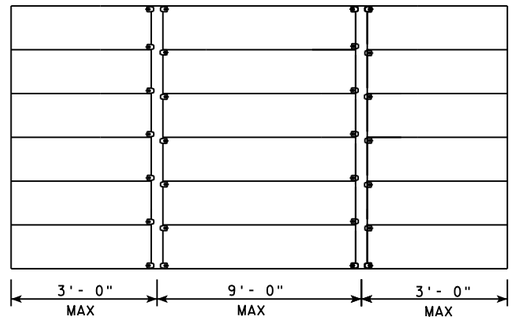
CUT SECTION A-A



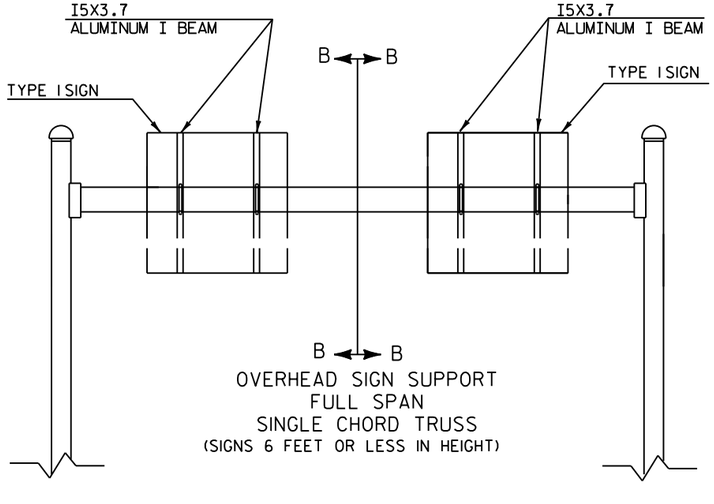
TYPICAL SIGN CONNECTION FOR
TWO CHORD TRUSS
PLAN VIEW

GENERAL NOTES

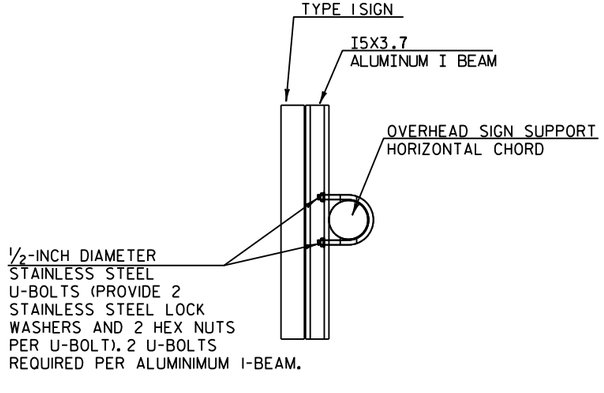
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE CLIPS ON EVERY EXTRUDED PANEL JOINT PER SIGN PLATE A4-6.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. MINIMUM NUMBER OF BRACKETS PER SIGN IS TWO. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
   STAINLESS STEEL U-BOLTS AND LOCKWASHERS ASTM 304.
   STAINLESS STEEL HEX NUTS ASTM A276.
   ALUMINUM I-BEAMS ARE 6061-T6.



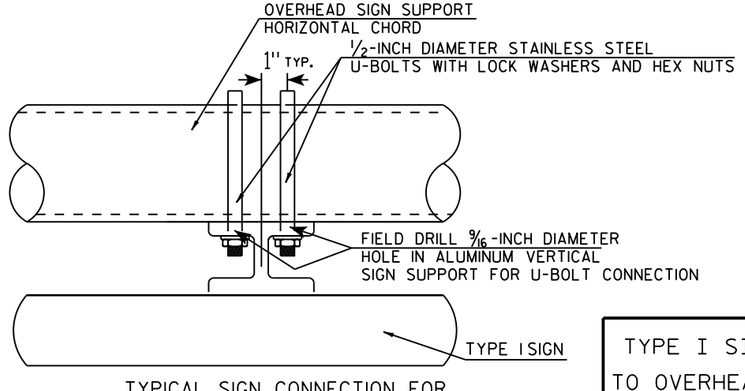
SPACING OF I5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT



OVERHEAD SIGN SUPPORT
FULL SPAN
SINGLE CHORD TRUSS
(SIGNS 6 FEET OR LESS IN HEIGHT)



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
SINGLE CHORD TRUSS
PLAN VIEW

TYPE I SIGN CONNECTION TO OVERHEAD SIGN SUPPORT

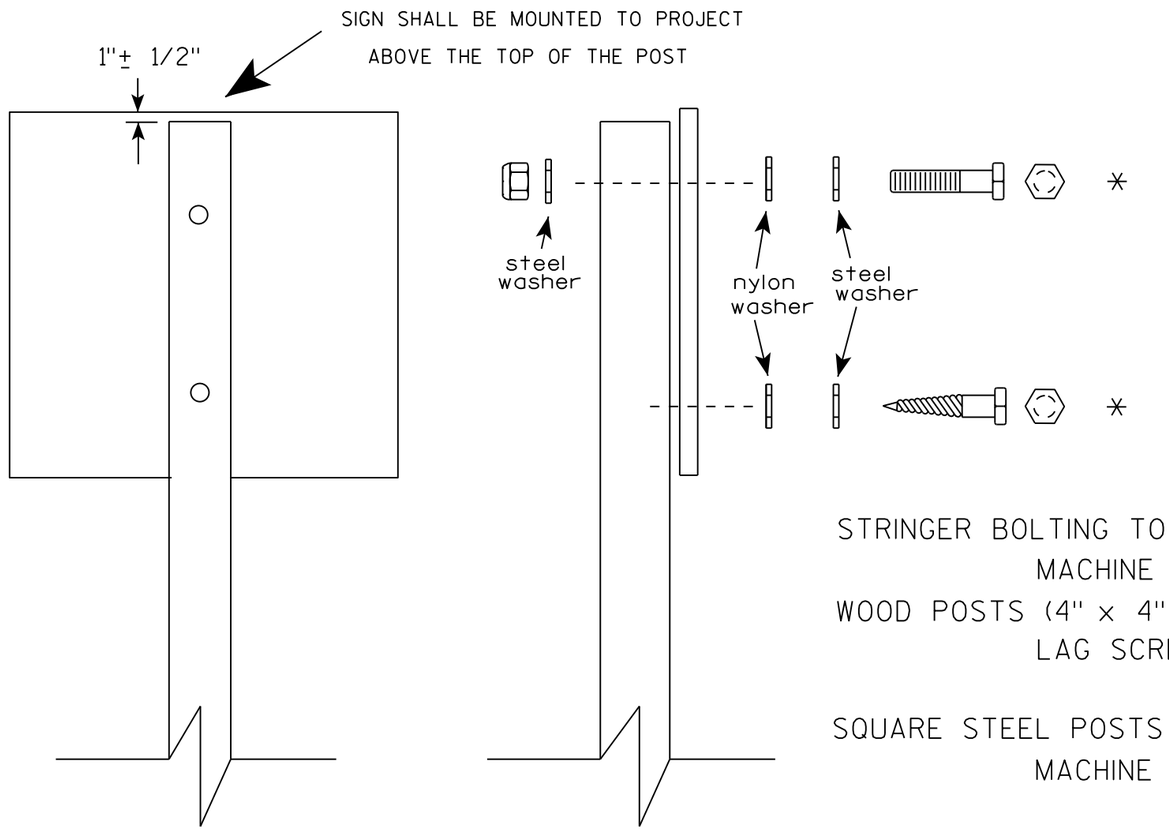
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 11/10/15 PLATE NO. A4-7.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A47.DGN PLOT DATE : 01-DEC-2015 17:42 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 38.916838:1.000000



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 4" or 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 8/11/16 PLATE NO. A4-8.8

447

PROJECT NO:

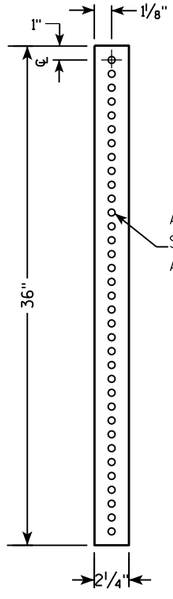
SHEET NO: E

7

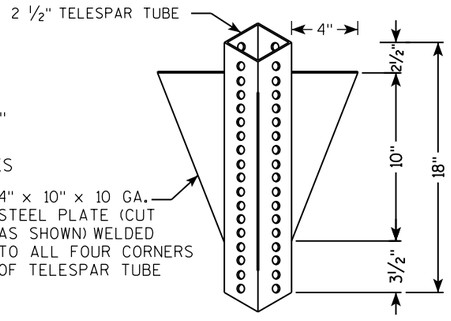
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

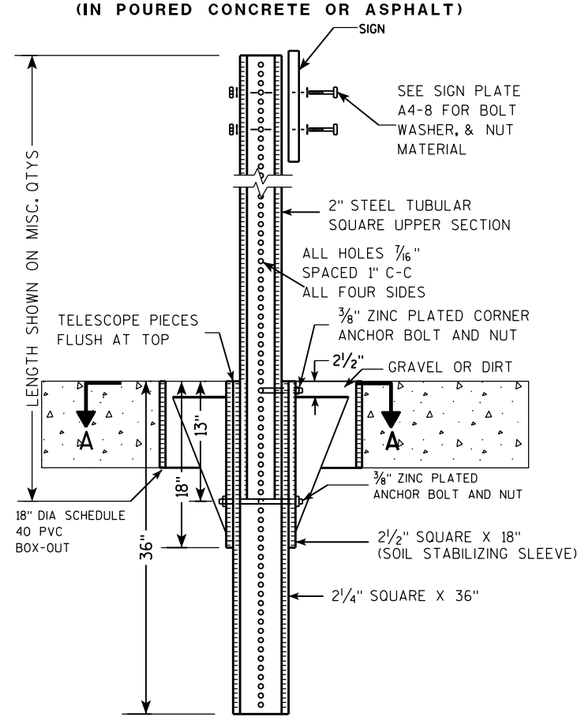
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



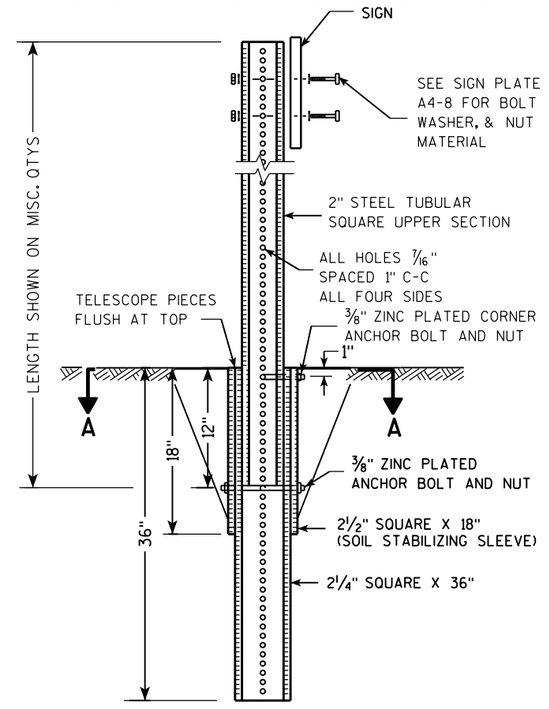
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

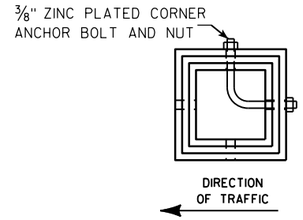


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

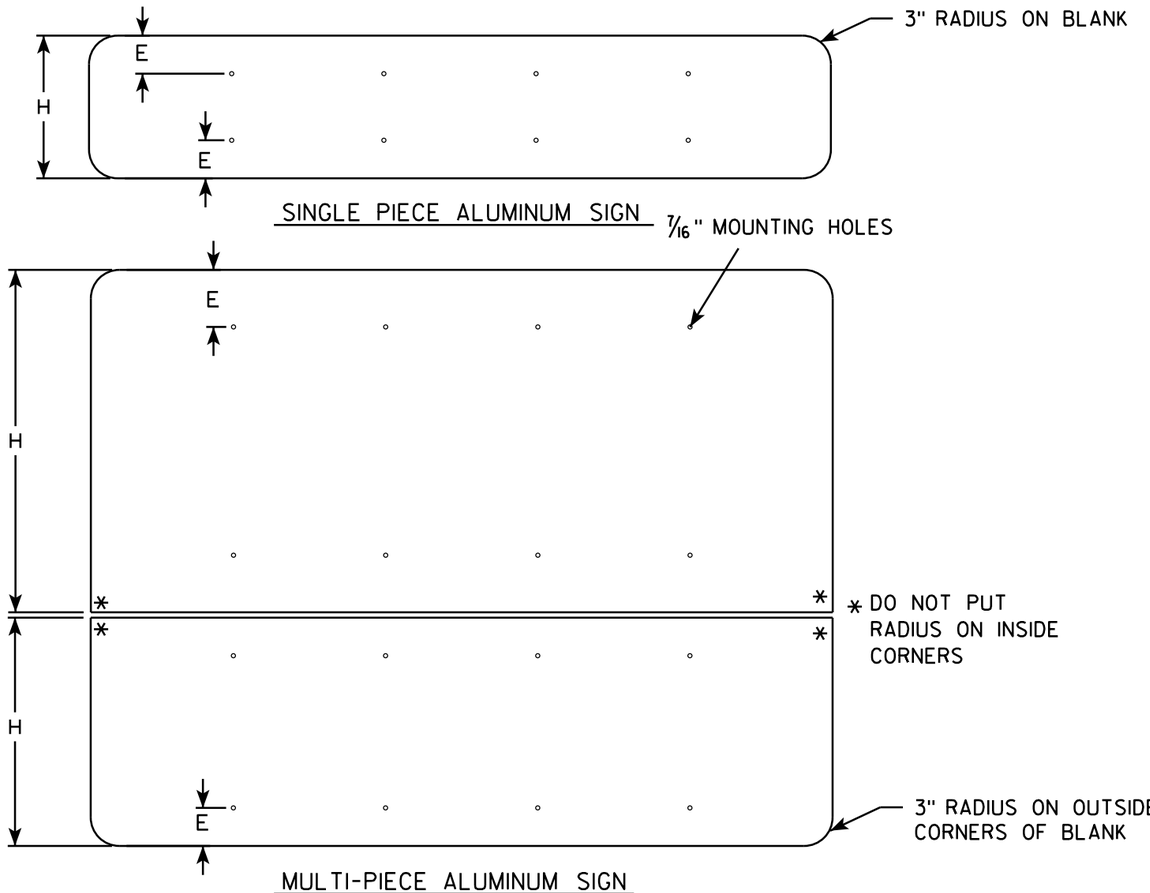
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 448 A4-9.9

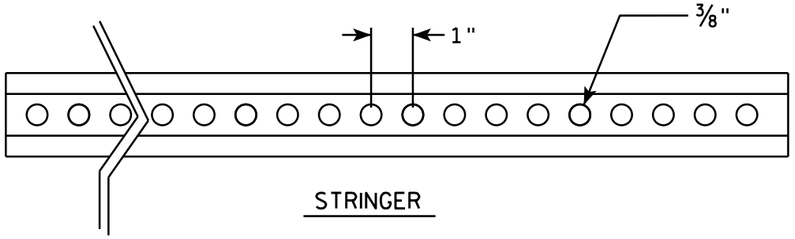
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

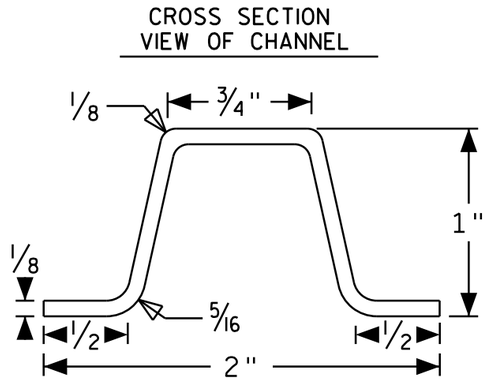


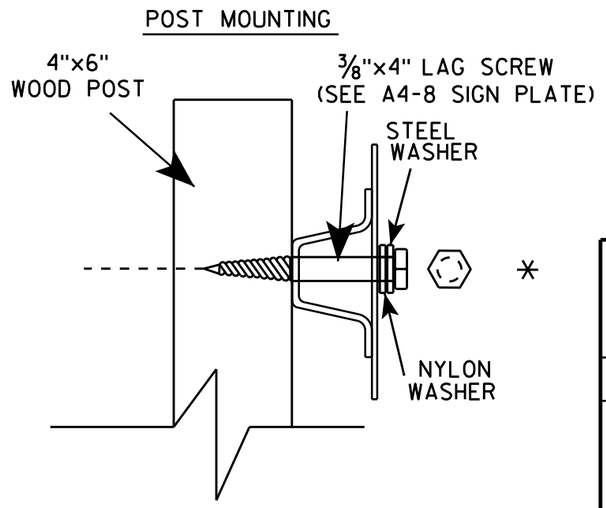
GENERAL NOTES

- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"







SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

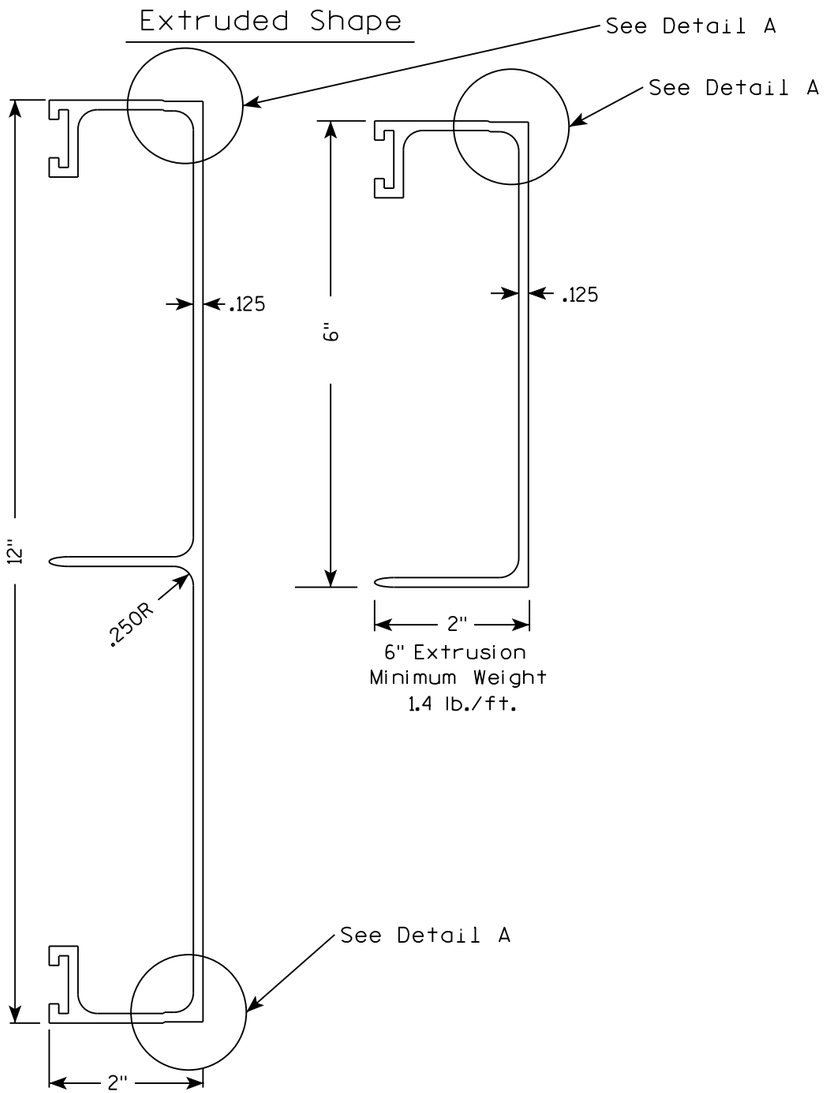
for State Traffic Engineer

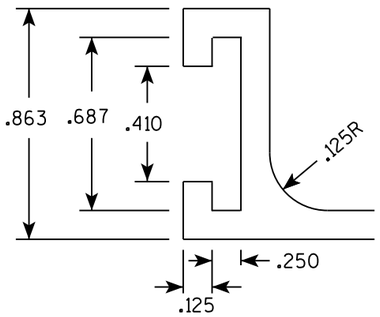
DATE 4/26/16 PLATE NO A4-18.1

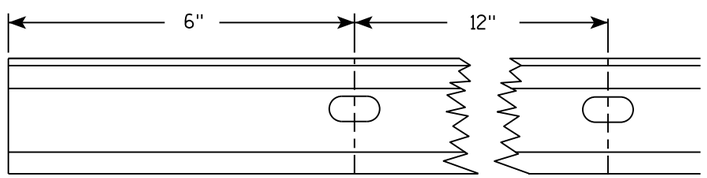
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

Extruded Shape







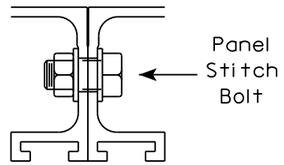
Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

Hardware

STITCH BOLT, WASHER & NUT

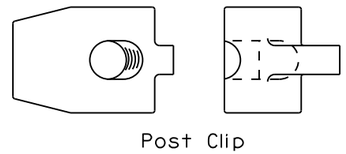
The hardware includes:

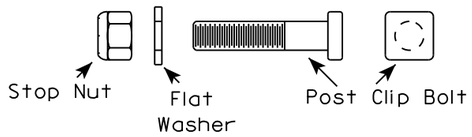
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

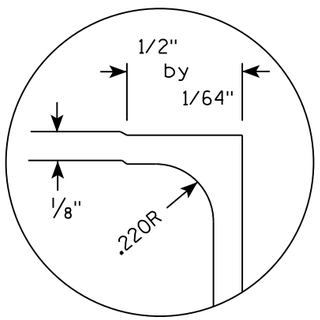
Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.



DETAIL A (EDGE WRAP JOINT)

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

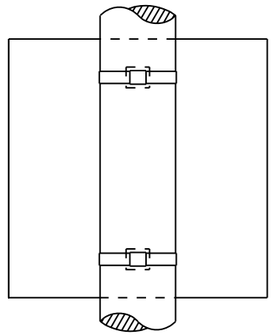
APPROVED Matthew R Rauch
for State Traffic Engineer

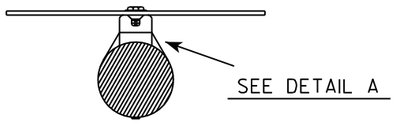
DATE 11/30/16 PLATE NO. A5-2.10

PROJECT NO:				SHEET NO: 450	E

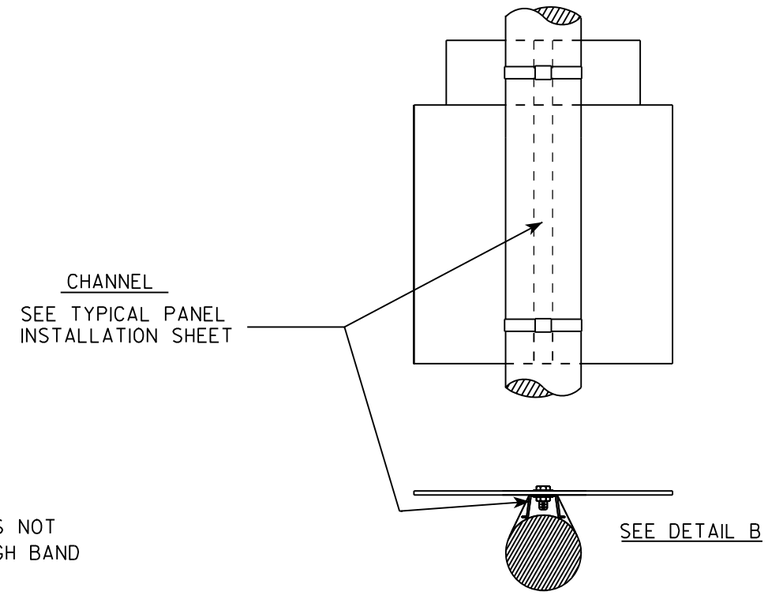
BANDING

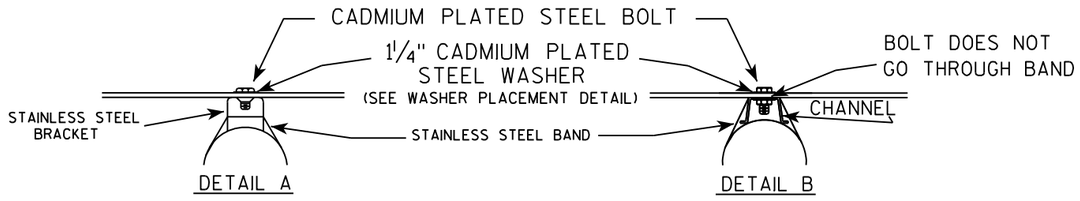
SINGLE SIGN



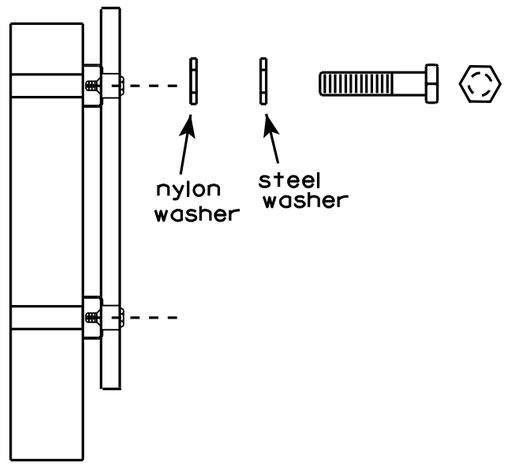


"J" ASSEMBLY





WASHER PLACEMENT



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

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

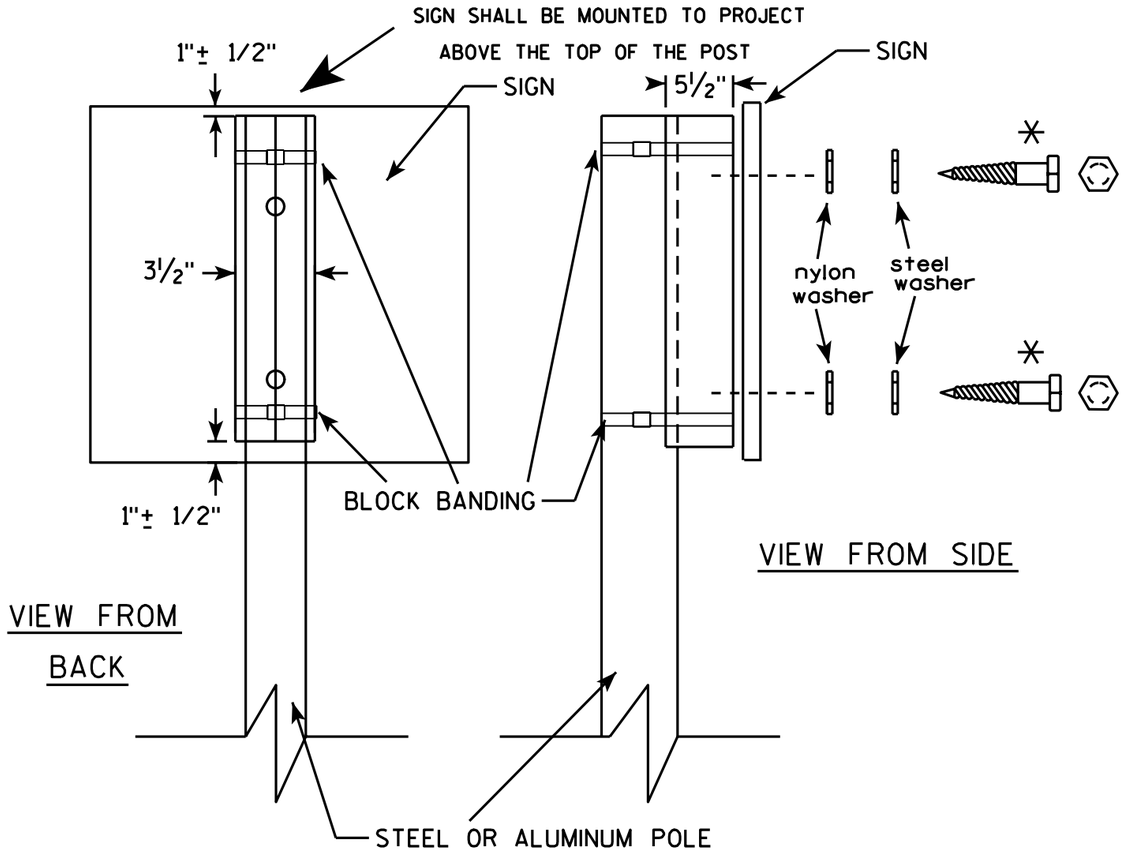
STANDARD SIGN
SIGN BANDING DETAILS

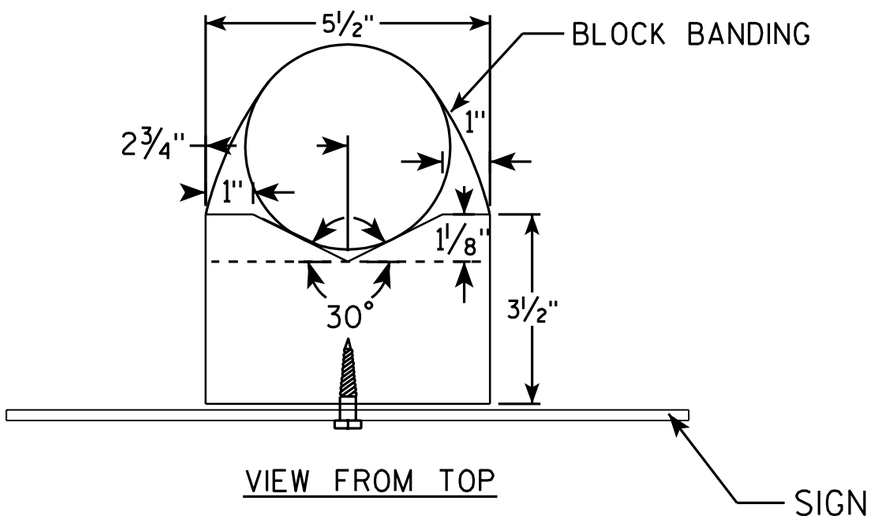
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 451	E





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, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. 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

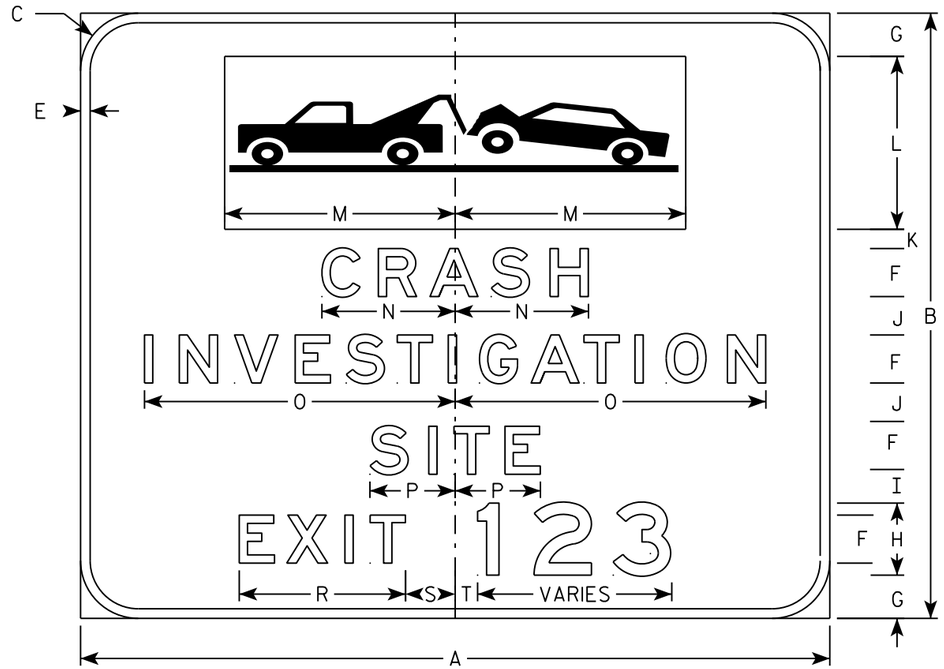
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 452 E

FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph

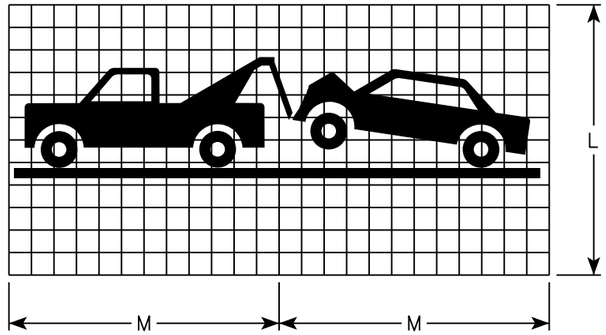
WISDOT/CADDS SHEET 42



D4-52

NOTES

1. Sign is Type I - Type SH Reflective
2. Color:
   Background - BLUE
   Message - WHITE
3. Message Series - E
4. Logo shall be white in color mounted on 96 x 36 .040 aluminmum with Blue SH Reflective Background sheeting.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	156	126	12		2	10	9	15	7	8	4	36	48	27 3/4	64 3/4	17 3/4		34 5/8	10 3/8	4 5/8							136.5
5	156	126	12		2	10	9	15	7	8	4	36	48	27 3/4	64 3/4	17 3/4		34 5/8	10 3/8	4 5/8							136.5

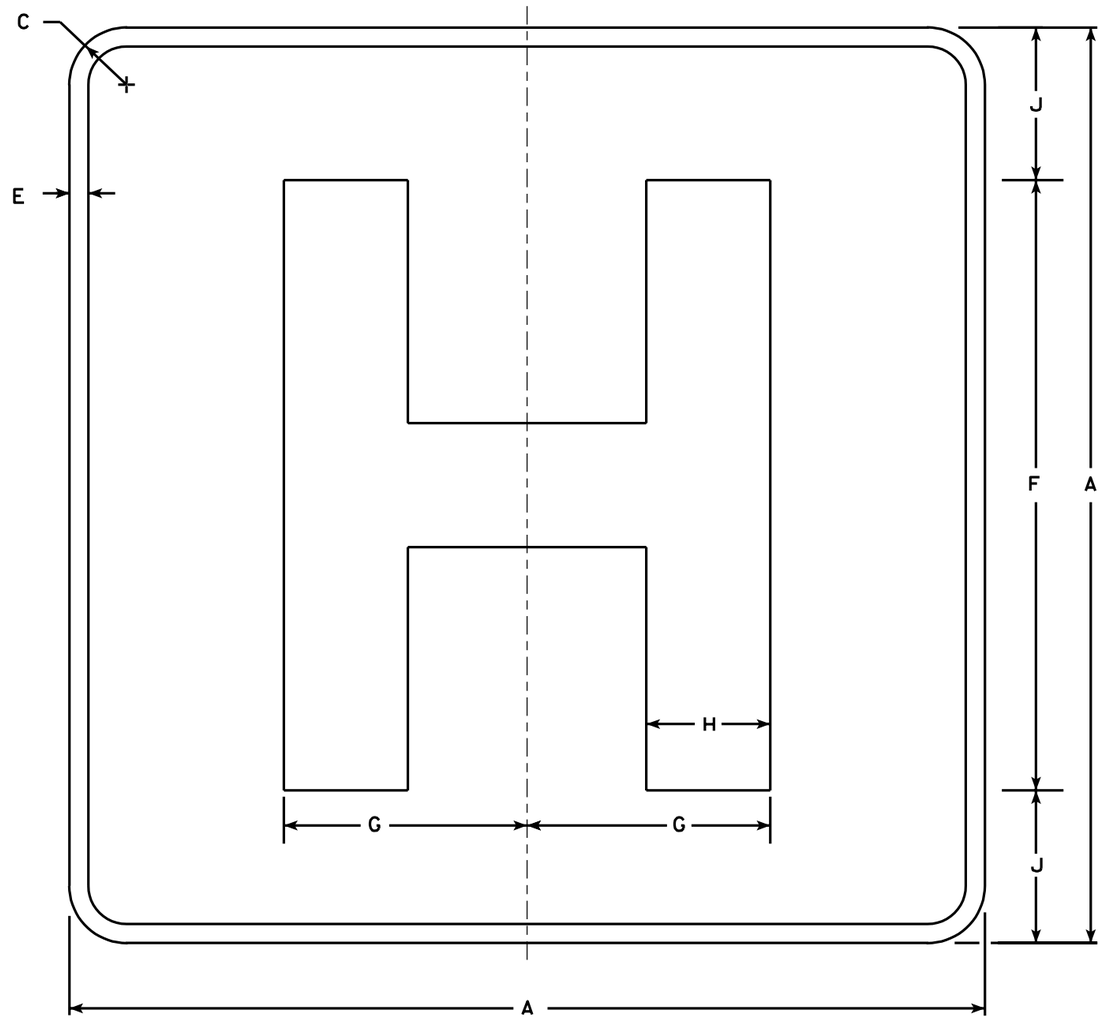
STANDARD SIGN
D4-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/17 PLATE NO. D4-52.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 453 | E



D9-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White - Type H Reflective
3. Message Series - E Modified
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	450 mmX 450 mm
2	600 mmX 600 mm
3	900 mmX 900 mm
4	X
5	X

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

STANDARD SIGN
D9-2

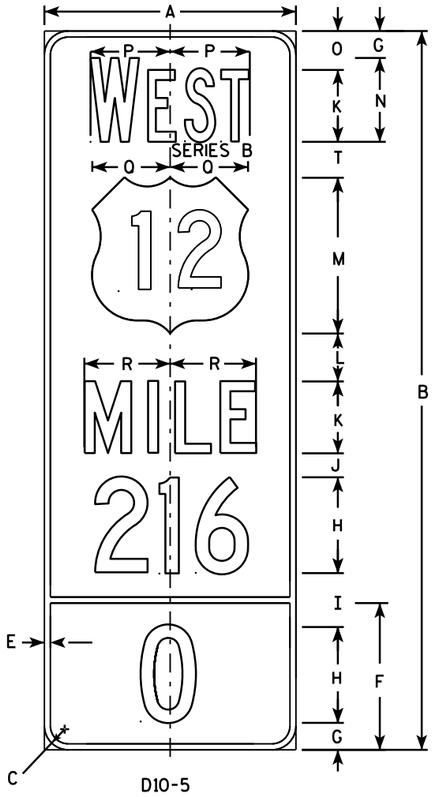
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spong
for State Traffic Engineer

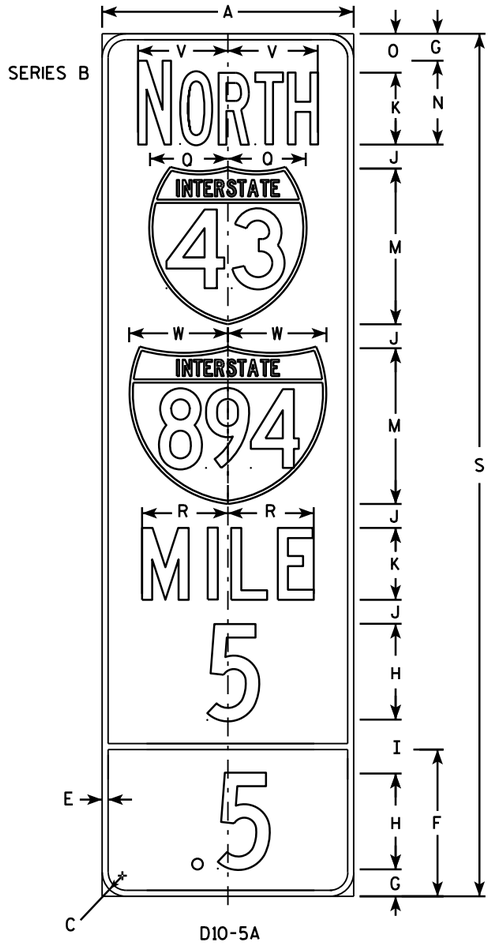
DATE 1/15/02 PLATE NO. D9-2.4

PROJECT NO:

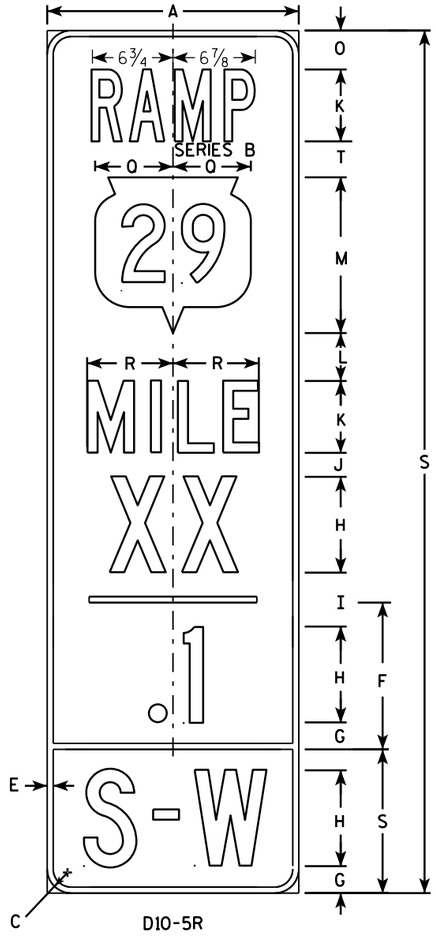
SHEET NO: 454 E



D10-5



D10-5A



D10-5R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - BLUE
   Message - WHITE
3. Interstate Shield Color
   Background - Top Red
   - Bottom Blue
   Message - White
4. Message Series - C or as noted on the Sign.
5. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
6. The decimal point is required for all digits except "0".
7. Optically adjust mileage numbers about the centerline of the sign to achieve proper balance.
8. Optically adjust Ramp direction letters about the centerline of the sign to achieve proper balance.

SERIES B

SERIES B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	D10-5 Area sq. ft.	D10-5A Area sq. ft.	D10-5R Area sq. ft.
1																													
2																													
3																													
4	21	60	1 ½		½	12 ¼	2 ¼	8	4 ½	2	6	4	13	7	3 ¼	6 ⅝	6 ½	7 ⅛	72	3		7 ½	8 ¼				8.75	10.5	10.5
5	21	60	1 ½		½	12 ¼	2 ¼	8	4 ½	2	6	4	13	7	3 ¼	6 ⅝	6 ½	7 ⅛	72	3		7 ½	8 ¼				8.75	10.5	10.5

STANDARD SIGN
D10-5

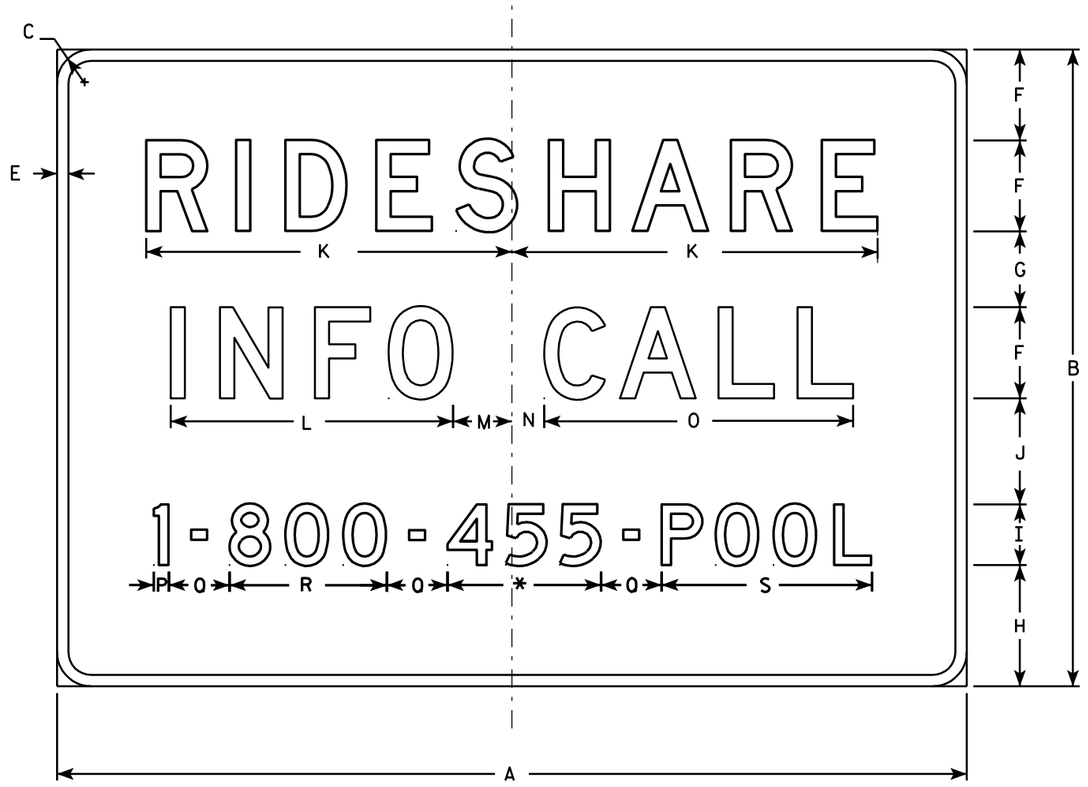
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/26/14 PL 455 D10-5.2

PROJECT NO:

SHEET NO: E



D12-2A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White - Type H Reflective
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. Substitute appropriate numerals and adjust spacing as required to achieve proper balance.

Metric equivalent for this sign is:

SIZE	
1	1200 mm X 525 mm
2	1500 mm X 1050 mm
3	
4	1500 mm X 1050 mm
5	1950 mm X 1350 mm

* Variable (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.	Area m2
1	48	21	1 1/2		1/2	3	2 3/4	3 1/2	3	2 3/4	12 1/8	9 3/8	2	1 1/8	10 1/4	3/4	3	7 3/4	10 5/8								7.0	0.63
2	60	42	2 1/4		3/4	6	5	8	4	7	24 1/8	18 5/8	3 7/8	2 1/8	20 1/8	1	4	10 3/8	13 7/8								17.5	1.58
3																												
4	60	42	2 1/4		3/4	6	5	8	4	7	24 1/8	18 5/8	3 7/8	2 1/8	20 1/8	1	4	10 3/8	13 7/8								17.5	1.58
5	78	54	3		1	8	6	10	6	8	30 7/8	23 5/8	4 7/8	2 1/8	26 3/8	1 1/2	5	15 1/2	21 1/4								29.25	2.63

STANDARD SIGN
D12-2A

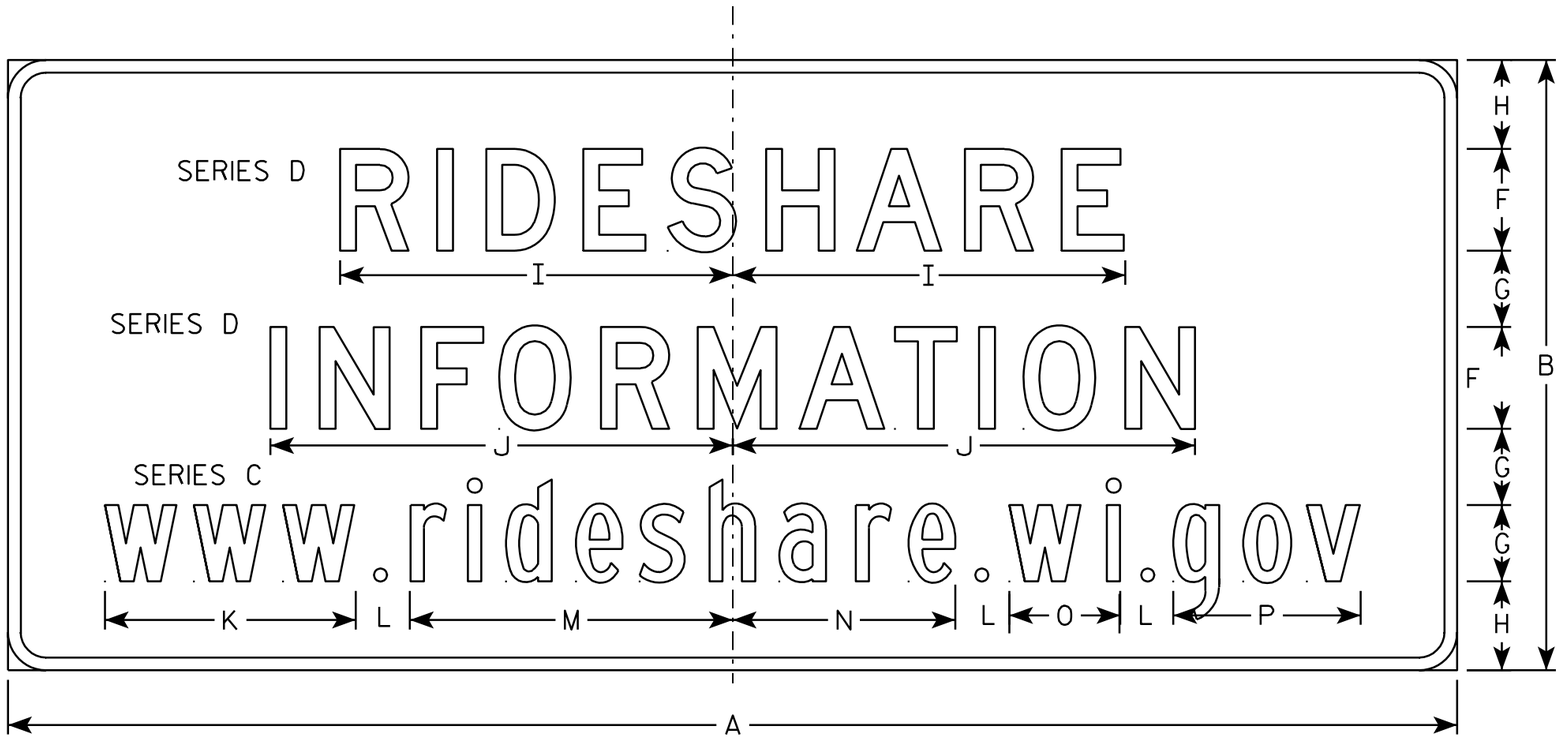
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spay for State Traffic Engineer

DATE 1/16/02 PLATE NO. D12-2A.3

PROJECT NO:

SHEET NO: 456 E



D12-2B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White
3. Message Series - Lines 1 & 2 are Series D and Line 3 is Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	
2	2100 mm X 900 mm
3	
4	2850 mm X 1200 mm
5	2850 mm X 1200 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	84	36	2 1/4		3/4	6	4 1/2	5 1/4	24 1/4	28 5/8	14 3/4	3	19	13 1/8	6 1/2	11											21.0	1.90
3																												
4	114	48	3		1	8	6	7	30 7/8	36 3/8	19 3/4	4 1/4	25 3/8	17 1/2	8 3/4	14 3/4											38.0	3.42
5	114	48	3		1	8	6	7	30 7/8	36 3/8	19 3/4	4 1/4	25 3/8	17 1/2	8 3/4	14 3/4											38.0	3.42

STANDARD SIGN
D12-2B

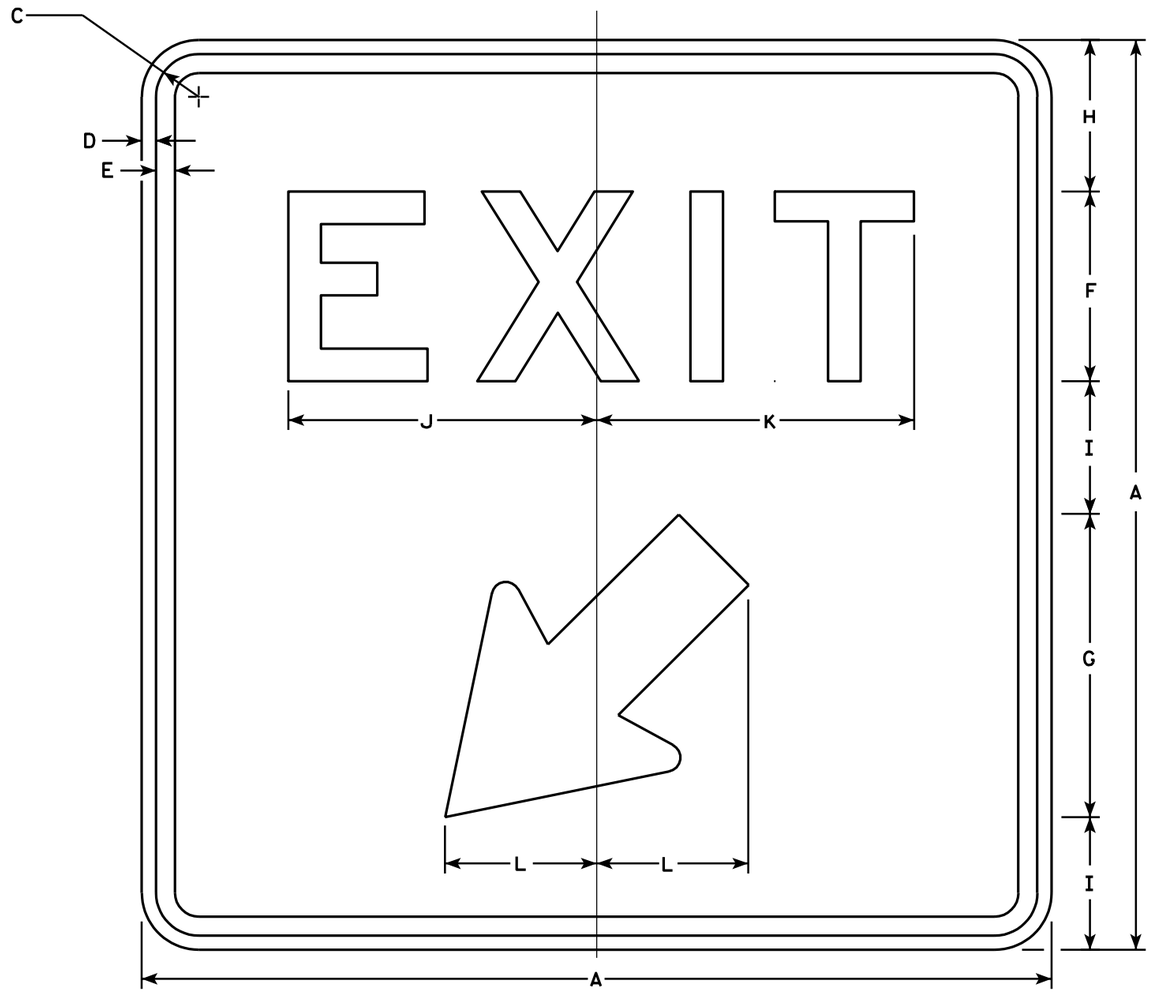
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/04/08 PLATE NO D12-2B.2

PROJECT NO:

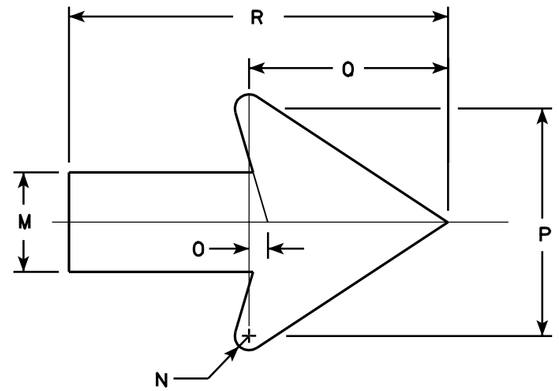
SHEET NO: 457 E



D52-54L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R52-54R is the same as R52-54L except that the arrow is reversed.



Arrow Detail

Metric equivalent for this sign is:

SIZE	
1	600 mm X 600 mm
2	600 mm X 600 mm
3	
4	
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.	Area sq. m.
1	24		1 1/8	3/8	1/2	5	8	4	3 1/2	8 1/8	8 3/8	4	2 5/8	3/8	1/2	6	5 1/4	10									4.0	.37
2	24		1 1/8	3/8	1/2	5	8	4	3 1/2	8 1/8	8 3/8	4	2 5/8	3/8	1/2	6	5 1/4	10									4.0	.37
3																												
4																												
5																												

STANDARD SIGN
D52-54

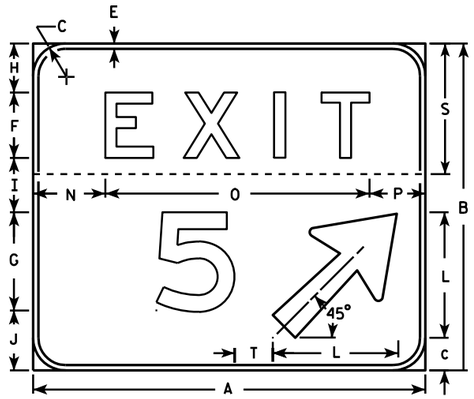
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

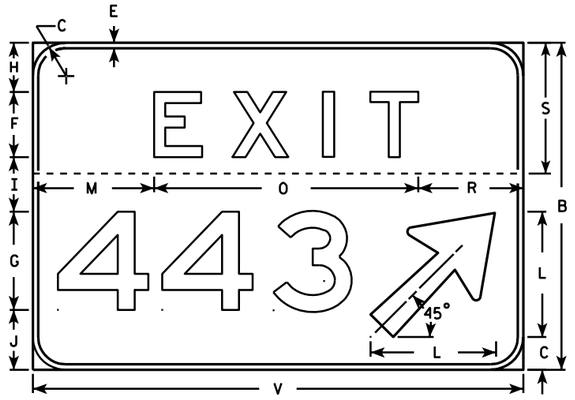
DATE 1/18/02 PLATE NO. D52-54.7

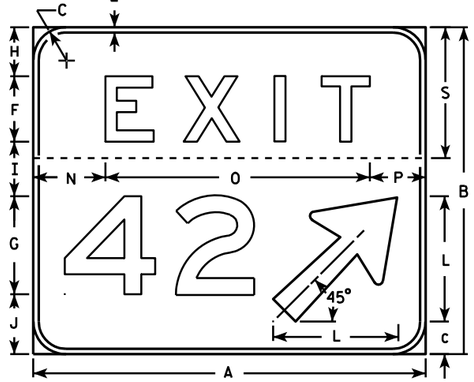
PROJECT NO:

SHEET NO: 458 E

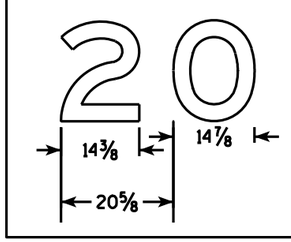


NOTE: T diminision shall be measured from the back of the number to the front of the arrow





EXAMPLE FOR USING SPACING CHART



NOTES

1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White (Type H reflective)
3. Message Series - E
4. Corners may be square or rounded but the border shall be rounded as shown.
5. Base material for this sign shall be plywood and shall be split into two seperate pieces as shown on each detail by the dashed line (----------).
6. Arrow is Type "A" from sign plate A1-1.
7. Substitute appropriate message, space per the table and adjust placement on sign to achieve proper balance.
8. As per the Standard Spec's, these signs shall not have a vertical joint.

SPACING CHART FOR 18" NUMERALS

NUMBERS	WIDTH	0	1	2	3	4	5	6	7	8	9	A	B	C
0	14 7/8	21 5/8	21 5/8	21 1/4	20 3/8	21 1/4	21 1/4	21 5/8	19 7/8	22 1/8	21 5/8			
1	5 7/8	14	14	14	13 1/8	12 1/8	14	14	12 1/4	14	14			
2	14 3/8	20 5/8	21 1/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8	18 7/8	21 1/8	20 5/8			
3	14 3/8	20 3/4	21 1/8	20 3/4	20 1/4	19 3/4	20 3/4	20 3/4	19 3/8	21 1/8	20 3/4			
4	16 5/8	22 7/8	22	22 1/2	21 5/8	21 5/8	22 7/8	22 7/8	20 5/8	23 3/8	22 7/8			
5	14 1/4	20 5/8	20 5/8	20 1/8	18 3/4	18 3/4	20 5/8	20 5/8	18 3/8	20 5/8	20 5/8			
6	14 1/2	21 1/4	20 3/4	20 3/4	19 7/8	19 1/2	20 3/8	20 3/4	19	20 3/4	20 3/8			
7	14 3/8	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4			
8	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8			
9	14 1/2	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4			
A	18	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	21 5/8	23 7/8	23
B	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/2	22 3/8	21 1/2
C	14 1/4	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18 3/8	21	19 3/4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
2																										
3																										
4																										
5	72	60	6		1	12	18	9	10	11	8 7/8	23	22 1/4	13 1/4	48 1/2	10 1/4		19 1/4	24	7		90		96	7 1/2	

1-2 Digit Bid Area	3 Digit Bid Area
Sq. Ft.	
30	37.5

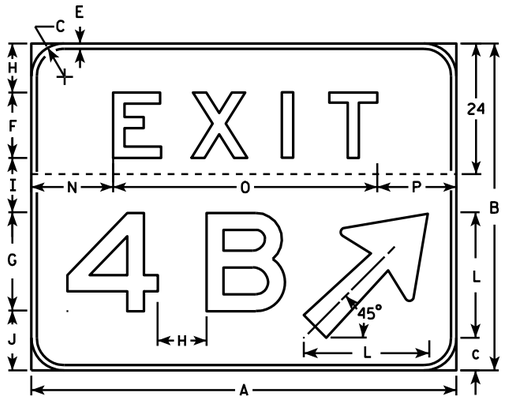
STANDARD SIGN E5-1A

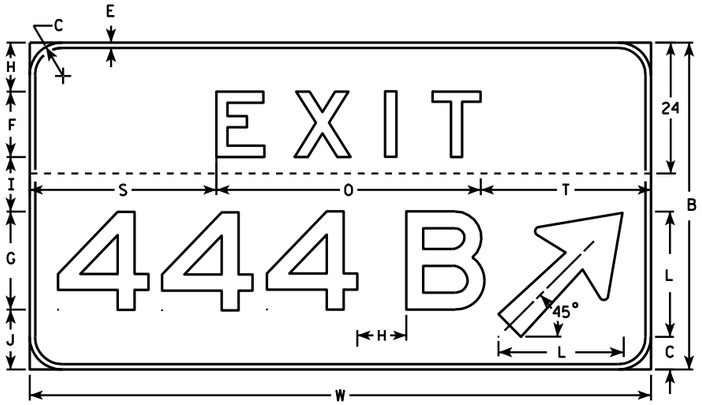
WISCONSIN DEPT OF TRANSPORTATION

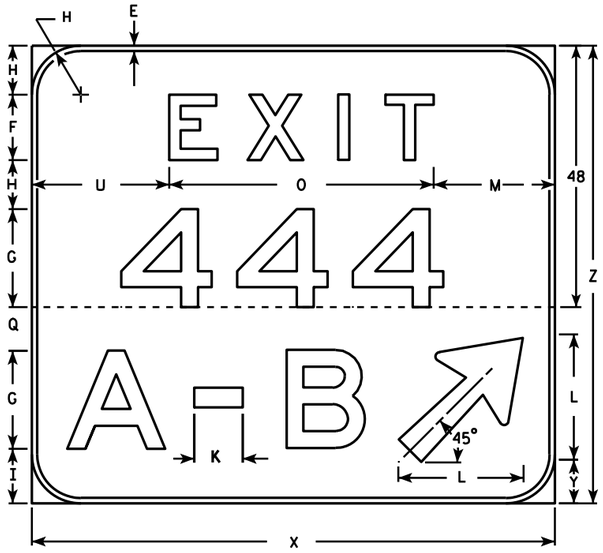
APPROVED Matthew R Rauch for State Traffic Engineer

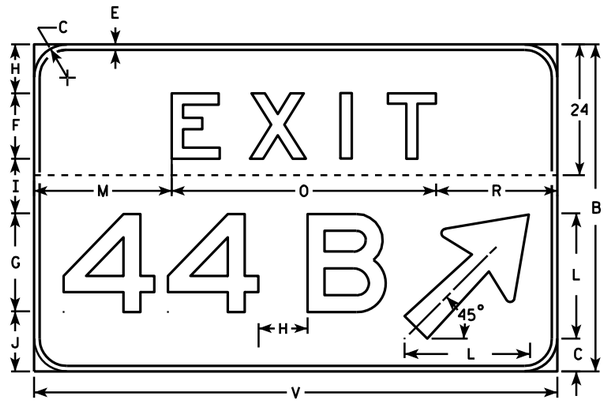
DATE 5/11/10 PLATE NO. E5-1A.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 459 | E

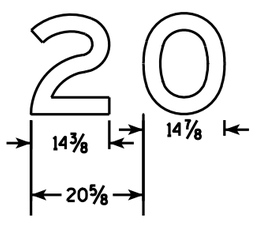








EXAMPLE FOR USING SPACING CHART



NOTES

1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White (Type H reflective)
3. Message Series - E
4. Corners may be square or rounded but the border shall be rounded as shown.
5. Base material for this sign shall be plywood and shall be split into two seperate pieces as shown on each detail by the dashed line (----------).
6. Arrow is Type "A" from sign plate A1-1.
7. Substitute appropriate message, space per the table and adjust placement on sign to achieve proper balance.
8. When two letters are hyphenated, the distance between them should be equal to two letter heights and the hyphen is spaced optically between them.
9. As per the Standard Spec's, these signs shall not have a vertical joint.

SPACING CHART FOR 18" NUMERALS

NUMBERS	WIDTH	0	1	2	3	4	5	6	7	8	9	A	B	C
0	14 7/8	21 5/8	21 5/8	21 1/4	20 3/8	21 1/4	21 1/4	21 5/8	19 7/8	22 1/8	21 5/8	19 7/8	22 1/8	22 1/8
1	5 7/8	14	14	14	13 1/8	12 1/8	14	14	12 1/4	14	14	9 7/8	14	14
2	14 3/8	20 5/8	21 1/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8	18 7/8	21 1/8	20 5/8	20 1/4	21 1/8	21 1/8
3	14 3/8	20 3/4	21 1/8	20 3/4	20 1/4	19 3/4	20 3/4	20 3/4	19 3/8	21 1/8	20 3/4	20 1/4	21 1/8	21 1/8
4	16 5/8	22 7/8	22	22 1/2	21 5/8	21 5/8	22 7/8	22 7/8	20 5/8	23 3/8	22 7/8	22 1/2	25 1/2	23 3/8
5	14 1/4	20 5/8	20 5/8	20 1/8	18 3/4	18 3/4	20 5/8	20 5/8	18 3/8	20 5/8	20 5/8	19 1/4	20 5/8	20 5/8
6	14 1/2	21 1/4	20 3/4	20 3/4	19 7/8	19 1/2	20 3/8	20 3/4	19	20 3/4	20 3/8	18	20 3/4	20 3/4
7	14 3/8	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8
8	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/4	21 1/2	21 1/2
9	14 1/2	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18	21 3/4	21 3/4
A	18	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	21 5/8	23 7/8	23
B	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/2	22 3/8	21 1/2
C	14 1/4	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18 3/8	21	19 3/4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
2																										
3																										
4																										
5	78	60	6		1	12	18	9	10	11	8 7/8	23	25 1/4	15	48 1/2	14 1/2	8	22 1/4	34 1/4	31 1/4	25 1/4	96	114	96	7 1/2	84

2 Digit Bid Area	3 Digit Bid Area	4 Digit Bid Area	5 Digit Bid Area
Sq. Ft.			
32.5	40.0	47.5	56.0

STANDARD SIGN
E5-1B

WISCONSIN DEPT OF TRANSPORTATION

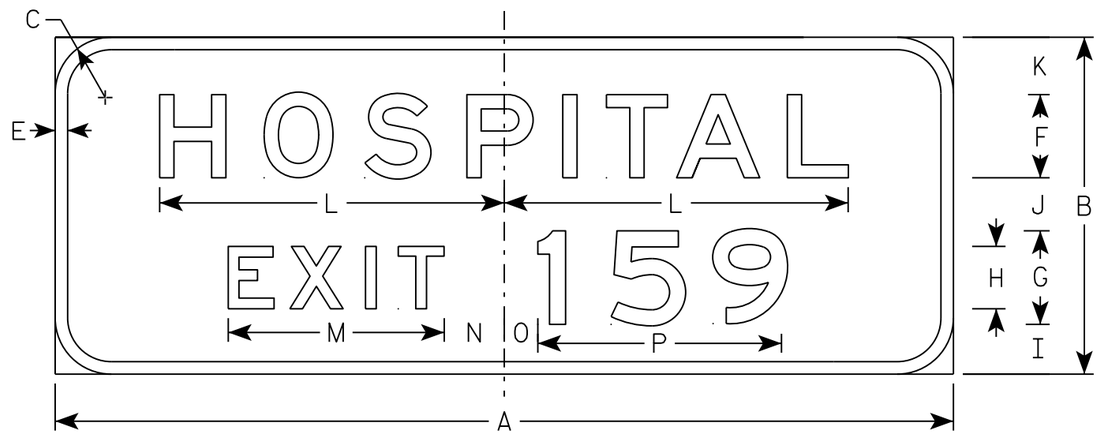
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/8/10 PLATE NO. E5-1B.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 460 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\E51B.DGN PLOT DATE : 08-JUN-2010 12:42 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 27.808870:1.000000
WISDOT/CADDS SHEET 42



E10-61

NOTES

1. Sign is Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White
3. Message Series - E
4. Apply proper Exit Numbers and letters, optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	144	54	9		2	13 3/8	15	10	8	8 1/2	9 1/4	55 1/4	34 5/8	9 5/8	5 3/8	39											54
5	144	54	9		2	13 3/8	15	10	8	8 1/2	9 1/4	55 1/4	34 5/8	9 5/8	5 3/8	39											54

TYPICAL SIGNS
E10-61

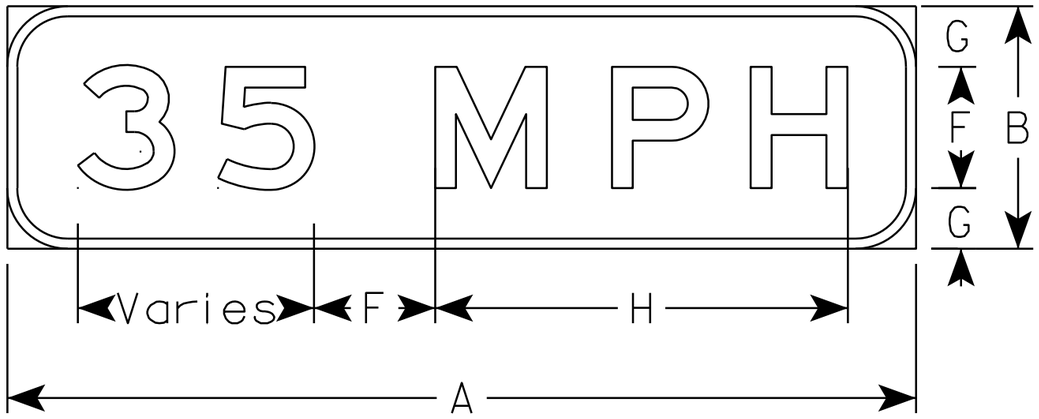
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/24/15 PLATE NO E10-61.3

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\E1061.DGN PLOT DATE : 01-DEC-2015 17:49 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 24.284107:1.000000



E13-1P

NOTES

1. Panel is - Type F reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E
4. The panel shown on this plate is for use with E5-1A.
5. Width, Radius and Border thickness shall match the E5-1A.
6. Substitute appropriate numerals and adjust placement to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	VARIES	24				12	6	40 7/8																			VARIES
2M																											
3																											
4																											
5																											

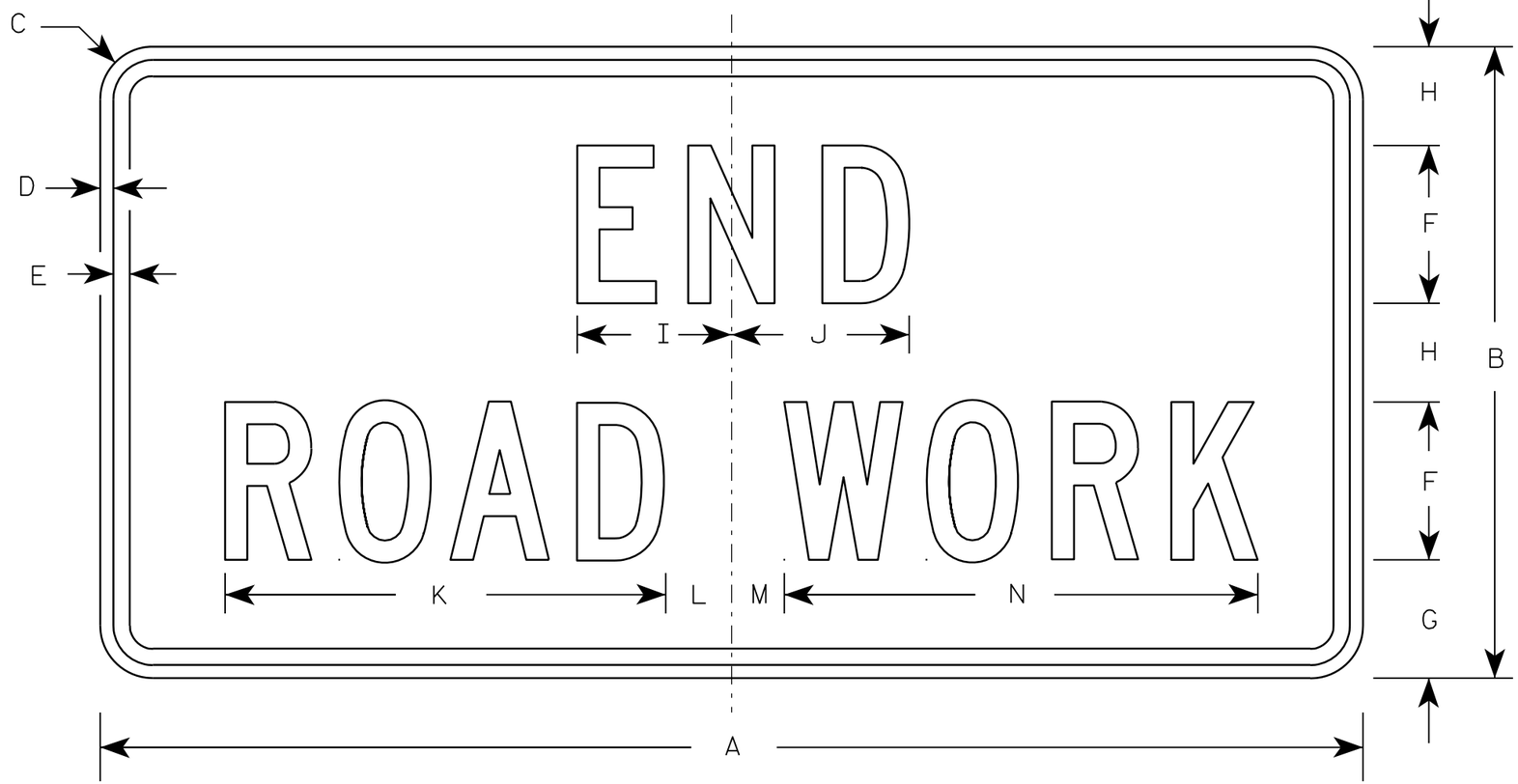
STANDARD SIGN
E13-1P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/5/2012 PLATE NO. E13-1P.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 462	E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

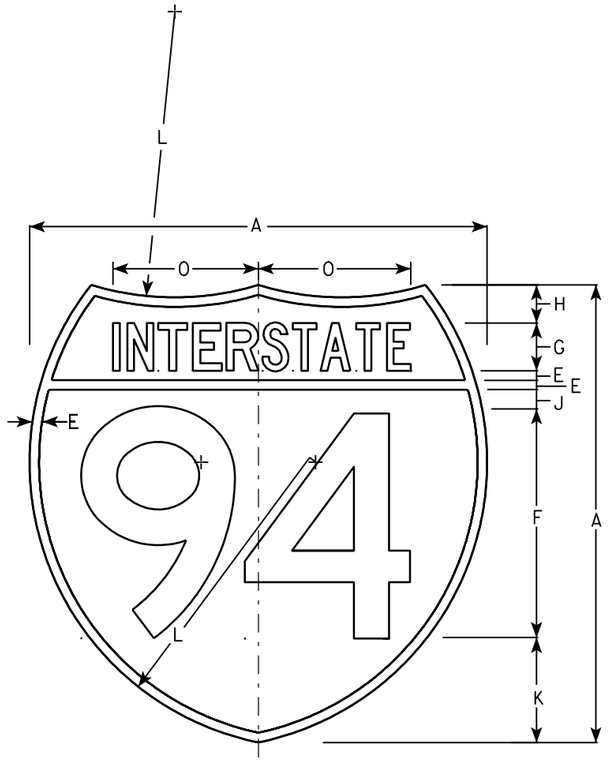
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

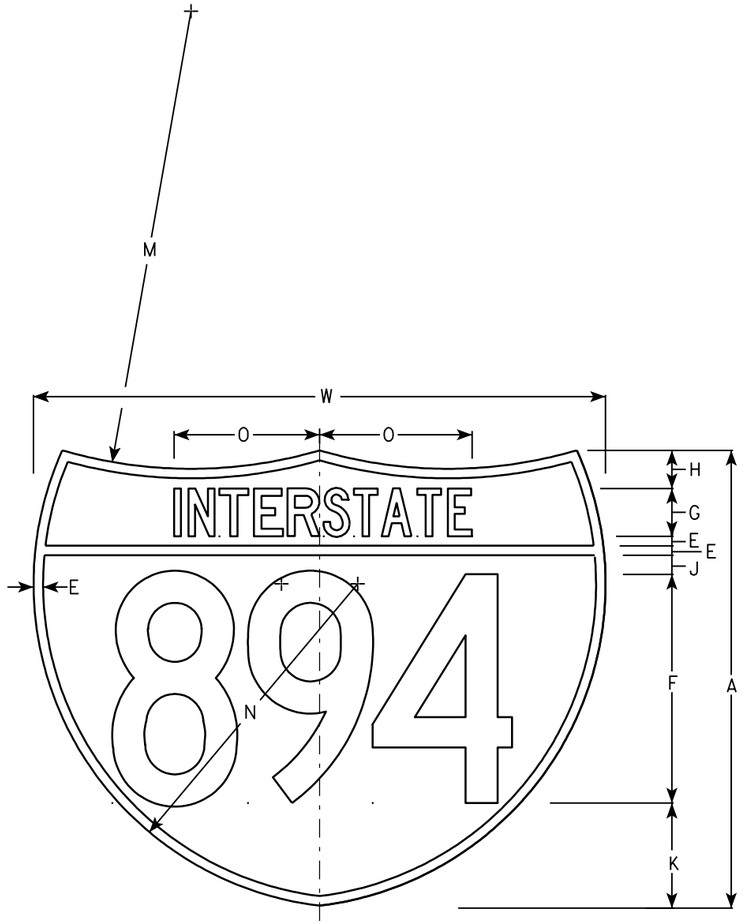
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 463	E



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

7

7

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

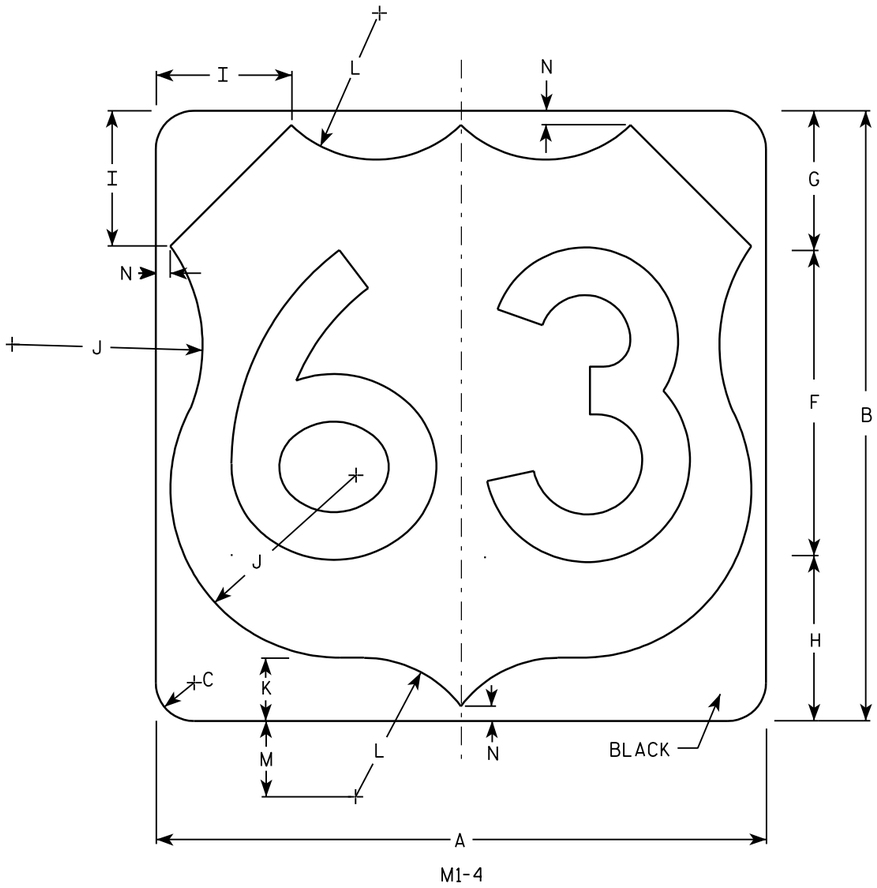
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

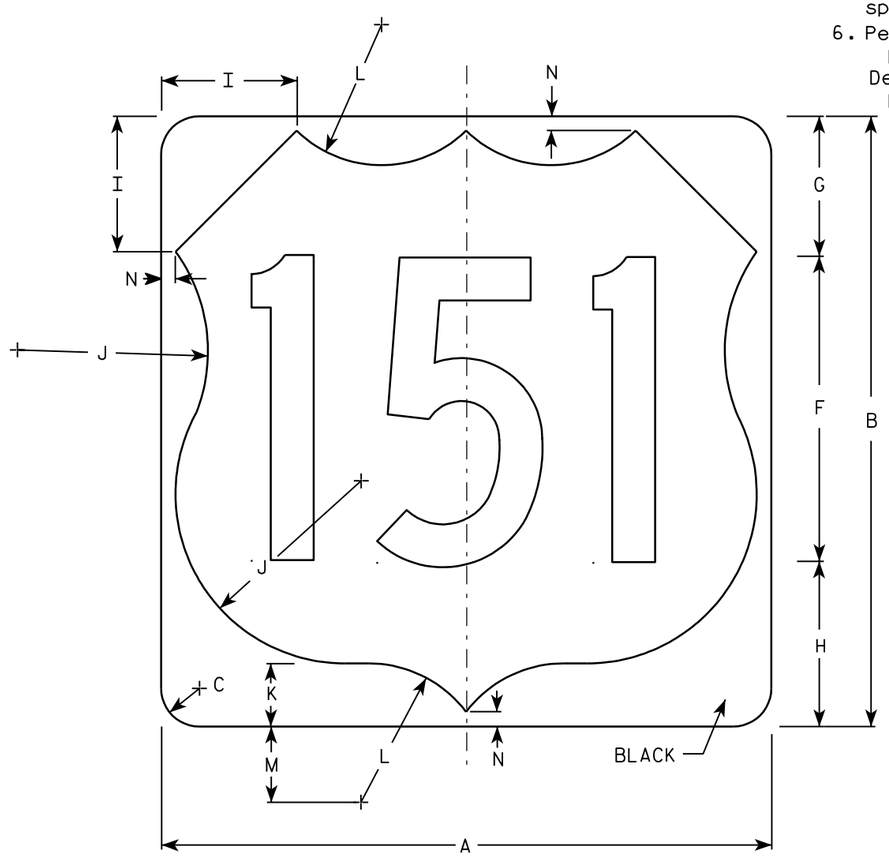
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 464	E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   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. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

Metric equivalent for this sign is:

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

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

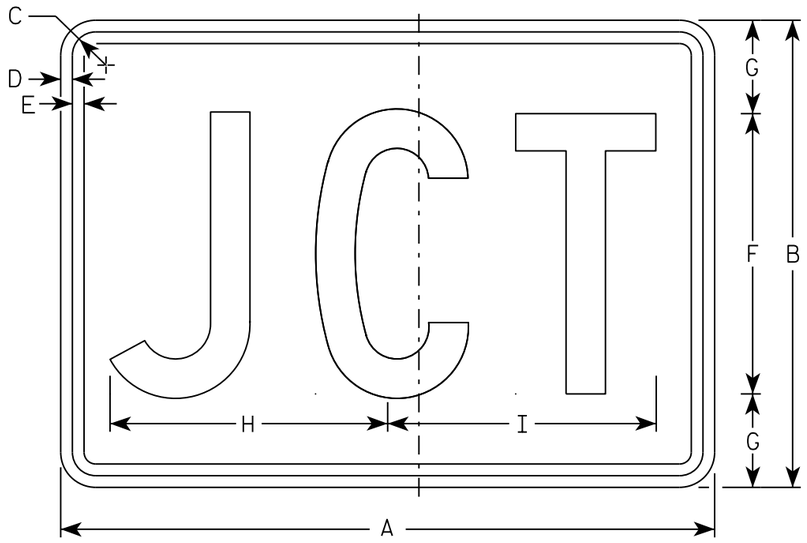
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

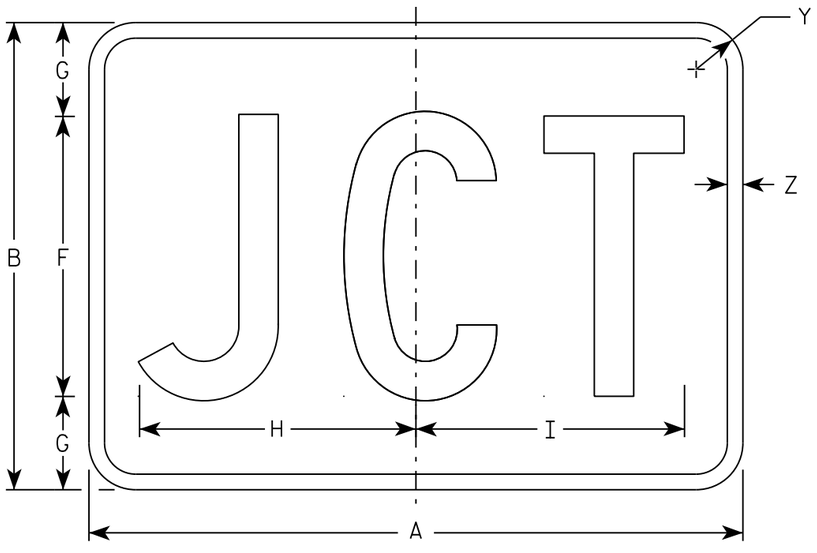
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/25/05 PLATE NO. M1-4.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 465 | E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

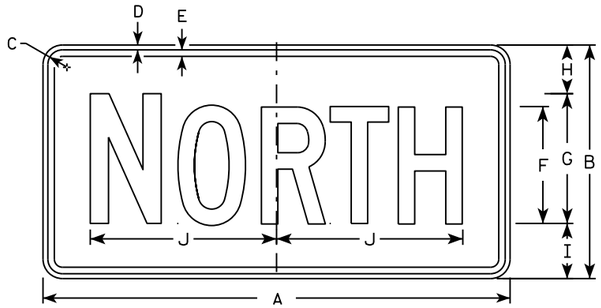
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

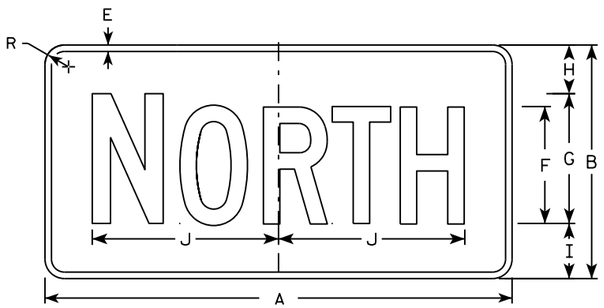
DATE 10/15/15 PLATE 466 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



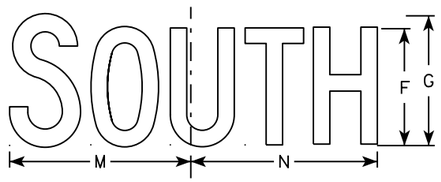
M3-1
MM3-1
MP3-1



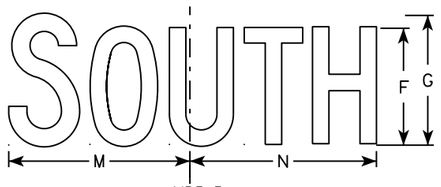
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

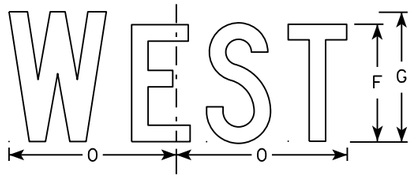
MB3-2
MK3-2
MN3-2



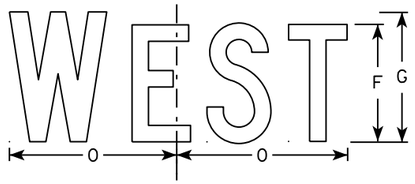
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

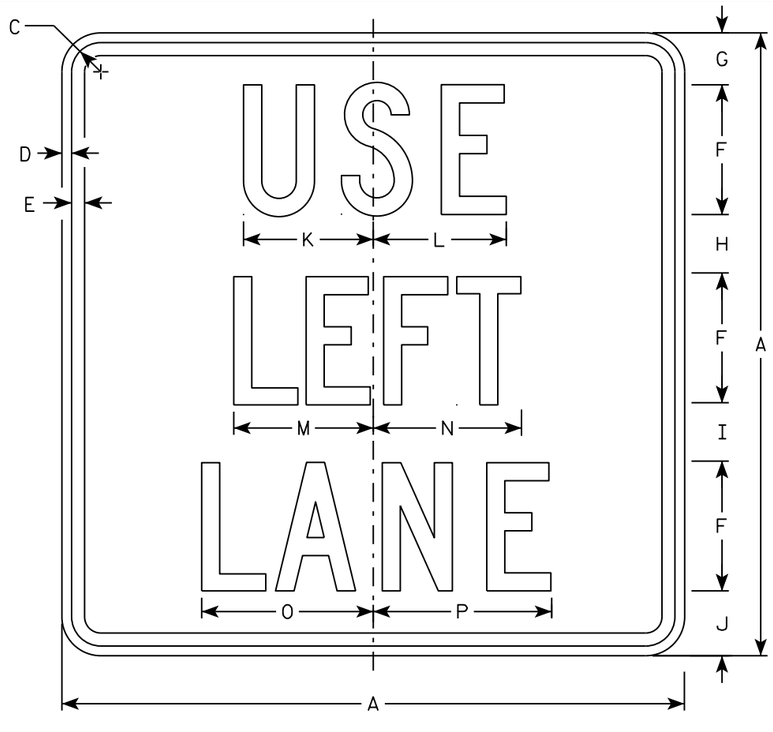
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

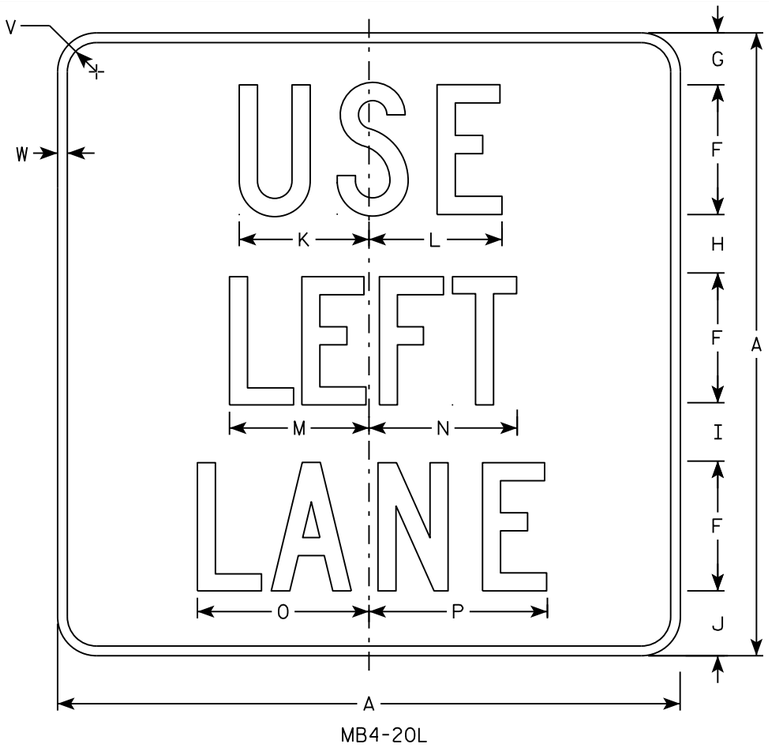
DATE 10/15/15 PLATE NO M3-1.14

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

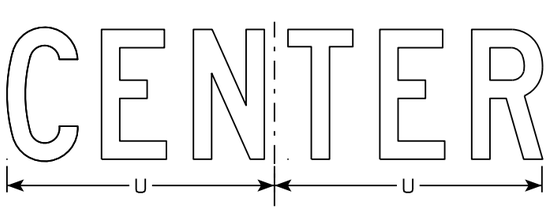
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-20L
MM4-20L
M04-20L
MP4-20L



MB4-20L
MK4-20L
MN4-20L
MR4-20L



M4-20C
MB4-20C
MK4-20C
MM4-20C
MN4-20C
M04-20C
MP4-20C
MR4-20C

M4-20R
MB4-20R
MK4-20R
MM4-20R
MN4-20R
M04-20R
MP4-20R
MR4-20R

NOTES

1. Sign is Type II - Type H except as Shown
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. M4-20 Background - White
   Message - Black
   MB4-20 Background - Blue
   Message - White
   MK4-20 Background - Green
   Message - White
   MM4-20 Background - White
   Message - Green
   MN4-20 Background - Brown
   Message - White
   M04-20 Background - Orange - Type F Reflective
   Message - Black
   MP4-20 Background - White
   Message - Blue
   MR4-20 Background - Brown
   Message - Yellow

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

STANDARD SIGN
M4-20

WISCONSIN DEPT OF TRANSPORTATION

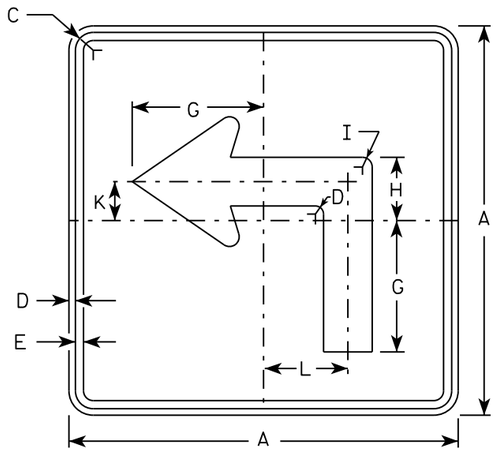
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 10/15/15 PLATE NO M4-20.5

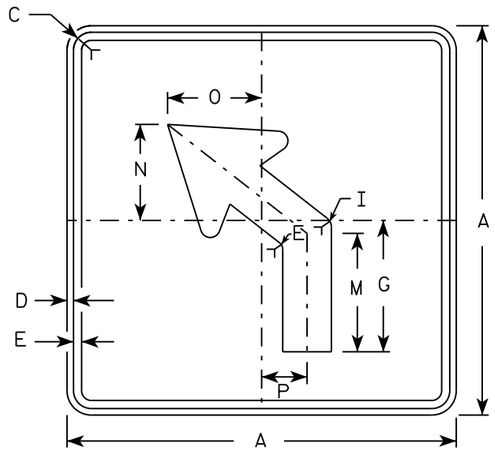
468

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

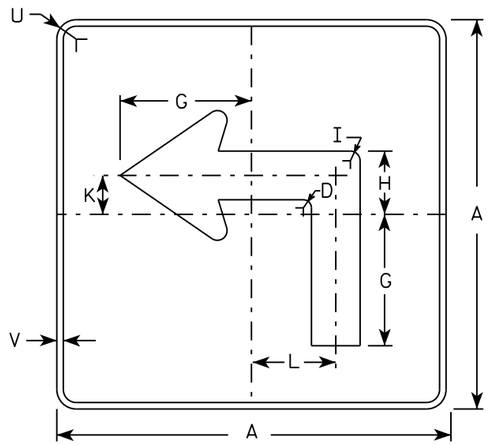
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M420.DGN PLOT DATE : 01-DEC-2015 18:03 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.837526:1.000000



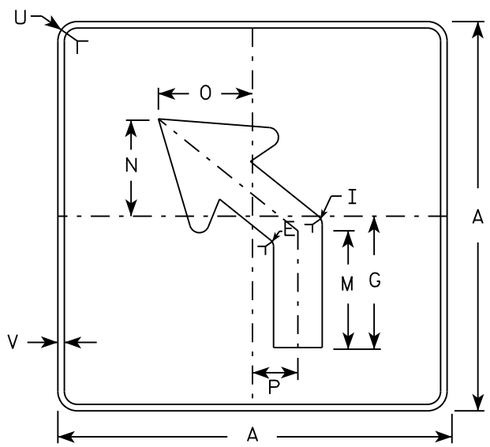
M5-1L
MM5-1L
MO5-1L
MP5-1L



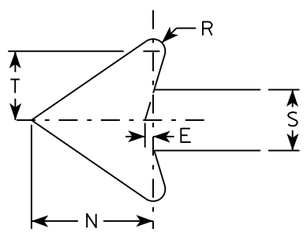
M5-2L
MM5-2L
MO5-2L
MP5-2L



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



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



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

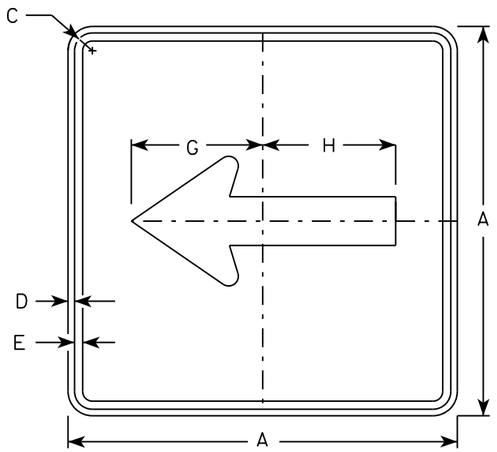
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

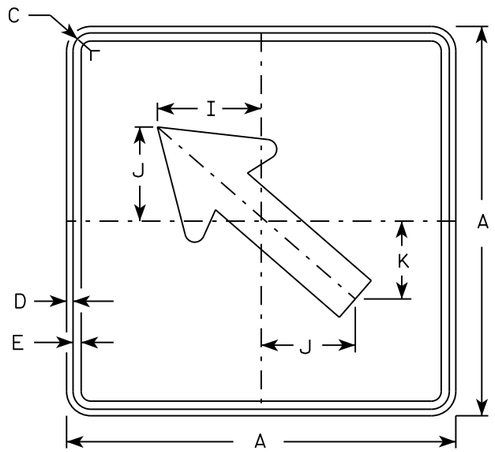
DATE 10/15/15 PLATE NO. M5-1.13

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



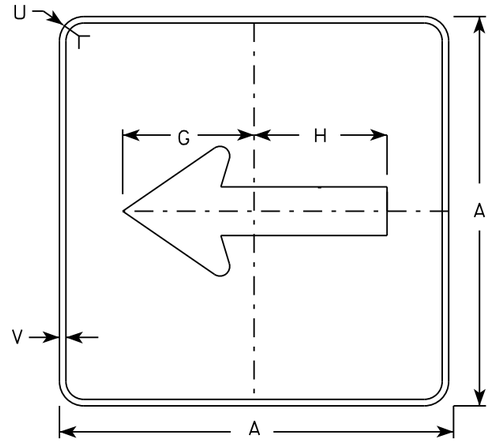
M6-1
MM6-1
MO6-1
MP6-1



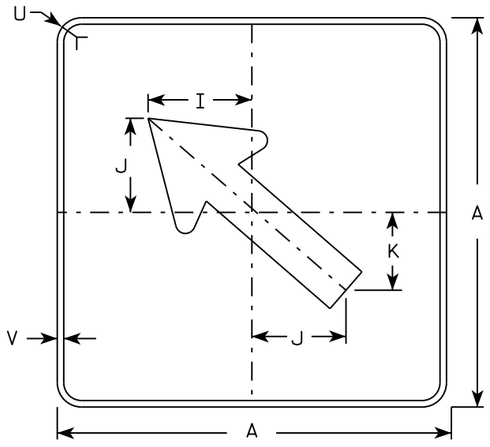
M6-2
MM6-2
MO6-2
MP6-2

NOTES

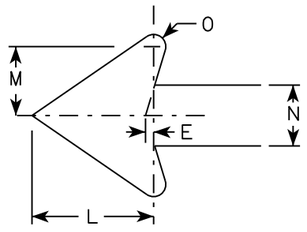
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



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



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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

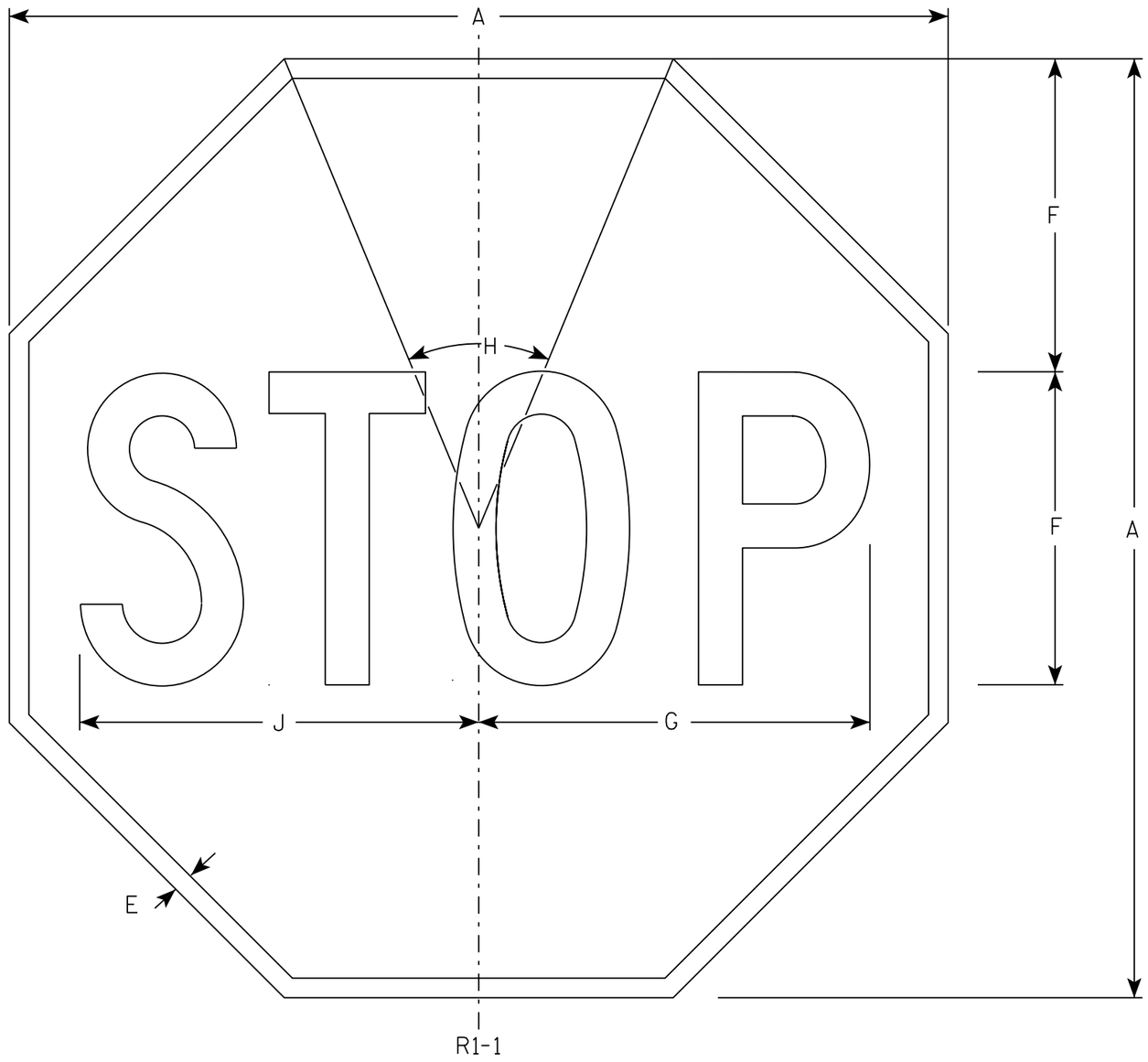
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 470 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

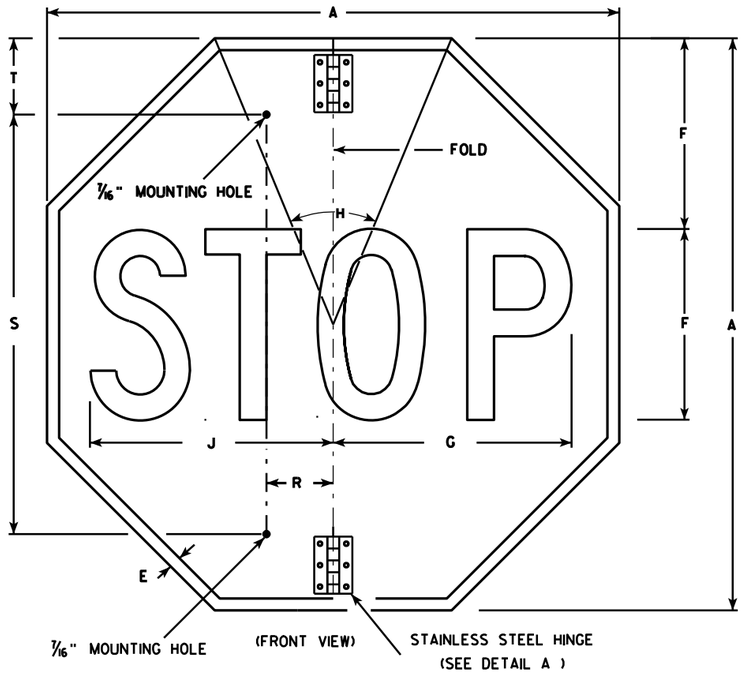
STANDARD SIGN
R1-1

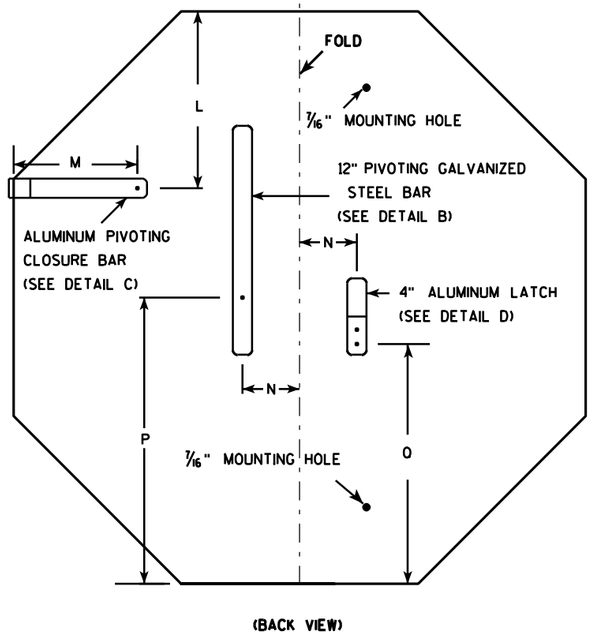
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

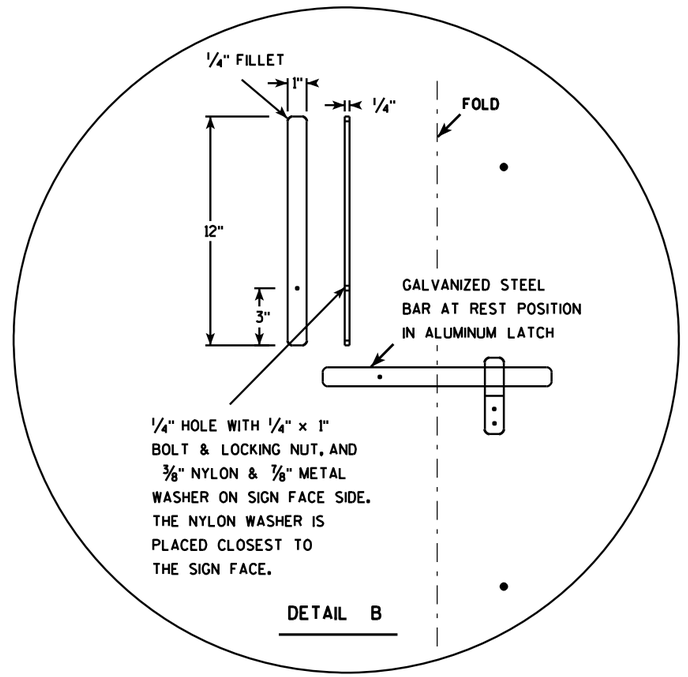
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 471	E

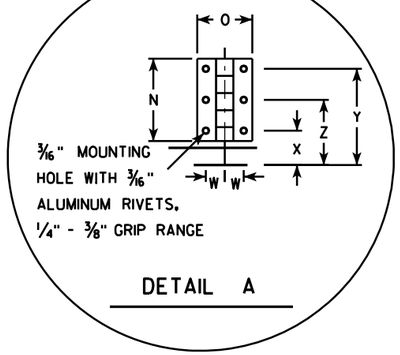


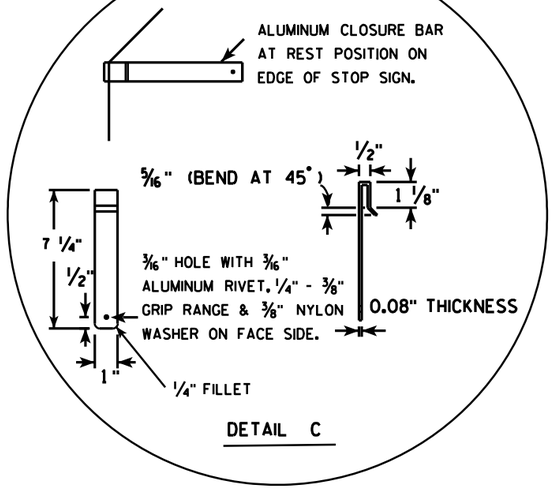


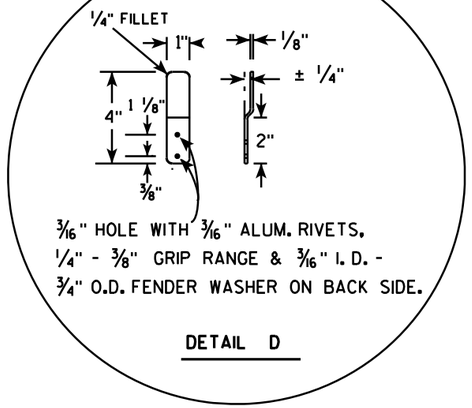
NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.









SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

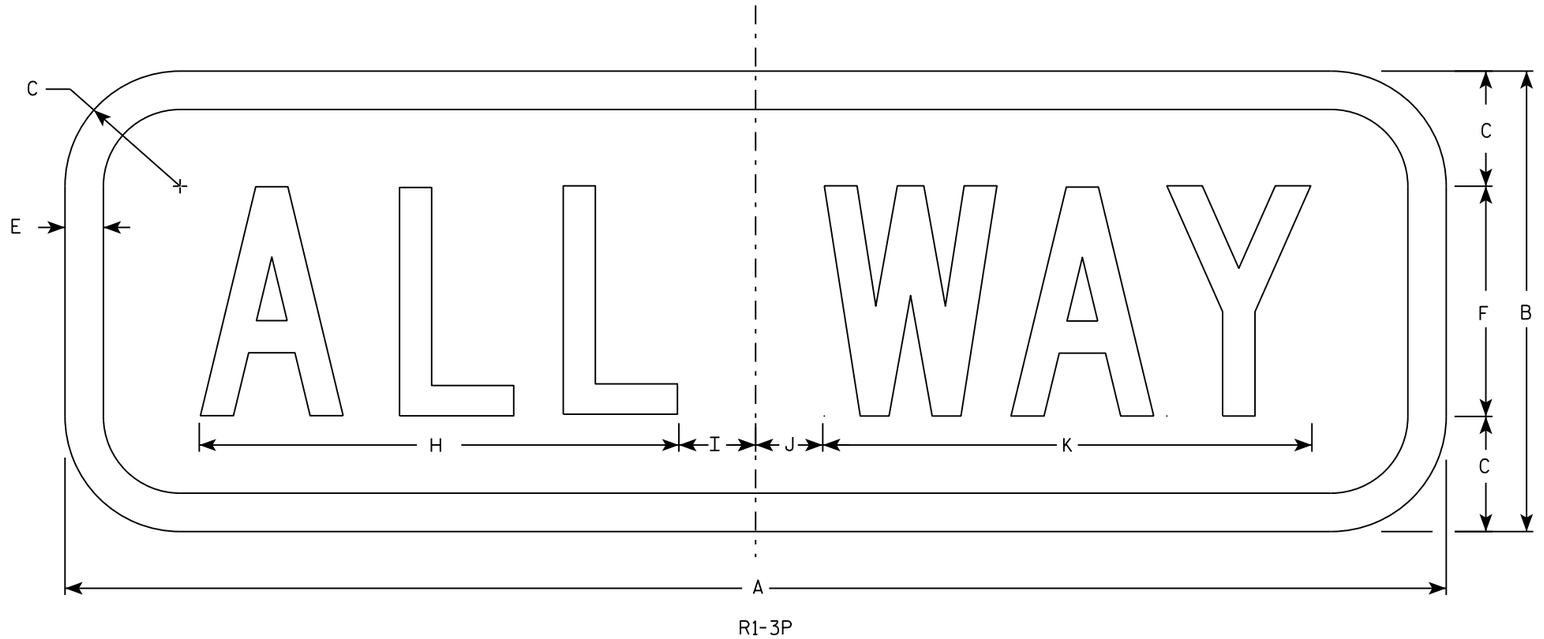
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 472	E



R1-3P

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. For 30"x30" R1-1 use 18"x6" R1-3P sign
   For 36"x36" R1-1 use 24"x9" R1-3P sign
   For 48"x48" R1-1 use 30"x12" R1-3P sign

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	6	1 ½		½	3		6 ¼	1 ¼	⅞	6 ⅜																0.75
2S	18	6	1 ½		½	3		6 ¼	1 ¼	⅞	6 ⅜																1.5
2M	24	9	1 ½		½	5		9 ¼	1 ¼	¾	9 ¾																1.5
3	24	9	1 ½		½	5		9 ¼	1 ¼	¾	9 ¾																1.5
4	30	12	2 ¼		⅝	6		11	2 ¼	1 ½	11 ¾																2.5
5	30	12	2 ¼		⅝	6		11	2 ¼	1 ½	11 ¾																2.5

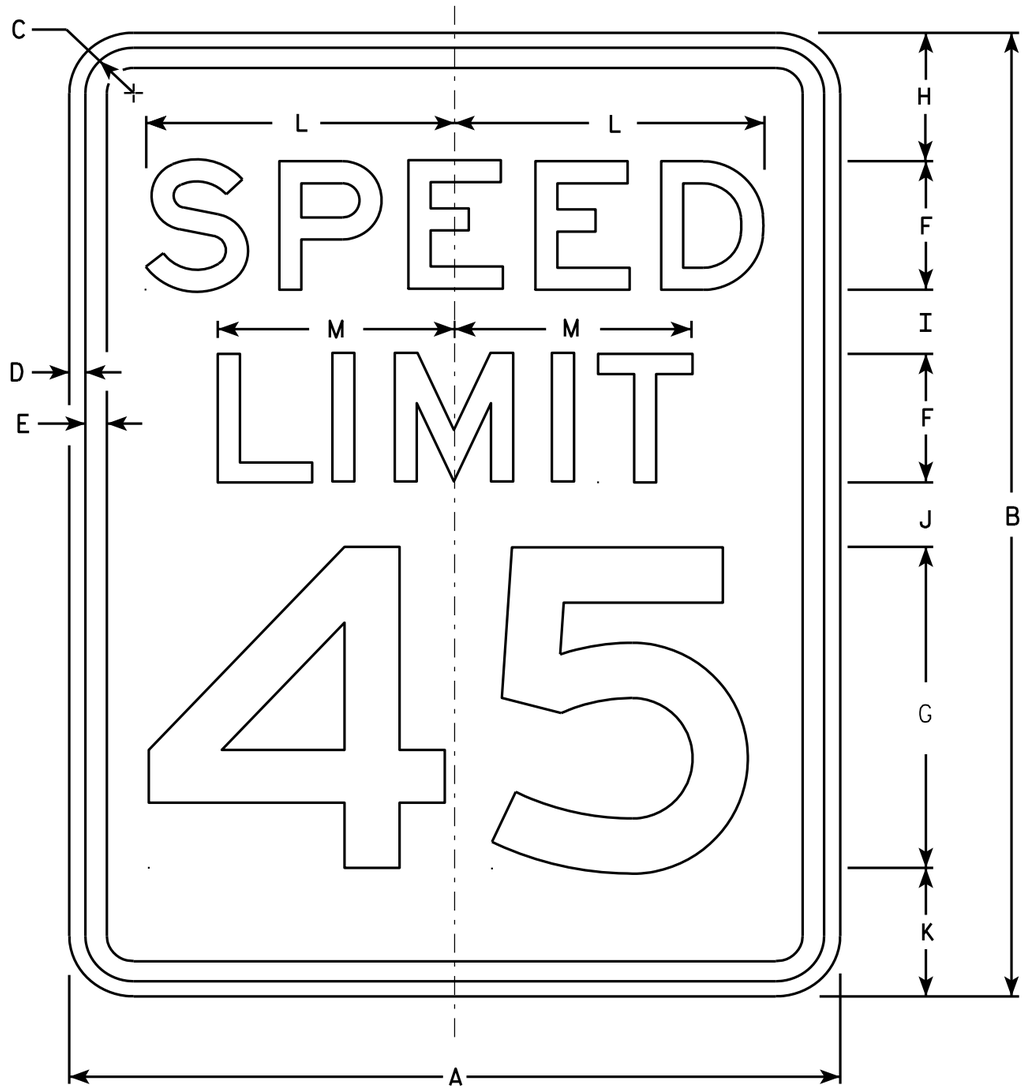
STANDARD SIGN
R1-3P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R1-3P.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 473 | E



R2-1

NOTES

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

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

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

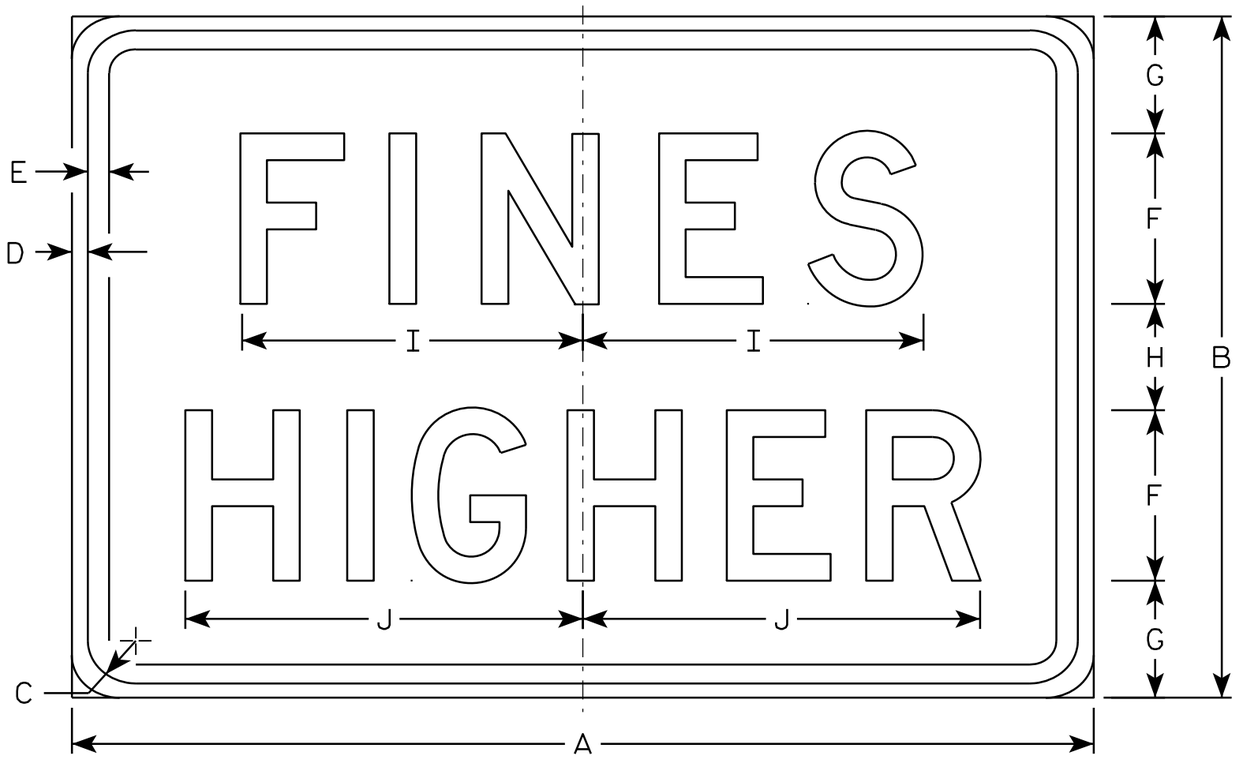
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 474 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000

WISDOT/CADDS SHEET 42



R2-6P

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

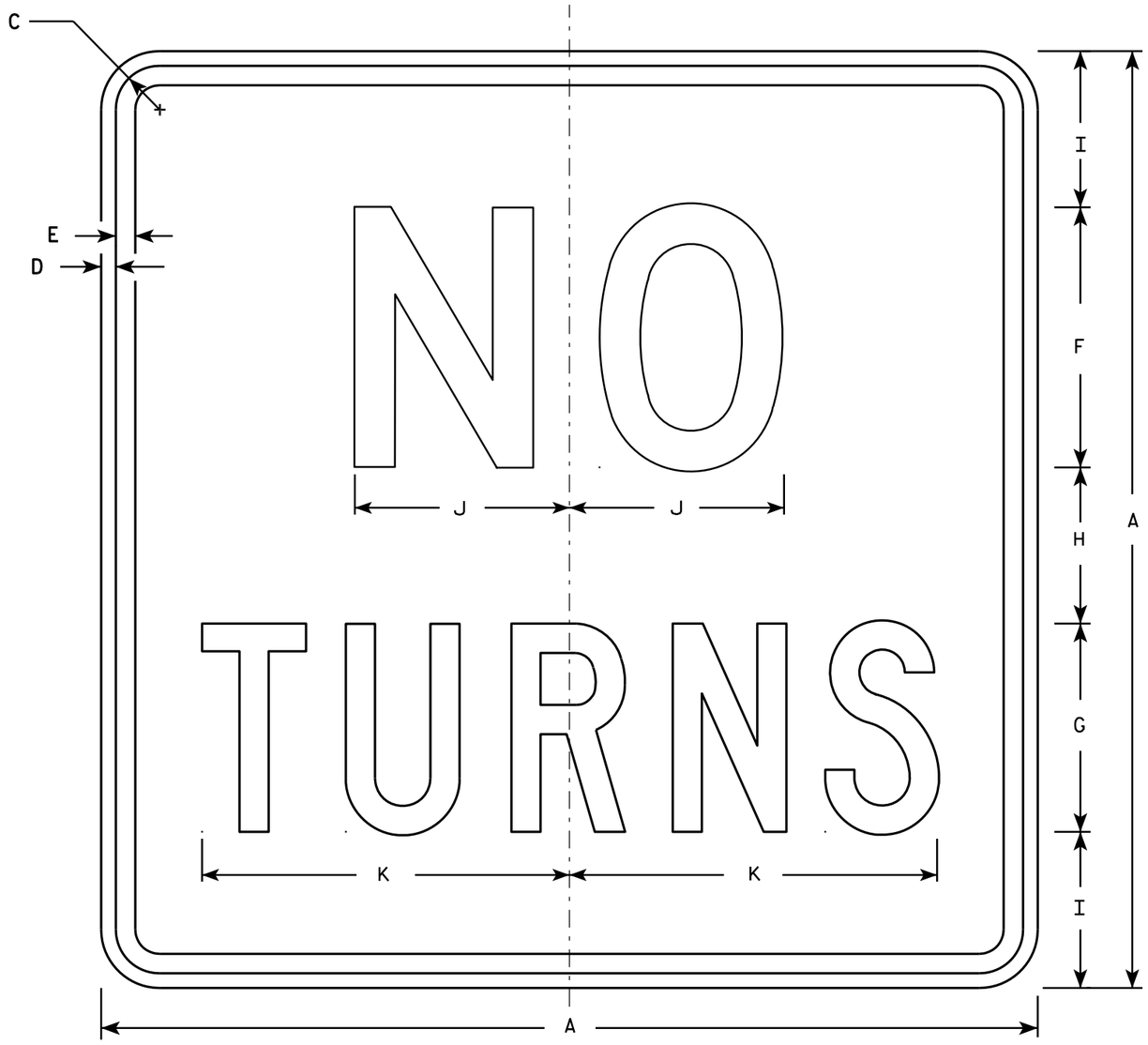
STANDARD SIGN
R2-6P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 475 | E



R3-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - 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 and Line 2 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																											
2S	24		1 1/8	3/8	1/2	6	5	4	4 1/2	5 1/8	8 3/4																4.0
2M	36		1 5/8	5/8	3/4	10	8	6	6	8 1/4	14 1/8																9.0
3	36		1 5/8	5/8	3/4	10	8	6	6	8 1/4	14 1/8																9.0
4	36		1 5/8	5/8	3/4	10	8	6	6	8 1/4	14 1/8																9.0
5	48		2 1/4	3/4	1	12	10	8	9	10 1/4	17 5/8																16.0

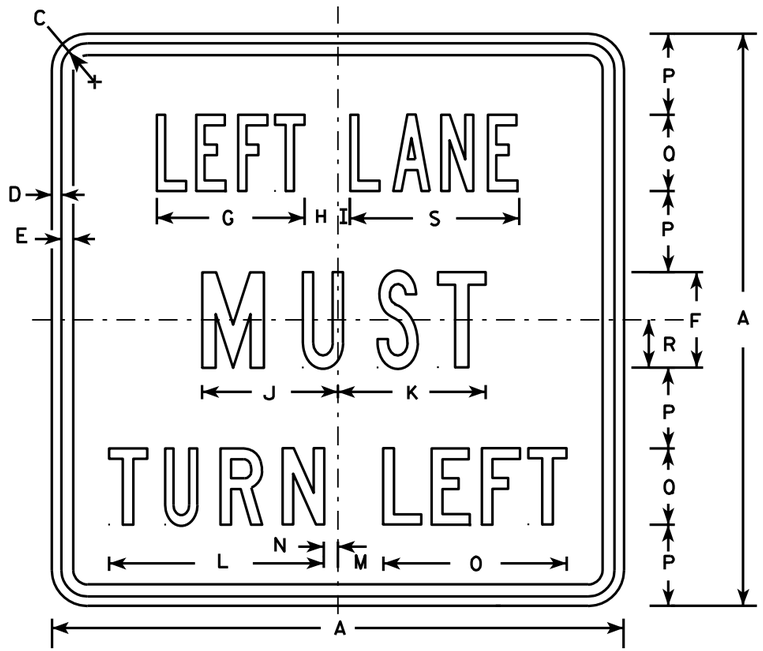
STANDARD SIGN
R3-3

WISCONSIN DEPT OF TRANSPORTATION

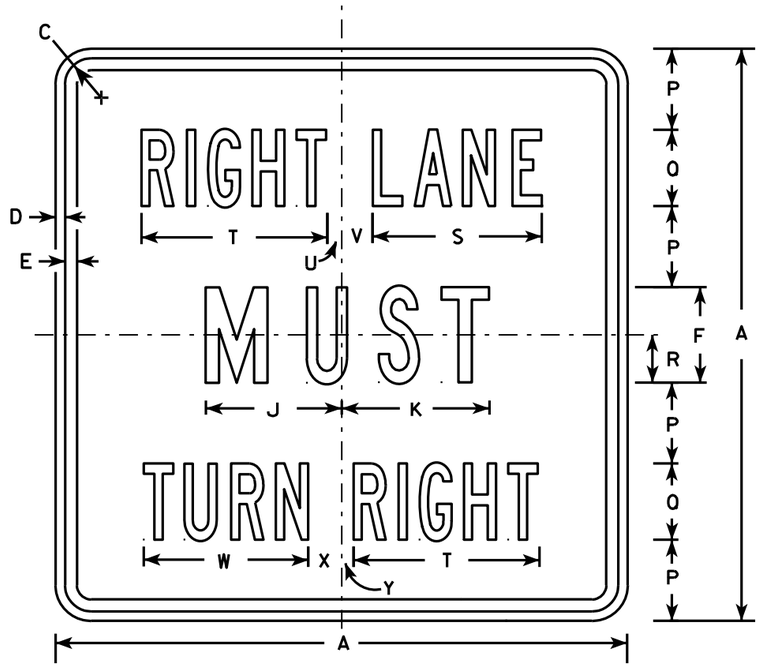
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 476 | E



R3-7L



R3-7R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
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	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

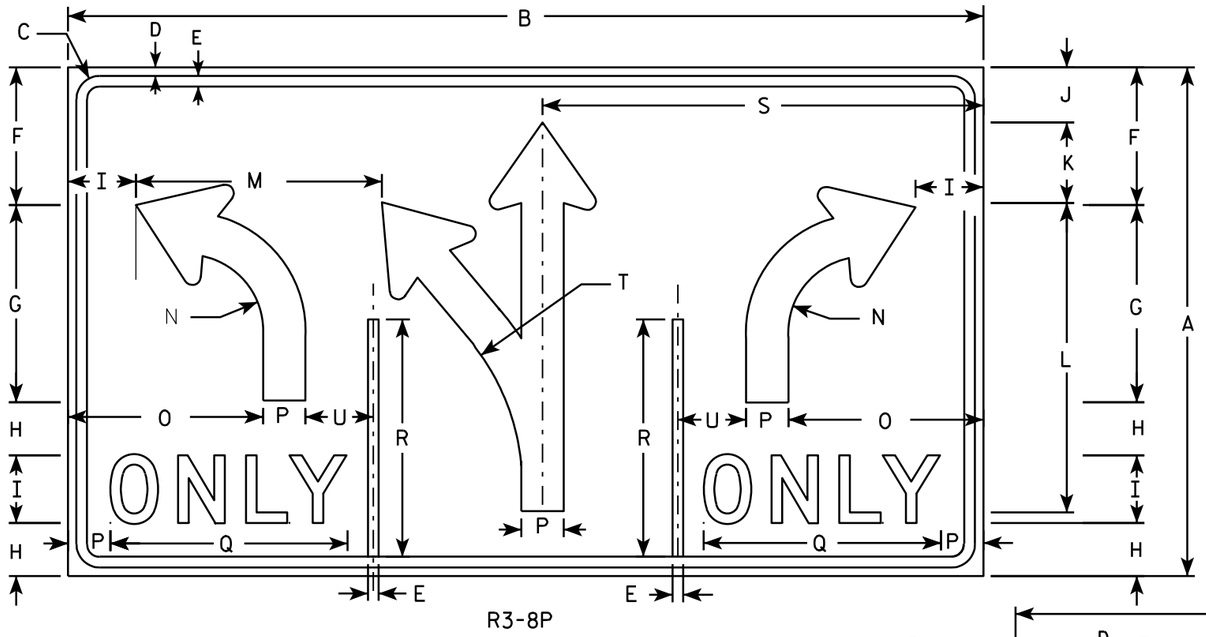
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

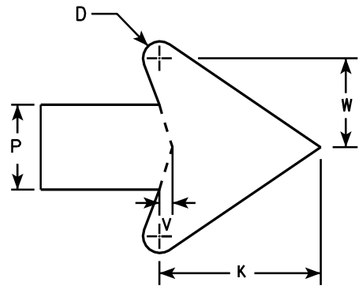
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 477 | E



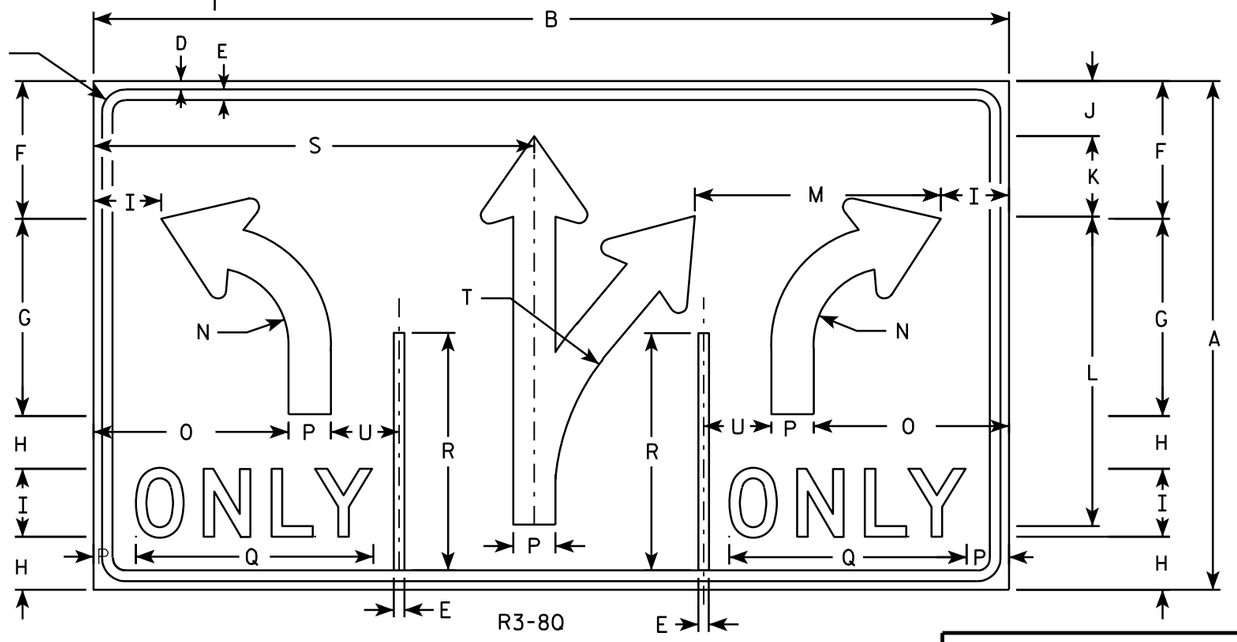
R3-8P

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL



R3-8Q

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	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14 1/2	4 1/2	11 1/2	2 1/2	14	14	26	13 1/4	4	3/8	2 5/8				11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14 1/2	4 1/2	11 1/2	2 1/2	14	14	26	13 1/4	4	3/8	2 5/8				11.25
3																											
4	48	84	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	22 5/8	7 1/4	17 1/4	3 3/4	20 5/8	22 3/8	40 3/4	21 7/8	7	5/8	4				28.0
5	48	84	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	22 5/8	7 1/4	17 1/4	3 3/4	20 5/8	22 3/8	40 3/4	21 7/8	7	5/8	4				28.0

STANDARD SIGN
R3-8P & R3-8Q

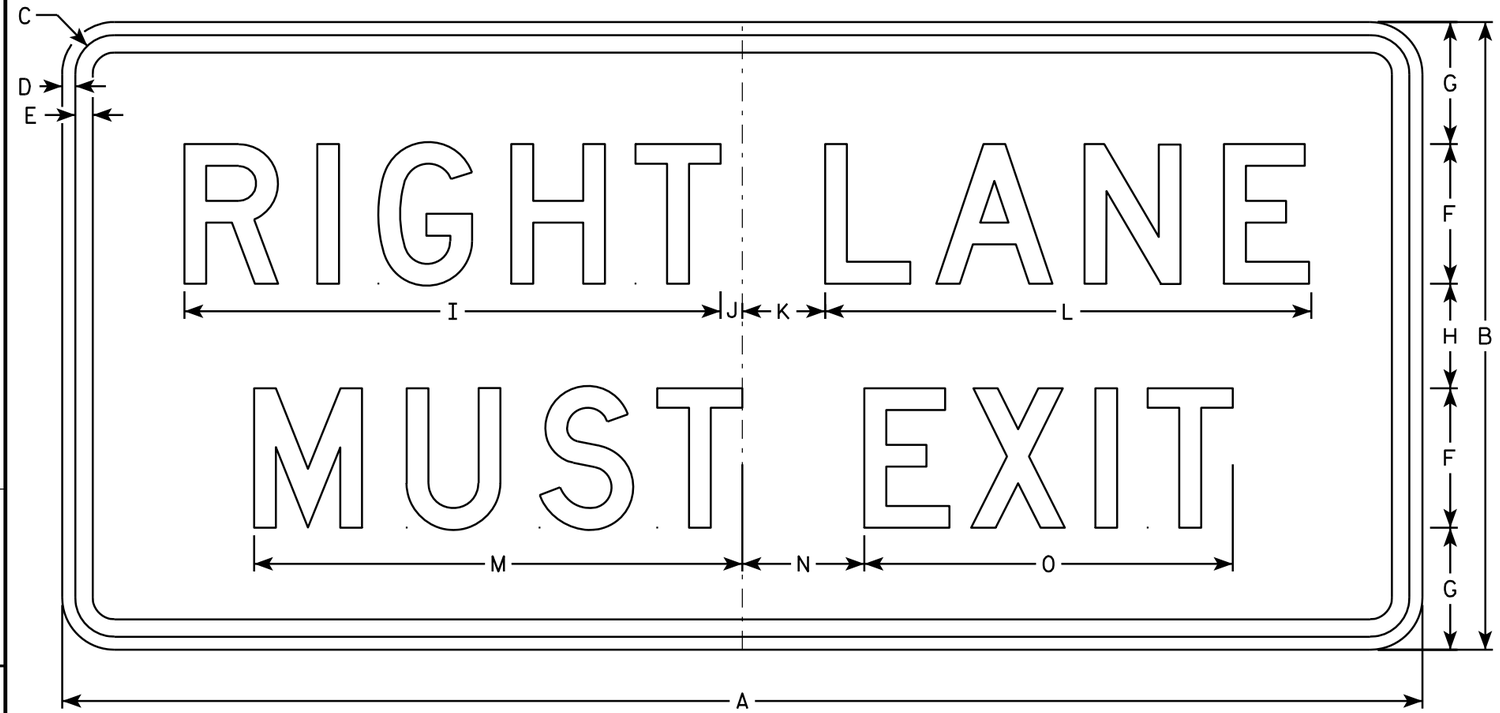
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

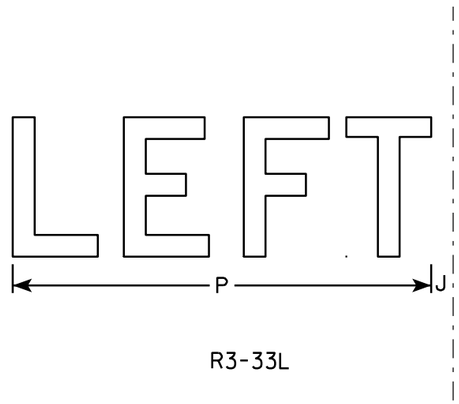
DATE 3/24/2011 PLATE NO. R3-8P.2

PROJECT NO:

SHEET NO: 478 E



R3-33R



R3-33L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3																											
4	78	36	2 1/4	3/4	1	8	7	6	30 3/4	1 1/4	4 3/4	27 7/8	28	7	21 1/8	24											19.5
5	78	36	2 1/4	3/4	1	8	7	6	30 3/4	1 1/4	4 3/4	27 7/8	28	7	21 1/8	24											19.5

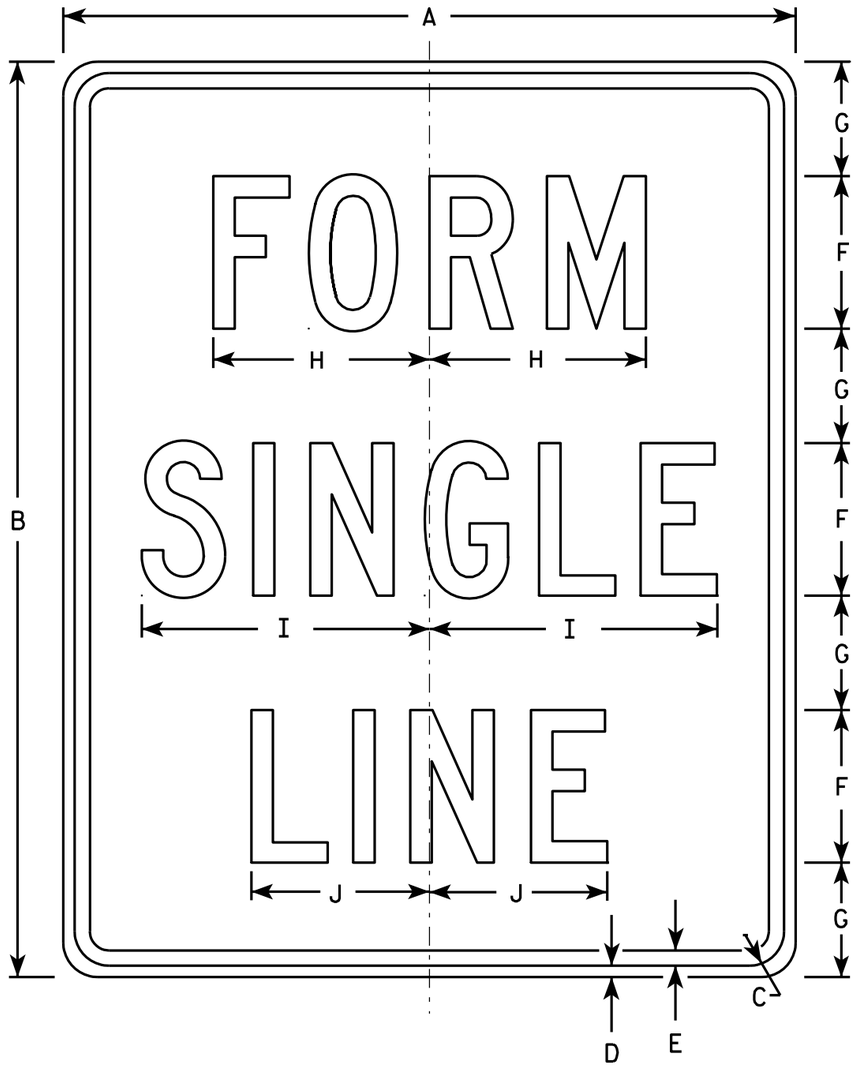
STANDARD SIGN
R3-33

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/7/10 PLATE NO. R3-33.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 479 | E



R3-58

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	30	1 1/8	3/8	1/2	5	3 3/4	7 1/8	9 3/8	5 7/8																	5.0
2S	24	30	1 1/8	3/8	1/2	5	3 3/4	7 1/8	9 3/8	5 7/8																	5.0
2M	24	30	1 1/8	3/8	1/2	5	3 3/4	7 1/8	9 3/8	5 7/8																	5.0
3	36	48	1 3/8	1/2	5/8	8	6	11 3/8	15 1/8	9 3/8																	12.0
4	36	48	1 3/8	1/2	5/8	8	6	11 3/8	15 1/8	9 3/8																	12.0
5																											

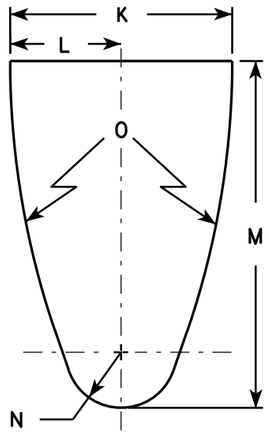
STANDARD SIGN
R3-58

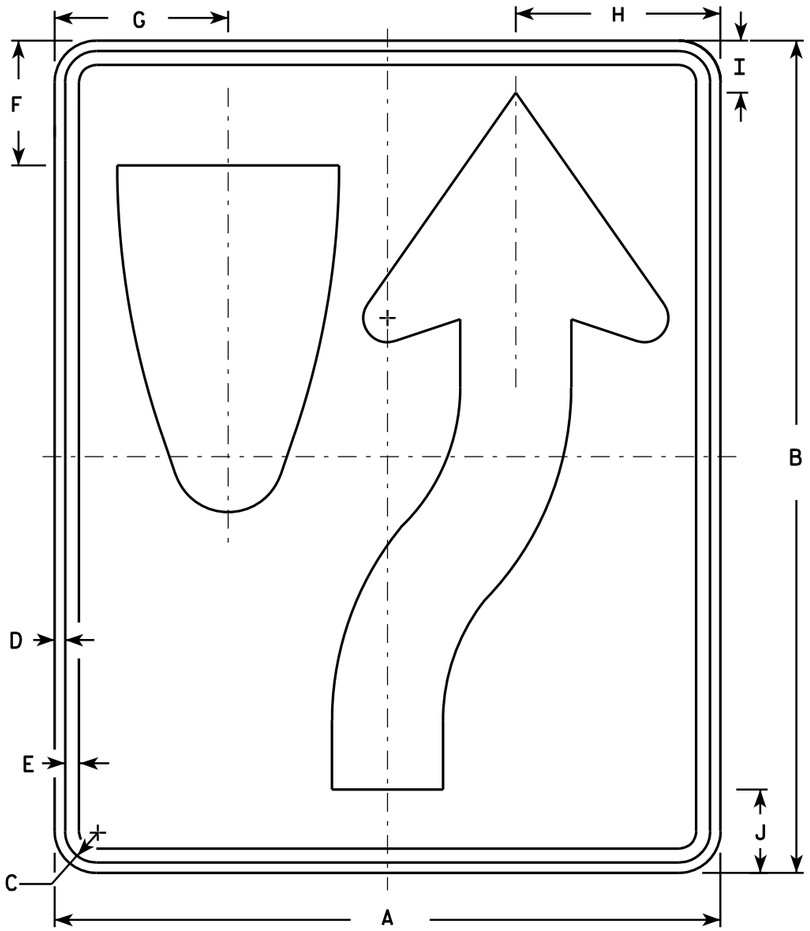
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-58.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 480	E

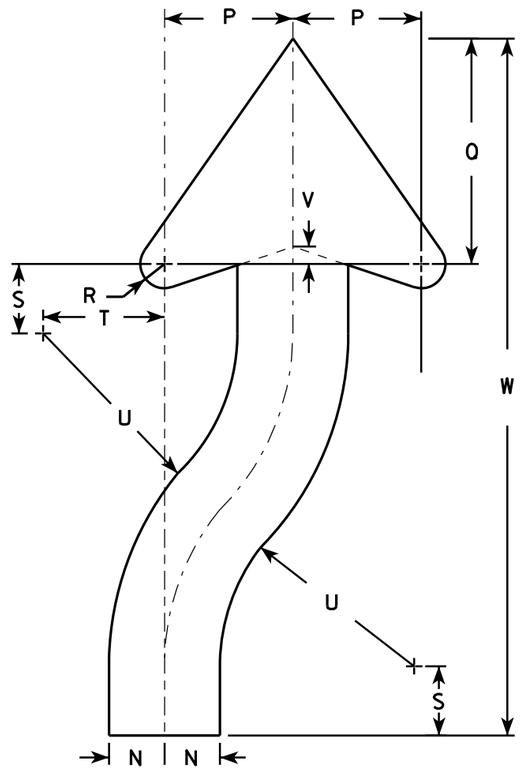




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend 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	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

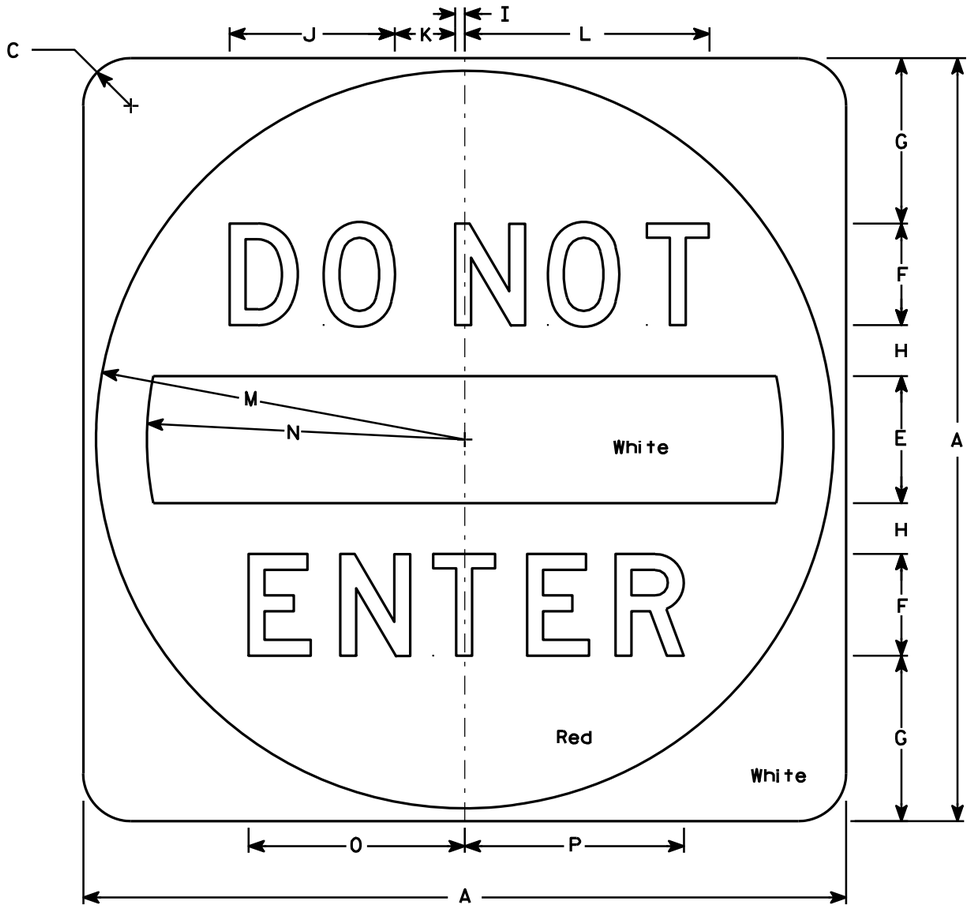
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 481	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors 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		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

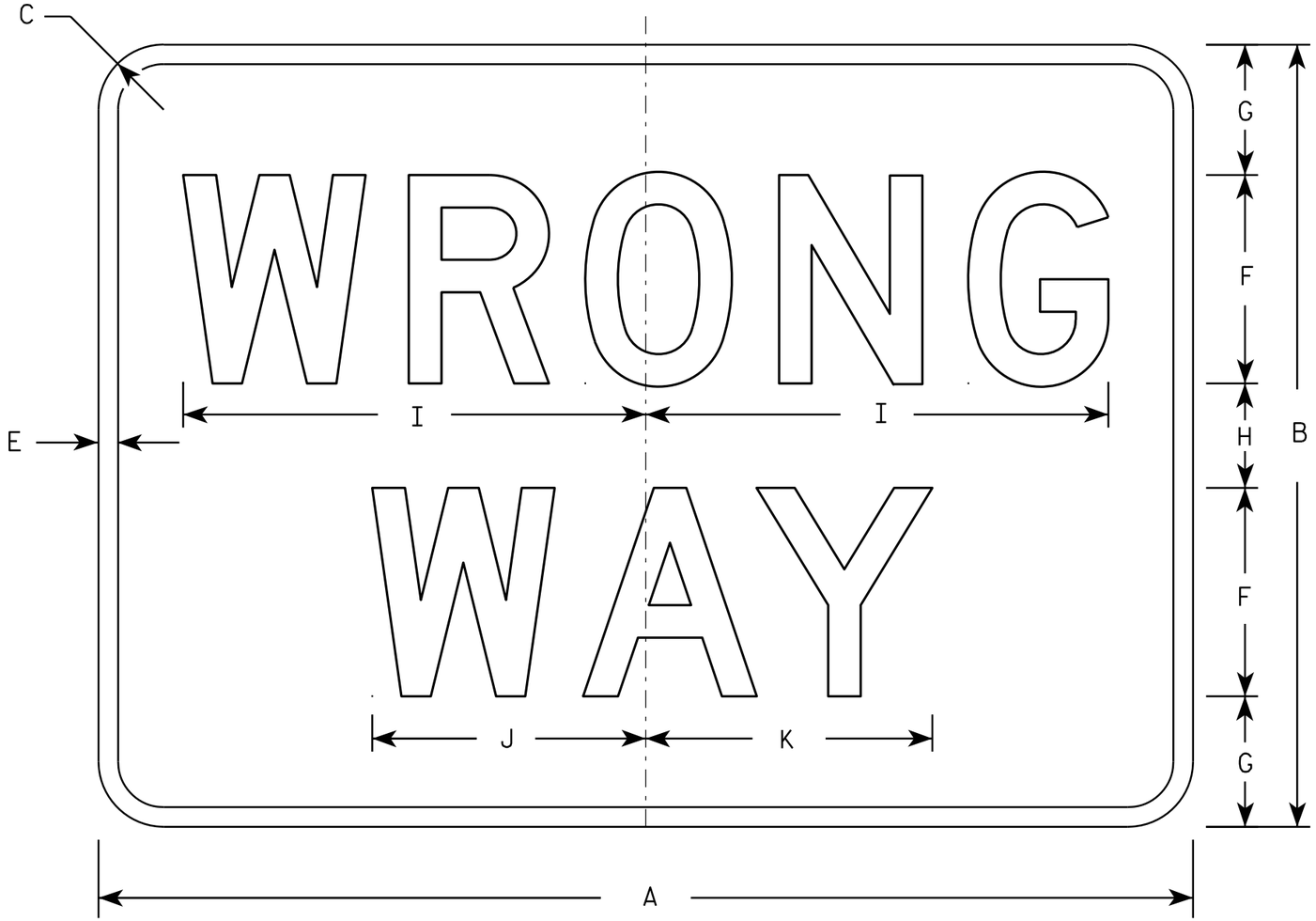
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 482 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - 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	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

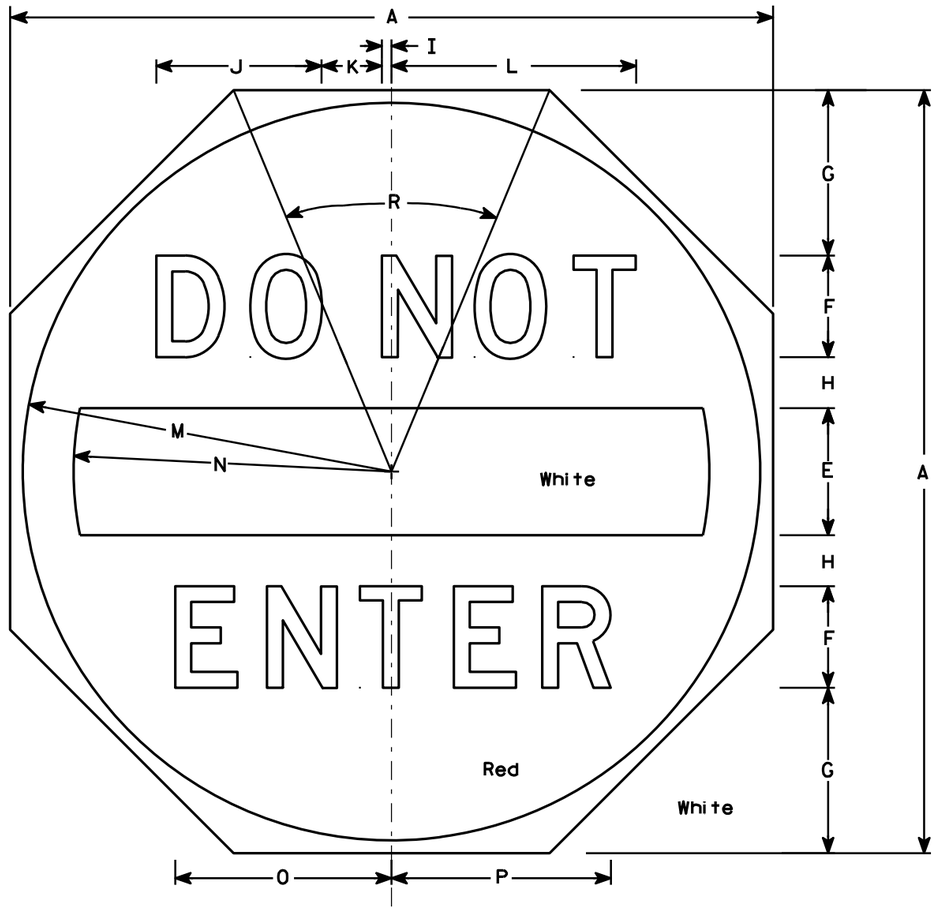
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 483	E



R5-1C

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors 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		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8		45°									5.18
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4		45°									7.46
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4		45°									7.46
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4		45°									13.25
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8		45°									13.25

STANDARD SIGN
R5-1C

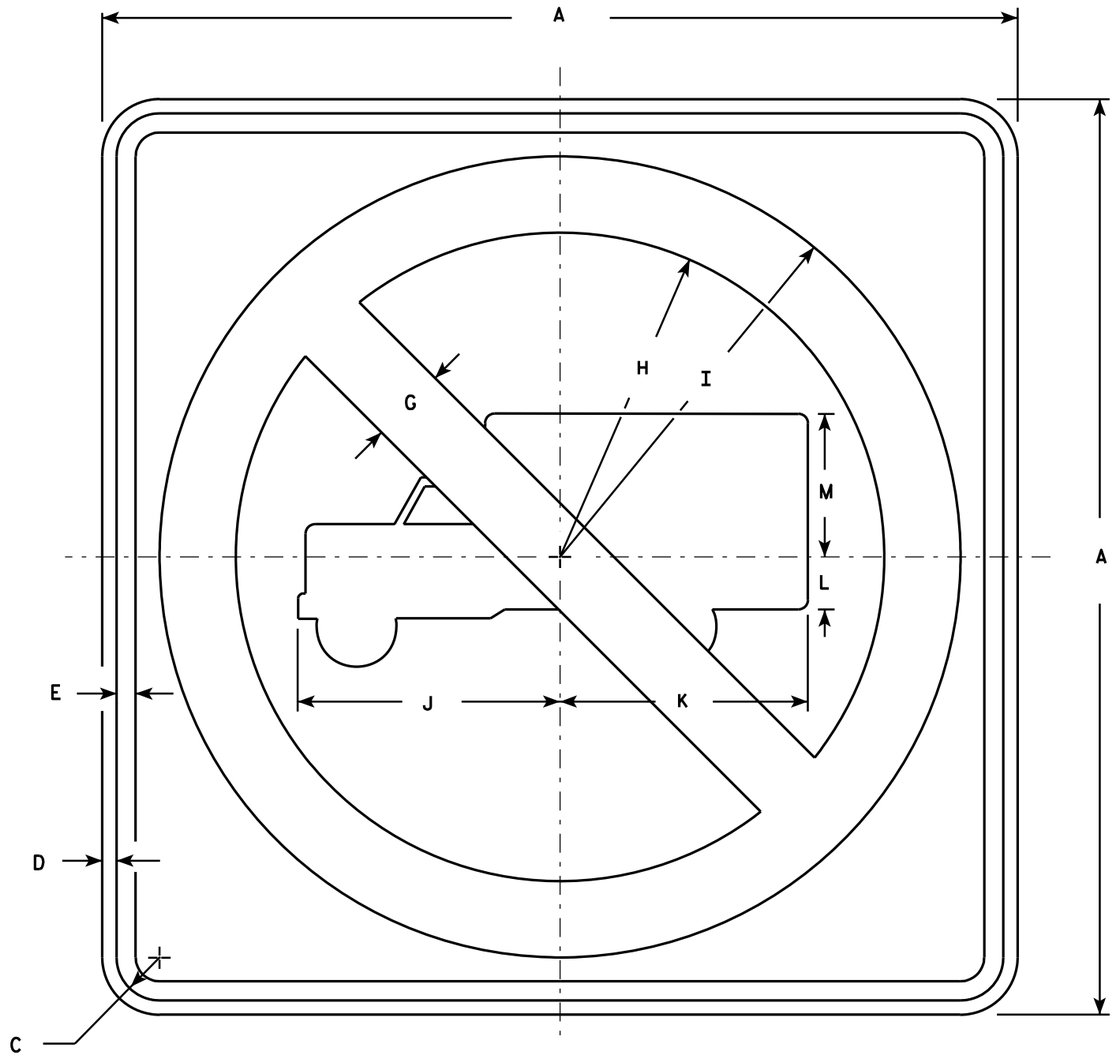
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

State Traffic Engineer

DATE 3/23/11 PLATE NO. R5-1C.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 484 | E



R5-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Circle & Diagonal - Reflective red.
   Truck Symbol & Border - Non-reflective black.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
2M	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
3	30		1 3/8	1/2	5/8		2 1/2	10 5/8	13 1/8	8 1/2	8 1/8	1 5/8	4 3/4														6.25
4	36		1 5/8	5/8	3/4		3	12 3/4	15 3/4	10 1/4	9 3/4	2	5 3/4														9.0
5	48		2 1/4	3/4	1		4	17	21	13 5/8	13	2 5/8	7 5/8														16.0

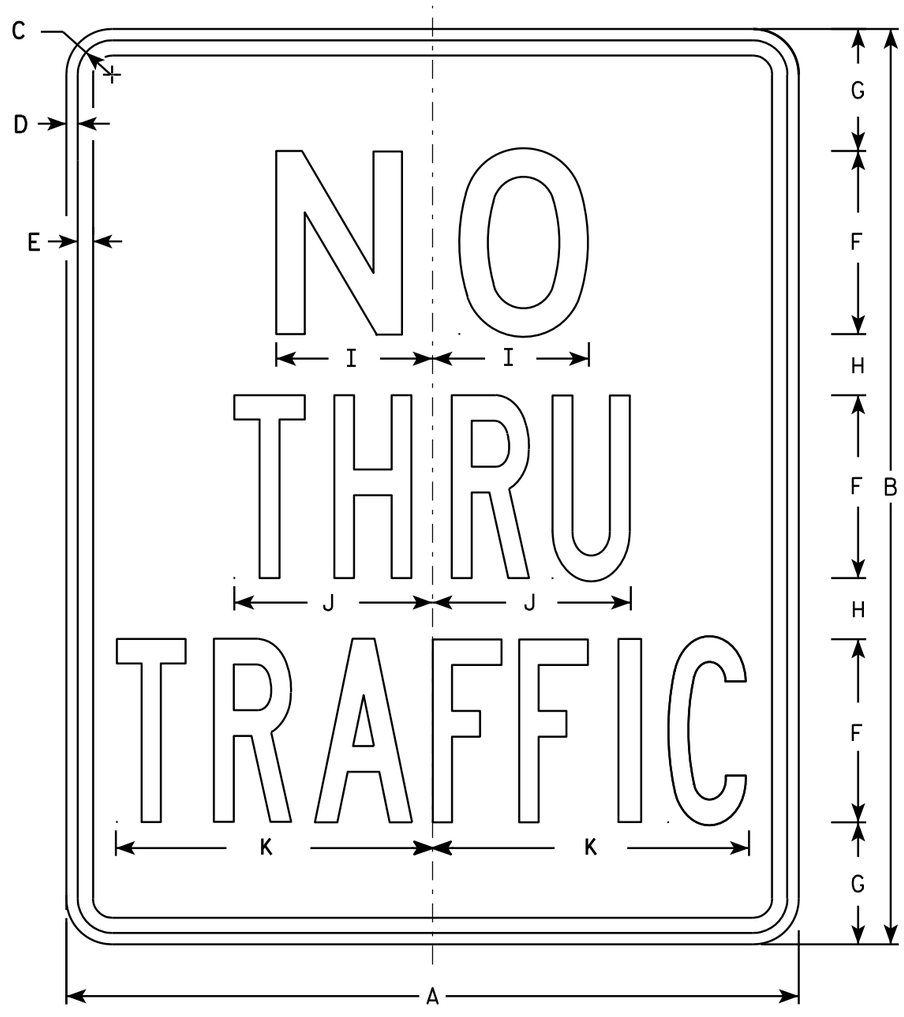
STANDARD SIGN
R5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-2.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 485	E



R5-54

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Line 1 is Series D and Lines 2 and 3 are 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																											
2S	24	30	1 1/8	3/8	1/2	6	4	2	5 1/8	6 1/2	10 3/8																5.0
2M	24	30	1 1/8	3/8	1/2	6	4	2	5 1/8	6 1/2	10 3/8																5.0
3																											
4																											
5																											

STANDARD SIGN
R5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-54.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 486	E

R5-57

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Lines 1, 2, and 5 are Series C.
   Lines 3 and 4 are 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																											
2S																											
2M																											
3																											
4	36		1 5/8	5/8	3/4	4	3	2	3 1/2	14 1/4	14 7/8	11	11 1/2	4 3/4	1 3/4	9		1 3/8	10	11	2 1/2	1 3/4	15 1/2	13	13 5/8		9.0
5	36		1 5/8	5/8	3/4	4	3	2	3 1/2	14 1/4	14 7/8	11	11 1/2	4 3/4	1 3/4	9		1 3/8	10	11	2 1/2	1 3/4	15 1/2	13	13 5/8		9.0

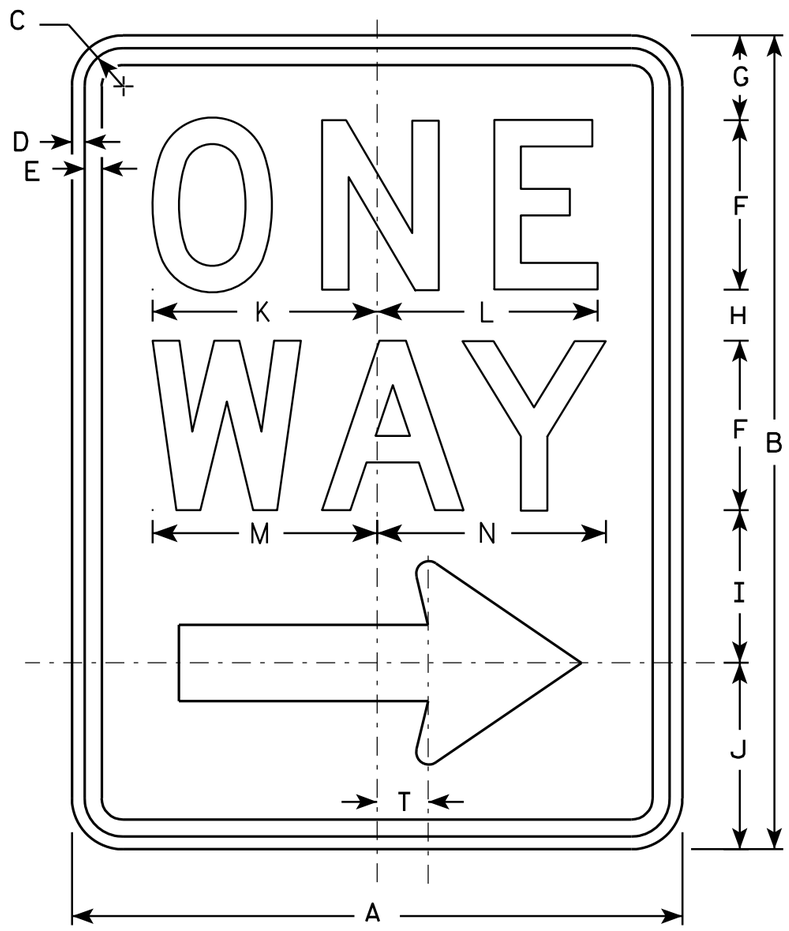
STANDARD SIGN
R5-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-57.10

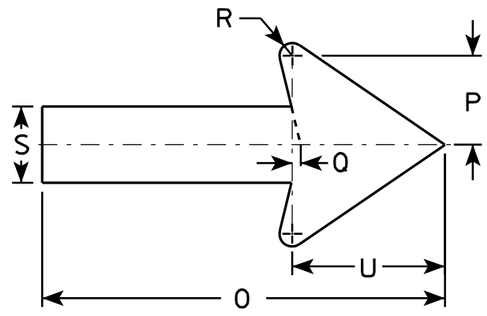
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 487 | E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

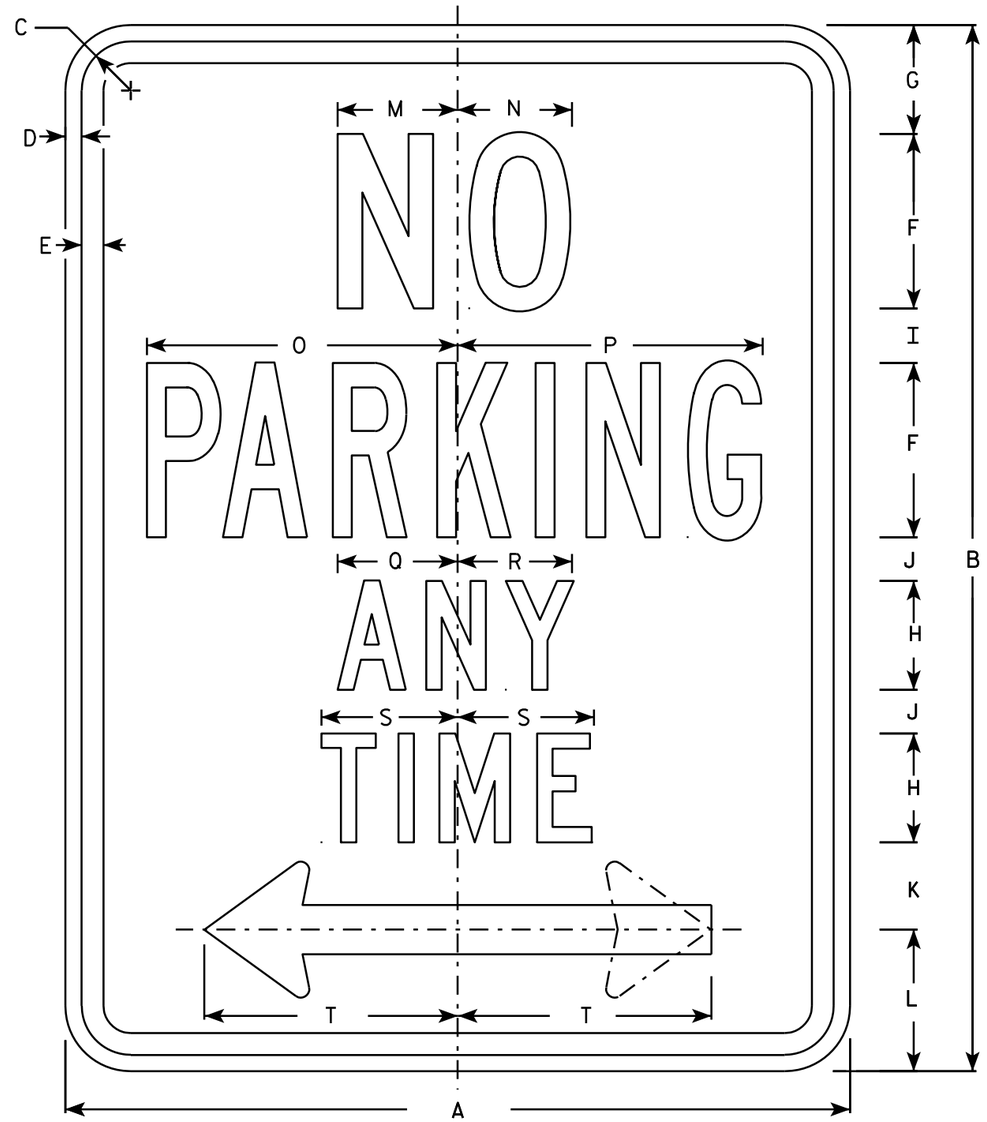
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

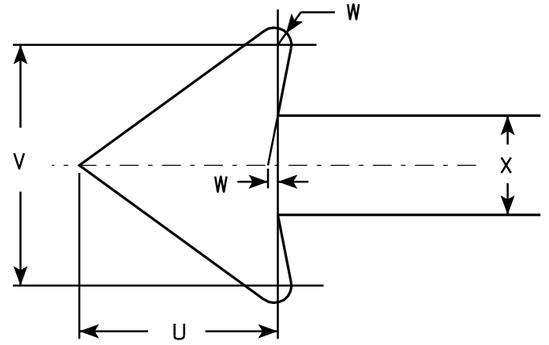
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 488	E



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
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, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (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	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

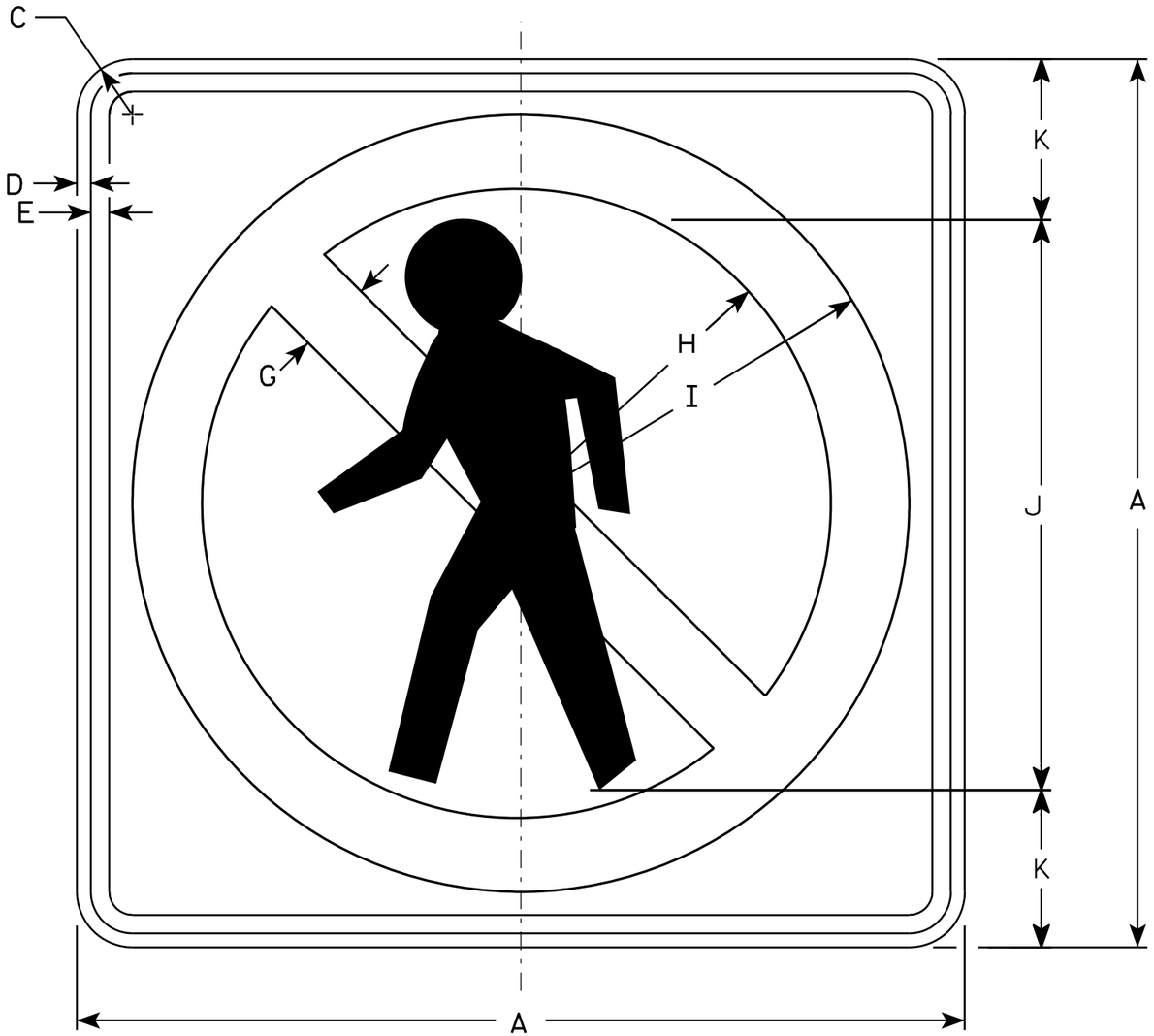
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 489	E



R9-3A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Pedistrian are non-reflective black. Circle with diagonal bar is reflective red.

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	18		1 1/8	3/8	3/8		1 1/2	6 1/4	7 7/8	12	3																2.25
2M	18		1 1/8	3/8	3/8		1 1/2	6 1/4	7 7/8	12	3																2.25
3																											
4	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	15	4																4.00
5																											

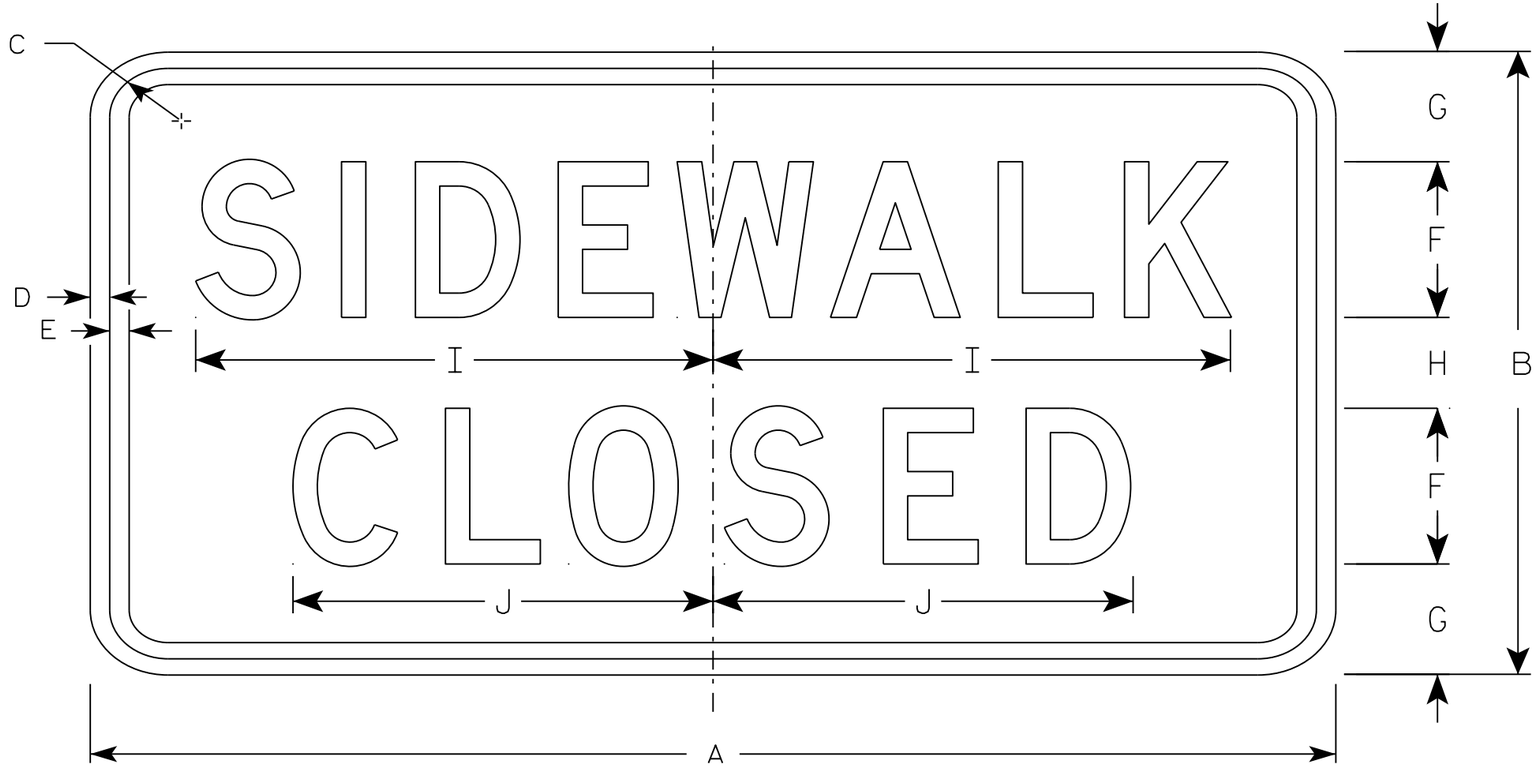
STANDARD SIGN
R9-3A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/4/10 PLATE NO. R9-3A.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 490 | E



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

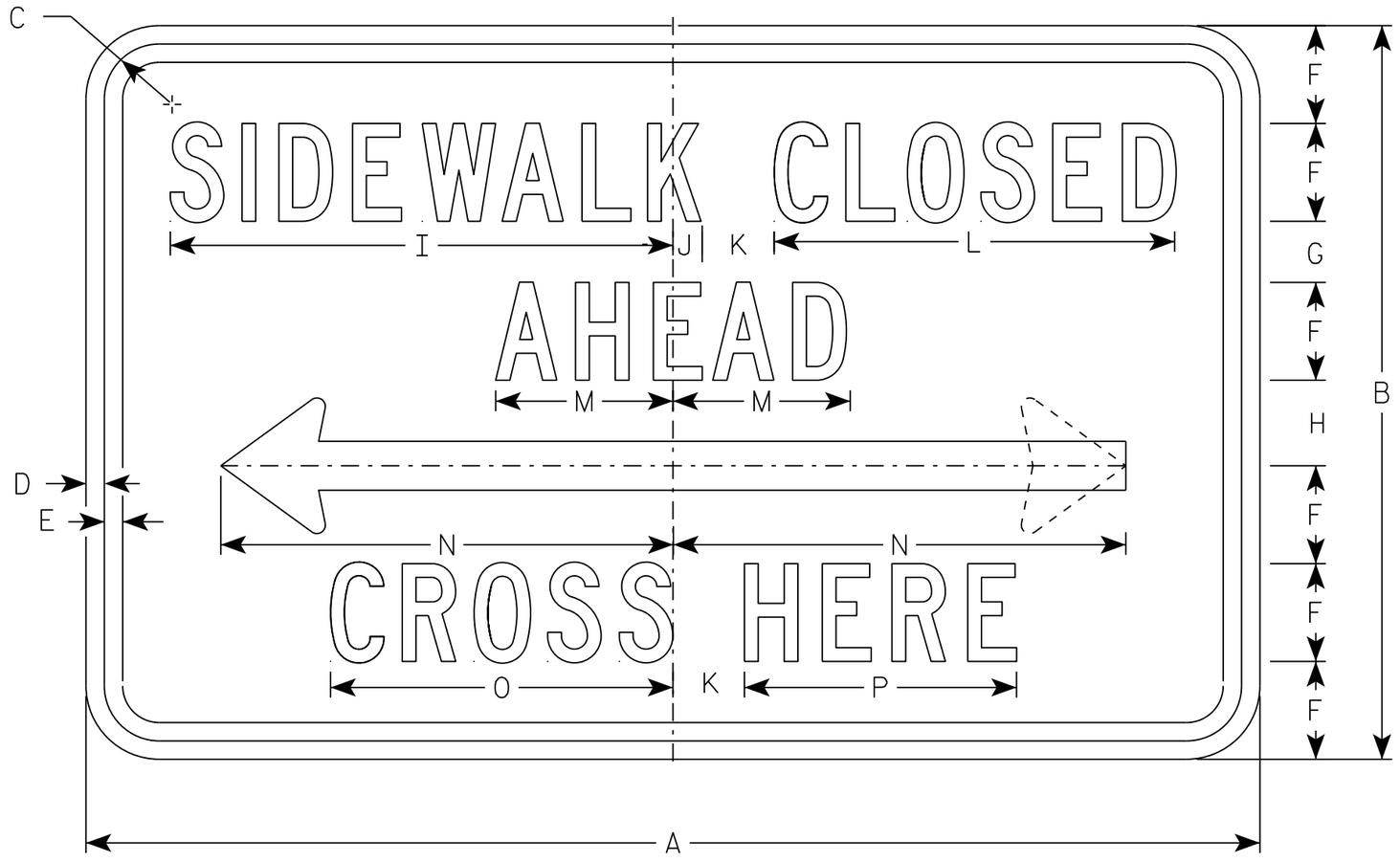
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

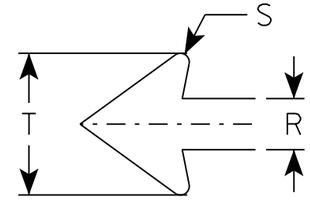
DATE 8/11/16 PLATE 491 R9-9.6

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-11



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. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	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 1/8	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 1/8	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																											

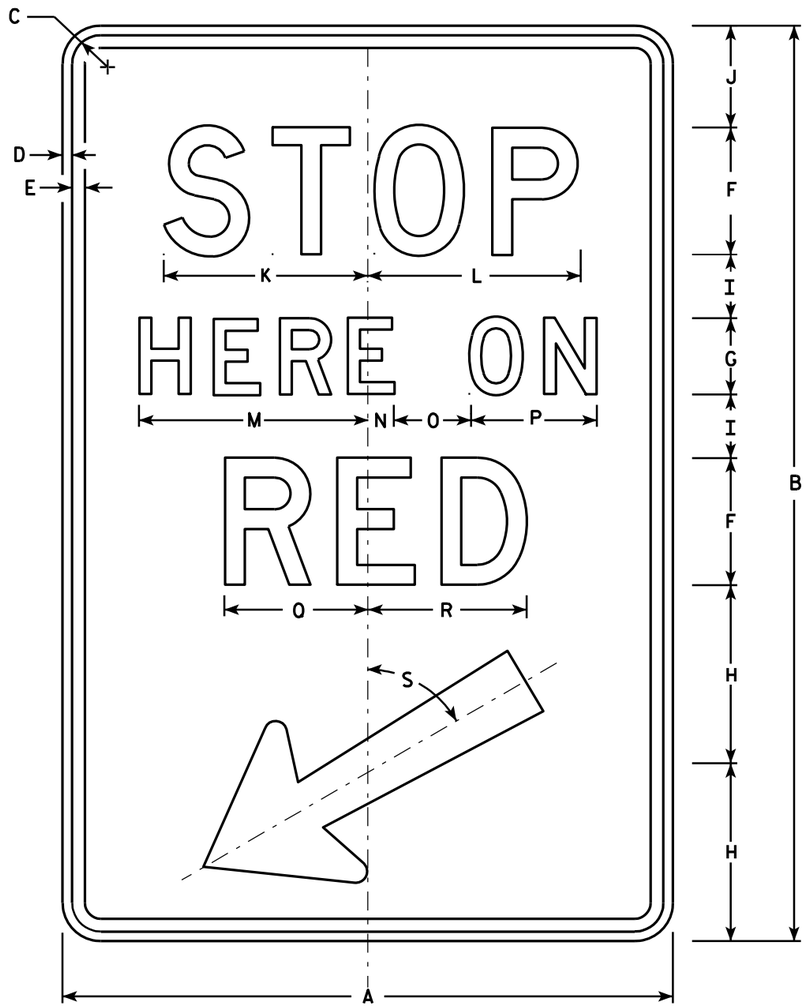
STANDARD SIGN
R9-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R9-11.3

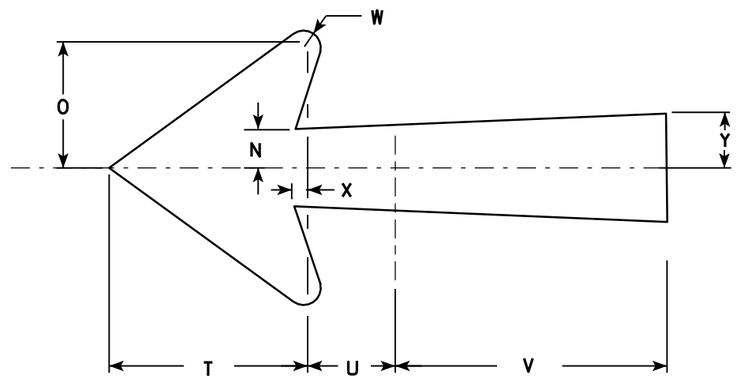
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 492	E



R10-6

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
2M	24	36	1 1/8	3/8	1/2	5	3	7	2 1/2	4	8	8 3/8	9	1	3	5	5 5/8	6 1/4	60°	5 1/4	2 1/4	7 1/8	1/2	3/8	1 3/8		6.0
3																											
4																											
5																											

STANDARD SIGN
R10-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/5/11 PLATE NO. R10-6.6

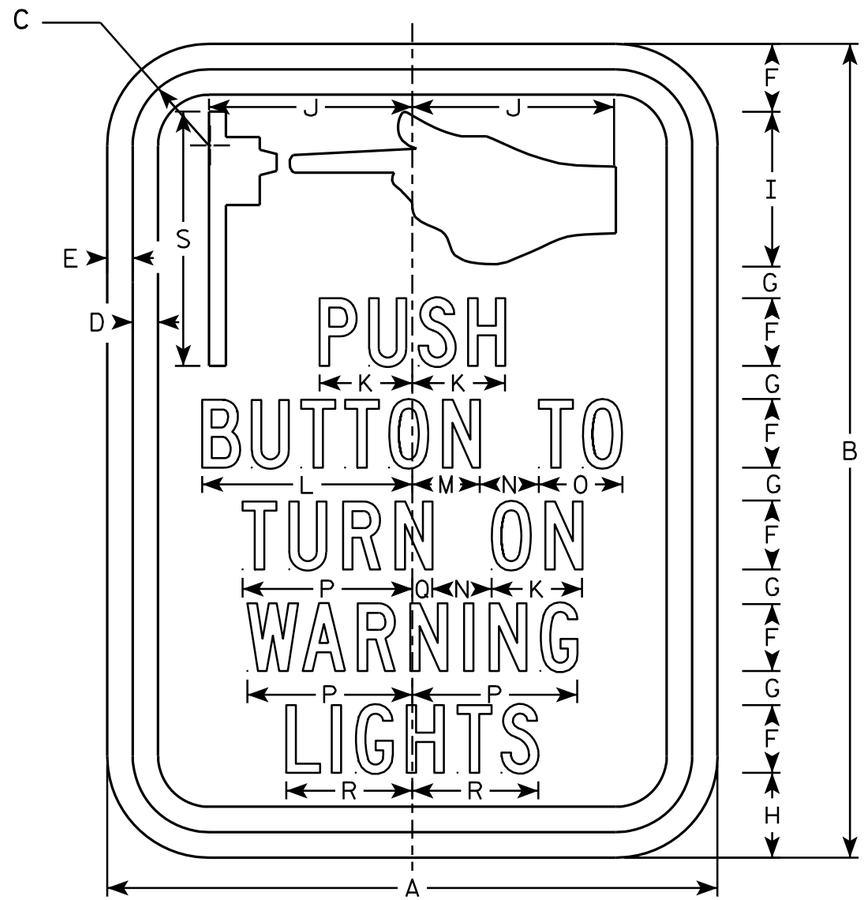
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 493	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R106.DGN PLOT DATE : 05-APR-2011 09:50 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

7



R10-25

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Size (1) comes as a decal only.

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	6	9	1 1/8	3/8	3/8	3/4	3/8	1	1 3/4	2	7/8	2 1/8	5/8	5/8	7/8	1 5/8	1/4	1 1/4	2 7/8								.38
2S	9	12	1 1/8	3/8	3/8	1	1/2	1 1/4	2 1/4	3	1 3/8	3 1/8	1	7/8	1 1/4	2 1/2	1/4	1 7/8	3 3/4								.75
2M	9	12	1 1/8	3/8	3/8	1	1/2	1 1/4	2 1/4	3	1 3/8	3 1/8	1	7/8	1 1/4	2 1/2	1/4	1 7/8	3 3/4								.75
3																											
4																											
5																											

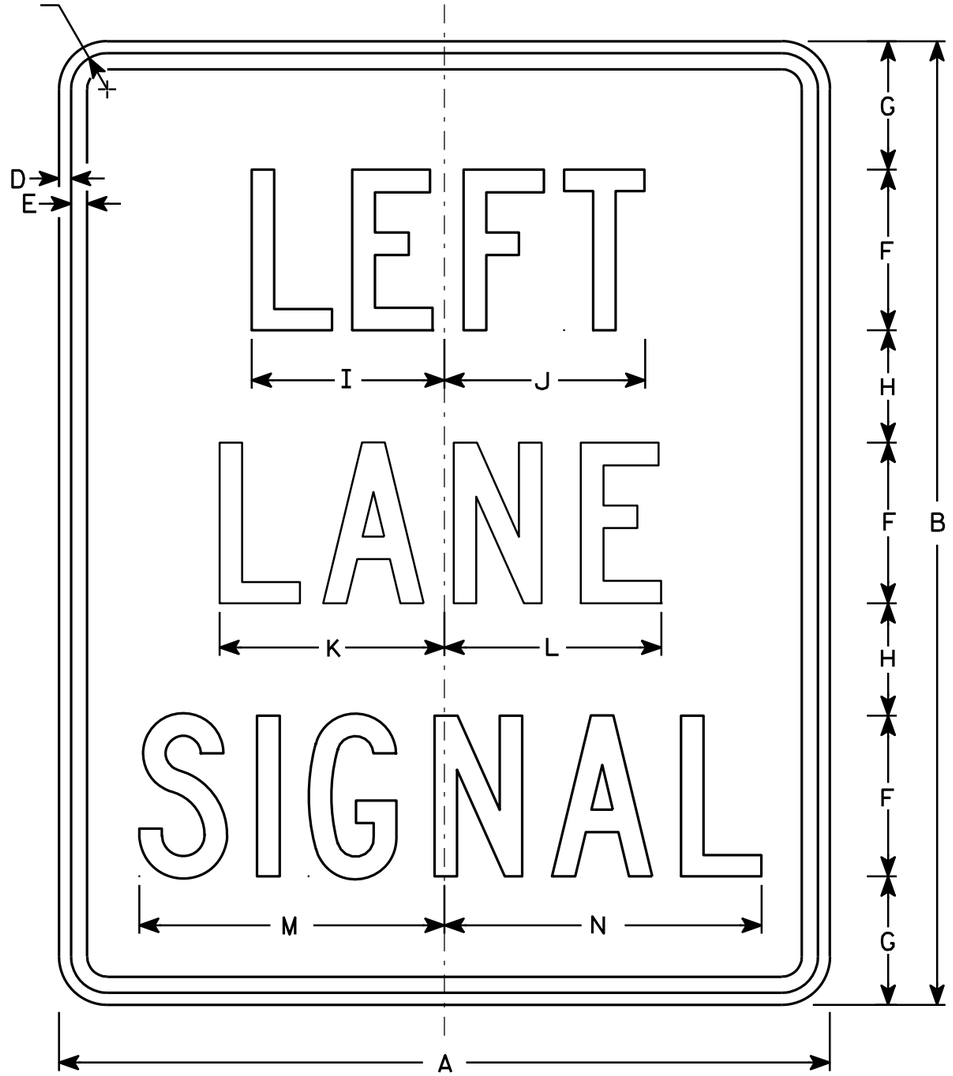
STANDARD SIGN
R10-25

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/10 PLATE NO. R10-25.1

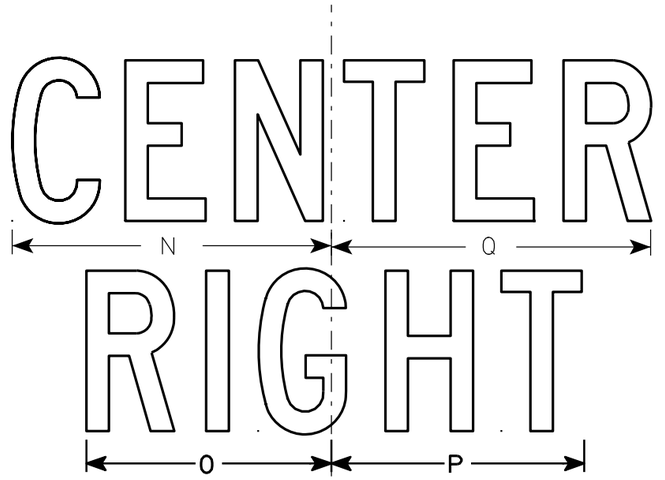
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 494	E



R10-65L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R10-65C

R10-65R

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	5	4	3 1/2	6	6 1/4	7	6 3/4	9 1/2	9 7/8	7 5/8	7 7/8	10										5.0
2M	24	30	1 1/8	3/8	1/2	5	4	3 1/2	6	6 1/4	7	6 3/4	9 1/2	9 7/8	7 5/8	7 7/8	10										5.0
3																											
4																											
5																											

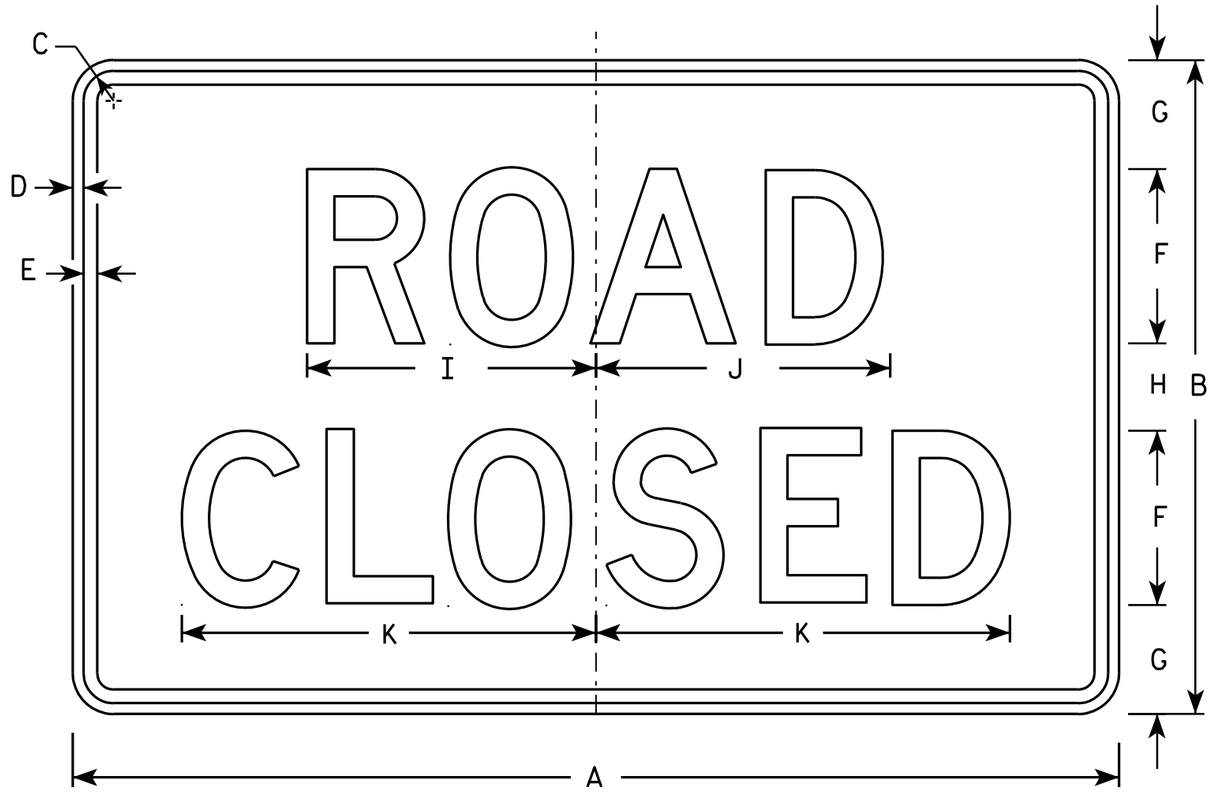
STANDARD SIGN
R10-65

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-65.2

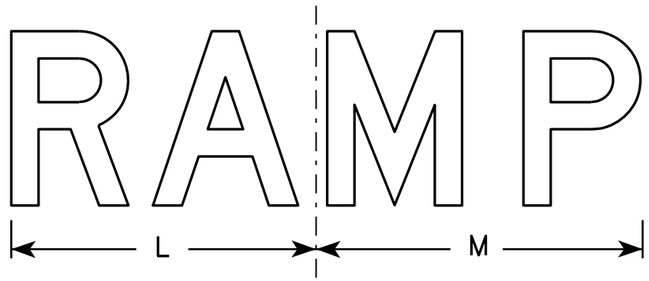
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 495	E



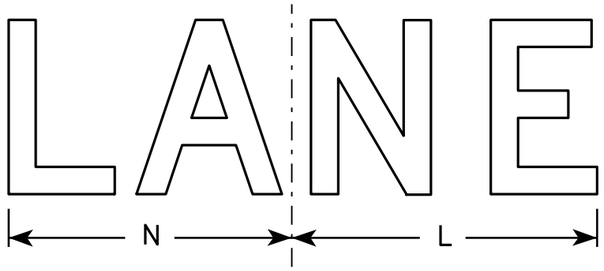
R11-2

NOTES

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



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

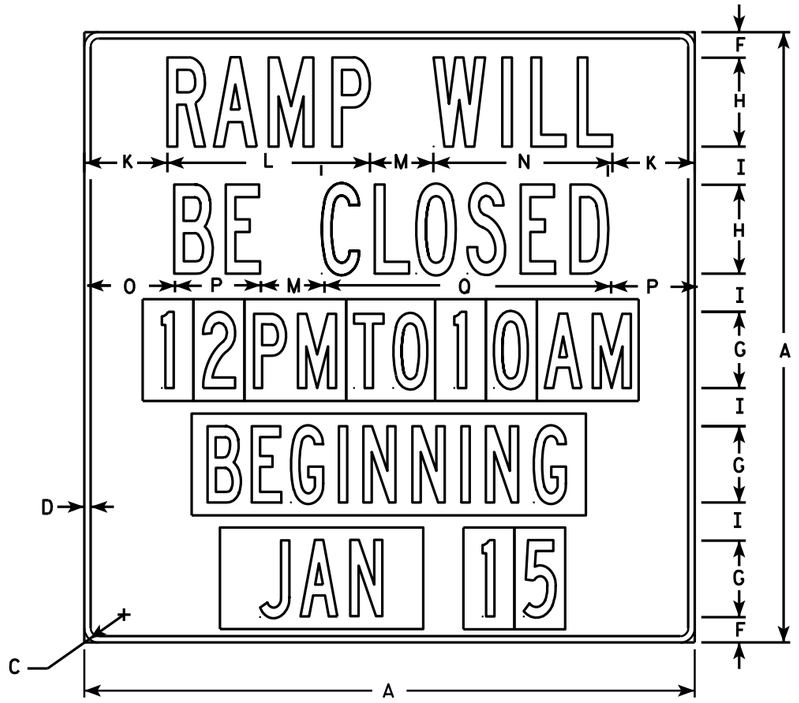
APPROVED Matthew R Rauch
for State Traffic Engineer

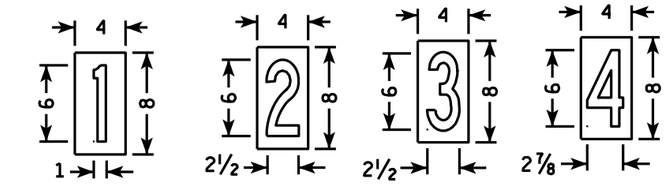
DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 496	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.DGN PLOT DATE : 01-APR-2011 14:25 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.952219:1.000000

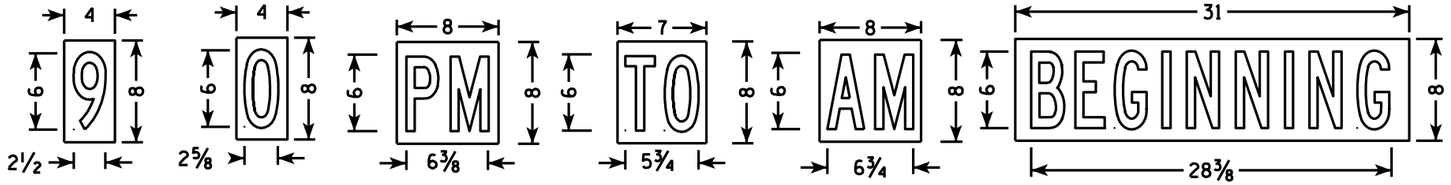
WISDOT/CADDS SHEET 42

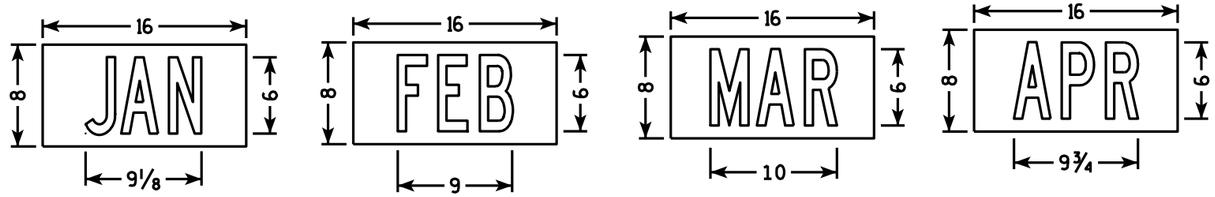


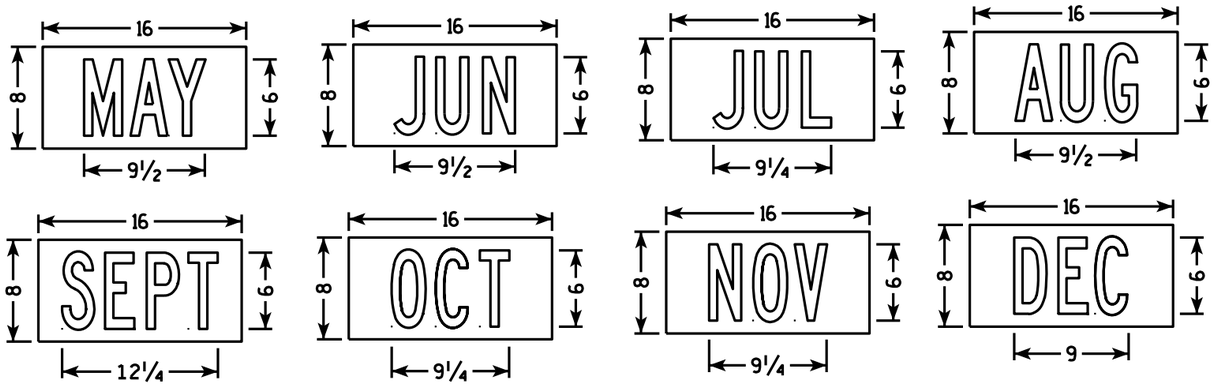


NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - B
4. Message plaques consist of Type H Reflective sheeting with the appropriate non-reflective black message applied to .040 aluminum and screwed to the base sign.







SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
2M	48		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
3																											
4																											
5																											

STANDARD SIGN
R11-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-51.4

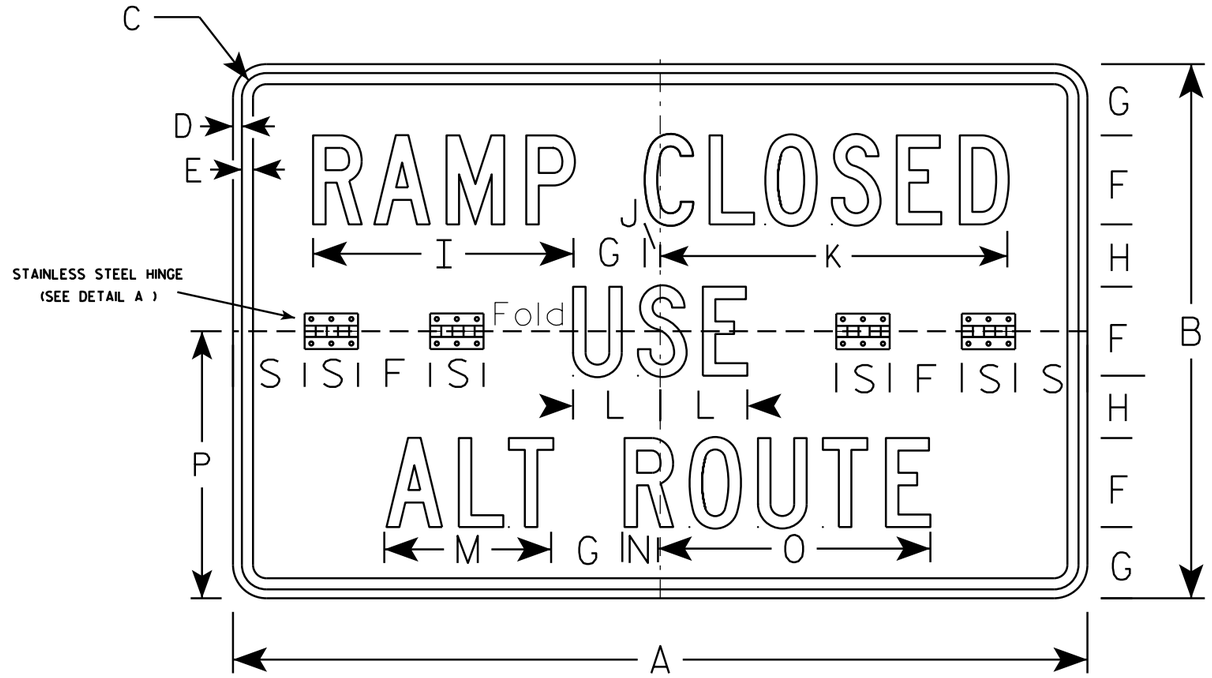
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 497	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R1151.DGN PLOT DATE : 01-APR-2011 14:07 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000

WISDOT/CADDS SHEET 42

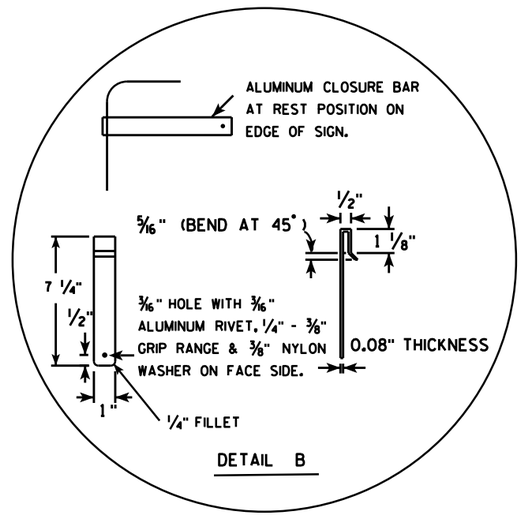
7

7



R11-54F

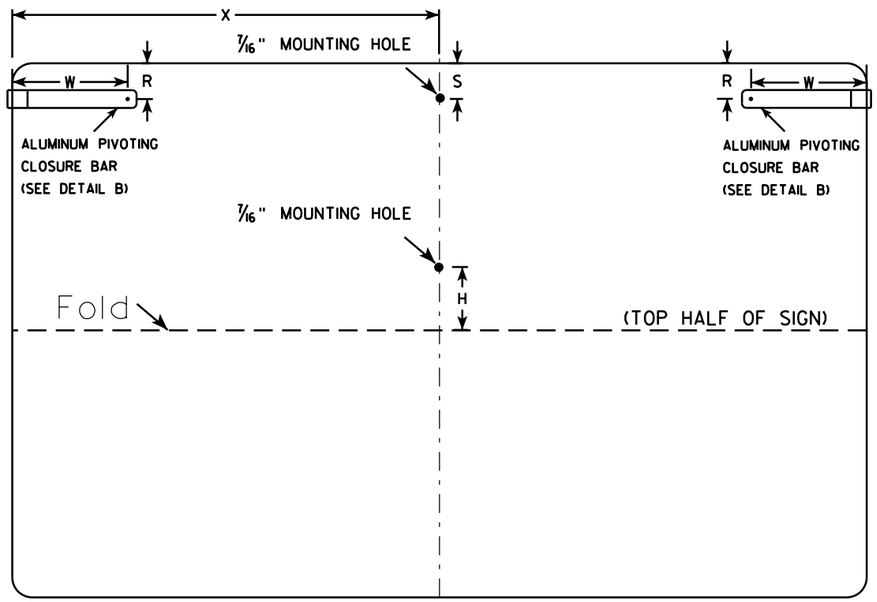
DETAIL A



DETAIL B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - C
4. Sign Base Material shall be aluminum, corners and borders shall be rounded.
5. All hardware used on the folding sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.
6. Refer to plate A5-3A for sign blank layout.



(BACK VIEW)

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
2M	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
3																											
4																											
5																											

STANDARD SIGN
R11-54F

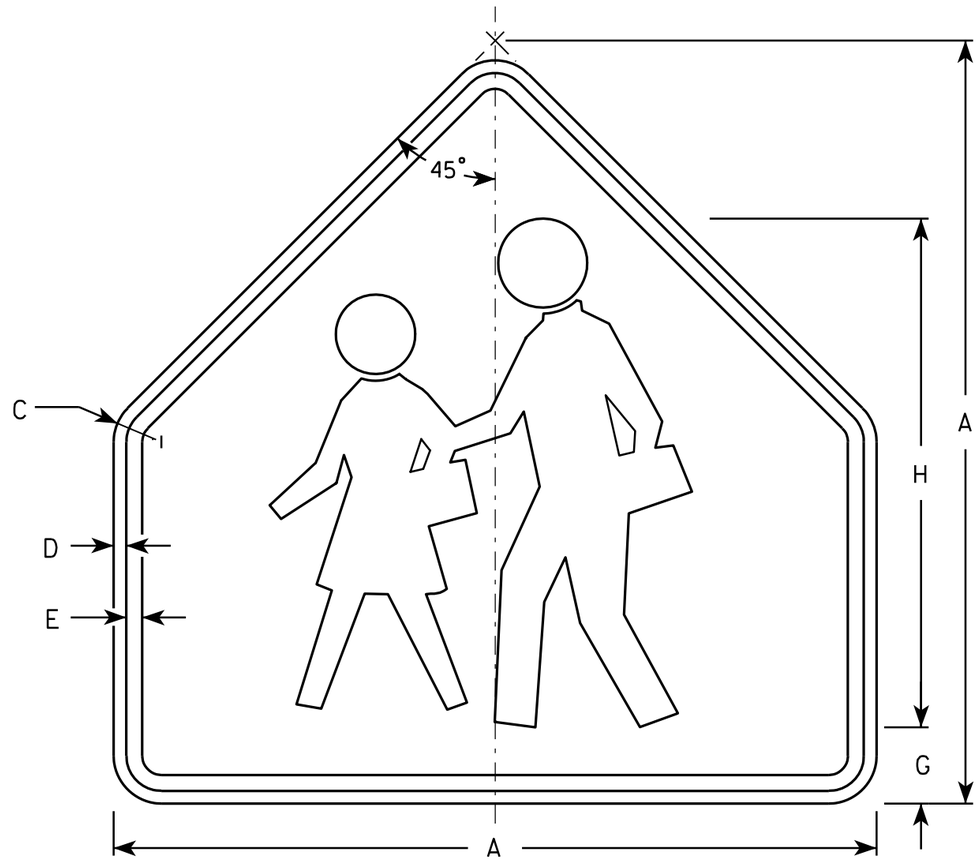
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/28/14 PLATE NO. R11-54F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R1154F.DGN PLOT DATE : 28-MAY-2014 14:15 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 8.511110:1.000000
WISDOT/CADDS SHEET 42



S1-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   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	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

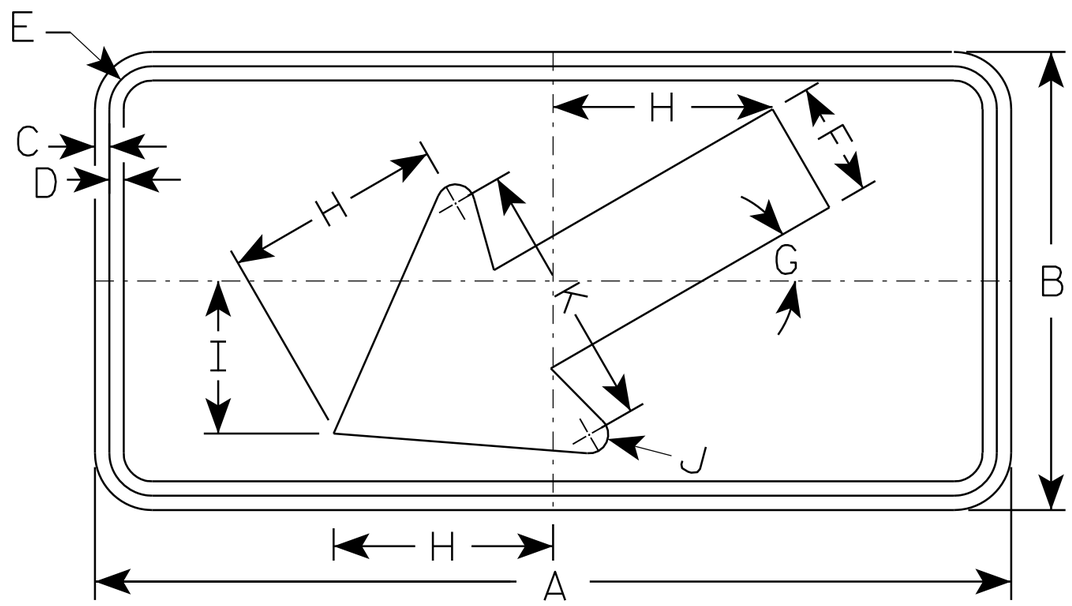
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 499	E



S16-7L

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   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. S16-7R are the same as S16-7L 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	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

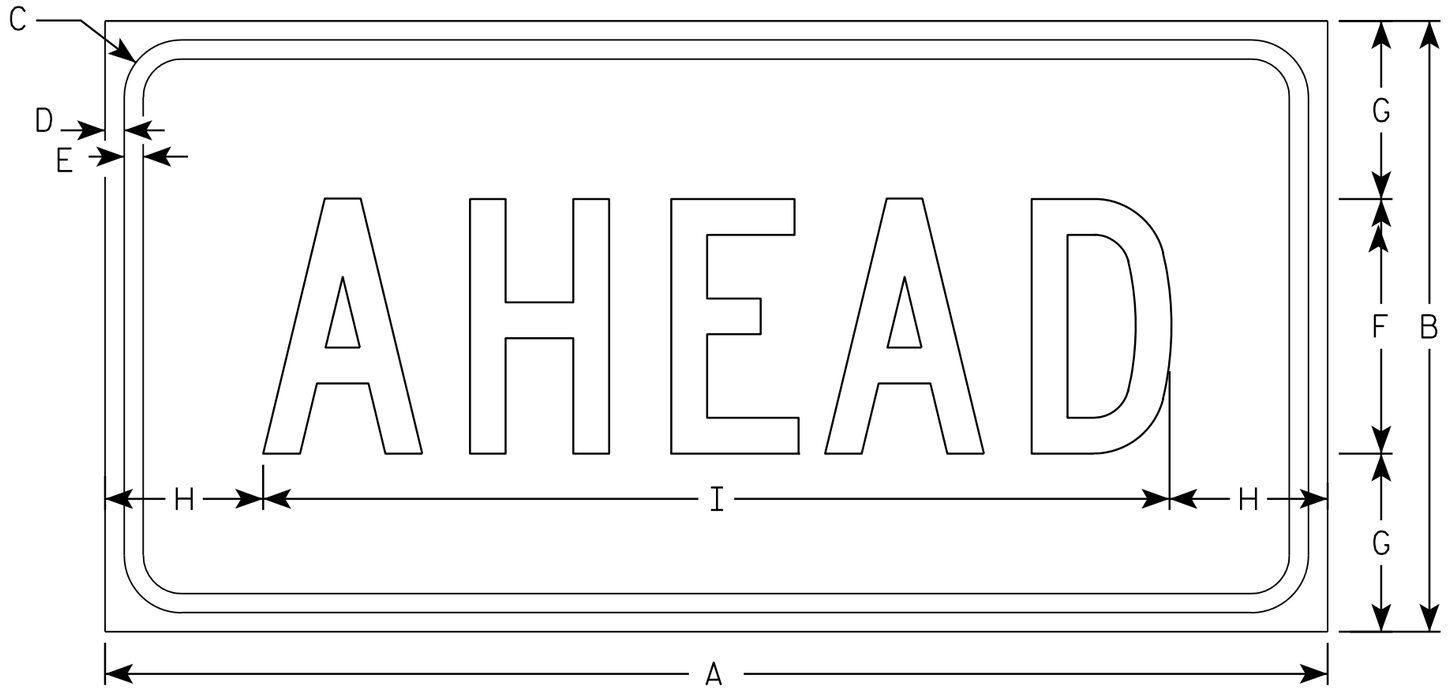
STANDARD SIGN
S16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-7.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 500 | E



S16-9P

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   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	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
S16-9P

WISCONSIN DEPT OF TRANSPORTATION

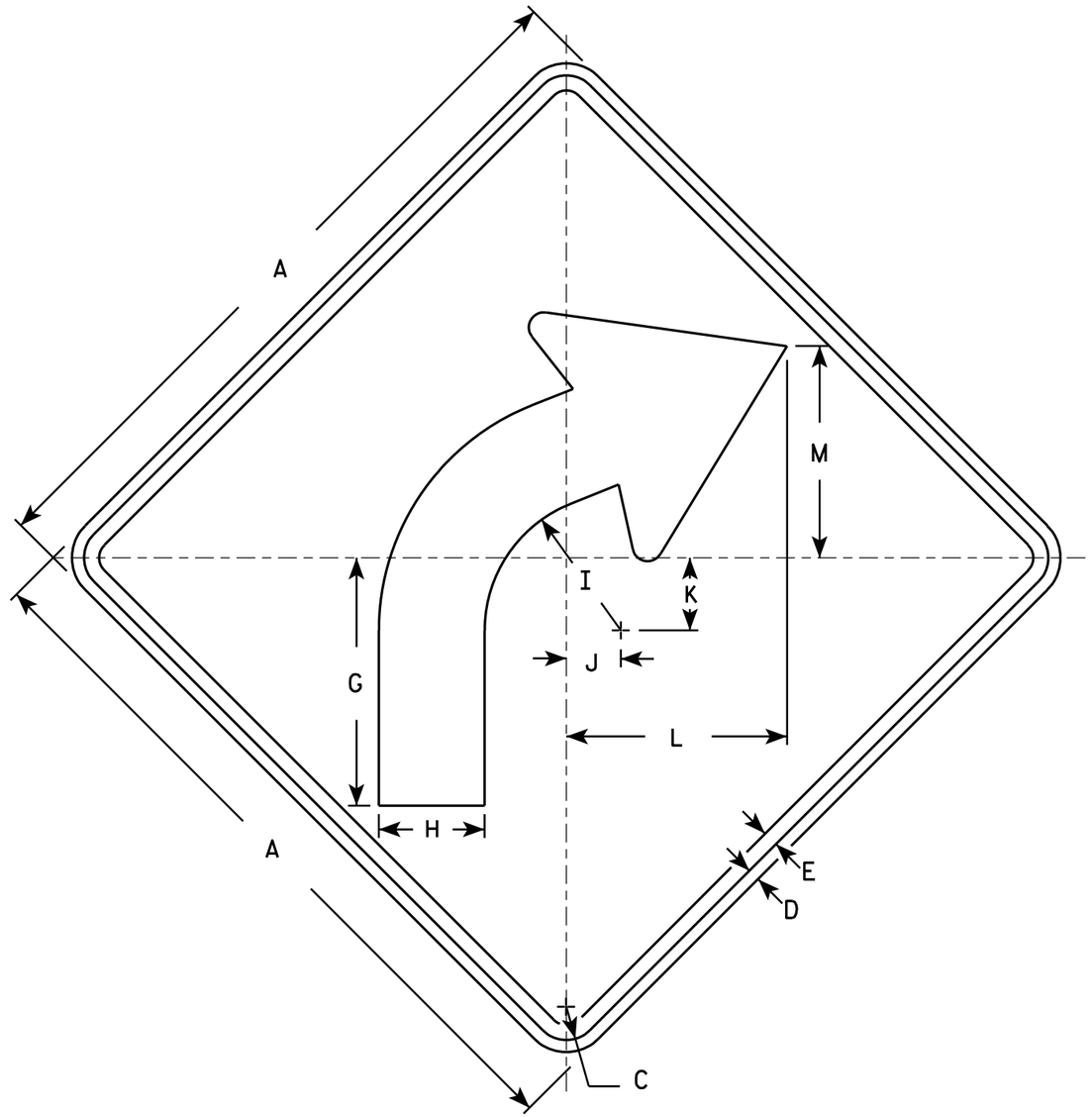
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

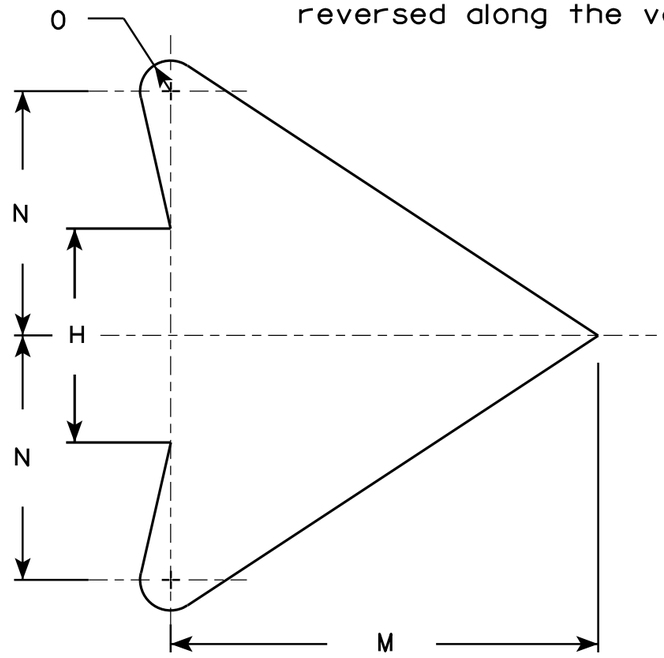
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 501 | E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

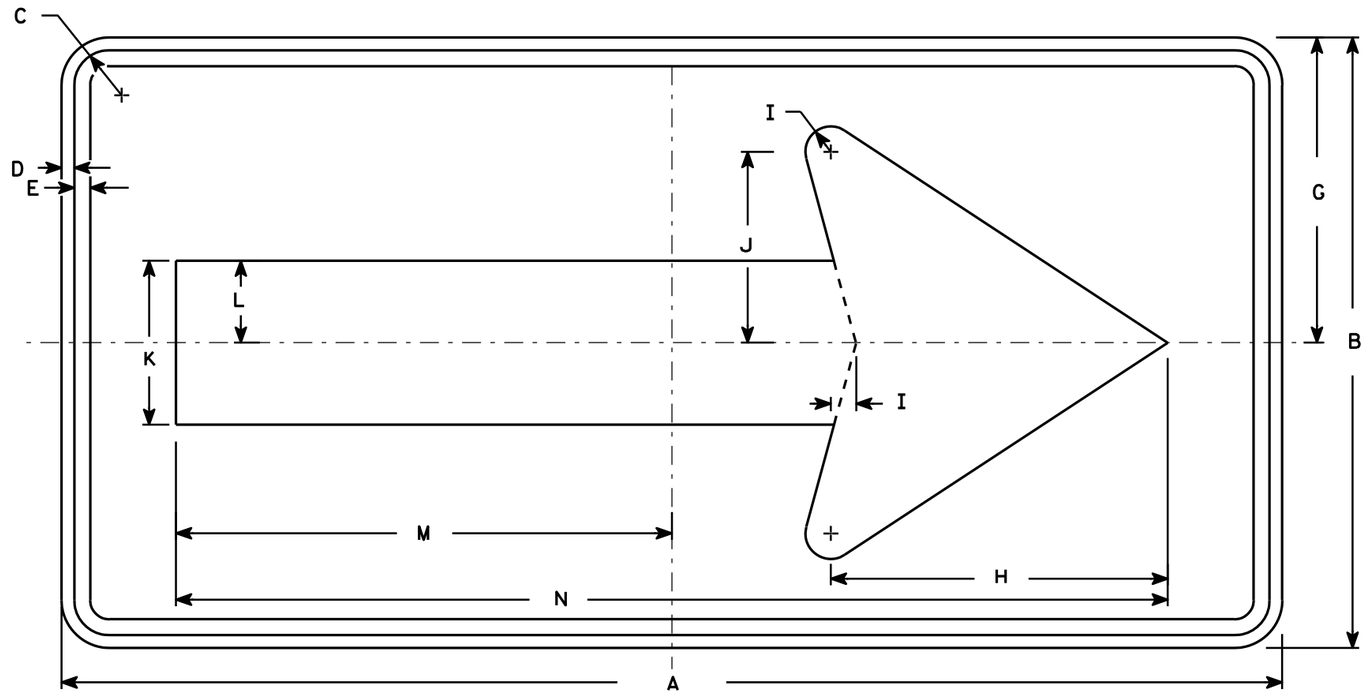
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 502	E



W1-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	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 3/8	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 3/8	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 3/8	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	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

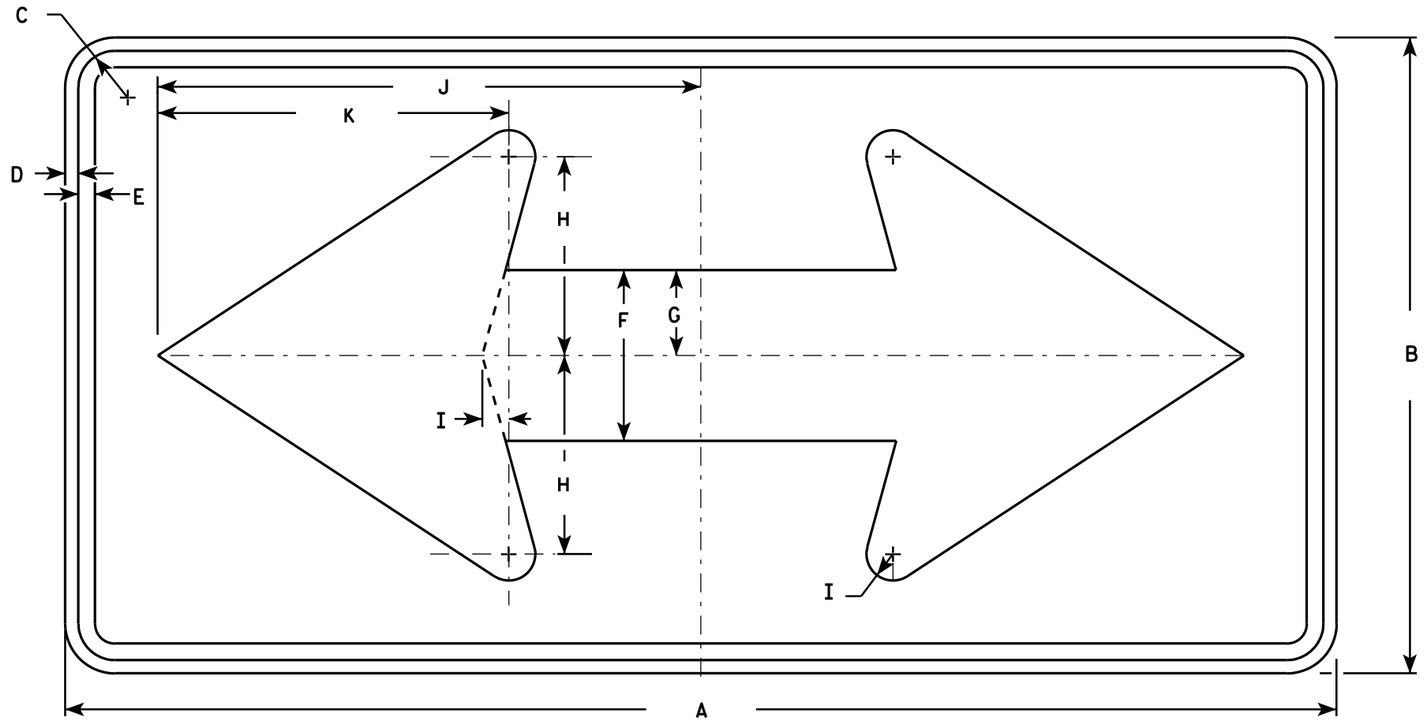
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 503



W1-7

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

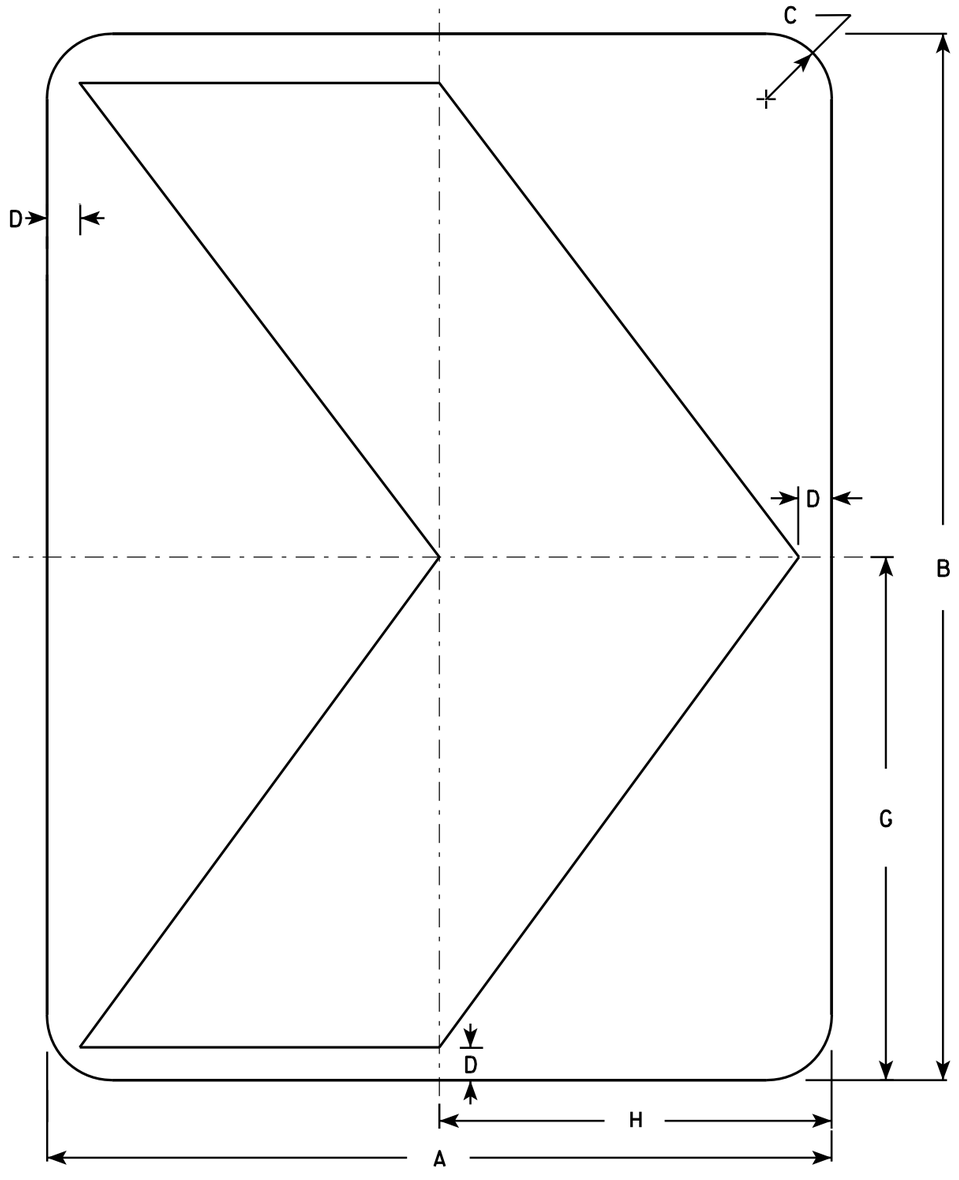
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 504 | E



W1-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 ½	½			9	6																			1.5
2S	18	24	1 ½	¾			12	9																			3.0
2M	18	24	1 ½	¾			12	9																			3.0
3	24	30	1 ½	1			15	12																			5.0
4	30	36	1 ⅞	1 ¼			18	15																			7.5
5	36	48	2 ¼	1 ½			24	18																			12.0

STANDARD SIGN
W1-8

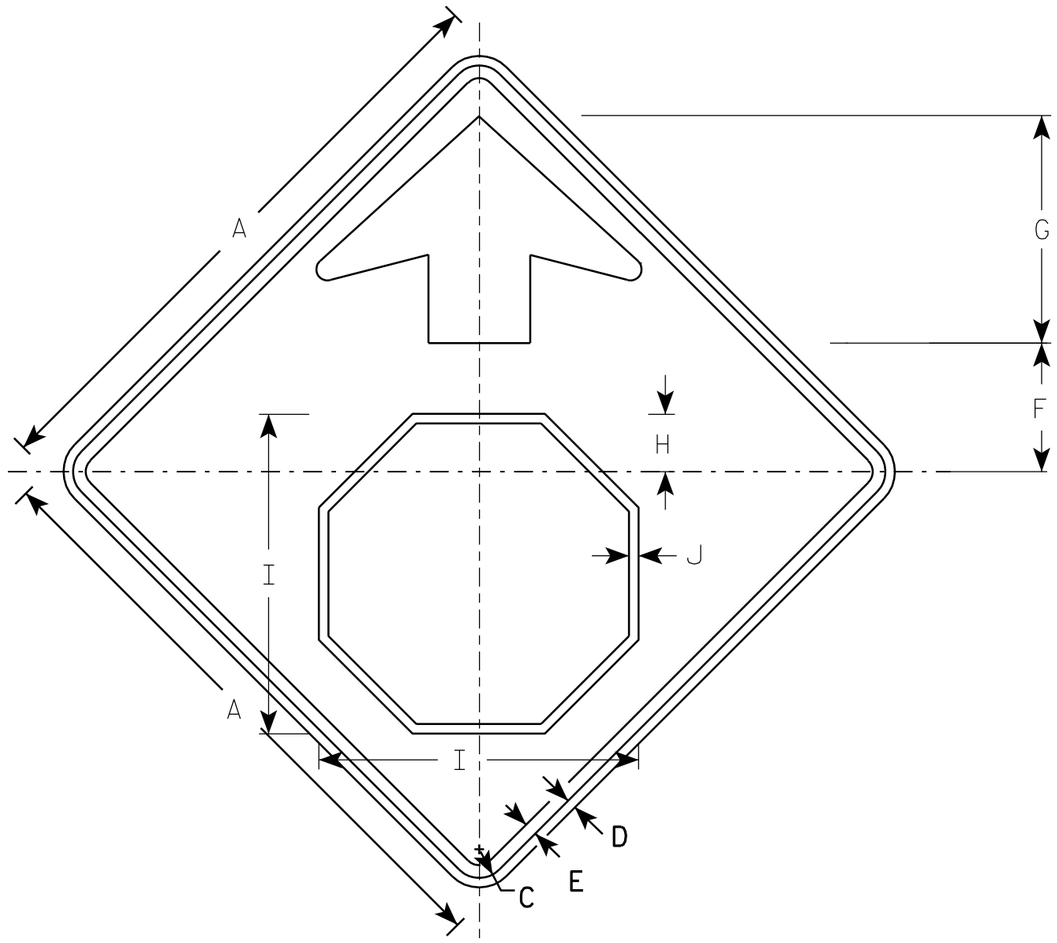
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-8.6

PROJECT NO:

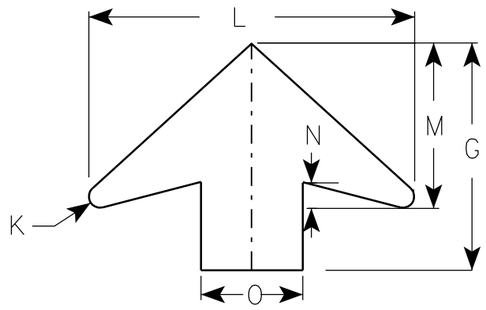
SHEET NO: 505 E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

