GRE

AUG 2017

PROJECT ID: 6190-15-72 / 6190-15-74

WITH: N/A

COUNTY: WINNEBAGO

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 = 414

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6190-15-72	WISC 2017281	1
6190-15-74		

MAIN ST, VILLAGE OF WINNECONNE

WOLF RIVER BRIDGE AND APPROACHES

STH 116

WINNEBAGO COUNTY

STATE PROJECT NUMBER
6190-15-72

MAIN ST, VILLAGE OF WINNECONNE

WOLF RIVER BRIDGE AND APPROACHES

STH 116

WINNEBAGO COUNTY

STATE PROJECT NUMBER
6190-15-74



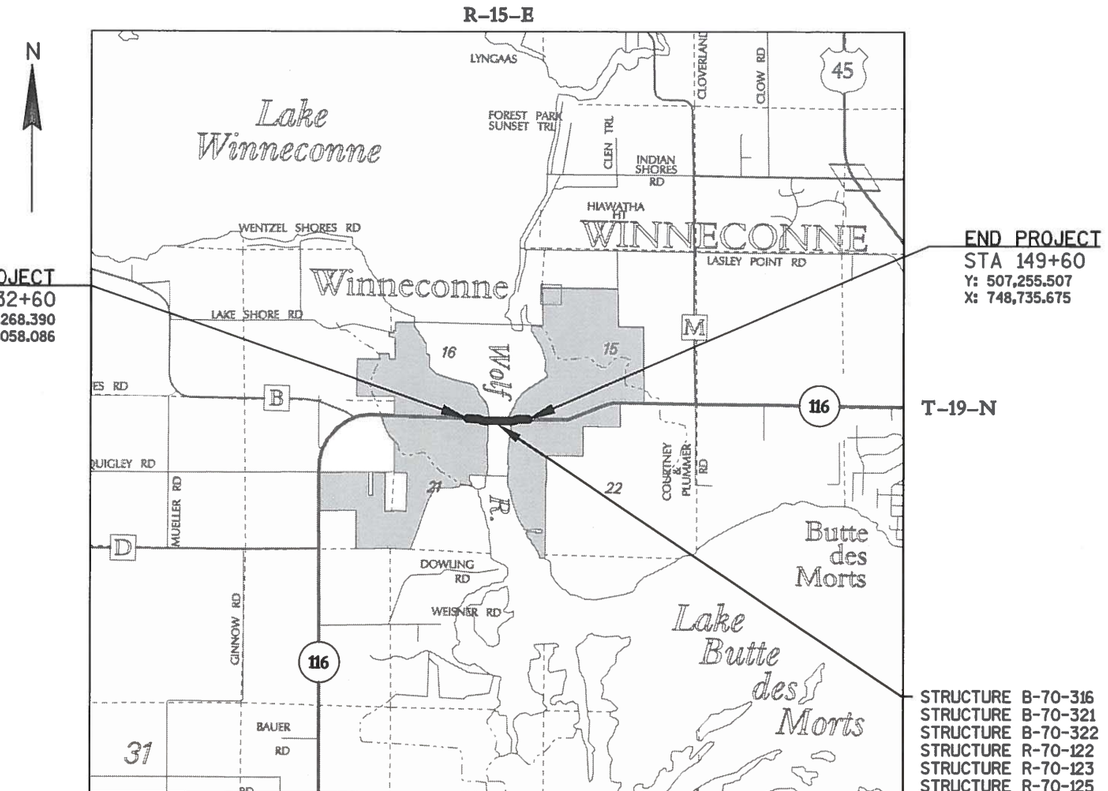
DESIGN DESIGNATION 6190-15-01

A.A.D.T.	2018	=	9,200
A.A.D.T.	2038	=	11,300
D.H.V.		=	554
D.D.		=	60/40
T.		=	5.7%
DESIGN SPEED		=	30 MPH
ESALS		=	1,416,200

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE		ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
MARSH AREA		TELEPHONE	T
		WATER	W
		UTILITY PEDESTAL	
WOODED OR SHRUB AREA		POWER POLE	
		TELEPHONE POLE	

R-15-E



BEGIN PROJECT
STA 132+60
Y: 507,268.390
X: 747,058.086

END PROJECT
STA 149+60
Y: 507,255.507
X: 748,735.675

T-19-N

STRUCTURE B-70-316
STRUCTURE B-70-321
STRUCTURE B-70-322
STRUCTURE R-70-122
STRUCTURE R-70-123
STRUCTURE R-70-125
STRUCTURE R-70-126

LAYOUT

SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.322 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, WINNEBAGO COUNTY, NAD83 (2012), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ORIGINAL PLANS PREPARED BY

OMNNI ASSOCIATES

WISCONSIN
MICHAEL A. MALCOLM
E-30025
Appleton, WI
PROFESSIONAL ENGINEER

01-28-17

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	OMNNI ASSOCIATES, INC
Designer	OMNNI ASSOCIATES, INC
Project Manager	B. BERTRAND
Regional Examiner	
Regional Supervisor	CHUCK KAROW

APPROVED FOR THE DEPARTMENT

DATE: 1-25-2017 William R. Bertrand (Signature)

E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-010101-TI.DWG
LAYOUT NAME - 61901572-010101-TI

PLOT DATE : 12/22/2016 2:11 PM PLOT BY : ANDREW WESTBROOK PLOT NAME :

GENERAL NOTES

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

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

IF EXCAVATION BELOW SUBGRADE (EBS) IS REQUIRED, IT WILL BE MEASURED AND PAID FOR AS COMMON EXCAVATION. THE LIMITS OF EBS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL DISTURBED AREAS NOT OTHERWISE SURFACED, ARE TO BE TOPSOILED, FERTILIZED, AND E-MATTED EXCEPT WHERE NOTED.

ALL MANHOLE AND INLET OFFSETS ARE GIVEN TO THE CENTER OF THE STRUCTURE.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ARE APPROXIMATE AND SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN WITH THE ENGINEER.

THE COST OF CONNECTING NEW STORM SEWERS OR DRAINAGE STRUCTURES TO THE EXISTING STORM SEWER SHALL BE INCIDENTAL TO THE COST OF THE STORM SEWER. TEMPORARY CONNECTIONS TO MAINTAIN DRAINAGE DURING CONSTRUCTION SHALL ALSO BE INDIDENTAL TO THE COST OF THE STORM SEWER.

IMMEDIATELY AFTER CONSTRUCTION OF ANY INLET, CONTRACTOR SHALL CONSTRUCT THE EROSION CONTROL PROTECTION IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS TO MINIMIZE SEDIMENTATION IN THE INLET AND STORM SEWER.

THE EXACT LOCATIONS OF ALL EROSION CONTROL ITEMS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

CURB AND GUTTER RADII ARE SHOWN TO THE CURB FACE.

CURB RAMP OPENINGS AS SHOWN ON THE PLANS ARE APPROXIMATE. ALL RAMP OPENINGS ARE INCIDENTAL TO THE ITEM OF CURB AND GUTTER AND SHALL BE 6" DEPTH.

REMOVING CONCRETE DRIVEWAYS WILL BE PAID FOR UNDER THE ITEM REMOVING CONCRETE SIDEWALK.

FIVE FOOT WIDE SIDEWALK REQUIRES TRANSVERSE JOINTS SPACED AT FIVE FEET AND TEN FOOT WIDE SIDEWALK REQUIRES TRANSVERSE JOINTS SPACED AT TEN FEET.

ALL 6-INCH CONCRETE SIDEWALK LOCATED IN THE RESIDENTIAL DRIVEWAYS SHALL BE PAID FOR AS 6-INCH CONCRETE DRIVEWAY.

BOXOUTS SHALL BE PROVIDED IN CONCRETE BY THE CONTRACTOR FOR SIGN PLACEMENT. THE COST FOR BOXOUTS WILL BE INCIDENTAL TO ASSOCIATED CONCRETE ITEM. LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.

WHERE SLOPE INTERCEPT LINES FALL OUTSIDE OF THE EXISTING RIGHT-OF-WAY, TEMPORARY INTERESTS TO ACCOMPLISH CONSTRUCTION WORK WITHIN THE SLOPE INTERCEPTS HAVE BEEN OBTAINED. THESE RIGHTS ARE EXTENDED TO THE CONTRACTOR.

ORDER OF "SECTION 2" SHEETS

SHEET TITLE

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVALS
PAVING DETAILS
EROSION CONTROL PLAN
STORM SEWER PLAN
SANITARY SEWER PLAN
WATER MAIN PLAN
SIGNING PLAN
LIGHTING PLAN
PAVEMENT MARKING
TRAFFIC CONTROL STAGING
ALIGNMENT LAYOUT

EROSION CONTROL NOTES

RUNOFF COEFFICIENT FOR THIS PROJECT: EXISTING PAVEMENT 0.95, EXISTING SLOPES 0.30, NEW PAVEMENT 0.95, NEW SLOPES 0.30.

TOTAL PROJECT AREA = 5.5 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 3.6 ACRES

2

UTILITIES

WATER

VILLAGE OF WINNECONNE
KIRK RUETTEN
30 SOUTH FIRST ST
PO BOX 488
WINNECONNE, WI 54986-0488
TEL: 920-582-4381
EMAIL: pwdirector@winneconnewi.gov

SANITARY SEWER

VILLAGE OF WINNECONNE
KIRK RUETTEN
30 SOUTH FIRST ST
PO BOX 488
WINNECONNE, WI 54986-0488
TEL: 920-582-4381
EMAIL: pwdirector@winneconnewi.gov

GAS

ALLIANT ENERGY
MARK VILLARS
880 N WISCONSIN ST
BERLIN, WI 54923
TEL: 920-361-5652
MOBILE: 920-290-0827
EMAIL: markvillars@alliantenergy.com

ELECTRIC

ALLIANT ENERGY
MARK VILLARS
880 N WISCONSIN ST
BERLIN, WI 54923
TEL: 920-361-5652
MOBILE: 920-290-0827
EMAIL: markvillars@alliantenergy.com

ATC MANAGEMENT
GERALD RHODE
801 O'KEEFE RD
PO BOX 6113
DE PERE, WI 54115-6113
TEL: 920-338-6523
EMAIL: grhode@atcllc.com

STREET LIGHTING

VILLAGE OF WINNECONNE
KIRK RUETTEN
30 SOUTH FIRST ST
PO BOX 488
WINNECONNE, WI 54986-0488
TEL: 920-582-4381
EMAIL: pwdirector@winneconnewi.gov

COMMUNICATION

CHARTER
BRUCE HENRY
1623 BROADWAY AVE
SHEBOYGAN, WI 53081
TEL: 608-826-1619
MOBILE: 920-263-0074
EMAIL: bruce.henry@charter.com

AT&T WISCONSIN
CHUCK BARTELT
70 E DIVISION ST
FOND DU LAC, WI 54935
TEL: 920-929-1013 (OFFICE)
MOBILE: 920-410-5104
EMAIL: cb1461@att.com

OTHER CONTACTS

DNR LIAISON

WI DEPARTMENT OF NATURAL RESOURCES
JAY SCHIEFELBEIN
2984 SHAWANO AVE
GREEN BAY, WI 54313
TEL: 920-662-5130
EMAIL: jeremiah.schiefelbein@wisconsin.gov

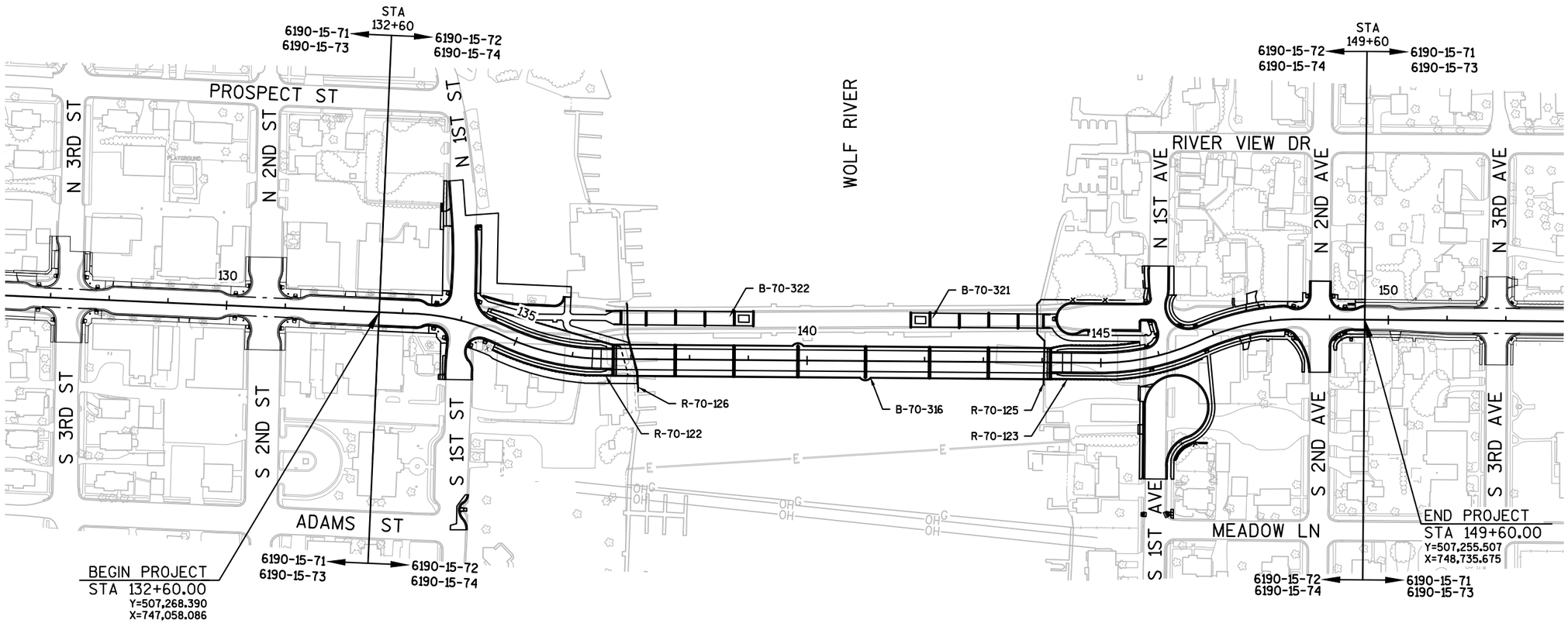
DIGGERS HOTLINE

CABLE LOCATE
TELEPHONE: (800) 242-8511 (TOLL FREE)

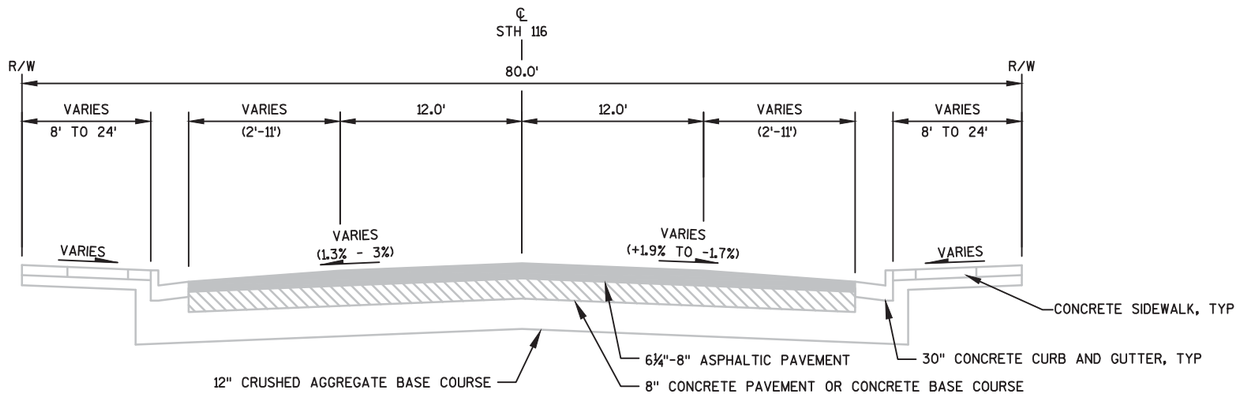
DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

2

N

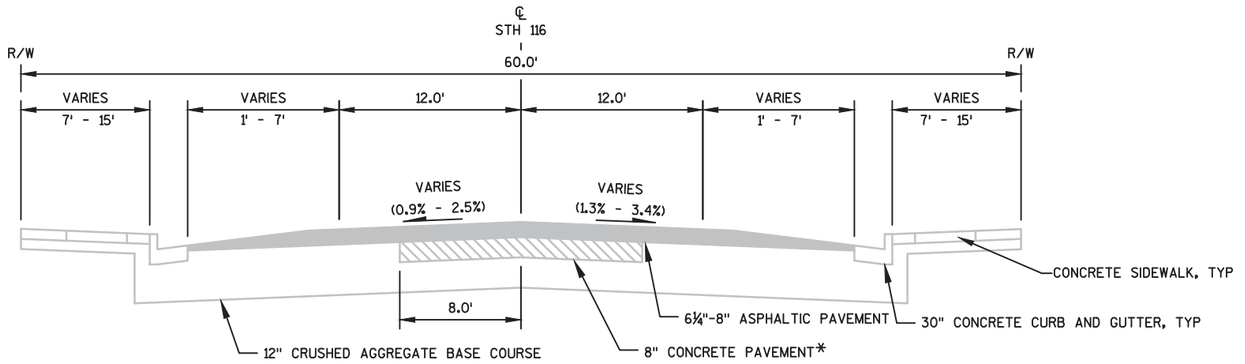


PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PROJECT OVERVIEW	SHEET 4	E



EXISTING TYPICAL SECTION STH 116

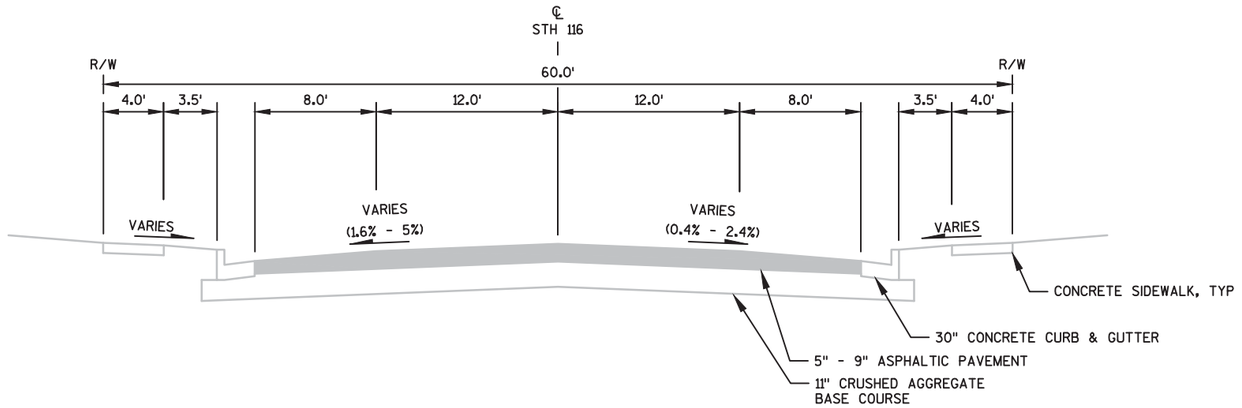
STA 132+60 - BRIDGE



EXISTING TYPICAL SECTION STH 116

BRIDGE - 2ND AVENUE

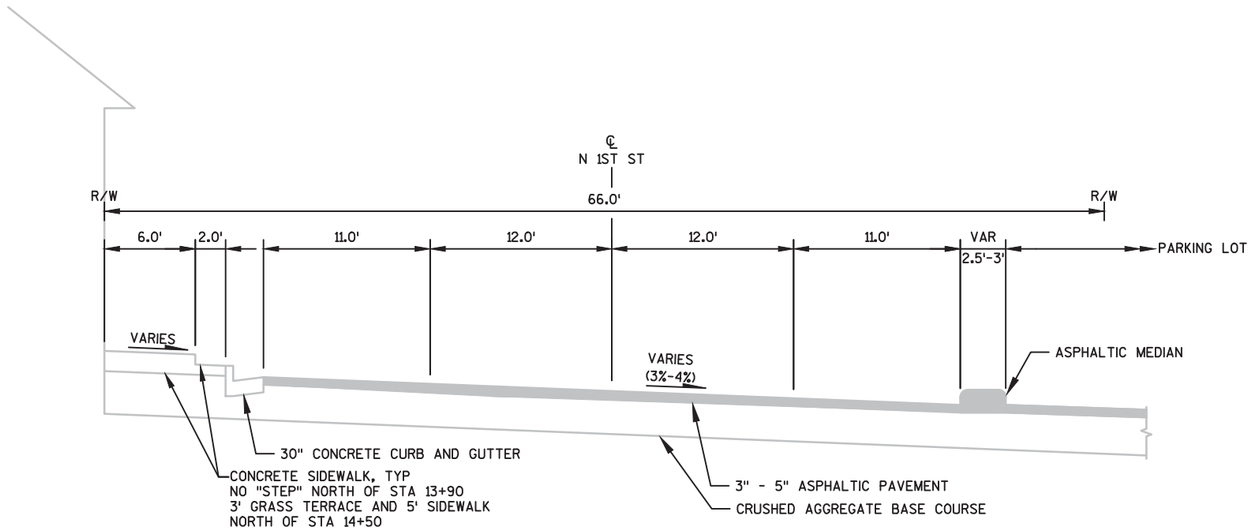
*NO CONCRETE PAVEMENT FROM APPROXIMATELY 60' EAST OF EXISTING BRIDGE TO APPROXIMATELY 260' EAST OF EXISTING BRIDGE



EXISTING TYPICAL SECTION STH 116

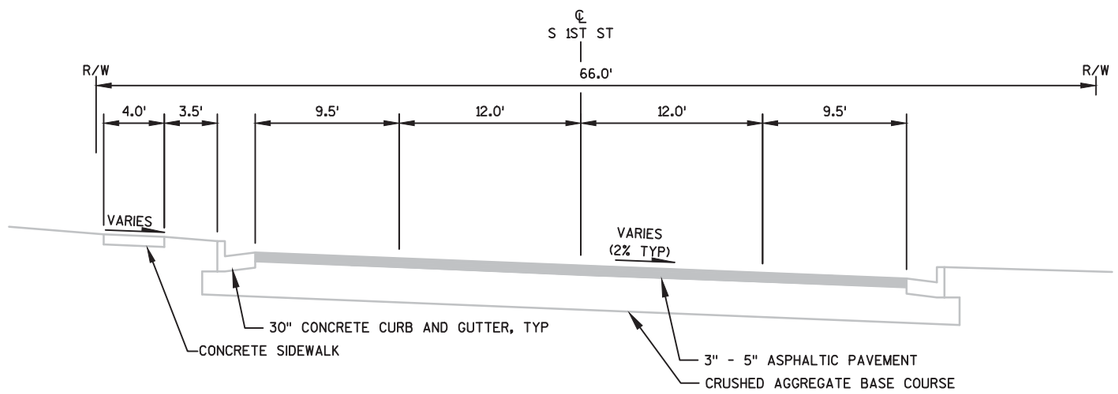
2ND AVENUE - STA 149+60

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 5	E



EXISTING TYPICAL SECTION N 1ST ST

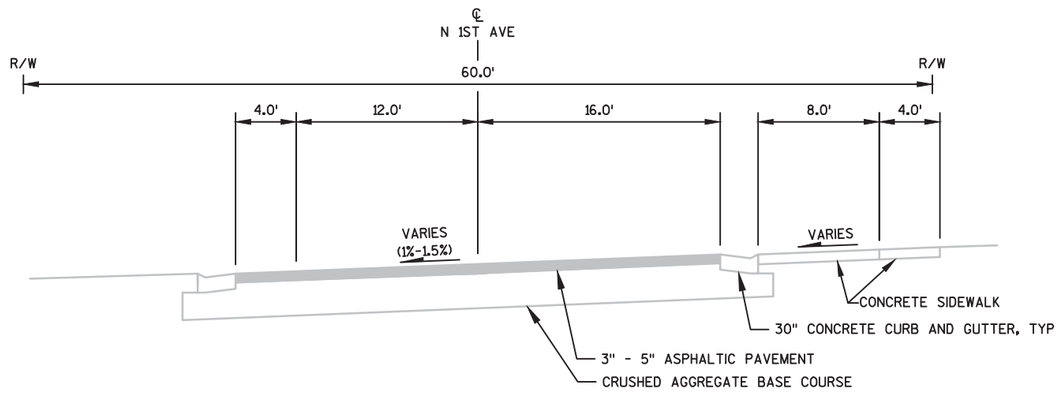
STA 12+99 - STA 14+91



EXISTING TYPICAL SECTION S 1ST ST

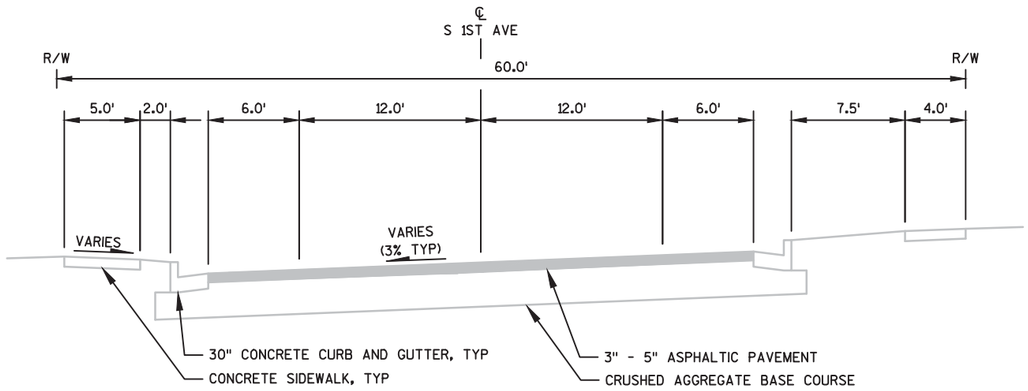
STA 11+50 - STA 12+00

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 6	E



EXISTING TYPICAL SECTION N 1ST AVE

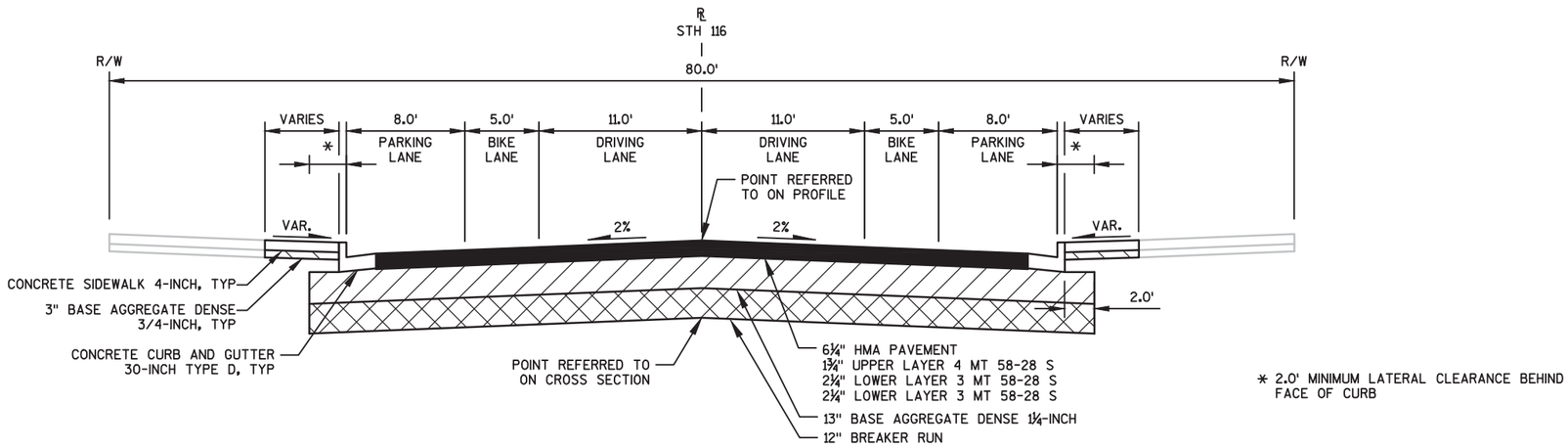
STA 16+00 - STA 17+50



EXISTING TYPICAL SECTION S 1ST AVE

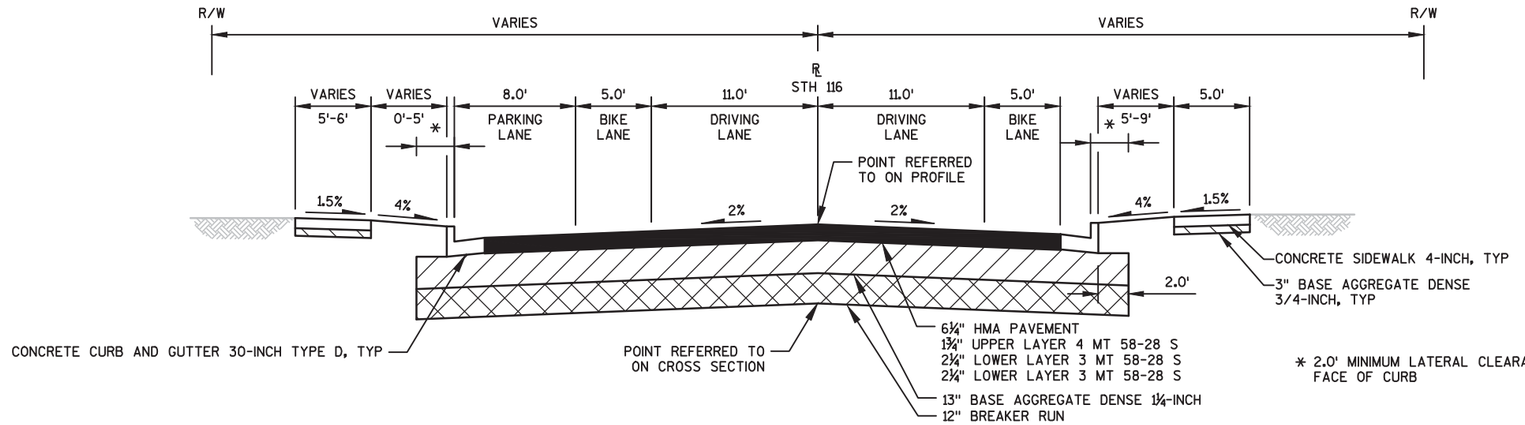
STA 12+94 - STA 14+77

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 7	E



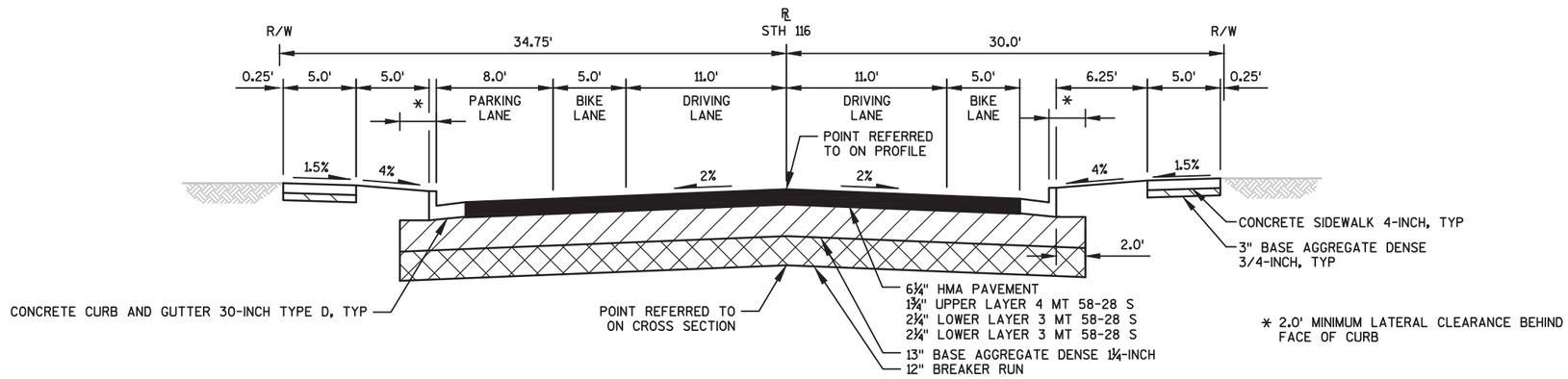
FINISHED TYPICAL SECTION STH 116

STA 132+60 - 1ST STREET



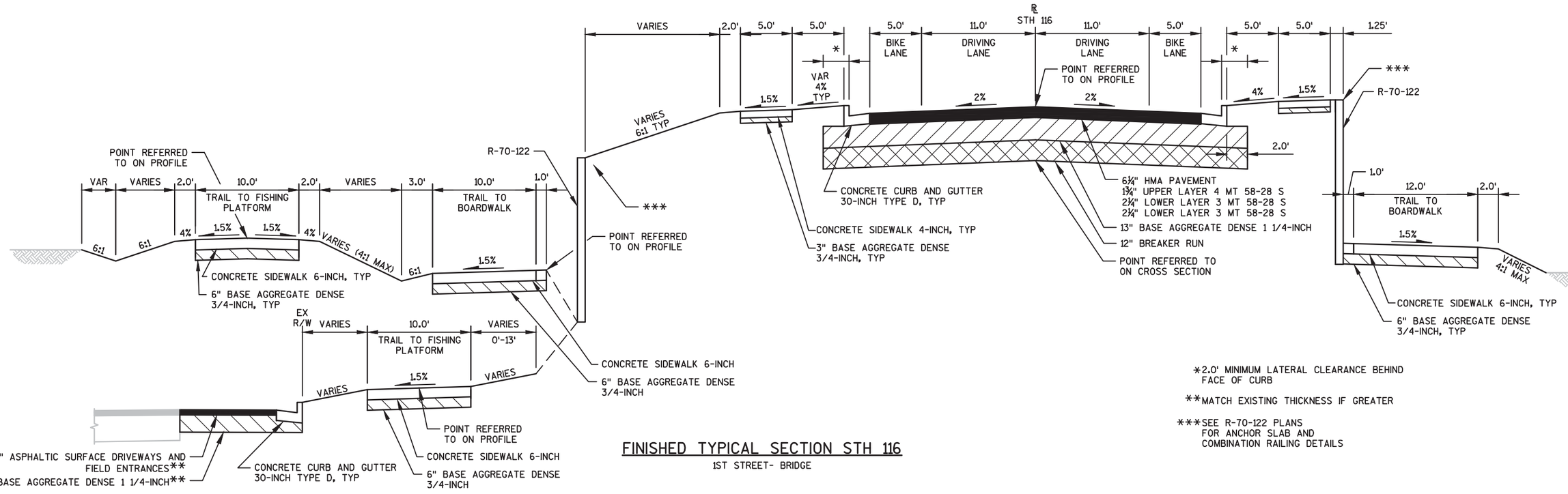
FINISHED TYPICAL SECTION STH 116

1ST AVENUE - 2ND AVENUE



FINISHED TYPICAL SECTION STH 116

2ND AVENUE - STA 149+60



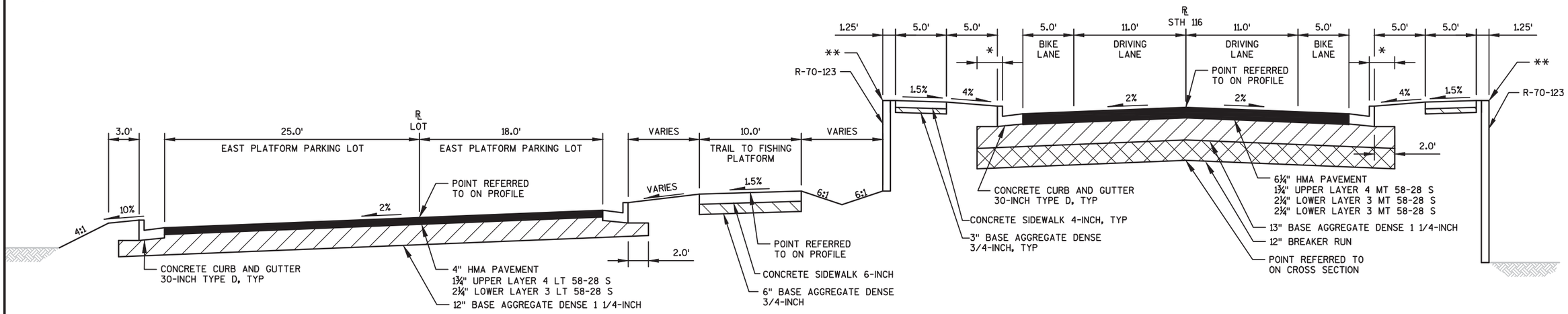
FINISHED TYPICAL SECTION STH 116

1ST STREET- BRIDGE

*2.0' MINIMUM LATERAL CLEARANCE BEHIND FACE OF CURB

**MATCH EXISTING THICKNESS IF GREATER

***SEE R-70-122 PLANS FOR ANCHOR SLAB AND COMBINATION RAILING DETAILS



FINISHED TYPICAL SECTION STH 116

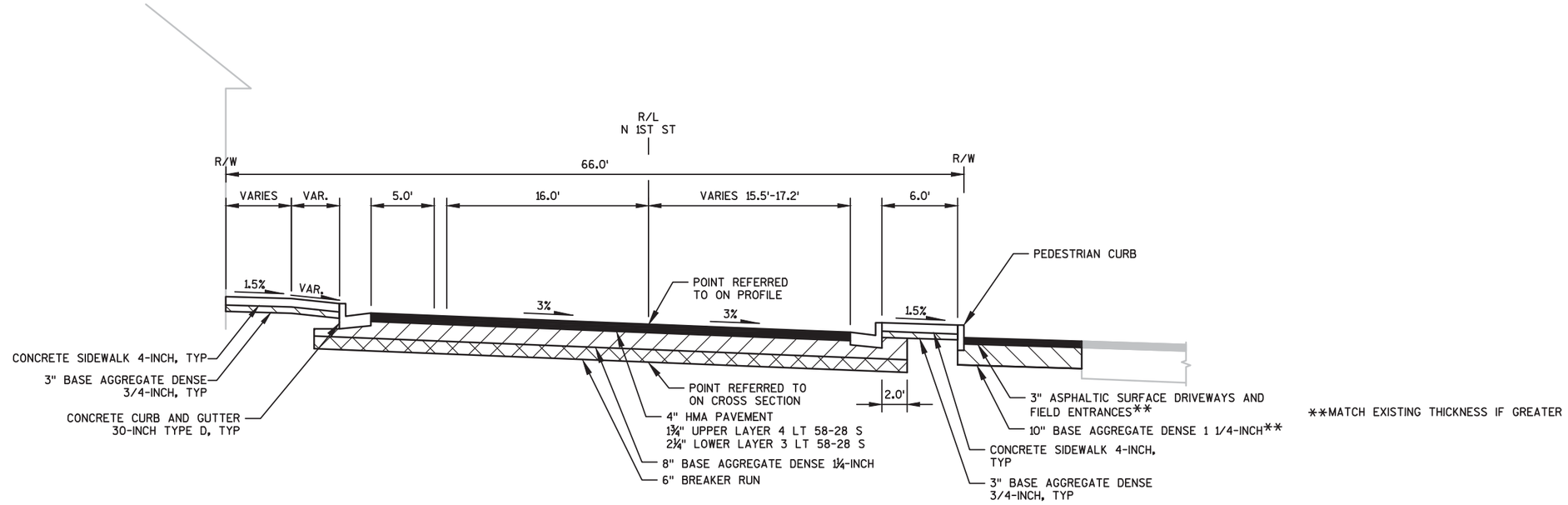
BRIDGE - 1ST AVENUE

* 2.0' MINIMUM LATERAL CLEARANCE BEHIND FACE OF CURB

** SEE R-70-123 PLANS FOR ANCHOR SLAB AND COMBINATION RAIL DETAIL

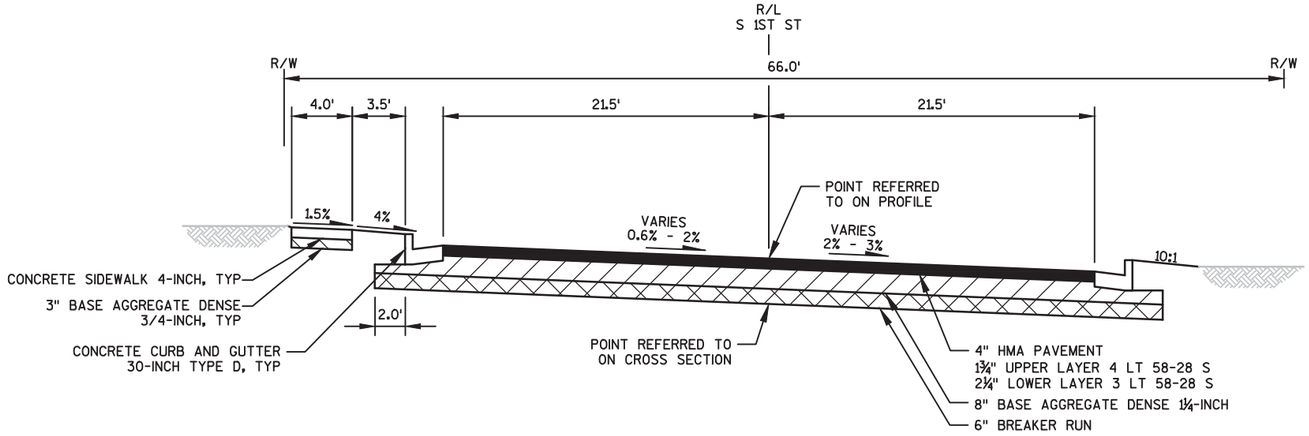
PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 9	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-020301-TS.DWG
61901572 PLAN - 61901572-020306-TS
PLOT DATE : 3/6/2017 9:11 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : ********
WISDOT/CADDS SHEET 42



FINISHED TYPICAL SECTION N 1ST ST

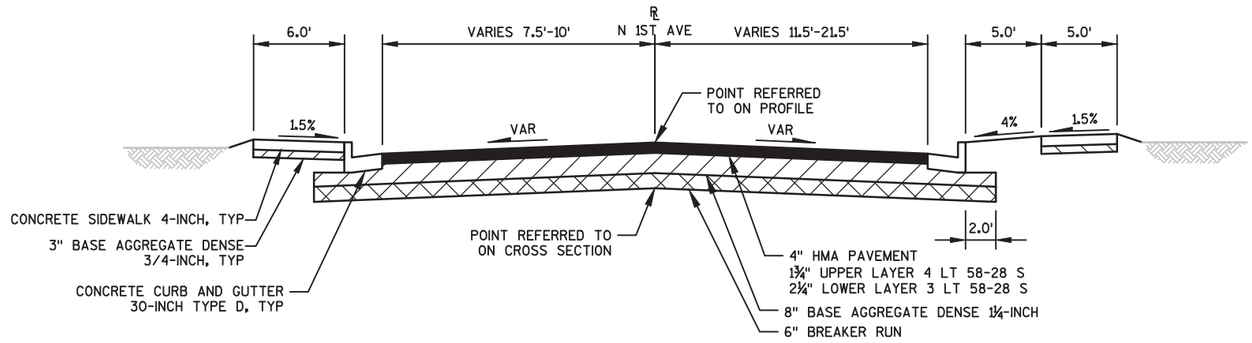
STA 12+99 - STA 14+91



FINISHED TYPICAL SECTION S 1ST ST

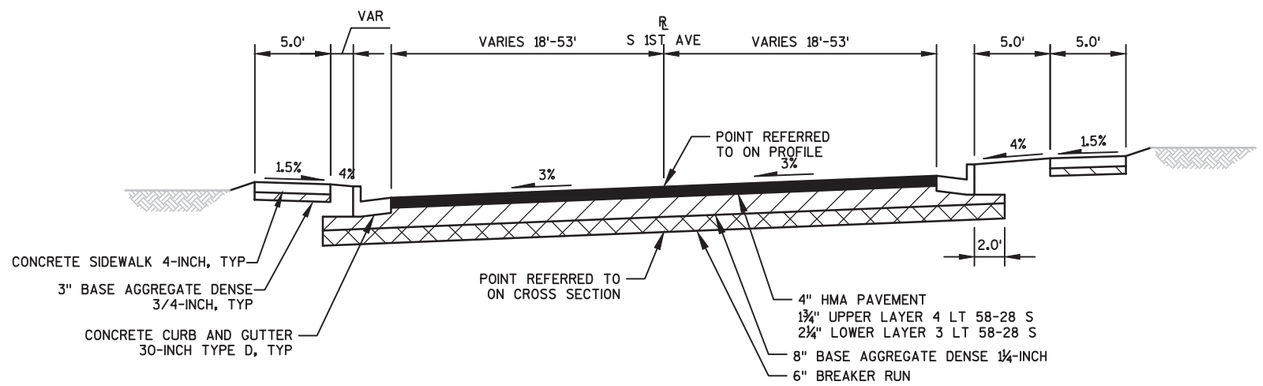
STA 11+50 - STA 12+00

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TYPICAL SECTIONS	SHEET 10	E



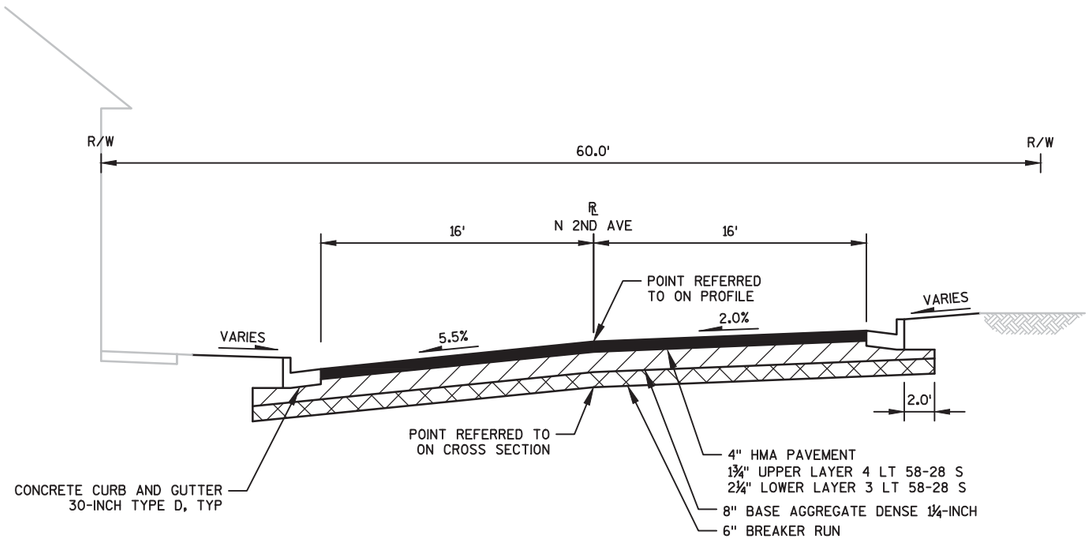
FINISHED TYPICAL SECTION N 1ST AVE

STA 16+50 - STA 17+50



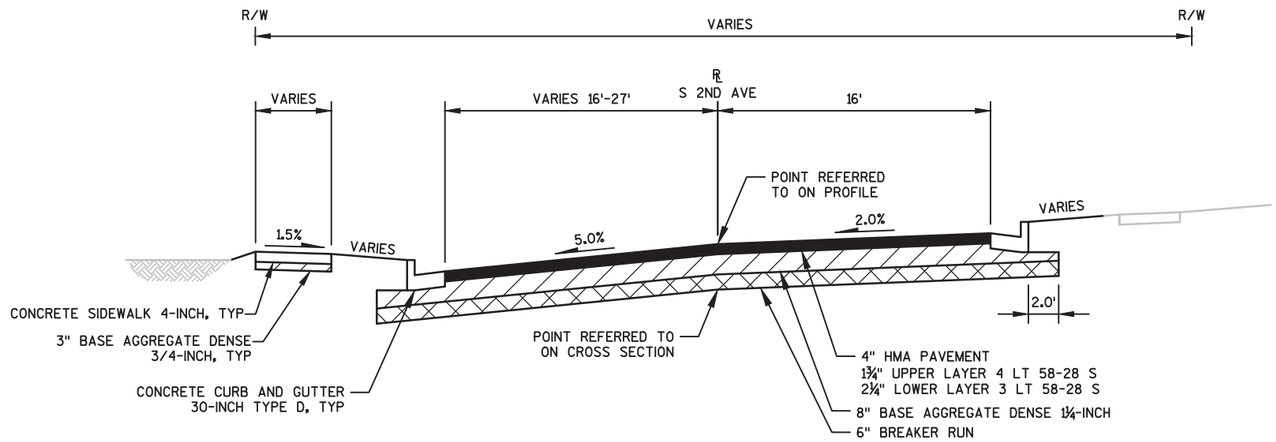
FINISHED TYPICAL SECTION S 1ST AVE

STA 12+94 - STA 14+77



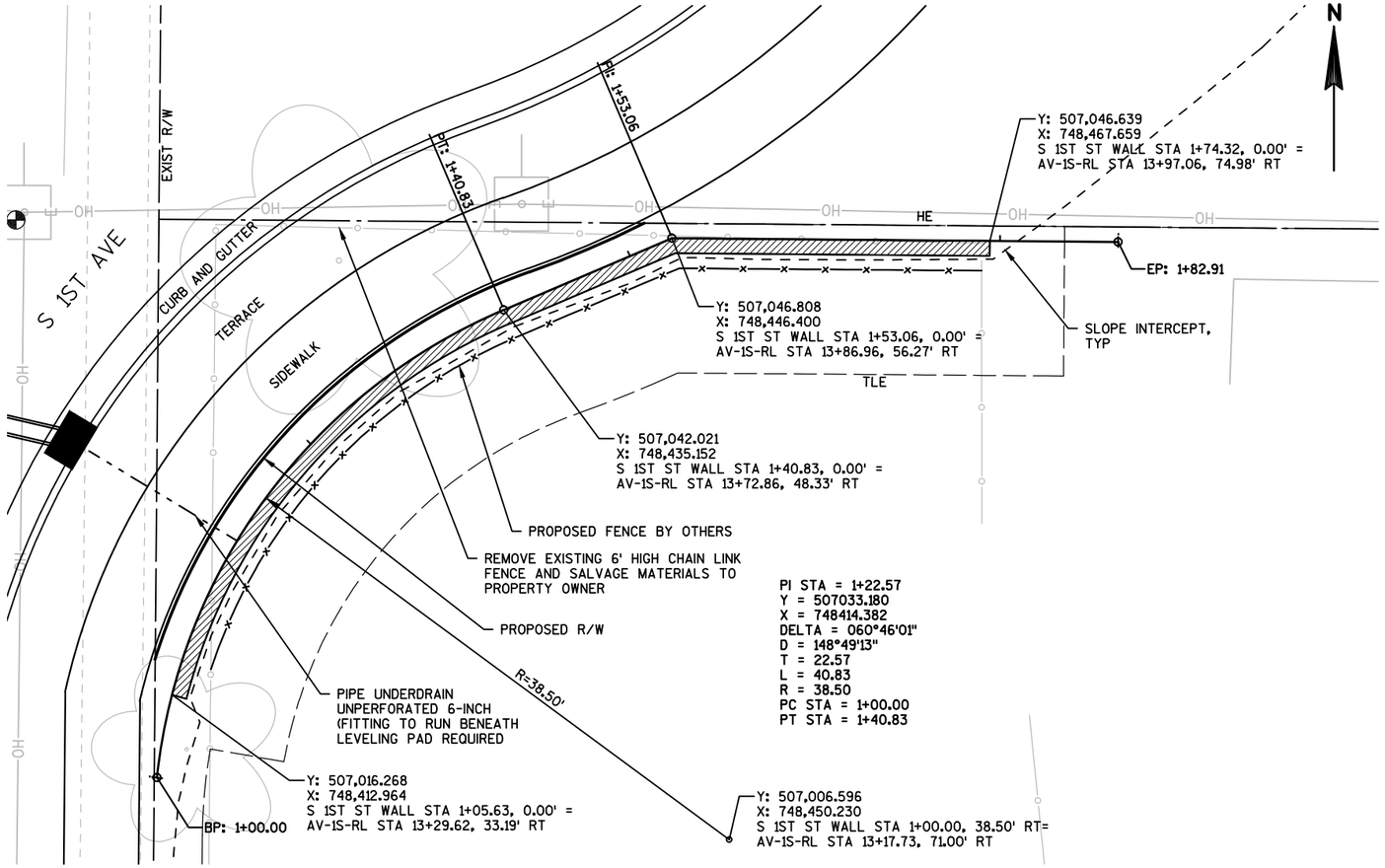
FINISHED TYPICAL SECTION N 2ND AVE

STA 26+91 - STA 27+15

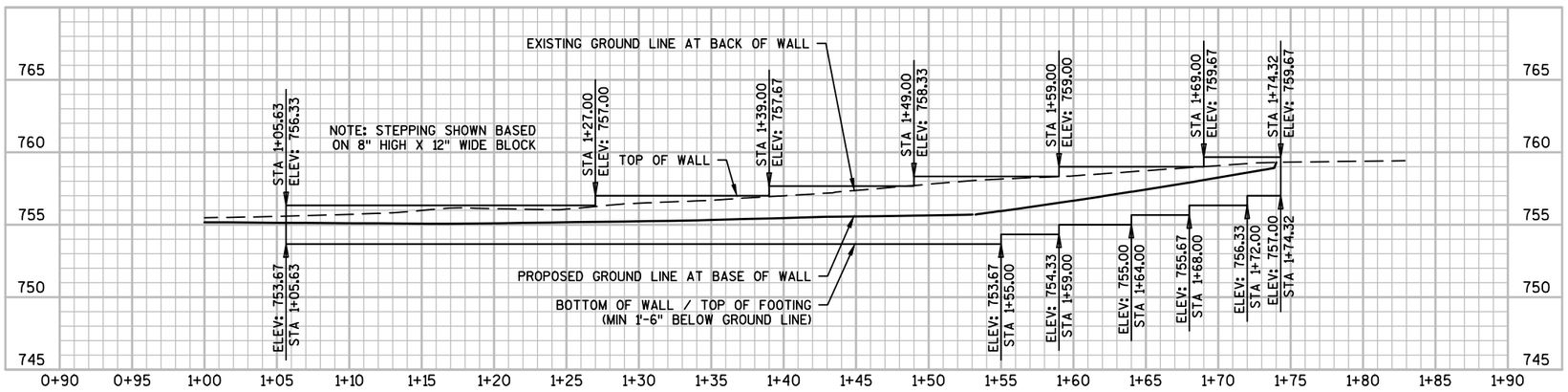


FINISHED TYPICAL SECTION S 2ND AVE

STA 25+60 - STA 26+03

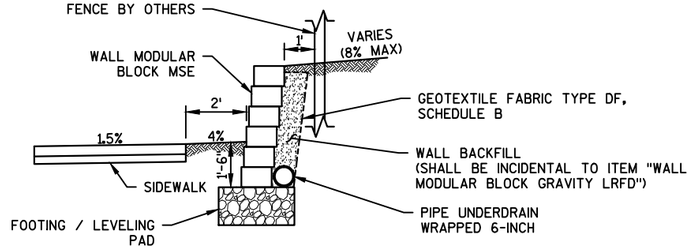


PLAN



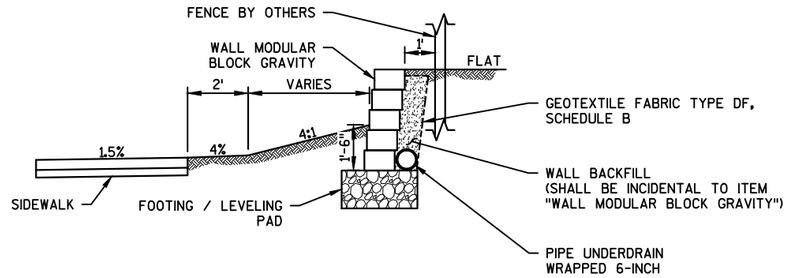
ELEVATION

(LOOKING AT B.F. OF WALL)



TYPICAL CROSS SECTION OF WALL

STA 1+05 TO STA 1+53



TYPICAL CROSS SECTION OF WALL

STA 1+53 TO STA 1+74

TOTAL ESTIMATED QUANTITIES

WALL MODULAR BLOCK GRAVITY LRPD ..... 235 SF

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK GRAVITY LRFD".

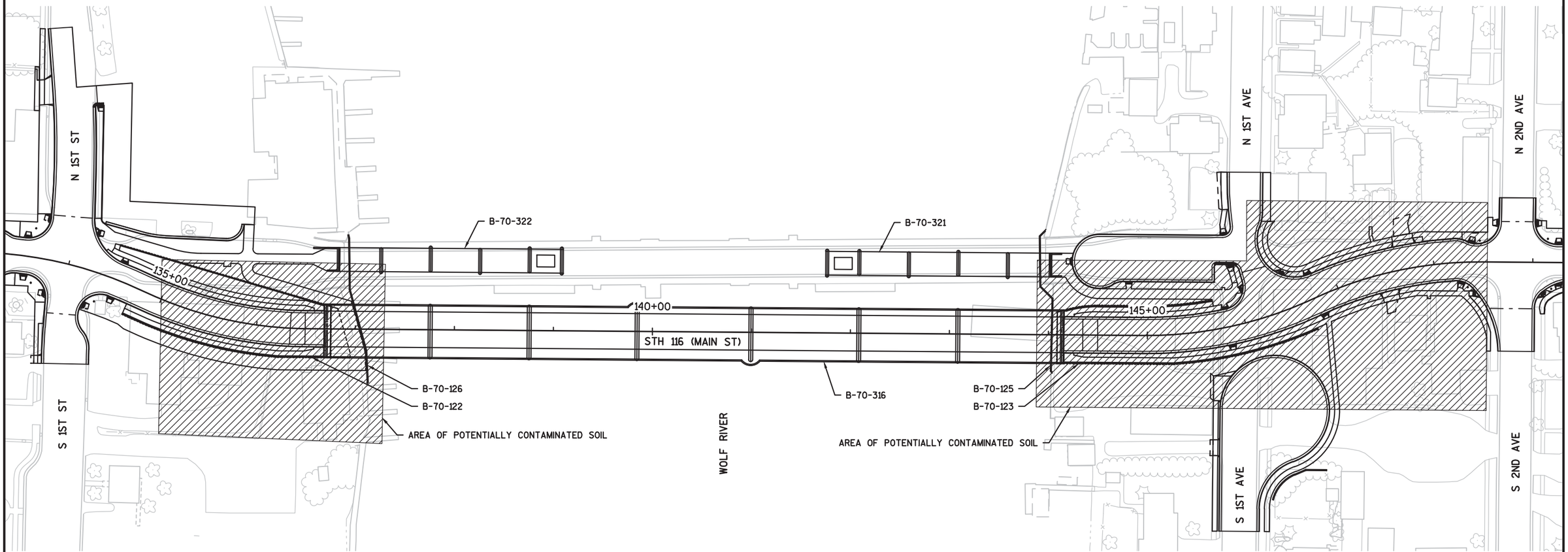
PLANS, ELEVATIONS, AND DETAILS SHOWN ON THE DRAWING ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

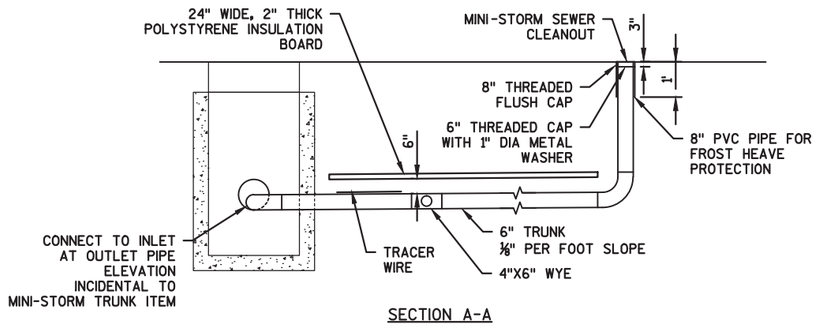
DESIGN FOR THE RETAINING WALL TO PROVIDE FOR THE FINISHED GRADE SLOPED BEHIND THE WALL AS SHOWN.

COLOR OF BLOCK SHALL BE GRAY.

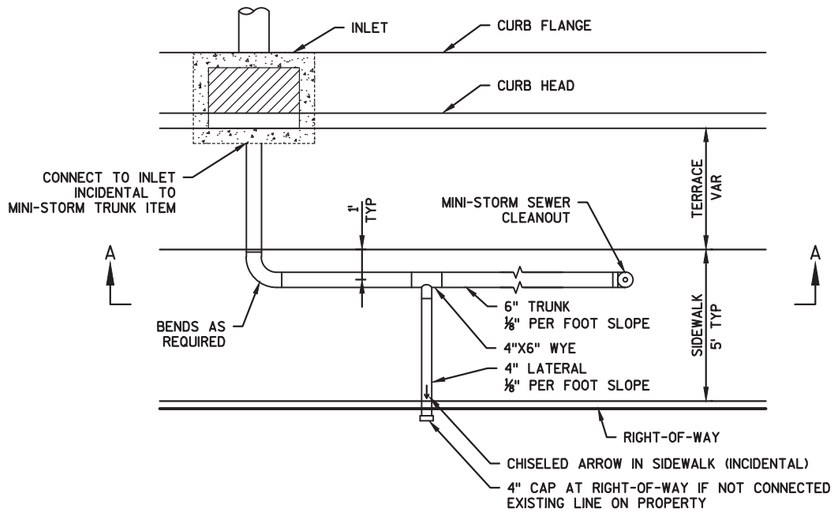
FOR THE PURPOSES OF COMPUTING LATERAL EARTH PRESSURES AGAINST UTILITIES AND STRUCTURES, ASSUMING TRIANGULAR LOAD DISTRIBUTION WITH GRANULAR BACKFILL, THE FOLLOWING SOIL PARAMETERS MAY BE USED: PHI=30°, y=115 pcf, Ka=0.33, Kp=3.0, Ko=0.5



PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	POTENTIAL SOIL CONTAMINATION LIMITS	SHEET 14	E

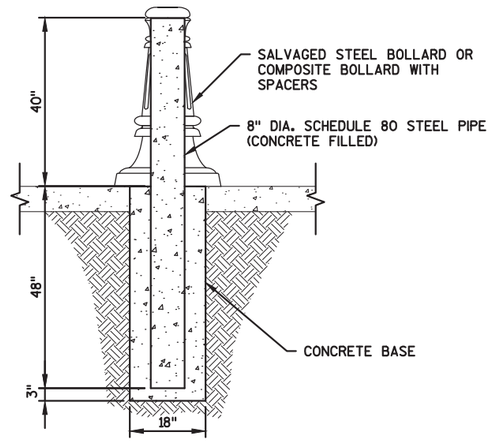


SECTION A-A

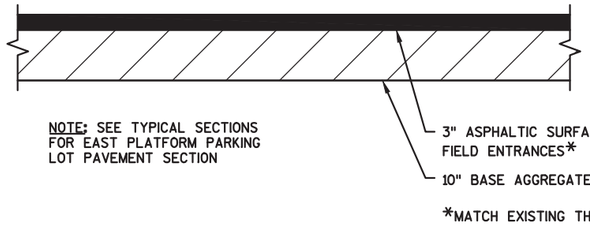


PLAN

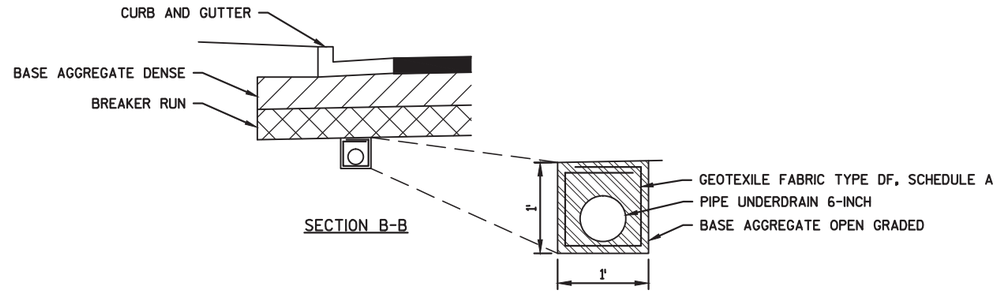
MINI STORM TRUNK DETAIL



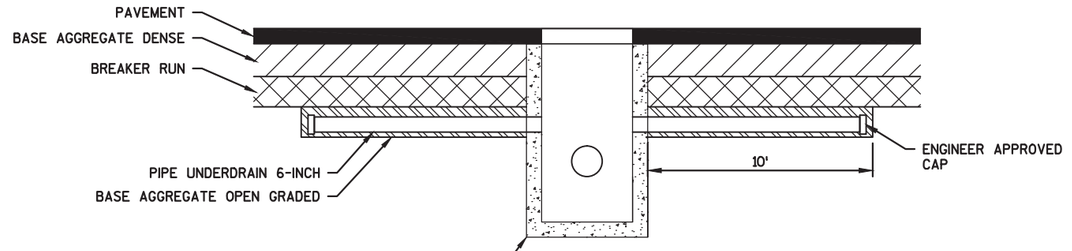
BOLLARD DETAIL



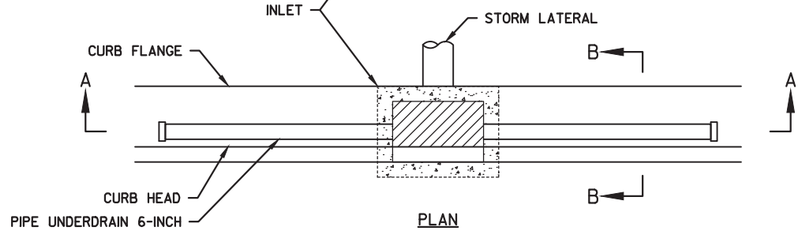
PARKING LOT RECONSTRUCTION TYPICAL PAVEMENT SECTION



SECTION B-B



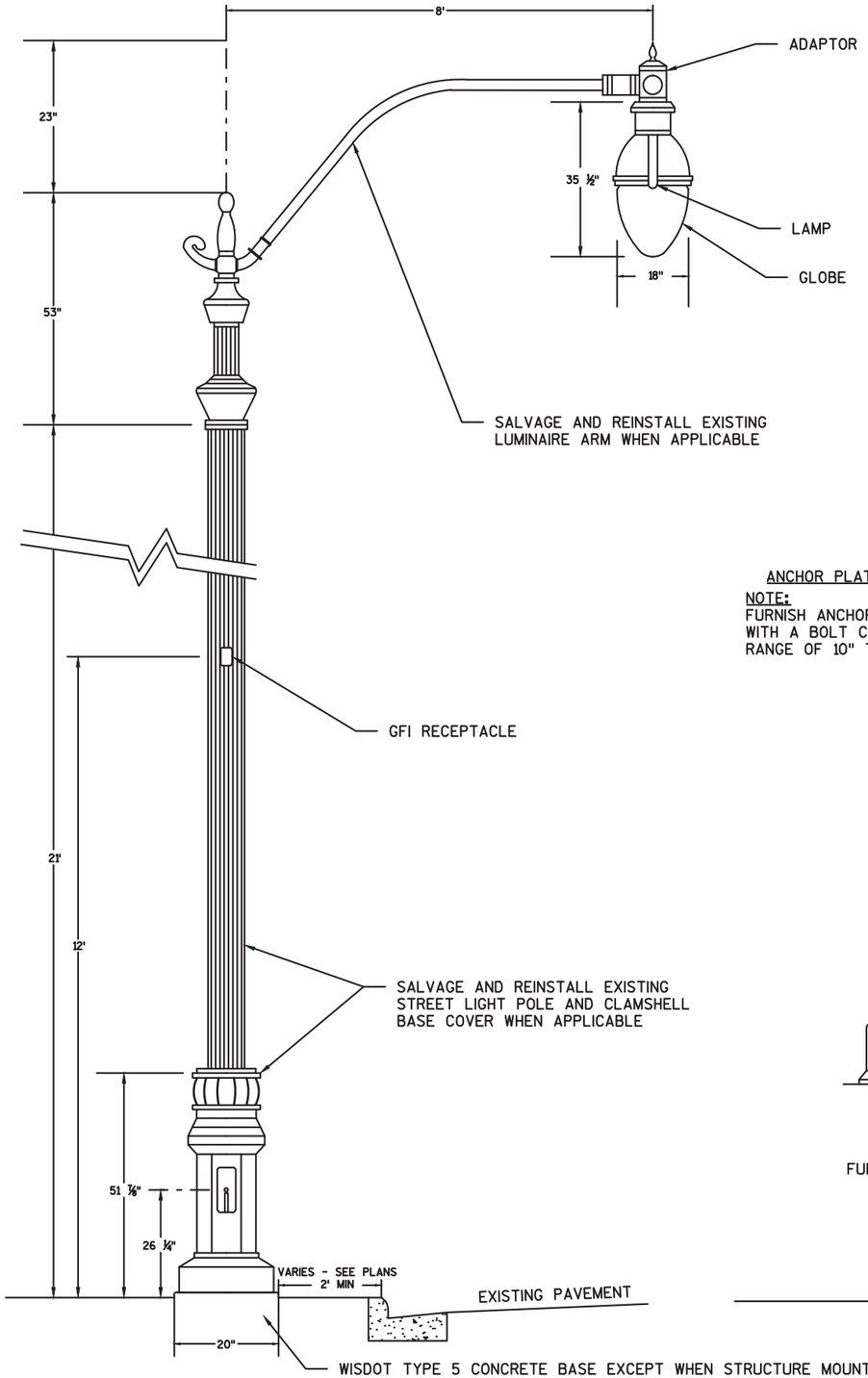
SECTION A-A



PLAN

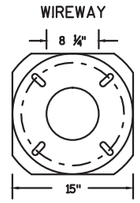
PIPE UNDERDRAIN DETAIL

LOCATED AT PROFILE LOW POINTS: SEE PLAN



ANCHOR PLATE

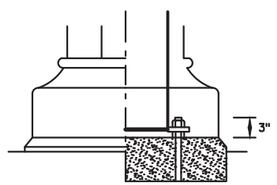
NOTE:
FURNISH ANCHOR PLATE WITH A BOLT CIRCLE RANGE OF 10" TO 13"



-- NOT TO SCALE --

BASE DETAILS

BOLT PROJECTION



FURNISH 4 ANCHOR BOLTS, 8 NUTS AND 8 WASHERS

-- NOT TO SCALE --

DECORATIVE LIGHTING - TYPE A

LUMINAIRE - INSTALL NEW

MODEL: RENAISSANCE SERIES - RN20

GLOBE: ACRYLIC PRISMATIC GLOBE - LE3R WITH HOUSE SHIELD

LAMP: 55 WATT, 32 LED, 3K, TYPE 3 DISTRIBUTION, 240 VOLT

ADAPTOR: SMA, SIDE-MOUNTED CAST-ALUMINUM

LUMINAIRE ARM - SALVAGE AND REINSTALL OR INSTALL NEW (SEE LIGHTING PLANS)

MODEL: 52021 - 8' ALHAMBRA ARM ASSEMBLY

DOUBLE BENT STEEL TUBE WELDED TO A STEEL ADAPTOR

POLE - SALVAGE AND REINSTALL OR INSTALL NEW (SEE LIGHTING PLANS)

MODEL: FLUTED POLE-21' TALL-FP-HH-AB-FST-DECO

16 SHARP FLUTED POLE SHAFT 8" BASE O.D.

3B10AC ALUMINUM CLAMSHELL DECO BASE COVER

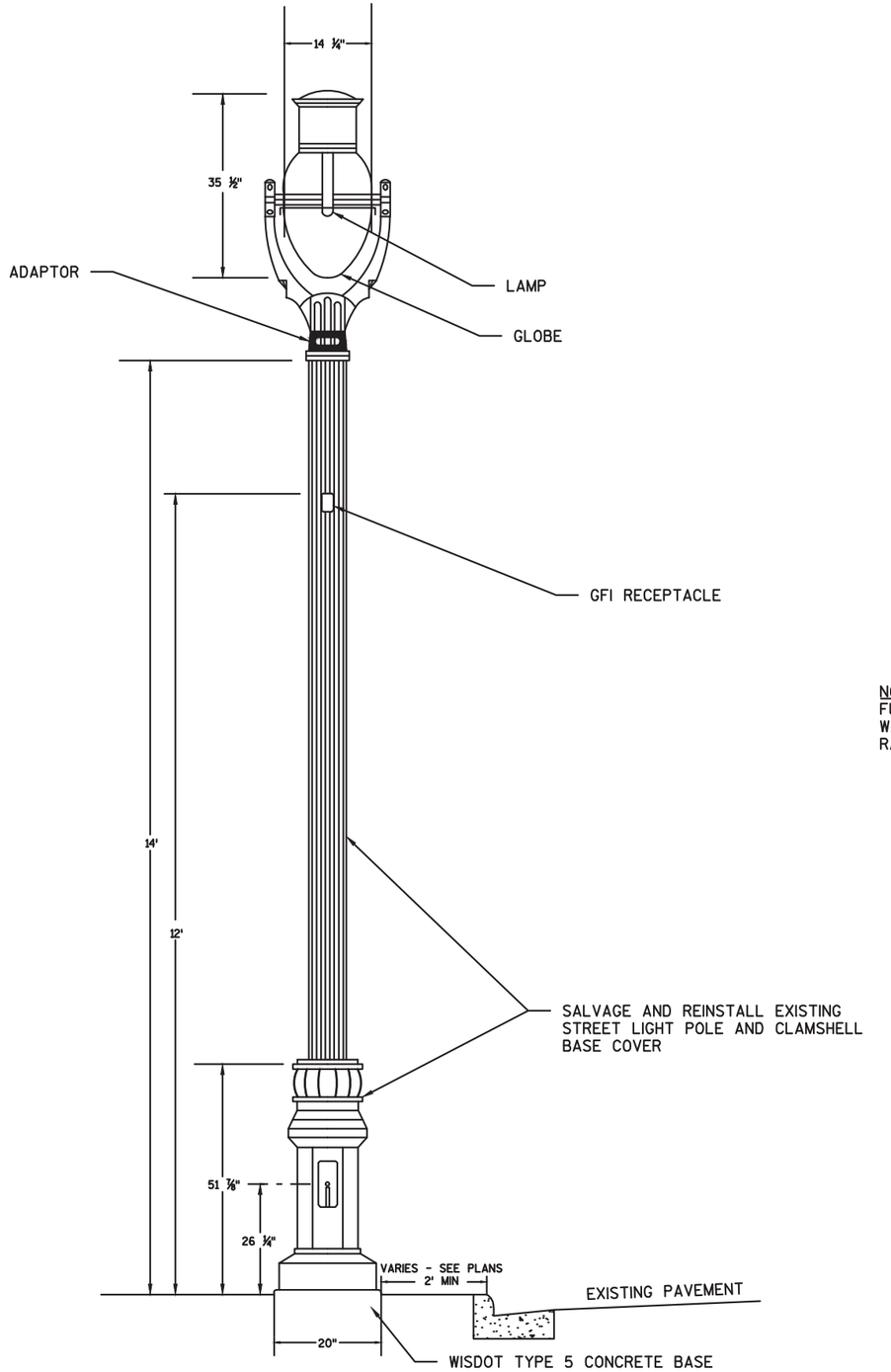
MISCELLANEOUS

HARDWARE: ALL EXPOSED SCREWS WILL BE IN STAINLESS STEEL. ALL SEALS AND SEALING DEVICES ARE MADE AND/OR LINED WITH EPDM AND/OR SILICON.

FINISH: COLOR TO BE DARK FOREST GREEN TEXTURED TO MATCH EXISTING. APPLICATION OF A POLYESTER POWDER COAT PAINT, (4 MILS/100MICRONS). THE CHEMICAL COMPOSITION PROVIDED A HIGHLY DURABLE UV AND SALT SPRAY RESISTANT FINISH IN ACCORDANCE TO THE ASTM-117-73 STANDARD AND HUMIDITY PROOF IN ACCORDANCE TO THE ASTM-D2247-68 STANDARD.

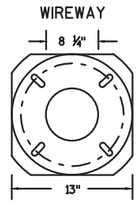
2

2



ANCHOR PLATE

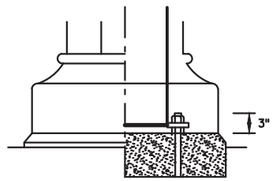
NOTE:
FURNISH ANCHOR PLATE WITH A BOLT CIRCLE RANGE OF 11" TO 13"



-- NOT TO SCALE --

BASE DETAILS

BOLT PROJECTION



FURNISH 4 ANCHOR BOLTS, 8 NUTS AND 8 WASHERS

-- NOT TO SCALE --

LUMINAIRE - INSTALL NEW

MODEL: RENAISSANCE SERIES - RNS20

GLOBE: ACRYLIC PRISMATIC GLOBE - LE3R WITH HOUSE SHIELD

LAMP: 35 WATT, 32 LED, 3K, TYPE 3 DISTRIBUTION, 240 VOLT

ADAPTOR: YM - POST-TOP MOUNTED

POLE - SALVAGE AND REINSTALL

MODEL: RN100D-14-GFI-GN8TX

16 FLUTED ROUND TAPERED SHAFT

DECORATIVE CLAMSHELL BASE COVER IS INCIDENTAL TO DECORATIVE POLE

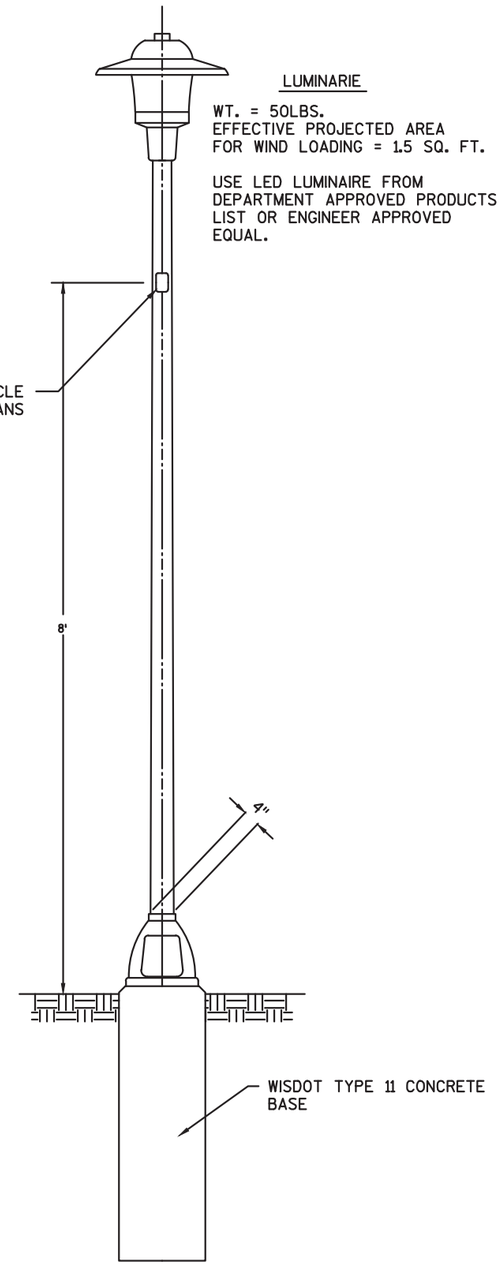
MISCELLANEOUS

ORDERING INFO: RNS20-35W32LED3K-T-ACDR-LE3R-277-DMG-YM-HS-GN8TX

HARDWARE: ALL EXPOSED SCREWS WILL BE IN STAINLESS STEEL. ALL SEALS AND SEALING DEVICES ARE MADE AND/OR LINED WITH EPDM AND/OR SILICON.

FINISH: COLOR TO BE DARK FOREST GREEN TEXTURED (GN8TX). APPLICATION OF A POLYESTER POWDER COAT PAINT, (4 MILS/100MICRONS). THE CHEMICAL COMPOSITION PROVIDED A HIGHLY DURABLE UV AND SALT SPRAY RESISTANT FINISH IN ACCORDANCE TO THE ASTM-117-73 STANDARD AND HUMIDITY PROOF IN ACCORDANCE TO THE ASTM-D2247-68 STANDARD.

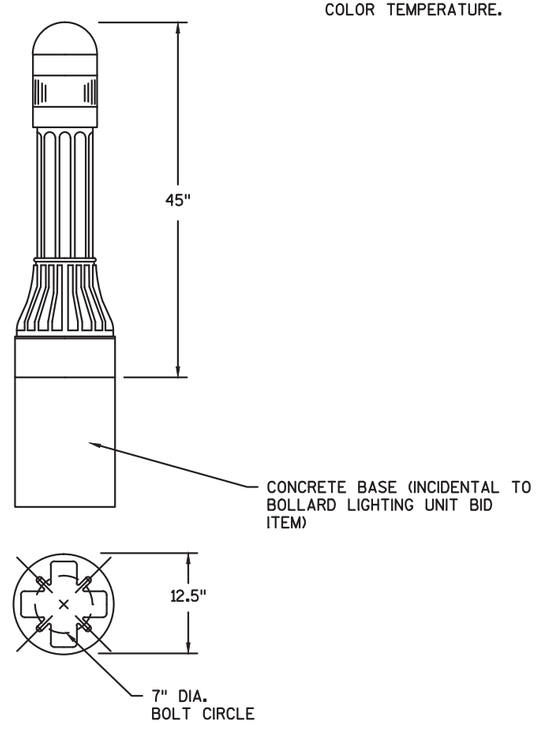
DECORATIVE LIGHTING - TYPE B



LIGHTING UNITS WALKWAY - BLACK

GENERAL NOTES

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

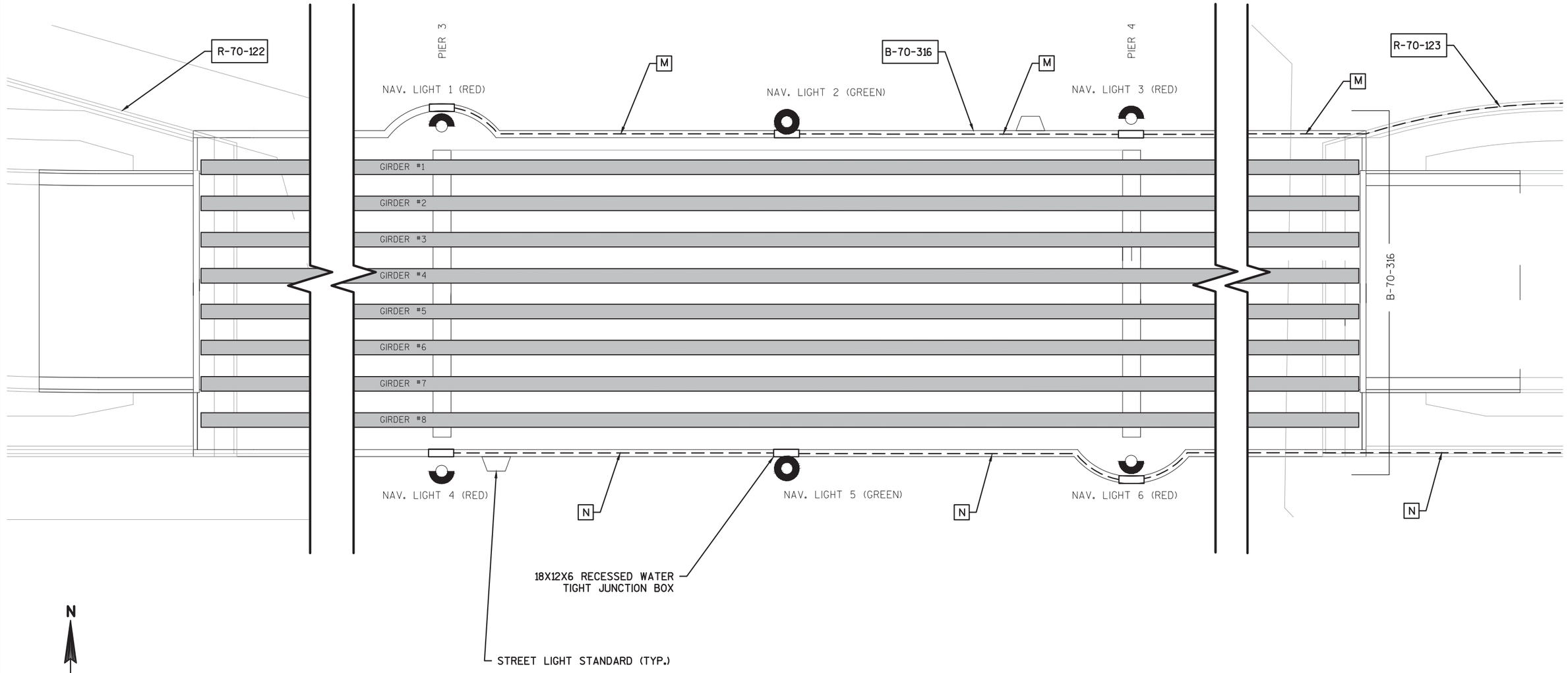


LUMINARIE

USE ENGINEER APPROVED LED BOLLARD OF SIMILAR DESIGN TO DETAIL.
LUMINAIRE SHALL BE APPROXIMATELY 24W AND HAVE 3K COLOR TEMPERATURE.

BOLLARD LIGHTING UNIT - LED

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	LIGHTING - CONSTRUCTION DETAILS	SHEET 18	E



NAVIGATION LIGHTING CONDUCTORS

CB300	1	2"		
A	1	#8	1	#8
NEU	1	#8	--	--

= M

NAVIGATION LIGHTING CONDUCTORS

CB300	1	2"		
B	1	#8	1	#8
NEU	1	#8	--	--

= N

NOTES:

SEE STRUCTURE PLANS FOR ADDITIONAL INFORMATION ON CONDUITS AND JUNCTION BOXES

NAVIGATION LIGHTING SYSTEM DETAIL - PLAN VIEW

NO SCALE

GENERAL NOTES

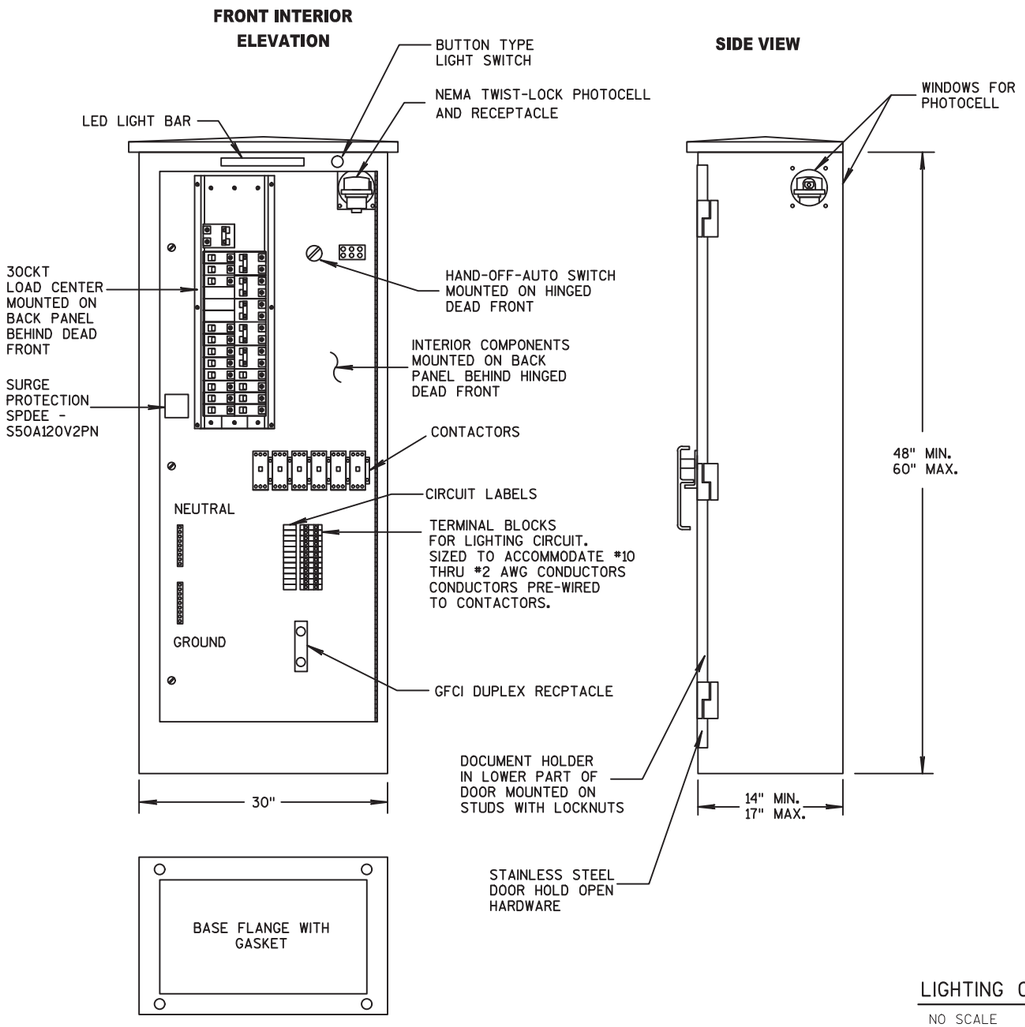
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

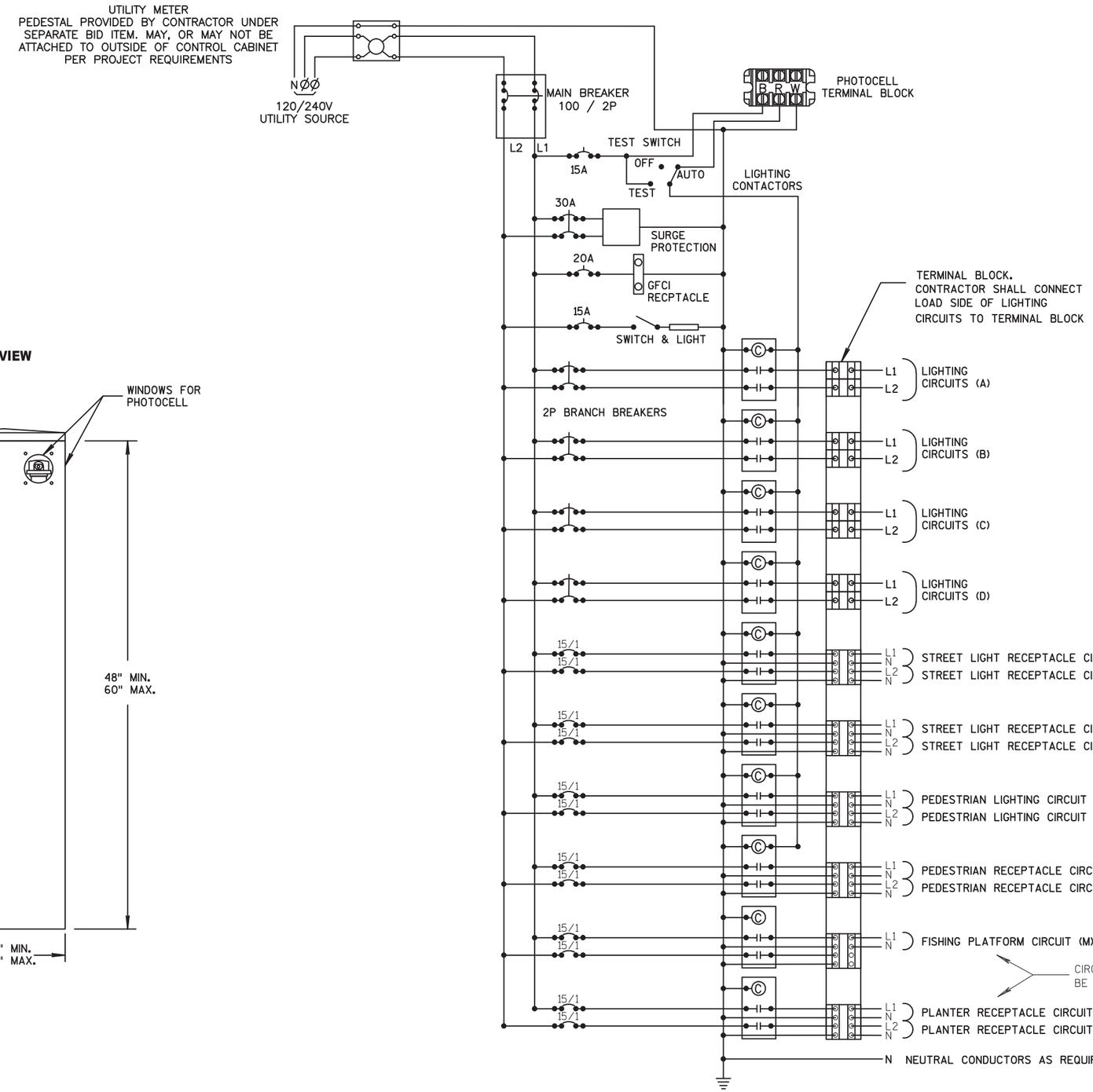
ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.



LIGHTING CONTROL CABINET - CB100

NO SCALE



CONTROL CABINET SCHEMATIC

GENERAL NOTES

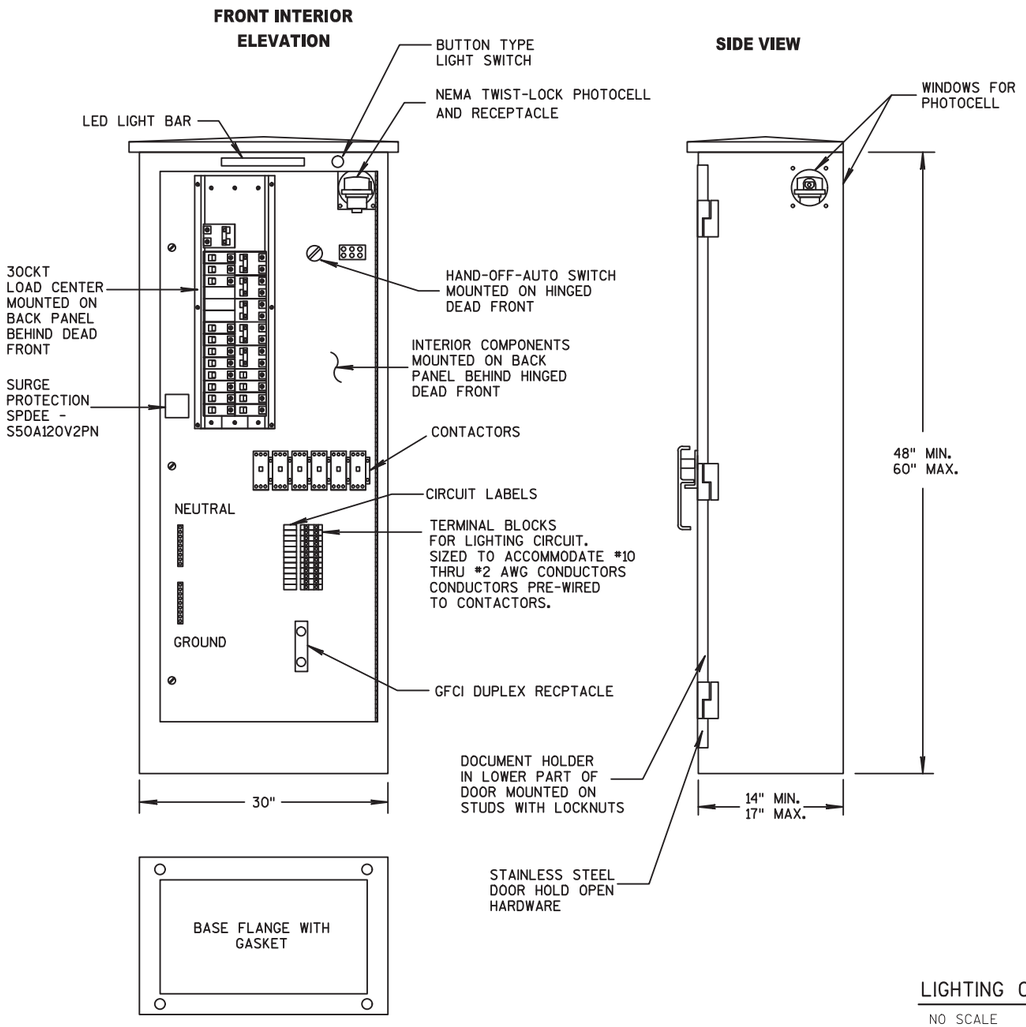
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

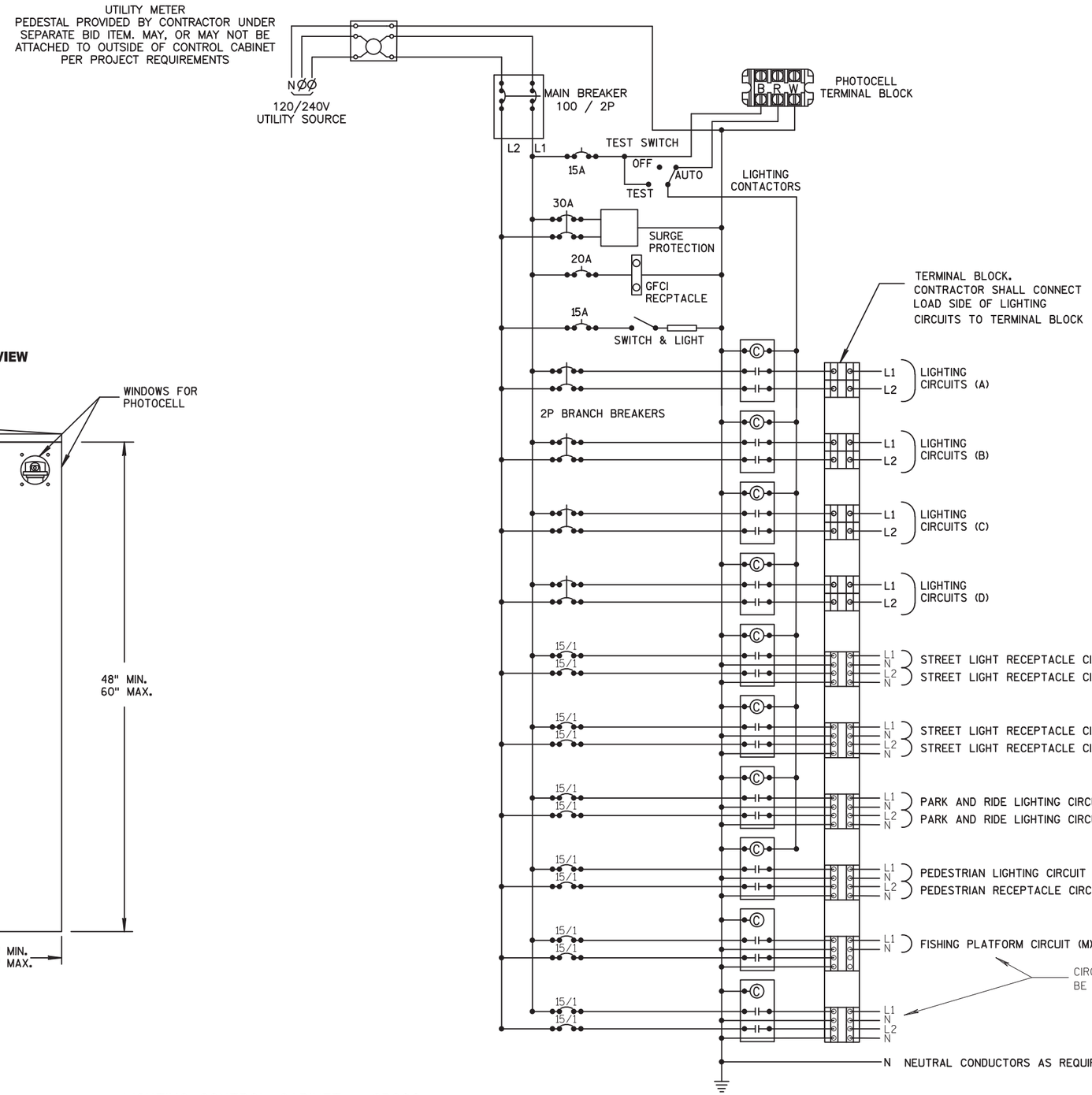
ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.



LIGHTING CONTROL CABINET - CB200

NO SCALE



CONTROL CABINET SCHEMATIC

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	LIGHTING - CONSTRUCTION DETAILS	SHEET 21	E

GENERAL NOTES (APPLIES TO THIS CONSTRUCTION DETAIL)

THE EXACT LOCATION OF THE ELECTRICAL METER SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. ADJUST ALL LOCATIONS AROUND SITE CONDITIONS INCLUDING TOPOGRAPHY AND UTILITIES.

CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE THE ELECTRICAL SERVICE LATERAL WILL APPROACH.

CONTRACTOR MUST PROVIDE UTILITY APPROVED METER SOCKET AND INSTALL PER UTILITY AND MANUFACTURER'S REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN TWO GROUNDING ELECTRODES ARE REQUIRED, THE DISTANCE APART SHALL BE 6-FEET OR PER LOCAL UTILITY REGULATIONS.

ALL MOUNTING CHANNEL AND HARDWARE SHALL BE STAINLESS STEEL.

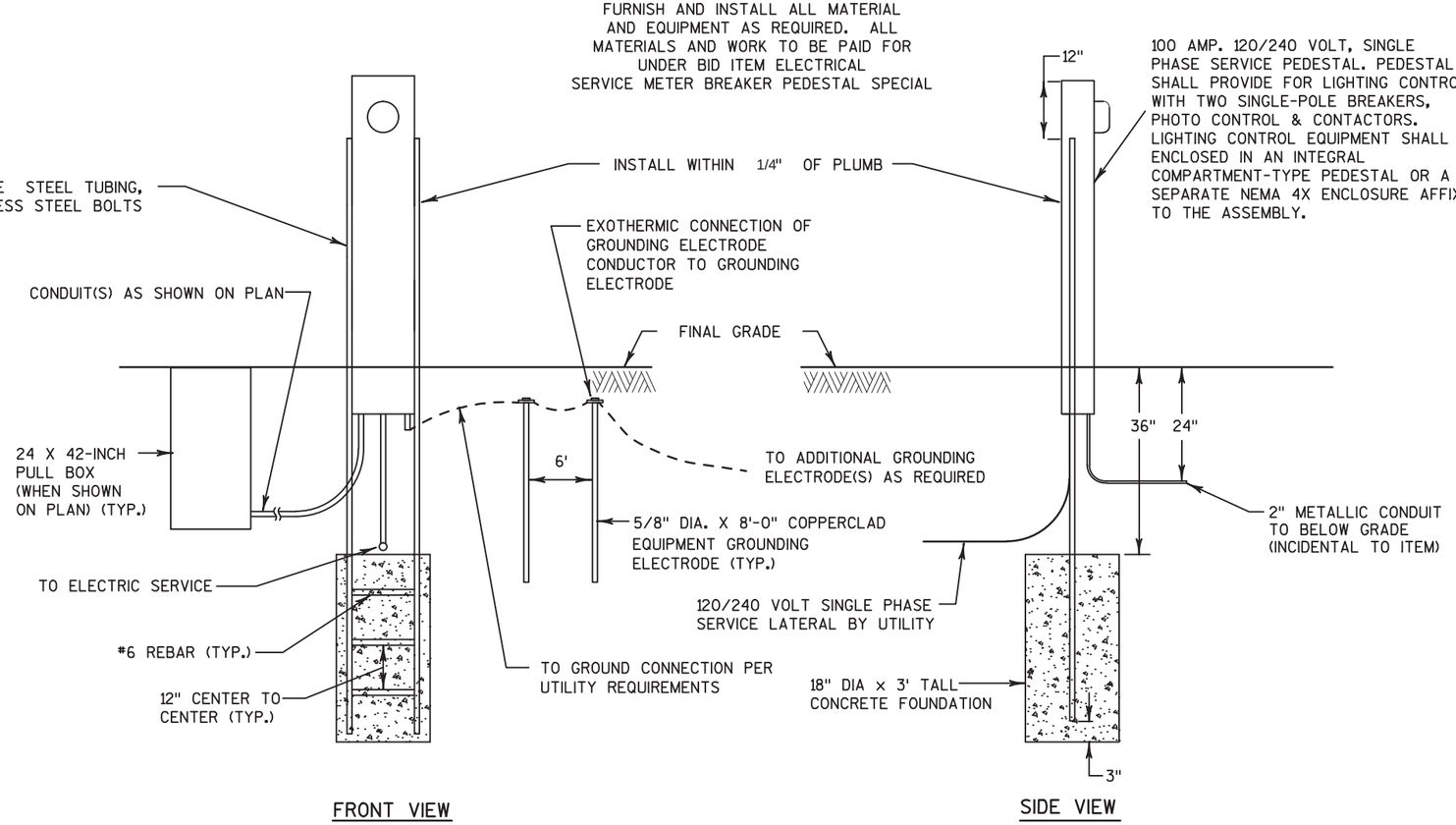
THE LOCATION AND ARRANGEMENT OF ALL EQUIPMENT SHOWN IS APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD.

SEE STANDARD DETAIL DRAWING "CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)" FOR ADDITIONAL INFORMATION NOT SHOWN ON THIS DETAIL.

PROVIDE FOR PHOTOCELL OPERATION ON THE PEDESTAL. ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.



TOP VIEW



FRONT VIEW

SIDE VIEW

ELECTRICAL SERVICE METER BREAKER PEDESTAL SPECIAL

NOT TO SCALE

GENERAL NOTES (APPLIES TO THIS CONSTRUCTION DETAIL)

THE EXACT LOCATION OF THE ELECTRICAL METER SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. ADJUST ALL LOCATIONS AROUND SITE CONDITIONS INCLUDING TOPOGRAPHY AND UTILITIES.

CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE THE ELECTRICAL SERVICE LATERAL WILL APPROACH.

CONTRACTOR MUST PROVIDE UTILITY APPROVED METER SOCKET AND INSTALL PER UTILITY AND MANUFACTURER'S REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

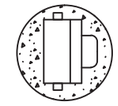
IF MORE THAN TWO GROUNDING ELECTRODES ARE REQUIRED, THE DISTANCE APART SHALL BE 6-FEET OR PER LOCAL UTILITY REGULATIONS.

ALL MOUNTING CHANNEL AND HARDWARE SHALL BE STAINLESS STEEL.

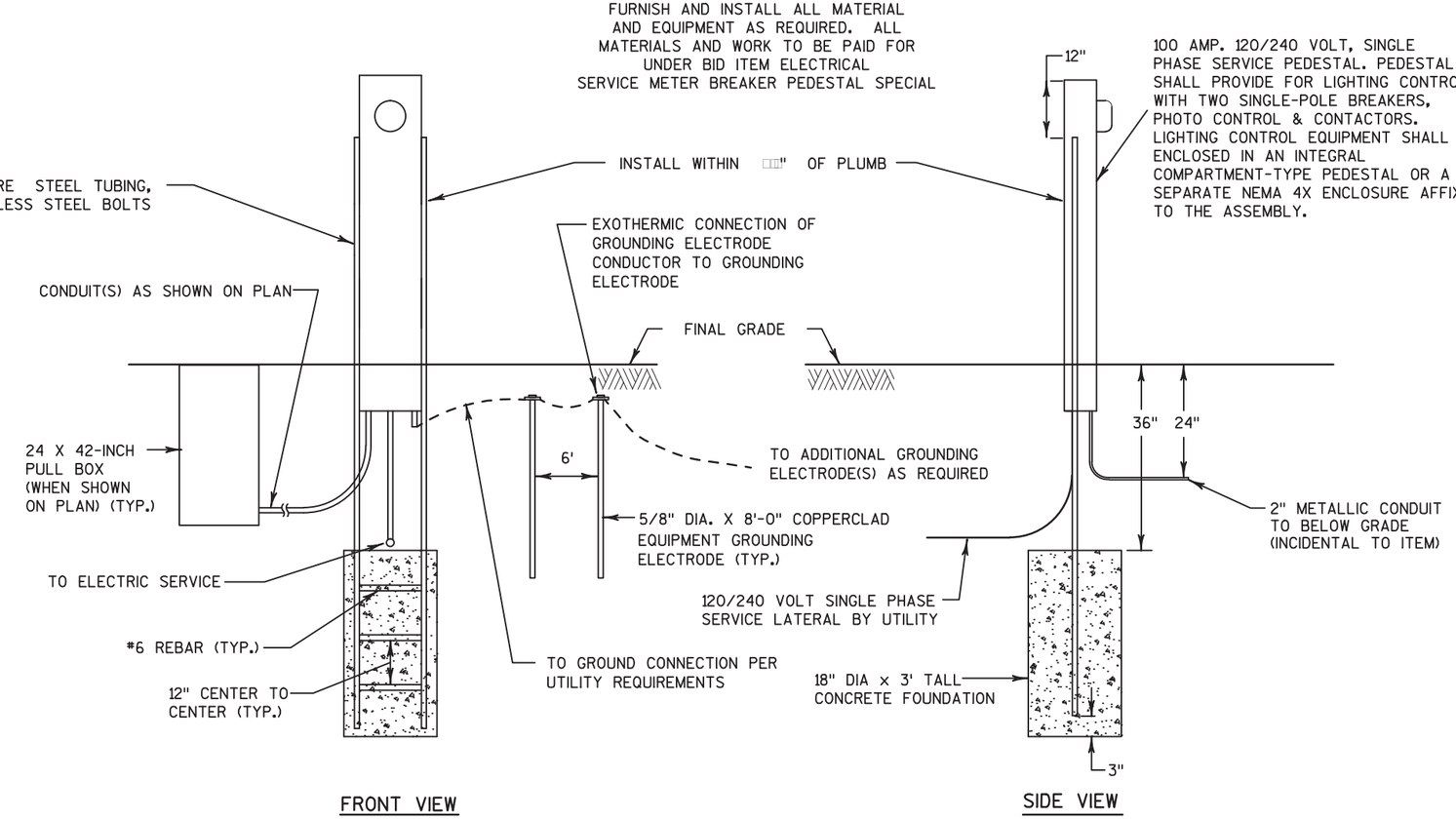
THE LOCATION AND ARRANGEMENT OF ALL EQUIPMENT SHOWN IS APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD.

SEE STANDARD DETAIL DRAWING "CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)" FOR ADDITIONAL INFORMATION NOT SHOWN ON THIS DETAIL.

PROVIDE FOR PHOTOCELL OPERATION ON THE PEDESTAL. ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.



TOP VIEW



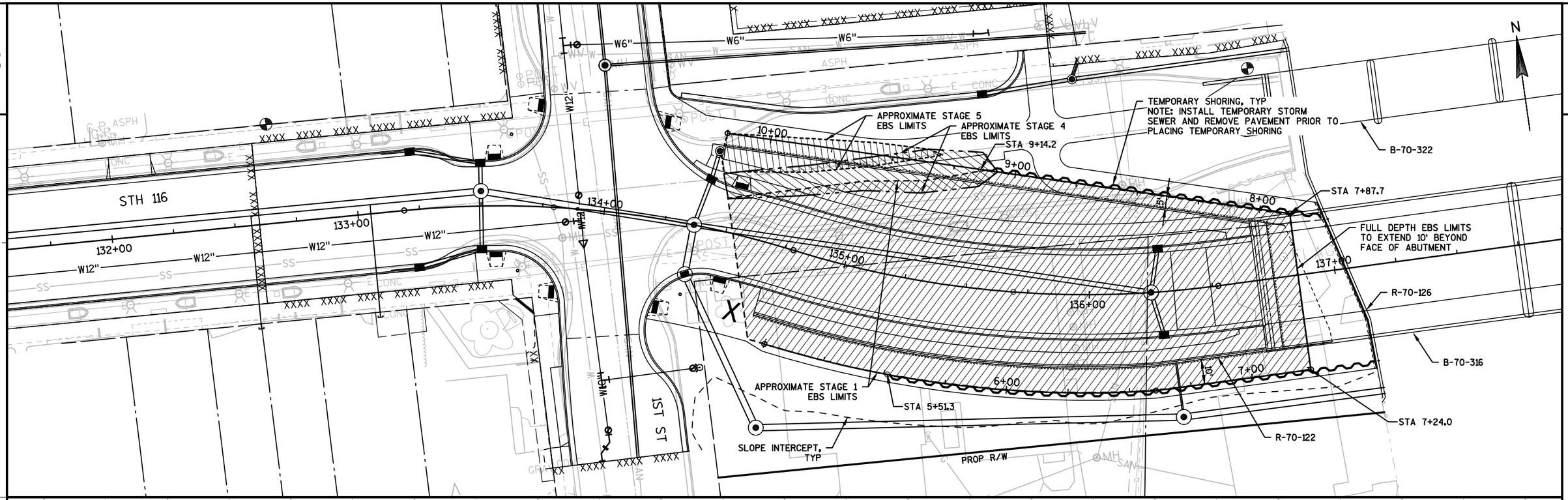
FRONT VIEW

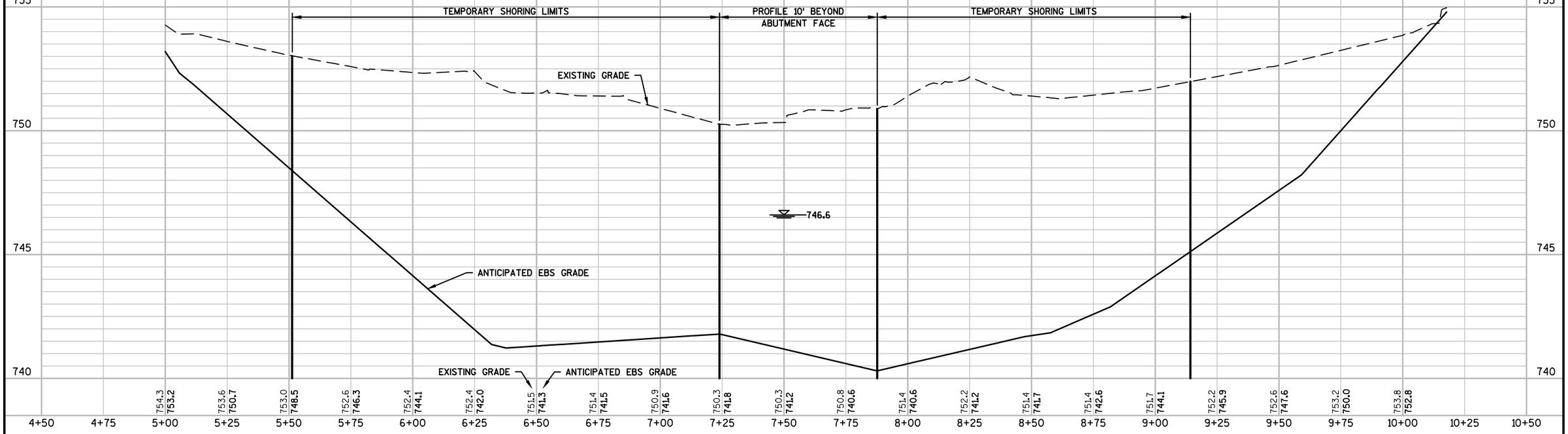
SIDE VIEW

ELECTRICAL SERVICE METER BREAKER PEDESTAL SPECIAL

NOT TO SCALE

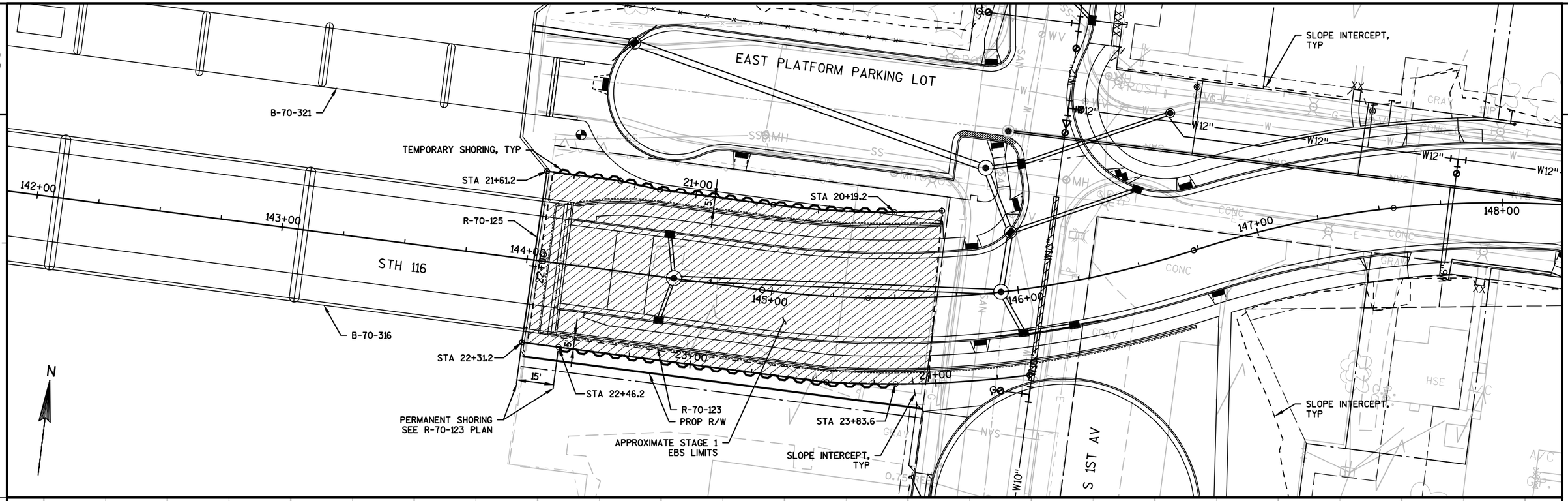
PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	LIGHTING - CONSTRUCTION DETAILS	SHEET 23	E

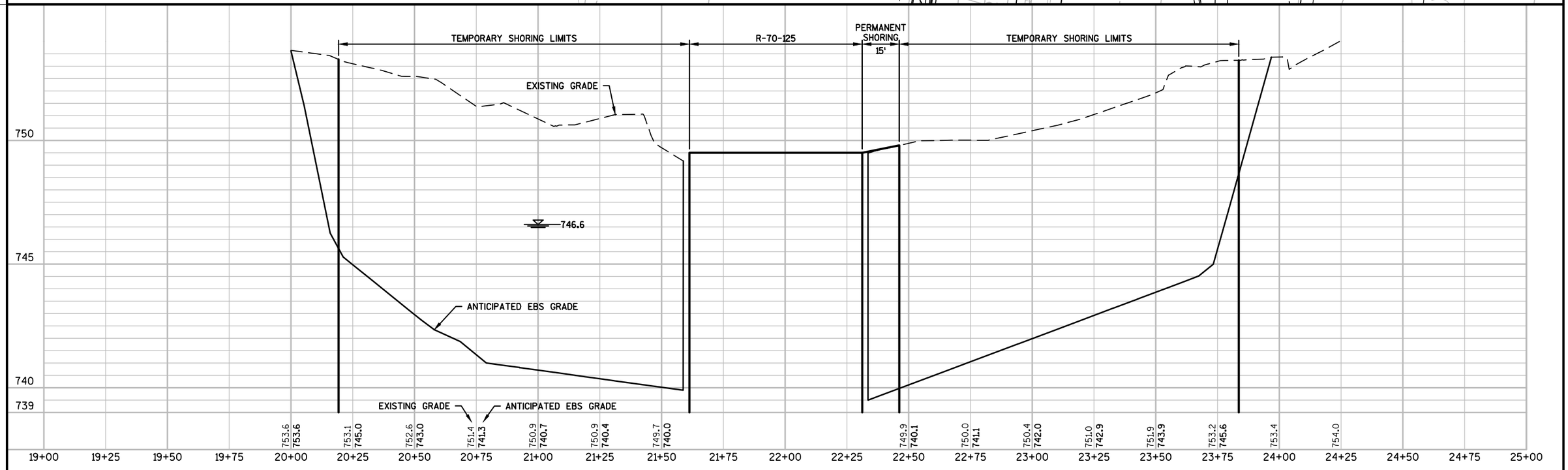




PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TEMPORARY SHORING AND EBS WEST APPROACH	SHEET 24	E

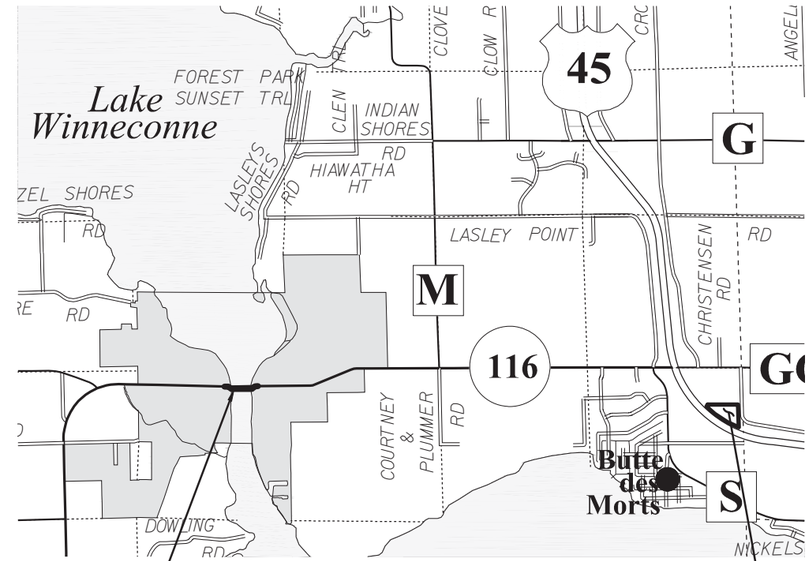
FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-021009-CD.DWG
61901572 PLAN - 61901572-021009-CD
PLOT DATE : 5/10/2017 10:21 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:40_XREF





PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TEMPORARY SHORING AND EBS EAST APPROACH	SHEET 25	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-021009-CD.DWG
61901572 PLAN - 61901572-021010-CD
PLOT DATE : 5/10/2017 10:21 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : **********



DISPOSAL SITE AREA MAP
1" = 1 MILE

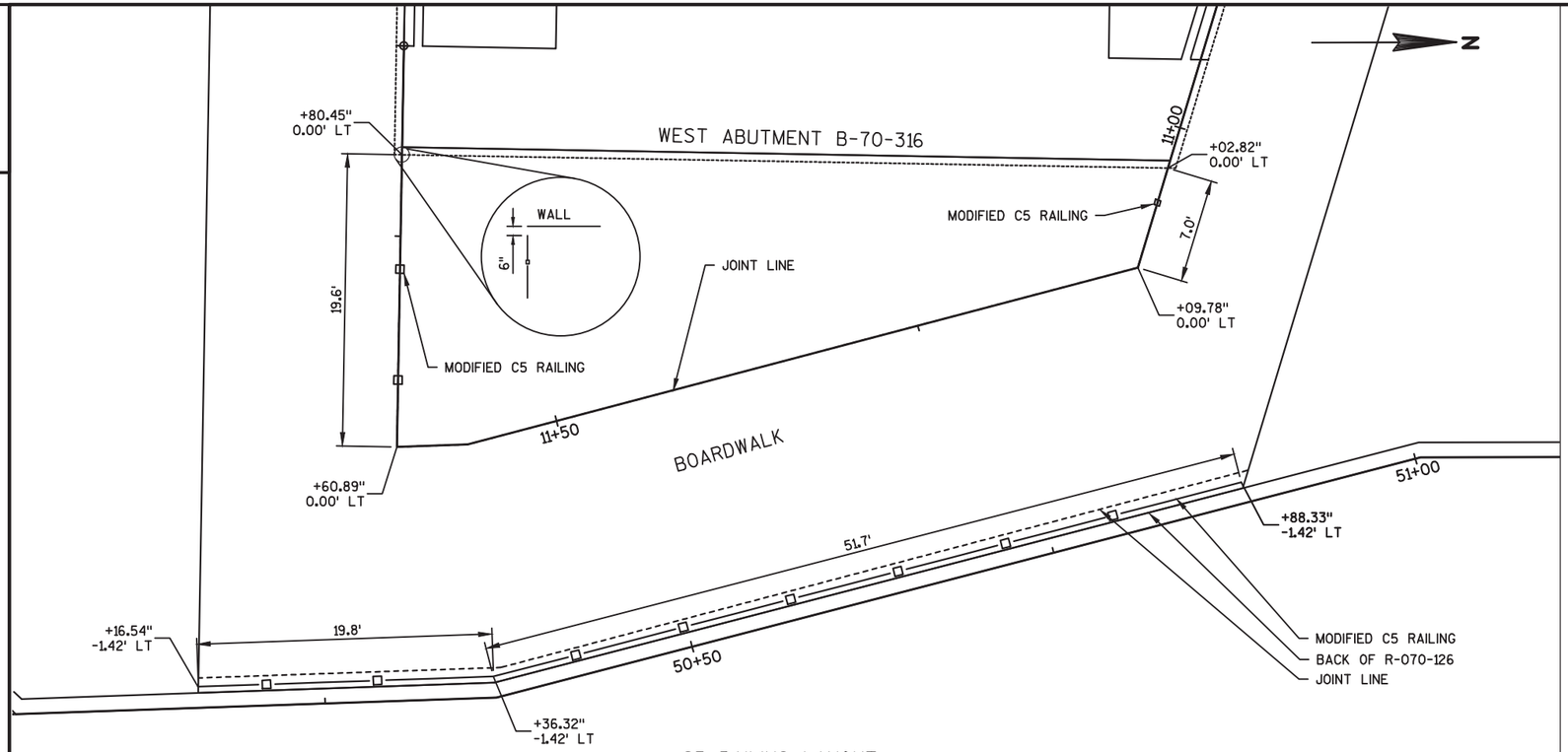


DISPOSAL SITE
1" = 300'

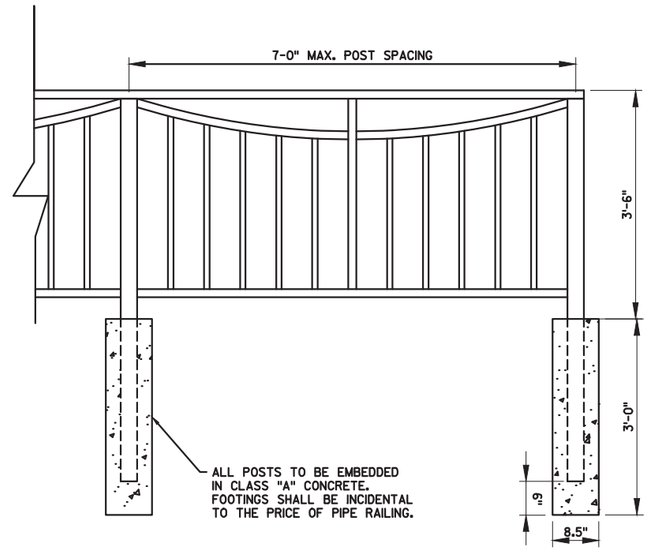
PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	RIVER EXCAVATION DISPOSAL SITE	SHEET 26	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-021012-CD.DWG
LAYOUT NAME - 61901572-021012-CD
PLOT DATE : 1/27/2017 5:27 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 44

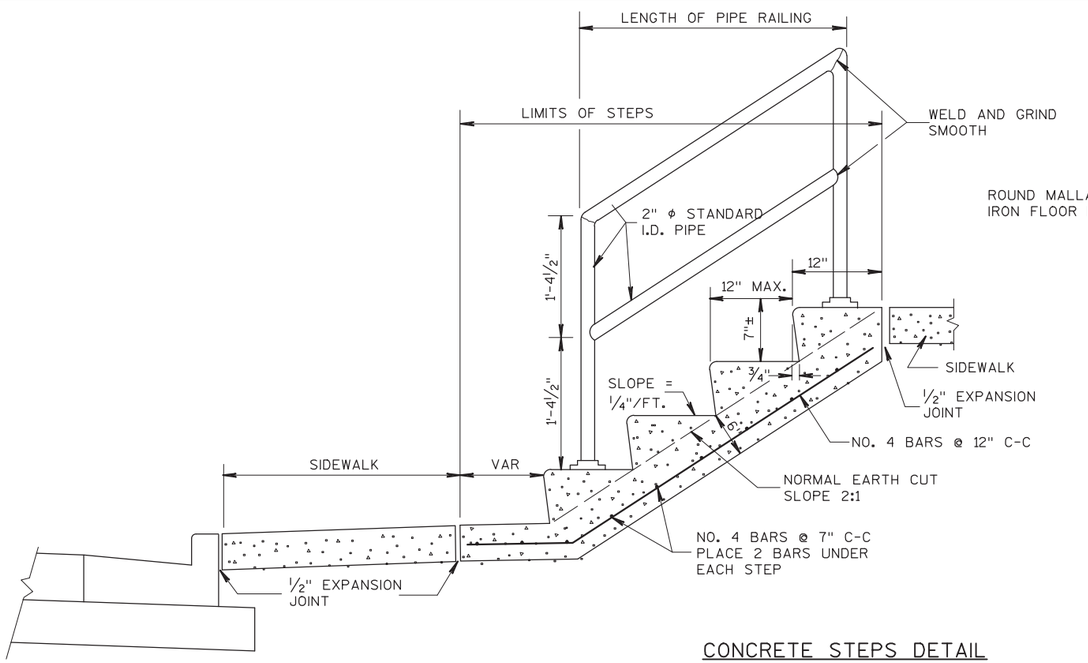


C5 RAILING LAYOUT

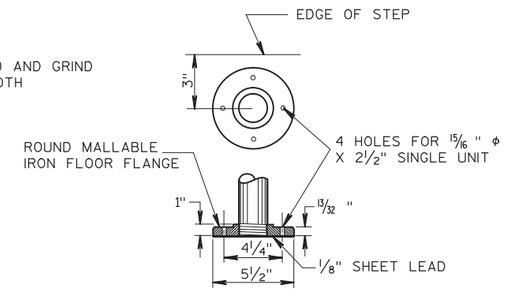


RAILING STEEL TYPE C5 SPECIAL

STA 50+17 TO STA 50+88
STA 11+03 TO STA 11+10
STA 11+61 TO STA 11+80



CONCRETE STEPS DETAIL



FLANGE DETAIL

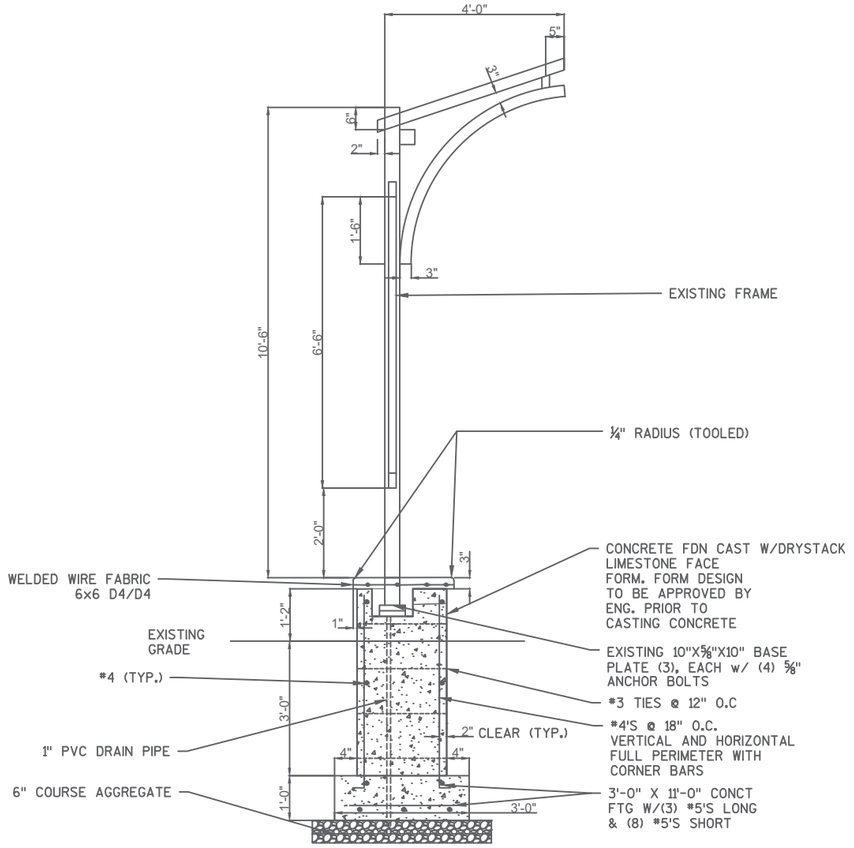
NOTE:

THE EXACT LOCATION, WIDTHS, & NUMBER OF STEPS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

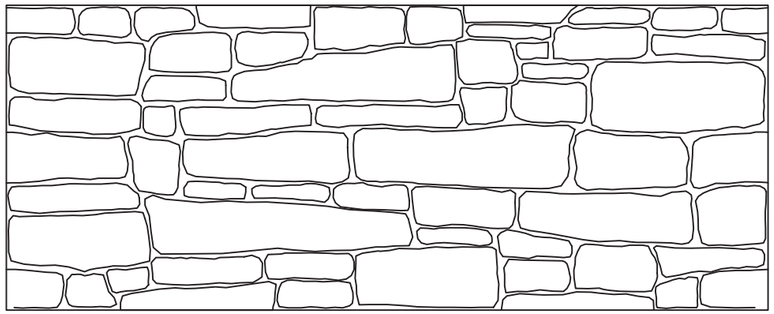
STEEL REINFORCEMENT AND PIPE RAILING NOT REQUIRED ON STEPS WITH 2 RISERS OR LESS.

MINIMUM WIDTH OF STEP EQUALS 4 FEET.

RAILING TO BE PLACED ON LEFT ASCENDING SIDE OF STEPS ONLY.



CORNER ARBOR SECTION



FORMLINER DETAILS

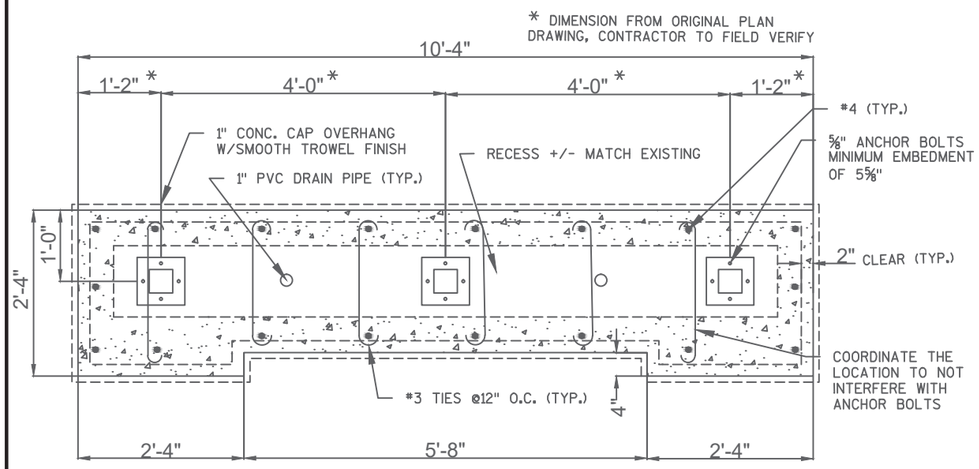
APPLY FORMLINER TO THE EXTERIOR WALLS A MINIMUM DEPTH OF 6" BELOW FINISHED GRADE. FINISHED STAIN IS TO INCLUDE A MIXTURE OF GRAYS TO BE APPROVED BY THE ENGINEER.

FORMLINER COURSING SHALL BE LEVEL.

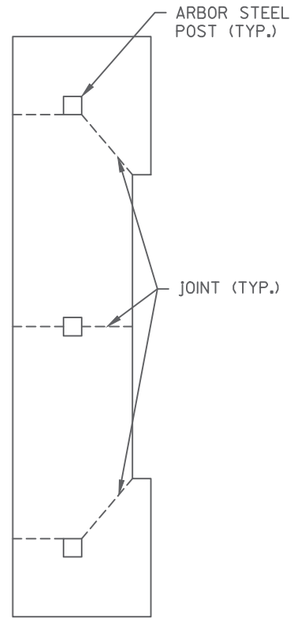
DRYSTACK STONE FORMLINER:
SIZE = 3" TO 24" (TO MATCH STRUCTURE PARAPET WALLS)
MAX. RELIEF = ½"

FOR INFORMATION ONLY

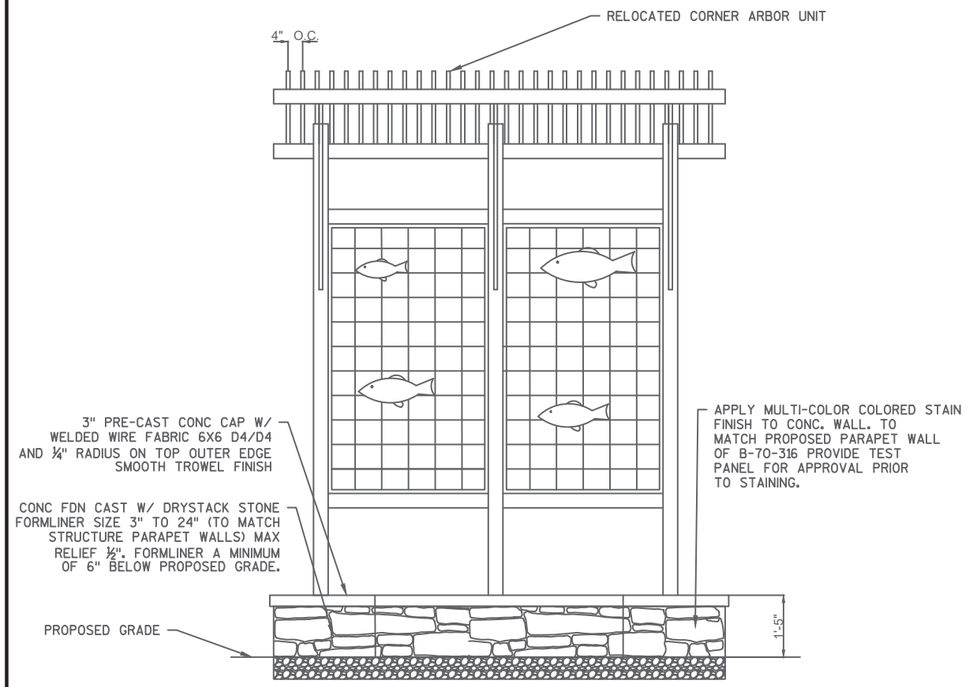
QUANTITY INFORMATION		
ITEM	QTY	UNIT
CONCRETE MASONRY	4.7	CY
BAR STEEL REINFORCEMENT HIGH STRENGTH	201	LB
COARSE AGGREGATE	0.6	CY
1" PVC	10	LF
ANCHOR BOLTS	12	EA



CORNER ARBOR BASE DETAIL

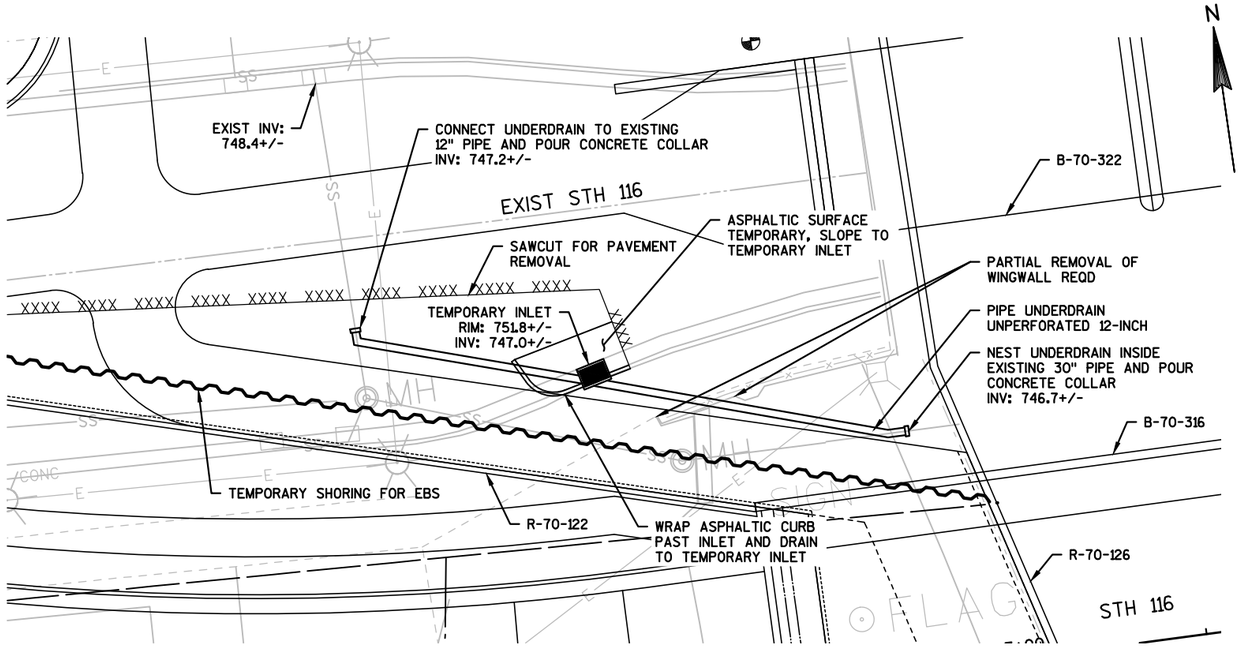


PRE-CAST CONCRETE CAP JOINTING DETAIL

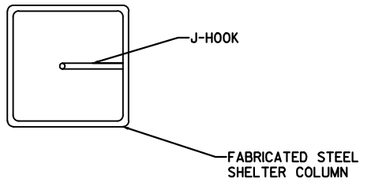


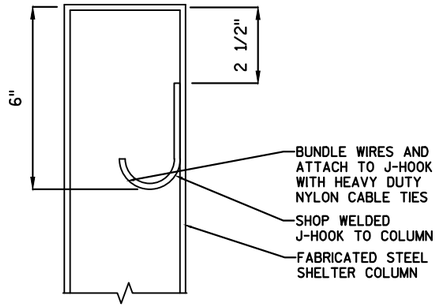
CORNER ARBOR ELEVATION

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS: ARBOR	SHEET 28	E



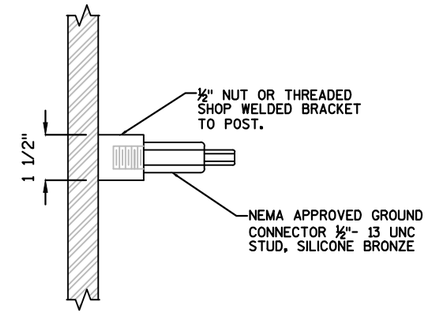
WEST SIDE TEMPORARY STORM SEWER DETAIL





FABRICATED STEEL STRUCTURE
J-HOOK DETAILS

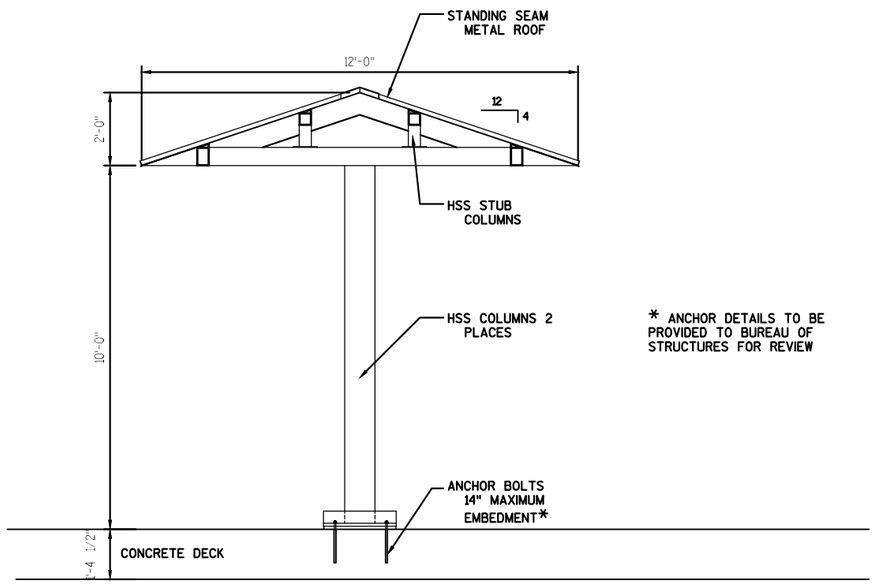
NOTE: PROVIDE RACEWAY HOLE NEAR TOP OF COLUMN TO FACILITATE WIRING OF RECEPTACLE



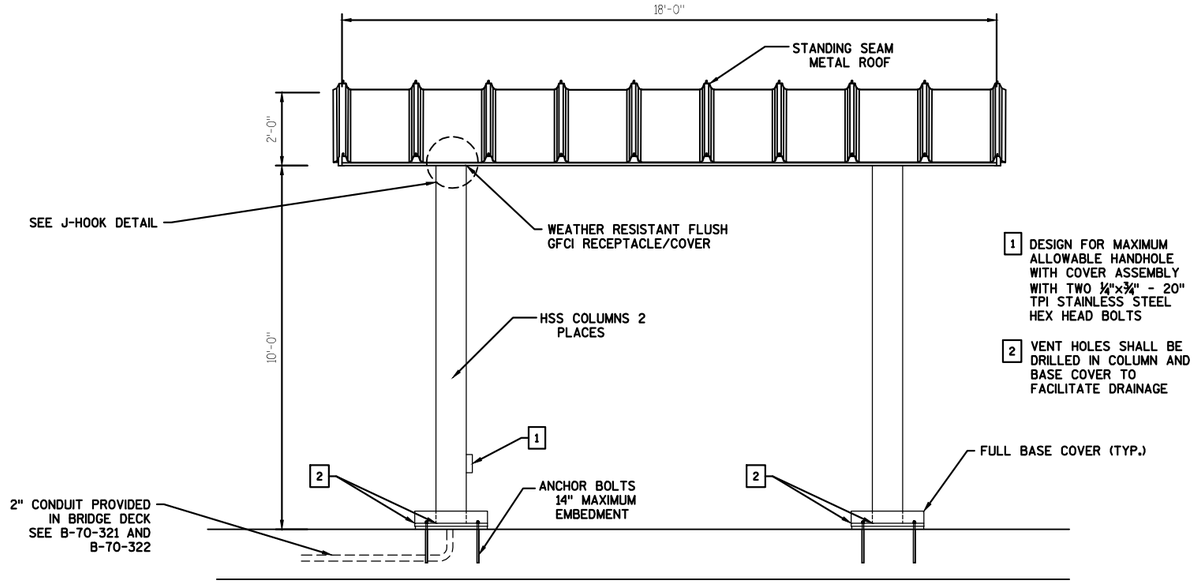
FABRICATED STEEL STRUCTURE
GROUNDING DETAILS

PLACE IN THE MIDDLE OF COLUMN DIRECTLY OPPOSITE OF THE HANDHOLE

NOTE: ALL REQUIRED NUTS, BOLTS, WASHERS SHOULD BE STAINLESS STEEL



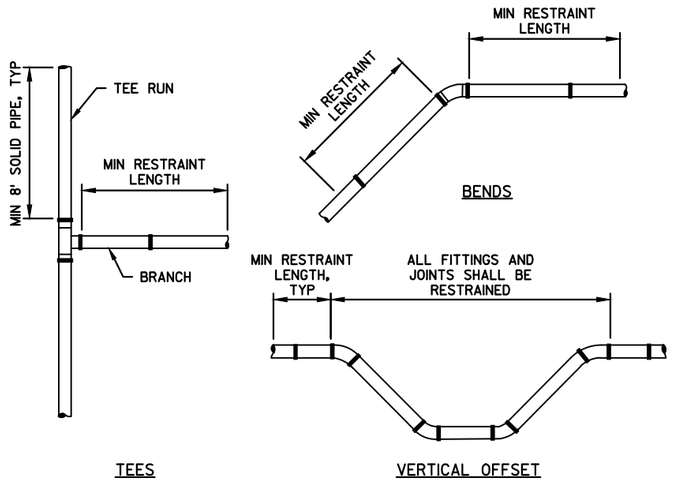
FISHING PLATFORM FABRICATED STEEL SHELTER SECTION



FISHING PLATFORM FABRICATED STEEL SHELTER ELEVATION

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CONSTRUCTION DETAILS	SHEET 29	E

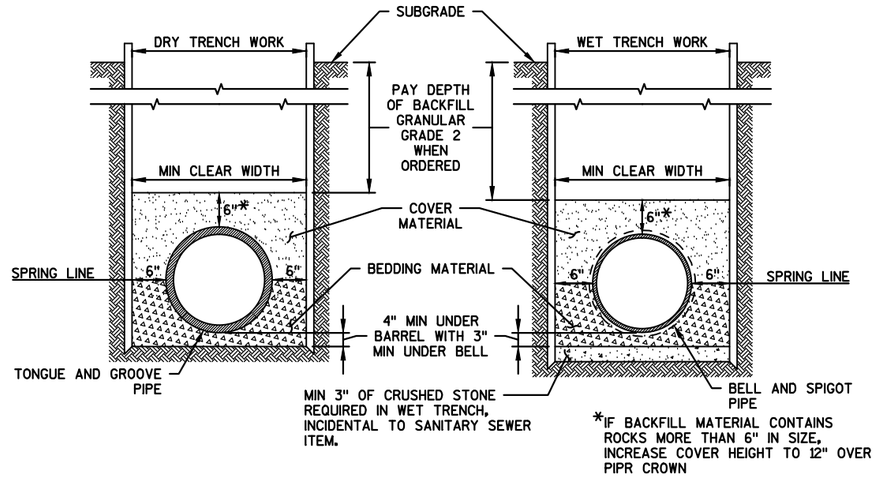
FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-021016-CD.DWG
61901572 PLAN - 61901572-021016-CD
PLOT DATE : 5/10/2017 12:27 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:20_XREF



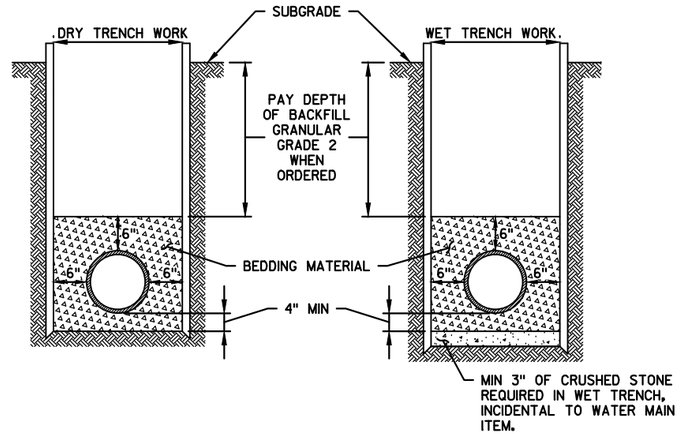
MINIMUM RESTRAINT LENGTH ON BOTH SIDES OF FITTING				
FITTING TYPE / NOMINAL SIZE	6"	8"	12"	16"
11 1/4° BEND	2'	2'	3'	3'
22 1/2° BEND	3'	3'	5'	6'
45° BEND	5'	6'	9'	11'
90° BEND	11'	15'	21'	27'
DEAD END	30'	40'	56'	73'
TOP SIDE OF VERTICAL OFFSET	13'	17'	24'	31'
TEE RUN X BRANCH 6" BY	14'			
TEE RUN X BRANCH 8" BY	10'	24'		
TEE RUN X BRANCH 12" BY	1'	15'	40'	
TEE RUN X BRANCH 16" BY	1'	7'	33'	56'

NOTES:
1. ALL FITTINGS WILL BE RESTRAINED WITH A MEGA-LUG TYPE RESTRAINT.

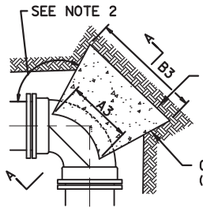
WATER MAIN RESTRAINT DETAIL



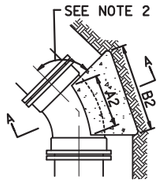
PVC SANITARY SEWER BEDDING DETAIL



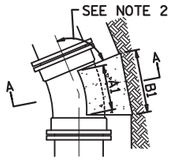
WATER MAIN BEDDING DETAIL



PLAN - 90° BEND



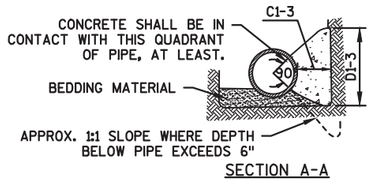
PLAN - 45° BEND



PLAN - 22-1/2° BEND

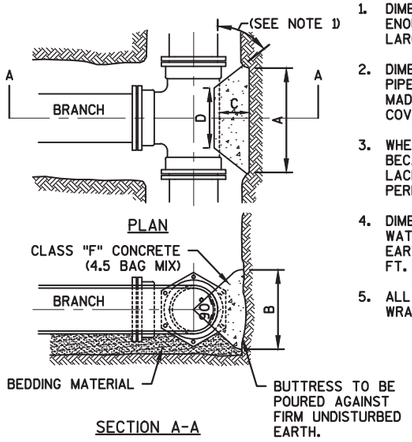
NOTES:
1. DIMENSIONS IN TABLE ARE BASED ON A WATER PRESSURE OF 150 P.S.I. AND ON EARTH RESISTANCE OF 2 TONS PER SQ. FT.
2. DIMENSION C1-3 SHOULD BE LARGE ENOUGH TO MAKE ANGLE EQUAL TO OR LARGER THAN 45°.
3. DIMENSION A1-3 SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH M.J. BOLTS.
4. SHAPE OF BACK OF BUTTRESS MAY VARY AS LONG AS POUR IS AGAINST FIRM UNDISTURBED EARTH.
5. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.

BUTTRESS DIMENSIONS						
PIPE SIZE	22-1/2° BENDS		45° BENDS		90° BENDS	
	B1	D1	B2	D2	B3	D3
6"	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-2"
8"	1'-0"	1'-0"	1'-4"	1'-2"	1'-10"	1'-6"
12"	1'-4"	1'-4"	1'-10"	1'-10"	2'-0"	2'-3"
16"	1'-10"	1'-8"	2'-6"	2'-4"	3'-10"	2'-10"
20"	2'-4"	2'-0"	3'-3"	2'-10"	3'-0"	3'-4"
24"	2'-10"	2'-4"	4'-0"	3'-3"	6'-4"	3'-10"
30"	3'-6"	3'-0"	5'-4"	3'-10"	8'-0"	4'-8"



SECTION A-A

BLOCKING FOR BENDS



PLAN

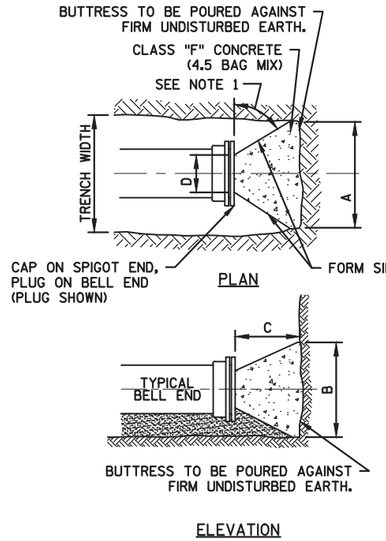
SECTION A-A

NOTES:
1. DIMENSION "C" SHOULD BE LARGE ENOUGH TO MAKE ANGLE EQUAL TO OR LARGER THAN 45°.
2. DIMENSION "D" EQUALS APPROX. I.D. OF PIPE LESS 2". AN EFFORT SHOULD BE MADE TO PREVENT THE CONCRETE FROM COVERING THE M.J. BOLTS.
3. WHERE BUTTRESSES ARE NOT POSSIBLE BECAUSE OF POOR SOIL CONDITIONS OR LACK OF ROOM, STRAPPING SHALL BE PERMITTED.
4. DIMENSIONS IN TABLE ARE BASED ON A WATER PRESSURE OF 150 P.S.I. AND ON EARTH RESISTANCE OF 2 TONS PER SQ. FT.
5. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.

BUTTRESS DIMENSIONS				
B.D.	A	B	C	D
6"	1'-3"	1'-0"	SEE NOTE 1	SEE NOTE 2
8"	1'-6"	1'-4"		
12"	2'-3"	2'-0"		
16"	3'-2"	2'-6"		
20"	4'-0"	3'-0"		
24"	5'-3"	3'-4"		
30"	6'-6"	4'-3"		

B.D. = BRANCH DIAMETER

BLOCKING FOR TEES



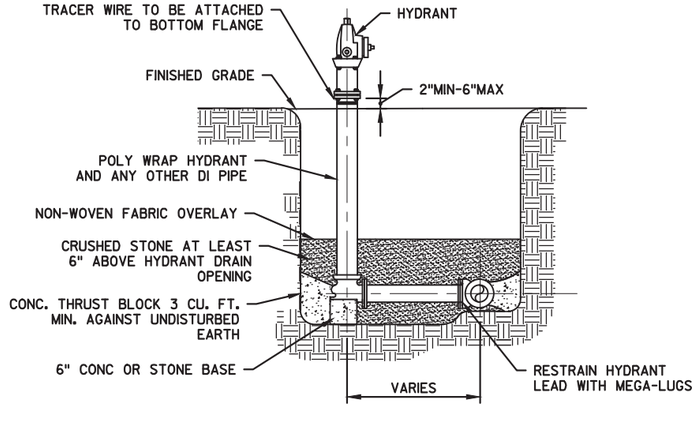
PLAN

ELEVATION

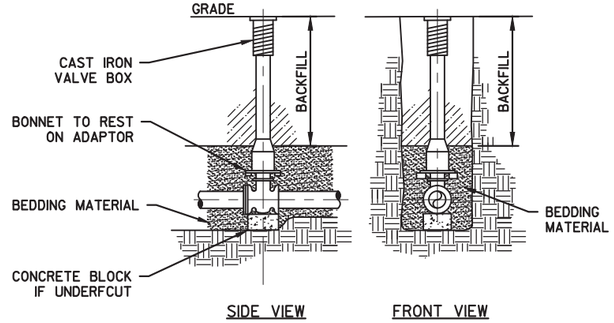
BUTTRESS DIMENSIONS				
DIA.	A	B	C	D
6"	1'-6"	1'-2"	SEE NOTE 2	SEE NOTE 3
8"	2'-0"	1'-4"		
12"	2'-5"	1'-10"		
16"	3'-4"	2'-4"		
20"	4'-3"	2'-10"		
24"	5'-2"	3'-4"		
30"	6'-9"	4'-0"		

NOTES:
1. DIMENSIONS IN TABLE ARE BASED ON A WATER PRESSURE OF 150 P.S.I. AND ON EARTH RESISTANCE OF 2 TONS PER SQ. FT.
2. DIMENSION C SHOULD BE LARGE ENOUGH TO MAKE ANGLE EQUAL TO OR LARGER THAN 45°.
3. DIMENSION D SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH M.J. BOLTS.
4. SHAPE OF BACK OF BUTTRESS MAY VARY AS LONG AS POUR IS AGAINST FIRM UNDISTURBED EARTH.
5. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED IN POLYETHYLENE.

BLOCKING FOR PLUGS



HYDRANT DETAIL



SIDE VIEW FRONT VIEW

STANDARD VALVE AND BOX SETTING

2

2

N

SALVAGE 4-FT CHAIN LINK FENCE

SAWCUT, TYP

N 1ST ST

S 1ST ST

STH 116

PLANTERS TO REMAIN

REMOVE/REINSTALL WASTE RECEPTACLE

REMOVE/REINSTALL BOLLARD REMOVE BASE

REMOVE/REINSTALL BENCH

REMOVE BOLLARD REMOVE BASE

REMOVE/REINSTALL KIOSK

REMOVE/REINSTALL BENCH

REMOVE DRIVEWAYS

SALVAGE PLANTER RAIL REMOVE PLANTER CURB

REMOVE/REINSTALL WASTE RECEPTACLE

SAWCUT, TYP

ANTICIPATED AREA OF CONCRETE PAVEMENT REMOVAL PER AS-BUILT INFORMATION

SALVAGE RAILING/SIGN

REMOVE CONCRETE AREA ADJACENT TO BUILDING UNDER REMOVING CONCRETE SIDEWALK ITEM

REMOVE/REINSTALL WASTE RECEPTACLE

REMOVE DRIVEWAY

PLANTER TO REMAIN

REMOVE/REINSTALL BENCH

REMOVE/REINSTALL KIOSK

REMOVE/REINSTALL BOLLARD REMOVE BASE

REMOVE/REINSTALL BOLLARD REMOVE BASE

BUILDING TO BE MOVED PRIOR TO CONSTRUCTION

BUILDING TO BE RAZED PRIOR TO CONSTRUCTION

SLOPE INTERCEPT, TYP

SAWCUT, TYP

REMOVAL OF ASPHALTIC SURFACE WITHIN TEMPORARY SHORING LIMITS PAID AS COMMON EXC

REMOVING ASPHALTIC SURFACE

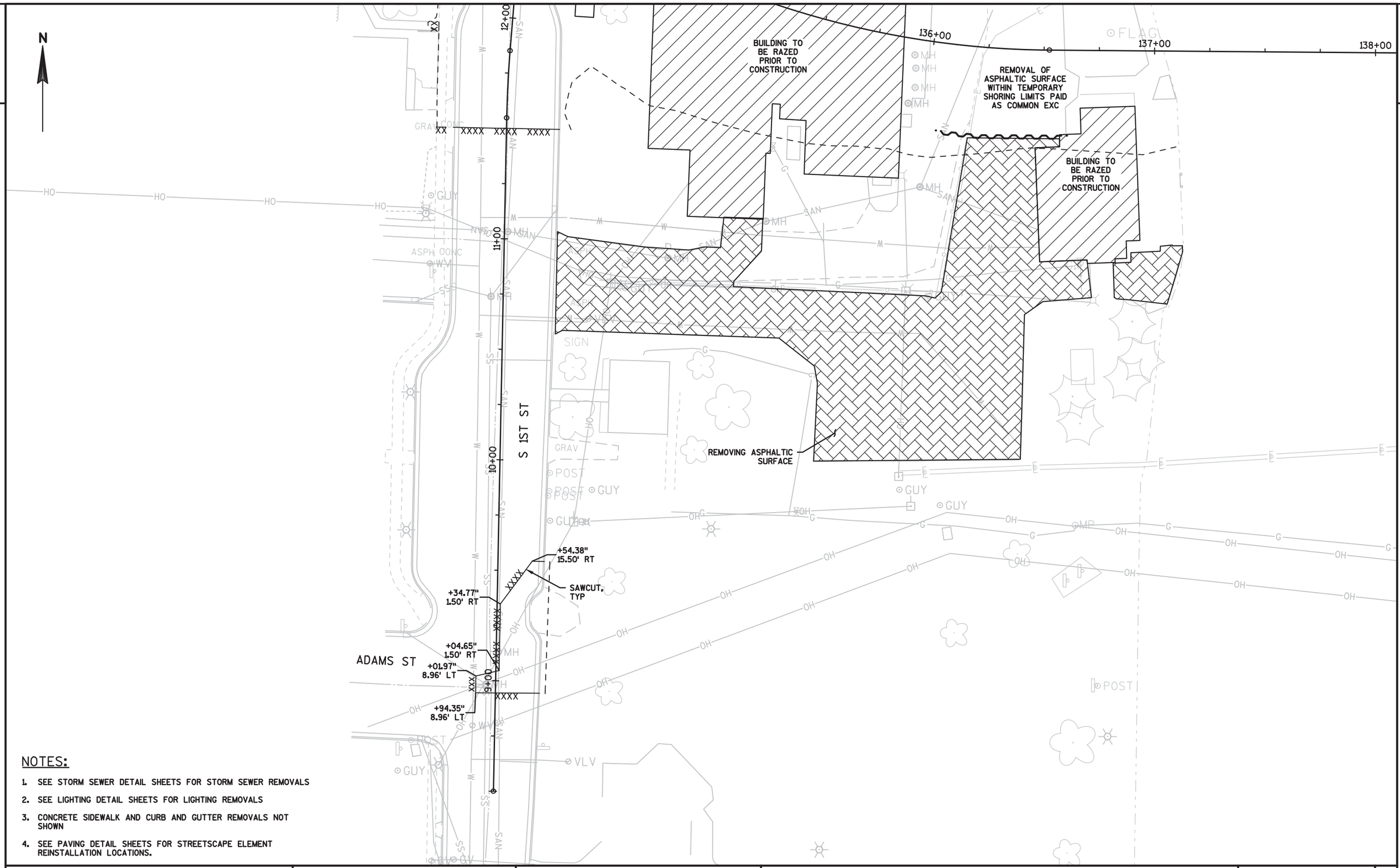
BUILDING TO BE RAZED PRIOR TO CONSTRUCTION

133+00 134+00 135+00 136+00 137+00 138+00 301+00 302+00 303+00 304+00 12+00 13+00 14+00 15+00

NOTES:

1. SEE STORM SEWER DETAIL SHEETS FOR STORM SEWER REMOVALS
2. SEE LIGHTING DETAIL SHEETS FOR LIGHTING REMOVALS
3. CONCRETE SIDEWALK AND CURB AND GUTTER REMOVALS NOT SHOWN
4. SEE PAVING DETAIL SHEETS FOR STREETSCAPE ELEMENT REINSTALLATION LOCATIONS.

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	REMOVALS	SHEET 32	E



NOTES:

1. SEE STORM SEWER DETAIL SHEETS FOR STORM SEWER REMOVALS
2. SEE LIGHTING DETAIL SHEETS FOR LIGHTING REMOVALS
3. CONCRETE SIDEWALK AND CURB AND GUTTER REMOVALS NOT SHOWN
4. SEE PAVING DETAIL SHEETS FOR STREETSCAPE ELEMENT REINSTALLATION LOCATIONS.

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	REMOVALS	SHEET 33	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-021050-RM.DWG
LAYOUT NAME - 61901572-021051-RM
PLOT DATE : 1/27/2017 5:28 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

ANTICIPATED AREA OF CONCRETE PAVEMENT REMOVAL PER AS-BUILT INFORMATION

REMOVE MORTAR RUBBLE MASONRY WALL BEHIND EMBANKMENT WALL LIMITS APPROXIMATE

REMOVE BOLLARD REMOVE BASE

SAWCUT, TYP

N 1ST AVE

REMOVING ASPHALTIC SURFACE

REMOVE/REINSTALL BOLLARD REMOVE BASE

REMOVE/REINSTALL KIOSK

ANTICIPATED AREA OF CONCRETE PAVEMENT REMOVAL PER AS-BUILT INFORMATION

REMOVE/REINSTALL WASTE RECEPTACLE

N 2ND AVE

REMOVE/REINSTALL BOLLARD REMOVE BASE

REMOVE/REINSTALL ARBOR

STH 116

501+00

149+00

150+00

148+00

REMOVE BOLLARD REMOVE BASE

REMOVE/REINSTALL BOLLARD REMOVE BASE

SAWCUT, TYP

REMOVE BOLLARD REMOVE BASE

REMOVE/REINSTALL WASTE RECEPTACLE

147+00

REMOVE STONE MASONRY WALL BEHIND EMBANKMENT WALL LIMITS APPROXIMATE

146+00

REMOVE/REINSTALL BOLLARD REMOVE BASE

144+00

145+00

BUILDING TO BE RAZED PRIOR TO CONSTRUCTION

REMOVING CONCRETE PAVEMENT

BUILDING TO BE RAZED PRIOR TO CONSTRUCTION

BUILDING TO BE RAZED PRIOR TO CONSTRUCTION

S 1ST AVE

14+00

S 2ND AVE

SLOPE INTERCEPT, TYP

REMOVE 6-FT CHAIN LINK FENCE AND SALVAGE MATERIALS TO PROPERTY OWNER

13+00

N

NOTES:

1. SEE STORM SEWER DETAIL SHEETS FOR STORM SEWER REMOVALS
2. SEE LIGHTING DETAIL SHEETS FOR LIGHTING REMOVAL
3. CONCRETE SIDEWALK AND CURB AND GUTTER REMOVALS NOT SHOWN
4. SEE PAVING DETAIL SHEETS FOR STREETSCAPE ELEMENT REINSTALLATION LOCATIONS

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	REMOVALS	SHEET 34	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-021050-RM.DWG
LAYOUT NAME - 61901572-021052-RM

PLOT DATE : 3/17/2017 9:11 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

MATCH LINE

N

N 1ST ST

S 1ST ST

STH 116

REINSTALL WASTE RECEPTACLE

REINSTALL BENCH

REINSTALL BOLLARD

REINSTALL KIOSK

SHAPE SIDEWALK TO DIRECT WATER FROM WALL GUTTER INTO INLET

MATCH LINE

LEGEND

CS-4	CONCRETE SIDEWALK 4-INCH
CS-6	CONCRETE SIDEWALK 6-INCH
CG-30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
CCP	CONCRETE CURB PEDESTRIAN
CD-6	CONCRETE DRIVEWAY 6-INCH
CD-8	CONCRETE DRIVEWAY 8-INCH
HMA LT	HMA PAVEMENT LT
HMA-MT	HMA PAVEMENT MT
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
CR-2	CURB RAMP TYPE 2
CR-3	CURB RAMP TYPE 3
CR-4A1	CURB RAMP TYPE 4A1
WF-NP	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
BAD	BASE AGGREGATE DENSE
G	GRASS

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVING DETAIL: STH 116 / S 1ST ST	SHEET 35	E

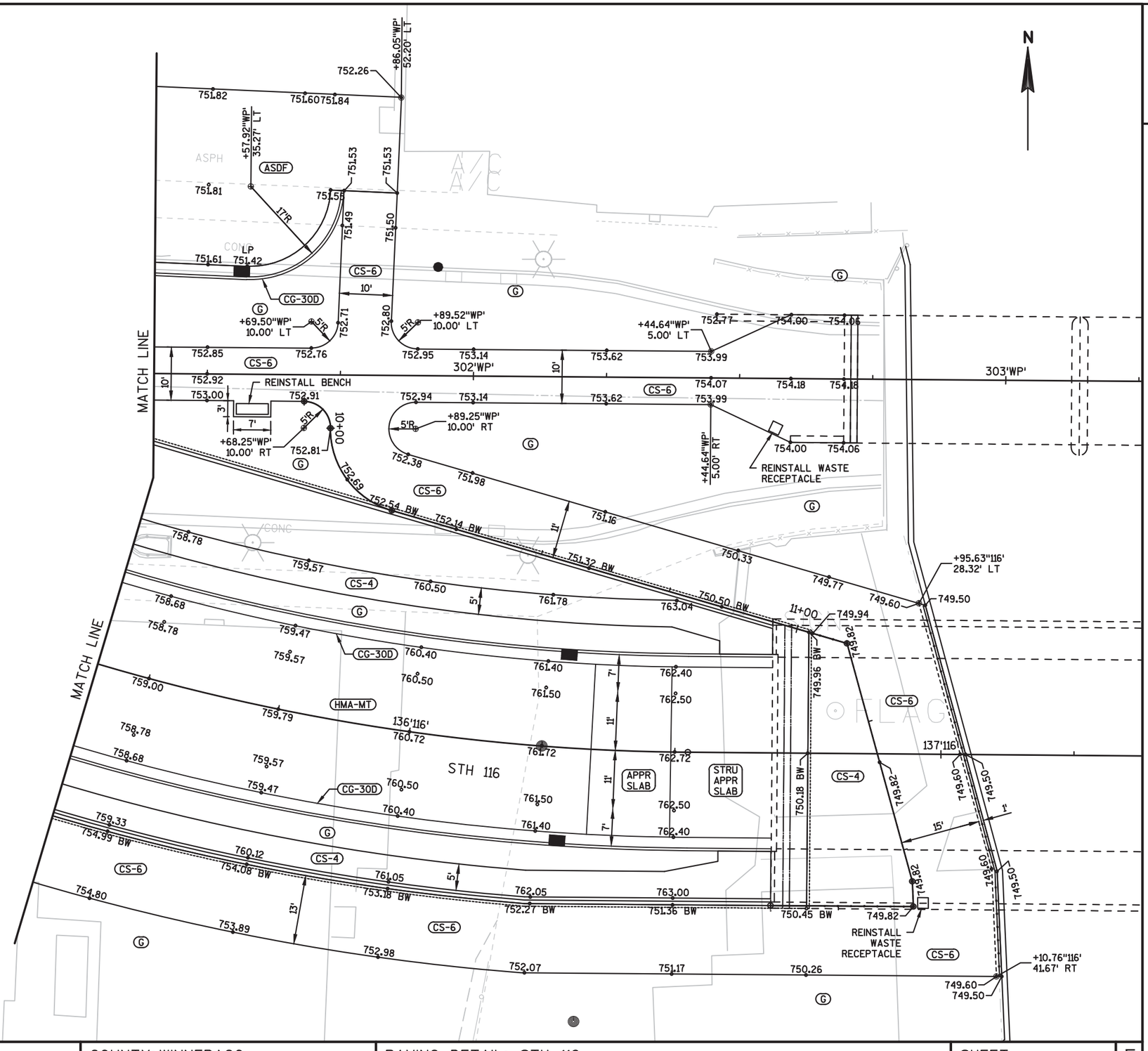
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LAYOUT NAME - 61901572-021201-PD

PLOT DATE : 1/27/2017 5:29 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

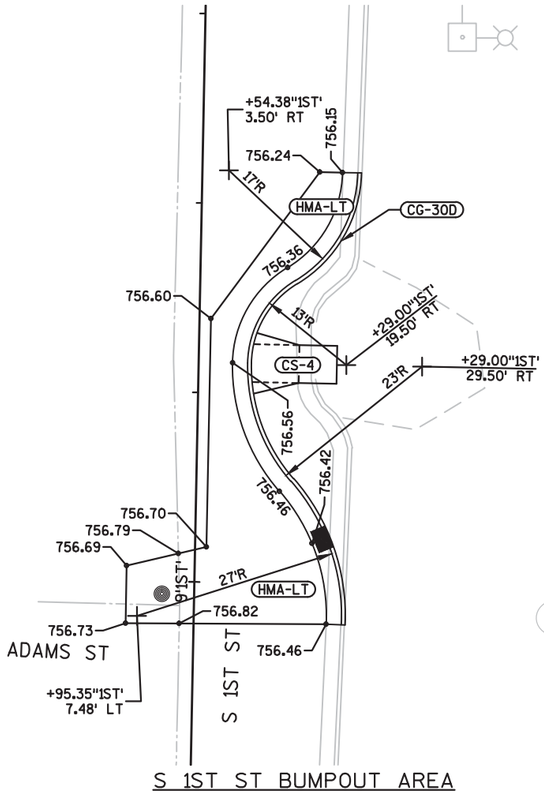
2

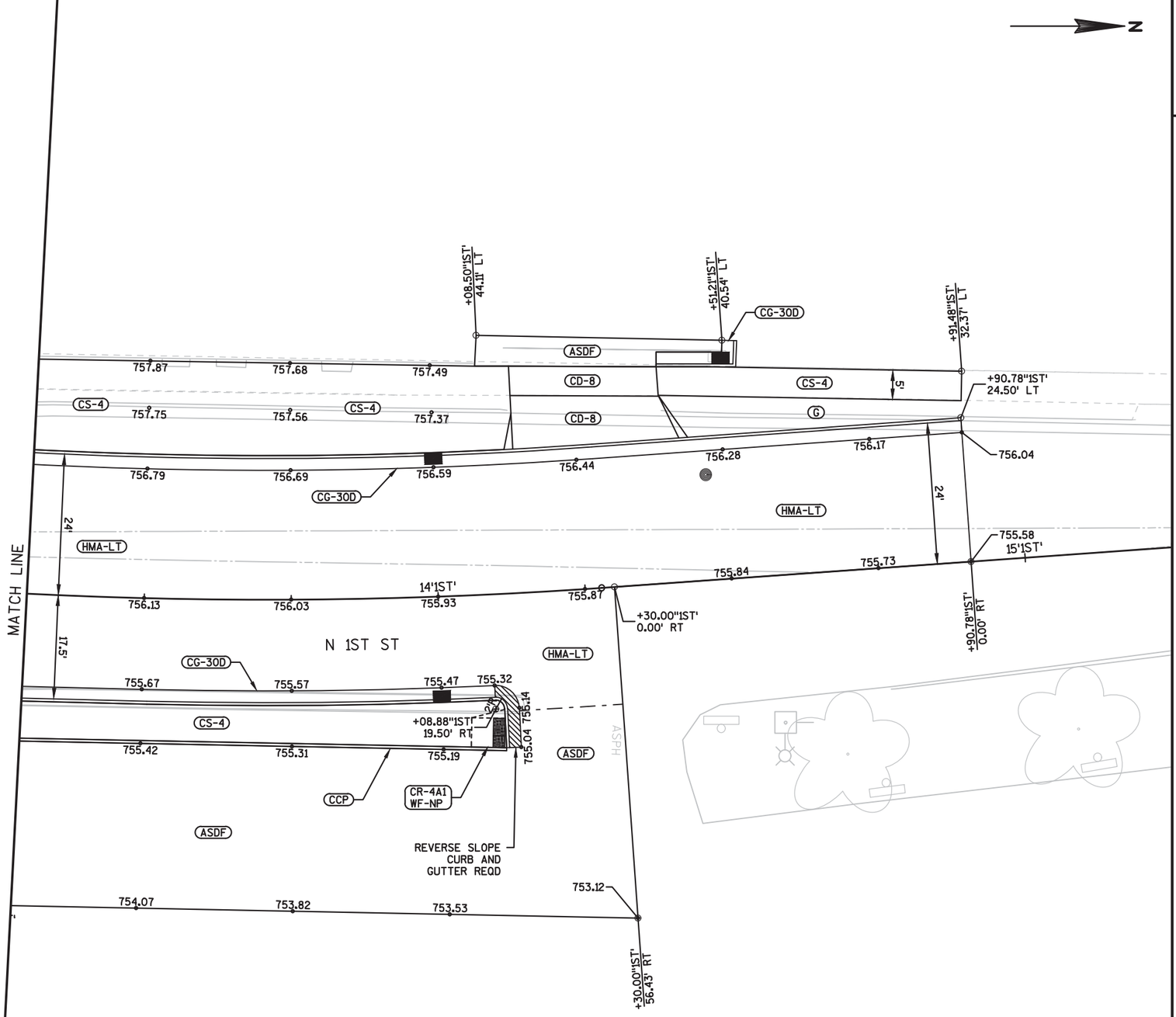


LEGEND

CS-4	CONCRETE SIDEWALK 4-INCH
CS-6	CONCRETE SIDEWALK 6-INCH
CG-30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
CCP	CONCRETE CURB PEDESTRIAN
CD-6	CONCRETE DRIVEWAY 6-INCH
CD-8	CONCRETE DRIVEWAY 8-INCH
HMA LT	HMA PAVEMENT LT
HMA-MT	HMA PAVEMENT MT
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
CR-2	CURB RAMP TYPE 2
CR-3	CURB RAMP TYPE 3
CR-4A1	CURB RAMP TYPE 4A1
WF-NP	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
BAD	BASE AGGREGATE DENSE
G	GRASS

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVING DETAIL: STH 116	SHEET 36	E





LEGEND

CS-4	CONCRETE SIDEWALK 4-INCH
CS-6	CONCRETE SIDEWALK 6-INCH
CG-30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
CCP	CONCRETE CURB PEDESTRIAN
CD-6	CONCRETE DRIVEWAY 6-INCH
CD-8	CONCRETE DRIVEWAY 8-INCH
HMA LT	HMA PAVEMENT LT
HMA-MT	HMA PAVEMENT MT
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
CR-2	CURB RAMP TYPE 2
CR-3	CURB RAMP TYPE 3
CR-4A1	CURB RAMP TYPE 4A1
WF-NP	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
BAD	BASE AGGREGATE DENSE
G	GRASS

2

N

MATCH LINE

FENCE BY OTHERS

REINSTALL WASTE RECEPTACLE

LP 753.31

REVERSE SLOPE CURB AND GUTTER REQD

N 1ST AVE

STH 116

GRAV

CONC

+35.75"FP' 12.00' LT

+36.19"EP' 0.00' LT

+11.36"N1AV' 19.46' LT

+60.51"EP' 35.00' LT

+96.02"N1AV' 18.84' LT

+08.07"N1AV' 22.41' RT

+93.02"N1AV' 18.32' RT

+79.98"N1AV' 62.00' LT

+72.34"N1AV' 51.50' RT

+60.11"N1AV' 30.90' LT

+55.19"EP' 5.00' RT

+18.52"FP' 7.43' LT

+69.84"EP' 16.00' RT

+52.69"EP' 20.50' RT

+41.52"N1AV' 32.45' LT

+21.42"FP' 9.50' RT

+35.75"FP' 12.00' RT

+60.42"FP' 7.85' RT

+40.57' 53.04' LT

+24.95' 70.81' LT

+02.94' 58.95'

+80.33"116' 28.50' RT

+74.65"116' 28.50' RT

+25.75"116' 20.45' RT

+35.75"116' 22.42' RT

+24.64"116' 23.50' RT

404'FP'

405'FP'

501'EP'

144'116'

145'116'

146'116'

CG-30D

CR-2 WF-NP CS-6

CR-3 WF-NP

CR-3 WF-NP CS-6

CR-4A1

HMA-LT

HMA-MT

CS-4

CS-6

BAD

CD-8 HES

STRU APPR SLAB

APPR SLAB

27'

20'

10'

11'

7'

5'

3R

8R

22R

23R

38R

55R

LEGEND

CS-4	CONCRETE SIDEWALK 4-INCH	ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
CS-6	CONCRETE SIDEWALK 6-INCH	CR-2	CURB RAMP TYPE 2
CG-30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D	CR-3	CURB RAMP TYPE 3
CCP	CONCRETE CURB PEDESTRIAN	CR-4A1	CURB RAMP TYPE 4A1
CD-6	CONCRETE DRIVEWAY 6-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
CD-8	CONCRETE DRIVEWAY 8-INCH	BAD	BASE AGGREGATE DENSE
HMA LT	HMA PAVEMENT LT	G	GRASS
HMA-MT	HMA PAVEMENT MT		

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVING DETAIL: STH 116 / EAST PLATFORM PARKING LOT	SHEET 38	E

2

2

N

STH 116

N 2ND AVE

S 2ND AVE

MATCH LINE

BAD

CD-6

CS-4

CG-30D

HMA-LT

HMA-MT

CR-3 WF-NP

CR-2 WF-NP CS-6

CR-3 WF-NP CS-6

CCP

REINSTALL WASTE RECEPTACLE

REINSTALL BOLLARD

REINSTALL ARBOR

(1) CONCRETE STEP REQD

(2) CONCRETE STEPS REQD

EXIST STEP TO REMAIN

+15.00"N2AV' 16.00' LT

+15.00"N2AV' 16.00' RT

+43.77"116' 41.00' LT

+90.93"N2AV' 41.00' LT

+91.01"N2AV' 41.00' RT

+25.15"116' 41.00' LT

+38.16"116' 41.00' LT

+91.02"N2AV' 54.01' RT

+49.08"116' 20.76'

+21.07"116' 3.00' RT

+61.90" 3.00'

+07.97"S2AV' -60.87' RT

+26.11"116' 33.85' RT

+19.85"116' 41.00' RT

+57.12"S2AV' -116.00' RT

+45.47"116' 82.06'

+60.00"S2AV' 29.85' LT

+60.00"S2AV' 16.04' LT

+60.00"S2AV' 16.00' RT

+24.82"116' 47.00' RT

+03.01"S2AV' 41.00' RT

+84.02"S2AV' 57.25' RT

+41.06"116' 66.00' RT

+31.59"S2AV'

LEGEND

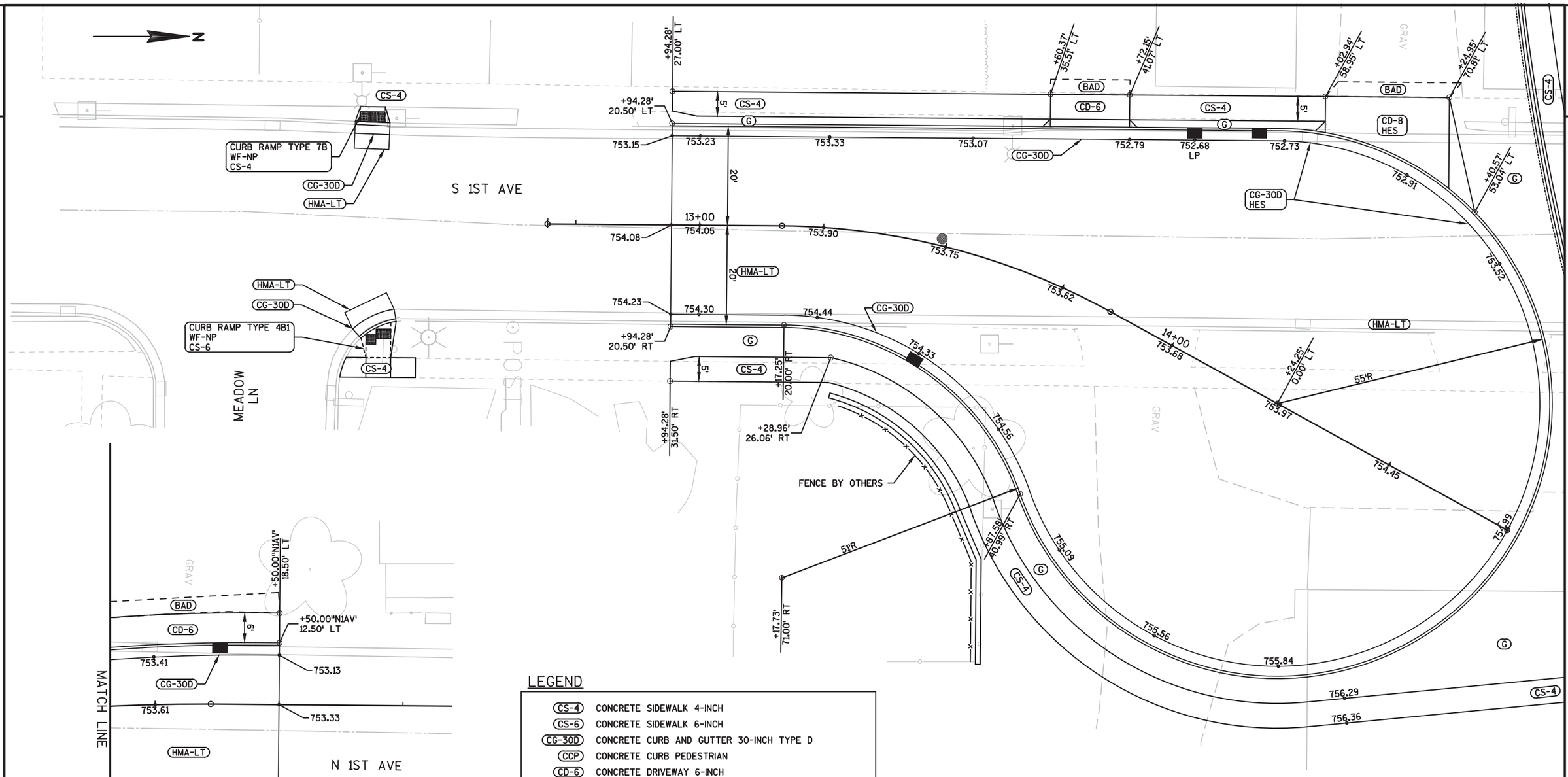
CS-4	CONCRETE SIDEWALK 4-INCH
CS-6	CONCRETE SIDEWALK 6-INCH
CG-30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
CCP	CONCRETE CURB PEDESTRIAN
CD-6	CONCRETE DRIVEWAY 6-INCH
CD-8	CONCRETE DRIVEWAY 8-INCH
HMA LT	HMA PAVEMENT LT
HMA-MT	HMA PAVEMENT MT
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
CR-2	CURB RAMP TYPE 2
CR-3	CURB RAMP TYPE 3
CR-4A1	CURB RAMP TYPE 4A1
WF-NP	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
BAD	BASE AGGREGATE DENSE
G	GRASS

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVING DETAIL: STH 116 / 2ND AVE	SHEET 39	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-021201-PD.DWG
LAYOUT NAME - 61901572-021207-PD

PLOT DATE : 1/27/2017 5:30 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42



LEGEND

CS-4	CONCRETE SIDEWALK 4-INCH
CS-6	CONCRETE SIDEWALK 6-INCH
CG-30D	CONCRETE CURB AND GUTTER 30-INCH TYPE D
CCP	CONCRETE CURB PEDESTRIAN
CD-6	CONCRETE DRIVEWAY 6-INCH
CD-8	CONCRETE DRIVEWAY 8-INCH
HMA LT	HMA PAVEMENT LT
HMA-MT	HMA PAVEMENT MT
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
CR-2	CURB RAMP TYPE 2
CR-3	CURB RAMP TYPE 3
CR-4A1	CURB RAMP TYPE 4A1
WF-NP	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
BAD	BASE AGGREGATE DENSE
G	GRASS

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVING DETAIL: S 1ST AVE / N 1ST AVE	SHEET 40	E

MATCH LINE

PROSPECT ST

N 1ST ST

MATCH LINE

N

N 1ST ST

S 1ST ST

STH 116

13+00

14+00

15+00

12+00

133+00

134+00

135+00

136+00

137+00

138+00

A/C

A

C

MH

ASPH

CONC

POST

LEGEND

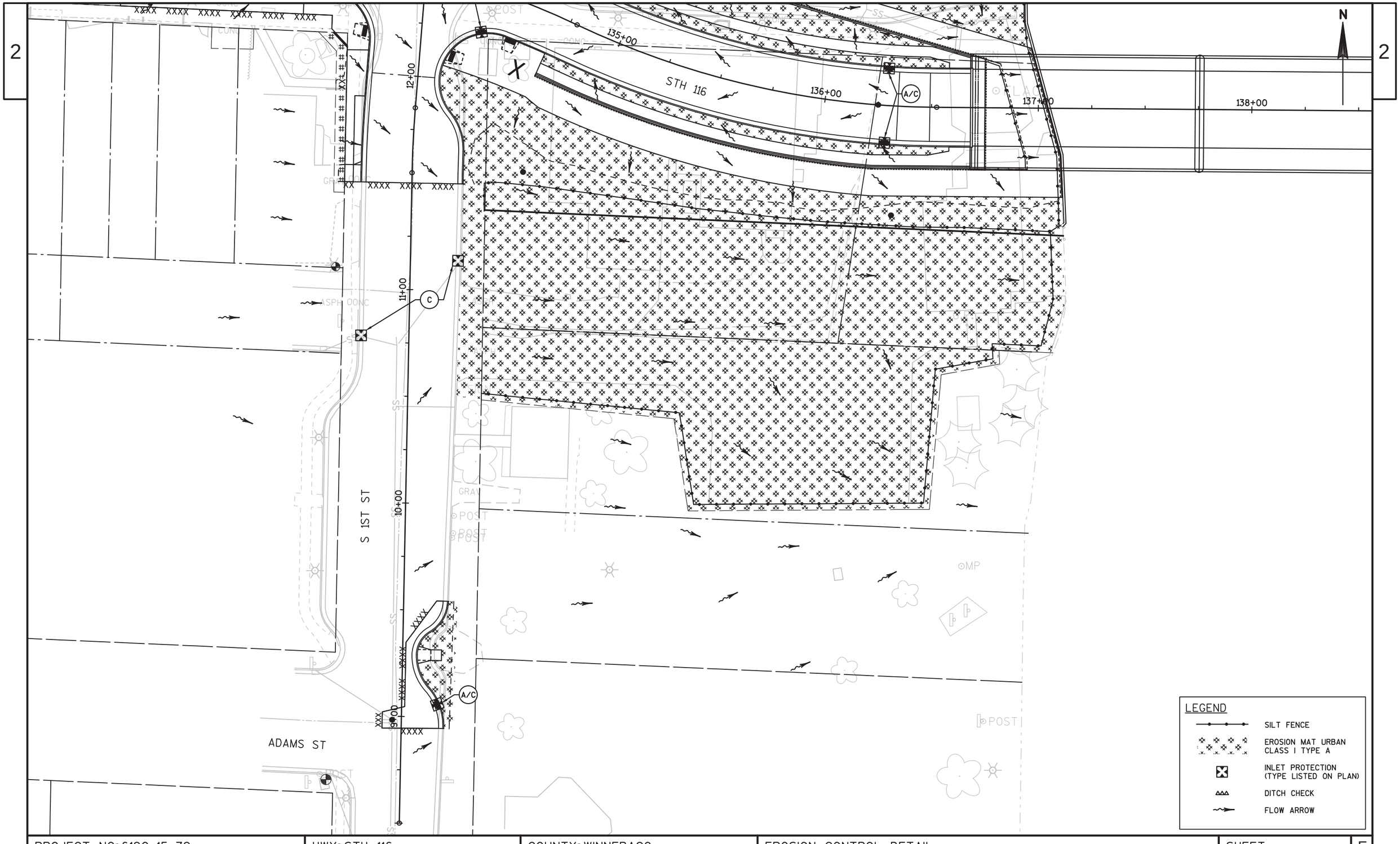
- SILT FENCE
- EROSION MAT URBAN CLASS I TYPE A
- INLET PROTECTION (TYPE LISTED ON PLAN)
- DITCH CHECK
- FLOW ARROW

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	EROSION CONTROL DETAIL	SHEET 41	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-022001-EC.DWG
LAYOUT NAME - 61901572-022001-EC

PLOT DATE : 1/30/2017 2:22 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	EROSION CONTROL DETAIL	SHEET 42	E

2

2

N

N 1ST AVE

N 2ND AVE

S 1ST AVE

S 2ND AVE

STH 116

144+00

145+00

146+00

147+00

148+00

149+00

150+00

17+00

27+00

26+00

14+00

13+00

A/C

A/D

A

CONC

GRAV

SS

HSE

G.P.

ASPH

POST

XXXX

XX

LEGEND

SILT FENCE

EROSION MAT URBAN CLASS I TYPE A

INLET PROTECTION (TYPE LISTED ON PLAN)

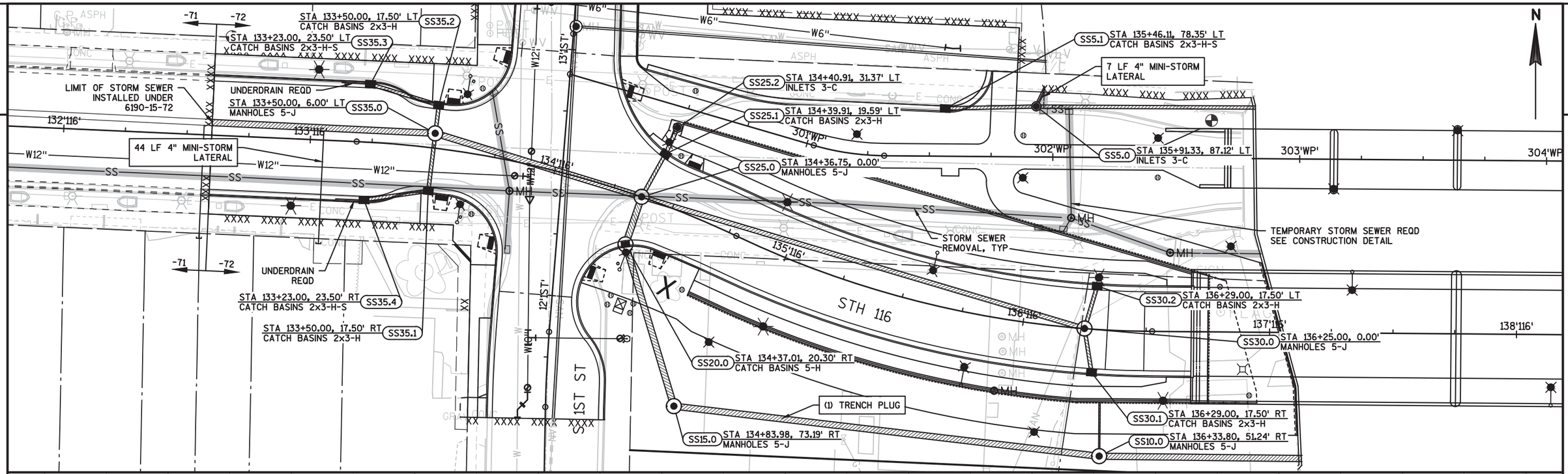
DITCH CHECK

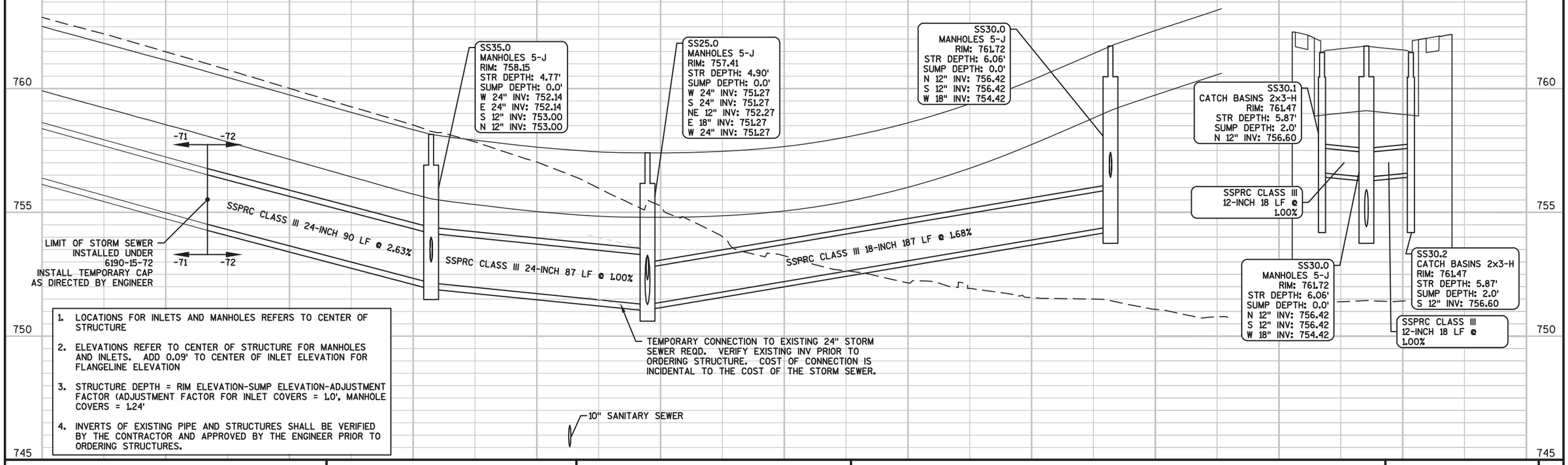
FLOW ARROW

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	EROSION CONTROL DETAIL	SHEET 43	E

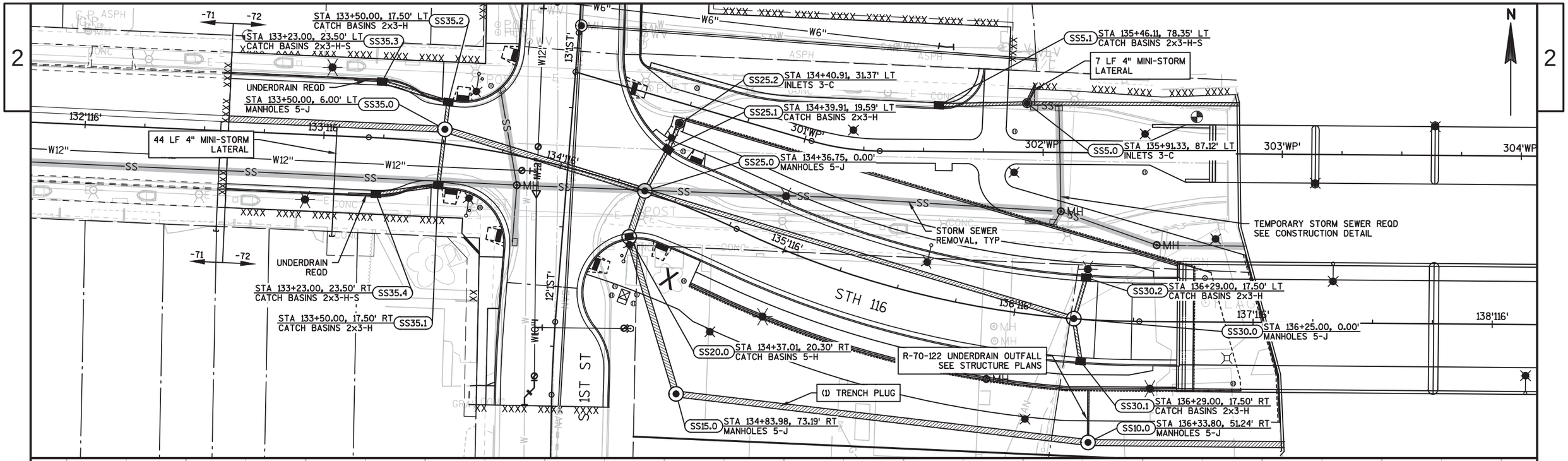
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LAYOUT NAME - 61901572-022003-EC

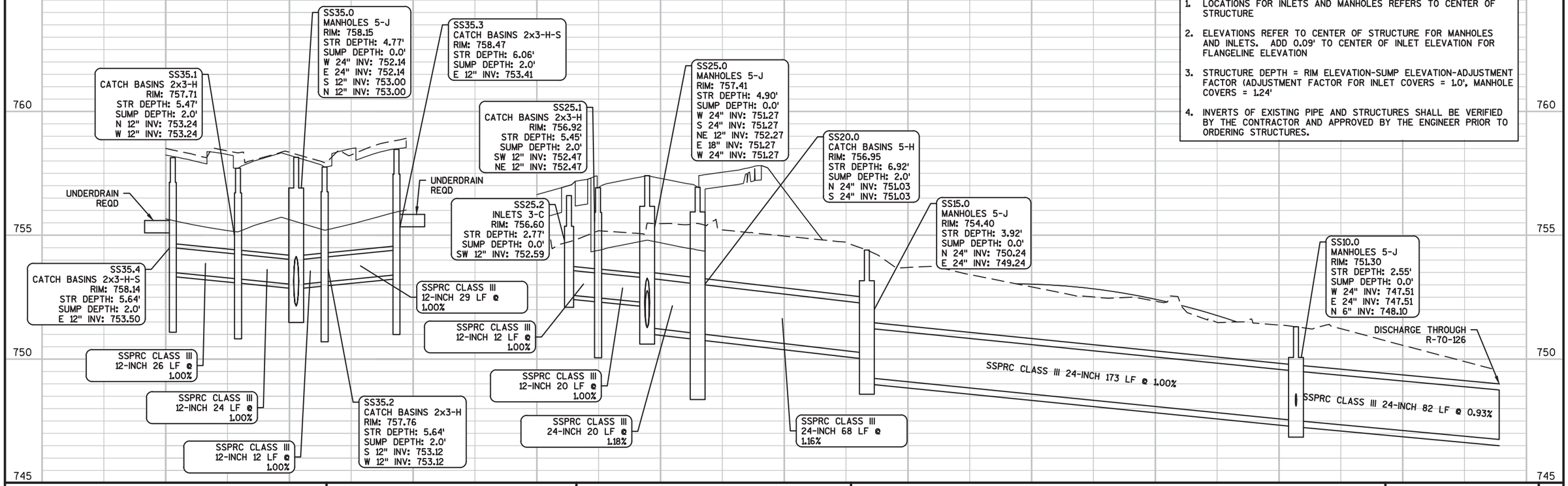
PLOT DATE : 1/30/2017 2:23 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:40 FT





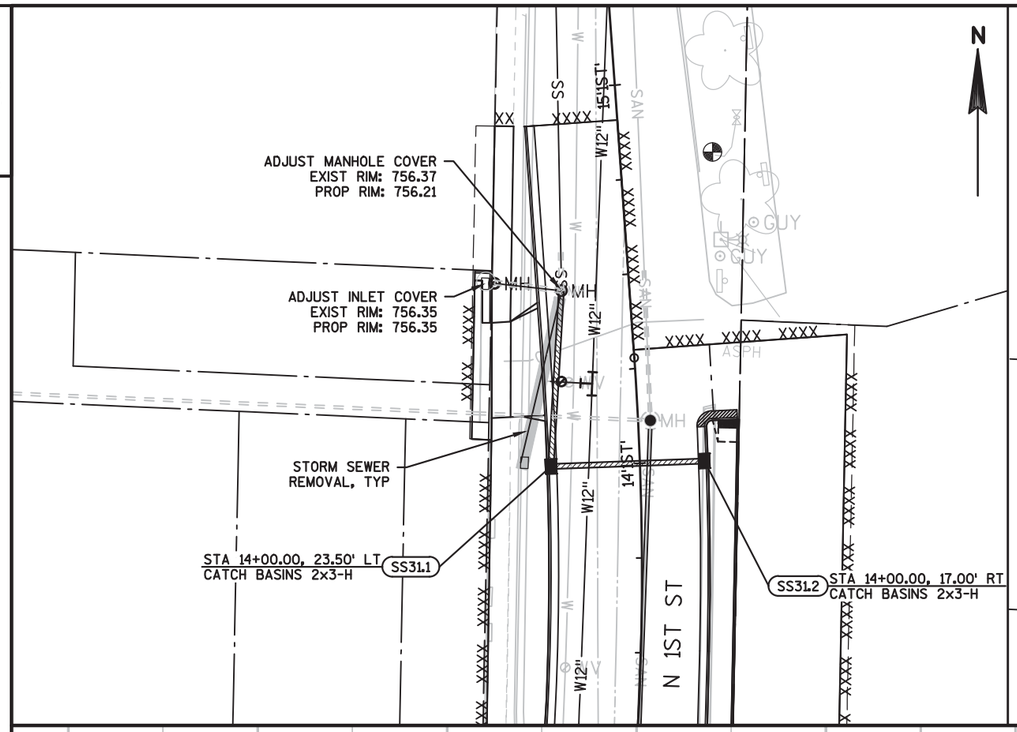
1. LOCATIONS FOR INLETS AND MANHOLES REFERS TO CENTER OF STRUCTURE
2. ELEVATIONS REFER TO CENTER OF STRUCTURE FOR MANHOLES AND INLETS. ADD 0.09' TO CENTER OF INLET ELEVATION FOR FLANGELINE ELEVATION
3. STRUCTURE DEPTH = RIM ELEVATION-SUMP ELEVATION-ADJUSTMENT FACTOR (ADJUSTMENT FACTOR FOR INLET COVERS = 1.0', MANHOLE COVERS = 1.24'
4. INVERTS OF EXISTING PIPE AND STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

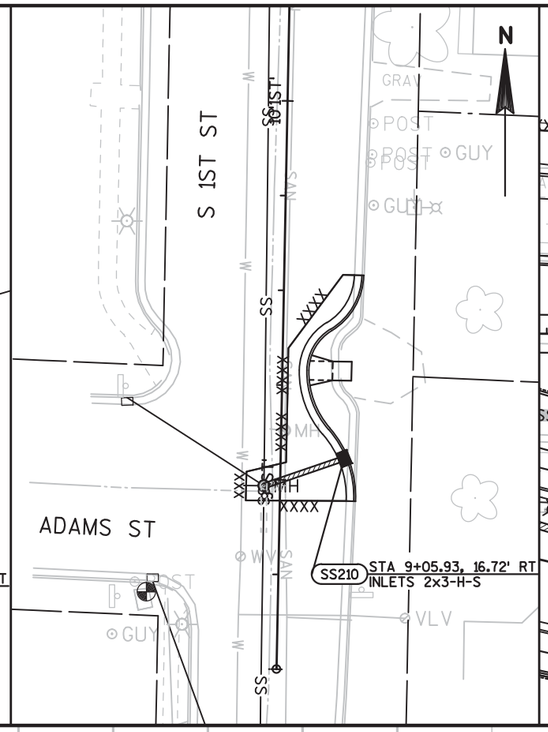


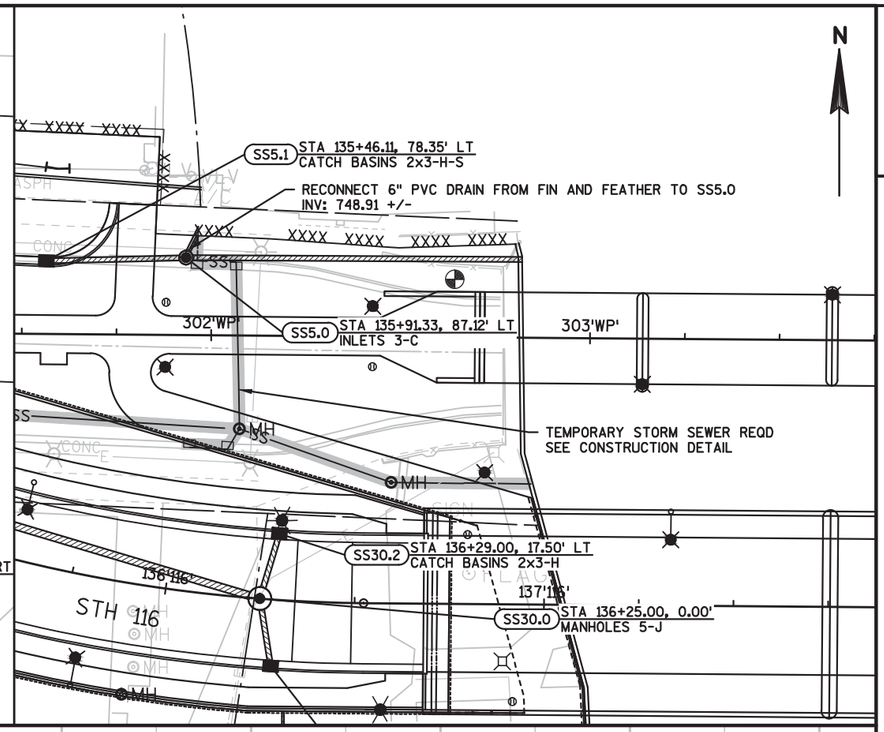


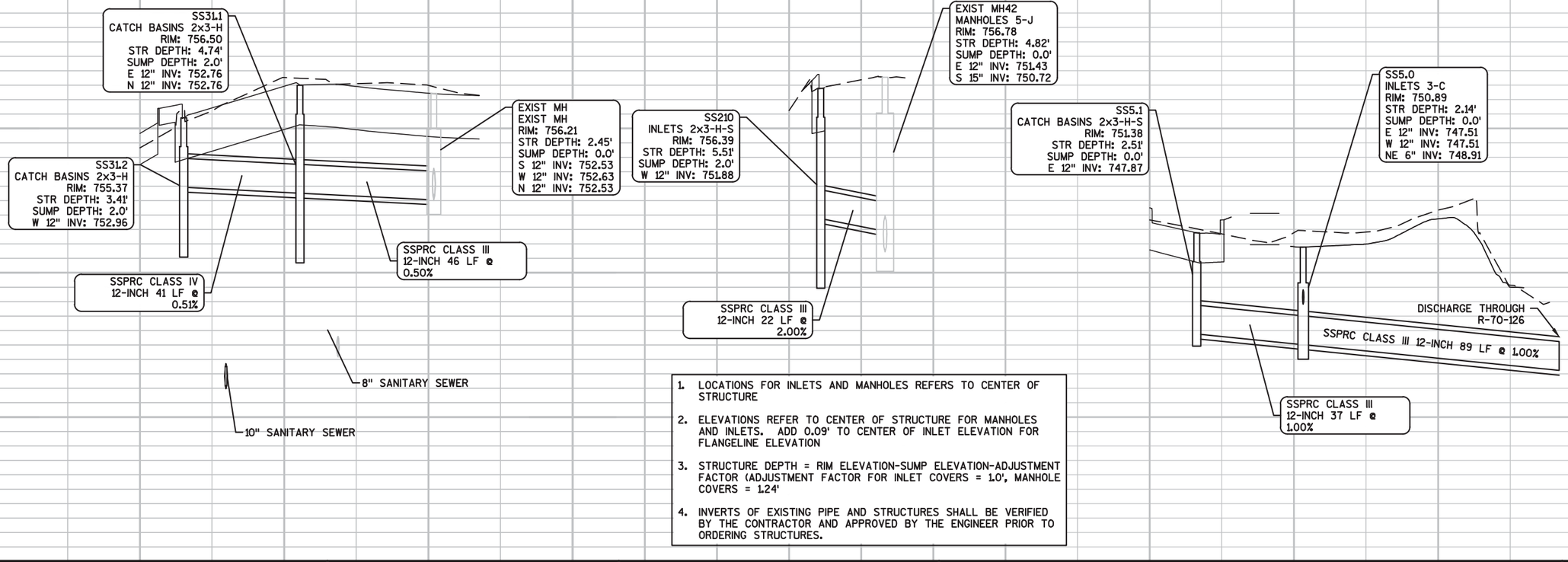
1. LOCATIONS FOR INLETS AND MANHOLES REFERS TO CENTER OF STRUCTURE
2. ELEVATIONS REFER TO CENTER OF STRUCTURE FOR MANHOLES AND INLETS. ADD 0.09' TO CENTER OF INLET ELEVATION FOR FLANGELINE ELEVATION
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4. INVERTS OF EXISTING PIPE AND STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET 45	E









1. LOCATIONS FOR INLETS AND MANHOLES REFERS TO CENTER OF STRUCTURE
2. ELEVATIONS REFER TO CENTER OF STRUCTURE FOR MANHOLES AND INLETS. ADD 0.09' TO CENTER OF INLET ELEVATION FOR FLANGELINE ELEVATION
3. STRUCTURE DEPTH = RIM ELEVATION-SUMP ELEVATION-ADJUSTMENT FACTOR (ADJUSTMENT FACTOR FOR INLET COVERS = 1.0', MANHOLE COVERS = 1.24'
4. INVERTS OF EXISTING PIPE AND STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

13 LF 4" MINI-STORM LATERAL

STA 17+38.00, 11.40' LT
CATCH BASINS 4-H
DRIVEWAY CURB HEAD REQD
SS106.0

SS100.0 STA 144+31.84, 92.28' LT
CATCH BASINS 4-H-S

(1) TRENCH PLUG

N 1ST AVE

17'N1AV'

SS106.1 STA 17+08.00, 21.90' RT
CATCH BASINS 2x3-H
DRIVEWAY CURB HEAD REQD

11 LF 4" MINI-STORM LATERAL
(1) TRENCH PLUG

SS105.1 STA 16+50.00, 9.15' LT
CATCH BASINS 2x3-H

SS105.6 STA 146+80.00, 55.80' LT
INLETS 3-C

10 LF 4" MINI-STORM LATERAL
(1) TRENCH PLUG

6 LF 4" MINI-STORM LATERAL
(1) TRENCH PLUG

MINI-STORM CLEANOUT

27'N2AV'

N 2ND AVE

SS110.3 STA 149+55.07, 22.62' LT
CATCH BASINS 2x3-H-S

12 LF 4" MINI-STORM
LATERAL

UNDERDRAIN REQD

(1) TRENCH PLUG

STA 16+50.01, 23.71' LT
MANHOLES 5-J
SS105.0

501'PL'

UNDERDRAIN
REQD

STORM SEWER
REMOVAL, TYP

145 LF 6" MINI-STORM
TRUNK

148'116'

149'116'

150'116'

147'116'

(1) TRENCH PLUG

STA 144+56.00, 17.50' LT
CATCH BASINS 2x3-H
SS107.3

STA 145+99.93, 23.51' LT
CATCH BASINS 4-H
SS105.2

SS105.5 STA 146+57.60, 30.27' LT
CATCH BASINS 2x3-H

72 LF 4" MINI-STORM
LATERAL
(1) TRENCH PLUG

12 LF 4" MINI-STORM LATERAL
(1) TRENCH PLUG

SS110.2 STA 26+25.12, 31.53' RT
CATCH BASINS 2x3-H-S

12 LF 4" MINI-STORM
LATERAL

STA 145+93.00, 0.00'
MANHOLES 5-J
SS107.0

146'116'

UNDERDRAIN
REQD

STH 116

144'116'

145'116'

UNDERDRAIN
REQD

SS107.1 STA 144+60.00, 0.00'
MANHOLES 5-J

SS105.4 STA 146+20.00, 17.50' RT
CATCH BASINS 2x3-H-S

SS105.3 STA 146+00.00, 17.50' RT
CATCH BASINS 2x3-H-S

STA 144+56.00, 17.50' RT
CATCH BASINS 2x3-H
SS107.2

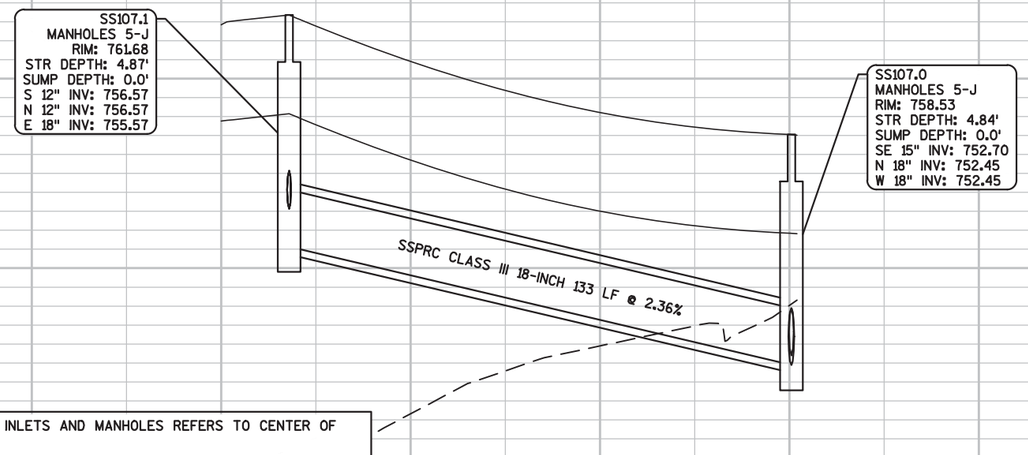
STA 26+13.16, 35.03' LT
CATCH BASINS 2x3-H
SS110.1

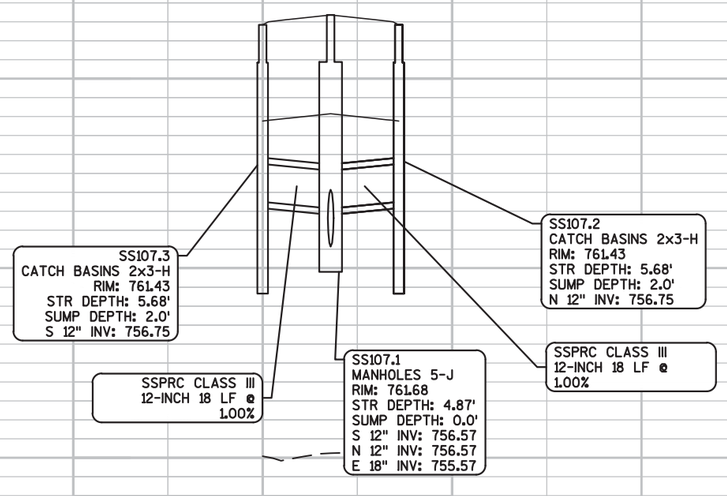
26'S2AV'

S 2ND AVE

SS110.0 STA 26+00.00, 0.00'
MANHOLES 5-J

N





1. LOCATIONS FOR INLETS AND MANHOLES REFERS TO CENTER OF STRUCTURE
2. ELEVATIONS REFER TO CENTER OF STRUCTURE FOR MANHOLES AND INLETS. ADD 0.09' TO CENTER OF INLET ELEVATION FOR FLANGELINE ELEVATION
3. STRUCTURE DEPTH = RIM ELEVATION-SUMP ELEVATION-ADJUSTMENT FACTOR (ADJUSTMENT FACTOR FOR INLET COVERS = 1.0', MANHOLE COVERS = 1.24'
4. INVERTS OF EXISTING PIPE AND STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

13 LF 4" MINI-STORM LATERAL

STA 17+38.00, 11.40' LT
CATCH BASINS 4-H
DRIVEWAY CURB HEAD REQD
SS106.0

SS100.0 STA 144+31.84, 92.28' LT
CATCH BASINS 4-H-S

(1) TRENCH PLUG

N 1ST AVE

17'N1AV'

SS106.1 STA 17+08.00, 21.90' RT
CATCH BASINS 2x3-H
DRIVEWAY CURB HEAD REQD

11 LF 4" MINI-STORM LATERAL
(1) TRENCH PLUG

SS105.1 STA 16+50.00, 9.15' LT
CATCH BASINS 2x3-H

SS105.6 STA 146+80.00, 55.80' LT
INLETS 3-C

10 LF 4" MINI-STORM LATERAL
(1) TRENCH PLUG

6 LF 4" MINI-STORM LATERAL
(1) TRENCH PLUG

MINI-STORM CLEANOUT

27'N2AV'

N 2ND AVE

SS110.3 STA 149+55.07, 22.62' LT
CATCH BASINS 2x3-H-S

12 LF 4" MINI-STORM LATERAL

UNDERDRAIN REQD

(1) TRENCH PLUG

STA 16+50.01, 23.71' LT
MANHOLES 5-J
SS105.0

501'PL'

UNDERDRAIN REQD

STORM SEWER REMOVAL, TYP

145 LF 6" MINI-STORM TRUNK

149'116'

150'116'

148'116'

147'116'

(1) TRENCH PLUG

STA 144+56.00, 17.50' LT
CATCH BASINS 2x3-H
SS107.3

STA 145+99.93, 23.51' LT
CATCH BASINS 4-H
SS105.2

SS105.5 STA 146+57.60, 30.27' LT
CATCH BASINS 2x3-H

72 LF 4" MINI-STORM LATERAL
(1) TRENCH PLUG

12 LF 4" MINI-STORM LATERAL
(1) TRENCH PLUG

STA 145+93.00, 0.00'
MANHOLES 5-J
SS107.0

146'116'

UNDERDRAIN REQD

STH 116

144'116'

145'116'

UNDERDRAIN REQD

26'S2AV'

SS110.2 STA 26+25.12, 31.53' RT
CATCH BASINS 2x3-H-S

12 LF 4" MINI-STORM LATERAL

SS110.0 STA 26+00.00, 0.00'
MANHOLES 5-J

SS105.4 STA 146+20.00, 17.50' RT
CATCH BASINS 2x3-H-S

SS105.3 STA 146+00.00, 17.50' RT
CATCH BASINS 2x3-H-S

STA 26+13.16, 35.03' LT
CATCH BASINS 2x3-H
SS110.1

S 2ND AVE

STA 144+56.00, 17.50' RT
CATCH BASINS 2x3-H
SS107.2

SS107.1 STA 144+60.00, 0.00'
MANHOLES 5-J

N

SS100.0
CATCH BASINS 4-H-S
RIM: 753.25
STR DEPTH: 6.34'
SUMP DEPTH: 2.0'
E 24" INV: 747.91
W 24" INV: 747.91

SS105.0
MANHOLES 5-J
RIM: 757.31
STR DEPTH: 5.05'
SUMP DEPTH: 0.0'
SE 18" INV: 751.52
W 24" INV: 751.02
E 12" INV: 751.79
W 18" INV: 751.52

UNDERDRAIN REQD

UNDERDRAIN REQD

TEMPORARY CONNECTION TO EXISTING 18" STORM SEWER REQD. VERIFY EXISTING INV PRIOR TO ORDERING STRUCTURE. COST OF CONNECTION IS INCIDENTAL TO THE COST OF THE STORM SEWER.

SS105.4
CATCH BASINS 2x3-H-S
RIM: 758.02
STR DEPTH: 5.31'
SUMP DEPTH: 2.0'
W 12" INV: 753.71

UNDERDRAIN REQD

SSPRC CLASS III 24-INCH 151 LF @ 2.06%

SSPRC CLASS IV
12-INCH 21 LF @
2.00%

SSPRC CLASS III
18-INCH 28 LF @
1.78%

SS105.3
CATCH BASINS 2x3-H-S
RIM: 758.07
STR DEPTH: 6.03'
SUMP DEPTH: 2.0'
E 12" INV: 753.29
NW 15" INV: 753.04

SS105.2
CATCH BASINS 4-H
RIM: 757.82
STR DEPTH: 6.81'
SUMP DEPTH: 2.0'
S 18" INV: 752.02
NW 18" INV: 752.02
NE 12" INV: 752.52

SSPRC CLASS III
15-INCH 19 LF @
1.83%

SS107.0
MANHOLES 5-J
RIM: 758.53
STR DEPTH: 4.84'
SUMP DEPTH: 0.0'
SE 15" INV: 752.70
N 18" INV: 752.45
W 18" INV: 752.45

SSPRC CLASS III
18-INCH 24 LF @
1.76%

SSPRC CLASS III
24-INCH 42 LF @
3.37%

DISCHARGE THROUGH R-70-125

18" SANITARY SEWER

SS105.5
CATCH BASINS 2x3-H
RIM: 757.68
STR DEPTH: 6.00'
SUMP DEPTH: 2.0'
SW 12" INV: 752.68

SS106.1
CATCH BASINS 2x3-H
RIM: 753.68
STR DEPTH: 4.68'
SUMP DEPTH: 2.0'
NW 12" INV: 750.00

SSPRC CLASS III
12-INCH 54 LF @
0.30%

SS105.2
CATCH BASINS 4-H
RIM: 757.82
STR DEPTH: 6.81'
SUMP DEPTH: 2.0'
S 18" INV: 752.02
NW 18" INV: 752.02
NE 12" INV: 752.52

SSPRC CLASS III
12-INCH 44 LF @
1.75%

CONNECT TO EXIST PIPE AND POUR CONCRETE COLLAR

SS106.0
CATCH BASINS 4-H
RIM: 752.92
STR DEPTH: 6.47'
SUMP DEPTH: 2.0'
SE 12" INV: 749.22
N 15" INV: 747.45

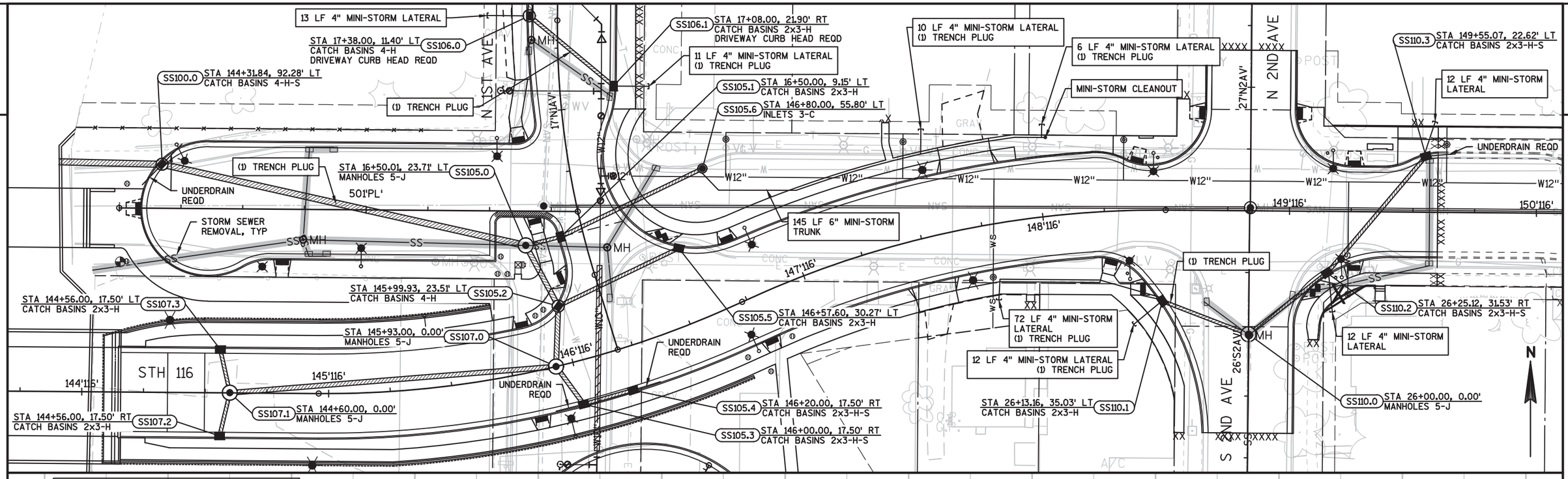
18" SANITARY SEWER

1. LOCATIONS FOR INLETS AND MANHOLES REFERS TO CENTER OF STRUCTURE
2. ELEVATIONS REFER TO CENTER OF STRUCTURE FOR MANHOLES AND INLETS. ADD 0.09' TO CENTER OF INLET ELEVATION FOR FLANGELINE ELEVATION
3. STRUCTURE DEPTH = RIM ELEVATION-SUMP ELEVATION-ADJUSTMENT FACTOR (ADJUSTMENT FACTOR FOR INLET COVERS = 1.0', MANHOLE COVERS = 1.24'
4. INVERTS OF EXISTING PIPE AND STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.

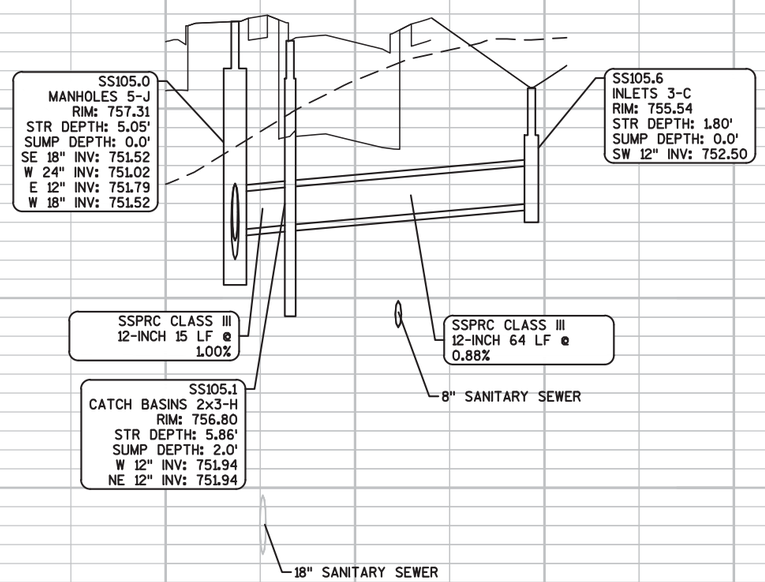
755
750
745
740

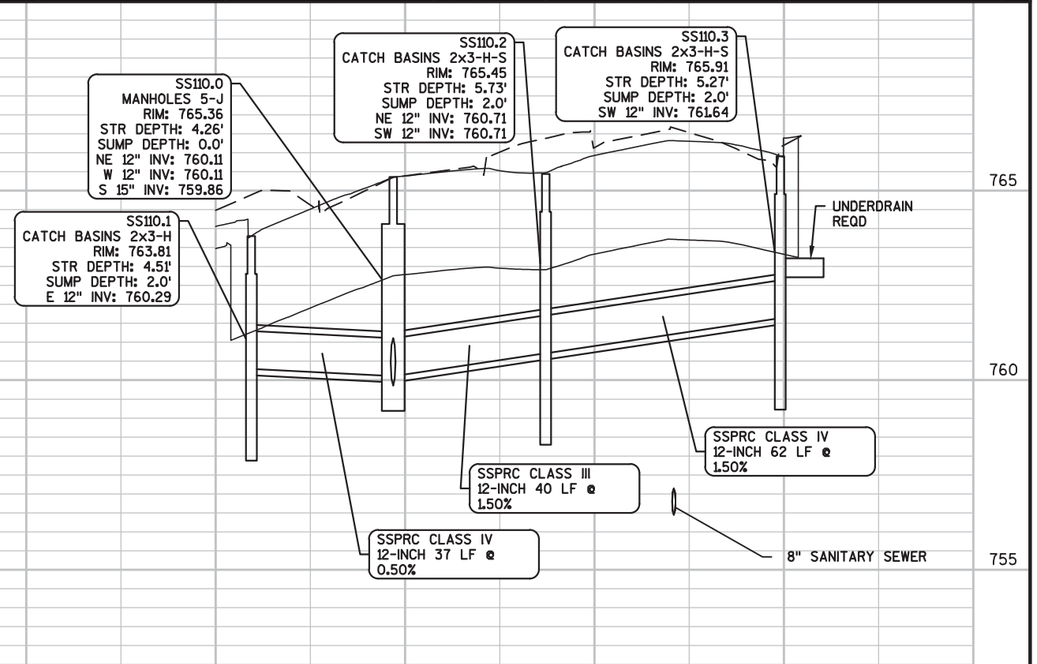
PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET 48	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-022501-SS.DWG
LAYOUT NAME - 61901572-022510-SS
PLOT DATE : 1/27/2017 10:22 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 41



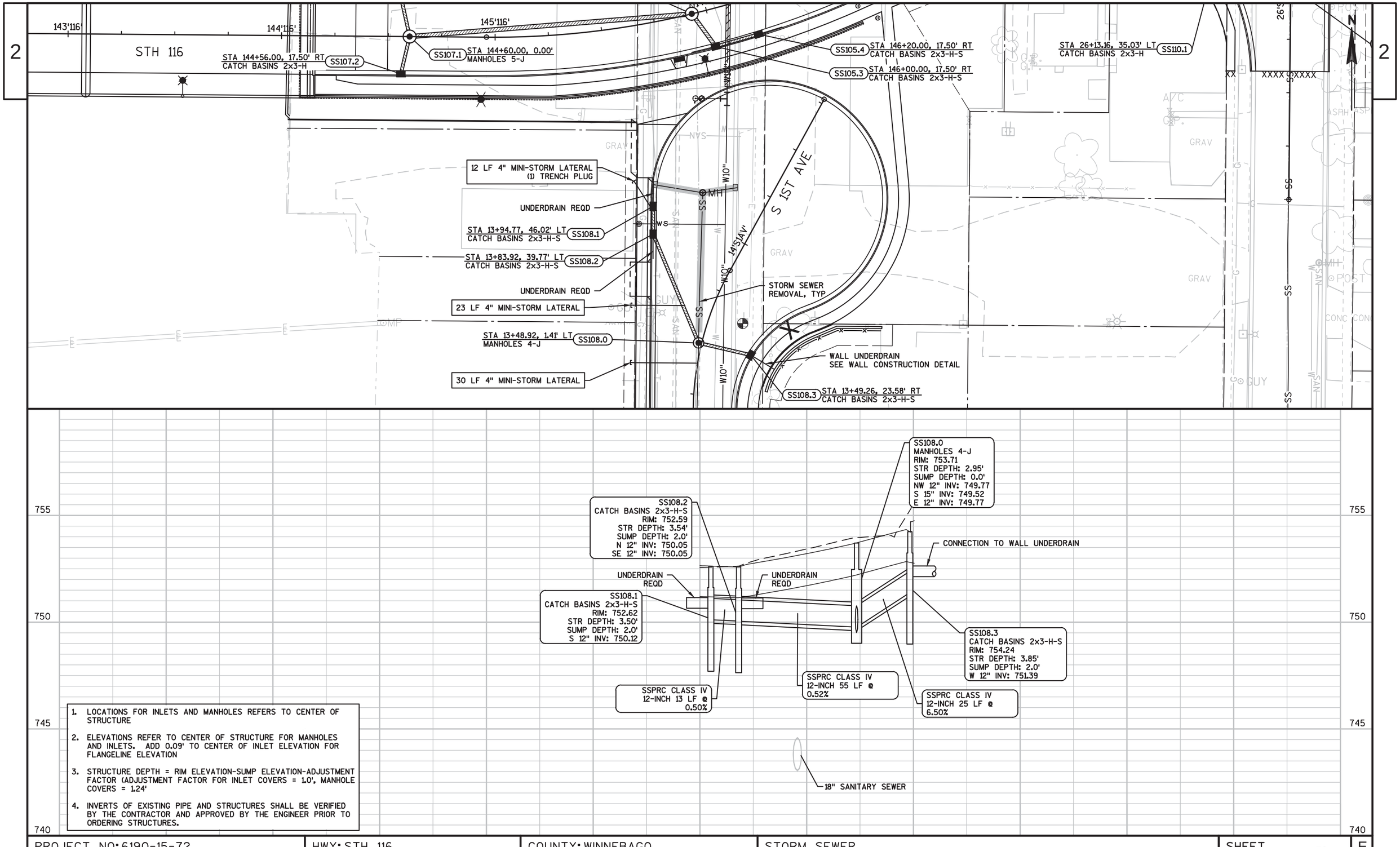
1. LOCATIONS FOR INLETS AND MANHOLES REFERS TO CENTER OF STRUCTURE
2. ELEVATIONS REFER TO CENTER OF STRUCTURE FOR MANHOLES AND INLETS. ADD 0.09' TO CENTER OF INLET ELEVATION FOR FLANGELINE ELEVATION
3. STRUCTURE DEPTH = RIM ELEVATION-SUMP ELEVATION-ADJUSTMENT FACTOR (ADJUSTMENT FACTOR FOR INLET COVERS = 1.0', MANHOLE COVERS = 1.24'
4. INVERTS OF EXISTING PIPE AND STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.



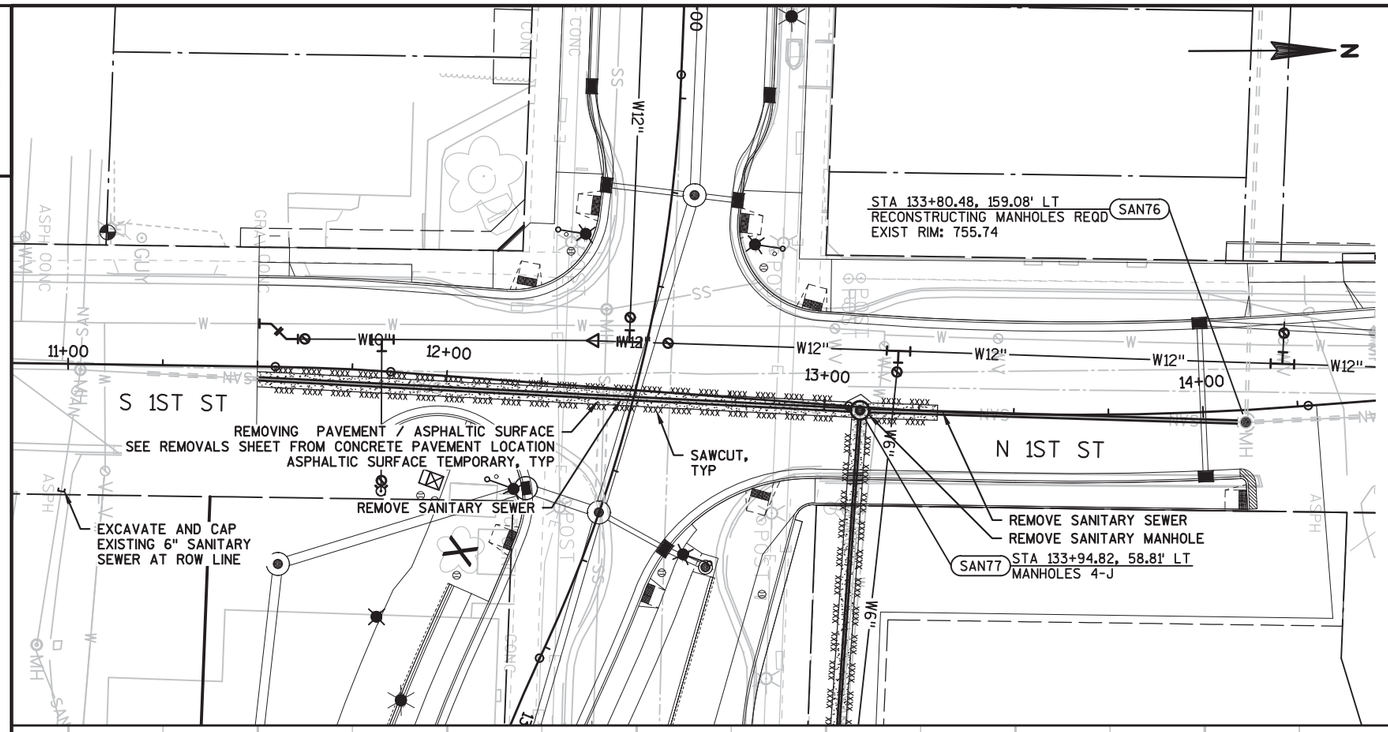


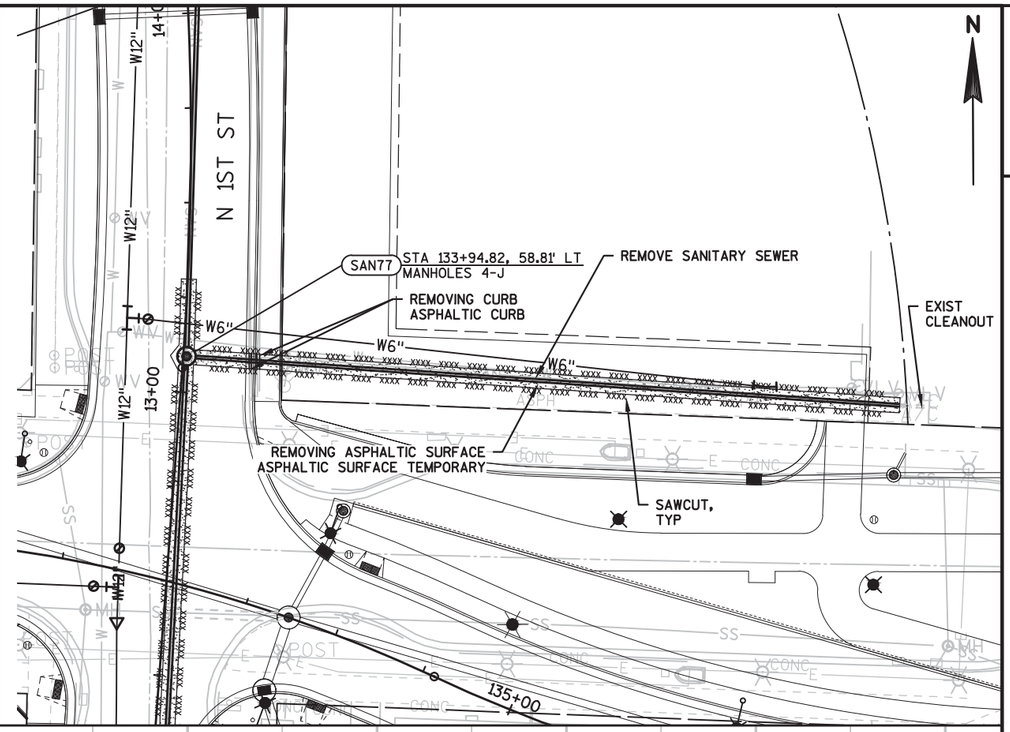
PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	STORM SEWER	SHEET 49	E

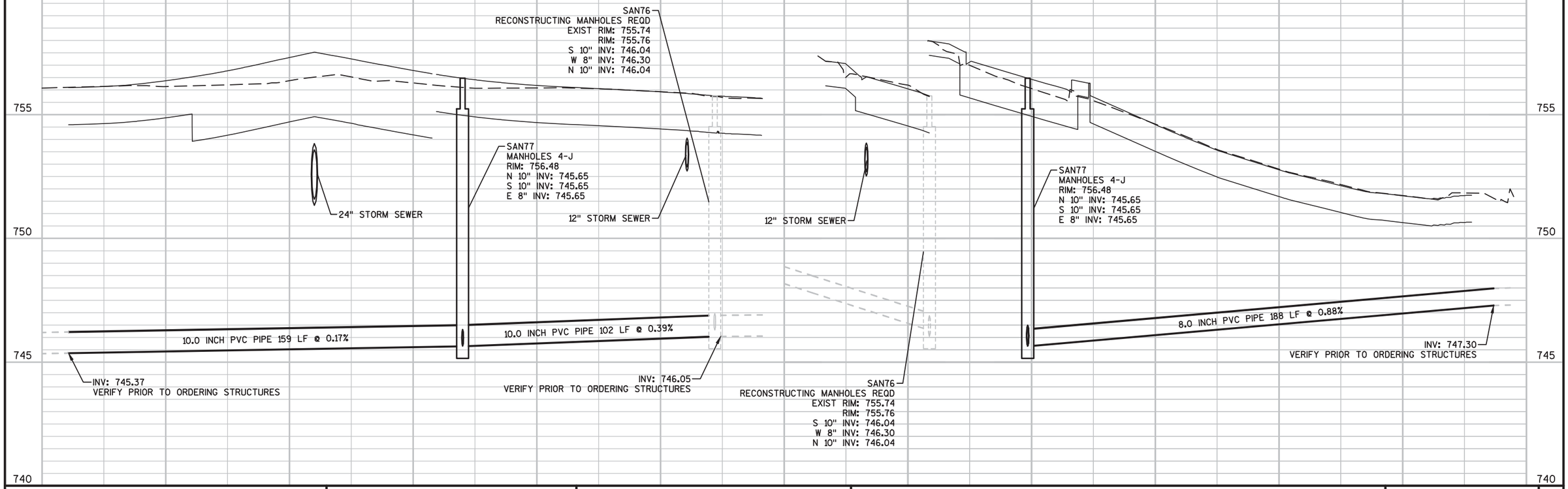
FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-022501-SS.DWG
LAYOUT NAME - 61901572-022511-SS
PLOT DATE : 1/27/2017 10:18 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 41



1. LOCATIONS FOR INLETS AND MANHOLES REFERS TO CENTER OF STRUCTURE
2. ELEVATIONS REFER TO CENTER OF STRUCTURE FOR MANHOLES AND INLETS. ADD 0.09' TO CENTER OF INLET ELEVATION FOR FLANGELINE ELEVATION
3. STRUCTURE DEPTH = RIM ELEVATION-SUMP ELEVATION-ADJUSTMENT FACTOR (ADJUSTMENT FACTOR FOR INLET COVERS = 1.0', MANHOLE COVERS = 1.24'
4. INVERTS OF EXISTING PIPE AND STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO ORDERING STRUCTURES.



