GRE

MARCH 2019

PROJECT ID: 1500-37-74

WITH: 1500-37-75,4570-12-71,4570-12-72

COUNTY: MANITOWOC

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 = 658

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1500-37-74	WISC 2019210	1
1500-37-75	———	———
4570-12-71	WISC 2018472	1
4570-12-72	———	———

WALDO BLVD, CITY OF MANITOWOC

14TH STREET-8TH STREET

USH 10

MANITOWOC COUNTY

STATE PROJECT NUMBER

1500-37-74/75

WALDO BLVD, CITY OF MANITOWOC

8TH STREET-MARITIME DRIVE

STH 42

MANITOWOC COUNTY

STATE PROJECT NUMBER

4570-12-71/72

PROJECT LOCATION

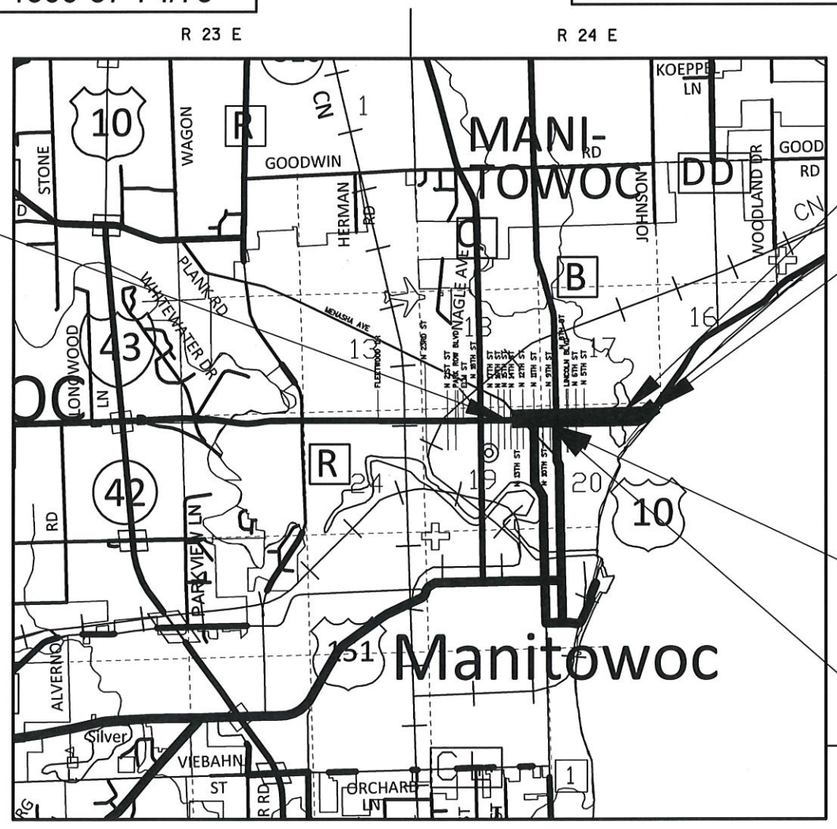
BEGIN PROJECT 1500-37-74/75
STA. 131+75.00
Y=306811.919
X=231679.310

DESIGN DESIGNATION

			USH 10	STH 42
A.A.D.T.	2019	=	15,400	11,700
A.A.D.T.	2039	=	17,200	13,600
D.H.V.	2039	=	1,961	1,551
D.D.		=	58/42	58/42
T.		=	5.5%	5.5%
DESIGN SPEED		=	40 MPH	40 MPH
ESALS		=	3,124,400	2,423,600

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
		TELEPHONE	T
MARSH AREA		WATER	W
		UTILITY PEDESTAL	
		POWER POLE	
WOODED OR SHRUB AREA		TELEPHONE POLE	



LAYOUT
SCALE 0 1 MI

STRUCTURE B-36-0900

END PROJECT 4570-12-71/72
STA. 194+90.00

T 19 N

BEGIN PROJECT 4570-12-71/72
STA. 152+25.00
Y=306786.930
X=233729.157

END PROJECT 1500-37-74/75
STA. 152+25.00

T 18 N

TOTAL NET LENGTH OF CENTERLINE = 0.388 MI. PROJECT 1500-37-74
TOTAL NET LENGTH OF CENTERLINE = 0.808 MI. PROJECT 4570-12-71

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, MANITOWOC COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ACCEPTED FOR
CITY OF MANITOWOC

1-4-19
DATE

DIRECTOR OF PUBLIC INFRASTRUCTURE

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES

WISCONSIN
TROY B. ROBILLARD
35694
GREEN BAY
PROFESSIONAL ENGINEER

12/27/2019
(Date)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	AYRES ASSOCIATES
Designer	AYRES ASSOCIATES
Project Manager	BRIAN HAEN
Regional Examiner	
Regional Supervisor	CHAD DEGRAVE

APPROVED FOR THE DEPARTMENT

DATE: 1/4/19 Brian Haen
(Signature)

E

GENERAL NOTES

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

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

FILL, AS SHOWN ON THE PLAN SHEETS, PERTAINS TO EMBANKMENT CONSTRUCTED FROM EXCAVATION COMMON. THE FACTOR USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 1.33.

EXCAVATION BELOW SUBGRADE (EBS) WILL BE MEASURED AND PAID FOR AS EXCAVATION COMMON. THE LOCATION FOR EBS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE EXACT LOCATION AND WIDTH OF PRIVATE ENTRANCES WILL BE DETERMINED BY THE FIELD BY THE ENGINEER. ALL DRIVEWAYS ARE TO BE REPLACED IN KIND UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE PLANS. BASE AGGREGATE DENSE 1 1/4-INCH WILL BE USED UNDER ALL DRIVEWAYS.

THE REMOVAL OF ASPHALT DRIVEWAYS WILL BE PAID FOR AS EXCAVATION COMMON.

MAINTAIN DRIVING SURFACE TO ALL PROPERTY OWNERS WITH BASE AGGREGATE DENSE 1 1/4-INCH.

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

SAW CUT LOCATIONS SHOWN ON THE PLAN ARE SUBJECT TO ADJUSTMENT BY THE ENGINEER IN THE FIELD. THE LINE OF SUCH SAW CUTS WILL BE NEATLY DELINEATED THROUGH THE ASPHALT AND/OR CONCRETE STREETS, DRIVEWAYS AND/OR PARKING LOTS AT THE MATCH LINE AS SHOWN ON THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER WITHOUT ANY DAMAGE TO THE REMAINING PORTION OF THE EXISTING PAVEMENT.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN AND PROVIDE DOCUMENTATION TO THE ENGINEER.

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

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS, FLOODWAY OR FLOODPLAIN OF ANY WETLANDS.

EROSION CONTROL MEASURES WILL BE PLACED AS SHOWN ON THE EROSION CONTROL PLAN. THE EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER. REMOVAL OF ITEMS ARE INCIDENTAL TO THE RESPECTIVE EROSION CONTROL BID ITEM COSTS.

NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT APPROVAL BY THE ENGINEER. FINAL LIMITS OF FENCE REMOVAL TO BE DETERMINED BY THE ENGINEER.

RESHAPE AND SEEDING OF ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY OPERATIONS OUTSIDE OF THE ENGINEER DETERMINED CONSTRUCTION LIMITS ARE INCIDENTAL TO THE CONTRACT.

DO NOT USE FERTILIZER WITHIN 20 FEET OF NAVIGABLE WATERWAYS OR WETLANDS.

STATIONING, DISTANCES, AND OFFSETS FOR SIGNS AND TRAFFIC CONTROL DEVICES SHOWN IN THE PLANS ARE APPROXIMATE. EXACT LOCATIONS ARE DETERMINED BY THE ENGINEER.

COVER ALL SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" AS SHOWN IN THE PLANS OR DIRECTED BY THE ENGINEER.

BOXOUTS WILL BE PROVIDED IN CONCRETE SIDEWALK BY THE CONTRACTOR FOR SIGN PLACEMENT. THE COST OF THE BOXOUTS WILL BE INCIDENTAL TO CONCRETE SIDEWALK. LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING MOTORISTS AND PEDESTRIANS THAT MAY ENTER THE WORK ZONE FROM POSSIBLE HAZARD.

CURB AND GUTTER ELEVATIONS ARE ALONG THE FLANGE LINE UNLESS OTHERWISE NOTED.

RADIUS POINTS, UNLESS OTHERWISE NOTED, ARE TO FACE OF CURB.

CURVE DATA IS BASED ON ARC DEFINITION.

BEARINGS SHOWN ON THIS PLAN ARE TRUE BEARINGS.

PROPERTY LINES SHOWN ARE APPROXIMATE.

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

CONCRETE DEPTH ON ALL CURB RAMPS SHALL BE 6-INCH.

REMOVAL OF ANY MESH OR REINFORCEMENT FOUND IN CONCRETE PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE REMOVING PAVEMENT ITEM

ALL WATER AND SANITARY SEWER UTILITIES ARE STATIONED FROM THE EAST BOUND CONSTRUCTION REFERENCE LINE.

THE OWNER RESERVES THE RIGHT TO SALVAGE ANY EXISTING UTILITY AND STREET APPURTENANCES INCLUDING, BUT NOT LIMITED TO, CASTINGS, VALVES, HYDRANTS OR SIGN AND SIGN SUPPORTS.

PROTECT EXISTING ASPHALT ON STREETS OUTSIDE OF PROPOSED SAW CUTS. ANY DAMAGE DURING CONSTRUCTION UNDER THIS CONTRACT SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

PROTECT EXISTING WATER AND SANITARY SEWER UTILITIES AND APPURTENANCES NOT SHOWN TEMPORARY REMOVAL AND ANY DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

ALL EXISTING PIPES ABANDONED-IN-PLACE SHALL HAVE A PIPE PLUG. EXISTING ABANDONED PIPES ENCOUNTERED SHALL RECEIVE A PIPE PLUG.

ALL SANITARY SEWER PIPE AND WATER MAIN SHALL BE SAW CUT AT RIGHT ANGLES TO PROVIDE A CLEAN JOINT.

FIELD VERIFY LOCATION, SIZE, AND TYPE OF SANITARY SEWER LATERALS AND CONNECT TO PROPOSED SANITARY PIPELINE WITH WYE, APPROPRIATE BEND, PIPELINE, AND TRANSITION COUPLINGS. SEWER SEWER LATERALS SHALL BE VISUALLY INSPECTED. ALL EXPOSED SANITARY LATERALS SHALL SHALL BE CONNECTED BY THE END OF THE DAY.

FIELD VERIFY SANITARY LATERAL INVERT ELEVATIONS TO EXISTING BUILDINGS. SANITARY LATERALS MAY NEED TO BE LOWERED TO AVOID PROPOSED WATER MAIN CONFLICTS. RISERS MAY BE REQUIRED.

DYE TESTING MAY BE REQUIRED TO FIELD VERIFY USE OF SANITARY LATERALS. ALL COSTS ASSOCIATED WITH DYE TESTING SHALL BE INCLUDED IN BID PRICE FOR SANITARY LATERAL RECONNECTION.

WHEN CONNECTING TO AN EXISTING MANHOLE, RECONSTRUCT NEW BENCH AND FLOW LINE TO ACCOMODATE NEW PIPE.

EXISTING WATER MAINS TO REMAIN IN SERVICE DURING CONSTRUCTION OF THE PROPOSED WATER MAIN. WATER SERVICES CAN NOT BE RECONNECTED UNTIL SAFE WATER SAMPLES HAVE BEEN OBTAINED AND THE PIPELINE HAS BEEN PRESSURE TESTED.

ALL WATER MAIN PIPELINES INCLUDING WATER SERVICES HAVING A DEPTH OF COVER LESS THAN 6-FEET OR UNDER STORM SEWER GREATER THAN 30" TO BE PROTECTED AGAINST FREEZING BY INSTALLATION OF 2-INCH THICK TRENCH INSULATION. INSULATION TO BE FULL TRENCH WIDTH AND PLACED ABOVE INITIAL BACKFILL ZONE.

WATER SERVICE SIZE TO BE INSTALLED AT A 1" MINIMUM DIAMETER OR MATCH EXISTING UNLESS NOTED ON DRAWINGS.

FIELD VERIFY LOCATION, SIZE AND TYPE OF WATER MAIN SERVICES. ALL FIELD VERIFICATION COSTS TO BE INCLUDED IN THE BID PRICES FOR WATER MAIN RECONNECTIONS.

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 9.81 ACRES
SOIL GROUP C

ORDER OF SECTION 2 SHEETS

GENERAL NOTES & CONTACTS
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
PAVING DETAILS
EROSION CONTROL
STORM SEWER
PLANTING AND LIGHTING
PERMANENT SIGNING
TRAFFIC SIGNALS
PAVEMENT MARKING
TRAFFIC CONTROL
STAGE CONSTRUCTION
DETOURS
ALIGNMENT DIAGRAMS

STANDARD ABBREVIATIONS

ABUT	ABUTMENT
AC	ACRE
AGG	AGGREGATE
AH	AHEAD
ET AL	AND OTHERS
BK	BACK
BLDG	BUILDING
BLK	BLOCK
BR	BRIDGE
CB	CATCH BASIN
CL OR C/L	CENTER LINE
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CPCA	CULVERT PIPE CORRUGATED ALUMINUM
CPCS	CULVERT PIPE CORRUGATED STEEL
CTH	COUNTY TRUNK HIGHWAY
CR	CREEK
CP	CULVERT PIPE
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DIA	DIAMETER
DWY OR DW	DRIVEWAY
E	EAST
X	EAST GRID COORDINATE
EB OR EBND	EASTBOUND
EL OR ELEV	ELEVATION
ENT	ENTRANCE
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXIST OR EX	EXISTING
FF OR F-F	FACE TO FACE
FE	FIELD ENTRANCE
FG	FINISHED GRADE
FT	FOOT
INL	INLET
INV	INVERT
IP	IRON PIPE OR PIN
LT	LEFT
L	LENGTH OF CURVE
LIN FT OR LF	LINEAR FOOT
MH	MANHOLE
NC	NORMAL CROWN
NW OR N/W	NORMAL WATER
N	NORTH
Y	NORTH GRID COORDINATE
NB OR NBND	NORTHBOUND
PT	POINT
PCC	POINT OF COMPOUND CURVE
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
POC	POINT ON CURVE
POT	POINT ON TANGENT
RR	RAILROAD
RL OR R/L	REFERENCE LINE
REBAR	REINFORCEMENT BAR
REQ'D	REQUIRED
R/W	RIGHT-OF-WAY
R	RADIUS
S	SOUTH
SB OR SBND	SOUTHBOUND
STH	STATE TRUNK HIGHWAYS
STA	STATION
SS	STORM SEWER
SE	SUPER ELEVATION
SURF	SURFACE
T	TANGENT
TYP	TYPICAL
WB OR WBND	WESTBOUND

AB	ANCHOR BOLT
ABV	ABOVE
ADJ	ADJUST
AFF	ABOVE FINISHED FLOOR
AL	ALUMINUM
ALT	ALTERNATE WITH
ALT/	ALTERNATE
APPROX	APPROXIMATE
ASPH	ASPHALT
AUTO	AUTOMATIC
AVE	AVENUE
@	AT
BC	BACK OF CURB
BD	BOARD
BEL	BELOW
BETWN	BETWEEN
BF	BACK FACE
BFV	BUTTERFLY VALVE
BLD	BLIND
BLDG	BUILDING
BLKG	BLOCKING
BLVD	BOULEVARD
BM	BENCHMARK
BO	BREAKOFF
BRG	BEARING
BRK	BRICK
BS	BACK OF SIDEWALK
BTM	BOTTOM
BV	BALL VALVE
Ⓑ	BASELINE
B/	BOTTOM OF
CB	CATCH BASIN
CF	CUBIC FOOT
CHKD P	CHECKERED PLATE
CI	CAST IRON
CJ	CONTROL JOINT
CHL	CHLORINE
CLG	CEILING
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
CONN	CONNECTION
CONST	CONSTRUCTION
CONST JT	CONSTRUCTION JOINT
CONT	CONTINUOUS
CONTR	CONTRACTOR
CONTR JT	CONTRACTION JOINT
COR	CORNER
CP	CONTROL POINT
CPLG	COUPLING
CRS	COURSE
CTG	CASTING
CULV	CULVERT
CV	CHECK VALVE
CW	COLD WATER
CY	CUBIC YARD
DEFL	DEFLECTION
DEG / °	DEGREE
DF	DRINKING FOUNTAIN
DI	DUCTILE IRON
DIM	DIMENSION
DISCH	DISCHARGE
DN	DOWN
DP	DEPTH
DR	DOOR
DTL	DETAIL
DWG	DRAWING
EA	EACH
EF	EACH FACE
EFF	EFFLUENT
EJ	EXPANSION JOINT
ELB	ELBOW
ELEC	ELECTRICAL
EQ	EQUAL
EQUIP	EQUIPMENT
ER	END OF RADIUS
EST	ESTIMATE
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EXH	EXHAUST
EXP	EXPANSION
EXT	EXTERIOR
FD	FLOOR DRAIN
FDN	FOUNDATION
FERT	FERTILIZER
FGL	FIBERGLASS
FIN	FINISHED
FL	FLOWLINE
FLG	FLANGED
FLR	FLOOR
FM	FORCE MAIN
FN	FENCE
FT (')	FOOT
FTG	FOOTING
FUT	FUTURE

G	GAS
GA	GAGE
G OR GAR	GARAGE
GEN	GENERAL
GRD	GRADE, GROUND
GV	GATE VALVE
GRAV	GRAVEL
GW	GROUNDWATER
HB	HOSE BIB
HM	HOLLOW METAL
HORZ	HORIZONTAL
HSE	HOUSE
HT	HEIGHT
HW	HOT WATER
HWR	HOT WATER RETURN
HYD	HYDRANT
ID	INSIDE DIAMETER
IF	INSIDE FACE
IN (")	INCHES
INCL	INCLUDE
INF	INFLUENT
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
JT	JOINT
KGV	KNIFE GATE VALVE
LAB	LABORATORY
LAV	LAVATORY
LG OR L	LENGTH
LOC	LOCATION
LP	LIGHT POLE
LS	LUMP SUM
LT	LEFT
MAS	MASONRY
MAX	MAXIMUM
MECH	MECHANICAL
MFG	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MP	MID POINT
MTL	MATERIAL
NF	NEAR FACE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NPW	NON-POTABLE WATER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OE	OVERHEAD ELECTRIC
OF	OUTSIDE FACE
OH	OVERHEAD
OPG	OPENING
PE	PRIVATE ENTRANCE
PED	PEDESTAL
PERF	PERFORATE
PKG	PARKING
P	PLATE
PL	PLACE
PLP	PROPERTY LINE
PP	POWER POLE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PW	POTABLE WATER
%	PERCENT
QTY	QUANTITY
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RD	ROOF DRAIN
RDWY	ROADWAY
RED	REDUCER
REF OR Ⓡ	REFERENCE
REINF	REINFORCING
REM	REMOVE
REPL	REPLACE
REV	REVISED
RM	ROOM
RR	RAILROAD
RT	RIGHT

SAN	SANITARY
SAMH	SANITARY MANHOLE
SCH	SCHEDULE
SEC	SECTION
SF	SQUARE FOOT
SHT	SHEET
SIM	SIMILAR
SL	SLOPE
SPA	SPACE
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
SSMH	STORM SEWER MANHOLE
ST	STREET
STD	STANDARD
STL	STEEL
SURF	SURFACE
SW	SIDEWALK
SWR	SEWER
SY	SQUARE YARD
SYS	SYSTEM
T&B	TOP & BOTTOM
TC	TOP BACK OF CURB
T	TELEPHONE
THK	THICKNESS
THRU	THROUGH
TP	TELEPHONE POLE
TYP	TYPICAL
T/	TOP OF
UG	UNDERGROUND GAS
UE	UNDERGROUND ELECTRICAL
UNEXC	UNEXCAVATED
UNO	UNLESS NOTED OTHERWISE
USH	UNITED STATES HIGHWAY
T	UNDERGROUND TELEPHONE
TV	UNDERGROUND VIDEO
V	VALVE
V&B	VALVE & BOX
VAR	VARIABLE
VER	VERTICAL
VC	VERTICAL CURVE
W	WEST
W/	WITH
W/O	WITHOUT
WD	WIDTH
WM	WATER MAIN
WS	WATER SURFACE
WTP	WATER TREATMENT PLANT
WTR	WATER
WWF	WELDED WIRE FABRIC
WWM	WOVEN WIRE MESH

PROJECT AND UTILITY CONTACTS

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION HEADQUARTERS
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NORTHEAST REGION - PRIMARY CONTACT
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AT&T WISCONSIN-COMMUNICATION LINE
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APPLETON, WI 54911-4742
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RANDY JUNK
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MANITOWOC, WI 54220-4543
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MANITOWOC, WI 54221-1090
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MANITOWOC PUBLIC UTILITIES - COMMUNICATIONS LINE/ELECTRICITY
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PO BOX 1090
MANITOWOC, WI 54221-1090
PHONE: 920-683-4310
CELL: 920-374-1059
EMAIL: sbacalzo@mpu.org

MANITOWOC COUNTY AIRPORT-AIRPORT FACILITY
3500 STATE HWY 310
MANITOWOC, WI 54220
PHONE: 920-683-4366

McLEOD USA TELECOMMUNICATION SERVICES, INC.-
COMMUNICATION LINE
NATHAN BECKER
13935 BISHOPS DRIVE
BROOKFIELD, WI 53005
PHONE: 262-792-7938
EMAIL: Nathan.becker@windstream.com

NET LEC LLC-COMMUNICATION LINE
DENNIS LAFAVE
1700 INDUSTRIAL DRIVE
GREEN BAY, WI 54302
PHONE: 920-619-9774
EMAIL: dlafave@mi-tech.us

WISCONSIN PUBLIC SERVICE CORPORATION - GAS/PETROLEUM
LORI BUTRY
700 N. ADAMS STREET
PO BOX 19001
GREEN BAY, WI 54307-9001
PHONE: 920-433-1360
EMAIL: LAButry@integrysgroup.com

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

2

2

N

BEGIN PROJECT 1500-37-74/75
STA. 131+75
Y = 306811.919
X = 231679.310

END PROJECT 1500-37-74/75
STA. 152+25.00

BEGIN PROJECT 4570-12-71/72
STA. 152+25.00
Y = 306786.930
X = 233729.157

END PROJECT 4570-12-71/72
STA. 194+90.00EB
Y = 307065.948
X = 237860.063

MENASHA AVE

N. 8TH ST. (CTH B)

N. 5TH ST.

STH 42

STH 42 (MEMORIAL DR.)

115 120 125 130 135 140 145 150 155 160 165 170 175 180 185 190 195 199

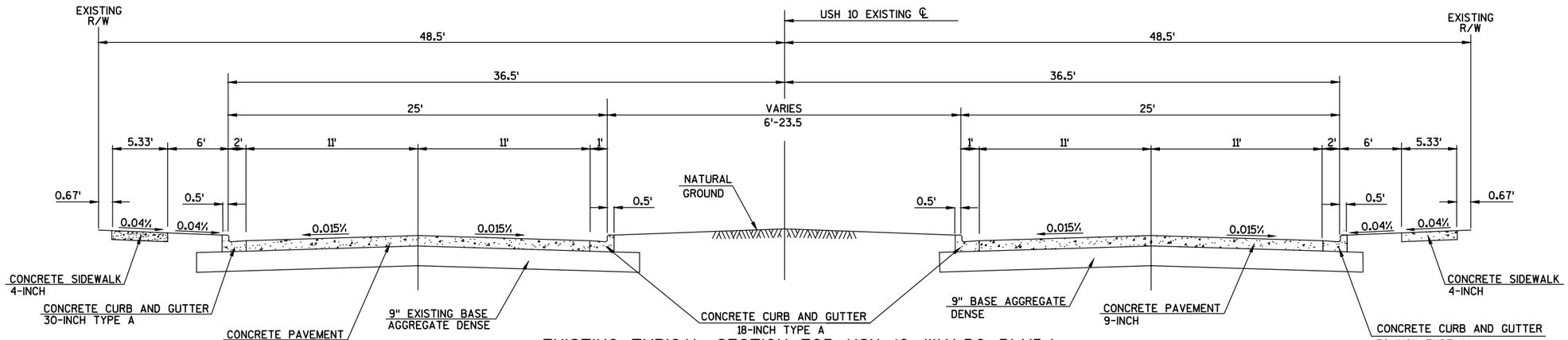
USH 10/STH 42

STRUCTURE B-36-0900

MARITIME DR.

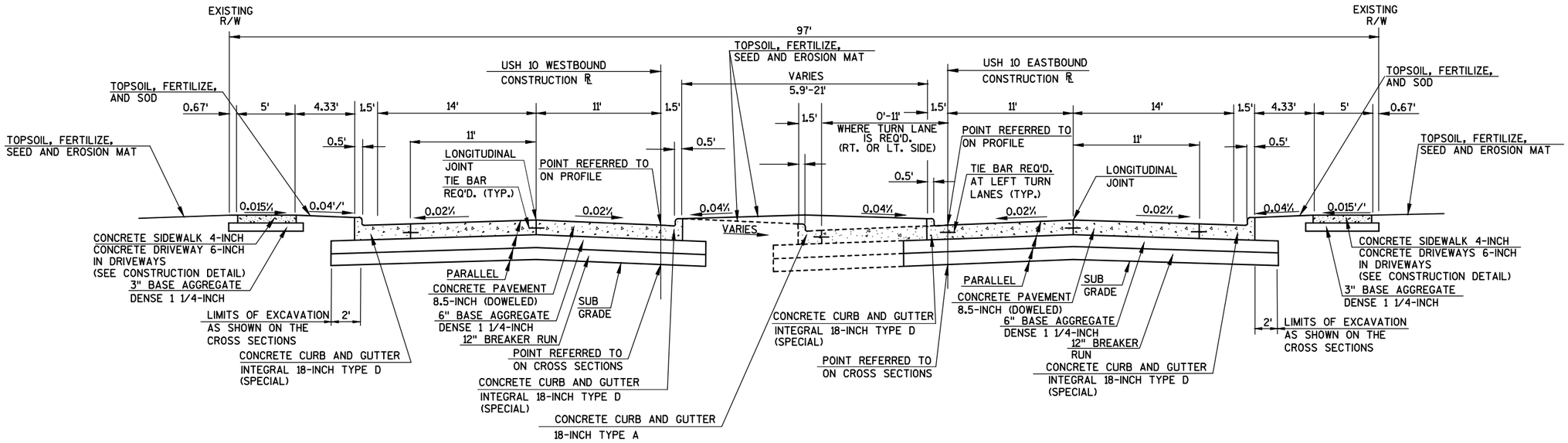
N. 18TH ST.
N. 17TH ST.
N. 16TH ST.
N. 15TH ST.
N. 14TH ST.
N. 13TH ST.
N. 12TH ST.
N. 11TH ST.
N. 10TH ST.
N. 9TH ST.
N. 8TH ST. (USH 10)
LINCOLN BLVD.
N. 6TH ST.

PROJECT NO: 1500-37-74/75, 4570-12-71/72	HWY: USH 10/STH 42	COUNTY: MANITOWOC	PROJECT OVERVIEW	SHEET 4	E



EXISTING TYPICAL SECTION FOR USH 10 (WALDO BLVD.)

STA. 131+75.00-STA. 152+25.00

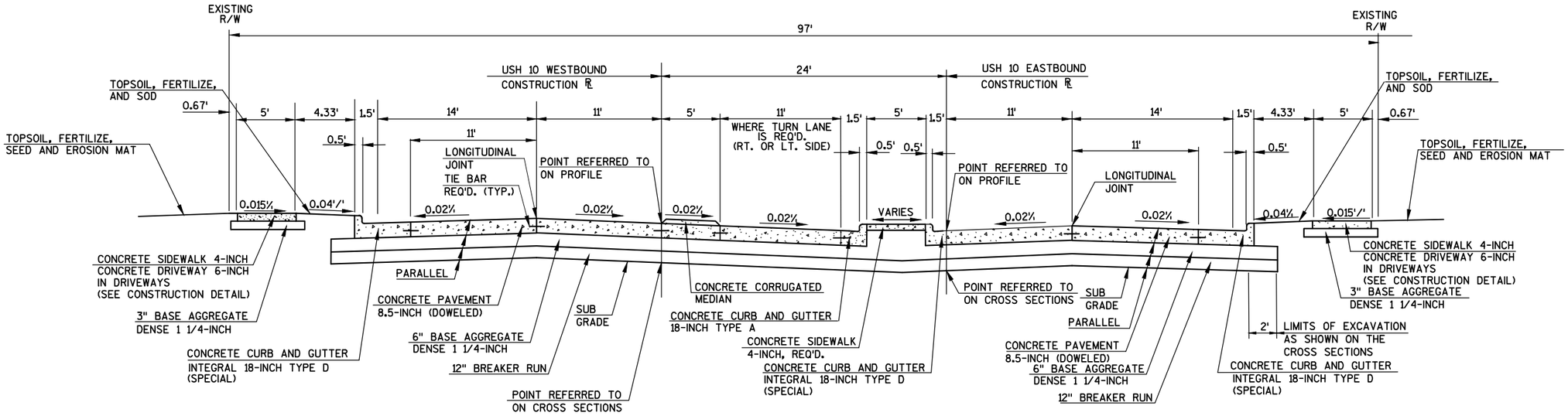


TYPICAL FINISHED CROSS SECTION FOR USH 10 (WALDO BOULEVARD)

STA. 131+75.00 - STA. 152+25.00

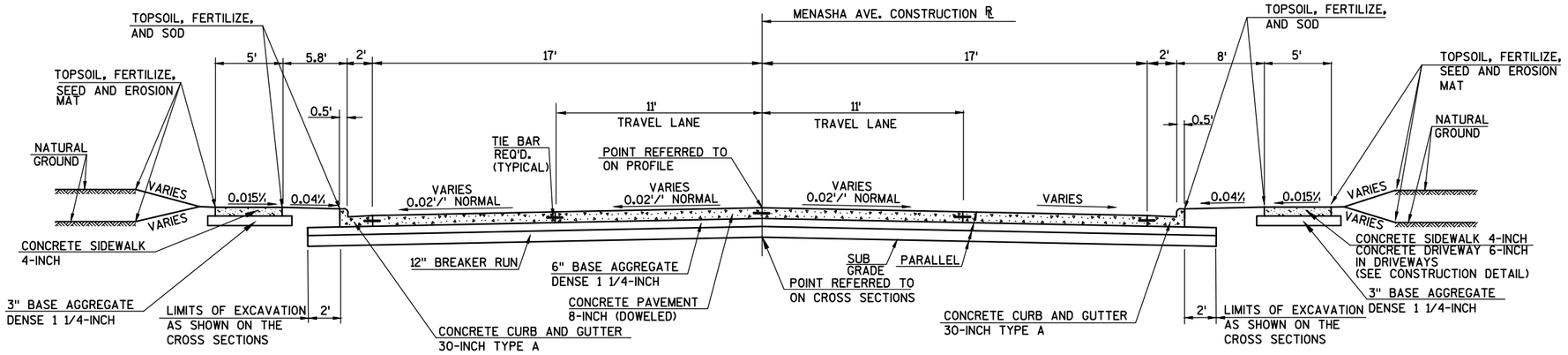
PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 5	E

2



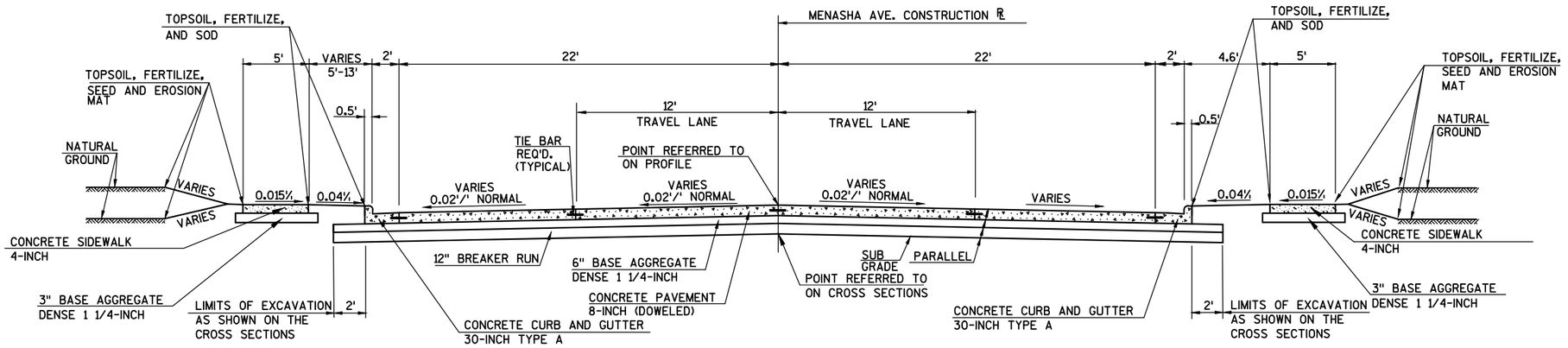
TYPICAL FINISHED CROSS SECTION FOR USH 10 (WALDO BOULEVARD) AT SLOTTED LEFT TURN LANES

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 6	E



TYPICAL FINISHED CROSS SECTION FOR MENASHA AVE. (SMN)

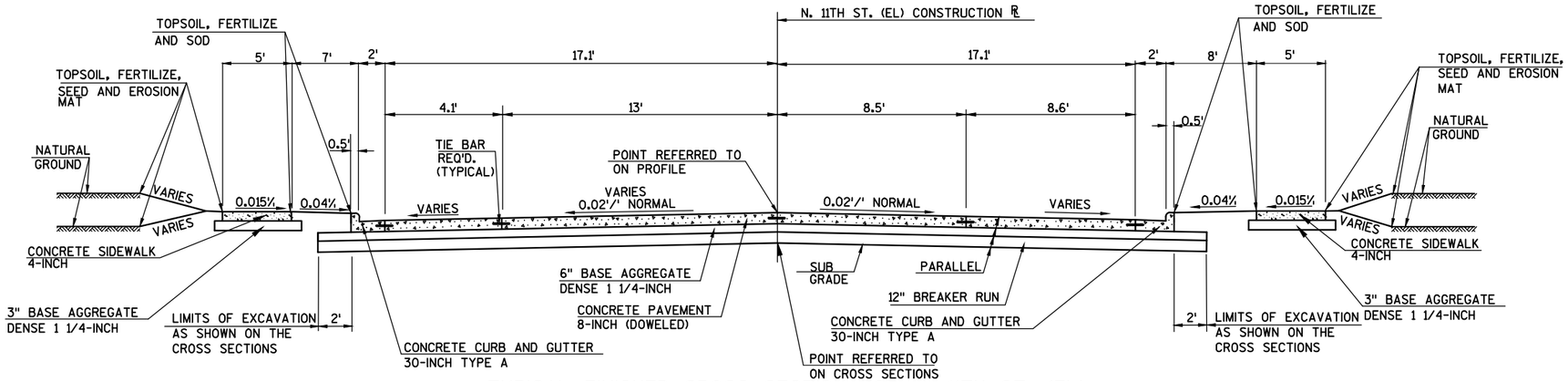
STA. 8+90-STA. 9+86



TYPICAL FINISHED CROSS SECTION FOR MENASHA AVE. (NMN)

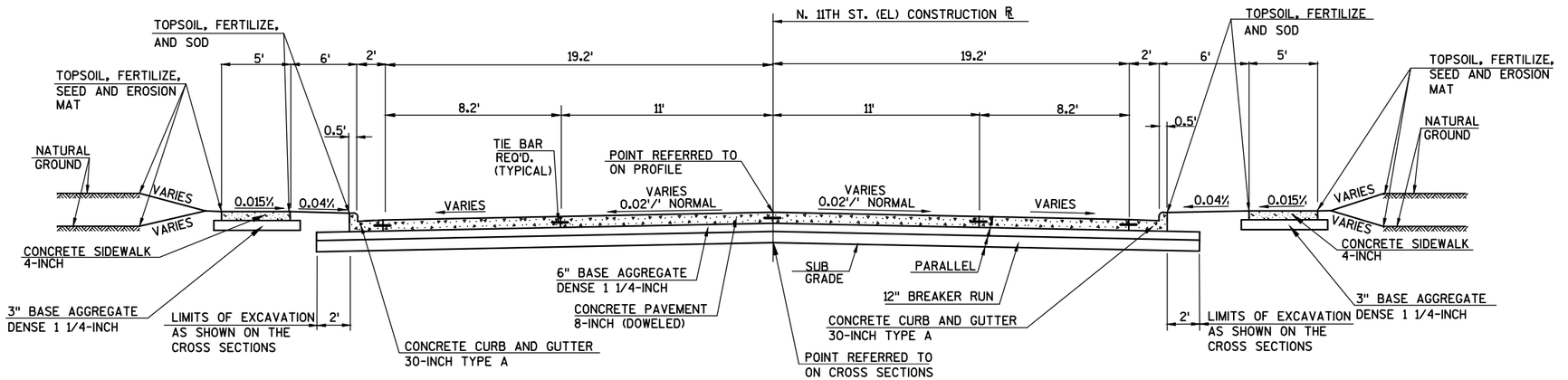
STA. 10+25-STA. 12+10.55

PROJECT NO:1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 7	E



TYPICAL FINISHED CROSS SECTION FOR N. 11TH ST. (EL)

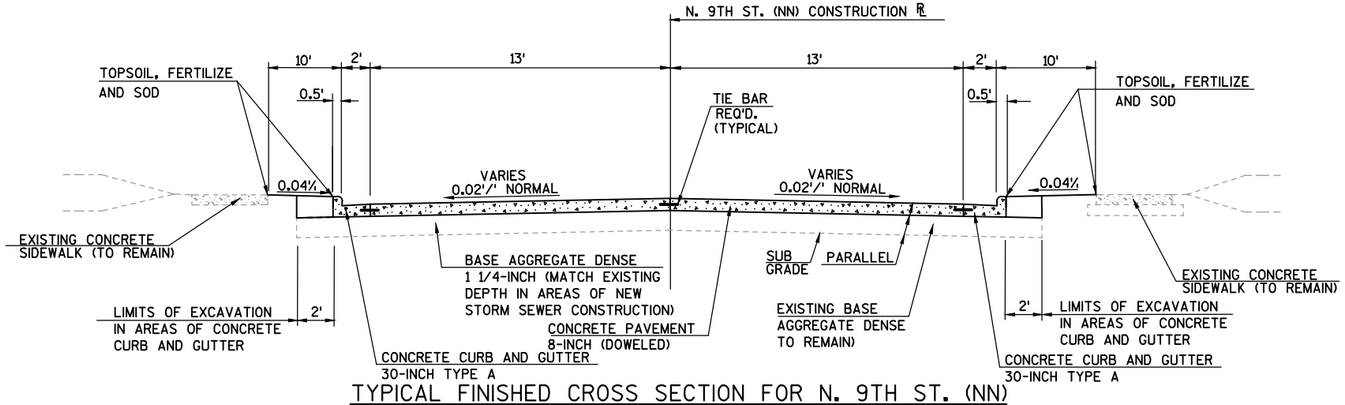
STA. 9+35-STA. 9+75



TYPICAL FINISHED CROSS SECTION FOR N. 11TH ST. (EL)

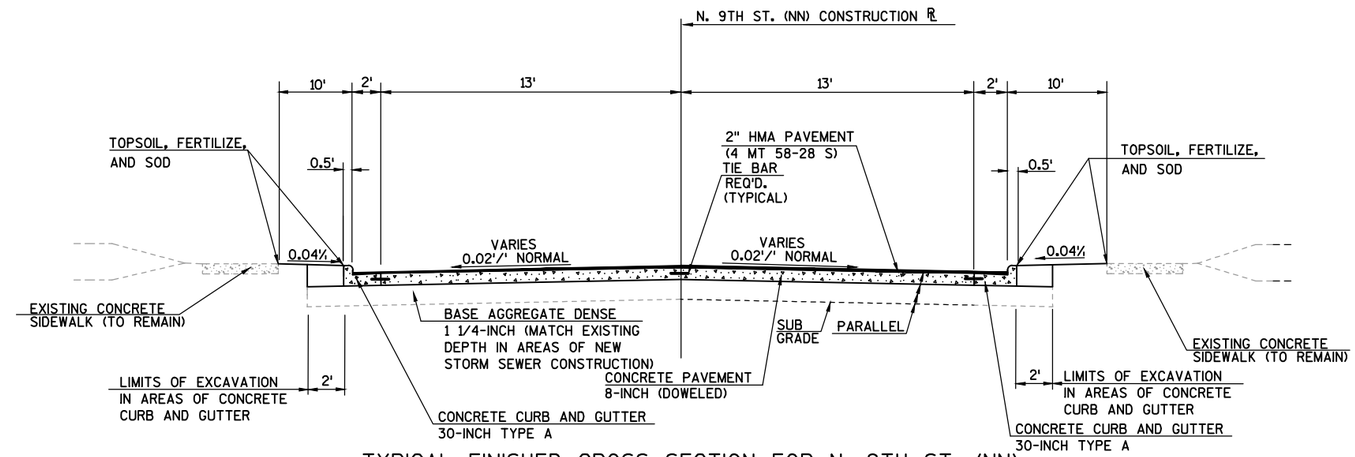
STA. 10+49-STA. 11+00

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 8	E



TYPICAL FINISHED CROSS SECTION FOR N. 9TH ST. (NN)

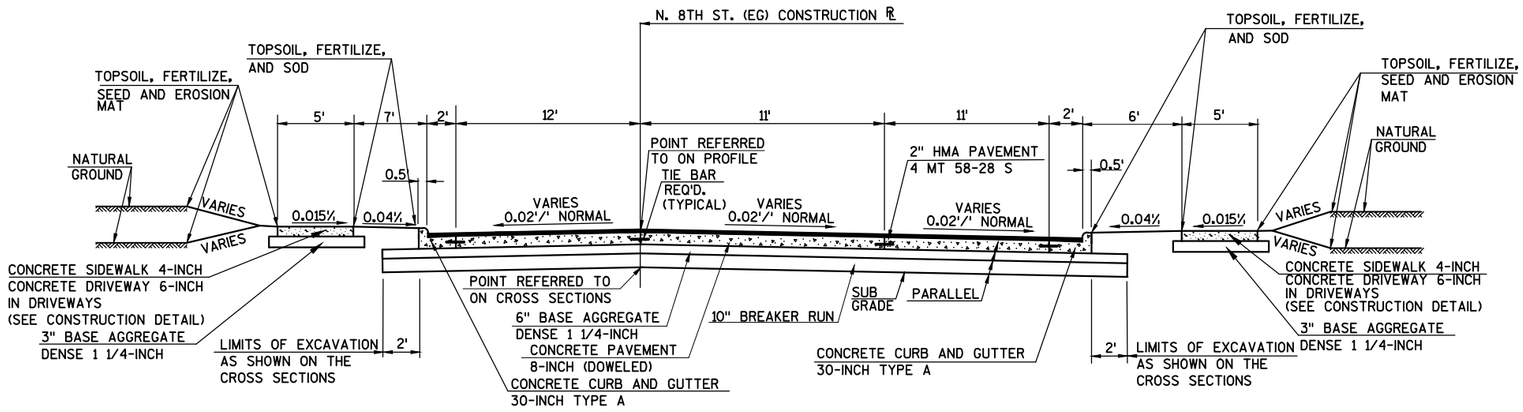
STA. 11+25 - STA. 12+65 N. 9TH ST. (NN)



TYPICAL FINISHED CROSS SECTION FOR N. 9TH ST. (NN)

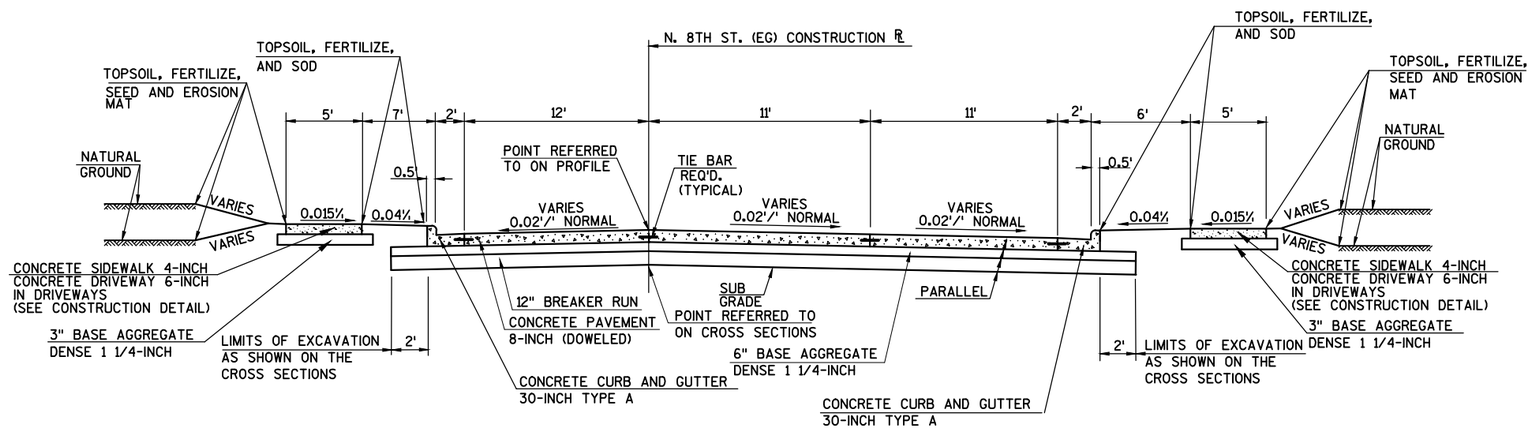
STA. 12+65 - STA. 12+70 N. 9TH ST. (NN)

PROJECT NO:1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 9	E



TYPICAL FINISHED CROSS SECTION FOR N. 8TH ST. (EG)

STA. 8+50-STA. 8+55

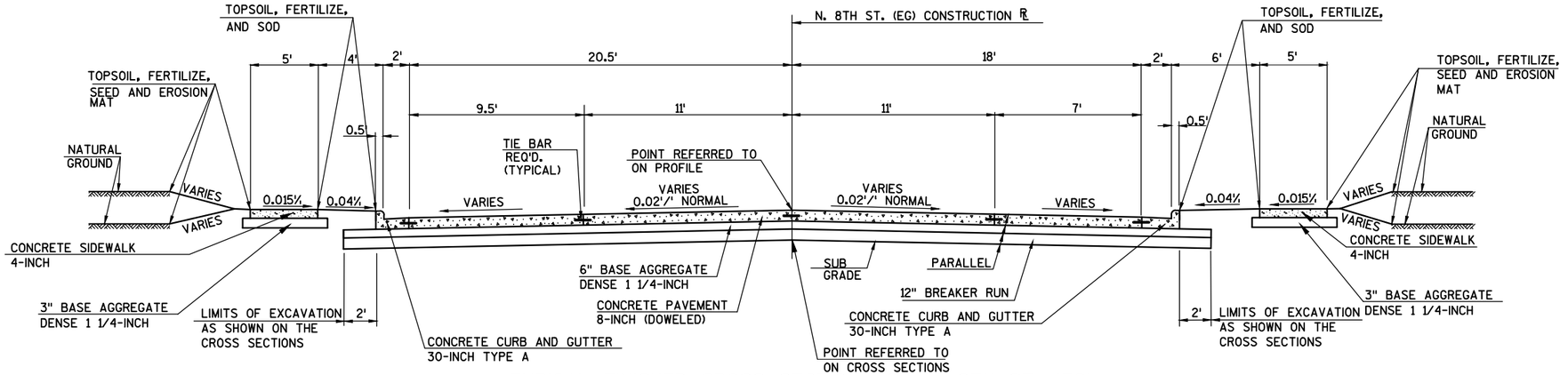


TYPICAL FINISHED CROSS SECTION FOR N. 8TH ST. (EG)

STA. 8+55-STA. 9+75

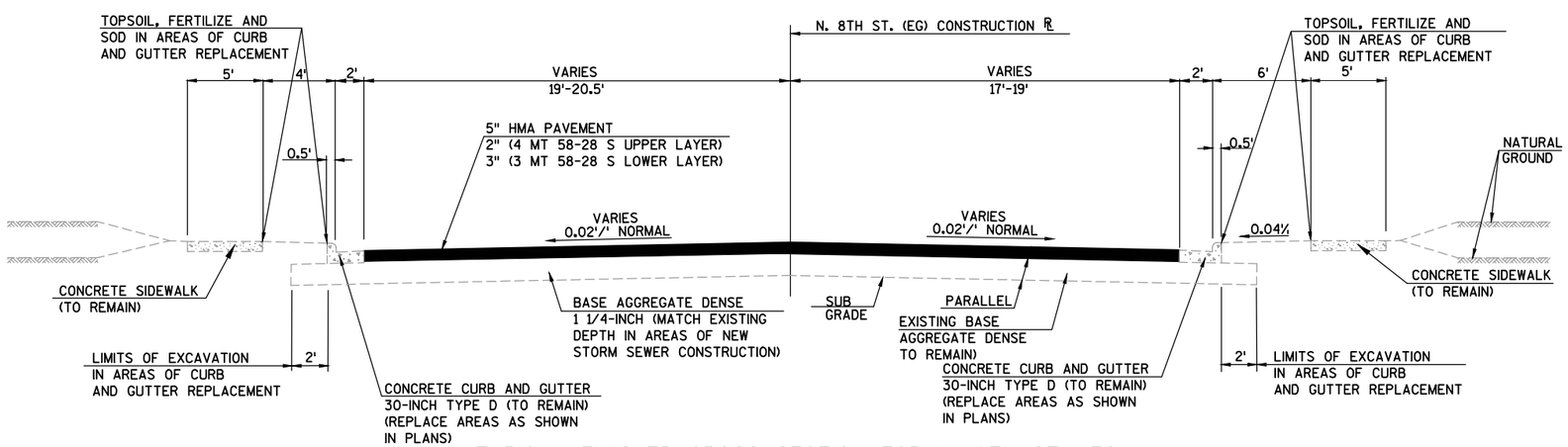
PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 10	E

2



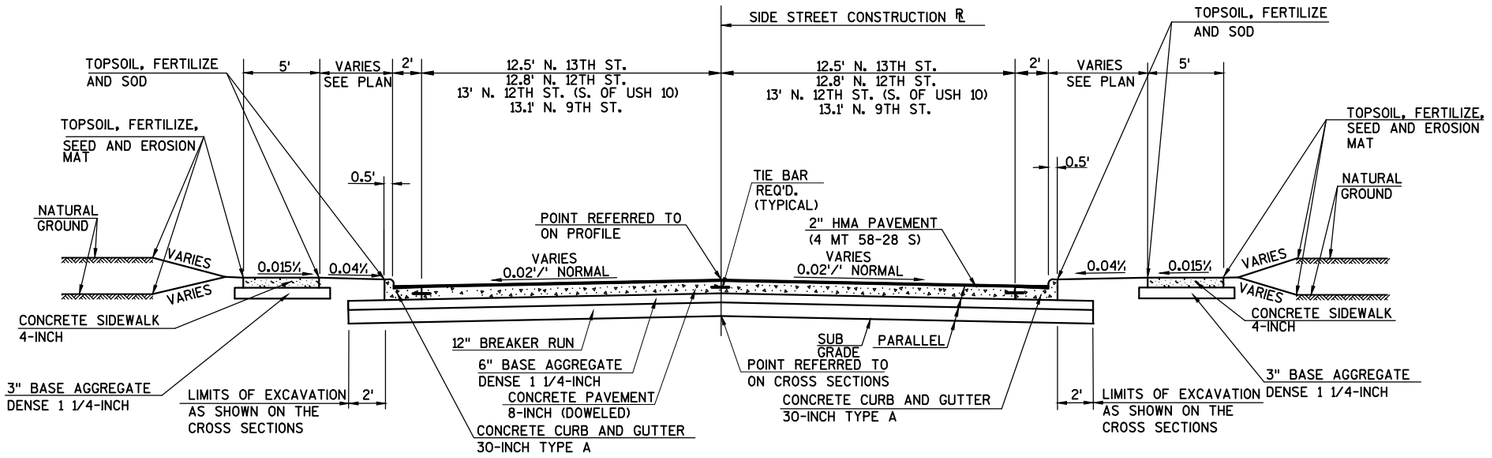
TYPICAL FINISHED CROSS SECTION FOR N. 8TH ST. (EG)

STA. 10+49.22-STA. 11+50



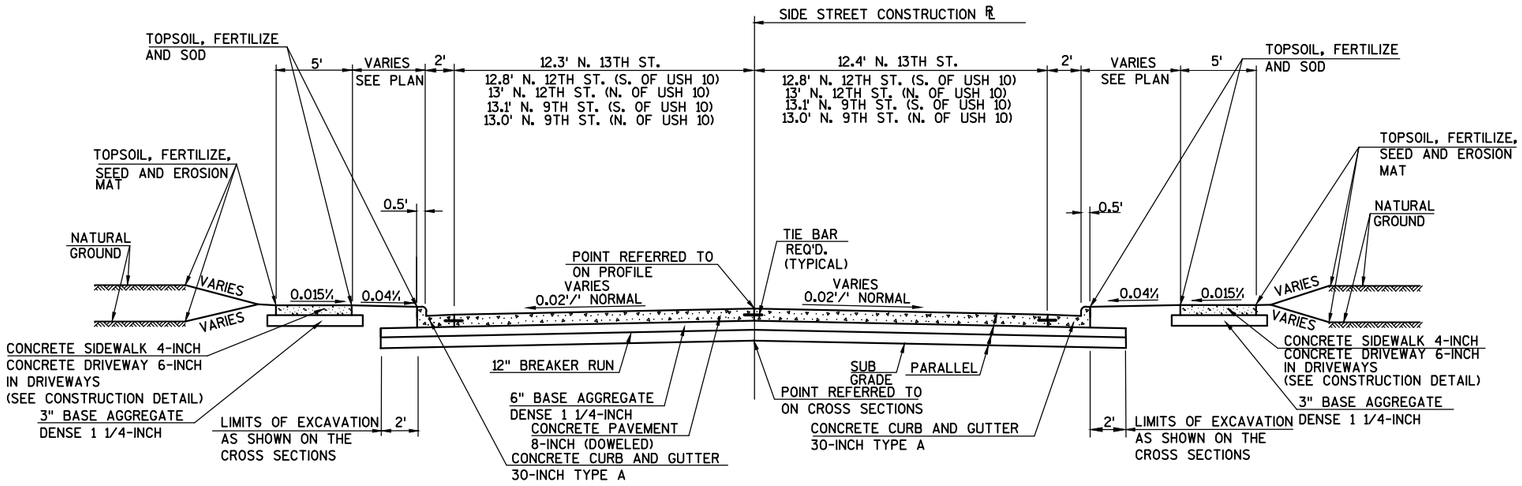
TYPICAL FINISHED CROSS SECTION FOR N. 8TH ST. (EG)

STA. 11+50-STA. 12+90



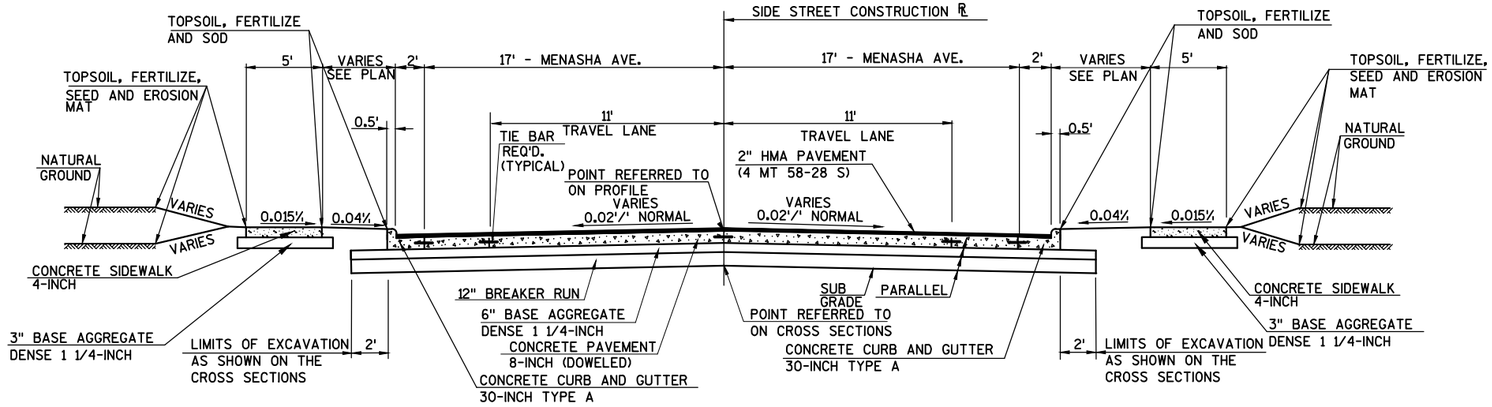
TYPICAL FINISHED CROSS SECTION FOR ASPHALT OVERLAYED SIDE STREETS

STA. 9+35-STA. 9+40 N. 13TH ST. (TH)
STA. 8+15-STA. 8+20 N. 12TH ST. (TW)
STA. 10+80-STA. 10+85 N. 12TH ST. (TW)
STA. 9+00-STA. 9+05 N. 9TH ST. (NN)



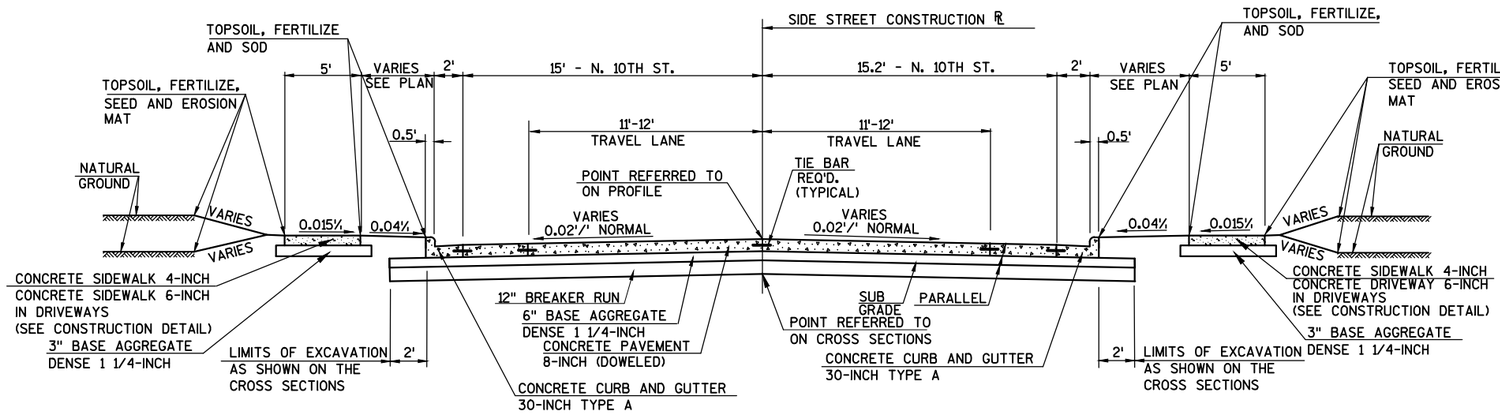
TYPICAL FINISHED CROSS SECTION FOR CONCRETE SURFACED SIDE STREETS

STA. 9+40 - STA. 9+75 N. 13TH ST. (TH)
STA. 8+20 - STA. 9+75 N. 12TH ST. (TW)
STA. 10+49 - STA. 10+80 N. 12TH ST. (TW)
STA. 9+05 - STA. 9+75 N. 9TH ST. (NN)
STA. 10+49 - STA. 11+25 N. 9TH ST. (NN)



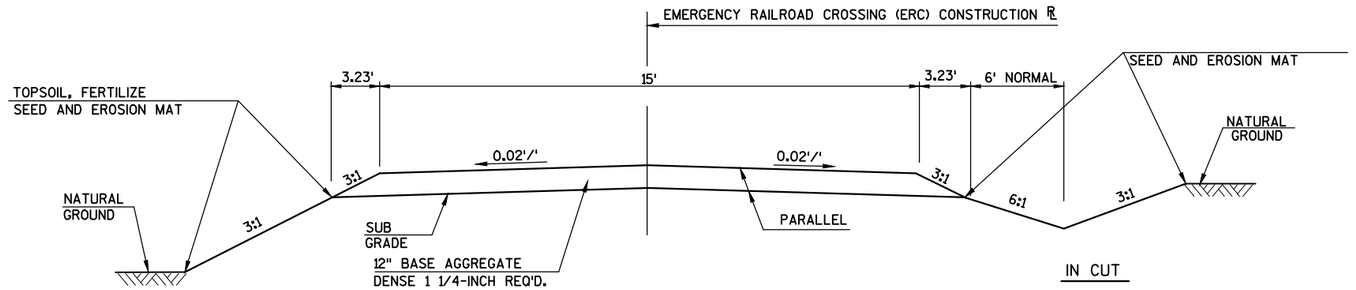
TYPICAL FINISHED CROSS SECTION FOR ASPHALT OVERLAYED SIDE STREETS

STA. 8+85-STA. 8+90 S. MENASHA AVE. (SMN)



TYPICAL FINISHED CROSS SECTION FOR CONCRETE SURFACED SIDE STREETS

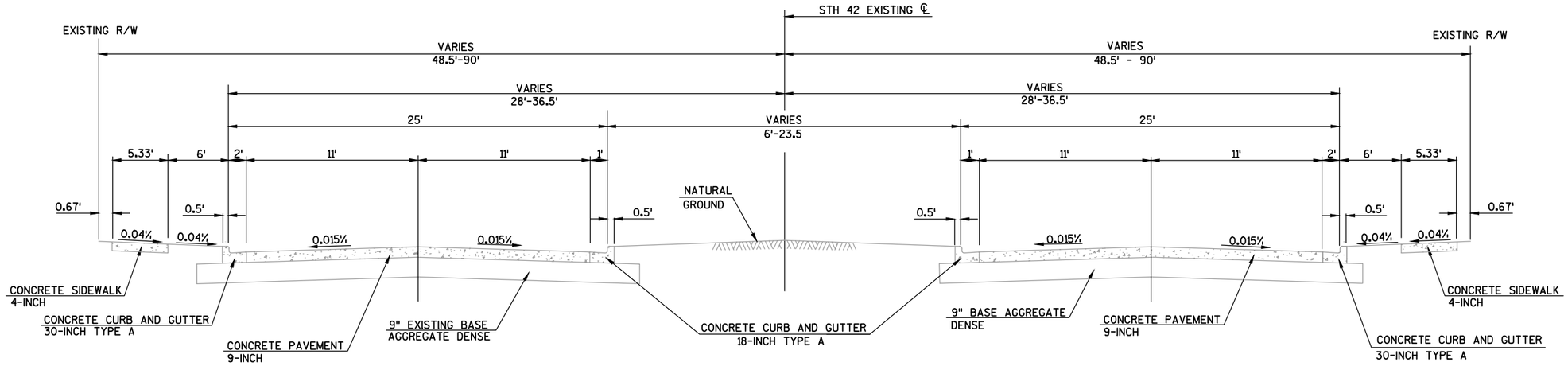
STA. 9+35 - STA. 9+75 N. 10TH ST. (TN)



TYPICAL CROSS SECTION FOR EMERGENCY RAILROAD CROSSING

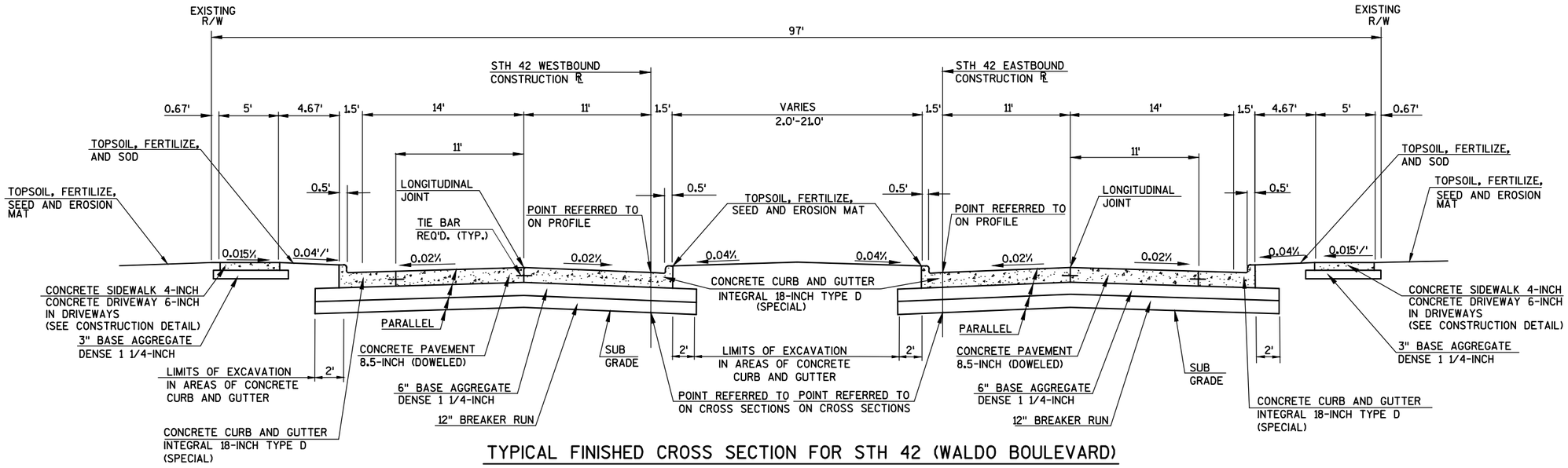
STA. 10+37 - STA. 11+45

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 13	E



EXISTING TYPICAL SECTION FOR STH 42 (WALDO BLVD.)

STA. 152+25-STA. 196+50

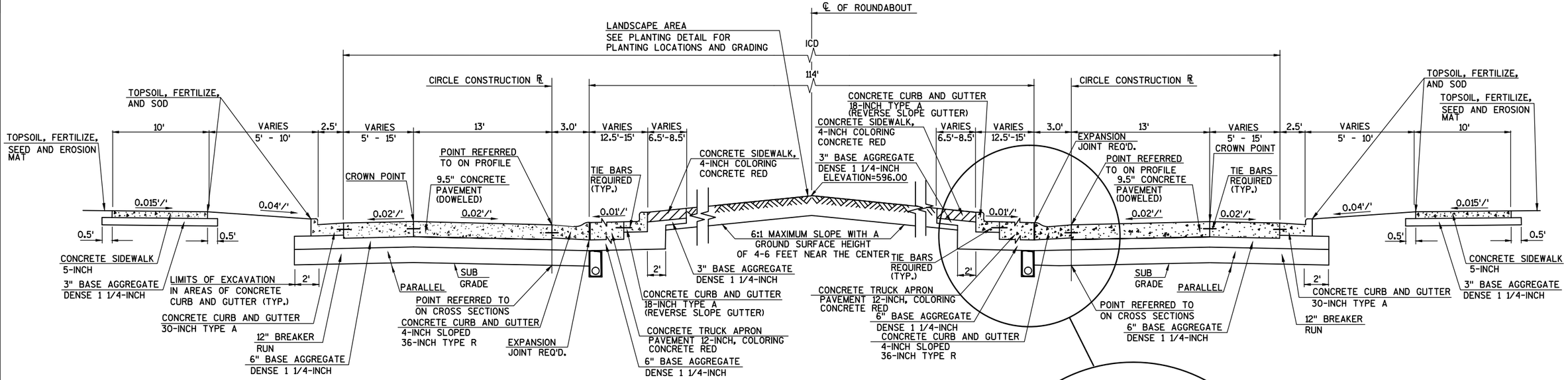


TYPICAL FINISHED CROSS SECTION FOR STH 42 (WALDO BOULEVARD)

STA. 152+25.00 - STA. 185+87.41

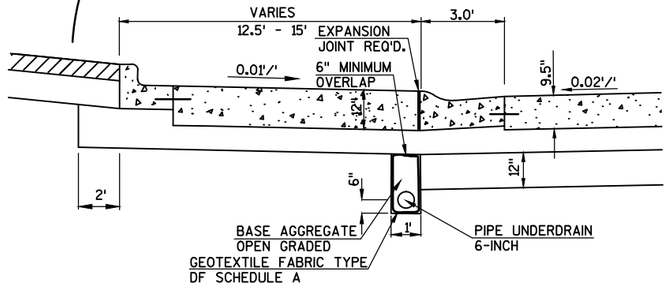
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 14	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_020301_TS.DWG PLOT DATE : 4/11/2018 2:20 PM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:200 FT



TYPICAL FINISHED SECTION FOR STH 42/MARITIME DR.

ROUNDABOUT DETAIL

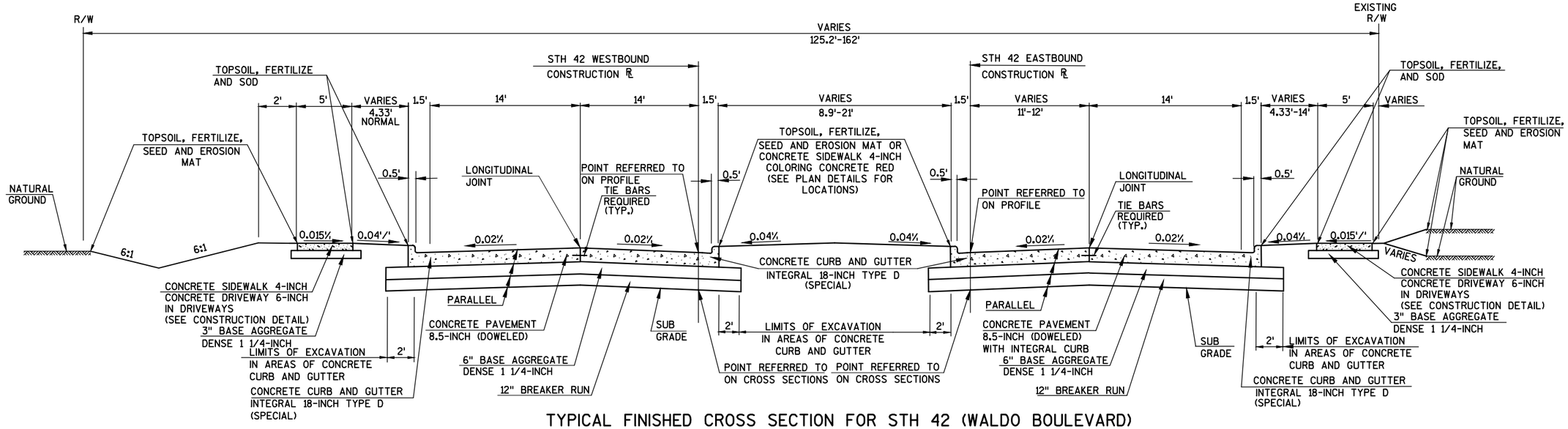


TRUCK APRON (TYPICAL)

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_020302_TS.DWG PLOT DATE : 4/11/2018 2:20 PM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:200 FT

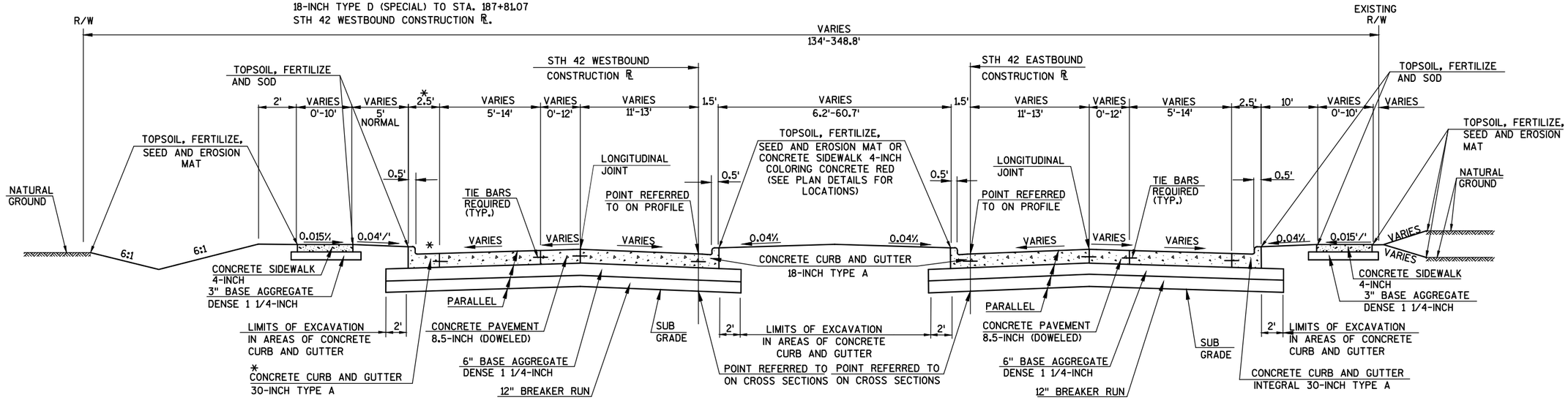
WISDOT/CADDS SHEET 42



TYPICAL FINISHED CROSS SECTION FOR STH 42 (WALDO BOULEVARD)

STA. 185+87.41-STA. 187+82.19 STH 42 EBND.

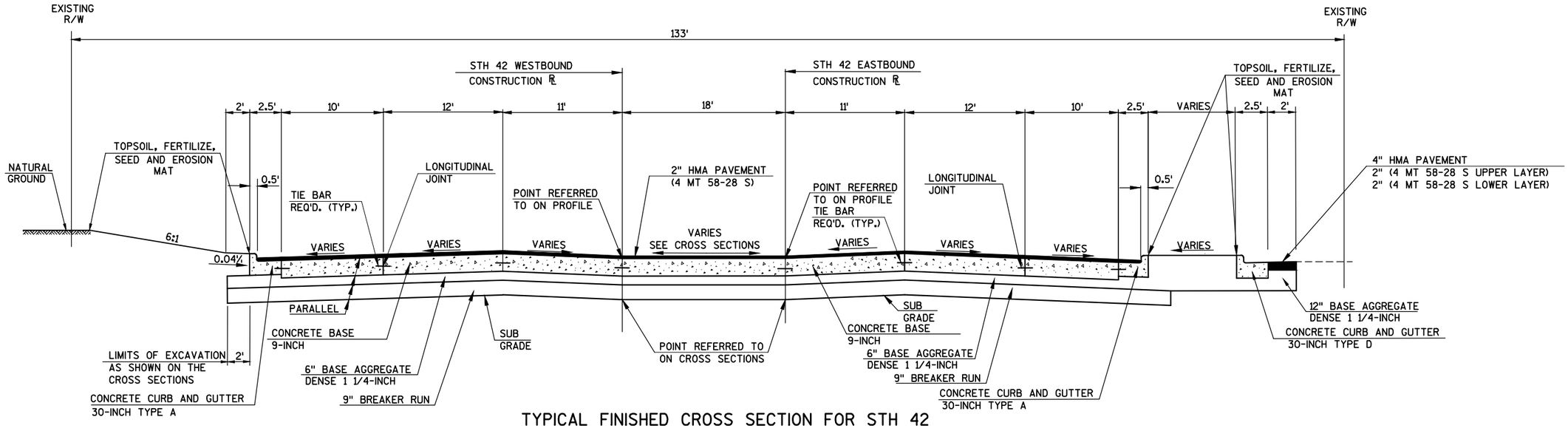
*-CONCRETE CURB AND GUTTER INTEGRAL
18-INCH TYPE D (SPECIAL) TO STA. 187+81.07
STH 42 WESTBOUND CONSTRUCTION ℄.



TYPICAL FINISHED CROSS SECTION FOR STH 42 (WALDO BOULEVARD)

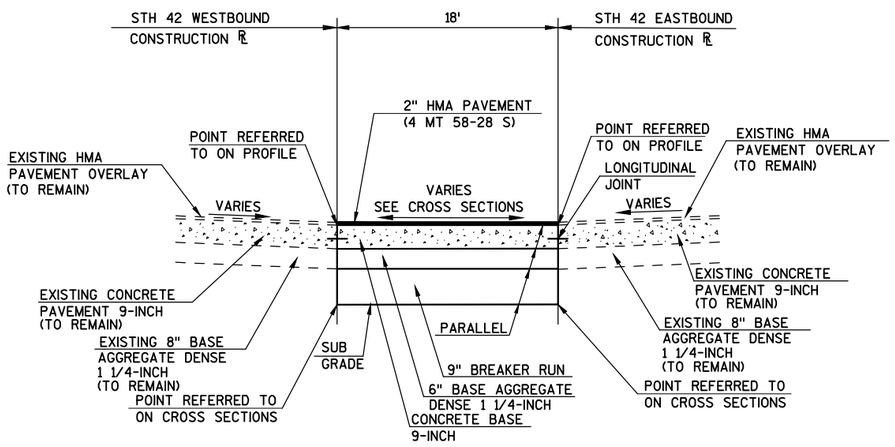
STA. 187+82.19-STA. 188+96.86 STH 42 EBND.
STA. 190+44.26-STA. 194+82.83 STH 42 EBND.

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 16	E



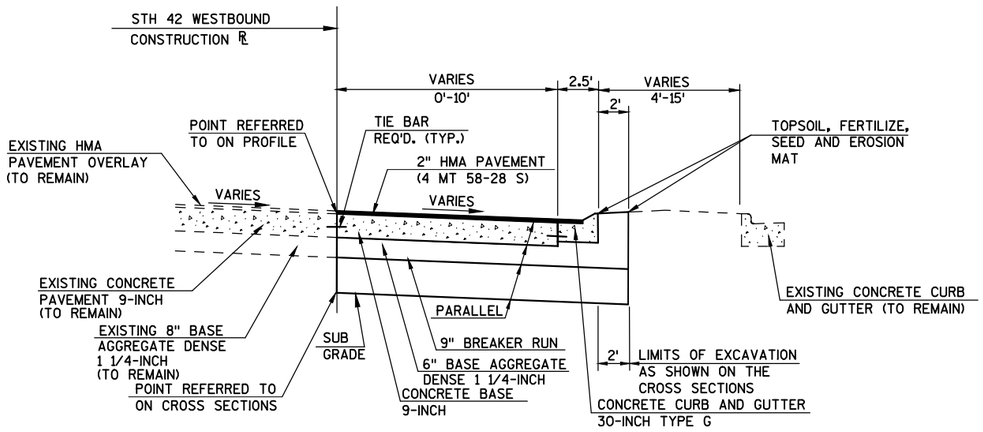
TYPICAL FINISHED CROSS SECTION FOR STH 42

STA. 194+82.83-STA. 194+90.24 STH 42 EBND.



TYPICAL FINISHED CROSS SECTION FOR STH 42

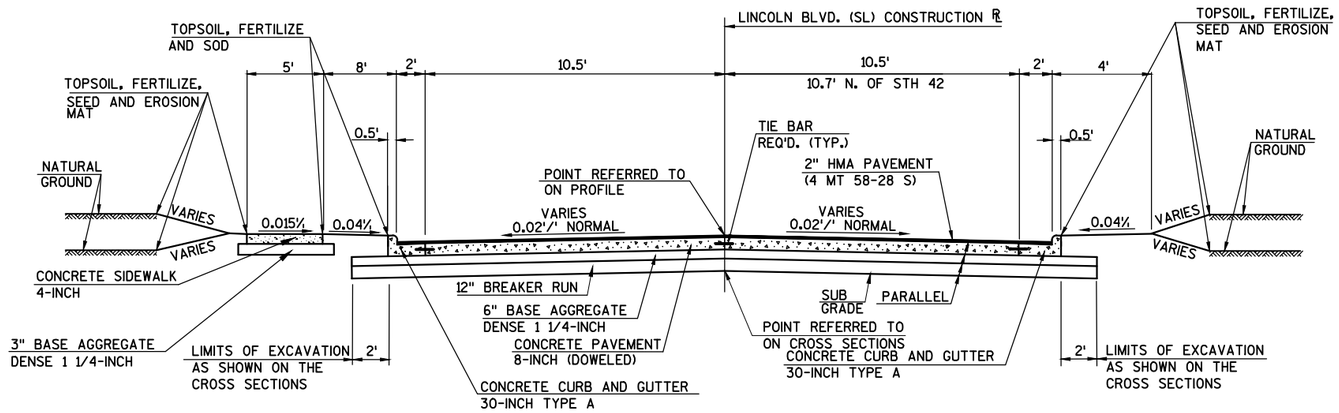
STA. 194+90-STA. 195+53 STH 42 EBND.



TYPICAL FINISHED CROSS SECTION FOR STH 42

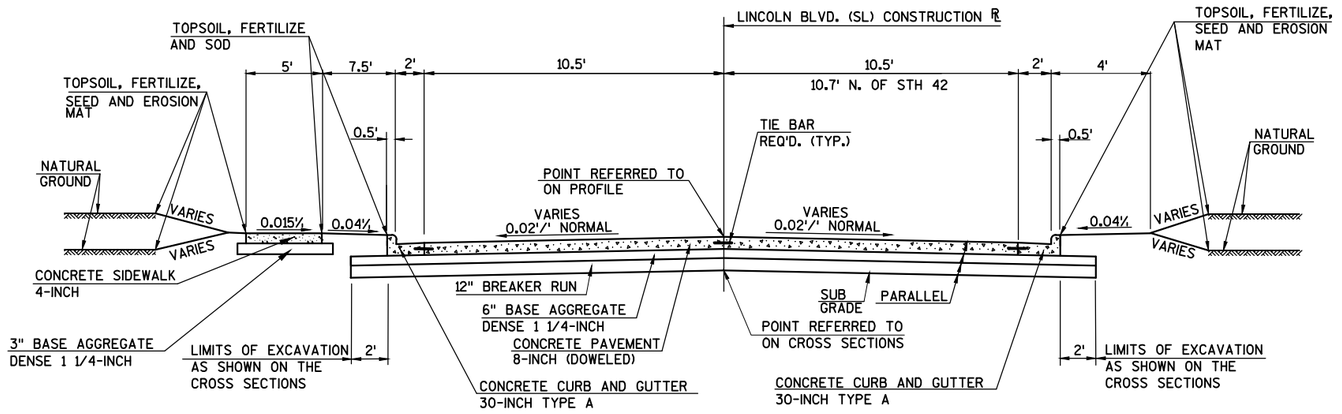
STA. 195+53-STA. 196+94.7 STH 42 EBND.

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 17	E



TYPICAL FINISHED CROSS SECTION FOR LINCOLN BLVD. (SL)

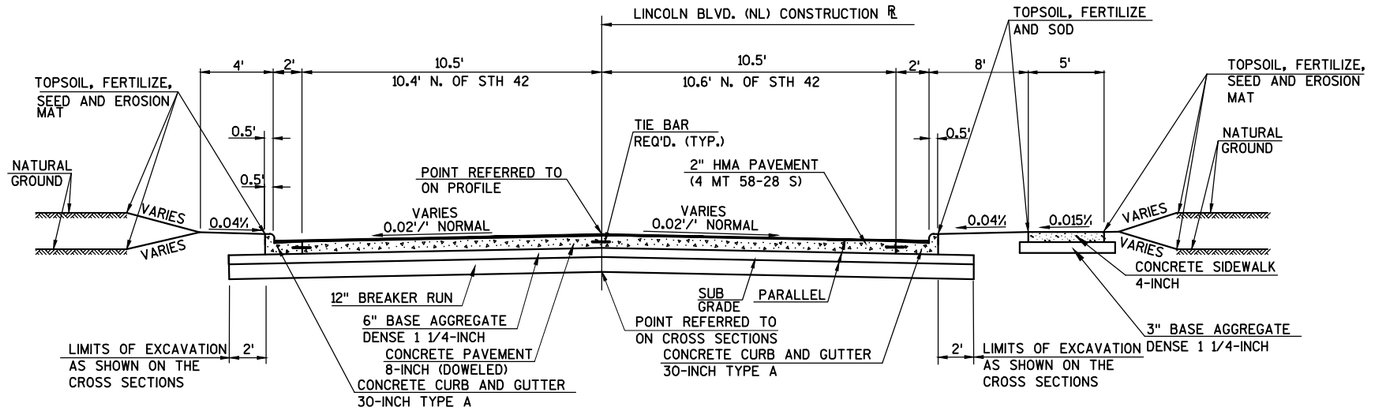
STA. 9+10 - STA. 9+15 LINCOLN BLVD. (SL)
STA. 10+80 - STA. 10+85 LINCOLN BLVD. (SL)



TYPICAL FINISHED CROSS SECTION FOR LINCOLN BLVD. (SL)

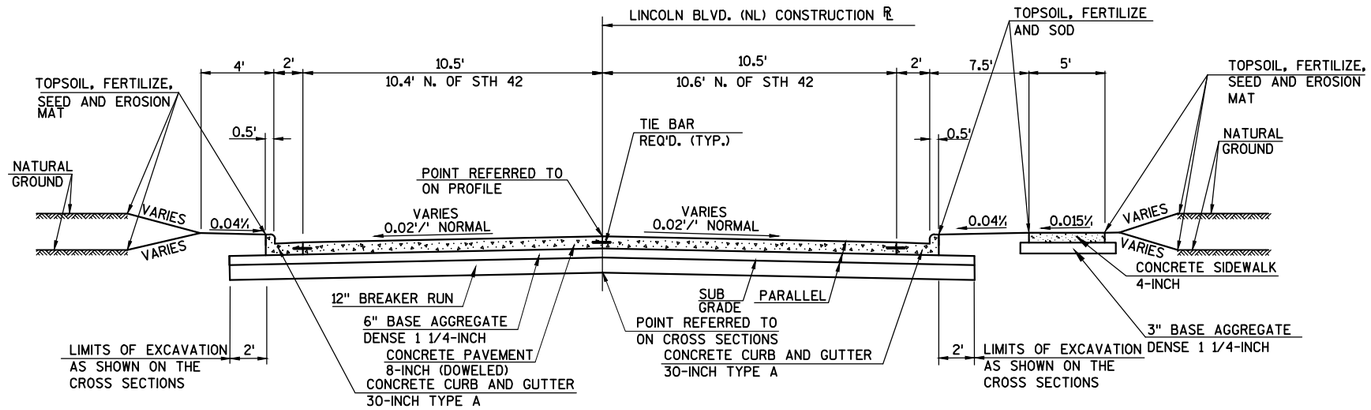
STA. 9+15 - STA. 9+75 LINCOLN BLVD. (SL)
STA. 10+49 - STA. 10+80 LINCOLN BLVD. (SL)

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 18	E



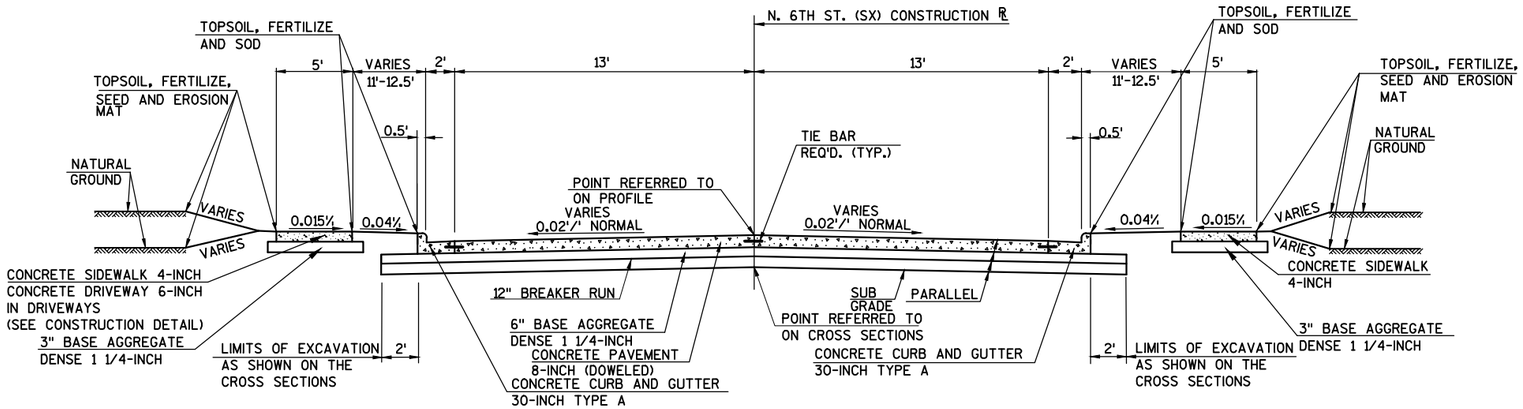
TYPICAL FINISHED CROSS SECTION FOR LINCOLN BLVD. (NL)

STA. 9+10 - STA. 9+15 LINCOLN BLVD. (NL)
STA. 10+80 - STA. 10+85 LINCOLN BLVD. (NL)



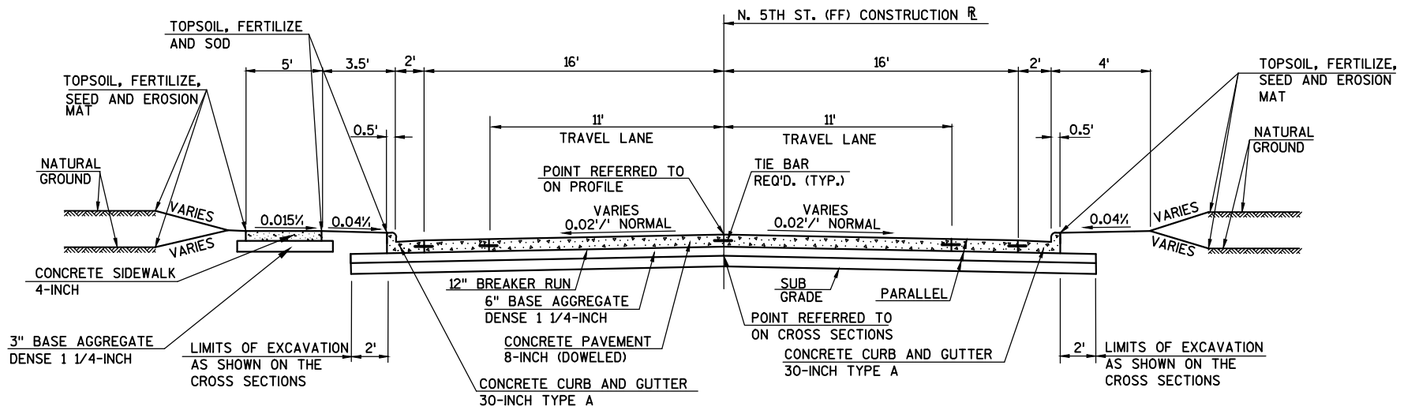
TYPICAL FINISHED CROSS SECTION FOR LINCOLN BLVD. (NL)

STA. 9+15 - STA. 9+75 LINCOLN BLVD. (NL)
STA. 10+49 - STA. 10+80 LINCOLN BLVD. (NL)



TYPICAL FINISHED CROSS SECTION FOR N. 6TH ST. (SX)

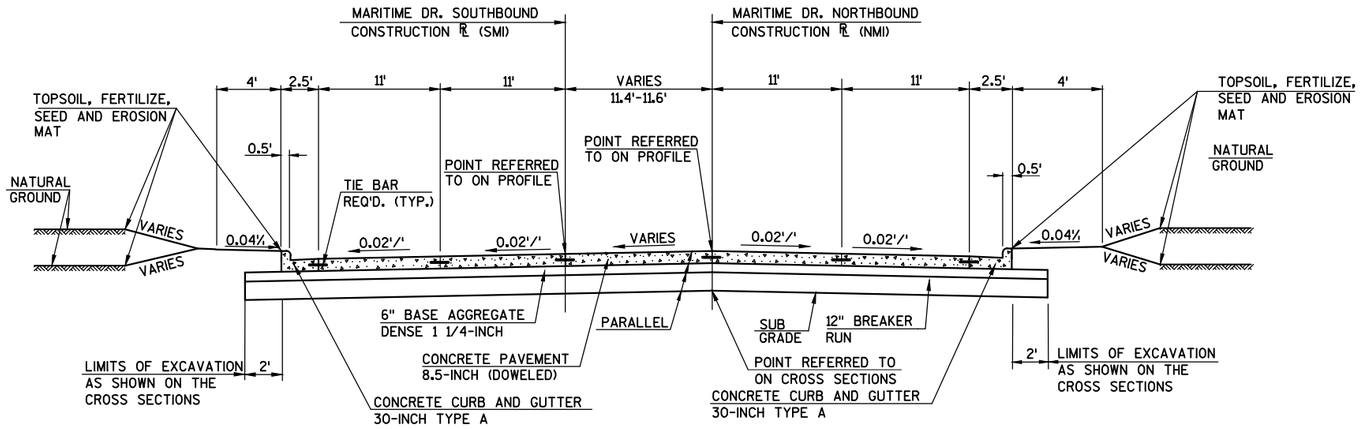
STA. 9+35 - STA. 9+75 (SX)
STA. 10+49 - STA. 11+00 (SX)



TYPICAL FINISHED CROSS SECTION FOR N. 5TH ST. (FF)

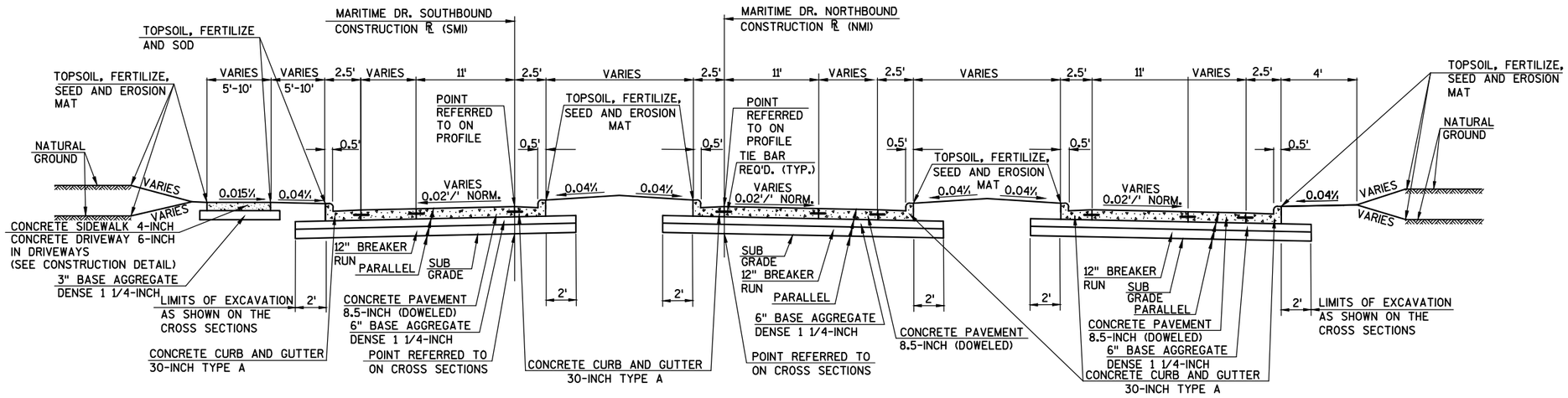
STA. 10+25 - STA. 10+60 (FF)

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 20	E



TYPICAL FINISHED CROSS SECTION FOR MARITIME DR.