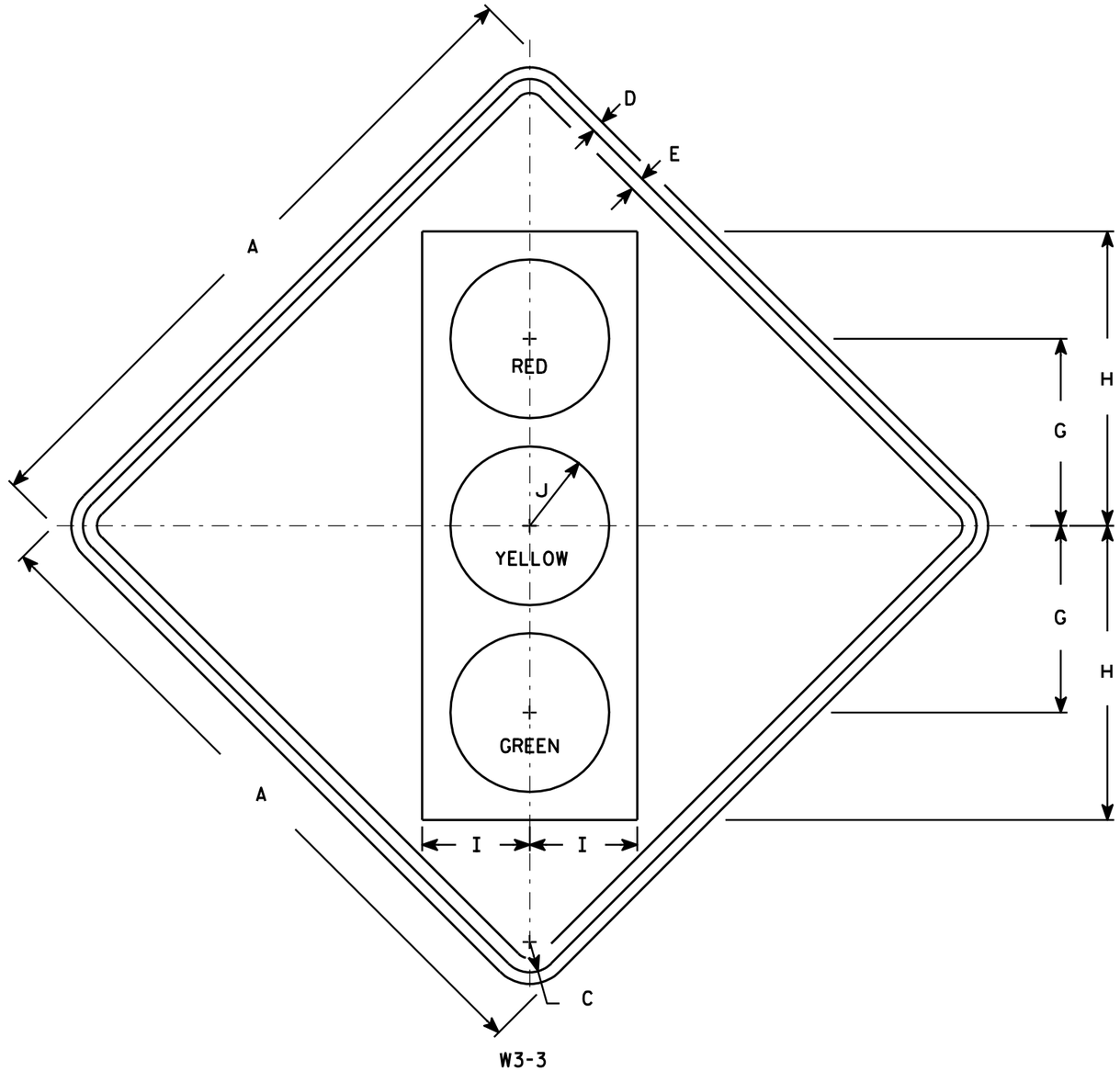
SHEET NO: 506 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W31.DGN PLOT DATE : 07-JUN-2010 12:59 PLOT BY : ditjph

WISDOT/CADDS SHEET 42

7

7



NOTES

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

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

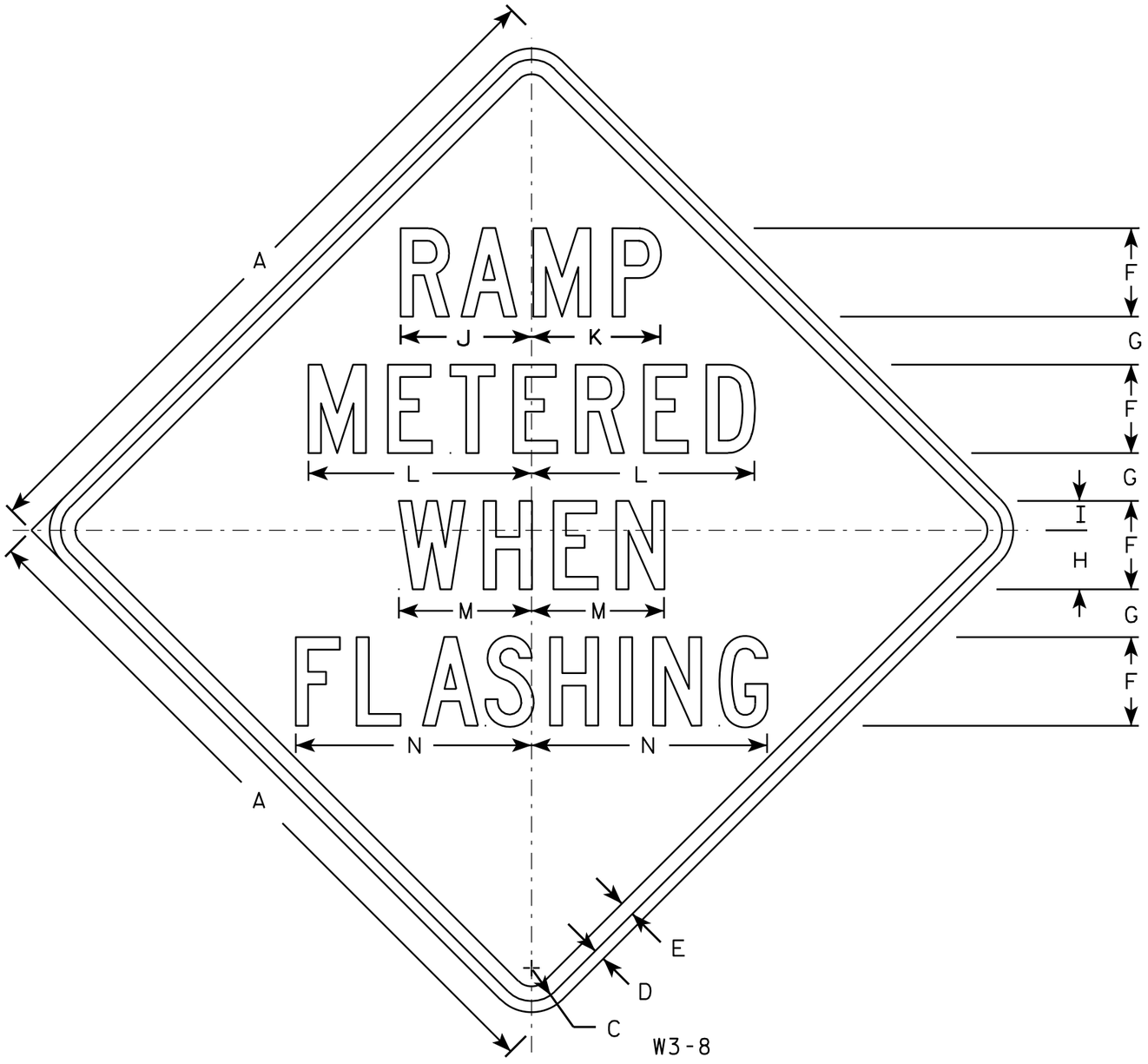
STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 507 | E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. 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																											
2S	48		2 1/4	3/4	1	6	3 3/4	4	2	8 7/8	8 3/4	15 1/8	9	16													16.0
2M	48		2 1/4	3/4	1	6	3 3/4	4	2	8 7/8	8 3/4	15 1/8	9	16													16.0
3	48		2 1/4	3/4	1	6	3 3/4	4	2	8 7/8	8 3/4	15 1/8	9	16													16.0
4	48		2 1/4	3/4	1	6	3 3/4	4	2	8 7/8	8 3/4	15 1/8	9	16													16.0
5	48		2 1/4	3/4	1	6	3 3/4	4	2	8 7/8	8 3/4	15 1/8	9	16													16.0

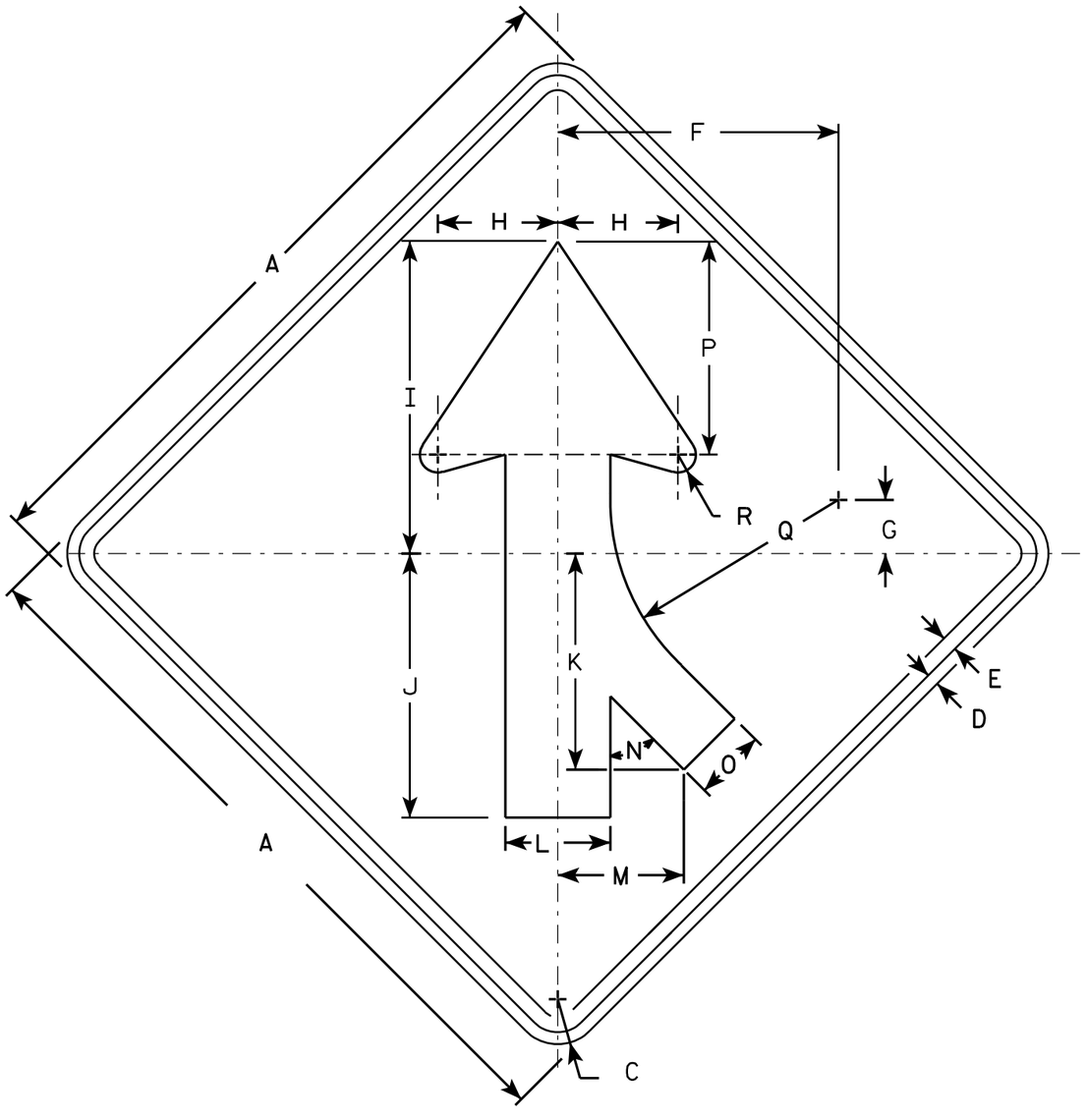
STANDARD SIGN
W3-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W3-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 508	E



W4-1 R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-1L is the same as W4-1R 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	30		1 3/8	1/2	5/8	11 5/8	2 1/2	5	13	11	9	4 3/8	5 1/4	45°	3	8 7/8	9 1/2	3/4									6.25
2S	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2M	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
3	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

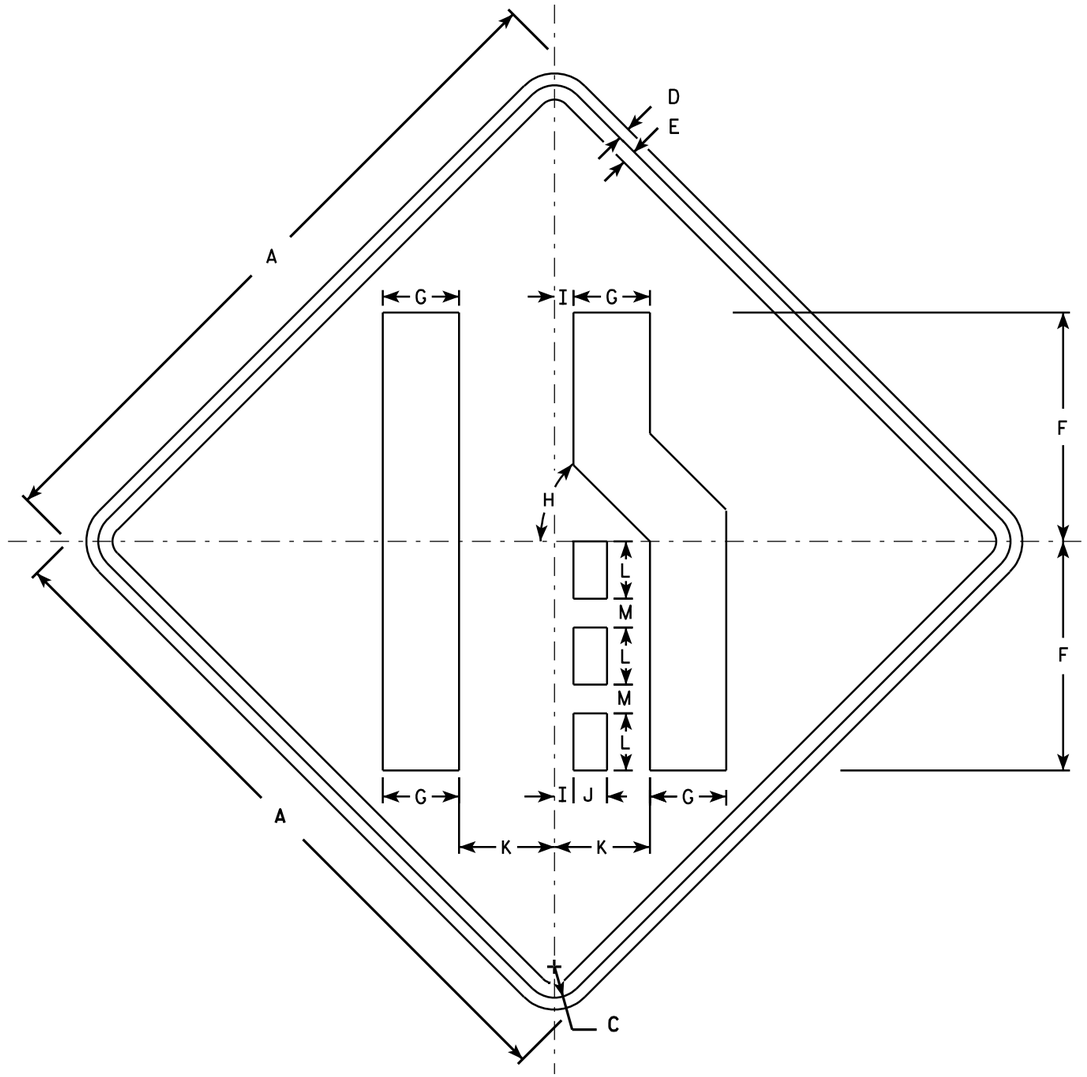
STANDARD SIGN
W4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 509	E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R 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	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W4-2

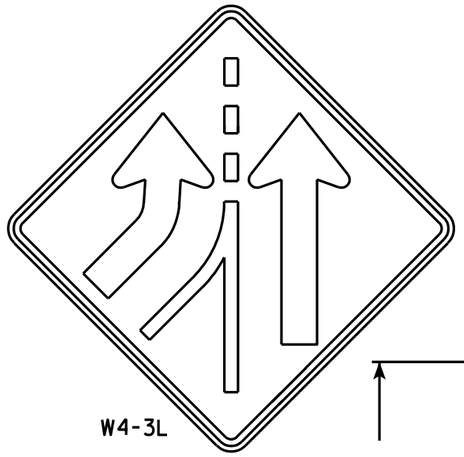
WISCONSIN DEPT OF TRANSPORTATION

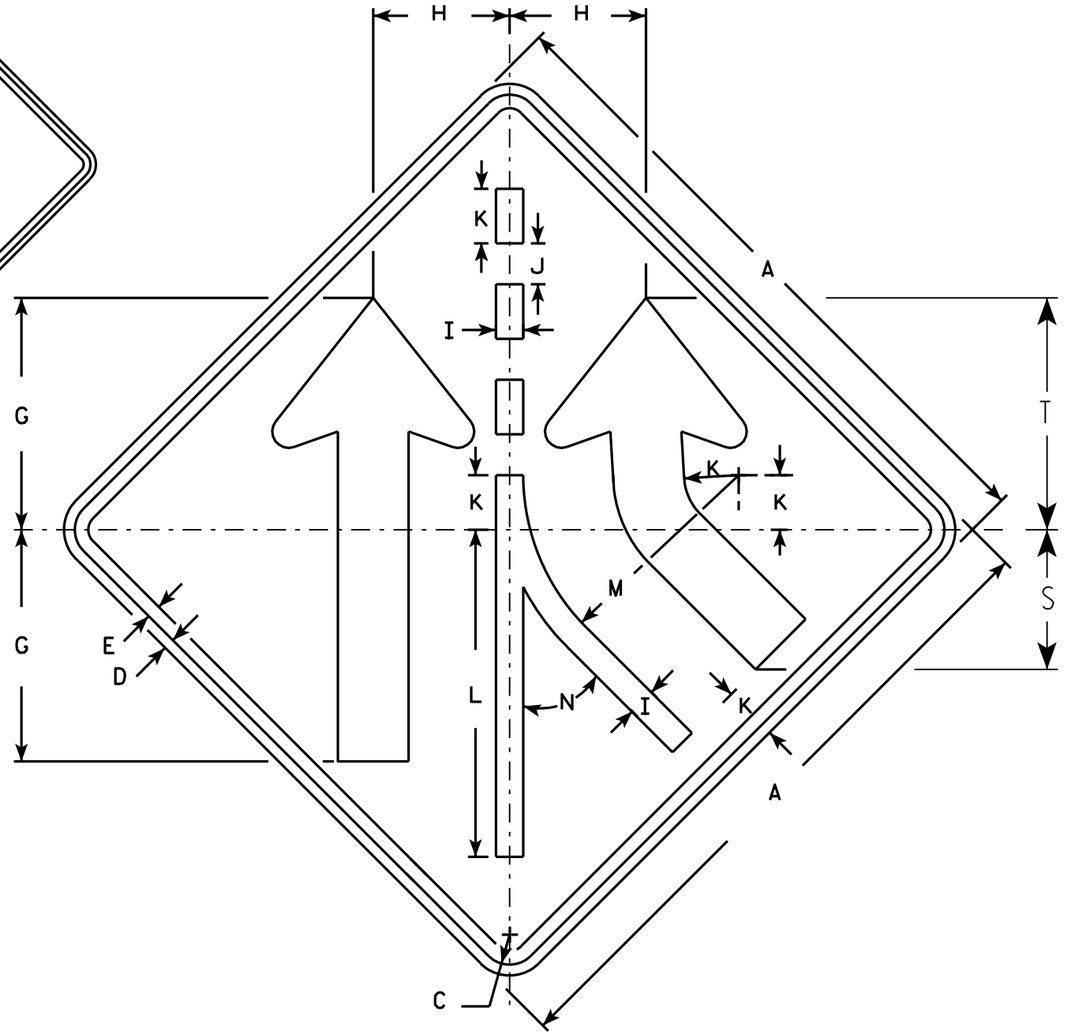
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 510 E

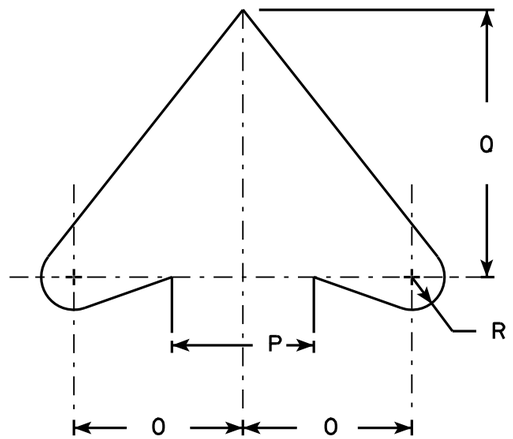




W4-3R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-3 L is the same as W4-3 R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		10 5/8	6 1/4	1 1/4	1 7/8	2 1/2	15	9 7/8	45°	3 7/8	3 1/4	6 1/8	3/4	6 3/8	10 5/8							6.25
2S	36		1 5/8	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
2M	36		1 5/8	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
3																											
4	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
5	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0

STANDARD SIGN
W4-3

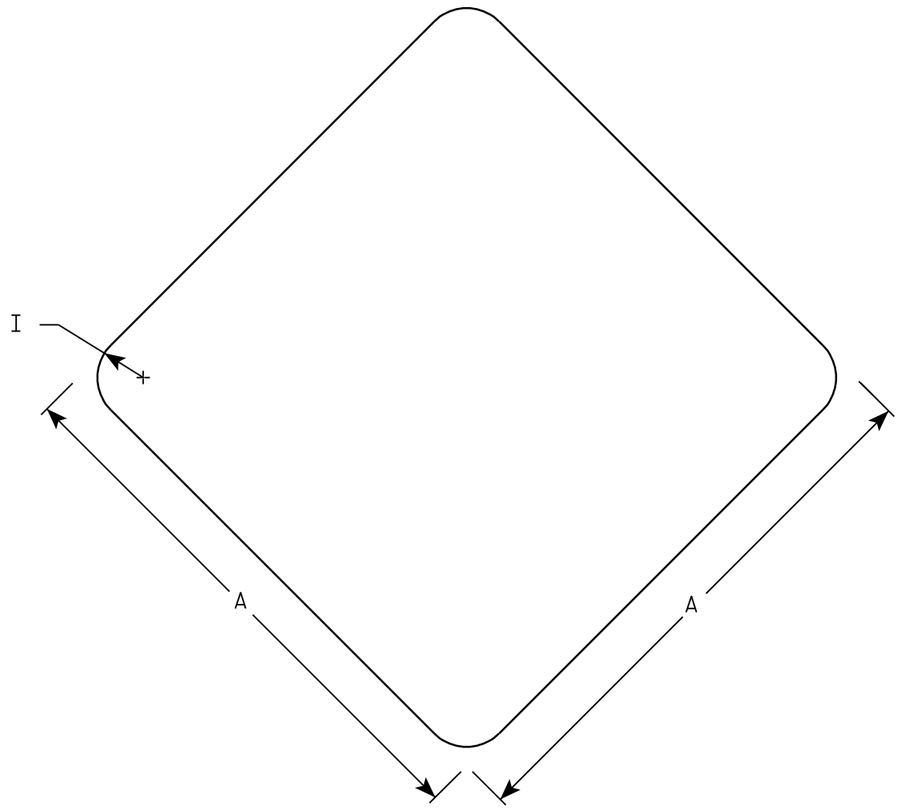
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-3.8

PROJECT NO:

SHEET NO: 511 E



W5-54

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners 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	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

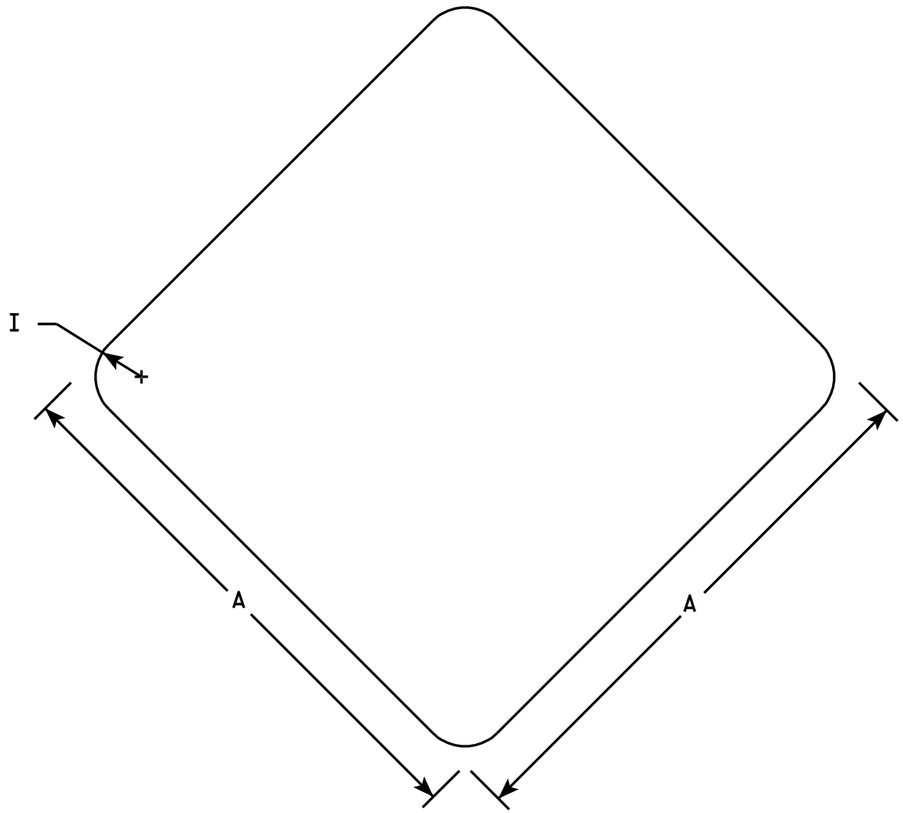
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 512 | E



W5-56

NOTES

1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners 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	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

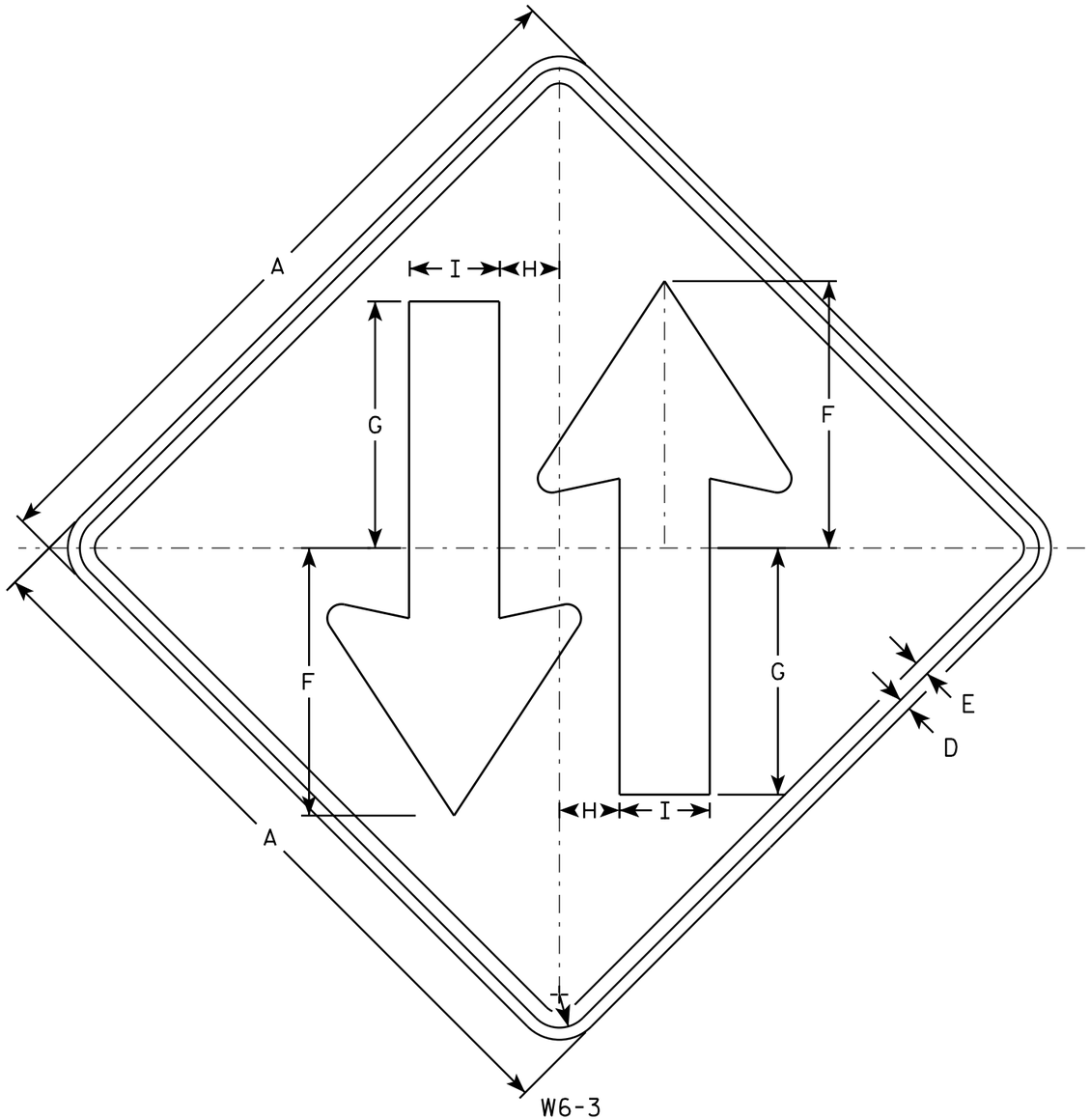
STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. W5-56.6

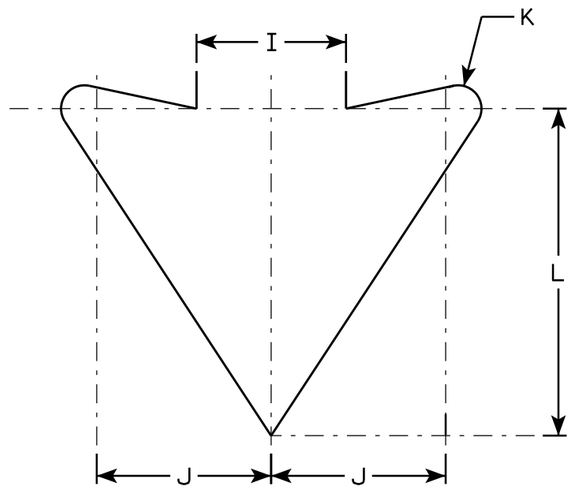
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 513	E



W6-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



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	30		1 3/8	1/2	5/8	11 1/8	10 1/4	2 1/2	3 3/4	4 3/8	5/8	8 1/4															6.25
2S	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
2M	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
3																											
4	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0
5	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0

STANDARD SIGN
W6-3

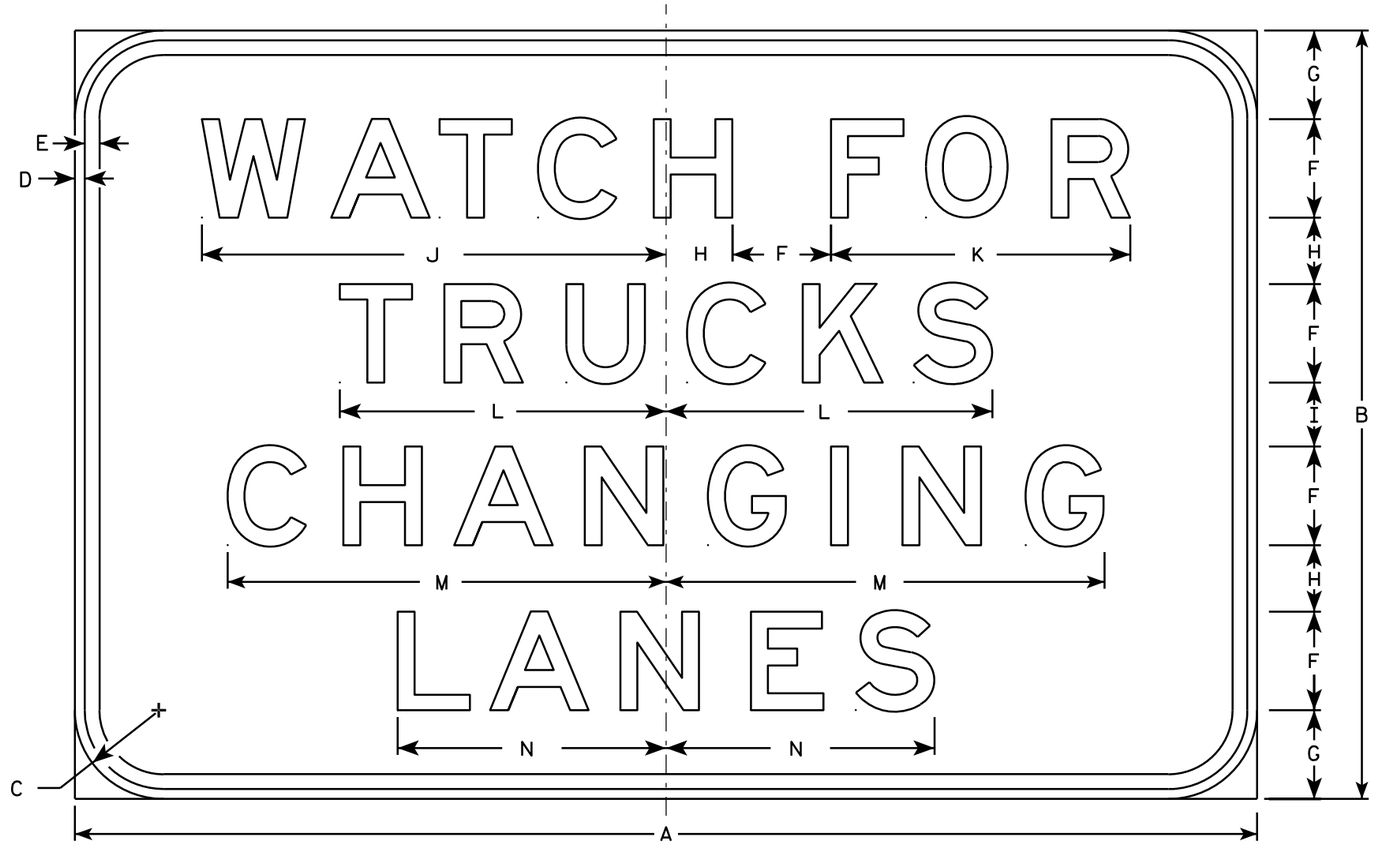
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/16 PLATE 16-3.11

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W63.DGN PLOT DATE : 10-MAR-2016 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000 WISDOT/CADDS SHEET 42



W7-61

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3																											
4																											
5	120	78	9	1	1 1/2	10	9	6 3/4	6 1/2	47 1/8	30 3/8	33 1/8	44 1/2	27 1/4													65.0

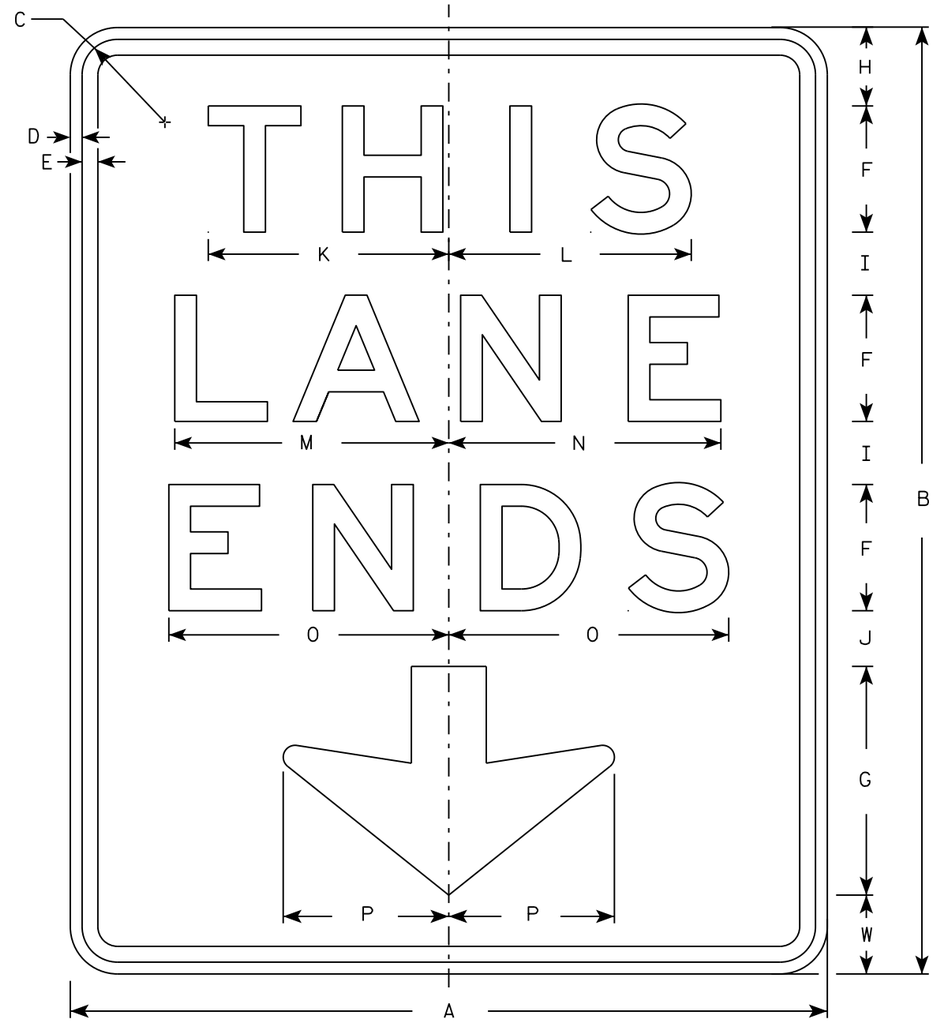
STANDARD SIGN
W7-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/14/13 PLATE NO. W7-61.8

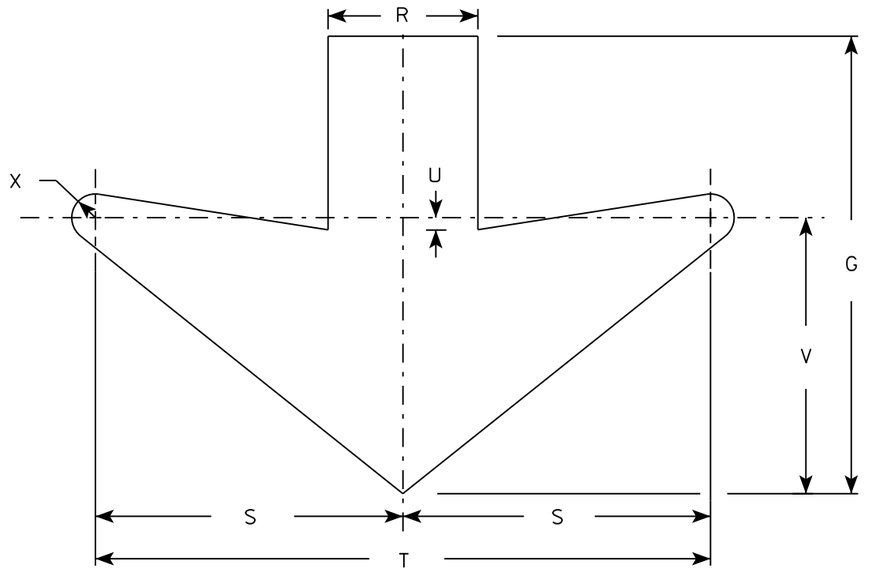
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 515	E



W9-62

NOTES

1. Sign is Type II - Type F Reflective except see Note 5
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E
4. Size 4 and 5 shall be Type I - Type F Reflective



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	48	60	2 1/4	3/4	1	8	14 1/2	5	4	3 1/2	15 1/4	15 3/8	17 3/8	17 1/4	17 3/4	10 1/2		4 3/4	9 3/4	19 1/2	3/4	8 3/4	5	3/4			20.0
2S	48	60	2 1/4	3/4	1	8	14 1/2	5	4	3 1/2	15 1/4	15 3/8	17 3/8	17 1/4	17 3/4	10 1/2		4 3/4	9 3/4	19 1/2	3/4	8 3/4	5	3/4			20.0
2M	48	60	2 1/4	3/4	1	8	14 1/2	5	4	3 1/2	15 1/4	15 3/8	17 3/8	17 1/4	17 3/4	10 1/2		4 3/4	9 3/4	19 1/2	3/4	8 3/4	5	3/4			20.0
3																											
4	72	90	6	1	1 1/2	12	22	8	6	5	23	23	26 1/8	26 1/8	26 5/8	16		6 1/2	15	30	2	15	7	1			45.0
5	72	90	6	1	1 1/2	12	22	8	6	5	23	23	26 1/8	26 1/8	26 5/8	16		6 1/2	15	30	2	15	7	1			45.0

STANDARD SIGN
W9-62

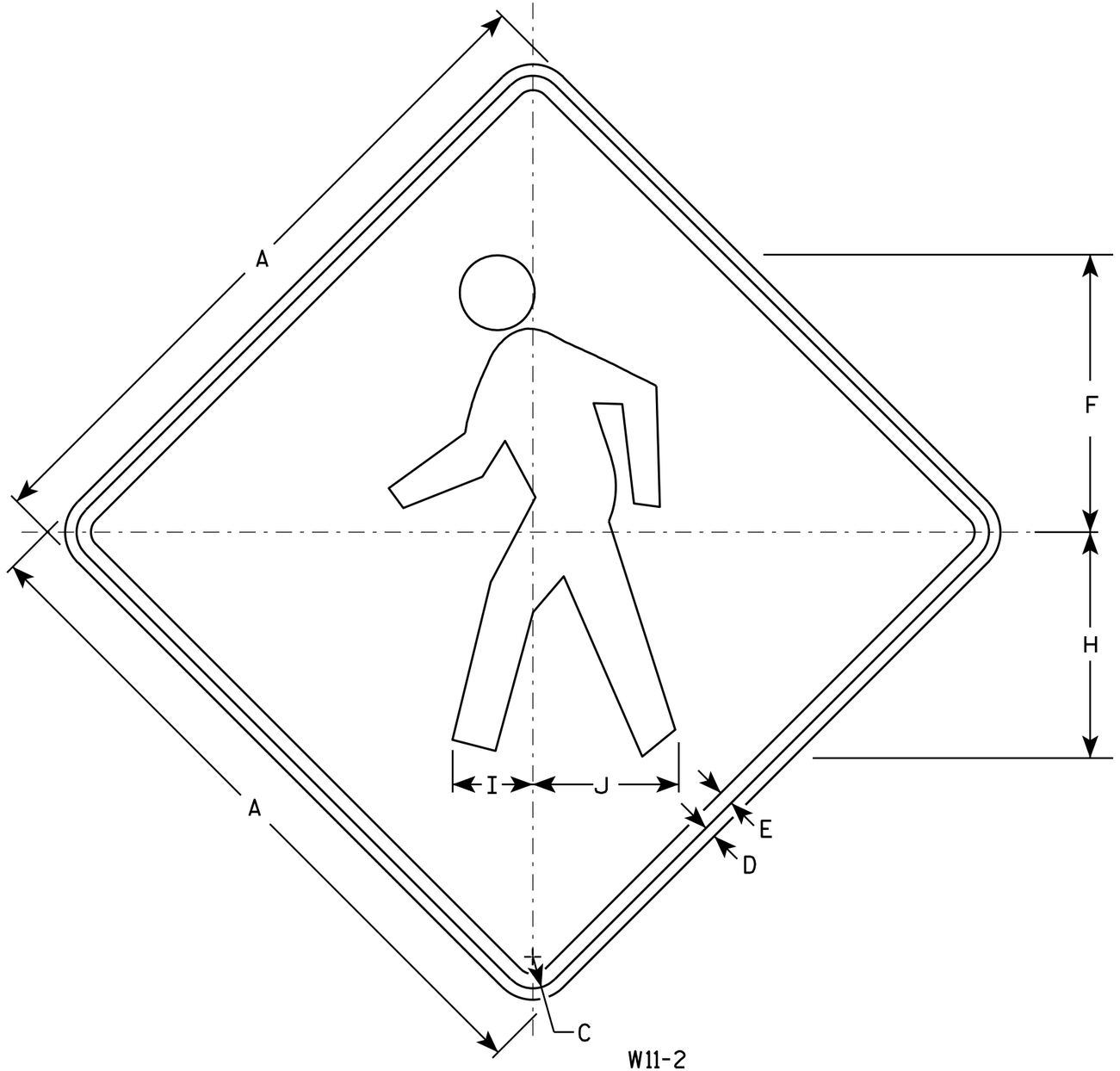
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. W9-62.11

PROJECT NO:

SHEET NO: 516 E



W11-2

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

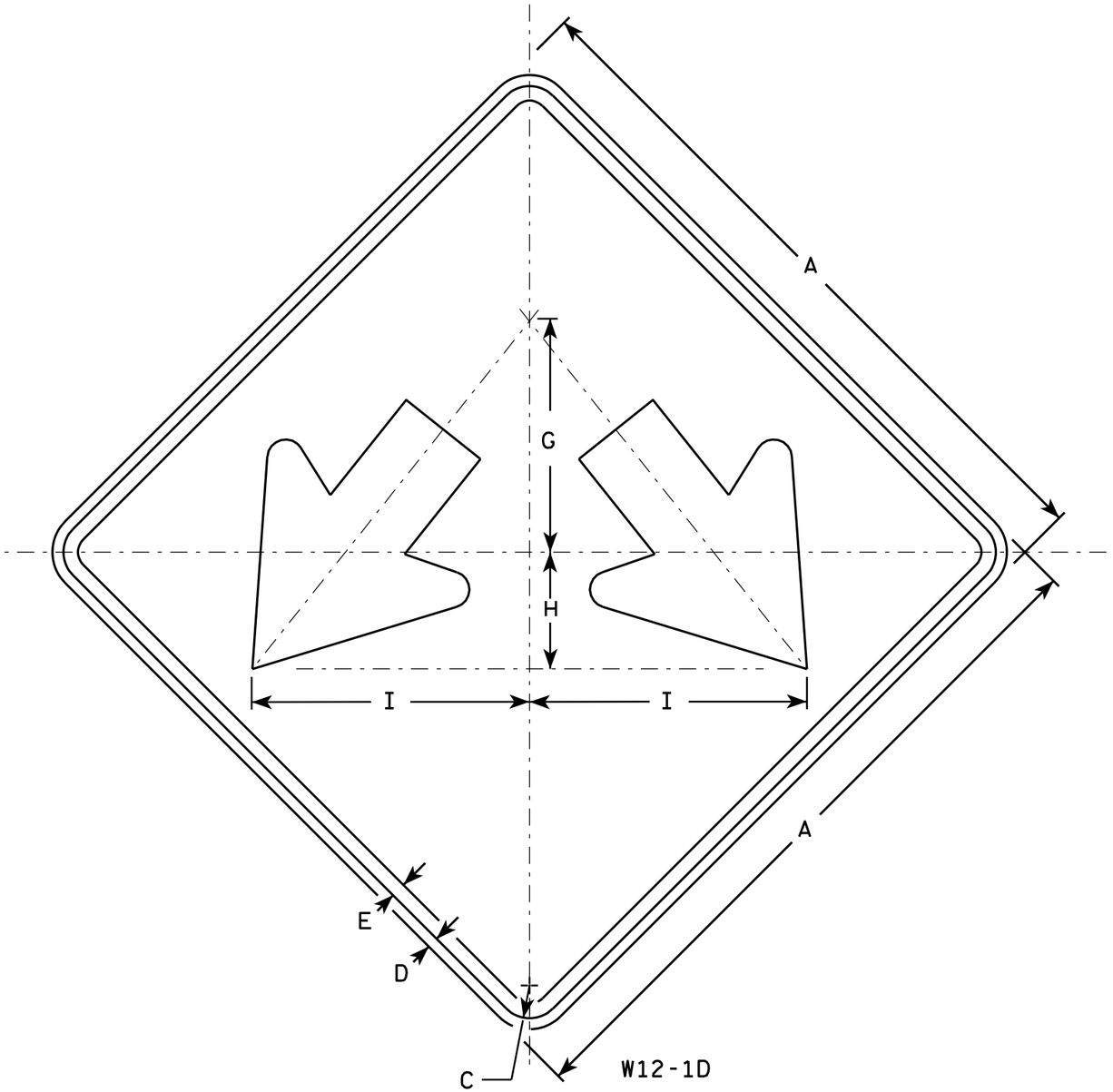
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

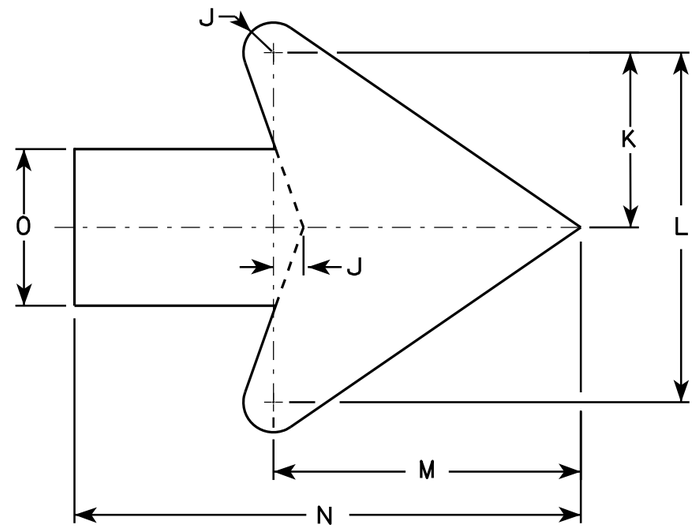
DATE 6/7/10 PLATE NO. W11-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 517	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



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		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

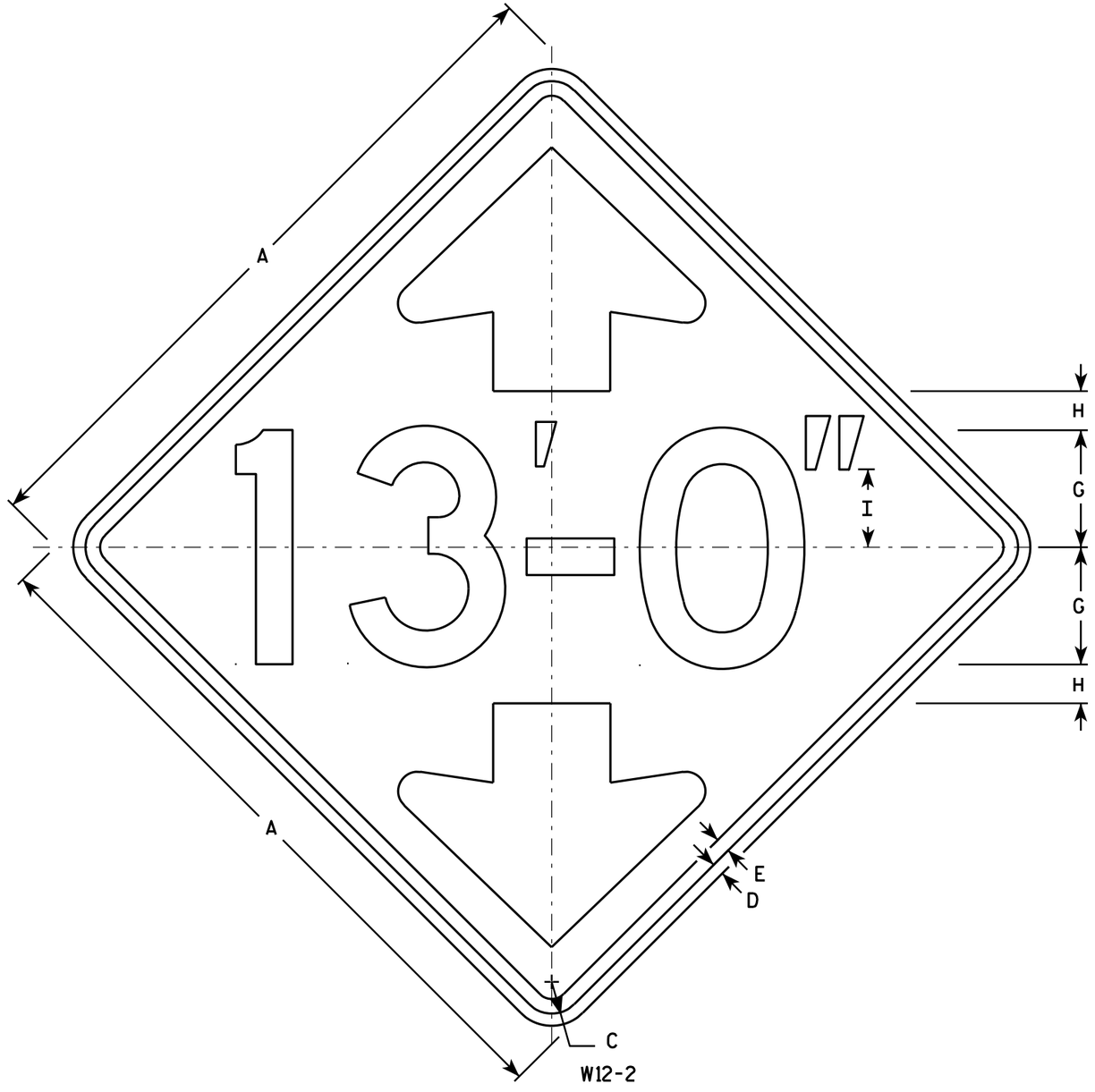
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

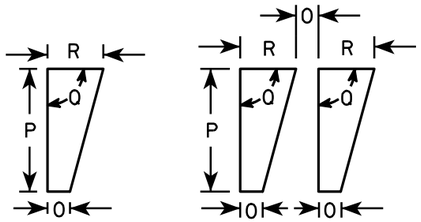
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 518	E



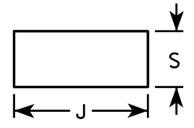
NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. 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. Substitute appropriate numerals and optically adjust spacing of numerals, hyphen, foot & inch marks to achieve proper balance.

Arrow Detail



Foot Mark & Inch Mark Detail



Hyphen 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	30		1 3/8	1/2	5/8		5	1 5/8	3 3/8	3 3/4	6 5/8	5 3/4	3/4	2 1/2	1/2	2 1/4	90°	1	1 5/8								6.25
2S	36		1 5/8	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.00
2M	36		1 5/8	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.00
3	36		1 5/8	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.00
4	36		1 5/8	5/8	3/4		6	2	4	4 1/2	8	6 7/8	1	3	1/2	2 3/4	90°	1 1/4	1 7/8								9.00
5	48		2 1/4	3/4	1		8	2 5/8	5 1/2	5 7/8	10 5/8	9 1/4	1 3/8	4	5/8	3 5/8	90°	1 5/8	2 1/2								16.00

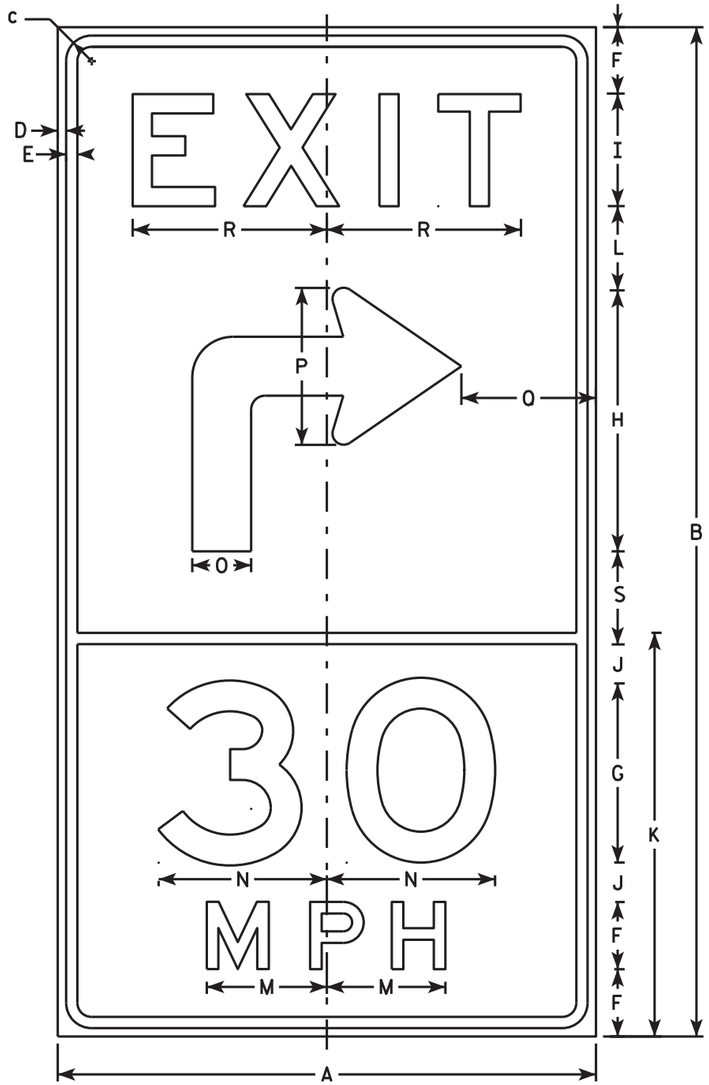
STANDARD SIGN
W12-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-2.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 519	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	90	2 1/4	3/4	1	6	16	23 1/4	10	3 1/2	36	7 1/2	10 3/4	15	5 1/4	14	12	17 3/8	8 1/4								30
2M	48	90	2 1/4	3/4	1	6	16	23 1/4	10	3 1/2	36	7 1/2	10 3/4	15	5 1/4	14	12	17 3/8	8 1/4								30
3																											
4																											
5																											

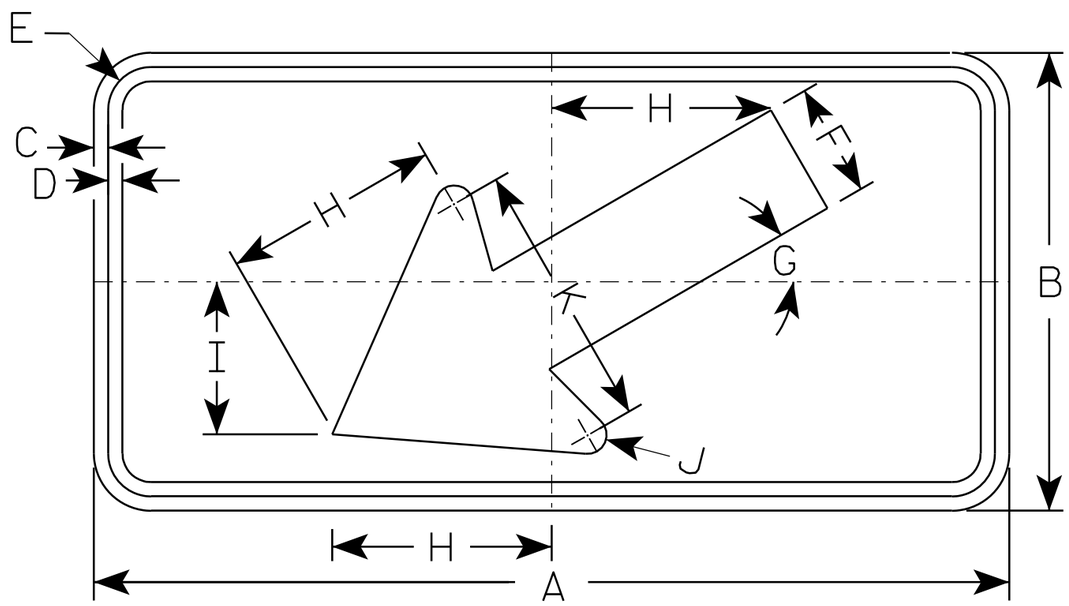
STANDARD SIGN
W13-2D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/12/13 PLATE NO. W13-2D.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W16-7L

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W16-7R is the same as W16-L 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																											
2S	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4																											8
5																											8

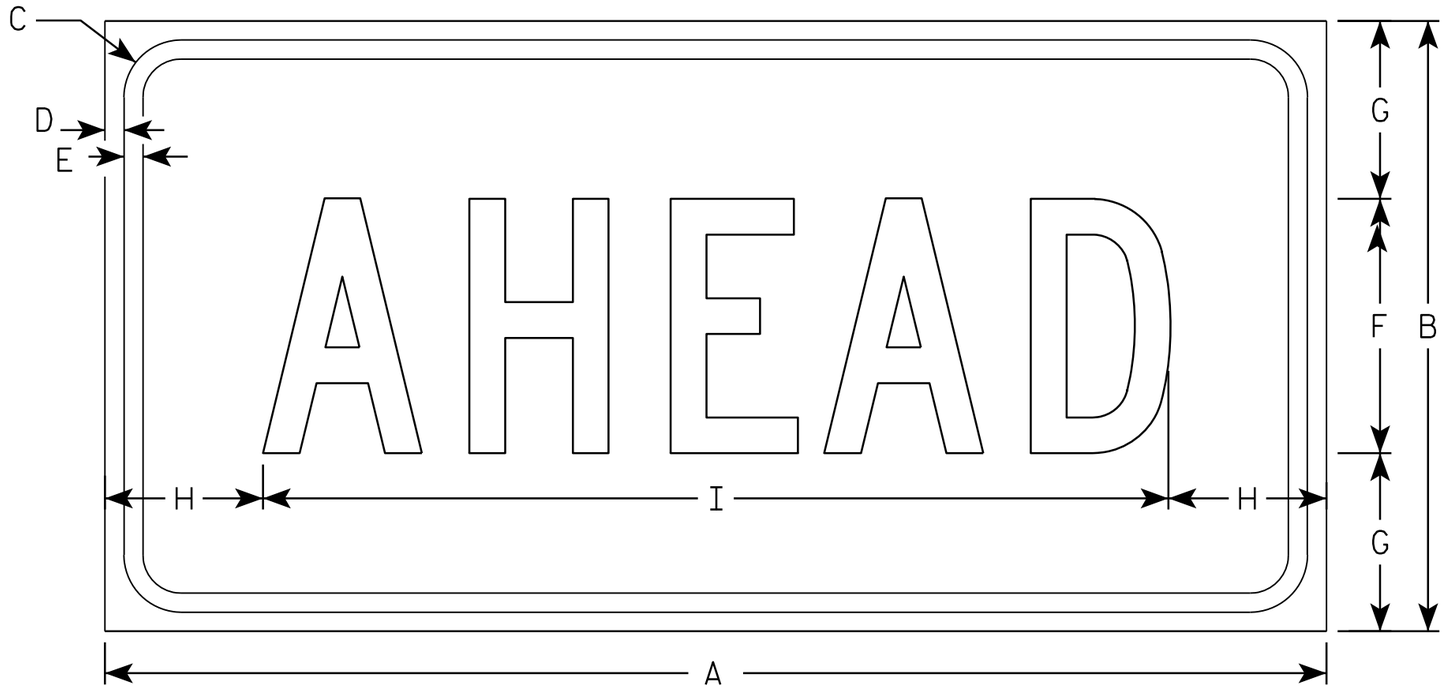
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. W16-7.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 521	E



W16-9P

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - 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																											
2S	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
W16-9P

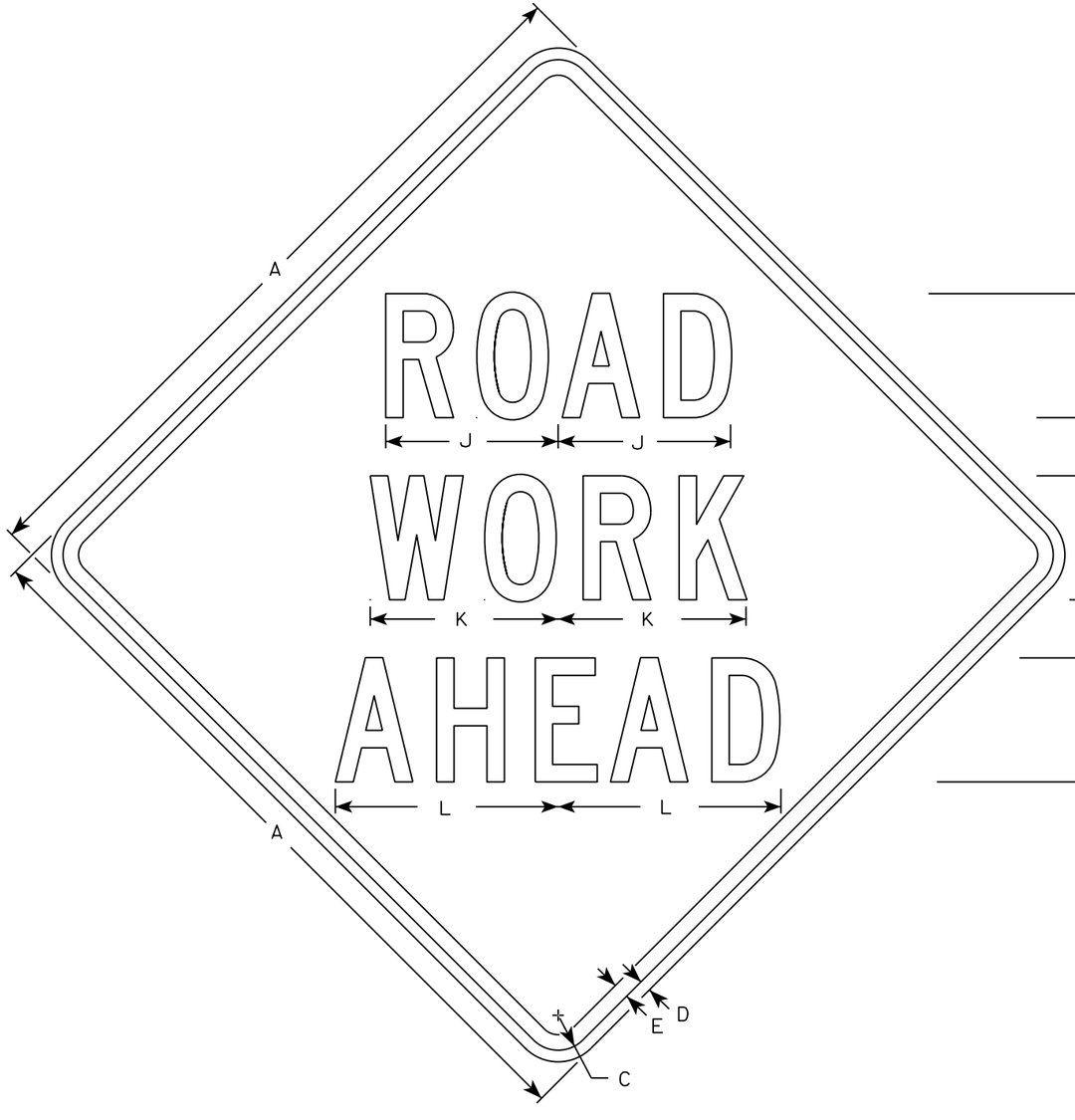
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

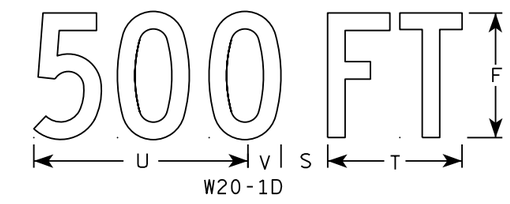
DATE 12/28/10 PLATE NO. W16-9P.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 522 | E

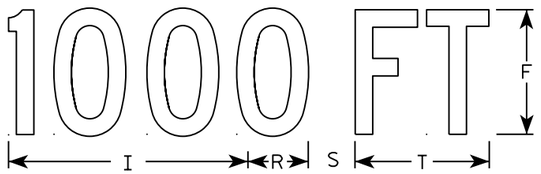
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W169P.DGN PLOT DATE : 28-DEC-2010 13:39 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 2.979524:1.000000
WISDOT/CADDS SHEET 42



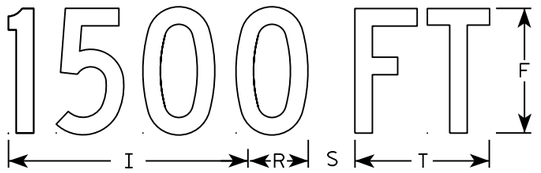
W20-1A



W20-1D

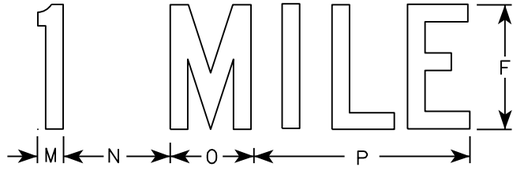


W20-1C

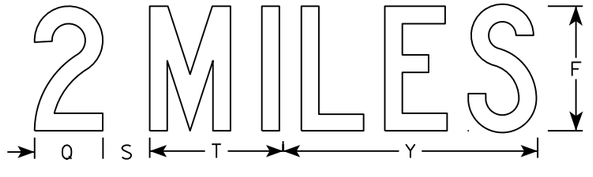


W20-1B

W20-1G



W20-1F



W20-1E

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		1 3/8	1/2	5/8	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		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

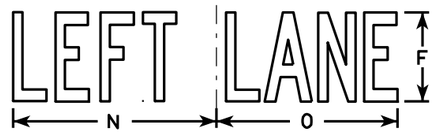
PROJECT NO:

SHEET NO: E

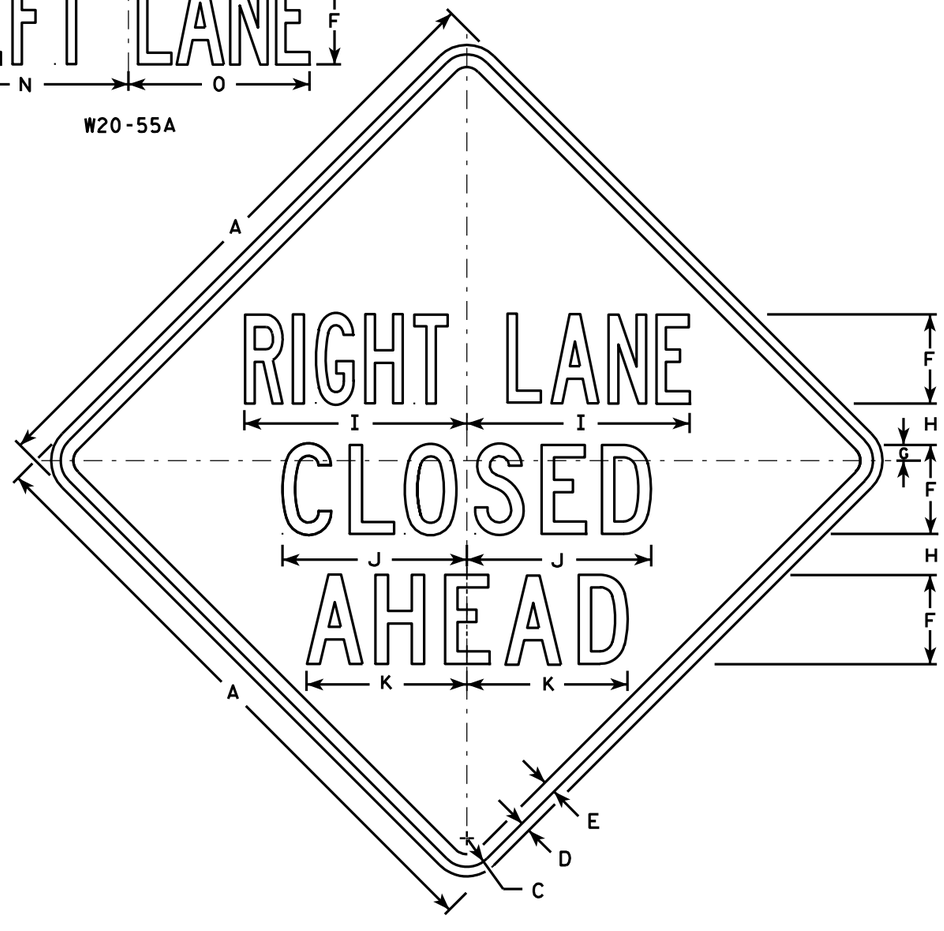
7

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$

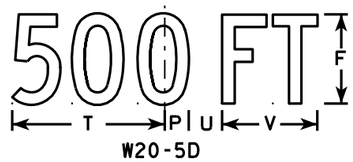
W20-56A



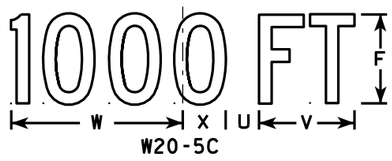
W20-55A



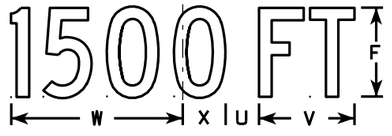
W20-5A



W20-5D



W20-5C



W20-5B

W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

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

WISCONSIN DEPT OF TRANSPORTATION

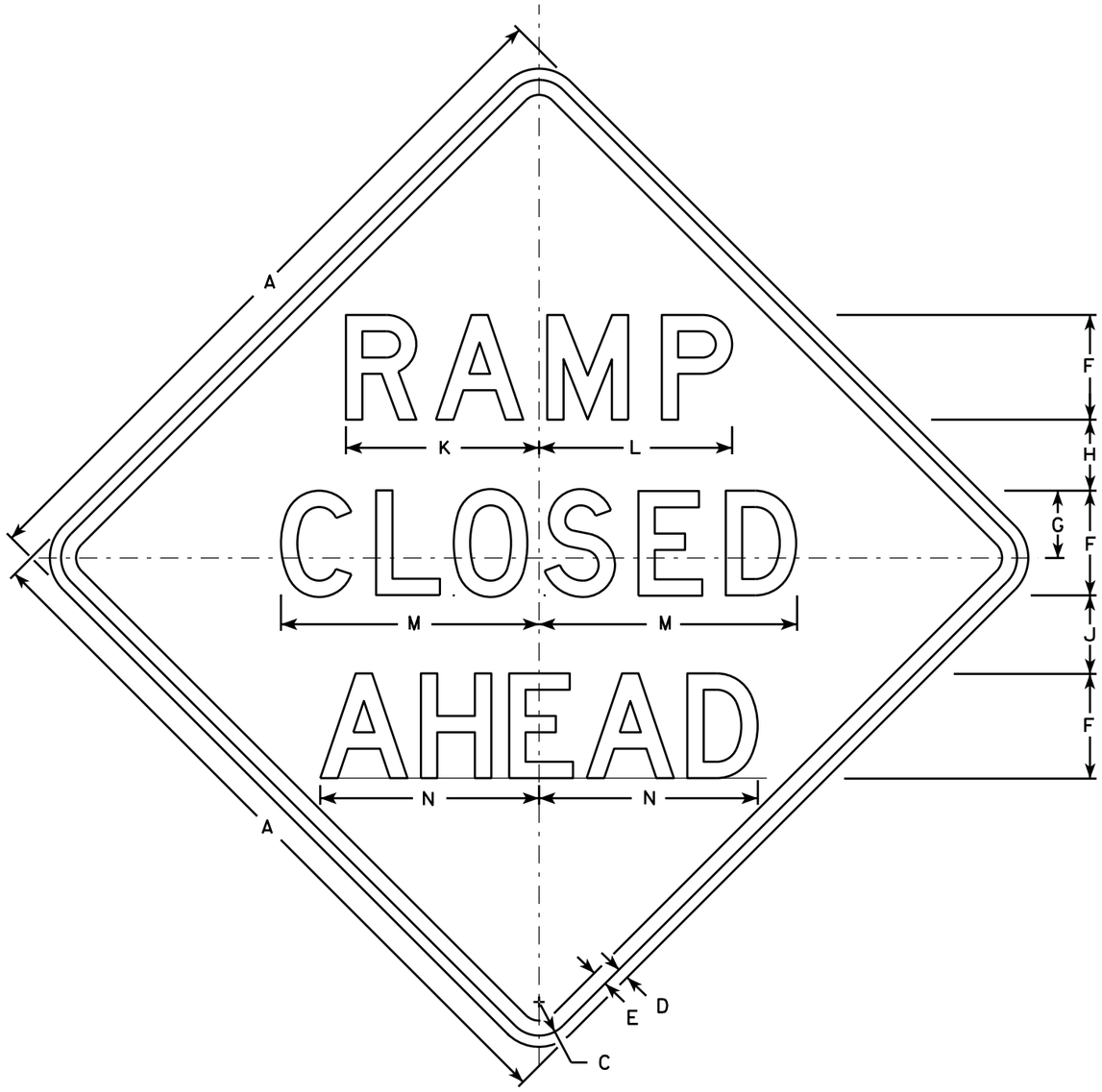
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

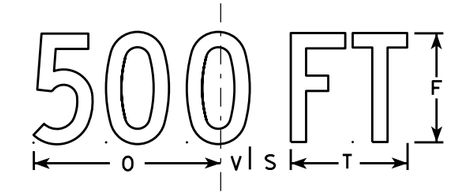
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 524	E

7

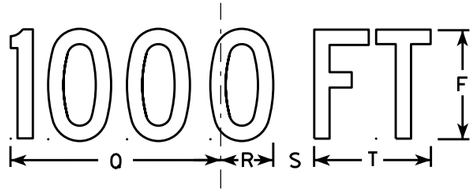
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



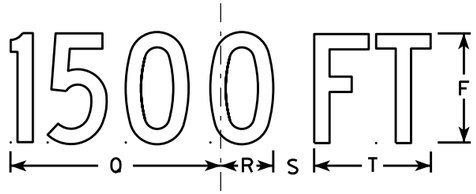
W20-53A



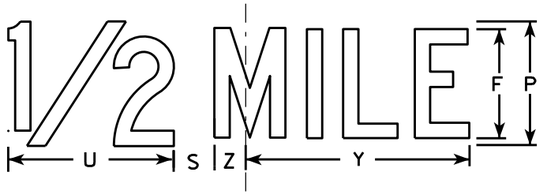
W20-53D



W20-53C



W20-53B



W20-53G

W20-53F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	9 1/4	9 1/4	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-53A,B,C,D,F,G

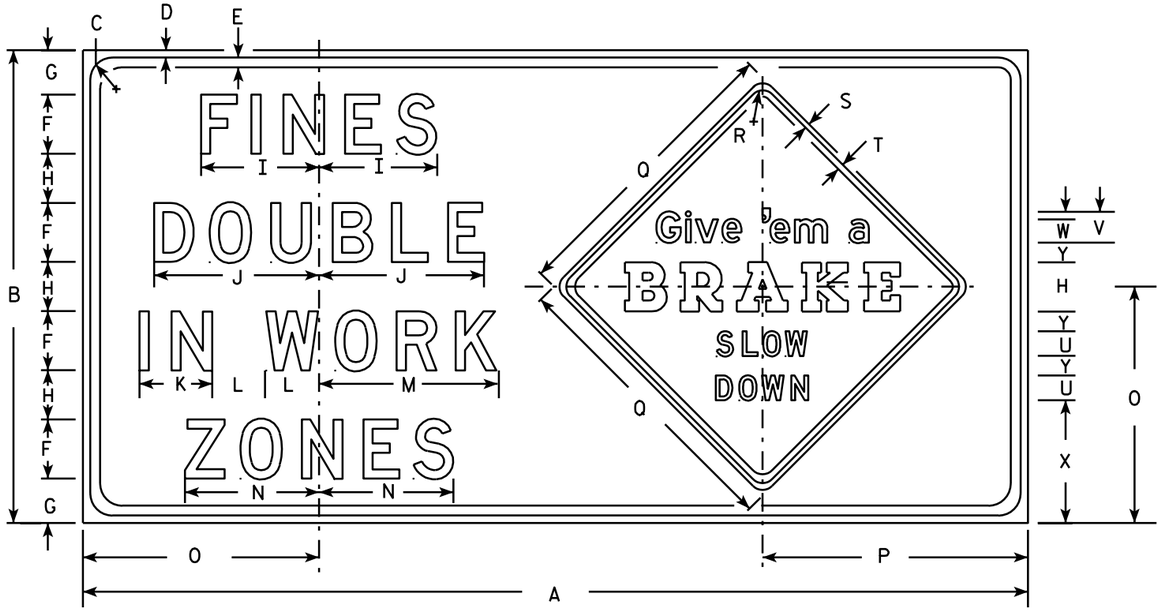
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

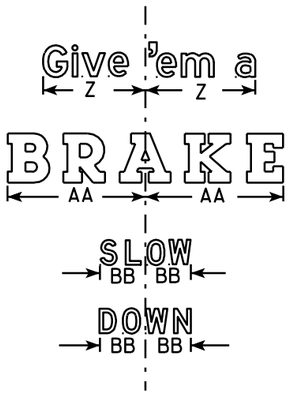
DATE 5/27/15 PLATE NO. W20-53.1

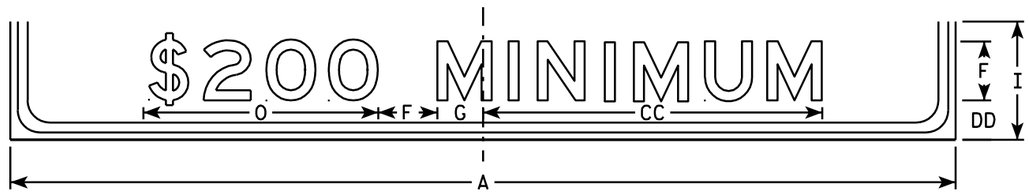
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 27-MAY-2015 19:40 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.729210:1.000000
WISDOT/CADDS SHEET 42



W21-62





W21-62P

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White - (See Note 5)
   Message - Black
3. Message Series -
   Fines Double Message - All lines are Series D
   Give 'em a Brake -
   Line one is Series E, line two is a Special Graphic Series and lines three and four are Series D.
4. The base material shall be plywood. Corners may be square or rounded, but borders shall be rounded as shown. The base material for Give 'em a Brake sign can be a seperate sheet of aluminum with the corners and borders rounded as shown. This seperate panel shall then be attached to the plywood with aluminum or stainless steel sheet metal screws.
5. Background for the Give 'em a Brake sign shall be Type F reflective orange.

Metric equivalent for this sign is:

SIZE	
1	
2	
3	2400 mm X 1200 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	Area sq. ft.	Area m2
1																																
2																																
3	96	48	2 1/4	3/4	1	6	4 1/2	5	12	16 3/4	7 3/8	5 1/2	18 1/4	13 5/8	24	27	30	1 3/8	1/2	5/8	2 1/2	3 1/8	2 3/8	12 1/2	2	10 3/4	14	4 5/8	34 1/2	4	32.0	2.88
4																																
5																																

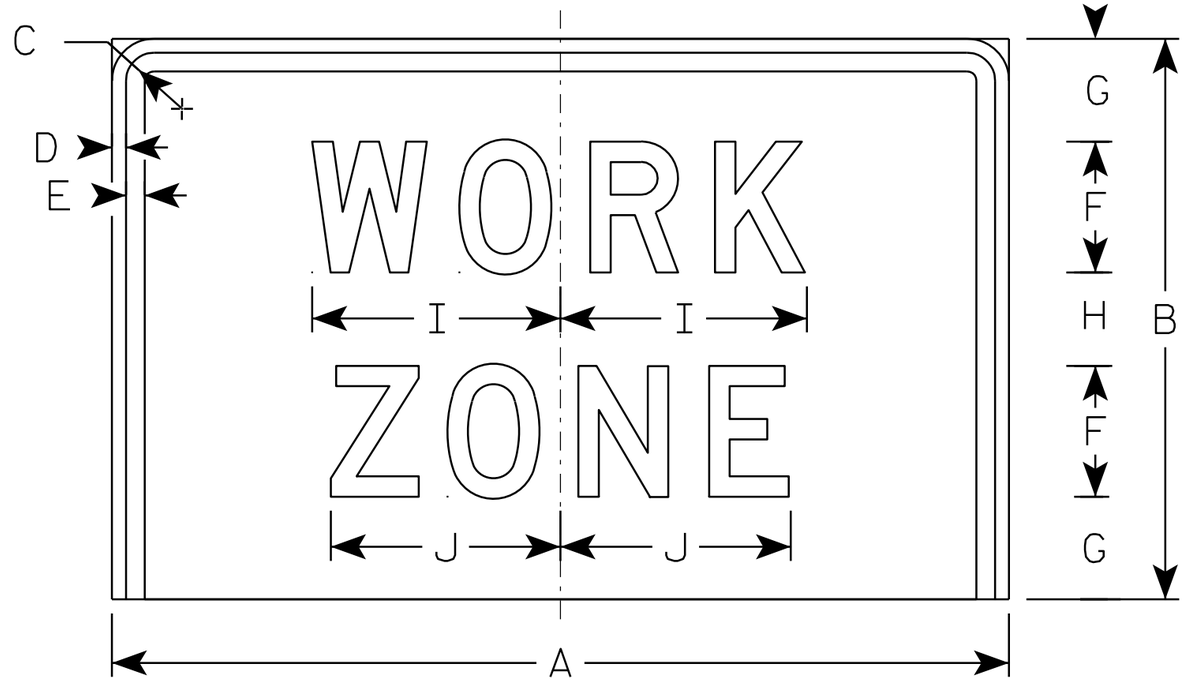
STANDARD SIGN
W21-62

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/16/07 PLATE NO. W21-62.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 526	E



W21-620

NOTES

1. Sign is Type II - Type F - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D

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	2 1/4	3/4	1	7	5 1/2	5	13 1/4	12 1/4																	10.0
2M	48	30	2 1/4	3/4	1	7	5 1/2	5	13 1/4	12 1/4																	10.0
3																											
4																											
5																											

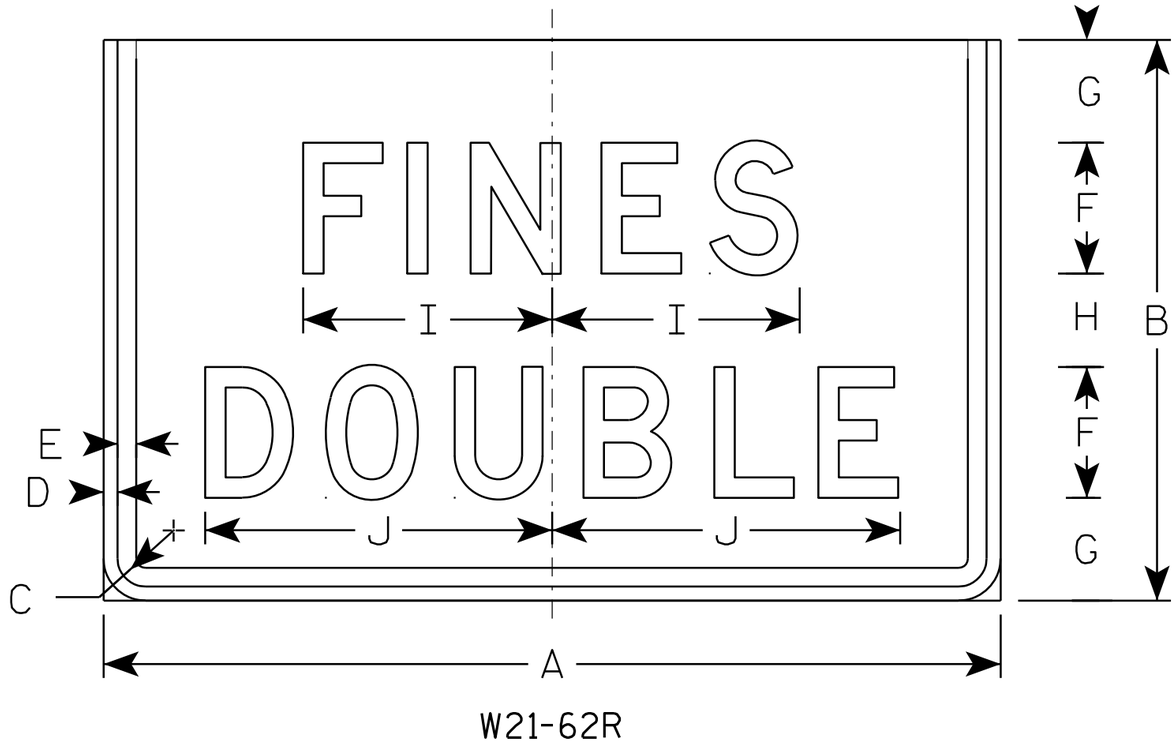
STANDARD SIGN
W21-620

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-620.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 527	E



W21-62R

NOTES

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

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	2 1/4	3/4	1	7	5 1/2	5	13 1/4	18 5/8																	10.0
2M	48	30	2 1/4	3/4	1	7	5 1/2	5	13 1/4	18 5/8																	10.0
3																											
4																											
5																											

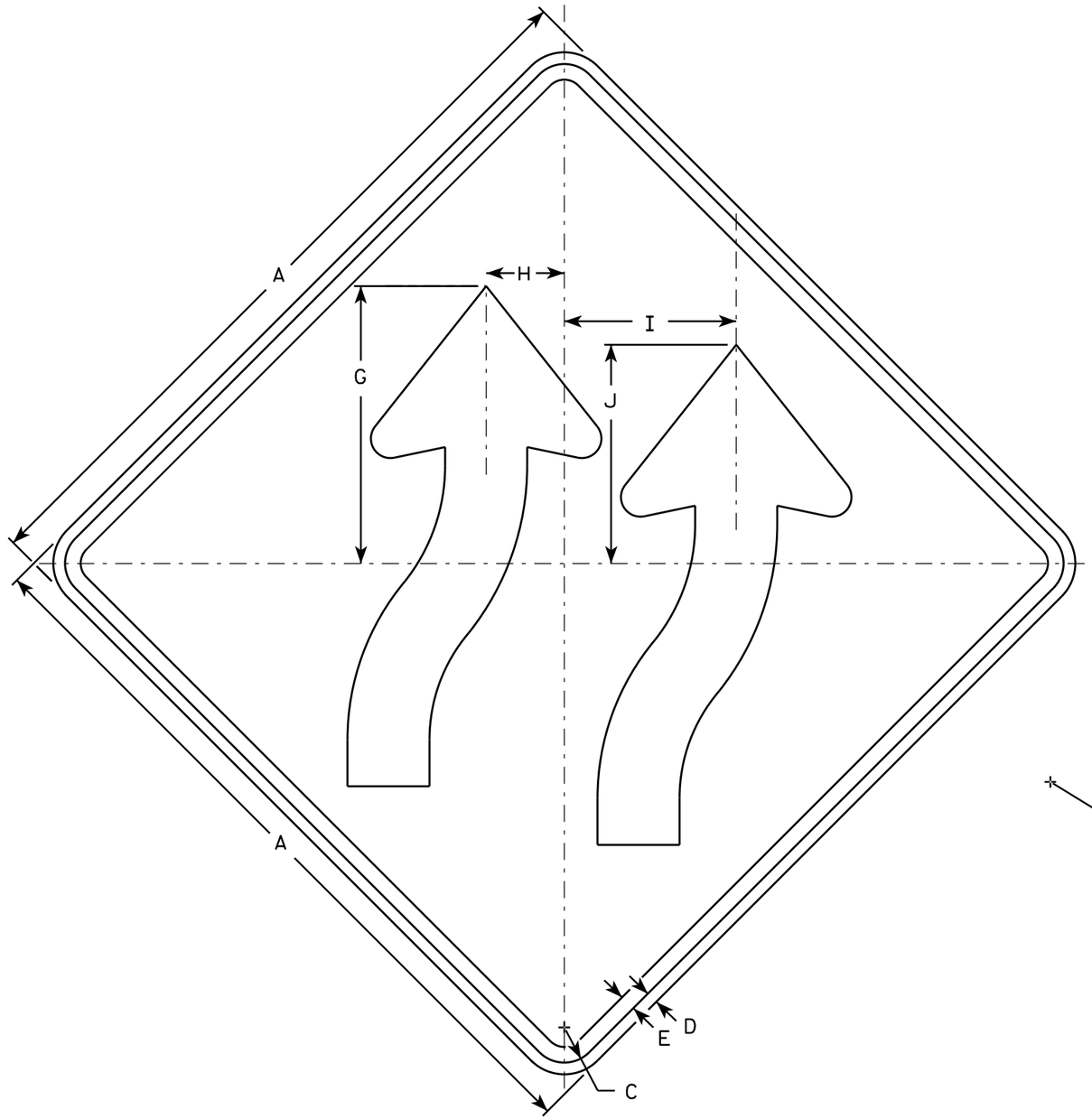
STANDARD SIGN
W21-62R

WISCONSIN DEPT OF TRANSPORTATION

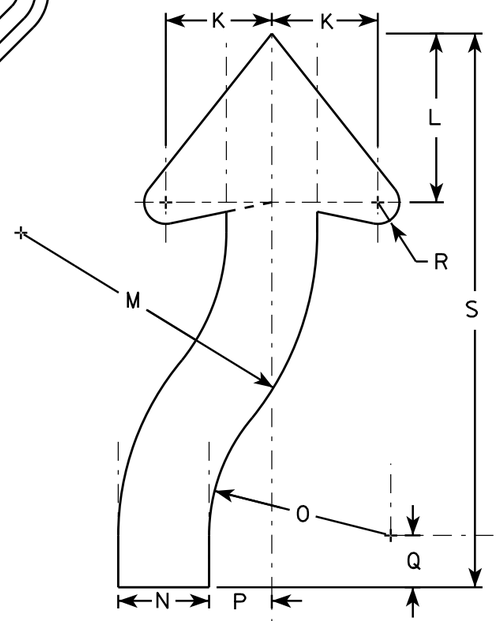
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-62R.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 528 | E



W01-4bR



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4bL is the same as W014-bR exept arrows are reversed along the vertical centerline

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		13 3/8	3 3/4	8 1/4	10 1/2	4 5/8	7 3/8	12 7/8	3 7/8	7 7/8	2 3/4	2 1/4	7/8	24								9.0
2S	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
2M	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
3	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
4	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
5	48		2 1/4	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0

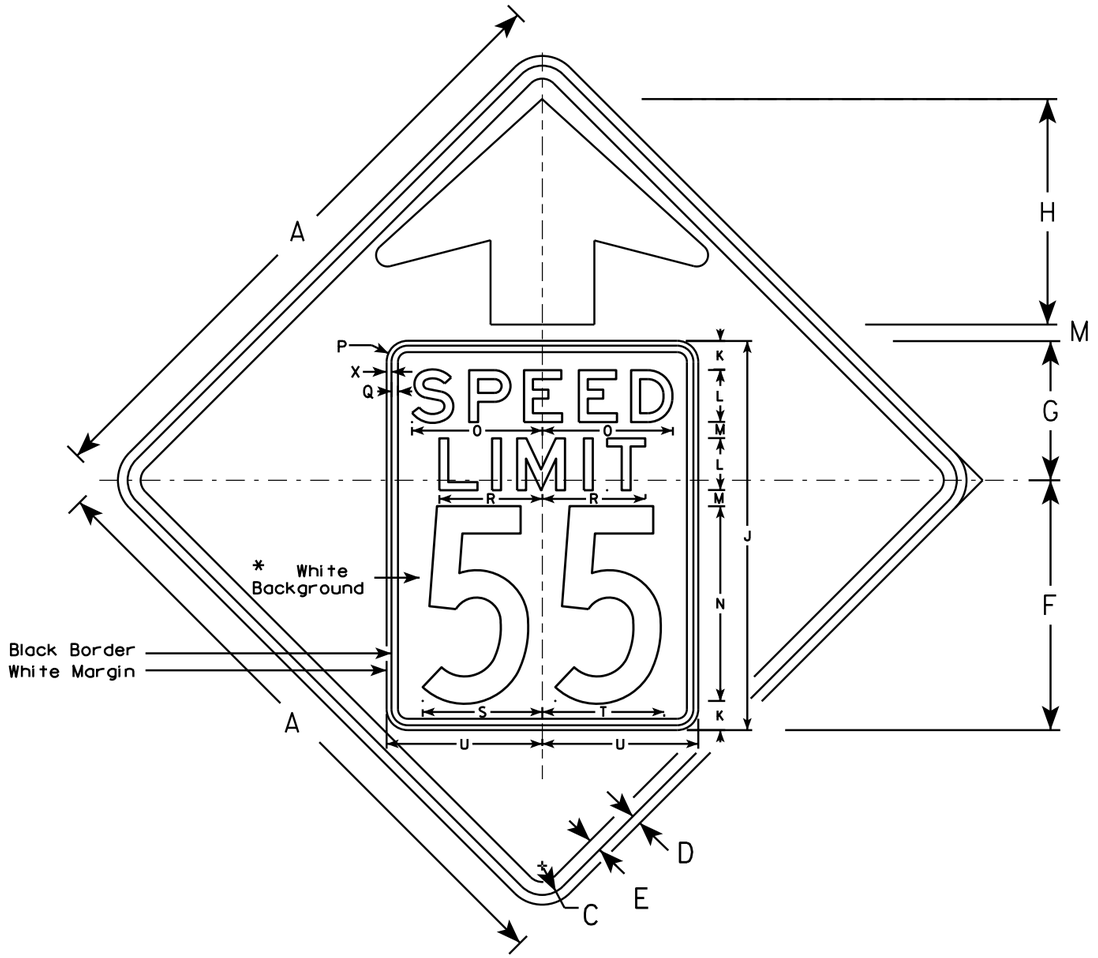
STANDARD SIGN
W01-4b

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-4b.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

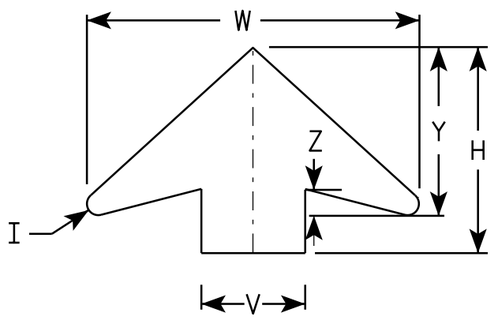


W03-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - ORANGE*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2S	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
2M	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
3	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W03-5

WISCONSIN DEPT OF TRANSPORTATION

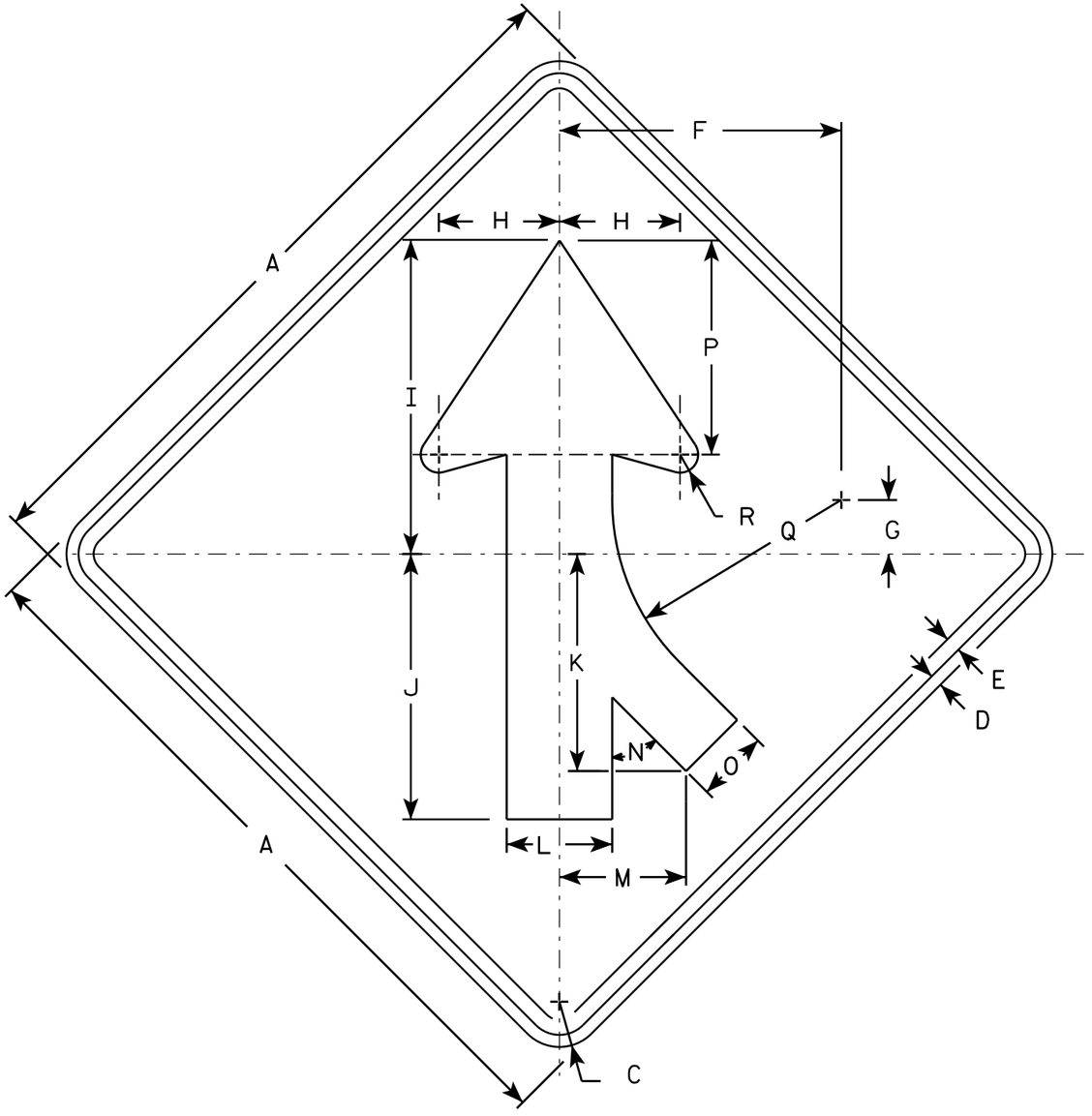
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-5.1

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W035.DGN PLOT DATE : 20-NOV-2013 11:32 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



W04-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-1L is the same as W4-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2S	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
2M	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
3	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

STANDARD SIGN
W04-1

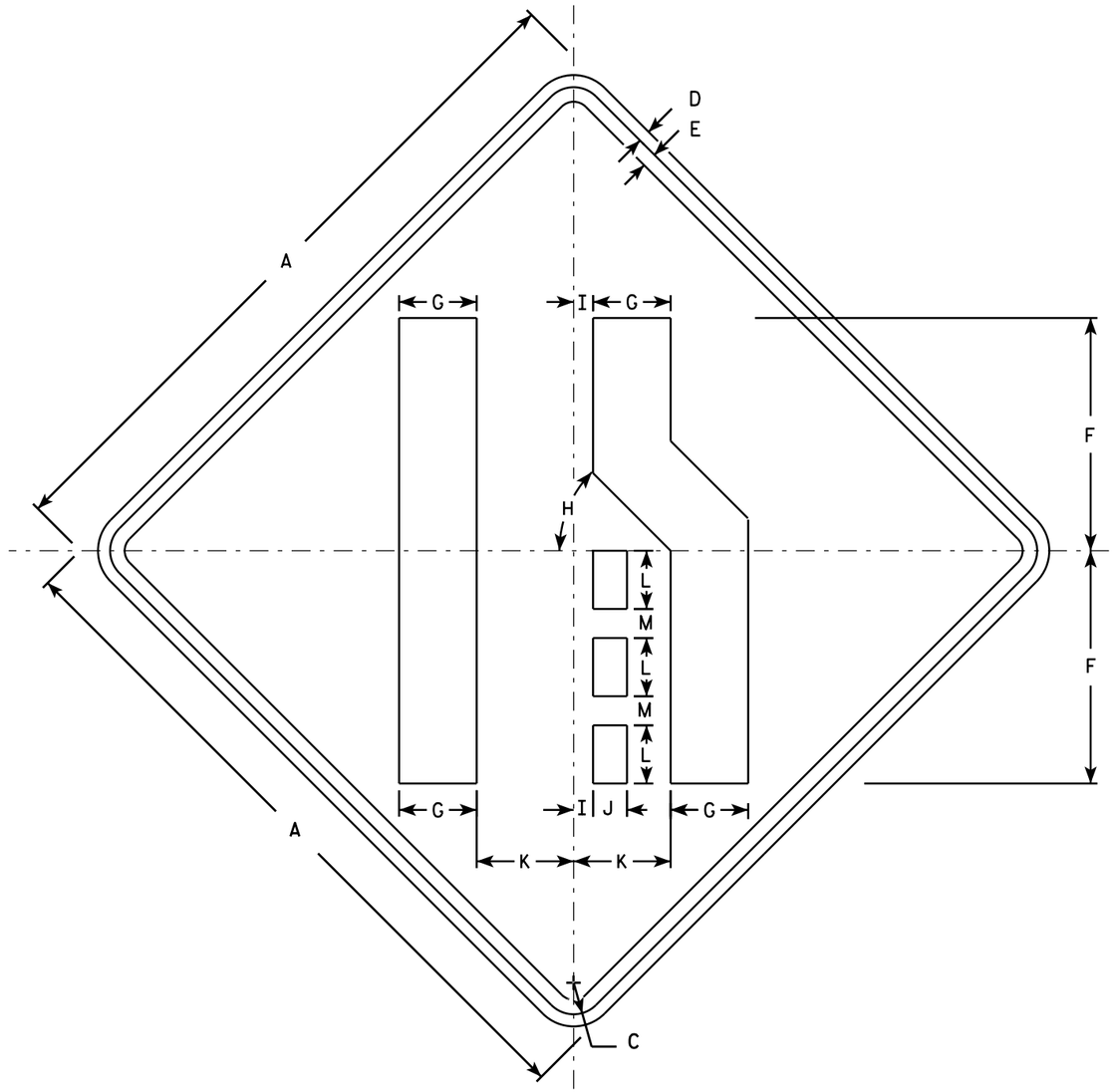
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew L Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO W04-1.1

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W041.DGN PLOT DATE : 20-NOV-2013 11:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000
WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

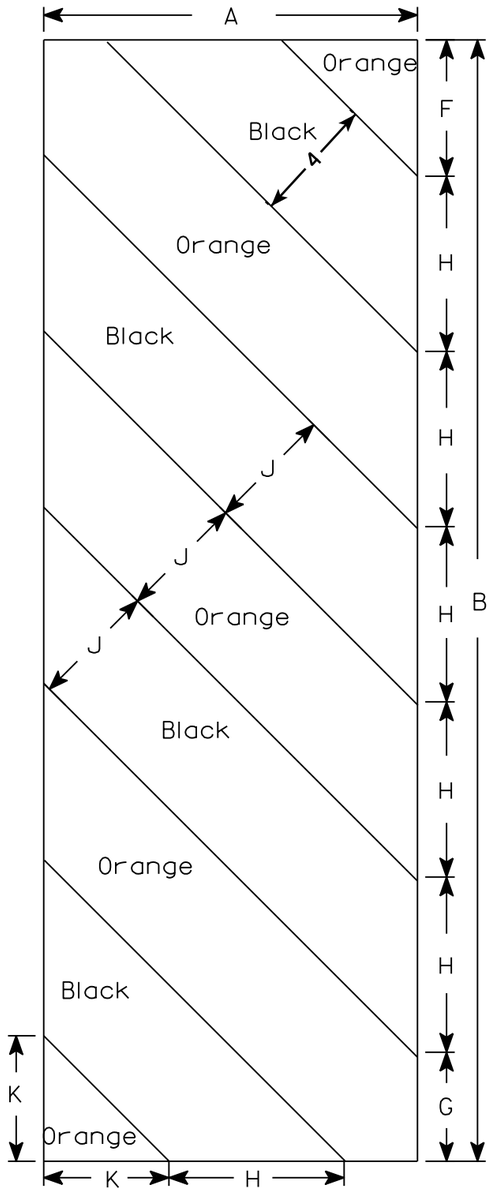
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

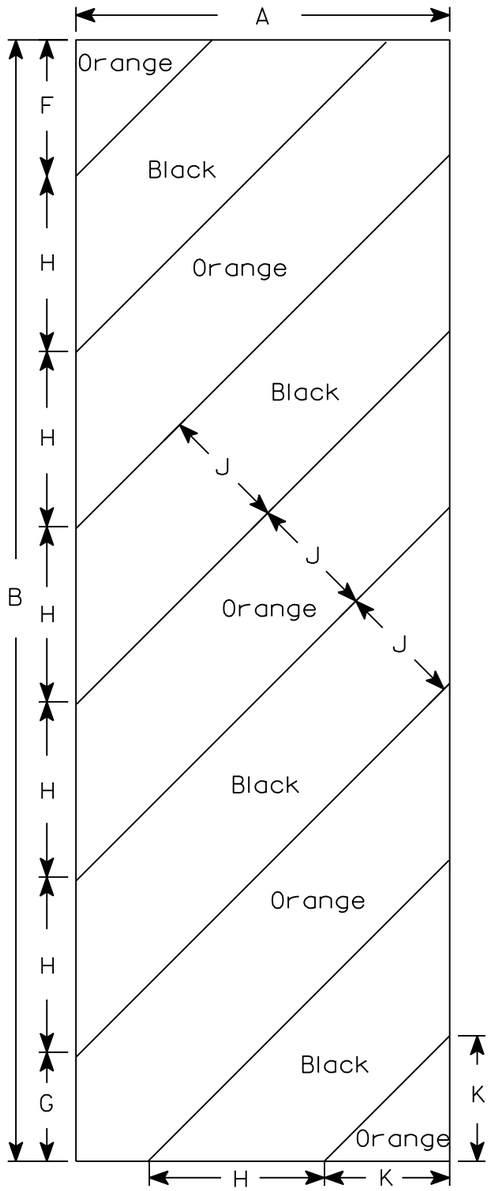
DATE 11/20/13 PLATE 532 W04-2.1

PROJECT NO:

SHEET NO: E



W05-52L



W05-52R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Alternate colors of stripes as shown.

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	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

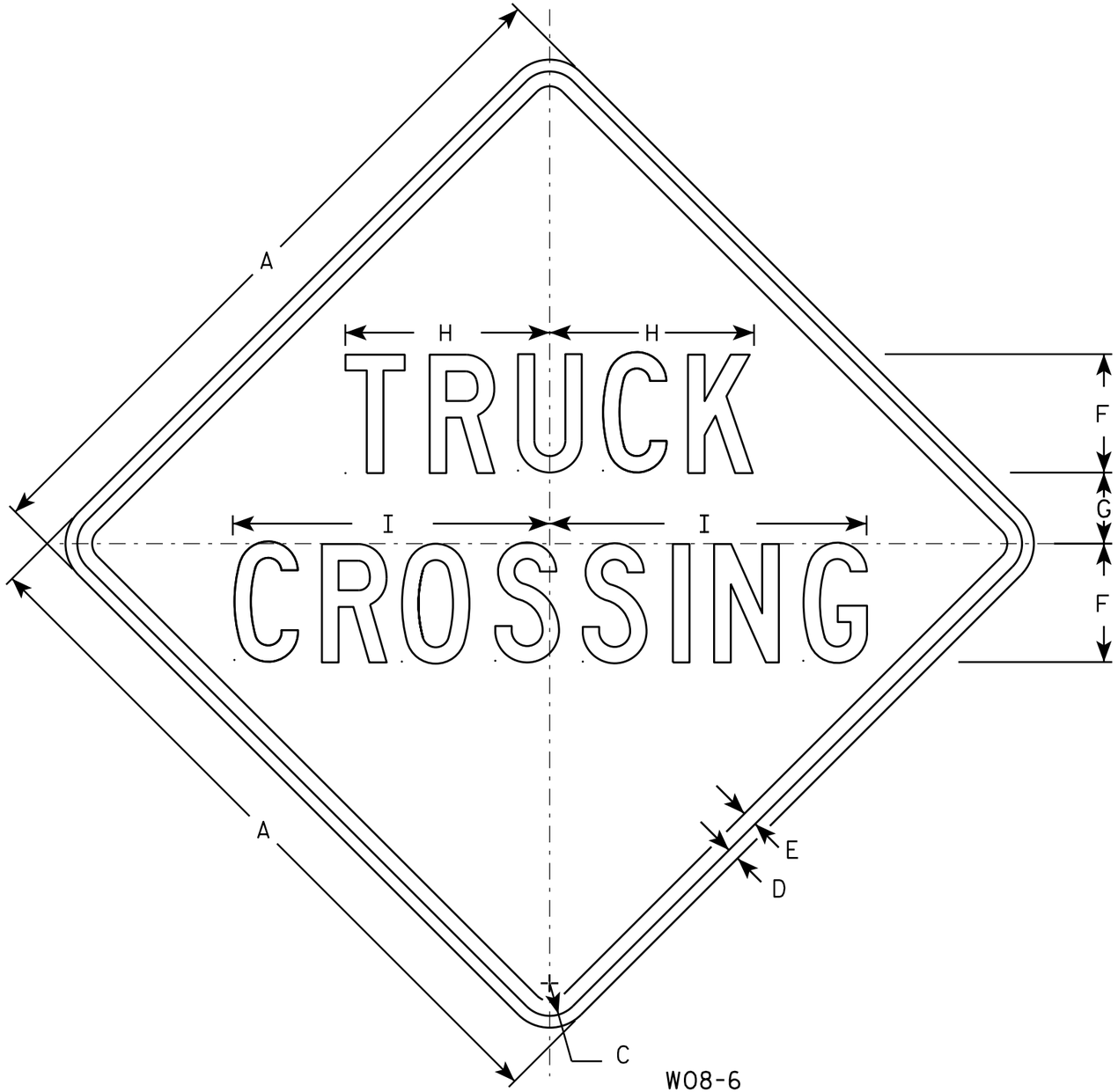
W05-52L & W05-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE No. W05-52.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W08-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	3 1/2	10 3/8	16																		9.0
2S	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0
2M	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0
3	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0
4	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	13 3/4	21 1/4																		16.0

STANDARD SIGN
W08-6

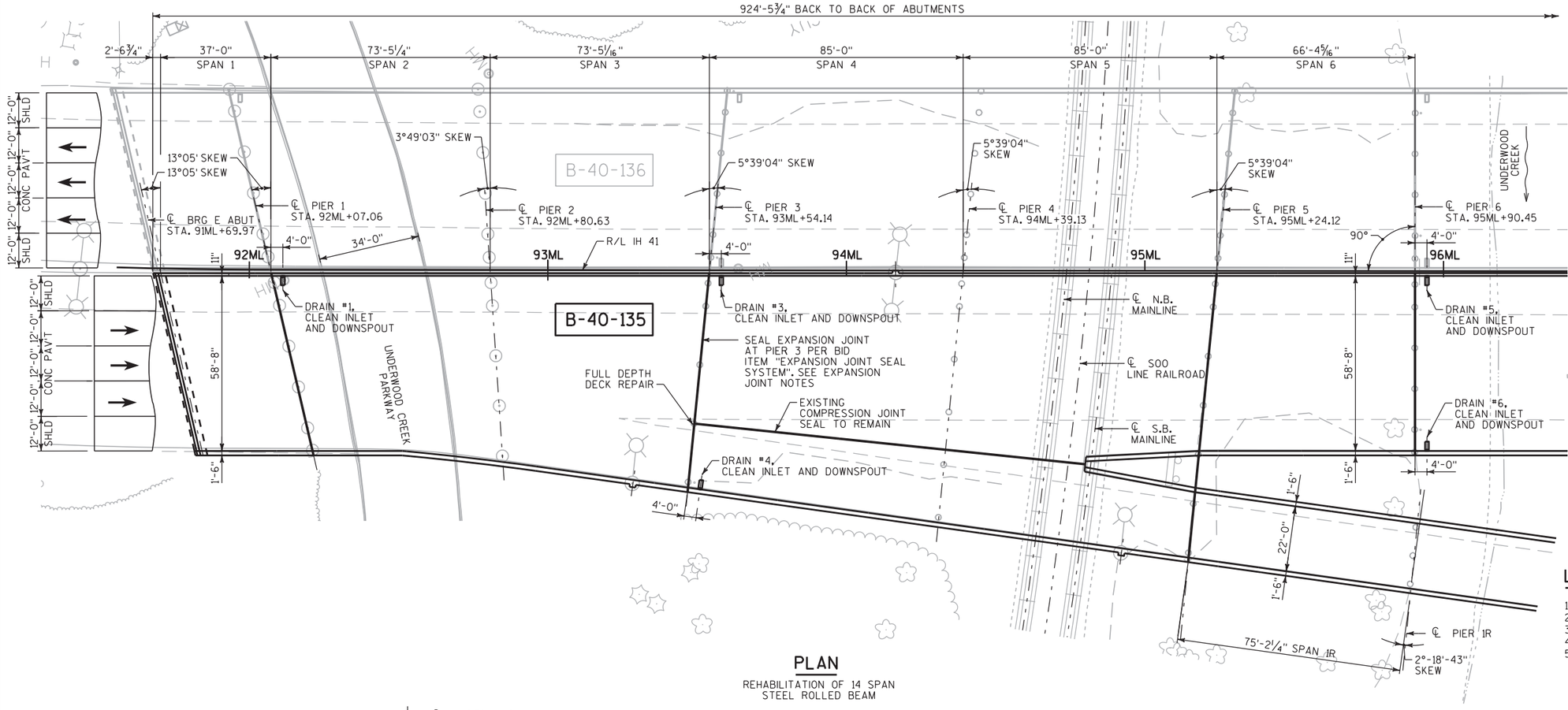
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 534 W08-6.1

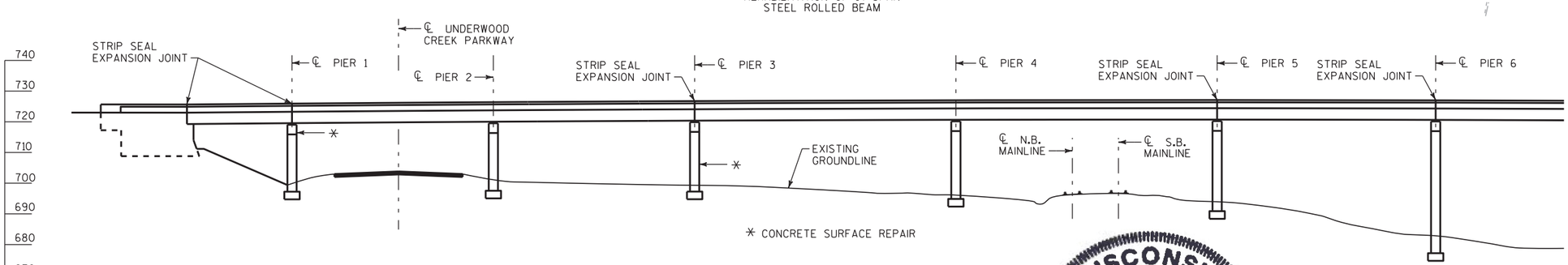
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

STATE PROJECT NUMBER
2010-14-70



PLAN

REHABILITATION OF 14 SPAN STEEL ROLLED BEAM



ELEVATION

LOOKING SOUTH

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION (1 OF 2)
2. GENERAL PLAN & ELEVATION (2 OF 2)
3. TYPICAL SECTION, GENERAL NOTES & QUANTITIES
4. CONCRETE SURFACE REPAIR
5. GALVANIC ANODES

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVE MILLER (414)-847-0480

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 08/24/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

WISCONSIN
STEVEN G. MILLER
E-26710
MILWAUKEE, Wi
PROFESSIONAL ENGINEER
8-1-2017

STRUCTURE B-40-135

IH 41 NB OVER STH 100 MAYFAIR RD

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

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
SGM	BKS	GLM	SGM

GENERAL PLAN & ELEVATION (1 OF 2)

SHEET 1 OF 5

8

8

FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14615\B135_080101_gp.dgn PLOT DATE : 01-AUG-2017 11:32 PLOT BY : gmcginn PLOT NAME : B135_080101_gp PLOT SCALE : 0.166667:1

STATE PROJECT NUMBER
2010-14-70

924'-5¾" BACK TO BACK OF ABUTMENTS

80'-0" SPAN 7 | 80'-0" SPAN 8 | 70'-0" SPAN 9 | 70'-0" SPAN 10 | 27'-6¼" SPAN 11 | 67'-9" SPAN 12 | 67'-9" SPAN 13 | 35'-11⅛" SPAN 14 | 2'-9"

B-40-136

B-40-135

℄ PIER 6 STA. 95ML+90.45 — ℄ PIER 7 STA. 96ML+70.45 — ℄ PIER 8 STA. 97ML+50.45 — ℄ PIER 9 STA. 98ML+20.45 — ℄ PIER 10 STA. 98ML+90.45 — ℄ PIER 11 STA. 99ML +18.10 — ℄ PIER 12 STA. 99ML+85.89 — ℄ PIER 13 STA. 100ML+53.68 — ℄ BRG W ABUT STA. 100ML +89.63

24°38'51" SKEW (SPAN 11) — 24°38'51" SKEW (SPAN 12) — 24°38'51" SKEW (SPAN 13) — 24°38'51" SKEW (SPAN 14)

UNDERWOOD CREEK

90° (typ.)