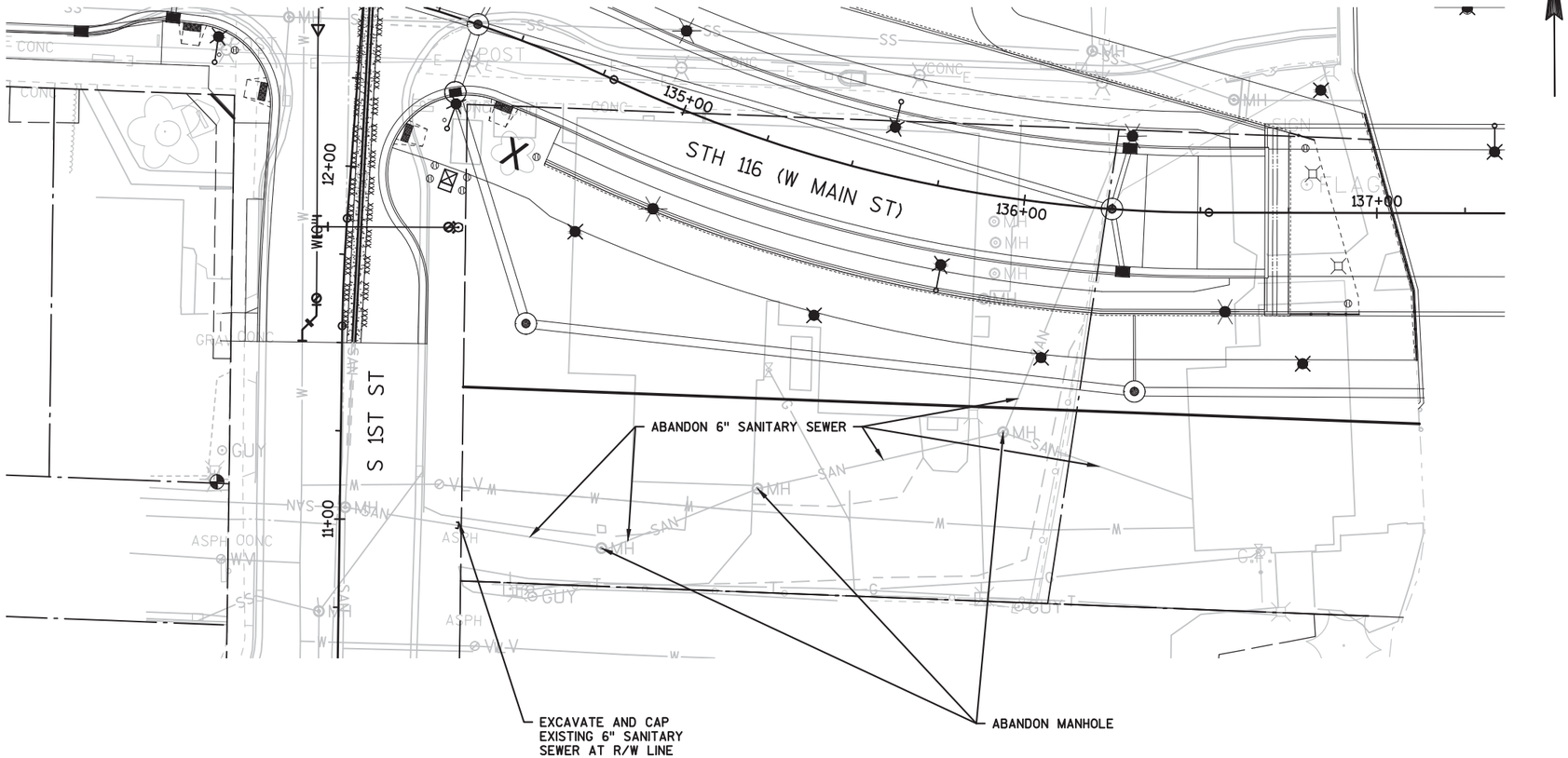




PROJECT NO: 6190-15-74	HWY: STH 116	COUNTY: WINNEBAGO	SANITARY SEWER	SHEET 51	E

2

N



N

PROJECT NO: 6190-15-74	HWY: STH 116	COUNTY: WINNEBAGO	SANITARY SEWER	SHEET 52	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\74 SHEETS\61901574-023001-UP.DWG
LAYOUT NAME - 61901574-023005-UP
PLOT DATE : 2/28/2017 10:16 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 41

2

30 LF SANITARY SEWER LATERAL (1) TRENCH PLUG

30 LF SANITARY SEWER LATERAL (1) TRENCH PLUG

30 LF SANITARY SEWER LATERAL (1) TRENCH PLUG

SAN193 STA 148+84.21, 1.25' LT
MANHOLES 4-J

CONSTRUCTION LIMITS
72/74 ← → 71/73

STA 146+05.21, 64.16' LT
RECONSTRUCTING MANHOLES REQD
EXIST RIM: 754.66
SAN170

N 1ST AVE

N 2ND AVE

S 2ND AVE

STH 116 (E MAIN ST)

REMOVE SANITARY SEWER

REMOVE SANITARY MANHOLE

(1) TRENCH PLUG

REMOVE SANITARY SEWER

32 LF SANITARY SEWER LATERAL
INSTALL DURING STAGE 1 AND TEMPORARILY CONNECT
TO EXISTING SERVICE UNTIL FINAL CONNECTION MADE IN STAGE 5
SAWCUTS, REMOVALS, AND RESTORATION SHOWN ON WATER PLANS

36 LF SANITARY SEWER LATERAL
6" PROPOSED REGARDLESS OF EXISTING SIZE
(1) TRENCH PLUG
INSTALL DURING STAGE 1 AND TEMPORARILY CONNECT
TO EXISTING SERVICE UNTIL FINAL CONNECTION MADE IN STAGE 5
SAWCUTS, REMOVALS, AND RESTORATION SHOWN ON WATER PLANS

EXCAVATE AND CAP SANITARY SERVICE LATERAL AT TRUNK

144+00 145+00 146+00 147+00 148+00 149+00 150+00

17+00 26+00 27+00

N

755 750 745

SAN170
RECONSTRUCTING MANHOLES REQD
EXIST RIM: 754.66
RIM: 756.38
S 18" INV: 743.28
N 18" INV: 743.28
E 8" INV: 748.36

12" STORM SEWER

8.0 INCH PVC PIPE 286 LF @ 2.72%

CONNECT TO EXISTING PVC EXTERNAL DROP

765 760 755 750

SAN193
MANHOLES 4-J
RIM: 765.09
E 8" INV: 756.25
W 8" INV: 756.15

8.0 INCH PVC PIPE 76 LF @ 0.41%

-74 CONSTRUCTION LIMITS
CONNECT TO EXIST SANITARY SEWER
INSTALLED UNDER PROJECT 6190-15-73

8.0 INCH PVC PIPE 286 LF @ 2.72%

PROJECT NO: 6190-15-74	HWY: STH 116	COUNTY: WINNEBAGO	SANITARY SEWER	SHEET 53	E

CONSTRUCTION LIMITS
71/73 ← → 72/74

STH 116 (W MAIN ST)

N 1ST

S 2ND ST

131+00 132+00 133+00 134+00 135+00 136+00 137+00

W12" W12" W12" W12" W12" W12"

71/73 ← → 72/74

130 LF 12" WATER MAIN

LIMIT OF WATERMAIN INSTALLED IN STAGE 1

(1) 12"X12" TEE
STA 133+91.0, 4.6' RT
(1) 12" VALVE AND BOX

SAWCUT, TYP

REMOVING ASPHALTIC SURFACE
ASPHALTIC SURFACE TEMPORARY

169 LF 6" WATER MAIN

6" 11.25° BEND
STA 135+41.2, 102.5' LT
CONNECT TO EXIST MAIN
VERIFY H AND V LOCATION

REMOVE HYDRANT

REMOVE VALVE

REMOVE VALVE

REMOVE VALVE

REMOVE HYDRANT

ANTICIPATED CONTAMINATED SOIL LIMITS

N

EXISTING GRADE ALONG MAIN

PROPOSED GRADE ALONG MAIN

PROPOSED SUBGRADE ALONG MAIN

STA: 131+01.3
T/P: 758.4

STA: 132+60.0
T/P: 753.5

7' MIN DEPTH

12" STORM SEWER

12"X12" TEE
STA 133+91.0
T/P: 749.5

PROPOSED 1ST ST WATER MAIN

-74 CONSTRUCTION LIMITS
PROVIDE TEMPORARY CAP

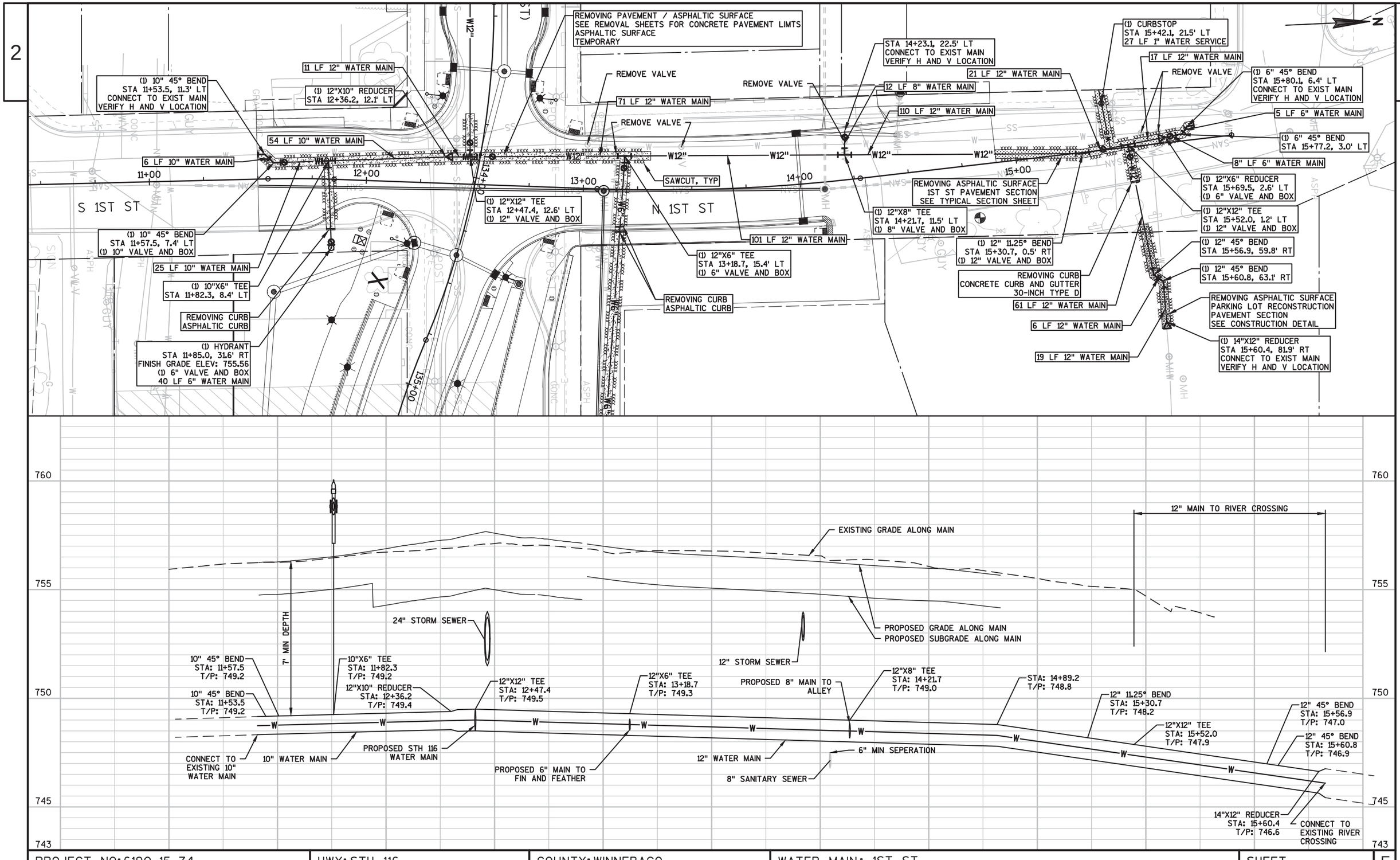
12" WATER MAIN

10" SANITARY SEWER

760 755 750 745

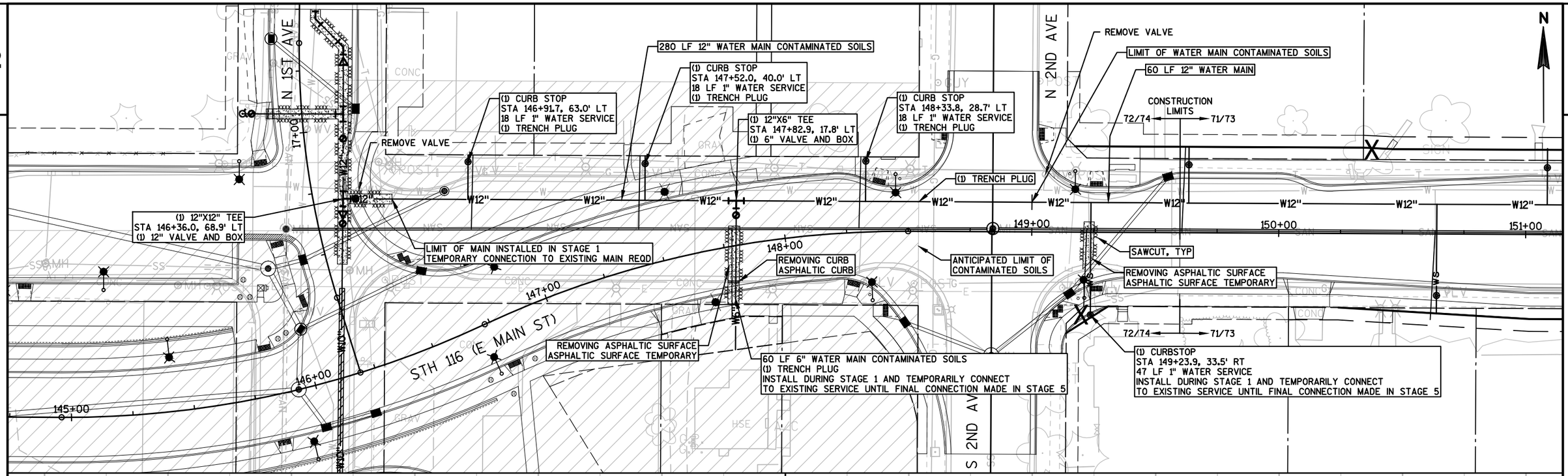
PROJECT NO: 6190-15-74	HWY: STH 116	COUNTY: WINNEBAGO	WATER MAIN: W MAIN ST	SHEET 54	E

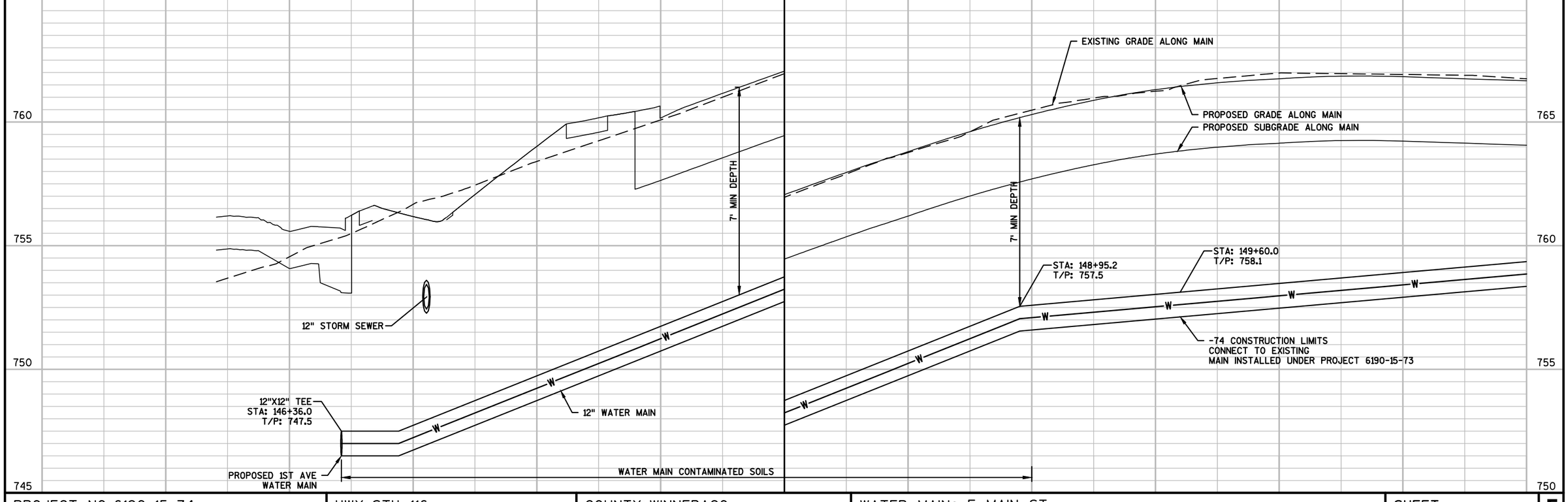
FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\74 SHEETS\61901574-023050-UP.DWG
LAYOUT NAME - 61901574-023050-UP
PLOT DATE : 5/11/2017 12:56 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 41



PROJECT NO: 6190-15-74	HWY: STH 116	COUNTY: WINNEBAGO	WATER MAIN: 1ST ST	SHEET 55	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\74 SHEETS\61901574-023050-UP.DWG
LAYOUT NAME - 61901574-023051-UP
PLOT DATE : 2/23/2017 8:19 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 41





PROJECT NO: 6190-15-74	HWY: STH 116	COUNTY: WINNEBAGO	WATER MAIN: E MAIN ST	SHEET 56	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\74 SHEETS\61901574-023050-UP.DWG
LAYOUT NAME - 61901574-023070-UP
PLOT DATE : 5/11/2017 12:52 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 41

2

(1) CURBSTOP
STA 13+84.8, 47.9' LT
43 LF 1" WATER SERVICE

154 LF 10" WATER MAIN
CONT SOILS

6 LF 10" WATER MAIN
CONT SOILS

(1) HYDRANT
STA 14+48.6, 53.0' LT
FINISH GRADE ELEV: 753.91
(1) 6" VALVE AND BOX
15 LF 6" WATER MAIN CONTAMINATED SOILS

REMOVE VALVE

(1) TRENCH PLUG

(1) 10"X6" TEE
STA 14+55.5, 40.0' LT

END OF CASING
STA 14+60.6, 42.6' LT

END OF CASING
STA 16+34.8, 3.0' RT

(1) 10" 45° BEND
STA 13+09.5, 13.8' RT

(1) 10" 45° BEND
STA 13+05.8, 9.8' RT
CONNECT TO EXIST MAIN
VERIFY H AND V LOCATION

109 LF 10" WATER MAIN
CONT SOILS

8 LF 12" WATER MAIN
CONT SOILS

34 LF 12" WATER MAIN
CONT SOILS

(1) HYDRANT
STA 17+09.3, 24.0' LT
FINISH GRADE ELEV: 753.69
(1) 6" VALVE AND BOX
41 LF 6" WATER MAIN CONTAMINATED SOILS

REMOVE HYDRANT

REMOVE VALVE

24 LF 12" WATER MAIN CONT SOILS

(1) 10" 45° BEND
STA 17+46.1, 6.5' RT
CONNECT TO EXIST MAIN
VERIFY H AND V LOCATION

REMOVING APSHALTIC SURFACE
ASPHALTIC SURFACE TEMPORARY

16 LF 10" WATER MAIN CONT SOILS

(1) 10" 45° BEND
STA 17+34.8, 17.8' RT

SAWCUT, TYP

(1) 12"X12" TEE
STA 16+70.7, 12.0' RT
(1) 12" VALVE AND BOX

(1) 12"X10" REDUCER
STA 17+30.2, 17.8' RT

(1) 12"X10" REDUCER
STA 16+62.6, 10.3' RT
(1) 10" VALVE AND BOX

(1) TRENCH PLUG

12"X6" TEE
STA 17+06.2, 16.7' RT

ANTICIPATED LIMIT OF
SOIL CONTAMINATION

13+00 14+00 16+00 17+00 18+00 19+00

S 1ST AVE

N 1ST AVE

STH 116 (E MAIN ST)

W10" W12"

N

PROPOSED GRADE ALONG MAIN
PROPOSED SUBGRADE ALONG MAIN
EXISTING GRADE ALONG MAIN
12" STORM SEWER
12" STORM SEWER
12" STORM SEWER
12" STORM SEWER
7' MIN DEPTH
18" MIN
8" SANITARY SEWER
12"X10" REDUCER
STA: 16+62.6
T/P: 747.3
12"X12" TEE
STA: 16+70.7
T/P: 747.5
12"X6" TEE
STA: 17+06.2
T/P: 747.0
12"X10" REDUCER
STA: 17+30.2
T/P: 746.6
10" 45° BEND
STA: 17+34.8
T/P: 746.6
10" 45° BEND
STA: 17+46.1
T/P: 746.3
10" 45° BEND
STA: 13+05.8
T/P: 747.2
10" 45° BEND
STA: 13+09.5
T/P: 747.1
STA: 13+98.0
T/P: 746.4
10"X6" TEE
STA: 14+55.5
T/P: 746.4
STA: 14+53.4
T/P: 746.4
END OF CASING
STA: 16+34.8
T/P: 747.1
END OF CASING
STA: 14+60.6
T/P: 746.5
PROPOSED STH 116
WATER MAIN
CONNECT TO EXISTING
10" WATER MAIN
10" WATER MAIN
CONTAMINATED
SOILS
24" CASING PIPE
REQD
12" WATER MAIN
CONTAMINATED
SOILS
CONNECT TO
EXISTING 10" WATER
MAIN

755 750 745 740

PROJECT NO: 6190-15-74	HWY: STH 116	COUNTY: WINNEBAGO	WATER MAIN: 1ST AVE	SHEET 57	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\74 SHEETS\61901574-023050-UP.DWG
LAYOUT NAME - 61901574-023071-UP
PLOT DATE : 2/23/2017 8:19 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 41

2

SIGN-REMOVE EXISTING

SIGN-REMOVE AND REPLACE

SIGN-PLACE NEW

N

STOP
R1-1
30" X 30"
1

1ST ST

SPEED LIMIT 25
R2-1
24" X 30"
MOUNT TO LIGHT POLE
3

NO FISHING FROM BRIDGE
R9-55
18" X 24"
MOUNT TO LIGHT POLE
4A

135

BEGIN ONE WAY
R6-6
24" X 30"
2A

WRONG WAY
R5-1A
36" X 24"
2AA

6190-15-71

6190-15-72

WRONG WAY
R5-1A
36" X 24"
2

SIGNING NOTES

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

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

VILLAGE STREET SIGNS SHALL NOT BE INSTALLED ON STATE OWNED STOP SIGNS.
CONTACT VILLAGE OF WINNECONNE PUBLIC WORKS (920-582-4381) FOR REMOVAL OF VILLAGE OWNED SIGNS.

2

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET 58	E

N

DO NOT ENTER
R5-1
30" X 30"
5AA

W6-3
36" X 36"
AHEAD
W16-9P
24" X 8"
5A
5B

GRAV CONC
ASPH CONC

DO NOT ENTER
R5-1
30" X 30"
5DD

ONE WAY
R6-2R
24" X 30"
5DDD

ASPH
ASPH

1ST ST

WRONG WAY
R5-1A
36" X 24"
5C

GRAV

5D
WRONG WAY
R5-1A
36" X 24"

STOP
R1-1
30" X 30"
5E

END ONE WAY
R6-7
24" X 30"
5F

DO NOT ENTER
R5-1
30" X 30"
5G

5H
STOP
R1-1
30" X 30"

5I
END ONE WAY
R6-7
24" X 30"

5J
DO NOT ENTER
R5-1
30" X 30"

5K
ONE WAY
R6-2R
24" X 30"

5L
ONE WAY
R6-1R
36" X 12"

5M
STOP
R1-1
30" X 30"

5N
R3-2
24" X 24"

5Q
LEFT TURN ONLY
R3-53L
24" X 30"

5PP
ONE WAY
R6-1L
36" X 12"

5P
STOP
R1-1
30" X 30"

SIGN-REMOVE EXISTING

SIGN-REMOVE AND REPLACE

SIGN-PLACE NEW

SIGNING NOTES

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

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

VILLAGE STREET SIGNS SHALL NOT BE INSTALLED ON STATE OWNED STOP SIGNS.
CONTACT VILLAGE OF WINNECONNE PUBLIC WORKS (920-582-4381) FOR REMOVAL OF VILLAGE OWNED SIGNS.

SIGN-REMOVE EXISTING

SIGN-REMOVE AND REPLACE

SIGN-PLACE NEW

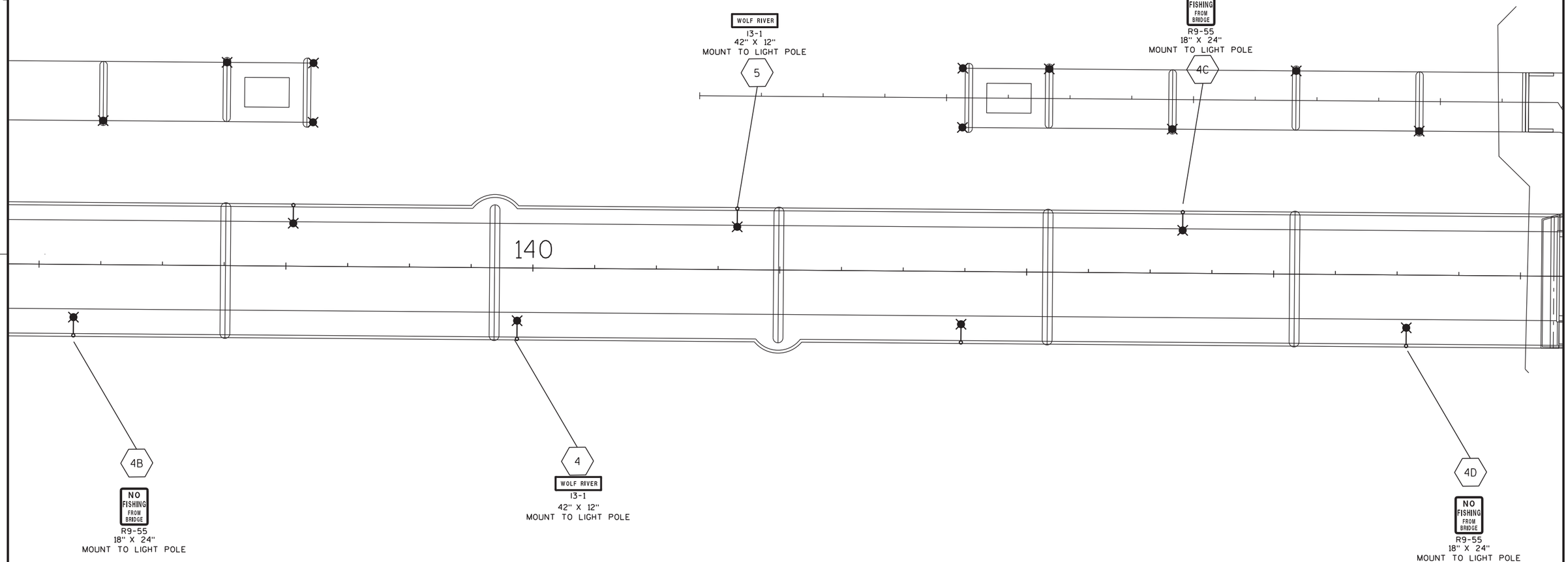
N

SIGNING NOTES

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

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

VILLAGE STREET SIGNS SHALL NOT BE INSTALLED ON STATE OWNED STOP SIGNS.
CONTACT VILLAGE OF WINNECONNE PUBLIC WORKS (920-582-4381) FOR REMOVAL OF VILLAGE OWNED SIGNS.



PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET 60	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\6190-15-72 STH 116 Winneconne Bridge- Winnebago\61901572_sgnpln.dgn PLOT DATE : 19-DEC-2016 08:21 PLOT BY : dotets PLOT NAME : PLOT SCALE : 40.0149:1

WISDOT/CADDS SHEET 42

2

2

RESERVED PARKING
THIS SPACE
R7-8A
12" X 18"
6A

VAN ACCESSIBLE
R7-8V
12" X 6"
6B

DO NOT ENTER
R5-1
30" X 30"
7

ONE WAY
R6-2L
24" X 30"
7A

ONE WAY
R6-2L
24" X 30"
7E

ONE WAY
R6-2R
24" X 30"
7F

SPEED LIMIT 25
R2-1
24" X 30"
11

END SCHOOL ZONE
S5-2
24" X 30"
12

STOP
R1-1
30" X 30"
13

2ND AVE

145

150

6

SPEED LIMIT 25
R2-1
24" X 30"

7B
7C
7D

W5-56
18" X 18"
3'-6" MOUNTING HEIGHT

8

S1-1
36" X 36"

9

AHEAD
S16-9P
30" X 18"

10

FINES HIGHER
R2-6P
24" X 18"

N

14

STOP
R1-1
30" X 30"

15

SCHOOL SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT
S4-51
24" X 48"
MOUNT TO LIGHT POLE
RADAR BOARD TO
BE INSTALLED
BY MUNICIPALITY

6190-15-72

6190-15-71

SIGN-REMOVE EXISTING

SIGN-REMOVE AND REPLACE

SIGN-PLACE NEW

SIGNING NOTES

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

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

VILLAGE STREET SIGNS SHALL NOT BE INSTALLED ON STATE OWNED STOP SIGNS.
CONTACT VILLAGE OF WINNECONNE PUBLIC WORKS (920-582-4381) FOR REMOVAL OF VILLAGE OWNED SIGNS.

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET 61	E

2

SIGN-REMOVE EXISTING

SIGN-REMOVE AND REPLACE

SIGN-PLACE NEW

N

SIGNING NOTES

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

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CONTACT VILLAGE OF WINNECONNE PUBLIC WORKS (920-582-4381) FOR REMOVAL OF VILLAGE OWNED SIGNS.

1ST ST

ASPH

CONC

GRAV

135

6190-15-71

6190-15-72

21A — WEST 116 — J4-1 REMOVE

21 — STOP — R1-1 REMOVE

20 — SPEED LIMIT 25 — R2-1 REMOVE

22 — STOP — R1-1 REMOVE

23 — DRAW BRIDGE — W3-6 REMOVE

24 — SPEED LIMIT 25 — R2-1 REMOVE

25 — $500 FINE FOR THROWING LITTER OR TRASH ON HIGHWAYS KEEP WISCONSIN CLEAN — R5-56 REMOVE

26 — NO PARKING ANY TIME — R7-1D REMOVE

27 — STEEL GRID DECK — W8-63 REMOVE

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	SIGN REMOVALS	SHEET 62	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\6190-15-72 STH 116 Winneconne Bridge- Winnebago\61901572_sgnpln.dgn PLOT DATE : 19-DEC-2016 08:21 PLOT BY : dotets PLOT NAME : PLOT SCALE : 40.079722:1

2

2

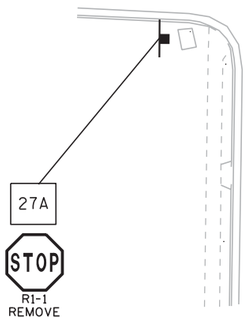
N

ASPH CONC

ASPH

GRAV

1ST ST



SIGN-REMOVE EXISTING

SIGN-REMOVE AND REPLACE

SIGN-PLACE NEW

SIGNING NOTES

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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	SIGN REMOVALS	SHEET 63	E

SIGN-REMOVE EXISTING

SIGN-REMOVE AND REPLACE

SIGN-PLACE NEW

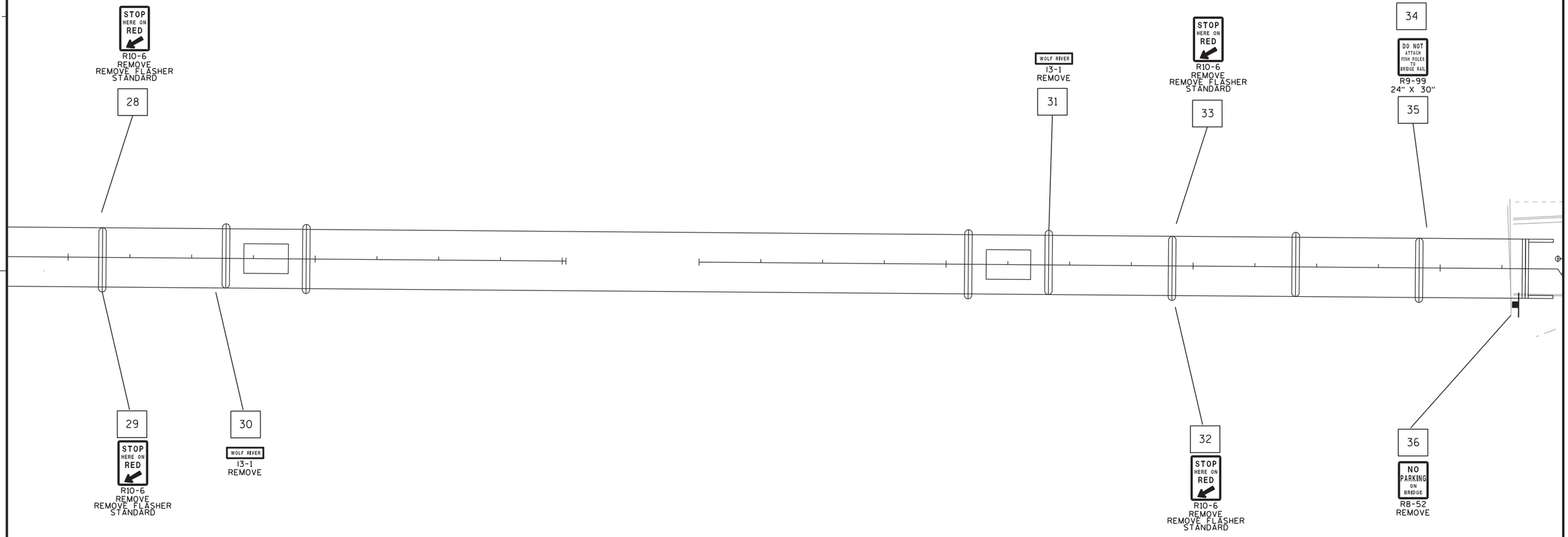
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SIGNING NOTES

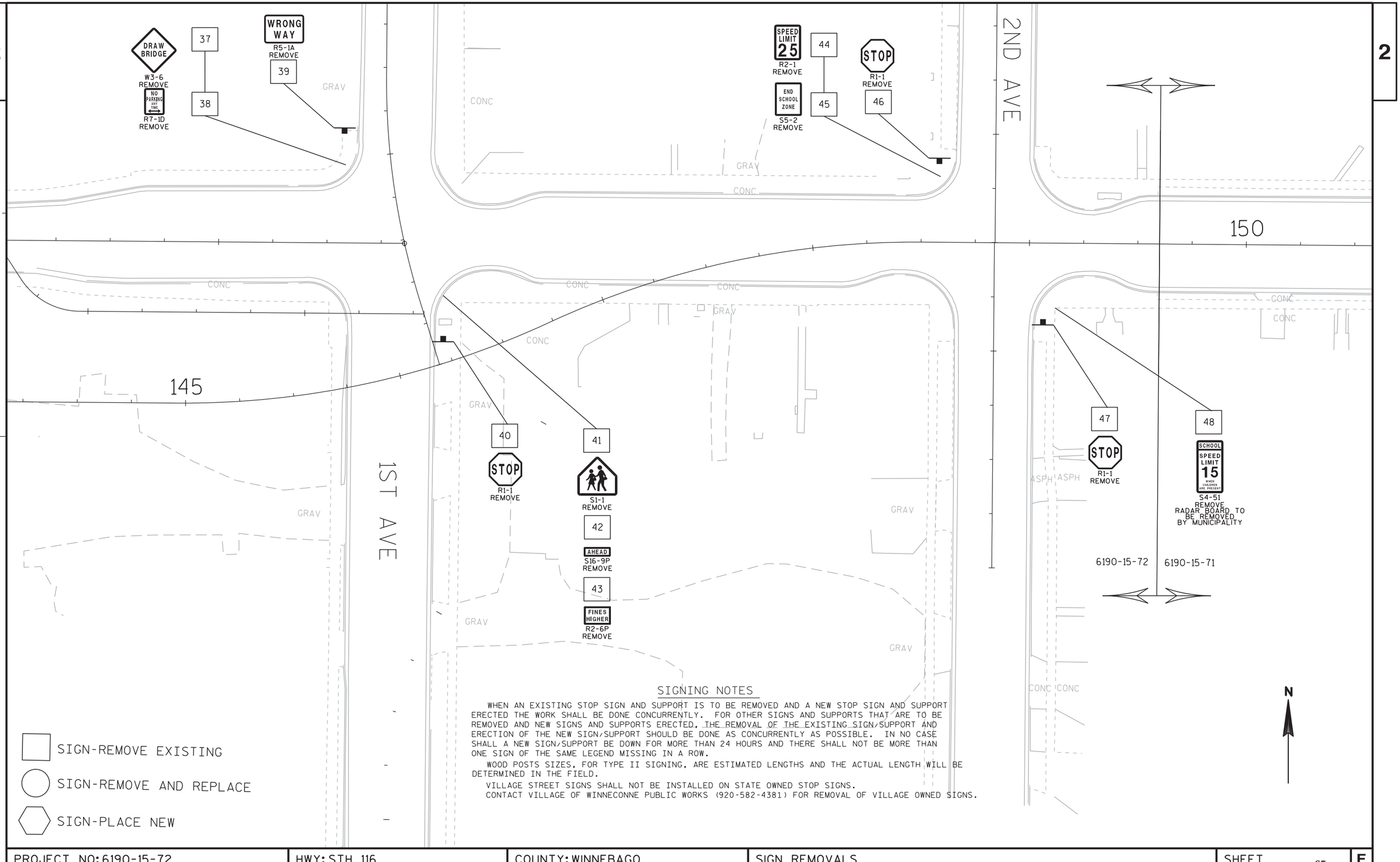
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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	SIGN REMOVALS	SHEET 64	E



SIGNING NOTES

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

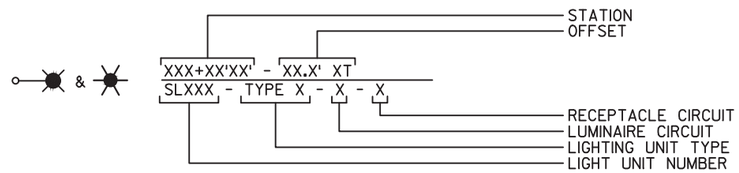
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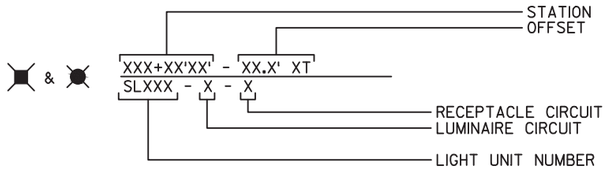
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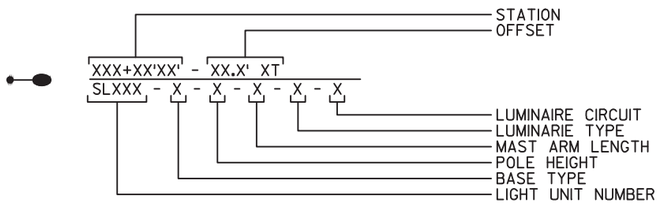
PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	SIGN REMOVALS	SHEET 65	E

LIGHTING PLAN LEGEND:

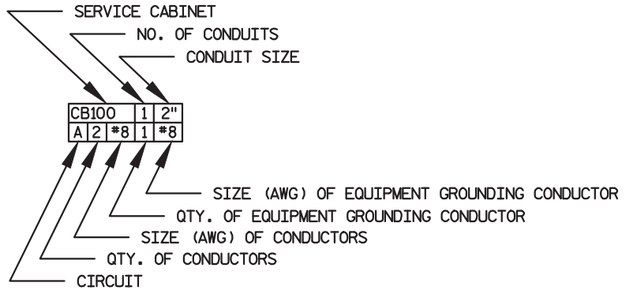
- EXISTING DECORATIVE STREET LIGHT
- EXISTING DECORATIVE PEDESTRIAN STREET LIGHT
- DECORATIVE STREET LIGHT (TYPE A)
- DECORATIVE PEDESTRIAN STREET LIGHT (TYPE B)
- WISDOT UTILITY WALKWAY LED LIGHTING UNIT
- BOLLARD WALKWAY LED LIGHTING UNIT
- NAVIGATION LIGHT - CENTER OF CHANNEL (GREEN)
- NAVIGATION LIGHT - EDGE OF CHANNEL (RED)
- SINGLE ARM LIGHTING UNIT
- CONCRETE CONTROL CABINET BASE/LIGHTING CONTROL CABINET
- ELECTRICAL SERVICE METER BREAKER PEDESTAL
- PULL BOX NON-CONDUCTIVE (24"X42")
- LIGHTING CONDUIT (2" SCHEDULE 40 PVC UNLESS NOTED)
- X — REMOVE AND SALVAGE EXISTING STREET LIGHTING UNIT







CONDUIT/CONDUCTOR LEGEND



PWO = PULL WIRE ONLY

GENERAL STREET LIGHTING NOTES:

1) THE ENGINEER SHALL APPROVE THE FINAL LOCATION FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION.

2) PITCH ALL CONDUITS TOWARD PULLBOXES. INSTALL A 2" DRAIN DUCT TO DITCH OR STORM SEWER AS REQUIRED FOR DRAINAGE. THIS 2" DRAIN DUCT IS INCIDENTAL TO THE PULL BOX BID ITEM. DRAIN DUCT IS NOT SHOWN. DO NOT SPLICE IN PULLBOXES.

3) 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.

4) TEMPORARY LIGHTING IS NOT SHOWN IN THE LIGHTING PLANS. ALL TEMPORARY LIGHTING FOR THIS PROJECT IS DEFINED AND PAID FOR UNDER THE TEMPORARY LIGHTING SPECIAL PROVISION.

SHEET 1 OF 11

STREET LIGHTING PLANS PREPARED BY:



1/31/2017 (DATE) (SIGNATURE)

CONDUCTOR COLOR LEGEND

CB100	CB200	CB300
STREET LIGHTING CONDUCTORS A - BLACK B - RED C - BLACK D - RED	STREET LIGHTING CONDUCTORS A - BLACK B - RED C - BLACK D - RED	NAVIGATION LIGHTING CONDUCTORS A - BLACK & NEUTRAL B - RED & NEUTRAL
240V PHASE TO PHASE	240V PHASE TO PHASE	120V PHASE TO GROUND
STREET LIGHTING RECEPTACLE CONDUCTORS E - BLUE & NEUTRAL F - BROWN & NEUTRAL G - BLUE & NEUTRAL H - BROWN & NEUTRAL	STREET LIGHTING RECEPTACLE CONDUCTORS E - BLUE & NEUTRAL F - BROWN & NEUTRAL G - BLUE & NEUTRAL H - BROWN & NEUTRAL	
120V PHASE TO GROUND	120V PHASE TO GROUND	
PEDESTRIAN LIGHTING CONDUCTORS I - BLACK & NEUTRAL J - RED & NEUTRAL	PARK AND RIDE LIGHTING CONDUCTORS I - BLACK & NEUTRAL J - RED & NEUTRAL	
120V PHASE TO GROUND	120V PHASE TO GROUND	
PEDESTRIAN LIGHTING RECEPTACLE CONDUCTORS K - BLUE & NEUTRAL L - BROWN & NEUTRAL	PEDESTRIAN LIGHTING CONDUCTORS K - BLACK & NEUTRAL	
120V PHASE TO GROUND	120V PHASE TO GROUND	
FISHING PLATFORM M - ORANGE & NEUTRAL	PEDESTRIAN LIGHTING RECEPTACLE CONDUCTORS L - BLUE & NEUTRAL	
120V PHASE TO GROUND	120V PHASE TO GROUND	
PLANTER RECEPTACLE CONDUCTORS N - ORANGE & NEUTRAL O - ORANGE & NEUTRAL	FISHING PLATFORM M - ORANGE & NEUTRAL	
120V PHASE TO GROUND	120V PHASE TO GROUND	

NOTES:

1) REINSTALL SALVAGED STREET LIGHTING UNIT

2) RETRO-FIT STREET LIGHT WITH LED LUMINAIRE

3) STREET LIGHTS WEST OF PROJECT 6190-15-72 LIMITS TO REMAIN POWERED FROM EXISTING CONTROL CABINET ON 2ND ST

4) PLANTERS TO BE FED FROM EXISTING CONTROL CABINET ON 2ND ST UNTIL POWER IS DISCONNECTED IN PROJECT 6190-15-71

N

STA. 133+65.8 - 26.7' LT
PB106

STA. 133+60.5 - 30.8' LT
SL119 - TYPE A - B - F
SEE NOTE 1

CONNECT TO EXISTING PLANTERS

STA. 133+02.3 - 28.5' LT
SL117 - TYPE B - A - E
SEE NOTE 2

LIGHTING INSTALLED WITH PROJECT 6190-15-72

STA. 134+39.7 - 32.0' LT
SL121 - TYPE A - D - H
SEE NOTE 1

STA. 134+45.9 - 21.0' LT
PB105

STA. 134+91.8 - 21.0' LT
SL123 - TYPE B - C - G
SEE NOTE 1

STA. 135+59.6 - 21.0' LT
SL125 - TYPE A - D - H
SEE NOTE 1

SEE SHEET 8 OF 11 FOR PEDESTRIAN PATHWAY AND FISHING PIER LIGHTING

STA. 136+29.5 - 21.0' LT
SL127 - TYPE B - C - G
SEE NOTE 1

STA. 137+33.3 - 24.8' LT
SL200 - TYPE A - B - F

B-70-322

MATCH LINE STA. 137+50

STH 116/E MAIN ST

132+00

133+00

134+00

135+00

136+00

137+00

14+00

13+00

12+00

N 1ST ST

LIGHTING TO BE INSTALLED WITH PROJECT 6190-15-71

CONNECT TO EXISTING PLANTERS

STA. 132+93.3 - 27.1' RT
SL116 - TYPE B - B - F
SEE NOTE 2

STA. 133+64.2 - 28.5' RT
SL118 - TYPE A - A - E
SEE NOTE 1

STA. 133+69.7 - 24.2' RT
PB100

STA. 134+38.2 - 30.7' RT
SL120 - TYPE A - C - G
SEE NOTE 1

STA. 134+38.4 - 41.8' RT
PB102

STA. 134+38.4 - 45.8' RT
PB101

STA. 134+43.9 - 43.6' RT
CB100

STA. 135+02.1 - 29.2' RT
SL122 - TYPE B - D - H
SEE NOTE 1

STA. 134+66.9 - 29.0' RT
PB103

R-70-122

B-70-316

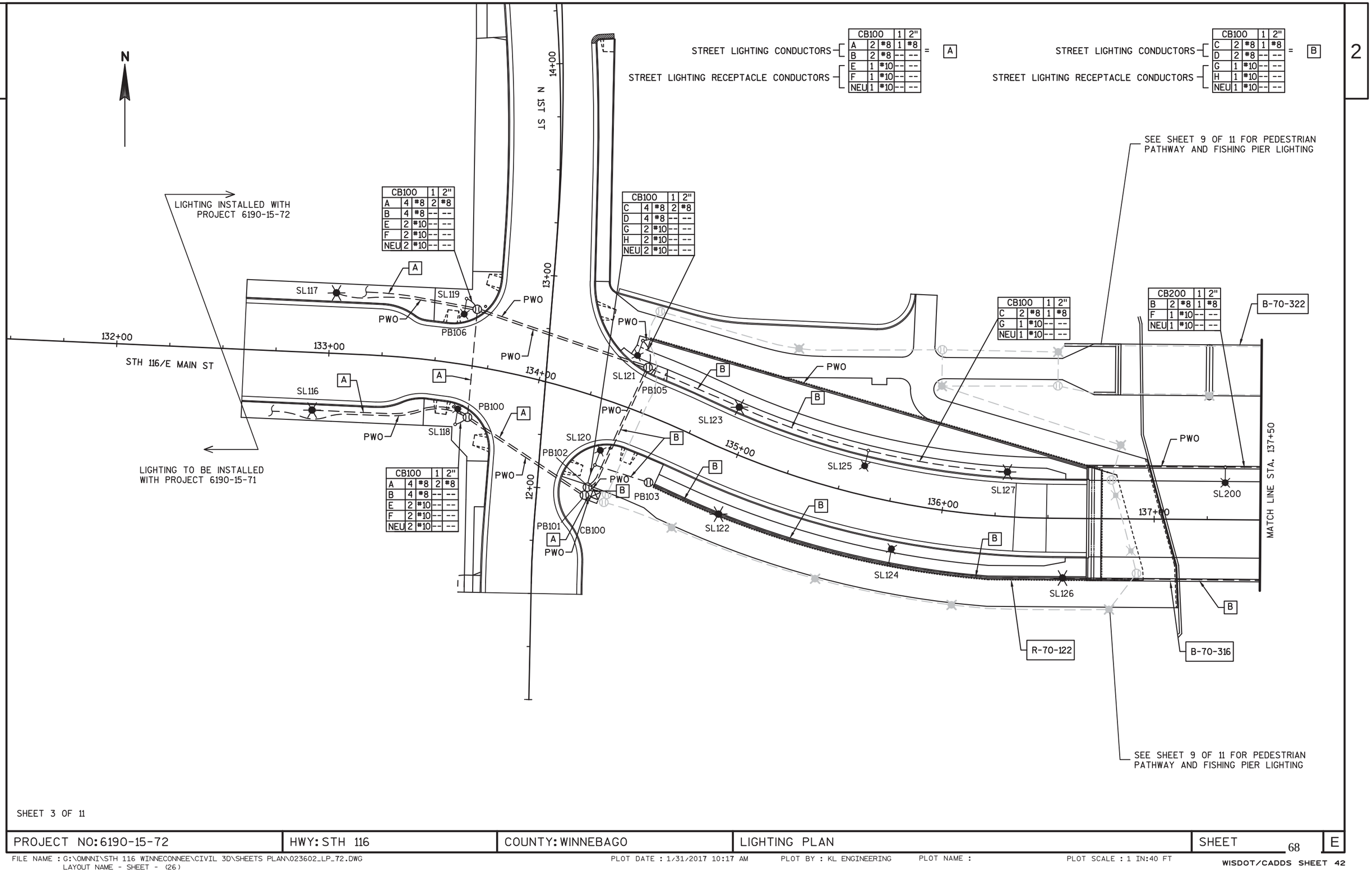
STA. 135+80.0 - 29.3' RT
SL124 - TYPE A - C - G
SEE NOTE 1

STA. 136+57.0 - 28.1' RT
SL126 - TYPE B - D - H
SEE NOTE 1

SEE SHEET 8 OF 11 FOR PEDESTRIAN PATHWAY AND FISHING PIER LIGHTING

SHEET 2 OF 11

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	LIGHTING PLAN	SHEET 67	E



CB100	1	2"
A	4	#8
B	4	#8
E	2	#10
F	2	#10
NEU	2	#10

CB100	1	2"
A	2	#8
B	2	#8
E	1	#10
F	1	#10
NEU	1	#10

CB100	1	2"
C	4	#8
D	4	#8
G	2	#10
H	2	#10
NEU	2	#10

CB100	1	2"
C	2	#8
D	2	#8
G	1	#10
H	1	#10
NEU	1	#10

CB100	1	2"
C	2	#8
G	1	#10
NEU	1	#10

CB200	1	2"
B	2	#8
F	1	#10
NEU	1	#10

SHEET 3 OF 11

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	LIGHTING PLAN	SHEET 68	E

FILE NAME : G:\OMNNI\STH 116 WINNECONNEE\CIVIL 3D\SHEETS PLAN\023602_LP_72.DWG
LAYOUT NAME - SHEET - (26)

PLOT DATE : 1/31/2017 10:17 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

SEE SHEET 8 OF 11 FOR FISHING PIER LIGHTING

SEE SHEET 10 OF 11 FOR FISHING PIER LIGHTING

SEE NAVIGATION LIGHTING DETAIL SHEETS

STA. 140+82.6 - 24.8' LT
SL202 - TYPE A - B - F

STA. 139+02.8 - 24.8' LT
SL201 - TYPE A - A - E

STA. 142+63.0 - 24.8' LT
SL203 - TYPE A - A - E

MATCH LINE STA. 137+50

138+00 139+00 140+00 141+00 142+00 143+00

STH 116/E MAIN ST

MATCH LINE STA. 143+50

B-70-316

STA. 138+14.1 - 28.8' RT
SL128 - TYPE A - C - G

STA. 139+93.8 - 28.8' RT
SL129 - TYPE A - D - H

STA. 141+73.6 - 28.8' RT
SL130 - TYPE A - C - G

SHEET 4 OF 11

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	LIGHTING PLAN	SHEET 69	E

FILE NAME : G:\OMNNI\STH 116 WINNECONNEE\CIVIL 3D\SHEETS PLAN\023601_LP_72.DWG
LAYOUT NAME - SHEET - (27)

PLOT DATE : 1/31/2017 10:07 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

SEE SHEET 9 OF 11
FOR FISHING PIER LIGHTING

SEE SHEET 11 OF 11
FOR FISHING PIER LIGHTING

SEE NAVIGATION LIGHTING
DETAIL SHEETS

CB200			1	2"
A	2	#8	1	#8
E	1	#10	--	--
N	1	#10	--	--

MATCH LINE STA. 137+50

SL201 SL202 SL203

138+00 139+00 140+00 141+00 142+00 143+00

STH 116/E MAIN ST

MATCH LINE STA. 143+50

SL128 SL129 SL130

B B B B

B-70-316

STREET LIGHTING CONDUCTORS
STREET LIGHTING RECEPTACLE CONDUCTORS

CB100			1	2"
C	2	#8	1	#8
D	2	#8	--	--
G	1	#10	--	--
H	1	#10	--	--
NEU	1	#10	--	--

= B

STREET LIGHTING CONDUCTORS
STREET LIGHTING RECEPTACLE CONDUCTORS

CB200			1	2"
A	2	#8	1	#8
B	2	#8	--	--
E	1	#10	--	--
F	1	#10	--	--
NEU	1	#10	--	--

= C

SHEET 5 OF 11

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	LIGHTING PLAN	SHEET 70	E

FILE NAME : G:\OMNNI\STH 116 WINNECONNEE\CIVIL 3D\SHEETS PLAN\023602_LP_72.DWG
LAYOUT NAME - SHEET - (27)
PLOT DATE : 1/31/2017 10:17 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:

1) REINSTALL SALVAGED STREET LIGHTING UNIT

SEE SHEET 10 OF 11 FOR PEDESTRIAN PATHWAY AND FISHING PIER LIGHTING

SEE SHEET 10 OF 11 FOR PARKING LOT LIGHTING

B-70-321

B-70-316

MATCH LINE STA. 143+50

144+00

145+00

146+00

147+00

148+00

149+00

17+00

N 1ST AVE

N 2ND AVE

S 1ST AVE

STH 116/E MAIN ST

STA. 145+93.3 - 23.5' LT
PB201

STA. 145+86.9 - 43.6' LT
CB200

STA. 145+81.4 - 40.9' LT
PB200

REMOVE EXISTING LIGHTING CONTROL CABINET

STA. 144+35.5 - 29.3' LT
SL204 - TYPE B - B - F
SEE NOTE 1

STA. 145+42.1 - 29.3' LT
SL205 - TYPE A - A - E
SEE NOTE 1

STA. 144+93.6 - 29.1' RT
SL132 - TYPE B - C - G
SEE NOTE 1

R-70-123

STA. 143+53.9 - 28.8' RT
SL131 - TYPE A - D - H
SEE NOTE 1

STA. 145+94.1 - 29.2' RT
SL133 - TYPE A - D - H
SEE NOTE 1

STA. 146+85.6 - 27.0' LT
SL207 - TYPE A - C - G
SEE NOTE 1

STA. 146+86.3 - 21.0' RT
PB202

STA. 146+70.8 - 21.0' RT
SL206 - TYPE A - D - H
SEE NOTE 1

STA. 146+71.8 - 30.5' RT
PB104

STA. 148+45.0 - 23.0' LT
SL211 - TYPE A - C - G
SEE NOTE 1

STA. 147+56.6 - 27.0' LT
SL209 - TYPE B - D - H
SEE NOTE 1

STA. 147+67.2 - 21.0' RT
SL208 - TYPE B - C - G
SEE NOTE 1

STA. 148+34.6 - 27.7' RT
SL210 - TYPE A - D - H
SEE NOTE 1

STA. 149+17.5 - 24.7' LT
SL213 - TYPE A - D - H
SEE NOTE 1

STA. 149+21.4 - 26.6' RT
SL212 - TYPE A - C - G
SEE NOTE 1

N

SHEET 6 OF 11

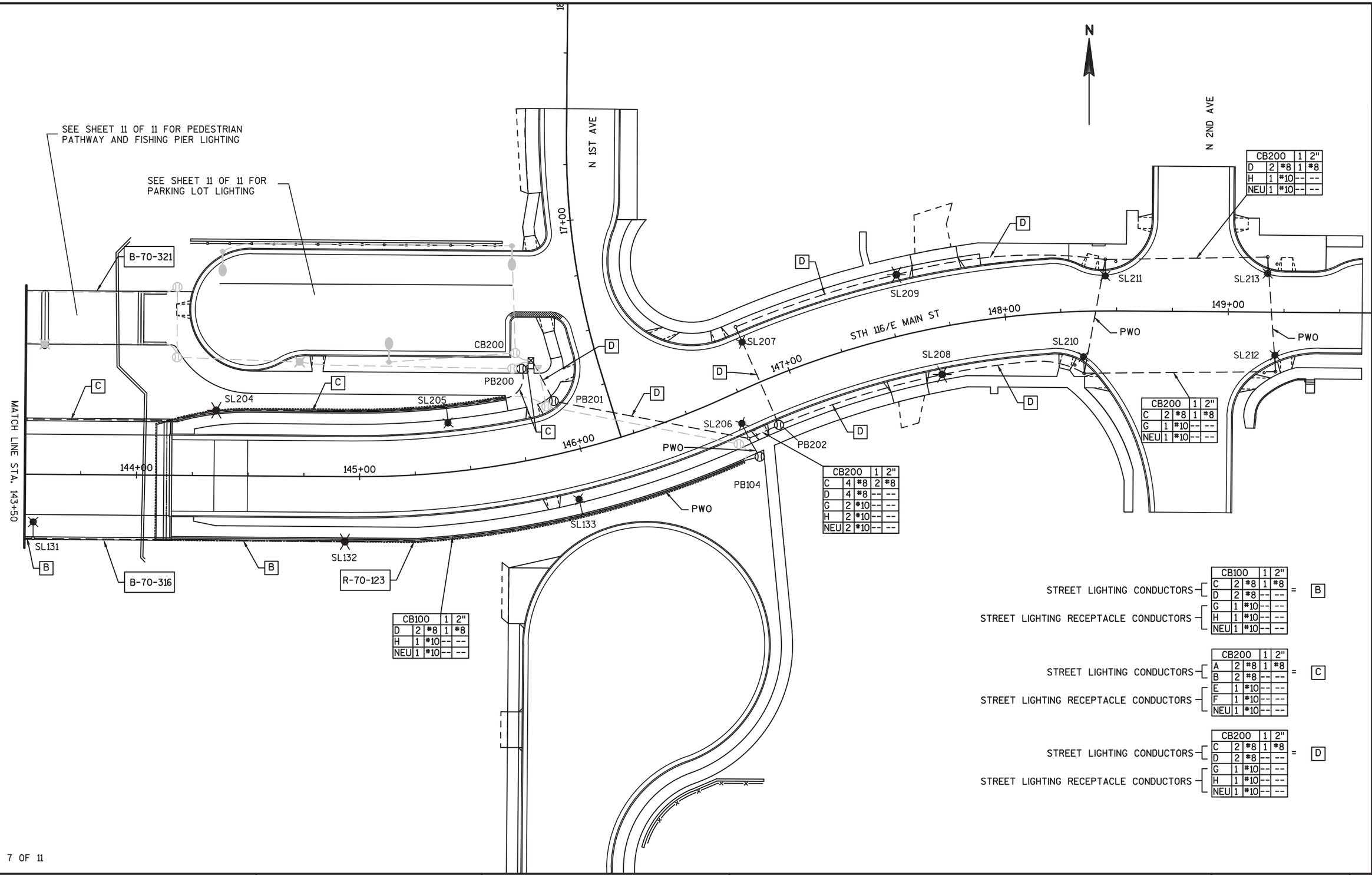
PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	LIGHTING PLAN	SHEET 71	E

FILE NAME : G:\OMNNI\STH 116 WINNECONNEE\CIVIL 3D\SHEETS PLAN\023601_LP_72.DWG
LAYOUT NAME - SHEET - (28)

PLOT DATE : 1/31/2017 10:07 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



CB200	1	2"
D	2	#8	1	#8
H	1	#10	--	--
NEU	1	#10	--	--

CB200	1	2"
C	2	#8	1	#8
G	1	#10	--	--
NEU	1	#10	--	--

CB200	1	2"
C	4	#8	2	#8
D	4	#8	--	--
G	2	#10	--	--
H	2	#10	--	--
NEU	2	#10	--	--

CB100	1	2"
D	2	#8	1	#8
H	1	#10	--	--
NEU	1	#10	--	--

STREET LIGHTING CONDUCTORS
STREET LIGHTING RECEPTACLE CONDUCTORS

CB100	1	2"
C	2	#8	1	#8
D	2	#8	--	--
G	1	#10	--	--
H	1	#10	--	--
NEU	1	#10	--	--

= B

STREET LIGHTING CONDUCTORS
STREET LIGHTING RECEPTACLE CONDUCTORS

CB200	1	2"
A	2	#8	1	#8
B	2	#8	--	--
E	1	#10	--	--
F	1	#10	--	--
NEU	1	#10	--	--

= C

STREET LIGHTING CONDUCTORS
STREET LIGHTING RECEPTACLE CONDUCTORS

CB200	1	2"
C	2	#8	1	#8
D	2	#8	--	--
G	1	#10	--	--
H	1	#10	--	--
NEU	1	#10	--	--

= D

SHEET 7 OF 11

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	LIGHTING PLAN	SHEET 72	E

NOTES:

1) GFCI RECEPTACLE TO BE INSTALLED ON POLE

2) STREET LIGHTING SHOWN ON PREVIOUS PLAN SHEETS

N

STA. 135+09.2 - 57.2' LT
SL141 - J - L
SEE NOTE 1

STA. 135+87.3 - 74.7' LT
PB112

STA. 134+42.4 - 47.8' LT
PB111

STA. 135+90.4 - 57.7' LT
SL142 - J - L
SEE NOTE 1

STA. 136+54.2 - 78.3' LT
SL143 - J - L
SEE NOTE 1

STA. 136+54.2 - 62.3' LT
PB113

SEE B-70-322
SL145 - J - L

B-70-322

SEE B-70-322
SL144 - J - L

SEE B-70-322
SL149 - J - L

SEE B-70-322
SL147 - J - L

TO FISHING SHELTER
SEE B-70-322

SEE B-70-322
SL146 - J - L

SEE B-70-322
SL148 - J - L

STA. 136+84.1 - 34.7' LT
SL140 - J - L
SEE NOTE 1

STA. 136+79.8 - 18.3' LT
PB109

STA. 136+81.8 - 11.1' LT
SL139 - I

STA. 134+85.8 - 43.7' RT
SL134 - I - K
SEE NOTE 1

STA. 134+49.3 - 41.8' RT
PB110

STA. 134+49.4 - 45.7' RT
PB107

R-70-122

STA. 136+89.1 - 15.1' RT
SL138 - I

B-70-316

STA. 136+91.9 - 25.7' RT
PB108

STA. 136+09.6 - 43.7' RT
SL136 - I - K
SEE NOTE 1

STA. 136+79.1 - 42.8' RT
SL137 - I - K
SEE NOTE 1

STA. 135+50.5 - 43.7' RT
SL135 - I - K
SEE NOTE 1

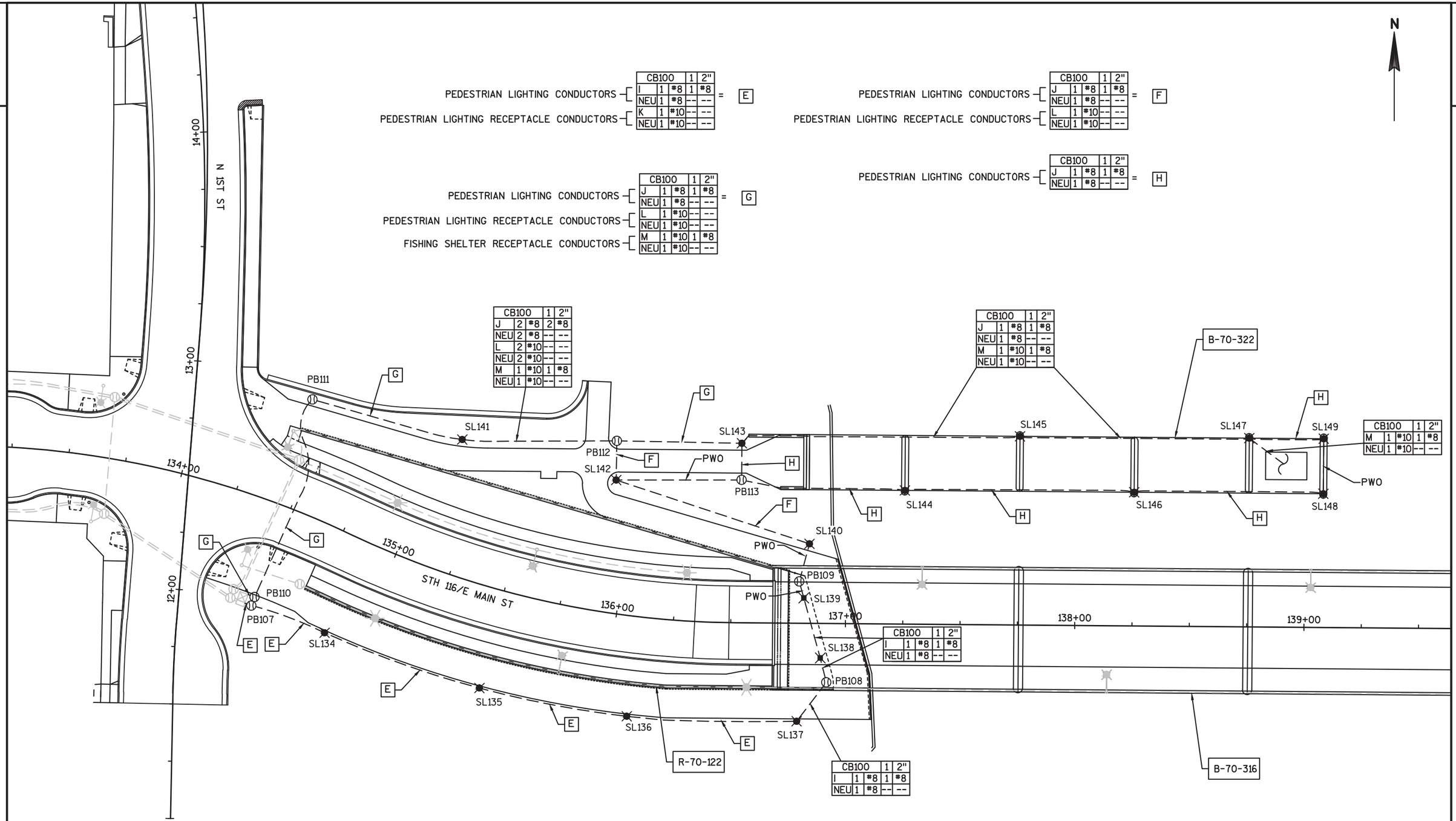
N 1ST ST

STH 116/E MAIN ST

14+00
13+00
12+00
134+00
135+00
136+00
137+00
138+00
139+00

SHEET 8 OF 11

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	LIGHTING PLAN - PATHWAYS AND FISHING PIER	SHEET 73	E



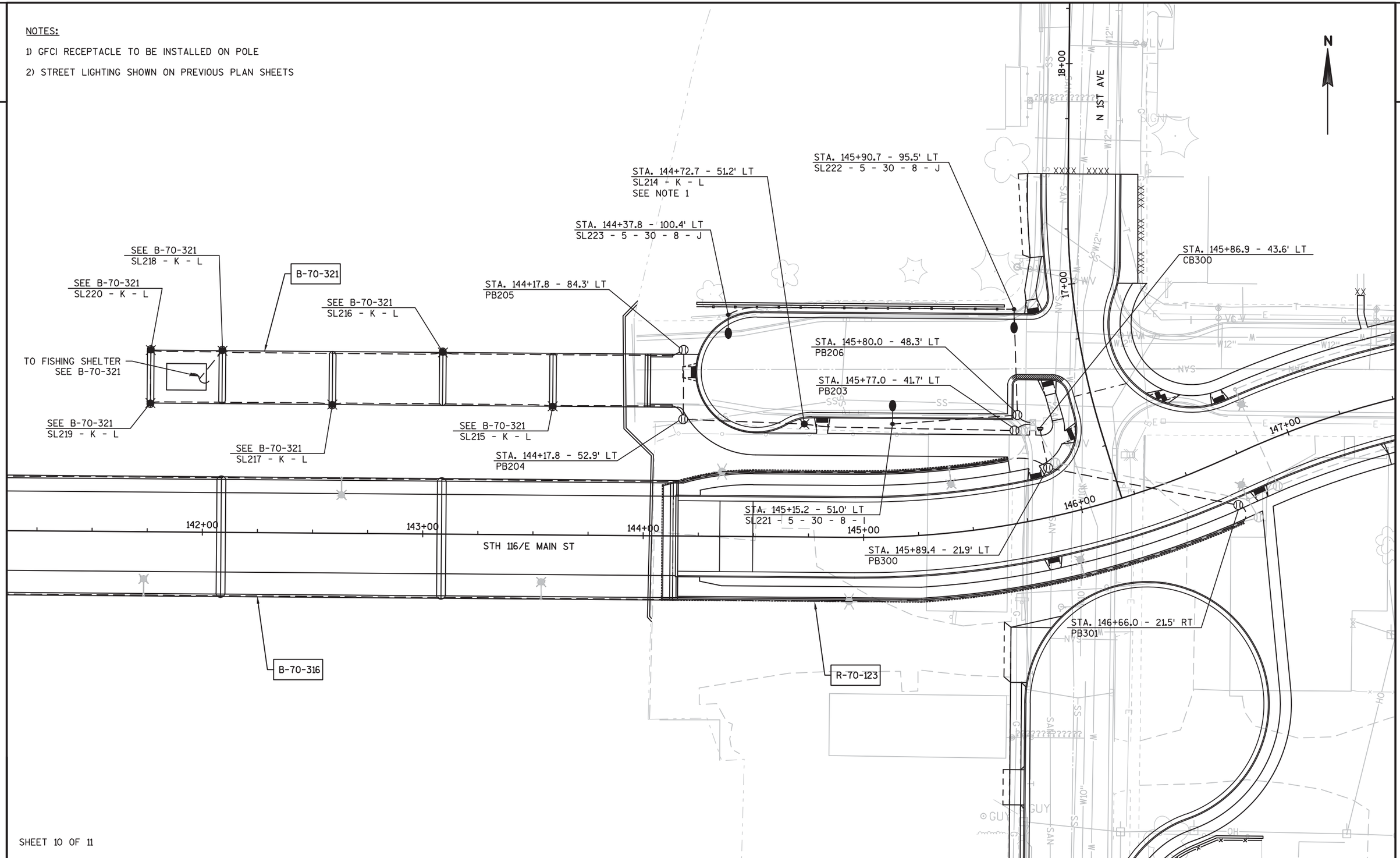
SHEET 9 OF 11

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	LIGHTING PLAN	SHEET 74	E

NOTES:

1) GFCI RECEPTACLE TO BE INSTALLED ON POLE

2) STREET LIGHTING SHOWN ON PREVIOUS PLAN SHEETS



SHEET 10 OF 11

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	LIGHTING PLAN	SHEET 75	E

PARK AND RIDE LIGHTING CONDUCTORS

CB200	1	2"
I	1 *8	1 *8
NEU	1 *8	-- --

= I

PARK AND RIDE LIGHTING CONDUCTORS

CB200	1	2"
J	1 *8	1 *8
NEU	1 *8	-- --

= J

PEDESTRIAN LIGHTING CONDUCTORS

CB200	1	2"
K	1 *8	1 *8
NEU	1 *8	-- --
L	1 *10	-- --
NEU	1 *10	-- --
M	1 *10	1 *8
NEU	1 *10	-- --

= K

PEDESTRIAN LIGHTING RECEPTACLE CONDUCTORS

FISHING SHELTER RECEPTACLE CONDUCTORS

PEDESTRIAN LIGHTING CONDUCTORS

CB200	1	2"
K	1 *8	1 *8
NEU	1 *8	-- --

= L

NAVIGATION LIGHTING CONDUCTORS

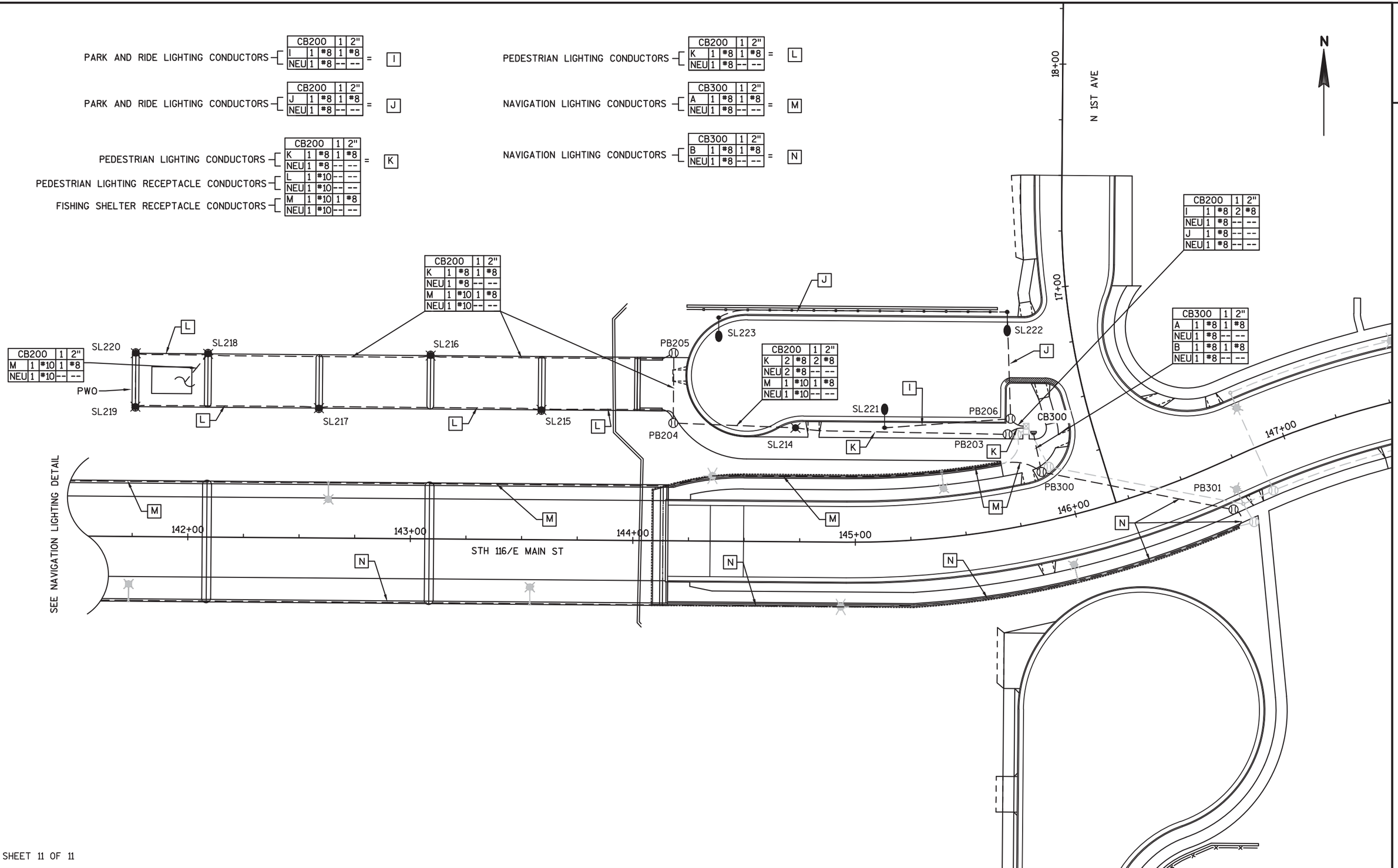
CB300	1	2"
A	1 *8	1 *8
NEU	1 *8	-- --

= M

NAVIGATION LIGHTING CONDUCTORS

CB300	1	2"
B	1 *8	1 *8
NEU	1 *8	-- --

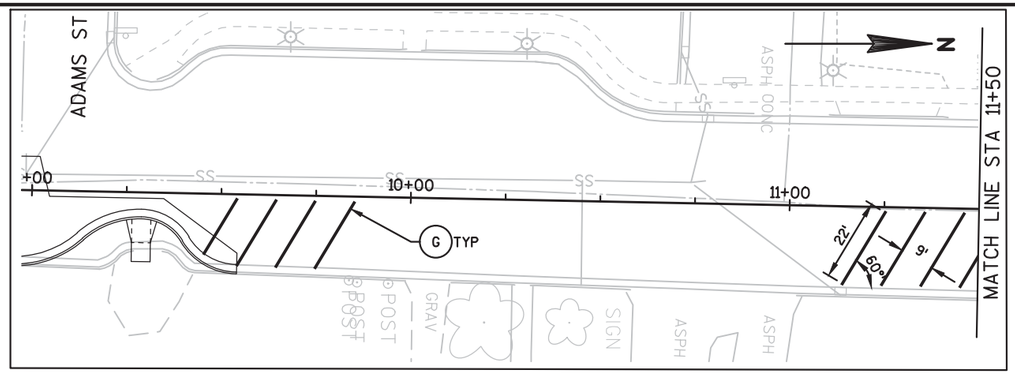
= N



SHEET 11 OF 11

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	LIGHTING PLAN	SHEET 76	E

2



LEGEND

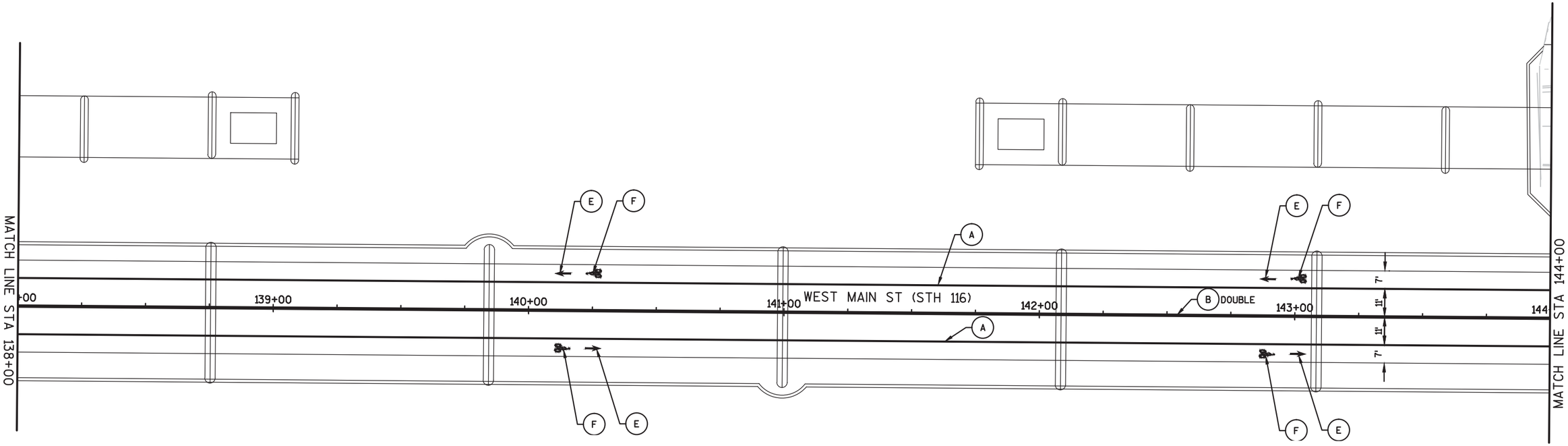
- (A) PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- (B) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- (C) PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (D) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
- (E) PAVEMENT MARKING ARROWS BIKE LANE EPOXY (WHITE)
- (F) PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY (WHITE)
- (G) PAVEMENT MARKING STALL EPOXY (WHITE)
- (H) PAVEMENT MARKING SYMBOLS EPOXY (WHITE)

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVEMENT MARKING	SHEET 77	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-024501-PM.DWG
LAYOUT NAME - 61901572-024501-PM
PLOT DATE : 1/27/2017 5:33 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

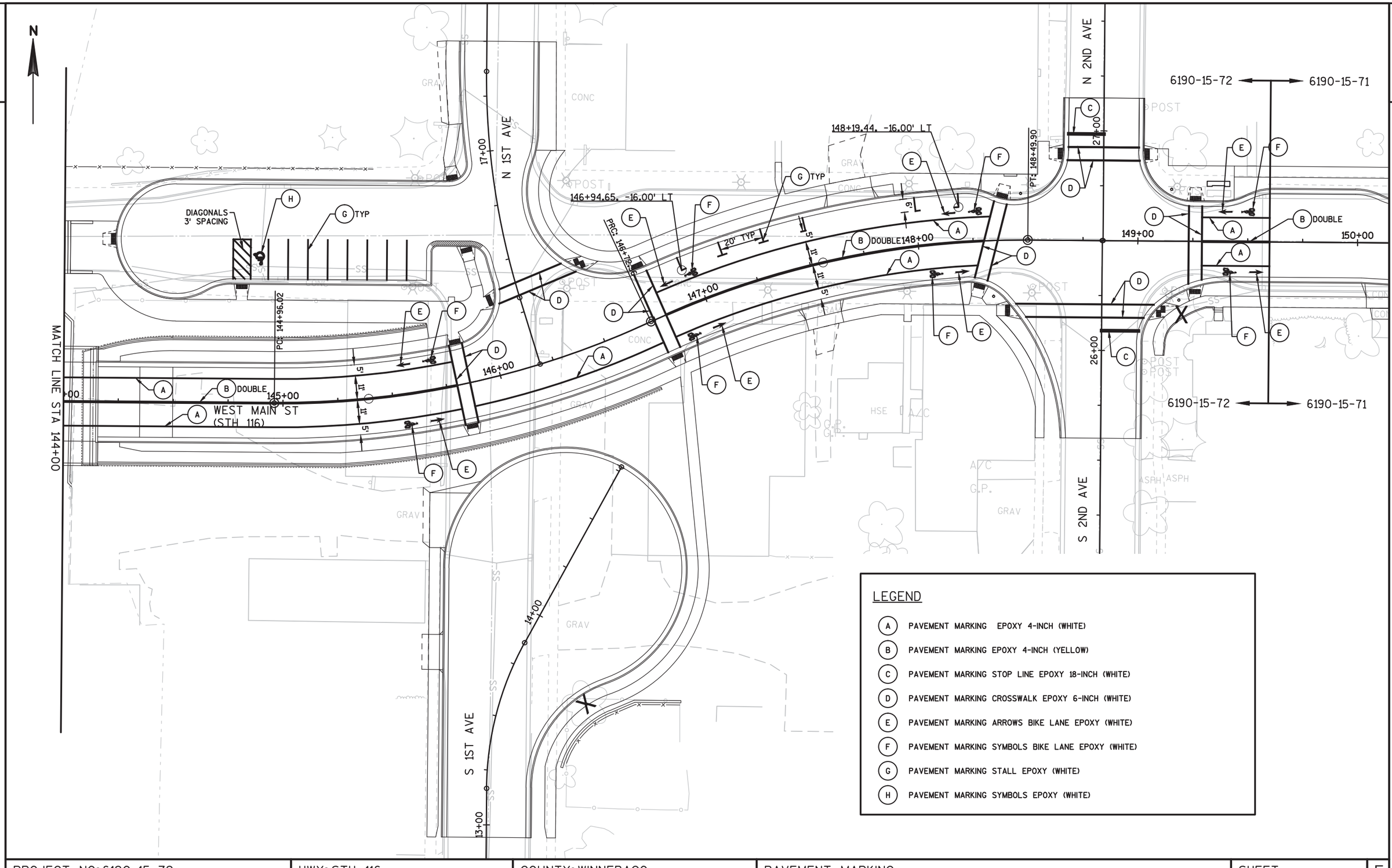
2

N



LEGEND

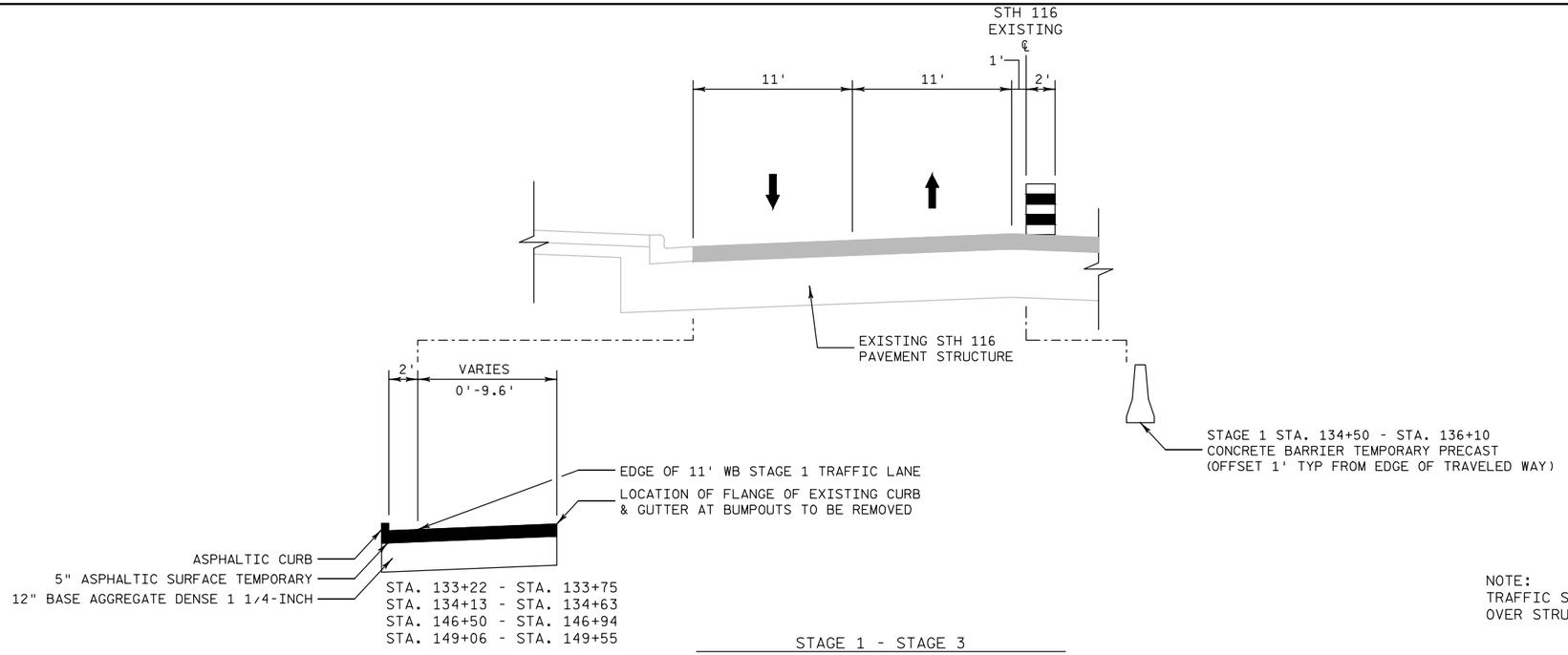
- (A) PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- (B) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- (C) PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (D) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
- (E) PAVEMENT MARKING ARROWS BIKE LANE EPOXY (WHITE)
- (F) PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY (WHITE)
- (G) PAVEMENT MARKING STALL EPOXY (WHITE)
- (H) PAVEMENT MARKING SYMBOLS EPOXY (WHITE)



LEGEND

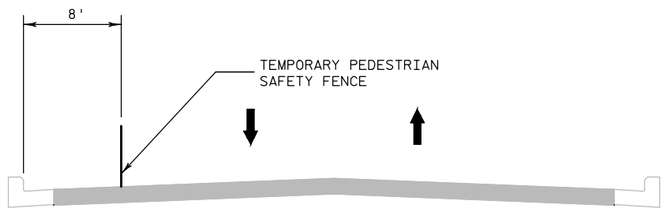
- (A) PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- (B) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- (C) PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (D) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
- (E) PAVEMENT MARKING ARROWS BIKE LANE EPOXY (WHITE)
- (F) PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY (WHITE)
- (G) PAVEMENT MARKING STALL EPOXY (WHITE)
- (H) PAVEMENT MARKING SYMBOLS EPOXY (WHITE)

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PAVEMENT MARKING	SHEET 79	E

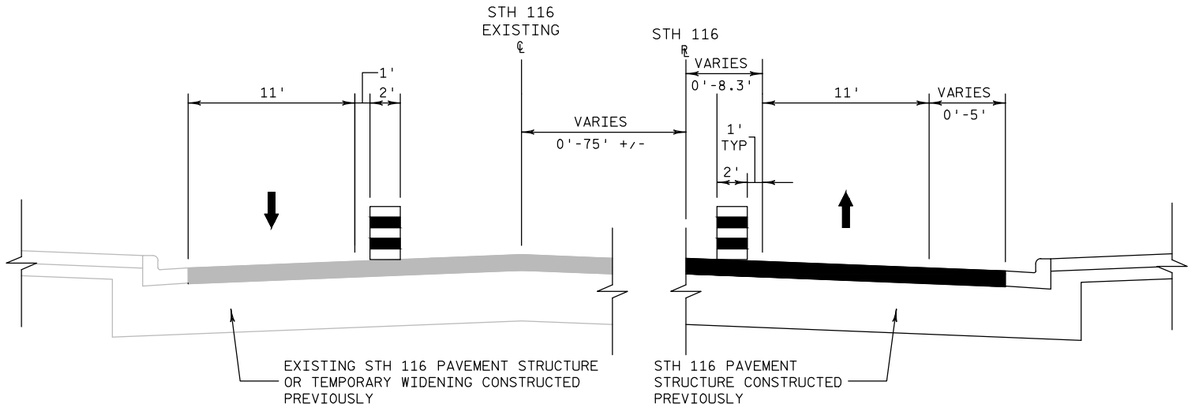


STAGE 1 - STAGE 3

NOTE:
TRAFFIC SHALL UTILIZE THE EXISTING TRAVEL LANES
OVER STRUCTURE B-70-913



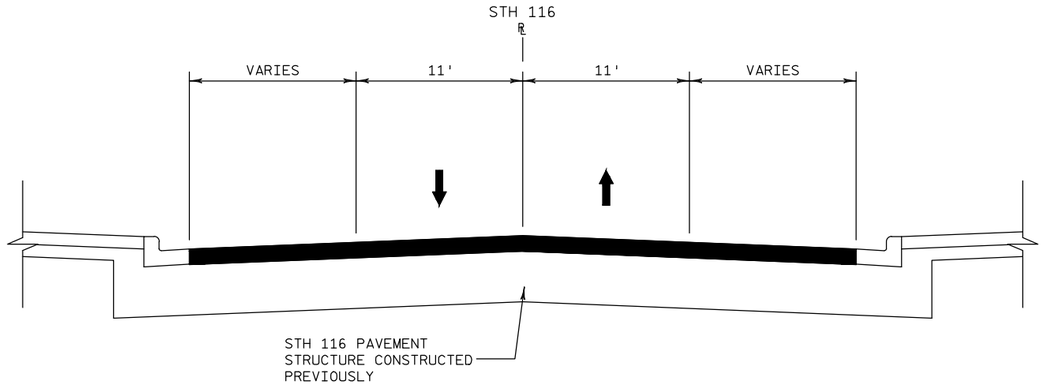
ADAMS STREET LOOKING EAST
(STAGE 3 TEMPORARY PEDESTRIAN ACCOMMODATION)



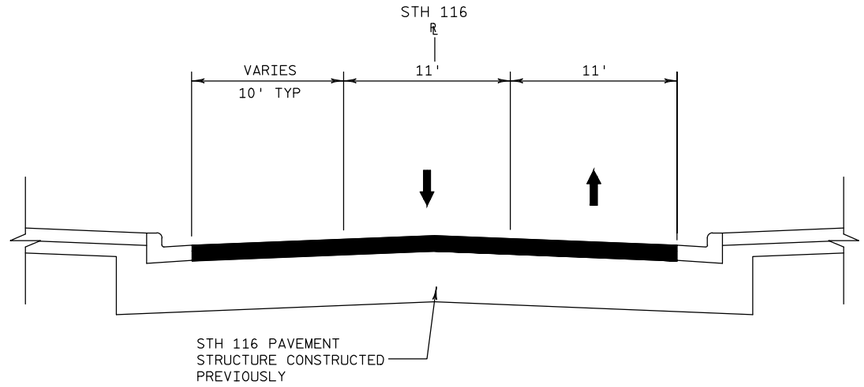
STAGE 4

NOTES:
WESTBOUND TRAFFIC SHALL UTILIZE THE EXISTING WESTBOUND TRAVEL LANE OVER STRUCTURE B-70-913

EASTBOUND TRAFFIC SHALL UTILIZE THE EASTBOUND TRAVEL LANE OVER STRUCTURE B-70-316



STAGE 5



STAGE 5
STA. 132+56 TO STRUCTURE B-70-316
DURING ROADWAY CONSTRUCTION ONLY

2

LEGEND

SIGN ON PERMANENT SUPPORT

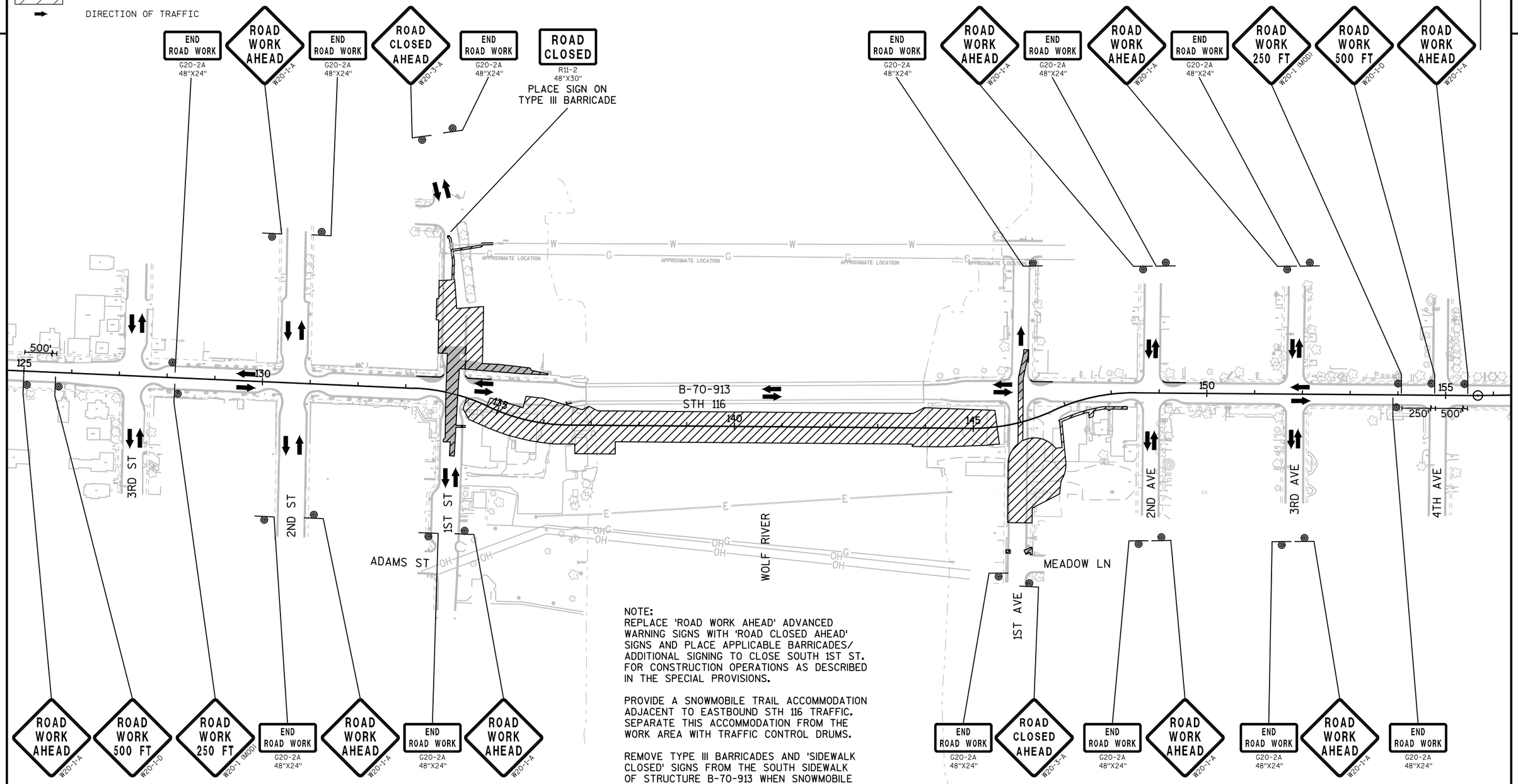
SIGN ON TEMPORARY SUPPORT

WORK AREA

DIRECTION OF TRAFFIC

ANTICIPATED CONSTRUCTION TIMEFRAME:
-ROADWAY - LATE SEPTEMBER 2017 TO NOVEMBER 2017
-STRUCTURE - LATE SEPTEMBER 2017 TO SPRING 2018

N



NOTE:
REPLACE 'ROAD WORK AHEAD' ADVANCED WARNING SIGNS WITH 'ROAD CLOSED AHEAD' SIGNS AND PLACE APPLICABLE BARRICADES/ ADDITIONAL SIGNING TO CLOSE SOUTH 1ST ST. FOR CONSTRUCTION OPERATIONS AS DESCRIBED IN THE SPECIAL PROVISIONS.

PROVIDE A SNOWMOBILE TRAIL ACCOMMODATION ADJACENT TO EASTBOUND STH 116 TRAFFIC. SEPARATE THIS ACCOMMODATION FROM THE WORK AREA WITH TRAFFIC CONTROL DRUMS.

REMOVE TYPE III BARRICADES AND 'SIDEWALK CLOSED' SIGNS FROM THE SOUTH SIDEWALK OF STRUCTURE B-70-913 WHEN SNOWMOBILE TRAILS ARE OPEN.

SEE SPECIAL PROVISIONS FOR ADDITIONAL DETAILS.

PROPOSED WORK SHOWN AS COMPLETED IN THE TRAFFIC CONTROL PLANS ARE SHOWN FOR GRAPHICAL PURPOSES ONLY. DETAILS FOR CONSTRUCTION AND LAYOUT SHALL BE OBTAINED FROM OTHER SECTIONS OF THE PLANS.

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL OVERVIEW - STAGE 1	SHEET 82 E

FILE NAME : X:\PROJECTS\WINNEBAGO\6190-15-00_6190-15-01 STH 116\DESIGN\C3D\SHEETSPLAN\025003-TC-OVERVIEW STG 1.DWG
LAYOUT NAME - ****
PLOT DATE : 5/10/2017 2:09 PM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT

NOTE:
REMOVE EXISTING BUMPOUT, AND CONSTRUCT ASPHALTIC SURFACE TEMPORARY AND ASPHALTIC CURB PRIOR TO STAGE 1 TRAFFIC SHIFT

N

REMOVE EXISTING CENTERLINE PAVEMENT MARKINGS FROM STA. 131+25 TO B-70-913

REMOVE ON-STREET PARKING PAVEMENT MARKINGS 2ND ST. TO 1ST ST., LT

ROAD CLOSED
R11-2
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

W01-6
48"X24"

R8-3
24"X24"

W01-4L

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
48"X24"

TEMPORARY PEDESTRIAN SAFETY FENCE

REMOVE ON-STREET PARKING PAVEMENT MARKINGS BETWEEN COMMERCIAL ENTRANCES, LT

W01-4R

130
STH 116

15:1 SHIFTING TAPER

STA. 134+50
6:1 TAPER

STA. 134+75

15:1 SHIFTING TAPER

STA. 136+10

135

COVER PLATES TEMPORARY REQD

LANE CLOSED
R11-2-L
48"X30"

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)

STOP
R1-1
30"X30"

SEE CONSTRUCTION DETAIL FOR TEMPORARY STORM SEWER

SAWING CONCRETE REQD

CONCRETE BARRIER TEMPORARY PRECAST AND CRASH CUSHIONS TEMPORARY REQD. REPLACE WITH TRAFFIC CONTROL DRUMS FOLLOWING THE COMPLETION OF EBS CONSTRUCTION OPERATIONS AND REMOVAL OF CONCRETE BARRIER TEMPORARY PRECAST. CONCRETE BARRIER TEMPORARY PRECAST SHALL NOT BE IN PLACE WHILE THE SNOWMOBILE ACCOMMODATION IS PROVIDED.

2ND ST

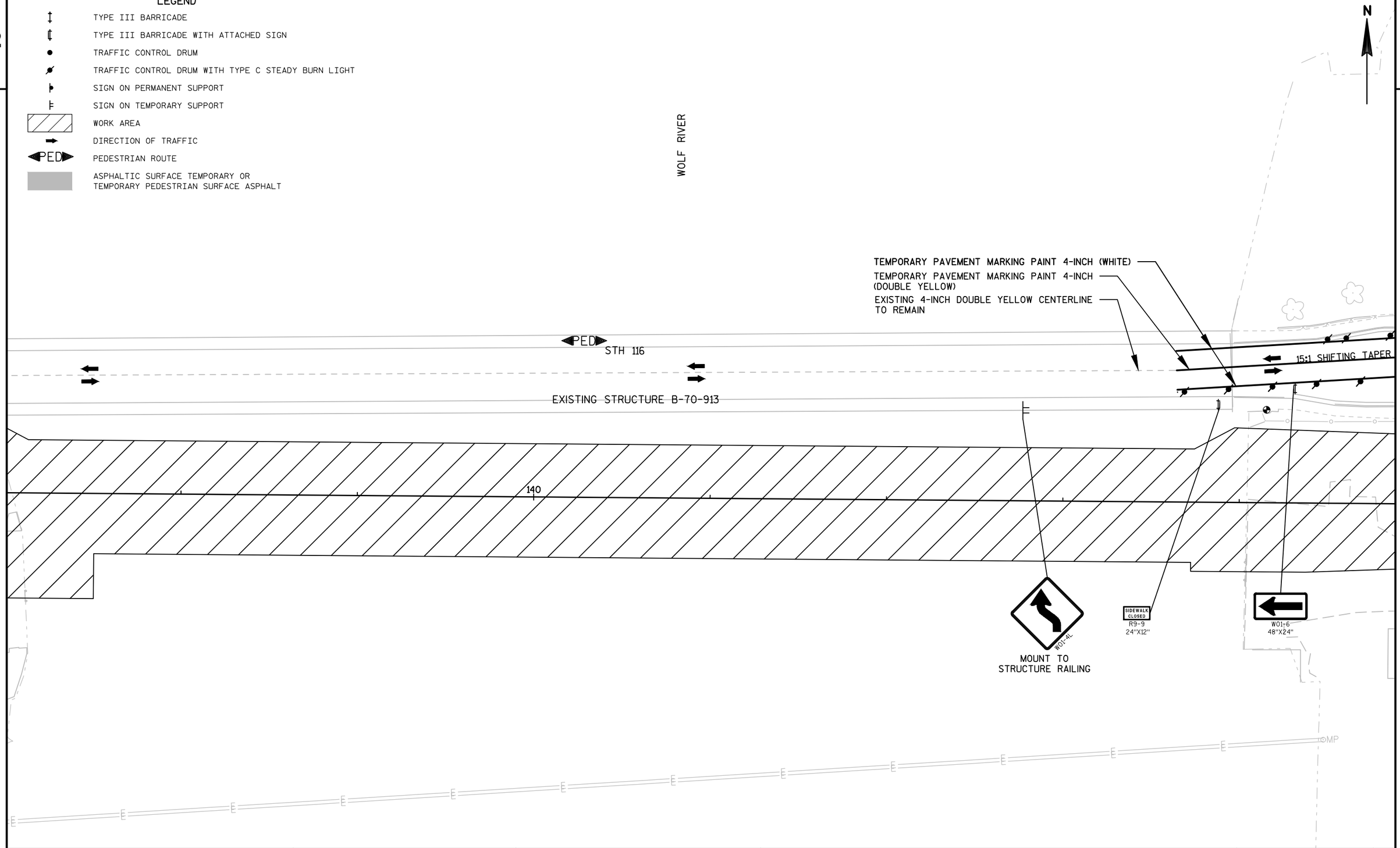
1ST ST

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 1	SHEET 83	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT



PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 1	SHEET 84	E

NOTE:
REMOVE EXISTING BUMPOUT, AND CONSTRUCT ASPHALTIC SURFACE TEMPORARY AND ASPHALTIC CURB PRIOR TO STAGE 1 TRAFFIC SHIFT

COVER PLATES TEMPORARY REQD

REMOVE ON-STREET PARKING PAVEMENT MARKINGS 1ST AVE. TO 2ND AVE., LT

REMOVE EXISTING CENTERLINE PAVEMENT MARKINGS FROM B-70-913 TO STA. 150+96

W01-6
48"X24"

ROAD CLOSED
R11-2
48"X30"

W01-4L

SIDEWALK CLOSED
R9-9
24"X12"

15:1 SHIFTING TAPER

145

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
48"X24"

LANE CLOSED
R11-2-L
48"X30"

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
48"X24"

TEMPORARY PEDESTRIAN SAFETY FENCE

W01-4R

SAWING CONCRETE REQD
(EXISTING SIDEWALK TO ALLOW FOR PERMANENT SIDEWALK CONSTRUCTION)

CONSTRUCT CURB RAMPS AT S. 1ST AVE/MEADOW LN INTERSECTION

1ST AVE

2ND AVE

3RD AVE

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)

150

15:1 SHIFTING TAPER

STH 116

STOP
R1-1
30"X30"

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PED — PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 1	SHEET 85	E

2

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

WORK AREA

DIRECTION OF TRAFFIC

ANTICIPATED CONSTRUCTION TIMEFRAME:
-SPRING 2018 TO JUNE 2018

N

2

ROAD WORK AHEAD W20-1-A

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1-A

END ROAD WORK G20-2A 48"X24"

END ROAD WORK G20-2A 48"X24"

WORK AREA PROJECT ID 6190-15-71/73 (WORK BY OTHERS)

WORK AREA PROJECT ID 6190-15-72/74

APPROXIMATE LOCATION

APPROXIMATE LOCATION

APPROXIMATE LOCATION

APPROXIMATE LOCATION

125

130

135

B-70-913
STH 116

140

145

150

155

3RD ST

2ND ST

1ST ST

ADAMS ST

WOLF RIVER

2ND AVE

3RD AVE

4TH AVE

1ST AVE

MEADOW LN

PED

PED

PROJECT ID 6190-15-72/74

PROJECT ID 6190-15-71/73 (WORK BY OTHERS)

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1-A

SIDEWALK CLOSED AHEAD CROSS HERE R9-11 48"X24"

PLACE SIGN ON TYPE III BARRICADE IN TERRACE

END ROAD WORK G20-2A 48"X24"

ROAD CLOSED AHEAD W20-3-A

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1-A

PROPOSED WORK SHOWN AS COMPLETED IN THE TRAFFIC CONTROL PLANS ARE SHOWN FOR GRAPHICAL PURPOSES ONLY. DETAILS FOR CONSTRUCTION AND LAYOUT SHALL BE OBTAINED FROM OTHER SECTIONS OF THE PLANS.

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL OVERVIEW - STAGE 2	SHEET 86 E

FILE NAME : X:\PROJECTS\WINNEBAGO\6190-15-00_6190-15-01 STH 116\DESIGN\C3D\SHEETSPLAN\025005-TC-OVERVIEW STG 2.DWG
LAYOUT NAME - ****
PLOT DATE : 5/10/2017 2:12 PM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT

N

2

INSTALL BELOW EXISTING 'STOP' SIGN ON EXISTING POLE

STOP
ALL WAY
R1-3-P
18"X6"

SIDEWALK CLOSED
R9-9
24"X12"

NOTE:
16"X16" SIGN FLAGS ARE INCIDENTAL TO THE TRAFFIC CONTROL SIGNS BID ITEM

TEMPORARY PEDESTRIAN SAFETY FENCE

ROAD CLOSED
R11-2
48"X30"

STOP
R1-1
30"X30"
ALL WAY
R1-3-P
18"X6"

W3-1
36"X36"

W01-4R

PED

130
STH 116

2ND ST

1ST ST

135

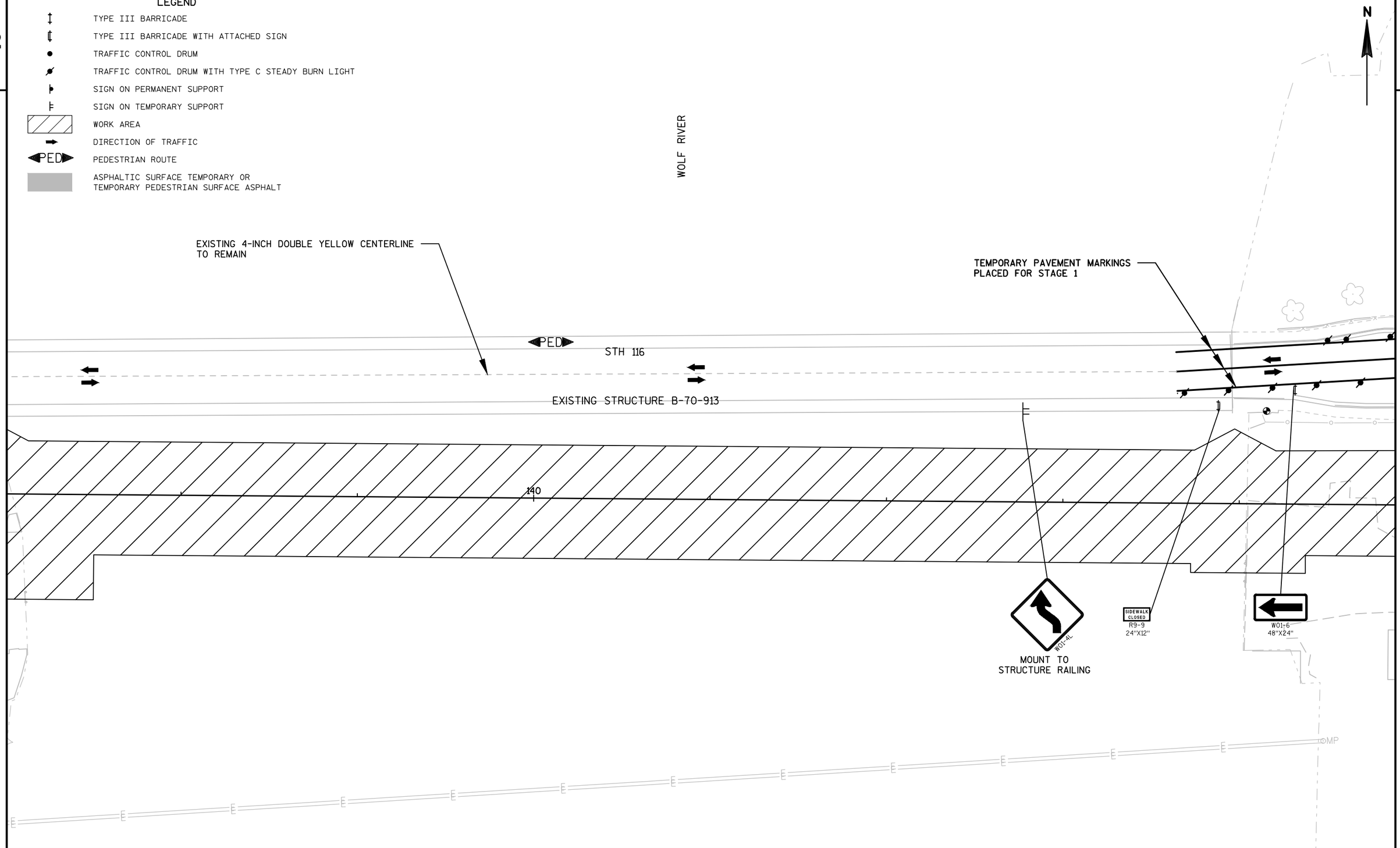
TEMPORARY PAVEMENT MARKINGS PLACED FOR STAGE 1

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 2	SHEET 87	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT



PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 2	SHEET 88	E

FILE NAME : X:\PROJECTS\WINNEBAGO\6190-15-00_6190-15-01 STH 116\DESIGN\C3D\SHEETSPLAN\025006-TC-SHEETS STG 2.DWG
LAYOUT NAME - ****
PLOT DATE : 5/10/2017 2:01 PM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

W01-6
48"X24"

ROAD CLOSED
R11-2
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

PED

W01-4L

W01-4R

TEMPORARY PAVEMENT MARKINGS
PLACED FOR STAGE 1

150

STH 116

145

SAWCUT REQD

TEMPORARY PEDESTRIAN
SAFETY FENCE

STOP
R1-1
30"X30"

LANE CLOSED
R11-2-L
48"X30"

1ST AVE

2ND AVE

3RD AVE

ROAD CLOSED
R11-2
48"X30"

CONC
GRAV
ASPH
POST
SIGN
FLAG
HSE
C.P.
CONC

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PED — PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 2	SHEET 89	E

2

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

WORK AREA

DIRECTION OF TRAFFIC

ANTICIPATED CONSTRUCTION TIMEFRAME:
-JUNE 2018 TO AUGUST 2018

N

2

ROAD WORK AHEAD W20-1-A

END ROAD WORK G20-2A 48"X24"

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1-A

END ROAD WORK G20-2A 48"X24"

WORK AREA
PROJECT ID 6190-15-71/73
(WORK BY OTHERS)

PROJECT ID 6190-15-71/73

PROJECT ID 6190-15-72/74

APPROXIMATE LOCATION

APPROXIMATE LOCATION

APPROXIMATE LOCATION

APPROXIMATE LOCATION

125

130

135

B-70-913
STH 116

140

145

150

155

3RD ST

2ND ST

1ST ST

ADAMS ST

WOLF RIVER

PED

PED

MEADOW LN

1ST AVE

2ND AVE

3RD AVE

4TH AVE

WORK AREA
PROJECT ID
6190-15-72/74

WORK AREA
PROJECT ID
6190-15-71/73
(WORK BY OTHERS)

TEMPORARY PEDESTRIAN SAFETY FENCE - SEE ADAMS ST TYPICAL SECTION

END ROAD WORK G20-2A 48"X24"

ROAD CLOSED AHEAD W20-3-A

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11 48"X24"

PLACE SIGN ON TYPE III BARRICADE IN TERRACE

END ROAD WORK G20-2A 48"X24"

ROAD CLOSED AHEAD W20-3-A

END ROAD WORK G20-2A 48"X24"

ROAD CLOSED AHEAD W20-3-A

NOTE:
REPLACE 'ROAD CLOSED AHEAD' AND APPLICABLE BARRICADES/ ADDITIONAL SIGNS WITH 'ROAD WORK AHEAD' ADVANCED WARNING SIGNAGE WHEN S. 2ND AVE. IS OPEN TO LOCAL TRAFFIC AS DESCRIBED IN THE SPECIAL PROVISIONS. SEE PREVIOUS STAGES FOR TRAFFIC CONTROL DEVICES REQUIRED ON S. 2ND AVE. WHEN IT IS OPEN TO TRAFFIC.

PROPOSED WORK SHOWN AS COMPLETED IN THE TRAFFIC CONTROL PLANS ARE SHOWN FOR GRAPHICAL PURPOSES ONLY. DETAILS FOR CONSTRUCTION AND LAYOUT SHALL BE OBTAINED FROM OTHER SECTIONS OF THE PLANS.

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL OVERVIEW - STAGE 3	SHEET 90 E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT

N

2

ROAD CLOSED
R11-2
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

PED

W01-6
48"X24"

TEMPORARY PAVEMENT MARKINGS PLACED IN STAGE 1

W01-4L

W01-4R

15:1 SHIFTING TAPER

130
STH 116

135

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
48"X24"

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)

2ND ST

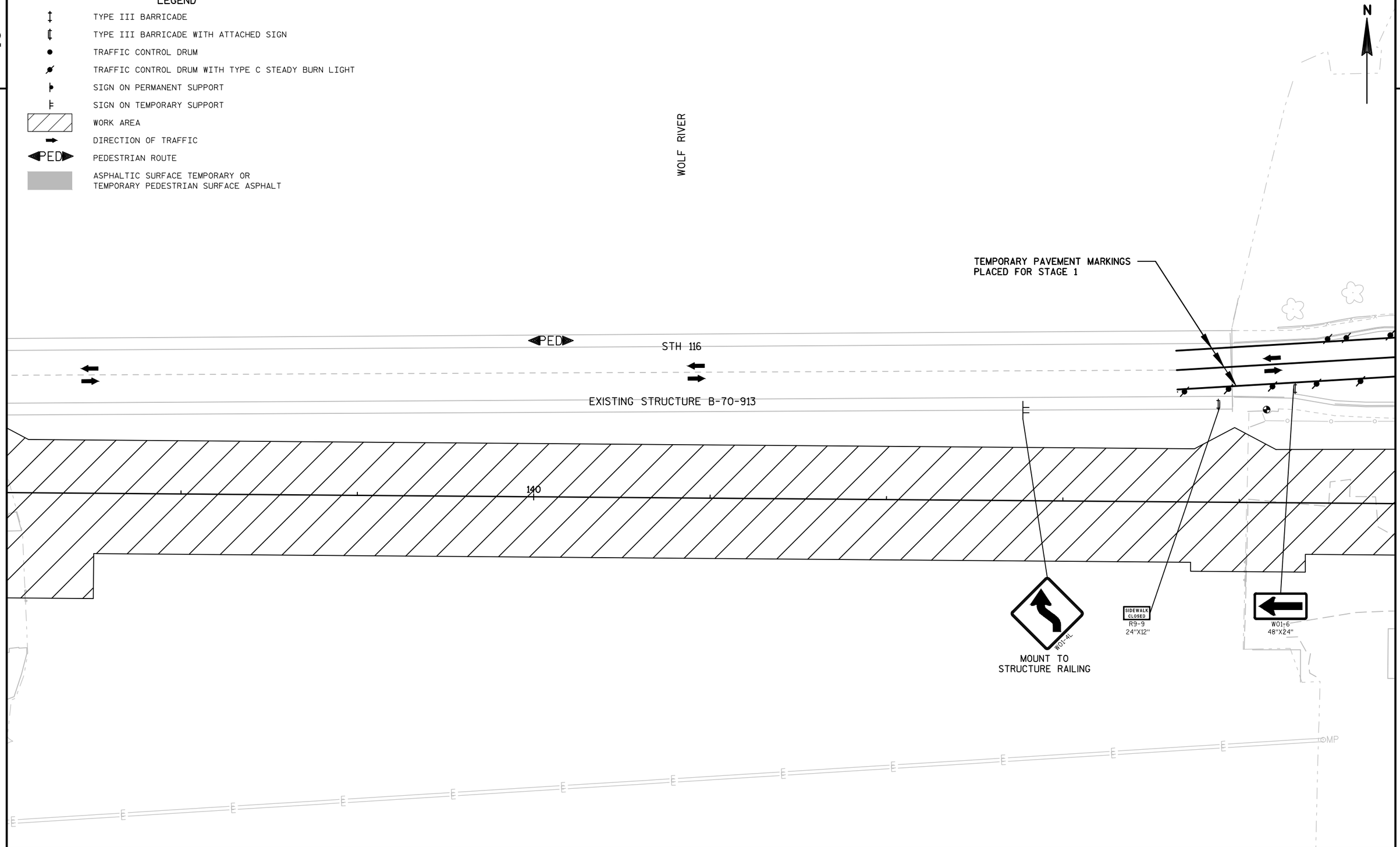
1ST ST

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 3	SHEET 91	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT



2

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 3	SHEET 92	E

FILE NAME : X:\PROJECTS\WINNEBAGO\6190-15-00_6190-15-01 STH 116\DESIGN\C3D\SHEETSPLAN\025008-TC-SHEETS STG 3.DWG
LAYOUT NAME - ****
PLOT DATE : 5/10/2017 2:22 PM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

TEMPORARY PAVEMENT MARKINGS PLACED FOR STAGE 1

W01-6
48"X24"

ROAD CLOSED
R11-2
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

W01-4L

PED

150

STH 116

145

W3-1
36"X36"

STOP
R1-1
30"X30"

NOTE:
16"X16" SIGN FLAGS ARE INCIDENTAL TO THE TRAFFIC CONTROL SIGNS BID ITEM

LANE CLOSED
R11-2-L
48"X30"

1ST AVE

2ND AVE

3RD AVE

NOTES:
TEMPORARY CURB RAMPS (2 EA) REQD ON S. 2ND AVE WHILE THE SOUTH LEG OF THE INTERSECTION IS CLOSED.

MAINTAIN PEDESTRIAN TRAFFIC ON EXISTING AND TEMPORARY PEDESTRIAN SURFACE IN THE SE QUADRANT OF STH 116/S. 2ND AVE. UNTIL ALL PERMANENT SIDEWALK, CURB & GUTTER AND PAVEMENT IN THE SW QUADRANT OF THE INTERSECTION IS COMPLETE SUCH THAT A NORTH-SOUTH CROSSING OF STH 116 ALONG THE WEST SIDE OF 2ND AVE. CAN BE MAINTAINED. REFER TO SDD TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION FOR THE APPROPRIATE LAYOUT OF R9-9 AND R11-9 SIGNS AND BARRICADES.

NOTES:
FOLLOWING THE REMOVAL OF THE S. 2ND AVENUE CLOSURE DURING STAGE 3:
-PLACE R1-1 AND R1-3-P SIGNS AT THE SOUTH APPROACH OF STH 116/2ND AVENUE
-PLACE R1-3-P SIGNS AT THE NORTH AND WEST APPROACHES TO THE STH 116/2ND AVENUE INTERSECTION

R1-3-P
18"X6"
ALL WAY

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 3	SHEET 93	E

2

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

WORK AREA

DIRECTION OF TRAFFIC

ANTICIPATED CONSTRUCTION TIMEFRAME:
-SEPTEMBER 2018 TO MID-OCTOBER 2018

N

2

ROAD CLOSED AHEAD
W20-5-A

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1-A

STOP
R1-1
30"X30"

W3-1
36"X36"

ROAD CLOSED AHEAD
W20-5-A

END ROAD WORK
G20-2A
48"X24"

NOTE:
16"X16" SIGN FLAGS ARE INCIDENTAL TO THE TRAFFIC CONTROL SIGNS BID ITEM

PROJECT ID
6190-15-71/73

PROJECT ID
6190-15-72/74

APPROXIMATE LOCATION

125 130 135 140 145 150 155

B-70-913

STH 116

B-70-316

3RD ST

2ND ST

1ST ST

ADAMS ST

WOLF RIVER

2ND AVE

3RD AVE

4TH AVE

1ST AVE

MEADOW LN

WORK AREA
PROJECT ID
6190-15-72/74

PROJECT ID
6190-15-71/73

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1-A

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1-A

PROPOSED WORK SHOWN AS COMPLETED IN THE TRAFFIC CONTROL PLANS ARE SHOWN FOR GRAPHICAL PURPOSES ONLY. DETAILS FOR CONSTRUCTION AND LAYOUT SHALL BE OBTAINED FROM OTHER SECTIONS OF THE PLANS.

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL OVERVIEW - STAGE 4	SHEET 94 E

FILE NAME : X:\PROJECTS\WINNEBAGO\6190-15-00_6190-15-01 STH 116\DESIGN\C3D\SHEETSPLAN\025009-TC-OVERVIEW STG 4.DWG
LAYOUT NAME - ****

PLOT DATE : 5/11/2017 6:53 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT

N

NOTE:
16"x16" SIGN FLAGS ARE INCIDENTAL TO THE TRAFFIC CONTROL SIGNS BID ITEM

ROAD CLOSED
R11-2
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

DO NOT ENTER
R5-1
30"X30"

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
48"X24"

W01-6
48"X24"

STOP
R1-1
30"X30"

LANE CLOSED
R11-2-L
48"X30"

W3-1
36"X36"

W01-4R

PED

130

135

STH 116

2ND ST

1ST ST

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)

FLAG
POST
CONC
ASPH
GRAV
SIGN

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 4	SHEET 95	E

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT

N

WOLF RIVER

EXISTING 4-INCH DOUBLE YELLOW CENTERLINE TO REMAIN

LANE CLOSED
R11-2-L
48"X30"

PED

TEMPORARY PAVEMENT MARKINGS PLACED FOR STAGE 1

LANE CLOSED
R11-2-L
48"X30"

EXISTING STRUCTURE B-70-913

STH 116

140

PED

STRUCTURE B-70-316

SEE PERMANENT PAVEMENT MARKING PLANS

SIDEWALK CLOSED
R9-9
24"X12"

MP

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 4	SHEET 96	E

FILE NAME : X:\PROJECTS\WINNEBAGO\6190-15-00_6190-15-01 STH 116\DESIGN\C3D\SHEETSPLAN\025010-TC-SHEETS STG 4.DWG
LAYOUT NAME - ****

PLOT DATE : 5/11/2017 9:30 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

N

TEMPORARY PAVEMENT MARKINGS PLACED FOR STAGE 1

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)

R3-2
24"X24"

STOP
R1-1
30"X30"

W01-6
48"X24"

W01-6
48"X24"

SIDEWALK CLOSED
R9-9
24"X12"

ROAD CLOSED
R11-2
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
48"X24"

ROAD CLOSED
R11-2
48"X30"

150

STH 116

145

LANE CLOSED
R11-2-L
48"X30"

1ST AVE

2ND AVE

3RD AVE

PED

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 4	SHEET 97	E

2

LEGEND

SIGN ON PERMANENT SUPPORT

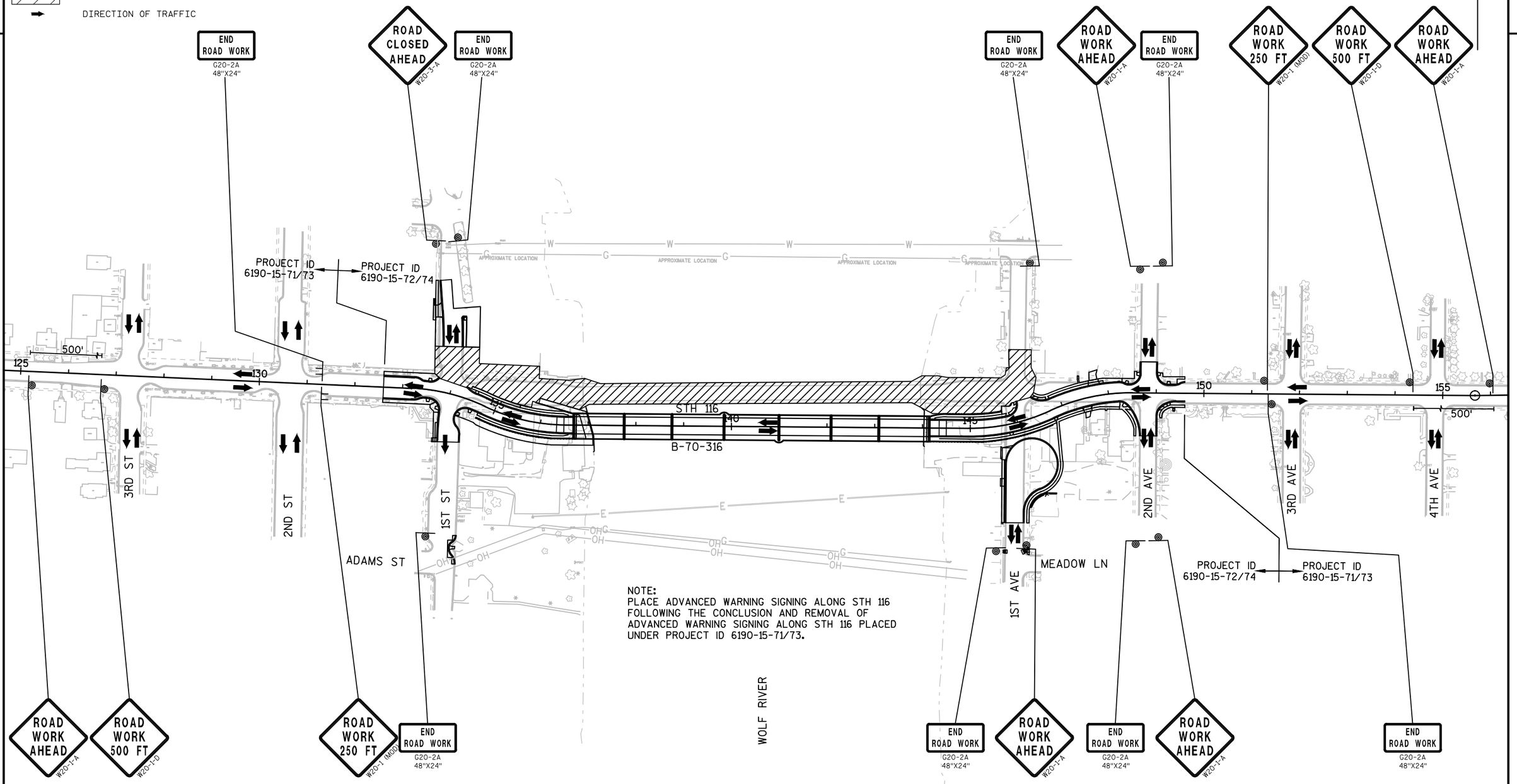
SIGN ON TEMPORARY SUPPORT

WORK AREA

DIRECTION OF TRAFFIC

ANTICIPATED CONSTRUCTION TIMEFRAME:
-ROADWAY - MID-OCTOBER 2018 TO MID-NOVEMBER 2018
-STRUCTURES - MID-OCTOBER 2018 TO MID-SEPTEMBER 2019

N



NOTE:
PLACE ADVANCED WARNING SIGNING ALONG STH 116 FOLLOWING THE CONCLUSION AND REMOVAL OF ADVANCED WARNING SIGNING ALONG STH 116 PLACED UNDER PROJECT ID 6190-15-71/73.

PROPOSED WORK SHOWN AS COMPLETED IN THE TRAFFIC CONTROL PLANS ARE SHOWN FOR GRAPHICAL PURPOSES ONLY. DETAILS FOR CONSTRUCTION AND LAYOUT SHALL BE OBTAINED FROM OTHER SECTIONS OF THE PLANS.

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL OVERVIEW - STAGE 5	SHEET 98 E

FILE NAME : X:\PROJECTS\WINNEBAGO\6190-15-00_6190-15-01 STH 116\DESIGN\C3D\SHEETSPLAN\025011-TC-OVERVIEW STG 5.DWG
LAYOUT NAME - ****
PLOT DATE : 5/11/2017 6:57 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT

CONSTRUCTION ACCESS NE QUADRANT STH 116/1ST STREET
FOR USE DURING STRUCTURE CONSTRUCTION FOLLOWING THE COMPLETION OF ROADWAY CONSTRUCTION

N

ROAD CLOSED
R11-2
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

PED

130

STH 116

135

2ND ST

1ST ST

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)

TEMPORARY PEDESTRIAN SAFETY FENCE

TEMPORARY PAVEMENT MARKINGS PLACED FOR STAGE 4

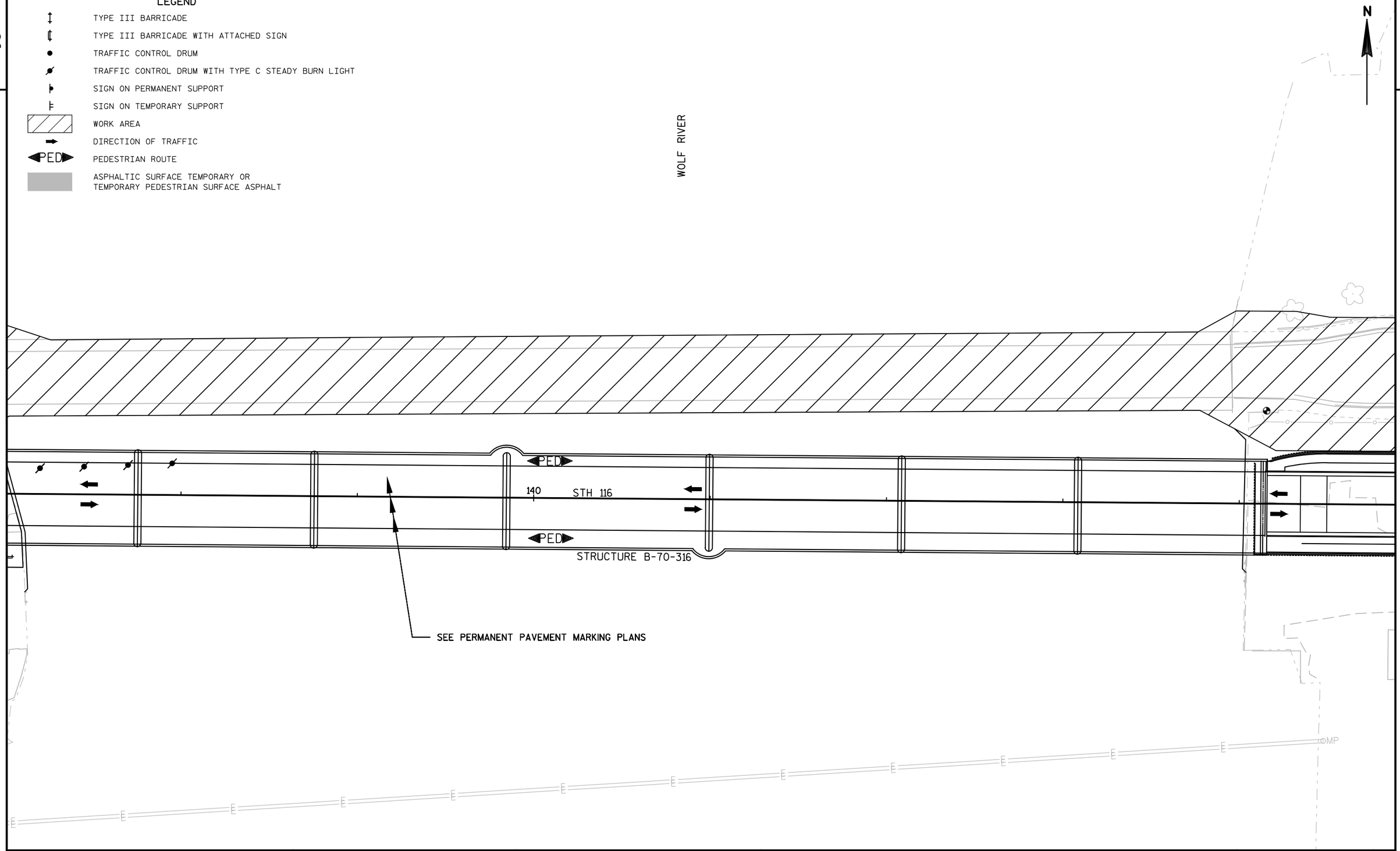
PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 5	SHEET 99	E

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT



PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 5	SHEET 100	E

FILE NAME : X:\PROJECTS\WINNEBAGO\6190-15-00_6190-15-01 STH 116\DESIGN\C3D\SHEETSPLAN\025012-TC-SHEETS STG 5.DWG
LAYOUT NAME - ****

PLOT DATE : 5/11/2017 7:52 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:50 FT

NOTE:
CONSTRUCTION ACCESS FOLLOWING THE COMPLETION OF ROADWAY CONSTRUCTION EAST OF THE WOLF RIVER SHALL BE VIA THE PARKING AREA. PLACE TYPE III BARRICADES WITH A 'ROAD CLOSE' SIGN AT THE ENTRANCE OF THE PARKING AREA WHEN CONSTRUCTION VEHICLES ARE NOT ENTERING/EXITING.

ROAD CLOSED
R11-2
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

ROAD CLOSED
R11-2
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED
R9-9
24"X12"

TEMPORARY PAVEMENT MARKING PAINT 4-INCH (DOUBLE YELLOW)

TEMPORARY PAVEMENT MARKING PLACED FOR STAGE 4

145

150

STH 116

1ST AVE

2ND AVE

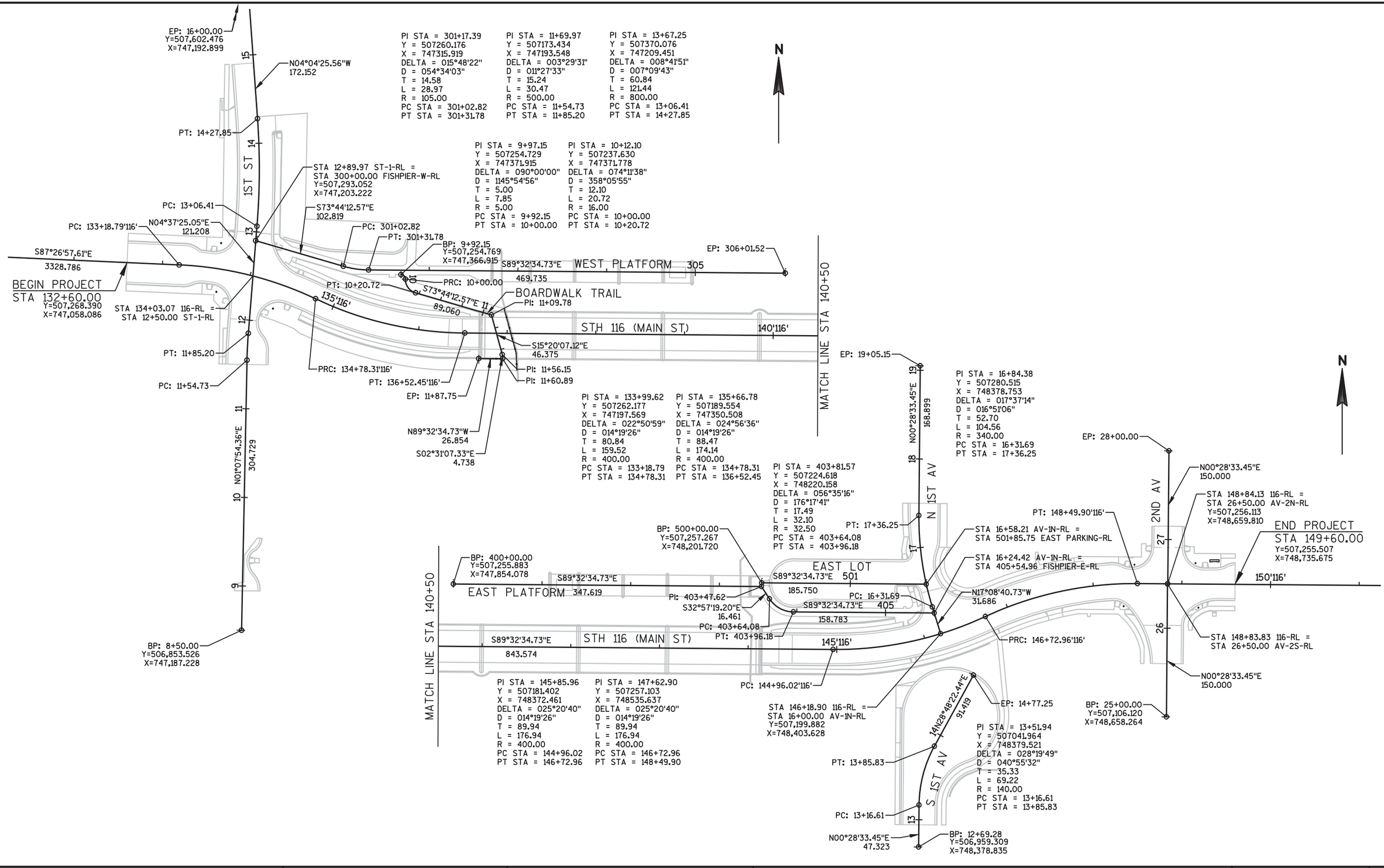
3RD AVE

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC
- PEDESTRIAN ROUTE
- ASPHALTIC SURFACE TEMPORARY OR TEMPORARY PEDESTRIAN SURFACE ASPHALT

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	TRAFFIC CONTROL - STAGE 5	SHEET 101	E



PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	ALIGNMENT PLAN	SHEET 102	E

					6190-15-72	6190-15-74
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0010	201.0105	Clearing	STA	2.000	2.000	
0020	201.0120	Clearing	ID	4.000	4.000	
0030	201.0205	Grubbing	STA	2.000	2.000	
0040	201.0220	Grubbing	ID	4.000	4.000	
0050	204.0100	Removing Pavement	SY	2,985.000	2,915.000	70.000
0060	204.0110	Removing Asphaltic Surface	SY	3,355.000	3,000.000	355.000
0070	204.0150	Removing Curb & Gutter	LF	3,295.000	3,255.000	40.000
0080	204.0155	Removing Concrete Sidewalk	SY	2,880.000	2,880.000	
0090	204.0170	Removing Fence	LF	85.000	85.000	
0100	204.0195	Removing Concrete Bases	EACH	33.000	33.000	
0110	204.0210	Removing Manholes	EACH	12.000	8.000	4.000
0120	204.0220	Removing Inlets	EACH	21.000	21.000	
0130	204.0245	Removing Storm Sewer (size) 001. 6-Inch	LF	8.000	8.000	
0140	204.0245	Removing Storm Sewer (size) 002. 12-INCH	LF	384.000	384.000	
0150	204.0245	Removing Storm Sewer (size) 003. 15-INCH	LF	140.000	140.000	
0160	204.0245	Removing Storm Sewer (size) 004. 18-INCH	LF	316.000	316.000	
0170	204.0245	Removing Storm Sewer (size) 005. 24-INCH	LF	310.000	310.000	
0180	204.0245	Removing Storm Sewer (size) 006. 30-INCH	LF	80.000	80.000	
0190	204.0250	Abandoning Manholes	EACH	3.000		3.000
0200	204.0291.S	Abandoning Sewer	CY	2.000		2.000
0210	204.9060.S	Removing (item description) 001. Dock	EACH	6.000	6.000	
0220	204.9060.S	Removing (item description) 002. Bollard	EACH	4.000	4.000	
0230	204.9060.S	Removing (item description) 003. Flasher Standard	EACH	4.000	4.000	
0240	204.9060.S	Removing (item description) 004. Existing Lighting Control Cabinet	EACH	1.000	1.000	
0250	204.9060.S	Removing (item description) 005. Fire Hydrant	EACH	3.000		3.000
0260	204.9060.S	Removing (item description) 006. Valve and Box	EACH	10.000		10.000
0270	204.9090.S	Removing (item description) 001. Retaining Wall	LF	195.000	195.000	
0280	204.9090.S	Removing (item description) 007. Sanitary Sewer	LF	800.000		800.000
0290	204.9105.S	Removing (item description) 001. Retaining Wall Sta 60+24.82	LS	1.000	1.000	
0300	204.9105.S	Removing (item description) 002. Retaining Wall Sta 50+02.72	LS	1.000	1.000	
0310	205.0100	Excavation Common	CY	16,250.000	16,250.000	
0320	206.1000	Excavation for Structures Bridges (structure) 001. B-70-316	LS	1.000	1.000	
0330	206.1000	Excavation for Structures Bridges (structure) 002. B-70-321	LS	1.000	1.000	
0340	206.1000	Excavation for Structures Bridges (structure) 003. B-70-322	LS	1.000	1.000	
0350	206.5000	Cofferdams (structure) 001. B-70-316	LS	1.000	1.000	

					6190-15-72	6190-15-74
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0360	206.5000	Cofferdams (structure) 002. B-70-321	LS	1.000	1.000	
0370	206.5000	Cofferdams (structure) 003. B-70-322	LS	1.000	1.000	
0380	208.0100	Borrow	CY	3,640.000	3,640.000	
0390	208.1100	Select Borrow	CY	14,750.000	14,750.000	
0400	209.0300.S	Backfill Coarse Aggregate (size) 001. No 1	CY	92.000	92.000	
0410	209.2100	Backfill Granular Grade 2	CY	1,320.000	670.000	650.000
0420	210.1500	Backfill Structure Type A	TON	570.000	570.000	
0430	213.0100	Finishing Roadway (project) 001. 6190-15-72	EACH	1.000	1.000	
0440	305.0110	Base Aggregate Dense 3/4-Inch	TON	801.000	801.000	
0450	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	8,538.000	8,348.000	190.000
0460	310.0110	Base Aggregate Open-Graded	TON	7.000	7.000	
0470	311.0110	Breaker Run	TON	4,777.000	4,760.000	17.000
0480	415.0410	Concrete Pavement Approach Slab	SY	106.660	106.660	
0490	416.0160	Concrete Driveway 6-Inch	SY	124.000	124.000	
0500	416.0180	Concrete Driveway 8-Inch	SY	46.000	46.000	
0510	416.0280	Concrete Driveway HES 8-Inch	SY	38.000	38.000	
0520	450.4000	HMA Cold Weather Paving	TON	110.000	100.000	10.000
0530	455.0605	Tack Coat	GAL	724.000	724.000	
0540	460.2000	Incentive Density HMA Pavement	DOL	1,504.000	1,504.000	
0550	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	885.000	885.000	
0560	460.5223	HMA Pavement 3 LT 58-28 S	TON	475.000	470.000	5.000
0570	460.5224	HMA Pavement 4 LT 58-28 S	TON	372.000	366.000	6.000
0580	460.6223	HMA Pavement 3 MT 58-28 S	TON	1,089.000	1,089.000	
0590	460.6224	HMA Pavement 4 MT 58-28 S	TON	424.000	424.000	
0600	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	160.000	157.000	3.000
0610	465.0125	Asphaltic Surface Temporary	TON	247.000	197.000	50.000
0620	465.0310	Asphaltic Curb	LF	340.000	305.000	35.000
0630	501.1000.S	Ice Hot Weather Concreting	LB	31,830.000	31,830.000	
0640	502.0100	Concrete Masonry Bridges	CY	3,866.000	3,866.000	
0650	502.1100	Concrete Masonry Seal	CY	356.000	356.000	
0660	502.3100	Expansion Device (structure) 001. B-70-316	LS	1.000	1.000	
0670	502.3200	Protective Surface Treatment	SY	5,345.000	5,345.000	
0680	502.3210	Pigmented Surface Sealer	SY	628.000	628.000	
0690	503.0146	Prestressed Girder Type I 45W-Inch	LF	5,937.000	5,937.000	
0700	504.0500	Concrete Masonry Retaining Walls	CY	378.000	378.000	
0710	505.0400	Bar Steel Reinforcement HS Structures	LB	37,100.000	37,100.000	
0720	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	655,085.000	655,085.000	
0730	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	1,290.000	1,290.000	
0740	506.0105	Structural Steel Carbon	LB	4,195.000	4,195.000	
0750	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	80.000	80.000	

					6190-15-72	6190-15-74
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0760	506.2610	Bearing Pads Elastomeric Laminated	EACH	32.000	32.000	
0770	506.3005	Welded Stud Shear Connectors 7/8x4-Inch	EACH	94.000	94.000	
0780	506.4000	Steel Diaphragms (structure) 001. B-70-316	EACH	98.000	98.000	
0790	509.5100.S	Polymer Overlay	SY	793.000	793.000	
0800	511.1100	Temporary Shoring	SF	5,270.000	5,270.000	
0810	512.0500	Piling Steel Sheet Permanent Delivered	SF	8,285.000	8,285.000	
0820	512.0600	Piling Steel Sheet Permanent Driven	SF	8,285.000	8,285.000	
0830	513.7026	Railing Steel Type C5 (structure) 001. B-70-316	LF	1,500.000	1,500.000	
0840	513.7026	Railing Steel Type C5 (structure) 004. R-70-122	LF	424.000	424.000	
0850	513.7026	Railing Steel Type C5 (structure) 005. R-70-123	LF	411.000	411.000	
0860	513.8026	Railing Steel Pedestrian Type C5 (structure) 002. B-70-321	LF	496.000	496.000	
0870	513.8026	Railing Steel Pedestrian Type C5 (structure) 003. B-70-322	LF	510.000	510.000	
0880	516.0500	Rubberized Membrane Waterproofing	SY	80.000	80.000	
0890	517.1015.S	Concrete Staining Multi-Color (structure) 001. B-70-316	SF	5,300.000	5,300.000	
0900	517.1015.S	Concrete Staining Multi-Color (structure) 004. R-70-122	SF	3,725.000	3,725.000	
0910	517.1015.S	Concrete Staining Multi-Color (structure) 005. R-70-123	SF	3,865.000	3,865.000	
0920	517.1050.S	Architectural Surface Treatment (structure) 001. B-70-316	SF	5,300.000	5,300.000	
0930	517.1050.S	Architectural Surface Treatment (structure) 004. R-70-122	SF	3,725.000	3,725.000	
0940	517.1050.S	Architectural Surface Treatment (structure) 005. R-70-123	SF	3,865.000	3,865.000	
0950	520.8000	Concrete Collars for Pipe	EACH	3.000	3.000	
0960	532.0201.S	Wall Modular Block Gravity LRFD	SF	235.000	235.000	
0970	550.0500	Pile Points	EACH	233.000	233.000	
0980	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	4,460.000	4,460.000	
0990	550.1120	Piling Steel HP 12-Inch X 53 Lb	LF	7,050.000	7,050.000	
1000	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	3,652.000	3,647.000	5.000
1010	601.0600	Concrete Curb Pedestrian	LF	160.000	160.000	
1020	602.0405	Concrete Sidewalk 4-Inch	SF	14,640.000	14,640.000	
1030	602.0415	Concrete Sidewalk 6-Inch	SF	14,615.000	14,615.000	
1040	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	294.000	294.000	
1050	602.1500	Concrete Steps	SF	14.000	14.000	
1060	603.8000	Concrete Barrier Temporary Precast Delivered	LF	155.000	155.000	
1070	603.8125	Concrete Barrier Temporary Precast Installed	LF	155.000	155.000	
1080	604.0400	Slope Paving Concrete	SY	97.000	97.000	
1090	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	606.000	606.000	
1100	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-	LF	27.000	27.000	

					6190-15-72	6190-15-74
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
		Inch				
1110	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	372.000	372.000	
1120	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	713.000	713.000	
1130	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	254.000	254.000	
1140	611.0420	Reconstructing Manholes	EACH	2.000		2.000
1150	611.0530	Manhole Covers Type J	EACH	10.000	10.000	
1160	611.0612	Inlet Covers Type C	EACH	3.000	3.000	
1170	611.0624	Inlet Covers Type H	EACH	16.000	16.000	
1180	611.0639	Inlet Covers Type H-S	EACH	12.000	12.000	
1190	611.1004	Catch Basins 4-FT Diameter	EACH	3.000	3.000	
1200	611.1005	Catch Basins 5-FT Diameter	EACH	1.000	1.000	
1210	611.1230	Catch Basins 2x3-FT	EACH	24.000	24.000	
1220	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000	
1230	611.2005	Manholes 5-FT Diameter	EACH	9.000	9.000	
1240	611.3003	Inlets 3-FT Diameter	EACH	3.000	3.000	
1250	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000	
1260	611.8115	Adjusting Inlet Covers	EACH	1.000	1.000	
1270	611.8120.S	Cover Plates Temporary	EACH	2.000	2.000	
1280	612.0106	Pipe Underdrain 6-Inch	LF	90.000	90.000	
1290	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	40.000	40.000	
1300	612.0212	Pipe Underdrain Unperforated 12-Inch	LF	100.000	100.000	
1310	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	1,210.000	1,210.000	
1320	614.0905	Crash Cushions Temporary	EACH	1.000	1.000	
1330	616.0404	Fence Chain Link Salvaged 4-FT	LF	10.000	10.000	
1340	618.0100	Maintenance And Repair of Haul Roads (project) 001. 6190-15-72	EACH	1.000	1.000	
1350	619.1000	Mobilization	EACH	1.000	0.970	0.030
1360	624.0100	Water	MGAL	188.000	188.000	
1370	625.0100	Topsoil	SY	10,579.000	10,510.000	69.000
1380	628.1504	Silt Fence	LF	2,250.000	2,250.000	
1390	628.1520	Silt Fence Maintenance	LF	2,250.000	2,250.000	
1400	628.1905	Mobilizations Erosion Control	EACH	8.000	8.000	
1410	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000	
1420	628.2006	Erosion Mat Urban Class I Type A	SY	10,579.000	10,510.000	69.000
1430	628.6510	Soil Stabilizer Type B	ACRE	1.500	1.500	
1440	628.7005	Inlet Protection Type A	EACH	31.000	31.000	
1450	628.7015	Inlet Protection Type C	EACH	27.000	27.000	
1460	628.7020	Inlet Protection Type D	EACH	5.000	5.000	

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Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
1470	628.7504	Temporary Ditch Checks	LF	70.000	70.000	
1480	628.7560	Tracking Pads	EACH	3.000	3.000	
1490	629.0205	Fertilizer Type A	CWT	10.440	10.400	0.040
1500	630.0110	Seeding Mixture No. 10	LB	80.000	80.000	
1510	630.0140	Seeding Mixture No. 40	LB	190.000	189.000	1.000
1520	630.0200	Seeding Temporary	LB	16.000	15.000	1.000
1530	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	25.000	25.000	
1540	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	4.000	4.000	
1550	637.2210	Signs Type II Reflective H	SF	184.510	184.510	
1560	637.2220	Signs Type II Reflective SH	SF	6.750	6.750	
1570	637.2230	Signs Type II Reflective F	SF	28.830	28.830	
1580	638.2602	Removing Signs Type II	EACH	26.000	26.000	
1590	638.3000	Removing Small Sign Supports	EACH	9.000	9.000	
1600	642.5401	Field Office Type D	EACH	1.000	1.000	
1610	643.0100	Traffic Control (project) 001. 6190-15-72	EACH	1.000	1.000	
1620	643.0300	Traffic Control Drums	DAY	31,040.000	31,040.000	
1630	643.0310.S	Temporary Portable Rumble Strips	LS	1.000	1.000	
1640	643.0420	Traffic Control Barricades Type III	DAY	18,132.000	18,132.000	
1650	643.0705	Traffic Control Warning Lights Type A	DAY	22,191.000	22,191.000	
1660	643.0715	Traffic Control Warning Lights Type C	DAY	6,617.000	6,617.000	
1670	643.0900	Traffic Control Signs	DAY	24,924.000	24,924.000	
1680	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000	
1690	644.1410.S	Temporary Pedestrian Surface Asphalt	SF	575.000	575.000	
1700	644.1601.S	Temporary Curb Ramp	EACH	2.000	2.000	
1710	644.1616.S	Temporary Pedestrian Safety Fence	LF	1,185.000	1,185.000	
1720	645.0111	Geotextile Type DF Schedule A	SY	50.000	50.000	
1730	645.0112	Geotextile Type DF Schedule B	SY	35.000	35.000	
1740	645.0140	Geotextile Type SAS	SY	900.000	900.000	
1750	646.0106	Pavement Marking Epoxy 4-Inch	LF	5,685.000	5,685.000	
1760	646.0600	Removing Pavement Markings	LF	3,740.000	3,740.000	
1770	647.0206	Pavement Marking Arrows Bike Lane Epoxy	EACH	18.000	18.000	
1780	647.0256	Pavement Marking Symbols Epoxy	EACH	1.000	1.000	
1790	647.0306	Pavement Marking Symbols Bike Lane Epoxy	EACH	18.000	18.000	
1800	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	55.000	55.000	
1810	647.0656	Pavement Marking Parking Stall Epoxy	LF	840.000	840.000	
1820	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	823.000	823.000	
1830	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	7,835.000	7,835.000	
1840	650.4000	Construction Staking Storm Sewer	EACH	41.000	41.000	
1850	650.4500	Construction Staking Subgrade	LF	2,290.000	2,290.000	
1860	650.5000	Construction Staking Base	LF	2,290.000	2,290.000	

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Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
1870	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	3,845.000	3,845.000	
1880	650.6500	Construction Staking Structure Layout (structure) 001. B-70-316	LS	1.000	1.000	
1890	650.6500	Construction Staking Structure Layout (structure) 002. B-70-321	LS	1.000	1.000	
1900	650.6500	Construction Staking Structure Layout (structure) 003. B-70-322	LS	1.000	1.000	
1910	650.6500	Construction Staking Structure Layout (structure) 004. R-70-122	LS	1.000	1.000	
1920	650.6500	Construction Staking Structure Layout (structure) 005. R-70-123	LS	1.000	1.000	
1930	650.6500	Construction Staking Structure Layout (structure) 006 R-70-125	LS	1.000	1.000	
1940	650.6500	Construction Staking Structure Layout (structure) 007. R-70-126	LS	1.000	1.000	
1950	650.8500	Construction Staking Electrical Installations (project) 001. 6190-15-72	LS	1.000	1.000	
1960	650.9910	Construction Staking Supplemental Control (project) 001. 6190-15-72	LS	1.000	1.000	
1970	650.9920	Construction Staking Slope Stakes	LF	2,290.000	2,290.000	
1980	652.0125	Conduit Rigid Metallic 2-Inch	LF	250.000	250.000	
1990	652.0210	Conduit Rigid Nonmetallic Schedule 40 1-Inch	LF	151.000	151.000	
2000	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	7,618.000	7,618.000	
2010	653.0220	Junction Boxes 18x6x6-Inch	EACH	8.000	8.000	
2020	653.0222	Junction Boxes 18x12x6-Inch	EACH	25.000	25.000	
2030	654.0105	Concrete Bases Type 5	EACH	18.000	18.000	
2040	654.0111	Concrete Bases Type 11	EACH	9.000	9.000	
2050	654.0230	Concrete Control Cabinet Bases Type L30	EACH	2.000	2.000	
2060	655.0610	Electrical Wire Lighting 12 AWG	LF	8,616.000	8,616.000	
2070	655.0615	Electrical Wire Lighting 10 AWG	LF	15,316.000	15,316.000	
2080	655.0620	Electrical Wire Lighting 8 AWG	LF	31,691.000	31,691.000	
2090	656.0200	Electrical Service Meter Breaker Pedestal (location) 001. CB100	LS	1.000	1.000	
2100	656.0200	Electrical Service Meter Breaker Pedestal (location) 002. CB200	LS	1.000	1.000	
2110	657.6005.S	Anchor Assemblies Light Poles on Structures	EACH	27.000	27.000	
2120	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	2.000	2.000	
2130	690.0150	Sawing Asphalt	LF	3,350.000	1,360.000	1,990.000
2140	690.0250	Sawing Concrete	LF	1,595.000	1,335.000	260.000
2150	715.0502	Incentive Strength Concrete Structures	DOL	25,464.000	25,464.000	
2160	999.1000.S	Seismograph	LS	1.000	1.000	
2170	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,100.000	2,100.000	

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Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
2180	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	5,760.000	5,760.000	
2190	SPV.0035	Special 405. Hauling Structure Excavation B-70-316	CY	1,440.000	1,440.000	
2200	SPV.0035	Special 406. Hauling Structure Excavation B-70-321	CY	120.000	120.000	
2210	SPV.0035	Special 407. Hauling Structure Excavation B-70-322	CY	140.000	140.000	
2220	SPV.0060	Special 010. Remove and Reinstall Bollard	EACH	7.000	7.000	
2230	SPV.0060	Special 011. Remove and Reinstall Bench	EACH	3.000	3.000	
2240	SPV.0060	Special 012. Remove and Reinstall Waste Receptacle	EACH	6.000	6.000	
2250	SPV.0060	Special 013. Remove and Reinstall Kiosk	EACH	3.000	3.000	
2260	SPV.0060	Special 014. Mini Storm Sewer Cleanouts	EACH	1.000		1.000
2270	SPV.0060	Special 016. Low Permeable Trench Plugs	EACH	22.000	4.000	18.000
2280	SPV.0060	Special 018. Remove and Reinstall Arbor	EACH	1.000	1.000	
2290	SPV.0060	Special 020. Temporary Inlet	EACH	1.000	1.000	
2300	SPV.0060	Special 110. Fire Hydrant	EACH	3.000		3.000
2310	SPV.0060	Special 111. Connect To Existing Water Main	EACH	7.000		7.000
2320	SPV.0060	Special 112. Water Main Bend 11.25 Degree 6-Inch	EACH	1.000		1.000
2330	SPV.0060	Special 113. Water Main Bend 11.25 Degree 10-Inch	EACH	4.000		4.000
2340	SPV.0060	Special 114. Water Main Bend 11.25 Degree 12-Inch	EACH	1.000		1.000
2350	SPV.0060	Special 115. Water Main Bend 45 Degree 6-Inch	EACH	2.000		2.000
2360	SPV.0060	Special 116. Water Main Bend 45 Degree 10-Inch	EACH	6.000		6.000
2370	SPV.0060	Special 117. Water Main Bend 45 Degree 12-Inch	EACH	4.000		4.000
2380	SPV.0060	Special 118. Water Main Reducer 12x6-Inch	EACH	1.000		1.000
2390	SPV.0060	Special 119. Water Main Reducer 12x10-Inch	EACH	5.000		5.000
2400	SPV.0060	Special 120. Water Main Reducer 14x12-Inch	EACH	1.000		1.000
2410	SPV.0060	Special 121. Water Main Tee 10x6-Inch	EACH	2.000		2.000
2420	SPV.0060	Special 122. Water Main Tee 12x6-Inch	EACH	3.000		3.000
2430	SPV.0060	Special 123. Water Main Tee 12x8-Inch	EACH	1.000		1.000
2440	SPV.0060	Special 124. Water Main Tee 12x12-Inch	EACH	3.000		3.000
2450	SPV.0060	Special 125. Water Main Valve and Box 6-Inch	EACH	5.000		5.000
2460	SPV.0060	Special 126. Water Main Valve and Box 8-Inch	EACH	1.000		1.000
2470	SPV.0060	Special 127. Water Main Valve and Box 10-Inch	EACH	4.000		4.000
2480	SPV.0060	Special 128. Water Main Valve and Box 12-Inch	EACH	8.000		8.000
2490	SPV.0060	Special 129. Corporation, Curb Stop, and Box (Set)	EACH	6.000		6.000
2500	SPV.0060	Special 211. Standard Sanitary Pipe Connection	EACH	3.000		3.000
2510	SPV.0060	Special 212. Sanitary Wye 8-Inch Main	EACH	5.000		5.000
2520	SPV.0060	Special 213. Sanitary Manhole Covers Type J Special	EACH	2.000		2.000
2530	SPV.0060	Special 214. Internal Chimney Seal 1-Piece	EACH	2.000		2.000
2540	SPV.0060	Special 215. Internal Chimney Seal 2-Piece	EACH	2.000		2.000
2550	SPV.0060	Special 310. Pull Box Non-Conductive 24x42-Inch	EACH	23.000	23.000	
2560	SPV.0060	Special 312. Remove and Reinstall Decorative Lighting Assembly	EACH	24.000	24.000	

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Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
2570	SPV.0060	Special 313. Decorative Luminaire - Type A	EACH	14.000	14.000	
2580	SPV.0060	Special 314. Decorative Luminaire - Type B	EACH	10.000	10.000	
2590	SPV.0060	Special 315. Decorative Street Light Assembly - Type A	EACH	8.000	8.000	
2600	SPV.0060	Special 316. Bollard Lighting Unit - LED	EACH	2.000	2.000	
2610	SPV.0060	Special 317. Transformer Bases Breakaway 11 1/2-Inch Bolt Circle - Black	EACH	3.000	3.000	
2620	SPV.0060	Special 318. Poles Type 5 - Aluminum - Black	EACH	3.000	3.000	
2630	SPV.0060	Special 319. Luminaire Arms Single Member 4 1/2-Inch Clamp 8 Ft - Black	EACH	3.000	3.000	
2640	SPV.0060	Special 320. Luminaires Utility LED A - Black	EACH	3.000	3.000	
2650	SPV.0060	Special 321. Light Pole Modifier - GFCI Receptacle	EACH	9.000	9.000	
2660	SPV.0060	Special 322. Lighting Units Walkway Black	EACH	21.000	21.000	
2670	SPV.0060	Special 410. Fabricated Steel Shelter	EACH	2.000	2.000	
2680	SPV.0060	Special 411. Clearance Gauge	EACH	2.000	2.000	
2690	SPV.0060	Special 412. Underwater Inspection	EACH	1.000	1.000	
2700	SPV.0060	Special 413. Deadman Tiebacks	EACH	12.000	12.000	
2710	SPV.0075	Special 020. Street Sweeping	HRS	300.000	300.000	
2720	SPV.0090	Special 030. Mini Storm Lateral 4-Inch	LF	264.000		264.000
2730	SPV.0090	Special 031. Mini Storm Trunk 6-Inch	LF	145.000		145.000
2740	SPV.0090	Special 032. Salvage Planter Rail	LF	40.000	40.000	
2750	SPV.0090	Special 034. Rail Steel Pedestrian Type C5 Sidewalk	LF	98.000	98.000	
2760	SPV.0090	Special 035. Concrete Curb and Gutter HES 30-Inch Type D	LF	40.000	40.000	
2770	SPV.0090	Special 130. Water Main 6-Inch	LF	222.000		222.000
2780	SPV.0090	Special 131. Water Main 8-Inch	LF	12.000		12.000
2790	SPV.0090	Special 132. Water Main 10-Inch	LF	85.000		85.000
2800	SPV.0090	Special 133. Water Main 12-Inch	LF	607.000		607.000
2810	SPV.0090	Special 134. Water Main 6-Inch Contaminated Soils	LF	116.000		116.000
2820	SPV.0090	Special 135. Water Main 10-Inch Contaminated Soils	LF	285.000		285.000
2830	SPV.0090	Special 136. Water Main 12-Inch Contaminated Soils	LF	346.000		346.000
2840	SPV.0090	Special 137. Water Service 1-Inch	LF	171.000		171.000
2850	SPV.0090	Special 139. Steel Casing Pipe 24-Inch	LF	75.000		75.000
2860	SPV.0090	Special 230. Sanitary Sewer Pipe 8-Inch	LF	550.000		550.000
2870	SPV.0090	Special 231. Sanitary Sewer Pipe 10-Inch	LF	261.000		261.000
2880	SPV.0090	Special 232. Sanitary Sewer Lateral 4 Or 6-Inch	LF	158.000		158.000
2890	SPV.0090	Special 430. Waler Corrosion Protection	LF	141.000	141.000	
2900	SPV.0105	Special 051. Salvage Railing / Sign	LS	1.000	1.000	
2910	SPV.0105	Special 052. Preparation, Shaping, and Finishing Sediment Disposal Site	LS	1.000	1.000	
2920	SPV.0105	Special 151. Construction Staking Miscellaneous Village Utilities	LS	1.000		1.000

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Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
2930	SPV.0105	Special 350. Navigational Lights and Aids	LS	1.000	1.000	
2940	SPV.0105	Special 351. Electrical Service Meter Breaker Pedestal Special	LS	1.000	1.000	
2950	SPV.0105	Special 450. Rem Old Structure Over Waterway With Minimal Debris Mod Station 140+42	LS	1.000	1.000	
2960	SPV.0120	Special 060. Water For Seeded Areas	MGAL	300.000	300.000	
2970	SPV.0165	Special 470. Wall Concrete Panel Mechanically Stabilized Earth LRFD/QMP **P**	SF	7,151.000	7,151.000	
2980	SPV.0195	Special 001. Excavation Hauling and Disposal of Contaminated Soil	TON	9,280.000	9,010.000	270.000
2990	SPV.0200	Special 200. Sanitary Manhole	VF	17.300		17.300

3

3

CLEARING AND GRUBBING

STATION	OFFSET FT	DIR	ROADWAY	201.0105 CLEARING STA	201.0120 CLEARING ID	201.0205 GRUBBING STA	201.0220 GRUBBING ID	COMMENT
PROJECT 6190-15-72								
CATEGORY 0010								
134+60	30	RT	STH 116	---	4	---	4	4" MAPLE
149+00 - 150+00	33	RT	STH 116	1	---	1	---	18" WHITE PINE
13+00 - 14+00	37	RT	S 1ST AV	1	---	1	---	18" MAPLE
			PROJECT TOTALS	2	4	2	4	

REMOVING CURB AND GUTTER

STATION	TO	STATION	ROADWAY	204.0150 LF	COMMENTS
PROJECT 6190-15-72					
CATEGORY 0010					
132+60	-	137+75	STH 116	860	
143+75	-	149+60	STH 116	1,155	
11+50	-	12+00	S 1ST ST	100	
13+00	-	14+91	N 1ST ST	420	
SOUTH OF CURB RET			S 1ST AV	485	INCL MEADOW LN CURB RAMPS
NORTH OF CURB RET			N 1ST AV	80	
25+60	-	26+05	S 2ND AV	90	
8+95	-	9+54	S 1ST ST	65	ADAMS ST BUMPOUT

PROJECT TOTAL 3,255

REMOVING STORM SEWER STRUCTURES

STATION	OFFSET FT	DIR	ROADWAY	204.0210 REMOVING MANHOLES EA	204.0220 REMOVING INLETS EA
PROJECT 6190-15-72					
CATEGORY 0010					
133+70	25.8	LT	STH 116	---	1
133+84	12.1	RT	STH 116	1	---
133+88	35.5	RT	STH 116	---	1
135+96	85.6	LT	STH 116	---	1
136+01	38.5	LT	STH 116	---	1
136+08	86.5	LT	STH 116	---	1
136+12	39.2	LT	STH 116	---	1
136+15	44.1	LT	STH 116	1	---
136+60	31.9	LT	STH 116	1	---
144+89	62.2	LT	STH 116	1	---
144+91	98.5	LT	STH 116	---	1
144+91	56.5	LT	STH 116	---	1
144+99	56.5	LT	STH 116	---	1
145+03	98.5	LT	STH 116	---	1
146+22	20.8	LT	STH 116	---	1
146+28	40.6	LT	STH 116	1	---
148+67	37.2	RT	STH 116	---	1
149+01	34.1	RT	STH 116	---	1
149+57	20.8	LT	STH 116	---	1
149+57	20.8	RT	STH 116	---	1
14+01	30.5	LT	N 1ST ST	---	1
14+04	50.3	LT	S 1ST AV	---	1
14+21	16.5	LT	S 1ST AV	---	1
14+11	28.7	LT	S 1ST AV	1	---
16+69	34.5	RT	N 1ST AV	---	1
17+04	20	RT	N 1ST AV	---	1
17+24	11.7	LT	N 1ST AV	---	1
17+28	10.6	LT	N 1ST AV	1	---
25+99	0.2	RT	S 2ND AV	1	---
			PROJECT TOTALS	8	21

REMOVING PAVEMENT

STATION	TO	STATION	ROADWAY	204.0100 SY	COMMENT
PROJECT 6190-15-72					
CATEGORY 0010					
132+60	-	137+75	STH 116	2,080	ROADWAY
143+75	-	149+60	STH 116	420	ROADWAY
SW CORNER STH 116 / 1ST AVE				415	PARKING LOT

PROJECT TOTAL 2,915

REMOVING ASPHALTIC SURFACE

STATION	TO	STATION	ROADWAY	204.0110 SY	COMMENT
PROJECT 6190-15-72					
CATEGORY 0010					
144+65	-	147+00	STH 116	1,300	ROADWAY IN FILL AREAS
STAGING AREA RESTORATION				1,700	

PROJECT TOTAL 3,000

REMOVING CONCRETE SIDEWALK

STATION	TO	STATION	ROADWAY	204.0155 SY
PROJECT 6190-15-72				
CATEGORY 0010				
132+60	-	137+75	STH 116	1,400
143+75	-	149+60	STH 116	1,480

PROJECT TOTAL 2,880

REMOVING STORM SEWER

ROADWAY	SYSTEM	204.0245.001 REMOVING STORM SEWER 6-INCH LF	204.0245.002 REMOVING STORM SEWER 12-INCH LF	204.0245.003 REMOVING STORM SEWER 15-INCH LF	204.0245.004 REMOVING STORM SEWER 18-INCH LF	204.0245.005 REMOVING STORM SEWER 24-INCH LF	204.0245.006 REMOVING STORM SEWER 30-INCH LF
PROJECT 6190-15-72							
CATEGORY 0010							
STH 116	W TRUNK AND LATERALS	8	54	16	186	224	80
STH 116	E TRUNK AND LATERALS	---	92	19	130	86	---
N 1ST ST	LATERAL AT STA 14+00	---	47	---	---	---	---
S 1ST AV	TRUNK AND LATERALS	---	---	105	---	---	---
N 1ST AV	LATERALS	---	45	---	---	---	---
S 2ND AV	LATERALS	---	146	---	---	---	---
		PROJECT TOTALS	8	384	140	316	310	80

STREETSCAPE ELEMENTS

STATION	OFFSET FT	DIR	ROADWAY	204.0195* REMOVING CONCRETE BASES EA	SPV.0060.010 REMOVE AND REINSTALL BOLLARD EA	SPV.0060.011 REMOVE AND REINSTALL BENCH EA	SPV.0060.012 REMOVE AND REINSTALL WASTE RECEPTACLE EA	SPV.0060.013 REMOVE AND REINSTALL KIOSK EA	204.9060.S.002 REMOVE BOLLARD EA	SPV.0090.032 SALVAGE PLANTER RAIL LF	SPV.0105.051 SALVAGE RAILING/SIGN LS	COMMENT
PROJECT 6190-15-72												
CATEGORY 0010												
132+64	29	RT	STH 116	---	---	---	1	---	---	---	---	REINSTALL IN EXIST LOCATION
132+88	29	LT	STH 116	---	---		1	---	---	---	---	REINSTALL IN EXIST LOCATION
133+30	31	RT	STH 116	---	---	1	---	---	---	---	---	REINSTALL IN EXIST LOCATION
133+34	32	LT	STH 116	---	---	1	---	---	---	---	---	REINSTALL IN EXIST LOCATION
133+47	24	RT	STH 116	---	---	---	---	1	---	---	---	REINSTALL IN EXIST LOCATION
133+61	29	LT	STH 116	1	1	---	---	---	---	---	---	REINSTALL @ STH 116 STA 133+62.0, 29.0' LT
133+65	23	RT	STH 116	1	1	---	---	---	---	---	---	REINSTALL @ STH 116 STA 133+65.2, 26.2' RT
134+26	41	LT	STH 116	1	---	---	---	---	1	---	---	
134+37	9	RT	STH 116	1	1	---	---	---	---	---	---	REINSTALL @ STH 116 STA 134+36.7, 28.7' RT
134+43	48	LT	STH 116	---	---	---	---	1	---	---	---	REINSTALL @ STH 116 STA 133+46, 27' LT
134+55	58	LT	STH 116	---	---	1	---	---	---	---	---	REINSTALL @ W PLTFRM STA 301+58, 6' RT
135+00	73	LT	STH 116	---	---	---	---	---	---	20	---	PLANTER
135+07	76	LT	STH 116	---	---	---	1	---	---	---	---	REINSTALL @ W PLTFORM STA 302+57, 9' RT
135+36	23	LT	STH 116	---	---	---	1	---	---	---	---	REINSTALL @ BRDWALK TRL STA 11+60, 2' LT
135+44	24	LT	STH 116	---	---	---	---	---	---	20	---	PLANTER
136+62	33	LT	STH 116	---	---	---	---	---	---	---	1	
145+63	48	LT	STH 116	1	---	---	---	---	1	---	---	
145+82	96	LT	STH 116	1	---	---	---	---	1	---	---	
146+41	32	LT	STH 116	1	---	---	---	---	1	---	---	
146+49	27	LT	STH 116	---	---	---	1	---	---	---	---	REINSTALL @ EAST LOT STA 500+00, 7' LT
146+64	72	LT	STH 116	1	1		---	---	---	---	---	REINSTALL @ STH 116 STA 148+46.6, 21.2' LT
146+80	64	LT	STH 116	---	---	---		1	---	---	---	REINSTALL @ STH 116 STA 145+73, 30, LT
148+24	26	LT	STH 116	---	---	---	1		---	---	---	REINSTALL @ STH 116 STA 147+93, 28' LT
148+52	21	RT	STH 116	1	1	---	---	---	---	---	---	REINSTALL @ STH 116 STA 148+33.6, 25.4' RT
149+12	23	RT	STH 116	1	1	---	---	---	---	---	---	REINSTALL @ STH 116 STA 149+18.9, 26.8' RT
149+16	23	LT	STH 116	1	1	---	---	---	---	---	---	REINSTALL @ STH 116 STA 149+15.3, 23.6' LT
PROJECT TOTALS				11*	7	3	6	3	4	40	1	

*ADDITIONAL QUANTITY LISTED UNDER STREET LIGHTING REMOVALS

NOTE: VERIFY WHICH BOLLARD COVERS WILL BE REINSTALLED WITH THE VILLAGE OF WINNECONNE

REMOVE DOCK

STATION	OFFSET FT	DIR	ROADWAY	204.9060.S.001 EA	COMMENT
PROJECT 6190-15-72					
CATEGORY 0010					
137+25	27	LT	STH 116	1	
137+25	0	LT	STH 116	1	
137+25	31	RT	STH 116	1	
137+25	58	RT	STH 116	1	
137+25	84	RT	STH 116	1	
137+25	110	RT	STH 116	1	
PROJECT TOTAL				6	

REMOVE AND REINSTALL ARBOR

STATION	OFFSET	ROADWAY	SPV.0060.018 EA	COMMENTS
PROJECT 6190-15-72				
CATEGORY 0010				
149+37	20' LT	STH 116	1	SEE PAVING DETAIL FOR PROP LOCATION
PROJECT TOTAL			1	

REMOVE RETAINING WALL

STATION	TO	STATION	OFFSET FT	ROADWAY	204.9090.S.001 LF	COMMENTS
PROJECT 6190-15-72						
CATEGORY 0010						
500+05	-	500+75	22' RT	EAST LOT	70	BURIED STONE MASONRY
500+05	-	501+30	30' LT	EAST LOT	125	BURIED MORTAR RUBBLE MASONRY
PROJECT TOTAL					195	

EARTHWORK SUMMARY

ROADWAY	FROM / TO STATION	205.0100 COMMON EXCAVATION		SALVAGED UNUSABLE PAVEMENT MATERIAL	AVAILABLE MATERIAL (3)	UNEXPANDED FILL	UNEXPANDED SELECT BORROW	EXPANDED FILL	EXPANDED SELECT BORROW	WASTE	208.0100 BORROW	208.1100 SELECT BORROW	COMMENT
		CUT (1)	EBS					FACTOR 1.25	FACTOR 1.20				
CATEGORY 0010													
STH 116	132+60 / 149+60	3,125	8,265	990	2,135	940	11,290	1,175	13,550	2,135	1,175	13,550	2,4,6
1ST ST	11+50 / 14+90	710	0	230	480	30	0	38	0	443	0	0	
S 1ST AV	12+94 / 15+00	2,240	0	120	2,120	5	0	6	0	2,114	0	0	
N 1ST AV	16+50 / 17+50	200	0	65	135	75	0	94	0	41	0	0	
S 2ND AV	25+60 / 26+00	200	0	35	165	0	0	0	0	165	0	0	
N 2ND AV	27+00 / 27+15	35	0	10	25	0	0	0	0	25	0	0	
W PLATFORM TRL	300+50 / 302+65	225	0	80	145	145	0	181	0	145	180	0	4
PAVEMENT REMOVAL BACKFILL		0	0	0	0	1,080	0	1,350	0	0	1,350	0	
UNDISTRIBUTED		0	1,000	0	0	0	1,000	0	1,200	0	0	1,200	2
CATEGORY 0010 SUBTOTALS		6,735	9,265	1,530	5,205	2,275	12,290	2,844	14,750	5,068	2,705	14,750	
		16,000											
CATEGORY 0110													
E PLATFORM PL	500+00 / 501+50	105	45	75	30	670	0	840	0	0	810	0	5
UNDISTRIBUTED		0	100	0	0	0	100	125	0	0	125	0	5
CATEGORY 0110 SUBTOTALS		105	145	75	30	670	100	965	0	0	935	0	
		250											
PROJECT TOTALS		6,840	9,410	1,605	5,235	2,945	12,390	3,809	14,750	5,068	3,640	14,750	
		16,250											

1) SALVAGED / UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
2) EBS EXCAVATION SHALL BE BACKFILLED WITH SELECT BORROW MATERIAL.
3) AVAILABLE MATERIAL = CUT - SALVAGED MATERIAL.
4) DUE TO STAGED NATURE OF CONSTRUCTION AND LIMITED AREA FOR SOIL STOCKPILES, ALL CUT AND EBS MATERIAL ASSUMED TO BE WASTED AND ALL FILL AREAS FILLED WITH BORROW OR SELECT BORROW.
5) EBS EXCAVATION SHALL BE BACKILLED WITH BORROW MATERIAL.
6) SELECT BORROW SHALL BE USED IN APPROACH ROADWAY FILLS BETWEEN RETAINING WALLS.

EXCAVATION, HAULING, AND DISPOSAL OF CONTAMINATED SOIL

LOCATION	SPV.0195.001 TON
PROJECT 6190-15-72	
CATEGORY 0010	
WEST APPROACH EBS	5640
EAST APPROACH EBS	3120
WEST SIDE STORM SEWER	190
EAST SIDE STORM SEWER	60
PROJECT TOTAL	9,010

BACKFILL GRANULAR GRADE 2

LOCATION	209.2100 CY
PROJECT 6190-15-72	
CATEGORY 0010	
EXISTING STORM SEWER REMOVAL BACKFILL	670
PROJECT TOTAL	670

BASE AGGREGATE DENSE AND BREAKER RUN

STATION	TO	STATION	ROADWAY	305.0110 BASE AGGREGATE DENSE 3/4-INCH ROADWAY TON	305.0110 BASE AGGREGATE DENSE 3/4-INCH SIDEWALKS / TRAIL TON	305.0110 BASE AGGREGATE DENSE 3/4-INCH DRIVEWAYS TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH ROADWAY TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH DRIVEWAYS / PARKING LOTS TON	311.0110 BREAKER RUN ROADWAY TON	311.0110 BREAKER RUN EBS TON	624.0100 WATER MGAL	COMMENTS
PROJECT 6190-15-72												
CATEGORY 0010												
132+60	-	137+75	STH 116	0	255	0	1,750	0	1,540	0	50	
143+75	-	149+60	STH 116	0	130	16	2,340	15	2,060	0	64	
11+50	-	12+00	S 1ST ST	0	5	1	170	2	120	0	4	INCL BUMPOUT AT ADAMS
13+00	-	14+91	N 1ST ST	0	40	0	380	25	270	0	10	
12+94	-	14+81	S 1ST AV	0	40	5	750	17	535	0	19	INCL MEADOW LN CURB RAMPS
16+50	-	17+50	N 1ST AV	0	10	5	180	24	130	0	5	
25+60	-	26+03	S 2ND AV	0	5	0	100	0	70	0	2	
26+91	-	27+15	N 2ND AV	0	0	0	50	0	35	0	1	
300+50	-	302+70	W PLATFORM TRAIL	0	110	0	0	0	0	0	2	
403+35	-	405+10	E PLATFORM TRAIL	0	80	0	0	0	0	0	1	
9+92	-	11+87	BOARDWALK TRAIL	0	100	0	0	0	0	0	1	
FIN PARKING LOT			---	0	0	0	0	520	0	0	7	
TRAFFIC STAGING				0	0	0	935	0	0	0	13	
			CATEGORY 0010 SUBTOTALS	0	775 801	26	6,655 7,259**	604	4,760 4,760	0	179	
CATEGORY 0110												
EAST PLATFORM PARKING			STH 116	0	0	0	0	635	0	0	9	
			CATEGORY 0110 SUBTOTALS	0	0 0	0	0 635	635	0 0	0	9	
			PROJECT TOTALS	0	775 801	26	6,655 7,894	1,239	4,760 4,760	0	188	

**ADDITIONAL QTY LOCATED IN TEMPORARY SURFACE ITEMS TABLE

CONCRETE PAVEMENT APPROACH SLAB

STATION	TO	STATION	ROADWAY	415.0410 SY
PROJECT 6190-15-72				
CATEGORY 0010				
136+34.25	-	136+49.25	STH 116	53.33
144+34.75	-	144+49.75	STH 116	53.33
			PROJECT TOTALS	106.66

CONCRETE DRIVEWAY

STATION	TO	STATION	ROADWAY	416.0160 6-INCH SY	416.0180 8-INCH SY	416.0280 HES 8-INCH SY
PROJECT 6190-15-72						
CATEGORY 0010						
132+60	-	137+75	STH 116	0	0	0
143+75	-	149+60	STH 116	44	0	0
11+50	-	12+00	S 1ST ST	0	7	0
13+00	-	14+91	N 1ST ST	0	39	0
12+94	-	14+81	S 1ST AV	12	0	38
16+72	-	17+50	N 1ST AV	69	0	0
			PROJECT TOTALS	124	46	38

ASPHALTIC ITEMS

STATION		TO STATION	ROADWAY	455.0605 TACK COAT GAL	450.4000 HMA COLD WEATHER PAVING TON	460.2000 INCENTIVE DENSITY HMA PAVEMENT DOL	460.4110.S REHEATING HMA PAVEMENT LONGITUDINAL JOINTS LF	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	COMMENTS
PROJECT 6190-15-72													
CATEGORY 0010													
132+60	-	137+75	STH 116	213	50	408	375	0	0	459	178	0	
143+75	-	149+60	STH 116	292	50	560	510	0	0	630	245	0	
11+50	-	12+00	S 1ST ST	16	---	40	0	35	28	0	0	0	INCL BUMPOUT AT ADAMS
13+00	-	14+91	N 1ST ST	42	---	103	0	90	70	0	0	3	
12+94	-	14+81	S 1ST AV	83	---	203	0	178	139	0	0	0	INCL MEADOW LN CURB RAMPS
16+50	-	17+50	N 1ST AV	17	---	43	0	37	29	0	0	0	
25+60	-	26+03	S 2ND AV	10	---	25	0	22	17	0	0	0	
26+91	-	27+15	N 2ND AV	5	---	13	0	11	9	0	0	0	
FIN PARKING LOT			---	0	---	0	0	0	0	0	0	154	
CATEGORY 0010 SUBTOTALS				679*	100	1,395	885	375	292	1,089	424	157	
CATEGORY 0110													
EAST PLATFORM PARKING			---	44	---	109	0	95	74	0	0	0	
CATEGORY 0110 SUBTOTALS				44	---	109	0	95	74	0	0	0	
PROJECT TOTALS				723	100	1,503	885	470	366	1,089	424	157	

*ADDITONAL QTY IN TEMPORARY SURFACE TABLE

TEMPORARY SHORING

STRUCTURE	511.1100 SF
PROJECT 6190-15-72	
CATEGORY 0010	
R-70-122	2,710
R-70-123	2,560
PROJECT TOTAL	5,270

WALL MODULAR BLOCK GRAVITY

LOCATION	532.0201.S WALL MODULAR BLOCK GRAVITY LRFD SF
PROJECT 6190-15-72	
CATEGORY 0010	
S 1ST AV	235
PROJECT TOTAL	235

CONCRETE CURB AND GUTTER

STATION		TO STATION	ROADWAY	601.0411 30-INCH TYPE D LF	601.0600 CONCRETE CURB PEDESTRIAN LF	SPV.0090.035 HES 30-INCH TYPE D LF	COMMENTS
PROJECT 6190-15-72							
CATEGORY 0010							
132+60	-	136+68	STH 116	830	---	---	
144+16	-	149+60	STH 116	1,047	---	---	
11+50	-	12+00	S 1ST ST	104	---	---	
8+95	-	9+54	S 1ST ST	70	---	---	
13+00	-	14+91	N 1ST ST	327	---	---	
12+94	-	14+80	S 1ST AV	425	---	40	INCL MEADOW LN CURB RAMPS
16+42	-	17+50	N 1ST AV	173	---	---	
25+60	-	26+05	S 2ND AV	88	38	---	
26+91	-	27+15	N 2ND AV	48	---	---	
FIN PARKING LOT			---	150	122	---	
CATEGORY 0010 SUBTOTALS				3,262	160	40	
CATEGORY 0110							
EAST PLATFORM PARKING				385	---	---	
CATEGORY 0110 SUBTOTALS				385	---	---	
PROJECT TOTALS				3,647	160	40	

STORM SEWER PIPE REINFORCED CONCRETE

FROM	-	TO	520.8000 CONCRETE COLLARS FOR PIPE EA	608.0312 CLASS III 12-INCH LF	608.0315 CLASS III 15-INCH LF	608.0318 CLASS III 18-INCH LF	608.0324 CLASS III 24-INCH LF	608.0412 CLASS IV 12-INCH LF	SPV.0060.016 LOW PERMEABLE TRENCH PLUGS EA	JOINT TIES	INLET ELEV	DISCHARGE ELEV
PROJECT 6190-15-72												
CATEGORY 0010												
PROJ LIMIT	-	SS35.0	---	---	---	---	90	---	---	---	754.52	752.14
SS10.0	-	OUTFALL	---	---	---	---	82	---	---	4	747.51	746.75
SS100.0	-	OUTFALL	---	---	---	---	42	---	---	4	747.91	746.50
SS105.0	-	SS100.0	---	---	---	---	151	---	1	---	751.02	747.91
SS105.1	-	SS105.0	---	15	---	---	---	---	---	---	751.94	751.79
SS105.2	-	SS105.0	---	---	---	28	---	---	---	---	752.02	751.52
SS105.3	-	SS107.0	---	---	19	---	---	---	---	---	753.04	752.70
SS105.4	-	SS105.3	---	---	---	---	---	21	---	---	753.71	753.29
SS105.5	-	SS105.2	---	54	---	---	---	---	---	---	752.68	752.52
SS105.6	-	SS105.1	---	64	---	---	---	---	---	---	752.50	751.94
SS106.1	-	SS106.0	---	44	---	---	---	---	1	---	750.00	749.22
SS106.0	-	EXIST PIPE	1	---	8	---	---	---	---	---	747.45	---
SS107.0	-	SS105.2	---	---	---	24	---	---	---	---	752.45	752.02
SS107.1	-	SS107.0	---	---	---	133	---	---	---	---	755.57	752.45
SS107.2	-	SS107.1	---	18	---	---	---	---	---	---	756.75	756.57
SS107.3	-	SS107.1	---	18	---	---	---	---	---	---	756.75	756.57
SS108.1	-	SS108.2	---	---	---	---	---	13	---	---	750.12	750.05
SS108.2	-	SS108.0	---	---	---	---	---	55	---	---	750.05	749.77
SS108.3	-	SS108.0	---	---	---	---	---	25	---	---	751.39	749.77
SS110.1	-	SS110.0	---	---	---	---	---	37	1	---	760.29	760.11
SS110.2	-	SS110.0	---	40	---	---	---	---	---	---	760.71	760.11
SS110.3	-	SS110.2	---	---	---	---	---	62	---	---	761.64	760.71
SS15.0	-	SS10.0	---	---	---	---	173	---	1	---	749.24	747.51
SS20.0	-	SS15.0	---	---	---	---	68	---	---	---	751.03	750.24
SS25.0	-	SS20.0	---	---	---	---	20	---	---	---	751.27	751.03
SS25.1	-	SS25.0	---	20	---	---	---	---	---	---	752.47	752.27
SS25.2	-	SS25.1	---	12	---	---	---	---	---	---	752.59	752.47
SS30.0	-	SS25.0	---	---	---	187	---	---	---	---	754.42	751.27
SS30.1	-	SS30.0	---	18	---	---	---	---	---	---	756.60	756.42
SS30.2	-	SS30.0	---	18	---	---	---	---	---	---	756.60	756.42
SS31.1	-	EXIST MH	---	46	---	---	---	---	---	---	752.76	752.53
SS31.2	-	SS31.1	---	---	---	---	---	41	---	---	752.96	752.76
SS35.0	-	SS25.0	---	---	---	---	87	---	---	---	752.14	751.27
SS35.1	-	SS35.0	---	24	---	---	---	---	---	---	753.24	753.00
SS35.2	-	SS35.0	---	12	---	---	---	---	---	---	753.12	753.00
SS35.3	-	SS35.2	---	29	---	---	---	---	---	---	753.41	753.12
SS35.4	-	SS35.1	---	26	---	---	---	---	---	---	753.50	753.24
SS5.0	-	OUTFALL	---	89	---	---	---	---	---	4	747.51	746.62
SS5.1	-	SS5.0	---	37	---	---	---	---	---	---	747.87	747.51
SS210.0	-	EXIST MH	---	22	---	---	---	---	---	---	751.88	751.43
		PROJECT TOTALS	1*	606	27	372	713	254	4	12		

*ADDITIONAL QTY IN TEMPORARY STORM SEWER TABLE

CONCRETE SIDEWALK

STATION	TO	STATION	ROADWAY	602.0405 4-INCH SF	602.0415 6-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF
PROJECT 6170-15-72						
CATEGORY 0010						
132+60	-	136+68	STH 116	3,880	5,140	70
144+16	-	149+60	STH 116	4,620	1,780	144
9+25	-	12+00	S 1ST ST	310	---	0
13+00	-	14+91	N 1ST ST	2,685	---	10
12+94	-	14+80	S 1ST AV***	1,870	40	20
16+50	-	17+50	N 1ST AV	335	85	20
25+60	-	26+03	S 2ND AV	240	---	0
300+50	-	302+70	W PLATFORM TRAIL	---	2,820	10
403+35	-	405+10	E PLATFORM TRAIL	---	2,050	20
9+92	-	11+87	BOARDWALK TRAIL	700	2,700	---
			PROJECT TOTALS	14,640	14,615	294

*** INCL MEADOW LANE CURB RAMPS

CONCRETE STEPS

LOCATION	ROADWAY	602.1500 SF	COMMENT
PROJECT 6190-15-72			
CATEGORY 0010			
148+42 29' LT	STH 116	6	
149+37 30' RT	STH 116	8	
	PROJECT TOTAL	14	

ADJUSTING COVERS

STRUCTURE	STATION	OFFSET FT	ROADWAY	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH
PROJECT 6190-15-72					
CATEGORY 0010					
EX MANHOLE	14+47	18.0' LT	N 1ST ST	1	---
EX INLET	14+50	35.3' LT	N 1ST ST	---	1
			PROJECT TOTALS	1	1

STORM SEWER STRUCTURES

STRUCTURE	STATION	OFFSET*	ROADWAY	611.0530 MANHOLE COVERS TYPE J EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0612 INLET COVERS TYPE C EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.1230 CATCH BASINS 2X3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.3003 INLETS 3-FT DIAMETER EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	COMMENT
PROJECT 6190-15-72															
CATEGORY 0010															
SS5.0	135+91	87.1' LT	STH 116	---	---	---	1	---	---	---	---	---	1	1	
SS5.1	135+46	78.3' LT	STH 116	---	---	1	---	---	---	1	---	---	---	1	
SS10.0	136+34	51.2' RT	STH 116	1	---	---	---	---	---	---	---	1	---	1	
SS15.0	134+84	73.2' RT	STH 116	1	---	---	---	---	---	---	---	1	---	1	
SS20.0	134+37	20.3' RT	STH 116	---	1	---	---	---	1	---	---	---	---	1	
SS25.0	134+37	0' RT	STH 116	1	---	---	---	---	---	---	---	1	---	1	
SS25.1	134+40	19.6' LT	STH 116	---	1	---	---	---	---	1	---	---	---	1	
SS25.2	134+41	31.4' LT	STH 116	---	---	---	1	---	---	---	---	---	1	1	
SS30.0	136+25	0' RT	STH 116	1	---	---	---	---	---	---	---	1	---	1	
SS30.1	136+29	17.5' RT	STH 116	---	1	---	---	---	---	1	---	---	---	1	
SS30.2	136+29	17.5' LT	STH 116	---	1	---	---	---	---	1	---	---	---	1	
SS31.1	14+00	23.5' LT	1ST ST	---	1	---	---	---	---	1	---	---	---	1	
SS31.2	14+00	17' RT	1ST ST	---	1	---	---	---	---	1	---	---	---	1	
SS35.0	133+50	6' LT	STH 116	1	---	---	---	---	---	---	---	1	---	1	
SS35.1	133+50	17.5' RT	STH 116	---	1	---	---	---	---	1	---	---	---	1	
SS35.2	133+50	17.5' LT	STH 116	---	1	---	---	---	---	1	---	---	---	1	
SS35.3	133+23	23.5' LT	STH 116	---	---	1	---	---	---	1	---	---	---	1	
SS35.4	133+23	23.5' RT	STH 116	---	---	1	---	---	---	1	---	---	---	1	
SS100.0	500+17	17.8' LT	PARK LOT	---	---	1	---	1	---	---	---	---	---	1	
SS105.0	16+50	23.7' LT	N 1ST AV	1	---	---	---	---	---	---	---	1	---	1	
SS105.1	16+50	9.1' LT	N 1ST AV	---	1	---	---	---	---	1	---	---	---	1	
SS105.2	146+00	23.5' LT	STH 116	---	1	---	---	1	---	---	---	---	---	1	
SS105.3	146+00	17.5' RT	STH 116	---	---	1	---	---	---	1	---	---	---	1	
SS105.4	146+20	17.5' RT	STH 116	---	---	1	---	---	---	1	---	---	---	1	
SS105.5	146+58	30.3' LT	STH 116	---	1	---	---	---	---	1	---	---	---	1	
SS105.6	146+80	55.8' LT	STH 116	---	---	---	1	---	---	---	---	---	1	1	
SS106.0	17+38	11.4' LT	N 1ST AV	---	1	---	---	1	---	---	---	---	---	1	DWY CURB HEAD REQD
SS106.1	17+08	21.9' RT	N 1ST AV	---	1	---	---	---	---	1	---	---	---	1	DWY CURB HEAD REQD
SS107.0	145+93	0' RT	STH 116	1	---	---	---	---	---	---	---	1	---	1	
SS107.1	144+60	0' RT	STH 116	1	---	---	---	---	---	---	---	1	---	1	
SS107.2	144+56	17.5' RT	STH 116	---	1	---	---	---	---	1	---	---	---	1	
SS107.3	144+56	17.5' LT	STH 116	---	1	---	---	---	---	1	---	---	---	1	
SS108.0	13+48.9	1.4' LT	S 1ST AV	1	---	---	---	---	---	---	1	---	---	1	
SS108.1	13+95	46' LT	S 1ST AV	---	---	1	---	---	---	1	---	---	---	1	
SS108.2	13+84	39.8' LT	S 1ST AV	---	---	1	---	---	---	1	---	---	---	1	
SS108.3	13+49	23.6' RT	S 1ST AV	---	---	1	---	---	---	1	---	---	---	1	
SS110.0	26+00	0' RT	S 2ND AV	1	---	---	---	---	---	---	---	1	---	1	
SS110.1	26+13	35' LT	S 2ND AV	---	1	---	---	---	---	1	---	---	---	1	
SS110.2	26+25	31.5' RT	S 2ND AV	---	---	1	---	---	---	1	---	---	---	1	
SS110.3	149+55	22.6' LT	STH 116	---	---	1	---	---	---	1	---	---	---	1	
SS210.0	9+06	16.7' RT	1ST ST	---	---	1	---	---	---	1	---	---	---	1	
PROJECT TOTALS				10	16	12	3	3	1	24	1	9	3	41	

REMARKS
* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

3

TEMPORARY STORM SEWER

STATION	ROADWAY	520.8000 CONCRETE COLLARS FOR PIPE EA	612.0212 PIPE UNDERDRAIN UNPERFORATED 12-INCH LF	SPV.0060.020 TEMPORARY INLET EA	COMMENT
PROJECT 6190-15-72					
CATEGORY 0010					
136+49 45' LT	STH 116	2	100	1	WEST APPROACH SS OUTFALL STAGES 2-5
PROJECT TOTAL		2*	100	1	

*ADDITIONAL QTY IN STORM SEWER PIPE TABLE

FENCE

STATION TO STATION	ROADWAY	616.0404 FENCE CHAIN LINK SALVAGED 4-FT LF	204.0170 REMOVING FENCE LF	COMMENT
PROJECT 6190-15-72				
CATEGORY 0010				
14+54 LT	N 1ST ST	10	---	RESET IN EXISTING LOCATION
13+50 RT	S 1ST AVE	---	85	SALVAGE MATERIALS TO PROP OWNER
PROJECT TOTAL		10	85	

UNDERDRAIN

STATION	STRUCTURE	ROADWAY	310.0110 BASE AGGREGATE OPEN GRADED TON	612.0106 PIPE UNDERDRAIN 6-INCH LF	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	612.0406 PIPE UNDERDRAIN WRAPPED 6-INCH LF	645.0111 GEOTEXTILE FABRIC TYPE DF SCHEDULE A SY	645.0112 GEOTEXTILE FABRIC TYPE DF SCHEDULE B SY
PROJECT 6190-15-72								
CATEGORY 0010								
133+25	SS35.3	STH 116	0.7	10	---	---	6	---
133+25	SS35.4	STH 116	0.7	10	---	---	6	---
146+00	SS105.3	STH 116	0.7	10	---	---	6	---
146+20	SS105.4	STH 116	0.7	10	---	---	6	---
149+55	SS110.3	STH 116	0.7	10	---	---	6	---
13+84	SS108.2	S 1ST AV	0.7	10	---	---	6	---
13+94	SS108.1	S 1ST AV	0.7	10	---	---	6	---
500+17	SS100.0	PARK LOT	1.5	20	---	---	11	---
S 1ST AV CDS WALL	SS108.3		---	---	15	70	---	35
PROJECT TOTALS			7	90	15	70	50	35

EROSION CONTROL

STATION		TO STATION	ROADWAY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EA	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EA	628.6510 SOIL STABILIZER TYPE B ACRE	608.7005 INLET PROTECTION TYPE A EA	628.7015 INLET PROTECTION TYPE C EA	628.7020 INLET PROTECTION TYPE D EA	628.7504 TEMPORARY DITCH CHECKS LF	628.7560 TRACKING PAD EA	SPV.0075.020 STREET SWEEPING HRS	COMMENT
PROJECT 6190-15-72															
CATEGORY 0010															
132+60	-	137+75	STH 116	900	900	---	---	---	11	9	---	15	1	---	
143+75	-	149+60	STH 116	500	500	---	---	---	12	8	3	15	1	---	INCL EAST PARK LOT
8+95	-	12+00	S 1ST ST	---	---	---	---	---	1	3	---	---	---	---	INCL BUMPOUT AT ADAMS
13+00	-	16+00	N 1ST ST	---	---	---	---	---	2	4	---	---	---	---	
12+94	-	14+81	S 1ST AV	---	---	---	---	---	3	1	2	---	---	---	
16+50	-	17+50	N 1ST AV	---	---	---	---	---	2	2	---	---	---	---	
SEDIMENT DISPOSAL SITE				500	500	2	1	1	---	---	---	20	1	---	
UNDISTRIBUTED				350	350	6	3	0.5	---	---	---	20	---	300	
PROJECT TOTALS				2,250	2,250	8	4	1.5	31	27	5	70	3	300	

TEMPORARY SURFACE ITEMS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION		305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	455.0605 TACK COAT GAL	465.0125 ASPHALTIC SURFACE TEMPORARY TON	465.0310 ASPHALTIC CURB LF	644.1410.S TEMPORARY PEDESTRIAN SURFACE ASPHALT SF	REMARKS
0010	1	133+22	-	133+75	STH 116	LT	35	0.20	14	60	---	
0010	1	134+13	-	134+63	STH 116	LT	35	0.20	14	55	---	
0010	1	136+46	-	136+58	STH 116	LT	---	0.05	2	15	---	TEMP INL
0010	1	146+50	-	146+94	STH 116	LT	20	0.15	10	45	---	
0010	1	149+06	-	149+55	STH 116	LT	25	0.20	10	50	---	
0010	1	13+35	-	13+50	1ST ST.	LT & RT	53	0.10	22	35	75	
						SUBTOTALS	**168**	**0.90**	**72**	**260**	**75**	
0010	2	133+75	-	134+37	STH 116	LT & RT	45	0.10	20	10	---	
0010	2	148+20	-	148+30	STH 116	RT	2	---	---	---	60	
						SUBTOTALS	**45**	**0.10**	**20**	**10**	**0**	
0010	3	148+07	-	149+26	STH 116	RT	12	---	---	---	500	
						SUBTOTALS	**12**	**0**	**0**	**0**	**500**	
0010	5	134+13	-	134+32	STH 116	LT	5	0.10	5	35	---	
						SUBTOTALS	**5**	**0.10**	**5**	**35**	**0**	
0010	UNDISTRIBUTED						0	0.00	100	0	0	WEDGING
						TOTALS	**230***	**1***	**197**	**305**	**575**	

*ADDITIONAL QTY IN BASE AGGREGATE DENSE AND ASPHALTIC ITEMS TABLES

COVER PLATES TEMPORARY

CATEGORY	STAGE	STATION	LOCATION		611.8120.S EA	REMARKS
0010	1	133+70	STH 116	LT	1	
0010	1	146+62	STH 116	LT	1	
			TOTALS		**2**	

TEMPORARY CURB RAMPS

CATEGORY	STAGE	LOCATION		644.1601.S EA	REMARKS
0010	3	S. 2ND AVENUE	LT & RT	2	
		TOTALS		**2**	

TEMPORARY PORTABLE RUMBLE STRIPS

CATEGORY	STATION	TO	STATION	LOCATION	643.0310.S LS	REMARKS
0010	132+60	-	149+60	STH 116	1	
			TOTALS		**1**	

CONCRETE BARRIER SUMMARY

CATEGORY	STAGE	STATION	TO	STATION	LOCATION		603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF	614.0905 CRASH CUSHIONS TEMPORARY EA	REMARKS
0010	1	134+50	-	136+10	STH 116	LT	155	155	1	
						TOTALS	**155**	**155**	**1**	

TEMPORARY PEDESTRIAN SAFETY FENCE

CATEGORY	STAGE	STATION	TO	STATION	LOCATION		644.1616.S LF	REMARKS
0010	1	134+12	-	135+94	STH 116	LT	175	
0010	1	12+87	-	14+55	SOUTH 1ST AVE.	LT	155	
0010	2	132+60	-	133+73	STH 116	LT	120	
0010	2	132+60	-	133+79	STH 116	RT	115	
0010	2	146+50	-	148+15	STH 116	RT	200	
0010	3	ADAMS STREET				NORTH	280	
0010	5	134+40	-	135+85	STH 116	LT	140	
					TOTALS		**1,185**	

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TRAFFIC CONTROL SUMMARY

CATEGORY	STAGE	LOCATION	APPROX. SERVICE DAYS	643.0300 TRAFFIC CONTROL DRUMS NO IN SERVICE	643.0300 DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO IN SERVINCE	643.0420 DAYS	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO IN SERVICE	643.0705 DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C NO IN SERVICE	643.0715 DAYS	643.0900 TRAFFIC CONTROL SIGNS NO IN SERVICE	643.0900 DAYS	643.1050 TRAFFIC CONTROL SIGNS PCMS NO IN SERVICE	643.1050 DAYS
0010	PRE-1	STH 116	10	40	400	8	80	8	80	0	0	16	160	2	14
		SIDEROADS	10	0	0	0	0	0	0	0	0	19	190	0	0
		SUBTOTALS			**400**		**80**		**80**		**0**		**350**		**14**
0010	1	STH 116	189	75	14175	23	4347	29	5481	23	4347	42	7938	0	0
		SIDE ROADS	189	0	0	21	3969	25	4725	0	0	26	4914	0	0
		SOUTH 1ST AVENUE/MEADOW LANE	10	10	100	0	0	0	0	0	0	0	0	0	0
		1ST STREET CLOSURE	21	12	252	11	231	13	273	0	0	3	63	0	0
		NORTH 1ST AVENUE CLOSURE	21	0	0	12	252	14	294	0	0	4	84	0	0
		STH 116 FOLLOWING BARRIER REMOVAL	135	15	2025	0	0	0	0	0	0	0	0	0	0
		SUBTOTALS			**16552**		**8799**		**10773**		**4347**		**12999**		**0**
0010	2	STH 116	69	62	4278	23	1587	27	1863	10	690	25	1725	0	0
		SIDE ROADS	69	0	0	9	621	10	690	0	0	15	1035	0	0
		SUBTOTALS			**4278**		**2208**		**2553**		**690**		**2760**		**0**
0010	3	STH 116	40	42	1680	30	1200	37	1480	22	880	27	1080	0	0
		SIDE ROADS	40	0	0	16	640	18	720	0	0	17	680	0	0
		SOUTH 1ST STREET/ADAMS STREET	10	10	100	0	0	0	0	0	0	0	0	0	0
		SOUTH 2ND AVENUE CLOSURE	30	8	240	10	300	12	360		0	2	60	0	0
		FOLLOWING SOUTH 2ND AVENUE CLOSURE	10	10	100	6	60	8	80	0	0	8	80	0	0
		SUBTOTALS			**2120**		**2200**		**2640**		**880**		**1900**		**0**
0010	4	STH 116	35	110	3850	43	1505	57	1995	14	490	34	1190	0	0
		SIDE ROADS	35	8	280	10	350	12	420	0	0	20	700	0	0
		SUBTOTALS			**4130**		**1855**		**2415**		**490**		**1890**		**0**
0010	5	STH 116	35	16	560	19	665	21	735	6	210	0	0	0	0
		SIDE ROADS	35	0	0	15	525	17	595	0	0	15	525	0	0
		FOLLOWING ROADWAY PORTION COMPLETION	300	10	3000	6	1800	8	2400	0	0	15	4500	0	0
		SUBTOTALS			**3560**		**2990**		**3730**		**210**		**5025**		**0**
		TOTALS			**31,040**		**18,132**		**22,191**		**6,617**		**24,924**		**14**

REMOVING PAVEMENT MARKINGS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION		646.0600 LF	REMARKS
0010	1	131+25	-	136+90	STH 116		1,110	EXISTING CENTERLINE
0010	1	143+64	-	150+96	STH 116		1,445	EXISTING CENTERLINE
0010	1	131+25	-	133+25	STH 116	LT	135	ON-STREET PARKING
0010	1	134+95	-	135+25	STH 116	LT	30	ON-STREET PARKING
0010	1	146+90	-	148+25	STH 116	LT	120	ON-STREET PARKING
0010	2	133+75	-	134+48	STH 116		235	TEMPORARY CENTERLINE AND EDGELINES PLACED FOR STAGE 1
0010	3	134+48	-	134+84	STH 116		120	TEMPORARY CENTERLINE AND EDGELINE PLACED FOR STAGE 1
0010	4	133+11	-	133+87	STH 116		215	TEMPORARY EDGELINES PLACED FOR STAGE 4
0010	5	146+30	-	149+60	STH 116		330	TEMPORARY EDGELINE PLACED FOR STAGE 5
						TOTALS	**3,740**	

TEMPORARY PAVEMENT MARKING SUMMARY

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	649.0402 TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW) LF	649.0402 TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE) LF	REMARKS
0010	1	131+25	-	136+90	STH 116	1110	810	
0010	1	143+64	-	151+45	STH 116	1445	1145	
0010	3	133+10	-	134+84	STH 116	375	330	
0010	4	134+00	-	136+65	STH 116	540	---	
0010	4	134+28	-	134+84	STH 116	65	---	
0010	4	144+20	-	146+90	STH 116	475	---	
0010	4	146+90	-	149+60	STH 116	270	---	
0010	5	132+56	-	134+00	STH 116	285	---	
0010	5	146+30	-	149+60	STH 116	660	---	
0010	5	133+45	-	136+65	STH 116	---	325	
					TOTALS	**7,835**		

SAWING - STAGING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION		690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
0010	1	133+22	-	133+75	STH 116	LT	---	65	
0010	1	134+13	-	134+63	STH 116	LT	---	60	
0010	1	134+28	-	136+58	STH 116	LT	---	235	
0010	1	146+50	-	146+94	STH 116	LT	---	50	
0010	1	147+75	-	148+20	STH 116	RT	---	45	
0010	1	149+06	-	149+55	STH 116	LT	---	55	
0010	1	13+35	-	13+50	1ST ST.	LT & RT	50	5	
0010	2	133+75	-	134+37	STH 116	LT & RT	115	5	
0010	2	145+65	-	148+10	STH 116	RT	270	15	
0010	5	134+13	-	134+32	STH 116	LT	40	---	
						TOTALS	**475***	**535***	

*ADDITIONAL QTY LOCATED IN SAWING TABLE

PAVEMENT MARKING

STATION - STATION			ROADWAY	646.0106 EPOXY 4-INCH (YELLOW) LF	646.0106 EPOXY 4-INCH (WHITE) LF	647.0206 ARROWS BIKE LANE EPOXY (WHITE) EA	647.0256 SYMBOLS EPOXY HANDICAP (WHITE) EA	647.0306 SYMBOLS BIKE LANE EPOXY (WHITE) EA	647.0566 STOP LINE EPOXY 18-INCH (WHITE) LF	647.0656 PARKING STALL EPOXY 4-INCH (WHITE) LF	647.0766 CROSSWALK EPOXY 6-INCH (WHITE) LF
PROJECT 6190-15-72											
CATEGORY 0010											
132+60	-	149+60	STH 116	2,798	2,887	18	--	18	--	--	421
11+50	-	12+25	S 1ST ST	--	--	--	--	--	--	462	68
12+75	-	14+91	N 1ST ST	--	--	--	--	--	22	--	83
16+25	-	17+50	N 1ST AV	--	--	--	--	--	--	--	68
25+43	-	26+25	S 2ND AV	--	--	--	--	--	17	--	117
26+75	-	27+15	N 2ND AV	--	--	--	--	--	16	--	66
			CATEGORY 0010 SUBTOTALS	2,798	2,887	18	0	18	55	462	823
CATEGORY 0110											
132+60	-	149+60	STH 116	--	--	--	--	--	--	108	--
12+75	-	14+91	N 1ST ST	--	--	--	--	--	--	34	--
EAST PLATFORM PARKING			---	--	--	--	1	--	--	236	--
			CATEGORY 0110 SUBTOTALS	0	0	0	1	0	0	378	0
			PROJECT TOTALS	2,798	2,887	18	1	18	55	840	823
				5,685							

CONSTRUCTION STAKING

STATION	TO	STATION	ROADWAY	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB GUTTER AND CURB & GUTTER LF	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF	COMMENTS
PROJECT 6190-15-72									
CATEGORY 0010									
132+60	-	136+68	STH 116	408	408	830	1	408	
144+16	-	149+60	STH 116	544	544	1,047	---	544	
11+50	-	12+00	S 1ST ST	50	50	174	---	50	INCL BUMPOUT AT ADAMS
13+00	-	14+91	N 1ST ST	191	191	327	---	191	
12+94	-	14+80	S 1ST AV	186	186	463	---	186	INCL MEADOW LN CURB RAMPS
16+50	-	17+50	N 1ST AV	100	100	173	---	100	
25+60	-	26+05	S 2ND AV	45	45	126	---	45	
26+91	-	27+15	N 2ND AV	24	24	48	---	24	
300+50	-	302+70	W PLATFORM TRAIL	220	220	---	---	220	
403+35	-	405+10	E PLATFORM TRAIL	175	175	---	---	175	
10+00	-	11+87	BOARDWALK TRAIL	187	187	---	---	187	
FIN PARKING LOT			---	---	---	272	---	---	
			CATEGORY 0010 SUBTOTALS	2,130	2,130	3,460	1	2,130	
CATEGORY 0110									
500+10	-	501+70	E PLATFORM PARKING	160	160	385	---	160	
			CATEGORY 0110 SUBTOTALS	160	160	385	---	160	
			PROJECT TOTALS	2,290	2,290	3,845	1	2,290	

NOTE: CONSTRUCTION STAKING STORM SEWER LOCATED IN STORM SEWER TABLE.