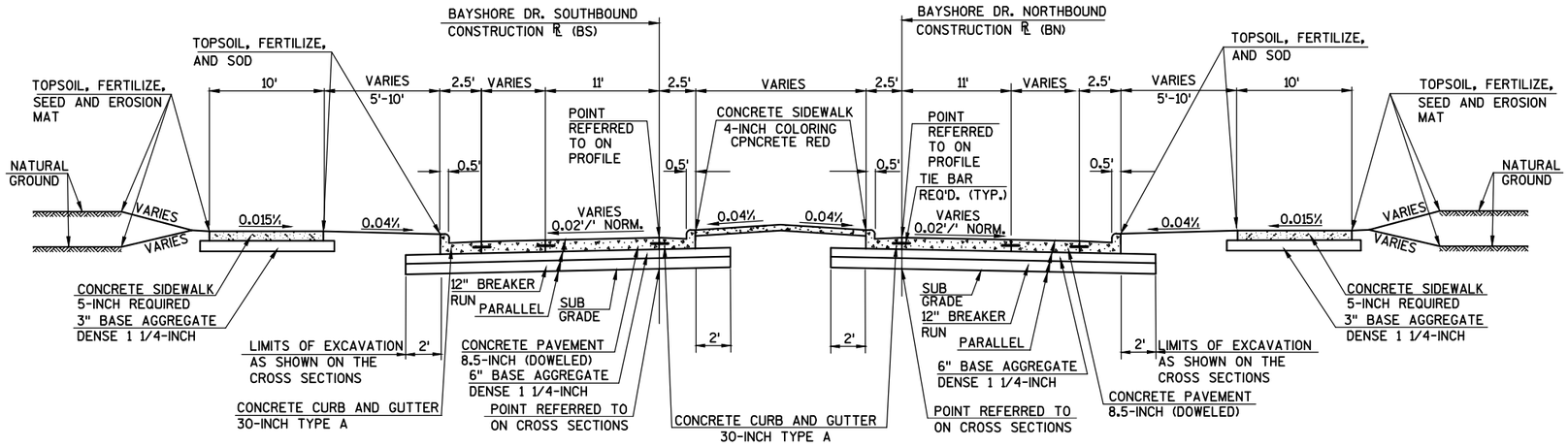
STA. 10+75 - STA. 11+00



TYPICAL FINISHED CROSS SECTION FOR MARITIME DR.

STA. 11+00 - STA. 13+59.21 (NMI)

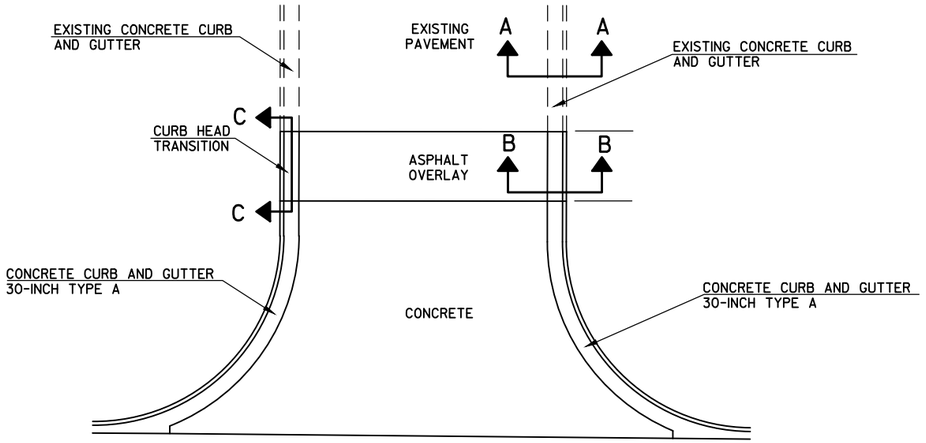
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 21	E



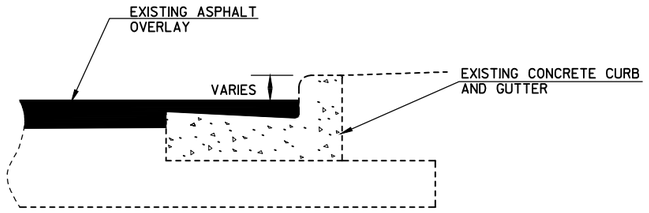
TYPICAL FINISHED SECTION FOR BAYSHORE DR.

STA. 20+00 - STA. 20+69.69(BN)

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 22	E

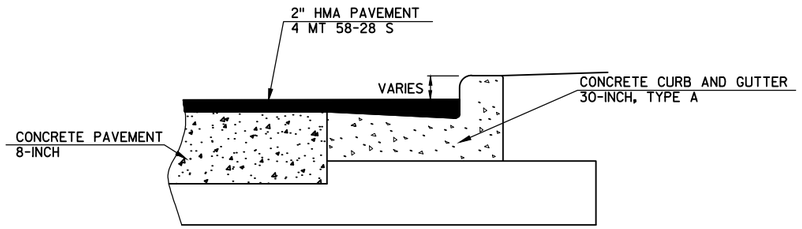


PLAN VIEW

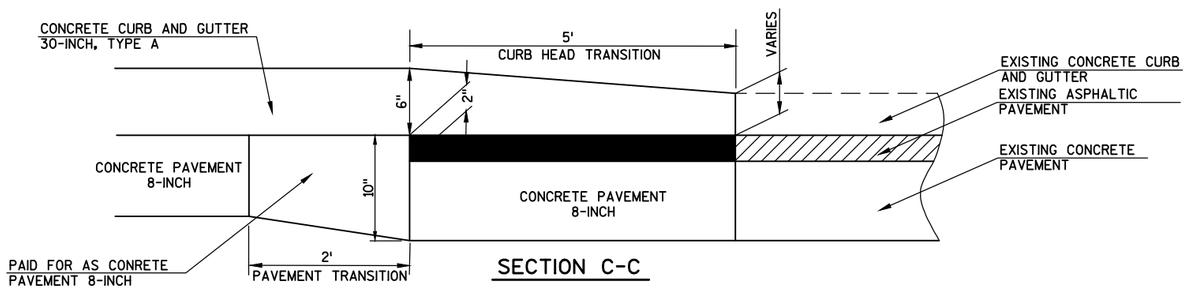


SECTION A-A

EXISTING SIDE STREET SECTION

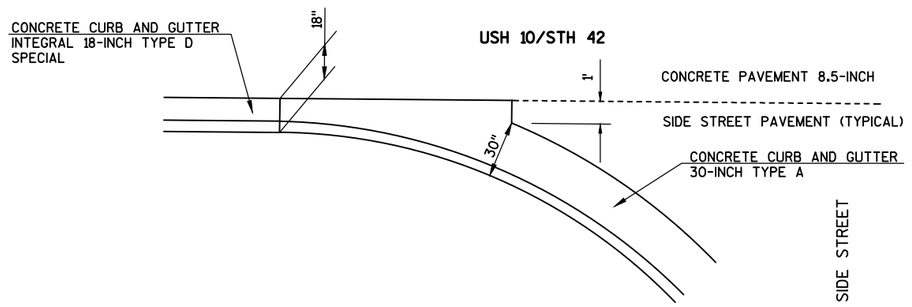


SECTION B-B



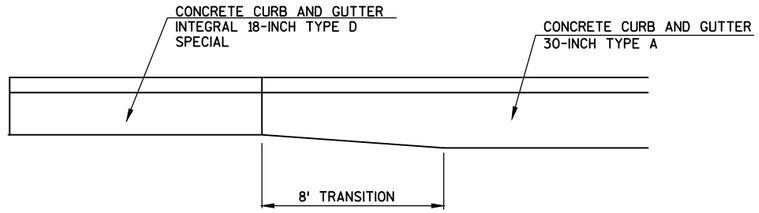
SECTION C-C

CURB HEAD TRANSITION FOR ASPHALT OVERLAID SIDE STREETS



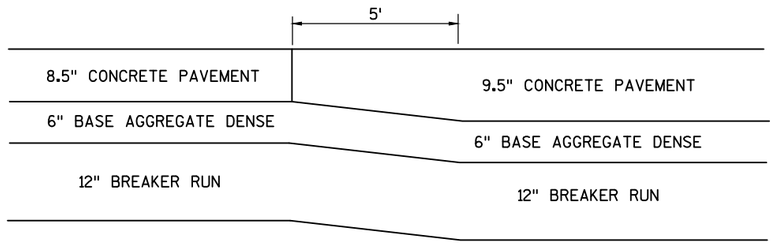
CONCRETE CURB AND GUTTER TRANSITION DETAIL

SEE PLAN DETAIL SHEETS FOR LOCATIONS

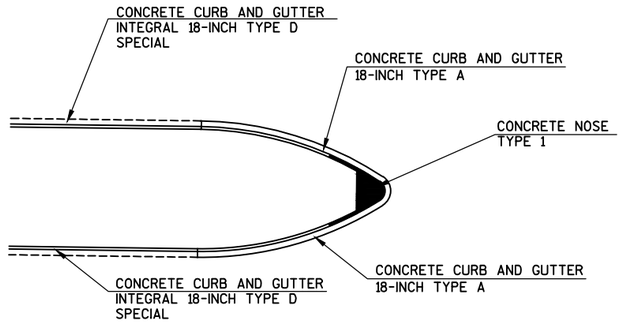


CONCRETE CURB AND GUTTER TRANSITION DETAIL

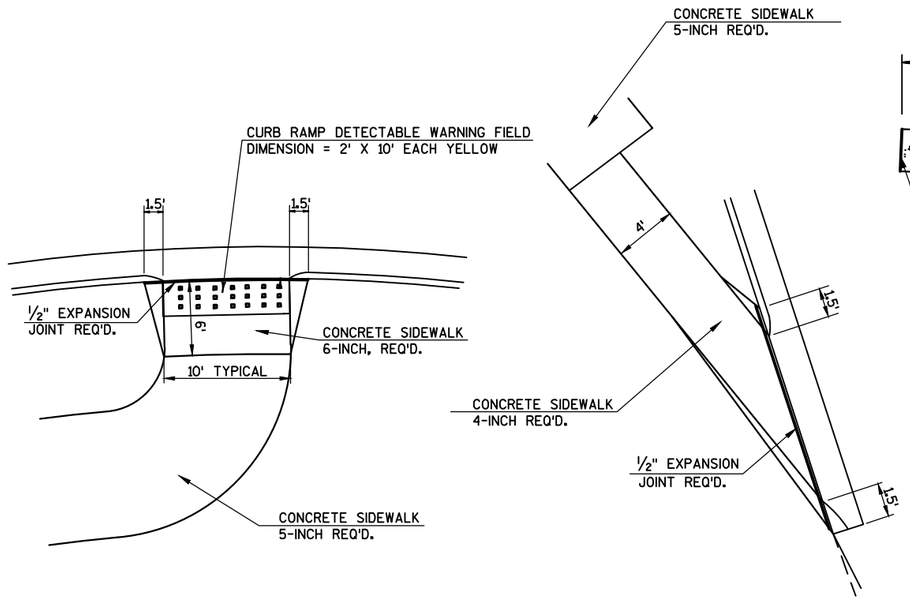
STA. 187+81.01 STH 42 WESTBOUND CONSTRUCTION ℞
STA. 187+82.19 STH 42 EASTBOUND CONSTRUCTION ℄



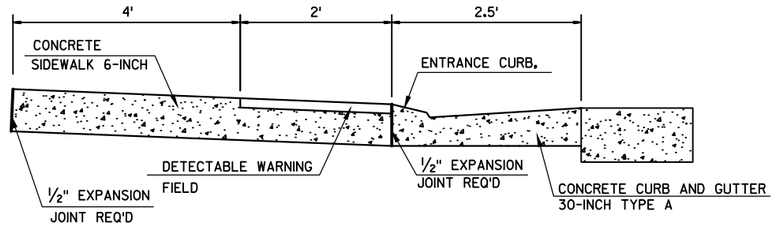
CONCRETE PAVEMENT TRANSITION AT ROUNDABOUT APPROACHES



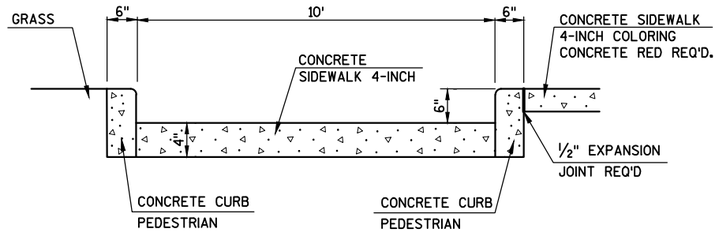
ISLAND NOSE DETAIL



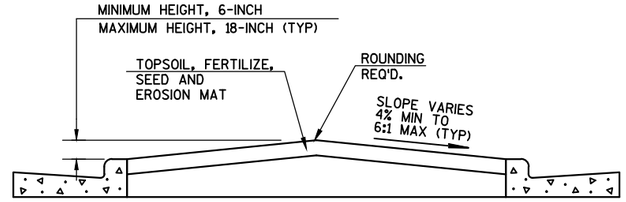
CURB RAMP DETAIL FOR STH 42/MARITIME DR./MEMORIAL DR.



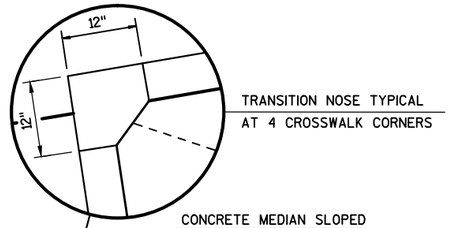
SECTION A-A

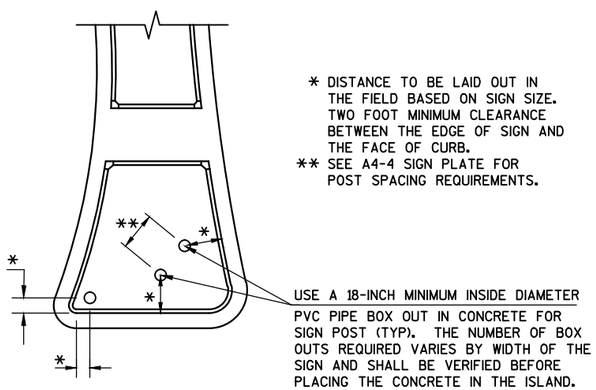


SECTION B-B



SECTION C-C



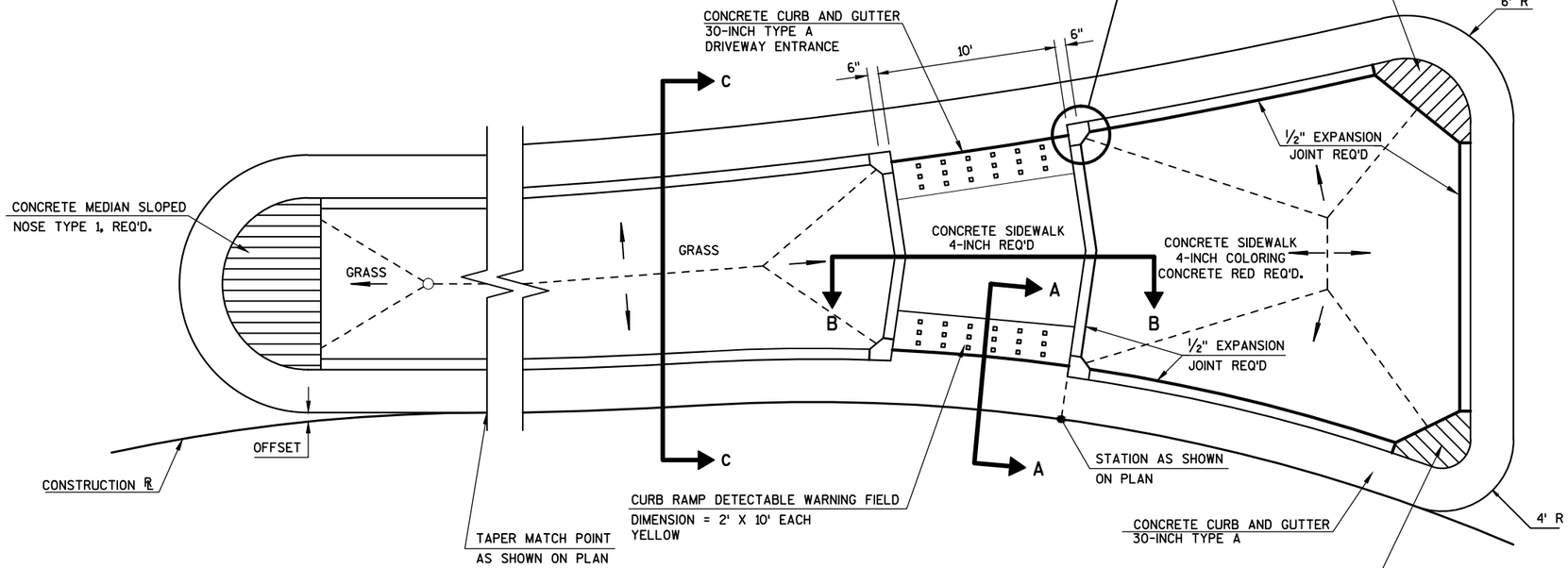


* DISTANCE TO BE LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.
** SEE A4-4 SIGN PLATE FOR POST SPACING REQUIREMENTS.

USE A 18-INCH MINIMUM INSIDE DIAMETER PVC PIPE BOX OUT IN CONCRETE FOR SIGN POST (TYP). THE NUMBER OF BOX OUTS REQUIRED VARIES BY WIDTH OF THE SIGN AND SHALL BE VERIFIED BEFORE PLACING THE CONCRETE IN THE ISLAND.

ISLAND SIGN LOCATION DETAIL (TYP)

NOTIFY THE REGIONAL TRAFFIC UNIT AT 920-492-5653 A MINIMUM OF TWO WEEKS PRIOR TO THE NEED FOR SIGN PLACEMENT TO ALLOW FOR STAKING OF ANY PERMANENT SIGNING REQUIRED ON THE PROJECT.

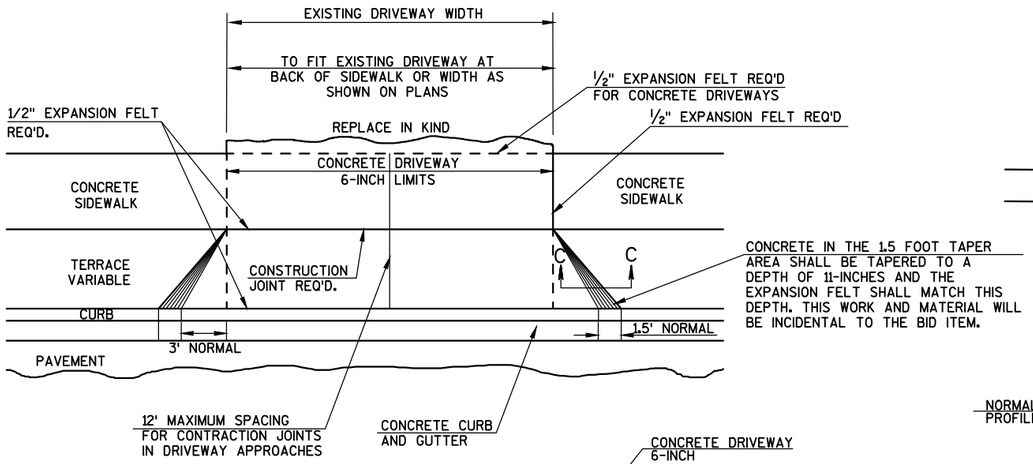


NOTE:
INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)
DO NOT MARK TRANSITION NOSE.

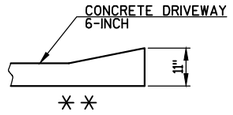
--- DRAINAGE BREAK POINT
← DIRECTION OF DRAINAGE

SPLITTER ISLAND DETAIL

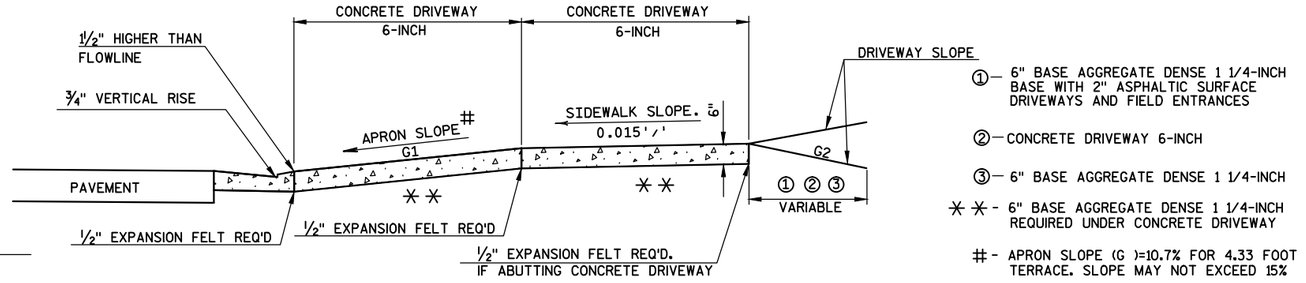
2



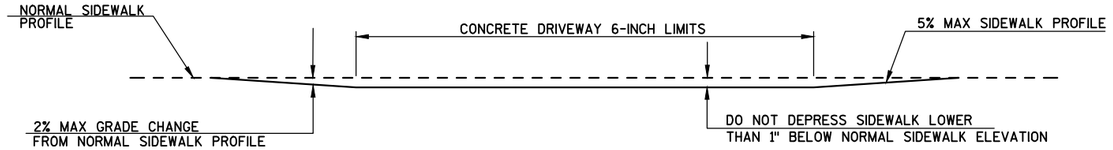
PLAN VIEW



SECTION C-C

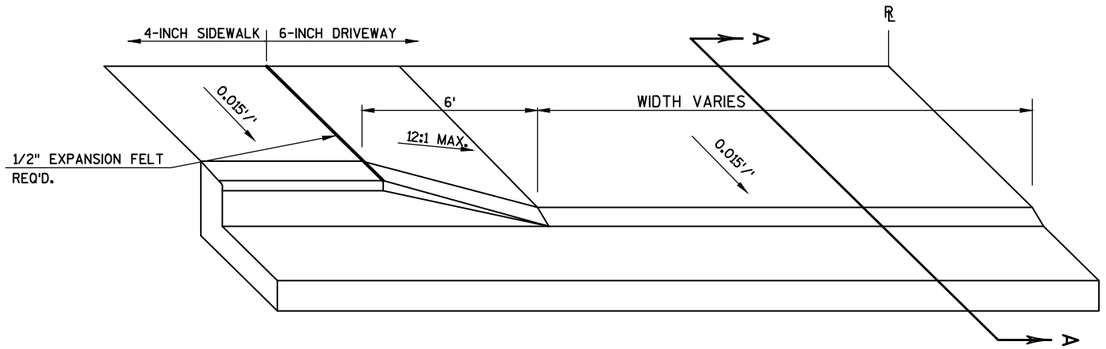


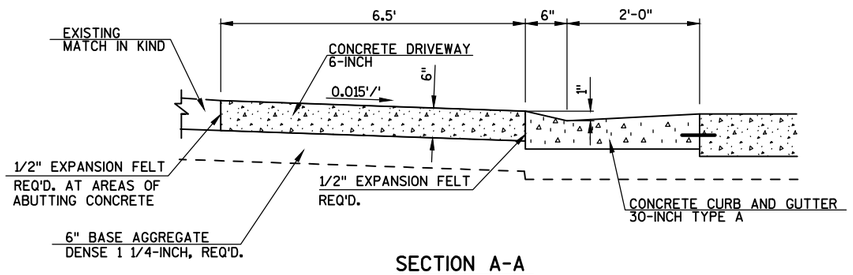
TYPICAL SIDEWALK SECTION



DEPRESSED SIDEWALK PROFILE DETAIL

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB AND GUTTER



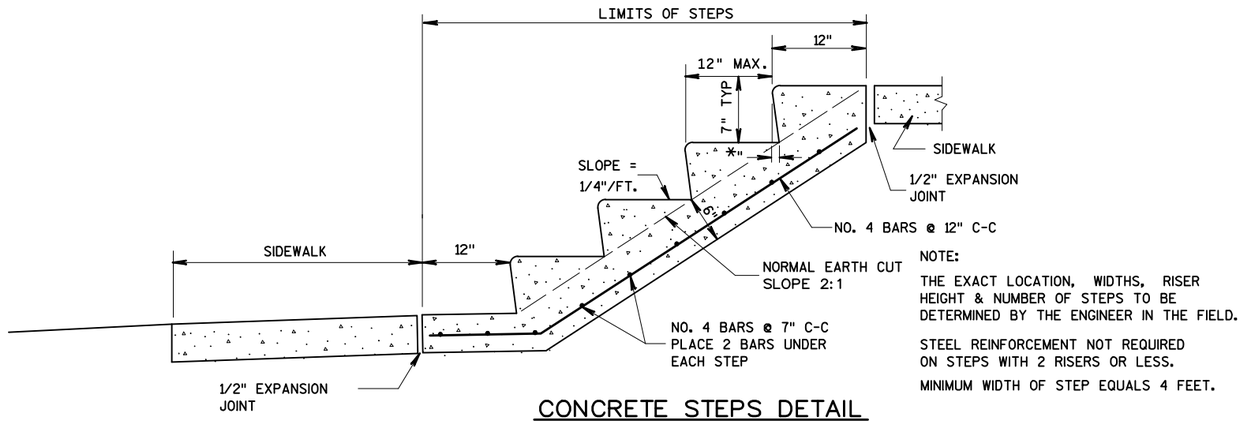


SECTION A-A

ENTRANCE WITH SIDEWALK ADJACENT TO CURB

STA. 9+02 - STA. 9+12 18TH STREET RT.

2

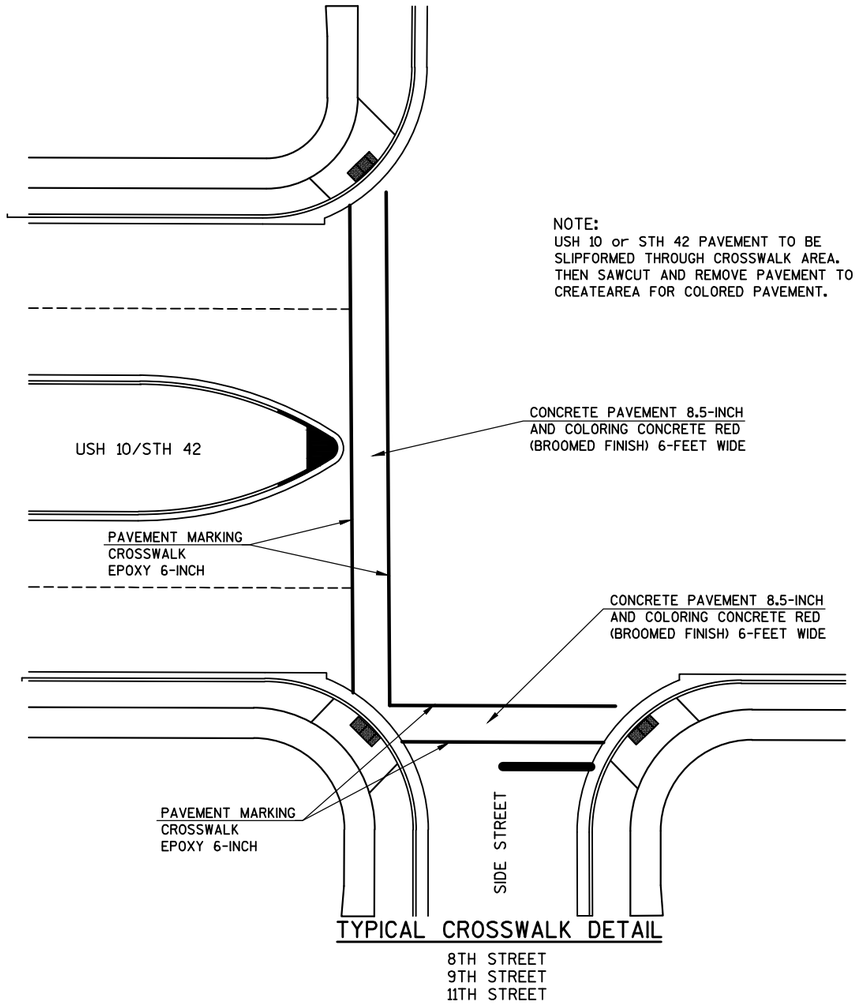


NOTE:
THE EXACT LOCATION, WIDTHS, RISER HEIGHT & NUMBER OF STEPS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

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

MINIMUM WIDTH OF STEP EQUALS 4 FEET.

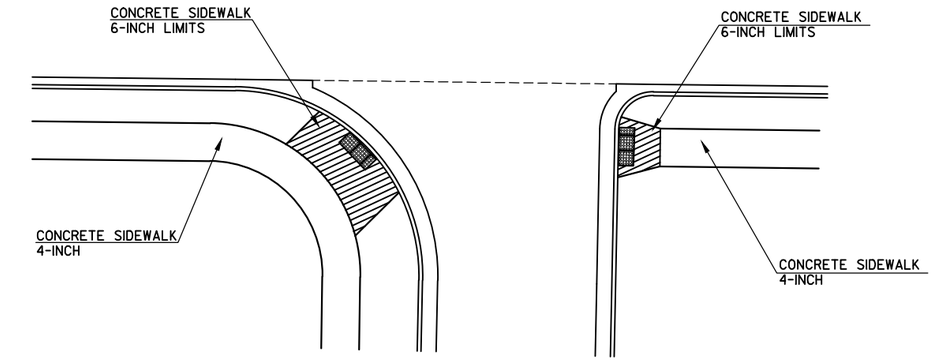
CONCRETE STEPS DETAIL



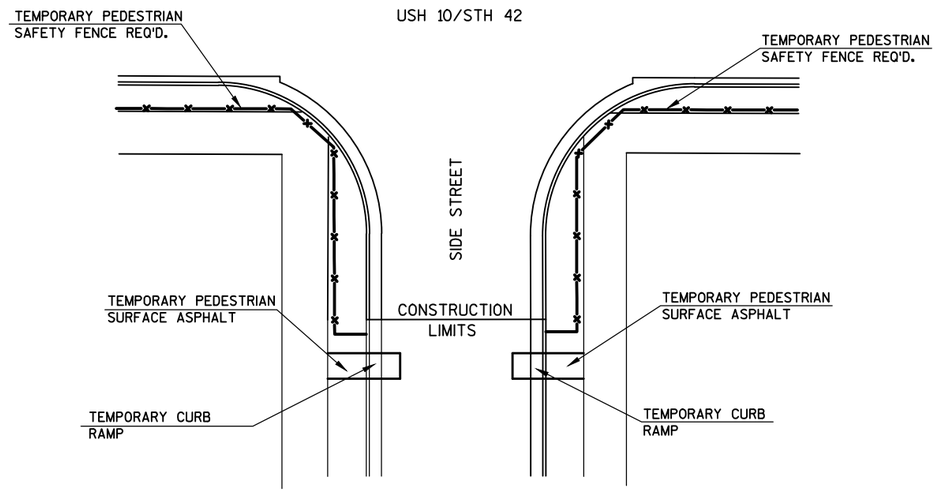
NOTE:
USH 10 or STH 42 PAVEMENT TO BE SLIPFORMED THROUGH CROSSWALK AREA. THEN SAWCUT AND REMOVE PAVEMENT TO CREATEAREA FOR COLORED PAVEMENT.

TYPICAL CROSSWALK DETAIL

8TH STREET
9TH STREET
11TH STREET

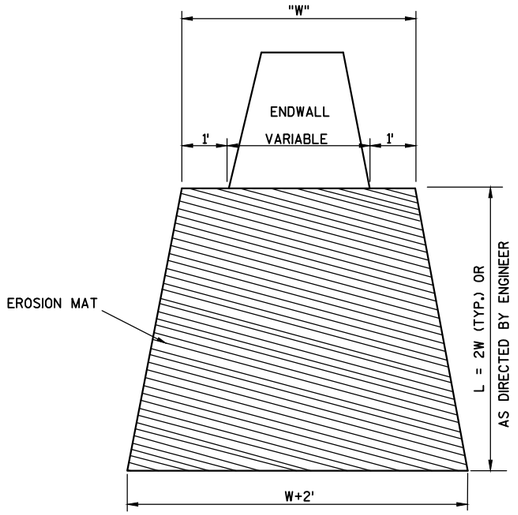


DETAIL FOR TYPICAL CONCRETE SIDEWALK 6-INCH LIMITS AT CURB RAMPS

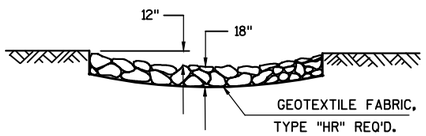


DETAIL FOR PEDESTRIAN TEMPORARY SIDE ROAD CROSSING

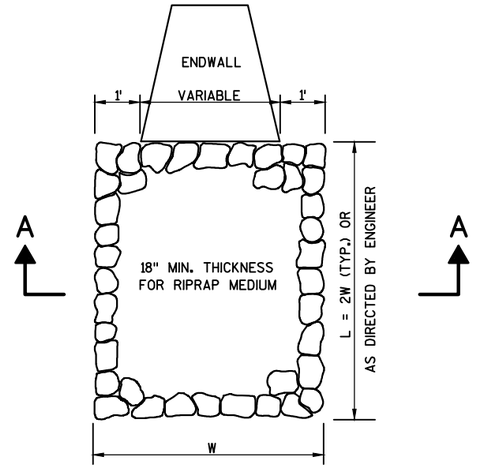
PROJECT NO:1500-37-74/75, 4570-12-71/72	HWY:USH 10/STH 42	COUNTY:MANITOWOC	CONSTRUCTION DETAILS	SHEET 26	E



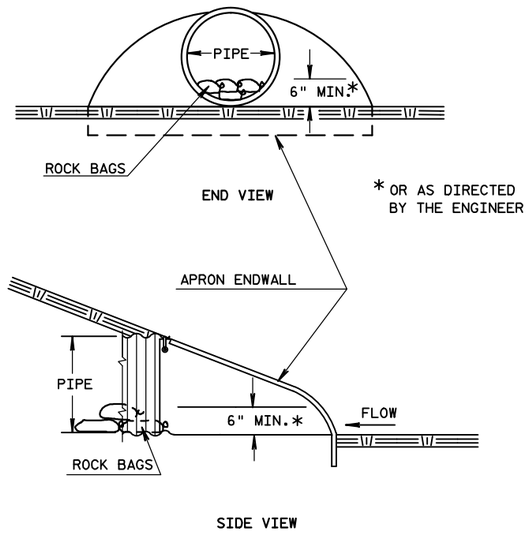
EROSION MAT TREATMENT AT CULVERTS



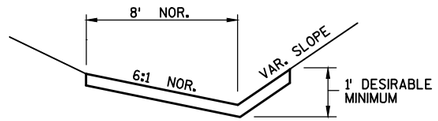
SECTION A-A



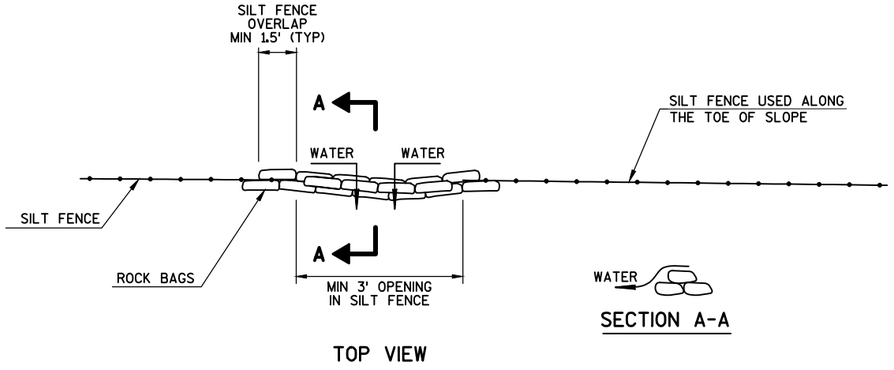
RIPRAP MEDIUM TREATMENT AT CULVERTS



CULVERT PIPE DITCH CHECK



EROSION MAT DETAIL FOR DITCHES

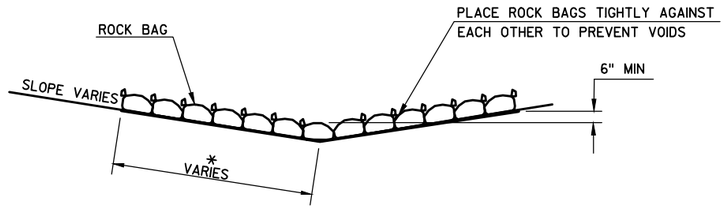


TOP VIEW

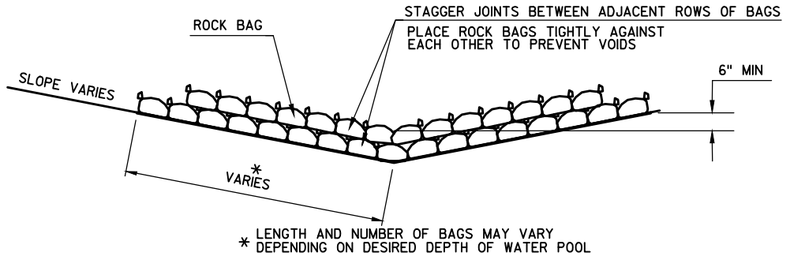
SECTION A-A

ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL

PAID AS ROCK BAGS



SIDE VIEW (SINGLE LAYER)

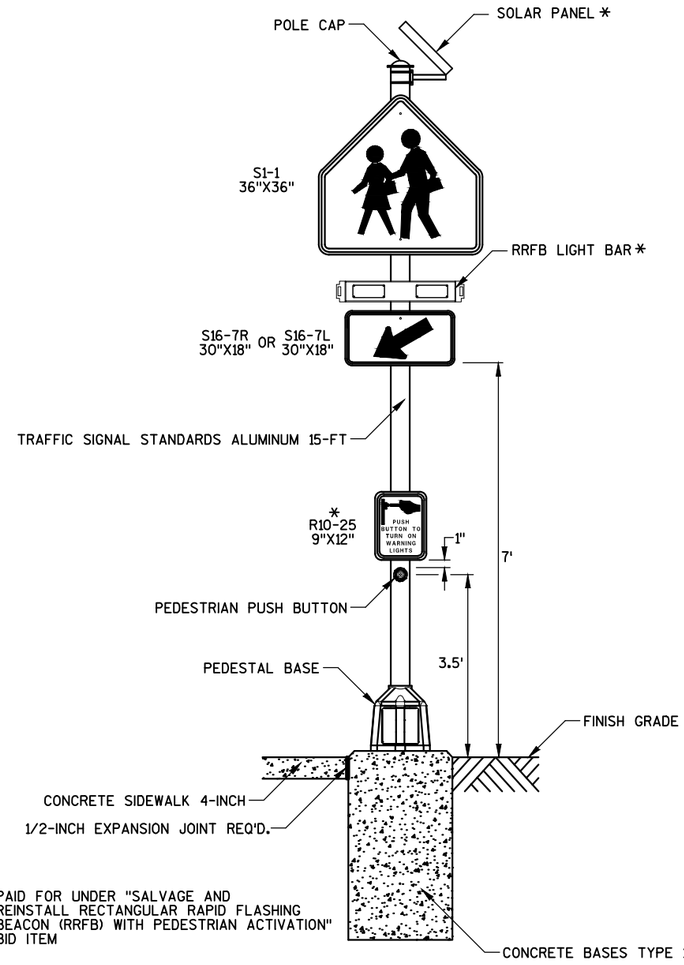


SIDE VIEW (MULTIPLE LAYER)

ROCK BAGS DITCH CHECK

PAID AS ROCK BAGS

(SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS)



RECTANGULAR RAPID FLASHING BEACON (RRFB) WITH PEDESTRIAN ACTIVATION ASSEMBLY DETAIL

SCALE: NONE

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.

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, 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.

ANCHOR RODS SHALL BE 1.25" X 60".

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.

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.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

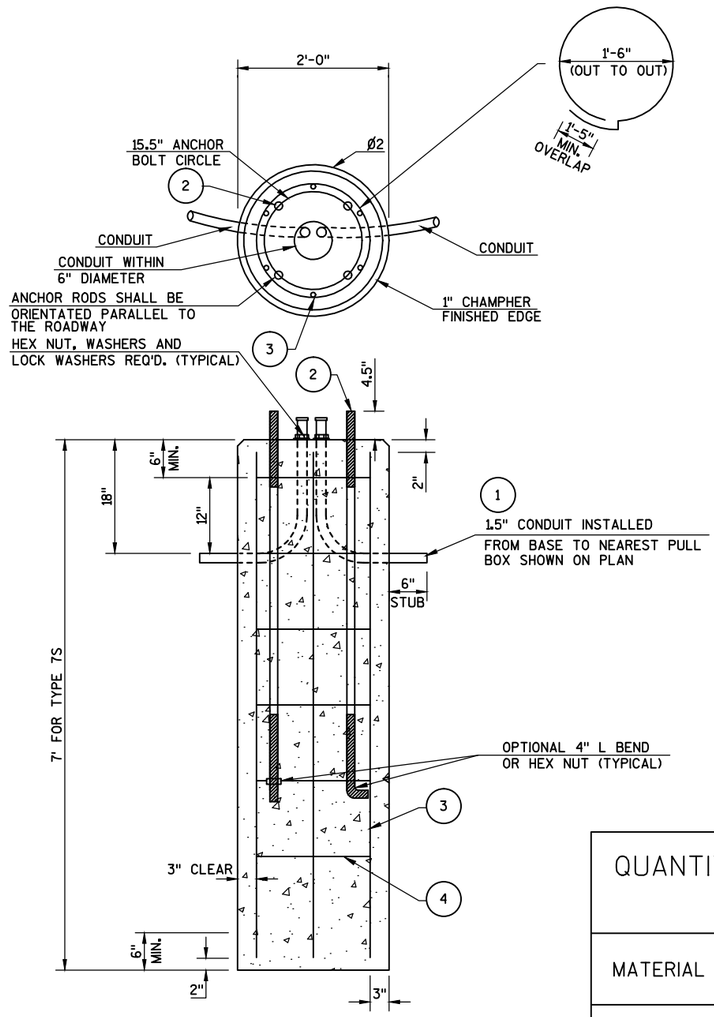
BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(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.

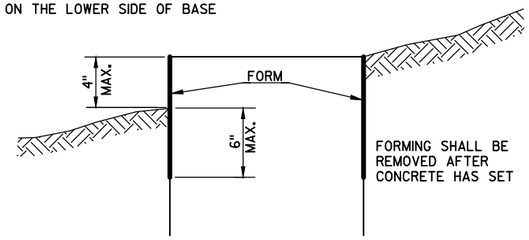
(2) 4 - 1.25" DIA. X 5'-0" ANCHOR RODS

(3) 6 - NO. 6 X 6'-8" BAR STEEL REINFORCEMENT FOR TYPE 7S

(4) 7 - NO. 4 X 6'-2" BAR STEEL REINFORCEMENT @ 1'-0" C-C FOR TYPE 7S



FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



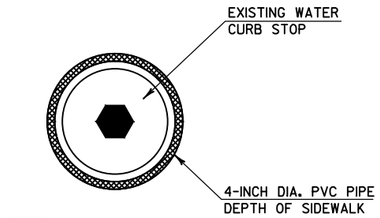
FORM DETAIL

QUANTITY REQUIREMENTS

		7S
MATERIAL	UNIT OF MEASURE	APPROXIMATE AMOUNT
CONCRETE	CUBIC YARDS	.8
HOOP STEEL REINFORCEMENT	LBS.	29
BAR STEEL REINFORCEMENT	LBS.	60

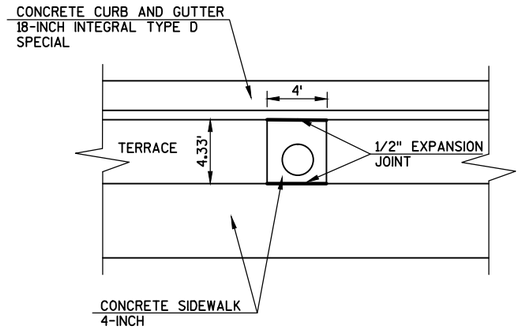
DETAIL FOR CONCRETE BASES TYPE 7 SPECIAL

2

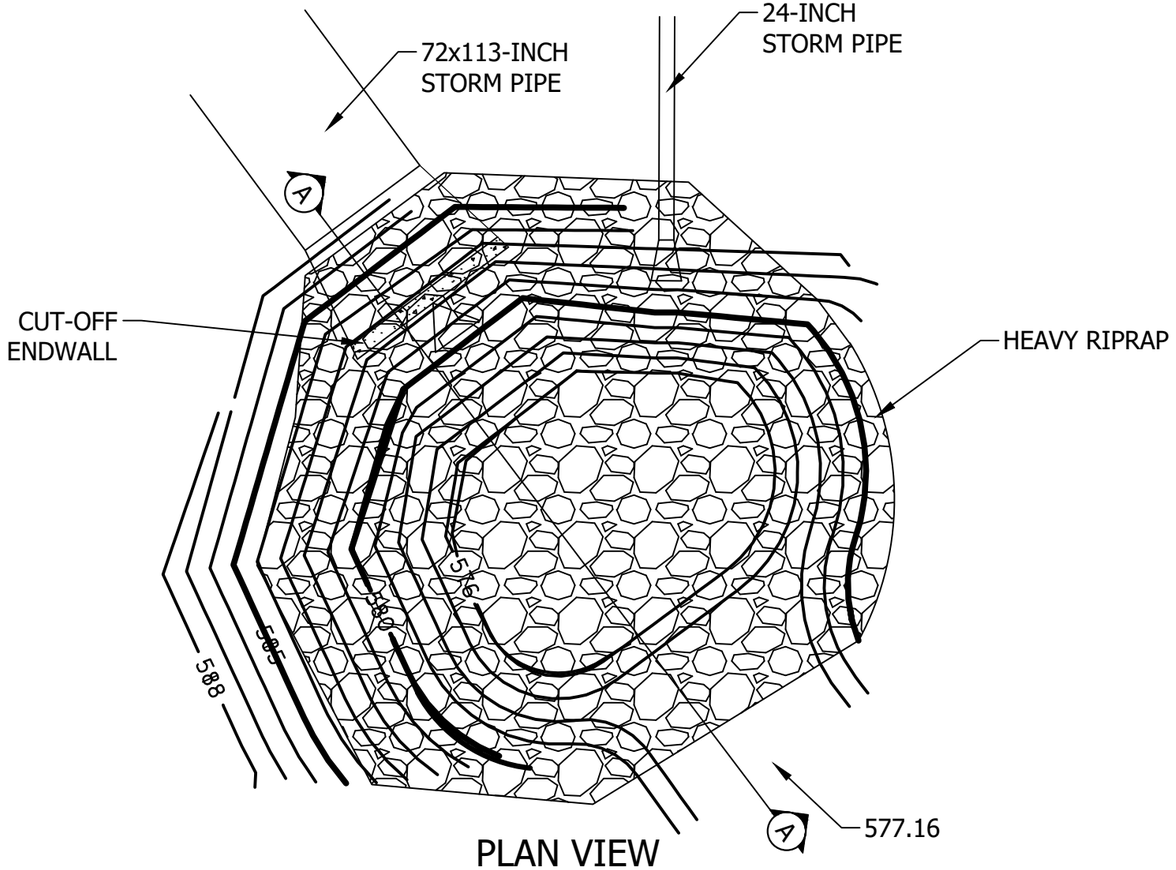


NOTE:
COST OF PVC PIPE IS
INCIDENTAL TO ITEMS
OF CONCRETE SIDEWALK

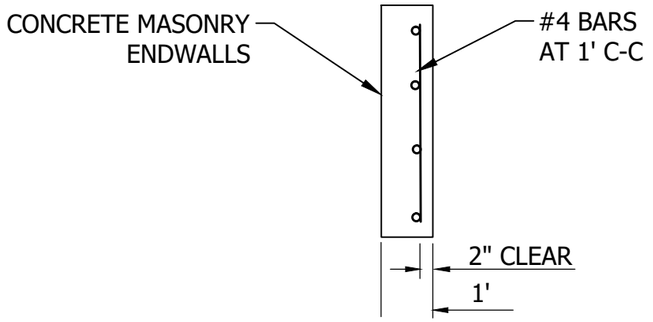
DETAIL FOR WATER CURB STOP IN SIDEWALK



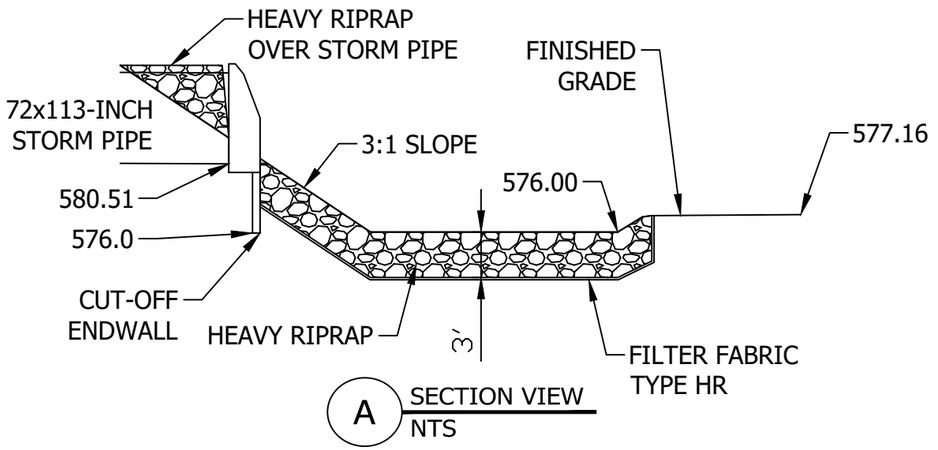
DETAIL FOR LIGHTING BASE IN TERRACE



PLAN VIEW

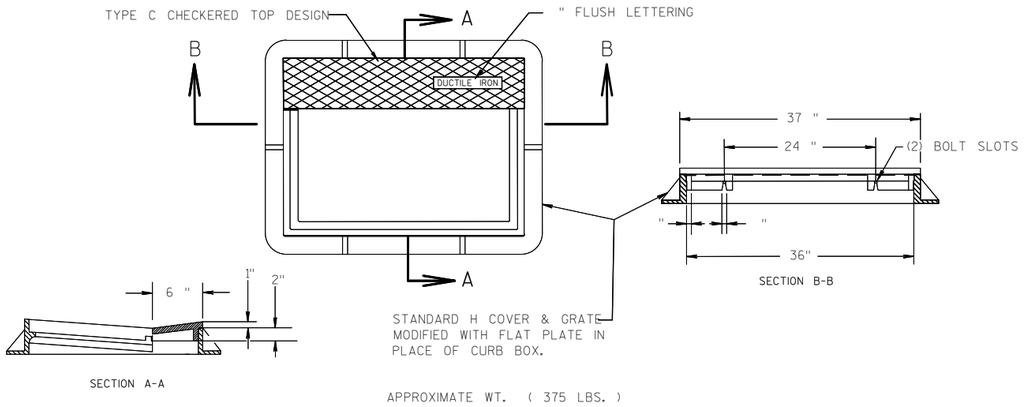


CUT-OFF WALL DETAIL



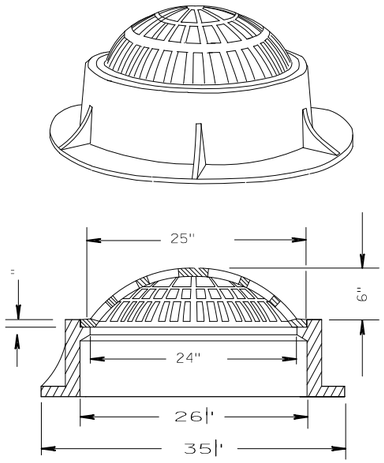
OUTFALL DISSIPATOR

PROJECT NO:1500-37-74/75, 4570-12-71/72	HWY:USH 10/STH 42	COUNTY:MANITOWOC	CONSTRUCTION DETAILS	SHEET 31	E

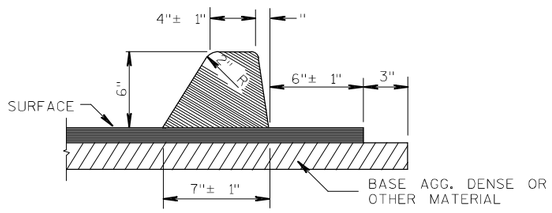


APPROXIMATE WT. (375 LBS.)

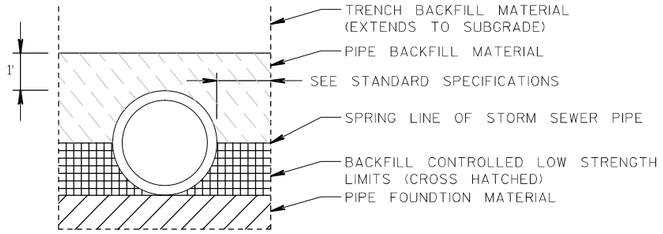
INLET COVER TYPE 'DW'
(WITH MOUNTABLE CURB PLATE)



TYPE 'BH' INLET
WEIGHT = 350 lbs.

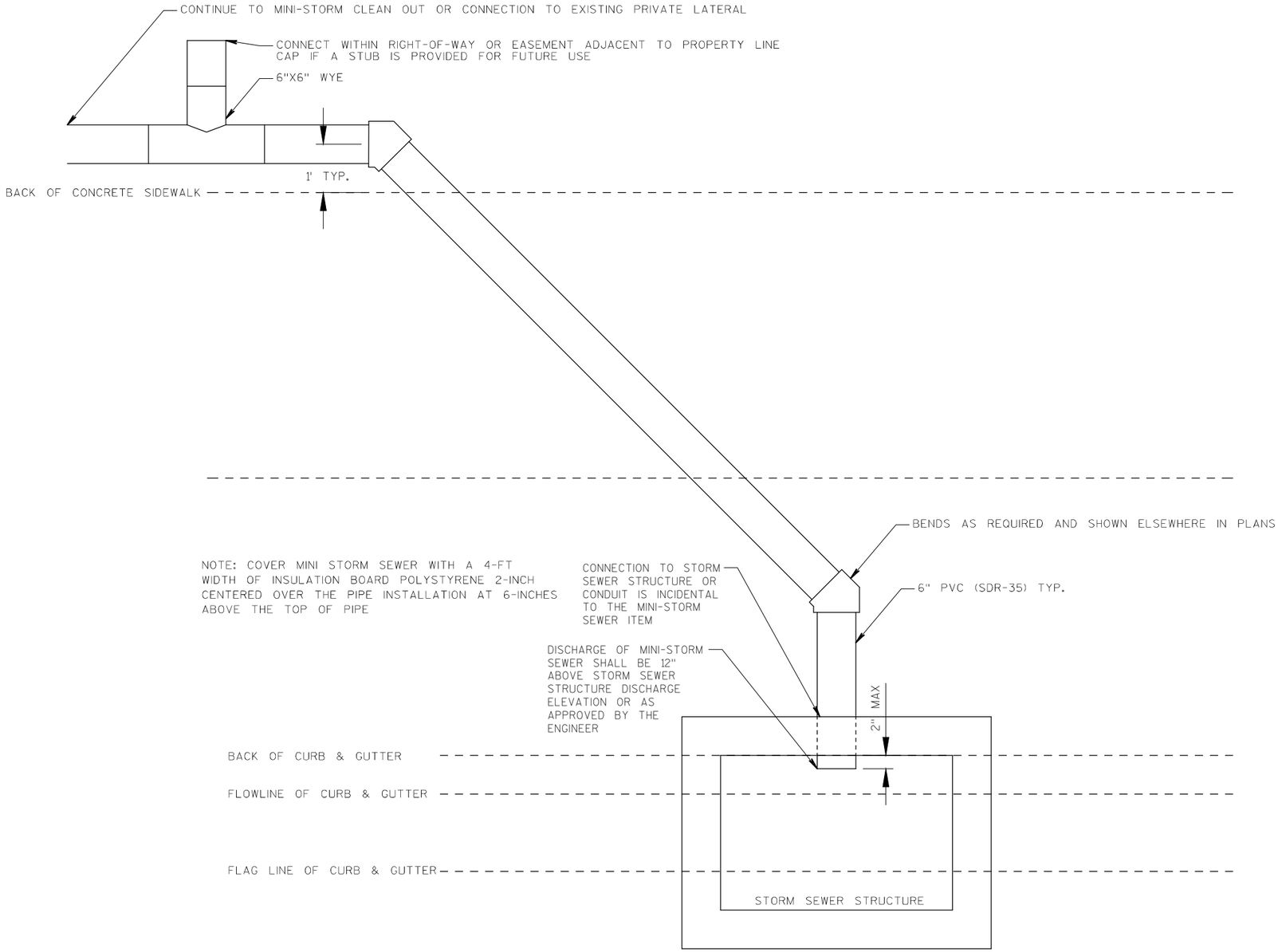


ASPHALTIC CURB DETAIL



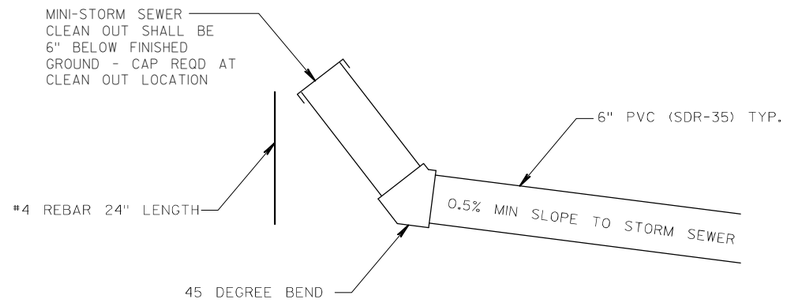
BACKFILL CONTROLLED LOW STRENGTH DETAIL

2



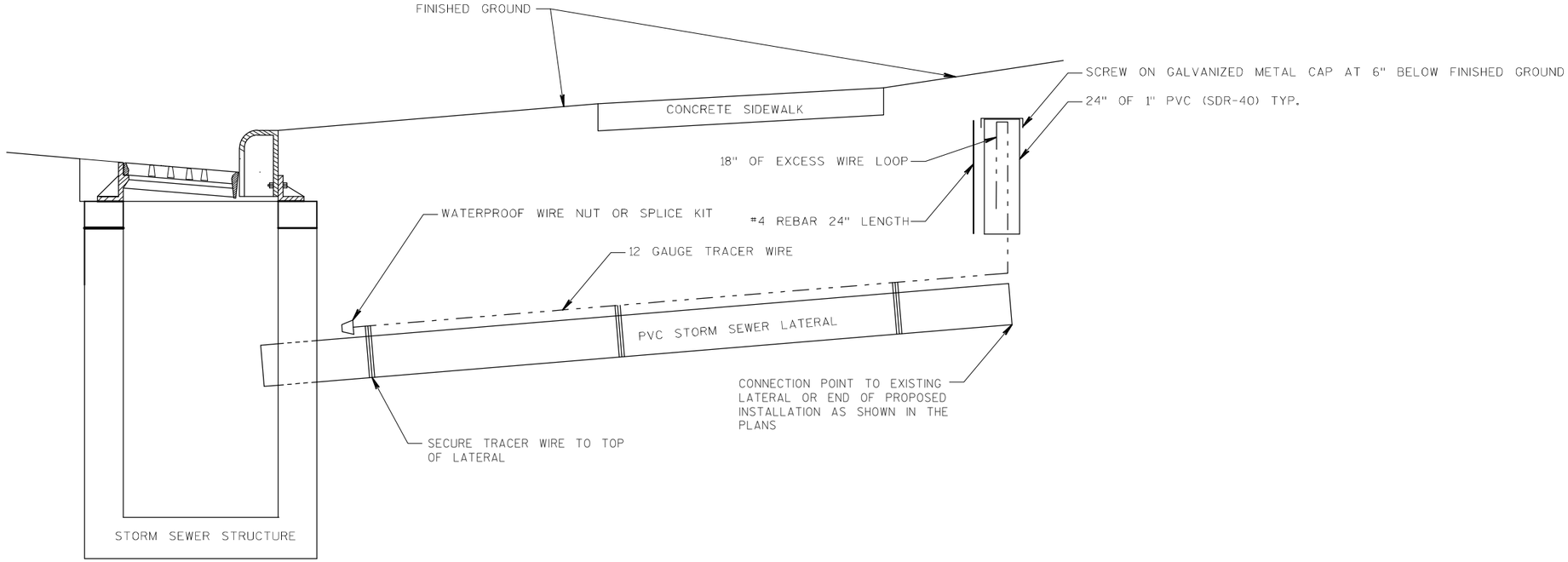
MINI-STORM SEWER AND PRIVATE LATERAL CONNECTION DETAIL

2

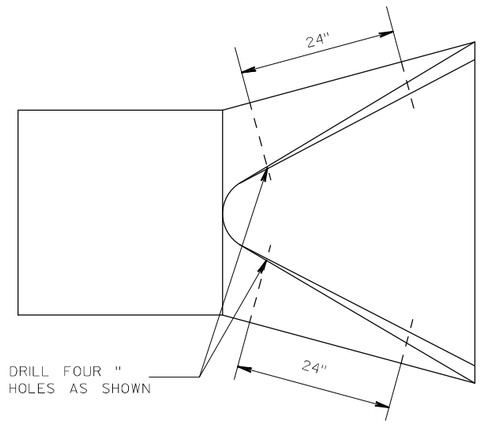


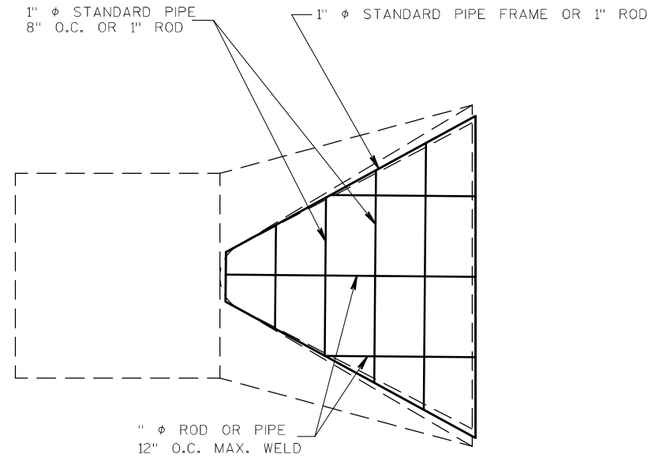
SEE STORM SEWER PLANS FOR CLEAN OUT LOCATIONS DESIGNATED AS - ⊕

MINI-STORM SEWER CLEAN OUT DETAIL

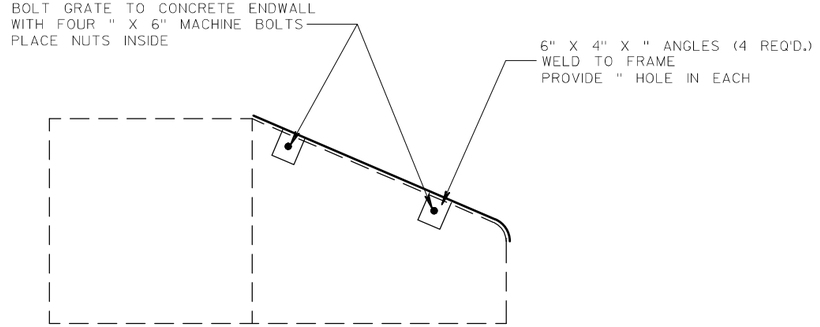


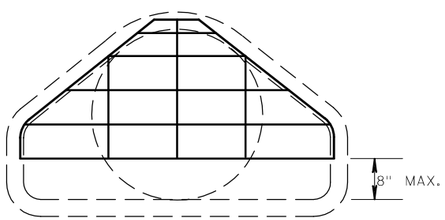
TRACER WIRE FOR STORM SEWER LATERAL DETAIL



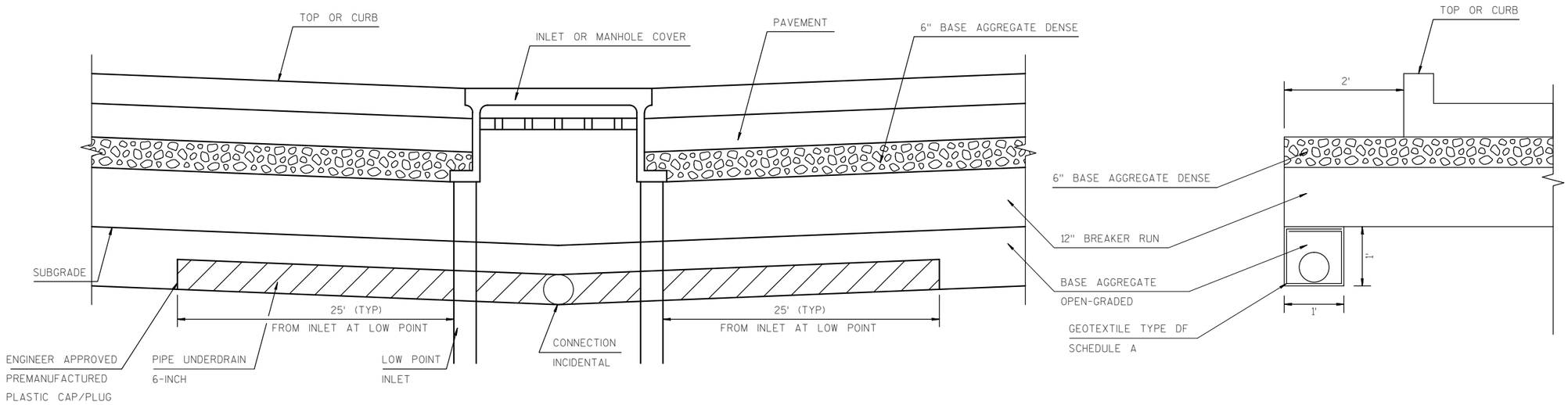


AT EACH PIPE

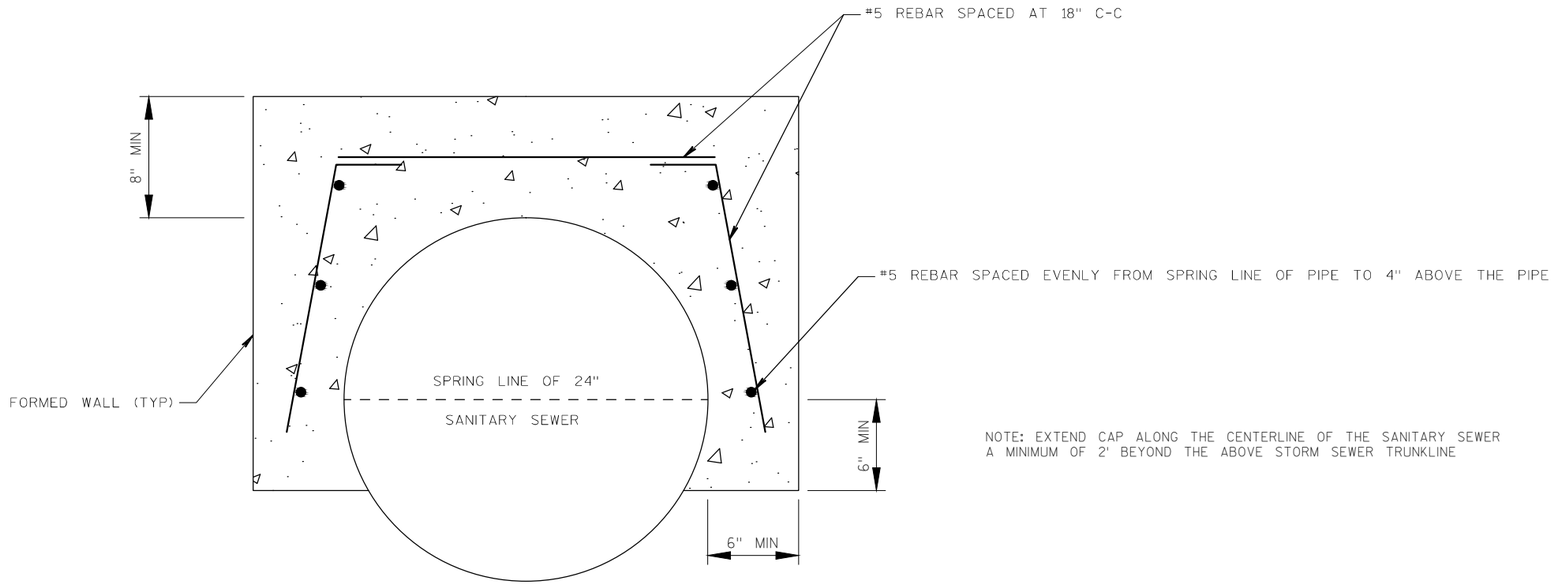




PIPE GRATE DETAIL

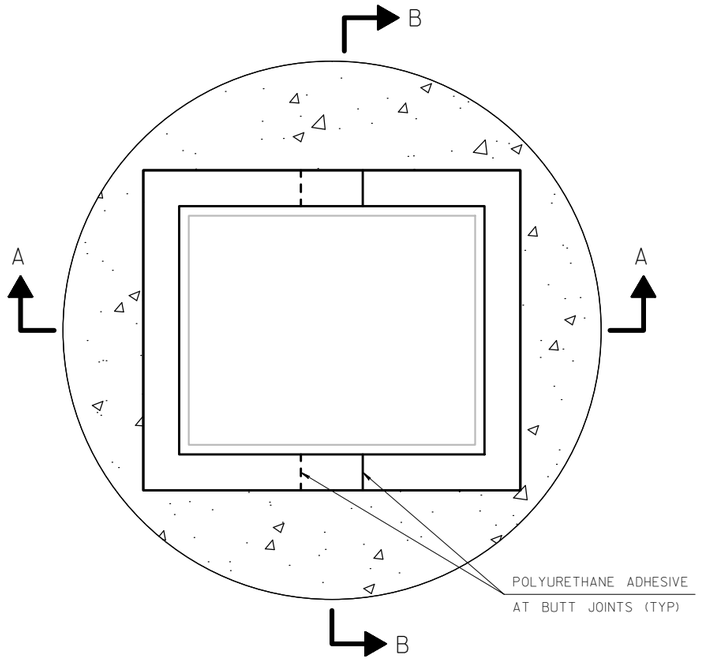


PIPE UNDERDRAIN DETAIL



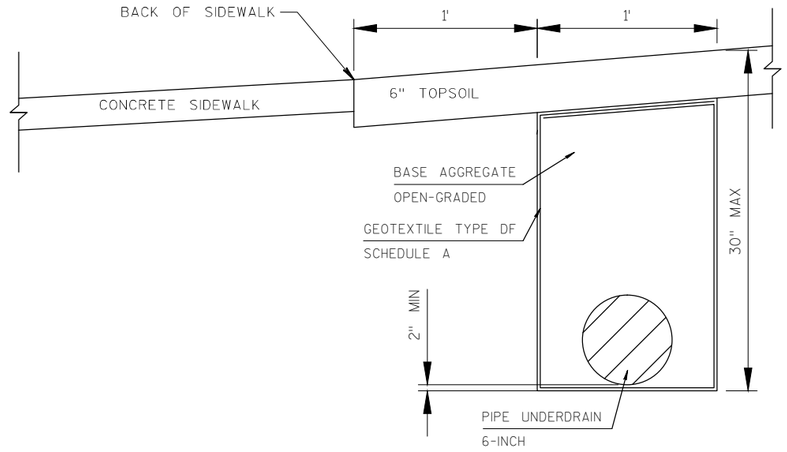
NOTE: EXTEND CAP ALONG THE CENTERLINE OF THE SANITARY SEWER A MINIMUM OF 2' BEYOND THE ABOVE STORM SEWER TRUNKLINE

DETAIL FOR CONCRETE CAP OVER SANITARY SEWER AT STA. 159'EB'+85, 11' RT

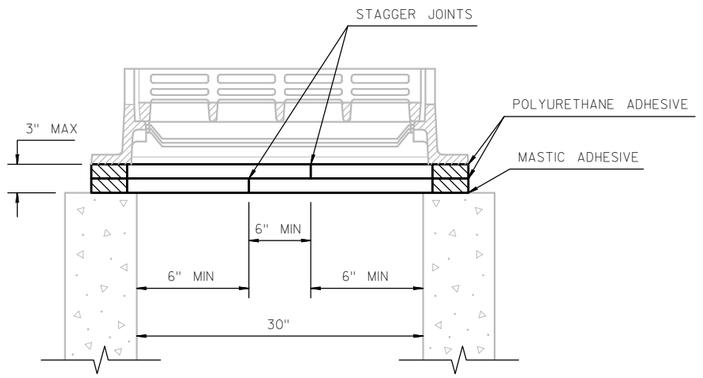


PLAN VIEW

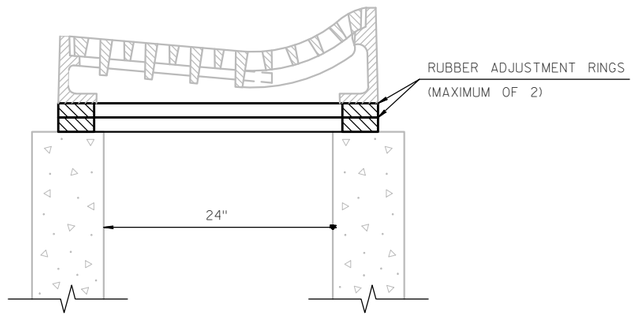
NOTE: ALL CUTS MADE TO RUBBER ADJUSTMENT RINGS WILL BE PERPENDICULAR AND PROVIDE A TIGHT JOINT.



DETAIL FOR PIPE UNDERDRAIN WRAPPED 6-INCH,
STA. 166'EB'+05 - STA. 172'EB'+70, RT

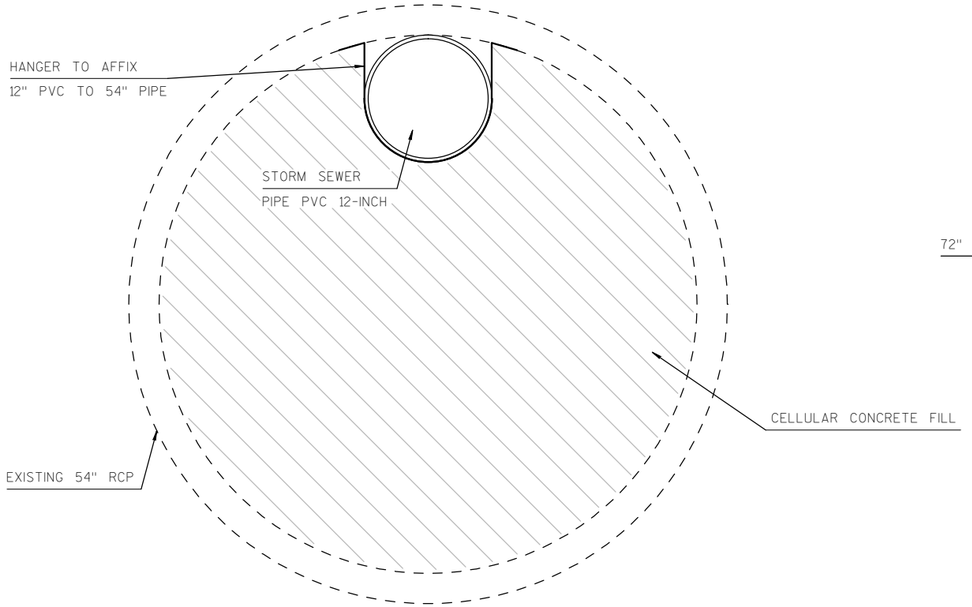


SECTION A-A



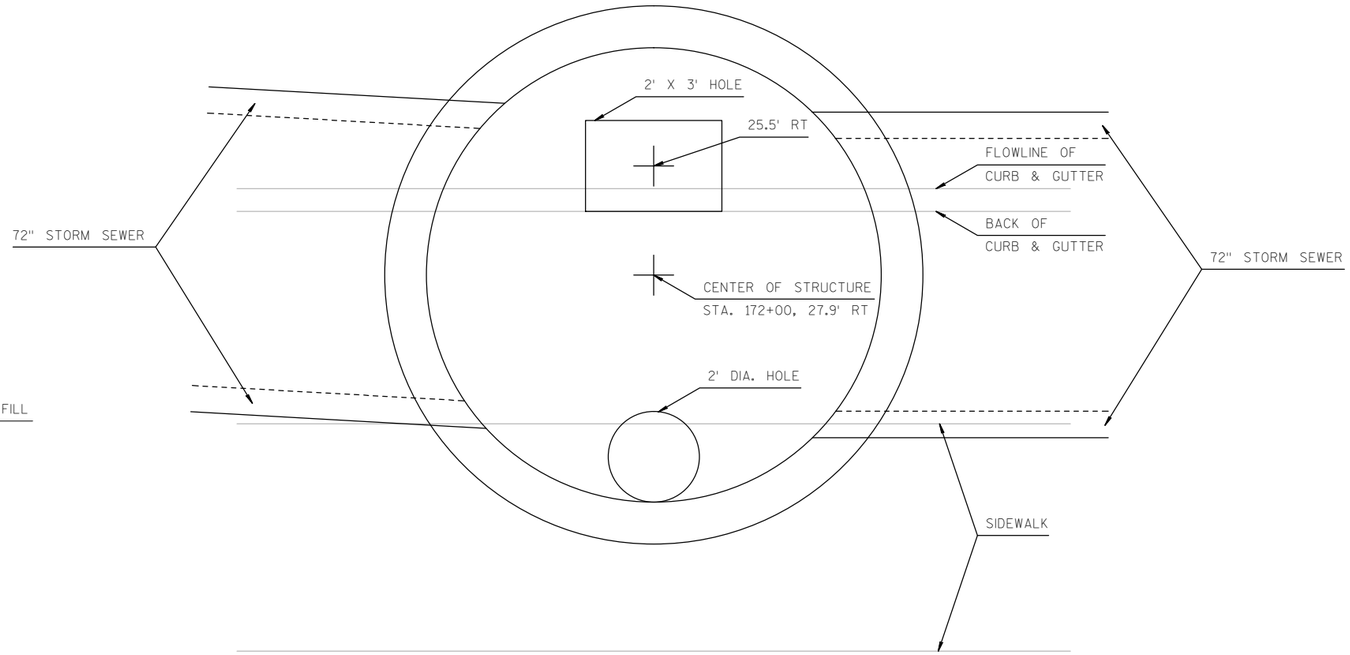
SECTION B-B

RUBBER RING CUTTING DETAIL FOR CATCH BASINS WITH TYPE 'T' CASTINGS



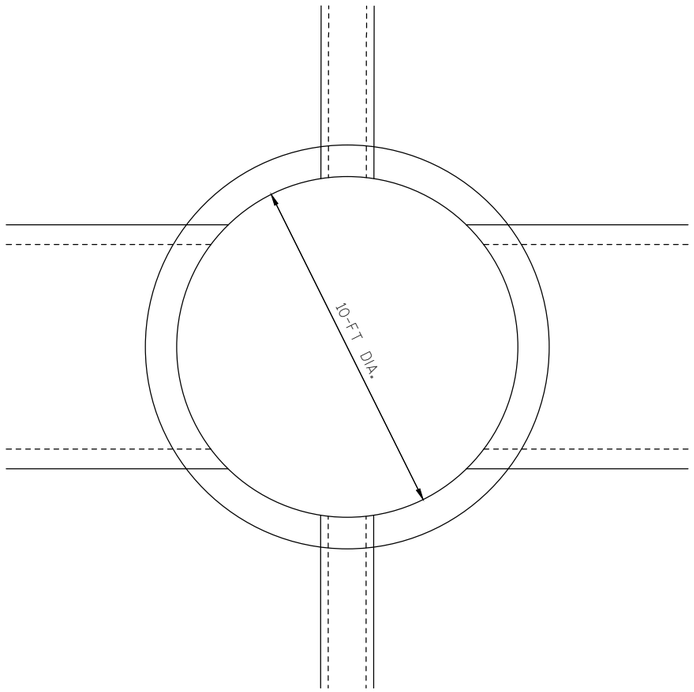
DETAIL FOR STORM SEWER PIPE PVC 12-INCH AFFIXED TO EXISTING SEWER
STA. 12'EG'+67, 151' LT TO CB-126.1

NOTE: CONNECTIONS TO PRIVATE LATERALS AND HANGERS NECESSARY TO ATTACH PVC PIPE TO EXISTING STORM SEWER ARE INCIDENTAL TO THE ITEM



DETAIL FOR CASTING LOCATION AT MH-142.0
STA. 172+00, 27.9' RT

2



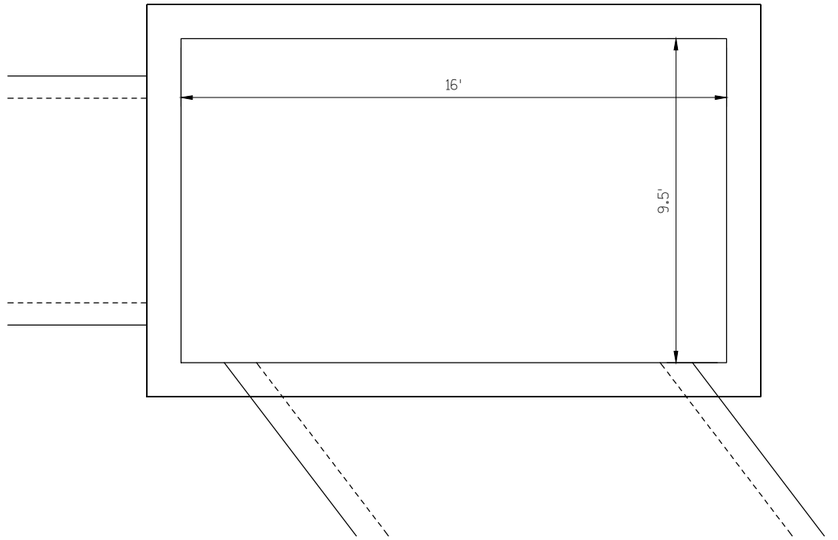
DETAIL FOR MANHOLES 10-FOOT DIAMETER SPECIAL

NOTES:

STRUCTURES AND REINFORCEMENT SHALL BE DESIGNED TO SUPPORT HS-20 LOADINGS

CONTRACTOR TO PROVIDE DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WISCONSIN FOR THE DESIGN OF THE MANHOLES

SEE STORM SEWER DETAILS FOR PIPE CONFIGURATIONS AND ELEVATIONS



DETAIL FOR MANHOLES 9.5X16-FOOT SPECIAL

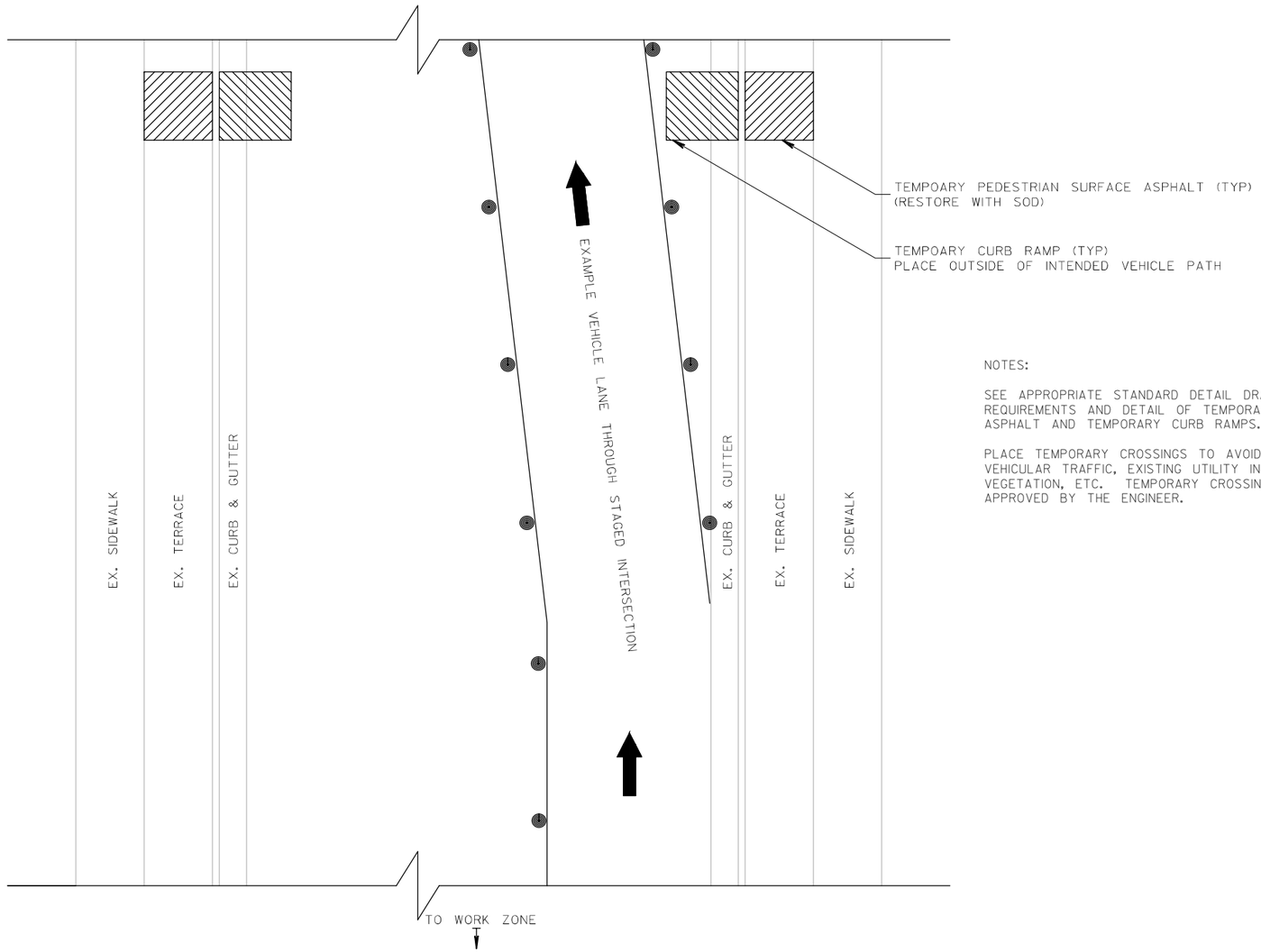
NOTES:

STRUCTURES AND REINFORCEMENT SHALL BE DESIGNED TO SUPPORT HS-20 LOADINGS

CONTRACTOR TO PROVIDE DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WISCONSIN FOR THE DESIGN OF THE MANHOLES

SEE STORM SEWER DETAILS FOR PIPE CONFIGURATIONS AND ELEVATIONS

2



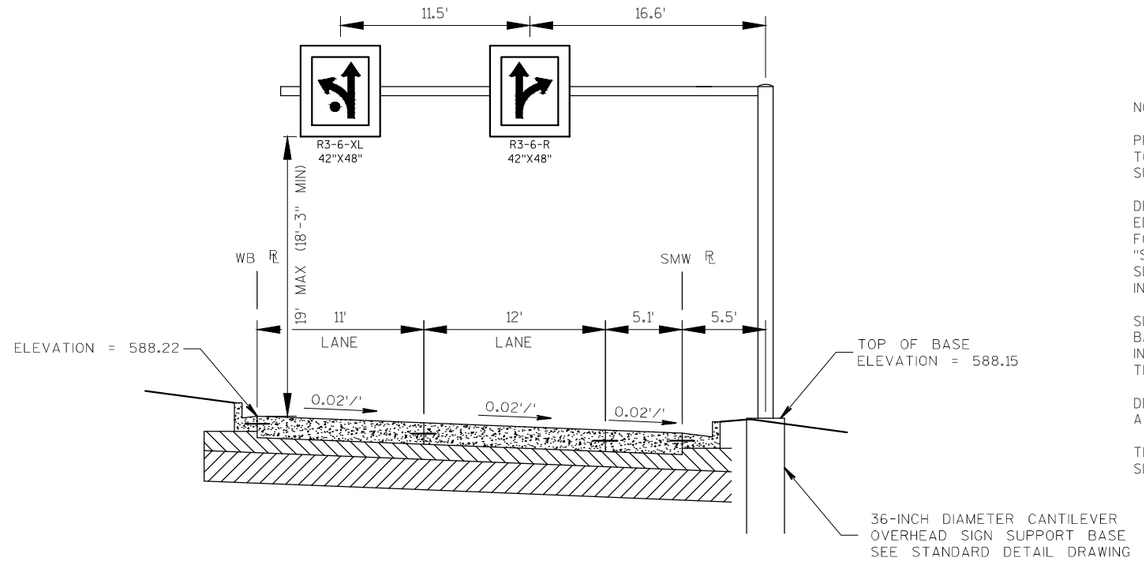
NOTES:

SEE APPROPRIATE STANDARD DETAIL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND DETAIL OF TEMPORARY PEDESTRIAN SURFACE ASPHALT AND TEMPORARY CURB RAMPS.

PLACE TEMPORARY CROSSINGS TO AVOID INTERFERENCE WITH VEHICULAR TRAFFIC, EXISTING UTILITY INSTALLATIONS, EXISTING VEGETATION, ETC. TEMPORARY CROSSING LOCATIONS SHALL BE APPROVED BY THE ENGINEER.

TEMPORARY PEDESTRIAN CROSSING OUTSIDE OF CONSTRUCTION LIMITS AT A STAGED INTERSECTION

2



NOTES:

PROVIDE AN IDENTIFICATION PLAQUE FOR OVERHEAD SIGN SUPPORTS, TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "OVERHEAD SIGN SUPPORT".

DESIGN NEW OVERHEAD SIGN SUPPORTS ACCORDING TO THE LATEST EDITION OF THE STATE OF WISCONSIN "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION" AND AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS", 6TH ADDITION AND INTERIM REVISIONS, FATIGUE CATEGORY I.

SIZE THE ANCHOR ROD/TEMPLATE ASSEMBLY TO FIT WITHIN THE BAR CAGE OF THE FOOTING BASE SHOWN IN THE CONTRACT PLANS IN ADDITION TO MEETING ALL APPLICABLE DESIGN REQUIREMENTS FOR THE DESIGN OF THE UPRIGHT BASE CONNECTION.

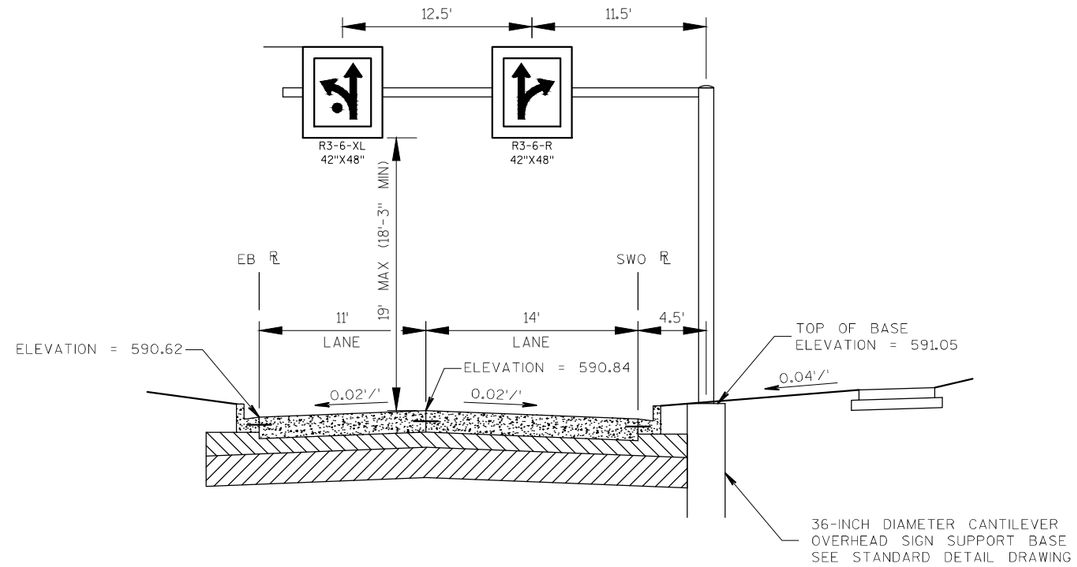
DESIGN THE STRUCTURE BASE PLATE CONNECTION TO ACCOMMODATE A MINIMUM OF SIX (6) ANCHOR RODS.

THE SIGN STRUCTURES SHALL BE DESIGNED TO SUPPORT THE THE SIGNS SHOWN.

OVERHEAD SIGN SUPPORTS DETAIL (LOOKING SOUTHWEST)

S-36-0018
STA. 192'WB'+78.4
STH 42 SB/MEMORIAL DRIVE

2



NOTES:

PROVIDE AN IDENTIFICATION PLAQUE FOR OVERHEAD SIGN SUPPORTS, TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "OVERHEAD SIGN SUPPORT".

DESIGN NEW OVERHEAD SIGN SUPPORTS ACCORDING TO THE LATEST EDITION OF THE STATE OF WISCONSIN "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION" AND AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS", 6TH ADDITION AND INTERIM REVISIONS, FATIGUE CATEGORY I.

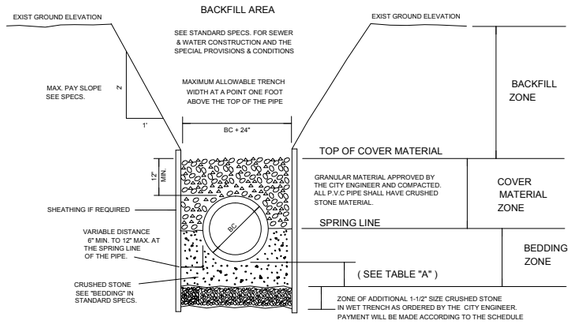
SIZE THE ANCHOR ROD/TEMPLATE ASSEMBLY TO FIT WITHIN THE BAR CAGE OF THE FOOTING BASE SHOWN IN THE CONTRACT PLANS IN ADDITION TO MEETING ALL APPLICABLE DESIGN REQUIREMENTS FOR THE DESIGN OF THE UPRIGHT BASE CONNECTION.

DESIGN THE STRUCTURE BASE PLATE CONNECTION TO ACCOMMODATE A MINIMUM OF SIX (6) ANCHOR RODS.

THE SIGN STRUCTURES SHALL BE DESIGNED TO SUPPORT THE THE SIGNS SHOWN.