96ML — 97ML — 98ML — 99ML — 100ML — 101ML

4'-0" — 11" — 3'-6"

58'-8"

DRAIN #5, CLEAN INLET AND DOWNSPOUT

DRAIN #6, CLEAN INLET AND DOWNSPOUT

DRAIN #7, CLEAN INLET AND DOWNSPOUT

DRAIN #8, CLEAN INLET AND DOWNSPOUT

SEAL EXPANSION JOINT AT PIER 8 PER BID ITEM "EXPANSION JOINT SEAL SYSTEM". SEE EXPANSION JOINT NOTES

SEAL EXPANSION JOINT AT PIER 10 PER BID ITEM "EXPANSION JOINT SEAL SYSTEM". SEE EXPANSION JOINT NOTES

PARAPET CONCRETE SURFACE REPAIR

PARAPET CONCRETE SURFACE REPAIR

12'-0" SHLD — 12'-0" CONC PAV'T — 12'-0" CONC PAV'T — 12'-0" SHLD

4'-6"

NB STH 100 HWY

SB STH 100 HWY

4'-0" — 1'-6" — 2°-18'-43" SKEW — 2°-18'-43" SKEW — 1'-6" — 22'-0" — 1'-6"

DRAIN #9, CLEAN INLET AND DOWNSPOUT

℄ PIER 3R — SEAL EXPANSION JOINT AT PIER 3R PER BID ITEM "EXPANSION JOINT SEAL SYSTEM". SEE EXPANSION JOINT NOTES

℄ PIER 4R — ℄ PIER 5R — ℄ PIER 1R — ℄ PIER 2R

DRAIN #10, CLEAN INLET AND DOWNSPOUT

℄ RAMP ABUTMENT

75'-0" SPAN 2R — 51'-4¾" SPAN 3R — 51'-4¾" SPAN 4R — 51'-4¾" SPAN 5R — 51'-4¾" SPAN 5R — 2'-6"

4'-0" SHLD — 18'-0" PAV'T

PLAN

℄ PIER 6 — ℄ PIER 7 — ℄ PIER 8 — ℄ PIER 9 — ℄ PIER 10 — ℄ PIER 11 — ℄ PIER 12 — ℄ PIER 13

STRIP SEAL EXPANSION JOINT (at each pier)

740 / 730 / 720 / 710 / 700 / 690 / 680 / 670

EXISTING GROUND LINE

℄ NB LANE STH 100 — ℄ SB LANE STH 100

EL 134.00

* CONCRETE SURFACE REPAIR

ELEVATION

LOOKING SOUTH

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-135

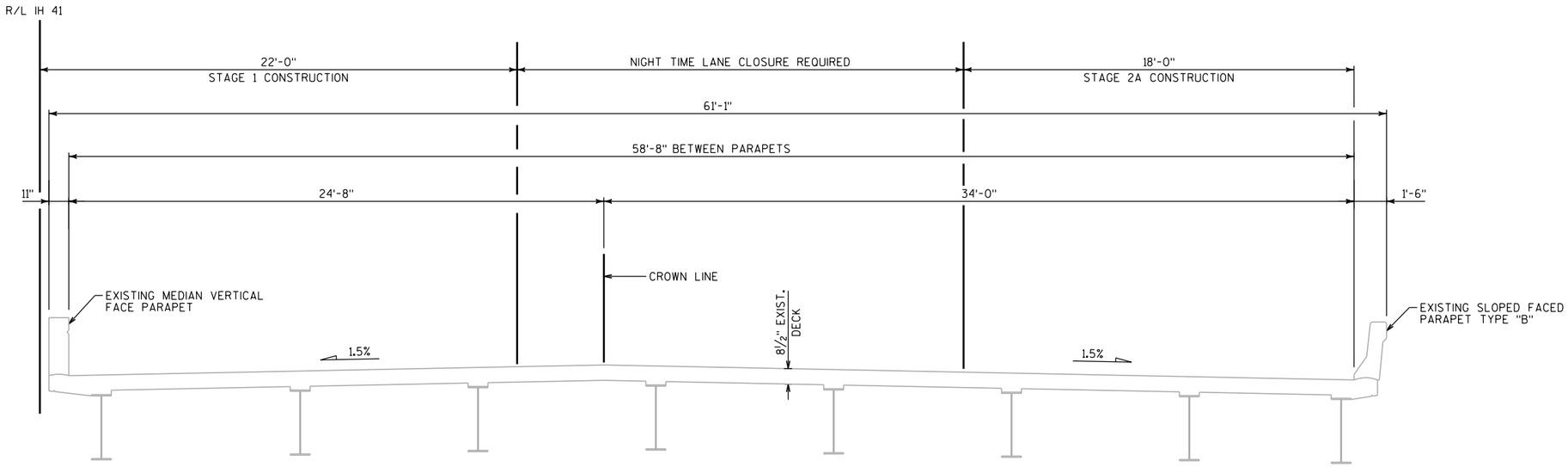
DRAWN BY GLM | PLANS CK'D. SGM

GENERAL PLAN & ELEVATION (2 OF 2)

SHEET 2 OF 5

FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14615\B135_080102_gp.dgn — PLOT DATE : 01-AUG-2017 11:42 — PLOT BY : gmcginn — PLOT NAME : B135_080102_gp — PLOT SCALE : 0.166667:1

STATE PROJECT NUMBER
2010-14-70



TYPICAL SECTION

(LOOKING WEST)

GENERAL NOTES

1. THE SCOPE OF THIS BRIDGE REHABILITATION PROJECT IS AS FOLLOWS:
   - PATCH DELAMINATED AND SPALLED AREAS ON THE TOP SURFACE OF THE BRIDGE DECK
   - CLEAN INLETS AND DOWNSPOUTS AT LOCATIONS NOTED ON PLANS
   - SEAL EXPANSION JOINTS AT PIERS 3, 8, 10 & 3R
   - CONCRETE SURFACE REPAIR ON PARAPETS AND PIERS AS NOTED ON THE PLANS
2. DRAWINGS SHALL NOT BE SCALED.
3. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
4. AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.
5. BEVEL EXPOSED EDGES OF CONCRETE TO MATCH EXISTING BEVELS UNLESS OTHERWISE NOTED.
6. "PREPARATION DECKS TYPE 1", "PREPARATION DECKS TYPE 2", & "FULL-DEPTH DECK REPAIR" AREAS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. DECK PREPARATION AND FULL DEPTH DECK REPAIRS SHALL BE FILLED WITH "FAST SET DECK PATCHING".
7. DECK PATCHING AND JOINT SEALING MUST CONFORM TO TRAFFIC CONTROL RESTRICTIONS NOTED ELSEWHERE IN THE CONTRACT DOCUMENTS. GENERALLY WORK IS RESTRICTED TO NIGHT TIME AND WEEKEND SHORT TERM CLOSURES.
8. CONCRETE SURFACE REPAIR ON THE SUBSTRUCTURE IS LIMITED TO PIER COLUMNS AND CAPS LOCATED IN AREAS NEAR TRAFFIC, SIDEWALKS, AND PARKING LOTS, AND OTHER AREAS OF SIGNIFICANT CONCRETE DETERIORATION. AREAS OF SPALLED AND DELAMINATED CONCRETE THAT DON'T MEET THIS DESCRIPTION ARE NOT TO BE REPAIRED.

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEM	UNIT	SUPER	PIER 1	PIER 3	PIER 10	PIER 11	PIER 13	TOTAL
509.0301	PREPARATION DECKS TYPE 1	SY	300	-	-	-	-	-	300
509.0302	PREPARATION DECKS TYPE 2	SY	120	-	-	-	-	-	120
509.1500	CONCRETE SURFACE REPAIR	SF	10	55	75	25	35	85	285
509.2000	FULL-DEPTH DECK REPAIR	SY	1	-	-	-	-	-	1
SPV.0060.4010	EMBEDDED GALVANIC ANODES	EACH	-	35	50	20	25	60	190
SPV.0060.4020	CLEAN INLETS AND DOWNSPOUTS	EACH	9	-	-	-	-	-	9
SPV.0090.4010	EXPANSION JOINT SEAL SYSTEM	LF	220	-	-	-	-	-	220
SPV.0090.4030	SAWING PAVEMENT DECK PREPARATION AREAS	LF	1000	-	-	-	-	-	1,000
SPV.0180.4010	FAST SET DECK PATCHING	SY	300	-	-	-	-	-	300

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS 20 (TAKEN FROM HSI, 06/14/2017
INVENTORY RATING = HS 19 (TAKEN FROM HSI, 06/14/2017)
OPERATING RATING = HS 32 (TAKEN FROM HSI, 06/14/2017)
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS
(TAKEN FROM HSI, 06/14/2017)

MATERIAL PROPERTIES

CONCRETE MASONRY..... f'c = 4,000 PSI

TRAFFIC DATA

IH 41

A.D.T. = 144,000 (2015)
A.D.T. = 180,630 (2035)
R.D.S. = 60 M.P.H.

STH 100

A.D.T. = 35,500 (2016)

EXPANSION JOINT NOTES

SEE SPECIAL PROVISION "EXPANSION JOINT SEAL SYSTEM" FOR DESCRIPTION, MATERIALS, CONSTRUCTION, MEASUREMENTS, AND PAYMENT INFORMATION.

CONTRACTOR TO SELECT APPROPRIATELY SIZED EXPANSION JOINT SEAL SYSTEM BASED ON THE SELECTED PRODUCTS SPECIFICATIONS AND AS APPROVED BY THE ENGINEER. MEASURED JOINT OPENINGS AT 76° REPORTED IN THE LATEST ROUTINE BRIDGE INSPECTION REPORT DATED JULY 21, 2016 ARE AS FOLLOWS:

PIER 3: 1.8"
PIER 8: 1.8"
PIER 10: 2.0"
PIER 3R: 1.6"

CONTRACTOR TO CONFIRM JOINT OPENING SIZE IN THE FIELD BEFORE SELECTING AND INSTALLING EXPANSION JOINT SEAL SYSTEM. IF ADDITIONAL JOINT OPENING IS REQUIRED FOR JOINT INSTALLATION, THE CONTRACTOR CAN DEVELOP A JOINT MODIFICATION PLAN FOR APPROVAL BY THE ENGINEER.

THE FOLLOWING TABLE IS PROVIDED FOR INFORMATION ONLY AND IS REPRODUCED FROM THE EXISTING BRIDGE PLANS. THE TABLE PROVIDES THE DESIGN JOINT OPENING FOR THE EXISTING STRIP SEAL EXPANSION JOINTS AT PIERS 3, 8, 10 AND 3R.

TEMP.	JOINT OPENING
90° F	1.25"
60° F	1.62"
30° F	2.12"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-135

DRAWN BY GLM | PLANS CK'D. SGM

TYPICAL SECTION
GENERAL NOTES
& QUANTITIES

SHEET 3 OF 5

FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14615\B135-080103_ts.dgn
PLOT DATE : 31-JUL-2017 14:01
PLOT BY : gmcginn
PLOT NAME : B135-080103_ts
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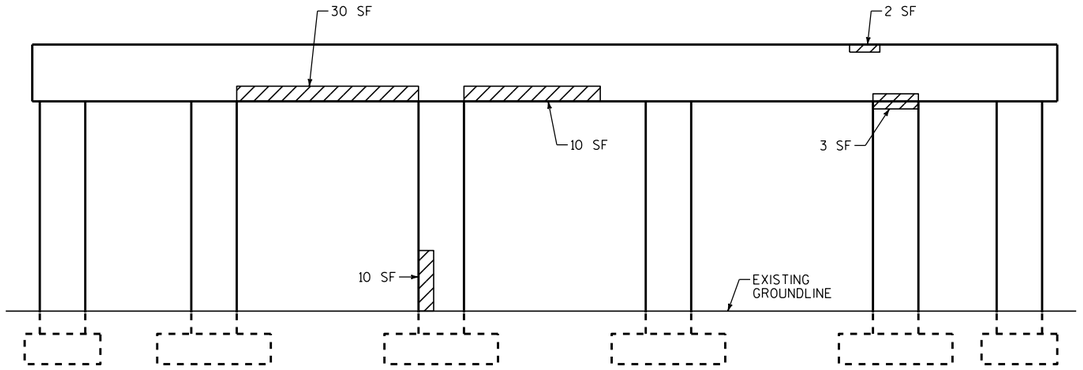
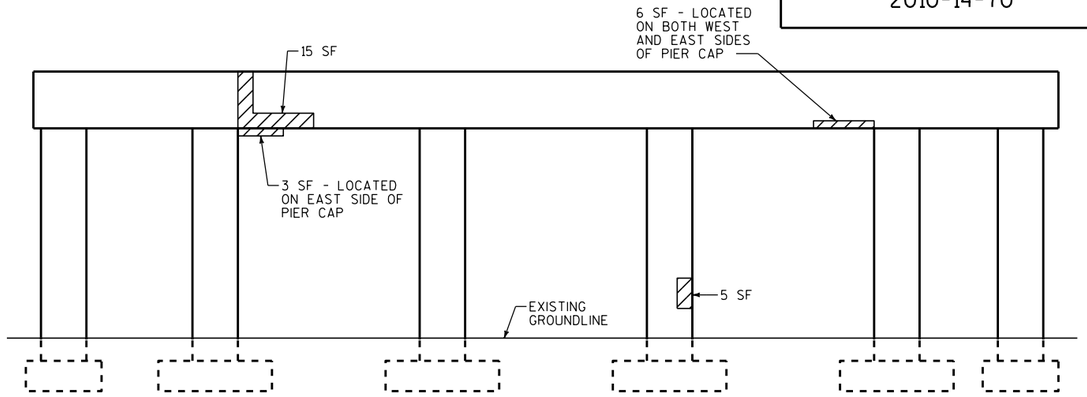
STATE PROJECT NUMBER

2010-14-70



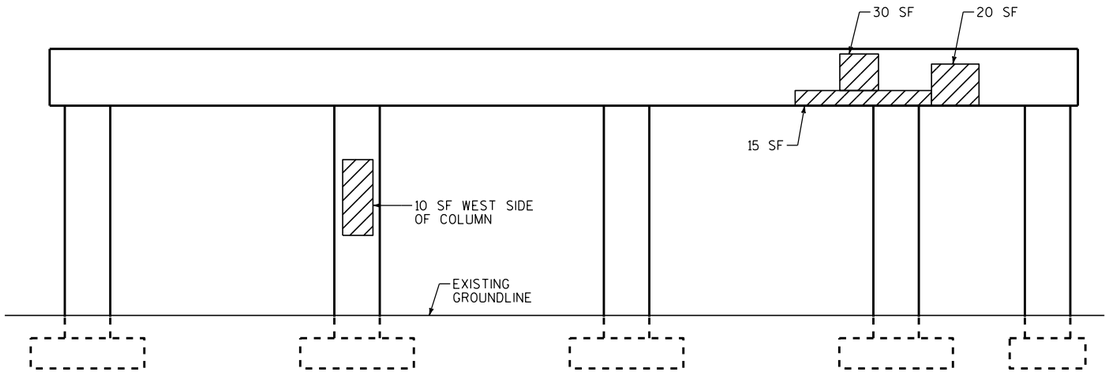
PIER 1 - WEST ELEVATION

LOOKING EAST



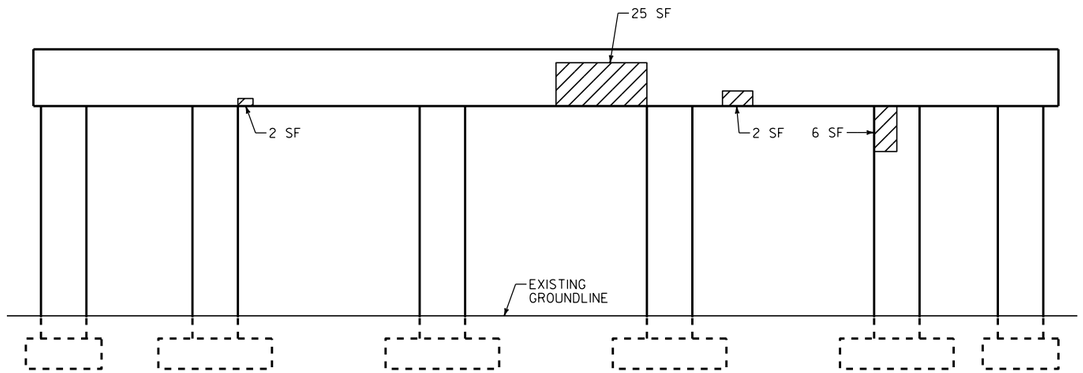
PIER 11 - WEST ELEVATION

LOOKING EAST



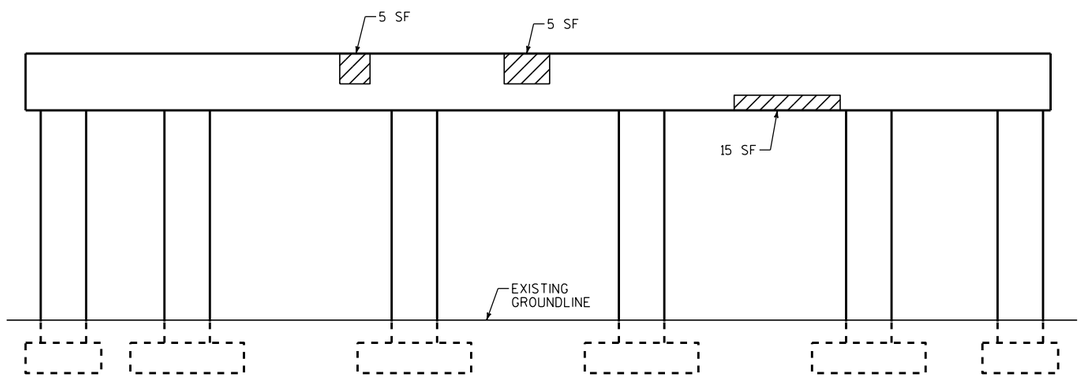
PIER 3 - EAST ELEVATION

LOOKING WEST



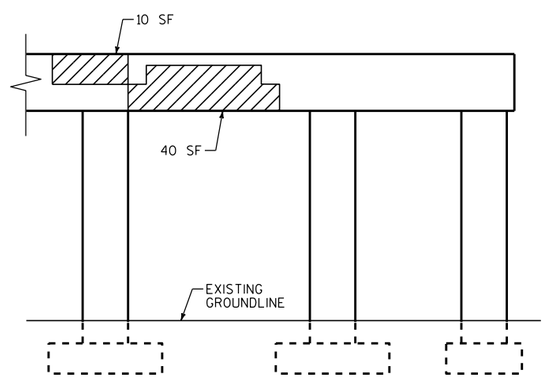
PIER 13 - WEST ELEVATION

LOOKING EAST



PIER 10 - EAST ELEVATION

LOOKING WEST



PIER 13 - EAST ELEVATION

LOOKING WEST

LEGEND

CONCRETE SURFACE REPAIR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-135

DRAWN BY GLM | PLANS CK'D. SGM

CONCRETE SURFACE REPAIR

SHEET 4 OF 5

8

8

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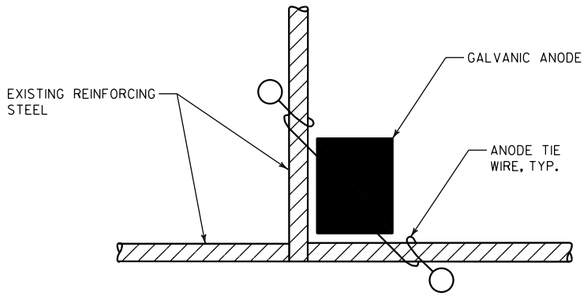
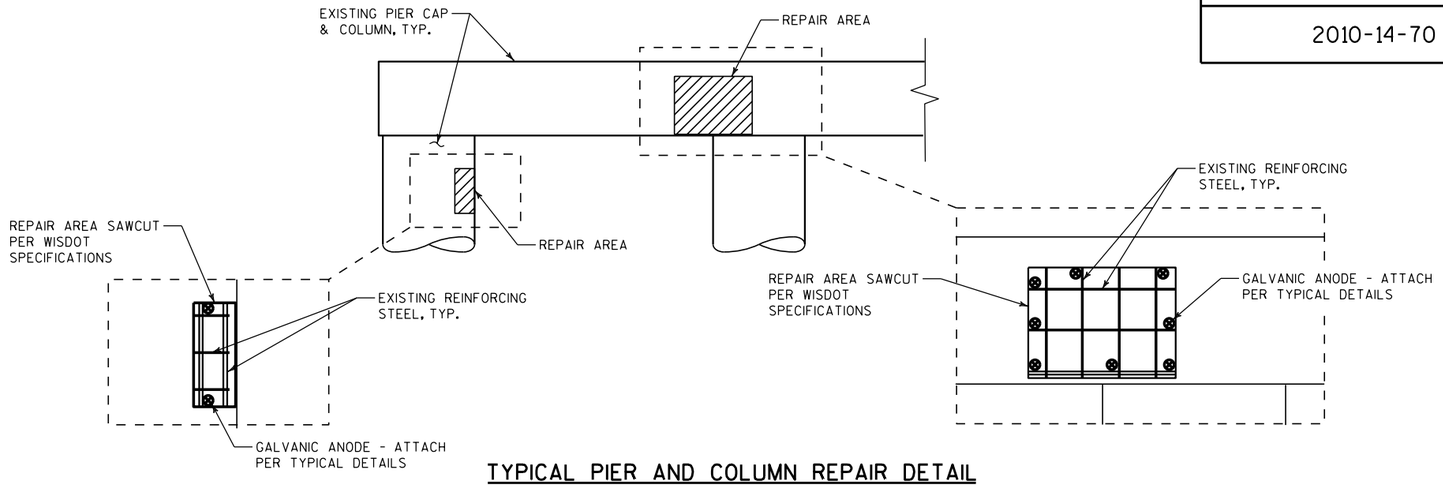
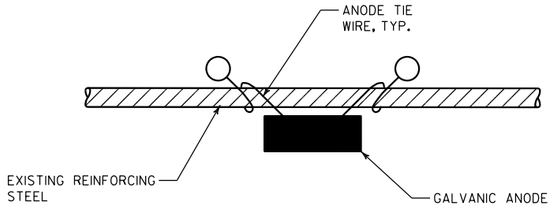
STATE PROJECT NUMBER
2010-14-70



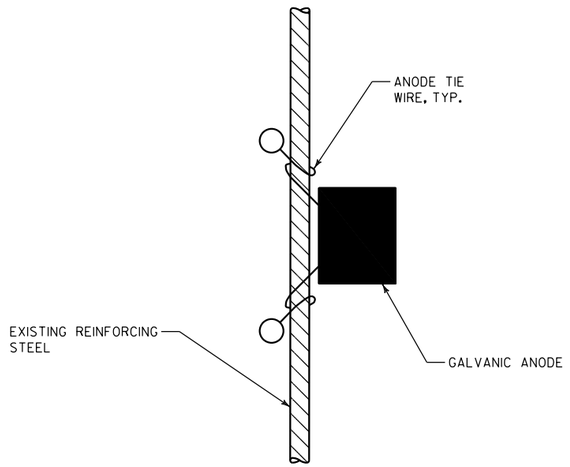
TYPICAL INSTALLATION AT BAR STEEL INTERSECTION



TYPICAL PIER AND COLUMN REPAIR DETAIL



TYPICAL INSTALLATION BELOW BAR STEEL



TYPICAL INSTALLATION BESIDE BAR STEEL

NOTES

SEE SPECIAL PROVISION "EMBEDDED GALVANIC ANODES" FOR DESCRIPTION. MATERIALS, CONSTRUCTION. MEASUREMENT, AND PAYMENT INFORMATION.

ANODES NEAREST TO EDGE OF REPAIR TO BE WITHIN 6" OF EDGE.

AFTER PLACEMENT, GALVANIC ANODES SHOULD MAINTAIN A MINIMUM TOP COVER OF 1½" AND A MINIMUM BOTTOM COVER OF ¾".

EXISTING REINFORCING STEEL TO BE COMPLETELY CLEANED OF CORROSIVE MATERIAL PRIOR TO INSTALLATION OF GALVANIC ANODES.

ENSURE ALL EXPOSED REINFORCING STEEL IS SECURELY FASTENED TOGETHER WITH TIE WIRE TO PROVIDE GOOD CONTINUITY. SEE SPECIAL PROVISIONS.

GALVANIC ANODES SHALL BE PLACED PER SPECIAL PROVISIONS "EMBEDDED GALVANIC ANODES". GALVANIC ANODES ESTIMATED QUANTITIES ON PLANS ARE BASED ON A MAXIMUM SPACING OF 24 INCHES IN EACH DIRECTION OF THE ESTIMATED "CONCRETE SURFACE REPAIR" AREA.

EXISTING REINFORCING BARS MAY BE CORRODED AND/OR DAMAGED DURING CONCRETE REMOVAL. PRESERVE AND INCORPORATE EXISTING REINFORCEMENT.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-135

DRAWN BY	GLM	PLANS CK'D.	SGM

GALVANIC ANODES

SHEET 5 OF 5

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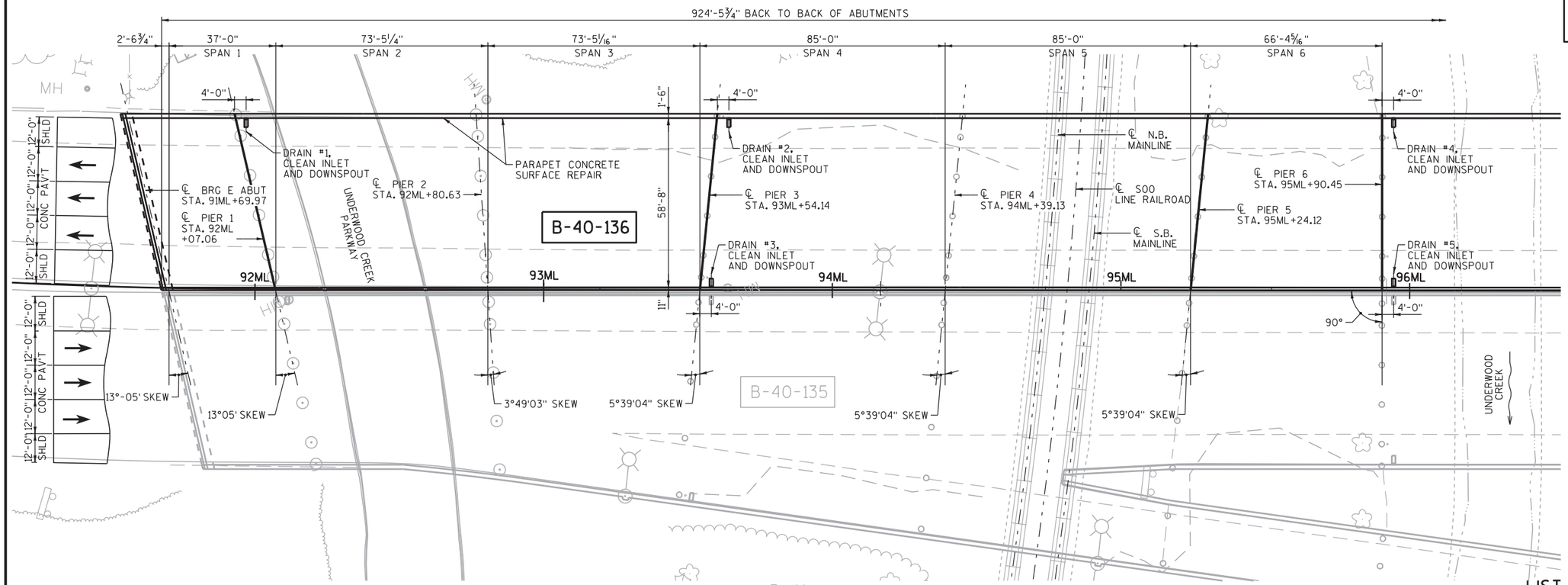
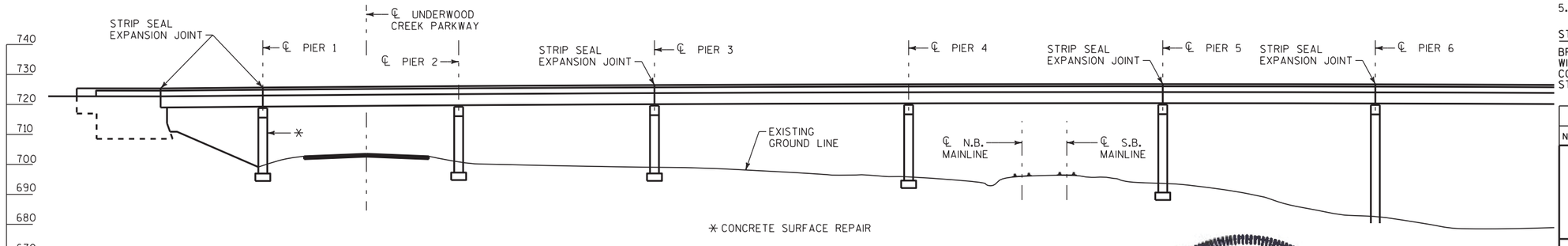
STATE PROJECT NUMBER

2010-14-70



PLAN

REHABILITATION OF 14 SPAN
STEEL ROLLED BEAM



ELEVATION

LOOKING SOUTH

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION (1 OF 2)
2. GENERAL PLAN & ELEVATION (2 OF 2)
3. TYPICAL SECTION, GENERAL NOTES & QUANTITIES
4. CONCRETE SURFACE REPAIR
5. GALVANIC ANODES

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVE MILLER (414) 847-0480

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 08/24/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-136

IH 41 SB OVER STH 100 MAYFAIR RD

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

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
SGM	BKS	GLM	SGM

GENERAL PLAN & ELEVATION (1 OF 2)

SHEET 1 OF 5

WISCONSIN
STEVEN G. MILLER
E-26710
MILWAUKEE, WI
PROFESSIONAL ENGINEER
8-1-2017

8

8

STATE PROJECT NUMBER

2010-14-70

924'-5¾" BACK TO BACK OF ABUTMENTS

80'-0" SPAN 7 | 80'-0" SPAN 8 | 55'-1 1/16" SPAN 9 | 55'-1 1/16" SPAN 10 | 57'-4 1/8" SPAN 11 | 67'-9" SPAN 12 | 67'-9" SPAN 13 | 35'-11 1/16" SPAN 14 | 2'-9"

4'-0" | 1'-6" | 58'-8" | 11" | 4'-0"

℄ PIER 6 STA. 95ML +90.45

DRAIN #4, CLEAN INLET AND DOWNSPOUT

DRAIN #5, CLEAN INLET AND DOWNSPOUT

℄ PIER 7 STA. 96ML +70.45

B-40-136

PARAPET CONCRETE SURFACE REPAIR. PATCH AREAS OF DELAMINATIONS ALONG TOP EDGE OF PARAPETS

℄ PIER 8 STA. 97ML+50.45

℄ PIER 9 STA. 98ML+20.45

SEAL EXPANSION JOINT AT PIERS 8 & 10 PER BID ITEM "EXPANSION JOINT SEAL SYSTEM". SEE EXPANSION JOINT NOTES

℄ PIER 10 STA. 98ML+90.45

℄ PIER 11 STA. 99ML+18.10

℄ PIER 12 STA. 99ML+85.89

DRAIN #6, CLEAN INLET AND DOWNSPOUT

℄ PIER 13 STA. 100ML+53.68

DRAIN #7, CLEAN INLET AND DOWNSPOUT

℄ BRG W ABUT STA. 100ML +89.63

96ML | 97ML | 98ML | 99ML | 100ML | 101ML

90° | 90° | 90° | 90° | 90°

5'-0"

24°38'51" SKEW | 24°38'51" SKEW | 24°38'51" SKEW | 24°38'51" SKEW

12'-0" SHLD | 12'-0" | 12'-0" | 12'-0" CONC PAVT | 12'-0" SHLD

UNDERWOOD CREEK

B-40-135

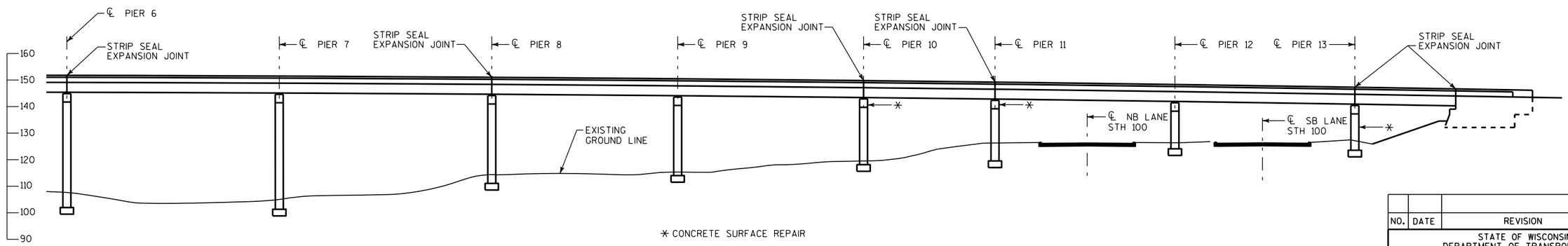
HWY

NB STH 100

SB STH 100

PLAN

REHABILITATION OF 14 SPAN STEEL ROLLED BEAM



✳ CONCRETE SURFACE REPAIR

ELEVATION

LOOKING SOUTH

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-136

DRAWN BY GLM | PLANS CK'D. SGM

GENERAL PLAN & ELEVATION (2 OF 2)

SHEET 2 OF 5

8

8

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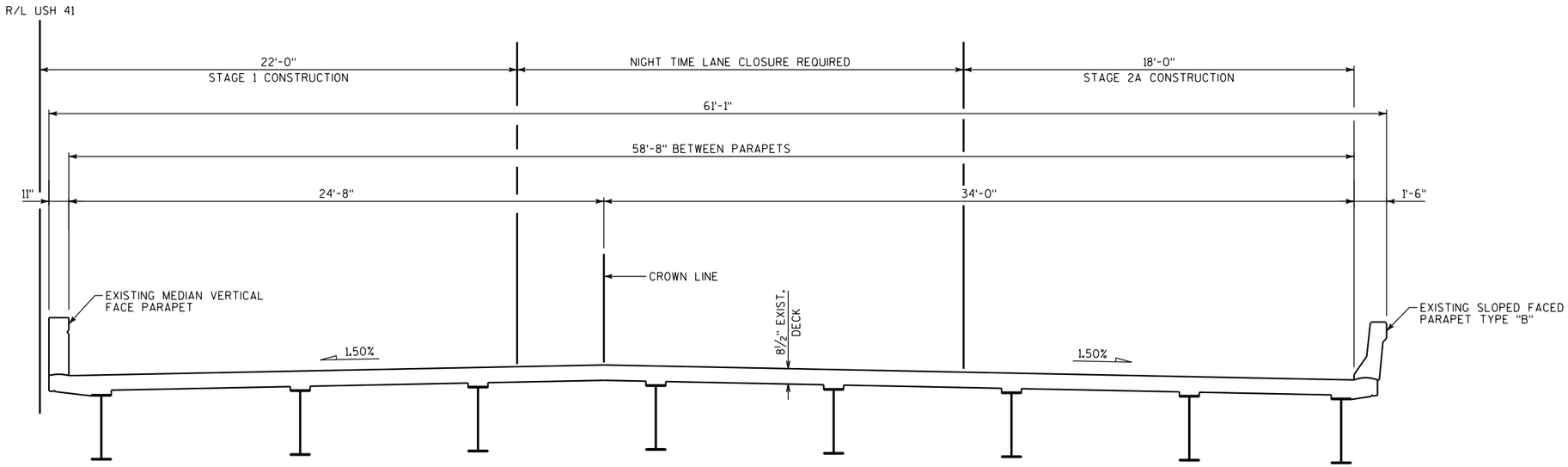
PLOT NAME : B136_080102_gp
PLOT SCALE : 0.166667:1

STATE PROJECT NUMBER
2010-14-70



TYPICAL SECTION

(LOOKING EAST)

GENERAL NOTES

1. THE SCOPE OF THIS BRIDGE REHABILITATION PROJECT IS AS FOLLOWS:
   - CLEAN INLETS AND DOWNSPOUTS AT LOCATIONS NOTED ON PLANS.
   - SEAL EXPANSION JOINTS AT PIERS 8 AND 10.
   - CONCRETE SURFACE REPAIR ON PARAPETS AND PIERS AS NOTED ON THE PLANS.
2. DRAWINGS SHALL NOT BE SCALED.
3. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
4. BEVEL EXPOSED EDGES OF CONCRETE TO MATCH EXISTING BEVELS UNLESS OTHERWISE NOTED.
5. JOINT SEALING MUST CONFORM TO TRAFFIC CONTROL RESTRICTIONS NOTED ELSEWHERE IN THE CONTRACT DOCUMENTS. GENERALLY WORK IS RESTRICTED TO NIGHT TIME AND WEEKEND SHORT TERM CLOSURES.
6. CONCRETE SURFACE REPAIR ON THE SUBSTRUCTURE IS LIMITED TO PIER COLUMNS AND CAPS LOCATED IN AREAS NEAR TRAFFIC, SIDEWALKS, AND PARKING LOTS, AND OTHER AREAS OF SIGNIFICANT CONCRETE DETERIORATION. AREAS OF SPALLED AND DELAMINATED CONCRETE THAT DON'T MEET THIS DESCRIPTION ARE NOT TO BE REPAIRED.

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS 20 (TAKEN FROM HSI, 06/14/2017
INVENTORY RATING = HS 21 (TAKEN FROM HSI, 06/14/2017)
OPERATING RATING = HS 36 (TAKEN FROM HSI, 06/14/2017)
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS
(TAKEN FROM HSI, 06/14/2017)

MATERIAL PROPERTIES

CONCRETE MASONRY..... f'c = 4,000 PSI

TRAFFIC DATA

IH 41

A.D.T. = 144,000 (2015)
A.D.T. = 180,630 (2035)
R.D.S. = 60 M.P.H.

STH 100

A.D.T. = 35,500 (2016)

EXPANSION JOINT NOTES

SEE SPECIAL PROVISION "EXPANSION JOINT SEAL SYSTEM" FOR DESCRIPTION, MATERIALS, CONSTRUCTION, MEASUREMENTS, AND PAYMENT INFORMATION.

CONTRACTOR TO SELECT APPROPRIATELY SIZED EXPANSION JOINT SEAL SYSTEM BASED ON THE SELECTED PRODUCTS SPECIFICATIONS AND AS APPROVED BY THE ENGINEER. MEASURED JOINT OPENINGS AT 76° REPORTED IN THE LATEST ROUTINE BRIDGE INSPECTION REPORT DATED JULY 21, 2016 ARE AS FOLLOWS:

PIER 8: 1.5"
PIER 10: 1.8"

CONTRACTOR TO CONFIRM JOINT OPENING SIZE IN THE FIELD BEFORE SELECTING AND INSTALLING EXPANSION JOINT SEAL SYSTEM. IF ADDITIONAL JOINT OPENING IS REQUIRED FOR JOINT INSTALLATION, THE CONTRACTOR CAN DEVELOP A JOINT MODIFICATION PLAN FOR APPROVAL BY THE ENGINEER.

THE FOLLOWING TABLE IS PROVIDED FOR INFORMATION ONLY AND IS REPRODUCED FROM THE EXISTING BRIDGE PLANS. THE TABLE PROVIDES THE DESIGN JOINT OPENING FOR THE EXISTING STRIP SEAL EXPANSION JOINTS AT PIERS 8 AND 10.

TEMP.	JOINT OPENING
90° F	1.25"
60° F	1.62"
30° F	2.12"

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEM	UNIT	SUPER	PIER 1	PIER 8	PIER 10	PIER 11	PIER 13	TOTAL
509.1500	CONCRETE SURFACE REPAIR	SF	55	40	25	10	40	55	225
SPV.0060.4020	CLEAN INLETS AND DOWNSPOUTS	EACH	7	-	-	-	-	-	7
SPV.0060.4010	EMBEDDED GALVANIC ANODES	EACH	-	30	15	10	25	40	120
SPV.0090.4010	EXPANSION JOINT SEAL SYSTEM	LF	122	-	-	-	-	-	122

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-136

DRAWN BY GLM | PLANS CK'D. SGM

TYPICAL SECTION
GENERAL NOTES
& QUANTITIES

SHEET 3 OF 5

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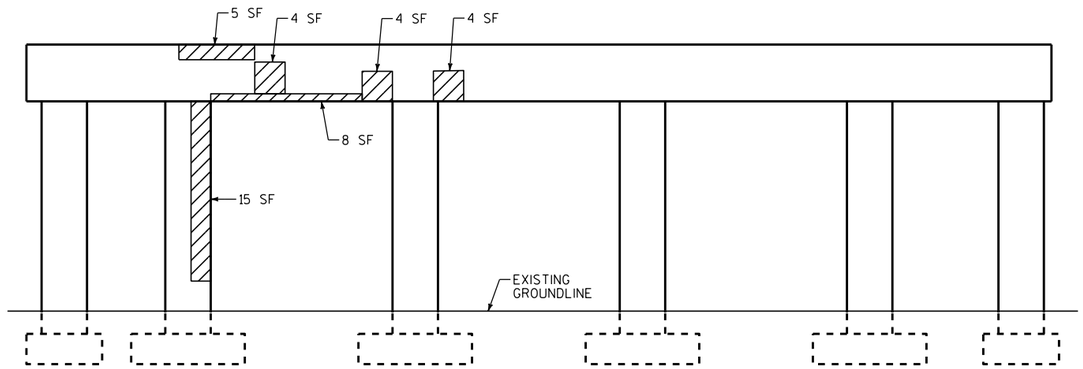
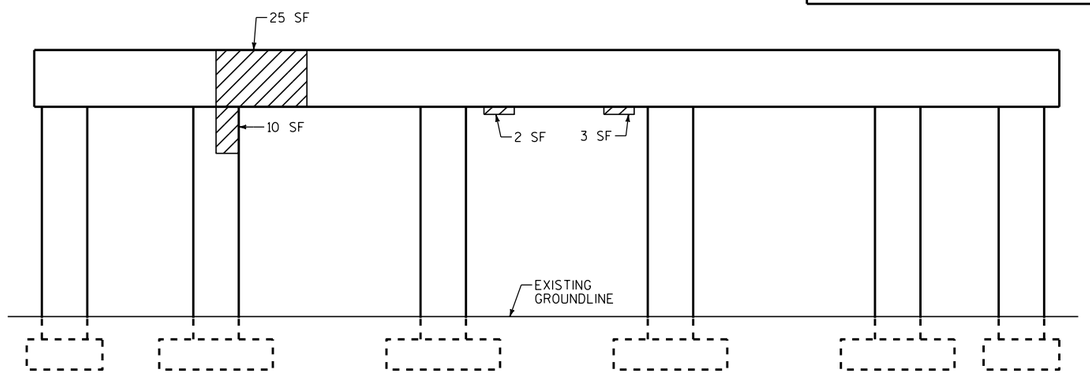
PLOT DATE : 01-AUG-2017 14:01
PLOT BY : gmcginn
PLOT NAME : B136-080103_ts
PLOT SCALE : 6:1

STATE PROJECT NUMBER
2010-14-70



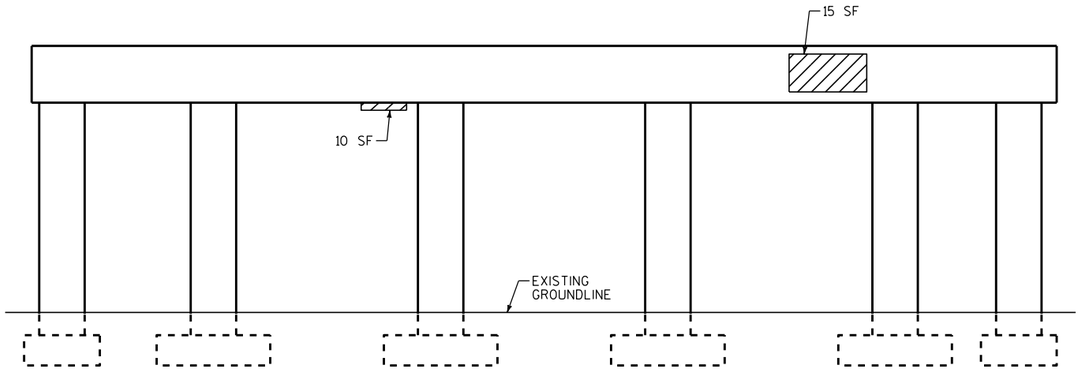
PIER 1 - WEST ELEVATION

LOOKING EAST



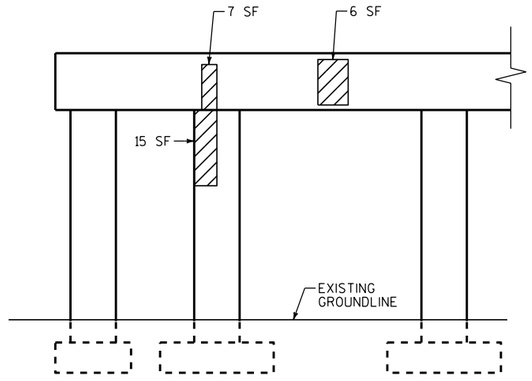
PIER 11 - EAST ELEVATION

LOOKING WEST



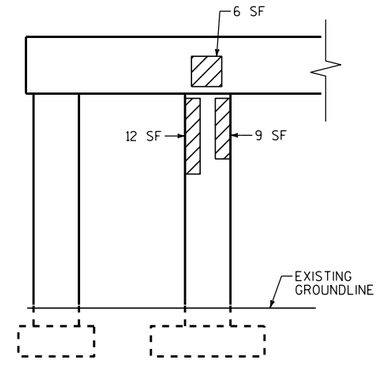
PIER 8 - EAST ELEVATION

LOOKING WEST



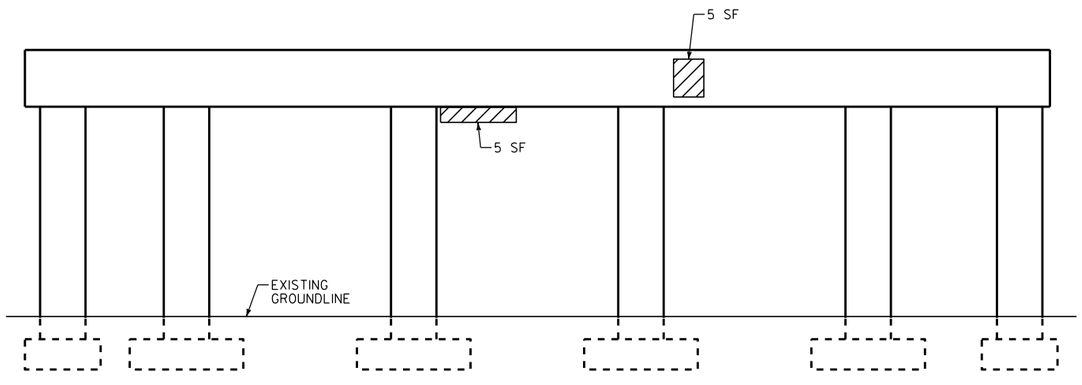
PIER 13 - WEST ELEVATION

LOOKING EAST



PIER 13 - EAST ELEVATION

LOOKING WEST



PIER 10 - WEST ELEVATION

LOOKING EAST

LEGEND

CONCRETE SURFACE REPAIR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-136

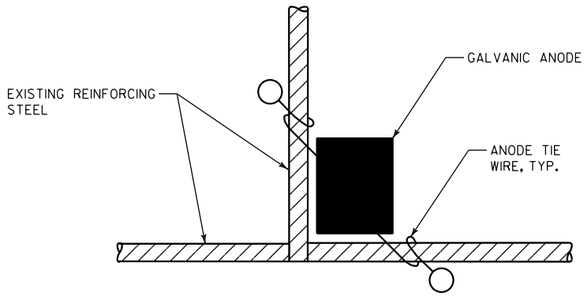
DRAWN BY GLM | PLANS CK'D. SGM

CONCRETE SURFACE REPAIR

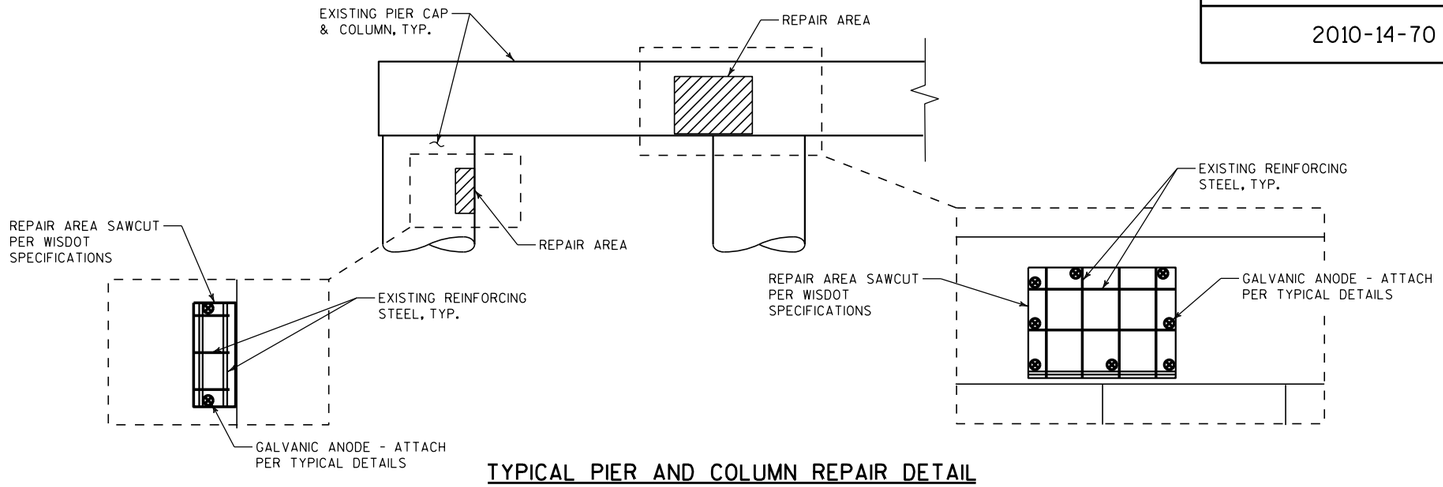
SHEET 4 OF 5

FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14619\B136-080301_pi.dgn PLOT DATE : 28-JUL-2017 15:55 PLOT BY : gmcginn PLOT NAME : B136-080301_pi PLOT SCALE : 10:1

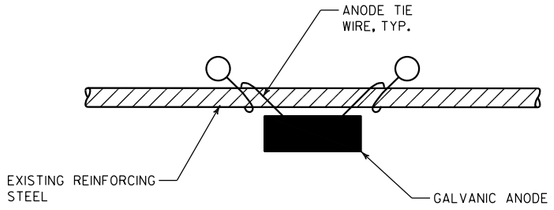
STATE PROJECT NUMBER
2010-14-70



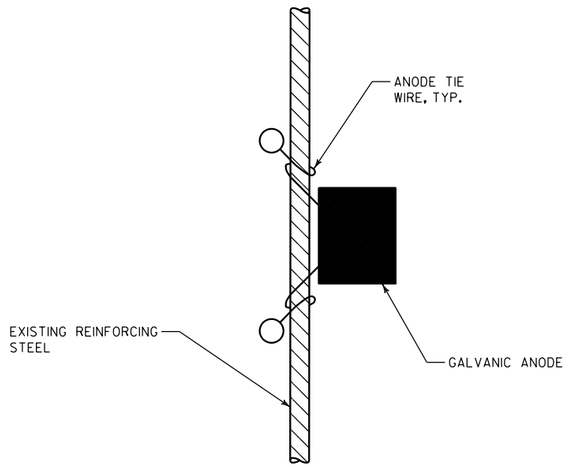
TYPICAL INSTALLATION AT BAR STEEL INTERSECTION



TYPICAL PIER AND COLUMN REPAIR DETAIL



TYPICAL INSTALLATION BELOW BAR STEEL



TYPICAL INSTALLATION BESIDE BAR STEEL

NOTES

SEE SPECIAL PROVISION "EMBEDDED GALVANIC ANODES" FOR DESCRIPTION, MATERIALS, CONSTRUCTION, MEASUREMENT, AND PAYMENT INFORMATION.

ANODES NEAREST TO EDGE OF REPAIR TO BE WITHIN 6" OF EDGE.

AFTER PLACEMENT, GALVANIC ANODES SHOULD MAINTAIN A MINIMUM TOP COVER OF 1½" AND A MINIMUM BOTTOM COVER OF ¾".

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EXISTING REINFORCING BARS MAY BE CORRODED AND/OR DAMAGED DURING CONCRETE REMOVAL. PRESERVE AND INCORPORATE EXISTING REINFORCEMENT.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-136

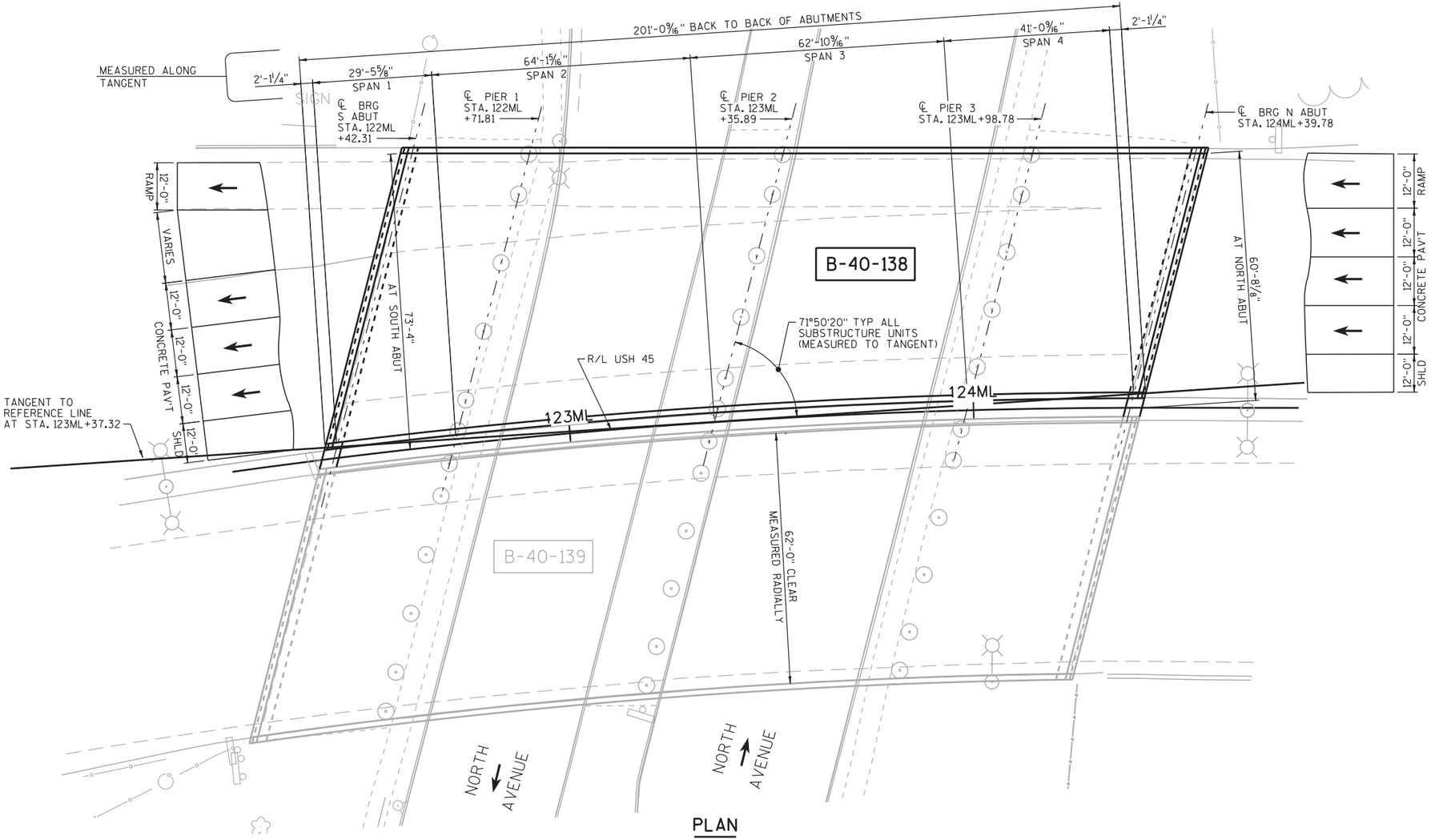
	DRAWN BY	GLM	PLANS CK'D.	SGM

GALVANIC ANODES

SHEET 5 OF 5

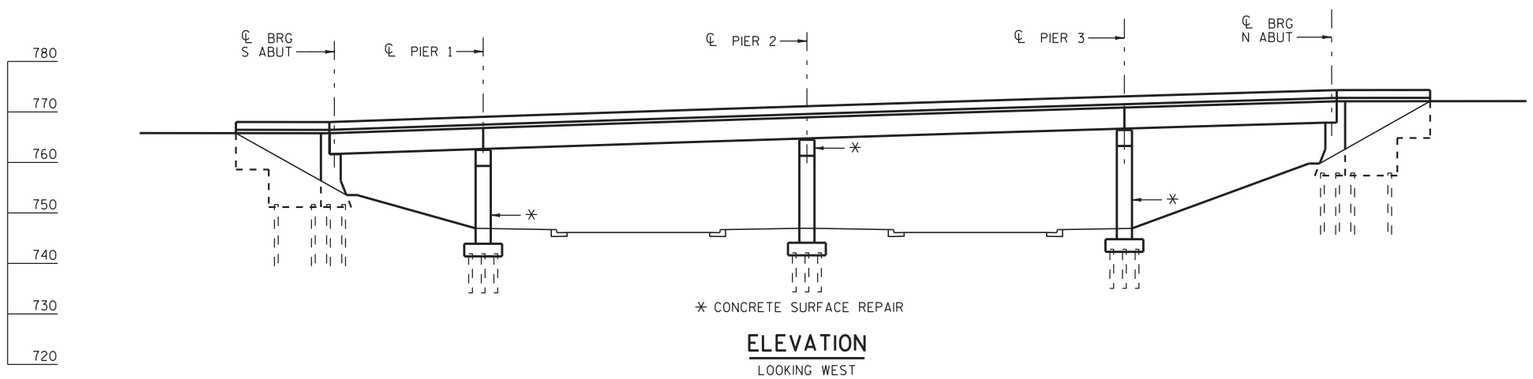
FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14619\B136_080302_pi.dgn PLOT DATE : 28-JUL-2017 15:57 PLOT BY : gmcginn PLOT NAME : B136_080302_pi PLOT SCALE : 2:1

STATE PROJECT NUMBER
2010-14-70



PLAN

REHABILITATION OF 4 SPAN
STEEL ROLLED BEAM



ELEVATION

LOOKING WEST

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS 20 (TAKEN FROM HSI, 06/14/2017
INVENTORY RATING = HS 28 (TAKEN FROM HSI, 06/14/2017)
OPERATING RATING = HS 53 (TAKEN FROM HSI, 06/14/2017)
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS
(TAKEN FROM HSI, 06/14/2017)

MATERIAL PROPERTIES

CONCRETE MASONRY ..... f'c = 4,000 PSI

TRAFFIC DATA

IH 41	NORTH AVE.
A.D.T. = 144,000 (2015)	A.D.T. = 25,100 (2016)
A.D.T. = 180,630 (2035)	A.D.T. = 30,300 (2037)
R.D.S. = 60 M.P.H.	R.D.S. = 40 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTION, GENERAL NOTES & QUANTITIES
3. CONCRETE SURFACE REPAIR
4. GALVANIC ANODES

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVE MILLER (414) 847-0480

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 08/24/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-138

IH 41 SB OVER NORTH AVE

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

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
SGM	BKS	GLM	SGM

GENERAL PLAN & ELEVATION

SHEET 1 OF 4

STEVEN G. MILLER E-26710 MILWAUKEE, WI
WISCONSIN PROFESSIONAL ENGINEER
8-1-2017

FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14623\B138_080101_gp.dgn
PLOT DATE : 01-AUG-2017 12:17
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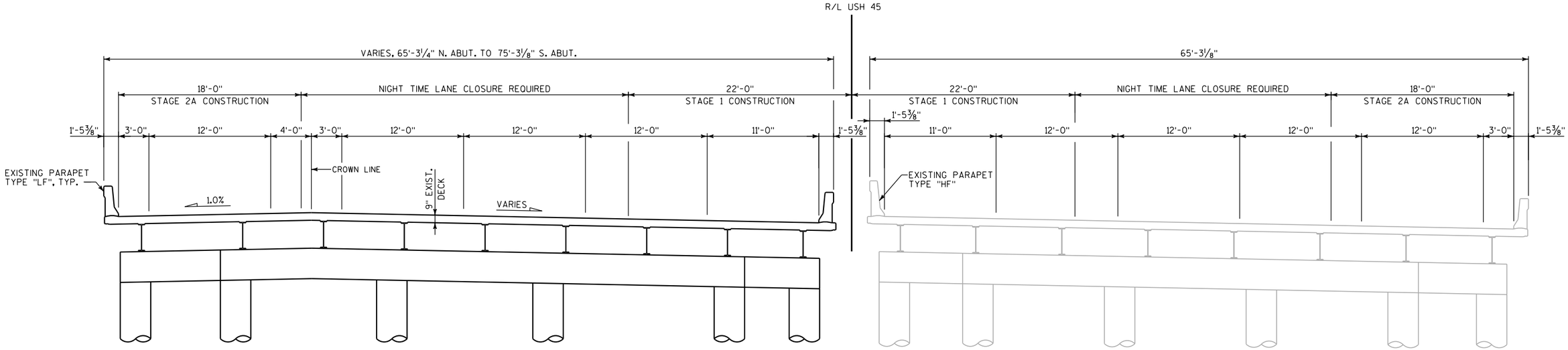
STATE PROJECT NUMBER
2010-14-70



TYPICAL SECTION B-40-138

(LOOKING NORTH)

TYPICAL SECTION B-40-139

(LOOKING NORTH)

GENERAL NOTES

1. THE SCOPE OF THIS BRIDGE REHABILITATION PROJECT IS AS FOLLOWS:
   -PATCH DELAMINATED AND SPALLED AREAS ON THE TOP SURFACE OF THE BRIDGE DECK.
   -CONCRETE SURFACE REPAIR ON PIER CAPS AND COLUMNS AS NOTED ON PLANS.
2. DRAWINGS ARE NOT TO BE SCALED.
3. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
4. AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.
5. BEVEL EXPOSED EDGES OF CONCRETE TO MATCH EXISTING BEVELS UNLESS OTHERWISE NOTED.
6. "PREPARATION DECKS TYPE 1","PREPARATION DECKS TYPE 2",& "FULL-DEPTH DECK REPAIR" AREAS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. DECK PREPARATION AND FULL DEPTH DECK REPAIRS SHALL BE FILLED WITH "FAST SET DECK PATCHING".
7. DECK PATCHING MUST CONFORM TO TRAFFIC CONTROL RESTRICTIONS NOTED ELSEWHERE IN THE CONTRACT DOCUMENTS. GENERALLY WORK IS RESTRICTED TO NIGHT TIME AND WEEKEND SHORT TERM CLOSURES.
8. CONCRETE SURFACE REPAIR LOCATIONS ARE LIMITED TO PIER COLUMNS AND CAPS LOCATED IN AREAS NEAR TRAFFIC AND OTHER AREAS OF SIGNIFICANT CONCRETE DETERIORATION. AREAS OF SPALLED AND DELAMINATED CONCRETE THAT DON'T MEET THIS DESCRIPTION ARE NOT TO BE REPAIRED.

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEM	UNIT	SUPER	SOUTH ABUT.	NORTH ABUT.	PIER 1	PIER 2	PIER 3	TOTAL
509.0301	PREPARATION DECKS TYPE 1	SY	70	-	-	-	-	-	70
509.0302	PREPARATION DECKS TYPE 2	SY	30	-	-	-	-	-	30
509.1500	CONCRETE SURFACE REPAIR	SF	-	-	-	135	20	75	230
509.2000	FULL-DEPTH DECK REPAIR	SY	1	-	-	-	-	-	1
SPV.0060.4010	EMBEDDED GALVANIC ANODES	EACH	-	-	-	70	10	40	120
SPV.0090.4030	SAWING PAVEMENT DECK PREPARATION AREAS	LF	250	-	-	-	-	-	250
SPV.0180.4010	FAST SET DECK PATCHING	SY	70	-	-	-	-	-	70

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-138

DRAWN BY GLM | PLANS CK'D. SGM

TYPICAL SECTION, GENERAL NOTES & QUANTITIES

SHEET 2 OF 4

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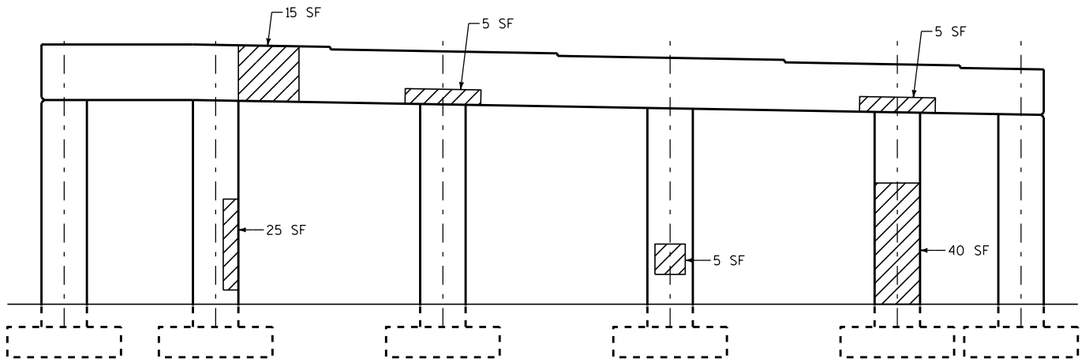
PLOT DATE : 01-AUG-2017 12:21
PLOT BY : gmcginn
PLOT NAME : B138-080102_ts
PLOT SCALE : 10:1

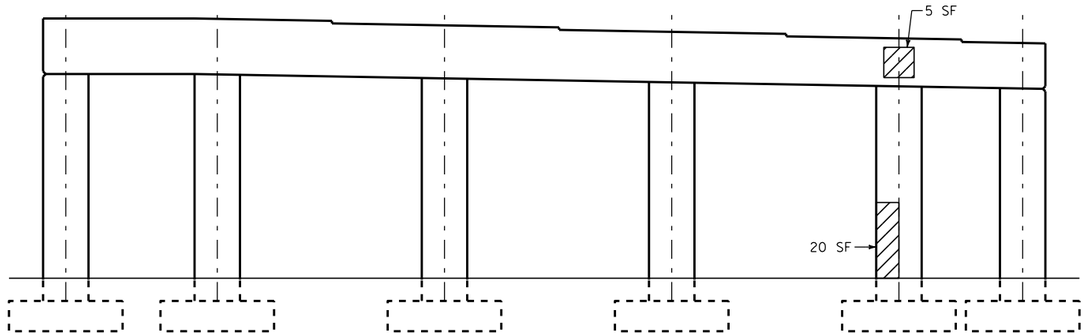
STATE PROJECT NUMBER

2010-14-70



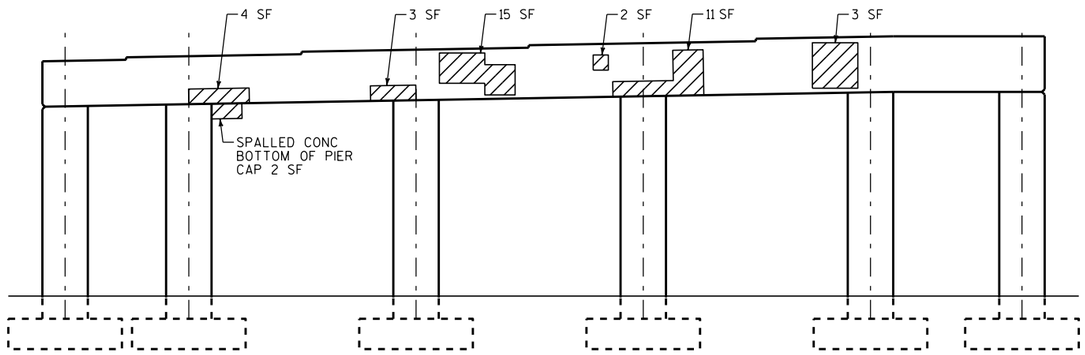
PIER 1 - SOUTH FACE ELEVATION

LOOKING NORTH



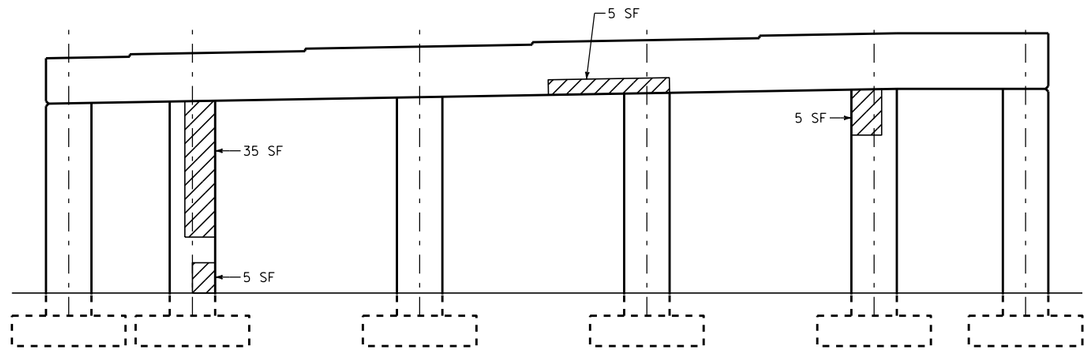
PIER 3 - SOUTH FACE ELEVATION

LOOKING NORTH



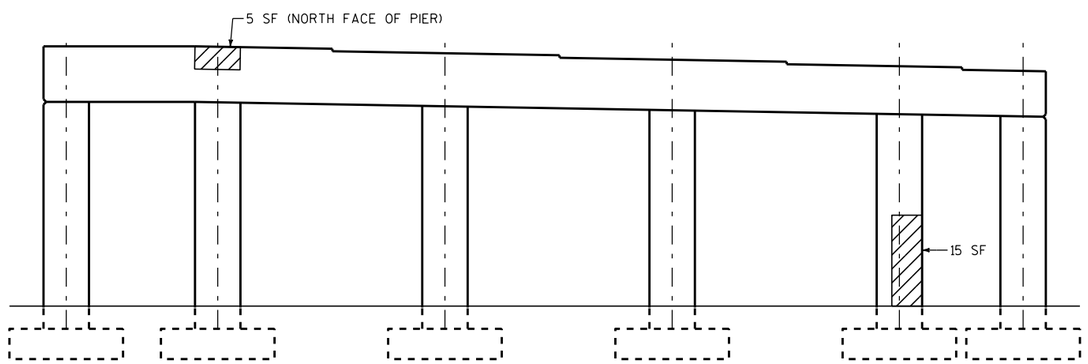
PIER 1 - NORTH FACE ELEVATION

LOOKING SOUTH



PIER 3 - NORTH FACE ELEVATION

LOOKING SOUTH



PIER 2 - SOUTH FACE ELEVATION

LOOKING NORTH

LEGEND

CONCRETE SURFACE REPAIR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-138

DRAWN BY GLM | PLANS CK'D. SGM

CONCRETE SURFACE REPAIR

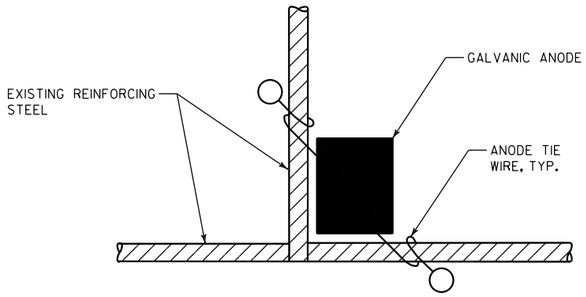
SHEET 3 OF 4

8

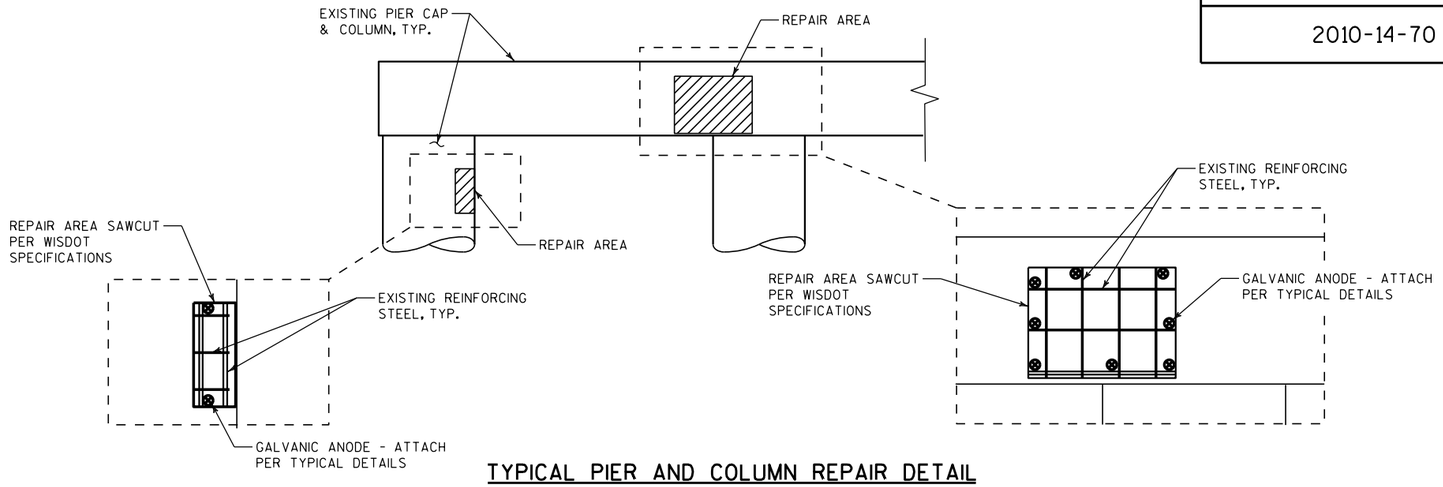
8

FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14623\B138-080301pi.dgn PLOT DATE : 01-AUG-2017 12:24 PLOT BY : gmcginn PLOT NAME : B138-080301pi PLOT SCALE : 10:1

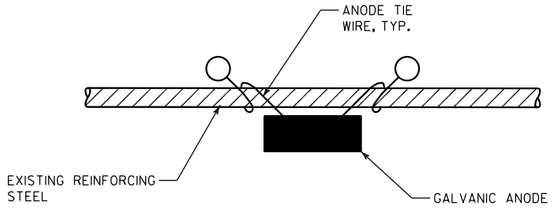
STATE PROJECT NUMBER
2010-14-70



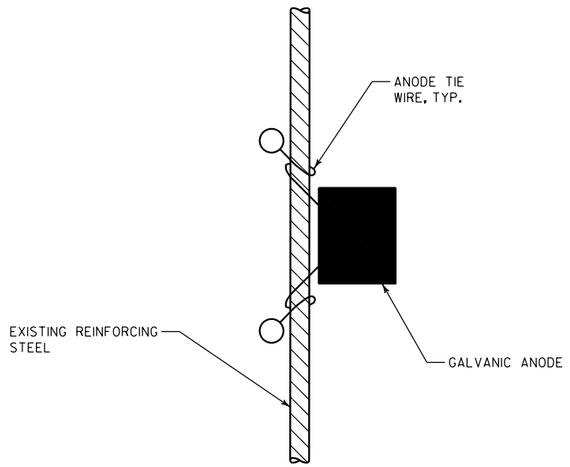
TYPICAL INSTALLATION AT BAR STEEL INTERSECTION



TYPICAL PIER AND COLUMN REPAIR DETAIL



TYPICAL INSTALLATION BELOW BAR STEEL



TYPICAL INSTALLATION BESIDE BAR STEEL

NOTES

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8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-138

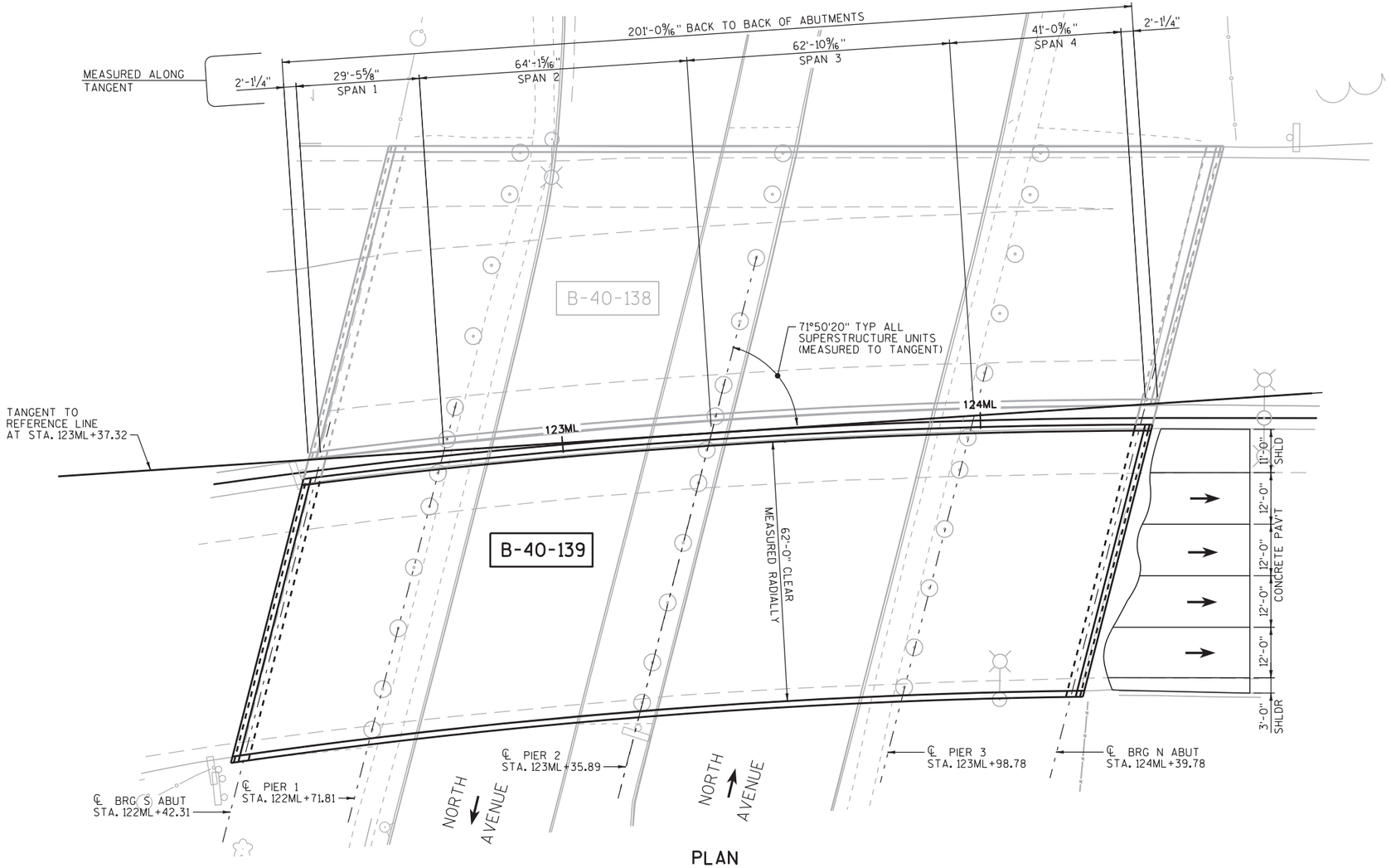
DRAWN BY	GLM	PLANS CK'D.	SGM

GALVANIC ANODES

SHEET 4 OF 4

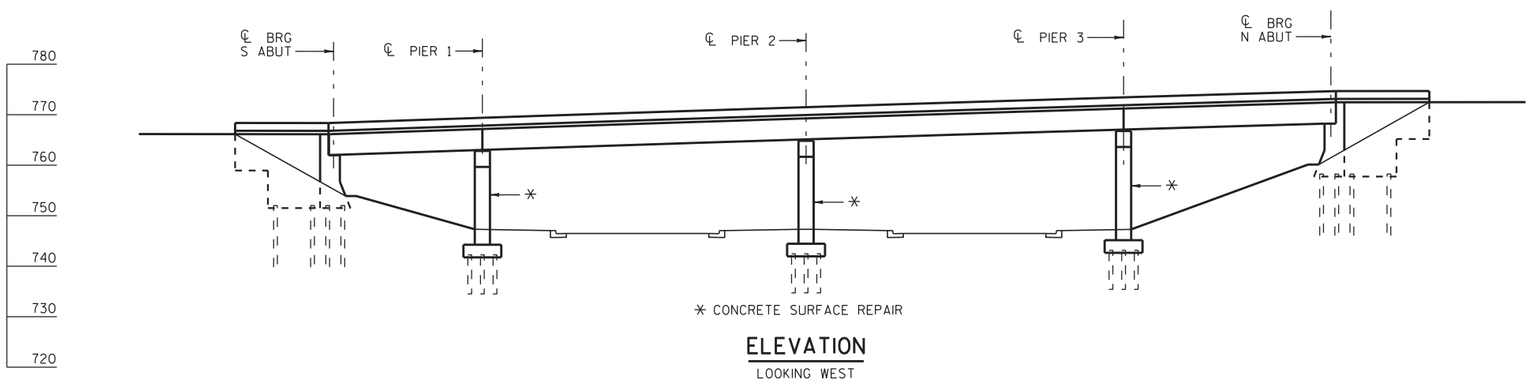
FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14623\B138_080302_pi.dgn PLOT DATE : 01-AUG-2017 12:26 PLOT BY : gmcginn PLOT NAME : B138_080302_pi PLOT SCALE : 2:1

STATE PROJECT NUMBER
2010-14-70



PLAN

REHABILITATION OF 4 SPAN
STEEL ROLLED BEAM



ELEVATION

LOOKING WEST

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS 20 (TAKEN FROM HSI, 06/14/2017
INVENTORY RATING = HS 28 (TAKEN FROM HSI, 06/14/2017)
OPERATING RATING = HS 53 (TAKEN FROM HSI, 06/14/2017)
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS
(TAKEN FROM HSI, 06/14/2017)

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A.D.T. = 180,630 (2035)	A.D.T. = 30,300 (2037)
R.D.S. = 60 M.P.H.	R.D.S. = 40 M.P.H.

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1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTION, GENERAL NOTES & QUANTITIES
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STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVE MILLER (414) 847-0480

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 08/24/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

WISCONSIN
STEVEN G. MILLER
E-26710
MILWAUKEE, WI
PROFESSIONAL ENGINEER
8-1-2017

STRUCTURE B-40-139

IH 41 NB OVER NORTH AVE

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

DESIGN SPEC.
REHABILITATION N/A

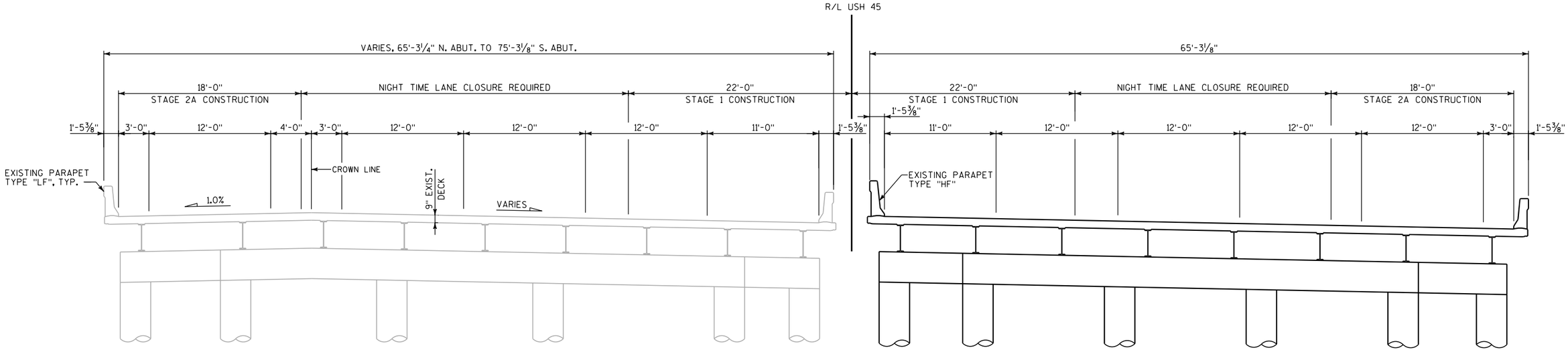
DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
SGM	BKS	GLM	SGM

GENERAL PLAN & ELEVATION

SHEET 1 OF 4

FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14627\B139_080101_gp.dgn
PLOT DATE : 01-AUG-2017 12:37
PLOT BY : gmcginn
PLOT NAME : B139_080101_gp
PLOT SCALE : 0.166667:1

STATE PROJECT NUMBER
2010-14-70



TYPICAL SECTION B-40-138

(LOOKING NORTH)

TYPICAL SECTION B-40-139

(LOOKING NORTH)

GENERAL NOTES

1. THE SCOPE OF THIS BRIDGE REHABILITATION PROJECT IS AS FOLLOWS:
   -PATCH DELAMINATED AND SPALLED AREAS ON THE TOP SURFACE OF THE BRIDGE DECK.
   -CONCRETE SURFACE REPAIR ON PIER CAPS AND COLUMNS AS NOTED ON PLANS.
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5. BEVEL EXPOSED EDGES OF CONCRETE TO MATCH EXISTING BEVELS UNLESS OTHERWISE NOTED.
6. "PREPARATION DECKS TYPE 1","PREPARATION DECKS TYPE 2",& "FULL-DEPTH DECK REPAIR" AREAS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. DECK PREPARATION AND FULL DEPTH DECK REPAIRS SHALL BE FILLED WITH "FAST SET DECK PATCHING".
7. DECK PATCHING MUST CONFORM TO TRAFFIC CONTROL RESTRICTIONS NOTED ELSEWHERE IN THE CONTRACT DOCUMENTS. GENERALLY WORK IS RESTRICTED TO NIGHT TIME AND WEEKEND SHORT TERM CLOSURES.
8. CONCRETE SURFACE REPAIR LOCATIONS ARE LIMITED TO PIER COLUMNS AND CAPS LOCATED IN AREAS NEAR TRAFFIC AND OTHER AREAS OF SIGNIFICANT CONCRETE DETERIORATION. AREAS OF SPALLED AND DELAMINATED CONCRETE THAT DON'T MEET THIS DESCRIPTION ARE NOT TO BE REPAIRED.

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEM	UNIT	SUPER	SOUTH ABUT.	NORTH ABUT.	PIER 1	PIER 2	PIER 3	TOTAL
509.0301	PREPARATION DECKS TYPE 1	SY	70	-	-	-	-	-	70
509.0302	PREPARATION DECKS TYPE 2	SY	30	-	-	-	-	-	30
509.1500	CONCRETE SURFACE REPAIR	SF	-	-	-	110	40	110	260
509.2000	FULL-DEPTH DECK REPAIR	SY	1	-	-	-	-	-	1
SPV.0060.4010	EMBEDDED GALVANIC ANODES	EACH	-	-	-	65	17	63	145
SPV.0090.4030	SAWING PAVEMENT DECK PREPARATION AREAS	LF	250	-	-	-	-	-	250
SPV.0180.4010	FAST SET DECK PATCHING	SY	70	-	-	-	-	-	70

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-139

DRAWN BY GLM | PLANS CK'D. SGM

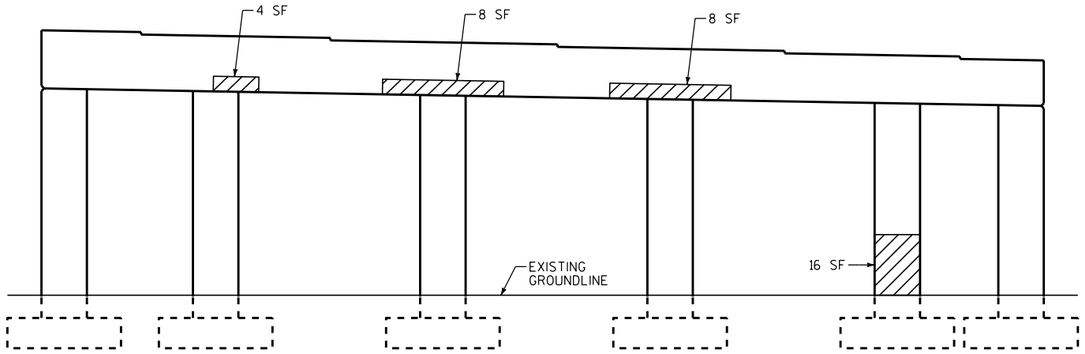
TYPICAL SECTION, GENERAL NOTES & QUANTITIES

SHEET 2 OF 4

FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14627\B139-080102_ts.dgn
PLOT DATE : 01-AUG-2017 12:41
PLOT BY : gmcginn
PLOT NAME : B139-080102_ts
PLOT SCALE : 10:1

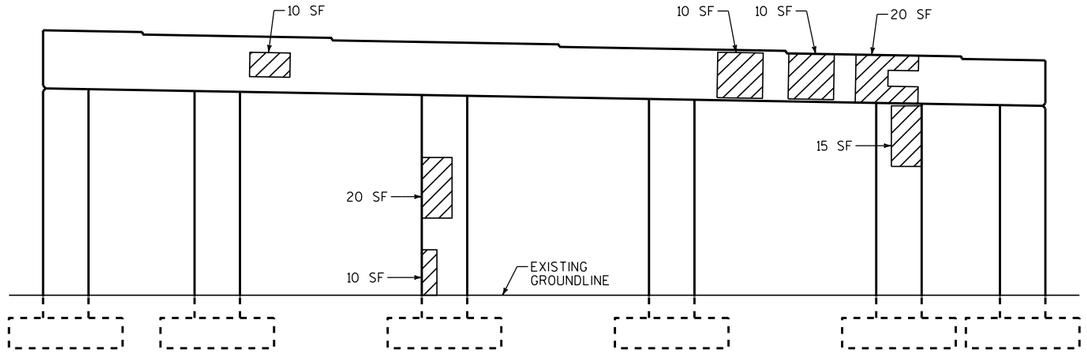
STATE PROJECT NUMBER

2010-14-70



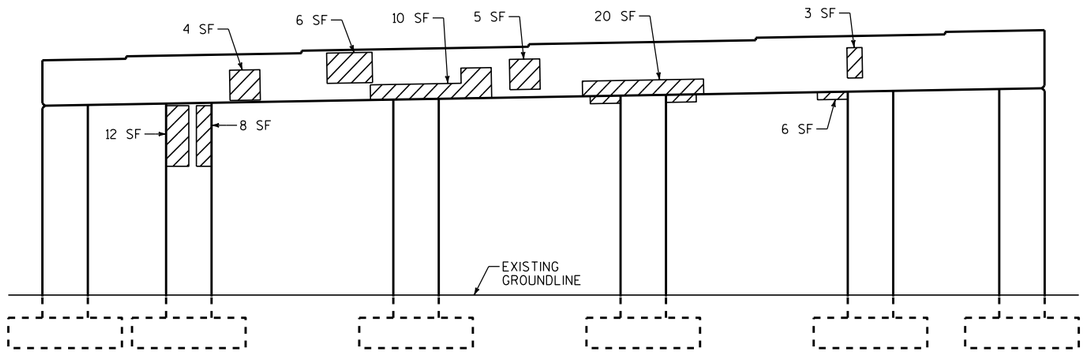
PIER 1 - SOUTH FACE ELEVATION

LOOKING NORTH



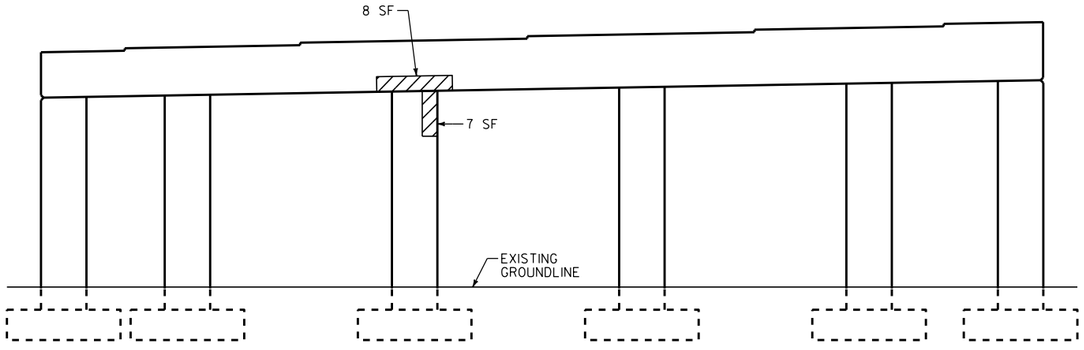
PIER 3 - SOUTH FACE ELEVATION

LOOKING NORTH



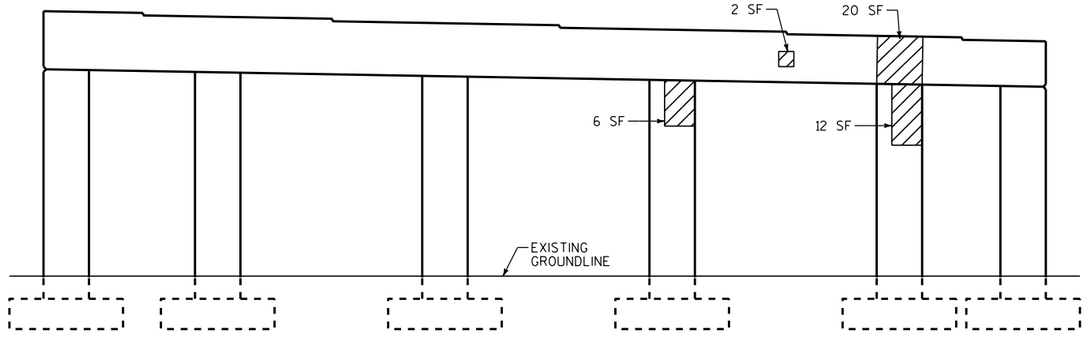
PIER 1 - NORTH FACE ELEVATION

LOOKING SOUTH



PIER 3 - NORTH FACE ELEVATION

LOOKING SOUTH



PIER 2 - SOUTH FACE ELEVATION

LOOKING NORTH

LEGEND

▨ CONCRETE SURFACE REPAIR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-139

DRAWN BY GLM | PLANS CK'D. SGM

CONCRETE SURFACE REPAIR

SHEET 3 OF 4

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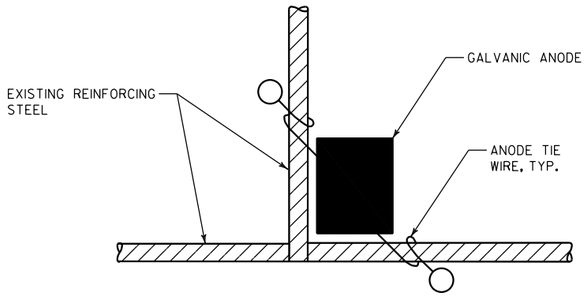
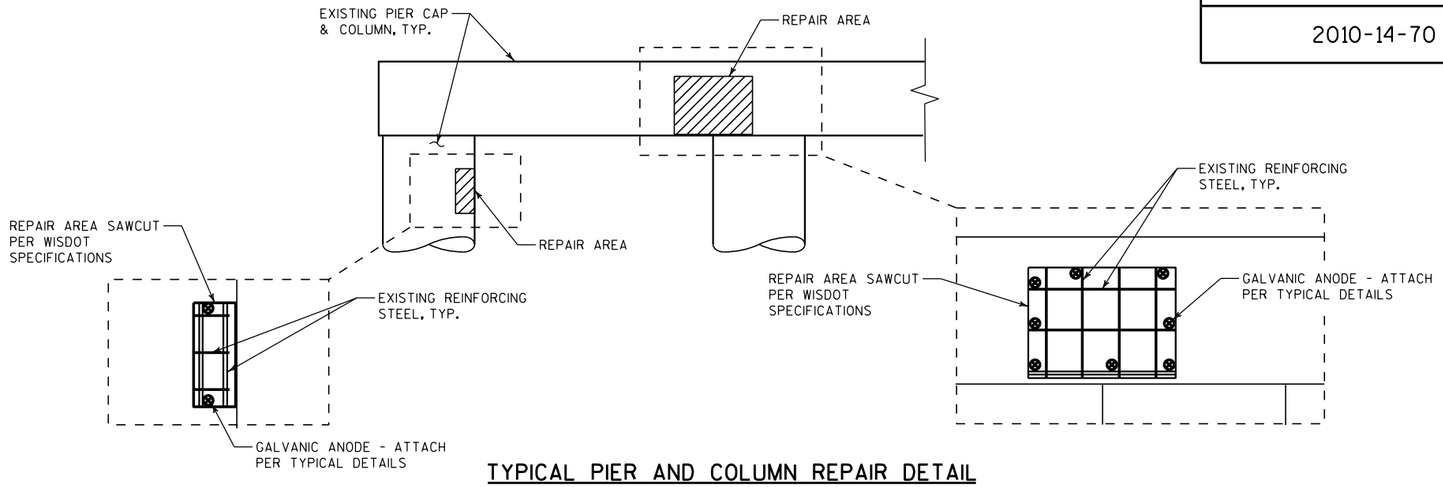
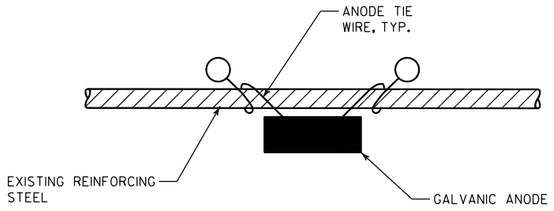
STATE PROJECT NUMBER
2010-14-70



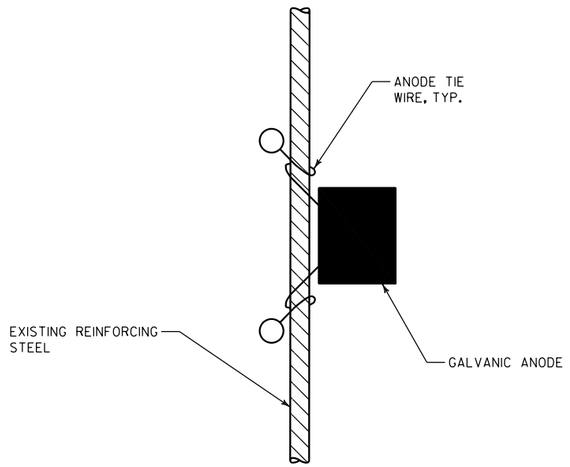
TYPICAL INSTALLATION AT BAR STEEL INTERSECTION



TYPICAL PIER AND COLUMN REPAIR DETAIL



TYPICAL INSTALLATION BELOW BAR STEEL



TYPICAL INSTALLATION BESIDE BAR STEEL

NOTES

SEE SPECIAL PROVISION "EMBEDDED GALVANIC ANODES" FOR DESCRIPTION. MATERIALS, CONSTRUCTION. MEASUREMENT, AND PAYMENT INFORMATION.

ANODES NEAREST TO EDGE OF REPAIR TO BE WITHIN 6" OF EDGE.

AFTER PLACEMENT, GALVANIC ANODES SHOULD MAINTAIN A MINIMUM TOP COVER OF 1½" AND A MINIMUM BOTTOM COVER OF ¾".

EXISTING REINFORCING STEEL TO BE COMPLETELY CLEANED OF CORROSIVE MATERIAL PRIOR TO INSTALLATION OF GALVANIC ANODES.

ENSURE ALL EXPOSED REINFORCING STEEL IS SECURELY FASTENED TOGETHER WITH TIE WIRE TO PROVIDE GOOD CONTINUITY. SEE SPECIAL PROVISIONS.

GALVANIC ANODES SHALL BE PLACED PER SPECIAL PROVISIONS "EMBEDDED GALVANIC ANODES". GALVANIC ANODES ESTIMATED QUANTITIES ON PLANS ARE BASED ON A MAXIMUM SPACING OF 24 INCHES IN EACH DIRECTION OF THE ESTIMATED "CONCRETE SURFACE REPAIR" AREA.

EXISTING REINFORCING BARS MAY BE CORRODED AND/OR DAMAGED DURING CONCRETE REMOVAL. PRESERVE AND INCORPORATE EXISTING REINFORCEMENT.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-139

DRAWN BY GLM | PLANS CK'D. SGM

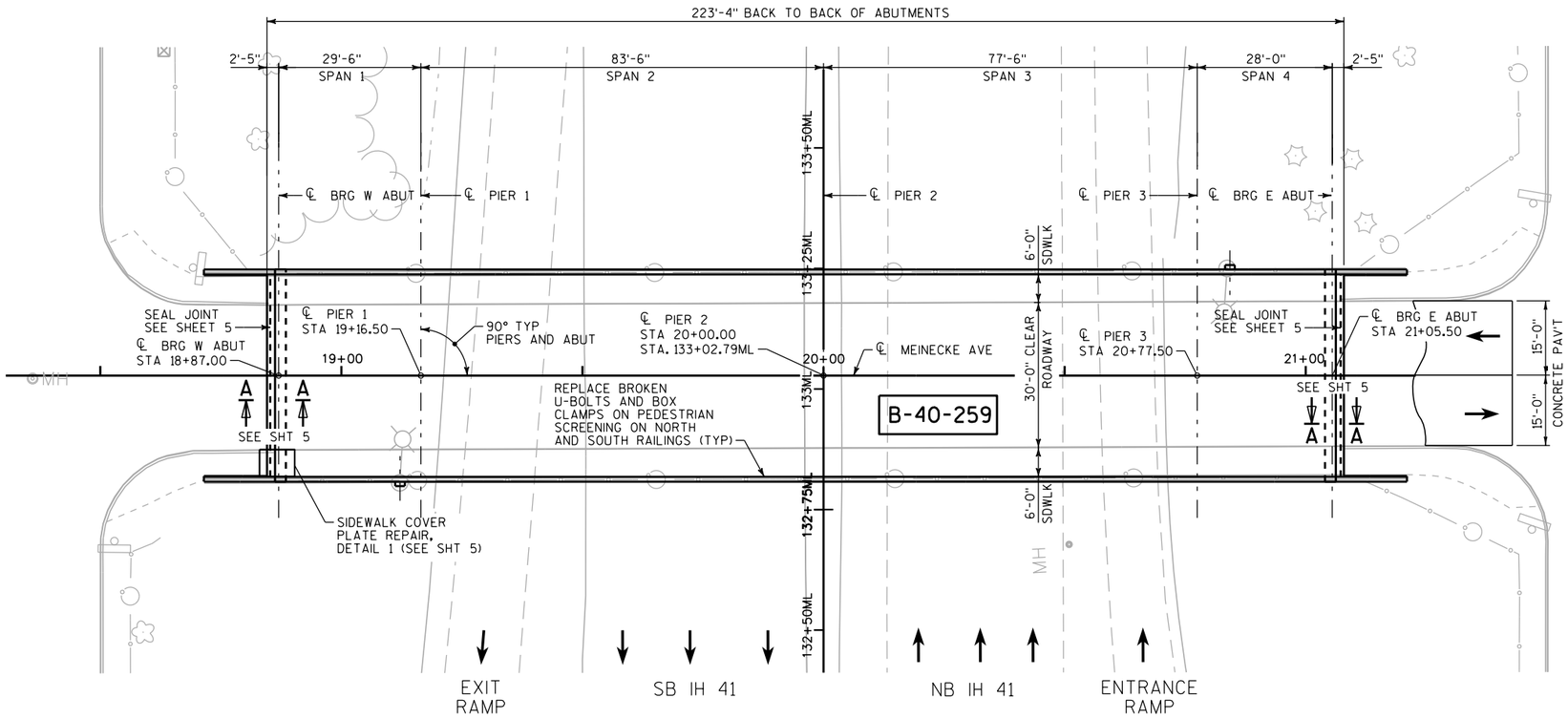
GALVANIC ANODES

SHEET 4 OF 4

FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14627\B139_080302_pi.dgn PLOT DATE : 01-AUG-2017 12:44 PLOT BY : gmcginn PLOT NAME : B139_080302_pi PLOT SCALE : 2:1

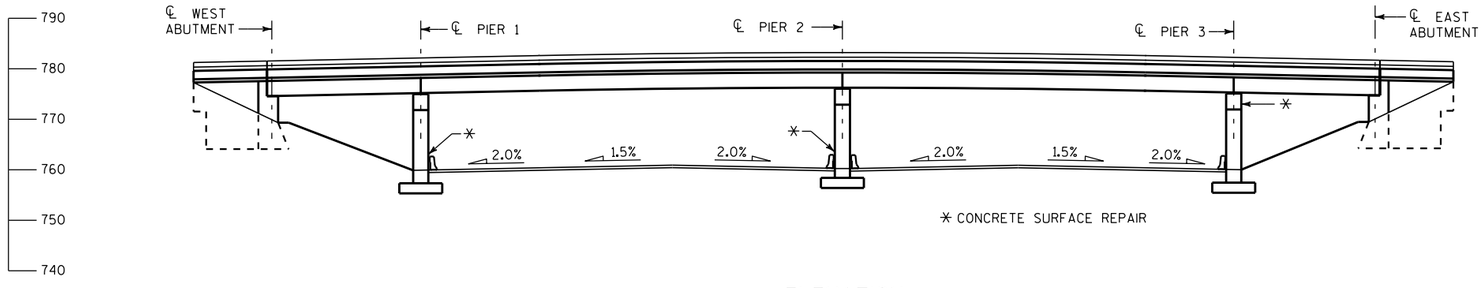
STATE PROJECT NUMBER

2010-14-70



PLAN

REHABILITATION OF 4 SPAN STEEL ROLLED BEAM



ELEVATION

LOOKING NORTH

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS 20 (TAKEN FROM HSI, 06/14/2017)
INVENTORY RATING = HS 15 (TAKEN FROM HSI, 06/14/2017)
OPERATING RATING = HS 25 (TAKEN FROM HSI, 06/14/2017)
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 220 KIPS (TAKEN FROM HSI, 06/14/2017)

MATERIAL PROPERTIES

CONCRETE MASONRY..... f'c = 4,000 PSI

TRAFFIC DATA

IH 41
A.D.T. = 144,000 (2015)
A.D.T. = 180,630 (2035)
R.D.S. = 60 M.P.H.

MEINECKE AVE.
A.D.T. = 1,350 (2037)
R.D.S. = 30 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTION, GENERAL NOTES & QUANTITIES
3. CONCRETE SURFACE REPAIR
4. GALVANIC ANODES
5. DETAILS

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVE MILLER (414) 847-0480

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
ch2m:
MILWAUKEE, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 08/24/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-40-259

MEINECKE AVE OVER IH 41

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

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
SGM	BKS	GLM	SGM

GENERAL PLAN & ELEVATION

SHEET 1 OF 5

WISCONSIN
STEVEN G. MILLER
E-28710
MILWAUKEE, WI
PROFESSIONAL ENGINEER
8-1-2017

8

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FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14631\B259_080101_gp.dgn
PLOT DATE : 01-AUG-2017 10:50
PLOT BY : gmcginn
PLOT NAME : B259_080101_gp
PLOT SCALE : 0.166667:1

STATE PROJECT NUMBER

2010-14-70

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL REINFORCING BARS ARE IN ENGLISH UNITS. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

SIGN BRIDGE CANTILEVER ID PLAQUES SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "SIGN BRIDGE CANTILEVERED S-40-XXX". LOCATE THE ID PLAQUE ON THE FREEWAY SIDE OF THE SUPPORT COLUMN SO THAT IT CAN BE SEEN FROM THE ROADWAY. FABRICATE AND INSTALL THE ID PLAQUE IN ACCORDANCE WITH S.D.D. 12 A 4-3.

CENTER SIGNS VERTICALLY ON TRUSS.

ALL STATIONS AND ELEVATIONS ARE IN FEET UNLESS OTHERWISE SHOWN OR NOTED. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2007).

ALTERNATE DESIGNS ARE NOT ALLOWED.

ALL STRUCTURAL STEEL MEMBERS SHALL BE GALVANIZED.

ALL BOLTED CONNECTIONS SHALL BE MADE WITH ¾" DIA A325 BOLTS, GALVANIZED PER ASTM A153 CLASS C AND MADE WITH DTI WASHERS.

WELD TEST AS PER AWS D1.1.

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION OF THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

CONTRACTOR SHALL SHOW SIGNS ON SHOP DRAWINGS.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO TRAFFIC OPS SE REGION: MR TOM HEYDEL, WIS DOT, 141 NW BARSTOW ST, WAUKESHA, WI 53187 AND THE PROJECT ENGINEER FOR APPROVAL.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRILLING OR EXCAVATING AND MAINTAINING A STABLE AND OPEN HOLE FOR SUBSEQUENT INSTALLATION OF CONCRETE MASONRY FOR THE SUPPORT BASES. PARTIAL OR FULL DEPTH TEMPORARY CASING MAY BE REQUIRED TO MAINTAIN THE STABILITY OF THE EXCAVATED HOLE FOR THE SIGN SUPPORT PRIOR TO FILLING THE HOLE WITH CONCRETE. TEMPORARY CASING, IF USED, SHALL BE INCIDENTAL TO THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

MATERIAL PROPERTIES

CONCRETE MASONRY ---------- f'c = 3,500 psi

HIGH STRENGTH STEEL
REINFORCEMENT, GRADE 60 ---------- fy = 60,000 psi

STRUCTURAL ANGLES,
PLATE AND BARS - ASTM A709 GRADE 36 ---- fy = 36,000 psi

CHORDS & COLUMN (INCLUDING
HANDHOLE) - API SPEC 5L GRADE 42 ---------- fy = 42,000 psi ☆

HIGH STRENGTH BOLTS - A325 ---------- fy = 92,000 psi

ANCHOR BOLTS - ASTM F1554---------- fy = 55,000 psi

STRUCTURAL MEMBERS GALVANIZED---------- ASTM A123

HARDWARE GALVANIZED ---------- ASTM A153 CLASS C

☆ ALTERNATE MATERIAL FOR COLUMN AND CHORD LESS THAN 10" DIAMETER MAY BE ASTM A500 GRADE B Fy = 42,000 psi, OR GRADE C Fy = 46,000 psi.

FOUNDATION DATA

	S-40-871	S-40-872	S-40-873
ALLOWABLE SHAFT END BEARING PRESSURE (PSF)	10,000	10,000	9,000
ALLOWABLE SKIN FRICTION (PSF)	600	400	500
SOIL COHESION (PSF)	2,500	2,000	2,500
ASSUMED SOIL FRICTION ANGLE	34°	33°	0°

DESIGN DATA

STRUCTURE NO.	DESIGN SIGN AREA	MAX. SIGN DEPTH
S-40-871	158 SF	11'-6"
S-40-872	128 SF	9'-6"
S-40-873	158 SF	11'-6"

DESIGNED ACCORDING TO AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 2013 6TH EDITION.

DEAD LOAD - WT. OF SIGN, SUPPORTING STRUCTURE, CATWALK, LIGHTS AND RAILINGS. LIVE LOAD - SINGLE LINE LOAD OF 500 LBS. DISTRIBUTED OVER 2'-0" OF CATWALK.
ICE LOAD - 3 PSF TO ONE FACE OF SIGN & AROUND SURFACE OF MEMBERS.
WIND PRESSURE - 90 MPH (3-SEC. GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3

GROUP LOADS	% OF ALLOWABLE STRESS
I. DEAD	100
II. DEAD + WIND	133
III. DEAD + ICE + 1/2 WIND	133
IV. FATIGUE CATEGORY I WITHOUT GALLOPING	**

NOTE: WIND LOAD FOR GROUP III LOADING SHALL NOT BE LESS THAN 25 PSF.