3

3

RESTORATION

STATION		TO STATION	ROADWAY	SPV.0120.060 WATER FOR SEEDED AREAS MGAL	625.0100 TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	629.0205 FERTILIZER TYPE A CWT	630.0110 SEEDING MIXTURE #10 LB	630.0140 SEEDING MIXTURE #40 LB	630.0200 SEEDING TEMPORARY LB	COMMENT
PROJECT 6190-15-72											
CATEGORY 0010											
132+60	-	137+75	STH 116	50	2,070	2,070	1.3	---	37	---	INCL 1ST ST AND BUMPOUT AT ADAMS
143+75	-	149+60	STH 116	40	1,990	1,990	1.3	---	36	---	INCLUDES EAST PARK LOT
12+94	-	14+81	S 1ST AV	20	970	970	0.6	---	18	---	
STAGING AREA				80	3,380	3,380	2.1	---	61	---	
SEDIMENT DISPOSAL SITE				50	---	---	3.0	65	---	---	
UNDISTRIBUTED				60	2,100	2,100	2	15	38	15	
PROJECT TOTALS				300	10,510	10,510	10.4	80	189	15	

SAWING

STATION		TO STATION	ROADWAY	690.0150 ASPHALT LF	690.0250 CONCRETE LF	COMMENT
PROJECT 6190-15-72						
CATEGORY 0010						
132+60	-	137+75	STH 116	---	285	EXIST CONC UNDER STH 116 AT PROJ LIMIT
143+75	-	149+60	STH 116	40	65	
8+95	-	12+00	S 1ST ST	150	20	
13+00	-	14+91	N 1ST ST	150	115	
12+94	-	14+81	S 1ST AV	65	30	INCL MEADOW LN CURB RAMPS
16+72	-	17+50	N 1ST AV	35	80	
25+60	-	26+05	S 2ND AV	35	15	
26+91	-	27+15	N 2ND AV	30	15	
FIN AND FEATHER			---	300	105	
UNDISTRIBUTED			---	80	70	
PROJECT TOTALS				885*	800*	

*ADDITIONAL QTY IN TRAFFIC CONTROL SAWING TABLE

GEOTEXTILE FABRIC

STATION		TO STATION	ROADWAY	645.0140 GEOTEXTILE FABRIC TYPE SAS SY	COMMENT
PROJECT 6190-15-72					
CATEGORY 0010					
UNDISTRIBUTED				900	10% ROADWAY AREA
PROJECT TOTAL				900	

RAIL STEEL PEDESTRIAN TYPE C5 SIDEWALK

STATION		TO STATION	OFFSET FT	ROADWAY	SPV.0090.034 LF	COMMENTS
PROJECT 6190-15-72						
CATEGORY 0010						
11+03	-	11+10	0' RT	BOARDWALK	7	
11+60	-	11+80	0' RT	BOARDWALK	20	
50+17	-	50+88	1.4' LT	R-70-126	71	
PROJECT TOTAL					98	

STREET LIGHTING REMOVALS

LIGHT NUMBER	STATION	R/L	204.0195 REMOVING CONCRETE BASES EACH
ALL ITEMS CATEGORY 0010			
EXSL1	132+93	RT	--
EXSL2	133+02	LT	--
EXSL3	133+65	RT	1
EXSL4	133+60	LT	1
EXSL5	134+40	RT	1
EXSL6	134+25	LT	1
EXSL7	134+60	LT	1
EXSL8	134+95	LT	1
EXSL9	135+20	LT	1
EXSL10	135+60	LT	1
EXSL11	136+15	LT	1
EXSL12	136+20	LT	1
EXSL13	145+65	LT	1
EXSL14	145+75	LT	1
EXSL15	146+40	LT	1
EXSL16	146+65	LT	1
EXSL17	147+25	RT	1
EXSL18	147+35	LT	1
EXSL19	147+90	RT	1
EXSL20	148+00	LT	1
EXSL21	148+50	RT	1
EXSL22	148+50	LT	1
EXSL23	149+20	RT	1
EXSL24	149+20	LT	1
PROJECT TOTALS			22

LIGHTING CONDUIT AND WIRE

FROM	-	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF	REMARKS
ALL ITEMS ARE CATEGORY 0010						
EX PLANTER	-	PB 100	100	--	--	FUTURE CIRCUITING FOR PLANTER RECEPTACLE
PB 100	-	PB 101	70	--	--	FUTURE CIRCUITING FOR PLANTER RECEPTACLE
PB 101	-	CB 100	10	--	--	FUTURE CIRCUITING FOR PLANTER RECEPTACLE
CB 100	-	PB 101	10	78	130	--
PB 101	-	PB 100	70	246	410	--
PB 100	-	SL 118	10	126	210	--
PB 100	-	SL 116	80	273	455	--
CB 100	-	PB 102	10	78	130	--
PB 102	-	SL 120	15	156	260	--
SL 120	-	PB 103	30	123	205	--
PB 103	-	SL 122	5	138	230	CONDUIT IN R-70-122
SL 122	-	SL 124	--	285	475	CONDUIT IN R-70-122
SL 124	-	SL 126	--	285	475	CONDUIT IN R-70-122
PB 102	-	PB 105	70	246	410	--
PB 105	-	SL 123	50	183	305	--
SL 123	-	SL 125	65	225	375	--
SL 125	-	SL 127	70	160	240	--
PB 105	-	SL 121	15	156	260	--
PB 105	-	PB 106	90	--	--	PULL WIRE ONLY
PB 106	-	SL 119	10	126	210	--
PB 106	-	PB 100	55	201	335	--
PB 106	-	SL 117	70	243	405	--
CB 100	-	PB 102	10	--	--	FUTURE CIRCUITING FOR PLANTER RECEPTACLE
PB 102	-	PB 105	65	--	--	FUTURE CIRCUITING FOR PLANTER RECEPTACLE
PB 105	-	PB 106	90	--	--	FUTURE CIRCUITING FOR PLANTER RECEPTACLE
PB 106	-	EX PLANTER	55	--	--	FUTURE CIRCUITING FOR PLANTER RECEPTACLE
CB 200	-	PB 200	10	78	130	--
PB 200	-	SL 205	15	168	280	CONDUIT IN R-70-123
SL 205	-	SL 204	--	345	575	CONDUIT IN R-70-123
CB 200	-	PB 201	20	108	180	--
PB 201	-	SL 206	90	303	505	--
SL 206	-	PB 104	10	--	--	PULL WIRE ONLY
PB 104	-	SL 133	10	--	--	PULL WIRE ONLY / CONDUIT IN R-70-123
SL 133	-	SL 132	--	240	360	CONDUIT IN R-70-123
SL 206	-	PB 202	15	156	260	--
PB 202	-	SL 208	80	273	455	--
SL 208	-	SL 210	70	240	400	--
SL 210	-	SL 211	55	--	--	PULL WIRE ONLY
SL 210	-	SL 212	90	200	300	--
SL 212	-	SL 213	55	--	--	PULL WIRE ONLY
SL 213	-	SL 211	75	170	255	--
SL 211	-	SL 209	100	330	550	--
SL 209	-	SL 207	80	270	450	--
SL 207	-	PB 202	50	183	305	--
CB 100	-	PB 110	10	52	78	--
PB 110	-	PB 111	100	224	336	--
PB 111	-	SL 141	70	162	243	--
SL 141	-	PB 112	70	324	486	--
PB 112	-	SL 142	20	62	93	--
SL 142	-	PB 113	60	--	--	PULL WIRE ONLY
PB 113	-	SL 143	20	--	93	--
SL 143	-	PB 112	60	142	213	FISHING SHELTER RECEPTACLE CONDUCTORS
CB 200	-	PB 203	10	52	78	--
PB 203	-	SL 214	100	222	333	--
SL 214	-	PB 204	55	--	396	--
PB 204	-	PB 205	35	--	141	--
UNDISTRIBUTED - TEMP LIGHTING			100	--	500	--
CATEGORY 0010 TOTALS			2660	7632	13015	

LIGHTING CONDUIT AND WIRE (CONTINUED)

FROM	-	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF	REMARKS
ALL ITEMS ARE CATEGORY 0020						
CB 300	-	PB 300	25	--	246	--
PB 300	-	NAV NORTH	20	--	1,503	CONDUIT IN R-70-123 & B-70-321
PB 300	-	PB 301	90	--	306	--
PB 301	-	NAV SOUTH	10	--	1,788	CONDUIT IN R-70-123 & B-70-321
CATEGORY 0020 TOTALS			145	0	3843	
ALL ITEMS ARE CATEGORY 0030						
CB 200	-	PB 203	--	52	26	FISHING PIER RECEPTACLE CIRCUIT
PB 203	-	SL 214	--	222	111	FISHING PIER RECEPTACLE CIRCUIT
SL 214	-	PB 204	--	132	66	FISHING PIER RECEPTACLE CIRCUIT
PB 204	-	SL 215	10	--	228	CONDUIT IN B-70-321
SL 215	-	SL 217	--	--	330	CONDUIT IN B-70-321
SL 217	-	SL 219	--	--	285	CONDUIT IN B-70-321
SL 219	-	SL 220	--	--	--	PULL WIRE ONLY / CONDUIT IN B-70-321
SL 220	-	SL 218	--	--	135	CONDUIT IN B-70-321
SL 218	-	SL 216	--	220	440	CONDUIT IN B-70-321
SL 216	-	PB 205	10	242	484	CONDUIT IN B-70-321
PB 205	-	PB 204	--	94	47	FISHING PIER RECEPTACLE CIRCUIT
CATEGORY 0030 TOTALS			20	868	2105	
ALL ITEMS ARE CATEGORY 0040						
CB 100	-	PB 110	--	52	26	FISHING PIER RECEPTACLE CIRCUIT
PB 110	-	PB 111	--	224	112	FISHING PIER RECEPTACLE CIRCUIT
PB 111	-	SL 141	--	162	81	FISHING PIER RECEPTACLE CIRCUIT
SL 141	-	PB 112	--	162	81	FISHING PIER RECEPTACLE CIRCUIT
PB 112	-	SL 143	--	142	71	FISHING PIER RECEPTACLE CIRCUIT
SL 143	-	SL 145	10	270	540	CONDUIT IN B-70-322
SL 145	-	SL 147	--	220	440	CONDUIT IN B-70-322
SL 147	-	SL 149	--	--	135	CONDUIT IN B-70-322
SL 149	-	SL 148	--	--	--	PULL WIRE ONLY / CONDUIT IN B-70-322
SL 148	-	SL 146	--	--	285	CONDUIT IN B-70-322
SL 146	-	SL 144	--	--	330	CONDUIT IN B-70-322
SL 144	-	PB 113	10	--	258	CONDUIT IN B-70-322
CATEGORY 0040 TOTALS			20	1232	2359	
ALL ITEMS ARE CATEGORY 0090						
SL 126	-	SL 128	--	510	850	CONDUIT IN R-70-122 & B-70-316
SL 128	-	SL 129	--	570	950	CONDUIT IN B-70-316
SL 129	-	SL 130	--	570	950	CONDUIT IN B-70-316
SL 130	-	SL 131	--	570	950	CONDUIT IN B-70-316
SL 131	-	SL 132	--	450	750	CONDUIT IN B-70-316 & R-70-123
SL 121	-	SL 200	10	--	--	PULL WIRE ONLY / CONDUIT IN R-70-122 & B-70-316
SL 200	-	SL 201	--	360	540	CONDUIT IN B-70-316
SL 201	-	SL 202	--	570	950	CONDUIT IN B-70-316
SL 202	-	SL 203	--	570	950	CONDUIT IN B-70-316
SL 203	-	SL 204	--	570	950	CONDUIT IN B-70-316 & R-70-123
CATEGORY 0090 TOTALS			10	4740	7840	

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LIGHTING CONDUIT AND WIRE (CONTINUED)

FROM	-	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF	REMARKS
ALL ITEMS ARE CATEGORY 0110						
CB 100	-	PB 107	10	52	78	--
PB 107	-	SL 134	35	92	138	--
SL 134	-	SL 135	75	170	255	--
SL 135	-	SL 136	70	160	240	--
SL 136	-	SL 137	75	170	255	--
SL 137	-	PB 108	20	--	93	--
PB 108	-	SL 138	15	--	78	--
SL 138	-	SL 139	30	--	120	--
SL 139	-	PB 109	10	--	--	PULL WIRE ONLY
PB 109	-	SL 140	20	--	--	PULL WIRE ONLY
SL 140	-	SL 142	90	200	300	--
CB 200	-	PB 206	10	--	156	--
PB 206	-	SL 221	60	--	213	--
PB 206	-	SL 222	50	--	183	--
SL 222	-	SL 223	130	--	420	--
CATEGORY 0110 TOTALS			700	844	2529	
PROJECT TOTALS			3555	15316	31691	

LIGHTING PULLBOXES

PULLBOX NUMBER	STATION	OFFSET	R/L	SPV.0060.310 PULL BOX NON-CONDUCTIVE 24X42-INCH EACH
ALL ITEMS ARE CATEGORY 0010				
PB 100	133+70	24.2'	RT	1
PB 101	134+38	45.8'	RT	1
PB 102	134+38	41.8'	RT	1
PB 103	134+67	29.0'	RT	1
PB 104	146+72	30.5'	RT	1
PB 105	134+46	21.0'	LT	1
PB 106	133+66	26.7'	LT	1
PB 110	134+49	41.8'	RT	1
PB 111	134+42	47.8'	LT	1
PB 112	135+87	74.7'	LT	1
PB 113	136+54	62.3'	LT	1
PB 200	145+81	40.9'	LT	1
PB 201	145+93	23.5'	LT	1
PB 202	146+86	21.0'	RT	1
PB 203	145+77	41.7'	LT	1
PB 204	144+18	52.9'	LT	1
PB 205	144+18	84.3'	LT	1
CATEGORY 0010 SUBTOTAL				17
ALL ITEMS ARE CATEGORY 0020				
PB 300	145+89	21.9'	LT	1
PB 301	146+66	21.5'	RT	1
CATEGORY 0020 SUBTOTAL				2
ALL ITEMS ARE CATEGORY 0110				
PB 107	134+49	45.7'	RT	1
PB 108	136+92	25.7'	RT	1
PB 109	136+80	18.3'	LT	1
PB 206	145+80	48.3'	LT	1
CATEGORY 0110 SUBTOTAL				4
PROJECT TOTALS				23

WALKWAY LIGHTING

LIGHT NUMBER	STATION	OFFSET	R/L	654.0111 CONCRETE BASE TYPE 11 EACH	SPV.0060.322 LIGHTING UNITS WALKWAY BLACK EACH	SPV.0060.316 BOLLARD LIGHTING UNIT - LED EACH	SPV.0060.321 LIGHT POLE MODIFIER - GFCI RECEPTACLE EACH	655.0610 * ELECTRICAL WIRE LIGHTING 12 AWG LF
ALL ITEMS ARE CATEGORY 0010								
SL 141	135+09	57.2'	LT	1	1	--	1	123
SL 142	135+90	57.7'	LT	1	1	--	1	123
SL 143	136+54	78.3'	LT	1	1	--	1	123
SL 214	144+73	51.2'	LT	1	1	--	1	123
CATEGORY 0010 SUBTOTAL				4	4	0	4	492
ALL ITEMS ARE CATEGORY 0030								
SL 215	SEE STRUCTURE B-70-321			--	1	--	--	69
SL 216	SEE STRUCTURE B-70-321			--	1	--	--	69
SL 217	SEE STRUCTURE B-70-321			--	1	--	--	69
SL 218	SEE STRUCTURE B-70-321			--	1	--	--	69
SL 219	SEE STRUCTURE B-70-321			--	1	--	--	69
SL 220	SEE STRUCTURE B-70-321			--	1	--	--	69
CATEGORY 0030 SUBTOTAL				0	6	0	0	414
ALL ITEMS ARE CATEGORY 0040								
SL 144	SEE STRUCTURE B-70-322			--	1	--	--	69
SL 145	SEE STRUCTURE B-70-322			--	1	--	--	69
SL 146	SEE STRUCTURE B-70-322			--	1	--	--	69
SL 147	SEE STRUCTURE B-70-322			--	1	--	--	69
SL 148	SEE STRUCTURE B-70-322			--	1	--	--	69
SL 149	SEE STRUCTURE B-70-322			--	1	--	--	69
CATEGORY 0040 SUBTOTAL				0	6	0	0	414
ALL ITEMS ARE CATEGORY 0110								
SL 134	134+86	43.7'	RT	1	1	--	1	123
SL 135	135+51	43.7'	RT	1	1	--	1	123
SL 136	136+10	43.7'	RT	1	1	--	1	123
SL 137	136+79	42.8'	RT	1	1	--	1	123
SL 138	136+89	15.1'	RT	--	--	1	--	36
SL 139	136+82	11.1'	LT	--	--	1	--	36
SL 140	136+84	34.7'	LT	1	1	--	1	123
CATEGORY 0110 SUBTOTAL				5	5	2	5	687
PROJECT TOTALS				9	21	2	9	2007

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

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STREET LIGHTING

LIGHT NUMBER	STATION	OFFSET	R/L	654.0105 CONCRETE BASE TYPE 5 EACH	SPV.0060.312 REMOVE AND REINSTALL DECORATIVE STREET LIGHT ASSEMBLY EACH	SPV.0060.313 DECORATIVE LUMINAIRE - TYPE A EACH	SPV.0060.314 DECORATIVE LUMINAIRE - TYPE B EACH	SPV.0060.315 DECORATIVE STREET LIGHT ASSEMBLY - TYPE A EACH	SPV.0060.317 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE - BLACK EACH	SPV.0060.318 POLES TYPE 5 - ALUMINUM - BLACK EACH	SPV.0060.319 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 8 FT- BLACK EACH	SPV.0060.320 LUMINAIRES UTILITY LED A - BLACK EACH	655.0610 * ELECTRICAL WIRE LIGHTING 12 AWG LF
ALL ITEMS ARE CATEGORY 0010													
SL 116	132+93	27.1'	RT	--	1	--	--	--	--	--	--	--	153
SL 117	133+02	28.5'	LT	--	1	--	--	--	--	--	--	--	153
SL 118	133+64	28.5'	RT	1	1	--	--	--	--	--	--	--	210
SL 119	133+61	30.8'	LT	1	1	--	--	--	--	--	--	--	210
SL 120	134+38	30.7'	RT	1	1	--	--	--	--	--	--	--	210
SL 121	134+40	32.0'	LT	1	1	--	--	--	--	--	--	--	210
SL 122	135+02	29.2'	RT	--	1	--	--	--	--	--	--	--	153
SL 123	134+92	21.0'	LT	1	1	--	--	--	--	--	--	--	153
SL 124	135+80	29.3'	RT	--	1	--	--	--	--	--	--	--	210
SL 125	135+60	21.0'	LT	1	1	--	--	--	--	--	--	--	210
SL 126	136+57	28.1'	RT	--	1	--	--	--	--	--	--	--	153
SL 127	136+30	21.0'	LT	1	1	--	--	--	--	--	--	--	153
SL 132	144+94	29.1'	RT	--	1	--	--	--	--	--	--	--	153
SL 133	145+94	29.2'	RT	--	1	--	--	--	--	--	--	--	210
SL 204	144+36	29.3'	LT	--	1	--	--	--	--	--	--	--	153
SL 205	145+42	29.3'	LT	--	1	--	--	--	--	--	--	--	210
SL 206	146+71	21.0'	RT	1	1	--	--	--	--	--	--	--	210
SL 207	146+86	27.0'	LT	1	1	--	--	--	--	--	--	--	210
SL 208	147+67	21.0'	RT	1	1	--	--	--	--	--	--	--	153
SL 209	147+57	27.0'	LT	1	1	--	--	--	--	--	--	--	153
SL 210	148+35	27.7'	RT	1	1	--	--	--	--	--	--	--	210
SL 211	148+45	23.0'	LT	1	1	--	--	--	--	--	--	--	210
SL 212	149+21	26.6'	RT	1	1	--	--	--	--	--	--	--	210
SL 213	149+18	24.7'	LT	1	1	--	--	--	--	--	--	--	210
CATEGORY 0010 SUBTOTAL				15	24	0	0	0	0	0	0	0	4470
ALL ITEMS ARE CATEGORY 0090													
SL 116	132+93	27.1'	RT	--	--	--	1	--	--	--	--	--	--
SL 117	133+02	28.5'	LT	--	--	--	1	--	--	--	--	--	--
SL 118	133+64	28.5'	RT	--	--	1	--	--	--	--	--	--	--
SL 119	133+61	30.8'	LT	--	--	1	--	--	--	--	--	--	--
SL 120	134+38	30.7'	RT	--	--	1	--	--	--	--	--	--	--
SL 121	134+40	32.0'	LT	--	--	1	--	--	--	--	--	--	--
SL 122	135+02	29.2'	RT	--	--	--	1	--	--	--	--	--	--
SL 123	134+92	21.0'	LT	--	--	--	1	--	--	--	--	--	--
SL 124	135+80	29.3'	RT	--	--	1	--	--	--	--	--	--	--
SL 125	135+60	21.0'	LT	--	--	1	--	--	--	--	--	--	--
SL 126	136+57	28.1'	RT	--	--	--	1	--	--	--	--	--	--
SL 127	136+30	21.0'	LT	--	--	--	1	--	--	--	--	--	--
SL 128	138+14	28.8'	RT	--	--	--	--	1	--	--	--	--	210
SL 129	139+94	28.8'	RT	--	--	--	--	1	--	--	--	--	210
SL 130	141+74	28.8'	RT	--	--	--	--	1	--	--	--	--	210
SL 131	143+54	28.8'	RT	--	--	--	--	1	--	--	--	--	210
SL 132	144+94	29.1'	RT	--	--	--	1	--	--	--	--	--	--
SL 133	145+94	29.2'	RT	--	--	1	--	--	--	--	--	--	--
SL 200	137+33	24.8'	LT	--	--	--	--	1	--	--	--	--	210
SL 201	139+03	24.8'	LT	--	--	--	--	1	--	--	--	--	210
SL 202	140+83	24.8'	LT	--	--	--	--	1	--	--	--	--	210
SL 203	142+63	24.8'	LT	--	--	--	--	1	--	--	--	--	210
SL 204	144+36	29.3'	LT	--	--	--	1	--	--	--	--	--	--
SL 205	145+42	29.3'	LT	--	--	1	--	--	--	--	--	--	--
SL 206	146+71	21.0'	RT	--	--	1	--	--	--	--	--	--	--
SL 207	146+86	27.0'	LT	--	--	1	--	--	--	--	--	--	--
SL 208	147+67	21.0'	RT	--	--	--	1	--	--	--	--	--	--
SL 209	147+57	27.0'	LT	--	--	--	1	--	--	--	--	--	--
SL 210	148+35	27.7'	RT	--	--	1	--	--	--	--	--	--	--
SL 211	148+45	23.0'	LT	--	--	1	--	--	--	--	--	--	--
SL 212	149+21	26.6'	RT	--	--	1	--	--	--	--	--	--	--
SL 213	149+18	24.7'	LT	--	--	1	--	--	--	--	--	--	--
CATEGORY 0090 SUBTOTAL				0	0	14	10	8	0	0	0	0	1680

3

STREET LIGHTING (CONTINUED)

LIGHT NUMBER	STATION	OFFSET	R/L	654.0105 CONCRETE BASE TYPE 5 EACH	SPV.0060.312 REMOVE AND REINSTALL DECORATIVE STREET LIGHT ASSEMBLY EACH	SPV.0060.313 DECORATIVE LUMINAIRE - TYPE A EACH	SPV.0060.314 DECORATIVE LUMINAIRE - TYPE B EACH	SPV.0060.315 DECORATIVE STREET LIGHT ASSEMBLY - TYPE A EACH	SPV.0060.317 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE - BLACK EACH	SPV.0060.318 POLES TYPE 5 - ALUMINUM - BLACK EACH	SPV.0060.319 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 8 FT- BLACK EACH	SPV.0060.320 LUMINAIRES UTILITY LED A - BLACK EACH	655.0610 * ELECTRICAL WIRE LIGHTING 12 AWG LF
ALL ITEMS ARE CATEGORY 0110													
SL 221	145+15	51.0'	LT	1	--	--	--	--	1	1	1	1	153
SL 222	145+91	95.5'	LT	1	--	--	--	--	1	1	1	1	153
SL 223	144+38	100.4'	LT	1	--	--	--	--	1	1	1	1	153
CATEGORY 0110 SUBTOTAL				3	0	0	0	0	3	3	3	3	459
PROJECT TOTALS				18	24	14	10	8	3	3	3	3	6609

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

LIGHTING CONTROL

CABINET NUMBER	STATION	OFFSET	R/L	650.8500.001 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS 6190-15-72 LS	654.0230 CONCRETE CONTROL CABINET BASES TYPE L30 EACH	656.0200.001 ELECTRICAL SERVICE METER BREAKER PEDESTAL (CB100) LS	656.0200.002 ELECTRICAL SERVICE METER BREAKER PEDESTAL (CB200) LS	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH EACH	204.9060.S.004 REMOVE EXISTING LIGHITNG CONTROL CABINET EACH	SPV.0105.351 ELECTRICAL SERVICE METER BREAKER PEDESTAL SPECIAL LS
ALL ITEMS ARE CATEGORY 0010										
EX CB	146+25			--	--	--	--	--	1	--
CB100	134+44	43.6'	RT	--	1	1	--	1	--	--
CB200	145+87	43.6'	LT	--	1	--	1	1	--	--
PROJECT 6190-15-72				1	--	--	--	--	--	--
CATEGORY 0010 SUBTOTAL				1	2	1	1	2	1	0
ALL ITEMS ARE CATEGORY 0020										
CB300	145+87	43.6'	LT	--	--	--	--	--	--	1
CATEGORY 0020 SUBTOTAL				0	0	0	0	0	0	1
PROJECT TOTALS				1	2	1	1	2	1	1

3

ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2220 SIGNS TYPE II REFLECTIVE SH S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	204.9060.S.003 REMOVE FLASHER STANDARD EA	REMARKS
1	1ST ST	R1-1	30" X 30"	5.18	---	---	1	---	---	---	---	
2	"	R5-1A	36" X 24"	6.00	---	---	1	---	---	---	---	
2A	"	R6-6	24" X 30"	5.00	---	---	1	---	---	---	---	
3	STH 116, E. OF 1ST ST	R2-1	24" X 30"	5.00	---	---	---	---	---	---	---	25 MPH, MOUNT TO LIGHT POLE
4A	"	R9-55	18" X 24"	3.00	---	---	---	---	---	---	---	MOUNT TO LIGHT POLE
4B	"	R9-55	18" X 24"	3.00	---	---	---	---	---	---	---	MOUNT TO LIGHT POLE
4C	"	R9-55	18" X 24"	3.00	---	---	---	---	---	---	---	MOUNT TO LIGHT POLE
4D	"	R9-55	18" X 24"	3.00	---	---	---	---	---	---	---	MOUNT TO LIGHT POLE
4	"	I3-1	42" X 12"	3.50	---	---	---	---	---	---	---	SEE DETAIL SHEET, MOUNT TO LIGHT POLE
5AA	1ST ST	R5-1	30" X 30"	6.25	---	---	1	---	---	---	---	
5A		W6-3	36" X 36"	---	---	9.00	1	---	---	---	---	
5B	"	W16-9P	24" X 8"	---	---	1.33	---	---	---	---	---	MOUNT BELOW SIGN 5A
5C	"	R5-1A	36" X 24"	6.00	---	---	1	---	---	---	---	
5DD	"	R5-1	30" X 30"	6.25	---	---	1	---	---	---	---	
5DDD	"	R6-2R	24" X 30"	5.00	---	---	1	---	---	---	---	
5D	"	R5-1A	30" X 30"	6.25	---	---	1	---	---	---	---	
5E	"	R1-1	30" X 30"	5.18	---	---	1	---	---	---	---	
5F	"	R6-7	24" X 30"	5.00	---	---	1	---	---	---	---	
5G	"	R5-1	30" X 30"	6.25	---	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 5F
5H	"	R1-1	30" X 30"	5.18	---	---	1	---	---	---	---	
5I	"	R6-7	24" X 30"	5.00	---	---	1	---	---	---	---	
5J	"	R5-1	30" X 30"	6.25	---	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 5I
5K	"	R6-2R	24" X 30"	5.00	---	---	1	---	---	---	---	
5L	"	R6-1R	36" X 12"	3.00	---	---	---	1	---	---	---	
5M	"	R1-1	30" X 30"	5.18	---	---	---	---	---	---	---	MOUNT BELOW SIGN 5L
5N	"	R3-2	24" X 24"	4.00	---	---	1	---	---	---	---	
5PP	"	R6-1L	36" X 12"	3.00	---	---	---	---	---	---	---	MOUNT ABOVE SIGN 5P
5P	"	R1-1	30" X 30"	5.18	---	---	---	1	---	---	---	
5Q	"	R3-53L	24" X 30"	5.00	---	---	1	---	---	---	---	
5	STH 116, E. OF 1ST ST	I3-1	42" X 12"	3.50	---	---	---	---	---	---	---	SEE DETAIL SHEET, MOUNT TO LIGHT POLE
6	"	R2-1	24" X 30"	5.00	---	---	1	---	---	---	---	25 MPH
6A	1ST AVE PARKING LOT	R7-8A	12" X 18"	1.50	---	---	1	---	---	---	---	
6B		R7-8V	12" X 6"	0.50	---	---	---	---	---	---	---	MOUNT BELOW SIGN 6A
7	1ST AVE	R5-1A	36" X 24"	6.00	---	---	1	---	---	---	---	
7A		R6-2L	24" X 30"	5.00	---	---	1	---	---	---	---	
7B	"	W5-56	18" X 18"	---	2.25	---	1	---	---	---	---	END OF ROADWAY MARKERS
7C	"	W5-56	18" X 18"	---	2.25	---	1	---	---	---	---	"
7D	"	W5-56	18" X 18"	---	2.25	---	1	---	---	---	---	"
	PAGE SUBTOTALS			151.15	6.75	10.33	23	2	0	0	0	

ERECTION & REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2220 SIGNS TYPE II REFLECTIVE SH S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	204.9060.S.003 REMOVE FLASHER STANDARD EA	REMARKS
7E	STH 116, E. OF 1ST AVE	R6-2L	24" X 30"	5.00	---	---	---	---	---	---	---	MOUNT TO LIGHT POLE
7F	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	MOUNT TO BACK OF SINGN 7E
8	"	S1-1	36" X 36"	---	---	6.75	---	1	---	---	---	
9	"	S16-9P	30" X 18"	---	---	3.75	---	---	---	---	---	MOUNT BELOW SIGN 8
10	"	R2-6P	24" X 18"	3.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN 9
11	"	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	25 MPH
12	"	S5-2	24" X 30"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN 11
13	2ND AVE	R1-1	30" X 30"	5.18	---	---	1	---	---	---	---	
14	"	R1-1	30" X 30"	5.18	---	---	1	---	---	---	---	
15	STH 116, E. OF 2ND AVE	S4-51	24" X 48"	---	---	8.00	---	---	---	---	---	MOUNT TO LIGHT POLE, RADAR BOARD TO BE INSTALLED BY MUNICIPALITY
16	VACANT	---	---	---	---	---	---	---	---	---	---	
17	VACANT	---	---	---	---	---	---	---	---	---	---	
18	VACANT	---	---	---	---	---	---	---	---	---	---	
19	VACANT	---	---	---	---	---	---	---	---	---	---	
20	STH 116, W. OF 1ST ST	R2-1	---	---	---	---	---	---	1	---	---	
21A	"	J4-1	---	---	---	---	---	---	1	---	---	
21	1ST ST	R1-1	---	---	---	---	---	---	1	1	---	
22	"	R1-1	---	---	---	---	---	---	1	1	---	
23	STH 116, E. OF 1ST ST	W3-6	---	---	---	---	---	---	1	---	---	
24	"	R2-1	---	---	---	---	---	---	1	1	---	
25	"	R5-56	---	---	---	---	---	---	1	---	---	
26	"	R7-10	---	---	---	---	---	---	1	---	---	
27	"	W8-63	---	---	---	---	---	---	1	---	---	
27A	1ST ST	R2-1	---	---	---	---	---	---	1	1	---	
28	STH 116, E. OF 1ST ST	R10-6	---	---	---	---	---	---	1	---	1	
29	"	R10-6	---	---	---	---	---	---	1	---	1	
30	"	I3-1	---	---	---	---	---	---	1	---	---	
31	"	I3-1	---	---	---	---	---	---	1	---	---	
32	"	R10-6	---	---	---	---	---	---	1	---	1	
33	"	R10-6	---	---	---	---	---	---	1	---	1	
34	"	W8-63	---	---	---	---	---	---	1	---	---	
35	"	R9-99	---	---	---	---	---	---	---	---	---	PART OF SIGN 34 REMOVAL
36	"	R8-52	---	---	---	---	---	---	1	1	---	
37	STH 116, W. OF 1ST AVE	W3-6	---	---	---	---	---	---	1	---	---	
38	"	R7-10	---	---	---	---	---	---	---	---	---	PART OF SIGN 37 REMOVAL
39	1ST AVE	R5-1A	---	---	---	---	---	---	1	1	---	
40	"	R1-1	---	---	---	---	---	---	1	1	---	
41	STH 116, E. OF 1ST AVE	S1-1	---	---	---	---	---	---	1	---	---	
42	"	S16-9P	---	---	---	---	---	---	---	---	---	PART OF SIGN 41 REMOVAL
43	"	R2-6P	---	---	---	---	---	---	---	---	---	PART OF SIGN 41 REMOVAL
44	"	R2-1	---	---	---	---	---	---	1	---	---	
45	"	S5-2	---	---	---	---	---	---	---	---	---	PART OF SIGN 44 REMOVAL
46	2ND AVE	R1-1	---	---	---	---	---	---	1	1	---	
47	"	R1-1	---	---	---	---	---	---	1	1	---	
48	STH 116, E. OF 2ND AVE	S4-51	---	---	---	---	---	---	1	---	---	RADAR BOARD TO BE REMOVED BY MUNICIPALITY
	PAGE SUBTOTALS			33.36	0.00	18.50	2	2	26	9	4	
	PROJECT TOTALS			**184.51**	**6.75**	**28.83**	**25**	**4**	**26**	**9**	**4**	

REMOVALS, SAWCUTS, PAVEMENT, AND CURB

ROADWAY / LOCATION	204.0100 REMOVING PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	204.0150 REMOVING CURB AND GUTTER LF	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	311.0110 BREAKER RUN TON	450.4000 HMA COLD WEATHER PAVING TON	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	465.0310 ASPHALTIC CURB LF	601.0411 30-INCH TYPE D LF	COMMENT
PROJECT 6190-15-74															
CATEGORY 0010															
WEST SIDE STH 116	30	135	600	130	10	60	0	0	0	0	0	19	10	---	2" ASPH SURF TEMP
EAST SIDE STH 116	---	---	---	---	---	0	0	0	0	0	0	---	---	---	OVER 6" BAD
CATEGORY 0010 SUBTOTALS	30	135	600	130	10	60	0	0	0	0	0	19	10	0	0
PROJECT 6190-15-74															
CATEGORY 0020															
WEST SIDE STH 116	40	130	960	130	20	100	17	10	5	6	3	21	15	5	2" ASPH SURF TEMP
EAST SIDE STH 116	---	90	430	---	10	30	0	0	0	0	0	10	10	---	OVER 6" BAD
CATEGORY 0020 SUBTOTALS	40	220	1,390	130	30	130	17	10	5	6	3	31	25	5	
PROJECT TOTALS	70	355	1,990	260	40	190	17	10	5	6	3	50	35	5	

SANITARY REMOVALS

LOCATION	204.0210 REMOVING MANHOLES EA	204.0250 ABANDONING MANHOLES EA	204.0291.S ABANDONING SEWER CY	204.9090.S.007 REMOVING SANITARY SEWER LF	COMMENTS
PROJECT 6190-15-74					
CATEGORY 0010					
STA 13+09, 0.8' RT, N 1ST ST	1	---	---	---	
STA 148+85, 1.3' LT, STH 116	1	---	---	---	
STA 135+19, 124.5' RT, STH 116	---	1	---	---	
STA 135+48, 95.2' RT, STH 116	---	1	---	---	
STA 136+02, 66.0' RT, STH 116	---	1	---	---	
STA 11+50 - STA 14+10, 1ST ST	---	---	---	260	10" DIA
FIN SERVICE	---	---	---	175	8" DIA
STA 146+05 - STA 149+60, STH 116	---	---	---	360	8" DIA
STA 14+30, 51' LT, S 1ST AVE			---	5	4" DIA
PARCEL 6 AND 9 SERVICE	---	---	2	---	6" DIA
PROJECT TOTALS	2	3	2	800	

WATER REMOVALS

STATION	OFFSET	ROADWAY	204.9060.S.005 REMOVING FIRE HYDRANT EA	204.9060.S.006 REMOVING VALVE AND BOX EA	COMMENTS
PROJECT 6190-15-74					
CATEGORY 0020					
13+01	20.2' LT	N 1ST ST	---	1	10 INCH
13+15	16.4' LT	N 1ST ST	---	1	6 INCH
13+46	19.8' LT	N 1ST ST	---	1	10 INCH
14+22	17.6' LT	N 1ST ST	---	1	8 INCH
15+59	5.9' LT	N 1ST ST	---	1	10 INCH
15+67	5.6' LT	N 1ST ST	---	1	10 INCH
13+03	27.2' RT	N 1ST ST	1	---	INCL VALVE
135+15	96.2' LT	STH 116	---	1	6 INCH
135+74	108.5' LT	STH 116	1	---	INCL VALVE
16+31	15.9' LT	N 1ST AV	---	1	10 INCH
16+73	18.9' RT	N 1ST AV	---	1	6 INCH
17+01	1.5' RT	N 1ST AV	---	1	10 INCH
17+09	23.9' LT	N 1ST AV	1	---	INCL VALVE
PROJECT TOTALS			3	10	

3

RESTORATION

ROADWAY	625.0100 TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	629.0205 FERTILIZER TYPE A CWT	630.0140 SEEDING MIXTURE #40 LB	630.0200 SEEDING TEMPORARY LB
PROJECT 6190-15-74					
CATEGORY 0020					
WEST SIDE STH 116	22	22	0.01	0.4	0.3
EAST SIDE STH 116	33	33	0.02	0.6	0.5
UNDISTRIBUTED	14	14	0.01	0.3	0.2
PROJECT TOTALS	69	69	0.04	1	1

CONNECTIONS

ROADWAY / LOCATION	SPV.0060.111 CONNECT TO EXISTING WATER MAIN EA	SPV.0060.211 STANDARD SANITARY PIPE CONNECTION EA	COMMENT
PROJECT 6190-15-74			
	CATEGORY 0020	CATEGORY 0010	
S 1ST ST	1	1	
N 1ST ST	1	---	
BOAT LAUNCH PARKING	1	---	
FIN SERVICE	1	1	
S 1ST AV	1	---	
N 1ST AV	1	---	
E STH 116	1	1	TEMPORARY
PROJECT TOTALS	7 CATEGORY 0020	3 CATEGORY 0010	

CONSTRUCTION STAKING MISCELLANEOUS VILLAGE UTILITIES

STATION	TO	STATION	ROADWAY	SPV.0105.151 LS	COMMENTS
PROJECT 6190-15-74					
CATEGORY 0020					
132+60	-	149+60	STH 116	1	
PROJECT TOTAL				1	

3

WATER MAIN BEND

ROADWAY / LOCATION	SPV.0060.112	SPV.0060.113	SPV.0060.114	SPV.0060.115	SPV.0060.116	SPV.0060.117	COMMENT
	11.25 DEGREE			45 DEGREE			
	6-INCH EA	10-INCH EA	12-INCH EA	6-INCH EA	10-INCH EA	12-INCH EA	
PROJECT 6190-15-74							
CATEGORY 0020							
STH 116 WEST	---	---	---	---	---	---	
STH 116 EAST	---	---	---	---	---	---	
1ST ST	---	---	1	2	2	---	
BOAT LAUNCH PARKING LOT	---	---	---	---	---	2	
S 1ST AVE	---	2	---	---	2	---	
N 1ST AVE	---	2	---	---	---	---	
FIN SERVICE	1	---	---	---	---	---	
UNDISTRIBUTED	---	---	---	---	2	2	TEMPORARY CONNECTIONS
PROJECT TOTALS	1	4	1	2	6	4	

WATER MAIN TEES AND REDUCERS

ROADWAY / LOCATION	SPV.0060.118	SPV.0060.119	SPV.0060.120	SPV.0060.121	SPV.0060.122	SPV.0060.123	SPV.0060.124	COMMENT
	WATER MAIN REDUCER			WATER MAIN TEE				
	12X6 INCH EA	12X10 INCH EA	14X12 INCH EA	10X6 INCH EA	12X6 INCH EA	12X8 INCH EA	12X12 INCH EA	
PROJECT 6190-15-74								
CATEGORY 0020								
STH 116 WEST	---	---	---	---	---	---	1	
STH 116 EAST	---	---	---	---	1	---	1	
1ST ST	1	1	---	1	1	1	1	
BOAT LAUNCH PARKING LOT	---	---	1	---	---	---	---	
S 1ST AV	---	---	---	1	---	---	---	
N 1ST AV	---	2	---	---	1	---	---	
UNDISTRIBUTED	---	2	---	---	---	---	---	TEMPORARY CONNECTIONS
PROJECT TOTALS	1	5	1	2	3	1	3	

WATER MAIN HYDRANTS AND VALVES

ROADWAY / LOCATION	SPV.0060.110	SPV.0060.125	SPV.0060.126	SPV.0060.127	SPV.0060.128	COMMENT
	FIRE HYDRANT	WATER MAIN VALVE AND BOX				
	EA	6-INCH EA	8-INCH EA	10-INCH EA	12-INCH EA	
PROJECT 6190-15-74						
CATEGORY 0020						
STH 116 WEST	---	---	---	---	1	
STH 116 EAST	---	1	---	---	---	
1ST ST	1	1	1	1	3	
S 1ST AV	1	1	---	---	---	
N 1ST AV	1	1	---	1	2	
FIN SERVICE	---	1	---	---	---	
UNDISTRIBUTED	---	---	---	2	2	TEMPORARY CONNECTIONS
PROJECT TOTALS	3	5	1	4	8	

WATER MAIN

ROADWAY / LOCATION	209.2100 BACKFILL GRANULAR GRADE 2 CY	SPV.0090.130 6-INCH LF	SPV.0090.131 8-INCH LF	SPV.0090.132 10-INCH LF	SPV.0090.133 12-INCH LF	SPV.0090.134 6-INCH CONTAMINATED SOILS LF	SPV.0090.135 10-INCH CONTAMINATED SOILS LF	SPV.0090.136 12-INCH CONTAMINATED SOILS LF	SPV.0090.139 STEEL CASING PIPE 24-INCH LF	SPV.0060.016 LOW PERMEABLE TRENCH PLUGS EA*	COMMENT
PROJECT 6190-15-74											
CATEGORY 0020											
STH 116 WEST SIDE	35	---	---	---	130	---	---	---	---	---	
STH 116 EAST SIDE	105	---	---	---	60	60	---	280	---	2	
1ST ST	115	13	12	85	331	---	---	---	---	---	8" MAIN AT STA 14+22, LT
1ST AV	90	---	---	---	---	---	285	66	75	2	
FIN AND FEATHER SERVICE	45	169	---	---	---	---	---	---	---	---	
HYDRANT LEAD	10	40	---	---	---	---	---	---	---	---	N 1ST ST STA 11+85, 32' RT
HYDRANT LEAD	5	---	---	---	---	15	---	---	---	---	S 1ST AV STA 14+49, 53' LT
HYDRANT LEAD	10	---	---	---	---	41	---	---	---	---	N 1ST AV STA 17+09, 24' LT
BOAT LAUNCH PARKING LOT	20	---	---	---	86	---	---	---	---	---	
PROJECT TOTALS	435**	222	12	85	607	116	285	346	75	4*	

*ADDITIONAL QTY LISTED UNDER WATER SERVICE TABLE
**QTY FOR TRENCH BACKFILL IN POOR SOILS, ESTIMATED 25% OF TRENCH LENGTH, 4' WIDE TRENCH, 7' DEEP

WATER SERVICE

STA	OFFSET	ROADWAY	SPV.0090.137 WATER SERVICE 1-INCH LF	SPV.0060.129 CORPORATION, CURB STOP, AND BOX (SET) EA	SPV.0060.016 LOW PERMEABLE TRENCH PLUGS EA*
PROJECT 6190-15-74					
CATEGORY 0020					
15+42	26' LT	1ST ST	27	1	---
13+82	46' LT	S 1ST AV	43	1	---
146+92	64' LT	STH 116	18	1	1
147+52	41' LT	STH 116	18	1	1
148+34	28' LT	STH 116	18	1	1
149+24	34' RT	STH 116	47	1	---
		PROJECT TOTALS	171	6	3*

*ADDITIONAL QTY LISTED UNDER WATER MAIN TABLE

SANITARY SEWER

ROADWAY / LOCATION	209.2100 BACKFILL GRANULAR GRADE 2 CY	SPV.0090.230 PIPE 8-INCH LF	SPV.0090.231 PIPE 10-INCH LF	SPV.0090.232 LATERAL 4 OR 6-INCH LF	SPV.0060.212 SANITARY WYE 8-INCH MAIN EA	SPV.0060.016 LOW PERMEABLE TRENCH PLUGS EA
PROJECT 6190-15-74						
CATEGORY 0010						
STH 116 EAST SIDE	95	362	---	---	---	1
1ST ST	70	---	261	---	---	---
FIN AND FEATHER SERVICE	50	188	---	---	---	---
SERVICE 146+83 LT	---	---	---	30	1	1
SERVICE 147+43 LT	---	---	---	30	1	1
SERVICE 147+79 RT	---	---	---	36	1	1
SERVICE 148+30 LT	---	---	---	30	1	1
SERVICE 149+22 RT	---	---	---	32	1	---
PROJECT TOTALS	215*	550	261	158	5	5

*QTY FOR TRENCH BACKFILL IN POOR SOILS, ESTIMATED 25% OF TRENCH LENGTH, 4' WIDE TRENCH, 7' DEEP

SANITARY SEWER STRUCTURES

STRUCTURE	STATION	OFFSET*	ROADWAY	204.0210 REMOVING MANHOLES EA	SPV.0200.200 SANITARY MANHOLE VF	SPV.0060.213 SANITARY MANHOLE COVERS TYPE J SPECIAL EA	611.0420 RECONSTRUCTING MANHOLES EA	SPV.0060.214 INTERNAL CHIMNEY SEAL 1-PIECE EA	SPV.0060.215 INTERNAL CHIMNEY SEAL 2-PIECE EA
PROJECT 6170-15-74									
CATEGORY 0010									
SAN77	13+09	0.9' RT	N 1ST ST	1	9.6	1	---	1	---
SAN 193	148+84	1.3' LT	STH 116	1	7.7	1	---	1	---
SAN 170	146+05	64.2' LT	STH 116	---	---	---	1	---	1
SAN76	14+11	3.3' RT	N 1ST ST	---	---	---	1	---	1
			PROJECT TOTALS	2	17.3	2	2	2	2

* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

MINI STORM SEWER

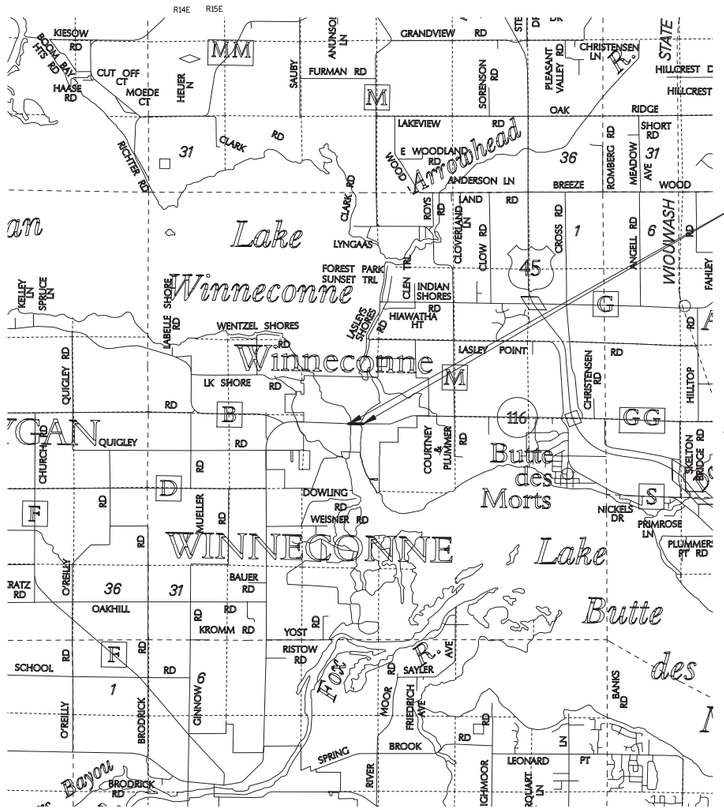
STATION TO STATION	DIR	ROADWAY	SPV.0090.030 MINI STORM LATERAL 4-INCH LF	SPV.0090.031 MINI STORM TRUNK 6-INCH LF	SPV.0060.014 MINI STORM SEWER CLEANOUTS EA	SPV.0060.016 LOW PERMEABLE TRENCH PLUGS EA	COMMENTS
PROJECT 6190-15-74							
CATEGORY 0030							
133+05	RT	STH 116	44	---	---	---	CONNECT TO SS TRUNK
135+91	LT	STH 116	7	---	---	---	CONNECT TO SS5.0 TO EXISTING ROOF DRAIN
146+80 - 148+05	LT	STH 116	---	145	1	---	CONNECT TO SS105.6
147+58	LT	STH 116	10	---	---	1	CONNECT TO MINI STORM TRUNK
148+02	LT	STH 116	6	---	---	1	CONNECT TO MINI STORM TRUNK
147+78 - 148+47	RT	STH 116	72	---	---	1	CONNECT TO SS110.1
149+16	RT	STH 116	12	---	---	---	CONNECT TO SS110.2
149+58	LT	STH 116	12	---	---	---	CONNECT TO SS1110.3
13+35	LT	S 1ST AV	30	---	---	---	CONNECT TO EXISTING STORM TRUNK
13+57	LT	S 1ST AV	23	---	---	---	CONNECT TO STORM LATERAL
14+00	LT	S 1ST AV	12	---	---	1	CONNECT TO SS108.1
17+07	RT	N 1ST AV	11	---	---	1	CONNECT TO SS106.1
17+38	LT	N 1ST AV	13	---	---	---	CONNECT TO SS106.0
26+04	LT	2 2ND AV	12	---	---	1	CONNECT TO SS110.1
		PROJECT TOTALS	264	145	1	6	

EXCAVATION, HAULING, AND DISPOSAL OF CONTAMINATED SOIL

LOCATION	SPV.0195.001 TON
PROJECT 6190-15-74	
CATEGORY 0010	
EAST SIDE SANITARY	110
CATEGORY 0020	
EAST SIDE WATER MAIN	160
PROJECT TOTAL	270

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
PROJ NO. 6190-15-23
MAIN ST, VILLAGE OF WINNECONNE
WOLF RIVER BRIDGE AND APPROACHES
STH 116
WINNEBAGO COUNTY





LAYOUT
SCALE 0 1 MI.

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W (TYPE)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
BUILDING RAZED

NATIONAL GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SECTION CORNER
R/W MONUMENT
NON-MONUMENTED R/W POINT
NOTATION FOR COMBUSTABLE FLUIDS — CAUTION
FOUND IRON PIN
VALVE (GAS, WATER, ETC.) — (TYPE)
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES — CAUTION
SIGN
OFF-PREMISE SIGN — I-25 — SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
BRIDGE
PARCEL NUMBER 25
UTILITY NUMBER 40

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RIGHT	RT
CENTERLINE	C/L	RIGHT OF WAY	R/W
CERTIFIED SURVEY MAP	CSM	SECTION	SEC
CONCRETE	CONC	SEPTIC VENT	SEPV
COUNTY	CO	SQUARE FEET	SF
COUNTY TRUNK HIGHWAY	CTH	STATE TRUNK HIGHWAY	STH
DISTANCE	DIST	STATION	STA
CORNER	COR	SUBDIVISION	SUBD
DOCUMENT NUMBER	DOC	TANGENT	TAN
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT	HE	VOLUME	V
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA

LONG CHORD	LC
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 6190-15-23

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, WINNEBAGO COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

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, 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 GREEN BAY.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6190-15-23 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME :F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-040100-RP.DWG
APPRAISAL PLAT DATE :
PLOT DATE : 12/14/2012 7:46 PM
PLOT BY : KIMBERLY SELLIER PLOT NAME :

1687546

REGISTER'S OFFICE
WINNEBAGO COUNTY, WI
RECORDED ON
05/15/2015 9:25 AM

JULIE PAGEL
REGISTER OF DEEDS

RECORDING FEE 25.00
PAGES: 2

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6190-15-23 - 4.01
SHEET 1 OF 2 AMENDMENT NO:___

TRANSPORTATION PROJECT PLAT NO: 6190-15-23 - 4.01

THAT PART OF LOT 5, BLOCK 1, LOTS 1,2,3,4, BLOCK 2, WILLIAMSPORT, LOT 12, 13, REPLAT OF THE WILLIAMS RESERVE, LOT 1, BLOCK 20, RIPON ADDITION TO WINNECONNE, LOT 1, CSM 1085, LOT 1, CSM 1090, LOT 1, CSM 2741, LOCATED IN AND INCLUDING GOVERNMENT LOT 4 OF SECTION 21, T19N, R15E, VILLAGE OF WINNECONNE, WINNEBAGO COUNTY, WISCONSIN.

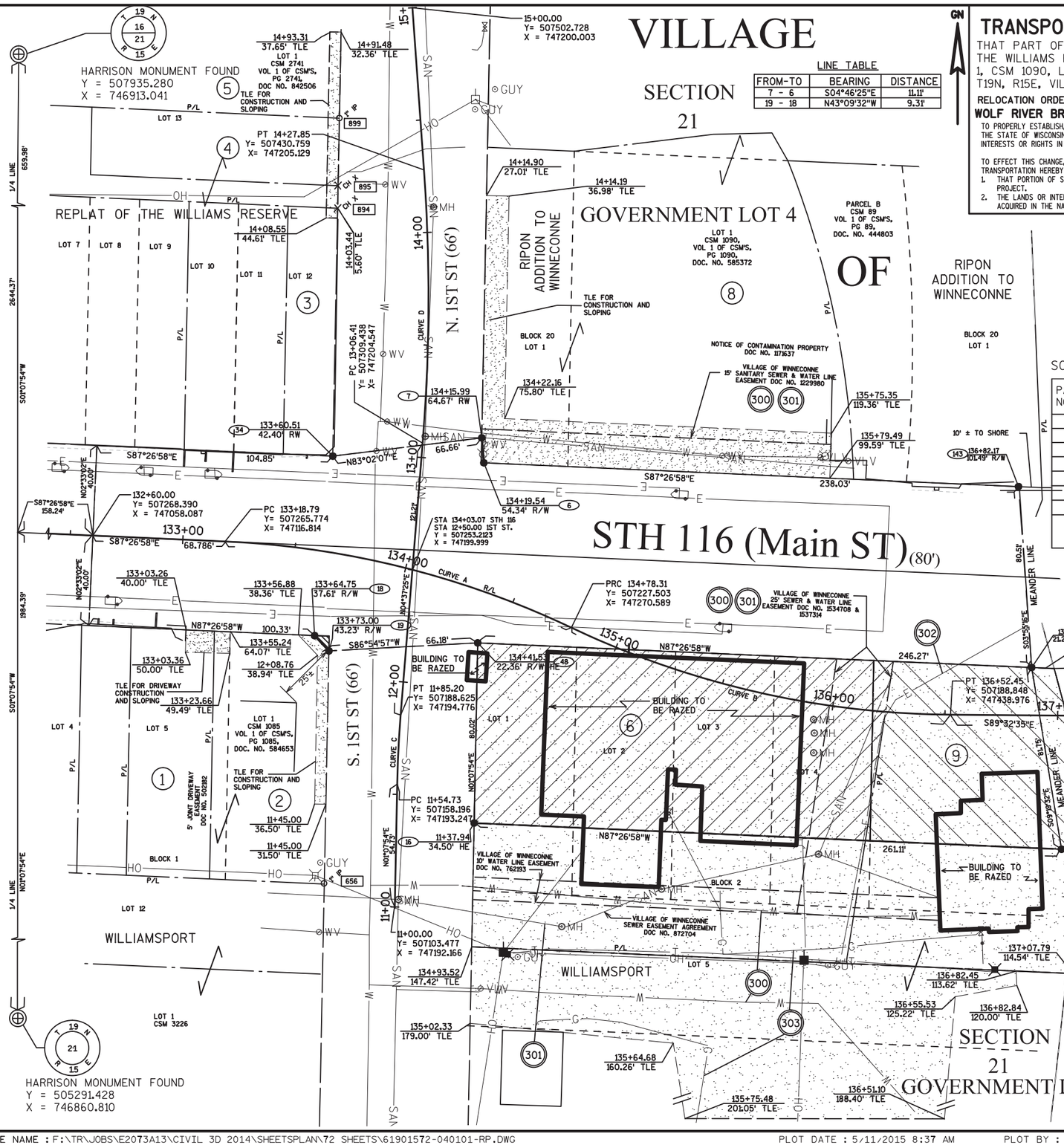
RELOCATION ORDER STH 116, WINNEBAGO COUNTY

WOLF RIVER BRIDGE AND APPROACHES

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



LINE TABLE		
FROM-TO	BEARING	DISTANCE
7 - 6	S04°46'25"E	11.11'
19 - 18	N43°09'32"W	9.31'

CURVE A	CURVE B	CURVE C	CURVE D
PI 133+99.62	PI 135+66.78	PI 11+69.97	PI 13+67.25
Y 507262.177	Y 507189.554	Y 507173.434	Y 507370.076
X 747197.569	X 747350.508	X 747193.548	X 747209.451
Δ 22°50'59"	Δ 24°56'36"	Δ 3°29'24"	Δ 8°41'50"
R 400.00'	R 400.00'	R 500.00'	R 800.00'
T 80.835'	T 88.471'	T 15.241'	T 60.836'
L 159.522'	L 174.138'	L 30.472'	L 121.439'
LC 158.467'	LC 172.766'	LC 30.467'	LC 121.322'
LCB S76°01'28"E	LCB S77°04'16"E	LCB N02°52'39"E	LCB N00°16'30"E

ROAD NAME	BASIS OF EXISTING R/W	YEAR
STH 116	REPLAT OF WILLIAMS RESERVE	
N 1ST ST	WILLIAMSPORT	1866
S 1ST ST	RIPON ADDITION TO WINNECONNE	1868
	CSM 89, CSM 1085	1973, 1982
	CSM 1090, CSM 2741	1983, 1996

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION

SCHEDULE OF LANDS AND INTEREST

PARCEL NO.		INTEREST REQUIRED	AREA REQUIRED NEW	EXISTING	TOTAL	TLE	HE
1	KENNETH W. THRUN JR.	TLE	---	---	---	124 SQ FT	---
2	XMI, LLC.	FEE TLE	21 SQ FT	---	21 SQ FT	447 SQ FT	---
3	TRUSTEES OF THE WINNECONNE LODGE #186	TLE	---	---	---	22 SQ FT	---
4	VILLAGE OF WINNECONNE	TLE	---	---	---	200 SQ FT	---
5	DEBRA S. RYF	TLE	---	---	---	191 SQ FT	---
6	DENNIS M. BIGGAR & DEBRA S. RYF	HE TLE	---	---	---	9302 SQ FT	14,349 SQ FT
8	FIN 'N FEATHER PROPERTIES, LLC.	FEE TLE	6 SQ FT	---	6 SQ FT	4086 SQ FT	---
9	MARY S. HOLTZ OR HER SUCCESSORS(S) IN TRUST, AS TRUSTEE(S) OF THE MARY S. HOLTZ LIVING TRUST DATED 9-18-2008, AS AMENDED AND/OR RESTATED	HE TLE	---	---	---	18,649 SQ FT	6230 SQ FT

EXISTING MONUMENT TABLE

PT NO.	STATION	OFFSET	MON
656	11+09.58 (1ST ST)	32.19'	1" IP
894	14+12.85 (1ST ST)	39.32'	CH X
894	14+23.21 (1ST ST)	38.54'	CH X
899	14+53.18 (1ST ST)	35.82'	1" IP

UTILITIES INTEREST REQUIRED

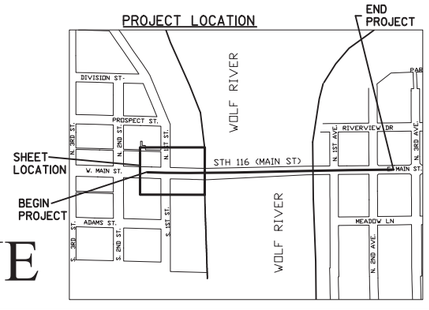
UTILITY NO.	OWNER(S)	INTEREST REQUIRED
300	VILLAGE OF WINNECONNE - WATER	RELEASE OF RIGHTS
301	VILLAGE OF WINNECONNE - SANITARY	RELEASE OF RIGHTS
302	WISCONSIN POWER AND LIGHT - ELECTRIC	RELEASE OF RIGHTS
303	WISCONSIN POWER AND LIGHT - GAS	RELEASE OF RIGHTS

PROPOSED R/W POINTS

PT #	Y	X	
6	507300.696	747231.712	R/W
7	507311.768	747230.788	R/W
16	507140.728	747227.409	HE
18	507223.966	747156.541	R/W
19	507217.177	747162.906	R/W
34	507303.684	747164.615	R/W
48	507220.738	747228.989	R/W HE
142	507209.778	747475.013	R/W HE
143	507290.102	747469.507	R/W
144	507129.108	747488.260	HE

0' 50' 100'

PROJECT LOCATION



OMNNI ASSOCIATES
ONE SYSTEMS DRIVE
APPLETON, WI 54914-1654
PHONE (920) 735-6900
FAX (920) 830-6100

I, **DAVID A. YURK** PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: David A. Yurk DATE: 5-1-2015
PRINT NAME: **DAVID A. YURK**
REGISTRATION NUMBER: S-2648

WISCONSIN DAVID A. YURK S-2648 OSHKOSH, WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
REGION OFFICE
SIGNATURE: Curt Van Erem DATE: 5-12-2015
PRINT NAME: **CURT VAN EREM**

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-040101-RP.DWG
PLOT DATE : 5/11/2015 8:37 AM PLOT BY : DAVE A. YURK PLOT NAME : PLOT SCALE : **********
APPRAISAL PLAT DATE : ----------

TRANSPORTATION PROJECT PLAT NO: 6190-15-23 - 4.01 AMENDMENT NO. 1

AMENDS PARCEL 8 OF TRANSPORTATION PROJECT PLAT 6190-15-23 - 4.01 RECORDED IN DOCUMENT NO. 1687546

THAT PART OF LOT 5, BLOCK 1, LOTS 1,2,3,4, BLOCK 2, WILLIAMSPORT, LOT 12, 13, REPLAT OF THE WILLIAMS RESERVE, LOT 1, BLOCK 20, RIPON ADDITION TO WINNECONNE, LOT 1, CSM 1085, LOT 1, CSM 1090, LOT 1, CSM 2741, LOCATED IN AND INCLUDING GOVERNMENT LOT 4 OF SECTION 21, T19N, R15E, VILLAGE OF WINNECONNE, WINNEBAGO COUNTY, WISCONSIN.

RELOCATION ORDER STH 116, WINNEBAGO COUNTY

WOLF RIVER BRIDGE AND APPROACHES

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

1703968

REGISTER'S OFFICE
WINNEBAGO COUNTY, WI
RECORDED ON
12/23/2015 8:13 AM

JULIE PAGEL
REGISTER OF DEEDS

RECORDING FEE 25.00
PAGES: 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6190-15-23 - 4.01
AMENDMENT NO: 1

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 AS DOCUMENT NO. 1687546 FOR ADDITIONAL INFORMATION.

ROAD NAME	BASIS OF EXISTING R/W	YEAR
STH 116	REPLAT OF WILLIAMS RESERVE	
N 1ST ST	WILLIAMSPORT	1866
S 1ST ST	RIPON ADDITION TO WINNECONNE	1868
	CSM 89, CSM 1085	1973, 1982
	CSM 1090, CSM 2741	1983, 1996

CURVE A	CURVE B	CURVE C	CURVE D
PI 133+99.62	PI 135+66.78	PI 11+69.97	PI 13+67.25
Y 507262.177	Y 507189.554	Y 507173.434	Y 507370.076
X 747197.569	X 747350.508	X 747193.548	X 747209.451
Δ 22°50'59"	Δ 24°56'36"	Δ 3°29'24"	Δ 8°41'50"
R 400.00'	R 400.00'	R 500.00'	R 800.00'
T 80.835'	T 88.471'	T 15.241'	T 60.836'
L 159.522'	L 174.138'	L 30.472'	L 121.439'
LC 158.467'	LC 172.766'	LC 30.467'	LC 121.322'
LCB S76°01'28"E	LCB S77°04'16"E	LCB N02°52'39"E	LCB N00°16'30"E

SCHEDULE OF LANDS AND INTEREST

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION

PARCEL NO.		INTEREST REQUIRED	AREA REQUIRED NEW	EXISTING	TOTAL	TLE	HE
1	KENNETH W. THRUN JR.	TLE	---	---	---	124 SQ FT	---
2	XMI, LLC.	FEE TLE	21 SQ FT	---	21 SQ FT	447 SQ FT	---
3	TRUSTEES OF THE WINNECONNE LODGE #186	TLE	---	---	---	22 SQ FT	---
4	VILLAGE OF WINNECONNE	TLE	---	---	---	200 SQ FT	---
5	DEBRA S. RYF	TLE	---	---	---	191 SQ FT	---
6	DENNIS M. BIGGAR & DEBRA S. RYF	HE TLE	---	---	---	9302 SQ FT	14,349 SQ FT
8	FIN 'N FEATHER PROPERTIES, LLC.	FEE TLE	6 SQ FT	---	6 SQ FT	6695 SQ FT	---
9	MARY S. HOLTZ OR HER SUCCESSORS(S) IN TRUST, AS TRUSTEE(S) OF THE MARY S. HOLTZ LIVING TRUST DATED 9-18-2008, AS AMENDED AND/OR RESTATED	HE TLE	---	---	---	18,649 SQ FT	6230 SQ FT

UTILITIES INTEREST REQUIRED

UTILITY NO.	OWNER(S)	INTEREST REQUIRED
300	VILLAGE OF WINNECONNE - WATER	RELEASE OF RIGHTS
301	VILLAGE OF WINNECONNE - SANITARY	RELEASE OF RIGHTS
302	WISCONSIN POWER AND LIGHT - ELECTRIC	RELEASE OF RIGHTS
303	WISCONSIN POWER AND LIGHT - GAS	RELEASE OF RIGHTS

EXISTING MONUMENT TABLE

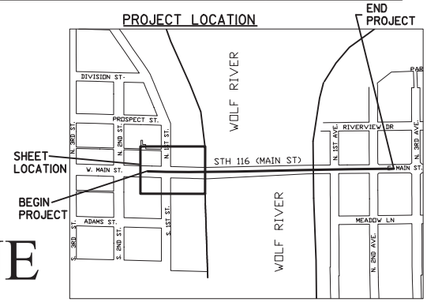
PT NO.	STATION	OFFSET	MON
656	11+09.58 (1ST ST)	32.19'	1" IP
894	14+12.85 (1ST ST)	39.32'	CH X
894	14+23.21 (1ST ST)	38.54'	CH X
899	14+53.18 (1ST ST)	35.82'	1" IP

PROPOSED R/W POINTS

PT #	Y	X	
6	507300.696	747231.712	R/W
7	507311.768	747230.788	R/W
16	507140.728	747227.409	HE
18	507223.966	747156.541	R/W
19	507217.177	747162.906	R/W
34	507303.684	747164.615	R/W
48	507220.738	747228.989	R/W HE
142	507209.778	747475.013	R/W HE
143	507290.102	747469.507	R/W
144	507129.108	747488.260	HE

0' 50' 100'

PROJECT LOCATION



OMNNI ASSOCIATES
ONE SYSTEMS DRIVE
APPLETON, WI 54914-1654
PHONE (920) 735-6900
FAX (920) 830-6100

I, **DAVID A. YURK** PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: David A. Yurk DATE: 12-10-2015

PRINT NAME: **DAVID A. YURK**

REGISTRATION NUMBER: S-2648

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

REGION OFFICE

SIGNATURE: Curt VanErem DATE: 12-22-2015

PRINT NAME: **CURT VAN EREM**

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-040101-RP AMENDMENT.DWG PLOT DATE : 12/21/2015 3:02 PM PLOT BY : DAVE A. YURK PLOT NAME : PLOT SCALE : **********

APPRAISAL PLAT DATE : ----------

TRANSPORTATION PROJECT PLAT NO: 6190-15-23 - 4.01 AMENDMENT NO. 2

AMENDS PARCELS 6 AND 9 OF TRANSPORTATION PROJECT PLAT 6190-15-23 - 4.01 RECORDED IN DOCUMENT NO. 1687546

THAT PART OF LOT 5, BLOCK 1, LOTS 1,2,3,4, BLOCK 2, WILLIAMSPORT, LOT 12, 13, REPLAT OF THE WILLIAMS RESERVE, LOT 1, BLOCK 20, RIPON ADDITION TO WINNECONNE, LOT 1, CSM 1085, LOT 1, CSM 1090, LOT 1, CSM 2741, LOCATED IN AND INCLUDING GOVERNMENT LOT 4 OF SECTION 21, T19N, R15E, VILLAGE OF WINNECONNE, WINNEBAGO COUNTY, WISCONSIN.

RELOCATION ORDER STH 116, WINNEBAGO COUNTY

WOLF RIVER BRIDGE AND APPROACHES

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

1705886

REGISTER'S OFFICE
WINNEBAGO COUNTY, WI
RECORDED ON
01/26/2016 10:08 AM

CHRISTOPHER LARSON
DEPUTY REGISTER OF DEEDS

RECORDING FEE 25.00
PAGES: 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6190-15-23 - 4.01
AMENDMENT NO: 2

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 AS DOCUMENT NO. 1687546 FOR ADDITIONAL INFORMATION.

ROAD NAME	BASIS OF EXISTING R/W	YEAR
STH 116	REPLAT OF WILLIAMS RESERVE	
N 1ST ST	WILLIAMSPORT	1866
S 1ST ST	RIPON ADDITION TO WINNECONNE	1868
	CSM 89, CSM 1085	1973, 1982
	CSM 1090, CSM 2741	1983, 1996

CURVE A	CURVE B	CURVE C	CURVE D
PI 133+99.62	PI 135+66.78	PI 11+69.97	PI 13+67.25
Y 507262.177	Y 507189.554	Y 507173.434	Y 507370.076
X 747197.569	X 747350.508	X 747193.548	X 747209.451
Δ 22°50'59"	Δ 24°56'36"	Δ 3°29'24"	Δ 8°41'50"
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T 80.835'	T 88.471'	T 15.241'	T 60.836'
L 159.522'	L 174.138'	L 30.472'	L 121.439'
LC 158.467'	LC 172.766'	LC 30.467'	LC 121.322'
LCB S76°01'28"E	LCB S77°04'16"E	LCB N02°52'39"E	LCB N00°16'30"E

SCHEDULE OF LANDS AND INTEREST

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION

PARCEL NO.		INTEREST REQUIRED	AREA REQUIRED NEW	EXISTING	TOTAL	TLE
1	KENNETH W. THRUN JR.	TLE	---	---	---	124 SQ FT
2	XMI, LLC.	FEE TLE	21 SQ FT	---	21 SQ FT	447 SQ FT
3	TRUSTEES OF THE WINNECONNE LODGE #186	TLE	---	---	---	22 SQ FT
4	VILLAGE OF WINNECONNE	TLE	---	---	---	200 SQ FT
5	DEBRA S. RYF	TLE	---	---	---	191 SQ FT
6	DENNIS M. BIGGAR & DEBRA S. RYF	FEE TLE	14,349 SQ FT	---	14,349 SQ FT	9302 SQ FT
8	FIN 'N FEATHER PROPERTIES, LLC.	FEE TLE	6 SQ FT	---	6 SQ FT	6695 SQ FT
9	MARY S. HOLTZ OR HER SUCCESSORS(S) IN TRUST, AS TRUSTEE(S) OF THE MARY S. HOLTZ LIVING TRUST DATED 9-18-2008, AS AMENDED AND/OR RESTATED	FEE TLE	6230 SQ FT	---	6230 SQ FT	18,649 SQ FT

UTILITIES INTEREST REQUIRED

UTILITY NO.	OWNER(S)	INTEREST REQUIRED
300	VILLAGE OF WINNECONNE - WATER	RELEASE OF RIGHTS
301	VILLAGE OF WINNECONNE - SANITARY	RELEASE OF RIGHTS
302	WISCONSIN POWER AND LIGHT - ELECTRIC	RELEASE OF RIGHTS
303	WISCONSIN POWER AND LIGHT - GAS	RELEASE OF RIGHTS

EXISTING MONUMENT TABLE

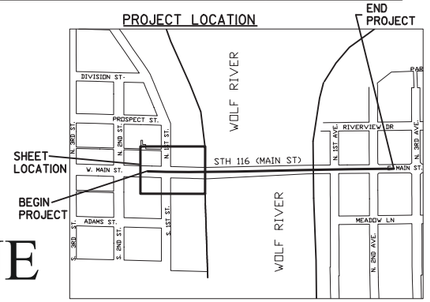
PT NO.	STATION	OFFSET	MON
656	11+09.58 (1ST ST)	32.19'	1" IP
894	14+12.85 (1ST ST)	39.32'	CH X
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16	507140.728	747227.409	R/W
18	507223.966	747156.541	R/W
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143	507290.102	747469.507	R/W
144	507129.108	747488.260	R/W

0' 50' 100'

PROJECT LOCATION



OMNNI ASSOCIATES
ONE SYSTEMS DRIVE
APPLETON, WI 54914-1654
PHONE (920) 735-6900
FAX (920) 830-6100

I, **DAVID A. YURK** PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: David A. Yurk DATE: 1-14-2016
PRINT NAME: DAVID A. YURK
REGISTRATION NUMBER: S-2648

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
REGION OFFICE
SIGNATURE: Curt VanErem DATE: 1-22-2016
PRINT NAME: CURT VAN EREM

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-040101-RP AMENDMENT2.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 1/14/2016 10:02 AM
PLOT BY : DAVE A. YURK
PLOT NAME :
PLOT SCALE : **********

TRANSPORTATION PROJECT PLAT NO: 6190-15-23 - 4.02

THAT PART OF LOTS 1, 2, BLOCK 11, LOTS 1, 2, 3, 4, 5, 8, 9, 10, BLOCK 14, LOTS 4, 5, BLOCK 15, LOT 4, BLOCK 18, LOTS 1, 2, 3, 4, 5, BLOCK 19, GOVERNMENT LOT 1, SECTION 21, T19N, R15E, VILLAGE OF WINNECONNE, WINNEBAGO COUNTY, WISCONSIN.

RELOCATION ORDER STH 116, WINNEBAGO COUNTY

WOLF RIVER BRIDGE AND APPROACHES

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

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1688107
REGISTER'S OFFICE
WINNEBAGO COUNTY, WI
RECORDED ON
05/26/2015 9:21 AM
JULIE PAGEL
REGISTER OF DEEDS
RECORDING FEE 25.00
PAGES: 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6190-15-23 -- 4.02
AMENDMENT NO:---

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 AS DOCUMENT NO. 1687546 FOR ADDITIONAL INFORMATION.

ROAD NAME	BASIS OF EXISTING R/W	YEAR
STH 116	PLAT OF WINNECONNE	
1ST AND 2ND AVE	CSM 1443, CSM 6236	1985, 2008

PROPOSED R/W POINTS

PT #	Y	X	
9	507142.307	748352.853	R/W
27	507018.654	748411.829	HE
28	507044.565	748436.877	HE
29	507047.823	748444.547	HE
30	507047.316	748508.072	HE
31	507147.312	748508.900	HE
32	507198.261	748477.622	HE
33	507222.167	748558.824	PLE HE
35	507178.386	748629.163	HE
36	507214.717	748689.467	R/W
42	507290.596	748693.347	R/W
70	507288.552	748354.069	R/W
73	507288.073	748414.067	R/W
81	507214.773	748525.426	PLE HE
82	507204.773	748525.377	PLE HE
88	507215.945	748610.039	HE
89	507220.073	748775.518	R/W
90	507289.665	748810.094	R/W
108	507286.351	748630.060	R/W
166	507289.826	748194.284	R/W
167	507229.764	748201.948	R/W
168	507143.528	748199.852	R/W
188	507221.073	748695.928	R/W
193	507222.042	748574.524	PLE HE
194	507211.189	748574.434	PLE HE

STATION OFFSET TABLE

POINT #	STATION	OFFSET	DESC.
33	147+77.88	28.75'	PLE HE
81	147+41.05	28.75'	PLE HE
82	147+38.04	38.50'	PLE HE
193	147+94.64	31.24'	PLE HE
194	147+92.97	41.98'	PLE HE

LINE TABLE

FROM-TO	BEARING	DISTANCE
188-36	S45°27'59"W	9.06'
88-194	S82°23'37"W	35.92'
194-82	S82°23'37"W	49.49'
82-81	N00°28'33"E	10.13'
81-33	N77°30'15"E	34.17'
33-193	S89°32'35"E	15.70'
193-194	S00°28'33"W	10.85'

CURVE TABLE

FROM-TO	BEARING	ARC	CHORD	RADIUS
35-88	N26°59'05"W	42.82'	42.15'	69.46'
29-28	S66°59'20"W	8.34'	8.33'	65.75'
28-27	S44°01'40"W	37.37'	36.04'	40.25'

CURVE A
PI 145+85.96
Y 507181.402
X 748372.461
Δ 25°20'40"
R 400.00'
L 176.938'
LC 175.499'
LCB N77°47'05"E

CURVE B
PI 147+62.90
Y 507257.103
X 748535.627
Δ 25°20'40"
R 400.00'
L 176.938'
LC 175.499'
LCB N77°47'05"E

CURVE C
PI 16+84.38
Y 507280.515
X 748378.753
Δ 17°37'14"
R 340.00'
L 104.563'
LC 104.151'
LCB N08°20'03"W

CURVE D
PI 13+51.94
Y 507041.964
X 748379.521
Δ 28°19'49"
R 140.00'
L 69.224'
LC 68.521'
LCB N14°38'28"E

EXSITING MONUMENT TABLE

PT NO.	STATION	OFFSET	MON
613	13+70.51 (1ST AVE)	24.41'	1" IP
629	13+97.09 (1ST AVE)	57.81'	3/4 REBAR
851	149+13.89 (MAIN ST)	37.91'	1" IP
856	147+94.53 (MAIN ST)	34.30'	1" IP

SCHEDULE OF LANDS AND INTEREST

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION

PARCEL NO.		INTEREST REQUIRED	AREA REQUIRED NEW	EXISTING	TOTAL	TLE	HE	PLE
11	DOUGLAS A. NELSON	TLE	---	---	---	3810 SQ FT	---	---
12	EXECUTIVE INVESTMENTS LLC.	FEE TLE	14,000 SQ FT	---	14,000 SQ FT	381 SQ FT	---	---
13	RICHARD E. EHLKE AS VENDER AND WILLIAM R. HILLMAN & JANICE L. HILLMAN, A VENDEES INTEREST IN LAND CONTRACT RECORDED AS DOCUMENT NO. 1484654	TLE	---	---	---	151 SQ FT	---	---
14	ROBERT J. ALBRIGHT	TLE	---	---	---	315 SQ FT	---	---
16	MARC C. SALM	FEE TLE	317 SQ FT	---	317 SQ FT	813 SQ FT	---	---
17	STEVEN J. BROOKS	HE TLE	---	---	---	1775 SQ FT	16,765 SQ FT	---
18	PDK PROPERTIES LLC.	HE PLE TLE	---	---	---	8118 SQ FT	1299 SQ FT	583 SQ FT
19	KATHRYN KELLY	TLE	---	---	---	353 SQ FT	---	---
21	DENNIS M. & BARBARA J. BIGGAR	FEE TLE	543 SQ FT	---	543 SQ FT	863 SQ FT	---	---
22	DEBORAH A. BARTELT	FEE TLE	435 SQ FT	---	435 SQ FT	844 SQ FT	---	---
23	DOUGLAS R. FALK	TLE	---	---	---	100 SQ FT	---	---

UTILITIES INTEREST REQUIRED

UTILITY NO.	OWNER(S)	INTEREST REQUIRED
302	WISCONSIN POWER AND LIGHT ELECTRIC	RELEASE OF RIGHTS
303	WISCONSIN POWER AND LIGHT GAS	RELEASE OF RIGHTS
304	AT&T	RELEASE OF RIGHTS

OMNNI ASSOCIATES
ONE SYSTEMS DRIVE
APPLETON, WI 54914-1654
PHONE (920) 735-6900
FAX (920) 830-6100

I, DAVID A. YURK PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: David A Yurk DATE: 5-1-2015
PRINT NAME: DAVID A. YURK
REGISTRATION NUMBER: S-2648

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
REGIONOFFICE
SIGNATURE: Curt Van Erem DATE: 5-20-2015
PRINT NAME: CURT VAN EREM

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-040101-RP.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 5/20/2015 8:44 AM PLOT BY : DAVE A. YURK PLOT NAME : PLOT SCALE : **********

1703635

REGISTER'S OFFICE
WINNEBAGO COUNTY, WI
RECORDED ON
12/18/2015 8:16 AM

JULIE PAGEL
REGISTER OF DEEDS

RECORDING FEE 25.00
PAGES: 1

TRANSPORTATION PROJECT PLAT NO: 6190-15-23 - 4.02 AMENDMENT NO. 1

AMENDS PARCEL 22 OF TRANSPORTATION PROJECT PLAT 6190-15-23 - 4.02 RECORDED IN DOCUMENT NO. 1688107

THAT PART OF LOTS 1, 2, BLOCK 11, LOTS 1, 2, 3, 4, 5, 8, 9, 10, BLOCK 14, LOTS 4, 5, BLOCK 15, LOT 4, BLOCK 18, LOTS 1, 2, 3, 4, 5, BLOCK 19, GOVERNMENT LOT 1, SECTION 21, T19N, R15E, VILLAGE OF WINNECONNE, WINNEBAGO COUNTY, WISCONSIN.

RELOCATION ORDER STH 116, WINNEBAGO COUNTY

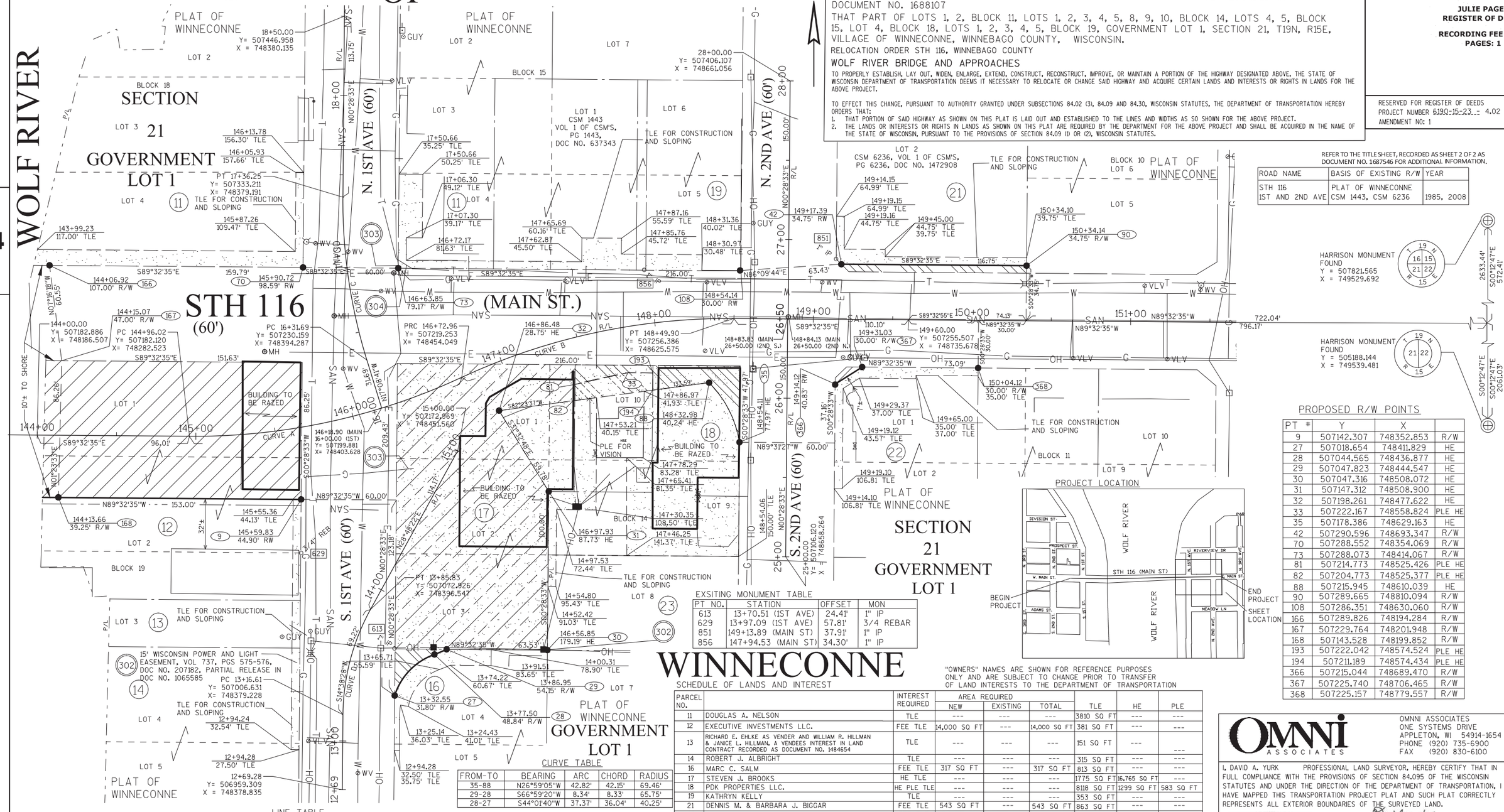
WOLF RIVER BRIDGE AND APPROACHES

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

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1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6190-15-23 - 4.02
AMENDMENT NO: 1



REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 AS DOCUMENT NO. 1687546 FOR ADDITIONAL INFORMATION.

ROAD NAME	BASIS OF EXISTING R/W	YEAR
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1ST AND 2ND AVE	CSM 1443, CSM 6236	1985, 2008

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29	507047.823	748444.547	HE
30	507047.316	748508.072	HE
31	507147.312	748508.900	HE
32	507198.261	748477.622	HE
33	507222.167	748558.824	PLE HE
35	507178.386	748629.163	HE
42	507290.596	748693.347	R/W
70	507288.552	748354.069	R/W
73	507288.073	748414.067	R/W
81	507214.773	748525.426	PLE HE
82	507204.773	748525.377	PLE HE
88	507215.945	748610.039	HE
90	507289.665	748810.094	R/W
108	507286.351	748630.060	R/W
166	507289.826	748194.284	R/W
167	507229.764	748201.948	R/W
168	507143.528	748199.852	R/W
193	507222.042	748574.524	PLE HE
194	507211.189	748574.434	PLE HE
366	507215.044	748689.470	R/W
367	507225.740	748706.465	R/W
368	507225.157	748779.557	R/W

EXSITING MONUMENT TABLE

PT NO.	STATION	OFFSET	MON
613	13+70.51 (1ST AVE)	24.41'	1" IP
629	13+97.09 (1ST AVE)	57.81'	3/4 REBAR
851	149+13.89 (MAIN ST)	37.91'	1" IP
856	147+94.53 (MAIN ST)	34.30'	1" IP

CURVE TABLE

FROM-TO	BEARING	ARC	CHORD	RADIUS
35-88	N26°59'05"W	42.82'	42.15'	69.46'
29-28	S66°59'20"W	8.34'	8.33'	65.75'
28-27	S44°01'40"W	37.37'	36.04'	40.25'

STATION OFFSET TABLE

POINT #	STATION	OFFSET	DESC.
33	147+77.88	28.75'	PLE HE
81	147+41.05	28.75'	PLE HE
82	147+38.04	38.50'	PLE HE
193	147+94.64	31.24'	PLE HE
194	147+92.97	41.98'	PLE HE

LINE TABLE

FROM-TO	BEARING	DISTANCE
367-366	S57°48'57"W	20.08'
88-194	S82°23'37"W	35.92'
194-82	S82°23'37"W	49.49'
82-81	N00°28'33"E	10.13'
81-33	N77°30'15"E	34.17'
33-193	S89°32'35"E	15.70'
193-194	S00°28'33"W	10.85'

CURVE A: PI 145+85.96, Y 507181.402, X 748372.461, Δ 25°20'40", R 400.00', L 176.938', LC 175.499', LCB N77°47'05"E

CURVE B: PI 147+62.90, Y 507257.103, X 748535.627, Δ 25°20'40", R 400.00', L 176.938', LC 175.499', LCB N77°47'05"E

CURVE C: PI 16+84.38, Y 507280.515, X 748378.753, Δ 17°37'14", R 340.00', L 104.563', LC 104.151', LCB N08°20'03"W

CURVE D: PI 13+51.94, Y 507041.964, X 748379.521, Δ 28°19'49", R 140.00', L 69.224', LC 68.521', LCB N14°38'28"E

WINNECONNE

SCHEDULE OF LANDS AND INTEREST

"OWNERS" NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE DEPARTMENT OF TRANSPORTATION

PARCEL NO.		INTEREST REQUIRED	AREA REQUIRED NEW	EXISTING	TOTAL	TLE	HE	PLE
11	DOUGLAS A. NELSON	TLE	---	---	---	3810 SQ FT	---	---
12	EXECUTIVE INVESTMENTS LLC.	FEE TLE	14,000 SQ FT	---	14,000 SQ FT	381 SQ FT	---	---
13	RICHARD E. EHLKE AS VENDER AND WILLIAM R. HILLMAN & JANICE L. HILLMAN, A VENDEES INTEREST IN LAND CONTRACT RECORDED AS DOCUMENT NO. 1484654	TLE	---	---	---	151 SQ FT	---	---
14	ROBERT J. ALBRIGHT	TLE	---	---	---	315 SQ FT	---	---
16	MARC C. SALM	FEE TLE	317 SQ FT	---	317 SQ FT	813 SQ FT	---	---
17	STEVEN J. BROOKS	HE TLE	---	---	---	1775 SQ FT	16,765 SQ FT	---
18	PDK PROPERTIES LLC.	HE PLE TLE	---	---	---	8118 SQ FT	1299 SQ FT	583 SQ FT
19	KATHRYN KELLY	TLE	---	---	---	353 SQ FT	---	---
21	DENNIS M. & BARBARA J. BIGGAR	FEE TLE	543 SQ FT	---	543 SQ FT	863 SQ FT	---	---
22	DEBORAH A. BARTELT	FEE TLE	67 SQ FT	---	67 SQ FT	842 SQ FT	---	---
23	DOUGLAS R. FALK	TLE	---	---	---	100 SQ FT	---	---

UTILITIES INTEREST REQUIRED

UTILITY NO.	OWNER(S)	INTEREST REQUIRED
302	WISCONSIN POWER AND LIGHT ELECTRIC	RELEASE OF RIGHTS
303	WISCONSIN POWER AND LIGHT GAS	RELEASE OF RIGHTS
304	AT&T	RELEASE OF RIGHTS

0' 60' 120'

OMNNI ASSOCIATES
ONE SYSTEMS DRIVE
APPLETON, WI 54914-1654
PHONE (920) 735-6900
FAX (920) 830-6100

I, DAVID A. YURK PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: David A. Yurk DATE: 12/8/15

PRINT NAME: DAVID A. YURK

REGISTRATION NUMBER: S-2648

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

REGION OFFICE

SIGNATURE: Curt Van Erem DATE: 12/8/15

PRINT NAME: CURT VAN EREM

BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEV
BM607	136+75.8, 85.6' LT	ALUM DISK, NW ABUT B-70-913	753.40
BM18	132+66.5, 40.2' LT	0.32' E OF SW CORNER FIRST STEP 124 MAIN ST	761.29

BEGIN PROJECT
STA 132+60.00
Y=507,268.390
X=747,058.086

STH 116 (W MAIN ST)

N 1ST ST

S 1ST ST

BM18

BM607

REMOVE DWY

REMOVE OLD STRUCTURE
B-70-913

EXIST R/W

TLE

PROP R/W

SLOPE INTERCEPT, TYP

BP: 9+92.15

EP: 11+87.75

B-70-322

B-70-316

R-70-126

R-70-122

MATCH LINE STA 137+75

132'116'
133'116'
134'116'
135'116'
136'116'
137'116'
301'WP'
302'WP'
303'WP'
10+00
11+00

EXISTING PROFILE GRADE

FINISHED PROFILE GRADE

-2.83%

4.00%

VPC STA = 133+22.09'116'
VPC ELEV = 759.03

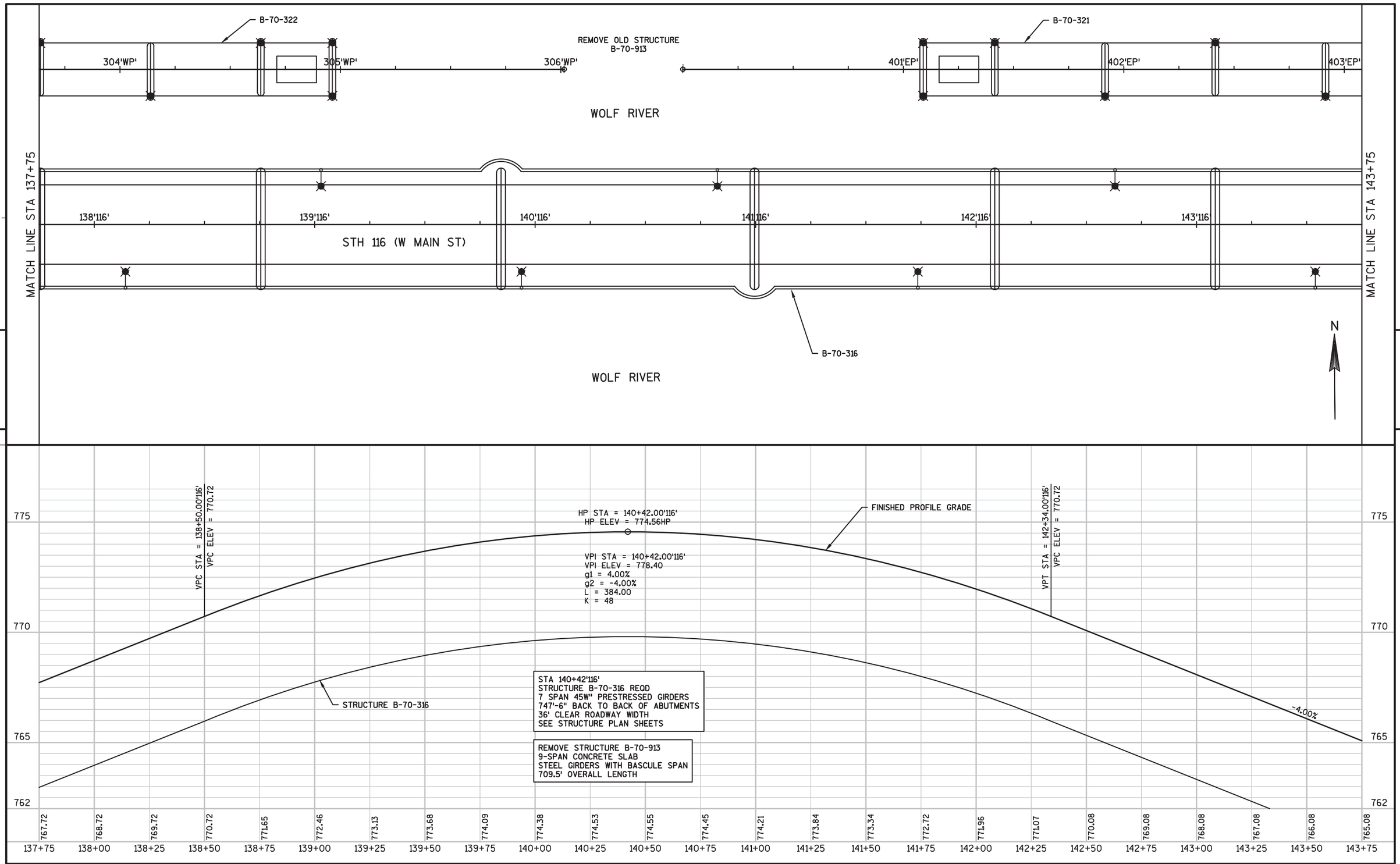
VPI STA = 134+60.00'116'
VPI ELEV = 755.12
g1 = -2.83%
g2 = 4.00%
L = 275.83
K = 40

VPT STA = 135+97.91'116'
VPC ELEV = 760.64

LP STA = 134+36.45'116'
LP ELEV = 757.407

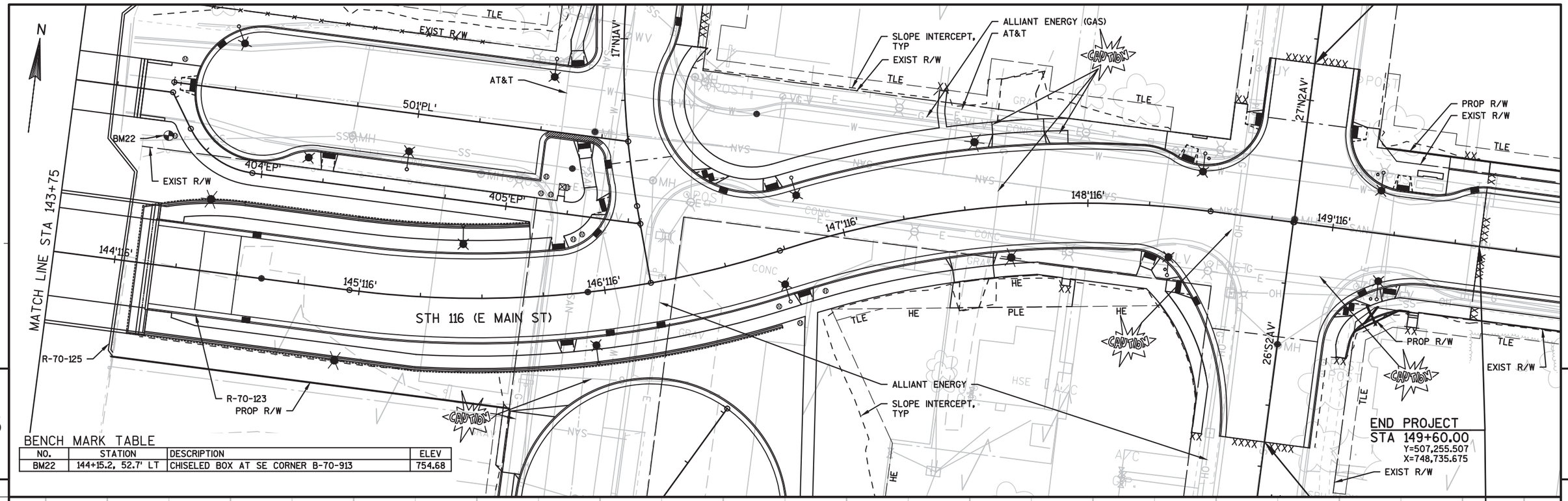
STRUCTURE B-70-316

| | | |



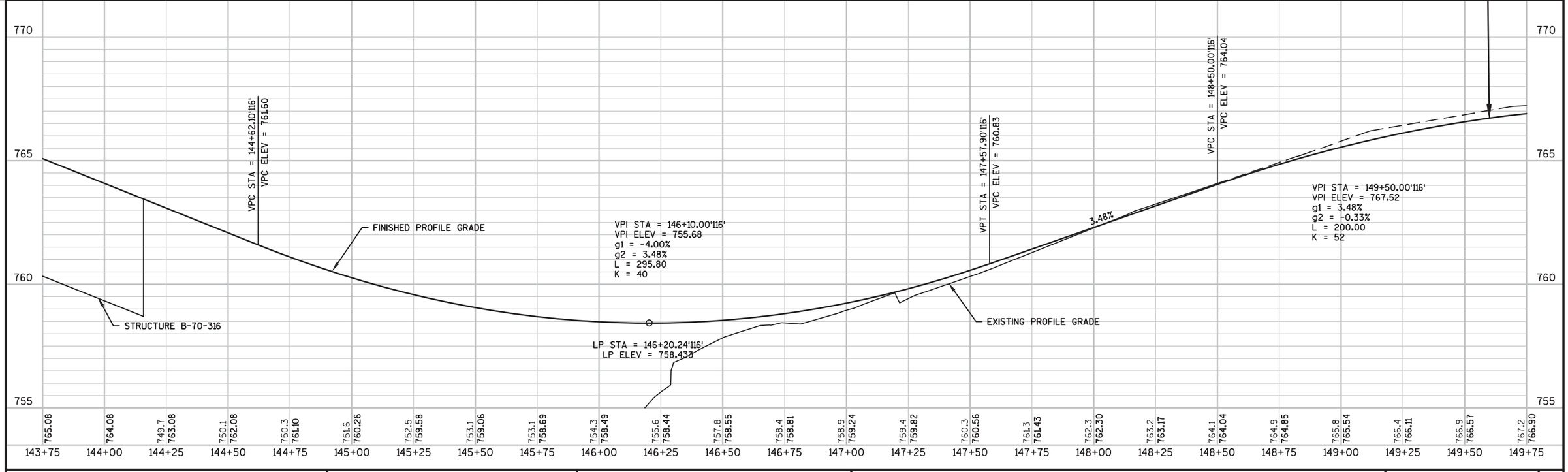
PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE: STH 116	SHEET 145	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-050101-PP.DWG
61901572 PLAN - 61901572-050102-PP
PLOT DATE : 3/17/2017 10:24 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 44



BENCH MARK TABLE

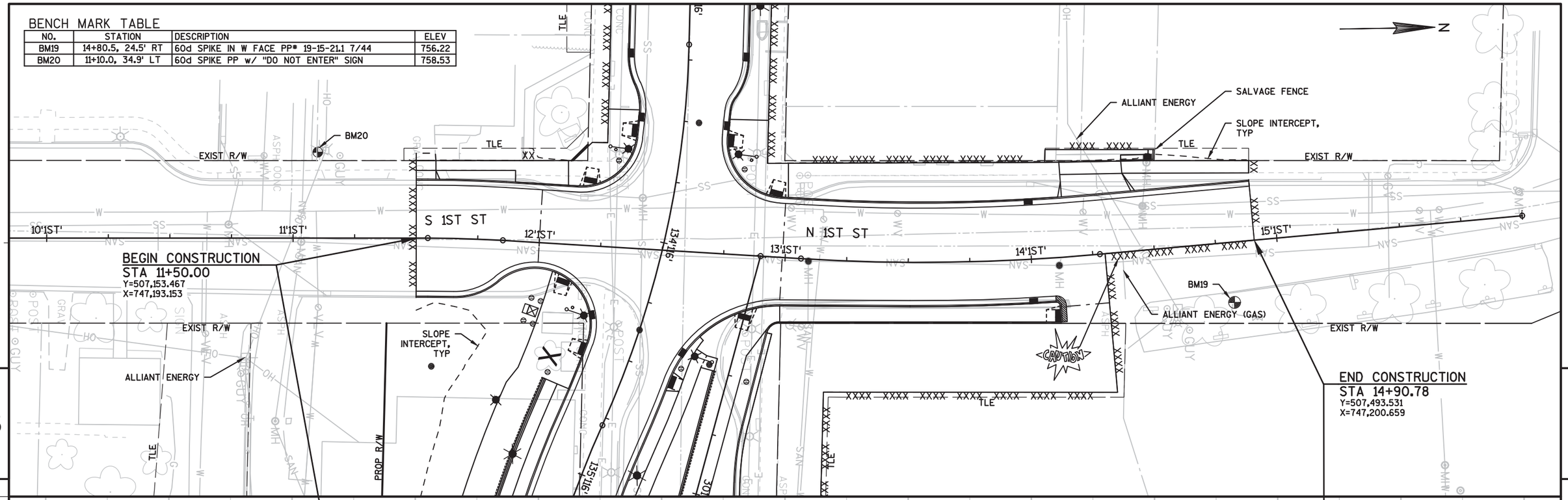
NO.	STATION	DESCRIPTION	ELEV
BM22	144+15.2, 52.7' LT	CHISELED BOX AT SE CORNER B-70-913	754.68

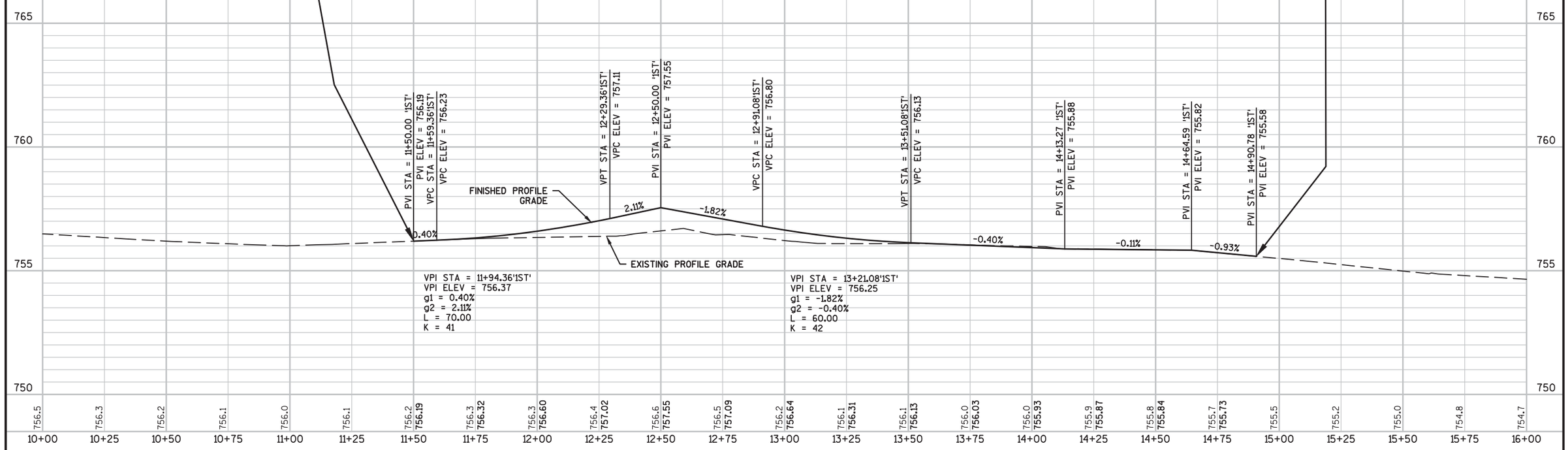


PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE: STH 116	SHEET 146	E

BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEV
BM19	14+80.5, 24.5' RT	60d SPIKE IN W FACE PP* 19-15-21.1 7/44	756.22
BM20	11+10.0, 34.9' LT	60d SPIKE PP w/ "DO NOT ENTER" SIGN	758.53





PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE: 1ST ST	SHEET 147	E

BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEV
BM23	13+64.4 15.8' RT	60d SPIKE IN W FACE PP* 19-15-21.2 40a/36	755.90

ALLIANT ENERGY
EXIST R/W
S 1ST AVE
13'S1AV'
ALLIANT ENERGY
BM23
14'S1AV'
EXIST R/W
BEGIN CONSTRUCTION
STA 12+94.28
Y=506,984.308
X=748,379.042
PROP R/W
TLE
SALVAGE EXISTING CHAIN LINK FENCE AND RESET ALONG PROPOSED RETAINING WALL
SLOPE INTERCEPT, TYP
HE
CAUTION
H 116 (E MAIN ST)
405'EP'
146'116'
147'116'
HE
SLOPE INTERCEPT, TYP
TLE
EXIST R/W
AT&T
17'N1AV'
18'N1AV'
19'N1AV'
N 1ST AVE
XXXX XXXX XXXX
EXIST R/W
TLE
CAUTION
ALLIANT ENERGY (GAS)
ALLIANT ENERGY
END CONSTRUCTION
STA 17+50.00
Y=507,346.962
X=748,379.305
N

765
760
755
750

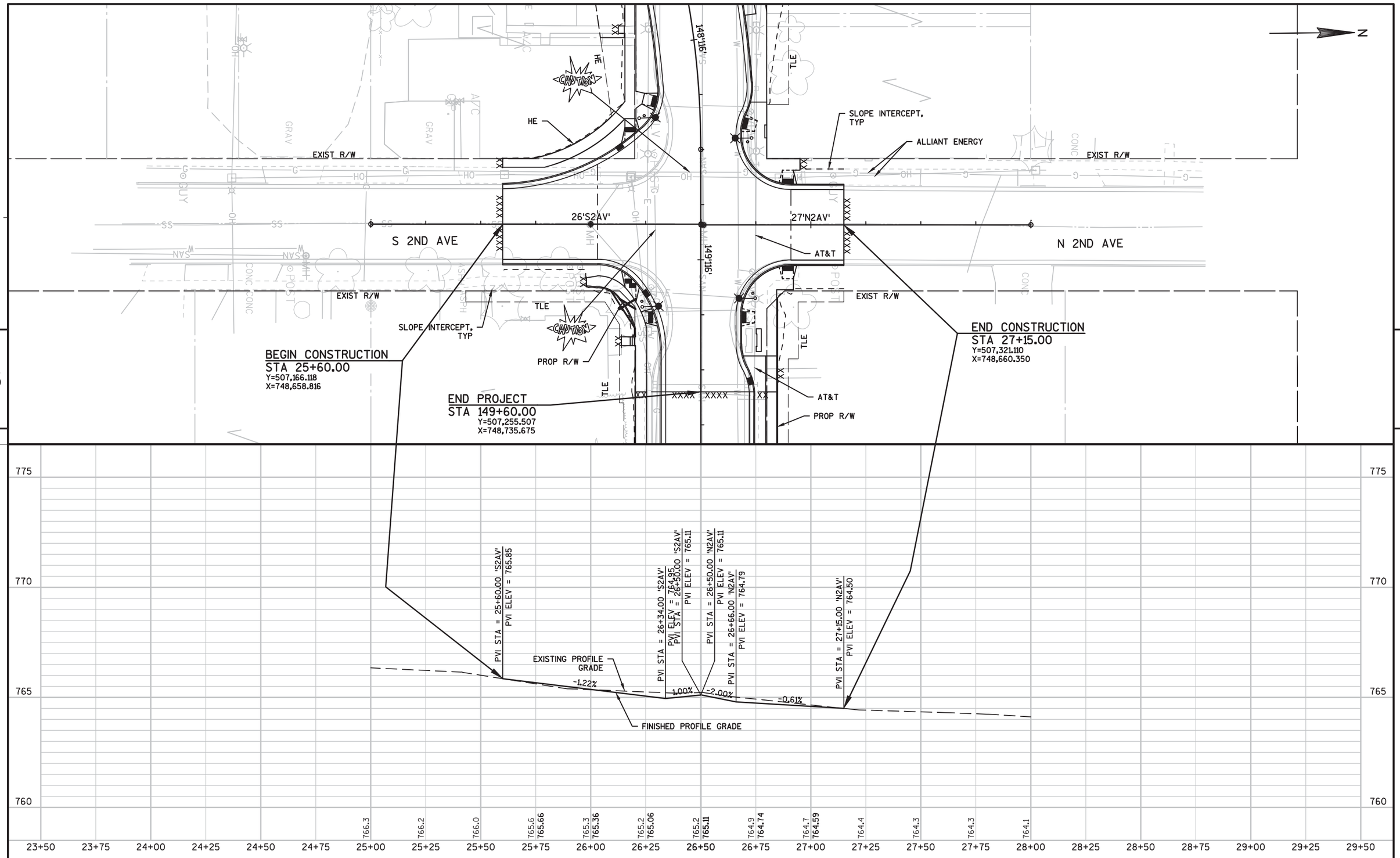
PVI STA = 12+94.28 'S1AV'
PVI ELEV = 754.08
VPI STA = 14+00.00'S1AV'
VPI ELEV = 753.45
g1 = -0.60%
g2 = 2.00%
L = 69.93
K = 27
VPC STA = 13+65.03'S1AV'
VPC ELEV = 753.66
VPT STA = 14+34.97'S1AV'
VPC ELEV = 754.15
PVI STA = 14+77.25 'S1AV'
PVI ELEV = 754.99
EXISTING PROFILE GRADE
-0.60%
2.00%
LP STA = 13+81.17'S1AV'
LP ELEV = 753.609
FINISHED PROFILE GRADE

PVI STA = 16+00.00 'N1AV'
PVI ELEV = 758.43
VPC STA = 16+26.54'N1AV'
VPC ELEV = 757.90
VPT STA = 16+51.54'N1AV'
VPC ELEV = 756.96
VPC STA = 16+84.78'N1AV'
VPC ELEV = 755.13
VPT STA = 17+43.40'N1AV'
VPC ELEV = 753.36
PVI STA = 17+50.00 'N1AV'
PVI ELEV = 753.33
-2.00%
-5.51%
-0.52%
VPI STA = 16+39.04'N1AV'
VPI ELEV = 757.65
g1 = -2.00%
g2 = -5.51%
L = 25.00
K = 7
VPI STA = 17+14.09'N1AV'
VPI ELEV = 753.52
g1 = -5.51%
g2 = -0.52%
L = 58.62
K = 12

754.2
754.1 754.05
754.0 753.90
754.0 753.75
754.0 753.62
754.7 753.68
755.9 753.97
757.7 754.45
759.5 754.95
755.0 758.43
755.3 757.93
755.4 757.05
754.9 755.67
753.7 754.39
753.4 753.61
753.3 753.33
753.3
753.1
753.0
752.9
752.9
752.7

12+50 12+75 13+00 13+25 13+50 13+75 14+00 14+25 14+50 14+75 15+00 16+00 16+25 16+50 16+75 17+00 17+25 17+50 17+75 18+00 18+25 18+50 18+75 19+00 19+25 19+35

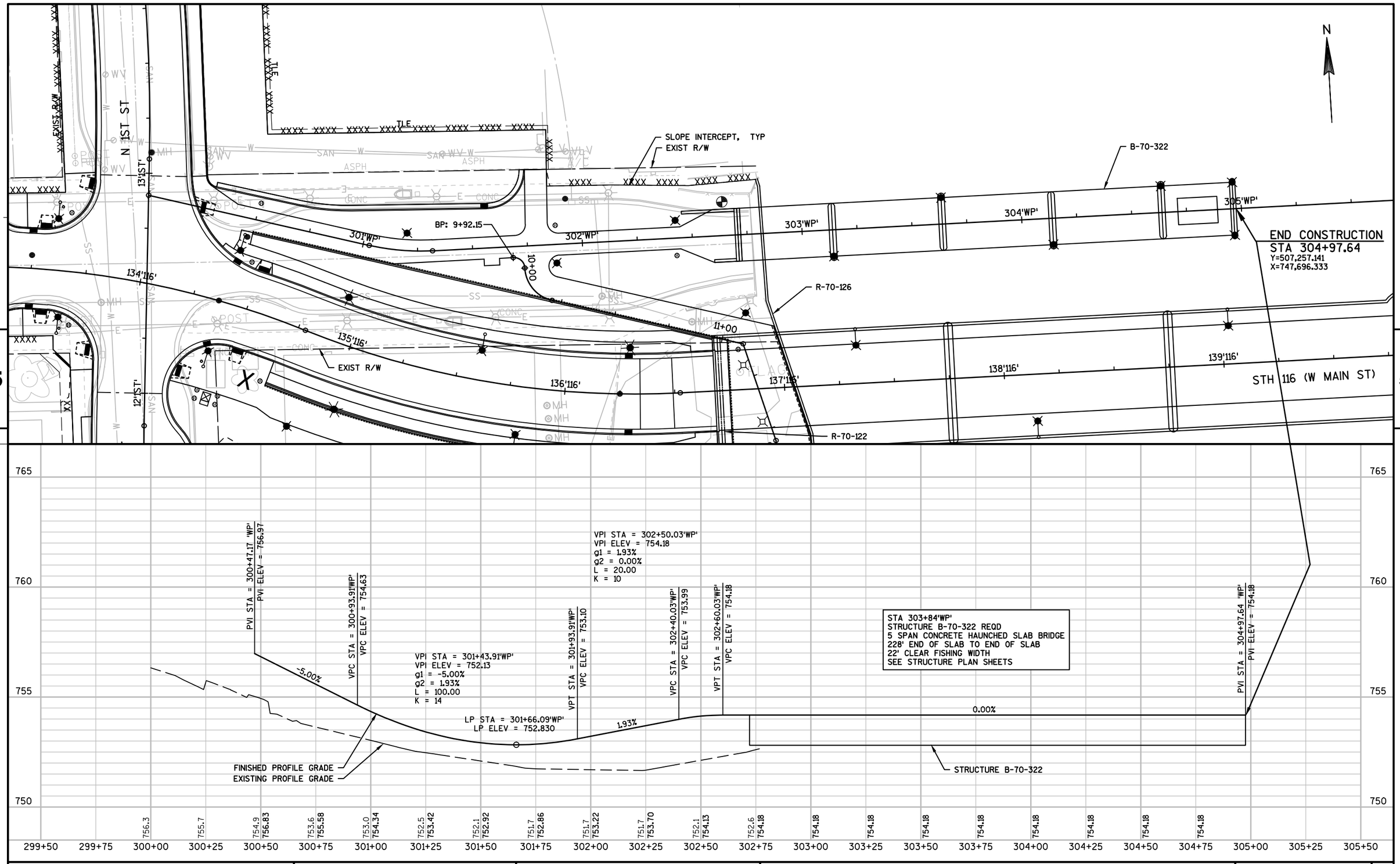
PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE: 1ST AVE	SHEET 148	E



PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE: 2ND AVE	SHEET 149	E

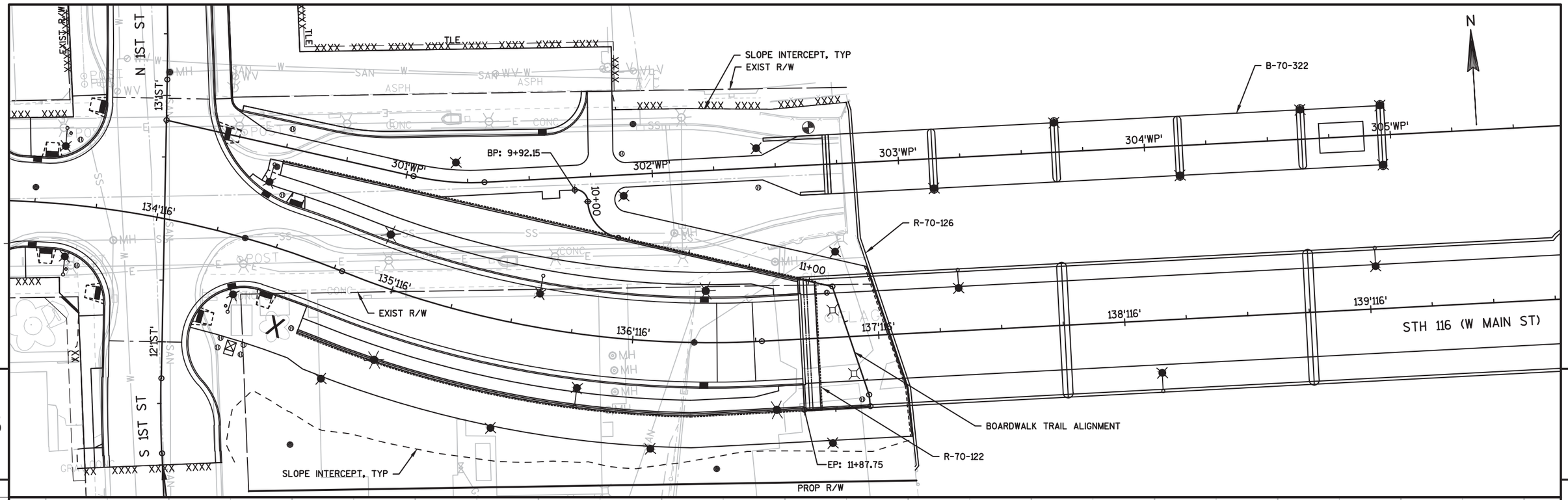
FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-050101-PP.DWG
61901572 PLAN - 61901572-050120-PP

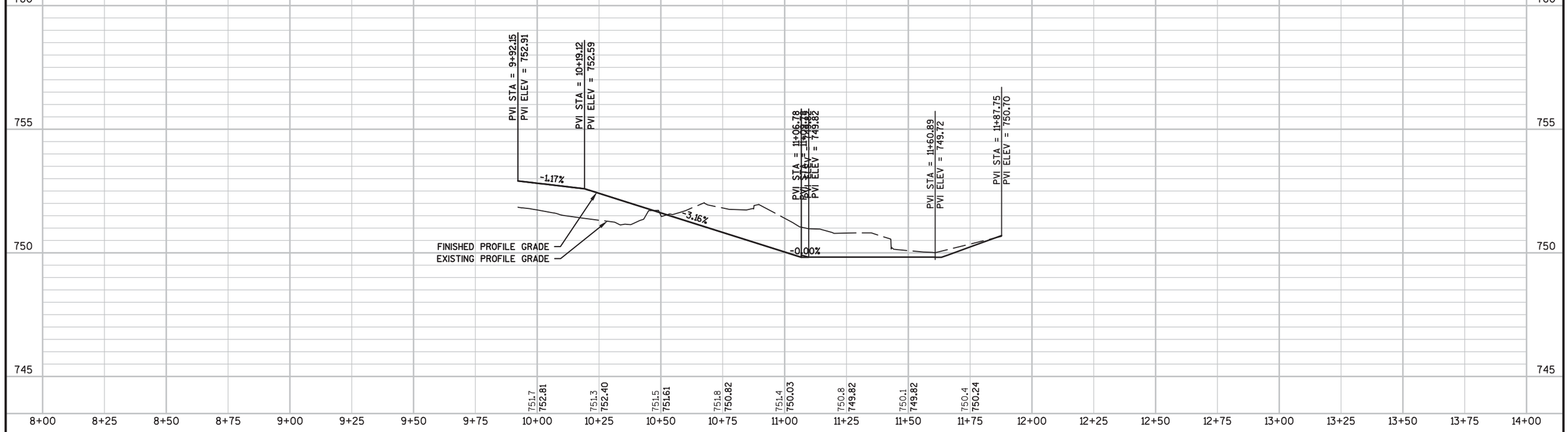
PLOT DATE : 3/17/2017 10:27 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1" = 40'_XREF



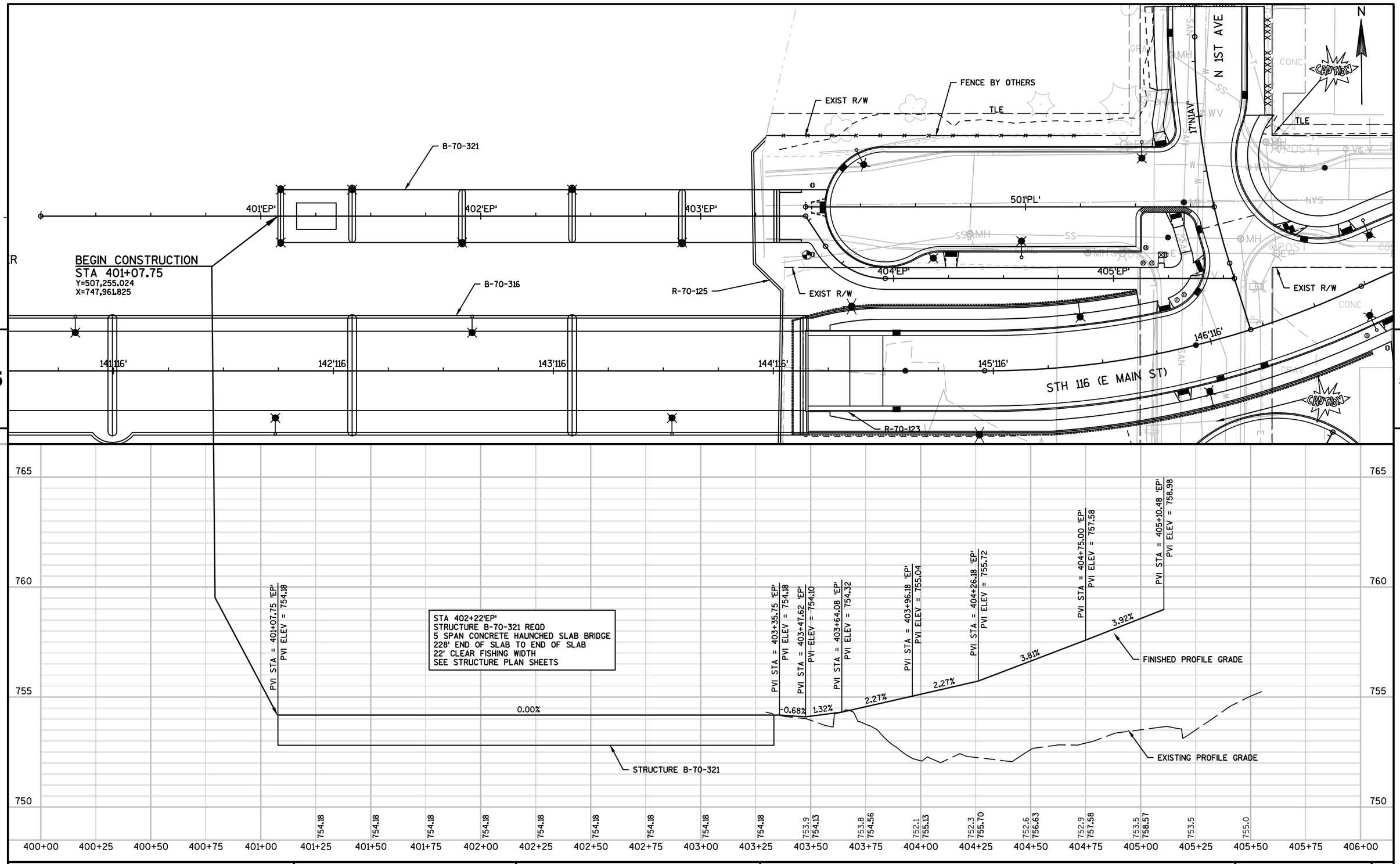
PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE: WEST FISHING PLATFORM TRAIL	SHEET 150	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-050101-PP.DWG
61901572 PLAN - 61901572-050130-PP
PLOT DATE : 3/17/2017 1:40 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 44

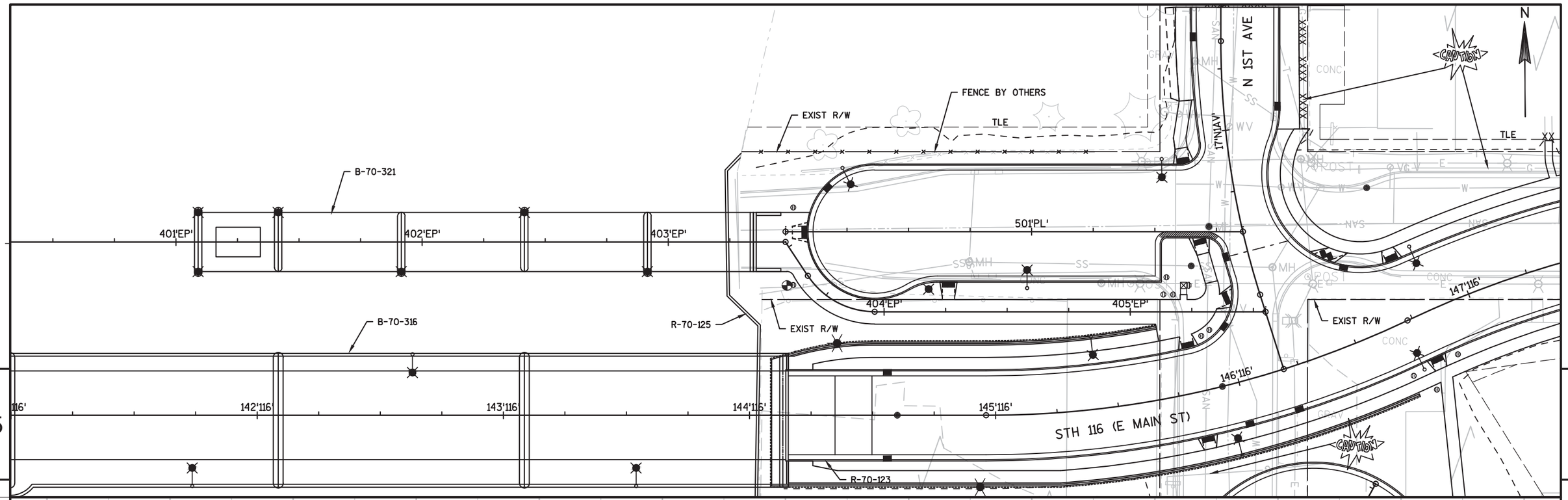


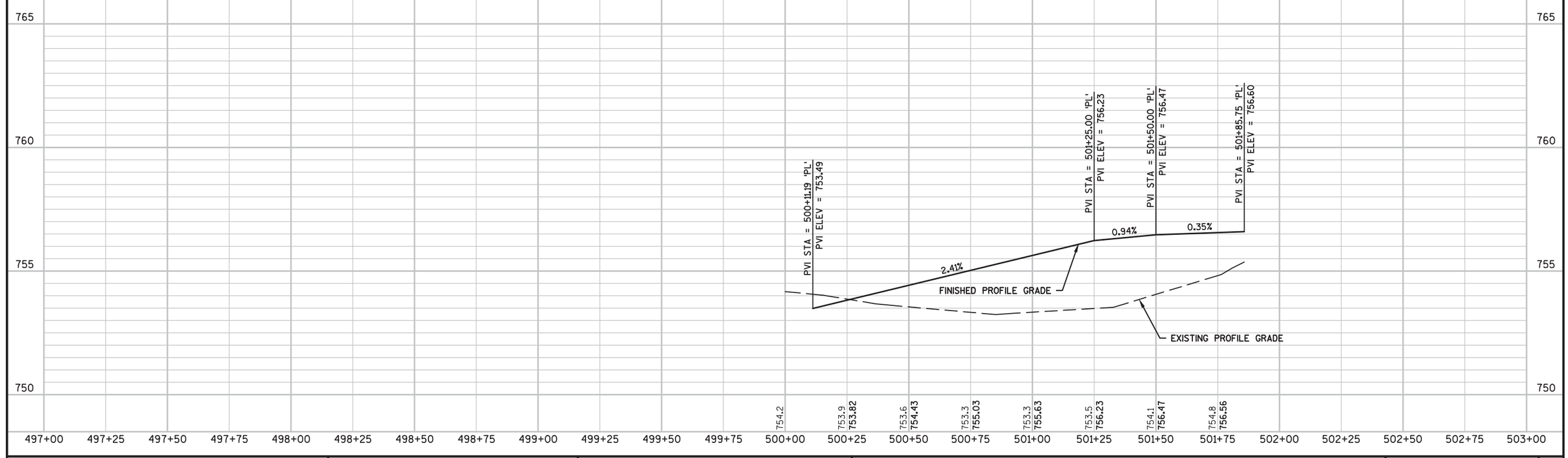


PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE: BOARDWALK TRAIL	SHEET 151	E



PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE: EAST FISHING PLATFORM TRAIL	SHEET 152	E





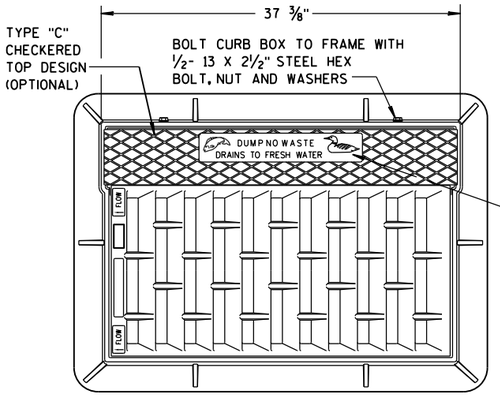
PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PLAN AND PROFILE: EAST FISHING PLATFORM PARKING LOT	SHEET 153	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-050101-PP.DWG
61901572 PLAN - 61901572-050141-PP
PLOT DATE : 3/17/2017 10:27 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 44

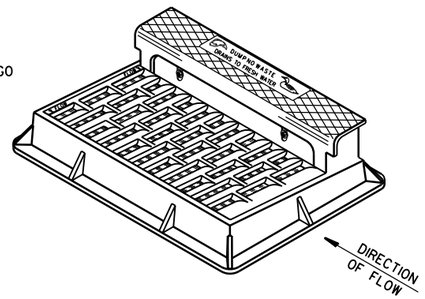
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08A09-02	CATCH BASINS 2X3-FT AND 2.5X3-FT
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
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
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
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C14-02	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D04-02	LIGHTING CONTROL CABINET 120/240 VOLT
09E01-14D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E04-06	WALKWAY LIGHTING UNIT AND CONCRETE BASE, TYPE 11
12A03-10	NAME PLATE (STRUCTURES)
13B02-08A	CONCRETE PAVEMENT APPROACH SLAB
13B02-08B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
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
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
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
15C07-13A	PAVEMENT MARKING SYMBOLS
15C07-13E	PAVEMENT MARKING FOR BIKE LANES
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C12-05	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C29-05A	BICYCLE LANE MARKING
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

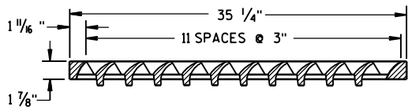
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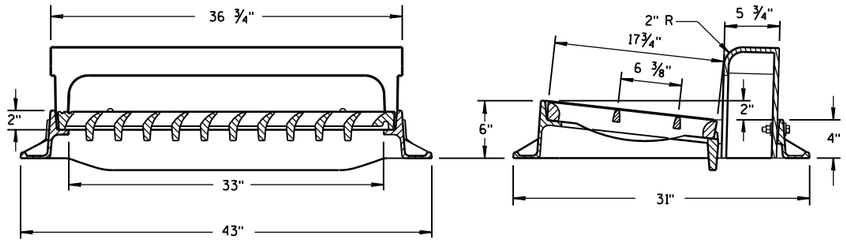


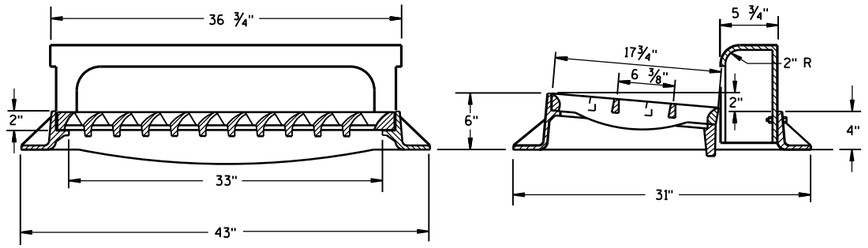
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

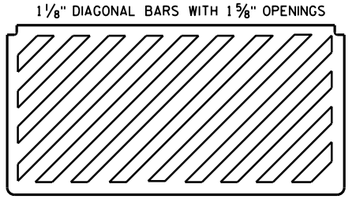






TYPE "H"

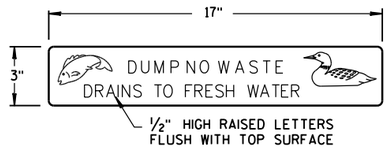
NOTE: EITHER CASTING IS ACCEPTABLE



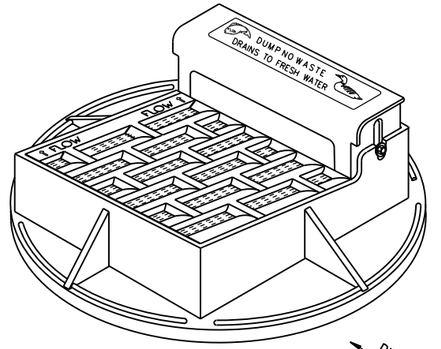
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

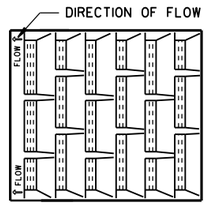
NOTE:
GRATE IS REVERSIBLE.

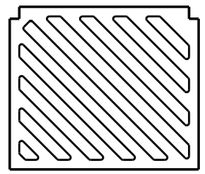
GENERAL NOTES

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 CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

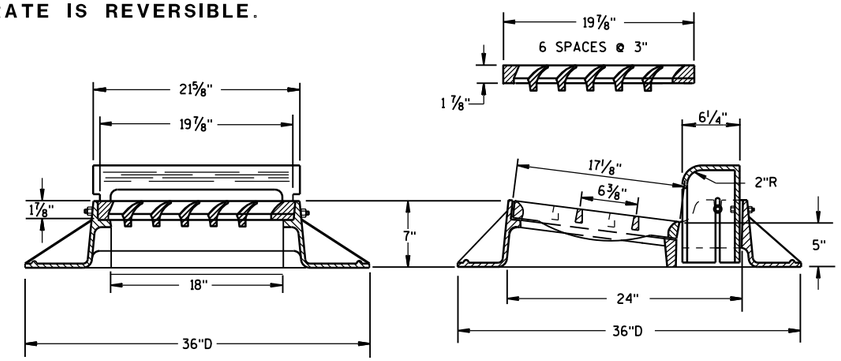




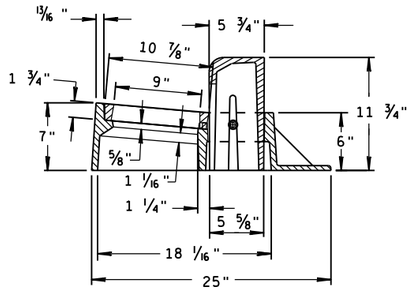
SPECIAL GRATE FOR TYPE "A" COVER

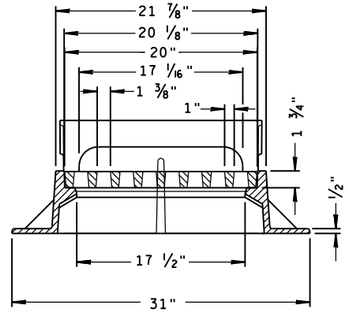
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

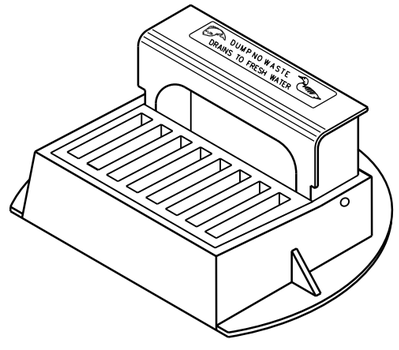


TYPE "A"





TYPE "Z"



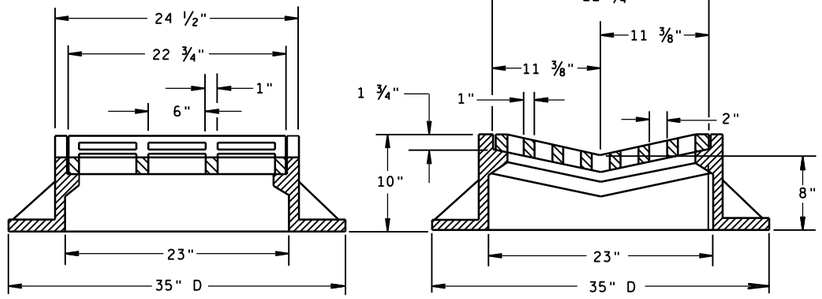
INLET COVERS
TYPE A, H, A-S, H-S & Z

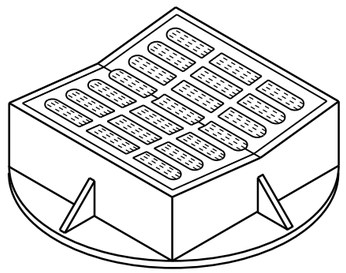
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

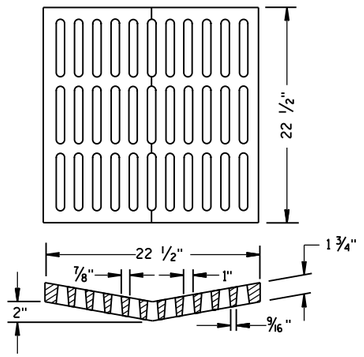
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S.D.D. 8 A 5-19a



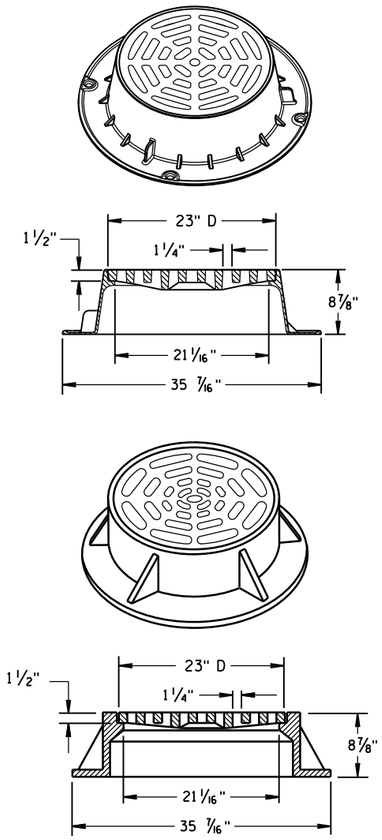


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

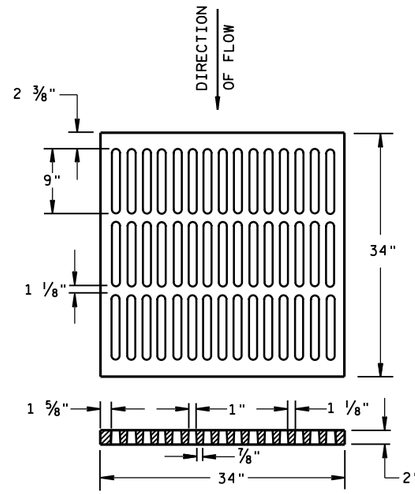
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

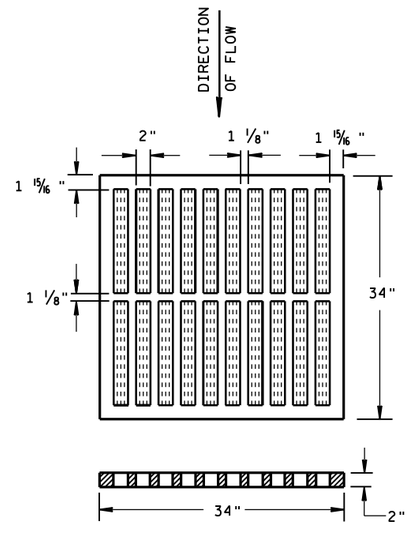
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



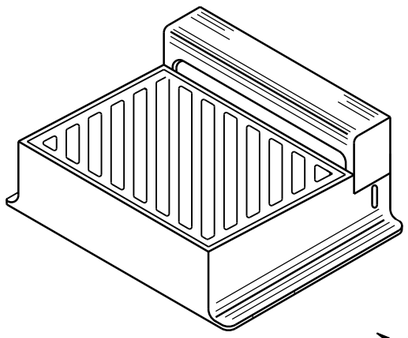
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

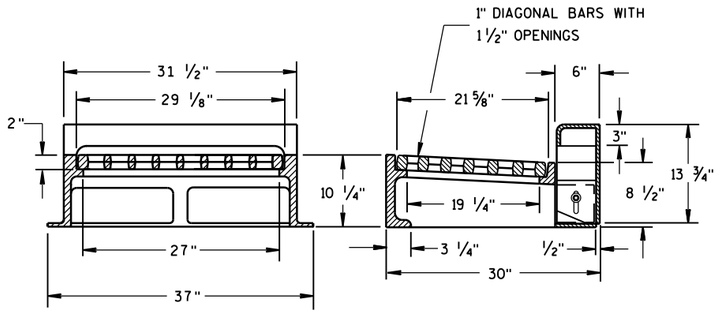


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

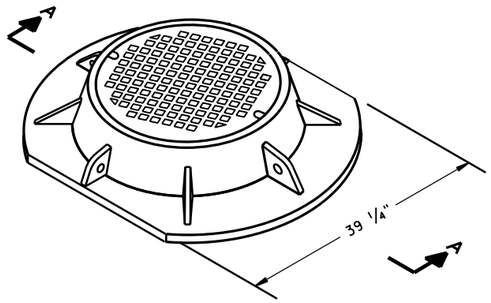
INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

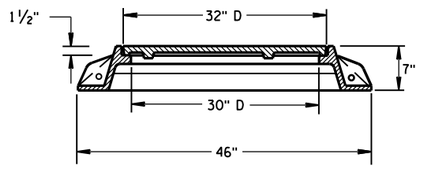
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

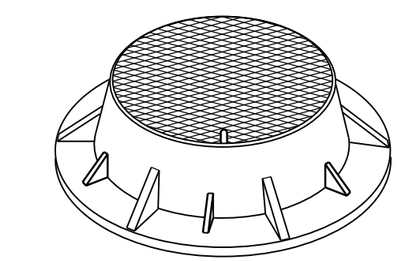
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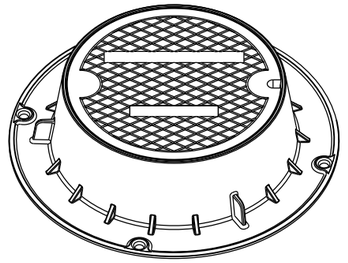
S.D.D. 8 A 5-19b

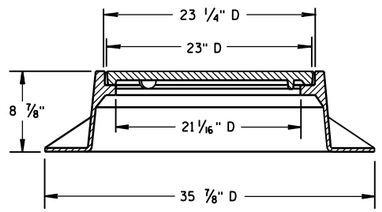


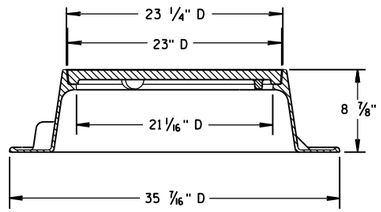


SECTION A-A
TYPE "K"









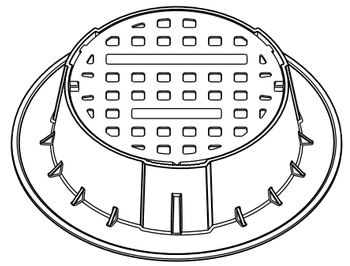
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

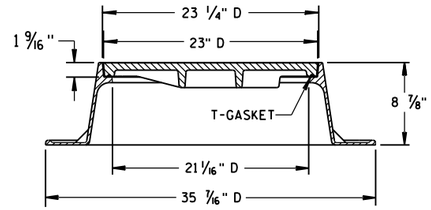
GENERAL NOTES

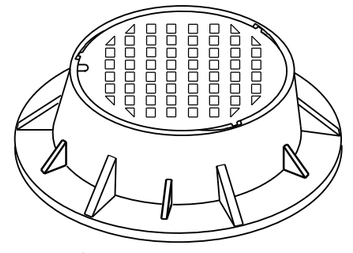
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

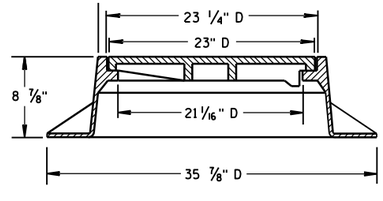
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

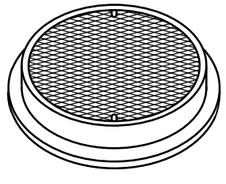


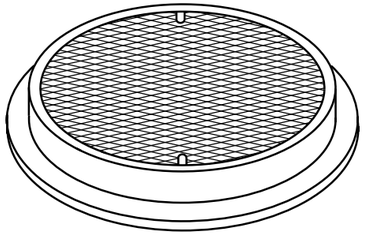


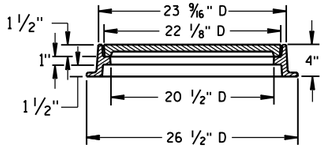




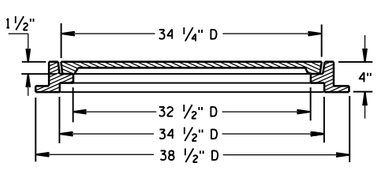
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



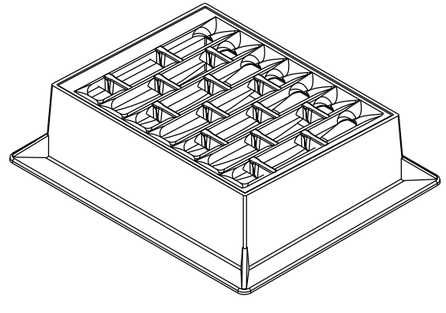


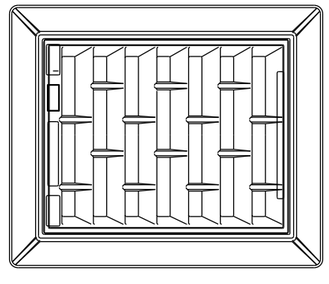


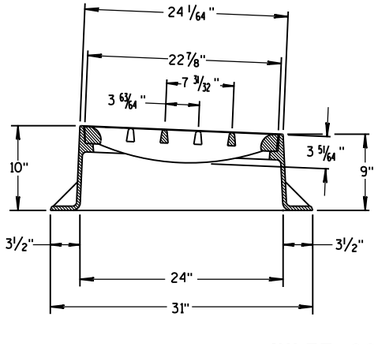
TYPE "L"

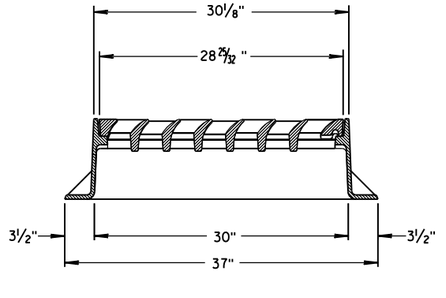


TYPE "M"









INLET COVER TYPE "BW"

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

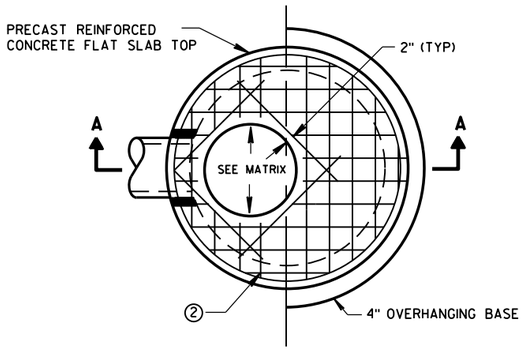
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

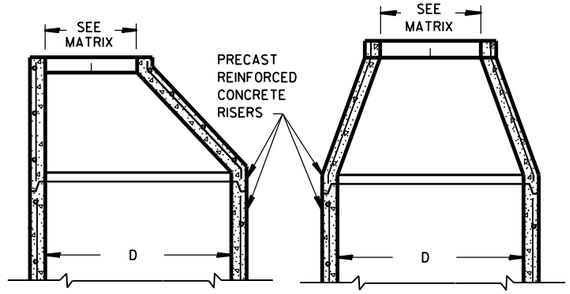
S.D.D. 8 A 5-19d

6

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

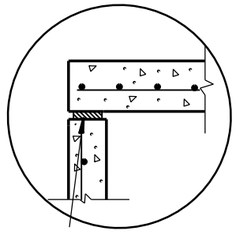


PLAN VIEW CIRCULAR OPENING

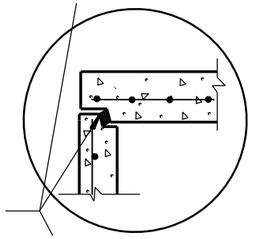


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

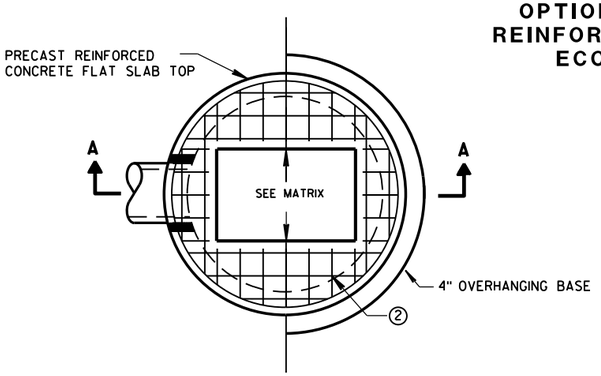
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



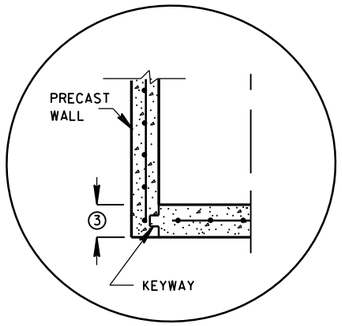
TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT

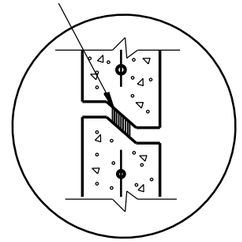


PLAN VIEW RECTANGULAR OPENING



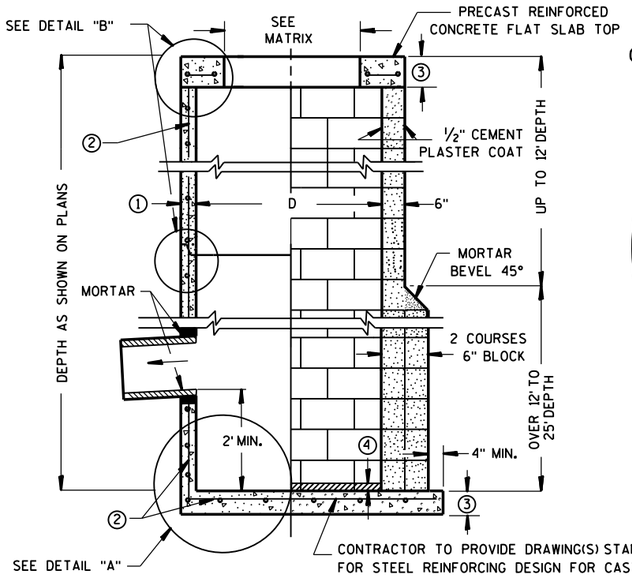
PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



RISER WITH TONGUE AND GROOVE JOINT

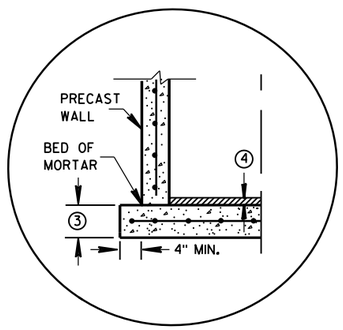
DETAIL "B"



SECTION A-A

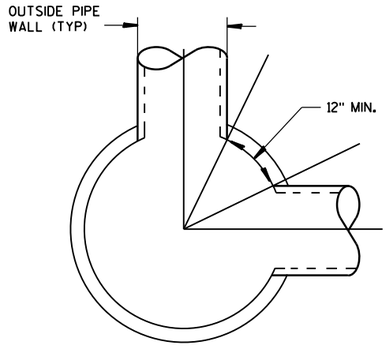
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②



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 CATCH BASIN 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 CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE 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 INCH 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.

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.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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 AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS 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".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

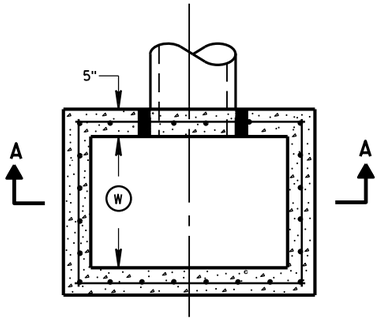
PIPE MATRIX

CATCH BASIN 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	30

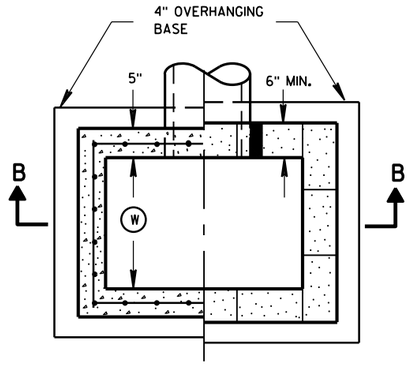
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

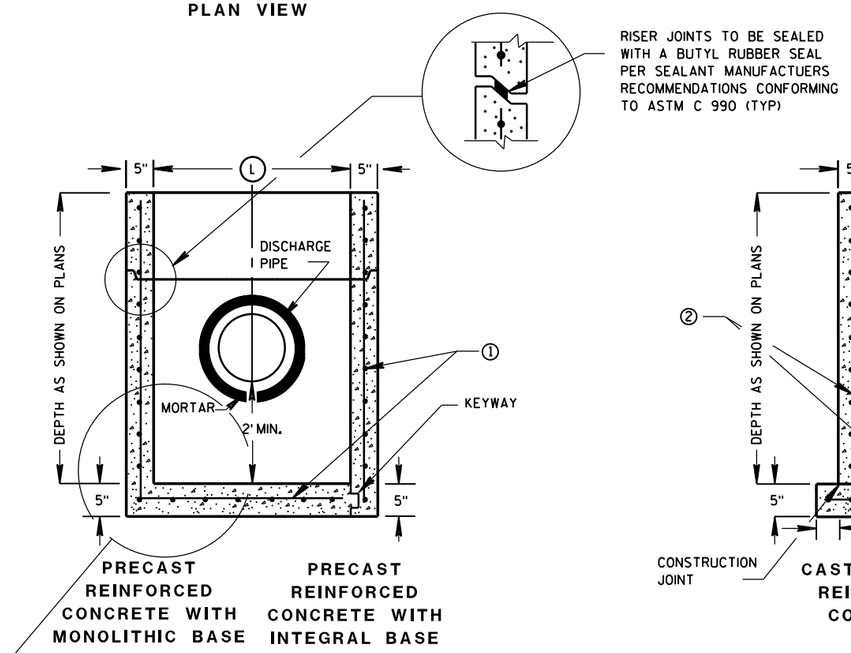
APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVI
FHWA



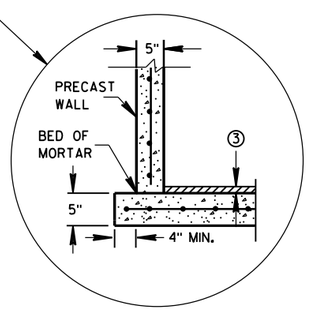
PLAN VIEW



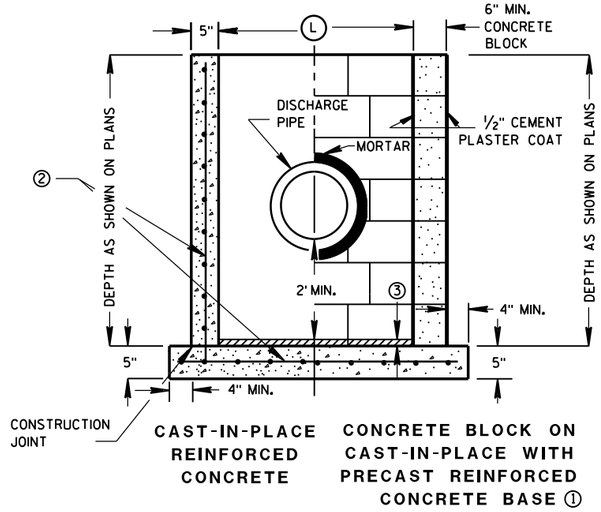
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



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.

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ALL PRECAST CATCH BASIN 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" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST CATCH BASINS 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.

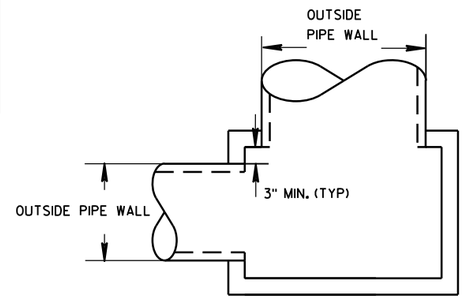
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

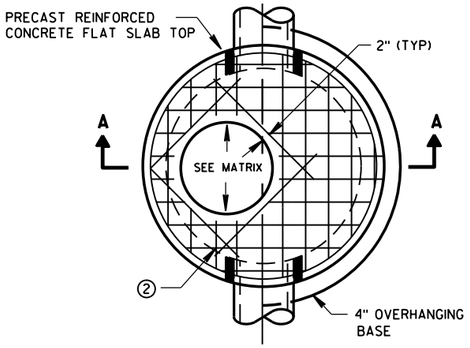
CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

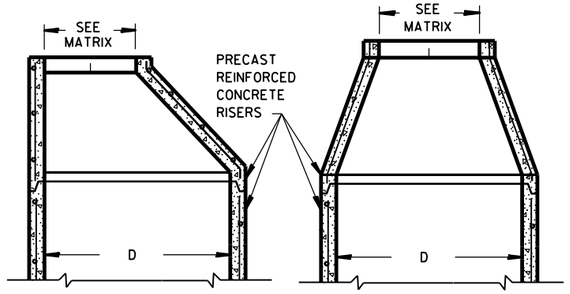
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Sept., 2016 — DATE
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FHWA

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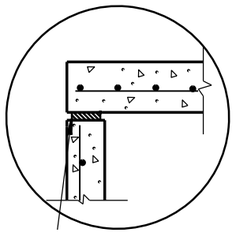


PLAN VIEW CIRCULAR OPENING

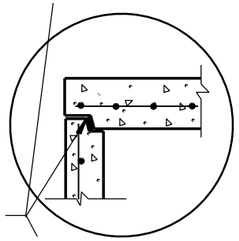


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

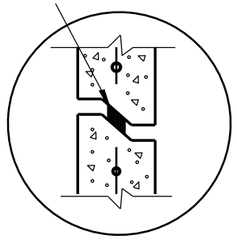


TOP WITH PLAIN END JOINT



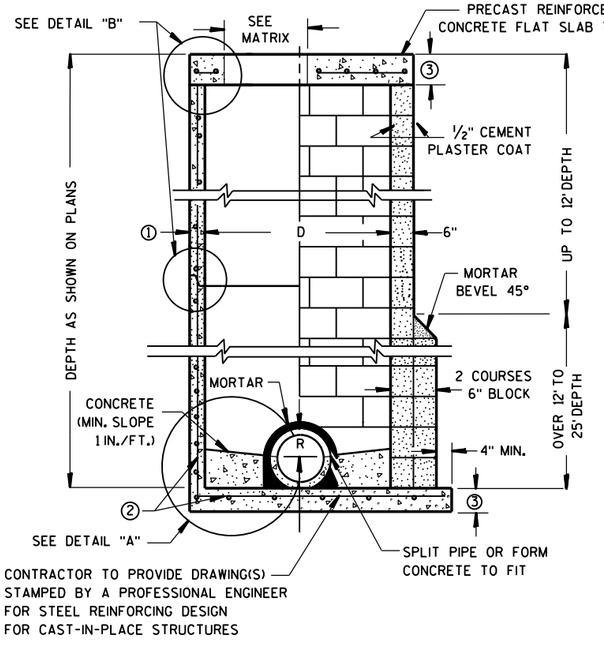
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



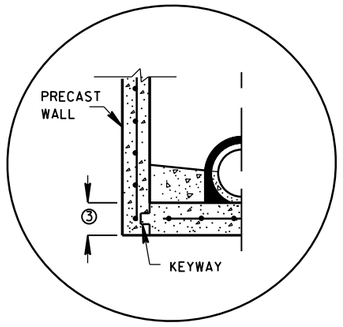
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

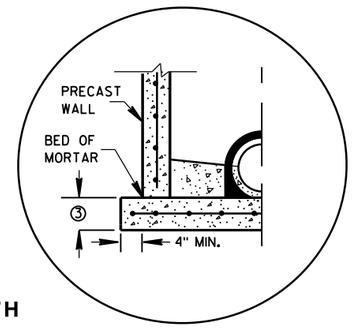


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

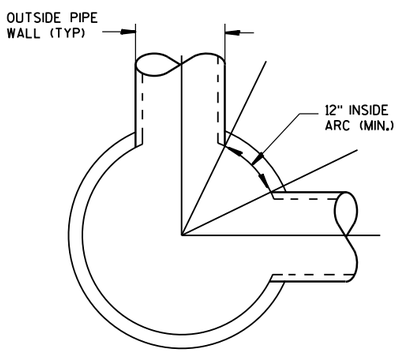


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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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.

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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.

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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.

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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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

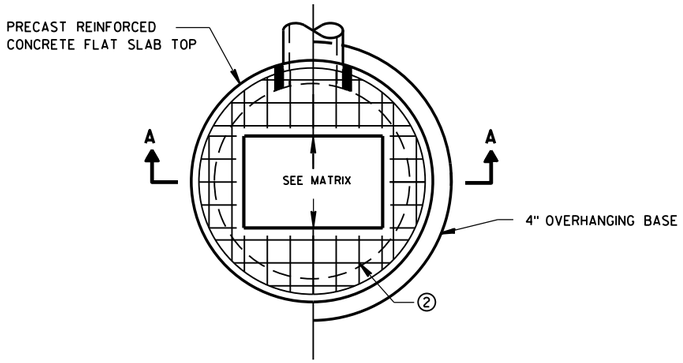
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Sept., 2016
DATE

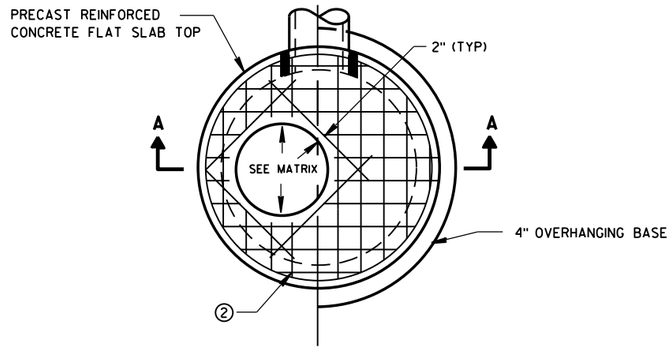
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
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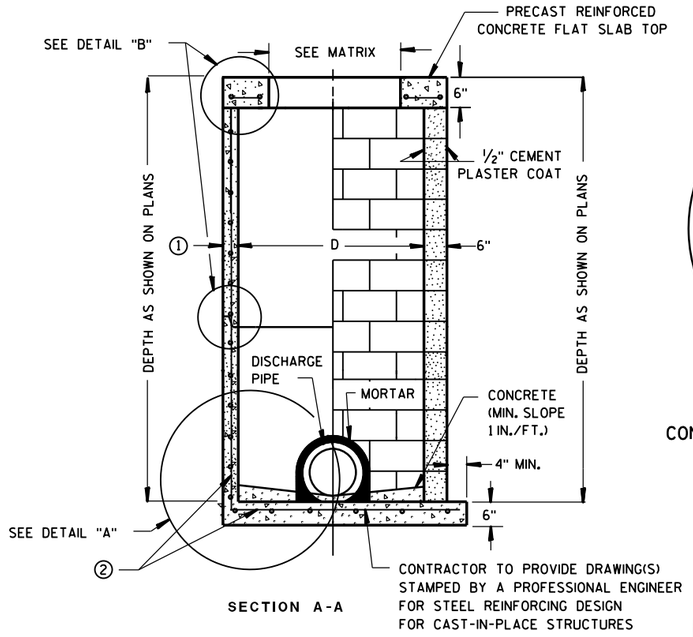
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PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

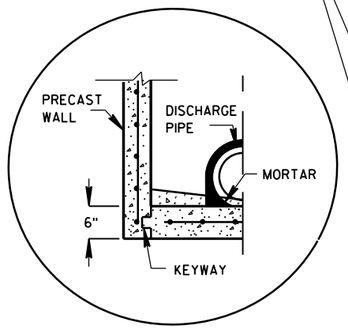


SECTION A-A

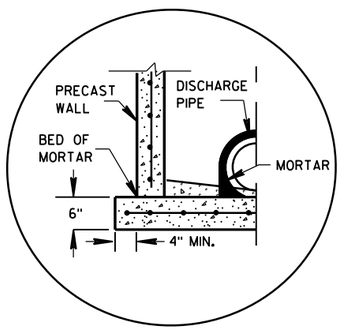
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

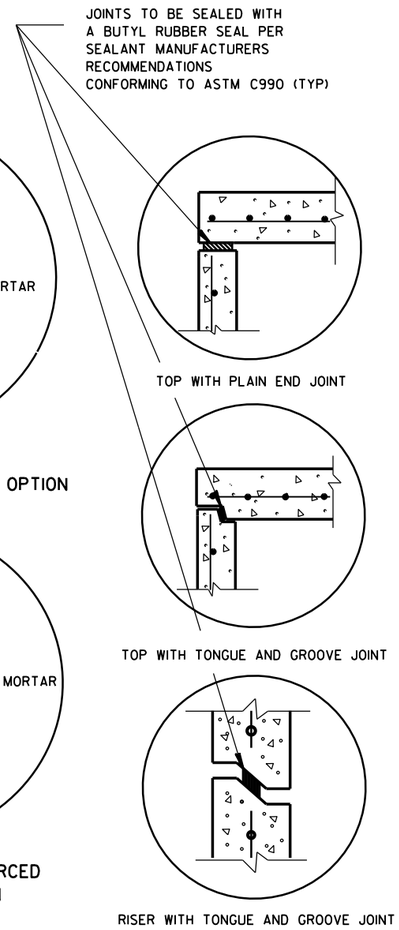


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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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.

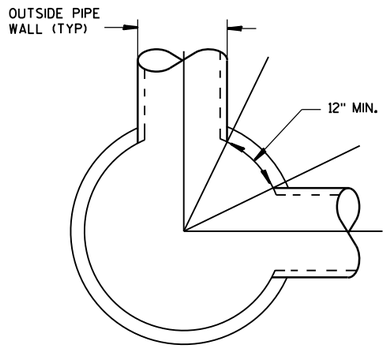
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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

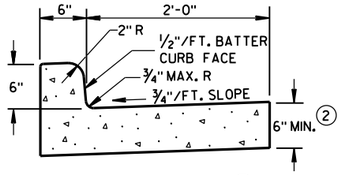
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept.. 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS | UNIT SUPERVI ENT
FHWA

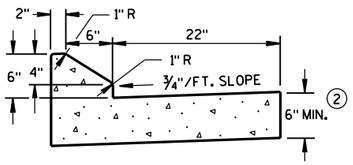
INLETS 3-FT AND 4-FT DIAMETER

6

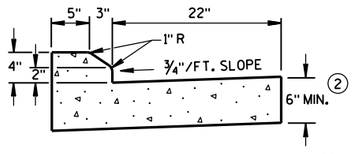
S.D.D. 8 C 6-2



TYPES A & D ①

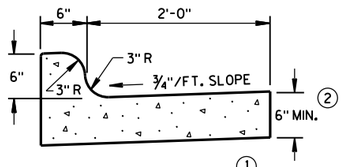


6" SLOPED CURB TYPES G & J ①

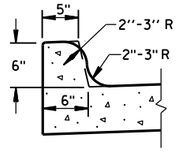


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

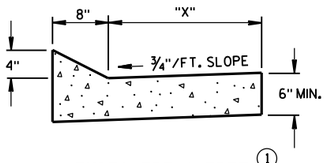


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

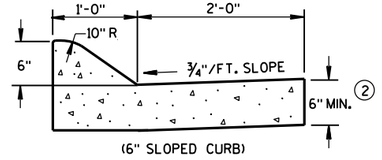
CONCRETE CURB & GUTTER 30"



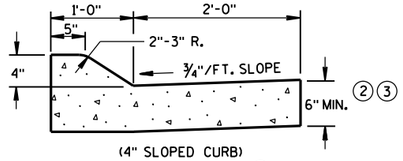
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

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

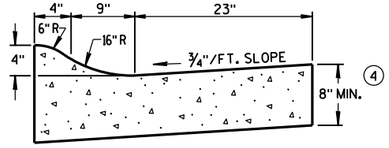


(6" SLOPED CURB)



(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.

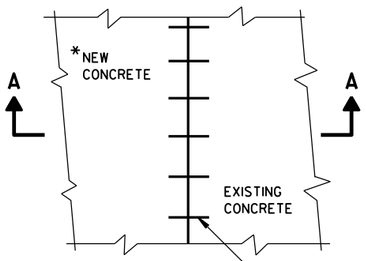
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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.

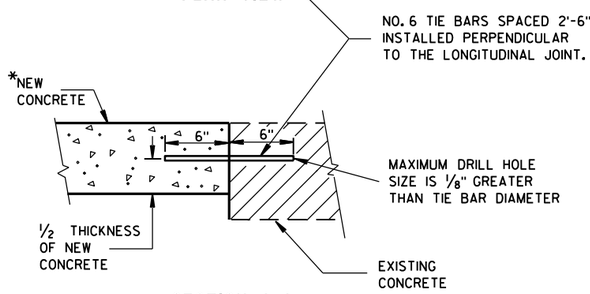
⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



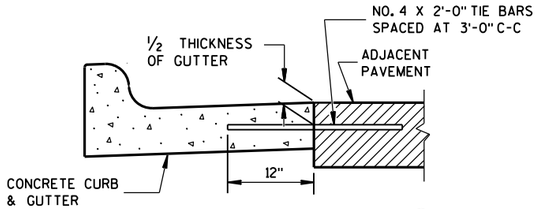
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

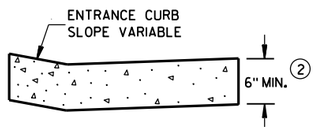


SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT

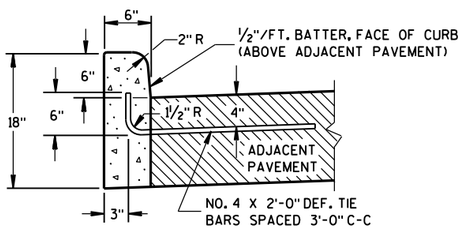


TYPICAL TIE BAR LOCATION ①

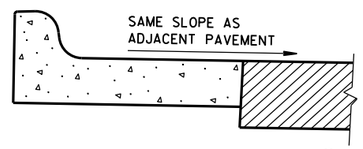


DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)

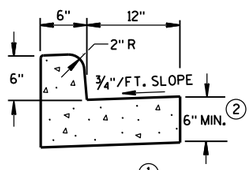


① TYPES A & D



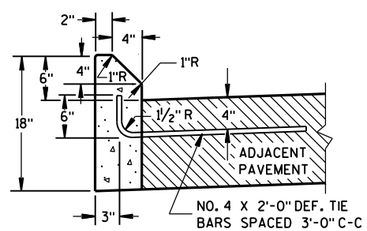
⑥ REVERSE SLOPE GUTTER

(TYPICAL FOR ALL CURB & GUTTER TYPES)



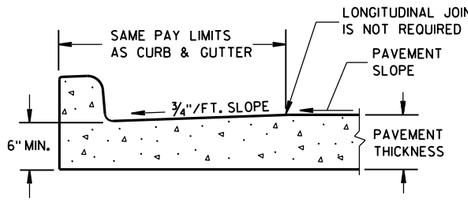
① TYPES A & D

CONCRETE CURB & GUTTER 18"

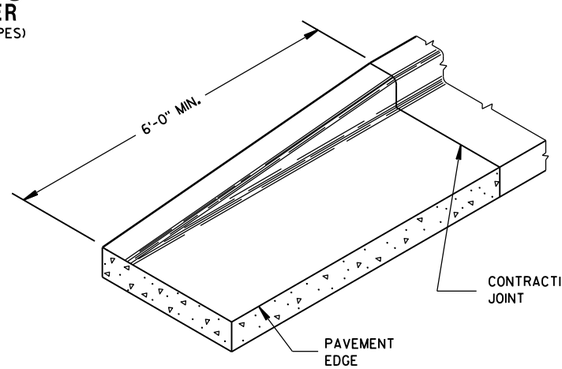


① TYPES G & J

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

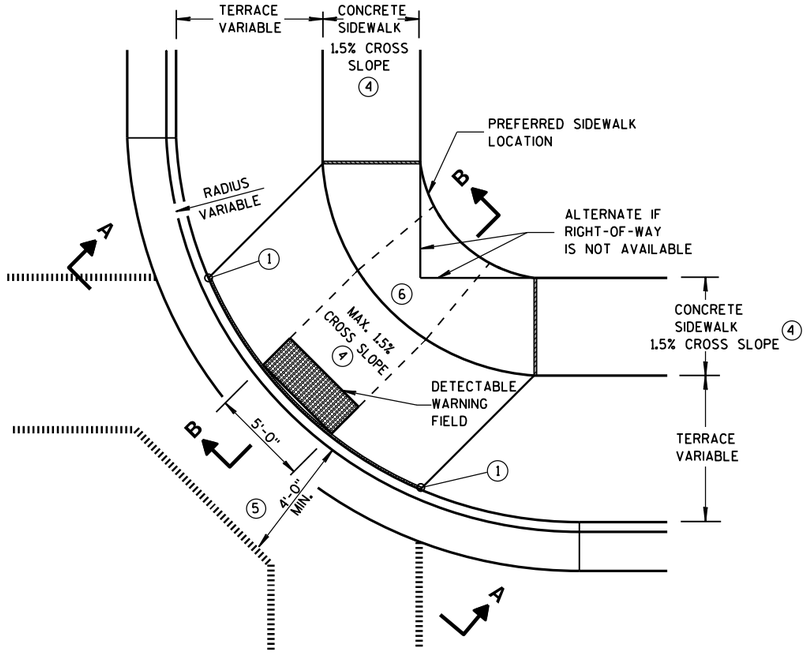
June, 2016 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

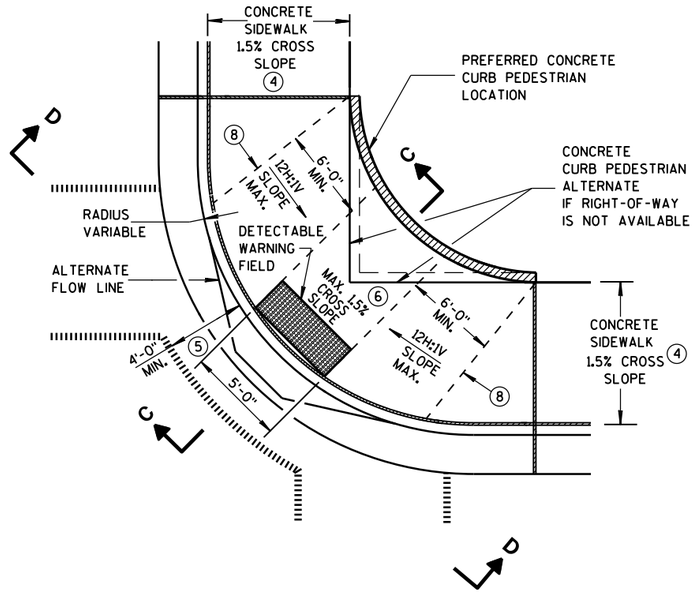
S.D.D. 8 D 1-19



PLAN VIEW

TYPE 1 RAMP

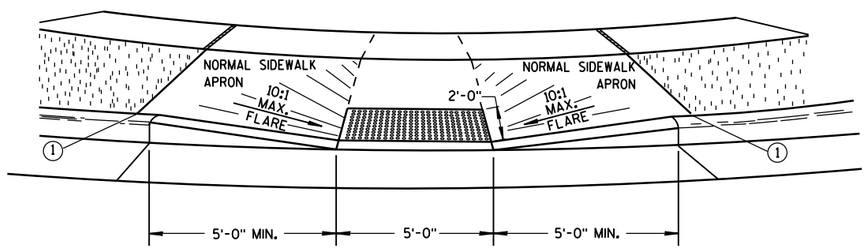
(CENTER OF CORNER RADIUS)



PLAN VIEW

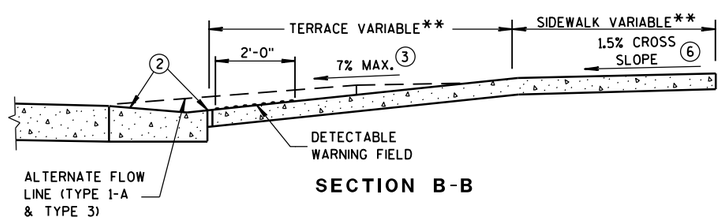
TYPE 1-A RAMP

(NO TERRACE)

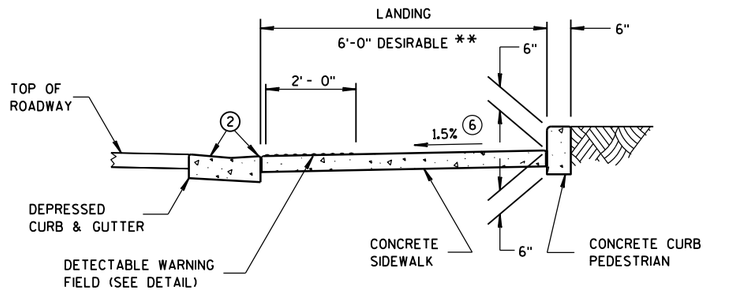


VIEW A-A

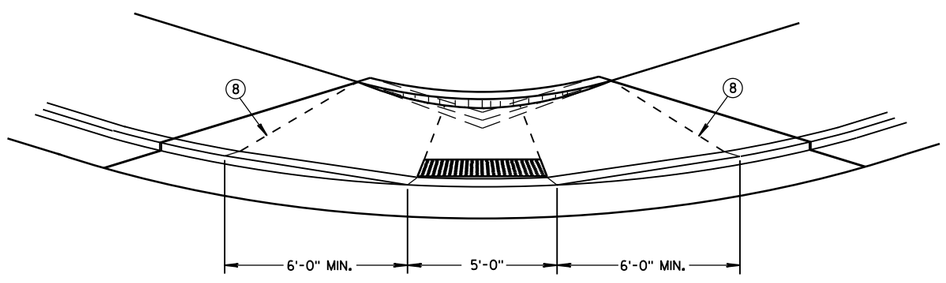
** WIDTH SHOWN ELSEWHERE IN THE PLANS



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

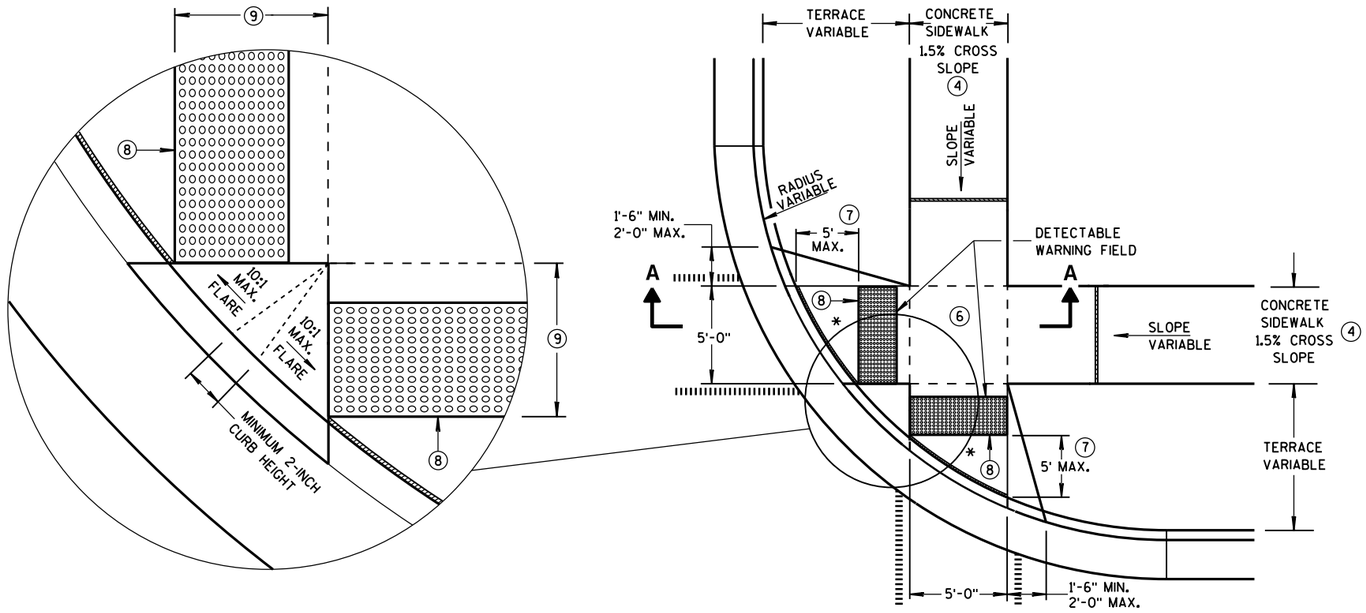
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 5-18a

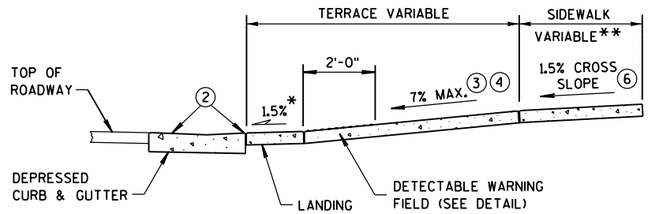


PLAN VIEW

TYPE 2 RAMP

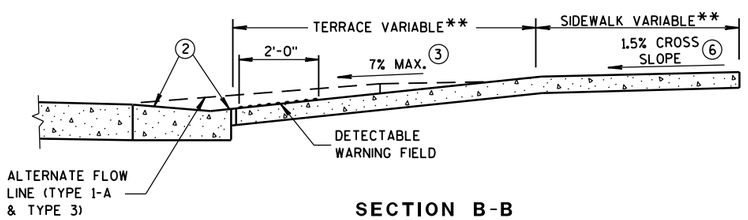
(ON LINE WITH SIDEWALK)

* 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.

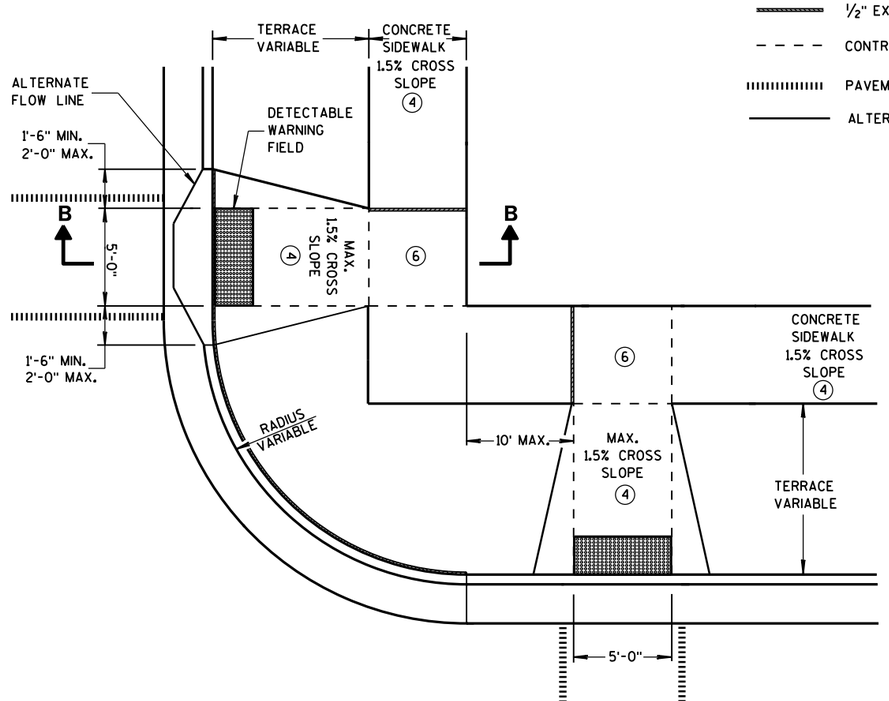
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION 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

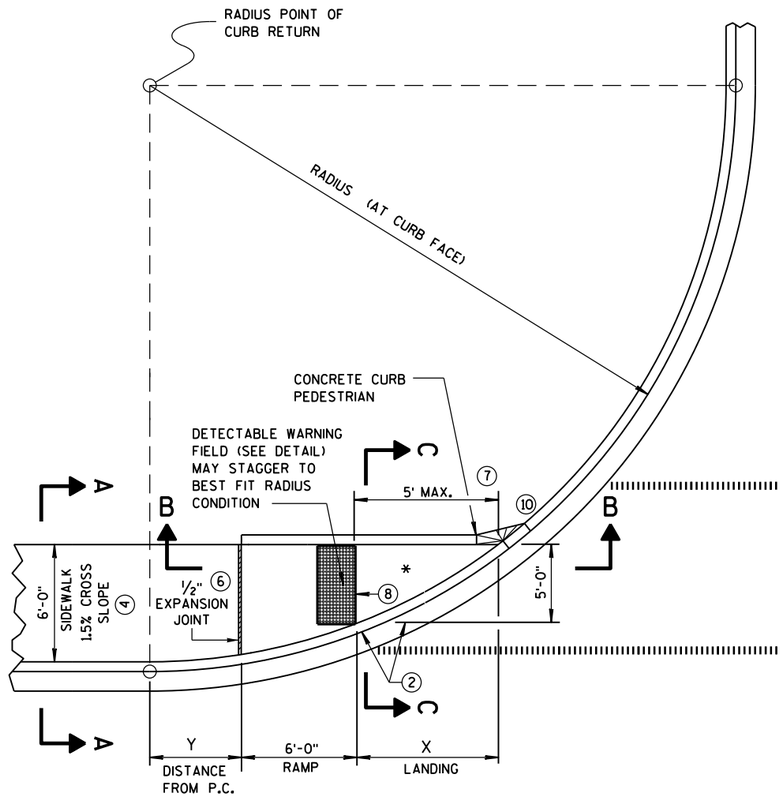
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

S.D.D. 8 D 5-18b

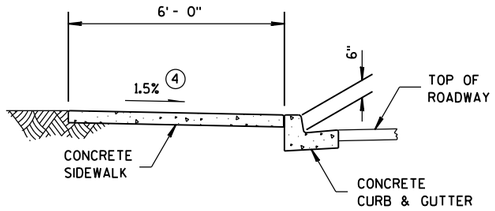


CURB RAMP TYPE 4A

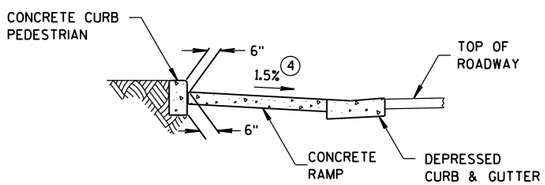
PLAN VIEW

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"

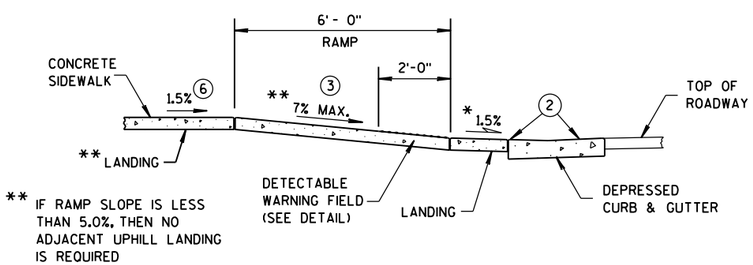
INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A



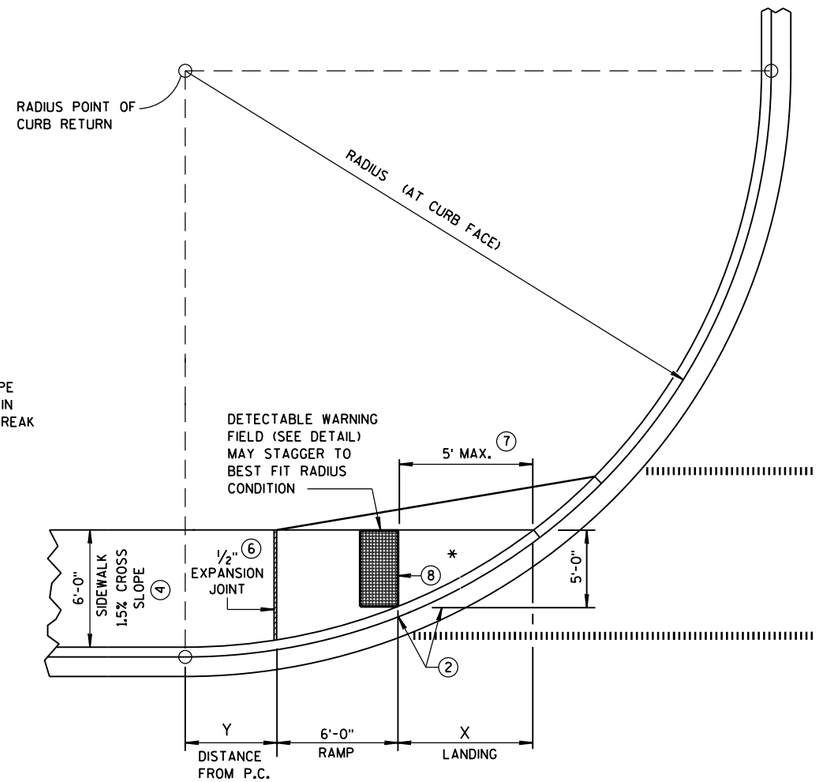
SECTION C-C FOR TYPE 4A



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B 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.

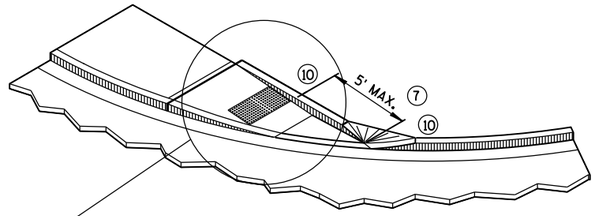
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

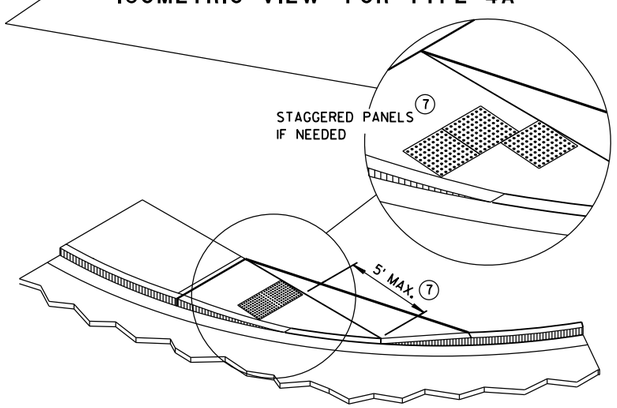
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION 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

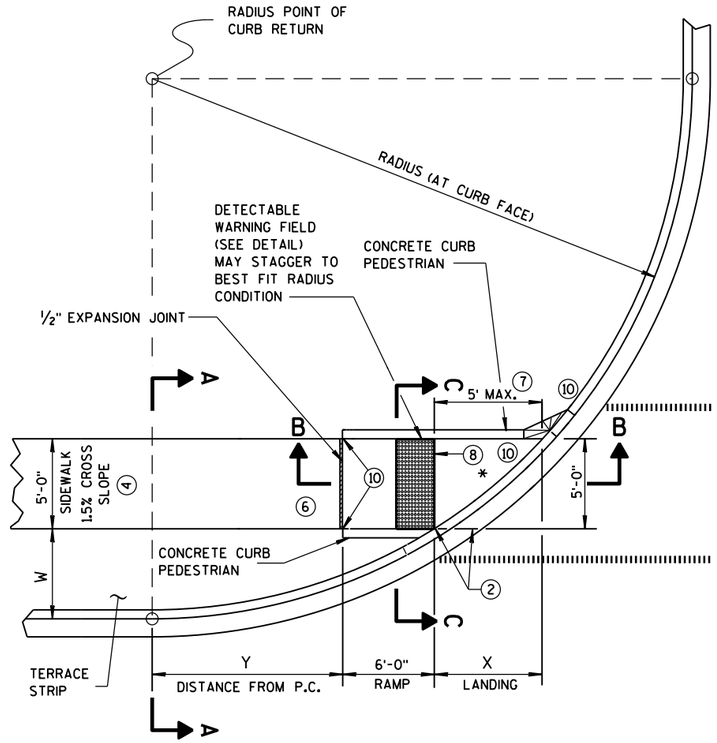
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

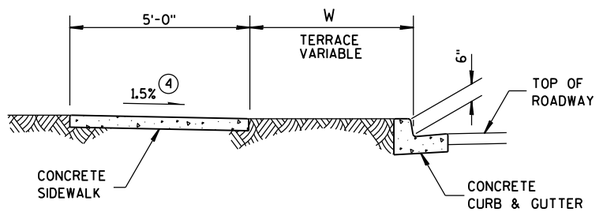
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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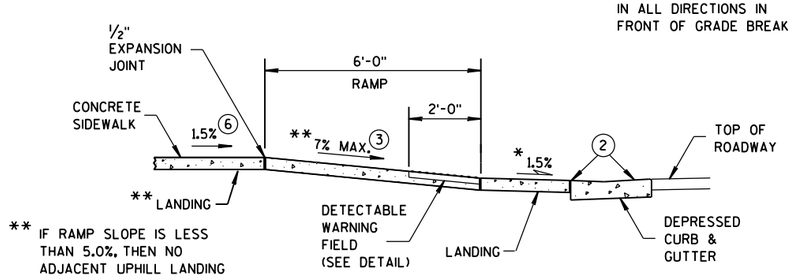
S.D.D. 8 D 5-18c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



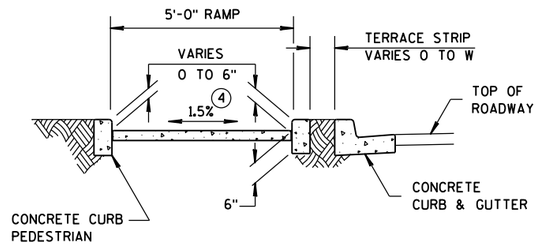
SECTION B-B FOR TYPE 4B

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.

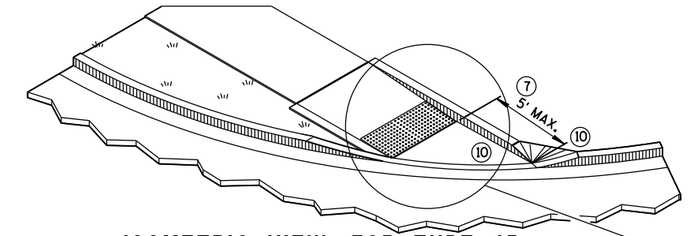
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

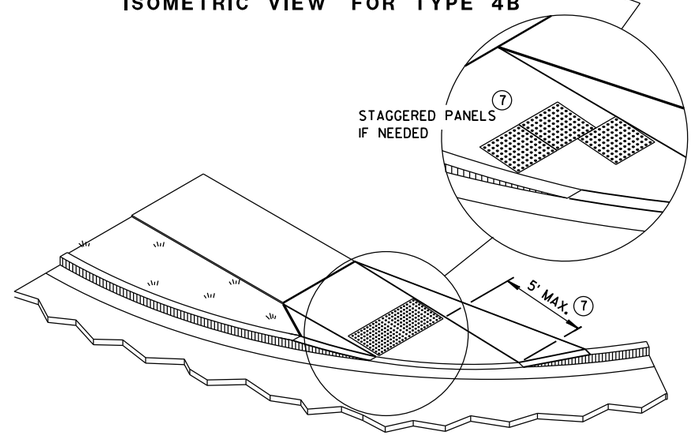
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. USE EQUAL-SIZE PANELS TO DEVELOP OVERLAPPING, STAGGERED ROWS. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

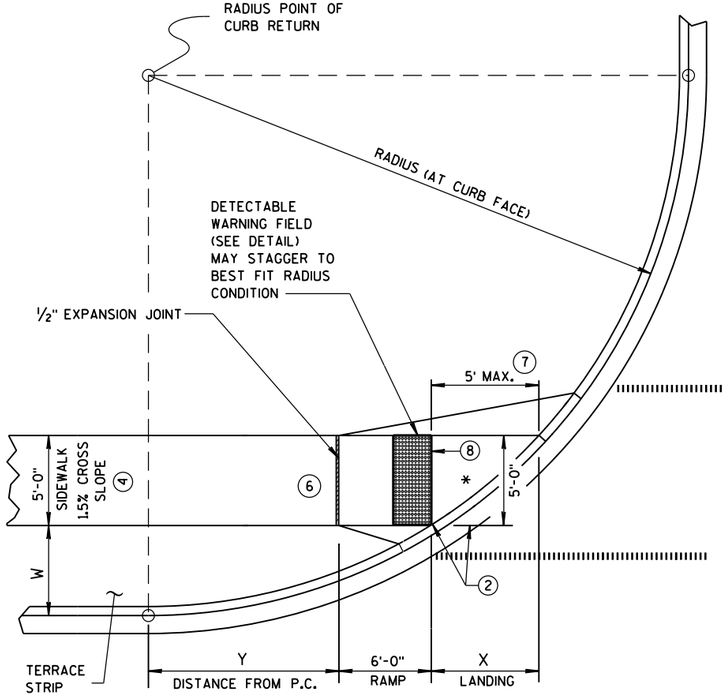
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1



CURB RAMP TYPE 4B1
PLAN VIEW

CURB RAMPS TYPE 4B AND 4B1

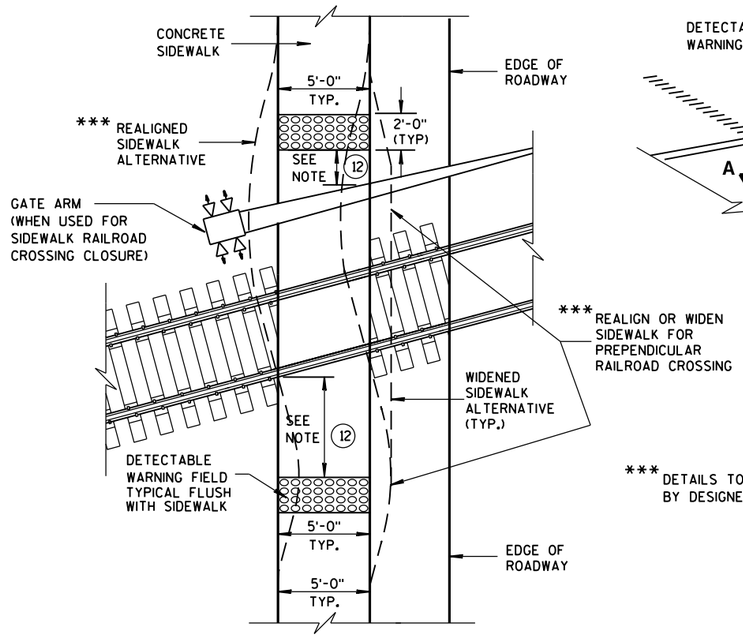
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 8 D 5-18d

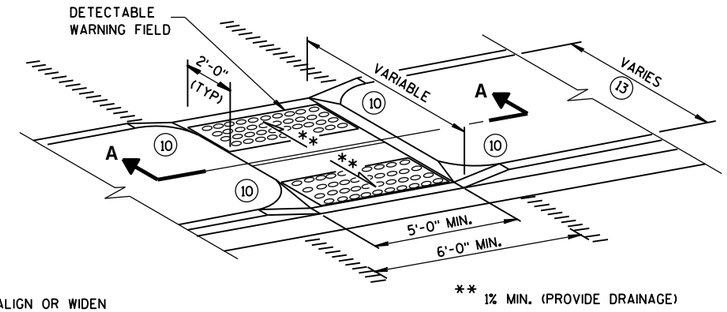
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S.D.D. 8 D 5-18d



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

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.

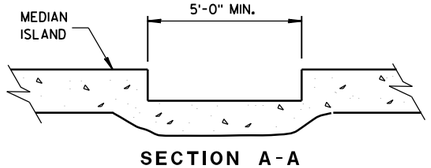
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(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.

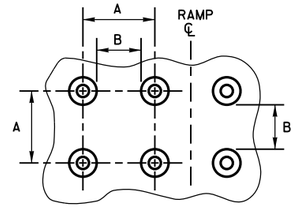
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



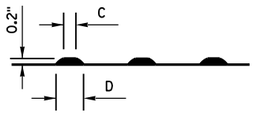
SECTION A-A

	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.

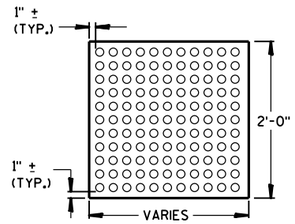


PLAN VIEW

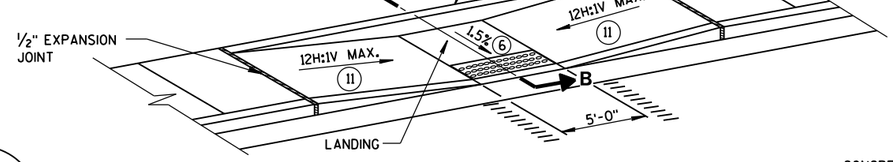


ELEVATION VIEW

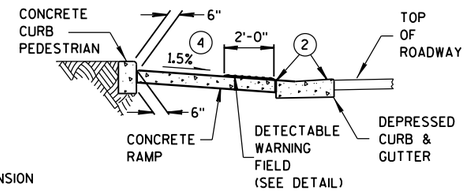
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING FIELD (TYPICAL)

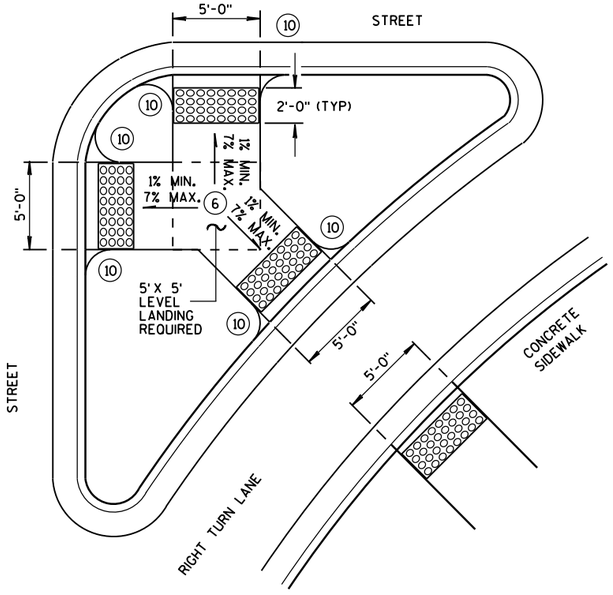


MID-BLOCK CROSSING
TYPE 7A

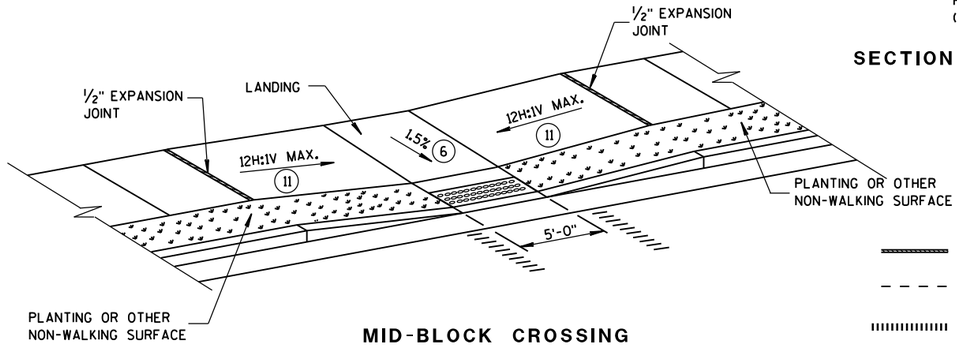


SECTION B-B

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

- 1/2" 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
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERV

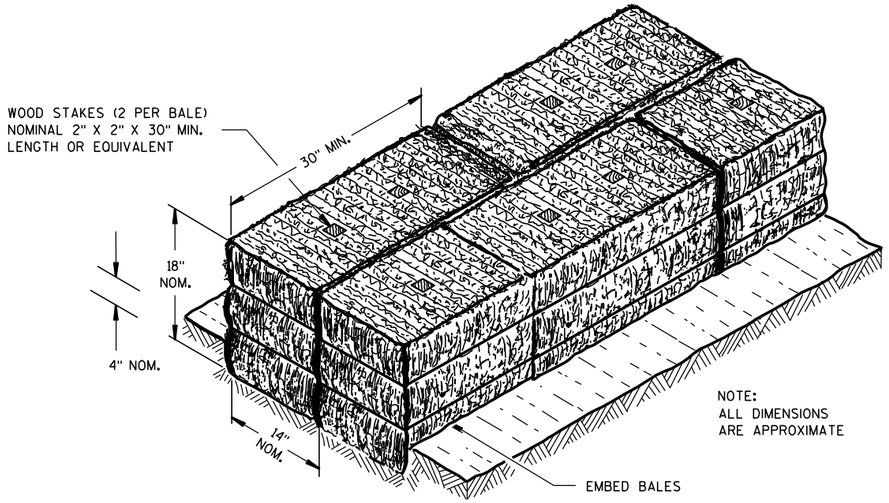
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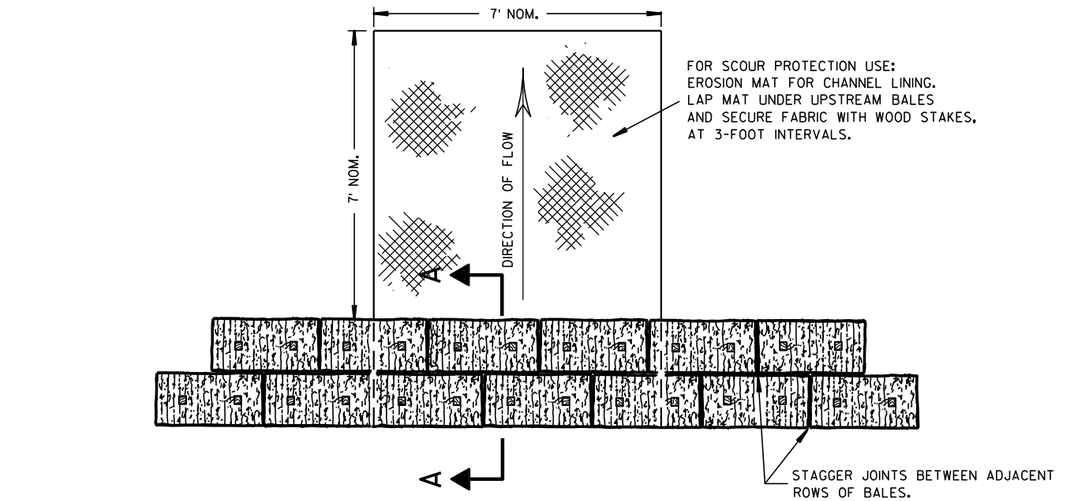
S.D.D. 8 D 5-18e

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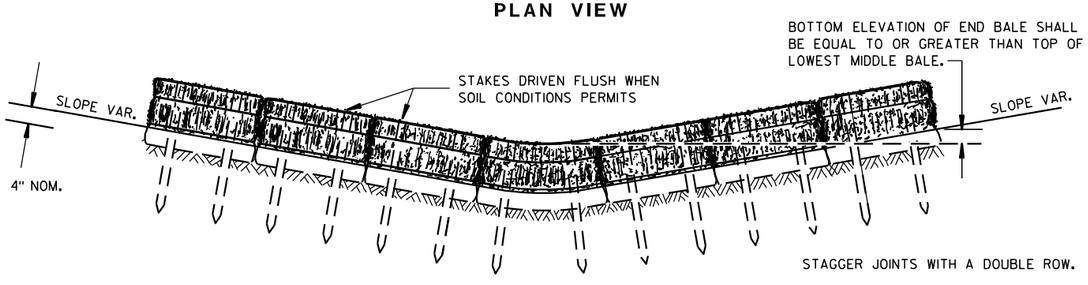
S.D.D. 8 D 5-18e



SECTION A-A



PLAN VIEW



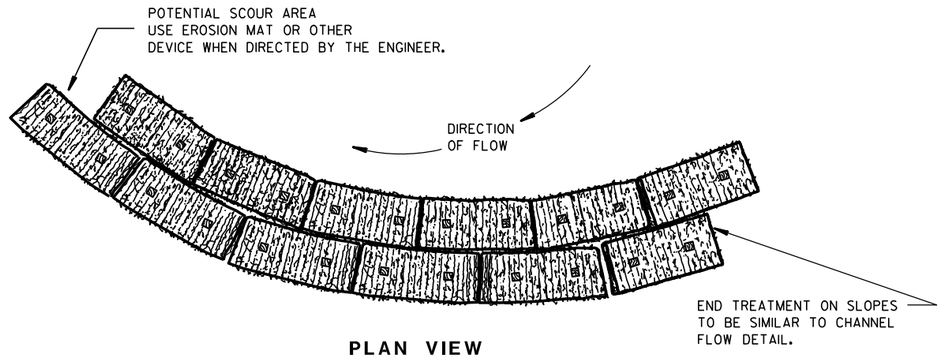
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

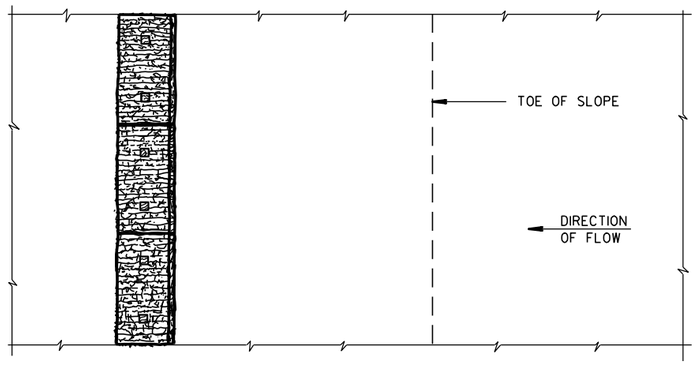
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

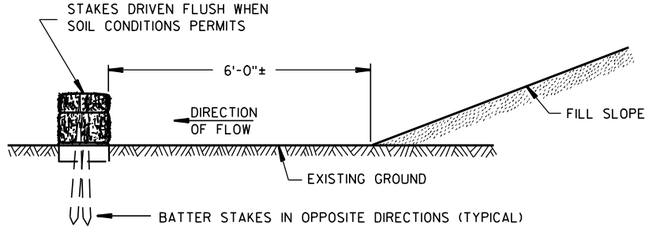


PLAN VIEW

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

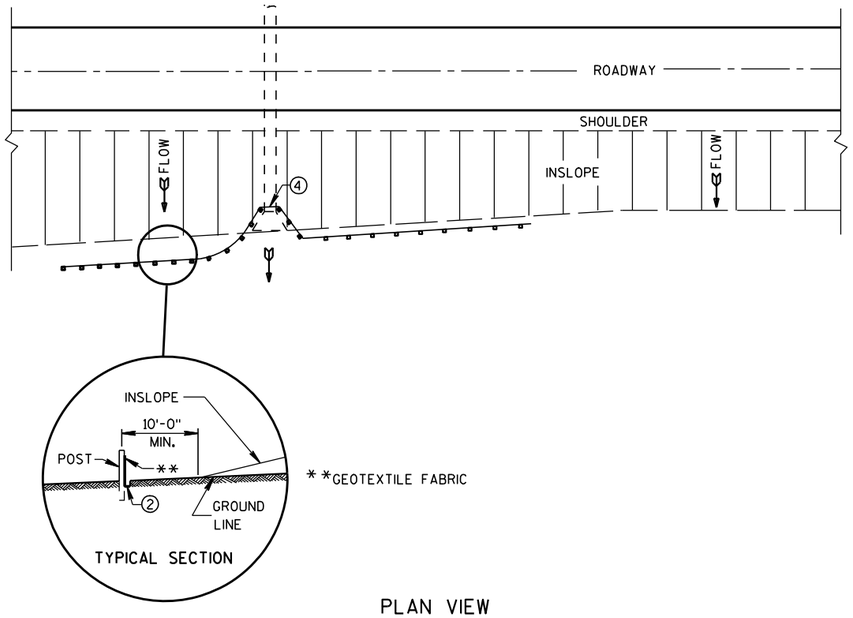
6/04/02 DATE

/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

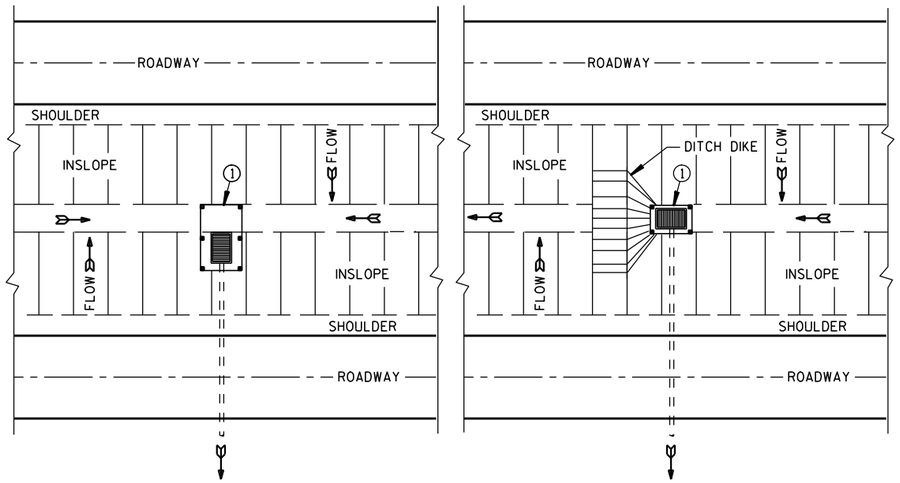
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S.D.D. 8 E 8-3



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.

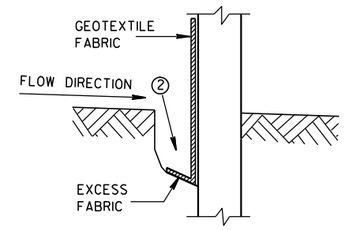
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

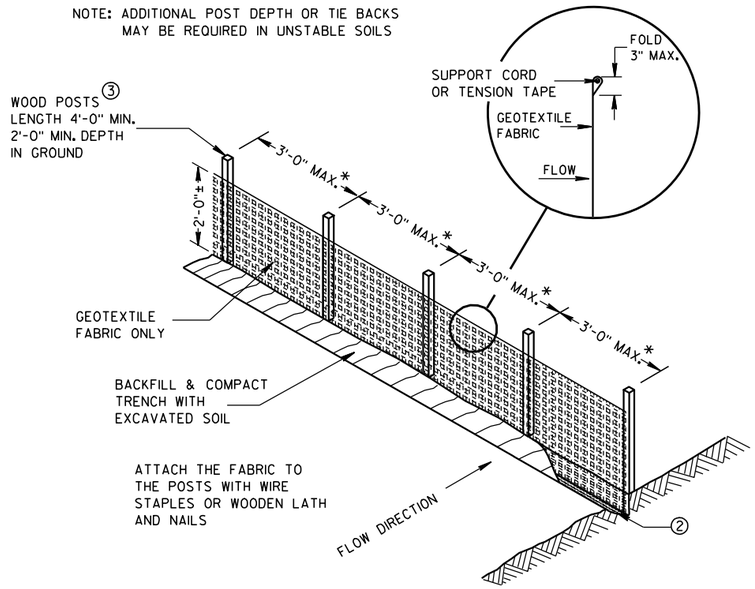
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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.

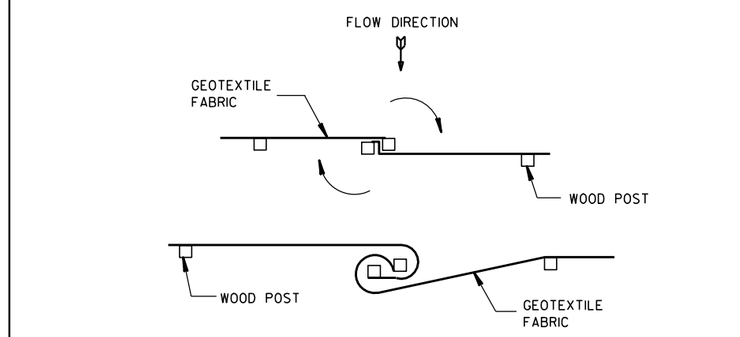


TRENCH DETAIL

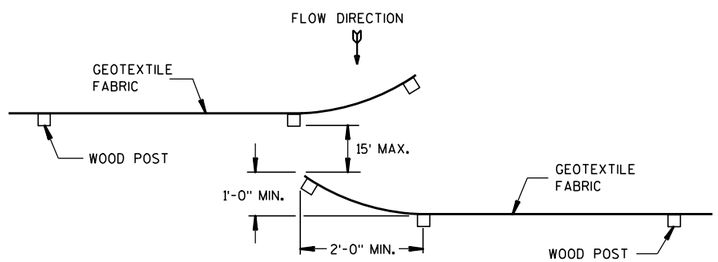


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

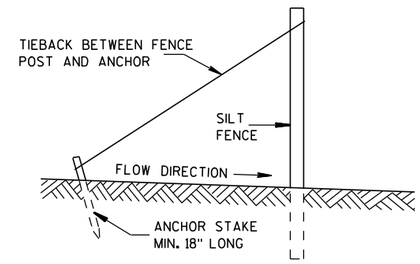


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

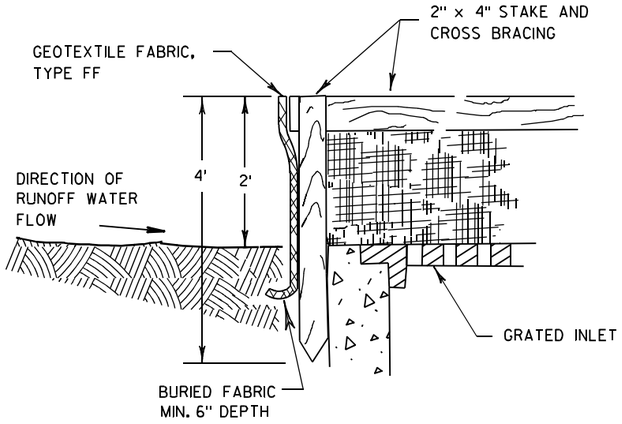
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

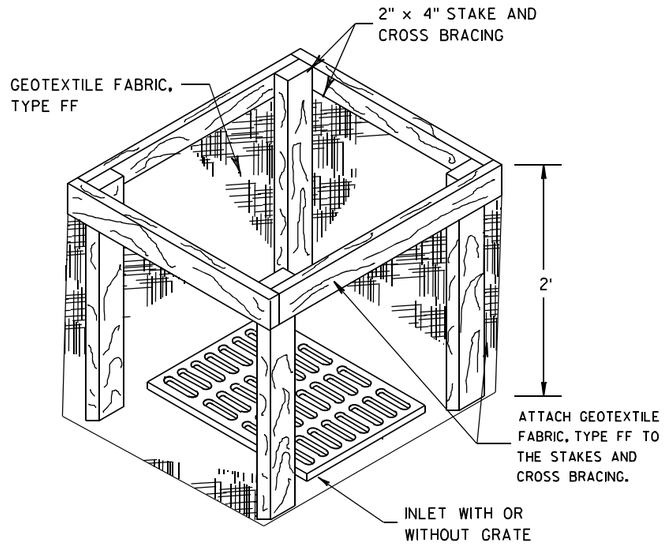
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S.D.D. 8 E 9-6

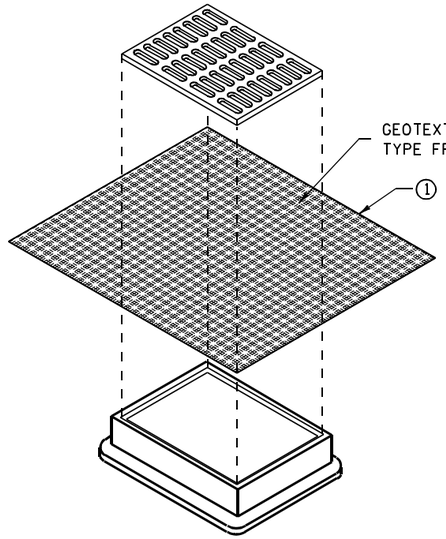
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S.D.D. 8 E 9-6



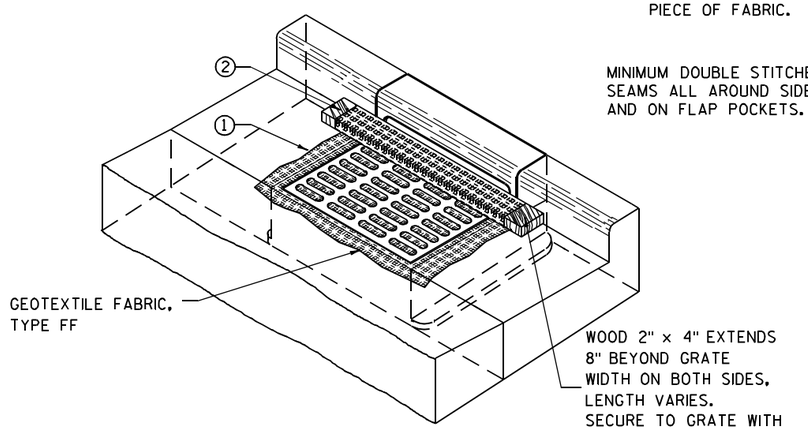


INLET PROTECTION, TYPE A

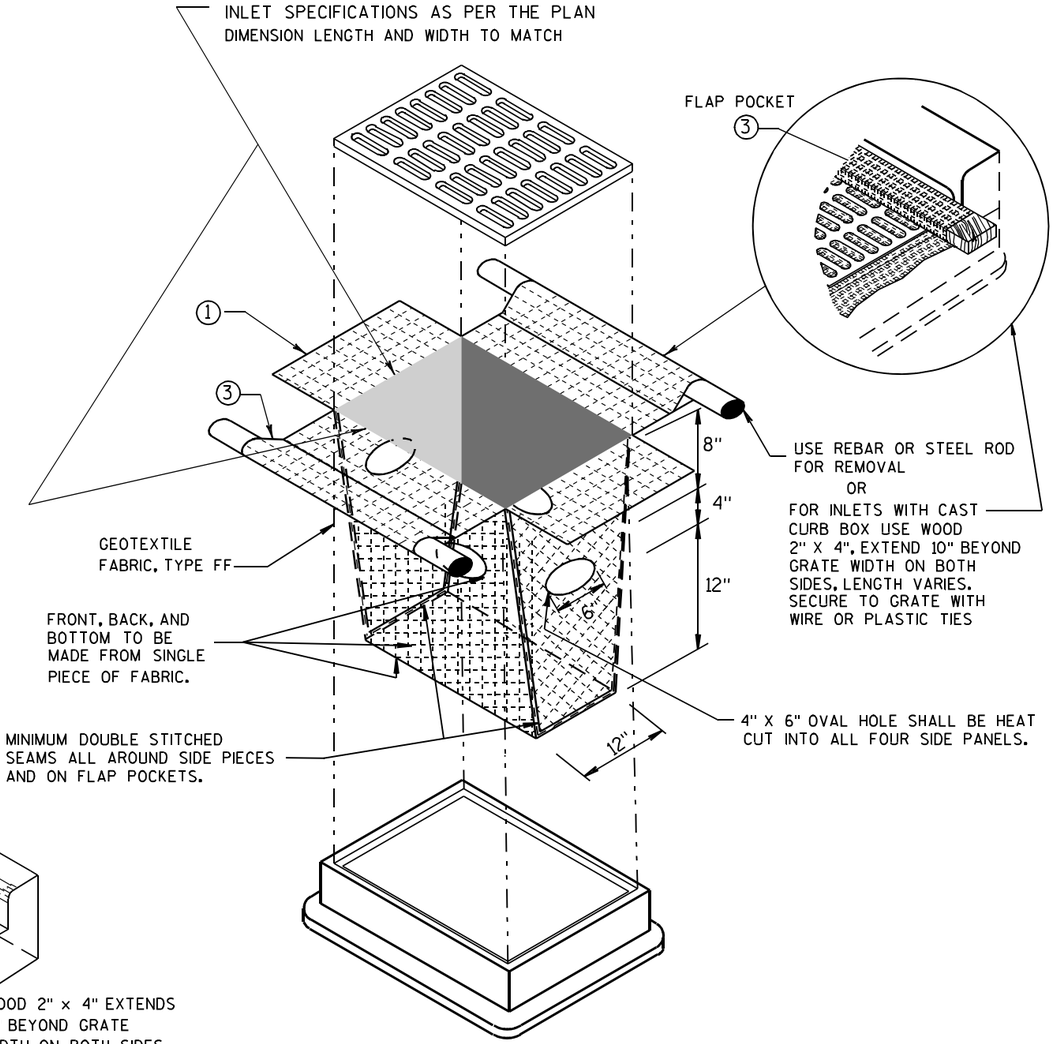


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE 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.

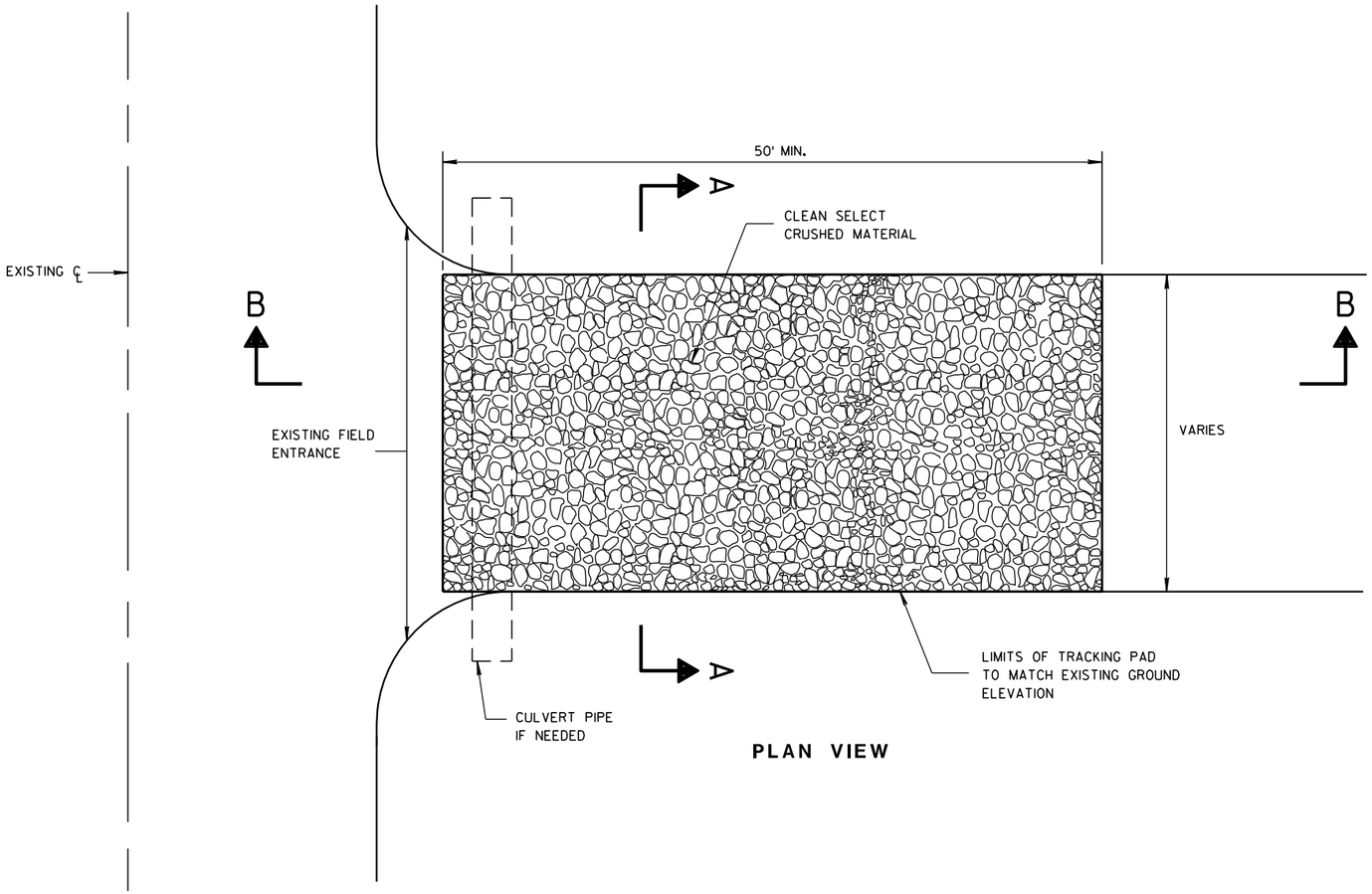
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

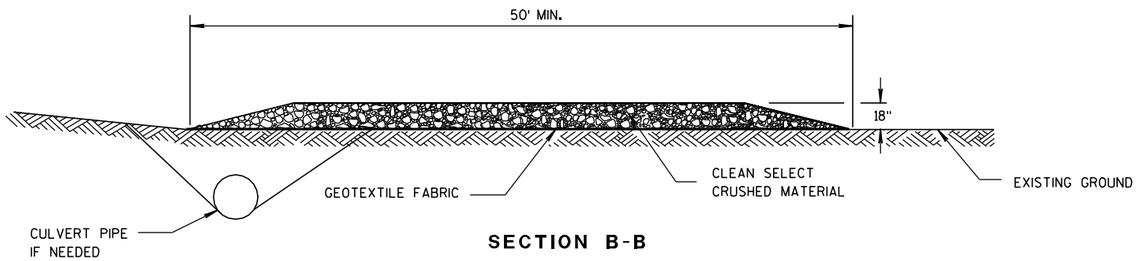
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 10-2



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.

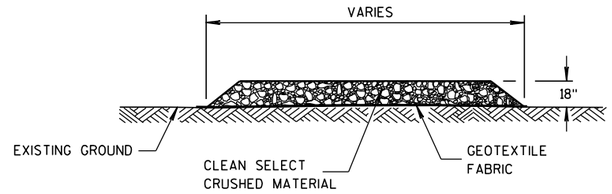
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

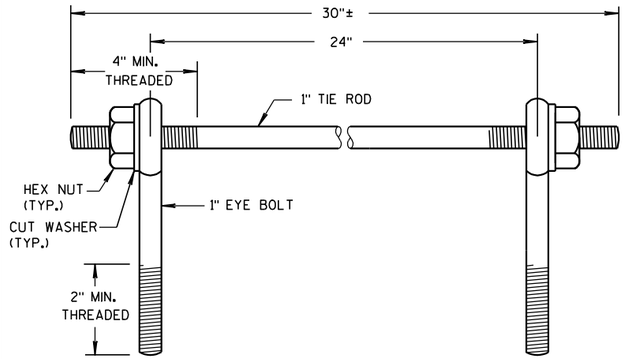
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011 DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS ENGINEER
FHWA

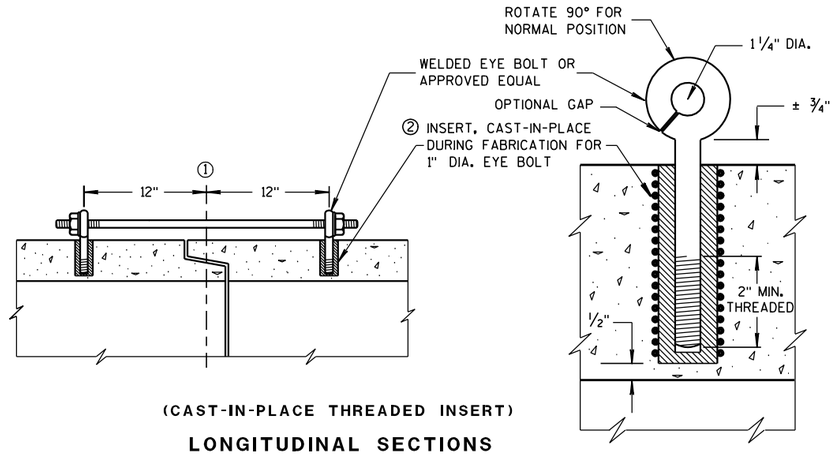
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6

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.

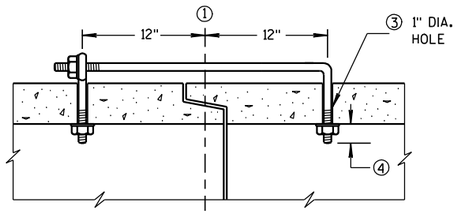
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

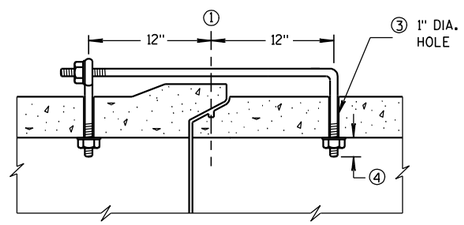
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

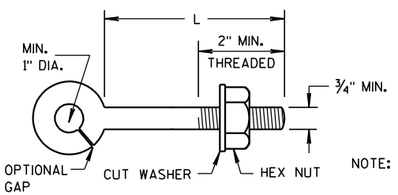


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

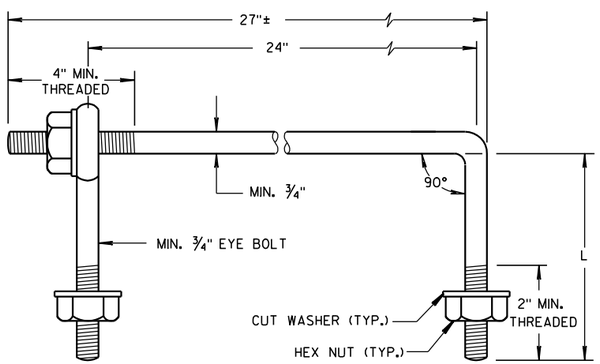
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

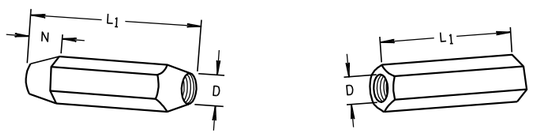
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

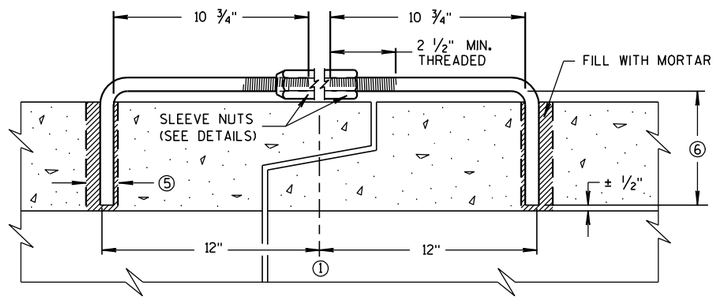
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

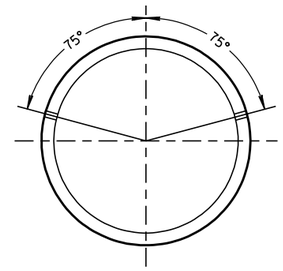
SLEEVE NUTS



LONGITUDINAL SECTION

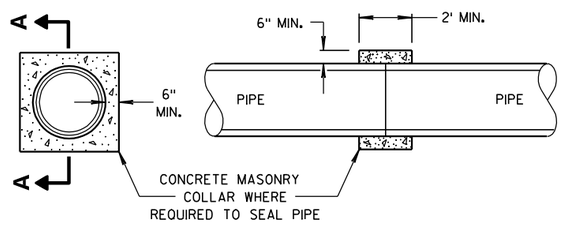
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

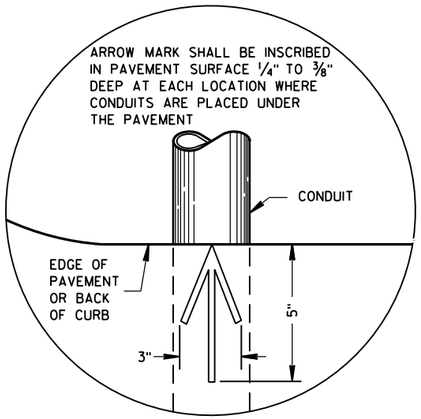
FHWA

6

S.D.D. 8 F 4-7

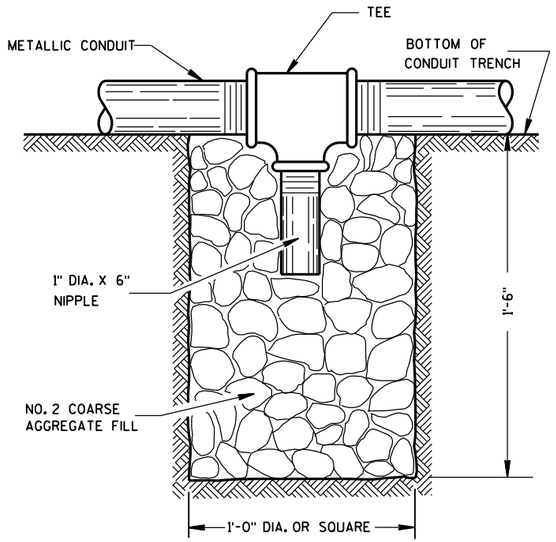
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S.D.D. 8 F 4-7



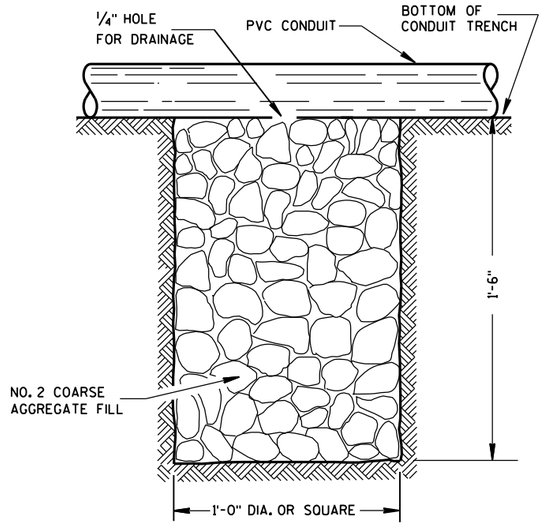
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

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.

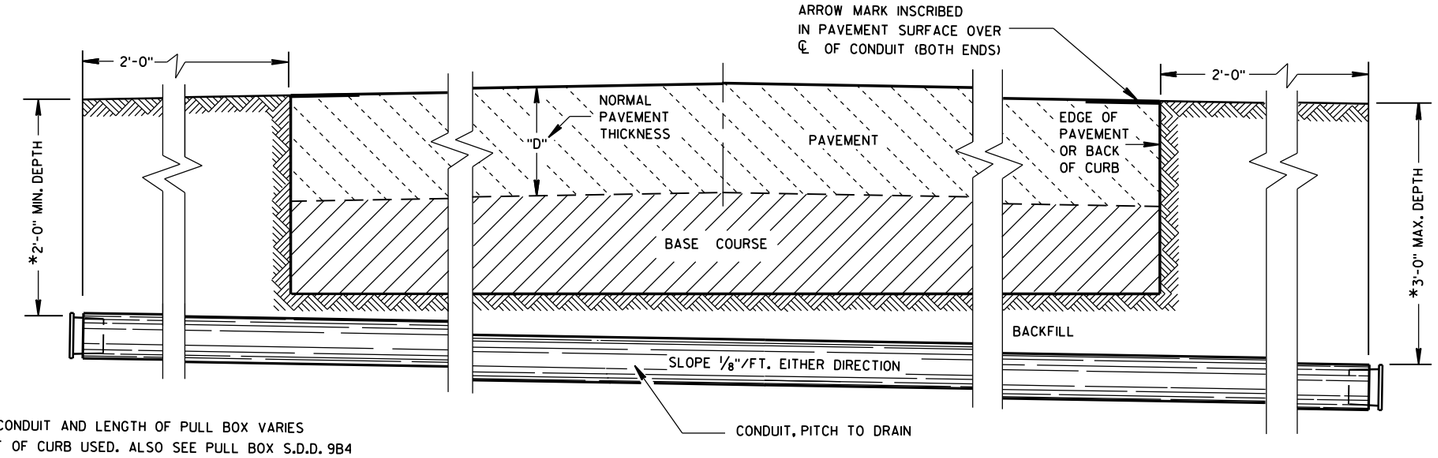
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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.



*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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

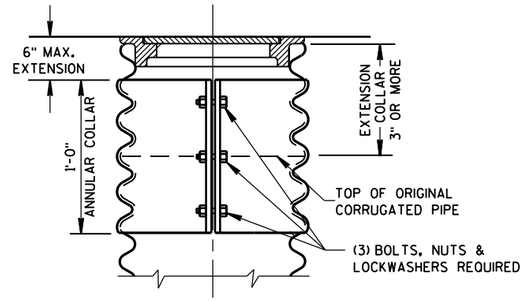
S.D.D. 9 B 2-9

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

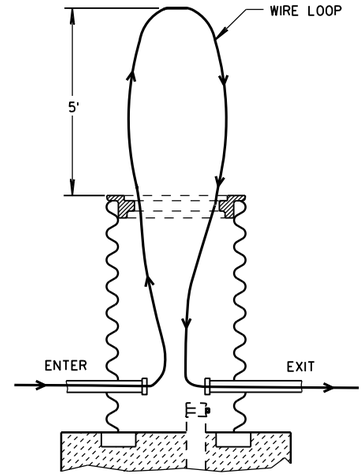
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

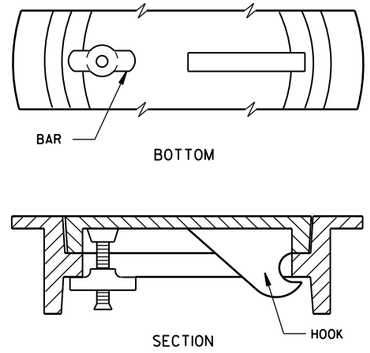
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

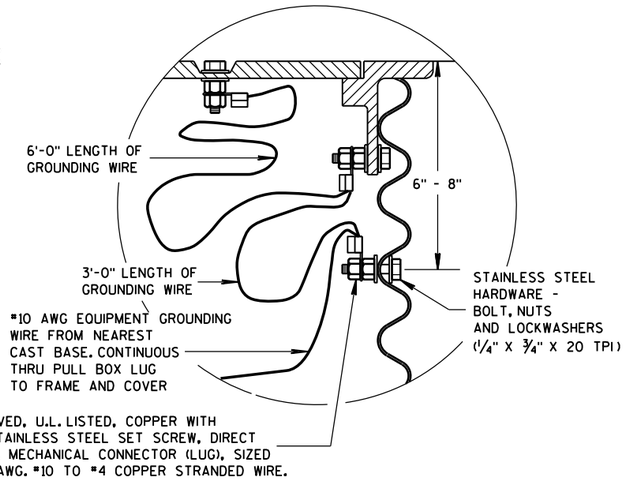


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

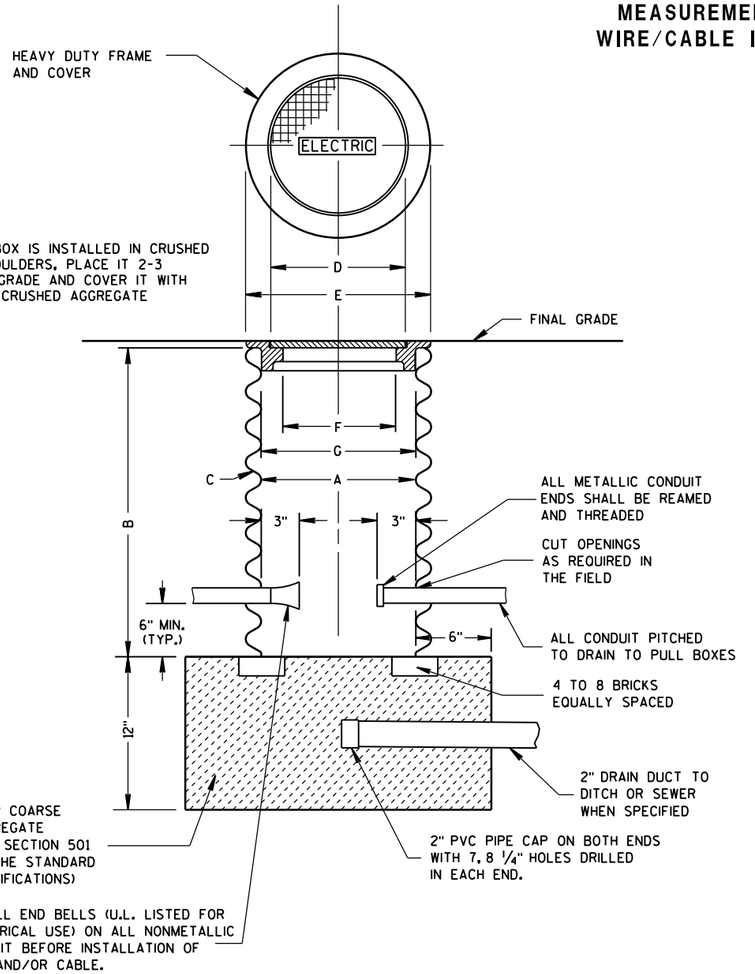


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

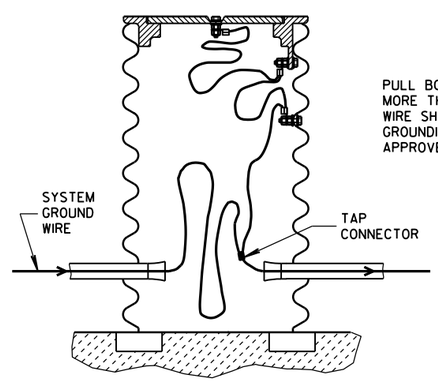
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

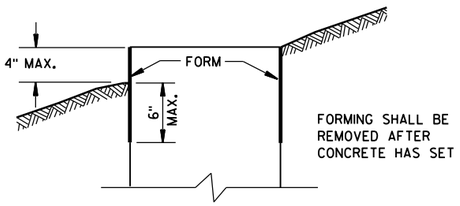
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

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FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS 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.