OVERHEAD SIGN SUPPORTS DETAIL (LOOKING EAST)

S-36-0019
STA. 186'EB'+91.6
STH 42 NB/WALDO BOULEVARD

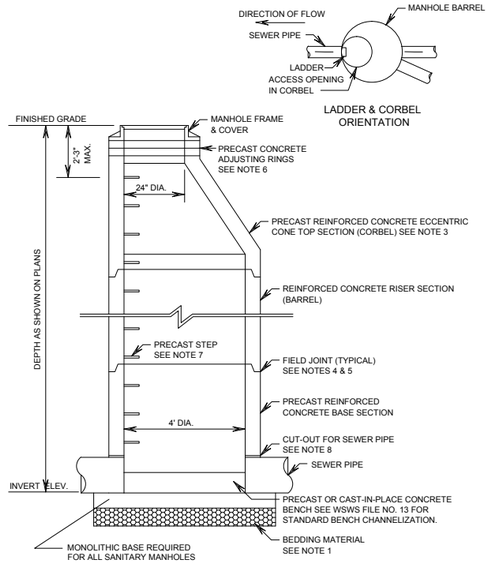


TYPICAL SECTION SHOWING
BEDDING AND BACKFILL REQUIREMENTS
FOR SANITARY AND STORM SEWER

TABLE "A"

PIPE DIAMETER	STONE THICKNESS
24" & OVER	8"
21"	7"
18"	6"
15"	5"
12" & UNDER	4"

1 TRENCH SECTION
NOT TO SCALE

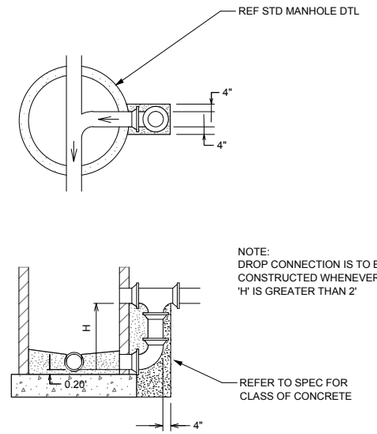


NOTES

1. MANHOLE BASE SECTIONS SHALL BE PLACED ON AT LEAST 8" OF BEDDING MATERIAL CONFORMING TO WSWS 8.43.2 FOR DRY SUBGRADE AND WSWS 8.43.6 FOR WET SUBGRADE.
2. CONCRETE AND STEEL REINFORCEMENT SHALL CONFORM TO ASTM C-478 REQUIREMENTS.
3. PRECAST REINFORCED CONCRETE ECCENTRIC CONE TOPS (OFFSET CORBELS) MUST BE USED FOR MANHOLES OF DEPTHS GREATER THAN FIVE (5) FEET.

   IF THE MANHOLE DEPTH, AS MEASURED FROM THE TOP OF THE CASTING FRAME TO THE TOP OF THE MANHOLE BASE SLAB, IS LESS THAN 5 FEET, A FLAT PRECAST REINFORCED CONCRETE MANHOLE TOP SHALL BE USED INSTEAD OF A CORBEL SECTION. THE FLAT MANHOLE TOP SHALL BE PROVIDED WITH AN ECCENTRIC 24" DIAMETER OPENING FOR THE MANHOLE CASTING.
4. PRECAST REINFORCED CONCRETE RISER SECTIONS (BARRELS) MAY BE PLACED WITH TONGUE OR "D" JOINT ENDS EITHER UP OR DOWN.
5. ALL FIELD JOINTS AT MANHOLE PIECES SHALL BE WATERTIGHT AND SHALL BE MADE IN ACCORDANCE WITH WSWS 3.5.4(i).
6. PRECAST REINFORCED CONCRETE ADJUSTING RINGS SHALL BE USED TO ADJUST THE FRAME TO THE REQUIRED GRADE. A MINIMUM OF 4" AND A MAXIMUM OF 10" OF ADJUSTING RINGS AND MORTAR SHALL BE USED FOR THE ADJUSTMENT. MORTAR OR FLEXIBLE SEAL SHALL BE ..." MINIMUM THICKNESS BETWEEN EACH RING, RING AND STRUCTURE, AND RING AND FRAME. THE THICKNESS OF EACH GRADE RING SHALL RANGE FROM 2" MINIMUM TO 6" MAXIMUM. GRADE RINGS SHALL BE REINFORCED WITH AT LEAST ONE RING OF STEEL REBAR CENTERED WITHIN THE RING.
7. STEPS SHALL BE PRECAST INTO THE MANHOLE SECTIONS BY THE MANUFACTURER. THE STEPS SHALL MEET THE REQUIREMENTS OF WSWS 6.40.0. THE TOP STEP SHALL BE SET NO LESS THAN THREE (3) INCHES AND NO MORE THAN SIX (6) INCHES BELOW THE TOP OF THE CORBEL. THE STEPS SHALL BE EQUALLY SPACED VERTICALLY AT SIXTEEN (16) INCHES ON CENTER.
8. THE ENTIRE SPACE BETWEEN THE PIPE LEADS AND THE PRECAST MANHOLE WALL SHALL BE MORTARED OR CONCRETED IN PLACE BY THE CONTRACTOR. SOLID CONCRETE BRICKS MORTARED IN PLACE MAY BE USED AS A FILLER FOR STORM MANHOLES.
9. FOR DETAILS OF OUTSIDE DROP TYPE CONNECTIONS OF SEWER PIPE TO SANITARY MANHOLES SEE DETAIL WSWS FILE NO.19
10. ALL SANITARY MANHOLES SHALL HAVE A MONOLITHIC BASE.

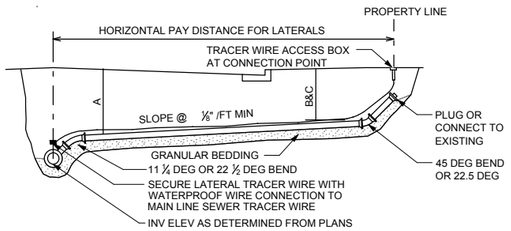
2 STANDARD SANITARY MANHOLE
NOT TO SCALE



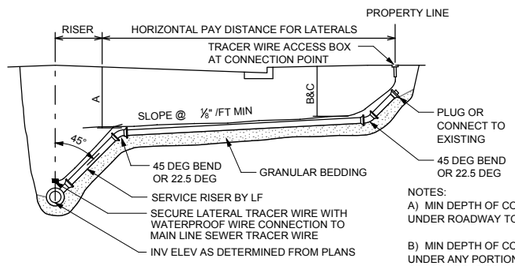
NOTE:
DROP CONNECTION IS TO BE CONSTRUCTED WHENEVER 'H' IS GREATER THAN 2'

REFER TO SPEC FOR CLASS OF CONCRETE

3 MANHOLE DROP ENTRANCE
NOT TO SCALE



STANDARD INSTALLATION W/OUT RISER



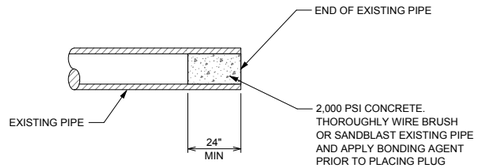
STANDARD INSTALLATION W/ RISER

NOTES:
A) MIN DEPTH OF COVER UNDER ROADWAY TO BE 7'-0"

B) MIN DEPTH OF COVER UNDER ANY PORTION OF GRASS AREAS TO 5'-0"

C) MIN DEPTH OF COVER AT PROPERTY LINE TO 9'-0" (12' DESIRABLE) OR AS REQUIRED TO SERVE EXISTING DEVELOPMENT.

4 SANITARY SEWER LATERAL
NOT TO SCALE

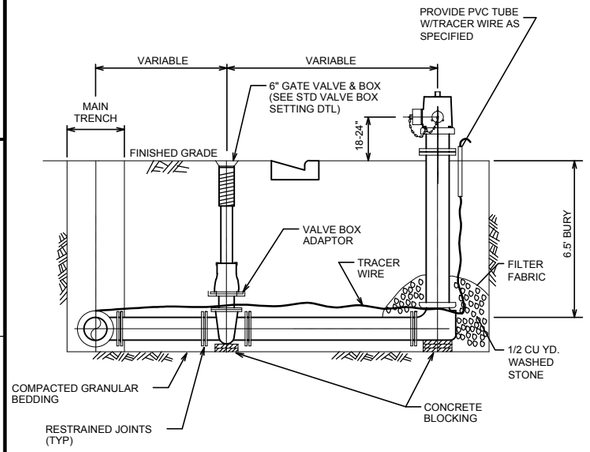


5 PIPE PLUG
NOT TO SCALE

PROJECT NO: 1500-37-75/4570-12-72	HWY: USH 10/STH 42	COUNTY: MANITOWOC	CONSTRUCTION DETAILS	SHEET 43	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\WM_SAN_WALDO_DETAILS.DWG PLOT DATE : 1/7/2019 7:00 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

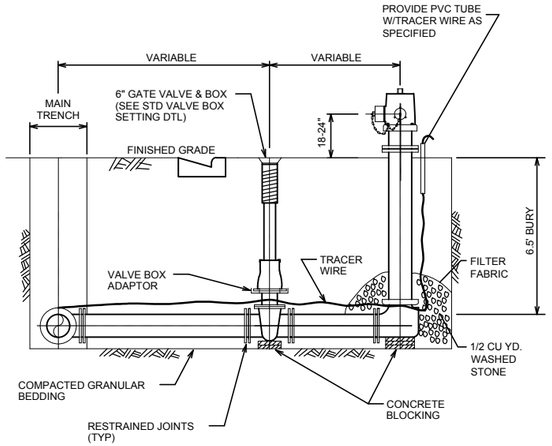


NOTE:

1. ENTIRE HYDRANT LEAD SHALL BE RESTRAINED FROM MAIN TO HYDRANT.
2. DUCTILE IRON FITTINGS, HYDRANT BARREL AND VALVE BOX SHALL BE WRAPPED WITH POLYETHYLENE ENCASEMENT.

6 STANDARD HYDRANT ASSEMBLY WALDO BLVD

NOT TO SCALE

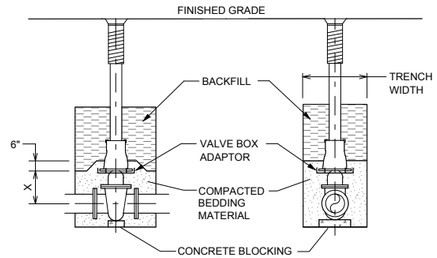


NOTE:

1. ENTIRE HYDRANT LEAD SHALL BE RESTRAINED FROM MAIN TO HYDRANT.
2. DUCTILE IRON FITTINGS, HYDRANT BARREL AND VALVE BOX SHALL BE WRAPPED WITH POLYETHYLENE ENCASEMENT.

7 STANDARD HYDRANT ASSEMBLY SIDE STREETS

NOT TO SCALE



SIDE VIEW

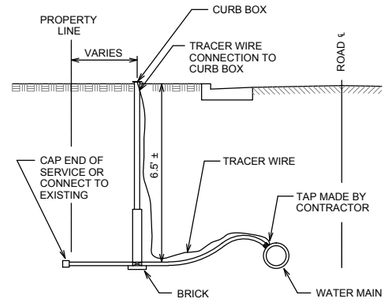
PIPE DIA (INCHES)	X=SETTING (INCHES)
2	6
3	7
4	8
6	12
8	13

FRONT VIEW

PIPE DIA (INCHES)	X=SETTING (INCHES)
10	17
12	21
14	25
16	30

8 STANDARD VALVE BOX SETTING

NOT TO SCALE

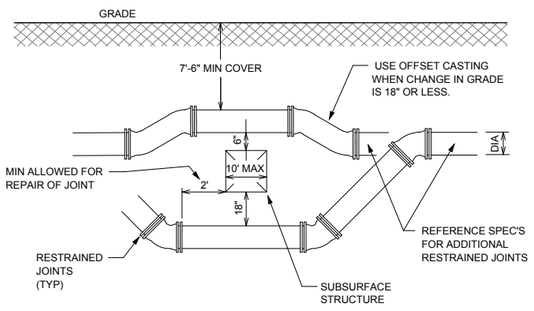


NOTE:

1. TAP WATER MAIN ON 45° WITH PIPE. MINIMUM HORIZONTAL DISTANCE BETWEEN CORP STOPS SHALL BE 3-FEET.
2. WATER SERVICES SHALL BE POLYETHYLENE UNLESS SHOWN OTHERWISE.

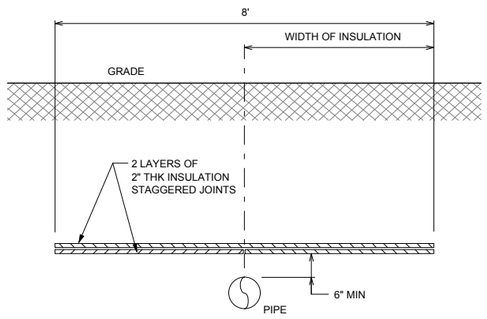
9 WATER SERVICE INSTALLATION

NOT TO SCALE



10 OFFSET W/RESTRAINED JOINTS (WATER MAIN AND FORCE MAIN)

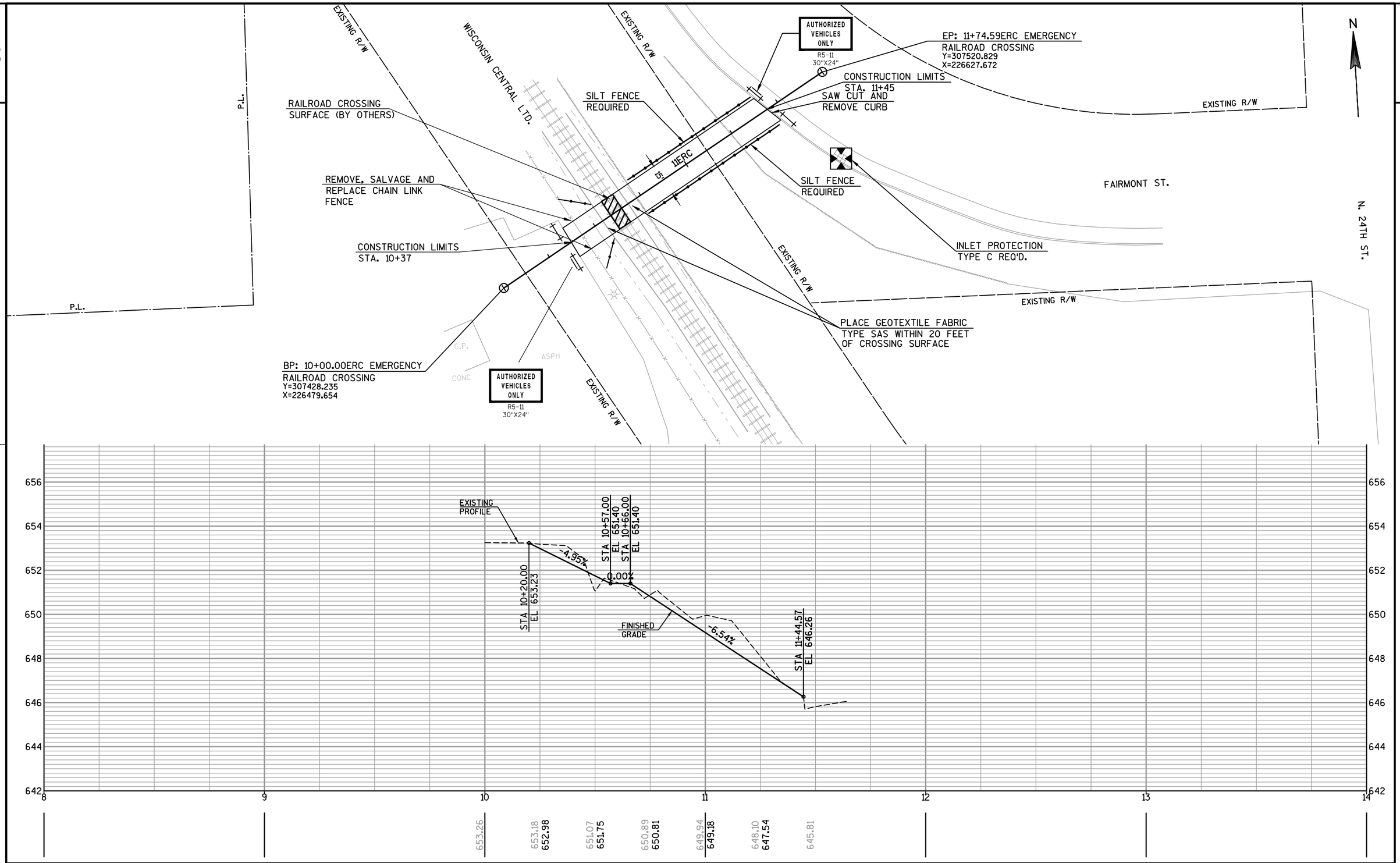
NOT TO SCALE



11 TRENCH INSULATION

NOT TO SCALE

PROJECT NO: 1500-37-75/4570-12-72	HWY: USH 10/STH 42	COUNTY: MANITOWOC	CONSTRUCTION DETAILS	SHEET 44	E



PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	CONSTRUCTION DETAIL-EMERGENCY VEHICLE RAILROAD CROSSING	SHEET 45	E

USH 10 EASTBOUND ℄
ALL POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS
13	133+34.8	26.0' RT	25'
14	133+34.8	51.0' RT	25'
15	133+59.8	50.9' RT	25'
16	133+88.5	51.1' RT	25'
17	134+13.5	51.0' RT	25'
18	134+13.5	26.0' RT	25'
19	134+20.5	50.0' LT	25'
20	134+20.5	75.0' LT	25'
21	134+45.0	80.3' LT	25'

USH 10 EASTBOUND ℄
ALL POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS
28	132+44.2	1.0' LT	10'
29	133+32.2	12.0' LT	10'
30	134+15.2	23.0' LT	59'
31	134+32.1	18.4' LT	2'
32	134+10.1	12.0' LT	59'

CONSTRUCTION LIMITS
STA. 12+10.55NMN

NOTE: CONCRETE MEDIAN SLOPED
NOSES ARE TYPE 1 UNLESS OTHERWISE NOTED.

CONSTRUCTION LIMITS
STA. 131+25

STA. 130+95.67WB USH 10/STH 42=
STA. 10+24.00FO N. 14TH ST.
Y=306836.955
X=231600.752

CAUTION
BURIED GAS LINE
(APPROXIMATE LOCATION)
BURIED TELEPHONE
(APPROXIMATE LOCATION)
BURIED ELECTRIC
(APPROXIMATE LOCATION)

STA. 134+74.82WB USH 10/STH 42=
STA. 10+00NMN MENASHA AVE.
Y=306831.963
X=231979.872

ASPHALTIC CURB
REQ'D.
ASPHALTIC SURFACE
TEMPORARY REQ'D.
SLOPE
INTERCEPT
CONCRETE CURB AND GUTTER
18-INCH INTEGRAL REQ'D.
CONCRETE SIDEWALK
4-INCH REQ'D.
CURB RAMP
TYPE 7B REQ'D.
CURB RAMP
TYPE 1 REQ'D.
CURB RAMP
TYPE 5 REQ'D.

CONCRETE SIDEWALK
4-INCH REQ'D.
CONCRETE CURB AND GUTTER
18-INCH INTEGRAL REQ'D.

STA. 130+96.32EB USH 10/STH 42=
STA. 10+00.00FO N. 14TH ST.
Y=306812.955
X=231600.635

STA. 133+73.98EB USH 10/STH 42=
STA. 10+00.00TH N. 13TH ST.
Y=306809.298
X=231878.274

BEGIN PROJECT 1500-37-74
STA. 131+75.00
Y=306811.918
X=231679.310

CONSTRUCTION LIMITS
STA. 9+35TH

TLE LINE
EXISTING R/W
P.L.
N. 14TH ST.
N. 13TH ST.
MENASHA AVE.
USH 10/STH 42
N00°16'47"E
N01°15'07"E
N00°34'15"E

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PLAN DETAIL	SHEET 46 E

NOTE: CONCRETE MEDIAN SLOPED NOSES ARE TYPE 1 UNLESS OTHERWISE NOTED.

CONSTRUCTION LIMITS
STA. 10+85TW

EXISTING R/W

N. 12TH ST.
N00°54'22"E

11TW

PI: 135+31.21
Y=306831.219
X=232036.255

CURB RAMP
TYPE 1 REQ'D.

CURB RAMP
TYPE 5 REQ'D.

STA. 136+51.35WB USH 10/STH 42=
STA. 10+24.00TW N. 12TH ST.
Y=306829.780
X=232156.393

CURB RAMP
TYPE 1 REQ'D.

SLOPE
INTERCEPT

BURIED GAS LINE
(APPROXIMATE LOCATION)

CAUTION

CONCRETE CURB AND GUTTER
18-INCH INTEGRAL REQ'D.

CONCRETE SIDEWALK
4-INCH REQ'D.

BURIED ELECTRIC
(APPROXIMATE LOCATION)

BURIED TELEPHONE CABLE
(APPROXIMATE LOCATION)

25'R

13'

5'

4.33'

135WB S89°14'44"E | 136WB | 137WB | S89°18'48"E | 138WB | 139WB | 140WB | 141WB

135EB S89°14'44"E | 136EB | 137EB | S89°18'48"E | 138EB | 139EB | 140EB | 141EB

USH 10/STH 42

21'

CONCRETE SIDEWALK
4-INCH REQ'D.

14'

11'

5'

CONCRETE CORRUGATED
MEDIAN 5-WIDE REQ'D.

10TW

CURB RAMP
TYPE 5 REQ'D.

4.33'

EXISTING R/W

PI: 135+31.67
Y=306807.222
X=232035.953

CURB RAMP
TYPE 1 REQ'D.

12.8'

CURB RAMP
TYPE 1 REQ'D.

STA. 136+51.74EB USH 10/STH 42=
STA. 10+00.00TW N. 12TH ST.
Y=306805.783
X=232156.013

9TW

N65°35'43"W

NW'LY 10'

STA. 8+85.25TW N. 12TH ST.=
STA. 10+00.00SMN MENASHA AVE.
Y=306691.041
X=232155.094

N. 12TH ST.
N00°27'32"E

CURB RAMP
TYPE 1 REQ'D.

17'

NW'LY

CONSTRUCTION LIMITS
STA. 8+85SMN

MENASHA AVE.
N39°50'36"W

CONSTRUCTION LIMITS
STA. 8+15TW

8TW

PI STA = 9+40.79
Y = 306665.940
X = 232210.417
DELTA = 25°45'07"
D = 28°39'33"
T = 45.70'
L = 89.86'
R = 199.92'
PC STA = 8+95.09
PT STA = 9+84.95

USH 10 EASTBOUND
ALL POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE				STATION & OFFSET TABLE				STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS	POINT	STATION	OFFSET	RADIUS	POINT	STATION	OFFSET	RADIUS
1	135+03.5	11.4' LT	2'	11	136+91.7	26.0' RT	25'	21	136+91.8	84.3' RT	25'
2	134+95.5	71.2' LT	25'	12	136+91.7	51.0' RT	25'	22	136+66.8	84.4' RT	25'
3	135+20.2	75.0' LT	25'	13	136+67.2	51.1' RT	25'	23	138+19.3	1.0' LT	10'
4	135+20.2	50.0' LT	25'	14	136+37.2	50.9' RT	25'	24	139+47.3	17.0' LT	10'
5	136+12.0	50.0' LT	25'	15	136+12.2	51.0' RT	25'	25	139+08.0	0.0'	----
6	136+12.0	75.0' LT	25'	16	136+12.2	26.0' RT	25'	26	139+48.0	5.0' LT	----
7	136+36.5	74.9' LT	25'	17	136+67.2	179.2' RT	20'	27	139+48.0	0.0'	----
8	136+67.0	75.1' LT	25'	18	136+87.2	179.1' RT	20'	28	140+95.8	17.0' LT	59'
9	136+92.0	75.0' LT	25'	19	136+99.8	163.6' RT	20'	31	135+35.1	22.9' LT	59'
10	136+92.0	50.0' LT	25'	20	136+80.9	106.8' RT	25'	32	135+33.3	0.9' LT	59'

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PLAN DETAIL	SHEET 47	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\1500_37_71_021212_PD.DWG PLOT DATE : 1/3/2019 8:46 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

NOTE: CONCRETE MEDIAN SLOPED NOSES ARE TYPE 1 UNLESS OTHERWISE NOTED.

USH 10 EASTBOUND ℄
ALL POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE				STATION & OFFSET TABLE				STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS	POINT	STATION	OFFSET	RADIUS	POINT	STATION	OFFSET	RADIUS
1	141+04.7	51.0' LT	30'	14	144+78.8	50.0' RT	25'	27	143+93.5	24.0' LT	----
2	141+04.7	81.0' LT	30'	15	145+03.8	50.1' RT	25'	28	143+93.5	19.0' LT	----
3	141+34.7	80.9' LT	30'	16	145+38.0	49.9' RT	25'	29	144+41.0	24.0' LT	----
4	141+77.0	81.1' LT	30'	17	145+63.0	50.0' RT	25'	30	144+88.1	5.0' LT	3'
5	142+07.0	81.0' LT	30'	18	145+63.0	25.0' RT	25'	31	145+61.4	19.0' LT	----
6	142+06.8	51.0' LT	30'	19	141+10.8	22.0' LT	3'	32	145+65.8	4.0' LT	2'
7	141+83.8	25.0' RT	10'	20	141+11.3	20.1' LT	3'&59'	33	145+65.3	5.9' LT	2'&59'
8	141+83.8	35.0' RT	10'	21	140+95.8	18.0' LT	59'	34	145+80.8	8.0' LT	59'
9	141+73.8	34.9' RT	10'	22	141+22.6	0.0' LT	----	35	146+40.7	2.0' LT	10'
10	141+35.7	50.3' RT	25'	23	141+88.7	24.0' LT	----	36	146+40.4	8.0' LT	10'
11	141+10.7	50.0' RT	25'	24	142+14.0	6.0' LT	2'	37	146+40.9	24.0' LT	----
12	141+10.7	25.0' RT	25'	25	142+13.5	4.0' LT	2'&74'	38	146+79.6	24.0' LT	----
13	144+78.8	25.0' RT	25'	26	142+30.8	2.0' LT	74'	39	146+40.9	19.0' LT	----

USH 10 EASTBOUND ℄

STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS
40	141+22.6	5.0' LT	----
41	141+88.7	24.0' LT	----
42	145+61.4	24.0' LT	----

CONSTRUCTION LIMITS
STA. 11+00EL

STA. 141+55.09WB USH 10/STH 42=
STA. 10+24.00EL N. 11TH ST.
Y=306823.744
X=232660.092

CURB RAMP TYPE 1 REQ'D.

CONCRETE CURB AND GUTTER 18-INCH INTEGRAL REQ'D.

SLOPE INTERCEPT

CONCRETE SIDEWALK 4-INCH REQ'D.

CURB RAMP TYPE 7B REQ'D.

BURIED TELEPHONE CABLE (APPROXIMATE LOCATION)

BURIED ELECTRIC (APPROXIMATE LOCATION)

CONCRETE CORRUGATED MEDIAN 5-WIDE REQ'D.

CONCRETE SIDEWALK 4-INCH REQ'D.

CURB RAMP TYPE 1 REQ'D. (BURIED ELECTRIC (APPROXIMATE LOCATION))

REMOVE BEAM GUARD

STA. 141+55.46EB USH 10/STH 42=
STA. 10+00.00EL N. 11TH ST.
Y=306799.747
X=232659.692

CONSTRUCTION LIMITS
STA. 9+35EL

CONCRETE SIDEWALK 4-INCH REQ'D.

CONCRETE CURB AND GUTTER 18-INCH INTEGRAL REQ'D.

CURB RAMP TYPE 1 REQ'D. (SLOPE INTERCEPT)

CURB RAMP TYPE 1 WITH PEDESTRIAN CURB REQ'D.

STA. 1145+20.99EB USH 10/STH 42=
STA. 10+00.00TN N. 10TH ST.
Y=306795.366
X=233025.201

CONSTRUCTION LIMITS
STA. 9+35TN

BP: 8+20.63

N. 11TH ST. N00°57'13"E

N. 11TH ST. N01°16'32"E

N. 10TH ST. N00°56'26"E

USH 10/STH 42 S89°18'48"E

141WB 142WB 143WB 144WB 145WB 146WB 147WB

141EB 142EB 143EB 144EB 145EB 146EB 147EB

10EL 9EL 10TN 9TN

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PLAN DETAIL	SHEET 48	E

NOTE: CONCRETE MEDIAN SLOPED
NOSES ARE TYPE 1 UNLESS OTHERWISE NOTED.

PI: 11+38.34
Y=306929.935
X=233340.703

STA. 148+33.76WB USH 10/STH 42=
STA. 10+24.00NN N. 9TH ST.
Y=306815.611
X=233338.710

STA. 151+51.56WB USH 10/STH 42=
STA. 10+24.22EG N. 8TH ST.
Y=306811.808
X=233656.009

STA. 148+34.11EB USH 10/STH 42=
STA. 10+00.00NN N. 9TH ST.
Y=306791.614
X=233338.292

STA. 151+43.38EB USH 10/STH 42=
STA. 10+00.00EG N. 8TH ST.
Y=306787.908
X=233647.546

END PROJECT 1500-37-74
STA. 152+25.00EB
Y=306786.930
X=233729.157

MATCH EXISTING COLORED AND STAMPED CONCRETE WALKWAY AT BACK OF NEW SIDEWALK. ADJUST SIDEWALK ELEVATION TO MATCH.

CAUTION

BURIED GAS LINE (APPROXIMATE LOCATION)

BURIED ELECTRIC (APPROXIMATE LOCATION)

BURIED TELEPHONE CABLE (APPROXIMATE LOCATION)

CURB RAMP TYPE 1 REQ'D.

CURB RAMP TYPE 2 REQ'D.

CURB RAMP TYPE 2 WITH PEDESTRIAN CURB REQ'D.

CONCRETE CURB AND GUTTER 18-INCH INTEGRAL REQ'D.

CONCRETE SIDEWALK 4-INCH REQ'D.

RECONSTRUCT STEPS

SLOPE INTERCEPT

CONSTRUCTION LIMITS STA. 9+00NN

CONSTRUCTION LIMITS STA. 8+50EG

BP: 8+22.48

BP: 8+38.47

USH 10 EASTBOUND &
ALL POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS
1	147+94.5	50.1' LT	25'
2	147+94.5	75.1' LT	25'
3	148+19.5	75.0' LT	25'
4	148+49.5	75.2' LT	25'
5	148+74.5	75.1' LT	25'
6	148+74.5	50.1' LT	25'
7	148+74.2	25.9' RT	25'
8	148+74.2	50.9' RT	25'
9	148+49.2	50.9' RT	25'
10	148+18.9	50.9' RT	25'
11	147+93.9	50.9' RT	25'
12	147+93.9	25.9' RT	25'

USH 10 EASTBOUND &
ALL POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS
13	150+83.7	50.1' LT	45'
14	150+83.7	95.1' LT	45'
15	151+28.7	95.3' LT	45'
16	151+71.3	84.9' LT	35'
17	152+06.3	85.1' LT	35'
18	152+06.3	50.1' LT	35'
19	152+02.4	25.9' RT	35'
20	152+02.4	60.9' RT	35'
21	151+67.4	60.9' RT	35'
22	151+29.4	35.9' RT	10'
23	151+19.4	35.9' RT	10'
24	151+19.4	25.9' RT	10'

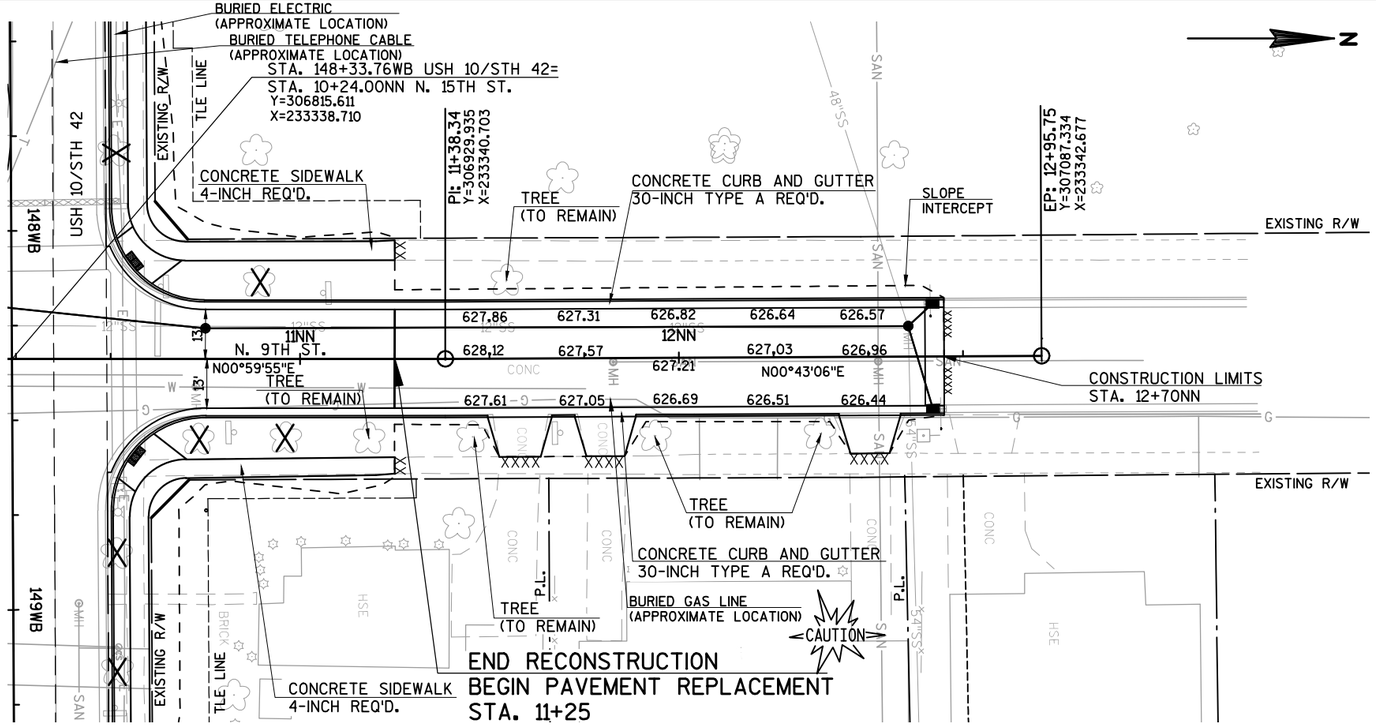
STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS
25	147+28.7	12.1' LT	10'
26	147+68.4	23.1' LT	10'
27	147+74.5	12.1' LT	59'
28	147+94.6	15.6' LT	2'&59'
29	147+93.9	17.5' LT	2'
30	147+94.6	19.4' LT	2'&59'
31	148+73.6	9.5' LT	2'&59'
32	148+74.6	6.7' LT	2'
33	148+73.9	4.8' LT	2'&59'
34	148+94.4	1.1' LT	59'
35	149+04.0	12.1' LT	10'
36	149+03.4	1.1' LT	10'

USH 10 EASTBOUND &
ALL POINTS ARE TO FACE OF CURB

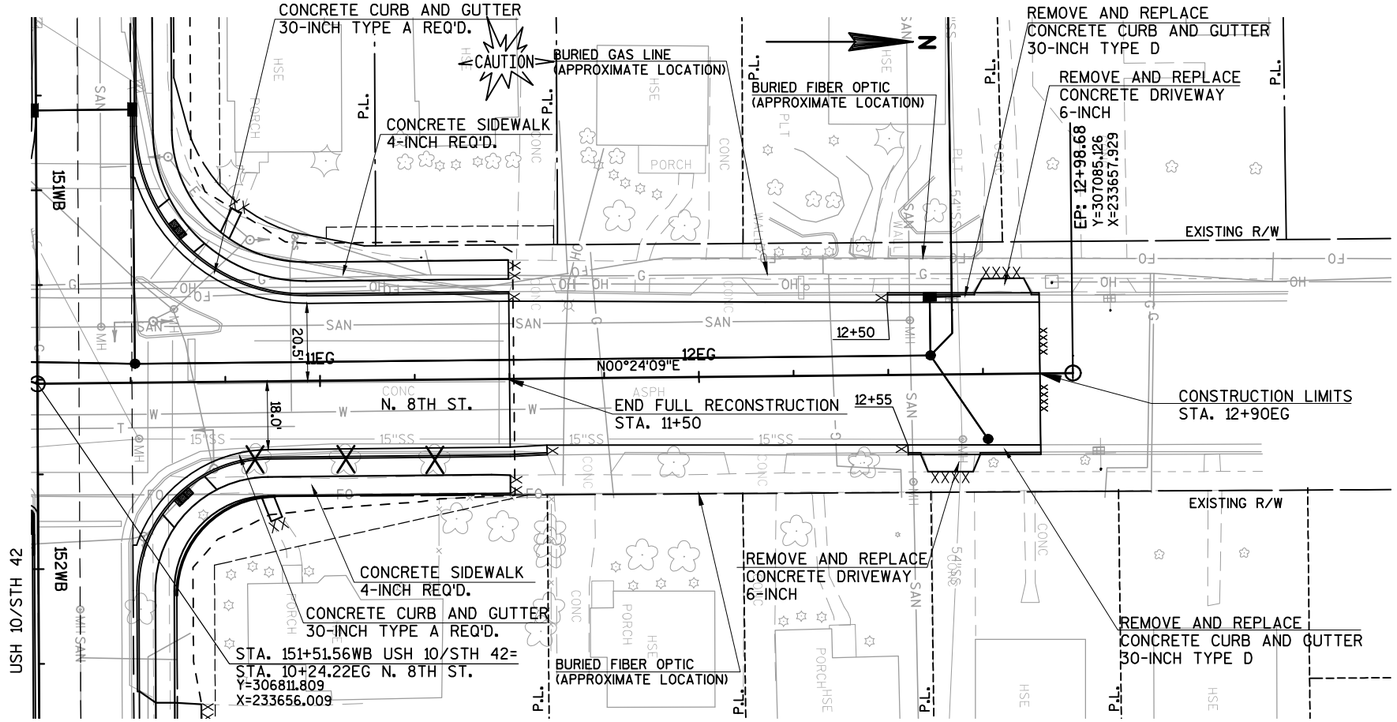
STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS
37	149+22.6	12.1' LT	10'
38	149+91.3	12.1' LT	10'
39	150+10.6	23.1' LT	10'
40	150+79.9	23.1' LT	59'
41	151+04.3	15.6' LT	2'
42	150+91.3	12.1' LT	59'
43	151+05.2	17.4' LT	2'&59'
44	151+04.8	13.6' LT	2'&59'
45	151+86.4	23.1' LT	2'
46	151+86.4	21.1' LT	2'
47	151+85.0	19.7' LT	2'&59'
48	152+28.0	1.1' LT	59'

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PLAN DETAIL	SHEET 49	E

NOTE:
SEE PLAN DETAIL
SHEET STA. 147+00-STA.
153+00 FOR 9TH STREET
INTERSECTION LAYOUT STA.
9+00-STA. 11+25.



NOTE:
SEE PLAN DETAIL
SHEET STA. 147+00-STA.
153+00 FOR 8TH STREET
INTERSECTION LAYOUT STA.
8+50-STA. 11+50.



PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PLAN DETAIL-9TH STREET AND 8TH STREET	SHEET 50	E

STH 42 EASTBOUND &
ALL POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE				STATION & OFFSET TABLE				STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS	POINT	STATION	OFFSET	RADIUS	POINT	STATION	OFFSET	RADIUS
1	155+25.4	50.0' LT	25'	13	156+58.1	26.0' RT	25'	25	152+28.0	1.0' LT	59'
2	155+25.4	75.0' LT	25'	14	156+58.1	51.0' RT	25'	26	155+02.9	1.0' LT	59'
3	155+50.4	75.0' LT	25'	15	156+33.1	50.8' RT	25'	27	155+02.7	23.0' LT	59'
4	155+75.6	55.0' LT	5'	16	156+08.3	31.0' RT	5'	28	155+34.6	13.6' LT	2'&59'
5	155+80.6	55.0' LT	5'	17	156+03.3	31.0' RT	5'	29	155+34.6	10.3' LT	2'&59'
6	155+80.6	50.0' LT	5'	18	156+03.3	26.0' RT	5'	30	155+33.6	11.9' LT	2'
7	156+03.5	50.0' LT	5'	19	155+80.3	26.0' RT	5'	31	156+80.7	23.0' LT	59'
8	156+03.5	55.0' LT	5'	20	155+80.3	31.0' RT	5'	32	156+80.6	1.0' LT	59'
9	156+08.5	55.0' LT	5'	21	155+75.3	31.0' RT	5'	33	156+49.0	13.8' LT	2'&59'
10	156+33.5	75.0' LT	25'	22	155+50.1	51.2' RT	25'	34	156+49.0	10.4' LT	2'&59'
11	156+58.5	75.0' LT	25'	23	155+25.1	51.0' RT	25'	35	156+50.1	12.1' LT	2'
12	156+58.5	50.0' LT	25'	24	155+25.1	26.0' RT	25'				

NOTE: CONCRETE MEDIAN SLOPED NOSES ARE TYPE 1 UNLESS OTHERWISE NOTED.

CONSTRUCTION LIMITS
STA. 10+85SL

STA. 155+62.51WB STH 42=
STA. 10+24.00SL LINCOLN BLVD.
Y=306806.878
X=234067.405

CONCRETE CURB AND GUTTER
18-INCH INTEGRAL REQ'D.

CONCRETE SIDEWALK
4-INCH REQ'D.

SLOPE INTERCEPT

CURB RAMP
TYPE 1 REQ'D.

CURB RAMP
TYPE 5 REQ'D.

CONSTRUCTION LIMITS
STA. 10+85NL

STA. 156+20.55WB STH 42=
STA. 10+24.00NL LINCOLN BLVD.
Y=306806.183
X=234125.406

CURB RAMP
TYPE 1 REQ'D.

TLE LINE

EXISTING R/W

P.L.

LINCOLN BLVD. (WEST)

LINCOLN BLVD. (EAST)

STH 42

BURIED ELECTRIC
(APPROXIMATE LOCATION)

S89°18'48"E

CONCRETE
SIDEWALK
4-INCH REQ'D.

CONCRETE CURB
TYPE A REQ'D.

SLOPE INTERCEPT
STA. 155+63.03EB STH 42=
STA. 10+00.00SL LINCOLN BLVD.
Y=306782.874
X=234067.164

CONSTRUCTION LIMITS
STA. 9+10SL

CURB RAMP
TYPE 1 REQ'D.

CURB RAMP
TYPE 5 REQ'D.

SIA. 156+21.05EB STH 42=
STA. 10+00.00NL LINCOLN BLVD.
Y=306782.184
X=234125.177

CONSTRUCTION LIMITS
STA. 9+10NL

N01°09'50"E

N01°10'52"E

BEGIN PROJECT 4570-12-71
STA. 152+25.00EB
Y=306786.930
X=233729.157

BP: 8+38.47

BP: 8+27.47

BP: 8+29.28

N. 8TH ST.

151WB 152WB 153WB 154WB 155WB 156WB 157WB

151EB 152EB 153EB 154EB 155EB 156EB 157EB

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PLAN DETAIL	SHEET 51	E

STH 42 EASTBOUND &
ALL POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE				STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS	POINT	STATION	OFFSET	RADIUS
1	159+46.2	50.0' LT	25'	13	159+25.5	23.0' LT	59'
2	159+46.2	75.0' LT	25'	14	159+25.8	1.0' LT	59'
3	159+71.2	75.0' LT	25'	15	159+57.5	13.6' LT	2'&59'
4	160+01.2	75.0' LT	25'	16	159+57.4	10.2' LT	2'&59'
5	160+26.2	75.0' LT	25'	17	160+45.9	23.0' LT	59'
6	160+26.2	50.0' LT	25'	18	159+56.4	11.9' LT	2'
7	160+25.9	26.0' RT	25'	19	160+46.2	1.0' LT	59'
8	160+25.9	51.0' RT	25'	20	160+14.2	13.8' LT	2'&59'
9	160+00.9	50.9' RT	25'	21	160+14.2	10.4' LT	2'&59'
10	159+70.9	51.1' RT	25'	22	160+15.3	12.1' LT	2'
11	159+45.9	51.0' RT	25'	23	162+92.3	23.0' LT	59'
12	159+45.9	26.0' RT	25'	24	162+92.3	1.0' LT	59'

EP: 11+95.75

NOTE: CONCRETE MEDIAN SLOPED
NOSES ARE TYPE 1 UNLESS OTHERWISE NOTED.

CONSTRUCTION LIMITS
STA. 11+00SX

STA. 159+85.63WB STH 42=
STA. 10+24.00SX N. 6TH ST.
Y=306801.816
X=234490.503

CURB RAMP
TYPE 1 WITH
PEDESTRIAN
CURB REQ'D.

NEW STEPS
BY OTHERS
REMOVE
EXISTING

CURB RAMP
TYPE 1 WITH
PEDESTRIAN
CURB REQ'D.

SLOPE
INTERCEPT

CONCRETE SIDEWALK
4-INCH REQ'D.

CONCRETE CURB AND GUTTER
18-INCH INTEGRAL REQ'D.

MATCH EXISTING RETAINING
WALL (DO NOT DISTURB)

PI = 159+53.25WB STH 42
Y=306802.195
X=234458.125

TLE LINE

EXISTING R/W

N. 6TH ST.
N00°46'25"E

STH 42
157WB 158WB 159WB 160WB 161WB 162WB 163WB
157EB 158EB 159EB 160EB 161EB 162EB 163EB

BURIED ELECTRIC
(APPROXIMATE LOCATION)

S89°18'48"E
S89°19'48"E

PI=159+53.74EB STH 42
Y=306778.197
X=234457.841

RELOCATE
DRIVEWAY

CURB RAMP
TYPE 1 REQ'D.

CURB RAMP
TYPE 1 REQ'D.

STA. 159+86.08EB STH 42=
STA. 10+00.00SX N. 6TH ST.
Y=306777.819
X=234490.179

CONSTRUCTION LIMITS
STA. 9+25SX

N. 6TH ST.
N00°54'02"E

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PLAN DETAIL	SHEET 52	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_021202_PD.DWG PLOT DATE : 7/19/2018 7:24 PM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

2

EP: 11+75.15

EXISTING R/W

N. 5TH ST.

N00°59'25"E

EXISTING R/W

NOTE: CONCRETE MEDIAN SLOPED NOSES ARE TYPE 1 UNLESS OTHERWISE NOTED.

P.L.

P.L.

P.L.

P.L.

N

CONSTRUCTION LIMITS
STA. 10+60FF

STA. 163+52.16WB STH 42=
STA. 10+00.00FF N. 5TH ST.
Y=306797.530
X=234857.009

CURB RAMP
TYPE 1 REQ'D.

SLOPE
INTERCEPT
EXISTING R/W

CONCRETE CURB AND GUTTER
18-INCH INTEGRAL REQ'D.

CONCRETE SIDEWALK
4-INCH REQ'D.

CURB RAMP
TYPE 1 WITH
PEDESTRIAN
CURB REQ'D.

16'

16'

5'

14'

4.33'

11'

21'

11'

14'

4.33'

5'

163WB 164WB 165WB 166WB 167WB 168WB 169WB

163EB 164EB 165EB 166EB 167EB 168EB 169EB

STH 42

S89°19'48"E

BURIED ELECTRIC
(APPROXIMATE LOCATION)

CURB RAMP
TYPE 7B REQ'D.

CURB TYPE A
REQUIRED

(TO REMAIN)

INLET (TO REMAIN)

CURB (TO REMAIN)

SLOPE
INTERCEPT

EXISTING R/W

CONCRETE SIDEWALK
4-INCH REQ'D.
CONCRETE CURB AND GUTTER
18-INCH INTEGRAL REQ'D.

BURIED GAS LINE
(APPROXIMATE LOCATION)

CAUTION

STH 42 EAS[illegible]OUND
ALL POINTS ARE T[illegible] FACE OF CURB

STATION & OFFSET TABLE				STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS	POINT	STATION	OFFSET	RADIUS
1	163+09.9	50.0' LT	25'	8	163+24.4	10.1' LT	2'&59'
2	163+09.9	75.0' LT	25'	9	163+23.4	11.8' LT	2'
3	163+34.9	74.9' LT	25'	10	164+16.0	23.0' LT	59'
4	163+70.9	75.1' LT	25'	11	164+15.6	1.0' LT	59'
5	163+95.9	75.0' LT	25'	12	163+84.4	13.9' LT	2'
6	163+95.9	50.0' LT	25'	13	163+84.4	10.5' LT	2'&59'
7	163+24.5	13.5' LT	2'&59'	14	163+85.5	12.2' LT	2'&59'

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PLAN DETAIL	SHEET	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_021203_PD.DWG PLOT DATE : 7/20/2018 5:42 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

2

N

EXISTING R/W

SLOPE INTERCEPT

CURB RAMP TYPE 7B REQ'D.

CONCRETE CURB AND GUTTER 18-INCH INTEGRAL REQ'D.

CONCRETE SIDEWALK 4-INCH REQ'D.

EXISTING R/W

5'

14'

4.67'

11'

21'

11'

14'

4.67'

5'

BURIED ELECTRIC (APPROXIMATE LOCATION)

CURB RAMP TYPE 5 REQ'D.

169WB 170WB 171WB 172WB 173WB 174WB 175WB

STH 42

169EB 170EB 171EB 172EB 173EB 174EB 175EB

CURB RAMP TYPE 5 REQ'D.

CURB RAMP TYPE 7B REQ'D.

BURIED GAS LINE (APPROXIMATE LOCATION)

CAUTION

BURIED ELECTRIC (APPROXIMATE LOCATION)

SLOPE INTERCEPT

CONCRETE SIDEWALK 4-INCH REQ'D.

CONCRETE CURB AND GUTTER 18-INCH INTEGRAL REQ'D.

EXISTING R/W

TLE LINE

R/W LINE

R/W LINE

FENCE CHAIN LINK POLYMER COATED 6-FT REQUIRED

PLE LINE

EXISTING R/W

P.L.

P.L.

WALL

HSE

CONC

ASPH

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PLAN DETAIL	SHEET 54	E

2

2

N

P.L.

P.L.

P.L.

P.L.

PLACE JOINT IN CONCRETE
PAVEMENT AT EDGE OF
BRIDGE DECK

STA. 179+00-STA. 179+50
SEE CROSS SECTIONS FOR
SPECIAL MEDIAN GRADING

CONCRETE CURB AND GUTTER
18-INCH INTEGRAL REQ'D.

SLOPE
INTERCEPT

CONCRETE SIDEWALK
4-INCH REQ'D.

EXISTING R/W

TLE LINE

EXISTING R/W

5'

14'

4.33'

11'

175WB 176WB 177WB 178WB 179WB 180WB 181WB

STH 42

BURIED ELECTRIC
(APPROXIMATE LOCATION)

175EB 176EB 177EB 178EB 179EB 180EB 181EB

11'

14'

4.33'

5'

EXISTING R/W

SLOPE
INTERCEPT

CONCRETE SIDEWALK
4-INCH REQ'D.

CONCRETE CURB AND GUTTER
18-INCH INTEGRAL REQ'D.

DO NOT DISTURB
MONUMENT

WISDOT MON.

EXISTING R/W

TLE LINE

PLE LINE

CAUTION

BURIED GAS LINE
(APPROXIMATE LOCATION)

PLACE JOINT IN CONCRETE
PAVEMENT AT EDGE OF
BRIDGE DECK

REHABILITATE STRUCTURE
B-36-900
(SEE STRUCTURE PLANS)

P.L.

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PLAN DETAIL	SHEET 55	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_021205_PD.DWG PLOT DATE : 7/27/2018 2:52 PM PLOT BY : VERVILLE, PHILLIP PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

STH 42 EASTBOUND ℄
ALL POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS
7	184+67.9	26.0' RT	25'
8	184+68.0	51.0' RT	25'
9	184+43.0	51.2' RT	25'
10	184+03.5	50.8' RT	25'
11	183+78.5	51.0' RT	25'

STATION & OFFSET TABLE			
POINT	STATION	OFFSET	RADIUS
12	183+78.5	26.0' RT	25'
13	183+63.3	23.0' LT	59'
14	183+71.8	1.0' LT	59'
15	183+99.1	10.9' LT	2'&59'
16	183+98.8	7.5' LT	2'&59'
17	183+97.9	9.3' LT	2'
18	184+83.3	23.0' LT	59'
19	184+91.8	1.0' LT	59'
20	184+56.3	16.5' LT	2'&59'
21	184+56.0	13.1' LT	2'&59'
22	184+57.2	14.7' LT	2'
23	186+75.2	42.7' RT	200'

NOTE: CONCRETE MEDIAN SLOPED
NOSES ARE TYPE 1 UNLESS OTHERWISE NOTED.

N

PI: 182+85.27WB
Y=306774.921
X=236789.985

PC: 186+38.30WB

CONCRETE CURB AND GUTTER
18-INCH TYPE A REQ'D.

SLOPE
INTERCEPT

TLE LINE

R/W LINE

CONCRETE CURB AND GUTTER
18-INCH INTEGRAL REQ'D.

CONCRETE SIDEWALK
4-INCH REQ'D.

TLE LINE
EXISTING R/W

5'
14'
4.33'
11'
21'
11'
14'
4.33'
5'

181WB S89°19'48"E 182WB 183WB 184WB 185WB S89°19'45"E 186WB 187WB

STH 42

181EB S89°19'48"E 182EB 183EB 184EB 185EB S89°19'47"E 186EB 187EB

BURIED ELECTRIC
(APPROXIMATE LOCATION)

EXISTING R/W
TLE LINE

CONCRETE SIDEWALK
4-INCH REQ'D.

CONCRETE CURB AND GUTTER
18-INCH INTEGRAL REQ'D.

PI: 182+85.76EB
Y=306750.923
X=236789.704

CURB RAMP
TYPE 4B1 REQ'D.
WITH RADIAL
DETECTABLE WARNING
FIELD

SLOPE
INTERCEPT

35.5'

ASPHALTIC SURFACE
REQ'D.

CURB RAMP
TYPE 4B1 REQ'D.
WITH RADIAL
DETECTABLE WARNING
FIELD

EXISTING R/W
TLE LINE

CONCRETE CURB AND GUTTER
18-INCH TYPE A REQ'D.

PC: 185+87.41EB

BURIED GAS LINE
(APPROXIMATE LOCATION)

CAUTION

P.L.

P.L.

P.L.

BLDG

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PLAN DETAIL	SHEET 56	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_021206_PD.DWG PLOT DATE : 7/20/2018 6:09 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

ALL CURB POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE			
POINT	Y	X	RADIUS
1	306814.9	237246.6	100'
2	306822.7	237271.5	100'
3	306824.6	237275.8	100'
4	306828.5	237287.8	100'
5	306710.5	237184.6	200'
6	306716.0	237233.8	200'
7	306903.9	237610.8	29' & 282.5'
8	306907.5	237622.4	29'
9	306893.2	237589.5	282.5'
10	306837.4	237357.7	----
11	306811.8	237369.3	----

STATION & OFFSET TABLE			
POINT	Y	X	RADIUS
12	306801.0	237374.2	----
13	306788.9	237371.6	----
14	306755.1	237364.5	----
15	306870.5	237559.7	----
16	306835.8	237562.3	----
17	306827.8	237562.9	15'
18	306828.9	237577.9	15'
19	306818.1	237567.5	15'
20	306800.9	237585.4	15'
21	306790.1	237575.0	15'
22	306796.9	237588.4	15'

N

MATCH LINE

CONSTRUCTION LIMITS
STA. 20+69.69(BN)

CONCRETE CURB AND GUTTER
18-INCH TYPE A REQ'D.

CONCRETE CURB AND GUTTER
30-INCH TYPE A REQ'D.

CONCRETE CURB AND GUTTER
30-INCH TYPE A REQ'D.

CONSTRUCTION SIDEWALK
5-INCH REQ'D.

SLOPE
INTERCEPT

CONSTRUCTION LIMITS
STA. 20+69.87(BS)

CONCRETE CURB AND GUTTER
4-INCH SLOPED
36-INCH TYPE R REQ'D.

SEE CONSTRUCTION DETAIL
FOR MEDIAN LAYOUT.

CONCRETE SIDEWALK
4-INCH REQ'D.

CURB RAMP
TYPE 7 REQ'D.

R/W LINE

CONCRETE CURB AND GUTTER
18-INCH TYPE A REQ'D.

CONCRETE SIDEWALK
4-INCH REQ'D.

CURB RAMP
TYPE 7 REQ'D.

CONSTRUCTION SIDEWALK
4-INCH REQ'D.

CONCRETE CURB AND GUTTER
30-INCH TYPE A REQ'D.

SLOPE
INTERCEPT

SEE CONSTRUCTION DETAIL
FOR MEDIAN LAYOUT.

BURIED FIBER OPTIC
(APPROXIMATE LOCATION)

CONCRETE CURB AND GUTTER
18-INCH TYPE A REQ'D.

CONCRETE CURB AND GUTTER
18-INCH TYPE A REQ'D.

CURB RAMP
TYPE 7 REQ'D.

BURIED ELECTRIC
(APPROXIMATE LOCATION)

CONCRETE CURB AND GUTTER
30-INCH TYPE A REQ'D.

CONCRETE TRUCK APRON
12-INCH COLORED WISDOT RED

EXISTING R/W
TLE LINE

BURIED FIBER OPTIC
(APPROXIMATE LOCATION)

CONCRETE SIDEWALK
4-INCH REQ'D.

CONCRETE CURB AND GUTTER
18-INCH TYPE A REQ'D.

STH 42

ALL CURB POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE			
POINT	Y	X	RADIUS
23	306789.7	237592.0	----
25	306816.1	237388.3	4'
26	306785.5	237389.5	2'
27	306840.3	237454.0	9'&45'
28	306840.9	237457.4	9'&99'
29	306831.9	237457.3	9'
30	306839.1	237489.1	9'&45'
31	306838.3	237491.3	9'&99'
32	306830.3	237487.1	15'
33	306758.1	237490.6	9'&45'

ALL CURB POINTS ARE TO FACE OF CURB

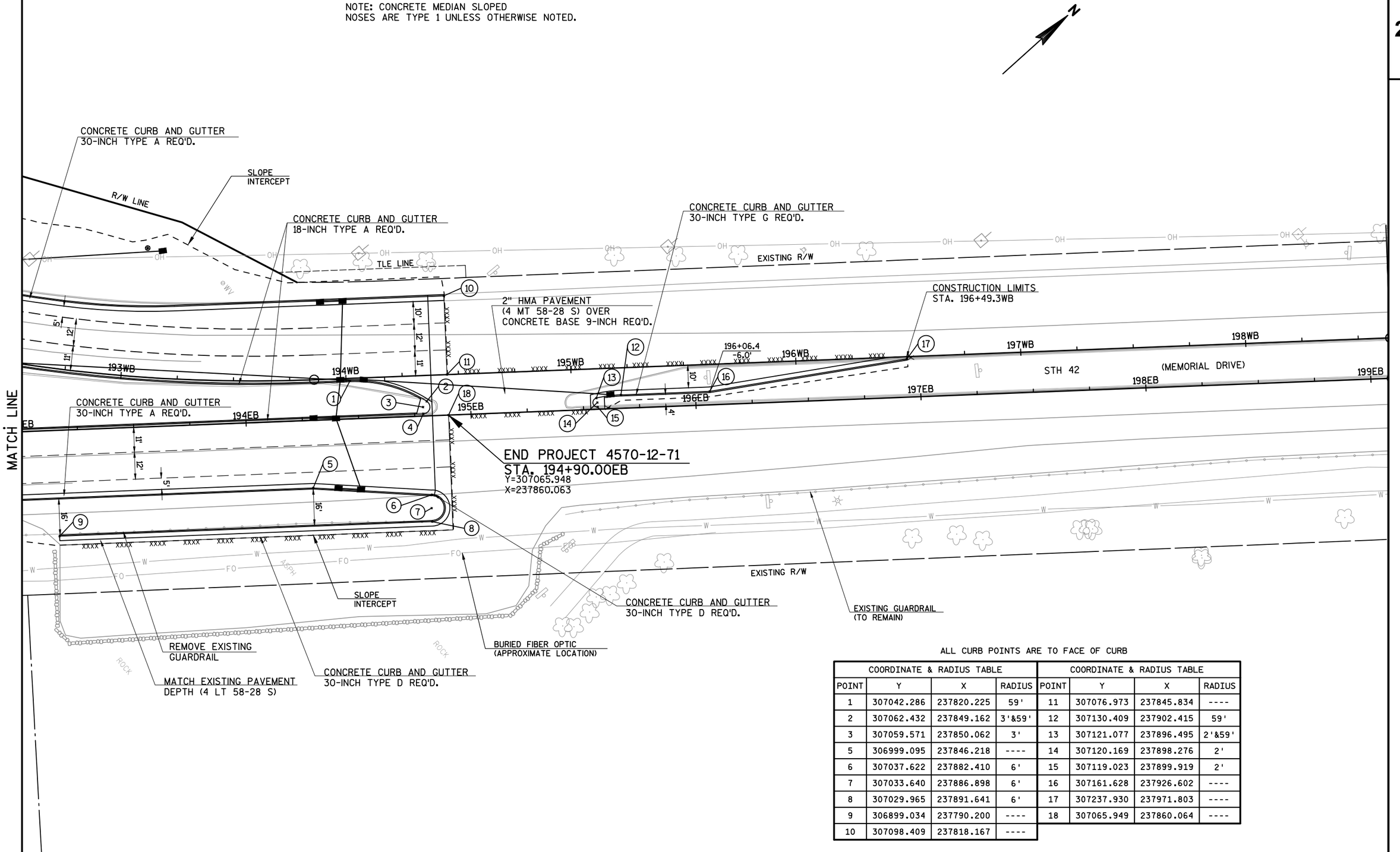
STATION & OFFSET TABLE			
POINT	Y	X	RADIUS
34	306757.3	237488.7	9'&99'
35	306766.2	237486.5	9'
36	306757.8	237451.7	9'&99'
37	306758.7	237449.2	9'&45'
38	306766.7	237453.5	9'
39	306798.4	237470.5	45'
40	306834.1	237544.3	2'
41	306775.9	237551.4	4'
42	306749.1	237288.0	----
43	306738.9	237308.2	----
44	306810.8	237276.3	----
45	306822.8	237285.7	----
46	306906.7	237636.4	----

ALL CURB POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE			
POINT	Y	X	RADIUS
80	306887.0	237445.7	2'
81	306892.2	237464.9	4'
82	306906.9	237425.9	----
83	306905.5	237446.6	----
84	306904.9	237454.5	----
85	306909.2	237461.5	----
86	306920.8	237480.1	----
87	306931.1	237448.2	3'
88	306944.3	237421.7	----
89	306949.4	237438.1	----
90	306949.8	237445.4	----
91	306956.3	237460.4	----
92	306941.5	237407.9	----
93	306963.0	237473.9	----

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PLAN DETAIL	SHEET 57	E

NOTE: CONCRETE MEDIAN SLOPED
NOSES ARE TYPE 1 UNLESS OTHERWISE NOTED.



ALL CURB POINTS ARE TO FACE OF CURB

COORDINATE & RADIUS TABLE				COORDINATE & RADIUS TABLE			
POINT	Y	X	RADIUS	POINT	Y	X	RADIUS
1	307042.286	237820.225	59'	11	307076.973	237845.834	----
2	307062.432	237849.162	3'&59'	12	307130.409	237902.415	59'
3	307059.571	237850.062	3'	13	307121.077	237896.495	2'&59'
5	306999.095	237846.218	----	14	307120.169	237898.276	2'
6	307037.622	237882.410	6'	15	307119.023	237899.919	2'
7	307033.640	237886.898	6'	16	307161.628	237926.602	----
8	307029.965	237891.641	6'	17	307237.930	237971.803	----
9	306899.034	237790.200	----	18	307065.949	237860.064	----
10	307098.409	237818.167	----				

ALL CURB POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE				STATION & OFFSET TABLE			
POINT	Y	X	RADIUS	POINT	Y	X	RADIUS
1	306705.699	237454.918	4'	12	306691.541	237552.542	----
2	306710.489	237497.576	2'	13	306691.546	237575.674	----
3	306734.549	237550.941	2'	14	306691.548	237584.793	35'
4	613236.882	474976.205	2.5'	15	306742.387	237615.996	35'
5	306578.102	237398.467	50'	16	306763.625	237605.218	----
6	306603.423	237410.153	50'	17	306748.014	237613.187	----
7	306680.999	237433.212	----	18	306760.632	237634.595	52'
8	306686.283	237454.714	----	19	306780.092	237653.601	52'
9	306691.524	237476.038	----	20	306793.441	237661.049	----
10	306691.529	237497.798	----	21	306712.690	237616.925	35'
11	306691.530	237517.852	----	22	306681.282	237651.207	----

N

MATCH LINE

EXISTING R/W

REMOVE EXISTING CONCRETE SIDEWALK

CONCRETE SIDEWALK 5-INCH

SLOPE INTERCEPTS

CONCRETE SIDEWALK 4-INCH

CURB RAMP TYPE 7 REQ'D.

REMOVE SIDEWALK RAMP AND CONCRETE SIDEWALK

BURIED FIBER OPTIC (APPROXIMATE LOCATION)

BURIED TELEPHONE (APPROXIMATE LOCATION)

EXISTING R/W

CONCRETE CURB AND GUTTER 30-INCH TYPE A REQ'D.

TLE LINE

SEE CONSTRUCTION DETAIL FOR MEDIAN LAYOUT.

CONCRETE CURB AND GUTTER 30-INCH TYPE A REQ'D.

CONCRETE MEDIAN SLOPED NOSE TYPE 1 REQ'D.

MARITIME DRIVE

CURB RAMP TYPE 7 REQ'D.

CONCRETE SIDEWALK 4-INCH

CURB RAMP TYPE 7 REQ'D.

CONCRETE SIDEWALK 5-INCH

REMOVE SIDEWALK RAMP, CONCRETE SIDEWALK AND ASPHALTIC SIDEWALK

SLOPE INTERCEPTS

3" HMA ASPHALTIC SURFACE

CONCRETE CURB AND GUTTER 30-INCH TYPE A REQ'D.

3" HMA ASPHALTIC SURFACE

3" HMA ASPHALTIC SURFACE

BURIED FIBER OPTIC (APPROXIMATE LOCATION)

CONSTRUCTION LIMITS STA. 9+25

ALL CURB POINTS ARE TO FACE OF CURB

STATION & OFFSET TABLE			
POINT	Y	X	RADIUS
23	613218.605	475001.603	----
24	613244.558	475078.535	----
25	306598.938	237503.448	2.5'
26	306690.269	237619.192	10'
27	306717.437	237633.948	10'
28	306746.826	237624.957	5'
29	306759.336	237618.609	5'
30	306726.548	237584.785	35'
31	306677.286	237640.765	5'
32	306692.033	237654.275	5'
34	306654.799	237657.435	2.5'&58'
35	306666.143	237671.017	58'

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PLAN DETAIL	SHEET 59	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_021209_PD.DWG PLOT DATE : 1/2/2019 1:35 PM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

2

EP: 11+84.75

N. 14TH ST.
N00°16'41"E

STA. 130+95.67WB USH 10/STH 42=
STA. 10+24.00FT N. 14TH ST.
Y=306836.955
X=231600.752

129WB 130WB 131WB

129EB USH 10/STH 42 130EB 131EB

STA. 130+96.32EB USH 10/STH 42=
STA. 10+00.00FT N. 14TH ST.
Y=306812.955
X=231600.635

N. 14TH ST.
N01°15'07"E

BP: 8+18.10

N

PT: x12+

625.36 624.92 624.82 625.26 625.17 624.73 624.63 624.62 624.73 MENASHA AVE. 624.64 625.08 NWNT

STA. 134+74.82WB USH 10/STH 42=
STA. 10+00.00NMN MENASHA AVE.
Y=306831.963
X=231979.872

624.58 624.58 625.02 624.68 624.64 625.11 624.70 625.37 625.20 624.76

BEGIN PROJECT 1500-37-74
STA. 131+75.00

628.86	628.60	628.35	628.10	627.84	627.57	627.28	626.96	626.61	626.26	625.91	625.56	624.85	
629.14	628.88	628.63	628.38	628.12	627.85	627.56	627.24	626.89	626.54	626.19	625.84	625.48	625.13
628.92	628.66	628.41	628.16	627.90	627.63	627.34	627.02	626.67	626.32	625.97	625.62	624.91	
	132WB				133WB				134WB			135WB	
629.01	628.73	628.46	628.18	627.91	627.63	627.33	627.03	626.70	626.37	626.04	625.71	625.38	625.05
629.23	628.95	628.68	628.40	628.13	627.85	627.55	627.25	626.92	626.59	626.26	625.93	625.60	625.27
628.95	628.67	628.40	628.12	627.85	627.57	627.27	626.97	626.64	626.31	625.98	625.65	625.32	624.99
	132EB				133EB				134EB			135EB	

4.33' 14' 11' 11' 14' 4.33' 5' 5' 21' 10' 11'

627.87 627.23 627.56 627.18 626.73 626.59 626.26 626.14 625.80 625.26 624.93

626.50 627.13 626.91 626.67 627.19 626.98 627.45

STA. 133+73.98EB USH 10/STH 42=
STA. 10+00.00TH N. 13TH ST.
Y=306809.295
X=231878.274

9TH

N. 13TH ST.
N00°31'51"E

CONSTRUCTION LIMITS
STA. 9+23

BP: 8+13.74

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PAVEMENT GRADES	SHEET 60	E

2

N

CONSTRUCTION LIMITS
STA. 10+85

N. 12TH ST.
N00°54'22"E

STA. 136+51.31WB USH 10/STH 42=
STA. 10+24.00TW N. 12TH ST.
Y=306829.777
X=232156.350

PI: 135+31.21
Y=306831.219
X=232036.255

11TW

622.79 622.85 622.70

622.82 622.91 622.76 622.87

5' 4.33' 14' 11' 21' 11' 4.33' 14' 5'

624.85 624.50 624.78 624.15 623.81 623.53 623.28 623.06 623.08 622.90 622.72 622.55 622.37 622.19 622.01 621.83 621.65 621.47 621.29 621.11 620.94 620.76 620.58 620.40 620.22 620.08 620.03

625.13 624.43 624.09 623.81 623.56 623.87 623.36 623.18 623.00 622.83 622.65 622.47 622.29 622.11 621.93 621.75 621.57 621.39 621.21 621.03 620.85 620.67 620.49 620.36 620.30

135WB 624.91 624.56 624.21 623.87 136WB 623.59 623.14 623.34 137WB 622.96 622.78 622.61 622.43 622.25 622.07 138WB 621.89 621.71 621.53 621.34 621.16 620.98 620.80 139WB 620.62 140WB 620.44 620.26 620.13 620.07 141WB

S89°14'44"E

USH 10/STH 42

625.05 624.72 624.39 624.08 623.78 623.51 623.26 623.02 622.80 622.61 622.43 622.25 622.08 621.90 621.73 621.55 621.37 621.20 621.02 620.86 620.69 620.51 620.34 620.16 620.03 619.98

S89°14'44"E S89°18'48"E

625.27 624.94 624.61 624.30 624.02 624.00 623.73 623.48 623.20 623.24 623.02 622.83 622.65 622.47 622.30 622.12 621.95 621.77 621.59 621.41 621.24 621.06 620.89 620.71 620.54 620.40 620.35

621.48 621.28 621.07 620.98 620.80 620.62 620.45 620.27 620.14 620.09

624.99 624.66 624.33 623.72 623.45 623.22 622.96 622.74 622.55 622.37 622.19 622.02 621.84 621.67 621.49 621.30 621.12 620.95 620.77 620.59 620.42 620.24 620.11 620.06

622.84

622.78 623.04 622.77

PI: 135+31.67
Y=306807.222
X=232035.967

622.89 623.15 623.00 622.89

STA. 8+85.25TW N. 12TH ST.=
STA. 10+00.00SMN MENASHA AVE.
Y=306691.041
X=232155.094

623.24 9TW 623.49 623.04 623.72

623.11 623.43 623.77 623.77

N65°35'43"W

623.62 623.87 623.44 N. 12TH ST.

STA. 136+51.79WB USH 10/STH 42=
STA. 10+00.00TW N. 12TH ST.
Y=306805.778
X=232156.060

MENASHA AVE.

624.10

624.00 624.26 624.05 N00°27'32"E 624.36

623.68 623.76 623.84 NWSS 624.42 623.88 624.63

624.38 624.73 624.64 623.95 N89°50'38"W 624.08

CONSTRUCTION LIMITS
STA. 8+15

624.79 624.39

CONSTRUCTION LIMITS
STA. 8+85

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PAVEMENT GRADES	SHEET 61	E

2

N

N00°57'13"E
N. 11TH ST.

CONSTRUCTION LIMITS
STA. 11+27

STA. 141+55.79EB USH 10/STH 42=
STA. 10+24.00EL N. 11TH ST.
Y=306823.744
X=232660.092

11EL

141WB 142WB 143WB 144WB 145WB 146WB 147WB

141EB 142EB 143EB 144EB 145EB 146EB 147EB

USH 10/STH 42

S89°18'48"E

10TN

4.33'
14'
11'
5'

STA. 141+55.46WB USH 10/STH 42=
STA. 10+00.00EL N. 11TH ST.
Y=306799.747
X=232659.692

CONSTRUCTION LIMITS
STA. 9+35

9EL

N01°16'32"E
N. 11TH ST.

P.L.

STA. 1145+20.99EB USH 10/STH 42=
STA. 10+00.00TN N. 10TH ST.
Y=306795.366
X=233025.201

CONSTRUCTION LIMITS
STA. 9+35

9TN

N00°56'26"E
N. 10TH ST.

BP: 8+20.63

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PAVEMENT GRADES	SHEET 62	E

2

END RECONSTRUCTION
BEGIN PAVEMENT REPLACEMENT
STA. 11+25
Y=306916.595
X=233340.471

STA. 148+33.761WB USH 10/STH 42=
STA. 10+24.00NN N. 9TH ST.
Y=306815.611
X=233338.710

PI: 11+38.34
Y=306929.935
X=233340.703

STA. 128+14.41WB USH 10/STH 42=
STA. 10+24.22EG N. 8TH ST.
Y=306811.808
X=233656.009

N. 9TH ST.

N. 8TH ST.

N

147WB 148WB 149WB 150WB 151WB 152WB 153WB

147EB 148EB 149EB 150EB 151EB 152EB 153EB

USH 10/STH 42

S89°18'48"E

N. 9TH ST.

N00°45'50"E

BP: 8+22.48

STA. 148+34.11EB USH 10/STH 42=
STA. 10+00.00NN N. 9TH ST.
Y=306791.614
X=233338.292

CONSTRUCTION LIMITS
STA. 9+00

STA. 128+14.89EB USH 10/STH 42=
STA. 10+00.00EG N. 8TH ST.
Y=306787.849
X=233652.489

N. 8TH ST.

N00°42'01"E

BP: 8+38.47

CONSTRUCTION LIMITS
STA. 8+50

END PROJECT 1500-37-74
STA. 152+25.00

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PAVEMENT GRADES	SHEET 63	E

2

12EG

N. 8TH ST.

11EG

CONSTRUCTION LIMITS
STA. 10+85

STA. 155+62.51WB STH 42=
STA. 10+24.00SL LINCOLN BLVD.
Y=306806.877
X=234067.451

12SL

11SL

LINCOLN BLVD. (WEST)

12NL

11NL

LINCOLN BLVD. (EAST)

CONSTRUCTION LIMITS
STA. 10+85

STA. 156+20.55WB STH 42=
STA. 10+24.00NL LINCOLN BLVD.
Y=306806.183
X=234125.406

N

5'

14'

4.33'

11'

2'

620.95 619.93 618.79 617.63 616.47 615.31 614.16 613.00 611.84 610.73 609.75 608.91 608.20 607.63 607.20 606.86 606.52 606.18 605.85 605.51

621.22 620.20 619.06 617.91 616.75 615.59 614.44 613.28 612.12 611.01 610.03 609.19 608.48 607.91 607.48 607.14 606.80 606.46 606.13 605.79

621.01 619.97 618.83 617.69 616.53 615.37 614.22 613.06 611.90 610.79 609.81 608.97 608.26 607.69 607.26 606.92 606.58 606.24 605.91 605.57

151WB 152WB 153WB 154WB 155WB 156WB 157WB

151EB 152EB 153EB 154EB 155EB 156EB 157EB

STH 42

S89°18'48"E

621.68 620.79 619.77 618.63 617.41 616.19 614.96 613.74 612.52 611.35 610.33 609.46 608.75 608.19 607.75 607.33 607.13 606.49 606.07 605.65

621.90 621.00 619.98 618.85 617.63 616.41 615.18 613.96 612.74 611.57 610.55 609.68 608.97 608.41 607.97 607.55 607.13 606.71 606.29 605.87

621.61 620.71 619.69 618.57 617.35 616.13 614.90 613.68 612.46 611.29 610.27 609.40 608.69 608.13 607.69 607.27 606.85 606.43 606.01 605.59

10EG

9EG

N. 8TH ST.

BEGIN PROJECT 4570-12-71
STA. 152+25.00

BP: 8+38.47

607.34 607.34 607.81 607.75 607.72 607.54 607.50 607.26 607.51 607.25 607.27 606.75 607.45 607.25 607.07 606.30

STA. 155+63.03EB STH 42=
STA. 10+00.00SL LINCOLN BLVD.
Y=306782.879
X=234067.164

608.23 608.00 607.94 607.75 607.11 608.02 608.24 608.60 608.81 608.76 609.11 607.55 607.60 607.51 608.62 608.55 608.29 609.05

608.90 609.17 608.93 608.61

CONSTRUCTION LIMITS
STA. 9+35

9SL

9NL

STA. 156+21.05EB STH 42=
STA. 10+00.00NL LINCOLN BLVD.
Y=306782.184
X=234125.177

LINCOLN BLVD. (WEST)

N01°09'50"E

CONSTRUCTION LIMITS
STA. 9+35

LINCOLN BLVD. (EAST)

N01°10'52"E

606.92 606.41 606.91

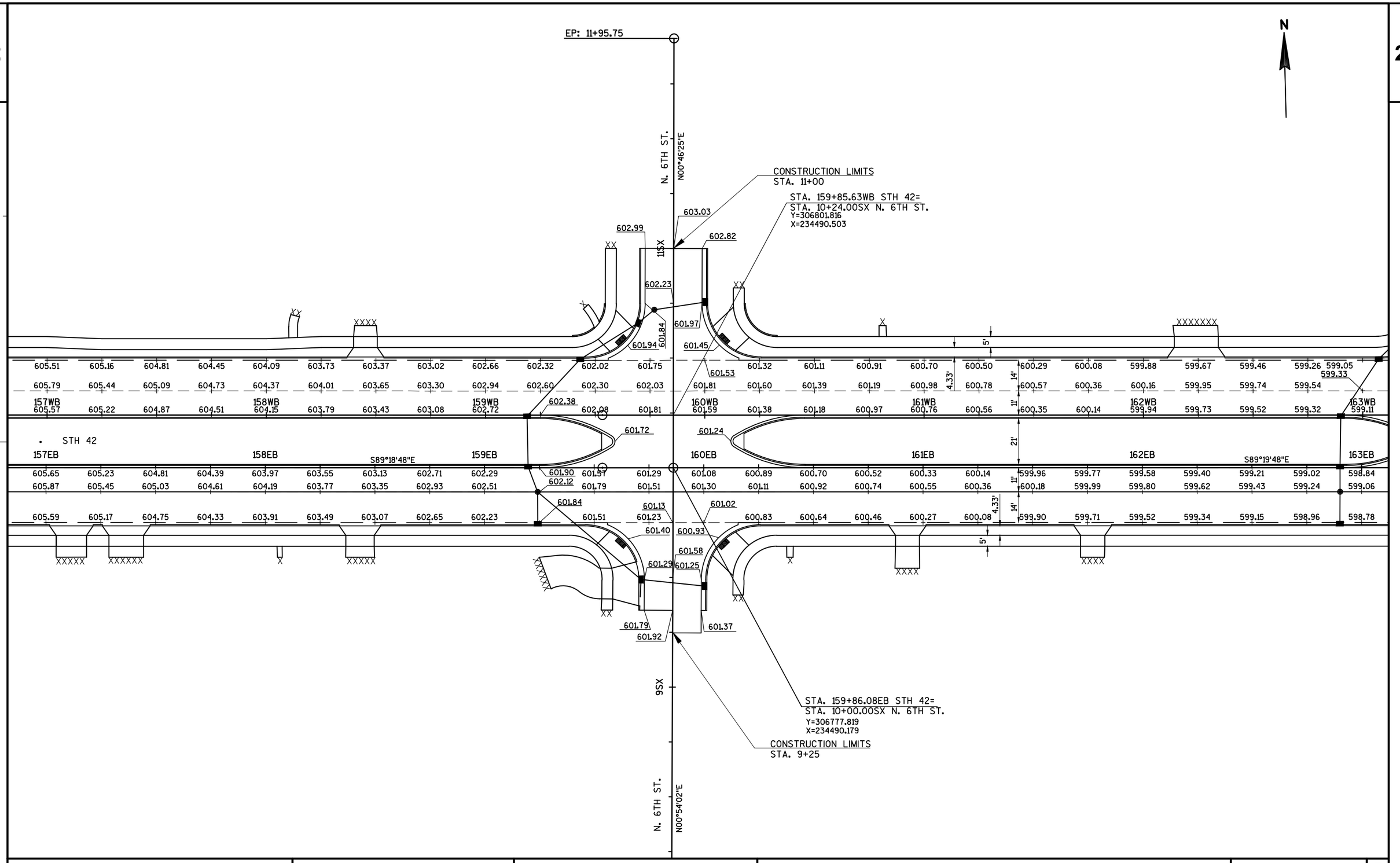
BP: 8+27.47

BP: 8+29.28

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT GRADES	SHEET	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_021801_GR.DWG PLOT DATE : 8/14/2017 11:18 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1" = 40'_XREF

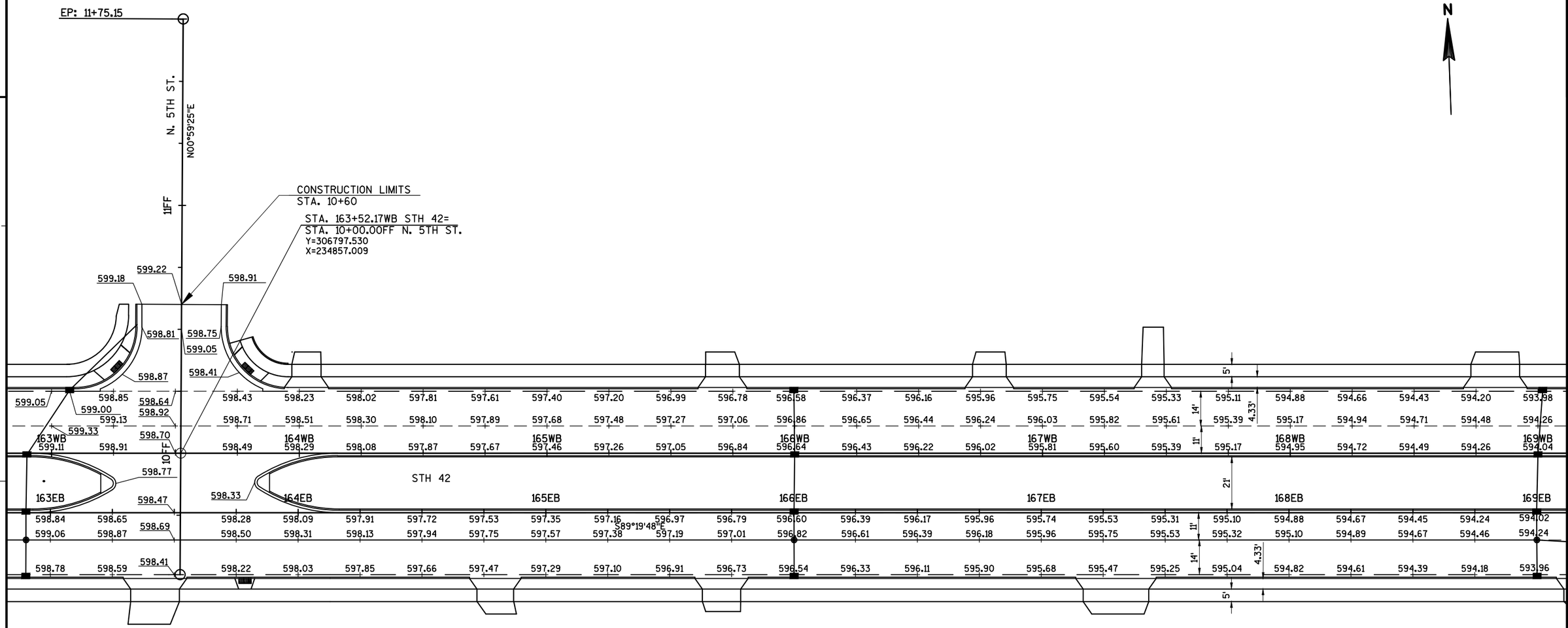
WISDOT/CADDS SHEET 42



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT GRADES	SHEET	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_021802_GR.DWG PLOT DATE : 8/14/2017 11:21 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT GRADES	SHEET	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_021803_GR.DWG PLOT DATE : 8/14/2017 11:23 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

2

2

N

5'

4.33'

14'

11'

593.98 593.75 593.52 593.29 593.07 592.84 592.61 592.39 592.16 591.93 591.70 591.48 591.25 591.02 590.79 590.57 590.34 590.08 589.82 589.56 589.30 589.05 588.79 588.53 588.27

594.26 594.03 593.80 593.57 593.35 593.12 592.89 592.67 592.44 592.21 591.98 591.76 591.53 591.30 591.07 590.85 590.62 590.36 590.10 589.84 589.59 589.33 589.07 588.81 588.55

169WB 170WB 171WB 172WB 173WB 174WB 175WB

594.04 593.81 593.58 593.35 593.13 592.90 592.67 592.45 592.22 591.99 591.76 591.54 591.31 591.08 590.85 590.63 590.40 590.14 589.88 589.62 589.37 589.11 588.85 588.59 588.33

S89°19'48"E

STH 42

2.1'

169EB 170EB 171EB 172EB 173EB 174EB 175EB

S89°19'48"E

594.02 593.81 593.59 593.38 593.16 592.95 592.73 592.52 592.30 592.09 591.87 591.66 591.44 591.23 591.01 590.78 590.56 590.33 590.10 589.88 589.65 589.42 589.20 588.97 588.75

594.24 594.03 593.81 593.60 593.38 593.17 592.95 592.74 592.52 592.31 592.09 591.88 591.66 591.45 591.23 591.00 590.78 590.55 590.32 590.10 589.87 589.64 589.42 589.19 588.97

592.24 592.03

593.96 593.75 593.53 593.32 593.10 592.89 592.67 592.46 591.81 591.60 591.38 591.17 590.95 590.72 590.50 590.27 590.04 589.82 589.59 589.36 589.14 588.91 588.69

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT GRADES	SHEET	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_021804_GR.DWG PLOT DATE : 8/14/2017 11:25 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

N

5'

588.27 588.01 587.76 587.53 587.33 587.15 587.00 586.87 586.76 586.68 586.62 586.59 586.58 586.59 586.63 586.70 586.78 586.90 587.02 587.15 587.28 587.41 587.54 587.65 587.77

14'

4.33'

588.55 588.29 588.04 587.81 587.61 587.43 587.28 587.15 587.04 586.96 586.90 586.87 586.86 586.87 586.91 586.98 587.06 587.18 587.30 587.43 587.56 587.69 587.82 587.93 588.05

11'

175WB 176WB 177WB 178WB 179WB 180WB 181WB

588.33 588.07 587.82 587.59 587.39 587.21 587.06 586.93 586.82 586.74 586.68 586.65 586.64 586.65 586.69 586.76 586.84 586.96 587.08 587.21 587.34 587.47 587.60 587.71 587.83

STH 42

21'

175EB 176EB 177EB 178EB 179EB 180EB 181EB

588.75 588.52 588.29 588.07 587.84 587.61 587.39 587.16 586.94 586.75 586.62 586.54 586.53 586.56 586.66 586.77 586.88 586.99 587.11 587.22 587.33 587.44 587.56 587.67 587.80

11'

588.97 588.74 588.51 588.29 588.06 587.83 587.61 587.38 587.16 586.97 586.84 586.76 586.78 586.88 586.99 587.10 587.21 587.33 587.44 587.55 587.66 587.78 587.89 588.02

14'

4.33'

586.75

586.47

587.16

588.69 588.46 588.23 588.01 587.78 587.55 587.33 587.10 586.88 586.69 586.56 586.48 586.50 586.60 586.71 586.82 586.93 587.05 587.27 587.38 587.50 587.61 587.74

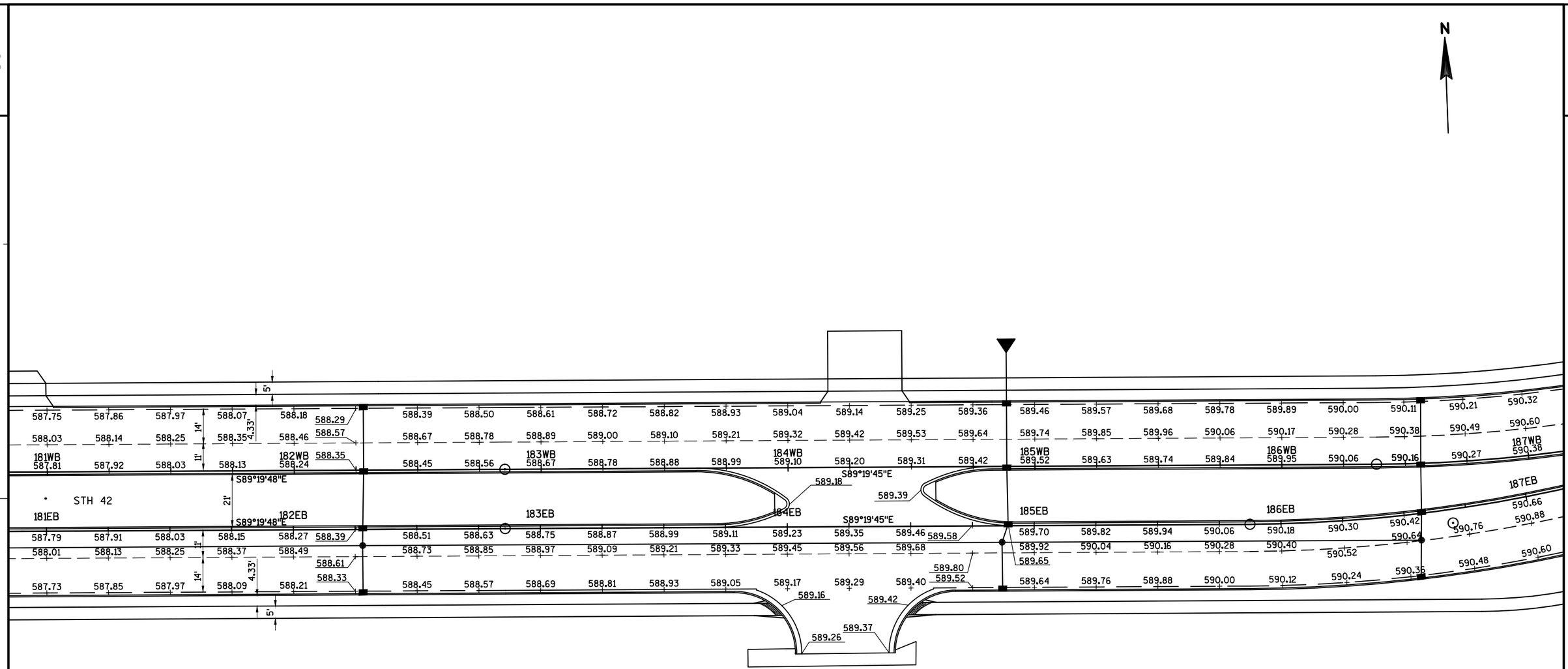
5'

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT GRADES	SHEET	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_021805_GR.DWG PLOT DATE : 8/14/2017 11:27 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT GRADES	SHEET	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_021806_GR.DWG PLOT DATE : 8/14/2017 11:30 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1" = 40'_XREF

2

N

BAYSHORE DRIVE

MATCH LINE

MEMORIAL DRIVE

MARITIME DRIVE

MATCH LINE

STH 42

3RCC

2RCC

1RCC

187WB

187EB

188WB

188EB

189WB

191WB

192WB

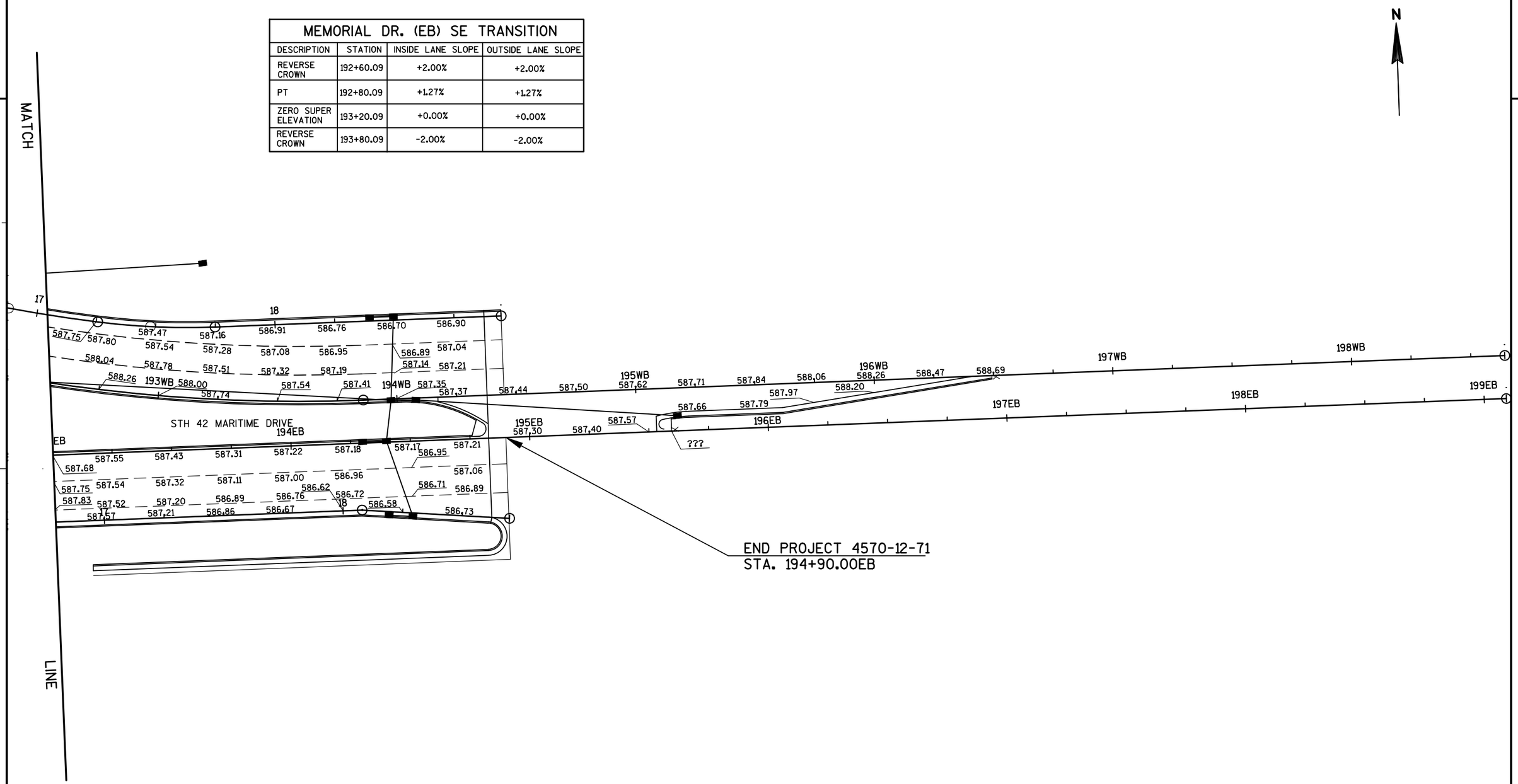
192EB

191EB

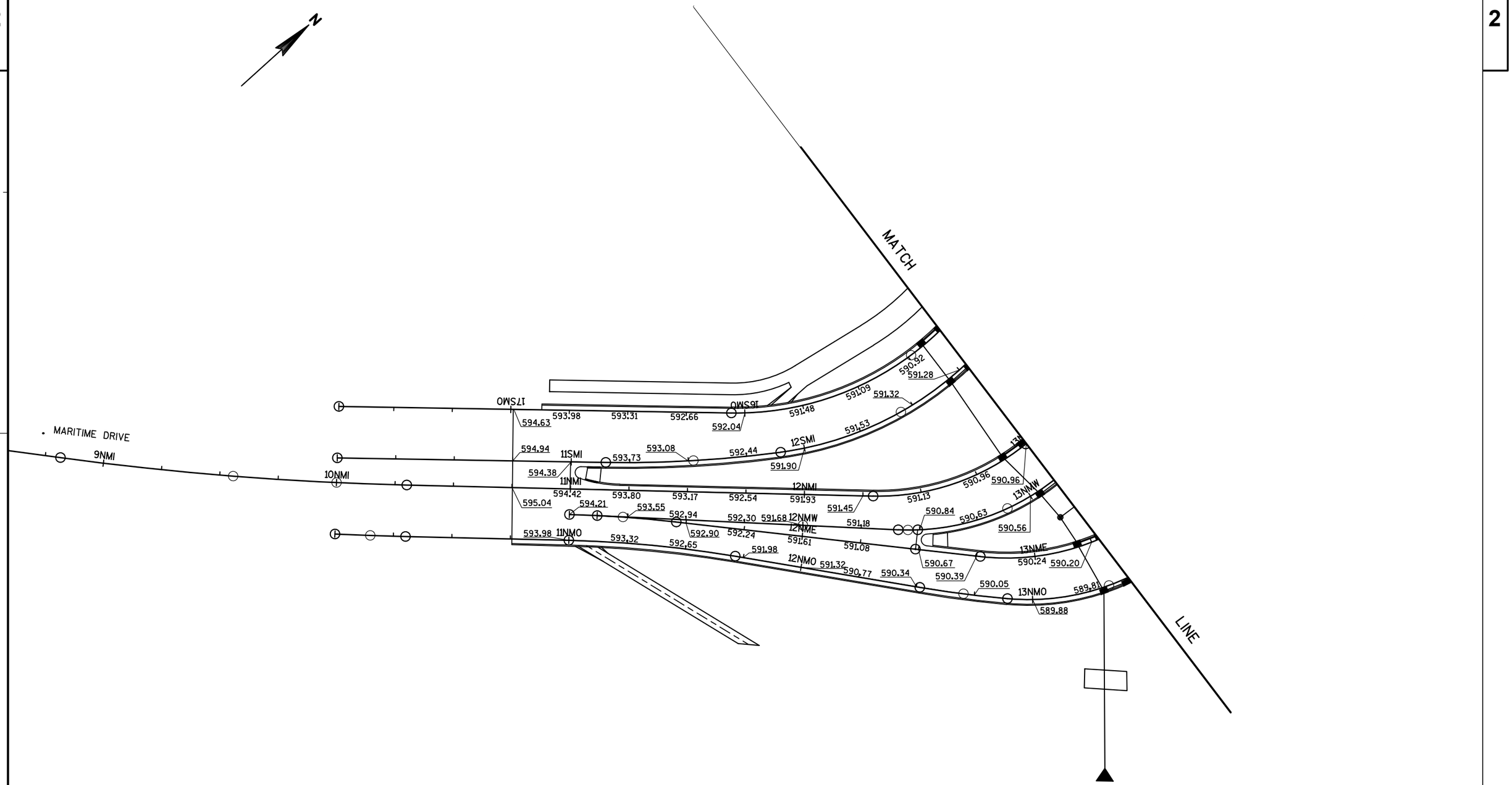
MEMORIAL DR. (EB) SE TRANSITION			
DESCRIPTION	STATION	INSIDE LANE SLOPE	OUTSIDE LANE SLOPE
REVERSE CROWN	192+60.09	+2.00%	+2.00%
PT	192+80.09	+1.27%	+1.27%
ZERO SUPER ELEVATION	193+20.09	+0.00%	+0.00%
REVERSE CROWN	193+80.09	-2.00%	-2.00%

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT GRADES	SHEET 70	E

MEMORIAL DR. (EB) SE TRANSITION			
DESCRIPTION	STATION	INSIDE LANE SLOPE	OUTSIDE LANE SLOPE
REVERSE CROWN	192+60.09	+2.00%	+2.00%
PT	192+80.09	+1.27%	+1.27%
ZERO SUPER ELEVATION	193+20.09	+0.00%	+0.00%
REVERSE CROWN	193+80.09	-2.00%	-2.00%



2



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT GRADES	SHEET	E

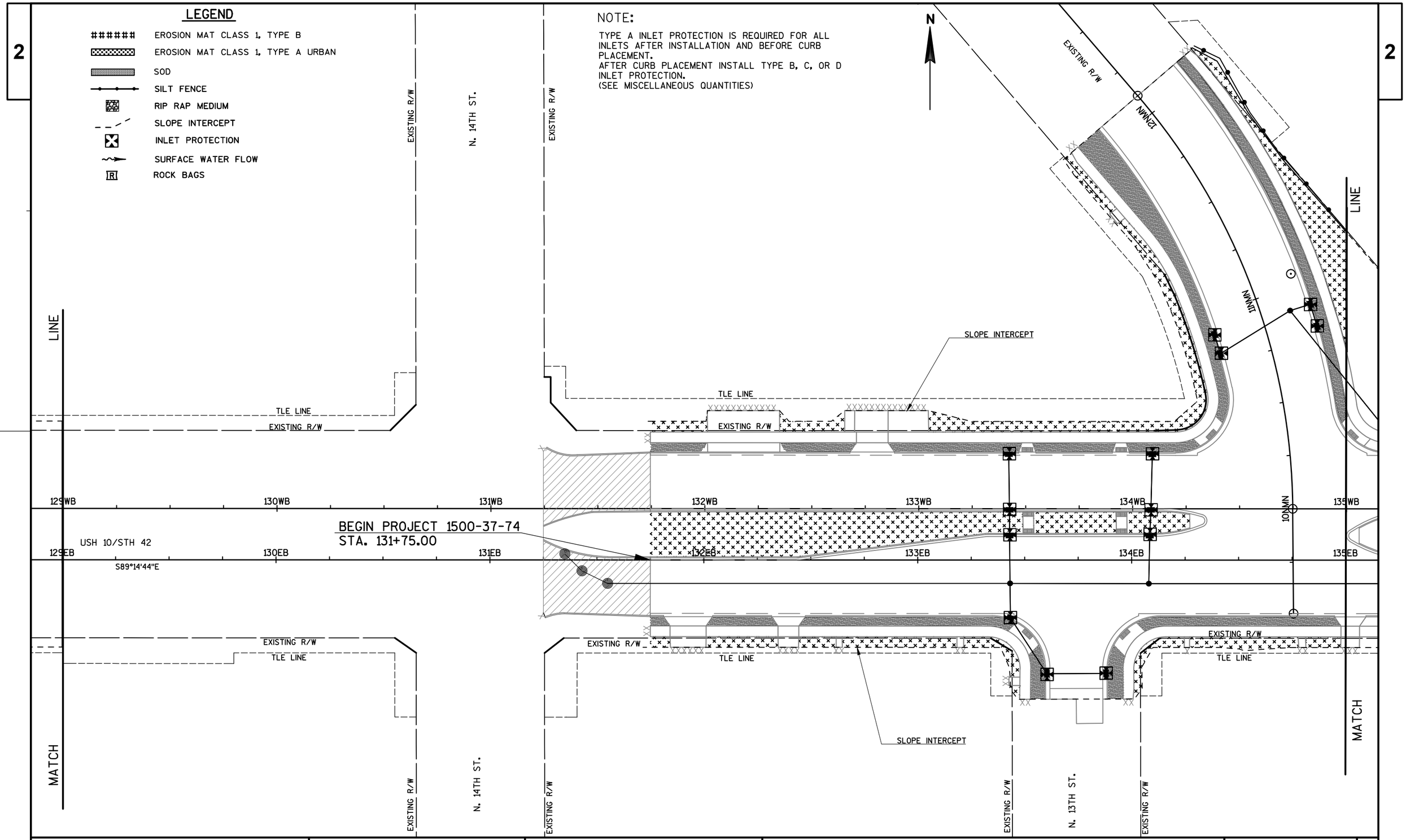
FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_021809_GR.DWG PLOT DATE : 8/14/2017 11:36 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

LEGEND

- ###### EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)



PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	EROSION CONTROL PLAN	SHEET 73	E

2

LEGEND

- ###### EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- R ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

N

LINE

EXISTING R/W

N. 12TH ST.

11TW

SLOPE INTERCEPT

135WB 136WB 137WB 138WB 139WB 140WB 141WB

135EB 136EB 137EB 139EB 140EB 141EB

S89°14'44"E

USH 10/STH 42

10TW

S89°18'48"E

MATCH

9TW

8TW

NWS01

NWS6

MENASHA AVE.