** SEE SECTION 11 OF "THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTUAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 6TH EDITION FOR FATIGUE LOADS AND STRESS RANGE LIMITS

LIST OF DRAWINGS

1. GENERAL NOTES & DESIGN DATA
2. S-40-871 GENERAL PLAN & ELEVATION
3. S-40-872 GENERAL PLAN & ELEVATION
4. S-40-873 GENERAL PLAN & ELEVATION
5. S-40-871 FOOTING DETAILS
6. S-40-872 & S-40-873 FOOTING DETAILS
7. GALVANIZED STEEL CANTILEVER SIGN TRUSS
8. GALVANIZED STEEL CANTILEVER SIGN TRUSS DETAILS
9. HANDHOLE DETAILS
10. S-40-871 SUBSURFACE EXPLORATION
11. S-40-872 SUBSURFACE EXPLORATION
12. S-40-873 SUBSURFACE EXPLORATION

WISCONSIN
STEVEN G. MILLER
E-26710
MILWAUKEE, WI
PROFESSIONAL ENGINEER
7-31-2017

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
WILLIAM DREHER (608) 266-8489
CONSULTANT:
STEVE MILLER (414) 248-7677

NO.	DATE	REVISION	BY

ch2m

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 09/05/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

CANTILEVER SIGN STRUCTURES

ZOO FREEWAY SWAN TO BURLEIGH SIGN STRUCTURES

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

DESIGN SPEC.
AASHTO STD SPECS FOR HIGHWAY SIGNS 6TH ED

DESIGNED BY	DESIGN CK'D	DRAWN BY	PLANS CK'D.
ASW/EKM	EKM/ASW	ASW/EKM	SGM

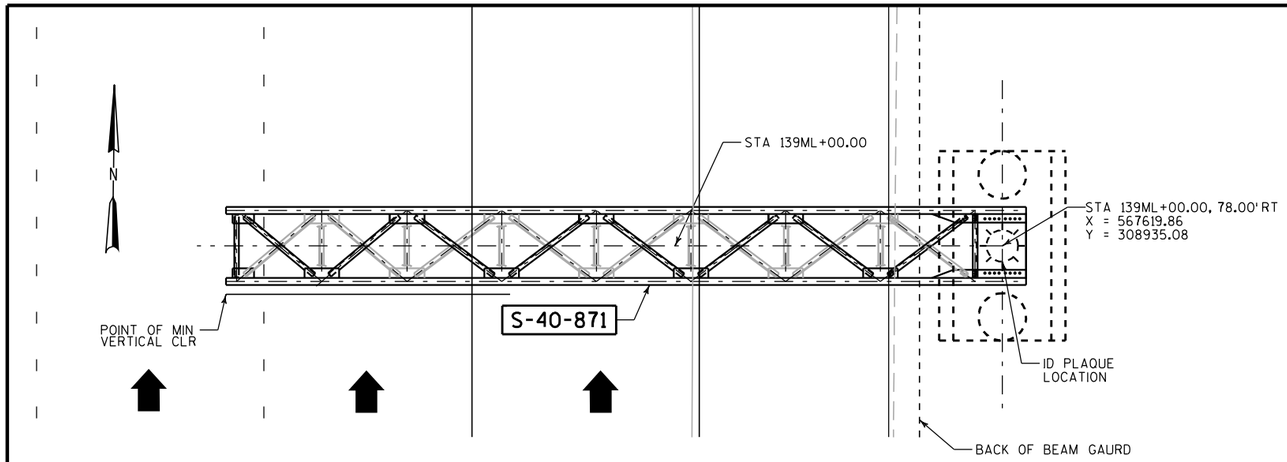
GENERAL NOTES & DESIGN DATA

SHEET 1 OF 12

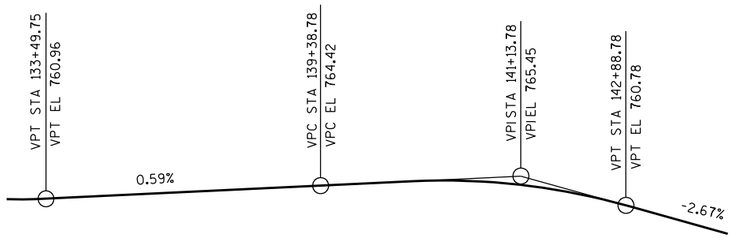
8

8

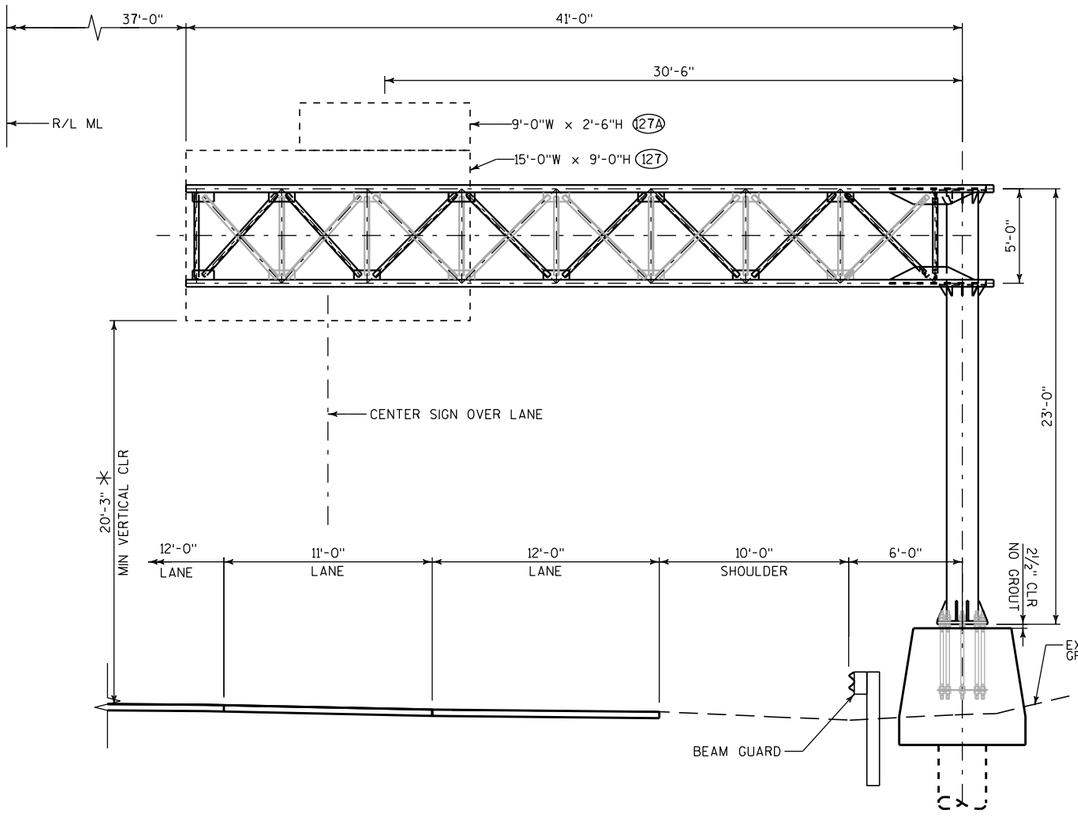
STATE PROJECT NUMBER
2010-14-70



PLAN

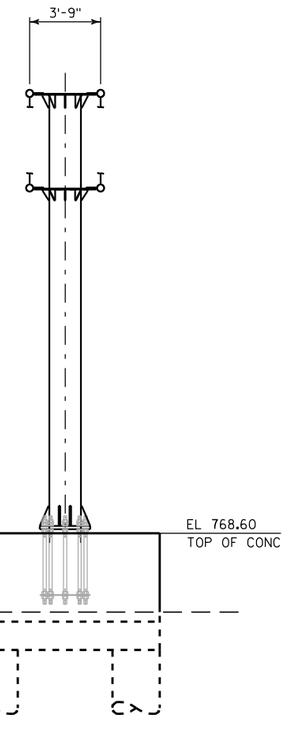


PROFILE GRADE LINE ML



ELEVATION

S-40-871 - STA 139ML+00.00
IH 41 NB
(LOOKING UP STATION AT FRONT FACE OF SIGN)



END VIEW

TOTAL ESTIMATE OF QUANTITIES

BID ITEM NO.	BID ITEM	UNIT	TOTAL
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	22
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	2875
641.1200.0001	SIGN BRIDGE CANTILEVERED S-40-871 ◑	LS	1
SPV.0075.4500	OBSTRUCTIONS SIGN SUPPORTS CONCRETE MASONRY	HRS	1

ALL ITEMS ARE CATEGORY 4500

LEGEND

✳ INCLUDES 2'-0" FOR FUTURE CATWALK INSTALLATION

(XXX) SIGN NUMBERS (PERMANENT SIGNING PLANS)

◑ THIS LUMP SUM BID ITEM INCLUDES HORIZONTAL TRUSS, VERTICAL STEEL COLUMN AND ANCHOR ASSEMBLIES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES

DRAWN BY ASW | PLANS CK'D. SGM

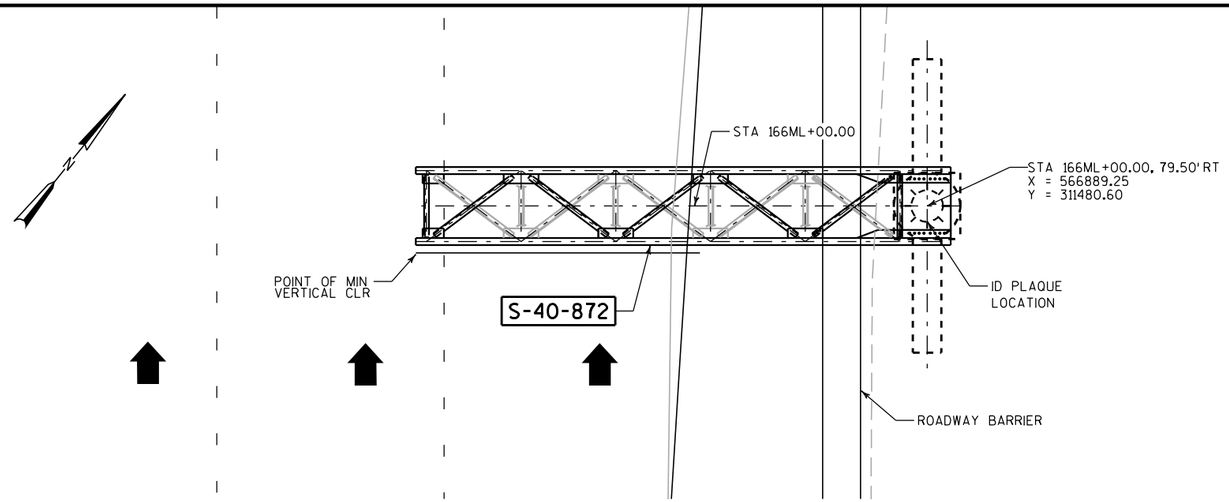
S-40-871
GENERAL PLAN
& ELEVATION

SHEET 2 OF 12

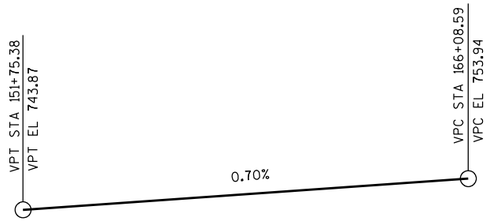
8

8

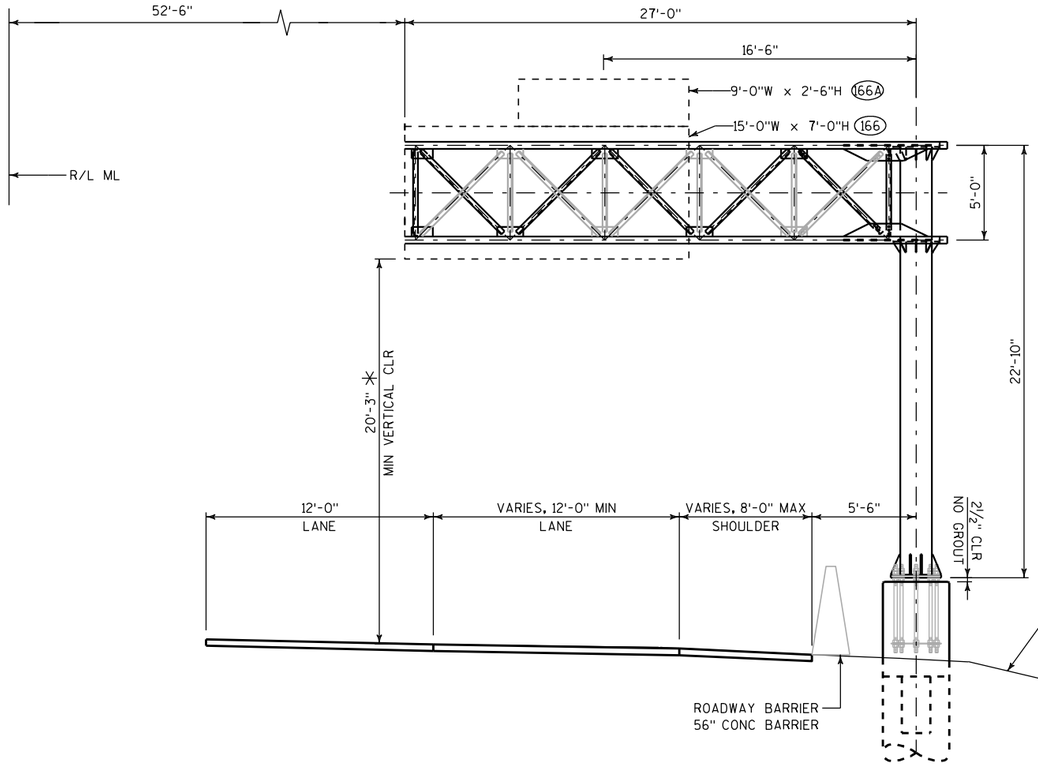
STATE PROJECT NUMBER
2010-14-70



PLAN

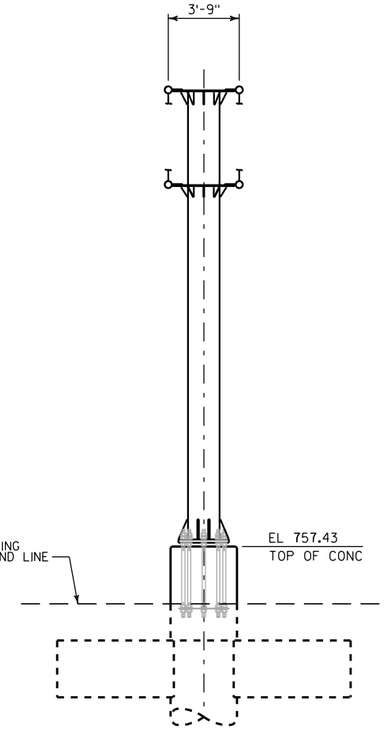


PROFILE GRADE LINE ML



ELEVATION

S-40-872 - STA 166ML+00.00
IH 41 NB
(LOOKING UP STATION AT FRONT FACE OF SIGN)



END VIEW

TOTAL ESTIMATE OF QUANTITIES

BID ITEM NO.	BID ITEM	UNIT	TOTAL
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	9
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	990
641.1200.0002	SIGN BRIDGE CANTILEVERED S-40-872 ◑	LS	1
SPV.0075.4500	OBSTRUCTIONS SIGN SUPPORTS CONCRETE MASONRY	HRS	1

ALL ITEMS ARE CATEGORY 4510

LEGEND

✳ INCLUDES 2'-0" FOR FUTURE CATWALK INSTALLATION

(XXX) SIGN NUMBERS (PERMANENT SIGNING PLANS)

◑ THIS LUMP SUM BID ITEM INCLUDES HORIZONTAL TRUSS, VERTICAL STEEL COLUMN AND ANCHOR ASSEMBLIES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES

DRAWN BY ASW | PLANS CK'D. SGM

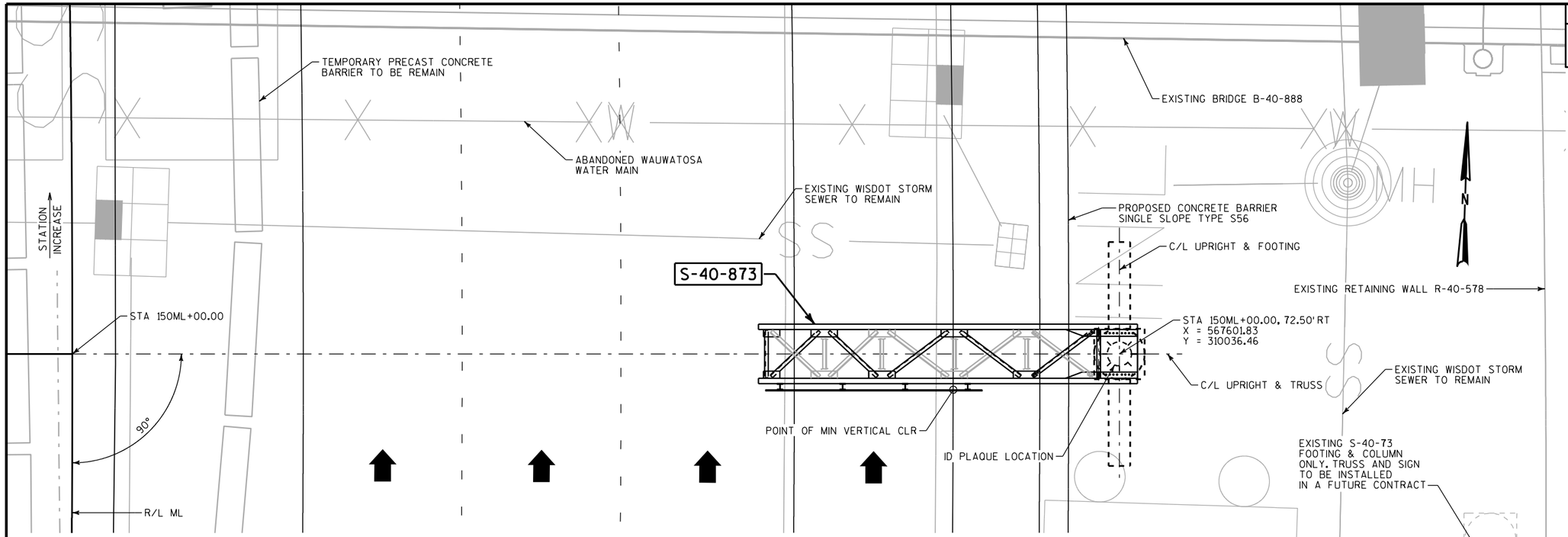
S-40-872
GENERAL PLAN
& ELEVATION

SHEET 3 OF 12

8

8

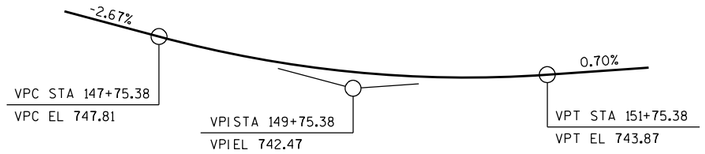
STATE PROJECT NUMBER
2010-14-70



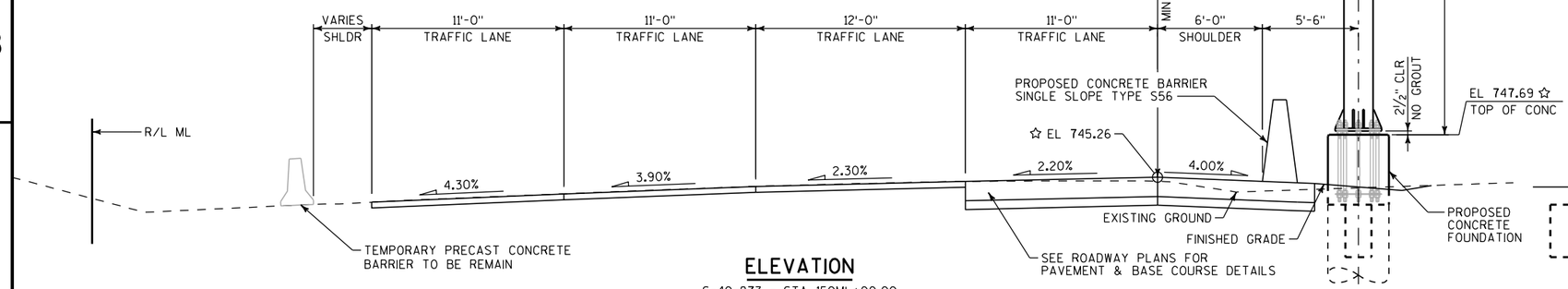
TOTAL ESTIMATE OF QUANTITIES

BID ITEM NO.	BID ITEM	UNIT	TOTAL
636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	9
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	990
641.1200.0003	SIGN BRIDGE CANTILEVERED S-40-873 ◑	LS	1
SPV.0075.4500	OBSTRUCTIONS SIGN SUPPORTS CONCRETE MASONRY	HRS	1

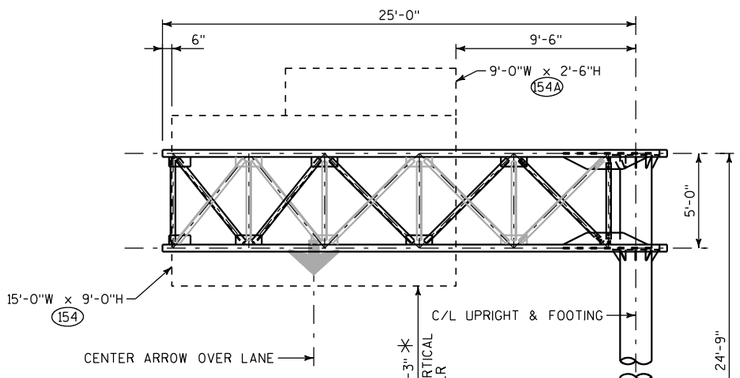
ALL ITEMS ARE CATEGORY 4520



PROFILE GRADE LINE ML

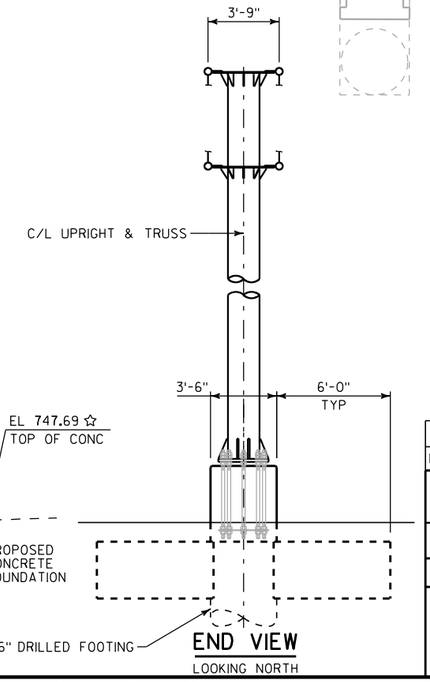


PLAN



ELEVATION

S-40-873 - STA 150ML+00.00
USH 45 NB / IH 41 NB
(LOOKING UP STATION AT FRONT FACE OF SIGN)



END VIEW

LOOKING NORTH

LEGEND

- ✳ INCLUDES 2'-0" FOR FUTURE CATWALK INSTALLATION
- (XXX) SIGN NUMBERS (PERMANENT SIGNING PLANS)
- ◑ THIS LUMP SUM BID ITEM INCLUDES HORIZONTAL TRUSS, VERTICAL STEEL COLUMN AND ANCHOR ASSEMBLIES.
- ☆ ELEVATIONS GIVEN ALONG C/L UPRIGHTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES

DRAWN BY	EKM	PLANS CK'D.	SGM

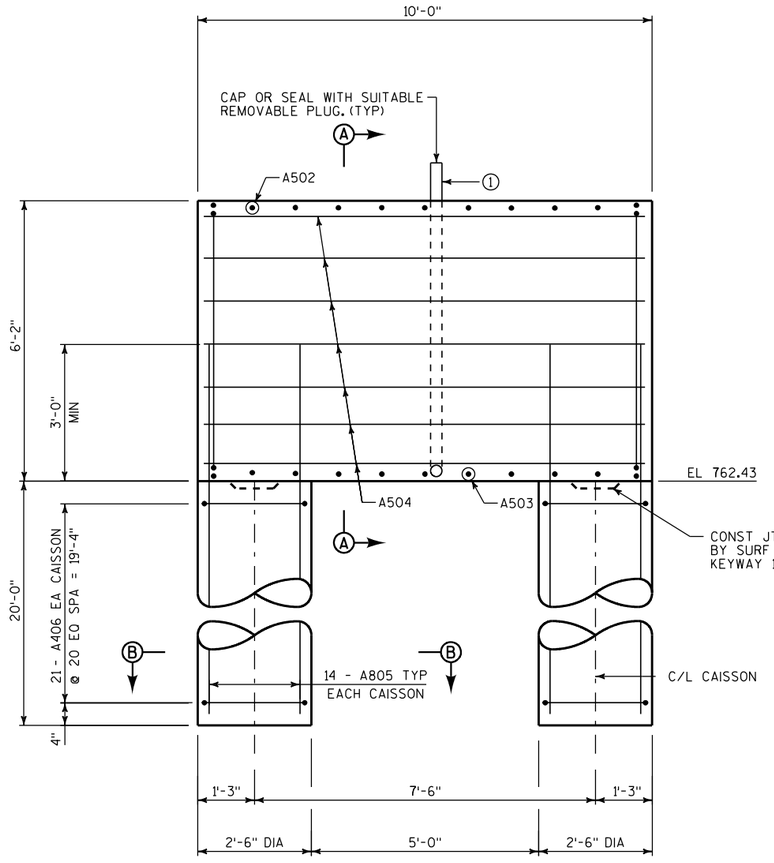
S-40-873 GENERAL PLAN & ELEVATION

SHEET 4 OF 12

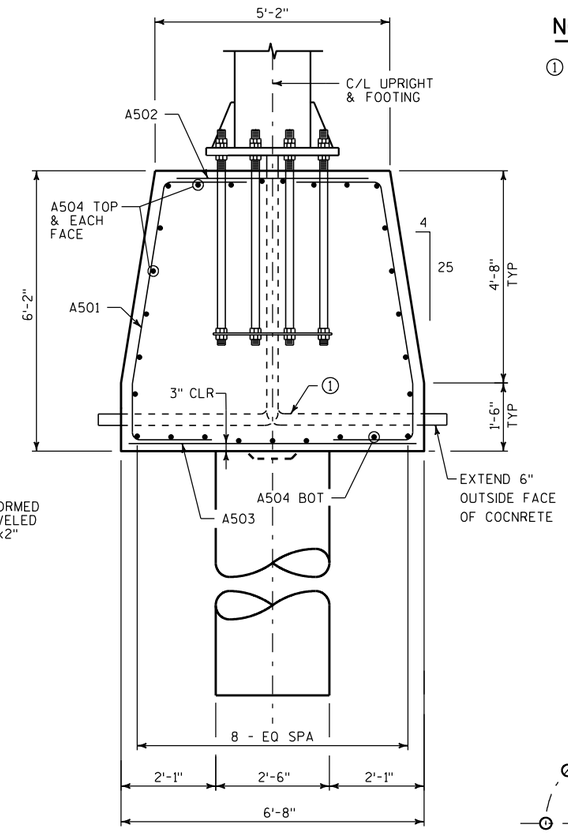
8

8

STATE PROJECT NUMBER
2010-14-70



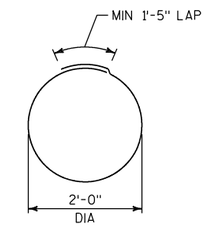
ELEVATION



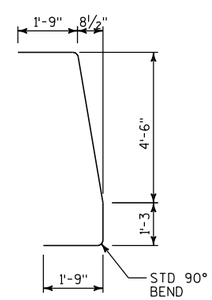
SECTION A-A

NOTES

1. 2" DIA. NON-METALLIC CONDUIT (20'-0" - INCIDENTAL TO "SIGN SUPPORTS CONCRETE MASONRY")



A406

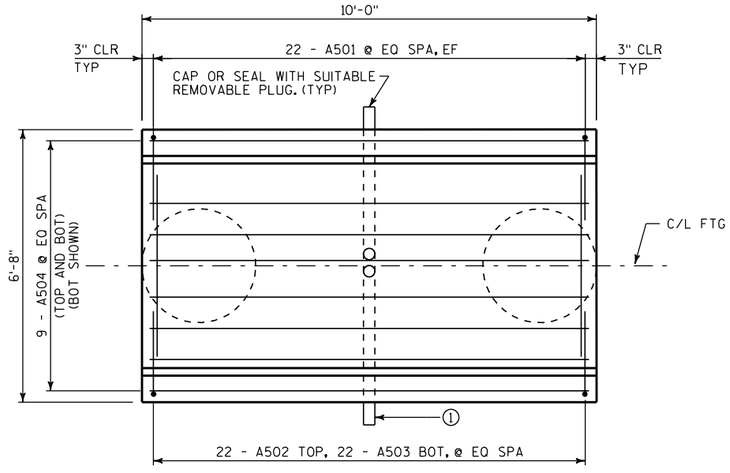


A501

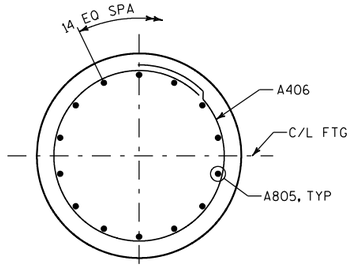
NOTE:
BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE

BILL OF BARS

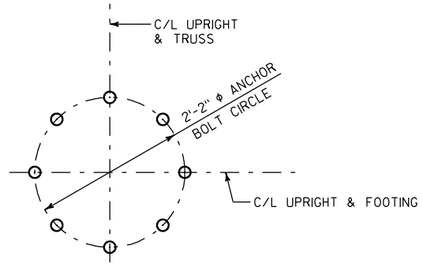
BAR MARK	COAT	NO REQ'D	LENGTH	BENT	LOCATION
A501	X	44	9'-0"	X	FOOTING - TRANSVERSE
A502	X	22	4'-8"	-	FOOTING - TRANSVERSE
A503	X	22	6'-2"	-	FOOTING - TRANSVERSE
A504	X	27	9'-6"	-	FOOTING - LONGITUDINAL
A805	X	28	23'-0"	-	CAISSON - VERTICAL
A406	X	42	8'-0"	X	CAISSON - TRANSVERSE

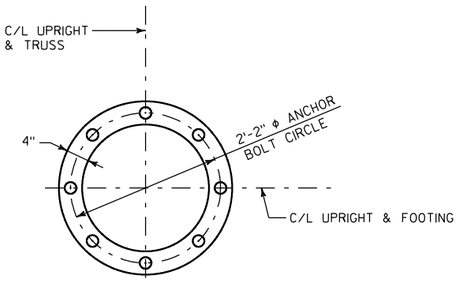


PLAN

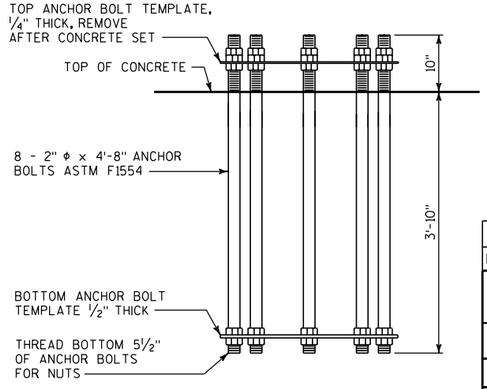


SECTION B-B
(OTHER CAISSON SIMILAR)





TOP VIEW OF TOP & BOTTOM TEMPLATES



ANCHOR BOLT DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES

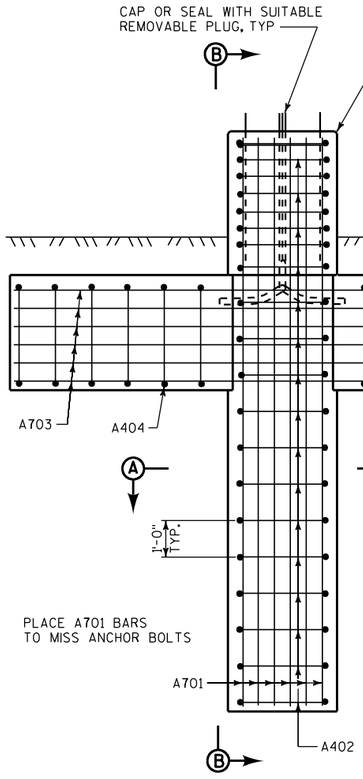
DRAWN BY ASW | PLANS CK'D. SGM

S-40-871
FOOTING DETAILS

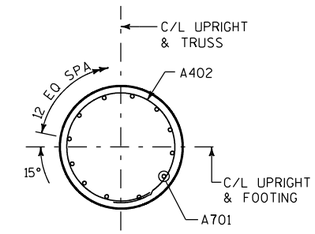
SHEET 5 OF 12

8

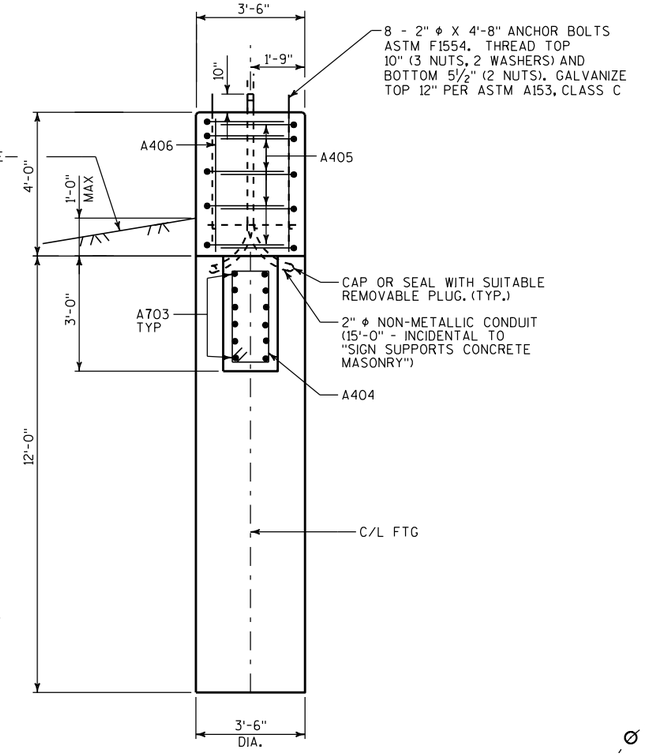
8



ELEVATION



SECTION A-A



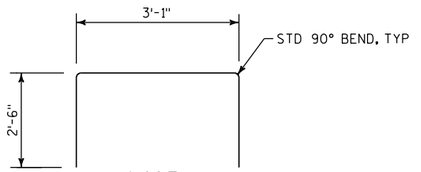
SECTION B-B

BILL OF BARS

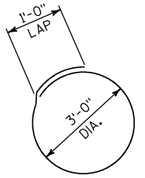
NOTE:
THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	LOCATION
A701	X	12	15'-6"		FOOTING - COLUMN/TOP
A402	X	16	11'-2"	X	FOOTING - COLUMN/TOP
A703	X	12	15'-0"		FOOTING - WINGS
A404	X	12	7'-6"	X	FOOTING - WINGS
A405	X	10	7'-11"	X	FOOTING - TOP
A406	X	4	3'-6"		FOOTING - TOP - COLUMNS

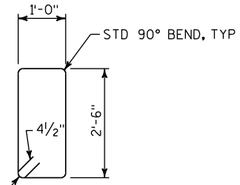
BILL OF BARS SHOWN IS ONLY FOR ONE FOUNDATION OF ONE SIGN STRUCTURE.



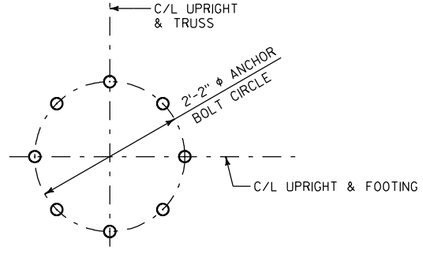
A405

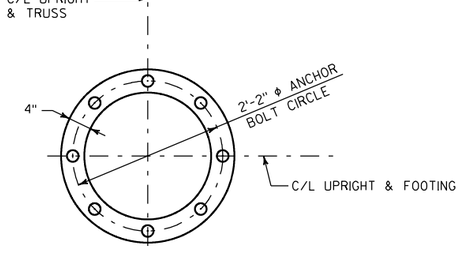


A402

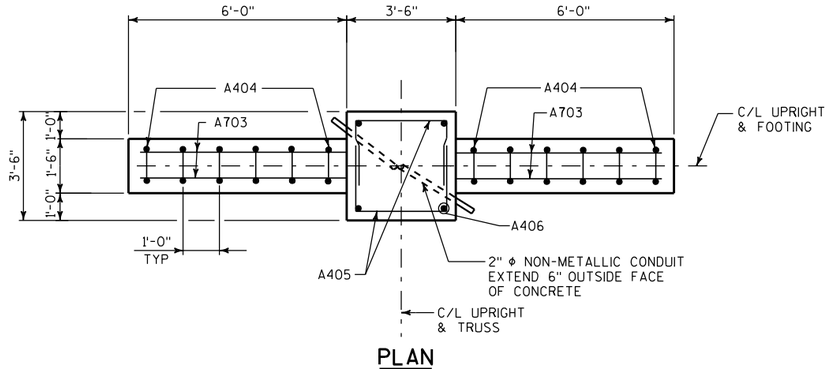


A404
(STIRRUP)

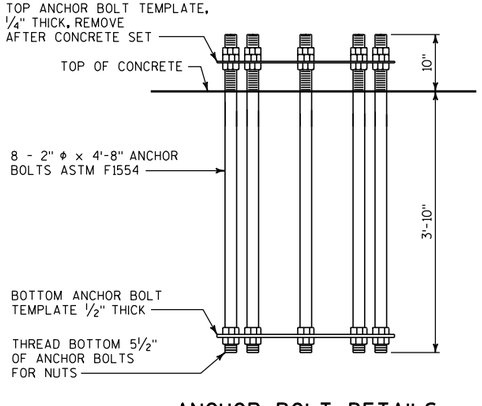




TOP VIEW OF TOP & BOTTOM TEMPLATES



PLAN



ANCHOR BOLT DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

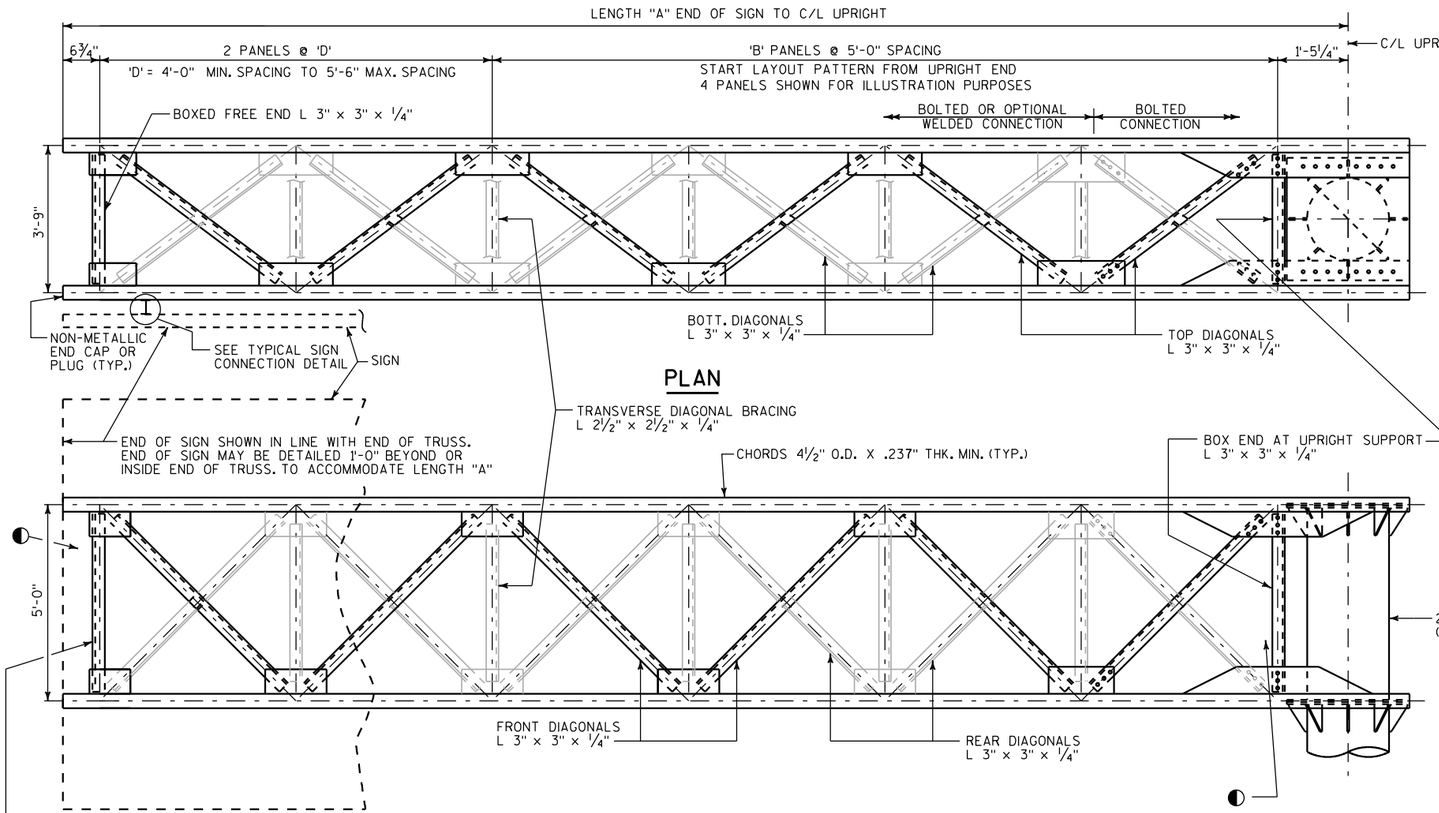
CANTILEVER SIGN STRUCTURES

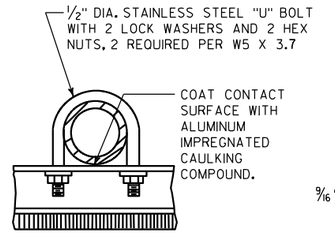
DRAWN BY EKM | PLANS CK'D. SGM

S-40-872 &
S-40-873
FOOTING DETAILS

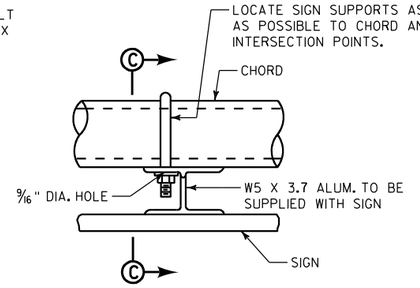
SHEET 6 OF 12

STATE PROJECT NUMBER
2010-14-70

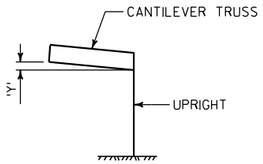




SECTION C-C



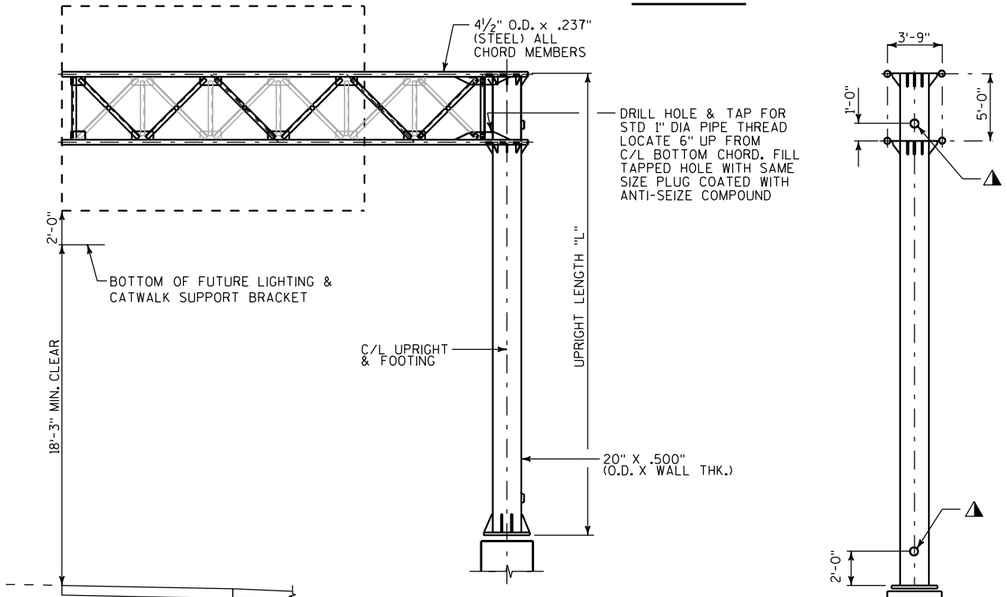
TYPICAL SIGN CONNECTION



CAMBER DIAGRAM

TABLE OF DIMENSIONS

STRUCTURE	"A"	"L"	"B"	"D"	"Y"
S-40-871	41'-0"	23'-0"	6	4'-6"	5⅛"
S-40-872	27'-0"	22'-10"	3	5'-0"	1¾"
S-40-873	25'-0"	24'-9"	3	4'-0"	1¾"



ELEVATION

(FOR PAVEMENT AND TOP OF FOOTING ELEVATIONS, SEE SHEETS 2 THRU 4)

END VIEW

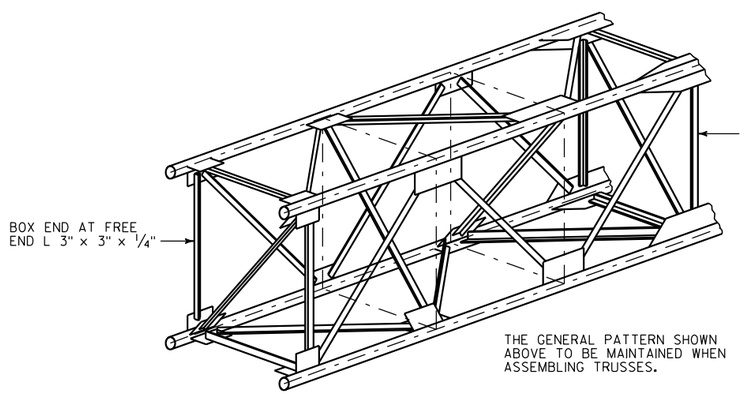
LEGEND

◐ SEE CANTILEVER SIGN TRUSS DETAILS SHEET FOR CONNECTION OF TRANSVERSE DIAGONAL BRACING AT UPRIGHT SUPPORT AND FREE END

⚠ HANDHOLE, SEE SHT 9 FOR DETAILS

NOTES

PREFABRICATE CAMBER INTO THE HORIZONTAL SUPPORT PROVIDING AN AMOUNT "Y" AT THE END OF TRUSS SHOWN IN THE "CAMBER DIAGRAM". DO NOT RAKE VERTICAL UPRIGHT BY ADJUSTMENT OF THE LEVELING NUTS.



THE GENERAL PATTERN SHOWN ABOVE TO BE MAINTAINED WHEN ASSEMBLING TRUSSES.

TYPICAL TRUSS SECTION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES

DRAWN BY EKM | PLANS CK'D. SGM

GALVANIZED STEEL CANTILEVER SIGN TRUSS

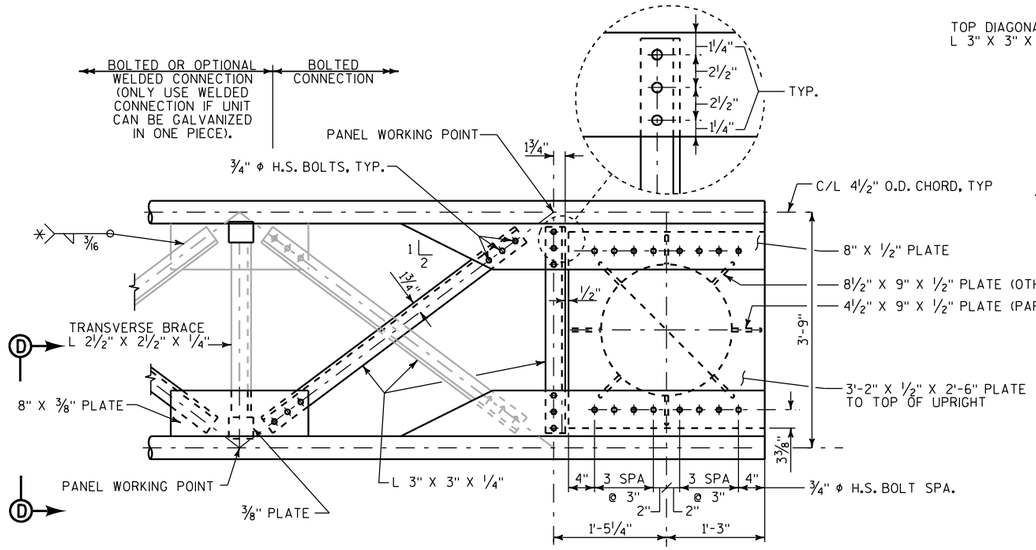
SHEET 7 OF 12

8

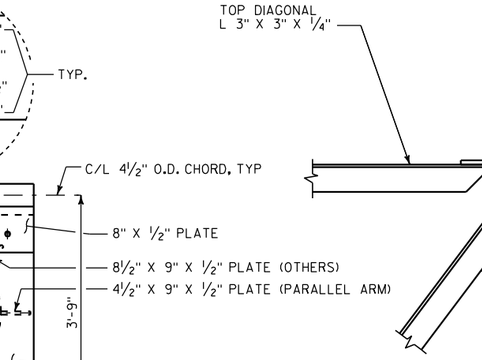
8

FILE NAME : W:\PDS\C3D\10603316\70\Structs\S-40-0873\cds\Final\080303_de.dgn
PLOT DATE : 27-JUL-2017 10:13
PLOT BY : mscekm
PLOT NAME : 080303_de
PLOT SCALE : 4:1

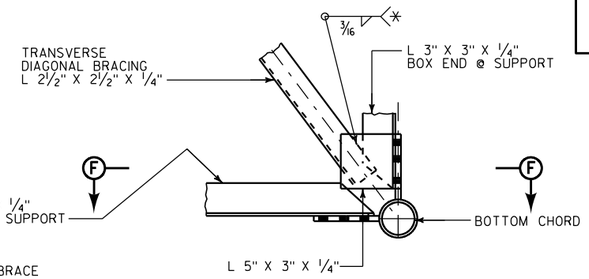
STATE PROJECT NUMBER
2010-14-70



PLAN TRUSS TO UPRIGHT

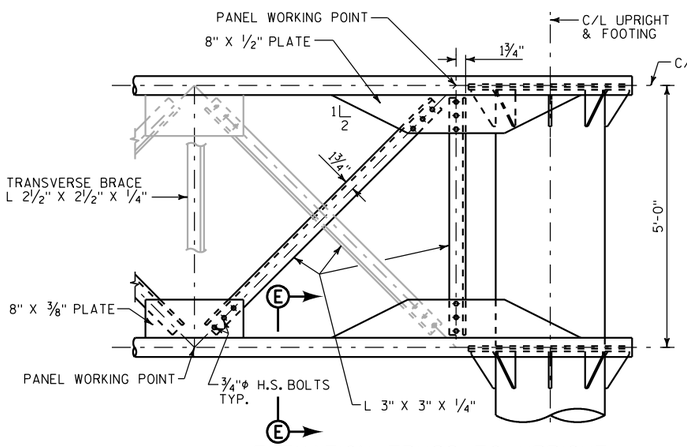


SECTION D-D

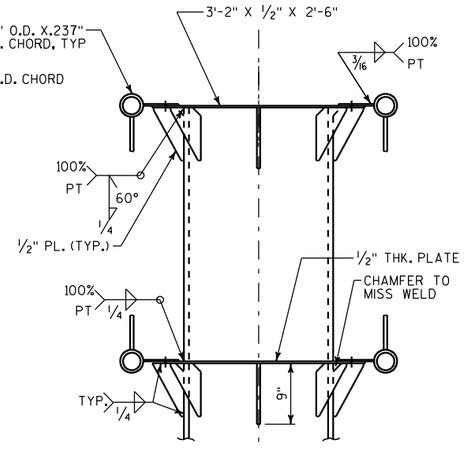


SECTION E-E

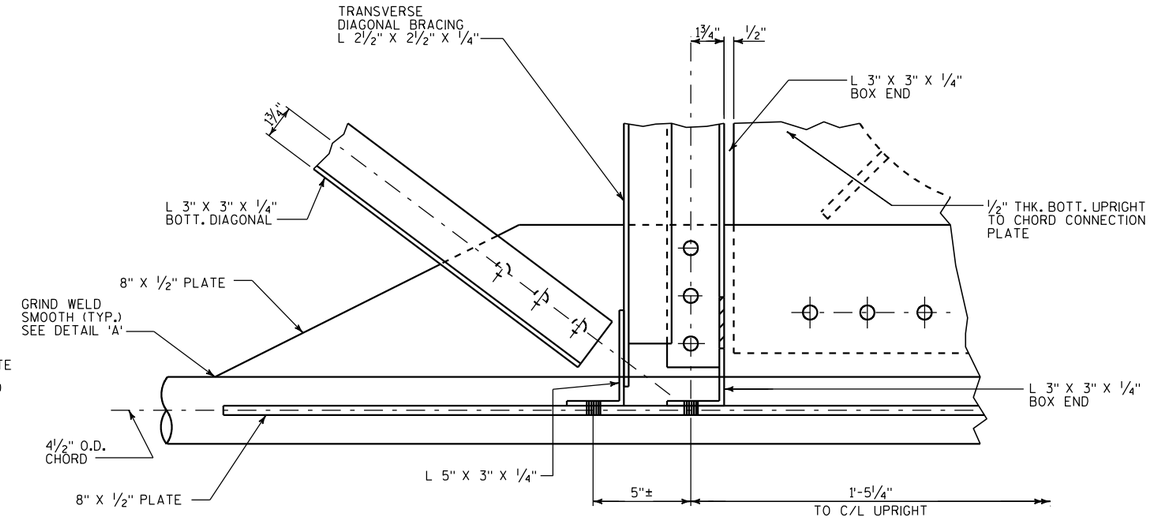
✳ ANGLE	WELD LENGTH (MIN.)
L 2½" X 2½" X ¼"	7"
L 3" X 3" X ¼"	8"



ELEVATION TRUSS TO UPRIGHT

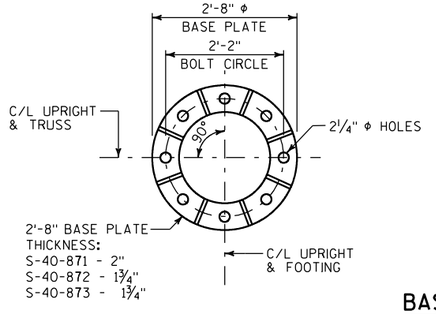


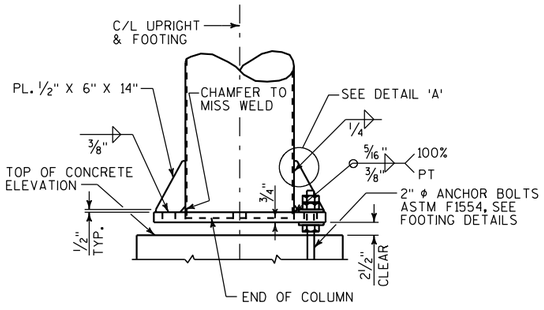
END VIEW TRUSS TO UPRIGHT



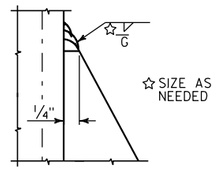
SECTION F-F

(LOOKING DOWN @ BOTT. HORIZ. PLANE @ FRONT CHORD)

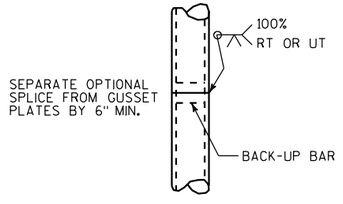




BASE PLATE DETAILS



DETAIL 'A'



OPTIONAL COLUMN OR CHORD SPLICE DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES

DRAWN BY EKM | PLANS CK'D. SGM

GALVANIZED STEEL CANTILEVER SIGN TRUSS DETAILS

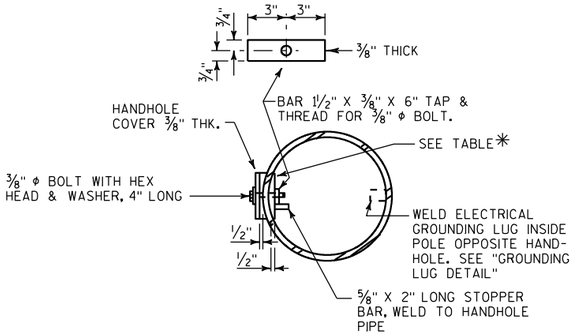
SHEET 8 OF 12

8

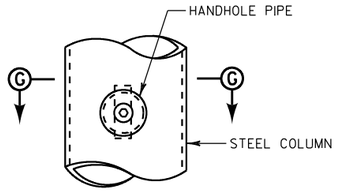
8

STATE PROJECT NUMBER

2010-14-70



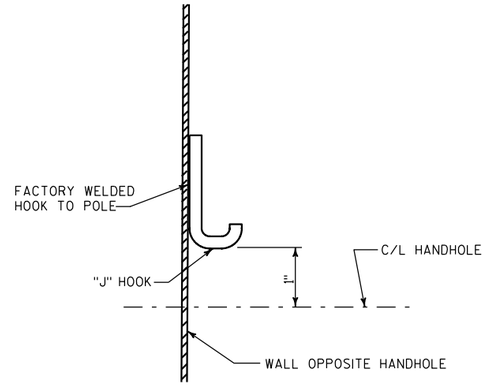
SECTION G-G



HANDHOLE DETAILS

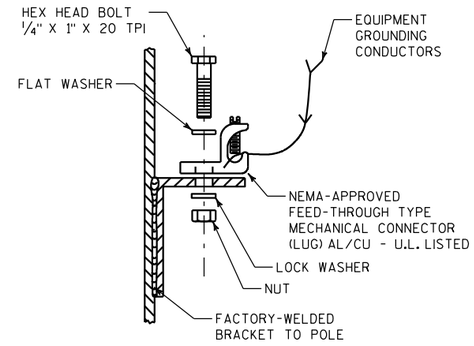
HANDHOLE NOTES

HANDHOLES SHALL BE LOCATED IN THE COLUMN AS DETAILED ON SHT 6.



TYPICAL "J" HOOK LOCATION

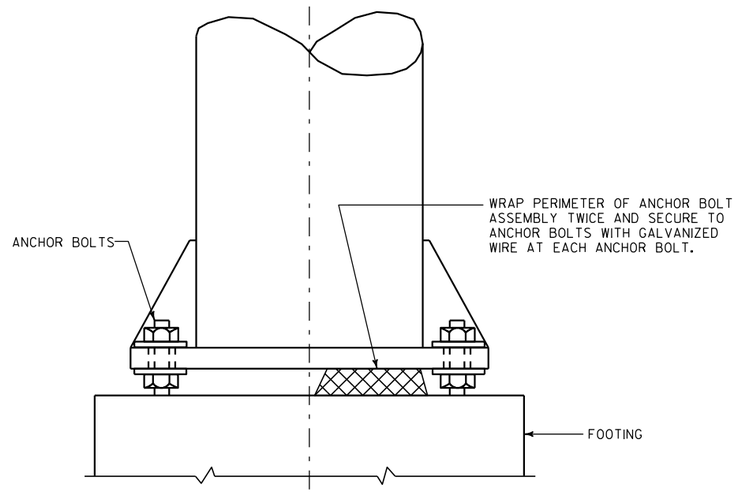
THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF ALL COLUMNS. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

✳ UPRIGHT DIAM. SIZE	HANDHOLE PIPE O.D. X MIN. THK.
UP TO AND INCLD. 16" X .375"	5.562" X .500"
GREATER THAN 16" X .375" TO AND INCLD. 24" X .562"	6.625" X .562"



RODENT SCREEN

(ONLY REQ'D. WHEN ELECTRICAL DEVICES ARE INSTALLED)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES

DRAWN BY EKM | PLANS CK'D. SGM

HANDHOLE DETAILS

SHEET 9 OF 12

FILE NAME : W:\PDS\C3D\10603316\70\Structs\S-40-0873\cds\Final\080305_de.dgn
PLOT DATE : 27-JUL-2017 10:13
PLOT BY : mscekm
PLOT NAME : 080305_de
PLOT SCALE : 4:1

BORING #	DATE COMPLETED	LATITUDE	LONGITUDE
B-071-1	MAY 31, 2017	43.06419	-88.053055
BORINGS COMPLETED BY: GESTRA ENGINEERING, INC			
REPORT COMPLETED BY: CH2M			

NOTE:

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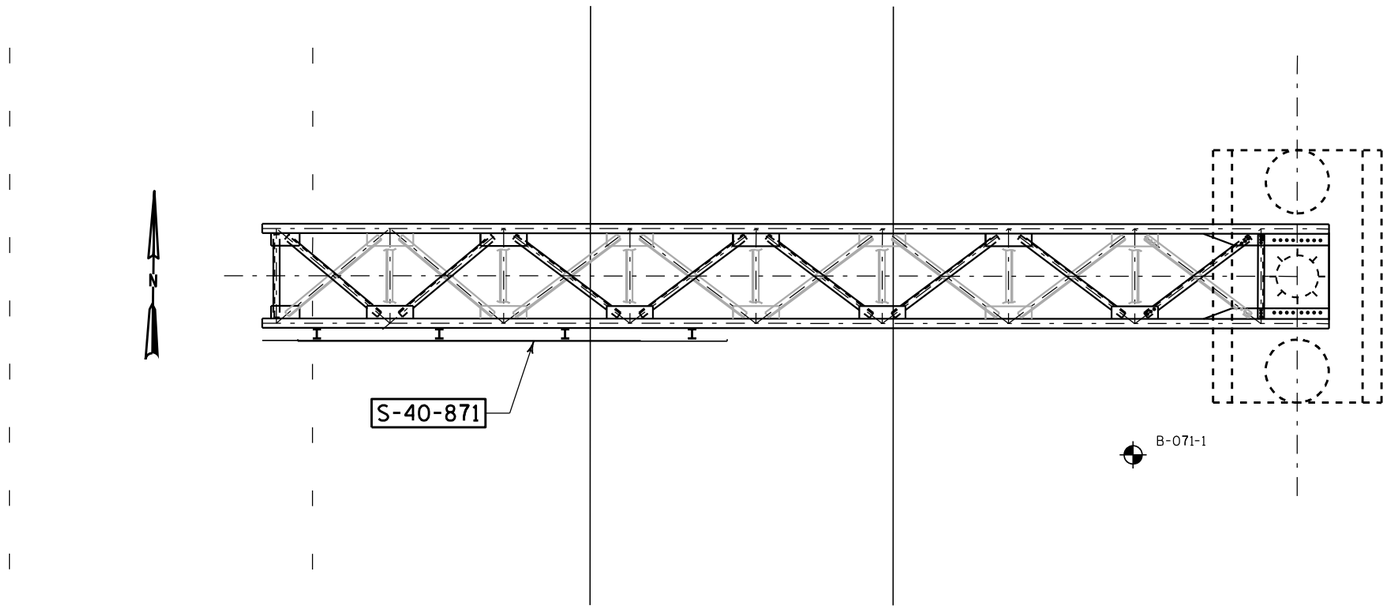
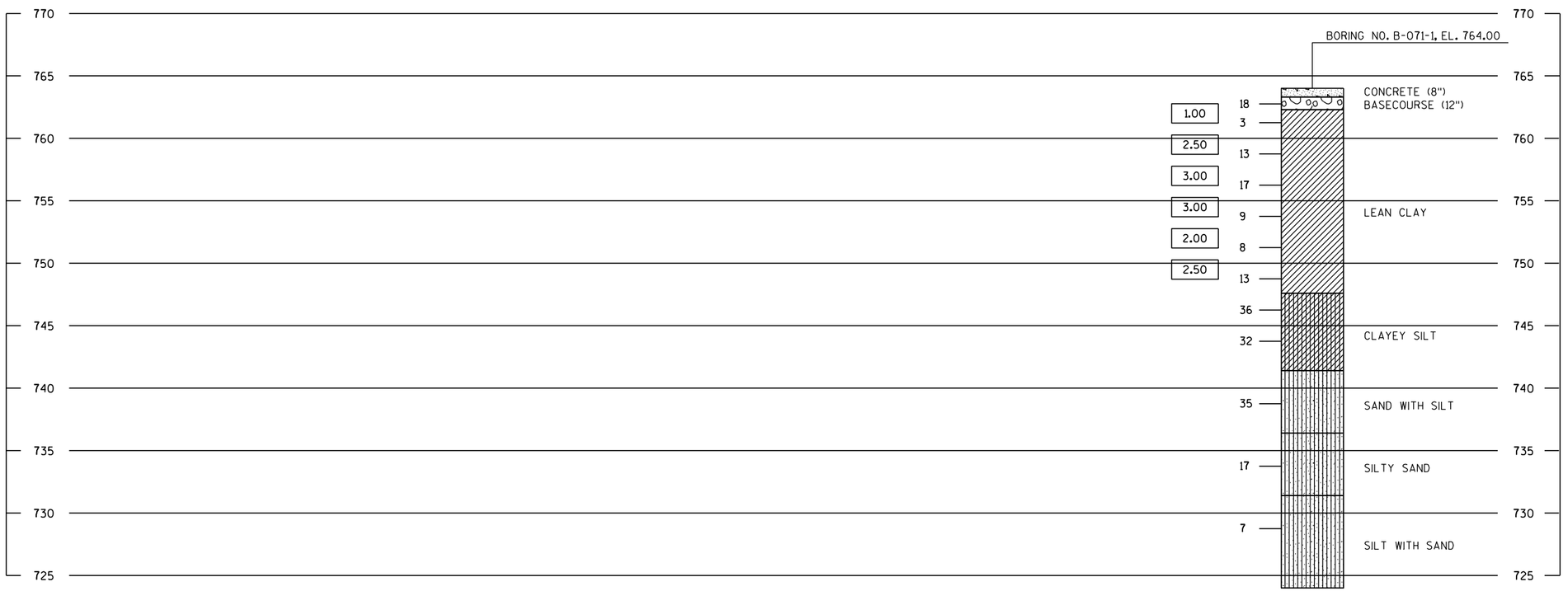
DENOTES SOIL BORING LOCATION



PLAN



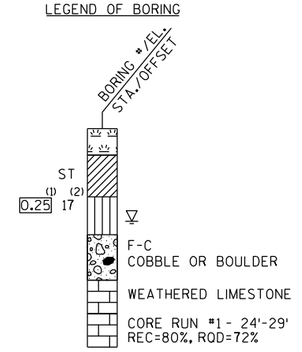
STATE PROJECT NUMBER

2010-14-70

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES

DRAWN BY ASW | PLANS CK'D. SGM

S-40-871
SUBSURFACE
EXPLORATION

SHEET 10 OF 12

8

8

FILE NAME : W:\PDS\C3D\10603316\70\Structs\S-40-0873\cds\Final\080401_se.dgn PLOT DATE : 27-JUL-2017 10:13 PLOT BY : mscekm PLOT NAME : 080401_se PLOT SCALE : 6:1

BORING #	DATE COMPLETED	LATITUDE	LONGITUDE
B-077-1	MAY 31, 2017	43.071193	-88.055763
BORINGS COMPLETED BY: GESTRA ENGINEERING, INC			
REPORT COMPLETED BY: CH2M			

NOTE:

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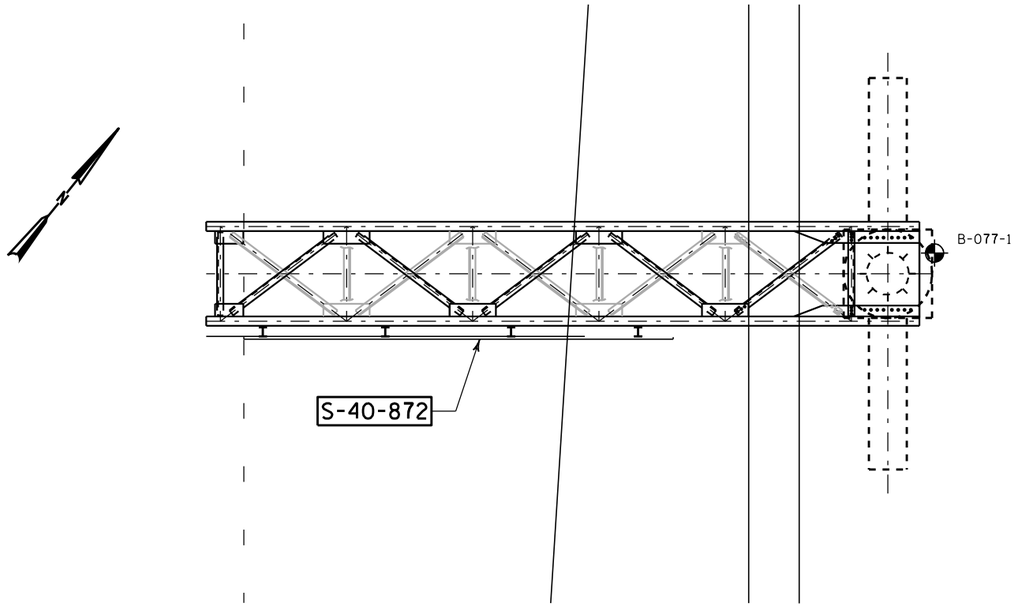

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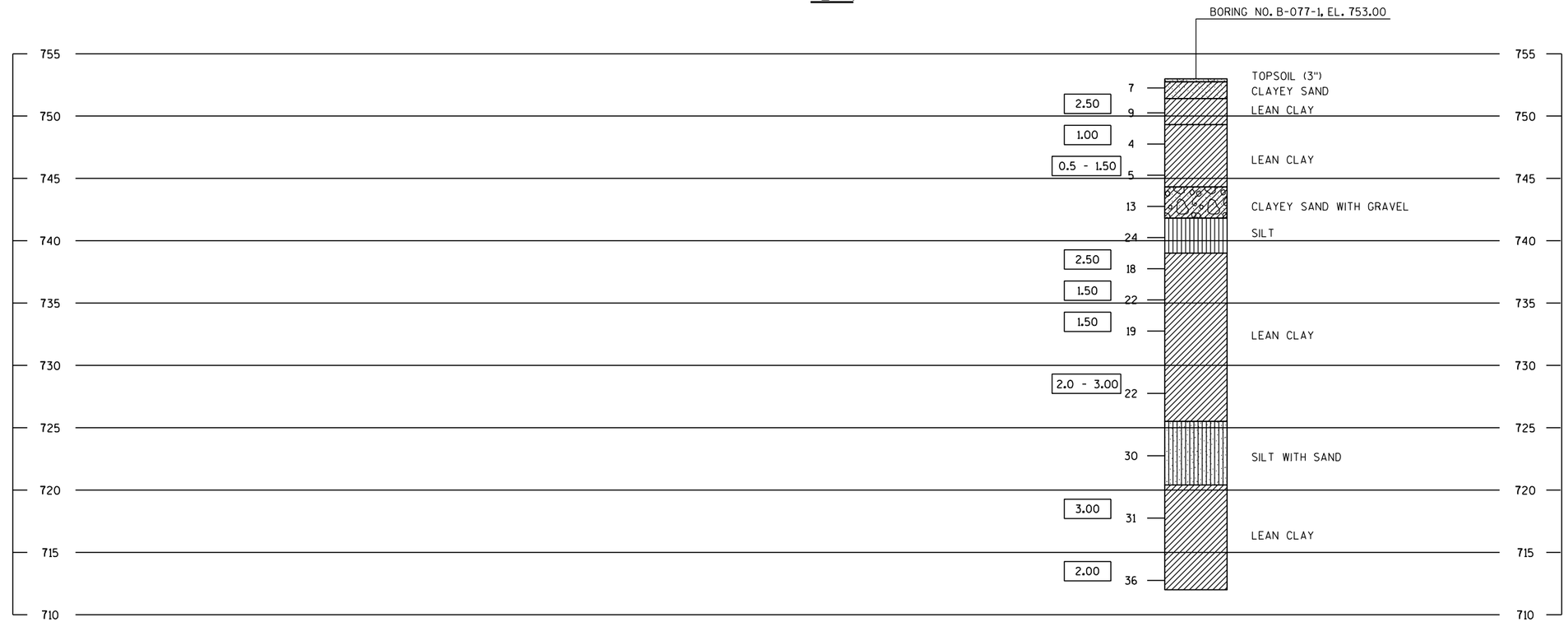


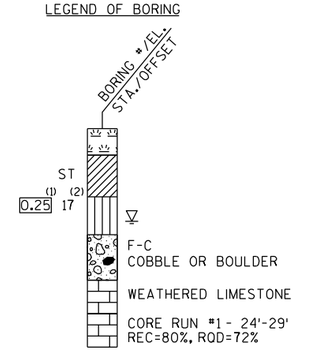
STATE PROJECT NUMBER

2010-14-70

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES

DRAWN BY	ASW	PLANS CK'D.	SGM

S-40-872
SUBSURFACE
EXPLORATION

SHEET 11 OF 12

8

8

FILE NAME : W:\PDS\C3D\10603316\70\Structs\S-40-0873\cds\Final\080402_se.dgn PLOT DATE : 27-JUL-2017 10:13 PLOT BY : mscekm PLOT NAME : 080402_se PLOT SCALE : 6:1

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-3	NOVEMBER 5, 2014	310040.4	567628.0
BORINGS COMPLETED BY: PSI			
REPORT COMPLETED BY: WISDOT GEOTECHNICAL UNIT			

NOTE:

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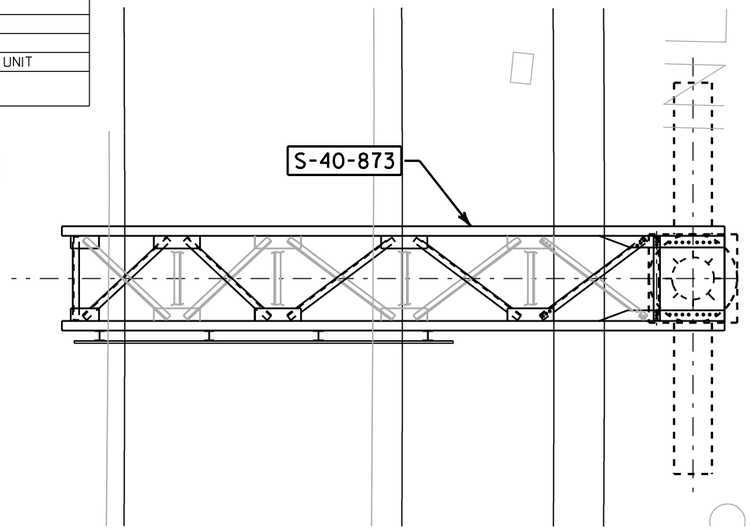
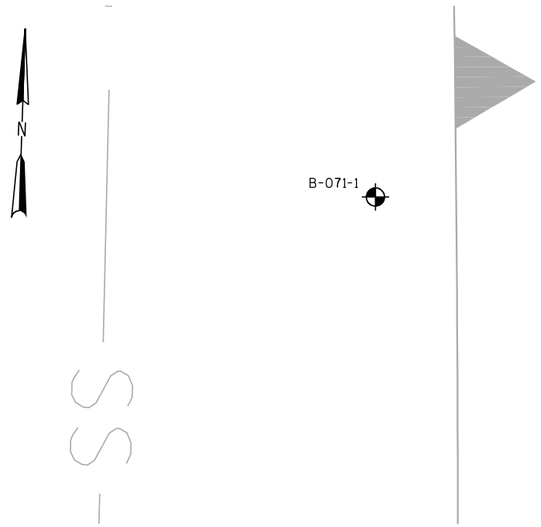
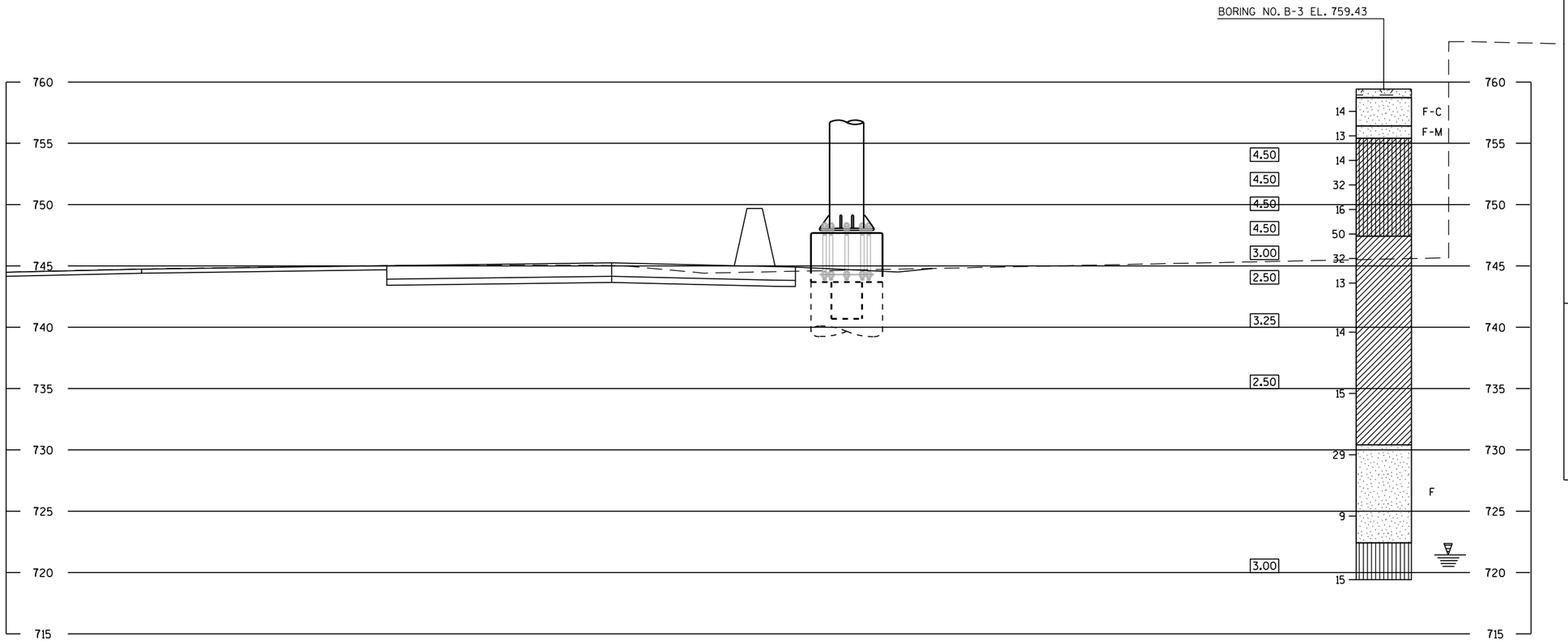




PLAN



STATE PROJECT NUMBER

2010-14-70

MATERIAL SYMBOLS

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CONCRETE	FILL	GRAVEL
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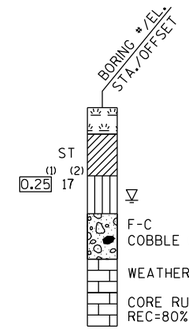

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES

DRAWN BY	EKM	PLANS CK'D.	SGM

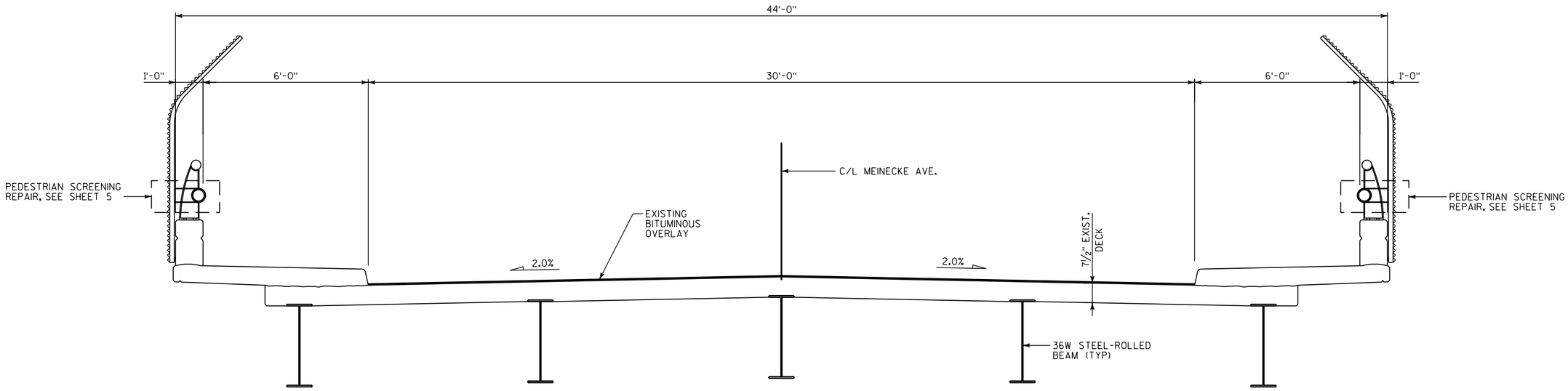
S-40-873
SUBSURFACE
EXPLORATION

SHEET 12 OF 12

8

8

STATE PROJECT NUMBER
2010-14-70



TYPICAL SECTION
(LOOKING EAST)

GENERAL NOTES

1. THE SCOPE OF THIS BRIDGE REHABILITATION PROJECT IS AS FOLLOWS:
   - SEAL JOINTS AT THE ENDS OF THE BRIDGE DECK
   - REPAIR COVER PLATES ON THE SIDEWALK JOINTS
   - CONCRETE SURFACE REPAIR ON PIER CAPS AND COLUMNS AS NOTED ON THE PLANS
   - PEDESTRIAN SCREENING REPAIR
2. DRAWINGS SHALL NOT BE SCALED.
3. DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
4. BEVEL EXPOSED EDGES OF CONCRETE TO MATCH EXISTING BEVELS UNLESS OTHERWISE NOTED.
5. CONCRETE SURFACE REPAIR LOCATIONS ARE LIMITED TO PIER COLUMNS AND CAPS LOCATED IN AREAS NEAR TRAFFIC AND OTHER AREAS OF SIGNIFICANT CONCRETE DETERIORATION. AREAS OF SPALLED AND DELAMINATED CONCRETE THAT DON'T MEET THIS DESCRIPTION ARE NOT TO BE REPAIRED.

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEM	UNIT	SUPER	WEST ABUT.	EAST ABUT.	PIER 1	PIER 2	PIER 3	TOTAL
509.1500	CONCRETE SURFACE REPAIR	SF	-	-	-	66	3	11	80
SPV.0060.4010	EMBEDDED GALVANIC ANODES	EACH	-	-	-	45	2	8	55
SPV.0090.4020	ROADWAY JOINT SLIDING PLATE SEALANT	LF	60	-	-	-	-	-	60
SPV.0105.4010	SIDEWALK JOINT SLIDING PLATE REPAIR	LS	1	-	-	-	-	-	1
SPV.0105.4020	PEDESTRIAN SCREENING REPAIR	LS	1	-	-	-	-	-	1

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-259

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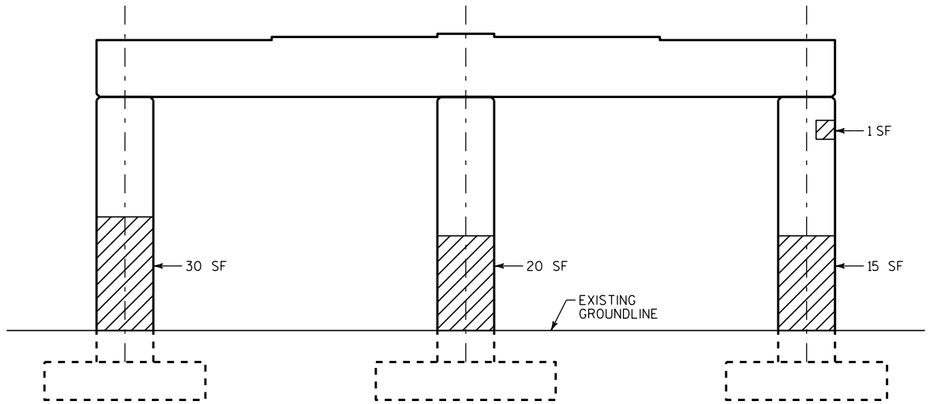
TYPICAL SECTION
GENERAL NOTES
& QUANTITIES

SHEET 2 OF 5

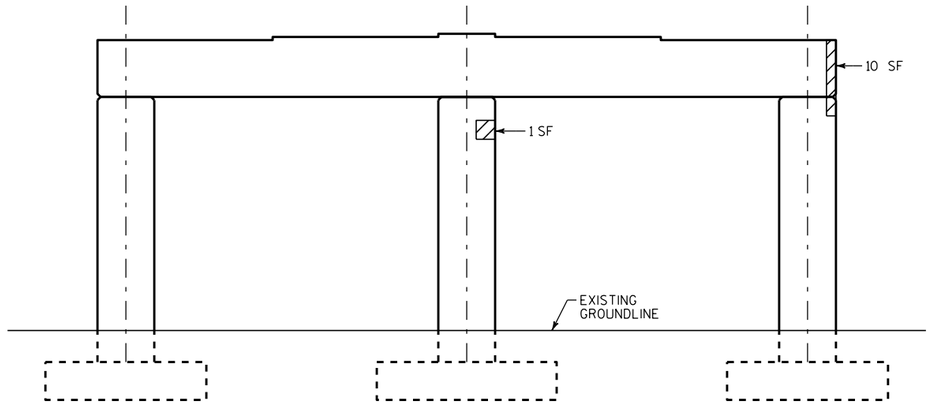
FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14631\B259-080102_ts.dgn
PLOT DATE : 01-AUG-2017 10:43
PLOT BY : gmcginn
PLOT NAME : B259-080102_ts
PLOT SCALE : 4:1

STATE PROJECT NUMBER
2010-14-70



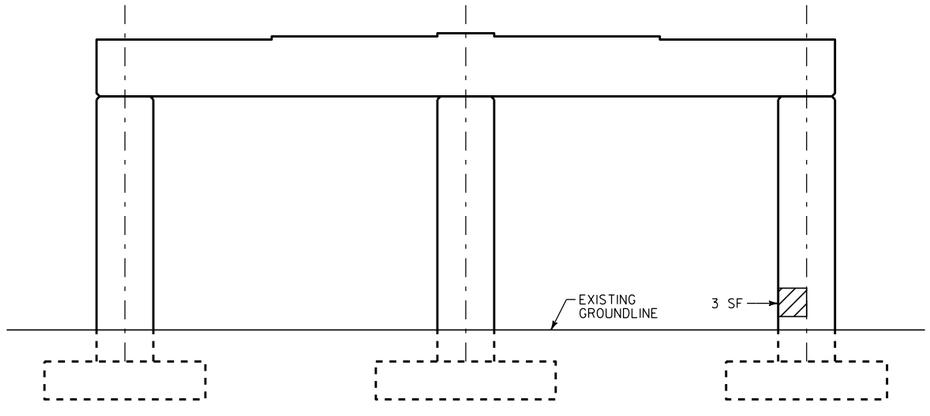
PIER 1 - EAST ELEVATION

LOOKING WEST



PIER 3 - EAST ELEVATION

LOOKING WEST



PIER 2 - WEST ELEVATION

LOOKING EAST

LEGEND

CONCRETE SURFACE REPAIR

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-259

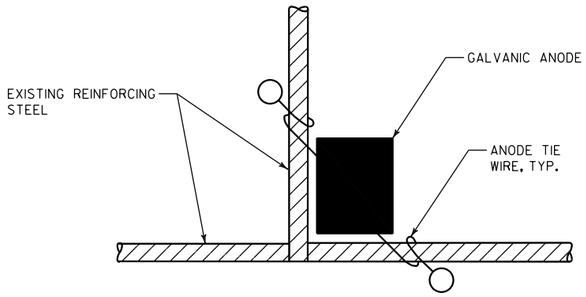
DRAWN BY GLM | PLANS CK'D. SGM

CONCRETE SURFACE REPAIR

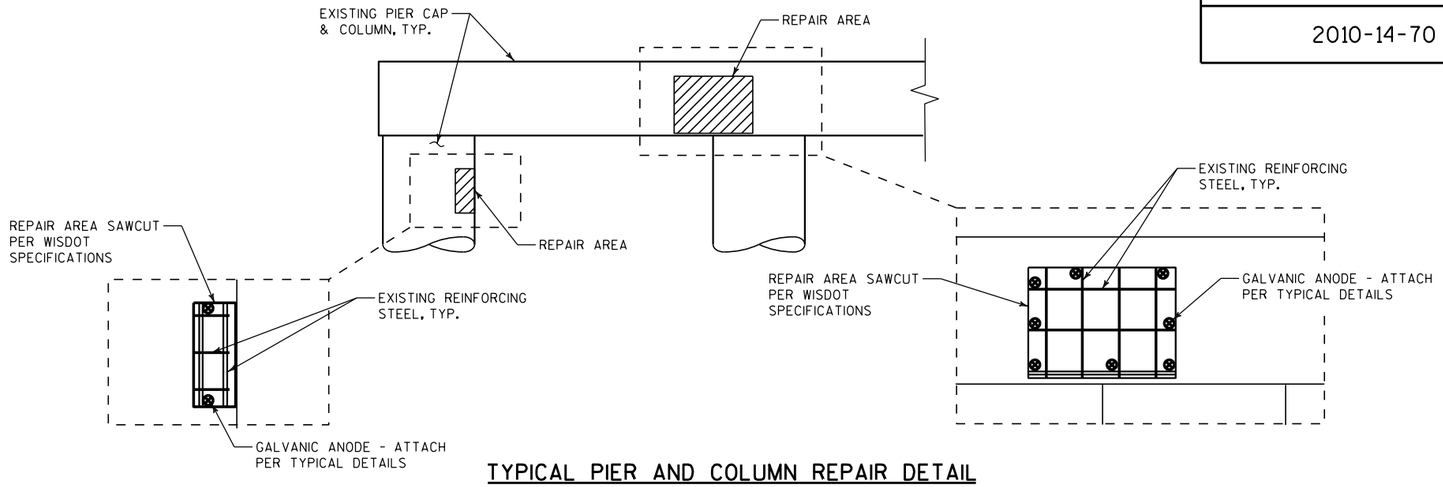
SHEET 3 OF 5

FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14631\B259-080302_pi.dgn
PLOT DATE : 01-AUG-2017 07:13
PLOT BY : gmcginn
PLOT NAME : B259-080302_pi
PLOT SCALE : 8:1

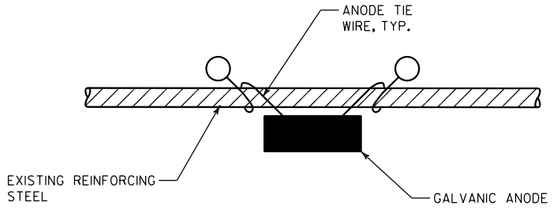
STATE PROJECT NUMBER
2010-14-70



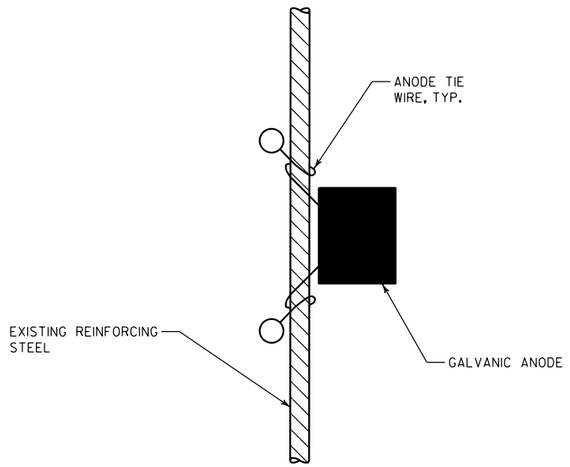
TYPICAL INSTALLATION AT BAR STEEL INTERSECTION



TYPICAL PIER AND COLUMN REPAIR DETAIL



TYPICAL INSTALLATION BELOW BAR STEEL



TYPICAL INSTALLATION BESIDE BAR STEEL

NOTES

SEE SPECIAL PROVISION "EMBEDDED GALVANIC ANODES" FOR DESCRIPTION. MATERIALS. CONSTRUCTION. MEASUREMENT. AND PAYMENT INFORMATION.

ANODES NEAREST TO EDGE OF REPAIR TO BE WITHIN 6" OF EDGE.

AFTER PLACEMENT. GALVANIC ANODES SHOULD MAINTAIN A MINIMUM TOP COVER OF 1½" AND A MINIMUM BOTTOM COVER OF ¾".

EXISTING REINFORCING STEEL TO BE COMPLETELY CLEANED OF CORROSIVE MATERIAL PRIOR TO INSTALLATION OF GALVANIC ANODES.

ENSURE ALL EXPOSED REINFORCING STEEL IS SECURELY FASTENED TOGETHER WITH TIE WIRE TO PROVIDE GOOD CONTINUITY. SEE SPECIAL PROVISIONS.

GALVANIC ANODES SHALL BE PLACED PER SPECIAL PROVISIONS "EMBEDDED GALVANIC ANODES". GALVANIC ANODES ESTIMATED QUANTITIES ON PLANS ARE BASED ON A MAXIMUM SPACING OF 24 INCHES IN EACH DIRECTION OF THE ESTIMATED "CONCRETE SURFACE REPAIR" AREA.

EXISTING REINFORCING BARS MAY BE CORRODED AND/OR DAMAGED DURING CONCRETE REMOVAL. PRESERVE AND INCORPORATE EXISTING REINFORCEMENT.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-259

DRAWN BY	GLM	PLANS CK'D.	SGM

GALVANIC ANODES

SHEET 4 OF 5

FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14631\B259_080301_pi.dgn
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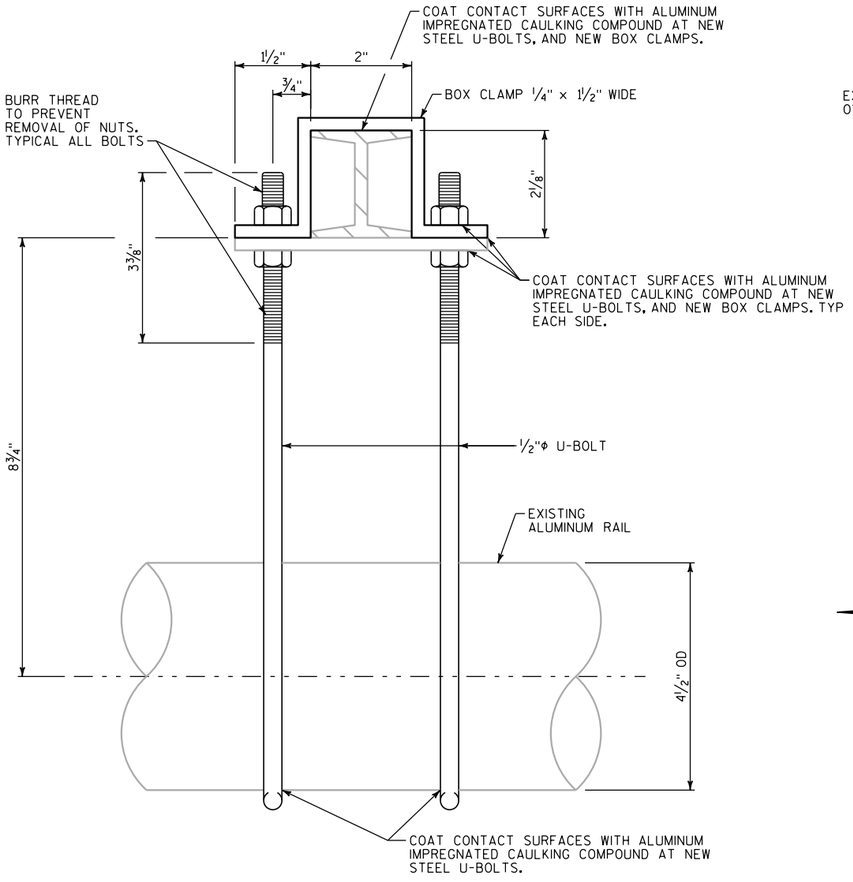
PLOT BY : gmcginn
PLOT NAME : B259_080301_pi
PLOT SCALE : 2:1

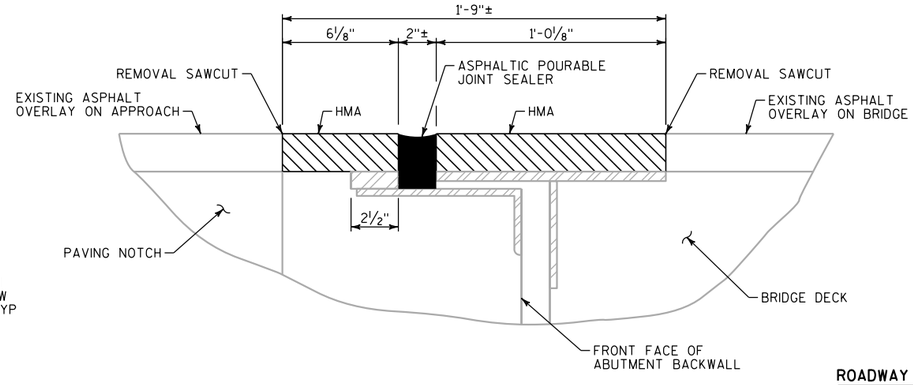
STATE PROJECT NUMBER
2010-10-70



U-BOLT AND BOX CLAMP DETAIL

U-BOLT AND BOX CLAMP REPAIR NOTES

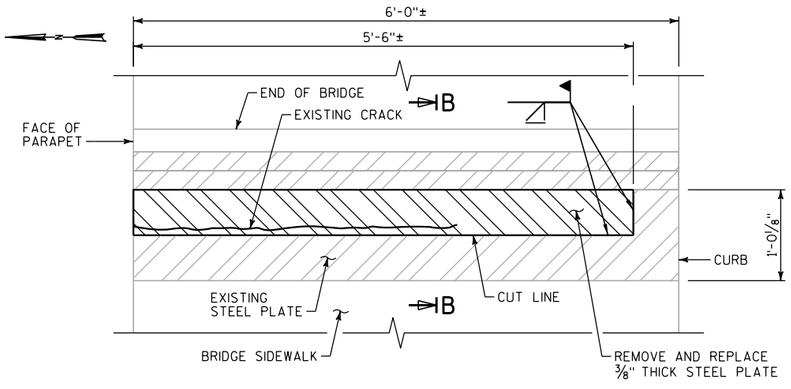
1. REMOVE AND REPLACE U-BOLTS THAT ARE BROKEN, CRACKED AND FRAYED ON THE PEDESTRIAN SCREENING. REPLACE A TOTAL OF 14 U-BOLTS.
2. U-BOLTS ARE TO BE MADE OF GALVANIZED STEEL.
3. ONLY REMOVE AND REPLACE U-BOLTS AT ONE POST LOCATION AT A TIME.
4. REMOVE AND REPLACE 2 BROKEN BOX CLAMPS ON THE SOUTH PEDESTRIAN SCREENING. REMOVE AND REPLACE THE FABRIC TIE TO ALLOW FOR BOX CLAMP INSTALLATION.
5. DIMENSIONS SHOWN ARE FROM THE ORIGINAL PLANS. CONTRACTOR SHALL FIELD VERIFY ALL U-BOLT AND BOX CLAMP DIMENSIONS PRIOR TO FABRICATION.



SECTION A-A

ROADWAY JOINT REPAIR NOTES

1. REMOVE THE EXISTING ASPHALTIC OVERLAY AT THE EXPANSION JOINTS AT THE EAST AND WEST ENDS OF THE BRIDGE FOR THE FULL 30 FOOT WIDTH OF THE ROADWAY. DEFINE REMOVAL LIMITS WITH A SAWCUT.
2. CLEAN THE SURFACE OF EXPANSION JOINT PLATES OF ANY LOOSE MATERIAL.
3. PLACE NEW HMA OVERLAY OVER THE EXPANSION JOINT AREA. THICKNESS TO MATCH THE ADJOINING OVERLAY. FORM OR SAWCUT A GAP IN THE OVERLAY AT THE EDGES OF THE EXPANSION JOINT PLATES TO ALLOW FOR MOVEMENT. FILL THE GAP WITH ASPHALTIC POURABLE JOINT SEALER.

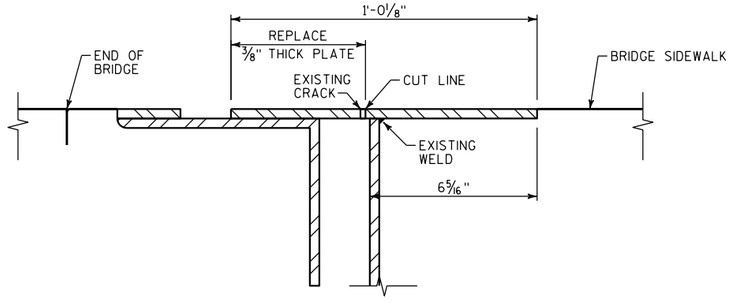


DETAIL 1

PLAN

SIDEWALK JOINT COVER PLATE REPAIR NOTES

1. CUT AND REMOVE THE CRACKED PORTION OF THE EXISTING SIDEWALK COVER PLATE AT THE SOUTHWEST CORNER OF THE BRIDGE.
2. CLEAN THE NOW EXPOSED SURFACE BELOW THE SLIDING PLATE WITH A WIRE BRUSH, SCRAPER, AND GRINDER AS NEEDED TO REMOVE ANY RUST BUILD UP.
3. WELD THE NEW PLATE IN PLACE WITH A CONTINUOUS SINGLE SIDED BEVEL WELD. GRIND THE SURFACE OF THE WELD FLUSH. THE NEW PLATE MUST LAY FLAT AND NOT BEND UP TO BE A TRIPPING HAZARD.



SECTION B-B

EXISTING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-40-259

DRAWN BY GLM | PLANS CK'D. SGM

DETAILS

SHEET 5 OF 5

FILE NAME : c:\users\gmcginn\pw\ch2m_den_003\dms14631\B259-080303_de.dgn
PLOT DATE : 01-AUG-2017 07:14
PLOT BY : gmcginn
PLOT NAME : B259-080303_de
PLOT SCALE : 0.25:1

Division 1 IH 41/USH 45 NB

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Expanded Fill	Expanded EBS Backfill	Reduced EBS In Fill	Mass Ordinate
							Note 1	Note 2	Note 3		1.0	1.2	1.3 Note 4	0.8 Note 5	Note 6
86+50 AH	8650.00	0.00	8.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87+00	8700.00	50.00	8.24	0.00	0.00	0.00	15.26	0.00	0.00	0.00	15.26	0.00	0.00	0.00	15.26
87+50	8750.00	50.00	8.24	0.00	0.00	0.00	15.25	0.00	0.00	0.00	30.51	0.00	0.00	0.00	30.51
88+00	8800.00	50.00	8.25	0.00	0.00	0.00	15.26	0.00	0.00	0.00	45.78	0.00	0.00	0.00	45.78
88+50	8850.00	50.00	8.21	0.00	0.00	0.00	15.24	0.00	0.00	0.00	61.02	0.00	0.00	0.00	61.02
89+00	8900.00	50.00	9.73	0.00	0.00	0.00	16.61	0.00	0.00	0.00	77.63	0.00	0.00	0.00	77.63
89+50	8950.00	50.00	9.73	0.00	0.00	0.00	18.01	0.00	0.00	0.00	95.64	0.00	0.00	0.00	95.64
90+00	9000.00	50.00	9.74	0.00	0.00	0.00	18.02	0.00	0.00	0.00	113.67	0.00	0.00	0.00	113.67
90+50	9050.00	50.00	9.75	0.00	0.00	0.00	18.04	0.00	0.00	0.00	131.71	0.00	0.00	0.00	131.71
91+00	9100.00	50.00	9.75	0.00	0.00	0.00	18.05	0.00	0.00	0.00	149.76	0.00	0.00	0.00	149.76
91+44 BK	9144.00	44.00	9.74	0.00	0.00	0.00	15.88	0.00	0.00	0.00	165.64	0.00	0.00	0.00	165.64
					Column totals		165.64	0.00	0.00	0.00					

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

Division 1 IH 41/USH 45 NB

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Expanded Fill	Expanded EBS Backfill	Reduced EBS In Fill	Mass Ordinate
							Note 1	Note 2	Note 3		1.0	1.2	1.3 Note 4	0.8 Note 5	Note 6
101+20 AH	10120.00	0.00	11.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
101+50	10150.00	30.00	11.91	0.00	0.00	0.00	13.23	0.00	0.00	0.00	13.23	0.00	0.00	0.00	13.23
102+00	10200.00	50.00	11.90	0.00	0.00	0.00	22.04	0.00	0.00	0.00	35.27	0.00	0.00	0.00	35.27
102+50	10250.00	50.00	11.92	0.00	0.00	0.00	22.05	0.00	0.00	0.00	57.32	0.00	0.00	0.00	57.32
103+00	10300.00	50.00	11.90	0.00	0.00	0.00	22.05	0.00	0.00	0.00	79.37	0.00	0.00	0.00	79.37
103+50	10350.00	50.00	11.90	0.00	0.00	0.00	22.04	0.00	0.00	0.00	101.40	0.00	0.00	0.00	101.40
104+00	10400.00	50.00	11.88	0.00	0.00	0.00	22.01	0.00	0.00	0.00	123.42	0.00	0.00	0.00	123.42
104+50	10450.00	50.00	11.88	0.00	0.00	0.00	21.99	0.00	0.00	0.00	145.41	0.00	0.00	0.00	145.41
105+00	10500.00	50.00	11.82	0.00	0.00	0.00	21.94	0.00	0.00	0.00	167.35	0.00	0.00	0.00	167.35
105+50	10550.00	50.00	11.87	0.00	0.00	0.00	21.94	0.00	0.00	0.00	189.28	0.00	0.00	0.00	189.28
106+00	10600.00	50.00	11.86	0.00	0.00	0.00	21.97	0.00	0.00	0.00	211.25	0.00	0.00	0.00	211.25
106+50	10650.00	50.00	11.92	0.00	0.00	0.00	22.01	0.00	0.00	0.00	233.26	0.00	0.00	0.00	233.26
107+00	10700.00	50.00	11.90	0.00	0.00	0.00	22.05	0.00	0.00	0.00	255.31	0.00	0.00	0.00	255.31
107+50	10750.00	50.00	11.77	0.00	0.00	0.00	21.92	0.00	0.00	0.00	277.23	0.00	0.00	0.00	277.23
108+00	10800.00	50.00	11.81	0.00	0.00	0.00	21.83	0.00	0.00	0.00	299.06	0.00	0.00	0.00	299.06
108+50	10850.00	50.00	10.06	0.00	0.00	0.00	20.25	0.00	0.00	0.00	319.31	0.00	0.00	0.00	319.31
109+00	10900.00	50.00	10.05	0.00	0.00	0.00	18.62	0.00	0.00	0.00	337.92	0.00	0.00	0.00	337.92
109+50	10950.00	50.00	10.06	0.00	0.00	0.00	18.62	0.00	0.00	0.00	356.54	0.00	0.00	0.00	356.54
110+00	11000.00	50.00	10.07	0.00	0.00	0.00	18.63	0.00	0.00	0.00	375.18	0.00	0.00	0.00	375.18
110+50	11050.00	50.00	10.05	0.00	0.00	0.00	18.63	0.00	0.00	0.00	393.80	0.00	0.00	0.00	393.80
111+00	11100.00	50.00	10.00	0.00	0.00	0.00	18.56	0.00	0.00	0.00	412.37	0.00	0.00	0.00	412.37
111+50	11150.00	50.00	9.95	0.00	0.00	0.00	18.47	0.00	0.00	0.00	430.84	0.00	0.00	0.00	430.84

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

(continued)

Division 1 IH 41/USH 45 NB

STATION		Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/ Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/ Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Incremental Vol (CY) (Unadjusted) EBS	Cumulative Vol (CY) Cut 1.0	Cumulative Vol (CY) Expanded Fill 1.2	Cumulative Vol (CY) Expanded EBS Backfill 1.3 Note 4	Cumulative Vol (CY) Reduced EBS In Fill 0.8 Note 5	Mass Ordinate Note 6
112+00		11200.00	50.00	10.07	0.00	0.00	0.00	18.54	0.00	0.00	0.00	449.38	0.00	0.00	0.00	449.38
112+50		11250.00	50.00	10.07	0.00	0.00	0.00	18.65	0.00	0.00	0.00	468.03	0.00	0.00	0.00	468.03
113+00		11300.00	50.00	10.06	0.00	0.00	0.00	18.63	0.00	0.00	0.00	486.66	0.00	0.00	0.00	486.66
113+50		11350.00	50.00	9.88	0.00	0.00	0.00	18.45	0.00	0.00	0.00	505.11	0.00	0.00	0.00	505.11
114+00		11400.00	50.00	9.97	0.00	0.00	0.00	18.38	0.00	0.00	0.00	523.49	0.00	0.00	0.00	523.49
114+50		11450.00	50.00	9.82	0.00	0.00	0.00	18.32	0.00	0.00	0.00	541.81	0.00	0.00	0.00	541.81
115+00		11500.00	50.00	9.99	0.00	0.00	0.00	18.34	0.00	0.00	0.00	560.15	0.00	0.00	0.00	560.15
115+50		11550.00	50.00	10.04	0.00	0.00	0.00	18.54	0.00	0.00	0.00	578.69	0.00	0.00	0.00	578.69
116+00		11600.00	50.00	9.94	0.00	0.00	0.00	18.49	0.00	0.00	0.00	597.18	0.00	0.00	0.00	597.18
116+50		11650.00	50.00	10.00	0.00	0.00	0.00	18.45	0.00	0.00	0.00	615.63	0.00	0.00	0.00	615.63
117+00		11700.00	50.00	9.99	0.00	0.00	0.00	18.50	0.00	0.00	0.00	634.13	0.00	0.00	0.00	634.13
117+50		11750.00	50.00	10.07	0.00	0.00	0.00	18.57	0.00	0.00	0.00	652.70	0.00	0.00	0.00	652.70
118+00		11800.00	50.00	9.87	0.00	0.00	0.00	18.46	0.00	0.00	0.00	671.16	0.00	0.00	0.00	671.16
118+50		11850.00	50.00	9.97	0.00	0.00	0.00	18.37	0.00	0.00	0.00	689.53	0.00	0.00	0.00	689.53
119+00		11900.00	50.00	9.89	0.00	0.00	0.00	18.39	0.00	0.00	0.00	707.92	0.00	0.00	0.00	707.92
119+50		11950.00	50.00	9.88	0.00	0.00	0.00	18.31	0.00	0.00	0.00	726.23	0.00	0.00	0.00	726.23
120+00		12000.00	50.00	9.86	0.00	0.00	0.00	18.28	0.00	0.00	0.00	744.51	0.00	0.00	0.00	744.51
120+50		12050.00	50.00	9.85	0.00	0.00	0.00	18.25	0.00	0.00	0.00	762.75	0.00	0.00	0.00	762.75
121+00		12100.00	50.00	10.00	0.00	0.00	0.00	18.38	0.00	0.00	0.00	781.13	0.00	0.00	0.00	781.13
121+50		12150.00	50.00	10.09	0.00	0.00	0.00	18.60	0.00	0.00	0.00	799.72	0.00	0.00	0.00	799.72
122+00		12200.00	50.00	10.23	0.00	0.00	0.00	18.81	0.00	0.00	0.00	818.53	0.00	0.00	0.00	818.53
122+09	BK	12209.00	9.00	10.06	0.00	0.00	0.00	3.38	0.00	0.00	0.00	821.92	0.00	0.00	0.00	821.92
						Column totals		821.92	0.00	0.00	0.00					

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

Division 1 IH 41/USH 45 NB

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.0	Expanded Fill 1.2	Expanded EBS Backfill 1.3	Reduced EBS In Fill 0.8	
							Note 1	Note 2	Note 3				Note 4	Note 5	Note 6
124+56 AH	12456.00	0.00	10.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125+00	12500.00	44.00	9.96	0.00	0.00	0.00	16.30	0.00	0.00	0.00	16.30	0.00	0.00	0.00	16.30
125+50	12550.00	50.00	10.00	0.00	0.00	0.00	18.48	0.00	0.00	0.00	34.78	0.00	0.00	0.00	34.78
126+00	12600.00	50.00	10.02	0.00	0.00	0.00	18.54	0.00	0.00	0.00	53.31	0.00	0.00	0.00	53.31
126+50	12650.00	50.00	9.90	0.00	0.00	0.00	18.44	0.00	0.00	0.00	71.76	0.00	0.00	0.00	71.76
127+00	12700.00	50.00	9.84	0.00	0.00	0.00	18.27	0.00	0.00	0.00	90.03	0.00	0.00	0.00	90.03
127+50	12750.00	50.00	9.68	0.00	0.00	0.00	18.06	0.00	0.00	0.00	108.10	0.00	0.00	0.00	108.10
128+00	12800.00	50.00	9.99	0.00	0.00	0.00	18.21	0.00	0.00	0.00	126.31	0.00	0.00	0.00	126.31
128+50	12850.00	50.00	9.89	0.00	0.00	0.00	18.41	0.00	0.00	0.00	144.71	0.00	0.00	0.00	144.71
129+00	12900.00	50.00	9.64	0.00	0.00	0.00	18.08	0.00	0.00	0.00	162.79	0.00	0.00	0.00	162.79
129+50	12950.00	50.00	9.95	0.00	0.00	0.00	18.13	0.00	0.00	0.00	180.93	0.00	0.00	0.00	180.93
130+00	13000.00	50.00	11.91	0.00	0.00	0.00	20.24	0.00	0.00	0.00	201.16	0.00	0.00	0.00	201.16
130+50	13050.00	50.00	11.73	0.00	0.00	0.00	21.88	0.00	0.00	0.00	223.04	0.00	0.00	0.00	223.04
131+00	13100.00	50.00	11.84	0.00	0.00	0.00	21.81	0.00	0.00	0.00	244.86	0.00	0.00	0.00	244.86
131+50	13150.00	50.00	11.80	0.00	0.00	0.00	21.88	0.00	0.00	0.00	266.74	0.00	0.00	0.00	266.74
132+00	13200.00	50.00	11.82	0.00	0.00	0.00	21.87	0.00	0.00	0.00	288.60	0.00	0.00	0.00	288.60
132+50	13250.00	50.00	11.82	0.00	0.00	0.00	21.89	0.00	0.00	0.00	310.49	0.00	0.00	0.00	310.49
133+00	13300.00	50.00	11.77	0.00	0.00	0.00	21.84	0.00	0.00	0.00	332.33	0.00	0.00	0.00	332.33
133+50	13350.00	50.00	11.80	0.00	0.00	0.00	21.81	0.00	0.00	0.00	354.14	0.00	0.00	0.00	354.14
134+00	13400.00	50.00	11.79	0.00	0.00	0.00	21.83	0.00	0.00	0.00	375.98	0.00	0.00	0.00	375.98
134+50	13450.00	50.00	11.80	0.00	0.00	0.00	21.84	0.00	0.00	0.00	397.81	0.00	0.00	0.00	397.81
135+00	13500.00	50.00	11.81	0.00	0.00	0.00	21.86	0.00	0.00	0.00	419.67	0.00	0.00	0.00	419.67
135+50	13550.00	50.00	10.08	0.00	0.00	0.00	20.26	0.00	0.00	0.00	439.93	0.00	0.00	0.00	439.93
136+00	13600.00	50.00	10.08	0.00	0.00	0.00	18.66	0.00	0.00	0.00	458.59	0.00	0.00	0.00	458.59
136+50	13650.00	50.00	10.08	0.00	0.00	0.00	18.66	0.00	0.00	0.00	477.25	0.00	0.00	0.00	477.25
137+00	13700.00	50.00	10.07	0.00	0.00	0.00	18.66	0.00	0.00	0.00	495.91	0.00	0.00	0.00	495.91

Notes:	
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2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

(continued)

Division 1 IH 41/USH 45 NB

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/ Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/ Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Incremental Vol (CY) (Unadjusted) EBS	Cumulative Vol (CY) Cut 1.0	Cumulative Vol (CY) Expanded Fill 1.2	Cumulative Vol (CY) Expanded EBS Backfill 1.3 Note 4	Cumulative Vol (CY) Reduced EBS In Fill 0.8 Note 5	Mass Ordinate Note 6
137+50	13750.00	50.00	10.07	0.00	0.00	0.00	18.64	0.00	0.00	0.00	514.55	0.00	0.00	0.00	514.55
138+00	13800.00	50.00	10.07	0.00	0.00	0.00	18.64	0.00	0.00	0.00	533.19	0.00	0.00	0.00	533.19
138+50	13850.00	50.00	10.08	0.00	0.00	0.00	18.66	0.00	0.00	0.00	551.85	0.00	0.00	0.00	551.85
139+00	13900.00	50.00	10.03	0.00	0.00	0.00	18.62	0.00	0.00	0.00	570.47	0.00	0.00	0.00	570.47
139+50	13950.00	50.00	9.95	0.00	0.00	0.00	18.49	0.00	0.00	0.00	588.96	0.00	0.00	0.00	588.96
140+00	14000.00	50.00	9.83	0.00	0.00	0.00	18.31	0.00	0.00	0.00	607.26	0.00	0.00	0.00	607.26
140+50	14050.00	50.00	9.73	0.00	0.00	0.00	18.10	0.00	0.00	0.00	625.37	0.00	0.00	0.00	625.37
141+00	14100.00	50.00	9.88	0.00	0.00	0.00	18.15	0.00	0.00	0.00	643.52	0.00	0.00	0.00	643.52
141+50	14150.00	50.00	9.63	0.00	0.00	0.00	18.06	0.00	0.00	0.00	661.58	0.00	0.00	0.00	661.58
142+00	14200.00	50.00	9.81	0.00	0.00	0.00	18.00	0.00	0.00	0.00	679.58	0.00	0.00	0.00	679.58
142+50	14250.00	50.00	9.89	0.00	0.00	0.00	18.24	0.00	0.00	0.00	697.81	0.00	0.00	0.00	697.81
143+00	14300.00	50.00	10.02	0.00	0.00	0.00	18.44	0.00	0.00	0.00	716.25	0.00	0.00	0.00	716.25
143+50	14350.00	50.00	10.52	0.00	0.00	0.00	19.02	0.00	0.00	0.00	735.27	0.00	0.00	0.00	735.27
144+00	14400.00	50.00	11.32	0.00	0.00	0.00	20.22	0.00	0.00	0.00	755.49	0.00	0.00	0.00	755.49
144+50	14450.00	50.00	12.12	0.00	0.00	0.00	21.70	0.00	0.00	0.00	777.18	0.00	0.00	0.00	777.18
145+00	14500.00	50.00	12.91	0.00	0.00	0.00	23.18	0.00	0.00	0.00	800.36	0.00	0.00	0.00	800.36
145+50	14550.00	50.00	13.73	0.00	0.00	0.00	24.66	0.00	0.00	0.00	825.02	0.00	0.00	0.00	825.02
146+00	14600.00	50.00	14.50	0.00	0.00	0.00	26.13	0.00	0.00	0.00	851.16	0.00	0.00	0.00	851.16
146+50	14650.00	50.00	15.31	0.00	0.00	0.00	27.60	0.00	0.00	0.00	878.75	0.00	0.00	0.00	878.75
147+00	14700.00	50.00	19.06	0.00	0.00	0.00	31.81	0.00	0.00	0.00	910.57	0.00	0.00	0.00	910.57
147+50	14750.00	50.00	19.99	0.00	0.00	0.00	36.15	0.00	0.00	0.00	946.72	0.00	0.00	0.00	946.72
148+00	14800.00	50.00	20.92	0.00	0.00	0.00	37.88	0.00	0.00	0.00	984.60	0.00	0.00	0.00	984.60
148+20 BK	14820.00	20.00	20.92	0.00	0.00	0.00	15.50	0.00	0.00	0.00	1000.10	0.00	0.00	0.00	1000.10
					Column totals		1000.10	0.00	0.00	0.00					

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

Division 1 IH 41/USH 45 NB

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Expanded Fill	Expanded EBS Backfill	Reduced EBS In Fill	
											1.0	1.2	1.3	0.8	
							Note 1	Note 2	Note 3				Note 4	Note 5	Note 6
151+55 AH	15155.00	0.00	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152+00	15200.00	45.00	9.90	0.00	0.00	0.00	16.50	0.00	0.00	0.00	16.50	0.00	0.00	0.00	16.50
152+31 BK	15231.00	31.00	9.90	0.00	0.00	0.00	11.37	0.00	0.00	0.00	27.87	0.00	0.00	0.00	27.87
						Column totals	27.87	0.00	0.00	0.00					

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

Division 1 IH 41/USH 45 SB

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Expanded Fill	Expanded EBS Backfill	Reduced EBS In Fill	
							Note 1	Note 2	Note 3		1.0	1.2	1.3 Note 4	0.8 Note 5	Note 6
86+94 AH	8694.00	0.00	9.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87+00	8700.00	6.00	9.75	0.00	0.00	0.00	2.17	0.00	0.00	0.00	2.17	0.00	0.00	0.00	2.17
87+50	8750.00	50.00	9.75	0.00	0.00	0.00	18.06	0.00	0.00	0.00	20.22	0.00	0.00	0.00	20.22
88+00	8800.00	50.00	9.75	0.00	0.00	0.00	18.06	0.00	0.00	0.00	38.28	0.00	0.00	0.00	38.28
88+50	8850.00	50.00	9.75	0.00	0.00	0.00	18.06	0.00	0.00	0.00	56.33	0.00	0.00	0.00	56.33
89+00	8900.00	50.00	9.75	0.00	0.00	0.00	18.06	0.00	0.00	0.00	74.39	0.00	0.00	0.00	74.39
89+31 BK	8931.00	31.00	9.75	0.00	0.00	0.00	11.19	0.00	0.00	0.00	85.58	0.00	0.00	0.00	85.58
					Column totals		85.58	0.00	0.00	0.00					

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

Division 1 IH 41/USH 45 SB

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.0	Expanded Fill 1.2	Expanded EBS Backfill 1.3	Reduced EBS In Fill 0.8	
							Note 1	Note 2	Note 3				Note 4	Note 5	Note 6
104+09 AH	10409.00	0.00	9.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
104+50	10450.00	41.00	9.74	0.00	0.00	0.00	14.78	0.00	0.00	0.00	14.78	0.00	0.00	0.00	14.78
105+00	10500.00	50.00	9.23	0.00	0.00	0.00	17.56	0.00	0.00	0.00	32.34	0.00	0.00	0.00	32.34
105+50	10550.00	50.00	17.15	0.00	0.00	0.00	24.42	0.00	0.00	0.00	56.76	0.00	0.00	0.00	56.76
106+00	10600.00	50.00	13.94	0.00	0.00	0.00	28.79	0.00	0.00	0.00	85.55	0.00	0.00	0.00	85.55
106+50	10650.00	50.00	15.16	0.00	0.00	0.00	26.94	0.00	0.00	0.00	112.49	0.00	0.00	0.00	112.49
107+00	10700.00	50.00	14.26	0.00	0.00	0.00	27.23	0.00	0.00	0.00	139.72	0.00	0.00	0.00	139.72
107+50	10750.00	50.00	13.23	0.00	0.00	0.00	25.45	0.00	0.00	0.00	165.17	0.00	0.00	0.00	165.17
108+00	10800.00	50.00	12.49	0.00	0.00	0.00	23.81	0.00	0.00	0.00	188.98	0.00	0.00	0.00	188.98
108+50	10850.00	50.00	10.18	0.00	0.00	0.00	20.99	0.00	0.00	0.00	209.97	0.00	0.00	0.00	209.97
109+00	10900.00	50.00	9.93	0.00	0.00	0.00	18.62	0.00	0.00	0.00	228.59	0.00	0.00	0.00	228.59
109+50	10950.00	50.00	9.98	0.00	0.00	0.00	18.44	0.00	0.00	0.00	247.03	0.00	0.00	0.00	247.03
110+00	11000.00	50.00	9.91	0.00	0.00	0.00	18.42	0.00	0.00	0.00	265.44	0.00	0.00	0.00	265.44
110+50	11050.00	50.00	10.09	0.00	0.00	0.00	18.51	0.00	0.00	0.00	283.96	0.00	0.00	0.00	283.96
111+00	11100.00	50.00	9.98	0.00	0.00	0.00	18.58	0.00	0.00	0.00	302.54	0.00	0.00	0.00	302.54
111+50	11150.00	50.00	9.94	1.00	0.00	0.00	18.44	0.00	0.00	0.00	320.98	0.00	0.00	0.00	320.98
112+00	11200.00	50.00	9.74	2.00	0.00	0.00	18.22	0.00	0.00	0.00	339.19	0.00	0.00	0.00	339.19
112+50	11250.00	50.00	9.97	3.00	0.00	0.00	18.25	0.00	0.00	0.00	357.44	0.00	0.00	0.00	357.44
113+00	11300.00	50.00	10.05	4.00	0.00	0.00	18.53	0.00	0.00	0.00	375.97	0.00	0.00	0.00	375.97
113+50	11350.00	50.00	10.06	5.00	0.00	0.00	18.61	0.00	0.00	0.00	394.58	0.00	0.00	0.00	394.58

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

(continued)