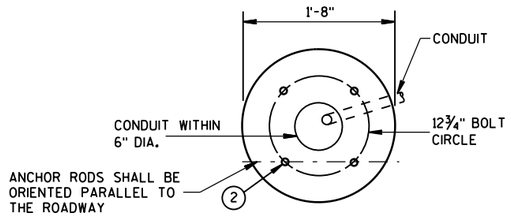
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

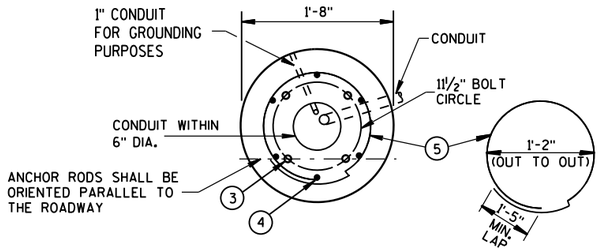
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

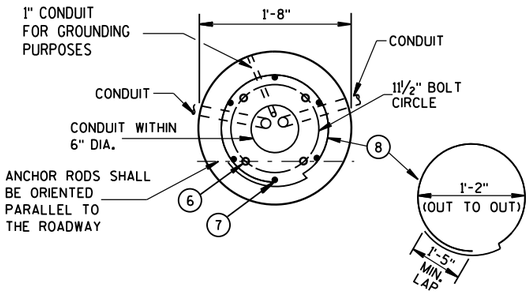
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



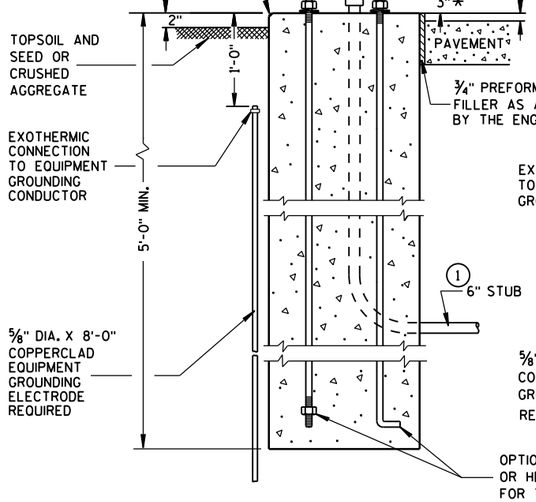




FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

HALF SECTION IN UNPAVED AREA

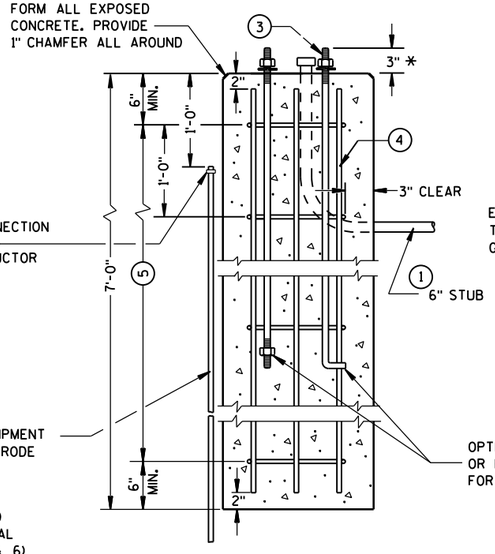
(TYPICAL FOR TYPES 1, 2, 5, & 6)



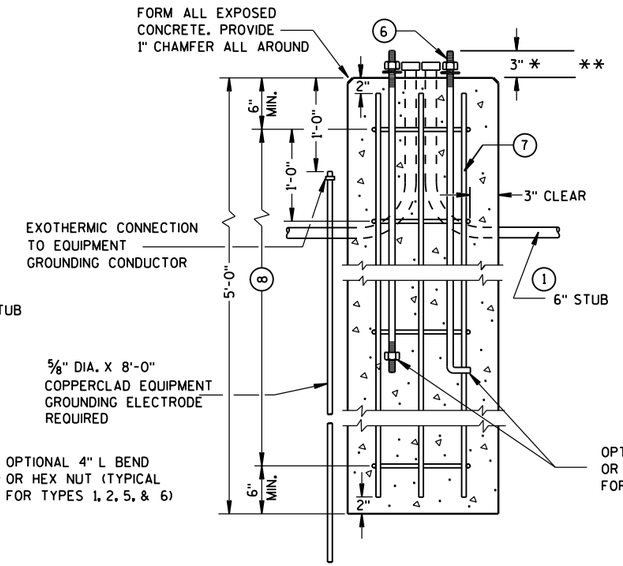
HALF SECTION IN PAVEMENT

(TYPICAL FOR TYPES 1, 2, 5, & 6)

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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GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

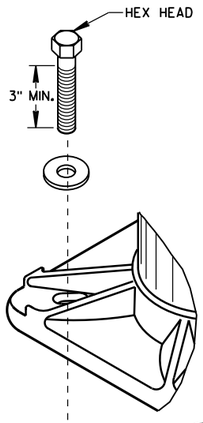
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

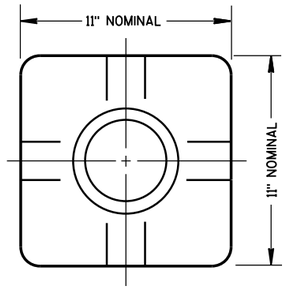
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

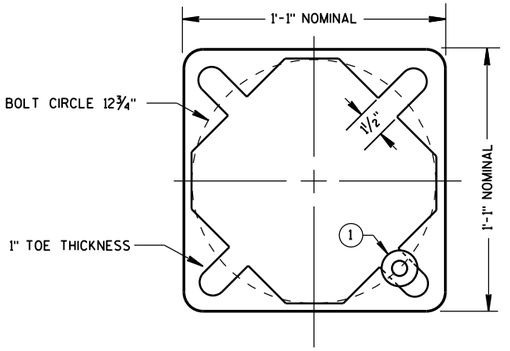
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

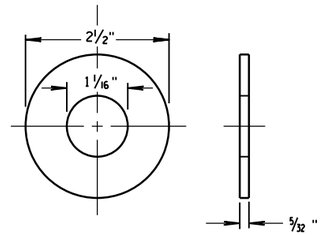




TOP VIEW
(PEDESTAL BASE)

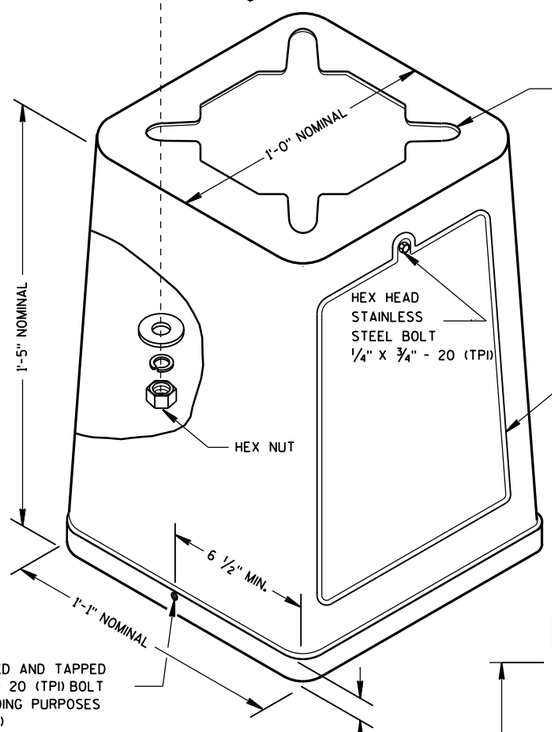


BOTTOM VIEW
(PEDESTAL BASE)

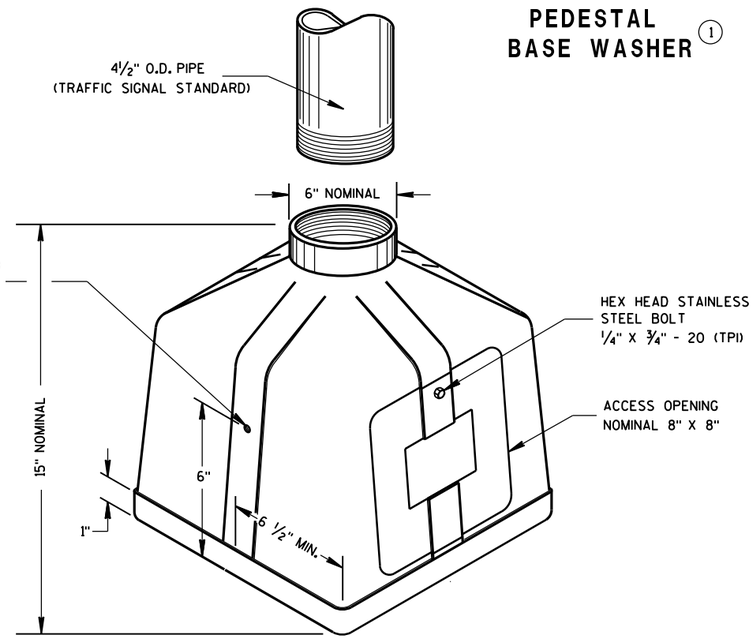


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

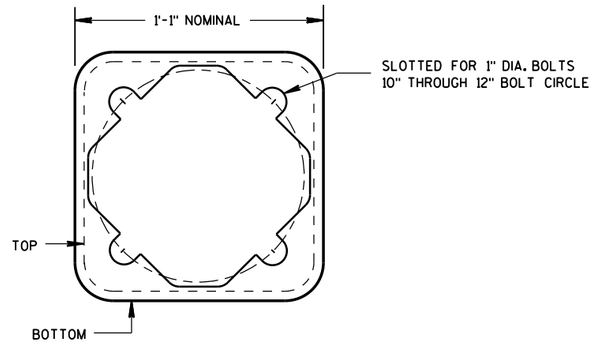


ISOMETRIC VIEW

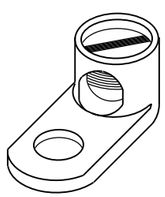


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

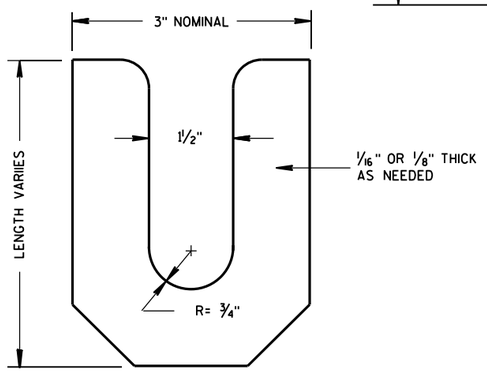


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
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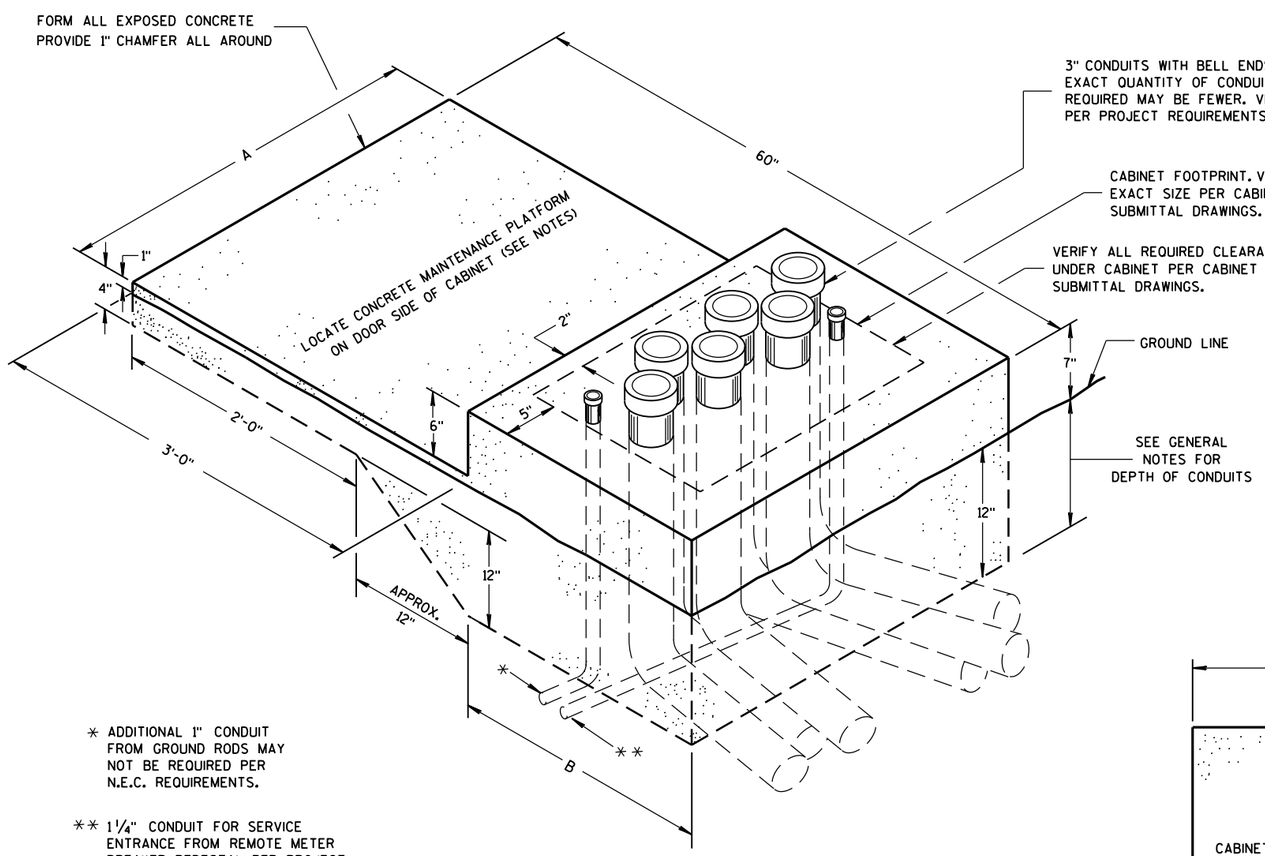
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

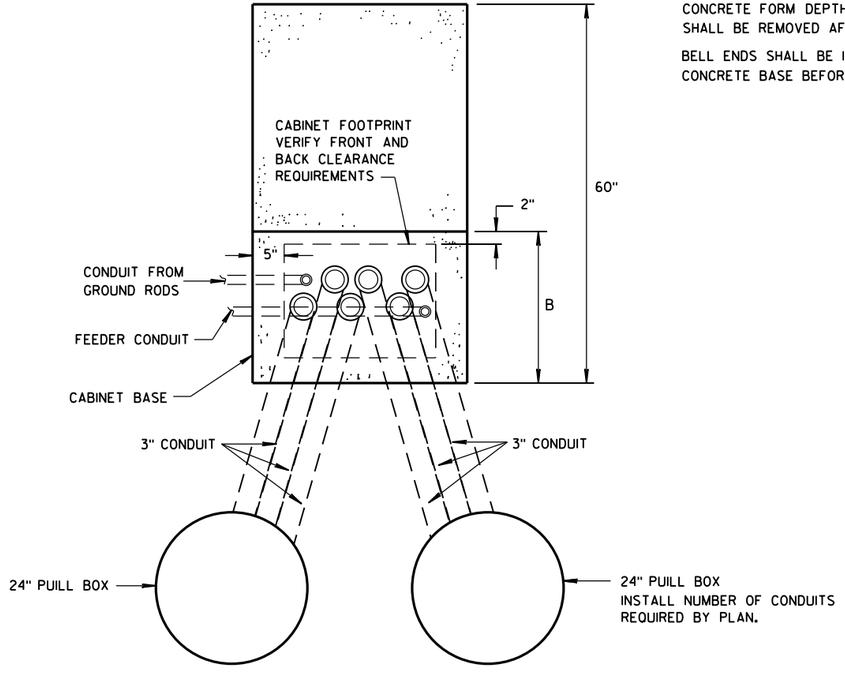
** 1¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

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 BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

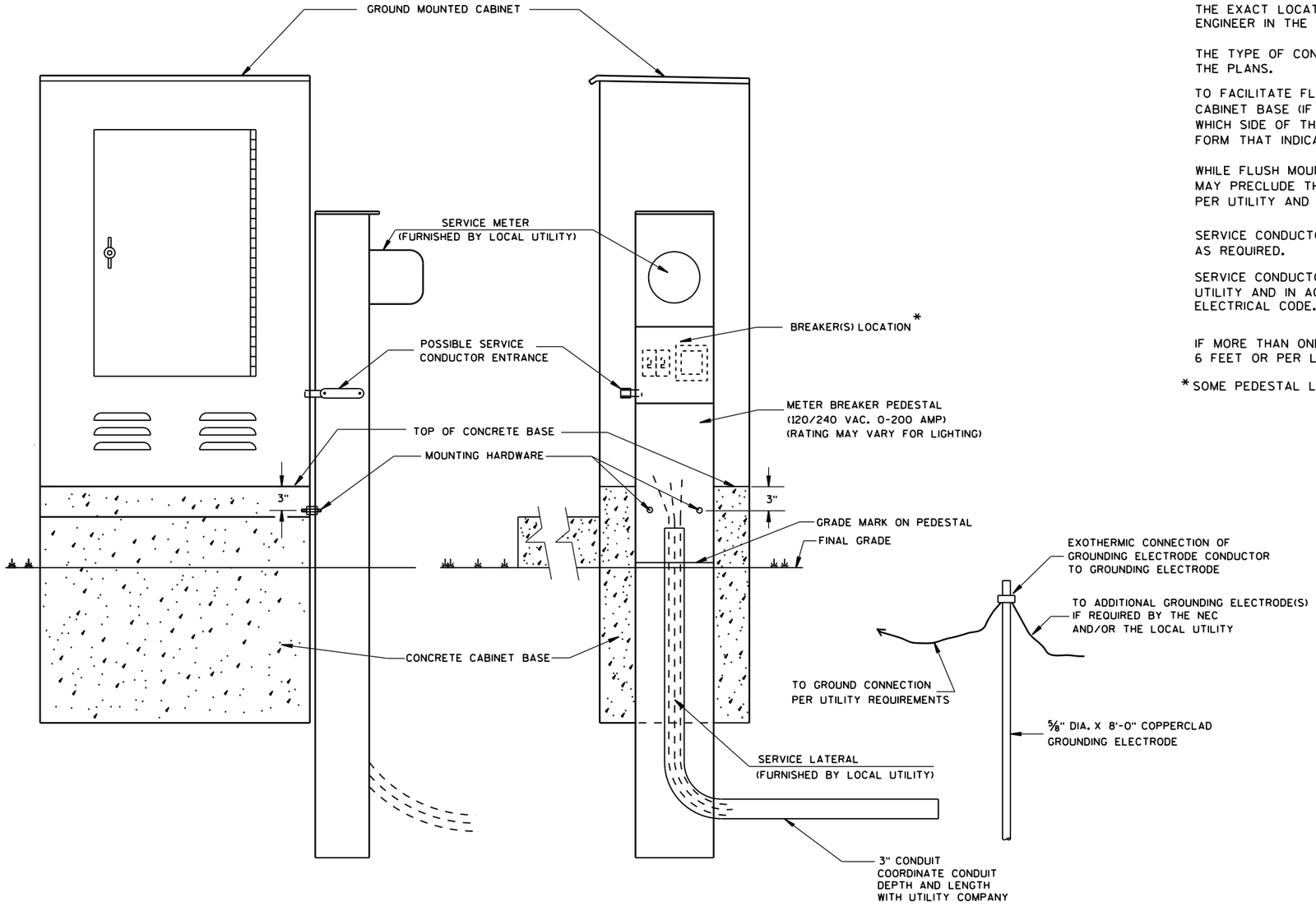
CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINE
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TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

*SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 D 1-5

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.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

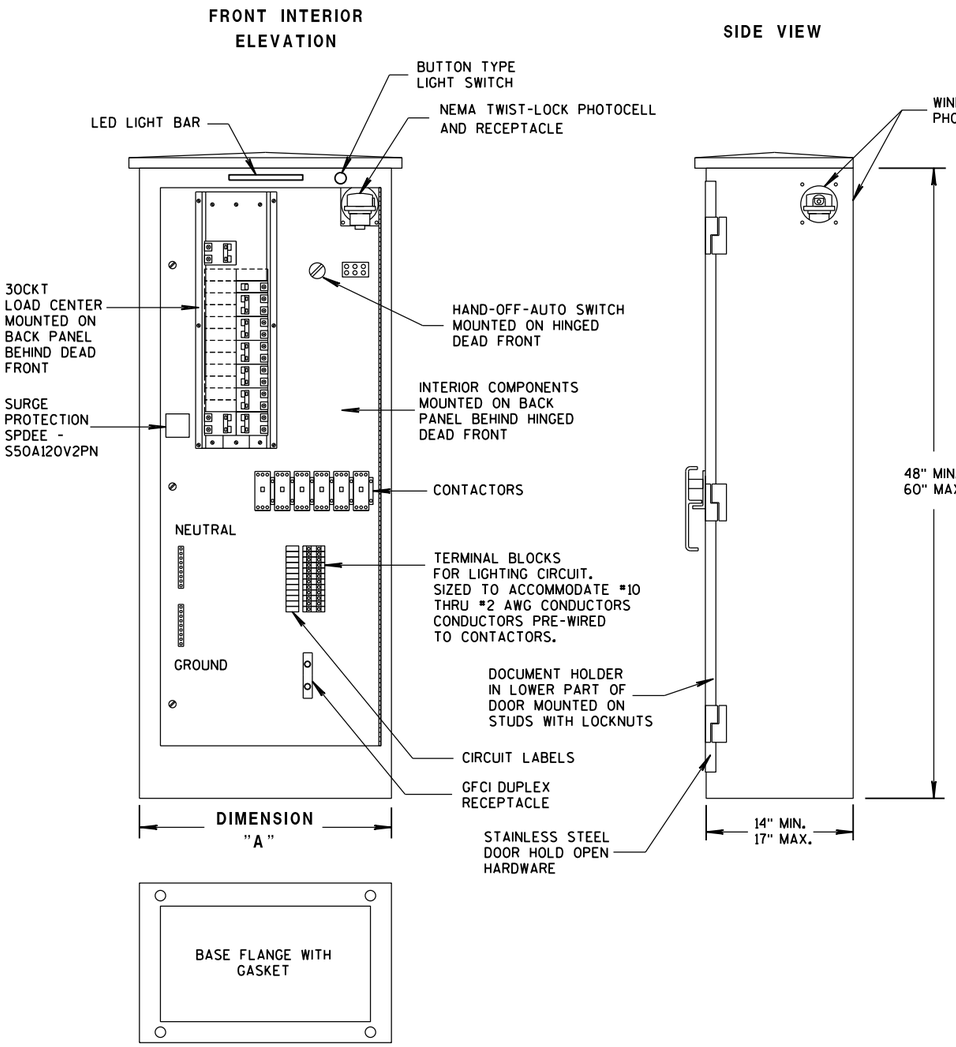
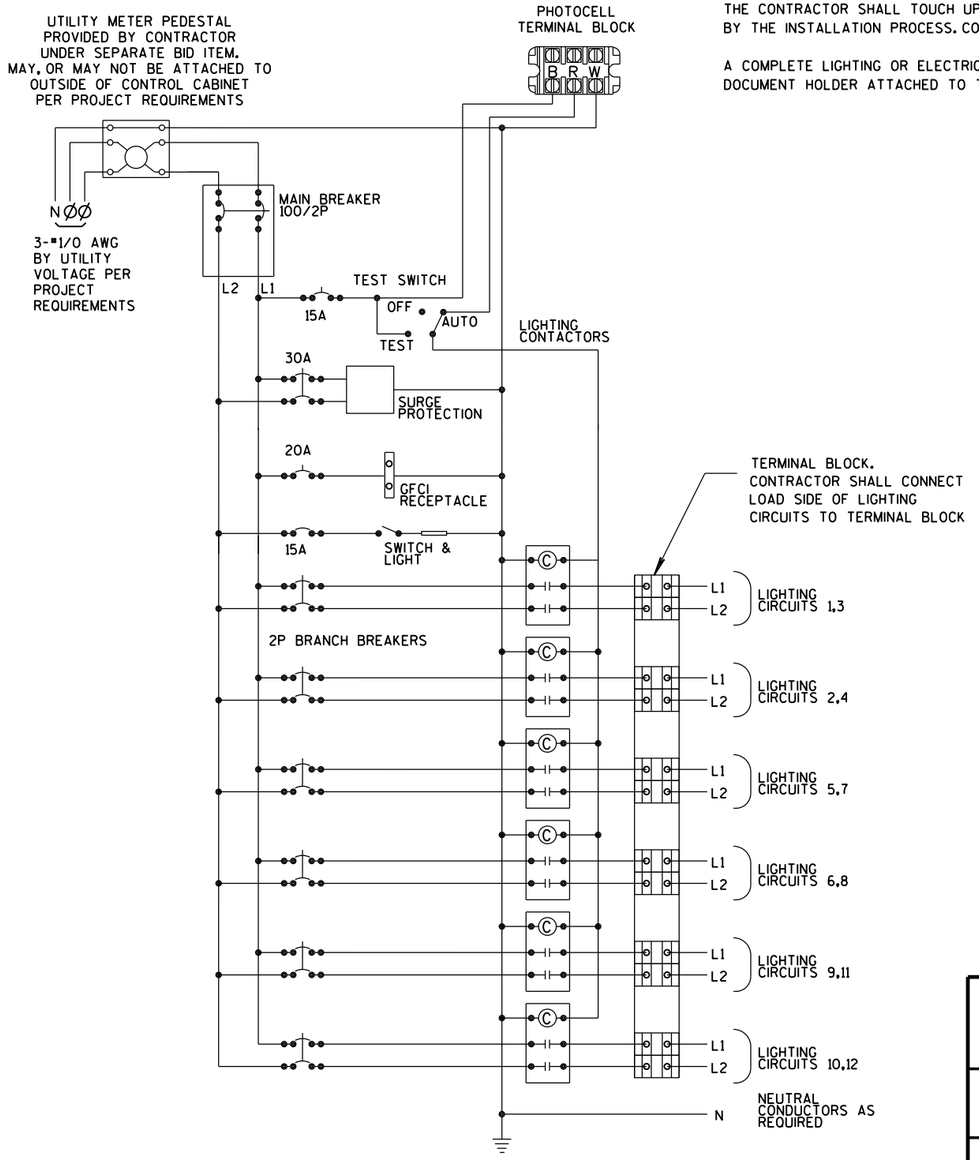


TABLE OF DIMENSIONS (INCHES)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



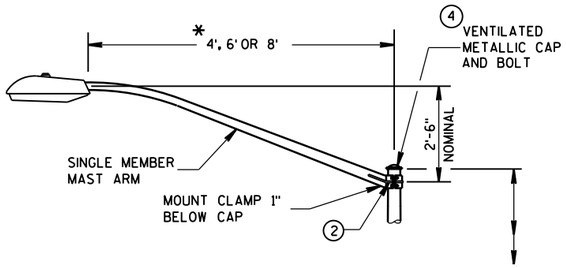
CONTROL CABINET SCHEMATIC

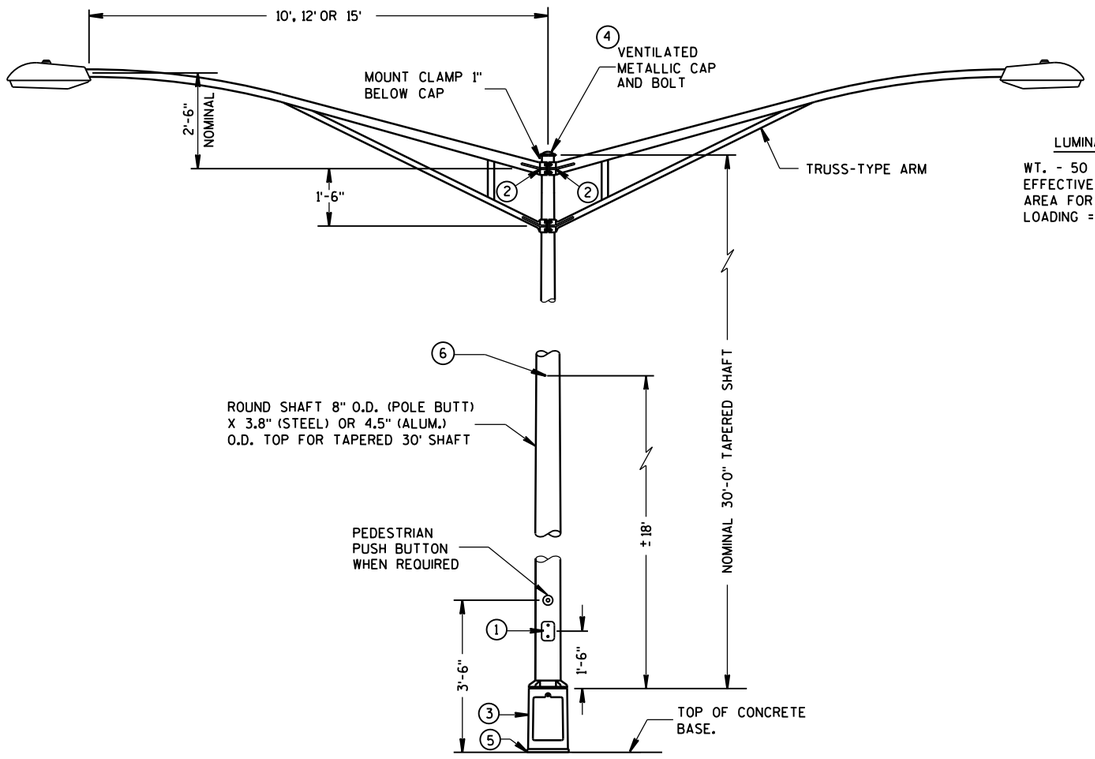
LIGHTING CONTROL CABINET 120/240 VOLT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

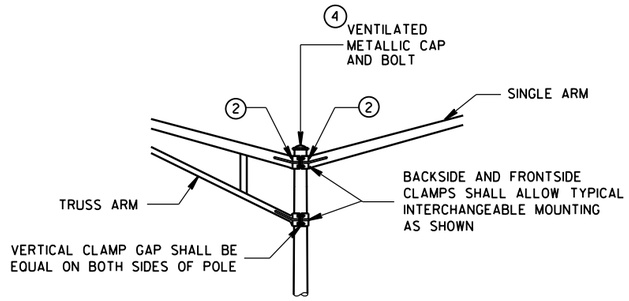
APPROVED
Sept. 2014 DATE
/S/ Thomas Gonring STATE LIGHTING ENGINEER
179
NYS.
FHWA

*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

6

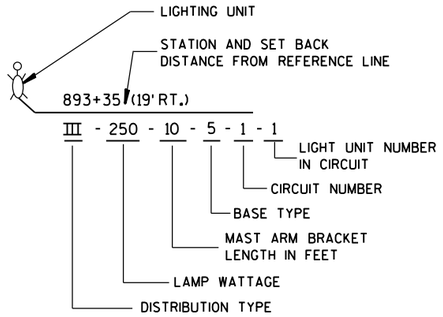
S.D.D. 9 E 1-14d

POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

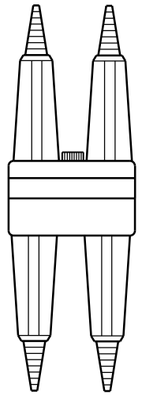
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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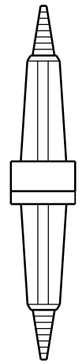
S.D.D. 9 E 1-14d



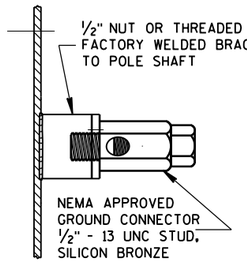
LIGHTING UNIT CODE
(TYPICAL)

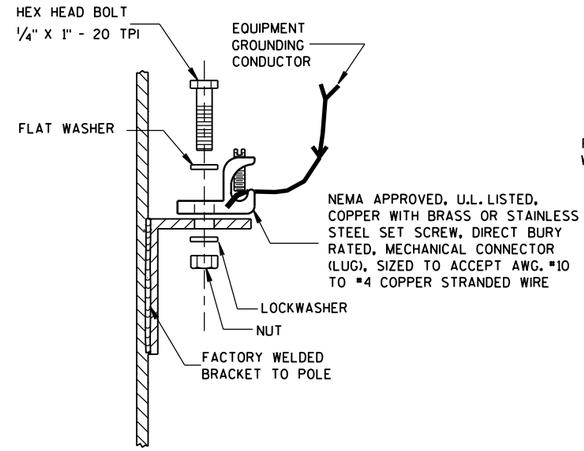


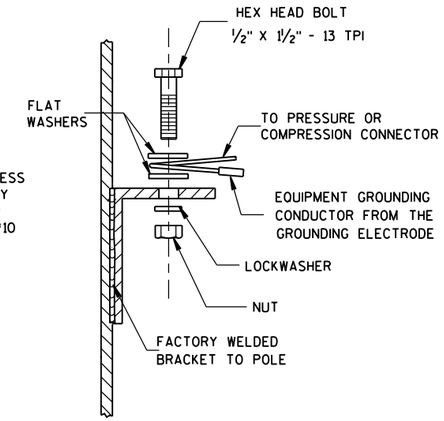
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



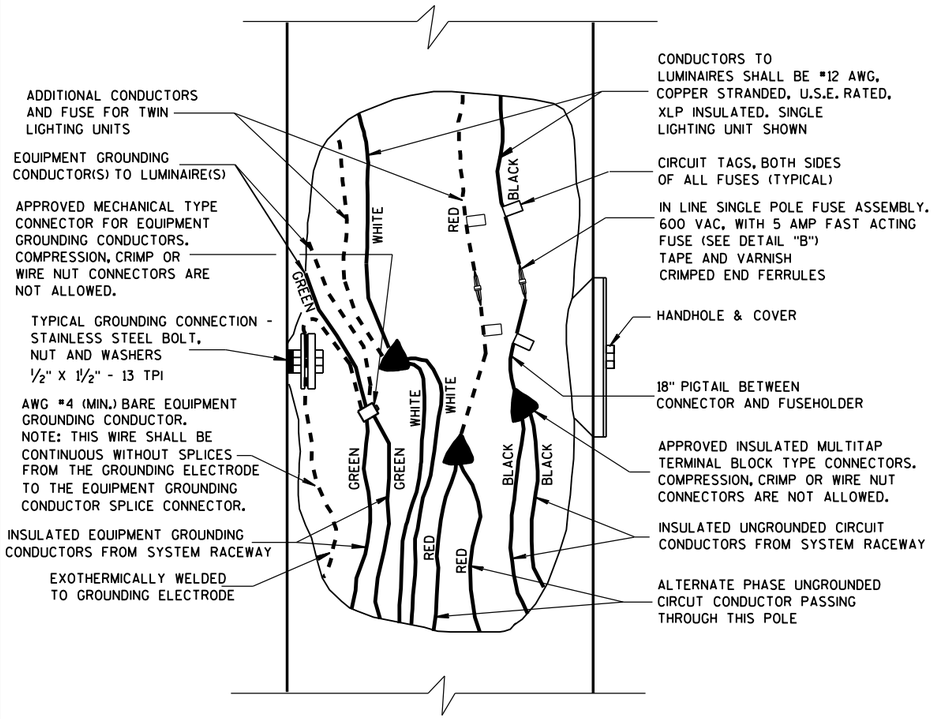
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



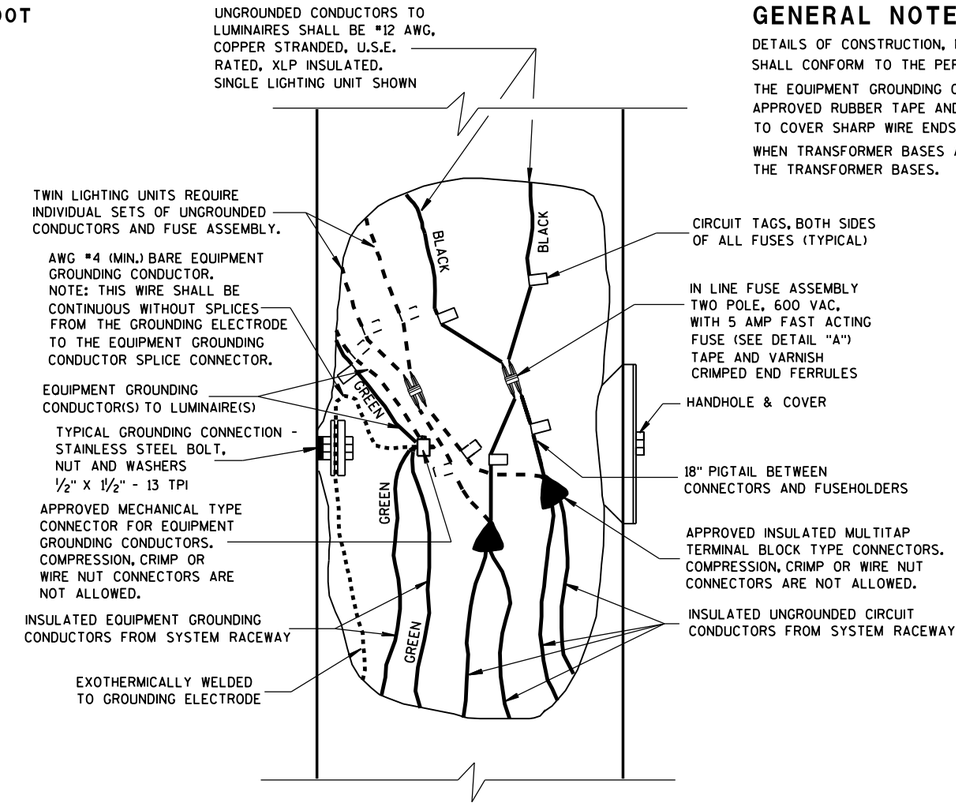




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

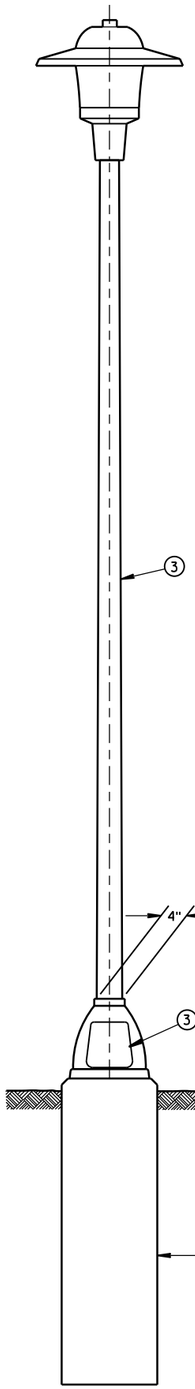
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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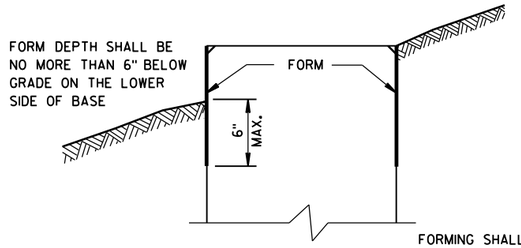


LUMINAIRE

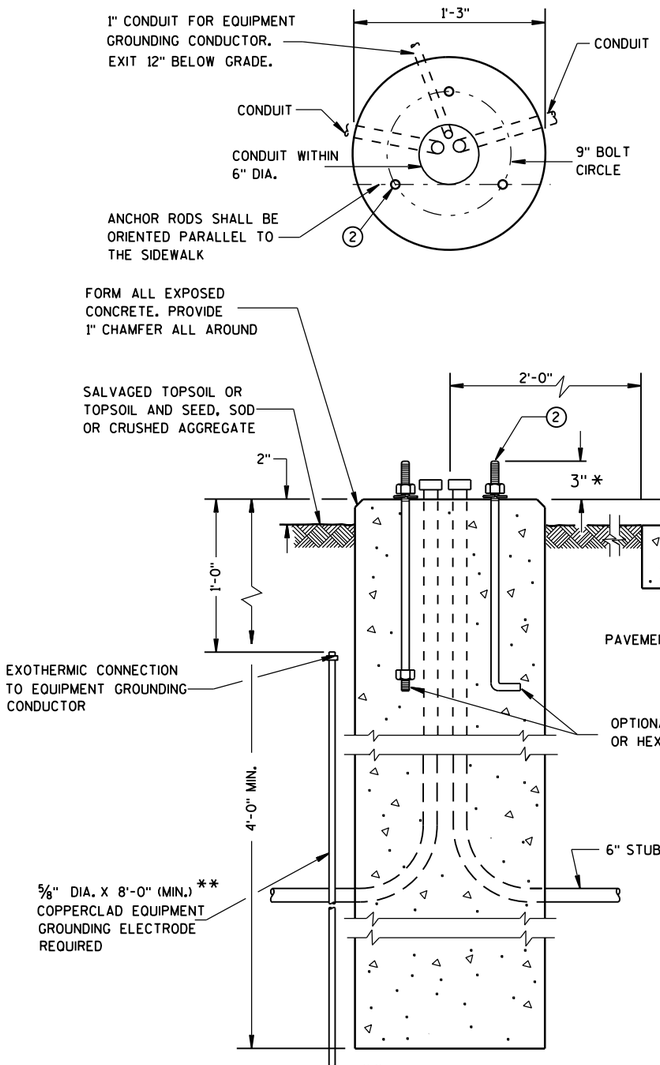
WT. = 50 LBS.
EFFECTIVE PROJECTED AREA
FOR WIND LOADING = 1.5 SQ. FT.

USE LUMINAIRE FROM DEPARTMENT APPROVED PRODUCTS LIST OR ENGINEER APPROVED EQUAL.

WALKWAY LIGHTING UNIT DETAIL



FORMING DETAIL



** GROUNDING ELECTRODE LENGTH MAY VARY, SEE SPECIAL PROVISIONS.

CONCRETE BASE, TYPE 11

GENERAL NOTES

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

CONCRETE BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT RUNS, NUMBER OF CONDUITS IN EACH CONCRETE BASE AND CONDUIT SIZE IS AS SHOWN ON THE PLANS. THE 1-INCH CONDUIT IS USED IN ALL BASES.

MINIMUM BENDING RADIUS OF CONDUIT SHALL BE SIX TIMES THE DIAMETER OF THE CONDUIT.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1-INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE AND BEFORE INSTALLATION OF CABLE OR WIRE.

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.

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 CONCRETE BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE CONCRETE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1-FOOT OR LESS.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NO. 4 AWG, BARE, STRANDED COPPER. IT SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED LEAVING A 2-FOOT LENGTH OF WIRE ABOVE THE CONCRETE BASE. THE 2-FOOT LENGTH OF EQUIPMENT GROUNDING CONDUCTOR ABOVE THE BASE SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL PER SECTION 5.17.6.3, AASHTO 2001 4TH EDITION STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS.

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

GENERAL NOTES (CONTINUED)

(1) DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24-INCHES MIN. DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES MIN. DEPTH OF ALL CONDUITS SHALL NOT EXCEED 36-INCHES.

(2) THREE - ¾-INCH DIA. X 15-INCH ANCHOR RODS OR ¾-INCH DIA. X 19-INCH ANCHOR RODS INCLUDING THE 4-INCH "L" BEND. THE "L" BEND SHALL NOT BE THREADED. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS.

(3) PEDESTAL BASE-STANDARD:

THE PEDESTAL BASE-STANDARD SHALL BE A ONE PIECE WELDED UNIT, WITH AN OVERALL HEIGHT OF TEN FEET.

THE POLE SHALL BE ROUND, TAPERED, ALUMINUM WITH A 3-INCH OUTSIDE DIAMETER TOP AND 0.125 INCH WALL THICKNESS.

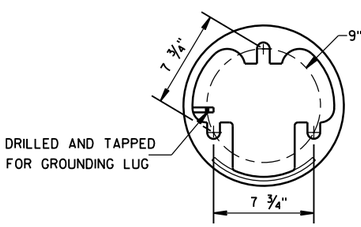
THE BELL SHAPED BASE SHALL BE 12 ½ INCHES IN DIAMETER AND HAVE A 9-INCH BOLT CIRCLE. ANCHOR RODS SHALL BE INCLUDED WITH THE BASE.

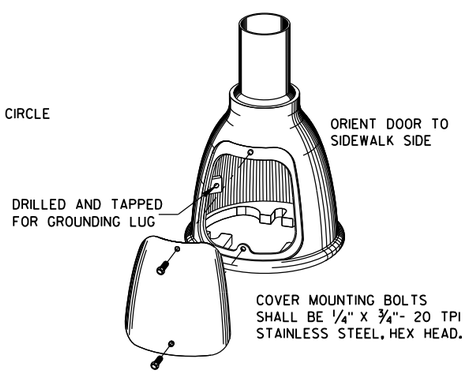
THE ACCESS DOOR OPENING SHALL BE APPROXIMATELY 7½ X 5¼ X 7½-INCHES.

THE FIXTURE AND PEDESTAL BASE-STANDARD SHALL BE PAINTED WITH AN EARTH COLORED THERMOSET POWDER COAT, ACRYLIC ENAMEL. THE ENAMEL SHALL BE FORMULATED TO SHOW NO APPRECIABLE FADING WITHIN FIVE YEARS.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED BRASS OR COPPER TYPE. CONNECTION HARDWARE SHALL BE STAINLESS STEEL (BOLT, NUT, LOCKWASHER - ¼" X ¾" - 20 TPI).

ALL NONMETALLIC CONDUIT CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES. (SEE NEC 347.5)





WALKWAY PEDESTAL BASE STANDARD DETAIL

WALKWAY LIGHTING UNIT AND CONCRETE BASE, TYPE 11

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

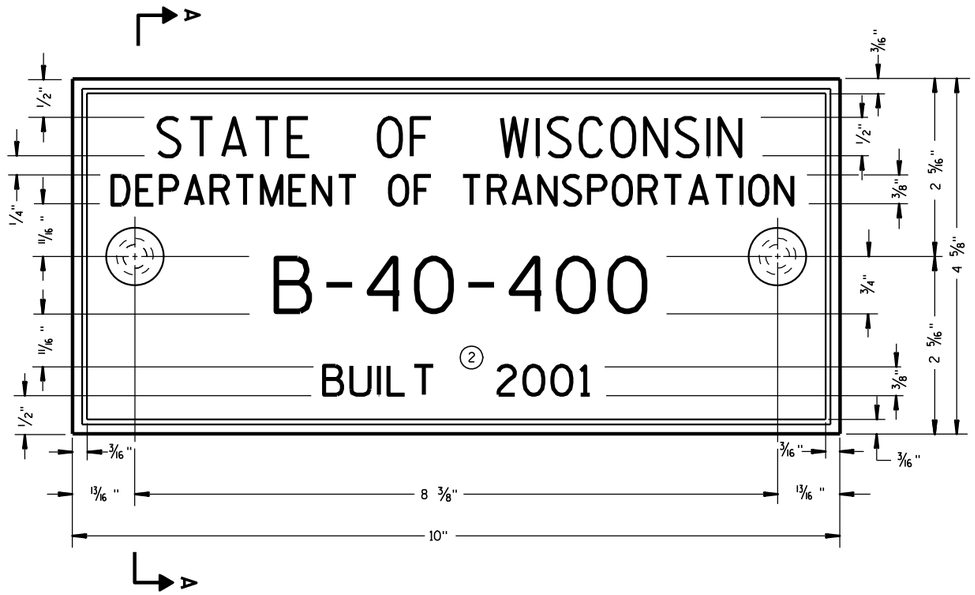
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 E 4-6



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

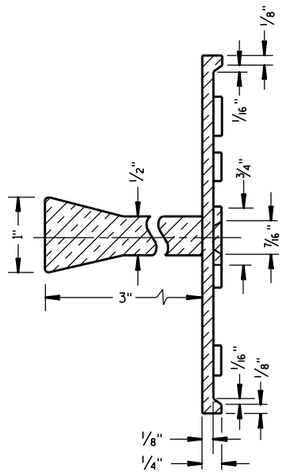
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

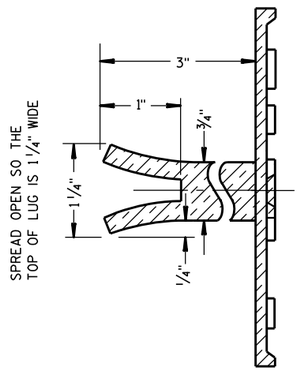
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

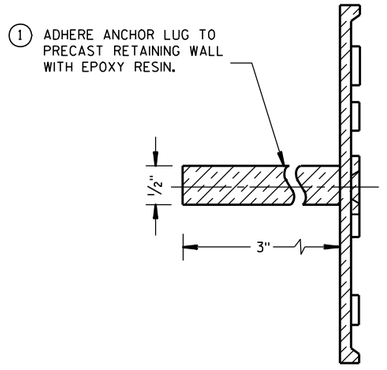
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER

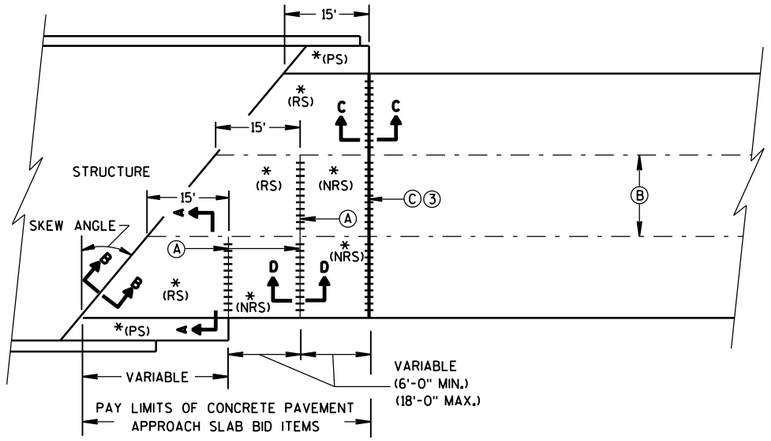
FHWA

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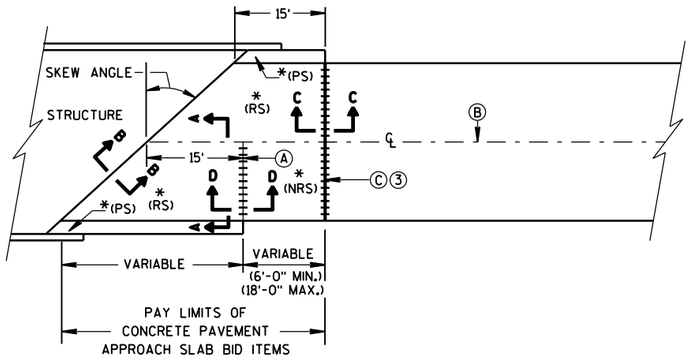
S.D.D. 12 A 3-10

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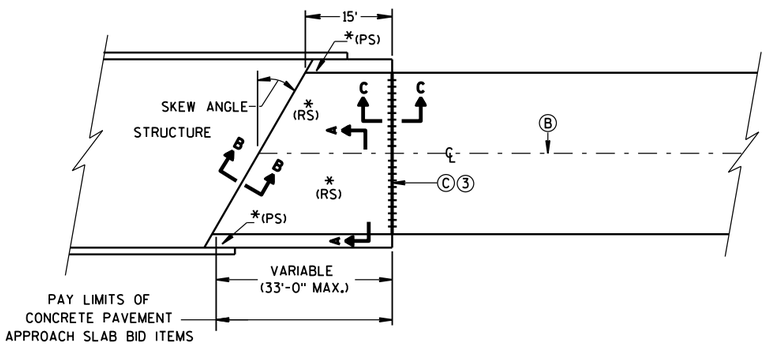
S.D.D. 12 A 3-10



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >20°
(PAVEMENT WIDTH ≤30')



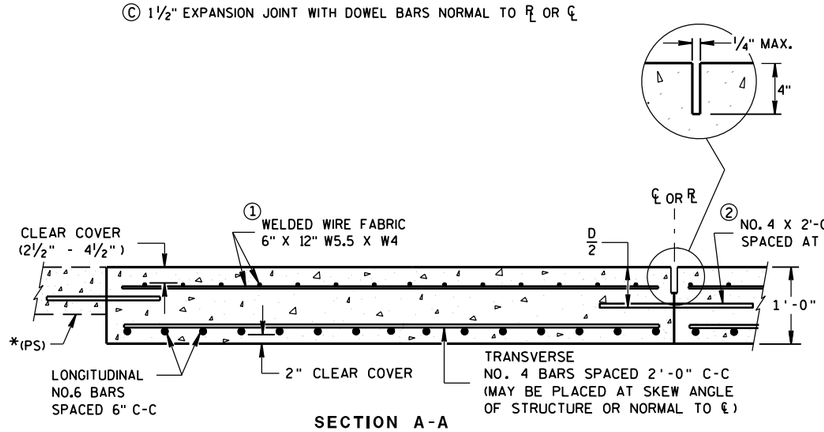
SKEWS ≤20°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

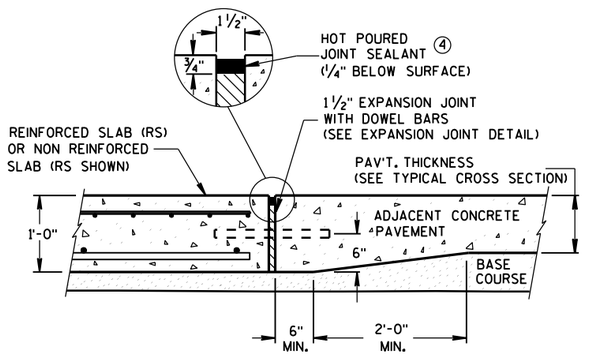
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

***STANDARD DOWEL BAR DIAMETER
(SEE SDD 13C11, & SDD 13C13)

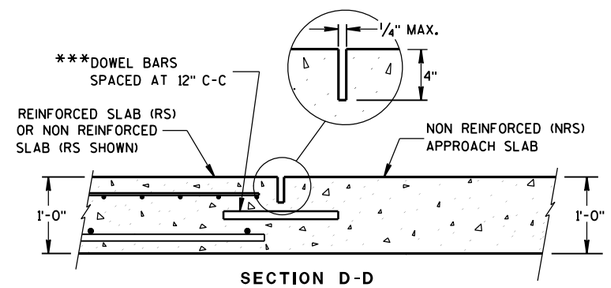
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
Ⓑ STANDARD LONGITUDINAL JOINT WITH TIE BARS.
Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

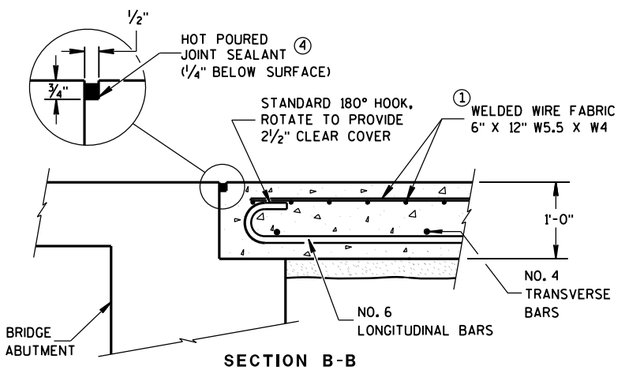
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

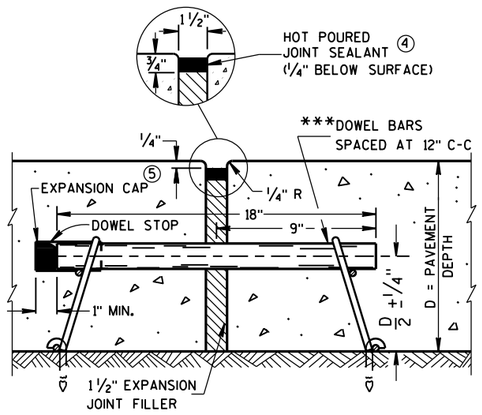
③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

④ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.

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



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

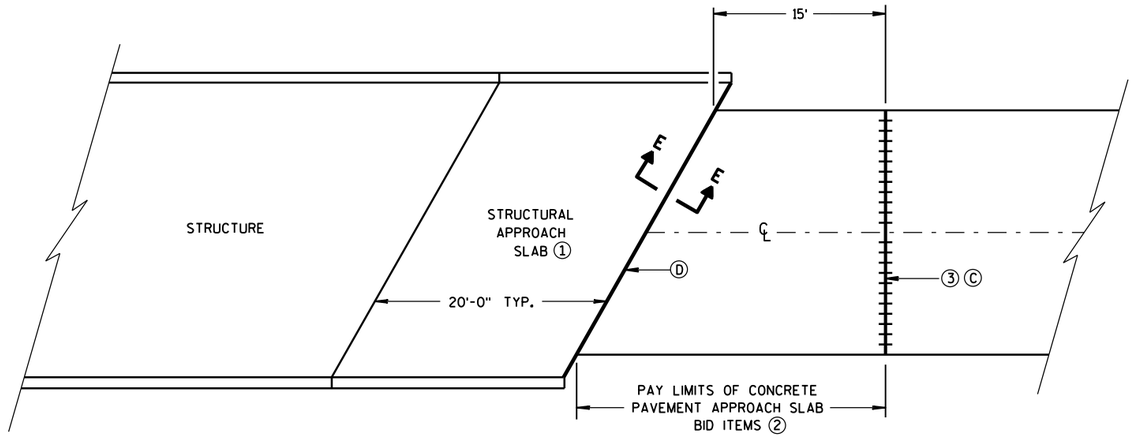
6

S.D.D. 13 B 2-8a

6

S.D.D. 13 B 2-8a

BRIDGE APPROACHES



GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

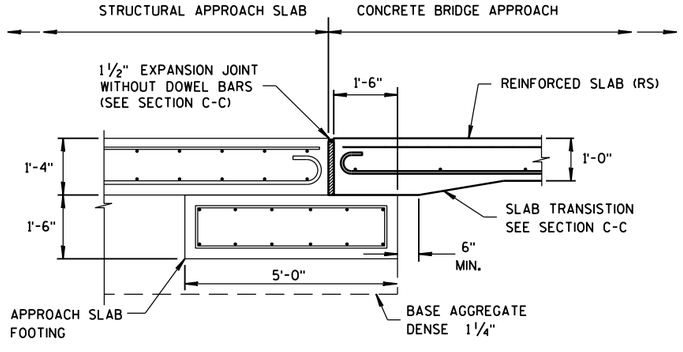
① SEE BRIDGE PLAN.

② CONFORM TO SHEET 13 B 2(A) FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS.

③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄

Ⓓ 1½" EXPANSION JOINT (NO DOWELS)



SECTION E-E

FOOTING DETAIL

STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

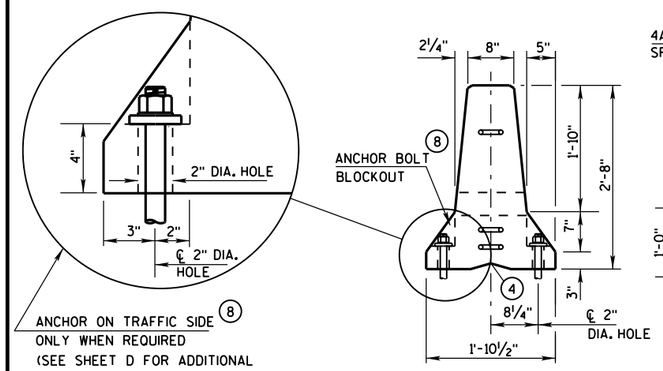
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPEF
FHWA

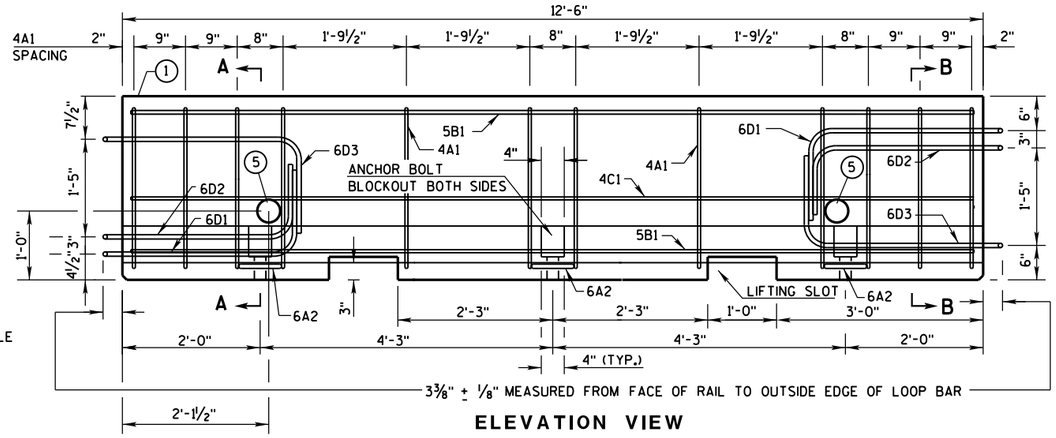
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S.D.D. 13 B 2-8b

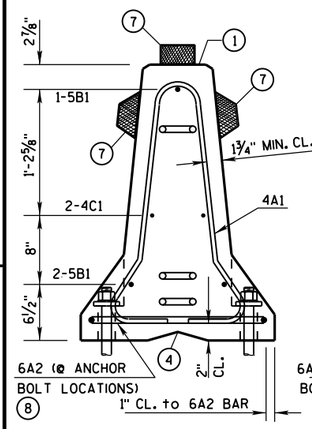
S.D.D. 13 B 2-8b



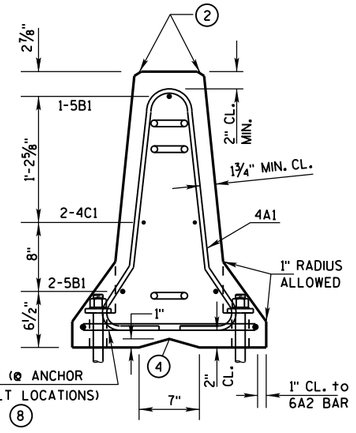
END VIEW



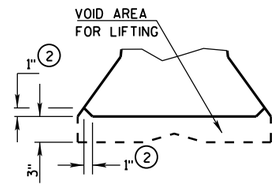
ELEVATION VIEW



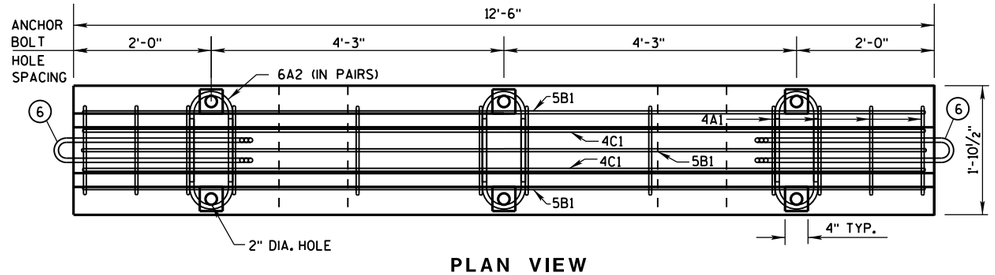
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

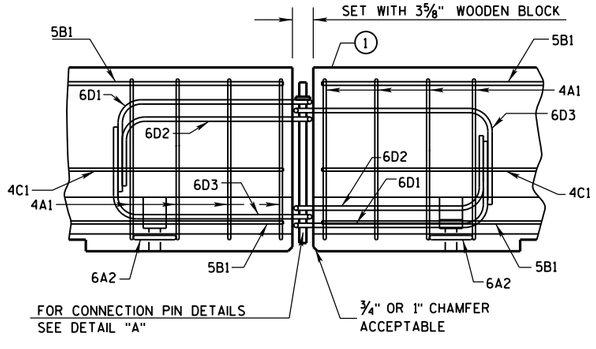


DETAIL "B"
LIFTING SLOT DETAIL

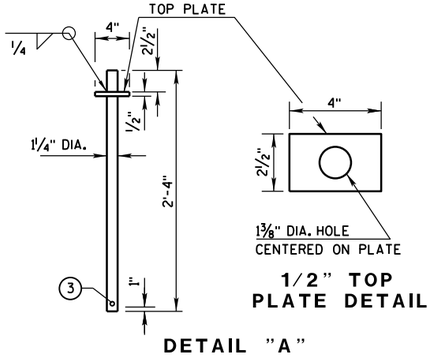


PLAN VIEW

DETAILS OF BARRIER SECTION

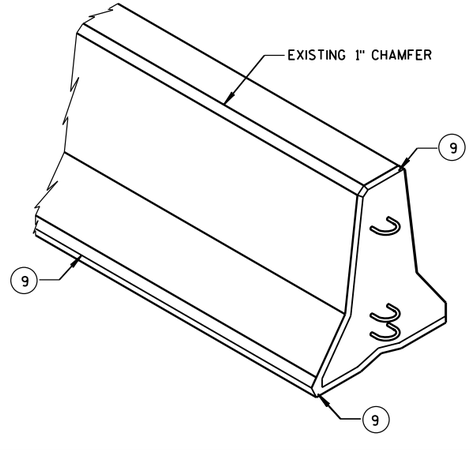


DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

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



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.

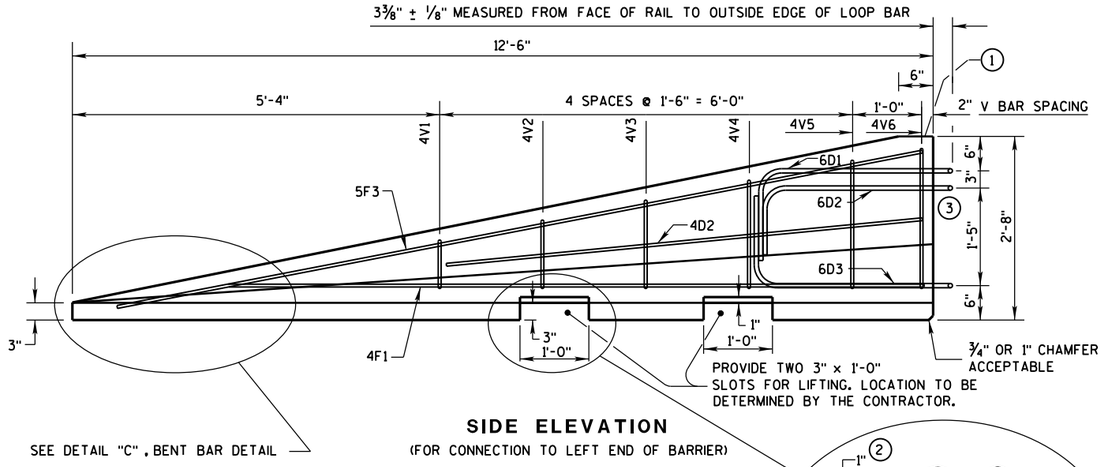
(9) 1" CHAMFER OPTIONAL.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

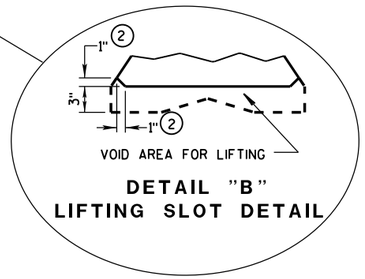
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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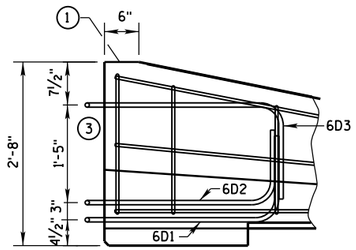
S.D.D. 14 B 7-14a



SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



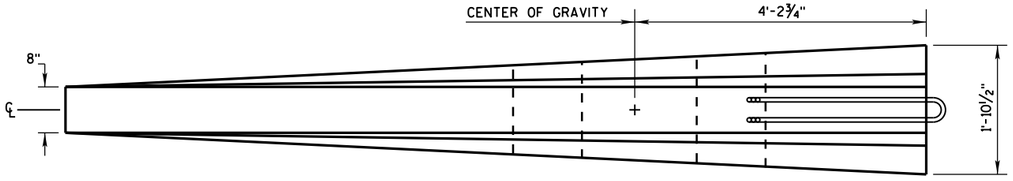
DETAIL "B"
LIFTING SLOT DETAIL



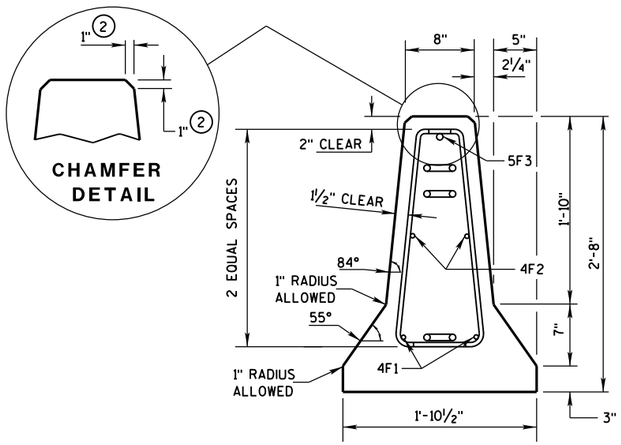
SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

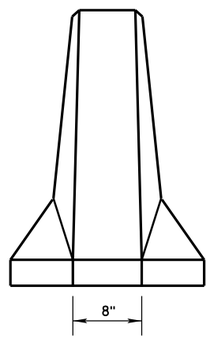
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



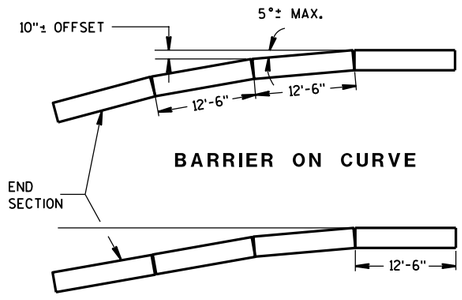
PLAN VIEW



END SECTION



FRONT ELEVATION



BARRIER ON CURVE

FLARE AT BARRIER END

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"

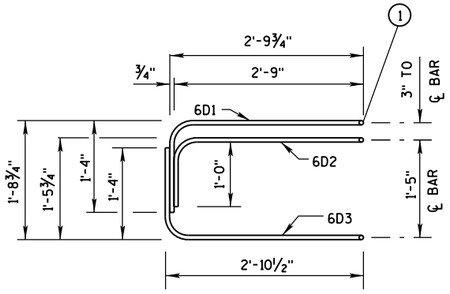
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 7-14b

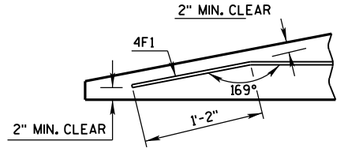
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

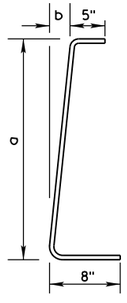
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



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

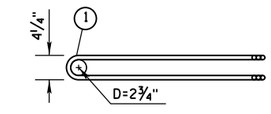
GENERAL NOTES

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

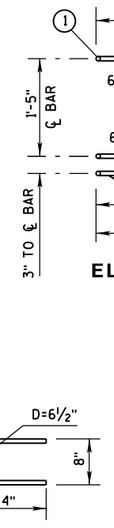
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

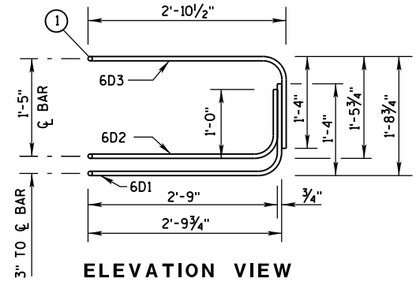
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



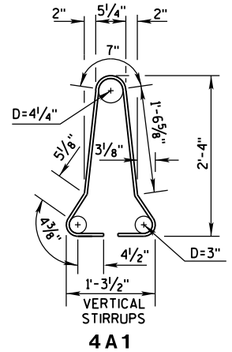
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



ELEVATION VIEW



4A1

BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

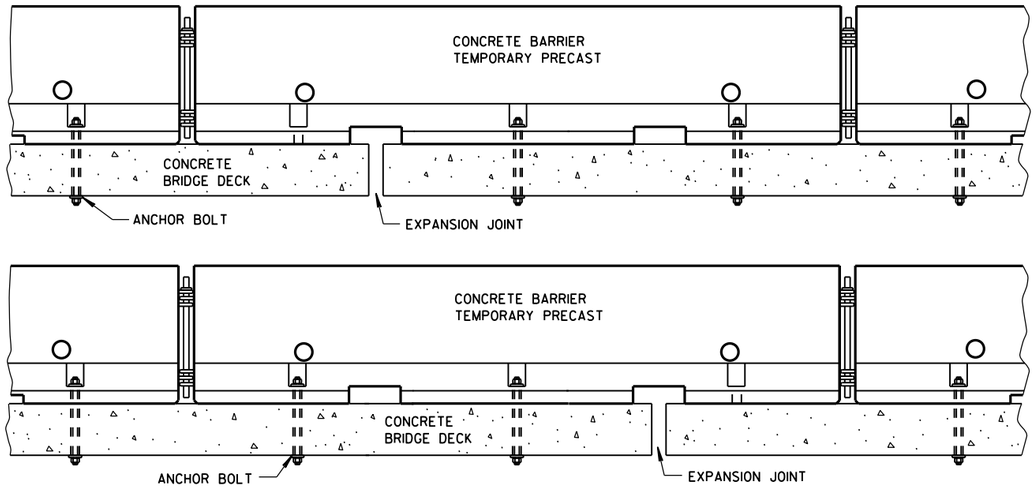
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 188

6

S.D.D. 14 B 7-14c

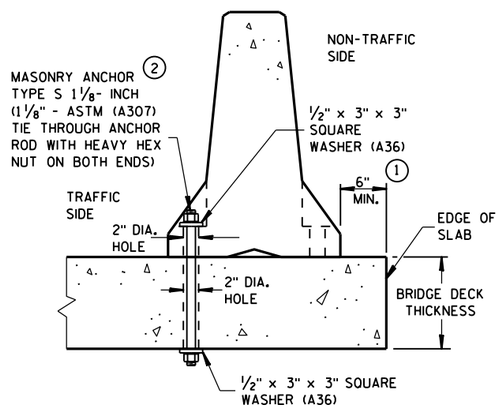
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S.D.D. 14 B 7-14c



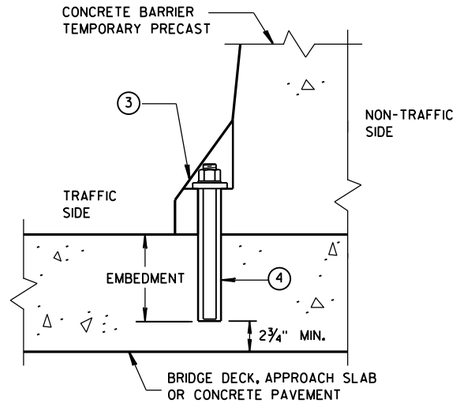
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(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 INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT ②

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

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.

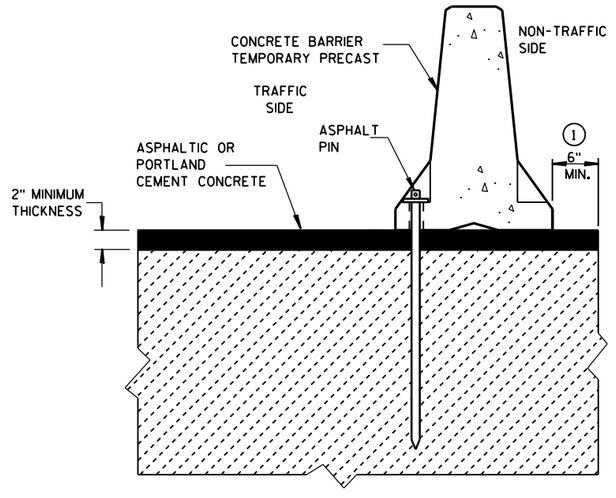
② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

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.

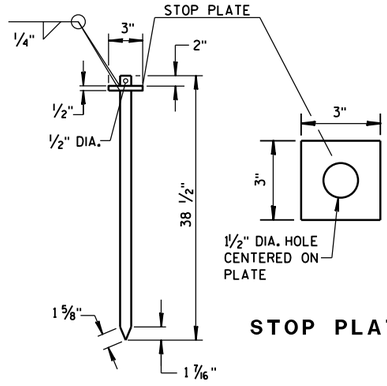
③ 1⅛" DIAMENTER A307 THREADED ROD, ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.

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.



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

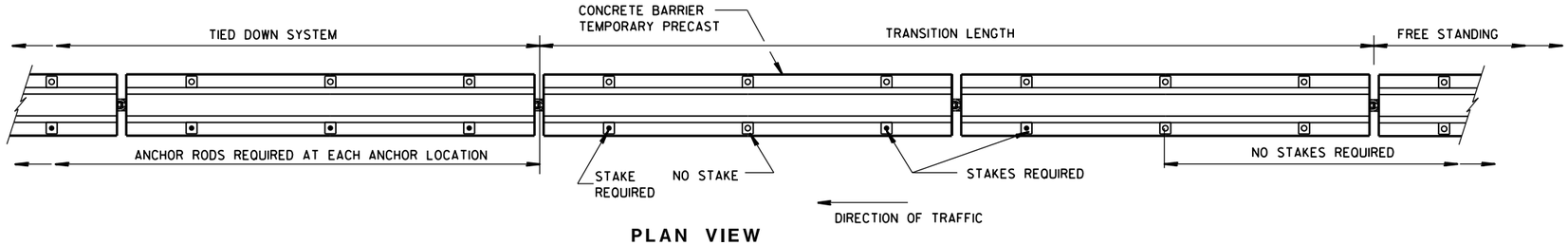
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



PLAN VIEW

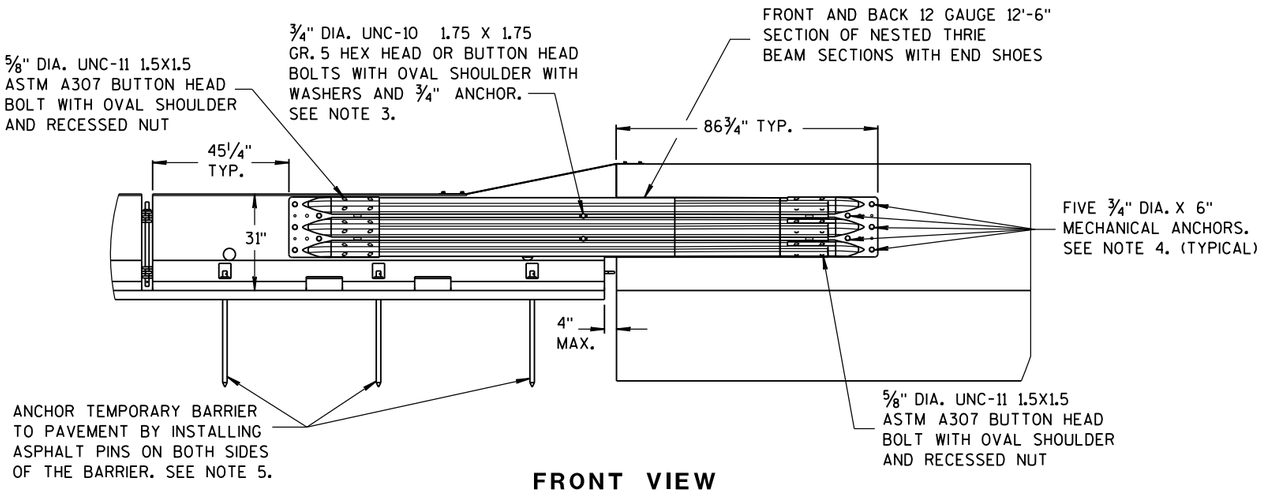
FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

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

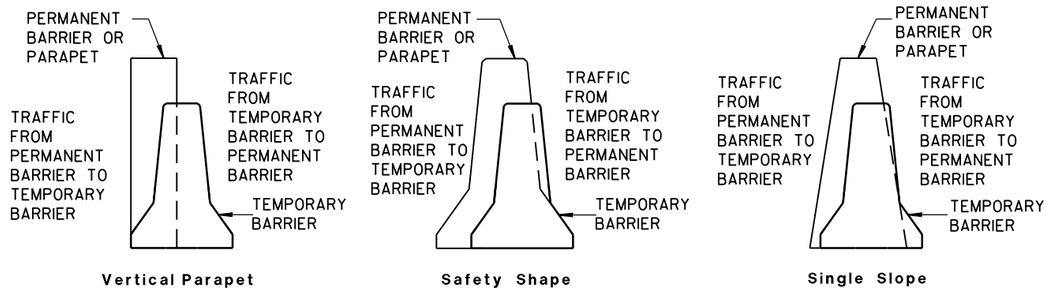
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

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

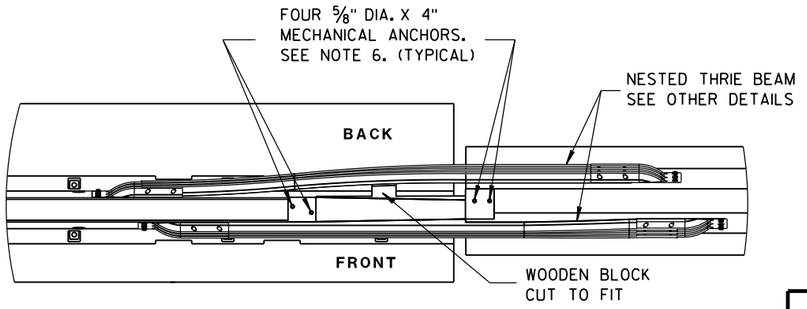
NOTES

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 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

BACK VIEW

FRONT VIEW



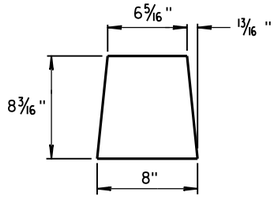
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

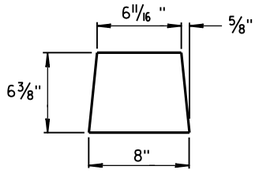
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

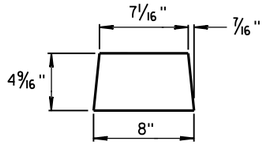
6
S.D.D. 14 B 7-14e



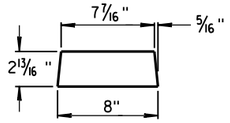
GUSSET 1



GUSSET 2

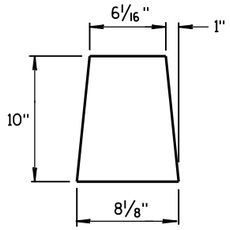


GUSSET 3

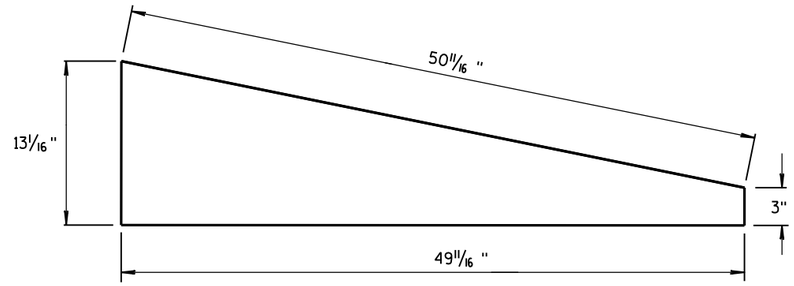


GUSSET 4

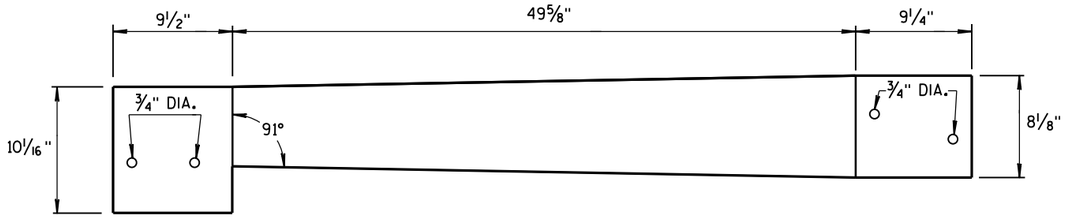
GUSSETS

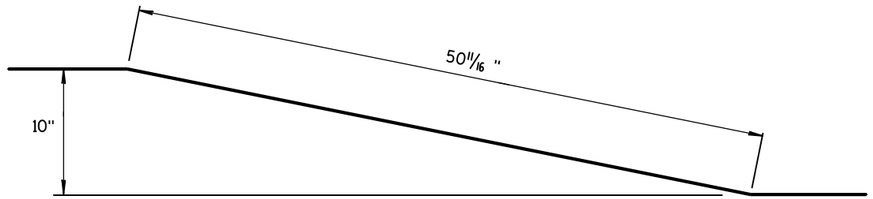


END PLATE



SIDE PLATE

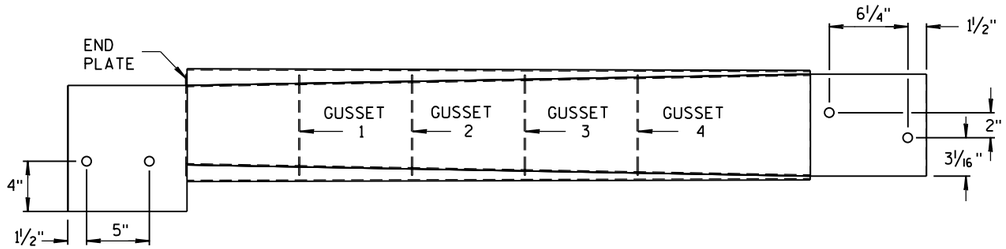


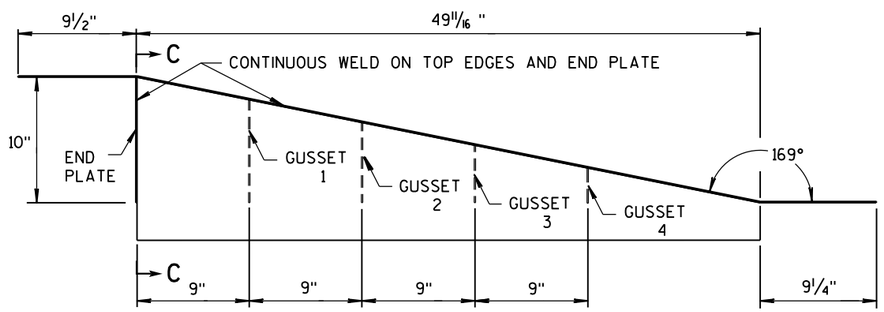


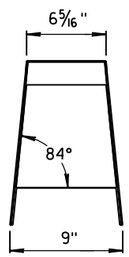
TOP PLATE

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

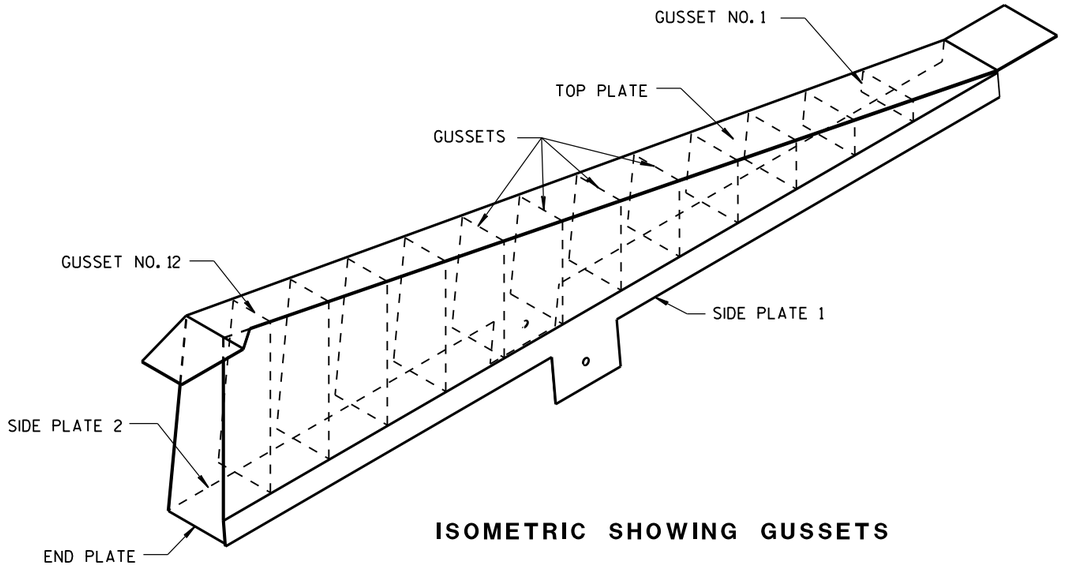
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

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

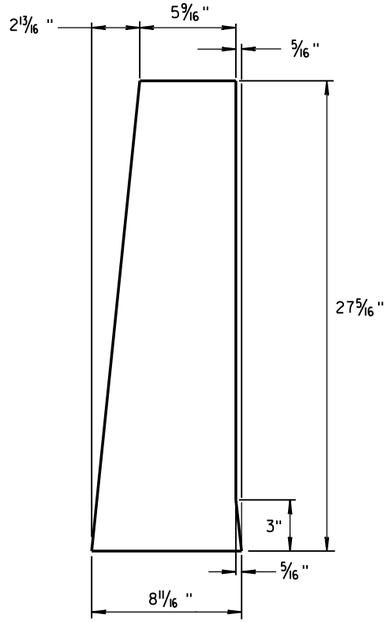
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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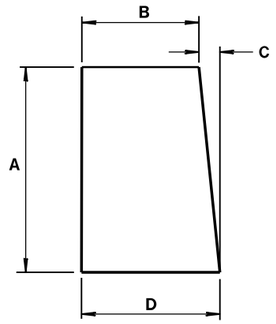


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



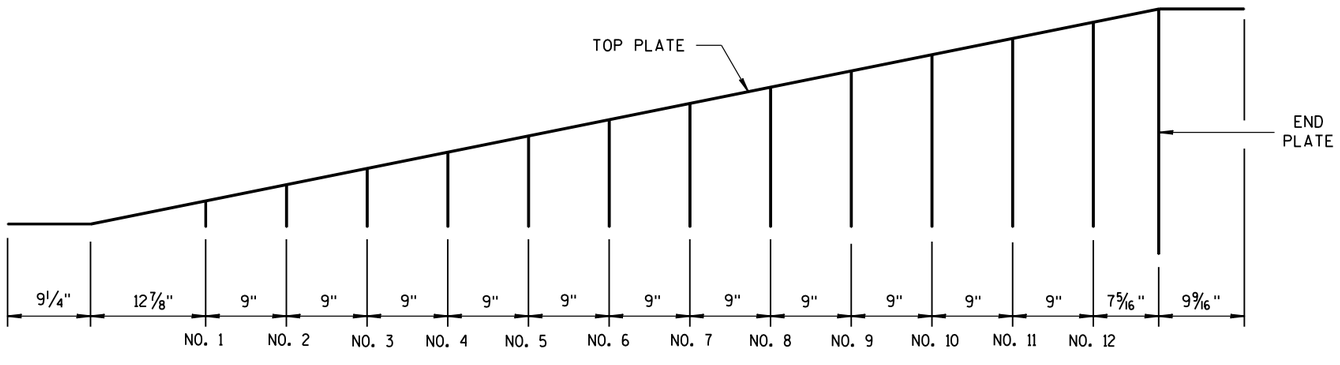
GUSSETS 1 - 12

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

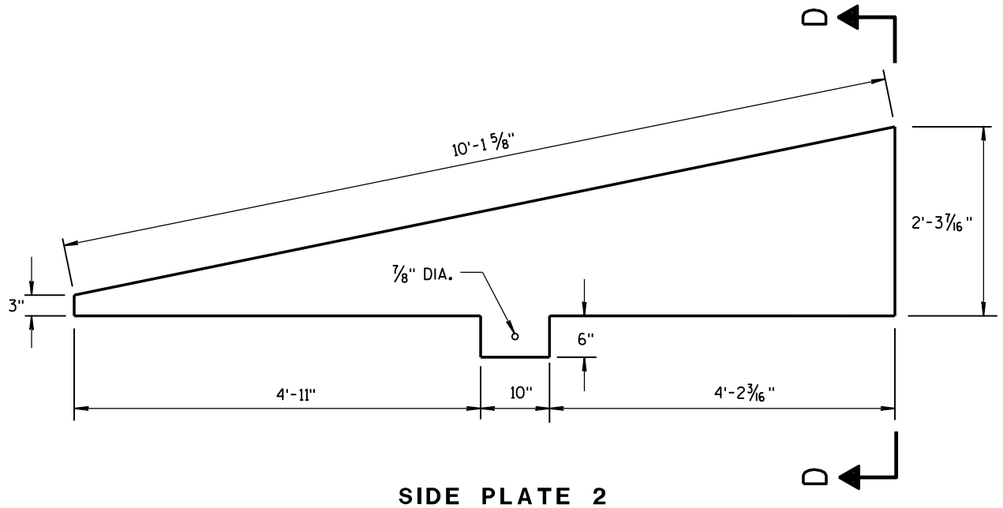
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

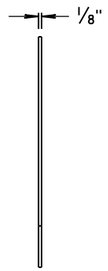
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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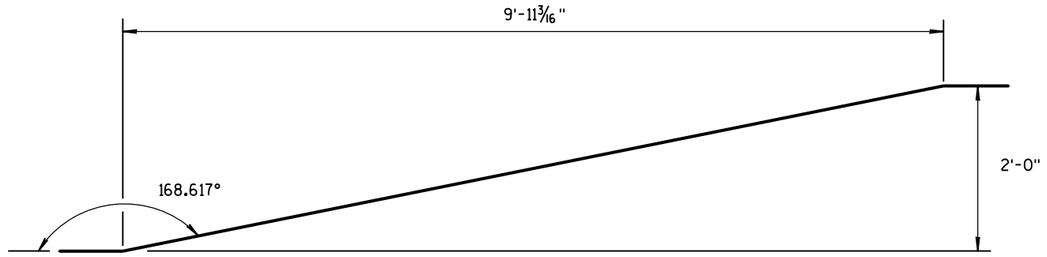
S.D.D. 14 B 7-14g



SIDE PLATE 2

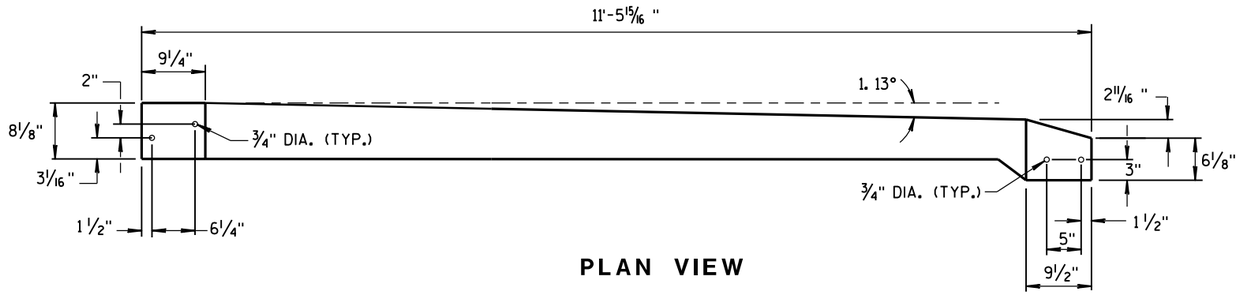


END VIEW



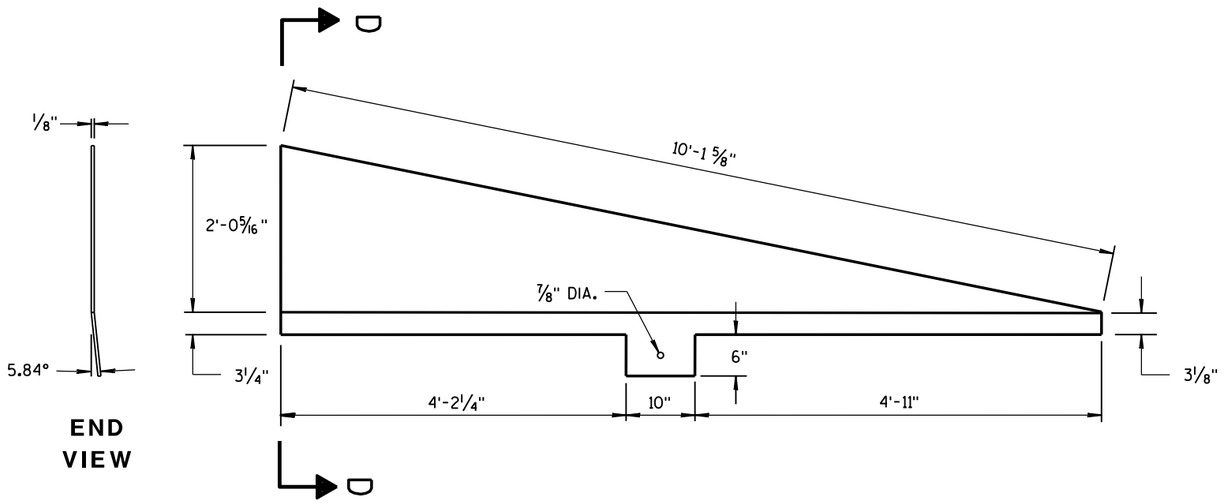
SIDE VIEW

TOP PLATE



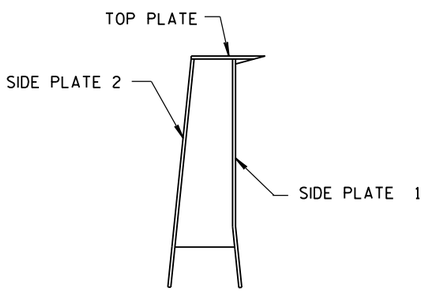
PLAN VIEW

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

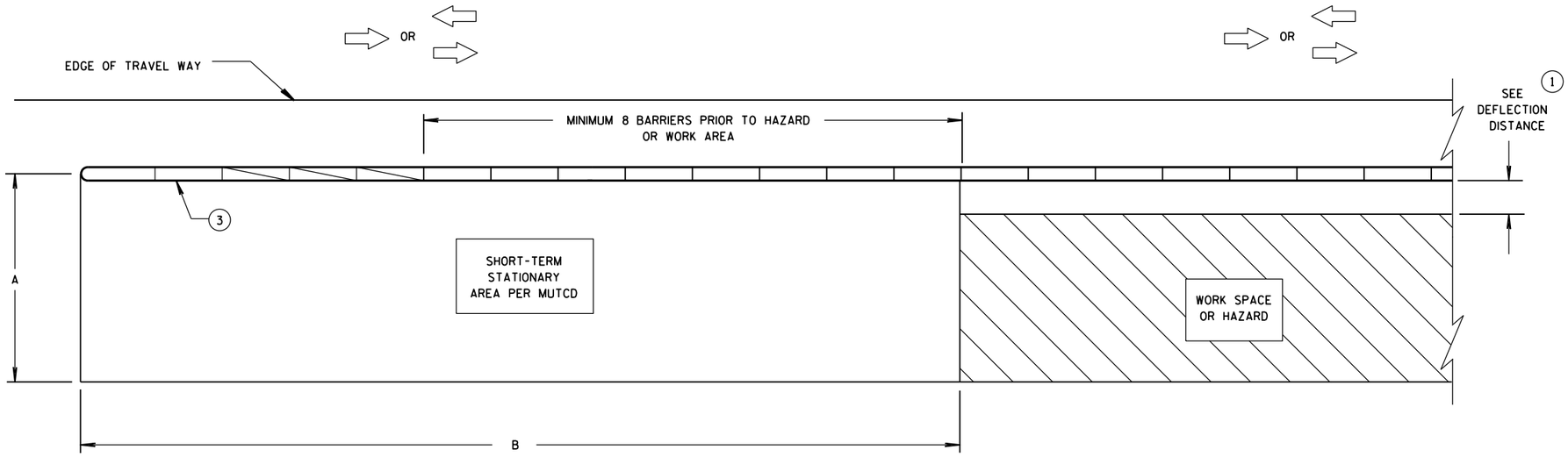
APPROVED
June 2014 — DATE
/S/ Jerry H. Zoaa — ROADWAY STANDARD D ENGINEER
FHWA

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S.D.D. 14 B 7-14h

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S.D.D. 14 B 7-14h



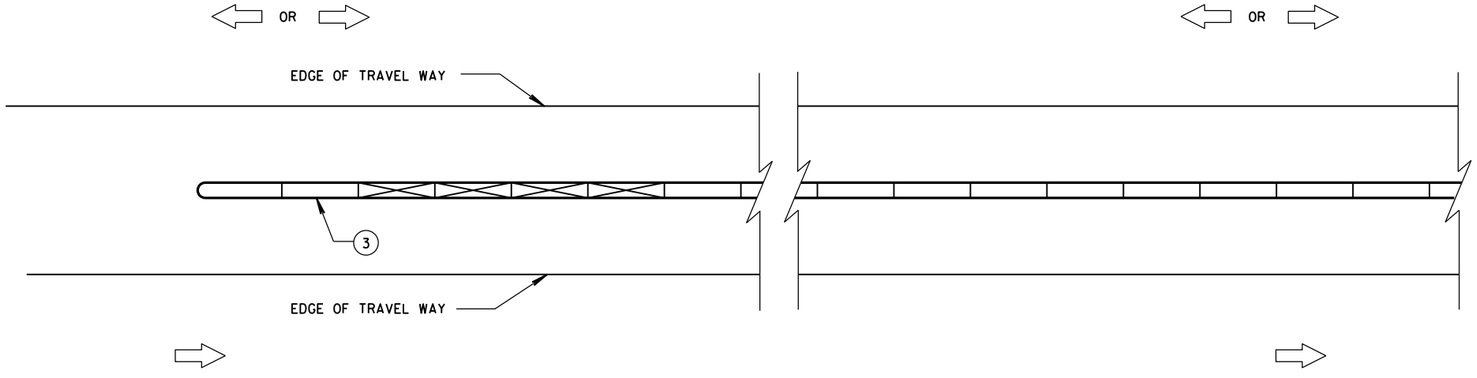
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

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.

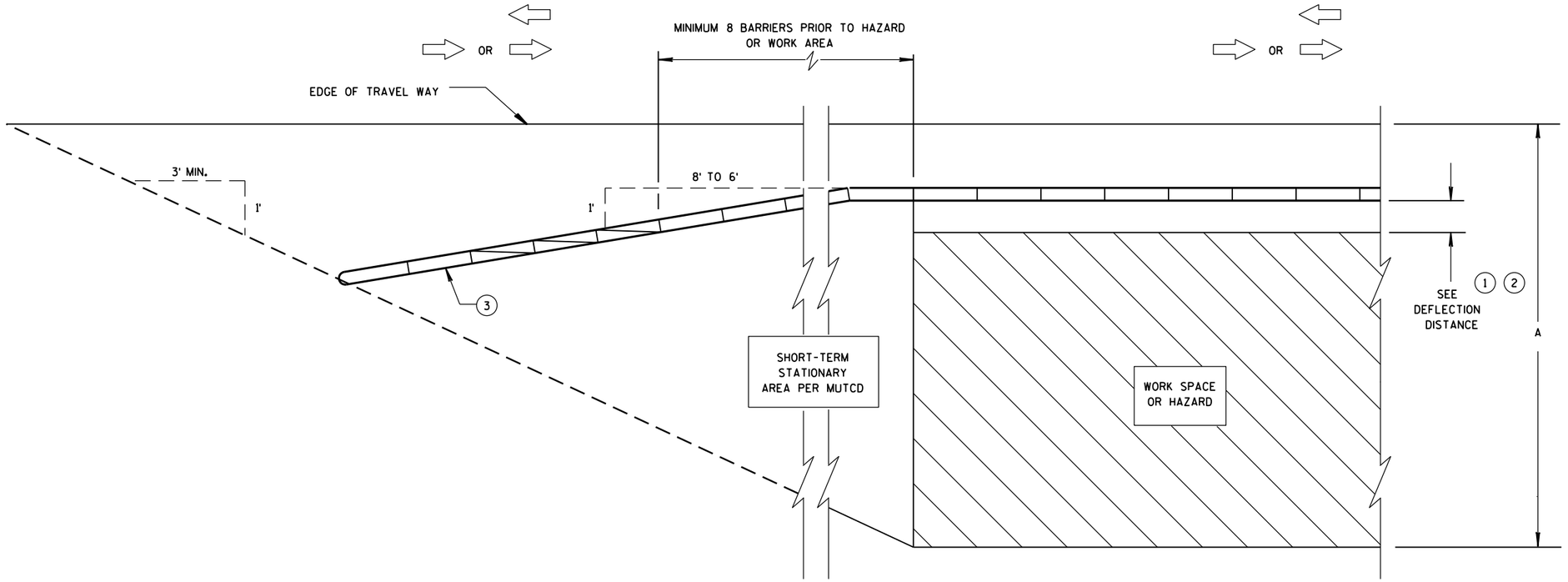
(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

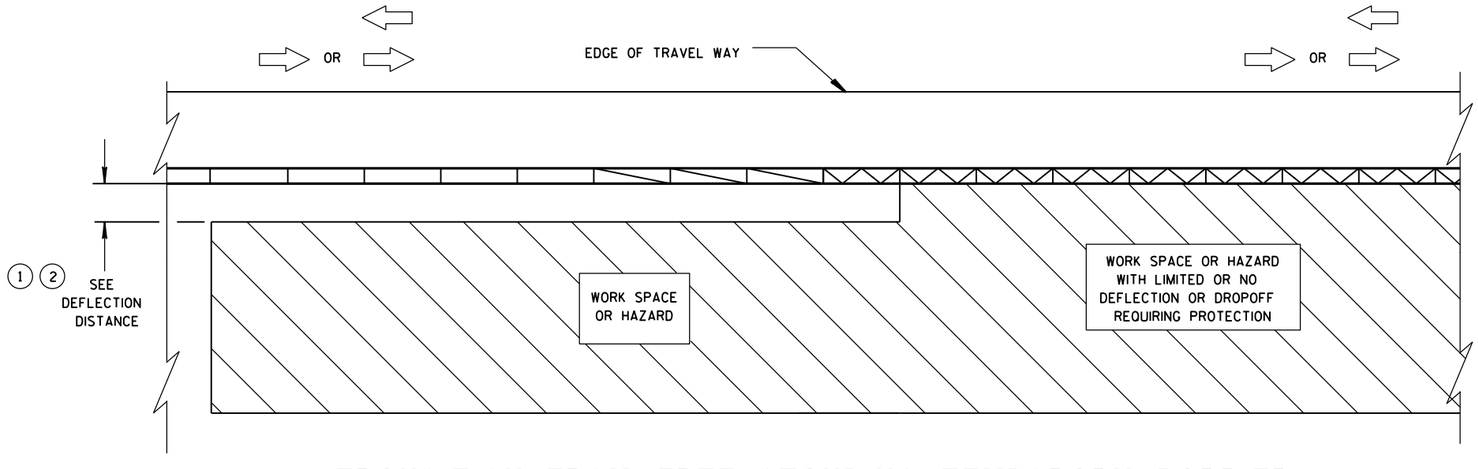
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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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

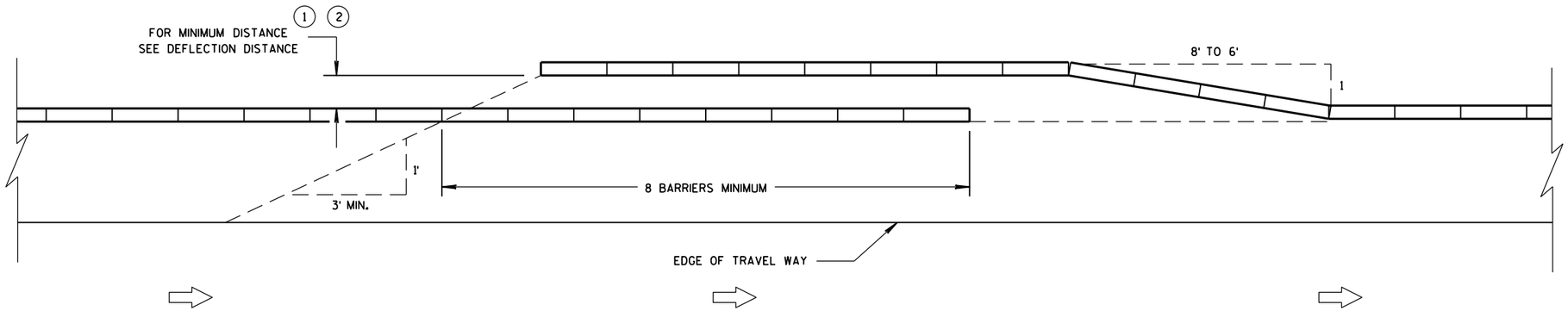
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

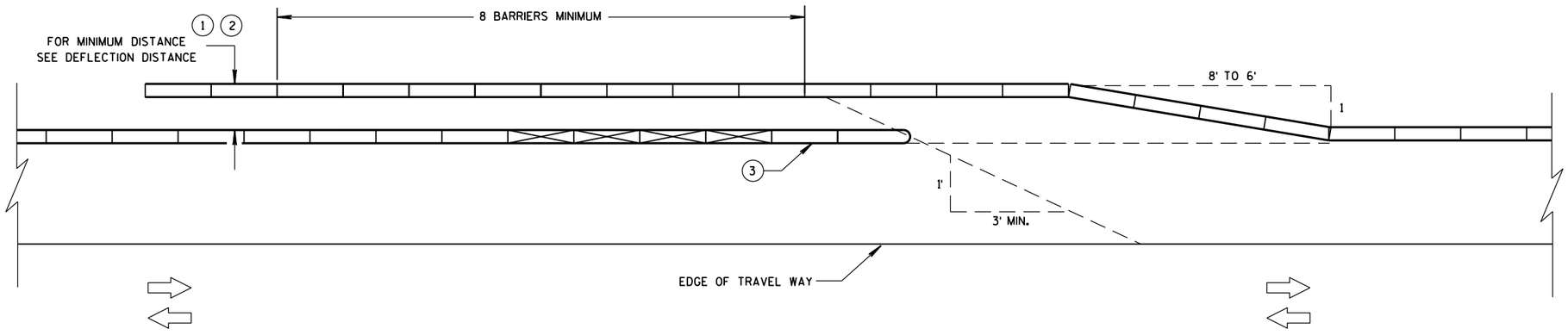
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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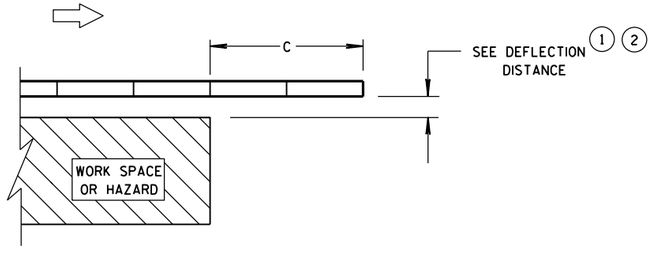
S.D.D. 14 B 8-2b



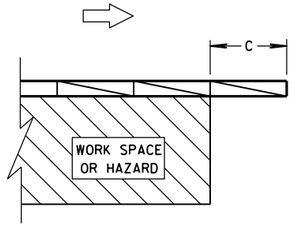
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

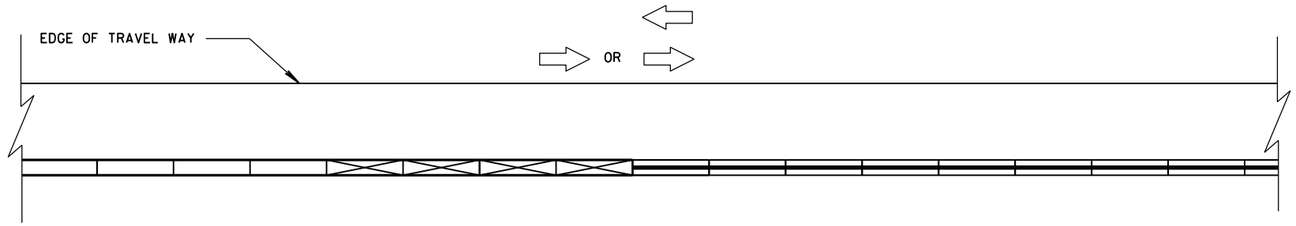
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

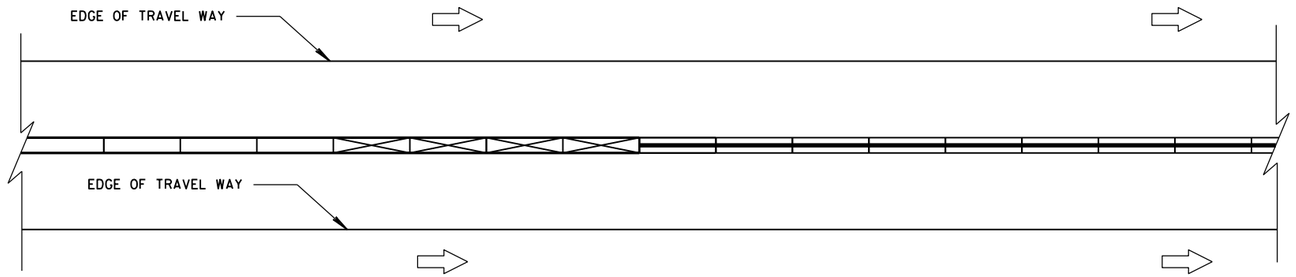
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 8-2c



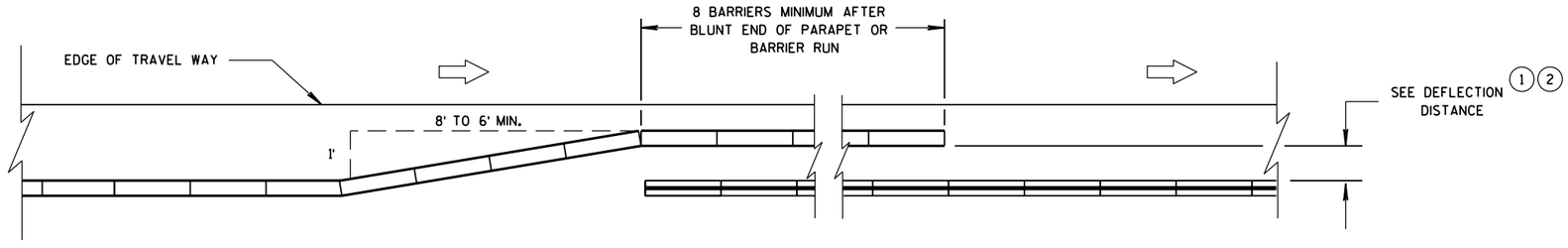
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



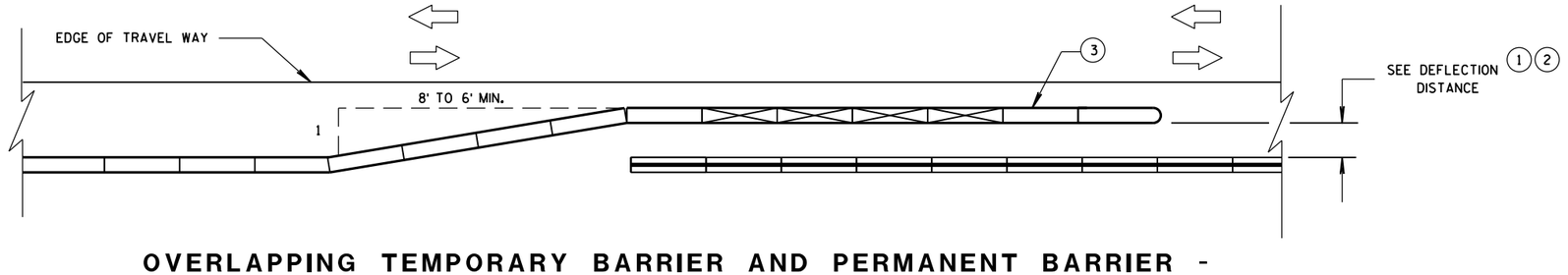
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

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

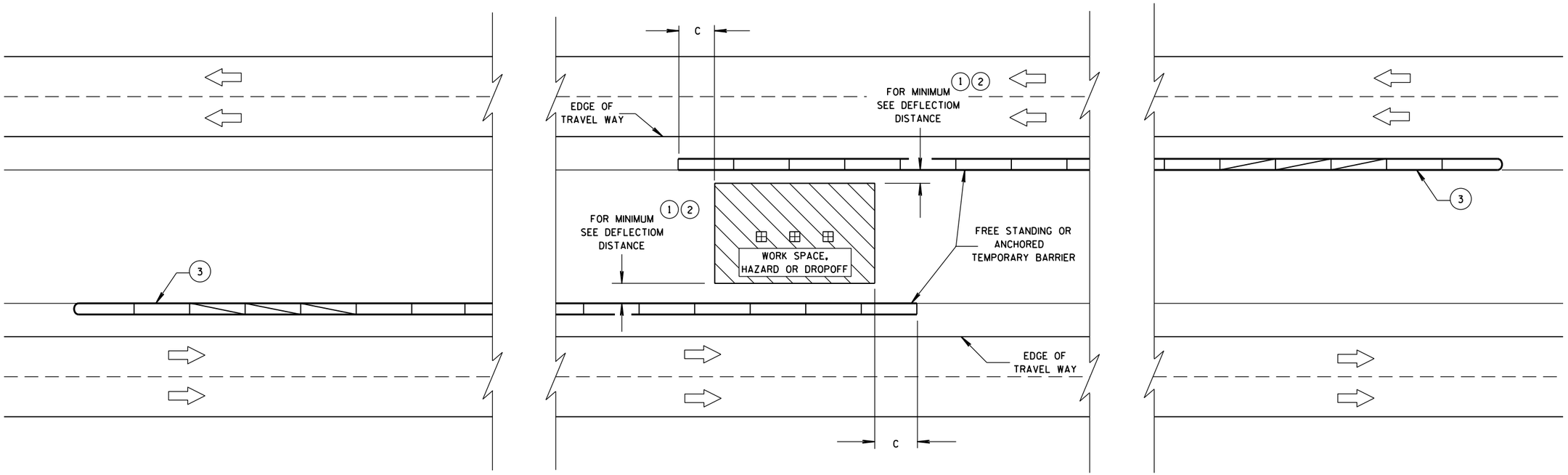
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

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



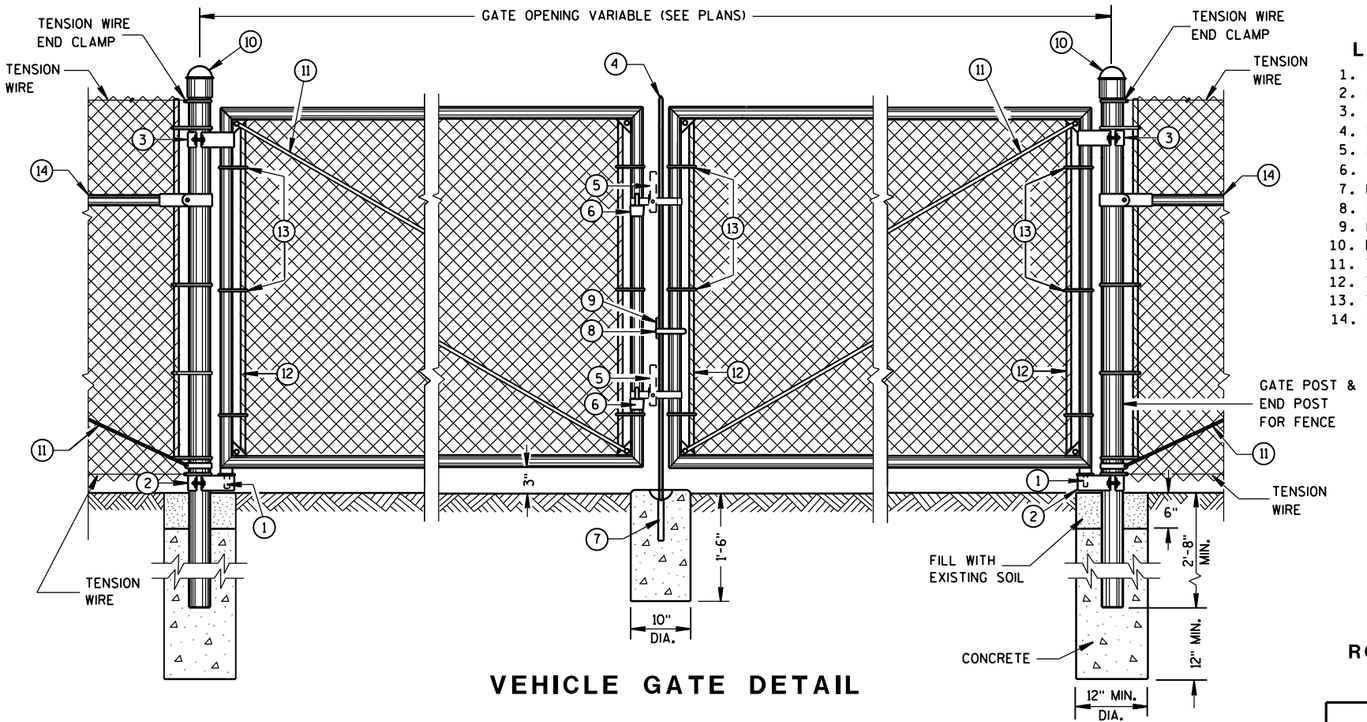
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

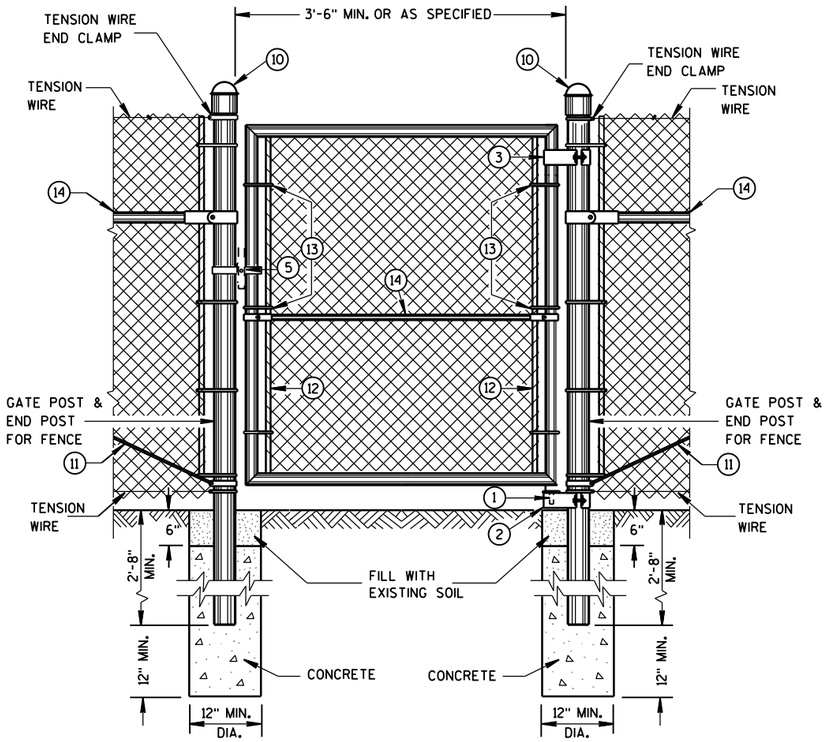
APPROVED
June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER
FHWA

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S.D.D. 14 B 8-2e



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

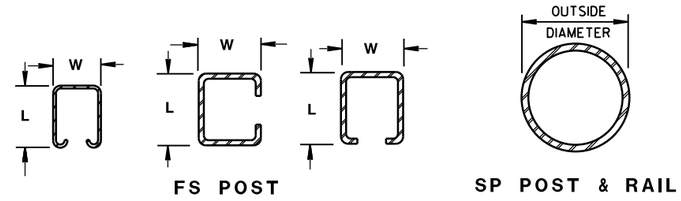
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



CROSS SECTIONS OF POSTS AND RAILS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

FENCE CHAIN LINK

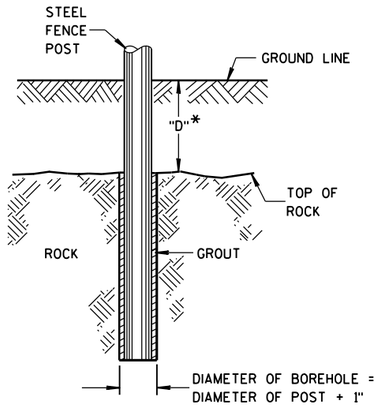
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 15 B 3-15a

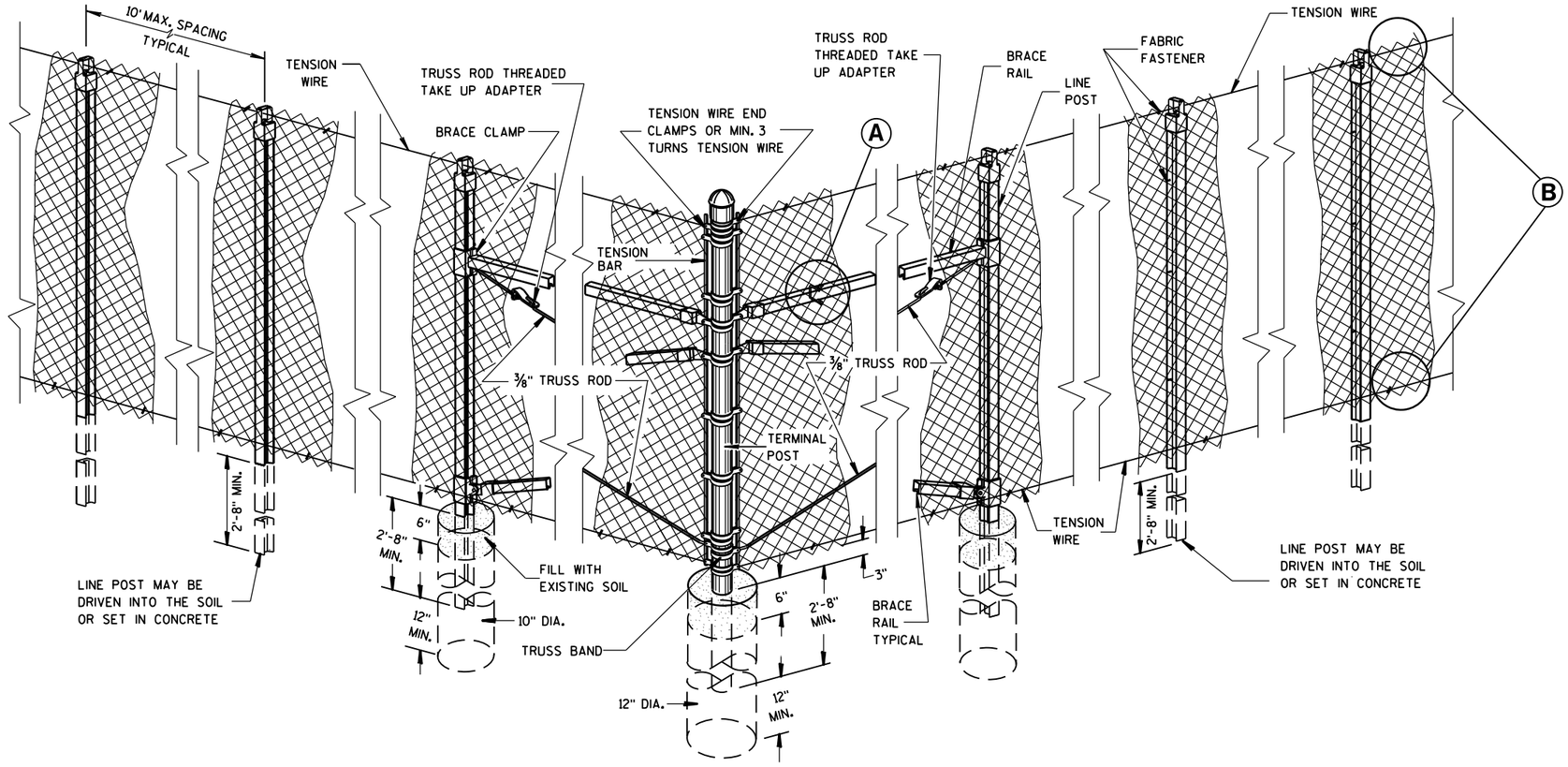
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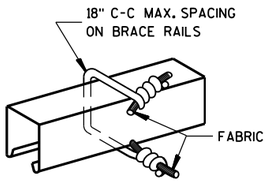


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



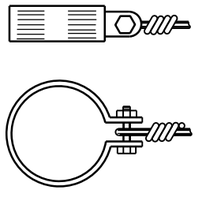
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



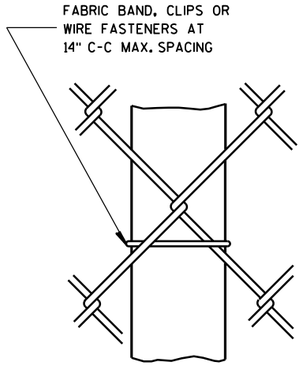
BRACE RAIL

FABRIC FASTENER

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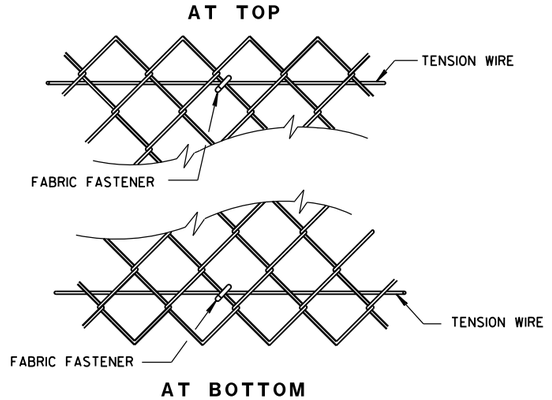
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

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FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

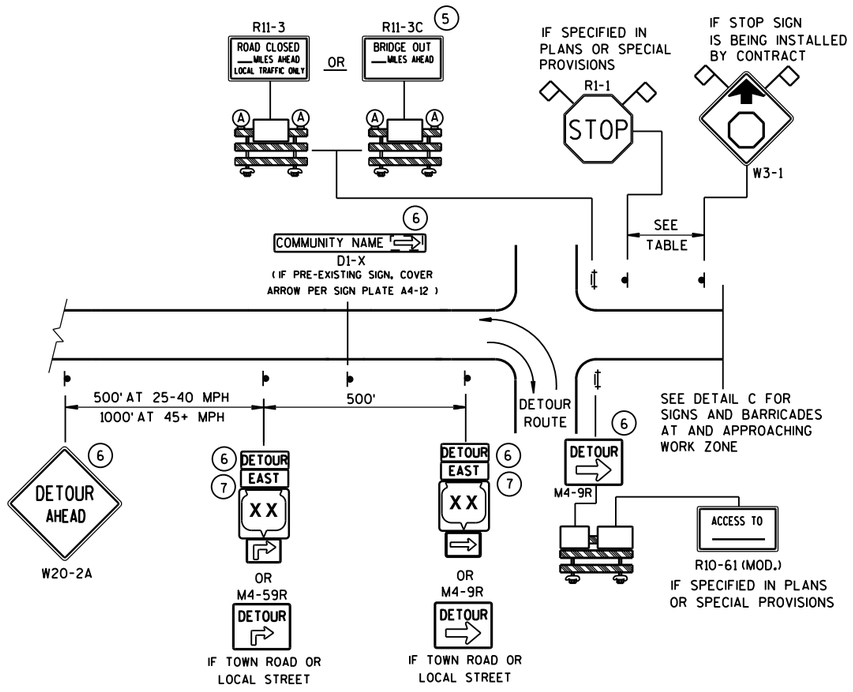
APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 15 B 3-15b

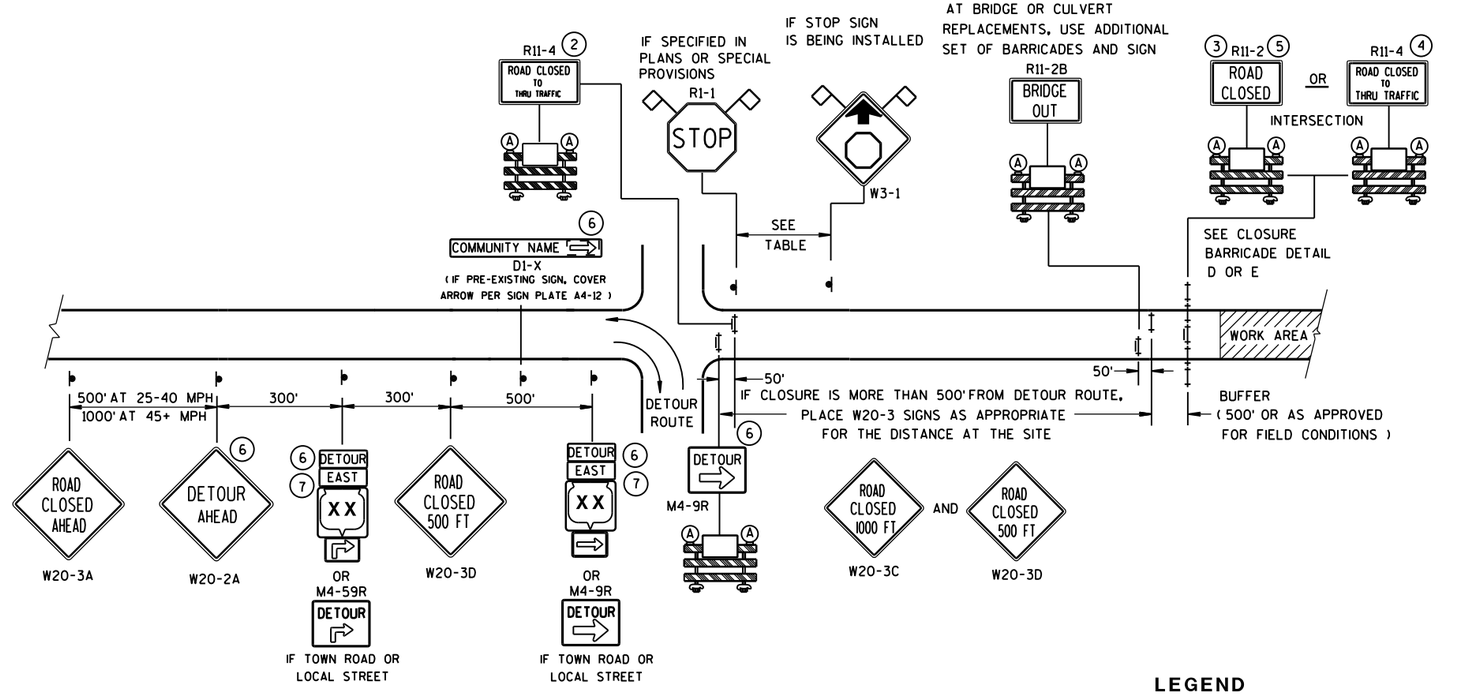
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S.D.D. 15 B 3-15b



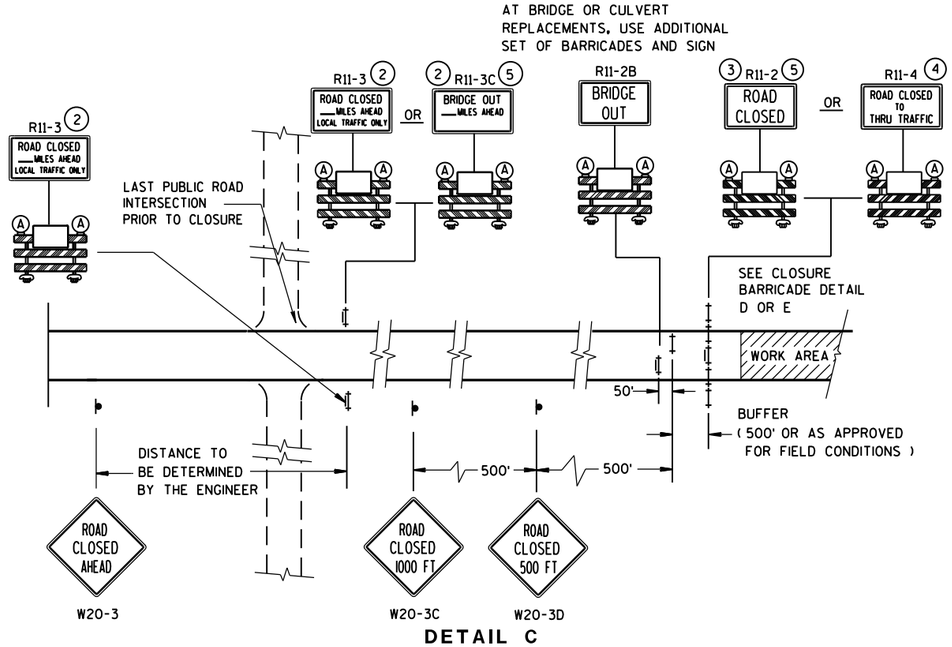
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**"
FOR GENERAL NOTES
AND FOOTNOTES (1) THROUGH (7)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (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)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

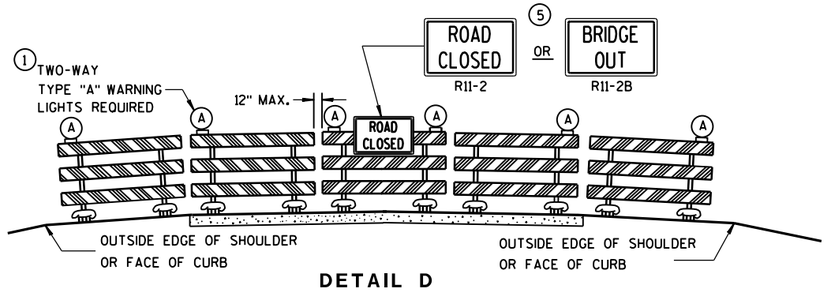
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

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S.D.D. 15 C 2-6a

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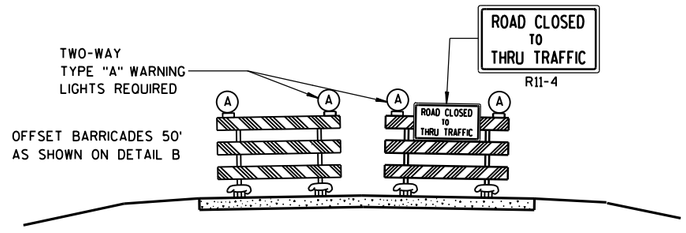
S.D.D. 15 C 2-6a



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

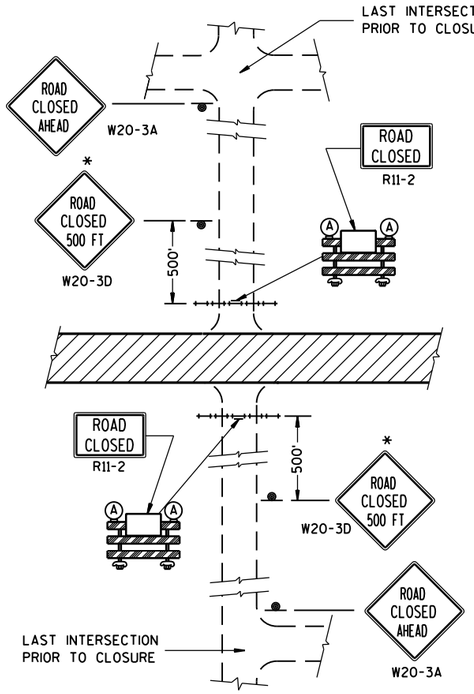
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] FIC
SAFETY ENGI[illegible]
FHWA

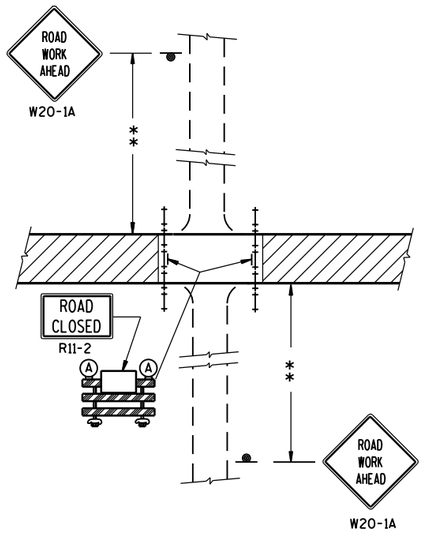
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S.D.D. 15 C 2-6b



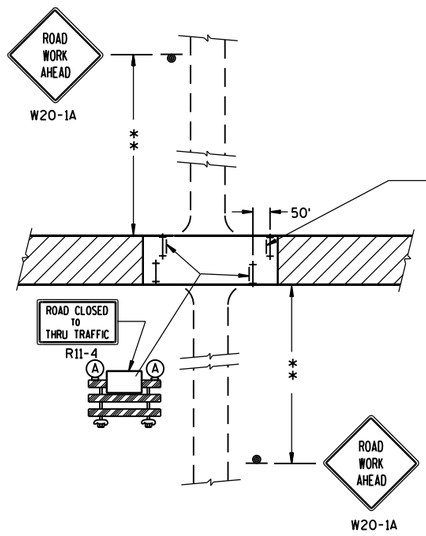
DETAIL 1

(NO ACCESS TO PROJECT)



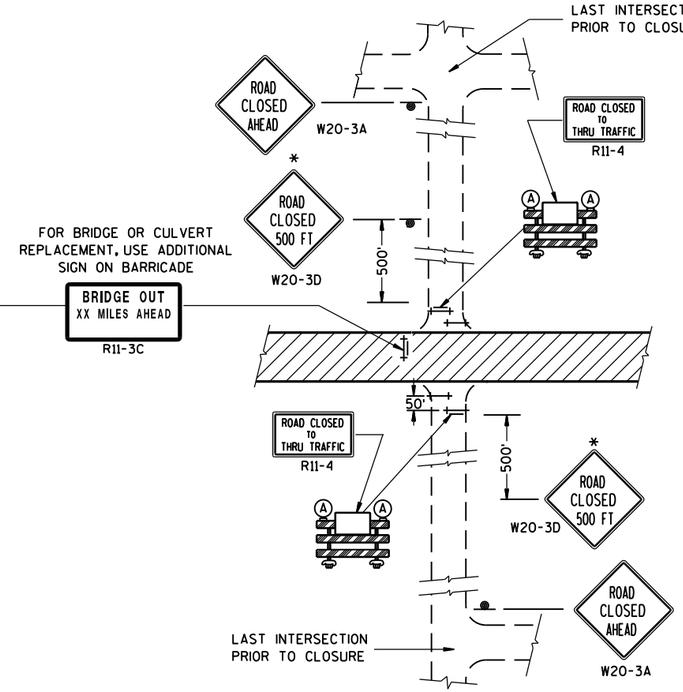
DETAIL 2

(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

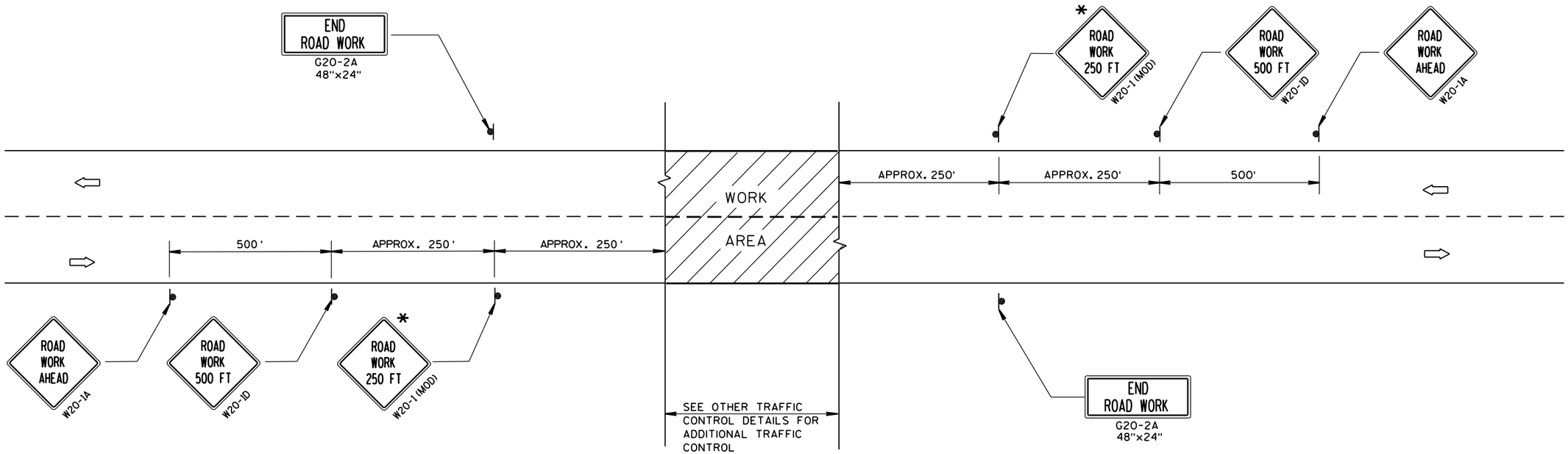
APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO... SAFETY ENGI... — FHWA

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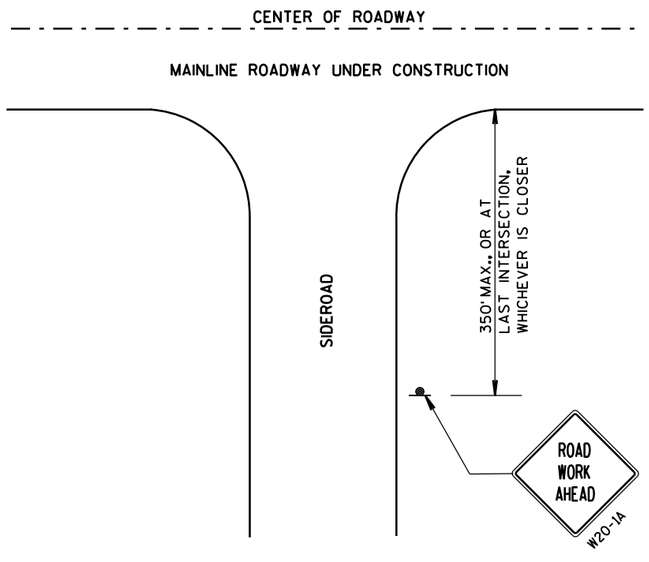
S.D.D. 15 C 3-3

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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

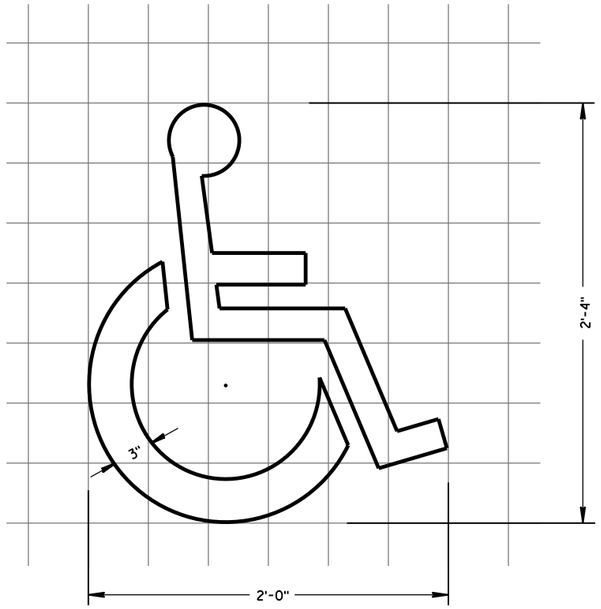
APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

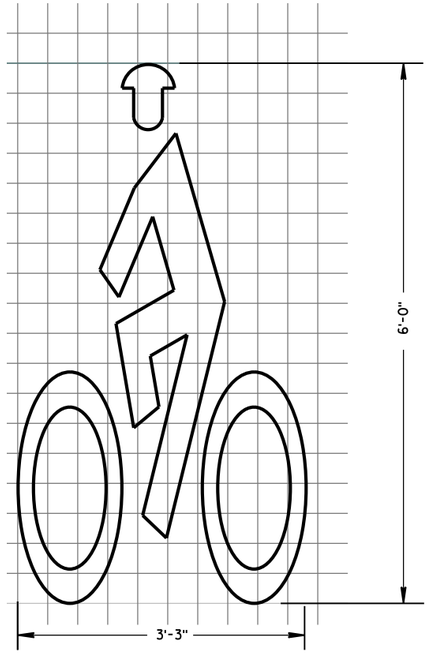
6

S.D.D. 15 C 5-3

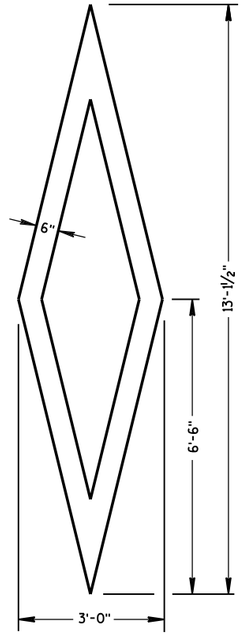
GENERAL NOTES

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.





BIKE CROSSING SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

S.D.D. 15 C 7-13a

S.D.D. 15 C 7-13a

PAVEMENT MARKING SYMBOLS

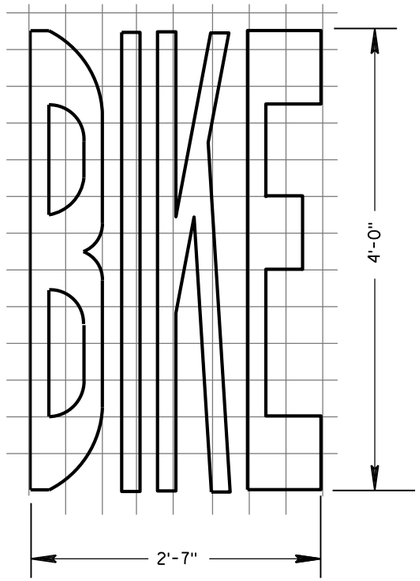
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

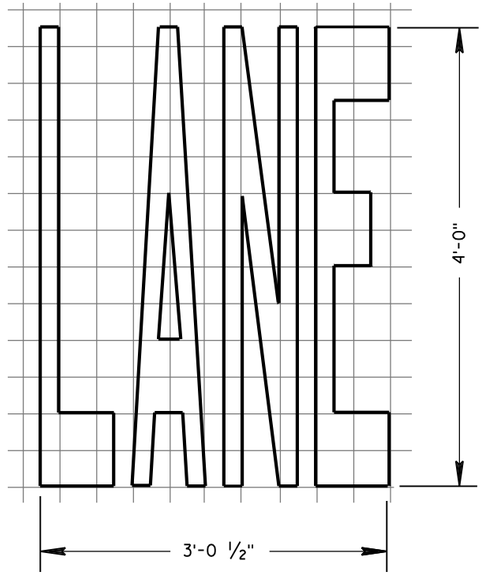
APPROVED

4/18/16 — DATE

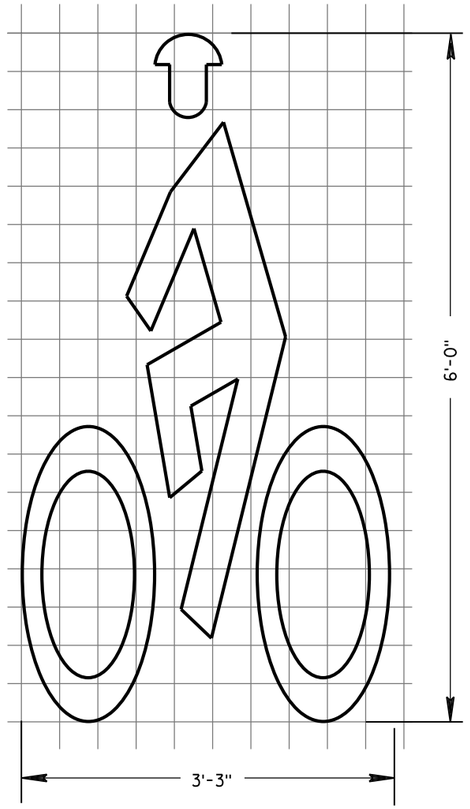
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

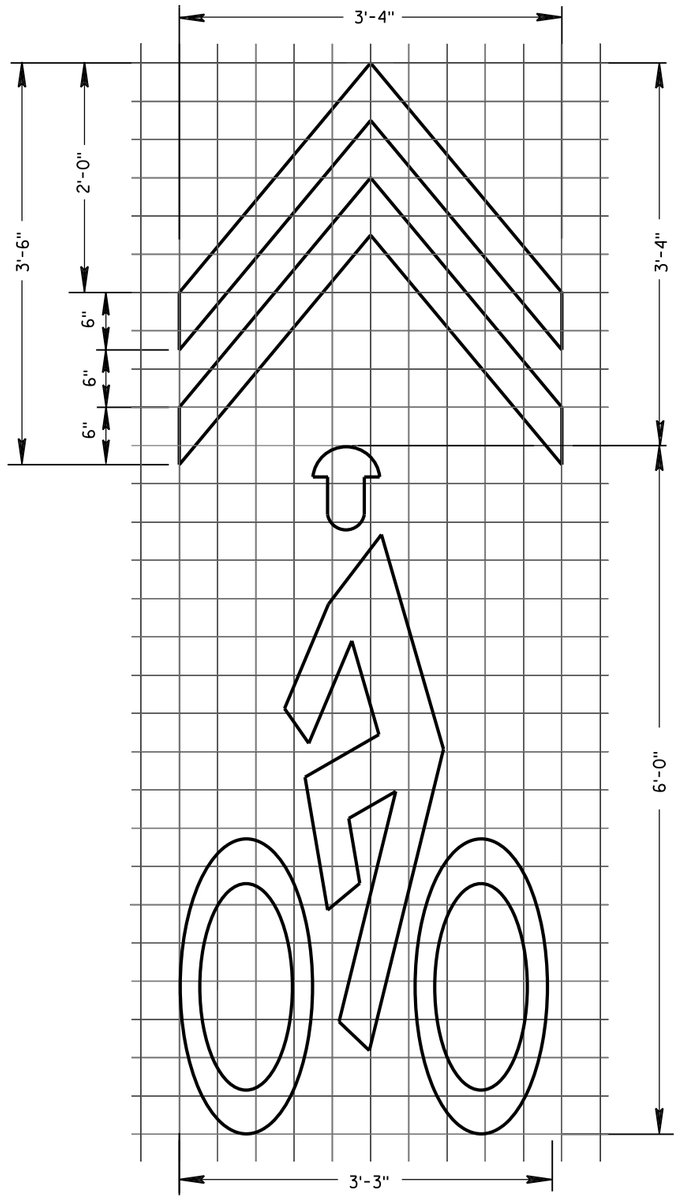




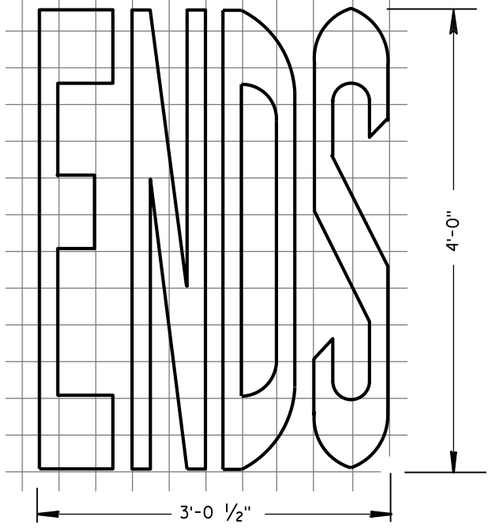
BIKE LANE WORDS



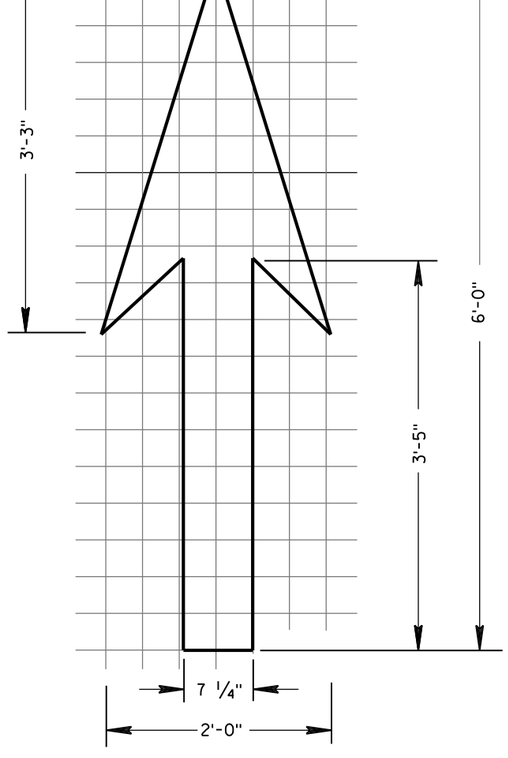
BIKE LANE SYMBOL



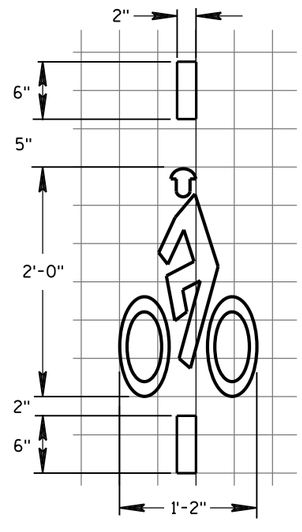
BIKE SYMBOL FOR SHARED LANE



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

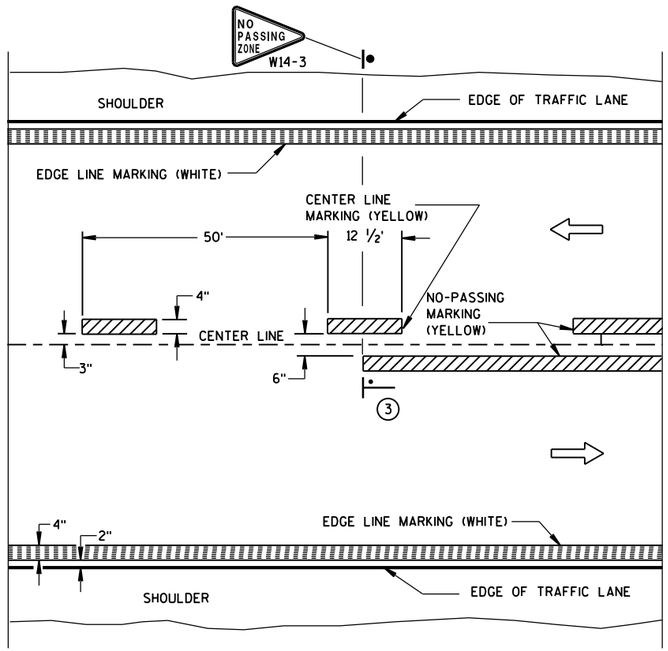
FHWA

6

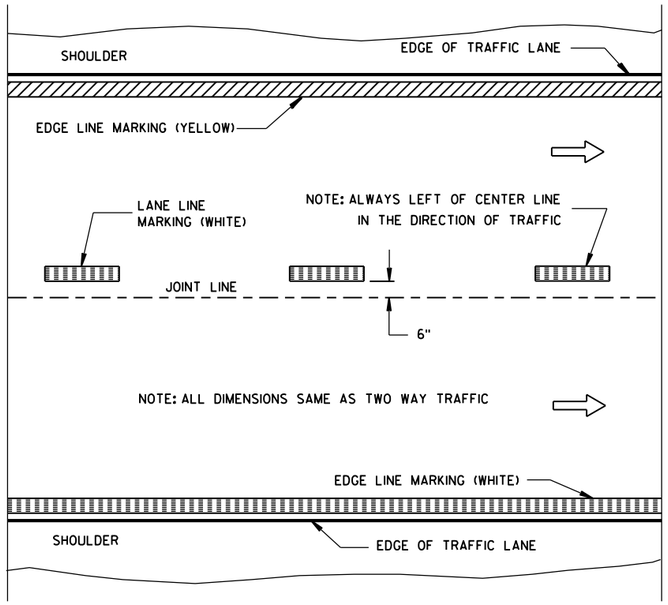
S.D.D. 15 C 7-13e

6

S.D.D. 15 C 7-13e



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

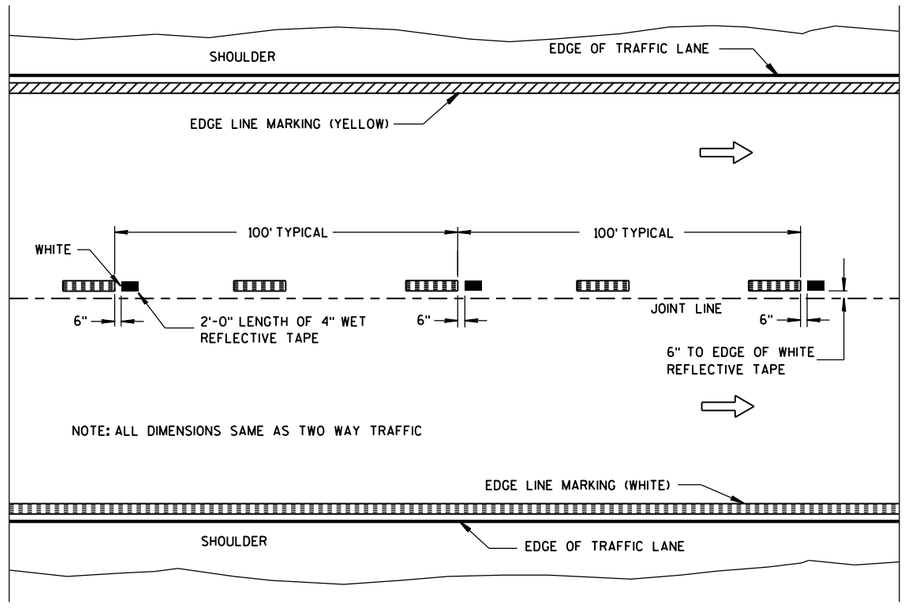
GENERAL NOTES

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

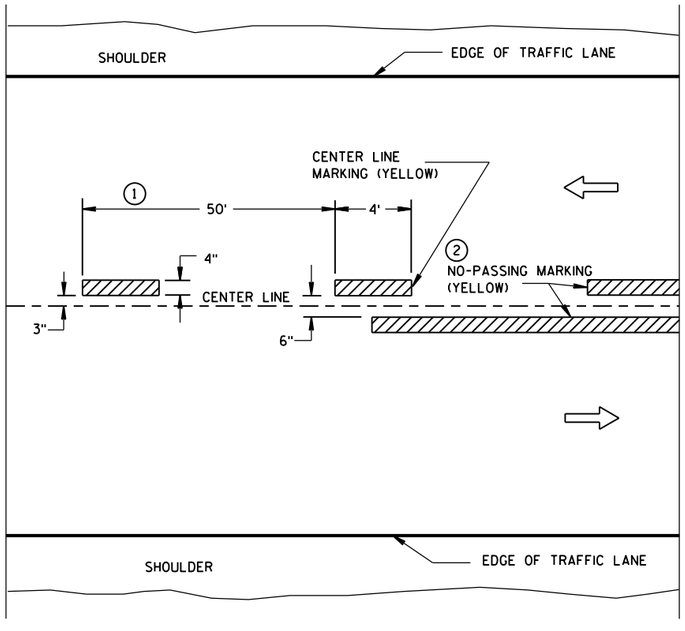
1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

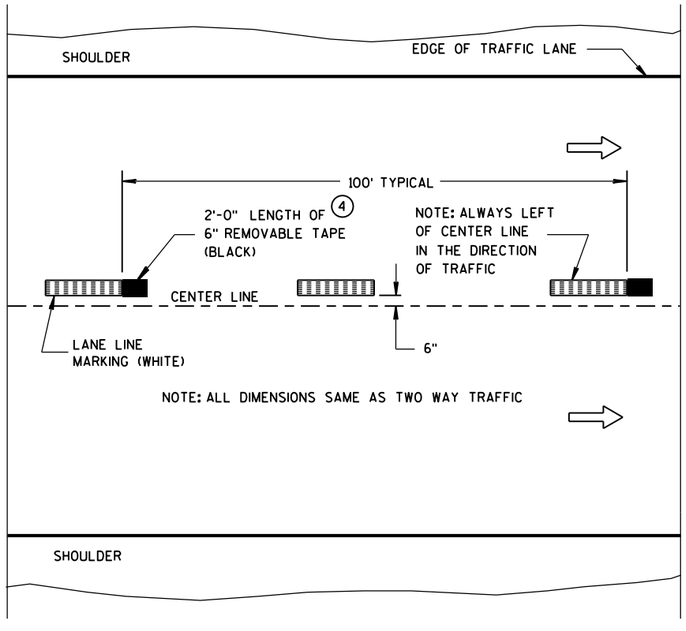
ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 8-16a

6

S.D.D. 15 C 8-16a

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

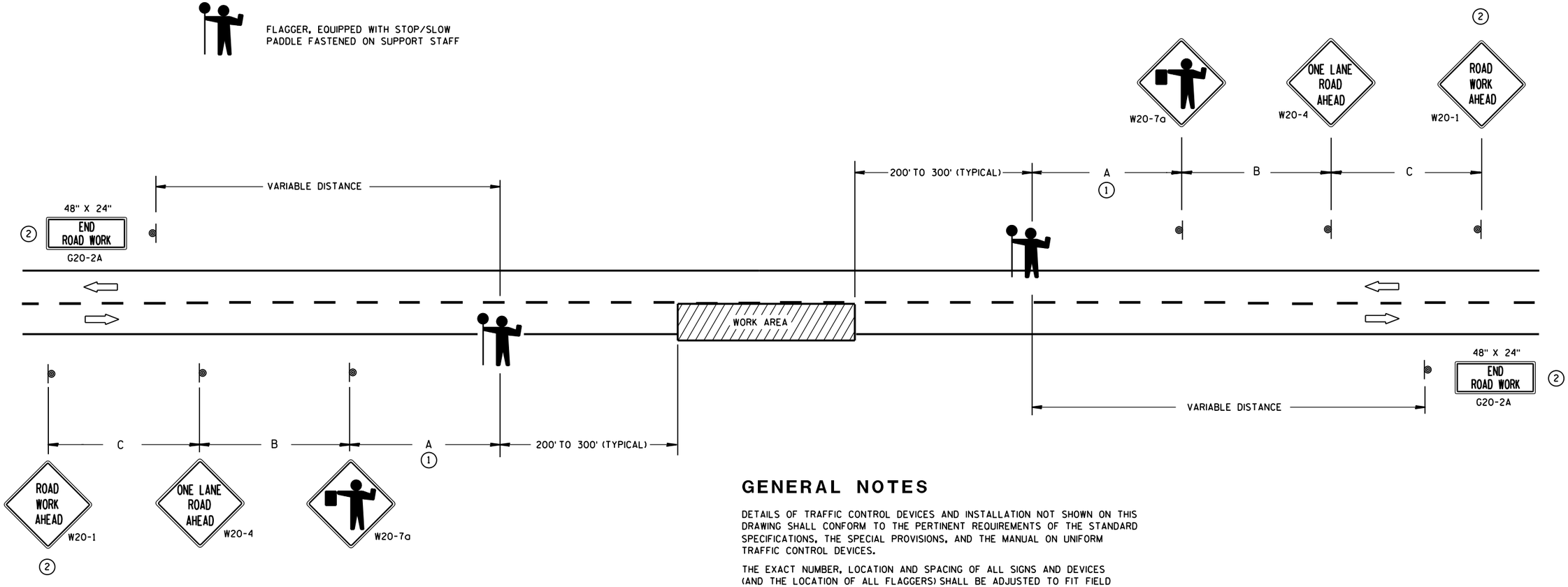
SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 12-4

6

S.D.D. 15 C 12-4

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

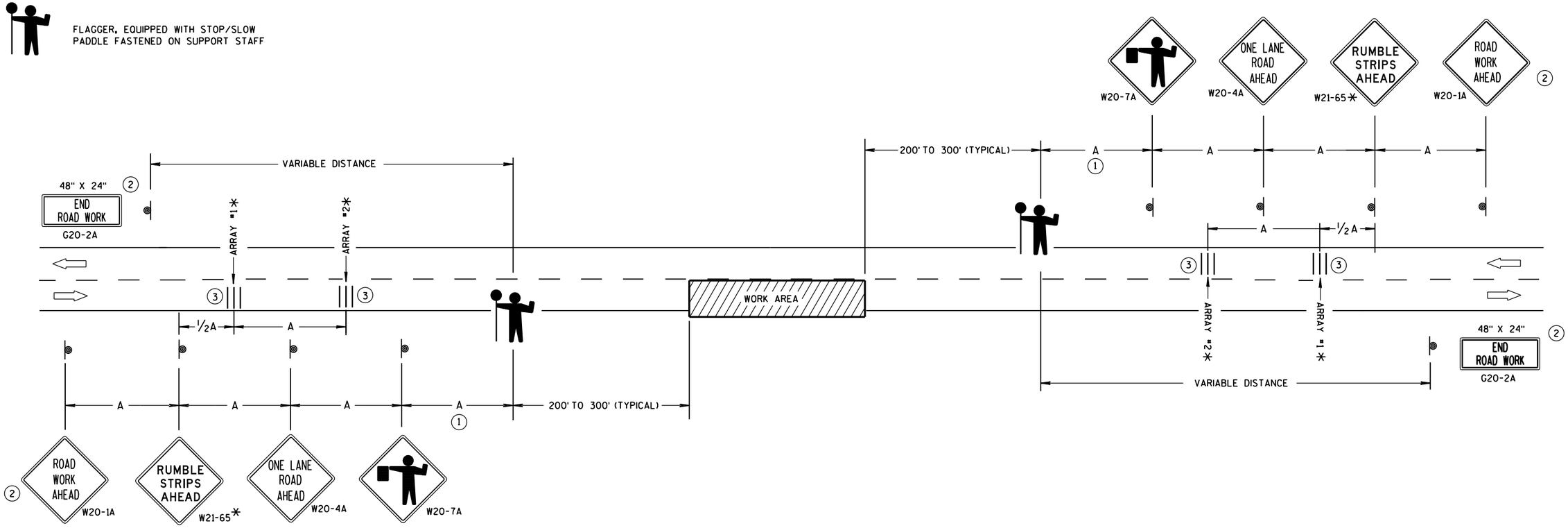
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

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

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

(1) FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

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

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

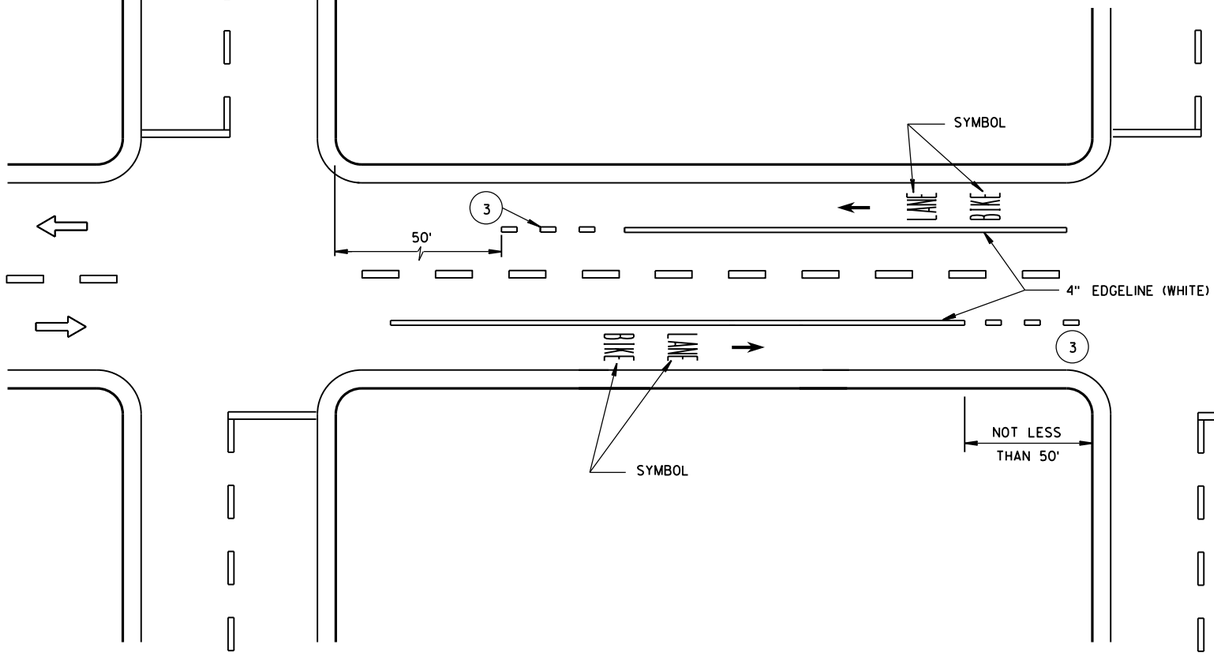
APPROVED
December, 2016 — /S/ Andrew Heldtke
DATE — WORK ZONE ENG
FHWA

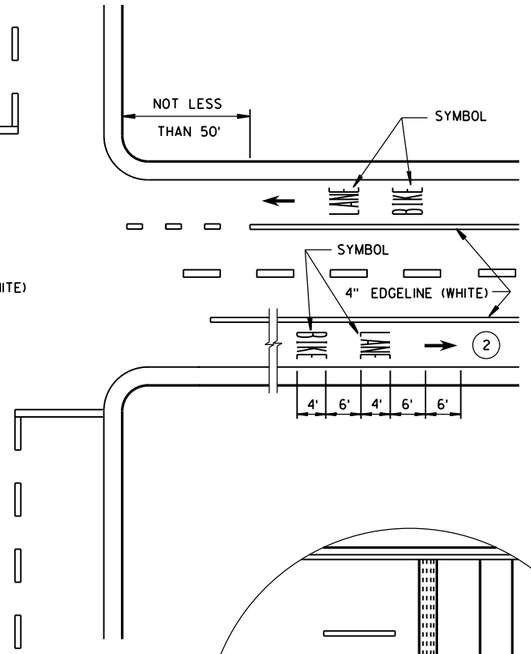
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S.D.D. 15 C 12-5

6

S.D.D. 15 C 12-5



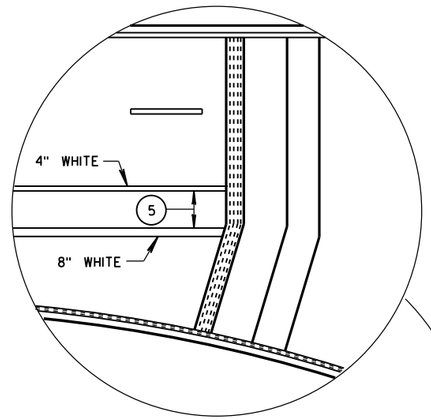


DESIGNATED BICYCLE LANE
NO PARKING

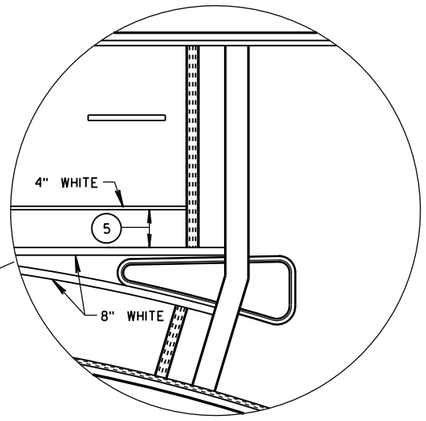
GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3'LINE, 9'GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMODATION FOR CONCRETE PAVEMENT IS 5 FEET WIDE. BIKE ACCOMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4 FEET. USE 5 FEET AT ≥45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FEET WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

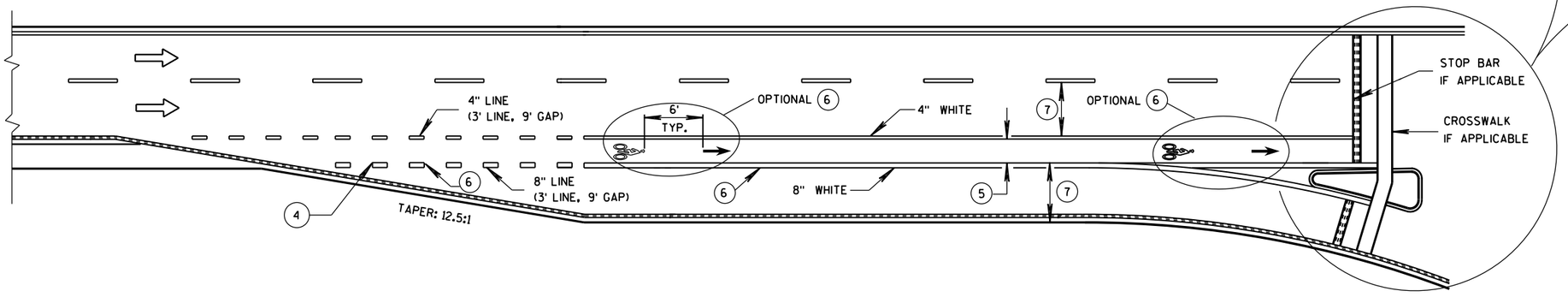
⇨ DIRECTION OF TRAVEL



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS
(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

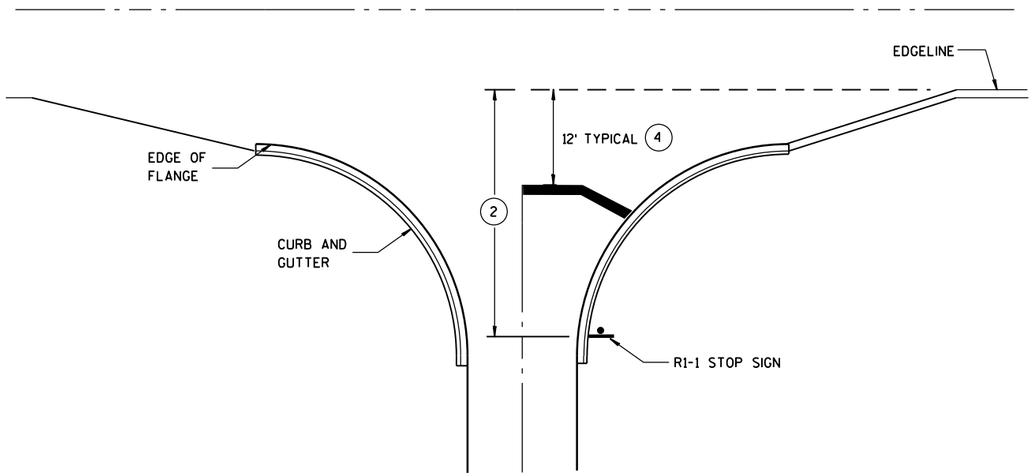
BICYCLE LANE MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12-2016 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	

6

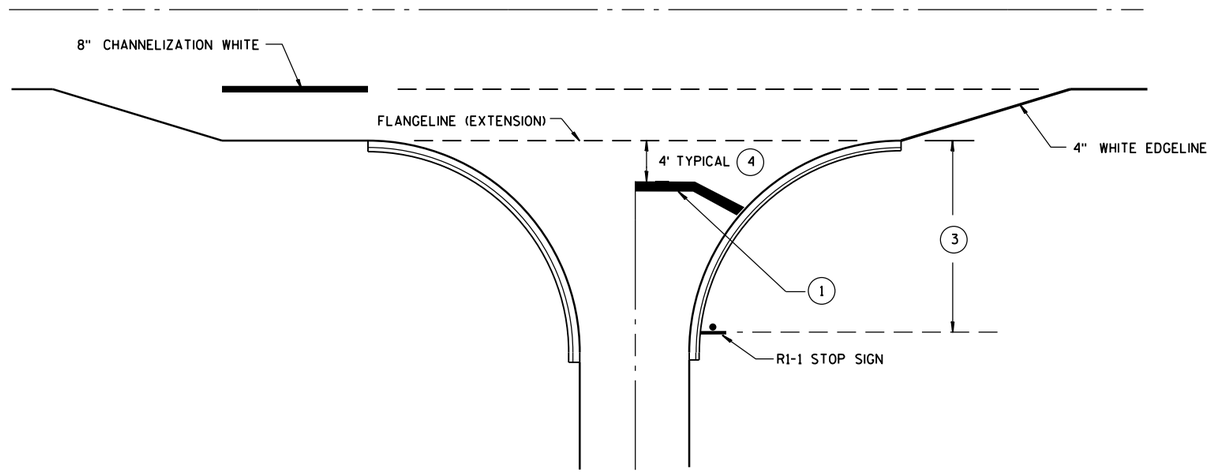
S.D.D. 15 C 29-5a

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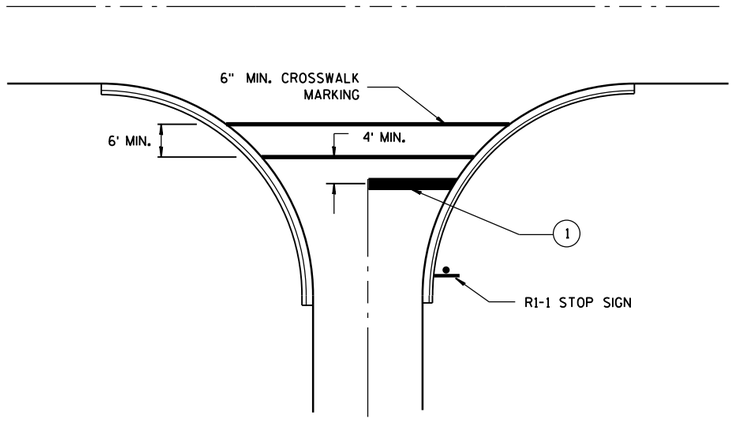
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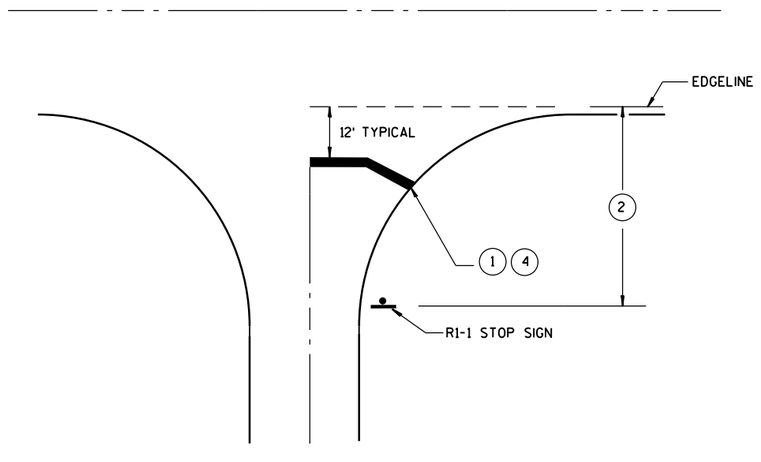
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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

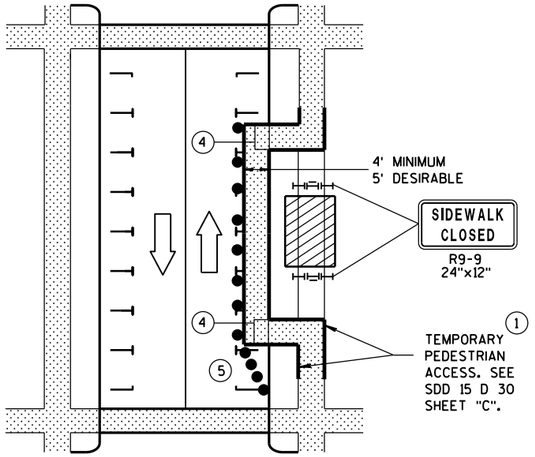
/S/ Matthew R. Rauch
STATE SIGNING AND MAR 211 NEER

FHWA

6

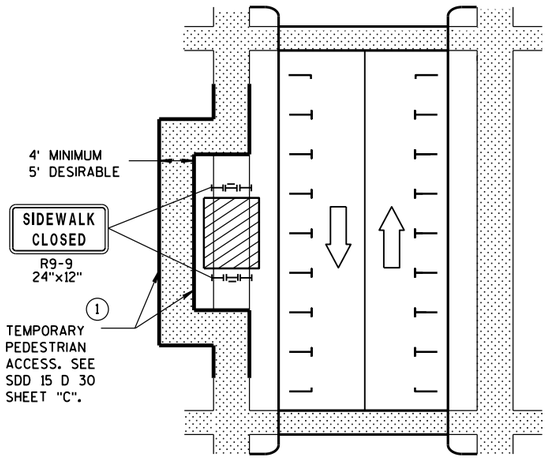
S.D.D. 15 C 33-2

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

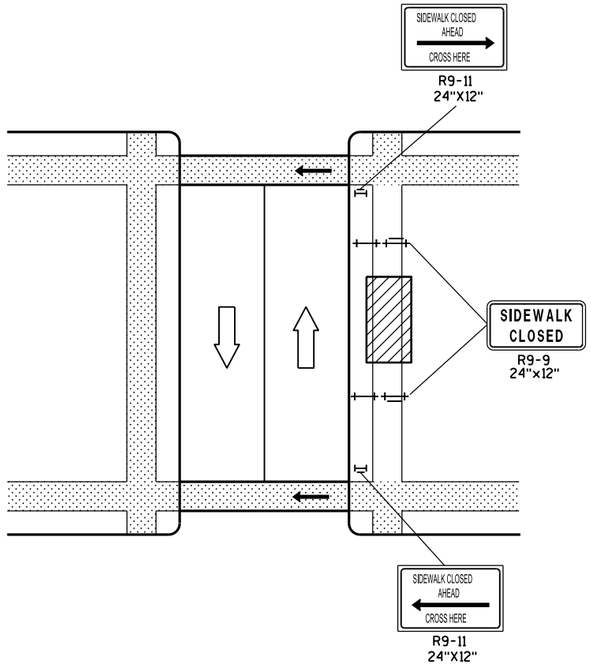


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

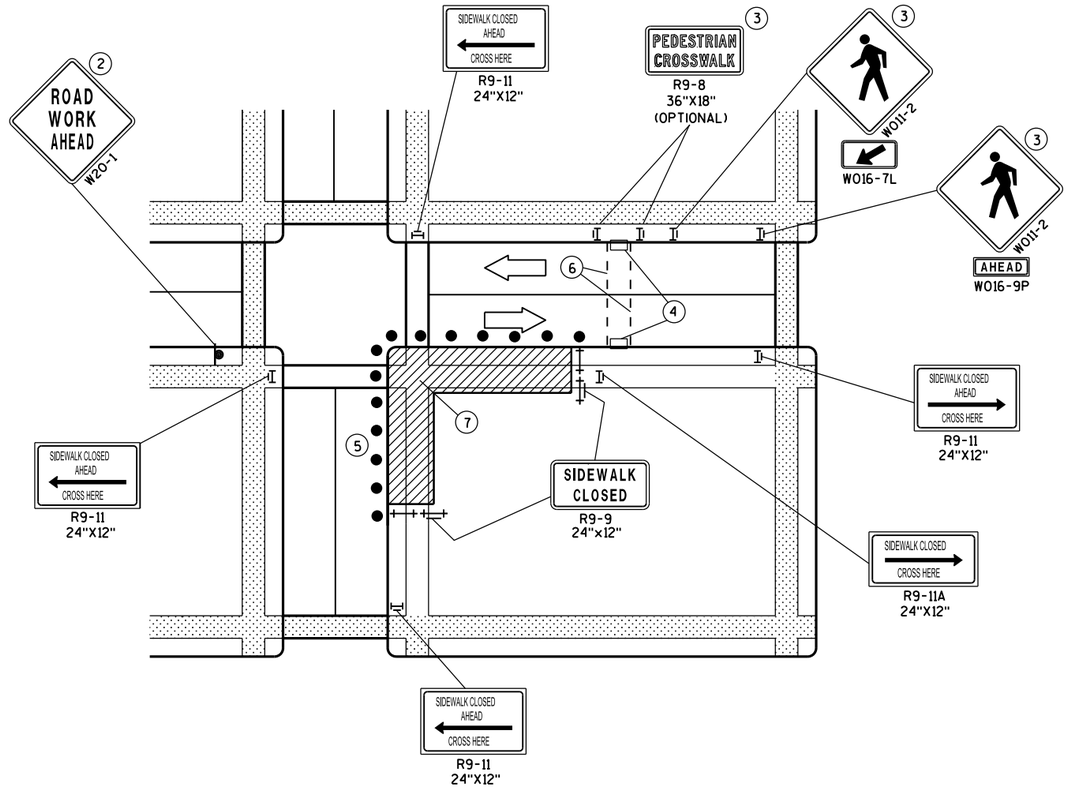
NOTE: LAYOUT SAME AS ABOVE.



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

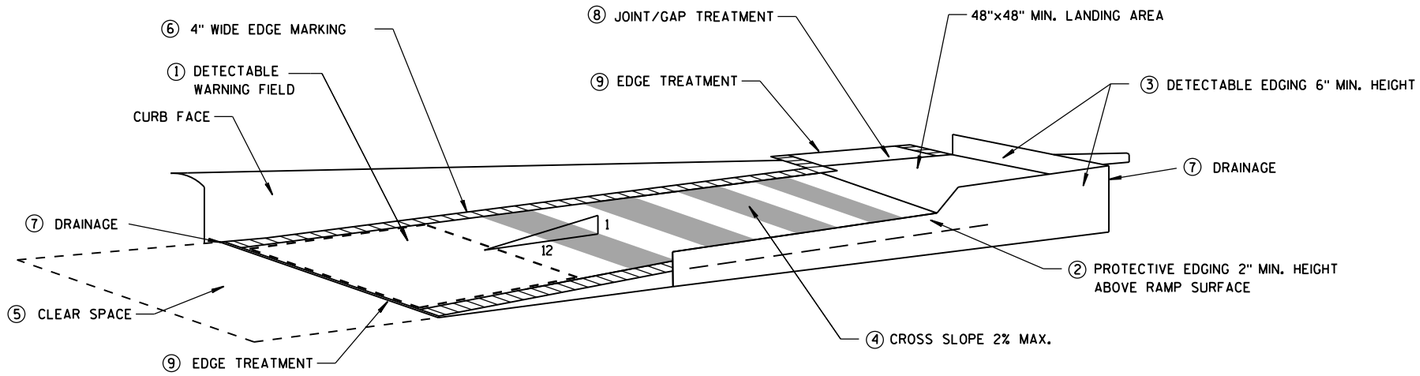
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 30-3a

6

S.D.D. 15 D 30-3a



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.

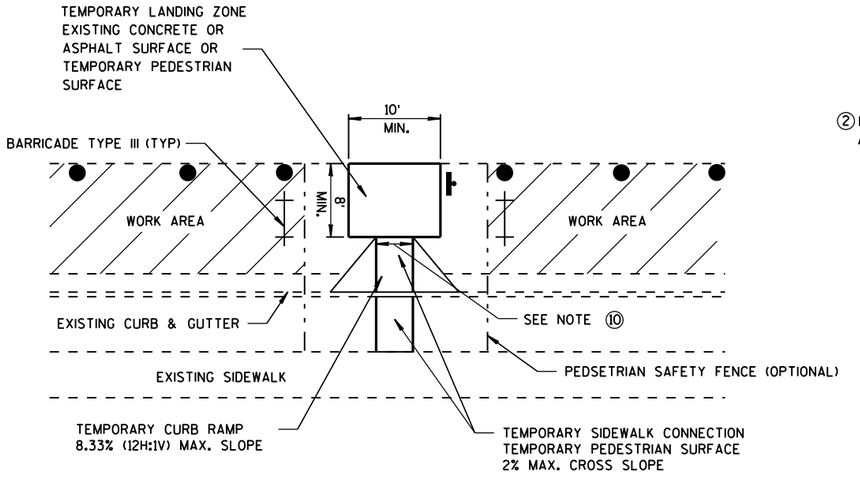
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

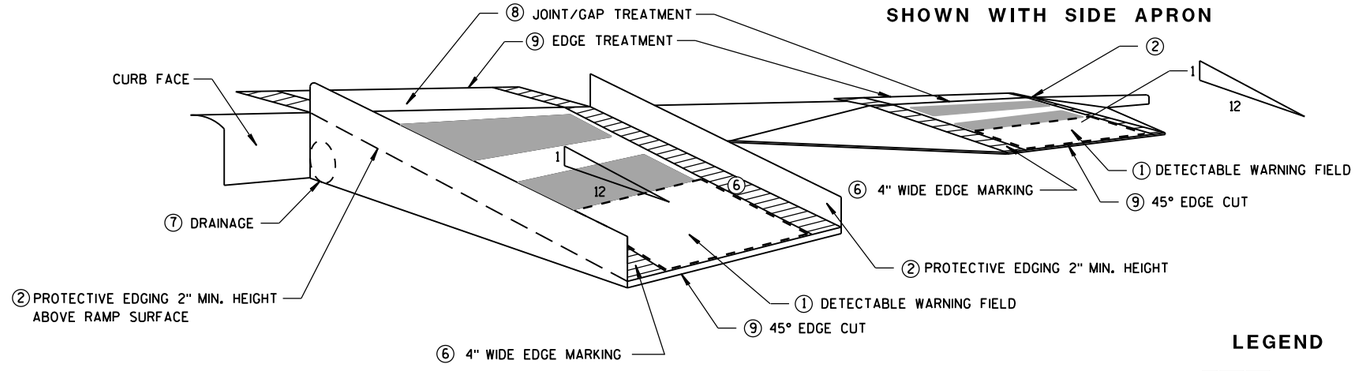
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

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

SHOWN WITH SIDE APRON

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 TRAFFIC SAFETY ENGINEER

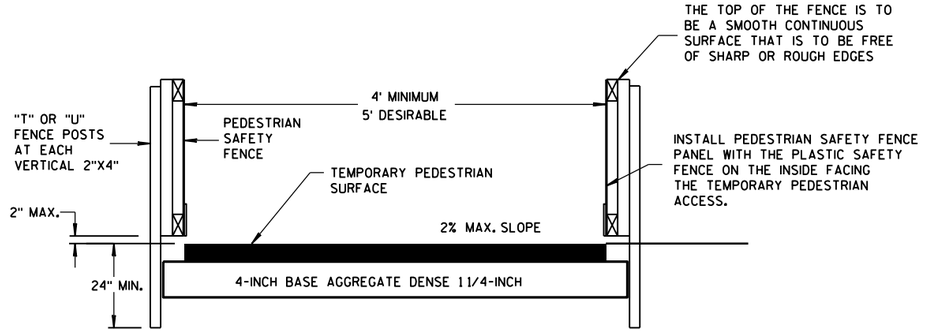
FHWA

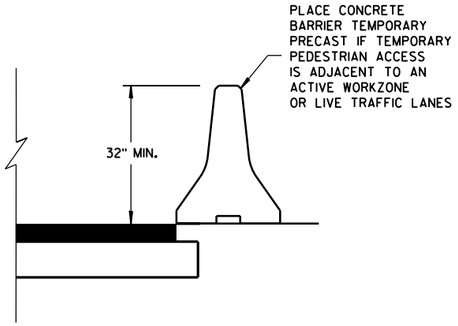
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S.D.D. 15 D 30-3b

6

S.D.D. 15 D 30-3b

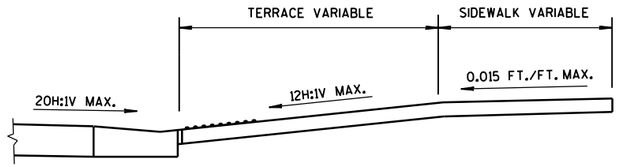




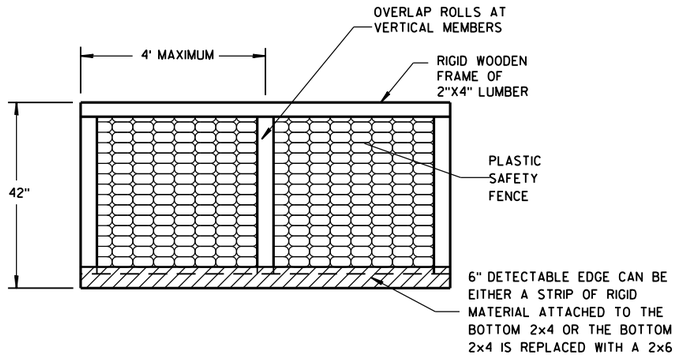
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

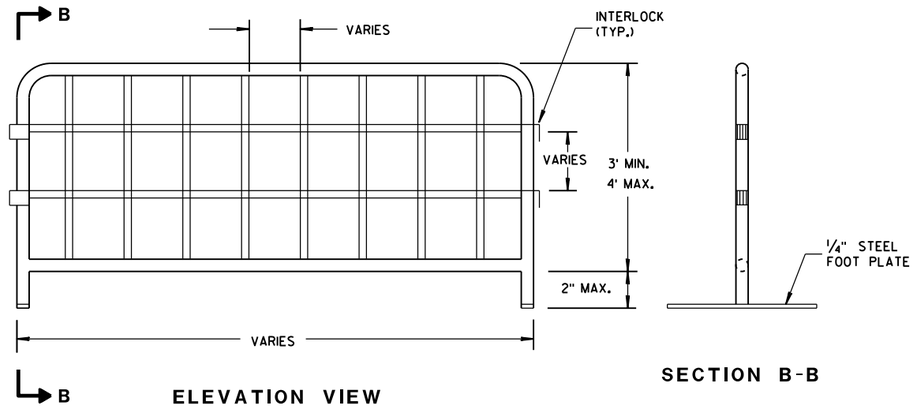
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



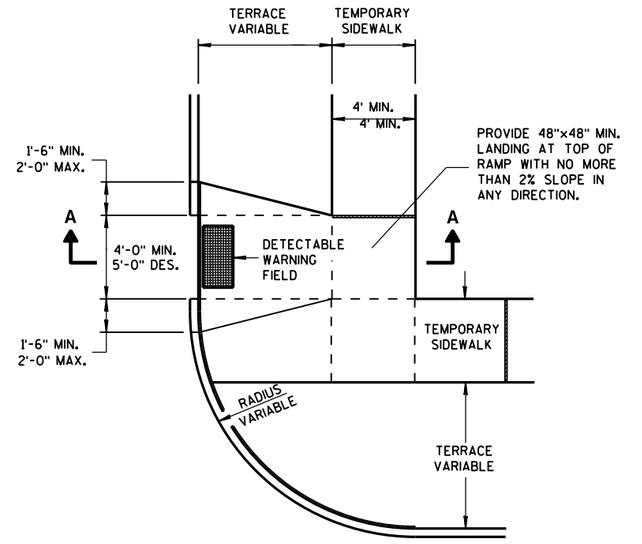
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

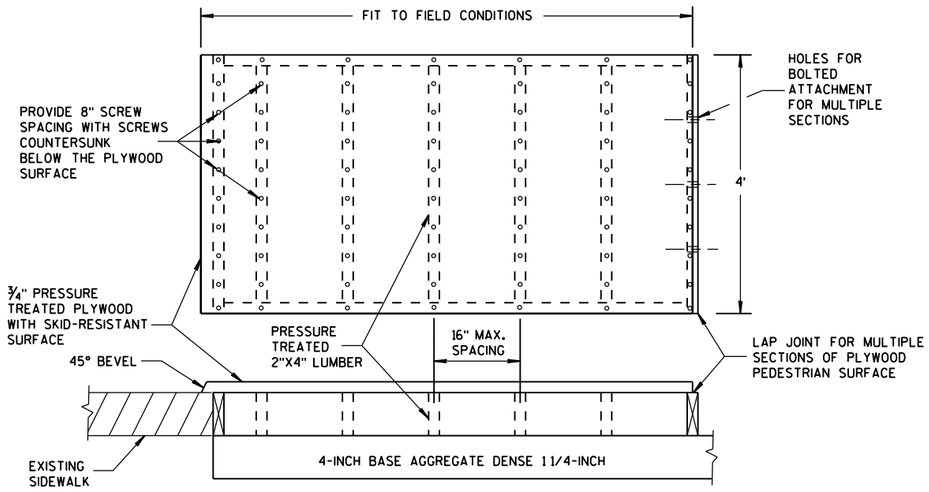
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



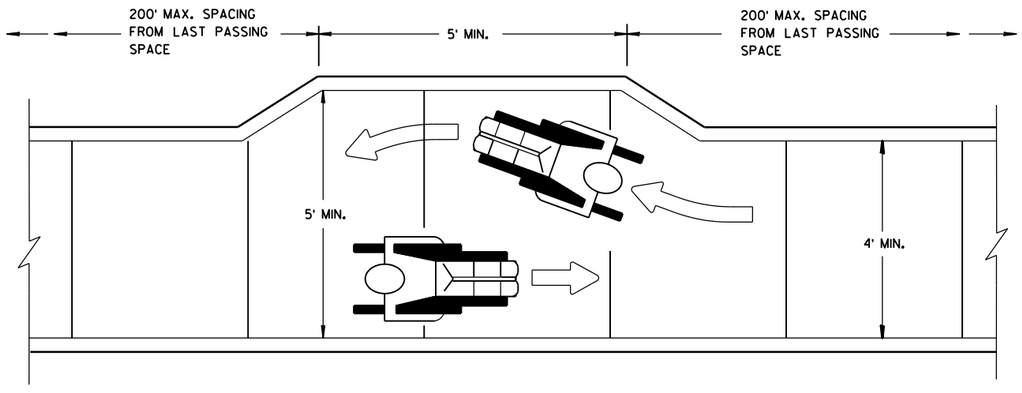
PLAN VIEW

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

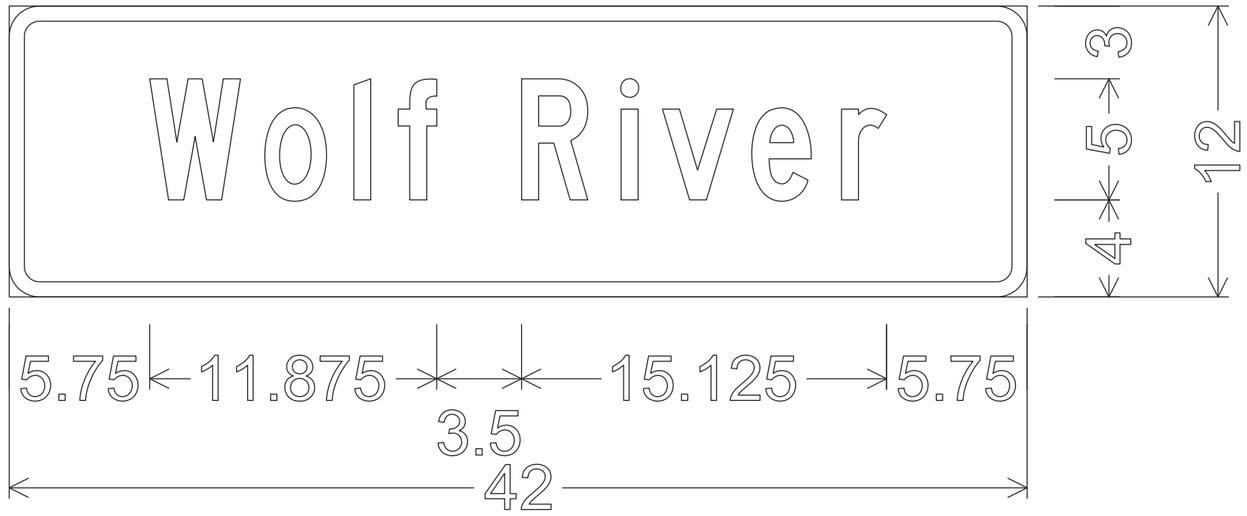
S.D.D. 15 D 30-3c

6

S.D.D. 15 D 30-3c

NOTES

1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C

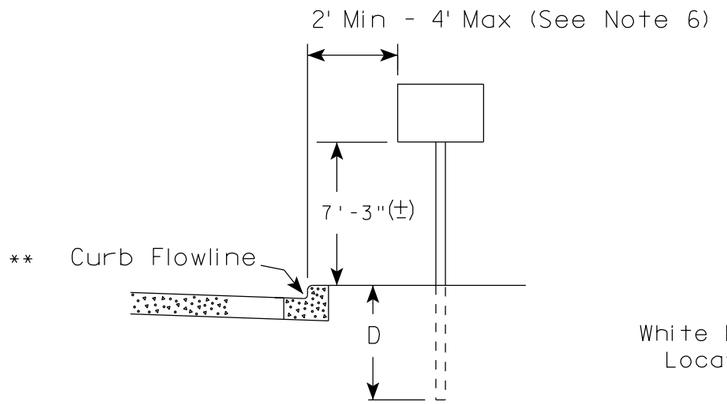


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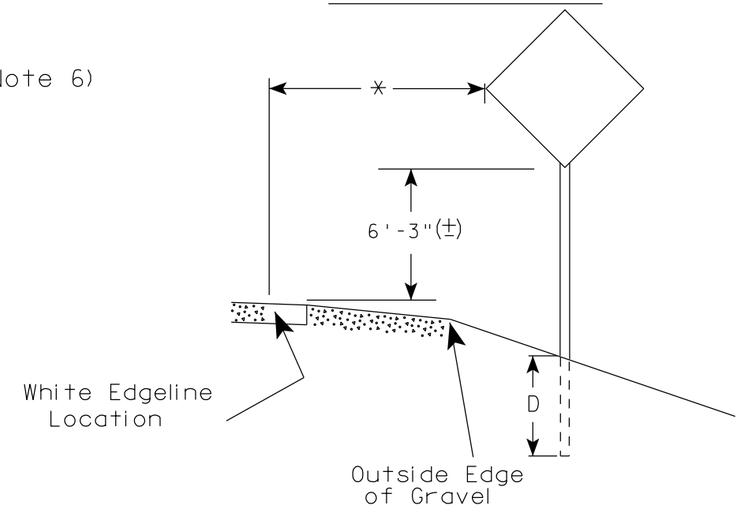
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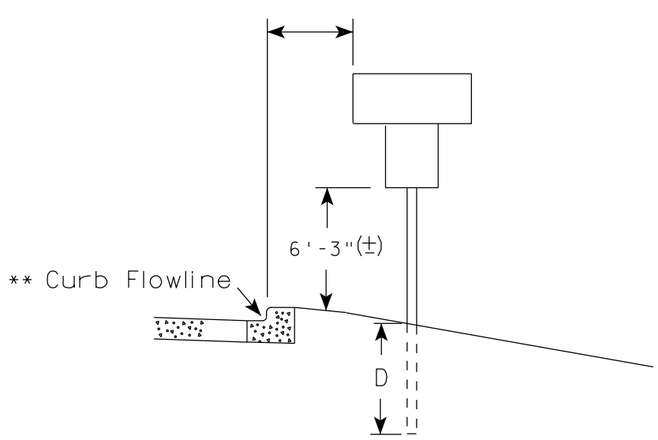
PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	PERMANENT SIGNING	SHEET NO: 215	E

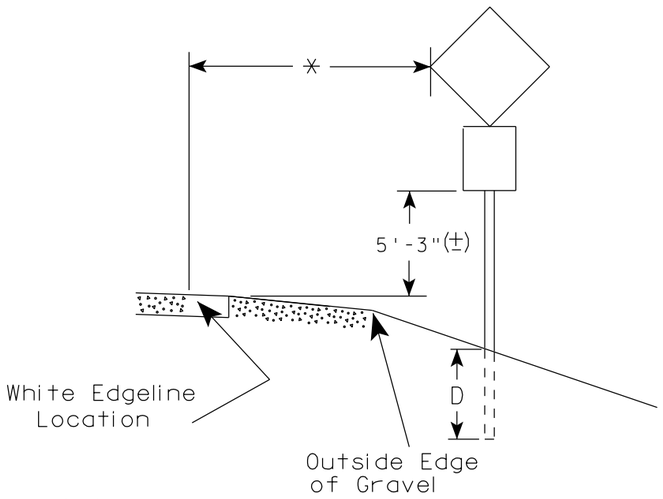
URBAN AREA



RURAL AREA (See Note 2)







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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
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" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

** 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.

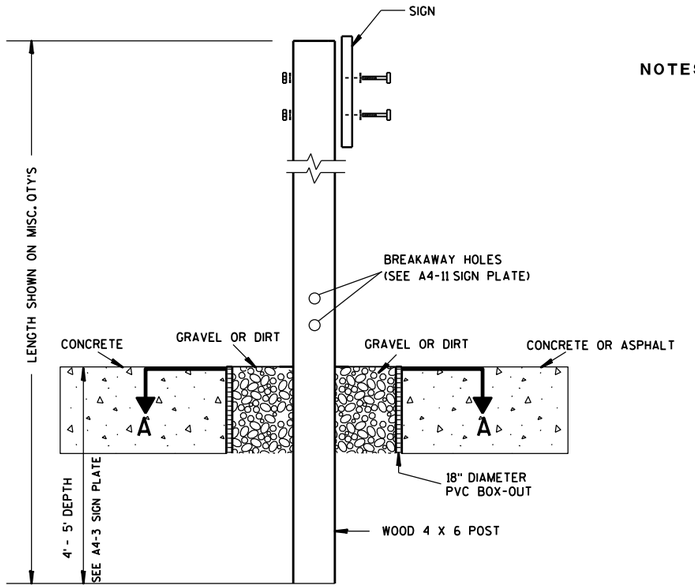
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

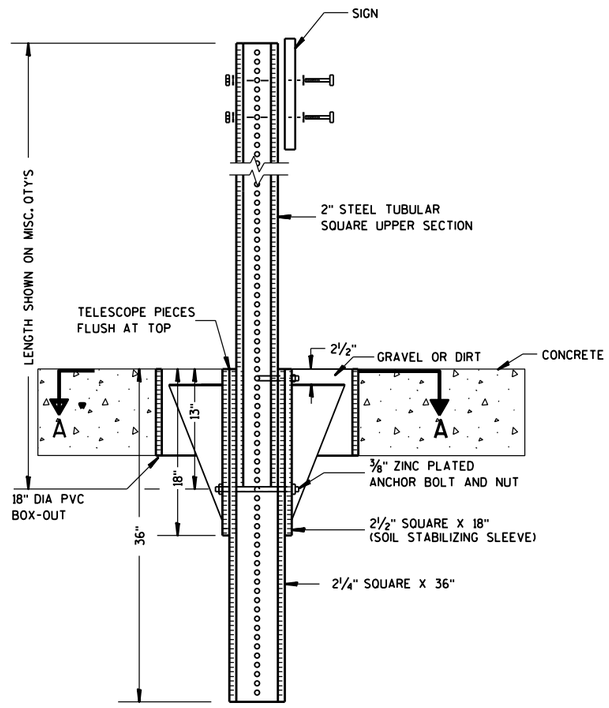
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

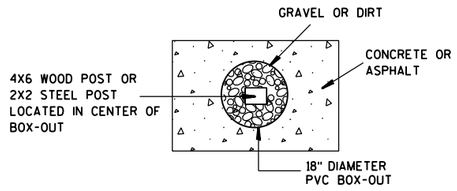
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

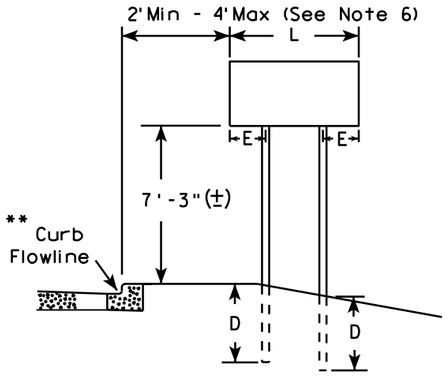
APPROVED Matthew R Rauch
for State Traffic Engineer

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

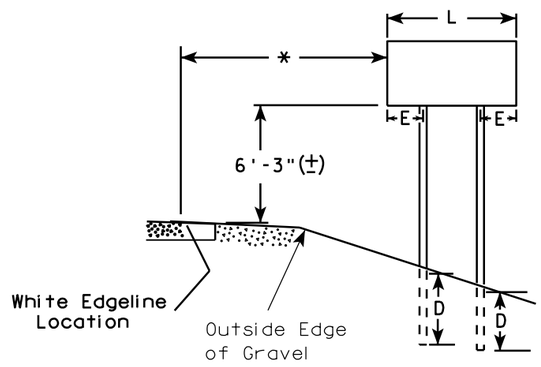
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

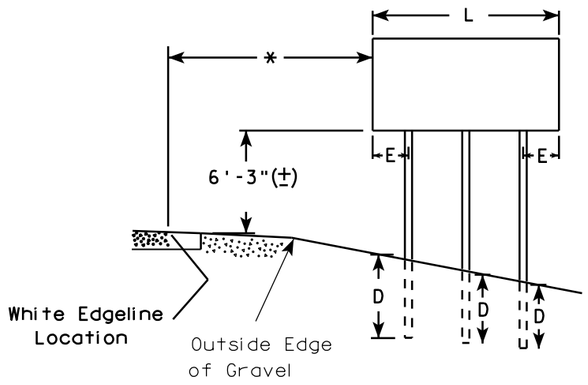
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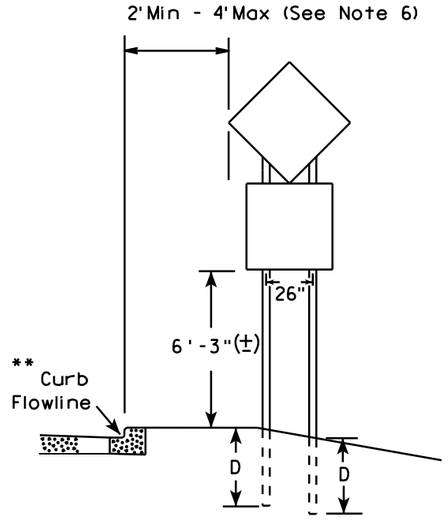
URBAN AREA



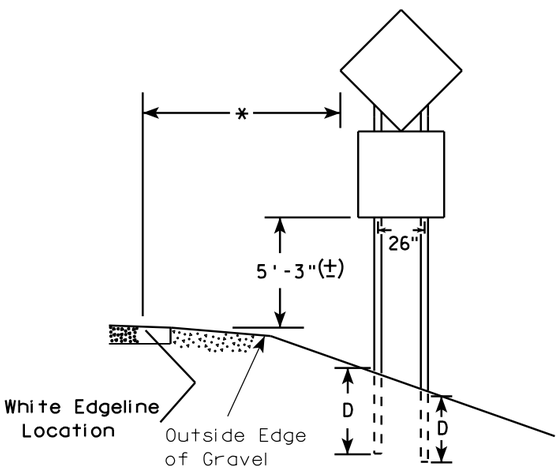
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
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.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

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

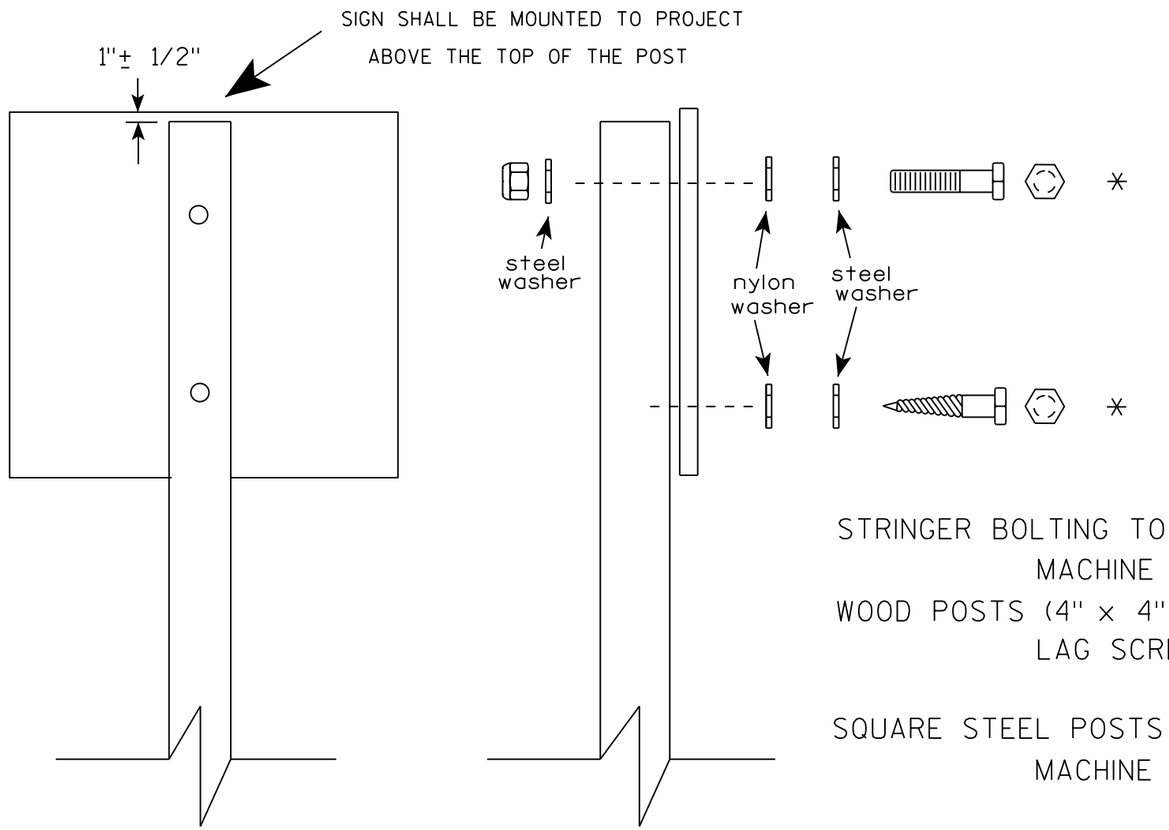
DATE 7/23/15 PLATE NO. A4-4 14

218

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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WISDOT/CADDS SHEET 42



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

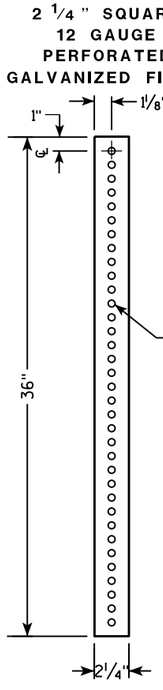
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

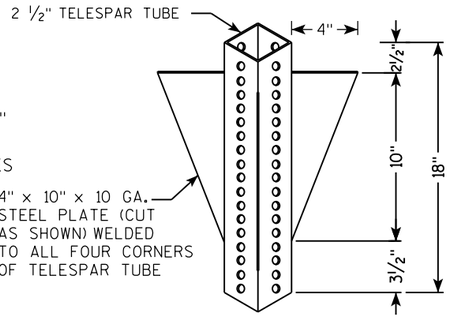
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

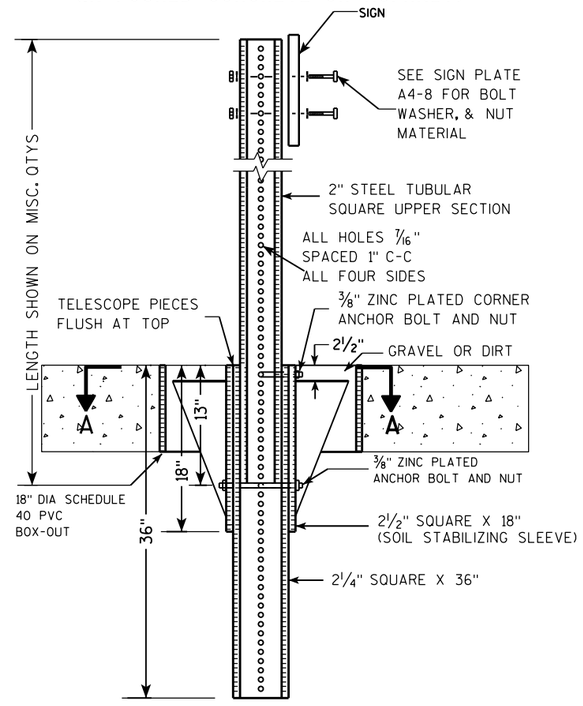
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



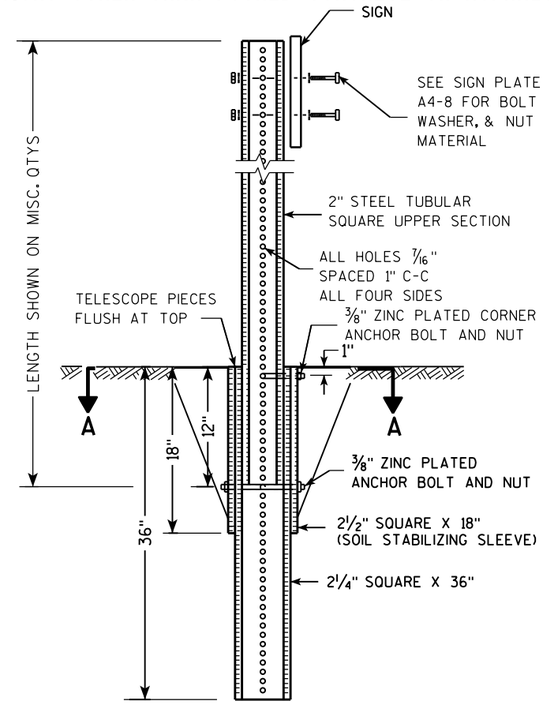
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

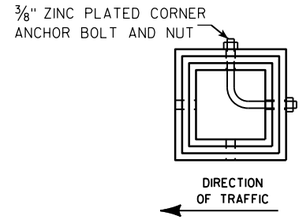


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

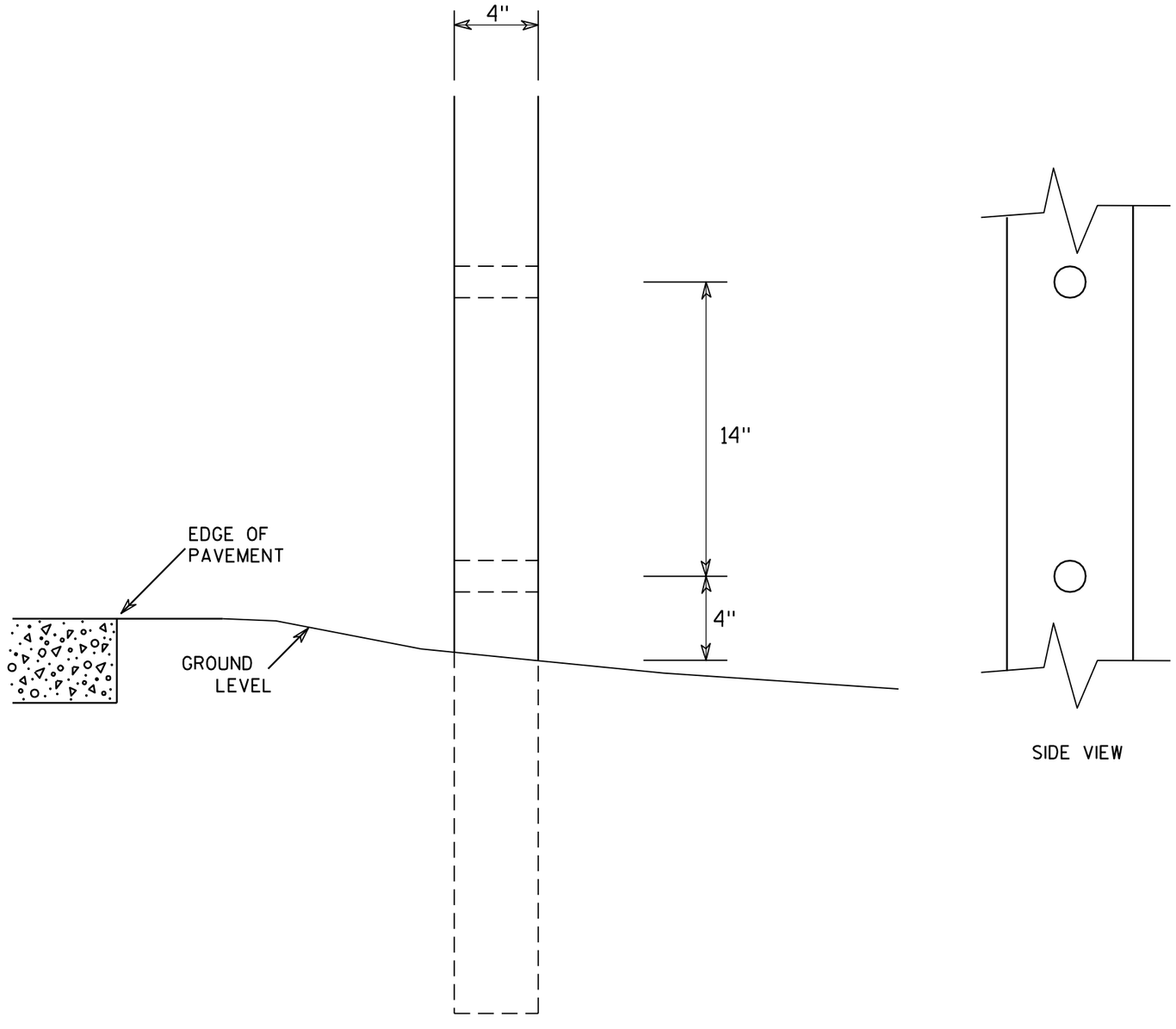
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 220 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

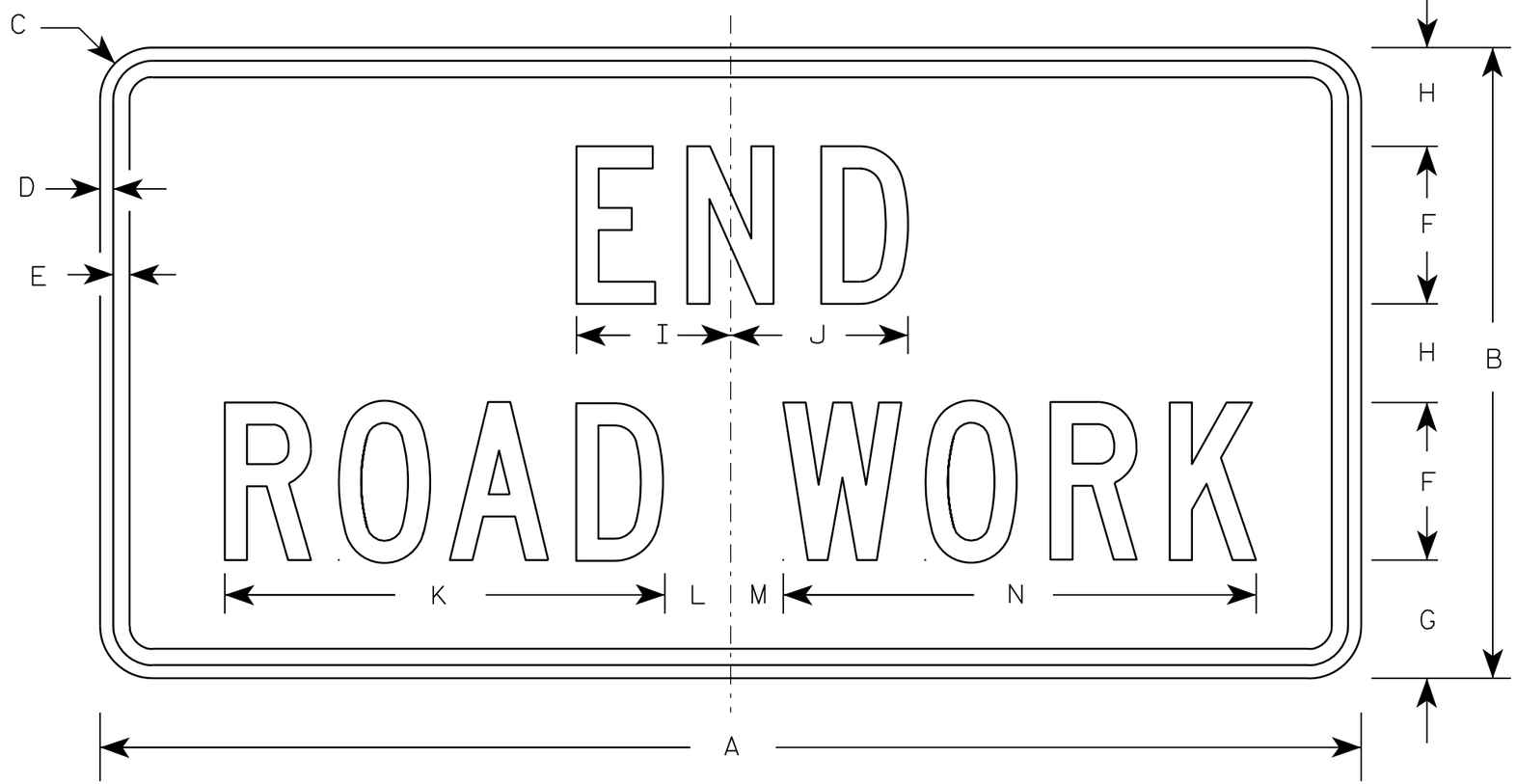
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 221	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

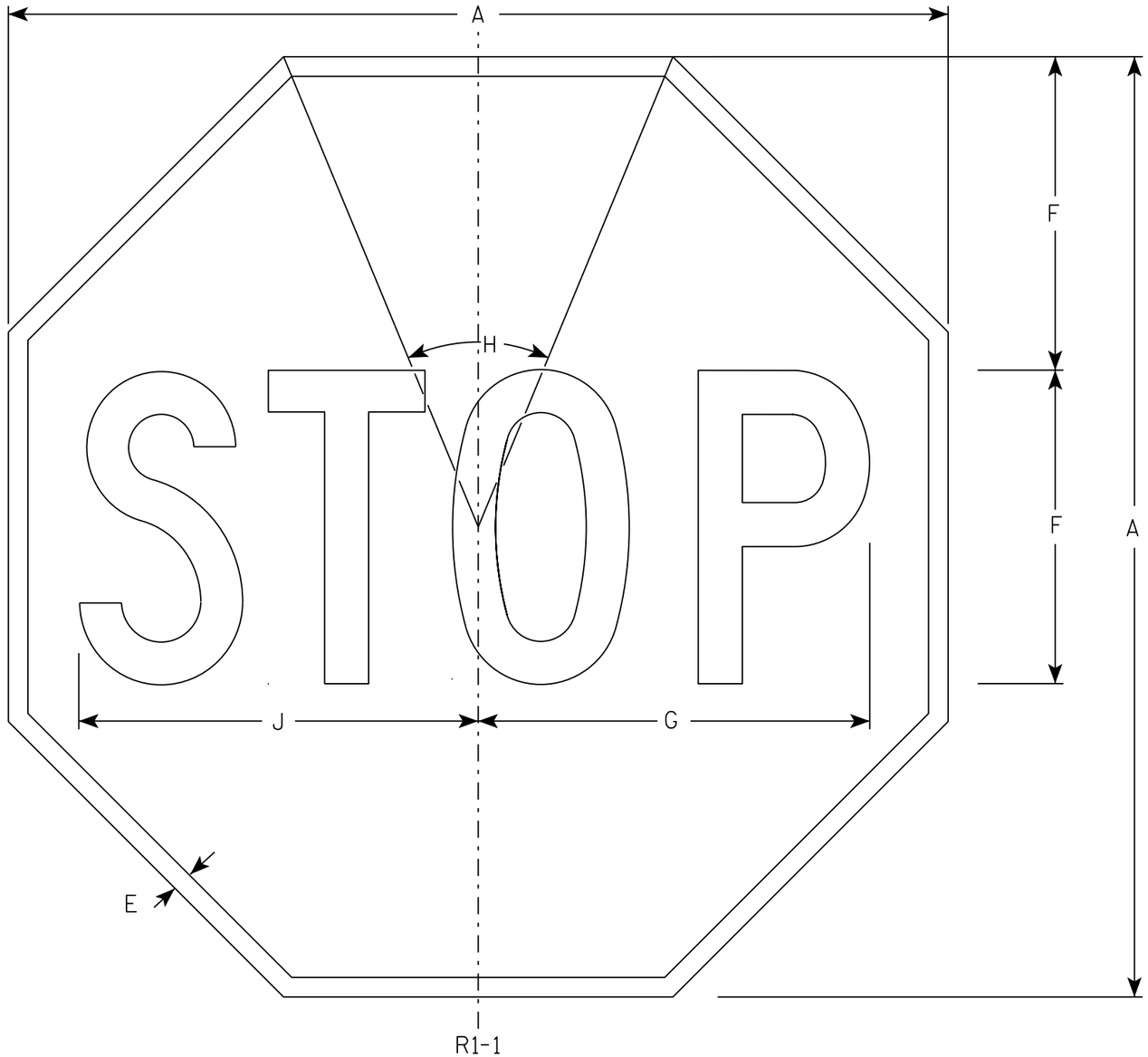
STANDARD SIGN
G20-2A

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: 222	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

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

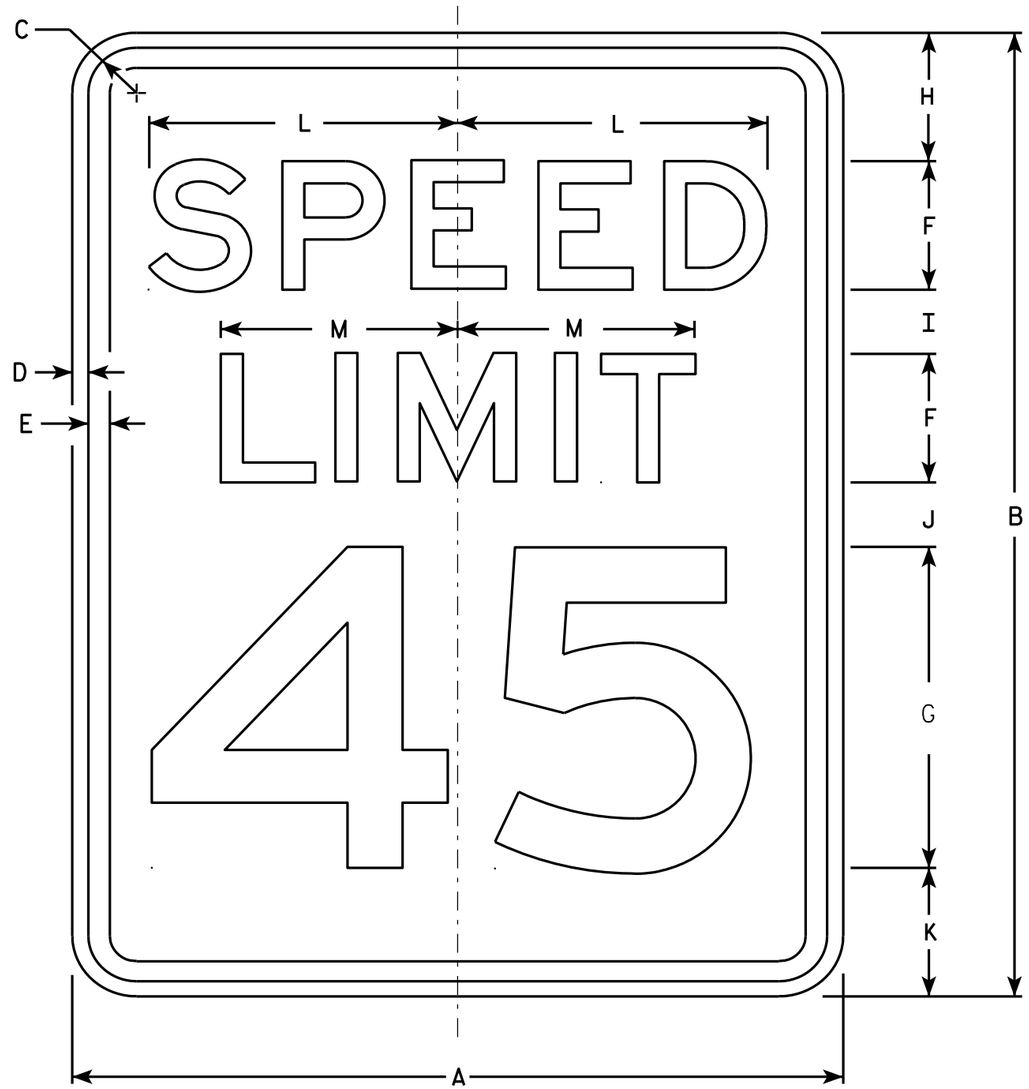
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE 223 R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

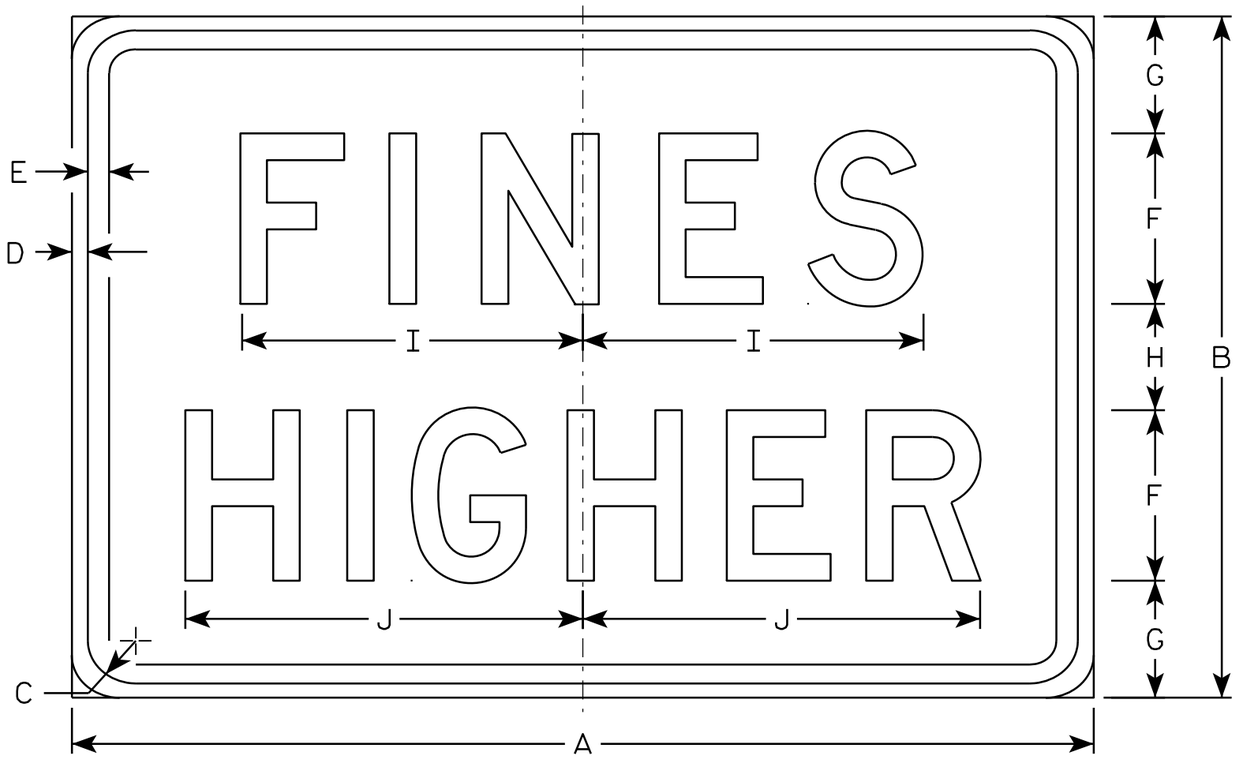
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 224	E



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

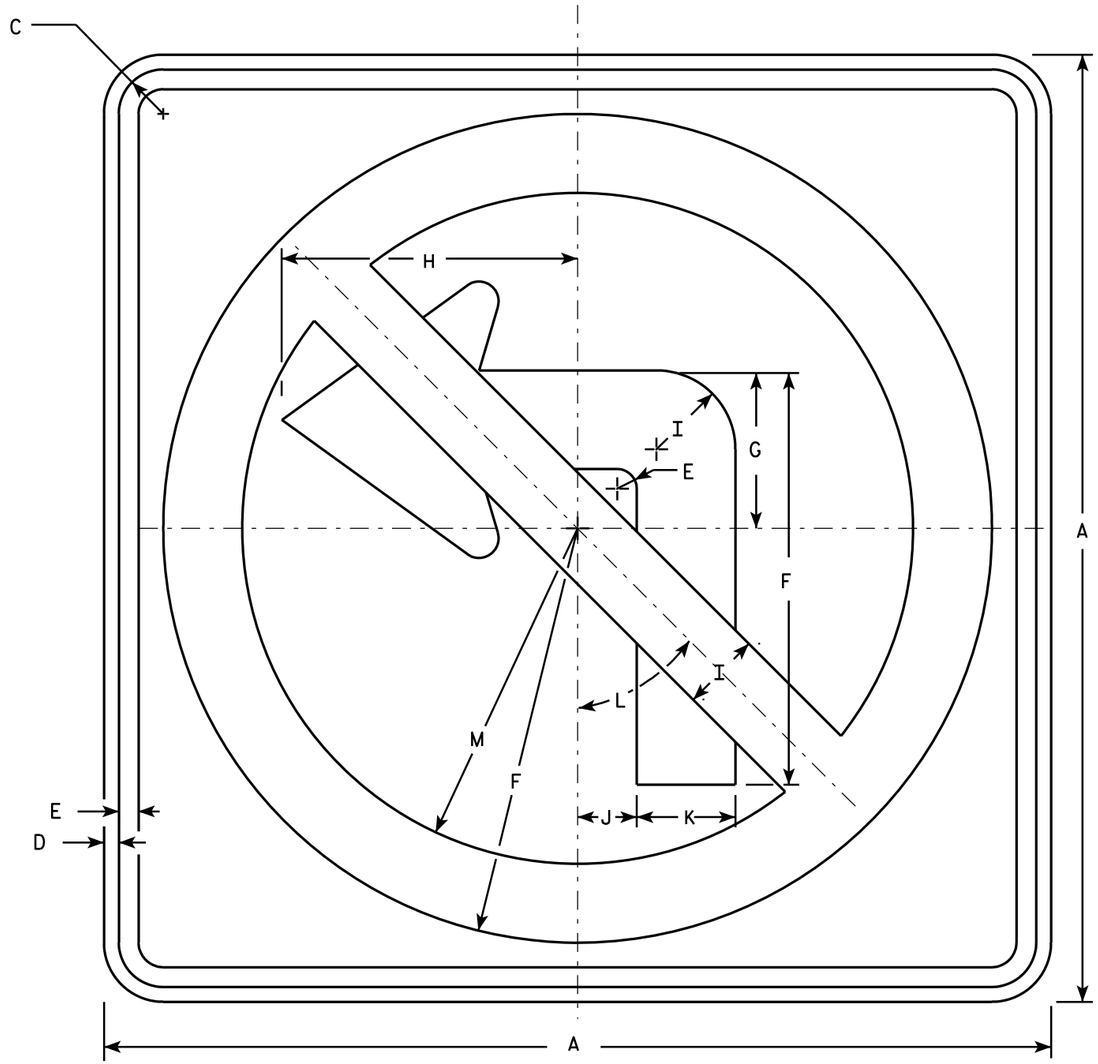
STANDARD SIGN
R2-6P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

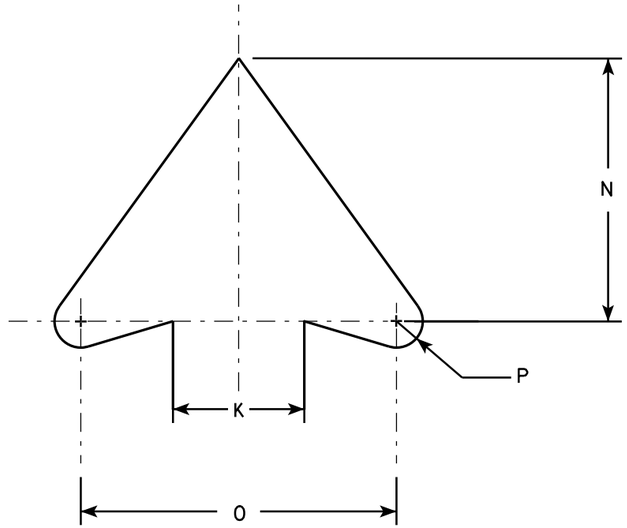
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 225 | E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

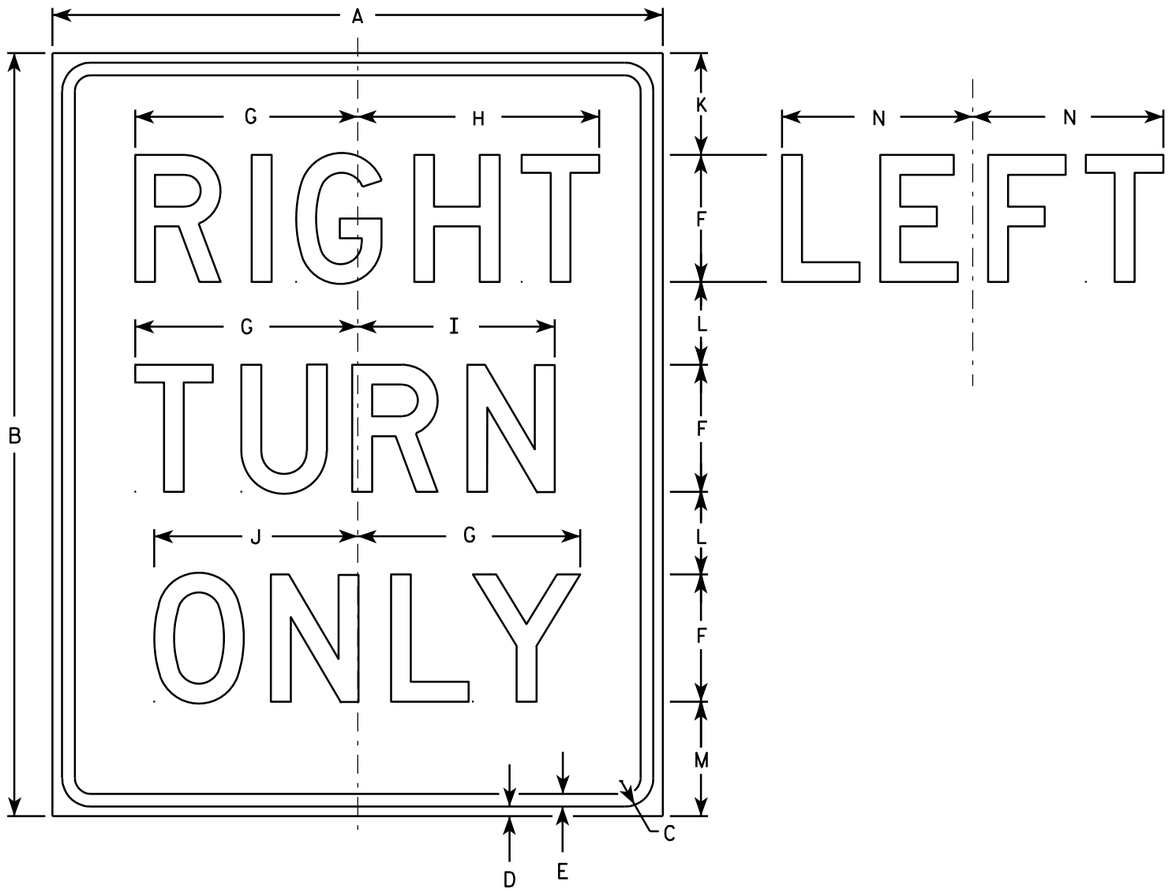
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 226	E



R3-53R

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. R3-53L same as R3-53R except LEFT is substituted for RIGHT.

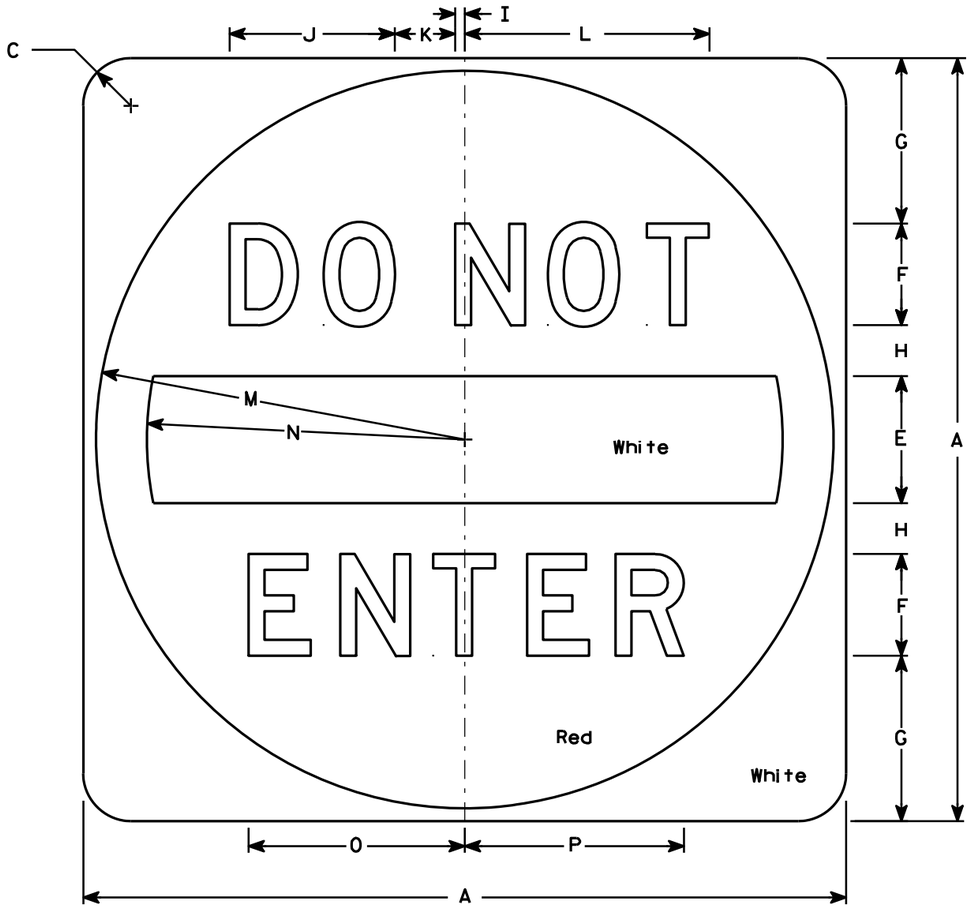
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
2M	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
3	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4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

STANDARD SIGN
R3-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/24/2011 PLATE NO. R3-53.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 227	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

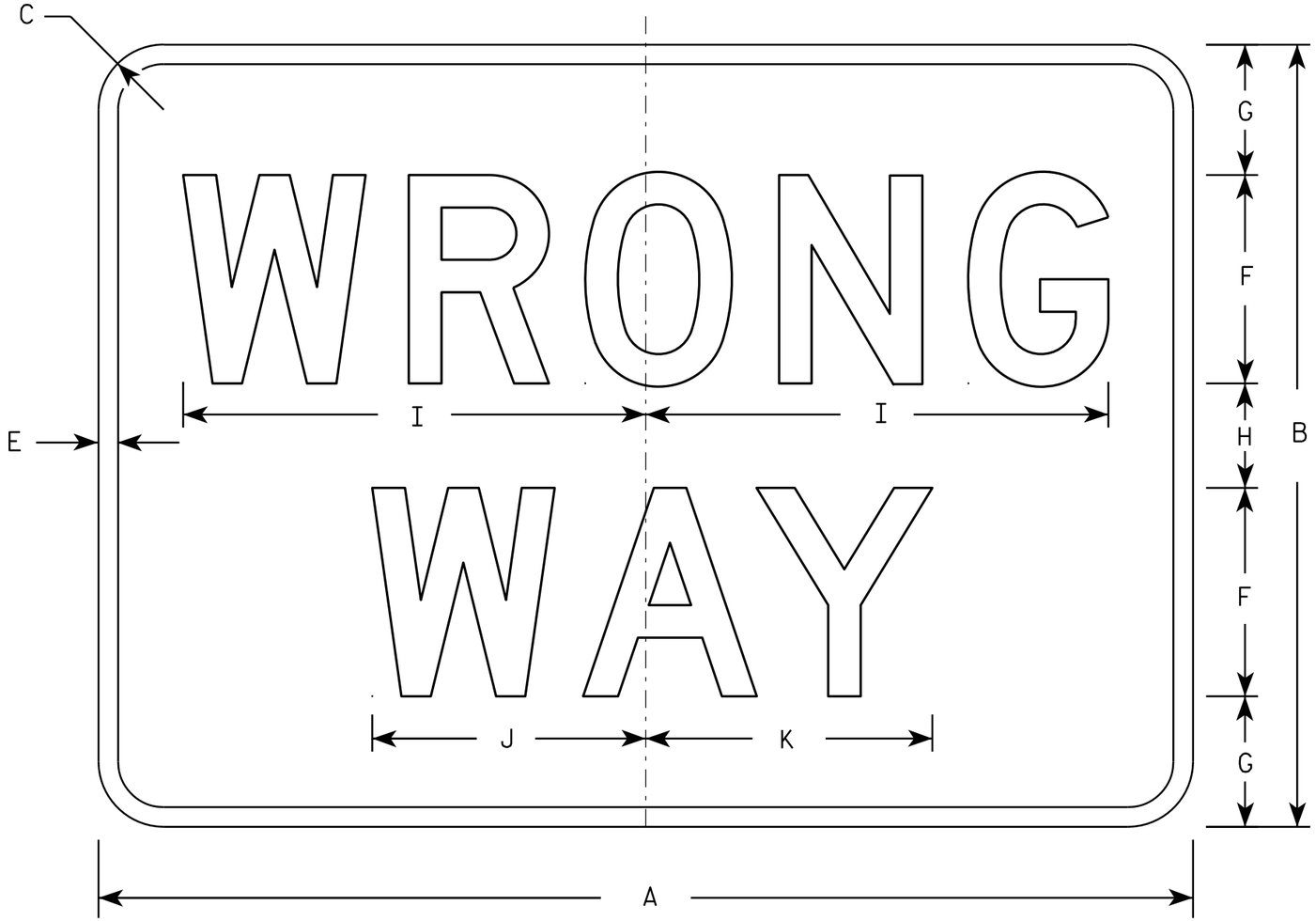
STANDARD SIGN
R5-1

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: 228 | 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

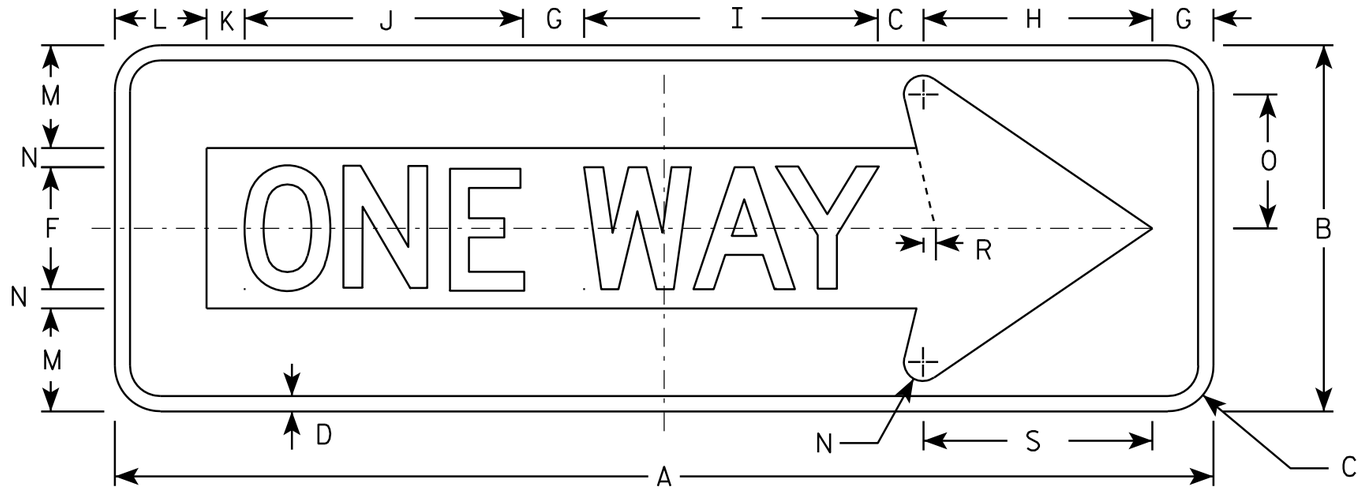
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 229 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R51A.DGN PLOT DATE : 17-DEC-2010 12:42 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.462457:1.000000

WISDOT/CADDS SHEET 42

7

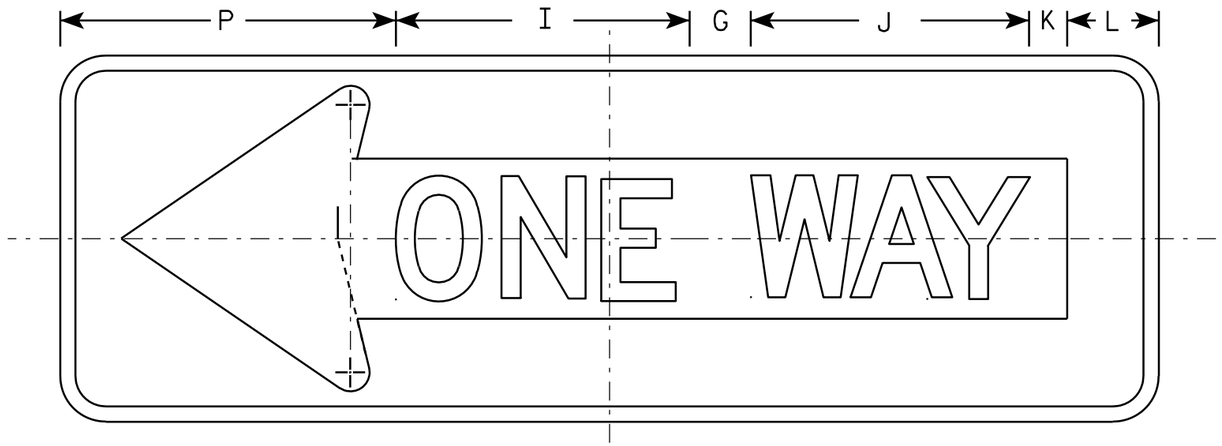
7



R6-1R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
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.



R6-1L

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	36	12	1 ½	½		4	2	7 ½	9 ⅝	9 ⅛	1 ¼	3	3 ⅜	⅝	4 ⅜	11		⅜	7 ½								3.0
2M	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
3	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
4	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
5																											

STANDARD SIGN
R6-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R6-1.2

PROJECT NO:

SHEET NO: 230 E

7

7



R6-6

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 except Line 1 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.