IP

PROJECT NO:1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	EROSION CONTROL PLAN	SHEET 74	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\1500_37_71_022012_EC.DWG PLOT DATE : 1/2/2019 1:53 PM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

- ###### EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- [R] ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

N

2

EXISTING R/W
N. 11TH ST.
EXISTING R/W
LINE
SLOPE INTERCEPT
TLE LINE
EXISTING R/W
LINE
141WB
142WB
143WB
144WB
145WB
146WB
147WB
141EB
142EB
USH 10/STH 42
S89°18'48"E
143EB
144EB
145EB
146EB
147EB
EXISTING R/W
IP
EXISTING R/W
TLE LINE
TLE LINE
MATCH
SLOPE INTERCEPT
MATCH
EXISTING R/W
N. 11TH ST.
EXISTING R/W
EXISTING R/W
N. 10TH ST.
EXISTING R/W

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	EROSION CONTROL PLAN	SHEET 75	E

LEGEND

- EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- ROCK BAGS

NOTE:
TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

N

LINE

EXISTING R/W

N. 9TH ST.

EXISTING R/W

EXISTING R/W

N. 8TH ST.

EXISTING R/W

TLE LINE

EXISTING R/W

SLOPE INTERCEPT

TLE LINE

EXISTING R/W

TLE LINE

EXISTING R/W

147WB 148WB 149WB 150WB 151WB 152WB 153WB

USH 10/STH 42

147EB 148EB 149EB 150EB 151EB 152EB 153EB

S89°18'48"E

MATCH

EXISTING R/W

TLE LINE

EXISTING R/W

TLE LINE

SLOPE INTERCEPT

EXISTING R/W

TLE LINE

END PROJECT 1500-37-74
STA. 152+25.00

EXISTING R/W

N. 9TH ST.

EXISTING R/W

EXISTING R/W

N. 8TH ST.

EXISTING R/W

2

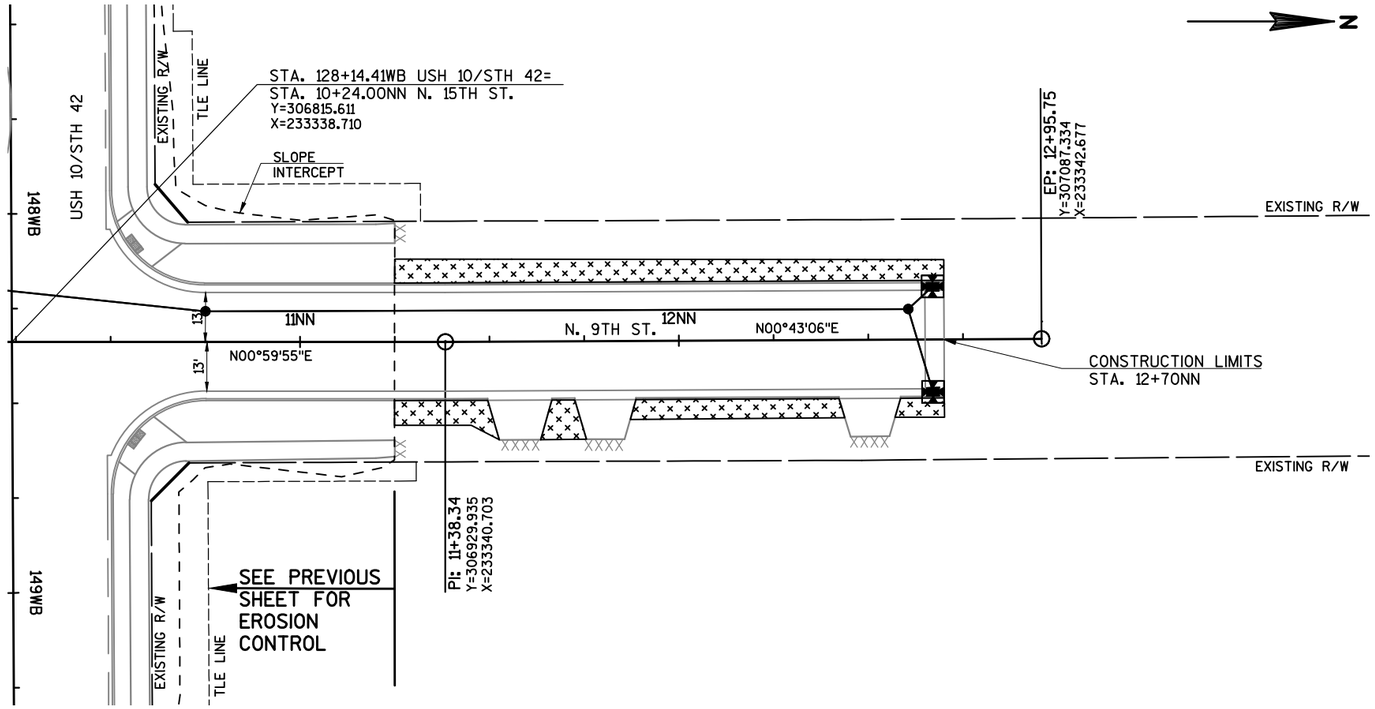
PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	EROSION CONTROL PLAN	SHEET	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\1500_37_71_022014_EC.DWG PLOT DATE : 1/2/2019 2:02 PM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

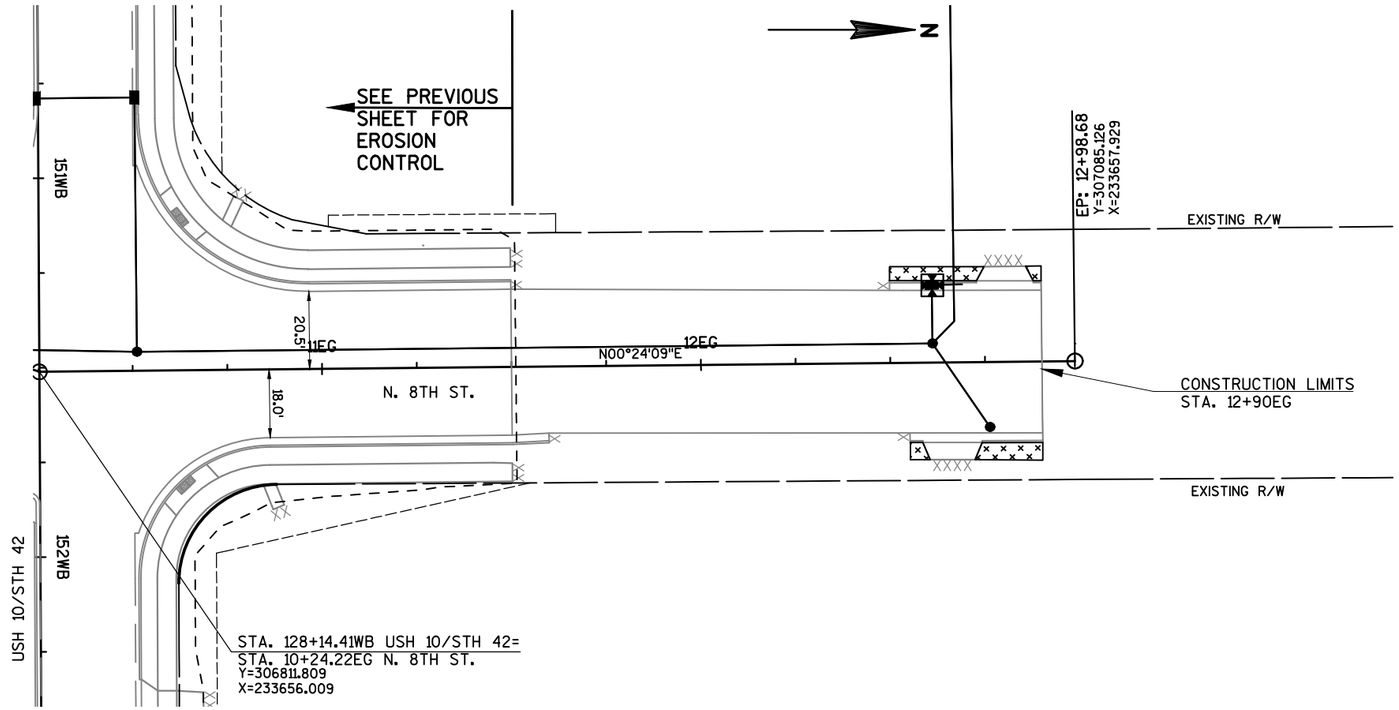
LEGEND

- EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- ROCK BAGS



NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)



PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	EROSION CONTROL-9TH STREET AND 8TH STREET	SHEET 77	E

2

LEGEND

- ###### EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- [R] ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

N

EXISTING R/W
N. 16TH ST.
EXISTING R/W
EXISTING R/W
LINCOLN BLVD. (WEST)
LINCOLN BLVD. (EAST)
EXISTING R/W
MATCH LINE

SLOPE INTERCEPT
TLE LINE
EXISTING R/W
TLE LINE
EXISTING R/W

151WB 152WB 153WB 154WB 155WB 156WB 157WB
STH 42
151EB 152EB 153EB 154EB 155EB 156EB 157EB
S89°18'48"E

EXISTING R/W
TLE LINE
SLOPE INTERCEPT
EXISTING R/W
TLE LINE

BEGIN PROJECT 4570-12-71
STA. 152+25.00

N. 16TH ST.
EXISTING R/W
EXISTING R/W
EXISTING R/W
LINCOLN BLVD. (WEST)
LINCOLN BLVD. (EAST)
EXISTING R/W
MATCH LINE

2

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	EROSION CONTROL PLAN	SHEET	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_022001 EC.DWG
PLOT DATE : 1/2/2019 2:11 PM
PLOT BY : SOUFAL, KEVIN
PLOT NAME :
PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 42

LEGEND

- EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

N

2

2

EXISTING R/W

N. 6TH ST.

EXISTING R/W

LINE

TLE LINE

EXISTING R/W

SLOPE INTERCEPT

EXISTING R/W

LINE

157WB STH 42 158WB 159WB 160WB 161WB 162WB 163WB

157EB 158EB 159EB 160EB 161EB 162EB 163EB

S89°18'48"E

S89°19'48"E

MATCH

EXISTING R/W

TLE LINE

EXISTING R/W

SLOPE INTERCEPT

MATCH

EXISTING R/W

N. 6TH ST.

EXISTING R/W

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	EROSION CONTROL PLAN	SHEET 79	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_022002 EC.DWG PLOT DATE : 1/2/2019 2:13 PM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

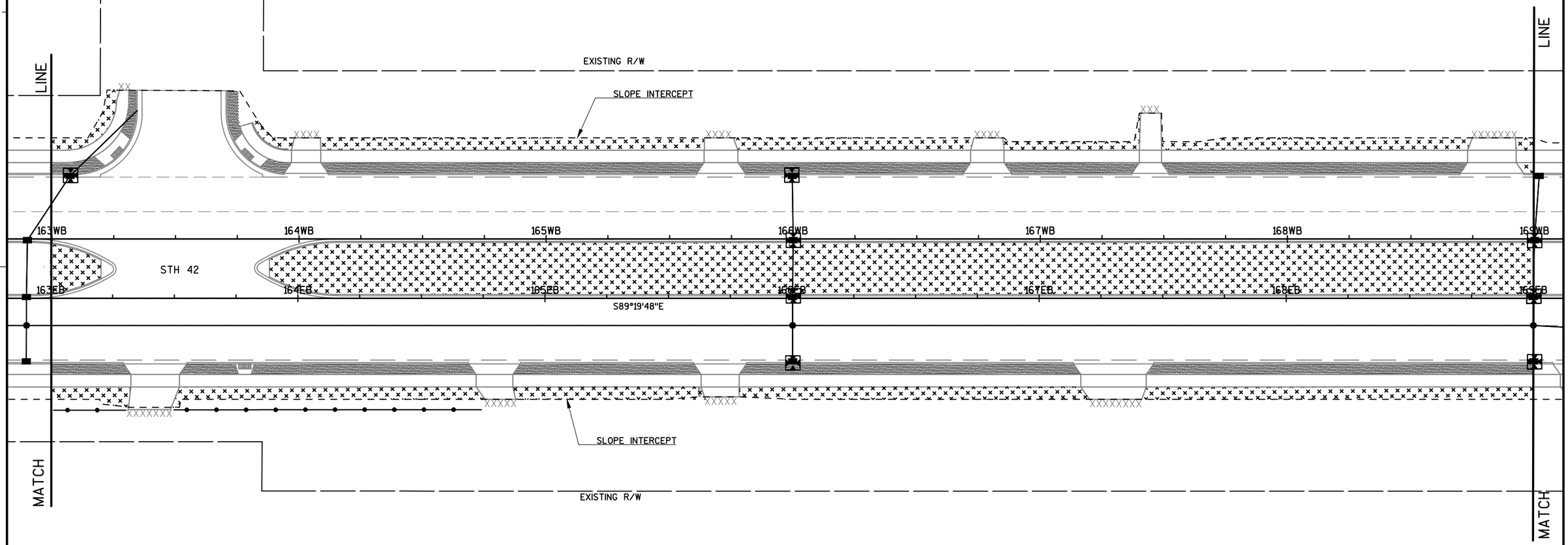
LEGEND

- ###### EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- [R] ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

N



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	EROSION CONTROL PLAN	SHEET 80	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_022003 EC.DWG PLOT DATE : 1/2/2019 2:17 PM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

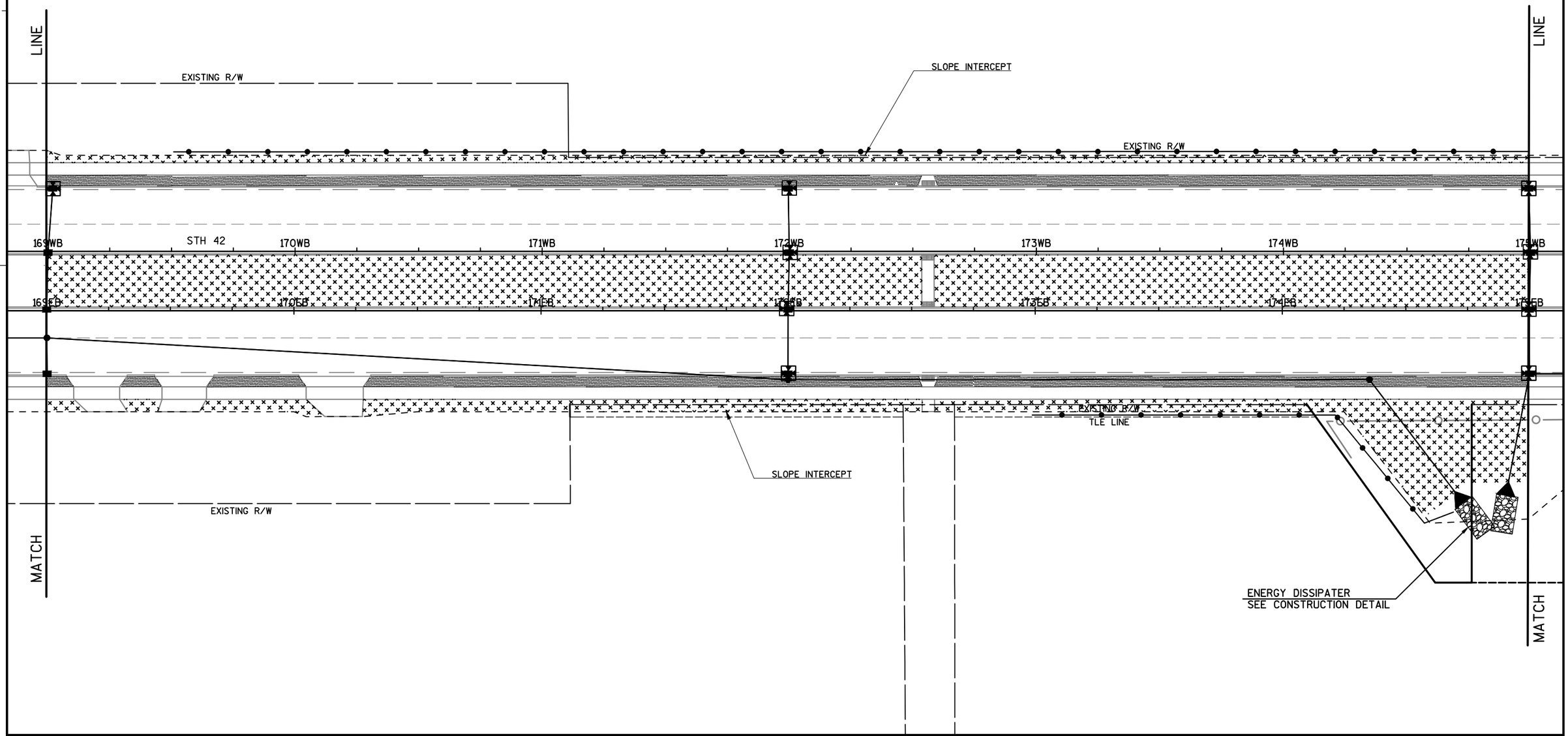
LEGEND

- EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

N



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	EROSION CONTROL PLAN	SHEET 81	E

2

LEGEND

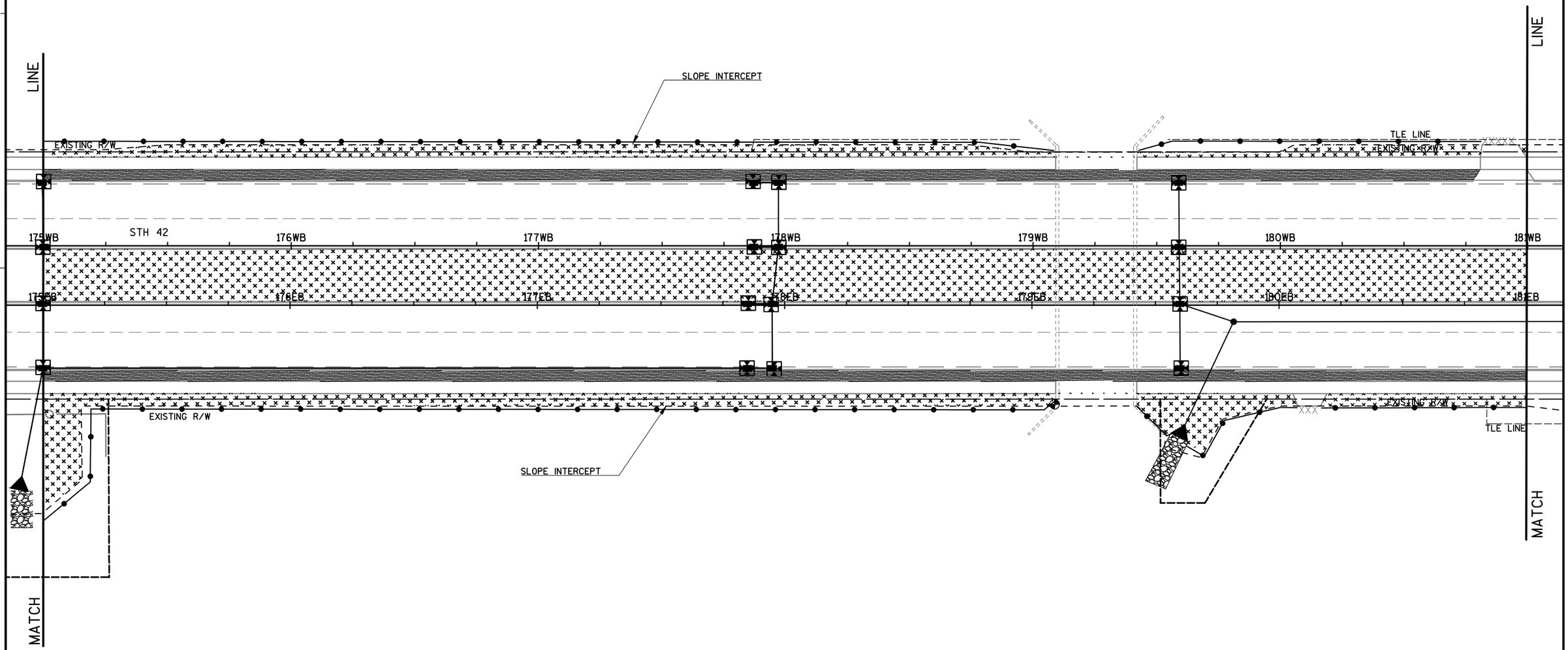
- ###### EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- [R] ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

N

2



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	EROSION CONTROL PLAN	SHEET 82	E

2

LEGEND

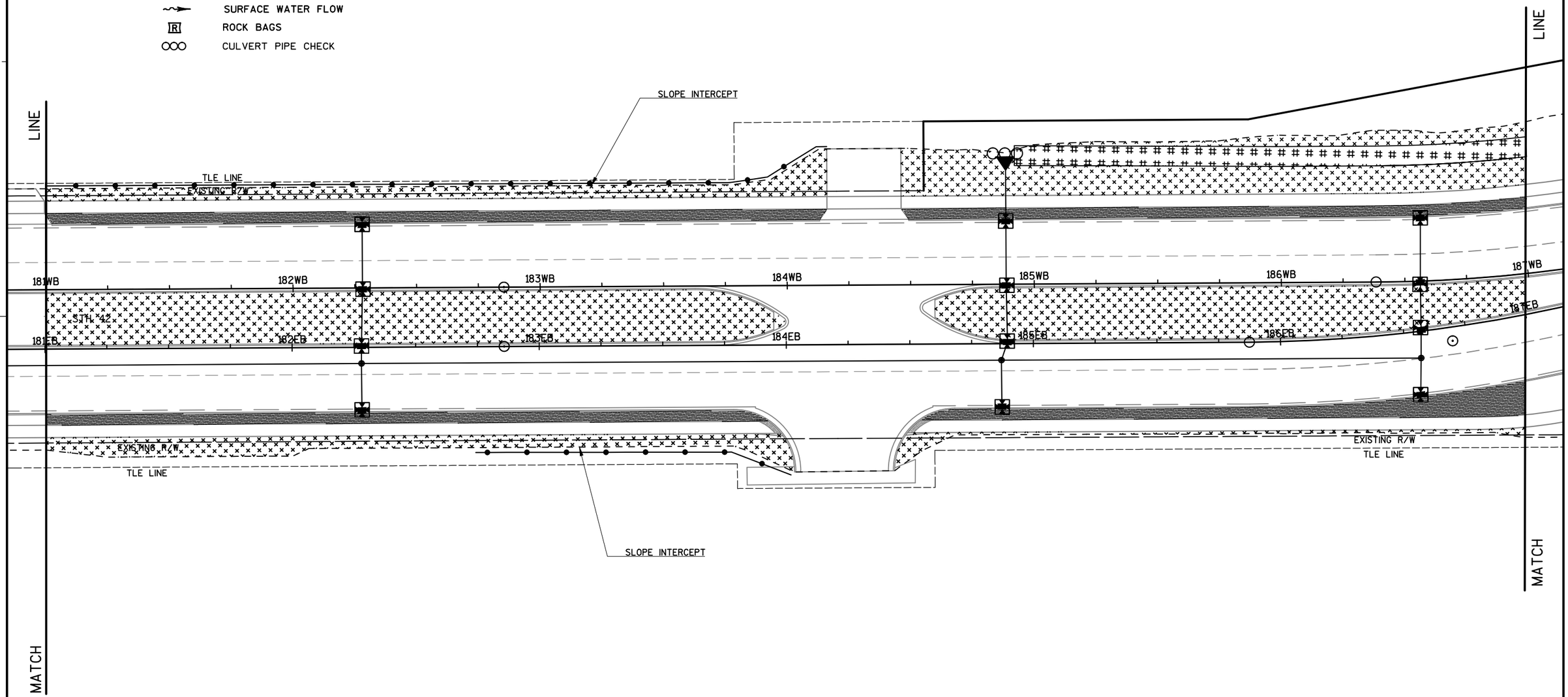
- EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- ROCK BAGS
- CULVERT PIPE CHECK

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

N

2



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	EROSION CONTROL PLAN	SHEET 83	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_022006 EC.DWG PLOT DATE : 1/4/2019 3:24 PM PLOT BY : VERVILLE, PHILLIP PLOT NAME : PLOT SCALE : 1in:40 ft_XREF

WISDOT/CADDS SHEET 42

LEGEND

- EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- ROCK BAGS

N

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

MATCH LINE

R/W LINE

SLOPE INTERCEPT

189WB

188WB

188EB

187WB

STH 42

EXISTING R/W

TLE LINE

MATCH LINE

192WB

191WB

191EB

13SMI

UML

REMOVE AND REPLACE RIPRAP

SLOPE INTERCEPT

MATCH LINE

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	EROSION CONTROL PLAN	SHEET 84	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_022007 EC.DWG PLOT DATE : 1/22/2019 7:00 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

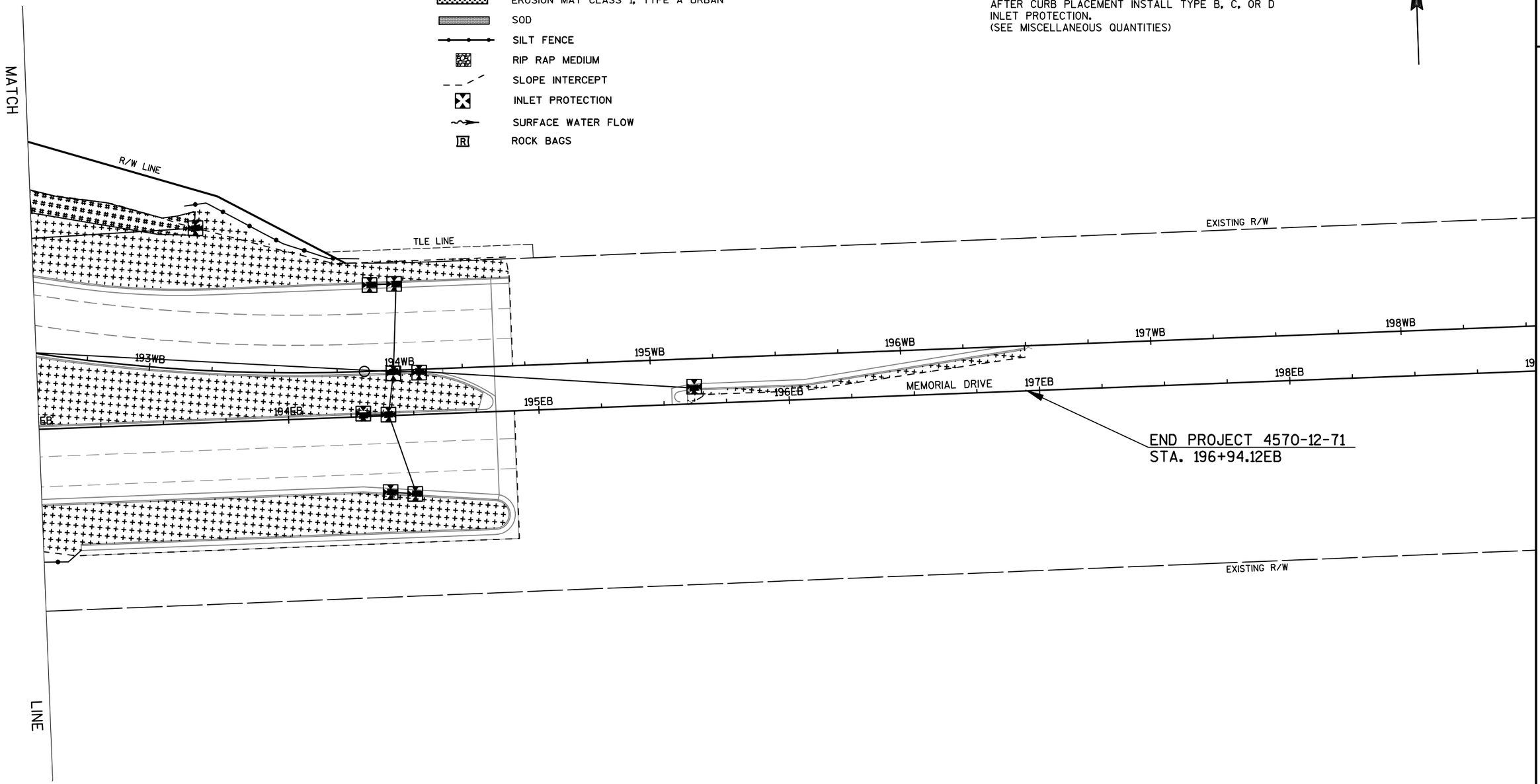
LEGEND

- EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

N



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	EROSION CONTROL PLAN	SHEET 85	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_022008 EC.DWG PLOT DATE : 1/3/2019 6:51 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1" = 40'_XREF

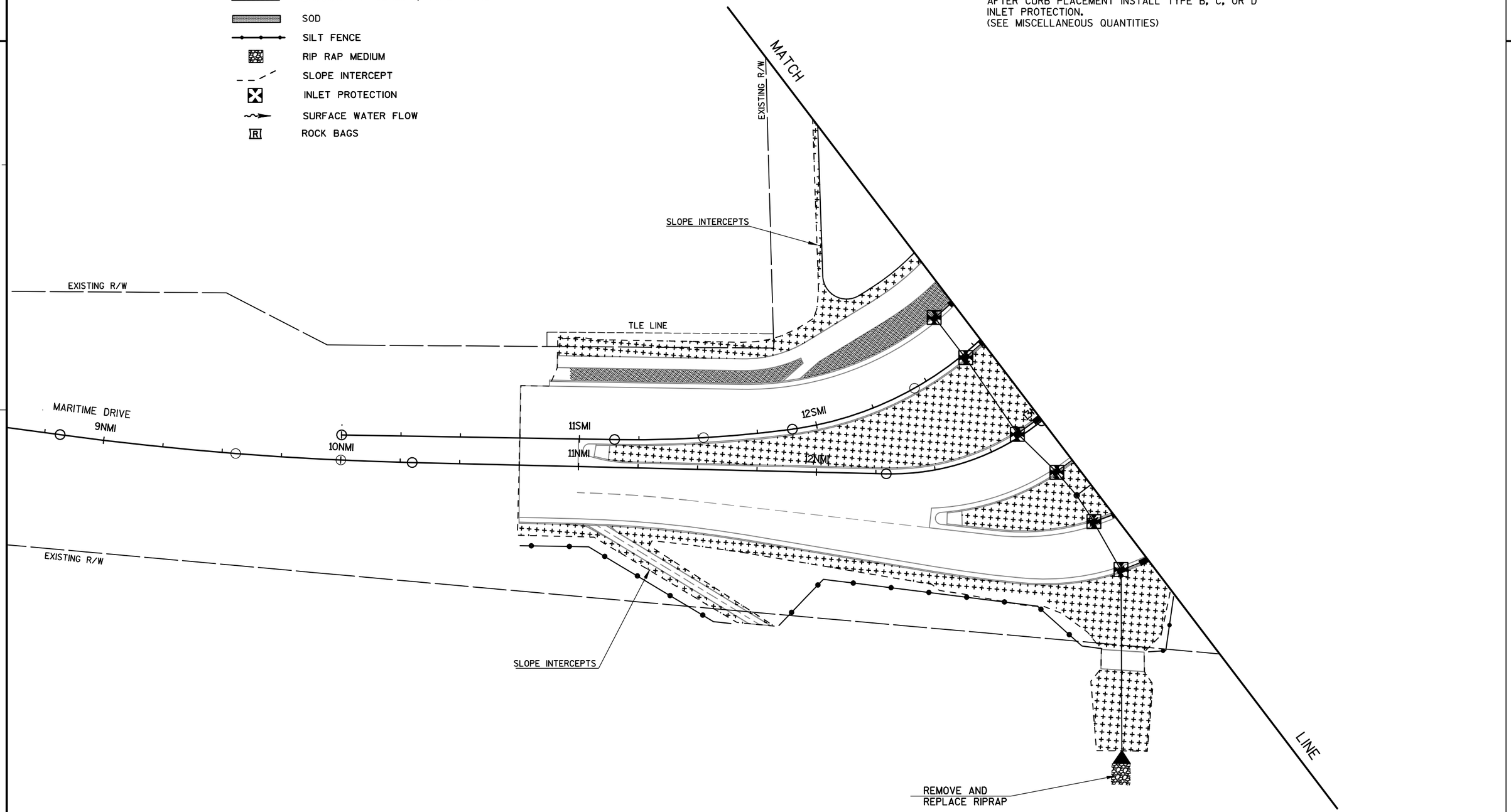
WISDOT/CADDS SHEET 42

LEGEND

- EROSION MAT CLASS 1, TYPE B
- EROSION MAT CLASS 1, TYPE A URBAN
- SOD
- SILT FENCE
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- INLET PROTECTION
- SURFACE WATER FLOW
- ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	EROSION CONTROL PLAN	SHEET 86	E

2

ABANDONING SEWER
REMOVING STORM SEWER
REMOVING MANHOLES/INLETS

N

N 15TH ST

N 14TH ST

N 13TH ST

USH 10/WALDO BLVD WB

USH 10/WALDO BLVD EB

REMOVAL LIMITS TO PROPOSED MH-101.2

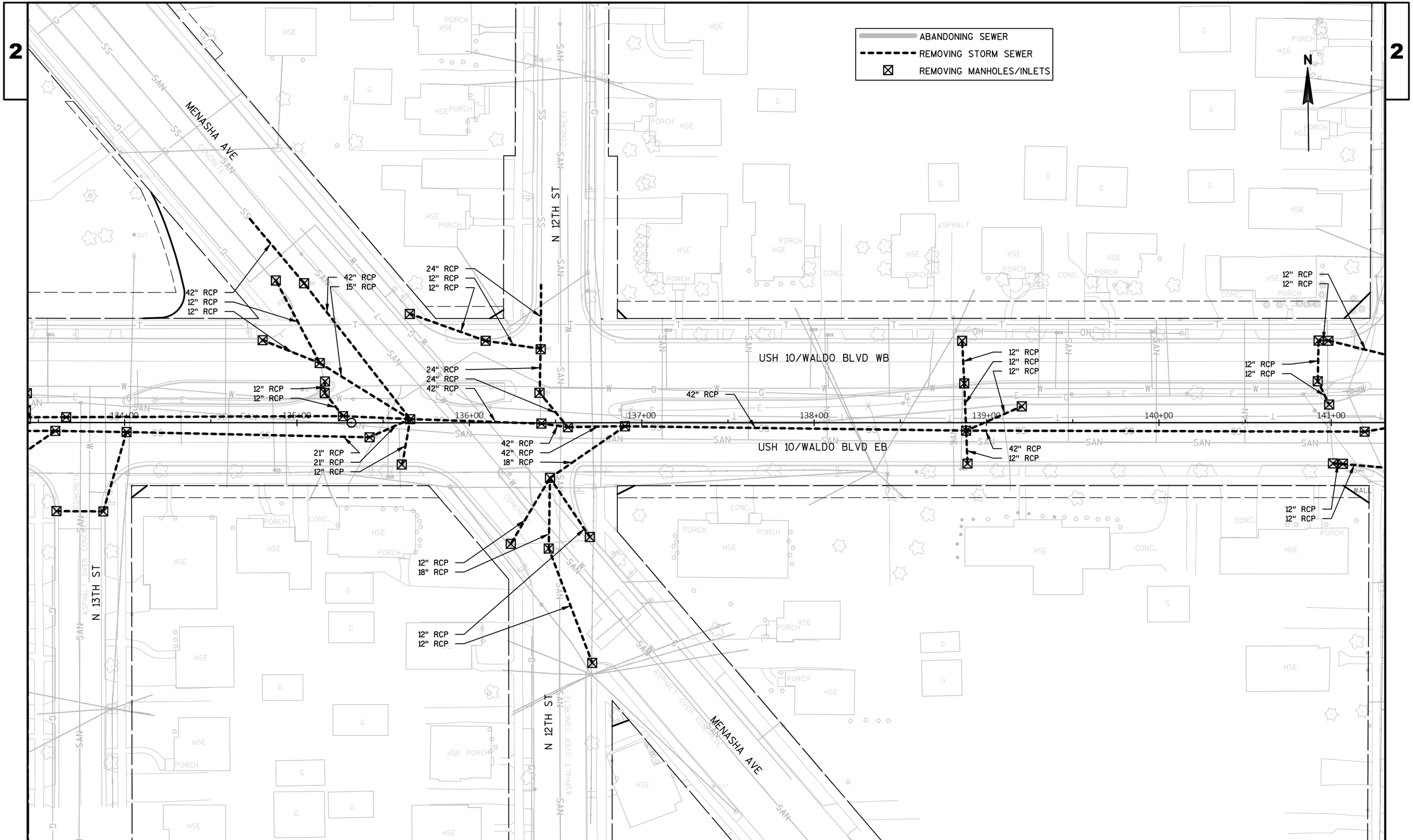
REMOVAL LIMITS TO PROPOSED MH-101.1

12" RCP
12" RCP
12" RCP
24" RCP
24" RCP
24" RCP
21" RCP
12" RCP
21" RCP
12" RCP
12" RCP

127+00 128+00 129+00 130+00 131+00 132+00 133+00 134+00

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER REMOVAL PLAN	SHEET 87	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\15003771-45701271_022501_SSRPA.DWG
LAYOUT NAME - 022510_SSRP
PLOT DATE : 12/26/2018 7:05 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42



PROJECT NO:1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER REMOVAL PLAN	SHEET 88	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\15003771-45701271_022501_SSRPA.DWG
LAYOUT NAME - 022511_SSRP
PLOT DATE : 12/26/2018 7:06 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

ABANDONING SEWER
REMOVING STORM SEWER
REMOVING MANHOLES/INLETS

N

N 11TH ST

N 10TH ST

N 9TH ST

USH 10/WALDO BLVD WB

USH 10/WALDO BLVD EB

12" VCP
12" VCP

SEALING PIPES REQD AT STORM REMOVAL LIMITS (WITHIN TLE)

SEALING PIPES REQD AT STORM REMOVAL LIMITS (WITHIN TLE)

12" RCP
12" VCP

12" RCP
18" RCP
12" RCP
48" RCP

48" RCP

48" RCP
48" RCP

36" RCP
12" RCP

12" RCP
12" RCP
12" RCP

12" RCP
36" RCP

15" RCP
15" RCP

12" RCP
12" RCP

12" RCP
12" RCP

12" RCP
8" PVC

141+00
142+00
143+00
144+00
145+00
146+00
147+00
148+00

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER REMOVAL PLAN	SHEET 89	E

2

ABANDONING SEWER
REMOVING STORM SEWER
REMOVING MANHOLES/INLETS

12" VCP
12" VCP

54" RCP

ABANDONING MANHOLES - 1 EA REQD

54" RCP

ABANDONING SEWER (54" RCP) LIMIT

N

NOTE:
ABANDONING SEWER (54" RCP) REQD FROM PROPOSED MANHOLE MH-122.2 TO APPROXIMATELY STA. 12'SL'+52, 85' LT (IMMEDIATELY WEST OF PRIVATE LATERAL CONNECTION). 12-INCH PVC SHALL BE PLACED IN 54" RCP FROM STA. 12'EG'+67, 151' LT TO CB-126.1 PRIOR TO ABANDONING SEWER - SEE STORM SEWER PLANS AND CONSTRUCTION DETAILS.

15" VCP

REMOVE TO CONSTRUCTION LIMITS

15" VCP

N 9TH ST

N 8TH ST

LINCOLN BLVD

12" RCP
12" RCP
15" RCP

15" RCP

12" RCP
12" RCP
12" RCP
12" RCP

USH 10/WALDO BLVD WB

STH 42/WALDO BLVD WB

12" RCP
12" RCP
12" RCP
12" RCP

15" RCP

12" RCP
12" RCP
12" RCP

148+00
149+00
150+00
151+00
152+00
153+00
154+00
155+00

12" VCP
12" VCP
12" VCP

USH 10/WALDO BLVD EB

12" VCP
12" RCP
12" RCP
12" RCP

STH 42/WALDO BLVD EB

12" RCP

12" PVC
12" PVC

PROJECT NO: 1500-37-74/4570-12-71	HWY: USH 10/STH 42	COUNTY: MANITOWOC	STORM SEWER REMOVAL PLAN	SHEET 90	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\15003771-45701271_022501_SSRPA.DWG
LAYOUT NAME - 022513_SSRP
PLOT DATE : 12/26/2018 7:06 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

ABANDONING SEWER
REMOVING STORM SEWER
REMOVING MANHOLES/INLETS

N

STH 42/WALDO BLVD WB

STH 42/WALDO BLVD EB

LINCOLN BLVD

N 6TH ST

60" RCP
15" RCP
12" RCP
ABANDONING MANHOLES - 1 EA REQD

156+00 157+00 158+00 159+00 160+00 161+00 162+00 163+0

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER REMOVAL PLAN	SHEET 91	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\15003771-4570127l_022501_SSRPA.DWG
LAYOUT NAME - 022514_SSRP
PLOT DATE : 12/26/2018 7:06 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

ABANDONING SEWER
REMOVING STORM SEWER
REMOVING MANHOLES/INLETS

N

N 5TH ST

STH 42/WALDO BLVD WB

STH 42/WALDO BLVD EB

12" RCP
12" RCP

15" PVC (25') &
15" RCP (40')

ABANDONING MANHOLES - 1 EA REQD

60" RCP

163+00 164+00 165+00 166+00 167+00 168+00 169+00 170+00

STA. 169+75 TO STA. 169+85
REMOVING STORM SEWER 60-INCH
REQD.

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER REMOVAL PLAN	SHEET 92	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\15003771-45701271_022501_SSRPA.DWG
LAYOUT NAME - 022515_SSRP

PLOT DATE : 12/26/2018 7:06 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

ABANDONING SEWER
REMOVING STORM SEWER
REMOVING MANHOLES/INLETS

N

STA. 175+65 TO STA. 175+75
REMOVING STORM SEWER 60-INCH
REQD.

12" RCP
12" RCP
ABANDONING MANHOLES - 1 EA REQD
12" RCP
12" RCP
60" RCP

STH 42/WALDO BLVD WB

STH 42/WALDO BLVD EB

12" RCP
12" RCP
ABANDONING MANHOLES - 1 EA REQD
12" RCP
12" RCP
60" CMP

STA. 172+65 TO STA. 172+75
REMOVING STORM SEWER 60-INCH
REQD.

170+00 171+00 172+00 173+00 174+00 175+00 176+00 177+00

SAN
WALL
CONC.
HSE
HSE
G

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER REMOVAL PLAN	SHEET 93	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\15003771-45701271_022501_SSRPA.DWG
LAYOUT NAME - 022516_SSRP
PLOT DATE : 12/26/2018 7:06 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

ABANDONING SEWER
REMOVING STORM SEWER
REMOVING MANHOLES/INLETS

N

STH 42/WALDO BLVD WB

STH 42/WALDO BLVD EB

12" RCP
12" RCP
12" RCP
12" RCP
60" CMP
18" RCP
18" RCP
12" RCP
12" RCP
12" RCP
12" RCP
15" RCP

177+00
178+00
179+00
180+00
181+00
182+00
183+00
184+00

CONC.
ASPHALT
BLDG
SAN
W
E
G
S
MH

2

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER REMOVAL PLAN	SHEET 94	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\15003771-45701271_022501_SSRPA.DWG
LAYOUT NAME - 022517_SSRP
PLOT DATE : 12/26/2018 7:06 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

ABANDONING SEWER
REMOVING STORM SEWER
REMOVING MANHOLES/INLETS

N

STH 42/WALDO BLVD WB

STH 42/WALDO BLVD EB

STH 42/MEMORIAL DR

MARITIME DR

12" RCP
12" RCP
12" RCP
12" RCP
12" RCP

185+00
186+00
187+00
188+00
189+00
190+00
191+00
192+00

12" PVC
12" PVC
12" PVC
12" PVC
12" PVC
12" PVC
12" PVC
12" PVC
12" PVC
12" PVC
12" PVC

15" PVC

24" CMP
24" CMP

SAN
W
E
G
WV
MH
ASPHALT
BLDG

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER REMOVAL PLAN	SHEET 95	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\15003771-45701271_022501_SSRPA.DWG
LAYOUT NAME - 022518_SSRP

PLOT DATE : 12/26/2018 7:07 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

ABANDONING SEWER
REMOVING STORM SEWER
REMOVING MANHOLES/INLETS

N

SAN SAN SAN SAN SAN SAN SAN SAN

8" PVC
12" PVC
12" PVC
12" PVC

STH 42/MEMORIAL DR

192+00 193+00 194+00 195+00 196+00 197+00 198+00 199+0

STH 42

15" PVC

W W W W W W W W W W W W

ASPHALT

ROCK ROCK

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER REMOVAL PLAN	SHEET 96	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\15003771-45701271_022501_SSRPA.DWG
LAYOUT NAME - 022519_SSRP

PLOT DATE : 12/26/2018 7:07 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:50 FT

N

USH 10/WALDO BLVD WB

USH 10/WALDO BLVD EB

129WB 130WB 131WB 132WB 133WB 134WB 135WB

129EB 130EB 131EB 132EB 133EB 134EB 135EB

N 14TH ST

10TH

N 13TH ST

MENASHA AVE

MH-101.2 STA 131+35, 2.8' LT MANHOLES 4-J-S

CONNECT EXISTING 24" STORM TO MH-101.2 CONCRETE COLLAR REQD

MH-101.1 STA 131+43, 5.1' RT MANHOLES 6-J-S

CONNECT EXISTING 21" STORM TO MH-101.1 CONCRETE COLLAR REQD

MH-101.0 STA 131+55, 11.0' RT MANHOLES 5-J-S

STA 133+42, 25.5' LT CATCH BASINS 2x3-H CB-102.1

STA 134+09, 25.5' LT CATCH BASINS 2x3-H CB-104.1

STA 133+42, 0.5' RT CATCH BASINS 2x3-H CB-102.2

CB-104.2 STA 134+09, 0.5' RT CATCH BASINS 2x3-H

STA 133+43, 11.5' LT CATCH BASINS 2x3-H CB-102.3

CB-104.3 STA 134+08, 11.5' LT CATCH BASINS 2x3-H

STA 133+43, 10.9' RT MANHOLES 6-J-S MH-102.0

6-INCH PVC REQD SEE CONSTRUCTION DETAIL

CONNECT EXISTING PRIVATE LATERAL 6-INCH PVC REQD SEE CONSTRUCTION DETAIL

STA 133+43, 27.0' RT CATCH BASINS 4-H CB-102.4

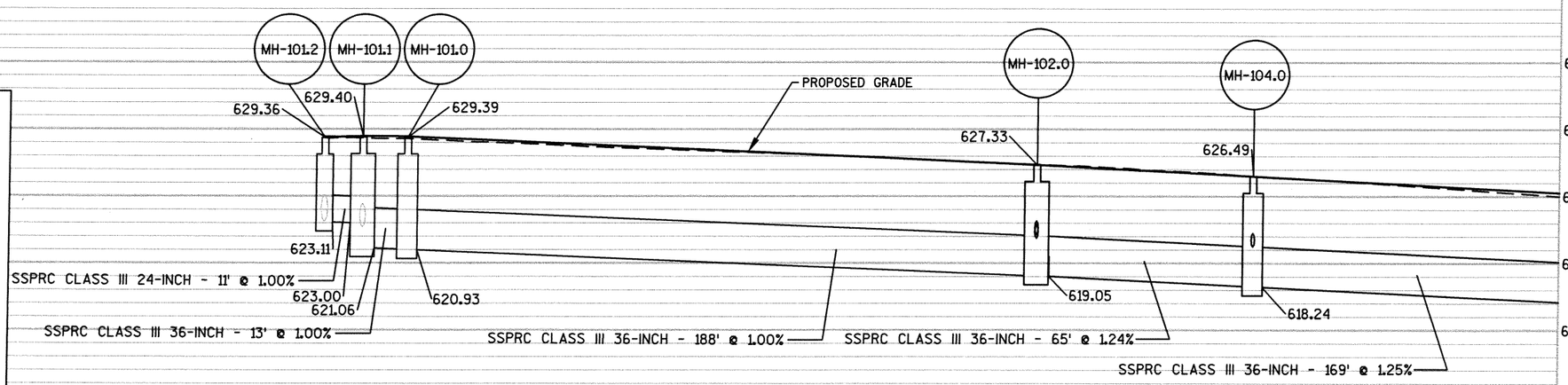
STA 9+47, 13.8' LT CATCH BASINS 2x3-H-S CB-102.5

MH-104.0 STA 134+08, 11.0' RT MANHOLES 5-J-S

6-INCH PVC REQD SEE CONSTRUCTION DETAIL

CB-102.6 STA 9+47, 13.9' RT CATCH BASINS 2x3-H

NOTE:
STORM SEWER SHOWN WEST OF MH-101.0, MH-101.1 AND MH-101.2 IS SHOWN FOR INFORMATION ONLY AND WILL BE CONSTRUCTED BY OTHERS UNDER A SEPARATE PROJECT.

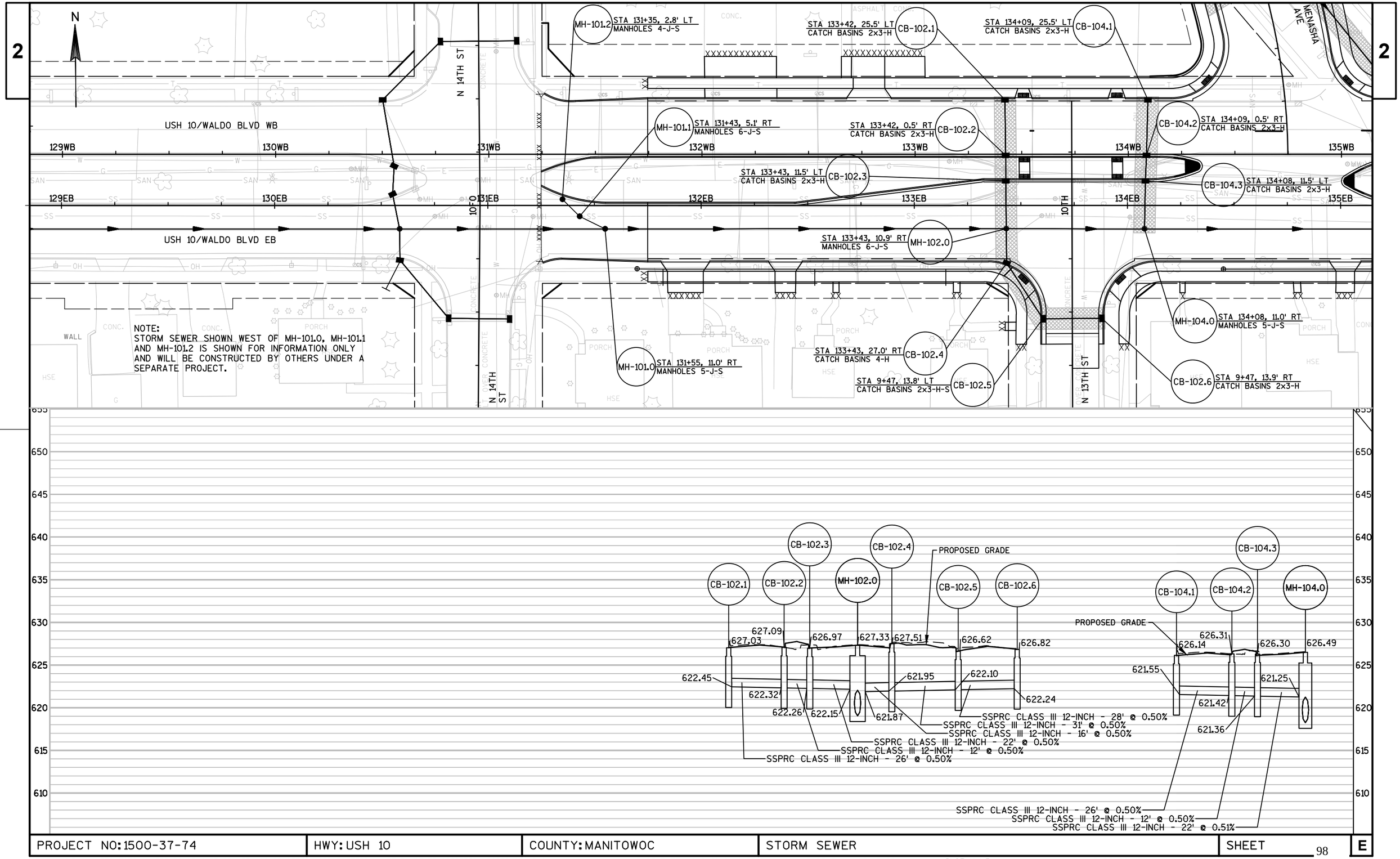


WISCONSIN
ANDREW W. BLOCK
E-41224-6
APPLETON
WI.
PROFESSIONAL ENGINEER

1/4/19

STORM SEWER PLANS DESIGNED BY
JT ENGINEERING, INC.

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET 97



PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET 98	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\15003771_022500_SSA.DWG PLOT DATE : 1/2/2019 12:57 PM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 41

2

MENASHA AVE

CB-106.1 STA 135+40, 50.0' LT INLETS 3-BM

CB-106.2 STA 135+76, 25.5' LT CATCH BASINS 2x3-H

CB-106.3 STA 135+76, 0.5' RT CATCH BASINS 2x3-H

CB-106.4 STA 135+77, 0.5' LT CATCH BASINS 2x3-H

MH-108.1 STA 10+80, 10.4' LT MANHOLES 5-J-S

N 12TH ST

6-INCH PVC REQD SEE CONSTRUCTION DETAIL

STA 138+33, 25.5' LT CATCH BASINS 2x3-H CB-110.1

CONNECT EXISTING PRIVATE LATERAL 6-INCH PVC REQD SEE CONSTRUCTION DETAIL

CB-110.4 STA 138+23, 0.5' RT CATCH BASINS 2x3-H

STA 140+89, 25.5' LT CATCH BASINS 2x3-H CB-112.2

STA 140+99, 25.5' LT CATCH BASINS 2x3-H-S CB-112.1

PIPE UNDERDRAIN 6-INCH REQD SEE CONSTRUCTION DETAIL

N

USH 10/WALDO BLVD WB

STA 138+23, 25.5' LT CATCH BASINS 2x3-H CB-110.2

CB-110.3 STA 138+33, 0.5' RT CATCH BASINS 2x3-H

STA 140+93, 0.5' RT CATCH BASINS 2x3-H CB-112.3

STA 141+03, 0.5' RT CATCH BASINS 2x3-H-S CB-112.4

135WB 136WB 137WB 138WB 139WB 140WB 141WB

STA 138+24, 1.1' LT CATCH BASINS 2x3-H CB-110.6

CB-110.5 STA 138+34, 2.3' LT CATCH BASINS 2x3-H

STA 140+87, 7.5' RT CATCH BASINS 4-H CB-112.5

STA 141+09, 6.0' RT CATCH BASINS 4-H-S CB-112.6

135EB 136EB 137EB 138EB 139EB 140EB 141EB

10TH AV

USH 10/WALDO BLVD EB

6-INCH PVC REQD SEE CONSTRUCTION DETAIL

6-INCH PVC REQD SEE CONSTRUCTION DETAIL

STA 135+77, 11.0' RT MANHOLES 10-J-S MH-106.0

STA 135+77, 25.5' RT CATCH BASINS 2x3-H CB-106.5

STA 9+47, 14.2' LT CATCH BASINS 4-H-S CB-108.2

N 12TH ST

MH-108.0 STA 136+41, 11.0' RT MANHOLES 8-J-S

CB-108.3 STA 9+47, 14.3' RT CATCH BASINS 4-H-S

6-INCH PVC REQD SEE CONSTRUCTION DETAIL

CB-110.7 STA 138+34, 25.5' RT CATCH BASINS 2x3-H

MH-110.0 STA 138+24, 11.0' RT MANHOLES 8-J-S

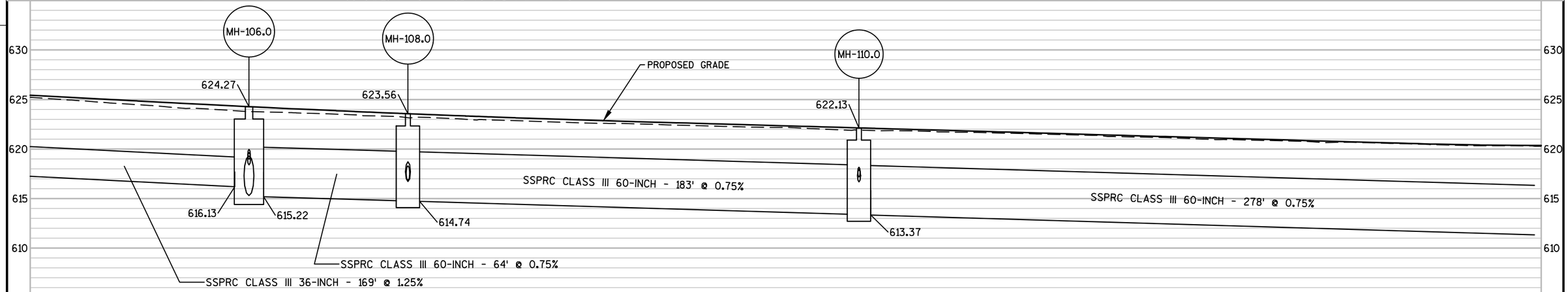
CB-110.8 STA 138+24, 25.5' RT CATCH BASINS 2x3-H

STA 141+02, 11.0' RT MANHOLES 8-J-S MH-112.0

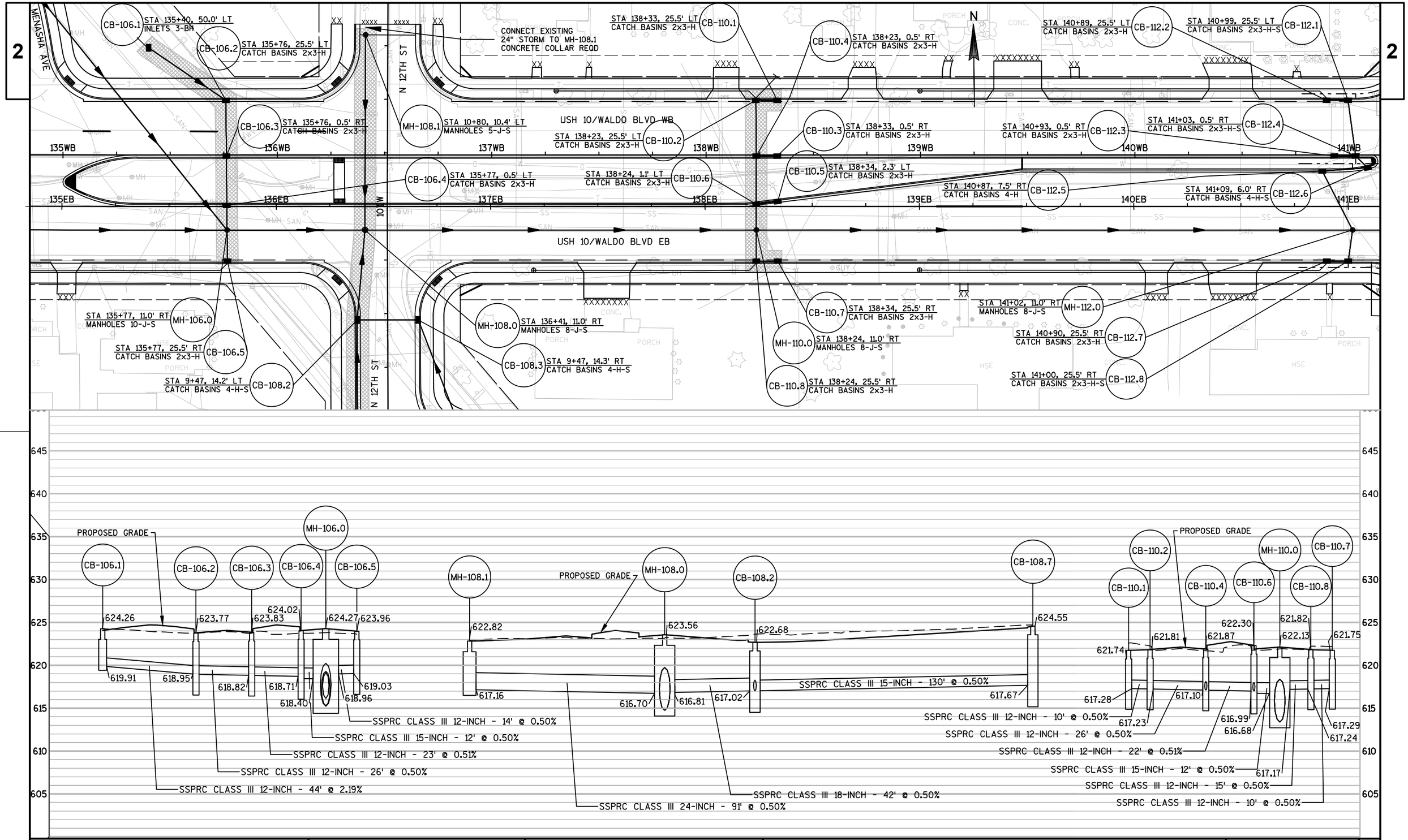
STA 140+90, 25.5' RT CATCH BASINS 2x3-H CB-112.7

STA 141+00, 25.5' RT CATCH BASINS 2x3-H-S CB-112.8

PIPE UNDERDRAIN 6-INCH PVC REQD SEE CONSTRUCTION DETAIL

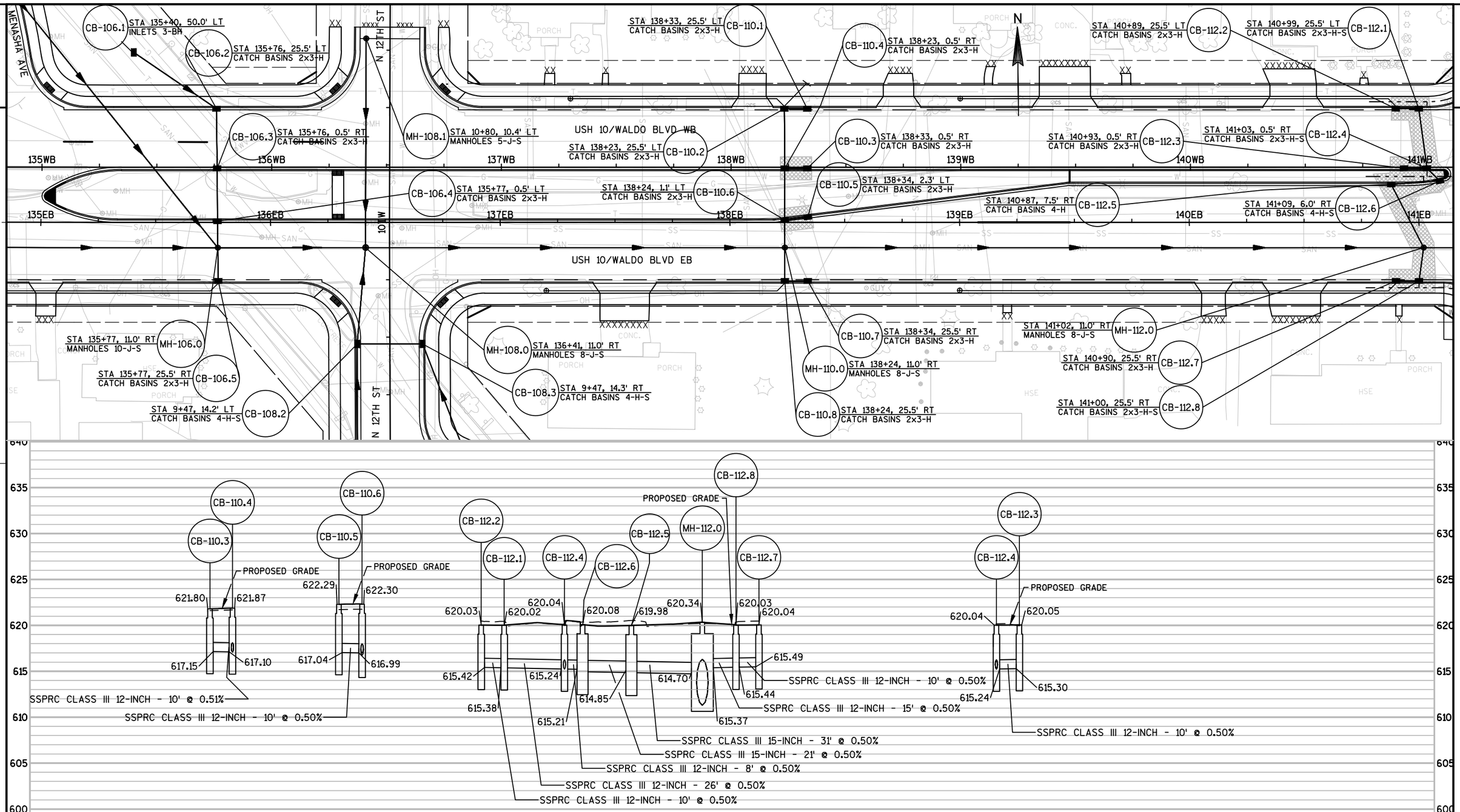


PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET 99	E

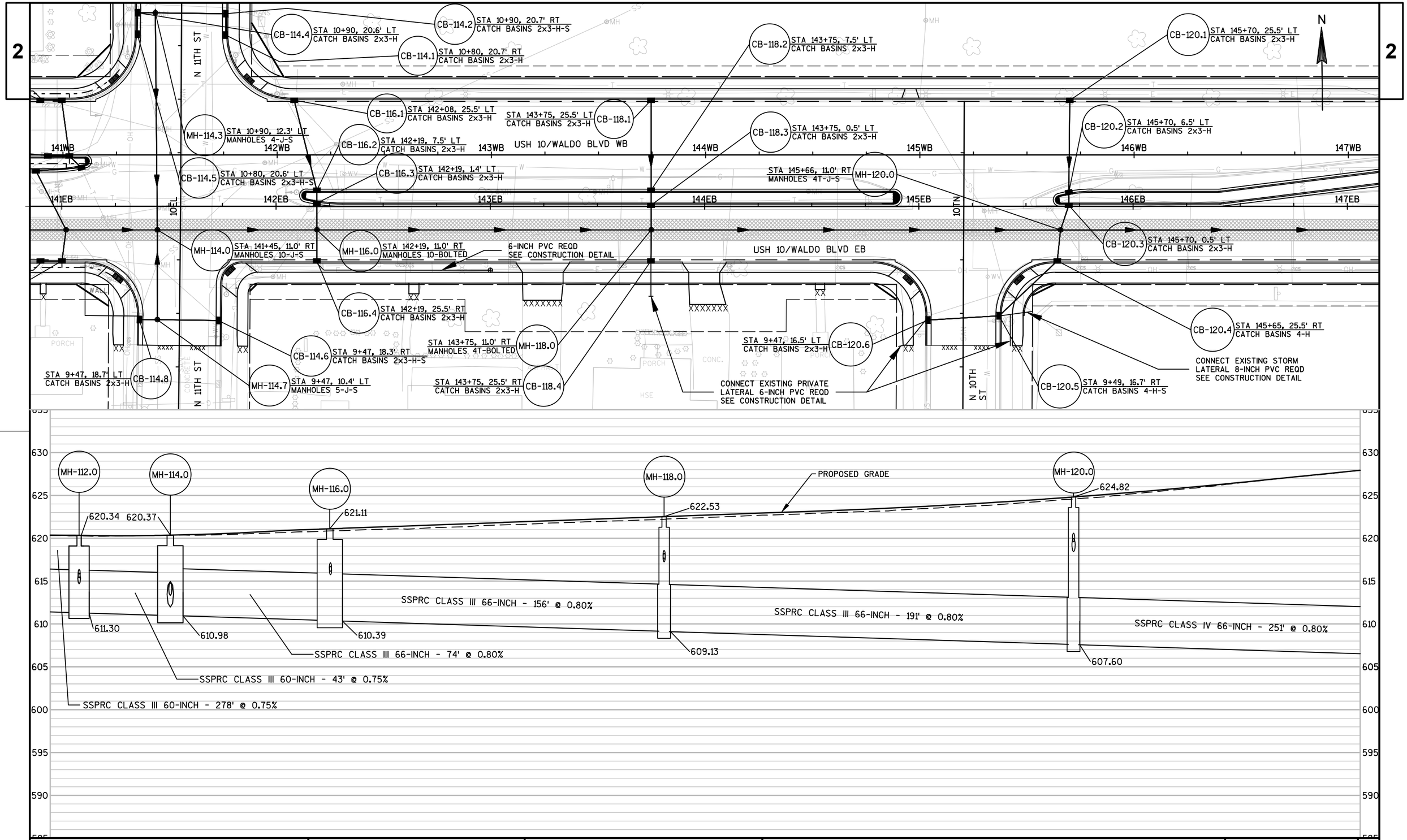


PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET 100	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\15003771_022500_SSA.DWG PLOT DATE : 1/2/2019 12:58 PM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 41



PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET 101	E



PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET 102	E

CONNECT EXISTING 12" STORM TO MH-114.3 CONCRETE COLLAR REQD

CB-114.4 STA 10+90, 20.6' LT CATCH BASINS 2x3-H

CB-114.2 STA 10+90, 20.7' RT CATCH BASINS 2x3-H-S

CB-114.1 STA 10+80, 20.7' RT CATCH BASINS 2x3-H

CB-116.1 STA 142+08, 25.5' LT CATCH BASINS 2x3-H

MH-114.3 STA 10+90, 12.3' LT MANHOLES 4-J-S

CB-116.2 STA 142+19, 7.5' LT CATCH BASINS, 2x3-H

CB-114.5 STA 10+80, 20.6' LT CATCH BASINS 2x3-H-S

CB-116.3 STA 142+19, 1.4' LT CATCH BASINS 2x3-H

MH-114.0 STA 141+45, 11.0' RT MANHOLES 10-J-S

MH-116.0 STA 142+19, 11.0' RT MANHOLES 10-BOLTED

CONNECT EXISTING 36" STORM TO MH-114.7 CONCRETE COLLAR REQD

CB-116.4 STA 142+19, 25.5' RT CATCH BASINS 2x3-H

CB-114.6 STA 9+47, 18.3' RT CATCH BASINS 2x3-H-S

STA 9+47, 18.7' LT CATCH BASINS 2x3-H CB-114.8

MH-114.7 STA 9+47, 10.4' LT MANHOLES 5-J-S

STA 143+75, 11.0' RT MANHOLES 4T-BOLTED MH-118.0

STA 143+75, 25.5' RT CATCH BASINS 2x3-H CB-118.4

STA 143+75, 25.5' LT CATCH BASINS 2x3-H CB-118.1

CB-118.2 STA 143+75, 7.5' LT CATCH BASINS 2x3-H

CB-118.3 STA 143+75, 0.5' LT CATCH BASINS 2x3-H

STA 145+66, 11.0' RT MANHOLES 4T-J-S MH-120.0

STA 9+47, 16.5' LT CATCH BASINS 2x3-H CB-120.6

CB-120.1 STA 145+70, 25.5' LT CATCH BASINS 2x3-H

CB-120.2 STA 145+70, 6.5' LT CATCH BASINS 2x3-H

CB-120.3 STA 145+70, 0.5' LT CATCH BASINS 2x3-H

CB-120.4 STA 145+65, 25.5' RT CATCH BASINS 4-H

CB-120.5 STA 9+49, 16.7' RT CATCH BASINS 4-H-S

USH 10/WALDO BLVD WB

USH 10/WALDO BLVD EB

N 11TH ST

N 10TH ST

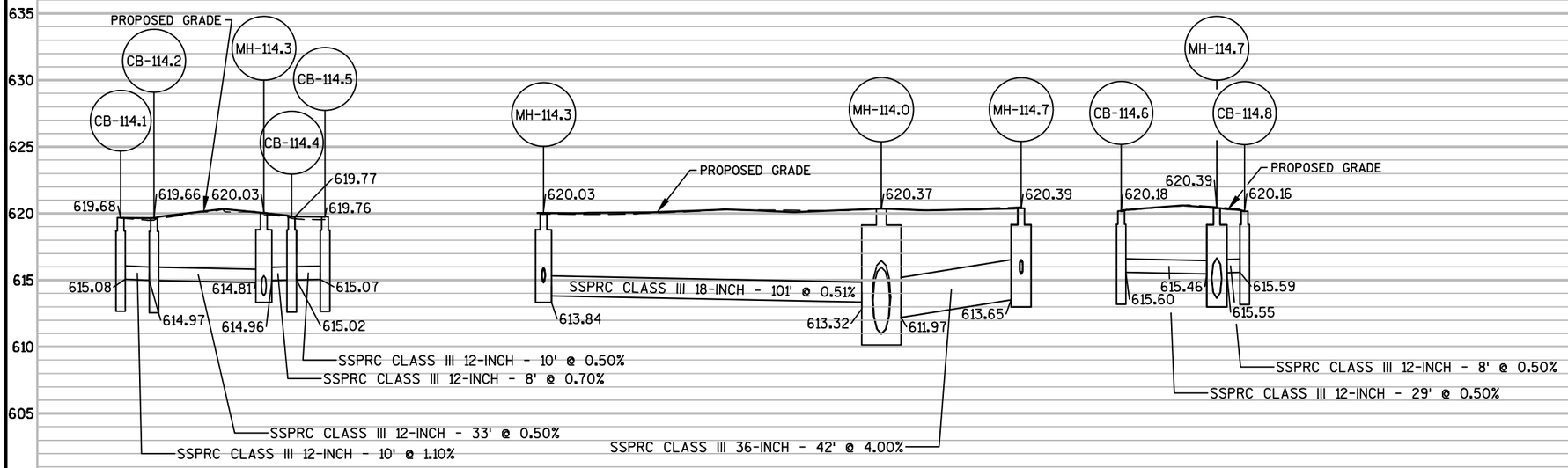
10 EL

10 TN

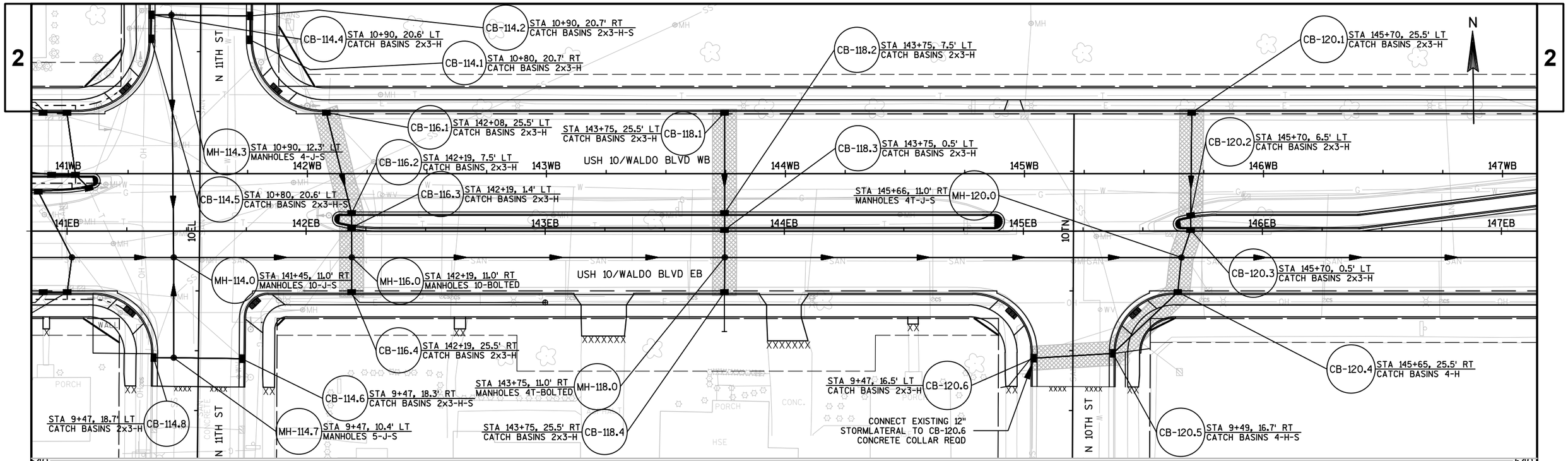
141WB 142WB 143WB 144WB 145WB 146WB 147WB

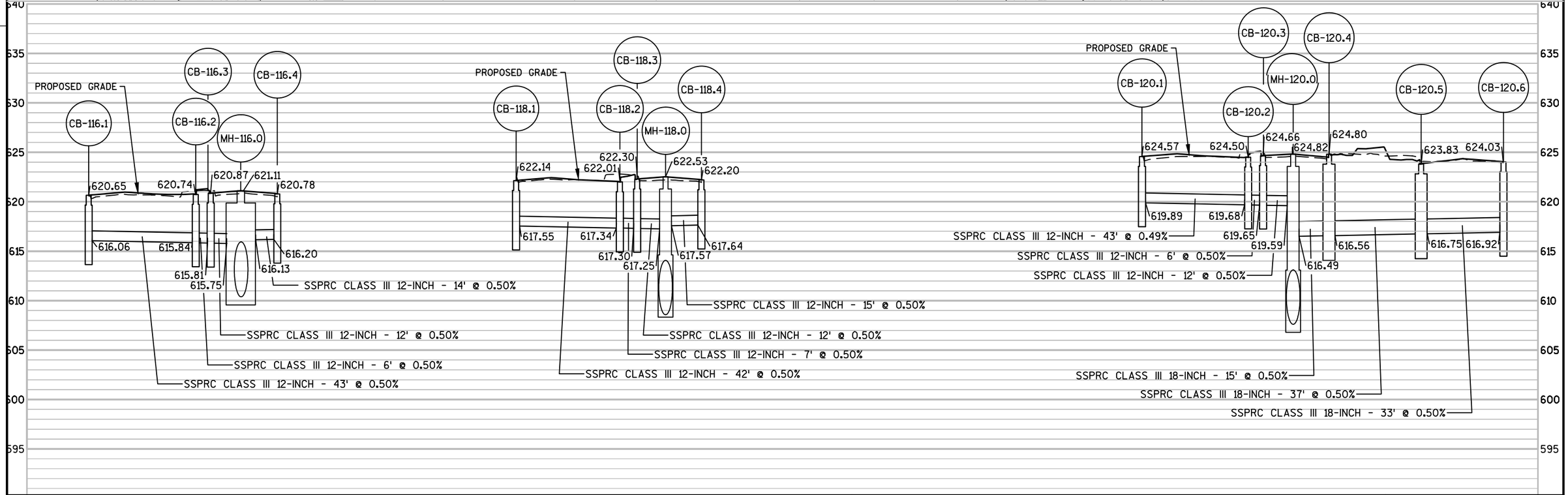
141EB 142EB 143EB 144EB 145EB 146EB 147EB

N



PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET 103	E

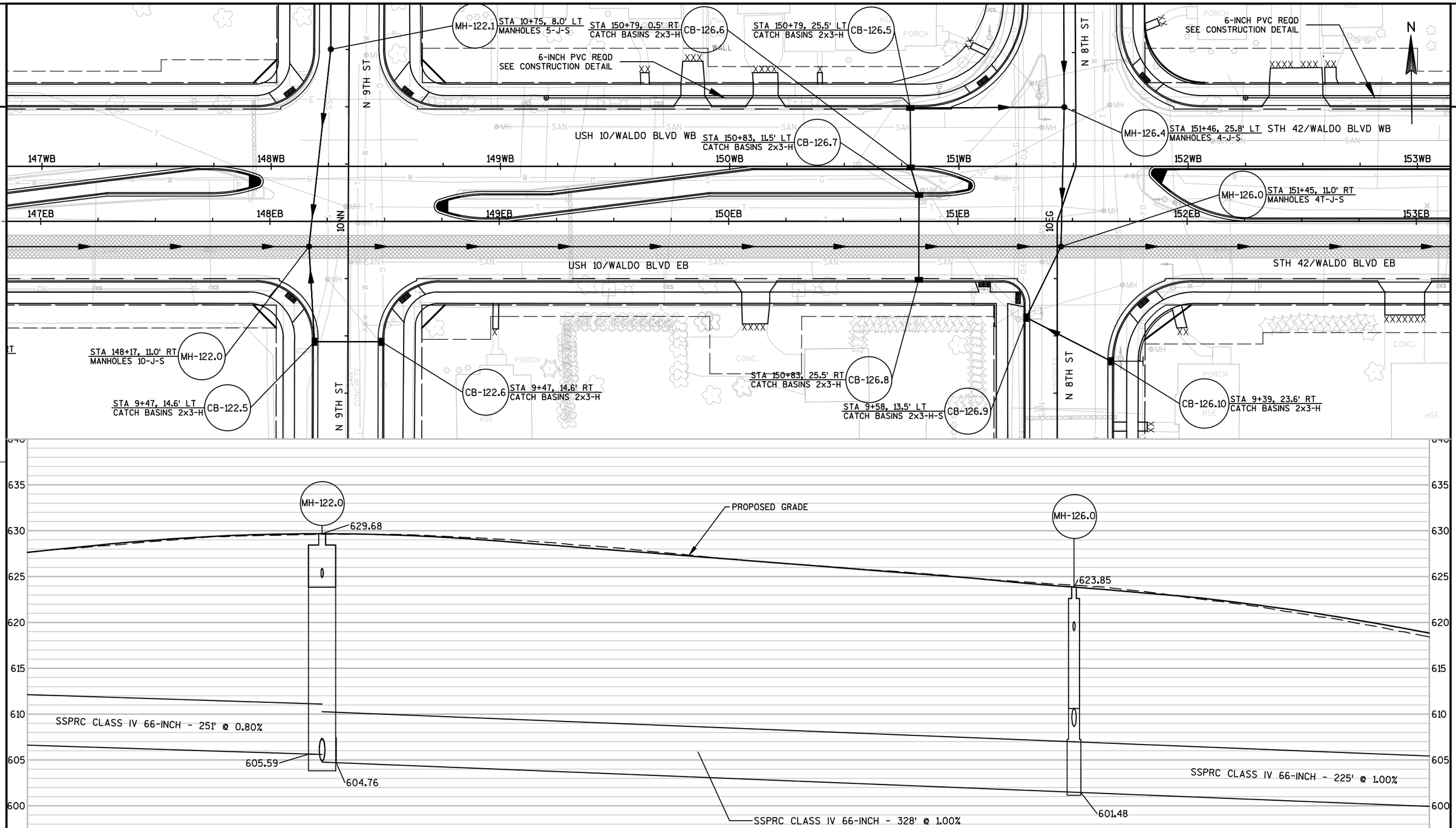




PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET 104	E

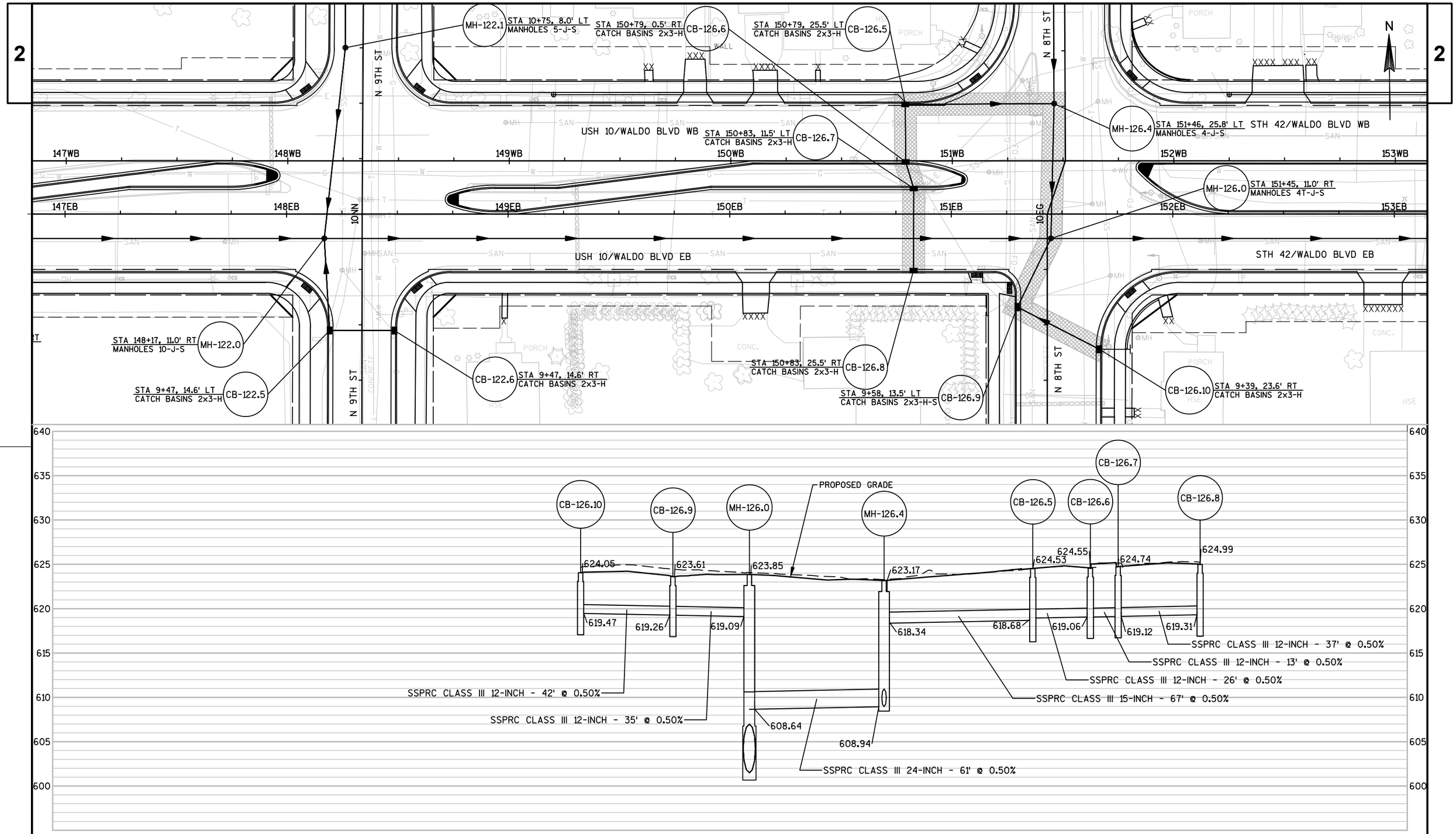
FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\15003771_022500_SSA.DWG PLOT DATE : 1/2/2019 1:08 PM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 41