Division 1 IH 41/USH 45 SB

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.0	Expanded Fill 1.2	Expanded EBS Backfill 1.3	Reduced EBS In Fill 0.8	
							Note 1	Note 2	Note 3				Note 4	Note 5	Note 6
114+00	11400.00	50.00	10.01	6.00	0.00	0.00	18.57	0.00	0.00	0.00	413.15	0.00	0.00	0.00	413.15
114+50	11450.00	50.00	9.94	7.00	0.00	0.00	18.47	0.00	0.00	0.00	431.62	0.00	0.00	0.00	431.62
115+00	11500.00	50.00	9.88	8.00	0.00	0.00	18.35	0.00	0.00	0.00	449.97	0.00	0.00	0.00	449.97
115+50	11550.00	50.00	9.88	9.00	0.00	0.00	18.29	0.00	0.00	0.00	468.26	0.00	0.00	0.00	468.26
116+00	11600.00	50.00	9.97	10.00	0.00	0.00	18.38	0.00	0.00	0.00	486.64	0.00	0.00	0.00	486.64
116+50	11650.00	50.00	10.07	11.00	0.00	0.00	18.55	0.00	0.00	0.00	505.19	0.00	0.00	0.00	505.19
117+00	11700.00	50.00	9.97	12.00	0.00	0.00	18.55	0.00	0.00	0.00	523.74	0.00	0.00	0.00	523.74
117+50	11750.00	50.00	10.09	13.00	0.00	0.00	18.57	0.00	0.00	0.00	542.31	0.00	0.00	0.00	542.31
118+00	11800.00	50.00	10.08	14.00	0.00	0.00	18.67	0.00	0.00	0.00	560.98	0.00	0.00	0.00	560.98
118+50	11850.00	50.00	9.68	15.00	0.00	0.00	18.29	0.00	0.00	0.00	579.27	0.00	0.00	0.00	579.27
119+00	11900.00	50.00	10.04	16.00	0.00	0.00	18.25	0.00	0.00	0.00	597.53	0.00	0.00	0.00	597.53
119+50	11950.00	50.00	10.08	17.00	0.00	0.00	18.63	0.00	0.00	0.00	616.15	0.00	0.00	0.00	616.15
120+00	12000.00	50.00	9.99	18.00	0.00	0.00	18.57	0.00	0.00	0.00	634.73	0.00	0.00	0.00	634.73
120+50	12050.00	50.00	9.97	19.00	0.00	0.00	18.48	0.00	0.00	0.00	653.20	0.00	0.00	0.00	653.20
121+00	12100.00	50.00	10.07	20.00	0.00	0.00	18.55	0.00	0.00	0.00	671.76	0.00	0.00	0.00	671.76
121+50	12150.00	50.00	10.07	21.00	0.00	0.00	18.64	0.00	0.00	0.00	690.40	0.00	0.00	0.00	690.40
122+00	12200.00	50.00	10.06	22.00	0.00	0.00	18.63	0.00	0.00	0.00	709.03	0.00	0.00	0.00	709.03
122+09 BK	12209.00	9.00	10.04	23.00	0.00	0.00	3.35	0.00	0.00	0.00	712.38	0.00	0.00	0.00	712.38
					Column totals		712.38	0.00	0.00	0.00					

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

Division 1 IH 41/USH 45 SB

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Expanded Fill	Expanded EBS Backfill	Reduced EBS In Fill	Mass Ordinate
											1.0	1.2	1.3	0.8	
							Note 1	Note 2	Note 3				Note 4	Note 5	Note 6
124+56	12456.00	0.00	10.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125+00	12500.00	44.00	9.88	0.00	0.00	0.00	16.25	0.00	0.00	0.00	16.25	0.00	0.00	0.00	16.25
125+50	12550.00	50.00	9.94	0.00	0.00	0.00	18.35	0.00	0.00	0.00	34.60	0.00	0.00	0.00	34.60
126+00	12600.00	50.00	9.59	0.00	0.00	0.00	18.07	0.00	0.00	0.00	52.67	0.00	0.00	0.00	52.67
126+50	12650.00	50.00	9.94	0.00	0.00	0.00	18.07	0.00	0.00	0.00	70.75	0.00	0.00	0.00	70.75
127+00	12700.00	50.00	9.82	0.00	0.00	0.00	18.29	0.00	0.00	0.00	89.04	0.00	0.00	0.00	89.04
127+50	12750.00	50.00	9.86	0.00	0.00	0.00	18.22	0.00	0.00	0.00	107.26	0.00	0.00	0.00	107.26
128+00	12800.00	50.00	9.95	0.00	0.00	0.00	18.34	0.00	0.00	0.00	125.60	0.00	0.00	0.00	125.60
128+50	12850.00	50.00	9.91	0.00	0.00	0.00	18.38	0.00	0.00	0.00	143.98	0.00	0.00	0.00	143.98
129+00	12900.00	50.00	9.65	0.00	0.00	0.00	18.11	0.00	0.00	0.00	162.09	0.00	0.00	0.00	162.09
129+50	12950.00	50.00	9.99	0.00	0.00	0.00	18.18	0.00	0.00	0.00	180.27	0.00	0.00	0.00	180.27
130+00	13000.00	50.00	11.73	0.00	0.00	0.00	20.11	0.00	0.00	0.00	200.38	0.00	0.00	0.00	200.38
130+50	13050.00	50.00	11.91	0.00	0.00	0.00	21.88	0.00	0.00	0.00	222.26	0.00	0.00	0.00	222.26
131+00	13100.00	50.00	11.88	0.00	0.00	0.00	22.03	0.00	0.00	0.00	244.29	0.00	0.00	0.00	244.29
131+50	13150.00	50.00	11.91	1.00	0.00	0.00	22.03	0.00	0.00	0.00	266.32	0.00	0.00	0.00	266.32
132+00	13200.00	50.00	11.91	2.00	0.00	0.00	22.06	0.00	0.00	0.00	288.37	0.00	0.00	0.00	288.37
132+50	13250.00	50.00	11.91	3.00	0.00	0.00	22.05	0.00	0.00	0.00	310.42	0.00	0.00	0.00	310.42
133+00	13300.00	50.00	11.91	4.00	0.00	0.00	22.05	0.00	0.00	0.00	332.47	0.00	0.00	0.00	332.47
133+50	13350.00	50.00	11.83	5.00	0.00	0.00	21.98	0.00	0.00	0.00	354.46	0.00	0.00	0.00	354.46
134+00	13400.00	50.00	11.91	6.00	0.00	0.00	21.98	0.00	0.00	0.00	376.43	0.00	0.00	0.00	376.43
134+50	13450.00	50.00	11.75	7.00	0.00	0.00	21.90	0.00	0.00	0.00	398.33	0.00	0.00	0.00	398.33
135+00	13500.00	50.00	11.86	8.00	0.00	0.00	21.86	0.00	0.00	0.00	420.19	0.00	0.00	0.00	420.19
135+50	13550.00	50.00	10.08	9.00	0.00	0.00	20.31	0.00	0.00	0.00	440.50	0.00	0.00	0.00	440.50
136+00	13600.00	50.00	10.08	10.00	0.00	0.00	18.66	0.00	0.00	0.00	459.16	0.00	0.00	0.00	459.16

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

(continued)

Division 1 IH 41/USH 45 SB

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.0	Expanded Fill 1.2	Expanded EBS Backfill 1.3	Reduced EBS In Fill 0.8	
							Note 1	Note 2	Note 3				Note 4	Note 5	Note 6
136+50	13650.00	50.00	10.09	11.00	0.00	0.00	18.67	0.00	0.00	0.00	477.83	0.00	0.00	0.00	477.83
137+00	13700.00	50.00	10.08	12.00	0.00	0.00	18.67	0.00	0.00	0.00	496.50	0.00	0.00	0.00	496.50
137+50	13750.00	50.00	10.07	13.00	0.00	0.00	18.65	0.00	0.00	0.00	515.15	0.00	0.00	0.00	515.15
138+00	13800.00	50.00	10.07	14.00	0.00	0.00	18.64	0.00	0.00	0.00	533.79	0.00	0.00	0.00	533.79
138+50	13850.00	50.00	10.01	15.00	0.00	0.00	18.59	0.00	0.00	0.00	552.38	0.00	0.00	0.00	552.38
139+00	13900.00	50.00	9.98	16.00	0.00	0.00	18.51	0.00	0.00	0.00	570.89	0.00	0.00	0.00	570.89
139+50	13950.00	50.00	9.98	17.00	0.00	0.00	18.48	0.00	0.00	0.00	589.37	0.00	0.00	0.00	589.37
140+00	14000.00	50.00	9.97	18.00	0.00	0.00	18.46	0.00	0.00	0.00	607.83	0.00	0.00	0.00	607.83
140+50	14050.00	50.00	9.76	19.00	0.00	0.00	18.26	0.00	0.00	0.00	626.09	0.00	0.00	0.00	626.09
141+00	14100.00	50.00	9.83	20.00	0.00	0.00	18.13	0.00	0.00	0.00	644.22	0.00	0.00	0.00	644.22
141+50	14150.00	50.00	9.31	21.00	0.00	0.00	17.72	0.00	0.00	0.00	661.94	0.00	0.00	0.00	661.94
142+00	14200.00	50.00	10.02	22.00	0.00	0.00	17.89	0.00	0.00	0.00	679.83	0.00	0.00	0.00	679.83
142+50	14250.00	50.00	9.94	23.00	0.00	0.00	18.48	0.00	0.00	0.00	698.31	0.00	0.00	0.00	698.31
143+00	14300.00	50.00	10.08	24.00	0.00	0.00	18.54	0.00	0.00	0.00	716.84	0.00	0.00	0.00	716.84
143+50	14350.00	50.00	10.09	25.00	0.00	0.00	18.67	0.00	0.00	0.00	735.52	0.00	0.00	0.00	735.52
144+00	14400.00	50.00	10.07	26.00	0.00	0.00	18.66	0.00	0.00	0.00	754.18	0.00	0.00	0.00	754.18
144+50	14450.00	50.00	10.08	27.00	0.00	0.00	18.66	0.00	0.00	0.00	772.83	0.00	0.00	0.00	772.83
145+00	14500.00	50.00	10.05	28.00	0.00	0.00	18.64	0.00	0.00	0.00	791.47	0.00	0.00	0.00	791.47
145+50	14550.00	50.00	10.08	29.00	0.00	0.00	18.63	0.00	0.00	0.00	810.11	0.00	0.00	0.00	810.11
146+00	14600.00	50.00	10.07	30.00	0.00	0.00	18.65	0.00	0.00	0.00	828.76	0.00	0.00	0.00	828.76
146+50	14650.00	50.00	10.08	31.00	0.00	0.00	18.66	0.00	0.00	0.00	847.42	0.00	0.00	0.00	847.42
147+00 BK	14700.00	50.00	11.75	32.00	0.00	0.00	20.21	0.00	0.00	0.00	867.63	0.00	0.00	0.00	867.63
					Column totals		867.63	0.00	0.00	0.00					

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

Division 1 IH 41/USH 45 SB

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Expanded Fill	Expanded EBS Backfill	Reduced EBS In Fill	
											1.0	1.2	1.3	0.8	
							Note 1	Note 2	Note 3				Note 4	Note 5	Note 6
147+00 AH	14700.00	0.00	11.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147+50	14750.00	50.00	11.91	0.00	0.00	0.00	21.91	0.00	0.00	0.00	21.91	0.00	0.00	0.00	21.91
148+00	14800.00	50.00	11.91	0.00	0.00	0.00	22.05	0.00	0.00	0.00	43.96	0.00	0.00	0.00	43.96
148+50	14850.00	50.00	11.90	0.00	0.00	0.00	22.04	0.00	0.00	0.00	66.00	0.00	0.00	0.00	66.00
149+00	14900.00	50.00	11.92	0.00	0.00	0.00	22.05	0.00	0.00	0.00	88.05	0.00	0.00	0.00	88.05
149+50	14950.00	50.00	11.91	0.00	0.00	0.00	22.06	0.00	0.00	0.00	110.11	0.00	0.00	0.00	110.11
150+00	15000.00	50.00	11.70	0.00	0.00	0.00	21.86	0.00	0.00	0.00	131.97	0.00	0.00	0.00	131.97
150+50	15050.00	50.00	11.54	0.00	0.00	0.00	21.52	0.00	0.00	0.00	153.49	0.00	0.00	0.00	153.49
151+00	15100.00	50.00	11.80	0.00	0.00	0.00	21.61	0.00	0.00	0.00	175.10	0.00	0.00	0.00	175.10
151+50	15150.00	50.00	11.92	0.00	0.00	0.00	21.96	0.00	0.00	0.00	197.06	0.00	0.00	0.00	197.06
152+00	15200.00	50.00	27.37	0.00	0.08	0.00	36.37	0.00	0.07	0.00	233.43	0.08	0.00	0.00	233.35
152+50	15250.00	50.00	25.75	0.00	0.13	0.00	49.18	0.00	0.19	0.00	282.61	0.31	0.00	0.00	282.30
153+00	15300.00	50.00	25.76	0.00	0.13	0.00	47.69	0.00	0.23	0.00	330.30	0.58	0.00	0.00	329.71
153+50	15350.00	50.00	25.24	0.00	0.17	0.00	47.22	0.00	0.27	0.00	377.51	0.91	0.00	0.00	376.61
154+00	15400.00	50.00	22.93	0.00	0.31	0.00	44.59	0.00	0.44	0.00	422.11	1.43	0.00	0.00	420.68
154+50	15450.00	50.00	24.05	1.00	0.27	0.00	43.49	0.00	0.53	0.00	465.60	2.06	0.00	0.00	463.54
155+00	15500.00	50.00	23.08	2.00	0.29	0.00	43.63	0.00	0.51	0.00	509.23	2.67	0.00	0.00	506.56
155+50	15550.00	50.00	22.55	3.00	0.38	0.00	42.25	0.00	0.61	0.00	551.48	3.41	0.00	0.00	548.07
156+00	15600.00	50.00	21.06	4.00	0.55	0.00	40.38	0.00	0.86	0.00	591.85	4.43	0.00	0.00	587.42
156+50	15650.00	50.00	21.54	5.00	0.53	0.00	39.44	0.00	1.00	0.00	631.30	5.63	0.00	0.00	625.66
157+00	15700.00	50.00	21.18	6.00	0.52	0.00	39.56	0.00	0.97	0.00	670.85	6.80	0.00	0.00	664.05
157+50	15750.00	50.00	22.41	7.00	0.41	0.00	40.36	0.00	0.86	0.00	711.21	7.83	0.00	0.00	703.38
158+00	15800.00	50.00	22.43	8.00	0.40	0.00	41.51	0.00	0.74	0.00	752.72	8.72	0.00	0.00	744.01
158+50	15850.00	50.00	22.88	9.00	0.32	0.00	41.95	0.00	0.66	0.00	794.68	9.51	0.00	0.00	785.17
159+00	15900.00	50.00	24.03	10.00	0.23	0.00	43.44	0.00	0.50	0.00	838.11	10.11	0.00	0.00	828.00
159+50	15950.00	50.00	25.01	11.00	0.17	0.00	45.41	0.00	0.37	0.00	883.52	10.55	0.00	0.00	872.97
160+00	16000.00	50.00	23.90	12.00	0.19	0.00	45.28	0.00	0.33	0.00	928.80	10.94	0.00	0.00	917.86

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

(continued)

Division 1 IH 41/USH 45 SB

STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut 1.0	Expanded Fill 1.2	Expanded EBS Backfill 1.3	Reduced EBS In Fill 0.8	
							Note 1	Note 2	Note 3				Note 4	Note 5	Note 6
160+50	16050.00	50.00	25.06	13.00	0.14	0.00	45.33	0.00	0.31	0.00	974.13	11.31	0.00	0.00	962.82
161+00	16100.00	50.00	25.77	14.00	0.12	0.00	47.06	0.00	0.24	0.00	1021.19	11.60	0.00	0.00	1009.59
161+50	16150.00	50.00	26.86	15.00	0.10	0.00	48.72	0.00	0.20	0.00	1069.91	11.84	0.00	0.00	1058.07
162+00	16200.00	50.00	28.02	16.00	0.07	0.00	50.81	0.00	0.15	0.00	1120.72	12.02	0.00	0.00	1108.71
162+50	16250.00	50.00	30.87	17.00	0.02	0.00	54.53	0.00	0.08	0.00	1175.25	12.11	0.00	0.00	1163.14
163+00	16300.00	50.00	34.58	18.00	0.00	0.00	60.60	0.00	0.02	0.00	1235.85	12.13	0.00	0.00	1223.71
163+50	16350.00	50.00	12.83	19.00	0.00	0.00	43.89	0.00	0.00	0.00	1279.74	12.13	0.00	0.00	1267.61
164+00	16400.00	50.00	12.83	20.00	0.00	0.00	23.76	0.00	0.00	0.00	1303.50	12.13	0.00	0.00	1291.37
164+50	16450.00	50.00	12.79	21.00	0.00	0.00	23.72	0.00	0.00	0.00	1327.22	12.13	0.00	0.00	1315.09
165+00	16500.00	50.00	12.84	22.00	0.00	0.00	23.73	0.00	0.00	0.00	1350.95	12.13	0.00	0.00	1338.82
165+50	16550.00	50.00	12.83	23.00	0.00	0.00	23.76	0.00	0.00	0.00	1374.71	12.13	0.00	0.00	1362.58
166+00	16600.00	50.00	12.43	24.00	0.00	0.00	23.38	0.00	0.00	0.00	1398.09	12.13	0.00	0.00	1385.95
166+50	16650.00	50.00	12.83	25.00	0.00	0.00	23.38	0.00	0.00	0.00	1421.47	12.13	0.00	0.00	1409.34
167+00	16700.00	50.00	12.83	26.00	0.00	0.00	23.76	0.00	0.00	0.00	1445.23	12.13	0.00	0.00	1433.10
167+50	16750.00	50.00	12.73	27.00	0.00	0.00	23.66	0.00	0.00	0.00	1468.89	12.13	0.00	0.00	1456.76
168+00	16800.00	50.00	12.82	28.00	0.00	0.00	23.65	0.00	0.00	0.00	1492.54	12.13	0.00	0.00	1480.41
168+50	16850.00	50.00	12.74	29.00	0.00	0.00	23.66	0.00	0.00	0.00	1516.20	12.13	0.00	0.00	1504.07
169+00	16900.00	50.00	12.78	30.00	0.00	0.00	23.63	0.00	0.00	0.00	1539.83	12.13	0.00	0.00	1527.70
169+50	16950.00	50.00	12.83	31.00	0.00	0.00	23.71	0.00	0.00	0.00	1563.54	12.13	0.00	0.00	1551.41
170+00	17000.00	50.00	12.81	32.00	0.00	0.00	23.74	0.00	0.00	0.00	1587.28	12.13	0.00	0.00	1575.14
170+50	17050.00	50.00	12.52	33.00	0.00	0.00	23.45	0.00	0.00	0.00	1610.73	12.13	0.00	0.00	1598.59
170+64 BK	17064.00	14.00	12.83	34.00	0.00	0.00	6.57	0.00	0.00	0.00	1617.30	12.13	0.00	0.00	1605.16
						Column totals	1617.30	0.00	10.11	0.00					

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

Division 2 IH 41/USH 45 NB

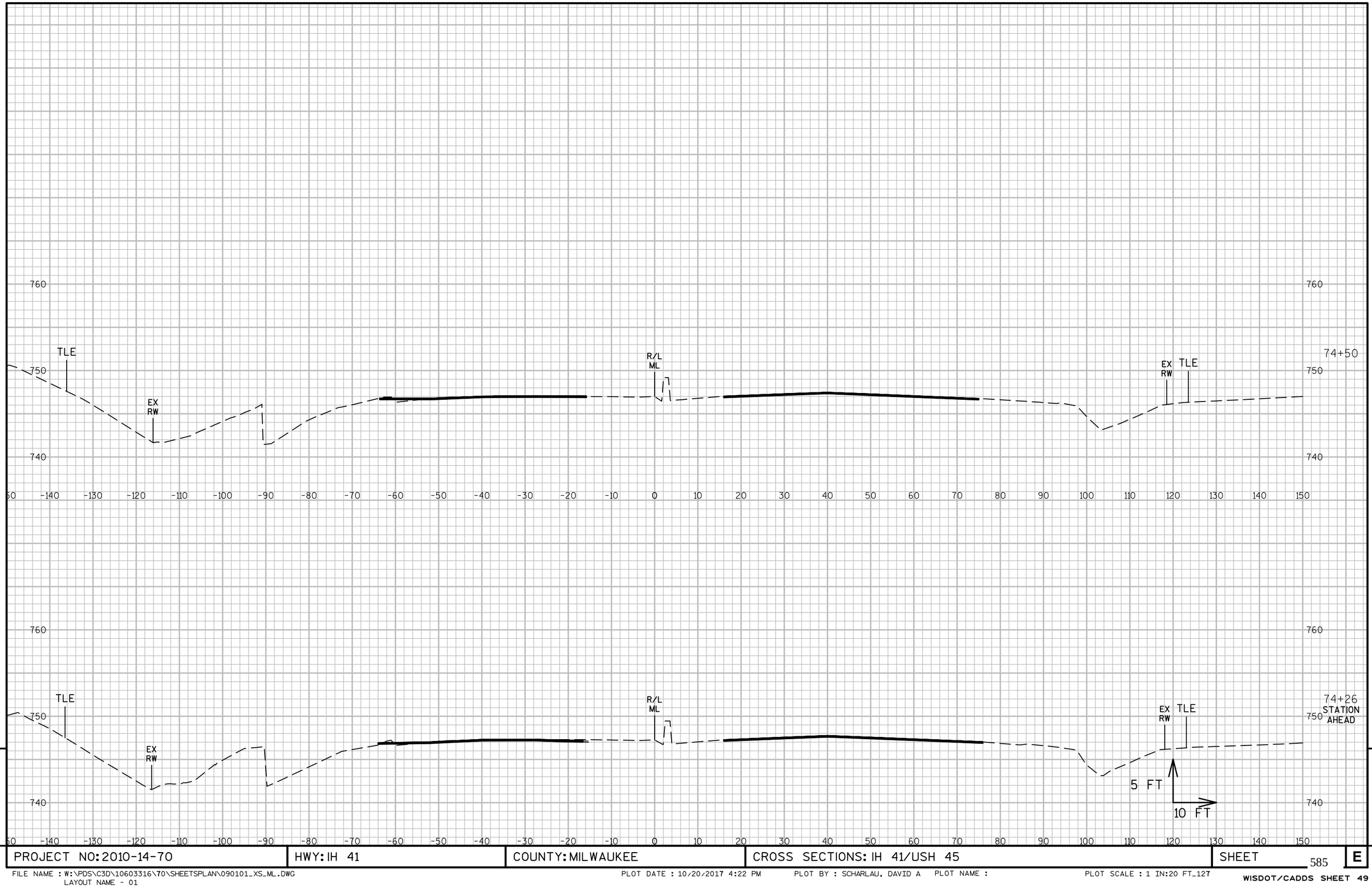
STATION	Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
			Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Expanded Fill	Expanded EBS Backfill	Reduced EBS In Fill	Mass Ordinate
											1.0	1.1	1.3	0.8	
							Note 1	Note 2	Note 3				Note 4	Note 5	Note 6
85+00 AH	8500.00	0.00	17.20	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85+50	8550.00	50.00	17.06	0.00	0.18	0.00	31.72	0.00	0.32	0.00	31.72	0.36	0.00	0.00	31.36
86+00	8600.00	50.00	16.23	0.00	0.42	0.00	30.82	0.00	0.55	0.00	62.54	0.96	0.00	0.00	61.58
86+50	8650.00	50.00	15.74	0.00	0.00	0.00	29.59	0.00	0.38	0.00	92.13	1.38	0.00	0.00	90.75
87+00	8700.00	50.00	15.70	0.00	0.00	0.00	29.10	0.00	0.00	0.00	121.23	1.38	0.00	0.00	119.85
87+50	8750.00	50.00	13.78	0.00	0.08	1.00	27.29	0.00	0.07	0.00	148.52	1.46	0.00	0.00	147.06
88+00	8800.00	50.00	16.67	0.00	0.00	0.00	30.86	0.00	0.00	0.00	179.38	1.46	0.00	0.00	177.92
88+50	8850.00	50.00	16.00	0.00	0.04	0.00	30.25	0.00	0.04	0.00	209.63	1.50	0.00	0.00	208.12
89+00	8900.00	50.00	15.22	0.00	0.58	0.00	28.90	0.00	0.57	0.00	238.53	2.13	0.00	0.00	236.39
89+50	8950.00	50.00	15.69	0.00	0.75	0.00	28.61	0.00	1.23	0.00	267.14	3.49	0.00	0.00	263.65
90+00	9000.00	50.00	16.06	0.00	1.06	0.00	29.39	0.00	1.67	0.00	296.53	5.33	0.00	0.00	291.20
90+50	9050.00	50.00	15.66	0.00	1.82	0.00	29.37	0.00	2.66	0.00	325.89	8.25	0.00	0.00	317.64
91+00	9100.00	50.00	16.33	0.00	2.68	0.00	30.23	0.00	4.95	0.00	356.13	13.70	0.00	0.00	342.43
91+41 BK	9141.00	41.00	16.33	0.00	2.68	0.00	24.79	0.00	4.06	0.00	380.91	18.17	0.00	0.00	362.75
Column totals							380.91	0.00	16.52	0.00					

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]

Division 2 IH 41/USH 45 NB

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/ Unusable Pavement Material	AREA (SF) Fill	AREA (SF) EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/ Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Incremental Vol (CY) (Unadjusted) EBS	Cumulative Vol (CY) Cut 1.0	Cumulative Vol (CY) Expanded Fill 1.1	Cumulative Vol (CY) Expanded EBS Backfill 1.3 Note 4	Cumulative Vol (CY) Reduced EBS In Fill 0.8 Note 5	Mass Ordinate Note 6
147+17 AH	14717.00	0.00	32.51	0.00	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147+50	14750.00	33.00	32.51	0.00	6.08	0.00	39.73	0.00	7.43	0.00	39.73	8.17	0.00	0.00	31.56
148+00	14800.00	50.00	31.61	0.00	4.71	0.00	59.37	0.00	9.99	0.00	99.09	19.15	0.00	0.00	79.94
148+50	14850.00	50.00	28.33	0.00	2.98	0.00	55.50	0.00	7.12	0.00	154.59	26.98	0.00	0.00	127.61
149+00	14900.00	50.00	27.57	0.00	1.56	0.00	51.75	0.00	4.20	0.00	206.35	31.60	0.00	0.00	174.75
149+50	14950.00	50.00	29.43	0.00	3.41	1.00	52.77	0.00	4.59	0.00	259.12	36.66	0.00	0.00	222.47
150+00	15000.00	50.00	27.65	0.00	0.33	0.00	51.20	0.00	0.60	0.00	310.33	37.32	0.00	0.00	273.01
150+50	15050.00	50.00	33.03	0.00	0.00	0.00	56.18	0.00	0.30	0.00	366.51	37.65	0.00	0.00	328.86
151+00	15100.00	50.00	43.54	0.00	0.00	0.00	70.89	0.00	0.00	0.00	437.40	37.65	0.00	0.00	399.75
151+50	15150.00	50.00	44.88	0.00	0.58	0.00	81.86	0.00	0.54	0.00	519.26	38.24	0.00	0.00	481.02
152+00	15200.00	50.00	28.23	0.00	8.74	0.00	67.69	0.00	8.63	0.00	586.95	47.73	0.00	0.00	539.21
152+50	15250.00	50.00	29.32	0.00	10.31	0.00	53.28	0.00	17.64	0.00	640.23	67.13	0.00	0.00	573.09
153+00	15300.00	50.00	24.06	0.00	13.47	0.00	44.55	0.00	24.94	0.00	684.77	94.56	0.00	0.00	590.21
153+50	15350.00	50.00	27.08	0.00	9.21	0.00	47.34	0.00	20.99	0.00	732.12	117.65	0.00	0.00	614.46
154+00	15400.00	50.00	28.51	0.00	4.42	0.00	51.46	0.00	12.62	0.00	783.58	131.53	0.00	0.00	652.05
154+50	15450.00	50.00	39.68	0.00	0.69	0.00	63.13	0.00	4.73	0.00	846.71	136.73	0.00	0.00	709.98
155+00	15500.00	50.00	39.00	0.00	0.39	0.00	72.85	0.00	0.99	0.00	919.56	137.82	0.00	0.00	781.74
155+50	15550.00	50.00	33.50	0.00	0.86	0.00	67.13	0.00	1.15	0.00	986.69	139.09	0.00	0.00	847.60
156+00	15600.00	50.00	26.77	0.00	3.10	0.00	55.80	0.00	3.66	0.00	1042.49	143.12	0.00	0.00	899.37
156+50	15650.00	50.00	26.67	0.00	3.17	0.00	49.47	0.00	5.80	0.00	1091.96	149.50	0.00	0.00	942.46
157+00	15700.00	50.00	26.26	0.00	3.45	0.00	49.00	0.00	5.99	0.00	1140.96	149.71	0.00	0.00	984.87
157+50	15750.00	50.00	25.91	0.00	3.57	0.00	48.30	0.00	6.49	0.00	1189.27	156.85	0.00	0.00	1026.04
158+00	15800.00	50.00	27.04	0.00	3.11	0.00	49.02	0.00	6.18	0.00	1238.28	163.65	0.00	0.00	1068.26
158+50	15850.00	50.00	27.84	0.00	2.57	0.00	50.81	0.00	5.25	0.00	1289.09	169.43	0.00	0.00	1113.29
159+00	15900.00	50.00	27.04	0.00	2.91	0.00	50.81	0.00	5.06	0.00	1339.90	175.00	0.00	0.00	1158.52
159+50	15950.00	50.00	28.18	0.00	1.67	0.00	51.12	0.00	4.24	0.00	1391.02	179.66	0.00	0.00	1204.98
160+00	16000.00	50.00	28.76	0.00	1.82	0.00	52.72	0.00	3.23	0.00	1443.74	183.21	0.00	0.00	1254.15
160+50	16050.00	50.00	30.48	0.00	0.14	0.00	54.85	0.00	1.81	0.00	1498.59	185.21	0.00	0.00	1307.00
161+00	16100.00	50.00	32.19	0.00	0.02	0.00	58.03	0.00	0.15	0.00	1556.62	185.37	0.00	0.00	1364.87
161+50	16150.00	50.00	36.85	0.00	0.00	0.00	68.24	0.00	0.00	0.00	1624.86	185.37	0.00	0.00	1433.11
162+00	16200.00	50.00	35.84	0.00	0.02	0.00	67.31	0.00	0.02	0.00	1692.17	185.39	0.00	0.00	1500.39
162+38 BK	16238.00	38.00	35.84	0.00	0.02	0.00	50.44	0.00	0.03	0.00	1742.61	185.42	0.00	0.00	1550.80
						Column totals	1742.61	0.00	174.37	0.00					

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections nor is it shown in these sheets. Refer to Summary Table for this roadway's quantity.
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Expanded EBS	Will be backfilled with Borrow
5 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill
6 - Mass Ordinate	If EBS to be backfilled with Cut or Borrow: [(Cut + EBS) - ((Fill) - (Reduced EBS in Fill)) * Fill Factor)]



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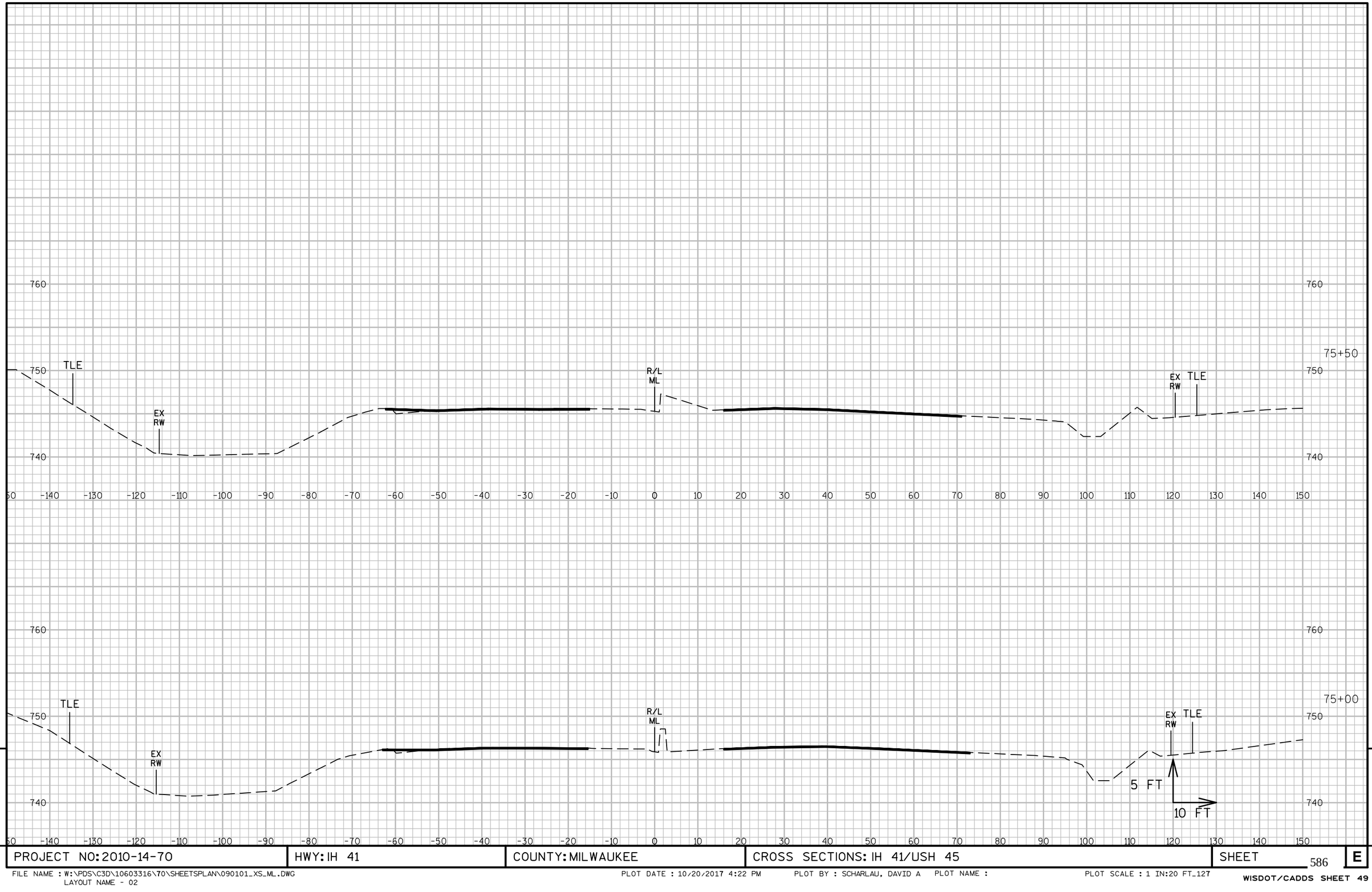
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 585	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 01

PLOT DATE : 10/20/2017 4:22 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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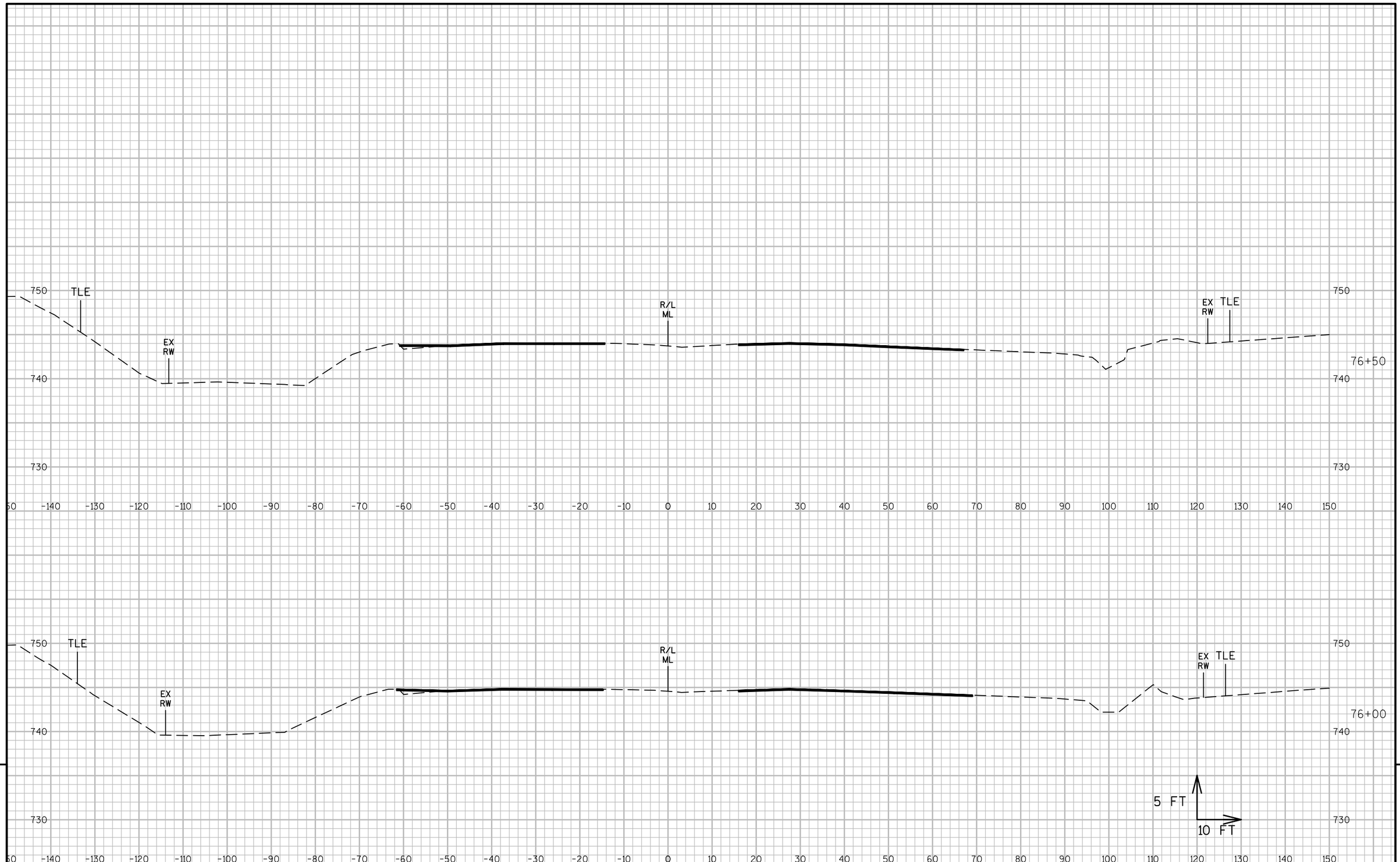
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 586	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 02

PLOT DATE : 10/20/2017 4:22 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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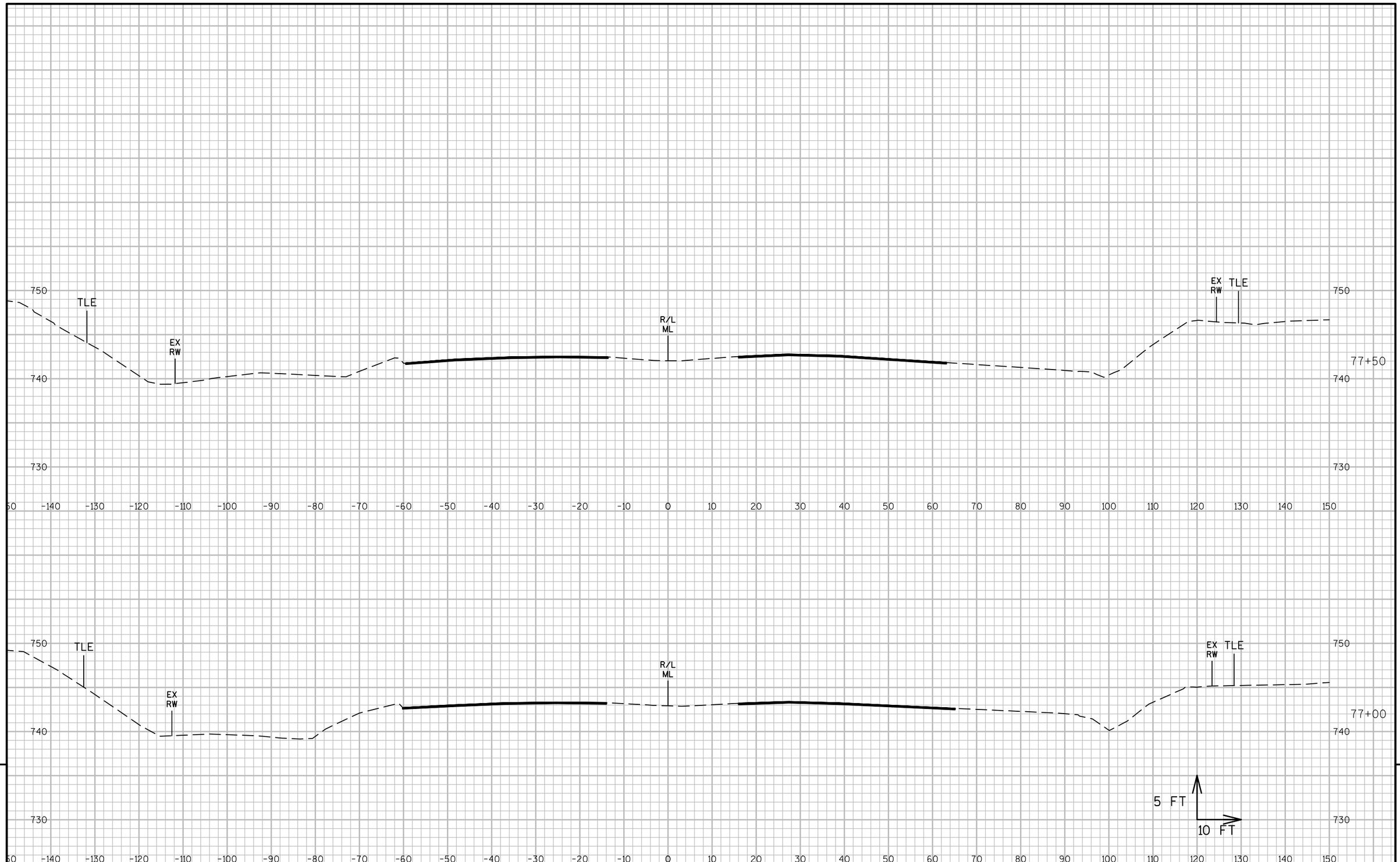
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 587	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 03

PLOT DATE : 10/20/2017 4:22 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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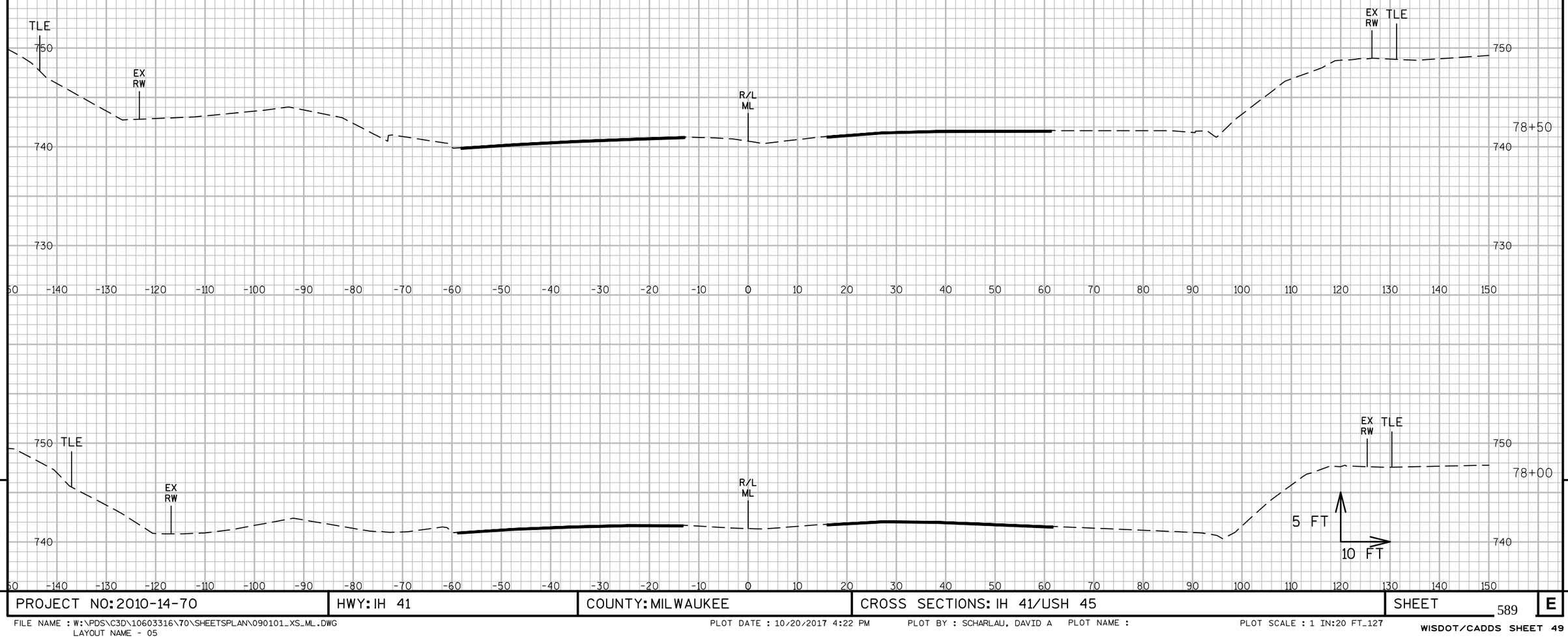
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 588	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 04

PLOT DATE : 10/20/2017 4:22 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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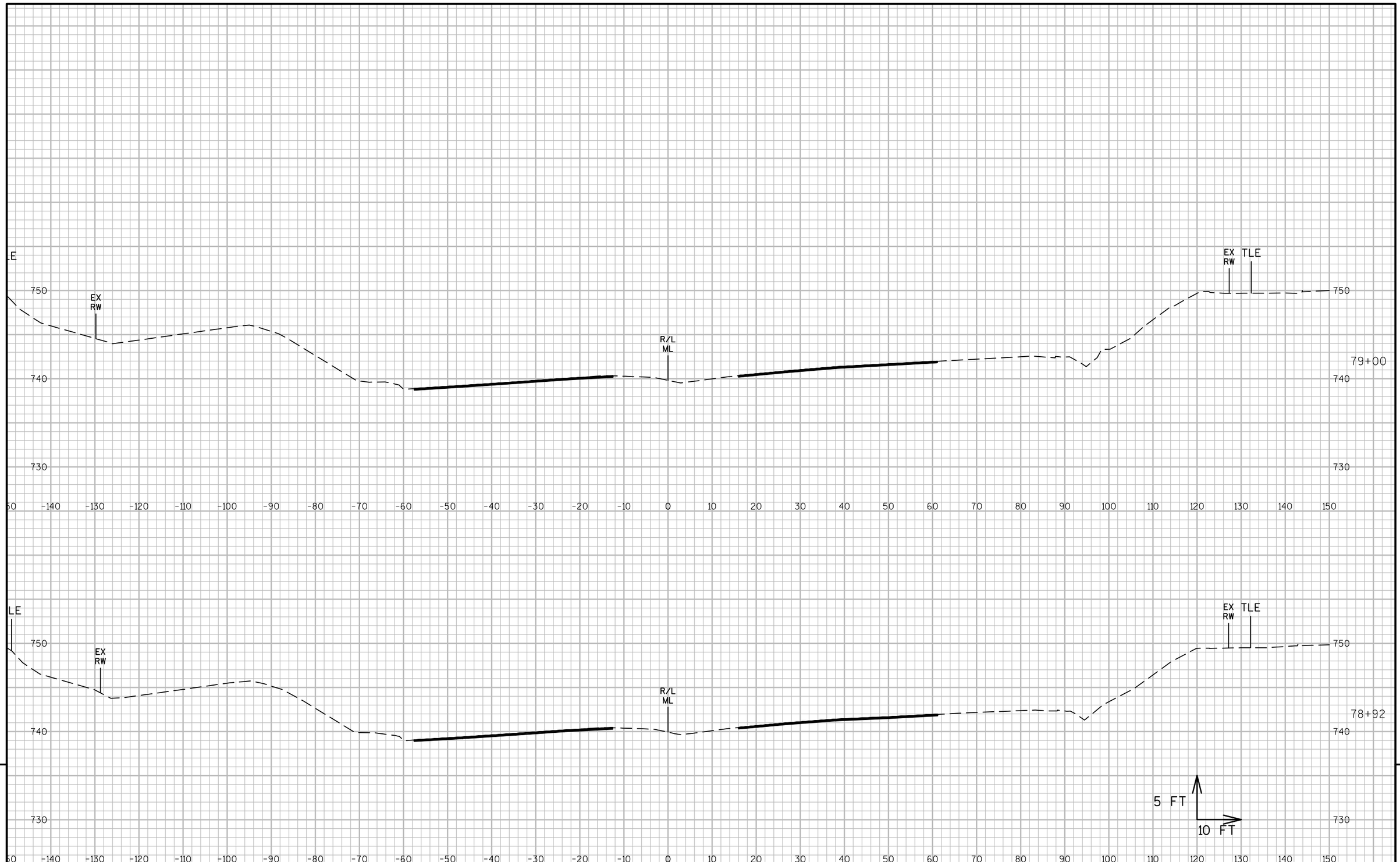
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 589	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 05

PLOT DATE : 10/20/2017 4:22 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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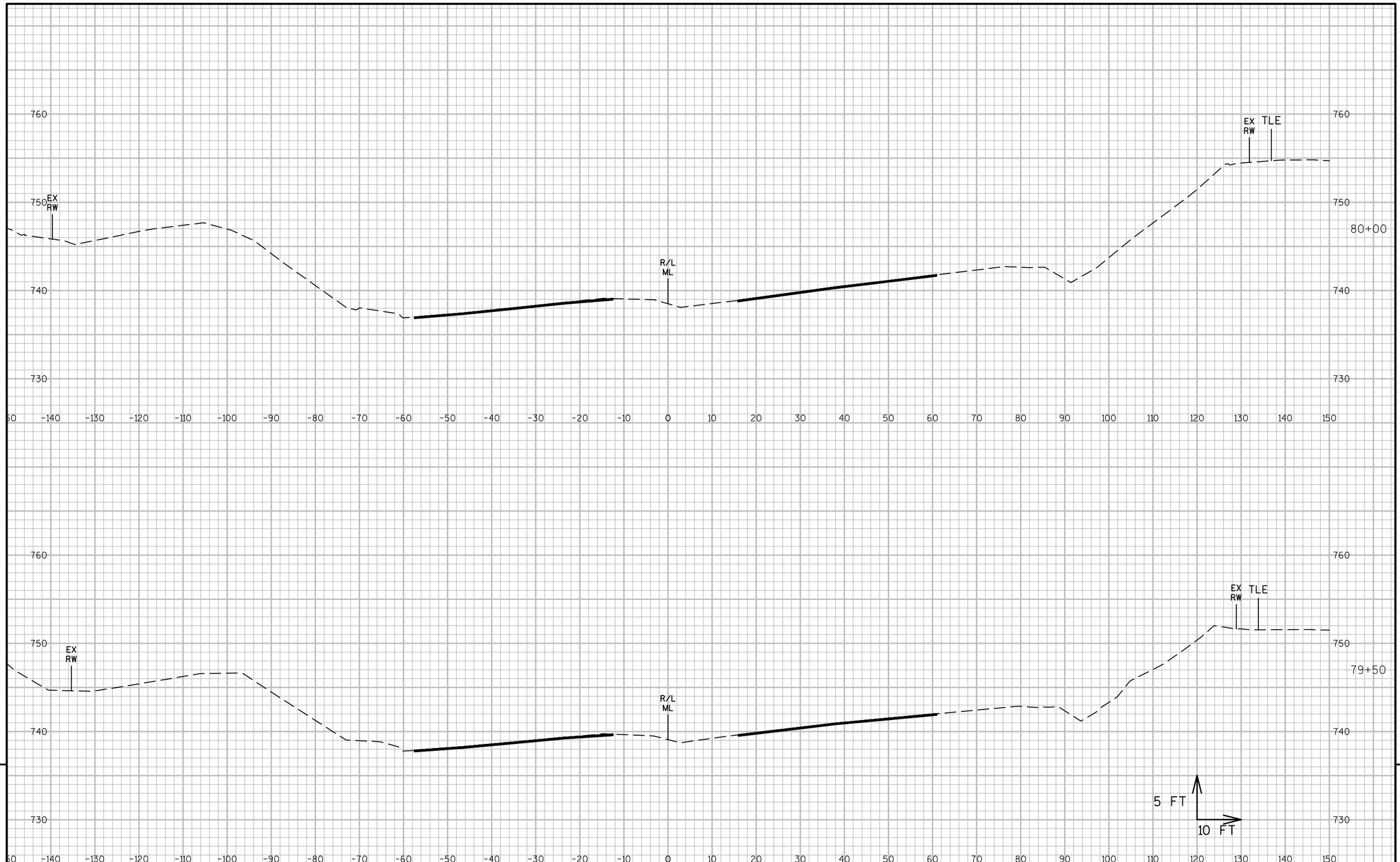
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 590	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 06

PLOT DATE : 10/20/2017 4:22 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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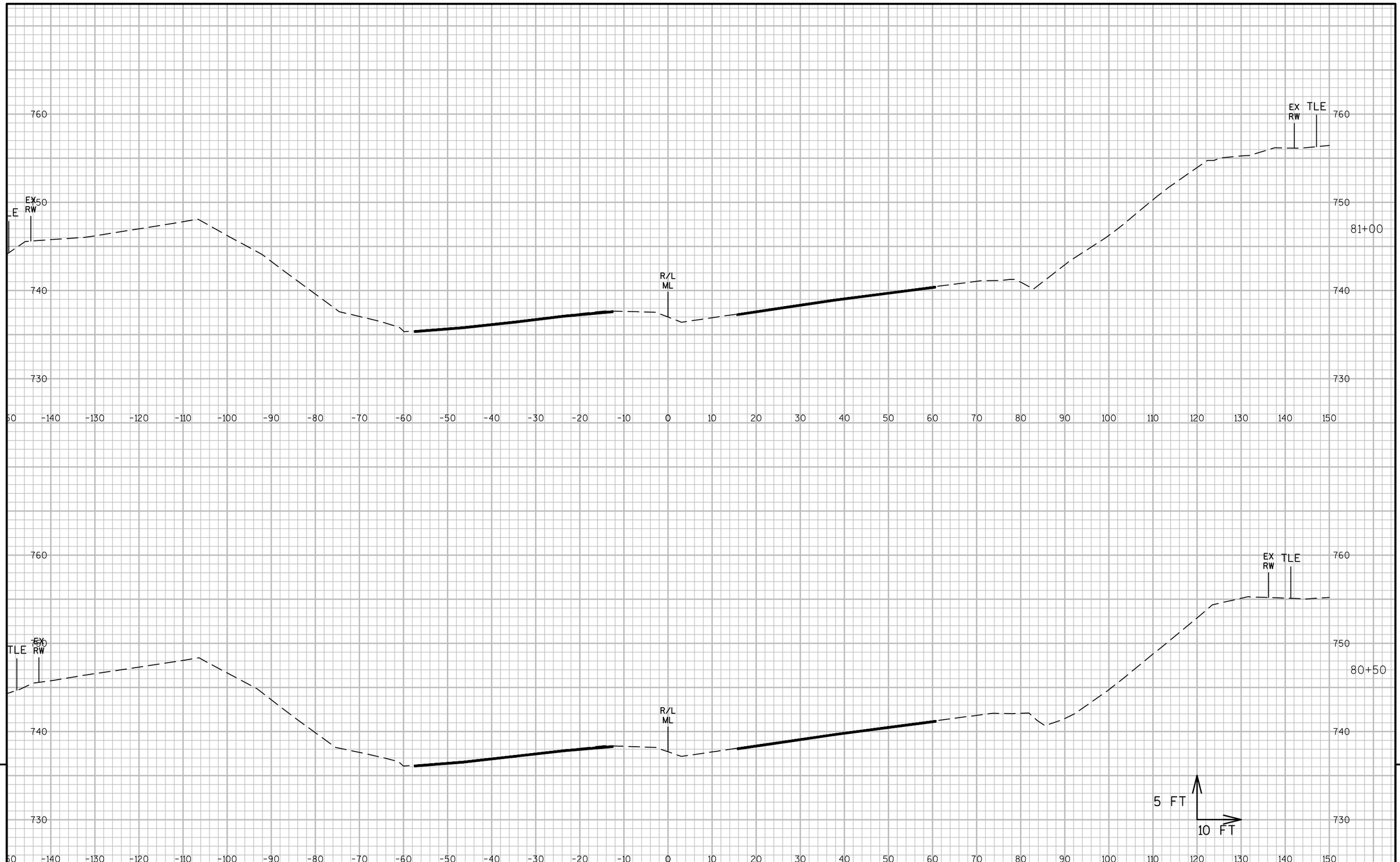
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 591	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 07

PLOT DATE : 10/20/2017 4:22 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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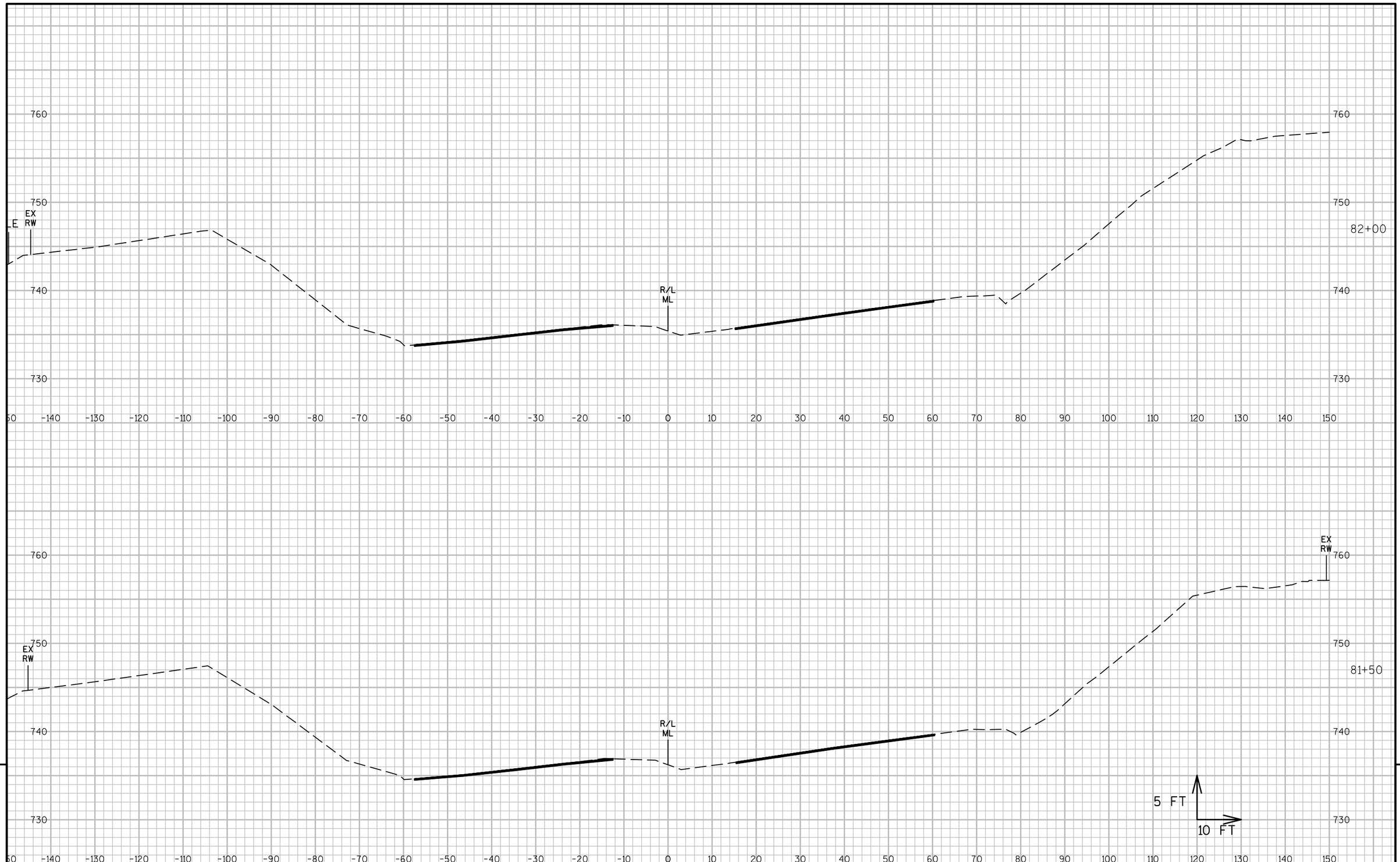
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 592	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 08

PLOT DATE : 10/20/2017 4:22 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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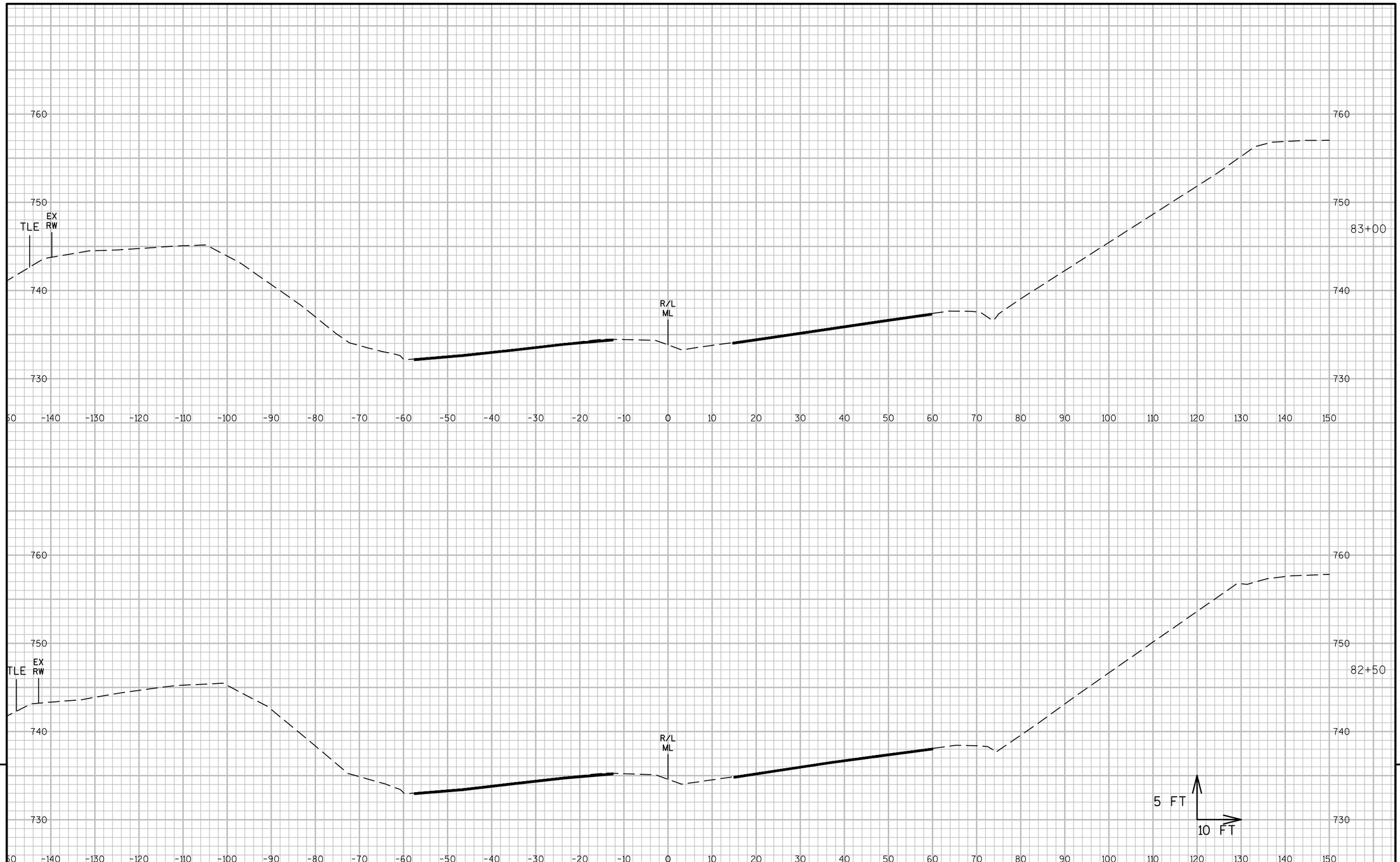
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 593	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 09

PLOT DATE : 10/20/2017 4:22 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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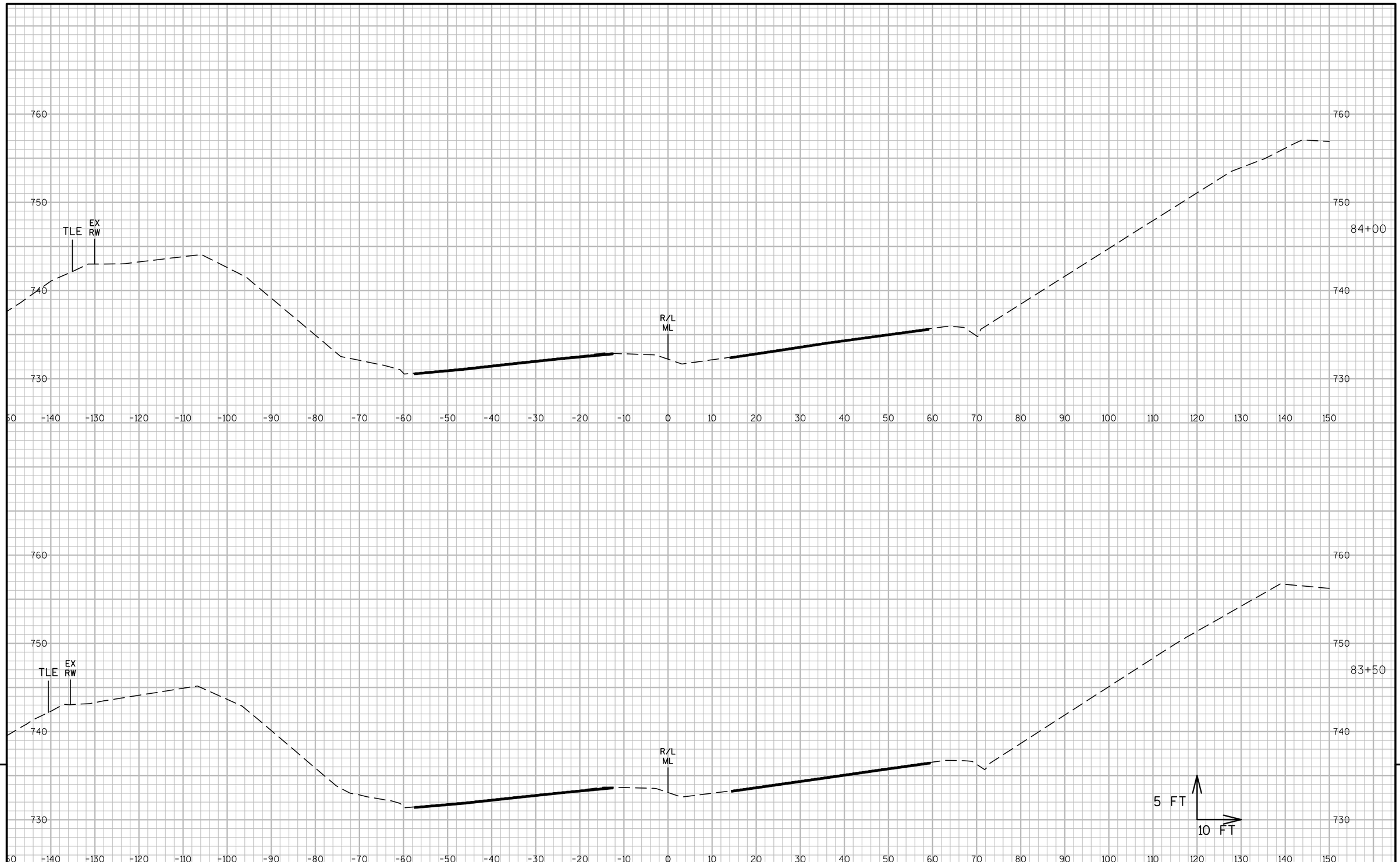
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 594	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 10

PLOT DATE : 10/20/2017 4:22 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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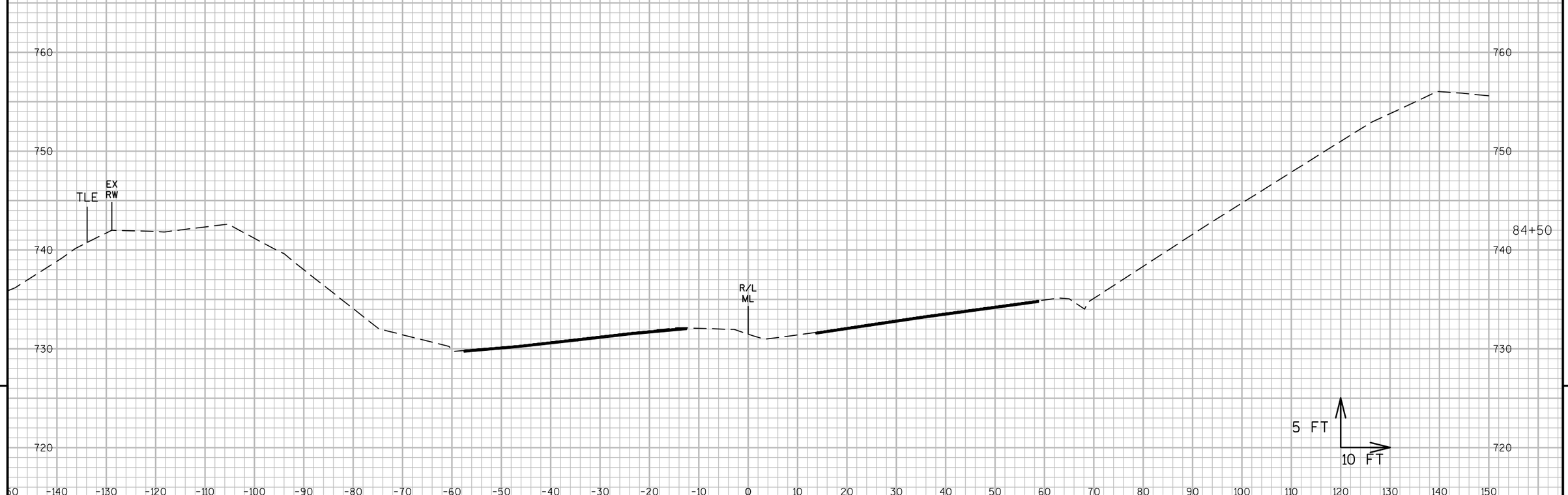
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 595	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 11

PLOT DATE : 10/20/2017 4:22 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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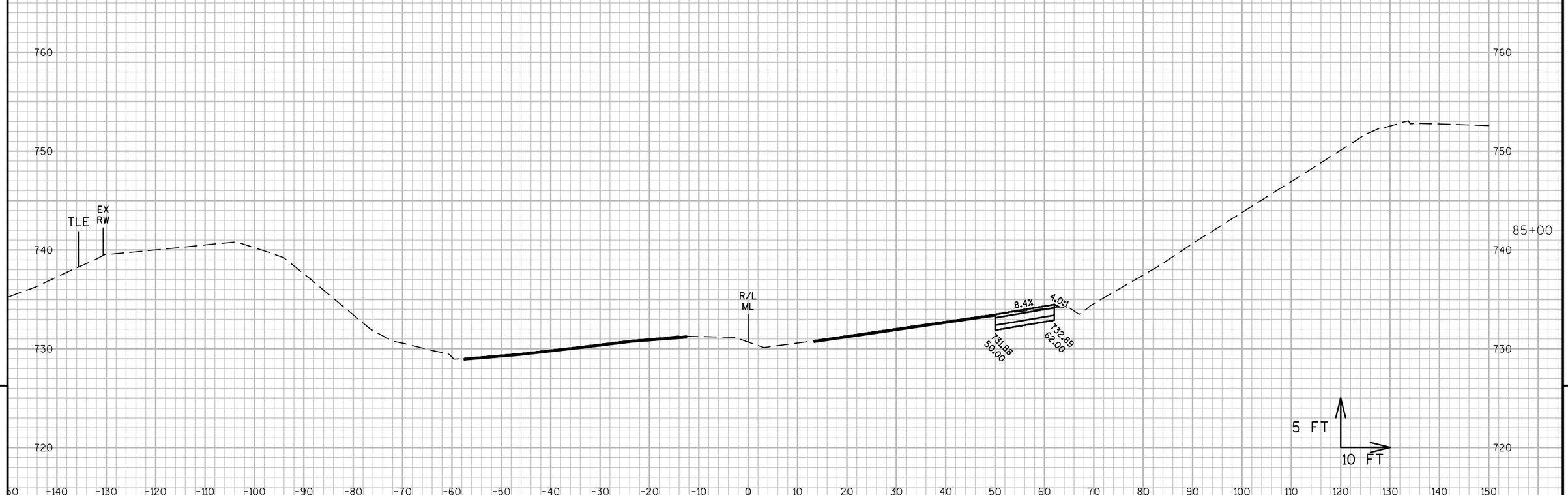
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 596 E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 12

PLOT DATE : 10/20/2017 4:23 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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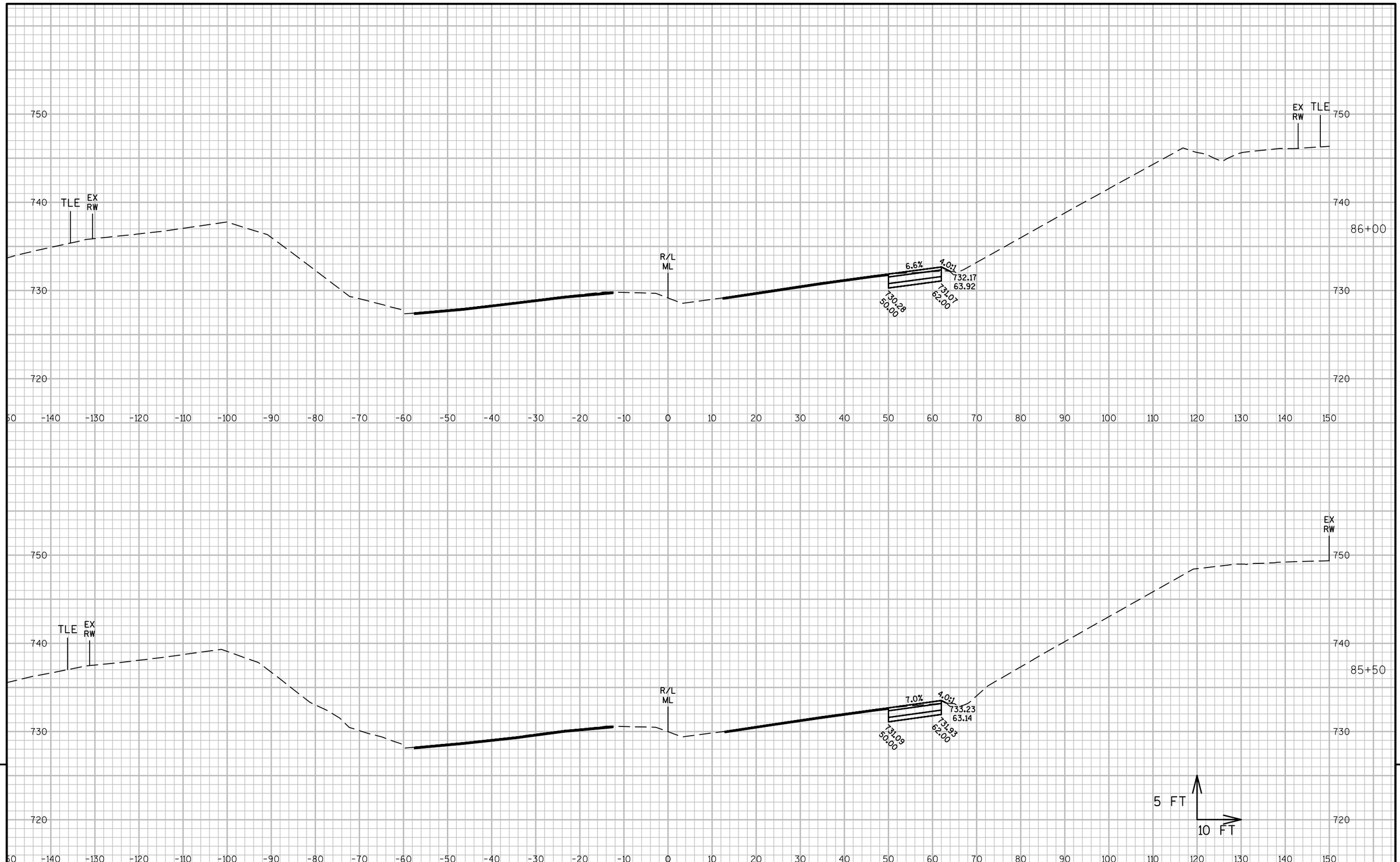
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 597	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 13

PLOT DATE : 10/20/2017 4:23 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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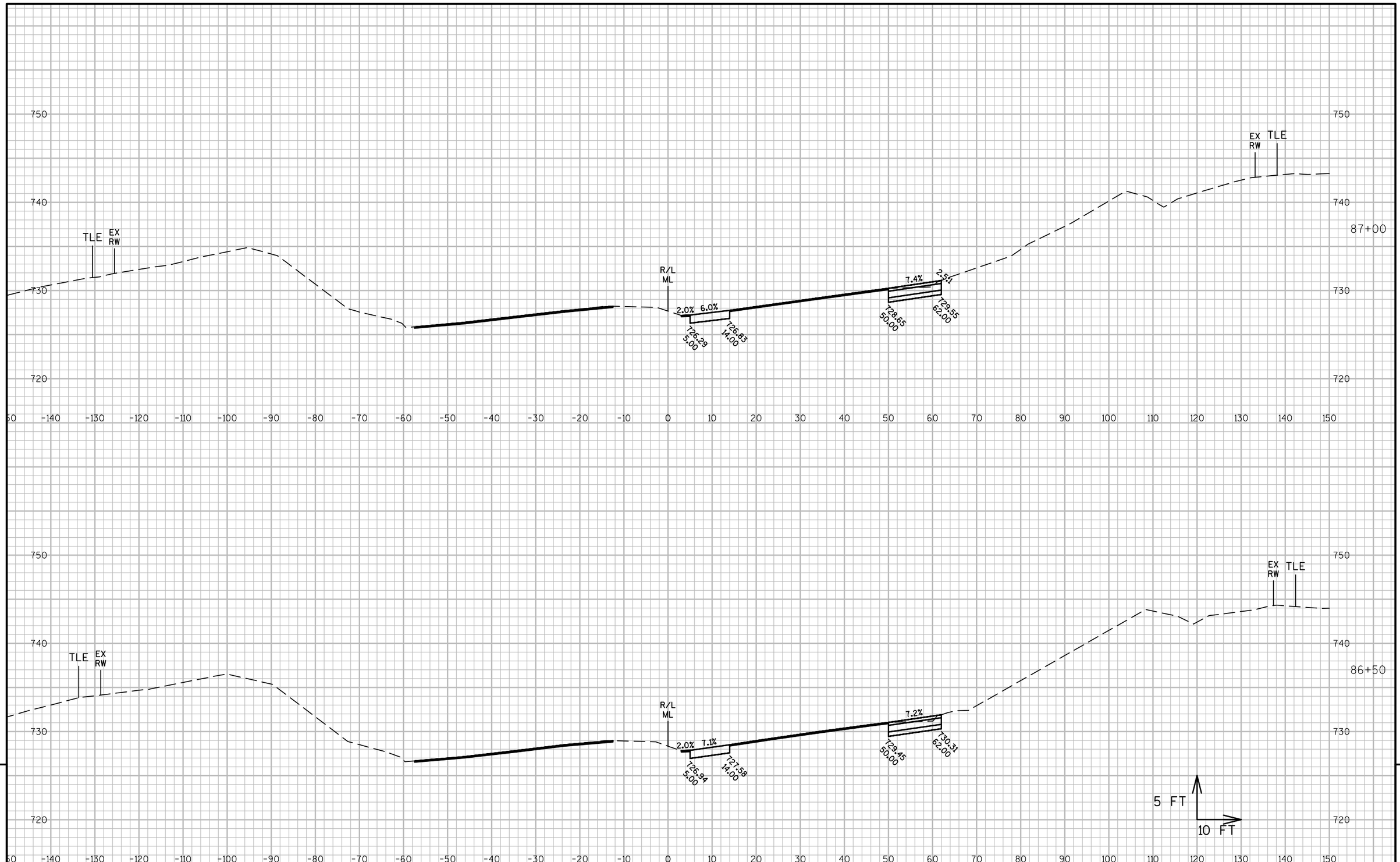
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 598	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 14

PLOT DATE : 10/20/2017 4:23 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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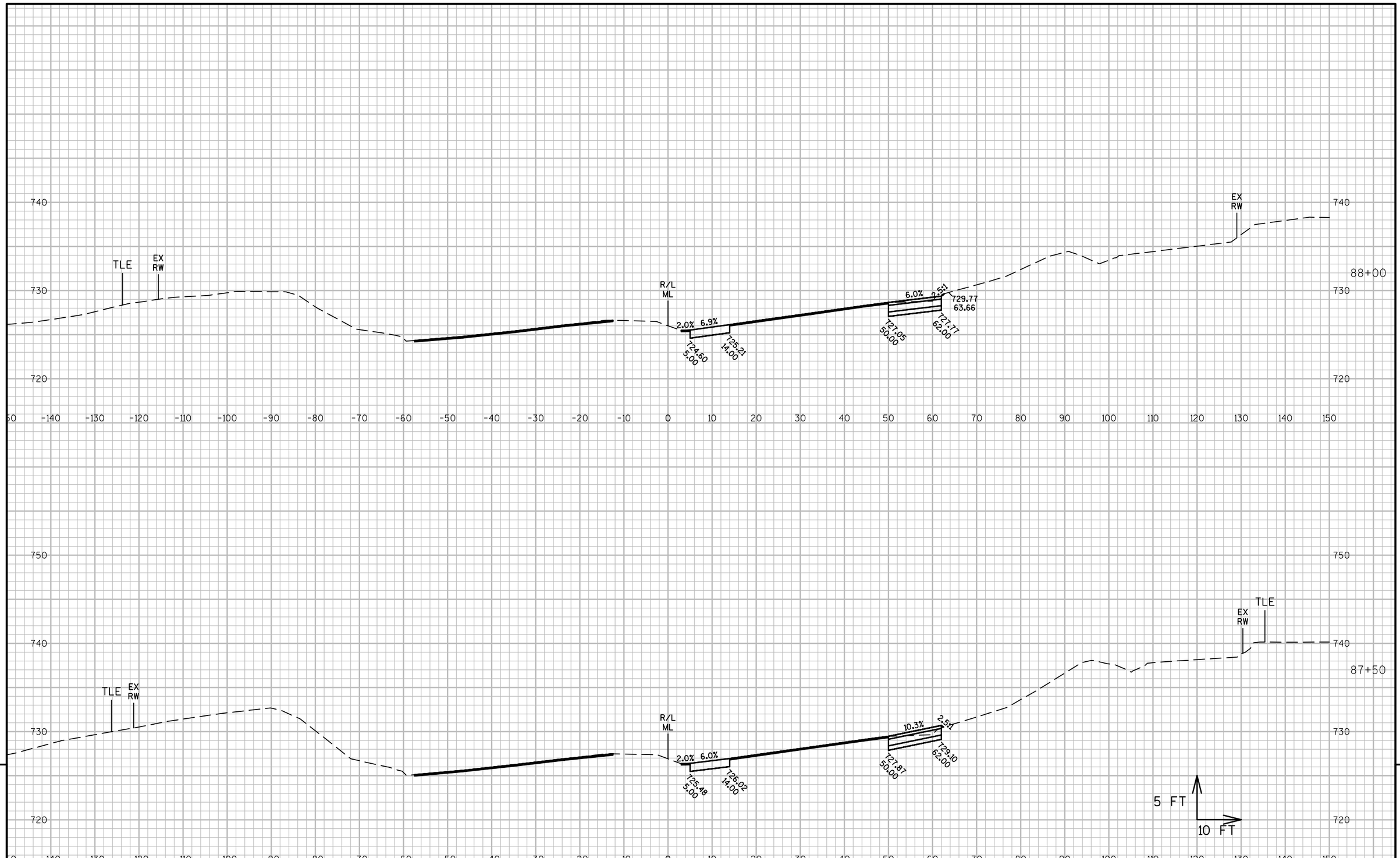
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 599 E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 15

PLOT DATE : 10/20/2017 4:23 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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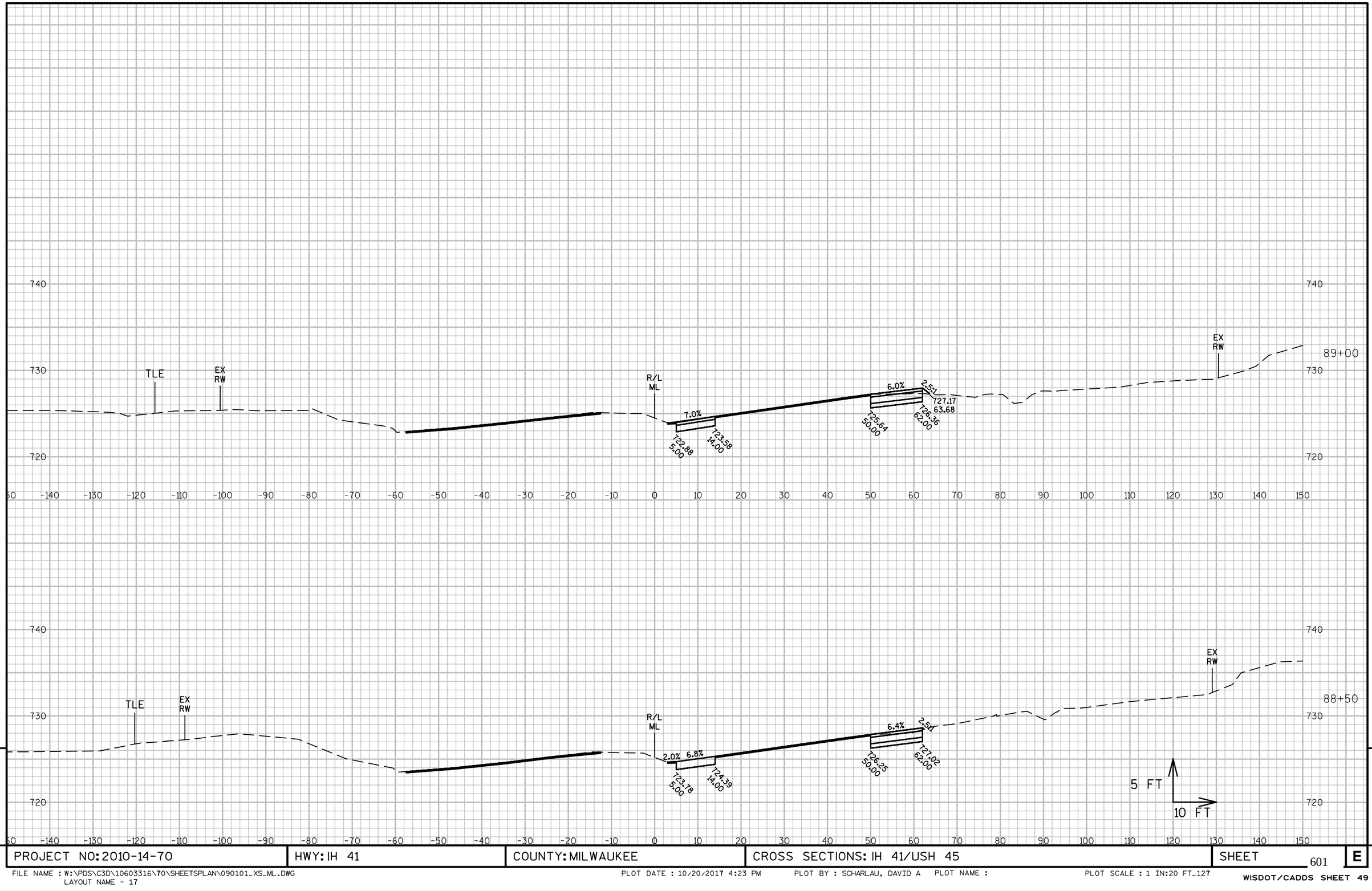
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 600	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 16

PLOT DATE : 10/20/2017 4:23 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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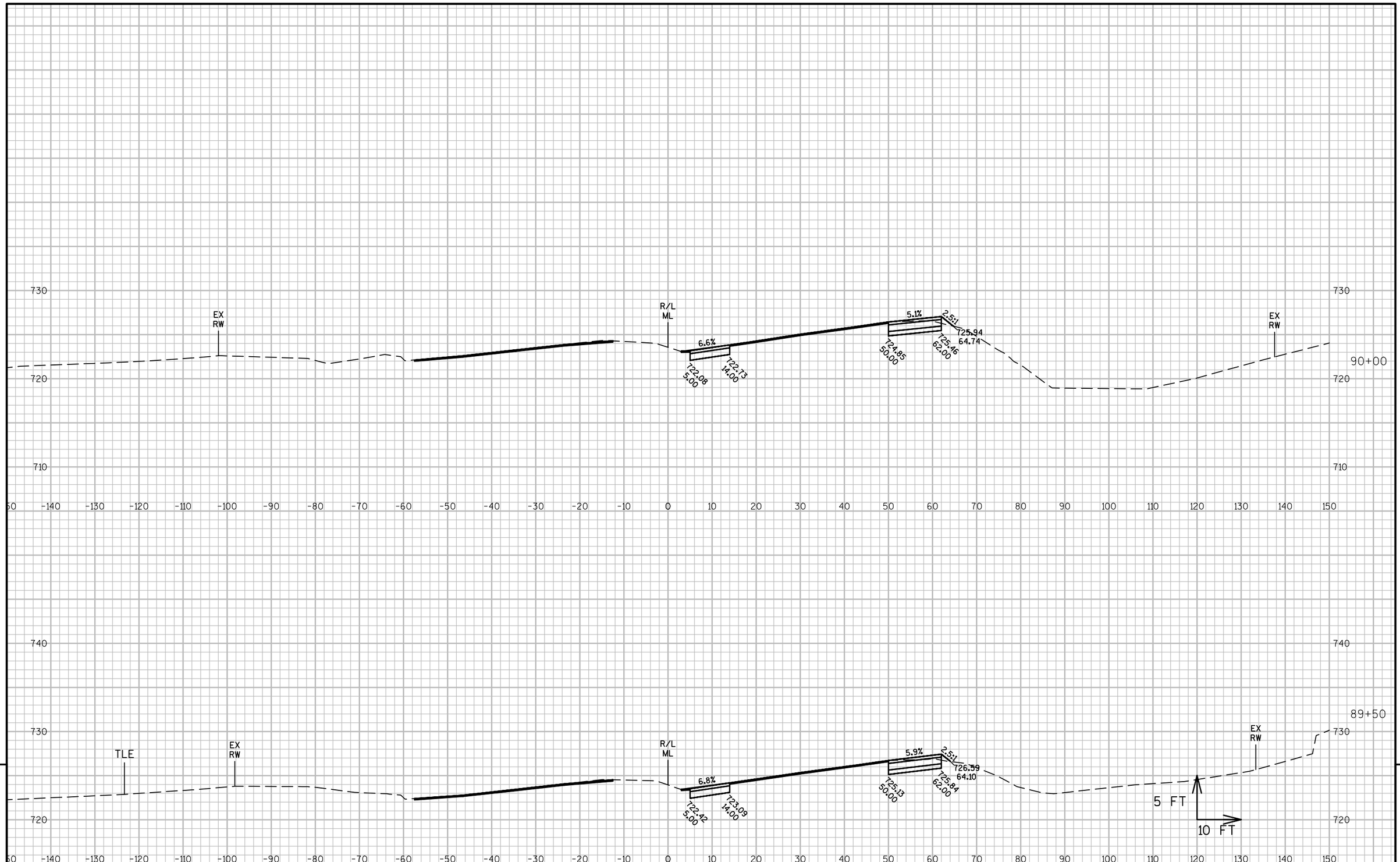
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 601	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 17

PLOT DATE : 10/20/2017 4:23 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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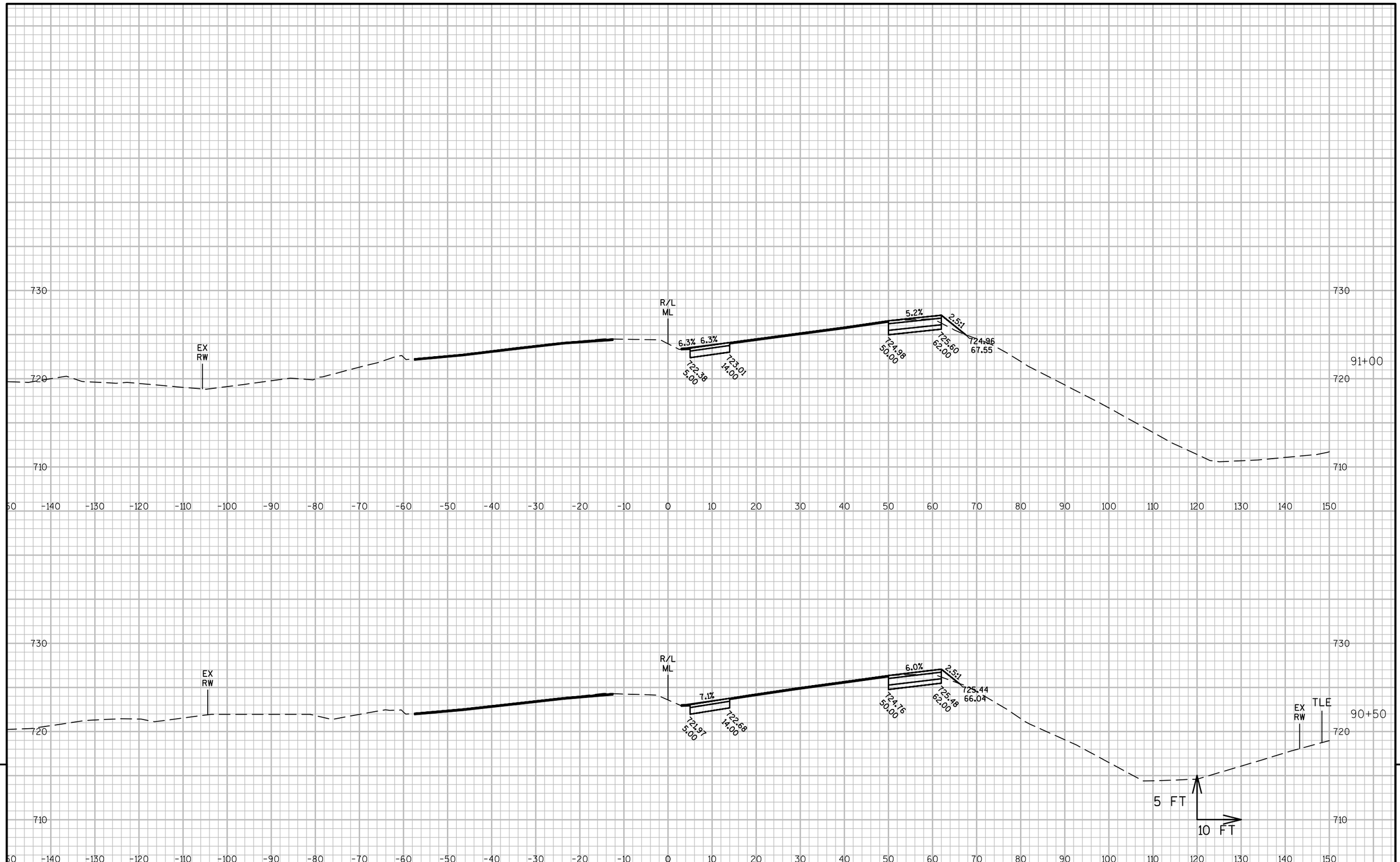
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 602	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 18

PLOT DATE : 10/20/2017 4:23 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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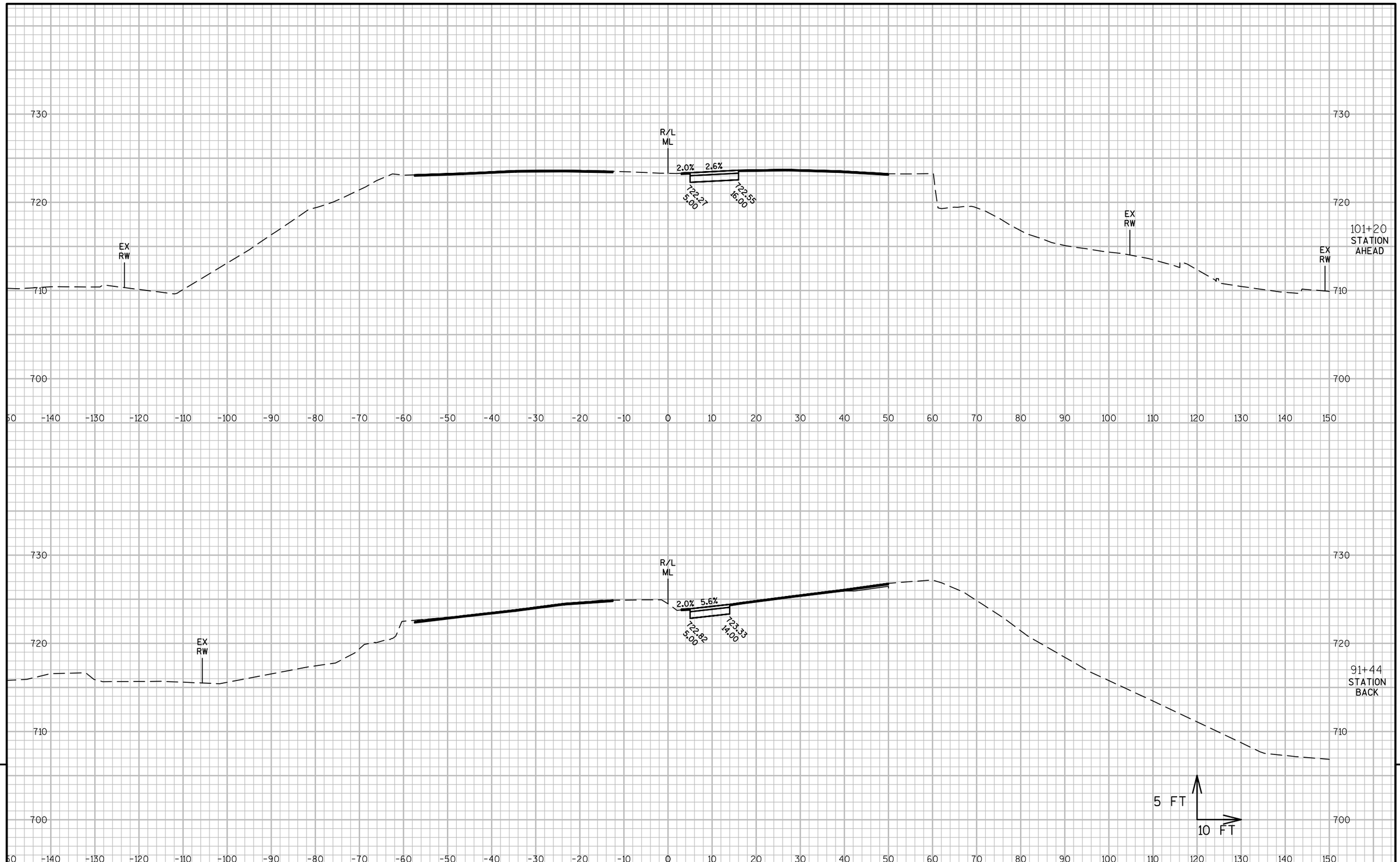
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 603	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 19

PLOT DATE : 10/20/2017 4:23 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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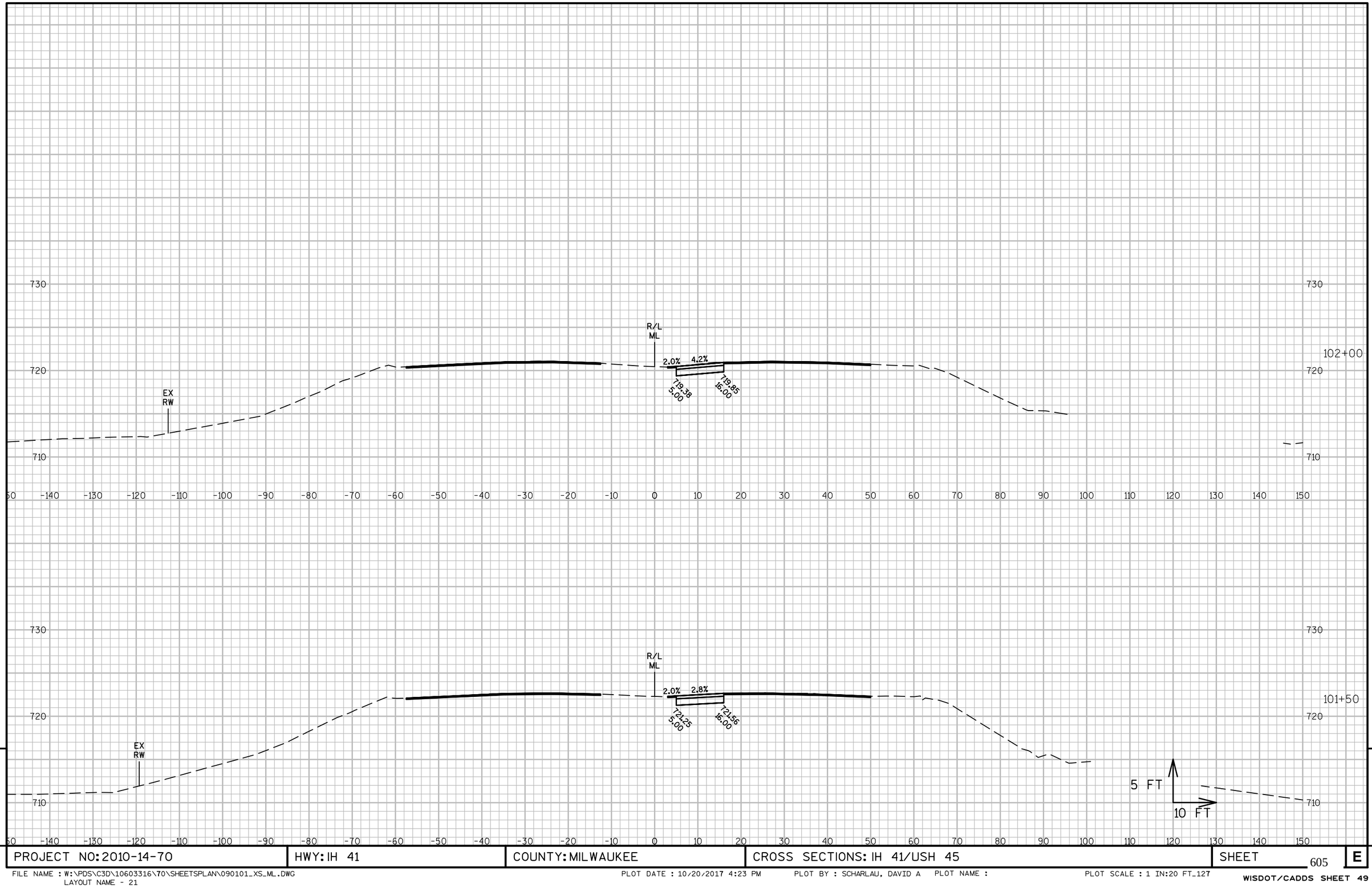
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 604	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 20

PLOT DATE : 10/20/2017 4:23 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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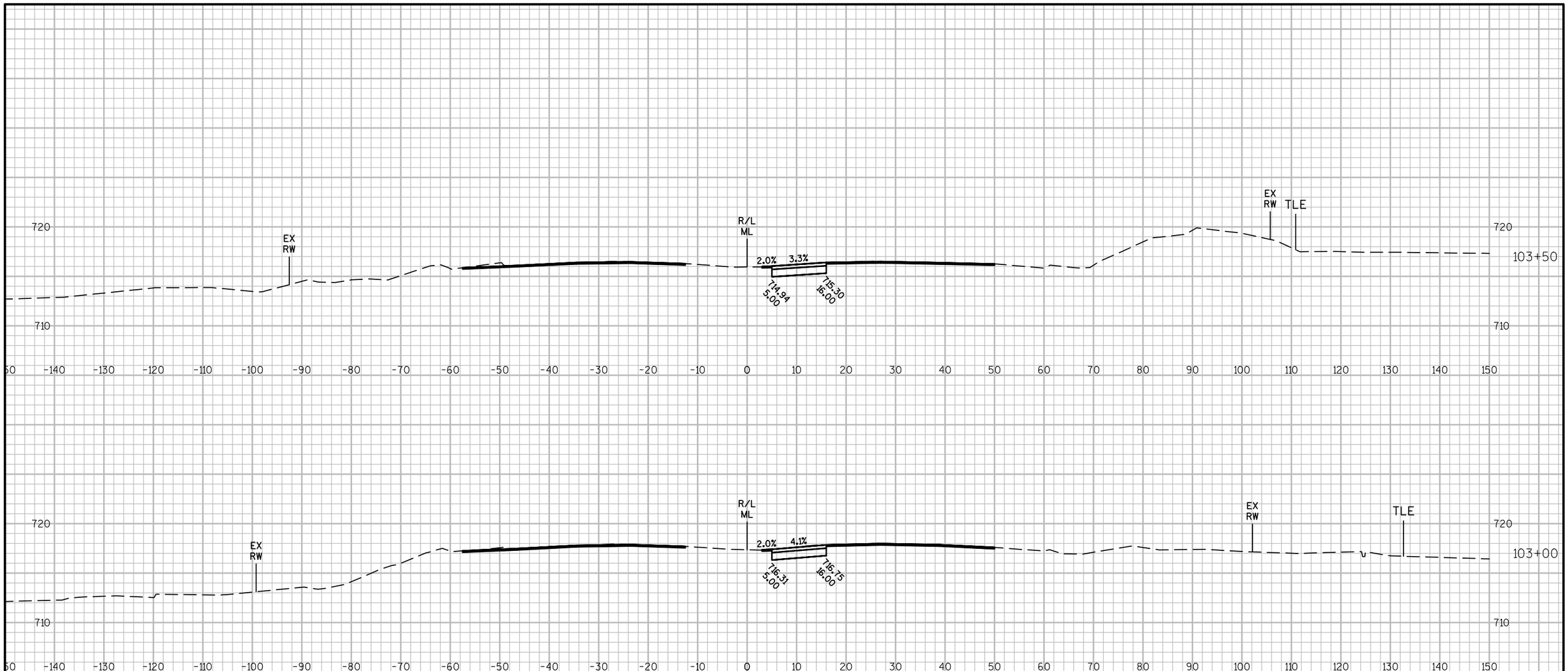
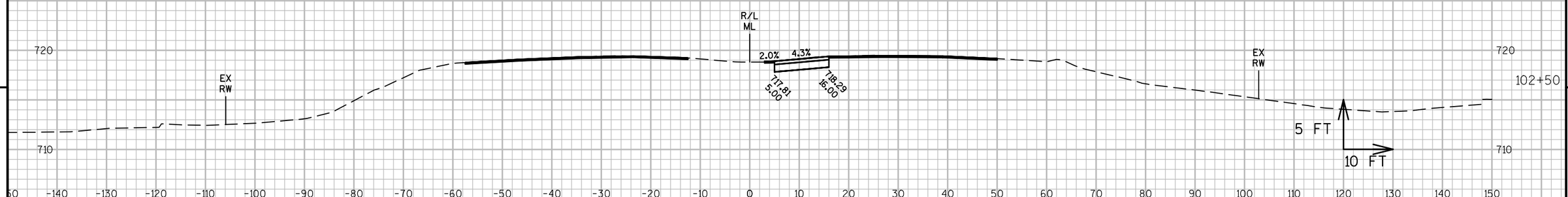
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 605	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 21

PLOT DATE : 10/20/2017 4:23 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49





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PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 606	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 22

PLOT DATE : 10/20/2017 4:23 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

730
720
710
EX RW
R/L ML
2.6% 2.0%
2.0% 0.3%
712.88 -14.16
712.65 -5.16
712.87 5.40
712.83 16.40
EX RW
TLE
104+50
730
720
710
-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
730
720
710
EX RW
R/L ML
2.0% 0.9%
713.81 5.00
713.91 16.00
EX RW
TLE
104+00
5 FT
10 FT
730
720
710
-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

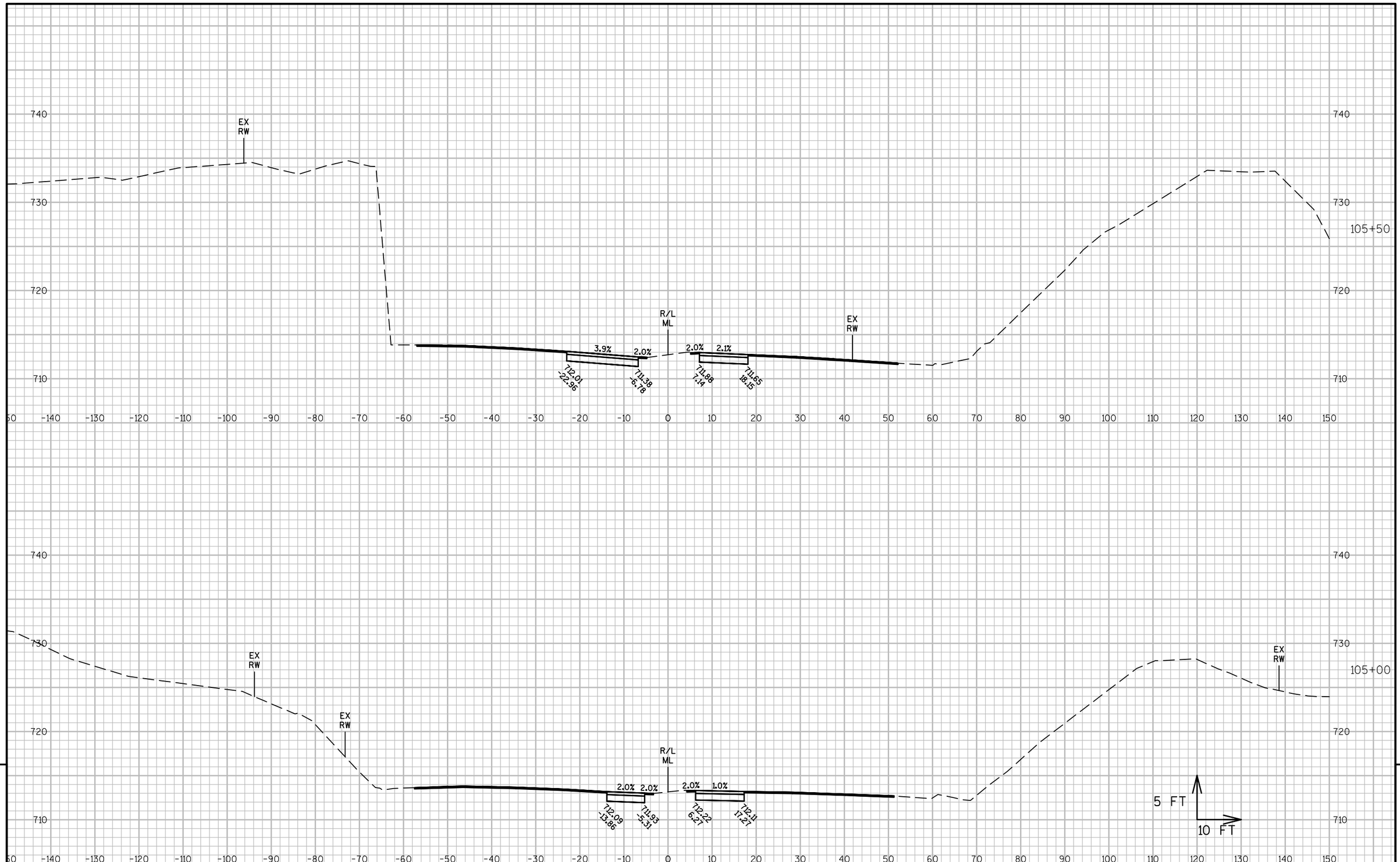
9

9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 607	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 23

PLOT DATE : 10/20/2017 4:23 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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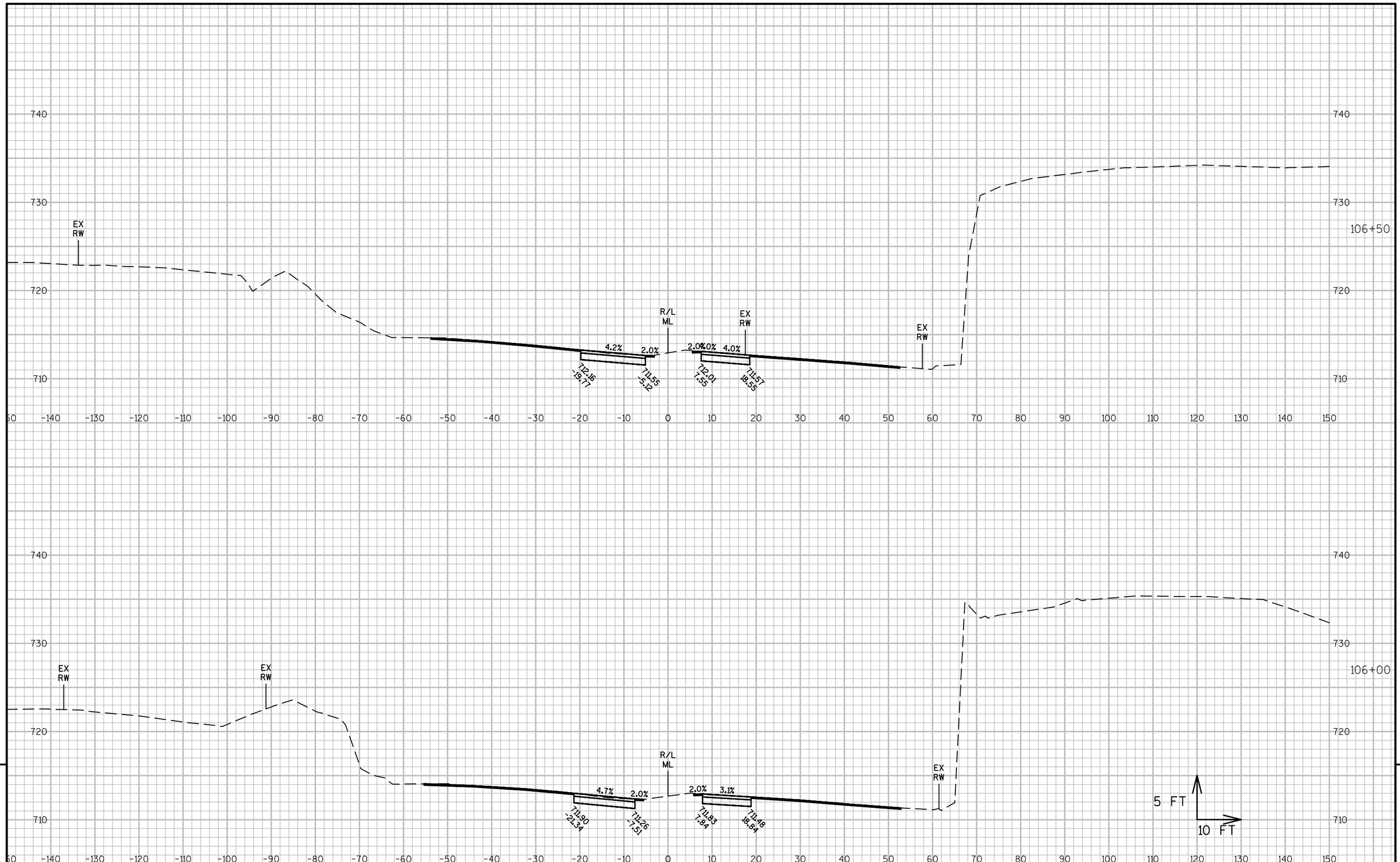
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 608	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 24

PLOT DATE : 10/20/2017 4:23 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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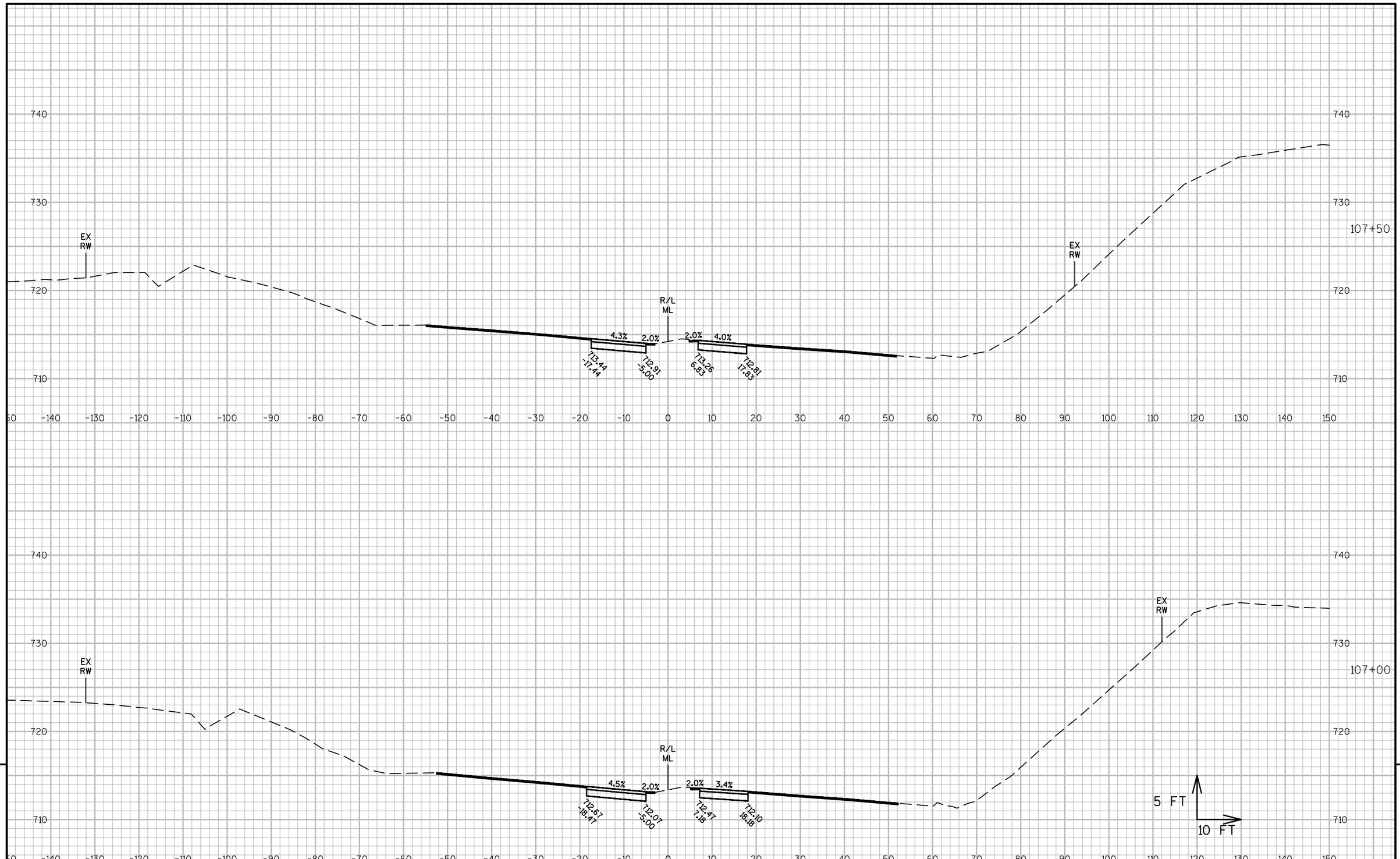
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 609	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 25