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
1																										
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	9 1/8	8 1/8	8 1/2															
2M	30	36	1 3/8	1/2	5/8	8	3 1/4	2 3/4	12 1/4	10 1/2	11 1/2															
3	36	48	1 3/8	1/2	5/8	10	5 1/4	3 1/4	15 1/4	12 3/4	13 3/8															
4	36	48	1 3/8	1/2	5/8	10	5 1/4	3 1/4	15 1/4	12 3/4	13 3/8															
5																										

STANDARD SIGN
R6-6

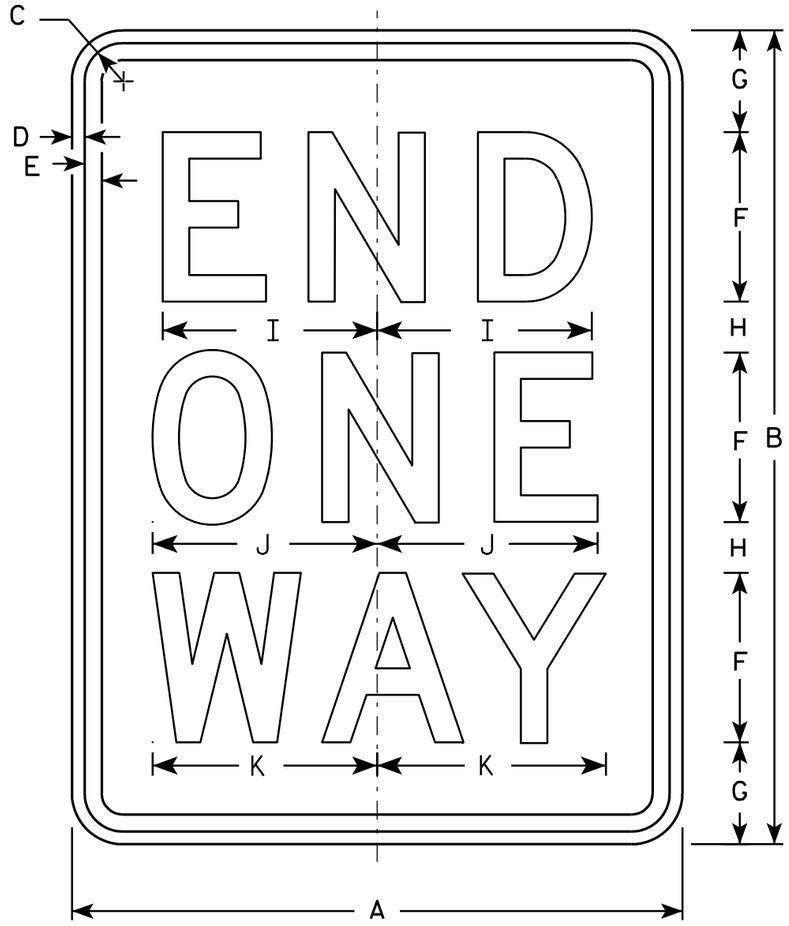
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 231 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R66.dgn PLOT DATE : 02-NOV-2010 14:36 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.469282:1.000000 WISDOT/CADDS SHEET 42



R6-7

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
1																										
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	8	8 1/8	8 1/2															
2M	30	36	1 3/8	1/2	5/8	8	3 1/4	2 3/4	10 1/8	10 1/2	11 1/2															
3	36	48	1 3/8	1/2	5/8	10	5 1/4	3 1/4	12 5/8	12 3/4	13 3/8															
4	36	48	1 3/8	1/2	5/8	10	5 1/4	3 1/4	12 5/8	12 3/4	13 3/8															
5																										

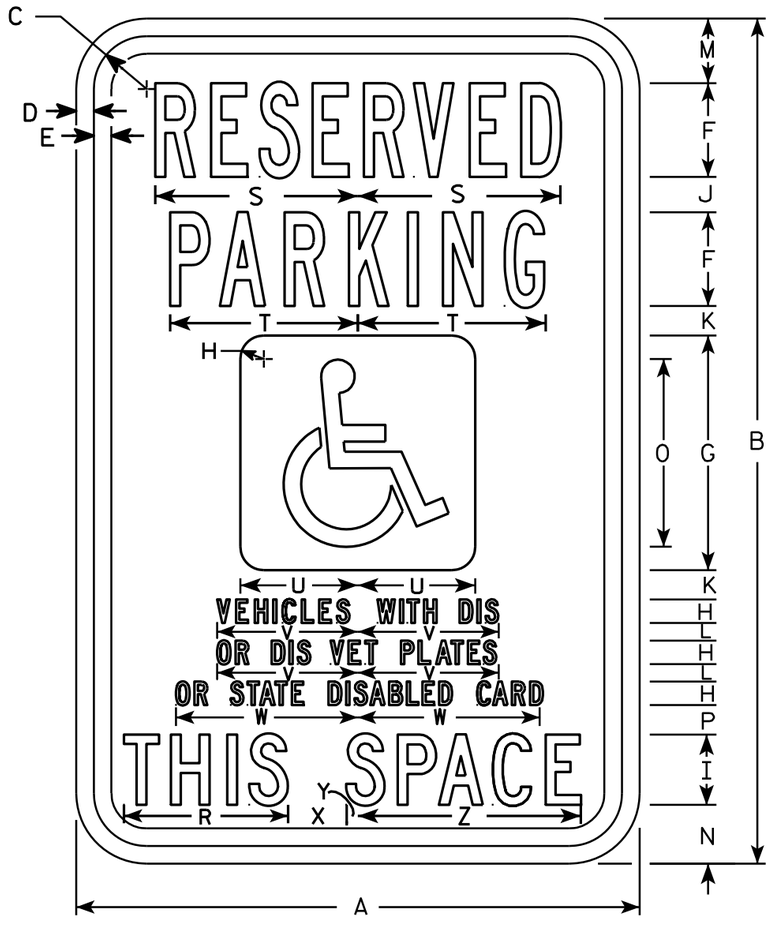
STANDARD SIGN
R6-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-7.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 232	E



R7-8A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Sign is white Type H Reflective; paraplegic background is blue.
   Message - Legend and border are green; paraplegic symbol is white
3. Message Series - Lines 1 & 2 are Series B
   Lines 3, 4, 5 & 6 are 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	12	18	1 1/8	3/8	3/8	2	5	1/2	1 1/2	3/4	5/8	3/8	1 3/8	1 1/4	4	5/8		3 1/2	4 3/8	4	2 1/2	3	3 7/8	1 1/4	1/4	4 3/4	1.5
2M	18	24	1 1/8	3/8	1/2	3	6	3/4	2	7/8	5/8	1/2	1 7/8	2	5	3/4		4 5/8	6 1/2	5 3/8	3	4 1/2	5 7/8	1 1/2	1/4	6 3/8	3.0
3	18	24	1 1/8	3/8	1/2	3	6	3/4	2	7/8	5/8	1/2	1 7/8	2	5	3/4		4 5/8	6 1/2	5 3/8	3	4 1/2	5 7/8	1 1/2	1/4	6 3/8	3.0
4																											
5																											

STANDARD SIGN
R7-8A

WISCONSIN DEPT OF TRANSPORTATION

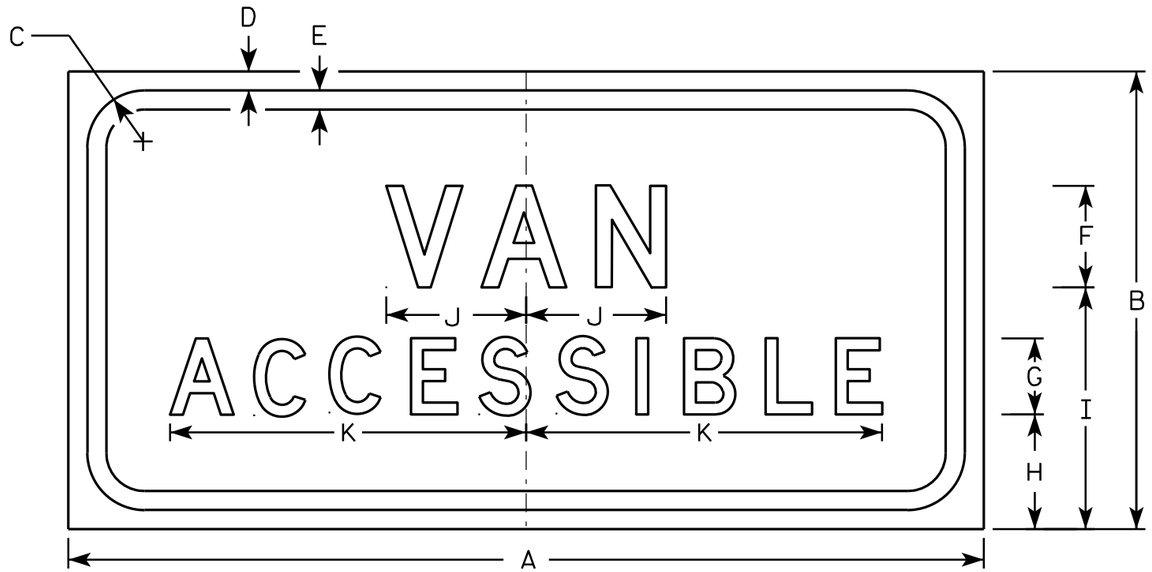
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/25/2011 PLATE NO. R7-8A.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 233 | E

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Green - 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.



R7-8V

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	6	1 1/8	3/8	3/8	1 1/2	1	1 5/8	3 1/2	2	4 1/4																0.50
2M	18	9	1 1/8	3/8	3/8	2	1 1/2	2 1/4	4 3/4	2 3/4	7																0.75
3	18	9	1 1/8	3/8	3/8	2	1 1/2	2 1/4	4 3/4	2 3/4	7																0.75
4																											
5																											

STANDARD SIGN
R7-8V

WISCONSIN DEPT OF TRANSPORTATION

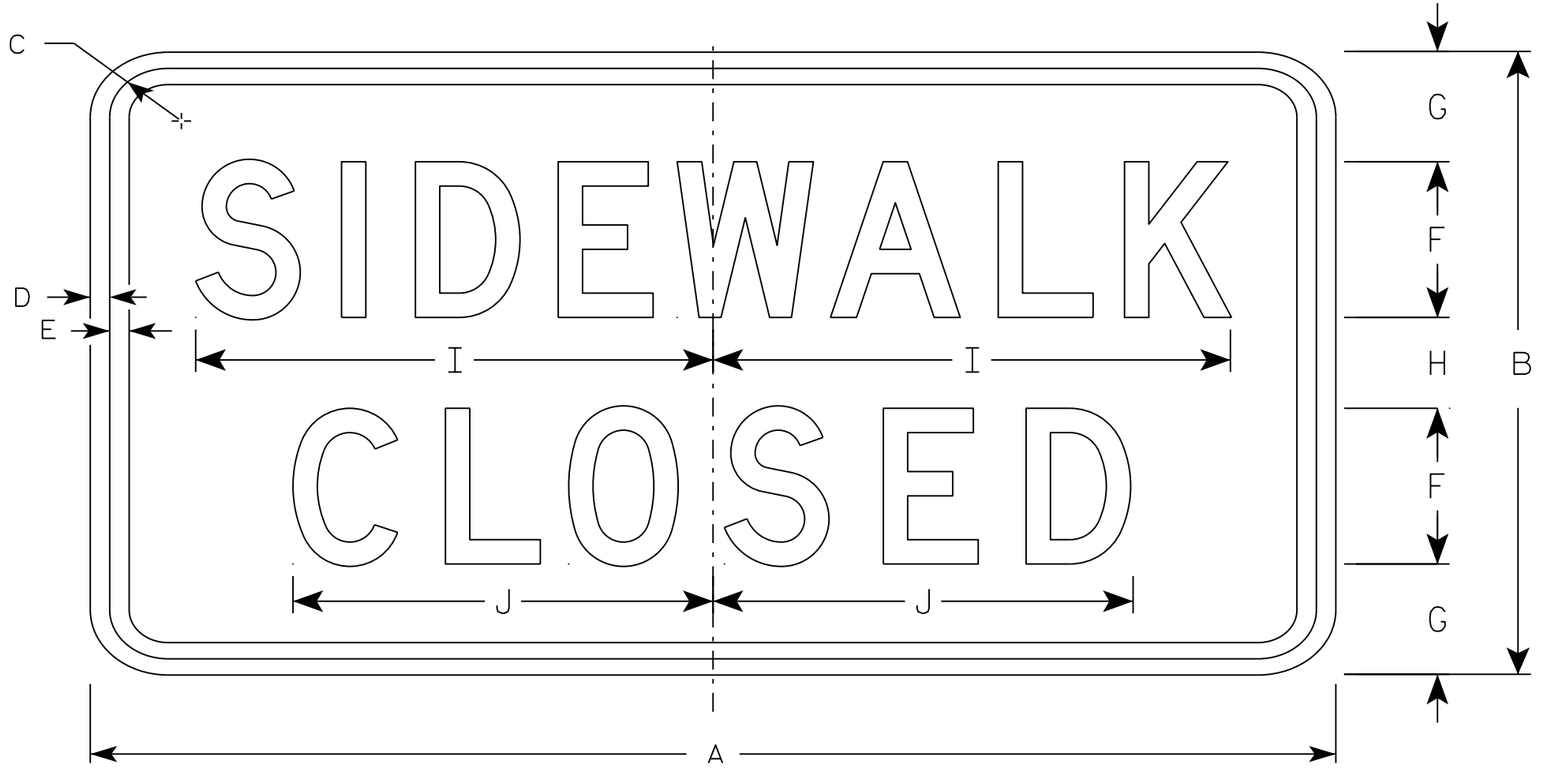
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-8V.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 234 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R78V.DGN PLOT DATE : 31-MAR-2011 11:13 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 2.979520:1.000000

WISDOT/CADDS SHEET 42



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

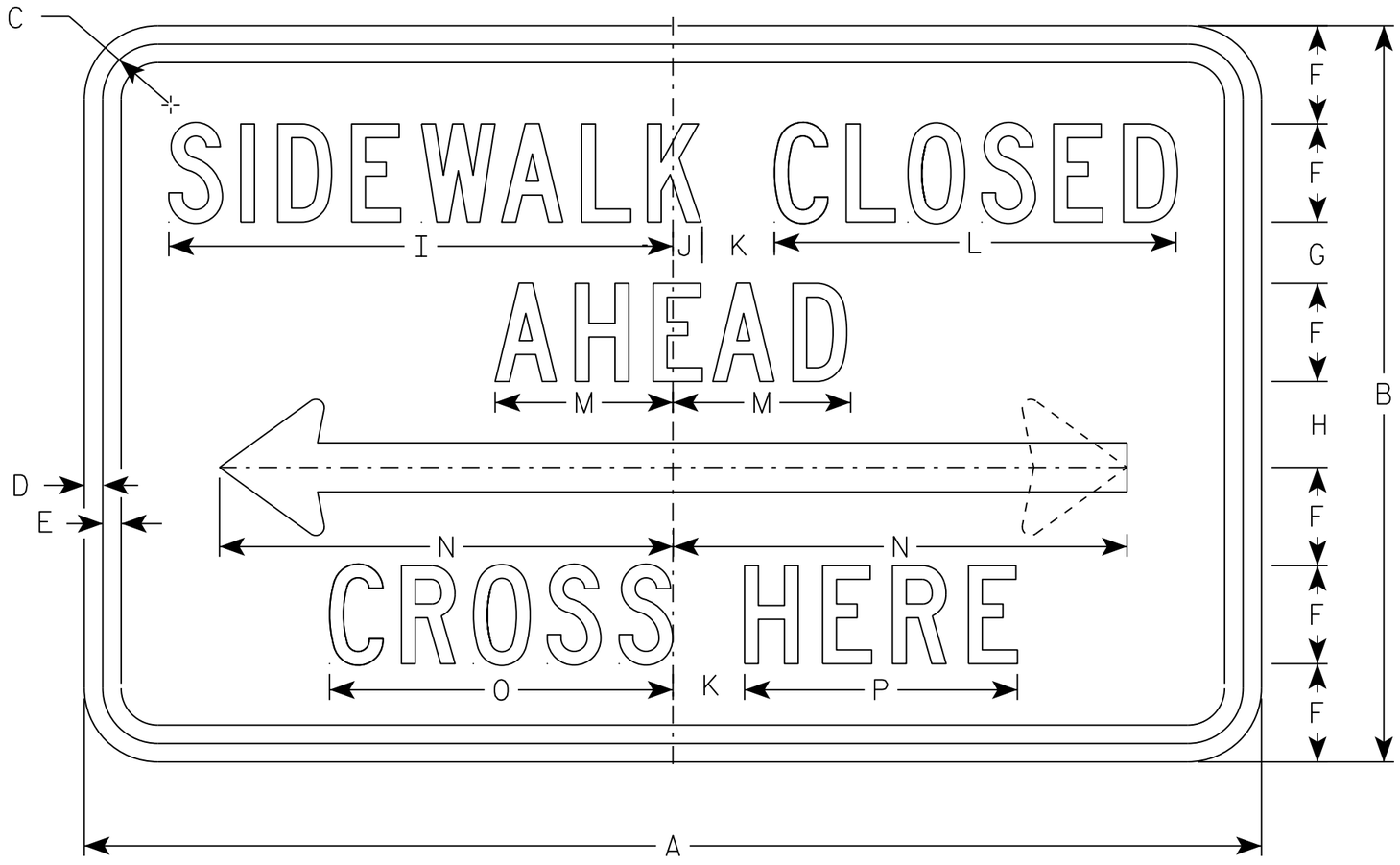
DATE 8/11/16 PLATE 235 R9-9.6

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

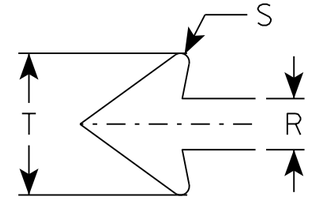
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000

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.



R9-11



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: 236	E



R9-55

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 E.
   Lines 2, 3 and 4 are 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	18	24	1 1/8	3/8	1/2	4	3	2 1/2	1 7/8	2 1/8	1 1/4	2 1/4	3 3/4	7 1/4	7 1/2	5 1/2											3.0
2M	18	24	1 1/8	3/8	1/2	4	3	2 1/2	1 7/8	2 1/8	1 1/4	2 1/4	3 3/4	7 1/4	7 1/2	5 1/2											3.0
3																											
4																											
5																											

STANDARD SIGN
R9-55

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/2011 PLATE NO. R9-55.6

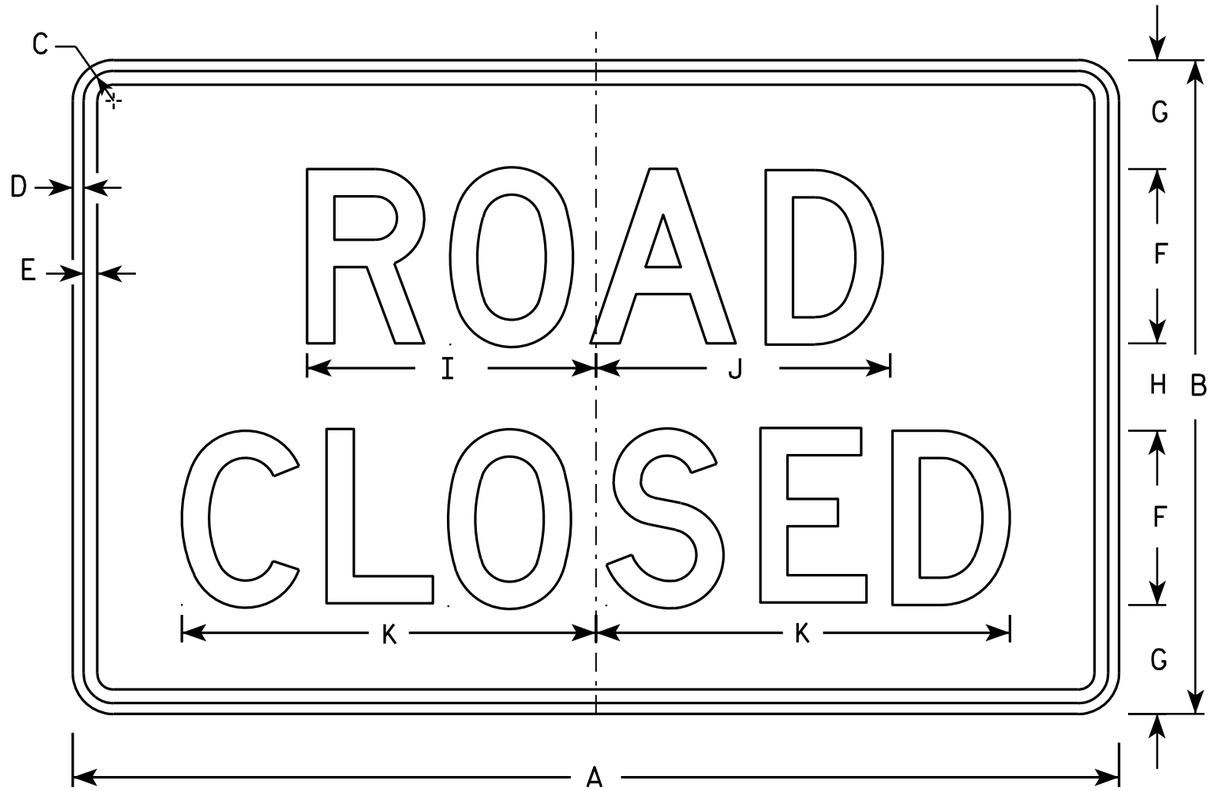
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 237	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R955.DGN PLOT DATE : 04-APR-2011 14:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.972696:1.000000

WISDOT/CADDS SHEET 42

7

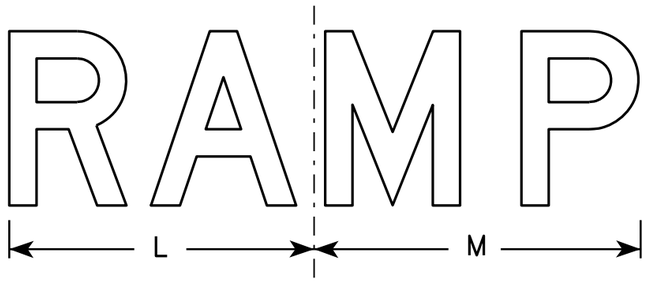
7



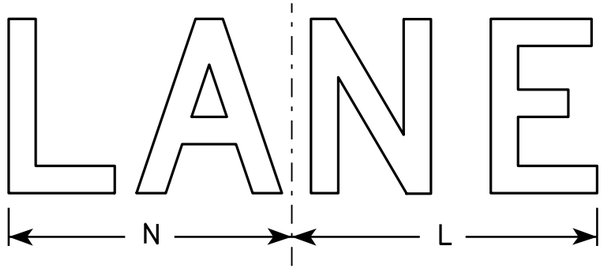
R11-2

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

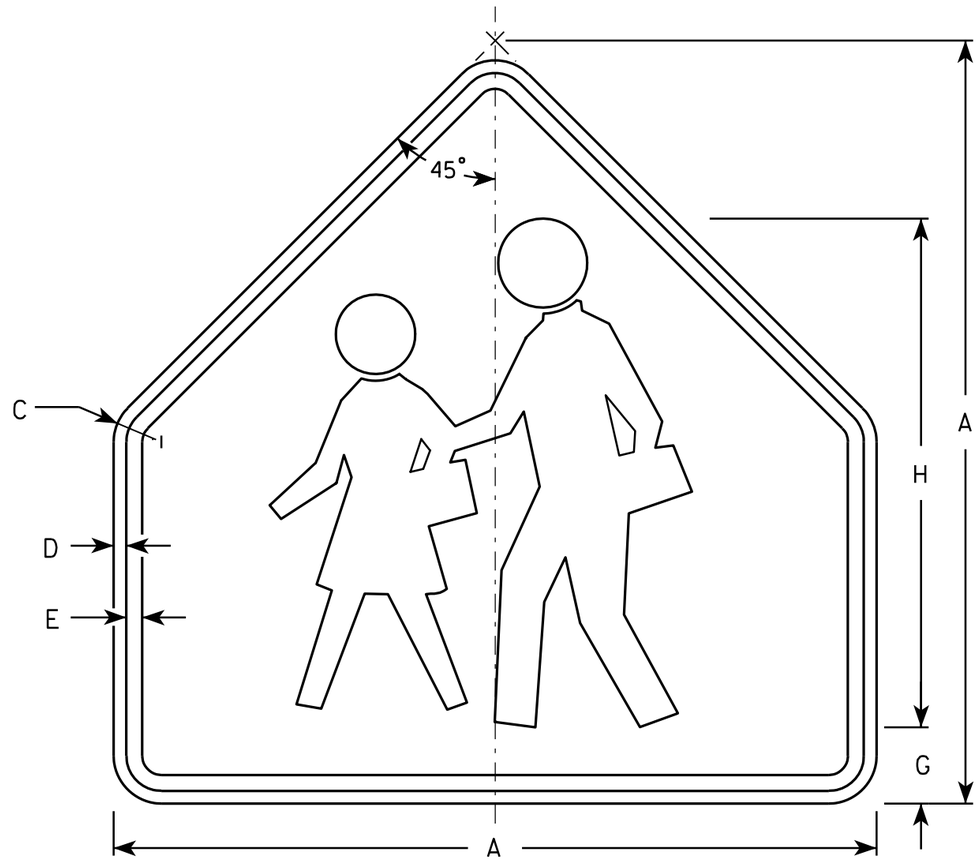
STANDARD SIGN
R11-2

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: 238 | E



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																											

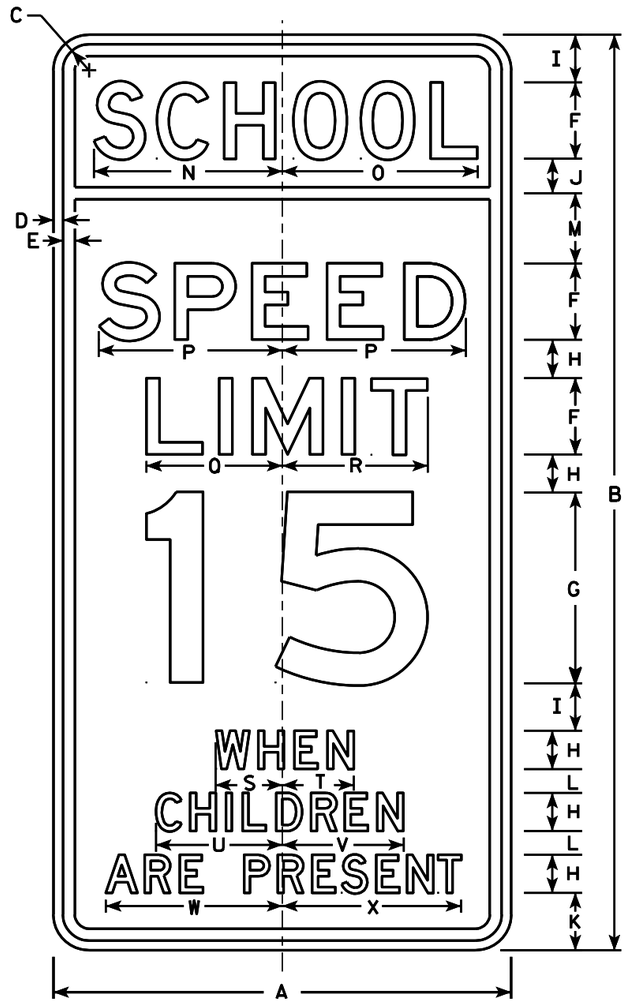
STANDARD SIGN
S1-1

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: 239	E



S4-51

NOTES

1. Sign is Type II - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. (See note 5).
2. Color:
   Background - See note 5
   Message - Black
3. Message Series - See note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Top panel (SCHOOL) background - Yellow Green -Type F Reflective.
   Lower panel background - White -Type H Reflective.
6. From top to bottom:
   Lines 1, 5, 6 & 7 are series D
   Lines 2, 3 & 4 are series E
7. Line 4 substitute appropriate numerals and adjust spacing to achieve proper balance.

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 1200 mm
3	900 mm X 1800 mm
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 m2
1																												
2	24	48	1 3/8	1/2	5/8	4	10	2	2 1/2	1 3/4	3	1 1/4	3 3/4	9 7/8	10 1/4	9 5/8	7 1/8	7 5/8	3 1/2	3 3/8	6 5/8	6 3/8	9 1/4	9 3/8			8.00	0.72
3	36	72	2 1/4	3/4	1	6	15	3	3 3/4	2 3/4	4 1/2	1 7/8	5 1/2	15	15 1/4	14 1/2	11 1/4	11 1/2	5 1/2	5 3/4	10	9 3/4	14	14 1/8			18.00	1.62
4																												
5																												

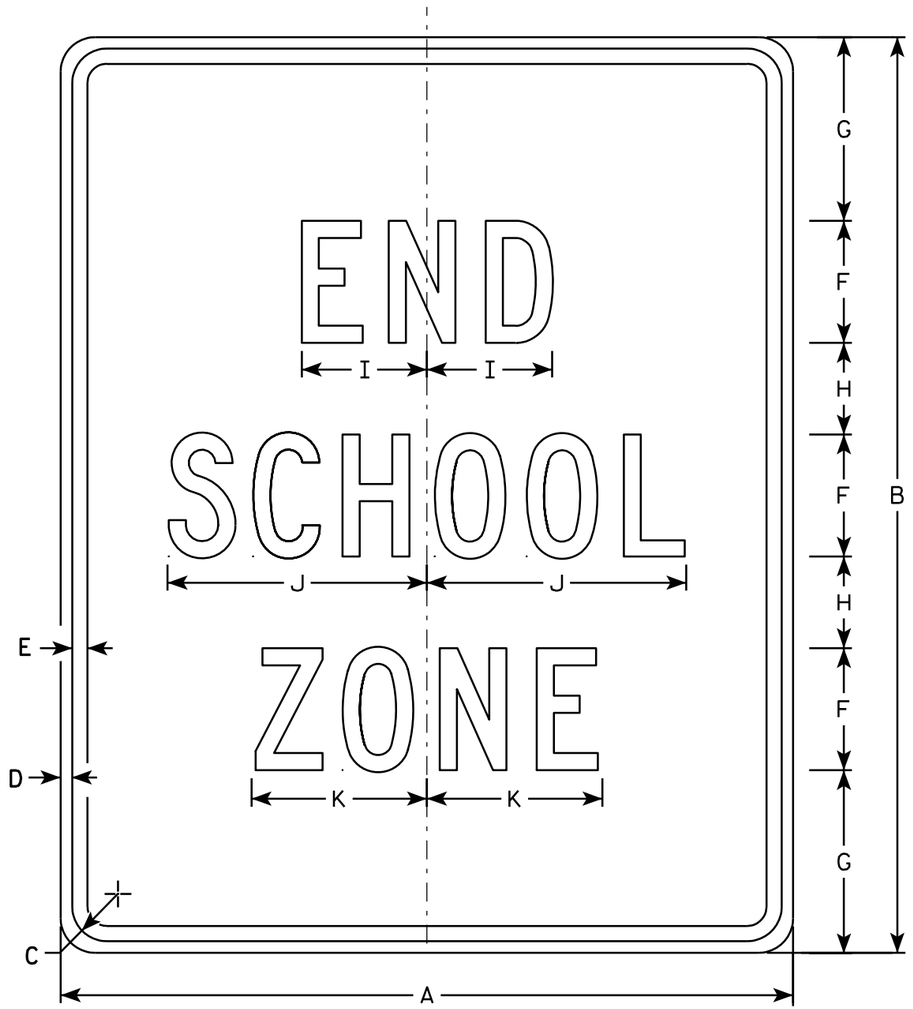
STANDARD SIGN
S4-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/26/10 PLATE NO. S4-51.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 240 | E



S5-2

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 - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	30	1 1/8	3/8	1/2	4	6	3	4 1/8	8 1/2	5 3/4																5.0
3	36	42	1 5/8	5/8	3/4	6	7	5	6 1/8	12 5/8	8 5/8																10.5
4																											
5																											

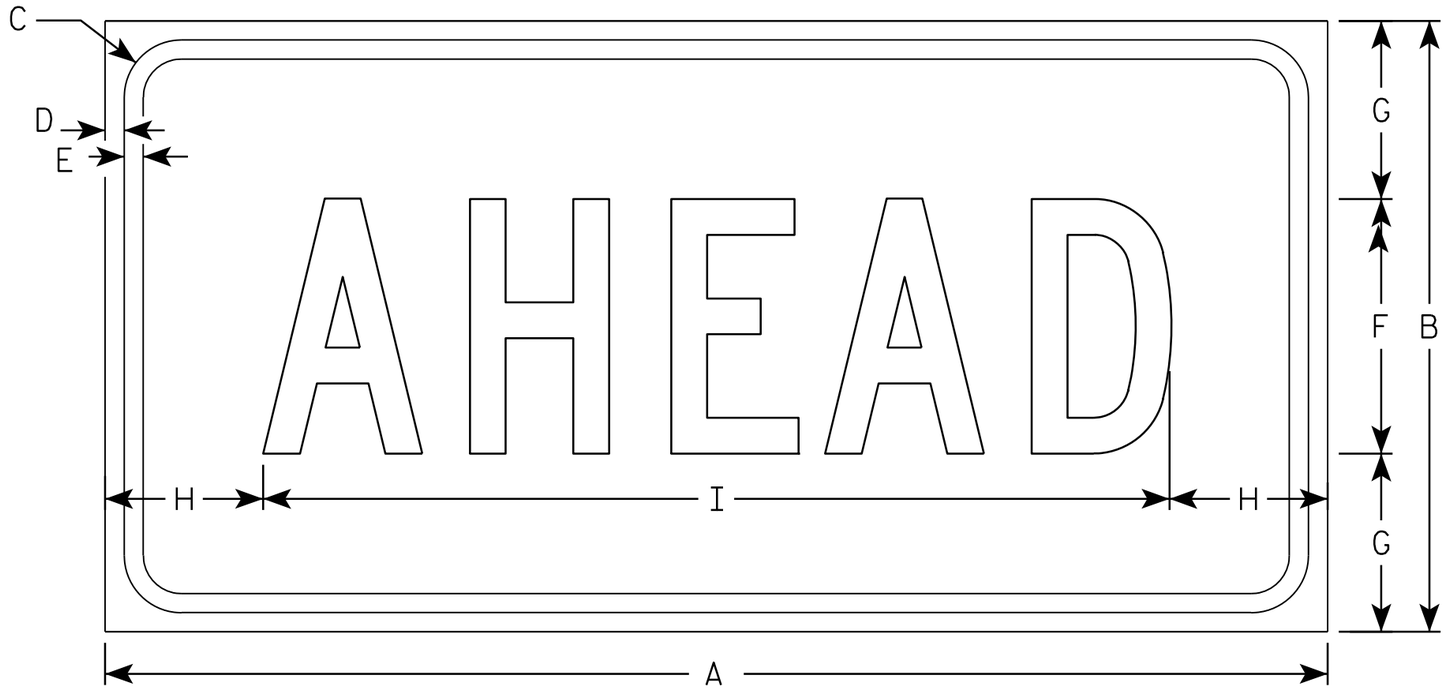
STANDARD SIGN
S5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/8/11 PLATE NO. S5-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 241 | 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

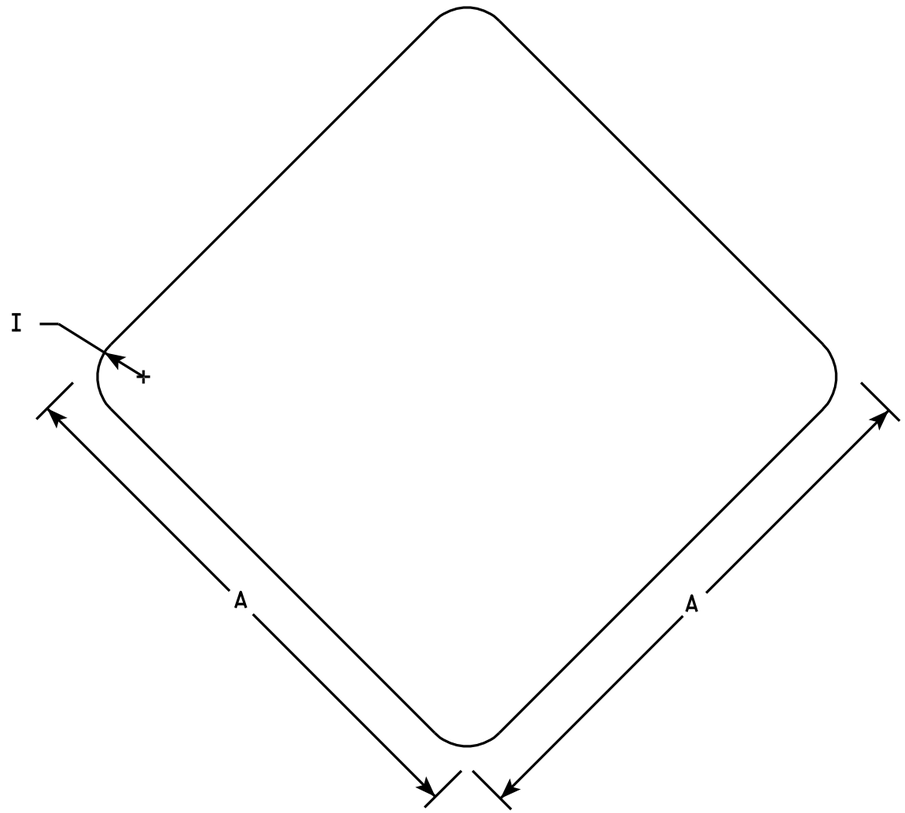
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 242 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\S169P.dgn PLOT DATE : 22-JUL-2013 10:32 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 2.977140:1.000000



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																											

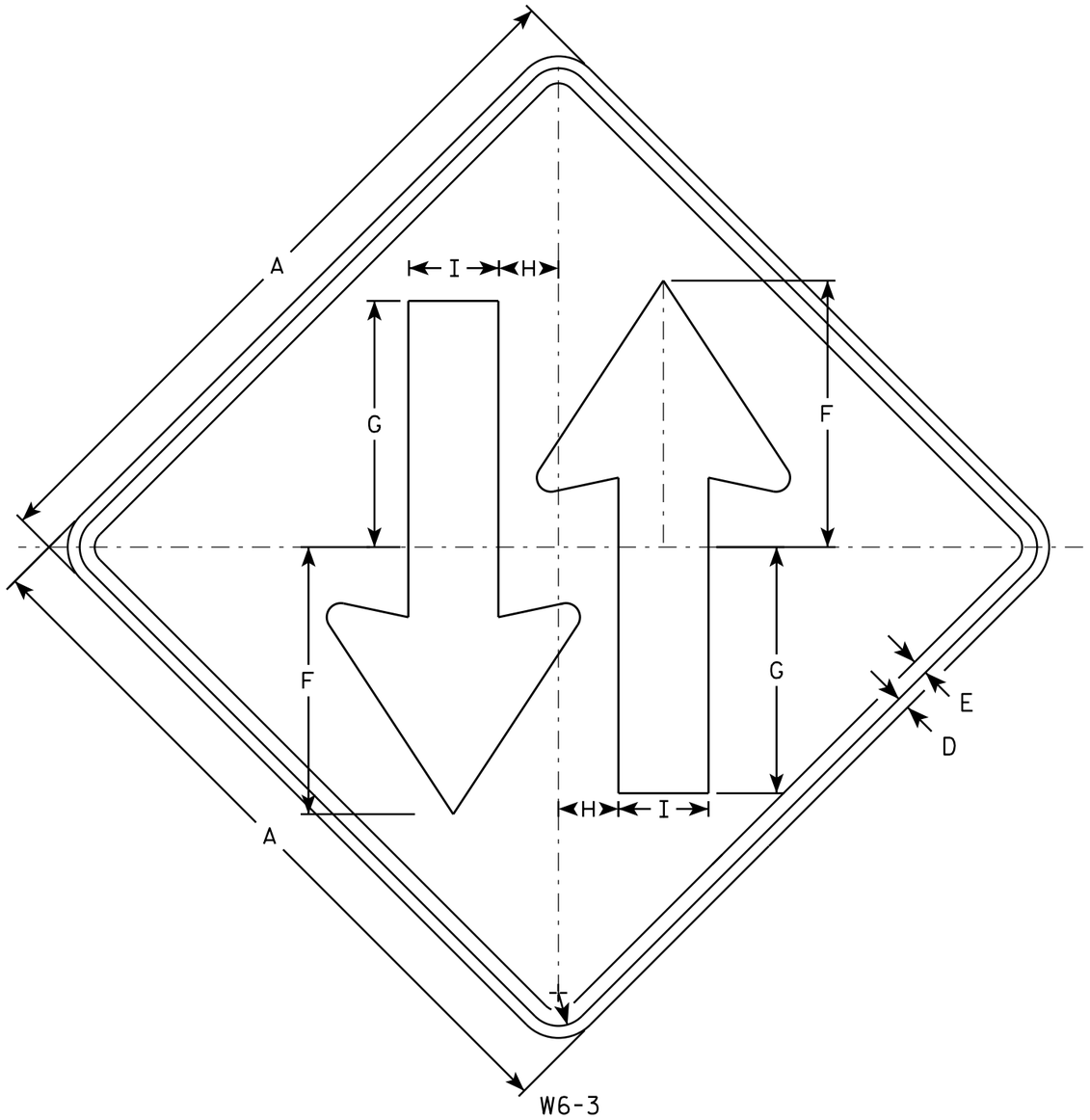
STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. W5-56.6

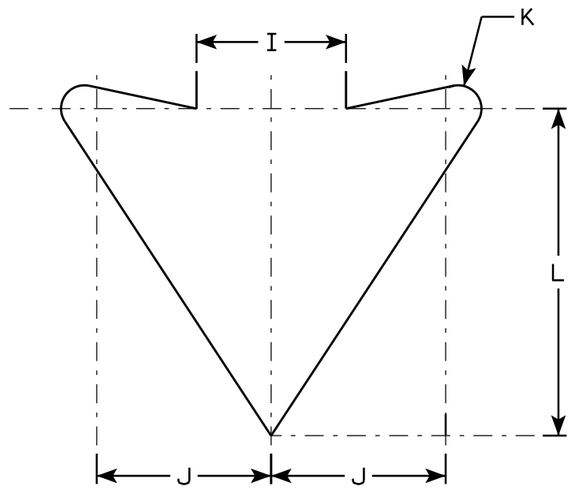
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 243	E



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

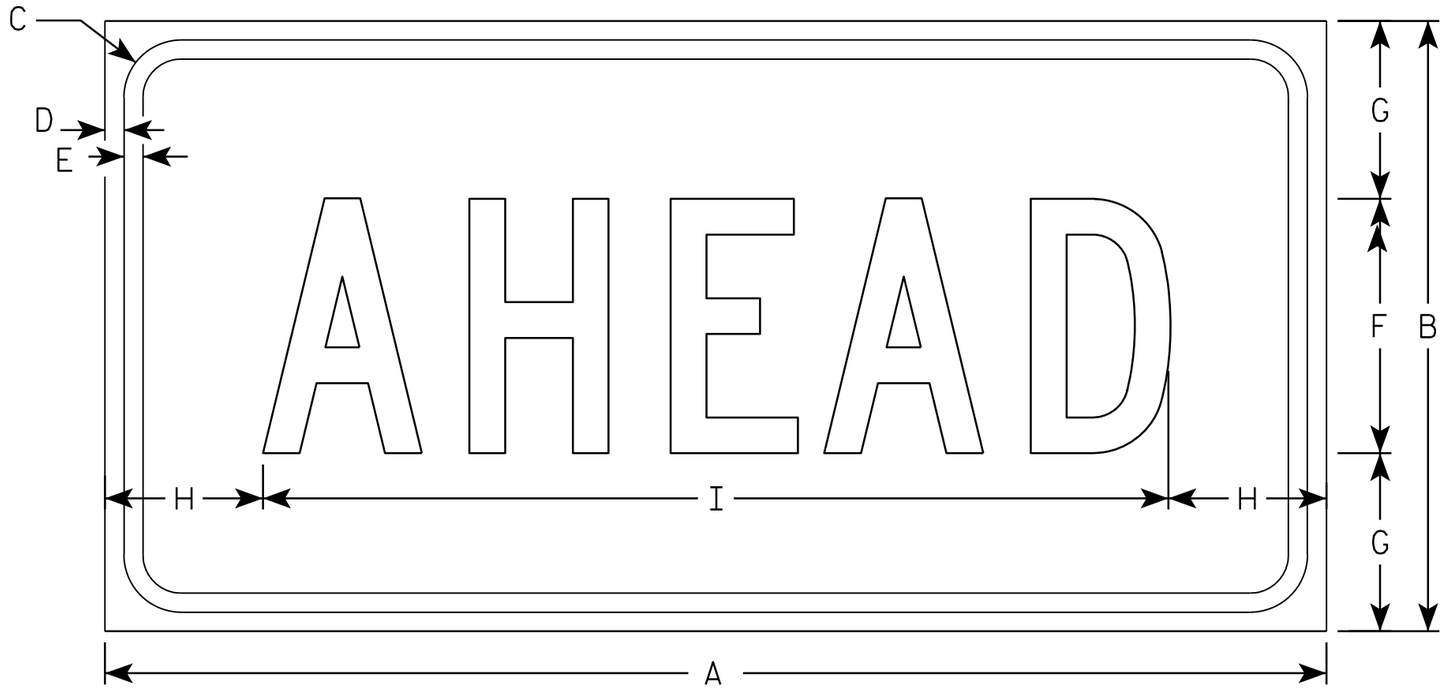
WISCONSIN DEPT OF TRANSPORTATION

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



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																											

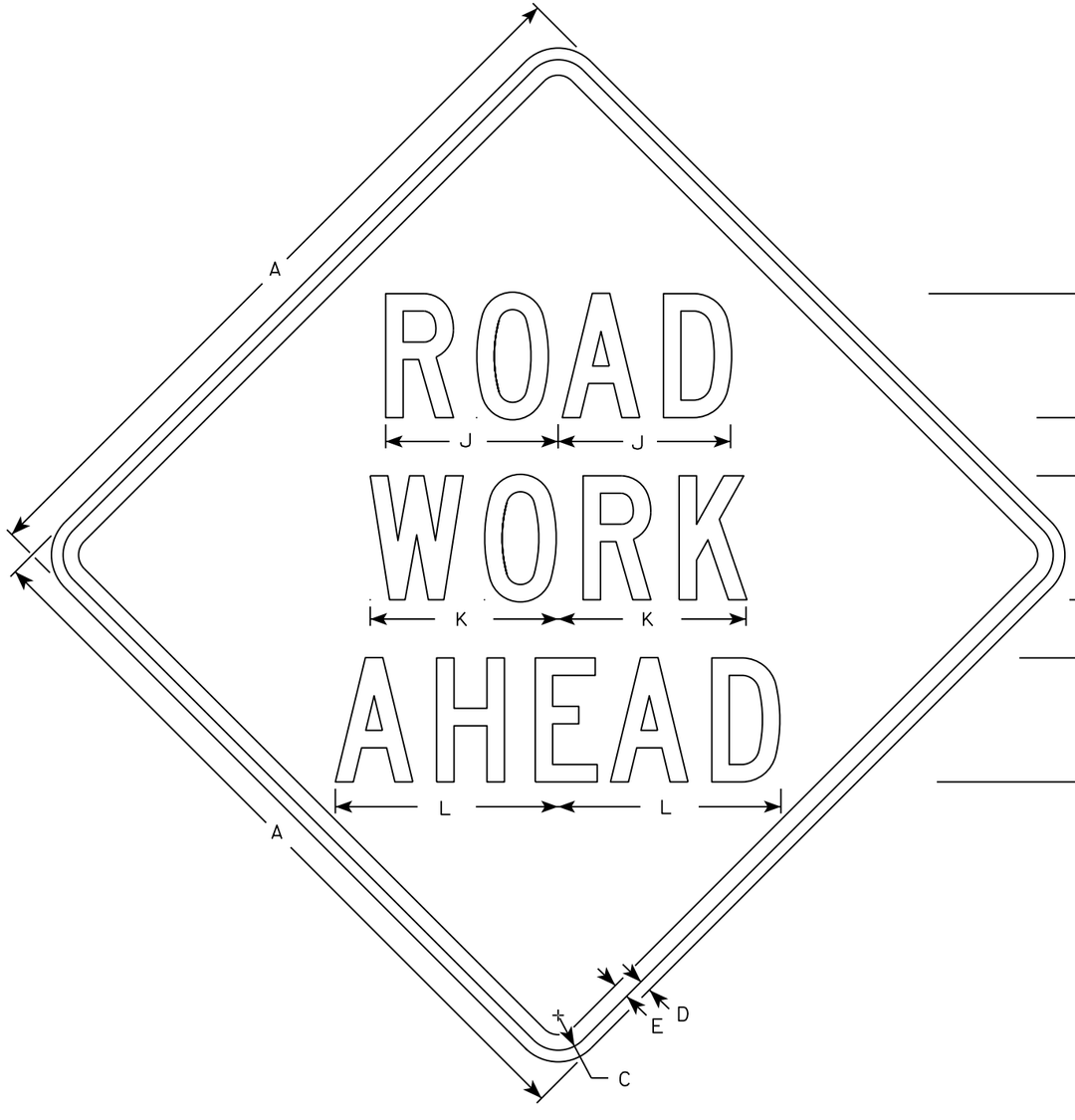
STANDARD SIGN
W16-9P

WISCONSIN DEPT OF TRANSPORTATION

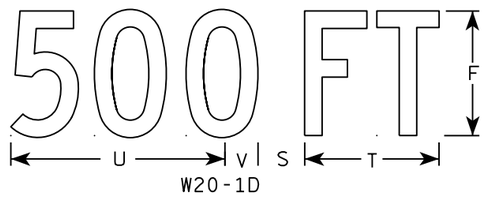
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/28/10 PLATE NO. W16-9P.6

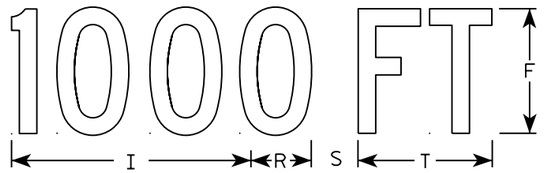
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 245 | E



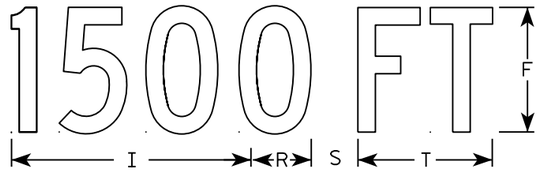
W20-1A



W20-1D



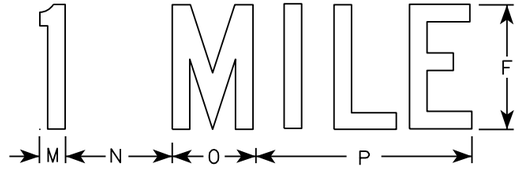
W20-1C



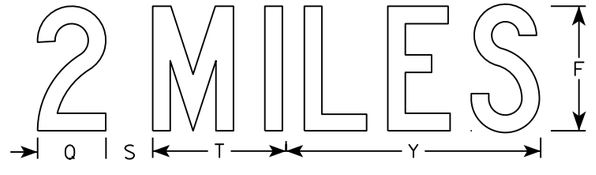
W20-1B



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

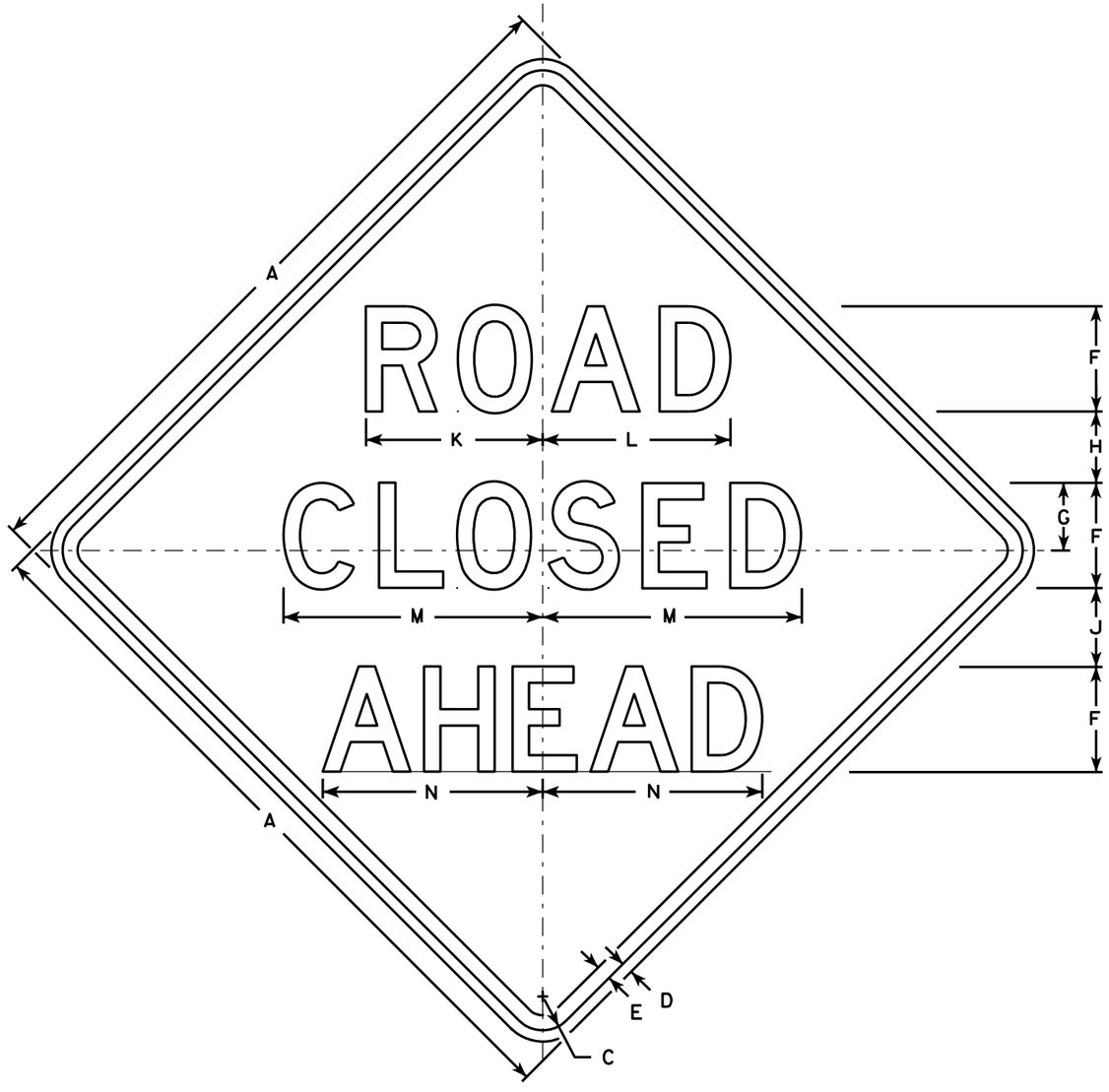
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

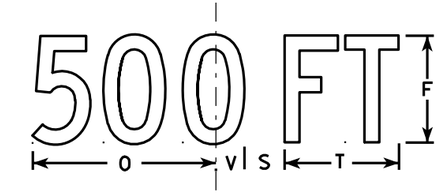
PROJECT NO:

SHEET NO: E

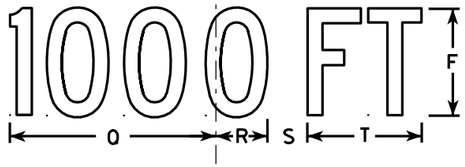
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



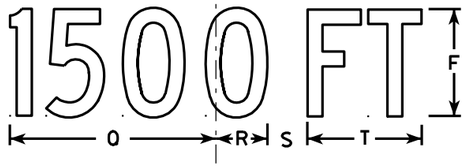
W20-3A



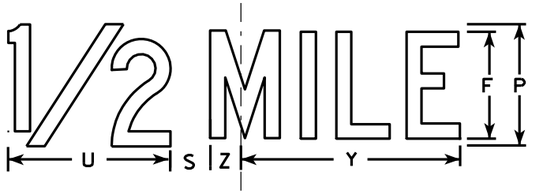
W20-3D



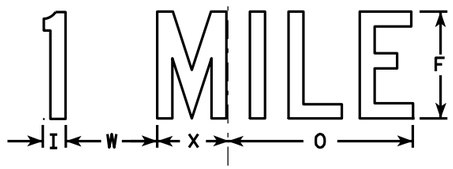
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

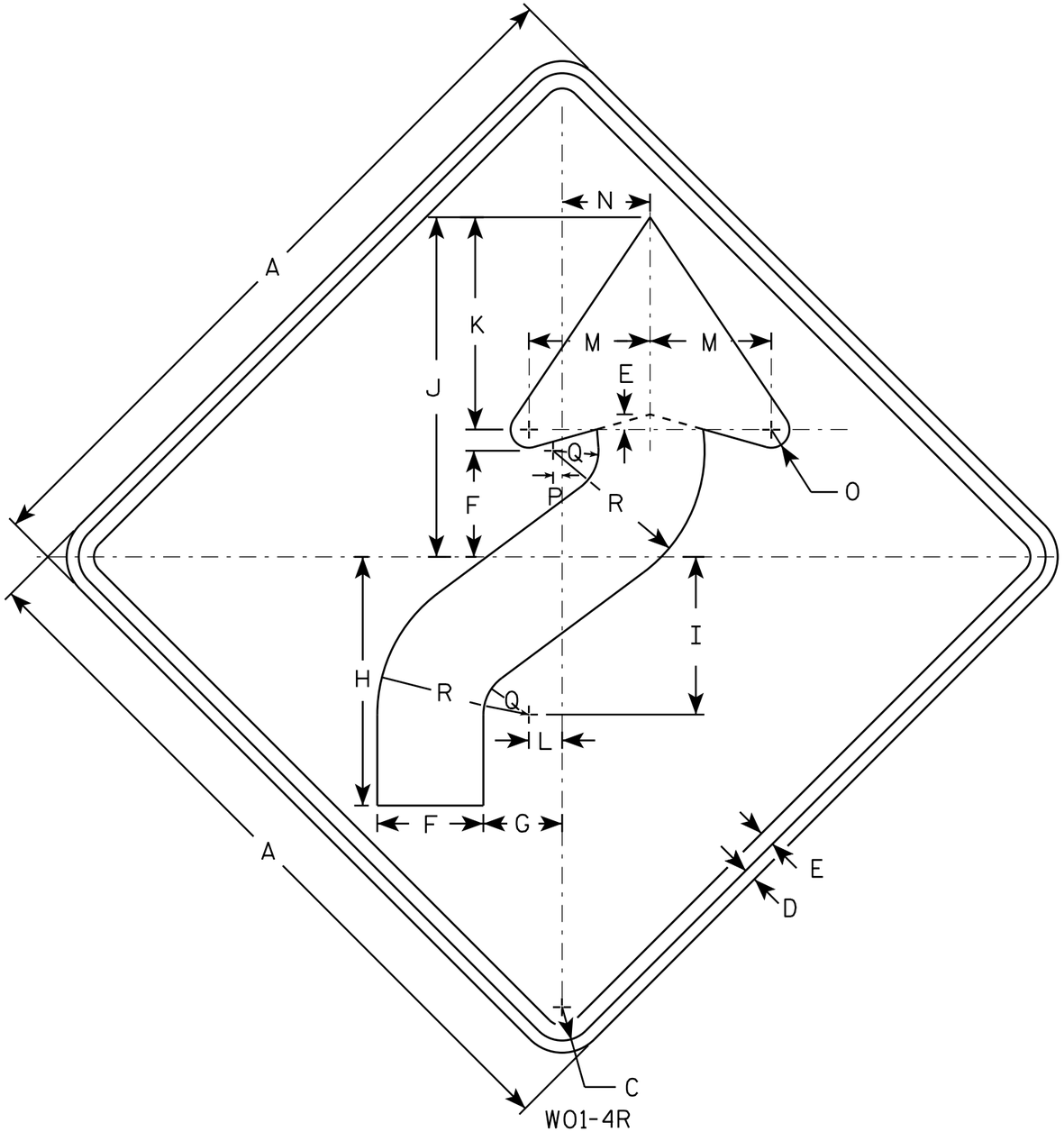
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 247 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

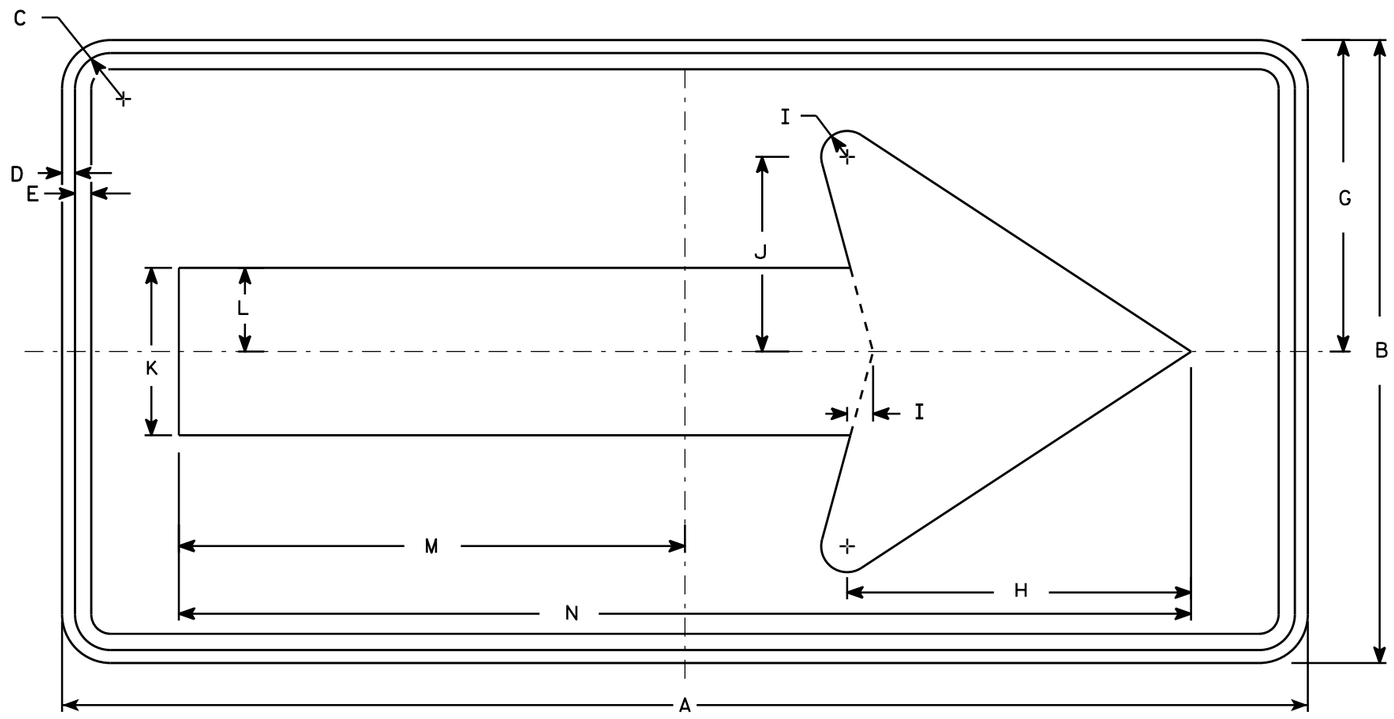
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000 WISDOT/CADDS SHEET 42



W01-6

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. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 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	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

STANDARD SIGN
W01-6

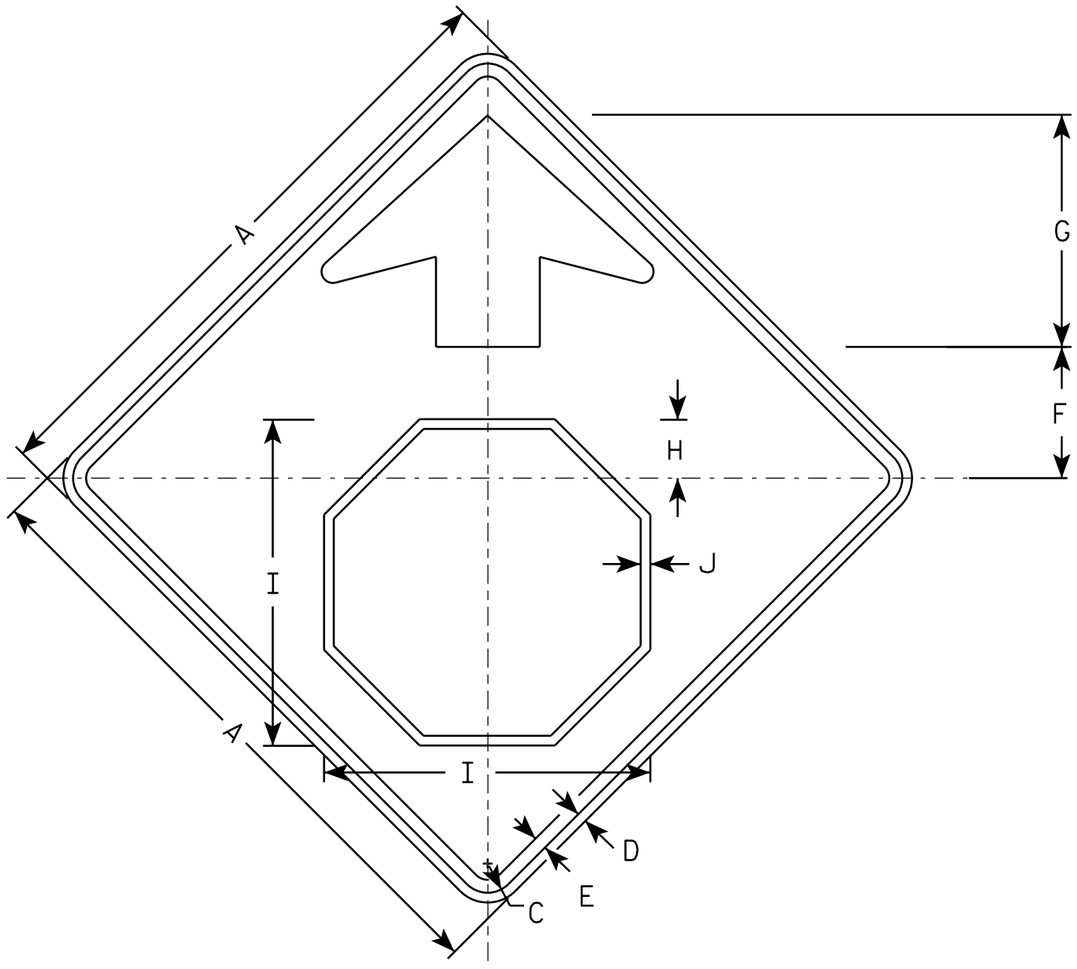
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

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

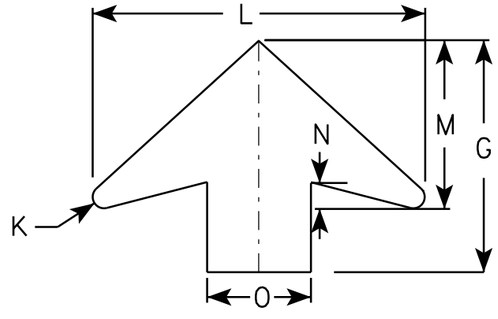
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W03-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   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	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
2S	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
2M	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
3	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
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
W03-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 250 03-1.1

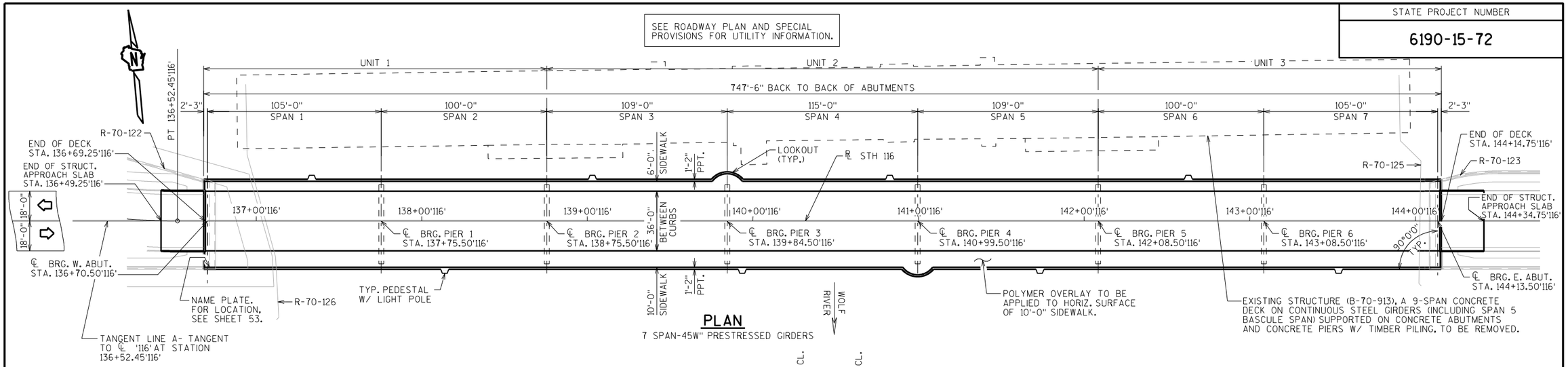
PROJECT NO: | SHEET NO: E

7 7

STATE PROJECT NUMBER

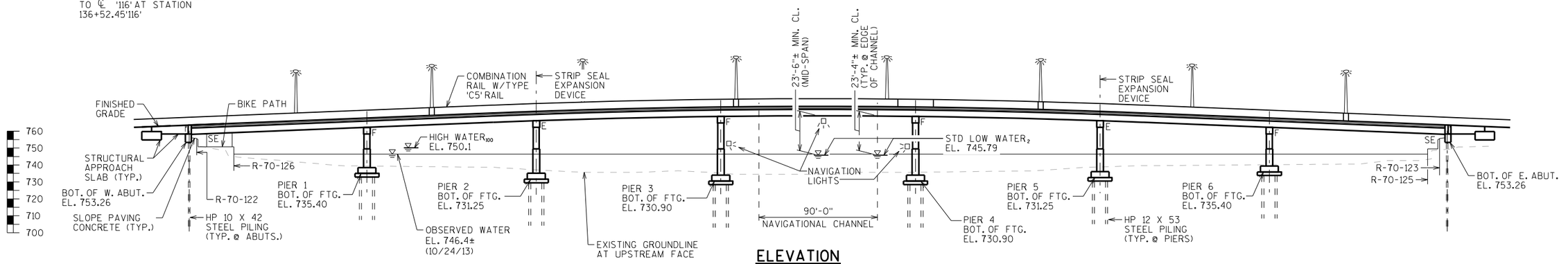
6190-15-72

SEE ROADWAY PLAN AND SPECIAL PROVISIONS FOR UTILITY INFORMATION.



PLAN

7 SPAN-45W" PRESTRESSED GIRDERS



ELEVATION

LOOKING UPSTREAM

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & GENERAL NOTES
3. QUANTITIES
4. SUBSURFACE EXPLORATION A
5. SUBSURFACE EXPLORATION B
6. WEST ABUTMENT
7. WEST ABUTMENT DETAILS
8. EAST ABUTMENT
9. EAST ABUTMENT DETAILS
10. PIER 1
11. PIER 1 DETAILS
12. PIER 2
13. PIER 2 DETAILS
14. PIER 3
15. PIER 3 DETAILS
16. PIER 4
17. PIER 4 DETAILS
18. PIER 5
19. PIER 5 DETAILS
20. PIER 6
21. PIER 6 DETAILS
22. SPANS 1 & 2 FRAMING PLAN
23. SPANS 3, 4, & 5 FRAMING PLAN
24. SPANS 6 & 7 FRAMING PLAN
25. SUPERSTRUCTURE CROSS SECTION 1
26. SUPERSTRUCTURE CROSS SECTION 2
27. SUPERSTRUCTURE CROSS SECTION 3
28. NORTH SIDEWALK, PARAPET, & RAIL CROSS SECTION
29. SOUTH SIDEWALK, PARAPET, & RAIL CROSS SECTION
30. SUPERSTRUCTURE DETAILS 1
31. SUPERSTRUCTURE DETAILS 2
32. SUPERSTRUCTURE DETAILS 3
33. DECK PLAN 1
34. DECK PLAN 2
35. DECK PLAN 3
36. TOP OF DECK ELEVATIONS
37. TYPICAL LIGHT STANDARD
38. LOOKOUT DETAILS 1
39. LOOKOUT DETAILS 2
40. 45W" PRESTRESSED GIRDER DETAILS 1
41. GIRDER DATA
42. 45W" PRESTRESSED GIRDER DETAILS 2
43. LAMINATED ELASTOMERIC BEARINGS
44. STEEL DIAPHRAGM
45. DEFLECTION JOINT DETAILS
46. DECK JOINT DIMENSIONS & ELEVATIONS
47. STRIP SEAL AT PIERS 2 & 5
48. STRIP SEAL COVER PLATE DETAILS
49. RAIL POST SPACING & CONDUIT LOCATIONS 1
50. RAIL POST SPACING & CONDUIT LOCATIONS 2
51. RAIL POST SPACING & CONDUIT LOCATIONS 3
52. RAIL POST SPACING & CONDUIT LOCATIONS 4
53. COMBINATION RAIL TYPE "C5" DETAILS 1
54. COMBINATION RAIL TYPE "C5" DETAILS 2
55. AESTHETIC DETAILS 1
56. AESTHETIC DETAILS 2
57. NAVIGATION LIGHTING & CONDUIT DETAILS 1
58. NAVIGATION LIGHTING & CONDUIT DETAILS 2
59. ALTERNATE CONSTRUCTION JOINT
60. WEST STRUCTURAL APPROACH SLAB
61. WEST STRUCTURAL APPROACH SLAB DETAILS
62. EAST STRUCTURAL APPROACH SLAB
63. EAST STRUCTURAL APPROACH SLAB DETAILS
64. SLOPE PAVING (CONCRETE CAST-IN-PLACE)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING; HL-93
INVENTORY RATING FACTOR: RF=1.06
OPERATING RATING FACTOR: RF=1.39
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY — DECK, PPT., STRUCT. APP. SLAB — f'c = 4,000 P.S.I.
ALL OTHER — f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.
BAR STEEL REINFORCEMENT STAINLESS, GRADE 60 — fy = 60,000 P.S.I.
45W" PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 8,000 P.S.I.
STRANDS- 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

TRAFFIC VOLUME

STH 116
A.D.T.= 11,300 (2038)
R.D.S.= 30 M.P.H.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} =22,840 C.F.S.
VEL.= 2.9 F.P.S.
HW.= EL. 750.11
WATERWAY AREA= 7,734 SQ. FT.
DRAINAGE AREA= 3,314 SQ. MI.
ROAD OVERTOPPING = NA
SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY

Q_2 =7,090 C.F.S.
$HW._2$= EL. 747.46

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10X42 STEEL PILING
DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE
AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 55 FEET LONG AT WEST ABUTMENT, AND
ESTIMATED 70 FEET LONG AT EAST ABUTMENT.

PIER TO BE SUPPORTED ON HP 12X53 STEEL PILING
DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS** PER PILE
AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 50 FEET LONG AT PIER 1.
ESTIMATED 45 FEET LONG AT PIER 2.
ESTIMATED 45 FEET LONG AT PIER 3.
ESTIMATED 45 FEET LONG AT PIER 4.
ESTIMATED 45 FEET LONG AT PIER 5.
ESTIMATED 45 FEET LONG AT PIER 6.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

CURVE DATA

P.I. STA. = 135+66.78
△ = 24°56'36"
D = 14°19'26"
T = 88.47'
L = 174.14'
R = 400.00'
P.C. STA. = 134+78.31
P.T. STA. = 136+52.45

STRUCTURE DESIGN CONTACTS:

ALEX CRABTREE (608) 266-3686
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS 3/20/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-70-316

STH 116 OVER THE WOLF RIVER

COUNTY	~~TOWN/CITY~~/VILLAGE
WINNEBAGO	WINNECONNE

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
ARC	BLB	WWR	BLB

GENERAL PLAN

SHEET 1 OF 64

251

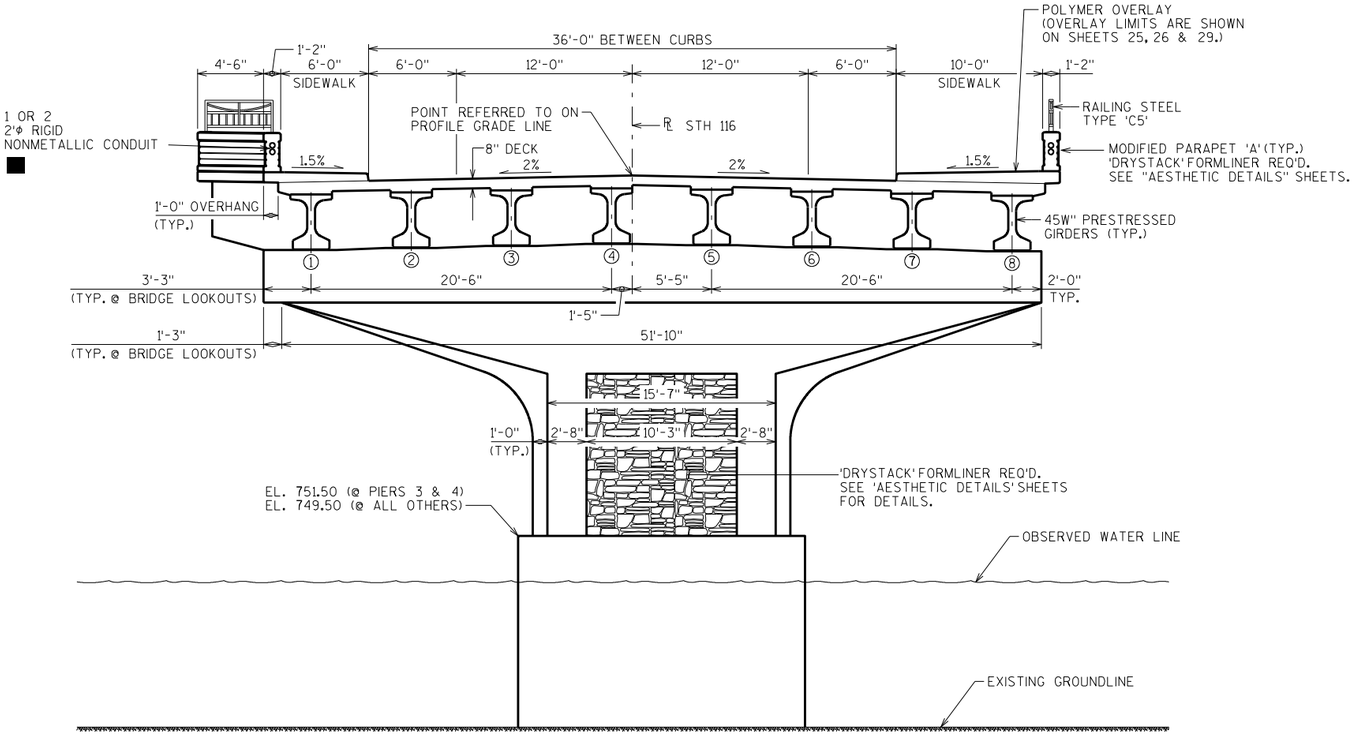
I.D. 6190-15-01A

DATE: MAR. 2017

SCALE = 30.00

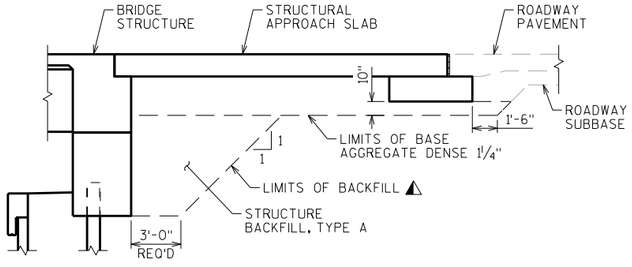
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8



CROSS SECTION THRU ROADWAY LOOKING EAST

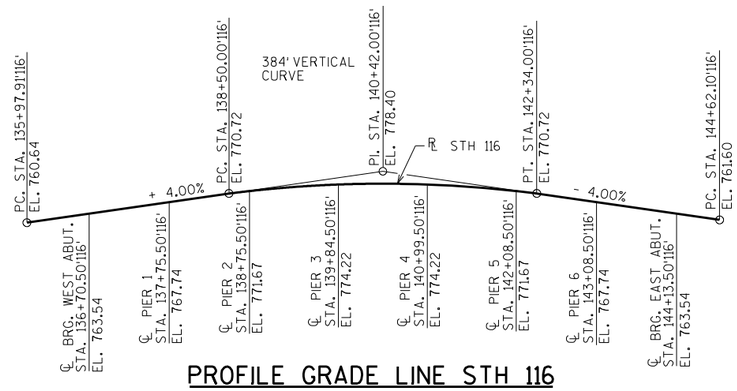
■ SEE "RAIL POST SPACING & CONDUIT LOCATIONS" SHEETS FOR CONDUIT LOCATIONS & LIMITS.



TYPICAL SECTION THRU ABUTMENT

(A1 ABUTMENT WITH STRUCTURAL APPROACH)

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.



PROFILE GRADE LINE STH 116

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN BELOW.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK, APPROACH SLAB SURFACES, 6'-0" SIDEWALK, AND ALL EXPOSED SURFACES OF 10'-0" SIDEWALK (NOT RECEIVING POLYMER OVERLAY). PROTECTIVE SURFACE TREATMENT SHOULD BE APPLIED AFTER POLYMER OVERLAY INSTALLATION OF 10'-0" SIDEWALK.

POLYMER OVERLAY TO BE APPLIED TO 10'-0" SIDEWALK & PIER 4 LOOKOUT, TO THE LIMITS SHOWN PER PLAN. USE TAPE, OR OTHER APPROVED METHOD, TO DEFINE EDGE OF POLYMER OVERLAY 6" FROM VERTICAL CURB FACE.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE NON-FORMLINED FRONT FACE, AND TOP OF THE PARAPETS, AS SHOWN ON SHEETS 55 & 56.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

AT ABUTMENTS, HP 12X53 STEEL PILING MAY BE USED IN LIEU OF HP 10X42 STEEL PILING. PAYMENT SHALL BE BASED ON BID PRICE FOR HP 10X42 STEEL PILING.

APPLY BRIDGE SEAT PROTECTION, AS PER SECTION 502.3.12 OF THE STANDARD SPECIFICATIONS, TO THE TOP SURFACES OF PIERS, 2 & 5 BELOW EXPANSION DEVICES.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "45W PRESTRESSED GIRDER DETAILS 2" SHEET.

SHEET PILING (IF USED) FOR PIER COFFERDAMS MAY BE DIFFICULT TO INSTALL DUE TO THE PRESENCE OF VERY HARD CLAYS AND SILTS, AS WELL AS BOULDERS.

STATE PROJECT NUMBER
6190-15-72

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

CROSS SECTION & GENERAL NOTES

SHEET 2

252

8

8

SCALE = 5

STATE PROJECT NUMBER

6190-15-72

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	WEST APPROACH	WEST ABUT.	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5	PIER 6	EAST ABUT.	EAST APPROACH	TOTAL
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-70-316	LS	———	———	———	———	———	———	———	———	———	———	———	1
206.5000	COFFERDAMS B-70-316	LS	———	———	———	———	———	———	———	———	———	———	———	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	———	———	149	———	———	———	———	———	———	149	———	298
305.0120	BASE AGGREGATE DENSE 1¼-INCH	TON	———	112	———	———	———	———	———	———	———	———	112	224
501.1000.S	ICE HOT WEATHER CONCRETING	LB	21,550	———	———	———	———	———	———	———	———	———	———	21,550
502.0100	CONCRETE MASONRY BRIDGES	CY	1787	48	37	127	165	166	166	165	127	37	48	2873
502.1100	CONCRETE MASONRY SEAL	CY	———	———	———	38	49	46	46	49	38	———	———	266
502.3100	EXPANSION DEVICE B-70-316	LS	———	———	———	———	———	———	———	———	———	———	———	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	3630	85	———	———	———	———	———	———	———	———	85	3800
502.3210	PIGMENTED SURFACE SEALER	SY	393	———	———	———	———	———	———	———	———	———	———	393
503.0146	PRESTRESSED GIRDER TYPE I45W-INCH	LF	5937	———	———	———	———	———	———	———	———	———	———	5937
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	———	———	3610	1740	2460	1900	1900	2460	1740	3610	———	19,420
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	364,360	7670	70	20,450	22,680	24,460	24,460	22,680	20,450	70	7670	515,020
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	1290	———	———	———	———	———	———	———	———	———	———	1290
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	80	———	———	———	———	———	———	———	———	———	———	80
506.2610	BEARING PADS ELASTOMERIC LAMINATED	EACH	32	———	———	———	———	———	———	———	———	———	———	32
506.4000	STEEL DIAPHRAGMS B-70-316	EACH	98	———	———	———	———	———	———	———	———	———	———	98
509.5100.S	POLYMER OVERLAY	SY	793	———	———	———	———	———	———	———	———	———	———	793
513.7026	RAILING STEEL TYPE C5 B-70-316	LF	1500	———	———	———	———	———	———	———	———	———	———	1500
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	———	13	———	———	———	———	———	———	13	———	26
517.1015.S	CONCRETE STAINING MULTI-COLOR B-70-316	SF	4400	———	———	94	167	189	189	167	94	———	———	5300
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-70-316	SF	4400	———	———	94	167	189	189	167	94	———	———	5300
550.0500	PILE POINTS	EACH	———	———	10	24	28	25	25	28	24	10	———	174
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	———	———	550	———	———	———	———	———	———	700	———	1250
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	———	———	———	1200	1260	1125	1125	1260	1080	———	———	7050
604.0400	SLOPE PAVING CONCRETE	SY	———	———	17	———	———	———	———	———	———	17	———	34
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	58	———	———	———	———	———	———	———	———	———	———	58
652.0210	CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH	LF	43	———	———	———	———	54	54	———	———	———	———	151
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	2310	———	———	———	———	———	———	———	———	———	———	2310
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	18	———	———	———	———	———	———	———	———	———	———	18
657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	8	———	———	———	———	———	———	———	———	———	———	8
SPV.0035	HAULING STRUCTURE EXCAVATION B-70-316	CY	———	———	———	240	240	240	240	240	240	———	———	1440
SPV.0060	UNDERWATER INSPECTION	EACH	———	———	———	———	———	———	———	———	———	———	———	1
SPV.0060	CLEARANCE GAUGE	EACH	———	———	———	———	———	1	1	———	———	———	———	2
SPV.0105	NAVIGATION LIGHTS AND AIDS	LS	———	———	———	———	———	———	———	———	———	———	———	1
SPV.0105	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS MODIFIED STA. 140+42	LS	———	———	———	———	———	———	———	———	———	———	———	1
	NON-BID ITEMS													
	BRIDGE SEAT PROTECTION	L.S.												1
	FILLER	SIZE												½", ¾", 1½"
	EXPANDED POLYSTYRENE	SIZE												1"

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

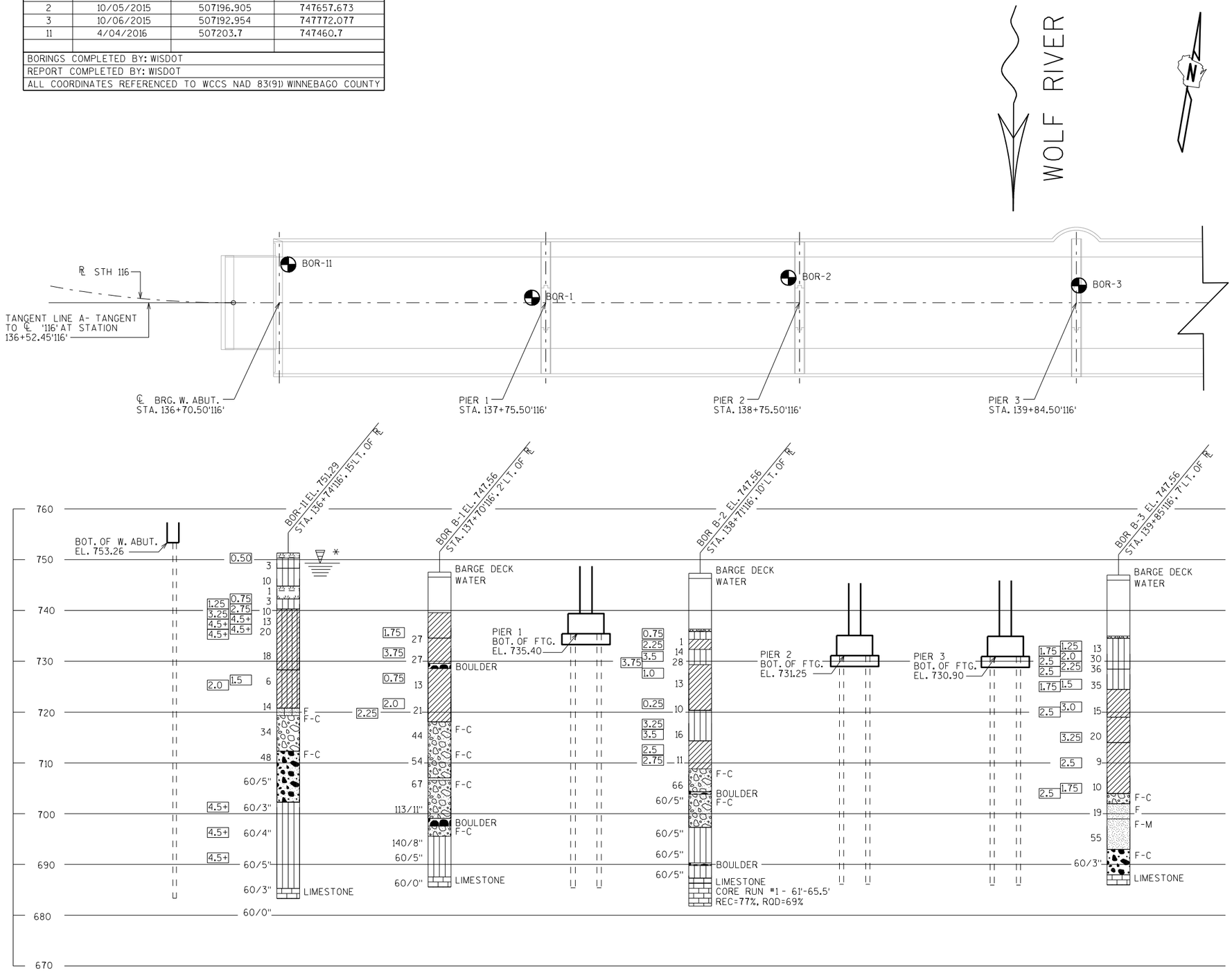
QUANTITIES

SHEET 3

253

SCALE = 5

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	9/30/2015	507189.867	747556.612
2	10/05/2015	507196.905	747657.673
3	10/06/2015	507192.954	747772.077
11	4/04/2016	507203.7	747460.7
BORINGS COMPLETED BY: WISDOT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) WINNEBAGO COUNTY			



* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

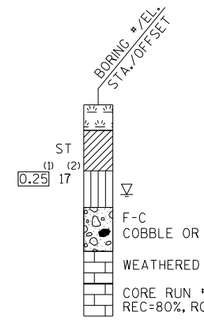
STATE PROJECT NUMBER

6190-15-72

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
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY TLP/WWR | PLANS CK'D. BLB

SUBSURFACE EXPLORATION A

SHEET 4

254

SCALE =

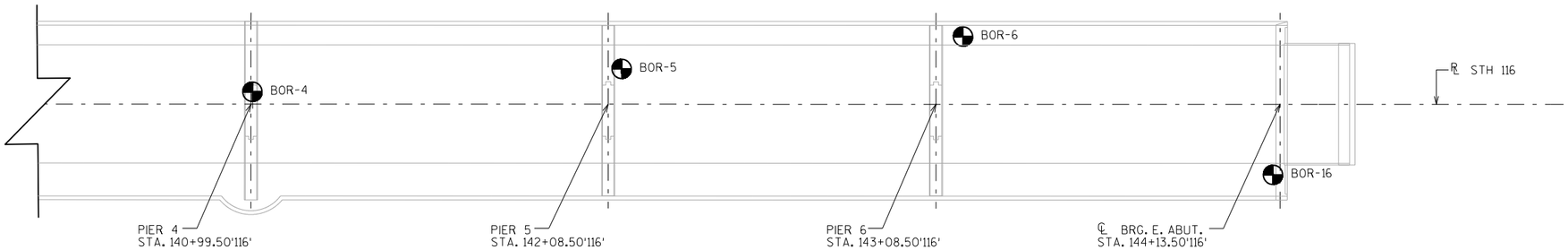
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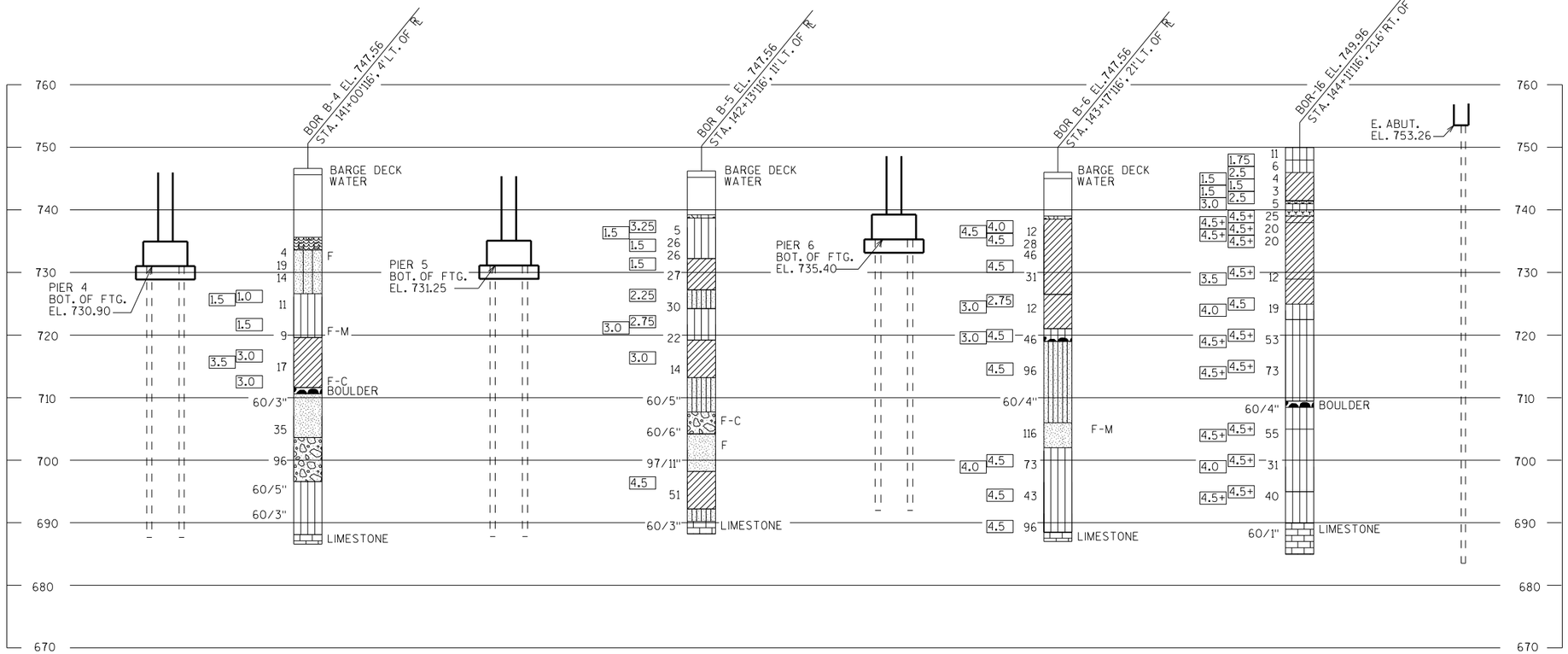
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BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
4	10/07/15	507188.999	747886.481
5	10/07/2015	507195.103	747999.189
6	10/12/2015	507204.147	748103.429
16	5/26/2016	507161.302	748197.700
BORINGS COMPLETED BY: WISDOT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) WINNEBAGO COUNTY			

WOLF RIVER

N





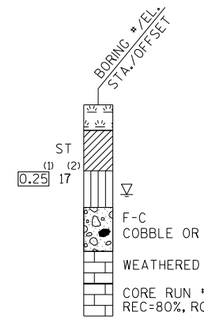
STATE PROJECT NUMBER

6190-15-72

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY TLP/WWR | PLANS CK'D. BLB

SUBSURFACE EXPLORATION B

SHEET 5

255

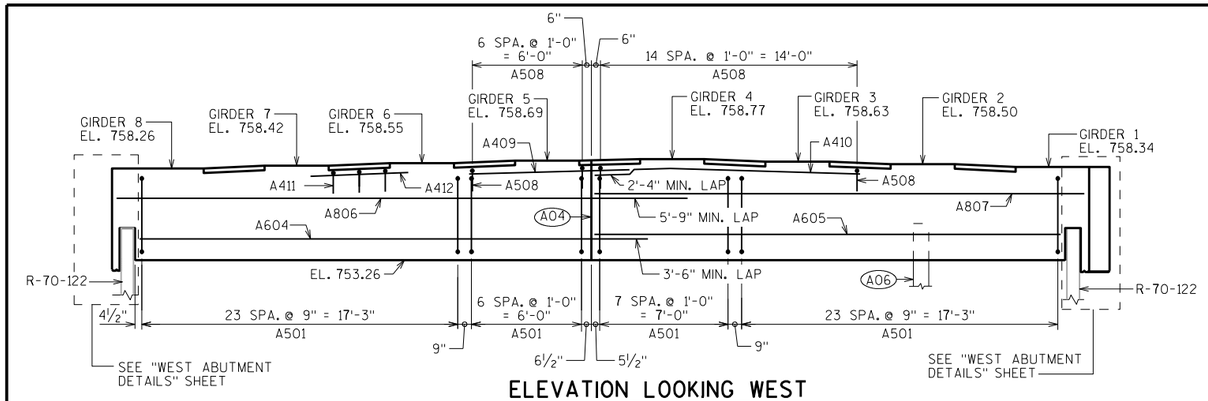
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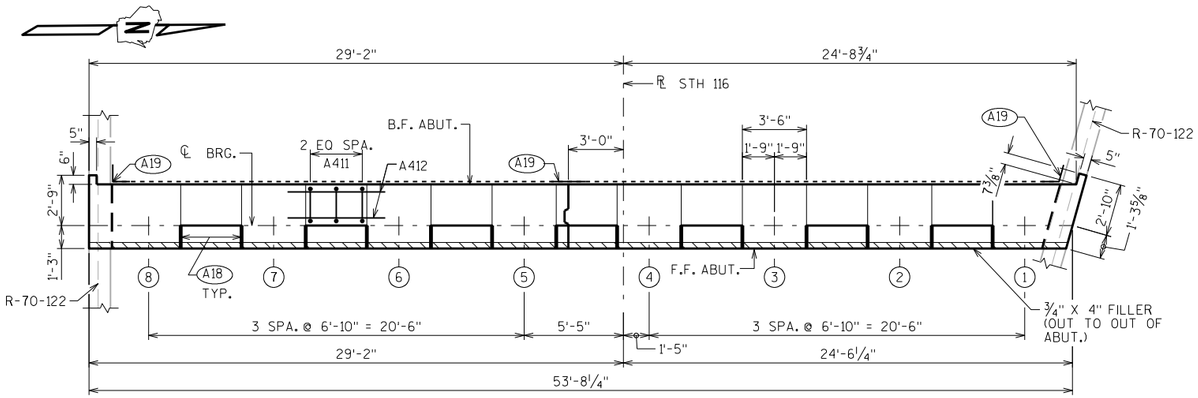
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STATE PROJECT NUMBER

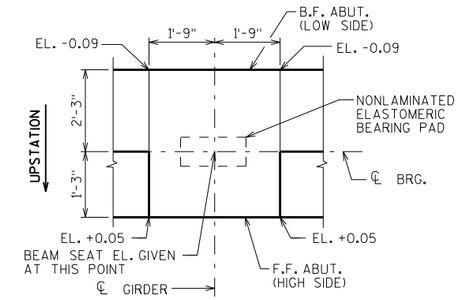
6190-15-72



ELEVATION LOOKING WEST

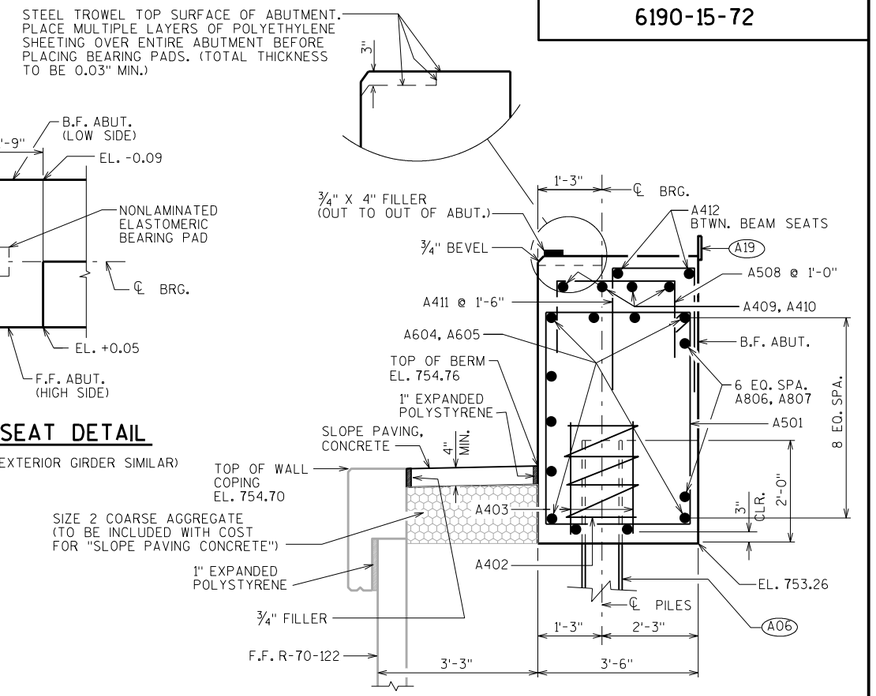


PLAN

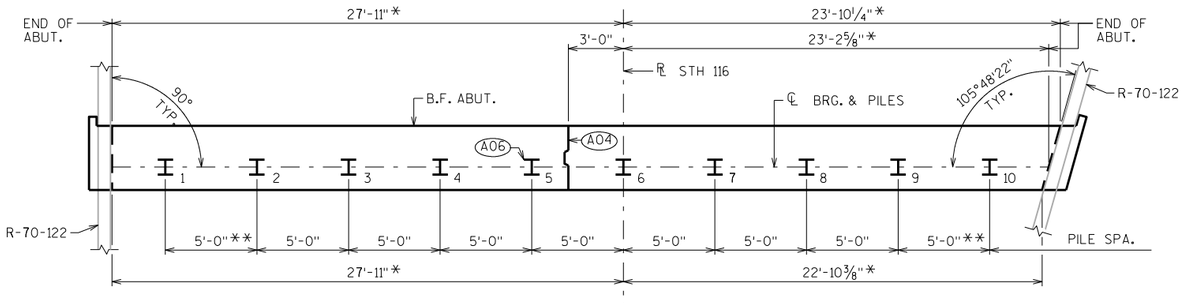


SLOPED BEAM SEAT DETAIL

(SHOWN AT INTERIOR GIRDER, EXTERIOR GIRDER SIMILAR)



SECTION THRU BODY



PILE PLAN

* DIMENSION BASED ON A WALL PANEL THICKNESS OF 8". ADJUST AS NECESSARY TO ACCOMODATE ACTUAL PANEL THICKNESS.

** ADJUST ACCORDINGLY TO MAINTAIN A MINIMUM CLEAR DISTANCE OF 2'-3" BETWEEN PILE AND B.F. OF WALL PANEL.

(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2" x 8". ¾" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE SHEET 59.

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 55 FEET LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY MODIFIED GATES.

(A18) ¾" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

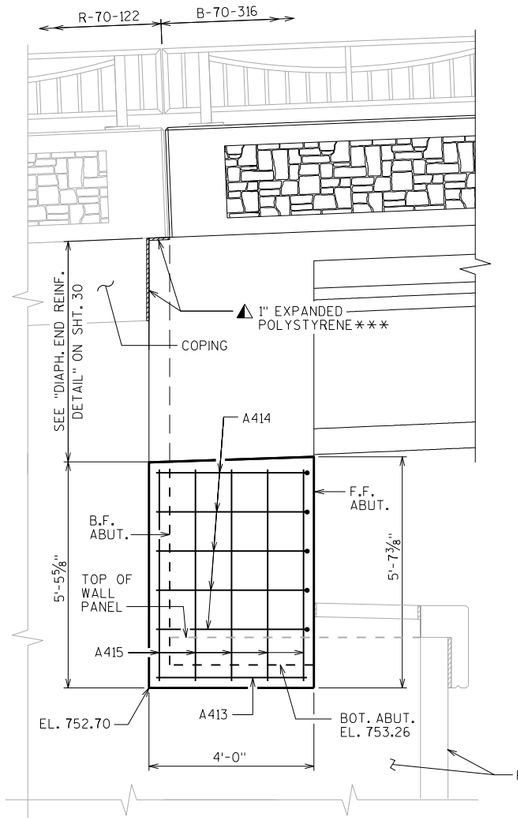
DRAWN BY WWR | PLANS CK'D. BLB

WEST ABUTMENT

SHEET 6

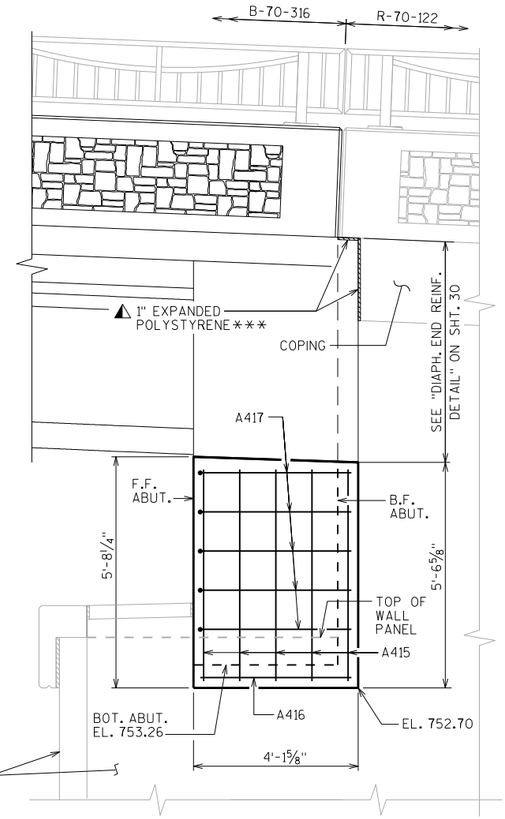
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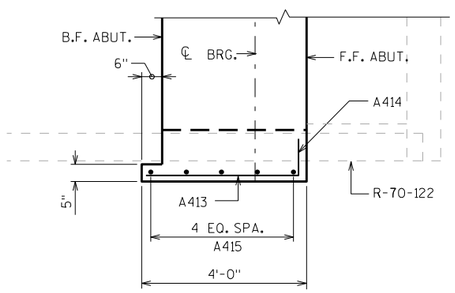
SOUTH END ELEVATION

(LOOKING NORTH)

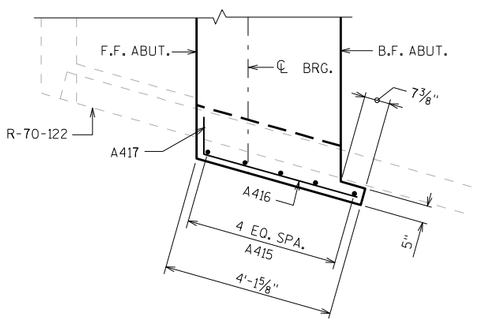


NORTH END ELEVATION

(LOOKING SOUTH)



SOUTH END PLAN



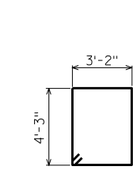
NORTH END PLAN

* DIMENSION BASED ON A WALL PANEL THICKNESS OF 8". ADJUST AS NECESSARY TO ACCOMODATE ACTUAL WALL PANEL THICKNESS.

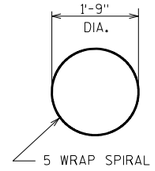
◐ WALL EMBEDMENT TO BE 0" MIN., 8" MAX.

*** INCIDENTAL TO THE BID ITEM CONCRETE MASONRY BRIDGES

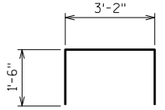
⚠ SEAL ALL THE EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)



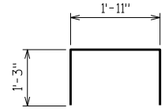
A501



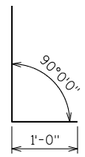
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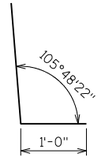
A508



A411



A414



A417

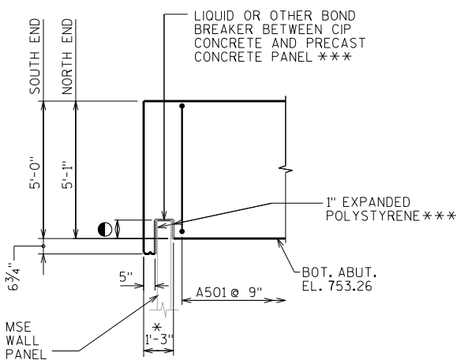
STATE PROJECT NUMBER

6190-15-72

BILL OF BARS

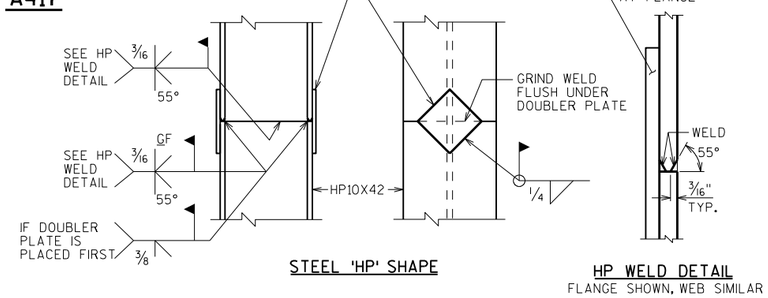
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		63	15'-5"	X		BODY-STIRRUP
A402		10	28'-0"	X		BODY-1 PER PILE
A403		20	2'-3"			BODY-2 PER PILE
A604		11	31'-10"			BODY-HORIZ.
A605		11	25'-8"			BODY-HORIZ.
A806		7	33'-9"			BODY-HORIZ.-B.F.
A807		7	26'-0"			BODY-HORIZ.-B.F.
A508		22	5'-11"	X		BODY-VERT.-TOP
A409		4	10'-0"			BODY-HORIZ.-TOP
A410		4	15'-9"			BODY-HORIZ.-TOP
A411		21	4'-3"	X		BODY-VERT.-BTWN. BEAM SEATS
A412		14	5'-5"			BODY-HORIZ.-BTWN. BEAM SEATS
A413	X	1	3'-8"			BODY-HORIZ.-S. END
A414	X	5	4'-7"	X		BODY-HORIZ.-S. END
A415	X	10	5'-2"			BODY-VERT.-S. & N. END
A416	X	1	3'-9"			BODY-HORIZ.-N. END
A417	X	5	4'-8"	X		BODY-HORIZ.-N. END



GENERAL END SECTION AT ℄ BRG.

(SHOWING WALL PANEL NOTCH DETAILS)



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

WEST ABUTMENT DETAILS

SHEET 7

257

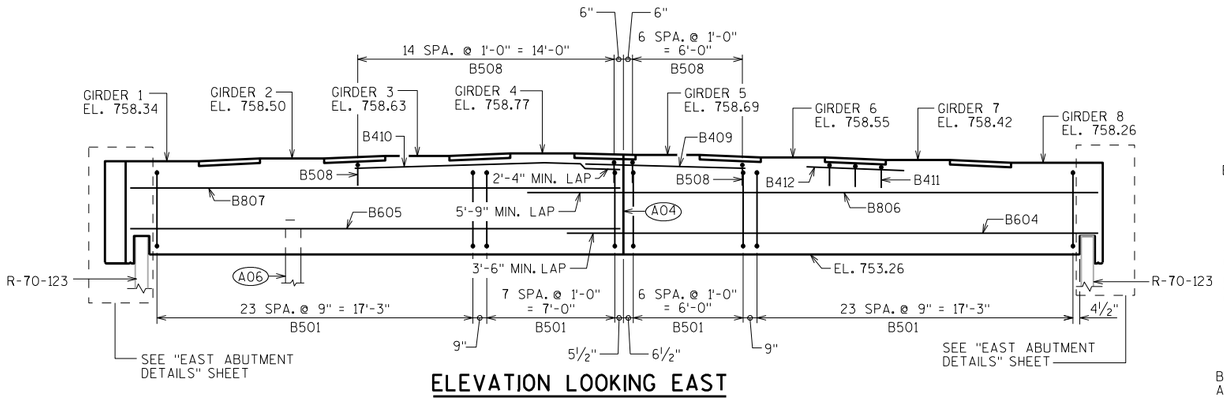
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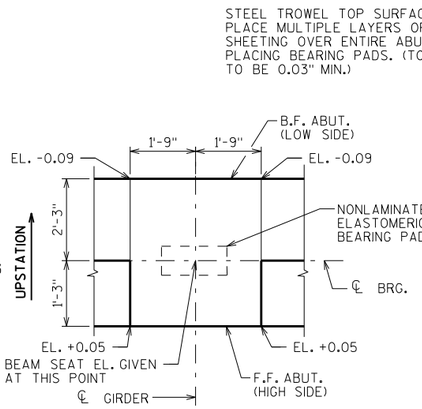
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STATE PROJECT NUMBER

6190-15-72

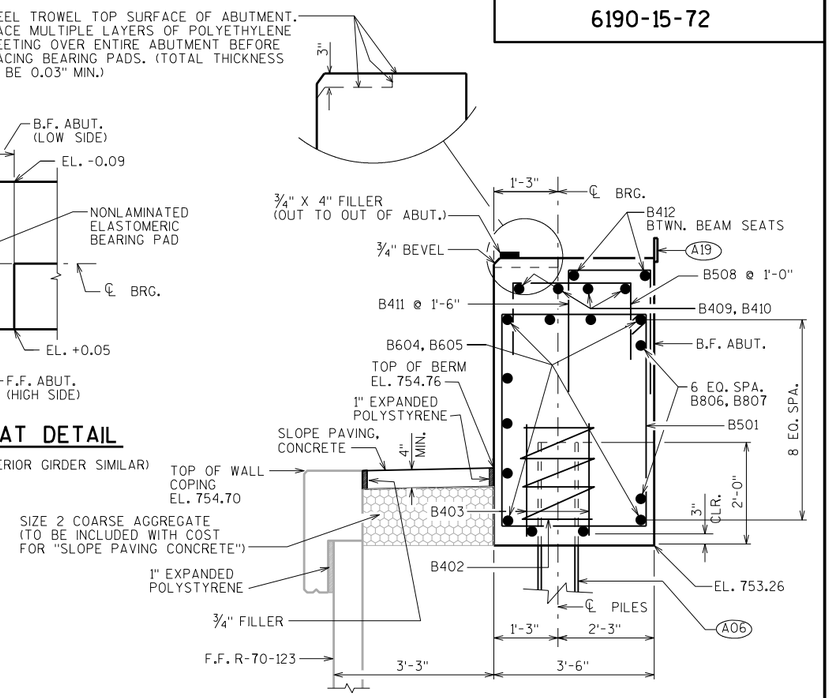


ELEVATION LOOKING EAST

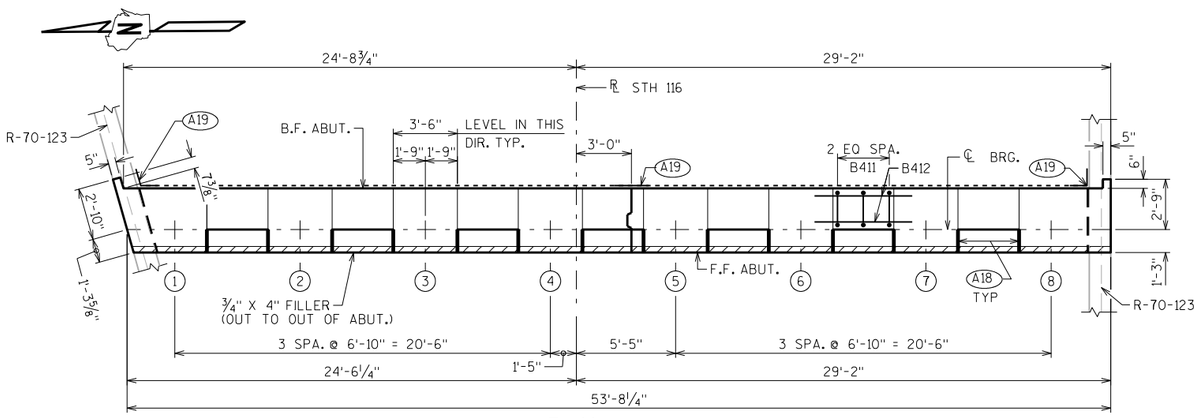


SLOPED BEAM SEAT DETAIL

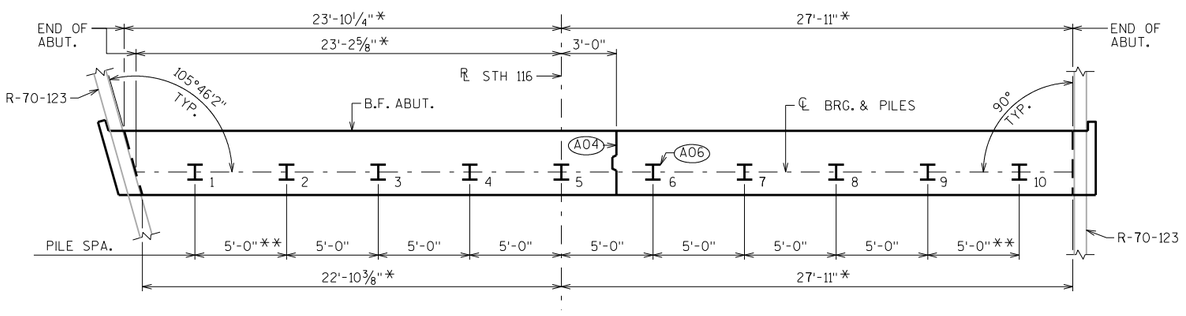
(SHOWN AT INTERIOR GIRDER, EXTERIOR GIRDER SIMILAR)



SECTION THRU BODY



PLAN



PILE PLAN

* DIMENSION BASED ON A WALL PANEL THICKNESS OF 8". ADJUST AS NECESSARY TO ACCOMODATE ACTUAL PANEL THICKNESS.

** ADJUST ACCORDINGLY TO MAINTAIN A MINIMUM CLEAR DISTANCE OF 2'-3" BETWEEN PILE AND B.F. OF WALL PANEL.

(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2" × 8". ¾" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE SHEET 59.

(A06) SUPPORT ABUTMENT ON HP 10 × 42 STEEL PILING, ESTIMATED 70 FEET LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY MODIFIED GATES.

(A18) ¾" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

EAST ABUTMENT

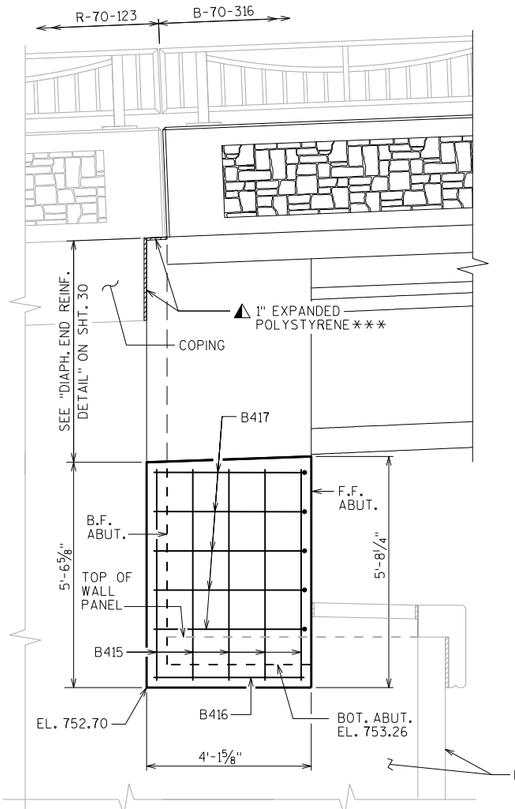
SHEET 8

258

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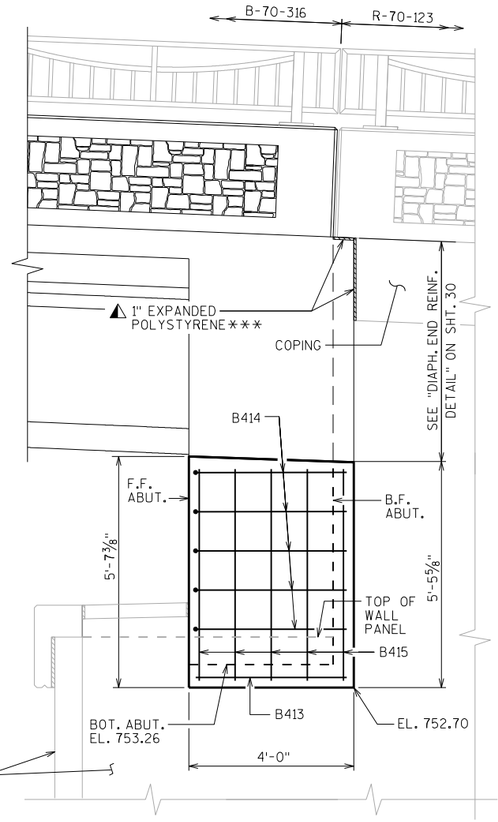
STATE PROJECT NUMBER

6190-15-72



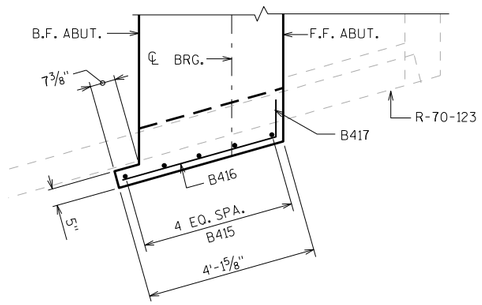
NORTH END ELEVATION

(LOOKING SOUTH)

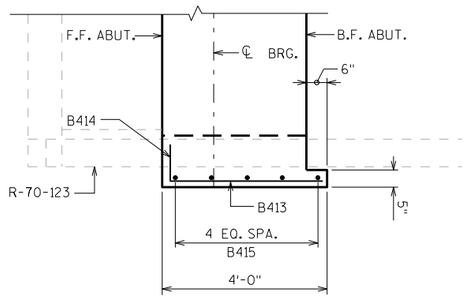


SOUTH END ELEVATION

(LOOKING NORTH)



NORTH END PLAN



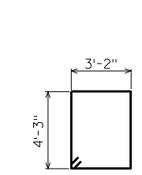
SOUTH END PLAN

* DIMENSION BASED ON A WALL PANEL THICKNESS OF 8". ADJUST AS NECESSARY TO ACCOMODATE ACTUAL WALL PANEL THICKNESS.

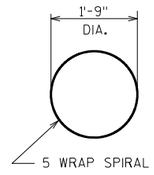
◐ WALL EMBEDMENT TO BE 0" MIN., 8" MAX.

*** INCIDENTAL TO THE BID ITEM CONCRETE MASONRY BRIDGES

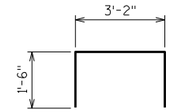
⚠ SEAL ALL THE EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)



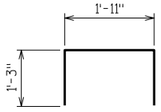
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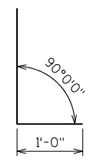
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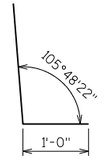
B508



B411



B414

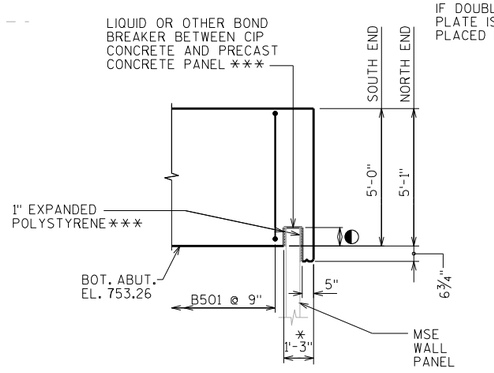


B417

BILL OF BARS

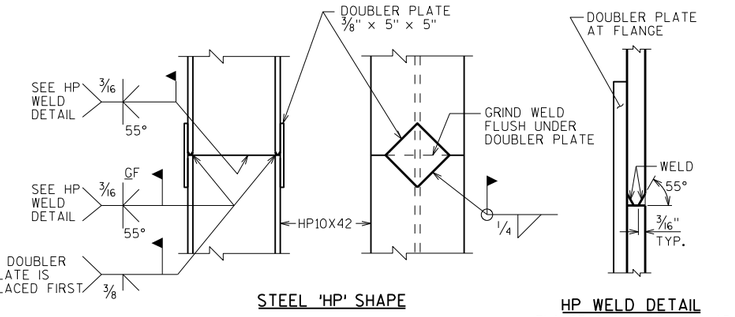
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

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B806		7	33'-9"			BODY-HORIZ.-B.F.
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B508		22	5'-11"	X		BODY-VERT.-TOP
B409		4	10'-0"			BODY-HORIZ.-TOP
B410		4	15'-9"			BODY-HORIZ.-TOP
B411		21	4'-3"	X		BODY-VERT.-BTWN. BEAM SEATS
B412		14	5'-5"			BODY-HORIZ.-BTWN. BEAM SEATS
B413	X	1	3'-8"			BODY-HORIZ.-S. END
B414	X	5	4'-7"	X		BODY-HORIZ.-S. END
B415	X	10	5'-2"			BODY-VERT.-S. & N. END
B416	X	1	3'-9"			BODY-HORIZ.-N. END
B417	X	5	4'-8"	X		BODY-HORIZ.-N. END



GENERAL END SECTION AT ℄ BRG.

(SHOWING WALL PANEL NOTCH DETAILS)



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

EAST ABUTMENT DETAILS

SHEET 9

259

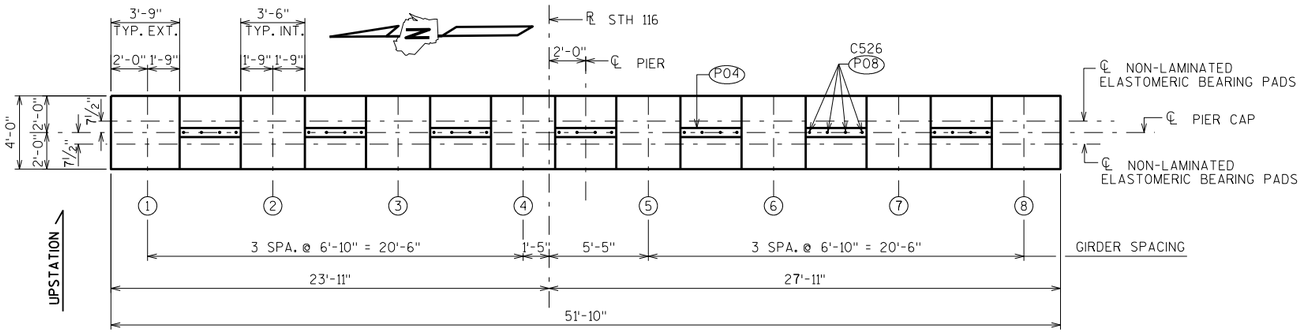
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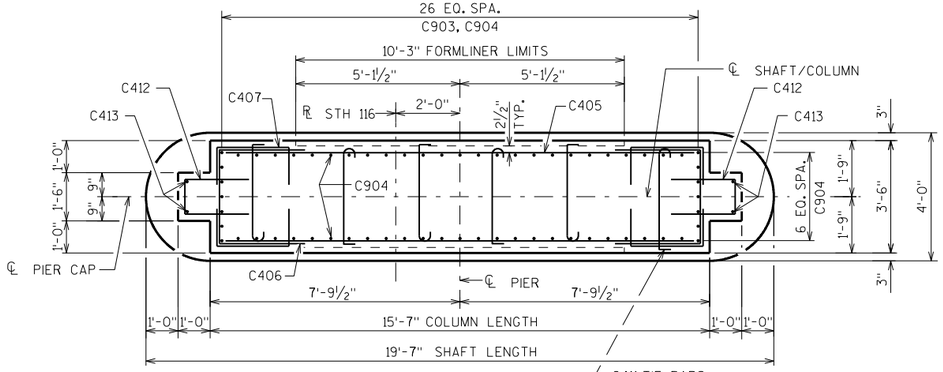
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STATE PROJECT NUMBER

6190-15-72

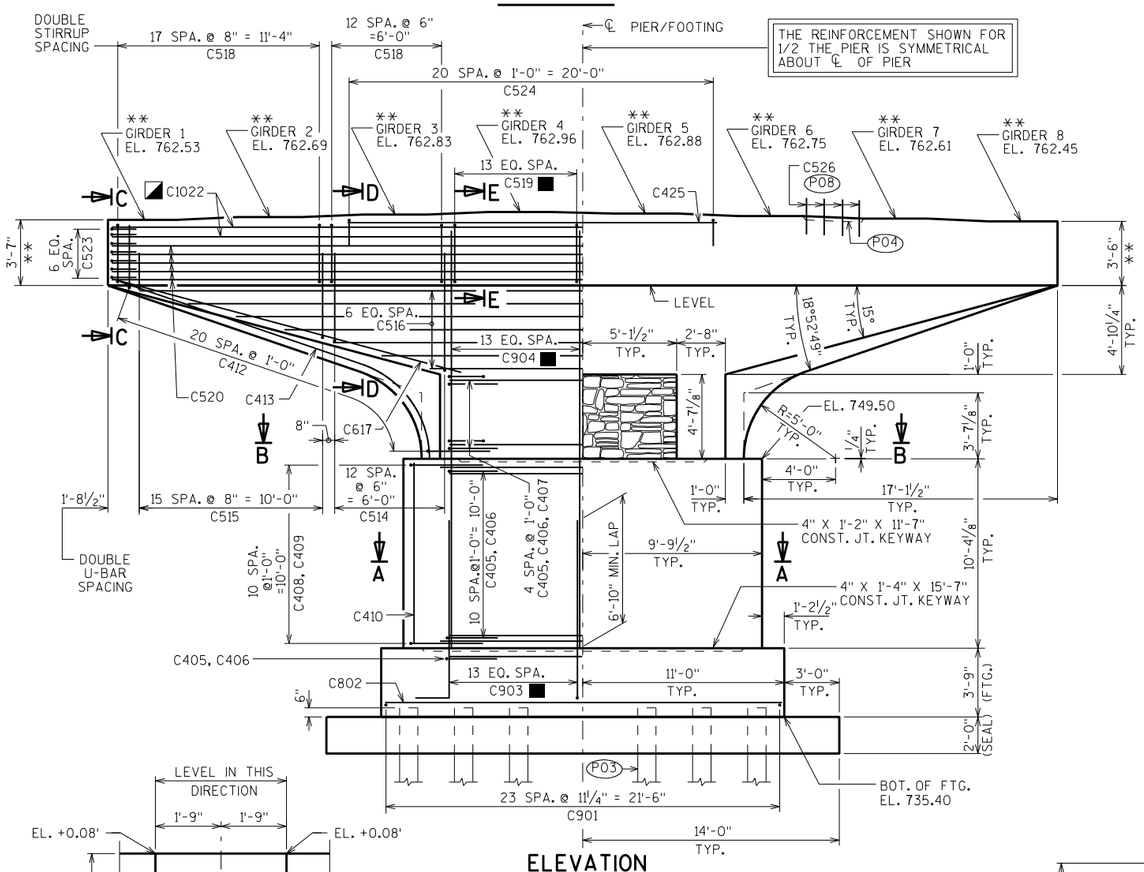


CAP PLAN



SECTION B-B

C411 TIE BARS.
ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF THE TIES. TIES ARE SPACED 1'-0" VERTICALLY, AND EQUALLY SPACED HORIZONTALLY, AS SHOWN. TIE BARS ARE LOCATED BTWN. TOP OF FOOTING AND TOP OF FORMLINER.



ELEVATION

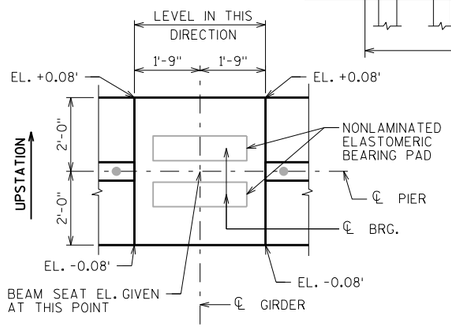
■ BARS AT ℄ OF PIER ARE SHOWN OFFSET FOR CLARITY OF ℄

(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING, ESTIMATED 50'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(P04) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" BETWEEN BEAM SEATS

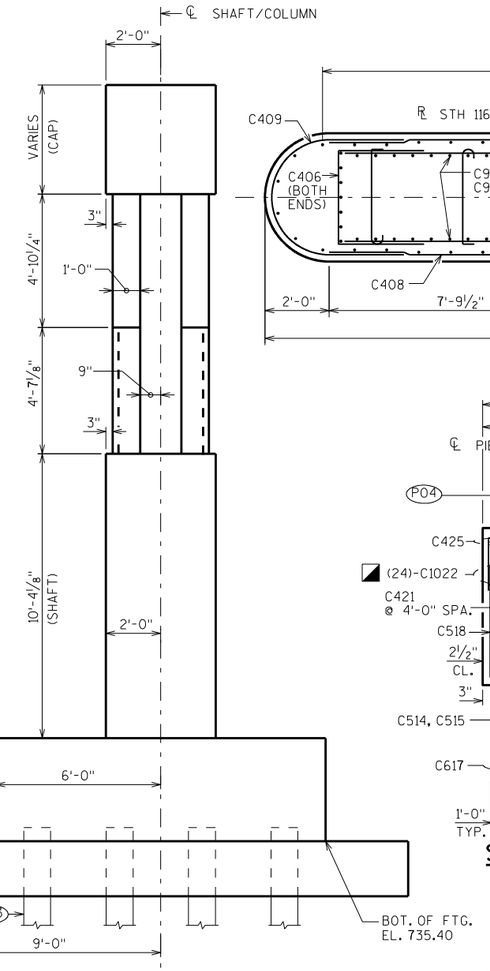
(P08) C526 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

** = ELEVATION/DIMENSION @ ℄ OF PIER



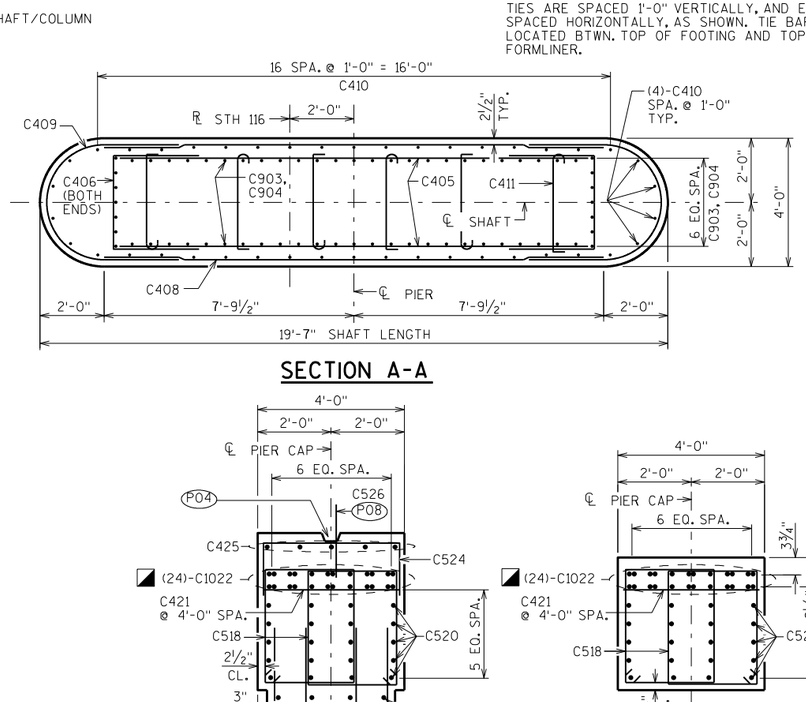
SLOPED BEAM SEAT DETAIL - PIER 1

(SHOWN AT INTERIOR GIRDER, EXTERIOR GIRDER SIMILAR)

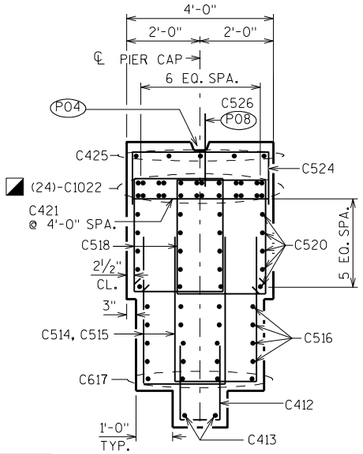


SIDE ELEVATION

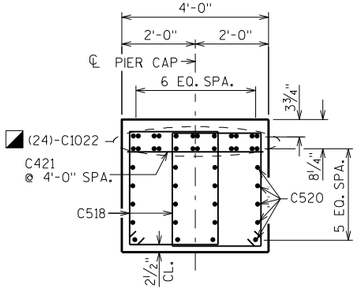
(STEEL REINFORCEMENT NOT SHOWN)
(DIMENSIONS SYMMETRICAL ABOUT ℄ SHAFT/COLUMN)



SECTION A-A



SECTION D-D



SECTION C-C



BUNDLING DETAIL

■ BUNDLE APPLICABLE BARS AS SHOWN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

PIER 1

SHEET 10

260

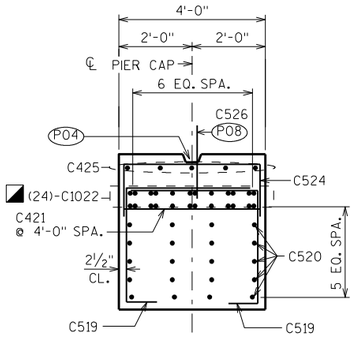
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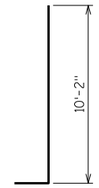
8

STATE PROJECT NUMBER

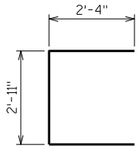
6190-15-72



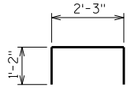
SECTION E-E
(SHOWING ONLY CAP STEEL FOR CLARITY)



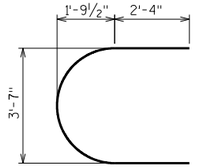
C903



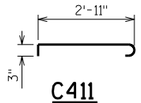
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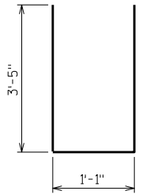
C407



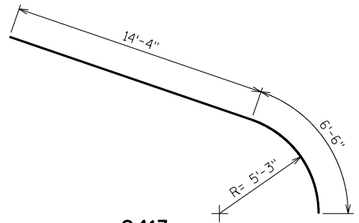
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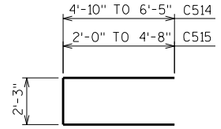
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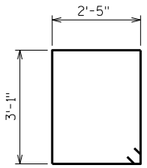
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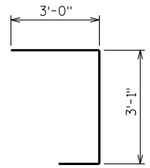
C413



C514, C515

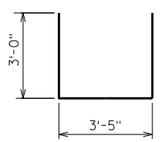


C518

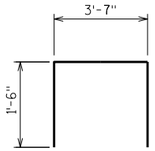


C519

NOTE: BENDS ON C519 TO MATCH THOSE ON C518



C523



C524

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

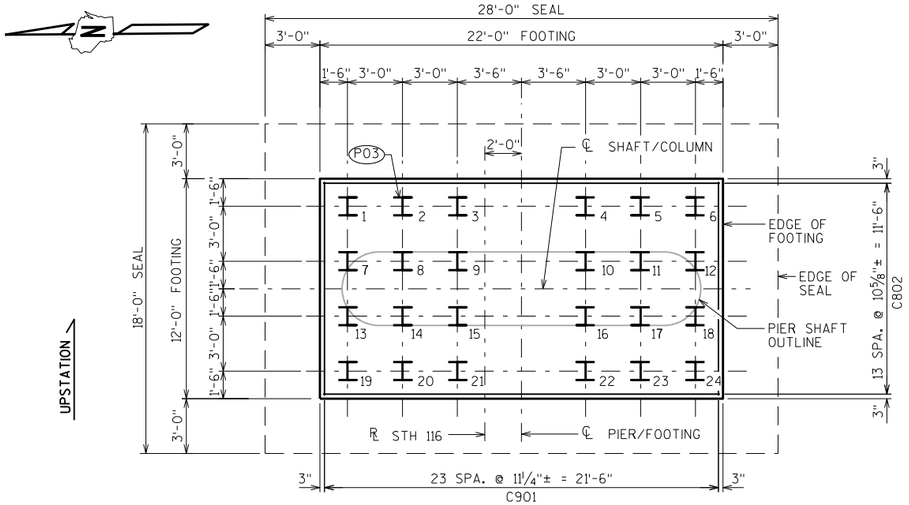
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
C901		24	11'-6"			FOOTING
C802		14	21'-6"			FOOTING
C903	X	64	11'-9"	X		FOOTING/SHAFT-VERT.
C904	X	64	22'-11			SHAFT-VERT.
C405	X	34	15'-2"			SHAFT/COLUMN-HORIZ.
C406	X	34	7'-5"	X		SHAFT/COLUMN-HORIZ. ENDS
C407	X	20	4'-5"	X		COLUMN-HORIZ.
C408	X	22	15'-7"			SHAFT-HORIZ.
C409	X	22	10'-4"	X		SHAFT-HORIZ. ENDS
C410	X	42	10'-0"			SHAFT-VERT.
C411	X	90	3'-7"	X		SHAFT/COLUMN-HORIZ. TIE BARS
C412	X	42	7'-9"	X		COLUMN CURVE
C413	X	4	20'-10"	X		COLUMN CURVE
C514	X	52	13'-3"	X	◭	COLUMN-VERT. U-BAR
C515	X	64	8'-8"	X	◭	COLUMN-VERT. U-BAR
C516	X	28	32'-7"		◭	COLUMN-HORIZ.
C617	X	8	19'-8"			COLUMN TAPER
C518	X	124	11'-8"	X		CAP-VERT. STIRRUP
C519	X	54	6'-8"	X		CAP-VERT.
C520	X	20	51'-5"			CAP-HORIZ.
C421	X	12	3'-7"			CAP-HORIZ SUPPORT BAR
C1022	X	24	51'-5"			CAP-HORIZ. TOP
C523	X	14	9'-2"	X		CAP-HORIZ. ENDS
C524	X	21	6'-4"	X		CAP-VERT. U-BAR TOP
C425	X	5	20'-2"			CAP-HORIZ. TOP
C526	X	28	2'-0"			CAP-VERT. DOWEL BTWN. BEAM SEATS

◭ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
C514	4 SERIES OF 13	11'-8" TO 14'-10"
C515	4 SERIES OF 16	6'-0" TO 11'-4"
C516	4 SERIES OF 7	16'-8" TO 48'-5"
	SERIES OF	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.



PILE/FOOTING PLAN

◪ BUNDLE APPLICABLE BARS AS SHOWN

(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING, ESTIMATED 50'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(P04) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" BETWEEN BEAM SEATS

(P08) C526 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

PIER 1 DETAILS

SHEET 11

261

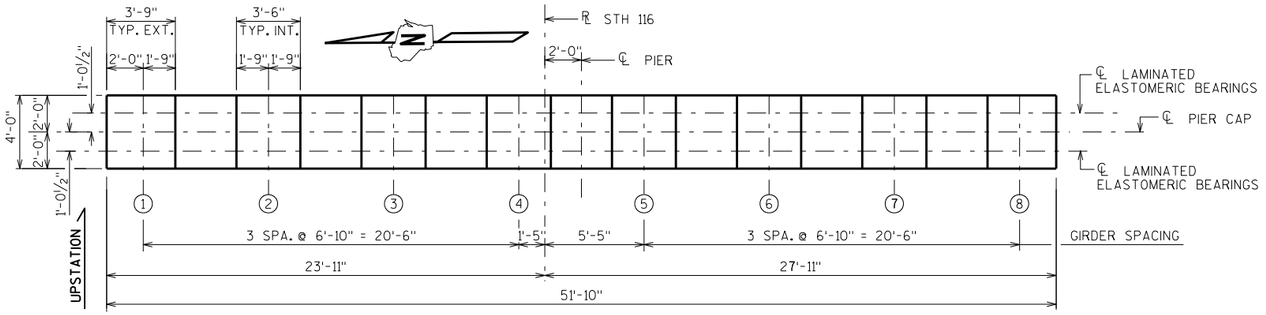
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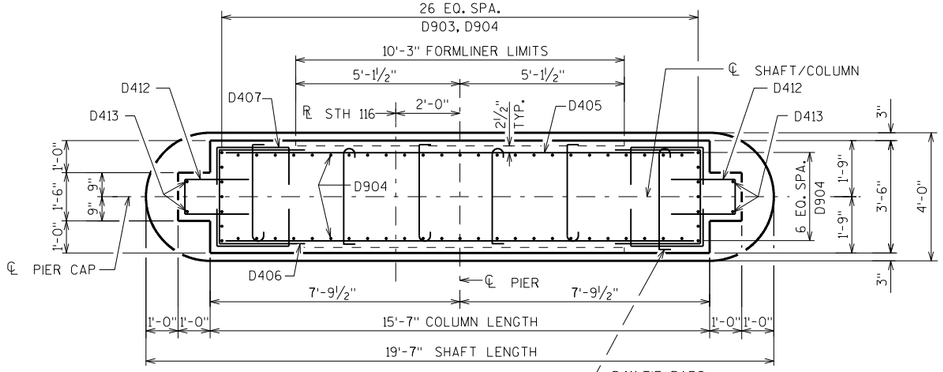
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STATE PROJECT NUMBER

6190-15-72

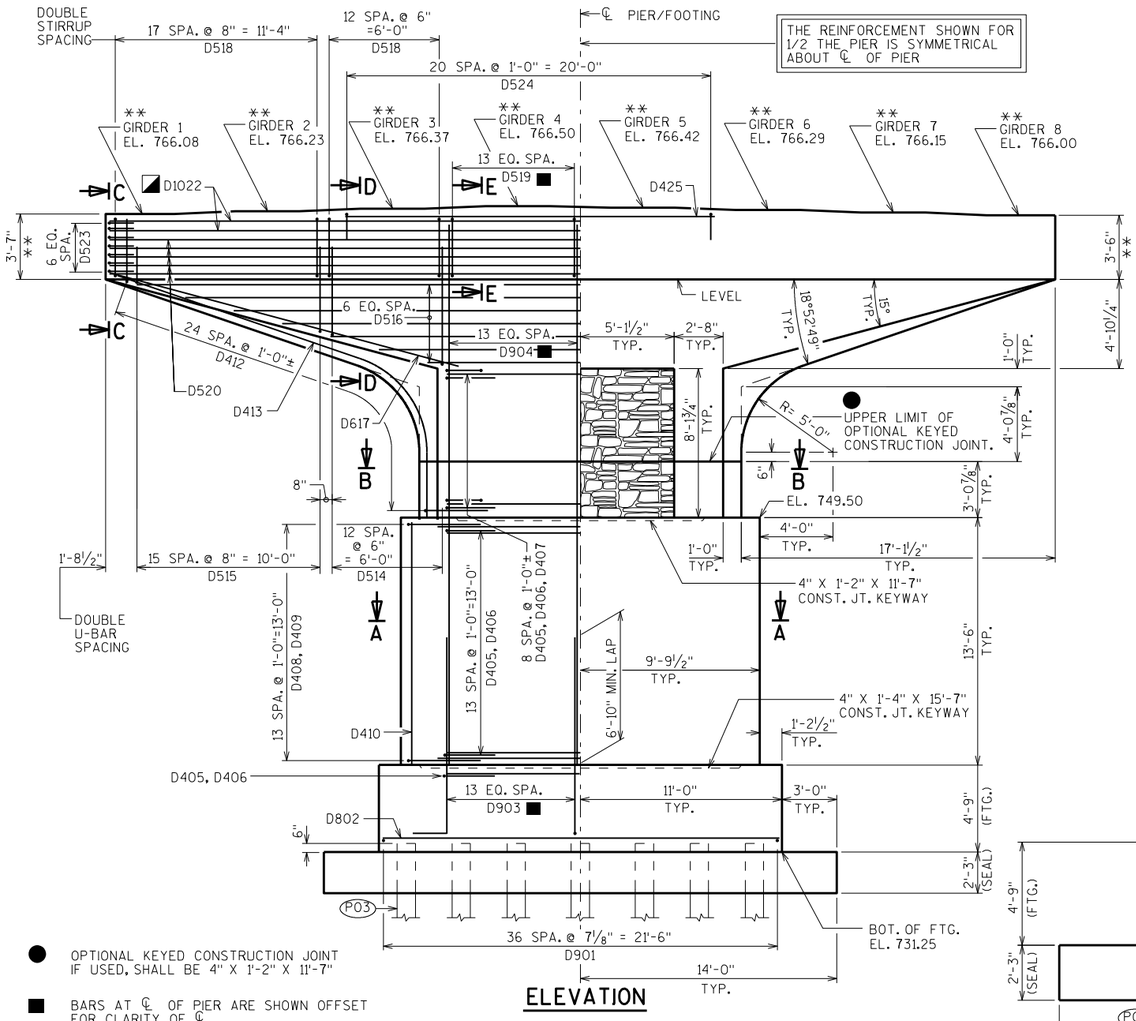


CAP PLAN



SECTION B-B

D411 TIE BARS.
ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF THE TIES. TIES ARE SPACED 1'-0" VERTICALLY, AND EQUALLY SPACED HORIZONTALLY, AS SHOWN. TIE BARS ARE LOCATED BTWN. TOP OF FOOTING AND TOP OF FORMLINER.



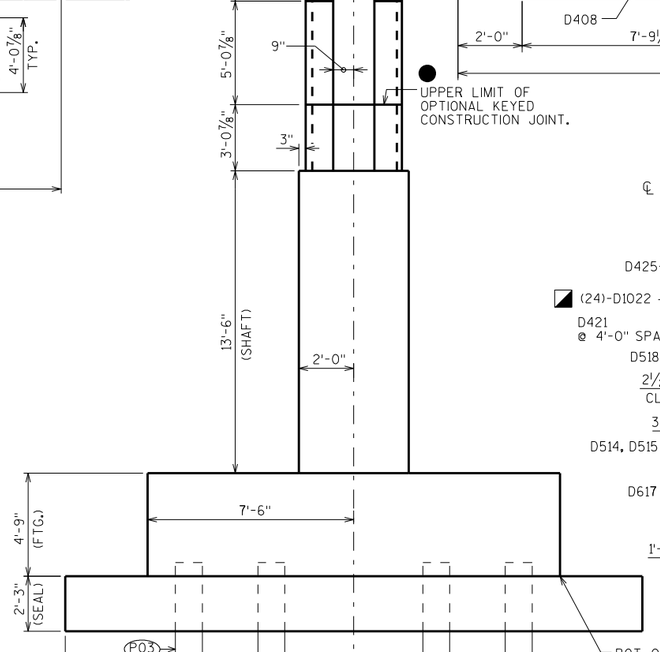
ELEVATION

● OPTIONAL KEYED CONSTRUCTION JOINT IF USED, SHALL BE 4" X 1'-2" X 11'-7"

■ BARS AT ℄ OF PIER ARE SHOWN OFFSET FOR CLARITY OF ℄

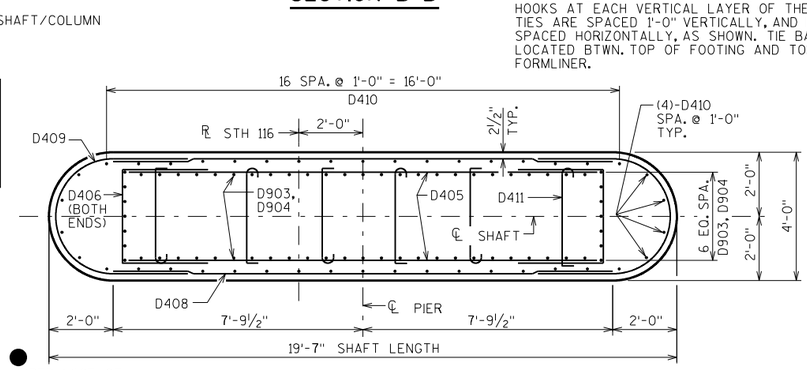
(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

** = ELEVATION/DIMENSION @ ℄ OF PIER

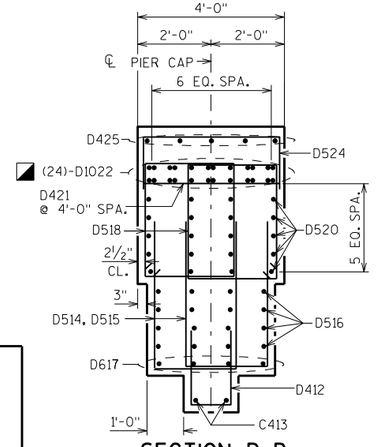


SIDE ELEVATION

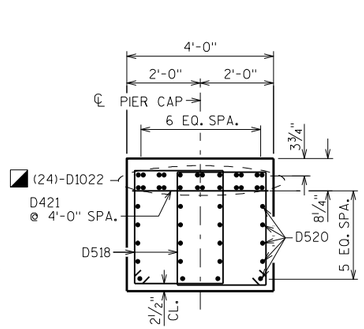
(STEEL REINFORCEMENT NOT SHOWN)
(DIMENSIONS SYMMETRICAL ABOUT ℄ SHAFT/COLUMN)



SECTION A-A



SECTION D-D



SECTION C-C



BUNDLING DETAIL

◪ BUNDLE APPLICABLE BARS AS SHOWN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

PIER 2

SHEET 12

262

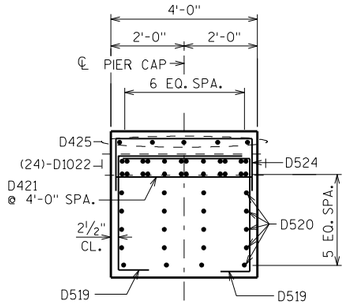
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8

STATE PROJECT NUMBER

6190-15-72

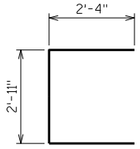


SECTION E-E

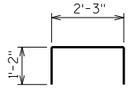
(SHOWING ONLY CAP STEEL FOR CLARITY)



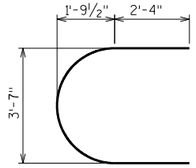
D903



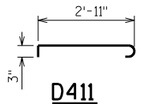
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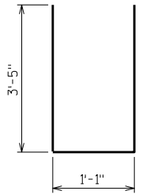
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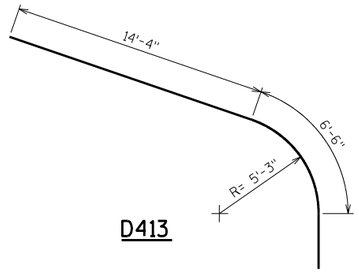
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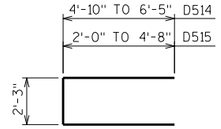
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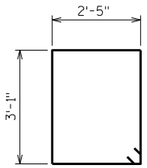
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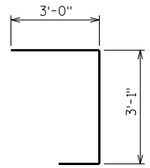
D413



D514, D515



D518



D519

NOTE: BENDS ON D519 TO MATCH THOSE ON D518

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

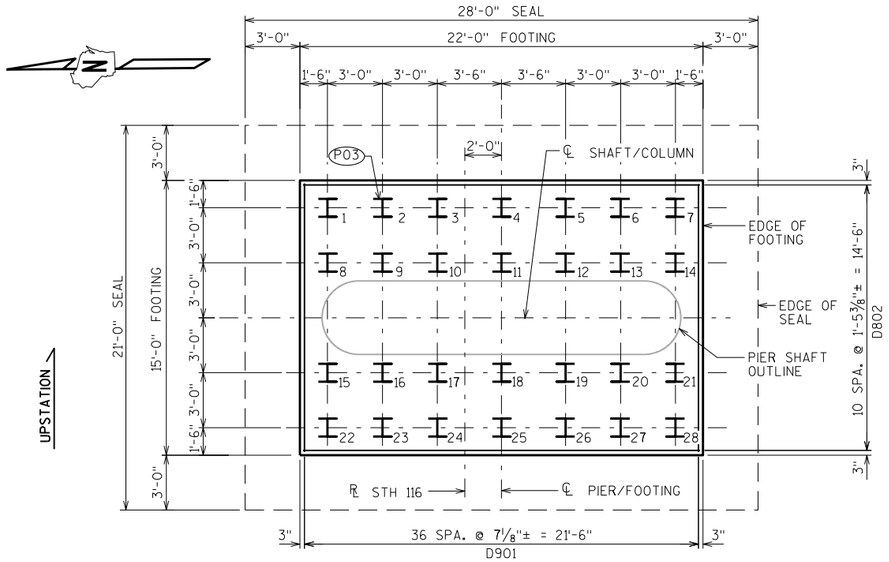
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
D901		37	14-6"			FOOTING
D802		11	21'-6"			FOOTING
D903	X	64	12'-9"	X		FOOTING/SHAFT-VERT.
D904	X	64	29'-6"			SHAFT-VERT.
D405	X	48	15'-2"			SHAFT/COLUMN-HORIZ.
D406	X	48	7'-5"	X		SHAFT/COLUMN-HORIZ. ENDS
D407	X	36	4'-5"	X		COLUMN-HORIZ.
D408	X	28	15'-7"			SHAFT-HORIZ.
D409	X	28	10'-4"	X		SHAFT-HORIZ. ENDS
D410	X	42	13'-1"			SHAFT-VERT.
D411	X	126	3'-7"	X		SHAFT/COLUMN-HORIZ. TIE BARS
D412	X	50	7'-9"	X		COLUMN CURVE
D413	X	4	24'-0"	X		COLUMN CURVE
D514	X	52	13'-3"	X	⚠	COLUMN-VERT. U-BAR
D515	X	64	8'-8"	X	⚠	COLUMN-VERT. U-BAR
D516	X	28	32'-7"		⚠	COLUMN-HORIZ.
D617	X	8	19'-8"			COLUMN TAPER
D518	X	124	11'-8"	X		CAP-VERT. STIRRUP
D519	X	54	6'-8"	X		CAP-VERT.
D520	X	20	51'-5"			CAP-HORIZ.
D421	X	12	3'-7"			CAP-HORIZ SUPPORT BAR
D1022	X	24	51'-5"			CAP-HORIZ. TOP
D523	X	14	9'-2"	X		CAP-HORIZ. ENDS
D524	X	21	6'-4"	X		CAP-VERT. U-BAR TOP
D425	X	5	20'-2"			CAP-HORIZ. TOP
D526	X	28	2'-0"			CAP-VERT. DOWEL BTWN. BEAM SEATS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

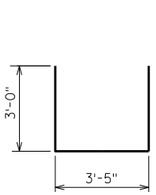
BAR MARK	NO. REQ'D.	LENGTH
D514	4 SERIES OF 13	11'-8" TO 14'-10"
D515	4 SERIES OF 16	6'-0" TO 11'-4"
D516	4 SERIES OF 7	16'-8" TO 48'-5"
	SERIES OF	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.

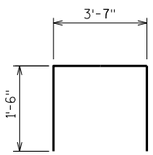


PILE/FOOTING PLAN

UPSTATION



D523



D524

P03 SUPPORT PIER ON HP 12 × 53 STEEL PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

PIER 2 DETAILS

SHEET 13

263

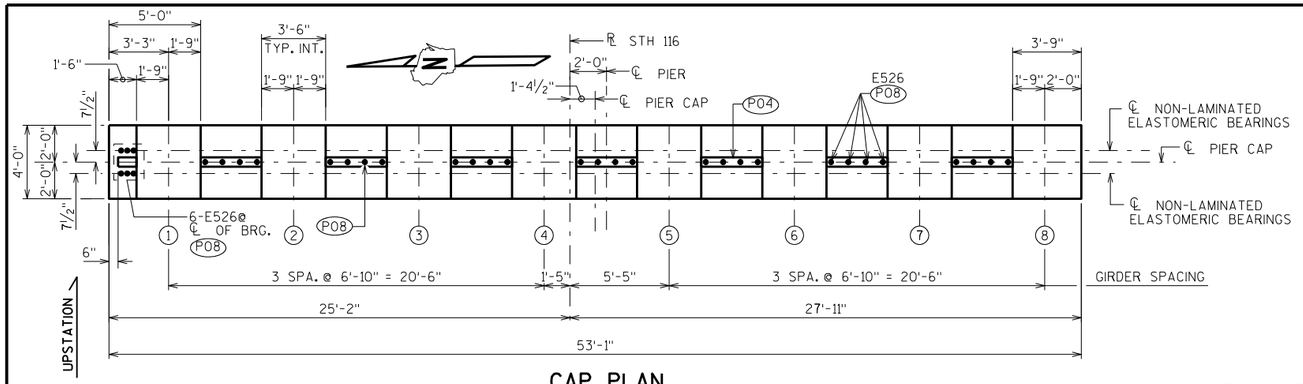
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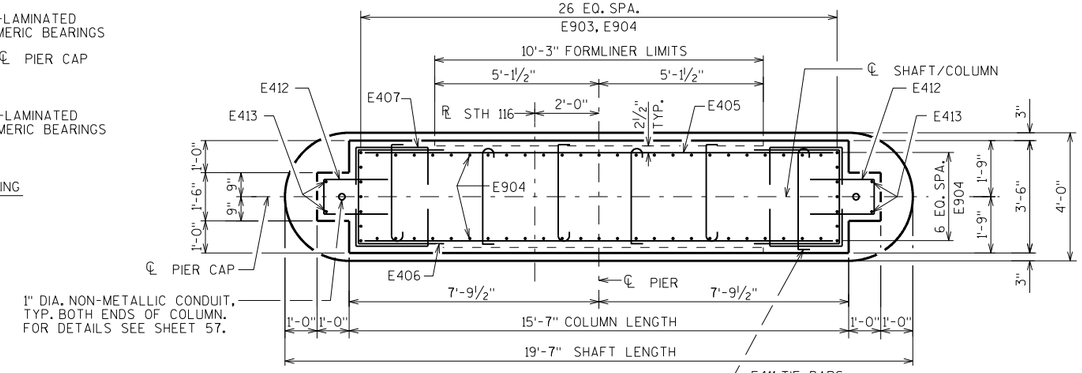
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STATE PROJECT NUMBER

6190-15-72



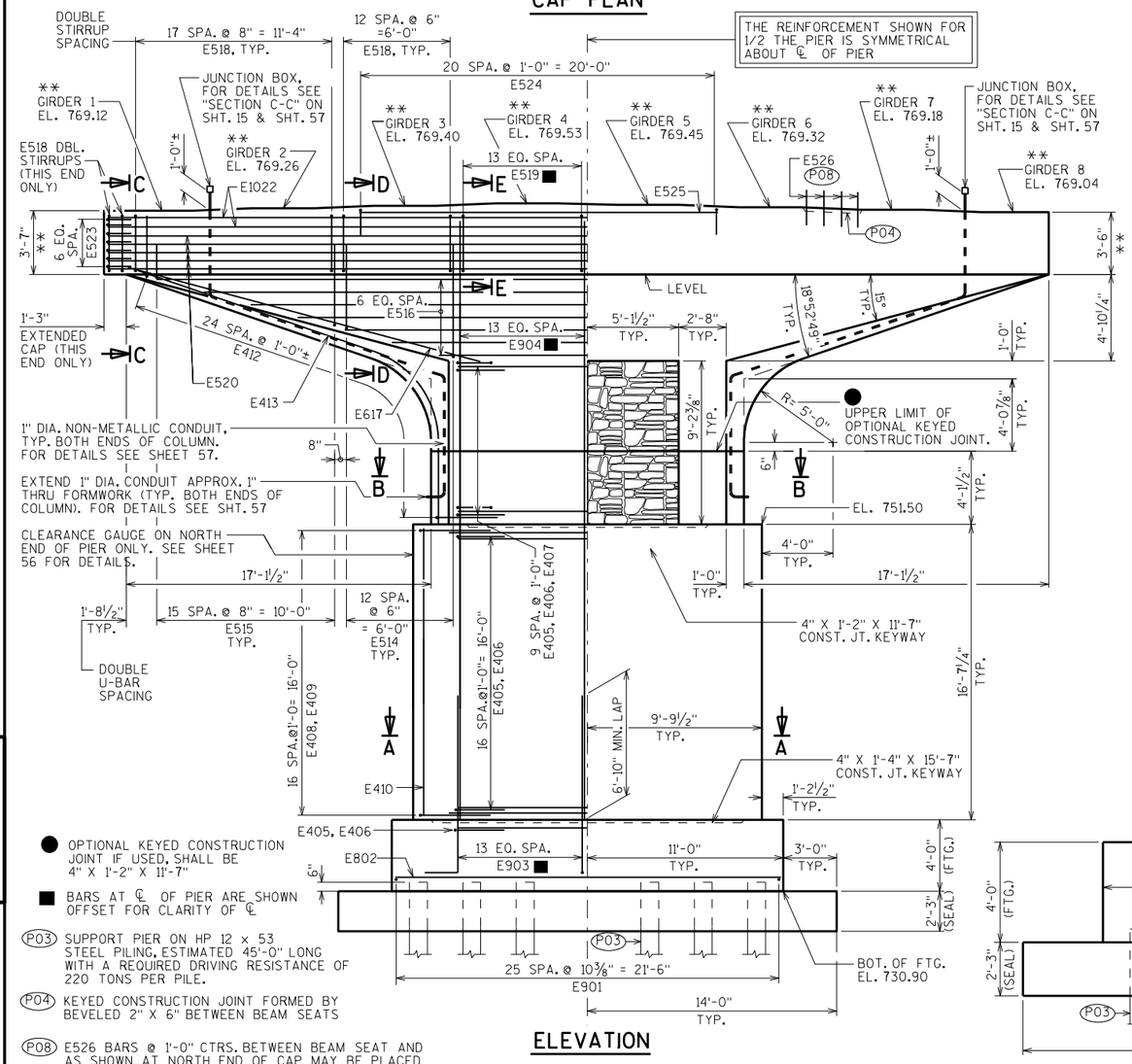
CAP PLAN



1" DIA. NON-METALLIC CONDUIT, TYP. BOTH ENDS OF COLUMN. FOR DETAILS SEE SHEET 57.

SECTION B-B

E411 TIE BARS. ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF THE TIES. TIES ARE SPACED 1'-0" VERTICALLY, AND EQUALLY SPACED HORIZONTALLY, AS SHOWN. TIE BARS ARE LOCATED BTWN. TOP OF FOOTING AND TOP OF FORMLINER.



● OPTIONAL KEYED CONSTRUCTION JOINT IF USED, SHALL BE 4" X 1'-2" X 11'-7"

■ BARS AT ℄ OF PIER ARE SHOWN OFFSET FOR CLARITY OF ℄

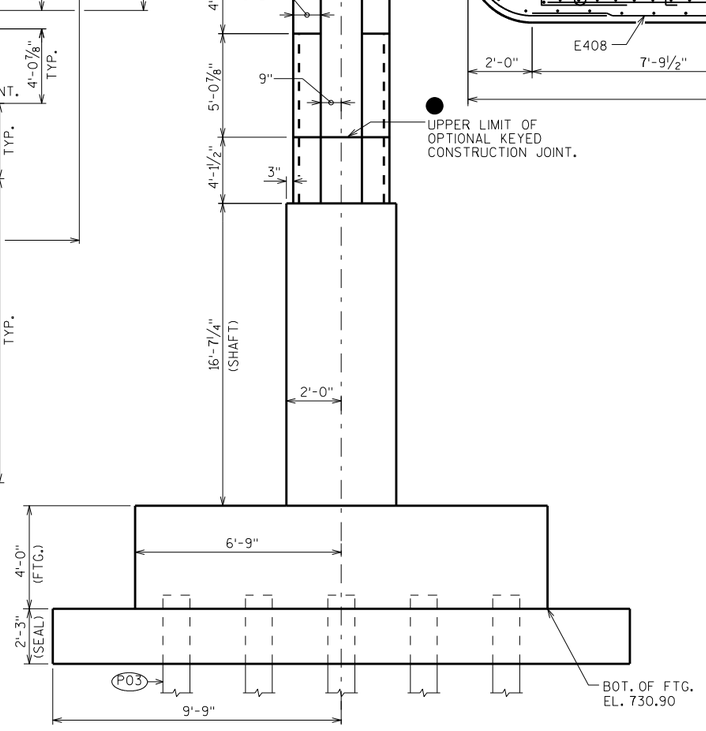
(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(P04) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" BETWEEN BEAM SEATS

(P08) E526 BARS @ 1'-0" CTRS. BETWEEN BEAM SEAT AND AS SHOWN AT NORTH END OF CAP MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

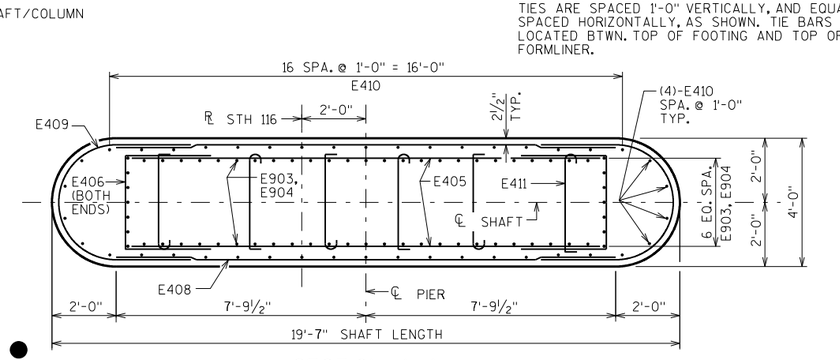
** = ELEVATION/DIMENSION @ ℄ OF PIER

ELEVATION

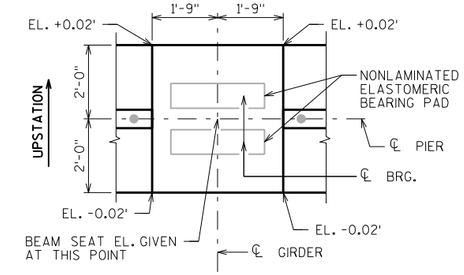


SIDE ELEVATION

(STEEL REINFORCEMENT NOT SHOWN)
(DIMENSIONS SYMMETRICAL ABOUT ℄ SHAFT/COLUMN)



SECTION A-A



SLOPED BEAM SEAT DETAIL - PIER 3

(SHOWN AT INTERIOR GIRDER, EXTERIOR GIRDER SIMILAR)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

PIER 3

SHEET 14

264

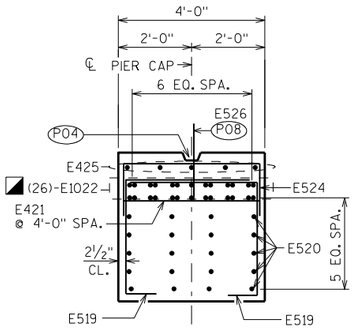
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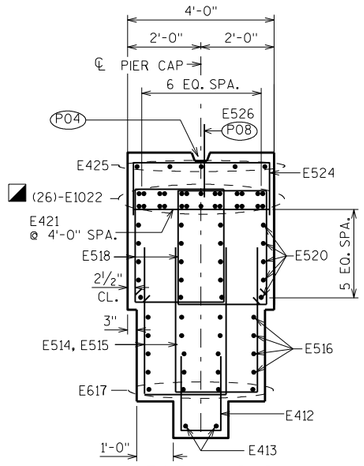
STATE PROJECT NUMBER

6190-15-72

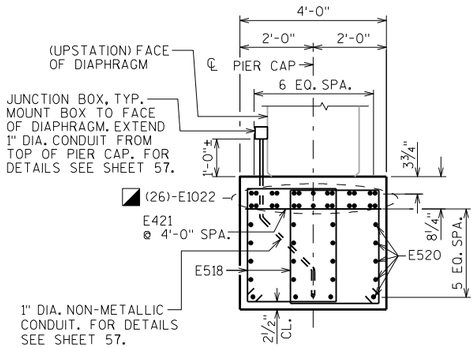


SECTION E-E

(SHOWING ONLY CAP STEEL FOR CLARITY)



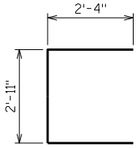
SECTION D-D



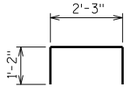
SECTION C-C



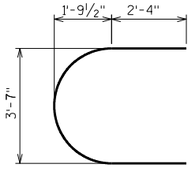
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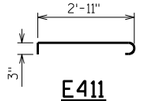
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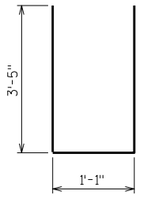
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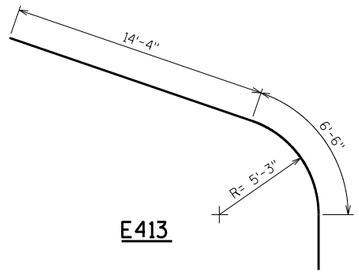
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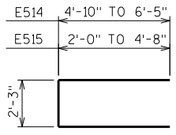
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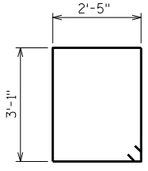
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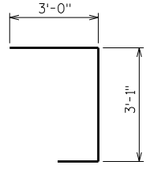
E413



E514, E515

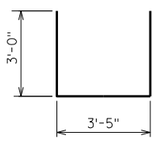


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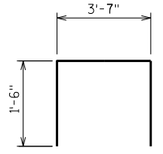


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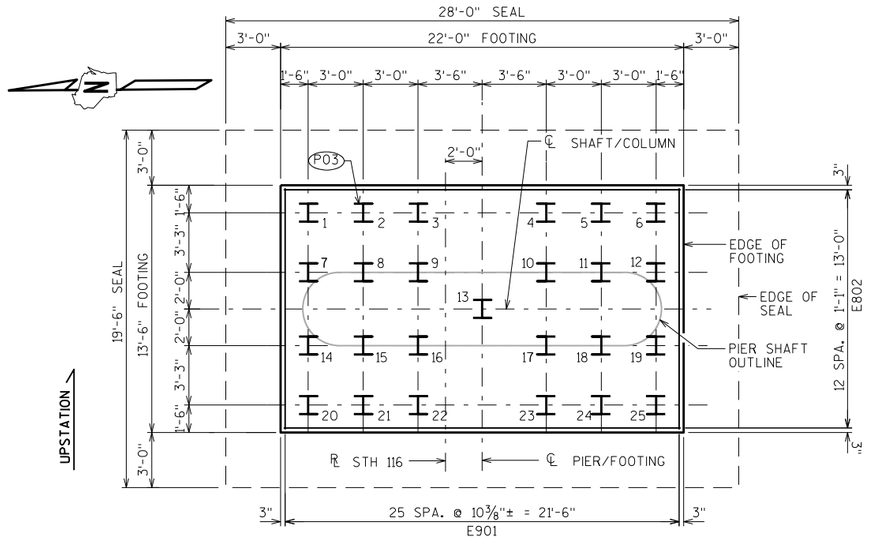
NOTE: BENDS ON E519 TO MATCH THOSE ON E518



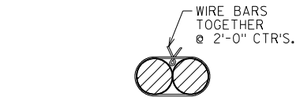
E523



E524



PILE/FOOTING PLAN



BUNDLING DETAIL

◪ BUNDLE APPLICABLE BARS AS SHOWN

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
E901		26	13'-0"			FOOTING
E802		13	21'-6"			FOOTING
E903	X	64	12'-0"	X		FOOTING/SHAFT-VERT.
E904	X	64	33'-7"			SHAFT-VERT.
E405	X	56	15'-2"			SHAFT/COLUMN-HORIZ.
E406	X	56	7'-5"	X		SHAFT/COLUMN-HORIZ. ENDS
E407	X	40	4'-5"	X		COLUMN-HORIZ.
E408	X	34	15'-7"			SHAFT-HORIZ.
E409	X	34	10'-4"	X		SHAFT-HORIZ. ENDS
E410	X	42	16'-3"			SHAFT-VERT.
E411	X	150	3'-7"	X		SHAFT/COLUMN-HORIZ. TIE BARS
E412	X	50	7'-9"	X		COLUMN CURVE
E413	X	4	25'-1"	X		COLUMN CURVE
E514	X	52	13'-3"	X	◭	COLUMN-VERT. U-BAR
E515	X	64	8'-8"	X	◭	COLUMN-VERT. U-BAR
E516	X	28	32'-7"		◭	COLUMN-HORIZ.
E617	X	8	19'-8"			COLUMN TAPER
E518	X	128	11'-8"	X		CAP-VERT. STIRRUP
E519	X	54	6'-8"	X		CAP-VERT.
E520	X	20	52'-8"			CAP-HORIZ.
E421	X	12	3'-7"			CAP-HORIZ SUPPORT BAR
E1022	X	26	52'-8"			CAP-HORIZ. TOP
E523	X	14	9'-2"	X		CAP-HORIZ. ENDS
E524	X	21	6'-4"	X		CAP-VERT. U-BAR TOP
E425	X	5	20'-2"			CAP-HORIZ. TOP
E526	X	34	2'-0"			CAP-VERT. DOWEL BTWN. BEAM SEATS

◭ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
E514	4 SERIES OF 13	11'-8" TO 14'-10"
E515	4 SERIES OF 16	6'-0" TO 11'-4"
E516	4 SERIES OF 7	16'-8" TO 48'-5"
	SERIES OF	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.

(P03) SUPPORT PIER ON HP 12 × 53 STEEL PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(P04) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" BETWEEN BEAM SEATS

(P08) E526 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

PIER 3 DETAILS

SHEET 15

265

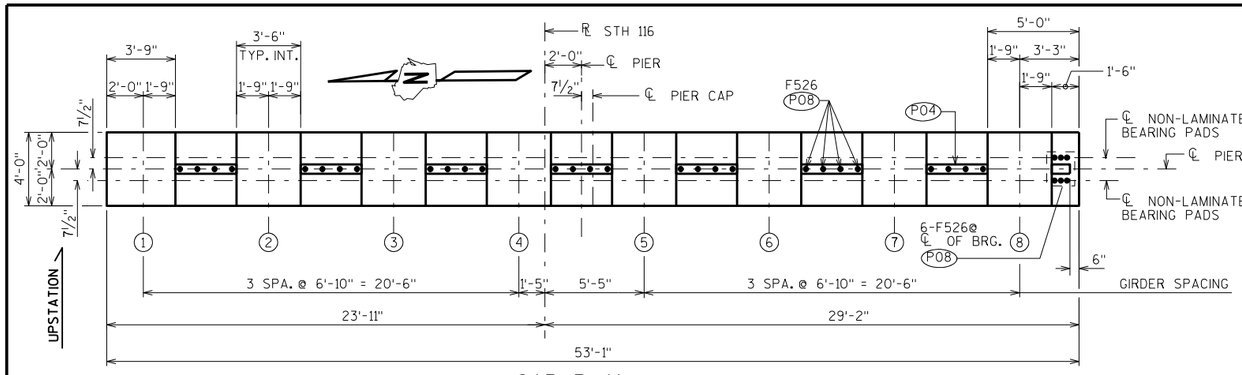
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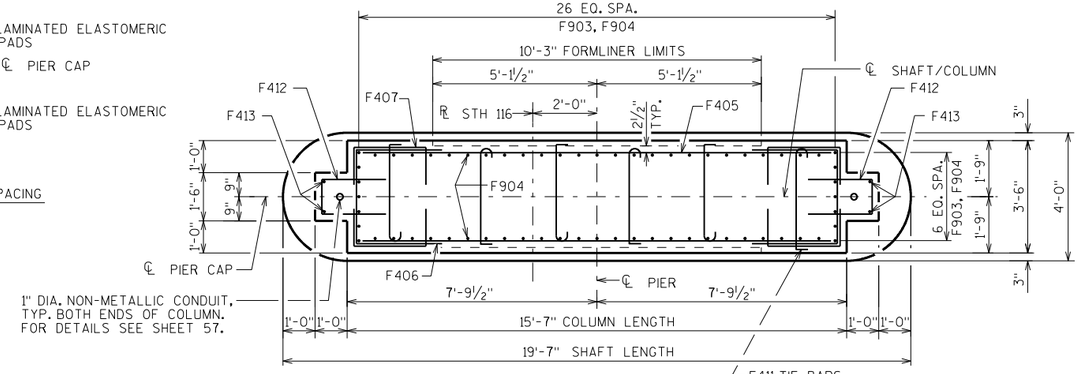
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STATE PROJECT NUMBER

6190-15-72

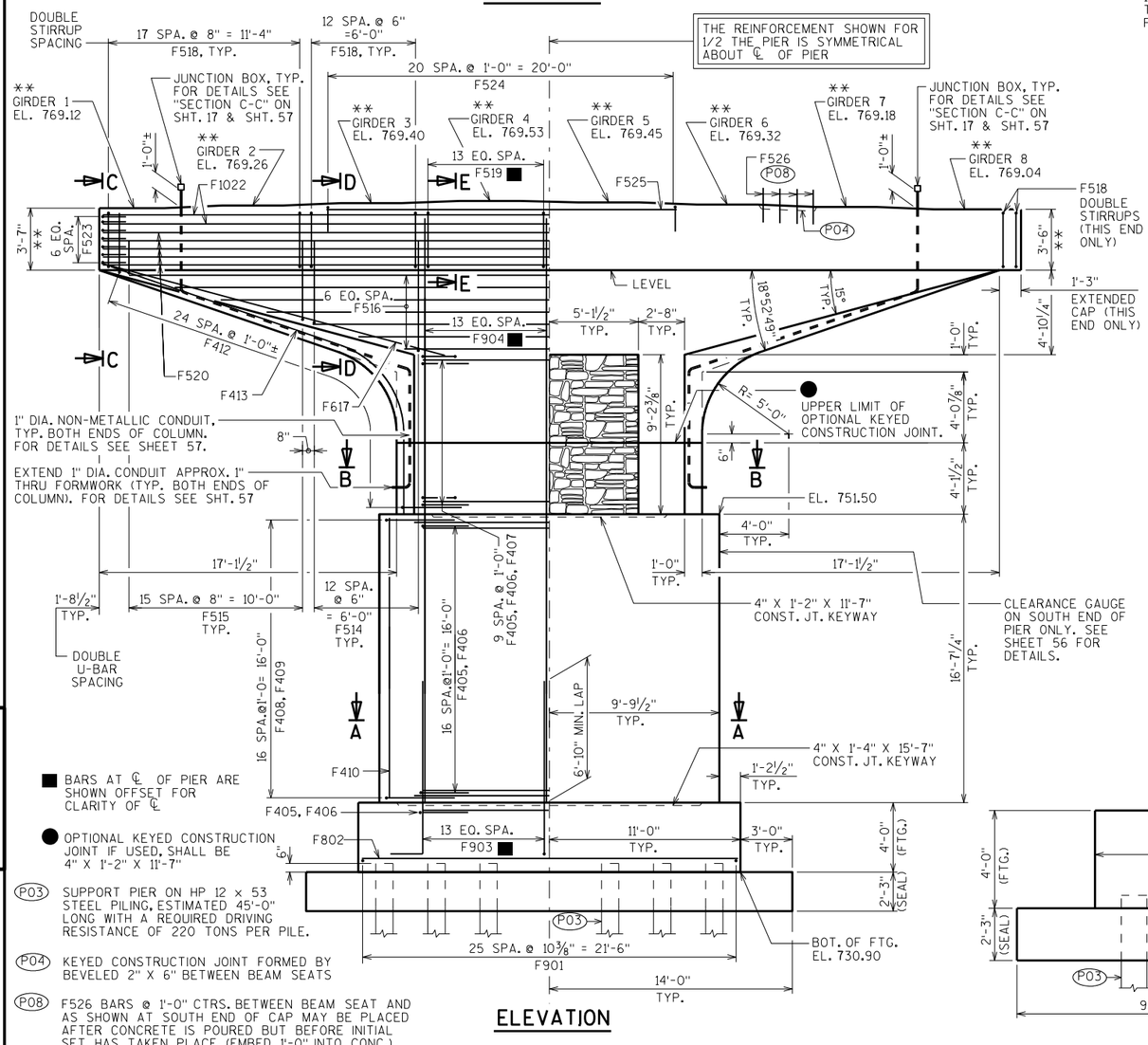


CAP PLAN



SECTION B-B

F411 TIE BARS. ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF THE TIES. TIES ARE SPACED 1'-0" VERTICALLY, AND EQUALLY SPACED HORIZONTALLY, AS SHOWN. TIE BARS ARE LOCATED BTWN. TOP OF FOOTING AND TOP OF FORMLINER.



ELEVATION

■ BARS AT ℄ OF PIER ARE SHOWN OFFSET FOR CLARITY OF ℄

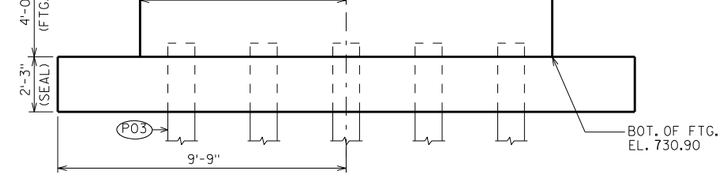
● OPTIONAL KEYED CONSTRUCTION JOINT IF USED, SHALL BE 4" X 1'-2" X 11'-7"

(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(P04) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" BETWEEN BEAM SEATS

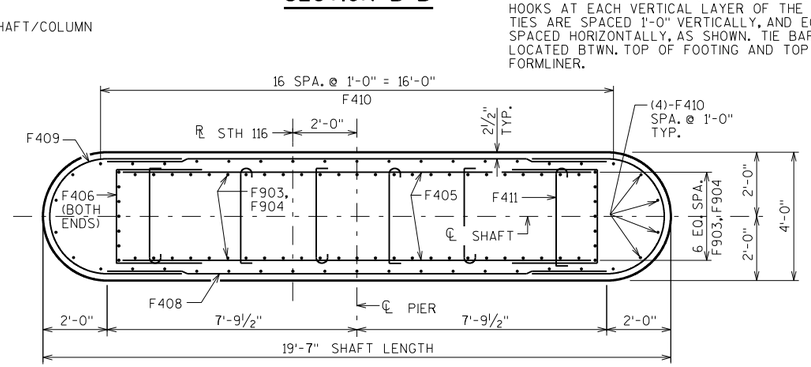
(P08) F526 BARS @ 1'-0" CTRS. BETWEEN BEAM SEAT AND AS SHOWN AT SOUTH END OF CAP MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

** = ELEVATION/DIMENSION @ ℄ OF PIER

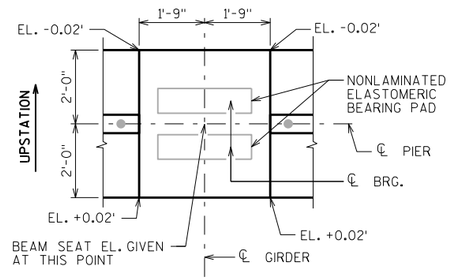


SIDE ELEVATION

(STEEL REINFORCEMENT NOT SHOWN)
(DIMENSIONS SYMMETRICAL ABOUT ℄ SHAFT/COLUMN)



SECTION A-A



SLOPED BEAM SEAT DETAIL - PIER 4

(SHOWN AT INTERIOR GIRDER, EXTERIOR GIRDER SIMILAR)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

PIER 4

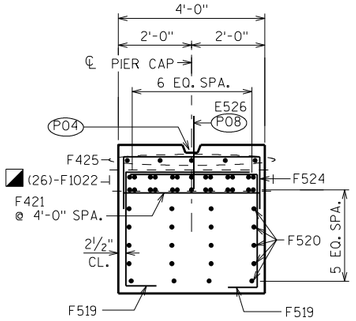
SHEET 16

266

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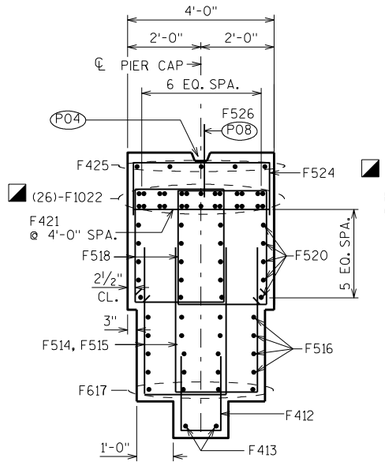
STATE PROJECT NUMBER

6190-15-72

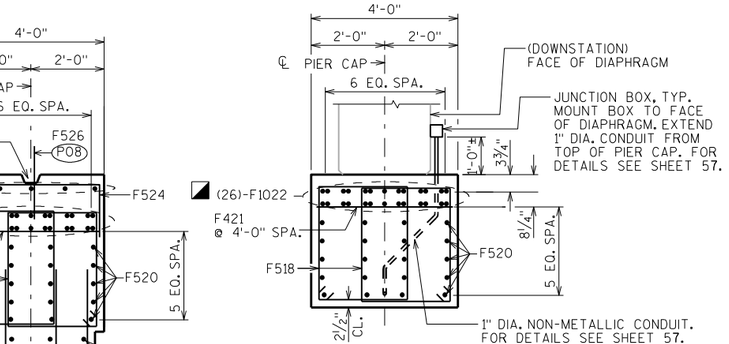


SECTION E-E

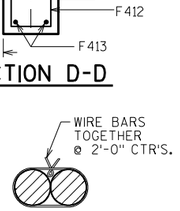
(SHOWING ONLY CAP STEEL FOR CLARITY)



SECTION D-D

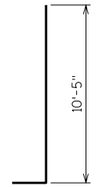


SECTION C-C

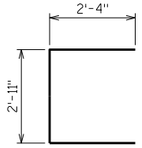


BUNDLING DETAIL

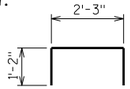
BUNDLE APPLICABLE BARS AS SHOWN



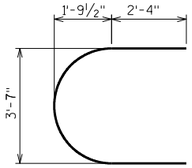
F903



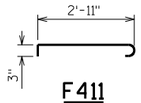
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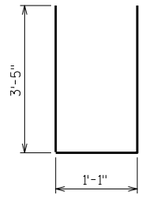
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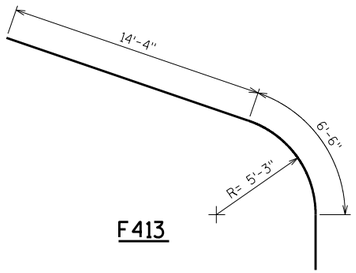
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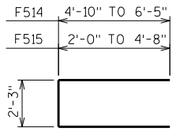
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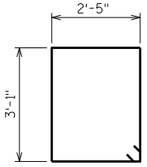
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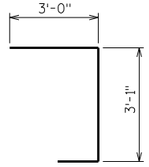
F413



F514, F515

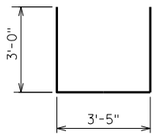


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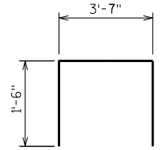


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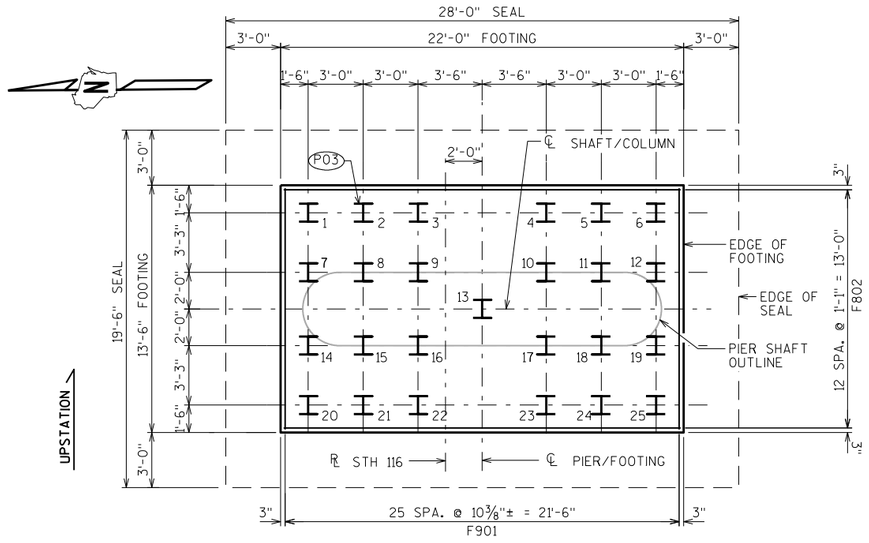
NOTE: BENDS ON F519 TO MATCH THOSE ON F518



F523



F524



PILE/FOOTING PLAN

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
F901		26	13'-0"			FOOTING
F802		13	21'-6"			FOOTING
F903	X	64	12'-0"	X		FOOTING/SHAFT-VERT.
F904	X	64	33'-7"			SHAFT-VERT.
F405	X	56	15'-2"			SHAFT/COLUMN-HORIZ.
F406	X	56	7'-5"	X		SHAFT/COLUMN-HORIZ. ENDS
F407	X	40	4'-5"	X		COLUMN-HORIZ.
F408	X	34	15'-7"			SHAFT-HORIZ.
F409	X	34	10'-4"	X		SHAFT-HORIZ. ENDS
F410	X	42	16'-3"			SHAFT-VERT.
F411	X	150	3'-7"	X		SHAFT/COLUMN-HORIZ. TIE BARS
F412	X	50	7'-9"	X		COLUMN CURVE
F413	X	4	25'-1"	X		COLUMN CURVE
F514	X	52	13'-3"	X	⚠	COLUMN-VERT. U-BAR
F515	X	64	8'-8"	X	⚠	COLUMN-VERT. U-BAR
F516	X	28	32'-7"		⚠	COLUMN-HORIZ.
F617	X	8	19'-8"			COLUMN TAPER
F518	X	128	11'-8"	X		CAP-VERT. STIRRUP
F519	X	54	6'-8"	X		CAP-VERT.
F520	X	20	52'-8"			CAP-HORIZ.
F421	X	12	3'-7"			CAP-HORIZ SUPPORT BAR
F1022	X	26	52'-8"			CAP-HORIZ. TOP
F523	X	14	9'-2"	X		CAP-HORIZ. ENDS
F524	X	21	6'-4"	X		CAP-VERT. U-BAR TOP
F425	X	5	20'-2"			CAP-HORIZ. TOP
F526	X	34	2'-0"			CAP-VERT. DOWEL BTWN. BEAM SEATS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
F514	4 SERIES OF 13	11'-8" TO 14'-10"
F515	4 SERIES OF 16	6'-0" TO 11'-4"
F516	4 SERIES OF 7	16'-8" TO 48'-5"
	SERIES OF	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.

(P04) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" BETWEEN BEAM SEATS

(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(P08) F526 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

PIER 4 DETAILS

SHEET 17

267

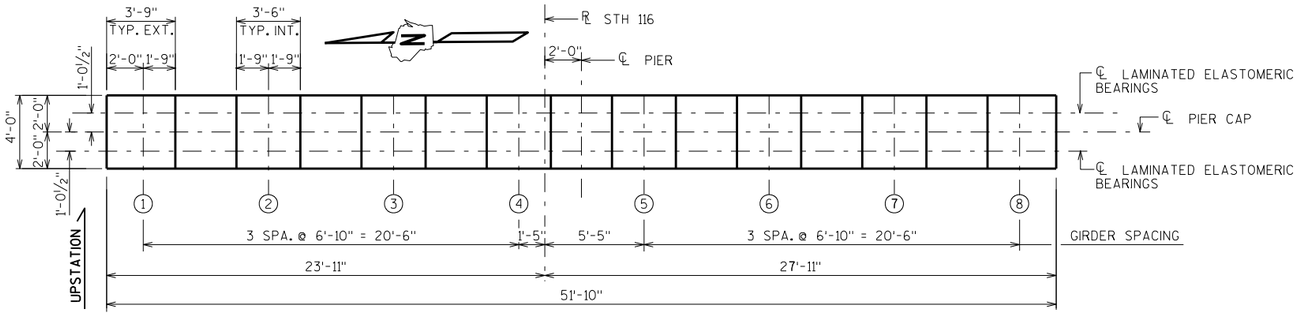
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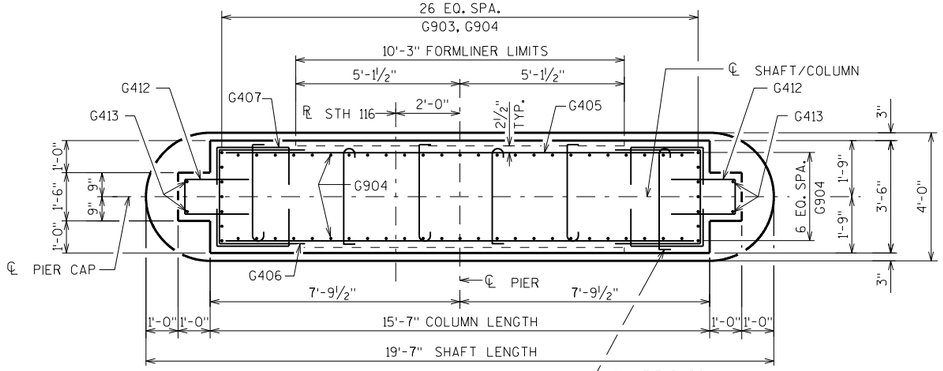
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STATE PROJECT NUMBER

6190-15-72

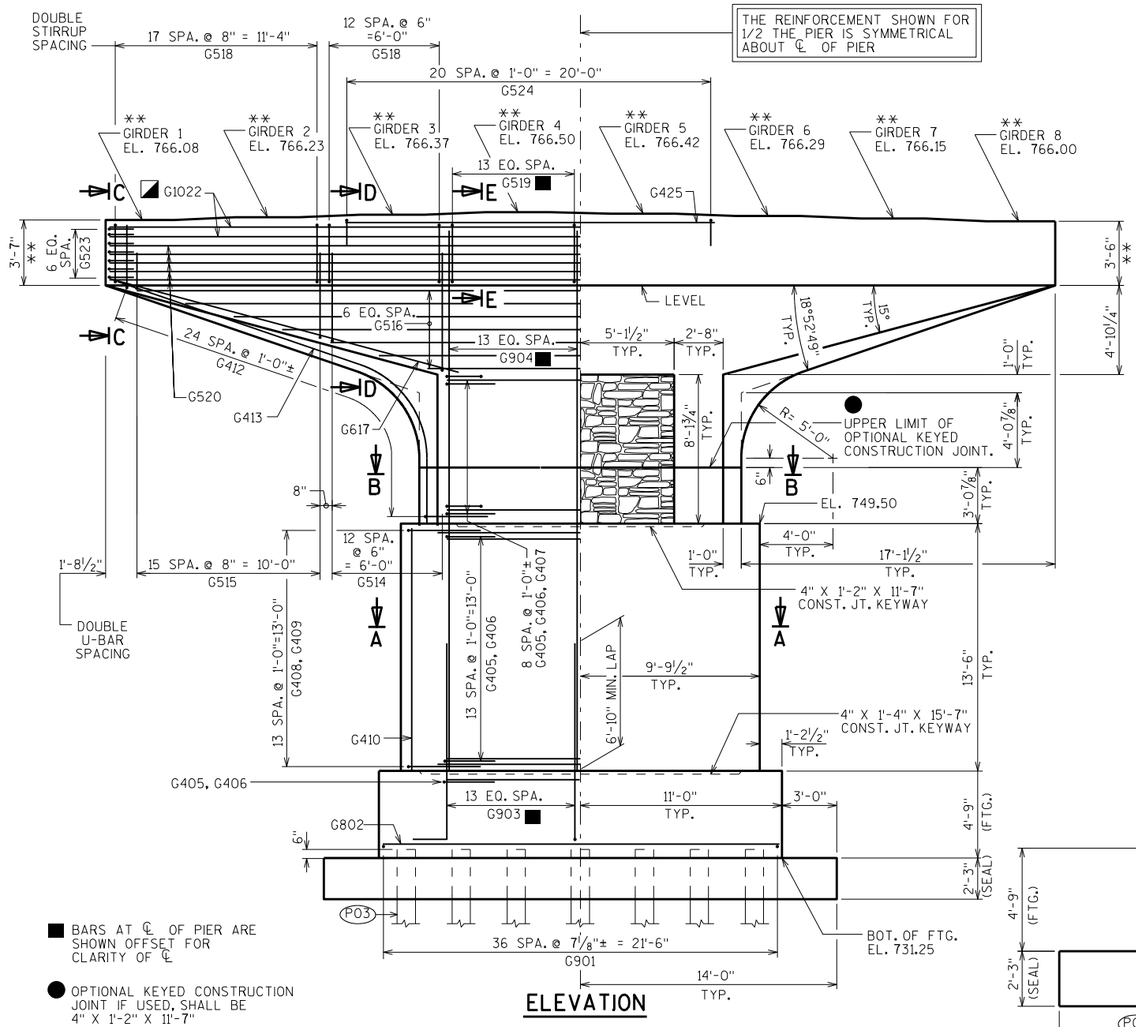


CAP PLAN



SECTION B-B

G411 TIE BARS.
ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF THE TIES. TIES ARE SPACED 1'-0" VERTICALLY, AND EQUALLY SPACED HORIZONTALLY, AS SHOWN. TIE BARS ARE LOCATED BTWN. TOP OF FOOTING AND TOP OF FORMLINER.



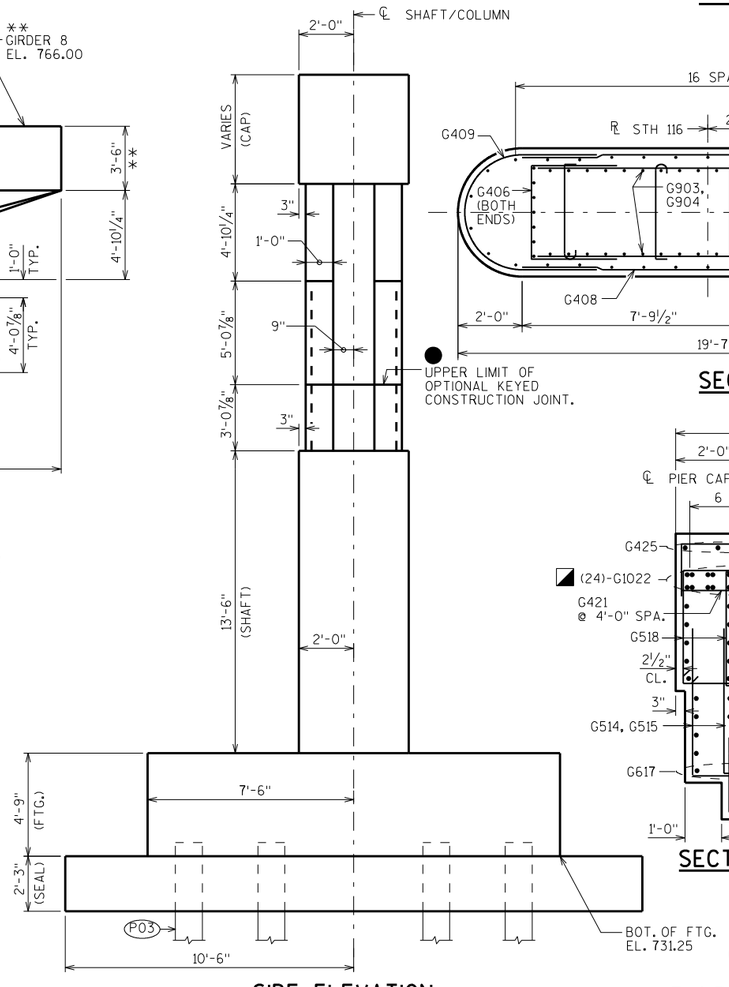
ELEVATION

■ BARS AT ℄ OF PIER ARE SHOWN OFFSET FOR CLARITY OF ℄

● OPTIONAL KEYED CONSTRUCTION JOINT IF USED, SHALL BE 4" X 1'-2" X 11'-7"

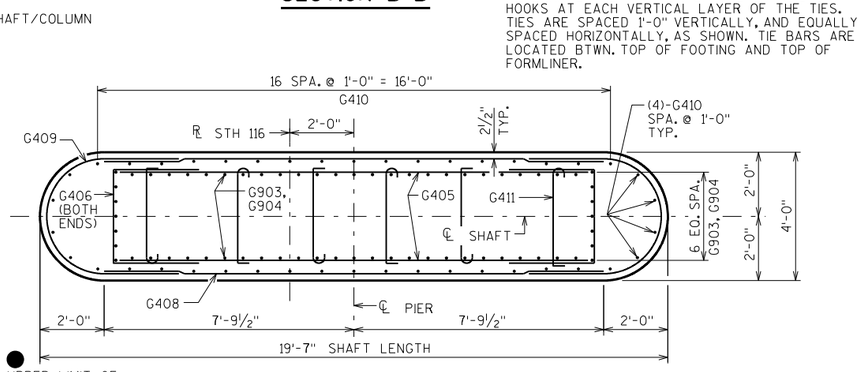
(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

** = ELEVATION/DIMENSION @ ℄ OF PIER

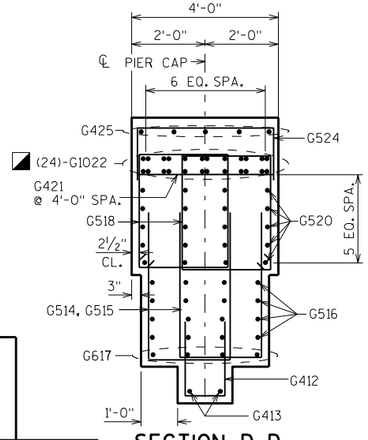


SIDE ELEVATION

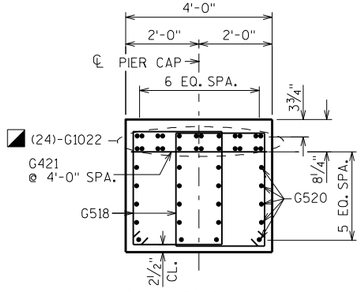
(STEEL REINFORCEMENT NOT SHOWN)
(DIMENSIONS SYMMETRICAL ABOUT ℄ SHAFT/COLUMN)



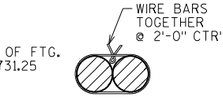
SECTION A-A



SECTION D-D



SECTION C-C



BUNDLING DETAIL

◪ BUNDLE APPLICABLE BARS AS SHOWN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

PIER 5

SHEET 18

268

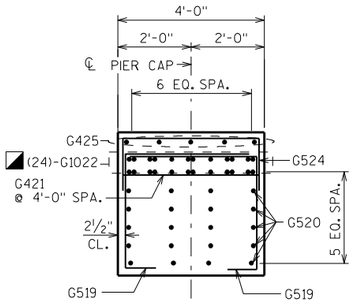
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8

STATE PROJECT NUMBER

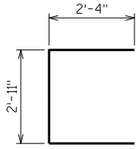
6190-15-72



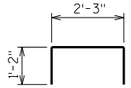
SECTION E-E
(SHOWING ONLY CAP STEEL FOR CLARITY)



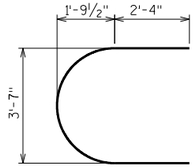
G903



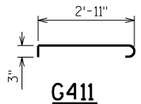
G406



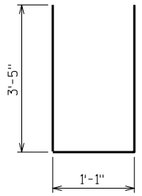
G407



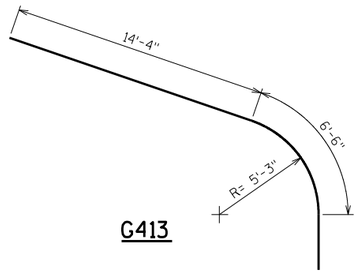
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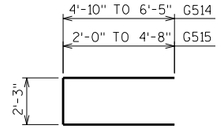
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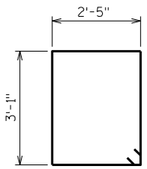
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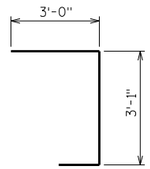
G413



G514, G515

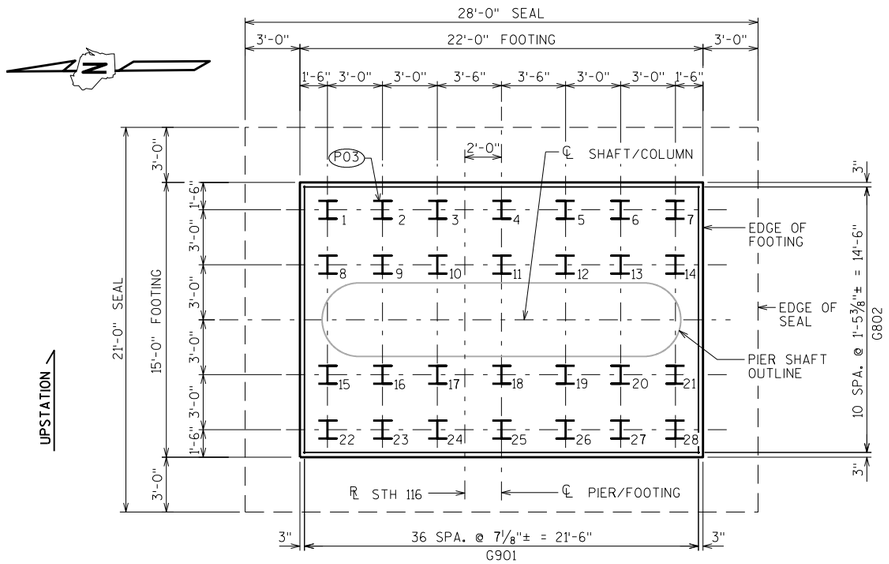


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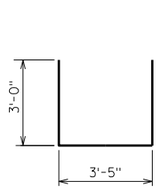


G519

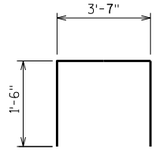
NOTE: BENDS ON G519 TO MATCH THOSE ON G518



PILE/FOOTING PLAN



G523



G524

(P03) SUPPORT PIER ON HP 12 × 53 STEEL PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
G901		37	14-6"			FOOTING
G802		11	21'-6"			FOOTING
G903	X	64	12'-9"	X		FOOTING/SHAFT-VERT.
G904	X	64	29'-6"			SHAFT-VERT.
G405	X	48	15'-2"			SHAFT/COLUMN-HORIZ.
G406	X	48	7'-5"	X		SHAFT/COLUMN-HORIZ. ENDS
G407	X	36	4'-5"	X		COLUMN-HORIZ.
G408	X	28	15'-7"			SHAFT-HORIZ.
G409	X	28	10'-4"	X		SHAFT-HORIZ. ENDS
G410	X	42	13'-1"			SHAFT-VERT.
G411	X	126	3'-7"	X		SHAFT/COLUMN-HORIZ. TIE BARS
G412	X	50	7'-9"	X		COLUMN CURVE
G413	X	4	24'-0"	X		COLUMN CURVE
G514	X	52	13'-3"	X	⚠	COLUMN-VERT. U-BAR
G515	X	64	8'-8"	X	⚠	COLUMN-VERT. U-BAR
G516	X	28	32'-7"		⚠	COLUMN-HORIZ.
G617	X	8	19'-8"			COLUMN TAPER
G518	X	124	11'-8"	X		CAP-VERT. STIRRUP
G519	X	54	6'-8"	X		CAP-VERT.
G520	X	20	51'-5"			CAP-HORIZ.
G421	X	12	3'-7"			CAP-HORIZ SUPPORT BAR
G1022	X	24	51'-5"			CAP-HORIZ. TOP
G523	X	14	9'-2"	X		CAP-HORIZ. ENDS
G524	X	21	6'-4"	X		CAP-VERT. U-BAR TOP
G425	X	5	20'-2"			CAP-HORIZ. TOP
G526	X	28	2'-0"			CAP-VERT. DOWEL BTWN. BEAM SEATS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
G514	4 SERIES OF 13	11'-8" TO 14'-10"
G515	4 SERIES OF 16	6'-0" TO 11'-4"
G516	4 SERIES OF 7	16'-8" TO 48'-5"
	SERIES OF	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

PIER 5 DETAILS

SHEET 19

269

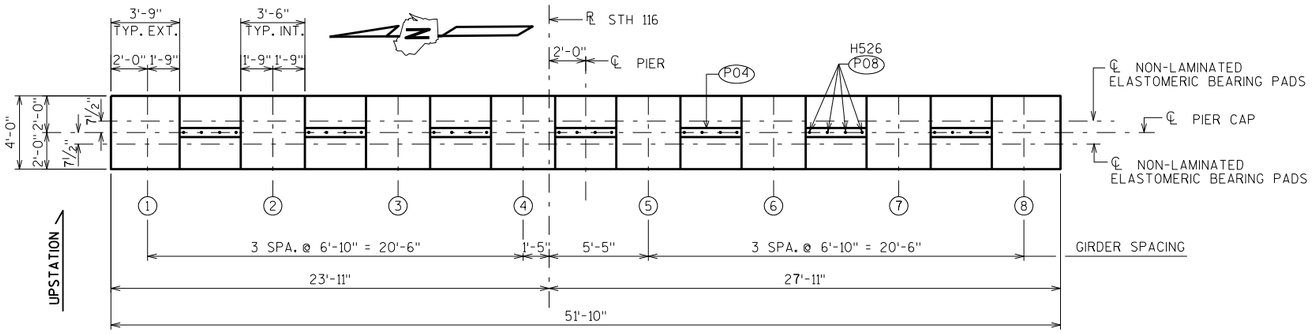
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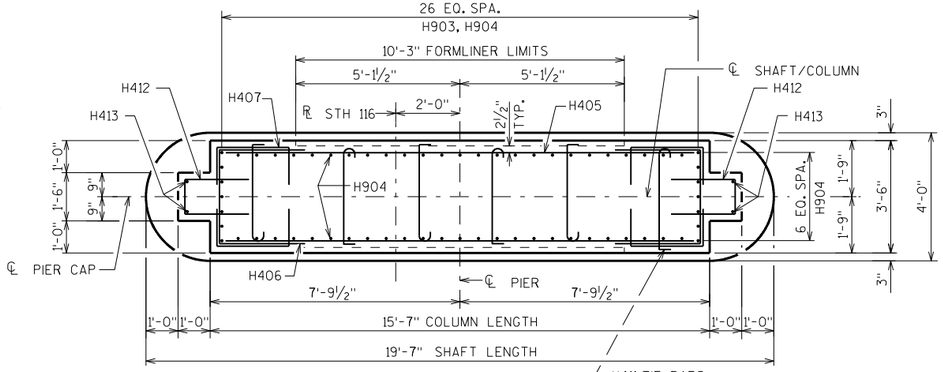
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STATE PROJECT NUMBER

6190-15-72

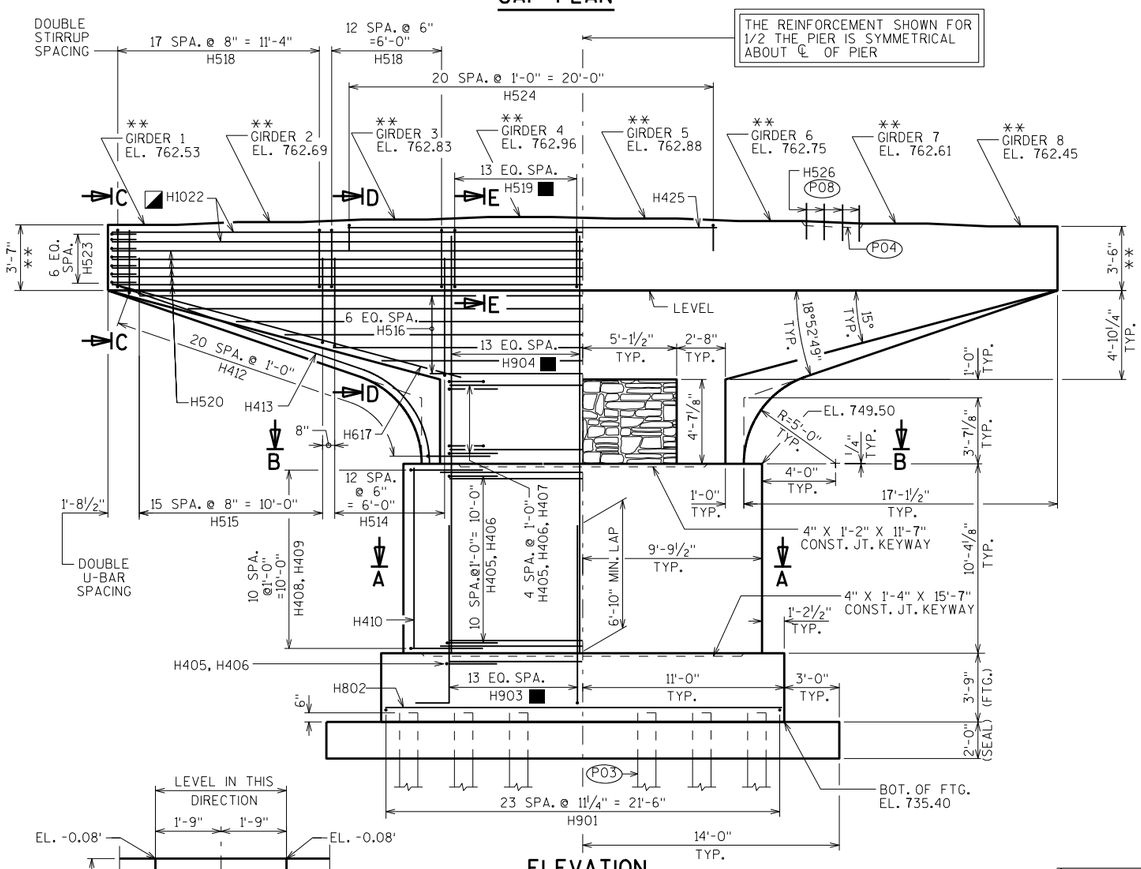


CAP PLAN



SECTION B-B

H411 TIE BARS.
ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF THE TIES. TIES ARE SPACED 1'-0" VERTICALLY, AND EQUALLY SPACED HORIZONTALLY, AS SHOWN. TIE BARS ARE LOCATED BTWN. TOP OF FOOTING AND TOP OF FORMLINER.



ELEVATION

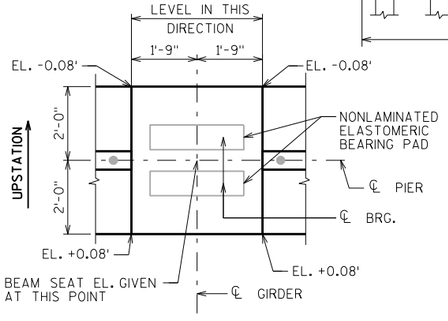
■ BARS AT ℄ OF PIER ARE SHOWN OFFSET FOR CLARITY OF ℄

(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(P04) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" BETWEEN BEAM SEATS

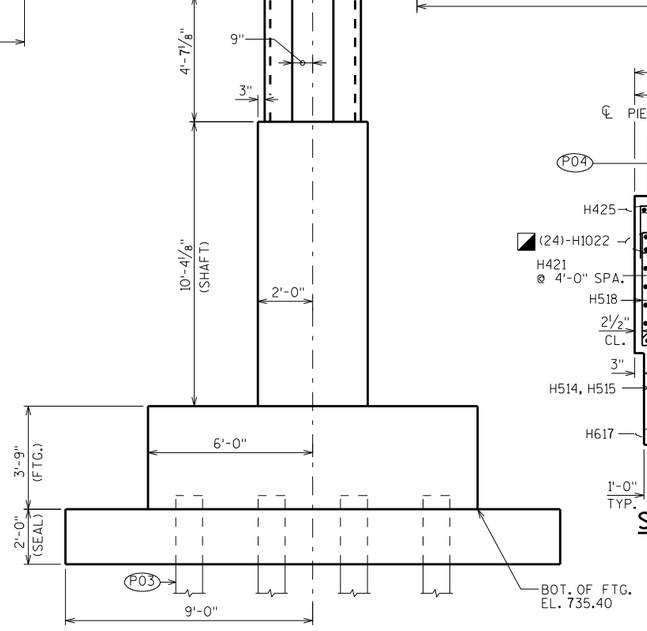
(P08) H526 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

** = ELEVATION/DIMENSION @ ℄ OF PIER



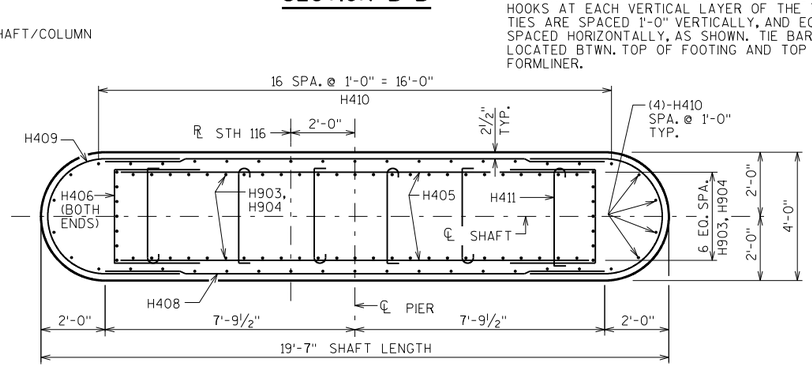
SLOPED BEAM SEAT DETAIL - PIER 6

(SHOWN AT INTERIOR GIRDER, EXTERIOR GIRDER SIMILAR)

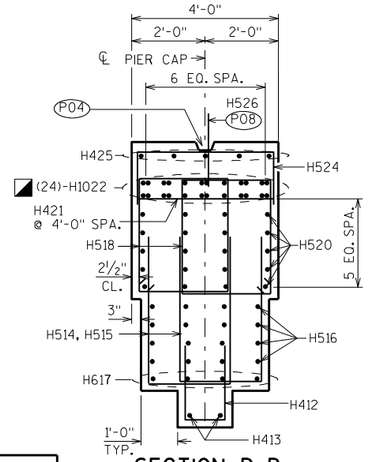


SIDE ELEVATION

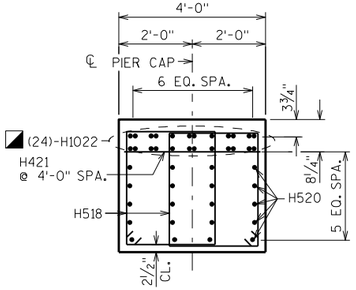
(STEEL REINFORCEMENT NOT SHOWN)
(DIMENSIONS SYMMETRICAL ABOUT ℄ SHAFT/COLUMN)



SECTION A-A



SECTION D-D



SECTION C-C

BUNDLING DETAIL

■ BUNDLE APPLICABLE BARS AS SHOWN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

PIER 6

SHEET 20

270

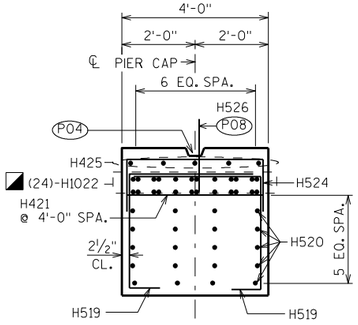
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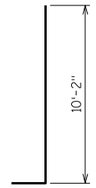
STATE PROJECT NUMBER

6190-15-72

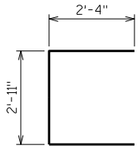


SECTION E-E

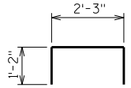
(SHOWING ONLY CAP STEEL FOR CLARITY)



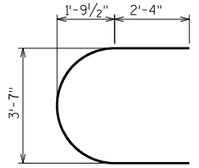
H903



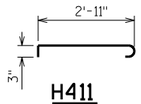
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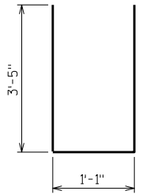
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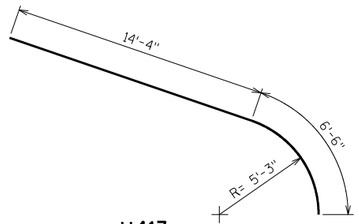
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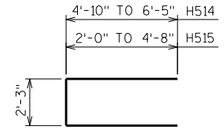
H411



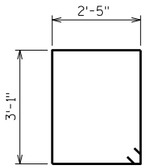
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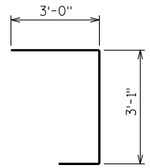
H413



H514, H515



H518



H519

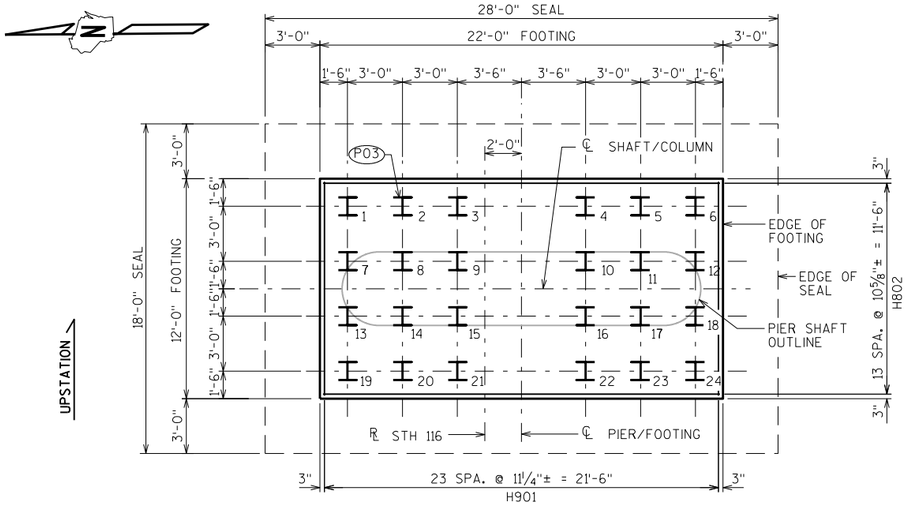
NOTE: BENDS ON H519 TO MATCH THOSE ON H518

BILL OF BARS

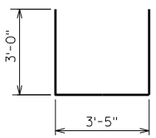
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
H901		24	11'-6"			FOOTING
H802		14	21'-6"			FOOTING
H903	X	64	11'-9"	X		FOOTING/SHAFT-VERT.
H904	X	64	22'-11			SHAFT-VERT.
H405	X	34	15'-2"			SHAFT/COLUMN-HORIZ.
H406	X	34	7'-5"	X		SHAFT/COLUMN-HORIZ. ENDS
H407	X	20	4'-5"	X		COLUMN-HORIZ.
H408	X	22	15'-7"			SHAFT-HORIZ.
H409	X	22	10'-4"	X		SHAFT-HORIZ. ENDS
H410	X	42	10'-0"			SHAFT-VERT.
H411	X	90	3'-7"	X		SHAFT/COLUMN-HORIZ. TIE BARS
H412	X	42	7'-9"	X		COLUMN CURVE
H413	X	4	20'-10	X		COLUMN CURVE
H514	X	52	13'-3"	X	◭	COLUMN-VERT. U-BAR
H515	X	64	8'-8"	X	◭	COLUMN-VERT. U-BAR
H516	X	28	32'-7"		◭	COLUMN-HORIZ.
H617	X	8	19'-8"			COLUMN TAPER
H518	X	124	11'-8"	X		CAP-VERT. STIRRUP
H519	X	54	6'-8"	X		CAP-VERT.
H520	X	20	51'-5"			CAP-HORIZ.
H421	X	12	3'-7"			CAP-HORIZ SUPPORT BAR
H1022	X	24	51'-5"			CAP-HORIZ. TOP
H523	X	14	9'-2"	X		CAP-HORIZ. ENDS
H524	X	21	6'-4"	X		CAP-VERT. U-BAR TOP
H425	X	5	20'-2"			CAP-HORIZ. TOP
H526	X	28	2'-0"			CAP-VERT. DOWEL BTWN. BEAM SEATS

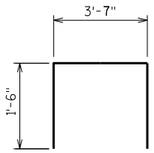
◭ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



PILE/FOOTING PLAN



H523



H524

BUNDLE APPLICABLE BARS AS SHOWN. SEE 20 FOR BUNDLING DETAILS.

(P03) SUPPORT PIER ON HP 12 x 53 STEEL PILING, ESTIMATED 45'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE.

(P04) KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" BETWEEN BEAM SEATS

(P08) H526 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
H514	4 SERIES OF 13	11'-8" TO 14'-10"
H515	4 SERIES OF 16	6'-0" TO 11'-4"
H516	4 SERIES OF 7	16'-8" TO 48'-5"
	SERIES OF	TO

BUNDLE AND TAG EACH SERIES SEPARATELY.

NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

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PIER 6 DETAILS

SHEET 21

271

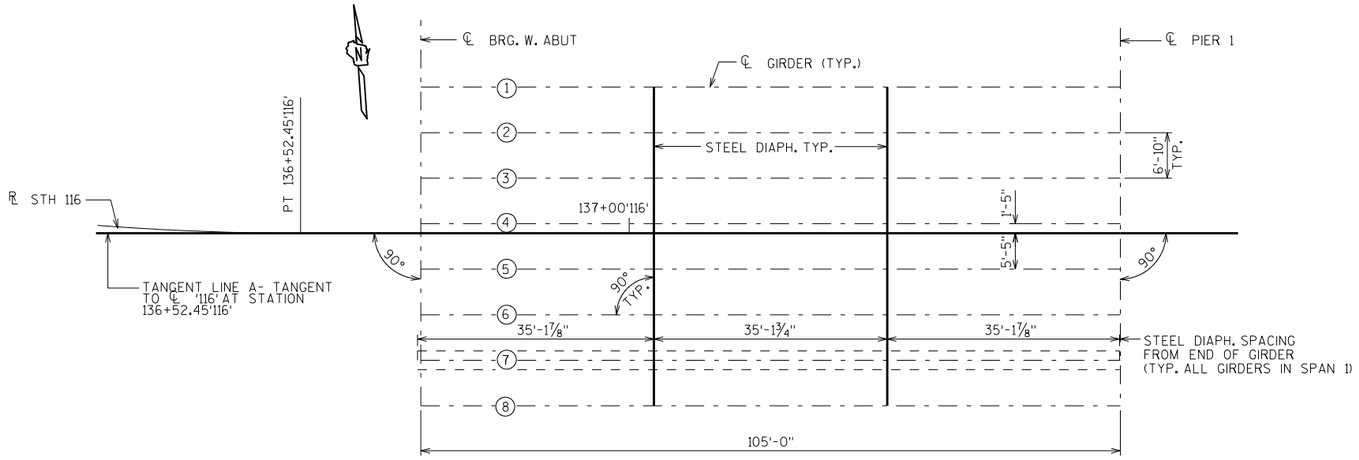
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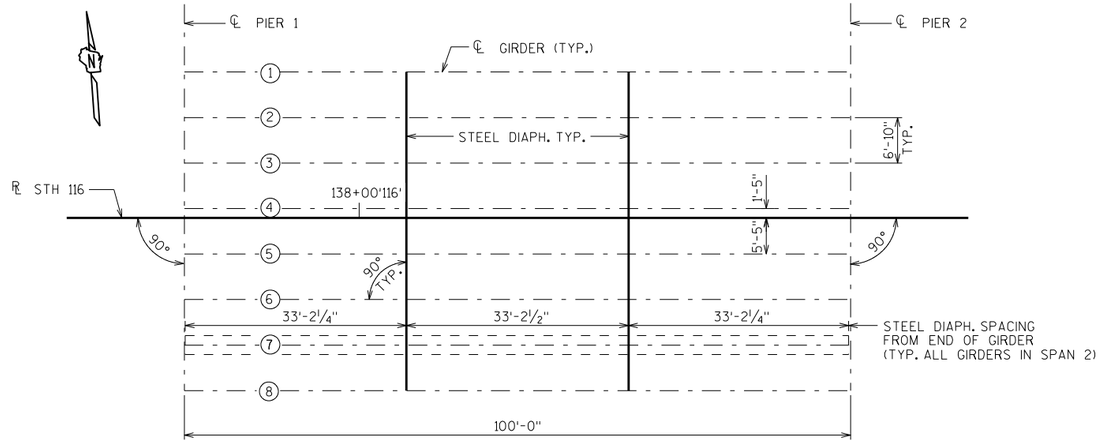
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PLAN SPAN 1



PLAN SPAN 2

8

8

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

SPANS 1 & 2
FRAMING PLAN

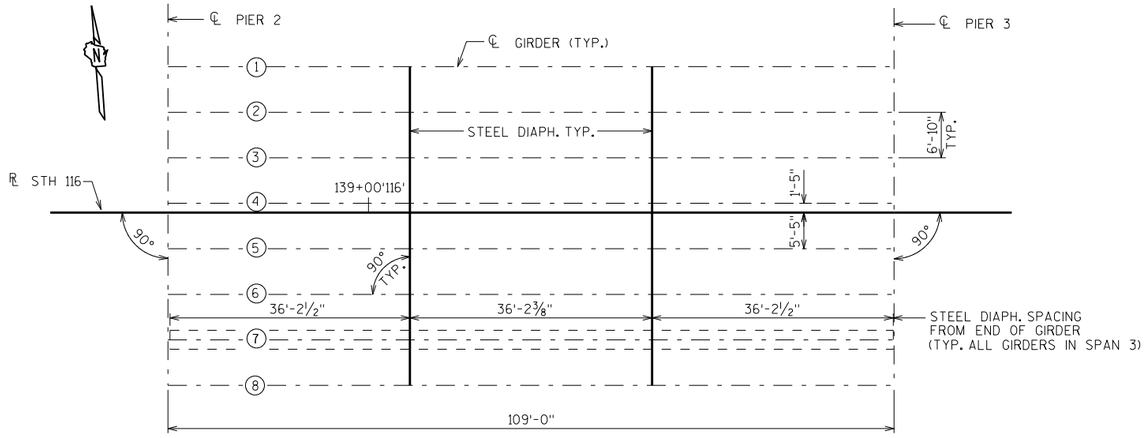
SHEET 22

272

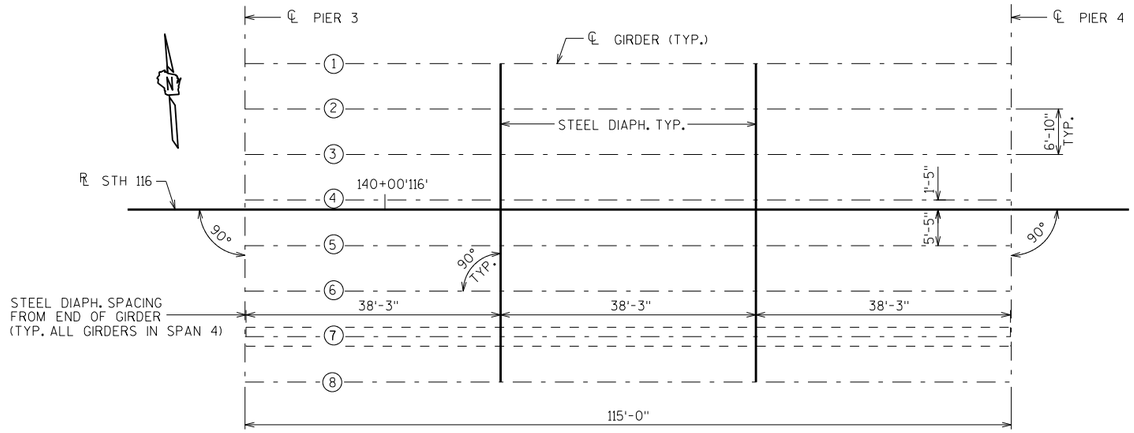
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STATE PROJECT NUMBER

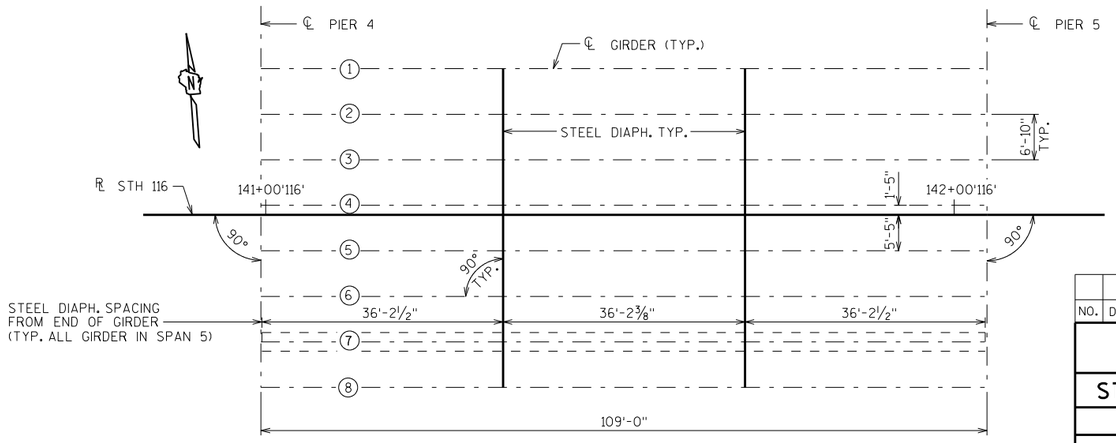
6190-15-72



PLAN SPAN 3



PLAN SPAN 4



PLAN SPAN 5

8

8

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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SPANS 3, 4, & 5 FRAMING PLAN

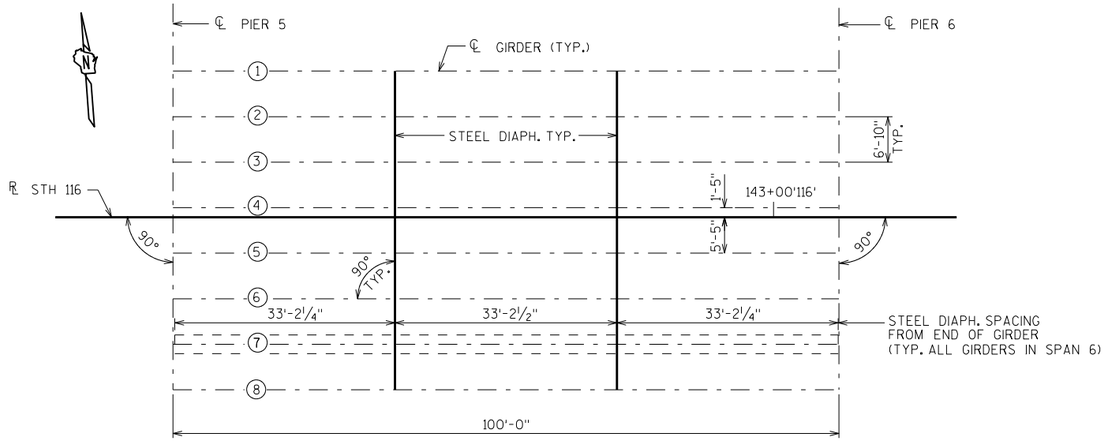
SHEET 23

273

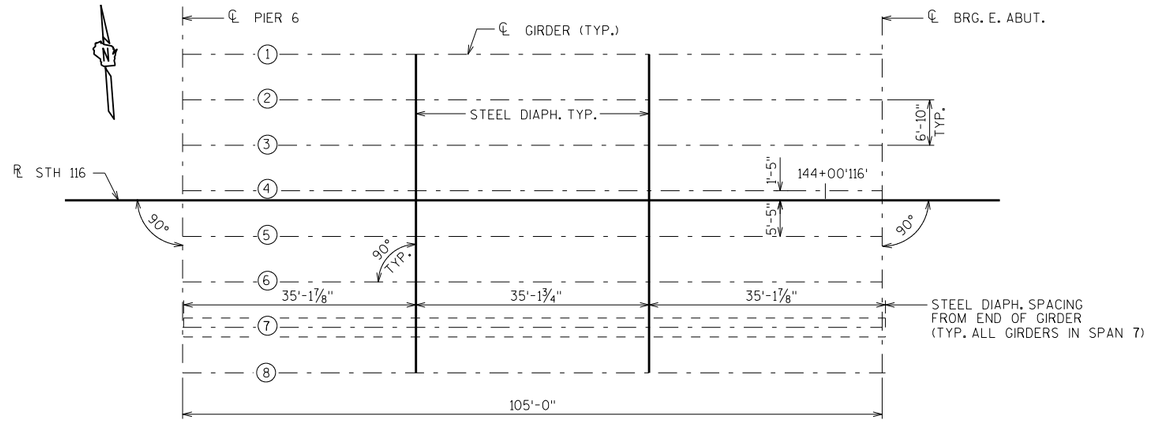
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PLAN SPAN 6



PLAN SPAN 7

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

SPANS 6 & 7
FRAMING PLAN

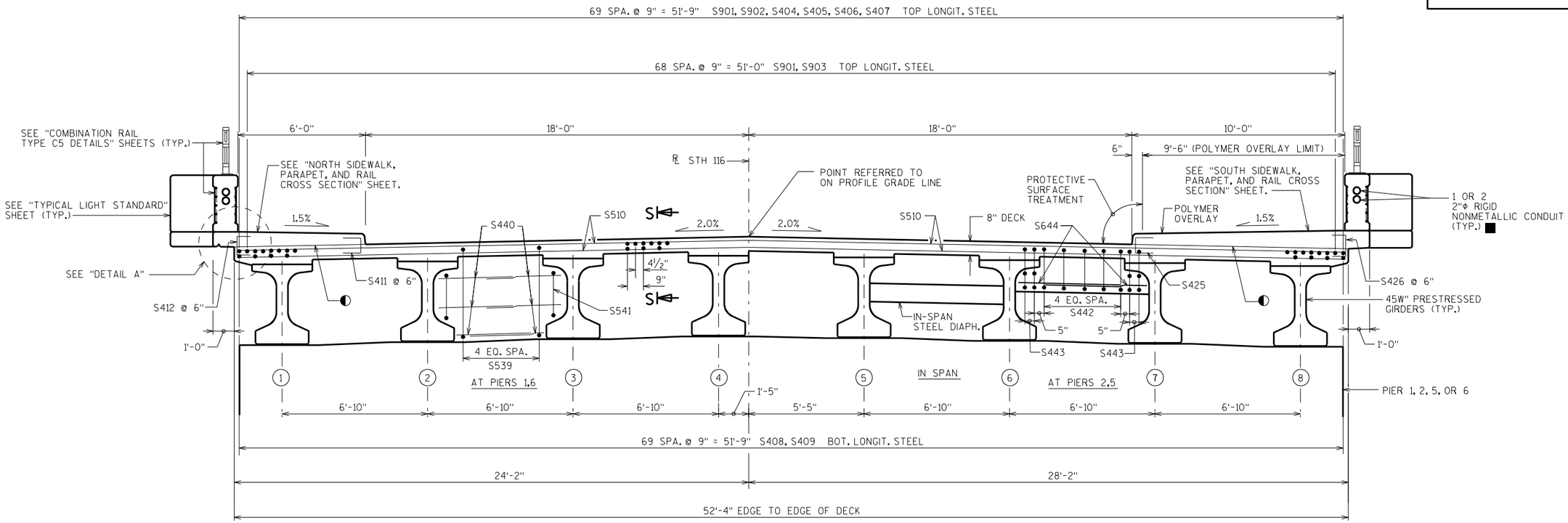
SHEET 24

274

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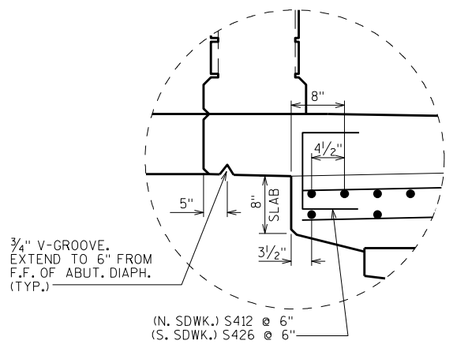
STATE PROJECT NUMBER

6190-15-72



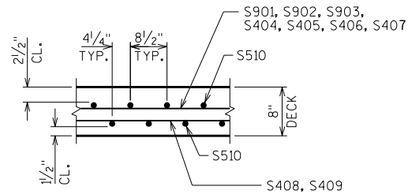
CROSS SECTION LOOKING EAST

(SHOWING ALL DECK STEEL AND PIER 1,2,5,6 DIAPH. STEEL)



DETAIL A

(TYP. @ EACH EDGE OF DECK)



SECTION S-S

LEGEND

■ SEE "RAIL SPACING AND CONDUIT LOCATIONS" SHEETS FOR CONDUIT LOCATIONS & LIMITS.

◐ CONSTRUCTION JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH. MATCH DECK X-SLOPE.