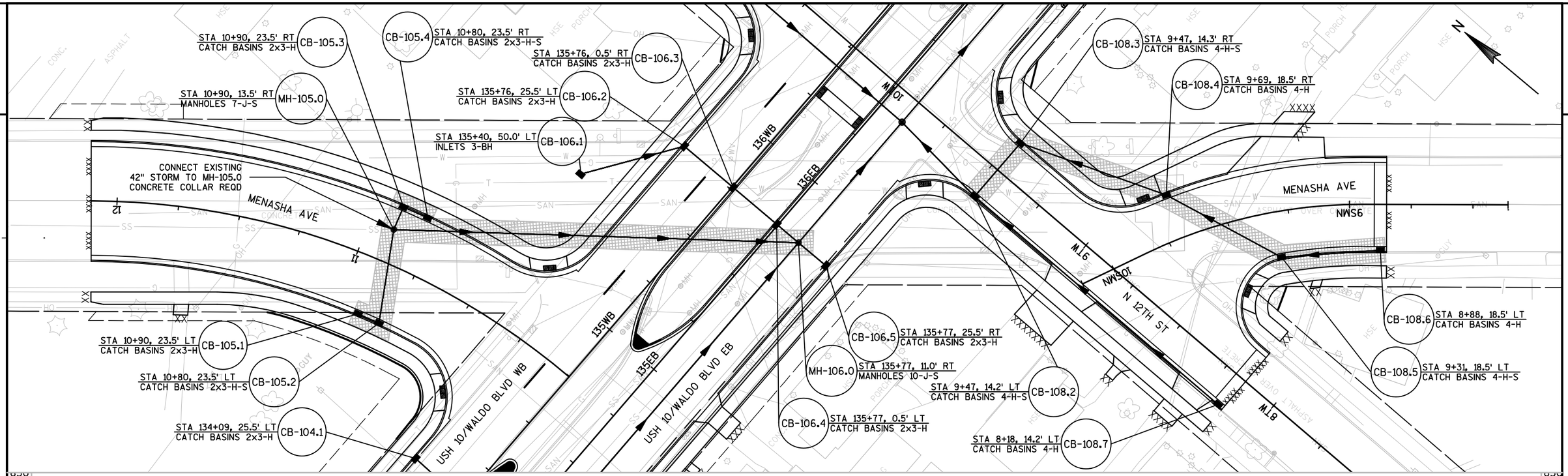


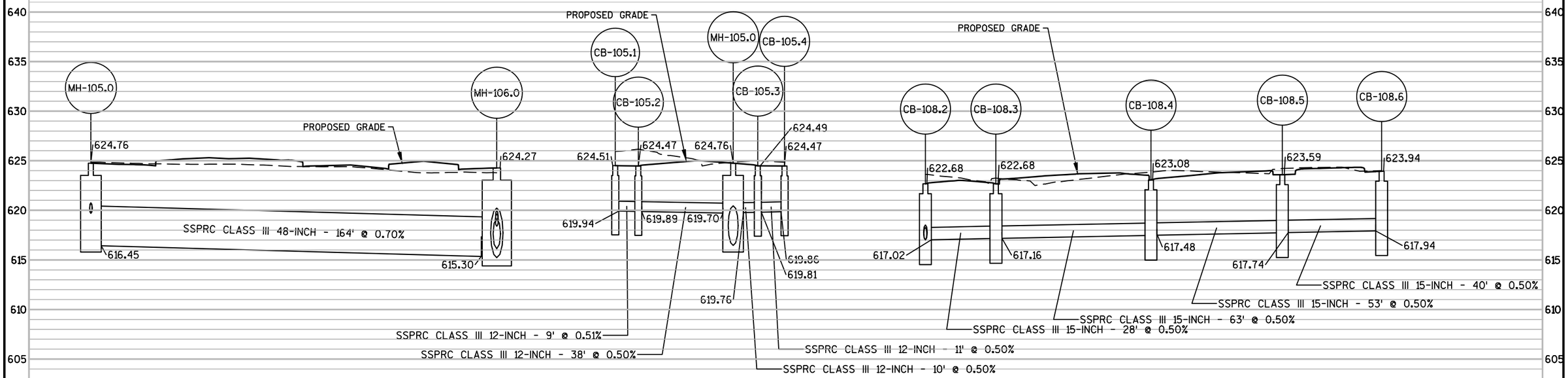
PROJECT NO:1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\15003771_022500_SSA.DWG PLOT DATE : 1/2/2019 1:00 PM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 41



PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET 106	E





PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET 107	E

2

N

CONNECT EXISTING 48" AND
24" STORM TO MH-122.2
CONCRETE COLLARS REQD

148EB

148WB

149EB

149WB

9NN

10NN

11NN

12NN

N 9TH ST

N 9TH ST

USH 10/WALDO BLVD EB

USH 10/WALDO BLVD WB

STA 9+47, 14.6' LT
CATCH BASINS 2x3-H
CB-122.5

STA 9+47, 14.6' RT
CATCH BASINS 2x3-H
CB-122.6

STA 148+17, 11.0' RT
MANHOLES 10-J-S
MH-122.0

MH-122.1
STA 10+75, 8.0' LT
MANHOLES 5-J-S

STA 12+61, 8.0' LT
MANHOLES 8-J-S
MH-122.2

CB-122.4
STA 12+67, 13.9' LT
INLETS 2x3-H-S

CB-122.3
STA 12+67, 13.8' RT
INLETS 2x3-H-S

645
640
635
630
625
620
615
610
605
600

PROPOSED GRADE

CB-122.6
CB-122.5
MH-122.0
MH-122.1
MH-122.2
CB-122.3
MH-122.2
CB-122.4
MH-122.2

EXISTING GRADE
EXISTING GRADE

629.82
629.83
629.68
629.32
626.51
626.58
626.51
626.48
626.51

626.24
626.10
625.10
624.89
621.84
621.73
621.87
621.83

SSPRC CLASS IV 12-INCH - 29' @ 0.50%

SSPRC CLASS III 12-INCH - 42' @ 0.50%

SSPRC CLASS III 30-INCH - 186' @ 1.00%

607.57

605.71

604.85

SSPRC CLASS III 30-INCH - 87' @ 1.00%

SSPRC CLASS III 12-INCH - 23' @ 0.50%

SSPRC CLASS III 12-INCH - 9' @ 0.50%

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET 108	E

2

STA 150+83, 25.5' RT
CATCH BASINS 2x3-H
CB-126.8

STA 150+83, 11.5' LT
CATCH BASINS 2x3-H
CB-126.7

CB-126.5
STA 150+79, 25.5' LT
CATCH BASINS 2x3-H

CB-126.6
STA 150+79, 0.5' RT
CATCH BASINS 2x3-H

STORM SEWER PIPE PVC 12-INCH AFFIXED TO EXISTING SEWER - SEE CONSTRUCTION DETAIL (12-INCH PVC PLACED ALONG CROWN OF EXISTING 54" STORM FROM EXISTING PRIVATE INLET (4" CAST IRON) AT STA. 12'EG'+67, 151' LT TO CB-126.1. CONNECT EXISTING PRIVATE LATERAL (12" CLAY) AT STA. 12'EG'+67, 33' LT)

STA 12+67, 20.5' LT
CATCH BASINS 2x3-H
CB-126.1

CONNECT TO EXISTING 12" STORM TO CB-126.1 CONCRETE COLLAR REQD

MH-126.2
STA 12+61, 5.0' LT
MANHOLES 4-J-S

MH-126.3
STA 12+76, 17.2' RT
MANHOLES 4-J-S

9EG
10EG
11EG
12EG

N 8TH ST

151EB
151WB
152EB
152WB

USH 10/WALDO BLVD EB
USH 10/WALDO BLVD WB

ABANDONING SEWER TO CONSTRUCTION LIMITS EXISTING 15" STORM

CONNECT EXISTING 15" STORM TO MH-126.3 CONCRETE COLLAR REQD

STA 9+58, 13.5' LT
CATCH BASINS 2x3-H-S
CB-126.9

STA 9+39, 23.6' RT
CATCH BASINS 2x3-H
CB-126.10

STA 151+45, 11.0' RT
MANHOLES 4T-J-S
MH-126.0

MH-126.4
STA 151+46, 25.8' LT
MANHOLES 4-J-S

N

645
640
635
630
625
620
615
610
605
600

PROPOSED GRADE

MH-126.4
623.17
608.94

SSPRC CLASS III 24-INCH - 210' @ 0.50%

MH-126.2
618.53
609.99

CB-126.1
618.33
610.07

609.99

SSPRC CLASS III 12-INCH - 17' @ 0.50%

EXISTING GRADE

MH-126.3
618.19
612.50

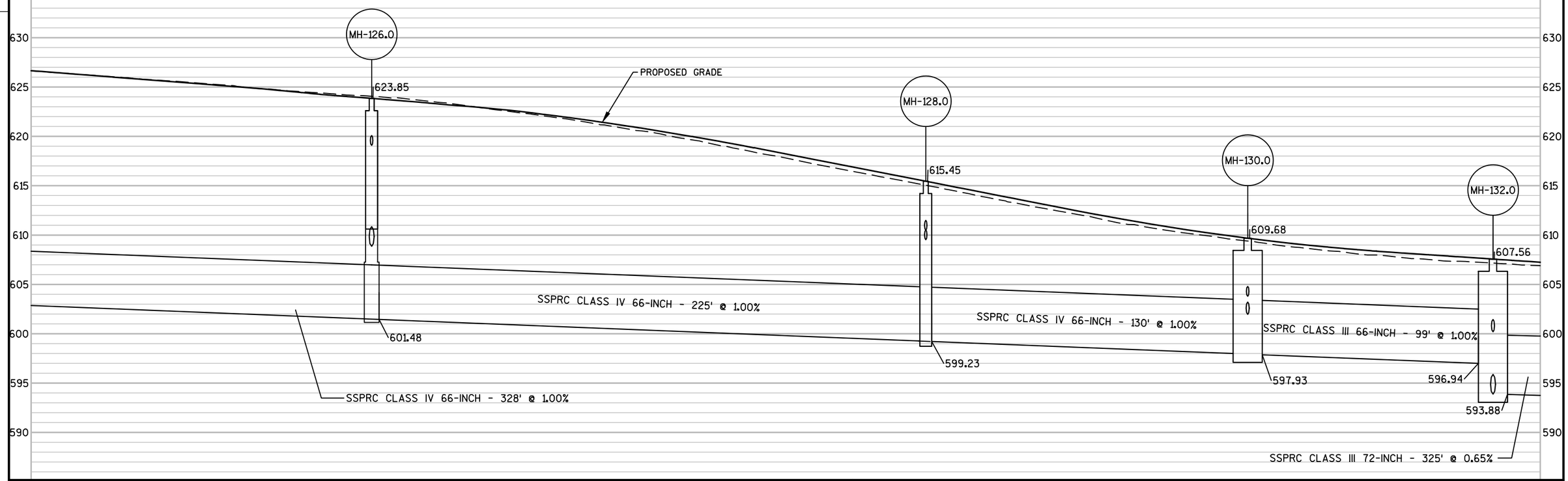
MH-126.2
618.53
612.23

SSPRC CLASS III 15-INCH - 27' @ 1.00%

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET 109	E

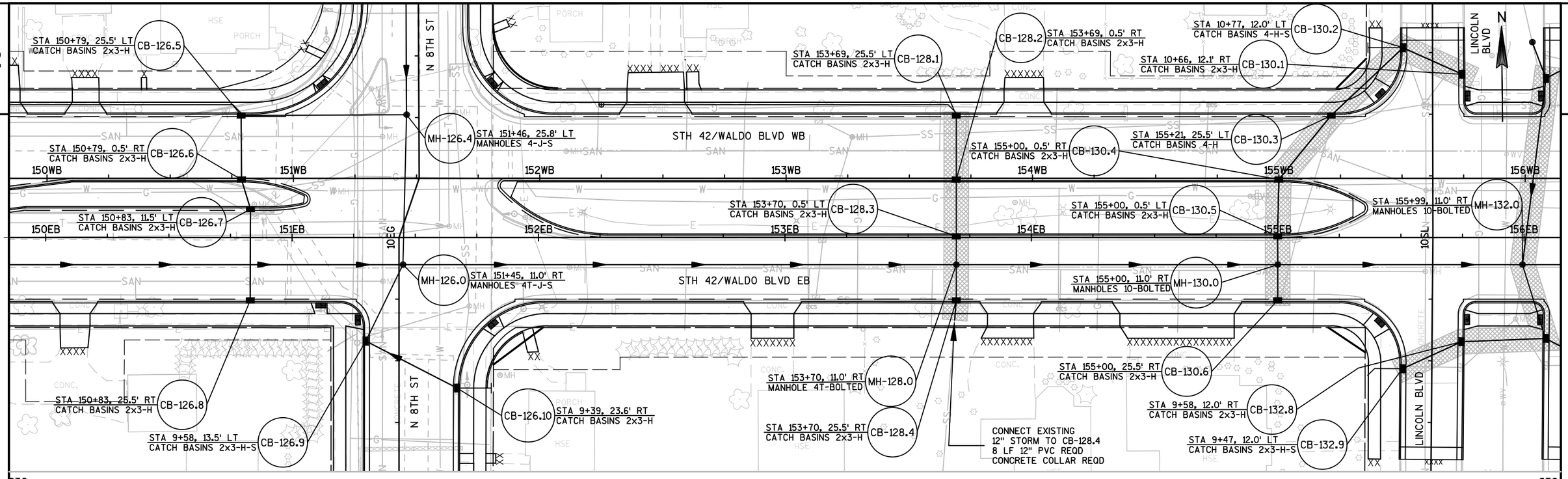
STA 150+79, 25.5' LT CATCH BASINS 2x3-H — CB-126.5
STA 150+79, 0.5' RT CATCH BASINS 2x3-H — CB-126.6
STA 150+83, 11.5' LT CATCH BASINS 2x3-H — CB-126.7
STA 150+83, 25.5' RT CATCH BASINS 2x3-H — CB-126.8
STA 9+58, 13.5' LT CATCH BASINS 2x3-H-S — CB-126.9
STA 9+39, 23.6' RT CATCH BASINS 2x3-H — CB-126.10
MH-126.4 STA 151+46, 25.8' LT MANHOLES 4-J-S
MH-126.0 STA 151+45, 11.0' RT MANHOLES 4T-J-S
6-INCH PVC REQD SEE CONSTRUCTION DETAIL
CONNECT EXISTING PRIVATE LATERAL TO CB-132.1 6-INCH PVC REQD SEE CONSTRUCTION DETAIL
STA 153+69, 25.5' LT CATCH BASINS 2x3-H — CB-128.1
CB-128.2 STA 153+69, 0.5' RT CATCH BASINS 2x3-H
STA 153+70, 0.5' LT CATCH BASINS 2x3-H — CB-128.3
STA 153+70, 25.5' RT CATCH BASINS 2x3-H — CB-128.4
STA 153+70, 11.0' RT MANHOLE 4T-BOLTED — MH-128.0
CONNECT EXISTING PRIVATE LATERAL TO CB-132.8 6-INCH PVC REQD SEE CONSTRUCTION DETAIL
STA 10+77, 12.0' LT CATCH BASINS 4-H-S — CB-130.2
STA 10+66, 12.1' RT CATCH BASINS 2x3-H — CB-130.1
STA 155+21, 25.5' LT CATCH BASINS 4-H — CB-130.3
STA 155+00, 0.5' RT CATCH BASINS 2x3-H — CB-130.4
STA 155+00, 0.5' LT CATCH BASINS 2x3-H — CB-130.5
STA 155+00, 25.5' RT CATCH BASINS 2x3-H — CB-130.6
STA 155+99, 11.0' RT MANHOLES 10-BOLTED — MH-132.0
STA 155+00, 11.0' RT MANHOLES 10-BOLTED — MH-130.0
STA 9+58, 12.0' RT CATCH BASINS 2x3-H — CB-132.8
STA 9+47, 12.0' LT CATCH BASINS 2x3-H-S — CB-132.9

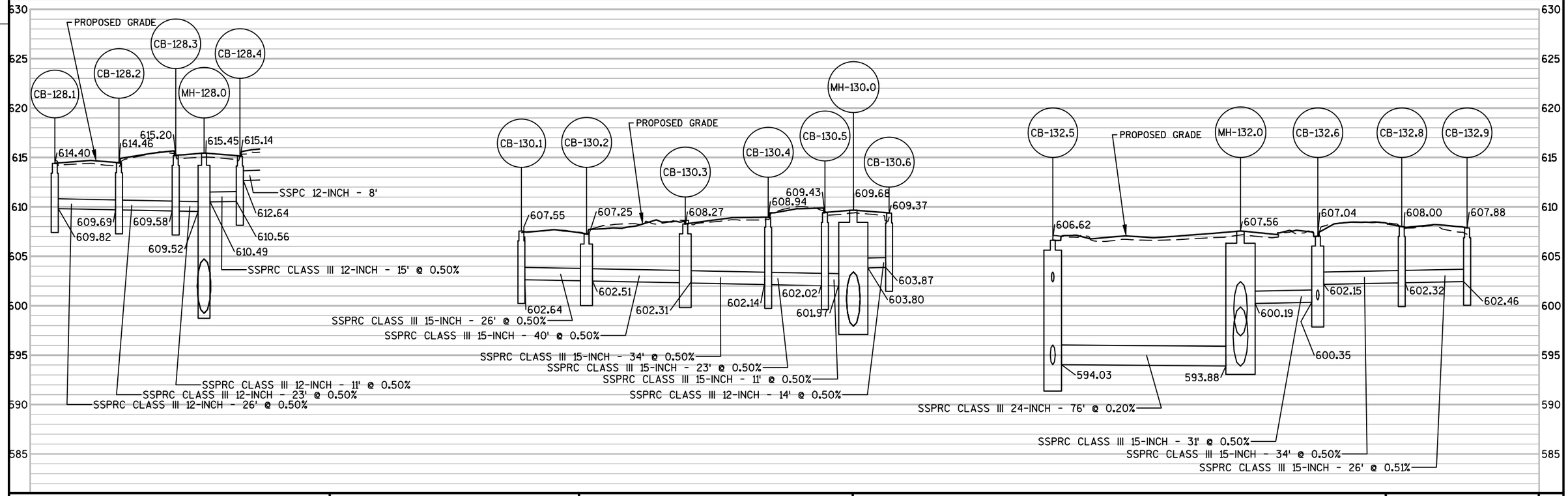
N 8TH ST
LINCOLN BLVD
STH 42/WALDO BLVD WB
STH 42/WALDO BLVD EB
150WB 151WB 152WB 153WB 154WB 155WB 156WB
150EB 151EB 152EB 153EB 154EB 155EB 156EB
10FG
10SLN



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET 110	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\45701271_022500_SS.DWG PLOT DATE : 7/24/2018 2:32 PM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 40'_XREF





PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET 111	E

MH-132.2 STA 10+79, 17.5' LT MANHOLES 8-J-S

CB-132.4 STA 10+77, 12.1' RT CATCH BASINS 2x3-H

CONNECT EXISTING PRIVATE LATERAL 6-INCH PVC REQDSEE CONSTRUCTION DETAIL

CB-132.5 STA 10+65, 12.0' LT CATCH BASINS 6-H-S

CB-132.6 STA 9+59, 12.0' LT CATCH BASINS 4-H-S

CONNECT EXISTING PRIVATE LATERAL 6-INCH PVC REQD SEE CONSTRUCTION DETAIL

CB-132.7 STA 9+47, 12.0' RT CATCH BASINS 2x3-H

6-INCH PVC REQD SEE CONSTRUCTION DETAIL

STA 159+43, 25.5' LT CATCH BASINS 4-H CB-134.4

STA 10+66, 16.1' LT CATCH BASINS 4-H-S CB-134.3

STA 10+72, 8.8' LT MANHOLES 4-J-S MH-134.2

STA 159+19, 0.5' RT CATCH BASINS 2x3-H CB-134.5

STA 159+20, 0.5' LT CATCH BASINS 2x3-H CB-134.6

STA 159+24, 11.0' RT MANHOLES 10-BOLTED MH-134.0

STA 159+24, 25.5' RT CATCH BASINS 2x3-H CB-134.7

STA 9+49, 14.5' LT CATCH BASINS 2x3-DW CB-134.8

CONNECT EXISTING PRIVATE LATERAL 6-INCH PVC REQD SEE CONSTRUCTION DETAIL

CB-134.1 STA 10+76, 14.5' RT CATCH BASINS 2x3-H

6-INCH PVC REQD SEE CONSTRUCTION DETAIL

CB-134.9 STA 9+46, 14.5' RT CATCH BASINS 2x3-H

6-INCH PVC REQD SEE CONSTRUCTION DETAIL

CONNECT EXISTING PRIVATE LATERAL 6-INCH PVC REQD SEE CONSTRUCTION DETAIL

LINCOLN BLVD

N 6TH ST

STH 42/WALDO BLVD WB

STH 42/WALDO BLVD EB

CATTLE PASS 10'X130'

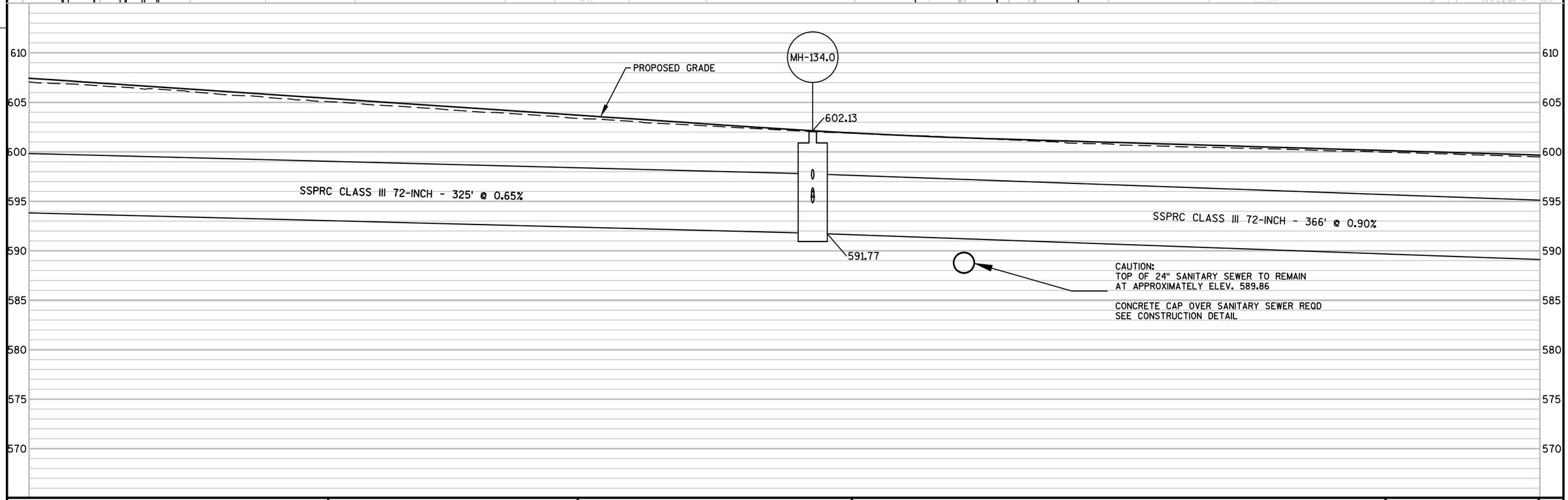
156WB 157WB 158WB 159WB 160WB 161WB 162WB

156EB 157EB 158EB 159EB 160EB 161EB 162EB

10NL 11NL 10SX 11SX

132.0

N



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET 112	E

CONNECT EXISTING 60" STORM TO MH-132.2 CONCRETE COLLAR REQD

MH-132.2 STA 10+79, 17.5' LT MANHOLES 8-J-S

CB-132.4 STA 10+77, 12.1' RT CATCH BASINS 2x3-H

CB-132.5 STA 10+65, 12.0' LT CATCH BASINS 6-H-S

STA 159+43, 25.5' LT CATCH BASINS 4-H CB-134.4

STA 10+72, 8.8' LT MANHOLES 4-J-S MH-134.2

STA 10+66, 16.1' LT CATCH BASINS 4-H-S CB-134.3

CONNECT EXISTING 12" STORM TO MH-134.2 CONCRETE COLLAR REQD

CB-134.1 STA 10+76, 14.5' RT CATCH BASINS 2x3-H

STA 159+19, 0.5' RT CATCH BASINS 2x3-H CB-134.5

STH 42/WALDO BLVD WB

STH 42/WALDO BLVD EB

CB-132.6 STA 9+59, 12.0' LT CATCH BASINS 4-H-S

STA 159+20, 0.5' LT CATCH BASINS 2x3-H CB-134.6

STA 159+24, 11.0' RT MANHOLES 10-BOLTED MH-134.0

STA 159+24, 25.5' RT CATCH BASINS 2x3-H CB-134.7

STA 9+49, 14.5' LT CATCH BASINS 2x3-DW CB-134.8

CB-134.9 STA 9+46, 14.5' RT CATCH BASINS 2x3-H

CONNECT EXISTING 6" STORM TO CB-134.8 6 LF 6" PVC REQD CONCRETE COLLAR REQD

CB-132.7 STA 9+47, 12.0' RT CATCH BASINS 2x3-H

156WB 157WB 158WB 159WB 160WB 161WB 162WB

156EB 157EB 158EB 159EB 160EB 161EB 162EB

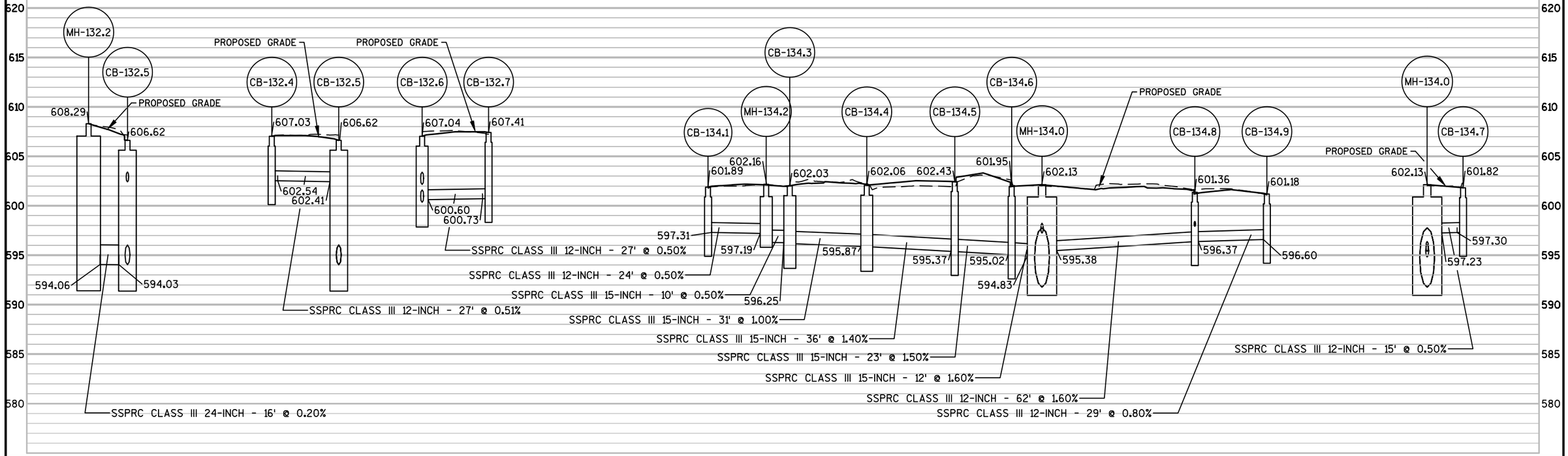
11NL 10NL 11SX 10SX

N 6TH ST

LINCOLN BLVD

CATTLE PASS 10'X130'

N



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET 113	E

6-INCH PVC REQD
SEE CONSTRUCTION DETAIL

EXISTING STORM SEWER STRUCTURES TO
REMAIN ADJUSTING INLETS - 2 EA REQD

6-INCH PVC REQD
SEE CONSTRUCTION DETAIL

N

N 5TH ST

CB-136.3 STA 163+07, 25.5' LT
CATCH BASINS 4-H

CB-138.1 STA 166+00, 25.5' LT
CATCH BASINS 2x3-H

STH 42/WALDO BLVD WB

STA 162+90, 0.5' RT
CATCH BASINS 2x3-H CB-136.4

CB-138.2 STA 166+00, 0.5' RT
CATCH BASINS 2x3-H

162WB 163WB 164WB 165WB 166WB 167WB 168WB

STA 162+90, 0.5' LT
CATCH BASINS 2x3-H CB-136.5

STA 166+00, 0.5' LT
CATCH BASINS 2x3-H CB-138.3

MH-138.0 STA 166+00, 11.0' RT
MANHOLES 10-BOLTED

162EB 163EB 164EB 165EB 166EB 167EB 168EB

STH 42/WALDO BLVD EB

STA 162+90, 11.0' RT
MANHOLES 10-BOLTED MH-136.0

CB-136.6 STA 162+90, 25.5' RT
CATCH BASINS 2x3-H

CONNECT EXISTING PRIVATE
LATERALS 6-INCH PVC REQD
STA. 165+05 & STA. 166+00
SEE CONSTRUCTION DETAIL
PLACE MINI STORM MAIN BELOW
SIDEWALK

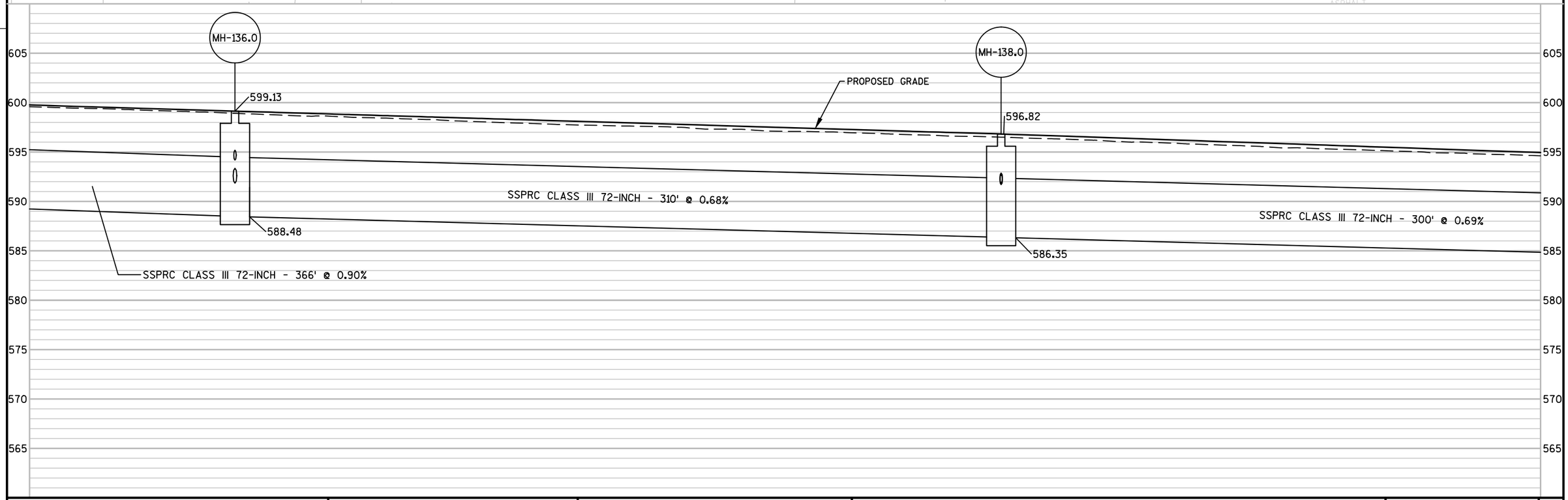
CB-138.4 STA 166+00, 25.5' RT
CATCH BASINS 2x3-H

6-INCH PVC REQD
SEE CONSTRUCTION DETAIL

6-INCH PVC REQD
CONNECT TO
EXISTING INLET

PIPE UNDERDRAIN
6-INCH REQD
SEE CONSTRUCTION DETAIL

CONNECT EXISTING
PRIVATE LATERAL
6-INCH PVC REQD
SEE CONSTRUCTION
DETAIL



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\45701271_022500_SS.DWG PLOT DATE : 7/24/2018 2:34 PM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 40'_XREF

CONNECT STORM SEWER TO EXISTING STORM SEWER STRUCTURE TO REMAIN

N 5TH ST

STH 42/WALDO BLVD WB

STH 42/WALDO BLVD EB

STA 162+90, 0.5' RT
CATCH BASINS 2x3-H
CB-136.4

CB-136.3
STA 163+07, 25.5' LT
CATCH BASINS 4-H

STA 162+90, 0.5' LT
CATCH BASINS 2x3-H
CB-136.5

STA 162+90, 11.0' RT
MANHOLES 10-BOLTED
MH-136.0

CB-136.6
STA 162+90, 25.5' RT
CATCH BASINS 2x3-H

CB-138.1
STA 166+00, 25.5' LT
CATCH BASINS 2x3-H

CB-138.2
STA 166+00, 0.5' RT
CATCH BASINS 2x3-H

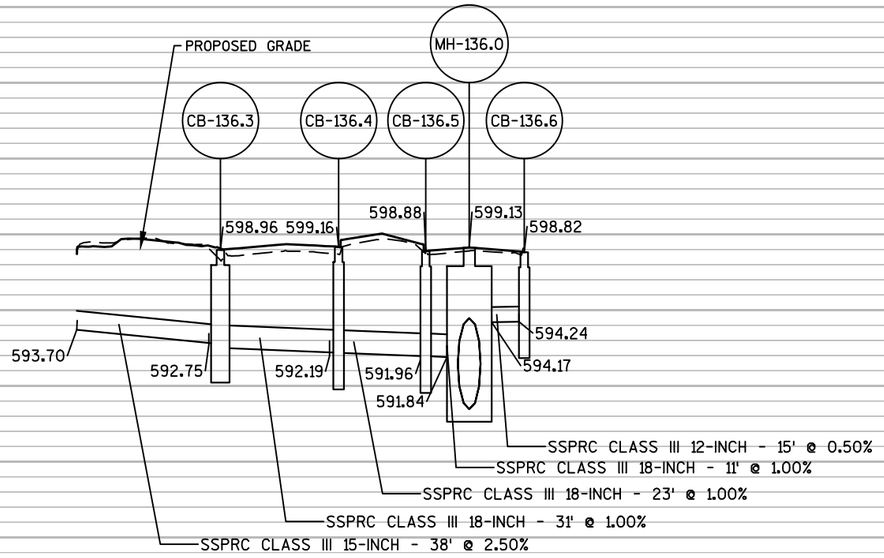
STA 166+00, 0.5' LT
CATCH BASINS 2x3-H
CB-138.3

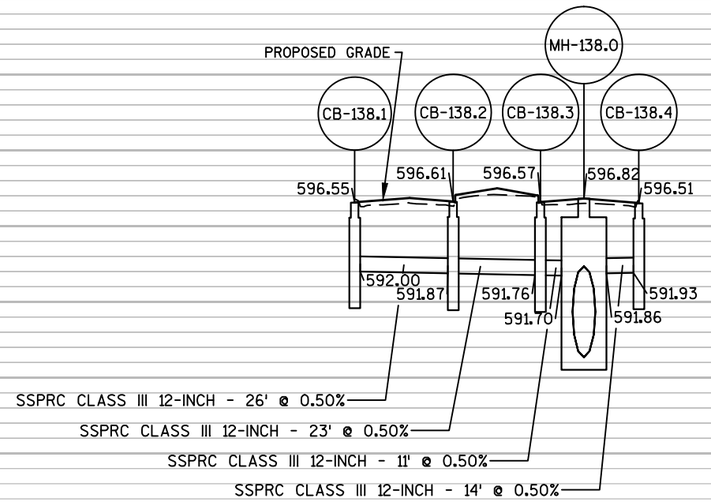
MH-138.0
STA 166+00, 11.0' RT
MANHOLES 10-BOLTED

CB-138.4
STA 166+00, 25.5' RT
CATCH BASINS 2x3-H

162WB 163WB 164WB 165WB 166WB 167WB 168WB

162EB 163EB 164EB 165EB 166EB 167EB 168EB





625 620 615 610 605 600 595 590 585 580

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\45701271_022500_SS.DWG PLOT DATE : 7/24/2018 2:34 PM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 41

6-INCH PVC REQD
SEE CONSTRUCTION DETAIL

CB-140.1 STA 169+02, 25.5' LT
CATCH BASINS 2x3-H

CB-140.2 STA 169+00, 0.5' RT
CATCH BASINS 2x3-H

STA 169+00, 0.5' LT
CATCH BASINS 2x3-H CB-140.3

MH-140.0 STA 169+00, 11.0' RT
MANHOLES 10-BOLTED

STA 169+00, 25.5' RT
CATCH BASINS 2x3-H CB-140.4

STH 42/WALDO BLVD WB

STH 42/WALDO BLVD EB

168WB 169WB 170WB 171WB

168EB 169EB 170EB 171EB

CONNECT EXISTING PRIVATE
LATERAL 6-INCH PVC REQD
SEE CONSTRUCTION DETAIL

CB-142.1 STA 172+00, 25.5' LT
CATCH BASINS 2x3-H

CB-142.2 STA 172+00, 0.5' RT
CATCH BASINS 2x3-H

172WB 173WB 174WB

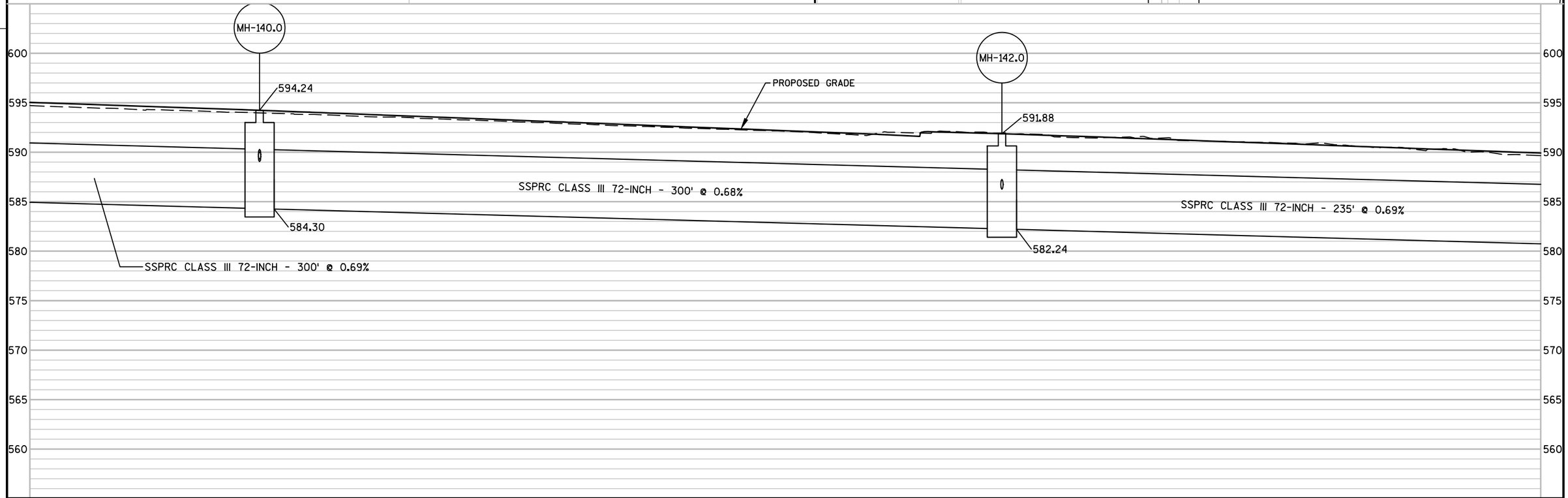
STA 172+00, 0.5' LT
CATCH BASINS 2x3-H CB-142.3

172EB 173EB 174EB

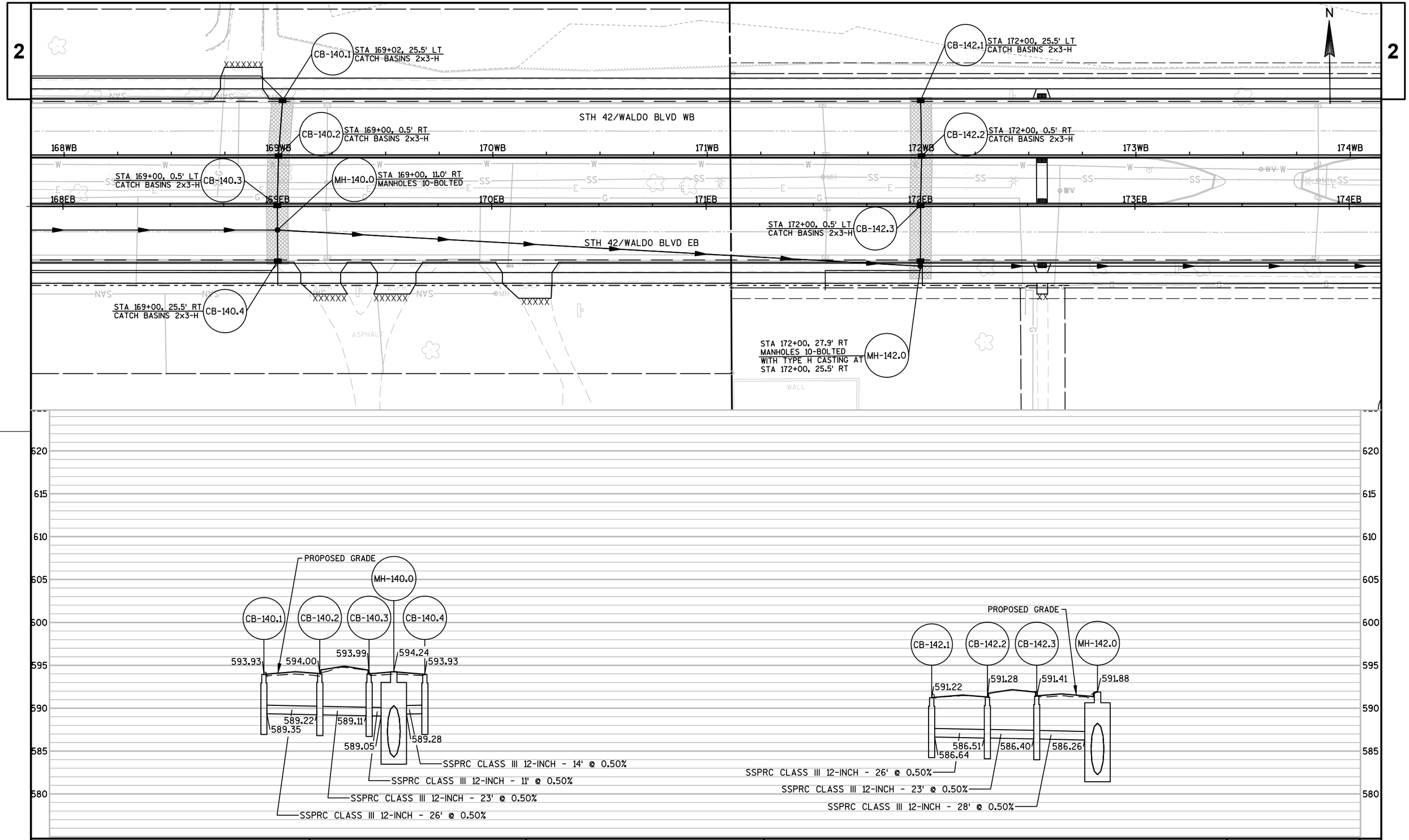
STA 172+00, 27.9' RT
MANHOLES 10-BOLTED
WITH TYPE H CASTING AT
STA 172+00, 25.5' RT
MH-142.0

PIPE UNDERDRAIN
6-INCH REQD
SEE CONSTRUCTION DETAIL

N



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET 116	E



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET 117	E

2

N

CB-150.1 STA 174+99, 25.5' LT CATCH BASINS 2x3-H

CB-150.2 STA 175+00, 0.5' RT CATCH BASINS 2x3-H

STH 42/WALDO BLVD WB

CB-150.3 STA 175+00, 0.5' LT CATCH BASINS 2x3-H

STH 42/WALDO BLVD EB

CB-150.0 STA 175+00, 25.5' RT CATCH BASINS 5-H

OF-3A STA 174+92, 69.3' RT APRON ENDWALLS FOR CPRC 24-INCH

MH-144.0 STA 174+35, 27.9' RT MANHOLE SPECIAL 9.5x16-FEET WITH BOLTED COVER

OF-3 STA 174+70, 73.2' RT APRON ENDWALLS FOR CPRC H.E. 72x113-INCH

PIPE UNDERDRAIN 6-INCH REQD SEE CONSTRUCTION DETAIL

PIPE UNDERDRAIN 6-INCH REQD SEE CONSTRUCTION DETAIL

PIPE UNDERDRAIN 6-INCH REQD SEE CONSTRUCTION DETAIL

STA 177+87, 25.5' LT CATCH BASINS 2x3-H CB-152.2

CB-152.1 STA 177+97, 25.5' LT CATCH BASINS 2x3-H-S

STA 179+59, 25.5' LT CATCH BASINS 2x3-H CB-160.1

STA 177+87, 0.5' RT CATCH BASINS 2x3-H CB-152.4

CB-152.3 STA 177+97, 0.5' RT CATCH BASINS 2x3-H-S

STA 179+59, 0.5' RT CATCH BASINS 2x3-H CB-160.2

STA 179+60, 0.5' LT CATCH BASINS 4-H CB-160.3

STA 177+85, 0.5' LT CATCH BASINS 2x3-H CB-152.6

CB-152.5 STA 177+95, 0.5' LT CATCH BASINS 2x3-H-S

STA 179+60, 25.5' RT CATCH BASINS 2x3-H CB-160.4

STA 177+85, 25.5' RT CATCH BASINS 4-H CB-152.0

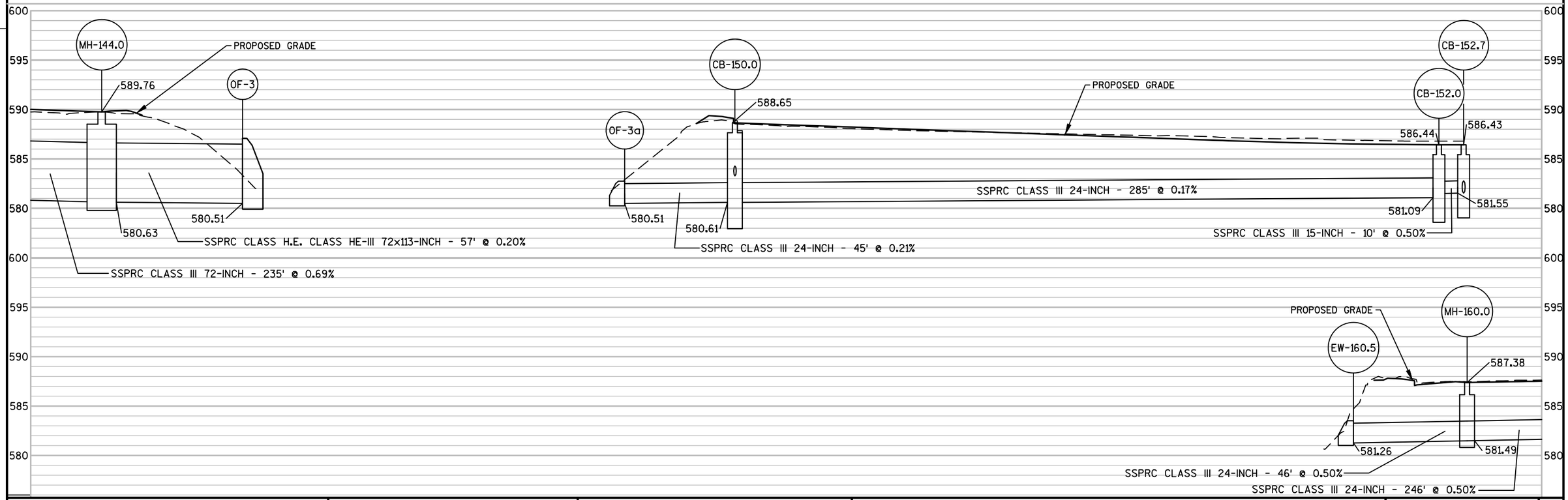
CB-152.7 STA 177+95, 25.5' RT CATCH BASINS 4-H-S

STA 179+82, 6.8' RT MANHOLES 5-J-S MH-160.0

STA 179+62, 48.4' RT APRON ENDWALLS FOR CPRC 24-INCH EW-160.5

174WB 175WB 176WB 177WB 178WB 179WB 180WB

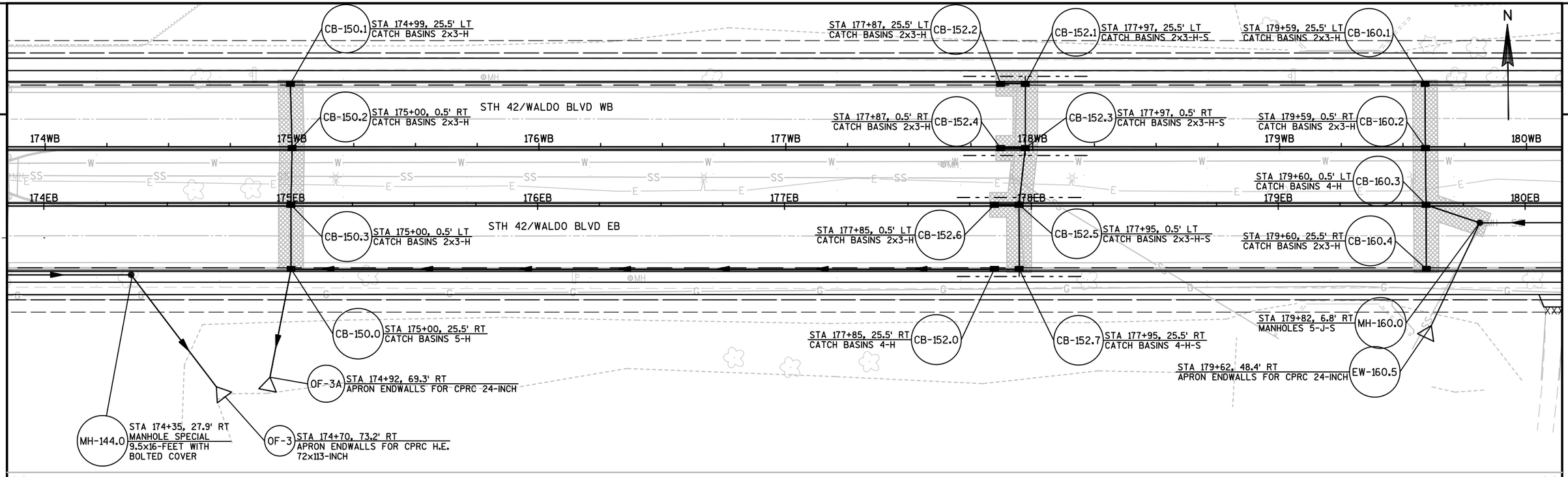
174EB 175EB 176EB 177EB 178EB 179EB 180EB

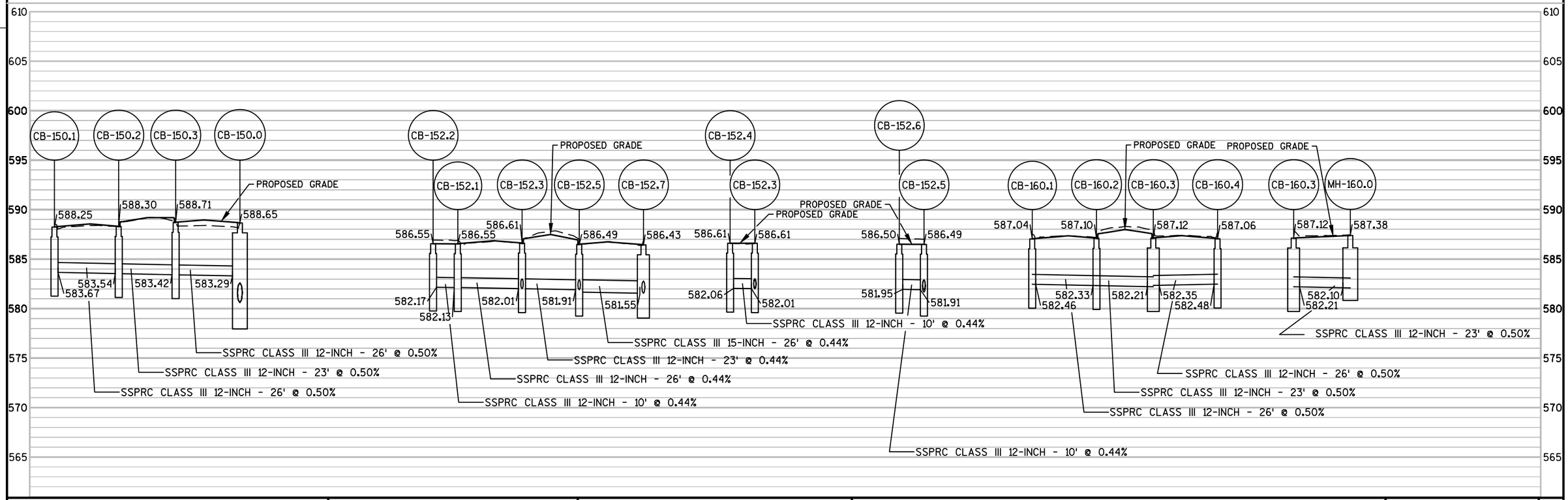


PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\45701271_022500_SS.DWG PLOT DATE : 7/24/2018 2:36 PM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 41





PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET 119	E

2

N

CB-162.1 STA 182+28, 25.5' LT
CATCH BASINS 2x3-H

CB-162.2 STA 182+28, 0.5' RT
CATCH BASINS 2x3-H

CB-162.3 STA 182+28, 0.5' LT
CATCH BASINS 2x3-H

MH-162.0 STA 182+28, 6.5' RT
MANHOLES 4-J-S

CB-162.4 STA 182+28, 25.5' RT
CATCH BASINS 2x3-H

EW-164.10 STA 184+89, 46.1' LT
APRON ENDWALLS FOR CPRC 18-INCH

CB-164.2 STA 184+89, 25.5' LT
CATCH BASINS 2x3-H

STA 184+89, 0.5' RT
CATCH BASINS 2x3-H
CB-164.3

CB-164.4 STA 184+89, 0.6' LT
CATCH BASINS 2x3-H

MH-164.0 STA 184+87, 6.7' RT
MANHOLES 5-J-S

CB-164.5 STA 184+87, 25.5' RT
CATCH BASINS 2x3-H

STH 42/WALDO BLVD WB

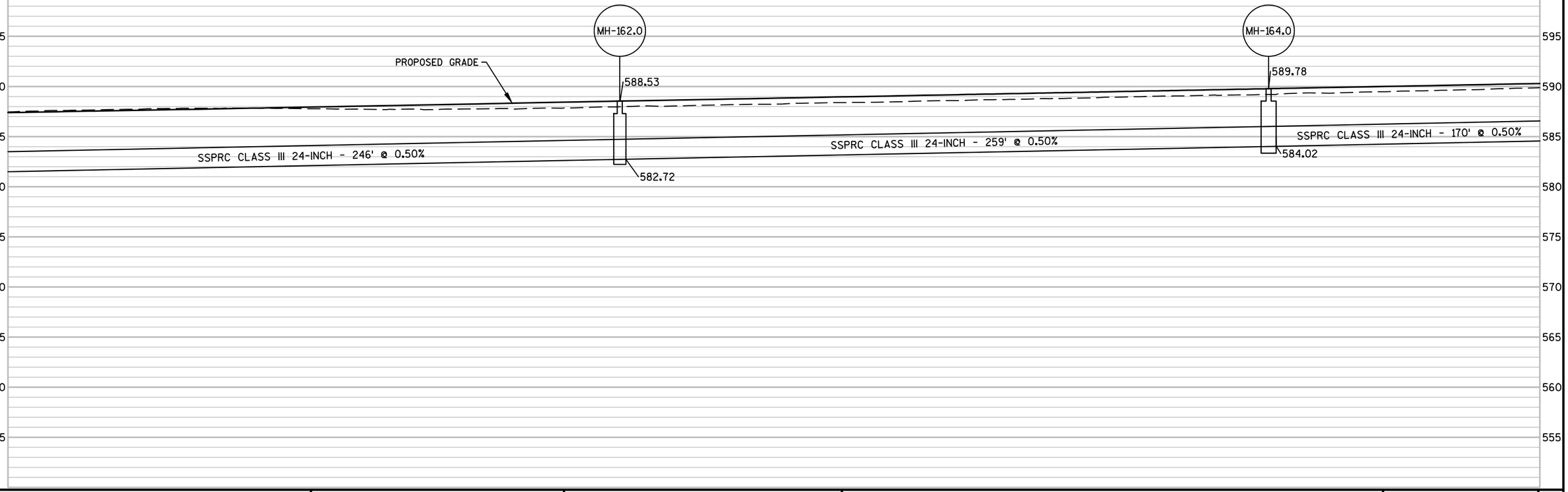
STH 42/WALDO BLVD EB

180WB 181WB 182WB 183WB 184WB 185WB 186WB

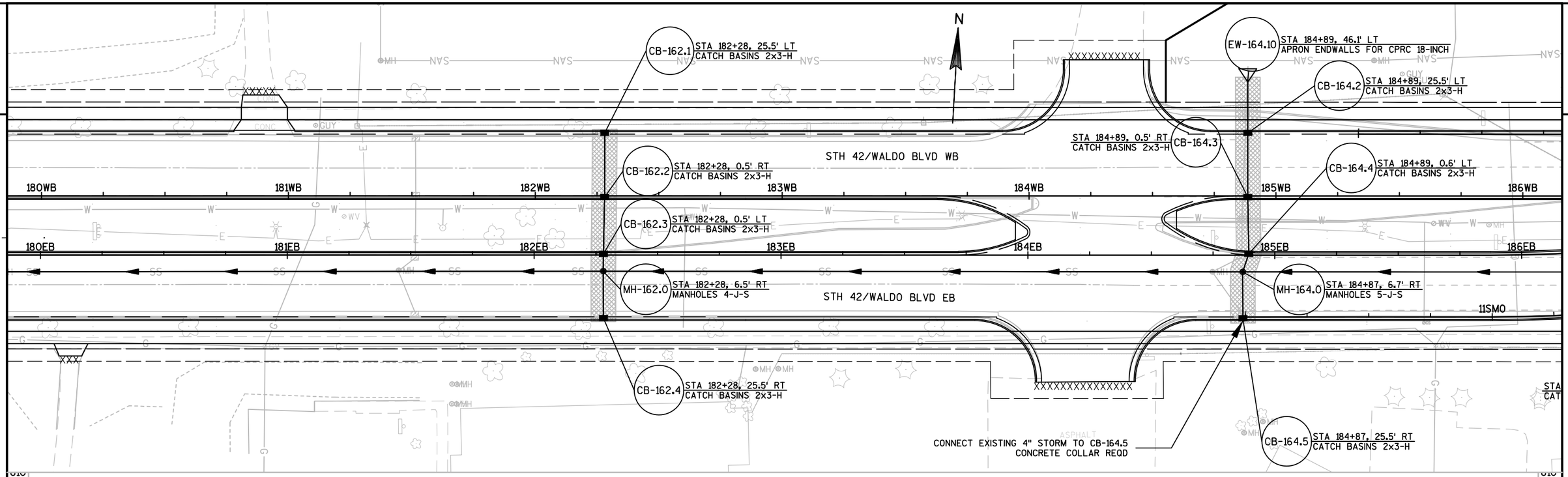
180EB 181EB 182EB 183EB 184EB 185EB 186EB

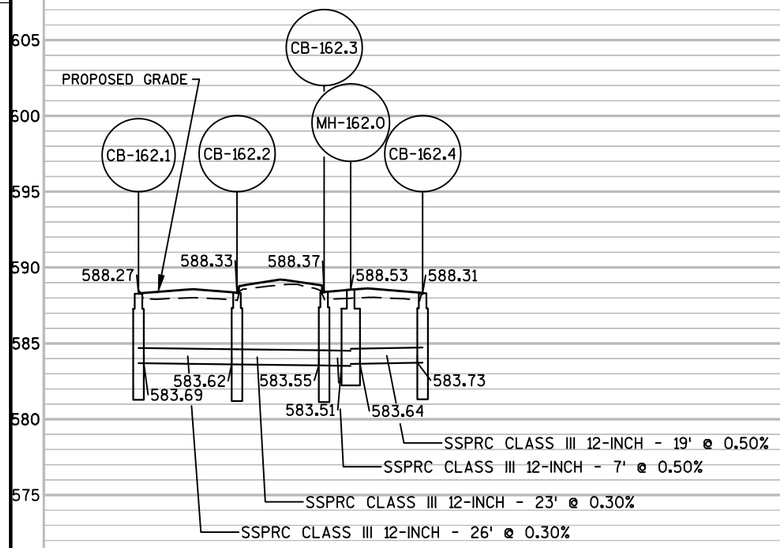
11SMO

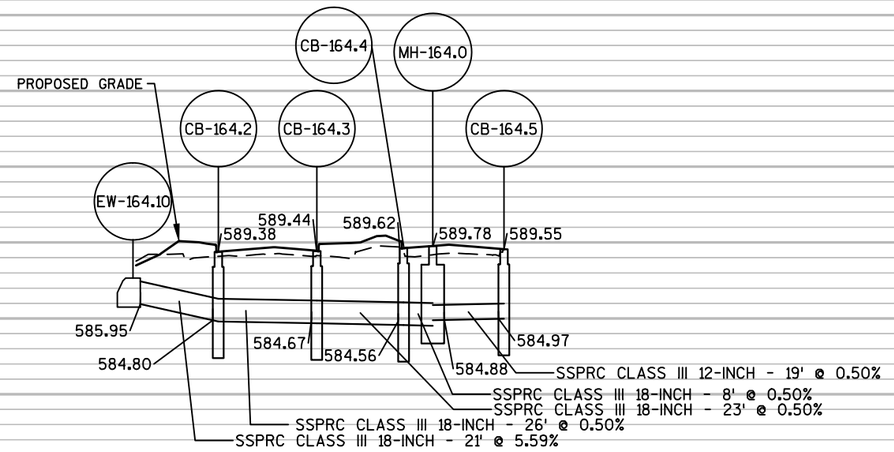
ASPHALT



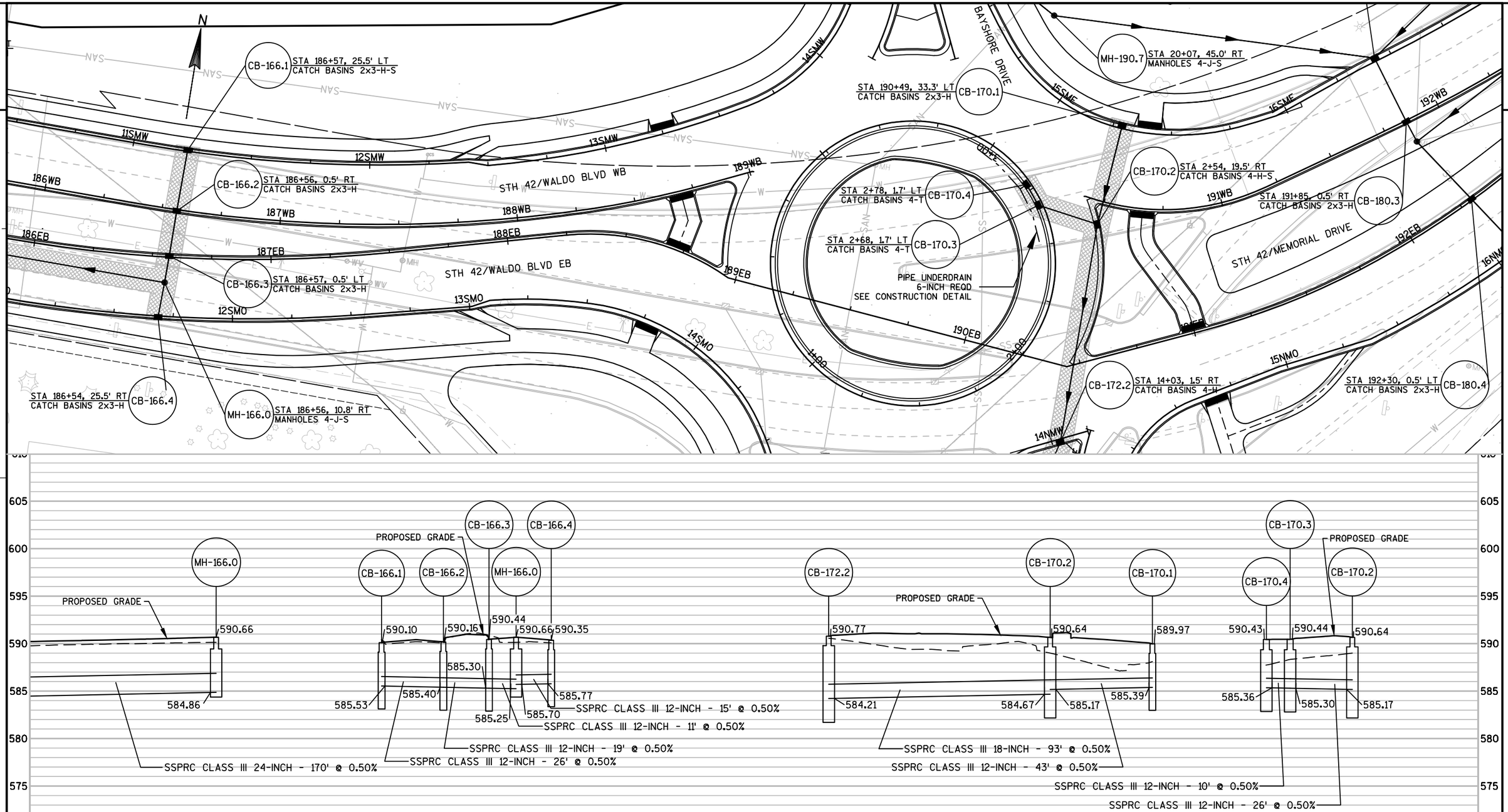
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET 120	E







PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET 121	E



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\45701271_022500_SS.DWG PLOT DATE : 1/21/2019 10:41 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 40'_XREF

STA 15+07, 1.5' RT
CATCH BASINS 2x3-H
CB-174.1

CB-174.3
STA 12+79, 1.5' RT
CATCH BASINS 2x3-H

CB-172.1
STA 1+51, 29.0' RT
CATCH BASINS 2x3-H

CB-172.2
STA 14+03, 1.5' RT
CATCH BASINS 4-H

STA 15+17, 1.5' RT
CATCH BASINS 2x3-H-S
CB-174.2

STA 12+69, 1.5' RT
CATCH BASINS 2x3-H-S
CB-174.4

MARITIME DRIVE

STA 12+88, 1.5' LT
CATCH BASINS 2x3-H-S
CB-174.6

PIPE UNDERDRAIN
6-INCH REQD (TYP)
SEE CONSTRUCTION DETAIL

MH-172.0
STA 13+59, 19.0' RT
MANHOLES 4-J-S

CB-174.5
STA 12+99, 1.5' LT
CATCH BASINS 2x3-H

CB-174.7
STA 13+14, 1.5' RT
CATCH BASINS 2x3-H

CB-174.9
STA 13+29, 1.5' LT
CATCH BASINS 2x3-H

CB-174.11
STA 13+41, 1.5' RT
CATCH BASINS 2x3-H

STA 13+04, 1.5' RT
CATCH BASINS 2x3-H-S
CB-174.8

STA 13+05, 14.5' RT
MANHOLES 5-J-S
MH-174.0

STA 13+19, 1.5' LT
CATCH BASINS 2x3-H-S
CB-174.10

CB-174.12
STA 13+31, 1.5' RT
CATCH BASINS 2x3-H-S

EW-174.13
STA 13+17, 75.1' RT
APRON ENDWALLS FOR CPRC 24-INCH

MH-180.0
STA 192+25, 33.6' LT
MANHOLES 5-J-S

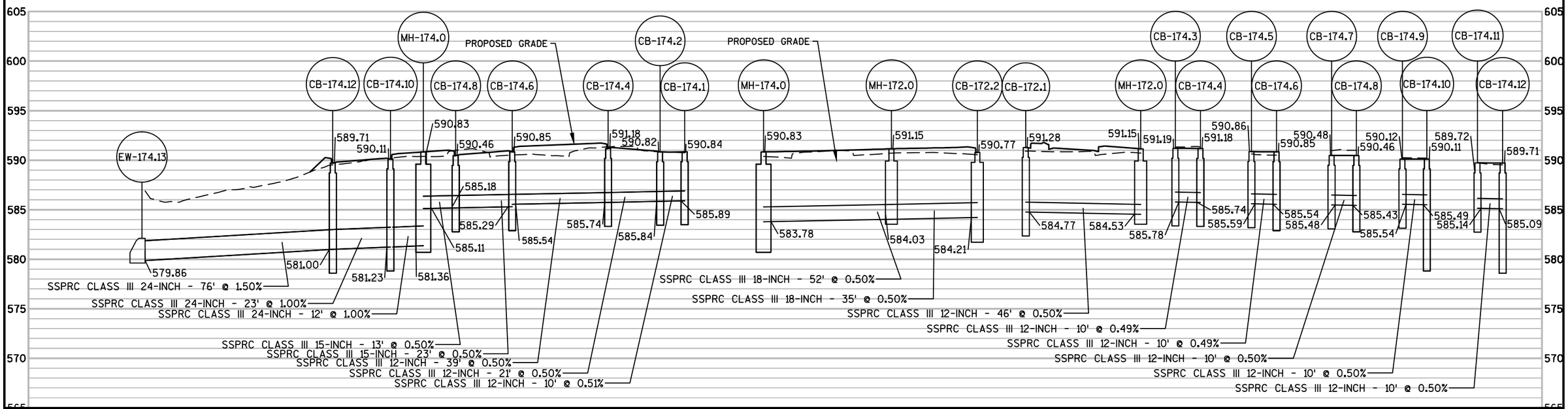
STA 193+15, 56.6' LT
INLETS MEDIAN 1G-MS
IN-180.1

CB-180.4
STA 192+30, 0.5' LT
CATCH BASINS 2x3-H

CB-180.5
STA 192+34, 29.5' RT
CATCH BASINS 2x3-H

EW-180.6
STA 192+40, 82.9' RT
APRON ENDWALLS FOR CPRC 24-INCH

STH 42/MEMORIAL DRIVE



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET 123	E

2

CB-180.2 STA 191+85, 29.5' LT CATCH BASINS 4-H

CB-180.3 STA 191+85, 0.5' RT CATCH BASINS 2x3-H

IN-180.1 STA 193+15, 56.6' LT INLETS MEDIAN 1G-MS

MH-180.0 STA 192+25, 33.6' LT MANHOLES 5-J-S

CB-180.4 STA 192+30, 0.5' LT CATCH BASINS 2x3-H

CB-180.5 STA 192+34, 29.5' RT CATCH BASINS 2x3-H

EW-180.6 STA 192+40, 82.9' RT APRON ENDWALLS FOR CPRC 24-INCH

CB-182.1 STA 193+90, 34.5' LT CATCH BASINS 2x3-H

CB-182.2 STA 194+00, 34.5' LT CATCH BASINS 2x3-H-S

PIPE UNDERDRAIN 6-INCH REQD SEE CONSTRUCTION DETAIL

CB-182.4 STA 193+98, 0.5' RT CATCH BASINS 4-H-S

CB-182.3 STA 194+08, 0.8' RT CATCH BASINS 2x3-H-S

CB-184.0 STA 195+17, 11.7' RT CATCH BASINS 2x3-HM-GJ

CB-182.6 STA 194+30, 0.5' LT CATCH BASINS 2x3-H

CB-182.5 STA 194+40, 0.5' LT CATCH BASINS 2x3-H-S

CB-182.8 STA 194+40, 30.6' RT CATCH BASINS 2x3-H

CB-182.7 STA 194+50, 31.5' RT CATCH BASINS 2x3-H-S

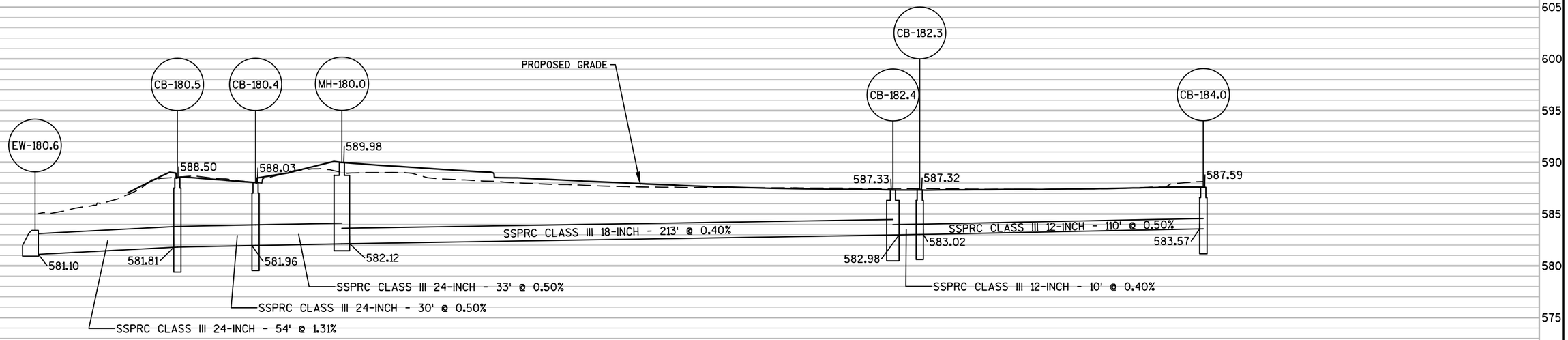
STH 42/MEMORIAL DRIVE

15NMO 16NMO 17NMO 18NMO

16SME 17SME 18SME

191WB 192WB 193WB 194WB 195WB 196WB

192EB 193EB 194EB 195EB 196EB 197EB



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET 124	E

2

CB-180.2 STA 191+85, 29.5' LT CATCH BASINS 4-H

CB-182.2 STA 194+00, 34.5' LT CATCH BASINS 2x3-H-S

STA 191+85, 0.5' RT CATCH BASINS 2x3-H CB-180.3

STA 193+15, 56.6' LT INLETS MEDIAN 1G-MS IN-180.1

STA 193+90, 34.5' LT CATCH BASINS 2x3-H CB-182.1

CB-182.4 STA 193+98, 0.5' RT CATCH BASINS 4-H-S

CB-182.3 STA 194+08, 0.8' RT CATCH BASINS 2x3-H-S

CB-184.0 STA 195+17, 11.7' RT CATCH BASINS 2x3-HM-GJ

MH-180.0 STA 192+25, 33.6' LT MANHOLES 5-J-S

STH 42/MEMORIAL DRIVE

CB-180.4 STA 192+30, 0.5' LT CATCH BASINS 2x3-H

STA 194+30, 0.5' LT CATCH BASINS 2x3-H CB-182.6

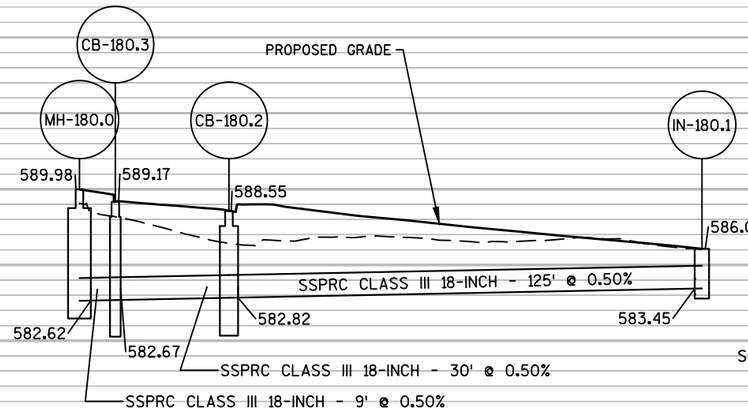
CB-182.5 STA 194+40, 0.5' LT CATCH BASINS 2x3-H-S

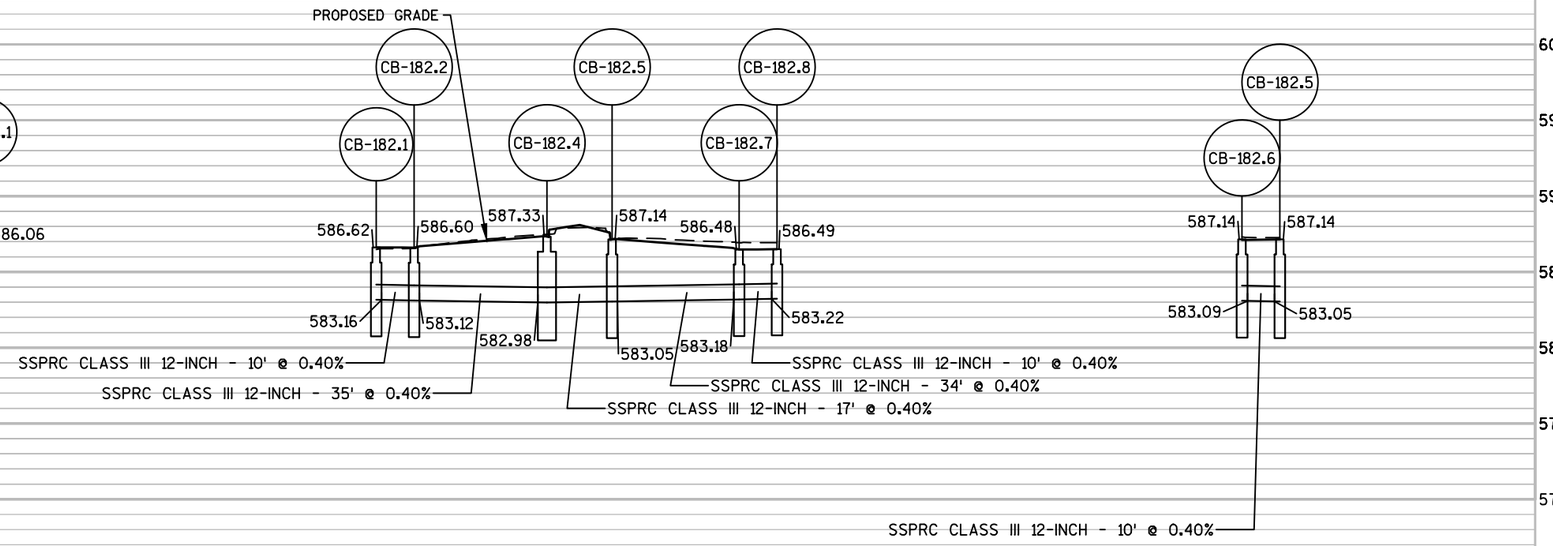
CB-180.5 STA 192+34, 29.5' RT CATCH BASINS 2x3-H

STA 194+40, 30.6' RT CATCH BASINS 2x3-H CB-182.8

CB-182.7 STA 194+50, 31.5' RT CATCH BASINS 2x3-H-S

EW-180.6 STA 192+40, 82.9' RT APRON ENDWALLS FOR CPRC 24-INCH

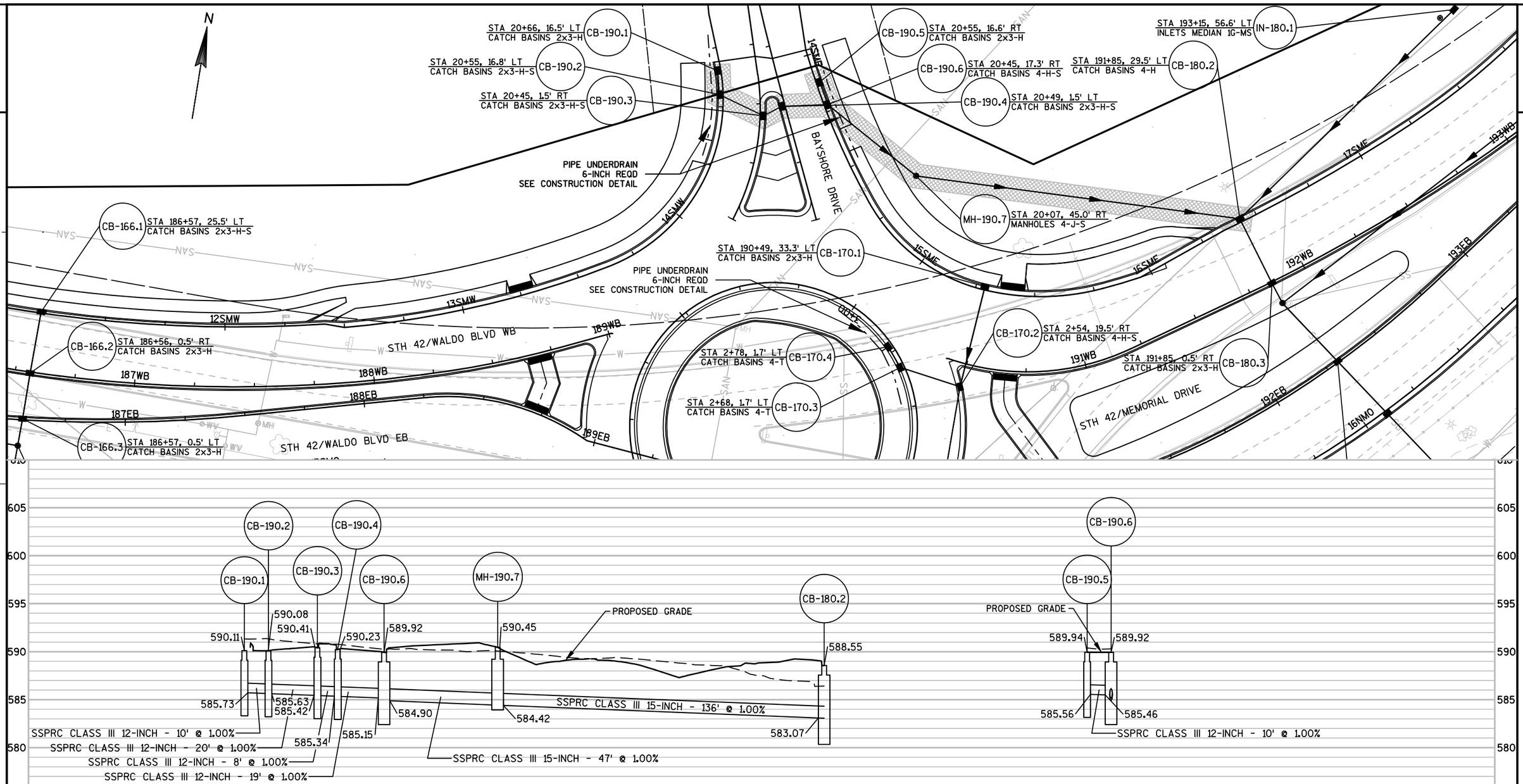




PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\45701271_022500_SS.DWG PLOT DATE : 1/21/2019 10:43 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 41

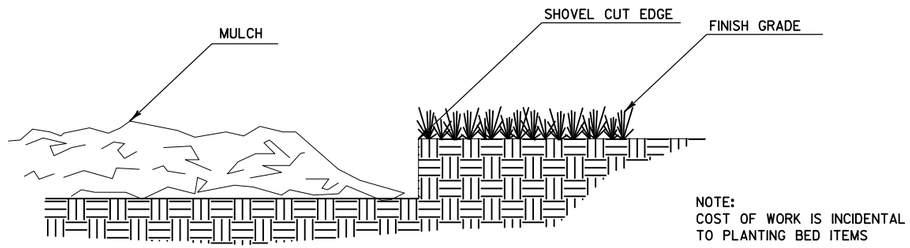


PROJECT NO: 4570-12-72	HWY: STH 42	COUNTY: MANITOWOC	STORM SEWER	SHEET 126 E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\STORM SEWER\45701271_022500_SS.DWG PLOT DATE : 1/21/2019 10:44 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 41

PLANT DATA CHART

SYM	COMMON NAME	SCIENTIFIC NAME	TYPE	AVG. MATURE HEIGHT	SIZE (CAL. OR HT.) WHEN PLANTED	MODE	ROOT ZONE DIAM.	MINIMUM SIZE BALL/POT DEPTH	BALL/POT SPREAD	ROOT DIAM.	PLANT HOLE DEPTH	GUY/BRACE REQ'D	FERT. UNITS REQ'D	RODENT PROTECT DIAM.	MULCH RING DIA. OR BED
	DECIDUOUS TREES														
GI	AUTUMN GOLD GINKGO	GINKGO BILOBA 'AUTUMN GOLD'	1	45'	2" CAL.	B&B	24"	16"	-	36"	16"	NO	4	NO	48"
HA	COMMON HACKBERRY	CELTIS OCCIDENTALIS	1	50'	2" CAL.	B&B	24"	16"	-	36"	16"	NO	4	NO	48"
KC	ESPRESSO KENTUCKY COFFEETREE	GYMNOCLADUS DIOICUS 'ESPRESSO'	1	50'	2" CAL.	B&B	24"	16"	-	36"	16"	NO	4	NO	48"
RE	REGAL ELM	ULMUS 'REGAL'	1	55'	2" CAL.	B&B	24"	16"	-	36"	16"	NO	4	NO	48"
RL	REDMOND LINDEN	TILIA AMERICANA 'REDMOND'	1	55'	2" CAL.	B&B	24"	16"	-	36"	16"	NO	4	NO	48"
RM	RED MAPLE	ACER RUBRUM	1	55'	2" CAL.	B&B	24"	16"	-	36"	16"	NO	4	NO	48"
SH	SKYLINE HONEYLOCUST	GLEDITSIA TRIACANTHOS F. INERMIS 'SKYCOLE' SKYLINE®	1	50'	2" CAL.	B&B	24"	16"	-	36"	16"	NO	4	NO	48"
WO	SWAMP WHITE OAK	QUERCUS BICOLOR	1	55'	2" CAL.	B&B	24"	16"	-	36"	16"	NO	4	NO	48"
	ORNAMENTAL TREES														
AS	AUTUMN BRILLIANCE SERVICEBERRY	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	3	20'	1 1/2" CAL.	B&B	16"	12"	-	28"	12"	NO	3	NO	40"
BS	COLORADO BLUE SPRICE	PICEA PUNGENS	6	50'	6' HT.	B&B	14"	11"	-	26"	11"	NO	2	NO	BED
CH	SCHUBERT CHOKECHERRY	PRUNUS VIRGINIANA 'SCHUBERT'	3	25'	1 1/2" CAL.	B&B	16"	12"	-	28"	12"	NO	3	NO	40"
CO	CRUSADER THORNLESS COCKSPUR HAW	CRATAEGUS CRUS-GALLI 'CRUZAM' CRUSADER™	3	25'	1 1/2" CAL.	B&B	16"	12"	-	28"	12"	NO	3	NO	40"
SS	SPRING SNOW CRABAPPLE	MALUS 'SPRING SNOW'	3	20'	1 1/2" CAL.	B&B	16"	12"	-	28"	12"	NO	3	NO	40"
	SHRUBS, GRASSES, & PERENNIALS														
Cj	PLUMOSA CREEPING JUNIPER	JUNIPERUS HORIZONTALIS 'PLUMOSA'	2	1'	6" HT.	CG	-	-	-	-	-	NO	2	NO	BED
St	STAGHORN SUMAC	RHUS TYPHINA	3	15'	2' HT.	CG	-	-	-	-	-	NO	2	NO	24"
wl	WALKER'S LOW BLUE CATMINT	NEPETA RACEMOSA 'WALKER'S LOW'	-	2'	SP4	CG	-	-	-	-	-	NO	-	-	BED



DETAIL FOR PLANTING BED SHOVEL CUT EDGE

2

NOTES

MANITOWOC PUBLIC UTILITIES DISTRIBUTION OPERATIONS DEPARTMENT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT MPU 3 DAYS IN ADVANCE AT (920) 683-4600.

PULL BOXES SHALL BE INSTALLED FLUSH TO GRADE ± 1" AND BE PLACED AT LEAST 3' BEHIND CURB AND GUTTER.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION SHALL ONLY BE ACCEPTED WITH THE WRITTEN APPROVAL OF THE ENGINEER.

LIGHTING PLAN LEGEND

STA 154+00EB, 12'LT
8-7S-37-(1-13)

- STATION
- OFFSET
- MAST ARM LENGTH
- BASE TYPE
- LIGHT UNIT NUMBER
- POLE HEIGHT

TWIN ARM LIGHTING UNIT ON CONCRETE BASE

SINGLE ARM LIGHTING UNIT ON CONCRETE BASE

PULL BOX

LIGHTING CONDUIT (REFER TO PLANS AND MISCELLANEOUS QUANTITIES FOR SIZE, TYPE AND WIRING)

N

N. 14TH ST.

STUB TO STA. 131+75 AND PLUG

2" SCH 40 PVC CONDUIT

STA 132+14EB, 19.5'LT

TO REMAIN

USH 10/STH 42

129EB 130EB 131EB 132EB 133EB 134EB 135EB

SH 1

CO 2

STA 132+10EB, 12'LT
8-7S-40-(1-17)

BEGIN PROJECT 1500-37-74
STA. 131+75.00

NOTES:
1. MAKE MINOR ADJUSTMENTS TO TREE LOCATIONS TO AVOID OBSTACLES.
2. TREE PLACEMENT GUIDELINE:
   A. 30' FROM ANY STREET CORNER
   B. 10' FROM A DRIVEWAY
   C. 10' FROM A GAS/WATER VALVE
   D. 40' FROM A STREET LIGHT OR UTILITY POLE
   E. 10' FROM A FIRE HYDRANT

PLANT LIST

Symbol	Common Name	Quantity on sheet
LARGE TREES		
GI	Autumn Gold ginkgo	
HA	Common hackberry	
KC	Espresso Kentucky coffeetree	
RE	Regal elm	
RM	Red maple	
RL	Redmond linden	
SH	Skyline honeylocust	1
WO	Swamp white oak	

SMALL TREES		
AS	Autumn Brilliance serviceberry	
BS	Colorado blue spruce	
CH	Schubert Chokecherry	
CO	Crusader thornless cockspur hawthorn	2
SS	Spring Snow crabapple	
SHRUBS, GRASSES, & PERENNIALS		
CJ	Plumosa creeping juniper	
St	Staghorn sumac	
wl	Walker's Low blue catmint	

LIGHTING PLAN LEGEND

STA 154+00EB, 12'LT
8-7S-37-(1-13)

- STATION
- OFFSET
- MAST ARM LENGTH
- BASE TYPE
- LIGHT UNIT NUMBER
- POLE HEIGHT

- TWIN ARM LIGHTING UNIT ON CONCRETE BASE
- SINGLE ARM LIGHTING UNIT ON CONCRETE BASE
- PULL BOX
- LIGHTING CONDUIT (REFER TO PLANS AND MISCELLANEOUS QUANTITIES FOR SIZE, TYPE AND WIRING)

NOTES

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PULL BOXES SHALL BE INSTALLED FLUSH TO GRADE ± 1" AND BE PLACED AT LEAST 3' BEHIND CURB AND GUTTER.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

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STA 135+29EB, 19.5'LT

STA 137+29EB, 19.5'LT

2" SCH 40 PVC CONDUIT

STA 138+46EB, 19.5'LT
PB-11

STA 139+10EB, 19.5'LT

PI: 135+31.67

USH 10/STH 42

135EB 136EB 137EB 138EB 139EB 140EB 141EB

N. 12TH ST.

MENASHA AVE.