PLOT DATE : 10/20/2017 4:24 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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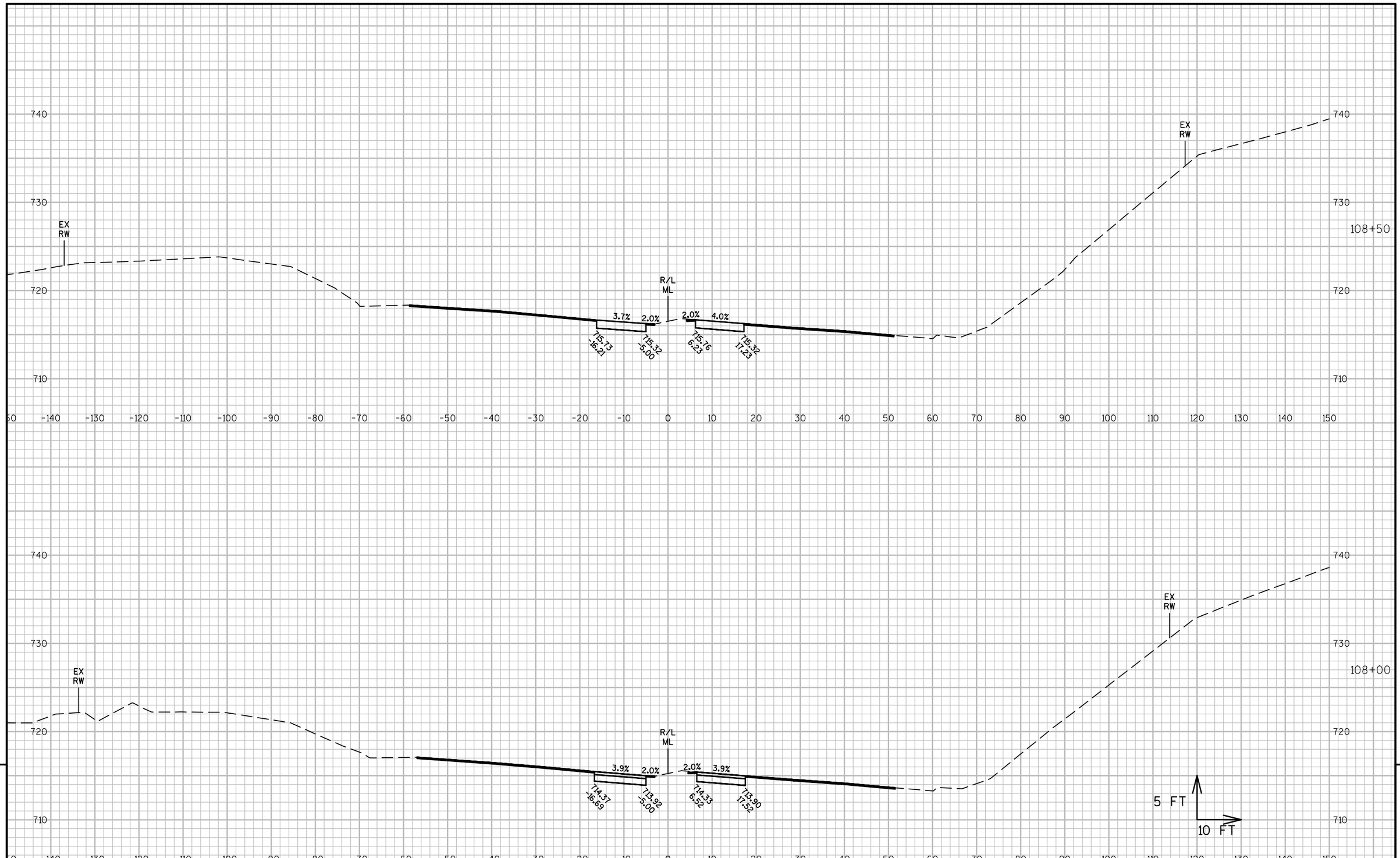
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 610	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 26

PLOT DATE : 10/20/2017 4:24 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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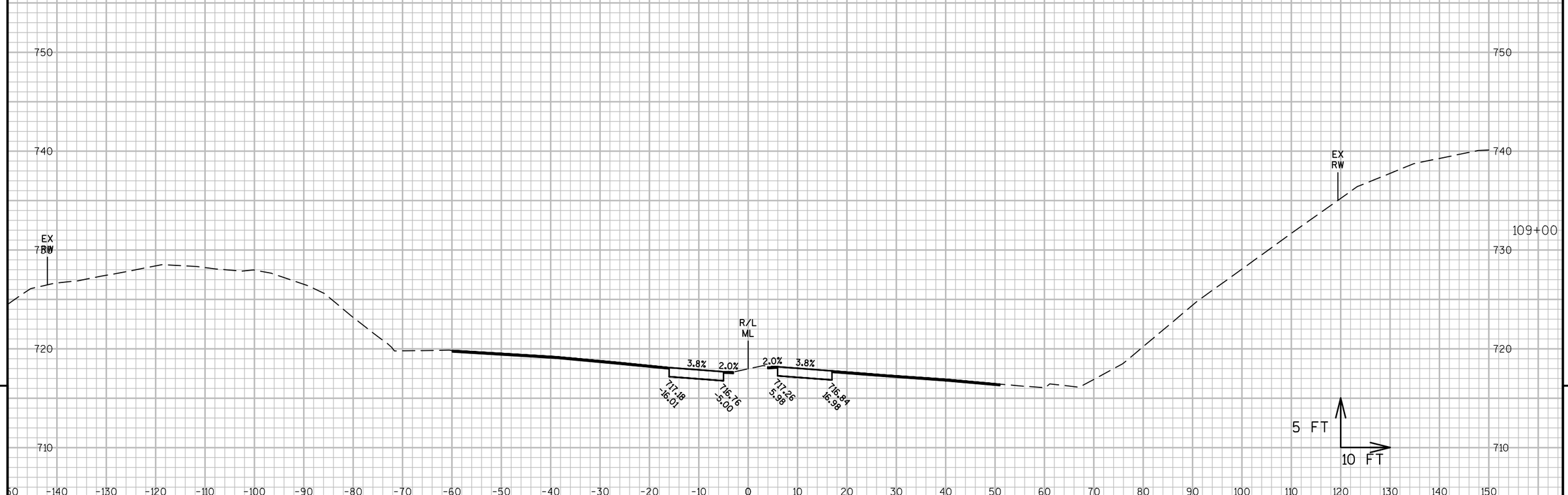
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 611	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 27

PLOT DATE : 10/20/2017 4:24 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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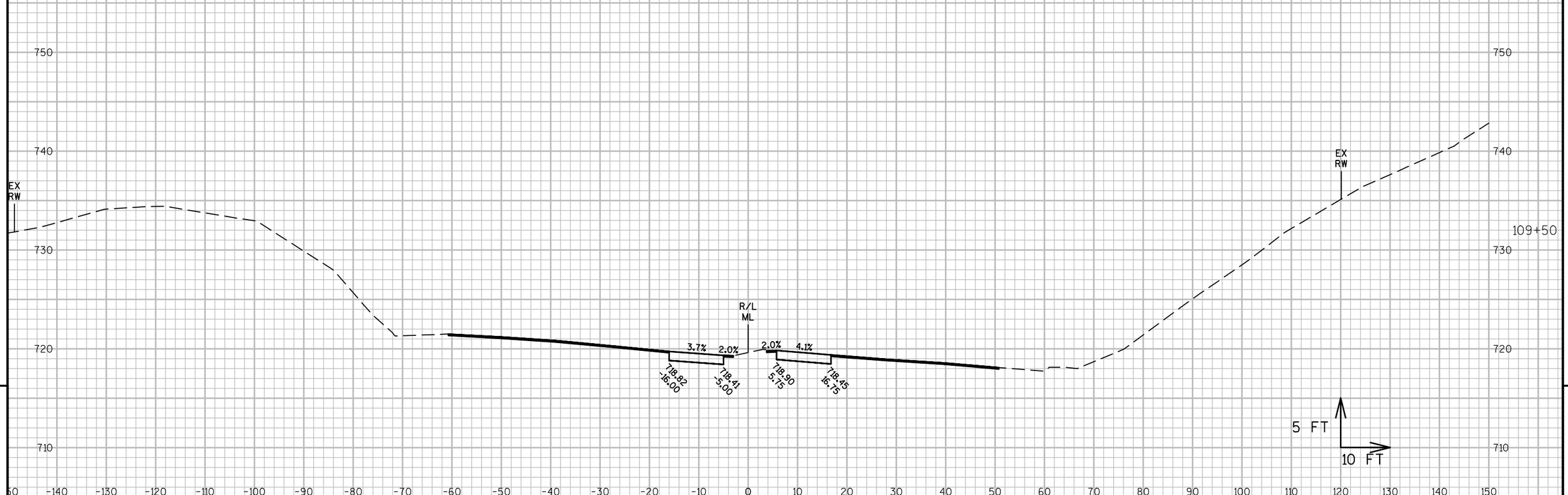
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 612	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 28

PLOT DATE : 10/20/2017 4:24 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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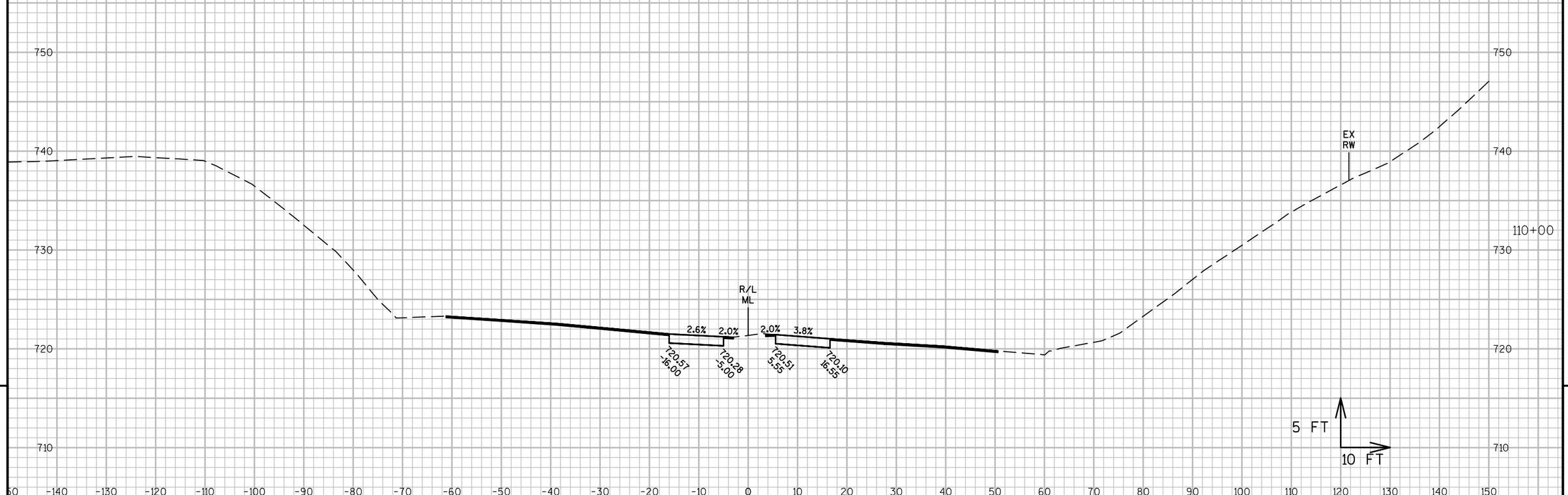
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 613	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 29

PLOT DATE : 10/20/2017 4:24 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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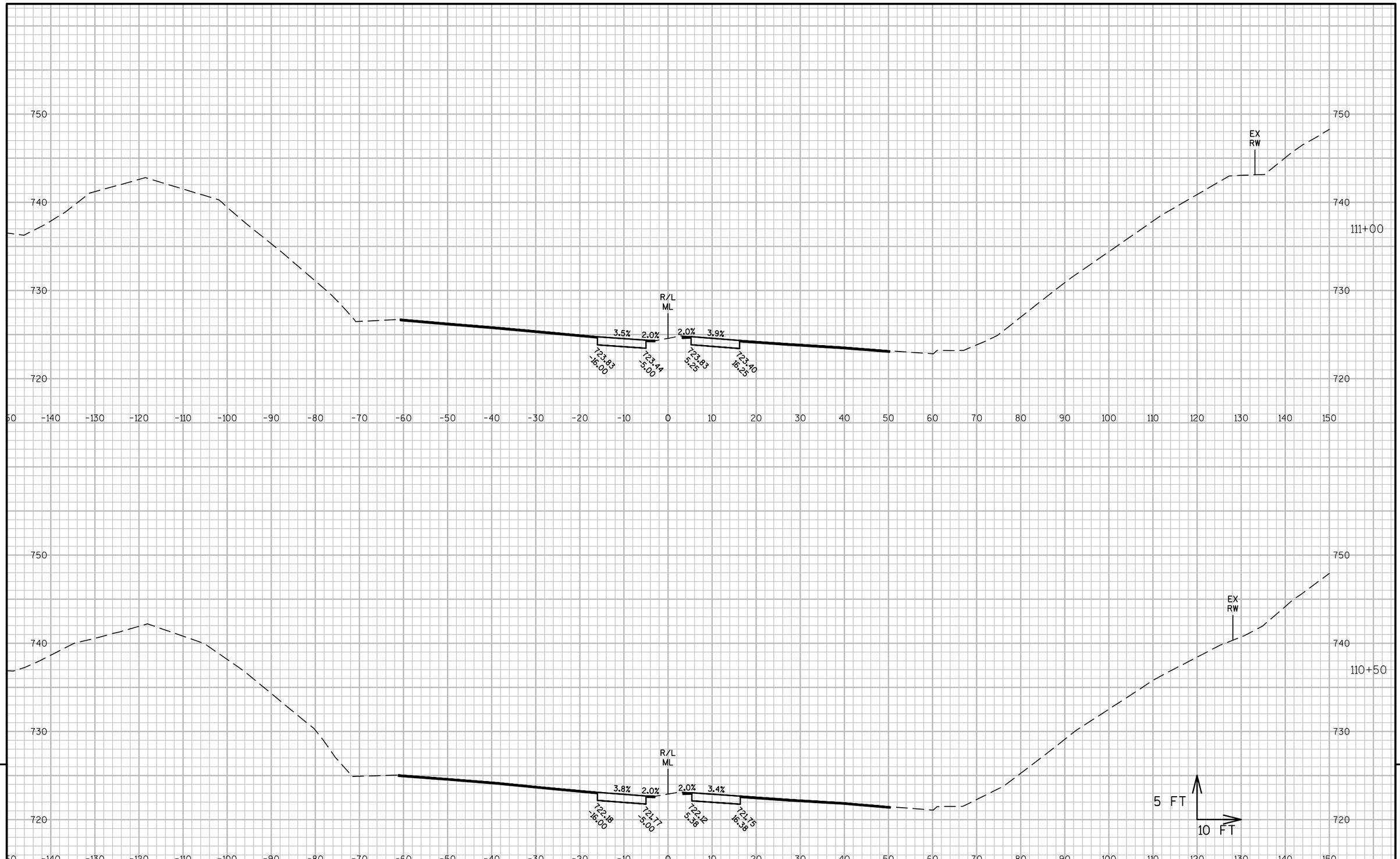
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 614	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 30

PLOT DATE : 10/20/2017 4:24 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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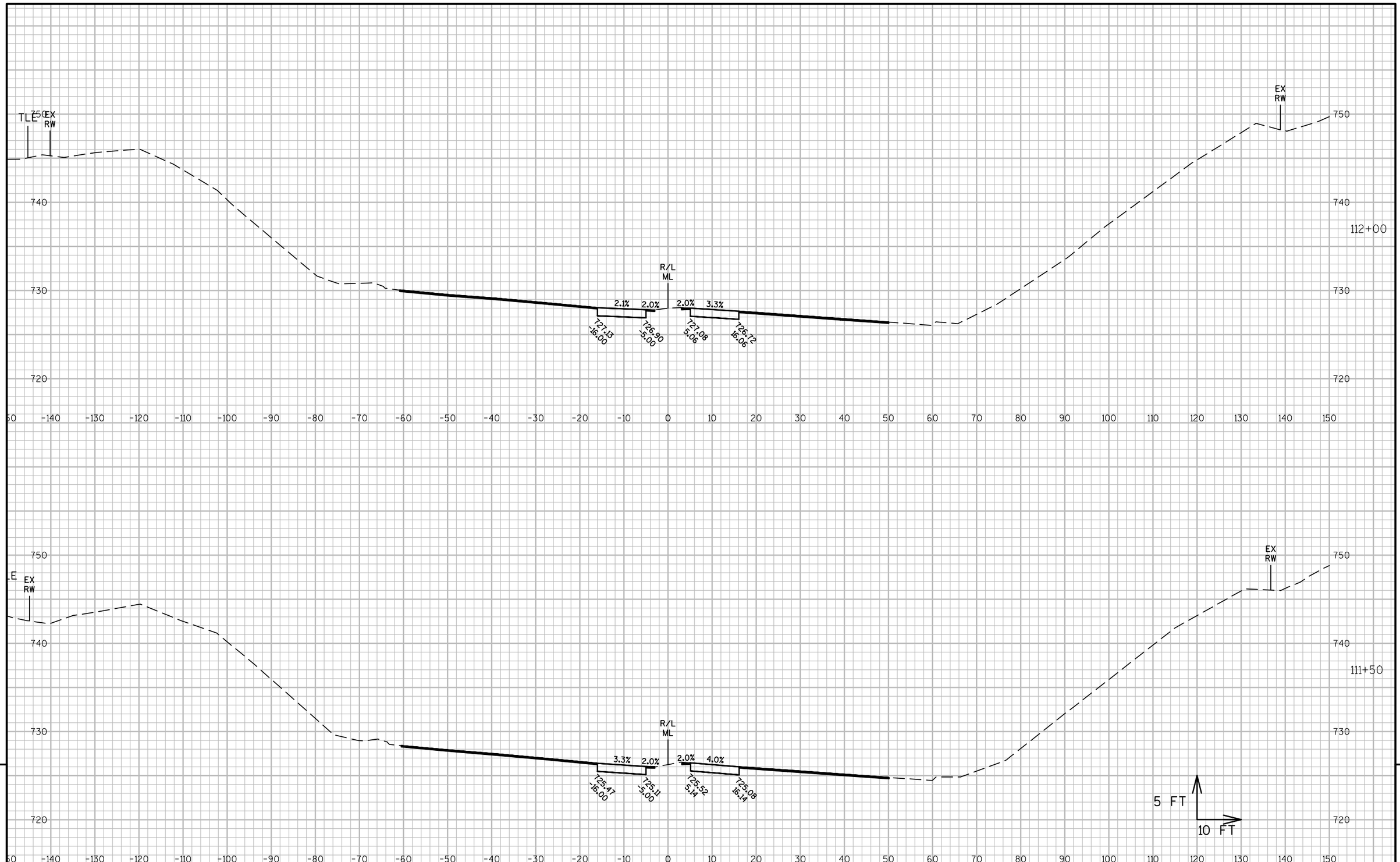
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 615	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 31

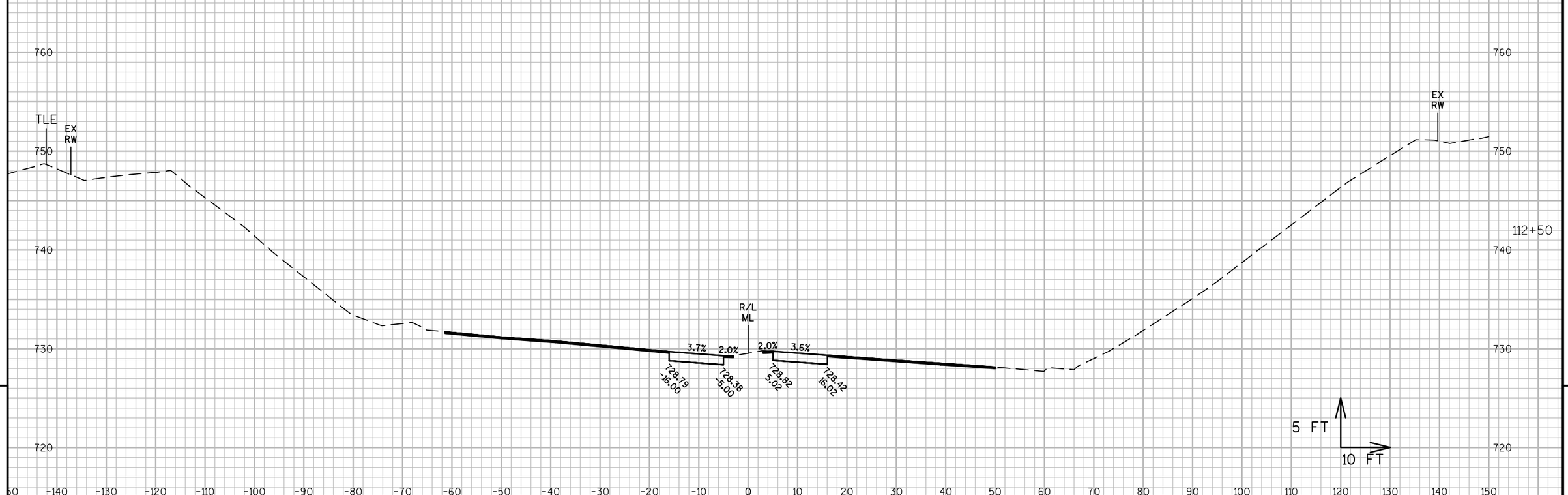
PLOT DATE : 10/20/2017 4:24 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



9 9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 616	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 32
PLOT DATE : 10/20/2017 4:24 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127
WISDOT/CADDS SHEET 49



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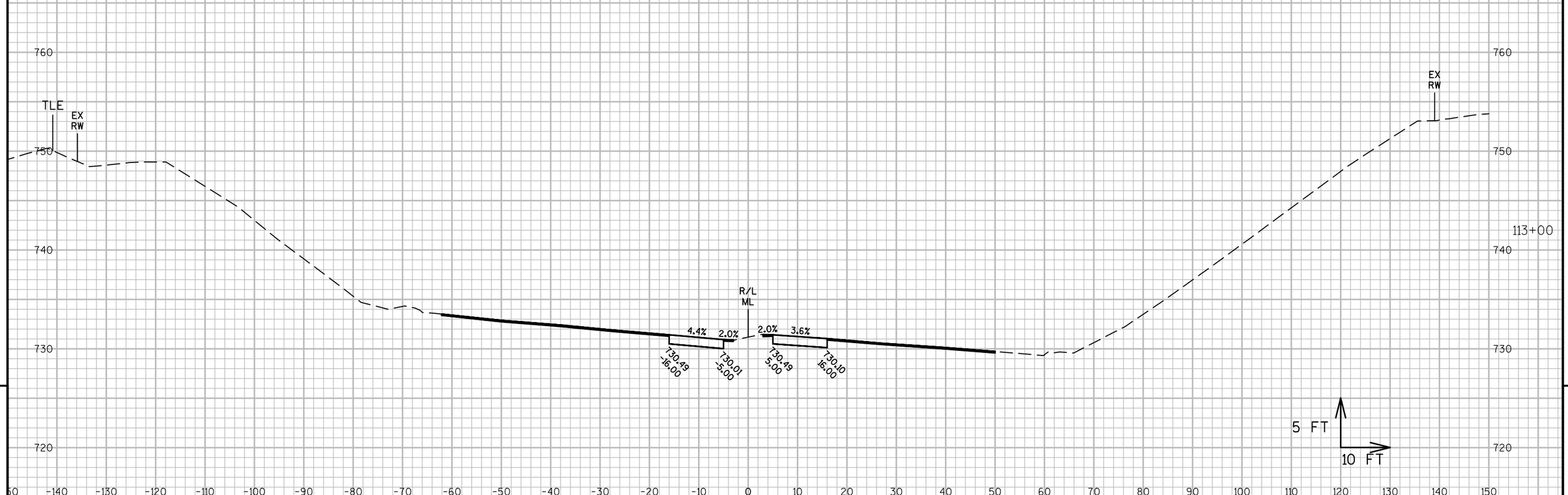
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 617	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 33
PLOT DATE : 10/20/2017 4:24 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127
WISDOT/CADDS SHEET 49



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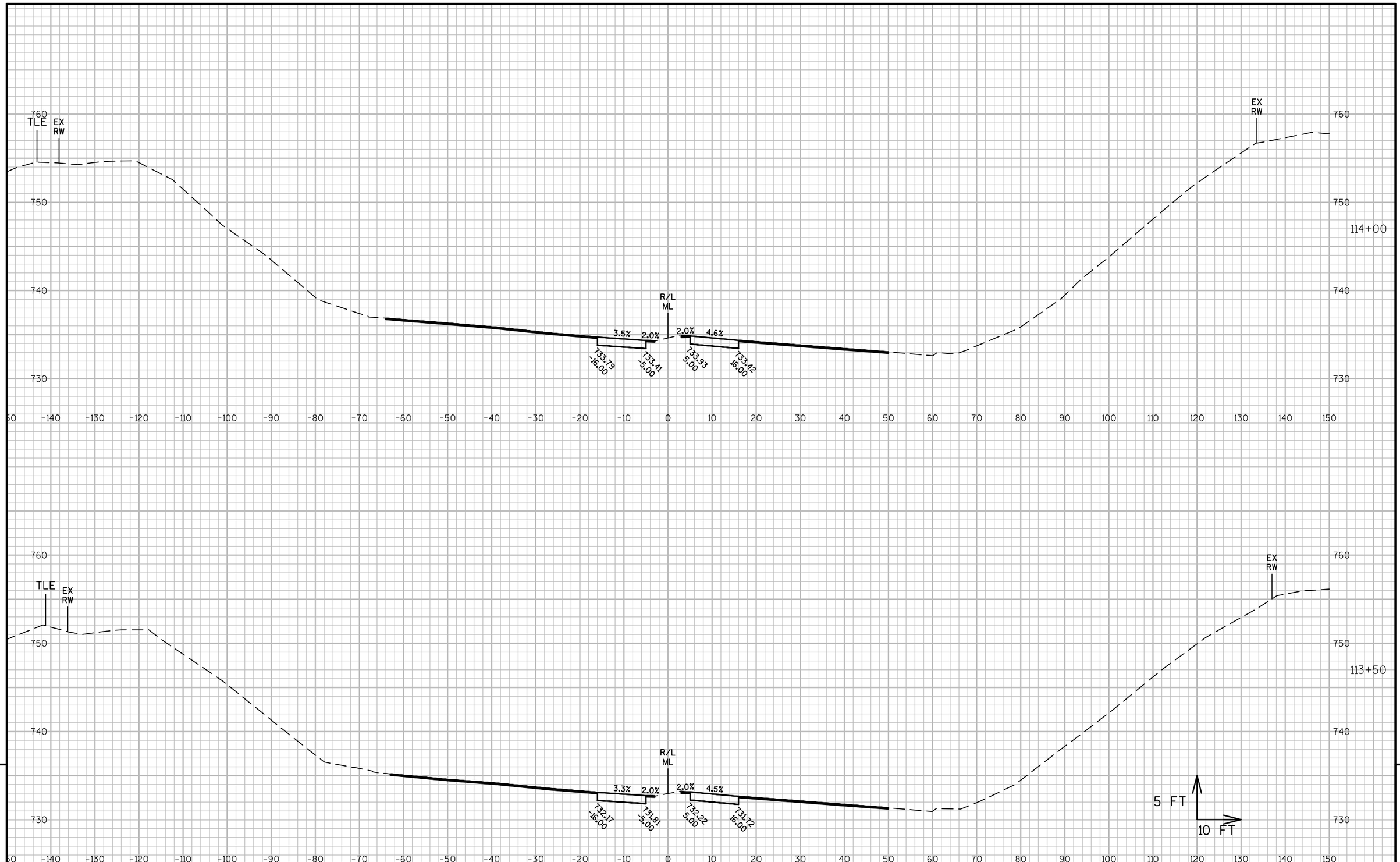
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 618	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 34

PLOT DATE : 10/20/2017 4:24 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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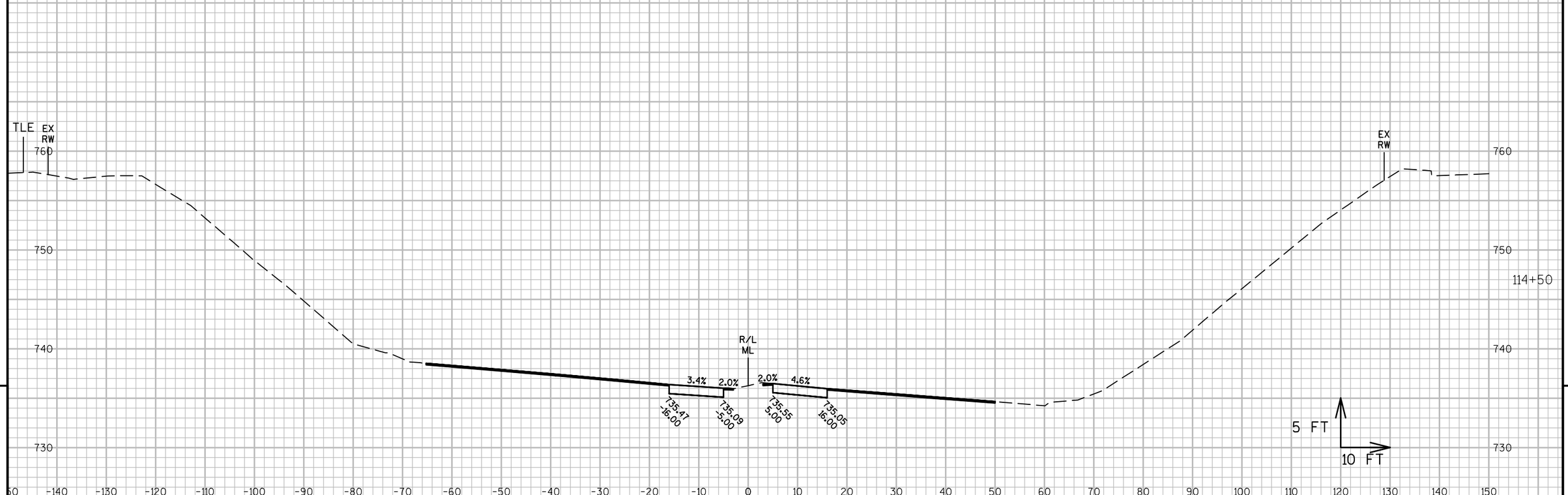
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 619	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 35
PLOT DATE : 10/20/2017 4:24 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127
WISDOT/CADDS SHEET 49



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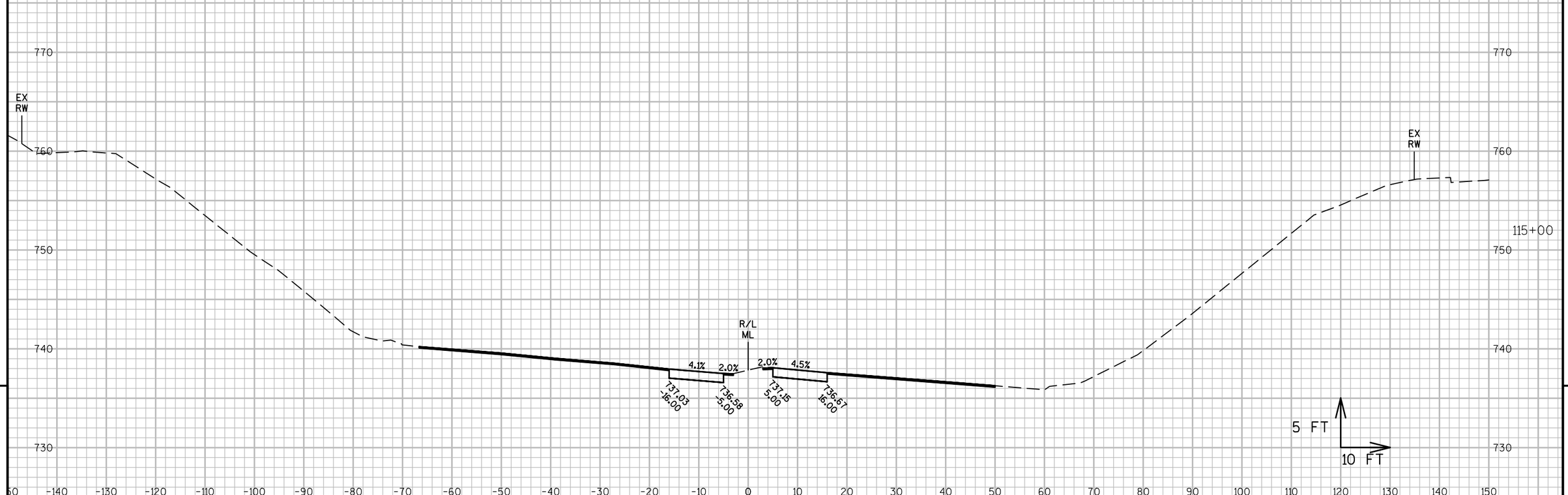
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 620	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 36
PLOT DATE : 10/20/2017 4:24 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127
WISDOT/CADDS SHEET 49



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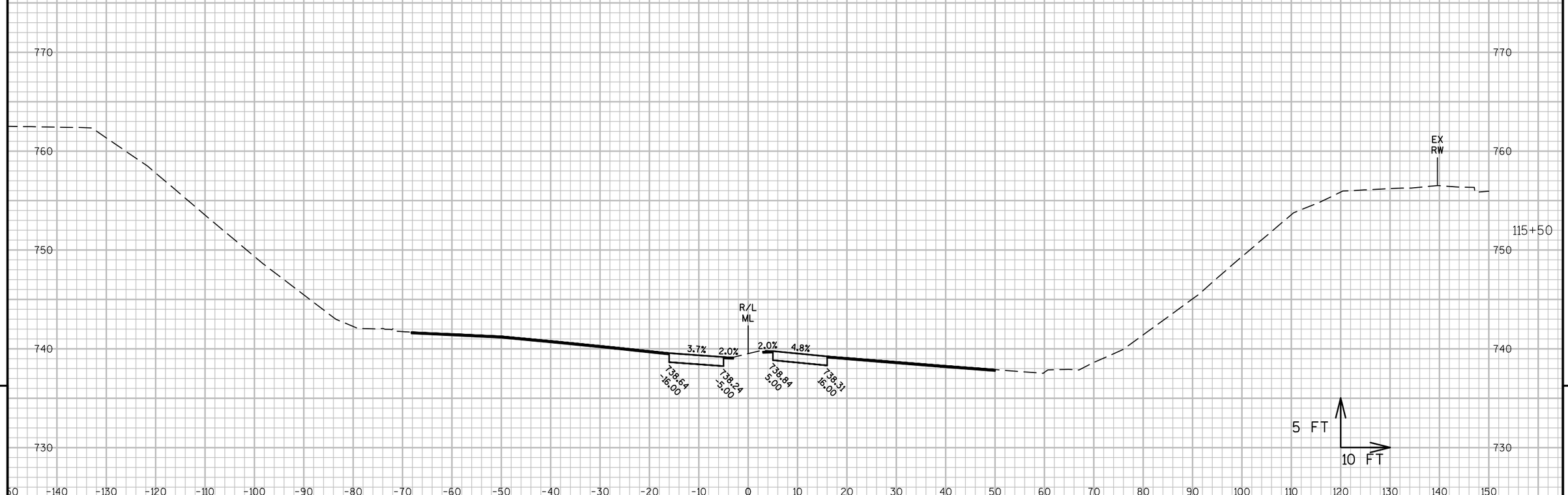
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 621	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 37

PLOT DATE : 10/20/2017 4:25 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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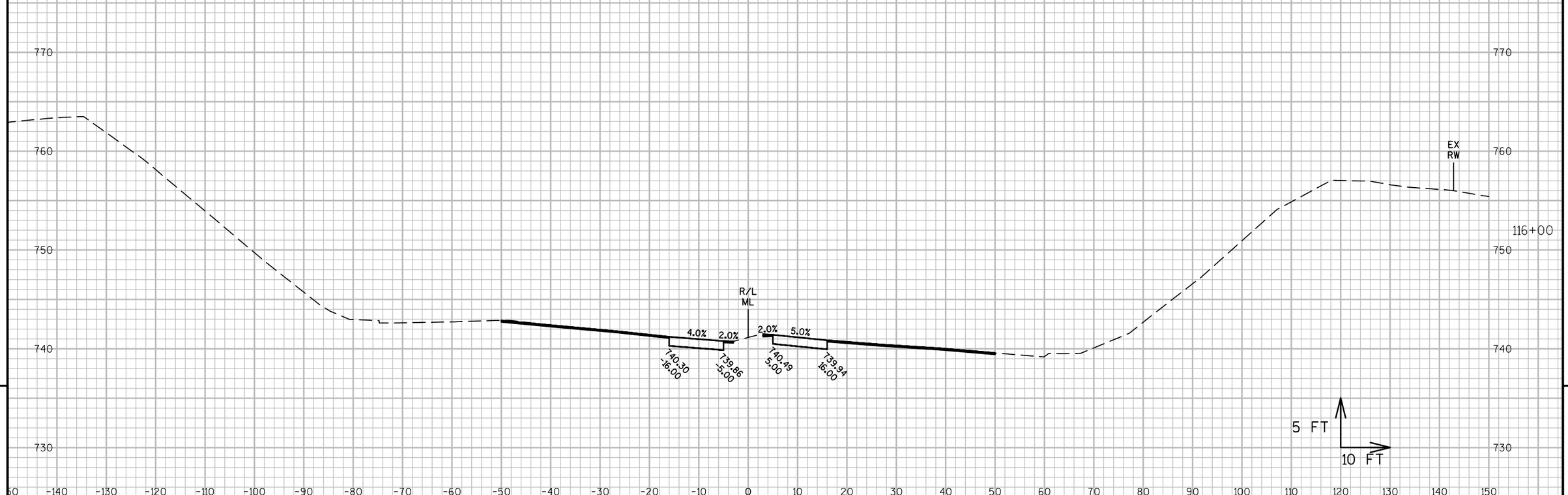
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 622	E



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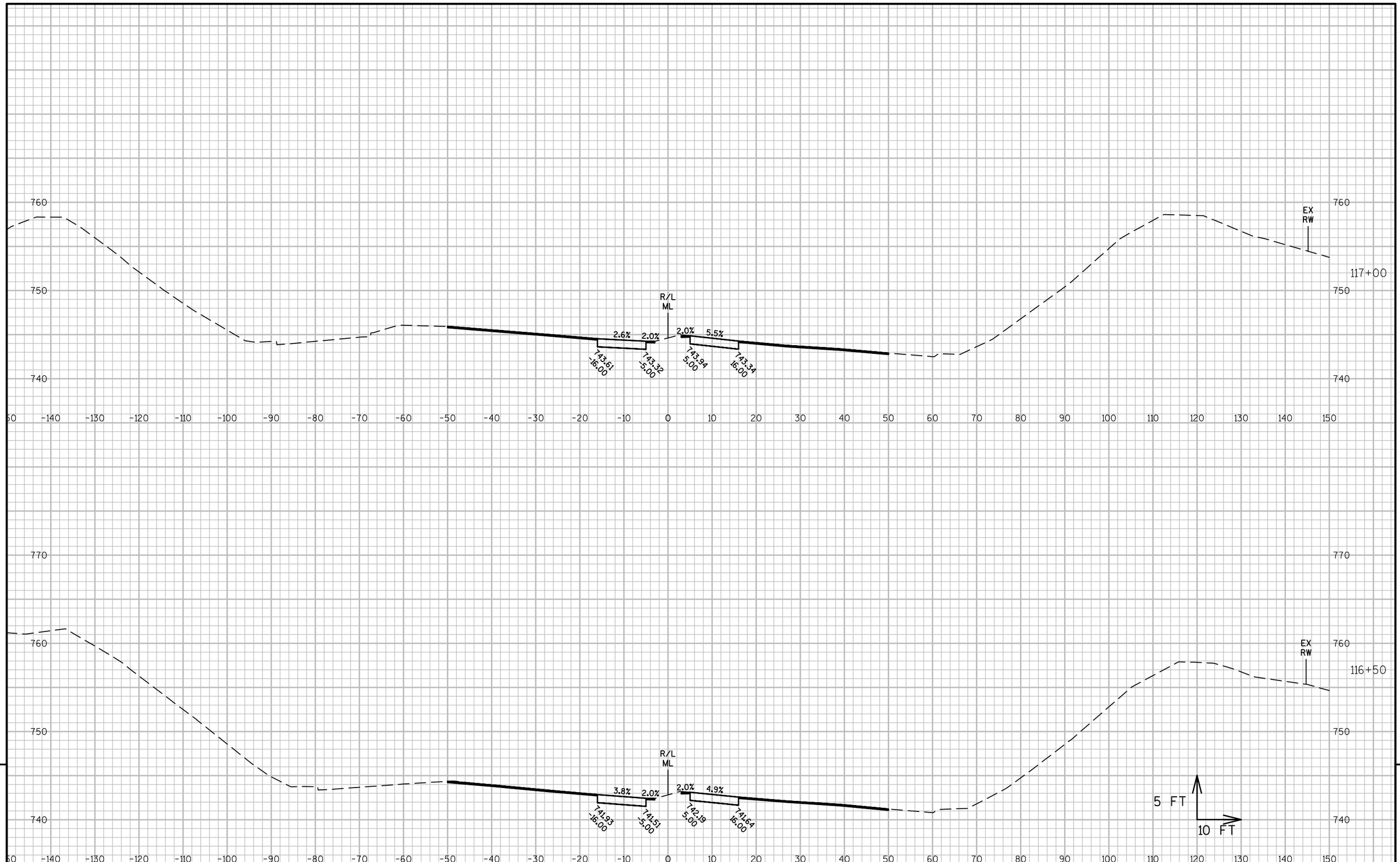
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 623 E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 39

PLOT DATE : 10/20/2017 4:25 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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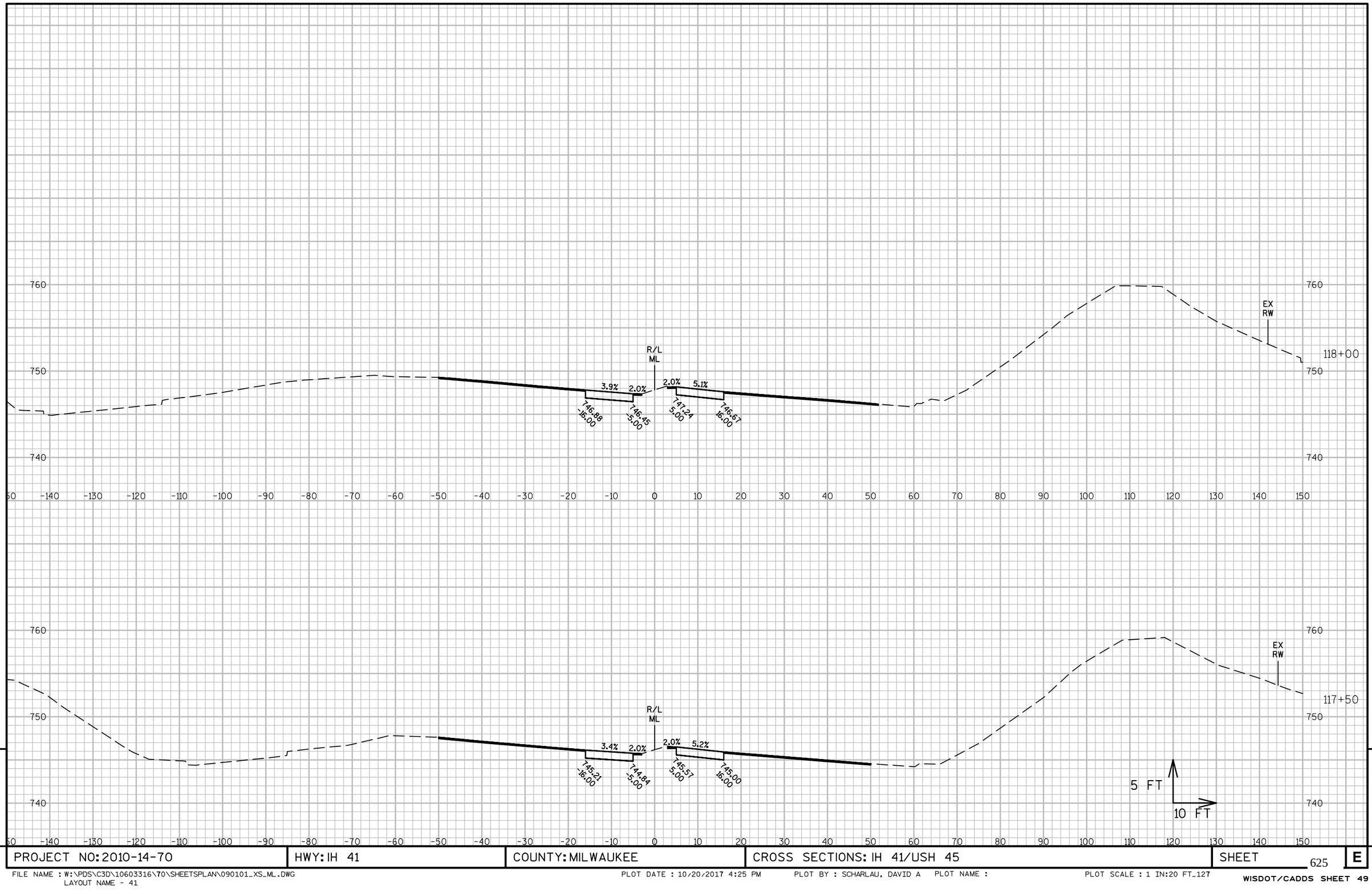
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 624	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 40

PLOT DATE : 10/20/2017 4:25 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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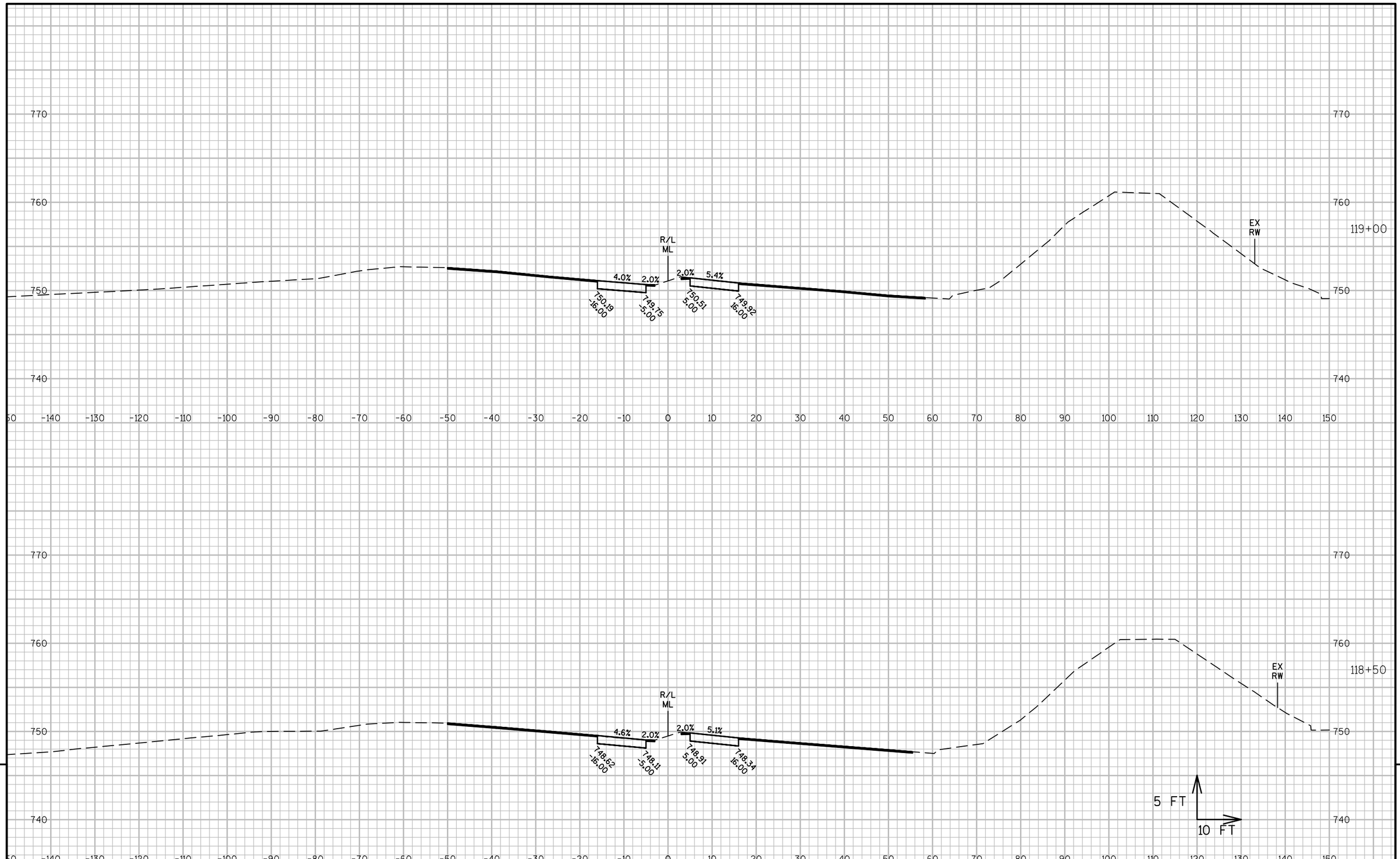
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 625	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 41

PLOT DATE : 10/20/2017 4:25 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49

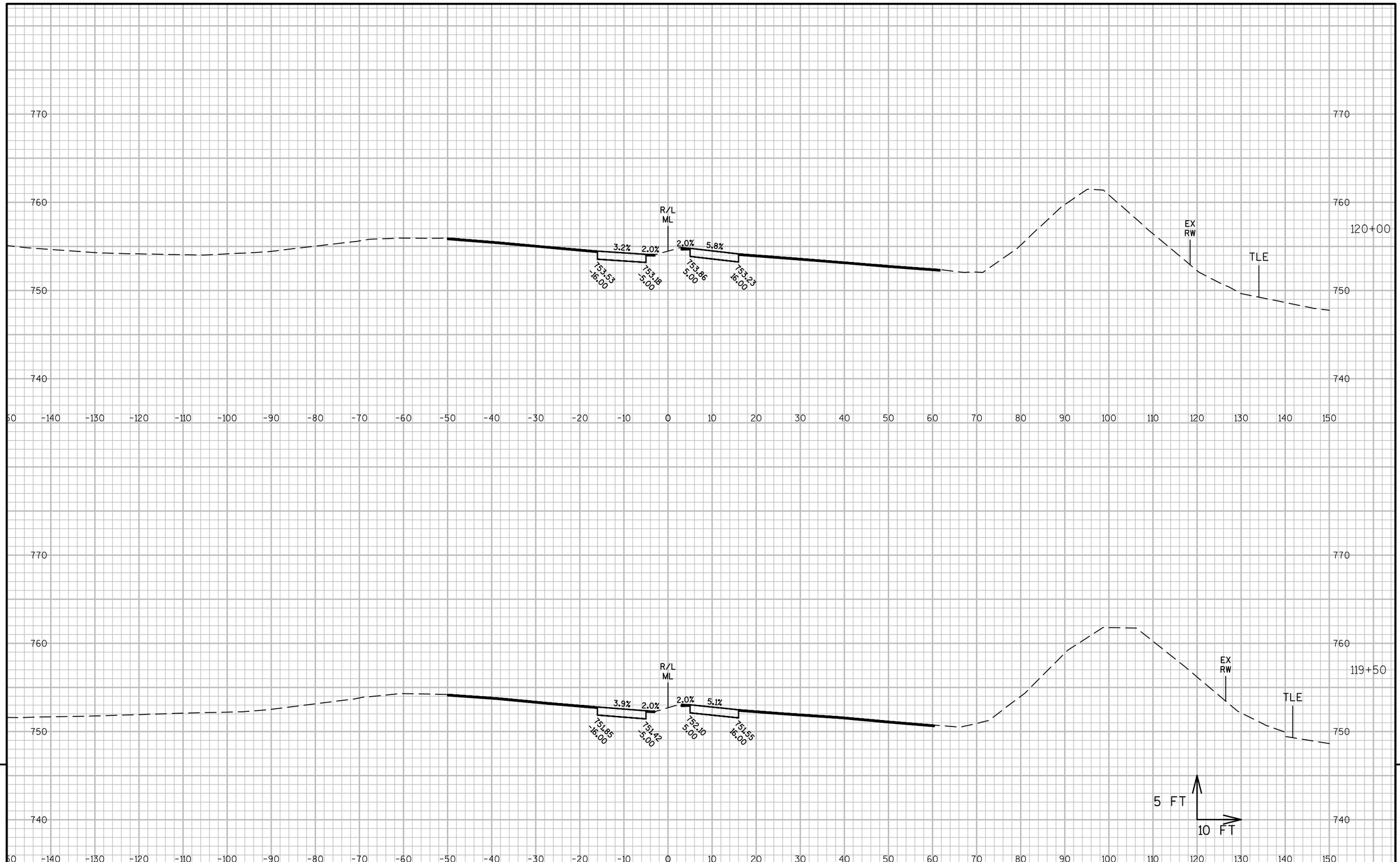


9	PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 626 E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 42

PLOT DATE : 10/20/2017 4:25 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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9

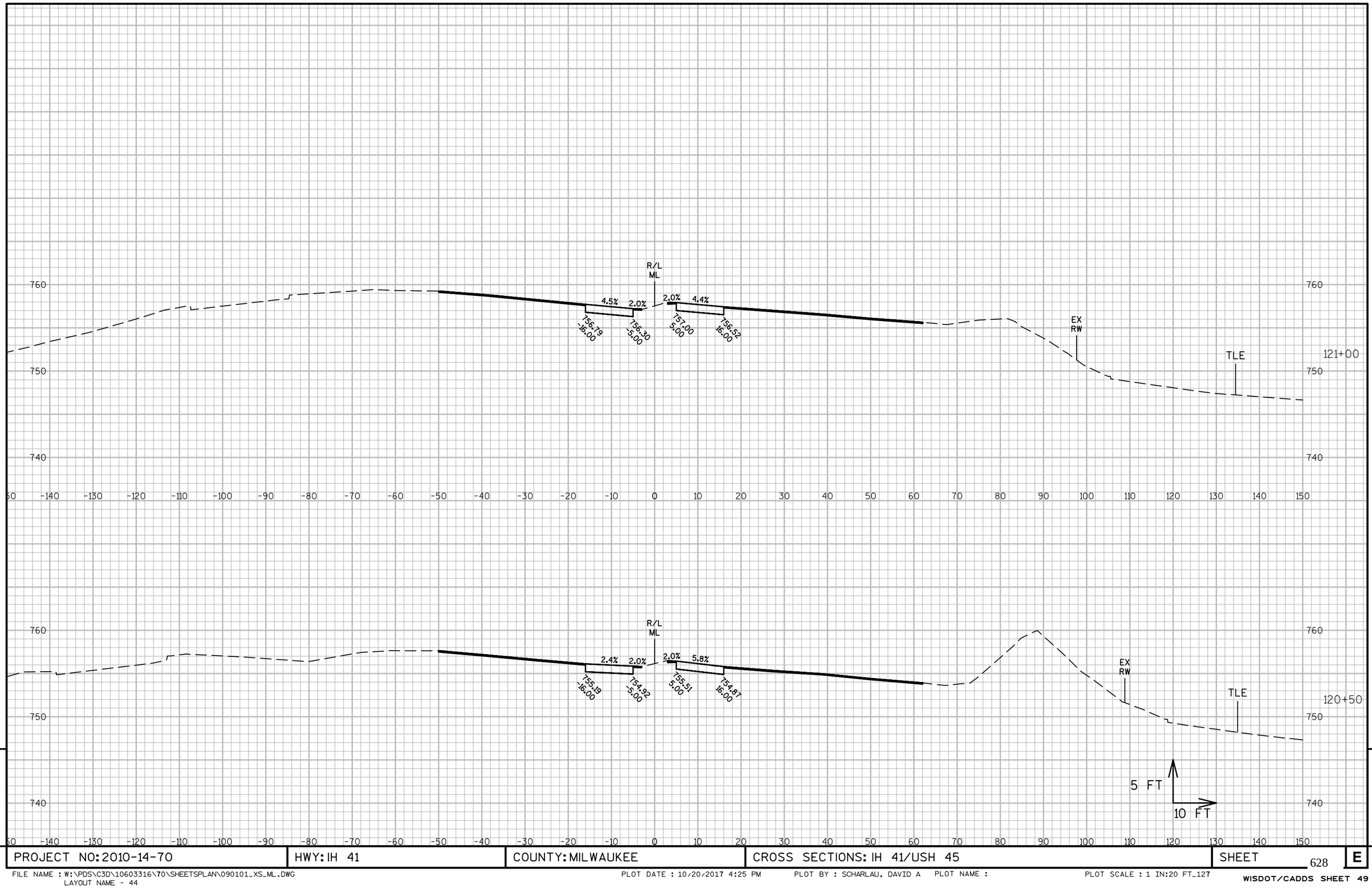
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 627	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 43

PLOT DATE : 10/20/2017 4:25 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME :

PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



9

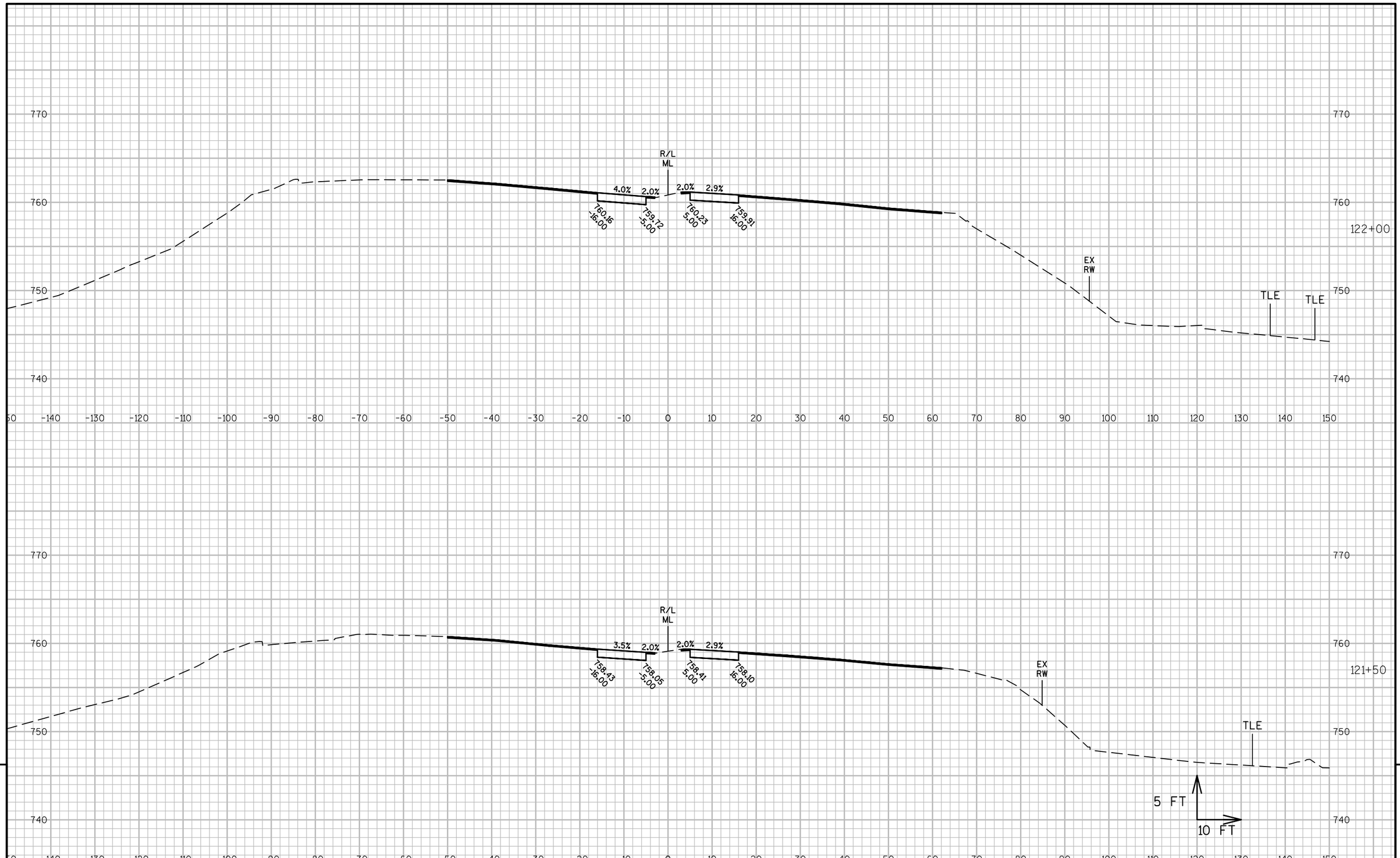
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 628	E

9

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 44

PLOT DATE : 10/20/2017 4:25 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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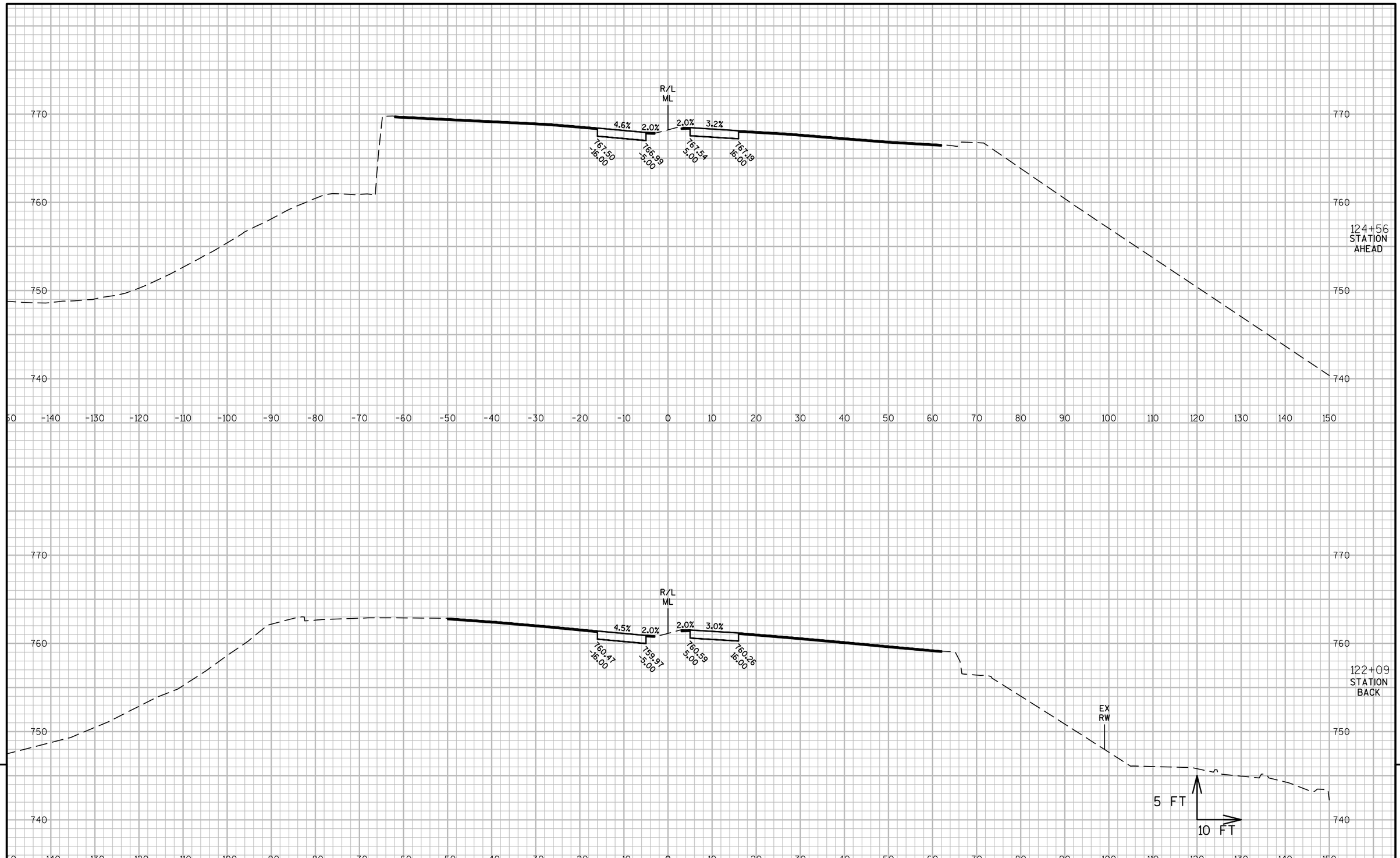
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 629	E



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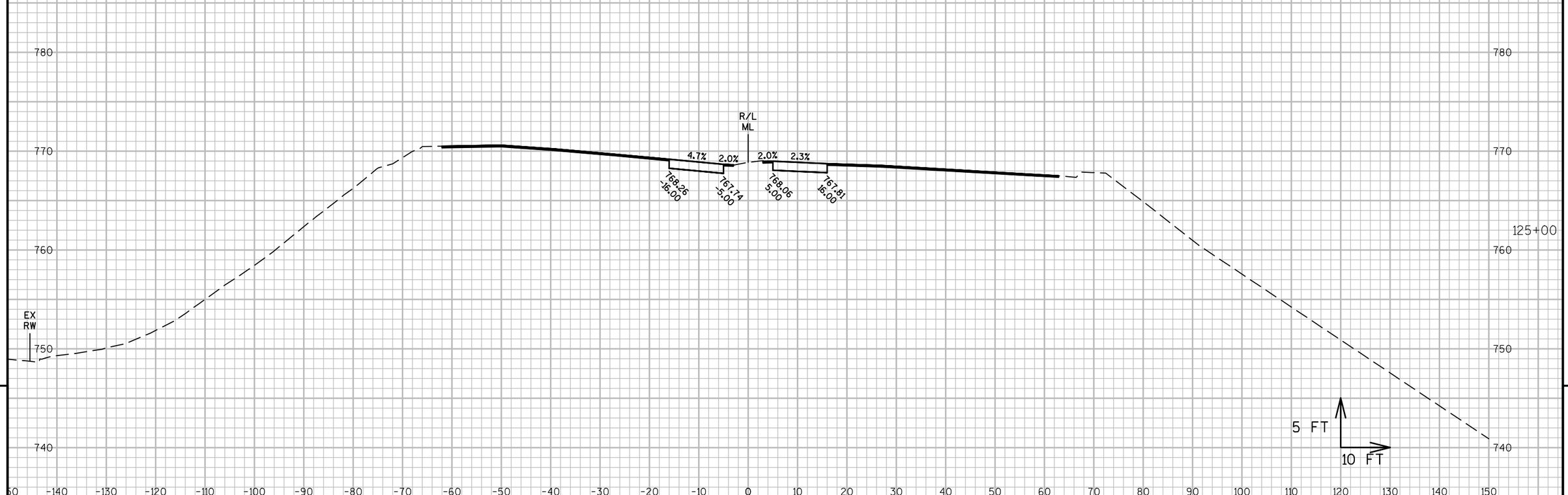
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 630	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 46

PLOT DATE : 10/20/2017 4:25 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



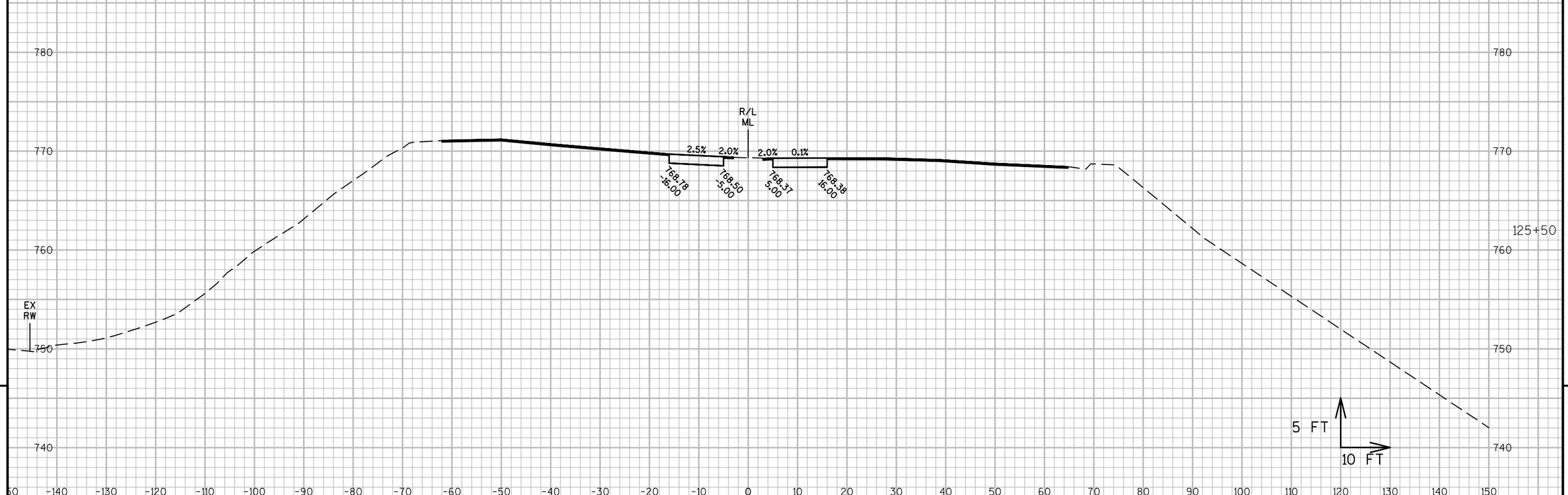
9

9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 631	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 47

PLOT DATE : 10/20/2017 4:25 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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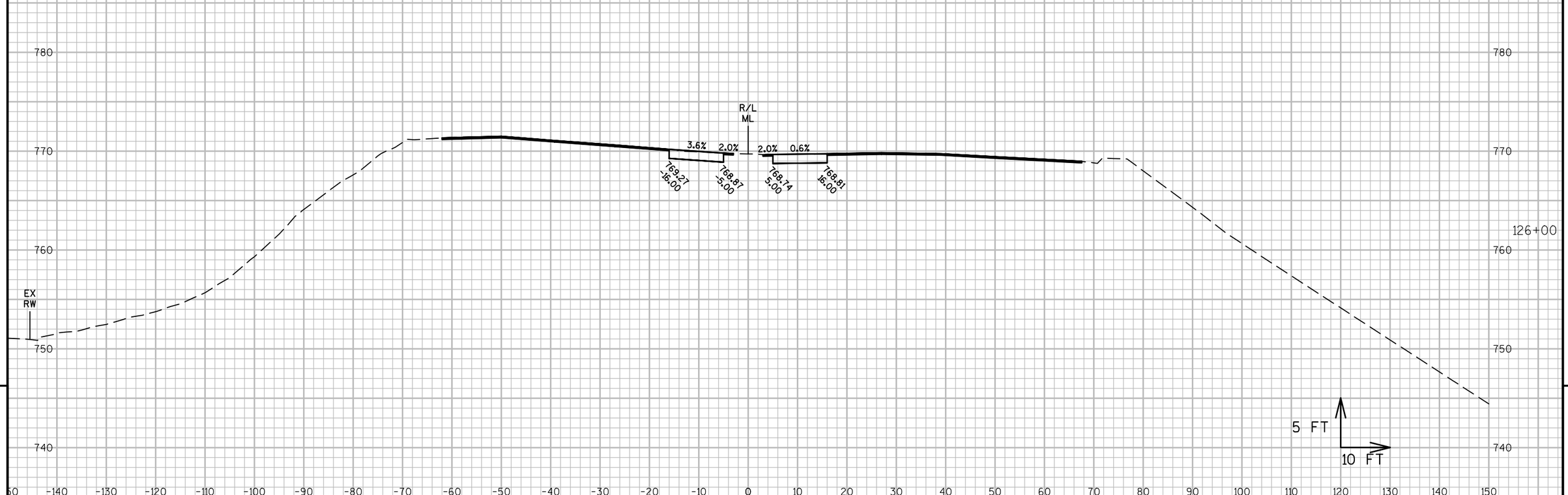
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 632 E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 48

PLOT DATE : 10/20/2017 4:25 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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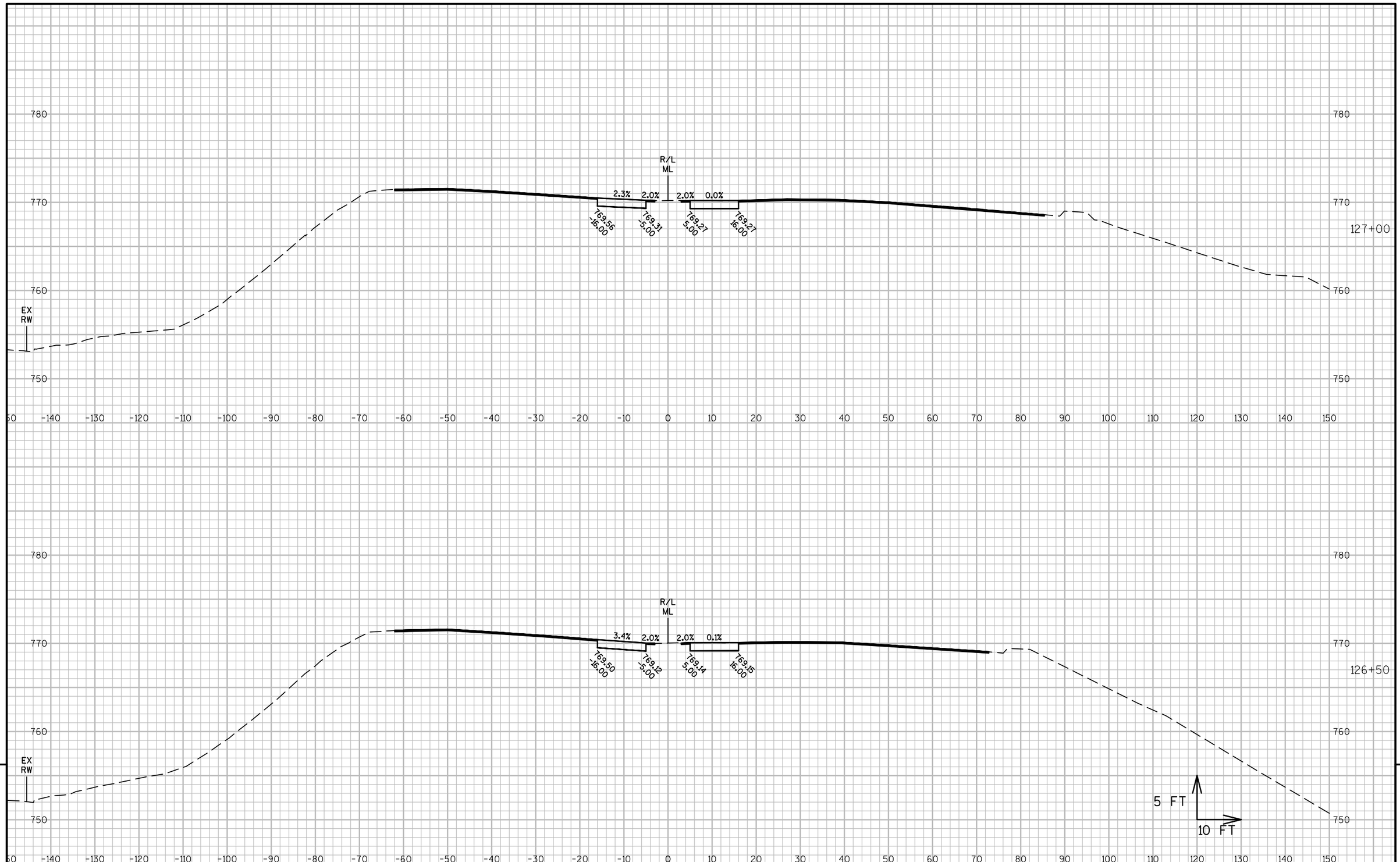
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 633 E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 49

PLOT DATE : 10/20/2017 4:25 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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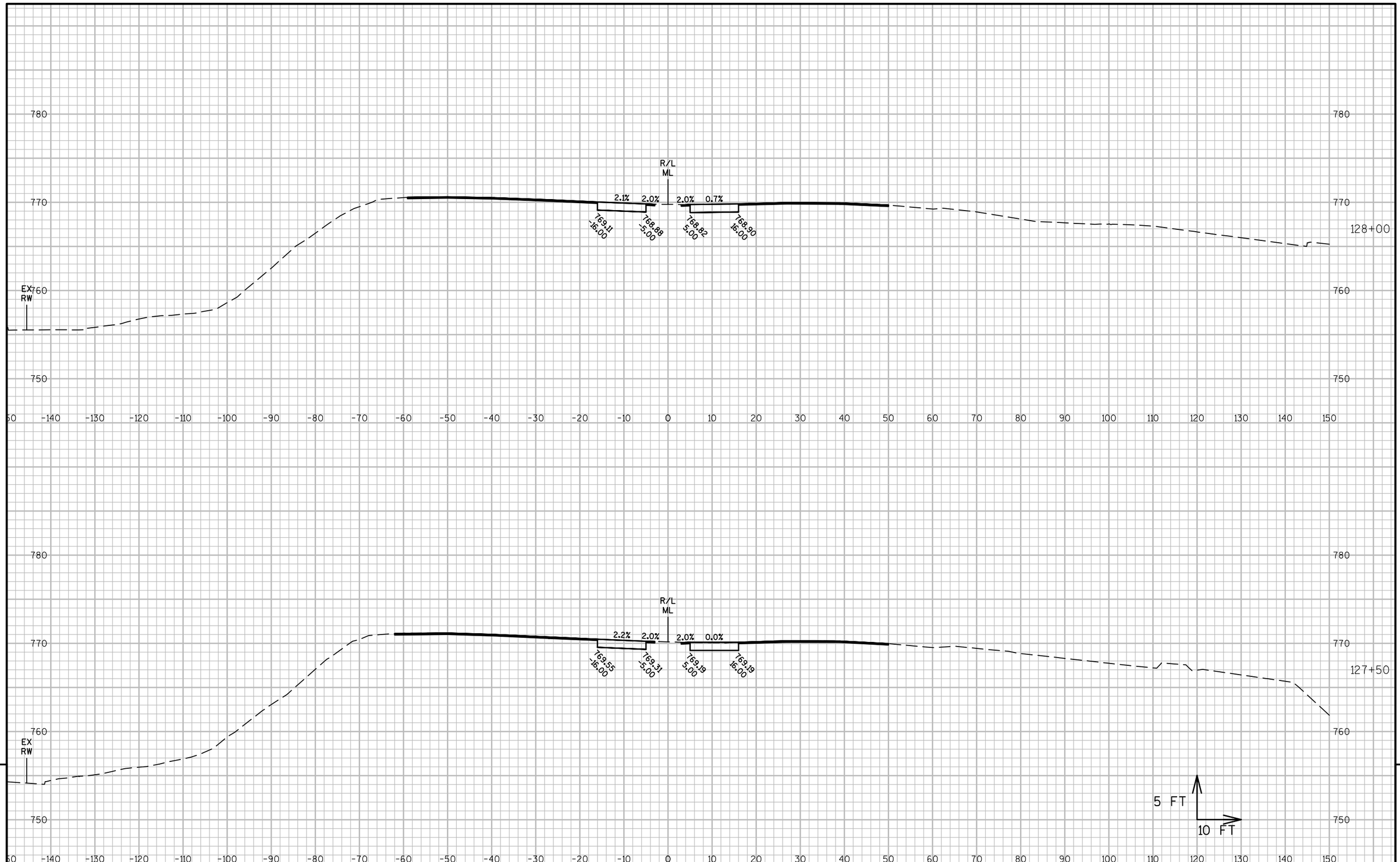
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 634	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 50

PLOT DATE : 10/20/2017 4:26 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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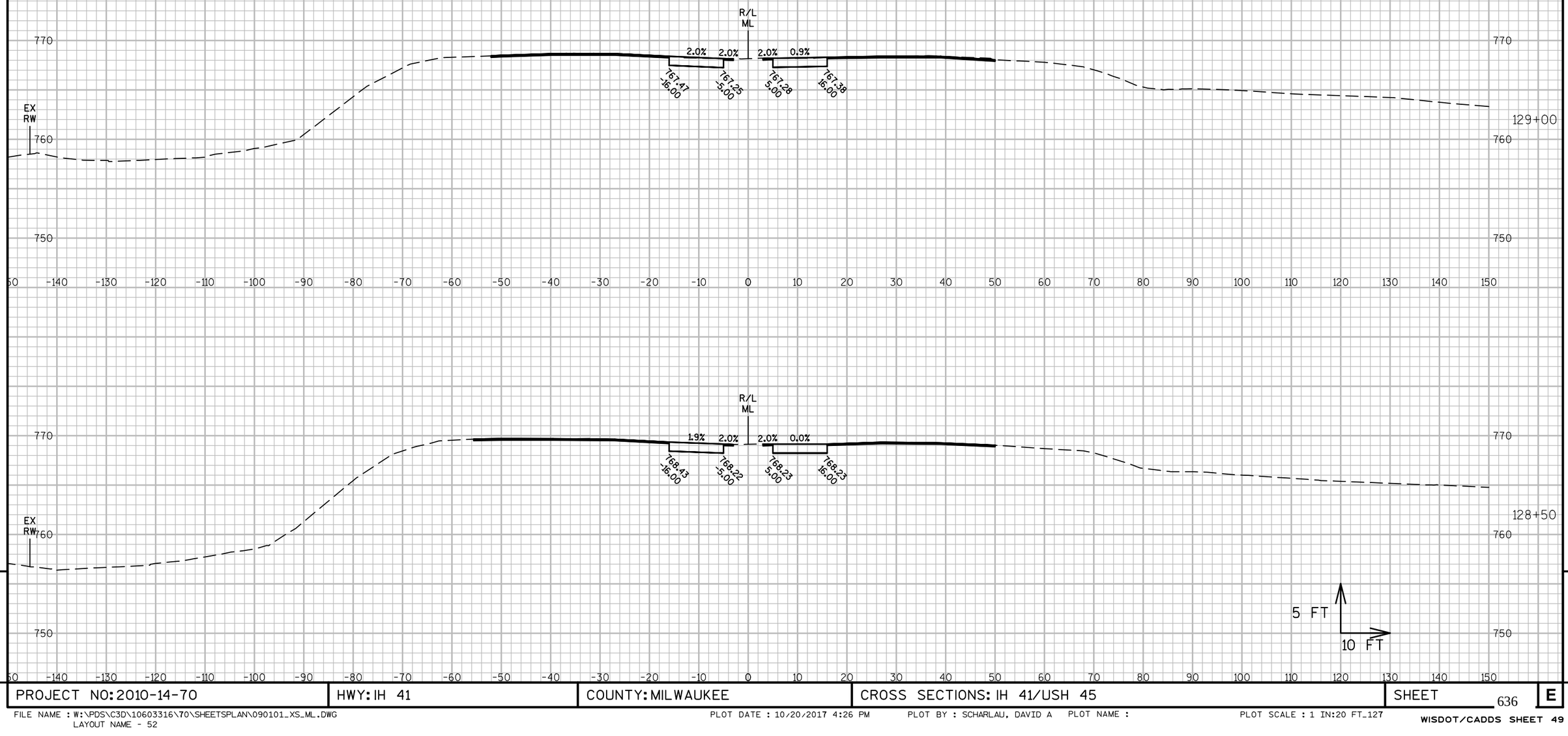
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 635	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 51

PLOT DATE : 10/20/2017 4:26 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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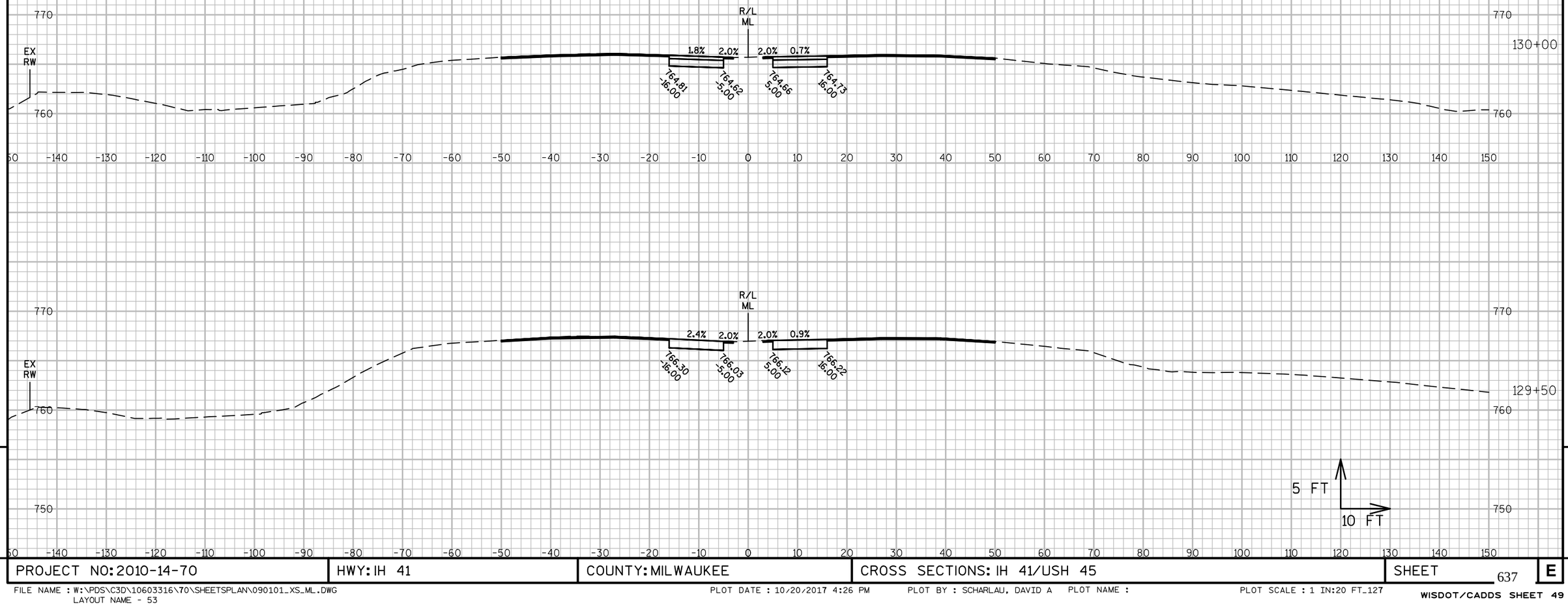
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 636	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 52

PLOT DATE : 10/20/2017 4:26 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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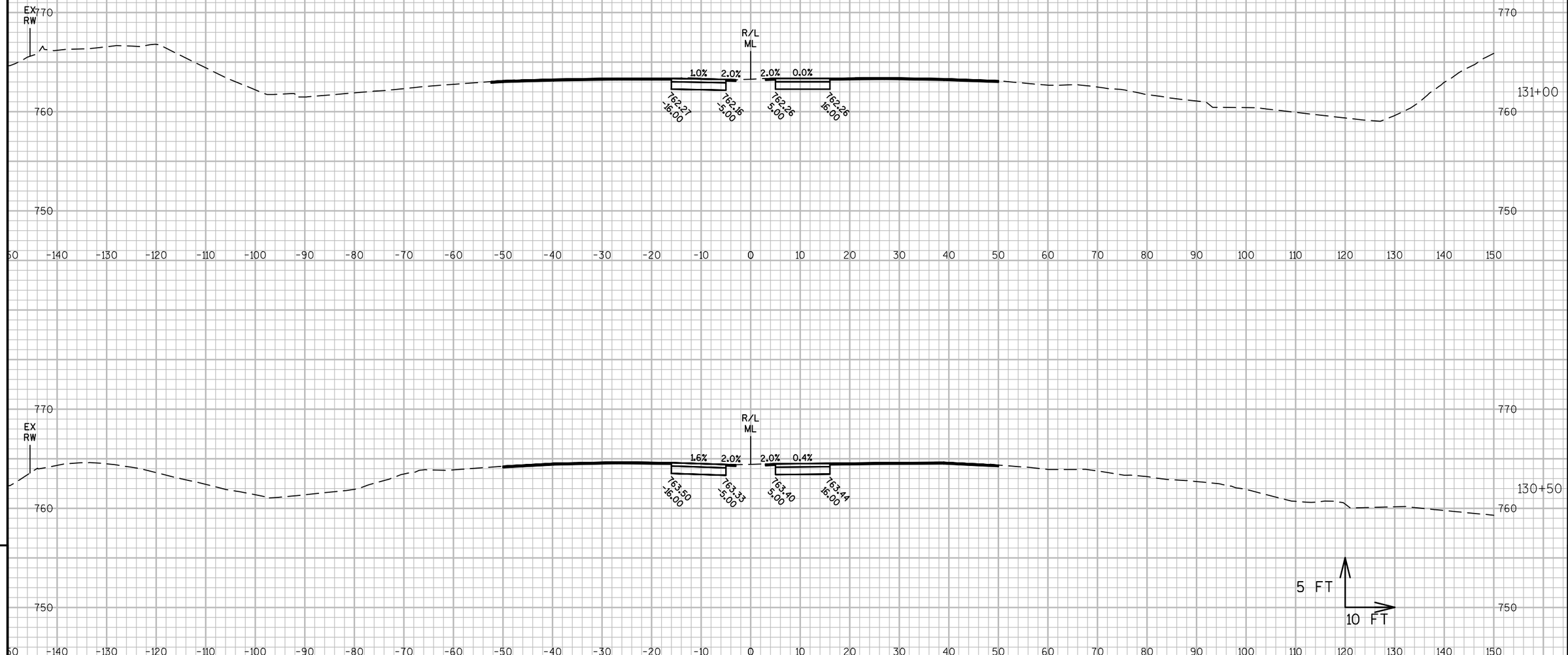
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 637	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 53

PLOT DATE : 10/20/2017 4:26 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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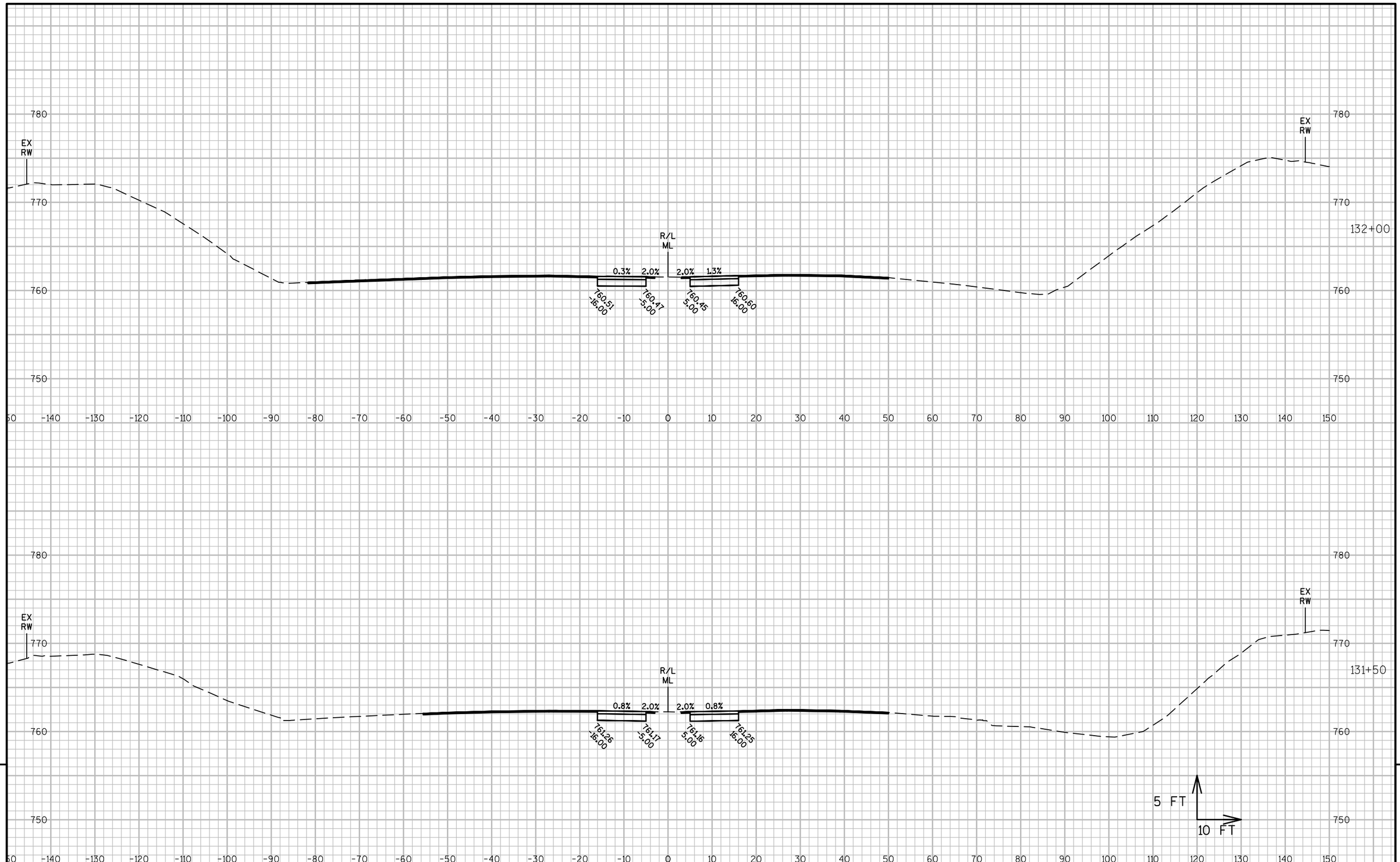
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 638	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 54

PLOT DATE : 10/20/2017 4:26 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



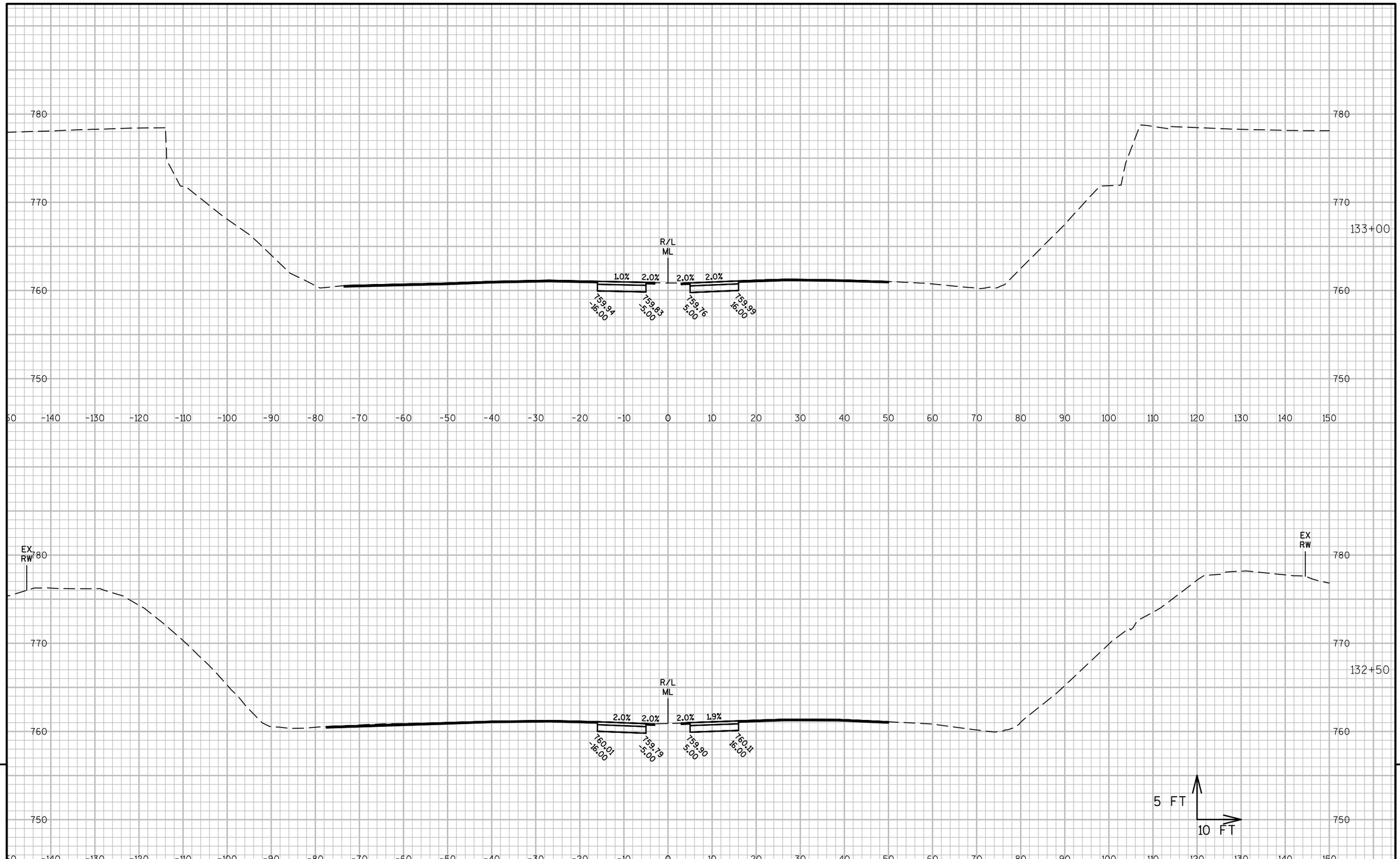
9

9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 639	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 55

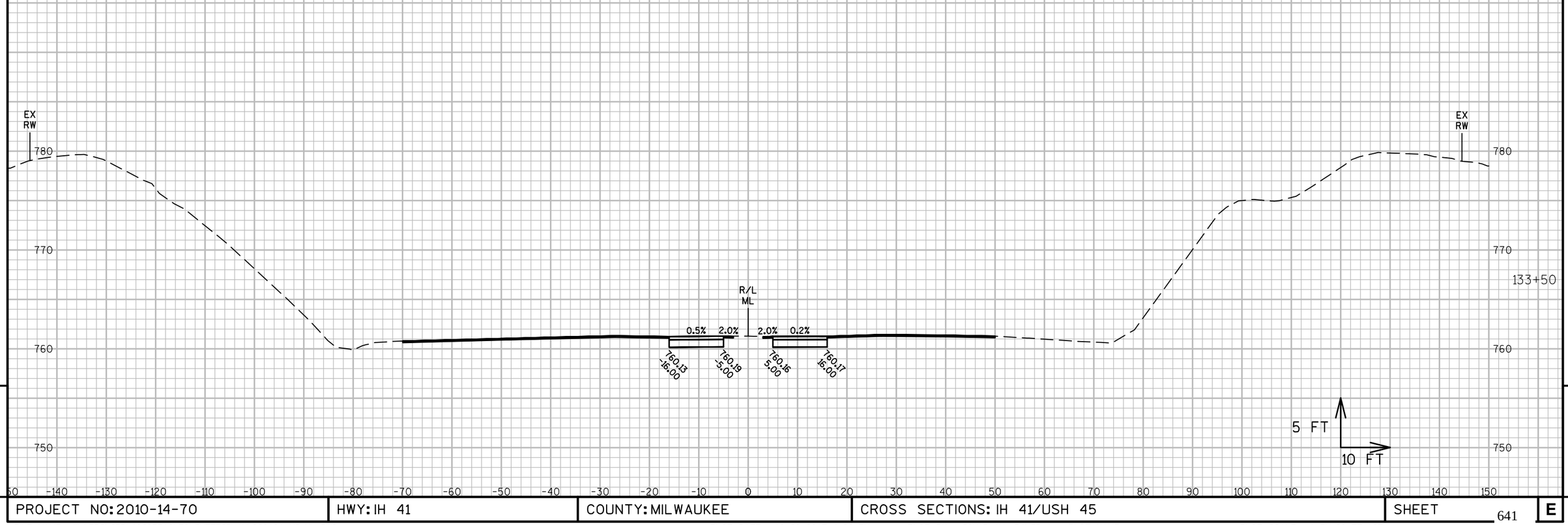
PLOT DATE : 10/20/2017 4:26 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 640	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 56

PLOT DATE : 10/20/2017 4:26 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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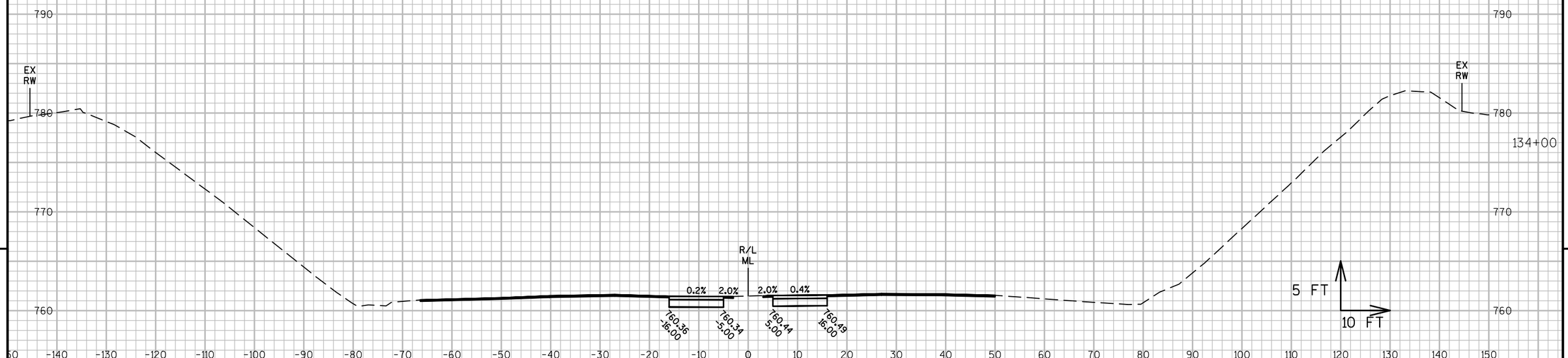
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 641	E



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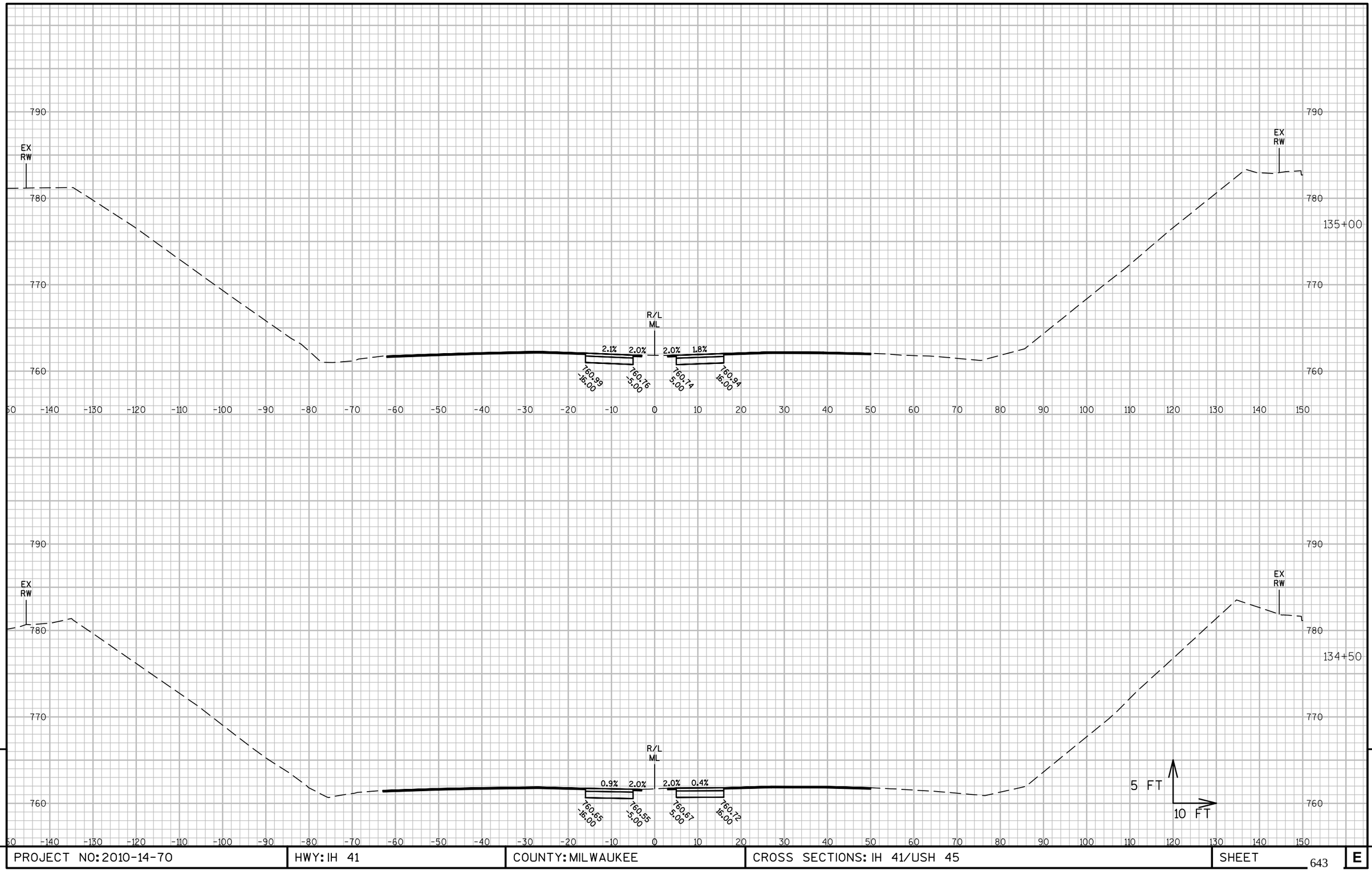
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 642	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 58

PLOT DATE : 10/20/2017 4:26 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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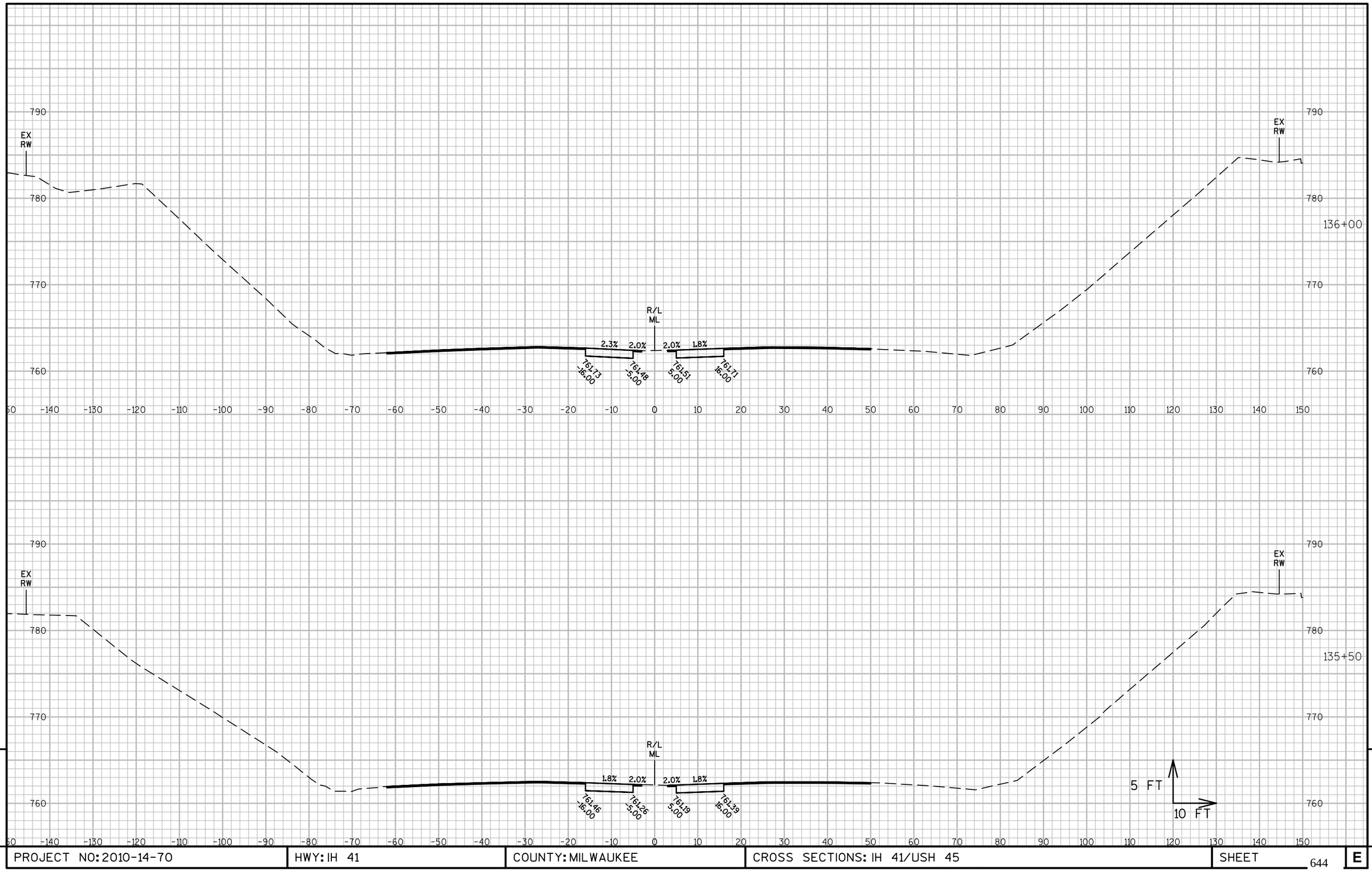
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 643	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 59

PLOT DATE : 10/20/2017 4:26 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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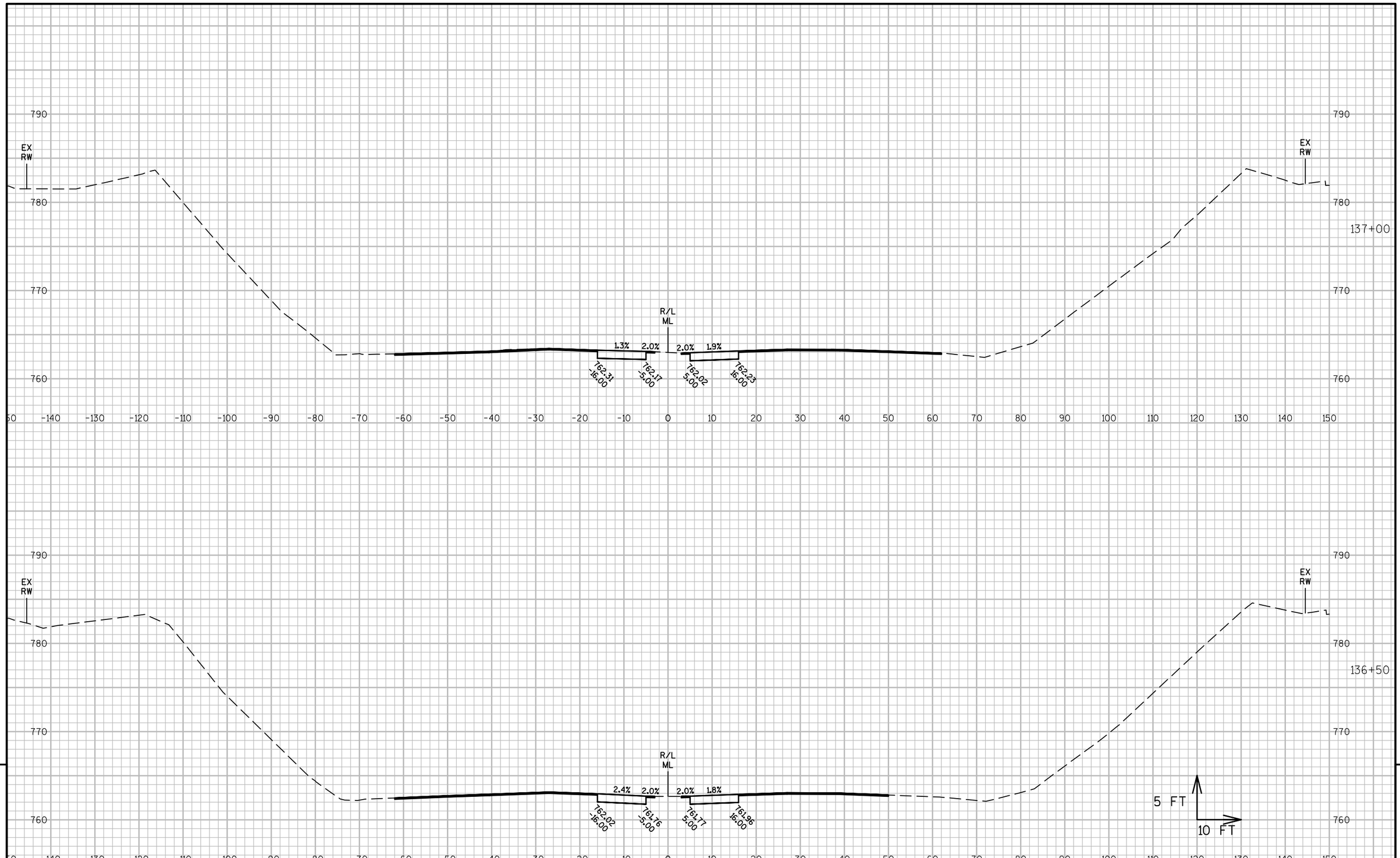
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 644	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 60

PLOT DATE : 10/20/2017 4:26 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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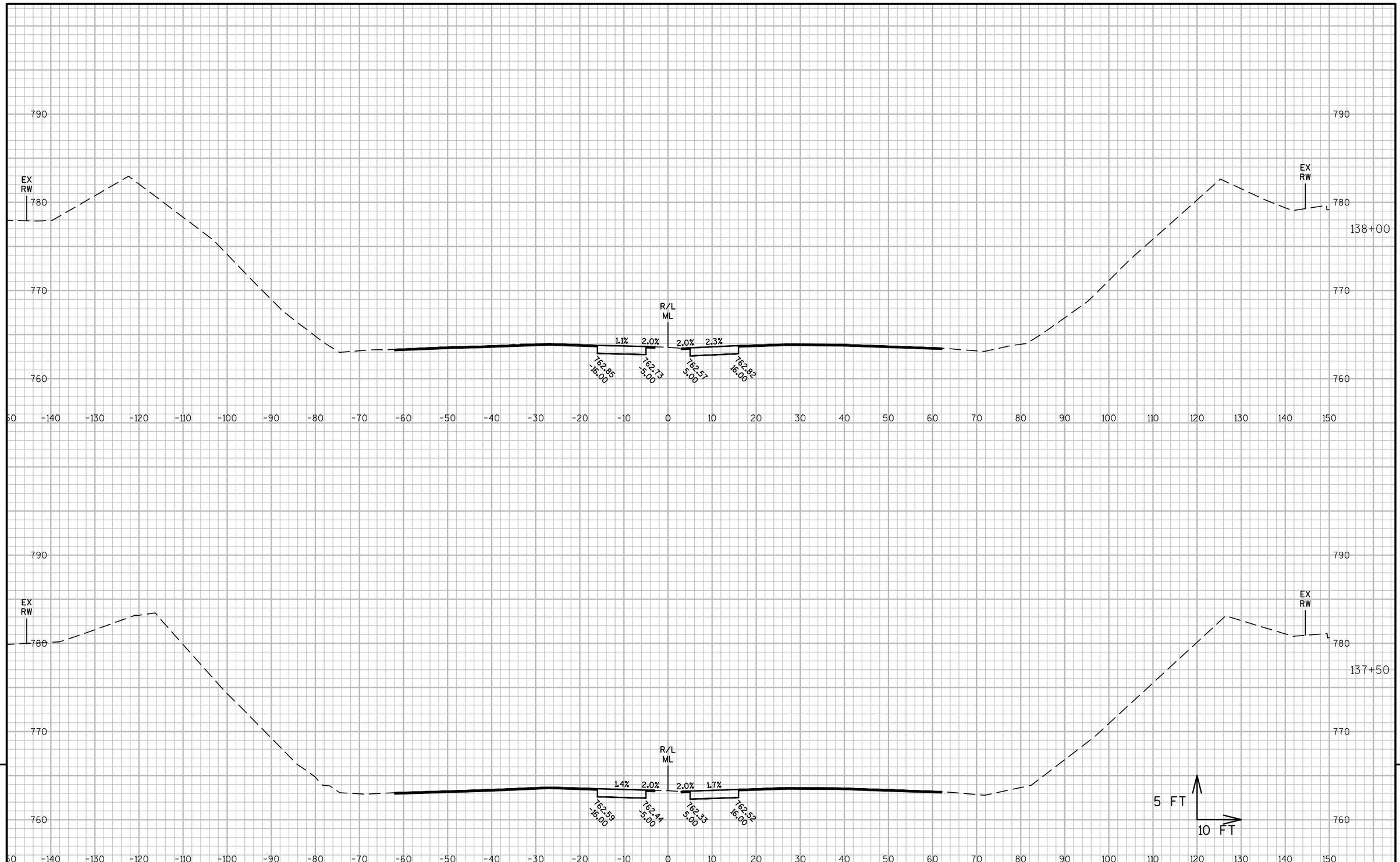
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 645	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 61

PLOT DATE : 10/20/2017 4:26 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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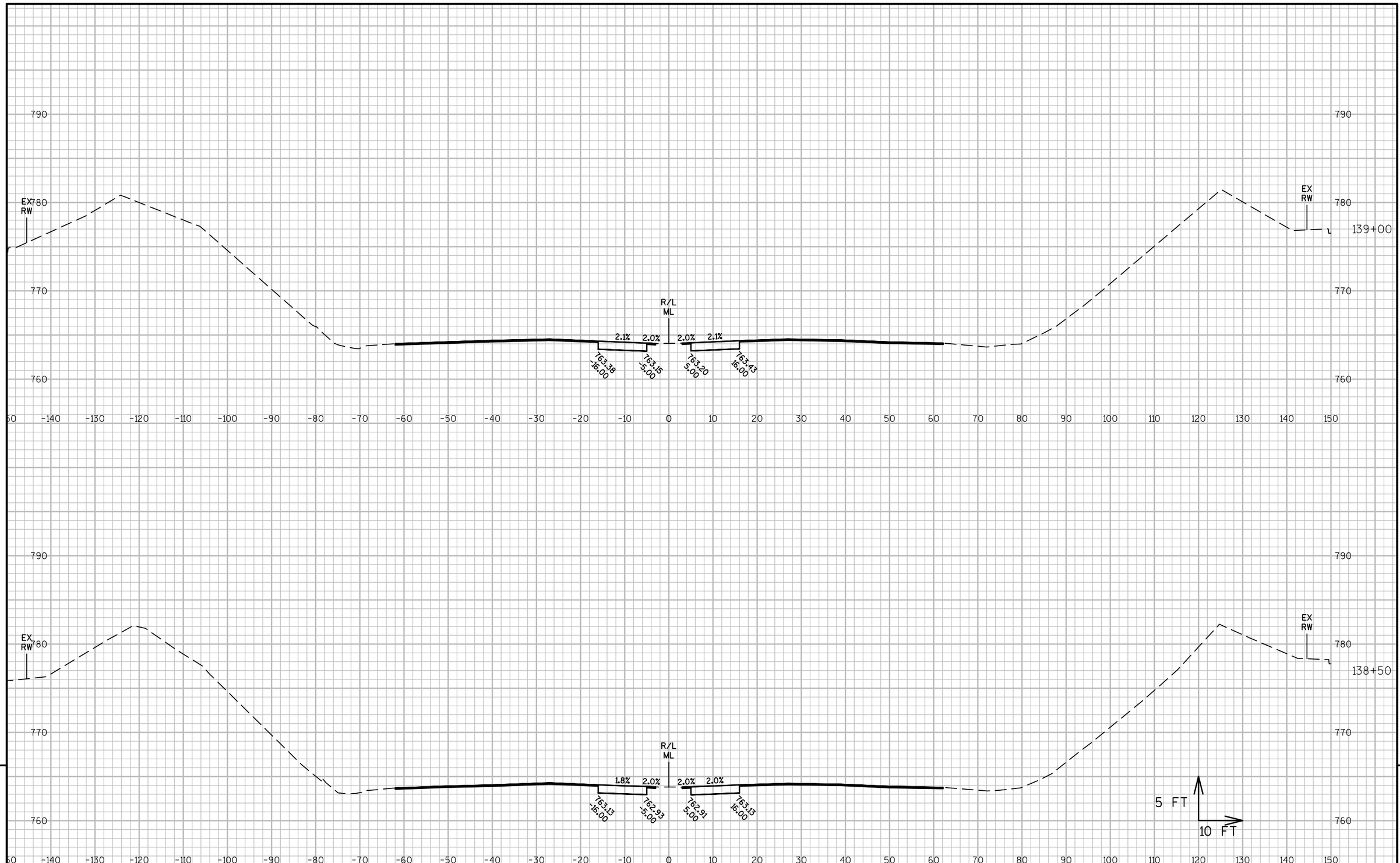
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 646	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 62