Ⓧ GIRDER NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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SUPERSTRUCTURE CROSS SECTION 1

SHEET 25

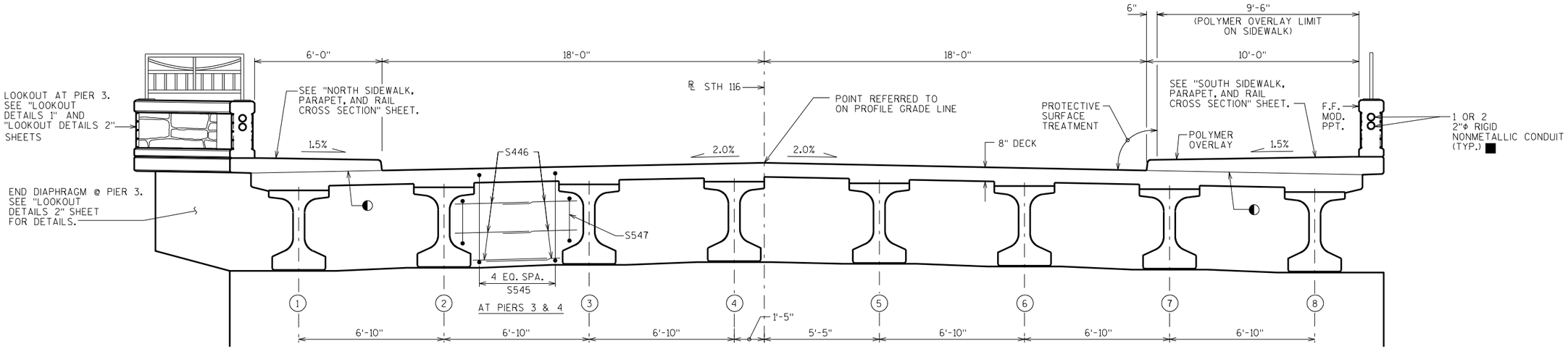
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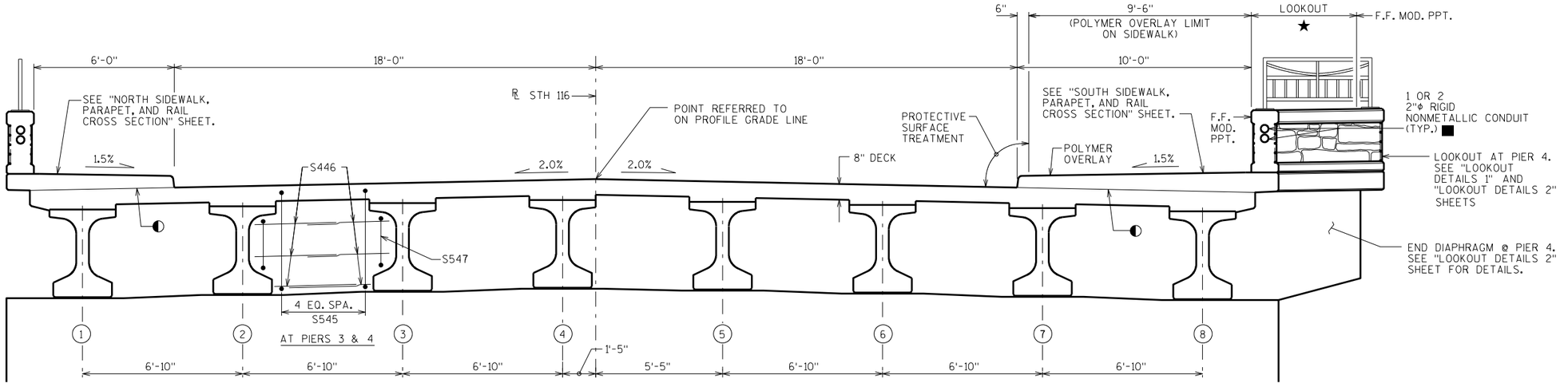
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8

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CROSS SECTION THRU PIER 3 LOOKING EAST



CROSS SECTION THRU PIER 4 LOOKING EAST

8

8

LEGEND

- ■ SEE "RAIL SPACING AND CONDUIT LOCATIONS" SHEETS FOR CONDUIT LOCATIONS & LIMITS.
- ◐ CONSTRUCTION JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH. MATCH DECK X-SLOPE.
- (X) GIRDER NUMBER
- ★ APPLY POLYMER OVERLAY TO TOP OF SIDEWALK @ PIER 4 LOOKOUT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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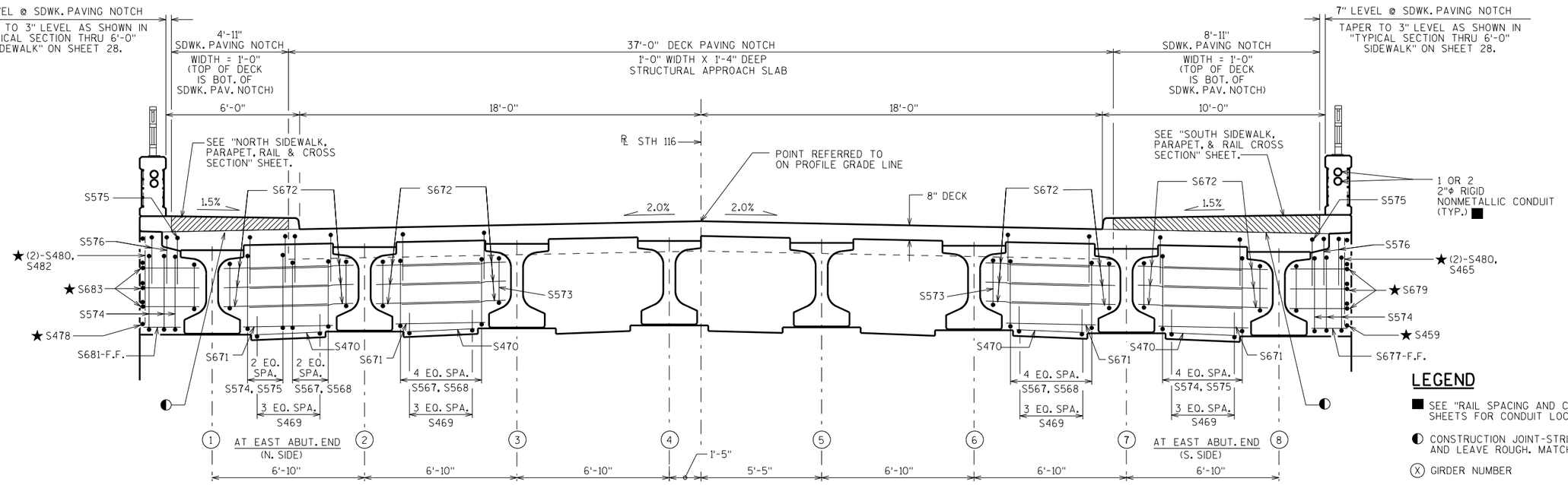
SUPERSTRUCTURE CROSS SECTION 2

SHEET 26

276

SCALE =

STATE PROJECT NUMBER
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CROSS SECTION LOOKING EAST AT EAST ABUTMENT DIAPHRAGM

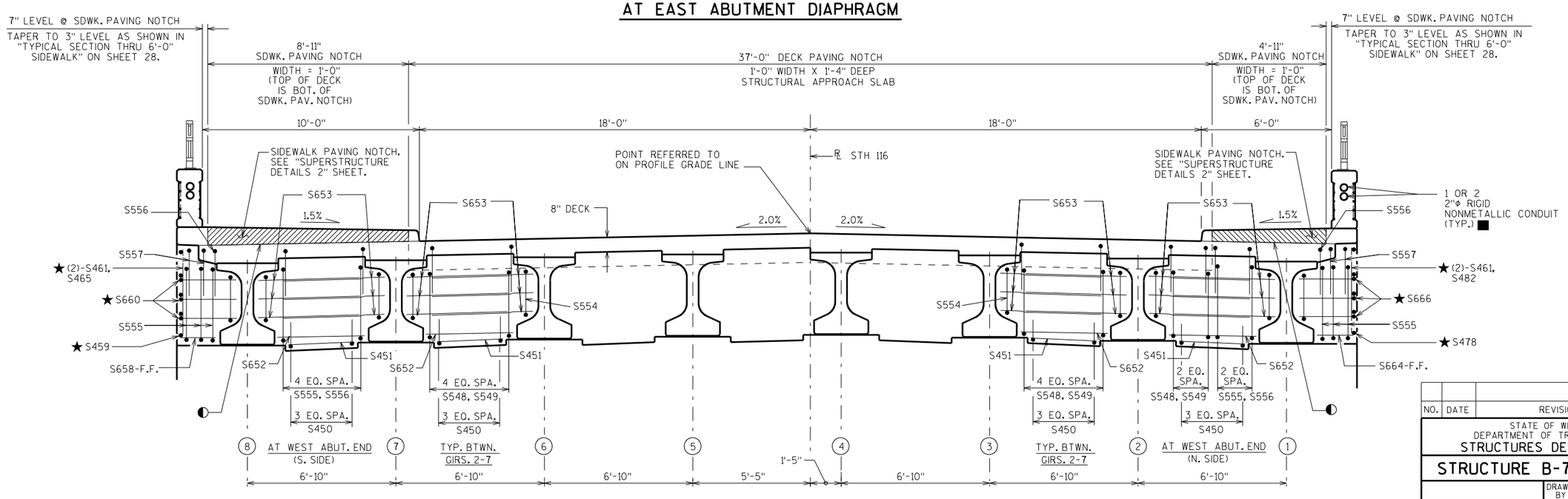
LEGEND

■ SEE "RAIL SPACING AND CONDUIT LOCATIONS" SHEETS FOR CONDUIT LOCATIONS & LIMITS.

◐ CONSTRUCTION JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH. MATCH DECK X-SLOPE.

(X) GIRDER NUMBER

★ SEE "REINF. DETAIL @ END OF DIAPHRAGM" DETAIL ON SHEET 30.



CROSS SECTION LOOKING WEST AT WEST ABUTMENT DIAPHRAGM

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

SUPERSTRUCTURE CROSS SECTION 3

SHEET 27

277

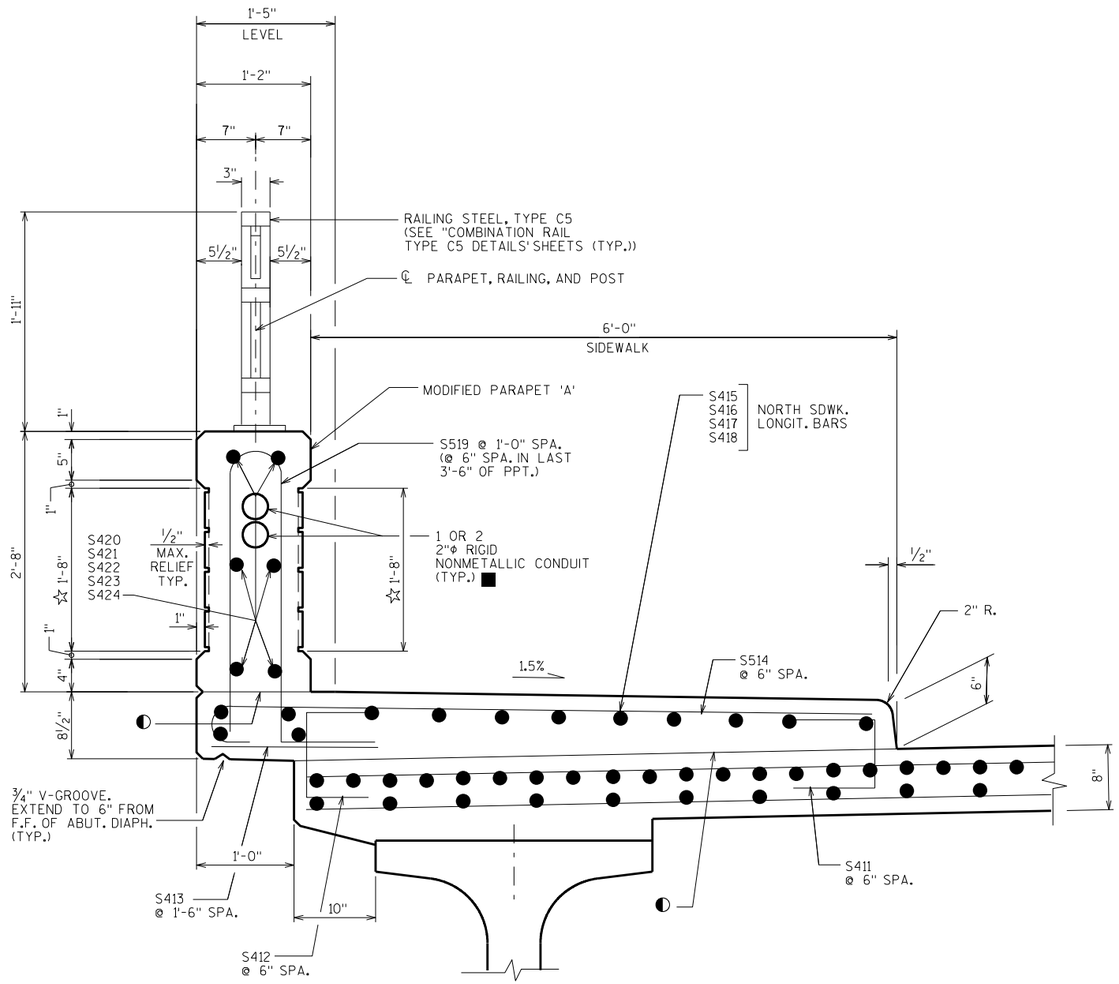
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8

SCALE =

STATE PROJECT NUMBER

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TYP. SECTION THRU 6'-0" SIDEWALK

SHOWING MODIFIED PPT. 'A' & STEEL RAILING TYPE C5

LEGEND

■ SEE "RAIL SPACING AND CONDUIT LOCATIONS" SHEETS FOR CONDUIT LOCATIONS & LIMITS.

◐ CONSTRUCTION JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(X) GIRDER NUMBER

☆ "ARCHITECTURAL SURFACE TREATMENT" AND "CONCRETE STAINING" REQ'D. FINISHED STAIN IS TO INCLUDE A MIXTURE OF GRAYS TO BE APPROVED BY THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

NORTH SIDEWALK, PARAPET, & RAIL CROSS SECTION

SHEET 28

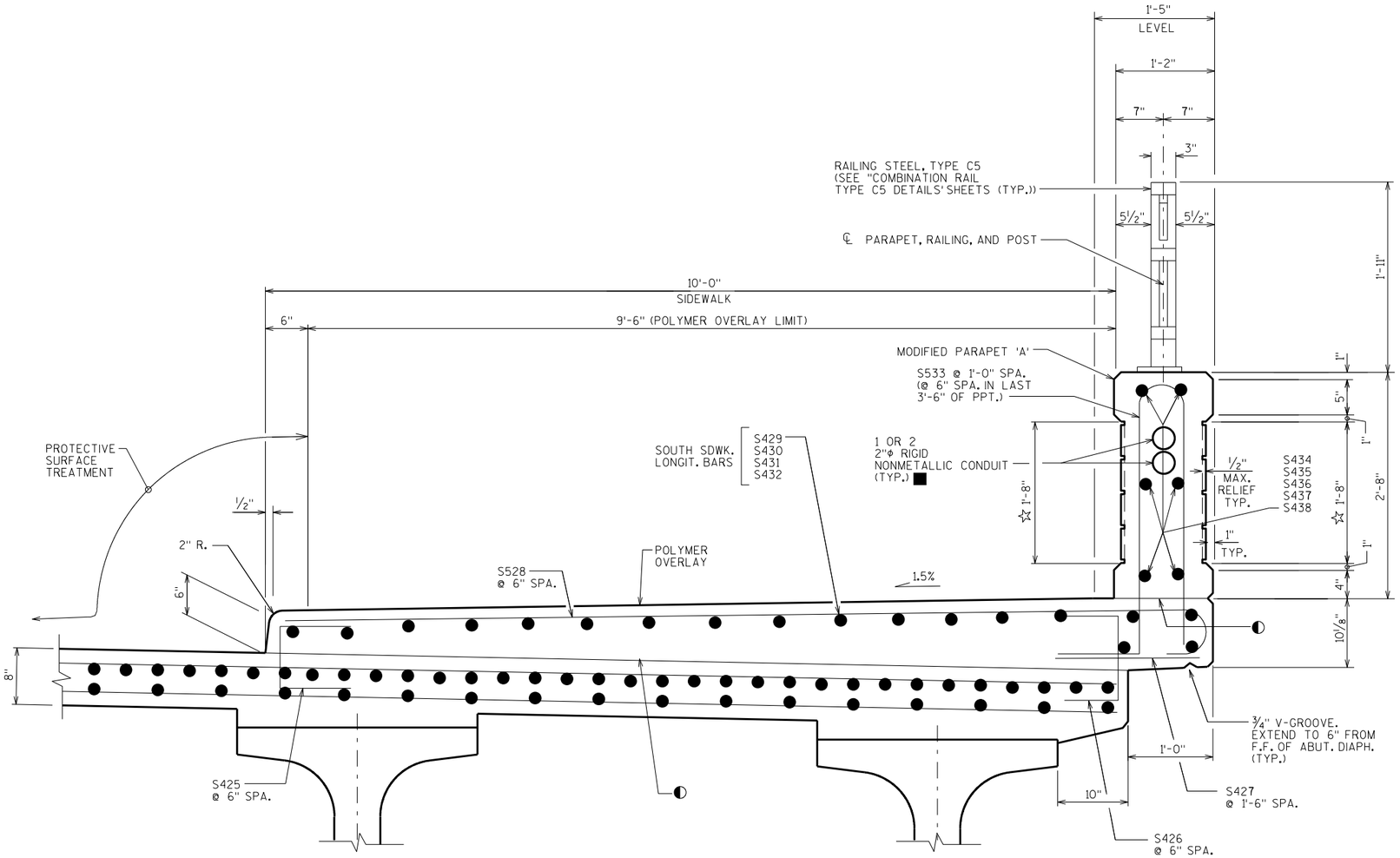
278

SCALE =

8

8

STATE PROJECT NUMBER
6190-15-72



TYP. SECTION THRU 10'-0" SIDEWALK

SHOWING MODIFIED PPT. 'A' & STEEL RAILING TYPE C5

LEGEND

■ SEE "RAIL SPACING AND CONDUIT LOCATIONS" SHEETS FOR CONDUIT LOCATIONS & LIMITS.

◐ CONSTRUCTION JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH.

Ⓧ GIRDER NUMBER

☆ "ARCHITECTURAL SURFACE TREATMENT" AND "CONCRETE STAINING" REQ'D. FINISHED STAIN IS TO INCLUDE A MIXTURE OF GRAYS TO BE APPROVED BY THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

SOUTH SIDEWALK, PARAPET, & RAIL CROSS SECTION

SHEET 29

279

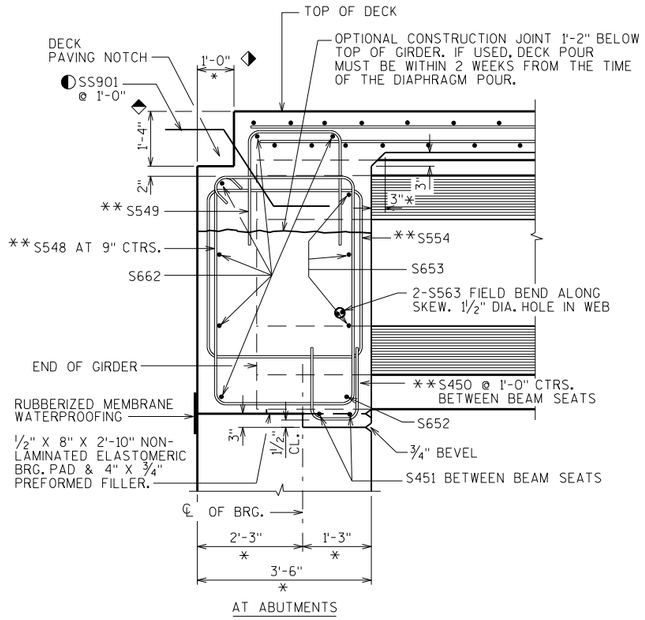
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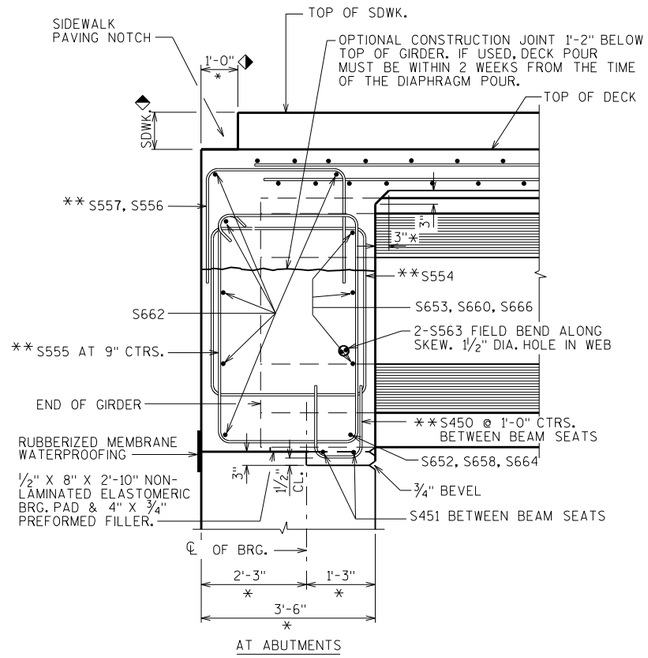
STATE PROJECT NUMBER

6190-15-72



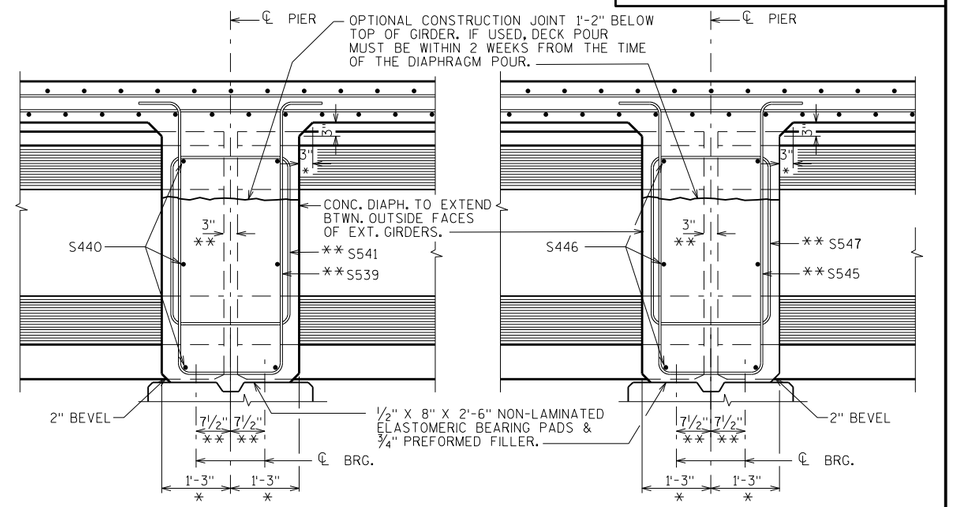
AT WEST ABUTMENT

(SHOWING SECTION AT STRUCT. APP. SLAB)



AT WEST ABUTMENT

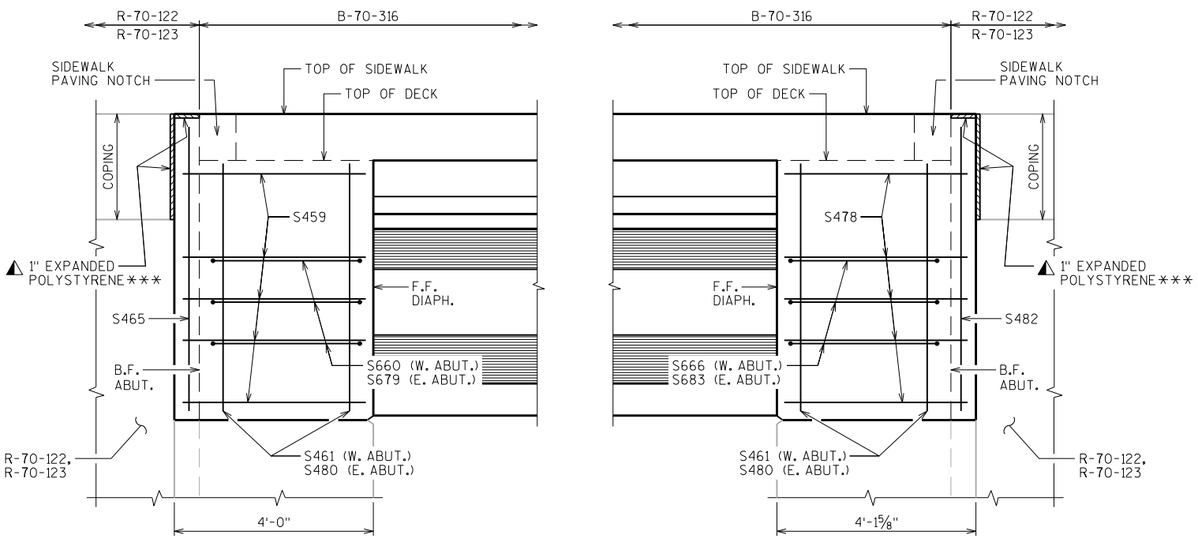
(SHOWING SECTION AT SIDEWALK)



AT PIERS 1 & 6

AT PIERS 3 & 4

PART. LONGITUDINAL SECTION LOOKING NORTH



AT S.W. & S.E END OF ABUTMENTS

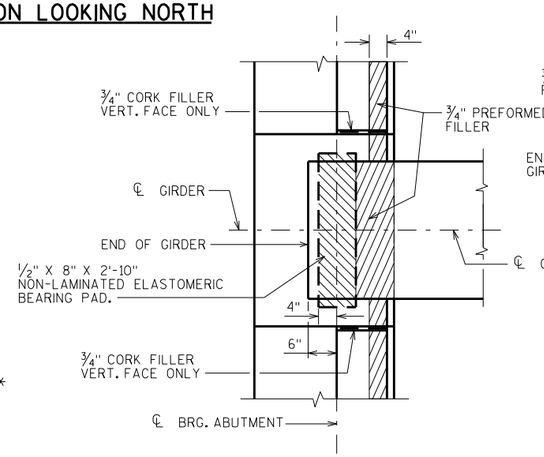
(S.W. END SHOWN, S.E. END SIMILAR)

AT N.W. & N.E END OF ABUTMENTS

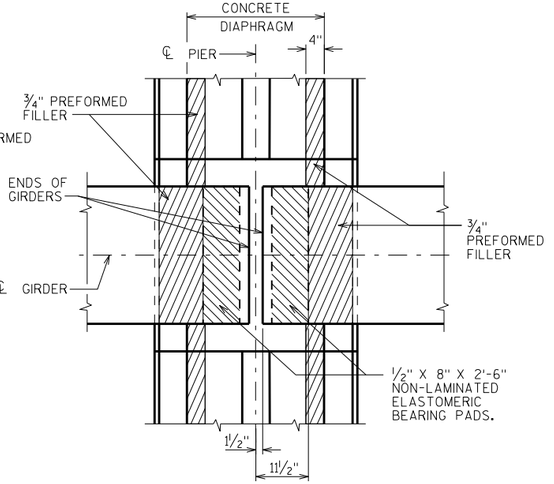
(N.W. END SHOWN, N.E. END SIMILAR)

REINF. DETAIL @ END OF DIAPHRAGM

(PARAPETS NOT SHOWN CLARITY)



BEARING PAD DETAIL AT W. ABUT.



BEARING PAD DETAIL AT PIERS 1, 3, 4, & 6

LEGEND

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

◐ (38) BARS @ 1'-0" SPA. TO BE PLACED WITHIN THE 37'-0" LONG X 1'-0" WIDE X 1'-4" DEEP PAVING NOTCH AREA AT STRUCTURAL APPROACH SLAB LIMITS.

◆ SEE "SUPERSTRUCTURE CROSS SECTION 3" SHEET FOR PAVING NOTCH LENGTHS AND ALSO, REFER TO THIS SHEET FOR ADDITIONAL BAR REINFORCEMENT PLACEMENT LOCATIONS.

*** INCIDENTAL TO THE BID ITEM CONCRETE MASONRY BRIDGES

⚠ SEAL ALL THE EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

SUPERSTRUCTURE DETAILS 1

SHEET 30

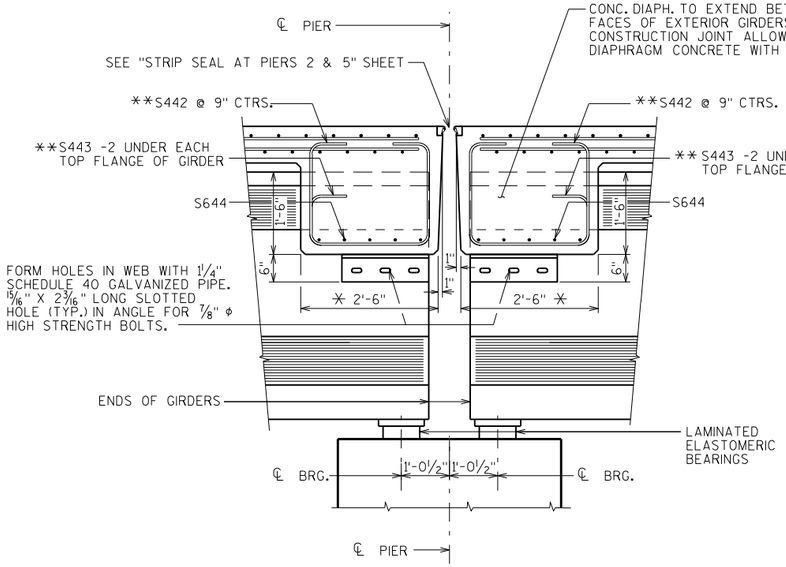
280

G45WDET
7-14

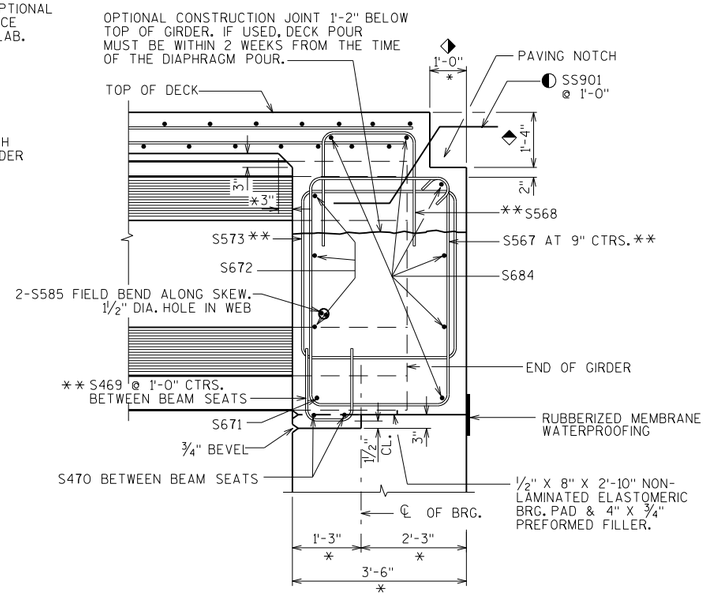
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STATE PROJECT NUMBER

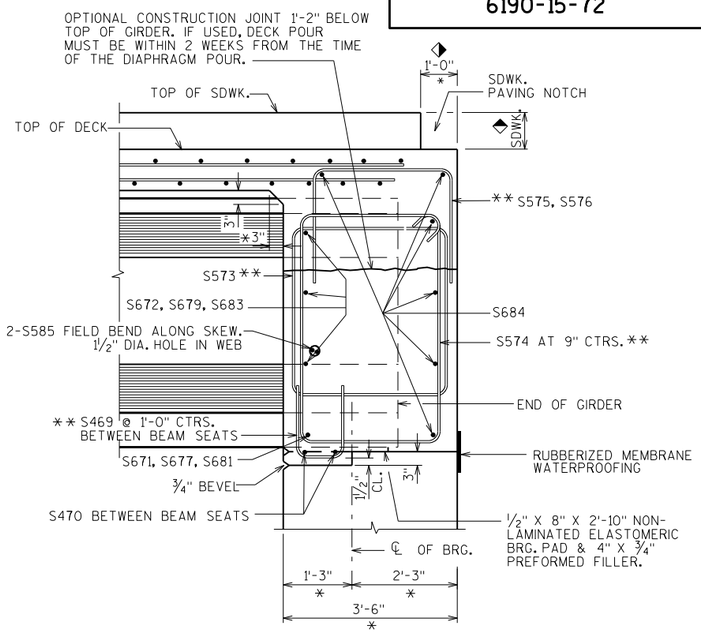
6190-15-72



AT PIERS 2 & 5

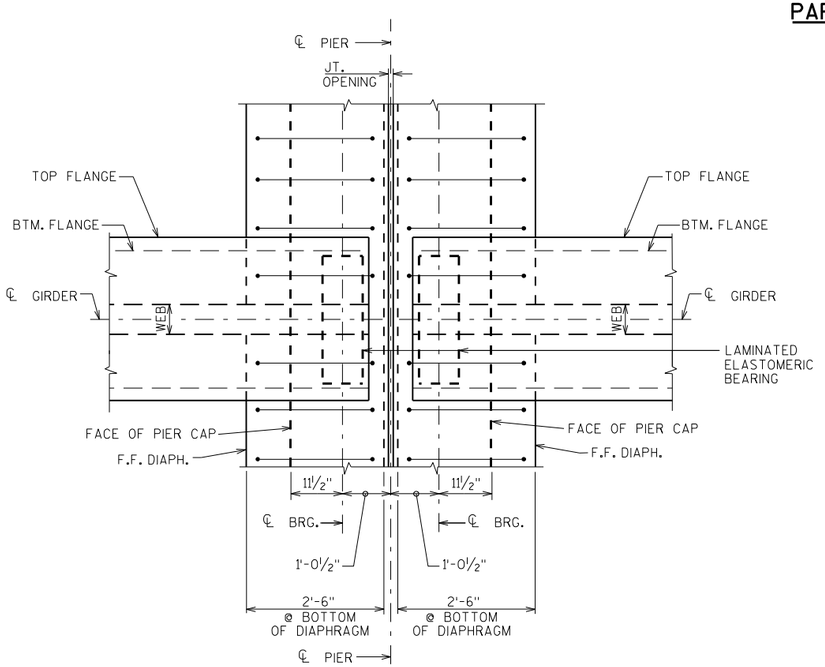


AT EAST ABUTMENT
(SHOWING SECTION AT STRUCT. APP. SLAB)

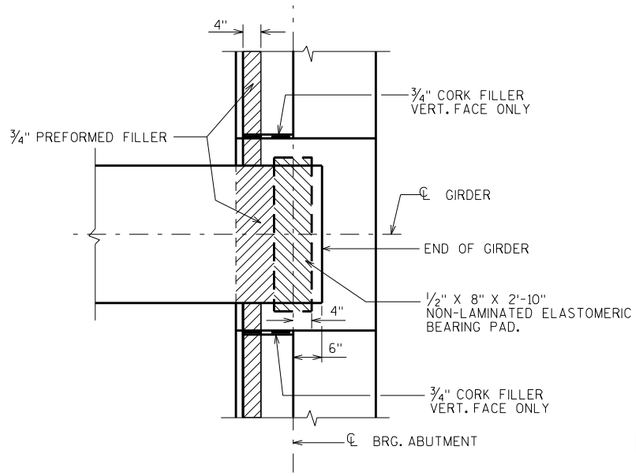


AT EAST ABUTMENT
(SHOWING SECTION AT SIDEWALK)

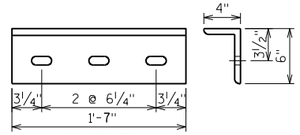
PART. LONGITUDINAL SECTION LOOKING NORTH



LAMINATED BEARING LAYOUT AT PIERS 2 & 5



BEARING PAD DETAIL AT E. ABUT.



ANGLE
6" X 4" X ¾" X 1'-7"

PROVIDE 3½" x 3½" x 5/16" PLATE WASHERS AT ALL LOCATIONS EXCEPT AT EXTERIOR FACES OF EXTERIOR GIRDERS WHERE 3½" x 3½" x ½" PLATE WASHERS SHALL BE PROVIDED.

NOTES

DIAPHRAGM SUPPORT ANGLES SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUT AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL SUPPORT ANGLES SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

ALL DIAPHRAGM SUPPORT HARDWARE SHALL BE INCIDENTAL TO "CONCRETE MASONRY BRIDGES".

LEGEND

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

◐ (38) BARS @ 1'-0" SPA. TO BE PLACED WITHIN THE 37'-0" LONG X 1'-0" WIDE X 1'-4" DEEP PAVING NOTCH AREA AT STRUCTURAL APPROACH SLAB LIMITS.

⬗ SEE "SUPERSTRUCTURE CROSS SECTION 3" SHEET FOR PAVING NOTCH LENGTHS AND ALSO, REFER TO THIS SHEET FOR ADDITIONAL BAR REINFORCEMENT PLACEMENT LOCATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

SUPERSTRUCTURE DETAILS 2

SHEET 31

281

G54WDET
7-14

SCALE =

8

8

STATE PROJECT NUMBER

6190-15-72

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S901	X	278	50'-3"			DECK-LONGIT.-TOP
S902	X	140	49'-2"			DECK-LONGIT.-TOP
S903	X	138	53'-9"			DECK-LONGIT.-TOP
S404	X	280	38'-5"			DECK-LONGIT.-TOP
S405	X	280	43'-1"			DECK-LONGIT.-TOP
S406	X	280	41'-3"			DECK-LONGIT.-TOP
S407	X	140	41'-0"			DECK-LONGIT.-TOP
S408	X	700	42'-6"			DECK-LONGIT.-BOT.
S409	X	630	38'-5"			DECK-LONGIT.-BOT.
S510	X	2115	52'-0"			DECK-TRANSVERSE
S411	X	1495	2'-8"	X		DECK/SDWK.-TRANS.-NORTH
S412	X	1495	2'-10"	X		DECK/SDWK.-TRANS.-NORTH
S413	X	501	1'-10"			SDWK.-TRANS.-NORTH
S514	X	1495	7'-6"	X		SDWK.-TRANS.-NORTH
S415	X	78	36'-10"			SDWK.-LONGIT.-NORTH
S416	X	78	34'-5"			SDWK.-LONGIT.-NORTH
S417	X	78	37'-5"			SDWK.-LONGIT.-NORTH
S418	X	39	39'-5"			SDWK.-LONGIT.-NORTH
S519	X	766	6'-8"	X		SDWK./PPT.-VERT.-NORTH
S420	X	36	36'-7"			PPT.-LONGIT.-NORTH
S421	X	36	34'-2"			PPT.-LONGIT.-NORTH
S422	X	18	34'-2"			PPT.-LONGIT.-NORTH
S423	X	18	36'-2"			PPT.-LONGIT.-NORTH
S424	X	18	37'-2"			PPT.-LONGIT.-NORTH
S425	X	1495	2'-8"	X		DECK/SDWK.-TRANS.-SOUTH
S426	X	1495	3'-0"	X		DECK/SDWK.-TRANS.-SOUTH
S427	X	501	1'-10"			SDWK.-TRANS.-SOUTH
S528	X	1495	11'-9"	X		SDWK.-TRANS.-SOUTH
S429	X	108	36'-10"			SDWK.-LONGIT.-SOUTH
S430	X	108	34'-5"			SDWK.-LONGIT.-SOUTH
S431	X	108	37'-5"			SDWK.-LONGIT.-SOUTH
S432	X	54	39'-5"			SDWK.-LONGIT.-SOUTH
S533	X	766	6'-8"	X		SDWK./PPT.-VERT.-SOUTH
S434	X	36	36'-7"			PPT.-LONGIT.-SOUTH
S435	X	36	34'-2"			PPT.-LONGIT.-SOUTH
S436	X	18	37'-2"			PPT.-LONGIT.-SOUTH
S437	X	18	36'-2"			PPT.-LONGIT.-SOUTH
S438	X	18	34'-2"			PPT.-LONGIT.-SOUTH
S539	X	70	11'-8"	X		DIAPH. PIER 1 & 6
S440	X	168	3'-8"			DIAPH. PIER 1 & 6
S541	X	28	9'-2"	X		DIAPH. PIER 1 & 6
S442	X	140	6'-11"	X		DIAPH. PIER 2 & 5
S443	X	112	5'-11"	X		DIAPH. PIER 2 & 5
S644	X	280	4'-10"			DIAPH. PIER 2 & 5
S545	X	70	11'-8"	X		DIAPH. PIER 3 & 4
S446	X	168	3'-8"			DIAPH. PIER 3 & 4
S547	X	28	9'-2"	X		DIAPH. PIER 3 & 4
S548	X	28	13'-0"	X		DIAPH. W. ABUT.
S549	X	28	7'-3"	X		DIAPH. W. ABUT.
S450	X	28	3'-3"	X		DIAPH. W. ABUT.
S451	X	14	3'-0"			DIAPH. W. ABUT.
S652	X	7	4'-0"			DIAPH. W. ABUT.
S653	X	42	4'-8"			DIAPH. W. ABUT.
S554	X	16	11'-2"	X		DIAPH. W. ABUT.
S555	X	14	13'-8"	X		DIAPH. W. ABUT.
S556	X	10	8'-3"	X		DIAPH. W. ABUT.
S557	X	4	8'-3"	X		DIAPH. W. ABUT.
S658	X	1	1'-8"			DIAPH. W. ABUT.
S459	X	10	3'-8"			DIAPH. - W. & E. ABUT. - SOUTH END
S660	X	3	7'-7"	X		DIAPH. W. ABUT.
S461	X	4	4'-4"			DIAPH. W. ABUT.
S662	X	6	52'-0"			DIAPH. W. ABUT.
S563	X	16	6'-0"			DIAPH. W. ABUT.
S664	X	1	0'-10"			DIAPH. W. ABUT.
S465	X	2	5'-2"			DIAPH. - W. & E. ABUT. - SOUTH END
S666	X	3	6'-7"	X		DIAPH. W. ABUT.

BILL OF BARS

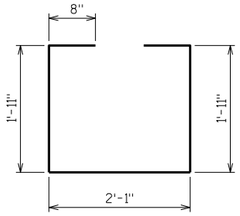
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S567	X	28	13'-0"	X		DIAPH. E. ABUT.
S568	X	28	7'-3"	X		DIAPH. E. ABUT.
S469	X	28	3'-3"	X		DIAPH. E. ABUT.
S470	X	14	3'-0"			DIAPH. E. ABUT.
S671	X	7	4'-0"			DIAPH. E. ABUT.
S672	X	42	4'-8"			DIAPH. E. ABUT.
S573	X	16	11'-2"	X		DIAPH. E. ABUT.
S574	X	14	13'-8"	X		DIAPH. E. ABUT.
S575	X	10	8'-3"	X		DIAPH. E. ABUT.
S576	X	4	8'-3"	X		DIAPH. E. ABUT.
S677	X	1	1'-8"			DIAPH. E. ABUT.
S478	X	10	3'-9"			DIAPH. - W. & E. ABUT. - NORTH END
S679	X	3	7'-7"	X		DIAPH. E. ABUT.
S480	X	4	4'-4"			DIAPH. E. ABUT.
S681	X	1	0'-10"			DIAPH. E. ABUT.
S482	X	2	5'-0"			DIAPH. - W. & E. ABUT. - NORTH END
S683	X	3	6'-7"	X		DIAPH. E. ABUT.
S684	X	6	52'-0"			DIAPH. E. ABUT.
S585	X	16	6'-0"			DIAPH. E. ABUT.
S486	X	56	5'-10"			DIAPH./STRIP SEAL PIER 2 & 5
S487	X	24	10'-6"	X		PPT. LONGIT. AT LOOKOUT
S488	X	24	3'-7"	X		PPT. LONGIT. AT LOOKOUT

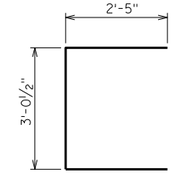
STAINLESS STEEL

SS901		76	5'-0"	X		DIAPH. E. & W. ABUT.

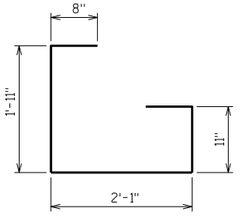
NOTE: SEE SHEET 39 FOR END DIAPHRAGM BARS AT LOOKOUT LOCATIONS PIERS 3 & 4.



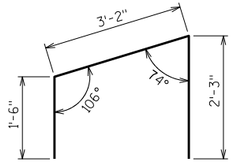
S442



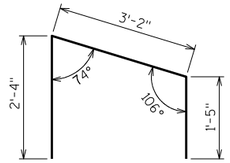
S660, S679



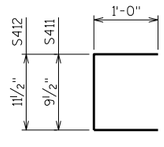
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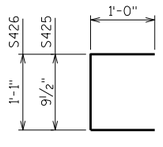
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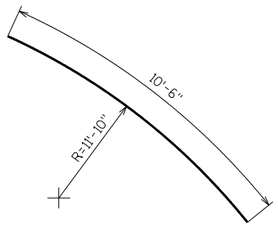
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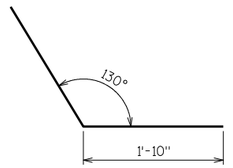
S411, S412



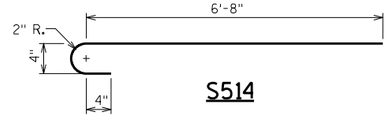
S425, S426



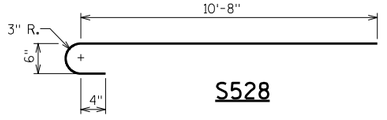
S487



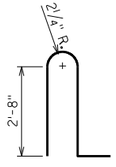
S488



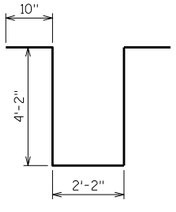
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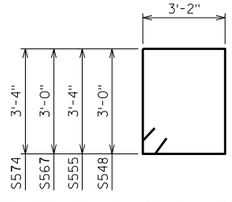
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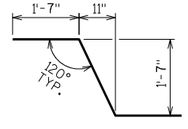
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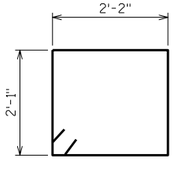
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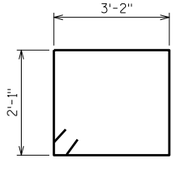
S548, S555, S567, S574



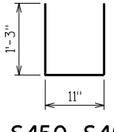
SS901



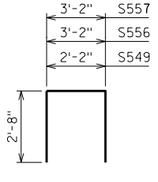
S541, S547



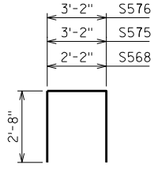
S554, S573



S450, S469



S549, S556, S557



S568, S575, S576

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

SUPERSTRUCTURE DETAILS 3

SHEET 32

282

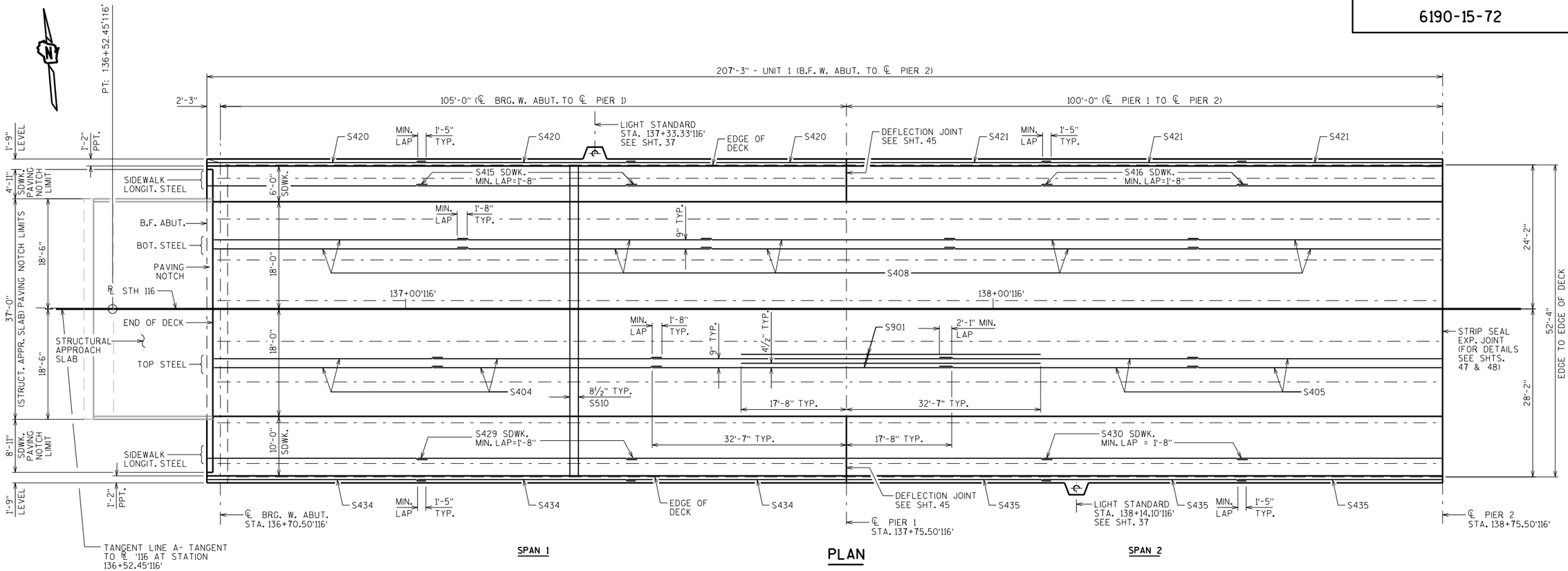
SCALE =

8

8

STATE PROJECT NUMBER

6190-15-72



PLAN

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

DECK PLAN 1

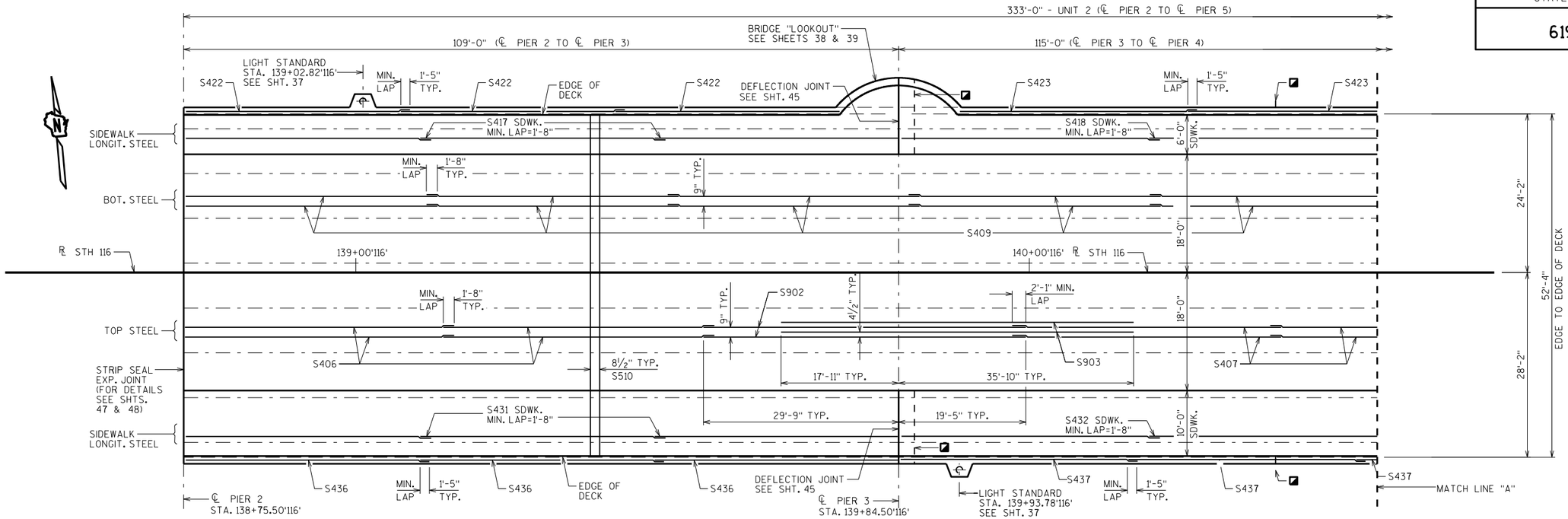
SHEET 33

283

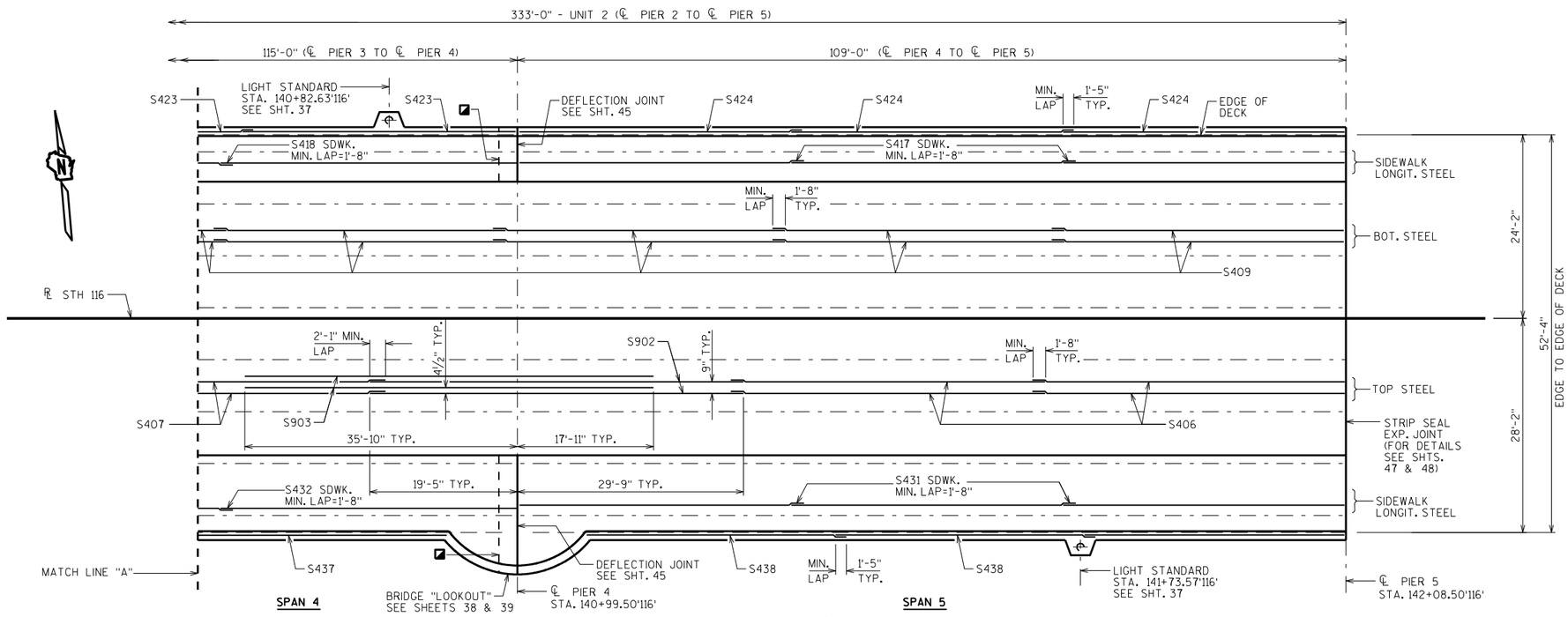
SCALE =

STATE PROJECT NUMBER

6190-15-72



PLAN



PLAN

◪ 1"ϕ NONMETALLIC CONDUIT REQ'D. FOR NAVIGATIONAL LIGHTING. SEE "RAIL POST SPACING & CONDUIT LOCATIONS" SHEETS FOR LOCATIONS. SEE "NAVIGATION LIGHTING AND CONDUIT DETAILS" SHEETS FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

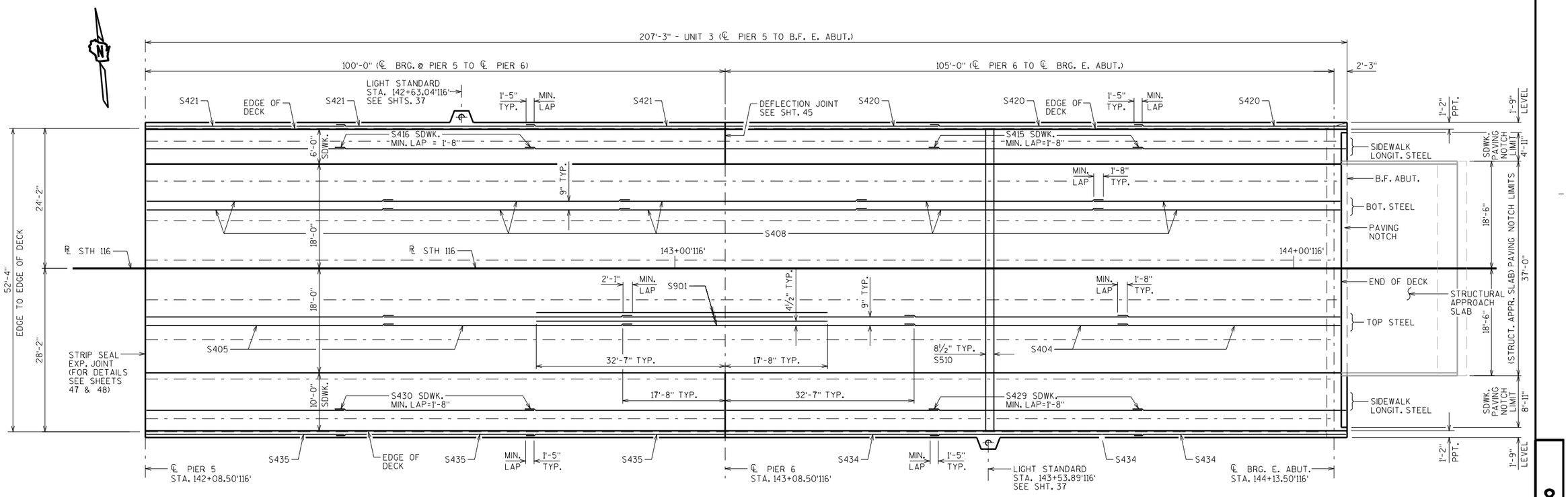
DECK PLAN 2

SHEET 34

284

SCALE =

STATE PROJECT NUMBER
6190-15-72



SPAN 6 SPAN 7

PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

DECK PLAN 3

SHEET 35

285

SCALE =

STATE PROJECT NUMBER

6190-15-72

TOP OF DECK ELEVATIONS

	W. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 2
LT. E.O.D.	763.06	763.48	763.90	764.32	764.74	765.16	765.58	766.00	766.42	766.84	767.26	767.66	768.06	768.46	768.86	769.26	769.66	770.06	770.46	770.84	771.19
GIR.1	763.10	763.52	763.94	764.36	764.78	765.20	765.62	766.04	766.46	766.88	767.30	767.70	768.10	768.50	768.90	769.30	769.70	770.10	770.50	770.88	771.23
GIR.2	763.24	763.66	764.08	764.50	764.92	765.34	765.76	766.18	766.60	767.02	767.44	767.84	768.24	768.64	769.04	769.44	769.84	770.24	770.64	771.01	771.37
GIR.3	763.38	763.80	764.22	764.64	765.06	765.48	765.90	766.32	766.74	767.16	767.58	767.98	768.38	768.78	769.18	769.58	769.98	770.38	770.77	771.15	771.51
GIR.4	763.51	763.93	764.35	764.77	765.19	765.61	766.03	766.45	766.87	767.29	767.71	768.11	768.51	768.91	769.31	769.71	770.11	770.51	770.91	771.29	771.64
CROWN/PGL	763.54	763.96	764.38	764.80	765.22	765.64	766.06	766.48	766.90	767.32	767.74	768.14	768.54	768.94	769.34	769.74	770.14	770.54	770.94	771.31	771.67
GIR.5	763.43	763.85	764.27	764.69	765.11	765.53	765.95	766.37	766.79	767.21	767.63	768.03	768.43	768.83	769.23	769.63	770.03	770.43	770.83	771.21	771.56
GIR.6	763.30	763.72	764.14	764.56	764.98	765.40	765.82	766.24	766.66	767.08	767.50	767.90	768.30	768.70	769.10	769.50	769.90	770.30	770.69	771.07	771.43
GIR.7	763.16	763.58	764.00	764.42	764.84	765.26	765.68	766.10	766.52	766.94	767.36	767.76	768.16	768.56	768.96	769.36	769.76	770.16	770.56	770.93	771.29
GIR.8	763.02	763.44	763.86	764.28	764.70	765.12	765.54	765.96	766.38	766.80	767.22	767.62	768.02	768.42	768.82	769.22	769.62	770.02	770.42	770.80	771.15
RT. E.O.D.	762.98	763.40	763.82	764.24	764.66	765.08	765.50	765.92	766.34	766.76	767.18	767.58	767.98	768.38	768.78	769.18	769.58	769.98	770.38	770.76	771.11

	PIER 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 3	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 4
LT. E.O.D.	771.19	771.56	771.90	772.22	772.51	772.78	773.02	773.23	773.43	773.59	773.74	773.86	773.96	774.03	774.07	774.08	774.07	774.03	773.96	773.86	773.74
GIR.1	771.23	771.60	771.94	772.26	772.55	772.82	773.06	773.27	773.47	773.63	773.78	773.90	774.00	774.07	774.11	774.12	774.11	774.07	774.00	773.90	773.78
GIR.2	771.37	771.74	772.08	772.39	772.68	772.95	773.19	773.41	773.60	773.77	773.91	774.04	774.13	774.20	774.24	774.26	774.24	774.20	774.13	774.04	773.91
GIR.3	771.51	771.87	772.21	772.53	772.82	773.09	773.33	773.55	773.74	773.91	774.05	774.17	774.27	774.34	774.38	774.40	774.38	774.34	774.27	774.17	774.05
GIR.4	771.64	772.01	772.35	772.67	772.96	773.23	773.47	773.68	773.88	774.04	774.19	774.31	774.41	774.48	774.52	774.53	774.52	774.48	774.41	774.31	774.19
CROWN/PGL	771.67	772.04	772.38	772.70	772.99	773.25	773.50	773.71	773.90	774.07	774.22	774.34	774.44	774.50	774.55	774.56	774.55	774.50	774.44	774.34	774.22
GIR.5	771.56	771.93	772.27	772.59	772.88	773.15	773.39	773.60	773.80	773.96	774.11	774.23	774.33	774.40	774.44	774.45	774.44	774.40	774.33	774.23	774.11
GIR.6	771.43	771.79	772.13	772.45	772.74	773.01	773.25	773.47	773.66	773.83	773.97	774.09	774.19	774.26	774.30	774.32	774.30	774.26	774.19	774.09	773.97
GIR.7	771.29	771.66	772.00	772.31	772.60	772.87	773.11	773.33	773.52	773.69	773.83	773.96	774.05	774.12	774.16	774.18	774.16	774.12	774.05	773.96	773.83
GIR.8	771.15	771.52	771.86	772.18	772.47	772.74	772.98	773.19	773.39	773.55	773.70	773.82	773.92	773.99	774.03	774.04	774.03	773.99	773.92	773.82	773.70
RT. E.O.D.	771.11	771.48	771.82	772.14	772.43	772.70	772.94	773.15	773.35	773.51	773.66	773.78	773.88	773.95	773.99	774.00	773.99	773.95	773.88	773.78	773.66

	PIER 4	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 5	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 6
LT. E.O.D.	773.74	773.59	773.43	773.23	773.02	772.78	772.51	772.22	771.90	771.56	771.19	770.84	770.46	770.06	769.66	769.26	768.86	768.46	768.06	767.66	767.26
GIR.1	773.78	773.63	773.47	773.27	773.06	772.82	772.55	772.26	771.94	771.60	771.23	770.88	770.50	770.10	769.70	769.30	768.90	768.50	768.10	767.70	767.30
GIR.2	773.91	773.77	773.60	773.41	773.19	772.95	772.68	772.39	772.08	771.74	771.37	771.01	770.64	770.24	769.84	769.44	769.04	768.64	768.24	767.84	767.44
GIR.3	774.05	773.91	773.74	773.55	773.33	773.09	772.82	772.53	772.21	771.87	771.51	771.15	770.77	770.38	769.98	769.58	769.18	768.78	768.38	767.98	767.58
GIR.4	774.19	774.04	773.88	773.68	773.47	773.23	772.96	772.67	772.35	772.01	771.64	771.29	770.91	770.51	770.11	769.71	769.31	768.91	768.51	768.11	767.71
CROWN/PGL	774.22	774.07	773.90	773.71	773.50	773.25	772.99	772.70	772.38	772.04	771.67	771.31	770.94	770.54	770.14	769.74	769.34	768.94	768.54	768.14	767.74
GIR.5	774.11	773.96	773.80	773.60	773.39	773.15	772.88	772.59	772.27	771.93	771.56	771.21	770.83	770.43	770.03	769.63	769.23	768.83	768.43	768.03	767.63
GIR.6	773.97	773.83	773.66	773.47	773.25	773.01	772.74	772.45	772.13	771.79	771.43	771.07	770.69	770.30	769.90	769.50	769.10	768.70	768.30	767.90	767.50
GIR.7	773.83	773.69	773.52	773.33	773.11	772.87	772.60	772.31	772.00	771.66	771.29	770.93	770.56	770.16	769.76	769.36	768.96	768.56	768.16	767.76	767.36
GIR.8	773.70	773.55	773.39	773.19	772.98	772.74	772.47	772.18	771.86	771.52	771.15	770.80	770.42	770.02	769.62	769.22	768.82	768.42	768.02	767.62	767.22
RT. E.O.D.	773.66	773.51	773.35	773.15	772.94	772.70	772.43	772.14	771.82	771.48	771.11	770.76	770.38	769.98	769.58	769.18	768.78	768.38	767.98	767.58	767.18

	PIER 6	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	E. ABUT.
LT. E.O.D.	767.26	766.84	766.42	766.00	765.58	765.16	764.74	764.32	763.90	763.48	763.06
GIR.1	767.30	766.88	766.46	766.04	765.62	765.20	764.78	764.36	763.94	763.52	763.10
GIR.2	767.44	767.02	766.60	766.18	765.76	765.34	764.92	764.50	764.08	763.66	763.24
GIR.3	767.58	767.16	766.74	766.32	765.90	765.48	765.06	764.64	764.22	763.80	763.38
GIR.4	767.71	767.29	766.87	766.45	766.03	765.61	765.19	764.77	764.35	763.93	763.51
CROWN/PGL	767.74	767.32	766.90	766.48	766.06	765.64	765.22	764.80	764.38	763.96	763.54
GIR.5	767.63	767.21	766.79	766.37	765.95	765.53	765.11	764.69	764.27	763.85	763.43
GIR.6	767.50	767.08	766.66	766.24	765.82	765.40	764.98	764.56	764.14	763.72	763.30
GIR.7	767.36	766.94	766.52	766.10	765.68	765.26	764.84	764.42	764.00	763.58	763.16
GIR.8	767.22	766.80	766.38	765.96	765.54	765.12	764.70	764.28	763.86	763.44	763.02
RT. E.O.D.	767.18	766.76	766.34	765.92	765.50	765.08	764.66	764.24	763.82	763.40	762.98

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STRUCTURE B-70-316

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TOP OF DECK ELEVATIONS

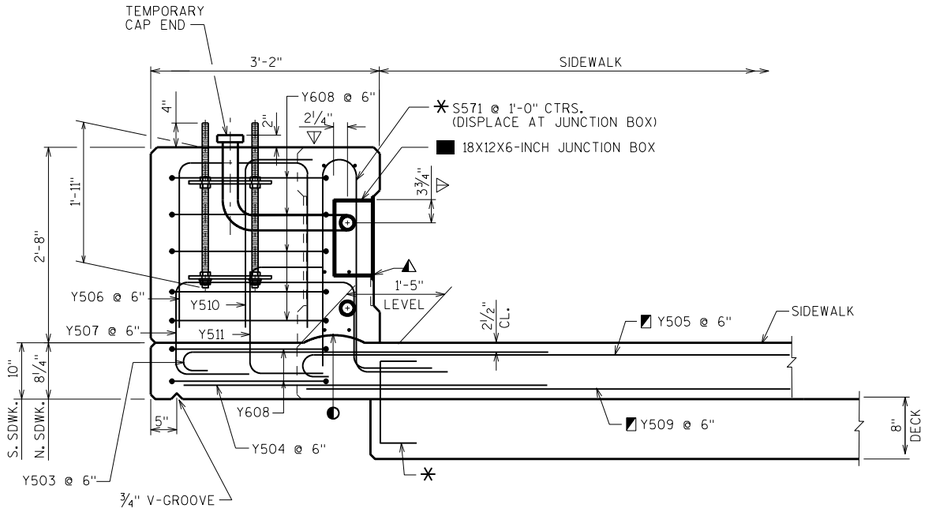
SHEET 36

286

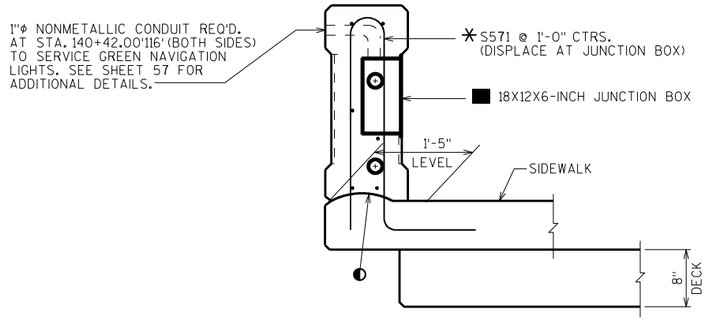
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STATE PROJECT NUMBER

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SECTION A-A



SECTION THRU VARIOUS PPT./JUNCTION BOX LOCATIONS

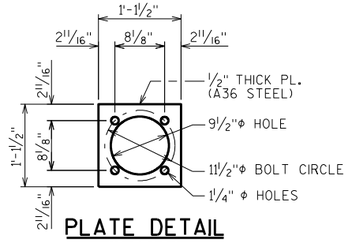
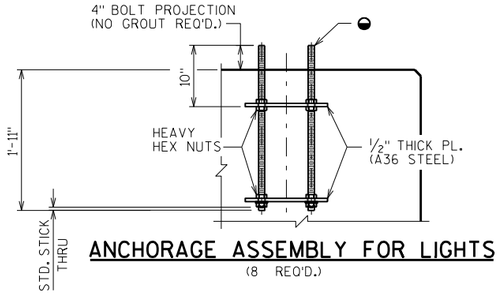
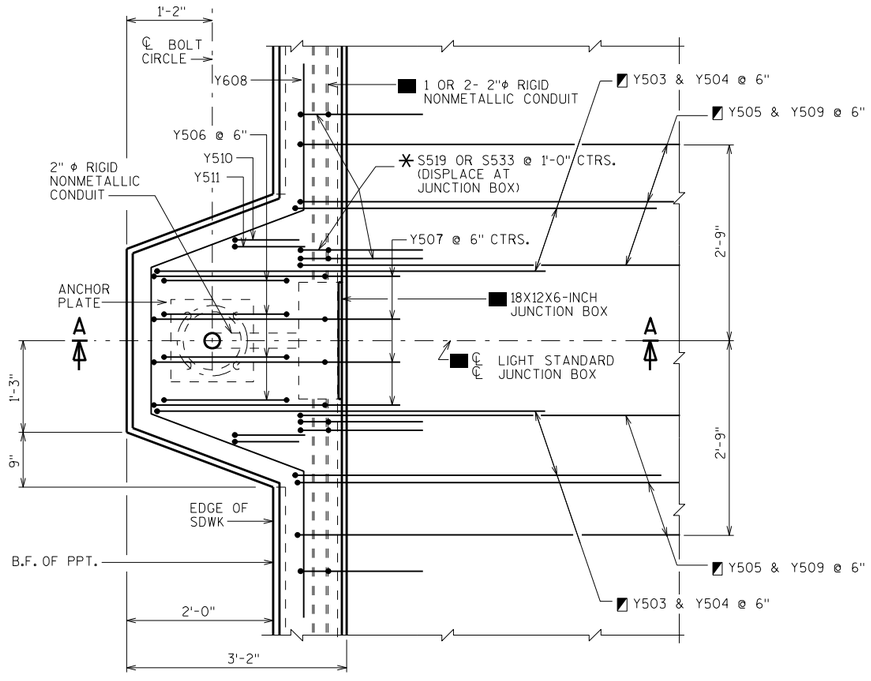


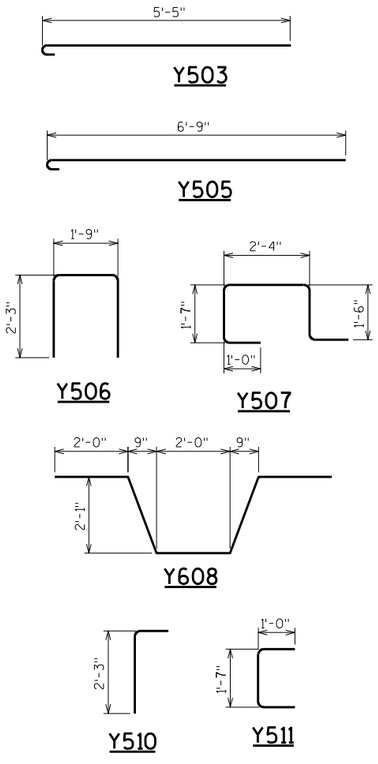
PLATE DETAIL
(16 REQ'D.)



ANCHORAGE ASSEMBLY FOR LIGHTS
(8 REQ'D.)



TYP. PLAN AT LIGHT STANDARD



NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18X12X6-INCH", EACH.
"ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES", EACH.
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH"

APPROVED MANUFACTURERS - JUNCTION BOXES:
SEE APPROVED PRODUCTS LIST.

APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER (4" TOTAL CONDUIT MOVEMENT).
O-Z/GEDNEY TYPE AX-8-200 AND BONDING JUMPER (8" TOTAL CONDUIT MOVEMENT).
O-Z/GEDNEY TYPE EX-200 WITH PBS-200-12S AND BONDING JUMPER (10" TOTAL CONDUIT MOVEMENT).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.

■ SEE SHEETS 49-52 FOR LOCATIONS.
SEE SHEETS 50 AND 58 FOR CONDUIT LIMITS.

ONLY ONE INDIVIDUAL RUN OF CONDUIT IS ALLOWED TO ENTER AND EXIT A JUNCTION BOX. WHERE TWO RUNS OF CONDUIT EXIST IN THE PARAPET, THE SECOND CONDUIT SHALL RUN ABOVE OR BELOW THE JUNCTION BOX. SEE SHEETS 49 THRU 52 TO DETERMINE WHICH CONDUIT (ROADWAY LIGHTING OR NAVIGATION LIGHTING) SHALL ENTER JUNCTION BOXES.

◐ CONSTR. JT. STRIKE OFF AS SHOWN

◭ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.

▽ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.

◩ THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN SIDEWALK.

◒ 1"ϕ THREADED ANCHOR BOLTS ASTM F1554 GR 55. HOT DIP ASTM A153, CLASS C, UPPER 8" OF BOLT INCLUDING NUTS & WASHERS. PROVIDE ENLARGED THREAD ON NUTS FOR PROPER FIT AFTER GALVANIZING. PROVIDE DOUBLE FLAT WASHERS & NUTS.

✳ SEE SHEETS 28 & 29 FOR ADDITIONAL BAR STEEL DETAILS.

BILL OF BARS

BAR MARK	COAT	NO.	LENGTH	BENT	LOCATION
Y503	X	48	6'-0"	X	SIDEWALK HORIZ. @ LIGHT STD.
Y504	X	48	6'-3"		SIDEWALK HORIZ. @ LIGHT STD.
Y505	X	80	7'-4"	X	SIDEWALK HORIZ. @ LIGHT STD.
Y506	X	32	6'-0"	X	PARAPET VERT. @ LIGHT STD.
Y507	X	32	6'-11"	X	PARAPET VERT. @ LIGHT STD.
Y608	X	56	10'-0"	X	PARAPET HORIZ. @ LIGHT STD.
Y509	X	80	6'-10"		SIDEWALK HORIZ. @ JUNCTION BOX
Y510	X	16	3'-2"	X	PARAPET VERT. @ LIGHT STD.
Y511	X	16	3'-5"	X	PARAPET VERT. @ LIGHT STD.

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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TYPICAL LIGHT STANDARD

SHEET 37

287

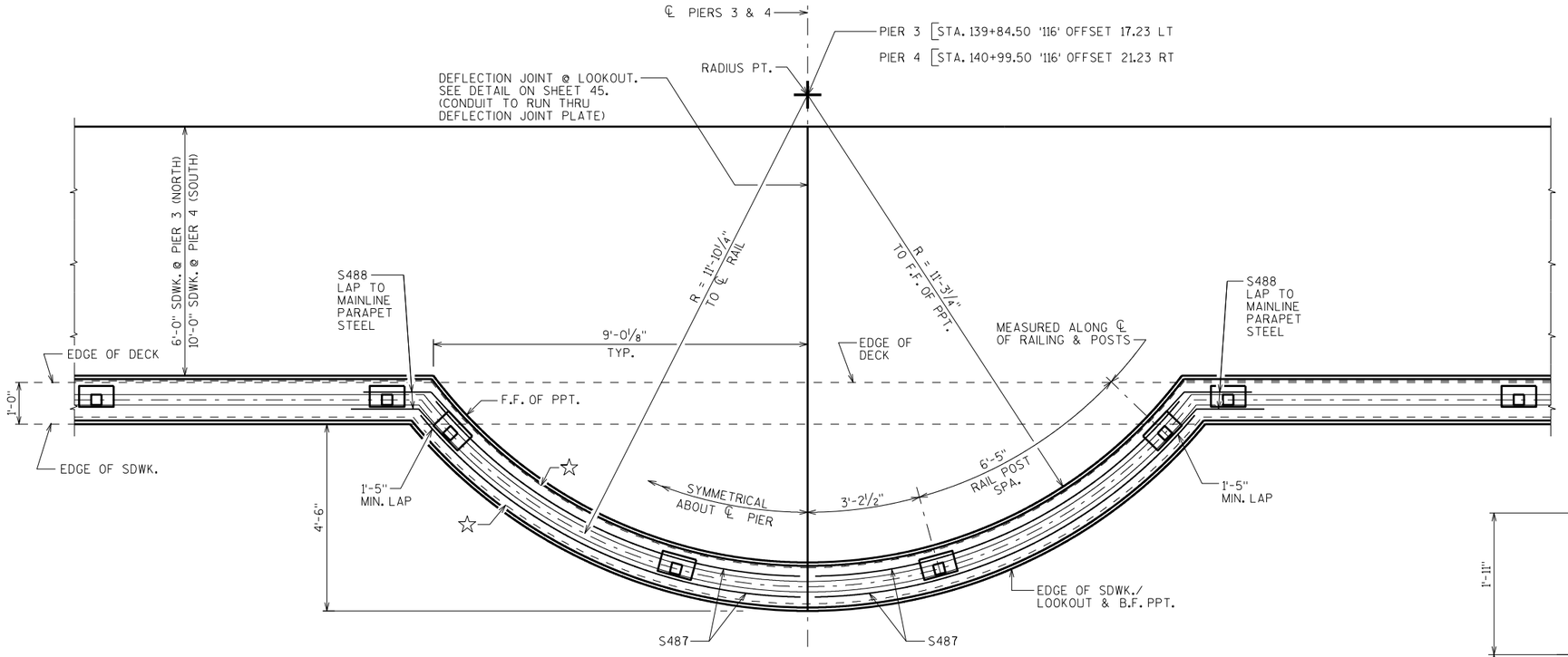
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SCALE =

STATE PROJECT NUMBER

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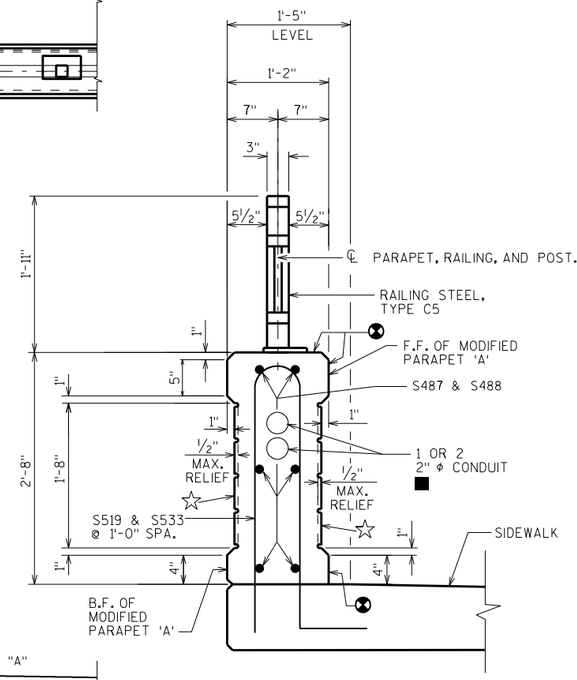


PLAN AT LOOKOUTS

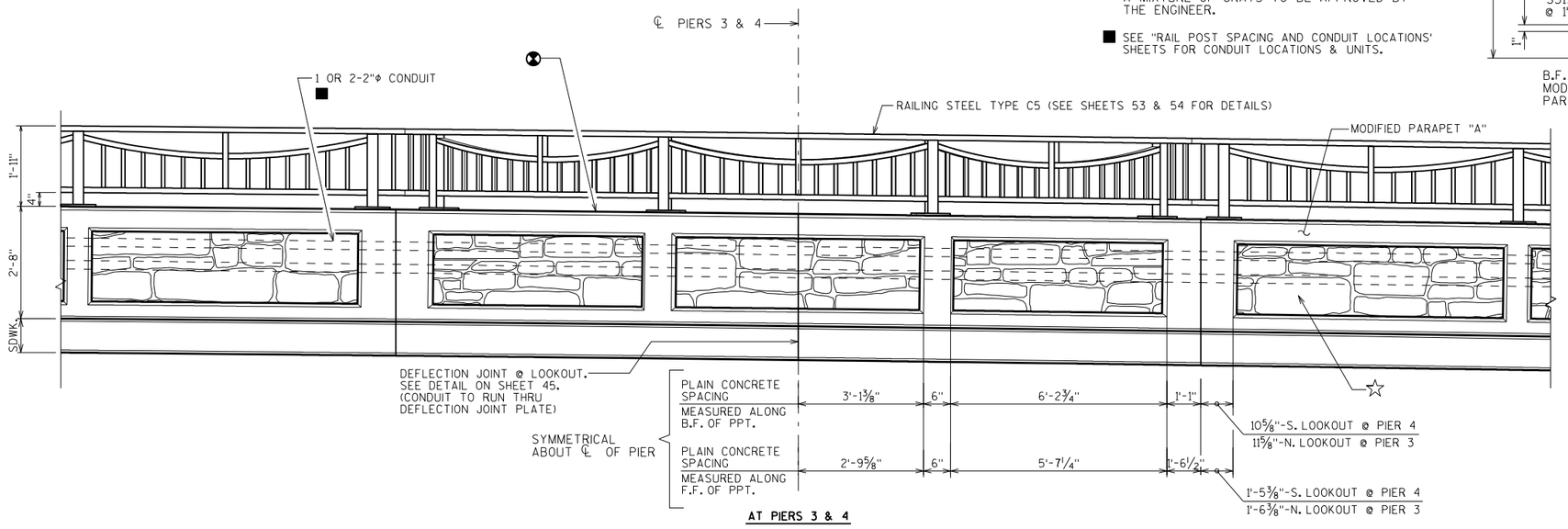
(SHOWING LONGITUDINAL PARAPET STEEL)

LEGEND

- PIGMENTED SURFACE SEALER (GRAY)
- "ARCHITECTURAL SURFACE TREATMENT" AND "CONCRETE STAINING" REQ'D. FINISHED STAIN COLOR SHALL INCLUDE A MIXTURE OF GRAYS TO BE APPROVED BY THE ENGINEER.
- SEE "RAIL POST SPACING AND CONDUIT LOCATIONS' SHEETS FOR CONDUIT LOCATIONS & UNITS.



SECTION THRU RAILING AT LOOKOUT



AT PIERS 3 & 4

OUTSIDE ELEVATION

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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LOOKOUT DETAILS 1

SHEET 38

288

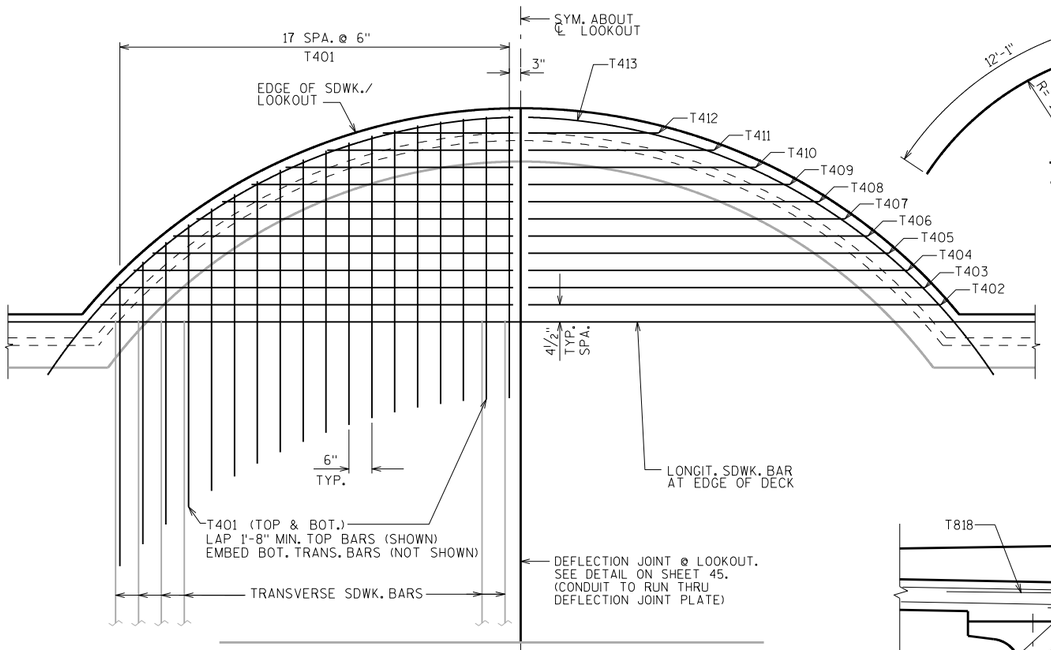
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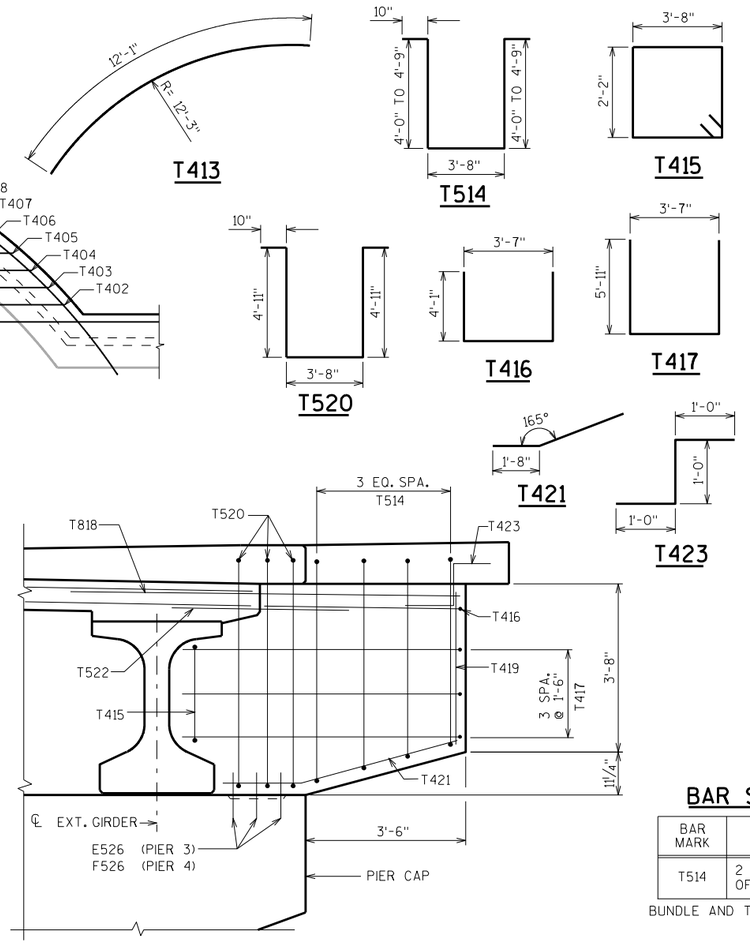
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PLAN AT LOOKOUTS



SIDE ELEVATION

(PPT. NOT SHOWN FOR CLARITY)

BILL OF BARS

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

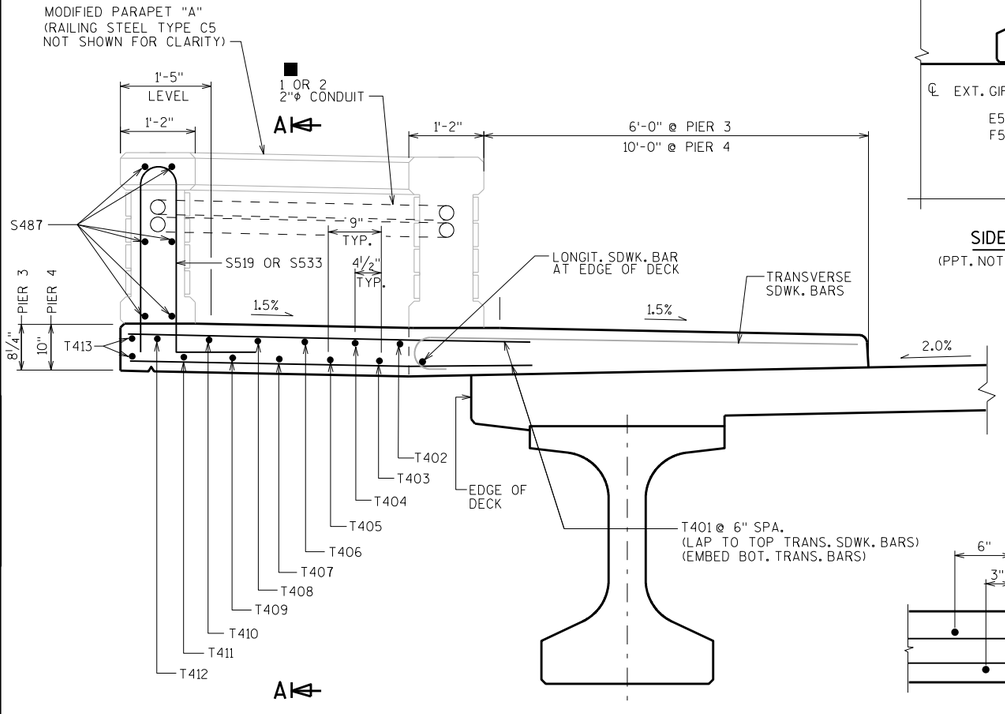
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T401	X	144	6'-2"			DECK @ LOOKOUTS-TRANS. TOP & BOTT.
T402	X	2	9'-0"			DECK @ LOOKOUTS-LONGIT.-TOP
T403	X	2	8'-8"			DECK @ LOOKOUTS-LONGIT.-BOT.
T404	X	2	8'-3"			DECK @ LOOKOUTS-LONGIT.-TOP
T405	X	2	7'-10"			DECK @ LOOKOUTS-LONGIT.-BOT.
T406	X	2	7'-5"			DECK @ LOOKOUTS-LONGIT.-TOP
T407	X	2	6'-11"			DECK @ LOOKOUTS-LONGIT.-BOT.
T408	X	2	6'-4"			DECK @ LOOKOUTS-LONGIT.-TOP
T409	X	2	5'-9"			DECK @ LOOKOUTS-LONGIT.-BOT.
T410	X	2	5'-0"			DECK @ LOOKOUTS-LONGIT.-TOP
T411	X	2	4'-1"			DECK @ LOOKOUTS-LONGIT.-BOT.
T412	X	2	2'-10"			DECK @ LOOKOUTS-LONGIT.-TOP
T413	X	4	12'-1"	X		DECK @ LOOKOUTS-LONGIT.-EDGE
T514	X	8	13'-7"	X	⚠	END DIAPHRAGM-VERT.
T415	X	2	12'-2"	X		END DIAPHRAGM-VERT.-STIRRUP
T416	X	2	11'-7"	X		END DIAPHRAGM-HORIZ.
T417	X	6	15'-3"	X		END DIAPHRAGM-HORIZ.
T818	X	10	10'-0"			END DIAPHRAGM-HORIZ.
T419	X	10	3'-4"			END DIAPHRAGM-VERT.
T520	X	6	14'-8"	X		END DIAPHRAGM-VERT.
T421	X	10	5'-3"	X		END DIAPHRAGM-HORIZ.
T522	X	10	5'-7"			END DIAPHRAGM-HORIZ.
T423	X	10	2'-10"	X		END DIAPHRAGM-VERT.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
T514	2 SERIES OF 4	12'-10" TO 14'-4"

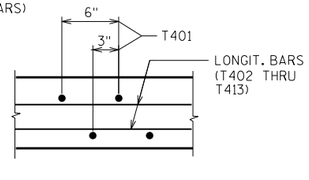
BUNDLE AND TAG EACH SERIES SEPARATELY.



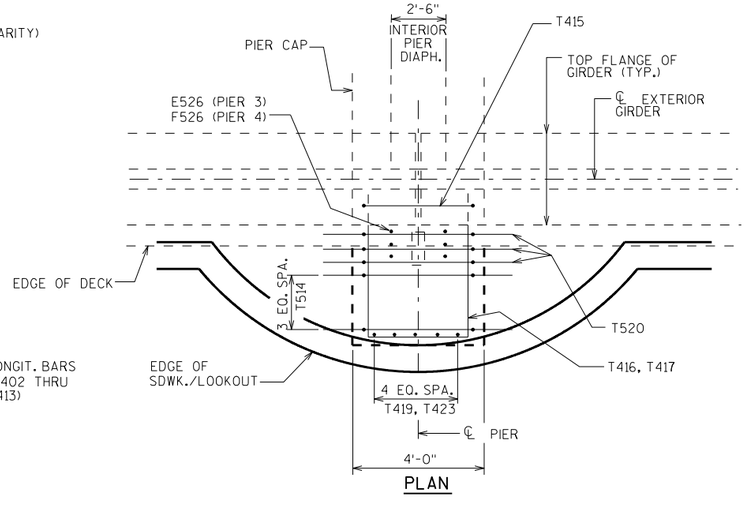
■ SEE "RAIL POST SPACING AND CONDUIT LOCATIONS" SHEETS FOR CONDUIT LOCATIONS & UNITS.

SECTION THRU SDWK. AT LOOKOUT

(DIAPHRAGM & PIER NOT SHOWN)



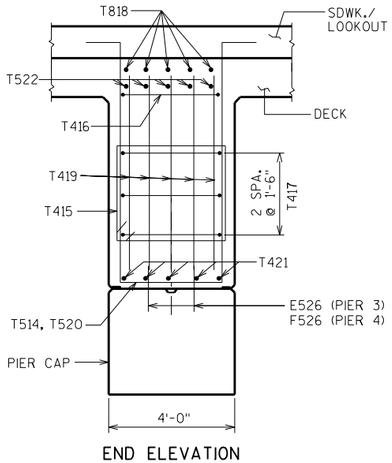
SECTION A-A



PLAN

END DIAPHRAGM DETAILS AT PIERS 3 & 4

(PARAPET SHOWN AT LOOKOUT, IN PLAN VIEW ONLY)



END ELEVATION

(PPT. AND GIRDER NOT SHOWN FOR CLARITY)

NO.	DATE	REVISION	BY

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LOOKOUT DETAILS 2

SHEET 39

289

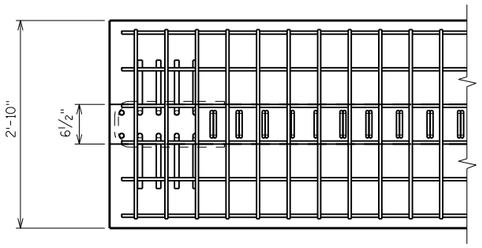
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SCALE =

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TOP FLANGE

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.3 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2 CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

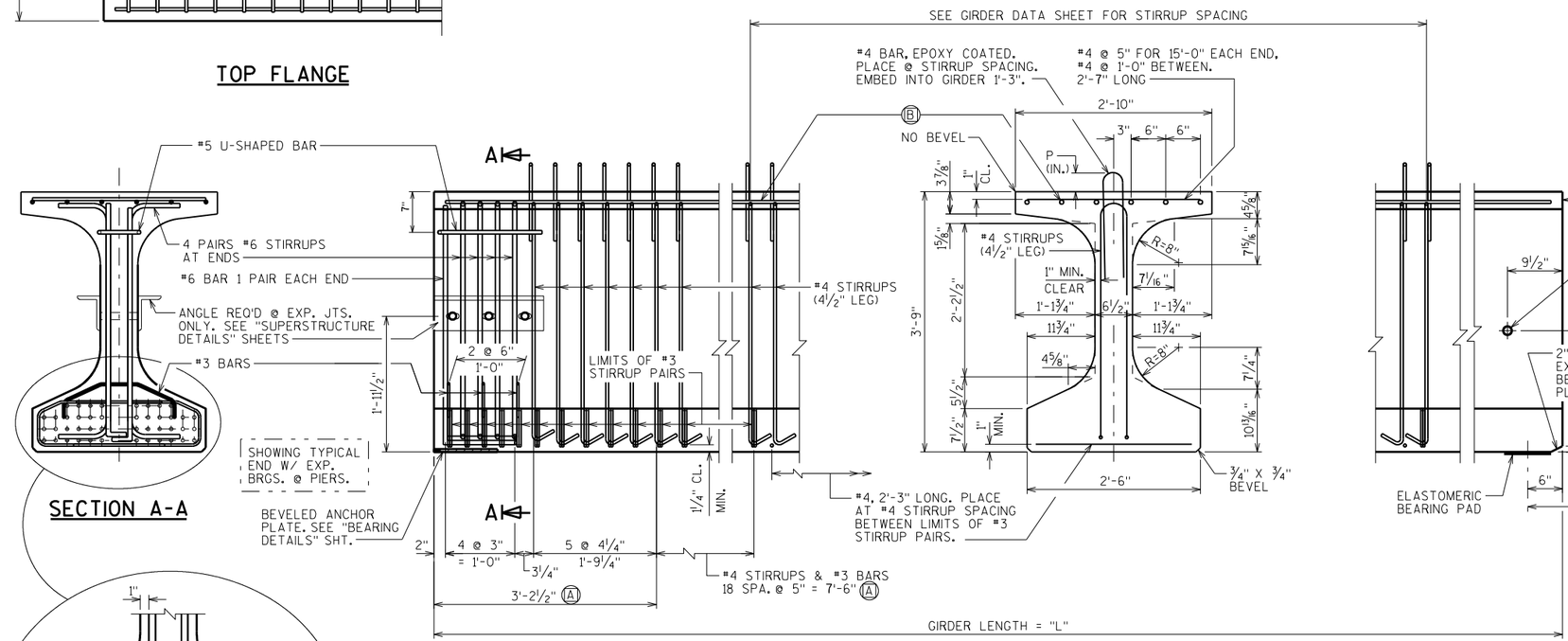
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

SEE "GIRDER DATA" SHEET FOR LOCATIONS WHERE EXPANSION BEARINGS ARE REQUIRED, AND FOR ADDIITIONAL GIRDER FABRICATION INFORMATION.

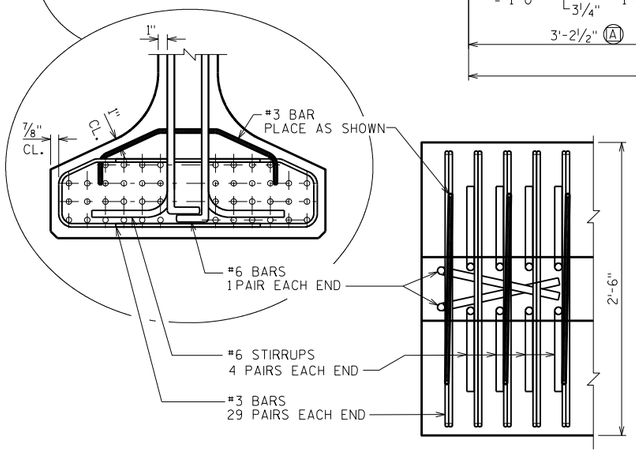


SECTION A-A

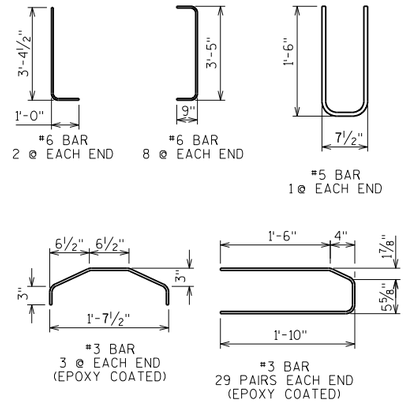
SIDE VIEW & TYPICAL SECTION IN SPAN

(A) DETAIL TYP. AT EACH END

(B) (6) #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"



BOTTOM FLANGE



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

45W" PRESTRESSED GIRDER DETAILS 1

SHEET 40

290

1-16
G45W

SCALE = 1.0

8

8

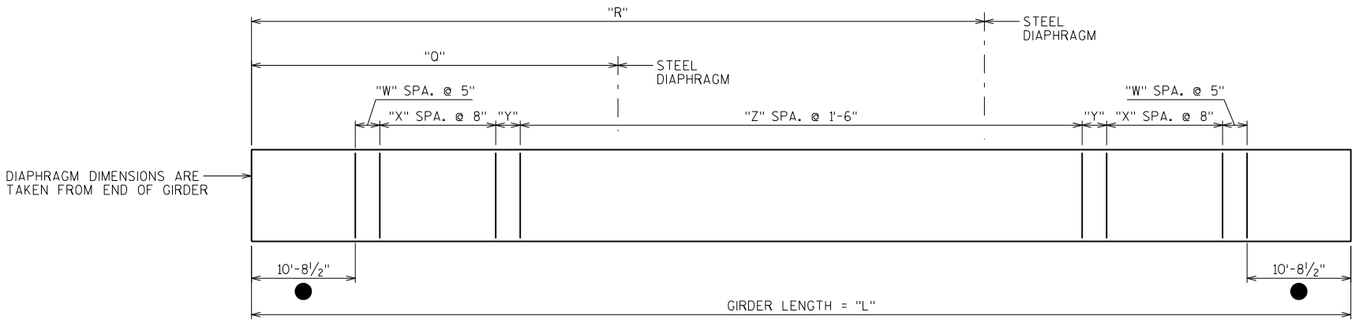
STATE PROJECT NUMBER

6190-15-72

✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	EXPANSION BEARING DETAILS REQUIRED	GIRDER	★ GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.)									CONC. STRGTH. f'c (p.s.i.)	"P" 1ST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN						UNDRAPED PATTERN		STIRRUP SPACING				DIAPHRAGM SPACING		
				1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10						TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳	"W"	"X"	"Y"	"Z"	LOCATION	"O"	"R"
1	———	1	105.46	0.59	1.10	1.51	1.76	1.83	1.73	1.46	1.05	0.54	8,000	7	7	7	0.6	30	6,400	41	13.25	16.25	4	——	——	1	16	11¼"	40	SPAN 1, ALL GIRDERS	35'-1⅞"	70'-3⅝"
		2-7	105.46	0.66	1.24	1.69	1.97	2.05	1.94	1.64	1.18	0.62																			
		8	105.46	0.59	1.10	1.51	1.76	1.83	1.73	1.46	1.05	0.54																			
2	AT EAST END	1	99.58	0.42	0.81	1.13	1.34	1.42	1.37	1.17	0.86	0.46	8,000	7	7	7	0.6	26	6,400	41	13.25	16.25	4	——	——	0	17	0"	37	SPAN 2, ALL GIRDERS	33'-2¼"	66'-4¾"
		2-7	99.58	0.48	0.92	1.28	1.51	1.60	1.53	1.32	0.97	0.51																			
		8	99.58	0.42	0.81	1.13	1.34	1.42	1.37	1.17	0.86	0.46																			
3	AT WEST END	1	108.61	0.68	1.29	1.75	2.04	2.13	2.02	1.70	1.23	0.64	8,000	8	9	8	0.6	34	6,400	40	13.75	16.75	5	——	——	2	17	8⅛"	41	SPAN 3, ALL GIRDERS	36'-2½"	72'-4⅞"
		2-7	108.61	0.77	1.45	1.98	2.31	2.42	2.28	1.93	1.40	0.73																			
		8	108.61	0.68	1.29	1.75	2.04	2.13	2.02	1.70	1.23	0.64																			
4	———	1	114.75	0.77	1.48	2.04	2.40	2.53	2.40	2.04	1.48	0.77	8,000	8	9	8	0.6	36	6,400	40	13.75	16.75	5	——	——	2	17	0"	46	SPAN 4, ALL GIRDERS	38'-3"	76'-6"
		2-7	114.75	0.89	1.70	2.35	2.76	2.90	2.76	2.35	1.70	0.89																			
		8	114.75	0.77	1.48	2.04	2.40	2.53	2.40	2.04	1.48	0.77																			
5	AT EAST END	1	108.61	0.64	1.23	1.70	2.02	2.13	2.04	1.75	1.29	0.68	8,000	8	9	8	0.6	34	6,400	40	13.75	16.75	5	——	——	2	17	8⅛"	41	SPAN 5, ALL GIRDERS	36'-2½"	72'-4⅞"
		2-7	108.61	0.73	1.40	1.93	2.28	2.42	2.31	1.98	1.45	0.77																			
		8	108.61	0.64	1.23	1.70	2.02	2.13	2.04	1.75	1.29	0.68																			
6	AT WEST END	1	99.58	0.46	0.86	1.17	1.37	1.42	1.34	1.13	0.81	0.42	8,000	7	7	7	0.6	26	6,400	41	13.25	16.25	4	——	——	0	17	0"	37	SPAN 6, ALL GIRDERS	33'-2⅜"	66'-4¾"
		2-7	99.58	0.51	0.97	1.32	1.53	1.60	1.51	1.28	0.92	0.48																			
		8	99.58	0.46	0.86	1.17	1.37	1.42	1.34	1.13	0.81	0.42																			
7	———	1	105.46	0.54	1.05	1.46	1.73	1.83	1.76	1.51	1.10	0.59	8,000	7	7	7	0.6	30	6,400	41	13.25	16.25	4	——	——	1	16	11¼"	40	SPAN 7, ALL GIRDERS	35'-1⅞"	70'-3⅝"
		2-7	105.46	0.62	1.18	1.64	1.94	2.05	1.97	1.69	1.24	0.66																			
		8	105.46	0.54	1.05	1.46	1.73	1.83	1.76	1.51	1.10	0.59																			



GIRDER ELEVATION

(SHOWING STEEL DIAPHRAGM AND STIRRUP SPACING)

● SEE SHEET "45W" PRESTRESSED GIRDER DETAILS 1" FOR END REINFORCEMENT

NOTES:

★ GIRDER LENGTHS SHOWN HAVE BEEN ADJUSTED FOR GRADE.

SEE "45W" PRESTRESSED GIRDER DETAILS 1" SHEET FOR ADDITIONAL INFORMATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

GIRDER DATA

SHEET 41

291

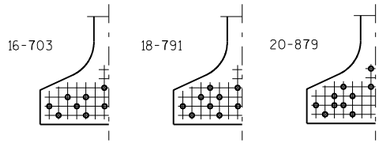
XX-GIRDATA.DGN
SCALE =

8

8

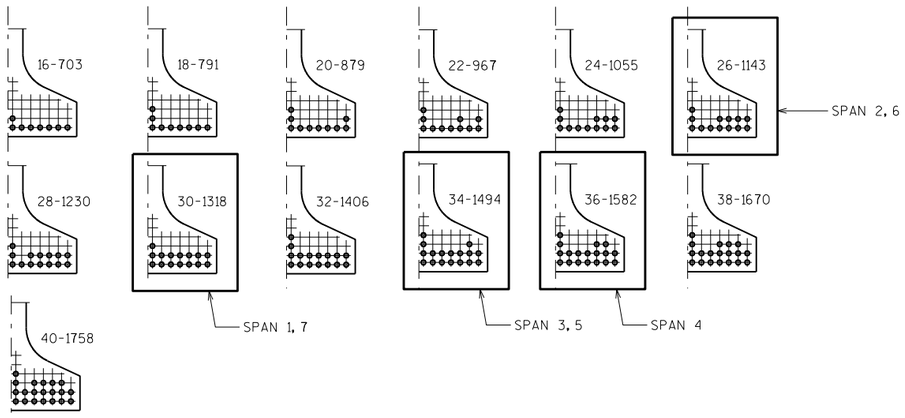
STATE PROJECT NUMBER

6190-15-72



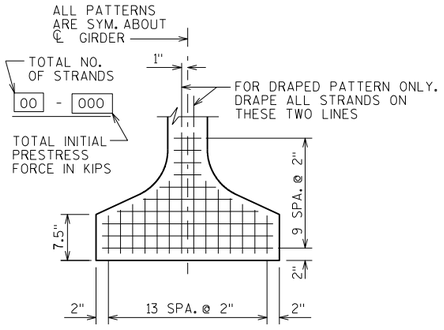
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS

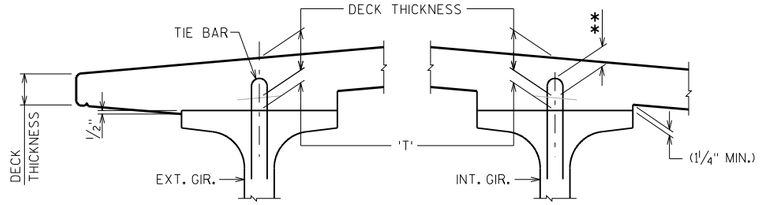


ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS



TYP. STRAND PATTERN



DECK HAUNCH DETAIL

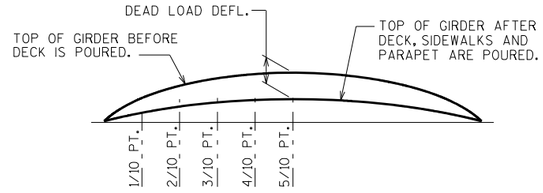
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

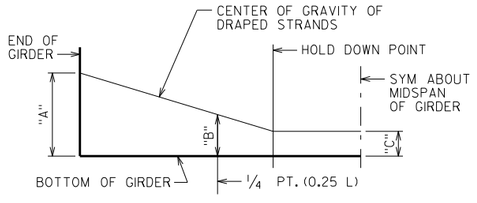
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3.125" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DEAD LOAD DEFLECTION DIAGRAM



DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1, 7	3.21
2, 6	2.45
3, 5	3.75
4	4.16

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

45W" PRESTRESSED GIRDER DETAILS 2

SHEET 42

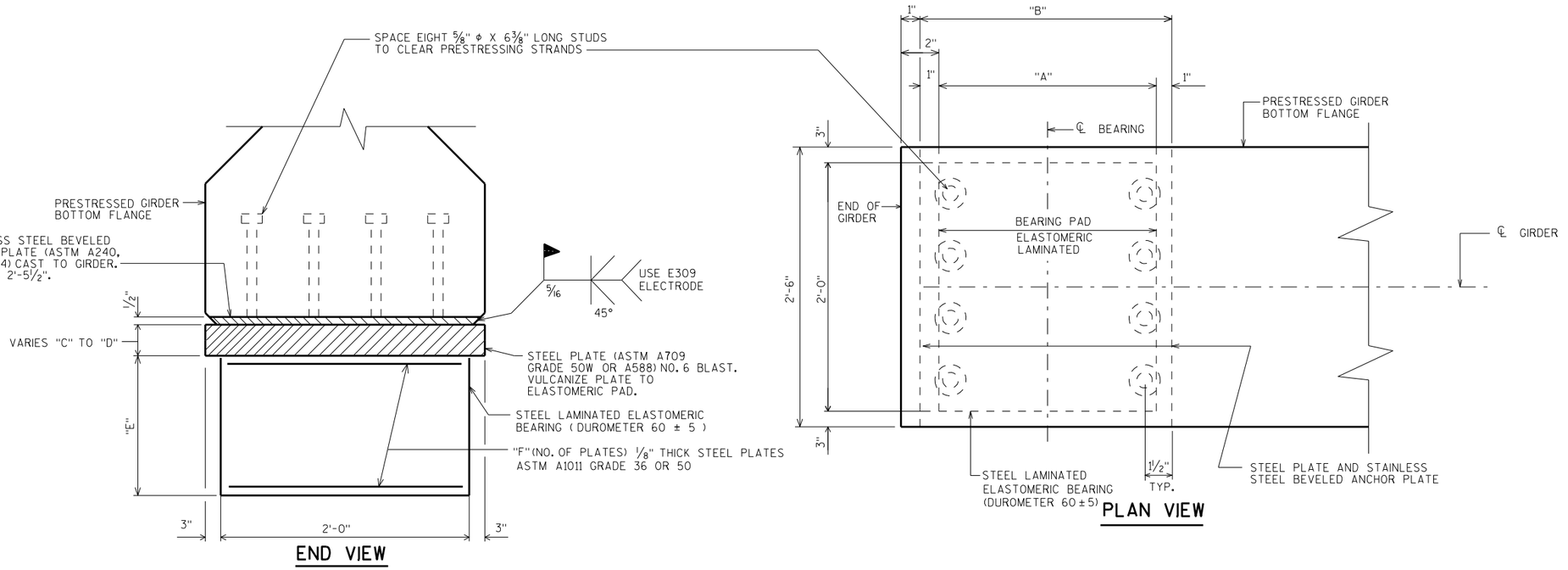
292

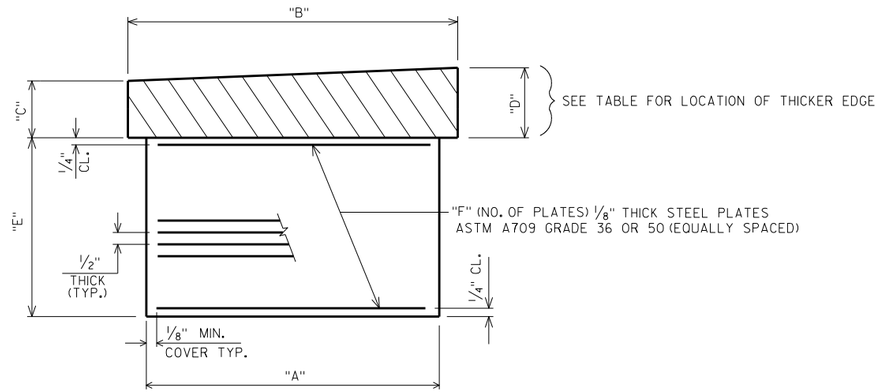
SCALE =

G45W
7-16

STATE PROJECT NUMBER

6190-15-72





SECTION THRU BEARING PAD ELASTOMERIC LAMINATED

(GIRDER AND STAINLESS STEEL ANCHOR PLATE NOT SHOWN FOR CLARITY)

	NO. REQ'D.	"A"	"B"	"C"	"D"	"E"	"F"	THICKER EDGE LOCATION
PIER 2, SPAN 2	8	1'-0"	1'-2"	1 1/2"	2"	3 3/4"	6	UPSTATION (TOWARD END OF GIRDER)
PIER 2, SPAN 3	8	1'-2"	1'-4"	1 3/4"	2 1/4"	4 3/8"	7	UPSTATION (TOWARD MIDDLE OF GIRDER)
PIER 5, SPAN 5	8	1'-2"	1'-4"	1 3/4"	2 1/4"	4 3/8"	7	DOWNSTATION (TOWARD MIDDLE OF GIRDER)
PIER 5, SPAN 6	8	1'-0"	1'-2"	1 1/2"	2"	3 3/4"	6	DOWNSTATION (TOWARD END OF GIRDER)

BEARING NOTES

BEARINGS SHALL NOT BE PLACED AT A TEMPERATURE GREATER THAN 85° F.

ALL MATERIAL USED FOR BEARING PADS ELASTOMERIC LAMINATED SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING PADS ELASTOMERIC LAMINATED", EACH.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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LAMINATED ELASTOMERIC BEARINGS

SHEET 43

293

66-BEARINGS.DGN

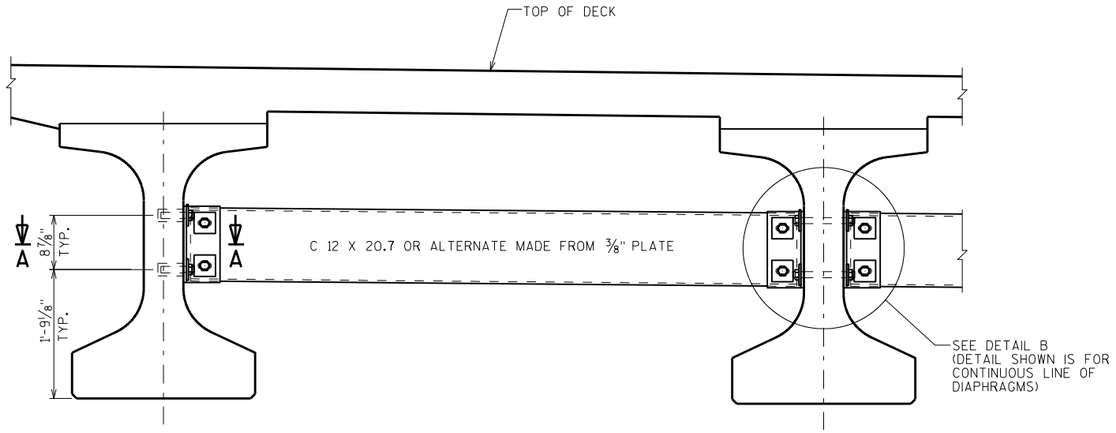
SCALE = :4

8

8

BRELASPG

STATE PROJECT NUMBER
6190-15-72



PART TRANSVERSE SECTION AT DIAPHRAGM

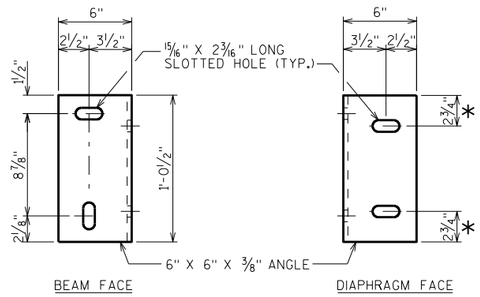
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-70-316, EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

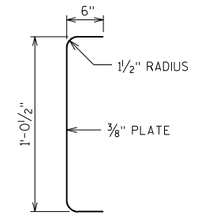
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

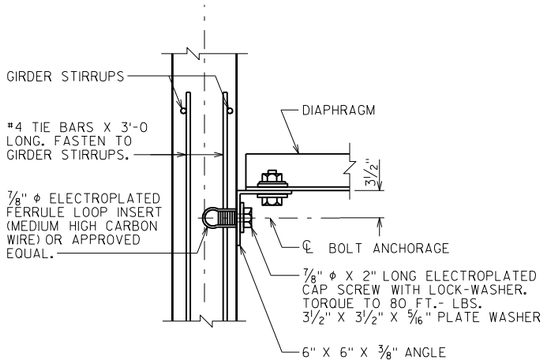


DIAPHRAGM SUPPORT

* 2½" FOR ALTERNATE PLATE DIAPHRAGM

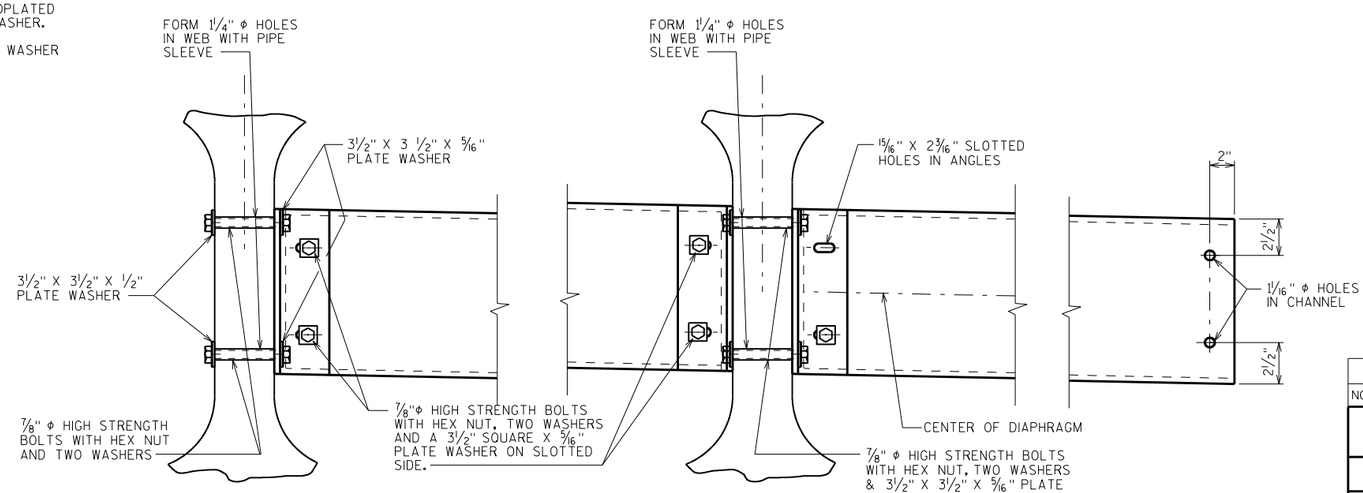


SECTION THRU ALTERNATE DIAPHRAGM



SECTION A-A

(FOR EXTERIOR ATTACHMENT)



(FOR STAGGERED DIAPHRAGM)

DETAIL B

(FOR CONTINUOUS LINE OF DIAPHRAGMS)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

STEEL DIAPHRAGM

SHEET 44

294

GSTDIA
7-13

SCALE =

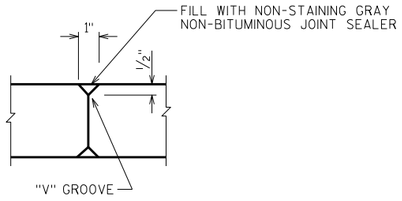
STATE PROJECT NUMBER

6190-15-72

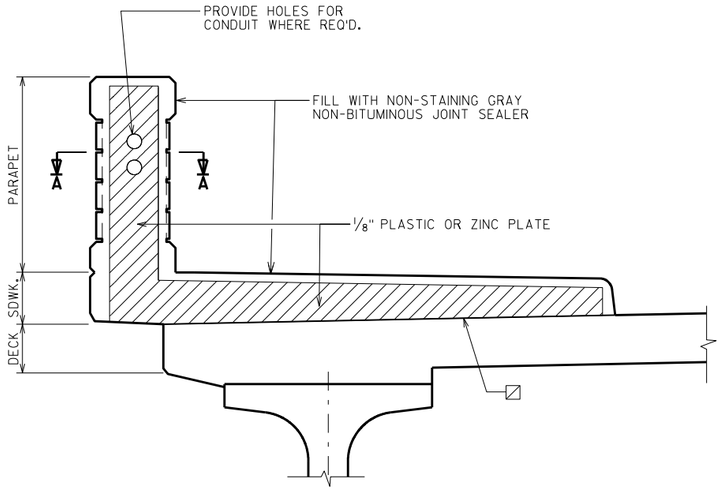
NOTES:

WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF 1/8" ZINC OR PLASTIC PLATE CUT AS SHOWN IN SECTIONS ON THIS SHEET BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.

☒ HORIZ. CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

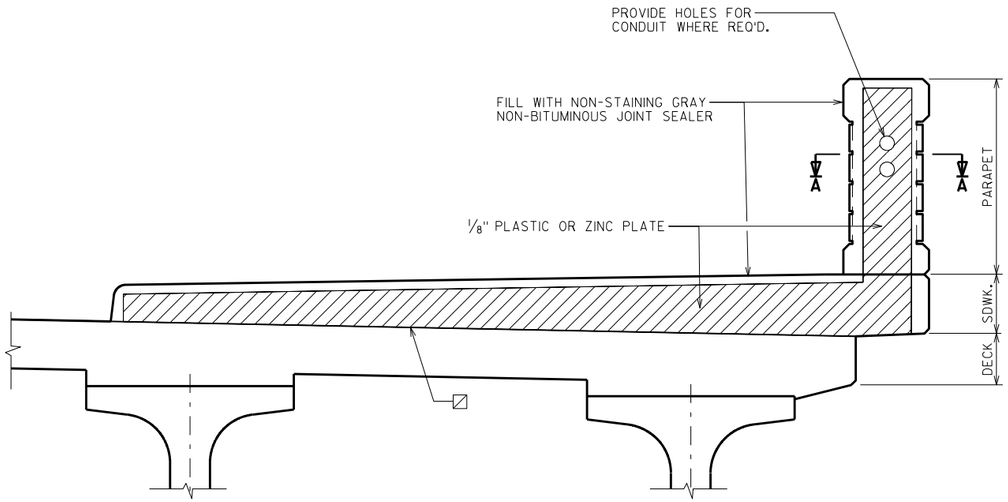


SECTION A-A



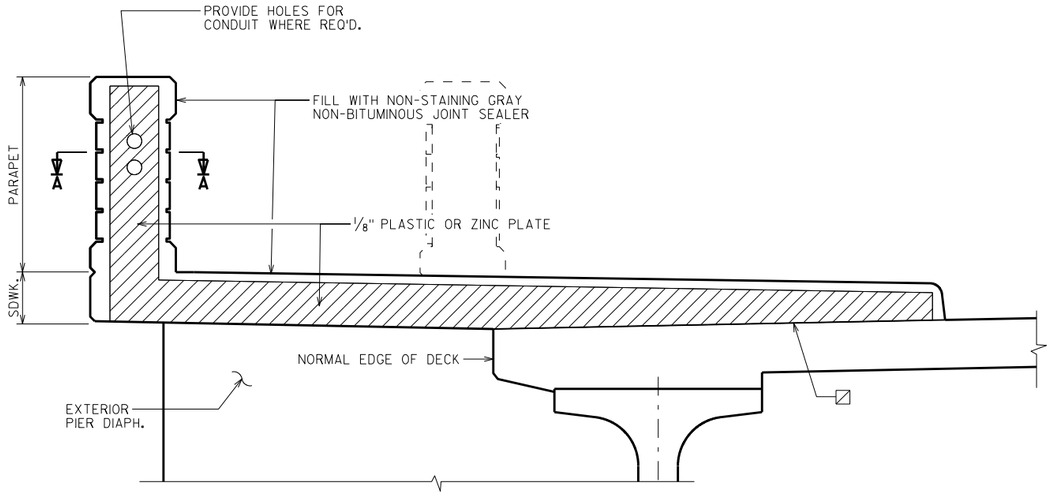
SECTION THRU 6' SIDEWALK AT GIRDER 1

(SHOWING DEFLECTION JOINT IN PARAPET AND SIDEWALK)
(FOR LOCATIONS, SEE "DECK PLAN" SHEETS)



SECTION THRU 10' SIDEWALK AT GIRDER 8

(SHOWING DEFLECTION JOINT IN PARAPET AND SIDEWALK)
(FOR LOCATIONS, SEE "DECK PLAN" SHEETS)



SECTION THRU SDWK. @ LOOKOUTS

(SHOWING DEFLECTION JOINT IN PARAPET AND SIDEWALK, FOR 6'SIDEWALK. 10' SIDEWALK SIDE SIMILAR.)
(FOR LOCATIONS, SEE "DECK PLAN" SHEETS)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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DEFLECTION JOINT DETAILS

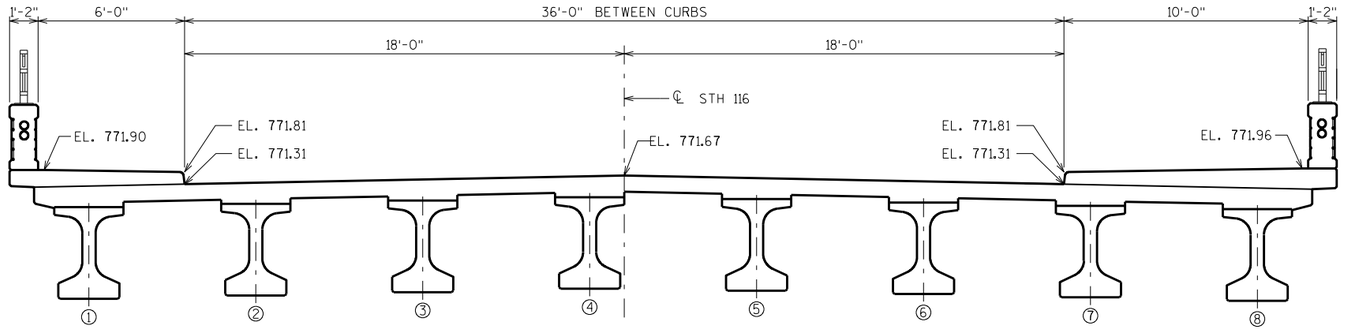
SHEET 45

295

SCALE =

STATE PROJECT NUMBER

6190-15-72



SECTION THRU DECK AT STRIP SEAL JOINTS-LOOKING EAST

(DIMENSIONS AND ELEVATIONS ARE GIVEN ALONG ℄ OF JOINT)
(JOINTS AT PIERS 2 & 5 ARE THE SAME)

8

8

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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DECK JOINT DIMENSIONS & ELEVATIONS

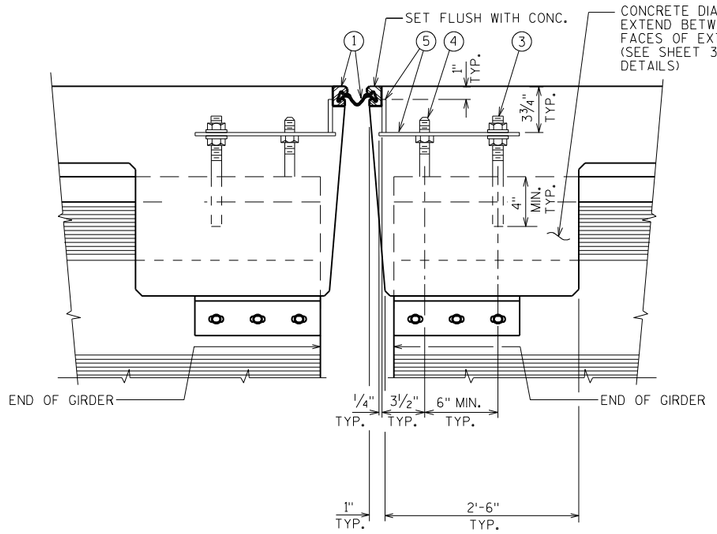
SHEET 46

296

SCALE =

STATE PROJECT NUMBER

6190-15-72



SECTION THRU JOINT AT PIERS 2 & 5

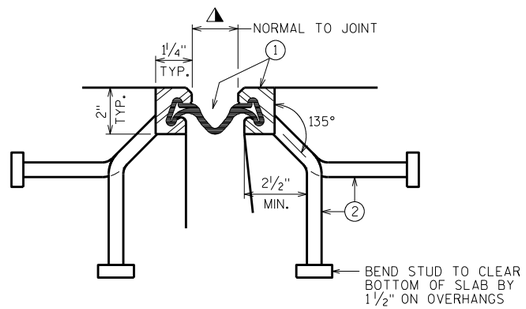
NORMAL TO ℄ SUBSTRUCTURE

LEGEND

1. NEOPRENE STRIP SEAL (4 - INCH) AND STEEL EXTRUSIONS.
2. STUDS $\frac{5}{8}$"ϕ X $6\frac{3}{8}$" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS AND BEND AS SHOWN AFTER WELDING.
2A. $\frac{1}{2}$" THICK ANCHOR PLATE WITH $\frac{5}{8}$"ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN GIRDERS.
3. $\frac{3}{4}$" ϕ THREADED ROD WITH 2 NUTS AND PLATE WASHERS. GROUT THREADED ROD INTO FIELD DRILLED HOLES ON ℄ OF GIRDER.
4. $\frac{3}{4}$"ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 3" X $\frac{1}{2}$" BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE $1\frac{1}{2}$" ϕ HOLE FOR NO. 3 & 1" ϕ HOLE FOR NO. 4.

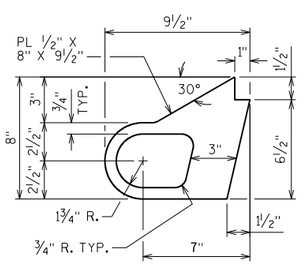
SEE SHEET 48

7. $\frac{3}{4}$"ϕ X $1\frac{1}{2}$" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE. RECESS $\frac{1}{16}$" BELOW PLATE SURFACE.
8. $\frac{3}{4}$"ϕ X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
9. $\frac{3}{4}$"ϕ X $2\frac{1}{4}$" GALVANIZED THREADED COUPLING.
10. 1" X 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.
11. SIDEWALK COVER PLATE $\frac{3}{8}$" X 2'-0" X LIMITS SHOWN. BEND DOWN FACE OF SIDEWALK WITH HOLES FOR NO. 7. GALVANIZE PLATE AFTER SLIP-RESISTANT SURFACE IS APPLIED.

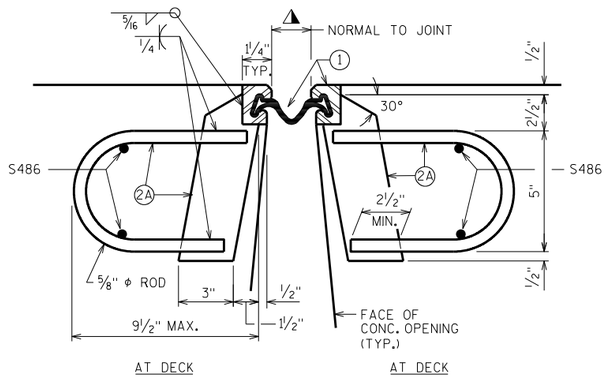


SECTION THRU JOINT

EXTERIOR GIRDER TO EDGE OF DECK AND AT PARAPETS AND SIDEWALKS

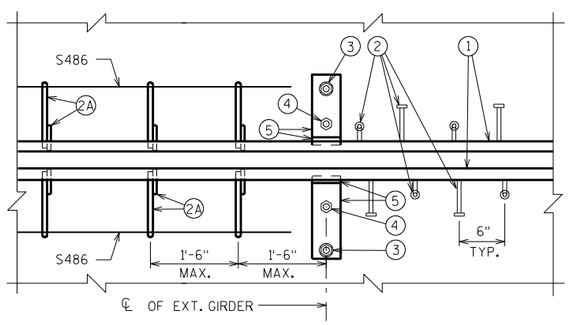


ALTERNATE STRIP SEAL ANCHOR



SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS.



PART PLAN

NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS, UNLESS MORE ARE REQUIRED FOR STAGED CONSTRUCTION, HANDLING OR GALVANIZING REQUIREMENTS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST AND SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN AND SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES, SUPPORTS AND EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS AND EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED. SLIP-RESISTANT SURFACE IS APPLIED TO SIDEWALK COVER PLATES BY THE MANUFACTURER AND THEN HOT DIPPED GALVANIZED TO THEIR RECOMMENDATIONS TO MAINTAIN THE INTEGRITY OF THIS SURFACE.

ANCHOR SYSTEM NO. 8 AND NO. 9 SHALL CONFORM TO ASTM A307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C AND D.

STRIP SEAL EXPANSION JOINT ASSEMBLIES, INCLUDING ANCHOR STUDS AND HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-70-316".

⚠ TEMPERATURE TABLE

SHADED UNDERSIDE DECK TEMP. (°F)	JOINT OPENING (NORMAL TO JT.)
85°	¾"
75°	1"
65°	1¼"
55°	1½"
45°	1⅝"
35°	1⅞"
25°	2⅛"
15°	2⅜"
5°	2⅝"

A SMALL JOINT OPENING DUE TO A HIGH TEMPERATURE AT TIME OF CONSTRUCTION MAY REQUIRE NEOPRENE STRIP SEAL INSTALLATION INTO STEEL EXTRUSIONS PRIOR TO SETTING THE EXPANSION JOINT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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STRIP SEAL AT PIERS 2 & 5

SHEET 47

297

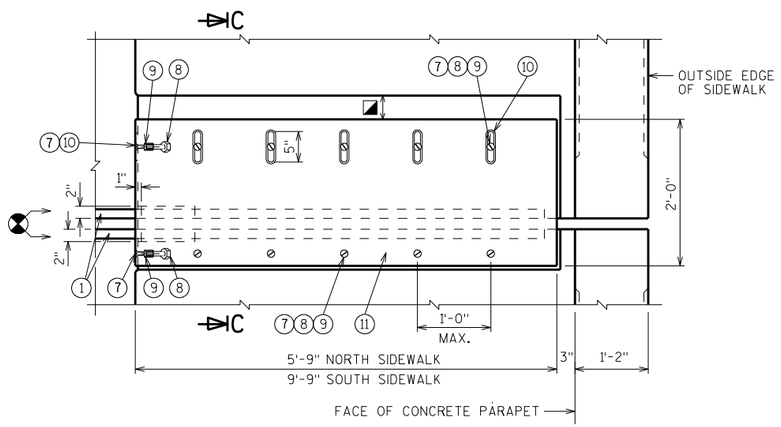
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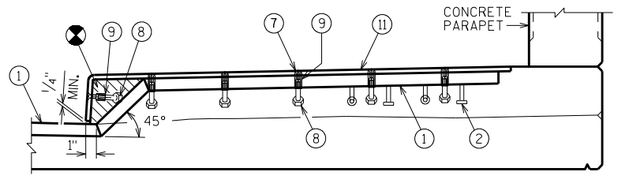
SCALE =

STATE PROJECT NUMBER

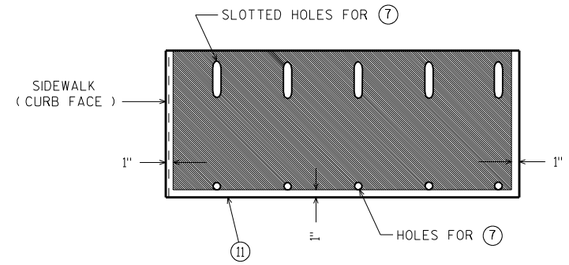
6190-15-72



PLAN AT SIDEWALK



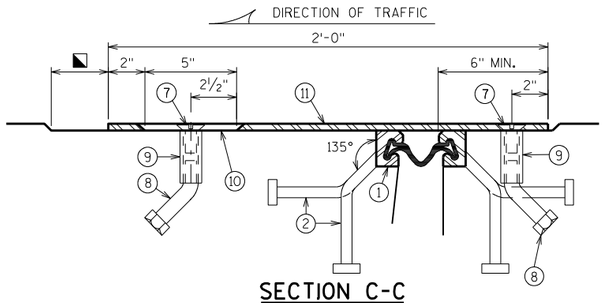
SECTION AT SIDEWALK



PLAN OF SIDEWALK COVER PLATE WITH SLIP-RESISTANT SURFACE

PLACE SLIP-RESISTANT SURFACE ON TOP WALKING SURFACE IN SHADED AREA ONLY (NOT ON CURB FACE).

APPROVED SLIP-RESISTANT APPLIED SURFACES FOR STEEL PLATES		
PRODUCT	MANUFACTURER	CONTACT AT
SLIPNOT GRADE 2, STEEL	W. S. MOLNAR COMPANY	1-800-SLIPNOT
ALGRIP, STEEL	ROSS TECHNOLOGY CORP.	1-800-345-8170



SECTION C-C

BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

JOINT OPENING DIMENSION ALONG SKEW PLUS ½".

SEE SHEET 47 FOR LEGEND.

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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STRIP SEAL COVER PLATE DETAILS

SHEET 48

298

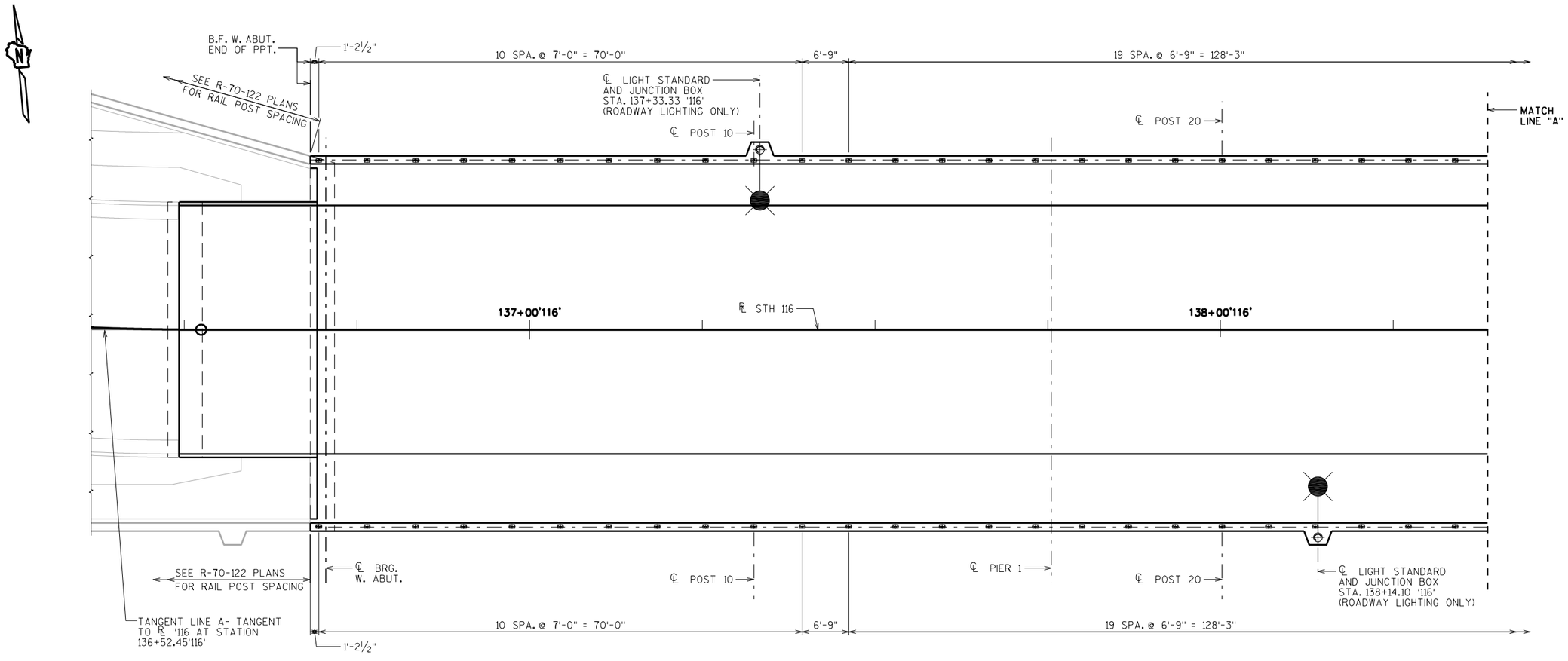
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SCALE =

STATE PROJECT NUMBER

6190-15-72



PLAN

NOTE: RAIL POST SPACING IS MEASURED ALONG ℄ OF RAIL & ACCOUNTS FOR VERTICAL GRADE ALONG THE PROFILE.

VERTICAL RAIL POSTS SHALL BE CENTERED ON THE 6" PLAIN CONCRETE BREAK ALONG THE LENGTH OF THE PARAPETS. (TYPICAL BOTH FACES OF PARAPETS).

RAIL POST SPACING SHALL BE USED FOR LOCATING 6" PLAIN CONCRETE BREAK AESTHETICS.

SEE AESTHETIC DETAILS ON SHEETS 55 & 56.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
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STRUCTURE B-70-316

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RAIL POST SPACING & CONDUIT LOCATIONS 1

SHEET 49

299

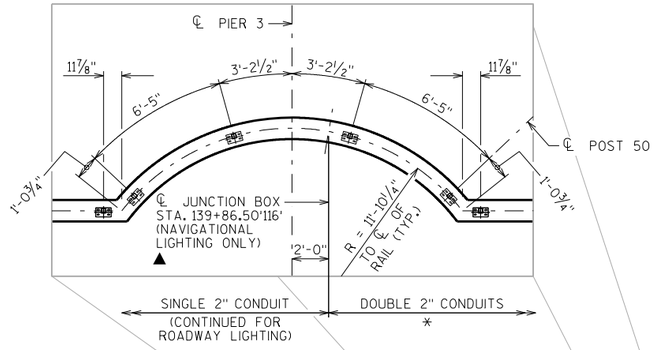
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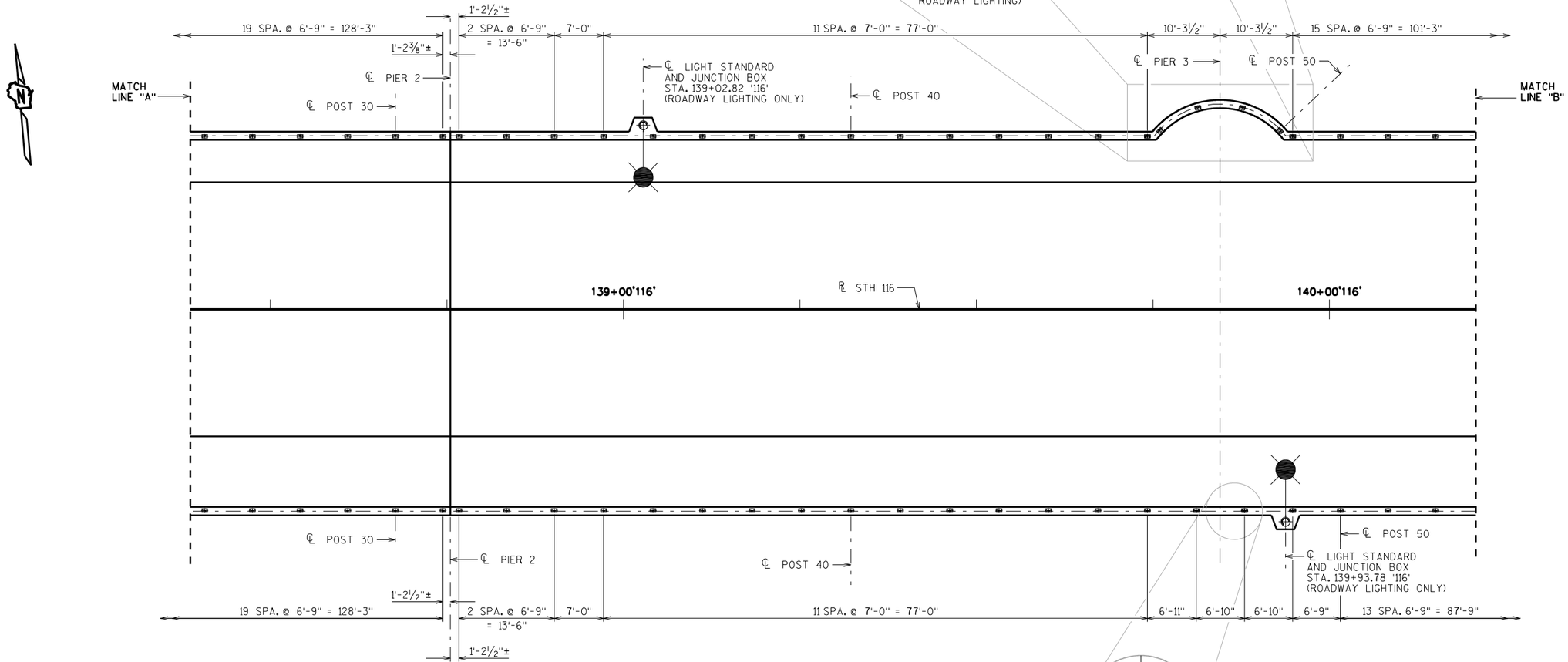
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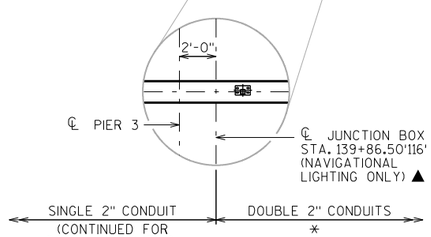
STATE PROJECT NUMBER

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PLAN



NOTE: RAIL POST SPACING IS MEASURED ALONG ℄ OF RAIL & ACCOUNTS FOR VERTICAL GRADE ALONG THE PROFILE.

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SEE AESTHETIC DETAILS ON SHEETS 55 & 56.

* HORIZONTAL CONDUIT IN PARAPET FOR NAVIGATION LIGHTING TO END AT PIER 3 JUNCTION BOXES (AT STA. 139+86.50'116' IN BOTH PARAPETS).

▲ SEE "NAVIGATION LIGHTING & CONDUIT DETAILS" SHEETS FOR NAVIGATION LIGHT CONDUIT PLACEMENT.

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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RAIL POST SPACING & CONDUIT LOCATIONS 2

SHEET 50

300

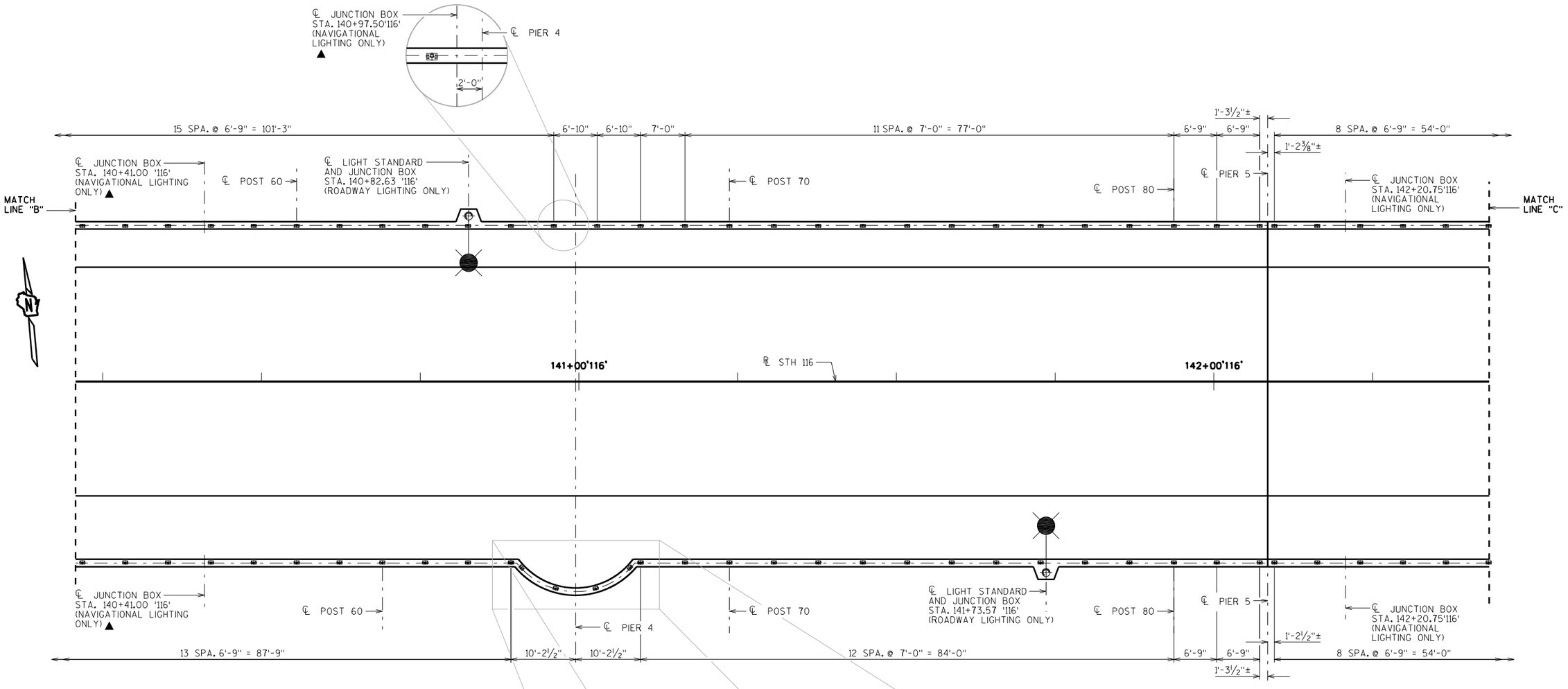
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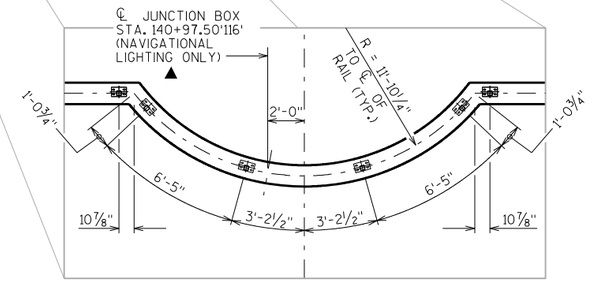
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STATE PROJECT NUMBER

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PLAN



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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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RAIL POST SPACING & CONDUIT LOCATIONS 3

SHEET 51

301

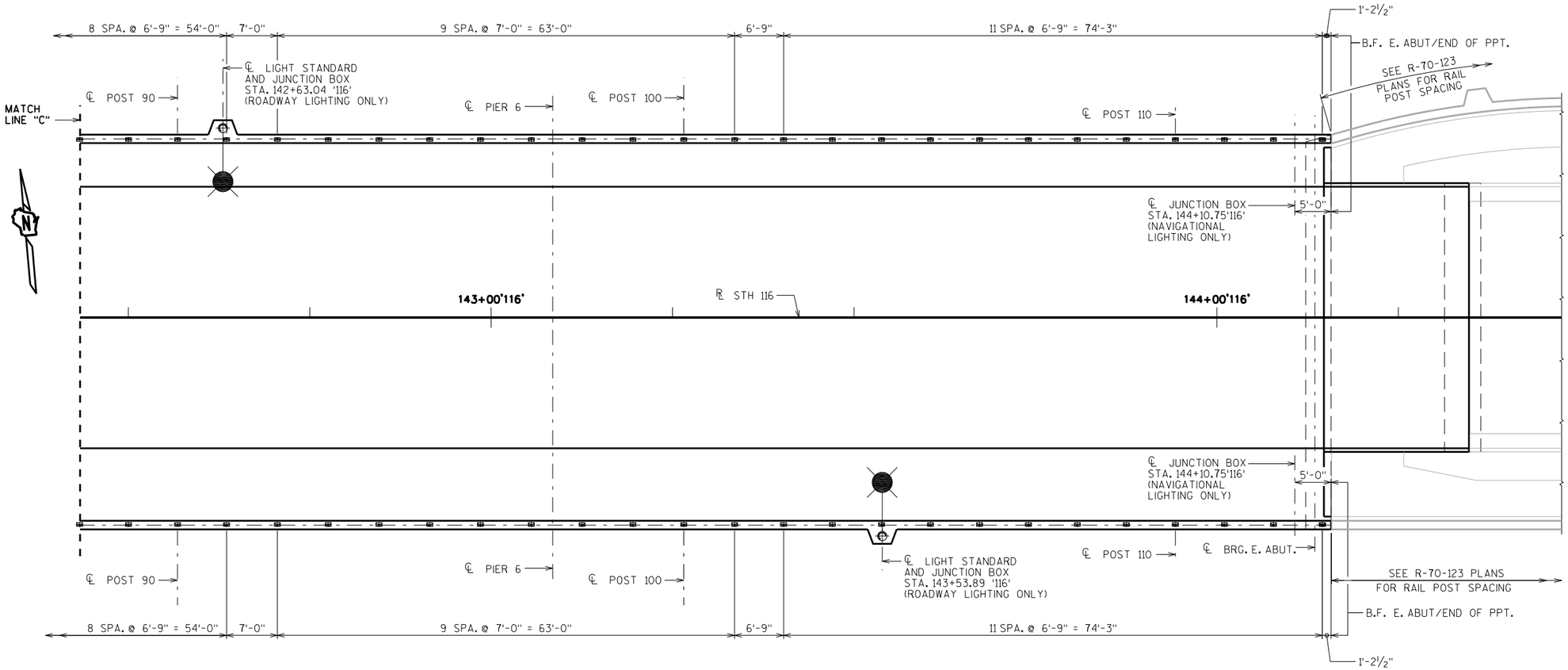
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SCALE =

STATE PROJECT NUMBER

6190-15-72



PLAN

NOTE: RAIL POST SPACING IS MEASURED ALONG ℄ OF RAIL & ACCOUNTS FOR VERTICAL GRADE ALONG THE PROFILE.

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SEE AESTHETIC DETAILS ON SHEETS 55 & 56.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
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STRUCTURE B-70-316

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RAIL POST SPACING & CONDUIT LOCATIONS 4

SHEET 52

302

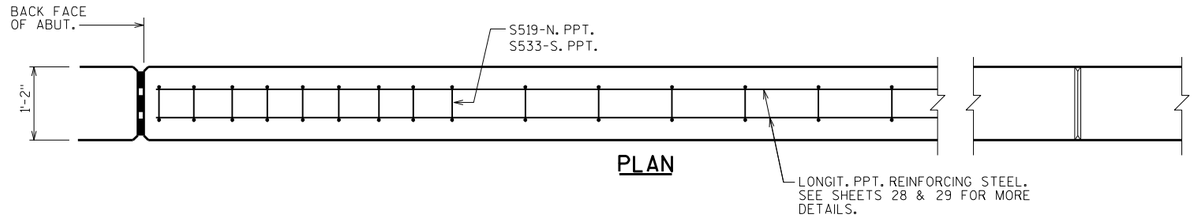
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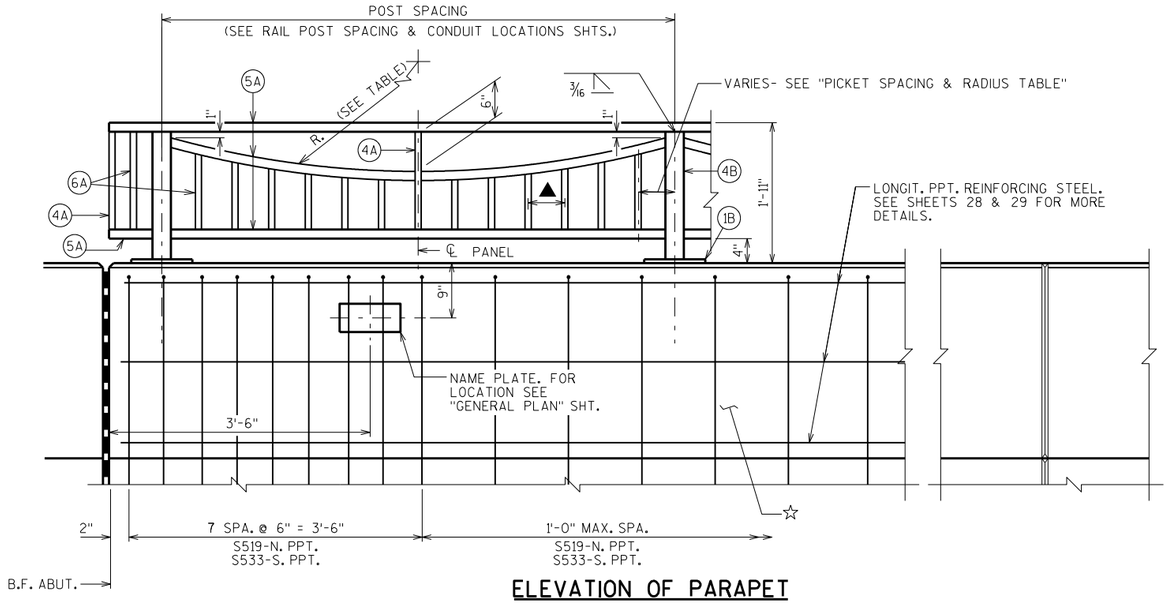
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STATE PROJECT NUMBER

6190-15-72

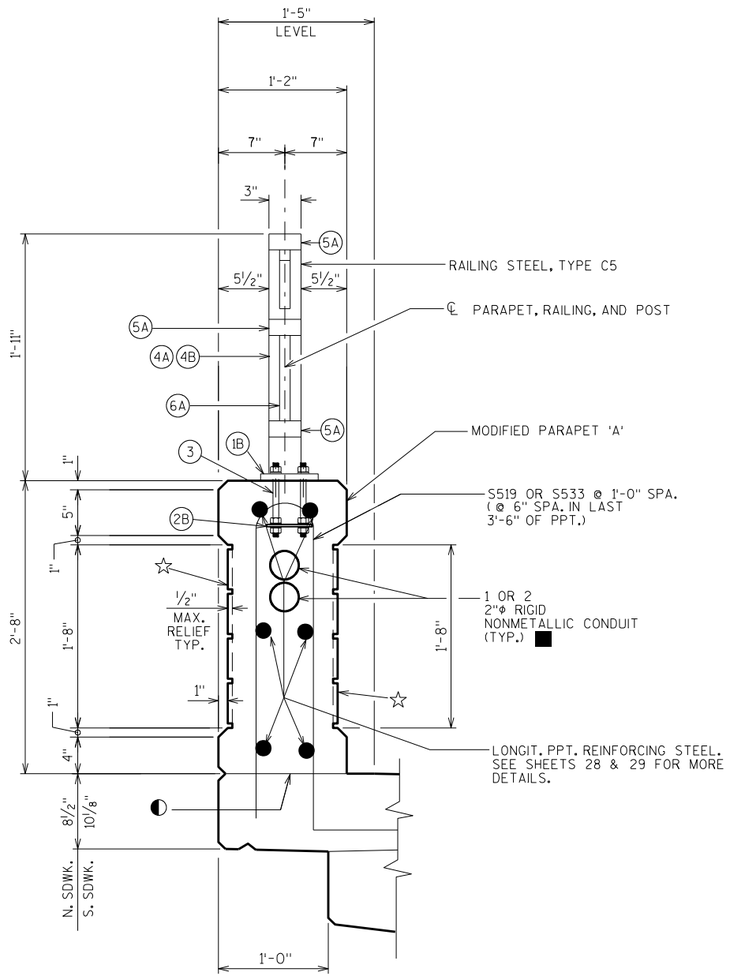


PLAN



ELEVATION OF PARAPET

(AESTHETICS NOT SHOWN FOR CLARITY)



SECTION THRU PARAPET ON BRIDGE

PICKET SPACING & RADIUS TABLE

POST SPA.	PICKET SPA.▲	RADIUS "R"
6'-5"	5½"	11'-7⅜"
6'-9"	5¾"	12'-10¾"
6'-10"	5¾"	13'-2½"
6'-11"	6"	13'-6½"
7'-0"	6"	13'-10½"

NOTES:

SEE "RAIL POST SPACING & CONDUIT LOCATIONS" SHEETS FOR RAIL POST LOCATIONS.

SEE SHEET 54 FOR LEGEND.

■ SEE "RAIL POST SPACING & CONDUIT LOCATIONS" SHEETS FOR CONDUIT LOCATIONS & LIMITS.

◐ CONSTRUCTION JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH. MATCH DECK CROSS SLOPE.

☆ "ARCHITECTURAL SURFACE TREATMENT" AND "CONCRETE STAINING" REQ'D. FINISHED STAIN IS TO INVOLVE A MIXTURE OF GRAYS TO BE APPROVED BY THE ENGINEER.

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STATE OF WISCONSIN
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STRUCTURE B-70-316

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COMBINATION RAIL TYPE "C5" DETAILS 1

SHEET 53

303

SCALE = 1.000

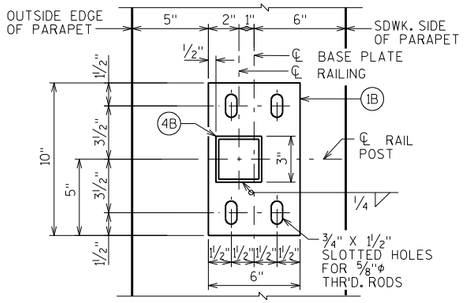
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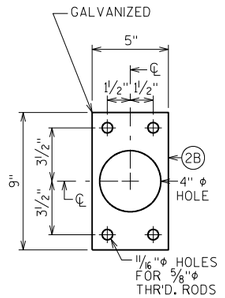
RAILCOMB
7-11

STATE PROJECT NUMBER

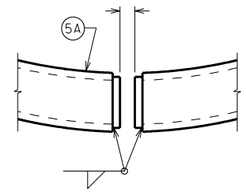
6190-15-72



TYPICAL RAIL POST BASE PLATE

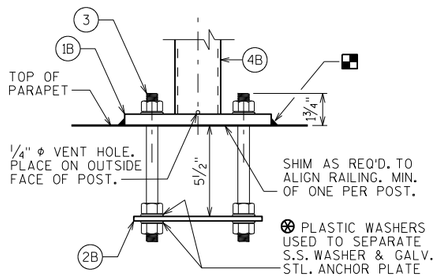


ANCHOR PLATE



CURVED MEMBER JOINT DETAIL

SEAL ENDS ON CURVED STRUCTURAL TUBING WITH 1/4" PLATE. WELD AND GRIND SMOOTH.



ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.

LEGEND

(1B) PLATE 5/8" X 6" X 10" WITH 3/4" X 1 1/2" SLOTTED HOLES

(2B) 1/4" X 5" X 9" ANCHOR PLATE WITH 11/16" Φ HOLES FOR THREADED RODS NO. 3.

(3) 5/8" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE ANCHORAGE: CONCRETE ADHESIVE ANCHORS 5/8-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. EMBED 5" IN CONCRETE FOR END RAILS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.

(4A) STRUCTURAL TUBING 3" X 1 1/2" X 3/16". PLACE VERTICAL. WELD TO NO. 5.

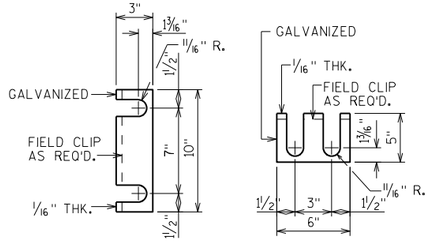
(4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

(5A) STRUCTURAL TUBING 3" X 1 1/2" X 3/16" RAILS. WELD TO NO. 1 & NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.

(6A) BAR 1" X 1" PICKETS. WELD TO NO. 5. PLACE VERTICAL.

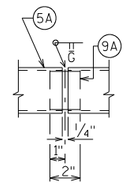
(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ STRIP SEAL EXP. JTS.)



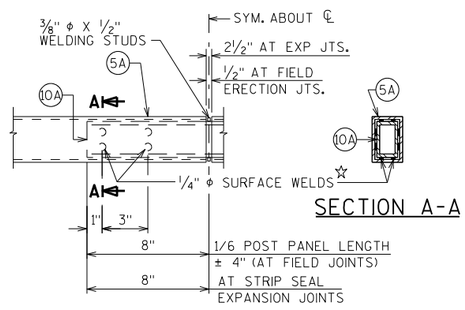
RAIL POST SHIM DETAIL

(2 SETS PER POST)



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



SECTION A-A

FIELD ERECTION JOINT DETAIL

☆ MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

RAILING NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C5 B-70-316", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3 & 12) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED FEDERAL COLOR NO. 27038, BLACK.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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COMBINATION RAIL TYPE "C5" DETAILS 2

SHEET 54

304

RAILCOMBDET 7-16

SCALE = 1.000

8

8

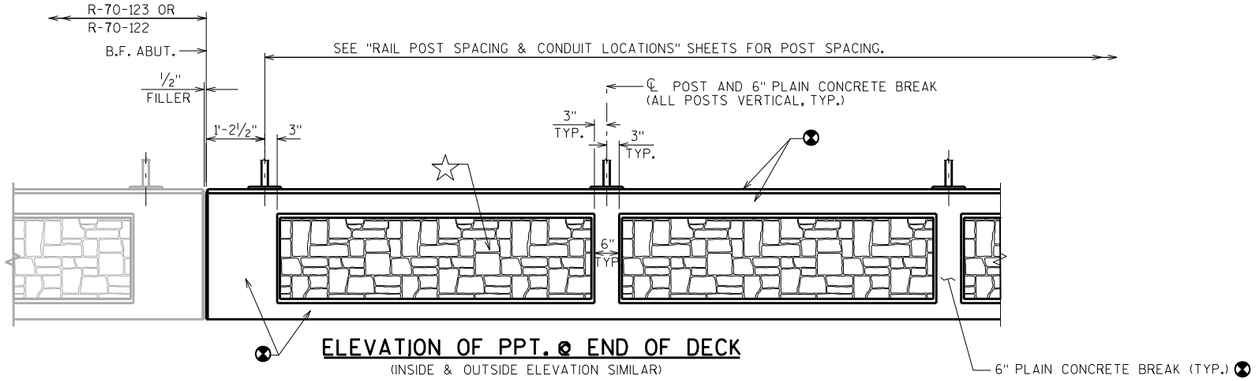
STATE PROJECT NUMBER

6190-15-72

PARAPET NOTES

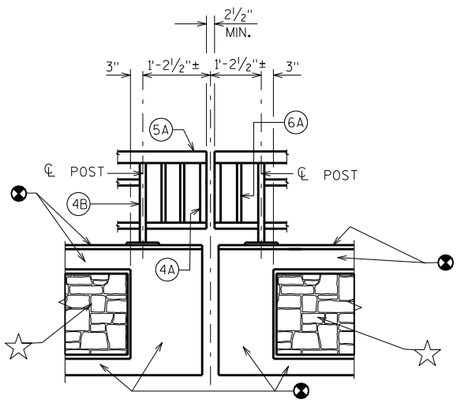
FORMLINER COURSING ON PARAPETS SHALL BE PARALLEL TO TOP OF PARAPET. THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONST. JTS.

SEE "LOOKOUT DETAILS 1" SHEET FOR AESTHETIC SPACING AT LOOKOUTS.



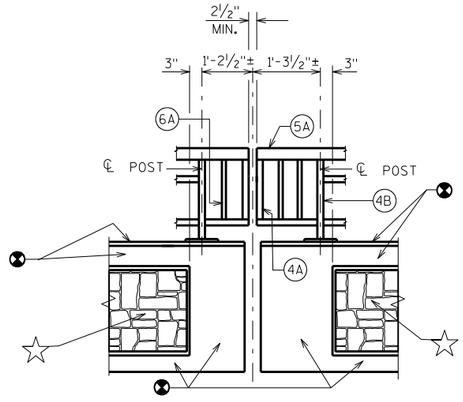
ELEVATION OF PPT. @ END OF DECK

(INSIDE & OUTSIDE ELEVATION SIMILAR)



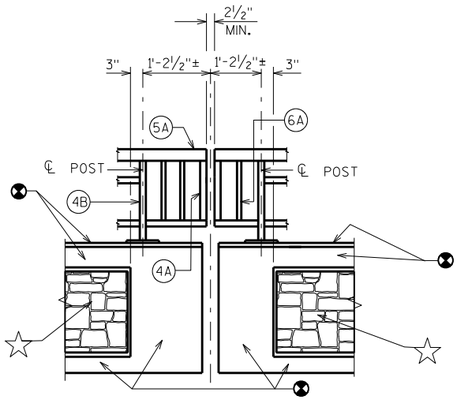
SOUTH INSIDE ELEVATION OF PPT. @ PIER 2

(MIRROR FORMLINER PATTERN ON OUTSIDE ELEVATION)



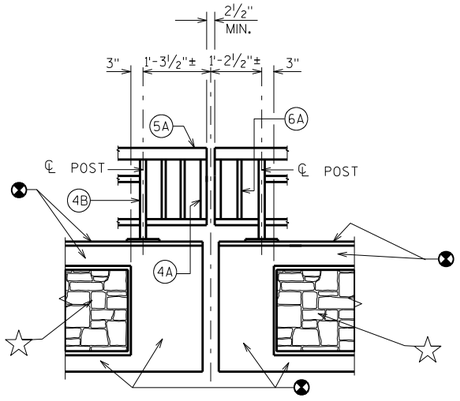
SOUTH INSIDE ELEVATION OF PPT. @ PIER 5

(MIRROR FORMLINER PATTERN ON OUTSIDE ELEVATION)



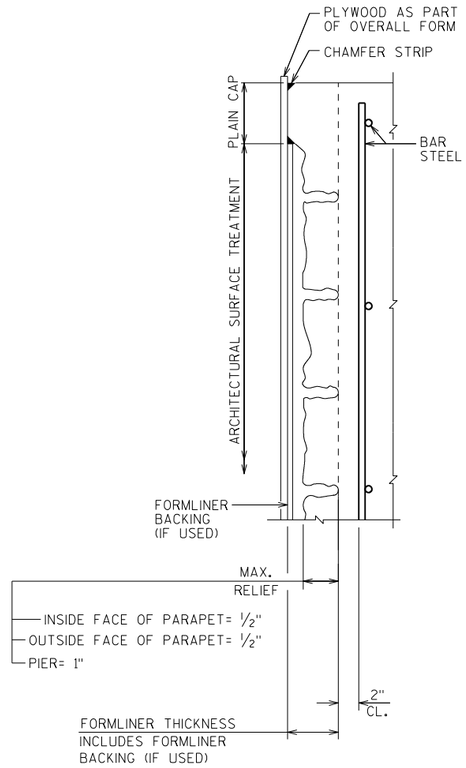
NORTH INSIDE ELEVATION OF PPT. @ PIER 2

(MIRROR FORMLINER PATTERN ON OUTSIDE ELEVATION)

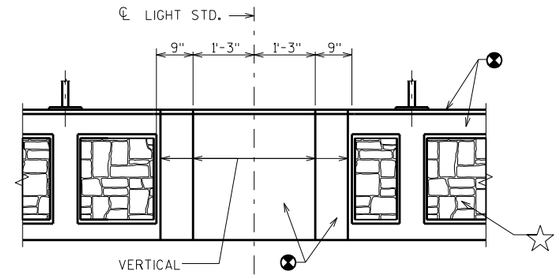


NORTH INSIDE ELEVATION OF PPT. @ PIER 5

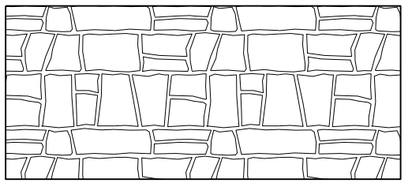
(MIRROR FORMLINER PATTERN ON OUTSIDE ELEVATION)



SECTION THRU FORMLINER



OUTSIDE ELEVATION OF PPT. AT LIGHT STD.



DRYSTACK STONE FORMLINER

FORMLINER THICKNESS = 3"
SIZE = 3" TO 24" (PARAPET)
SIZE = 3" TO 36" (PIER)
MAX. RELIEF = 1"

LEGEND

- PIGMENTED SURFACE SEALER (GRAY) INSIDE FACE ONLY.
- "ARCHITECTURAL SURFACE TREATMENT" AND "CONCRETE STAINING" REQ'D. FINISHED STAIN IS TO INVOLVE A MIXTURE OF GRAYS TO BE APPROVED BY THE ENGINEER.
- (XX) SEE SHEET 54 FOR RAILING MEMBER DESCRIPTIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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AESTHETIC DETAILS 1

SHEET 55

305

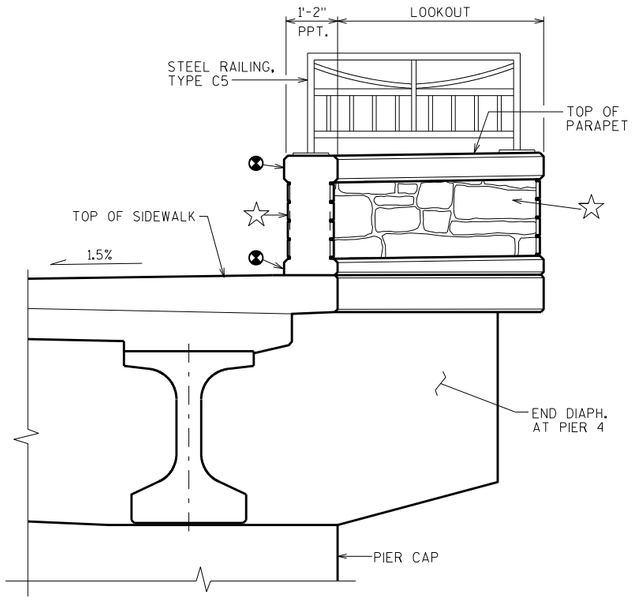
SCALE = 1:5

8

8

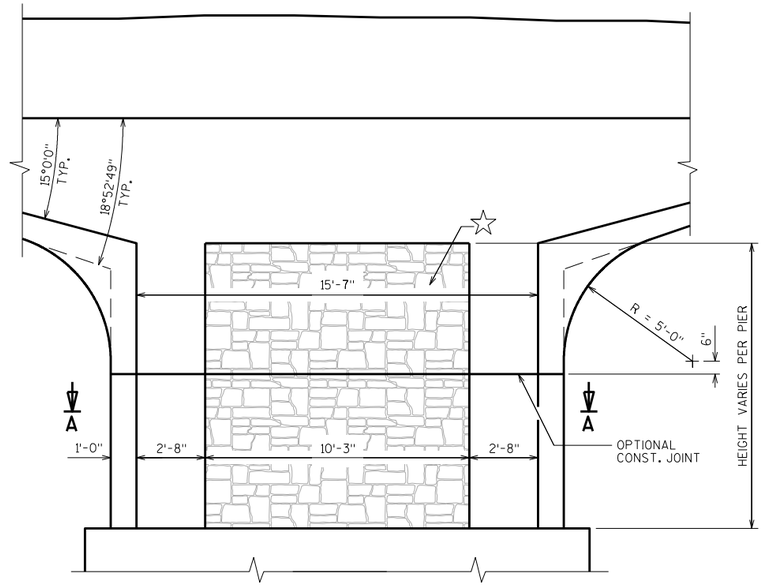
STATE PROJECT NUMBER

6190-15-72

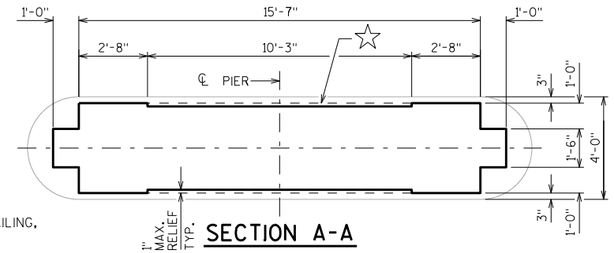


PARTIAL SECTION AT LOOKOUT - LOOKING EAST

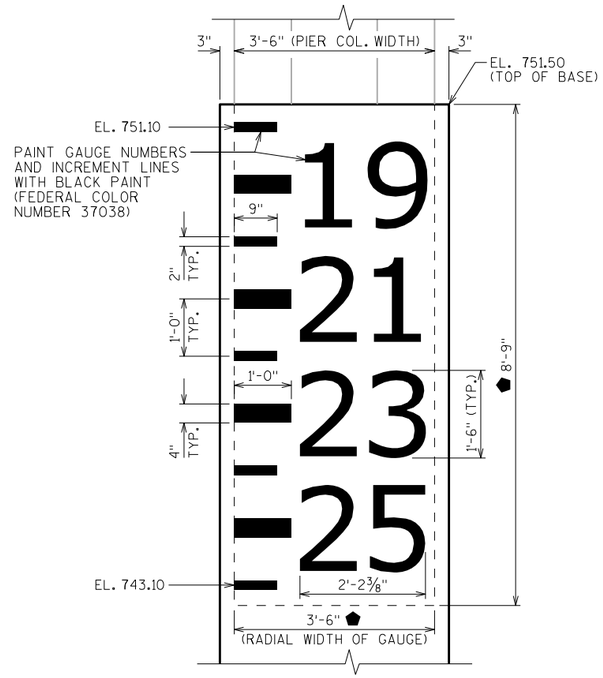
(LOOKOUT AT PIER 4 SHOWN)
(LOOKOUT AT PIER 3 SIMILAR)



ELEVATION @ PIERS



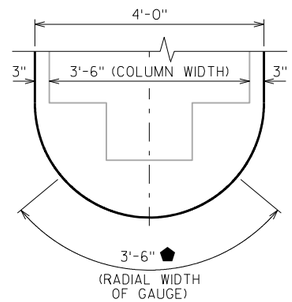
SECTION A-A



CLEARANCE GAUGE DETAIL

(LOOKING SOUTH ON PIER 3, LOOKING NORTH ON PIER 4)

⬟ PAINT AREA WHITE (FEDERAL COLOR NUMBER 27925)



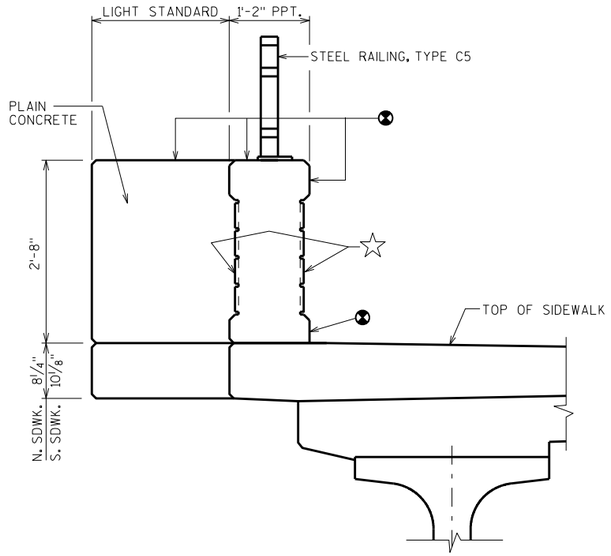
PLAN - END OF BASE

(SHOWING EXTENTS OF PAINTED GAUGE NUMBERS)

LEGEND

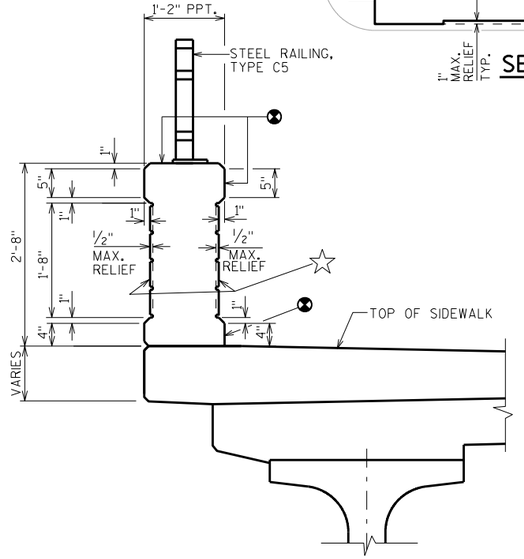
⊗ PIGMENTED SURFACE SEALER (GRAY)

☆ "ARCHITECTURAL SURFACE TREATMENT" AND "CONCRETE STAINING" REQ'D. FINISHED STAIN IS TO INCLUDE A MIXTURE OF GRAYS TO BE APPROVED BY THE ENGINEER.



SECTION THRU PARAPET AT LIGHT STD. - LOOKING EAST

(NORTH LIGHT STANDARD SHOWN, SOUTH LIGHT STANDARD SIMILAR)



SECTION THRU PARAPET (TYP.)

PIER NOTES

FORMLINER COURSING ON PARAPETS SHALL BE PARALLEL TO TOP OF PARAPET.

FORMLINER COURSING ON PIERS SHALL BE LEVEL.

THE FORMLINER COURSING ON ALL FACES OF EACH COLUMN SHALL BE VERTICALLY ALIGNED.

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

ALL CONCRETE AREAS THAT DO NOT RECEIVE "CONCRETE STAINING", "PIGMENTED SURFACE SEALER", OR "PROTECTIVE SURFACE TREATMENT" SHALL BE PLAIN CONCRETE, FINISHED AS INDICATED IN THE STANDARD SPECIFICATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

AESTHETIC DETAILS 2

SHEET 56

306

8

8

SCALE =

STATE PROJECT NUMBER

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ESTIMATED NAVIGATION LIGHTING QUANTITIES

ITEM	UNIT	TOTAL
GREEN CENTER CHANNEL FIXTURE LED, 360°	EACH	2
RED PIER FIXTURE LED, 180°	EACH	4
1" RIGID SCHEDULE 80 NON-METALLIC CONDUIT	LF	16
4X4X4 SURFACE MOUNTED JUNCTION BOXES	EACH	4
#12 AWG. WIRE	LF	1,100

NOTES

1) FIELD VERIFY THE LOCATIONS, LENGTHS & DIMENSIONS OF ALL NAVIGATION LIGHT MOUNTING EQUIPMENT. ADJUST AS REQ'D.

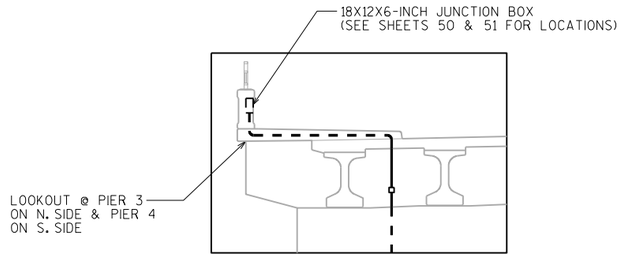
2) PLACE SWIVEL MOUNTING BRACKET AT STA. 140+42.00'116' (BOTH SIDES OF BRIDGE)

3) ALL ITEMS INDICATED WITH * SHALL BE PAID UNDER THE BID ITEM "NAVIGATION LIGHTS AND AIDS".

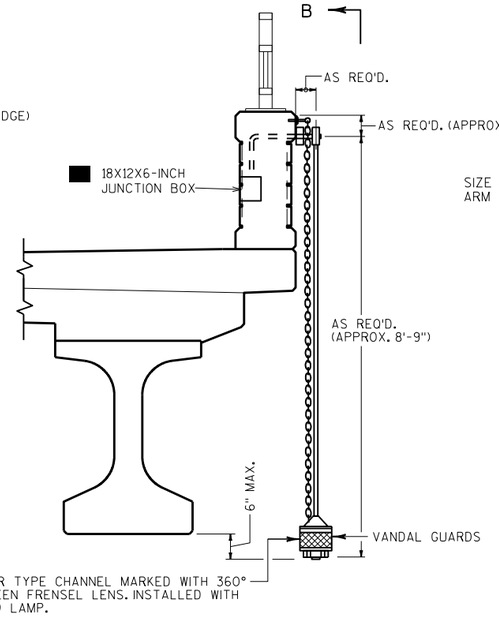
4) ALL OTHER ITEMS SHOWN SHALL BE PAID UNDER SEPARATE BID ITEMS.

5) AVOID REINFORCEMENT STEEL WHEN DRILLING HOLES FOR MASONRY ANCHORS. USE EPOXY ANCHORING COMPOUND IN CONJUNCTION WITH THE MASONRY ANCHORS.

■ SEE SHEETS 49-52 FOR LOCATIONS.
SEE SHEET 50 FOR CONDUIT LIMITS.

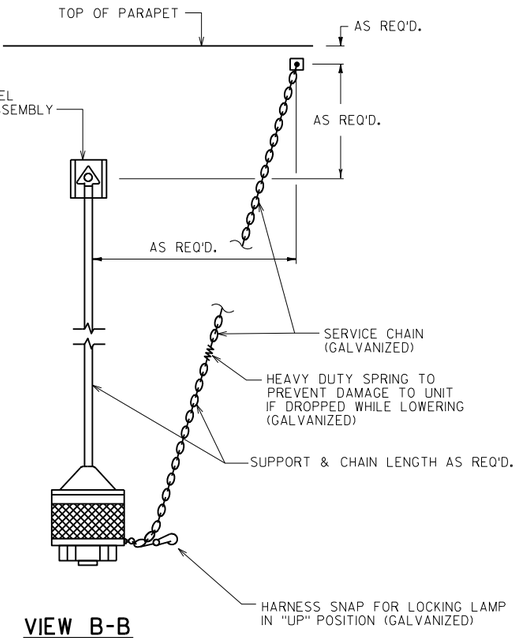


PART. ELEV. OF LOOKOUT AT PIERS 3 & 4

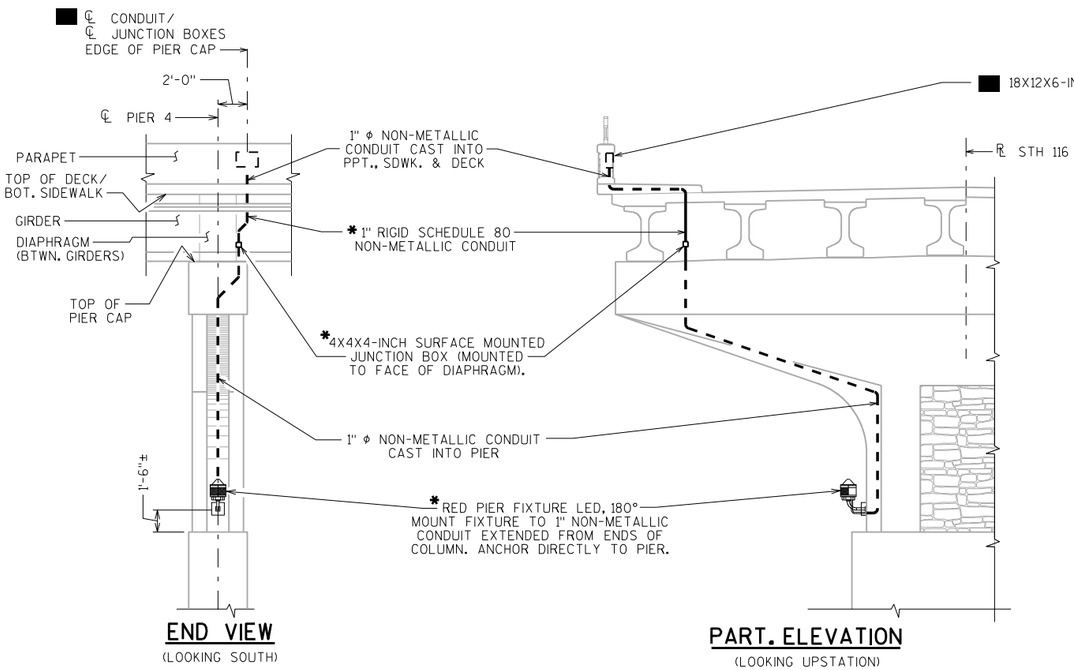


TYPICAL GREEN LIGHT INSTALLATION

REQ'D. AT MIDWAY POINT OF SPAN 4 (STATION 140+42.00'116') @ BOTH N. & S. SIDES OF DECK



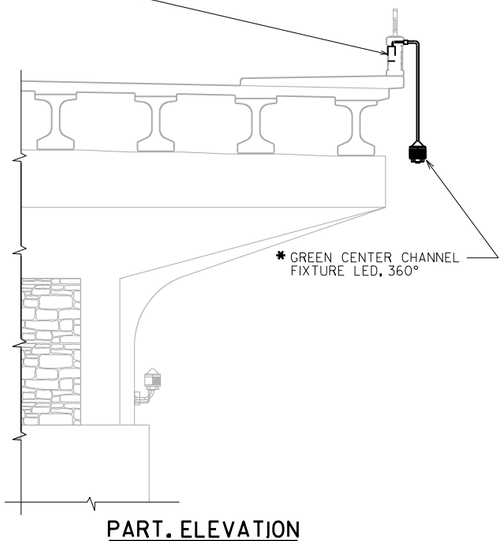
VIEW B-B



END VIEW
(LOOKING SOUTH)

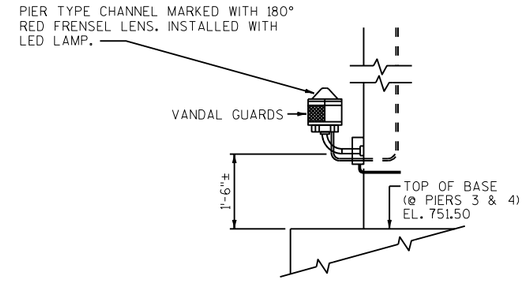
PART. ELEVATION
(LOOKING UPSTATION)

SHOWING TYPICAL DETAILS FOR RED LIGHT INSTALLATIONS
(INSTALL RED NAVIGATION LIGHTS ON EACH SIDE OF PIERS 3 & 4)
(CONDUIT INSTALLATION AND OTHER DETAILS SIMILAR EACH SIDE - SEE PIER SHEETS FOR CONDUIT INSTALLATION DETAILS)



PART. ELEVATION
(LOOKING UPSTATION)

SHOWING TYPICAL DETAILS FOR GREEN LIGHT INSTALLATIONS
(INSTALL GREEN NAVIGATION LIGHTS ON EACH SIDE OF THE BRIDGE AT THE CENTER OF SPAN 4 - STATION 140+42.00'116')



TYPICAL RED LIGHT INSTALLATION
(REQ'D. AT PIERS 3 & 4, TYP. BOTH SIDES)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY | PLANS CK'D. BLB

NAVIGATION LIGHTING AND CONDUIT DETAILS 1

SHEET 57

307

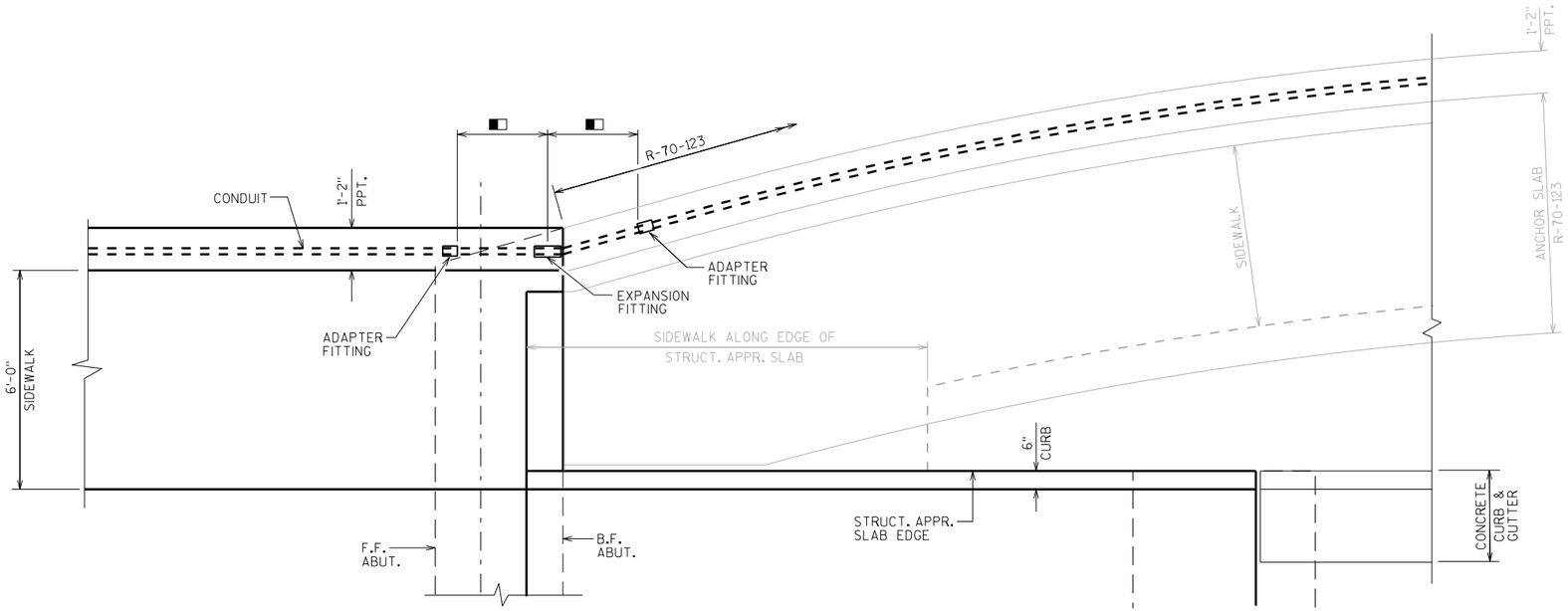
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SCALE = 5.0

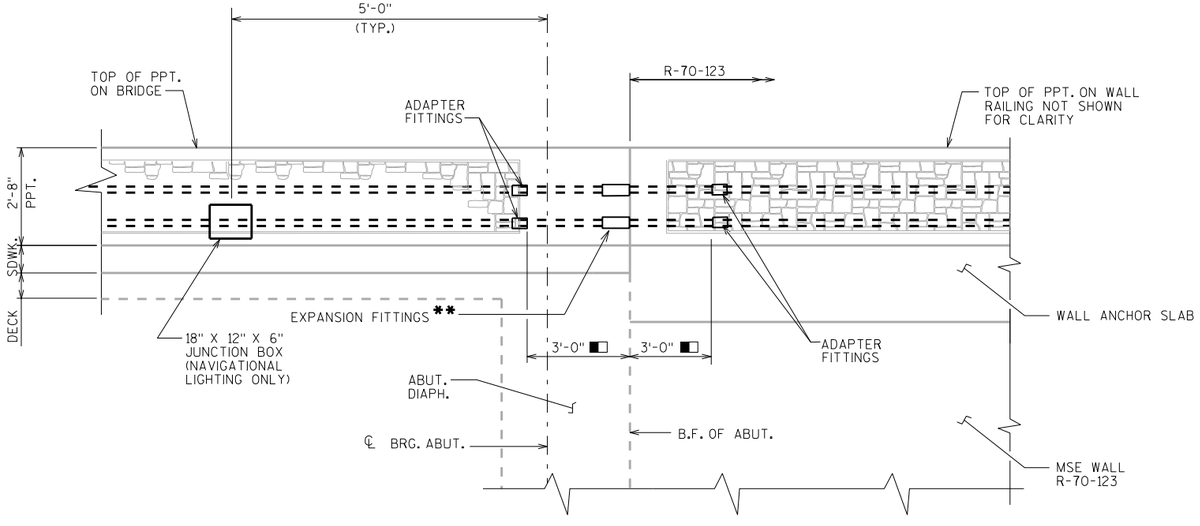
STATE PROJECT NUMBER

6190-15-72



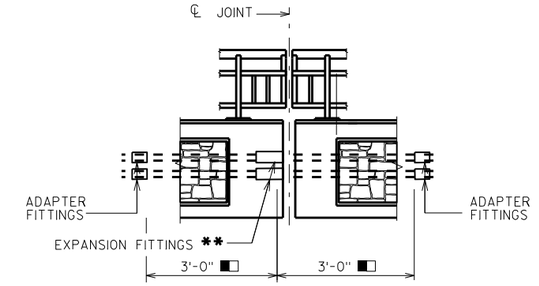
PLAN OF CONDUIT AT ABUTMENT/STRUCTURAL APPROACH SLAB/WALL ANCHOR SLAB

(NE CORNER SHOWN, SE CORNER SIMILAR)



INSIDE ELEVATION OF CONDUIT AT ABUTMENT/WALL ANCHOR SLAB

(NE CORNER SHOWN, SE CORNER SIMILAR)
(NW & SW CORNER HAVE ONLY SINGLE CONDUIT EXITING FOR ROADWAY LIGHTING)



INSIDE ELEVATION OF CONDUIT AT EXPANSION JOINTS

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18X12X6-INCH", EACH.
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH".

APPROVED MANUFACTURERS - JUNCTION BOXES:
SEE APPROVED MATERIAL LIST.

** APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER (4" TOTAL CONDUIT MOVEMENT).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED.

■□ USE 2"Φ RIGID NONMETALLIC CONDUIT EXCEPT AT EXPANSION FITTING. AT EXPANSION FITTING, USE RIGID METALLIC CONDUIT 3'-0" ON EACH SIDE OF EXP. FITTING INTO ABUTMENT DIAPHRAGM AND STRUCTURE BACKFILL.

ONLY ONE INDIVIDUAL RUN OF CONDUIT IS ALLOWED TO ENTER AND EXIT A JUNCTION BOX. WHERE TWO RUNS OF CONDUIT EXIST IN THE PARAPET, THE SECOND CONDUIT SHALL RUN ABOVE OR BELOW THE JUNCTION BOX. SEE SHEETS 49-52 TO DETERMINE WHICH CONDUIT (ROADWAY LIGHTING OR NAVIGATION LIGHTING) SHALL ENTER JUNCTION BOXES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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NAVIGATION LIGHTING AND CONDUIT DETAILS 2

SHEET 58

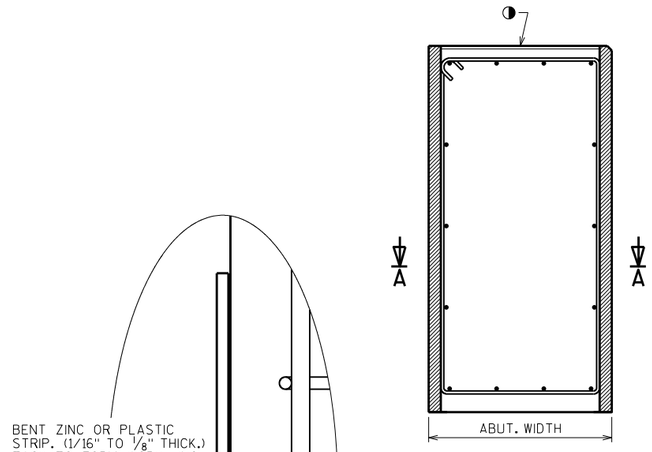
308

8

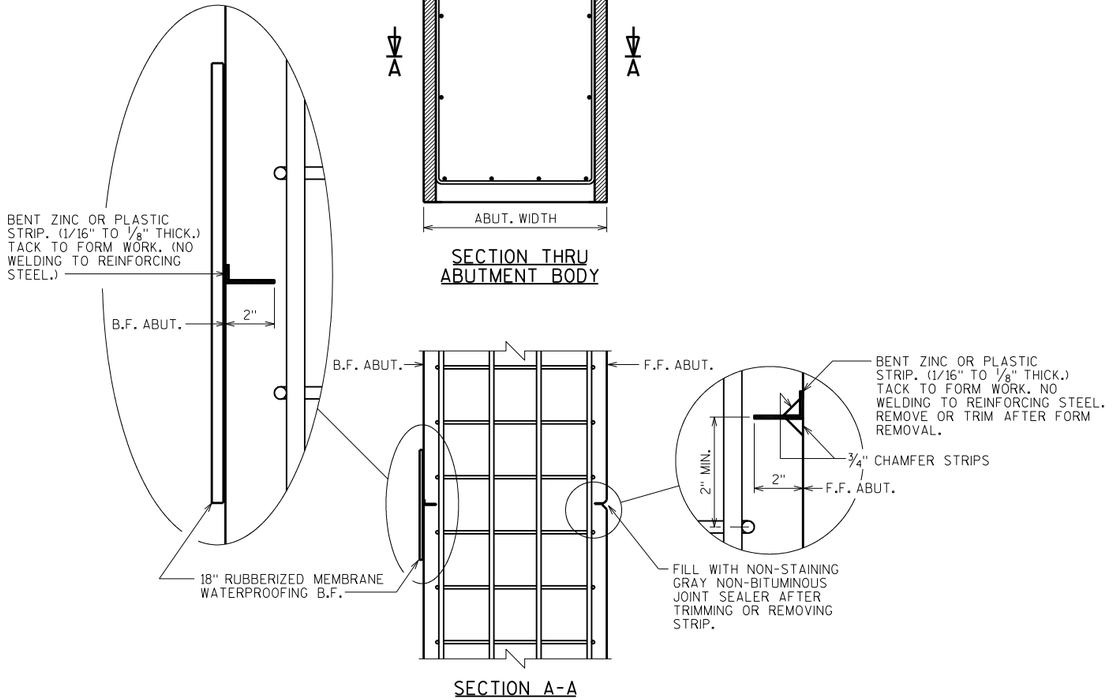
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SCALE =

STATE PROJECT NUMBER
6190-15-72



SECTION THRU ABUTMENT BODY



SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SAW CUTTING JOINT IS NOT ALLOWED.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

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ALTERNATE CONSTRUCTION JOINT

SHEET 59

309

8

8

123

SCALE =

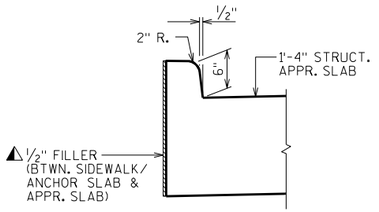
ALTJOINT
7-15

STATE PROJECT NUMBER

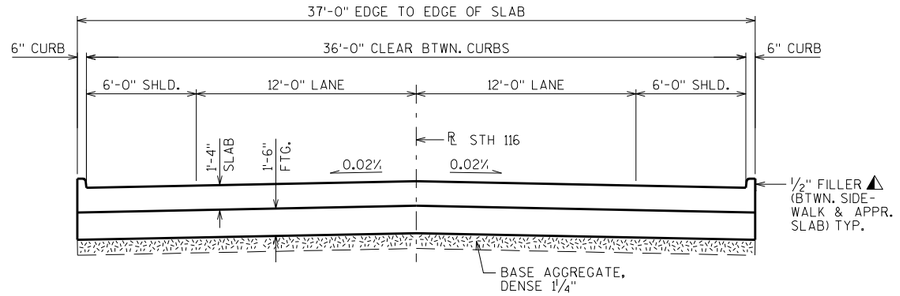
6190-15-72

CURVE DATA

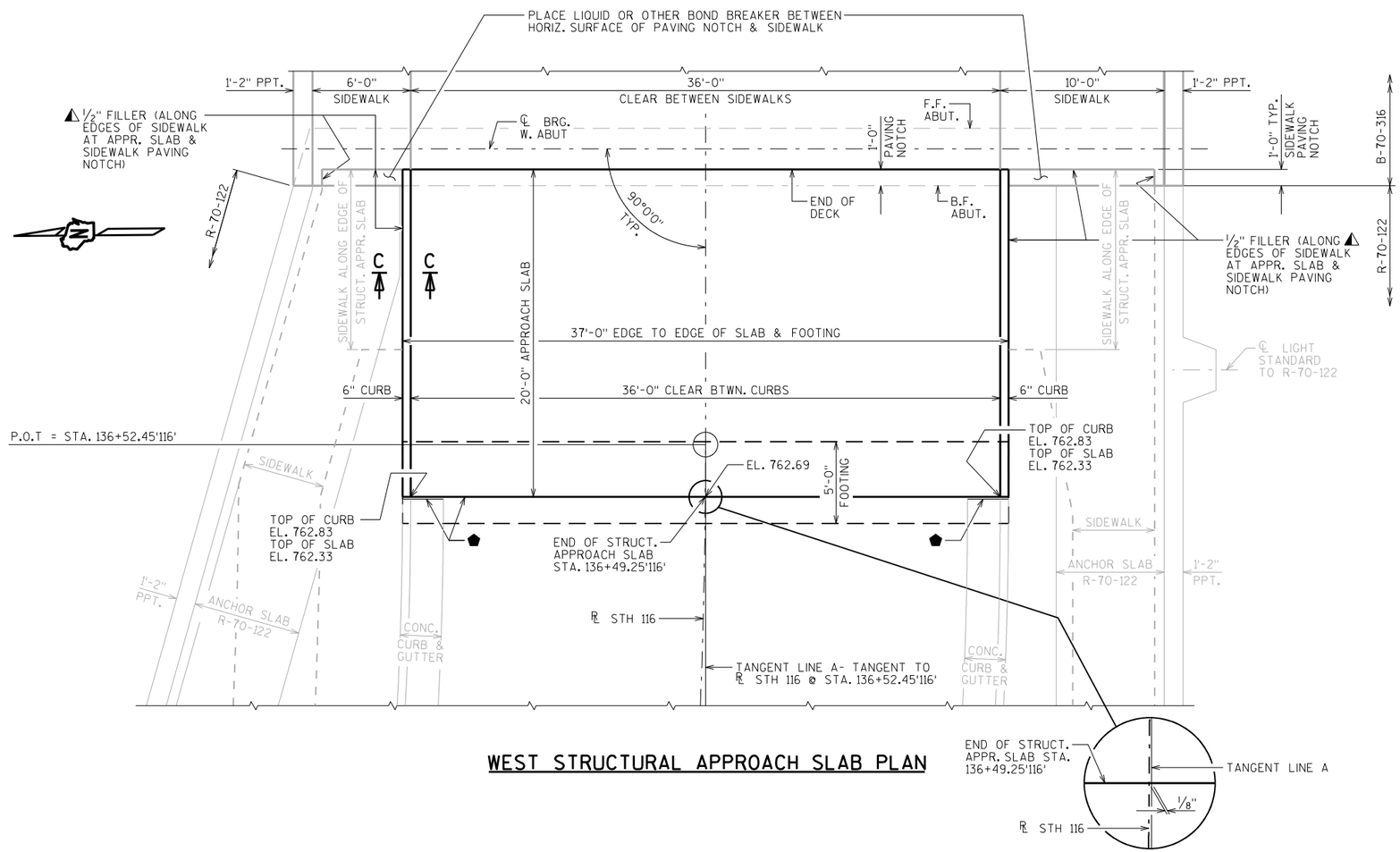
P.I. STA. = 135+66.78'116'
△ = 24°56'36"
D = 14°19'26"
T = 88.47'
L = 174.14'
R = 400.00'
P.C. STA. = 134+78.31'116'
P.T. STA. = 136+52.45'116'



SECTION C-C



CROSS SECTION THRU STRUCTURAL APPROACH SLAB - LOOKING EAST



WEST STRUCTURAL APPROACH SLAB PLAN

⚠ SEAL ALL THE EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE.)

⬟ 1½" EXPANSION FILLER TO BE PAID FOR UNDER CONCRETE MASONRY BRIDGES

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STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

WEST STRUCTURAL APPROACH SLAB

SHEET 60

310

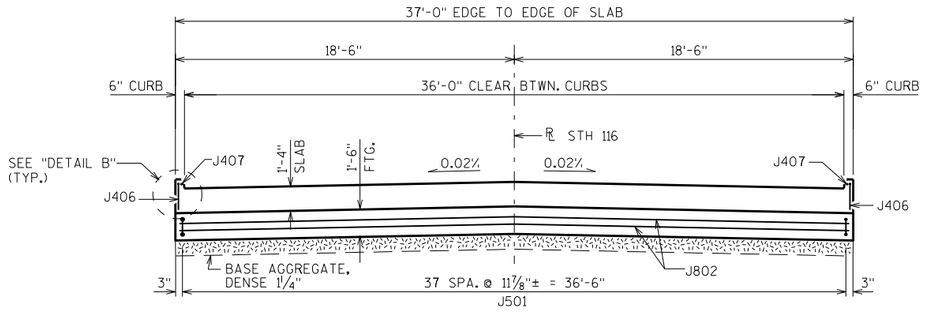
SCALE =

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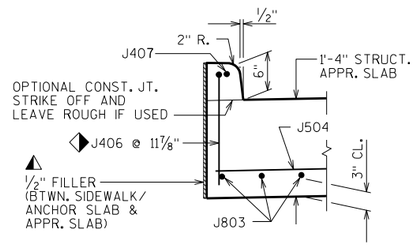
STATE PROJECT NUMBER

6190-15-72



CROSS SECTION THRU STRUCTURAL APPROACH SLAB LOOKING EAST

(SHOWING FOOTING STEEL AND CURB IN SLAB STEEL ONLY)

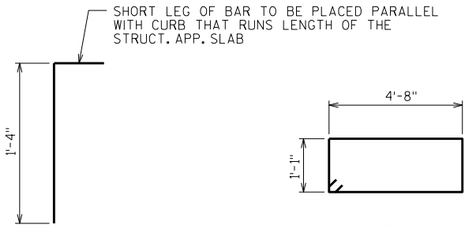


DETAIL B

BILL OF BARS

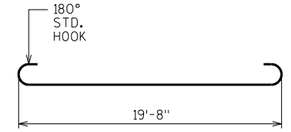
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
J501	X	38	12'-2"	X		FOOTING-VERT.
J802	X	12	36'-8"			FOOTING-HORIZ.
J803	X	62	21'-5"	X		SLAB-LONGIT.-BOT.
J504	X	42	36'-8"			SLAB-TRANSVERSE
J505	X	38	19'-8"			SLAB-LONGIT.-TOP
J406	X	42	1'-11"	X		SLAB EDGE-VERT.-CURB
J407	X	2	19'-8"			SLAB EDGE-HORIZ.-CURB

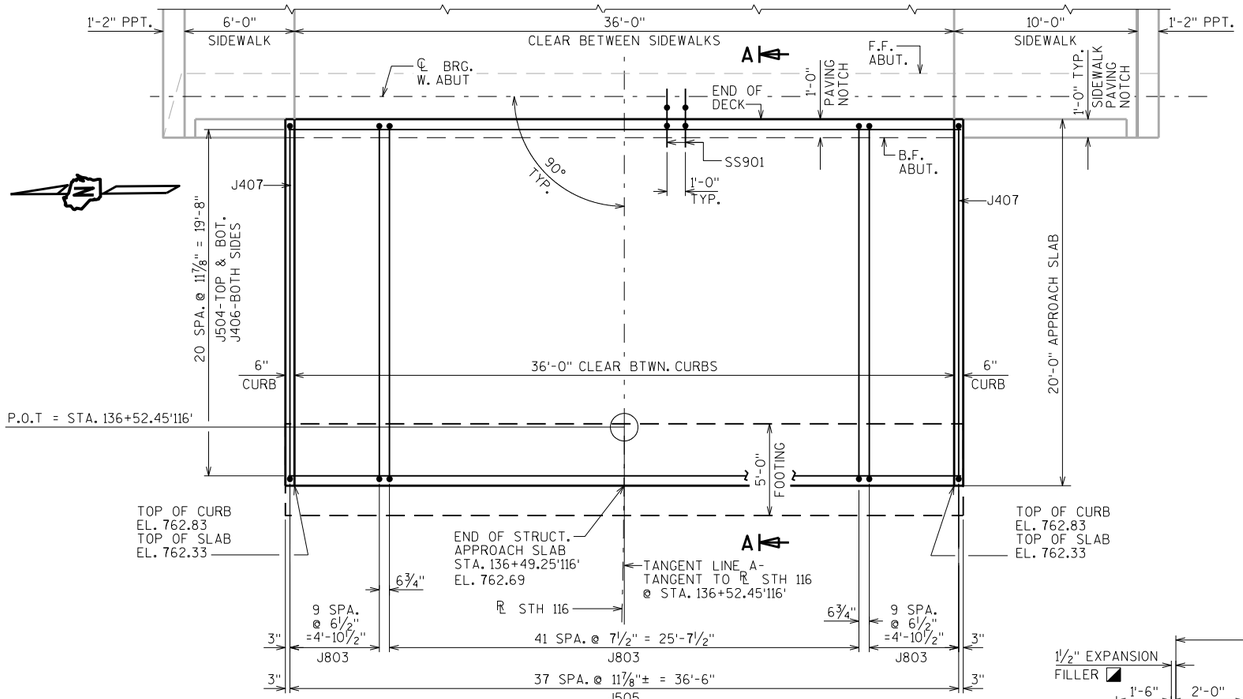


J406

J501

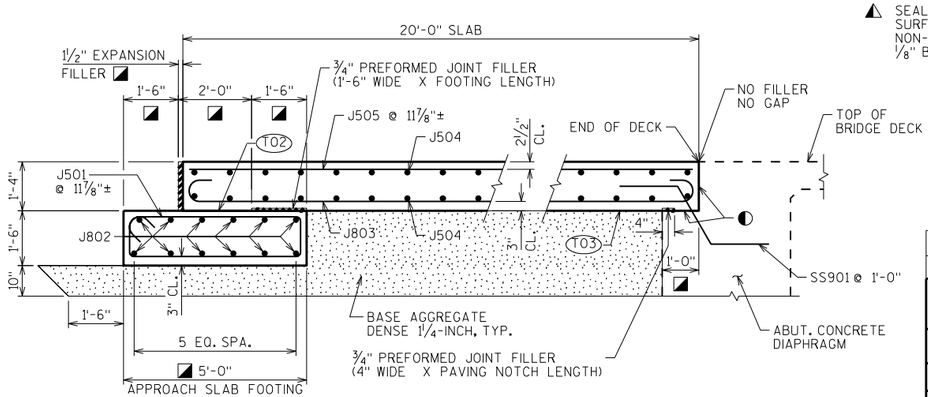


J803



WEST STRUCTURAL APPROACH SLAB PLAN

- ◆ J406 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.
- ◐ APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCTURAL APPROACH SLAB.
- ◪ MEASURED NORMAL TO ABUTMENT
- (T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE FOOTING.
- (T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE SUBGRADE.
- ◭ SEAL ALL THE EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)



SECTION A-A

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

WEST STRUCTURAL APPROACH SLAB DETAILS

SHEET 61

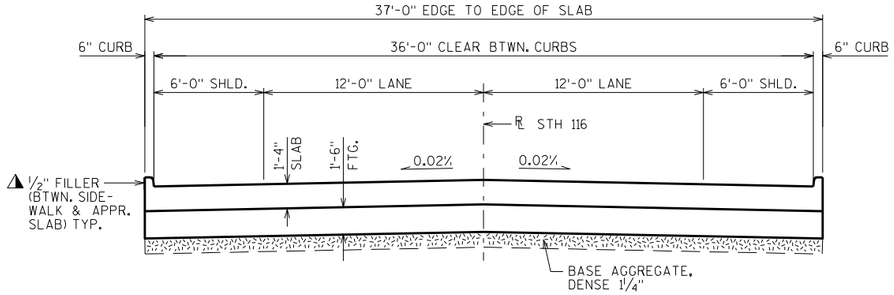
311

8

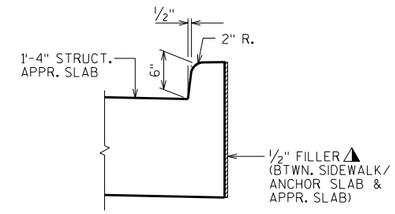
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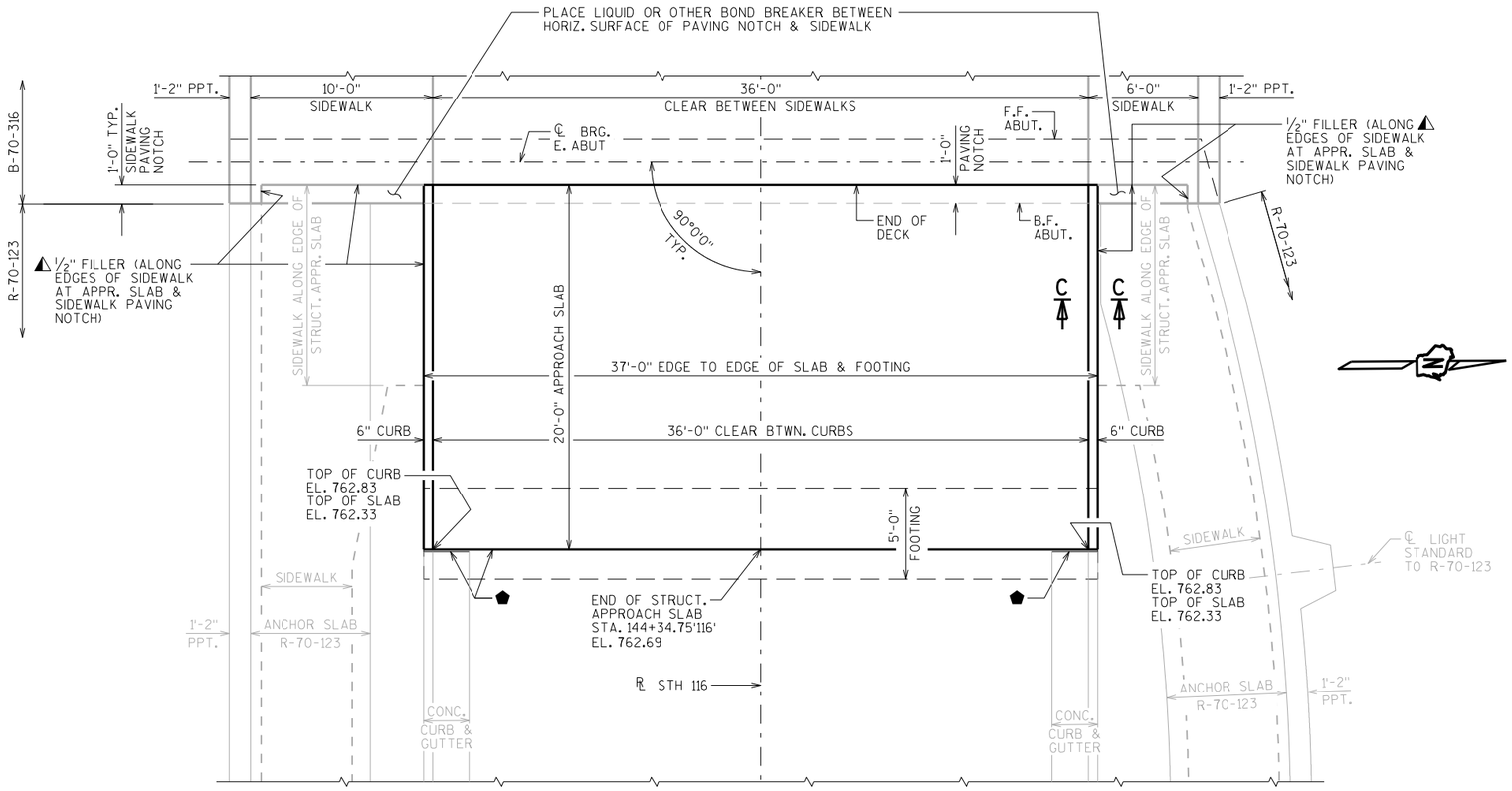
STATE PROJECT NUMBER
6190-15-72



CROSS SECTION THRU STRUCTURAL APPROACH SLAB - LOOKING WEST



SECTION C-C



EAST STRUCTURAL APPROACH SLAB PLAN

△ SEAL ALL THE EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)

⬟ 1½" EXPANSION FILLER TO BE PAID FOR UNDER CONCRETE MASONRY BRIDGES

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

EAST STRUCTURAL APPROACH SLAB

SHEET 62

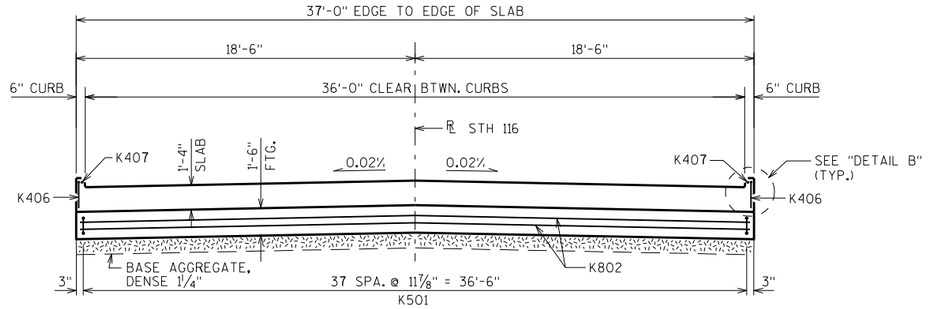
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SCALE =

8

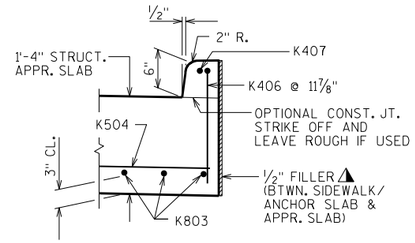
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STATE PROJECT NUMBER
6190-15-72



CROSS SECTION THRU STRUCTURAL APPROACH SLAB - LOOKING WEST

(SHOWING FOOTING STEEL AND CURB IN SLAB STEEL ONLY)

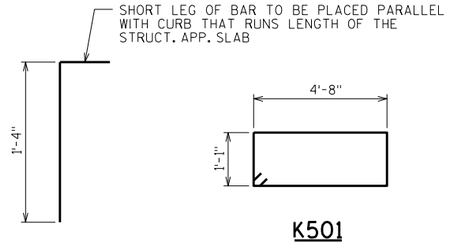


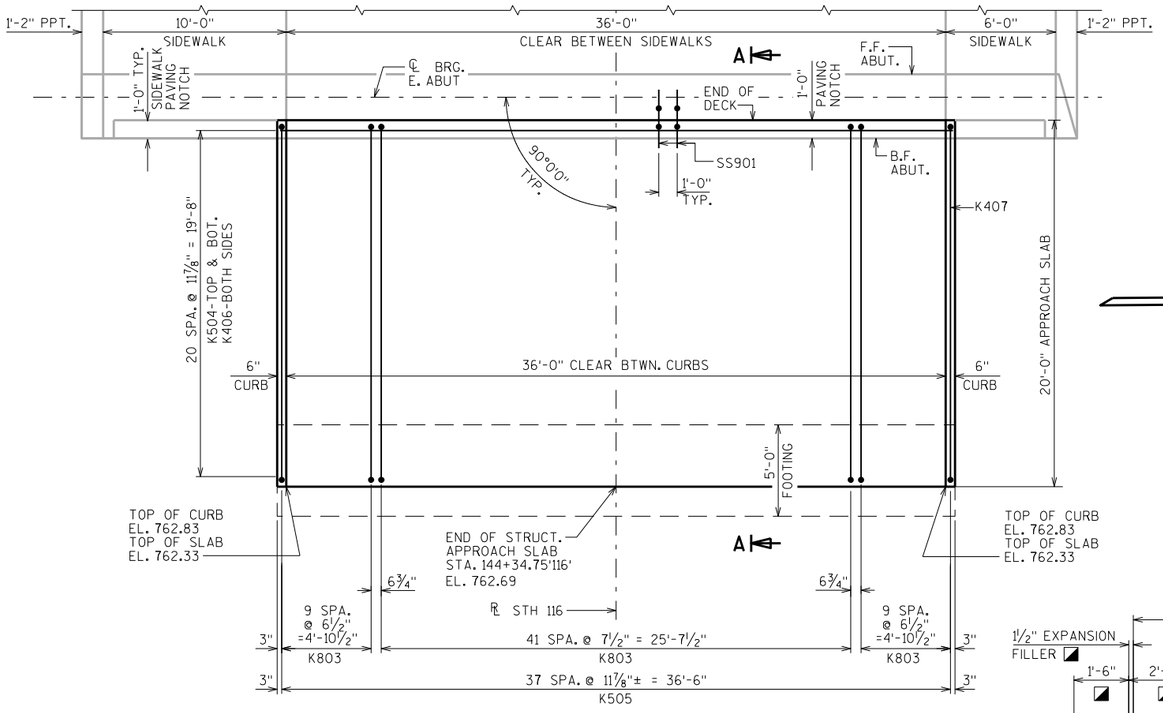
DETAIL B

BILL OF BARS

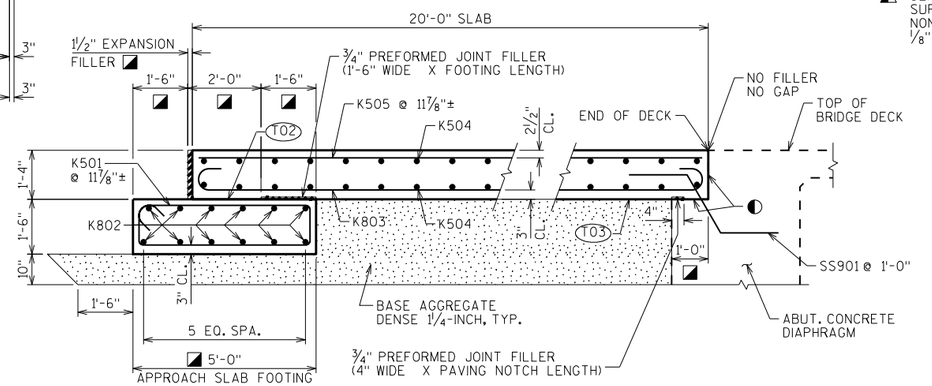
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

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K505	X	38	19'-8"			SLAB-LONGIT.-TOP
K406	X	42	1'-11"	X		SLAB EDGE-VERT.-CURB
K407	X	2	19'-8"			SLAB EDGE-HORIZ.-CURB





EAST STRUCTURAL APPROACH SLAB PLAN



SECTION A-A

◭ K406 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.

◐ APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCTURAL APPROACH SLAB.

◪ MEASURED NORMAL TO ABUTMENT

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE SUBGRADE.

◭ SEAL ALL THE EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

EAST STRUCTURAL APPROACH SLAB DETAILS

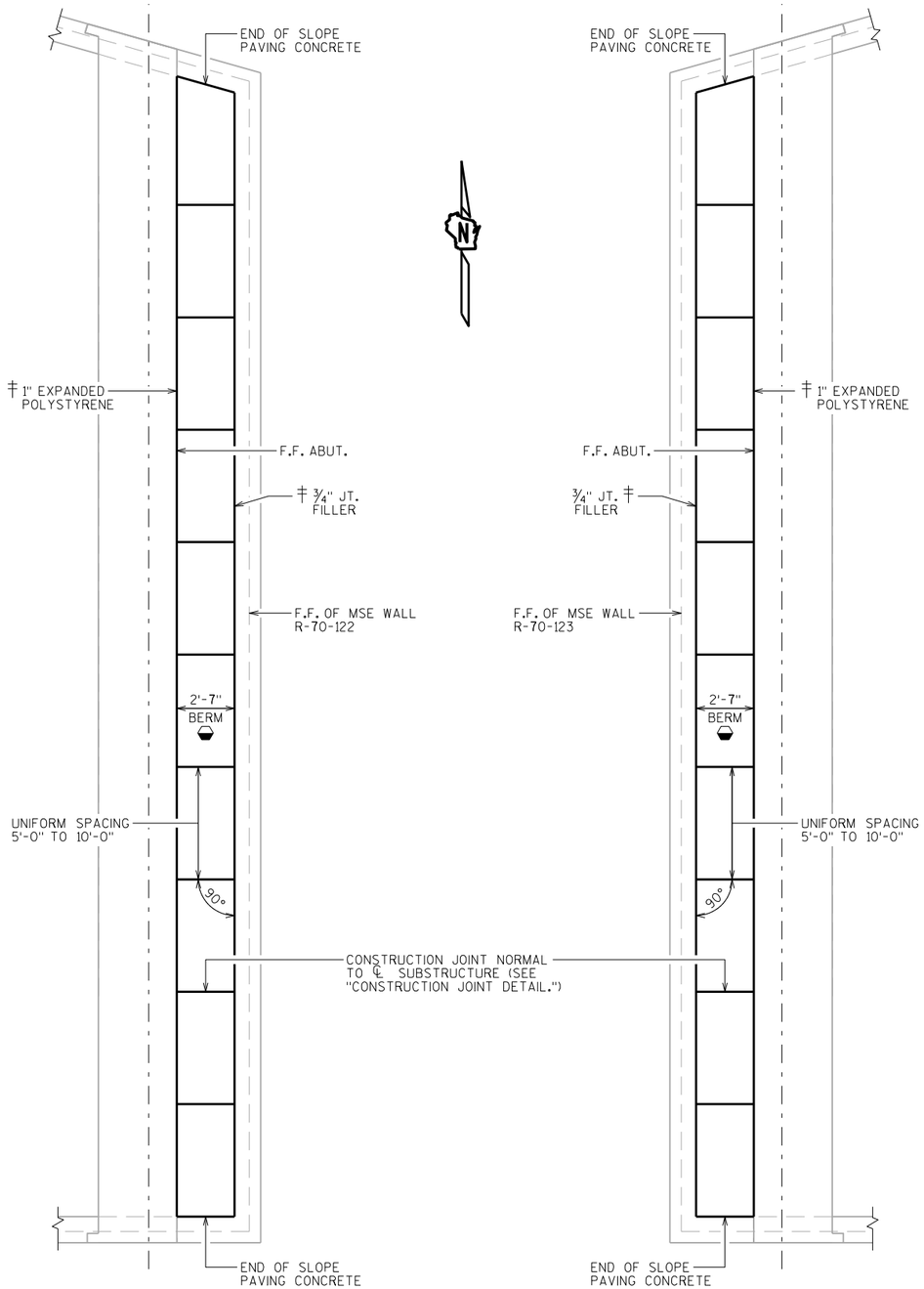
SHEET 63

313

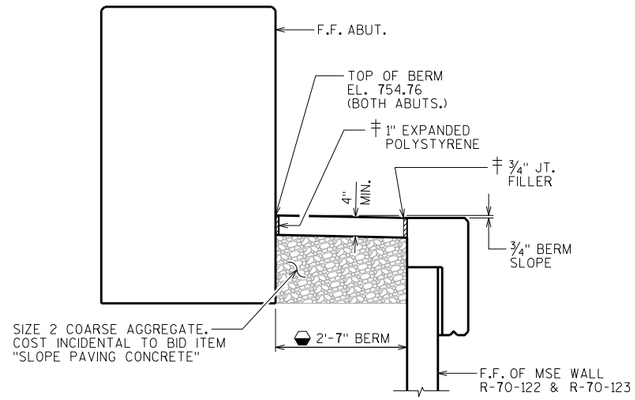
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STATE PROJECT NUMBER

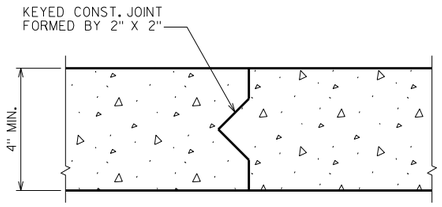
6190-15-72



CONSTRUCTION JOINT DESIGN



TYPICAL SECTION SLOPE PAVING CONCRETE



CONSTRUCTION JOINT DETAIL

GENERAL NOTES

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

LEGEND

‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER & EXPANDED POLYSTYRENE WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONC.)

BERM WIDTH SHOWN BASED ON ASSUMED MSE WALL PANEL THICKNESS OF 8".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-316

DRAWN BY WWR | PLANS CK'D. BLB

SLOPE PAVING (CONCRETE CAST-IN-PLACE)

SHEET 64

314

8

8

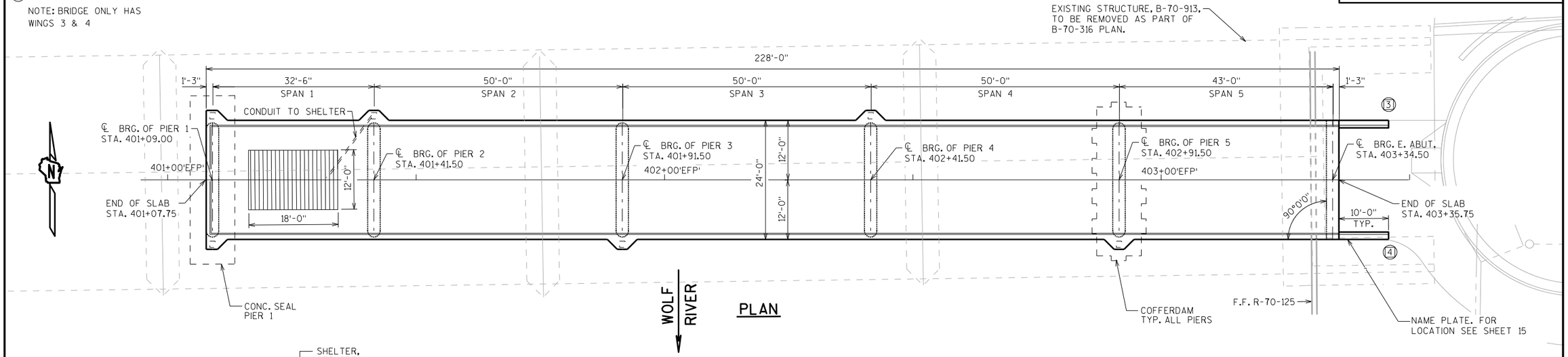
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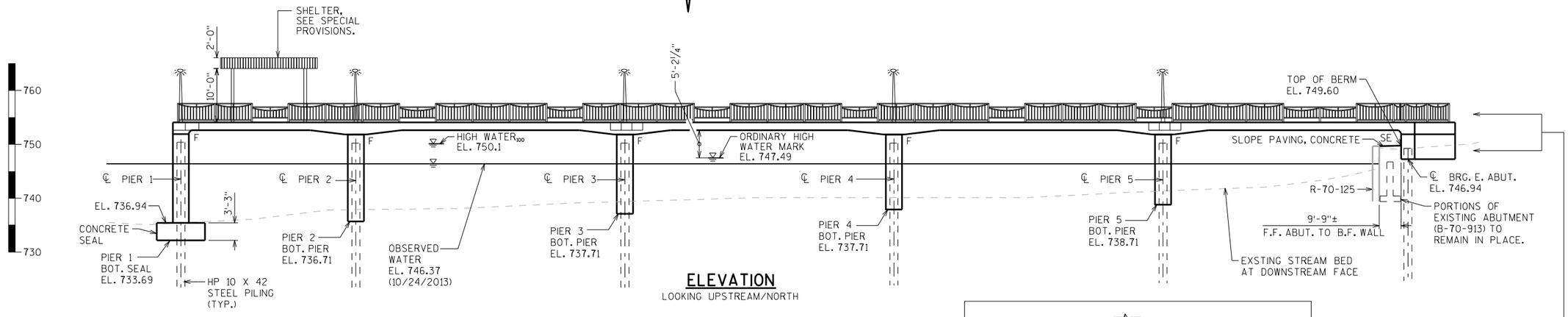
STATE PROJECT NUMBER

6190-15-72

INDICATES WING NUMBER

NOTE: BRIDGE ONLY HAS WINGS 3 & 4





ELEVATION

LOOKING UPSTREAM/NORTH

DESIGN DATA

LIVE LOAD:

DESIGN LOADING; PEDESTRAIN LIVE LOAD 90 PSF
DESIGN LOADING; VEHICLE LOAD = H10
STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY SLAB — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.

HYDRAULIC DATA

Q_{100} =22,840 C.F.S.
VEL. = 2.9 F.P.S.
HW.= EL. 750.11
WATERWAY AREA= 7,788 SQ. FT.
DRAINAGE AREA= 3,314 SQ. MI.
ROAD OVERTOPPING = NA
SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY
Q_2 =7,090 C.F.S.
$HW._2$= EL. 747.46

FOUNDATION DATA

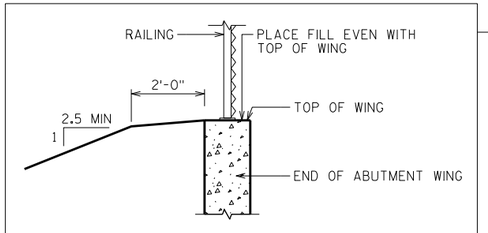
ABUTMENT TO BE SUPPORTED ON HP 10 X 42-INCH STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 40 FEET LONG. PILE POINTS REQ'D.

PIERS TO BE SUPPORTED ON HP 10 X 42-INCH STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 55 FEET LONG AT PIERS 1 AND 2. PILE POINTS REQ'D. ESTIMATED 50 FEET LONG AT PIERS 3, 4, AND 5. PILE POINTS REQ'D.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. PIER 1
5. PIER 2
6. PIER 3
7. PIER 4
8. PIER 5
9. EAST ABUTMENT
10. EAST ABUTMENT DETAILS
11. SUPERSTRUCTURE
12. SUPERSTRUCTURE DETAILS 1
13. SUPERSTRUCTURE DETAILS 2
14. SUPERSTRUCTURE DETAILS 3
15. COMBINATION RAIL TYPE C5 "MODIFIED"
16. COMBINATION RAIL TYPE C5 "MODIFIED" DETAILS
17. LIGHT STANDARD DETAILS
18. RAILING LAYOUT
19. CONDUIT DETAILS



TYPICAL FILL SECTION AT WING TIPS

STRUCTURE DESIGN CONTACTS:

TIM BOROWSKI (608) 266-4547
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS 3/20/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-70-321

EAST FISHING PLATFORM OVER THE WOLF RIVER

COUNTY	TOWN/CITY/VILLAGE
WINNEBAGO	WINNECONNE

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
TAB	CAD	WWR	TAB

GENERAL PLAN

SHEET 1 OF 19

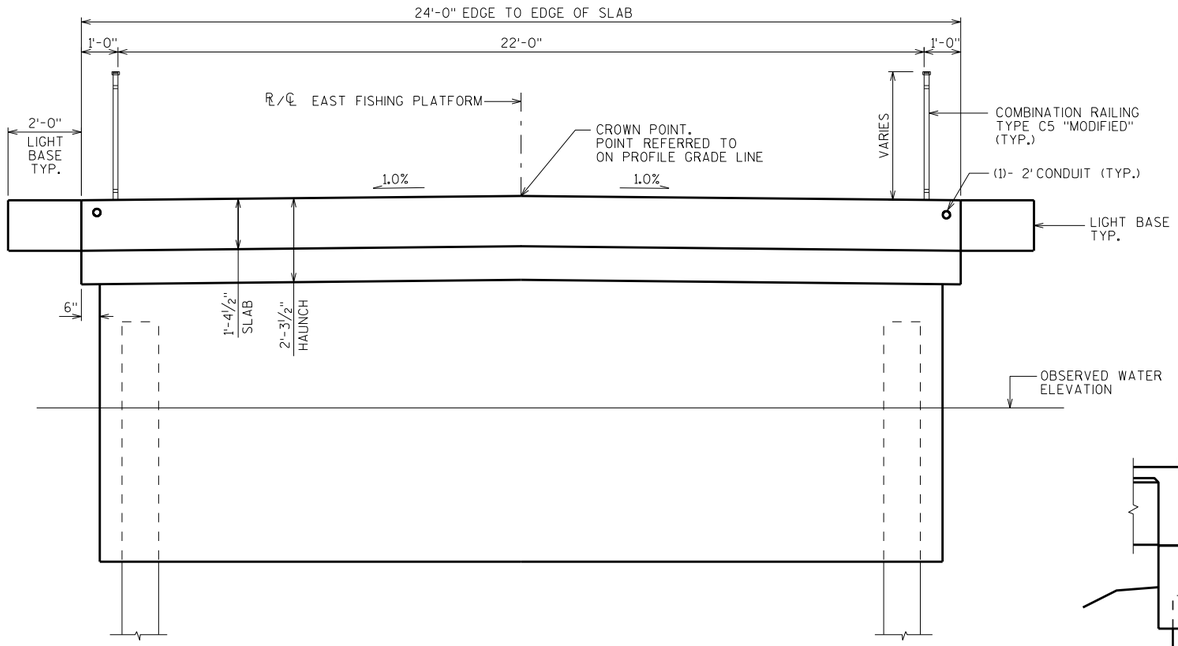
315

I.D. 6190-15-01B DATE: FEB. 2017

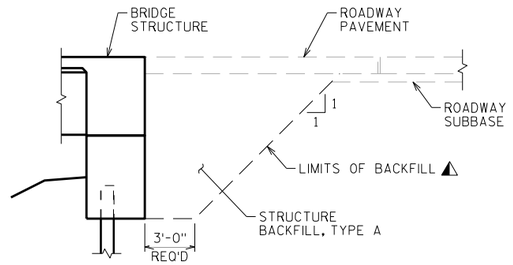
SCALE = 10.00

8

8



CROSS SECTION THRU EAST FISHING PLATFORM LOOKING EAST



TYPICAL SECTION THRU ABUTMENT

(A1 ABUTMENT WITHOUT STRUCTURAL APPROACH)

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

STATE PROJECT NUMBER

6190-15-72

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

THE QUANTITY FOR "BACKFILL STRUCTURE TYPE A" IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF SLAB SURFACES, VERTICAL SLAB EDGE AND EXTERIOR 1'-0" OF SLAB UNDERSIDE.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

THE EXISTING STREAM BED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

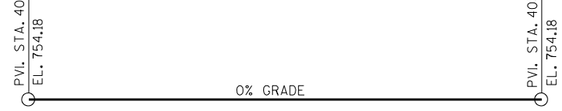
COFFERDAMS ARE REQUIRED AT ALL PIER LOCATIONS.

AT PIERS 2-5, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH STANDARD SPEC 502.3.5.3.