AS 2

RL 1

RL 1

STA 135+25EB, 12'LT
8-7S-40-(1-16)

STA 137+25EB, 12'LT
8-7S-40-(1-15)

STA 138+46EB, 29.5'RT
PB-12
INTALL PULL BOX
ADJACENT TO MPU
POLE "5G7072"

STA 139+10EB, 17.7'LT
8-7S-40-(1-14)

BEAM GUARD

NOTES:
1. MAKE MINOR ADJUSTMENTS TO TREE LOCATIONS TO AVOID OBSTACLES.
2. TREE PLACEMENT GUIDELINE:
   A. 30' FROM ANY STREET CORNER
   B. 10' FROM A DRIVEWAY
   C. 10' FROM A GAS/WATER VALVE
   D. 40' FROM A STREET LIGHT OR UTILITY POLE
   E. 10' FROM A FIRE HYDRANT

PLANT LIST

Symbol	Common Name	Quantity on sheet
LARGE TREES		
GI	Autumn Gold ginkgo	
HA	Common hackberry	
KC	Espresso Kentucky coffeetree	
RE	Regal elm	
RM	Red maple	
RL	Redmond linden	2
SH	Skyline honeylocust	
WO	Swamp white oak	

SMALL TREES		
AS	Autumn Brilliance serviceberry	2
BS	Colorado blue spruce	
CH	Schubert Chokecherry	
CO	Crusader thornless cockspur hawthorn	
SS	Spring Snow crabapple	
SHRUBS, GRASSES, & PERENNIALS		
CJ	Plumosa creeping juniper	
St	Staghorn sumac	
wi	Walker's Low blue catmint	

2

NOTES

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LIGHTING PLAN LEGEND

STATION — OFFSET

STA 154+00EB, 12'LT
8-7S-37-(1-13)

MAST ARM LENGTH — LIGHT UNIT NUMBER

BASE TYPE — POLE HEIGHT

- TWIN ARM LIGHTING UNIT ON CONCRETE BASE
- SINGLE ARM LIGHTING UNIT ON CONCRETE BASE
- PULL BOX
- LIGHTING CONDUIT (REFER TO PLANS AND MISCELLANEOUS QUANTITIES FOR SIZE, TYPE AND WIRING)

N

STA 141+31EB, 95'LT
PB-10
INSTALL PULL BOX ADJACENT TO MPU POLE "5G7482"

STA 141+81EB, 95'LT
PB-9

RM 7

STA 142+05EB, 52.5'LT
PB-8

STA 144+25EB, 53.5'LT
8-7S-40-(2-4)

STA 144+28EB, 52.5'LT

2" SCH 40 PVC CONDUIT

N. 11TH ST.

141EB 142EB 143EB 144EB 145EB 146EB 147EB

USH 10/STH 42

STA 142+05EB, 28.5'RT
PB-7

STA 142+78EB, 28.5'RT

STA 142+75EB, 29.5'RT
8-7S-40-(2-5)

2" SCH 40 PVC CONDUIT

STA 146+03EB, 28.5'RT

STA 146+00EB, 29.5'RT
8-7S-40-(2-3)

N. 11TH ST.

NOTES:
1. MAKE MINOR ADJUSTMENTS TO TREE LOCATIONS TO AVOID OBSTACLES.
2. TREE PLACEMENT GUIDELINE:
   A. 30' FROM ANY STREET CORNER
   B. 10' FROM A DRIVEWAY
   C. 10' FROM A GAS/WATER VALVE
   D. 40' FROM A STREET LIGHT OR UTILITY POLE
   E. 10' FROM A FIRE HYDRANT

PLANT LIST

Symbol	Common Name	Quantity on sheet
LARGE TREES		
GI	Autumn Gold ginkgo	
HA	Common hackberry	
KC	Espresso Kentucky coffeetree	
RE	Regal elm	
RM	Red maple	7
RL	Redmond linden	
SH	Skyline honeylocust	
WO	Swamp white oak	

SMALL TREES		
AS	Autumn Brilliance serviceberry	
BS	Colorado blue spruce	
CH	Schubert Chokecherry	
CO	Crusader thornless cockspur hawthorn	
SS	Spring Snow crabapple	
SHRUBS, GRASSES, & PERENNIALS		
CJ	Plumosa creeping juniper	
St	Staghorn sumac	
wl	Walker's Low blue catmint	

NOTES

MANITOWOC PUBLIC UTILITIES DISTRIBUTION OPERATIONS DEPARTMENT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT MPU 3 DAYS IN ADVANCE AT (920) 683-4600.

PULL BOXES SHALL BE INSTALLED FLUSH TO GRADE ± 1" AND BE PLACED AT LEAST 3' BEHIND CURB AND GUTTER.

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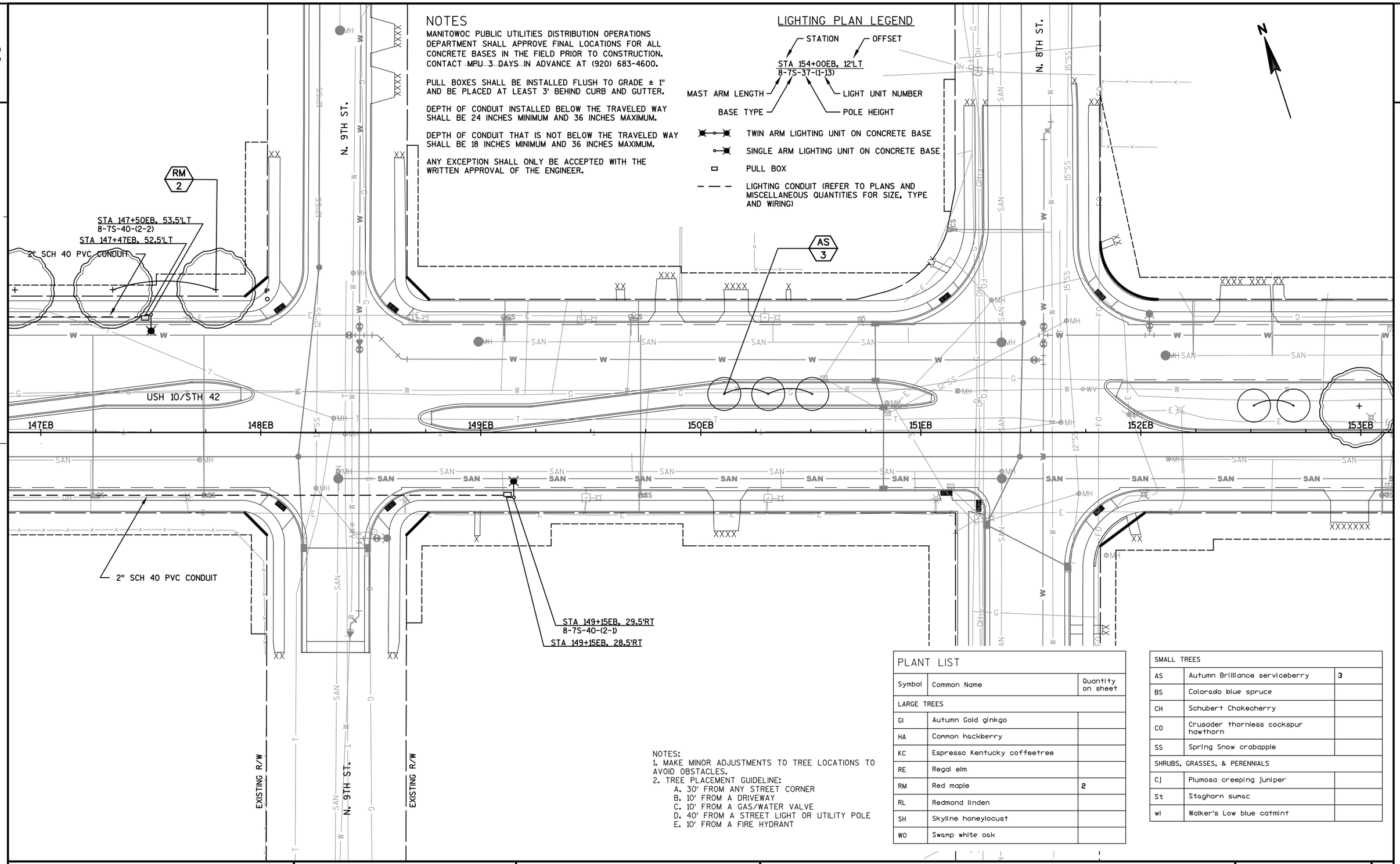
LIGHTING PLAN LEGEND

STA 154+00EB, 12'LT
8-7S-37-(1-13)

- STATION
- OFFSET
- MAST ARM LENGTH
- LIGHT UNIT NUMBER
- BASE TYPE
- POLE HEIGHT

- TWIN ARM LIGHTING UNIT ON CONCRETE BASE
- SINGLE ARM LIGHTING UNIT ON CONCRETE BASE
- PULL BOX
- LIGHTING CONDUIT (REFER TO PLANS AND MISCELLANEOUS QUANTITIES FOR SIZE, TYPE AND WIRING)



NOTES:
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   E. 10' FROM A FIRE HYDRANT

PLANT LIST

Symbol	Common Name	Quantity on sheet
LARGE TREES		
GI	Autumn Gold ginkgo	
HA	Common hackberry	
KC	Espresso Kentucky coffeetree	
RE	Regal elm	
RM	Red maple	2
RL	Redmond linden	
SH	Skyline honeylocust	
WO	Swamp white oak	

SMALL TREES		
AS	Autumn Brilliance serviceberry	3
BS	Colorado blue spruce	
CH	Schubert Chokecherry	
CO	Crusader thornless cockspur hawthorn	
SS	Spring Snow crabapple	
SHRUBS, GRASSES, & PERENNIALS		
CJ	Plumosa creeping juniper	
St	Staghorn sumac	
wi	Walker's Low blue catmint	

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	LIGHTING AND LANDSCAPING PLAN	SHEET 131	E

NOTES

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LIGHTING PLAN LEGEND

STA 154+00EB, 12'LT
8-7S-37-(1-13)

- STATION
- OFFSET
- MAST ARM LENGTH
- BASE TYPE
- LIGHT UNIT NUMBER
- POLE HEIGHT

TWIN ARM LIGHTING UNIT ON CONCRETE BASE

SINGLE ARM LIGHTING UNIT ON CONCRETE BASE

PULL BOX

LIGHTING CONDUIT (REFER TO PLANS AND MISCELLANEOUS QUANTITIES FOR SIZE, TYPE AND WIRING)

N. 8TH ST.

LINCOLN BLVD. (WEST)

LINCOLN BLVD. (EAST)

STH 42

151EB 152EB 153EB 154EB 155EB 156EB 157EB

CO 2

KC 3

STA 154+00EB, 12'LT
8-7S-40-(1-13)

STA 156+90EB, 12'LT
8-7S-40-(1-12)

STA 154+04EB, 4.5'LT

STA 156+94EB, 4.5'LT

2" SCH 40 PVC CONDUIT

NOTES:
1. MAKE MINOR ADJUSTMENTS TO TREE LOCATIONS TO AVOID OBSTACLES.
2. TREE PLACEMENT GUIDELINE:
   A. 30' FROM ANY STREET CORNER
   B. 10' FROM A DRIVEWAY
   C. 10' FROM A GAS/WATER VALVE
   D. 40' FROM A STREET LIGHT OR UTILITY POLE
   E. 10' FROM A FIRE HYDRANT

PLANT LIST

Symbol	Common Name	Quantity on sheet
LARGE TREES		
GI	Autumn Gold ginkgo	
HA	Common hackberry	
KC	Espresso Kentucky coffeetree	3
RE	Regal elm	
RM	Red maple	
RL	Redmond linden	
SH	Skyline honeylocust	
WO	Swamp white oak	

SMALL TREES		
AS	Autumn Brilliance serviceberry	
BS	Colorado blue spruce	
CH	Schubert Chokecherry	
CO	Crusader thornless cockspur hawthorn	
SS	Spring Snow crabapple	
SHRUBS, GRASSES, & PERENNIALS		
CJ	Plumosa creeping juniper	
St	Staghorn sumac	
wl	Walker's Low blue catmint	

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	LIGHTING AND LANDSCAPING PLAN	SHEET 132	E

NOTES

MANITOWOC PUBLIC UTILITIES DISTRIBUTION OPERATIONS DEPARTMENT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT MPU 3 DAYS IN ADVANCE AT (920) 683-4600.

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LIGHTING PLAN LEGEND

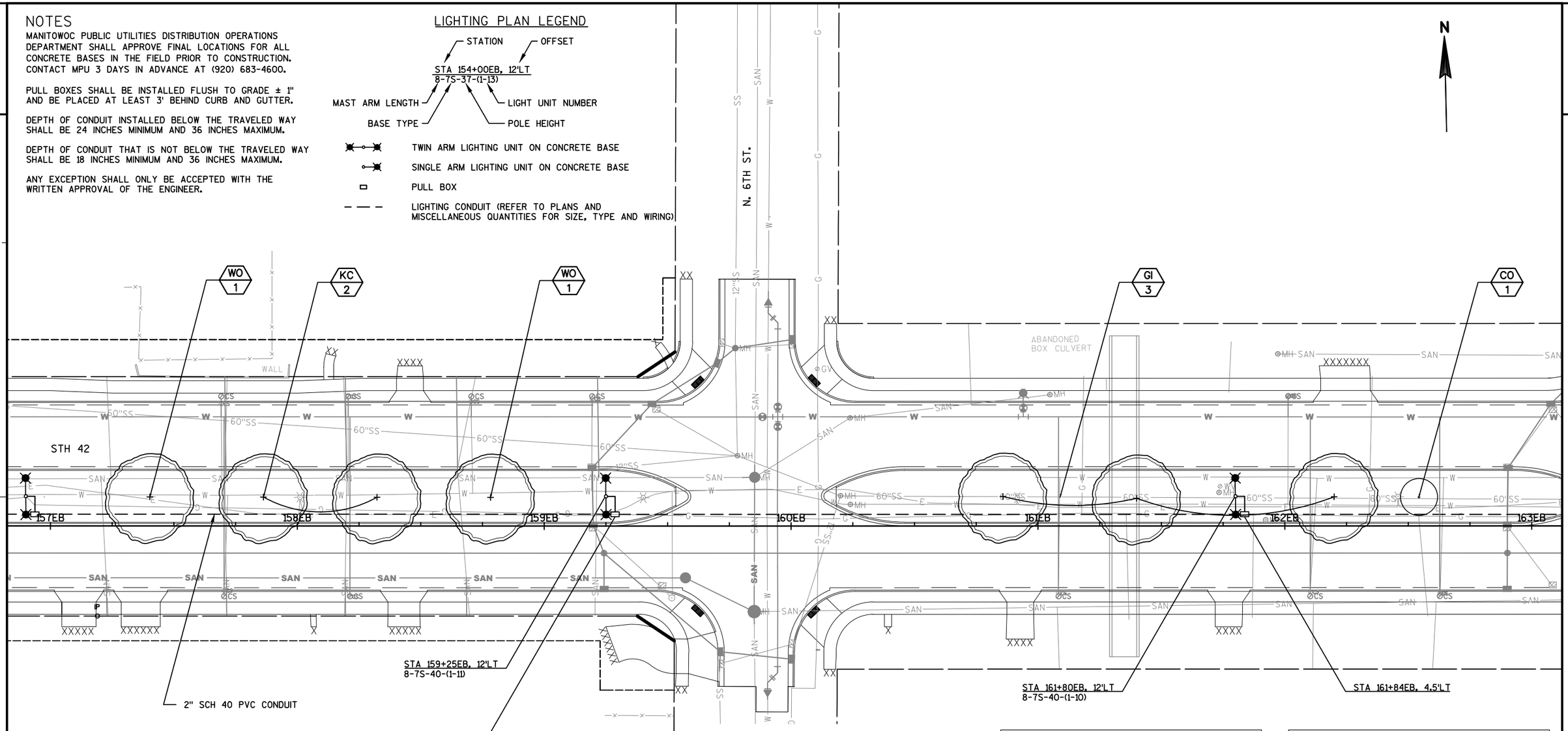
STATION — OFFSET

STA 154+00EB, 12'LT
8-7S-37-(1-13)

MAST ARM LENGTH — LIGHT UNIT NUMBER

BASE TYPE — POLE HEIGHT

- TWIN ARM LIGHTING UNIT ON CONCRETE BASE
- SINGLE ARM LIGHTING UNIT ON CONCRETE BASE
- PULL BOX
- LIGHTING CONDUIT (REFER TO PLANS AND MISCELLANEOUS QUANTITIES FOR SIZE, TYPE AND WIRING)



NOTES:
1. MAKE MINOR ADJUSTMENTS TO TREE LOCATIONS TO AVOID OBSTACLES.
2. TREE PLACEMENT GUIDELINE:
   A. 30' FROM ANY STREET CORNER
   B. 10' FROM A DRIVEWAY
   C. 10' FROM A GAS/WATER VALVE
   D. 40' FROM A STREET LIGHT OR UTILITY POLE
   E. 10' FROM A FIRE HYDRANT

PLANT LIST

Symbol	Common Name	Quantity on sheet
LARGE TREES		
GI	Autumn Gold ginkgo	3
HA	Common hackberry	
KC	Espresso Kentucky coffeetree	2
RE	Regal elm	
RM	Red maple	
RL	Redmond linden	
SH	Skyline honeylocust	
WO	Swamp white oak	2

SMALL TREES		
AS	Autumn Brilliance serviceberry	
BS	Colorado blue spruce	
CH	Schubert Chokecherry	
CO	Crusader thornless cockspur hawthorn	
SS	Spring Snow crabapple	1
SHRUBS, GRASSES, & PERENNIALS		
CJ	Plumosa creeping juniper	
St	Staghorn sumac	
wl	Walker's Low blue catmint	

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	LIGHTING AND LANDSCAPING PLAN	SHEET 133	E

NOTES

MANITOWOC PUBLIC UTILITIES DISTRIBUTION OPERATIONS DEPARTMENT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT MPU 3 DAYS IN ADVANCE AT (920) 683-4600.

PULL BOXES SHALL BE INSTALLED FLUSH TO GRADE ± 1" AND BE PLACED AT LEAST 3' BEHIND CURB AND GUTTER.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION SHALL ONLY BE ACCEPTED WITH THE WRITTEN APPROVAL OF THE ENGINEER.

LIGHTING PLAN LEGEND

STATION — OFFSET

STA 154+00EB, 12'LT
8-7S-37-(1-13)

MAST ARM LENGTH — LIGHT UNIT NUMBER

BASE TYPE — POLE HEIGHT

- TWIN ARM LIGHTING UNIT ON CONCRETE BASE
- SINGLE ARM LIGHTING UNIT ON CONCRETE BASE
- PULL BOX
- LIGHTING CONDUIT (REFER TO PLANS AND MISCELLANEOUS QUANTITIES FOR SIZE, TYPE AND WIRING)

N

N. 5TH ST.

STH 42

STA 164+85EB, 90'LT
PB-6A
INSTALL PULL BOX
ADJACENT TO PAD
MOUNT TRANSFORMER

CO 2 | SH 2 | HA 2 | RE 2 | RL 2 | RE 1

163EB | 164EB | 165EB | 166EB | 167EB | 168EB | 169EB

STA 164+85EB, 4.5'LT
PB-6

STA 166+80EB, 12'LT
8-7S-40-(1-8)

STA 166+84EB, 4.5'LT

STA 164+35EB, 12'LT
8-7S-40-(1-9)

2" SCH 40 PVC CONDUIT

STA 164+39EB, 4.5'LT

NOTES:
1. MAKE MINOR ADJUSTMENTS TO TREE LOCATIONS TO AVOID OBSTACLES.
2. TREE PLACEMENT GUIDELINE:
   A. 30' FROM ANY STREET CORNER
   B. 10' FROM A DRIVEWAY
   C. 10' FROM A GAS/WATER VALVE
   D. 40' FROM A STREET LIGHT OR UTILITY POLE
   E. 10' FROM A FIRE HYDRANT

PLANT LIST		
Symbol	Common Name	Quantity on sheet
LARGE TREES		
GI	Autumn Gold ginkgo	
HA	Common hackberry	2
KC	Espresso Kentucky coffeetree	
RE	Regal elm	3
RM	Red maple	
RL	Redmond linden	2
SH	Skyline honeylocust	2
WO	Swamp white oak	

SMALL TREES		
AS	Autumn Brilliance serviceberry	
BS	Colorado blue spruce	
CH	Schubert Chokecherry	
CO	Crusader thornless cockspur hawthorn	2
SS	Spring Snow crabapple	
SHRUBS, GRASSES, & PERENNIALS		
CJ	Plumosa creeping juniper	
St	Staghorn sumac	
wl	Walker's Low blue catmint	

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	LIGHTING AND LANDSCAPING PLAN	SHEET 134	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_023503 LP.DWG PLOT DATE : 7/20/2018 8:38 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

NOTES

MANITOWOC PUBLIC UTILITIES DISTRIBUTION OPERATIONS DEPARTMENT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT MPU 3 DAYS IN ADVANCE AT (920) 683-4600.

PULL BOXES SHALL BE INSTALLED FLUSH TO GRADE ± 1" AND BE PLACED AT LEAST 3' BEHIND CURB AND GUTTER.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

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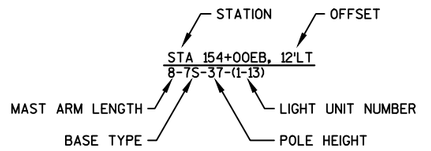
LIGHTING PLAN LEGEND



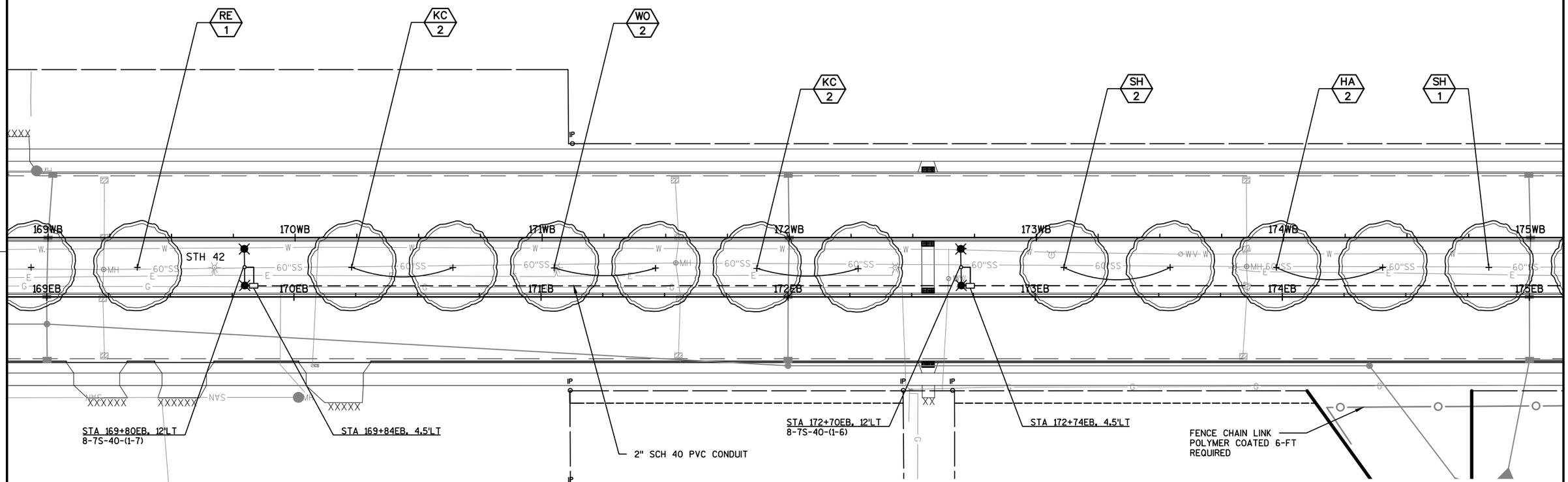
TWIN ARM LIGHTING UNIT ON CONCRETE BASE

SINGLE ARM LIGHTING UNIT ON CONCRETE BASE

PULL BOX

LIGHTING CONDUIT (REFER TO PLANS AND MISCELLANEOUS QUANTITIES FOR SIZE, TYPE AND WIRING)

N



NOTES:
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   E. 10' FROM A FIRE HYDRANT

PLANT LIST		
Symbol	Common Name	Quantity on sheet
LARGE TREES		
GI	Autumn Gold ginkgo	
HA	Common hackberry	2
KC	Espresso Kentucky coffeetree	4
RE	Regal elm	1
RM	Red maple	
RL	Redmond linden	
SH	Skyline honeylocust	3
WO	Swamp white oak	2

SMALL TREES		
AS	Autumn Brilliance serviceberry	
BS	Colorado blue spruce	
CH	Schubert Chokecherry	
CO	Crusader thornless cockspur hawthorn	
SS	Spring Snow crabapple	
SHRUBS, GRASSES, & PERENNIALS		
CJ	Plumosa creeping juniper	
St	Staghorn sumac	
wl	Walker's Low blue catmint	

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	LIGHTING AND LANDSCAPING PLAN	SHEET 135	E

NOTES

MANITOWOC PUBLIC UTILITIES DISTRIBUTION OPERATIONS DEPARTMENT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT MPU 3 DAYS IN ADVANCE AT (920) 683-4600.

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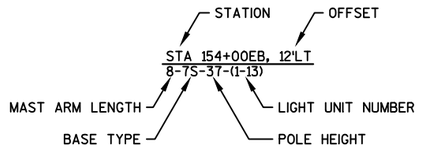
LIGHTING PLAN LEGEND



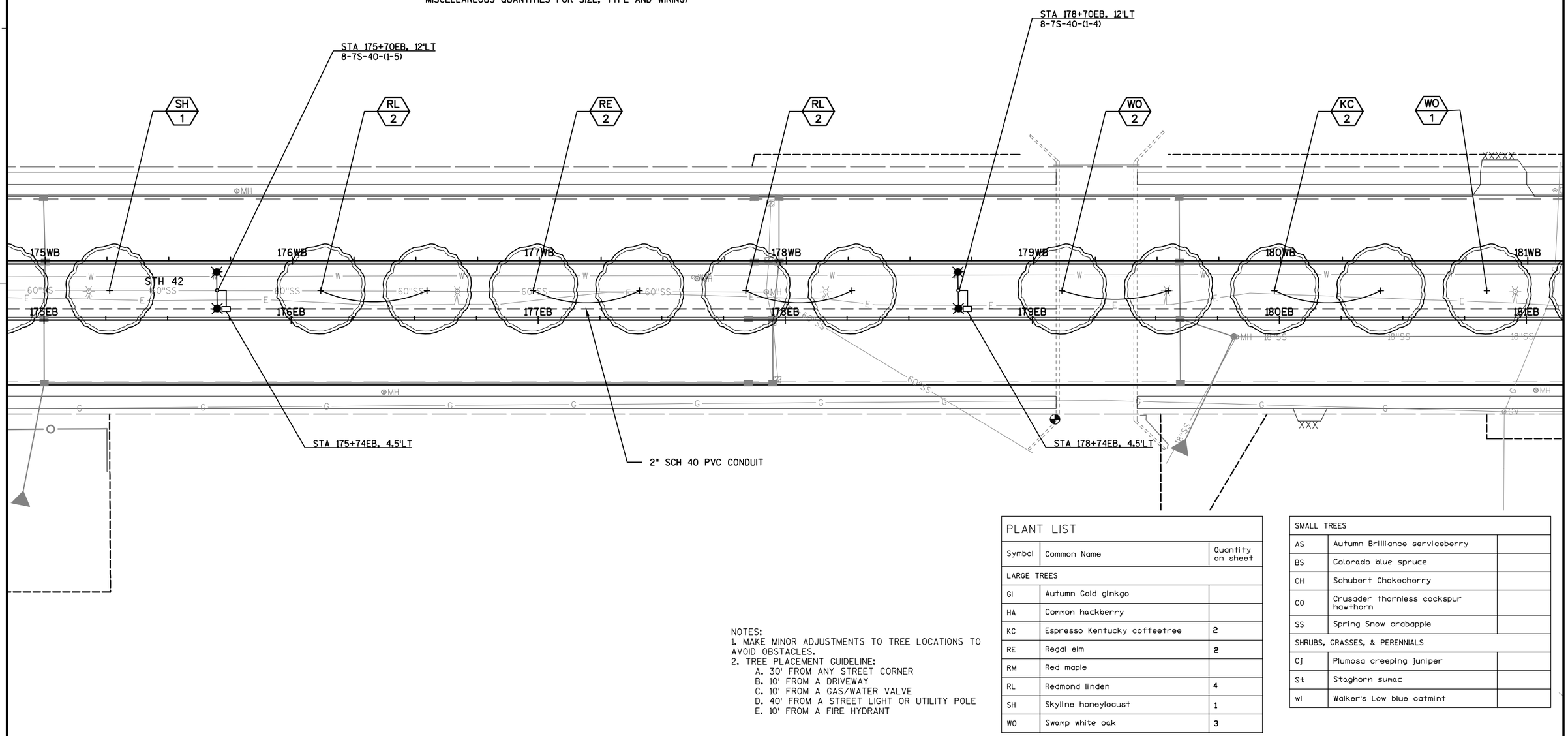
TWIN ARM LIGHTING UNIT ON CONCRETE BASE

SINGLE ARM LIGHTING UNIT ON CONCRETE BASE

PULL BOX

LIGHTING CONDUIT (REFER TO PLANS AND MISCELLANEOUS QUANTITIES FOR SIZE, TYPE AND WIRING)

N



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KC	Espresso Kentucky coffeetree	2
RE	Regal elm	2
RM	Red maple	
RL	Redmond linden	4
SH	Skyline honeylocust	1
WO	Swamp white oak	3

SMALL TREES		
AS	Autumn Brilliance serviceberry	
BS	Colorado blue spruce	
CH	Schubert Chokecherry	
CO	Crusader thornless cockspur hawthorn	
SS	Spring Snow crabapple	
SHRUBS, GRASSES, & PERENNIALS		
CJ	Plumosa creeping juniper	
St	Staghorn sumac	
wl	Walker's Low blue catmint	

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	LIGHTING AND LANDSCAPING PLAN	SHEET 136	E

NOTES

MANITOWOC PUBLIC UTILITIES DISTRIBUTION OPERATIONS DEPARTMENT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT MPU 3 DAYS IN ADVANCE AT (920) 683-4600.

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LIGHTING PLAN LEGEND

STATION — OFFSET

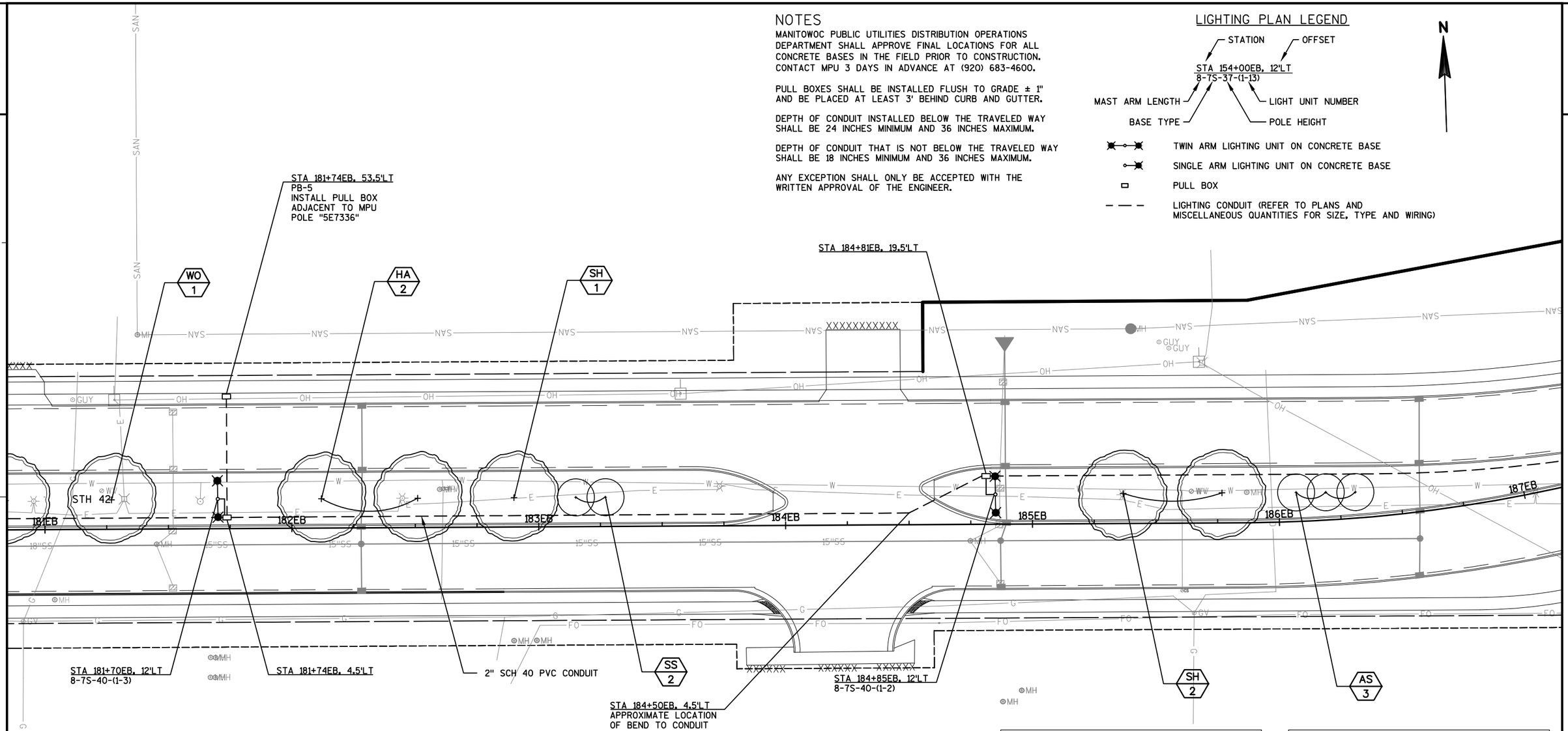
STA 154+00EB, 12'LT
8-7S-37-(1-13)

MAST ARM LENGTH — LIGHT UNIT NUMBER

BASE TYPE — POLE HEIGHT

- TWIN ARM LIGHTING UNIT ON CONCRETE BASE
- SINGLE ARM LIGHTING UNIT ON CONCRETE BASE
- PULL BOX
- LIGHTING CONDUIT (REFER TO PLANS AND MISCELLANEOUS QUANTITIES FOR SIZE, TYPE AND WIRING)

N



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SH	Skyline honeylocust	3
WO	Swamp white oak	1

SMALL TREES		
AS	Autumn Brilliance serviceberry	3
BS	Colorado blue spruce	
CH	Schubert Chokecherry	
CO	Crusader thornless cockspur hawthorn	
SS	Spring Snow crabapple	2
SHRUBS, GRASSES, & PERENNIALS		
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PLANT LIST		
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RE	Regal elm	
RM	Red maple	
RL	Redmond linden	
SH	Skyline honeylocust	
WO	Swamp white oak	

SMALL TREES		
AS	Autumn Brilliance serviceberry	8
BS	Colorado blue spruce	11
CH	Schubert Chokecherry	
CO	Crusader thornless cockspur hawthorn	3
SS	Spring Snow crabapple	
SHRUBS, GRASSES, & PERENNIALS		
CJ	Plumosa creeping juniper	111
St	Staghorn sumac	
wl	Walker's Low blue catmint	228

NOTES:
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   E. 10' FROM A FIRE HYDRANT

N

BAYSHORE DR.

STA 3+35RCC, 63'RT
15-7S-40-(3-3)

STA 3+34RCC, 60'RT

STA 191+80EB, 96'LT

STA 191+76EB, 94'LT
15-7S-40-(3-5)

STA 192+36EB, 85'LT
PB-1
INSTALL PULL BOX ADJACENT TO MPU POLE "5E7973"

CONCRETE SIDEWALK
4-INCH COLORING
CONCRETE RED
(NO STAMPING)

STA 3+73.3RCC, 53'RT

STA 3+75.5RCC, 52'RT
15-7S-40-(3-2)

2" SCH 40 PVC CONDUIT

STA 2+92RCC, 52'RT
15-7S-40-(3-4)

STA 2+91RCC, 55'RT

SHOVEL CUT EDGE (SEE CONSTRUCTION DETAIL)

SWITCHGRASS SEED

STA 188+25EB, 54'LT

STA 188+22EB, 54'LT
15-7S-40-(3-1)

STA 187+25EB, 10'LT

STA 187+25EB, 7'LT
8-7S-40-(1-1)

STA 187+98EB, 50'RT
15-7S-40-(3-13)

STA 188+00EB, 50'RT

STA 187+63EB, 88'RT
PB-4
INSTALL PULL BOX ADJACENT TO MPU POLE "5E6958"

STA 0+84RCC, 58'RT
15-7S-40-(3-12)

STA 0+85RCC, 57'RT

STA 1+05RCC, 67'RT
15-7S-40-(3-11)

STA 1+15RCC, 92'RT

STA 1+07RCC, 68'RT

STA 1+43RCC, 78'RT
6-7S-40-(3-10)

STA 1+41RCC, 80'RT

STA 1+77RCC, 114'RT

STA 1+78RCC, 112'RT
15-7S-40-(3-9)

STA 190+55EB, 71'RT

STA 190+54EB, 68'RT
15-7S-40-(3-8)

STA 190+82EB, 35'RT
15-7S-40-(3-7)

STA 190+80EB, 38'RT

STA 191+12EB, 4.5'LT
PB-3

STA 191+65EB, 34'RT
PB-2

STA 191+15EB, 33'RT
15-7S-40-(3-6)

STA 191+12EB, 35'RT

STH 42

188EB

187EB

192EB

193EB

194EB

1RCC

2RCC

935E

CO 3

BS 5

BS 3

BS 3

AS 2

AS 3

AS 3

Cj 14

Cj 14

Cj 14

Cj 14

Cj 14

Cj 14

Cj 14

Cj 9

Cj 9

Cj 9

wl 17

wl 17

wl 17

wl 17

wl 17

wl 30

wl 20

wl 76

LIGHTING PLAN LEGEND

STATION — OFFSET
STA 154+00EB, 12'LT
8-7S-37-(1-13)
MAST ARM LENGTH — LIGHT UNIT NUMBER
BASE TYPE — POLE HEIGHT

- TWIN ARM LIGHTING UNIT ON CONCRETE BASE
- SINGLE ARM LIGHTING UNIT ON CONCRETE BASE
- PULL BOX
- LIGHTING CONDUIT (REFER TO PLANS AND MISCELLANEOUS QUANTITIES FOR SIZE, TYPE AND WIRING)

NOTES

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PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	LIGHTING AND LANDSCAPING PLAN	SHEET 138	E

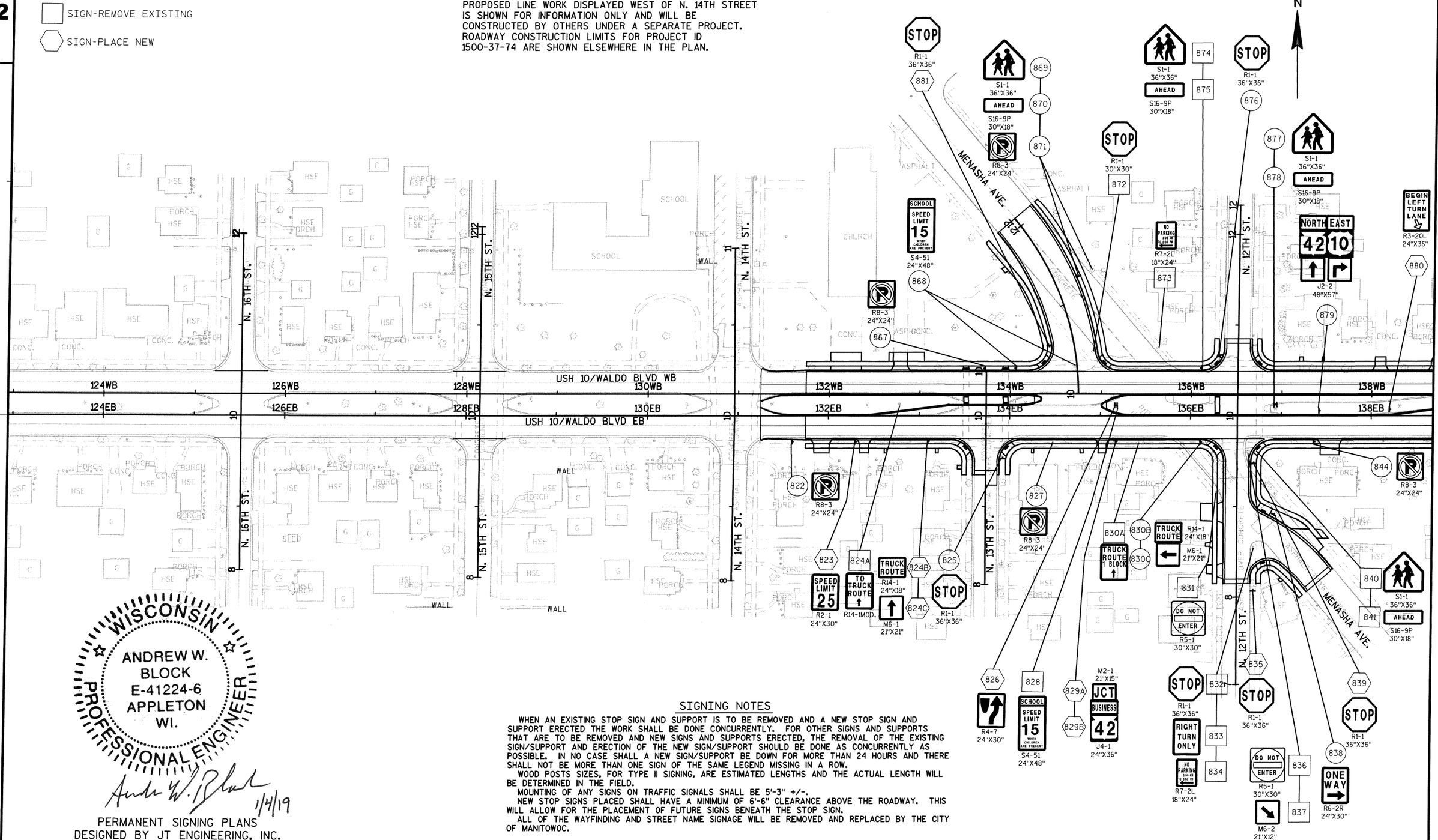
2

SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

NOTE:
PROPOSED LINE WORK DISPLAYED WEST OF N. 14TH STREET IS SHOWN FOR INFORMATION ONLY AND WILL BE CONSTRUCTED BY OTHERS UNDER A SEPARATE PROJECT. ROADWAY CONSTRUCTION LIMITS FOR PROJECT ID 1500-37-74 ARE SHOWN ELSEWHERE IN THE PLAN.



WISCONSIN
ANDREW W. BLOCK
E-41224-6
APPLETON
WI.
PROFESSIONAL ENGINEER

Andrew W. Block 1/4/19

PERMANENT SIGNING PLANS
DESIGNED BY JT ENGINEERING, INC.

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.

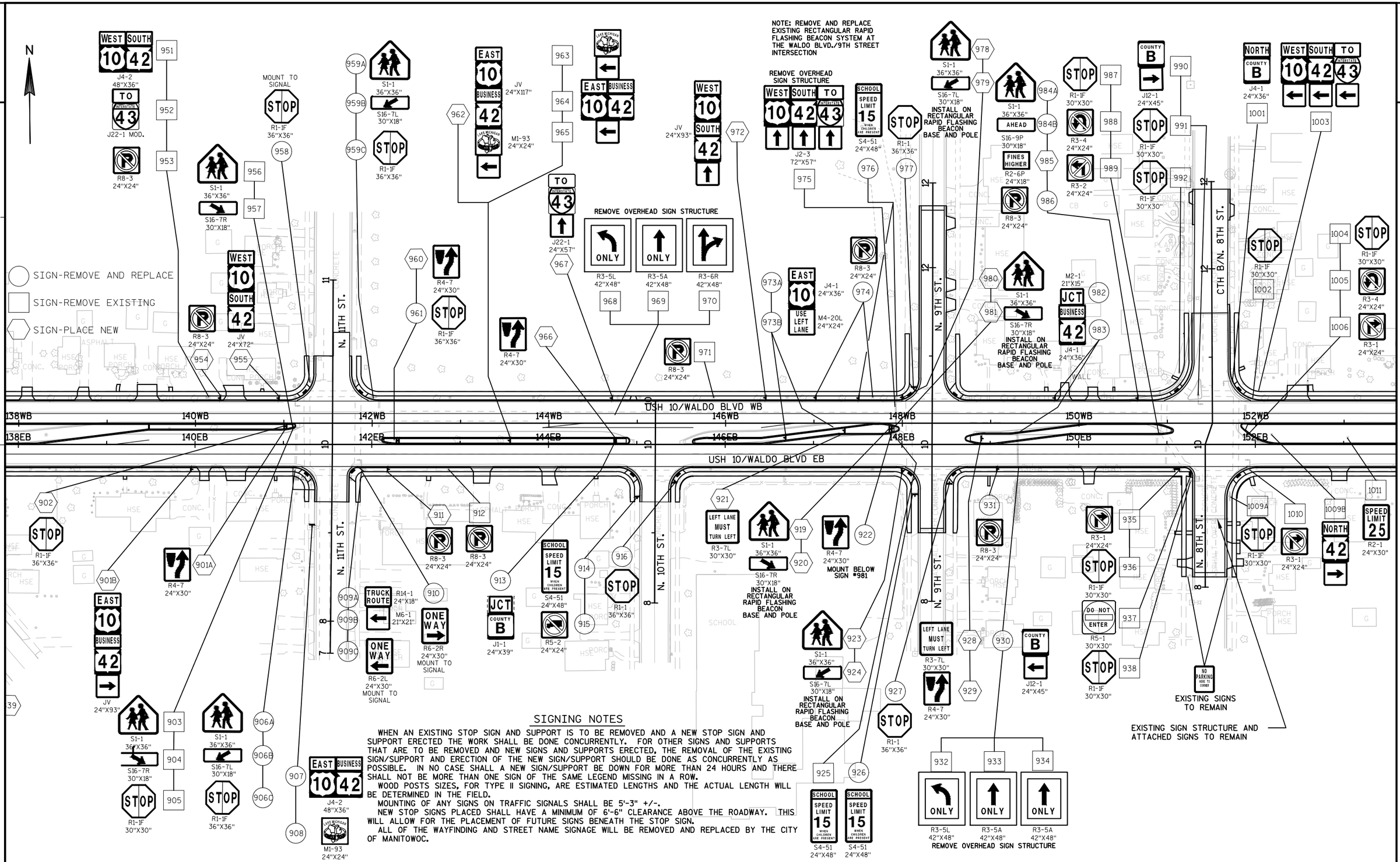
WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

MOUNTING OF ANY SIGNS ON TRAFFIC SIGNALS SHALL BE 5'-3" +/-.

NEW STOP SIGNS PLACED SHALL HAVE A MINIMUM OF 6'-6" CLEARANCE ABOVE THE ROADWAY. THIS WILL ALLOW FOR THE PLACEMENT OF FUTURE SIGNS BENEATH THE STOP SIGN.

ALL OF THE WAYFINDING AND STREET NAME SIGNAGE WILL BE REMOVED AND REPLACED BY THE CITY OF MANITOWOC.

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PERMANENT SIGNING	SHEET 139



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PROJECT NO: 1500-37-74 & 4570-12-71	HWY: USH 10	COUNTY: MANITOWOC	PERMANENT SIGNING	SHEET 140	E

2

N

150WB 152WB 154WB 156WB 158WB STH 42 SB/WALDO BLVD WB 160WB 162WB 164WB

150EB 152EB 154EB 156EB 158EB 160EB 162EB 164EB

STH 42 NB /WALDO BLVD EB

CTH B/ N. 8TH ST.

LINCOLN BLVD.

LINCOLN BLVD.

N. 6TH ST.

N. 5TH ST.

MOUNT TO SIGNAL
STOP R1-1F 36"X36" 1127
R3-4 24"X24" 1128
R3-2 24"X24" 1129
R4-7 24"X30" 1130
1131

MOUNT TO SIGNAL
STOP R1-1F 36"X36"

MOUNT TO SIGNAL
NORTH COUNTY B J4-1 24"X36" 1132

MOUNT TO SIGNAL
WEST 10 SOUTH 42 J2-2 48"X57" 1104
1133

MOUNT TO SIGNAL
STOP R1-1F 36"X36"
COUNTY B J12-1 24"X45" 1134

STOP R1-1 36"X36" 1141
STOP R1-1 36"X36" 1142
DO NOT ENTER R5-1 30"X30" 1143
SOUTH 42 TO 43 J4-2 48"X36" 1144
1140
W3-3 36"X36"

MOUNT TO SIGNAL
STOP R1-1F 36"X36" 1135
1136
R3-4 24"X24"
1137
R3-2 24"X24"
R3-2 24"X24" 1138
R8-3 24"X24" 1139

ONE WAY R6-2R 24"X30" 1145
JCT 10 JCT COUNTY B J1-2 48"X39" 1146
JCT 10 COUNTY B JV 24"X63" 1147
R8-3 24"X24" 1148
SPEED LIMIT 25 R2-1 24"X30" 1149
STOP R1-1 36"X36" 1150
SOUTH 42 J4-1 24"X36" 1151
R8-3 24"X24" 1152
STOP R1-1 36"X36" 1153
SPEED LIMIT 25 R2-1 24"X30" 1154

MOUNT TO SIGNAL
R3-1 24"X24" 1100
1102
DO NOT ENTER R5-1 30"X30"
1101
STOP R1-1F 36"X36"
MOUNT TO SIGNAL

NO PARKING HERE TO CORNER
EXISTING SIGNS TO REMAIN

EXISTING SIGN STRUCTURE AND ATTACHED SIGNS TO REMAIN

MOUNT TO SIGNAL
R3-1 24"X24" 1111
MOUNT TO SIGNAL
DO NOT ENTER R5-1 30"X30" 1110
STOP R1-1F 36"X36" 1109
1112A
NORTH 42 J4-1 24"X36"
1112B
M1-93 24"X24"
1113
R8-3 24"X24"
1104
NORTH 42 J2-1 24"X57"

1114
ONE WAY R6-2R 24"X30"

STOP R1-1 36"X36" 1115
STOP R1-1 36"X36" 1116
DO NOT ENTER R5-1 30"X30" 1117

STOP R1-1 36"X36" 1118
1119
1120
W11-3 30"X30"
R8-3 24"X24"
SPEED LIMIT 25 R2-1 24"X30" 1121
SPEED LIMIT 25 R2-1 24"X30" 1122
1123
1124
NORTH 42 NORTH J4-2 48"X36"
R8-3 24"X24"
1126
R8-3 24"X24"

SIGN-REMOVE AND REPLACE
SIGN-REMOVE EXISTING
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.

MOUNTING OF ANY SIGNS ON TRAFFIC SIGNALS SHALL BE 5'-3" +/-.

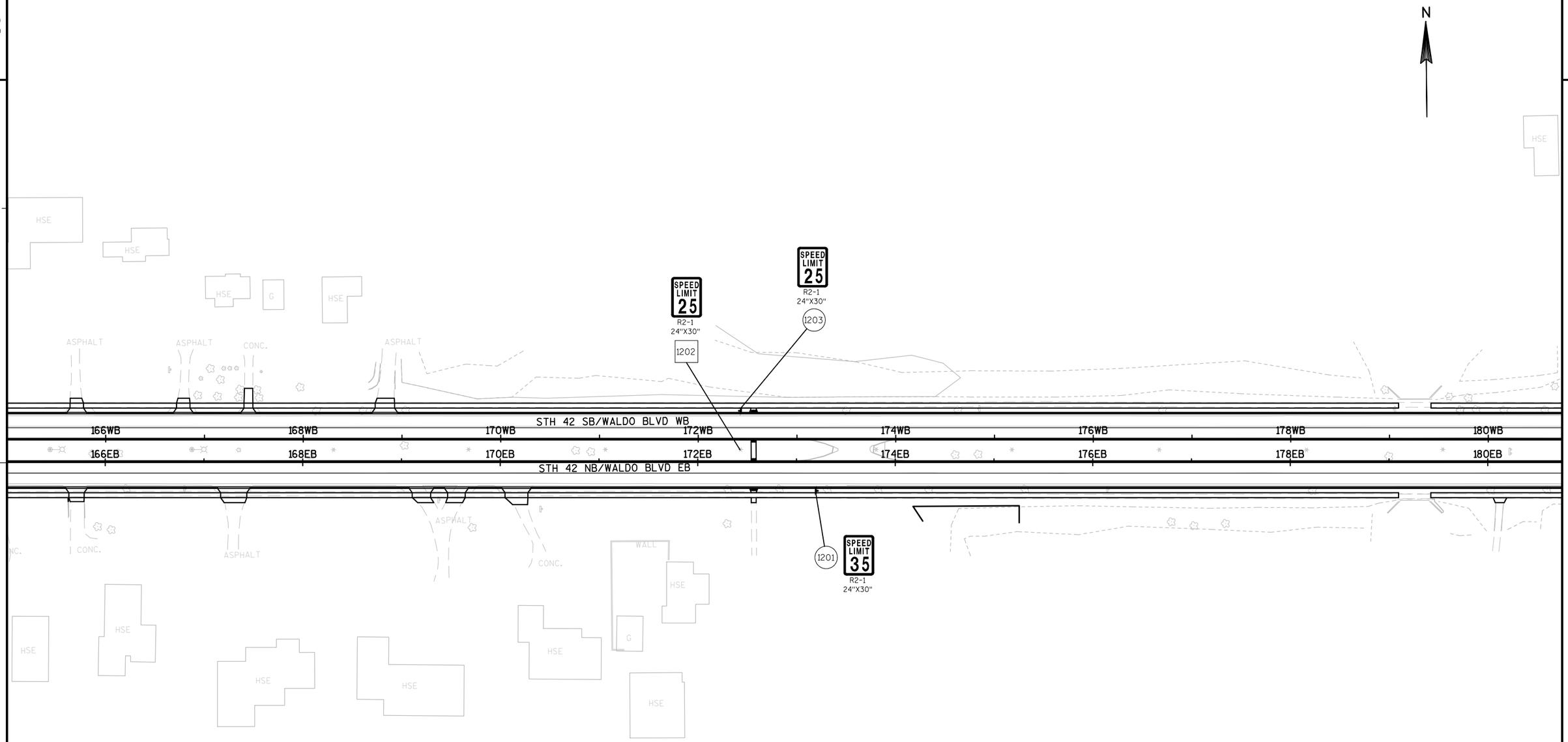
NEW STOP SIGNS PLACED SHALL HAVE A MINIMUM OF 6'-6" CLEARANCE ABOVE THE ROADWAY. THIS WILL ALLOW FOR THE PLACEMENT OF FUTURE SIGNS BENEATH THE STOP SIGN.

ALL OF THE WAYFINDING AND STREET NAME SIGNAGE WILL BE REMOVED AND REPLACED BY THE CITY OF MANITOWOC.

PROJECT NO: 1500-37-74 & 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PERMANENT SIGNING	SHEET 141	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\SIGNING\023201_PSA.DWG PLOT DATE : 1/3/2019 7:17 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 100'_XREF

2



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N

STH 42 SB/WALDO BLVD WB

STH 42 NB/WALDO BLVD EB

182WB 182EB 184WB 184EB 186WB 186EB 188WB 188EB 190EB 192WB 192EB 194WB 194EB 195EB

BAYSHORE DR.

STH 42/MEMORIAL DR.

MARITIME DR.

1300 R8-3 24"X24"

1301 R2-1 SPEED LIMIT 35 24"X30"

1302 J2-1 NORTH 42 24"X57"

1303 J2-1 MARITIME MDE 24"X8"

1304 R8-3 24"X24"

1305 R1-2 36"X31"

1306 R3-2 24"X24"

1307 R6-2R ONE WAY 24"X30"

1308 R8-3 24"X24"

1309 NO PARKING SUN 10 TO 9:00 AM

1310 R8-3 24"X24"

1311 R3-8E ONLY ONLY 36"X30"

1312 W11-2 30"X30"

1313 W11-2 30"X30"

1314 R5-1 DO NOT ENTER 30"X30"

1315 W1-6 42 48"X24"

1316

1317 JH-1 H 24"X45"

1319 R1-1 STOP 30"X30"

1320 R1-1 STOP 30"X30"

1321 R1-2 YIELD 36"X31"

1322 W4-1R 36" X 36"

1323 J4-2 NORTH 42 NORTH 48"X36"

1324 W11-3 30"X30"

1325 R8-3 24"X24"

1326 R2-1 SPEED LIMIT 35 24"X30"

1327 J4-2 SOUTH 42 SOUTH 48"X36"

1328 R1-2 YIELD 36"X31"

1329 R4-7 24"X30"

1330 R4-7 24"X30"

1331 R6-2L ONE WAY 24"X30"

1332 R1-1 STOP 30"X30"

1333 R1-1 STOP 30"X30"

1334 J12-1 42 24"X45"

MI-93 24"X24"

ASPHALT CONC. BLDG ROCK XXXX

SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PERMANENT SIGNING	SHEET 143	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\SIGNING\023201_PSA.DWG PLOT DATE : 1/4/2019 12:23 PM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 100'_XREF

SIGNING NOTES

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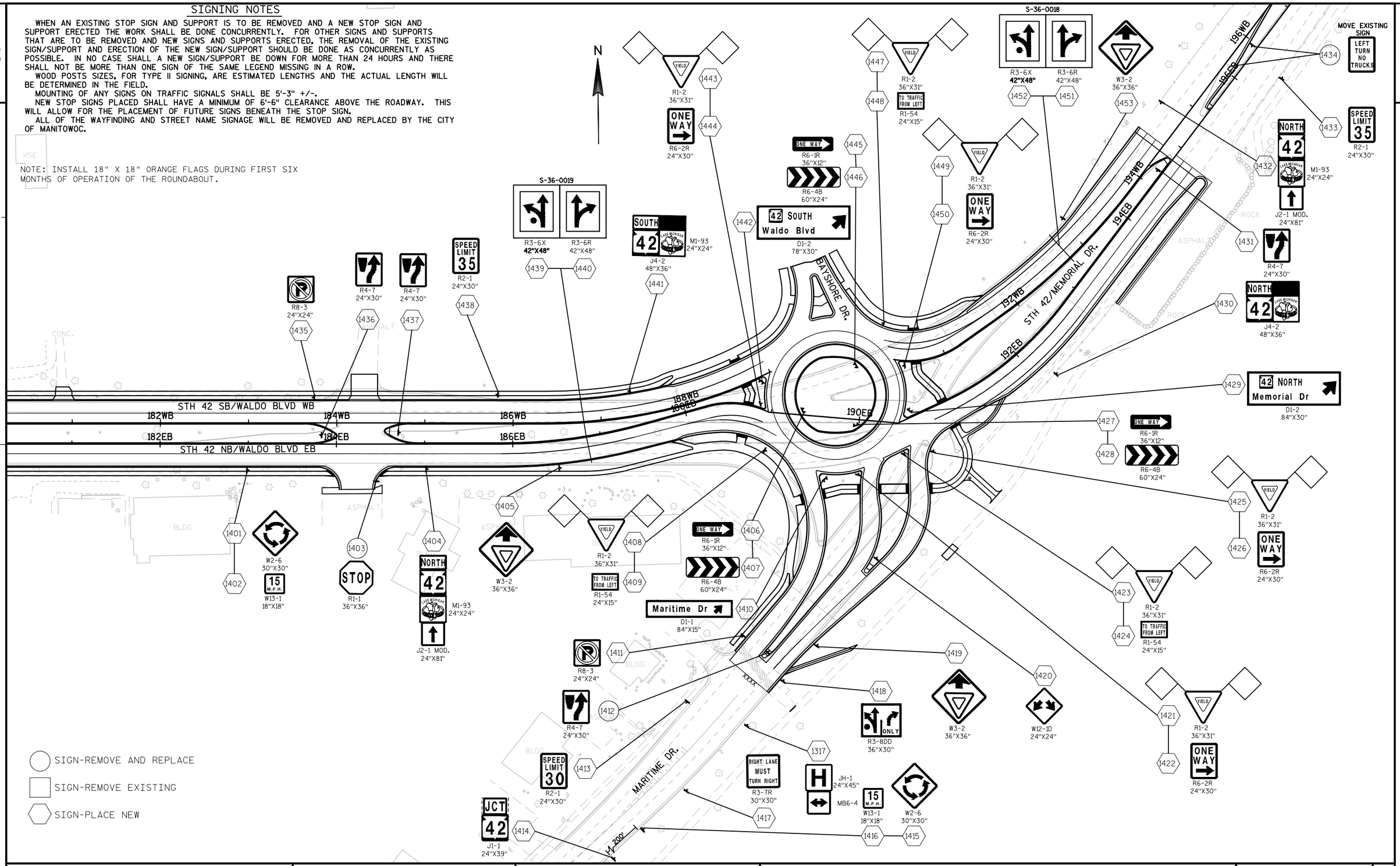
ALL OF THE WAYFINDING AND STREET NAME SIGNAGE WILL BE REMOVED AND REPLACED BY THE CITY OF MANITOWOC.

HSE

NOTE: INSTALL 18" X 18" ORANGE FLAGS DURING FIRST SIX MONTHS OF OPERATION OF THE ROUNDABOUT.



PROJECT NO: 4570-12-71/72	HWY: STH 42	COUNTY: MANITOWOC	PERMANENT SIGNING	SHEET 144	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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ALL OF THE WAYFINDING, AND STREET NAME SIGNAGE WILL BE REMOVED AND REPLACED BY THE CITY OF MANITOWOC.

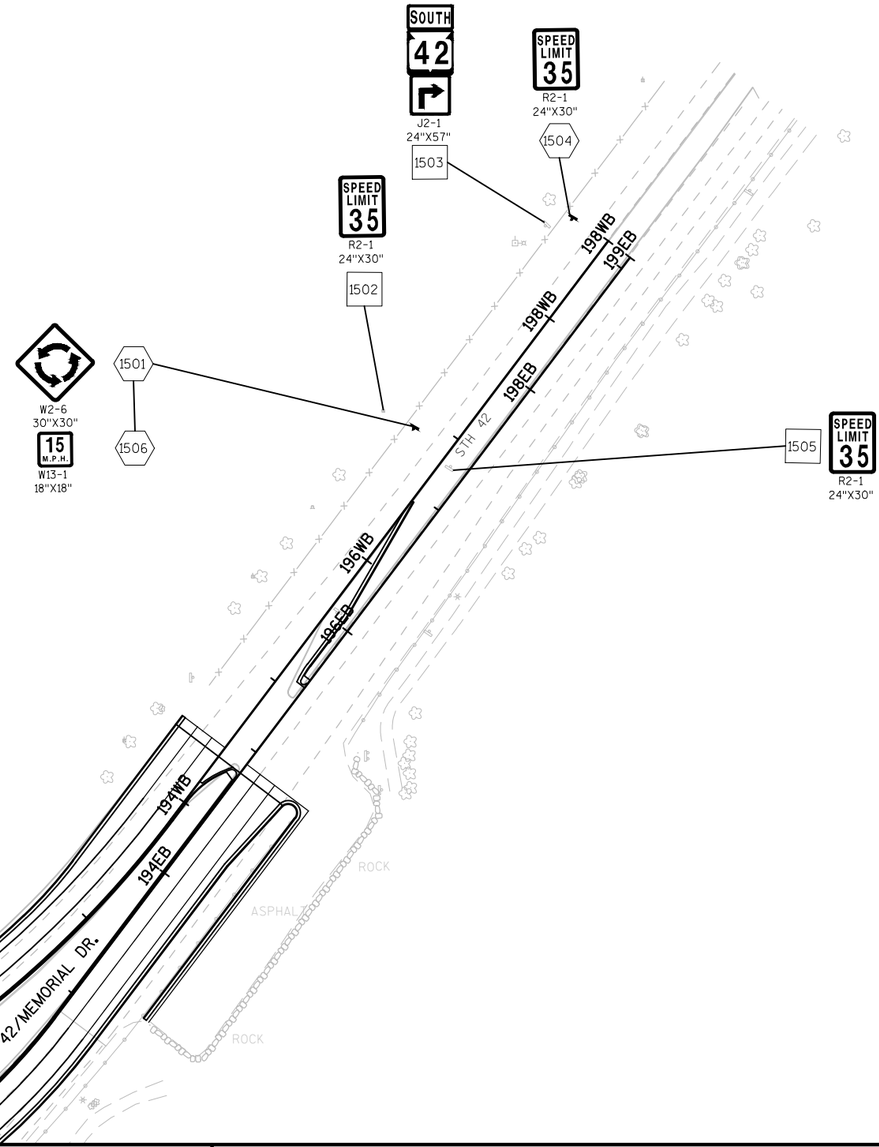
SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

bldg

N



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PERMANENT SIGNING	SHEET 145	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\SIGNING\023201_PSA.DWG PLOT DATE : 1/4/2019 12:24 PM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1" = 100'_XREF

WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE, TYPE 1 BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE, TYPE 2 BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- DON'T WALK INDICATOR 16"
  WALK INDICATOR 16"
- LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

N

2

2

SPEED LIMIT = 25 MPH

11TH ST.

SPEED LIMIT = 25 MPH

USH 10 (WALDO BLVD.)

139+00 140+00 141+00 142+00 143+00 144+00

11+00 10+00 9+00

PB1 PB2 PB3 PB4 PB5 PB6 PB7 PB8 PB9 PB10 PB11 PB12 PB13

SB1 SB2 SB3 SB4 SB5 SB6 SB8 SB9 SB10 SB11

EX. CAB.

ABANDON

CONSTRUCTION NOTES

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA NOT SHOWN.
2. EXISTING CONDUIT RUNS NO LONGER USED FOR THE PROPOSED TRAFFIC SIGNAL INSTALLATION TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY EXISTING TRAFFIC SIGNAL CABLE AND TRAFFIC SIGNAL WIRE NO LONGER USED FOR THE PROPOSED TRAFFIC SIGNAL INSTALLATION.
3. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRES AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.

TRAFFIC CONTROL SIGNAL
USH 10 (WALDO BLVD) & 11TH ST.
CITY OF MANITOWOC
MANITOWOC COUNTY

SIGNAL NO. ----

REGION CONTACT: M. DEZEEUW
DESIGNED BY: AYRES ASSOCIATES INC
REVISED BY:----

PAGE 1 OF 1

PROJECT NO: 1500-37-74	HWY: USH 10/STH 42	COUNTY: MANITOWOC	TRAFFIC SIGNAL REMOVAL PLAN-11TH ST.	SHEET	E

FILE NAME : V:\TRAFFIC\WK\41062900\SIGNAL PLAN SHEETS\024003 RP.DWG PLOT DATE : 1/2/2019 9:36 AM PLOT BY : HICKMAN, TRISTAN PLOT NAME : PLOT SCALE : 1:40_XREF

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE, TYPE 1 BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE, TYPE 2 BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM, TYPE 10 BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM, TYPE 13 BASE
- B PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY YELLOW ARROW
- G GREEN ARROW
- DON'T WALK INDICATOR 16"
  WALK INDICATOR 16"
- LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

N

SPEED LIMIT = 25 MPH

11TH ST.

USH 10 (WALDO BLVD.)

R/W

PB1 PB2 PB3 PB4 PB5 PB6 PB7 PB8 PB9 PB10 PB11 PB12 PB13 PB14

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10

CB1

2-3"

3"

45'

139+00 140+00 141+00 142+00 143+00 144+00

LOOP 41 6'X20' 3 TURNS

LOOP 42 & 43 6'X20' 4 TURNS

LOOP 11 & 12 6'X20' 4 TURNS

LOOP 51 & 52 6'X20' 4 TURNS

LOOP 61 6'X20' 4 TURNS

LOOP 62 6'X20' 4 TURNS

LOOP 21 6'X20' 4 TURNS

LOOP 22 6'X20' 4 TURNS

250' TO STOP BAR

125' TO STOP BAR

MONOTUBE STRUCTURE NO.	
BASE NO.	STRUCTURE NO.
SB2	S-36-0055
SB7	S-36-0054

CONFIGURATION WITH HEAD NUMBERS

3-V	4-VL	PED
1,2,3,6 7,8,11,12 13	4,5,9,10	14,15,16 17,18,19, 20,21

CONSTRUCTION NOTES

1. * IS THE FRONT CENTER OF THE LOOP DETECTORS
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 DAYS PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM. CONTACT THE CITY OF MANITOWOC AT 920-686-6517 (MARK DEZEEUW).
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
4. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICTS WITH EXISTING UTILITY FACILITIES.
5. ALL SIGNAL EQUIPMENT SHALL BE INSTALLED WITH A MINIMUM OF 2-FT CLEARANCE TO THE FACE OF THE CURB UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
6. CONDUIT EMBEDDED IN A TYPE 9, 10, 12, OR 13 BASE SHALL BE 3" CONDUIT.

TRAFFIC CONTROL SIGNAL
USH 10 (WALDO BLVD) & 11TH ST.
CITY OF MANITOWOC
MANITOWOC COUNTY

CABINET TYPE: TS-2
SIGNAL NO. ---- CONTROLLER TYPE: EPAC M52

REGION CONTACT: M. DEZEEUW
DESIGNED BY: AYRES ASSOCIATES INC
REVISED BY: ----

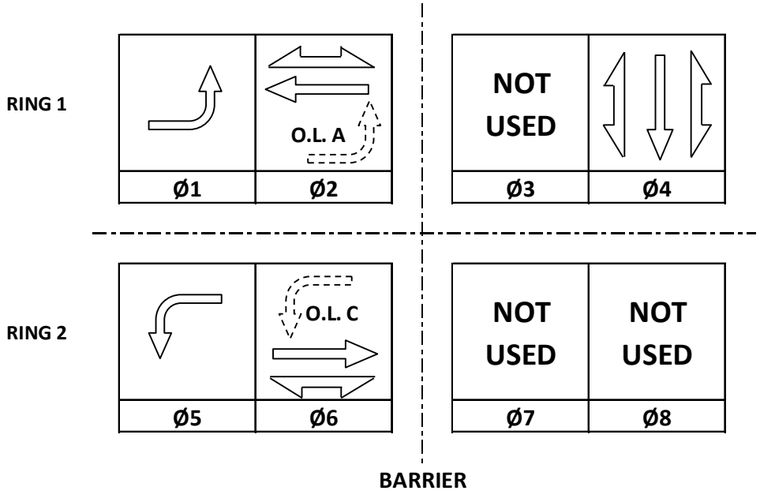
PAGE 1 OF 2

PROJECT NO: 1500-37-74	HWY: USH 10/STH 42	COUNTY: MANITOWOC	TRAFFIC SIGNAL PLAN-11TH ST.	SHEET E

FILE NAME : V:\TRAFFIC\WK\41062900\SIGNAL PLAN SHEETS\024203 SP.DWG PLOT DATE : 1/2/2019 9:37 AM PLOT BY : HICKMAN, TRISTAN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	4,5	R ←
Ø2	6,7,8	R
Ø3		
Ø4	11,12,13	R
Ø5	9,10	R ←
Ø6	1,2,3	R
Ø7		
Ø8		
Ø2P	14,15	
Ø4P	16,17,20,21	
Ø6P	18,19	
Ø8P		
OLA	4,5	--
OLB		
OLC	9,10	--
OLD		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3				
4				X
5		2		X
6	X	2	MIN	X
7				
8				

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	X
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM NO: SS-	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	21	41	42	51	61		
ASSIGNED PHASE	1	2	4	4	5	6		
OPERATION MODE	VEH	VEH	VEH	VEH	VEH	VEH		
SWITCH								
EXTEND	X	X	X	X	X	X		
EXTEND TIME								
DELAY								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								ASSIGNED PHASE
								OPERATION MODE
								SWITCH
								EXTEND
								EXTEND TIME
								DELAY
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	12	22	43	52	62			
ASSIGNED PHASE	1	2	4	5	6			
OPERATION MODE	VEH	VEH	VEH	VEH	VEH			
SWITCH								
EXTEND	X	X	X	X	X			
EXTEND TIME								
DELAY								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								ASSIGNED PHASE
								OPERATION MODE
								SWITCH
								EXTEND
								EXTEND TIME
								DELAY
								USE ADDED INITIAL
								CROSS SWITCH PHASE

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

USH 10/STH 42 & 11TH ST
CITY OF MANITOWOC
MANITOWOC COUNTY

SIGNAL NO: N/A | CABINET TYPE: TS2
CONTROLLER TYPE: EPAC M52
DATE: 01/19 | PAGE NO. 2 OF 2

PROJECT ID:	1500-37-74
INTERSECTION:	USH 10 & 11TH ST.

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

CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	JUMPER	SIGNAL INDICATION WIRE COLOR									
				RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK	PED BUTTON
SB1	12	4					RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		6		RED	ORG	GRN							
		14									BLK	BLU	
		BUTTON											WHT/BLK
SB2	15	2		RED	ORG	GRN							
		3		RED/BLK	ORG/BLK	GRN/BLK							
		5					RED/WHT	BLU/WHT	GRN/WHT	BLK/WHT			
		19									BLK	BLU	
		BUTTON											WHT/BLK
SB3	9	12		RED	ORG	GRN							
		20									BLK	BLU	
		BUTTON											WHT/BLK
SB4	7	13		RED	ORG	GRN							
SB5	7	17									BLK	BLU	
		BUTTON											WHT/BLK
SB6	12	1		RED	ORG	GRN							
		9					RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		18									BLK	BLU	
		BUTTON											WHT/BLK
SB7	15	7		RED	ORG	GRN							
		8		RED/BLK	ORG/BLK	GRN/BLK							
		10					RED/WHT	BLU/WHT	GRN/WHT	BLK/WHT			
SB8	7	15									BLK	BLU	
		BUTTON											WHT/BLK
SB9	9	11		RED	ORG	GRN							
		16									BLK	BLU	
		BUTTON											WHT/BLK
SB10	7	21									BLK	BLU	
		BUTTON											WHT/BLK

NOTE:

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

TRAFFIC CONTROL SIGNAL
USH 10 (WALDO BLVD.) & 11TH ST.
CITY OF MANITOWOC
MANITOWOC COUNTY

Equipment grounding conductor 10 AWG Green XLP	
FROM	TO
CAB.	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	CAB.

Pull Box Bonding Jumper 10 AWG Green XLP	
FROM	TO
PB1	SB1
PB4	SB1
PB5	SB2
PB6	SB3
PB7	SB5
PB8	SB6
PB13	SB7
PB13	SB8
PB14	SB9
PB15	SB10

TRAFFIC CONTROL SIGNAL
USH 10 (WALDO BLVD.) & 11TH ST.
CITY OF MANITOWOC
MANITOWOC COUNTY

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE, TYPE 1 BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE, TYPE 2 BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- DON'T WALK INDICATOR 16"
  WALK INDICATOR 16"
- LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

N

CTH B/8TH ST.

POSTED SPEED LIMIT = 25 MPH

USH 10 (WALDO BLVD.)

R/W

POSTED SPEED LIMIT = 35 MPH

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB11

PB1 PB2 PB3

EX.CAB.

149+00 150+00 151+00 152+00 153+00 154+00

12+00 11+00 10+00 9+00

CONSTRUCTION NOTES

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA NOT SHOWN.
2. EXISTING CONDUIT RUNS NO LONGER USED FOR THE PROPOSED TRAFFIC SIGNAL INSTALLATION TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY EXISTING TRAFFIC SIGNAL CABLE AND TRAFFIC SIGNAL WIRE NO LONGER USED FOR THE PROPOSED TRAFFIC SIGNAL INSTALLATION.
3. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRES AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.

TRAFFIC CONTROL SIGNAL
USH 10 (WALDO BLVD) & CTH B/8TH ST.
CITY OF MANITOWOC
MANITOWOC COUNTY

SIGNAL NO. ----

REGION CONTACT: M. DEZEEUW
DESIGNED BY: AYRES ASSOCIATES INC
REVISED BY: ----

PAGE 1 OF 1

PROJECT NO: 1500-37-74	HWY: USH 10/STH 42	COUNTY: MANITOWOC	TRAFFIC SIGNAL REMOVAL PLAN-8TH ST.	SHEET	E

FILE NAME : V:\TRAFFIC\WK\41062900\SIGNAL PLAN SHEETS\024004 RP.DWG
PLOT DATE : 1/2/2019 9:37 AM
PLOT BY : HICKMAN, TRISTAN
PLOT NAME :
PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE, TYPE 1 BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE, TYPE 2 BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM, TYPE 10 BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM, TYPE 13 BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RA RED ARROW
- FY YA YELLOW ARROW
- GA GREEN ARROW
- DON'T WALK INDICATOR 16"
  WALK INDICATOR 16"

LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

N

CTH B/8TH ST.

POSTED SPEED LIMIT = 25 MPH

USH 10 (WALDO BLVD.)

POSTED SPEED LIMIT = 35 MPH

R/W

LOOP 41 6'X20' 3 TURNS

LOOP 42 & 43 6'X20' 4 TURNS

LOOP 11 & 12 6'X20' 4 TURNS

LOOP 61 6'X20' 4 TURNS

LOOP 81 & 83 6'X20' 4 TURNS

LOOP 82 6'X20' 4 TURNS

LOOP 21 6'X20' 4 TURNS

125' TO STOP BAR

200' TO STOP BAR

250' TO STOP BAR

PB1 PB2 PB3 PB4 PB5 PB6 PB7 PB8 PB9 PB10 PB11 PB12 PB13 PB14 PB15

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9

CB1

2-3" 25'

3-3" 30'

MONOTUBE STRUCTURE NO.	
BASE NO.	STRUCTURE NO.
SB3	S-36-0056
SB7	S-36-0057

CONFIGURATION WITH HEAD NUMBERS

3-V	3-VL	4-VL	PED
1,2,3,6 7,8,9,10 11,12,13,14	15,16	4,5	17,18,19,20 21,22,23,24

CONSTRUCTION NOTES

1. * IS THE FRONT CENTER OF THE LOOP DETECTORS
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 DAYS PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM. CONTACT THE CITY OF MANITOWOC AT 920-686-6517 (MARK DEZEEUW).
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
4. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICTS WITH EXISTING UTILITY FACILITIES.
5. ALL SIGNAL EQUIPMENT SHALL BE INSTALLED WITH A MINIMUM OF 2-FT CLEARANCE TO THE FACE OF THE CURB UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
6. CONDUIT INSTALLED IN EXISTING PAVEMENT WILL BE CONDUIT 3-INCH SPECIAL.
7. CONCRETE SECTIONS CUT TO PLACE NEW LOOP DETECTORS AT ALL LOCATIONS. REFER TO SDD 9F15 SHEET B 'LOOP DETECTOR INSTALLED IN BASE COURSE (OPTION 2)' FOR INSTALLATION METHOD.
8. CONDUIT EMBEDDED IN A TYPE 9, 10, 12, OR 13 BASE SHALL BE 3" CONDUIT.

TRAFFIC CONTROL SIGNAL
USH 10 (WALDO BLVD) & CTH B/8TH ST.
CITY OF MANITOWOC
MANITOWOC COUNTY

CABINET TYPE: TS-2
SIGNAL NO. ---- CONTROLLER TYPE: EPAC M52

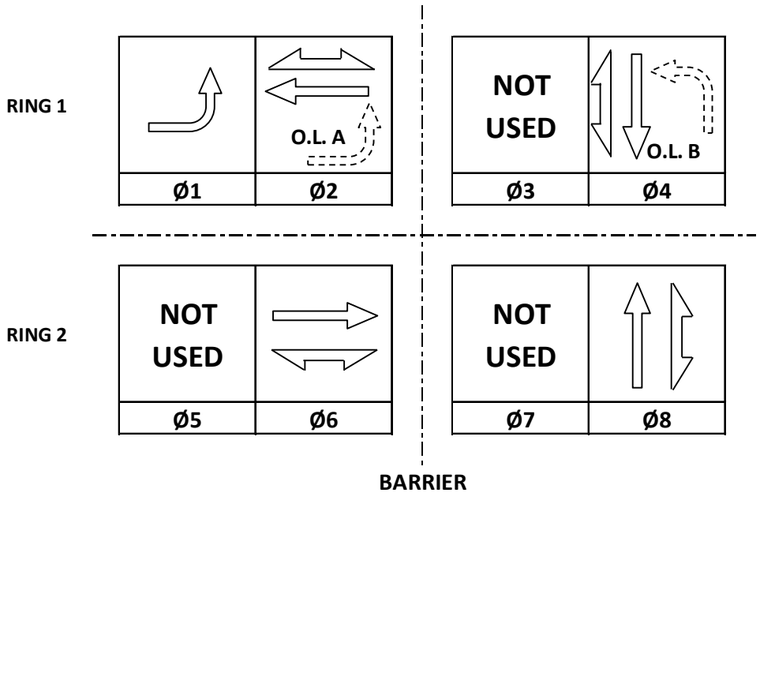
REGION CONTACT: M. DEZEEUW
DESIGNED BY: AYRES ASSOCIATES INC
REVISED BY: ----

PAGE 1 OF 2

PROJECT NO: 1500-37-74	HWY: USH 10/STH 42	COUNTY: MANITOWOC	TRAFFIC SIGNAL PLAN-8TH ST.	SHEET E

FILE NAME : V:\TRAFFIC\WK\41062900\SIGNAL PLAN SHEETS\024204 SP.DWG PLOT DATE : 1/2/2019 9:37 AM PLOT BY : HICKMAN, TRISTAN PLOT NAME : PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	4,5	R ←
Ø2	6,7,8	R
Ø3		
Ø4	9,10,11	R
Ø5		
Ø6	1,2,3	R
Ø7		
Ø8	12,13,14,15,16	R, R ←
Ø2P	17,18	
Ø4P	19,20	
Ø6P	21,22	
Ø8P	23,24	
OLA	4,5	
OLB	15,16	
OLC		
OLD		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3				
4		8		X
5				
6	X	2	MIN	X
7				
8		4		X

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	X
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM NO: SS-	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29
PLAN LOOP DETECTOR*(S)	12	22	43	42	82	84										
ASSIGNED PHASE	1	2	4	4	8	8										
OPERATION MODE	VEH	VEH	VEH	VEH	VEH	VEH										
SWITCH																
EXTEND	X	X	X	X	X	X										
EXTEND TIME																
DELAY																
USE ADDED INITIAL																
CROSS SWITCH PHASE																

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30
PLAN LOOP DETECTOR*(S)	11	21	41	61	81	83										
ASSIGNED PHASE	1	2	4	6	8	8										
OPERATION MODE	VEH	VEH	VEH	VEH	VEH	VEH										
SWITCH																
EXTEND	X	X	X	X	X	X										
EXTEND TIME																
DELAY																
USE ADDED INITIAL																
CROSS SWITCH PHASE																

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.

USH 10/STH 42 & CTH B/8TH ST
CITY OF MANITOWOC
MANITOWOC COUNTY
SIGNAL NO: N/A CABINET TYPE: TS2
CONTROLLER TYPE: EPAC M52
DATE: 01/19 PAGE NO. 2 OF 2

PROJECT NO: 1500-37-74	HWY: USH 10/STH 42	COUNTY: MANITOWOC	SEQUENCE OF OPERATIONS	SHEET NO: 153	E

FILE NAME : V:\TRAFFIC\WK\41062900\SIGNAL PLAN SHEETS\SEQUENCE OF OPS PLOT DATE : _____ PLOT BY : HICKMAN PLOT NAME : _____ PLOT SCALE : 1:1

2

PROJECT ID:	1500-37-74
INTERSECTION:	USH 10 & 8TH ST.

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

CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	JUMPER	SIGNAL INDICATION WIRE COLOR									
				RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK	PED BUTTON
SB1	9	11		RED	ORG	GRN							
		21									BLK	BLU	
		BUTTON											WHT/BLK
SB2	9	1		RED	ORG	GRN							
		20									BLK	BLU	
		BUTTON											WHT/BLK
SB3	12	7		RED	ORG	GRN							
		8		RED/BLK	ORG/BLK	GRN/BLK							
		18									BLK	BLU	
		BUTTON											WHT/BLK
SB4	15	9		RED	ORG	GRN							
		15					RED/BLK	ORG/BLK		BLK/WHT			
		16					RED/WHT	BLU/BLK		BLU/WHT			
		19									BLK	BLU	
		BUTTON											WHT/BLK
SB5	12	13		RED	ORG	GRN							
		14		RED/BLK	ORG/BLK	GRN/BLK							
SB6	7	24									BLK	BLU	
		BUTTON											WHT/BLK
SB7	12	4					RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT			
		6		RED	ORG	GRN							
		17									BLK	BLU	
		BUTTON											WHT/BLK
SB8	15	2		RED	ORG	GRN							
		3		RED/BLK	ORG/BLK	GRN/BLK							
		5					RED/WHT	BLU/WHT	GRN/WHT	BLK/WHT			
		22									BLK	BLU	
		BUTTON											WHT/BLK
SB9	12	10		RED	ORG	GRN							
		12		RED/BLK	ORG/BLK	GRN/BLK							
		23									BLK	BLU	
		BUTTON											WHT/BLK

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

TRAFFIC CONTROL SIGNAL
USH 10 (WALDO BLVD.) & CTH B/8TH ST.
CITY OF MANITOWOC
MANITOWOC COUNTY

Equipment grounding conductor 10 AWG Green XLP	
FROM	TO
CAB.	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	CAB.

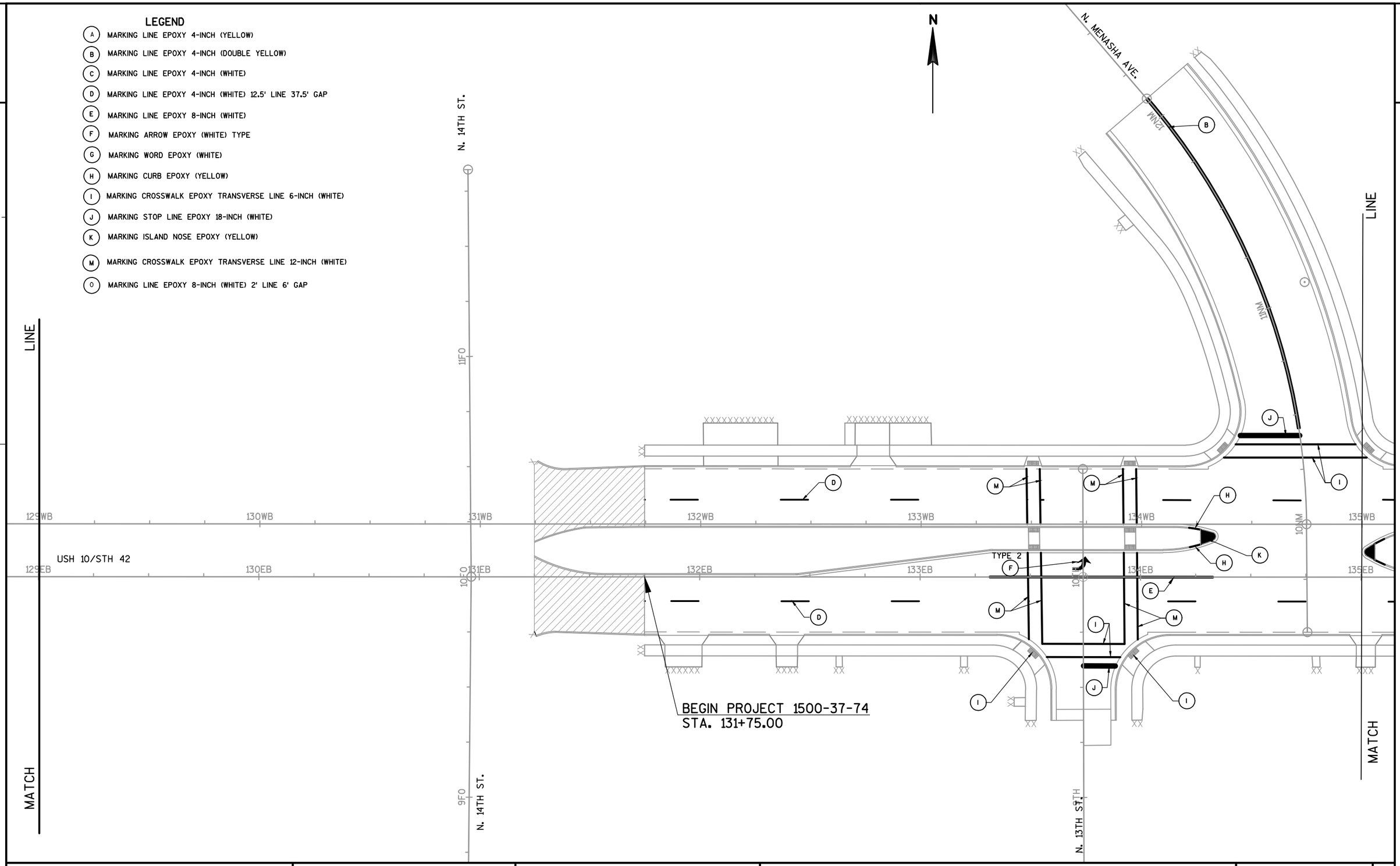
Pull Box Bonding Jumper 10 AWG Green XLP	
FROM	TO
PB1	SB1
PB3	SB1
PB4	SB2
PB5	SB2
PB9	SB4
PB10	SB5
PB12	SB5
PB13	SB6
PB14	SB7
PB17	SB7
PB18	SB8

TRAFFIC CONTROL SIGNAL
USH 10 (WALDO BLVD.) & CTH B/8TH ST.
CITY OF MANITOWOC
MANITOWOC COUNTY

2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE) TYPE
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH (WHITE)
- (O) MARKING LINE EPOXY 8-INCH (WHITE) 2' LINE 6' GAP



PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET 156	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\1500_37_71_024511_PM (2019).DWG PLOT DATE : 1/3/2019 7:03 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LINE

N. 12TH ST.

11TW

10TW

9TW

8TW

10SW

WS5

MENASHA AVE.