PLOT DATE : 10/20/2017 4:27 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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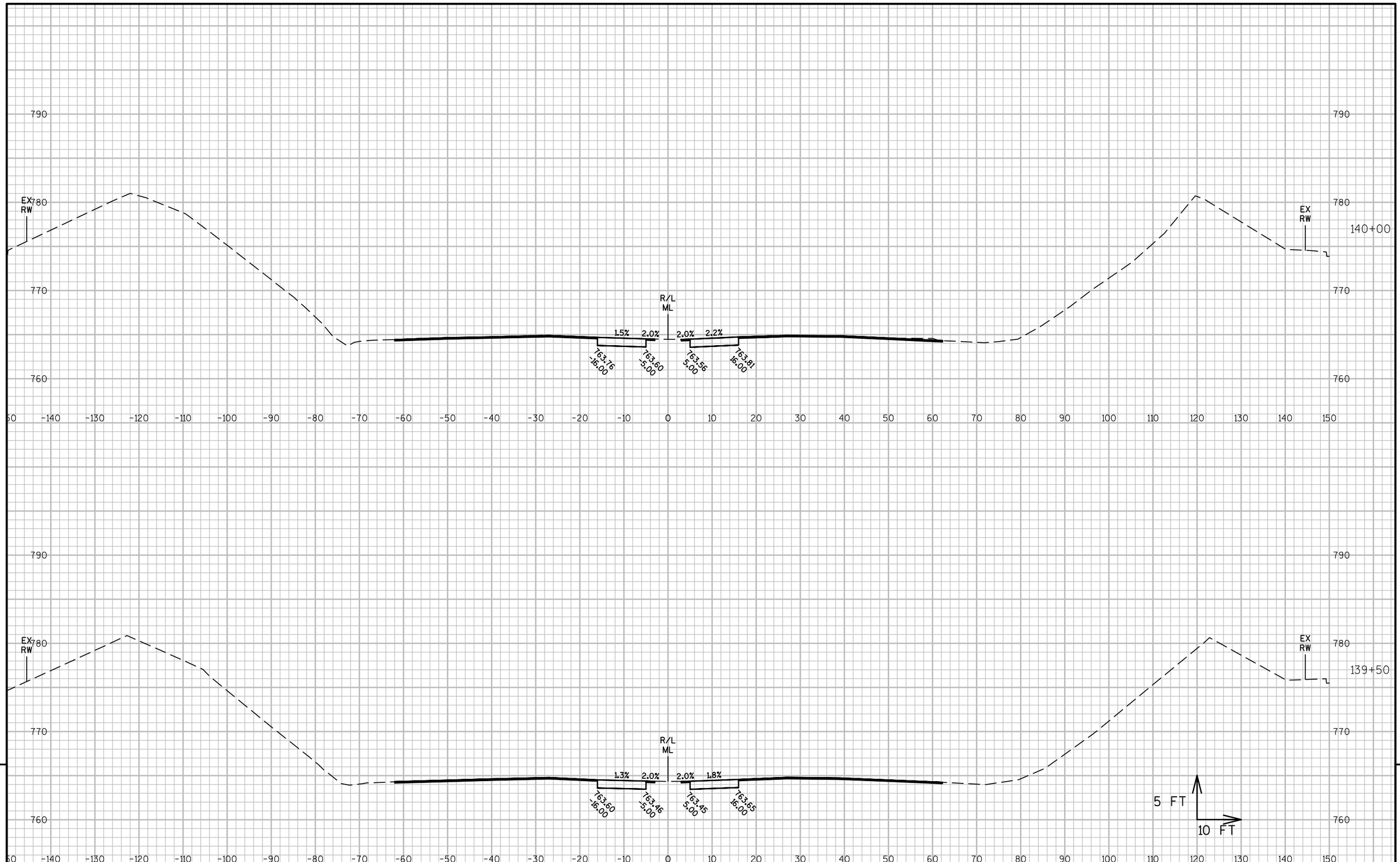
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 647	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 63

PLOT DATE : 10/20/2017 4:27 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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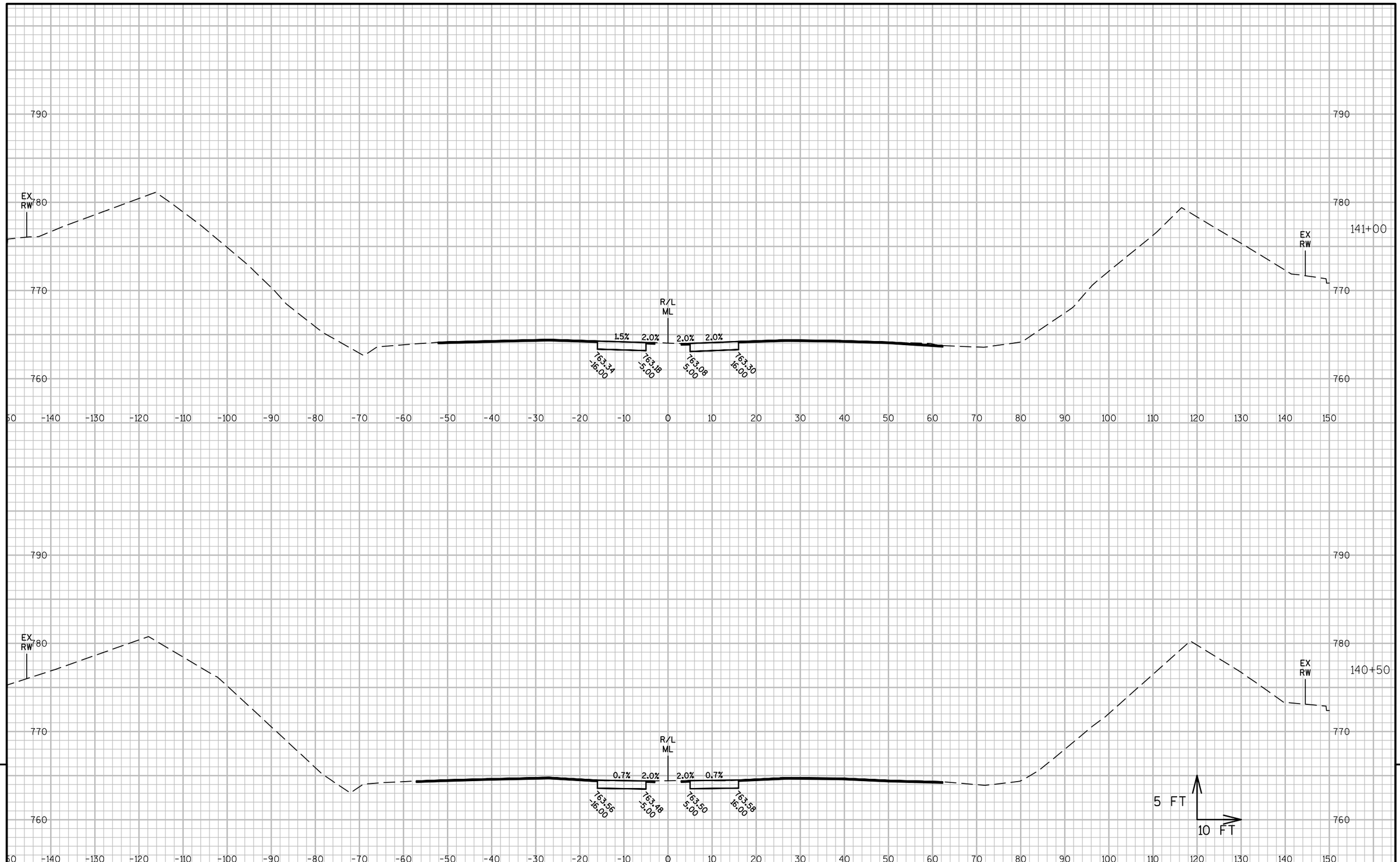
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 648	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 64

PLOT DATE : 10/20/2017 4:27 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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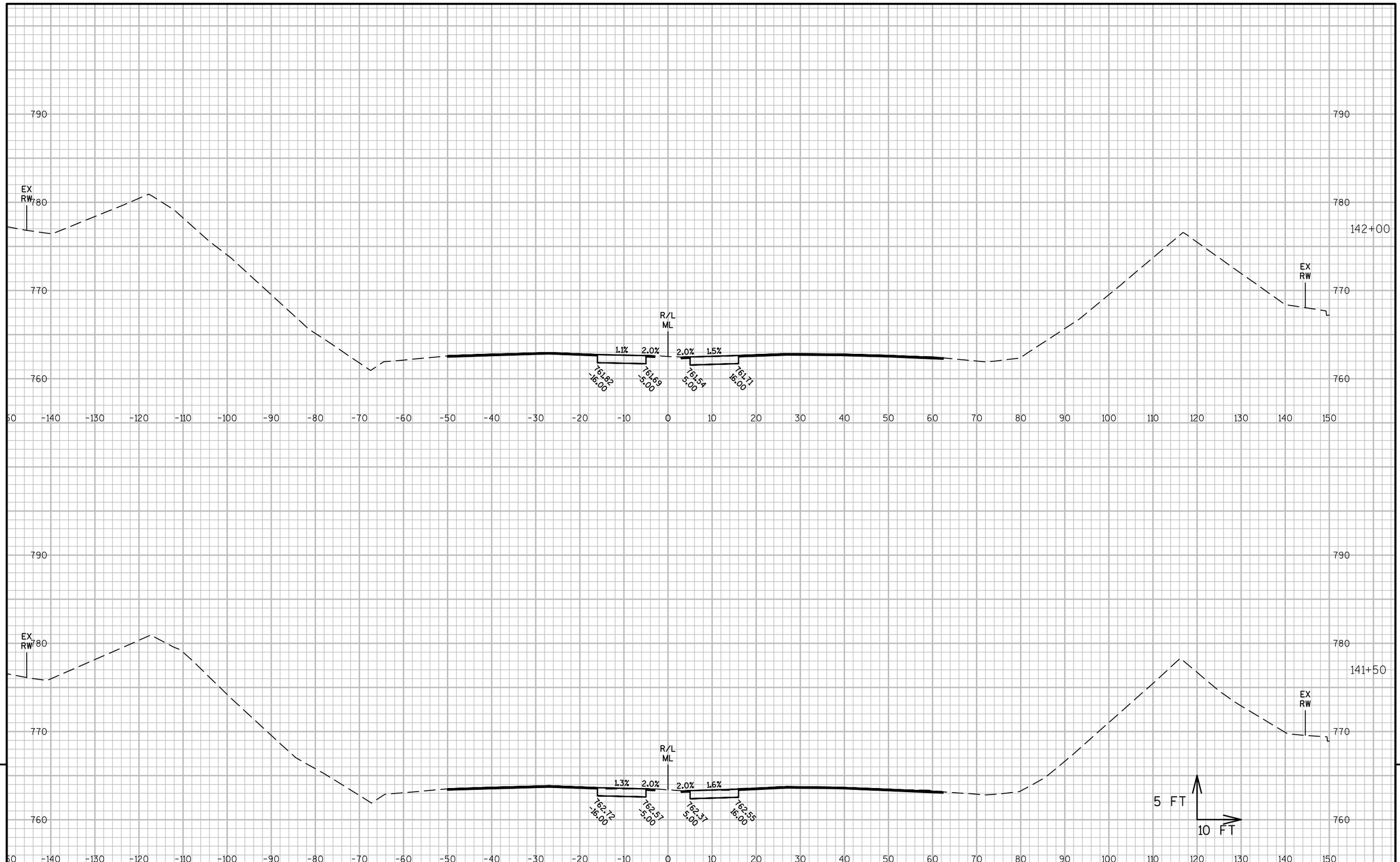
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 649	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 65

PLOT DATE : 10/20/2017 4:27 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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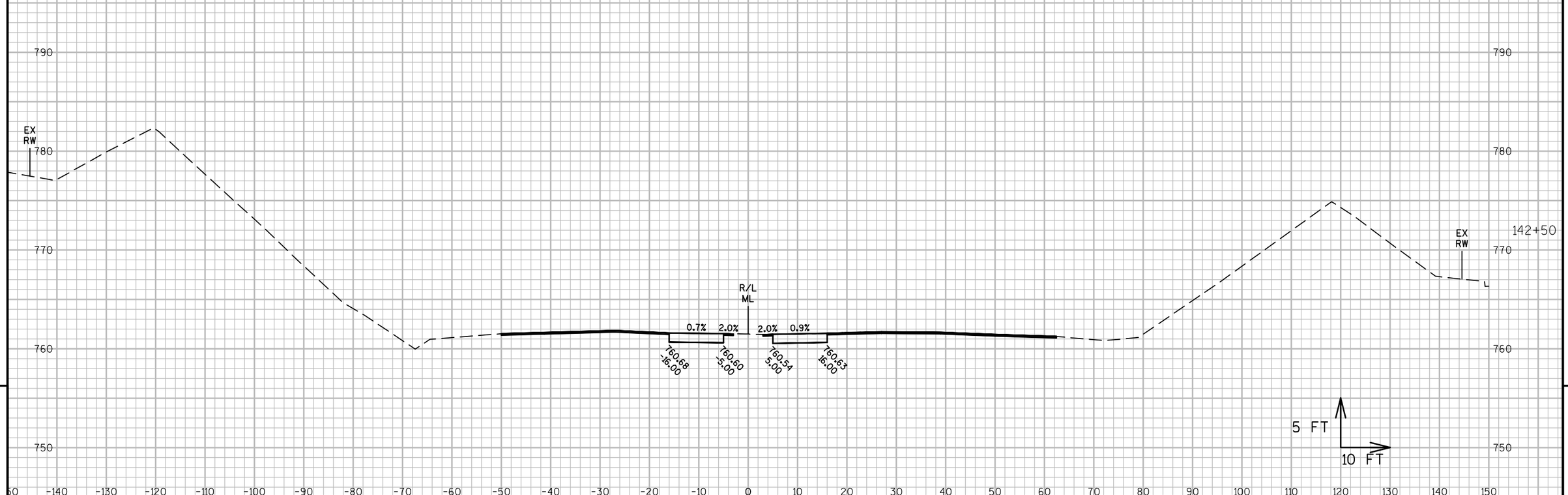
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 650	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 66

PLOT DATE : 10/20/2017 4:27 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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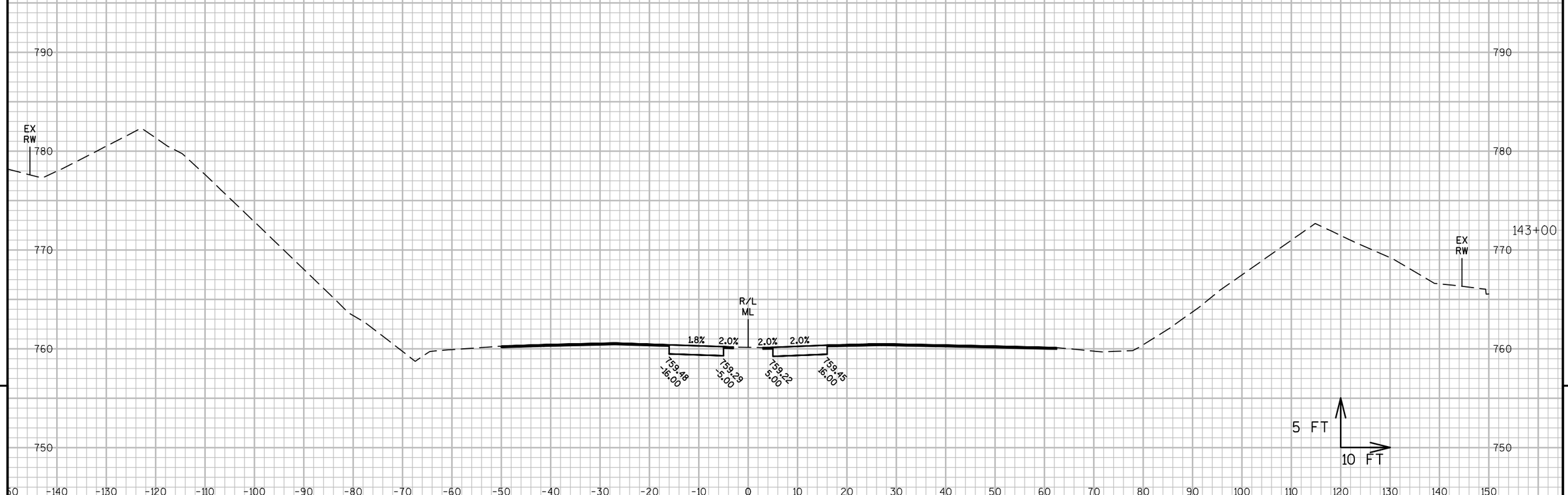
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 651	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 67

PLOT DATE : 10/20/2017 4:27 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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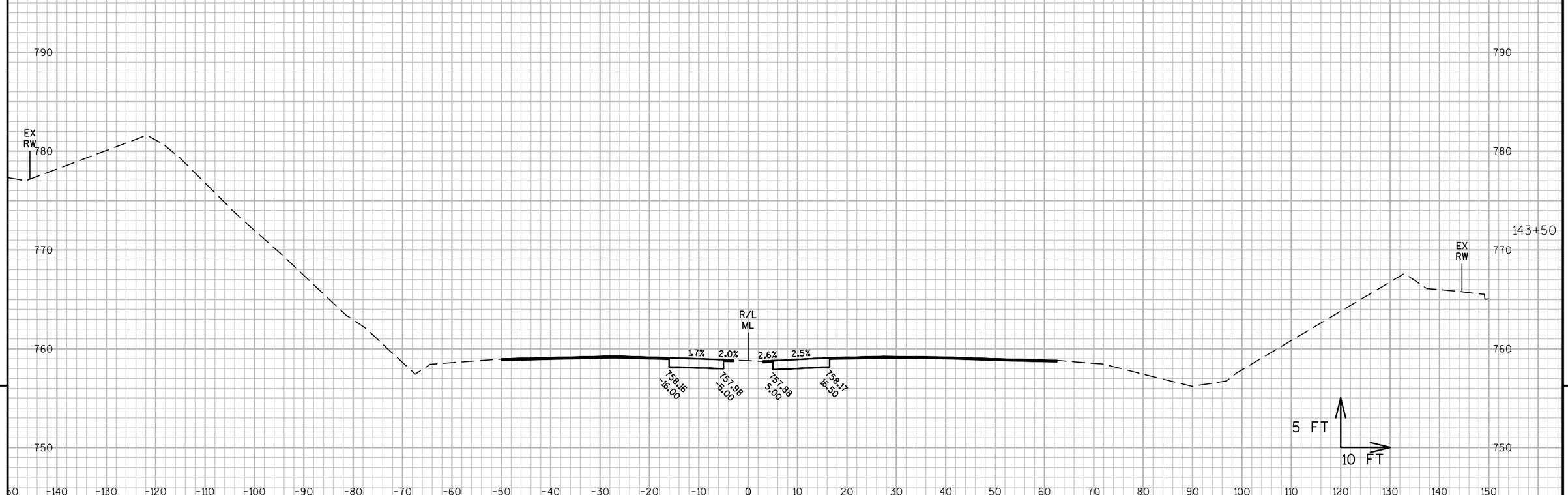
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 652	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 68

PLOT DATE : 10/20/2017 4:27 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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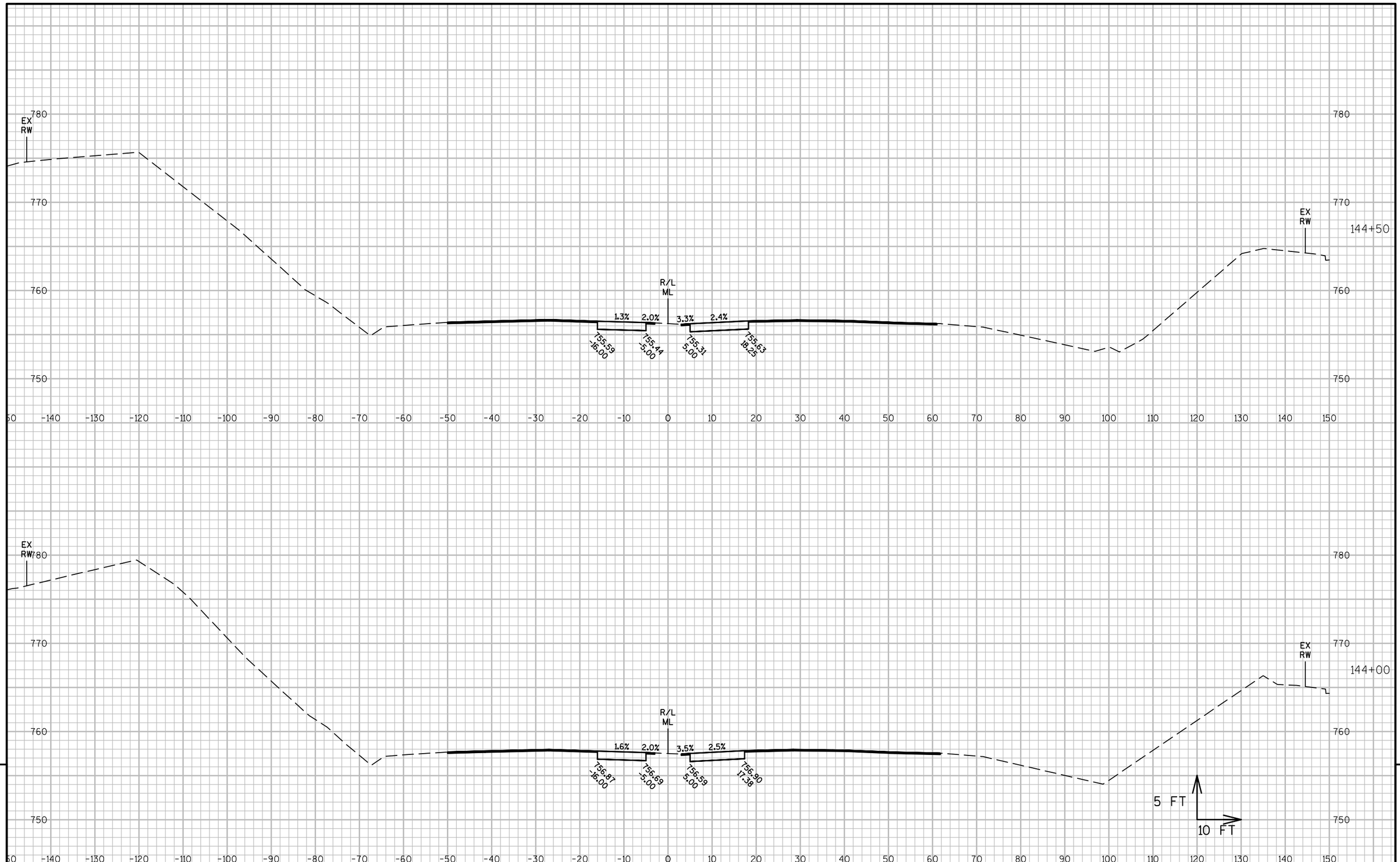
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 653	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 69

PLOT DATE : 10/20/2017 4:27 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



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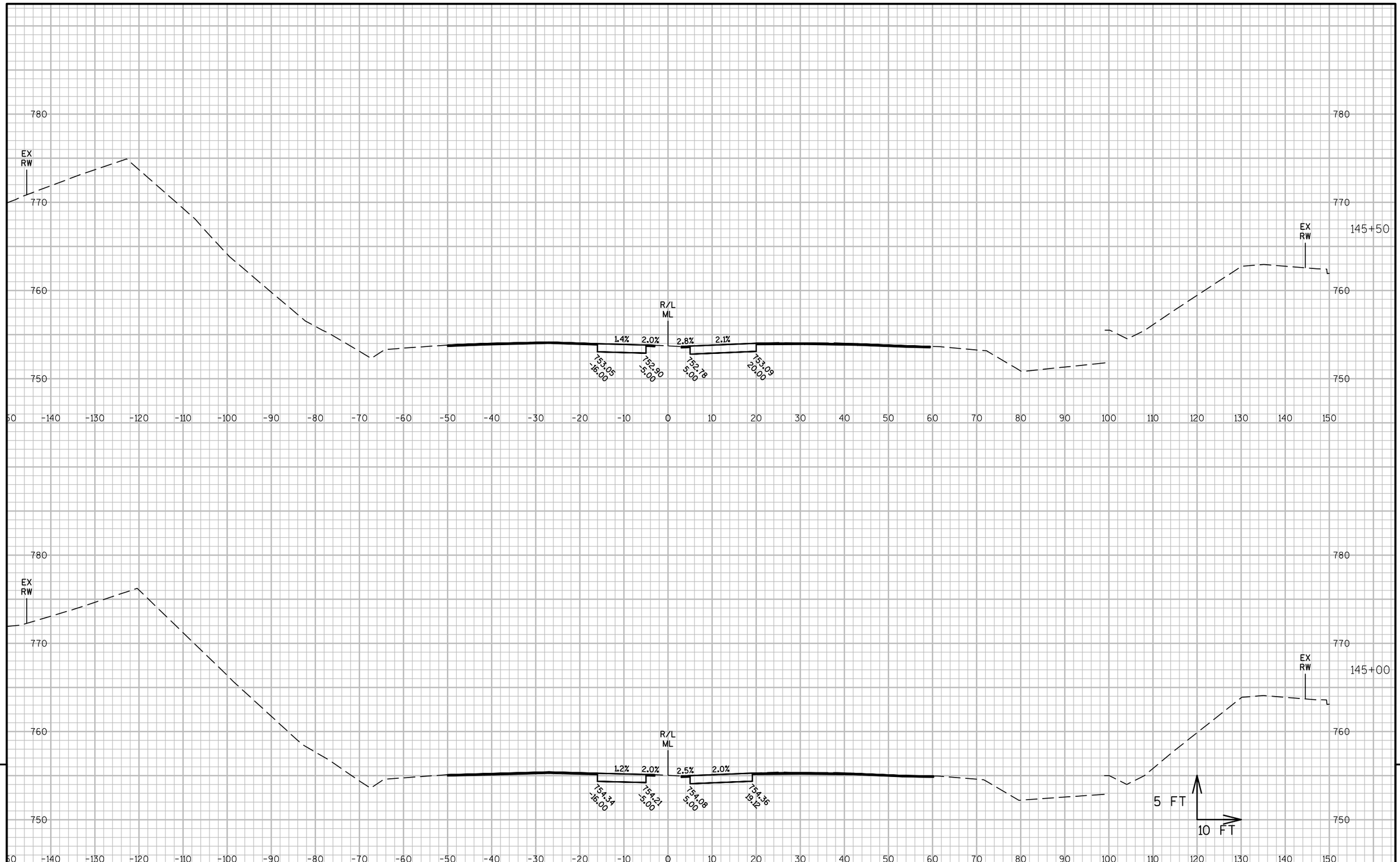
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 654	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 70

PLOT DATE : 10/20/2017 4:27 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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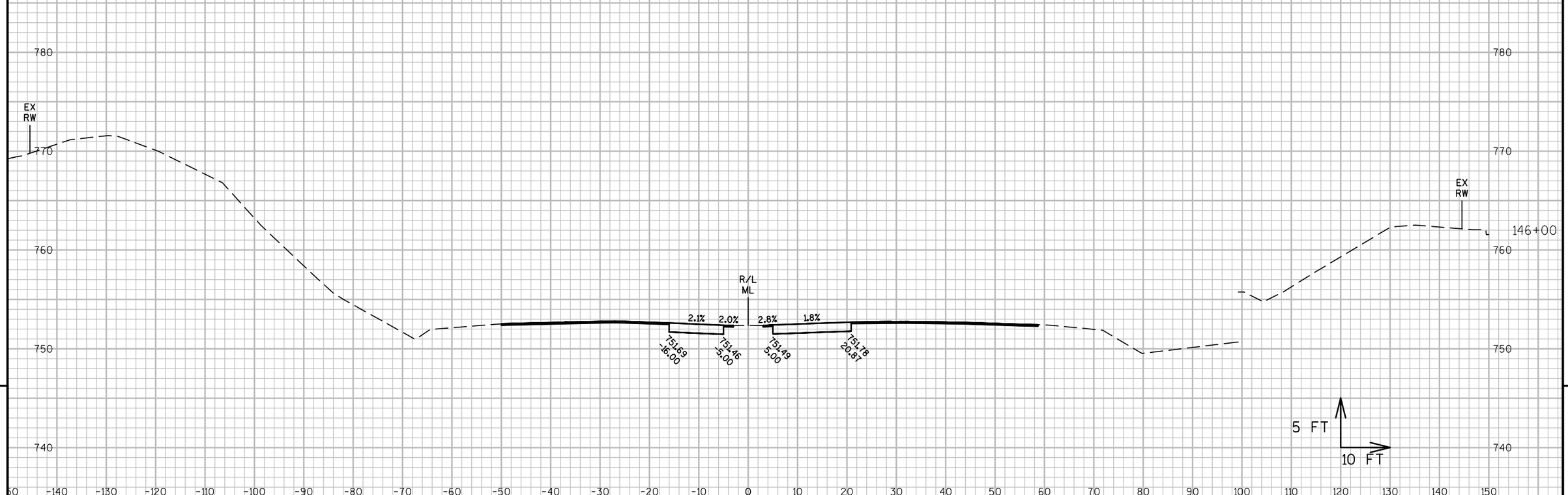
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 655	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 71

PLOT DATE : 10/20/2017 4:27 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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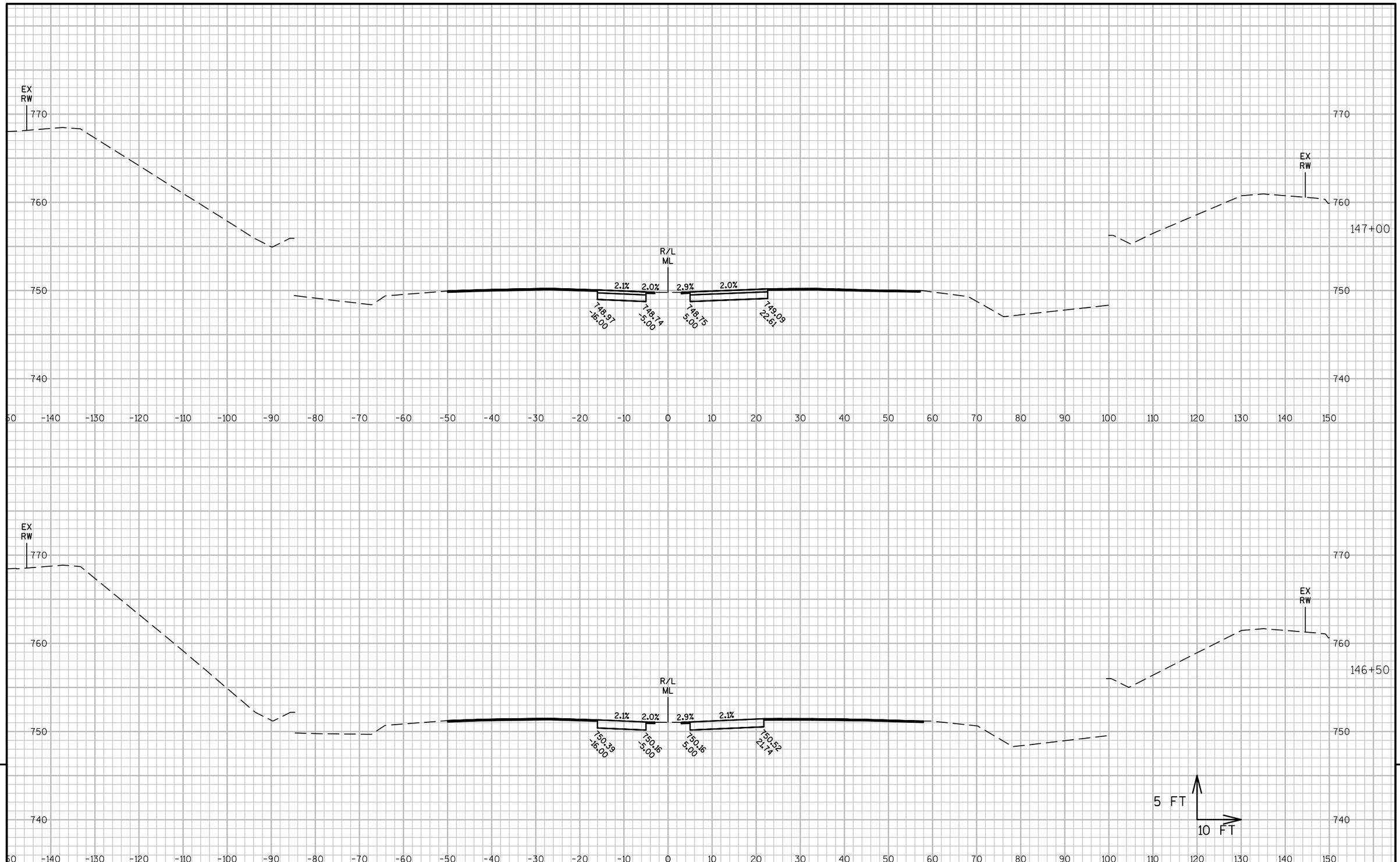
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 656	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 72

PLOT DATE : 10/20/2017 4:27 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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9

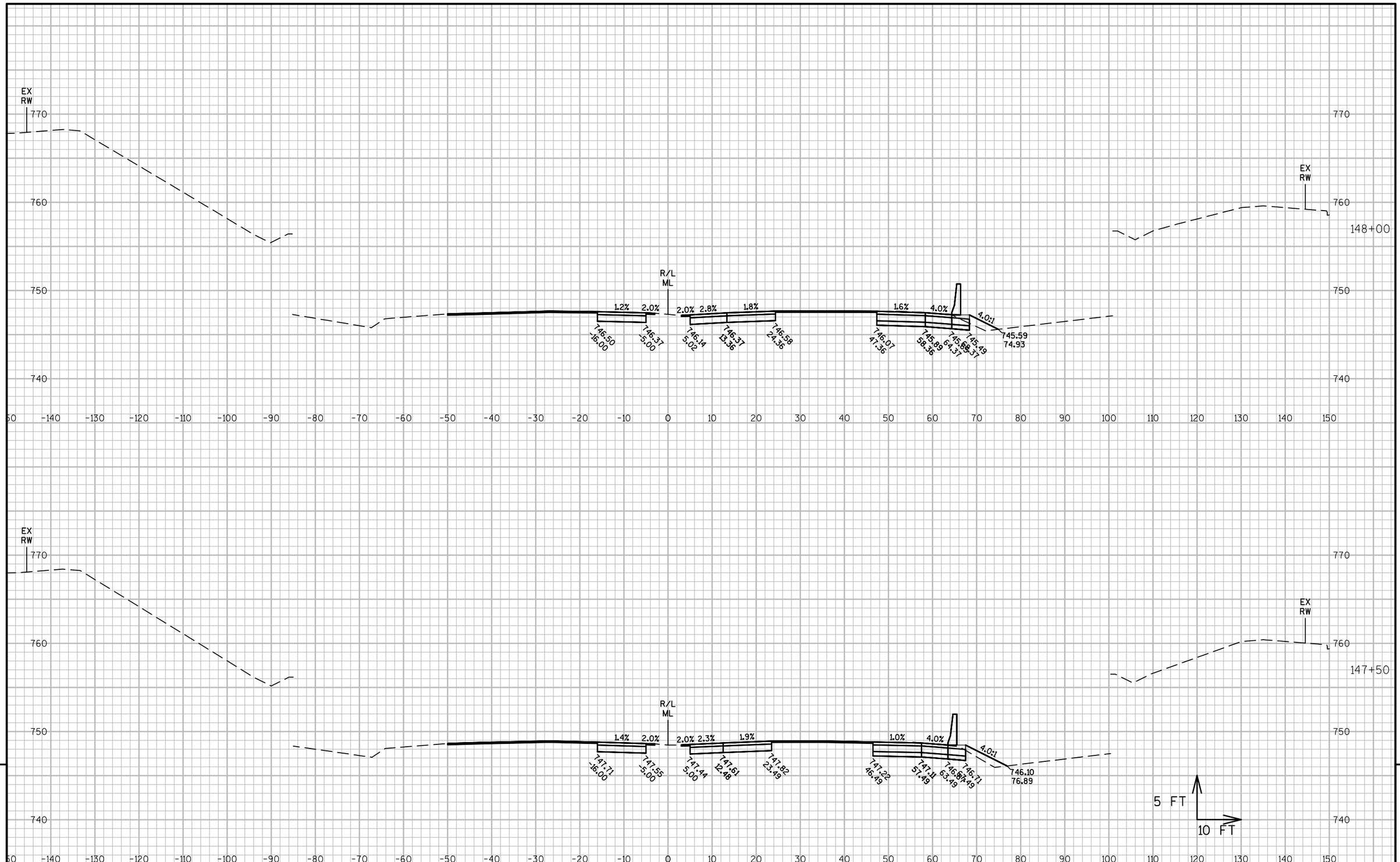
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 657	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 73

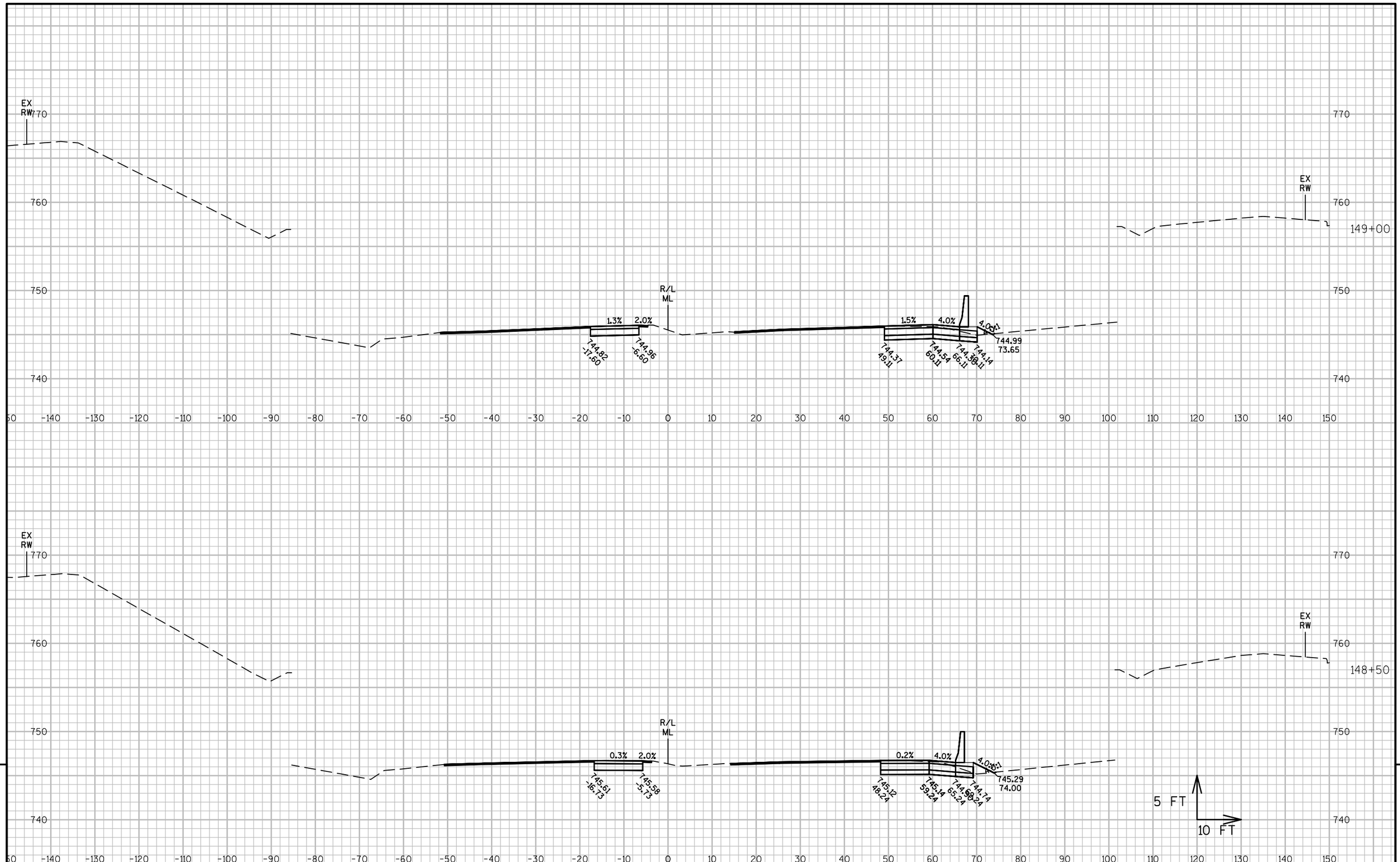
PLOT DATE : 10/20/2017 4:27 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME :

PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 658 E



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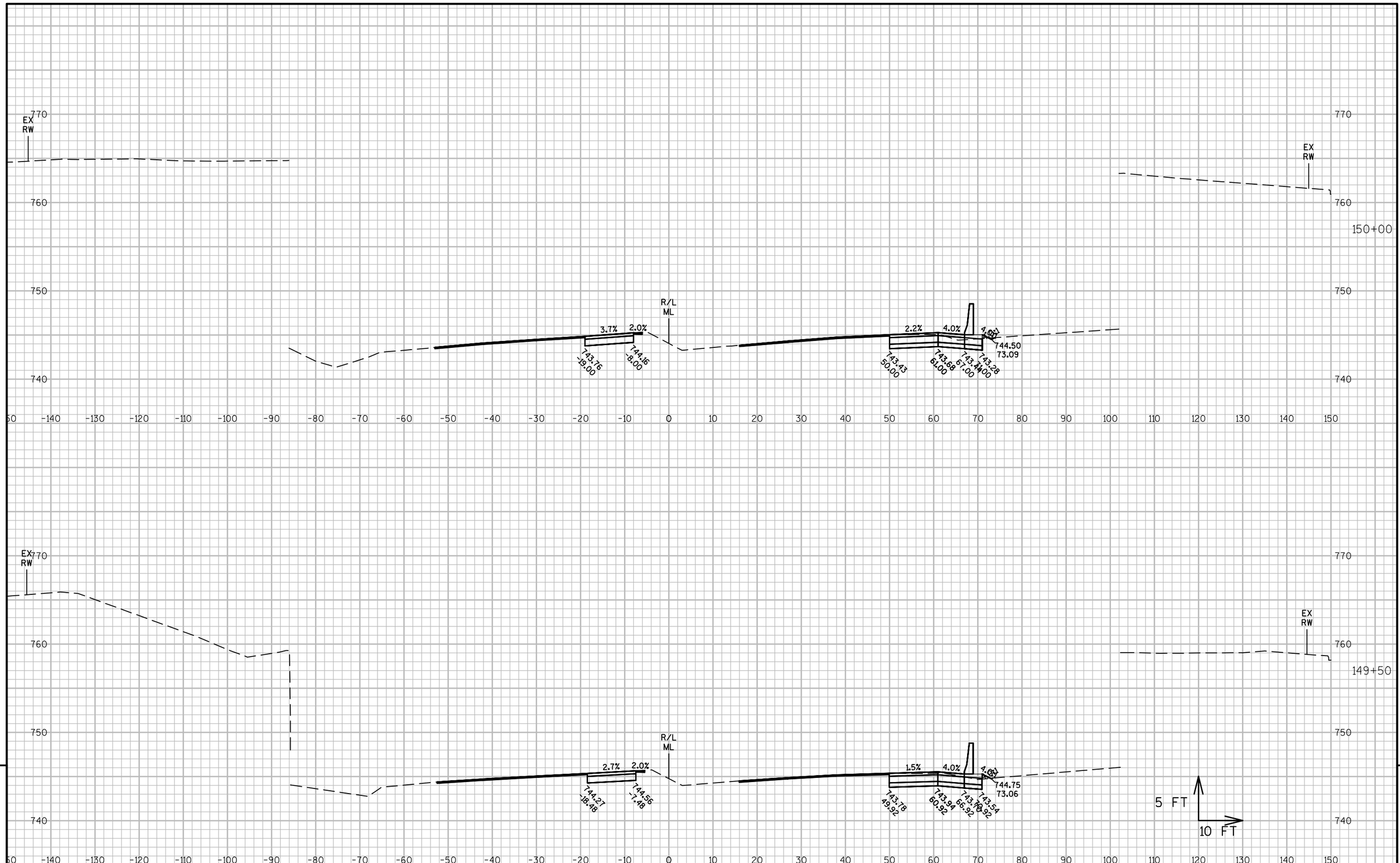
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 659	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 75

PLOT DATE : 10/20/2017 4:28 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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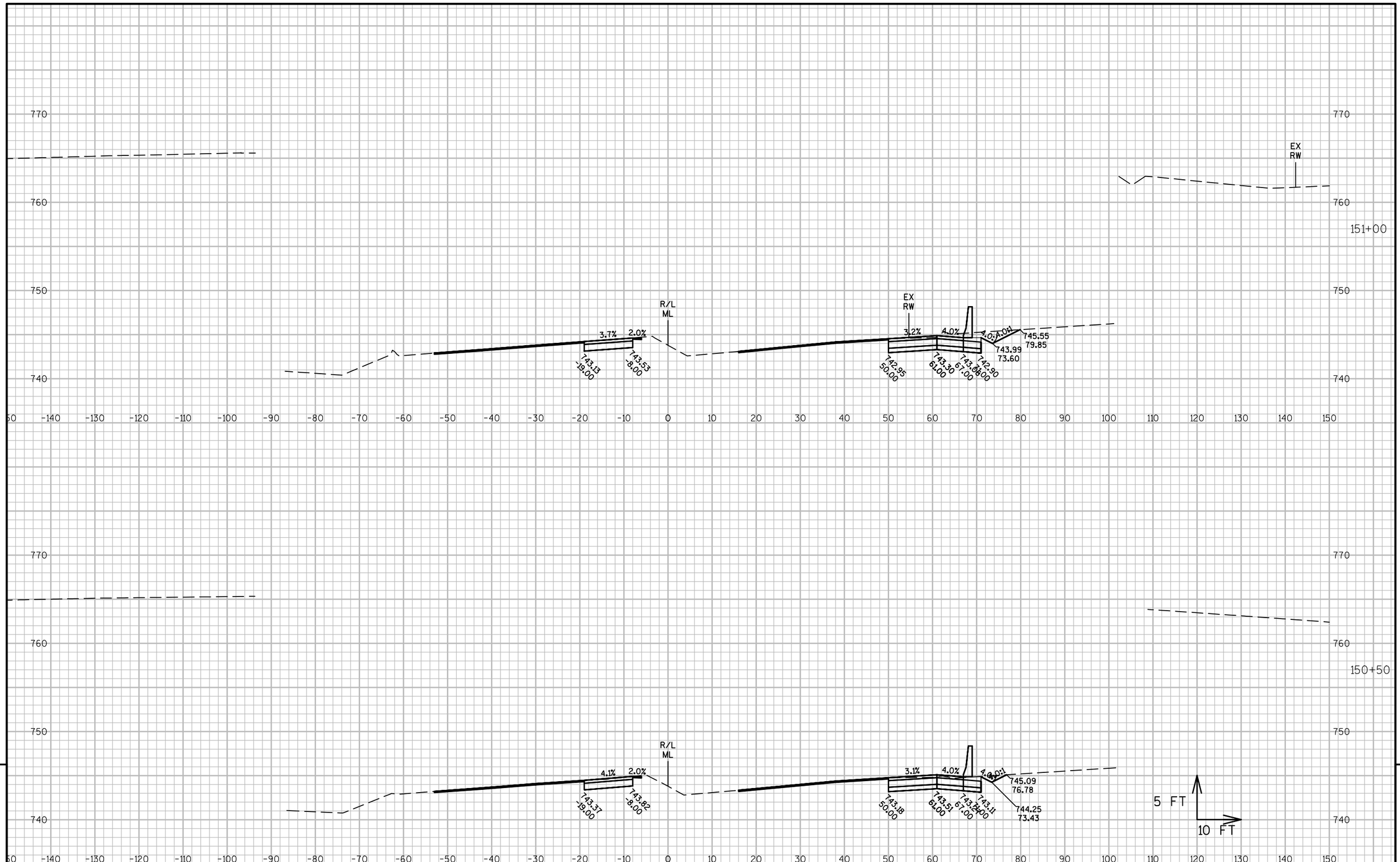
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 660	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 76

PLOT DATE : 10/20/2017 4:28 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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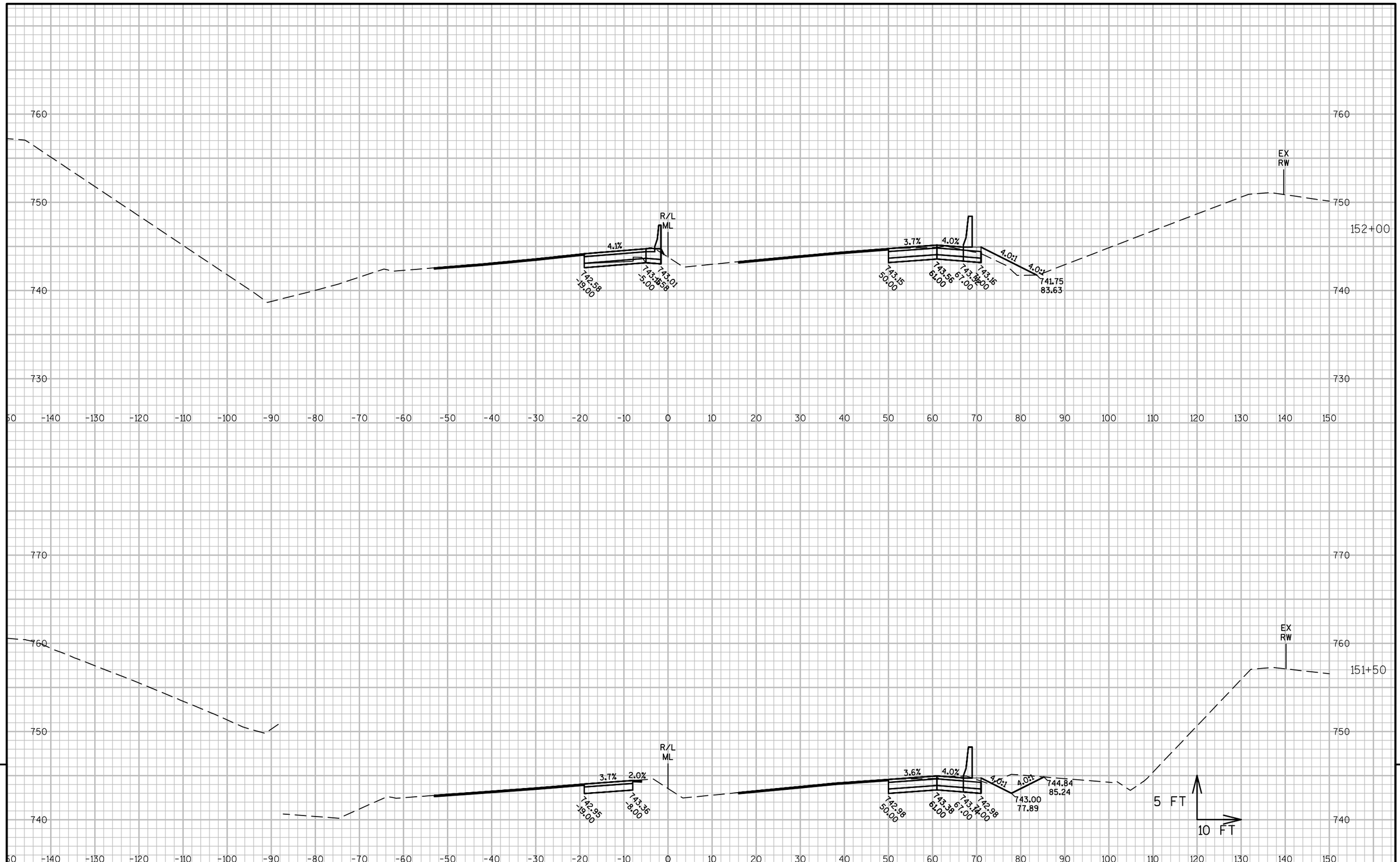
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 661 E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 77

PLOT DATE : 10/20/2017 4:28 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49

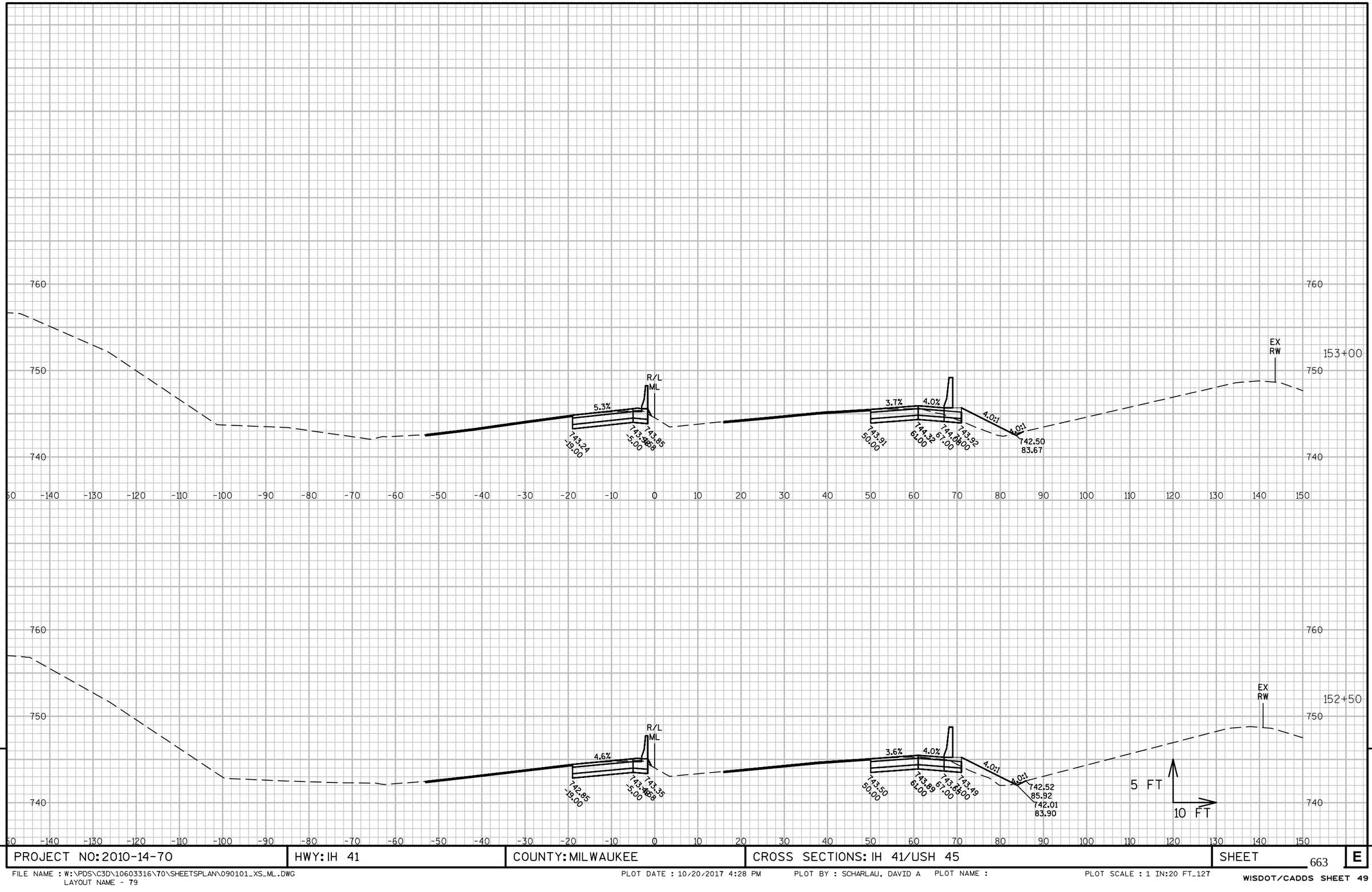


PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 662 E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 78

PLOT DATE : 10/20/2017 4:28 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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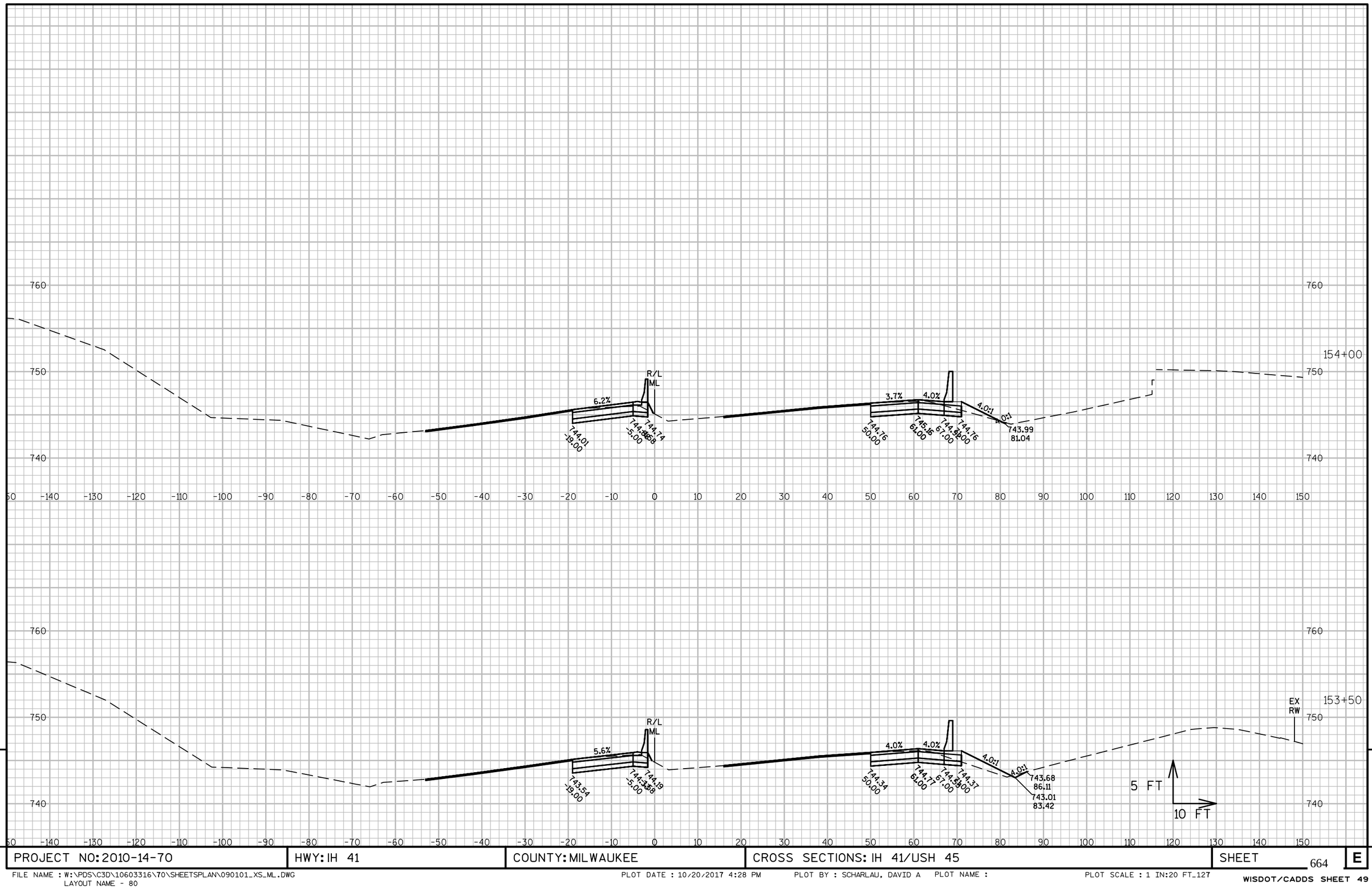
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 663	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 79
PLOT DATE : 10/20/2017 4:28 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127
WISDOT/CADDS SHEET 49



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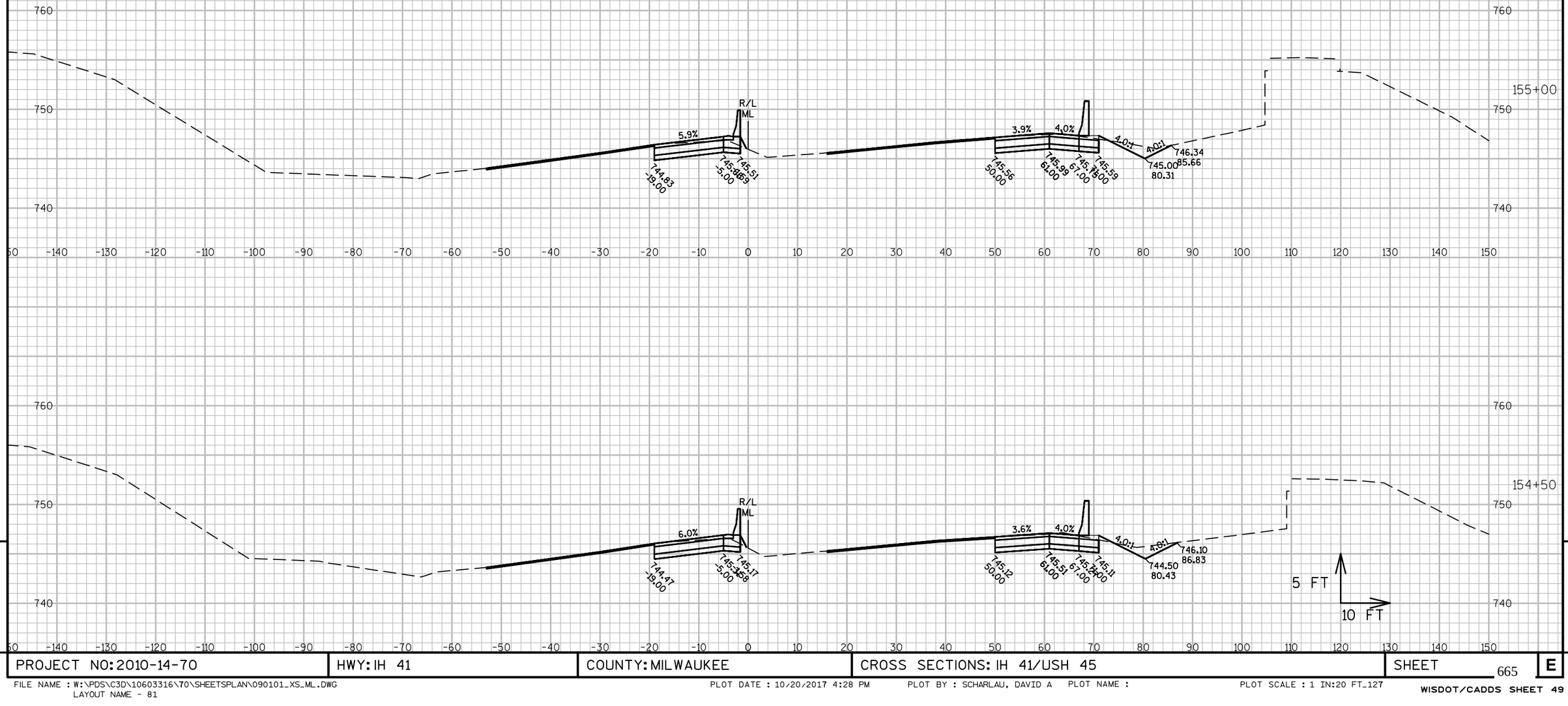
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 664	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 80

PLOT DATE : 10/20/2017 4:28 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 665	E

760
750
740
-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

156+00

R/L
ML
6.1%
745.72
-19.00
746.39
-5.00
746.44
0
4.5%
3.2%
4.0:1
5.0%
3.9:1
746.43
50.00
746.93
61.00
747.00
67.00
746.58
746.38
746.76
77.25

760
750
740
-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

155+50

R/L
ML
5.7%
745.26
-19.00
746.39
-5.00
745.92
0
4.7%
3.3%
4.0:1
5.0%
745.95
50.00
746.46
61.00
746.58
82.27
745.80
79.18
746.11
5 FT
10 FT

9

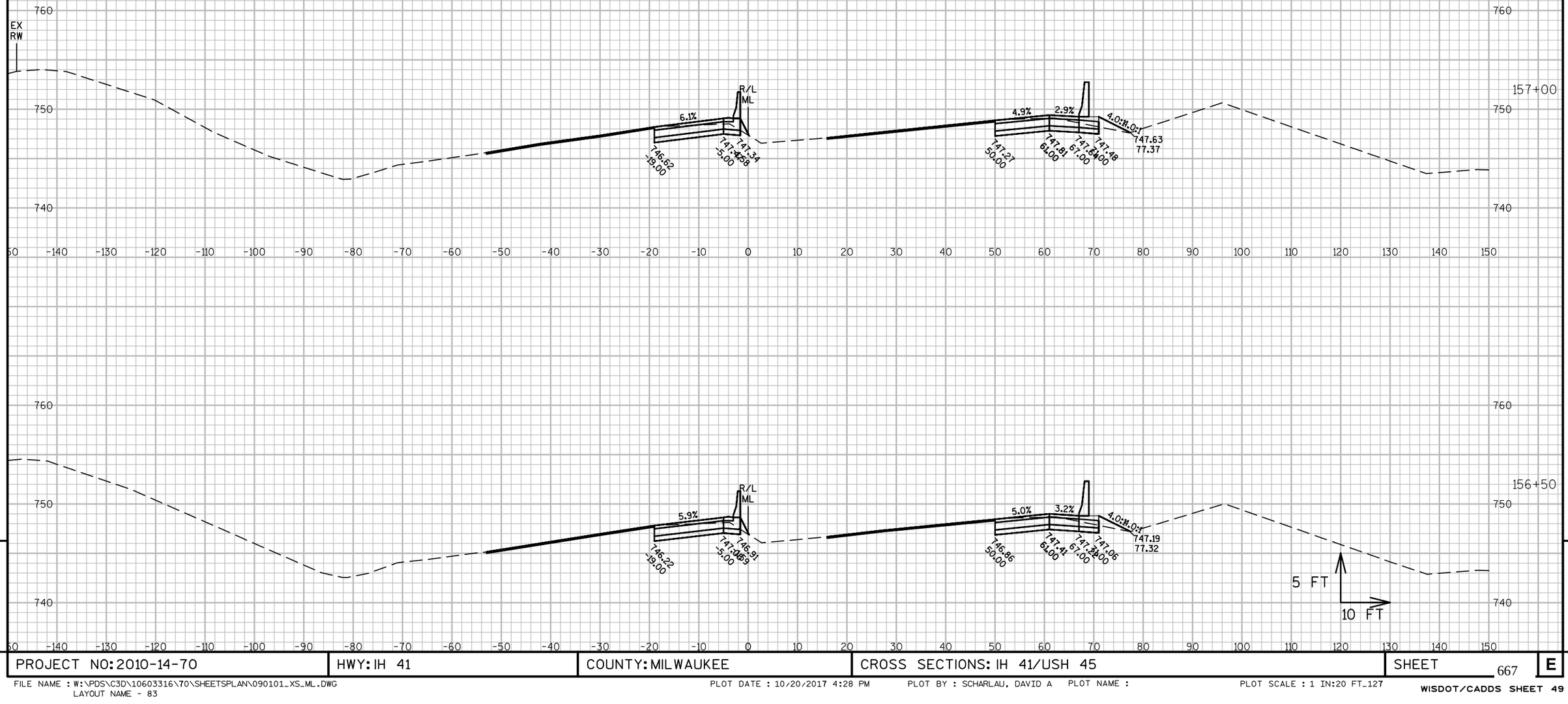
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 666	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 82

PLOT DATE : 10/20/2017 4:28 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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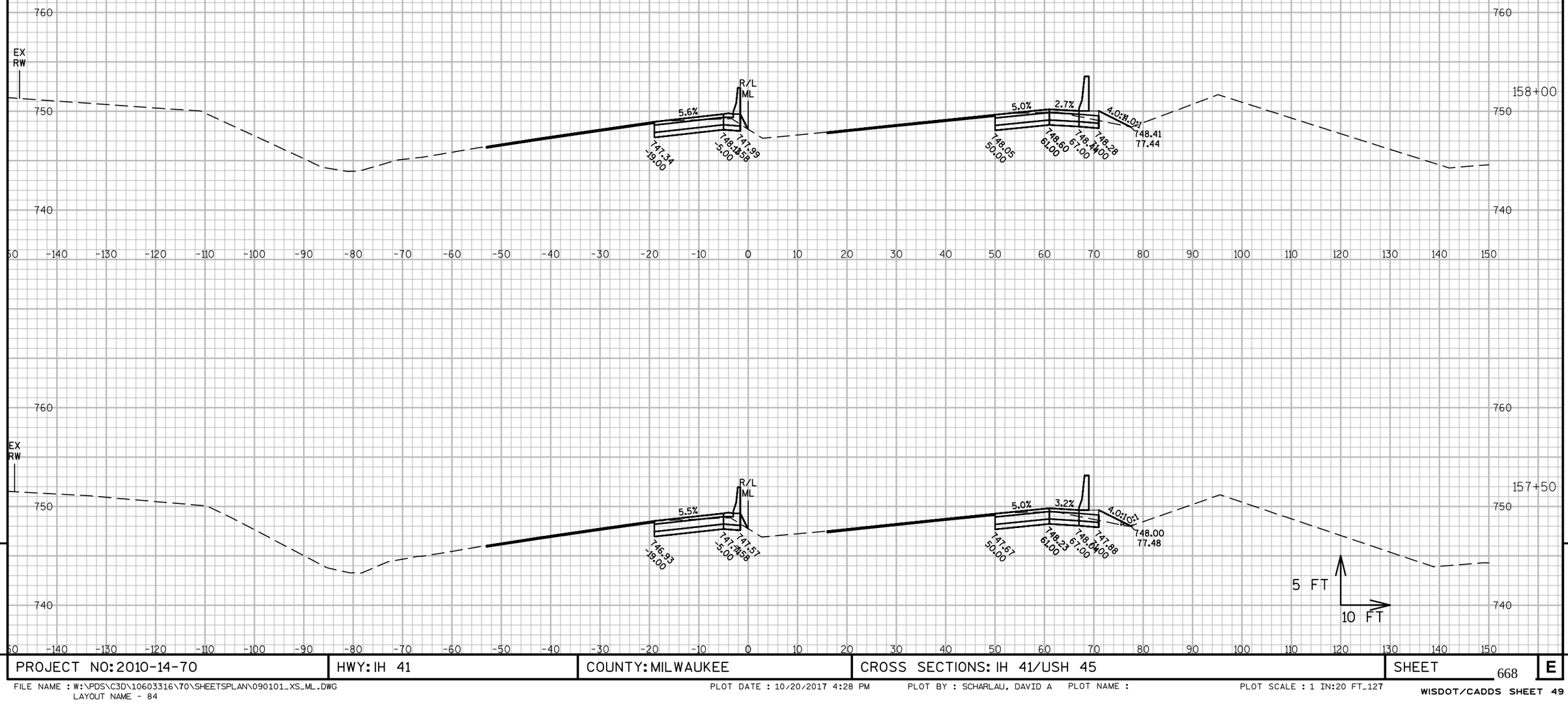
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 667	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 83

PLOT DATE : 10/20/2017 4:28 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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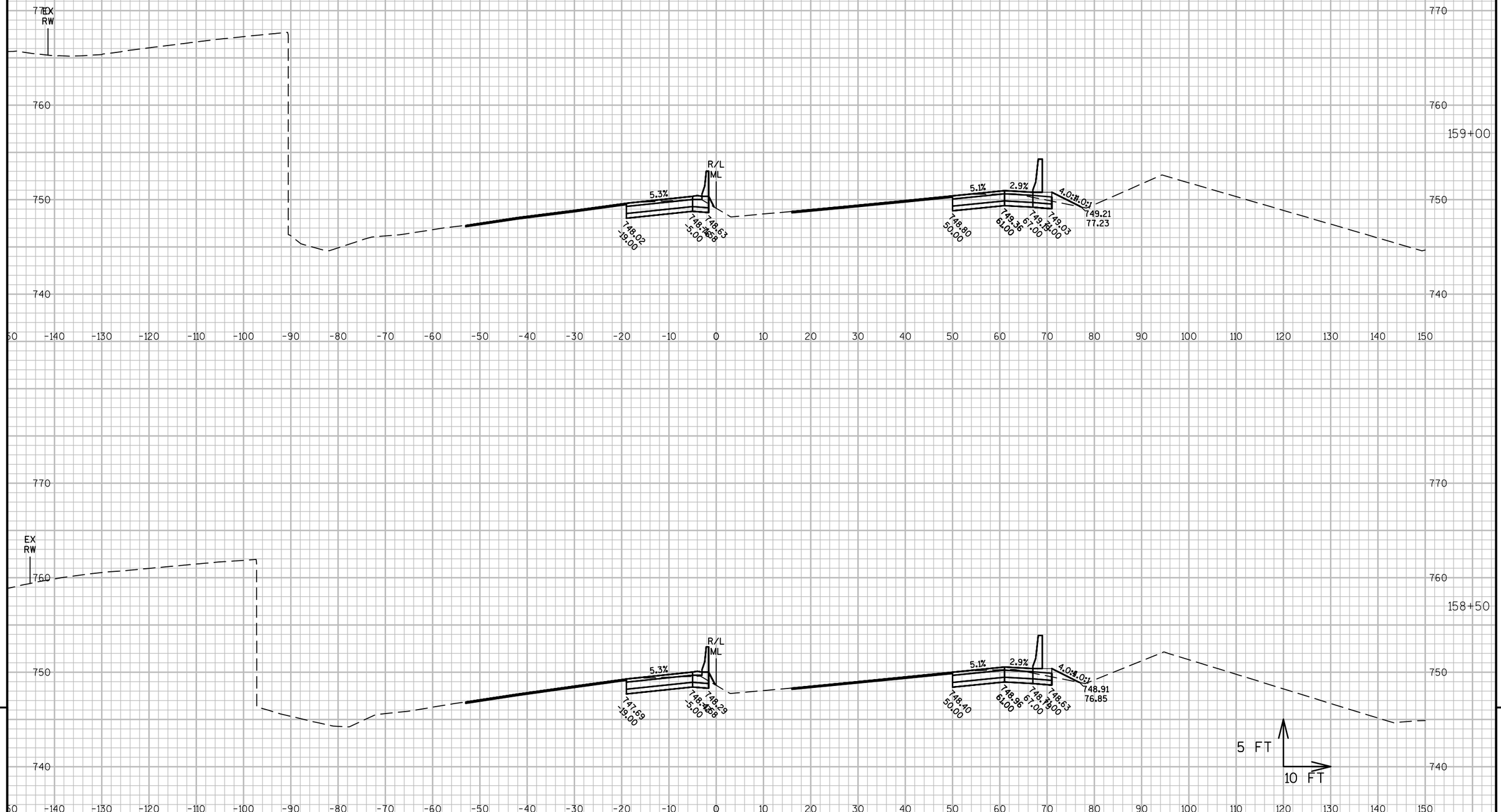
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 668	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 84

PLOT DATE : 10/20/2017 4:28 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



9

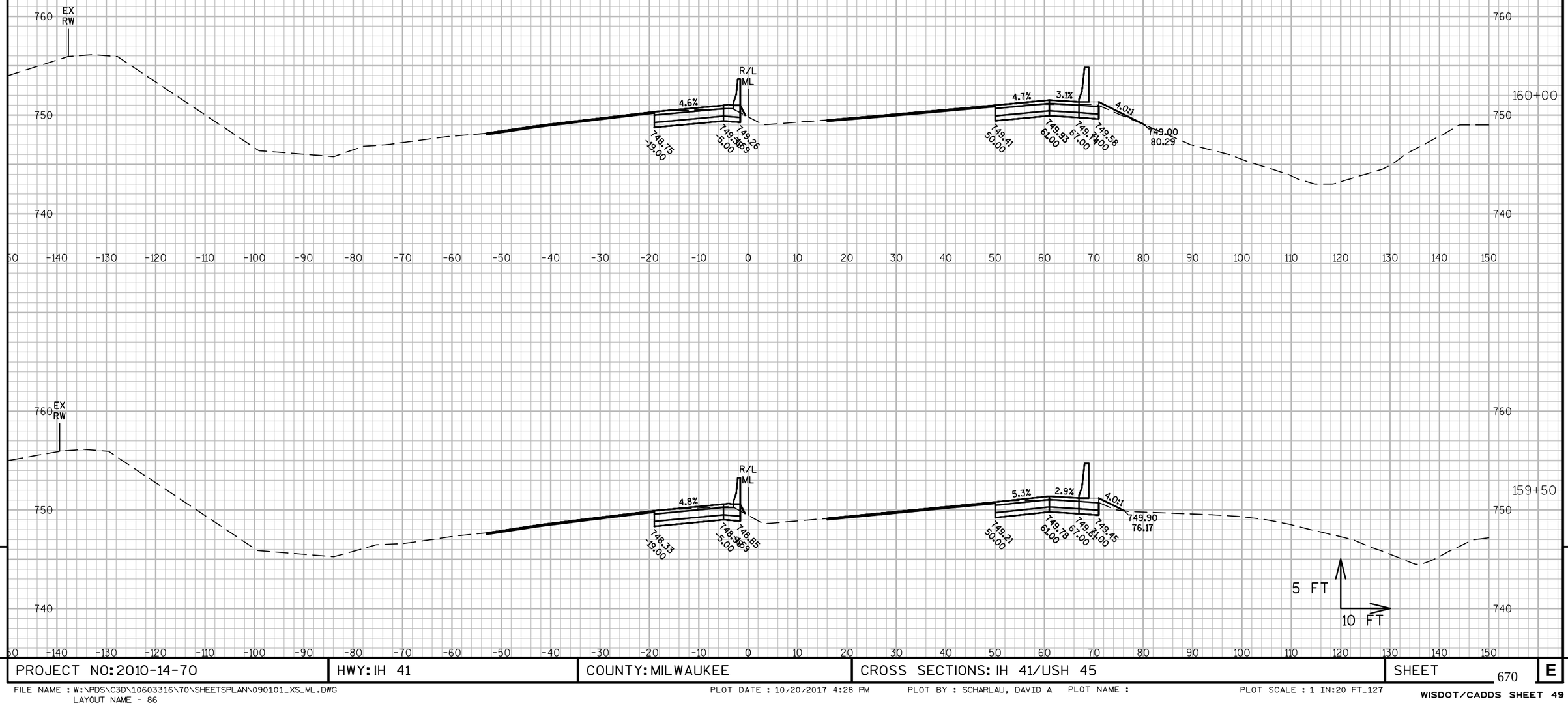
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 669	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 85

PLOT DATE : 10/20/2017 4:28 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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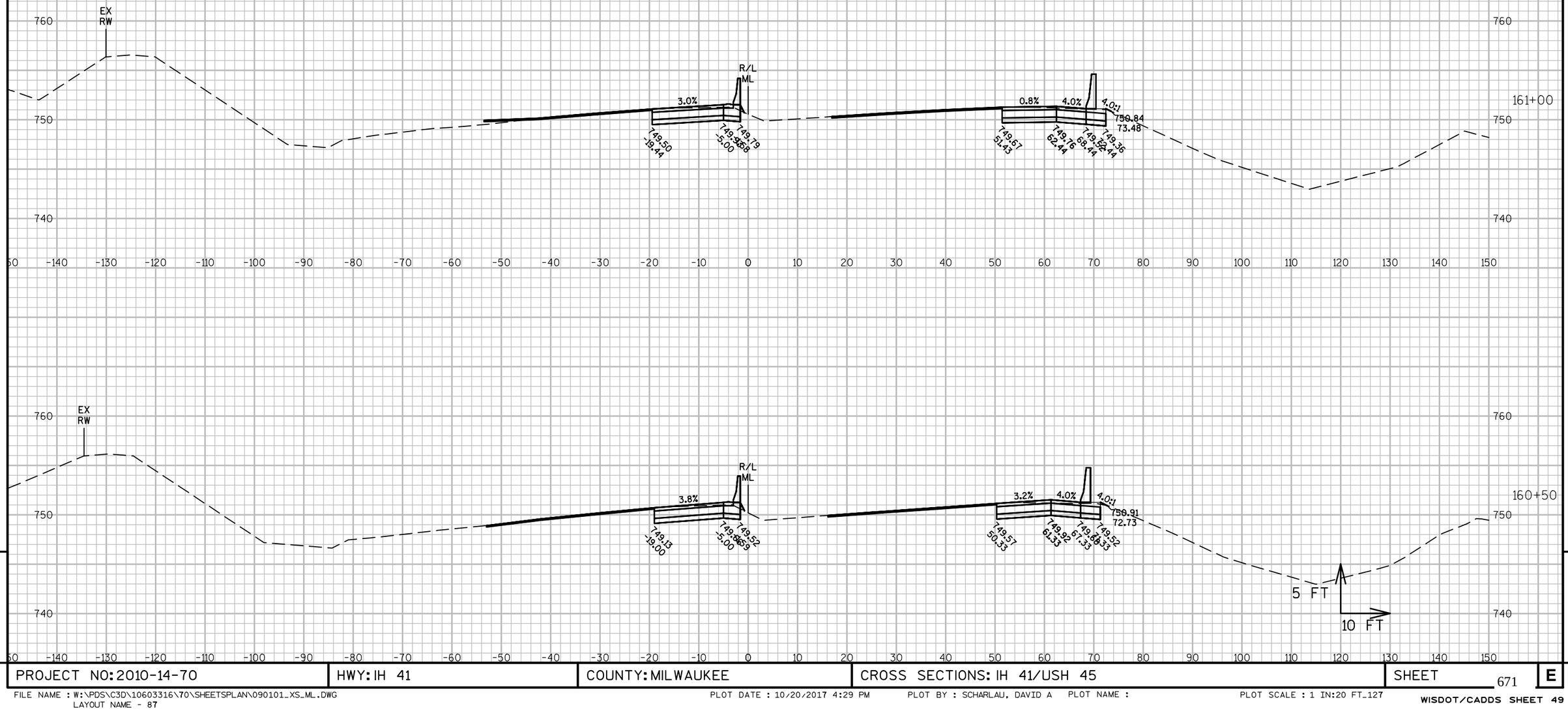
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 670	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 86

PLOT DATE : 10/20/2017 4:28 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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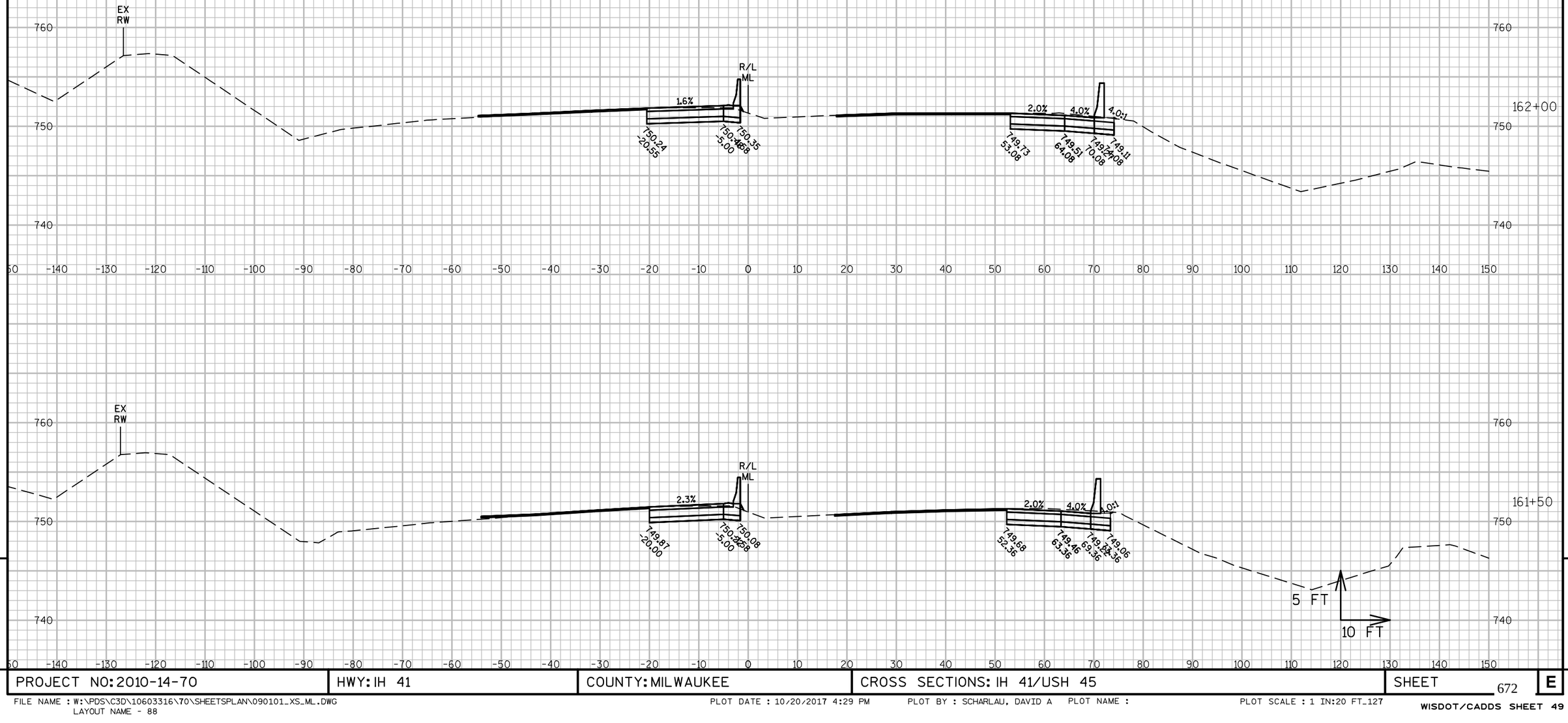
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 671	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 87

PLOT DATE : 10/20/2017 4:29 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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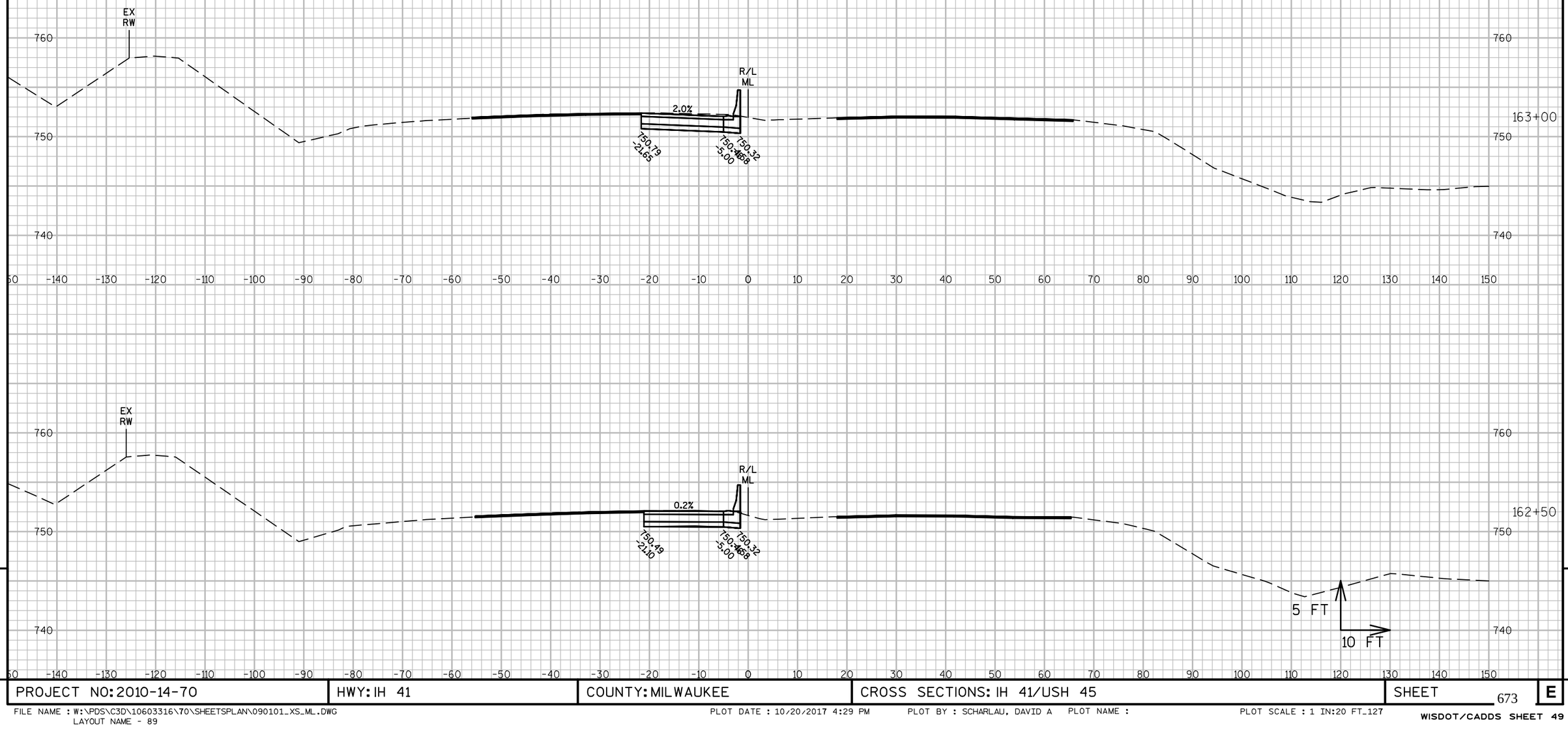
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 672 E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 88

PLOT DATE : 10/20/2017 4:29 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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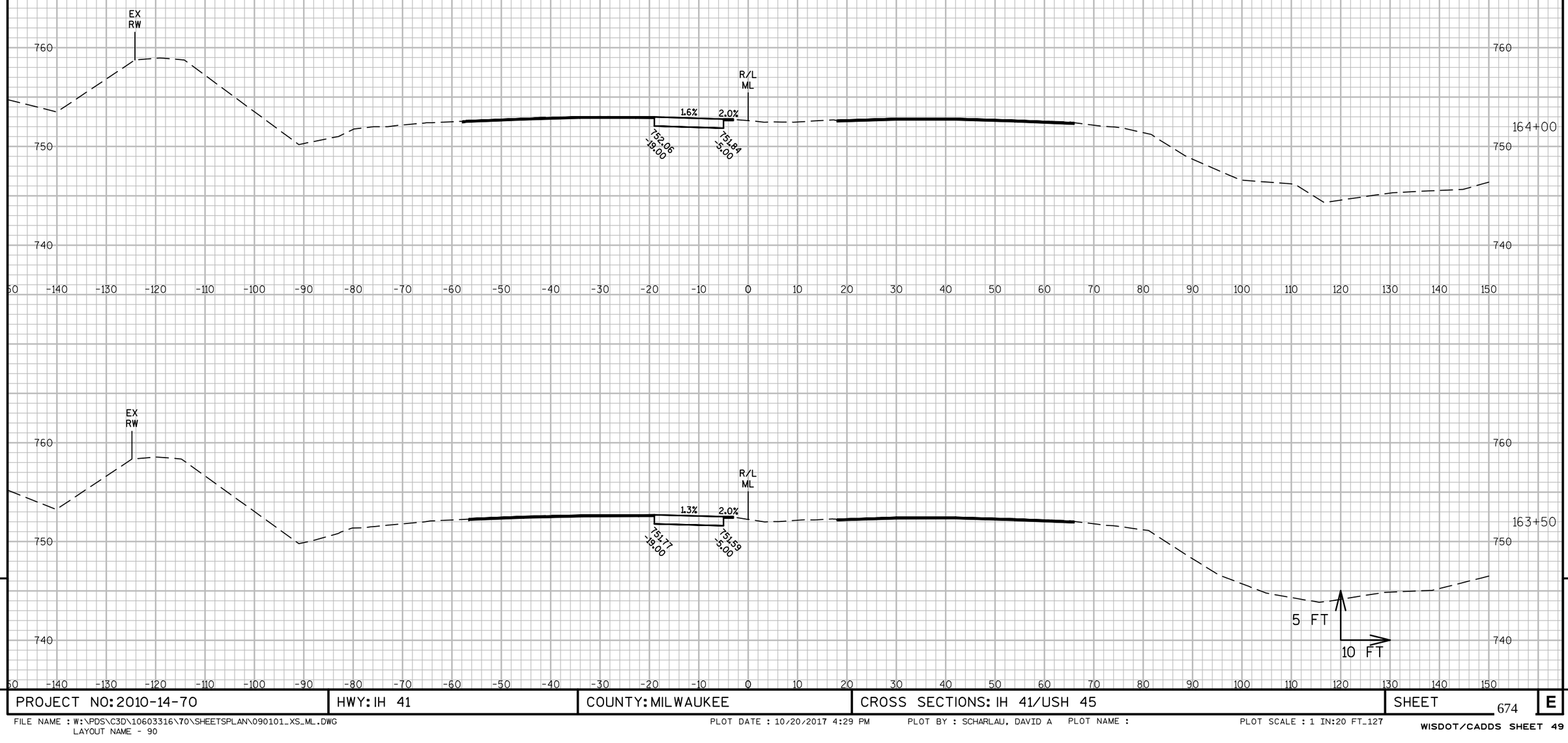
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 673	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 89

PLOT DATE : 10/20/2017 4:29 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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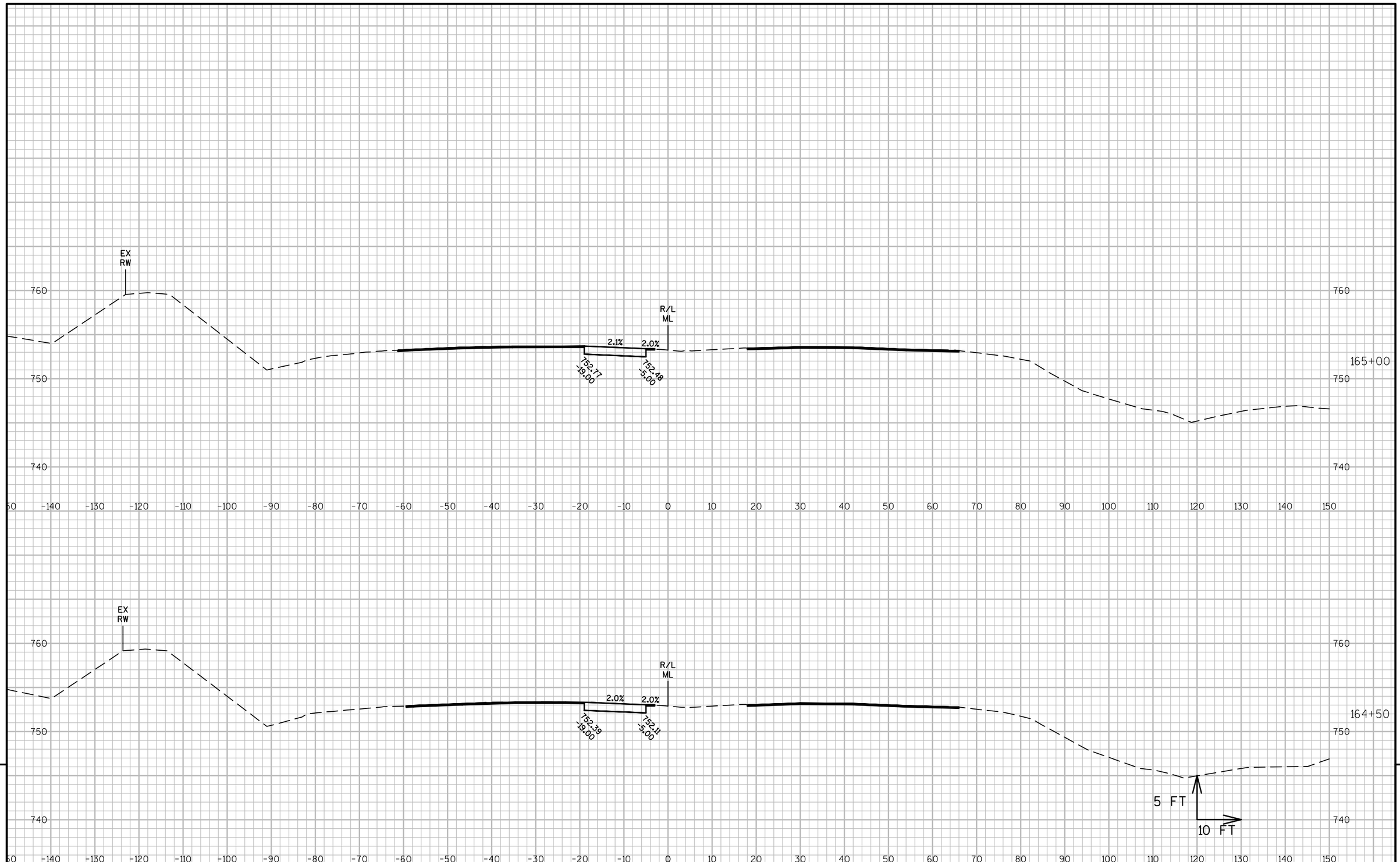
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 674	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 90

PLOT DATE : 10/20/2017 4:29 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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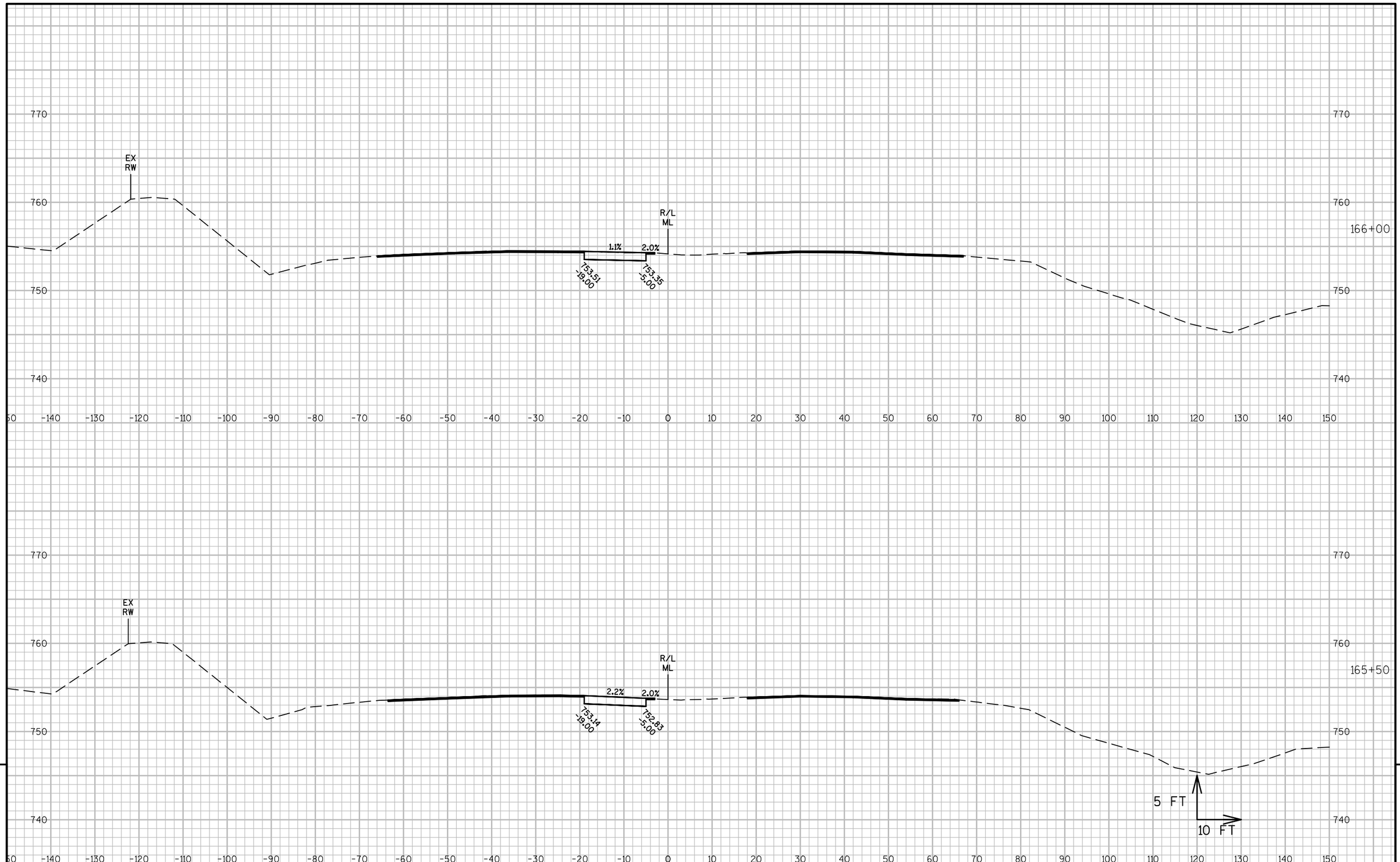
PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 675	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 91

PLOT DATE : 10/20/2017 4:29 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



9

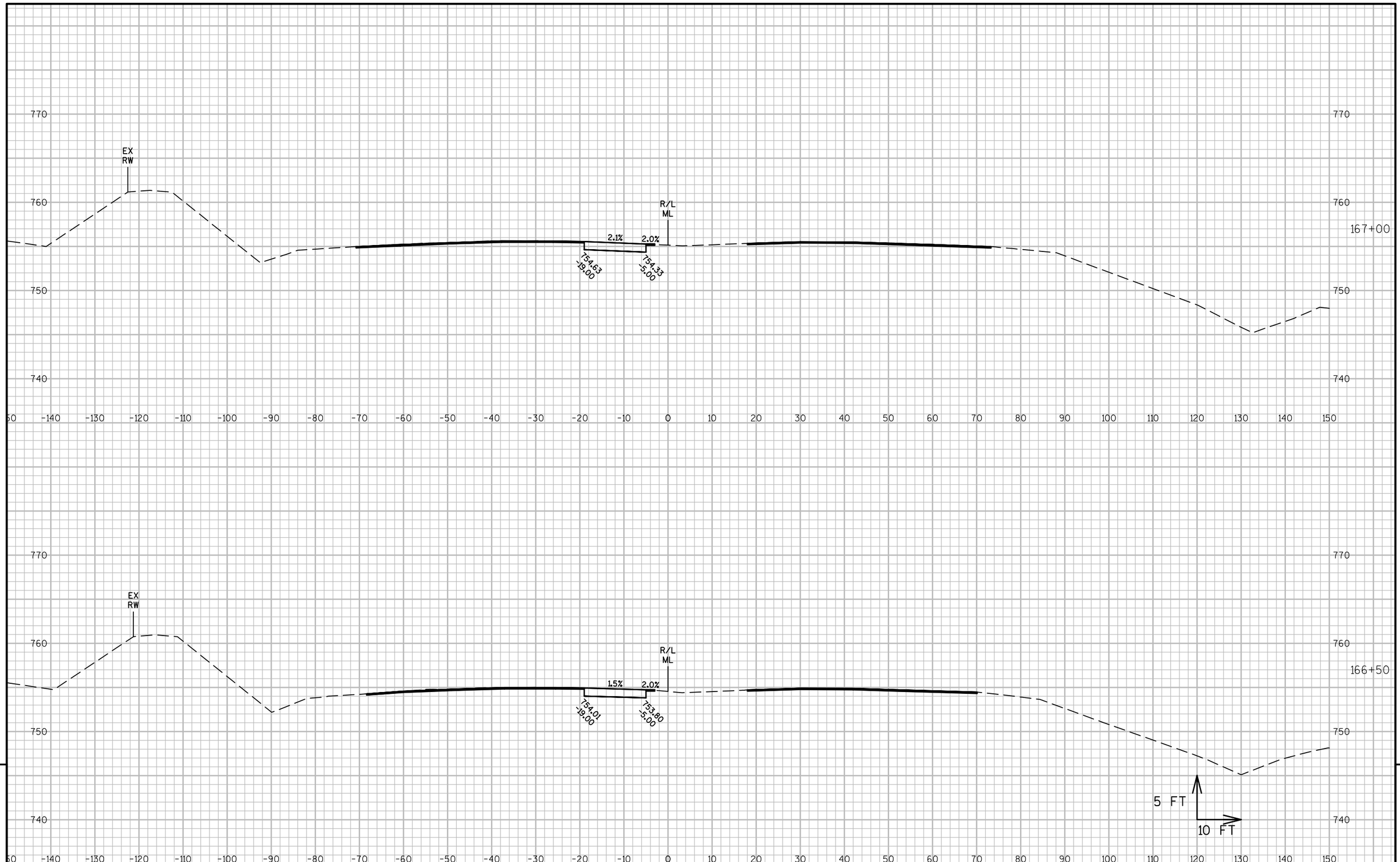
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 676	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 92

PLOT DATE : 10/20/2017 4:29 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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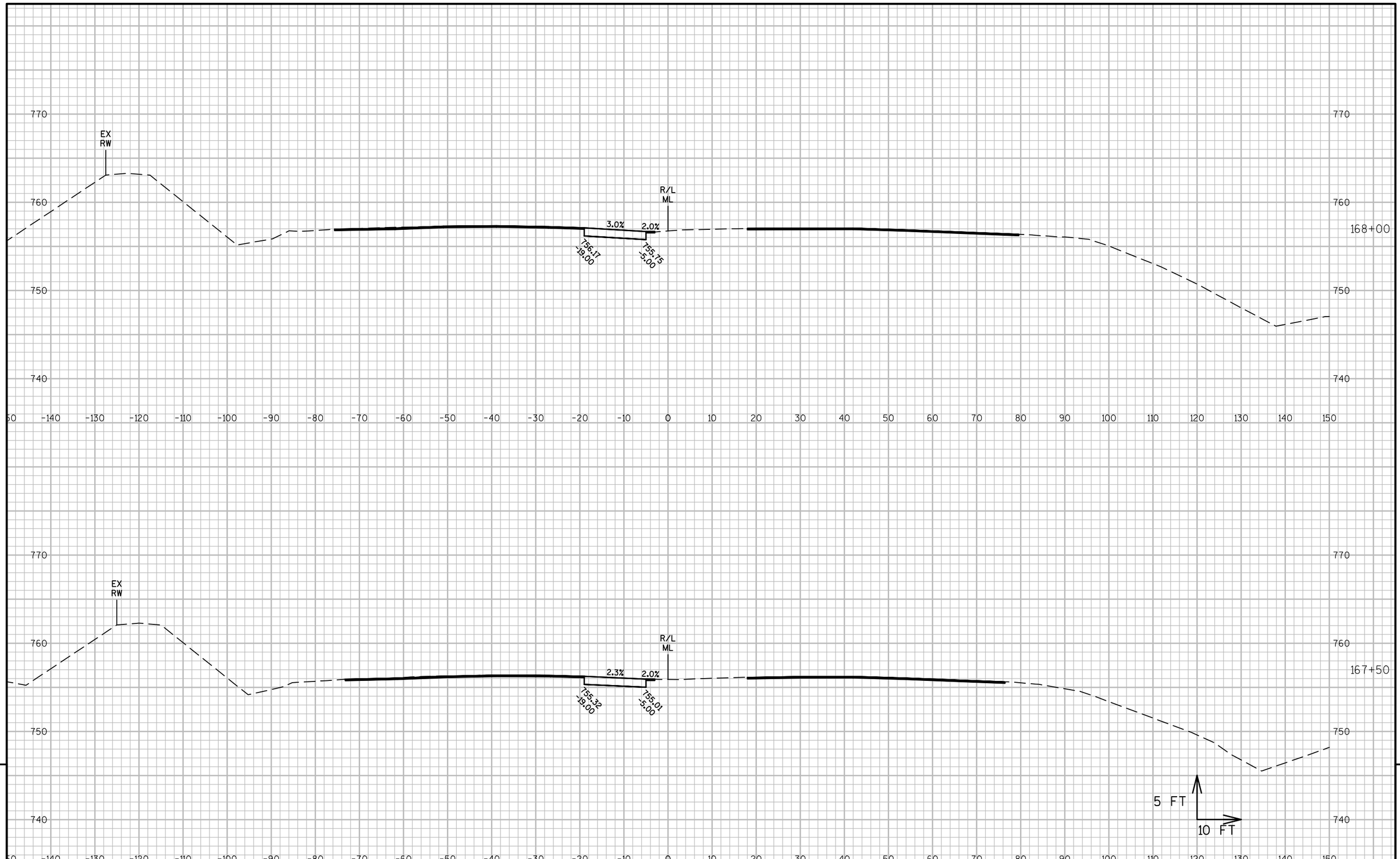
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 677	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 93

PLOT DATE : 10/20/2017 4:29 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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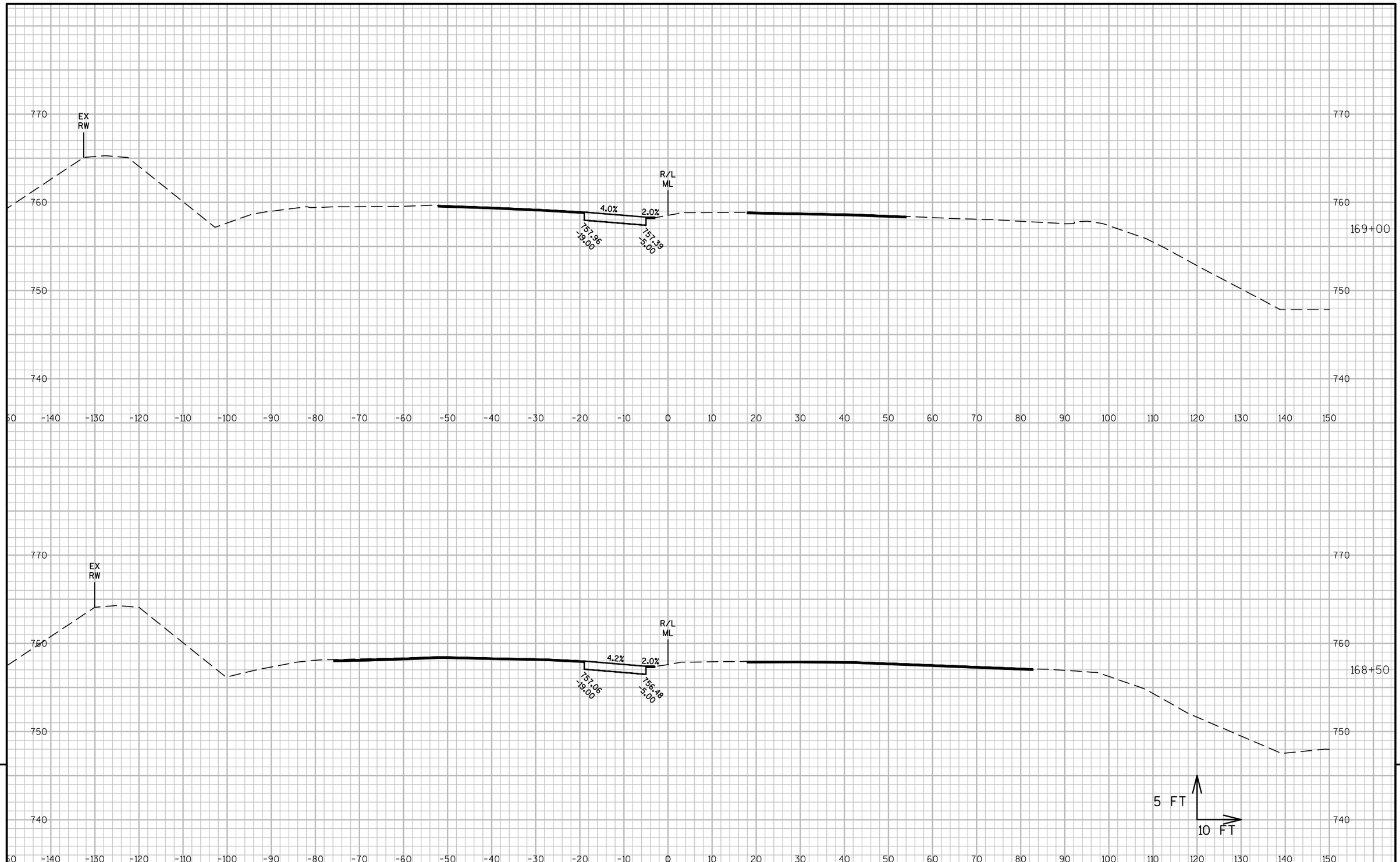
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 678	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 94

PLOT DATE : 10/20/2017 4:29 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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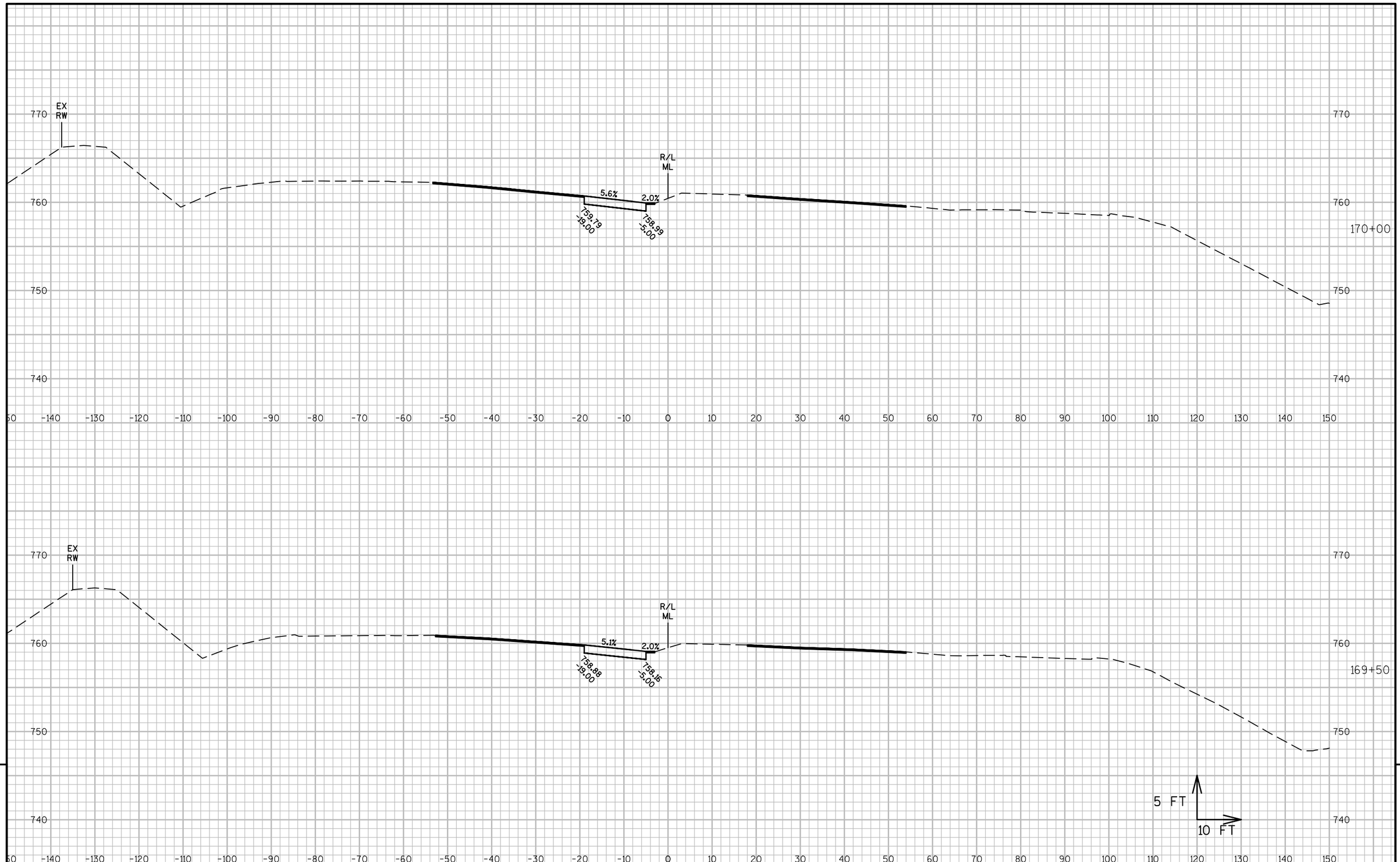
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 679	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 95

PLOT DATE : 10/20/2017 4:29 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49



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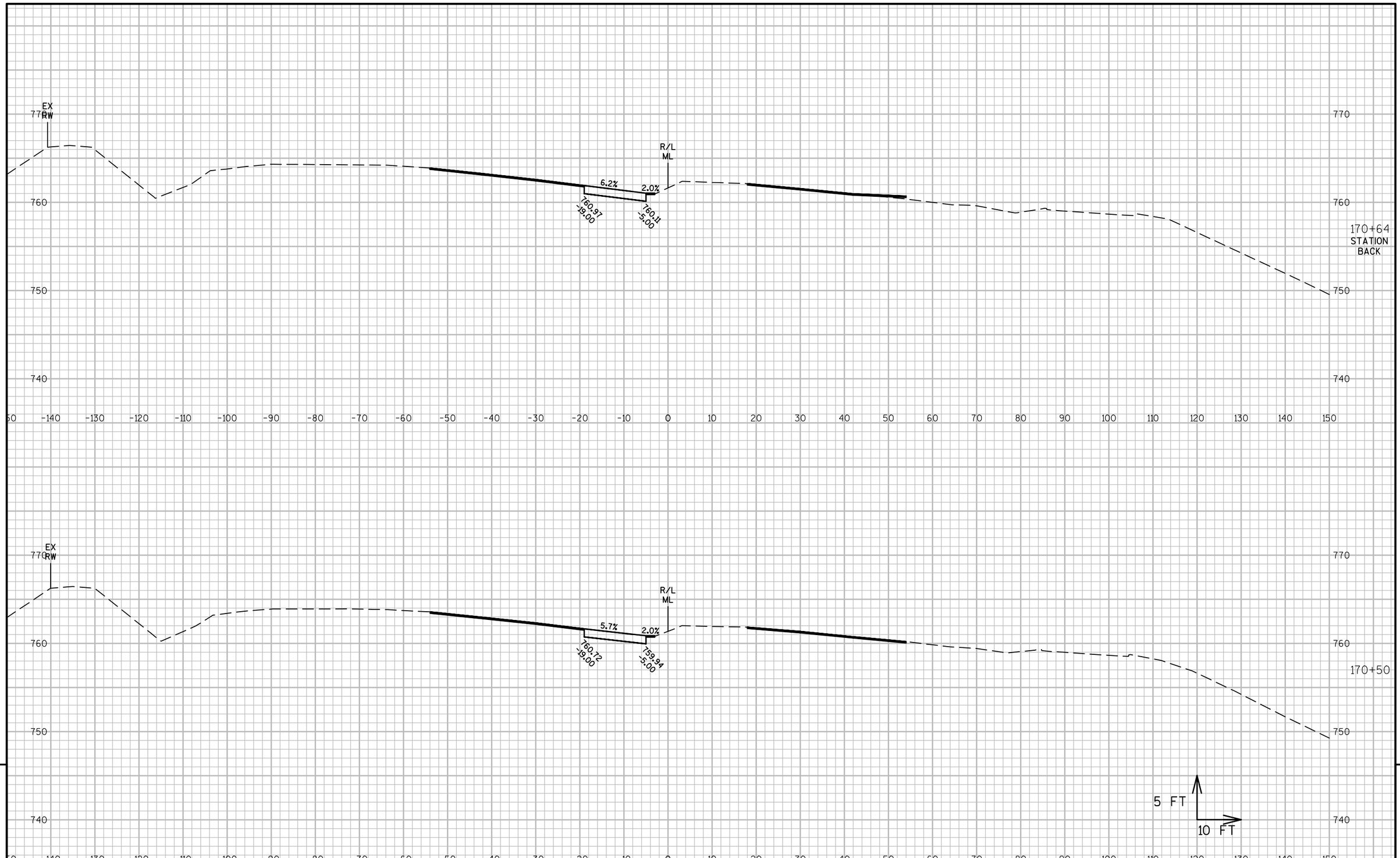
9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 680	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 96

PLOT DATE : 10/20/2017 4:29 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127



9

9

PROJECT NO: 2010-14-70	HWY: IH 41	COUNTY: MILWAUKEE	CROSS SECTIONS: IH 41/USH 45	SHEET 681	E

FILE NAME : W:\PDS\C3D\10603316\70\SHEETSPLAN\090101_XS_ML.DWG
LAYOUT NAME - 97

PLOT DATE : 10/20/2017 4:29 PM PLOT BY : SCHARLAU, DAVID A PLOT NAME : PLOT SCALE : 1 IN:20 FT_127

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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