AT PIER 1, COFFERDAM SHALL BE DEWATERED BEFORE PLACING PIER CONCRETE.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5	EAST ABUTMENT	CATEGORY 0100	TOTALS
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-70-321	LS	—	—	—	—	—	—	—	—	1
206.5000	COFFERDAMS B-70-321	LS	—	—	—	—	—	—	—	—	1
210.1500	BACKFILL STRUCTURE TYPE A	TONS	—	—	—	—	—	—	112	—	112
501.1000.S	ICE HOT WEATHER CONCRETING	LB	2380	235	235	215	215	200	195	—	3675
502.0100	CONCRETE MASONRY BRIDGES	CY	317	31	31	29	29	27	26	—	490
502.1100	CONCRETE MASONRY SEAL	CY	—	30	—	—	—	—	—	—	30
502.3200	PROTECTIVE SURFACE TREATMENT	SY	745	—	—	—	—	—	—	—	745
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	—	1510	1510	1415	1415	1320	1450	—	8620
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	49,875	—	—	—	—	—	1140	—	51,015
513.8026	RAILING STEEL PEDESTRIAN TYPE C5 B-70-321	LF	477	—	—	—	—	—	19	—	496
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	—	—	—	—	—	—	8	—	8
550.0500	PILE POINTS	EACH	—	5	5	5	5	5	4	—	29
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	—	275	275	250	250	250	160	—	1460
604.0400	SLOPE PAVING CONCRETE	SY	—	—	—	—	—	—	31	—	31
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	—	—	—	—	—	—	50	—	50
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	6	—	—	—	—	—	6	—	12
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	500	—	—	—	—	—	24	—	524
657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	6	—	—	—	—	—	—	—	6
SPV.0035	HAULING STRUCTURE EXCAVATION	CY	—	35	20	20	20	25	—	—	120
SPV.0060	FABRICATED STEEL SHELTER	EACH	—	—	—	—	—	—	—	1	1
	NON-BID ITEMS										
	FILLER	SIZE	—	—	—	—	—	—	—		½", ¾"



PROFILE GRADE LINE EFP

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-321

DRAWN BY MJH | PLANS CK'D. TAB

CROSS SECTION & QUANTITIES

SHEET 2

316

SCALE = 2

8

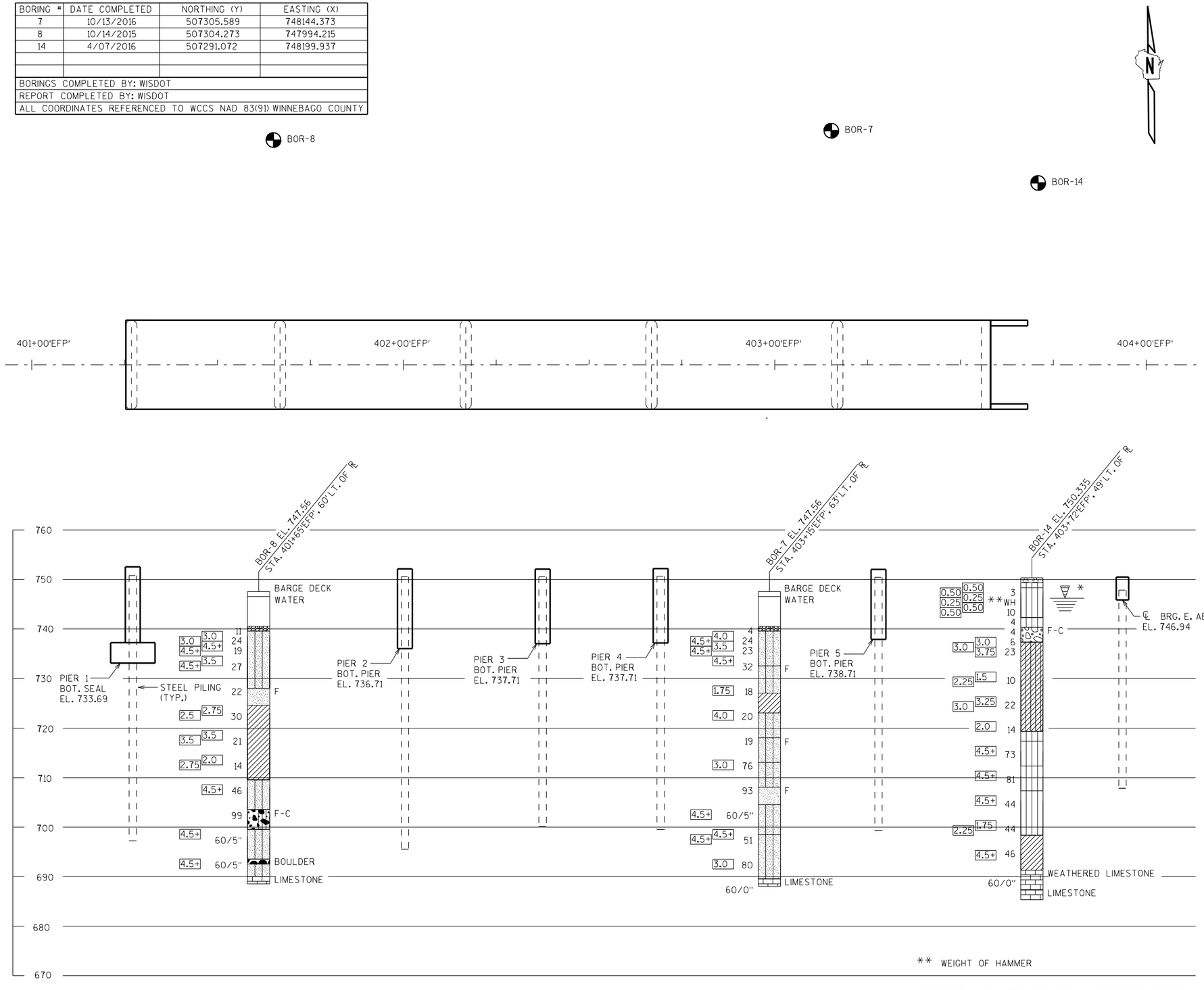
8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
7	10/13/2016	507305.589	748144.373
8	10/14/2015	507304.273	747994.215
14	4/07/2016	507291.072	748199.937

BORINGS COMPLETED BY: WISDOT

REPORT COMPLETED BY: WISDOT

ALL COORDINATES REFERENCED TO WCCS NAD 83(91) WINNEBAGO COUNTY



** WEIGHT OF HAMMER

* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

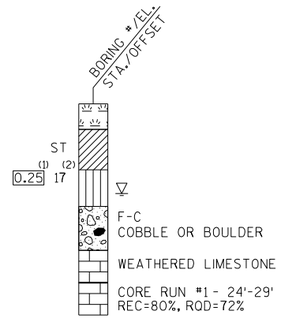
STATE PROJECT NUMBER

6190-15-72

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
STRUCTURES DESIGN SECTION

STRUCTURE B-70-321

DRAWN BY WWR | PLANS CK'D. TAB

SUBSURFACE EXPLORATION

SHEET 3

317

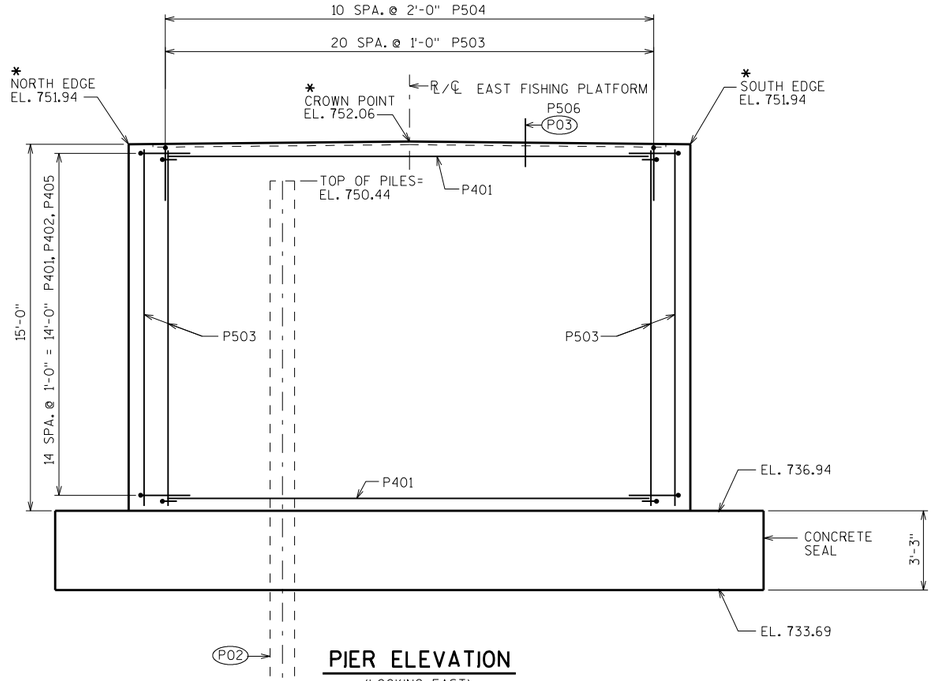
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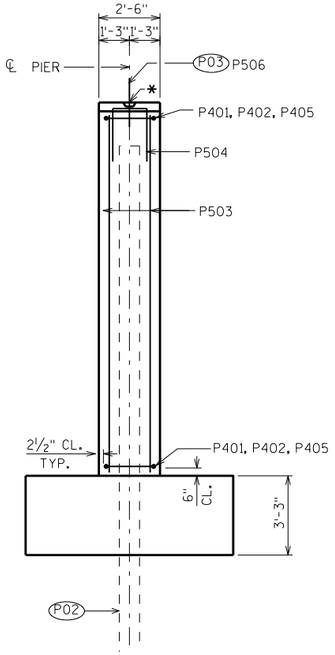
STATE PROJECT NUMBER

6190-15-72

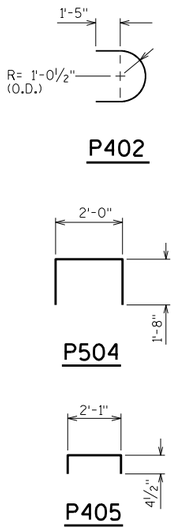


PIER ELEVATION

(LOOKING EAST)



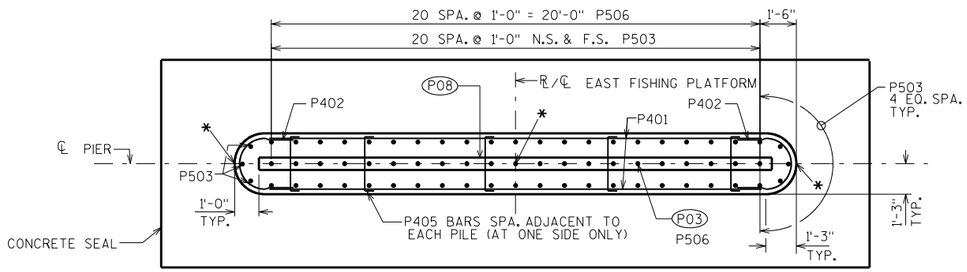
SECTION THRU PIER



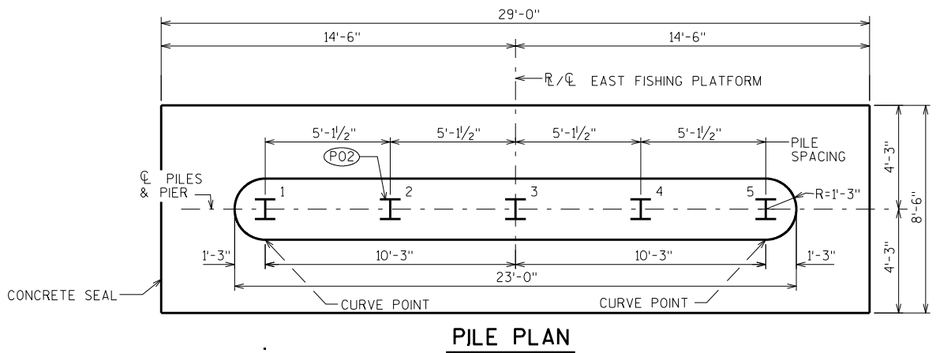
BILL OF BARS

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

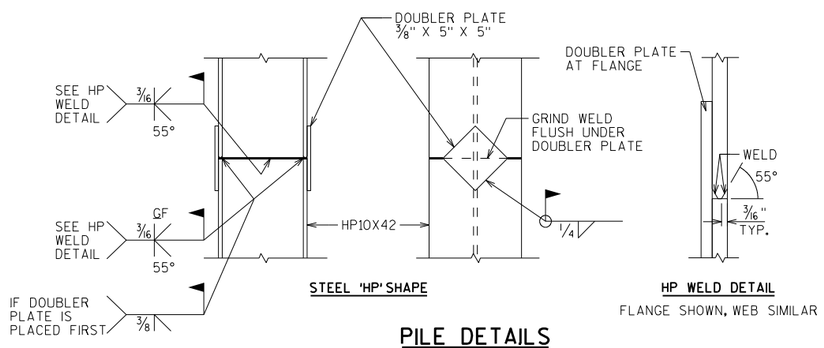
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
P401		30	20'-5"			SHAFT-HORIZ.
P402		30	6'-1"	X		SHAFT END U-BAR-HORIZ.
P503		48	14'-9"			SHAFT-VERT.
P504		11	5'-2"	X		SHAFT TOP U-BAR-VERT.
P405		75	2'-9"	X		SHAFT-HORIZ.
P506		21	2'-0"			SHAFT TOP-VERT.



PLAN



PILE PLAN



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

* INDICATES ELEVATION LOCATION AT TOP OF PIER. (SEE "SECTION THRU PIER" AND "PLAN" VIEW)

(P02) SUPPORT PIER ON HP 10 X 42 STEEL PILING, ESTIMATED 55'-0" LONG. & DRIVEN TO A MIN. BRG. VALUE OF 180 TONS PER PILE. PILE POINTS REQ'D.

(P03) P506 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P08) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 X 6.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-321

DRAWN BY WWR | PLANS CK'D. TAB

PIER 1

SHEET 4

318

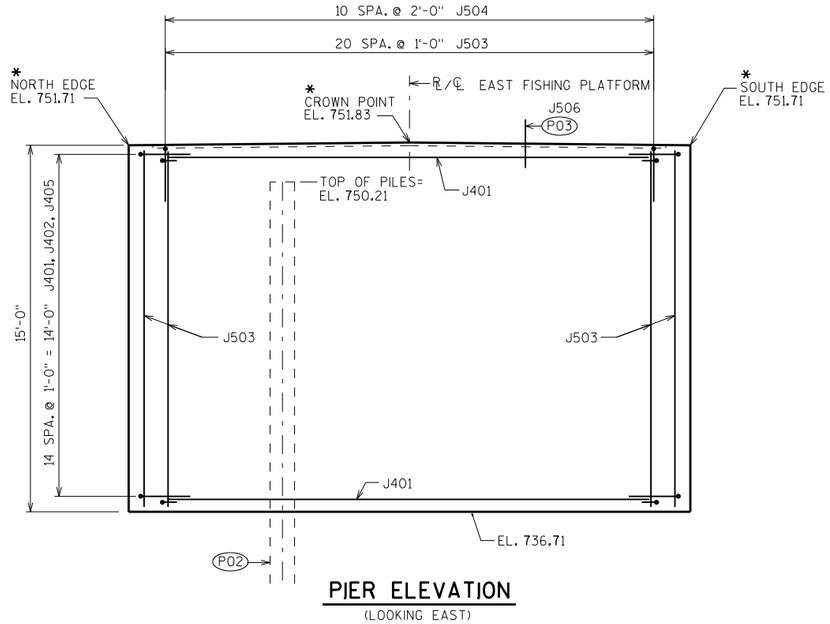
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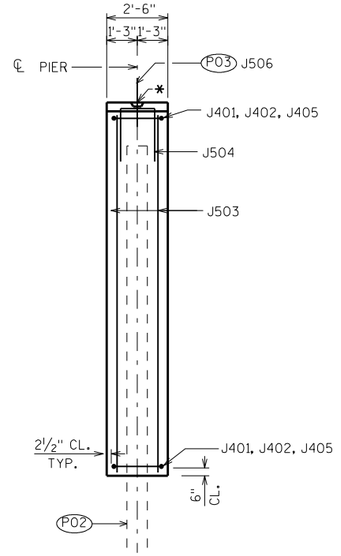
STATE PROJECT NUMBER

6190-15-72

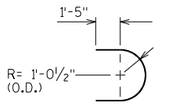


PIER ELEVATION

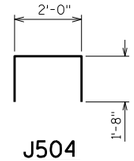
(LOOKING EAST)



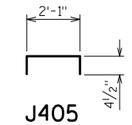
SECTION THRU PIER



J402



J504

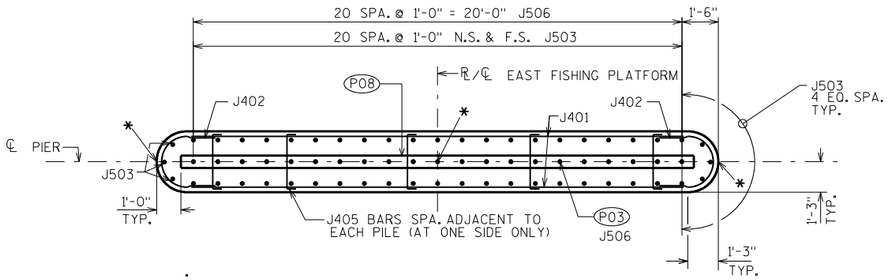


J405

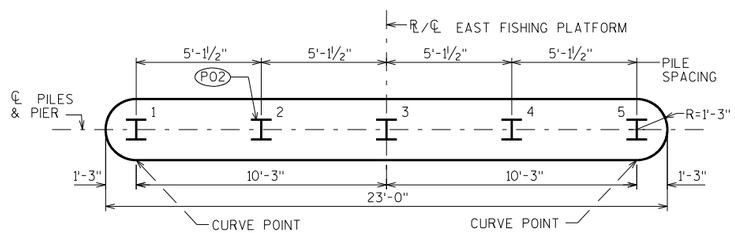
BILL OF BARS

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

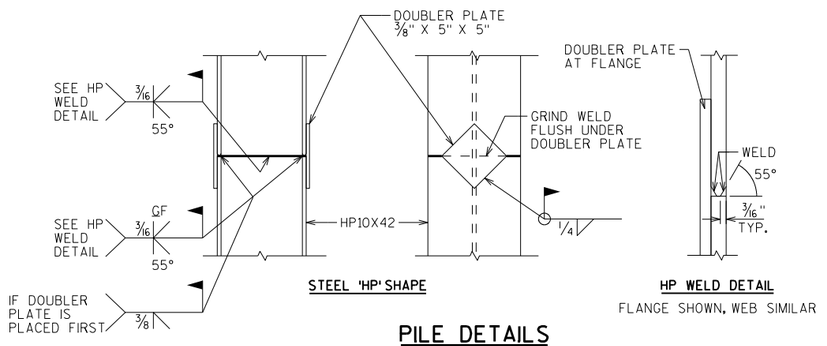
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
J401		30	20'-5"			SHAFT-HORIZ.
J402		30	6'-1"	X		SHAFT END U-BAR-HORIZ.
J503		48	14'-9"			SHAFT-VERT.
J504		11	5'-2"	X		SHAFT TOP U-BAR-VERT.
J405		75	2'-9"	X		SHAFT-HORIZ.
J506		21	2'-0"			SHAFT TOP-VERT.



PLAN



PILE PLAN



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

* INDICATES ELEVATION LOCATION AT TOP OF PIER. (SEE "SECTION THRU PIER" AND "PLAN" VIEW)

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-321

DRAWN BY WWR | PLANS CK'D. TAB

PIER 2

SHEET 5

319

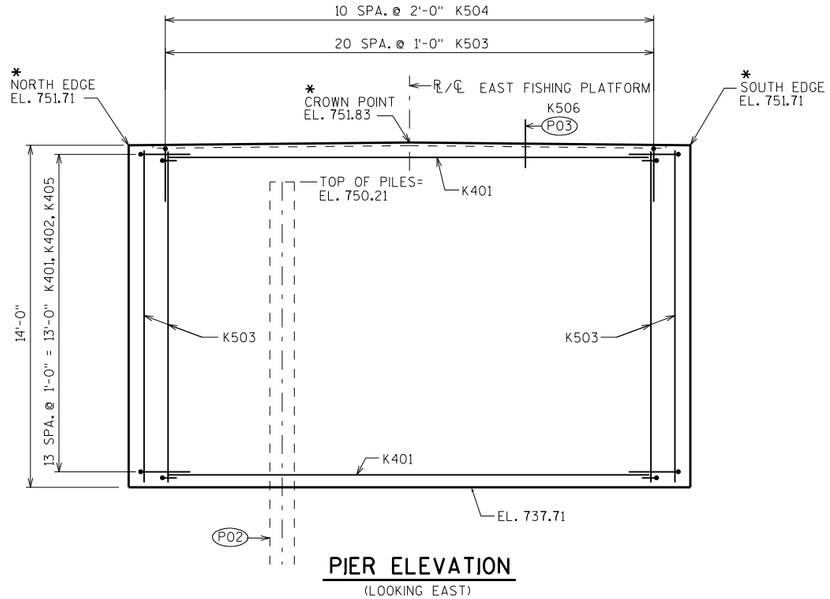
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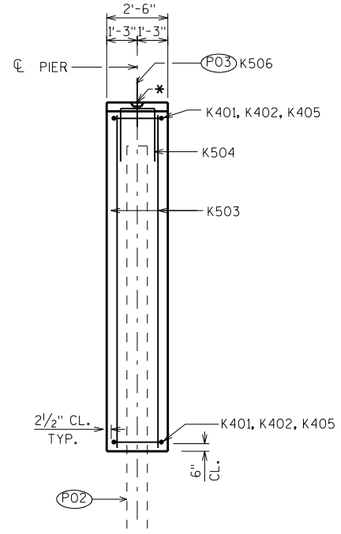
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STATE PROJECT NUMBER

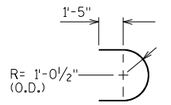
6190-15-72



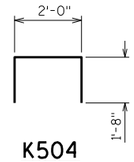
PIER ELEVATION
(LOOKING EAST)



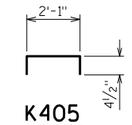
SECTION THRU PIER



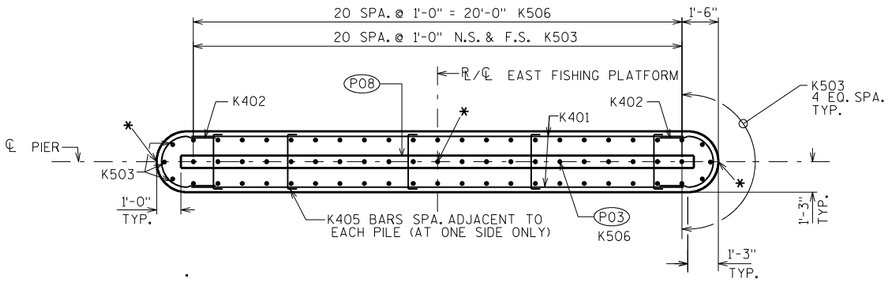
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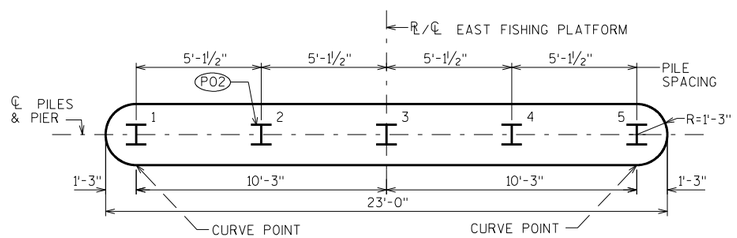
K504



K405



PLAN

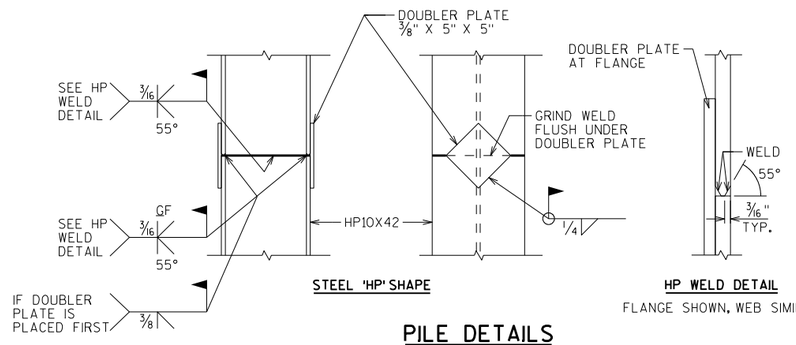


PILE PLAN

BILL OF BARS

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

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
K401		28	20'-5"			SHAFT-HORIZ.
K402		28	6'-1"	X		SHAFT END U-BAR-HORIZ.
K503		48	13'-9"			SHAFT-VERT.
K504		11	5'-2"	X		SHAFT TOP U-BAR-VERT.
K405		70	2'-9"	X		SHAFT-HORIZ.
K506		21	2'-0"			SHAFT TOP-VERT.



STEEL 'HP' SHAPE

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

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(P08) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 X 6.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-321

DRAWN BY WWR | PLANS CK'D. TAB

PIER 3

SHEET 6

320

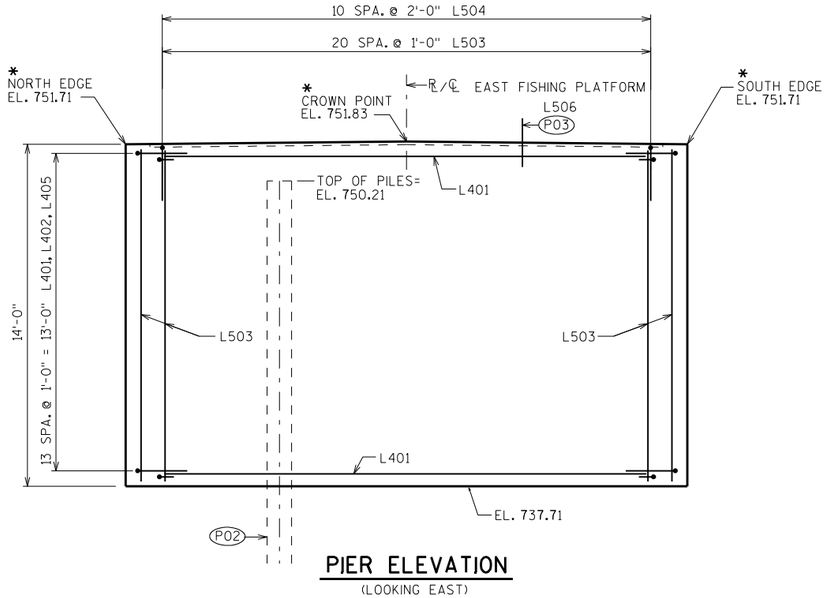
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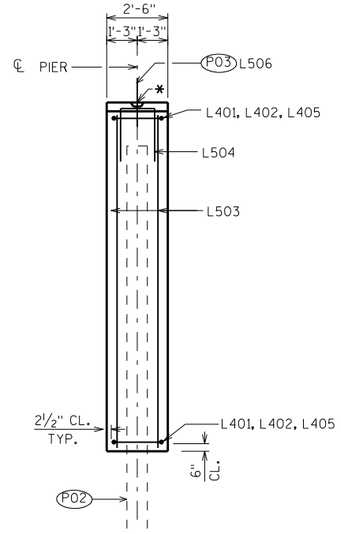
STATE PROJECT NUMBER

6190-15-72

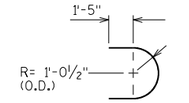


PIER ELEVATION

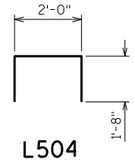
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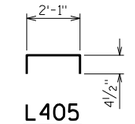
SECTION THRU PIER



L402



L504

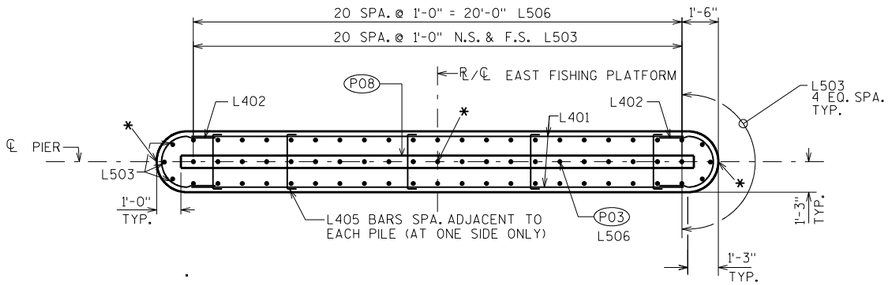


L405

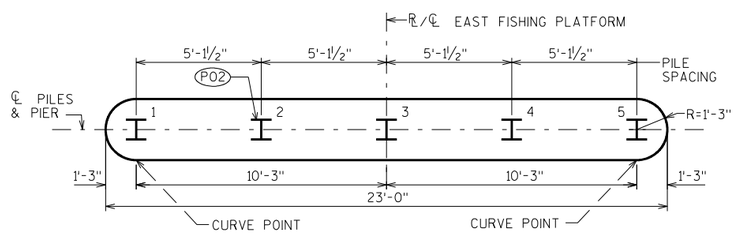
BILL OF BARS

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

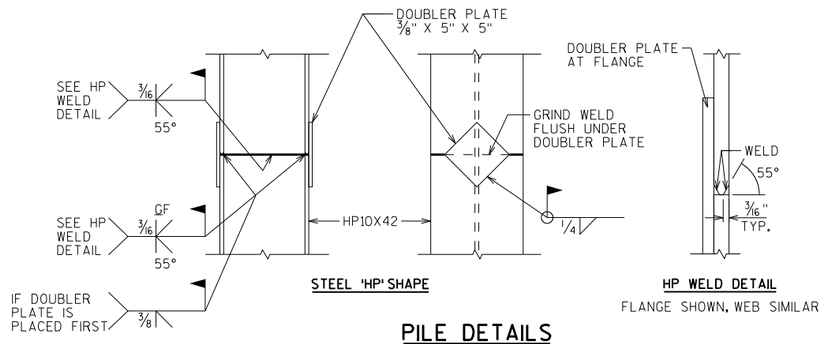
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
L401		28	20'-5"			SHAFT-HORIZ.
L402		28	6'-1"	X		SHAFT END U-BAR-HORIZ.
L503		48	13'-9"			SHAFT-VERT.
L504		11	5'-2"	X		SHAFT TOP U-BAR-VERT.
L405		70	2'-9"	X		SHAFT-HORIZ.
L506		21	2'-0"			SHAFT TOP-VERT.



PLAN



PILE PLAN



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

* INDICATES ELEVATION LOCATION AT TOP OF PIER. (SEE "SECTION THRU PIER" AND "PLAN" VIEW)

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STRUCTURES DESIGN SECTION

STRUCTURE B-70-321

DRAWN BY WWR | PLANS CK'D. TAB

PIER 4

SHEET 7

321

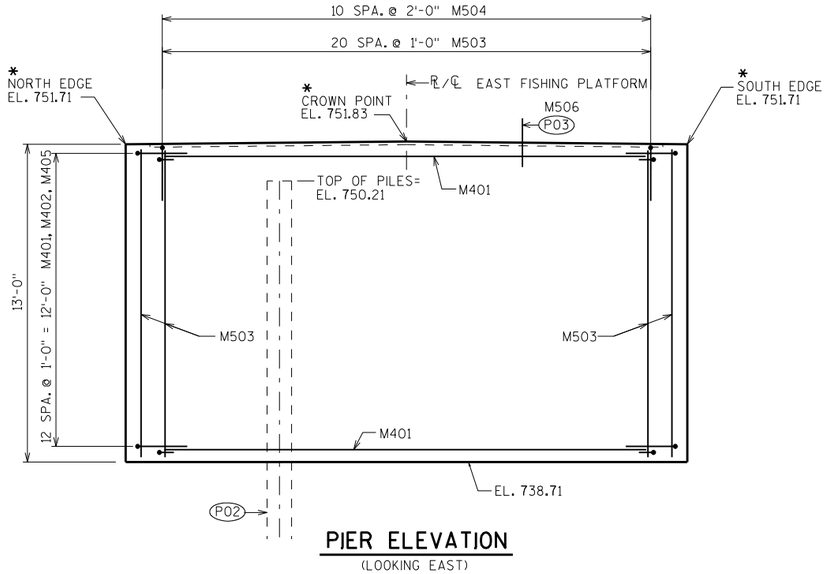
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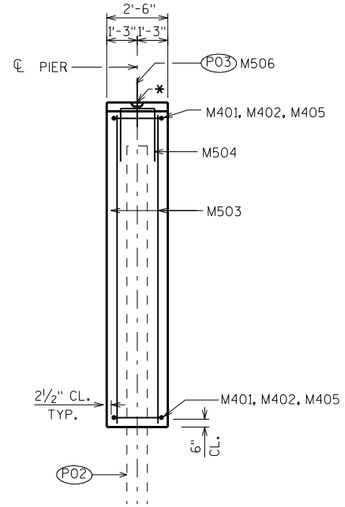
STATE PROJECT NUMBER

6190-15-72

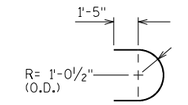


PIER ELEVATION

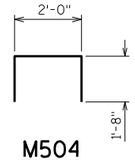
(LOOKING EAST)



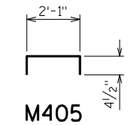
SECTION THRU PIER



M402



M504

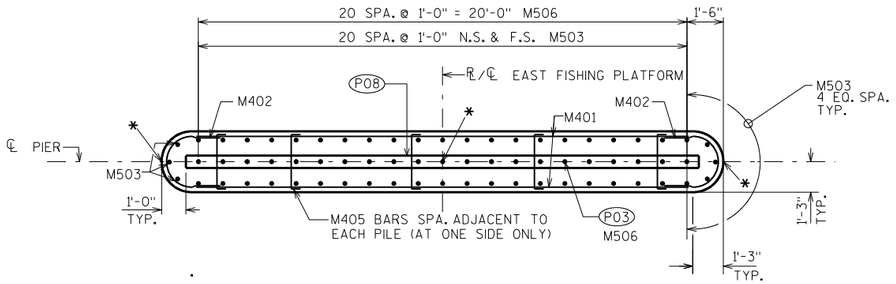


M405

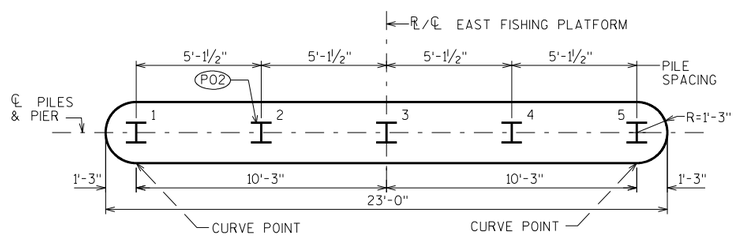
BILL OF BARS

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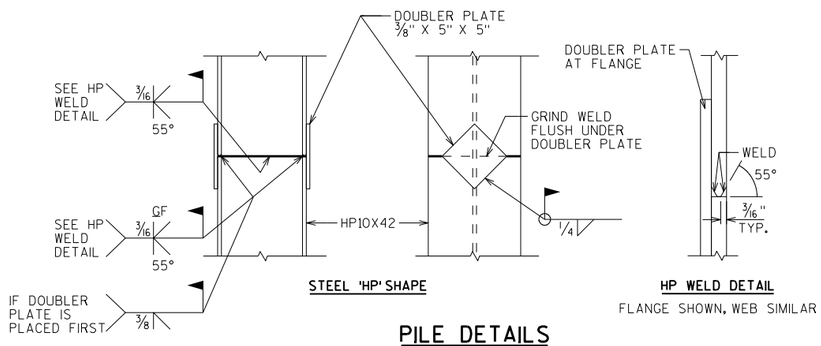
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
M401		26	20'-5"			SHAFT-HORIZ.
M402		26	6'-1"	X		SHAFT END U-BAR-HORIZ.
M503		48	12'-9"			SHAFT-VERT.
M504		11	5'-2"	X		SHAFT TOP U-BAR-VERT.
M405		65	2'-9"	X		SHAFT-HORIZ.
M506		21	2'-0"			SHAFT TOP-VERT.



PLAN



PILE PLAN



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

* INDICATES ELEVATION LOCATION AT TOP OF PIER. (SEE "SECTION THRU PIER" AND "PLAN" VIEW)

(P02) SUPPORT PIER ON HP 10 X 42 STEEL PILING, ESTIMATED 50'-0" LONG. & DRIVEN TO A MIN. BRG. VALUE OF 180 TONS PER PILE. PILE POINTS REQ'D.

(P03) M506 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P08) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 X 6.

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DRAWN BY WWR | PLANS CK'D. TAB

PIER 5

SHEET 8

322

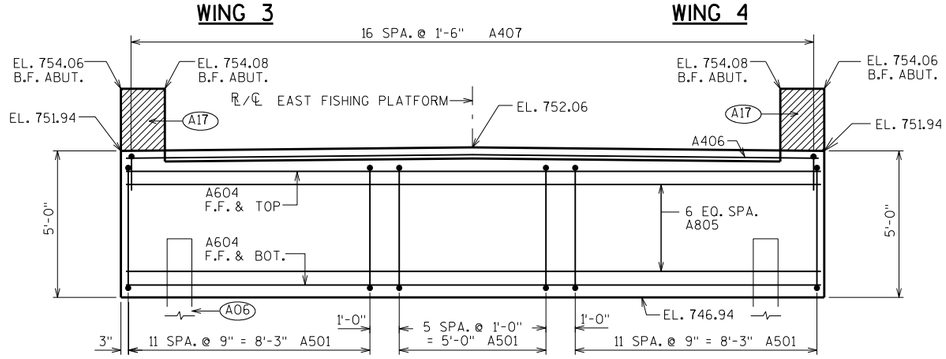
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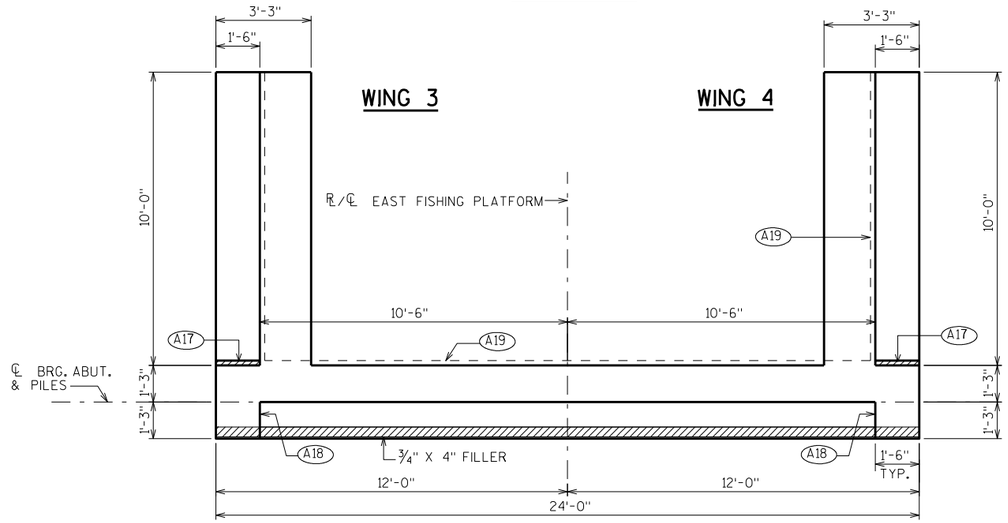
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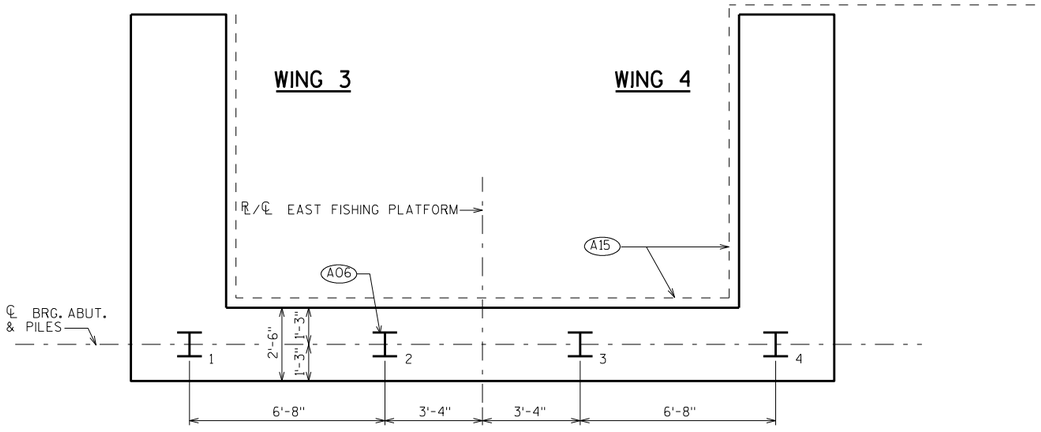
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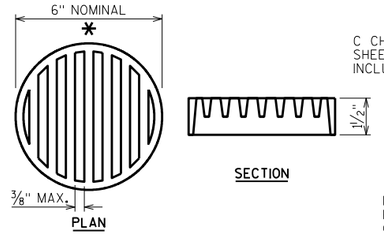
ELEVATION



PLAN



PILE PLAN



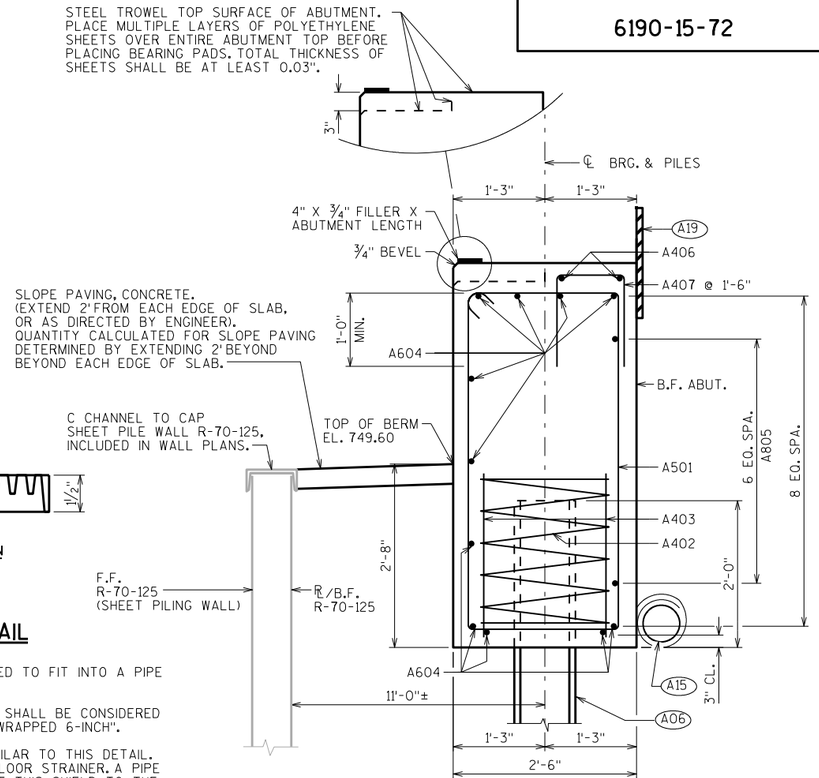
PLAN — SECTION

RODENT SHIELD DETAIL

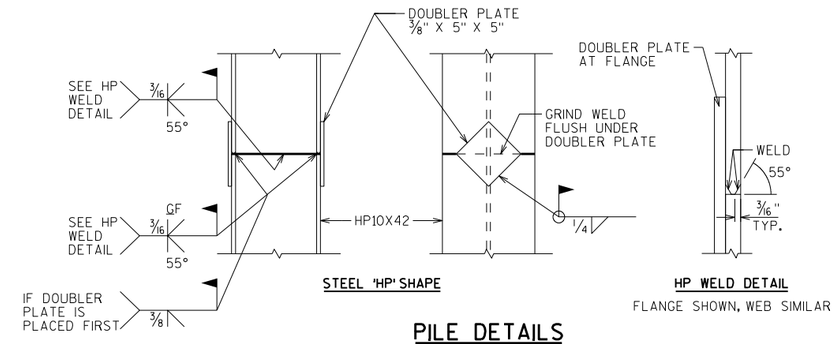
* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHEMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



SECTION THRU BODY



STEEL 'HP' SHAPE — HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 40'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE. PILE POINTS REQ'D.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH EDGE OF SLAB.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

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EAST ABUTMENT

SHEET 9

323

8

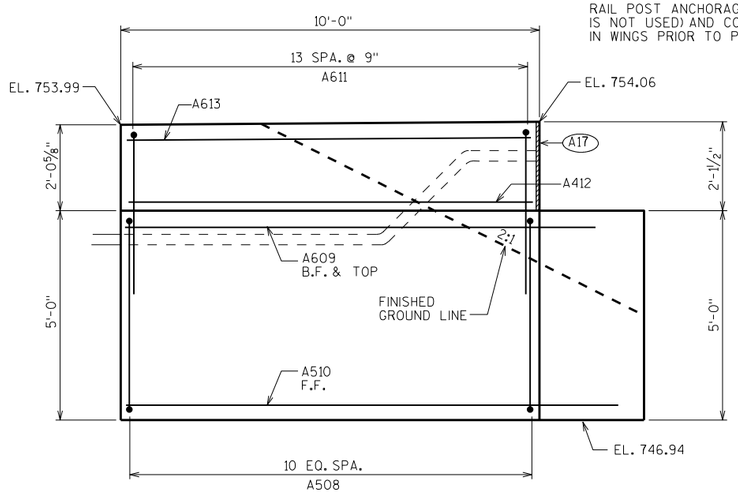
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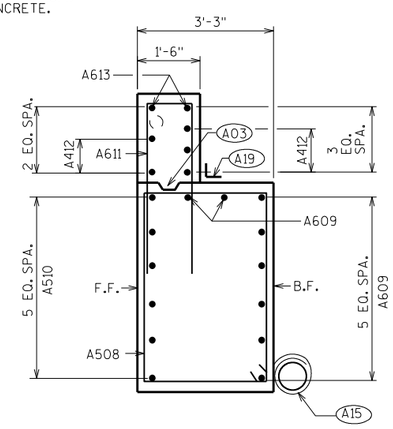
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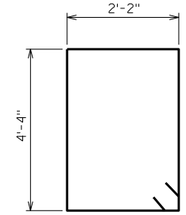
NOTE:
RAIL POST ANCHORAGE (IF ALTERNATE ANCHORAGE IS NOT USED) AND CONDUIT TO BE PLACED IN WINGS PRIOR TO POURING CONCRETE.



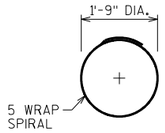
WING 3 ELEVATION



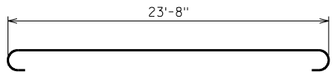
WING 3 SECTION



A501



A402

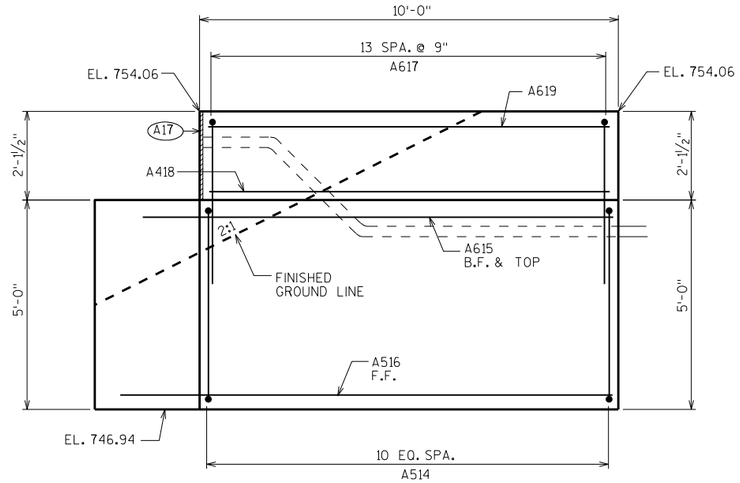


A805

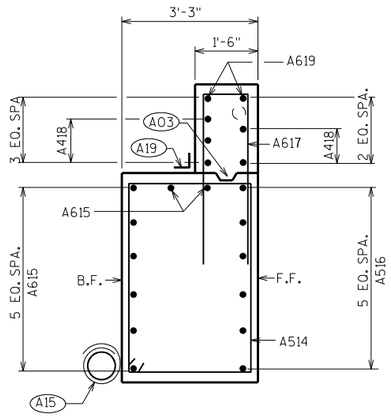
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

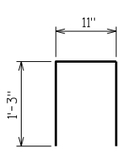
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		30	13'-8"	X		BODY-STIRRUP
A402		4	28'-0"	X		BODY-1 PER PILE
A403		8	2'-3"			BODY-2 PER PILE
A604		11	23'-8"			BODY-HORIZ.
A805		7	25'-6"	X		BODY-HORIZ.
A406		2	23'-8"			BODY-HORIZ.-TOP
A407		17	3'-2"	X		BODY-VERT.-TOP
A508	X	11	15'-6"	X		WING BODY 3 - STIRRUP
A609	X	8	12'-0"			WING BODY 3
A510	X	6	12'-2"			WING BODY 3
A611	X	14	5'-2"	X		WING BODY/WALL 3
A412	X	5	9'-8"			WINGWALL 3
A613	X	2	9'-8"			WINGWALL 3 - TOP
A514	X	11	15'-6"	X		WING BODY 4 - STIRRUP
A615	X	8	12'-0"			WING BODY 4
A516	X	6	12'-2"			WING BODY 4
A617	X	14	5'-2"	X		WING BODY/WALL 4
A418	X	5	9'-8"			WINGWALL 4
A619	X	2	9'-8"			WINGWALL 4 - TOP



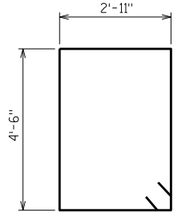
WING 4 ELEVATION



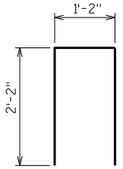
WING 4 SECTION



A407



A508, A514



A611, A617

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 × 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

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EAST ABUTMENT DETAILS

SHEET 10

324

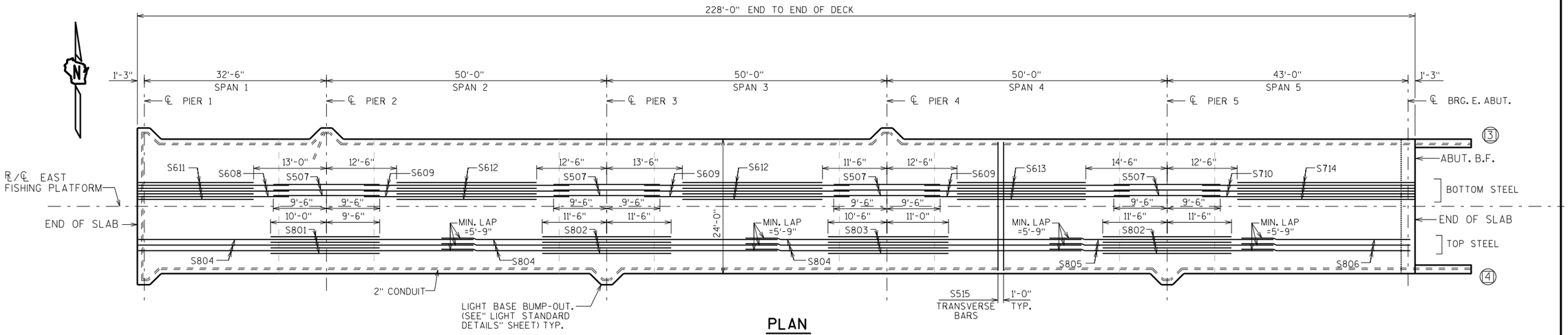
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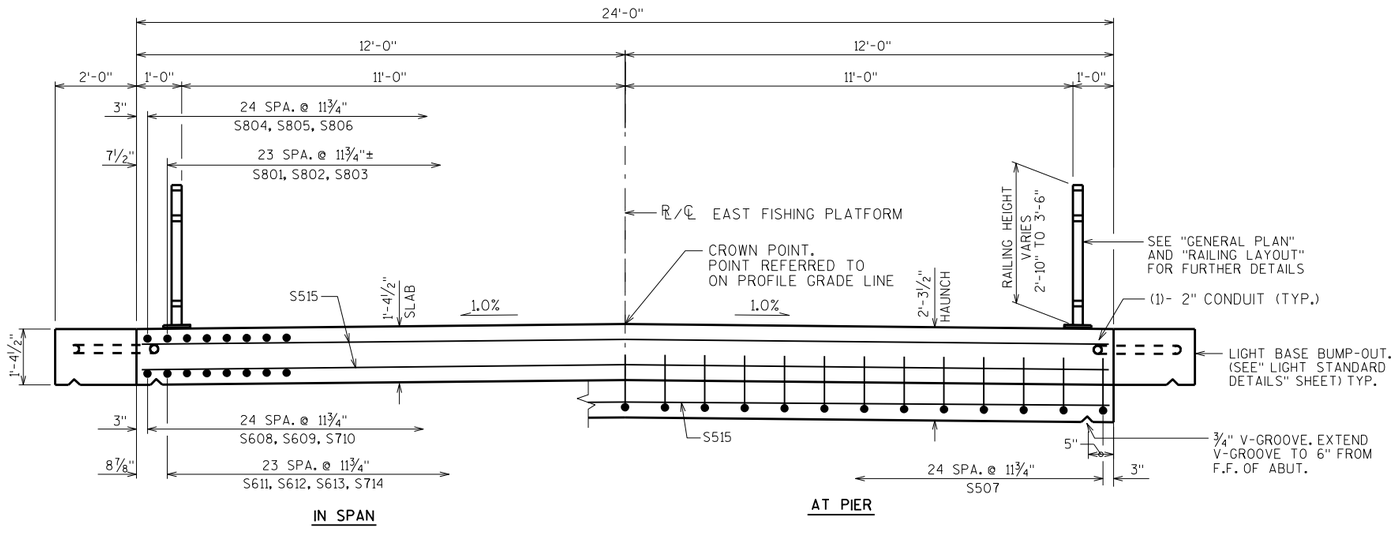
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INDICATES WING NUMBER



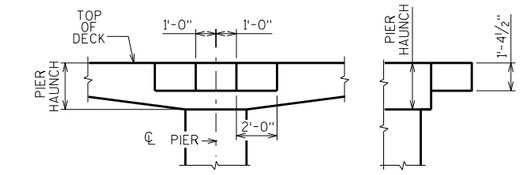
PLAN



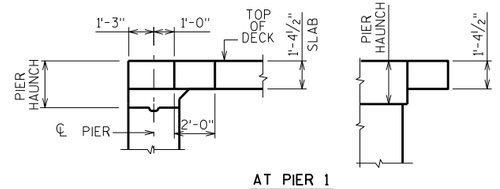
IN SPAN

AT PIER

CROSS SECTION THRU PLATFORM LOOKING EAST



AT PIERS 2, 3, 4, 5



AT PIER 1

LIGHT BASE DIMENSION DETAILS IN SLAB

NOTE:
RAIL POST ANCORAGE, LIGHT BASE ANCHORAGE, AND CONDUIT TO BE PLACED IN SLAB PRIOR TO POURING CONCRETE. SEE "RAILING LAYOUT", "LIGHT STANDARD DETAILS" AND "EAST ABUTMENT DETAILS" SHEETS FOR FURTHER DETAILS.

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SUPERSTRUCTURE

SHEET 11

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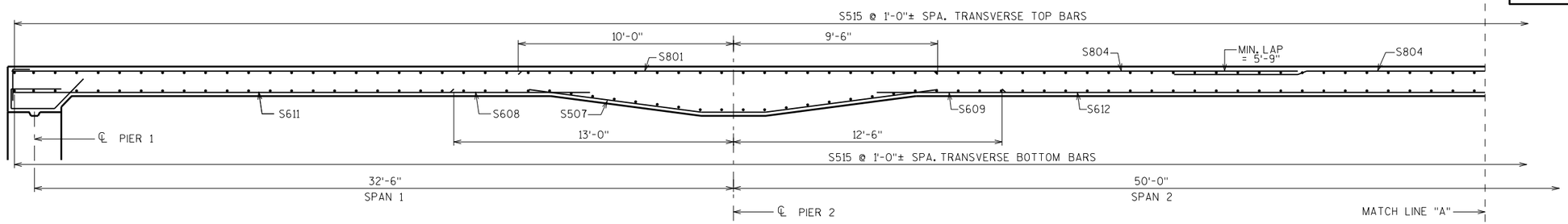
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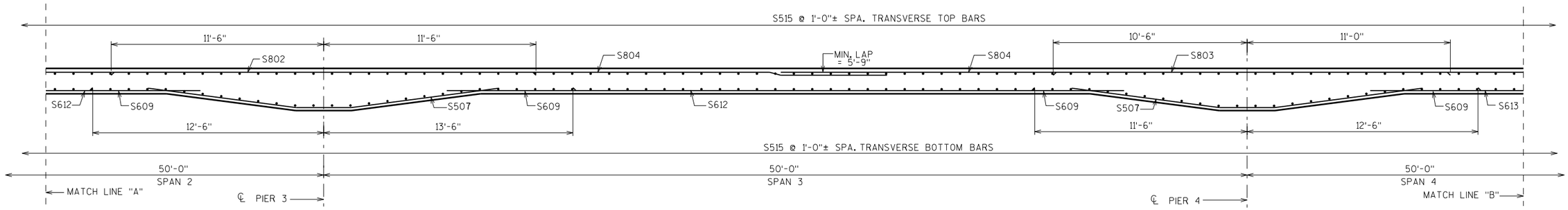
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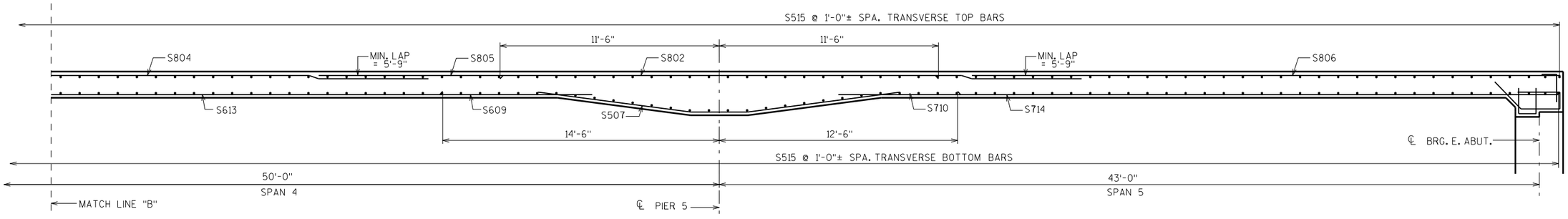
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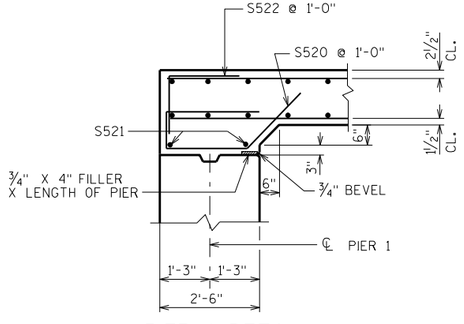
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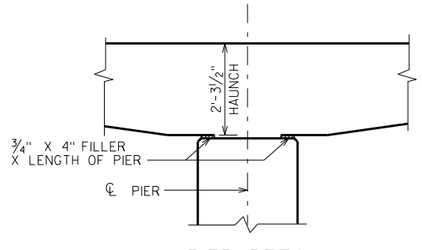
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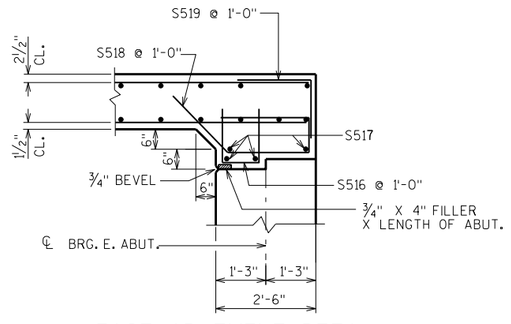
PART LONGITUDINAL SECTION



PIER 1 DETAIL



PIER DETAIL



EAST ABUTMENT DETAIL

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SUPERSTRUCTURE DETAILS 1

SHEET 12

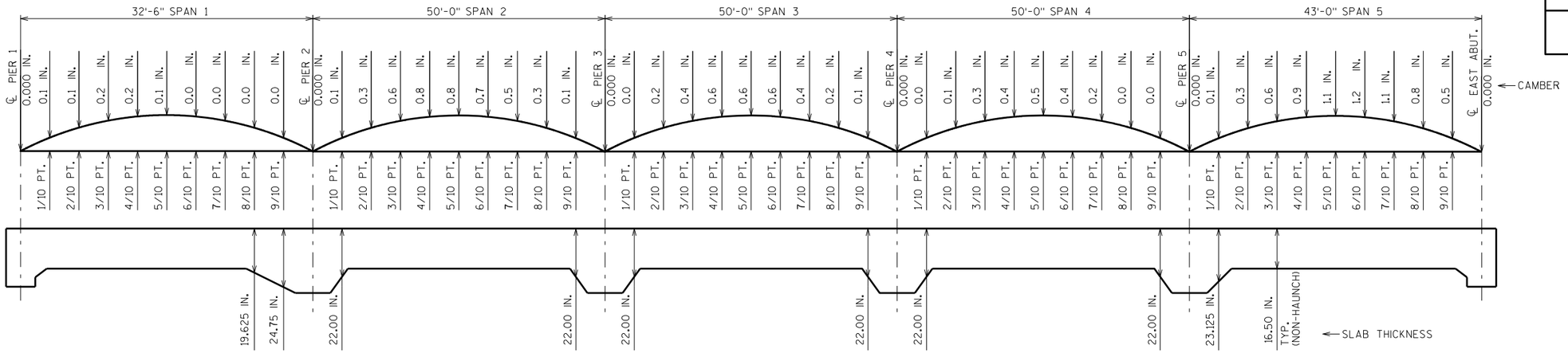
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CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

TOP OF SLAB ELEVATION AT FINAL GRADE
LESS (-) SLAB THICKNESS
PLUS (+) CAMBER
PLUS (+) FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS = TOP OF SLAB FALSEWORK ELEVATION.

SURVEY TOP OF SLAB ELEVATIONS

	PIER 1	5/10 PT.	PIER 2	5/10 PT.	PIER 3	5/10 PT.	PIER 4	5/10 PT.	PIER 5	5/10 PT.	E. ABUT.
N. EDGE											
CROWN OR ℄											
S. EDGE											

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF DECK ELEVATIONS AT THE ℄ OF ABUTMENTS, THE ℄ OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF SLAB AND CROWN OR ℄. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

TOP OF SLAB ELEVATIONS

	℄ PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 3
N. EDGE OF SLAB	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06
CROWN OR ℄	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18
S. EDGE OF SLAB	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06

℄ PIER 3	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 4	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 5
754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06
754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18
754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06

℄ PIER 5	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. . ABUT.
754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06
754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18
754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06

NOTES

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIAMTELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

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SUPERSTRUCTURE DETAILS 2

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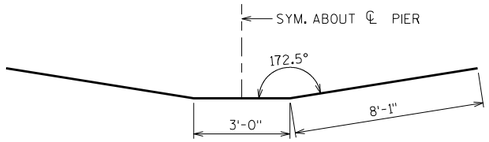
SLABCAMBER
7-13

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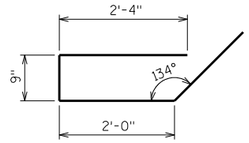
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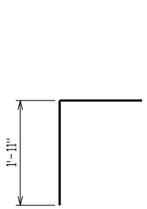
6190-15-72



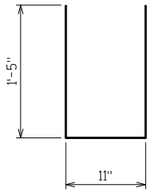
S507



S518, S520



S519, S522



S516

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S801	X	24	19'-6"			DECK LONGIT.-TOP PIER 2
S802	X	48	23'-0"			DECK LONGIT.-TOP PIER 3 & 5
S803	X	24	21'-6"			DECK LONGIT.-TOP PIER 4
S804	X	75	60'-0"			DECK LONGIT.-TOP
S805	X	25	40'-0"			DECK LONGIT.-TOP
S806	X	25	30'-10"			DECK LONGIT.-TOP
S507	X	100	19'-2"	X		DECK LONGIT.- BOT.-PIER 2,3,4,5
S608	X	25	26'-11			DECK LONGIT.-BOT.
S609	X	75	36'-8"			DECK LONGIT.-BOT.
S710	X	25	38'-0"			DECK LONGIT.-BOT.
S611	X	24	20'-7"			DECK LONGIT.-BOT.-SPAN 1
S612	X	48	25'-0"			DECK LONGIT.-BOT.-SPAN 2&3
S613	X	24	23'-0"			DECK LONGIT.-BOT.-SPAN 4
S714	X	24	31'-9"			DECK LONGIT.-BOT.-SPAN 5
S515	X	458	23'-8"			DECK-TRANSVERSE-TOP & BOT.
S516	X	25	3'-6"	X		ABUT.DIAPH.
S517	X	4	23'-8"			ABUT.DIAPH.
S518	X	25	6'-9"	X		ABUT.DIAPH.
S519	X	25	3'-5"	X		ABUT.DIAPH.
S520	X	25	6'-9"	X		PIER 1 DIAPH.
S521	X	2	23'-8"			PIER 1 DIAPH.
S522	X	25	3'-5"	X		PIER 1 DIAPH.

8

8

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SUPERSTRUCTURE DETAILS 3

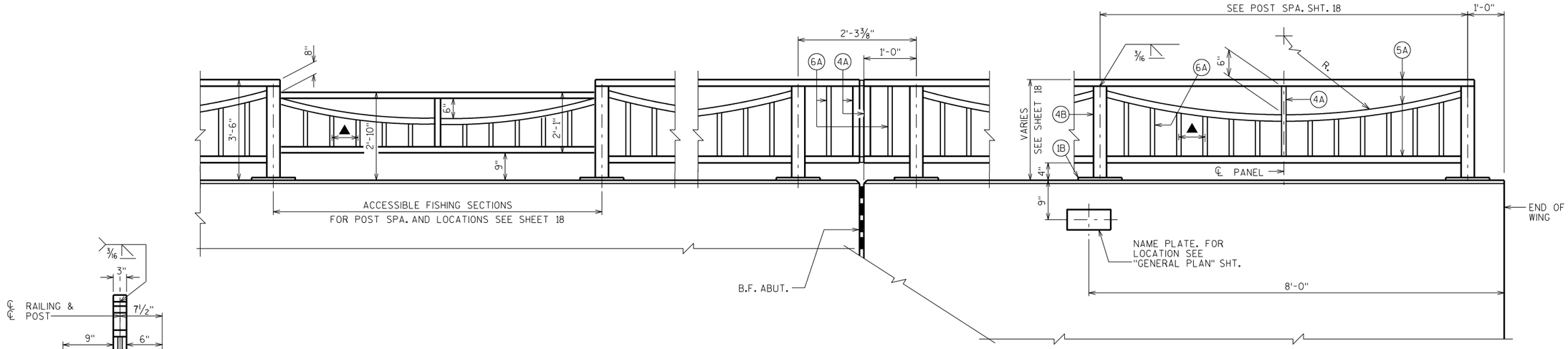
SHEET 14

328

SCALE = 2.667

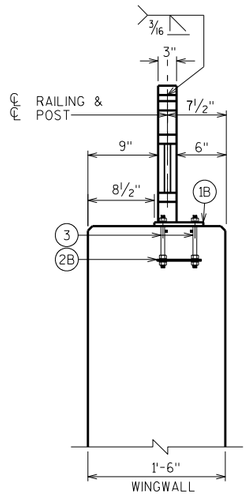
STATE PROJECT NUMBER

6190-15-72

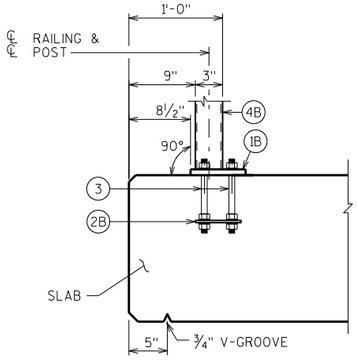


ELEVATION OF RAILING

WING 4 SHOWN, WING 3 SIMILAR



END VIEW



SECTION THRU RAILING ON BRIDGE

ADJUST LOCATIONS OF BARS TO ALLOW PLACEMENT OF ANCHOR ASSEMBLY FOR RAILING.

▲ 5 5/8" STD. PANEL
5 1/8" PANELS ALONG END OF BRIDGE
5 3/4" WING PANELS

NOTE:
SEE SHEET 16 FOR STEEL RAILING LEGEND.

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COMBINATION RAIL TYPE C5 "MODIFIED"

SHEET 15

329

SCALE = 1.000

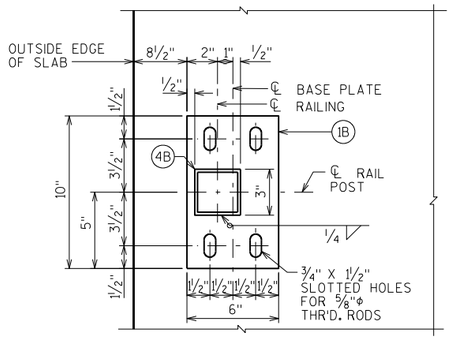
RAILCOMB
7-11

8

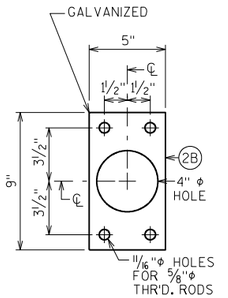
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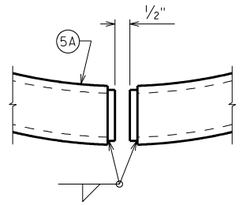
6190-15-72



TYPICAL RAIL POST BASE PLATE



ANCHOR PLATE



CURVED MEMBER JOINT DETAIL

SEAL ENDS ON CURVED STRUCTURAL TUBING WITH ¼" PLATE. WELD AND GRIND SMOOTH.

LEGEND

(1B) PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES

(2B) ¼" X 5" X 9" ANCHOR PLATE WITH 11/16" φ HOLES FOR ANCHOR BOLTS NO. 3.

(3) ⅝" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE ANCHORAGE: CONCRETE ADHESIVE ANCHORS ⅝-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. EMBED 5" IN CONCRETE FOR END RAILS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.12 OF THE STANDARD SPECIFICATIONS.

(4A) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 5.

(4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

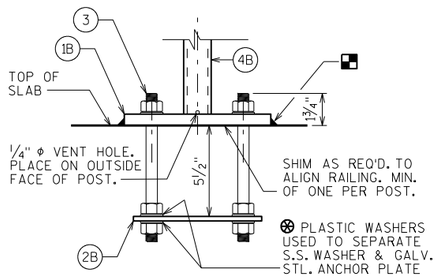
(5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.

(6A) BAR 1" X 1" PICKETS. WELD TO NO. 5. PLACE VERTICAL.

(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ STRIP SEAL EXP. JTS.)

NOTE:
SEE SHEET 15 FOR STEEL RAILING AND IDENTIFYING MEMBER LOCATIONS.



ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.

RAILING NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C5 B-70-321", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

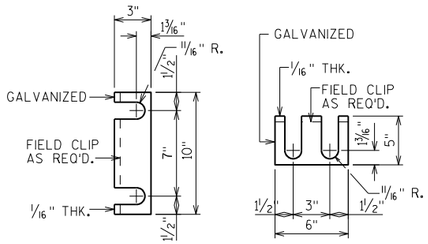
■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED FEDERAL COLOR NO. 27038, BLACK.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

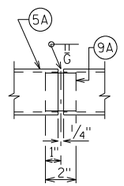
RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.



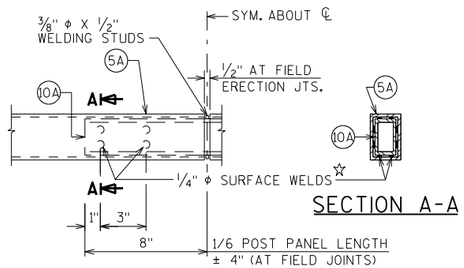
RAIL POST SHIM DETAIL

(2 SETS PER POST)



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



SECTION A-A

FIELD ERECTION JOINT DETAIL

☆ MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

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COMBINATION RAIL TYPE C5 "MODIFIED" DETAILS

SHEET 16

330

SCALE = 1.000

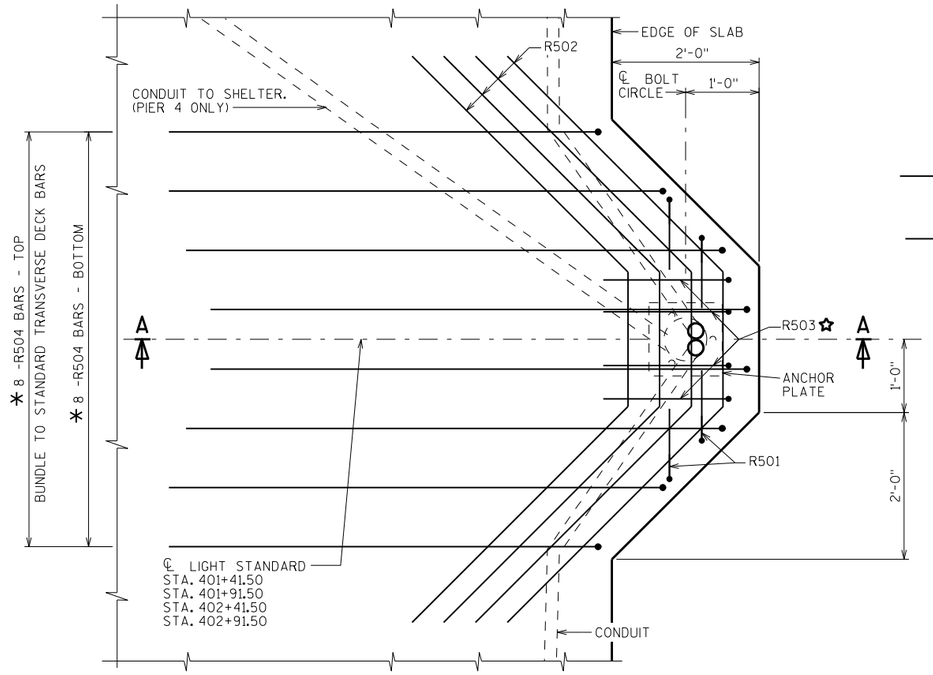
RAILCOMBDET
7-16

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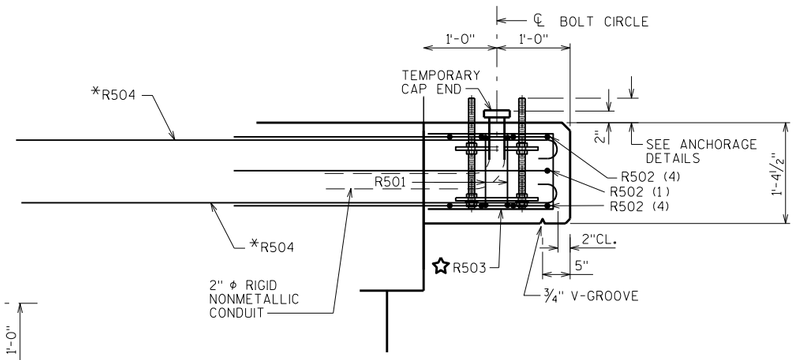
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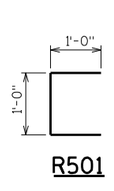
PLAN AT PIERS 2,3,4,5



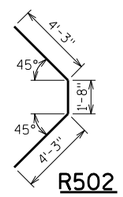
SECTION A-A

BILL OF BARS

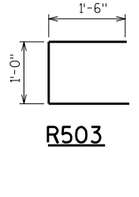
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	LOCATION
R501	X	24	2'-9"	X	LIGHT STD., VERT.
R502	X	36	10'-2"	X	LIGHT STD., HORIZ. IN DECK
R503	X	24	3'-9"	X	LIGHT STD., VERT.
R504	X	88	8'-1"	X	LIGHT STD., TRANSV. IN DECK
R505	X	6	10'-1"	X	LIGHT STD., HORIZ. PIER 1
R506	X	4	9'-8"	X	LIGHT STD., PIER 1
R507	X	4	9'-3"	X	LIGHT STD., PIER 1
R508	X	4	8'-10"	X	LIGHT STD., PIER 1



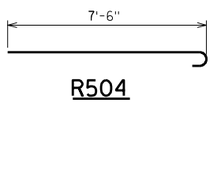
R501



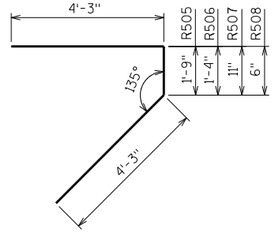
R502



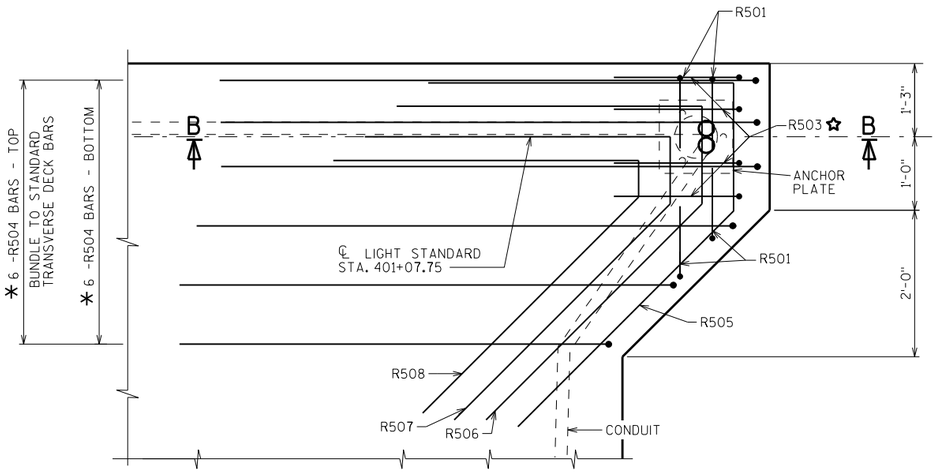
R503



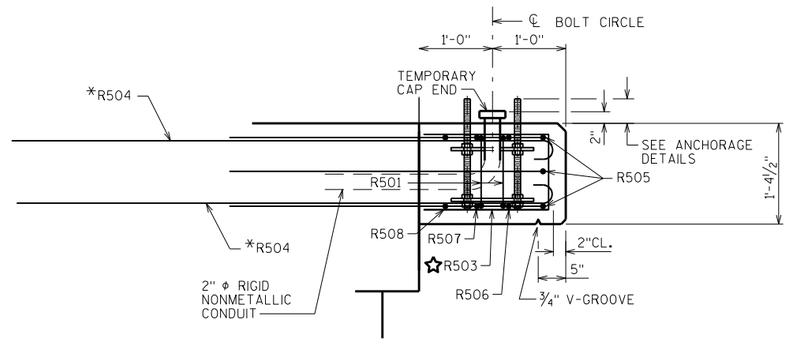
R504



R505, R506, R507, R508



PLAN AT PIER 1



SECTION B-B

* THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN DECK.

◒ ¾" DIA. THREADED ANCHOR BOLTS ASTM A449 OR AASHTO M 314-90 GR 55. HOT DIP ASTM A153, CLASS C, UPPER 8" OF BOLT INCLUDING NUTS & WASHERS. PROVIDE ENLARGED THREAD ON NUTS FOR PROPER FIT AFTER GALVANIZING. PROVIDE DOUBLE FLAT WASHERS & NUTS.

☆ TIE IN PLACE AFTER ANCHOR BOLT ASSEMBLY LOCATED.

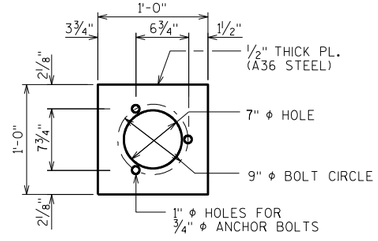
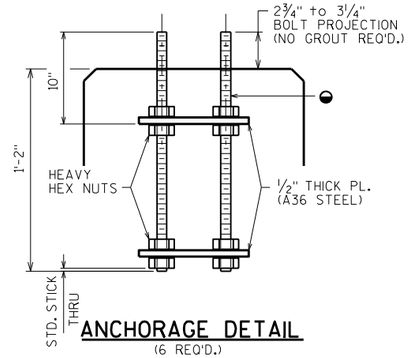


PLATE DETAIL
(12 REQ'D.)



ANCHORAGE DETAIL
(6 REQ'D.)

NOTES

BID ITEM SHALL BE:
"ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES" EACH

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LIGHT STANDARD DETAILS

SHEET 17

331

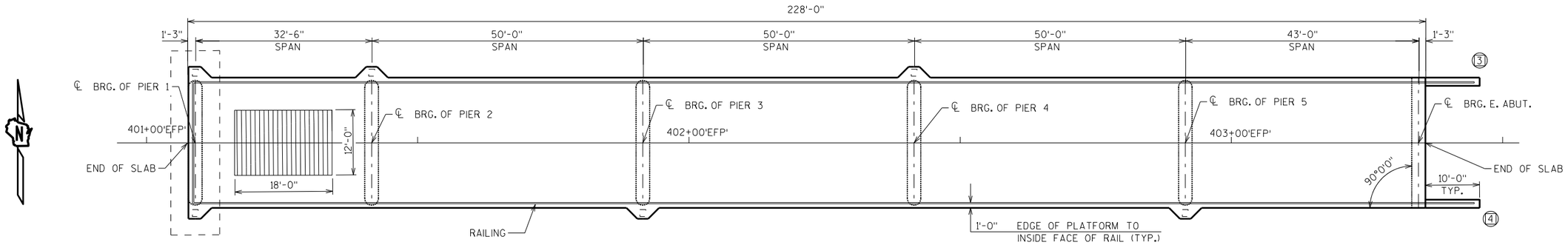
LIGHTDET
7-11

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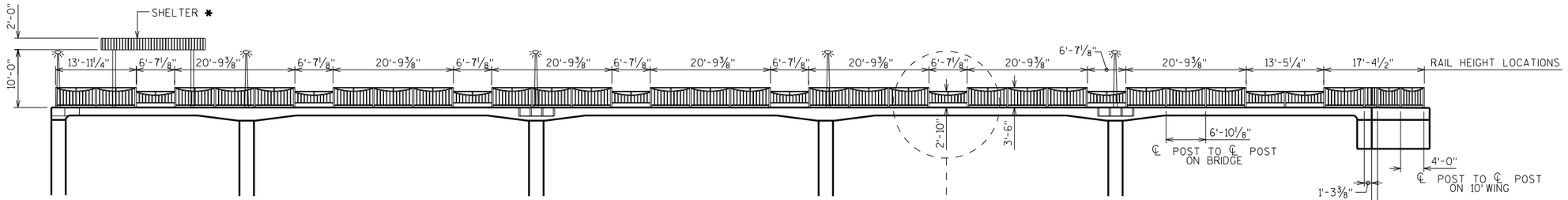
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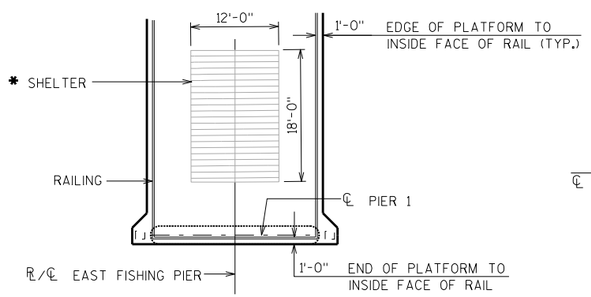


PLAN

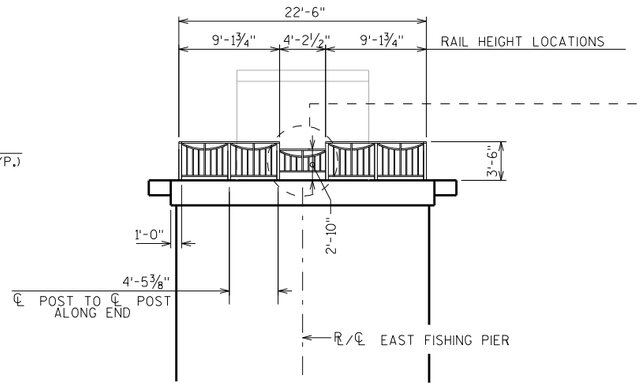


ELEVATION (ALONG LENGTH OF PLATFORM)

LOOKING NORTH

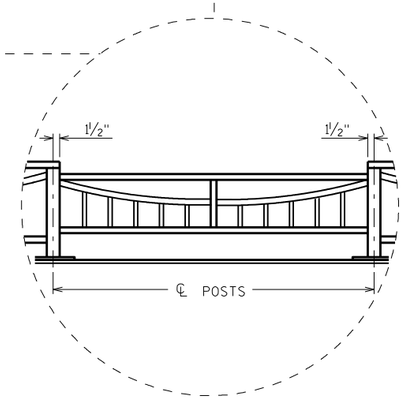


PLAN (AT END OF PLATFORM)



ELEVATION (AT END OF PLATFORM)

LOOKING EAST



* SEE SPECIAL PROVISION "FABRICATED STEEL SHELTER" FOR DETAILS. ANCHOR DETAILS TO BE PROVIDED TO BUREAU OF STRUCTURES FOR REVIEW.

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RAILING LAYOUT

SHEET 18

332

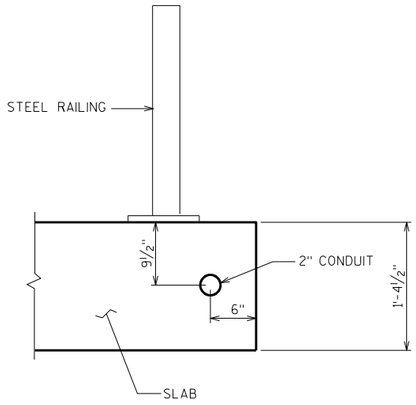
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8

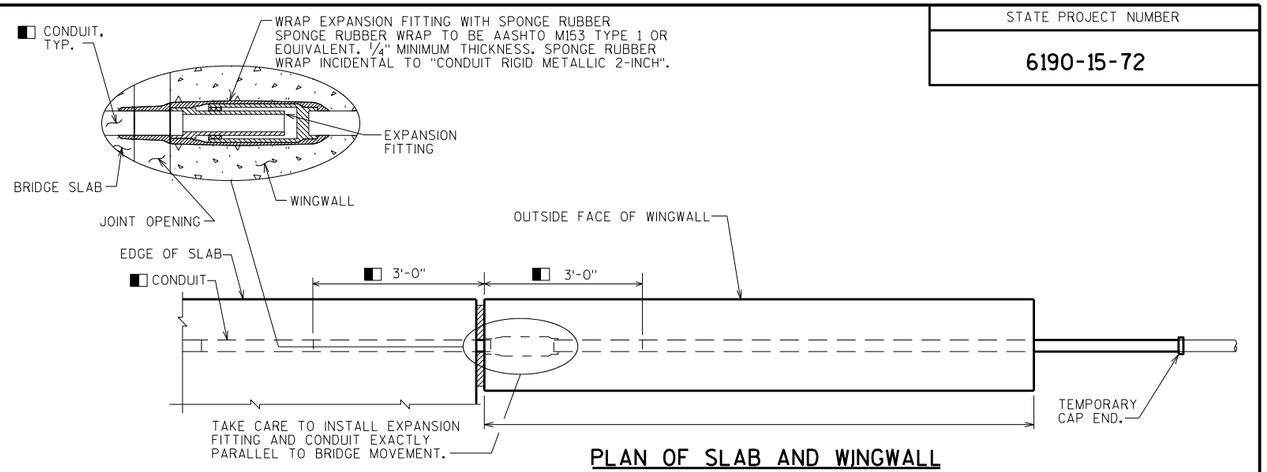
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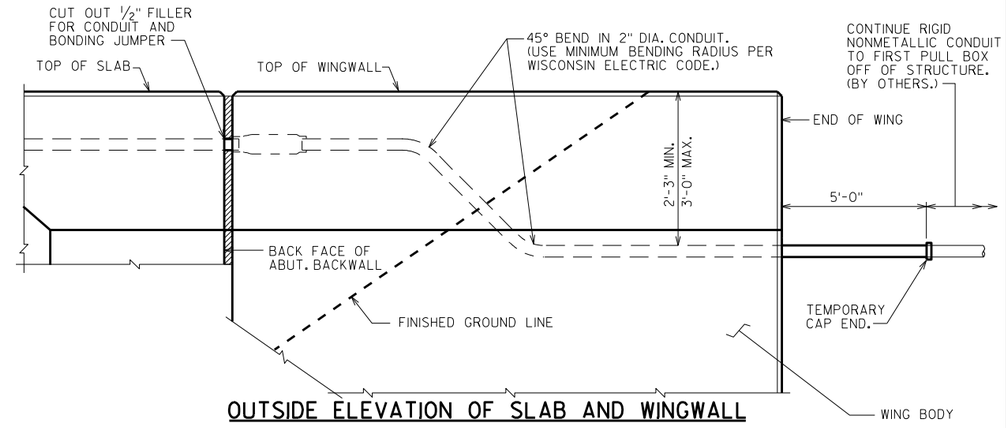
6190-15-72



SECTION THRU
SLAB EDGE



PLAN OF SLAB AND WINGWALL



OUTSIDE ELEVATION OF SLAB AND WINGWALL

■ USE 2" DIA. RIGID NONMETALLIC CONDUIT EXCEPT AT EXPANSION FITTING, USE RIGID METALLIC CONDUIT 3'-0" INTO THE SLAB AND WING SIDES OF THE JOINT OPENING.

NOTES

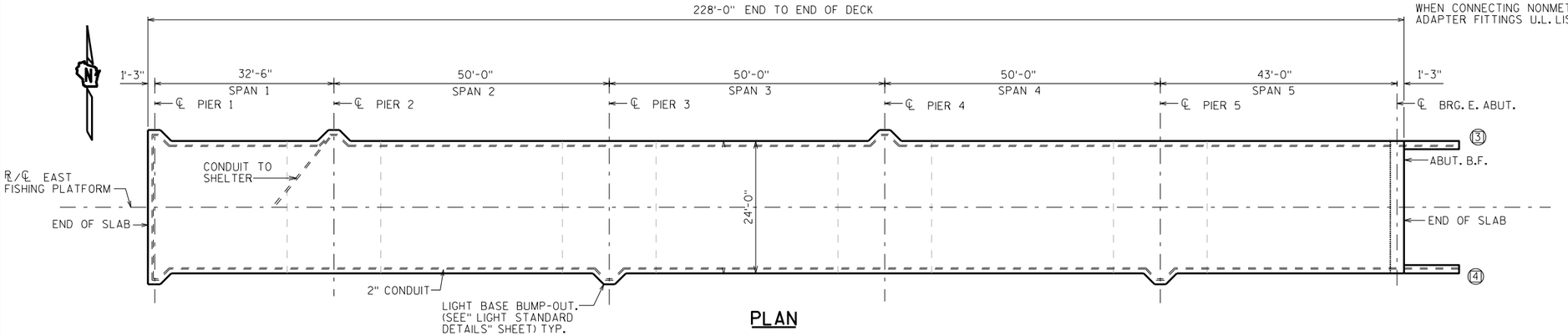
BID ITEMS SHALL BE:

"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH"

APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER (4" TOTAL CONDUIT MOVEMENT).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.



PLAN

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CONDUIT DETAILS

SHEET 19

333

SCALE =

PPTAELEC
7-13

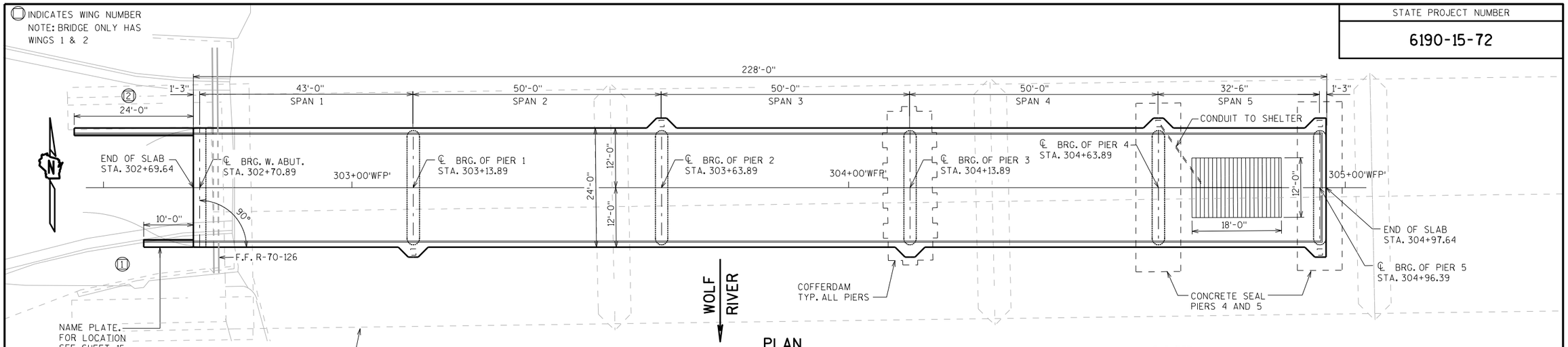
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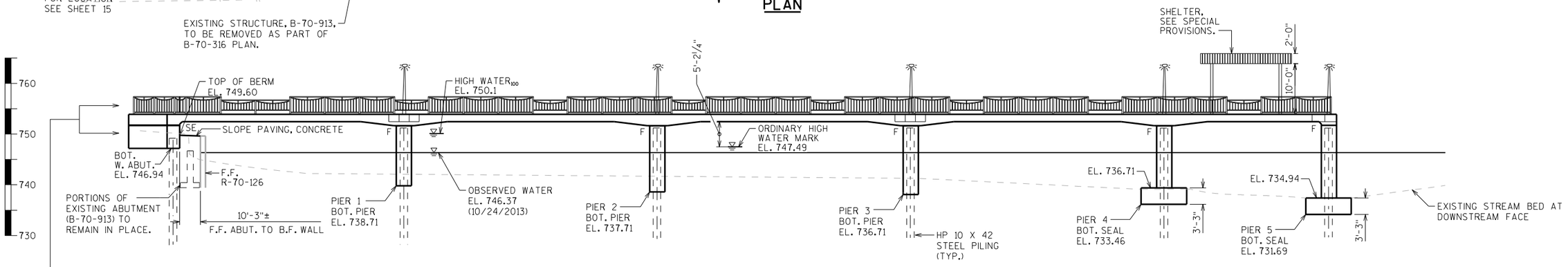
STATE PROJECT NUMBER

6190-15-72

INDICATES WING NUMBER
NOTE: BRIDGE ONLY HAS WINGS 1 & 2

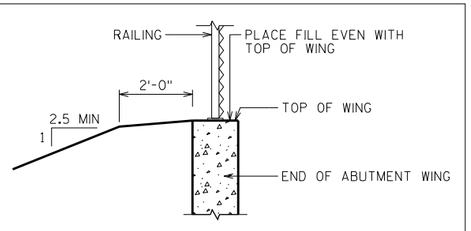


PLAN



ELEVATION

LOOKING UPSTREAM/NORTH



TYPICAL FILL SECTION AT WING TIPS

DESIGN DATA

LIVE LOAD:

DESIGN LOADING; PEDESTRAIN LIVE LOAD 90 PSF
DESIGN LOADING; VEHICLE LOAD = H10

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY SLAB — f'c = 4,000 P.S.I. ALL OTHER f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.

HYDRAULIC DATA

Q_{100} =22,840 C.F.S.
VEL. = 2.9 F.P.S.
HW.= EL. 750.11
WATERWAY AREA= 7,788 SQ. FT.
DRAINAGE AREA= 3,314 SQ. MI.
ROAD OVERTOPPING = NA
SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY
Q_2 =7,090 C.F.S.
$HW._2$= EL. 747.46

FOUNDATION DATA

ABUTMENT TO BE SUPPORTED ON HP 10 X 42-INCH STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 100 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 50 FEET LONG. PILE POINTS REQ'D.

PIERS TO BE SUPPORTED ON HP 10 X 42-INCH STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 60 FEET LONG. PILE POINTS REQ'D.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT
5. WEST ABUTMENT DETAILS
6. PIER 1
7. PIER 2
8. PIER 3
9. PIER 4
10. PIER 5
11. SUPERSTRUCTURE
12. SUPERSTRUCTURE DETAILS 1
13. SUPERSTRUCTURE DETAILS 2
14. SUPERSTRUCTURE DETAILS 3
15. COMBINATION RAILING TYPE C5 "MODIFIED"
16. COMBINATION RAILING TYPE C5 "MODIFIED" DETAILS
17. LIGHT STANDARD DETAILS
18. RAILING LAYOUT
19. CONDUIT DETAILS

STRUCTURE DESIGN CONTACTS:
TIM BOROWSKI (608) 266-4547
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS 3/20/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-70-322

WEST FISHING PLATFORM OVER THE WOLF RIVER

COUNTY	~~TOWN/CITY~~/VILLAGE
WINNEBAGO	WINNECONNE

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
TAB	CAD	WWR	TAB

GENERAL PLAN

SHEET 1 OF 19

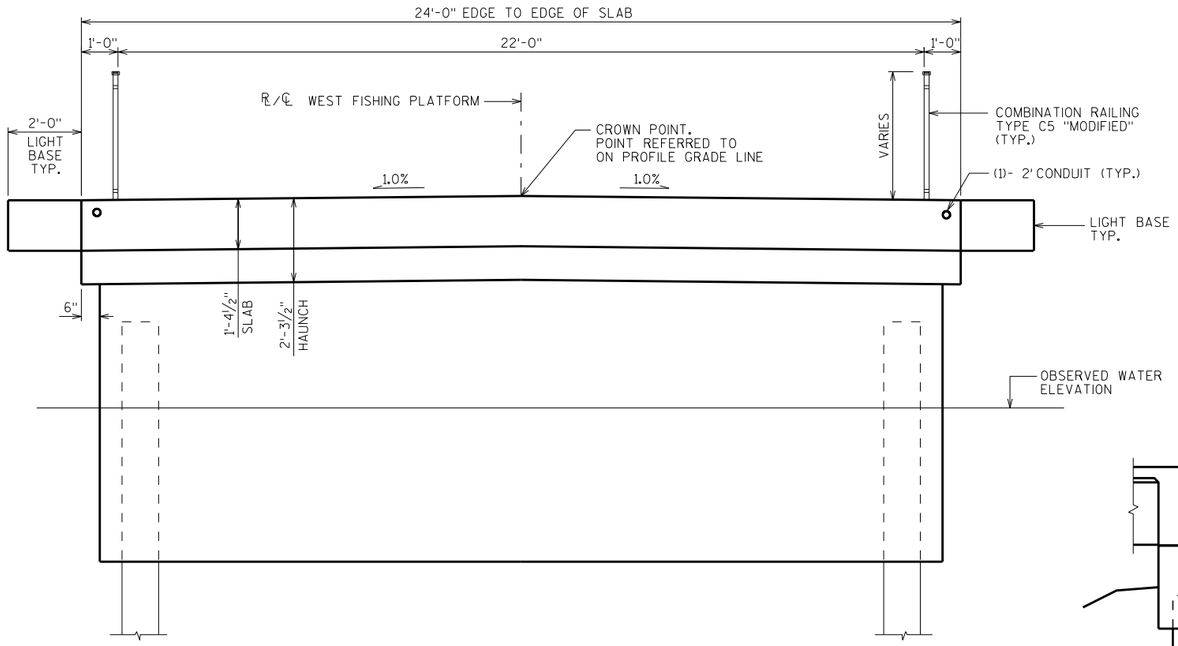
334

I.D. 6190-15-01C DATE: FEB. 2017

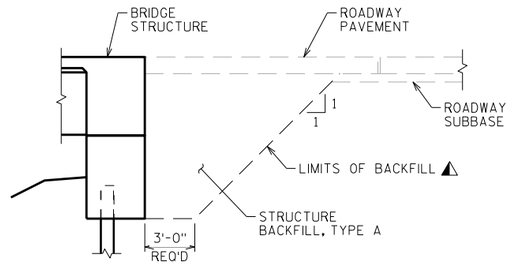
SCALE = 10.00

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CROSS SECTION THRU EAST FISHING PLATFORM LOOKING EAST



TYPICAL SECTION THRU ABUTMENT

(A1 ABUTMENT WITHOUT STRUCTURAL APPROACH)

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

STATE PROJECT NUMBER

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GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

THE QUANTITY FOR "BACKFILL STRUCTURE TYPE A" IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF SLAB SURFACES, VERTICAL SLAB EDGE AND EXTERIOR 1'-0" OF SLAB UNDERSIDE.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

THE EXISTING STREAM BED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

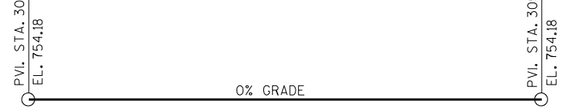
COFFERDAMS ARE REQUIRED AT ALL PIER LOCATIONS.

AT PIERS 1-3, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH STANDARD SPEC 502.3.5.3.

AT PIERS 4-5, COFFERDAMS SHALL BE DEWATERED BEFORE PLACING PIER CONCRETE.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	WEST ABUTMENT	PIER 1	PIER 2	PIER 3	PIER 4	PIER 5	CATEGORY 0100	TOTALS
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-70-322	LS	———	———	———	———	———	———	———	———	1
206.5000	COFFERDAMS B-70-322	LS	———	———	———	———	———	———	———	———	1
210.1500	BACKFILL STRUCTURE TYPE A	TONS	———	160	———	———	———	———	———	———	160
501.1000.S	ICE HOT WEATHER CONCRETING	LB	2380	250	200	215	235	235	260	———	3775
502.0100	CONCRETE MASONRY BRIDGES	CY	317	33	27	29	31	31	35	———	503
502.1100	CONCRETE MASONRY SEAL	CY	———	———	———	———	———	30	30	———	60
502.3200	PROTECTIVE SURFACE TREATMENT	SY	745	———	———	———	———	———	———	———	745
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	———	1600	1320	1420	1510	1510	1700	———	9060
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	49,875	2010	———	———	———	———	———	———	51,885
513.8026	RAILING STEEL PEDESTRIAN TYPE C5 B-70-322	LF	477	33	———	———	———	———	———	———	510
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	10	———	———	———	———	———	———	10
550.0500	PILE POINTS	EACH	———	5	5	5	5	5	5	———	30
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	———	250	300	300	300	300	300	———	1750
604.0400	SLOPE PAVING CONCRETE	SY	———	32	———	———	———	———	———	———	32
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	65	———	———	———	———	———	———	65
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	6	6	———	———	———	———	———	———	12
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	500	40	———	———	———	———	———	———	540
657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	6	———	———	———	———	———	———	———	6
SPV.0035	HAULING STRUCTURE EXCAVATION	CY	———	———	20	29	29	31	31	———	140
SPV.0060	FABRICATED STEEL SHELTER	EACH	———	———	———	———	———	———	———	1	1
	NON-BID ITEMS										
	FILLER	SIZE	———	———	———	———	———	———	———		½", ¾"



PROFILE GRADE LINE WFP

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-322

DRAWN BY WWR | PLANS CK'D. TAB

CROSS SECTION & QUANTITIES

SHEET 2

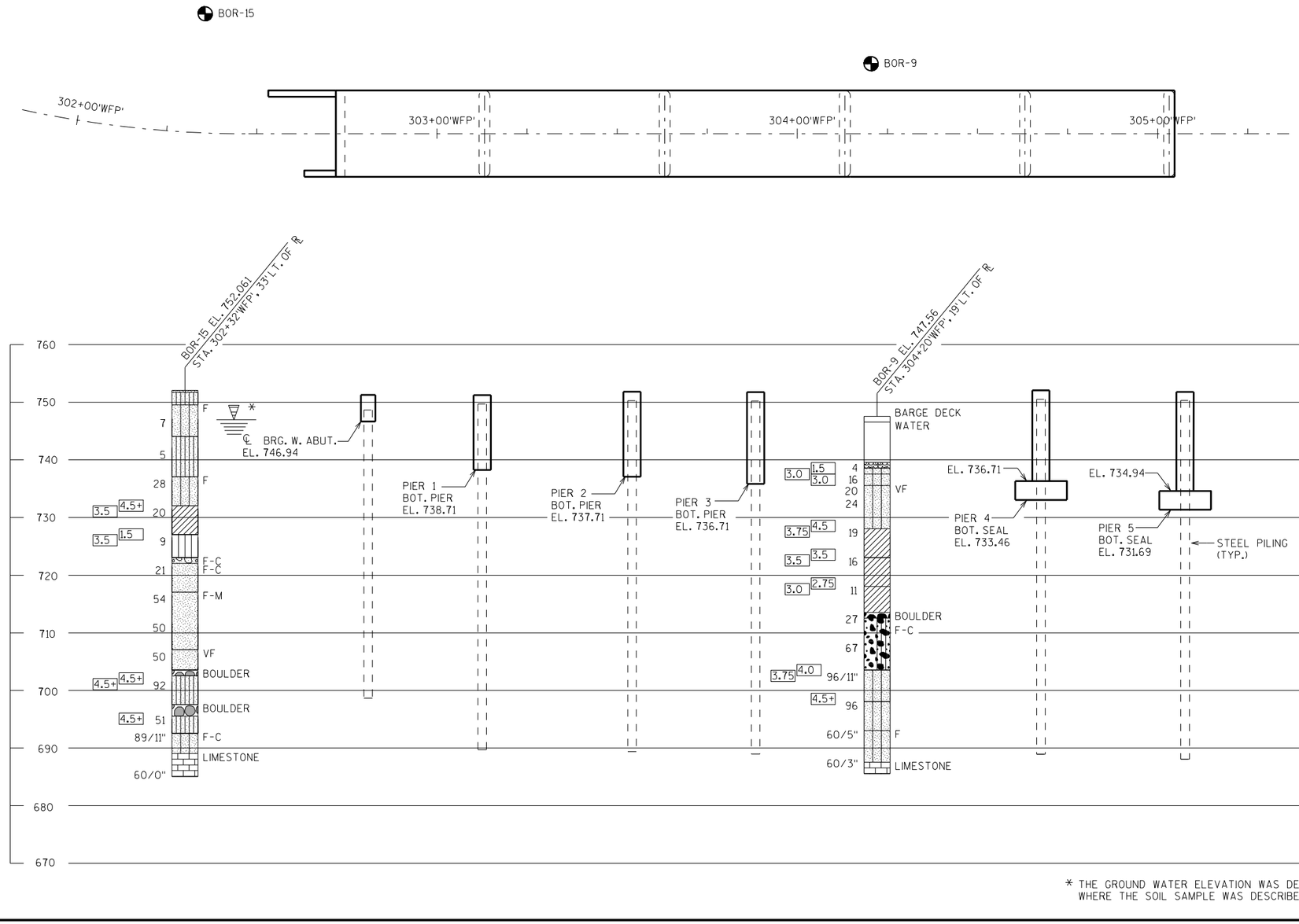
335

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SCALE =

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
9	10/14/2015	507266.177	747619.937
15	5/25/2016	507281.512	747435.238
BORINGS COMPLETED BY: WISDOT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) WINNEBAGO COUNTY			



* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

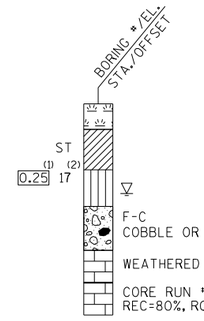
STATE PROJECT NUMBER

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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
STRUCTURES DESIGN SECTION

STRUCTURE B-70-322

DRAWN BY WWR | PLANS CK'D. TAB

SUBSURFACE EXPLORATION

SHEET 3

336

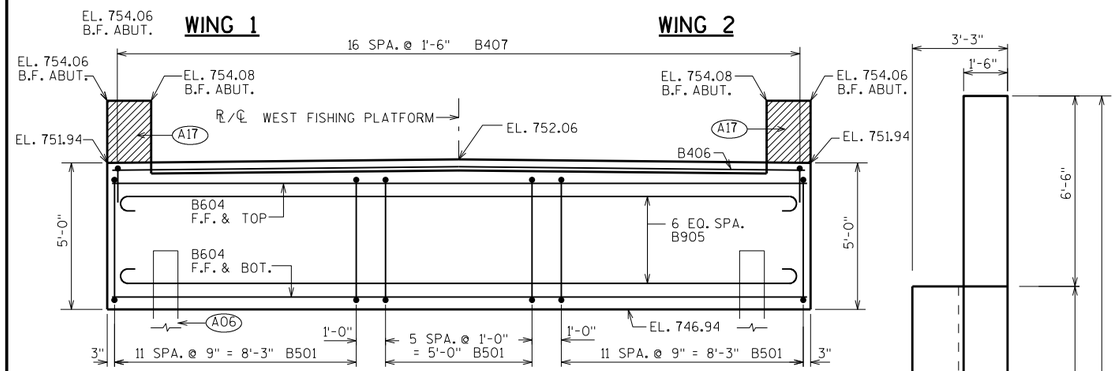
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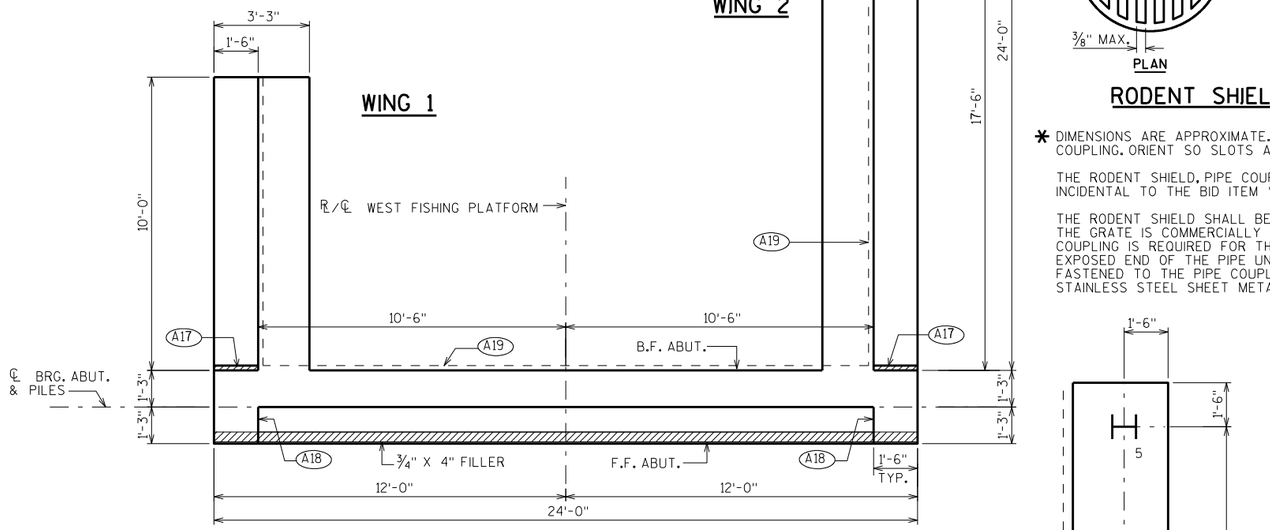
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STATE PROJECT NUMBER

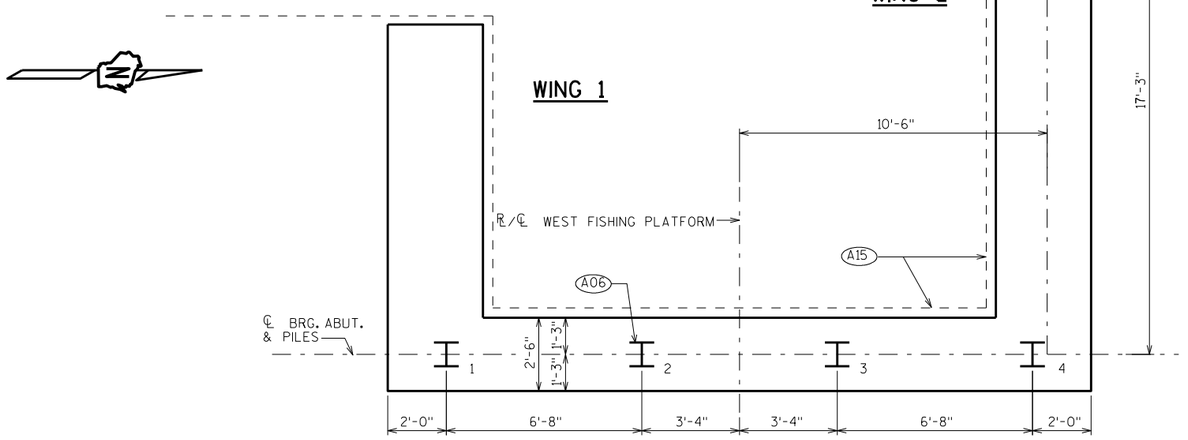
6190-15-72



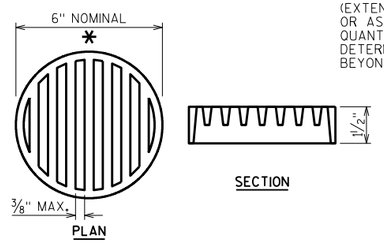
ELEVATION



PLAN



PILE PLAN

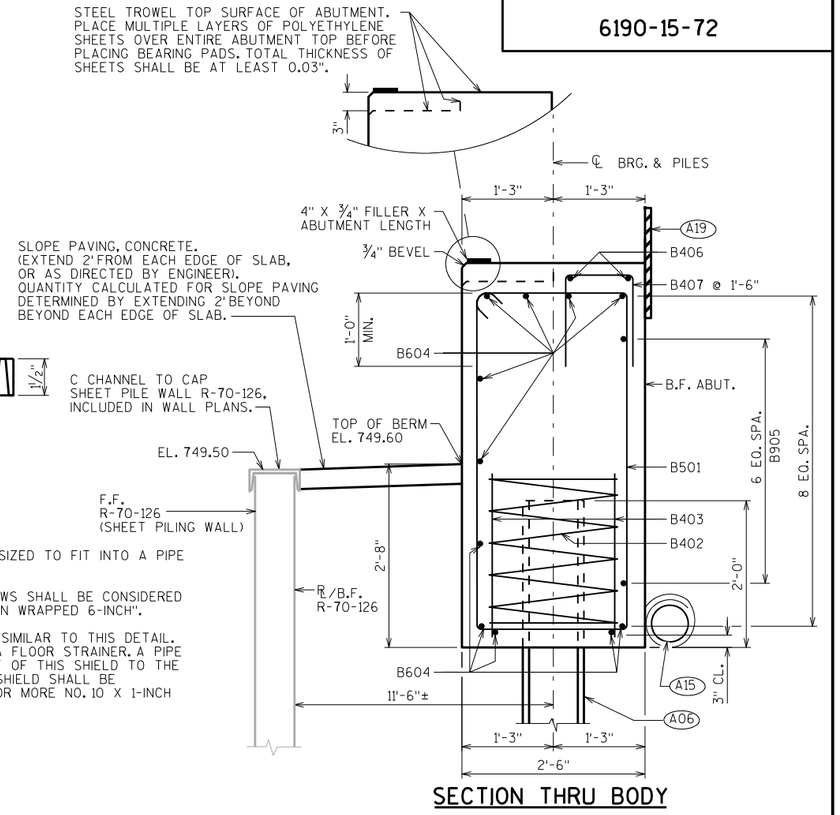


RODENT SHIELD DETAIL

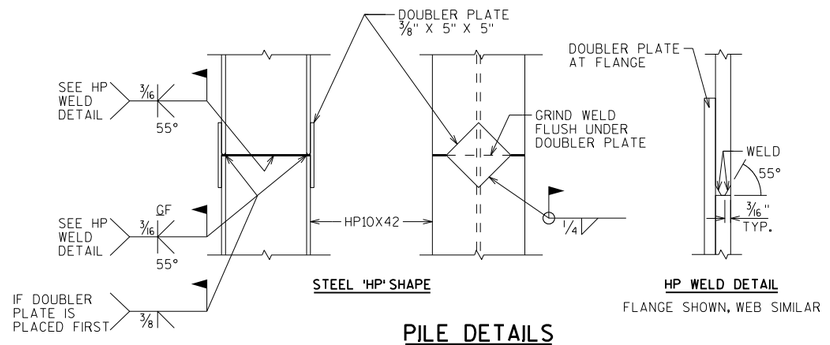
* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHEMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



SECTION THRU BODY



PILE DETAILS

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 50'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE. PILE POINTS REQ'D.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH EDGE OF SLAB.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-322

DRAWN BY WWR | PLANS CK'D. TAB

WEST ABUTMENT

SHEET 4

337

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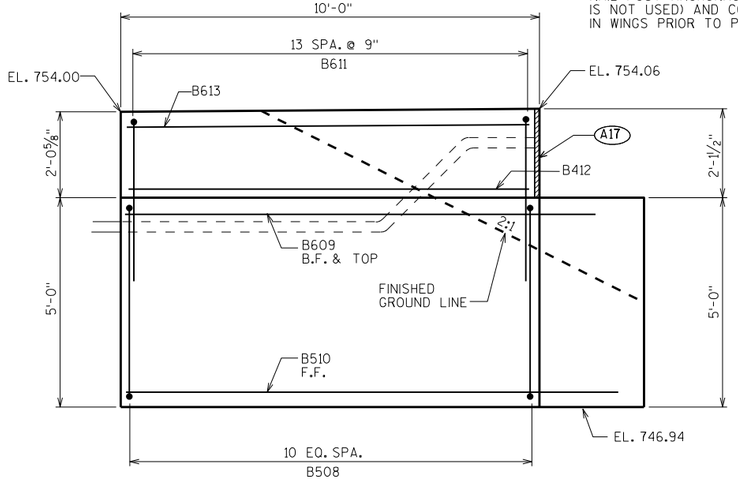
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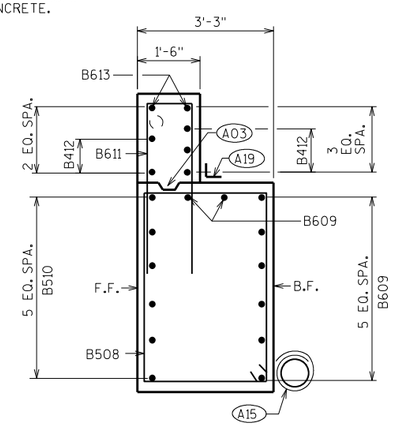
STATE PROJECT NUMBER

6190-15-72

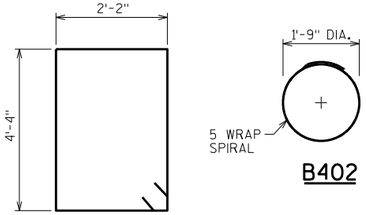
NOTE:
RAIL POST ANCHORAGE (IF ALTERNATE ANCHORAGE IS NOT USED) AND CONDUIT TO BE PLACED IN WINGS PRIOR TO POURING CONCRETE.



WING 1 ELEVATION

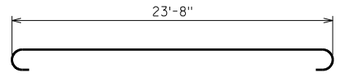


WING 1 SECTION

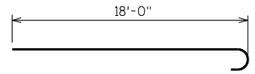


B501

B402



B905

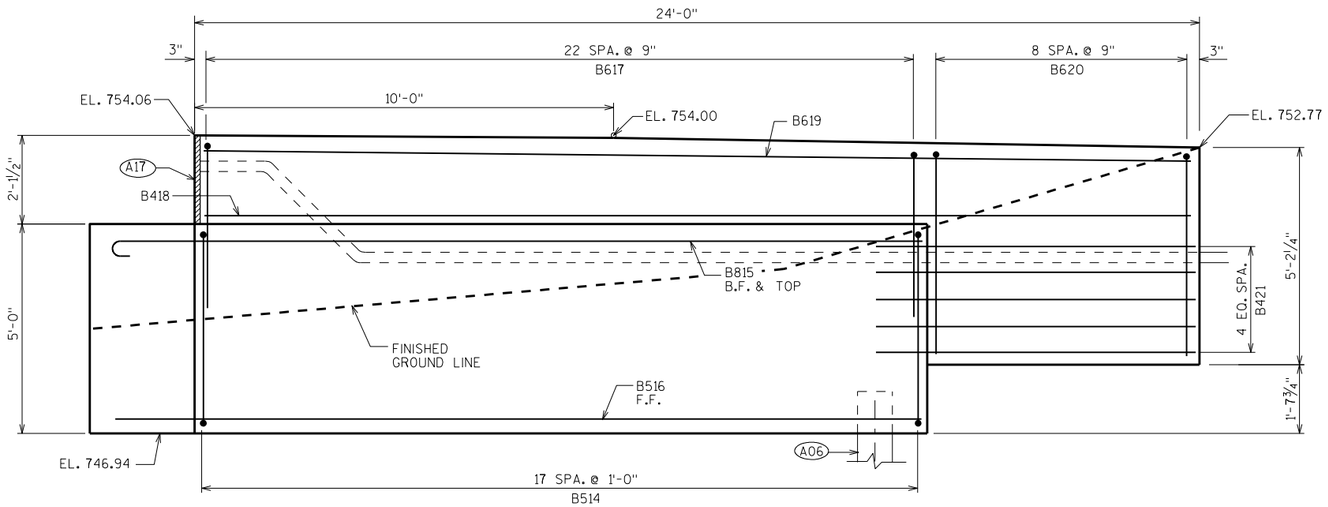


B815

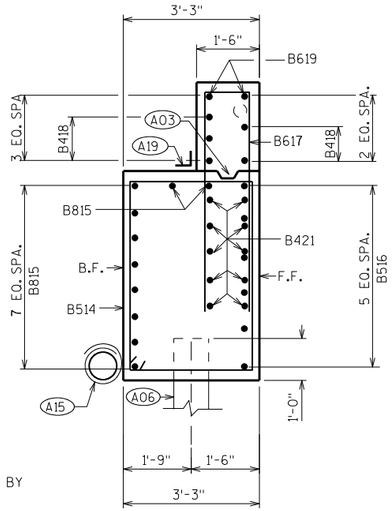
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

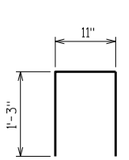
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		30	13'-8"	X		BODY-STIRRUP
B402		4	28'-0"	X		BODY-1 PER PILE
B403		8	2'-3"			BODY-2 PER PILE
B604		11	23'-8"			BODY-HORIZ.
B905		7	26'-2"	X		BODY-HORIZ.
B406		2	23'-8"			BODY-HORIZ.-TOP
B407		17	3'-2"	X		BODY-VERT.-TOP
B508	X	11	15'-6"	X		WING BODY 1 - STIRRUP
B609	X	8	12'-0"			WING BODY 1
B510	X	6	12'-2"			WING BODY 1
B611	X	14	5'-2"	X		WING BODY/WALL 1
B412	X	5	9'-8"			WINGWALL 1
B613	X	2	9'-8"			WINGWALL 1 - TOP
B514	X	18	15'-6"	X		WING BODY 2 - STIRRUP
B815	X	10	18'-11"	X		WING BODY 2
B516	X	6	19'-8"			WING BODY 2
B617	X	23	5'-2"	X		WING BODY/WALL 2
B418	X	5	23'-8"			WINGWALL 2
B619	X	2	23'-8"			WINGWALL 2 - TOP
B620	X	9	10'-6"	X		WINGWALL 2
B421	X	10	8'-0"			WINGWALL 2



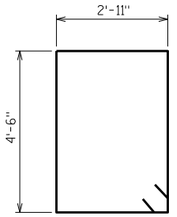
WING 2 ELEVATION



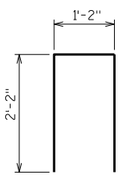
WING 2 SECTION



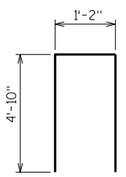
B407



B508, B514



B611, B617



B620

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 50'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 100 TONS PER PILE. PILE POINTS REQ'D.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

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WEST ABUTMENT DETAILS

SHEET 5

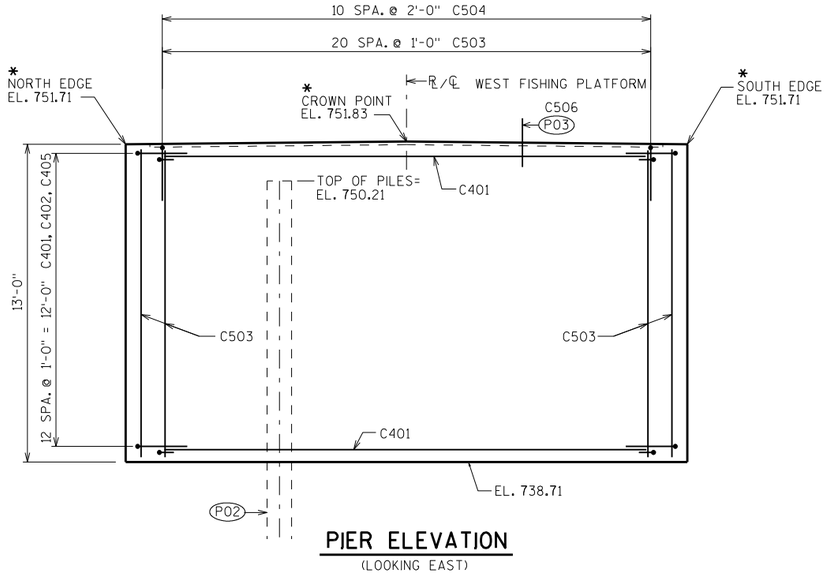
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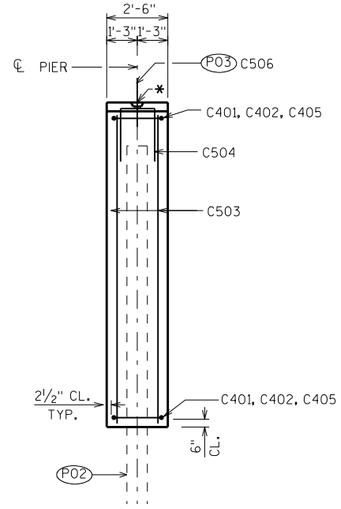
STATE PROJECT NUMBER

6190-15-72

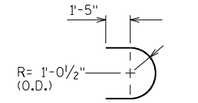


PIER ELEVATION

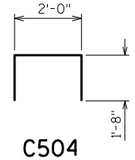
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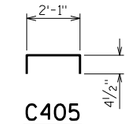
SECTION THRU PIER



C402



C504

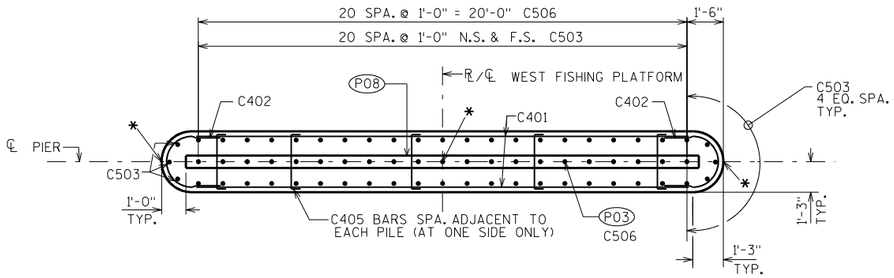


C405

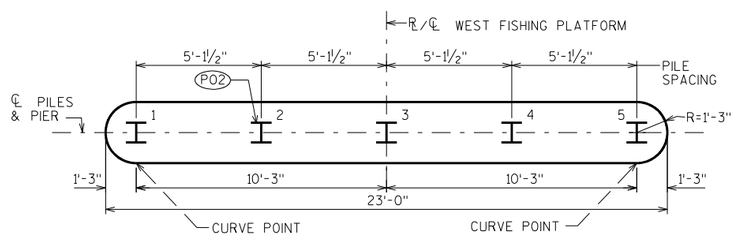
BILL OF BARS

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

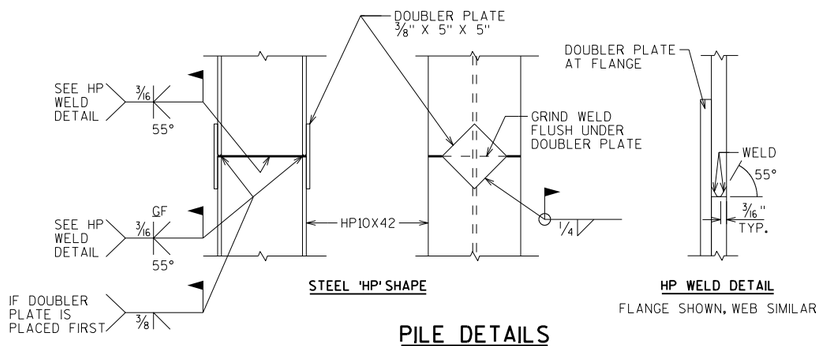
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
C401		26	20'-5"			SHAFT-HORIZ.
C402		26	6'-1"	X		SHAFT END U-BAR-HORIZ.
C503		48	12'-9"			SHAFT-VERT.
C504		11	5'-2"	X		SHAFT TOP U-BAR-VERT.
C405		65	2'-9"	X		SHAFT-HORIZ.
C506		21	2'-0"			SHAFT TOP-VERT.



PLAN



PILE PLAN



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

* INDICATES ELEVATION LOCATION AT TOP OF PIER. (SEE "SECTION THRU PIER" AND "PLAN" VIEW)

(P02) SUPPORT PIER ON HP 10 X 42 STEEL PILING, ESTIMATED 60'-0" LONG. & DRIVEN TO A MIN. BRG. VALUE OF 180 TONS PER PILE. PILE POINTS REQ'D.

(P03) C506 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P08) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 X 6.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-322

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PIER 1

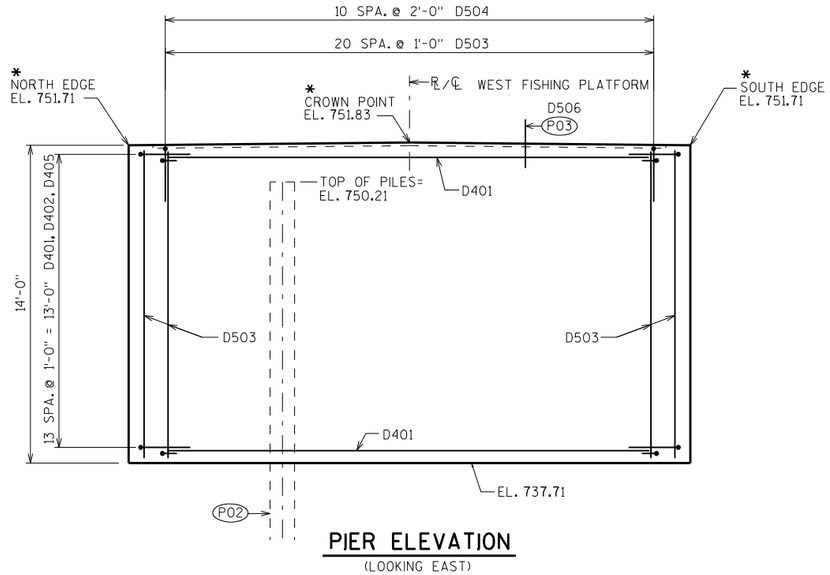
SHEET 6

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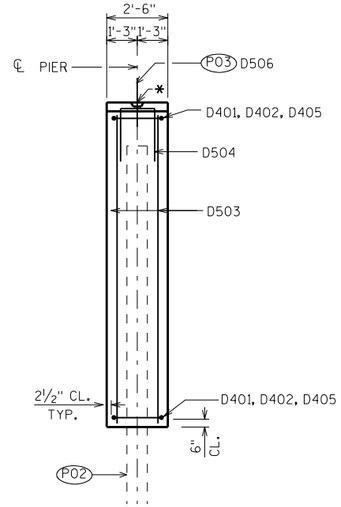
STATE PROJECT NUMBER

6190-15-72

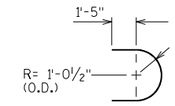


PIER ELEVATION

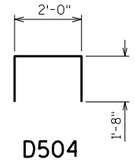
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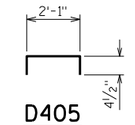
SECTION THRU PIER



D402



D504

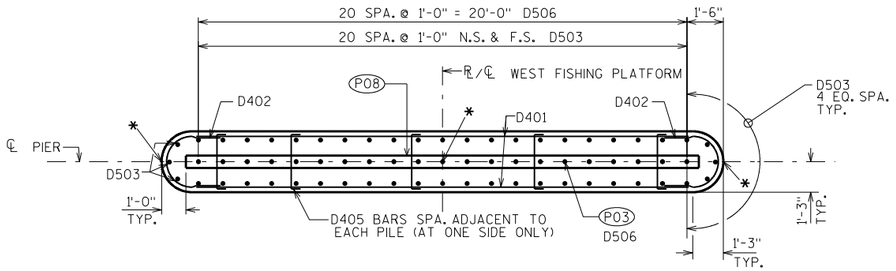


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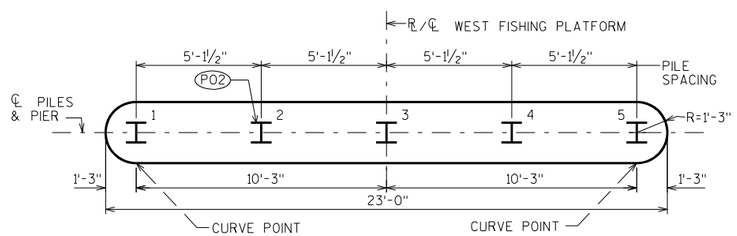
BILL OF BARS

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

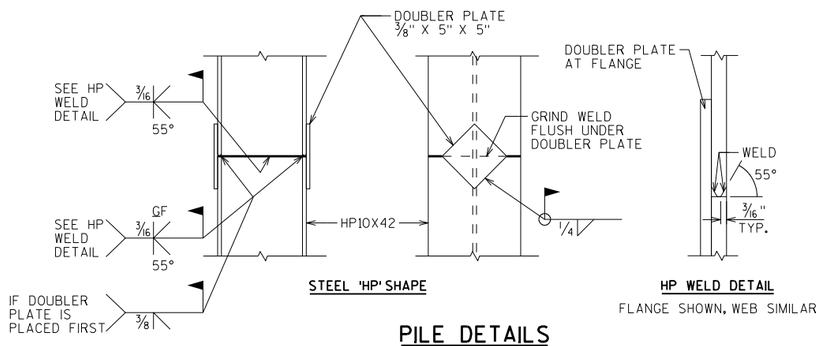
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
D401		28	20'-5"			SHAFT-HORIZ.
D402		28	6'-1"	X		SHAFT END U-BAR-HORIZ.
D503		48	13'-9"			SHAFT-VERT.
D504		11	5'-2"	X		SHAFT TOP U-BAR-VERT.
D405		70	2'-9"	X		SHAFT-HORIZ.
D506		21	2'-0"			SHAFT TOP-VERT.



PLAN



PILE PLAN



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

* INDICATES ELEVATION LOCATION AT TOP OF PIER. (SEE "SECTION THRU PIER" AND "PLAN" VIEW)

(P02) SUPPORT PIER ON HP 10 X 42 STEEL PILING. ESTIMATED 60'-0" LONG. & DRIVEN TO A MIN. BRG. VALUE OF 180 TONS PER PILE. PILE POINTS REQ'D.

(P03) D506 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P08) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 X 6.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

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PIER 2

SHEET 7

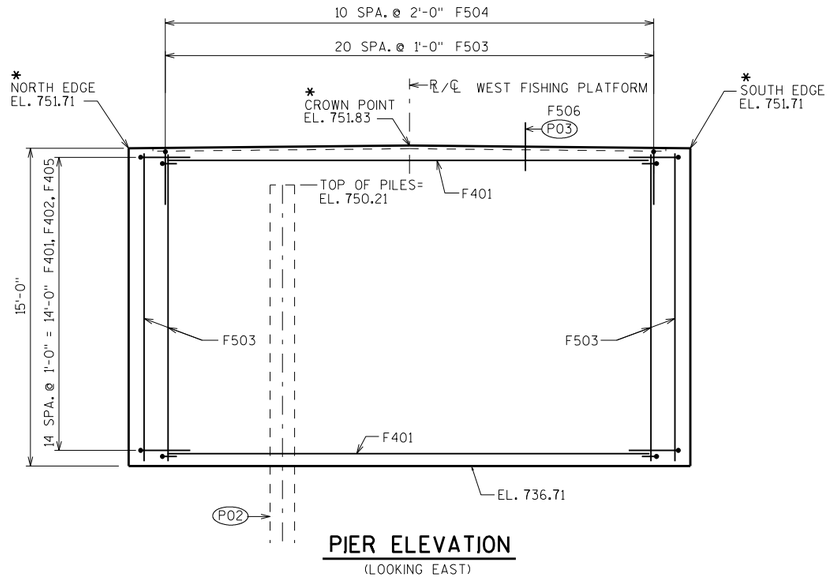
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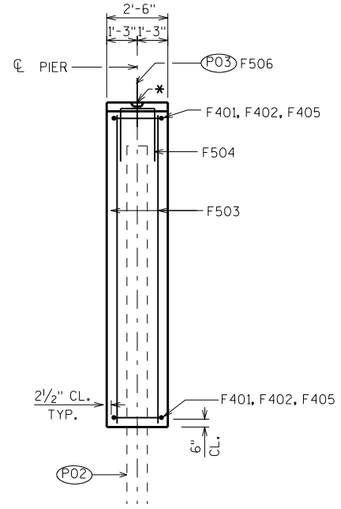
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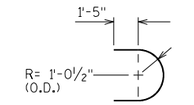
STATE PROJECT NUMBER
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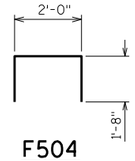
PIER ELEVATION
(LOOKING EAST)



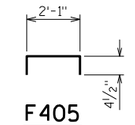
SECTION THRU PIER



F402



F504

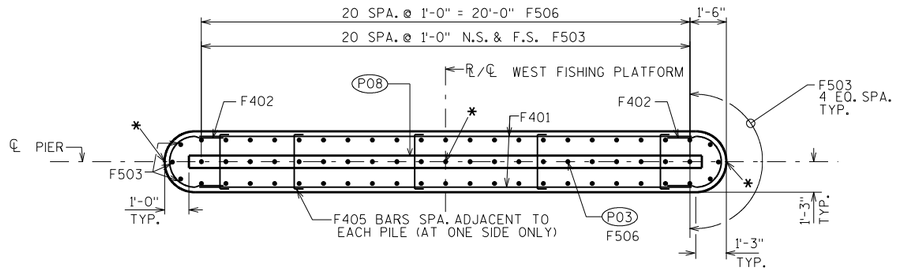


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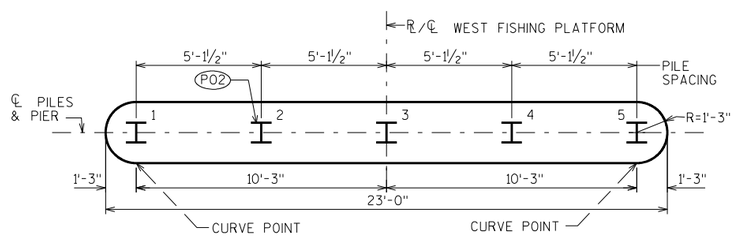
BILL OF BARS

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

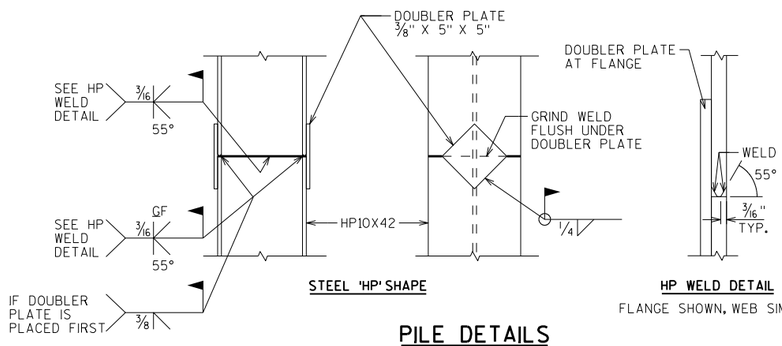
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
F401		30	20'-5"			SHAFT-HORIZ.
F402		30	6'-1"	X		SHAFT END U-BAR-HORIZ.
F503		48	14'-9"			SHAFT-VERT.
F504		11	5'-2"	X		SHAFT TOP U-BAR-VERT.
F405		75	2'-9"	X		SHAFT-HORIZ.
F506		21	2'-0"			SHAFT TOP-VERT.



PLAN



PILE PLAN



STEEL 'HP' SHAPE

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

* INDICATES ELEVATION LOCATION AT TOP OF PIER. (SEE "SECTION THRU PIER" AND "PLAN" VIEW)

(P02) SUPPORT PIER ON HP 10 X 42 STEEL PILING, ESTIMATED 60'-0" LONG. & DRIVEN TO A MIN. BRG. VALUE OF 180 TONS PER PILE. PILE POINTS REQ'D.

(P03) F506 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P08) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 X 6.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

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PIER 3

SHEET 8

341

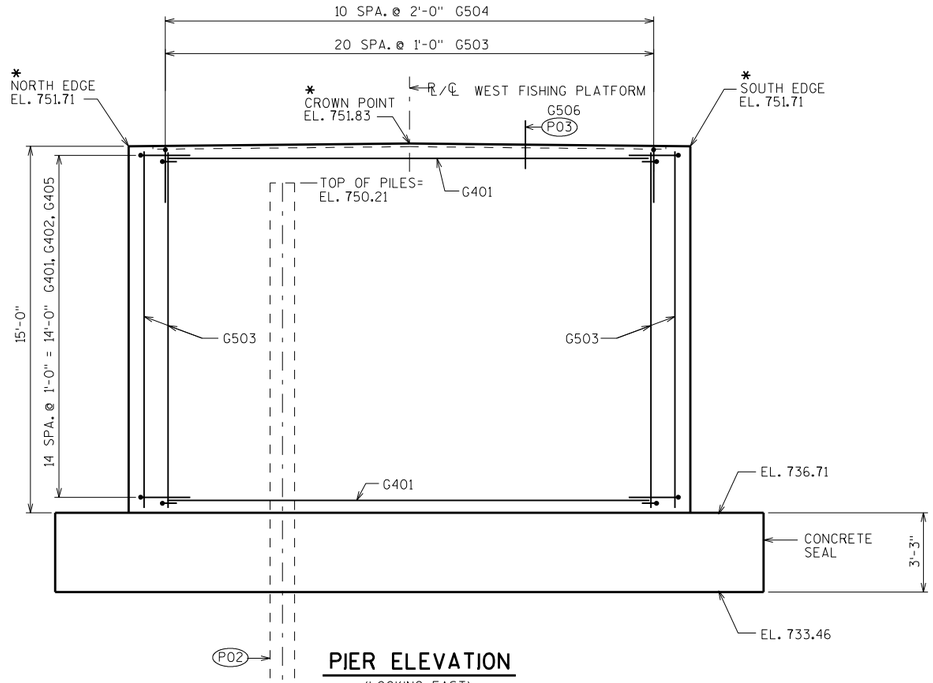
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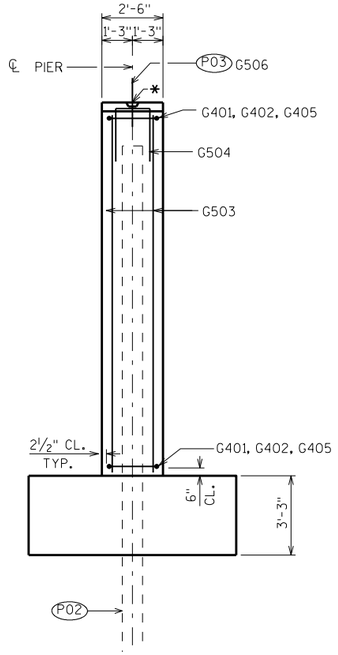
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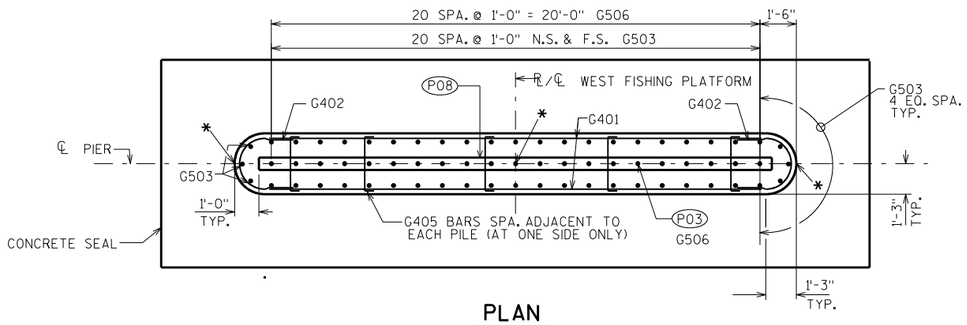


PIER ELEVATION

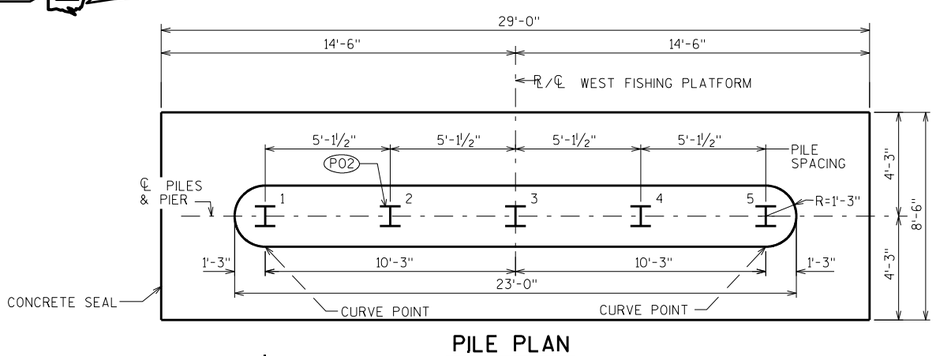
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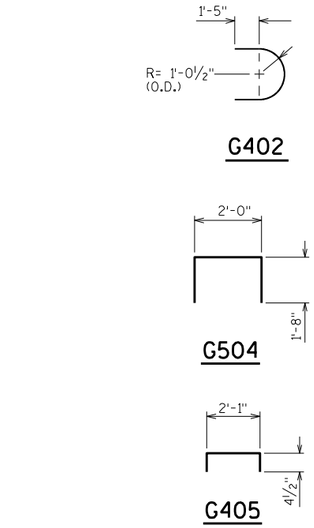
SECTION THRU PIER



PLAN



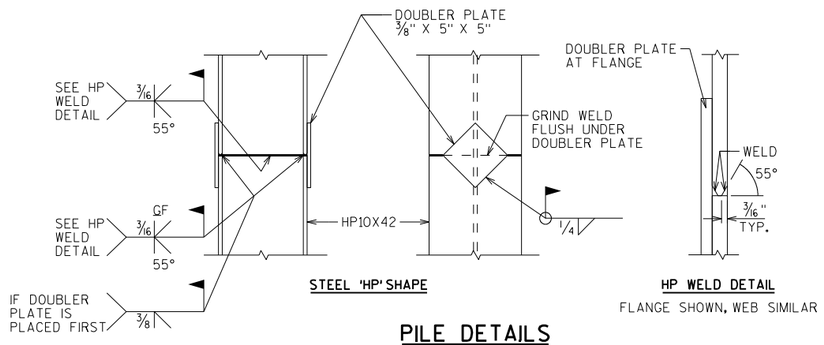
PILE PLAN



BILL OF BARS

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

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
G401		30	20'-5"			SHAFT-HORIZ.
G402		30	6'-1"	X		SHAFT END U-BAR-HORIZ.
G503		48	14'-9"			SHAFT-VERT.
G504		11	5'-2"	X		SHAFT TOP U-BAR-VERT.
G405		75	2'-9"	X		SHAFT-HORIZ.
G506		21	2'-0"			SHAFT TOP-VERT.



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

* INDICATES ELEVATION LOCATION AT TOP OF PIER. (SEE "SECTION THRU PIER" AND "PLAN" VIEW)

(P02) SUPPORT PIER ON HP 10 X 42 STEEL PILING, ESTIMATED 60'-0" LONG. & DRIVEN TO A MIN. BRG. VALUE OF 180 TONS PER PILE. PILE POINTS REQ'D.

(P03) G506 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P08) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 X 6.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-322

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PIER 4

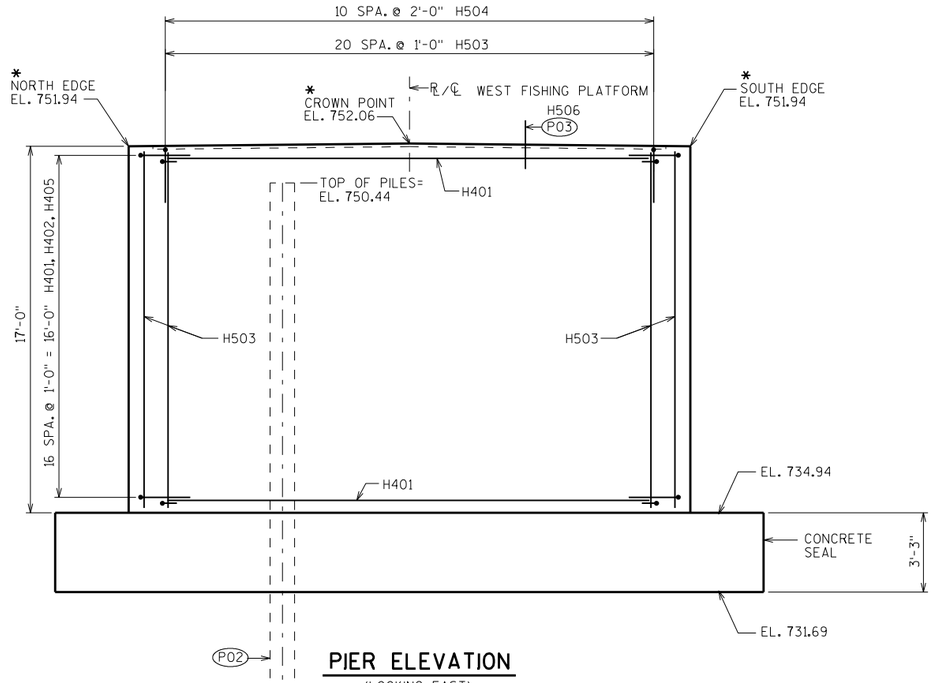
SHEET 9

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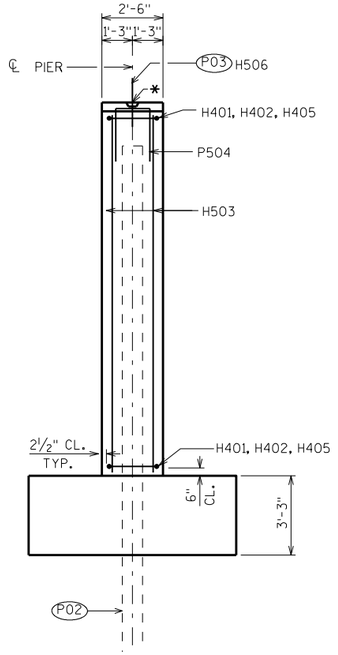
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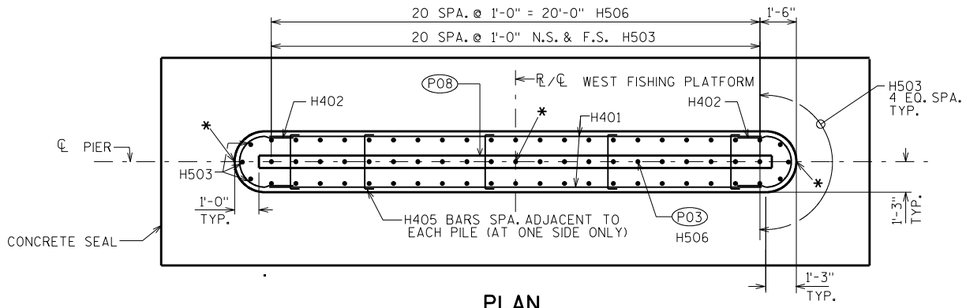
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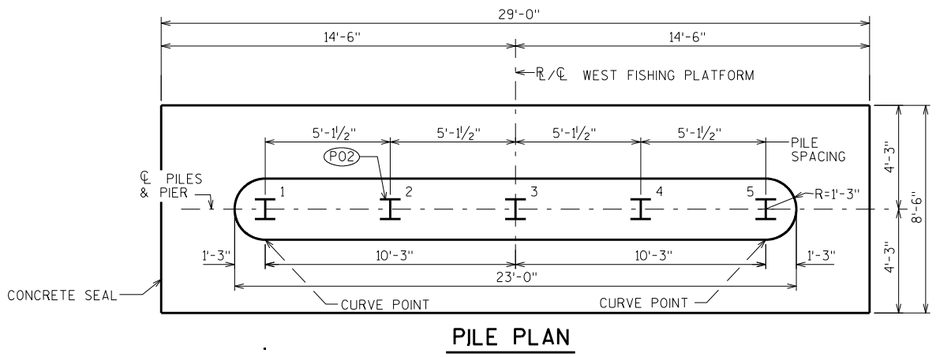
PIER ELEVATION
(LOOKING EAST)



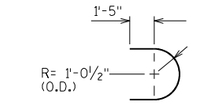
SECTION THRU PIER



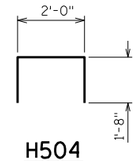
PLAN



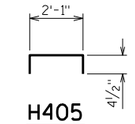
PILE PLAN



H402



H504

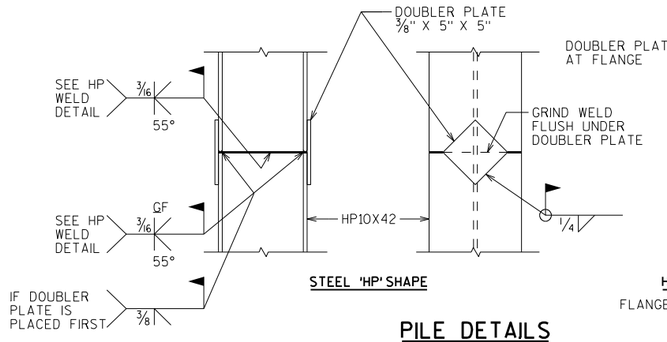


H405

BILL OF BARS

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

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
H401		34	20'-5"			SHAFT-HORIZ.
H402		34	6'-1"	X		SHAFT END U-BAR-HORIZ.
H503		48	16'-9"			SHAFT-VERT.
H504		11	5'-2"	X		SHAFT TOP U-BAR-VERT.
H405		85	2'-9"	X		SHAFT-HORIZ.
H506		21	2'-0"			SHAFT TOP-VERT.



STEEL 'HP' SHAPE

HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

* INDICATES ELEVATION LOCATION AT TOP OF PIER. (SEE "SECTION THRU PIER" AND "PLAN" VIEW)

(P02) SUPPORT PIER ON HP 10 X 42 STEEL PILING, ESTIMATED 60'-0" LONG. & DRIVEN TO A MIN. BRG. VALUE OF 180 TONS PER PILE. PILE POINTS REQ'D.

(P03) H506 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P08) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 X 6.

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PIER 5

SHEET 10

343

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8

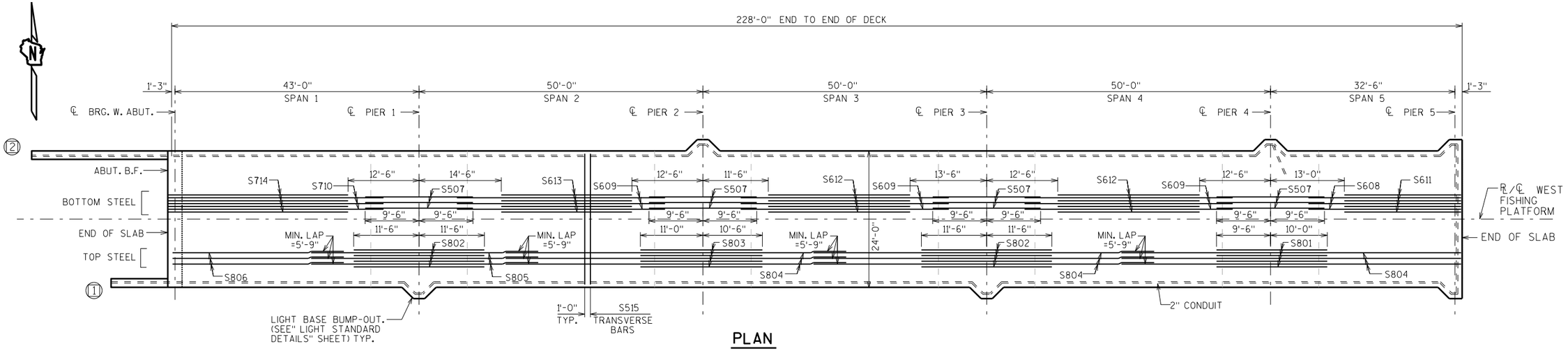
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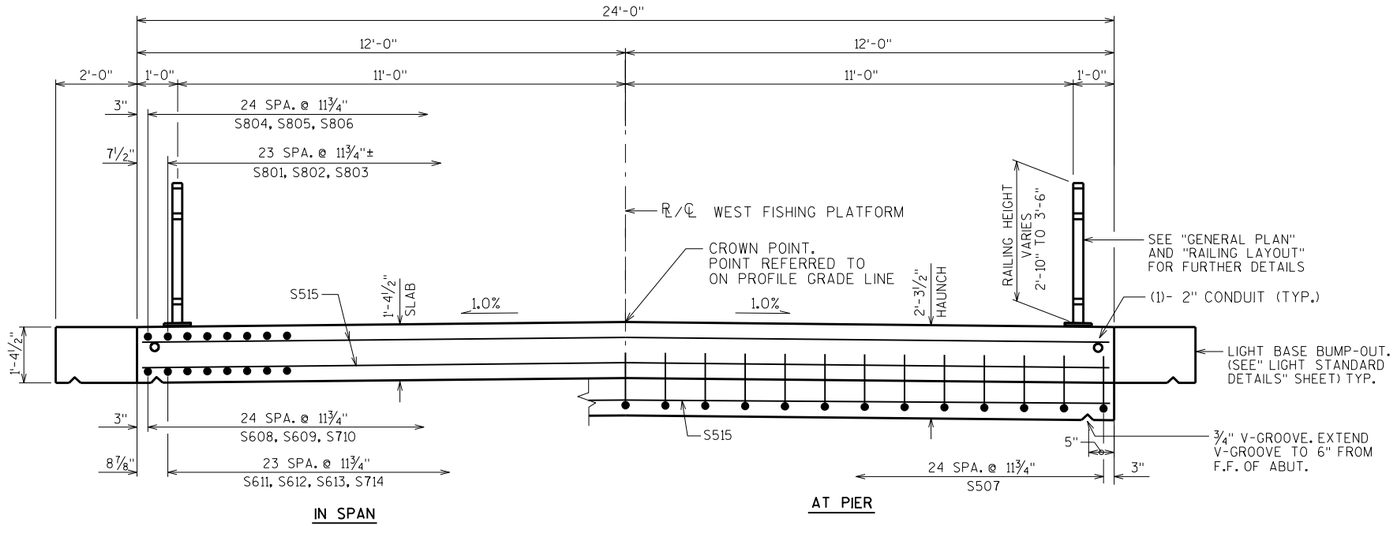
STATE PROJECT NUMBER

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INDICATES WING NUMBER



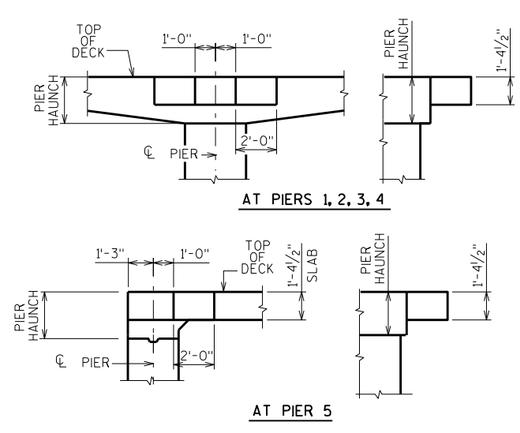
PLAN



IN SPAN

AT PIER

CROSS SECTION THRU PLATFORM LOOKING EAST



LIGHT BASE DIMENSION DETAILS IN SLAB

NOTE:

RAIL POST ANCORAGE, LIGHT BASE ANCHORAGE, AND CONDUIT TO BE PLACED IN SLAB PRIOR TO POURING CONCRETE. SEE "RAILING LAYOUT", "LIGHT STANDARD DETAILS" AND "WEST ABUTMENT DETAILS" SHEETS FOR FURTHER DETAILS.

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SUPERSTRUCTURE

SHEET 11

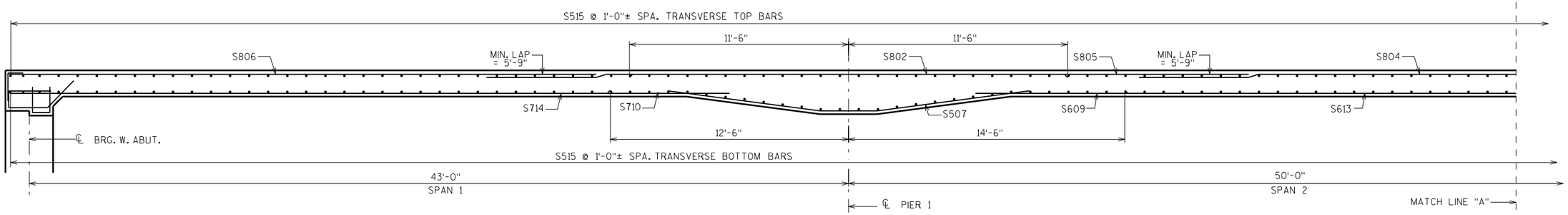
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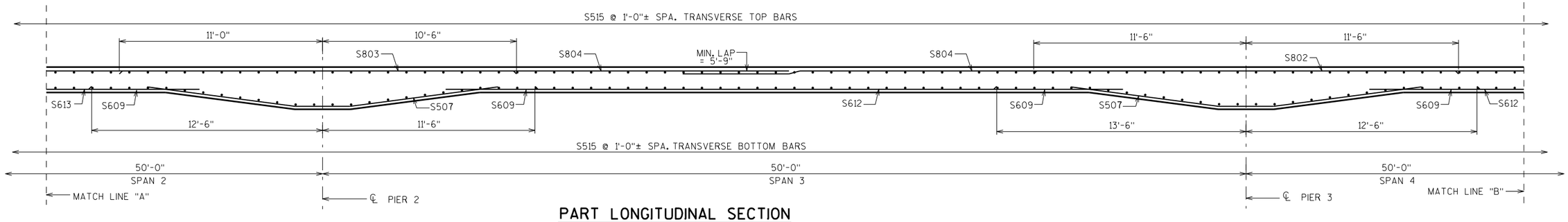
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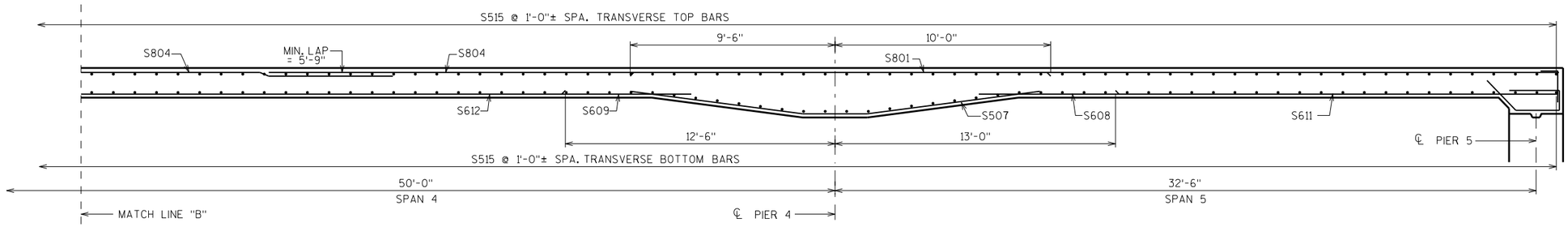
STATE PROJECT NUMBER
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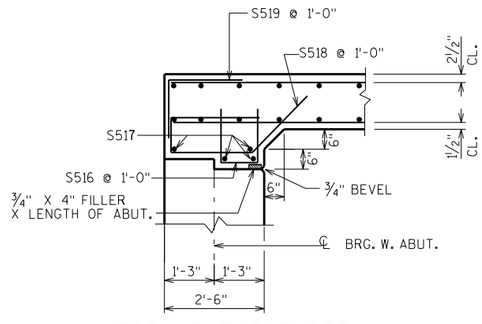
PART LONGITUDINAL SECTION



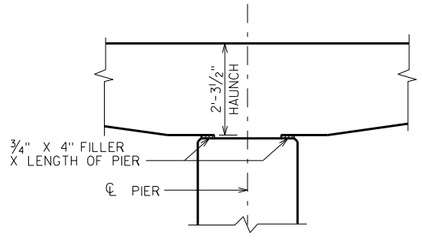
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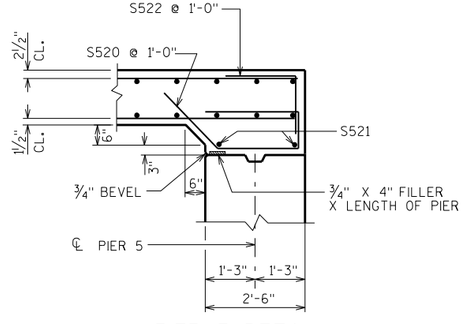
PART LONGITUDINAL SECTION



WEST ABUTMENT DETAIL



PIER DETAIL



PIER 5 DETAIL

8

8

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SUPERSTRUCTURE DETAILS 1

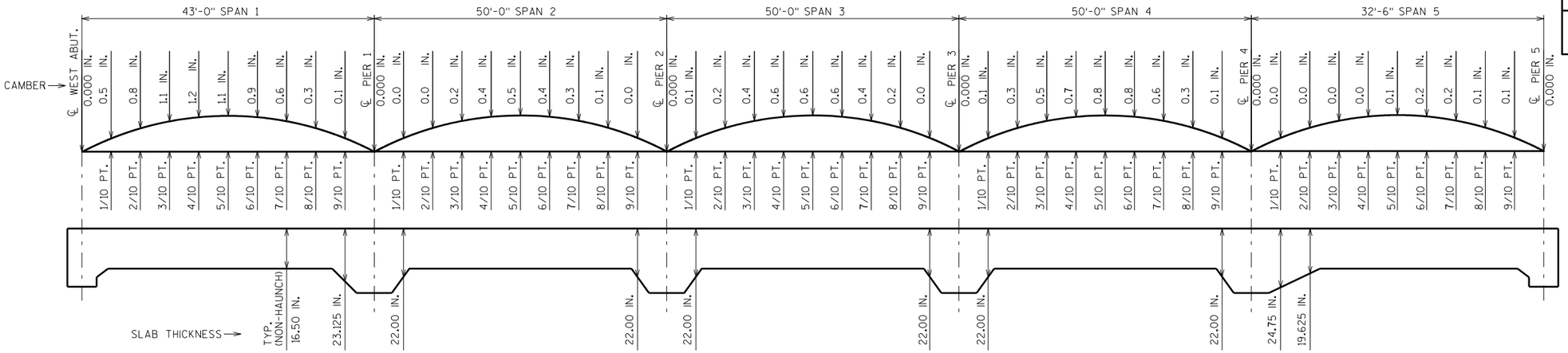
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CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

TOP OF SLAB ELEVATION AT FINAL GRADE
LESS (-) SLAB THICKNESS
PLUS (+) CAMBER
PLUS (+) FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS = TOP OF SLAB FALSEWORK ELEVATION.

SURVEY TOP OF SLAB ELEVATIONS

	W. ABUT.	5/10 PT.	PIER 1	5/10 PT.	PIER 2	5/10 PT.	PIER 3	5/10 PT.	PIER 4	5/10 PT.	PIER 5
N. EDGE											
CROWN OR ℄											
S. EDGE											

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF DECK ELEVATIONS AT THE ℄ OF ABUTMENTS, THE ℄ OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF SLAB AND CROWN OR ℄. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

TOP OF SLAB ELEVATIONS

	℄ BRG. W. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 2
N. EDGE OF SLAB	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06
CROWN OR ℄	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18
S. EDGE OF SLAB	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06

℄ PIER 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 3	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 4
754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06
754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18
754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06

℄ PIER 4	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 5
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754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18	754.18
754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06	754.06

NOTES

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIAMTELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

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SUPERSTRUCTURE DETAILS 2

SHEET 13

346

SLABCAMBER
7-13

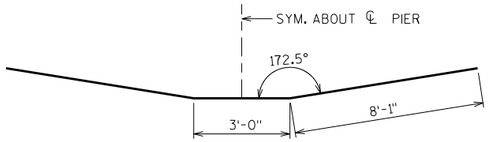
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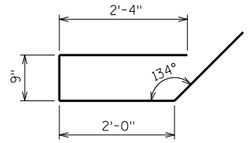
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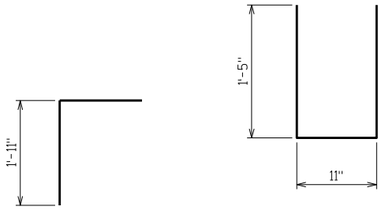
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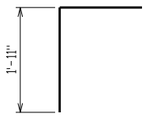
S507



S518, S520



S516



S519, S522

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S801	X	24	19'-6"			DECK LONGIT.-TOP PIER 4
S802	X	48	23'-0"			DECK LONGIT.-TOP PIER 1 & 3
S803	X	24	21'-6"			DECK LONGIT.-TOP PIER 2
S804	X	75	60'-0"			DECK LONGIT.-TOP
S805	X	25	40'-0"			DECK LONGIT.-TOP
S806	X	25	30'-10"			DECK LONGIT.-TOP
S507	X	100	19'-2"	X		DECK LONGIT.- BOT.-PIER 1,2,3,4
S608	X	25	26'-11			DECK LONGIT.-BOT.
S609	X	75	36'-8"			DECK LONGIT.-BOT.-SPANS 2,3,4
S710	X	25	38'-0"			DECK LONGIT.-BOT.-SPANS 1
S611	X	24	20'-7"			DECK LONGIT.-BOT.-SPAN 5
S612	X	48	25'-0"			DECK LONGIT.-BOT.-SPAN 3 & 4
S613	X	24	23'-0"			DECK LONGIT.-BOT.-SPAN 2
S714	X	24	31'-9"			DECK LONGIT.-BOT.-SPAN 1
S515	X	458	23'-8"			DECK-TRANSVERSE-TOP & BOT.
S516	X	25	3'-6"	X		ABUT.DIAPH.
S517	X	4	23'-8"			ABUT.DIAPH.
S518	X	25	6'-9"	X		ABUT.DIAPH.
S519	X	25	3'-5"	X		ABUT.DIAPH.
S520	X	25	6'-9"	X		PIER 5 DIAPH.
S521	X	2	23'-8"			PIER 5 DIAPH.
S522	X	25	3'-5"	X		PIER 5 DIAPH.

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SUPERSTRUCTURE DETAILS 3

SHEET 14

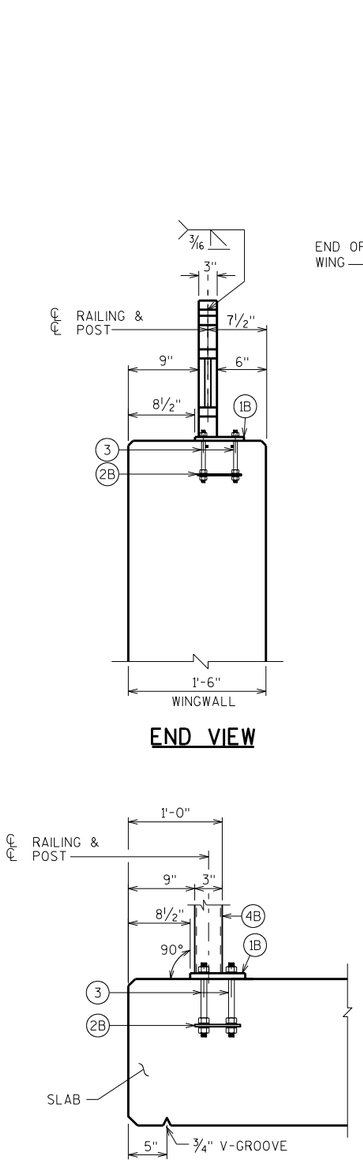
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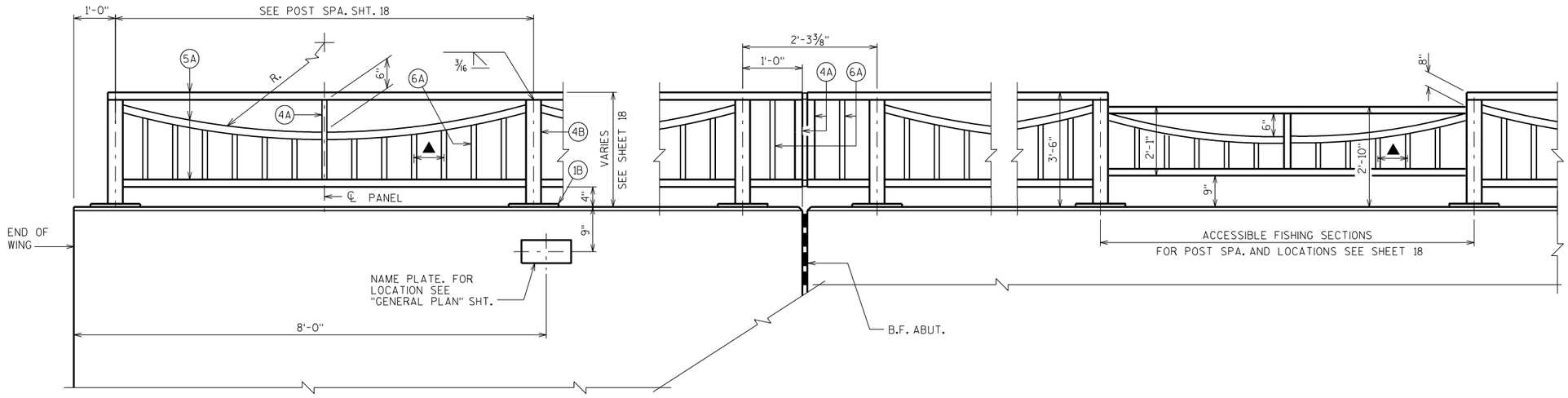
6190-15-72

END VIEW



SECTION THRU RAILING ON BRIDGE

ADJUST LOCATIONS OF BARS TO ALLOW PLACEMENT OF ANCHOR ASSEMBLY FOR RAILING.



ELEVATION OF RAILING

WING 1 SHOWN. WING 2 SIMILAR

▲
- 5 5/8" STD. PANEL
- 5 1/8" PANELS ALONG END OF BRIDGE
- 5 3/4" WING 1 PANELS
- 5 1/4" WING 2 PANELS

NOTE:
SEE SHEET 16 FOR STEEL RAILING LEGEND.

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COMBINATION RAIL TYPE C5 "MODIFIED"

SHEET 15

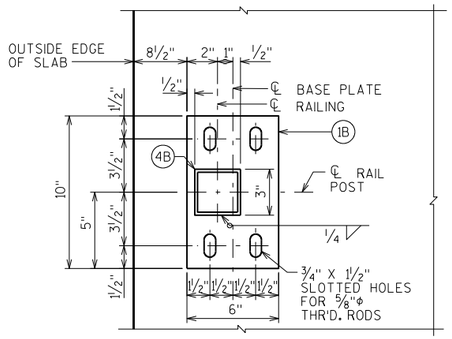
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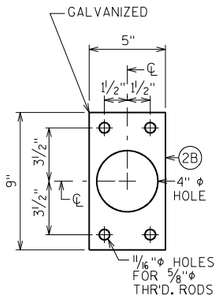
RAILCOMB
7-11

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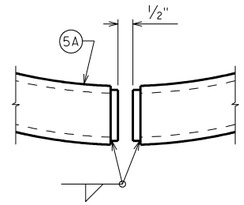
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TYPICAL RAIL POST BASE PLATE



ANCHOR PLATE



CURVED MEMBER JOINT DETAIL

SEAL ENDS ON CURVED STRUCTURAL TUBING WITH ¼" PLATE. WELD AND GRIND SMOOTH.

LEGEND

(1B) PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES

(2B) ¼" X 5" X 9" ANCHOR PLATE WITH 11/16" φ HOLES FOR ANCHOR BOLTS NO. 3.

(3) ⅝" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. (ALTERNATE ANCHORAGE: CONCRETE ADHESIVE ANCHORS ⅝-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. EMBED 5" IN CONCRETE FOR END RAILS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.12 OF THE STANDARD SPECIFICATIONS.

(4A) STRUCTURAL TUBING 3" X 1½" X 3/16". PLACE VERTICAL. WELD TO NO. 5.

(4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

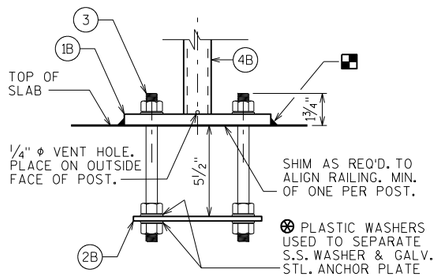
(5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.

(6A) BAR 1" X 1" PICKETS. WELD TO NO. 5. PLACE VERTICAL.

(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ STRIP SEAL EXP. JTS.)

NOTE:
SEE SHEET 15 FOR STEEL RAILING AND IDENTIFYING MEMBER LOCATIONS.



ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.

RAILING NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C5 B-70-322 ", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

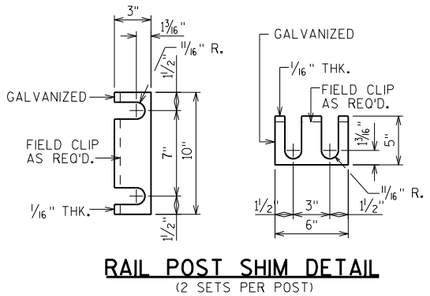
■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED FEDERAL COLOR NO. 27038, BLACK.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

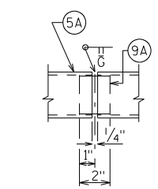
RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.



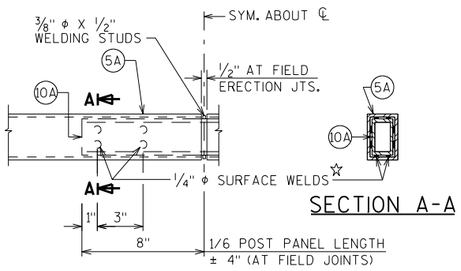
RAIL POST SHIM DETAIL

(2 SETS PER POST)



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



SECTION A-A

FIELD ERECTION JOINT DETAIL

☆ MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

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COMBINATION RAIL TYPE C5 "MODIFIED" DETAILS

SHEET 16

349

SCALE = 1.000

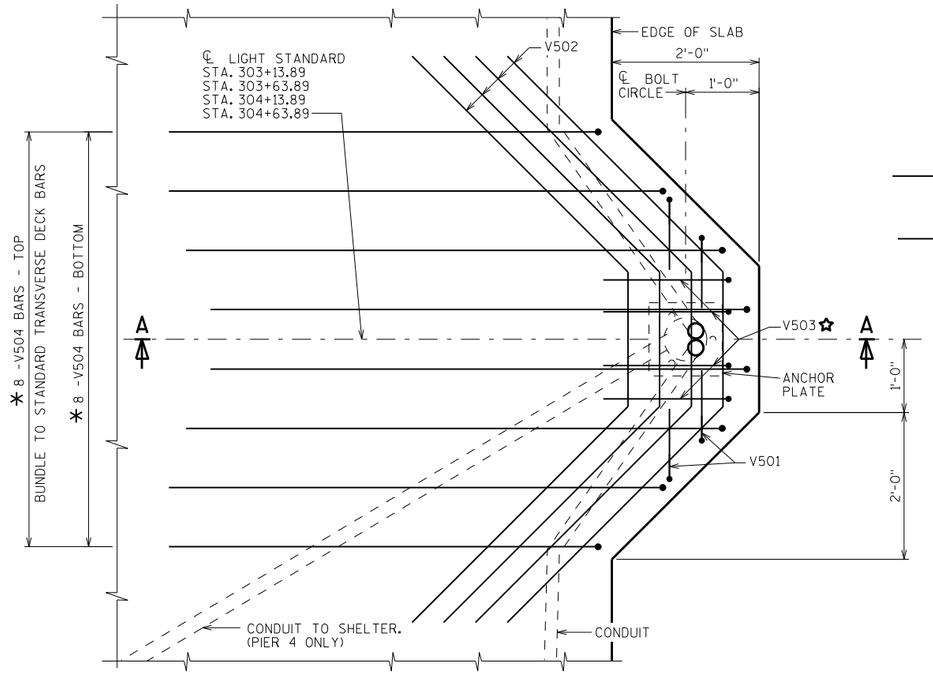
RAILCOMBDET
7-16

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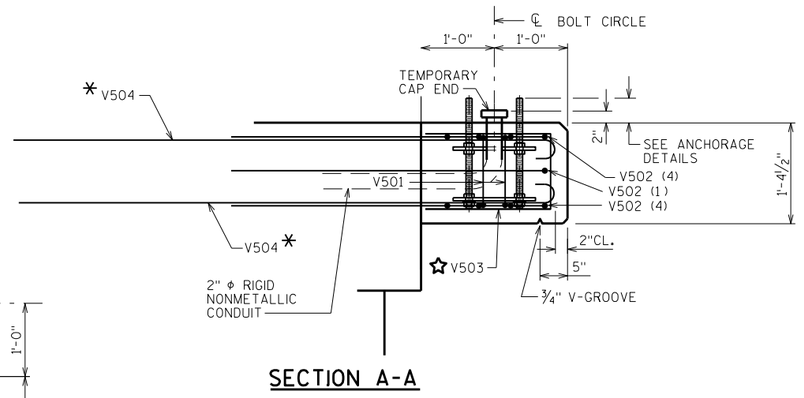
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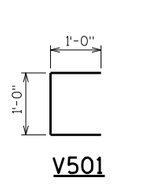
PLAN AT PIERS 1,2,3,4



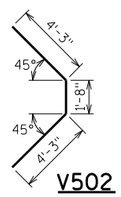
SECTION A-A

BILL OF BARS

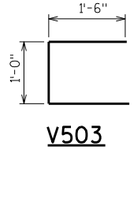
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	LOCATION
V501	X	24	2'-9"	X	LIGHT STD., VERT.
V502	X	36	10'-2"	X	LIGHT STD., HORIZ. IN DECK
V503	X	24	3'-9"	X	LIGHT STD., VERT.
V504	X	88	8'-1"	X	LIGHT STD., TRANSV. IN DECK
V505	X	6	10'-1"	X	LIGHT STD., HORIZ. PIER 5
V506	X	4	9'-8"	X	LIGHT STD., PIER 5
V507	X	4	9'-3"	X	LIGHT STD., PIER 5
V508	X	4	8'-10"	X	LIGHT STD., PIER 5



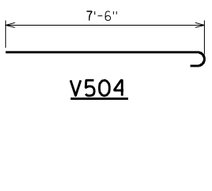
V501



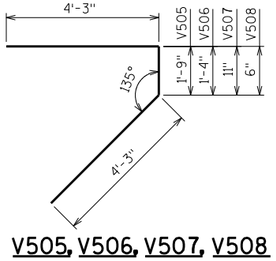
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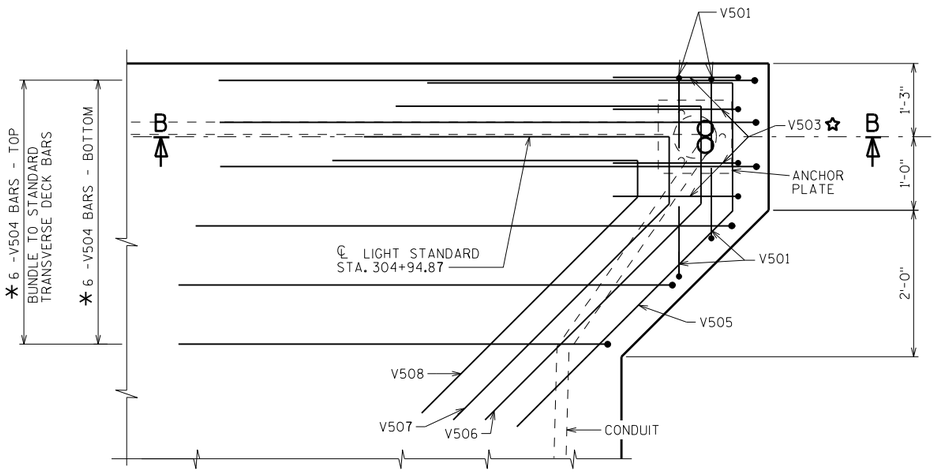
V503



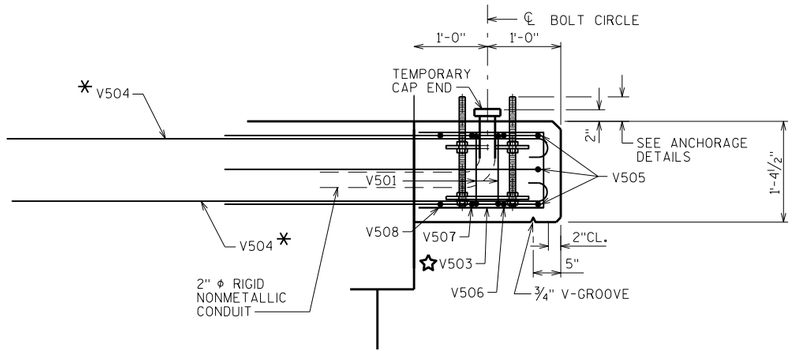
V504



V505, V506, V507, V508



PLAN AT PIER 5



SECTION B-B

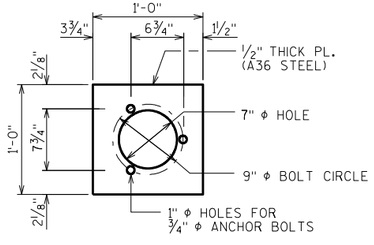
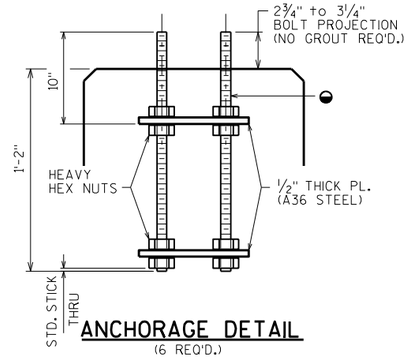


PLATE DETAIL
(12 REQ'D.)



ANCHORAGE DETAIL
(6 REQ'D.)

* THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN DECK.

◒ ¾" DIA. THREADED ANCHOR BOLTS ASTM A449 OR AASHTO M 314-90 GR 55. HOT DIP ASTM A153, CLASS C, UPPER 8" OF BOLT INCLUDING NUTS & WASHERS. PROVIDE ENLARGED THREAD ON NUTS FOR PROPER FIT AFTER GALVANIZING. PROVIDE DOUBLE FLAT WASHERS & NUTS.

☆ TIE IN PLACE AFTER ANCHOR BOLT ASSEMBLY LOCATED.

NOTES

BID ITEM SHALL BE:
"ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES" EACH

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-70-322

DRAWN BY WWR | PLANS CK'D. TAB

LIGHT STANDARD DETAILS

SHEET 17

350

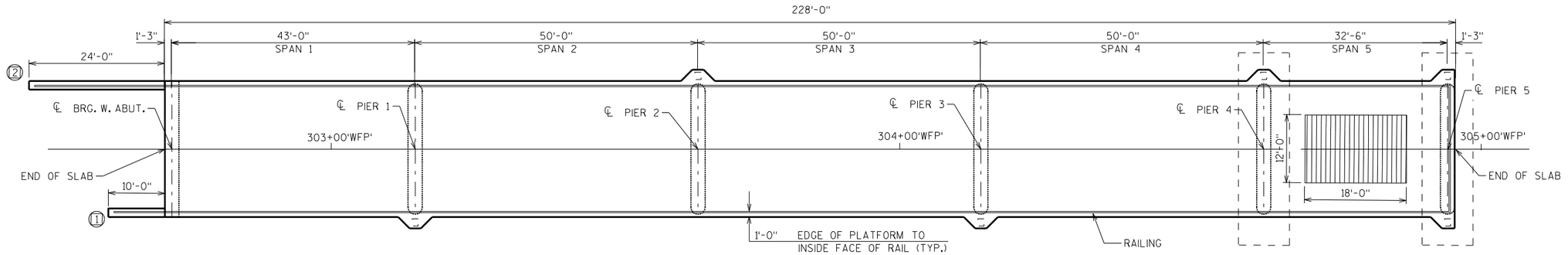
LIGHTDET
7-11

SCALE =

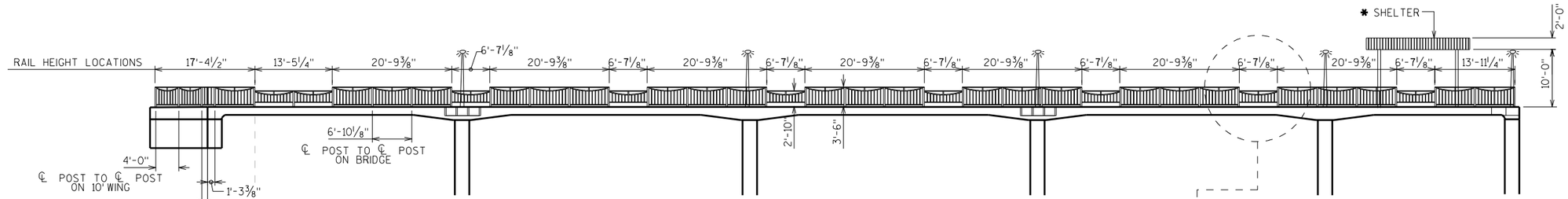
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8

STATE PROJECT NUMBER
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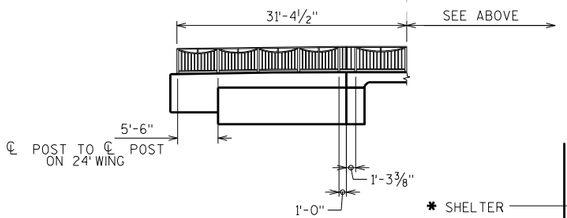
PLAN



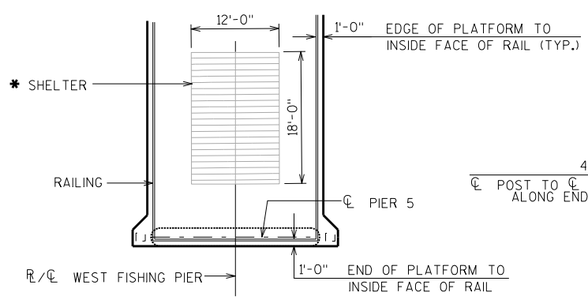
ELEVATION (ALONG LENGTH OF BRIDGE)

LOOKING NORTH

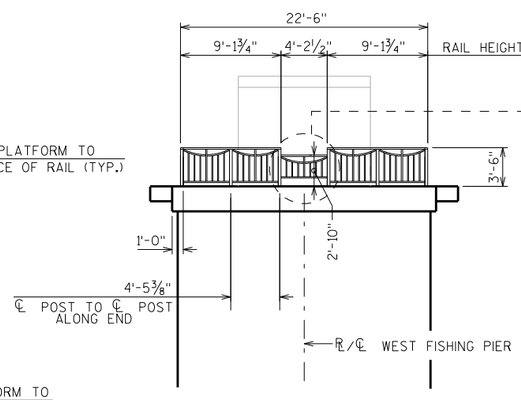
WING 1



WING 2

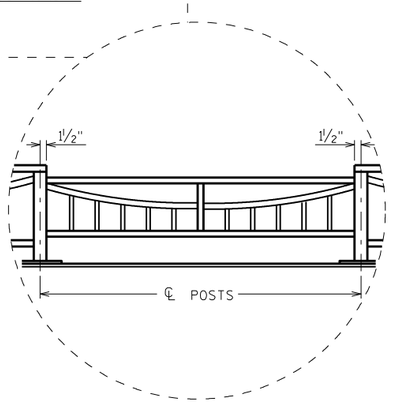


PLAN (AT END OF BRIDGE)



ELEVATION (AT END OF BRIDGE)

LOOKING WEST



* SEE SPECIAL PROVISION "FABRICATED STEEL SHELTER" FOR DETAILS. ANCHOR DETAILS TO BE PROVIDED TO BUREAU OF STRUCTURES FOR REVIEW.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-70-322

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RAILING LAYOUT

SHEET 18

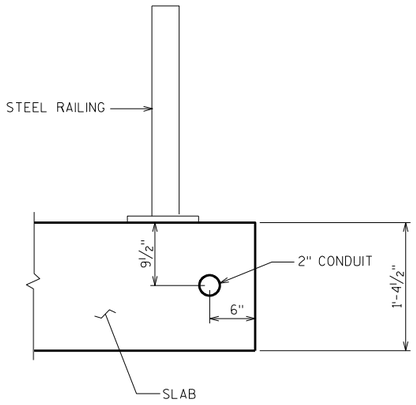
351

8

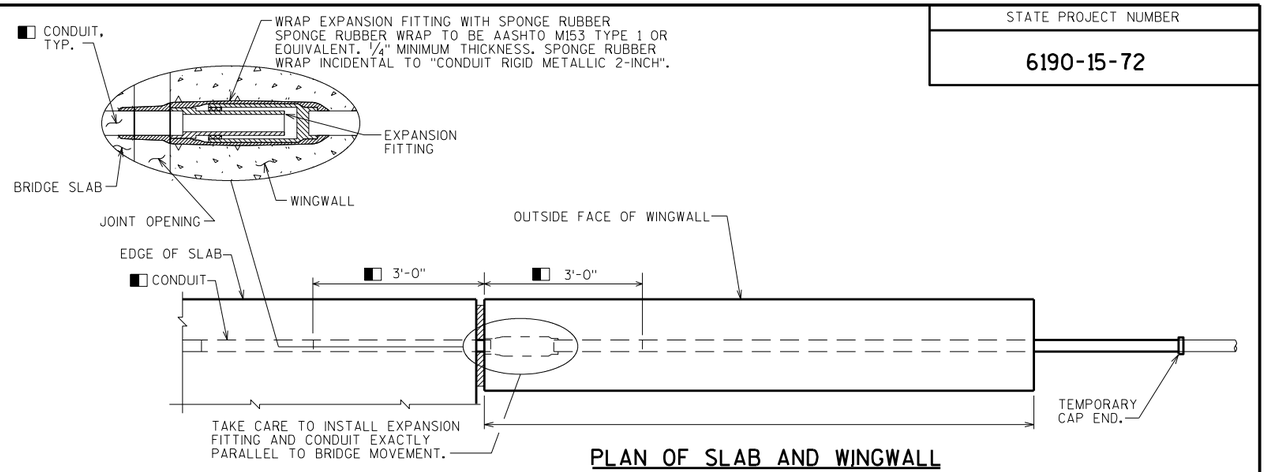
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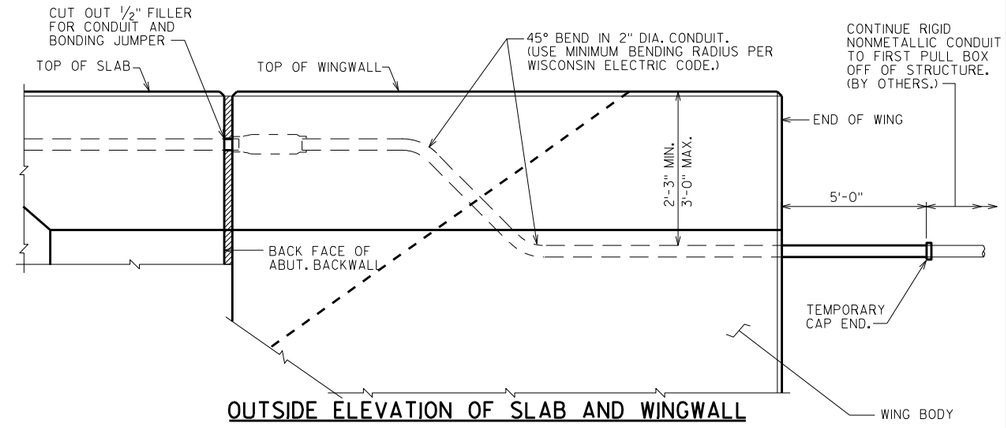
STATE PROJECT NUMBER
6190-15-72



SECTION THRU
SLAB EDGE



PLAN OF SLAB AND WINGWALL



OUTSIDE ELEVATION OF SLAB AND WINGWALL

NOTES

BID ITEMS SHALL BE:

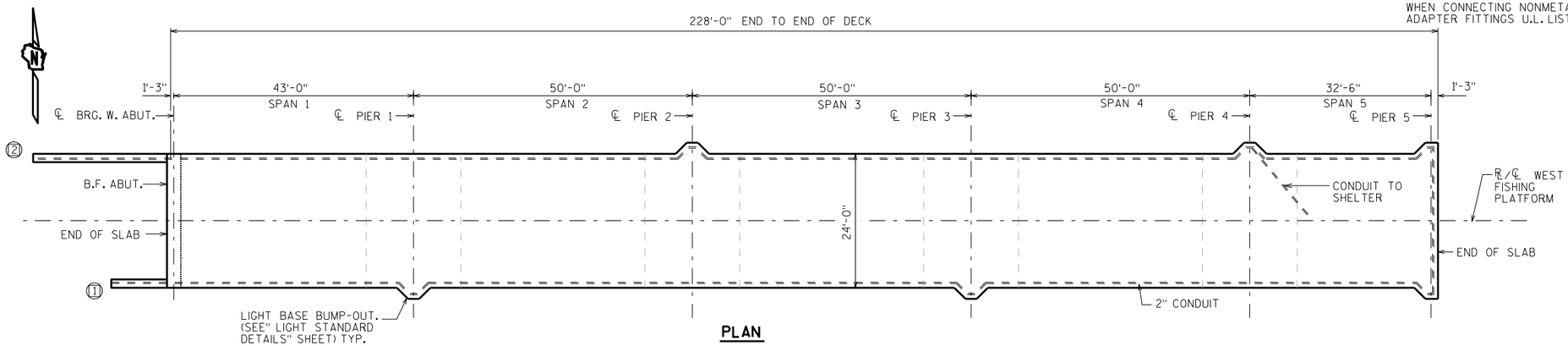
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH"

APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER (4" TOTAL CONDUIT MOVEMENT).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.

■ USE 2" DIA. RIGID NONMETALLIC CONDUIT EXCEPT AT EXPANSION FITTING, USE RIGID METALLIC CONDUIT 3'-0" INTO THE SLAB AND WING SIDES OF THE JOINT OPENING.



PLAN

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CONDUIT DETAILS

SHEET 19

352

SCALE =

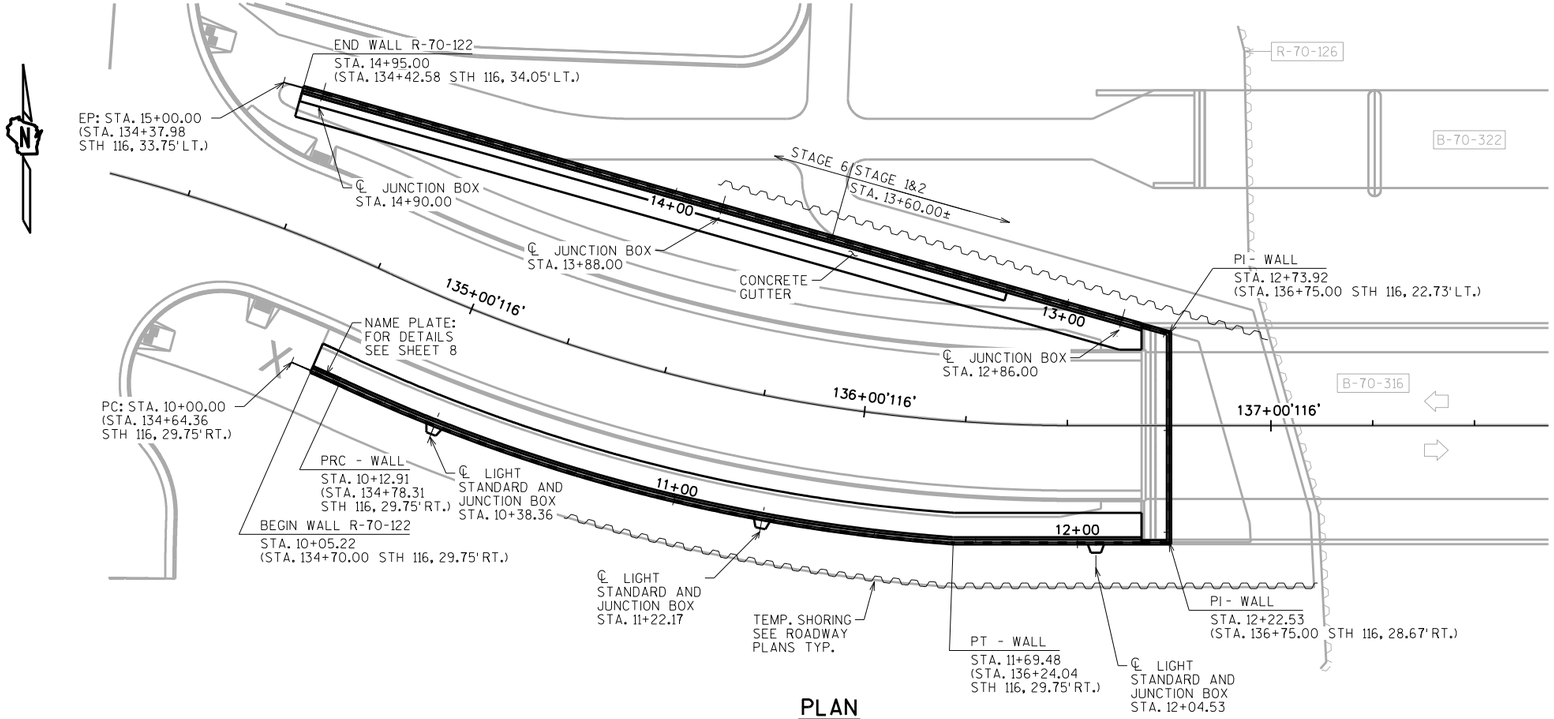
PPTAELEC
7-13

8

8

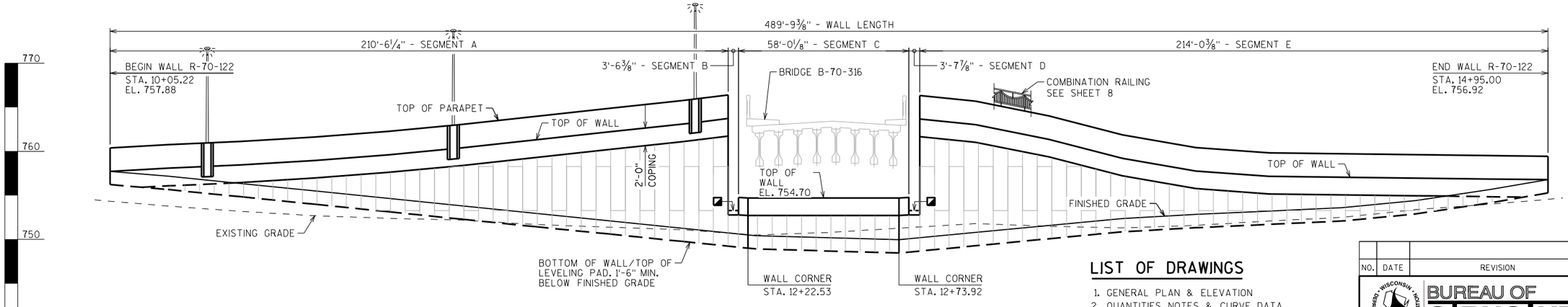
STATE PROJECT NUMBER

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PLAN

PRECAST CONCRETE PANEL MSE WALL



ELEVATION

LOOKING AT F.F. WALL
(VERT. SCALE EXAGGERATED BY 3)

■ TOP OF WALL IS ENCASED IN BRIDGE ABUTMENT. SEE B-70-316 PLANS FOR DETAILS.

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP".

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE PLANS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL SHALL BE DESIGNED USING THE ELEVATIONS GIVEN ON SHEET 3.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

THE DESIGN OF THE WALL SHALL INCLUDE THE HORIZONTAL EARTH LOADS AND 240 PSF LIVE LOAD SURCHARGE.

CONTRACTOR, WALL SUPPLIER, AND RAILING FABRICATOR SHALL COORDINATE RAILING POST SPA., MSE PANELS, AND COPING/ANCHOR SLAB JOINTS.

ALLOWABLE WALL SYSTEMS

WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP

MATERIAL PROPERTIES

CONCRETE MASONRY (COPING/ANCHOR SLAB) —— f'c = 4,000 P.S.I.

BAR STEEL REINFORCEMENT, GRADE 60 ———— fy = 60,000 P.S.I.

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. QUANTITIES, NOTES & CURVE DATA
3. ELEVATIONS, SOIL PARAMETERS & WALL DATA
4. TYPICAL SECTIONS 1
5. TYPICAL SECTIONS 2
6. UNDERDRAIN LAYOUT
7. BILL OF BARS
8. COMBINATION RAIL TYPE "C5"
9. COMBINATION RAIL DETAILS
10. PARAPET ELECTRICAL WORK
11. AESTHETIC DETAILS
12. SUBSURFACE EXPLORATION

STRUCTURE DESIGN CONTACTS:

TIM BOROWSKI (608) 266-4547
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

WISCONSIN DEPARTMENT OF TRANSPORTATION — BUREAU OF STRUCTURES

ACCEPTED William C. Dreher, PE — CHIEF STRUCTURES DESIGN ENGINEER — DATE 3/20/17

STRUCTURE R-70-122

RETAINING WALL AROUND W. ABUT OF B-70-316

COUNTY	TOWN/CITY/VILLAGE
WINNEBAGO	WINNECONNE

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
TAB	MWB	TAB	MWB

GENERAL PLAN & ELEVATION

SHEET 1 OF 12

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I.D. 6190-15-01D

DATE: FEB. 2017

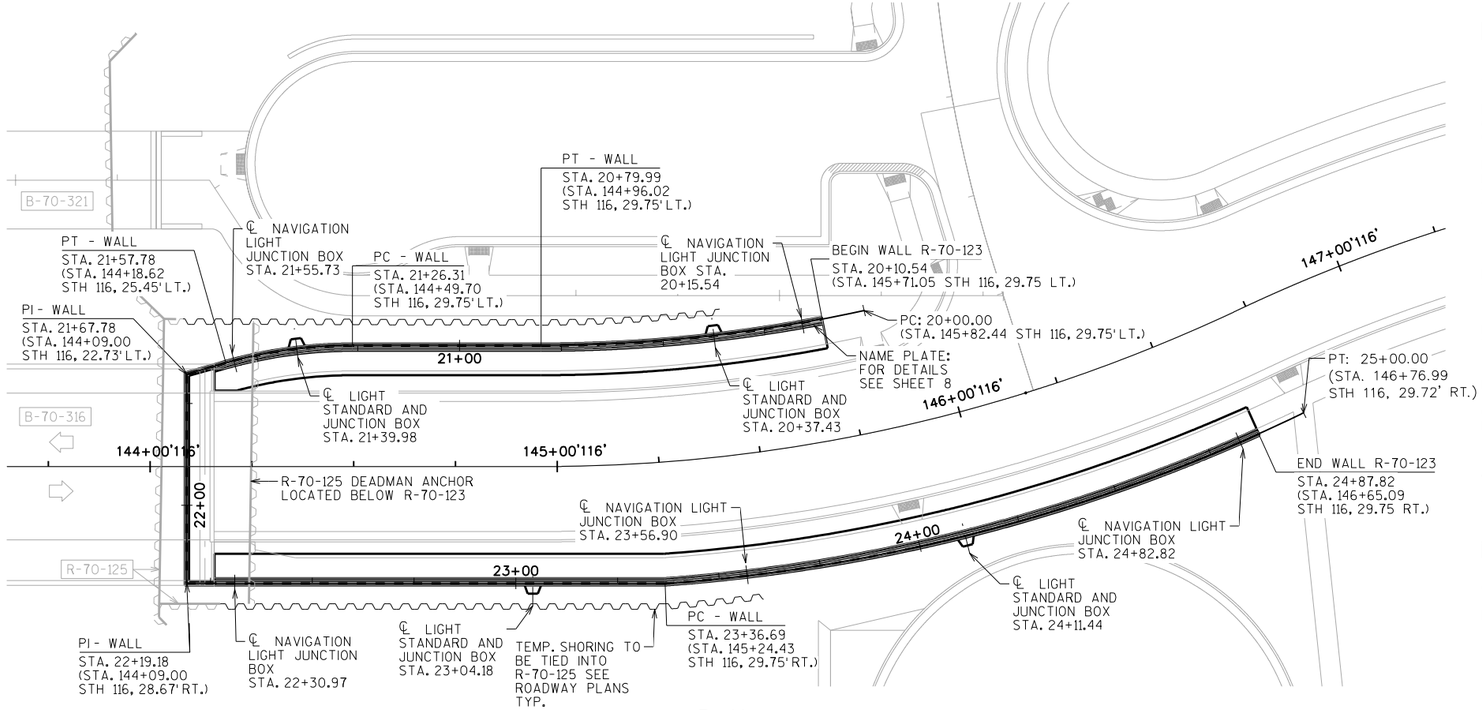
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8

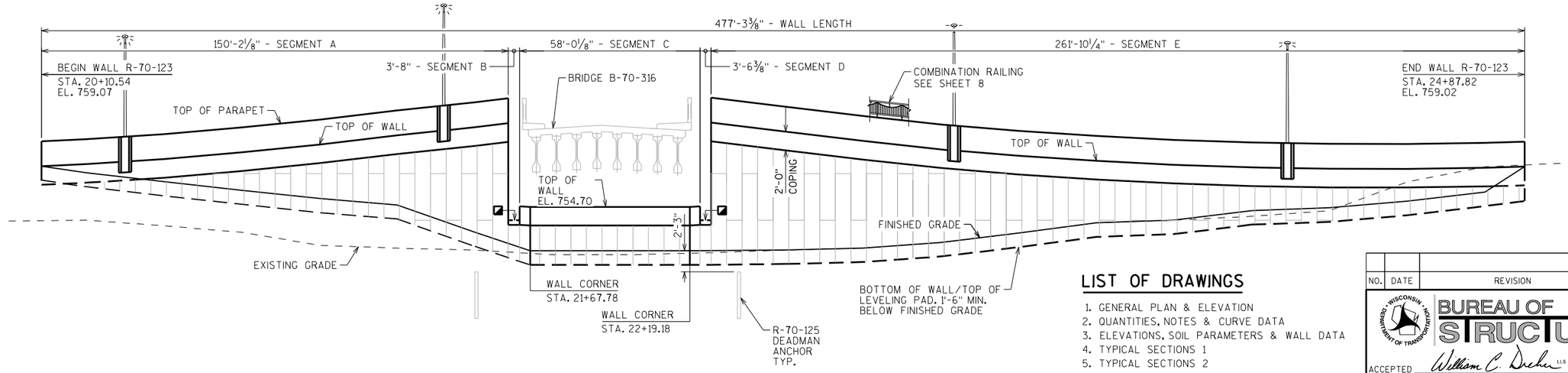
STATE PROJECT NUMBER

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PLAN

PRECAST CONCRETE PANEL MSE WALL



ELEVATION

LOOKING AT F.F. WALL
(VERT. SCALE EXAGGERATED BY 3)

■ TOP OF WALL IS ENCASED IN BRIDGE ABUTMENT. SEE B-70-316 PLANS FOR DETAILS.

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP".

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE PLANS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL SHALL BE DESIGNED USING THE ELEVATIONS GIVEN ON SHEET 3.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

THE MAXIMUM VALUE OF THE ANGLE OF INTERNAL FRICTION OF THE WALL BACKFILL MATERIAL IN THE REINFORCED ZONE SHALL BE ASSUMED TO BE 30° WITHOUT CERTIFIED TEST VALUES.

THE DESIGN OF THE WALL SHALL INCLUDE THE HORIZONTAL EARTH LOADS AND 240 PSF LIVE LOAD SURCHARGE.

CONTRACTOR, WALL SUPPLIER, AND RAILING FABRICATOR SHALL COORDINATE RAILING POST SPA., MSE PANELS, AND COPING/ANCHOR SLAB JOINTS

ALLOWABLE WALL SYSTEMS

WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP

MATERIAL PROPERTIES

CONCRETE MASONRY (COPING/ANCHOR SLAB) —— f'c = 4,000 P.S.I.

BAR STEEL REINFORCEMENT, GRADE 60 —— fy = 60,000 P.S.I.

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
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9. COMBINATION RAIL DETAILS
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12. SUBSURFACE EXPLORATION

STRUCTURE DESIGN CONTACTS:

TIM BOROWSKI (608) 266-4547
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

WISCONSIN DEPARTMENT OF TRANSPORTATION — BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS 3/20/17
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-70-123

RETAINING WALL AROUND E. ABUT OF B-70-316

COUNTY	~~TOWN/CITY~~/VILLAGE
WINNEBAGO	WINNECONNE

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
TAB	MWB	TAB	MWB

GENERAL PLAN & ELEVATION

SHEET 1 OF 12

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I.D. 6190-15-01E

DATE: FEB. 2017

SCALE = 18.00

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STATE PROJECT NUMBER

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TOTAL ESTIMATED QUANTITIES

	BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
	501.1000.S	ICE HOT WEATHER CONCRETING	LB	1,400
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	27
	502.3210	PIGMENTED SURFACE SEALER	SY	115
**	504.0500	CONCRETE MASONRY RETAINING WALLS	CY	187
**	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	18,575
	513.7026	RAILING STEEL TYPE C5 R-70-123	LF	411
*	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	16
	517.1015.S	CONCRETE STAINING MULTI-COLOR R-70-123	SF	3,865
	517.1050.S	ARCHITECTURAL SURFACE TREATMENT R-70-123	SF	3,865
	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	535
*	652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	78
*	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	344
	653.0220	JUNCTION BOXES 18X6X6-INCH	EACH	5
	653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	4
	657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	4
	SPV.0165	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/OMP	SF	3680
		NON-BID ITEMS		
		NON-BITUMINOUS JOINT SEALER	SIZE	1"
		CORK FILLER	SIZE	1/2", 3/4", 1"
		EXPANDED POLYSTYRENE	SIZE	1"

* QUANTITY ASSUMES 4 EXPANSION JOINTS IN SEGMENT A & 8 IN SEGMENT E

** QUANTITY INCLUDES: VEHICLE BARRIER (ANCHOR SLAB & PARAPET)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

BEVEL ALL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER UNLESS OTHERWISE SHOWN OR NOTED.

ALL BAR STEEL REINFORCEMENT IN CAST-IN-PLACE CONCRETE IS TO BE EPOXY COATED.

ALL WALL STATIONING AND OFFSETS ARE GIVEN AT THE FRONT FACE OF WALL R-70-123.

THE PLAN QUANTITY FOR THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/OMP"IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE WALL TO A CONSTANT DEPTH OF 1'-6" BELOW FINISHED GRADE.

COORDINATE THE CONSTRUCTION OF RETAINING WALL R-70-123 WITH THE EAST ABUTMENT OF BRIDGE B-70-316 AND RETAINING WALL R-70-125.

QUANTITIES AND REINFORCEMENT DETAILS ARE BASED ON AN ASSUMED CONCRETE WALL PANEL THICKNESS OF 8" AND A PANEL EMBEDMENT OF 5". FOR PANEL THICKNESS OR PANEL EMBEDMENT DIFFERENT THAN THESE VALUES, THE CONTRACTOR SHALL VERIFY REINFORCEMENT BAR DETAILS AND QUANTITIES AND WILL BE RESPONSIBLE FOR ANY QUANTITY VARIATIONS.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE TRAFFIC SIDE AND THE TOP OF THE PARAPET IN AREAS THAT ARE NOT DESIGNATED TO BE STAINED.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE TRAFFIC SIDE OF THE EXPOSED ANCHOR SLAB SURFACE.

CONCRETE STAINING AND ARCHITECTURAL SURFACE TREATMENT REQUIRED ON WALL. SEE "AESTHETIC DETAILS" SHEET FOR DETAILS.

8

CURVE DATA

WALL CURVE 1	WALL CURVE 2	WALL CURVE 3
PI = STA 20+40.15	PI = STA 21+42.15	PI = STA 24+19.34
Y = 507211.548	Y = 507212.365	Y = 507158.418
X = 748322.911	X = 748220.607	X = 748395.275
Δ = 12° 22' 43"	Δ = 15° 46' 02"	Δ = 21° 46' 21"
D = 15° 28' 30"	D = 50° 05' 52"	D = 13° 19' 56"
R = 370.25	R = 114.37	R = 429.75
T = 40.15	T = 15.84	T = 82.65
L = 79.99	L = 31.47	L = 163.31
PC = STA 20+00.00	PC = STA 21+26.31	PC = STA 23+36.69
PT = STA 20+79.99	PT = STA 21+57.78	PT = STA 25+00.00

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-70-123

DRAWN BY TAB | PLANS CK'D. MWB

QUANTITIES, NOTES & CURVE DATA

SHEET 2

355

SCALE = 1.0

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SOIL PARAMETERS

SOIL DESCRIPTION	FRICTION ANGLE (DEGREES)	COHESION (PSF)	UNIT WEIGHT (PCF)
GRANULAR BACKFILL BEHIND THE WALL IN THE REINFORCING ZONE	30	0	120
FILL, GRANULAR BEHIND/BELOW THE REINFORCING ZONE	31	0	120
BOR-18 - STA. 20+92.0, 4.4' RT. (STA. 144+84 STH 116, 34.0' LT.)			
GRANULAR FILL, REPLACES VERY SOFT SOILS EL. 754.8 TO EL. 741.0	31	0	115
CLAY AND SILT, BROWN, TRACE GRAVEL EL. 741.0 TO EL. 728.5	0	3,500	130
SAND, GRAY, FINE TO MEDIUM, SOME SILT, TRACE GRAVEL EL. 728.5 TO EL. 724.5	34	0	130
BOR-17 - STA. 21+62.0, 8.8' RT. (STA. 144+12 STH 116, 32.8' LT.)			
GRANULAR FILL, REPLACES VERY SOFT SOILS EL. 748.5 TO EL. 739.9	31	0	115
CLAY AND SILT, BROWN, TRACE GRAVEL EL. 739.9 TO EL. 725.9	0	3,500	130
SAND, BROWN, FINE TO MEDIUM, SOME SILT EL. 725.9 TO EL. 723.4	32	0	120
BOR-16 - STA. 22+12.0, 2.4' LT. (STA. 144+11 STH 116, 21.6' RT.)			
GRANULAR FILL, REPLACES ORGANIC SOILS EL. 748.5 TO EL. 739.5	31	0	115
CLAY, BROWN, SOME SILT, SOME GRAVEL EL. 739.5 TO EL. 729.0	0	4,000	130
CLAY AND SILT, BROWN, TRACE SAND EL. 729.0 TO EL. 722.5	0	3,000	125
SILT, GRAY, SOME SAND, LITTLE GRAVEL EL. 722.5 TO EL. 705.0	36	0	135
BOR-19 - STA. 22+93.1, 7.3' LT. (STA. 144+83 STH 116, 21.5' RT.)			
GRANULAR FILL, REPLACES VERY SOFT SOILS EL. 749.4 TO EL. 742.3	31	0	115
CLAY AND SILT, BROWN, TRACE GRAVEL EL. 742.3 TO EL. 726.8	0	3,500	130
SAND, GRAY, FINE TO MEDIUM EL. 726.8 TO EL. 724.3	33	0	130
BOR-10 - STA. 24+44.7, 0.7' LT. (STA. 146+26 STH 116, 29.0' RT.)			
SAND, BROWN, FINE, SOME SILT, TRACE GRAVEL EL. 752.8 TO EL. 751.4	31	0	115
SILT, BROWN, SOME CLAY EL. 751.4 TO EL. 748.4	0	1,500	115
SILT AND CLAY, BROWN, TRACE GRAVEL EL. 748.4 TO EL. 733.4	0	3,500	130
SILT, GRAY, SOME SAND, LITTLE GRAVEL, FEW BOULDERS EL. 733.4 TO EL. 730.4	33	0	130

WALL EXTERNAL & OVERALL STABILITY EVALUATION

DIMENSIONS					
WALL HEIGHT (FEET)[1]	6.6	6.2	15.2	11.5	6.1
EXPOSED WALL HEIGHT (FEET)	5.1	4.7	13.7	10.0	4.6
MINIMUM LENGTH OF REINFORCEMENT (FEET)[3]	8.0	12.8[2]	10.6	8.0	8.0
LENGTH OF REINFORCEMENT TO HEIGHT RATIO	NA	2.1	0.7	0.7	NA
BORING LOCATION USED	BOR - 18	BOR - 17	BOR - 16	BOR - 19	BOR - 10
APPROXIMATE WALL STATION	21+00.0	21+67.8	22+26.0	23+00.0	24+00.0
CAPACITY TO DEMAND RATIO (CDR)[4]					
SLIDING (CDR > 1.0)	1.8	1.0	1.3	1.3	1.9
ECCENTRICITY (CDR > 1.0)	4.5	3.2	1.7	1.6	5.3
GLOBAL STABILITY (CDR > 1.0)	NA[5]	NA[5]	1.2	NA[5]	NA[5]
BEARING RESISTANCE (CDR > 1.0)	3.2[6]	1.5[6]	1.3[6]	1.7[6]	3.4[6]
REQUIRED BEARING RESISTANCE (PSF)	5,000	5,000	5,000	5,000	5,000

NOTES:
1. THE WALL HEIGHT INCLUDES AN EMBEDMENT OF 1.5 FEET.
2. THE WALL STABILITY EVALUATION INCLUDED A SURCHARGE LOAD THAT WAS EQUAL TO THE WEIGHT OF THE SOIL BEHIND THE ABUTMENT.
3. THE LENGTH OF REINFORCEMENT IS THE MINIMUM REQUIRED LENGTH AT THAT LOCATION.
4. CDR REQUIREMENTS AND LOAD RESISTANCE FACTORS ARE PRESENTED IN CHAPTER 14 OF THE BRIDGE MANUAL
5. NA NOT APPLICABLE, GLOBAL SLOPE STABILITY WAS EVALUATED AT THE CRITICAL WALL LOCATION
6. REQUIRES THE EXCAVATION OF THE VERY SOFT SILTS, CLAYS AND PEATS BELOW THE WALL.
7. THE SLOPE IN FRONT AND BEHIND THE WALL IN ANALYSIS IS ASSUMED TO BE 6:1.

GEOMETRY TABLE

WALL SEGMENT	WALL STATION	TOP OF WALL EL.	FINISHED GRADE EL.	EXISTING GRADE EL.
A	20+10.54	759.07	759.07	753.2
	20+25.00	759.30	758.37	753.3
	20+50.00	759.83	757.41	752.7
	20+75.00	760.55	756.49	752.0
	21+00.00	761.39	755.61	750.6
	21+25.00	762.37	754.91	750.3
	21+50.00	763.24	751.99	750.1
	21+60.72	763.67	750.79	749.9
B	21+60.73	753.26◐	750.79	749.9
	21+64.40	753.26◐	750.38	749.8
C	21+64.41	754.76	750.38	749.8
	21+67.78	754.70	750.00	749.7
	21+75.00	754.70	750.00	749.6
	22+00.00	754.70	750.00	749.6
	22+19.18	754.70	750.00	749.8
	22+22.42	754.76	750.01	749.8
D	22+22.43	753.26◐	750.01	749.8
	22+25.96	753.26◐	750.02	749.8
E	22+25.97	763.73	750.02	749.8
	22+50.00	762.77	750.10	750.1
	22+75.00	761.77	750.30	750.3
	23+00.00	760.87	750.90	750.9
	23+25.00	760.18	751.90	751.9
	23+50.00	759.64	753.00	753.0
	23+75.00	759.22	753.30	753.3
	24+00.00	758.94	754.31	753.7
	24+25.00	758.79	754.61	754.3
	24+50.00	758.78	755.32	757.4
	24+75.00	758.90	756.30	759.0
	24+87.82	759.02	759.02	759.2

◐ ELEVATION GIVEN IS ASSUMING MINIMUM EMBEDMENT INTO B-70-316 ABUTMENT. SEE "TYPICAL SECTIONS 2" SHEET FOR DETAILS.

8

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ELEVATIONS, SOIL PARAMETERS & WALL DATA

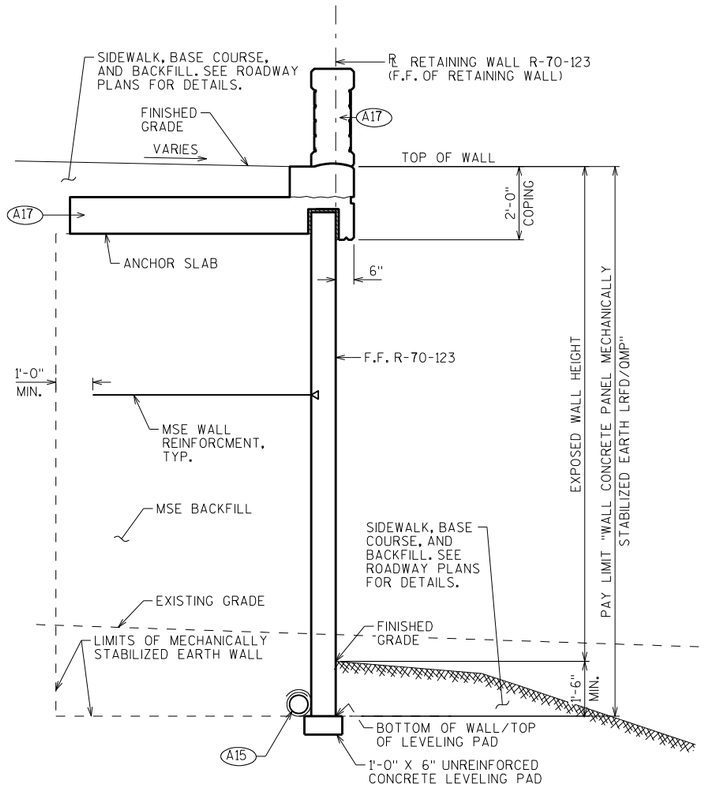
SHEET 3

356

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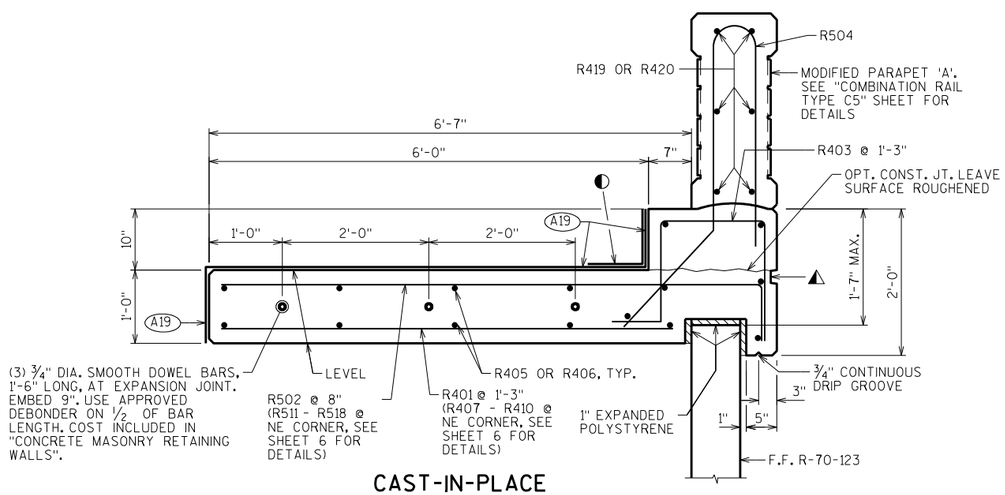
STATE PROJECT NUMBER

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TYPICAL SECTION

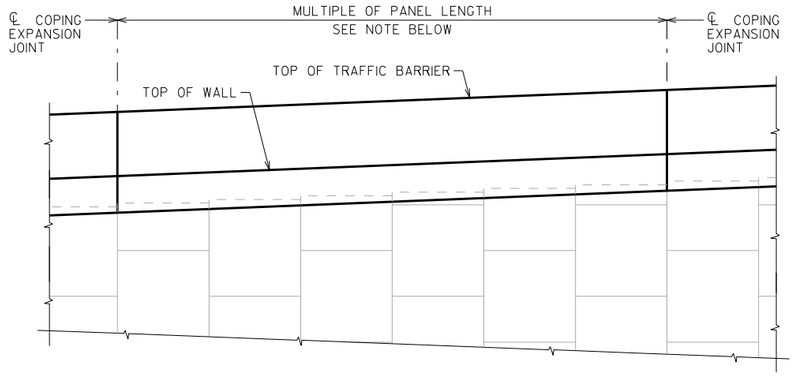
SEGMENT A: STA. 20+10.54 TO 21+60.72
SEGMENT E: STA. 22+25.97 TO 24+87.82



CAST-IN-PLACE CONCRETE TRAFFIC BARRIER DETAIL

◐ IF THE OPT. CONST. JT. IS USED, PLACE 18" RUBBERIZED MEMBRANE WATERPROOFING ALONG THE ENTIRE LONGITUDINAL JOINT. THE RUBBERIZED MEMBRANE WATERPROOFING SEALING THE OPT. CONST. JT. IS INCIDENTAL TO THE CONCRETE MASONRY BID ITEM.

◭ PROVIDE RUSTICATION IF OPT. CONST. JT. IS USED.



◒ CAST-IN-PLACE CONCRETE TRAFFIC BARRIER PARTIAL ELEVATION

LOOKING AT F.F. WALL

NOTE:
ALL JOINTS MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.

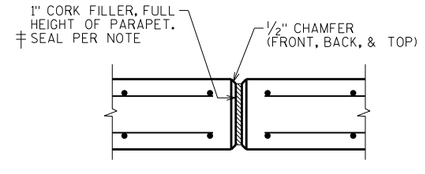
◒ EXPANSION JOINTS TO BE SPACED AT A MINIMUM OF 20' AND A MAXIMUM OF 30'. LOCATE EXPANSION JOINTS OVER WALL JOINTS. DO NOT RUN BAR STEEL THRU JOINT, EXCEPT FOR DOWEL BARS. JOINT TO EXTEND FULL DEPTH OF PARAPET AND ANCHOR SLAB.

‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONC.)

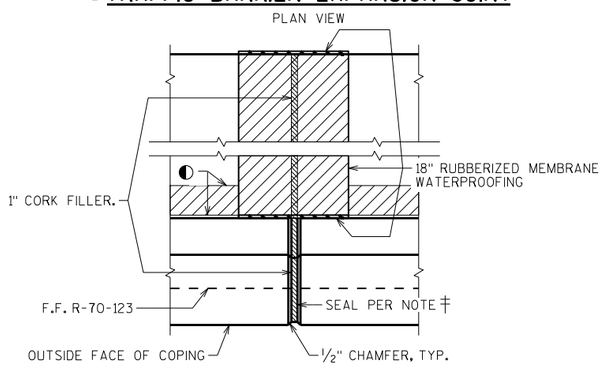
(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SEE 'UNDERDRAIN LAYOUT' SHEET

(A17) 1/2" FILLER TO BE PLACED BETWEEN ANCHOR SLAB/PPT. AND BACKFACE OF ABUTMENT. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

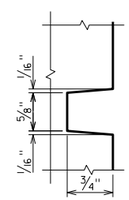


◒ TRAFFIC BARRIER EXPANSION JOINT



◒ ANCHOR SLAB EXPANSION JOINT

PLAN VIEW



RUSTICATION DETAIL

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TYPICAL SECTIONS 1

SHEET 4

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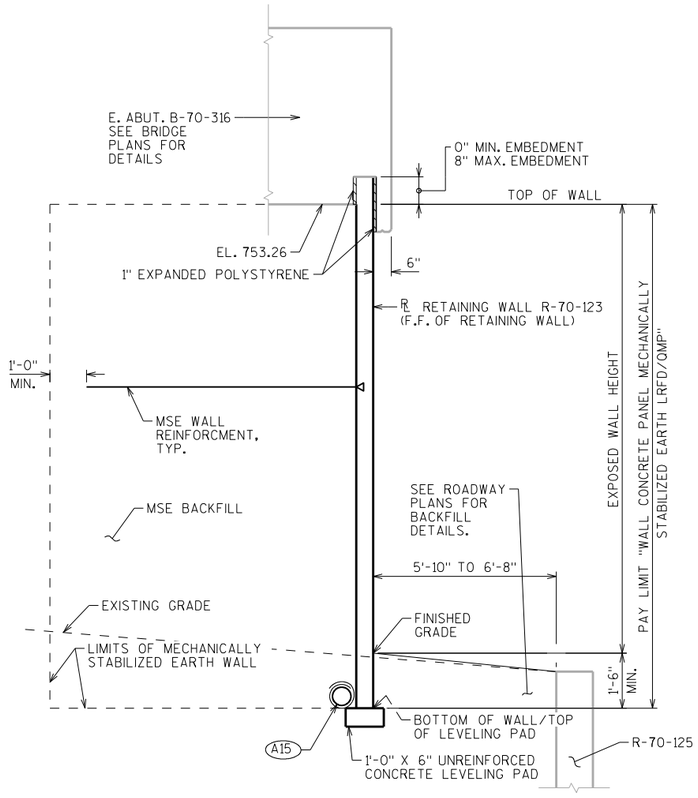
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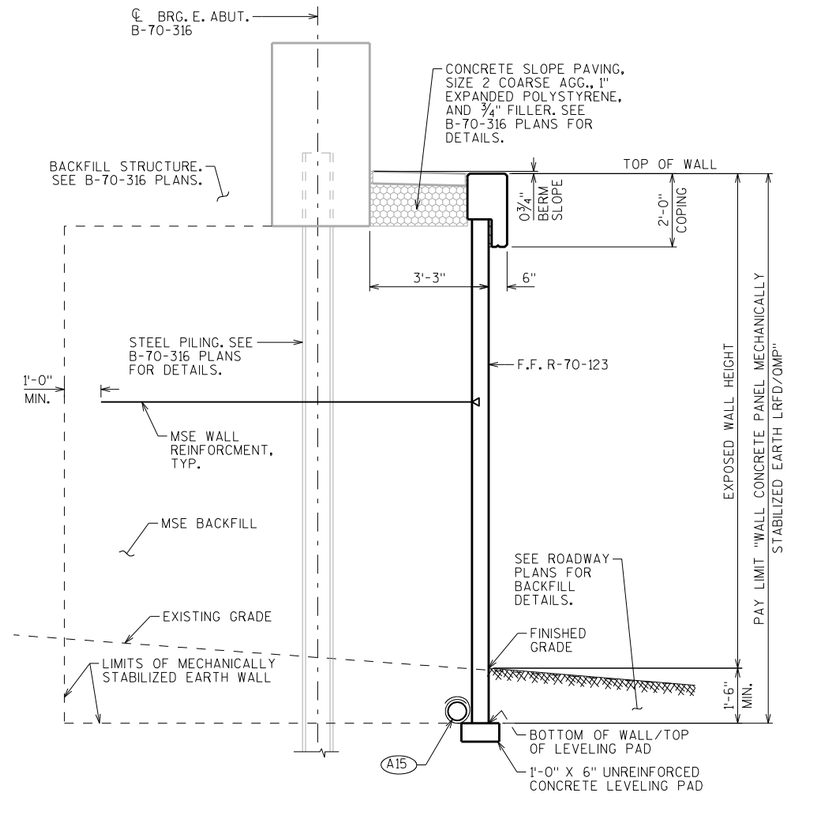
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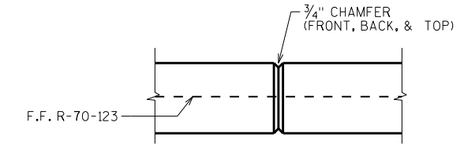
TYPICAL SECTION AT ABUTMENT

SEGMENT B: STA. 21+60.73 TO 21+64.40
SEGMENT D: STA. 22+22.43 TO 22+25.96



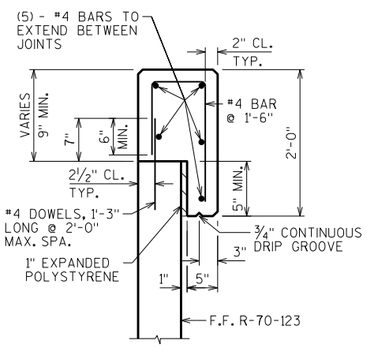
TYPICAL SECTION AT ABUTMENT

SEGMENT C: STA. 21+64.40 TO 22+22.42



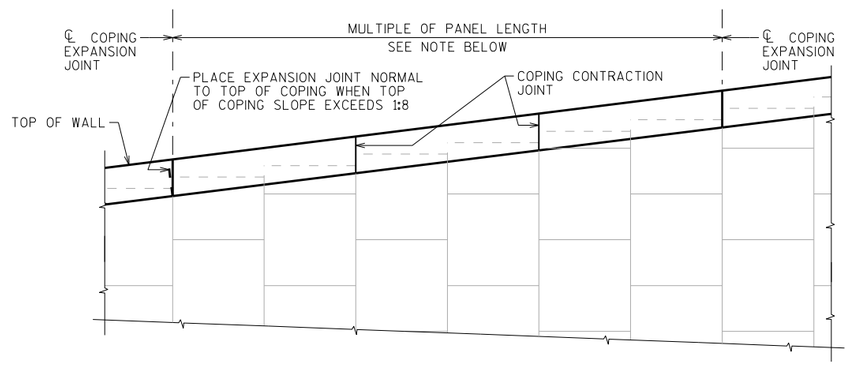
COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 12'



CAST-IN-PLACE CONCRETE COPING DETAIL

NOTE: CONCRETE AND BARS IN COPING ARE INCIDENTAL TO BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/OMP"

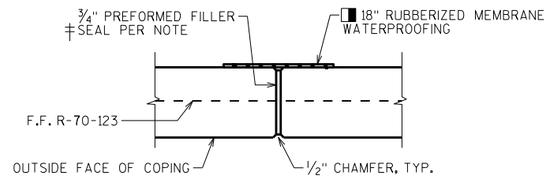


CAST-IN-PLACE COPING PARTIAL ELEVATION

LOOKING AT F.F. WALL

NOTE:
ALL JOINTS MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH).
SEE SHEET 6.



COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 50'

‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONC.)

MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF PANELS.

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TYPICAL SECTIONS 2

SHEET 5

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SCALE = 2.0

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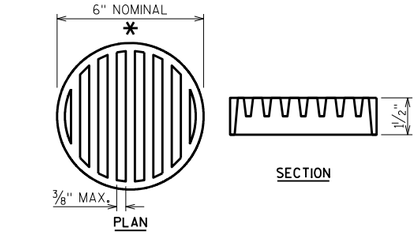
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PLAN



RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

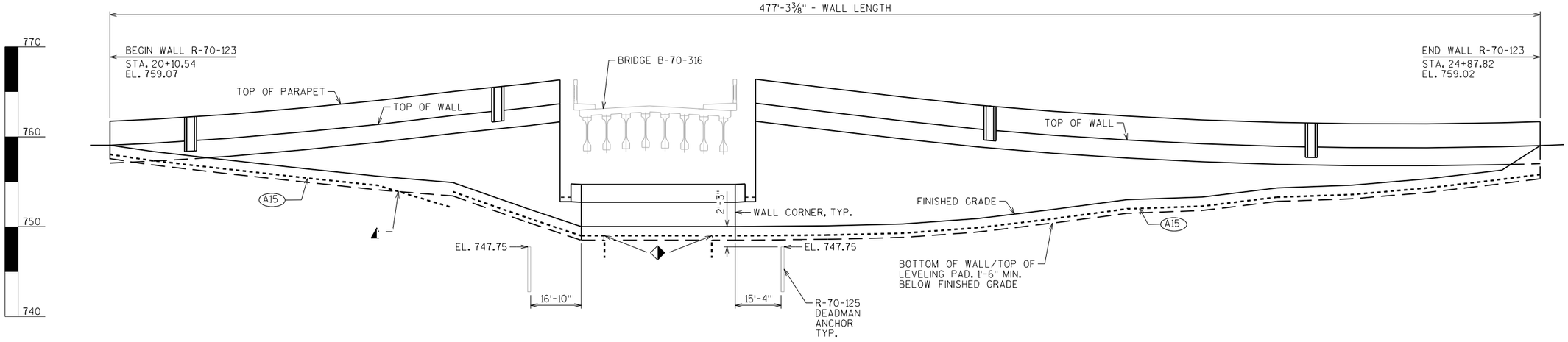
THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHEMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. RODENT SHIELD REQUIRED AT OUTLETS INCLUDING BURIED DEADENDS.

◭ RUN UNDER LEVELING PAD TO SUITABLE DRAINAGE.

◨ TEE FITTING, INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH". RUN UNDER LEVELING PAD AND DEADEND BETWEEN WALLS.



ELEVATION

LOOKING AT F.F. WALL
(VERT. SCALE EXAGGERATED BY 3)

8

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UNDERDRAIN LAYOUT

SHEET 6

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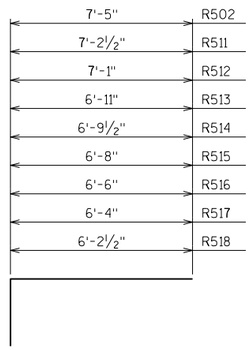
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BILL OF BARS

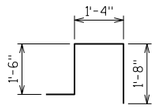
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	NOTE	LOCATION
R401	X	329	6'-2"			ANCHOR SLAB - BOTTOM TRANSVERSE
R502	X	614	8'-1"	X		ANCHOR SLAB - TOP TRANSVERSE
R403	X	332	4'-11"	X		ANCHOR SLAB - VERTICAL
R504	X	422	7'-8"	X		PPT./ANCHOR SLAB - VERTICAL
R405	X	15	148'-0"		⚠	ANCHOR SLAB - SEGMENT A - LONG.
R406	X	15	257'-0"		⚠	ANCHOR SLAB - SEGMENT E - LONG.
R407	X	1	5'-10"			ANCHOR SLAB - BOTTOM TRANSVERSE
R408	X	1	5'-6"			ANCHOR SLAB - BOTTOM TRANSVERSE
R409	X	1	5'-2"			ANCHOR SLAB - BOTTOM TRANSVERSE
R410	X	2	4'-11"			ANCHOR SLAB - BOTTOM TRANSVERSE
R511	X	1	7'-11"	X		ANCHOR SLAB - TOP TRANSVERSE
R512	X	1	7'-9"	X		ANCHOR SLAB - TOP TRANSVERSE
R513	X	1	7'-7"	X		ANCHOR SLAB - TOP TRANSVERSE
R514	X	1	7'-6"	X		ANCHOR SLAB - TOP TRANSVERSE
R515	X	1	7'-4"	X		ANCHOR SLAB - TOP TRANSVERSE
R516	X	1	7'-2"	X		ANCHOR SLAB - TOP TRANSVERSE
R517	X	1	7'-0"	X		ANCHOR SLAB - TOP TRANSVERSE
R518	X	1	6'-11"	X		ANCHOR SLAB - TOP TRANSVERSE
R419	X	6	148'-2"		⚠	PPT. -SEGMENT A - LONG.
R420	X	6	258'-4"		⚠	PPT. -SEGMENT E - LONG.
R521	X	16	11'-3"	X		LIGHT STD./ANCHOR SLAB
R522	X	8	10'-3"	X		LIGHT STD./ANCHOR SLAB
R523	X	24	9'-3"	X		LIGHT STD./ANCHOR SLAB
R524	X	16	9'-5"			LIGHT STD./ANCHOR SLAB - HORIZ.
R525	X	8	8'-5"			LIGHT STD./ANCHOR SLAB - HORIZ.
R526	X	24	7'-5"			LIGHT STD./ANCHOR SLAB - HORIZ.
R527	X	16	6'-0"	X		LIGHT STD. - VERT.
R528	X	16	7'-6"	X		LIGHT STD. - VERT.
R629	X	32	10'-0"	X		LIGHT STD. - HORIZ.
R530	X	8	3'-2"	X		LIGHT STD. - VERT.
R531	X	8	4'-0"	X		LIGHT STD. - VERT.
R532	X	15	5'-8"	X		JUNCTION BOX - VERT.
R533	X	15	2'-4"			JUNCTION BOX - VERT.

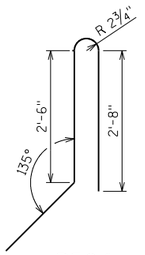
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. THE NUMBER REQUIRED IS THE BARS IN THE CROSS SECTION AND BARS SHALL BE CUT AS NEEDED FOR EXPANSION JOINTS.