135WB 136WB 137WB 138WB 139WB 140WB 141WB

135EB 136EB 137EB 138EB 139EB 140EB 141EB

USH 10/STH 42

TYPE 2

TYPE 2

MATCH

MATCH

LINE

2

N

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE) TYPE
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH (WHITE)
- (O) MARKING LINE EPOXY 8-INCH (WHITE) 2' LINE 6' GAP

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET 157	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\1500_37_71_024512_PM.DWG PLOT DATE : 1/3/2019 7:06 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

N

N. 11TH ST.

LINE

MATCH

TYPE 2

TYPE 3

11EL

8-INCH CONCRETE PAVEMENT WITH COLORING CONCRETE WISDOT RED

8.5-INCH CONCRETE PAVEMENT WITH COLORING CONCRETE WISDOT RED

8-INCH CONCRETE PAVEMENT WITH COLORING CONCRETE WISDOT RED

8.5-INCH CONCRETE PAVEMENT WITH COLORING CONCRETE WISDOT RED

USH 10/STH 42

141WB 142WB 143WB 144WB 145WB 146WB 147WB

141EB 142EB 143EB 144EB 145EB 146EB 147EB

10EL 10TN 9EL 9TN

N. 11TH ST. N. 10TH ST.

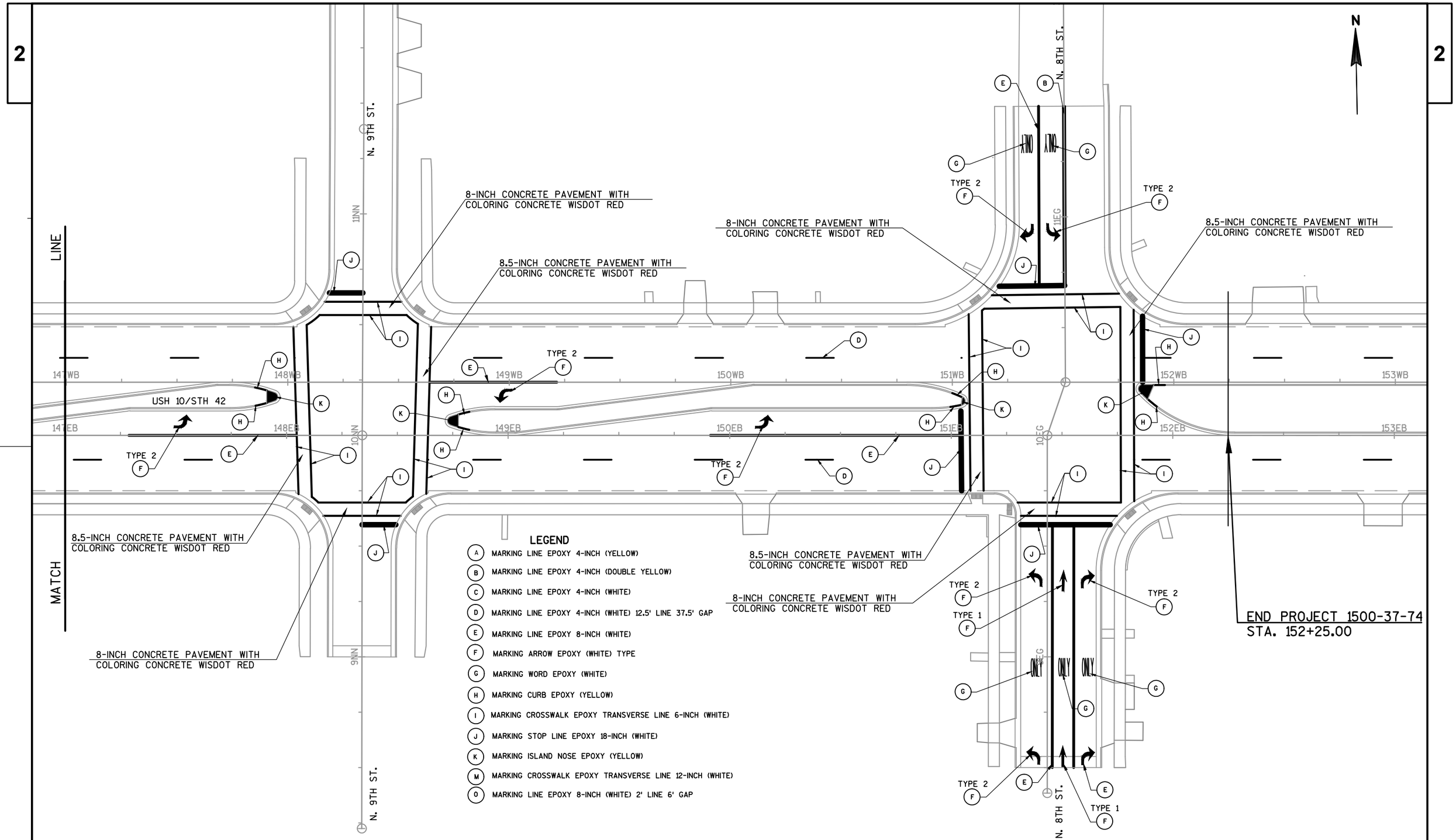
LINE

MATCH

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE) TYPE
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH (WHITE)
- (O) MARKING LINE EPOXY 8-INCH (WHITE) 2' LINE 6' GAP

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET 158	E



LEGEND

- A — MARKING LINE EPOXY 4-INCH (YELLOW)
- B — MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- C — MARKING LINE EPOXY 4-INCH (WHITE)
- D — MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- E — MARKING LINE EPOXY 8-INCH (WHITE)
- F — MARKING ARROW EPOXY (WHITE) TYPE
- G — MARKING WORD EPOXY (WHITE)
- H — MARKING CURB EPOXY (YELLOW)
- I — MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- J — MARKING STOP LINE EPOXY 18-INCH (WHITE)
- K — MARKING ISLAND NOSE EPOXY (YELLOW)
- M — MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH (WHITE)
- O — MARKING LINE EPOXY 8-INCH (WHITE) 2' LINE 6' GAP

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET 159	E

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH (WHITE)
- (O) MARKING LINE EPOXY 8-INCH (WHITE) 2' LINE 6' GAP
- (P) MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (R) MARKING LINE EPOXY 8-INCH (WHITE) 6' LINE 3' GAP
- (S) MARKING LINE YIELD LINE EPOXY 18-INCH (WHITE) 2' LINE 2' GAP

2

2

N

N. 8TH ST.

ONLY ONLY

ONLY ONLY ONLY

N. 8TH ST.

LINCOLN BLVD. (WEST)

LINCOLN BLVD. (EAST)

MATCH LINE

151WB 152WB 153WB 154WB 155WB 156WB 157WB

151EB 152EB 153EB 154EB 155EB 156EB 157EB

STH 42

S89°18'48"E

12SL 12NL 11SL 11NL 10SL 10NL 9SL 9NL

BEGIN PROJECT 4570-12-71
STA. 152+25.00

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET 160	E

2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
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- (I) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
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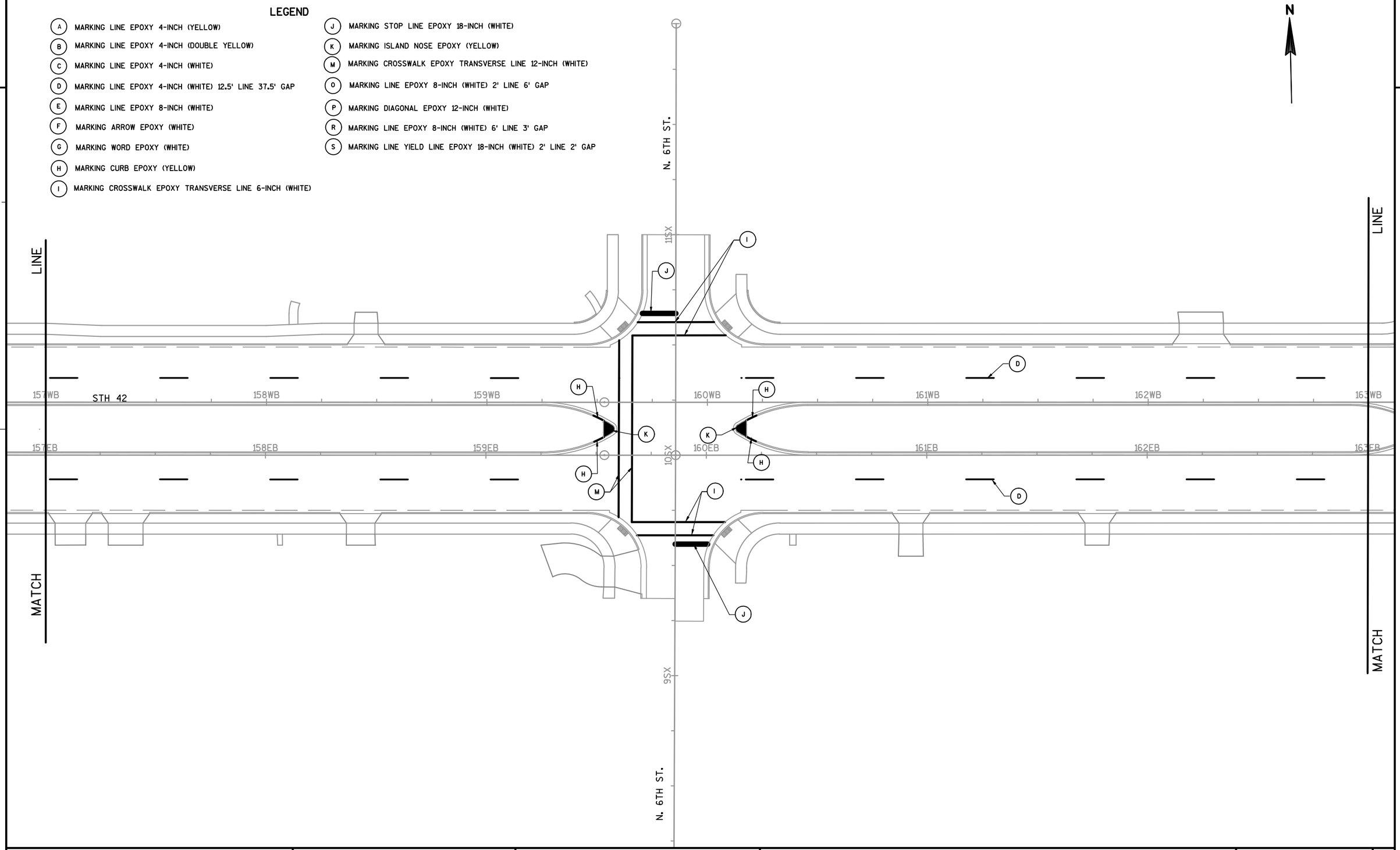
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH (WHITE)
- (O) MARKING LINE EPOXY 8-INCH (WHITE) 2' LINE 6' GAP
- (P) MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (R) MARKING LINE EPOXY 8-INCH (WHITE) 6' LINE 3' GAP
- (S) MARKING LINE YIELD LINE EPOXY 18-INCH (WHITE) 2' LINE 2' GAP



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET 161	E

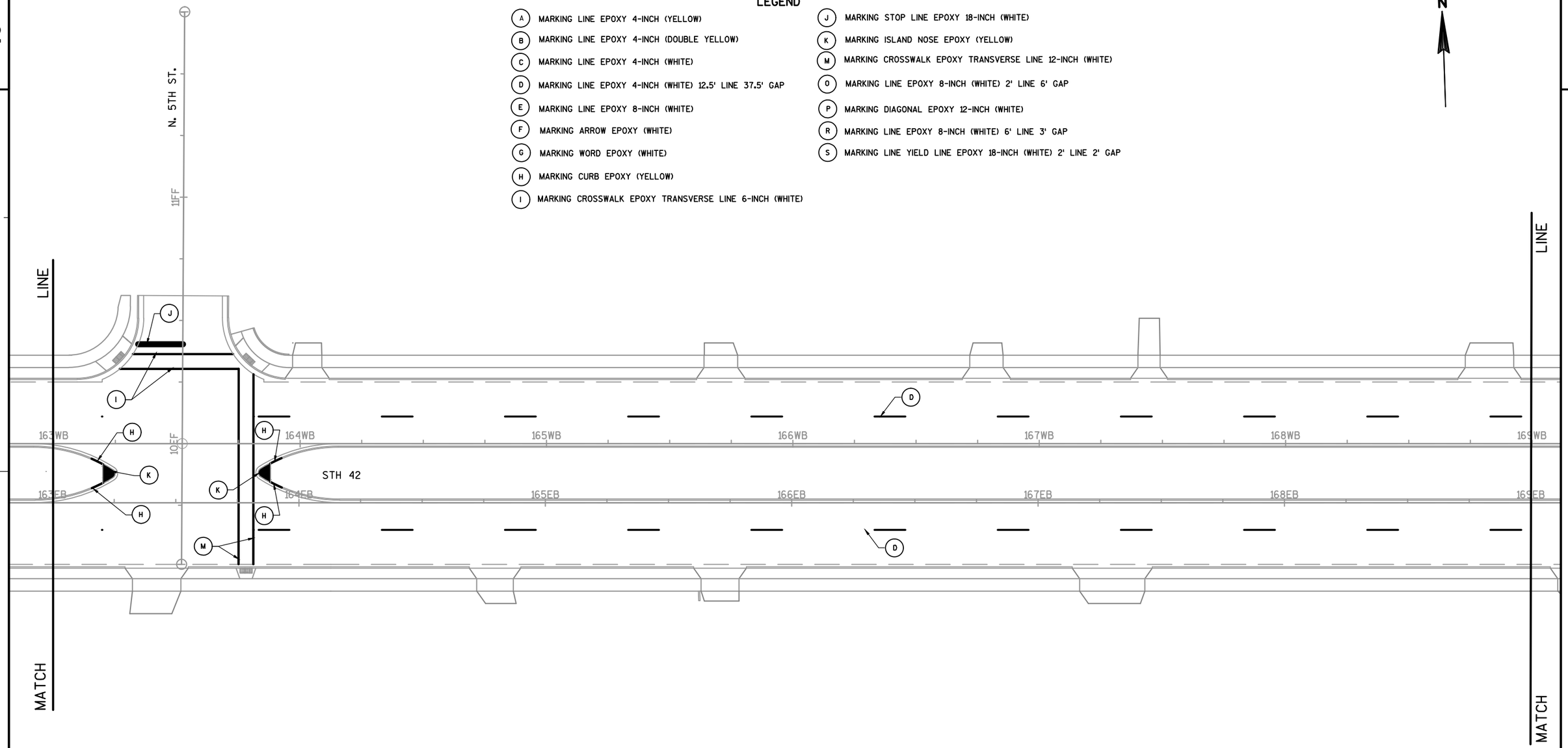
FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_024502 PM.DWG PLOT DATE : 1/3/2019 7:28 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH (WHITE)
- (O) MARKING LINE EPOXY 8-INCH (WHITE) 2' LINE 6' GAP
- (P) MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (R) MARKING LINE EPOXY 8-INCH (WHITE) 6' LINE 3' GAP
- (S) MARKING LINE YIELD LINE EPOXY 18-INCH (WHITE) 2' LINE 2' GAP



2

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET 162	E

2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
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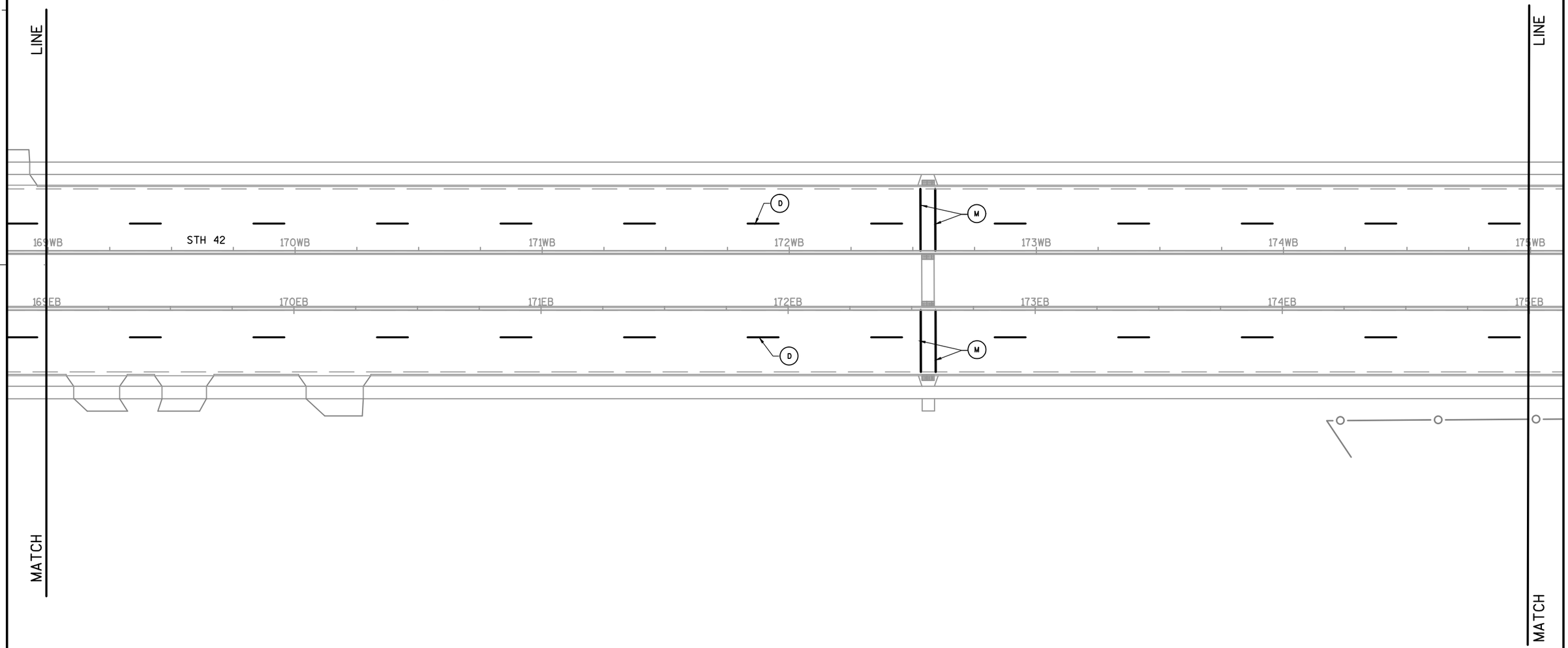
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH (WHITE)
- (O) MARKING LINE EPOXY 8-INCH (WHITE) 2' LINE 6' GAP
- (P) MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (R) MARKING LINE EPOXY 8-INCH (WHITE) 6' LINE 3' GAP
- (S) MARKING LINE YIELD LINE EPOXY 18-INCH (WHITE) 2' LINE 2' GAP

N

2



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET 163	E

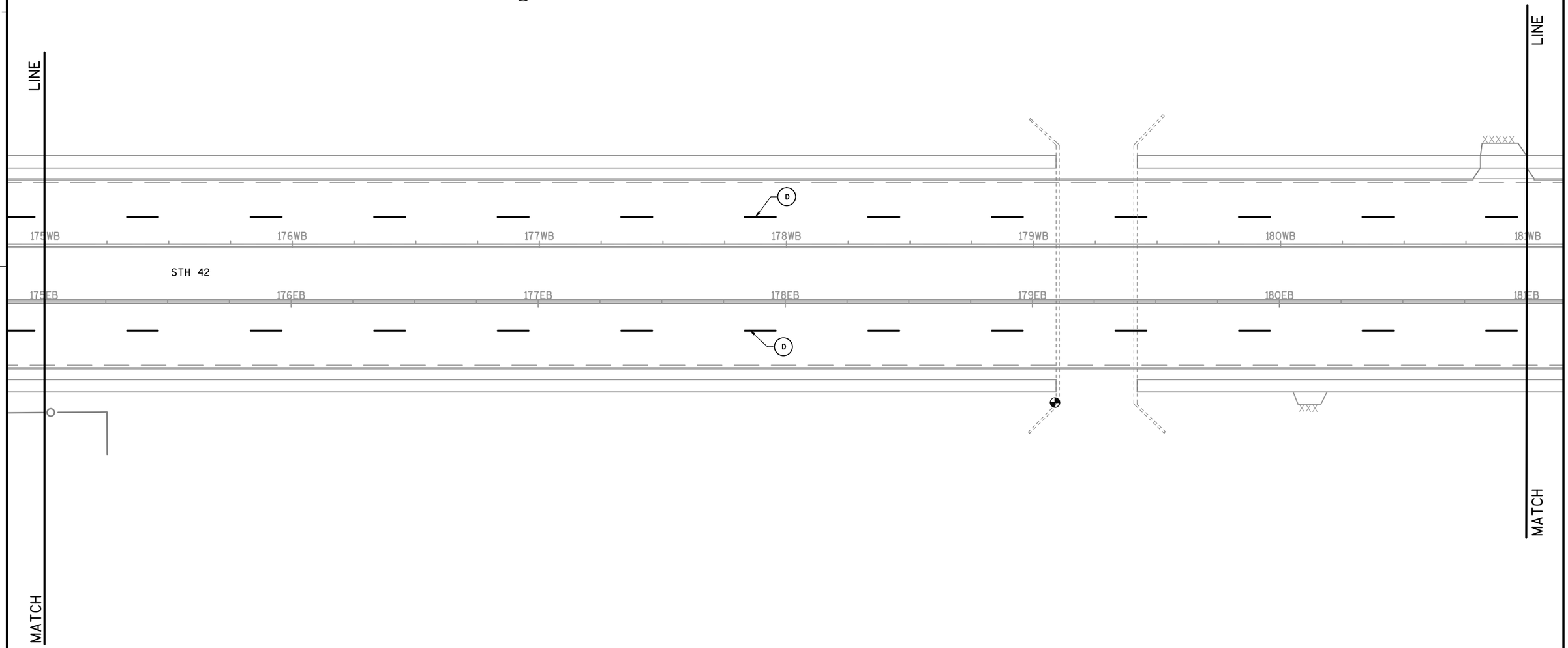
2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH (WHITE)
- (O) MARKING LINE EPOXY 8-INCH (WHITE) 2' LINE 6' GAP
- (P) MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (R) MARKING LINE EPOXY 8-INCH (WHITE) 6' LINE 3' GAP
- (S) MARKING LINE YIELD LINE EPOXY 18-INCH (WHITE) 2' LINE 2' GAP

N

2



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET 164	E

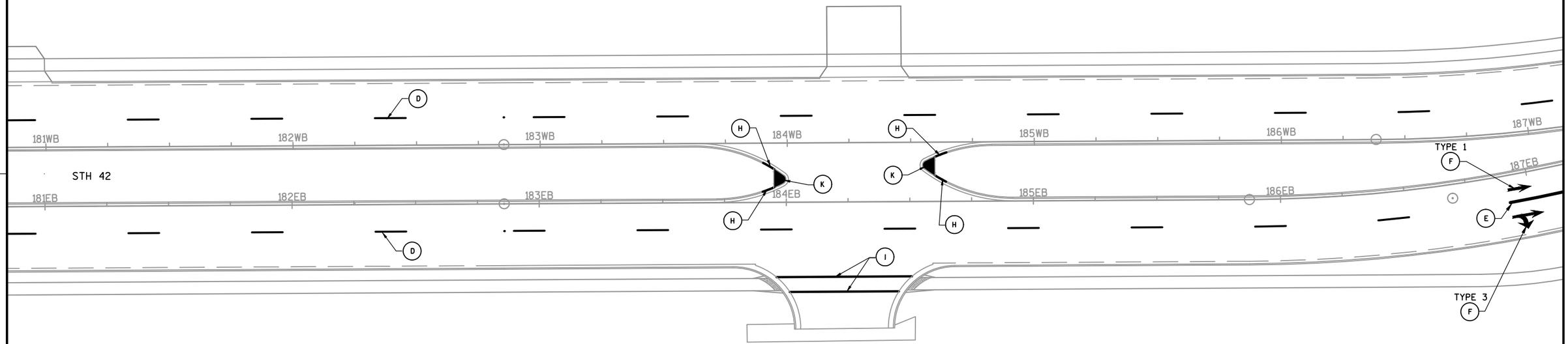
2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH (WHITE)
- (O) MARKING LINE EPOXY 8-INCH (WHITE) 2' LINE 6' GAP
- (P) MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (R) MARKING LINE EPOXY 8-INCH (WHITE) 6' LINE 3' GAP
- (S) MARKING LINE YIELD LINE EPOXY 18-INCH (WHITE) 2' LINE 2' GAP

N

2



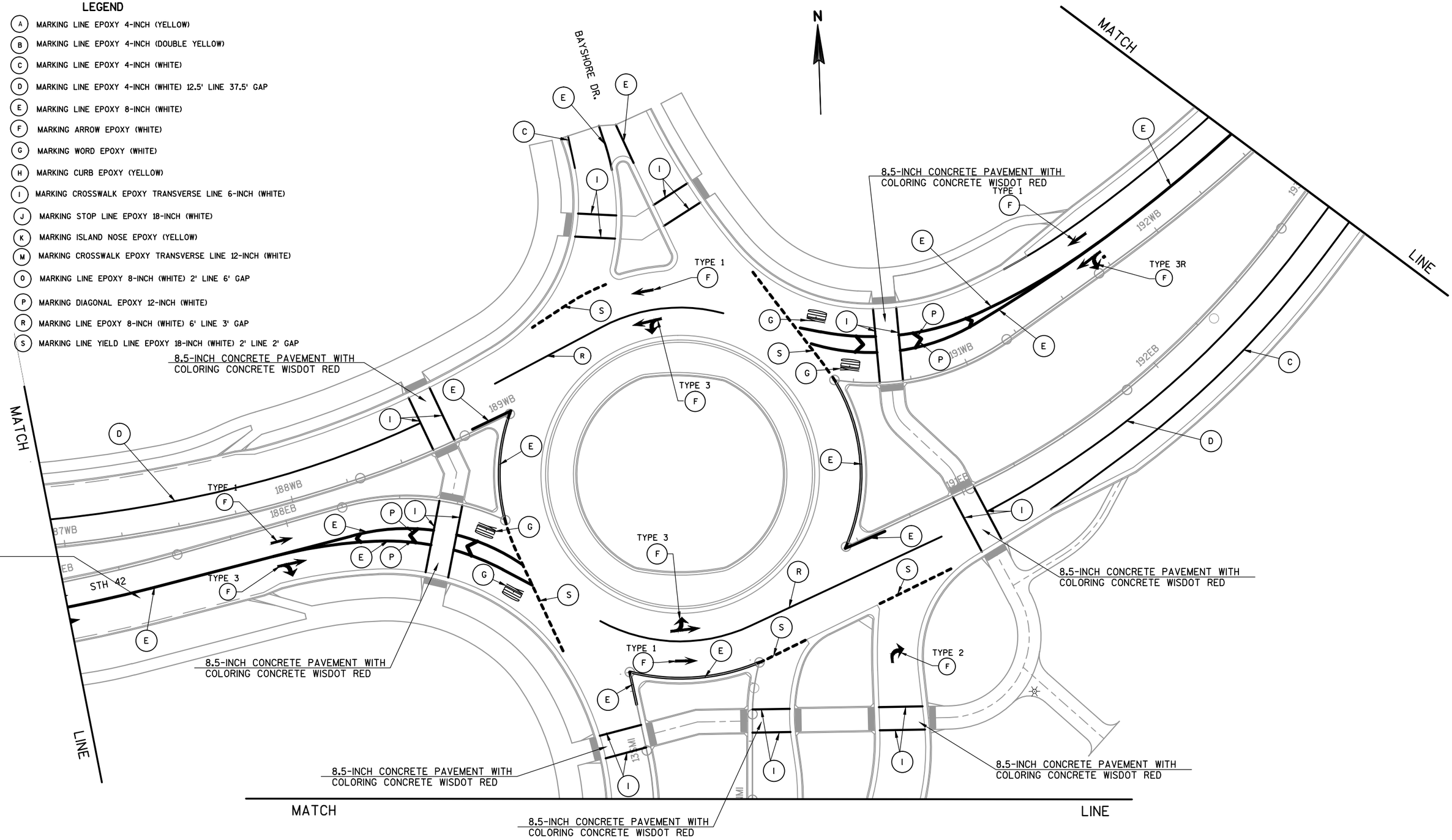
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_024506 PM.DWG PLOT DATE : 1/3/2019 7:40 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1in:40 ft_XREF

WISDOT/CADDS SHEET 42

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH (WHITE)
- (O) MARKING LINE EPOXY 8-INCH (WHITE) 2' LINE 6' GAP
- (P) MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (R) MARKING LINE EPOXY 8-INCH (WHITE) 6' LINE 3' GAP
- (S) MARKING LINE YIELD LINE EPOXY 18-INCH (WHITE) 2' LINE 2' GAP



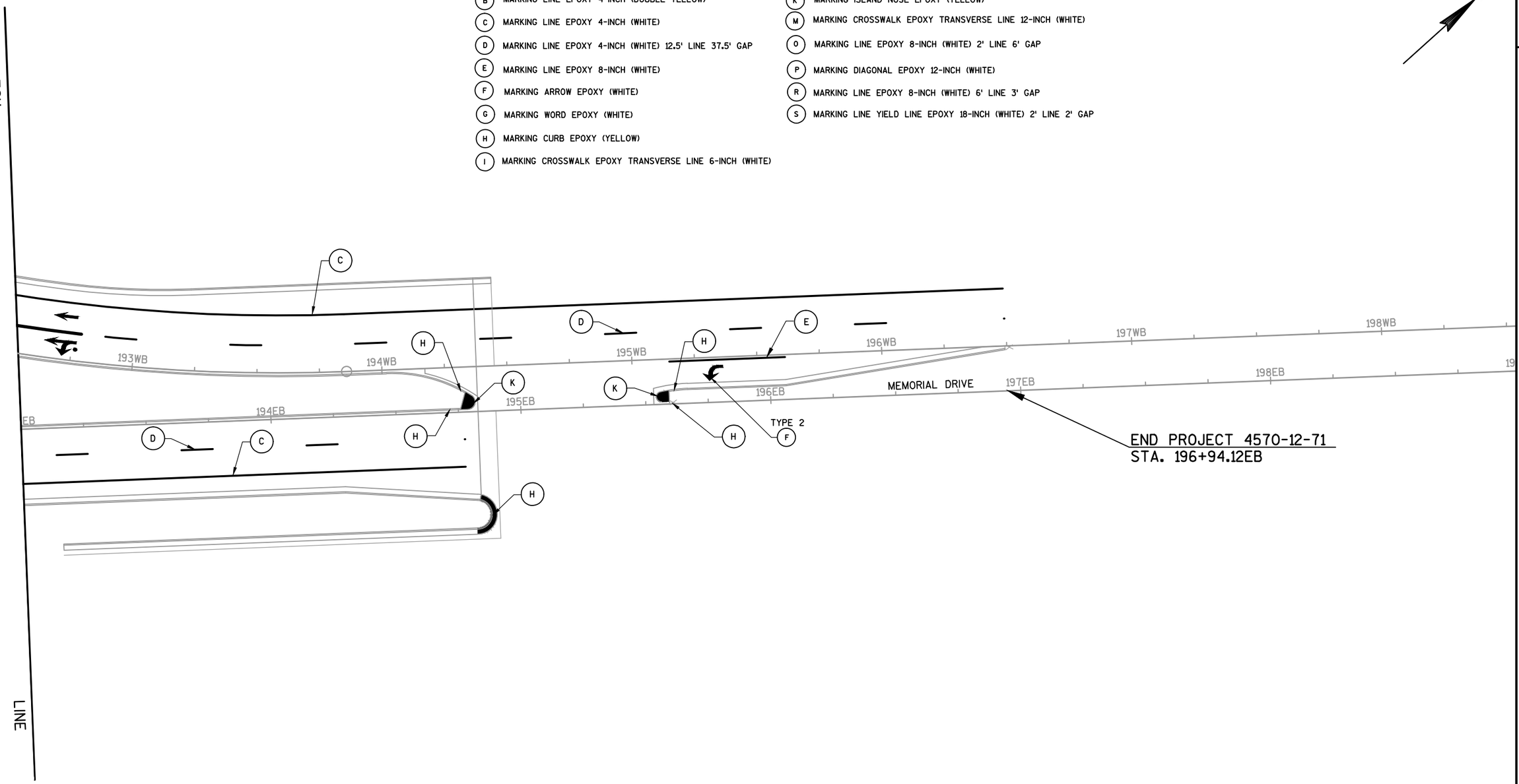
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET 166	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_024507 PM.DWG PLOT DATE : 1/3/2019 11:02 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

LEGEND

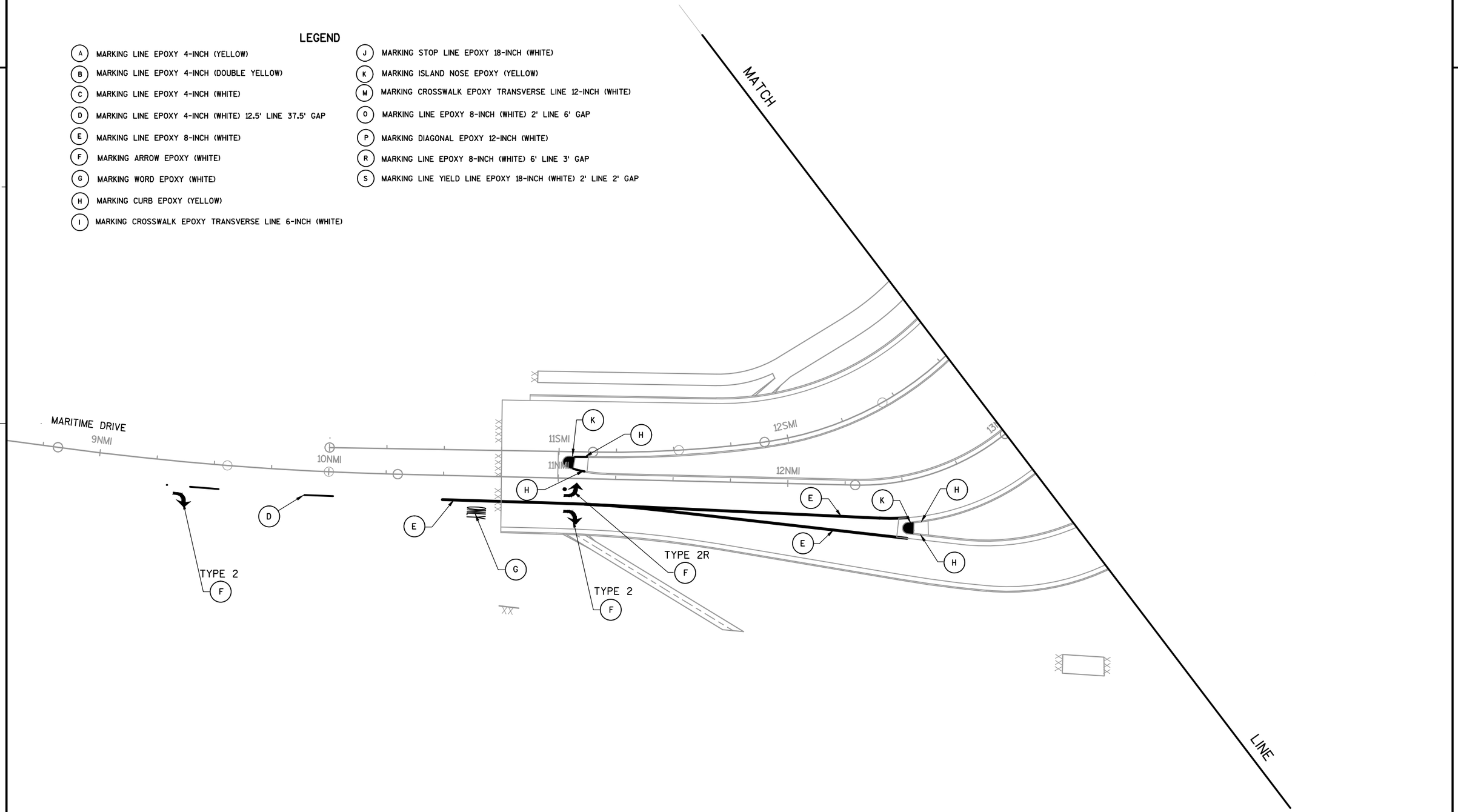
- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH (WHITE)
- (O) MARKING LINE EPOXY 8-INCH (WHITE) 2' LINE 6' GAP
- (P) MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (R) MARKING LINE EPOXY 8-INCH (WHITE) 6' LINE 3' GAP
- (S) MARKING LINE YIELD LINE EPOXY 18-INCH (WHITE) 2' LINE 2' GAP



2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 12-INCH (WHITE)
- (O) MARKING LINE EPOXY 8-INCH (WHITE) 2' LINE 6' GAP
- (P) MARKING DIAGONAL EPOXY 12-INCH (WHITE)
- (R) MARKING LINE EPOXY 8-INCH (WHITE) 6' LINE 3' GAP
- (S) MARKING LINE YIELD LINE EPOXY 18-INCH (WHITE) 2' LINE 2' GAP



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET 168	E

2

LEGEND

- 16"X16" SIGN FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS ITEM)
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- 5" ASPHALTIC SURFACE OVER 12" BASE AGGREGATE DENSE 1 1/4-INCH

WISCONSIN
ANDREW W.
BLOCK
E-41224-6
APPLETON
WI.
PROFESSIONAL ENGINEER

1/4/19

TRAFFIC CONTROL PLANS DESIGNED
BY JT ENGINEERING, INC.

TRAFFIC CONTROL GENERAL NOTES

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

CONFLICTING TRAFFIC SIGNS SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

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

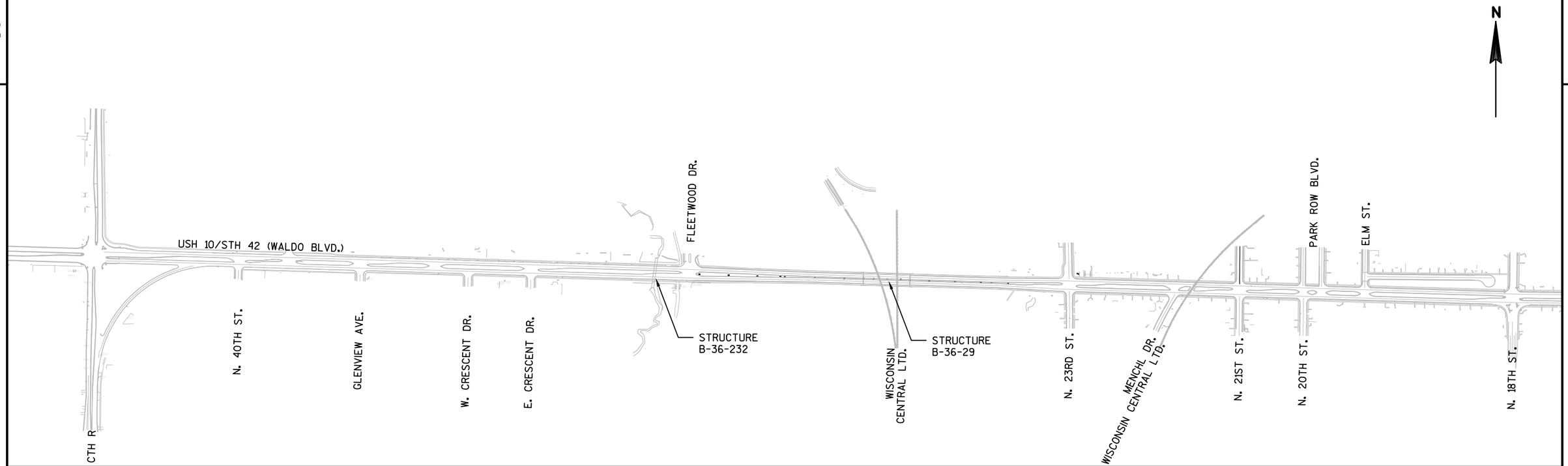
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED. USE OF SIGNS OTHER THAN 48" X 48" OR AS NOTED SHALL BE APPROVED BY THE ENGINEER.

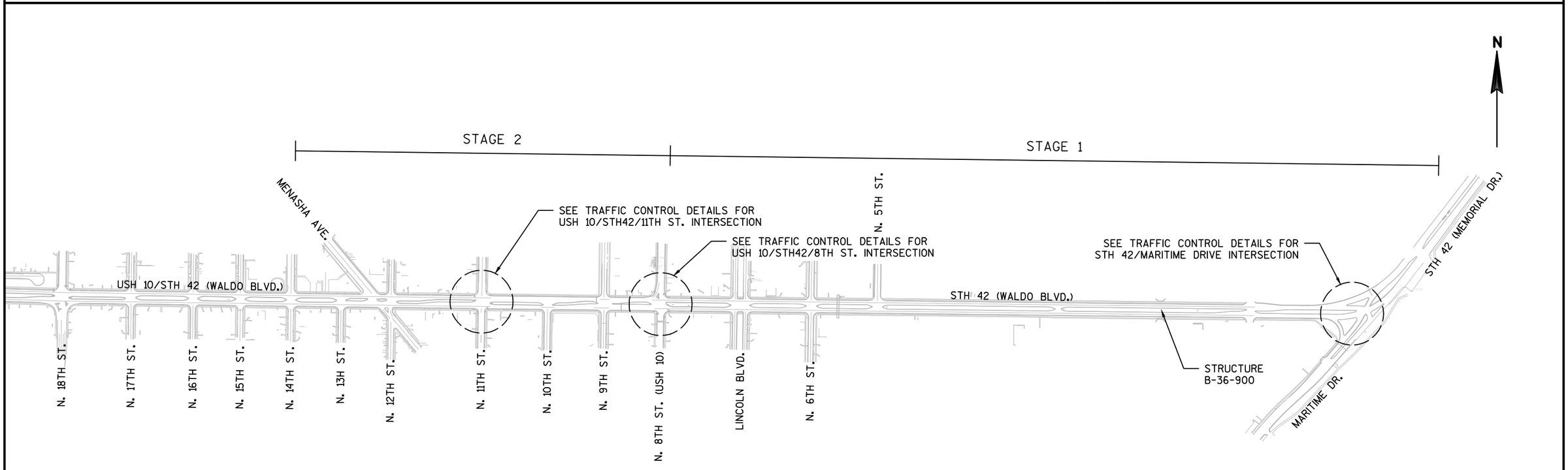
FOR NIGHTTIME OPERATION, ALL DRUMS IN TAPERS SHALL HAVE A TYPE C STEADY BURN WARNING LIGHT.

ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE A (LOW INTENSITY FLASHING) LIGHTS.

WORK AREAS SHOWN ILLUSTRATE GENERAL LOCATIONS OF WORK AND MAY NOT REFLECT ALL WORK REQUIRED.

2





PROJECT NO: 1500-37-74/75, 4570-12-71/72	HWY: USH 10/STH 42	COUNTY: MANITOWOC	TRAFFIC CONTROL OVERVIEW	SHEET 170 E

2

9TH ST.

CONCRETE

8TH ST.

ASPHALT

N

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1-A

LEFT LANE CLOSED AHEAD
W20-5S-A

W04-2L

W01-6
48"X24"

LANE CLOSED
R11-2-L
48"X30"

W01-6
48"X24"

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

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)
(125' TAPER)

25'
(TYP)

STOP
R1-1
30"X30"

W25-1

200'
300'
100'
200'

USH 10/WALDO BLVD.

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

STH 42/WALDO BLVD.

25'
(TYP)

TEMPORARY MARKING LINE
REMOVEABLE TAPE 4-INCH (WHITE)

W01-6
48"X24"

LANE CLOSED
R11-2-L
48"X30"

R3-1
24"X24"

STAGE 1 WORK ZONE

TEMPORARY PEDESTRIAN
SAFETY FENCE

NOTE: EXISTING TRAFFIC SIGNALS AT WALDO BLVD./8TH STREET SHALL BE OPERATIONAL DURING STAGE 1A.

LANE CLOSED
R11-2-L
48"X30"

W01-6
48"X24"

ROAD CLOSED AHEAD
W20-3-A

ROAD CLOSED 1000 FT
W20-3-C

RIGHT LANE CLOSED AHEAD
W20-5-A

ROAD CLOSED 500 FT
W20-3-D

W04-2R

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (WHITE)
(125' TAPER)

END ROAD WORK
G20-2A
48"X24"

W04-2R

RIGHT LANE CLOSED AHEAD
W20-5-A

ROAD WORK AHEAD
W20-1-A

SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY AND BARRICADES AND SIGNS FOR MAINLINE CLOSURES FOR ADDITIONAL DETAILS

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 1 - 8TH STREET	SHEET 171 E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\TRAFFIC CONTROL\025000_TC 15003771 8TH STAGE 1A.DWG PLOT DATE : 1/4/2019 11:04 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - ****

WISDOT/CADDS SHEET 42

2

9TH ST.

8TH ST.

ROAD CLOSED AHEAD
W20-3-A

ROAD CLOSED 1000 FT
W20-3-C

ROAD CLOSED 500 FT
W20-3-D

END ROAD WORK
G20-2A
48"X24"

PLACE TEMPORARY CURB RAMPS, PEDESTRIAN CROSSING, AND SIGNING OUTSIDE OF CONSTRUCTION LIMITS ON 8TH STREET NORTH OF USH 10

W011-2
30"X30"

W16-7L
24"X12"

DO NOT ENTER
R5-1
30"X30"

PLACE R9-11 SIGN AND BARRICADE AT TEMPORARY PEDESTRIAN CROSSING OUTSIDE OF CONSTRUCTION LIMITS ON 8TH STREET NORTH OF USH 10

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

SIDEWALK CLOSED
R9-9
24"X12"

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

LANE CLOSED
R11-2-L
48"X30"

STOP
R1-1
30"X30"

CROSS TRAFFIC DOES NOT STOP
W4-4P
24"X12"

R3-2
24"X24"

W003-1

PLACE BARRICADES AT 8TH STREET/ OAK STREET INTERSECTION

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

25' (TYP)

N

USH 10/WALDO BLVD.

STH 42/WALDO BLVD.

STAGE 2 WORK ZONE

TEMPORARY PEDESTRIAN SAFETY FENCE

W003-1

R3-1
24"X24"

STOP
R1-1
30"X30"

CROSS TRAFFIC DOES NOT STOP
W4-4P
24"X12"

SIDEWALK CLOSED
R9-9
24"X12"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

LANE CLOSED
R11-2-L
48"X30"

STAGE 1 WORK ZONE

TEMPORARY PEDESTRIAN SAFETY FENCE

W011-2
30"X30"

W16-7L
24"X12"

PLACE TEMPORARY CURB RAMPS, PEDESTRIAN CROSSING, AND SIGNING OUTSIDE OF CONSTRUCTION LIMITS ON 8TH STREET SOUTH OF USH 10

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW) (125' TAPER)

W004-2L

LEFT LANE CLOSED AHEAD
W20-5S-A

ROAD WORK AHEAD
W20-1-A

PLACE R9-11 SIGN AND BARRICADE AT TEMPORARY PEDESTRIAN CROSSING OUTSIDE OF CONSTRUCTION LIMITS ON 8TH STREET SOUTH OF USH 10

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

W01-6
48"X24"

SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY FOR ADDITIONAL DETAILS

PROJECT NO:1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 1 & 2 - 8TH STREET (SHT 1 OF 2)	SHEET 172 E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\TRAFFIC CONTROL\025000_TC 15003771 8TH STAGE 1AB 1OF2.DWG
LAYOUT NAME - ****
PLOT DATE : 1/4/2019 11:19 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

9TH ST.

ROAD CLOSED AHEAD W20-3-A

ROAD CLOSED 1000 FT W20-3-C

ROAD CLOSED 500 FT W20-3-D

W011-2 30"X30"

W16-7L 24"X12"

PLACE TEMPORARY CURB RAMPS, PEDESTRIAN CROSSING, AND SIGNING OUTSIDE OF CONSTRUCTION LIMITS ON 8TH STREET NORTH OF USH 10

PLACE BARRICADES AT 8TH STREET/ OAK STREET INTERSECTION

ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30"

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

25' (TYP)

8TH ST.

END ROAD WORK G20-2A 48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW) (100' SHIFTING TAPER)

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

PLACE R9-11-A SIGN AND BARRICADE AT TEMPORARY PEDESTRIAN CROSSING OUTSIDE OF CONSTRUCTION LIMITS ON 8TH STREET NORTH OF USH 10

W01-6 48"X24" AND LANE CLOSED R11-2-L 48"X30"

DO NOT ENTER R5-1 30"X30"

LANE CLOSED R11-2-L 48"X30"

STOP R1-1 30"X30"

CROSS TRAFFIC DOES NOT STOP W4-4P 24"X12"

R3-2 24"X24"

W004-1

N

USH 10/WALDO BLVD.

STH 42/WALDO BLVD.

STAGE 2 WORK ZONE

TEMPORARY PEDESTRIAN SAFETY FENCE

W004-1

R3-1 24"X24"

STOP R1-1 30"X30"

CROSS TRAFFIC DOES NOT STOP W4-4P 24"X12"

TEMPORARY CURB RAMP REQD.

SIDEWALK CLOSED R9-9 24"X12"

25' (TYP)

ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30"

LANE CLOSED R11-2-L 48"X30"

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

PLACE R9-11 SIGN AND BARRICADE AT TEMPORARY PEDESTRIAN CROSSING OUTSIDE OF CONSTRUCTION LIMITS ON 8TH STREET SOUTH OF USH 10

STAGE 1 WORK ZONE

TEMPORARY PEDESTRIAN SAFETY FENCE

W011-2 30"X30"

W16-7L 24"X12"

PLACE TEMPORARY CURB RAMPS, PEDESTRIAN CROSSING, AND SIGNING OUTSIDE OF CONSTRUCTION LIMITS ON 8TH STREET SOUTH OF USH 10

W004-2R

RIGHT LANE CLOSED AHEAD W20-5-A

ROAD WORK AHEAD W20-1-A

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

W01-6 48"X24"

END ROAD WORK G20-2A 48"X24"

SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY FOR ADDITIONAL DETAILS

ASPHALT OVER CONCRETE

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 1 & 2 - 8TH STREET (SHT 2 OF 2)	SHEET 173 E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\TRAFFIC CONTROL\025000_TC 15003771 8TH STAGE 1AB 2OF2.DWG LAYOUT NAME - ****
PLOT DATE : 1/4/2019 11:32 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY FOR ADDITIONAL DETAILS

ROAD WORK AHEAD
W20-1A

RIGHT LANE CLOSED AHEAD
W20-5A

W04-2R

11TH ST.

25' (TYP)

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)
(125' TAPER)

W01-6
48"X24"

W011-2
30"X30"
W16-7L
24"X12"

PLACE TEMPORARY CURB RAMPS, PEDESTRIAN CROSSING, AND SIGNING OUTSIDE OF CONSTRUCTION LIMITS ON 11TH STREET NORTH OF USH 10

PLACE R9-11 AND BARRICADE AT TEMPORARY PEDESTRIAN CROSSING OUTSIDE OF CONSTRUCTION LIMITS ON 11TH STREET NORTH OF USH 10

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

LANE CLOSED
R11-2-L
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

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

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

STOP
R1-1
30"X30"
CROSS TRAFFIC DOES NOT STOP
W4-4P
24"X12"

R3-1
24"X24"

N

USH 10/WALDO BLVD.

STAGE 2 WORK ZONE
TEMPORARY PEDESTRIAN SAFETY FENCE

W021-1

R3-2
24"X24"

STOP
R1-1
30"X30"
CROSS TRAFFIC DOES NOT STOP
W4-4P
24"X12"

PLACE R9-11 AND BARRICADE AT TEMPORARY PEDESTRIAN CROSSING OUTSIDE OF CONSTRUCTION LIMITS ON 11TH STREET SOUTH OF USH 10

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

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

SIDEWALK CLOSED
R9-9
24"X12"

25' (TYP)

END ROAD WORK
G20-2A
48"X24"

PLACE TEMPORARY CURB RAMPS, PEDESTRIAN CROSSING, AND SIGNING OUTSIDE OF CONSTRUCTION LIMITS ON 11TH STREET SOUTH OF USH 10

W011-2
30"X30"
W16-7L
24"X12"

STAGE 2 WORK ZONE
TEMPORARY PEDESTRIAN SAFETY FENCE

2

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 2 - 11TH STREET (SHT 1 OF 2)	SHEET 174 E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\TRAFFIC CONTROL\025000_TC 1500377 1 11TH STAGE 1C 1OF2.DWG PLOT DATE : 1/4/2019 1:08 PM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - ****

WISDOT/CADDS SHEET 42

2

2

N

ROAD WORK AHEAD
W20-1-A

11TH ST.

CONCRETE

10' (TYP)

PLACE TEMPORARY CURB RAMPS, PEDESTRIAN CROSSING, AND SIGNING OUTSIDE OF CONSTRUCTION LIMITS ON 18TH STREET NORTH OF USH 10

W011-2
30"X30"

W16-7L
24"X12"

W01-6
48"X24"

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

PLACE R9-11 AND BARRICADE AT TEMPORARY PEDESTRIAN CROSSING OUTSIDE OF CONSTRUCTION LIMITS ON 11TH STREET NORTH OF USH 10

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

SIDEWALK CLOSED
R9-9
24"X12"

LANE CLOSED
R11-2-L
48"X30"

STOP
R1-1
30"X30"

CROSS TRAFFIC DOES NOT STOP
W4-4P
24"X12"

R3-1
24"X24"

ASPHALT

HSE

PORCH

CONC.

USH 10/WALDO BLVD.

STAGE 2 WORK ZONE
TEMPORARY PEDESTRIAN SAFETY FENCE

W20-1

R3-2
24"X24"

STOP
R1-1
30"X30"

CROSS TRAFFIC DOES NOT STOP
W4-4P
24"X12"

TEMPORARY PEDESTRIAN CURB RAMP REQD

SIDEWALK CLOSED
R9-9
24"X12"

25' (TYP)

ROAD CLOSED TO THRU TRAFFIC
R11-4
60"X30"

STAGE 2 WORK ZONE
TEMPORARY PEDESTRIAN SAFETY FENCE

PLACE TEMPORARY CURB RAMPS, PEDESTRIAN CROSSING, AND SIGNING OUTSIDE OF CONSTRUCTION LIMITS ON 18TH STREET SOUTH OF USH 10

W011-2
30"X30"

W16-7L
24"X12"

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

PLACE R9-11 AND BARRICADE AT TEMPORARY PEDESTRIAN CROSSING OUTSIDE OF CONSTRUCTION LIMITS ON 11TH STREET SOUTH OF USH 10

END ROAD WORK
G20-2A
48"X24"

PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 2 - 11TH STREET (SHT 2 OF 2)	SHEET 175 E

2

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1-A

LEFT LANE CLOSED AHEAD
W20-5S-A

W04-2L

W01-6
48"X24"

LANE CLOSED
R11-2-L
48"X30"

W01-6
48"X24"

ROAD CLOSED
R11-2
48"X30"

TEMPORARY PEDESTRIAN SAFETY FENCE
NOTE: MAINTAIN EXISTING PEDESTRIAN CROSSING UNTIL A TEMPORARY CROSSING IS COMPLETE WITHIN THE CONSTRUCTION ZONE

ROAD CLOSED
R11-2
48"X30"

MARITIME DRIVE

25' (TYP)

25' (TYP)

10' (TYP)

25' (TYP)

700' 700' 350' 245' 120'

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY FOR ADDITIONAL DETAILS

MULTI USE PATH

PLACE AT PEDESTRIAN CROSSING

W011-2
30"X30"

W16-7L
24"X12"

PHASE 1 WORK ZONE

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 1 - MARITIME DRIVE PHASE 1	SHEET 176	E

WALDO BOULEVARD

PHASE 1 WORK ZONE

TEMPORARY PEDESTRIAN SAFETY FENCE

MAINTAIN PEDESTRIAN TRAFFIC ON EXISTING SIDEWALK

25' (TYP)

MARITIME DRIVE

ASPHALTIC CURB

ASPHALTIC SURFACE TEMPORARY

CONNECT EXISTING INLET TO MH-172.0TO MAINTAIN DRAINAGE; 28 LF STORM SEWER PIPE PVC 12-INCH REQD.

MULTI USE PATH

LANE CLOSED
R11-2-L
48"X30"

ASPHALTIC SURFACE TEMPORARY CONSTRUCTED PRIOR TO STAGE 1 TRAFFIC SHIFT

TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)

TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)

25' (TYP)

LANE CLOSED
R11-2-L
48"X30"

ASPHALTIC CURB

ASPHALTIC SURFACE TEMPORARY

N

NOTES:
CONSTRUCT STORM SEWER STRUCTURES 172.0, 174.0, 174.9 - 174.13, 180.4 - 180.6, CONNECTING STORM SEWER PIPES, AND THE TEMPORARY STORM SEWER PIPE CONNECTION TO STRUCTURE 172.0 DURING OFF-PEAK CLOSURES OF STH 42/MARITIME DRIVE

COVER PLATES TEMPORARY REQUIRED AT STORM SEWER STRUCTURES 174.0, 174.9, 174.10, AND 180.5

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 1 - MARITIME DRIVE PHASE 1	SHEET 177	E

2

N

ROAD CLOSED
R11-2
48"X30"

W01-6
48"X24"

SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY FOR ADDITIONAL DETAILS

PHASE 1 WORK ZONE

120'
245'
350'
700'
700'

25'
(TYP)

25'
(TYP)

STH 42

STH 42/MEMORIAL DRIVE

TEMPORARY MARKING LINE
PAINT 4-INCH (DOUBLE YELLOW)

TEMPORARY MARKING LINE
PAINT 4-INCH (WHITE)

ASPHALT

CURB

ROCK

ROCK

MULTI USE PATH

W01-6
48"X24"

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (WHITE)

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)

W06-2

W01-4L

25
M.P.H.
W013-1
36"X36"

W01-6
48"X24"

END
ROAD WORK
G20-2A
48"X24"

W04-2R

RIGHT LANE
CLOSED
AHEAD
W20-5-A

ROAD
WORK
AHEAD
W20-1-A

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 1 - MARITIME DRIVE PHASE 1	SHEET 178	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\TRAFFIC CONTROL\025000_TC 45701271 MARITIME DRIVE STAGE1.DWG
LAYOUT NAME - ****
PLOTTED DATE : 1/4/2019 10:23 AM
PLOT BY : ANDY BLOCK
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1-A

RIGHT LANE CLOSED AHEAD
W20-5-A

W04-2R

W01-6
48"X24"

LANE CLOSED
R11-2-L
48"X30"

MARITIME DRIVE

ASPHALT

BLDG

25'
(TYP)

700'
700'
350'
245'

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (WHITE)

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

25'
(TYP)

25'
(TYP)

TEMPORARY PEDESTRIAN
CURB RAMP REQD

SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY FOR ADDITIONAL DETAILS

MULTI USE PATH

W01-4R

ROAD CLOSED
R11-2
48"X30"

TEMPORARY PEDESTRIAN SAFETY FENCE
NOTE: MAINTAIN EXISTING PEDESTRIAN CROSSING UNTIL A TEMPORARY CROSSING IS COMPLETE WITHIN THE CONSTRUCTION ZONE

PHASE 2 WORK ZONE

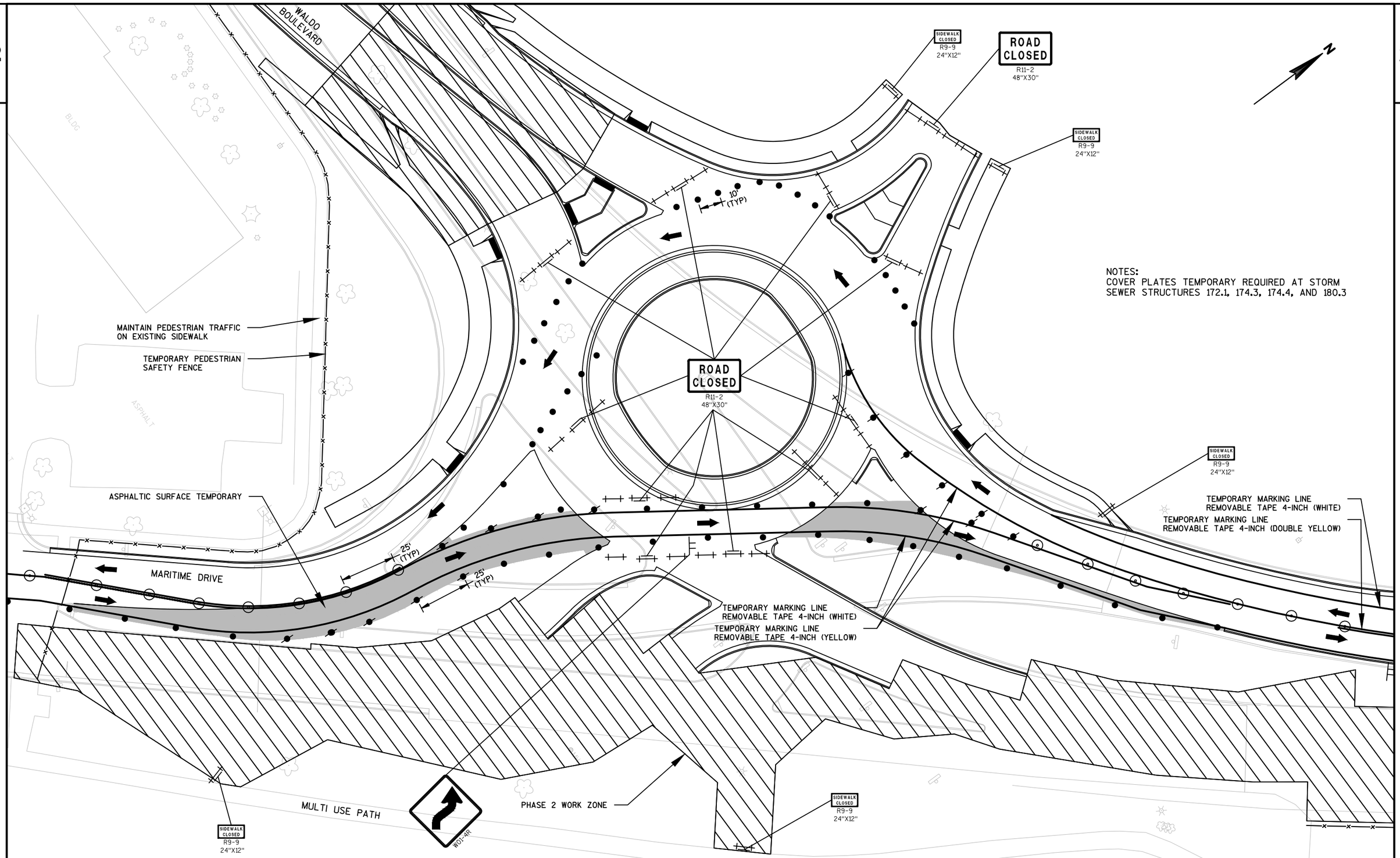
PLACE AT PEDESTRIAN CROSSING

W011-2
30"X30"

W16-7L
24"X12"

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 1 - MARITIME DRIVE PHASE 2	SHEET 179	E

2



NOTES:
COVER PLATES TEMPORARY REQUIRED AT STORM SEWER STRUCTURES 172.1, 174.3, 174.4, AND 180.3

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 1 - MARITIME DRIVE PHASE 2	SHEET 180	E

2

SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY FOR ADDITIONAL DETAILS

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (WHITE)

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

W01-6
48"X24"

R3-2
24"X24"

ASPHALTIC SURFACE TEMPORARY

245'

350'

700'

700'

25'
(TYP)

25'
(TYP)

25'
(TYP)

STH 42

STH 42/MEMORIAL DRIVE

10'
(TYP)

W01-4R

PHASE 2 WORK ZONE

TEMPORARY PEDESTRIAN SAFETY FENCE

ROAD
CLOSED
R11-2
48"X30"

R3-2
24"X24"

ONE
WAY
R6-2-R
24"X30"

W01-6
48"X24"

W06-2

W01-6
48"X24"

END
ROAD WORK
G20-2A
48"X24"

W04-2L

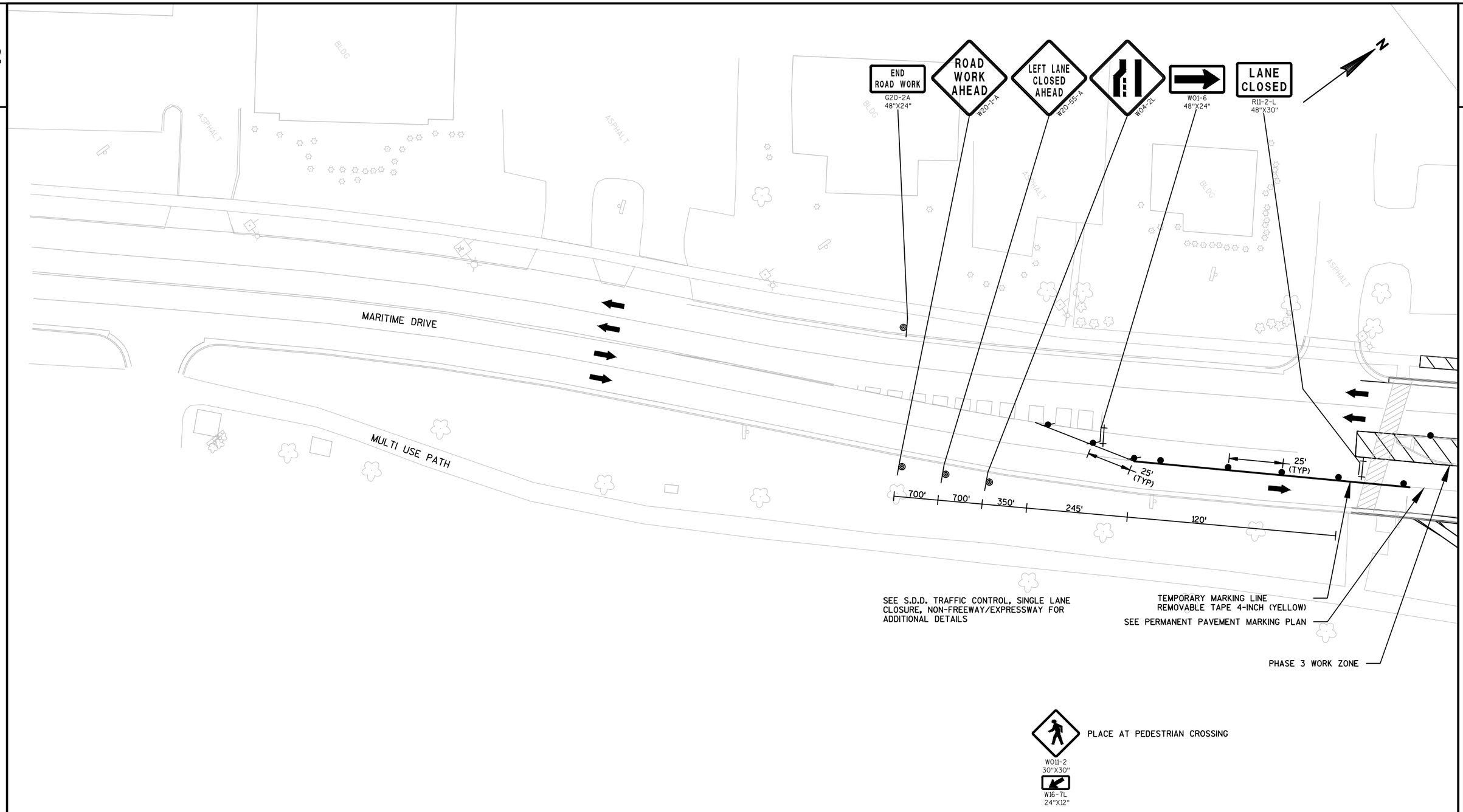
LEFT LANE
CLOSED
AHEAD
W20-5S-A

ROAD
WORK
AHEAD
W20-1-A

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 1 - MARITIME DRIVE PHASE 2	SHEET 181	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\TRAFFIC CONTROL\025000_TC 45701271 MARITIME DRIVE STAGEP2.DWG DATE : 1/4/2019 10:32 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - ****

2



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 1 - MARITIME DRIVE PHASE 3	SHEET 182	E

2

WALDO BOULEVARD

SIDEWALK CLOSED
R9-9
24"X12"

PHASE 3 WORK ZONE

ROAD CLOSED
R11-2
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

10' (TYP)

ROAD CLOSED
R11-2
48"X30"

UTILIZE A FLAGGING OPERATION AS NEEDED TO PLACE CONCRETE CURB & GUTTER ALONG SMI ALIGNMENT

MAINTAIN PEDESTRIAN ACCOMMODATIONS ON EXISTING SIDEWALK AND CROSSING UNTIL AN ALTERNATE CROSSING OF MARITIME DRIVE AND STH 42 IS ACCESSIBLE

SIDEWALK CLOSED
R9-9
24"X12"

LANE CLOSED
R11-2-L
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

MARITIME DRIVE

25' (TYP)

25' (TYP)

LANE CLOSED
R11-2-L
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED
R9-9
24"X12"

LANE CLOSED
R11-2-L
48"X30"

XXXX XXXX

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 1 - MARITIME DRIVE PHASE 3	SHEET 183	E

FILE NAME : X:\PROJECTS\MANITOWOC\1500-37-00_4570-12-00\DESIGN\C3D\SHEETSPLAN\TRAFFIC CONTROL\025000_TC 45701271 MARITIME DRIVE STAGE1.DWG PLOT DATE : 1/4/2019 10:42 AM PLOT BY : ANDY BLOCK PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - ****

2

SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY FOR ADDITIONAL DETAILS

TEMPORARY PAVEMENT MARKINGS PLACED FOR PHASE 2

PHASE 3 WORK ZONE

245'

350'

700'

700'

25' (TYP)

25' (TYP)

STH 42

STH 42/MEMORIAL DRIVE

XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX

ASPHALT

ROCK

ROCK

ONE WAY
R6-2-R
24"X30"

R3-2
24"X24"

R3-2
24"X24"

LANE CLOSED
R11-2-L
48"X30"

W01-6
48"X24"

END ROAD WORK
G20-2A
48"X24"

W04-2L

LEFT LANE CLOSED AHEAD
W20-5S-A

ROAD WORK AHEAD
W20-1-A

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	TRAFFIC CONTROL - STAGE 1 - MARITIME DRIVE PHASE 3	SHEET 184	E

LEGEND

(X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET

(X) PORTABLE CHANGEABLE MESSAGE SIGN

PCMS

POST MOUNTED SIGN

N

DETAIL #1
SEE SHEET 2 OF 4

DETAIL #2
SEE SHEET 2 OF 4

DETAIL #3
SEE SHEET 3 OF 4

DETAIL #4
SEE SHEET 3 OF 4

(SEE SHEET 4 OF 4)
MATCH LINE

WORK ZONE

1 — Manitowoc Exits
Hwy 42-151 1¾
COVER Hwy 42-10 4
Hwy 10-310 7½

2 3 — EAST M3-2 36" X 18" / 10 M1-4 36" X 36" / DETOUR AHEAD W020-2A 48" X 48"

4 5 — DETOUR M04-8 36" X 18" / EAST M3-2 36" X 18" / 10 M1-4 36" X 36" / M05-2R 30" X 30"

6 7 — DETOUR M04-8 36" X 18" / EAST M3-2 36" X 18" / 10 M1-4 36" X 36" / M06-2 30" X 30"

17 18 19 20 — DETOUR M04-8 24" X 12" / EAST M3-2 24" X 12" / WEST M3-4 24" X 12" / 10 M1-4 24" X 24" / M06-1 21" X 21"

21 — MODIFY TO M4-8A 24" X 18" / END DETOUR 10 J1-1

22 — DETOUR M04-8 24" X 12" / WEST M3-4 24" X 12" / 10 M1-4 24" X 24"

23A — WEST 10 J3-1 COVER

23B — WEST 10 J4-1 COVER

23 — MODIFY TO M4-8A 24" X 12" / DETOUR M04-8 24" X 12" / WEST 10 M06-1 21" X 21" J3-1

23C — JCT 42 JCT COUNTY B 42 J1-2 COVER / J13-1 COVER

23D — NORTH SOUTH 42 42 J2-2 COVER / SOUTH 42 J2-1 COVER

24 — 10 PCMS

24A — PCMS

25 — PCMS

26 — DETOUR M04-8 36" X 18" / WEST M3-4 36" X 18" / 10 M1-4 36" X 36"

27 — NORTH 42 JJ EAST 10 Manitowoc 1¾ MILE COVER

28 29 — DETOUR AHEAD W020-2A 48" X 48"

30 31 — DETOUR M04-8 36" X 18" / WEST M3-4 36" X 18" / 10 M1-4 36" X 36" / M06-1 30" X 30"

32 — DETOUR M04-8 36" X 18" / NORTH M3-1 36" X 18" / 42 M1-6 36" X 36"

51 — MODIFY TO M4-8A 30" X 24" / END DETOUR NORTH WEST INTERSTATE 43 10 J4-2

52 — DETOUR M04-8 36" X 18" / NORTH M3-1 36" X 18" / 42 M1-6 36" X 36"

53 — NORTH 42 JJ EAST 10 Manitowoc 1¾ MILE COVER

53A — Wisconsin Maritime Museum EXIT 152 COVER

54 55 — DETOUR M04-8 36" X 18" / NORTH M3-1 36" X 18" / 42 M1-6 36" X 36" / M05-2R 30" X 30"

56 — DETOUR M04-8 36" X 18" / SOUTH M3-3 36" X 18" / 42 M1-6 36" X 36"

58 59 — HWY 42 CLOSED TO MANITOWOC FOLLOW HWY 310 FMS 84" X 36"

58A 59A — HWY 42 CLOSED TO MANITOWOC FOLLOW HWY 310 FMS 84" X 36"

57 — DETOUR M04-8 36" X 18" / NORTH M3-1 36" X 18" / 42 M1-6 36" X 36" / M06-2 30" X 30"

76 — DETOUR M04-8 24" X 12" / NORTH M3-1 24" X 12" / 42 M1-6 24" X 24" / M06-2 21" X 21"

74 — DETOUR M04-8 24" X 12" / NORTH M3-1 24" X 12" / 42 M1-6 24" X 24" / M06-1 21" X 21"

69 — DETOUR M04-8 36" X 18" / NORTH M3-1 36" X 18" / 42 M1-6 36" X 36" / M06-2 30" X 30"

70 71 — DETOUR M04-8 36" X 18" / NORTH M3-1 36" X 18" / 42 M1-6 36" X 36" / M05-2R 30" X 30"

72 73 — NORTH M3-1 36" X 18" / 42 M1-6 36" X 36" / DETOUR AHEAD W020-2A 48" X 48"

77 — DETOUR M04-8 24" X 12" / SOUTH M3-3 24" X 12" / 42 M1-6 24" X 24" / M06-1 21" X 21"

75 — DETOUR M04-8 24" X 12" / SOUTH M3-3 24" X 12" / 42 M1-6 24" X 24" / M06-2 21" X 21"

99 — D1-2 R3-7L

100 101 — D1-2 R3-50L R3-50R

102 — D1-2 J13-1

78 79 80 81 82 — DETOUR M04-8 24" X 12" / NORTH SOUTH M3-1 M3-3 24" X 12" / 42 M1-6 24" X 24" / M06-1 21" X 21"

50 — M06-2 21" X 21"

85 84 83 — DETOUR M04-8 24" X 12" / SOUTH NORTH M3-3 M3-1 24" X 12" / 42 M1-6 24" X 24" / M06-1 M06-2 21" X 21"

310

CS — CR — S — R — Q — B — P — U

42 43 151 10

MIDDLE RD — STONE RD — LONGWOOD LN — PARKVIEW LN — HECKER RD — EXPO DR — CUSTER ST — MENASHA AVE — WAGON WHEEL RD — ROCKWOOD RD — CLOVER RD — SILVER CREEK RD — 18TH STREET — 8TH STREET — WALDO BLVD — MARITIME DR

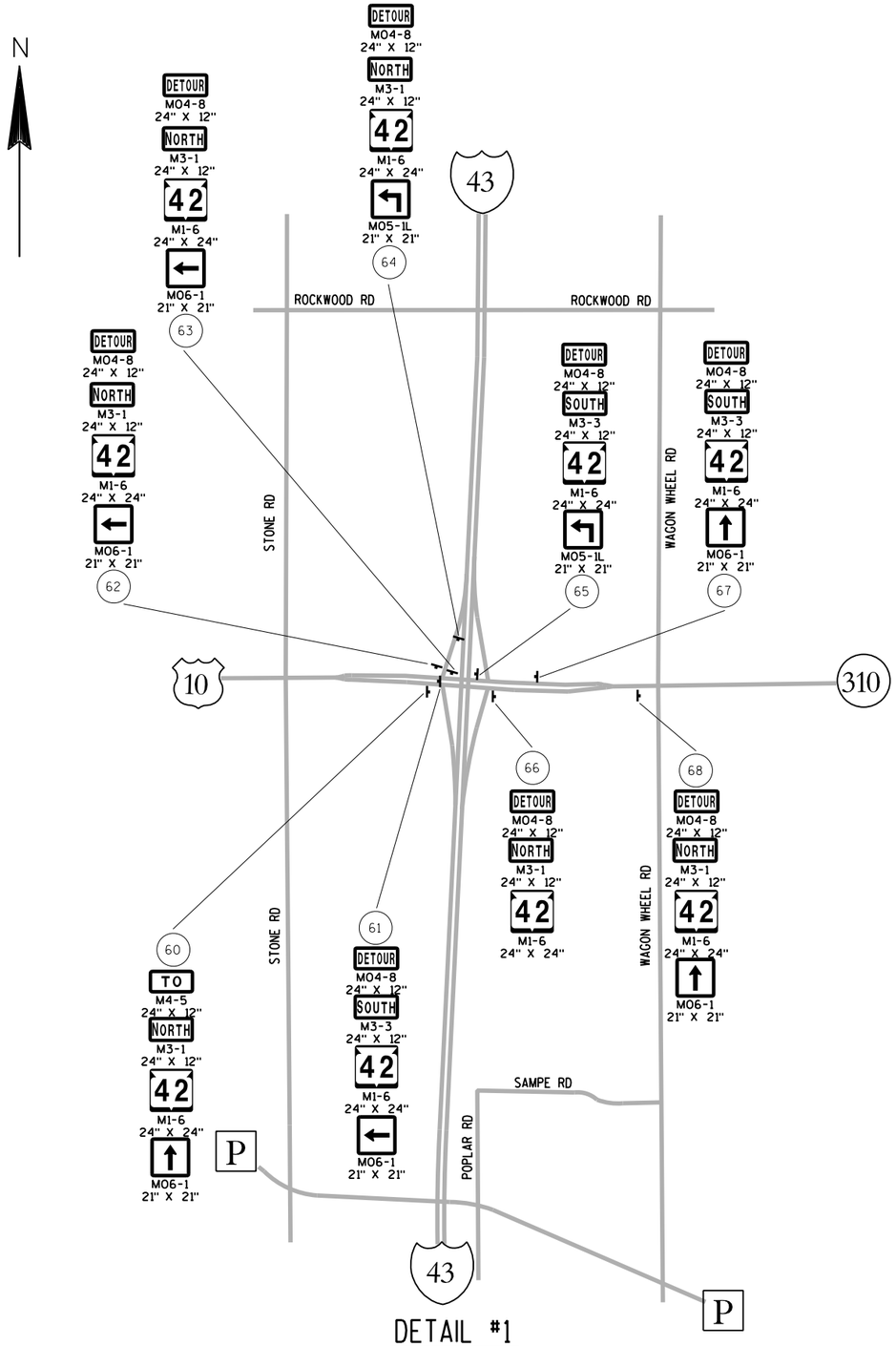
SHEET 1 OF 4

PLAN SHEET PRODUCED BY WisDOT-NE REGION

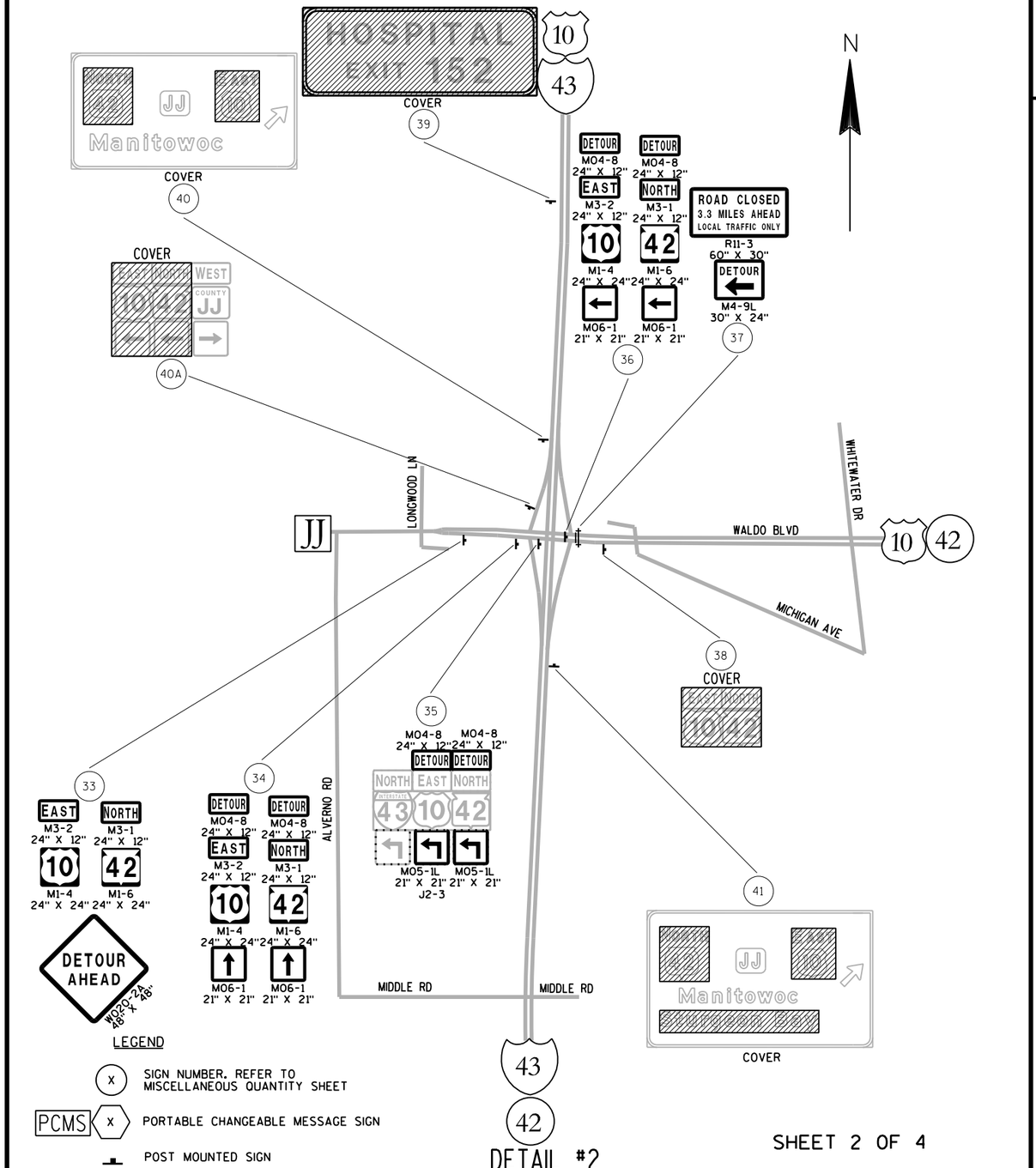
PROJECT NO: 1500-37-74, 4570-12-71	HWY: USH 10/STH 42	COUNTY: MANITOWOC	DETOUR SIGNING DETAIL	SHEET 185 E

FILE NAME : N:\C3D\41062900\SheetsPlan\027001_dt.dgn PLOT DATE : 1/2/2019 PLOT BY : soufalk PLOT NAME : PLOT SCALE : 1:5000

WISDOT/CADDS SHEET 42



DETAIL #1



DETAIL #2

LEGEND

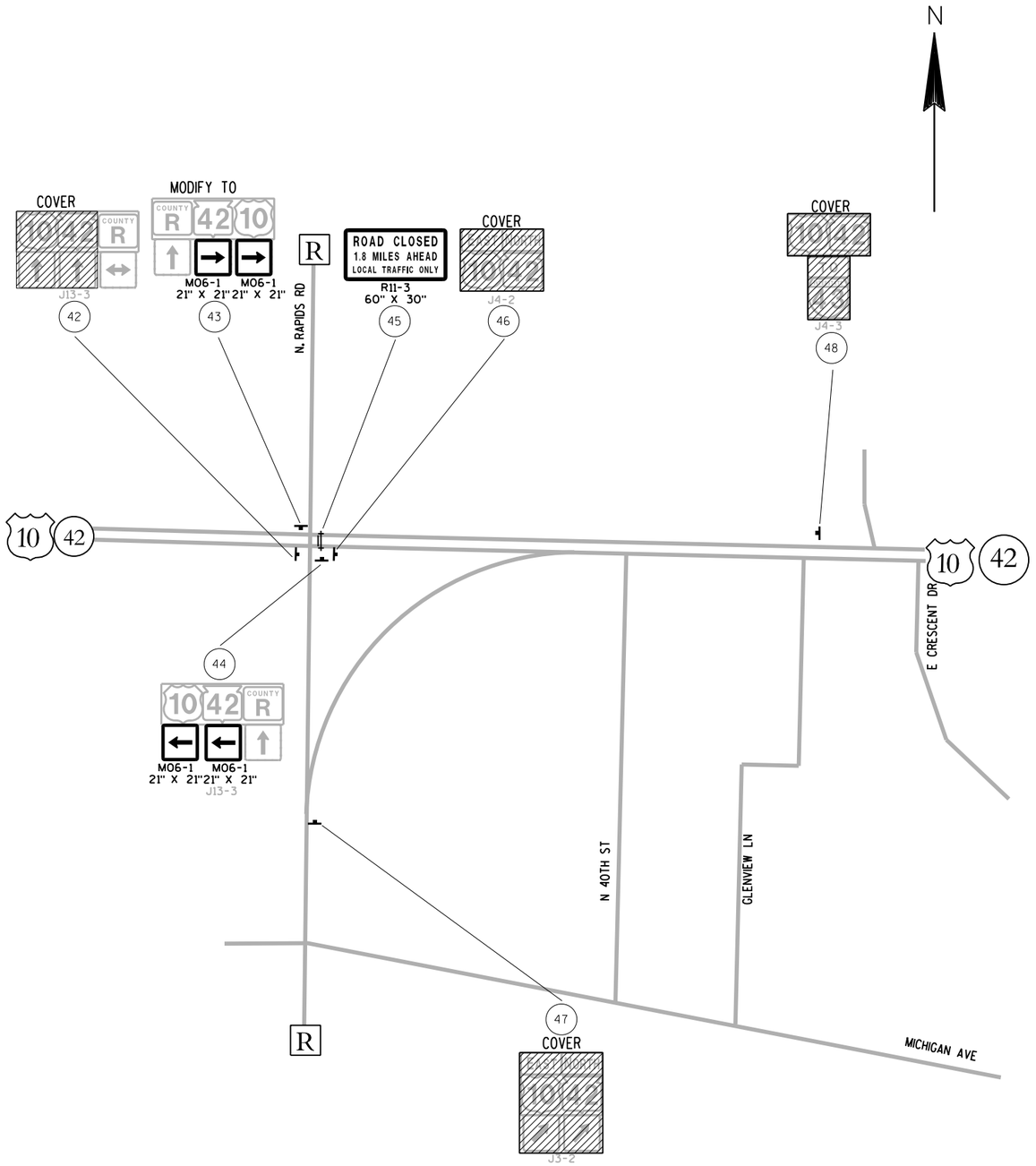
- (X) SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITY SHEET
- PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- POST MOUNTED SIGN

SHEET 2 OF 4

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1500-37-74, 4570-12-71	HWY: USH 10/STH 42	COUNTY: MANITOWOC	DETOUR SIGNING DETAIL	SHEET	E

FILE NAME : N:\C3D\41062900\SheetsPlan\027002_dt.dgn PLOT DATE : 1/2/2019 PLOT BY : soufalk PLOT NAME : PLOT SCALE : 1:200
WISDOT/CADDS SHEET 42



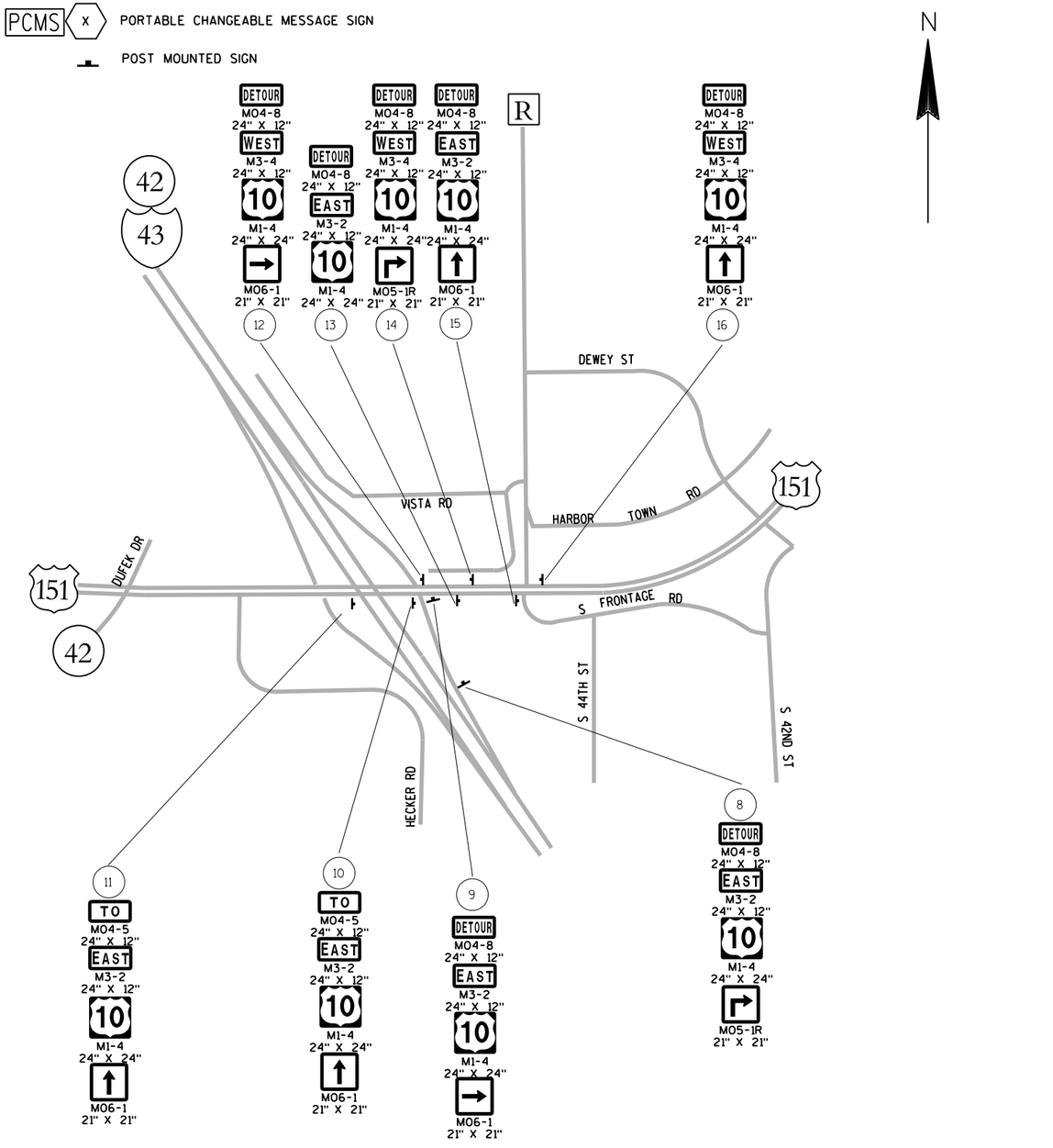
DETAIL #3

LEGEND

(X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET

PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN

POST MOUNTED SIGN



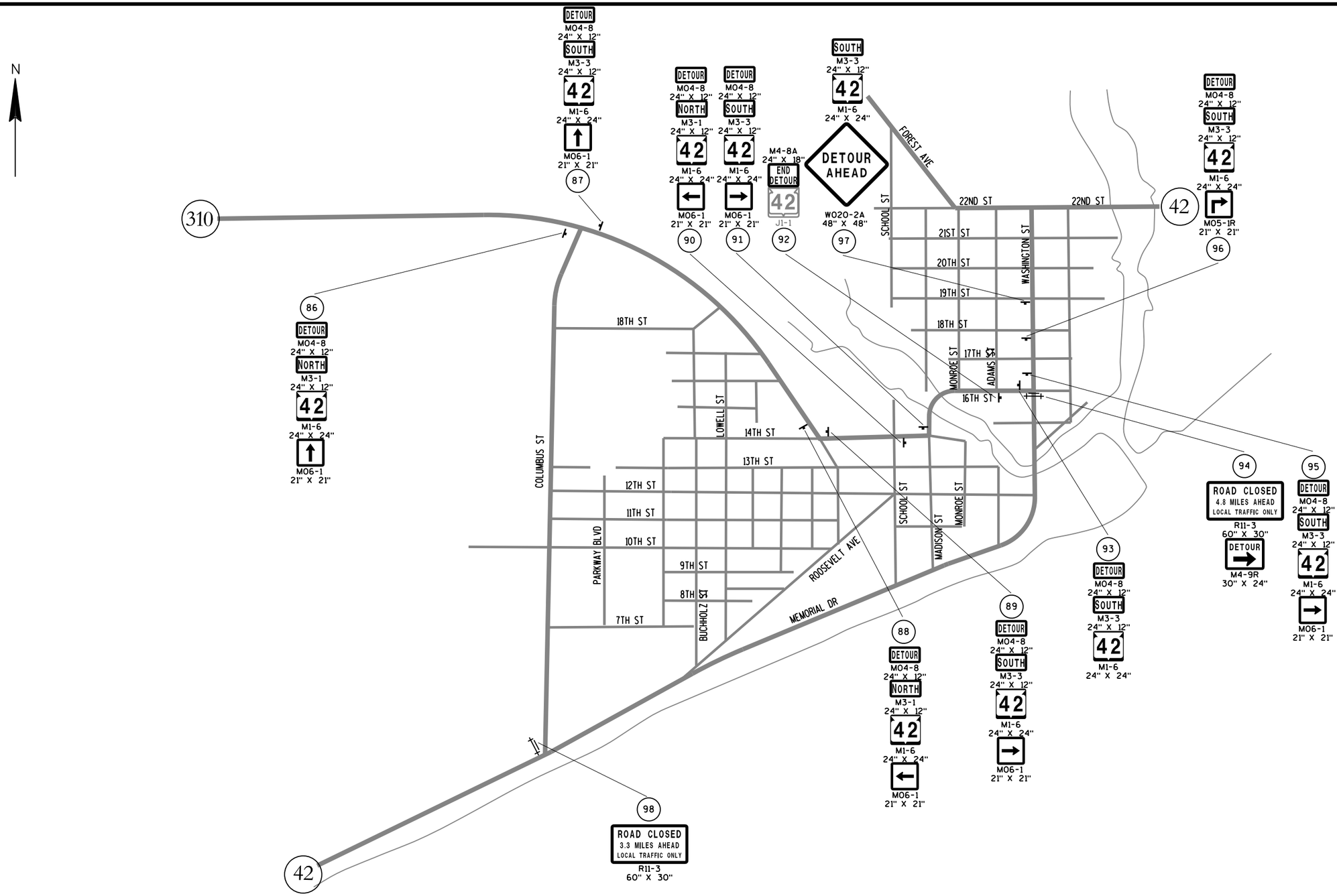
DETAIL #4

SHEET 3 OF 4

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1500-37-74, 4570-12-71	HWY: USH 10/STH 42	COUNTY: MANITOWOC	DETOUR SIGNING DETAIL	SHEET 187	E

2



LEGEND

(X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET

SIGN MOUNTED ON TYPE III BARRICADE

POST MOUNTED SIGN

SHEET 4 OF 4

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1500-37-74, 4570-12-71	HWY: USH 10/STH 42	COUNTY: MANITOWOC	DETOUR SIGNING DETAIL	SHEET 188	E

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
511	124+90EB	NE COR OF PORCH-56' RT	636.42
512	133+24EB	NE COR TOP CONC PORCH-56' RT	632.34
513	140+96EB	NE COR TOP CONC PORCH-56' RT	622.72
514	150+96EB	SE COR TOP CONC PORCH-79' LT	626.21

CURVE DATA
MENASHA AVE.

PI STA = 11+09.82
Y = 306941.781
X = 231980.408
DELTA = 40°12'43"
D = 19°05'55"
T = 109.82'
L = 210.55'
R = 300.00'
PC STA = 10+00.00
Y = 306831.963
X = 231979.872
PT STA = 12+10.55
Y = 307025.991
X = 231909.916
BK = N00°16'45.5"E
AH = N39°55'57.8"W

CURVE DATA
MENASHA AVE.

PI STA = 9+40.79
Y = 306665.940
X = 232210.417
DELTA = 25°45'07"
D = 28°39'33"
T = 45.70'
L = 89.86'
R = 199.92'
PC STA = 8+95.09
Y = 306630.851
X = 232239.697
PT STA = 9+84.95
Y = 306684.822
X = 232168.801
BK = N39°50'36.0"W
AH = N65°35'43.4"W

N

USH 10/STH 42

N. 17TH ST.
STA. 12+20.67'SV' N. 17TH ST.
Y=307045.312
X=230714.791
NO°44'07"E
125WB
S89°14'44"E
125EB
CP143
BM511
NO°27'25"E
NO°32'59"E
STA. 8+26.37'SV' N. 17TH ST.
Y=306651.036
X=230710.294
STA. 122+07.57'EB' USH 10/STH 42=
STA. 10+00.00'SV' N. 17TH ST.
Y=306824.658
X=230711.960

N. 16TH ST.
STA. 12+00.94'ST' N. 16TH ST.
Y=307020.112
X=231058.450
NO°44'12"E
STA. 8+29.80'ST' N. 16TH ST.
Y=306649.938
X=231054.521
STA. 125+51.51'EB' USH 10/STH 42=
STA. 10+00.00'ST' N. 16TH ST.
Y=306820.129
X=231055.878

N. 15TH ST.
STA. 12+08.45'FT' N. 15TH ST.
Y=307025.108
X=231321.748
NO°41'32"E
STA. 8+21.72'FT' N. 15TH ST.
Y=306638.390
X=231317.391
NO°35'27"E
STA. 128+14.89'EB' USH 10/STH 42=
STA. 10+00.00'FT' N. 15TH ST.
Y=306816.660
X=231319.230

N. 14TH ST.
STA. 11+84.45'FO' N. 14TH ST.
Y=306997.707
X=231601.532
NO°16'41"E
130WB
130EB
STA. 8+18.10'FO' N. 14TH ST.
Y=306631.102
X=231596.661
NO°15'07"E
STA. 130+96.32'EB' USH 10/STH 42=
STA. 10+00.00'FO' N. 14TH ST.
Y=306812.955
X=231600.635

MENASHA AVE.
STA. 134+74.82'WB' USH 10/STH 42=
STA. 10+00.00'NMN' N. MENASHA AVE.
Y=306831.963
X=231979.872
STA. 13+10.00'NMN' N. MENASHA AVE.
Y=307102.249
X=231846.080
PT
PC
N. 13TH ST.
STA. 8+13.74'TH' N. 13TH ST.
Y=306623.051
X=231876.418
NO°34'15"E
BM512
STA. 133+73.98'EB' USH 10/STH 42=
STA. 10+00.00'TH' N. 13TH ST.
Y=306809.298
X=231878.274
PI: 135+31.67EB
Y=306807.222
X=232035.953
STA. 8+85.25'TW' N. 12TH ST.=
STA. 10+00.00'SMN' S. MENASHA AVE.
Y=306691.041
X=232155.094
135WB
135EB
CP153
N65°35'43"W
PC
PC
N39°50'36"W
MENASHA AVE.