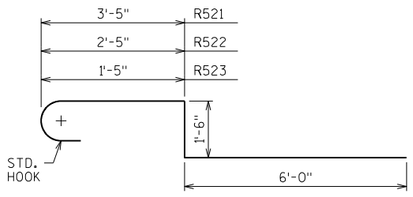
R502, R511, R512, R513, R514, R515, R516, R517, R518



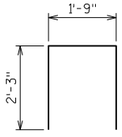
R403



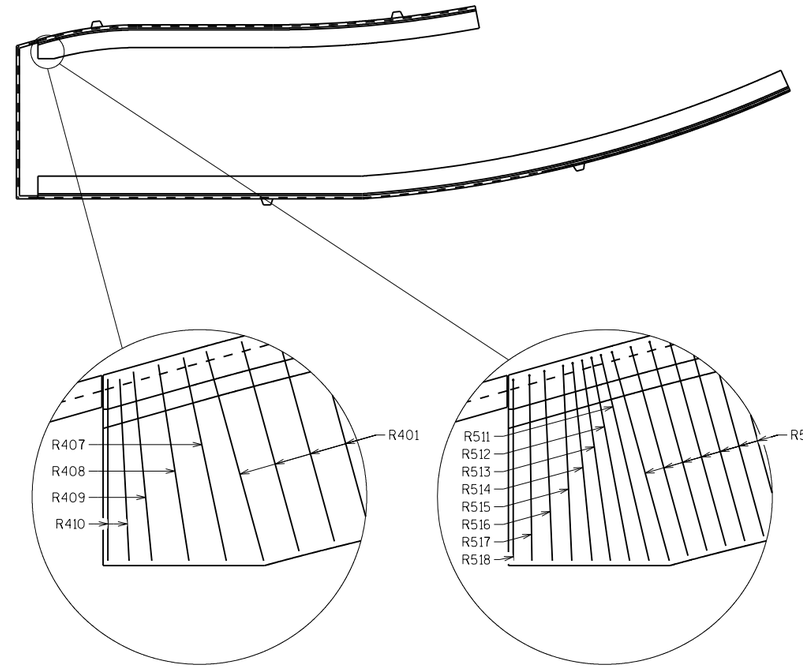
R504



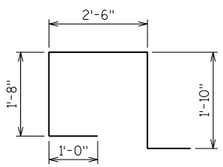
R521, R522, R523



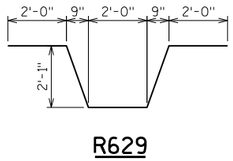
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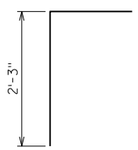
TRANSVERSE STEEL DETAIL



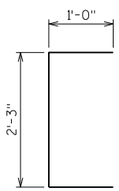
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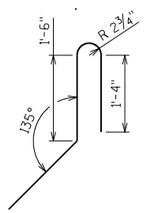
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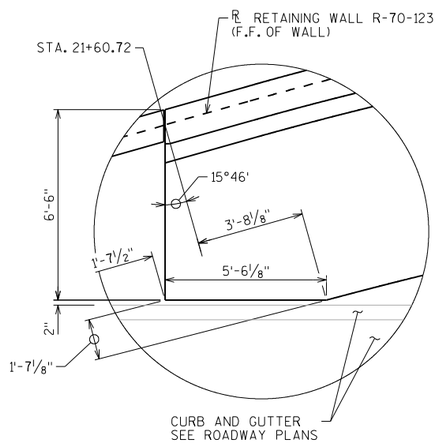
R530



R531



R532



DIMENSIONING DETAIL

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BILL OF BARS

SHEET 7

360

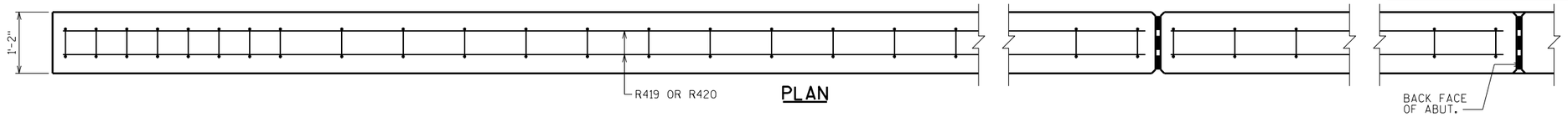
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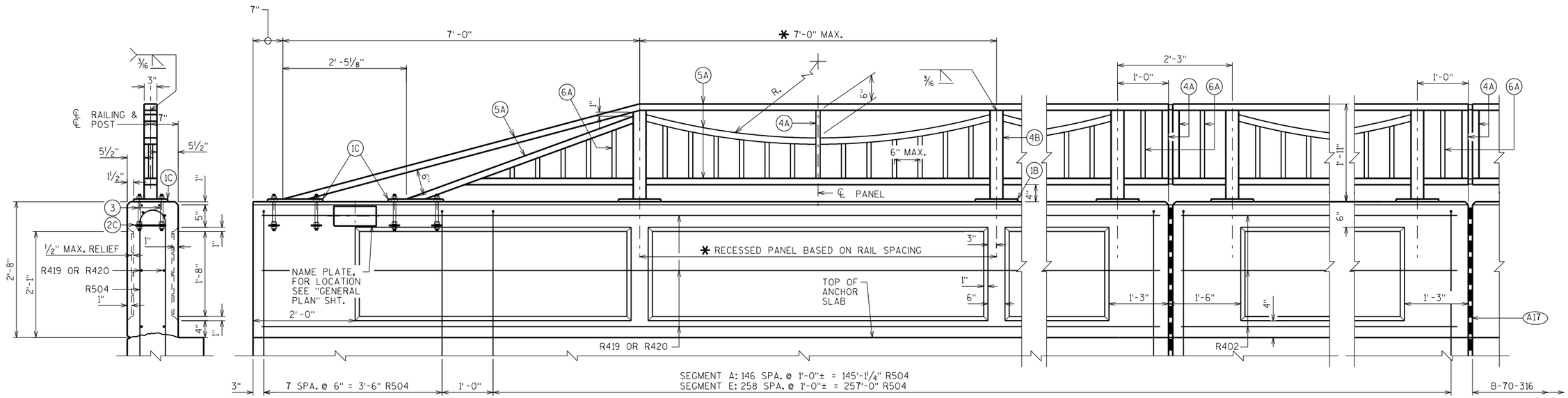
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PLAN



END VIEW

ELEVATION OF PARAPET

AT EXP. JOINTS

CUT LONG. STEEL AS NEEDED FOR EXP. JOINTS

AT ABUT.

* POST SPACING TO BE DETERMINED BASED ON WALL PANEL WIDTH AND ANCHOR SLAB JOINTS.

SEE "COMBINATION RAIL DETAILS" SHEET FOR LEGEND.

(A17) 1/2" FILLER TO BE PLACED BETWEEN ANCHOR SLAB/PPT. AND BACKFACE OF ABUTMENT. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

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COMBINATION RAIL TYPE "C5"

SHEET 8

361

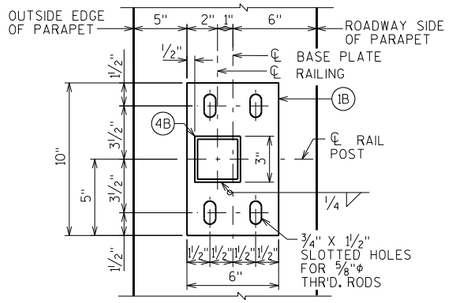
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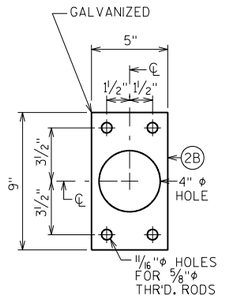
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STATE PROJECT NUMBER

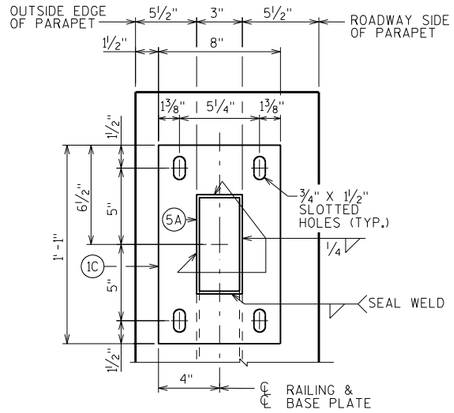
6190-15-72



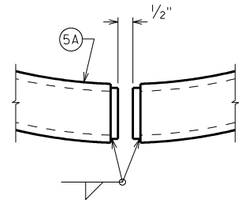
TYPICAL RAIL POST BASE PLATE



ANCHOR PLATE



END RAIL BASE PLATE



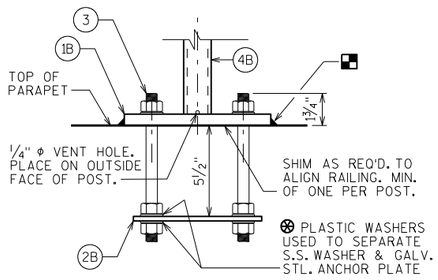
CURVED MEMBER JOINT DETAIL

SEAL ENDS ON CURVED STRUCTURAL TUBING WITH 1/4" PLATE. WELD AND GRUND SMOOTH.

LEGEND

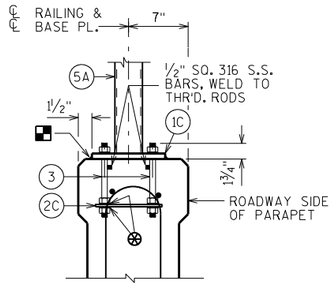
- (1B) PLATE 5/8" X 6" X 10" WITH 3/4" X 1 1/2" SLOTTED HOLES
- (1C) PLATE 5/8" X 8" X 1'-1" WITH 3/4" X 1 1/2" SLOTTED HOLES.
- (2B) 1/4" X 5" X 9" ANCHOR PLATE WITH 11/16" φ HOLES FOR ANCHOR BOLTS NO. 3.
- (2C) 1/4" X 2 1/2" X 7 1/4" ANCHOR PLATE WITH 11/16" φ HOLES FOR ANCHOR BOLTS NO. 3.
- (3) 5/8" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. ALTERNATE ANCHORAGE: CONCRETE ADHESIVE ANCHORS 5/8-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. EMBEDED 5" IN CONCRETE FOR END RAILS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATION.
- (4A) STRUCTURAL TUBING 3" X 1 1/2" X 3/16". PLACE VERTICAL. WELD TO NO. 5.
- (4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.
- (5A) STRUCTURAL TUBING 3" X 1 1/2" X 3/16" RAILS. WELD TO NO. 1 & NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.
- (6A) BAR 1" X 1" PICKETS. WELD TO NO. 5. PLACE VERTICAL.
- (9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".
- (10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ STRIP SEAL EXP. JTS.)

SEE "COMBINATION RAIL TYPE C5" SHEET FOR MEMBER LOCATIONS.



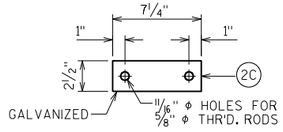
ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



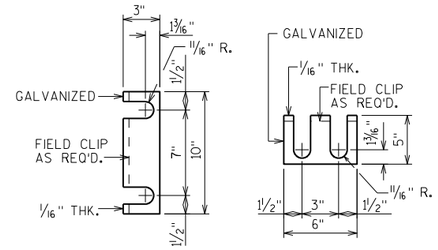
ANCHORAGE FOR END RAIL

NOTE: ANCHOR PLATES NOT REQ'D. WHEN ADHESIVE ANCHORS ARE USED.



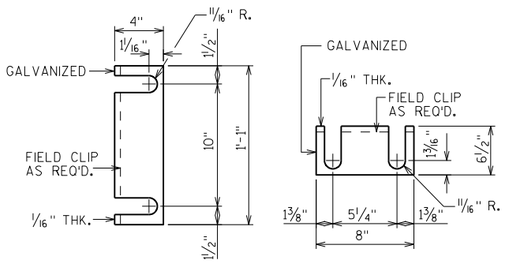
END RAIL ANCHOR PLATE

FOR END RAIL BASE PLATES
2 REQ'D. PER END RAIL BASE PLATE



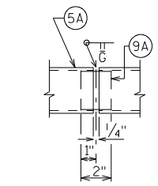
RAIL POST SHIM DETAIL

(2 SETS PER POST)



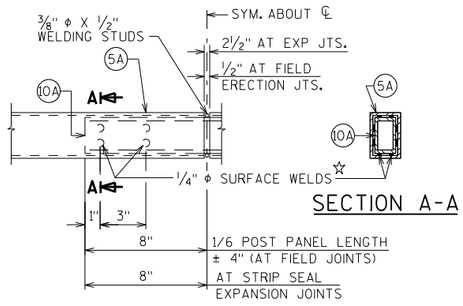
END RAIL SHIM DETAIL

(2 SETS PER POST)



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



SECTION A-A

FIELD ERECTION JOINT DETAIL

☆ MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

RAILING NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C5 R-70-123", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED FEDERAL COLOR NO. 27038, BLACK.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

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COMBINATION RAIL DETAILS

SHEET 9

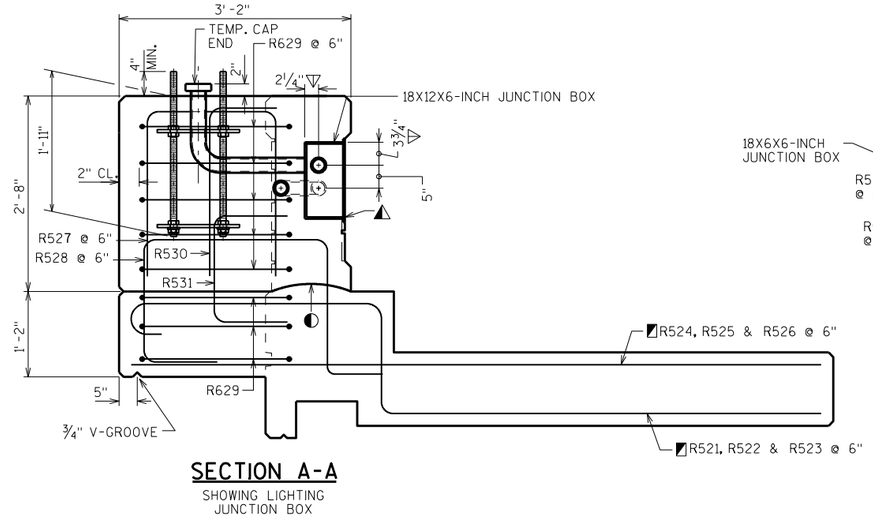
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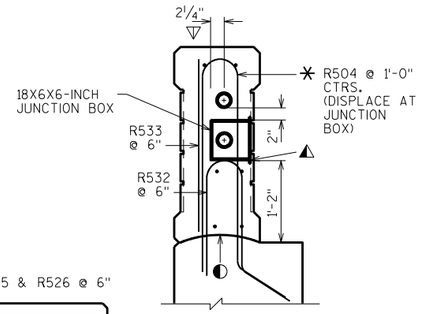
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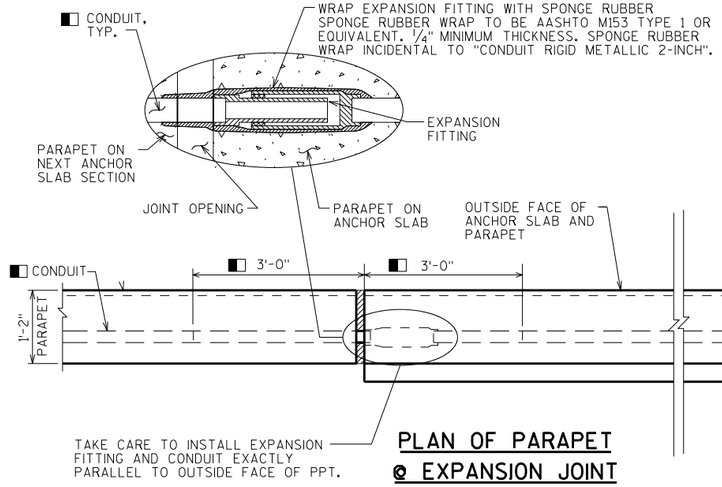
SECTION A-A

SHOWING LIGHTING JUNCTION BOX



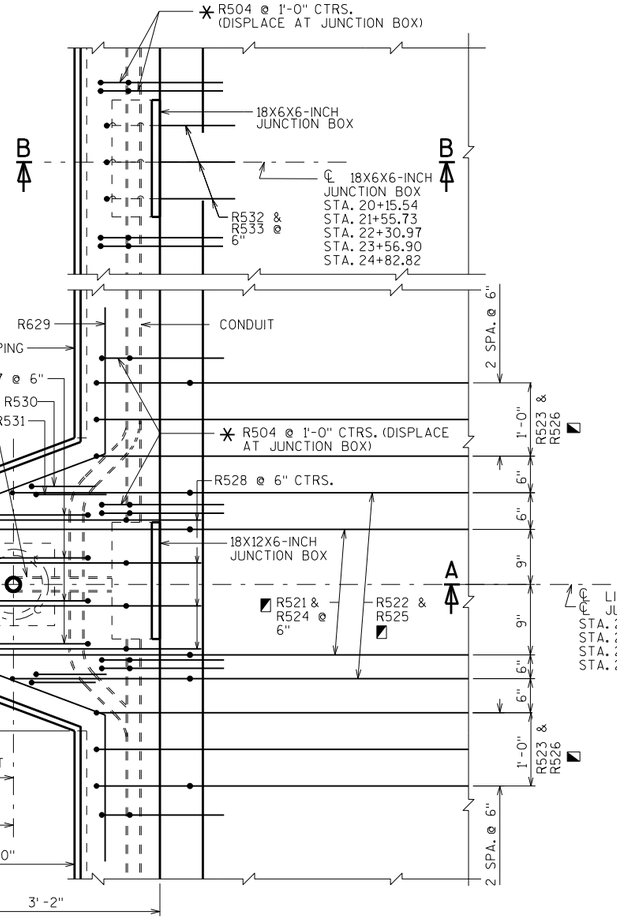
SECTION B-B

NAVIGATION LIGHT JUNCTION BOX



PLAN OF PARAPET @ EXPANSION JOINT

PLAN OF PARAPET @ WALL END



PLAN AT LIGHT STANDARD

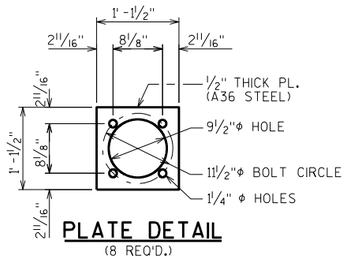
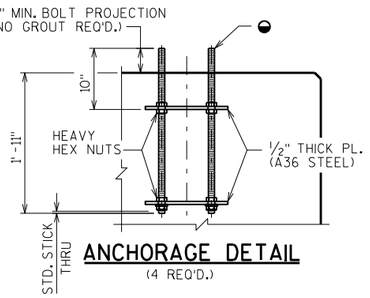


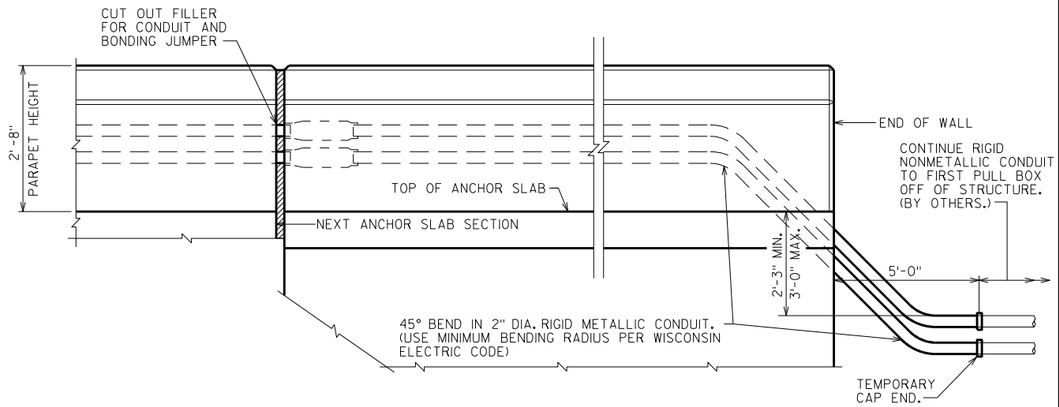
PLATE DETAIL

(8 REQ'D.)



ANCHORAGE DETAIL

(4 REQ'D.)



ELEVATION OF PARAPET @ EXPANSION JOINT

ELEVATION OF PARAPET @ WALL END

- USE RIGID NONMETALLIC CONDUIT EXCEPT AT EXPANSION FITTING. AT EXPANSION FITTING USE RIGID METALLIC CONDUIT 3'-0" INTO PARAPET ON EACH SIDE OF THE JOINT OPENING.
- CONSTR. JT. STRIKE OFF AS SHOWN
- CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.
- LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.
- THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN ANCHOR SLAB.
- 1"ϕ ANCHOR BOLTS ASTM A449 OR AASHTO M 314-90 GR 55. THREAD & HOT DIP ASTM A153, CLASS C, UPPER 8" OF BOLT INCLUDING NUTS & WASHERS. PROVIDE ENLARGED THREAD ON NUTS FOR PROPER FIT AFTER GALVANIZING. PROVIDE DOUBLE FLAT WASHERS & NUTS.
- SEE "COMBINATION RAIL TYPE C5", SHT. FOR ADDITIONAL BAR STEEL DETAILS.

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18X12X6-INCH", EACH.
"JUNCTION BOXES 18X6X6-INCH", EACH.
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH"
"ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES", EACH.

APPROVED MANUFACTURERS - JUNCTION BOXES:
SEE APPROVED MATERIAL LIST.
APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER (4" TOTAL CONDUIT MOVEMENT).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.

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PARAPET ELECTRICAL WORK

SHEET 10

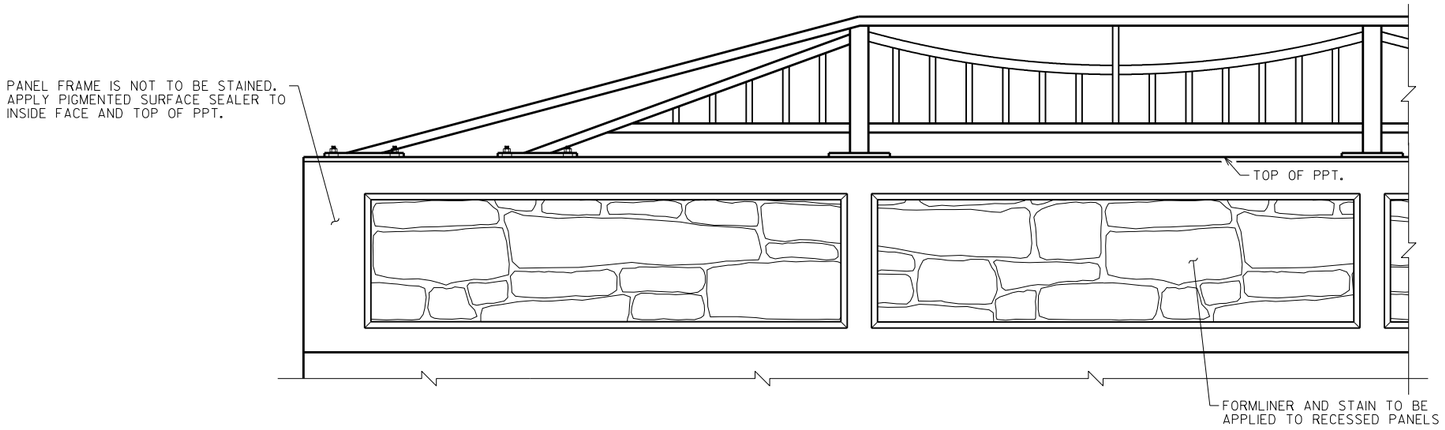
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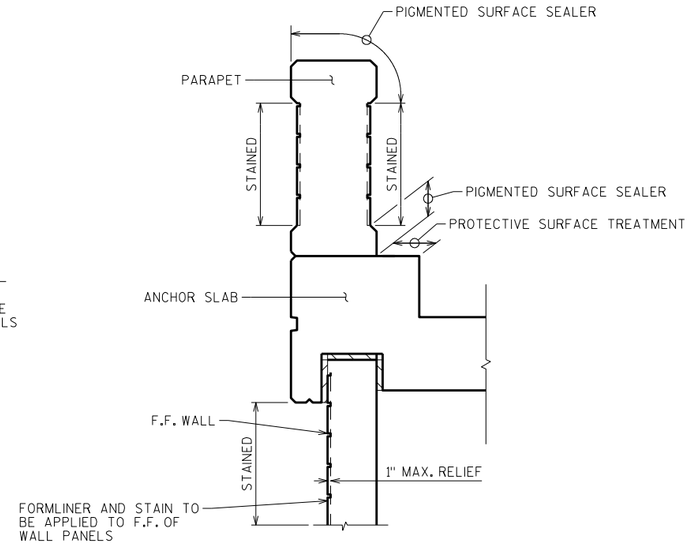
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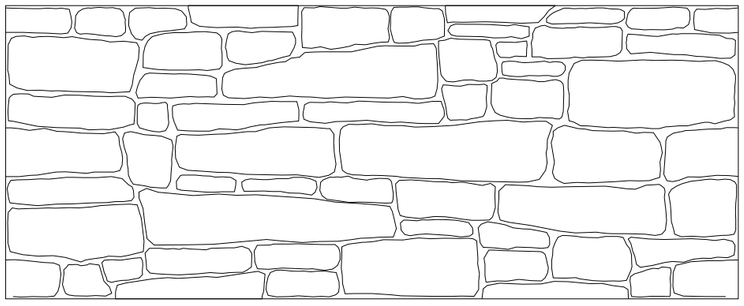
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ELEVATION OF PARAPET



CROSS SECTION OF PARAPET

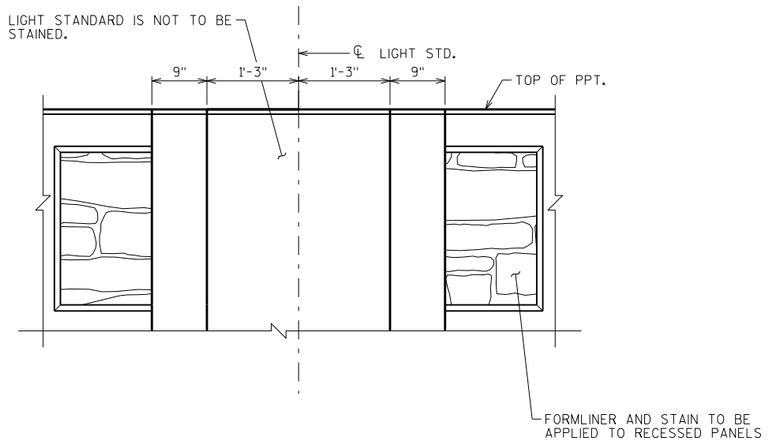


FORMLINER DETAILS

APPLY FORMLINER TO THE FRONT FACE OF THE PRECAST CONCRETE WALL PANELS TO A MINIMUM DEPTH OF 1'-0" BELOW FINISHED GRADE. FORMLINER SHOULD ALSO BE APPLIED TO THE INTERIOR AND EXTERIOR RECESSED PANELS ON PARAPETS. FINISHED STAIN IS TO INCLUDE A MIXTURE OF GRAYS TO BE APPROVED BY THE ENGINEER.

FORMLINER COURSING SHALL BE LEVEL.

DRYSTACK STONE FORMLINER:
SIZE = 3" TO 24" (PARAPET)
SIZE = 3" TO 36" (WALL PANELS)
MAX. RELIEF = 1/2" (PARAPET)
MAX. RELIEF = 1" (WALL PANELS)



EXTERIOR PPT. @ LIGHT STD.

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AESTHETIC DETAILS

SHEET 11

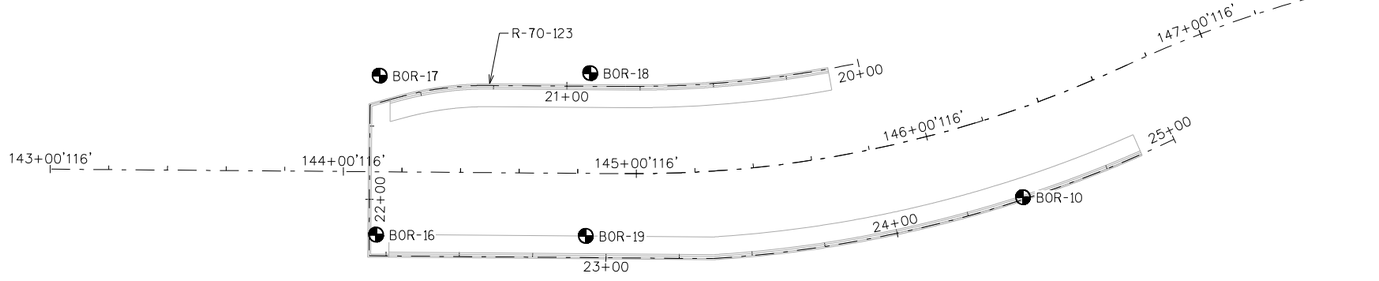
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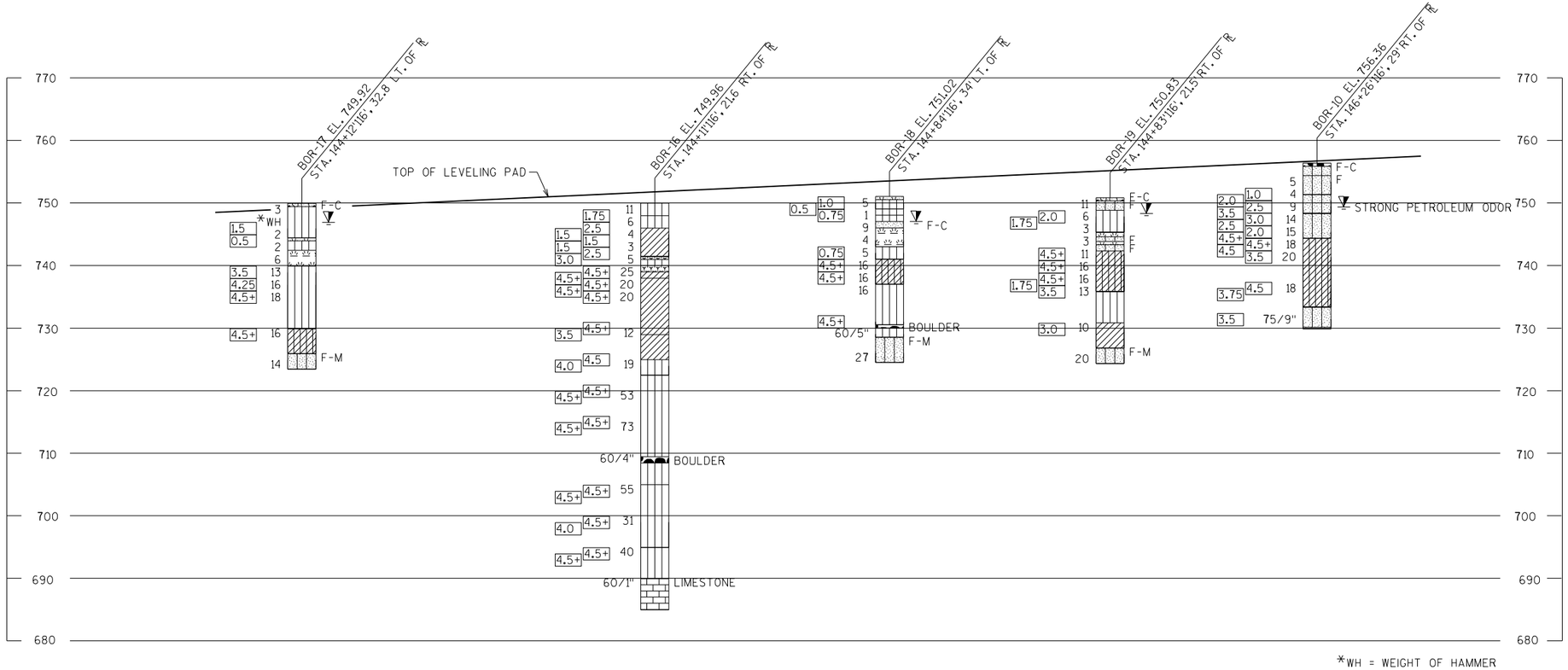
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BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
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16	5/26/2016	507161.302	748197.700
17	5/31/2016	507215.568	748198.886
18	5/31/2016	507216.414	748270.741
19	6/01/2016	507160.868	748269.229
BORINGS COMPLETED BY: WISDOT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) WINNEBAGO COUNTY			





*WH = WEIGHT OF HAMMER

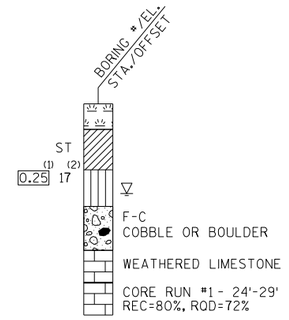
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MATERIAL SYMBOLS

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
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STRUCTURES DESIGN SECTION

STRUCTURE R-70-123

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SUBSURFACE EXPLORATION

SHEET 12

365

SCALE = 25

8

8

STATE PROJECT NUMBER

6190-15-72

TOTAL ESTIMATED QUANTITIES

	BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
	501.1000.S	ICE HOT WEATHER CONCRETING	LB	1,430
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	28
	502.3210	PIGMENTED SURFACE SEALER	SY	120
**	504.0500	CONCRETE MASONRY RETAINING WALLS	CY	191
**	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	18,590
	513.7026	RAILING STEEL TYPE C5 R-70-122	LF	424
*	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	20
	517.1015.S	CONCRETE STAINING MULTI-COLOR R-70-122	SF	3,725
	517.1050.S	ARCHITECTURAL SURFACE TREATMENT R-70-122	SF	3,725
	612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	25
	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	490
*	652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	90
*	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	345
	653.0220	JUNCTION BOXES 18X6X6-INCH	EACH	3
	653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	3
	657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	3
	SPV.0165	WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/OMP	SF	3,471
		NON-BID ITEMS		
		NON-BITUMINOUS JOINT SEALER	SIZE	1"
		CORK FILLER	SIZE	1/2", 3/4", 1"
		EXPANDED POLYSTYRENE	SIZE	1"

* QUANTITY ASSUMES 7 EXPANSION JOINTS IN SEGMENT A & 7 IN SEGMENT E

** QUANTITY INCLUDES: VEHICLE BARRIER (ANCHOR SLAB & PARAPET)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

BEVEL ALL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER UNLESS OTHERWISE SHOWN OR NOTED.

ALL BAR STEEL REINFORCEMENT IN CAST-IN-PLACE CONCRETE IS TO BE EPOXY COATED.

SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF JOINT FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP & HOLD 1/8" BELOW THE SURFACE OF CONCRETE).

ALL WALL STATIONING AND OFFSETS ARE GIVEN AT THE FRONT FACE OF WALL R-70-122.

THE PLAN QUANTITY FOR THE BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/OMP" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE WALL TO A CONSTANT DEPTH OF 1'-6" BELOW FINISHED GRADE.

COORDINATE THE CONSTRUCTION OF RETAINING WALL R-70-122 WITH THE WEST ABUTMENT OF BRIDGE B-70-316 AND RETAINING WALL R-70-126.

QUANTITIES AND REINFORCEMENT DETAILS ARE BASED ON AN ASSUMED CONCRETE WALL PANEL THICKNESS OF 8" AND A PANEL EMBEDMENT OF 5". FOR PANEL THICKNESS OR PANEL EMBEDMENT DIFFERENT THAN THESE VALUES, THE CONTRACTOR SHALL VERIFY REINFORCEMENT BAR DETAILS AND QUANTITIES AND WILL BE RESPONSIBLE FOR ANY QUANTITY VARIATIONS.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE TRAFFIC SIDE AND THE TOP OF THE PARAPET IN AREAS THAT ARE NOT DESIGNATED TO BE STAINED.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE TRAFFIC SIDE OF THE EXPOSED ANCHOR SLAB SURFACE.

THE WALL IS TO BE CONSTRUCTED TO FULL HEIGHT UP TO STA. 13+60.00± IN STAGE 1&2 AND IS TO BE COMPLETED IN STAGE 6 ONCE THE TRAFFIC IS SWITCHED TO THE NEW ROADWAY.

CONCRETE STAINING AND ARCHITECTURAL SURFACE TREATMENT REQUIRED ON WALL. SEE "AESTHETIC DETAILS" SHEET FOR DETAILS.

CURVE DATA

WALL CURVE 1		WALL CURVE 2	
PI	STA 10+06.46	PI	STA 10+92.07
	Y = 507203.398		Y = 507166.673
	X = 747251.997		X = 747329.338
Δ	1° 59' 52"	Δ	20° 52' 28"
D	15° 28' 30"	D	13° 19' 56"
R	370.25	R	429.75
T	6.46	T	79.16
L	12.91	L	156.57
PC	STA 10+00.00	PRC	STA 10+12.91
PRC	STA 10+12.91	PT	STA 11+69.48

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QUANTITIES, NOTES & CURVE DATA

SHEET 2

366

SCALE = 1.0

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SOIL PARAMETERS

SOIL DESCRIPTION	FRICTION ANGLE (DEGREES)	COHESION (PSF)	UNIT WEIGHT (PCF)
GRANULAR BACKFILL BEHIND THE WALL IN THE REINFORCING ZONE	30	0	120
FILL, GRANULAR BEHIND/BELOW THE REINFORCING ZONE	31	0	120
BOR-13 - STA. 11+43.7, 0.8' LT. (STA. 136+00 STH 116, 29.0' RT.)			
GRANULAR FILL, REPLACES VERY SOFT SOILS EL. 750.2 TO EL. 741.2	31	0	115
CLAY, BROWN, SOME SILT, TRACE GRAVEL EL. 741.2 TO EL. 724.7	0	3,000	125
BOR-20 - STA. 12+39.2, 25.3 RT. (STA. 137+00 STH 116, 12.0' RT.)			
GRANULAR FILL, REPLACES VERY SOFT SOILS EL. 749.2 TO EL. 741.8	31	0	115
SILT, BROWN, SOME CLAY, TRACE SAND AND GRAVEL EL. 741.8 TO EL. 737.8	0	2,500	120
SAND, GRAY, FINE, SOME SILT EL. 737.8 TO EL. 731.8	33	0	125
CLAY, BROWN, SOME SILT, TRACE GRAVEL EL. 731.8 TO EL. 726.8	0	3,000	125
CLAY, BROWN, LITTLE SILT EL. 726.8 TO EL. 724.3	0	2,000	120
BOR-11 - STA. 12+66.2, 0.9' LT. (STA. 136+74 STH 116, 15.0' LT.)			
GRANULAR FILL, REPLACES VERY SOFT SOILS EL. 751.3 TO EL. 742.3	31	0	115
SILT, BROWN, SOME CLAY EL. 742.3 TO EL. 740.3	0	1,000	115
CLAY, BROWN, SOME SILT, LITTLE GRAVEL EL. 740.3 TO EL. 728.3	0	3,000	125
CLAY, BROWN, SOME SILT EL. 728.3 TO EL. 720.8	0	1,500	115
SAND, GRAY, FINE, SOME SILT, SOME GRAVEL EL. 720.8 TO EL. 719.3	32	0	120
GRAVEL, GRAY, FINE TO COARSE, SOME SAND EL. 719.3 TO EL. 706.3	34	0	130
BOR-12 - STA. 14+45.0 (STA. 134+94 STH 116, 40.0' LT.)			
GRANULAR FILL, REPLACES VERY SOFT SOILS EL. 751.3 TO EL. 748.2	31	0	115
CLAY, BROWN, SOME SILT, TRACE GRAVEL EL. 748.2 TO EL. 735.2	0	3,000	125
GRAVEL, BROWN, FINE TO COARSE, SOME SAND, LITTLE SILT EL. 735.2 TO EL. 730.2	36	0	135
SAND, BROWN, FINE EL. 730.2 TO EL. 726.7	34	0	130

WALL EXTERNAL & OVERALL STABILITY EVALUATION

DIMENSIONS					
WALL HEIGHT (FEET)[1]	9.8	14.5	6.0	15.0	6.4
EXPOSED WALL HEIGHT (FEET)	8.3	13.0	4.5	13.5	4.9
MINIMUM LENGTH OF REINFORCEMENT (FEET)[3]	8.0	10.2	12.8[2]	10.5	8.0
LENGTH OF REINFORCEMENT TO HEIGHT RATIO	NA	0.7	2.1	0.7	NA
BORING LOCATION USED	BOR - 13	BOR - 20	BOR - 11	BOR - 11	BOR - 12
APPROXIMATE WALL STATION	11+50.0	12+15.7	12+50.0	12+81.0	13+75.0
CAPACITY TO DEMAND RATIO (CDR)[4]					
SLIDING (CDR > 1.0)	1.2	1.3	1.0	1.3	1.4
ECCENTRICITY (CDR > 1.0)	1.9	1.7	3.2	1.7	3.6
GLOBAL STABILITY (CDR > 1.0)	NA[5]	NA[5]	NA[5]	1.3	NA[5]
BEARING RESISTANCE (CDR > 1.0)	1.8[6]	1.4[6]	1.5[6]	1.3[6]	2.9[6]
REQUIRED BEARING RESISTANCE (PSF)	5,000	5,000	5,000	5,000	5,000

NOTES:
1. THE WALL HEIGHT INCLUDES AN EMBEDMENT OF 1.5 FEET.
2. THE WALL STABILITY EVALUATION INCLUDED A SURCHARGE LOAD THAT WAS EQUAL TO THE WEIGHT OF THE SOIL BEHIND THE ABUTMENT.
3. THE LENGTH OF REINFORCEMENT IS THE MINIMUM REQUIRED LENGTH AT THAT LOCATION.
4. CDR REQUIREMENTS AND LOAD RESISTANCE FACTORS ARE PRESENTED IN CHAPTER 14 OF THE BRIDGE MANUAL
5. NA NOT APPLICABLE, GLOBAL SLOPE STABILITY WAS EVALUATED AT THE CRITICAL WALL LOCATION
6. REQUIRES THE EXCAVATION OF THE VERY SOFT SILTS, CLAYS AND PEATS BELOW THE WALL.
7. THE SLOPE IN FRONT AND BEHIND THE WALL IN ANALYSIS IS ASSUMED TO BE 6:1.

GEOMETRY TABLE

WALL SEGMENT	WALL STATION	TOP OF WALL EL.	FINISHED GRADE EL.	EXISTING GRADE EL.
A	10+05.22	757.88	757.88	754.4
	10+25.00	758.09	757.18	753.8
	10+50.00	758.46	756.34	753.2
	10+75.00	758.97	755.50	752.7
	11+00.00	759.61	754.65	752.4
	11+25.00	760.39	753.81	752.2
	11+50.00	761.29	752.96	751.7
	11+75.00	762.20	752.12	751.4
	12+00.00	763.09	751.27	751.1
	12+15.74	763.73	750.70	750.7
B	12+15.74	753.26◐	750.70	750.7
	12+19.28	753.26◐	750.57	750.6
C	12+19.28	754.76	750.57	750.6
	12+22.53	754.70	750.45	750.6
	12+25.00	754.70	750.43	750.5
	12+50.00	754.70	750.19	750.8
	12+73.92	754.70	749.96	751.3
	12+77.30	754.76	750.07	751.4
D	12+77.30	753.26◐	750.07	751.4
	12+80.98	753.26◐	750.18	751.4
E	12+80.98	763.67	750.18	751.4
	13+00.00	763.03	750.79	751.8
	13+25.00	761.30	751.58	751.5
	13+50.00	759.18	752.37	751.3
	13+75.00	757.76	752.89	751.6
	14+00.00	757.30	753.33	752.1
	14+25.00	757.20	753.78	752.5
	14+50.00	757.10	754.67	753.4
	14+75.00	757.00	755.92	754.0
	14+95.00	756.92	756.92	754.6

◐ ELEVATION GIVEN IS ASSUMING MINIMUM EMBEDMENT INTO B-70-316 ABUTMENT. SEE "TYPICAL SECTIONS 2" SHEET FOR DETAILS.

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ELEVATIONS, SOIL PARAMETERS & WALL DATA

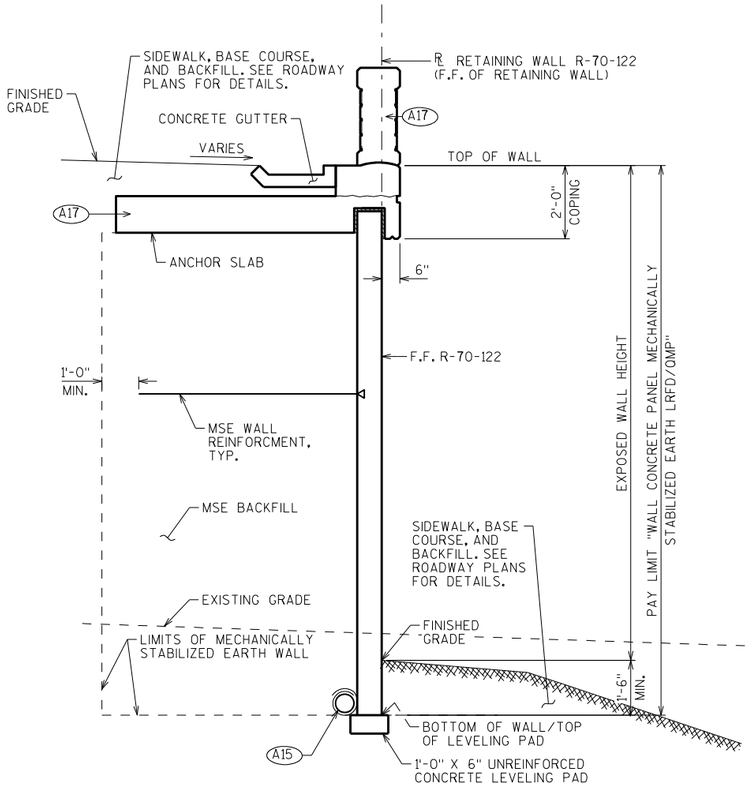
SHEET 3

367

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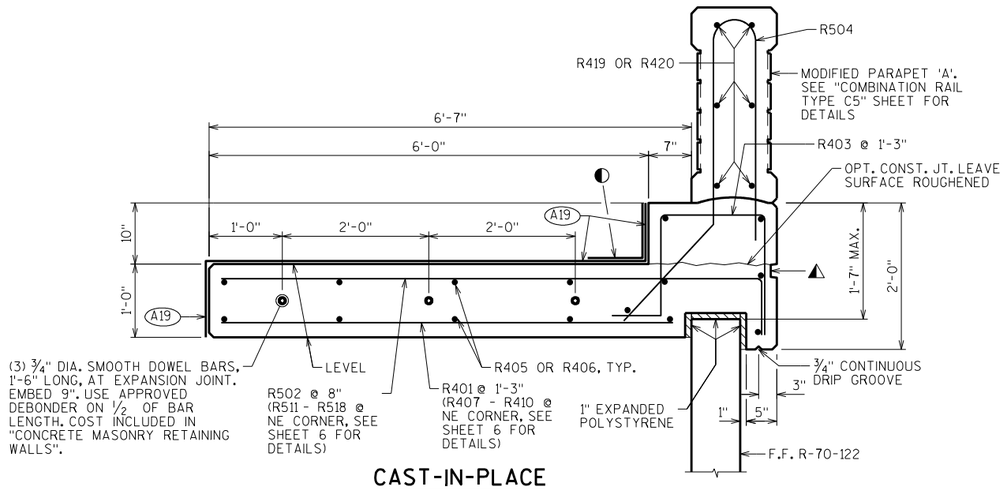
STATE PROJECT NUMBER

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TYPICAL SECTION

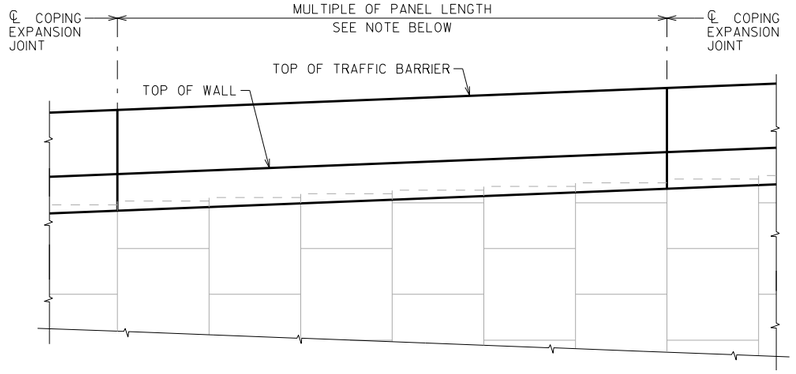
SEGMENT A: STA. 10+05.22 TO 12+15.74
SEGMENT E: STA. 12+80.98 TO 14+95.00



CAST-IN-PLACE CONCRETE TRAFFIC BARRIER DETAIL

◐ IF THE OPT. CONST. JT. IS USED, PLACE 18" RUBBERIZED MEMBRANE WATERPROOFING ALONG THE ENTIRE LONGITUDINAL JOINT. THE RUBBERIZED MEMBRANE WATERPROOFING SEALING THE OPT. CONST. JT. IS INCIDENTAL TO THE CONCRETE MASONRY BID ITEM.

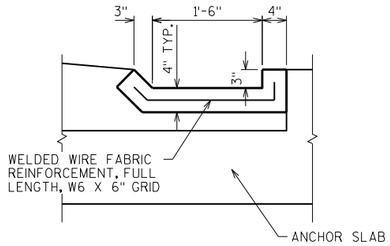
◭ PROVIDE RUSTICATION IF OPT. CONST. JT. IS USED.



◔ CAST-IN-PLACE CONCRETE TRAFFIC BARRIER PARTIAL ELEVATION

LOOKING AT F.F. WALL

NOTE:
ALL JOINTS MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.



CONCRETE GUTTER

CONCRETE GUTTER TO BE PLACED ALONG TOP OF WALL FROM STA. 13+15.00 TO STA. 14+95.00

GUTTER TO BE INCIDENTAL TO "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/OMP".

MAX SPACING OF CONTRACTION JOINTS = 12'

CONTRACTION JOINTS SHALL BE CONSTRUCTED AS PROVIDED UNDER SECTION 601.3.4 OF THE STANDARD SPECIFICATIONS.

DO NOT RUN STEEL THRU JOINT.

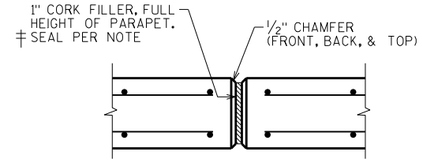
◔ EXPANSION JOINTS TO BE SPACED AT A MINIMUM OF 20' AND A MAXIMUM OF 30'. LOCATE EXPANSION JOINTS OVER WALL JOINTS. DO NOT RUN BAR STEEL THRU JOINT, EXCEPT FOR DOWEL BARS. JOINT TO EXTEND FULL DEPTH OF PARAPET AND ANCHOR SLAB.

‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONC.)

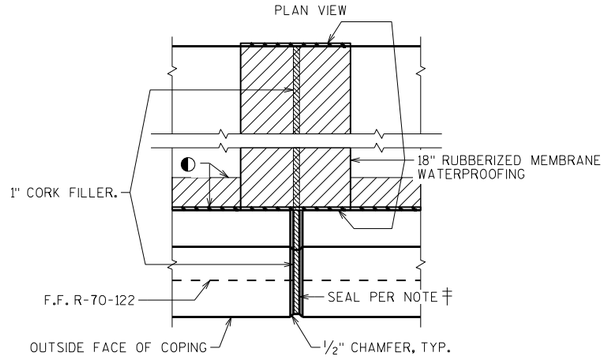
(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SEE 'UNDERDRAIN LAYOUT' SHEET

(A17) 1/2" FILLER TO BE PLACED BETWEEN ANCHOR SLAB/PPT. AND BACKFACE OF ABUTMENT. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

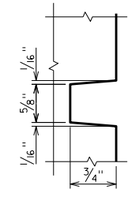


◔ TRAFFIC BARRIER EXPANSION JOINT



◔ ANCHOR SLAB EXPANSION JOINT

PLAN VIEW



RUSTICATION DETAIL

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TYPICAL SECTIONS 1

SHEET 4

368

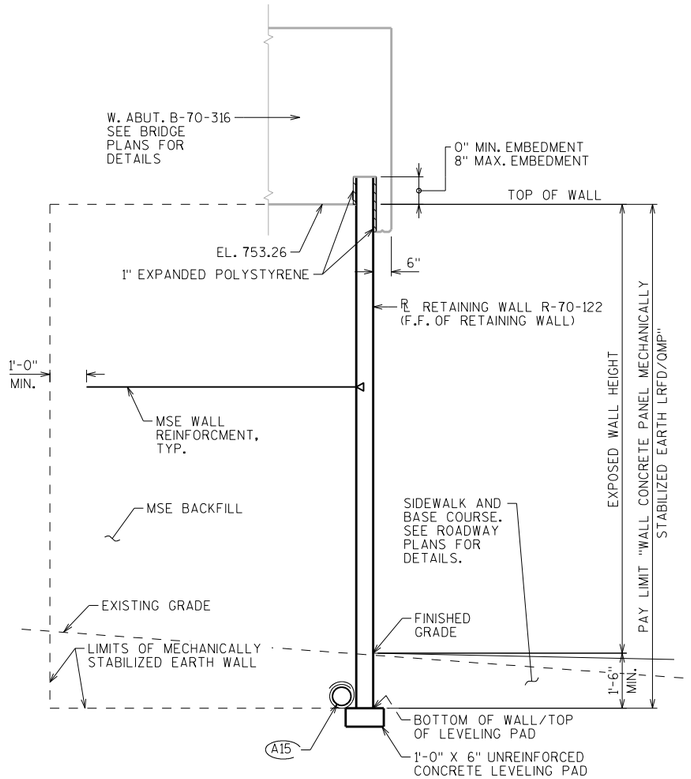
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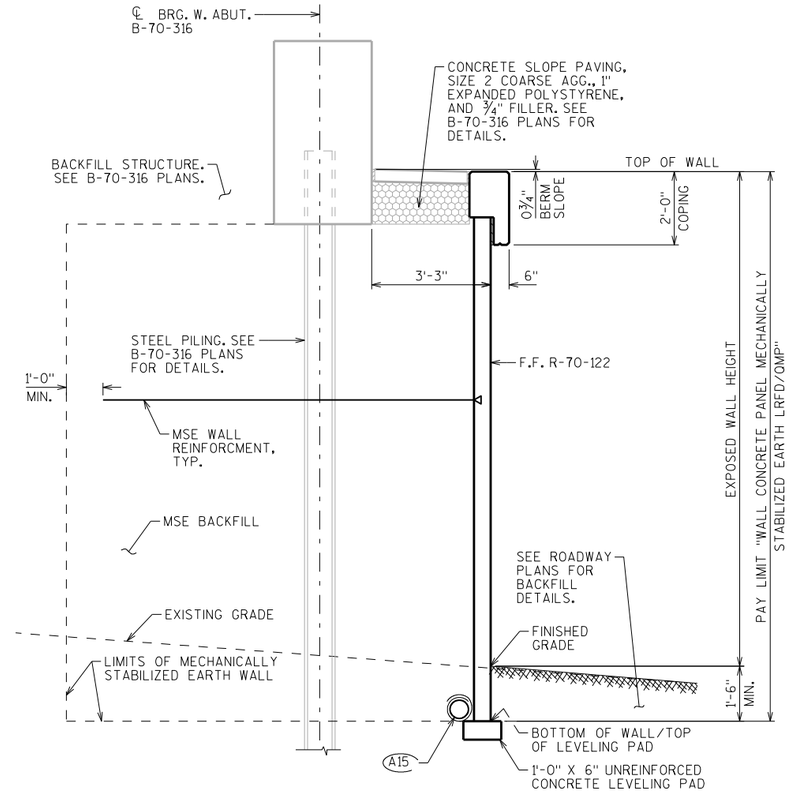
STATE PROJECT NUMBER

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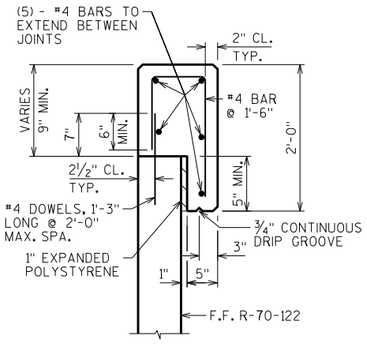
TYPICAL SECTION AT ABUTMENT

SEGMENT B: STA. 12+15.75 TO 12+19.28
SEGMENT D: STA. 12+77.31 TO 12+80.97



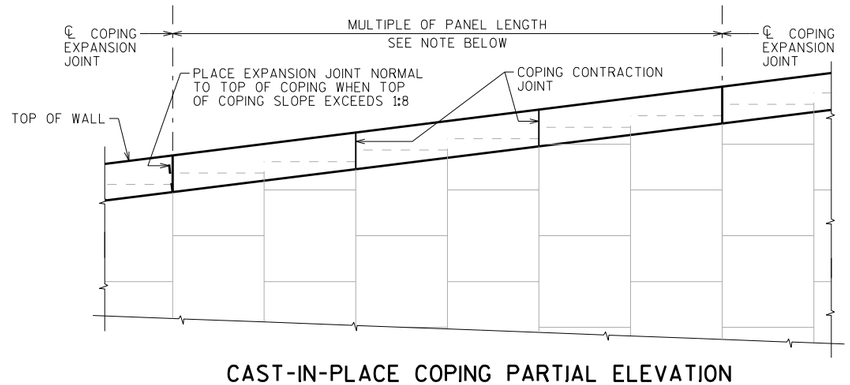
TYPICAL SECTION AT ABUTMENT

SEGMENT C: STA. 12+19.29 TO 12+77.30



CAST-IN-PLACE CONCRETE COPING DETAIL

NOTE: CONCRETE AND BARS IN COPING ARE INCIDENTAL TO BID ITEM "WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD/QMP"

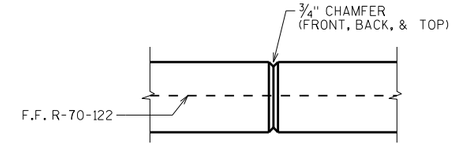


CAST-IN-PLACE COPING PARTIAL ELEVATION

LOOKING AT F.F. WALL

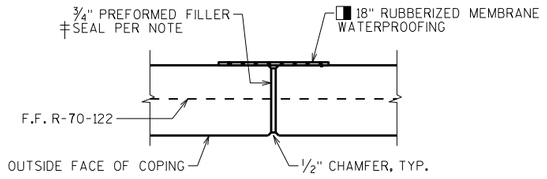
NOTE:
ALL JOINTS MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH).
SEE SHEET 6.



COPING CONTRACTION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 12'



COPING EXPANSION JOINT

DO NOT RUN BAR STEEL THRU JOINT.
MAX. SPACING OF JOINT = 50'

‡ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONC.)

MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO 6" BELOW TOP OF PANELS.

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TYPICAL SECTIONS 2

SHEET 5

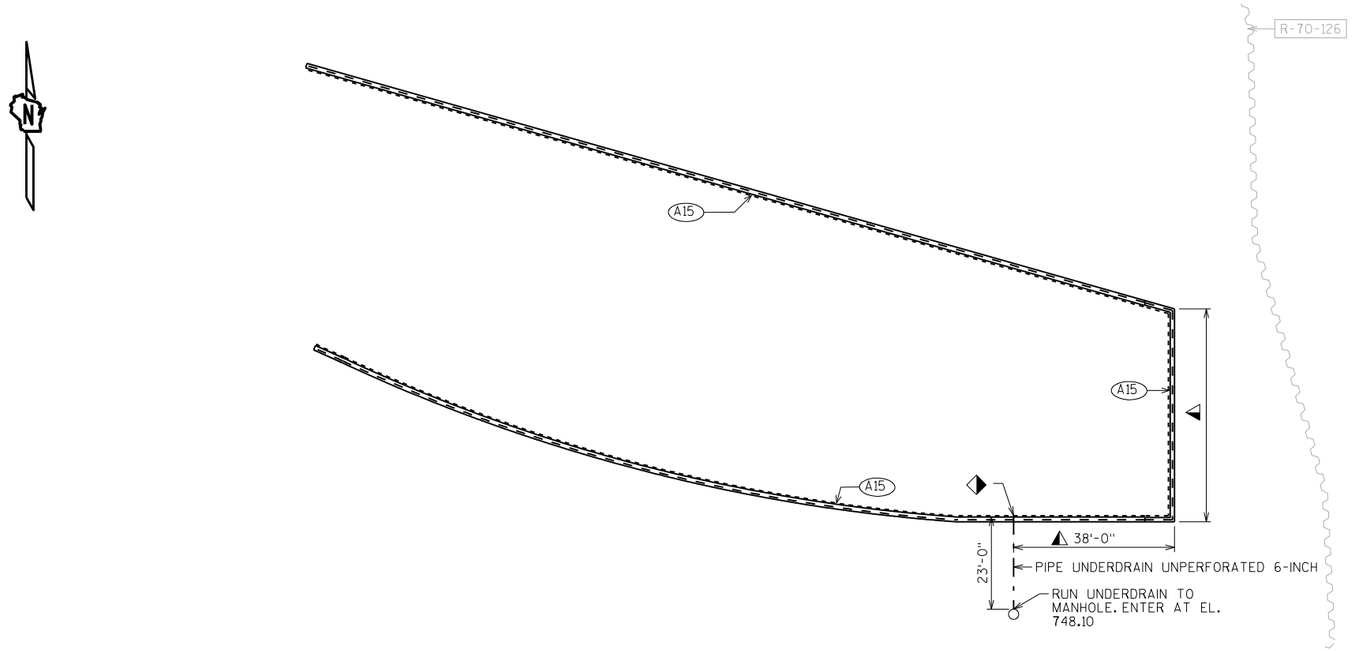
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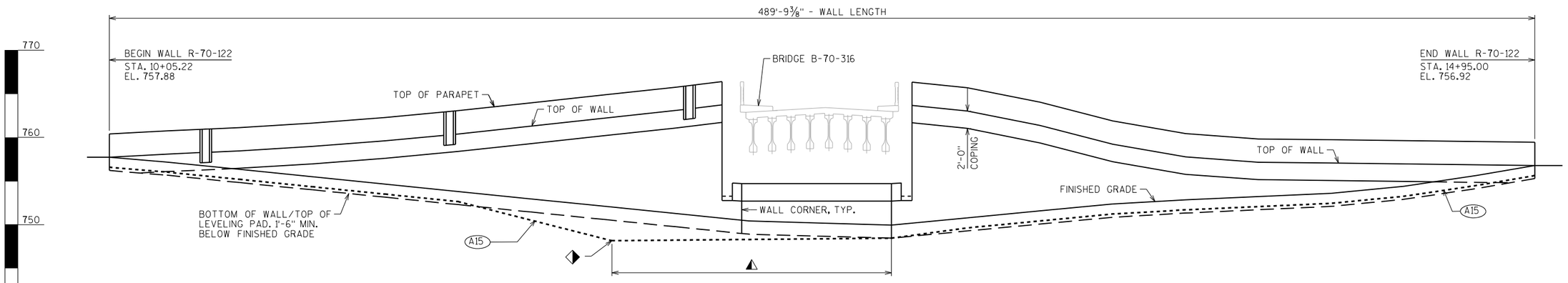


PLAN

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). UNLESS SHOWN, SLOPE 0.5% MIN.

◭ SECTIONS OF UNDERDRAIN TO BE SLOPED AT 0.3% MIN.

◈ TEE FITTING, INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH". RUN "PIPE UNDERDRAIN UNPERFORATED 6-INCH" UNDER LEVELING PAD AND AT 0.3% MIN. TO MANHOLE.



ELEVATION

LOOKING AT F.F. WALL
(VERT. SCALE EXAGGERATED BY 3)

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UNDERDRAIN LAYOUT

SHEET 6

370

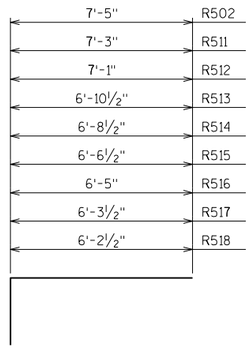
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BILL OF BARS

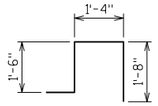
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	NOTE	LOCATION
R401	X	339	6'-2"			ANCHOR SLAB - BOTTOM TRANSVERSE
R502	X	633	8'-1"	X		ANCHOR SLAB - TOP TRANSVERSE
R403	X	342	4'-11"	X		ANCHOR SLAB - VERTICAL
R504	X	433	7'-8"	X		PPT./ANCHOR SLAB - VERTICAL
R405	X	15	206'-2"		⚠	ANCHOR SLAB - SEGMENT A - LONG.
R406	X	15	210'-10"		⚠	ANCHOR SLAB - SEGMENT E - LONG.
R407	X	1	5'-10"			ANCHOR SLAB - BOTTOM TRANSVERSE
R408	X	1	5'-6"			ANCHOR SLAB - BOTTOM TRANSVERSE
R409	X	1	5'-3"			ANCHOR SLAB - BOTTOM TRANSVERSE
R410	X	2	4'-11"			ANCHOR SLAB - BOTTOM TRANSVERSE
R511	X	1	7'-11"	X		ANCHOR SLAB - TOP TRANSVERSE
R512	X	1	7'-9"	X		ANCHOR SLAB - TOP TRANSVERSE
R513	X	1	7'-7"	X		ANCHOR SLAB - TOP TRANSVERSE
R514	X	1	7'-5"	X		ANCHOR SLAB - TOP TRANSVERSE
R515	X	1	7'-3"	X		ANCHOR SLAB - TOP TRANSVERSE
R516	X	1	7'-1"	X		ANCHOR SLAB - TOP TRANSVERSE
R517	X	1	7'-0"	X		ANCHOR SLAB - TOP TRANSVERSE
R518	X	1	6'-11"	X		ANCHOR SLAB - TOP TRANSVERSE
R419	X	6	207'-4"		⚠	PPT. -SEGMENT A - LONG.
R420	X	6	210'-8"		⚠	PPT. -SEGMENT E - LONG.
R521	X	12	11'-3"	X		LIGHT STD./ANCHOR SLAB
R522	X	6	10'-3"	X		LIGHT STD./ANCHOR SLAB
R523	X	18	9'-3"	X		LIGHT STD./ANCHOR SLAB
R524	X	12	9'-5"			LIGHT STD./ANCHOR SLAB - HORIZ.
R525	X	6	8'-5"			LIGHT STD./ANCHOR SLAB - HORIZ.
R526	X	18	7'-5"			LIGHT STD./ANCHOR SLAB - HORIZ.
R527	X	12	6'-0"	X		LIGHT STD. - VERT.
R528	X	12	7'-6"	X		LIGHT STD. - VERT.
R629	X	24	10'-0"	X		LIGHT STD. - HORIZ.
R530	X	6	3'-2"	X		LIGHT STD. - VERT.
R531	X	6	4'-0"	X		LIGHT STD. - VERT.
R532	X	9	5'-8"	X		JUNCTION BOX - VERT.
R533	X	9	2'-4"			JUNCTION BOX - VERT.

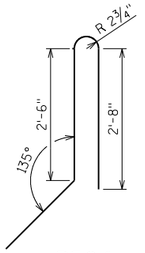
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. THE NUMBER REQUIRED IS THE BARS IN THE CROSS SECTION AND BARS SHALL BE CUT AS NEEDED FOR EXPANSION JOINTS.



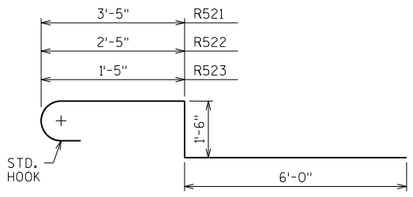
R502, R511, R512, R513, R514, R515, R516, R517, R518



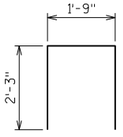
R403



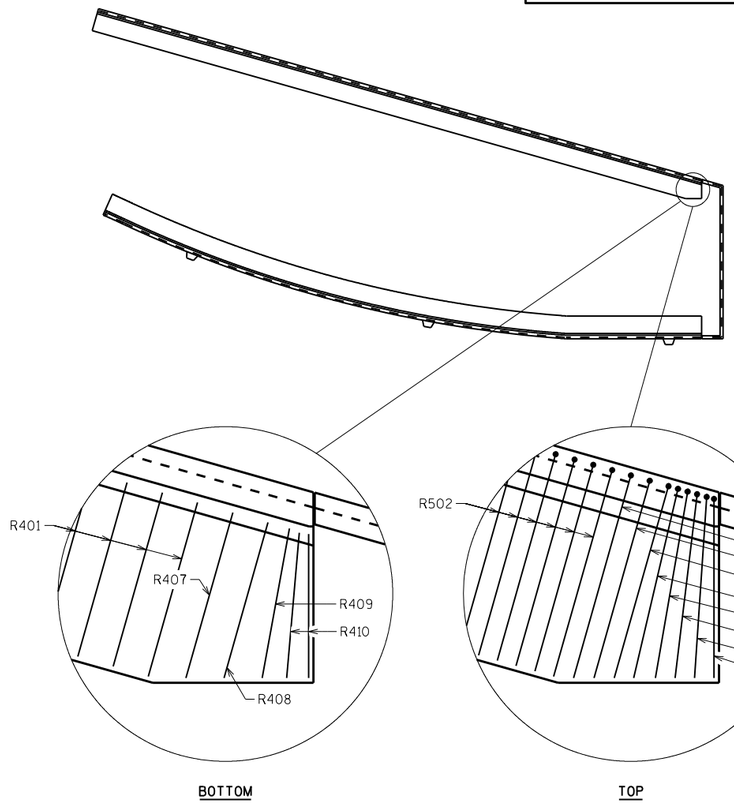
R504



R521, R522, R523

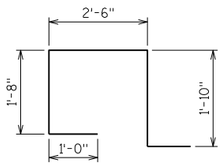


R527

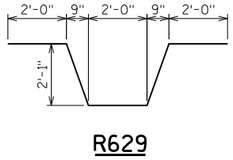


BOTTOM TOP

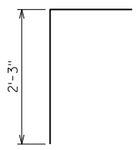
TRANSVERSE STEEL DETAIL



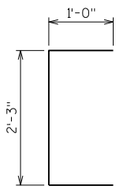
R528



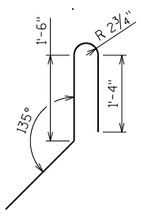
R629



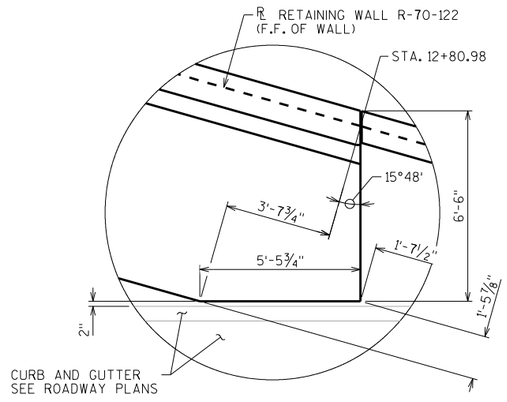
R530



R531



R532



DIMENSIONING DETAIL

STATE PROJECT NUMBER

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-70-122

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BILL OF BARS

SHEET 7

371

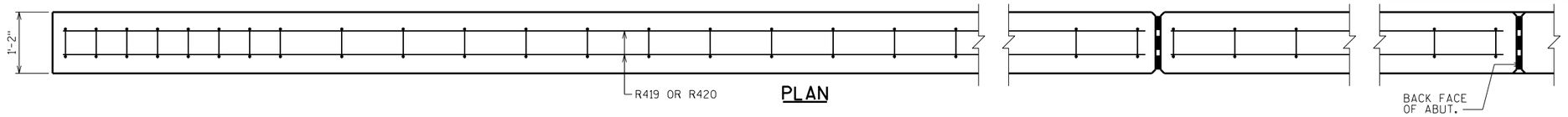
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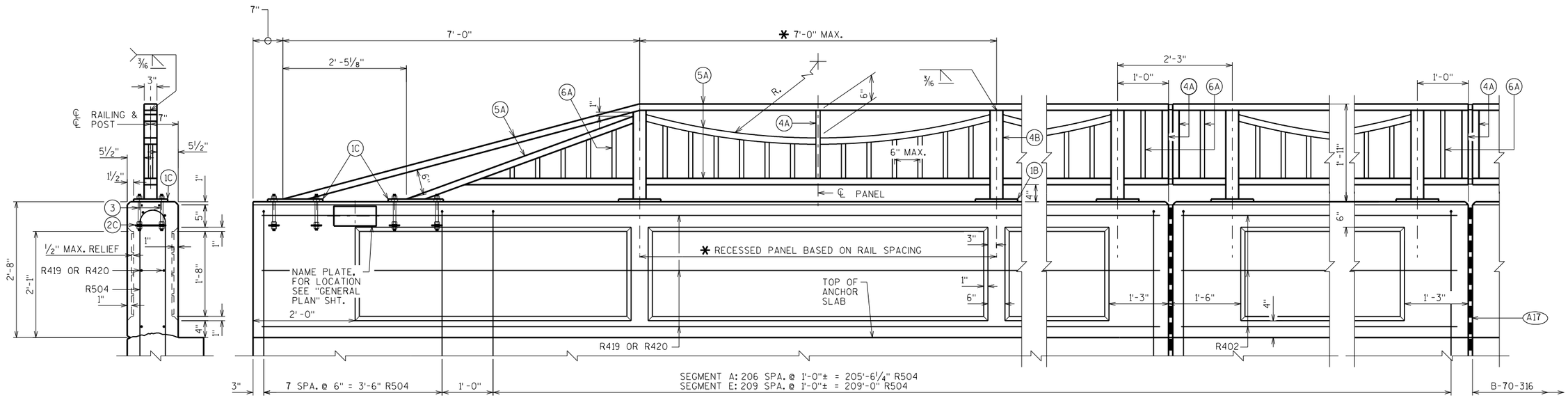
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PLAN



END VIEW

ELEVATION OF PARAPET

AT EXP. JOINTS

CUT LONG. STEEL AS NEEDED FOR EXP. JOINTS

AT ABUT.

* POST SPACING TO BE DETERMINED BASED ON WALL PANEL WIDTH AND ANCHOR SLAB JOINTS.

SEE "COMBINATION RAIL DETAILS" SHEET FOR LEGEND.

(A17) 1/2" FILLER TO BE PLACED BETWEEN ANCHOR SLAB/PPT. AND BACKFACE OF ABUTMENT. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE R-70-122

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COMBINATION RAIL TYPE "C5"

SHEET 8

372

SCALE = 1.000

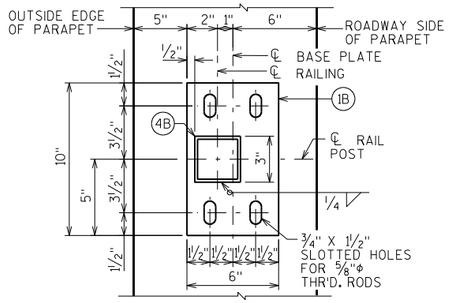
RAILCOMB
7-11

8

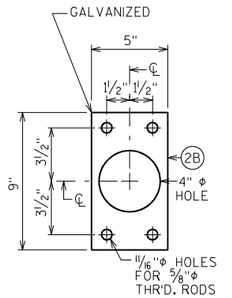
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STATE PROJECT NUMBER

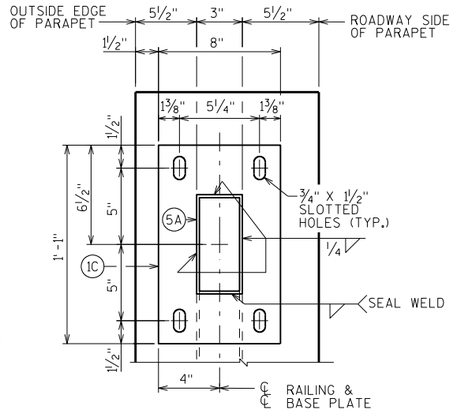
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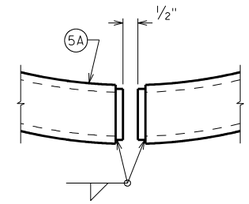
TYPICAL RAIL POST BASE PLATE



ANCHOR PLATE



END RAIL BASE PLATE



CURVED MEMBER JOINT DETAIL

SEAL ENDS ON CURVED STRUCTURAL TUBING WITH 1/4" PLATE. WELD AND GRIND SMOOTH.

LEGEND

(1B) PLATE 5/8" X 6" X 10" WITH 3/4" X 1 1/2" SLOTTED HOLES

(1C) PLATE 5/8" X 8" X 1'-1" WITH 3/4" X 1 1/2" SLOTTED HOLES.

(2B) 1/4" X 5" X 9" ANCHOR PLATE WITH 11/16" φ HOLES FOR ANCHOR BOLTS NO. 3.

(2C) 1/4" X 2 1/2" X 7 1/4" ANCHOR PLATE WITH 11/16" φ HOLES FOR ANCHOR BOLTS NO. 3.

(3) 5/8" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. ALTERNATE ANCHORAGE: CONCRETE ADHESIVE ANCHORS 5/8-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. EMBEDED 5" IN CONCRETE FOR END RAILS. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATION.

(4A) STRUCTURAL TUBING 3" X 1 1/2" X 3/16". PLACE VERTICAL. WELD TO NO. 5.

(4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.

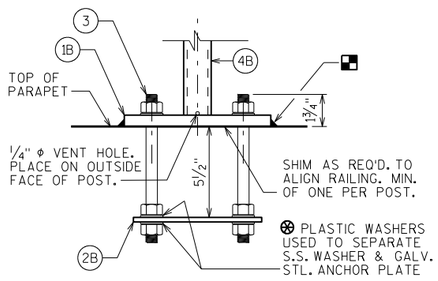
(5A) STRUCTURAL TUBING 3" X 1 1/2" X 3/16" RAILS. WELD TO NO. 1 & NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.

(6A) BAR 1" X 1" PICKETS. WELD TO NO. 5. PLACE VERTICAL.

(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

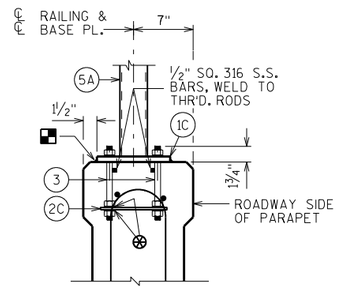
(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ STRIP SEAL EXP. JTS.)

SEE "COMBINATION RAIL TYPE C5" SHEET FOR MEMBER LOCATIONS.



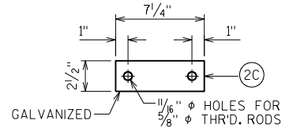
ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



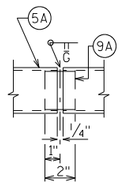
ANCHORAGE FOR END RAIL

NOTE: ANCHOR PLATES NOT REQ'D. WHEN ADHESIVE ANCHORS ARE USED.



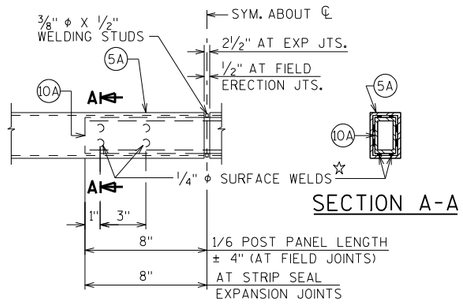
END RAIL ANCHOR PLATE

FOR END RAIL BASE PLATES
2 REQ'D. PER END RAIL BASE PLATE



SHOP RAIL SPLICE DETAIL

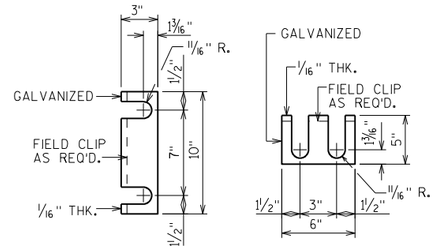
(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



SECTION A-A

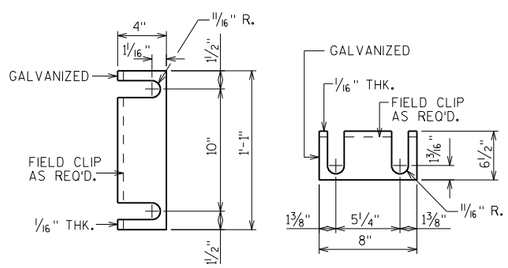
FIELD ERECTION JOINT DETAIL

☆ MIN. 5/8" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



RAIL POST SHIM DETAIL

(2 SETS PER POST)



END RAIL SHIM DETAIL

(2 SETS PER POST)

RAILING NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C5 R-70-122", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED FEDERAL COLOR NO. 27038, BLACK.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-70-122

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COMBINATION RAIL DETAILS

SHEET 9

373

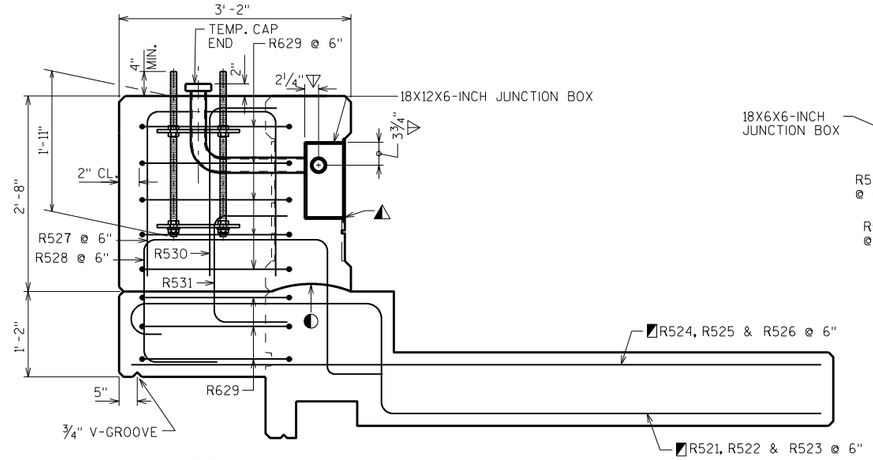
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1234 9 11

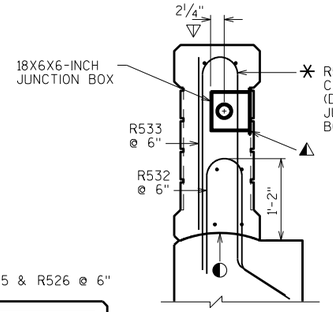
STATE PROJECT NUMBER

6190-15-72



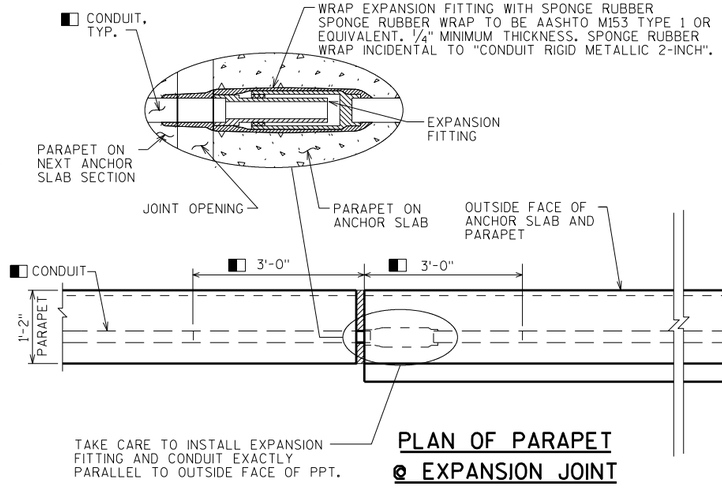
SECTION A-A

SHOWING LIGHTING JUNCTION BOX



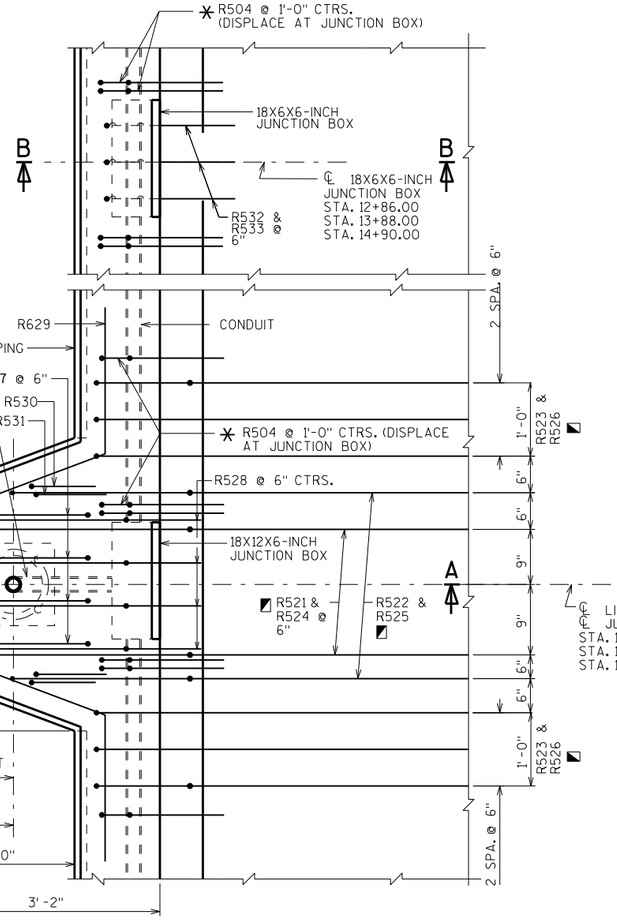
SECTION B-B

JUNCTION BOX



PLAN OF PARAPET @ EXPANSION JOINT

PLAN OF PARAPET @ WALL END



PLAN AT LIGHT STANDARD

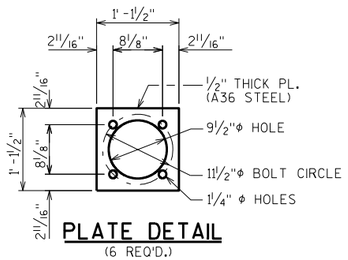
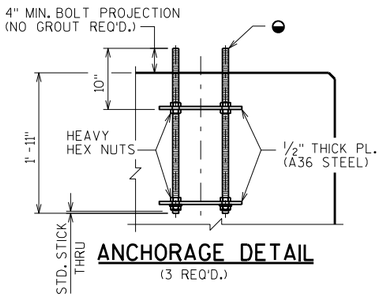


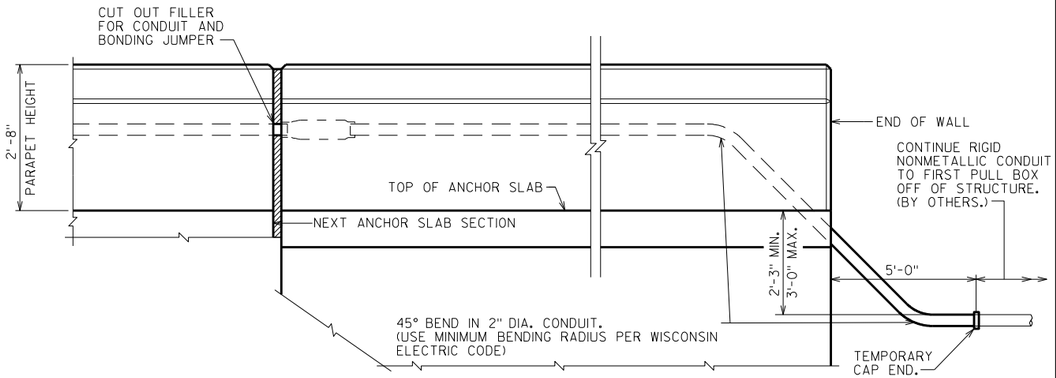
PLATE DETAIL

(6 REQ'D.)



ANCHORAGE DETAIL

(3 REQ'D.)



ELEVATION OF PARAPET @ EXPANSION JOINT

ELEVATION OF PARAPET @ WALL END

- USE RIGID NONMETALLIC CONDUIT EXCEPT AT EXPANSION FITTING. AT EXPANSION FITTING USE RIGID METALLIC CONDUIT 3'-0" INTO PARAPET ON EACH SIDE OF THE JOINT OPENING.
- CONSTR. JT. STRIKE OFF AS SHOWN
- CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.
- LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.
- THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN ANCHOR SLAB.
- 1"ϕ ANCHOR BOLTS ASTM A449 OR AASHTO M 314-90 GR 55. THREAD & HOT DIP ASTM A153, CLASS C, UPPER 8" OF BOLT INCLUDING NUTS & WASHERS. PROVIDE ENLARGED THREAD ON NUTS FOR PROPER FIT AFTER GALVANIZING. PROVIDE DOUBLE FLAT WASHERS & NUTS.
- SEE "COMBINATION RAIL TYPE C5", SHT. FOR ADDITIONAL BAR STEEL DETAILS.

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18X12X6-INCH", EACH.
"JUNCTION BOXES 18X6X6-INCH", EACH.
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH"
"ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES", EACH.

APPROVED MANUFACTURERS - JUNCTION BOXES:
SEE APPROVED MATERIAL LIST.
APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER (4" TOTAL CONDUIT MOVEMENT).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-70-122

DRAWN BY TAB | PLANS CK'D. MWB

PARAPET ELECTRICAL WORK

SHEET 10

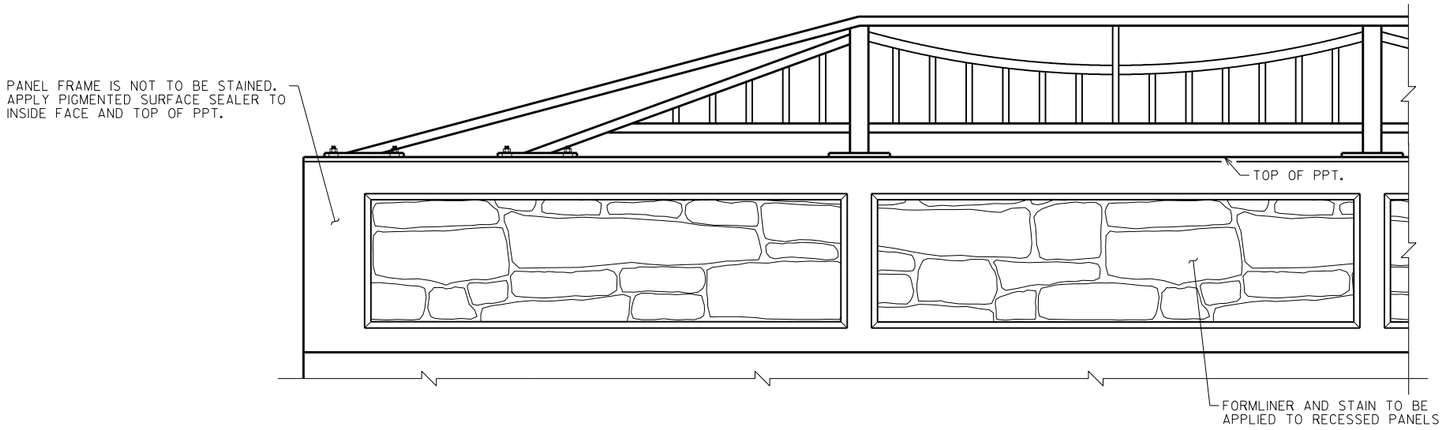
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8

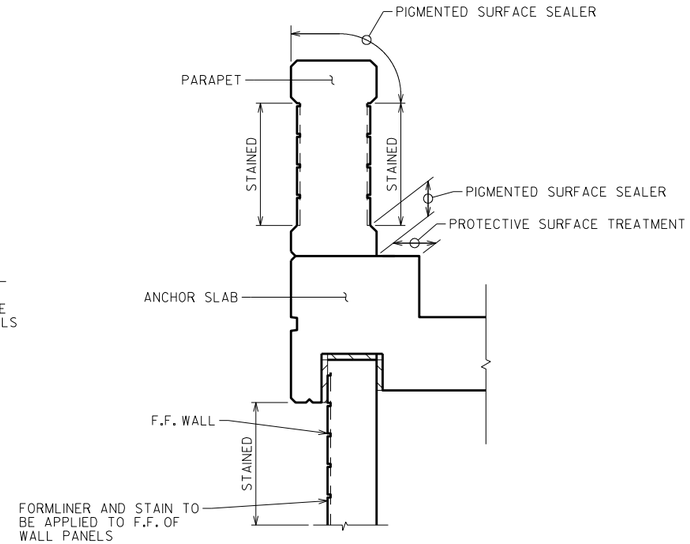
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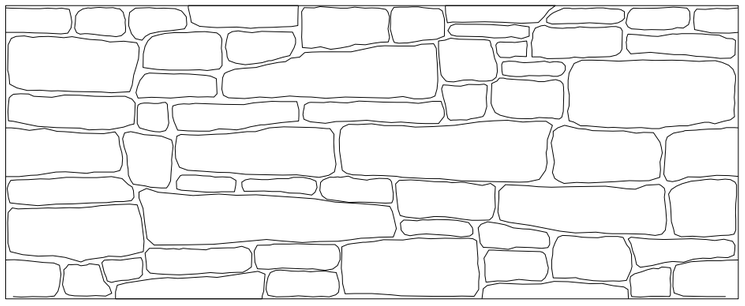
STATE PROJECT NUMBER
6190-15-72



ELEVATION OF PARAPET



CROSS SECTION OF PARAPET

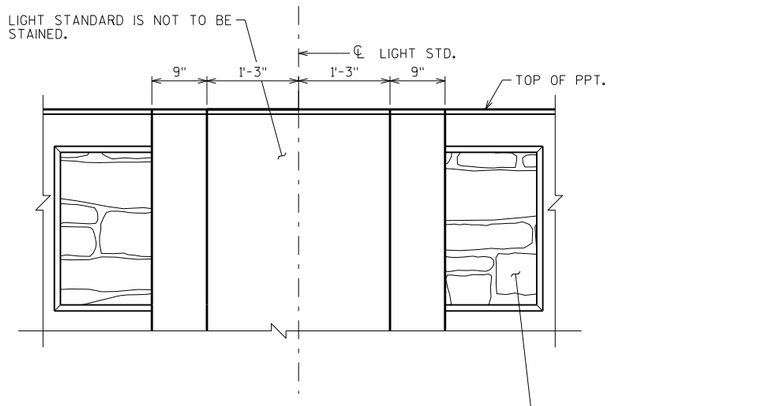


FORMLINER DETAILS

APPLY FORMLINER TO THE FRONT FACE OF THE PRECAST CONCRETE WALL PANELS TO A MINIMUM DEPTH OF 1'-0" BELOW FINISHED GRADE. FORMLINER SHOULD ALSO BE APPLIED TO THE INTERIOR AND EXTERIOR RECESSED PANELS ON PARAPETS. FINISHED STAIN IS TO INCLUDE A MIXTURE OF GRAYS TO BE APPROVED BY THE ENGINEER.

FORMLINER COURSING SHALL BE LEVEL.

DRYSTACK STONE FORMLINER:
SIZE = 3" TO 24" (PARAPET)
SIZE = 3" TO 36" (WALL PANELS)
MAX. RELIEF = 1/2" (PARAPET)
MAX. RELIEF = 1" (WALL PANELS)



EXTERIOR PPT. @ LIGHT STD.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-70-122

DRAWN BY TAB | PLANS CK'D. MWB

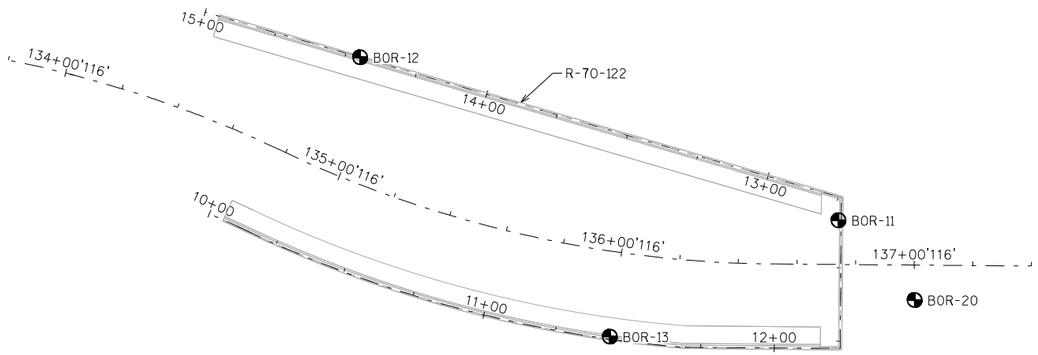
AESTHETIC DETAILS

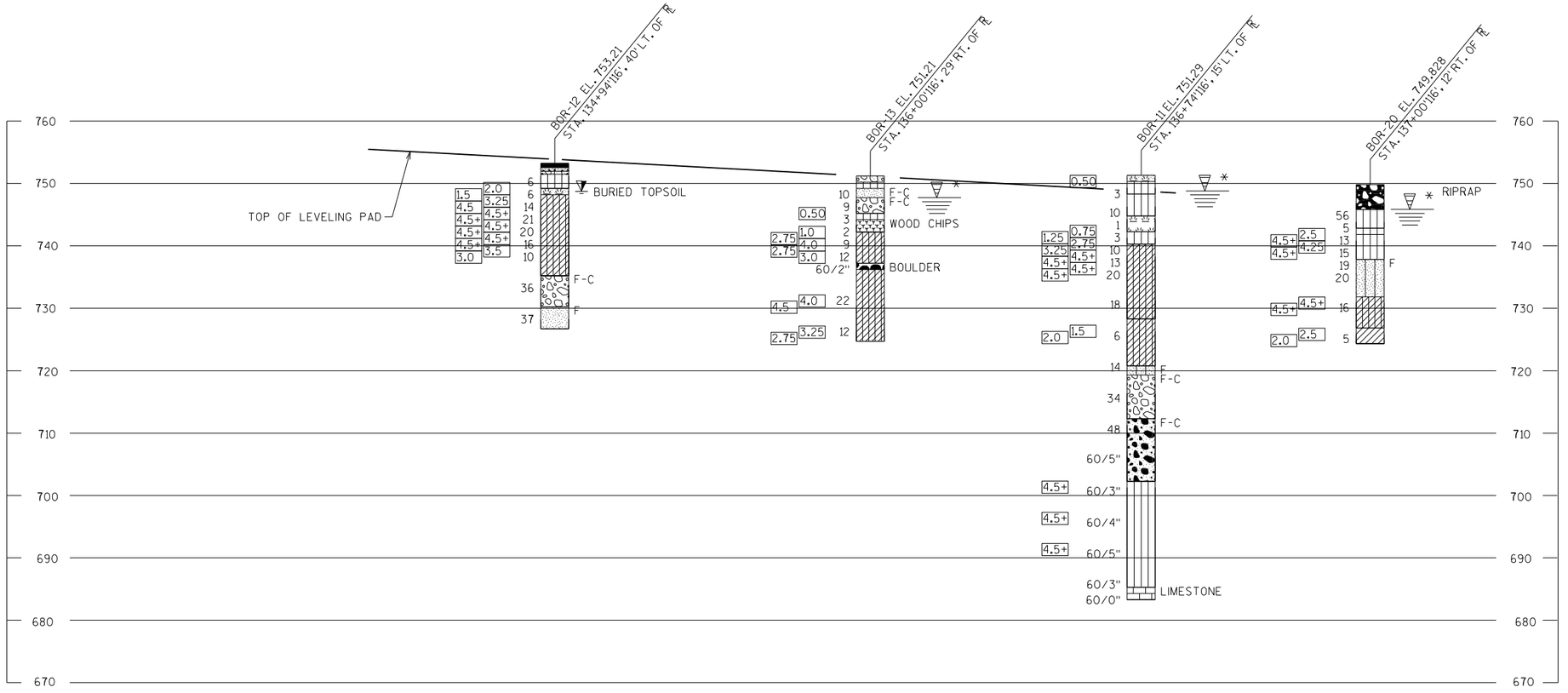
SHEET 11

375

SCALE =

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
11	4/04/2016	507203.7	747460.7
12	4/05/2016	507259.3	747297.5
13	4/05/2016	507164.0	747382.7
20	6/02/2016	507176.507	747486.697
BORINGS COMPLETED BY: WISDOT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) WINNEBAGO COUNTY			





* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

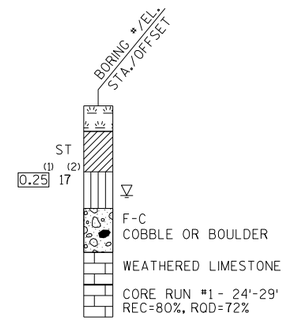
STATE PROJECT NUMBER

6190-15-72

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
STRUCTURES DESIGN SECTION

STRUCTURE R-70-122

DRAWN BY TLP/TAB | PLANS CK'D. MWB

SUBSURFACE EXPLORATION

SHEET 12

376

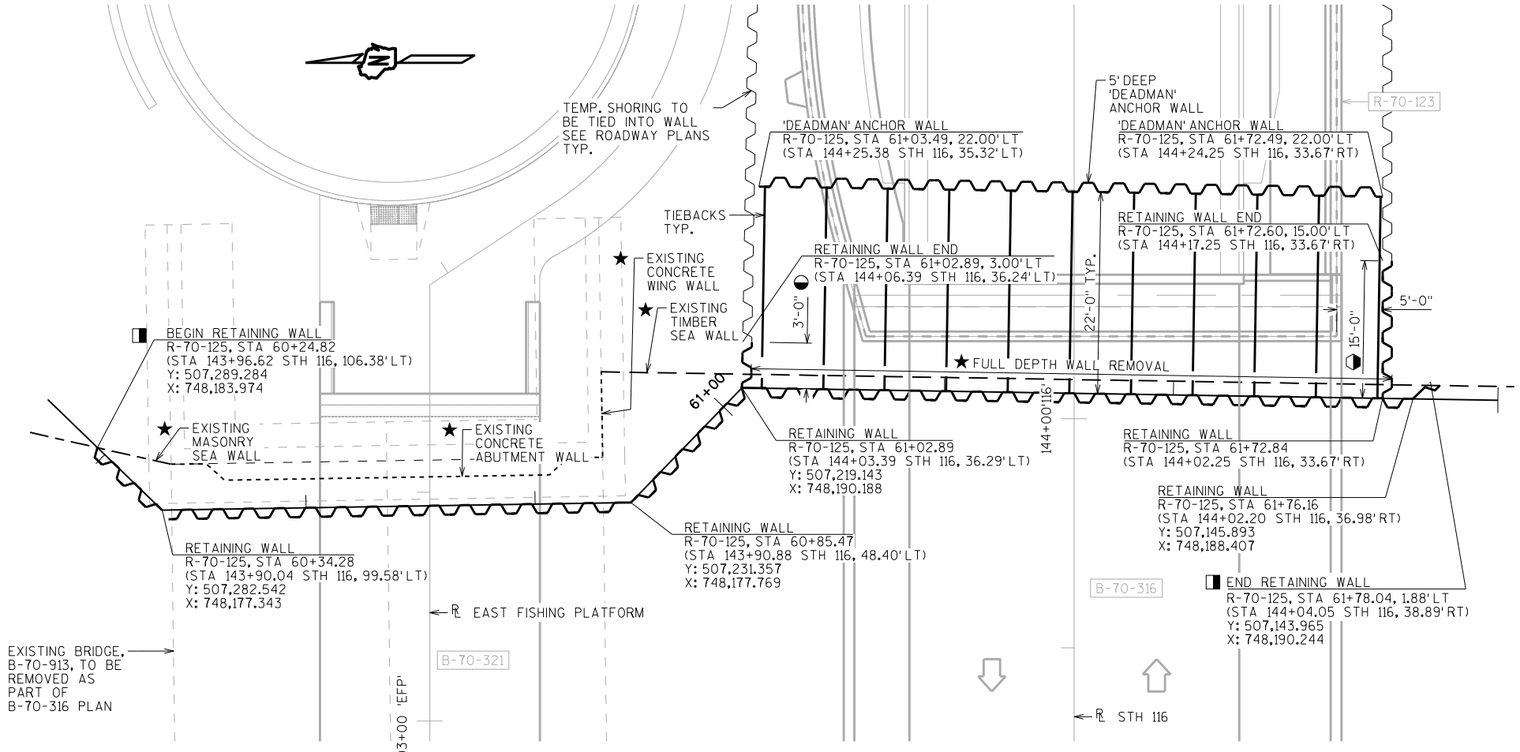
SCALE = 25

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STATE PROJECT NUMBER

6190-15-72



GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

ALL WALL STATIONING AND OFFSETS ARE GIVEN AT THE BACK FACE OF WALL R-70-125.

THE PLAN QUANTITY FOR THE BID ITEM "PILING STEEL SHEET PERMANENT DELIVERED" AND "PILING STEEL SHEET PERMANENT DRIVEN" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF WALL ELEVATION TO THE SHEET PILE TIP ELEVATION.

THE COLOR OF THE FINISHED TOP COAT OF STEEL SHEET PILE SHALL BE BLACK (FEDERAL COLOR NO. 27038 OR A SIMILAR COLOR APPROVED BY THE ENGINEER). PAINTING IS TO BE COMPLETED (FRONT, BACK AND ENDS) PRIOR TO DRIVING PILES AND SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL SHEET PERMANENT DRIVEN".

AFTER STEEL SHEET PILE IS DRIVEN, IF REQUIRED, ANY TOUCH UP PAINTING AND CLEANING IS TO BE DONE TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST.

COORDINATE THE CONSTRUCTION OF RETAINING WALL R-70-125 WITH RETAINING WALL R-70-123 AND THE EAST ABUTMENTS OF BRIDGES B-70-316 AND B-70-321.

AREA BETWEEN BACKFACE OF THE WALL AND THE EXISTING WALLS SHALL BE BACKFILLED WITH COARSE AGGREGATE SIZE NO. 1.

★ EXISTING WALLS SHALL BE REMOVED TO A DEPTH OF 2 FEET BELOW THE FINISHED GRADE IN ACCORDANCE WITH BID ITEM, "REMOVING RETAINING WALL STA. 60+24.82". ADDITIONALLY, WALLS BETWEEN TEMP. SHORING (STA 61+02.89 - STA 61+72.84) SHALL BE REMOVED TO FULL EBS LIMITS. SEE ROADWAY PLANS. BRIDGE ABUTMENT/WING WILL BE REMOVED AS PART OF THIS CONTRACT AND AS SHOWN IN THE PLAN FOR B-70-316.

THE NORTHEAST REGION SOILS ENGINEER SHOULD BE PRESENT TO EVALUATE THE SUBSURFACE CONDITIONS AT THE TIME OF CONSTRUCTION.

ALL HOLES CUT INTO WALL FOR STORM SEWER TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL PERMANENT DRIVEN"

DESIGN DATA

LIVE LOAD:

LIVE LOAD SURCHARGE OF 240 PSF.

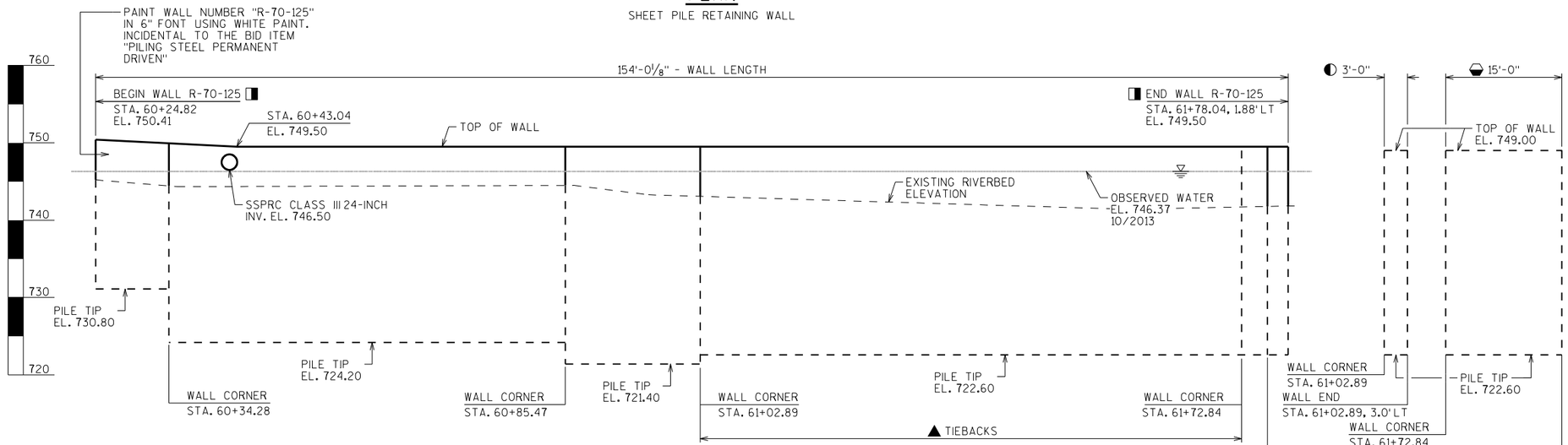
MATERIAL PROPERTIES:

STEEL SHEET PILING (ASTM A328) ———— fy = 39,000 P.S.I.

MIN. REQ'D. SECTION MODULUS (ASTM A328) = 30.0 IN^3/FT.

PLAN

SHEET PILE RETAINING WALL



ELEVATION

LOOKING EAST AT F.F. WALL

▲ SEGMENT OF WALL REQUIRES TIEBACKS. SEE 'TIEBACK DETAILS' SHEET.

◐ 3'-0" SEGMENT OF SHORING TO PERMANENTLY REMAIN IN PLACE. PAID FOR AS "PILING STEEL SHEET PERMANENT DELIVERED" AND "PILING STEEL SHEET PERMANENT DRIVEN"

◒ 15'-0" SEGMENT OF PERMANENT WALL THAT IS NOT EXPOSED AFTER FINAL GRADING.

◨ WALL ENDS ARE TO BE TUCKED BEHIND EXISTING WALL. (TIMBER PILE/MASONRY WALL)

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} = 22,840 C.F.S.
VEL. = 2.9 F.P.S.
$HW._{100}$ = EL. 750.11
WATERWAY AREA = 7,788 SQ. FT.
DRAINAGE AREA = 3,314 SQ. MI.
ROADWAY OVERTOPPING = N/A

2 YEAR FREQUENCY

Q_2 = 7,090 C.F.S.
$HW._2$ = EL. 747.46

STRUCTURE DESIGN CONTACTS:

TIM BOROWSKI (608) 266-4547
LAURA SHADEWALD (608) 267-9592

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. QUANTITIES & WALL DATA
3. TIEBACK DETAILS
4. SUBSURFACE EXPLORATION

NO.	DATE	REVISION	BY

WISCONSIN DEPARTMENT OF TRANSPORTATION — BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS 3/20/17
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-70-125

RETAINING WALL ALONG E. SHORE OF WOLF RIVER

COUNTY	TOWN/CITY/VILLAGE
WINNEBAGO	WINNECONNE

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	TAB	DESIGNED CK'D.	MJK	DRAWN BY	TAB	PLANS CK'D.	MJK

GENERAL PLAN & ELEVATION

SHEET 1 OF 4

377

I.D. 6190-15-01J DATE: JAN. 2017

SCALE = 8.00

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STATE PROJECT NUMBER
6190-15-72

TOTAL ESTIMATED QUANTITIES

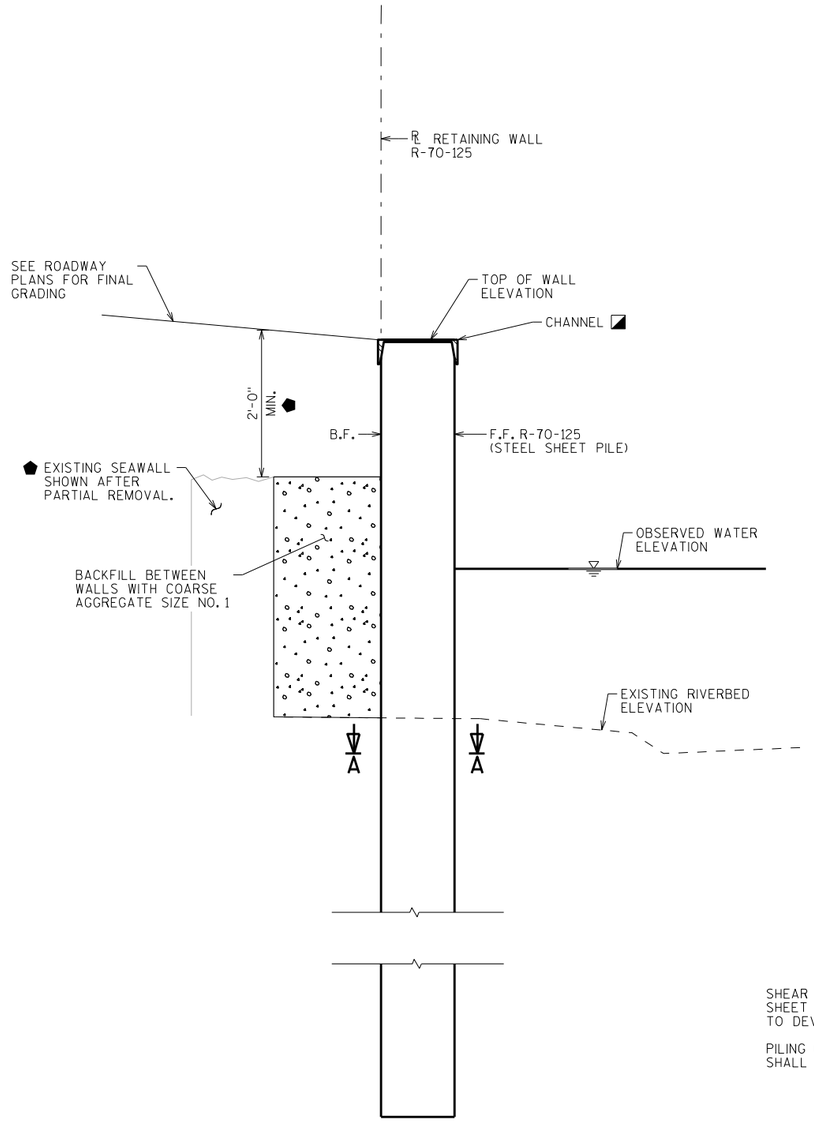
BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
204.9105.S	REMOVING RETAINING WALL STA. 60+24.82	LS	1
209.0300.S	BACKFILL COARSE AGGREGATE SIZE NO. 1	CY	50
506.0105	STRUCTURAL STEEL CARBON	LB	4,195
506.3005	WELDED STUD SHEAR CONNECTORS 7/8X4-INCH	EACH	94
512.0500	PILING STEEL SHEET PERMANENT DELIVERED	SF	4,840
512.0600	PILING STEEL SHEET PERMANENT DRIVEN	SF	4,840
SPV.0060	DEADMAN TIEBACKS	EACH	12
SPV.0090	WALER CORROSION PROTECTION	LF	141

GEOMETRY TABLE

WALL STATION	OFFSET TO B.F. WALL	TOP OF WALL EL.	RIVERBED EL.	TOP EXIST. WALL EL.
60+24.82	0.00'	750.41	745.23	750.41
60+35.39	0.00'	749.88	744.36	749.88
60+43.04	0.00'	749.50	744.38	749.50
60+84.94	0.00'	749.50	744.52	749.50
60+94.60	0.00'	749.50	743.31	749.50
61+56.65	0.00'	749.50	741.44	749.50
61+78.04	1.88' LT	749.50	741.86	749.50

◪ EXPOSED WALL SHALL BE CAPPED WITH AN APPROPRIATE MC OR C SHAPE DEPENDING ON PILE SECTION THAT IS USED. CAP CAN BE WELDED OR BOLTED INTO PLACE AND IS INCIDENTAL TO "PILING STEEL SHEET PERMANENT DRIVEN". CHANNEL AND CONNECTIONS ARE TO BE PAINTED IN ACCORDANCE WITH THE PILE SPEC. AND AFTER INSTALLATION, PAINT SHALL BE TOUCHED UP TO THE SATISFACTION OF THE ENGINEER.

⬟ SEE "REMOVING RETAINING WALL STA. 60+24.82" FOR DETAILS.

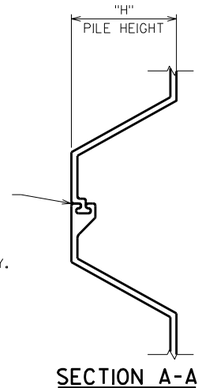


TYPICAL SECTION

LOOKING SOUTH
STA. 60+24.82 TO STA. 61+02.89
STA. 61+72.84 TO STA. 61+78.04, 1.88' LT

SHEAR CONNECTION BETWEEN PILING STEEL SHEET PERMANENT PANELS (TYP.). CONNECTION TO DEVELOP SHEETING SHEAR CAPACITY.

PILING CORNERS, KNUCKLES AND CONNECTORS SHALL ALSO DEVELOP SHEETING SHEAR CAPACITY.



SECTION A-A

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-70-125

DRAWN BY TAB | PLANS CK'D. MJK

QUANTITIES & WALL DATA

SHEET 2

378

SCALE = 1:00

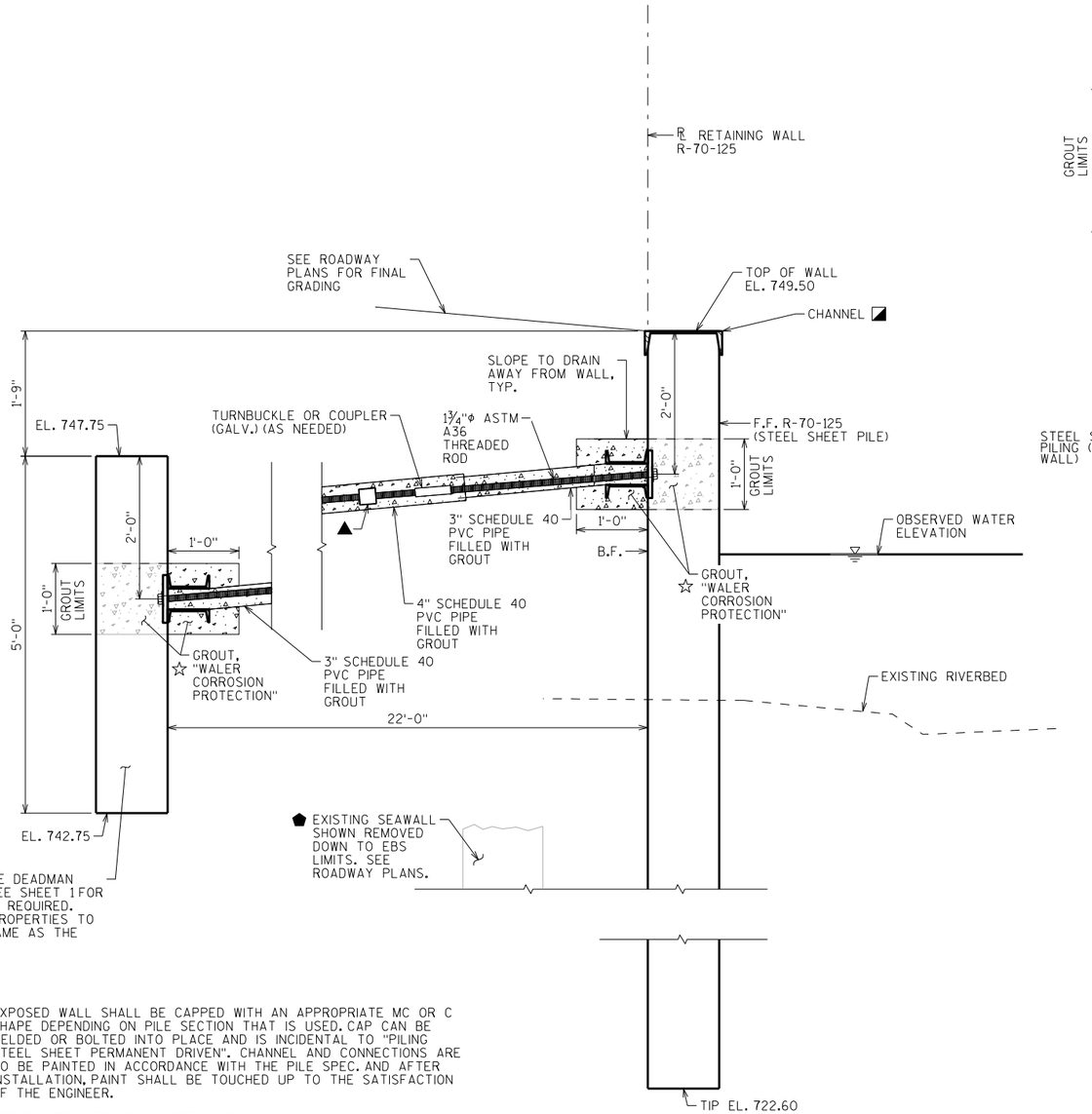
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TIEBACK DETAILS ASSUME THE USE OF PZ27 PILES WITH 12 TIEBACKS. IF A DIFFERENT SECTION IS USED SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED FOR REVIEW. TIEBACK CAPACITY OF 7.8 KIPS/FOOT OF WALL IS REQUIRED.

STATE PROJECT NUMBER

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◢ EXPOSED WALL SHALL BE CAPPED WITH AN APPROPRIATE MC OR C SHAPE DEPENDING ON PILE SECTION THAT IS USED. CAP CAN BE WELDED OR BOLTED INTO PLACE AND IS INCIDENTAL TO "PILING STEEL SHEET PERMANENT DRIVEN". CHANNEL AND CONNECTIONS ARE TO BE PAINTED IN ACCORDANCE WITH THE PILE SPEC. AND AFTER INSTALLATION, PAINT SHALL BE TOUCHED UP TO THE SATISFACTION OF THE ENGINEER.

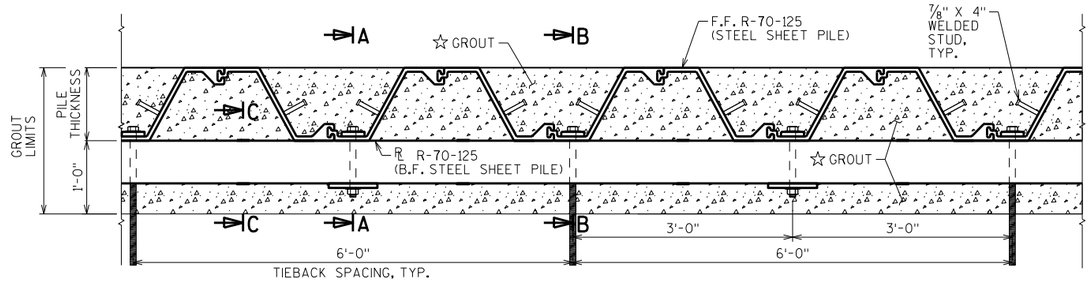
⬟ SEE BID ITEM "REMOVING RETAINING WALL STA. 60+24.82" FOR DETAILS.

▲ OPTIONAL MULTIDIRECTIONAL CONNECTOR MAY BE USED TO FACILITATE ALIGNMENT AT THE CONNECTION

☆ SEE SPECIAL PROVISION "WALER CORROSION PROTECTION"

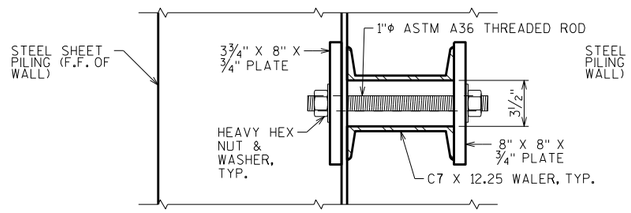
TYPICAL SECTION

LOOKING SOUTH
STA. 61+02.89 TO STA 61+72.84



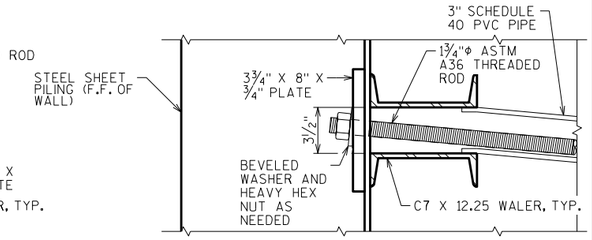
STEEL SHEET PILING PARTIAL PLAN

CONDUIT NOT SHOWN FOR CLARITY
SAME DETAILS TO BE APPLIED TO DEADMAN ANCHOR



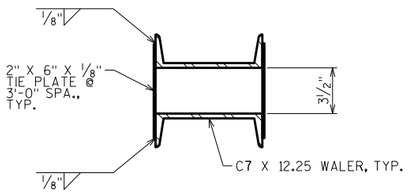
SECTION A-A

GROUT NOT SHOWN FOR CLARITY



SECTION B-B

GROUT NOT SHOWN FOR CLARITY



SECTION C-C

GROUT NOT SHOWN FOR CLARITY

PAYMENT BREAKDOWN

WALERS, PLATES, 1" ϕ THREADED RODS, AND BOLTS/WASHERS NEEDED TO CONNECT WALER TO THE WALL ARE TO BE PAID AS "STRUCTURAL STEEL CARBON".

1¾" ϕ THREADED RODS, CONDUIT, TURNBUCKLES, MULTIDIRECTIONAL CONNECTORS, GROUT INSIDE OF CONDUIT, AND BOLTS/WASHERS NEEDED TO CONNECT THE RODS TO THE WALL/ANCHOR ARE TO BE INCLUDED IN BID ITEM "DEADMAN TIEBACKS".

DEADMAN ANCHOR AND SHEETPILE WALL TO BE PAID AS "PILING STEEL SHEET PERMANENT DELIVERED" AND "PILING STEEL SHEET PERMANENT DRIVEN"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-70-125

DRAWN BY TAB | PLANS CK'D. MJK

TIEBACK DETAILS

SHEET 3

379

SCALE = 1.00

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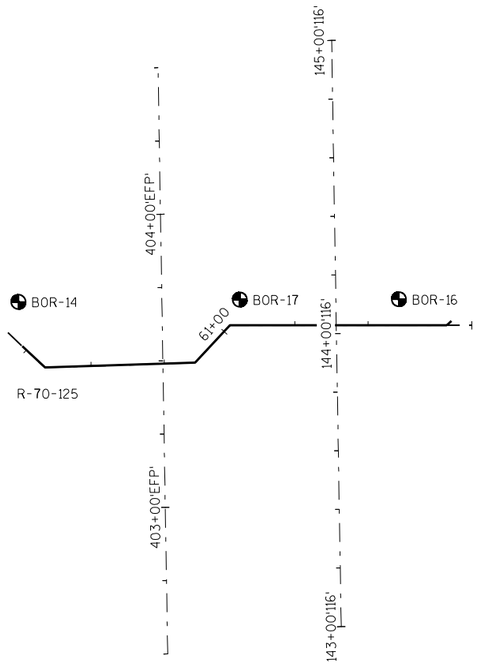
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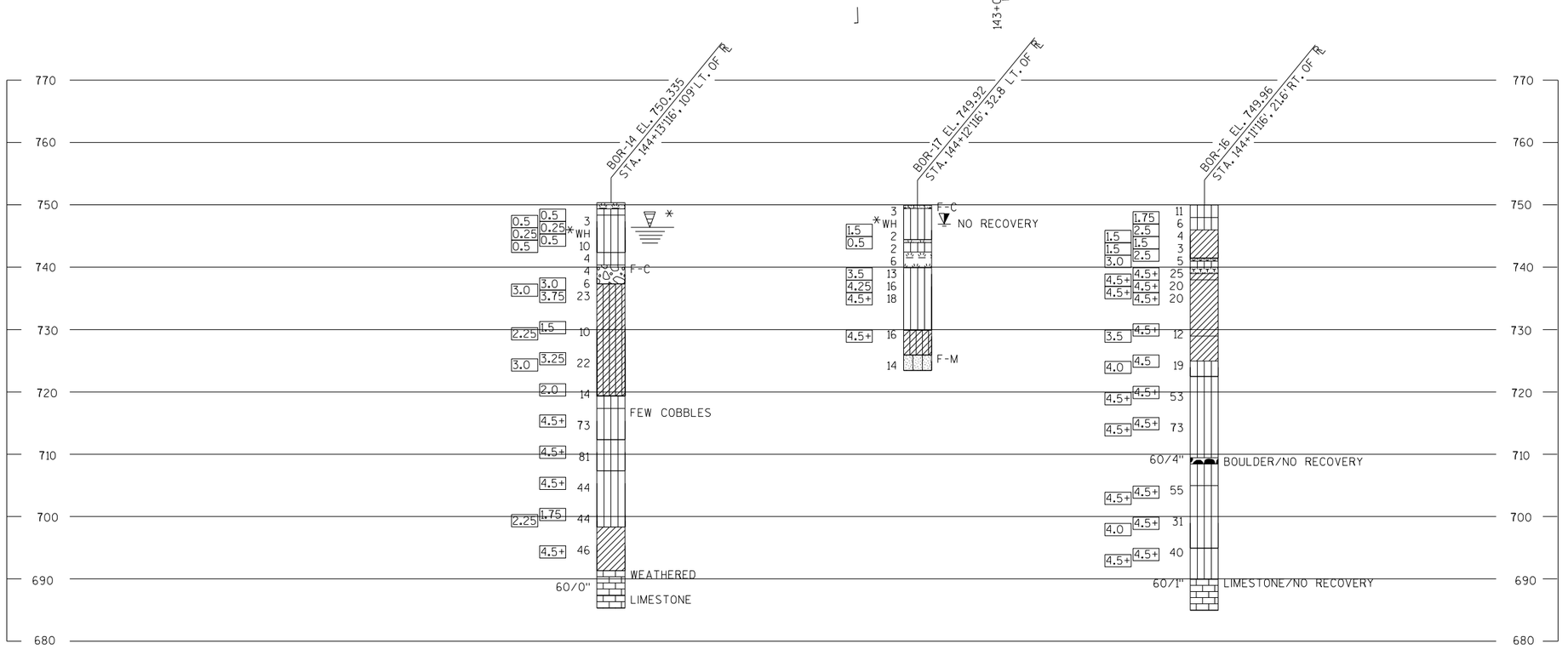
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
14	4/07/2016	507291.072	748199.937
16	5/26/2016	507161.302	748197.700
17	5/31/2016	507215.568	748198.886

BORINGS COMPLETED BY: WISDOT

REPORT COMPLETED BY: WISDOT

ALL COORDINATES REFERENCED TO WCCS NAD 83(91) WINNEBAGO COUNTY





*WH = WEIGHT OF HAMMER

* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

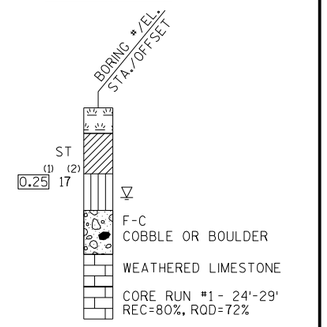
STATE PROJECT NUMBER

6190-15-72

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.

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- 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
STRUCTURES DESIGN SECTION

STRUCTURE R-70-125

DRAWN BY TLP/TAB | PLANS CK'D. MJK

SUBSURFACE EXPLORATION

SHEET 4

380

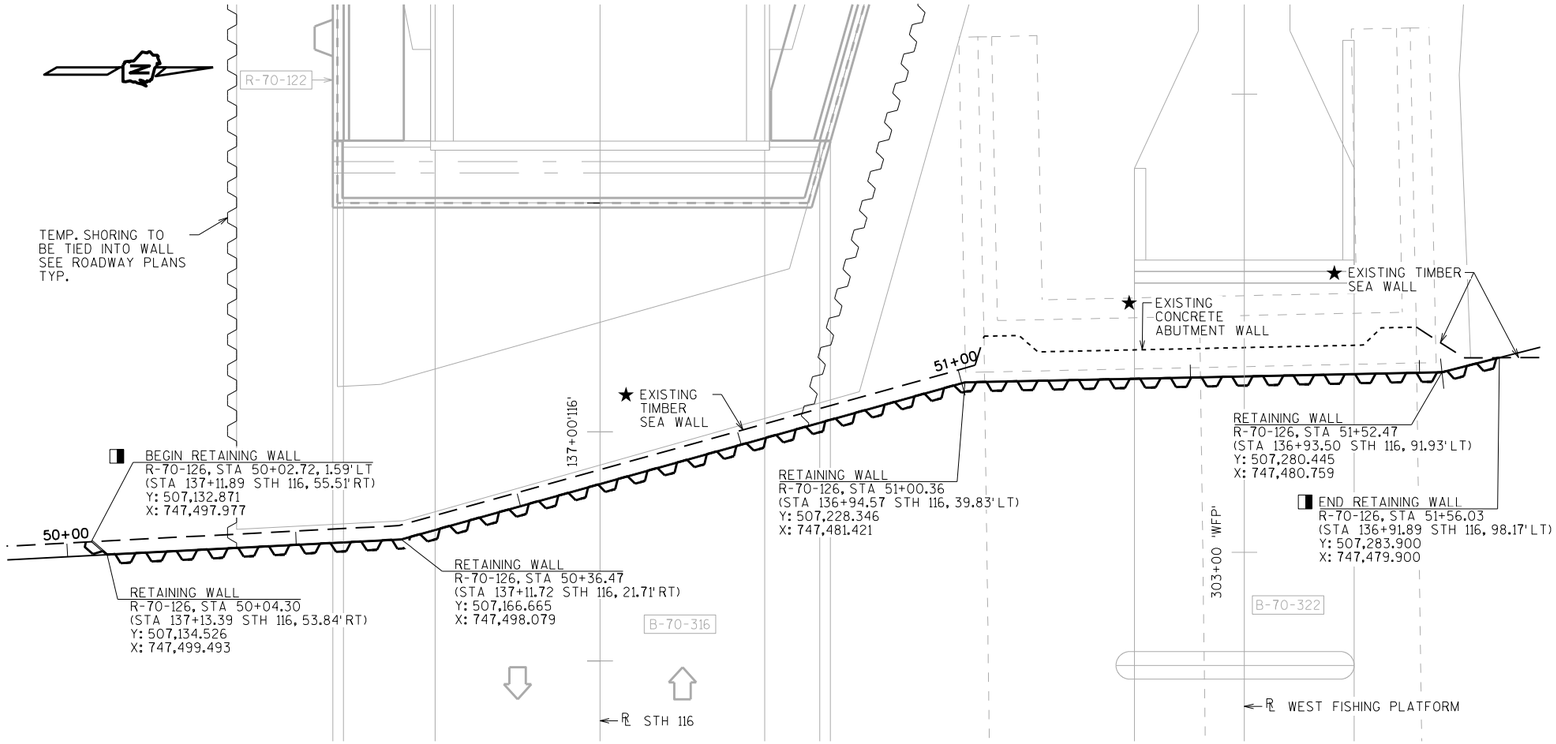
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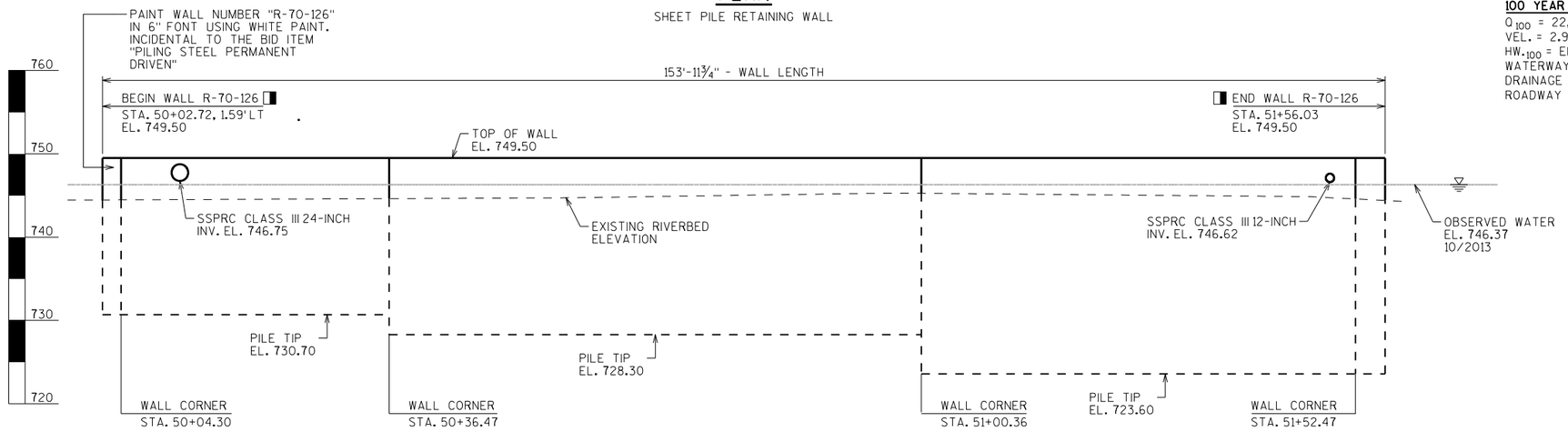
STATE PROJECT NUMBER

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PLAN

SHEET PILE RETAINING WALL



ELEVATION

LOOKING WEST AT F.F. WALL

◨ WALL ENDS ARE TO BE TUCKED BEHIND TIMBER PILES OF EXISTING WALL

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

ALL WALL STATIONING AND OFFSETS ARE GIVEN AT THE BACK FACE OF WALL R-70-126.

THE PLAN QUANTITY FOR THE BID ITEM "PILING STEEL SHEET PERMANENT DELIVERED" AND "PILING STEEL SHEET PERMANENT DRIVEN" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF WALL ELEVATION TO THE SHEET PILE TIP ELEVATION.

THE COLOR OF THE FINISHED TOP COAT OF STEEL SHEET PILE SHALL BE BLACK (FEDERAL COLOR NO. 27038 OR A SIMILAR COLOR APPROVED BY THE ENGINEER). PAINTING IS TO BE COMPLETED (FRONT, BACK AND ENDS) PRIOR TO DRIVING PILES AND SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL SHEET PERMANENT DRIVEN".

AFTER STEEL SHEET PILE IS DRIVEN, IF REQUIRED, ANY TOUCH UP PAINTING AND CLEANING IS TO BE DONE TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST.

COORDINATE THE CONSTRUCTION OF RETAINING WALL R-70-126 WITH RETAINING WALL R-70-122 AND THE WEST ABUTMENTS OF BRIDGES B-70-316 AND B-70-322.

AREA BETWEEN BACKFACE OF THE WALL AND THE EXISTING WALLS SHALL BE BACKFILLED WITH COARSE AGGREGATE SIZE NO. 1.

★ EXISTING WALLS SHALL BE REMOVED TO A DEPTH OF 2 FEET BELOW THE FINISHED GRADE IN ACCORDANCE WITH BID ITEM, "REMOVING RETAINING WALL STA. 50+02.72". FULL DEPTH OF EXISTING WALL SHALL BE REMOVED AT LOCATIONS WHERE TEMP. SHORING TIES INTO NEW WALL. BRIDGE ABUTMENT/WING WILL BE REMOVED AS PART OF THIS CONTRACT AND AS SHOWN IN THE PLAN FOR B-70-316.

THE NORTHEAST REGION SOILS ENGINEER SHOULD BE PRESENT TO EVALUATE THE SUBSURFACE CONDITIONS AT THE TIME OF CONSTRUCTION.

ALL HOLES CUT INTO WALL FOR STORM SEWER TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "PILING STEEL PERMANENT DRIVEN"

DESIGN DATA

LIVE LOAD:

LIVE LOAD SURCHARGE OF 240 PSF.

MATERIAL PROPERTIES:

STEEL SHEET PILING (ASTM A328) ———— fy = 39,000 P.S.I.

MIN. REQ'D. SECTION MODULUS (ASTM A328) = 30.0 IN^3/FT.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} = 22,840 C.F.S.
VEL. = 2.9 F.P.S.
$HW._{100}$ = EL. 750.11
WATERWAY AREA = 7,788 SQ. FT.
DRAINAGE AREA = 3,314 SQ. MI.
ROADWAY OVERTOPPING = N/A

2 YEAR FREQUENCY

Q_2 = 7,090 C.F.S.
$HW._2$ = EL. 747.46

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. QUANTITIES & WALL DATA
3. SUBSURFACE EXPLORATION

STRUCTURE DESIGN CONTACTS:

TIM BOROWSKI (608) 266-4547
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS 3/20/17
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-70-126

RETAINING WALL ALONG W. SHORE OF WOLF RIVER

COUNTY	TOWN/CITY/VILLAGE
WINNEBAGO	WINNECONNE

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
TAB	MJK	TAB	MJK

GENERAL PLAN & ELEVATION

SHEET 1 OF 3

381

I.D. 6190-15-01K DATE: JAN. 2017

SCALE = 8.00

8

8

STATE PROJECT NUMBER
6190-15-72

TOTAL ESTIMATED QUANTITIES

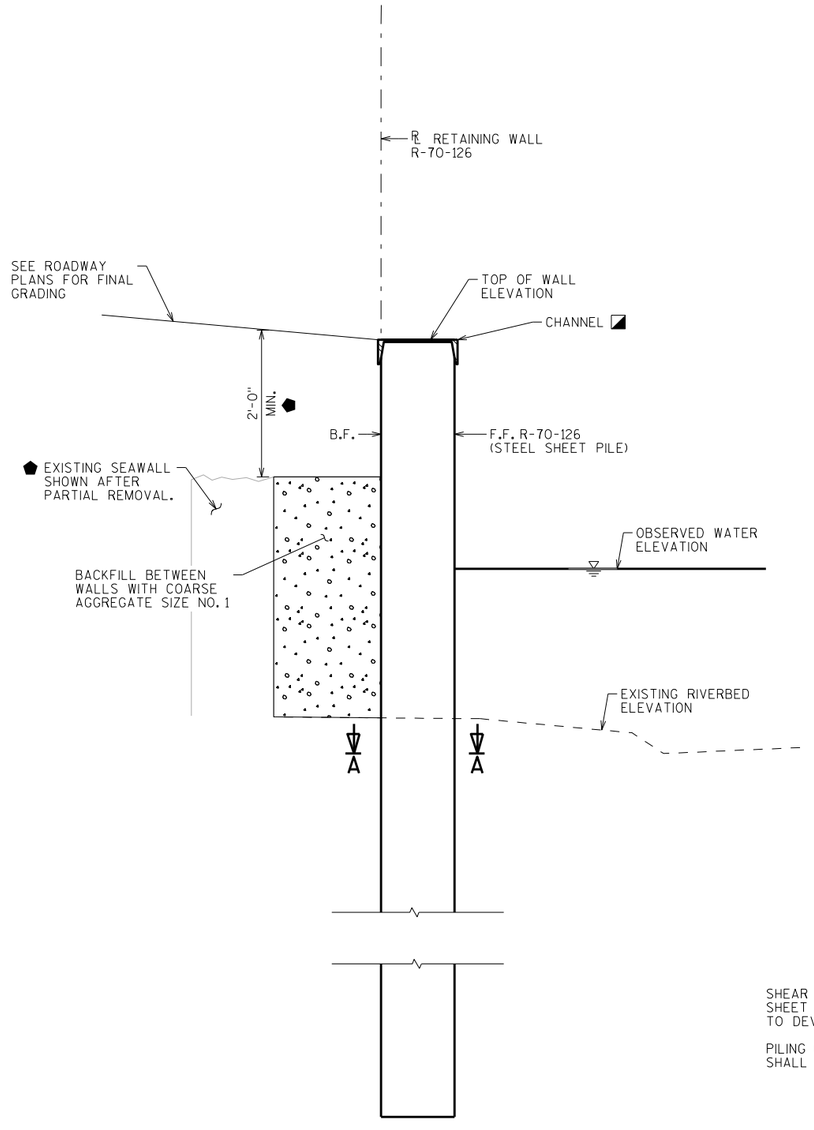
BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
204.9105.S	REMOVING RETAINING WALL STA. 50+02.72	LS	1
209.0300.S	BACKFILL COARSE AGGREGATE SIZE NO. 1	CY	42
512.0500	PILING STEEL SHEET PERMANENT DELIVERED	SF	3,445
512.0600	PILING STEEL SHEET PERMANENT DRIVEN	SF	3,445

GEOMETRY TABLE

WALL STATION	OFFSET TO B.F. WALL	TOP OF WALL EL.	RIVERBED EL.	TOP EXIST. WALL EL.
50+02.72	1.59' LT	749.50	744.49	749.50
50+57.70	0.00'	749.50	744.74	749.50
50+97.09	0.00'	749.50	745.32	749.50
51+47.05	0.00'	749.50	744.87	749.50
51+56.03	0.00'	749.50	744.25	749.50

◪ EXPOSED WALL SHALL BE CAPPED WITH AN APPROPRIATE MC OR C SHAPE DEPENDING ON PILE SECTION THAT IS USED. CAP CAN BE WELDED OR BOLTED INTO PLACE AND IS INCIDENTAL TO "PILING STEEL SHEET PERMANENT DRIVEN". CHANNEL AND CONNECTIONS ARE TO BE PAINTED IN ACCORDANCE WITH THE PILE SPEC. AND AFTER INSTALLATION, PAINT SHALL BE TOUCHED UP TO THE SATISFACTION OF THE ENGINEER.

⬟ SEE BID ITEM "REMOVING RETAINING WALL STA. 50+02.72" FOR DETAILS.

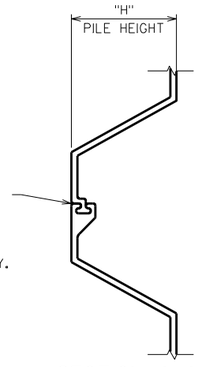


TYPICAL SECTION

LOOKING NORTH

SHEAR CONNECTION BETWEEN PILING STEEL SHEET PERMANENT PANELS (TYP.). CONNECTION TO DEVELOP SHEETING SHEAR CAPACITY.

PILING CORNERS, KNUCKLES AND CONNECTORS SHALL ALSO DEVELOP SHEETING SHEAR CAPACITY.



SECTION A-A

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-70-126

DRAWN BY TAB | PLANS CK'D. MJK

QUANTITIES & WALL DATA

SHEET 2

382

SCALE = 1:00

8

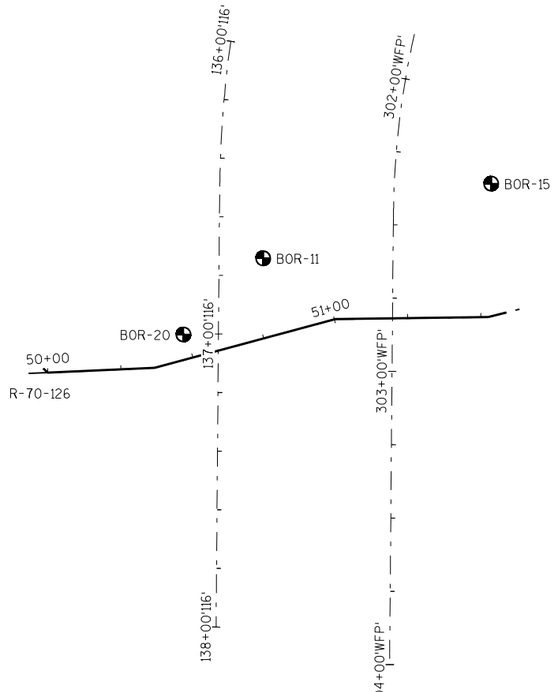
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BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
11	4/04/2016	507203.7	747460.7
15	5/25/2016	507281.512	747435.238
20	6/02/2016	507176.507	747486.697

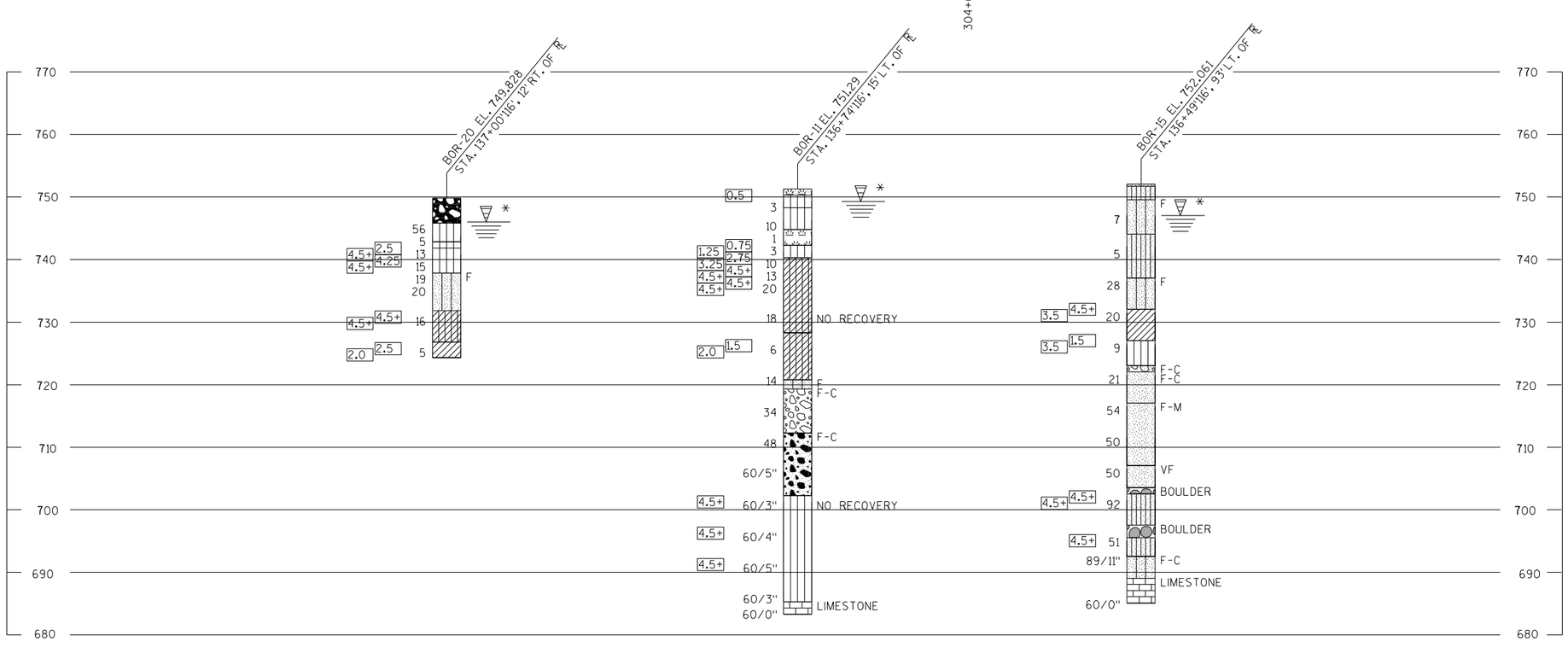
BORINGS COMPLETED BY: WISDOT

REPORT COMPLETED BY: WISDOT

ALL COORDINATES REFERENCED TO WCCS NAD 83(91) WINNEBAGO COUNTY







* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

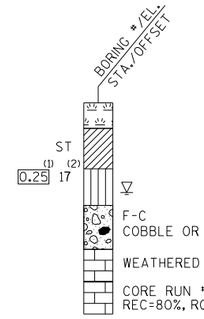
STATE PROJECT NUMBER

6190-15-72

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
STRUCTURES DESIGN SECTION

STRUCTURE R-70-126

DRAWN BY TLP/TAB | PLANS CK'D. MJK

SUBSURFACE EXPLORATION

SHEET 3

383

SCALE = 25.00

8

8

STH 116 EARTHWORK DETAIL

STATION	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMLATIVE VOL (CY)		
	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT 1.00	EXPANDED FILL 1.25	EXPANDED SELECT BORROW 1.20
132+60	163	76	0	0	0	0	0	0	0	0	0	0	0
133+00	163	73	0	0	0	241	110	0	0	0	241	0	0
133+10	161	71	0	0	0	60	27	0	0	0	301	0	0
133+50	130	66	0	0	0	216	101	0	0	0	517	0	0
134+00	208	122	0	0	0	313	174	0	0	0	830	0	0
134+50	5	0	88	16	14	197	113	81	15	13	1,027	102	18
134+75	0	0	86	213	135	2	0	81	106	69	1,030	203	145
135+00	0	0	82	446	322	0	0	78	305	212	1,030	300	511
135+25	0	0	85	619	464	0	0	77	493	364	1,030	396	1,103
135+50	0	0	88	799	585	0	0	80	656	486	1,030	497	1,891
135+75	0	0	68	973	721	0	0	72	820	605	1,030	587	2,875
136+00	3	2	41	1124	821	1	1	50	971	714	1,031	650	4,040
136+25	15	11	26	1088	792	8	6	31	1,024	747	1,039	689	5,269
136+50	38	14	4	965	705	25	12	14	950	693	1,064	706	6,409
136+62	43	0	0	896	669	18	3	1	414	305	1,082	707	6,906
136+63	0	0	0	669	669	1	0	0	29	25	1,083	707	6,940
136+85	0	0	0	610	610	0	0	0	521	521	1,083	707	7,566
136+86	0	0	0	0	0	0	0	0	11	11	1,083	707	7,579
144+04	0	0	0	0	0	0	0	0	0	0	1,083	707	7,579
144+05	0	0	0	596	596	0	0	0	11	11	1,083	707	7,593
144+21	0	0	0	690	690	0	0	0	381	381	1,083	707	8,050
144+22	0	0	15	1023	690	0	0	0	32	26	1,083	707	8,088
144+50	0	0	35	970	634	0	0	26	1,033	687	1,083	740	9,328
144+75	0	0	36	918	610	0	0	33	874	576	1,083	781	10,377
145+00	0	0	36	852	617	0	0	33	819	568	1,083	823	11,360
145+25	0	0	35	783	610	0	0	33	757	568	1,083	864	12,269
145+50	0	0	26	568	435	0	0	28	625	484	1,083	899	13,019
145+75	0	0	50	104	0	0	0	35	311	201	1,083	943	13,392
146+00	0	0	72	60	0	0	0	56	76	0	1,083	1,014	13,484
146+50	143	34	10	0	0	132	31	76	56	0	1,215	1,109	13,550
147+00	127	20	9	0	0	250	50	18	0	0	1,465	1,131	13,550
147+50	134	36	11	0	0	242	52	19	0	0	1,707	1,154	13,550
147+74	128	36	9	0	0	116	32	9	0	0	1,823	1,165	13,550
148+00	130	39	2	0	0	124	36	5	0	0	1,947	1,171	13,550
148+50	208	41	0	0	0	313	74	2	0	0	2,260	1,174	13,550
149+00	270	50	0	0	0	443	84	0	0	0	2,703	1,174	13,550
149+50	132	28	1	0	0	372	72	1	0	0	3,075	1,175	13,550
149+60	139	29	0	0	0	50	11	0	0	0	3,125	1,175	13,550

1st ST EARTHWORK DETAIL

STATION	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMLATIVE VOL (CY)		
	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT 1.00	EXPANDED FILL 1.25	EXPANDED SELECT BORROW 1.20
11+50	84	25	0	0	0	0	0	0	0	0	0	0	0
11+75	77	25	0	0	0	75	23	0	0	0	75	0	0
12+00	53	19	39	0	0	60	20	18	0	0	135	23	0
12+01	0	0	0	0	0	1	0	1	0	0	136	23	0
12+99	0	0	0	0	0	0	0	0	0	0	136	23	0
13+00	87	34	2	0	0	2	1	0	0	0	137	24	0
13+25	93	33	3	0	0	83	31	2	0	0	221	26	0
13+50	98	32	3	0	0	88	30	3	0	0	309	30	0
13+75	99	32	2	0	0	91	30	2	0	0	400	33	0
14+00	97	31	2	0	0	91	29	2	0	0	491	35	0
14+30	84	24	0	0	0	101	31	1	0	0	592	36	0
14+50	47	14	1	0	0	49	14	0	0	0	640	37	0
14+90	47	14	0	0	0	70	21	1	0	0	710	38	0

S 1ST AV EARTHWORK DETAIL

STATION	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMLATIVE VOL (CY)		
	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT 1.00	EXPANDED FILL 1.25	EXPANDED SELECT BORROW 1.20
12+94	75	21	1	0	0	0	0	0	0	0	0	0	0
13+50	105	20	1	0	0	187	43	2	0	0	187	3	0
13+70	176	23	0	0	0	104	16	0	0	0	291	3	0
14+00	376	22	0	0	0	307	25	0	0	0	597	3	0
14+25	482	19	0	0	0	397	19	0	0	0	995	3	0
14+50	559	9	2	0	0	482	13	1	0	0	1,477	4	0
14+75	467	0	0	0	0	475	4	1	0	0	1,952	5	0
15+00	157	0	0	0	0	289	0	0	0	0	2,240	5	0

N 1ST AV EARTHWORK DETAIL

STATION	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMLATIVE VOL (CY)		
	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT 1.00	EXPANDED FILL 1.25	EXPANDED SELECT BORROW 1.20
16+50	43	17	100	0	0	0	0	0	0	0	0	0	0
16+75	50	14	18	0	0	43	14	55	0	0	43	68	0
17+00	44	19	11	0	0	44	15	13	0	0	87	85	0
17+30	68	19	1	0	0	62	21	7	0	0	149	93	0
17+50	70	19	0	0	0	51	14	0	0	0	200	94	0

S 2ND AV EARTHWORK DETAIL

STATION	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMLATIVE VOL (CY)		
	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT 1.00	EXPANDED FILL 1.25	EXPANDED SELECT BORROW 1.20
25+60	110	23	0	0	0	0	0	0	0	0	0	0	0
25+75	126	23	0	0	0	66	13	0	0	0	66	0	0
26+00	165	24	0	0	0	135	22	0	0	0	200	0	0

N 2ND AV EARTHWORK DETAIL

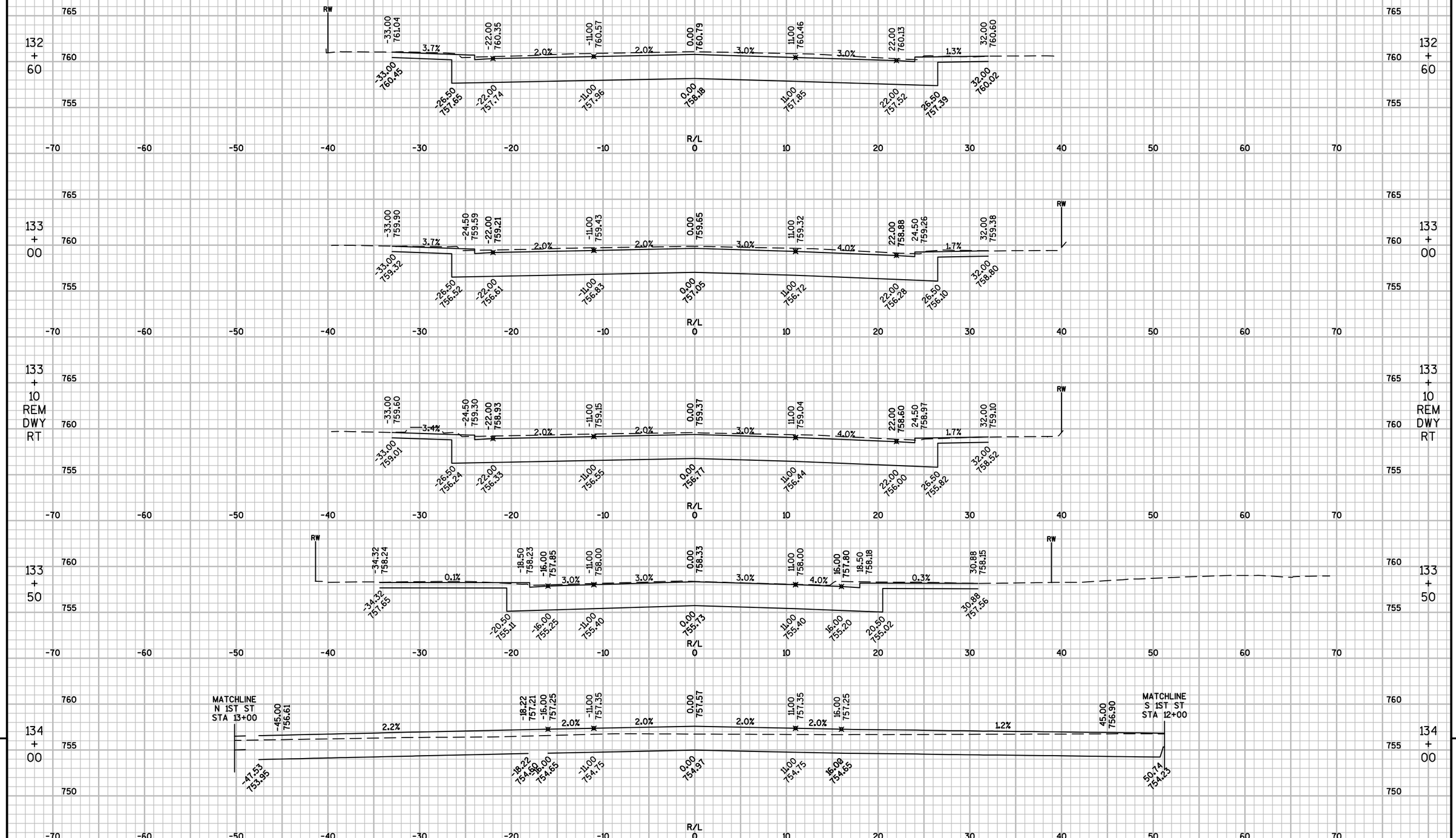
STATION	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMLATIVE VOL (CY)		
	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT 1.00	EXPANDED FILL 1.25	EXPANDED SELECT BORROW 1.20
27+00	64	17	0	0	0	0	0	0	0	0	0	0	0
27+15	63	18	0	0	0	35	10	0	0	0	35	0	0

WEST PLATFORM TRAIL EARTHWORK DETAIL

STATION	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMLATIVE VOL (CY)		
	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT 1.00	EXPANDED FILL 1.25	EXPANDED SELECT BORROW 1.20
300+50	30	7	7	0	0	0	0	0	0	0	0	0	0
301+00	38	9	10	0	0	63	15	16	0	0	63	20	0
301+50	41	11	8	0	0	73	19	17	0	0	136	41	0
301+80	35	9	6	0	0	42	11	8	0	0	178	50	0
302+00	2	3	30	0	0	14	4	13	0	0	192	67	0
302+25	4	4	42	0	0	3	3	33	0	0	195	109	0
302+50	23	23	42	0	0	13	13	39	0	0	207	157	0
302+65	40	33	27	0	0	18	16	19	0	0	225	181	0

EAST PLATFORM PARKING LOT EARTHWORK DETAIL

STATION	AREA (SF)					INCREMENTAL VOL (CY) (UNADJUSTED)					CUMLATIVE VOL (CY)		
	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	FILL	SELECT BORROW (NOT INCIDENTAL TO RET WALLS)	EBS	CUT 1.00	EXPANDED FILL 1.25	EXPANDED SELECT BORROW 1.20
500+00	58	41	34	0	7	0	0	0	0	0	0	0	0
500+25	65	41	46	0	23	57	38	37	0	14	57	46	0
500+50	19	19	74	0	14	39	28	56	0	17	96	116	0
500+75	0	0	126	0	8	9	9	93	0	10	105	231	0
501+00	0	0	166	0	0	0	0	135	0	4	105	400	0
501+25	0	0	194	0	0	0	0	167	0	0	105	609	0
501+50	0	0	201	0	0	0	0	183	0	0	105	837	0

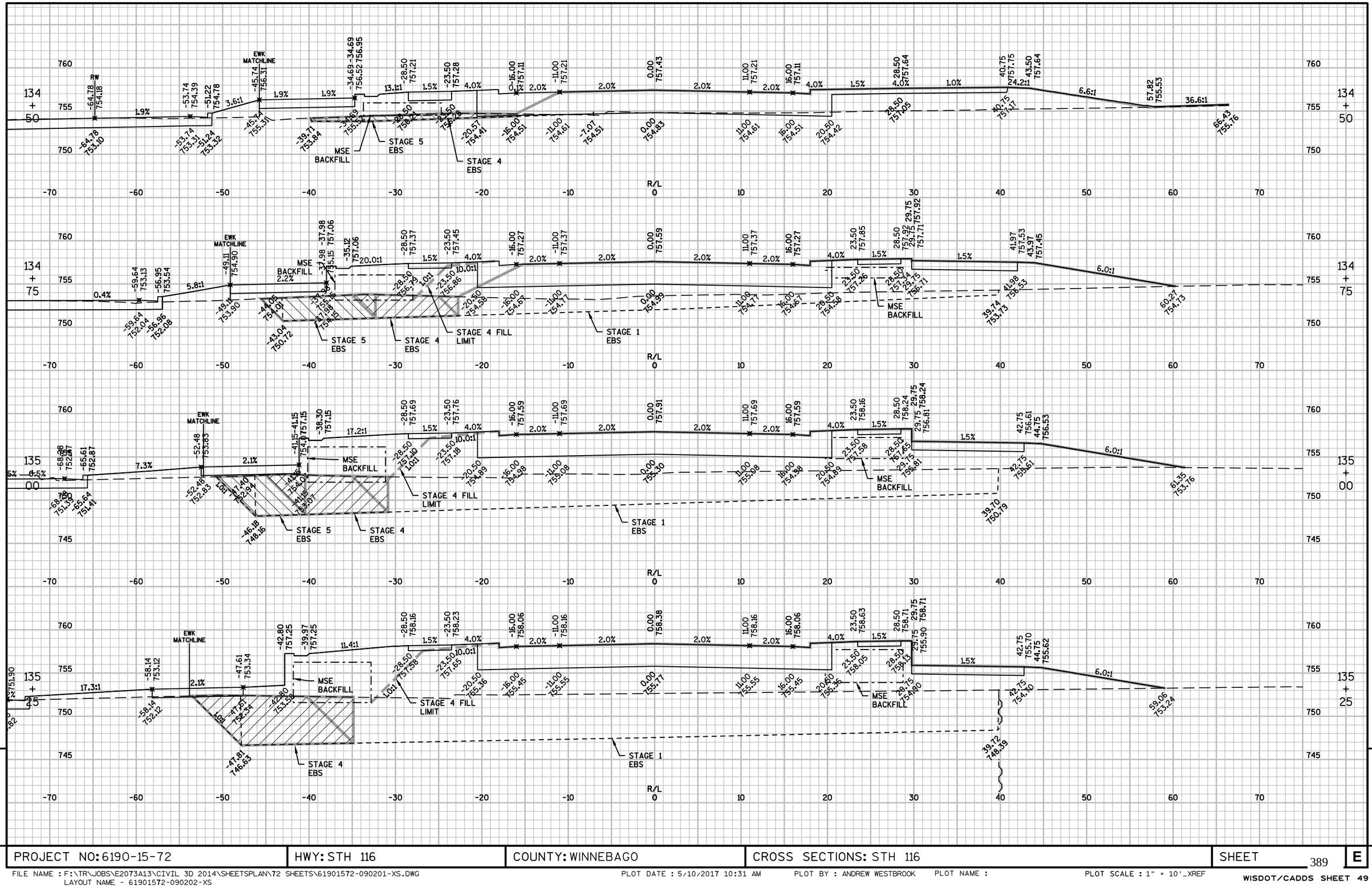


PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 388	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090201-XS

PLOT DATE : 5/10/2017 10:31 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

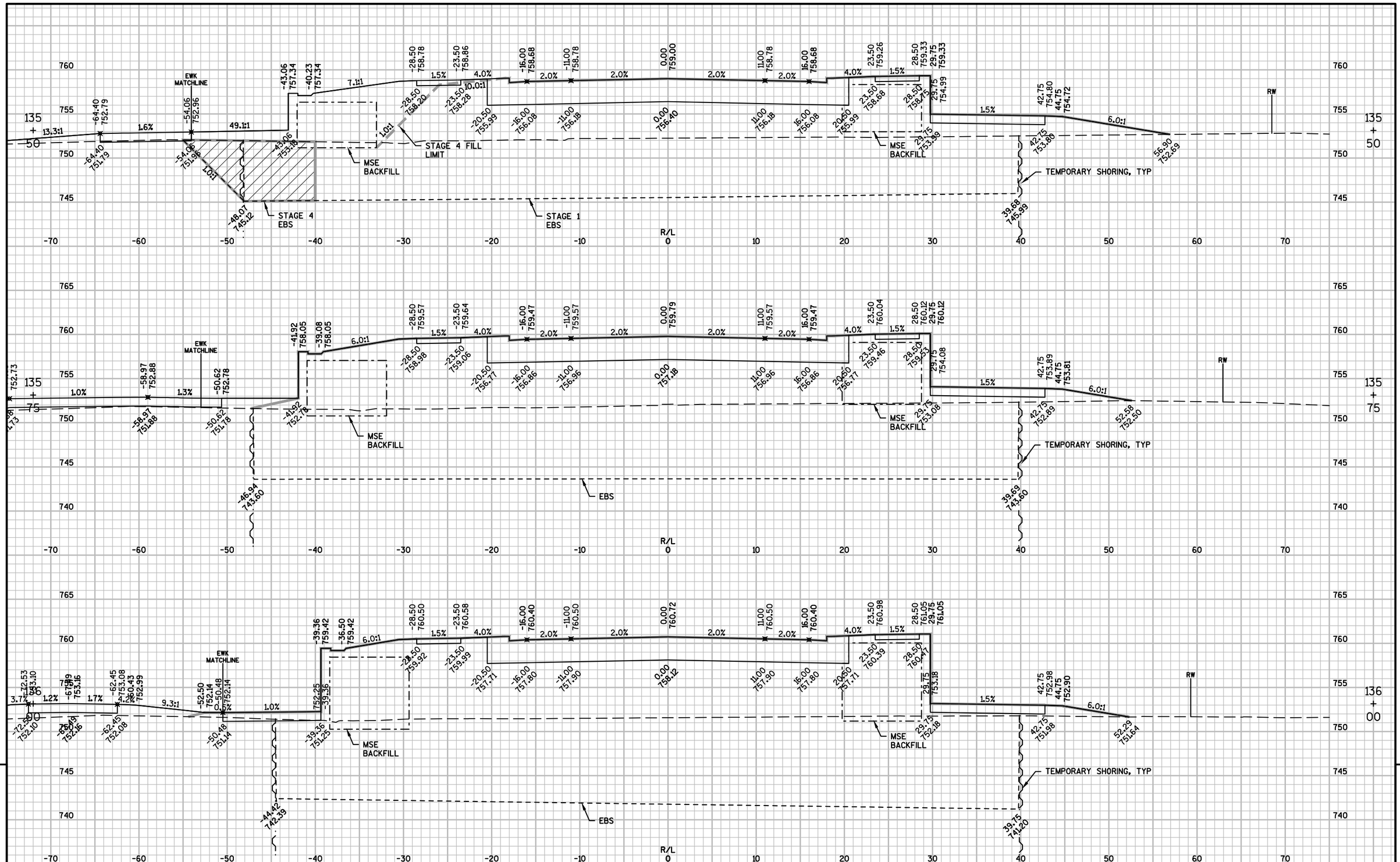


PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 389 E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090202-XS

PLOT DATE : 5/10/2017 10:31 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

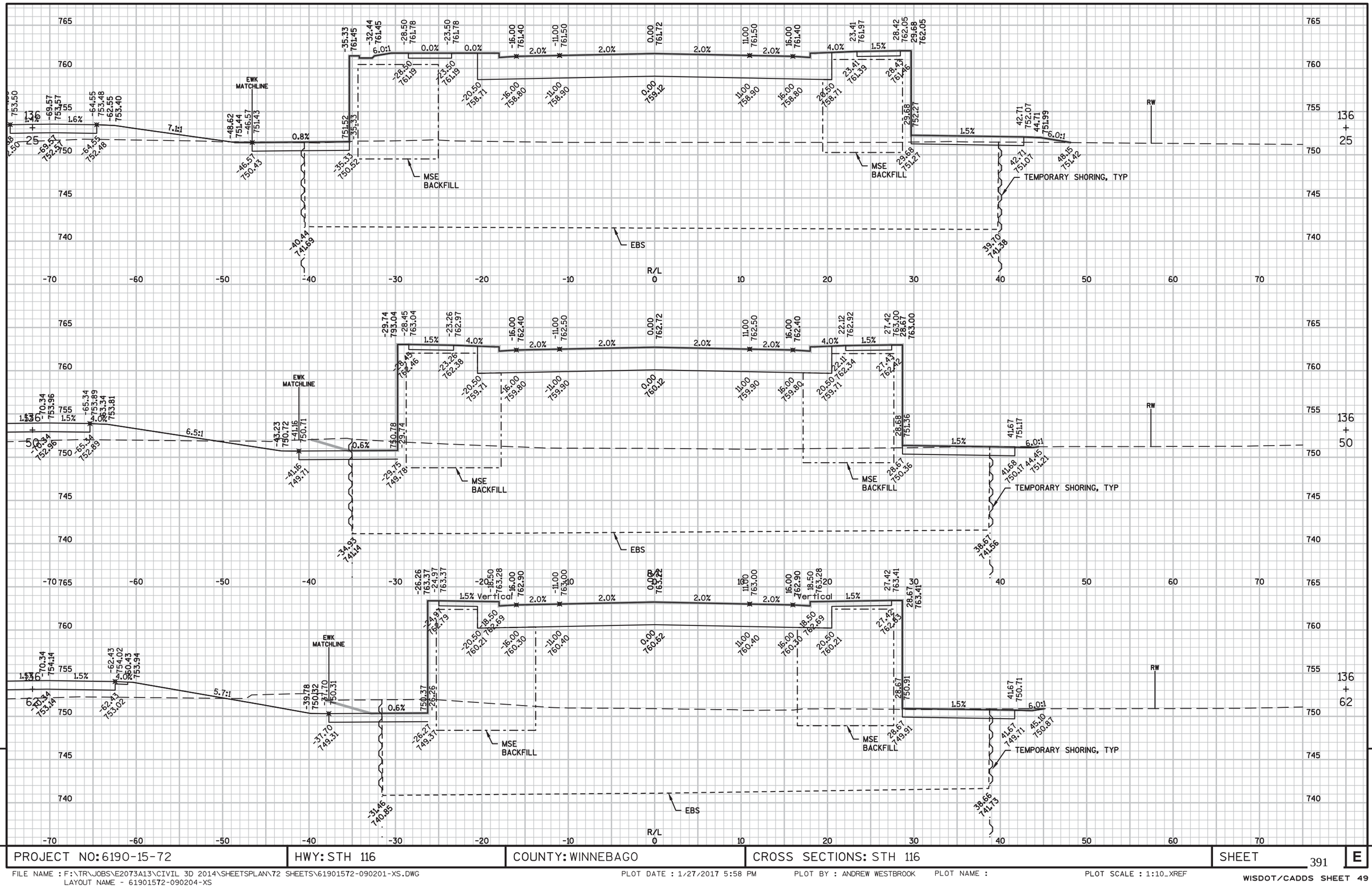


PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 390 E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090203-XS

PLOT DATE : 5/10/2017 10:31 AM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

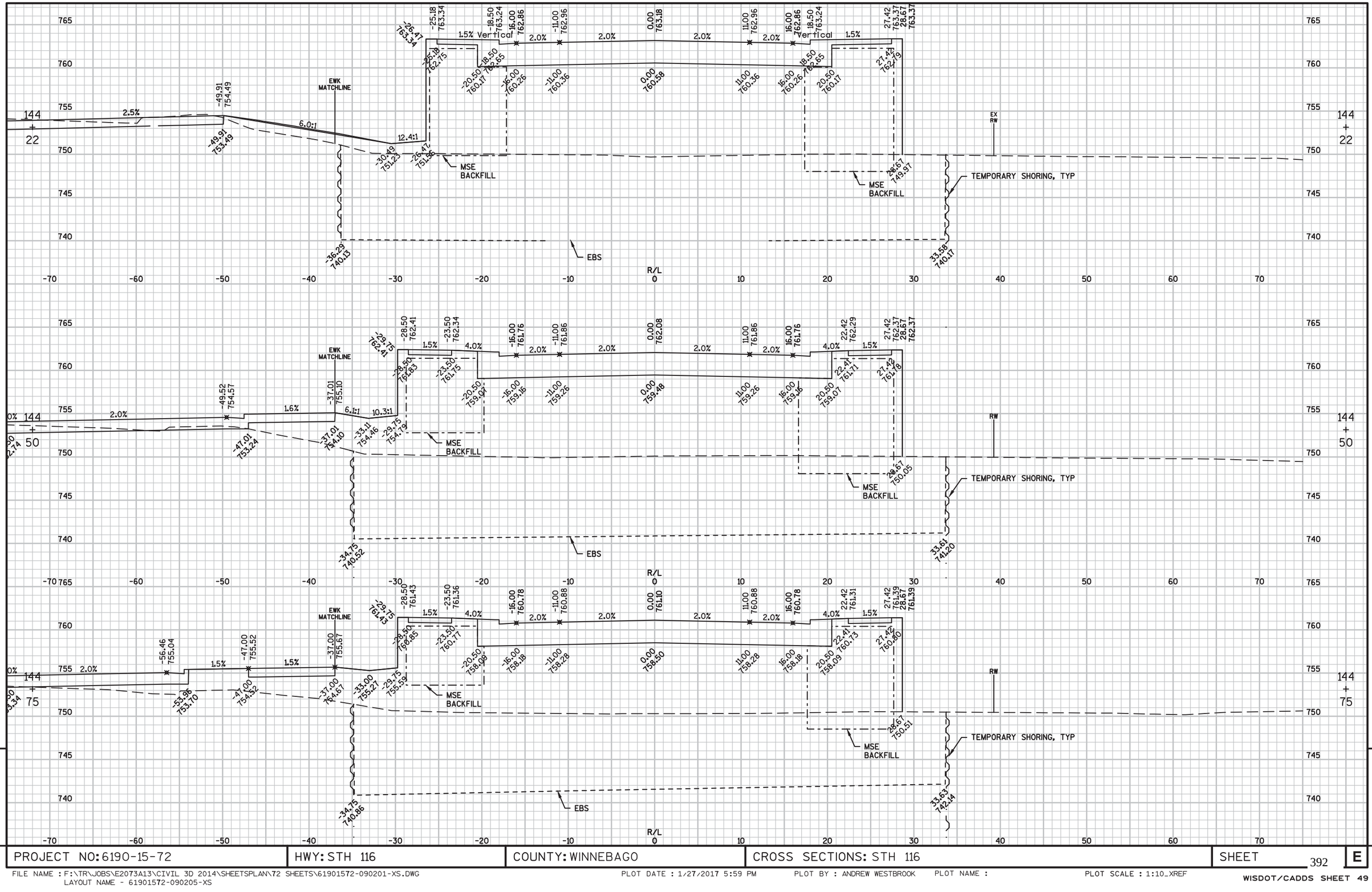


PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 391	E

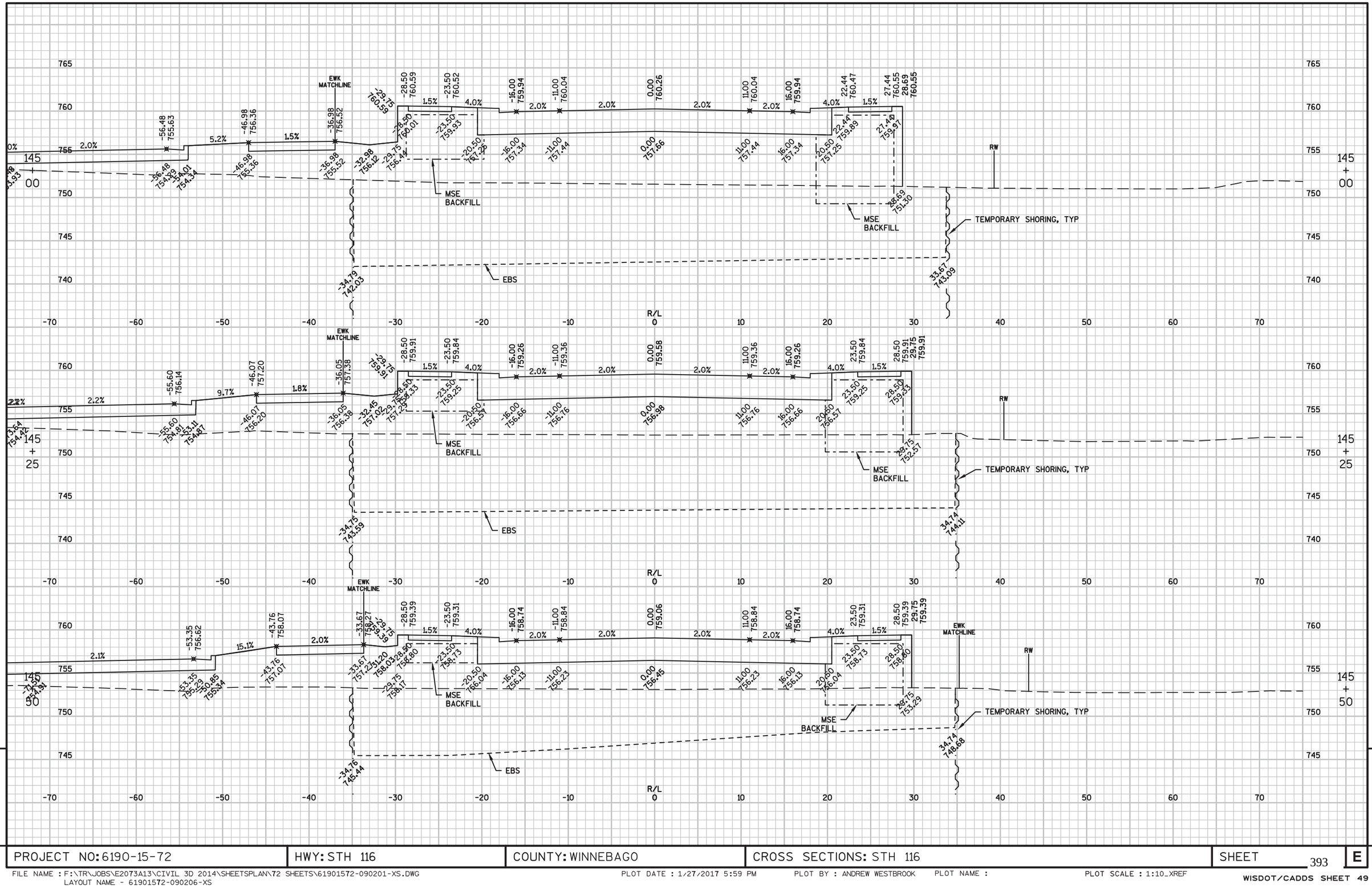
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LAYOUT NAME - 61901572-090204-XS

PLOT DATE : 1/27/2017 5:58 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



9	PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 392 E



PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 393	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090206-XS

PLOT DATE : 1/27/2017 5:59 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF

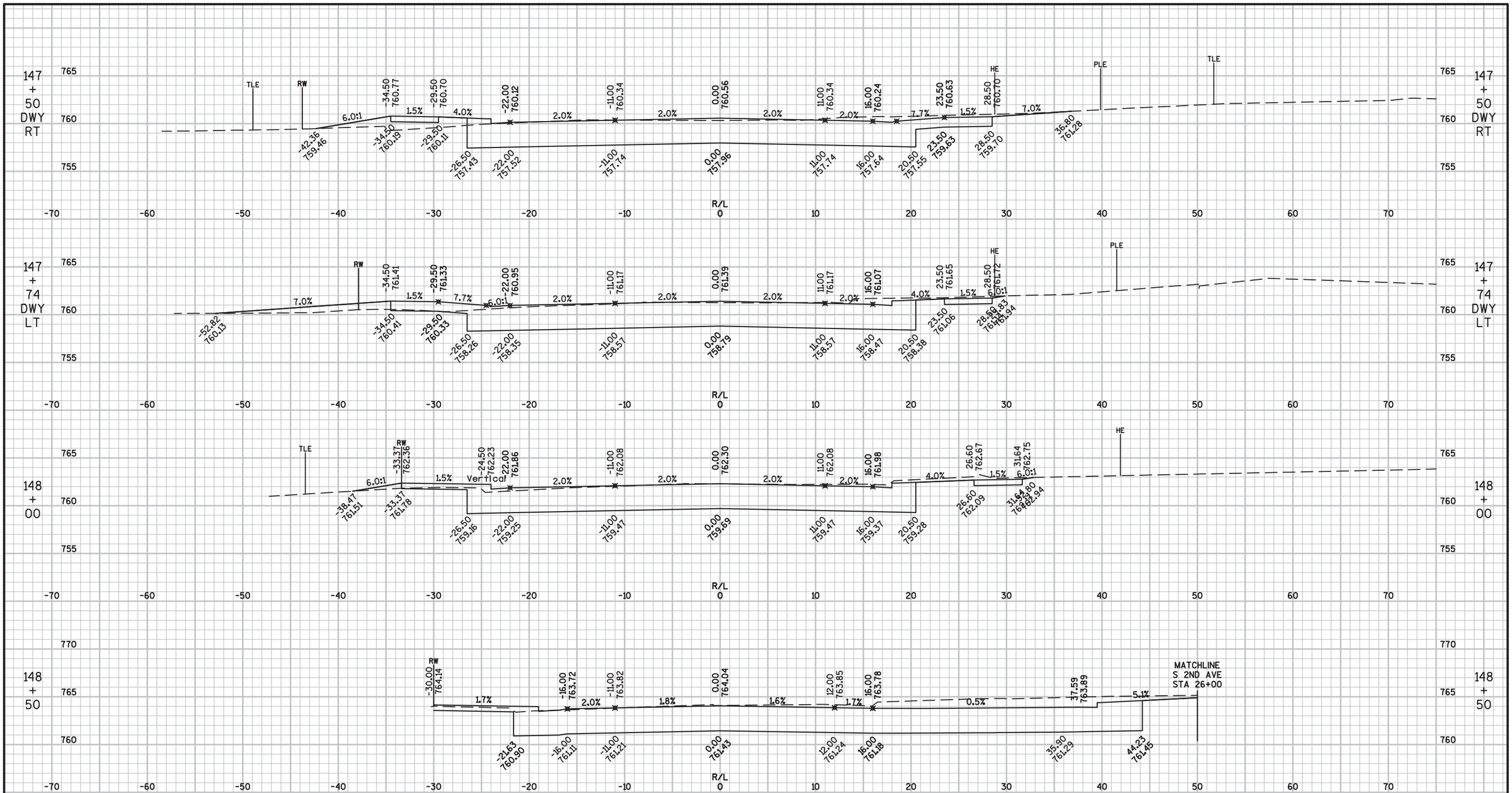
WISDOT/CADDS SHEET 49

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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 394	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090207-XS
PLOT DATE : 1/27/2017 5:59 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49

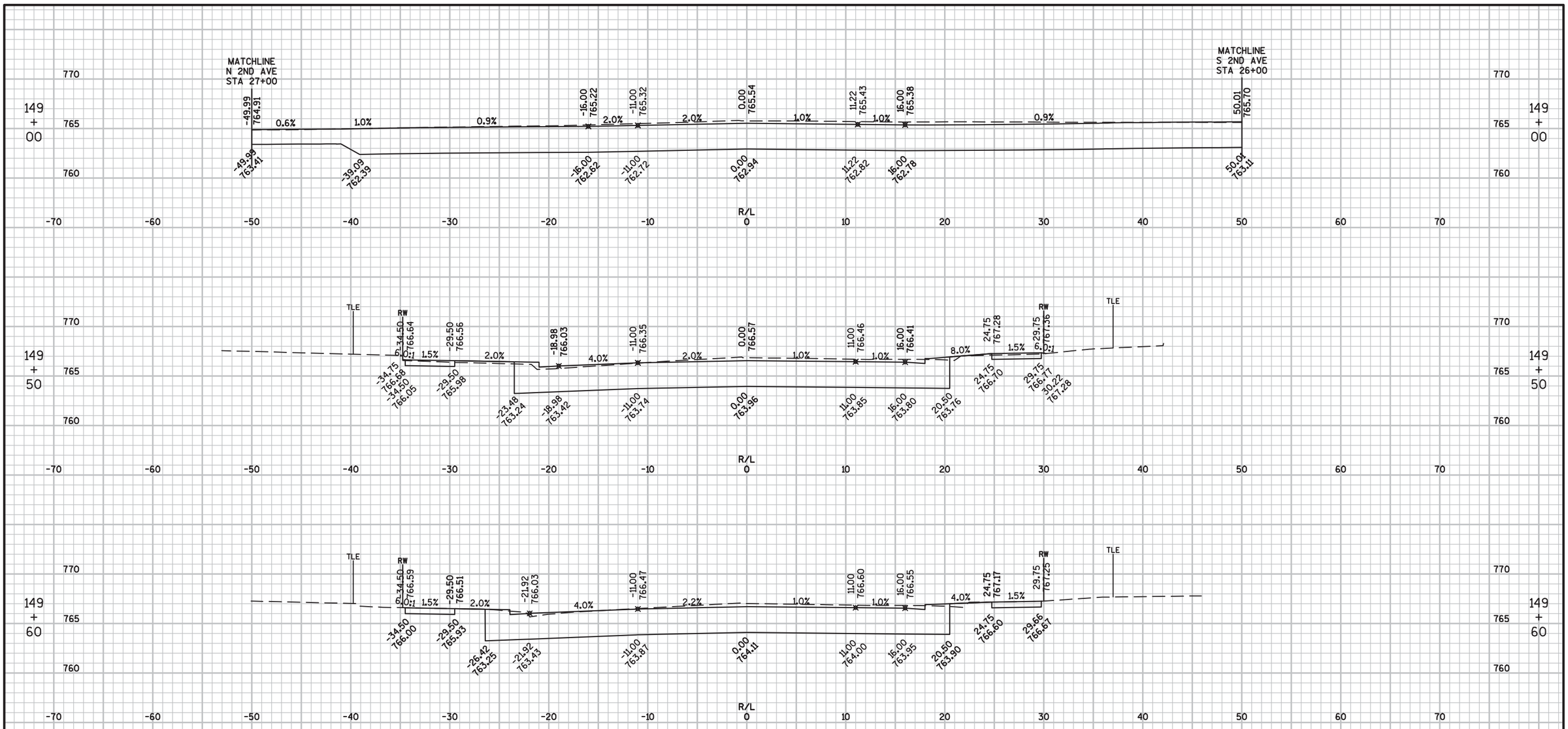


PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 395	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090208-XS

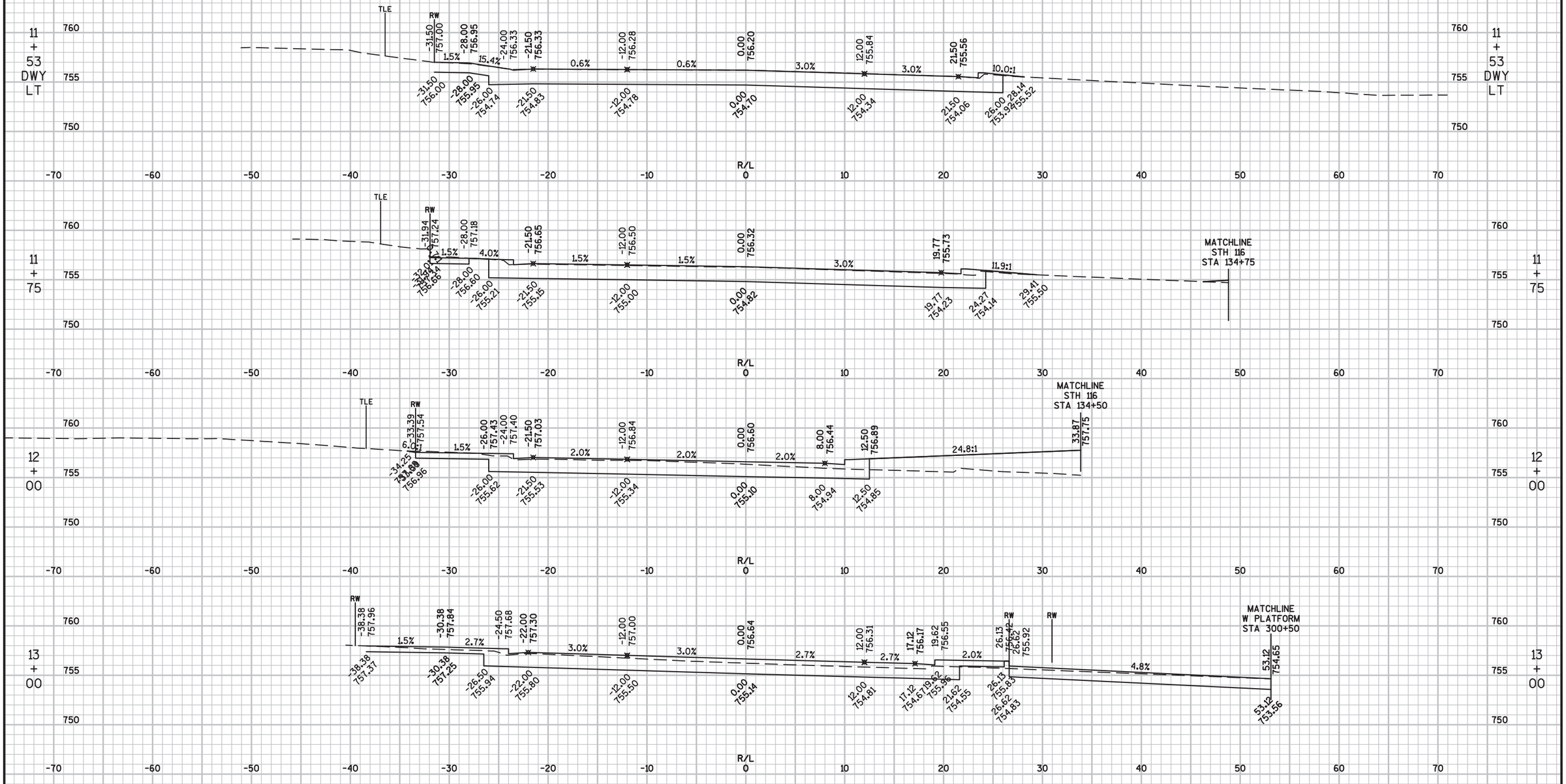
PLOT DATE : 1/27/2017 5:59 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: STH 116	SHEET 396	E

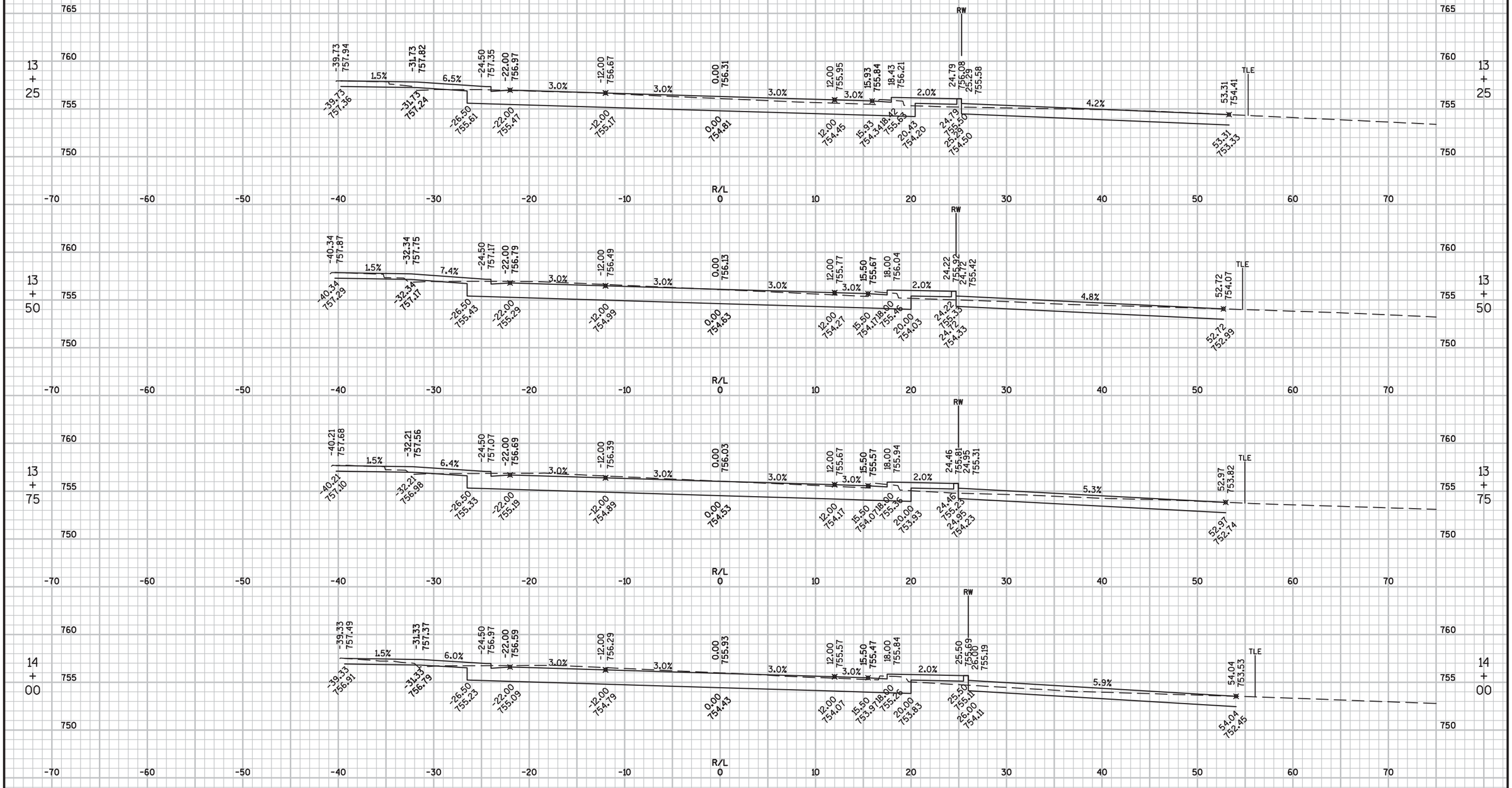
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LAYOUT NAME - 61901572-090209-XS
PLOT DATE : 1/27/2017 5:59 PM
PLOT BY : ANDREW WESTBROOK
PLOT NAME :
PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



9

PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: 1ST ST	SHEET 397	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090220-XS
PLOT DATE : 1/27/2017 5:59 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49

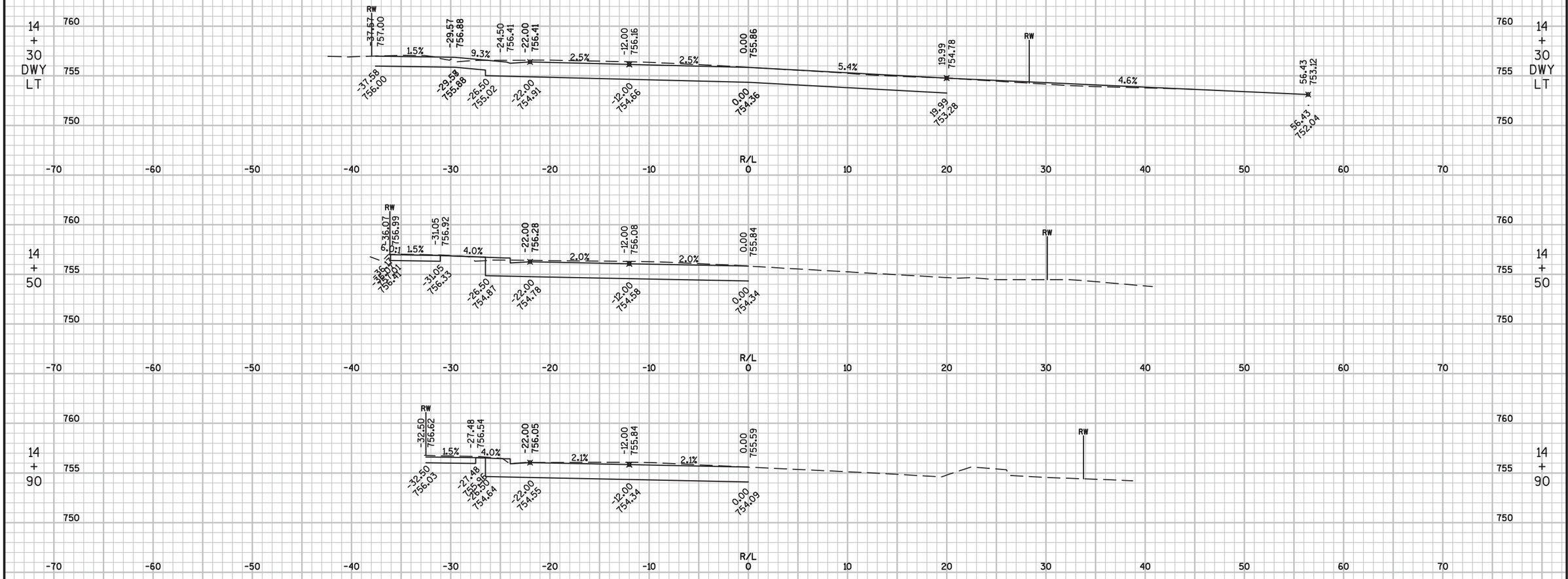


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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: 1ST ST	SHEET 398	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090221-XS
PLOT DATE : 1/27/2017 5:59 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49

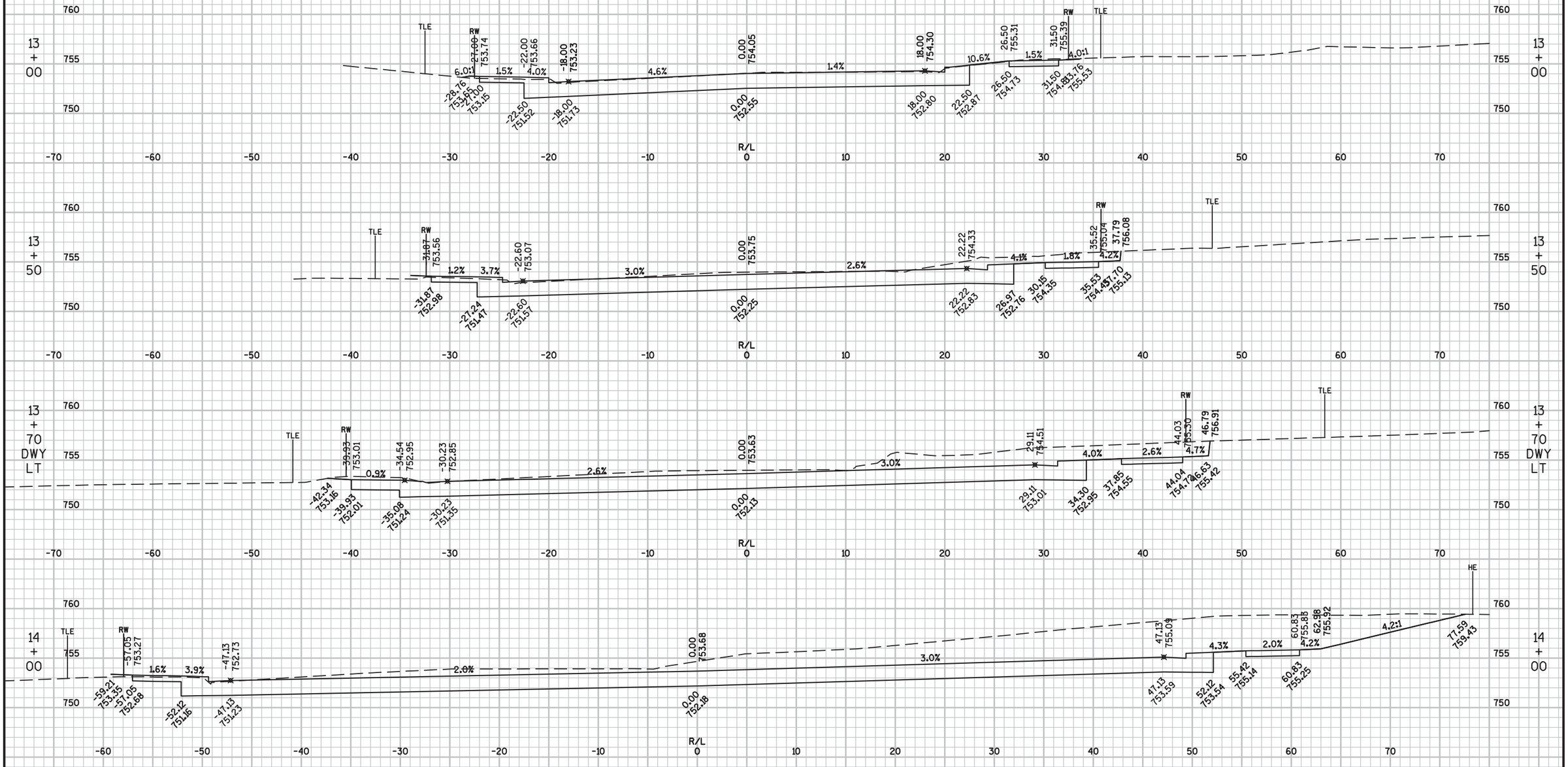


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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: 1ST ST	SHEET 399	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090222-XS

PLOT DATE : 1/27/2017 5:59 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF



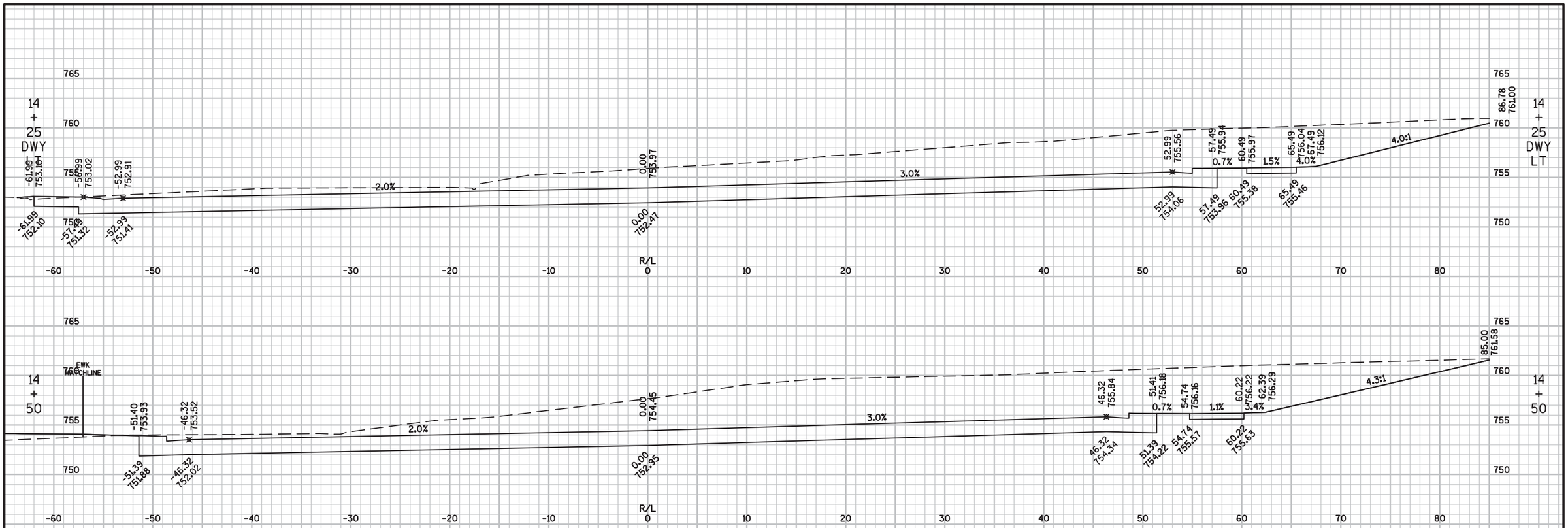
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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: 1ST AVE S	SHEET 400	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090230-XS

PLOT DATE : 1/30/2017 2:29 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1" = 10'_XREF

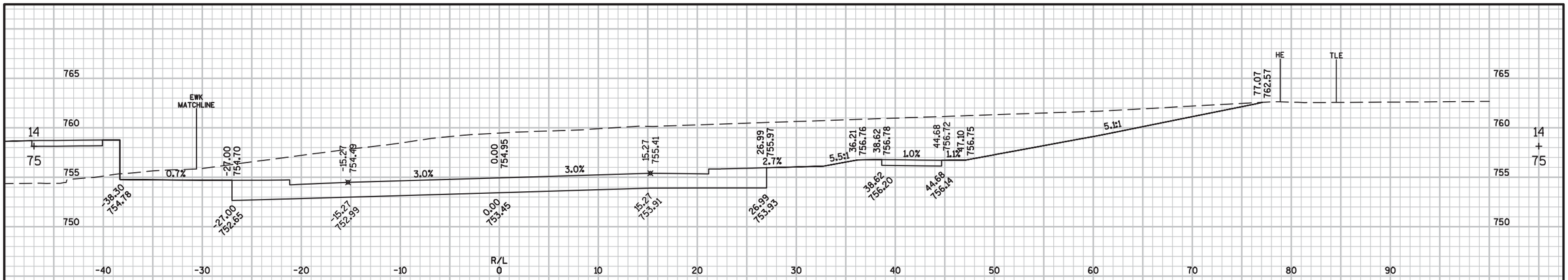


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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: 1ST AVE S	SHEET 401	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090231-XS
PLOT DATE : 1/27/2017 6:00 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49

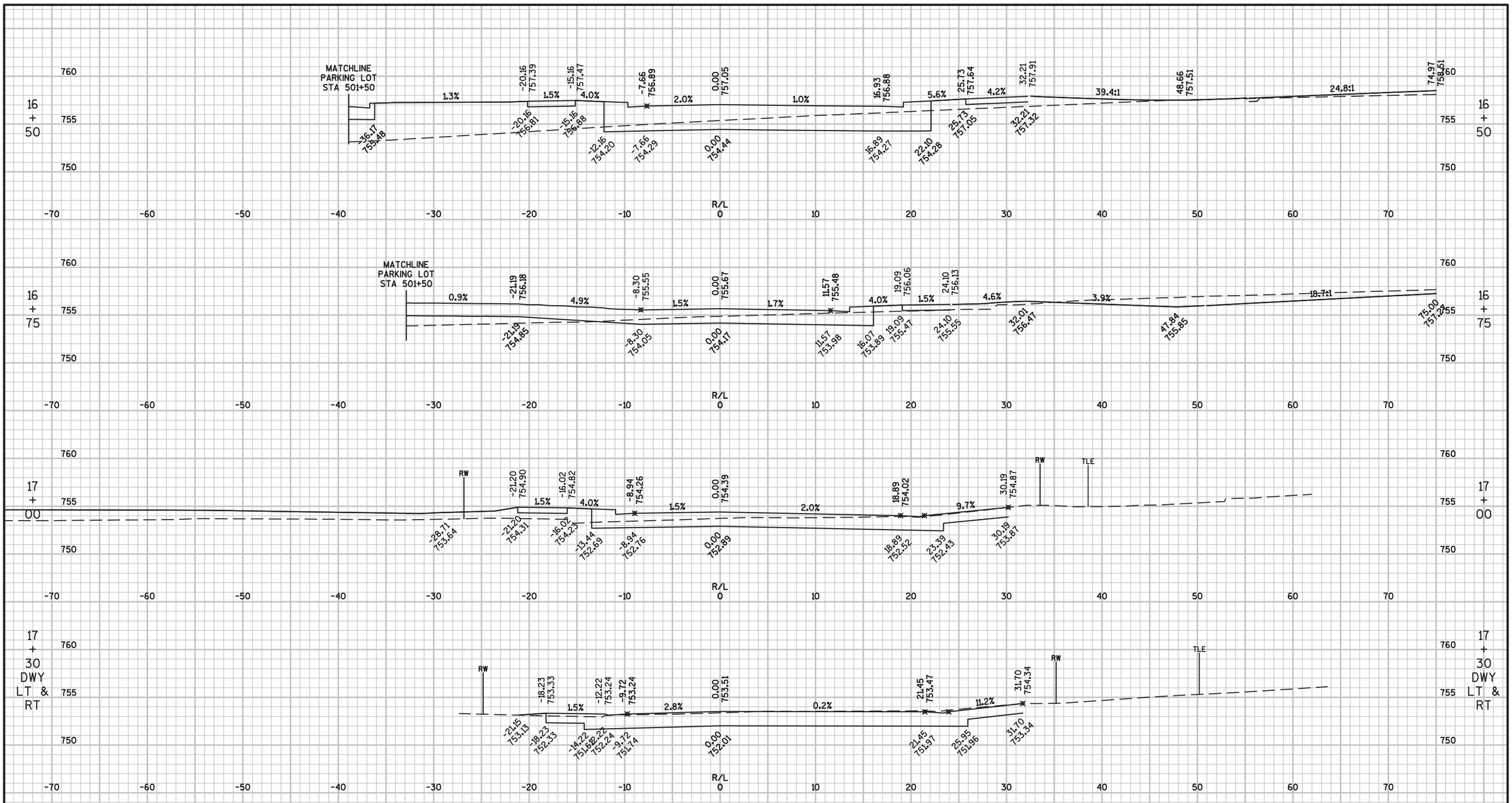


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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: 1ST AVE S	SHEET 402	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090232-XS
PLOT DATE : 1/27/2017 6:00 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49

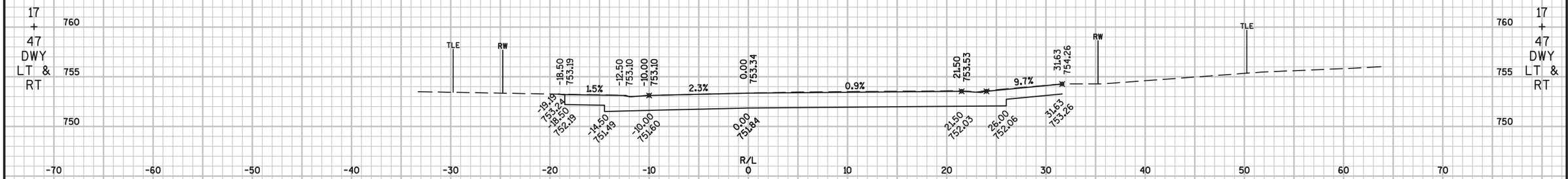


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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: 1ST AVE N	SHEET 403	E

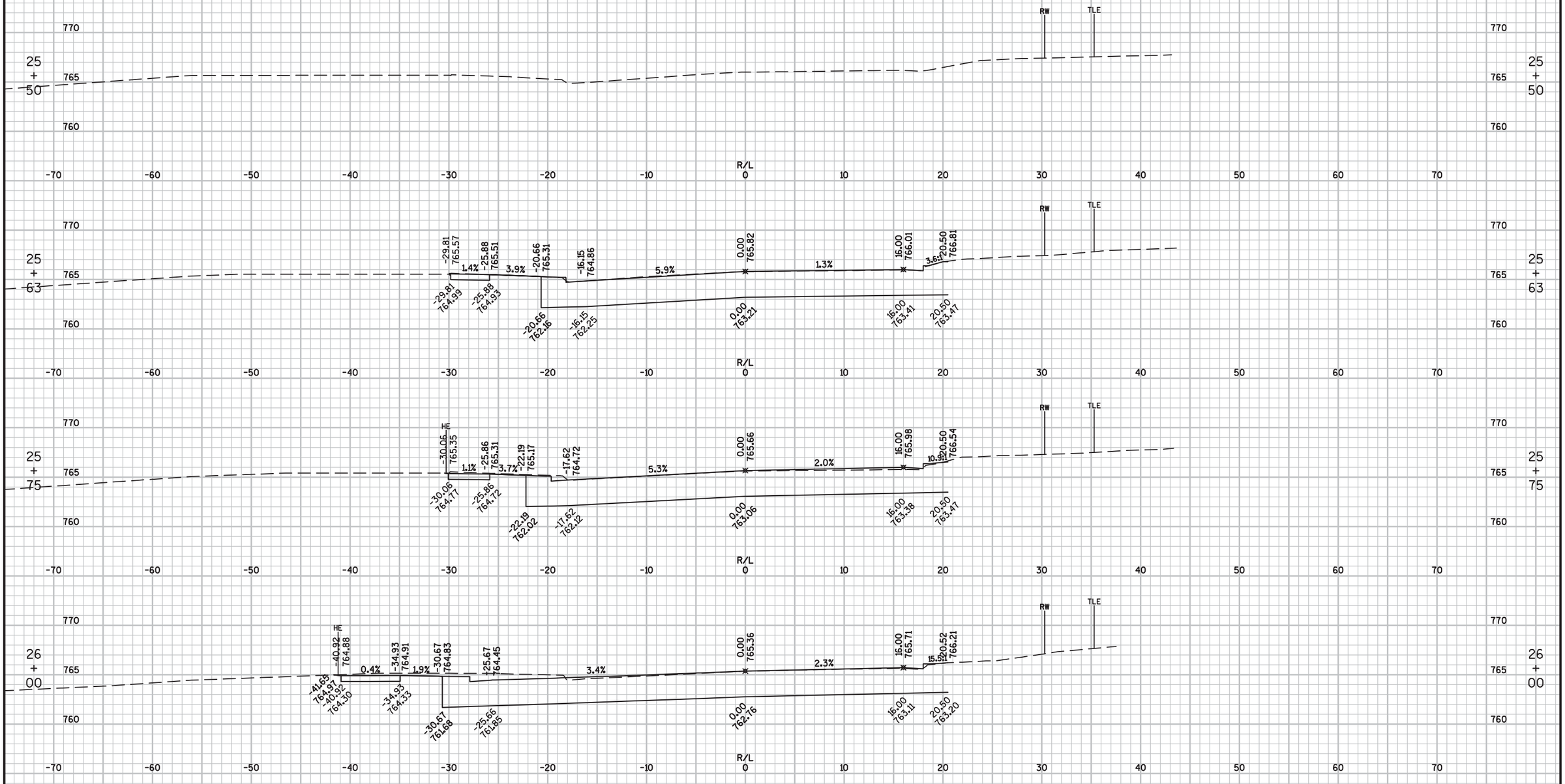
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LAYOUT NAME - 61901572-090235-XS
PLOT DATE : 1/27/2017 6:00 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: 1ST AVE N	SHEET 404	E

9

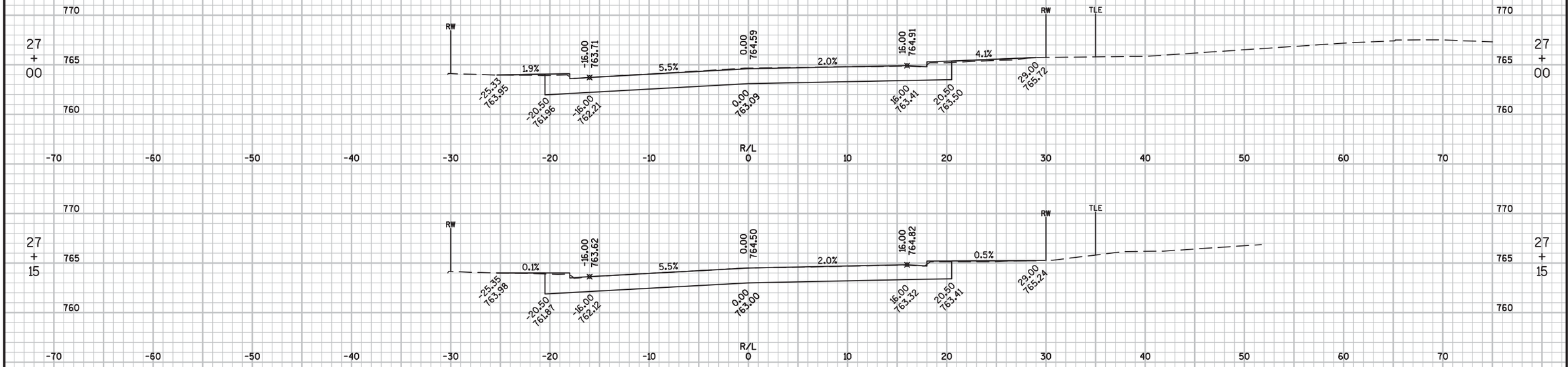


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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: S 2ND AVE	SHEET 405	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090240-XS

PLOT DATE : 1/27/2017 6:00 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF

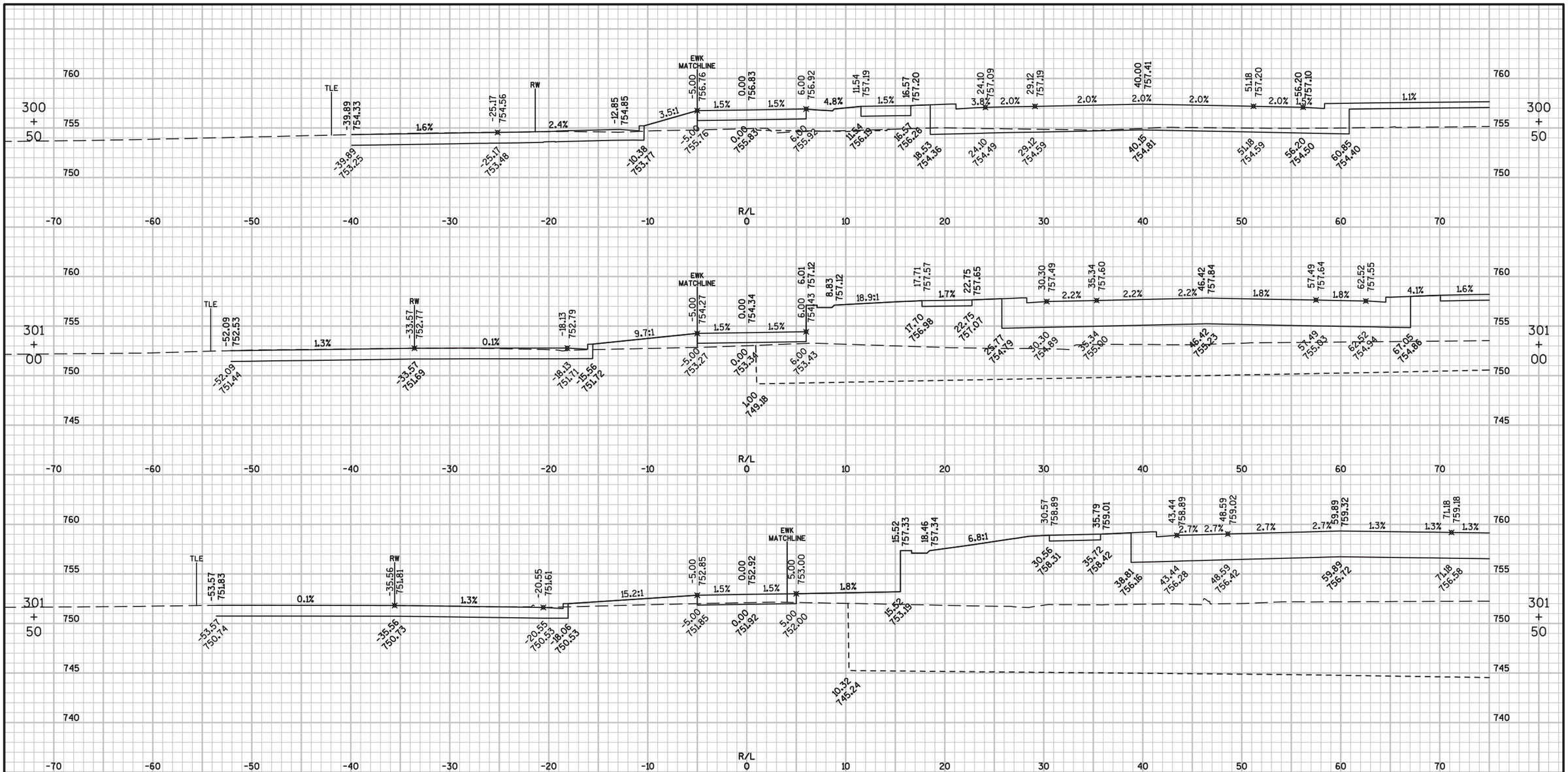


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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: N 2ND AVE	SHEET 406	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090245-XS
PLOT DATE : 1/27/2017 6:00 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



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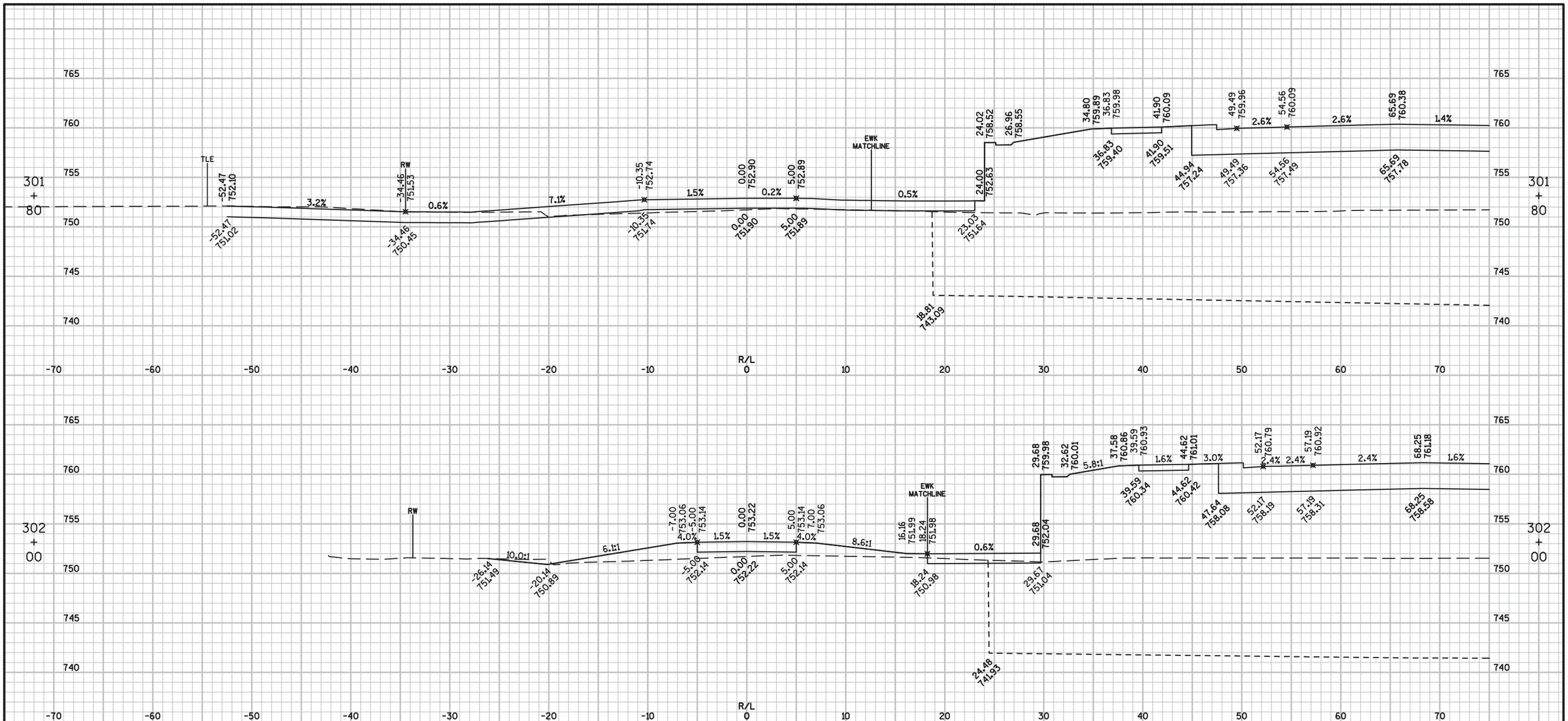
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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: WEST FISHING PLATFORM TRAIL	SHEET 407	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090250-XS

PLOT DATE : 1/27/2017 6:00 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

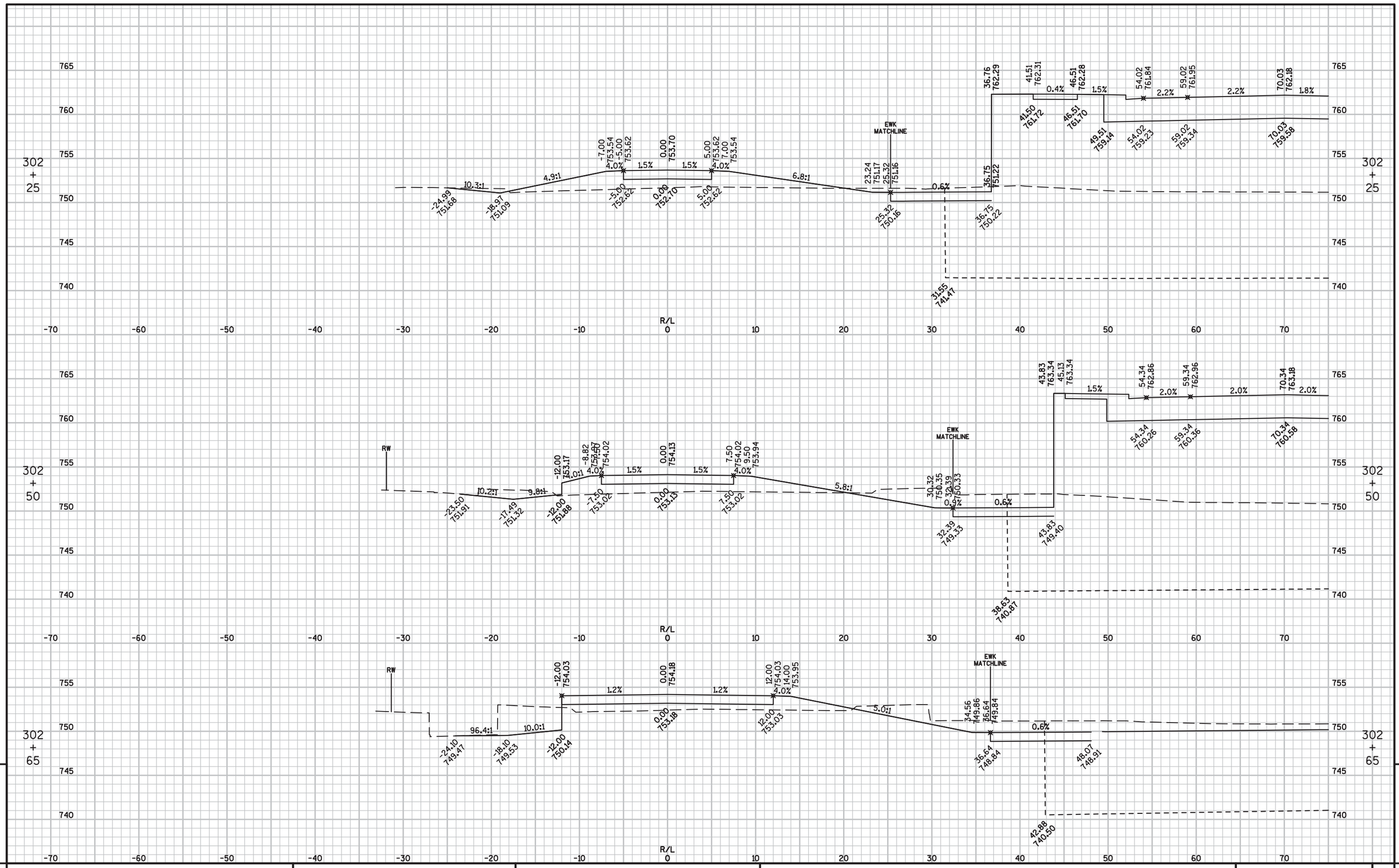


PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: WEST FISHING PLATFORM TRAIL	SHEET 408	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090251-XS

PLOT DATE : 1/27/2017 6:01 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



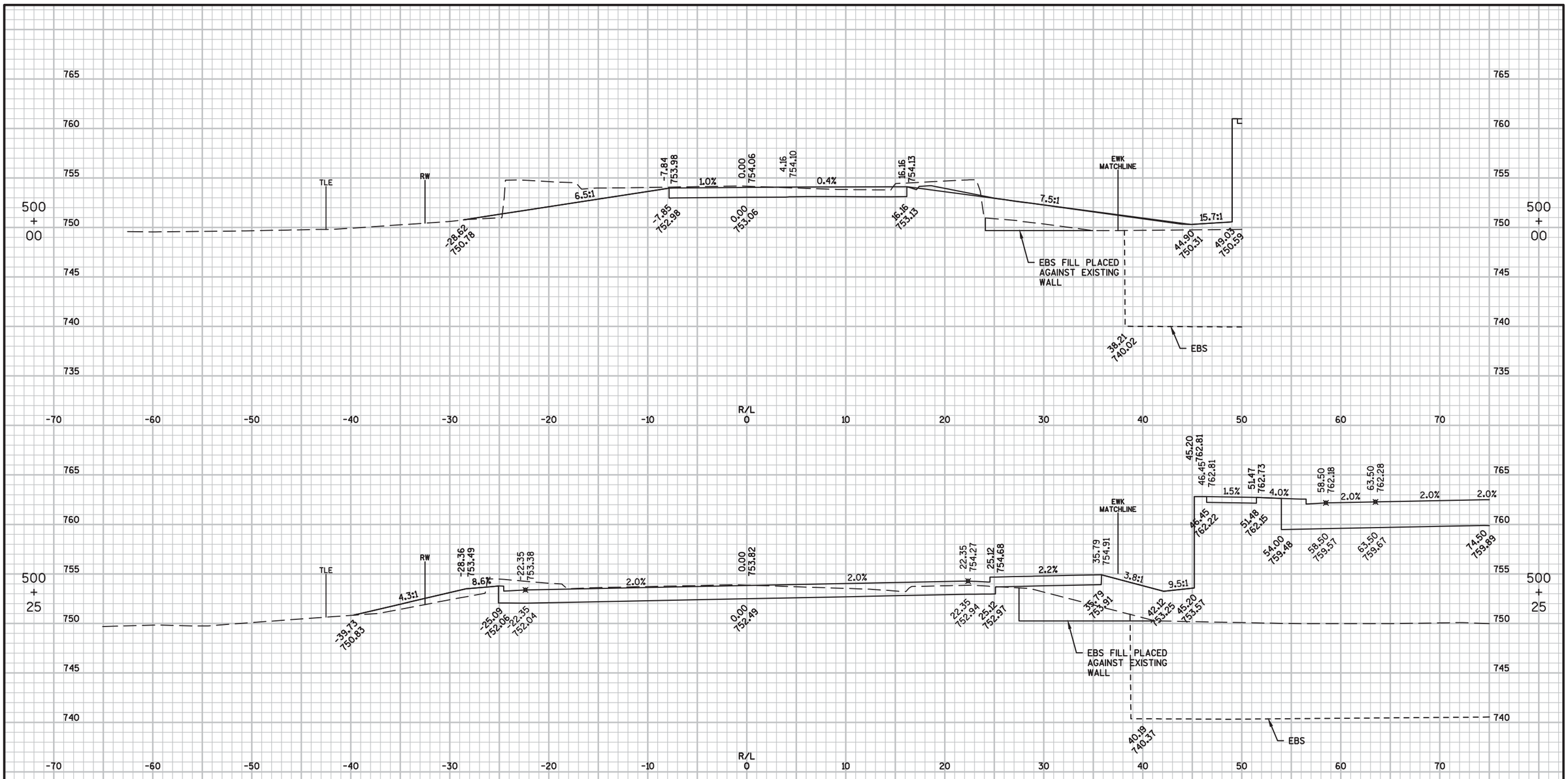
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PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: WEST FISHING PLATFORM TRAIL	SHEET 409	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090252-XS

PLOT DATE : 1/27/2017 6:01 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF

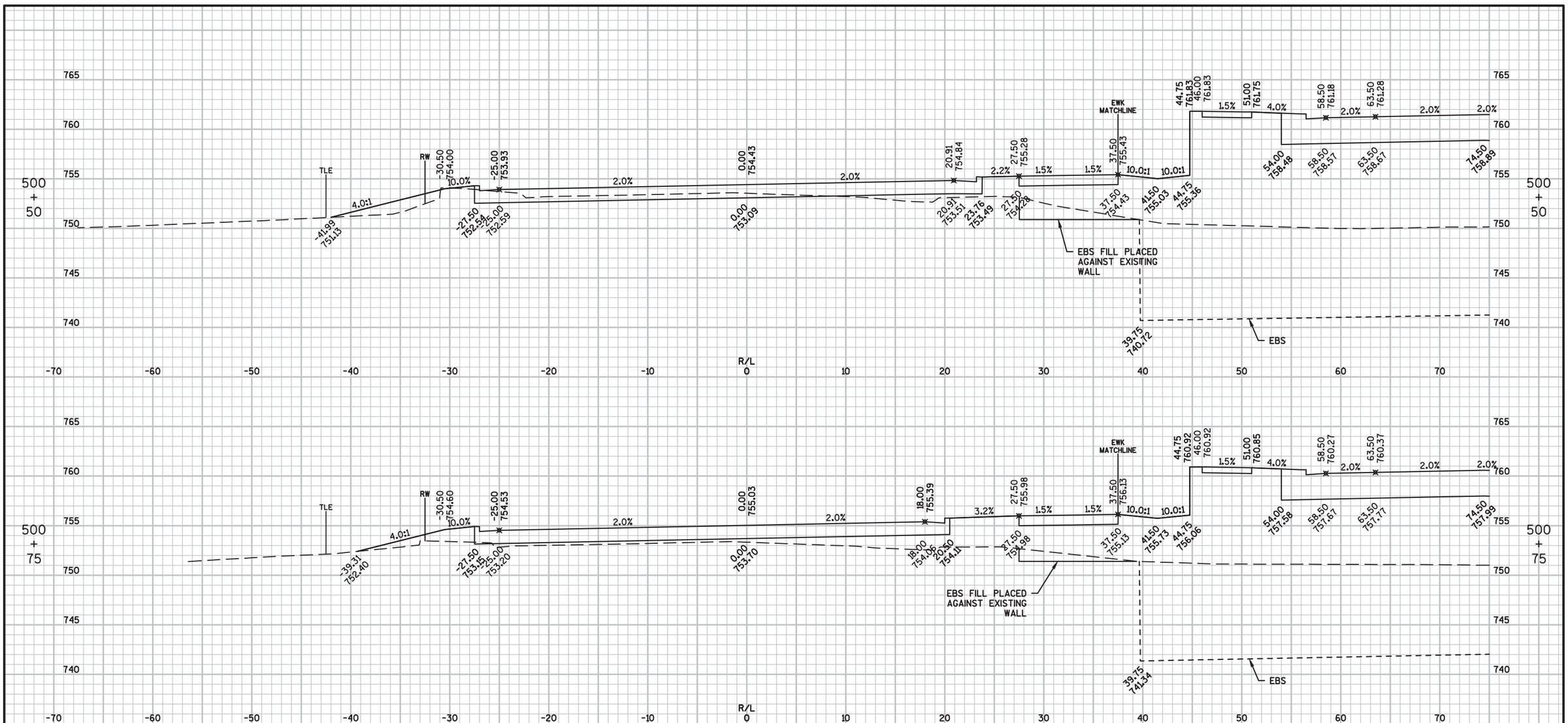


PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: EAST PLATFORM PARKING LOT	SHEET 410 E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090270-XS

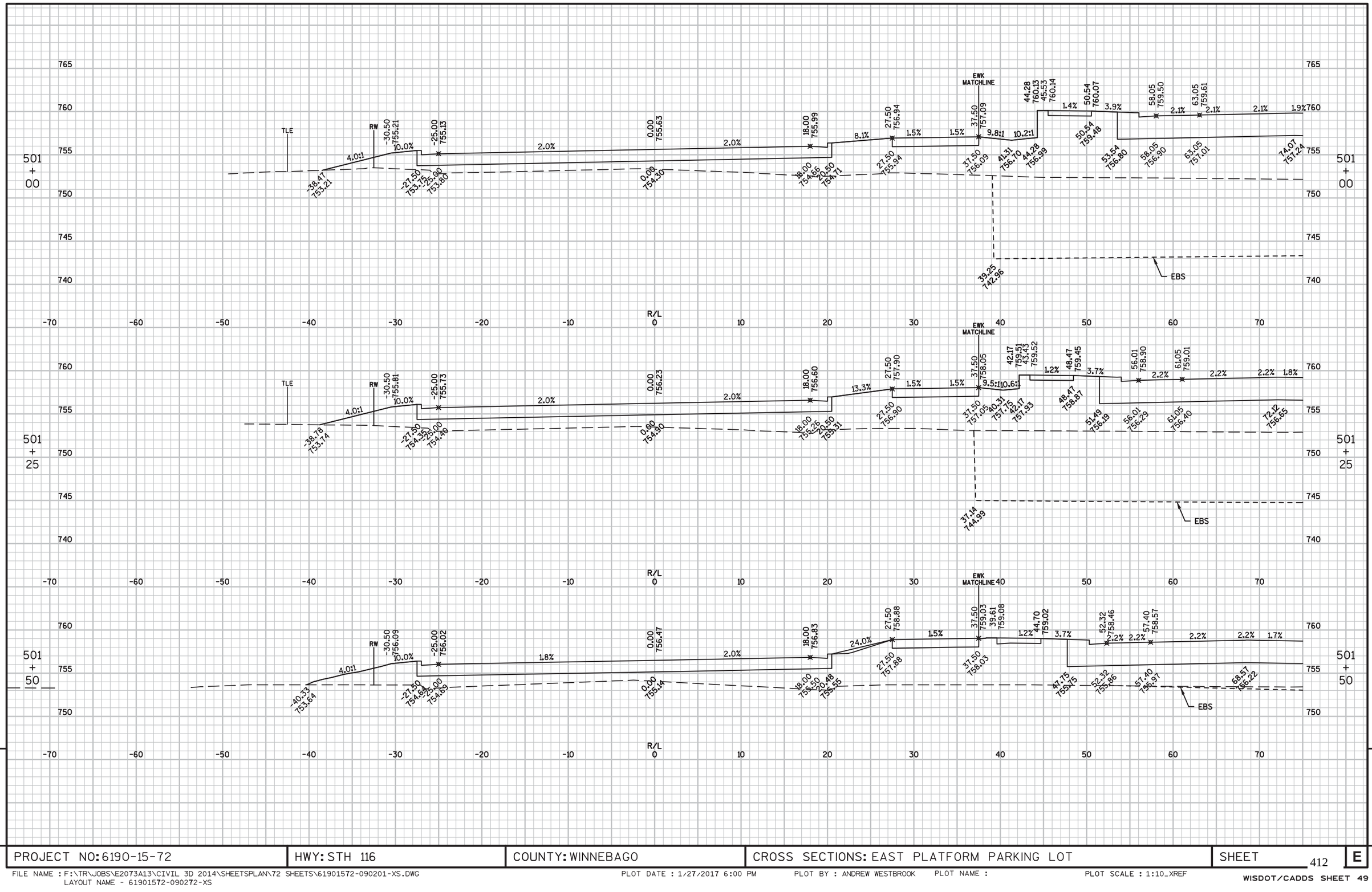
PLOT DATE : 1/27/2017 6:00 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: EAST PLATFORM PARKING LOT	SHEET 411	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090271-XS
PLOT DATE : 1/27/2017 6:00 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 6190-15-72	HWY: STH 116	COUNTY: WINNEBAGO	CROSS SECTIONS: EAST PLATFORM PARKING LOT	SHEET 412	E

FILE NAME : F:\TR\JOBS\E2073A13\CIVIL 3D 2014\SHEETSPLAN\72 SHEETS\61901572-090201-XS.DWG
LAYOUT NAME - 61901572-090272-XS
PLOT DATE : 1/27/2017 6:00 PM PLOT BY : ANDREW WESTBROOK PLOT NAME : PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
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