N. 12TH ST.
STA. 12+32.22'TW' N. 12TH ST.
Y=307037.974
X=232159.685
NO°54'22"E
NO°27'32"E
STA. 7+03.50'TW' N. 12TH ST.=
Y=306509.289
X=232153.639
STA. 8+35.82'SMN' S. MENASHA AVE.
Y=306585.343
X=232277.672
STA. 136+51.74'EB' USH 10/STH 42=
STA. 10+00.00'TW' N. 12TH ST.
Y=306805.783
X=232156.013

N. 11TH ST.
STA. 11+85.92'EL' N. 11TH ST.
Y=306985.639
X=232662.787
NO°57'13"E
BM513
NO°16'32"E
STA. 7+63.81'EL' N. 11TH ST.
Y=306563.612
X=232654.435
140WB
140EB
S89°18'48"E
STA. 141+55.46'EB' USH 10/STH 42=
STA. 10+00.00'EL' N. 11TH ST.
Y=306799.747
X=232659.692

P.I. STA. 11+38.34'NN'
Y=306929.935
X=233340.703
145WB
145EB
N. 10TH ST.
STA. 8+20.63'TN' N. 10TH ST.
Y=306616.020
X=233022.257
NO°56'26"E
STA. 145+20.99'EB' USH 10/STH 42=
STA. 10+00.00'TN' N. 10TH ST.
Y=306795.366
X=233025.201

N. 9TH ST.
STA. 12+95.77'NN' N. 9TH ST.
Y=307087.334
X=233343.447
NO°43'06"E
NO°59'55"E
STA. 8+22.48'NN' N. 9TH ST.
Y=306614.113
X=233335.926
NO°45'50"E
STA. 148+34.11'EB' USH 10/STH 42=
STA. 10+00.00'NN' N. 9TH ST.
Y=306791.614
X=233338.292

N. 8TH ST.
STA. 12+98.68'EG' N. 8TH ST.
Y=307085.126
X=233657.929
NO°24'09"E
BM514
N19°29'59"E
CP170
150WB
150EB
STA. 151+51.08'WB' USH 10/STH 42=
STA. 10+25.35'EG' N. 8TH ST.
Y=306811.808
X=233656.009
STA. 151+43.38'EB' USH 10/STH 42=
STA. 10+00.00'EG' N. 8TH ST.
Y=306787.908
X=233647.546
NO°42'01"E
STA. 8+38.47'EG' N. 8TH ST.
Y=306626.394
X=233645.571

BEGIN PROJECT 1500-37-74
STA. 131+75.00
Y=306811.919
X=231679.310

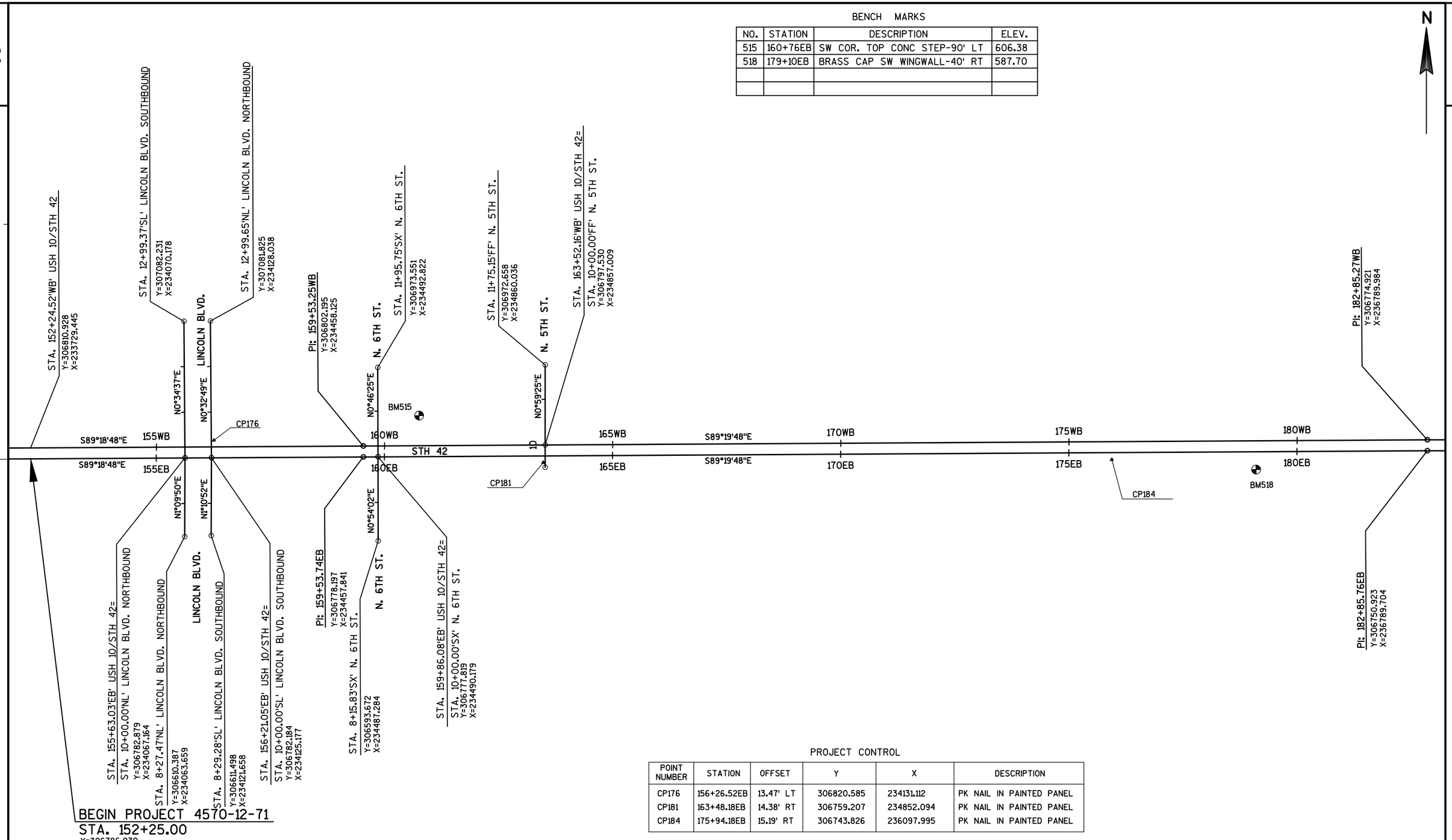
END PROJECT 1500-37-74
STA. 152+25.00
Y=306786.630
X=233754.155

PROJECT CONTROL

POINT NUMBER	STATION	OFFSET	Y	X	DESCRIPTION
CP143	125+57.64EB	8.67' RT	306801.384	231061.758	PK NAIL IN PAINTED PANEL
CP153	136+48.55EB	16.71' RT	306789.113	232152.619	PK NAIL IN PAINTED PANEL
CP170	151+59.89EB	38.92' LT	306826.627	233664.519	PK NAIL IN PAINTED PANEL

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
515	160+76EB	SW COR. TOP CONC STEP-90' LT	606.38
518	179+10EB	BRASS CAP SW WINGWALL-40' RT	587.70



PROJECT CONTROL

POINT NUMBER	STATION	OFFSET	Y	X	DESCRIPTION
CP176	156+26.52EB	13.47' LT	306820.585	234131.112	PK NAIL IN PAINTED PANEL
CP181	163+48.18EB	14.38' RT	306759.207	234852.094	PK NAIL IN PAINTED PANEL
CP184	175+94.18EB	15.19' RT	306743.826	236097.995	PK NAIL IN PAINTED PANEL

CURVE DATA

C1
PI STA = 187+35.35WB
Y = 306769.651
X = 237240.027
DELTA = 18°22'30"
D = 9°32'57"
T = 97.04'
L = 192.42'
R = 600.00'
PC STA = 186+38.30WB
Y = 306770.787
X = 237142.990
PT STA = 188+30.72WB
Y = 306799.162
X = 237332.475
BK = S89°19'44.8"E
AH = N72°17'45.7"E

C2
PI STA = 188+55.14WB
Y = 306806.586
X = 237355.732
DELTA = 6°59'07"
D = 14°19'26"
T = 24.41'
L = 48.77'
R = 400.00'
PC STA = 188+30.72WB
Y = 306799.162
X = 237332.475
PT STA = 188+79.49WB
Y = 306816.783
X = 237377.914
BK = N72°17'45.7"E
AH = N65°18'38.8"E

C3
PI STA = 190+82.94WB
Y = 306830.919
X = 237578.256
DELTA = 44°23'27"
D = 56°43'43"
T = 41.21'
L = 78.25'
R = 101.00'
PC STA = 190+41.74WB
Y = 306838.010
X = 237537.663
PT STA = 191+19.99WB
Y = 306854.249
X = 237612.224
BK = S80°05'28.6"E
AH = N55°31'04.8"E

C4
PI STA = 192+78.28WB
Y = 306943.869
X = 237742.710
DELTA = 17°45'03"
D = 8°11'06"
T = 109.31'
L = 216.87'
R = 700.00'
PC STA = 191+68.98WB
Y = 306881.984
X = 237652.607
PT STA = 193+85.84WB
Y = 307030.278
X = 237809.657
BK = N55°31'04.8"E
AH = N37°46'02.1"E

CURVE DATA

C14
PI STA = 20+32.16BS
Y = 306911.406
X = 237449.900
DELTA = 35°39'36"
D = 57°17'45"
T = 32.16'
L = 62.24'
R = 100.00'
PC STA = 20+00.00BS
Y = 306880.878
X = 237439.772
PT STA = 20+62.24BS
Y = 306942.114
X = 237440.332
BK = N18°21'15.6"E
AH = N17°18'20.4"W

CURVE DATA

C15
PI STA = 21+20.75BN
Y = 306996.069
X = 237423.843
DELTA = 7°06'50"
D = 4°46'29"
T = 74.59'
L = 148.99'
R = 1200.00'
PC STA = 20+46.16BN
Y = 306928.275
X = 237454.959
PT STA = 21+95.15BN
Y = 307067.194
X = 237401.363
BK = N24°39'14.1"W
AH = N17°32'23.7"W

C16
PI STA = 23+52.13BN
Y = 307216.876
X = 237354.054
DELTA = 55°14'36"
D = 19°05'55"
T = 156.98'
L = 289.25'
R = 300.00'
PC STA = 21+95.15BN
Y = 307067.194
X = 237401.363
PT STA = 24+84.41BN
Y = 307341.077
X = 237450.059
BK = N17°32'23.7"W
AH = N37°42'11.8"E

CURVE DATA

C5
PI STA = 186+69.64EB
Y = 306746.433
X = 237173.560
DELTA = 15°36'24"
D = 9°32'57"
T = 82.23'
L = 163.43'
R = 600.00'
PC STA = 185+87.41EB
Y = 306747.394
X = 237091.339
PT STA = 187+50.85EB
Y = 306767.626
X = 237253.007
BK = S89°19'47.3"E
AH = N75°03'48.4"E

C6
PI STA = 188+62.46EB
Y = 306796.393
X = 237360.845
DELTA = 40°51'39"
D = 56°43'43"
T = 37.62'
L = 72.03'
R = 101.00'
PC STA = 188+24.83EB
Y = 306786.696
X = 237324.493
PT STA = 188+96.86EB
Y = 306779.945
X = 237394.682
BK = N75°03'48.4"E
AH = S64°04'32.2"E

C7
PI STA = 191+43.65EB
Y = 306806.489
X = 237632.184
DELTA = 14°21'41"
D = 17°54'18"
T = 40.32'
L = 80.21'
R = 320.00'
PC STA = 191+03.33EB
Y = 306790.064
X = 237595.365
PT STA = 191+83.54EB
Y = 306831.533
X = 237663.778
BK = N65°57'30.6"E
AH = N51°35'49.1"E

C8
PI STA = 192+32.05EB
Y = 306861.667
X = 237701.794
DELTA = 13°49'47"
D = 14°19'26"
T = 48.51'
L = 96.55'
R = 400.00'
PC STA = 191+83.54EB
Y = 306831.533
X = 237663.778
PT STA = 192+80.09EB
Y = 306900.015
X = 237731.504
BK = N51°35'49.1"E
AH = N37°46'02.1"E

PROJECT CONTROL

POINT NUMBER	STATION	OFFSET	Y	X	DESCRIPTION
CP195	188+21.27EB	2.38' LT	306788.076	237320.433	PK NAIL IN PAINTED PANEL
CP194	192+27.80EB	65.08' LT	306907.113	237651.062	PK NAIL IN PAINTED PANEL

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
521	191+27EB	USGS BRASS CAP-107' RT	588.38

CURVE DATA

C9
PI STA = 11+52.27SMI
Y = 306543.360
X = 237414.434
DELTA = 8°35'06"
D = 11°27'33"
T = 37.53'
L = 74.92'
R = 500.00'
PC STA = 11+14.74SMI
Y = 306515.022
X = 237389.829
PT STA = 11+89.66SMI
Y = 306575.054
X = 237434.532
BK = N40°57'56.0"E
AH = N32°22'50.1"E

C10
PI STA = 12+46.95SMI
Y = 306623.437
X = 237465.214
DELTA = 43°39'55"
D = 40°04'01"
T = 57.29'
L = 108.98'
R = 143.00'
PC STA = 11+89.66SMI
Y = 306575.054
X = 237434.532
PT STA = 12+98.64SMI
Y = 306679.620
X = 237454.002
BK = N32°22'50.1"E
AH = N11°17'05.4"W

C11
PI STA = 9+55.81NMI
Y = 306387.854
X = 237293.409
DELTA = 6°18'46"
D = 4°15'00"
T = 74.34'
L = 148.54'
R = 1348.14'
PC STA = 8+81.46NMI
Y = 306337.792
X = 237238.448
PT STA = 10+30.00NMI
Y = 306443.655
X = 237342.532
BK = N47°40'15.5"E
AH = N41°21'29.5"E

C12
PI STA = 12+66.05NMI
Y = 306620.834
X = 237498.507
DELTA = 40°18'40"
D = 57°17'45"
T = 36.70'
L = 70.36'
R = 100.00'
PC STA = 12+29.35NMI
Y = 306593.284
X = 237474.253
PT STA = 12+99.70NMI
Y = 306657.533
X = 237499.177
BK = N41°21'29.5"E
AH = N01°02'49.1"E

C13
PI STA = 13+47.98NMI
Y = 306705.808
X = 237500.060
DELTA = 15°02'30"
D = 66°37'23"
T = 11.35'
L = 22.58'
R = 86.00'
PC STA = 13+36.63NMI
Y = 306694.456
X = 237499.852
PT STA = 13+59.21NMI
Y = 306716.717
X = 237503.206
BK = N01°02'49.1"E
AH = N16°05'18.9"E

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	ALIGNMENT DIAGRAM	SHEET 191	E

CURVE DATA

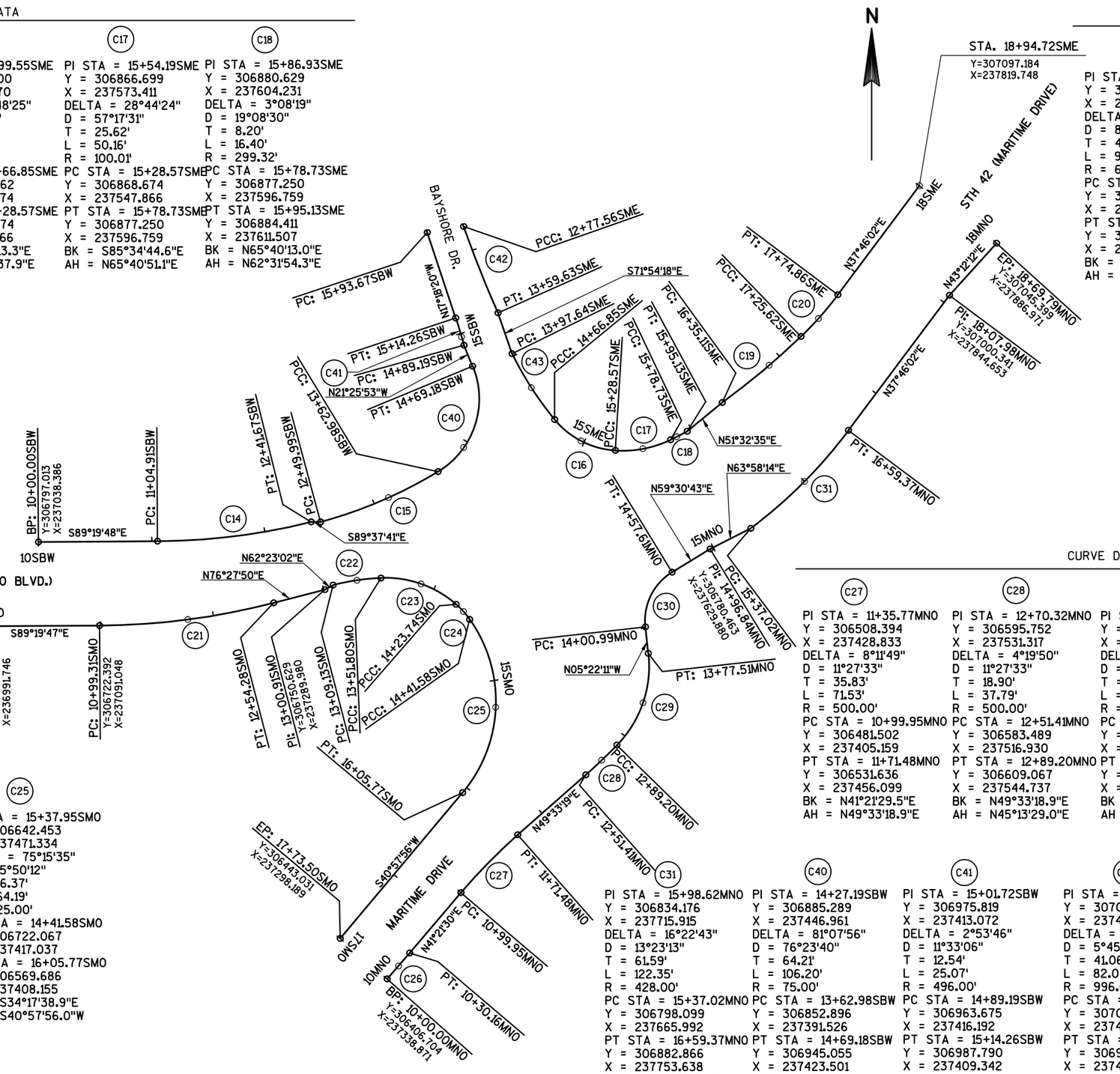
C14
PI STA = 11+73.61SBW
Y = 306794.982
X = 237211.987
DELTA = 13°37'37"
D = 9°57'52"
T = 68.70'
L = 136.75'
R = 575.00'
PC STA = 11+04.91SBW
Y = 306795.786
X = 237143.291
PT STA = 12+41.67SBW
Y = 306810.386
X = 237278.939
BK = S89°19'47.6"E
AH = N77°02'35.9"E

C15
PI STA = 13+06.86SBW
Y = 306824.201
X = 237342.419
DELTA = 16°11'06"
D = 14°19'26"
T = 56.88'
L = 112.99'
R = 400.00'
PC STA = 12+49.99SBW
Y = 306810.332
X = 237287.261
PT STA = 13+62.98SBW
Y = 306852.896
X = 237391.526
BK = N75°53'09.2"E
AH = N59°42'02.7"E

C16
PI STA = 14+99.55SME
Y = 306871.300
X = 237515.270
DELTA = 46°48'25"
D = 75°49'53"
T = 32.70'
L = 61.72'
R = 75.56'
PC STA = 14+66.85SME
Y = 306896.862
X = 237494.874
PT STA = 15+28.57SME
Y = 306868.674
X = 237547.866
BK = S38°35'13.3"E
AH = S85°23'37.9"E

C17
PI STA = 15+54.19SME
Y = 306866.699
X = 237573.411
DELTA = 28°44'24"
D = 57°17'31"
T = 25.62'
L = 50.16'
R = 100.01'
PC STA = 15+28.57SME
Y = 306868.674
X = 237547.866
PT STA = 15+78.73SME
Y = 306877.250
X = 237596.759
BK = S85°34'44.6"E
AH = N65°40'51.1"E

C18
PI STA = 15+86.93SME
Y = 306880.629
X = 237604.231
DELTA = 3°08'19"
D = 19°08'30"
T = 8.20'
L = 16.40'
R = 299.32'
PC STA = 15+78.73SME
Y = 306877.250
X = 237596.759
PT STA = 15+95.13SME
Y = 306884.411
X = 237611.507
BK = N65°40'13.0"E
AH = N62°31'54.3"E



CURVE DATA

C19
PI STA = 16+80.43SME
Y = 306935.345
X = 237679.891
DELTA = 7°43'02"
D = 8°31'34"
T = 45.32'
L = 90.51'
R = 672.00'
PC STA = 16+35.11SME
Y = 306909.275
X = 237642.814
PT STA = 17+25.62SME
Y = 306966.157
X = 237713.132
BK = N54°53'20.0"E
AH = N47°10'17.8"E

C20
PI STA = 17+50.30SME
Y = 306982.932
X = 237731.230
DELTA = 9°24'16"
D = 19°05'55"
T = 24.68'
L = 49.24'
R = 300.00'
PC STA = 17+25.62SME
Y = 306966.157
X = 237713.132
PT STA = 17+74.86SME
Y = 307002.438
X = 237746.342
BK = N47°10'17.8"E
AH = N37°46'02.1"E

C26
PI STA = 10+15.08MNO
Y = 306417.800
X = 237349.081
DELTA = 1°15'40"
D = 4°10'54"
T = 15.08'
L = 30.16'
R = 1370.14'
PC STA = 10+00.00MNO
Y = 306406.704
X = 237338.871
PT STA = 10+30.16MNO
Y = 306429.119
X = 237359.045
BK = N42°37'09.5"E
AH = N41°21'29.5"E

CURVE DATA

C21
PI STA = 11+77.19SMO
Y = 306721.485
X = 237168.926
DELTA = 14°12'23"
D = 9°10'02"
T = 77.88'
L = 154.97'
R = 625.00'
PC STA = 10+99.31SMO
Y = 306722.396
X = 237091.048
PT STA = 12+54.28SMO
Y = 306739.714
X = 237244.645
BK = S89°19'47.6"E
AH = N76°27'49.5"E

C22
PI STA = 13+30.54SMO
Y = 306759.446
X = 237318.087
DELTA = 12°12'03"
D = 28°35'37"
T = 21.42'
L = 42.67'
R = 200.38'
PC STA = 13+09.13SMO
Y = 306754.440
X = 237297.265
PT STA = 13+51.80SMO
Y = 306759.938
X = 237339.497
BK = N76°28'52.9"E
AH = N88°40'55.8"E

STH 42 (WALDO BLVD.)

C23
PI STA = 13+89.59SMO
Y = 306760.804
X = 237377.281
DELTA = 43°23'17"
D = 60°18'41"
T = 37.79'
L = 71.94'
R = 95.00'
PC STA = 13+51.80SMO
Y = 306759.938
X = 237339.497
PT STA = 14+23.74SMO
Y = 306735.478
X = 237405.334
BK = N88°41'16.6"E
AH = S47°55'26.1"E

C24
PI STA = 14+32.70SMO
Y = 306729.471
X = 237411.987
DELTA = 13°37'47"
D = 76°23'40"
T = 8.96'
L = 17.84'
R = 75.00'
PC STA = 14+23.74SMO
Y = 306735.478
X = 237405.334
PT STA = 14+41.58SMO
Y = 306722.067
X = 237417.037
BK = S47°55'26.1"E
AH = S34°17'38.9"E

C25
PI STA = 15+37.95SMO
Y = 306642.453
X = 237471.334
DELTA = 75°15'35"
D = 45°50'12"
T = 96.37'
L = 164.19'
R = 125.00'
PC STA = 14+41.58SMO
Y = 306722.067
X = 237417.037
PT STA = 16+05.77SMO
Y = 306569.686
X = 237408.155
BK = S34°17'38.9"E
AH = S40°57'56.0"W

CURVE DATA

C27
PI STA = 11+35.77MNO
Y = 306508.394
X = 237428.833
DELTA = 8°11'49"
D = 11°27'33"
T = 35.83'
L = 71.53'
R = 500.00'
PC STA = 10+99.95MNO
Y = 306481.502
X = 237405.159
PT STA = 11+71.48MNO
Y = 306531.636
X = 237456.099
BK = N41°21'29.5"E
AH = N49°33'18.9"E

C28
PI STA = 12+70.32MNO
Y = 306595.752
X = 237531.317
DELTA = 8°19'50"
D = 11°27'33"
T = 18.90'
L = 37.79'
R = 500.00'
PC STA = 12+51.41MNO
Y = 306583.489
X = 237516.930
PT STA = 12+89.20MNO
Y = 306609.067
X = 237544.737
BK = N49°33'18.9"E
AH = N45°13'29.0"E

C29
PI STA = 13+36.47MNO
Y = 306642.356
X = 237578.288
DELTA = 50°35'40"
D = 57°17'45"
T = 47.26'
L = 88.30'
R = 100.00'
PC STA = 12+89.20MNO
Y = 306609.067
X = 237544.737
PT STA = 13+77.51MNO
Y = 306689.413
X = 237573.865
BK = N45°13'29.0"E
AH = N05°22'10.6"W

C30
PI STA = 14+32.77MNO
Y = 306744.438
X = 237568.693
DELTA = 64°52'53"
D = 114°35'30"
T = 31.78'
L = 56.62'
R = 50.00'
PC STA = 14+00.99MNO
Y = 306712.797
X = 237571.667
PT STA = 14+57.61MNO
Y = 306760.562
X = 237596.080
BK = N05°22'10.6"W
AH = N59°30'42.9"E

C31
PI STA = 15+98.62MNO
Y = 306834.176
X = 237715.915
DELTA = 16°22'43"
D = 13°23'13"
T = 61.59'
L = 122.35'
R = 428.00'
PC STA = 15+37.02MNO
Y = 306798.099
X = 237665.992
PT STA = 16+59.37MNO
Y = 306882.866
X = 237753.638
BK = N54°08'45.1"E
AH = N37°46'02.1"E

C40
PI STA = 14+27.19SBW
Y = 306885.289
X = 237446.961
DELTA = 81°07'56"
D = 76°23'40"
T = 64.21'
L = 106.20'
R = 75.00'
PC STA = 13+62.98SBW
Y = 306852.896
X = 237391.526
PT STA = 14+69.18SBW
Y = 306945.055
X = 237423.501
BK = N59°42'02.7"E
AH = N21°25'53.3"W

C41
PI STA = 15+01.72SBW
Y = 306975.819
X = 237413.072
DELTA = 2°53'46"
D = 11°33'06"
T = 12.54'
L = 25.07'
R = 496.00'
PC STA = 14+89.19SBW
Y = 306963.675
X = 237416.192
PT STA = 15+14.26SBW
Y = 306987.790
X = 237409.342
BK = N14°24'34.2"W
AH = N17°18'20.4"W

C42
PI STA = 13+18.62SME
Y = 307029.478
X = 237430.657
DELTA = 4°43'15"
D = 5°45'09"
T = 41.06'
L = 82.07'
R = 996.00'
PC STA = 12+77.56SME
Y = 307068.459
X = 237417.769
PT STA = 13+59.63SME
Y = 306991.690
X = 237446.708
BK = S18°17'38.9"E
AH = S23°00'54.1"E

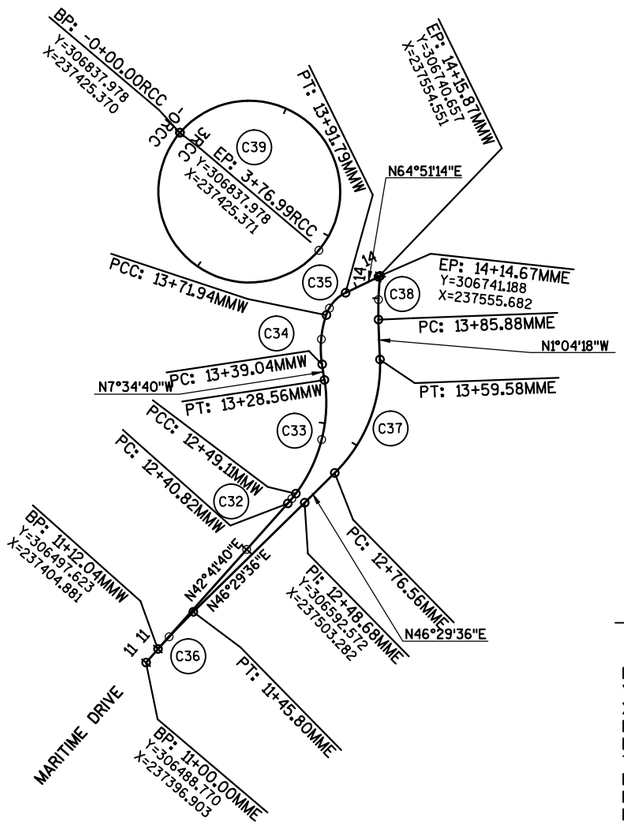
C42
PI STA = 14+32.40SME
Y = 306924.100
X = 237473.282
DELTA = 13°13'04"
D = 19°05'55"
T = 34.76'
L = 69.21'
R = 300.00'
PC STA = 13+97.64SME
Y = 306955.554
X = 237458.491
PT STA = 14+66.85SME
Y = 306896.862
X = 237494.874
BK = S25°11'06.4"E
AH = S38°24'10.1"E

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	ALIGNMENT DIAGRAM	SHEET 192 E

CURVE DATA

C32	C33	C34	C35
PI STA = 12+44.97MMW	PI STA = 12+91.07MMW	PI STA = 13+55.80MMW	PI STA = 13+82.42MMW
Y = 306595.320	Y = 306631.679	Y = 306700.267	Y = 306725.972
X = 237495.016	X = 237523.364	X = 237514.239	X = 237523.267
DELTA = 4°45'09"	DELTA = 45°31'12"	DELTA = 26°55'50"	DELTA = 45°30'04"
D = 57°17'45"	D = 57°17'45"	D = 81°51'04"	D = 229°10'59"
T = 4.15'	T = 41.95'	T = 16.76'	T = 10.48'
L = 8.29'	L = 79.45'	L = 32.90'	L = 19.85'
R = 100.00'	R = 100.00'	R = 70.00'	R = 25.00'
PC STA = 12+40.82MMW	PC STA = 12+49.11MMW	PC STA = 13+39.04MMW	PC STA = 13+71.94MMW
Y = 306592.270	Y = 306598.593	Y = 306683.653	Y = 306716.081
X = 237492.202	X = 237497.568	X = 237516.449	X = 237519.793
PT STA = 12+49.11MMW	PT STA = 13+28.56MMW	PT STA = 13+71.94MMW	PT STA = 13+91.79MMW
Y = 306598.593	Y = 306673.266	Y = 306716.081	Y = 306730.427
X = 237497.568	X = 237517.831	X = 237519.793	X = 237532.757
BK = N42°41'40.1"E	BK = N37°56'31.1"E	BK = N07°34'40.5"W	BK = N19°21'09.3"E
AH = N37°56'31.1"E	AH = N07°34'40.5"W	AH = N19°21'09.3"E	AH = N64°51'13.1"E

N



CURVE DATA

C39
PI STA = -0+00.00RCC
Y = 306837.977
X = 237425.370
DELTA = 359°59'59"
D = 95°29'35"
T = 0.00'
L = 376.99'
R = 60.00'
PC STA = -0+00.00RCC
Y = 306837.977
X = 237425.370
PT STA = 3+76.99RCC
Y = 306837.978
X = 237425.371
BK = S41°16'17.2"W
AH = S41°16'18.6"W

CURVE DATA

C36	C37	C38
PI STA = 11+22.91MME	PI STA = 13+20.63MME	PI STA = 14+00.30MME
Y = 306505.969	Y = 306642.105	Y = 306726.884
X = 237412.044	X = 237555.467	X = 237553.881
DELTA = 5°08'06"	DELTA = 47°33'53"	DELTA = 8°14'46"
D = 11°12'45"	D = 57°17'45"	D = 28°38'52"
T = 22.91'	T = 44.07'	T = 14.42'
L = 45.80'	L = 83.02'	L = 28.78'
R = 511.00'	R = 100.00'	R = 200.00'
PC STA = 11+00.00MME	PC STA = 12+76.56MME	PC STA = 13+85.88MME
Y = 306488.770	Y = 306611.766	Y = 306712.469
X = 237396.903	X = 237523.504	X = 237554.151
PT STA = 11+45.80MME	PT STA = 13+59.58MME	PT STA = 14+14.67MME
Y = 306521.744	Y = 306686.166	Y = 306741.188
X = 237428.663	X = 237554.643	X = 237555.682
BK = N41°21'29.5"E	BK = N46°29'35.7"E	BK = N01°04'17.7"W
AH = N46°29'35.7"E	AH = N01°04'17.7"W	AH = N07°10'28.8"E

Estimate Of Quantities

Line	Item	Item Description	Unit	Total	1500-37-74 Qty	1500-37-75 Qty	4570-12-71 Qty	4570-12-72 Qty
0002	201.0105	Clearing	STA	1.000	1.000			
0004	201.0120	Clearing	ID	2,760.000	1,380.000		1,380.000	
0006	201.0205	Grubbing	STA	1.000	1.000			
0008	201.0220	Grubbing	ID	2,900.000	1,410.000		1,490.000	
0010	203.0200	Removing Old Structure (station) 02. 179'EB'+26	LS	1.000			1.000	
0012	204.0100	Removing Pavement	SY	54,990.000	22,635.000		32,355.000	
0014	204.0110	Removing Asphaltic Surface	SY	675.000	590.000		85.000	
0016	204.0130	Removing Curb	LF	20.000			20.000	
0018	204.0150	Removing Curb & Gutter	LF	150.000	85.000		65.000	
0020	204.0155	Removing Concrete Sidewalk	SY	7,070.000	3,215.000		3,855.000	
0022	204.0195	Removing Concrete Bases	EACH	24.000	24.000			
0024	204.0210	Removing Manholes	EACH	39.000	28.000		11.000	
0026	204.0220	Removing Inlets	EACH	121.000	50.000		71.000	
0028	204.0245	Removing Storm Sewer (size) 01. 12-Inch or Less	LF	3,980.000	1,884.000		2,096.000	
0030	204.0245	Removing Storm Sewer (size) 02. 15-Inch	LF	1,132.000	229.000		903.000	
0032	204.0245	Removing Storm Sewer (size) 03. 18-Inch	LF	618.000	396.000		222.000	
0034	204.0245	Removing Storm Sewer (size) 04. 21-Inch	LF	430.000	430.000			
0036	204.0245	Removing Storm Sewer (size) 05. 24-Inch	LF	488.000	328.000		160.000	
0038	204.0245	Removing Storm Sewer (size) 06. 36-Inch	LF	85.000	85.000			
0040	204.0245	Removing Storm Sewer (size) 07. 42-Inch	LF	730.000	730.000			
0042	204.0245	Removing Storm Sewer (size) 08. 48-Inch	LF	165.000	165.000			
0044	204.0245	Removing Storm Sewer (size) 09. 60-Inch	LF	220.000			220.000	
0046	204.0250	Abandoning Manholes	EACH	8.000	1.000		7.000	
0048	204.0280	Sealing Pipes	EACH	2.000	2.000			
0050	204.0291.S	Abandoning Sewer	CY	1,965.000	390.000		1,575.000	
0052	204.9060.S	Removing (item description) 01. Light Poles and Bases	EACH	57.000	25.000		32.000	
0054	205.0100	Excavation Common	CY	46,930.000	20,335.000		26,225.000	370.000
0056	209.0200.S	Backfill Controlled Low Strength	CY	1,035.000	750.000		285.000	
0058	213.0100	Finishing Roadway (project) 01. 1500-37-74	EACH	1.000	1.000			
0060	213.0100	Finishing Roadway (project) 02. 4570-12-71	EACH	1.000			1.000	
0062	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	24,015.000	10,020.000		13,795.000	200.000
0064	310.0115	Base Aggregate Open-Graded	CY	95.000	8.000		82.000	5.000
0066	311.0110	Breaker Run	TON	43,870.000	17,270.000		26,300.000	300.000
0068	320.0155	Concrete Base 9-Inch	SY	300.000			300.000	
0070	405.0100	Coloring Concrete WisDOT Red	CY	364.000	127.000		221.000	16.000
0072	415.0080	Concrete Pavement 8-Inch	SY	6,625.000	5,500.000		1,125.000	
0074	415.0085	Concrete Pavement 8 1/2-Inch	SY	40,635.000	14,600.000		25,700.000	335.000
0076	415.0095	Concrete Pavement 9 1/2-Inch	SY	1,430.000			1,430.000	
0078	415.0210	Concrete Pavement Gaps	EACH	2.000	2.000			
0080	415.1080	Concrete Pavement HES 8-Inch	SY	200.000	100.000		100.000	

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					1500-37-74	1500-37-75	4570-12-71	4570-12-72
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**	**Qty**
0082	415.1085	Concrete Pavement HES 8 1/2-Inch	SY	200.000	100.000		100.000	
0084	415.4100	Concrete Pavement Joint Filling	SY	52,355.000	21,260.000		30,685.000	410.000
0086	415.5110.S	Concrete Pavement Joint Layout 01. 1500-37-74	LS	1.000	1.000			
0088	415.5110.S	Concrete Pavement Joint Layout 02. 4570-12-71	LS	1.000			1.000	
0090	415.5110.S	Concrete Pavement Joint Layout 03. 4570-37-72	LS	1.000				1.000
0092	416.0160	Concrete Driveway 6-Inch	SY	1,780.000	955.000		825.000	
0094	416.0512	Concrete Truck Apron 12-Inch	SY	410.000			410.000	
0096	416.0610	Drilled Tie Bars	EACH	118.000	8.000		110.000	
0098	416.0620	Drilled Dowel Bars	EACH	748.000	547.000		201.000	
0100	455.0605	Tack Coat	GAL	57.600	38.200		19.400	
0102	460.2000	Incentive Density HMA Pavement	DOL	170.000	120.000		50.000	
0104	460.6223	HMA Pavement 3 MT 58-28 S	TON	110.000	100.000		10.000	
0106	460.6224	HMA Pavement 4 MT 58-28 S	TON	140.000	85.000		55.000	
0108	465.0105	Asphaltic Surface	TON	25.000			25.000	
0110	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	40.000	8.000		32.000	
0112	465.0125	Asphaltic Surface Temporary	TON	665.000	420.000		245.000	
0114	465.0310	Asphaltic Curb	LF	391.000	335.000		56.000	
0116	502.0100	Concrete Masonry Bridges	CY	50.000			50.000	
0118	502.3200	Protective Surface Treatment	SY	110.000			110.000	
0120	502.3210	Pigmented Surface Sealer	SY	35.000			35.000	
0122	502.4204	Adhesive Anchors No. 4 Bar	EACH	260.000			260.000	
0124	504.0900	Concrete Masonry Endwalls	CY	3.000			3.000	
0126	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	4,540.000			4,540.000	
0128	509.0301	Preparation Decks Type 1	SY	30.000			30.000	
0130	509.0302	Preparation Decks Type 2	SY	15.000			15.000	
0132	509.0310.S	Sawing Pavement Deck Preparation Areas	LF	60.000			60.000	
0134	509.1500	Concrete Surface Repair	SF	50.000			50.000	
0136	509.2000	Full-Depth Deck Repair	SY	5.000			5.000	
0138	509.2100.S	Concrete Masonry Deck Repair	CY	5.000			5.000	
0140	513.7016	Railing Steel Type C3	LF	70.000			70.000	
0142	516.0610.S	Sheet Membrane Waterproofing for Top Slab (structure) 01. B-36-900	SY	280.000			280.000	
0144	517.1010.S	Concrete Staining (structure) 01. B-36-900	SF	460.000			460.000	
0146	517.1050.S	Architectural Surface Treatment (structure) 01. B-36-900	SF	160.000			160.000	
0148	520.8000	Concrete Collars for Pipe	EACH	16.000		11.000	5.000	
0150	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	1.000			1.000	
0152	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	4.000			4.000	
0154	601.0105	Concrete Curb Type A	LF	20.000			20.000	

					1500-37-74	1500-37-75	4570-12-71	4570-12-72
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**	**Qty**
0156	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	3,375.000	1,690.000		1,685.000	
0158	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	6,320.000	2,530.000		3,430.000	360.000
0160	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	260.000	75.000		185.000	
0162	601.0413	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type G	LF	220.000			220.000	
0164	601.0580	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R	LF	365.000			365.000	
0166	601.0600	Concrete Curb Pedestrian	LF	490.000	81.000		379.000	30.000
0168	602.0405	Concrete Sidewalk 4-Inch	SF	69,315.000	29,765.000		39,080.000	470.000
0170	602.0410	Concrete Sidewalk 5-Inch	SF	7,000.000			4,900.000	2,100.000
0172	602.0415	Concrete Sidewalk 6-Inch	SF	5,050.000	2,295.000		2,635.000	120.000
0174	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	870.000	320.000		470.000	80.000
0176	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	54.000			54.000	
0178	602.1500	Concrete Steps	SF	30.000	30.000			
0180	606.0200	Riprap Medium	CY	5.000			5.000	
0182	606.0300	Riprap Heavy	CY	560.000			560.000	
0184	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	2,584.000	1,106.000		1,411.000	67.000
0186	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	1,114.000	484.000		447.000	183.000
0188	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	928.000	228.000		700.000	
0190	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	1,744.000	373.000		1,371.000	
0192	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	273.000	273.000			
0194	608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	477.000	477.000			
0196	608.0348	Storm Sewer Pipe Reinforced Concrete Class III 48-Inch	LF	164.000	164.000			
0198	608.0360	Storm Sewer Pipe Reinforced Concrete Class III 60-Inch	LF	568.000	568.000			
0200	608.0366	Storm Sewer Pipe Reinforced Concrete Class III 66-Inch	LF	520.000	421.000		99.000	
0202	608.0372	Storm Sewer Pipe Reinforced Concrete Class III 72-Inch	LF	1,836.000			1,836.000	
0204	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	29.000	29.000			
0206	608.0466	Storm Sewer Pipe Reinforced Concrete Class IV 66-Inch	LF	934.000	579.000		355.000	
0208	611.0535	Manhole Covers Type J-Special	EACH	32.000	22.000		9.000	1.000
0210	611.0624	Inlet Covers Type H	EACH	128.000	53.000		73.000	2.000
0212	611.0630	Inlet Covers Type HM-GJ	EACH	1.000			1.000	
0214	611.0639	Inlet Covers Type H-S	EACH	43.000	17.000		22.000	4.000

					1500-37-74	1500-37-75	4570-12-71	4570-12-72
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**	**Qty**
0216	611.0642	Inlet Covers Type MS	EACH	1.000			1.000	
0218	611.0652	Inlet Covers Type T	EACH	2.000			2.000	
0220	611.1004	Catch Basins 4-FT Diameter	EACH	26.000	11.000		14.000	1.000
0222	611.1005	Catch Basins 5-FT Diameter	EACH	1.000			1.000	
0224	611.1006	Catch Basins 6-FT Diameter	EACH	1.000			1.000	
0226	611.1230	Catch Basins 2x3-FT	EACH	146.000	59.000		82.000	5.000
0228	611.2004	Manholes 4-FT Diameter	EACH	10.000	5.000		4.000	1.000
0230	611.2005	Manholes 5-FT Diameter	EACH	9.000	5.000		4.000	
0232	611.2006	Manholes 6-FT Diameter	EACH	2.000	2.000			
0234	611.2007	Manholes 7-FT Diameter	EACH	1.000	1.000			
0236	611.2008	Manholes 8-FT Diameter	EACH	5.000	4.000		1.000	
0238	611.2504	Manholes Variable Tee 4-FT Diameter	EACH	4.000	3.000		1.000	
0240	611.3003	Inlets 3-FT Diameter	EACH	1.000	1.000			
0242	611.3901	Inlets Median 1 Grate	EACH	1.000			1.000	
0244	611.8115	Adjusting Inlet Covers	EACH	2.000			2.000	
0246	611.8120.S	Cover Plates Temporary	EACH	8.000			8.000	
0248	611.9800.S	Pipe Grates	EACH	1.000			1.000	
0250	612.0106	Pipe Underdrain 6-Inch	LF	1,840.000	220.000		1,510.000	110.000
0252	612.0902.S	Insulation Board Polystyrene (inch) 01. 2-Inch	SY	1,270.000		575.000		695.000
0254	614.0920	Salvaged Rail	LF	330.000	25.000		305.000	
0256	614.0925	Salvaged Guardrail End Treatments	EACH	2.000			2.000	
0258	616.0700.S	Fence Safety	LF	2,500.000	500.000	1,000.000	500.000	500.000
0260	619.1000	Mobilization	EACH	1.000	0.250	0.100	0.550	0.100
0262	620.0100	Concrete Corrugated Median	SF	2,280.000	2,280.000			
0264	620.0300	Concrete Median Sloped Nose	SF	1,260.000	315.000		815.000	130.000
0266	623.0200	Dust Control Surface Treatment	SY	65,000.000	25,000.000		40,000.000	
0268	624.0100	Water	MGAL	850.000	345.000		500.000	5.000
0270	625.0100	Topsoil	SY	35,635.000	8,800.000		26,390.000	445.000
0272	627.0200	Mulching	SY	14,700.000	6,700.000		8,000.000	
0274	628.1504	Silt Fence	LF	7,350.000	2,500.000		4,850.000	
0276	628.1520	Silt Fence Maintenance	LF	43,500.000	14,400.000		29,100.000	
0278	628.1905	Mobilizations Erosion Control	EACH	11.000	4.000		5.000	2.000
0280	628.1910	Mobilizations Emergency Erosion Control	EACH	11.000	4.000		5.000	2.000
0282	628.2004	Erosion Mat Class I Type B	SY	1,650.000	750.000		900.000	
0284	628.2006	Erosion Mat Urban Class I Type A	SY	28,585.000	5,855.000		22,400.000	330.000
0286	628.7005	Inlet Protection Type A	EACH	178.000	71.000		103.000	4.000
0288	628.7010	Inlet Protection Type B	EACH	2.000	1.000		1.000	
0290	628.7015	Inlet Protection Type C	EACH	175.000	78.000		95.000	2.000
0292	628.7020	Inlet Protection Type D	EACH	50.000	28.000		20.000	2.000
0294	628.7555	Culvert Pipe Checks	EACH	3.000			3.000	

					1500-37-74	1500-37-75	4570-12-71	4570-12-72
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**	**Qty**
0296	628.7560	Tracking Pads	EACH	14.000	6.000		8.000	
0298	628.7570	Rock Bags	EACH	200.000	100.000		100.000	
0300	629.0210	Fertilizer Type B	CWT	33.400	17.000		16.000	0.400
0302	630.0130	Seeding Mixture No. 30	LB	575.000	100.000		475.000	
0304	630.0140	Seeding Mixture No. 40	LB	670.000	195.000		460.000	15.000
0306	630.0200	Seeding Temporary	LB	230.000	150.000		75.000	5.000
0308	630.0300	Seeding Borrow Pit	LB	230.000	140.000		90.000	
0310	630.0400	Seeding Nurse Crop	LB	9.000			9.000	
0312	631.0300	Sod Water	MGAL	419.000	115.000		300.000	4.000
0314	631.1000	Sod Lawn	SY	7,060.000	3,100.000		3,750.000	210.000
0316	632.0101	Trees (species) (size) (root) 01. Autumn Gold Ginkgo, 2-Inch Cal., B&B	EACH	3.000			3.000	
0318	632.0101	Trees (species) (size) (root) 02. Common Hackberry, 2-Inch Cal., B&B	EACH	6.000			6.000	
0320	632.0101	Trees (species) (size) (root) 03. Espresso Kentucky Coffeetree, 2-Inch Cal., B&B	EACH	11.000			11.000	
0322	632.0101	Trees (species) (size) (root) 04. Regal Elm, 2-Inch Cal., B&B	EACH	6.000			6.000	
0324	632.0101	Trees (species) (size) (root) 05. Red Maple, 2-Inch Cal., B&B	EACH	9.000	9.000			
0326	632.0101	Trees (species) (size) (root) 06. Redmond Linden, 2-Inch Cal., B&B	EACH	8.000	2.000		6.000	
0328	632.0101	Trees (species) (size) (root) 07. Skyline Honeylocust, 2-Inch Cal., B&B	EACH	10.000	1.000		9.000	
0330	632.0101	Trees (species) (size) (root) 08. Swamp White Oak, 2-Inch Cal., B&B	EACH	8.000			8.000	
0332	632.0101	Trees (species) (size) (root) 09. Autumn Brilliance Serviceberry, 1.5-Inch Cal., B&B	EACH	16.000	5.000		11.000	
0334	632.0101	Trees (species) (size) (root) 10. Colorado Blue Spruce, 6-Foot HT. Cal., B&B	EACH	11.000			11.000	
0336	632.0101	Trees (species) (size) (root) 11. Crusader Thornless Cockspur Hawthorn, 1.5-Inch Cal., B&B	EACH	2.000	2.000			
0338	632.0101	Trees (species) (size) (root) 12. Crusader Thornless Cockspur Hawthorn, 1.5-Inch Cal., B&B	EACH	8.000			8.000	
0340	632.0101	Trees (species) (size) (root) 13. Spring Snow Crabapple, 1.5-Inch Cal., B&B	EACH	2.000			2.000	
0342	632.0201	Shrubs (species) (size) (root) 01. Plumosa Creeping Juniper, 6-Inch HT., CG	EACH	111.000			111.000	
0344	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	20.000	10.000		10.000	
0346	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	8.000			6.000	2.000
0348	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	49.000	17.000		30.000	2.000
0350	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	46.000	18.000		26.000	2.000

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Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**	**Qty**
0352	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	10.000	7.000		3.000	
0354	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	1.000	1.000			
0356	637.0620	Sign Flags Permanent Type II	EACH	16.000			12.000	4.000
0358	637.2210	Signs Type II Reflective H	SF	965.560	457.460		471.090	37.010
0360	637.2215	Signs Type II Reflective H Folding	SF	82.060	74.600		7.460	
0362	637.2230	Signs Type II Reflective F	SF	163.000	97.500		65.500	
0364	637.5453	Barricades Permanent Type III	EACH	4.000	4.000			
0366	638.2102	Moving Signs Type II	EACH	1.000			1.000	
0368	638.2602	Removing Signs Type II	EACH	123.000	66.000		57.000	
0370	638.3000	Removing Small Sign Supports	EACH	81.000	32.000		49.000	
0372	638.3155	Removing Overhead Sign Supports Full Span (structure) 01. S-36-025	EACH	1.000	1.000			
0374	638.3155	Removing Overhead Sign Supports Full Span (structure) 02. S-36-034	EACH	1.000	1.000			
0376	638.3155	Removing Overhead Sign Supports Full Span (structure) 03. S-36-35	EACH	1.000	1.000			
0378	638.4000	Moving Small Sign Supports	EACH	1.000			1.000	
0380	641.8100	Overhead Sign Support (structure) 01. S-36-18	LS	1.000			1.000	
0382	641.8100	Overhead Sign Support (structure) 02. S-36-19	LS	1.000			1.000	
0384	642.5401	Field Office Type D	EACH	1.000	0.250	0.100	0.550	0.100
0386	643.0300	Traffic Control Drums	DAY	68,750.000	27,260.000		41,490.000	
0388	643.0420	Traffic Control Barricades Type III	DAY	16,790.000	8,765.000		8,025.000	
0390	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	70.000			70.000	
0392	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	70.000			70.000	
0394	643.0705	Traffic Control Warning Lights Type A	DAY	34,080.000	18,330.000		15,750.000	
0396	643.0715	Traffic Control Warning Lights Type C	DAY	4,540.000	750.000		3,790.000	
0398	643.0800	Traffic Control Arrow Boards	DAY	28.000	14.000		14.000	
0400	643.0900	Traffic Control Signs	DAY	84,547.000	14,516.000		70,031.000	
0402	643.0910	Traffic Control Covering Signs Type I	EACH	7.000			7.000	
0404	643.0920	Traffic Control Covering Signs Type II	EACH	18.000			18.000	
0406	643.1000	Traffic Control Signs Fixed Message	SF	117.000	16.500		100.500	
0408	643.1050	Traffic Control Signs PCMS	DAY	238.000	119.000		119.000	
0410	643.5000	Traffic Control	EACH	1.000	0.300		0.700	
0412	644.1410.S	Temporary Pedestrian Surface Asphalt	SF	6,350.000	3,880.000		2,470.000	
0414	644.1420.S	Temporary Pedestrian Surface Plywood	SF	2,000.000	1,000.000		1,000.000	
0416	644.1430.S	Temporary Pedestrian Surface Plate	SF	2,000.000	1,000.000		1,000.000	
0418	644.1601.S	Temporary Curb Ramp	EACH	41.000	28.000		13.000	
0420	644.1616.S	Temporary Pedestrian Safety Fence	LF	5,020.000	1,200.000		3,820.000	
0422	645.0111	Geotextile Type DF Schedule A	SY	1,180.000	125.000		995.000	60.000
0424	645.0120	Geotextile Type HR	SY	660.000			660.000	

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Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**	**Qty**
0426	645.0140	Geotextile Type SAS	SY	2,100.000	1,100.000		1,000.000	
0428	645.0220	Geogrid Type SR	SY	2,000.000	1,000.000		1,000.000	
0430	646.1020	Marking Line Epoxy 4-Inch	LF	4,350.000	1,485.000		2,790.000	75.000
0432	646.3020	Marking Line Epoxy 8-Inch	LF	2,495.000	1,020.000		1,420.000	55.000
0434	646.5020	Marking Arrow Epoxy	EACH	33.000	20.000		13.000	
0436	646.5120	Marking Word Epoxy	EACH	12.000	7.000		5.000	
0438	646.6120	Marking Stop Line Epoxy 18-Inch	LF	430.000	335.000		95.000	
0440	646.7120	Marking Diagonal Epoxy 12-Inch	LF	50.000			50.000	
0442	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	3,040.000	2,080.000		890.000	70.000
0444	646.8120	Marking Curb Epoxy	LF	300.000	160.000		130.000	10.000
0446	646.8220	Marking Island Nose Epoxy	EACH	29.000	16.000		12.000	1.000
0448	646.9000	Marking Removal Line 4-Inch	LF	15.000			15.000	
0450	646.9010	Marking Removal Line Water Blasting 4-Inch	LF	620.000			620.000	
0452	646.9100	Marking Removal Line 8-Inch	LF	410.000	35.000		375.000	
0454	646.9300	Marking Removal Special Marking	EACH	3.000			3.000	
0456	649.0105	Temporary Marking Line Paint 4-Inch	LF	2,705.000			2,705.000	
0458	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	7,115.000	975.000		6,140.000	
0460	650.4000	Construction Staking Storm Sewer	EACH	225.000	95.000		123.000	7.000
0462	650.4500	Construction Staking Subgrade	LF	15,221.000	5,270.000		9,813.000	138.000
0464	650.5000	Construction Staking Base	LF	140.000	140.000			
0466	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	620.000	75.000		185.000	360.000
0468	650.6500	Construction Staking Structure Layout (structure) 03. B-36-900	LS	1.000			1.000	
0470	650.7000	Construction Staking Concrete Pavement	LF	15,226.000	5,275.000		9,813.000	138.000
0472	650.8500	Construction Staking Electrical Installations (project) 01. 1500-37-74	LS	1.000	1.000			
0474	650.8500	Construction Staking Electrical Installations (project) 02. 4570-12-71	LS	1.000			1.000	
0476	650.9910	Construction Staking Supplemental Control (project) 01. 1500-37-74	LS	1.000	1.000			
0478	650.9910	Construction Staking Supplemental Control (project) 02. 4570-12-71	LS	1.000			1.000	
0480	650.9910	Construction Staking Supplemental Control (project) 03. 4570-12-72	LS	1.000				1.000
0482	650.9920	Construction Staking Slope Stakes	LF	15,221.000	5,270.000		9,813.000	138.000
0484	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	7,385.000	3,030.000		4,355.000	
0486	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	1,883.000	1,883.000			
0488	652.0800	Conduit Loop Detector	LF	1,784.000	1,784.000			
0490	653.0135	Pull Boxes Steel 24x36-Inch	EACH	10.000	10.000			
0492	653.0140	Pull Boxes Steel 24x42-Inch	EACH	19.000	19.000			
0494	653.0905	Removing Pull Boxes	EACH	18.000	16.000		2.000	

					1500-37-74	1500-37-75	4570-12-71	4570-12-72
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**	**Qty**
0496	654.0101	Concrete Bases Type 1	EACH	14.000	14.000			
0498	654.0102	Concrete Bases Type 2	EACH	4.000	4.000			
0500	654.0110	Concrete Bases Type 10	EACH	1.000	1.000			
0502	654.0113	Concrete Bases Type 13	EACH	3.000	3.000			
0504	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	2.000	2.000			
0506	655.0230	Cable Traffic Signal 5-14 AWG	LF	870.000	870.000			
0508	655.0240	Cable Traffic Signal 7-14 AWG	LF	1,269.000	1,269.000			
0510	655.0250	Cable Traffic Signal 9-14 AWG	LF	527.000	527.000			
0512	655.0260	Cable Traffic Signal 12-14 AWG	LF	936.000	936.000			
0514	655.0270	Cable Traffic Signal 15-14 AWG	LF	653.000	653.000			
0516	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	2,349.000	2,349.000			
0518	655.0610	Electrical Wire Lighting 12 AWG	LF	10,716.000	3,111.000		7,605.000	
0520	655.0620	Electrical Wire Lighting 8 AWG	LF	1,983.000	1,983.000			
0522	655.0700	Loop Detector Lead In Cable	LF	4,509.000	4,509.000			
0524	655.0800	Loop Detector Wire	LF	5,966.000	5,966.000			
0526	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. USH 10 & 11th Street	LS	1.000	1.000			
0528	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. USH 10 & 8th Avenue	LS	1.000	1.000			
0530	657.0100	Pedestal Bases	EACH	14.000	14.000			
0532	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	4.000	4.000			
0534	657.0305	Poles Type 2	EACH	2.000	2.000			
0536	657.0310	Poles Type 3	EACH	2.000	2.000			
0538	657.0350	Poles Type 10	EACH	1.000	1.000			
0540	657.0360	Poles Type 13	EACH	4.000	4.000			
0542	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	10.000	10.000			
0544	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	4.000	4.000			
0546	657.0530	Monotube Arms 30-FT	EACH	1.000	1.000			
0548	657.0535	Monotube Arms 35-FT	EACH	1.000	1.000			
0550	657.0545	Monotube Arms 45-FT	EACH	3.000	3.000			
0552	657.0590	Trombone Arms 20-FT	EACH	1.000	1.000			
0554	657.0595	Trombone Arms 25-FT	EACH	3.000	3.000			
0556	657.0815	Luminaire Arms Steel 15-FT	EACH	4.000	4.000			
0558	658.0173	Traffic Signal Face 3S 12-Inch	EACH	23.000	23.000			
0560	658.0174	Traffic Signal Face 4S 12-Inch	EACH	6.000	6.000			
0562	658.0416	Pedestrian Signal Face 16-Inch	EACH	16.000	16.000			
0564	658.0500	Pedestrian Push Buttons	EACH	16.000	16.000			
0566	658.5069	Signal Mounting Hardware (location) 01. USH 10 & 11th Street	LS	1.000	1.000			
0568	658.5069	Signal Mounting Hardware (location) 02. USH 10 & 8th Avenue	LS	1.000	1.000			

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Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**	**Qty**
0570	690.0150	Sawing Asphalt	LF	525.000	90.000		435.000	
0572	690.0250	Sawing Concrete	LF	3,960.000	2,615.000		1,345.000	
0574	715.0415	Incentive Strength Concrete Pavement	DOL	14,450.000	5,790.000		8,660.000	
0576	715.0502	Incentive Strength Concrete Structures	DOL	300.000			300.000	
0578	715.0710	Optimized Aggregate Gradation Incentive	DOL	45,398.000	19,996.000		25,402.000	
0580	999.1500.S	Crack and Damage Survey	LS	1.000	1.000			
0582	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	4,800.000	2,400.000		2,400.000	
0584	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	6,080.000	3,040.000		3,040.000	
0586	SPV.0035	Special 01. Planting Soil Mix	CY	335.000			335.000	
0588	SPV.0035	Special 02. Removing Buried Cattle Pass, Station 161+35	CY	10.000			10.000	
0590	SPV.0060	Special 01. Inlet Covers Type DW	EACH	1.000			1.000	
0592	SPV.0060	Special 02. Inlet Covers Type BH	EACH	1.000	1.000			
0594	SPV.0060	Special 03. Manhole Covers Bolted	EACH	11.000	2.000		9.000	
0596	SPV.0060	Special 04. Apron Endwalls For Culvert Pipe Reinf Conc Horizontal Elliptical 72x113-Inch	EACH	1.000			1.000	
0598	SPV.0060	Special 05. Manholes 10-FT	EACH	11.000	4.000		7.000	
0600	SPV.0060	Special 06. Manholes 9.5x16-FT	EACH	1.000			1.000	
0602	SPV.0060	Special 07. Mini Storm Sewer Cleanout	EACH	14.000		8.000		6.000
0604	SPV.0060	Special 08. Concrete Cap Over Sanitary Sewer	EACH	1.000			1.000	
0606	SPV.0060	Special 09. Utility Line Opening (ULO)	EACH	40.000	10.000	10.000	10.000	10.000
0608	SPV.0060	Special 10. Walker's Low Blue Catmint	EACH	228.000			228.000	
0610	SPV.0060	Special 11. Salvage Light Poles and Remove Concrete Bases	EACH	5.000	5.000			
0612	SPV.0060	Special 20. Concrete Bases Type 7 Special	EACH	35.000	9.000		26.000	
0614	SPV.0060	Special 21. Composite Light Poles 40-FT	EACH	35.000	9.000		26.000	
0616	SPV.0060	Special 22. Luminaire Arms Aluminum 6-FT	EACH	1.000			1.000	
0618	SPV.0060	Special 23. Luminaire Arms Aluminum 8-FT	EACH	39.000	13.000		26.000	
0620	SPV.0060	Special 24. Luminaire Arms Aluminum 15-FT	EACH	12.000			12.000	
0622	SPV.0060	Special 25. Luminaire LED	EACH	43.000	17.000		26.000	
0624	SPV.0060	Special 26. Luminaire LED RAB	EACH	13.000			13.000	
0626	SPV.0060	Special 27. Lighting Pull Box	EACH	48.000	15.000		33.000	
0628	SPV.0060	Special 40. Removing Fire Hydrants	EACH	11.000		9.000		2.000
0630	SPV.0060	Special 41. Removing Valve, Valve Manholes, and Valve Boxes	EACH	13.000		9.000		4.000
0632	SPV.0060	Special 42. Install Gate Valve and Box 6-Inch	EACH	7.000		5.000		2.000
0634	SPV.0060	Special 43. Install Gate Valve and Box 8-Inch	EACH	12.000		7.000		5.000
0636	SPV.0060	Special 44. Install Gate Valve and Box 10-Inch	EACH	1.000		1.000		
0638	SPV.0060	Special 45. Install Gate Valve and Box 12-Inch	EACH	14.000		11.000		3.000
0640	SPV.0060	Special 46. Install Fire Hydrant	EACH	7.000		5.000		2.000
0642	SPV.0060	Special 47. Install Water Service Corporation Stop &	EACH	32.000		19.000		13.000

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Line	Item	Item Description	Unit	Total	Qty	Qty	Qty	Qty
		Curb Stop and Box 1 1/4-Inch						
0644	SPV.0060	Special 49. Connect to Existing Water Main	EACH	31.000		13.000		18.000
0646	SPV.0060	Special 50. Connect to Existing Water Service	EACH	32.000		19.000		13.000
0648	SPV.0060	Special 51. Adjusting Water Valve Box	EACH	7.000				7.000
0650	SPV.0060	Special 52. Adjusting Water Service Curb Stop	EACH	11.000				11.000
0652	SPV.0060	Special 60. Sanitary Manhole Casting Type J	EACH	39.000		19.000		20.000
0654	SPV.0060	Special 61. Sanitary Manhole Chimney Seal	EACH	3.000				3.000
0656	SPV.0060	Special 62. Remove Existing Sanitary Sewer Manhole	EACH	26.000		16.000		10.000
0658	SPV.0060	Special 63. Reconnect Sanitary Sewer Lateral	EACH	39.000		27.000		12.000
0660	SPV.0085	Special 01. Seeding Switchgrass	LB	37.000			37.000	
0662	SPV.0090	Special 01. Concrete Curb and Gutter Integral 18-Inch Type D Special	LF	17,380.000	4,775.000		12,605.000	
0664	SPV.0090	Special 02. Storm Sewer Pipe Concrete Horizontal Elliptical Class HE-III 72x113-Inch	LF	57.000			57.000	
0666	SPV.0090	Special 03. Storm Sewer Pipe PVC 6-Inch	LF	8.000			8.000	
0668	SPV.0090	Special 04. Storm Sewer Pipe PVC 12-Inch	LF	36.000			36.000	
0670	SPV.0090	Special 05. Mini Storm 6-Inch	LF	2,815.000		1,270.000		1,545.000
0672	SPV.0090	Special 06. Mini Storm 8-Inch	LF	15.000		15.000		
0674	SPV.0090	Special 07. Televising Sewers	LF	10,035.000	2,154.000	2,411.000	3,891.000	1,579.000
0676	SPV.0090	Special 08. Marking Crosswalk Epoxy Transverse Line 12-Inch	LF	1,294.000	534.000		760.000	
0678	SPV.0090	Special 09. Remove and Reinstall Chain Link Fence	LF	30.000	30.000			
0680	SPV.0090	Special 10. Fence Chain Link Polymer-Coated 6-Ft	LF	125.000			125.000	
0682	SPV.0090	Special 11. Marking Line Yield Line Epoxy 18-Inch	LF	110.000			90.000	20.000
0684	SPV.0090	Special 40. Install Watermain Pipe 6-Inch	LF	75.000		50.000		25.000
0686	SPV.0090	Special 41. Install Watermain Pipe 8-Inch	LF	1,118.000		870.000		248.000
0688	SPV.0090	Special 42. Install Watermain Pipe 10-Inch	LF	78.000		78.000		
0690	SPV.0090	Special 43. Install Watermain Pipe 12-Inch	LF	3,835.000		2,480.000		1,355.000
0692	SPV.0090	Special 44. Water Service Pipe 1 1/4-Inch	LF	1,310.000		758.000		552.000
0694	SPV.0090	Special 60. Furnishing and Installing Sanitary Sewer Pipe 8-inch	LF	1,518.000		754.000		764.000
0696	SPV.0090	Special 61. Furnishing and Installing Sanitary Sewer Pipe 12-Inch	LF	193.000		193.000		
0698	SPV.0090	Special 62. Furnishing and Installing Sanitary Sewer Pipe 21-Inch	LF	598.000		598.000		
0700	SPV.0090	Special 63. Furnishing and Relaying Sanitary Sewer Pipe 8-inch	LF	339.000		339.000		
0702	SPV.0090	Special 64. Furnishing and Relaying Sanitary Sewer Pipe 12-inch	LF	225.000		225.000		
0704	SPV.0090	Special 65. Furnishing and Relaying Sanitary Sewer Pipe 15-inch	LF	50.000		50.000		
0706	SPV.0090	Special 66. Furnishing and Relaying Sanitary Sewer	LF	55.000				55.000

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Line	Item	Item Description	Unit	Total	Qty	Qty	Qty	Qty
		Pipe 24-inch						
0708	SPV.0090	Special 67. Removing Existing Sanitary Sewer	LF	1,268.000		933.000		335.000
0710	SPV.0090	Special 68. Sanitary Lateral 6-Inch	LF	1,117.000		807.000		310.000
0712	SPV.0090	Special 69. Sanitary Lateral Risers	LF	56.000		56.000		
0714	SPV.0090	Special 70. Abandoning Sanitary Sewer	LF	1,042.000		837.000		205.000
0716	SPV.0090	Special 71. Storm Sewer Pipe PVC 12-Inch Affixed to Existing Sewer	LF	135.000	135.000			
0718	SPV.0105	Special 01. Grading and Shaping Emergency Vehicle Railroad Crossing	LS	1.000	1.000			
0720	SPV.0105	Special 02. Construction Staking Emergency Vehicle Railroad Crossing	LS	1.000	1.000			
0722	SPV.0105	Special 03. Construction Staking Trees and Landscaping Project 1500-37-74	LS	1.000	1.000			
0724	SPV.0105	Special 04. Construction Staking Trees and Landscaping Project 4570-12-71	LS	1.000			1.000	
0726	SPV.0105	Special 05. Preservation of Existing Monuments Project 1500-37-74	LS	1.000	1.000			
0728	SPV.0105	Special 06. Preservation of Existing Monuments Project 4570-12-71	LS	1.000			1.000	
0730	SPV.0105	Special 07. Verify and Restoring of Existing Monuments Project 1500-37-74	LS	1.000	1.000			
0732	SPV.0105	Special 08. Verify and Restoring of Existing Monuments Project 4570-12-71	LS	1.000			1.000	
0734	SPV.0105	Special 09. Salvage & Reinstall Rectangular Rapid Flashing Beacon (RRFB) System	LS	1.000	1.000			
0736	SPV.0105	Special 10. Grading and Shaping Outfall Dissipator	LS	1.000			1.000	
0738	SPV.0105	Special 30. Remove Traffic Signals USH 10 & 11th Street	LS	1.000	1.000			
0740	SPV.0105	Special 31. Remove Traffic Signals USH 10 & 8th Street	LS	1.000	1.000			
0742	SPV.0105	Special 32. Remove Loop Detector Wire and Lead-In Cable USH 10 & 11th Street	LS	1.000	1.000			
0744	SPV.0105	Special 33. Remove Loop Detector Wire and Lead-In Cable USH 10 & 8th Street	LS	1.000	1.000			
0746	SPV.0105	Special 34. Traffic Signal Cabinet & Controller Fully Actuated 8 Phase USH 10 & 11th St	LS	1.000	1.000			
0748	SPV.0105	Special 35. Traffic Signal Cabinet & Controller Fully Actuated 8 Phase USH 10 & 8th St	LS	1.000	1.000			
0750	SPV.0105	Special 40. Water Main Trench Backfill Testing Project 1500-37-75	LS	1.000		1.000		
0752	SPV.0105	Special 41. Water Main Trench Backfill Testing Project 4570-12-72	LS	1.000				1.000
0754	SPV.0105	Special 42. Abandoning Water Main and Appurtenances, Project 1500-37-75	LS	1.000		1.000		

					1500-37-74	1500-37-75	4570-12-71	4570-12-72
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**	**Qty**	**Qty**
0756	SPV.0105	Special 43. Abandoning Water Main and Appurtenances, Project 4570-12-72	LS	1.000				1.000
0758	SPV.0105	Special 60. Sanitary Sewer Trench Backfill Testing Project 1500-37-75	LS	1.000		1.000		
0760	SPV.0105	Special 61. Sanitary Sewer Trench Backfill Testing Project 4570-12-72	LS	1.000				1.000
0762	SPV.0165	Special 40. Trench Insulation 4-Inch	SF	448.000		256.000		192.000
0764	SPV.0180	Special 01. Salvaging and Replacing Concrete Riprap	SY	60.000			60.000	
0766	SPV.0180	Special 02. Shredded Hardwood Bark Mulch	SY	400.000			400.000	
0768	SPV.0195	Special 40. Imported Water Main Trench Backfill	TON	4,000.000		3,000.000		1,000.000
0770	SPV.0195	Special 60. Imported Sanitary Sewer Trench Backfill	TON	2,900.000		2,100.000		800.000
0772	SPV.0195	Special 61. Sanitary Sewer Trench Stabilization	TON	260.000		200.000		60.000
0774	SPV.0200	Special 60. Sanitary Manhole 4-Foot	VF	321.500		199.200		122.300
0776	SPV.0200	Special 61. Reconstruct Sanitary Manhole	VF	10.100				10.100
0778	SPV.0200	Special 62. Drop Manhole	VF	86.000		64.700		21.300

CLEARING AND GRUBBING

ID	STATION	TO	STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA	201.0120 CLEARING ID	201.0220 GRUBBING ID
PROJECT 1500-37-74								
	131+75	-	133+75	USH 10, EB	-	-	78	78
	131+00	-	133+75	USH 10, WB	-	-	36	36
	133+75	-	136+50	USH 10, EB	-	-	96	96
	136+50	-	141+50	USH 10, EB	-	-	134	134
	136+50	-	141+50	USH 10, WB	-	-	180	192
	136+50	-	141+50	USH 10, MEDIAN	-	-	6	6
	141+50	-	145+25	USH 10, EB	-	-	18	18
	141+50	-	145+25	USH 10, WB	-	-	120	120
	141+50	-	145+25	USH 10, MEDIAN	-	-	6	6
	145+25	-	148+35	USH 10, WB	-	-	114	114
	145+25	-	148+35	USH 10, MEDIAN	-	-	6	6
	148+35	-	152+25	USH 10, EB	-	-	60	60
	148+35	-	152+25	USH 10, WB	-	-	54	54
	148+35	-	152+25	USH 10, MEDIAN	-	-	6	6
	10+49	-	10+98	N. 17TH ST	-	-	48	48
	9+35	-	9+75	N. 15TH ST	-	-	24	24
	9+35	-	9+75	N. 13TH ST	-	-	24	24
	10+25	-	12+11	N. MENASHA AVE	-	-	36	36
	8+15	-	9+75	N. 12TH ST	-	-	60	60
	10+49	-	10+85	N. 12TH ST	-	-	24	24
	10+49	-	12+70	N. 9TH ST	-	-	54	54
	10+50	-	12+90	N. 8TH ST	-	-	42	42
				EMERGENCY RAILROAD CROSSING	1	1	-	-
	UNDISTRIBUTED				-	-	154	172
	PROJECT TOTALS				1	1	1,380	1,410
PROJECT 4570-12-71								
	152+25	-	155+90	STH 42, EB	-	-	54	54
	152+25	-	155+90	STH 42, WB	-	-	60	60
	152+25	-	155+90	STH 42, MEDIAN	-	-	40	40
	155+90	-	159+90	STH 42, EB	-	-	114	114
	155+90	-	159+90	STH 42, WB	-	-	72	87
	155+90	-	159+90	STH 42, MEDIAN	-	-	45	45
	159+90	-	163+50	STH 42, EB	-	-	36	36
	159+90	-	163+50	STH 42, WB	-	-	6	6
	159+90	-	163+50	STH 42, MEDIAN	-	-	24	24
	163+50	-	191+00	STH 42, EB	-	-	288	318
	163+50	-	191+00	STH 42, WB	-	-	270	300
	163+50	-	191+00	STH 42, MEDIAN	-	-	246	246
	10+49	-	10+85	LINCOLN BLVD, SB	-	-	12	12
	10+49	-	11+00	N. 6TH ST	-	-	12	12
	10+75	-	14+00	MARITIME DR	-	-	36	36
	UNDISTRIBUTED				0	0	65	100
	PROJECT TOTALS				0	0	1,380	1,490
	TOTALS				1	1	2,760	2,900

REMOVING PAVEMENT

ID	CATEGORY	STATION	TO	STATION	LOCATION	204.0100 SY	REMARKS
PROJECT 1500-37-74							
	0010						
		131+75	-	133+75	USH 10, EB	629	
		131+75	-	133+75	USH 10, WB	625	
		133+75	-	136+50	USH 10, EB	1,205	
		133+75	-	136+50	USH 10, WB	886	
		136+50	-	141+50	USH 10, EB	1,842	
		136+50	-	141+50	USH 10, WB	1,701	
		141+50	-	145+25	USH 10, EB	1,152	
		141+50	-	145+25	USH 10, WB	1,562	
		145+25	-	148+35	USH 10, EB	1,078	
		145+25	-	148+35	USH 10, WB	1,175	
		148+35	-	152+25	USH 10, EB	1,571	
		148+35	-	152+25	USH 10, WB	1,359	
		10+25	-	10+85	FLEETWOOD DR	445	
		9+30	-	9+75	N. 23RD ST	196	
		10+50	-	10+95	N. 23RD ST	280	
		9+10	-	9+74	MENCHL DR	275	
		9+35	-	9+75	N. 21ST ST	194	
		10+49	-	11+00	N. 21ST ST	237	
		9+23	-	9+75	N. 13TH ST	177	
		8+15	-	9+75	N. 12TH ST	840	INCLUDES ISLAND
		10+49	-	10+85	N. 12TH ST	152	
		8+85	-	9+65	S. MENASHA AVE	415	
		10+25	-	12+10	N. MENASHA AVE	1,239	
		9+35	-	9+75	N. 11TH ST	188	
		10+49	-	11+00	N. 11TH ST	343	
		9+35	-	9+75	N. 10TH ST	189	
		9+00	-	9+75	N. 9TH ST	294	
		10+49	-	12+70	N. 9TH ST	786	
		8+50	-	9+75	N. 8TH ST	579	
		10+50	-	11+50	N. 8TH ST	627	INCLUDES ISLAND
		131+75	-	133+75	USH 10, EB	35	PE
		131+75	-	133+75	USH 10, WB	32	PE
		133+75	-	136+50	USH 10, EB	12	PE
		136+50	-	141+50	USH 10, EB	77	PE
		136+50	-	141+50	USH 10, WB	95	PE
		141+50	-	145+25	USH 10, EB	36	PE
		148+35	-	152+25	USH 10, EB	22	PE
		148+35	-	152+25	USH 10, WB	25	PE
		8+15	-	9+75	N. 12TH ST	60	PE
		8+85	-	9+65	S. MENASHA AVE	30	PE
		10+49	-	12+70	N. 9TH ST	46	PE
		8+50	-	9+75	N. 8TH ST	50	PE
		10+50	-	12+90	N. 8TH ST	13	PE
	CATEGORY 0010 TOTALS					22,145	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

REMOVING PAVEMENT (CONTINUED)

ID	STATION	TO	STATION	LOCATION	204.0100 SY	REMARKS
PROJECT 1500-37-74						
0020						
	ENTIRE PROJECT			USH 10	490	REMOVALS FOR COLORED CROSSWALKS
	CATEGORY 0020 TOTALS				490	
	PROJECT TOTAL				22,635	
PROJECT 4570-12-71						
0010						
	152+25	-	155+90	STH 42, EB	1,130	PE
	152+25	-	155+90	STH 42, WB	1,130	PE
	155+90	-	159+90	STH 42, EB	1,290	PE
	155+90	-	159+90	STH 42, WB	1,290	PE
	159+90	-	163+50	STH 42, EB	1,130	PE
	159+90	-	163+50	STH 42, WB	1,130	PE
	163+50	-	185+00	STH 42, EB	6,530	PE
	163+50	-	185+00	STH 42, WB	6,510	PE
	185+00	-	195+60	STH 42, EB	3,620	PE
	185+00	-	197+00	STH 42, WB	4,320	PE
	9+10	-	9+75	LINCOLN BLVD (WEST)	205	PE
	10+49	-	10+85	LINCOLN BLVD (WEST)	120	PE
	9+10	-	9+75	LINCOLN BLVD (EAST)	205	PE
	10+49	-	10+85	LINCOLN BLVD (EAST)	120	PE
	9+25	-	9+75	N. 6TH ST	190	PE
	10+49	-	11+00	N. 6TH ST	210	PE
	10+50	-	10+85	N. 5TH ST	170	PE
	10+75	-	13+75	MARITIME DR, NB	1,220	PE
	10+75	-	13+75	MARITIME DR, SB	1,231	PE
	152+25	-	155+90	STH 42, EB	100	PE
	152+25	-	155+90	STH 42, WB	22	PE
	155+90	-	159+90	STH 42, EB	63	PE
	155+90	-	159+90	STH 42, WB	11	PE
	159+90	-	163+50	STH 42, EB	106	PE
	163+50	-	185+00	STH 42, EB	127	PE
	163+50	-	185+00	STH 42, WB	113	PE
	9+25	-	9+75	N. 6TH ST	62	PE
	PROJECT TOTAL				32,355	
	TOTAL				54,990	

NOTE: SIDEWALK THROUGH DRIVEWAYS PAID FOR AS REMOVING SIDEWALK

REMOVING ASPHALTIC SURFACE

ID	STATION	TO	STATION	LOCATION	204.0110 SY	REMARKS
PROJECT 1500-37-74						
	11+50	-	12+90	N. 8TH ST	590	
	PROJECT TOTAL				590	
PROJECT 4570-12-71						
	13+10	-	13+21	MARITIME DRIVE, RT	16	
	192+26	-	192+52	STH 42, EB, RT	25	
	193+15	-	194+90	STH 42, EB, RT	44	
	PROJECT TOTAL				85	
	TOTAL				675	

REMOVING CURB AND GUTTER

ID	STATION	TO	STATION	LOCATION	204.0130 REMOVING CURB LF	204.0150 REMOVING CURB AND GUTTER LF	REMARKS
PROJECT 1500-37-74							
	11+50	-	11+60	N. 8TH ST, RT	-	10	
	12+50	-	12+90	N. 8TH ST, LT	-	40	
	12+55	-	12+90	N. 8TH ST, RT	-	35	
	PROJECT TOTAL				0	85	
PROJECT 4570-12-71							
	153+80			STH 42, EB, RT	8	-	PE
	165+63			STH 42, EB, RT	12	-	PE
	183+88	-	184+03	STH 42, EB	-	30	CE
	184+43	-	184+62	STH 42, EB	-	35	CE
	PROJECT TOTAL				20	65	
	TOTAL				20	150	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

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REMOVING CONCRETE SIDEWALK

ID	STATION	TO	STATION	LOCATION	204.0155 SY
PROJECT 1500-37-74					
	131+75	-	136+50	USH 10, EB	250
	131+75	-	136+50	USH 10, WB	297
	136+50		141+50	USH 10, EB	276
	136+50	-	141+50	USH 10, WB	300
	141+50	-	145+25	USH 10, EB	207
	141+50	-	145+25	USH 10, WB	210
	145+25	-	148+35	USH 10, EB	165
	145+25	-	148+35	USH 10, WB	165
	148+35	-	151+50	USH 10, EB	141
	148+35	-	151+50	USH 10, WB	160
	151+50	-	152+25	USH 10, EB	33
	151+50	-	152+25	USH 10, WB	23
	9+35	-	9+75	N. 13TH ST, LT	20
	9+35	-	9+75	N. 13TH ST, RT	15
	8+15	-	9+75	N. 12TH ST, LT	102
	8+15	-	9+75	N. 12TH ST, RT	45
	10+49	-	10+85	N. 12TH ST, LT	15
	10+49	-	10+85	N. 12TH ST, RT	23
	8+85	-	9+60	S. MENASHA AVE, LT	51
	8+85	-	9+99	S. MENASHA AVE, RT	59
	10+25	-	12+10	N. MENASHA AVE, LT	105
	10+25	-	12+10	N. MENASHA AVE, RT	97
	9+35	-	9+75	N. 11TH ST, LT	14
	9+35	-	9+75	N. 11TH ST, RT	16
	10+49	-	11+00	N. 11TH ST, LT	16
	10+49	-	11+00	N. 11TH ST, RT	16
	9+35	-	9+75	N. 10TH ST, LT	14
	9+35	-	9+75	N. 10TH ST, RT	14
	9+00	-	9+75	N. 9TH ST, LT	44
	9+00	-	9+75	N. 9TH ST, RT	30
	10+49	-	11+25	N. 9TH ST, LT	39
	10+49	-	11+25	N. 9TH ST, RT	32
	8+50	-	9+75	N. 8TH ST, LT	66
	8+50	-	9+75	N. 8TH ST, RT	65
	10+55	-	11+50	N. 8TH ST, LT	43
	10+55	-	11+50	N. 8TH ST, RT	47
	PROJECT TOTAL				3,215

REMOVING CONCRETE SIDEWALK (CONTINUED)

ID	STATION	TO	STATION	LOCATION	204.0155 SY
PROJECT 4570-12-71					
	152+25	-	155+62	STH 42, EB	179
	152+25	-	155+62	STH 42, WB	189
	155+62	-	156+20	STH 42, EB	19
	155+62	-	156+20	STH 42, WB	18
	156+20	-	159+90	STH 42, EB	180
	156+20	-	159+90	STH 42, WB	192
	159+90	-	163+50	STH 42, EB	189
	159+90	-	163+50	STH 42, WB	179
	163+50	-	184+25	STH 42, EB	1,101
	163+79	-	184+25	STH 42, WB	1,079
	184+25	-	187+55	STH 42, EB	181
	9+10	-	9+75	LINCOLN BLVD, SB, LT	35
	10+49	-	10+85	LINCOLN BLVD, SB, LT	15
	9+10	-	9+75	LINCOLN BLVD, NB, RT	37
	10+49	-	10+85	LINCOLN BLVD, NB, RT	14
	9+35	-	9+75	N. 6TH ST, LT	17
	9+35	-	9+75	N. 6TH ST, RT	15
	10+49	-	11+00	N. 6TH ST, LT	22
	10+49	-	11+00	N. 6TH ST, RT	23
	10+27	-	10+60	N. 5TH ST, LT	8
	10+90	-	13+45	MARITIME DR, LT	163
	PROJECT TOTAL				3,855
	TOTAL				7,070

NOTE: SIDEWALK THROUGH DRIVEWAYS PAID FOR AS REMOVING SIDEWALK

REMOVING LIGHT POLES AND BASES, SALVAGE LIGHT POLE AND REMOVE BASES, AND REMOVING PULL BOXES

ID	STATION	TO	STATION	LOCATION	204.9060.01 REMOVING LIGHT POLES AND BASES EACH	SPV.0060.11 SALVAGE LIGHT POLE AND REMOVE BASES EACH	653.0905 REMOVING PULL BOXES EACH *
PROJECT 1500-37-74							
	131+00	-	133+75	USH 10, MEDIAN	1	-	-
	133+75	-	136+50	USH 10, MEDIAN	2	-	-
	133+75	-	136+50	USH 10, WB	1	-	-
	136+50	-	141+50	USH 10, MEDIAN	-	4	-
	141+50	-	145+25	USH 10, EB	4	-	-
	141+50	-	145+25	USH 10, WB	3	1	-
	145+25	-	148+35	USH 10, EB	3	-	-
	145+25	-	148+35	USH 10, WB	3	-	-
	148+35	-	152+25	USH 10, EB	4	-	-
	148+35	-	152+25	USH 10, WB	2	-	-
	148+35	-	152+25	USH 10, MEDIAN	1	-	-
	9+00	-	9+75	N. 18TH ST, LT	1	-	-
	PROJECT TOTALS				25	5	0
PROJECT 4570-12-71							
	152+25	-	155+90	STH 42, MEDIAN	3	-	-
	155+90	-	159+90	STH 42, EB, RT	1	-	-
	155+90	-	159+90	STH 42, WB, LT	1	-	-
	155+90	-	159+90	STH 42, MEDIAN	3	-	-
	159+90	-	163+50	STH 42, MEDIAN	2	-	-
	163+50	-	191+00	STH 42, MEDIAN	19	-	2
	191+00	-	195+00	STH 42, EB	2	-	-
	191+00	-	195+00	STH 42, WB	1	-	-
	PROJECT TOTALS				32	0	2
	TOTALS				57	5	2

*QUANTITIES SHOWN ELSEWHERE

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ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

REMOVING AND ABANDONING STORM SEWER
(NOTE: LOCATION PROVIDED TYPICALLY REFERS TO UPSTREAM STRUCTURE OR REMOVAL LIMIT)

ID	STATION	OFFSET (FT)		LOCATION	204.0210 REMOVING MANHOLES EA	204.0220 REMOVING INLETS EA	204.0245.01 REMOVING STORM SEWER 12-INCH OR LESS LF	204.0245.02 REMOVING STORM SEWER 15-INCH LF	204.0245.03 REMOVING STORM SEWER 18-INCH LF	204.0245.04 REMOVING STORM SEWER 21-INCH LF	204.0245.05 REMOVING STORM SEWER 24-INCH LF	204.0245.06 REMOVING STORM SEWER 36-INCH LT	204.0245.07 REMOVING STORM SEWER 42-INCH LF	204.0245.08 REMOVING STORM SEWER 48-INCH LF	204.0245.09 REMOVING STORM SEWER 60-INCH LF	204.0250 ABANDONING MANHOLES EA	204.0280 SEALING PIPES EA	204.0291.S* ABANDONING SEWER CY
PROJECT 1500-37-74																		
	131+35	2.8	LT	USH 10	---	---	---	---	---	---	208	---	---	---	---	---	---	---
	131+43	5.1	RT	USH 10	---	---	---	---	---	217	---	---	---	---	---	---	---	---
	133+28	47.4	LT	USH 10	---	1	35	---	---	---	---	---	---	---	---	---	---	---
	133+33	23.9	RT	USH 10	---	1	33	---	---	---	---	---	---	---	---	---	---	---
	133+42	6.3	LT	USH 10	---	1	4	---	---	---	---	---	---	---	---	---	---	---
	133+43	17.1	LT	USH 10	---	1	11	---	---	---	---	---	---	---	---	---	---	---
	133+43	3.1	LT	USH 10	1	---	---	---	---	24	---	---	---	---	---	---	---	---
	133+60	4.8	RT	USH 10	1	---	---	---	42	---	---	---	---	---	---	---	---	---
	133+61	51.4	RT	USH 10	---	1	27	---	---	---	---	---	---	---	---	---	---	---
	133+66	3.2	LT	USH 10	1	---	---	---	---	162	---	---	---	---	---	---	---	---
	133+88	51.5	RT	USH 10	---	1	48	---	---	---	---	---	---	---	---	---	---	---
	134+01	5.4	RT	USH 10	1	---	---	---	141	---	---	---	---	---	---	---	---	---
	134+72	118	LT	USH 10	---	---	---	---	---	---	---	---	49	---	---	---	---	---
	134+80	47.9	LT	USH 10	---	1	36	---	---	---	---	---	---	---	---	---	---	---
	134+88	82.4	LT	USH 10	---	1	---	55	---	---	---	---	---	---	---	---	---	---
	135+04	80.9	LT	USH 10	1	---	---	---	---	---	---	---	100	---	---	---	---	---
	135+13	34.6	LT	USH 10	1	---	---	11	---	---	---	---	---	---	---	---	---	---
	135+16	24.1	LT	USH 10	---	1	7	---	---	---	---	---	---	---	---	---	---	---
	135+16	17.3	LT	USH 10	---	1	17	---	---	---	---	---	---	---	---	---	---	---
	135+27	3.9	LT	USH 10	1	---	---	---	---	---	39	---	---	---	---	---	---	---
	135+42	8.4	RT	USH 10	1	---	---	---	---	27	---	---	---	---	---	---	---	---
	135+61	23.9	RT	USH 10	---	1	27	---	---	---	---	---	---	---	---	---	---	---
	135+66	2.2	LT	USH 10	1	---	---	---	---	---	---	---	76	---	---	---	---	---
	135+66	63.4	LT	USH 10	---	1	47	---	---	---	---	---	---	---	---	---	---	---
	136+09	47.6	LT	USH 10	---	1	32	---	---	---	---	---	---	---	---	---	---	---
	136+24	70.2	RT	USH 10	---	1	45	---	---	---	---	---	---	---	---	---	---	---
	136+41	43.0	LT	USH 10	1	---	---	---	---	---	26	---	---	---	---	---	---	---
	136+41	17.4	LT	USH 10	1	---	---	---	---	---	18	---	---	---	---	---	---	---
	136+42	80.0	LT	USH 10	---	---	---	---	---	---	37	---	---	---	---	---	---	---
	136+42	0.5	RT	USH 10	1	---	---	---	---	---	---	---	49	---	---	---	---	---
	136+46	72.9	RT	USH 10	1	---	---	---	41	---	---	---	---	---	---	---	---	---
	136+47	31.9	RT	USH 10	1	---	---	---	53	---	---	---	---	---	---	---	---	---
	136+70	66.3	RT	USH 10	---	1	42	---	---	---	---	---	---	---	---	---	---	---
	136+71	139	RT	USH 10	---	1	---	---	71	---	---	---	---	---	---	---	---	---
	136+90	2.1	RT	USH 10	1	---	---	---	---	---	---	---	198	---	---	---	---	---
	138+86	47.3	LT	USH 10	---	1	25	---	---	---	---	---	---	---	---	---	---	---
	138+87	22.8	LT	USH 10	---	1	28	---	---	---	---	---	---	---	---	---	---	---

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

REMOVING AND ABANDONING STORM SEWER CONT.

(NOTE: LOCATION PROVIDED TYPICALLY REFERS TO UPSTREAM STRUCTURE OR REMOVAL LIMIT)

ID	STATION	OFFSET (FT)		LOCATION	204.0210 REMOVING MANHOLES EA	204.0220 REMOVING INLETS EA	204.0245.01 REMOVING STORM SEWER 12-INCH OR LESS LF	204.0245.02 REMOVING STORM SEWER 15-INCH LF	204.0245.03 REMOVING STORM SEWER 18-INCH LF	204.0245.04 REMOVING STORM SEWER 21-INCH LF	204.0245.05 REMOVING STORM SEWER 24-INCH LF	204.0245.06 REMOVING STORM SEWER 36-INCH LT	204.0245.07 REMOVING STORM SEWER 42-INCH LF	204.0245.08 REMOVING STORM SEWER 48-INCH LF	204.0245.09 REMOVING STORM SEWER 60-INCH LF	204.0250 ABANDONING MANHOLES EA	204.0280 SEALING PIPES EA	204.0291.S* ABANDONING SEWER CY
PROJECT 1500-37-74 CONT.																		
	138+88	4.5	RT	USH 10	1	---	---	---	---	---	---	---	231	---	---	---	---	---
	138+89	23.8	RT	USH 10	---	1	19	---	---	---	---	---	---	---	---	---	---	---
	139+21	9.4	LT	USH 10	---	1	35	---	---	---	---	---	---	---	---	---	---	---
	140+92	23.9	LT	USH 10	---	1	24	---	---	---	---	---	---	---	---	---	---	---
	140+93	47.5	LT	USH 10	---	1	6	---	---	---	---	---	---	---	---	---	---	---
	140+98	47.6	LT	USH 10	---	1	49	---	---	---	---	---	---	---	---	---	---	---
	140+99	10.5	LT	USH 10	---	1	35	---	---	---	---	---	---	---	---	---	---	---
	141+01	23.8	RT	USH 10	---	1	5	---	---	---	---	---	---	---	---	---	---	---
	141+06	23.9	RT	USH 10	---	1	39	---	---	---	---	---	---	---	---	---	---	---
	141+19	5.3	RT	USH 10	1	---	---	---	---	---	---	---	27	---	---	---	---	---
	141+36	79.7	LT	USH 10	---	1	45	---	---	---	---	---	---	---	---	---	---	---
	141+36	89.1	LT	USH 10	---	1	8	---	---	---	---	---	---	---	---	---	---	---
	141+37	51.2	RT	USH 10	---	1	25	---	---	---	---	---	---	---	---	---	---	---
	141+44	89.9	LT	USH 10	1	---	54	---	---	---	---	---	---	---	---	---	---	---
	141+44	53.0	RT	USH 10	---	---	---	---	---	---	---	28	---	---	---	---	---	---
	141+44	27.4	RT	USH 10	1	---	---	---	---	---	---	57	---	---	---	---	---	---
	141+45	0.8	RT	USH 10	1	---	---	---	---	---	---	---	---	42	---	---	---	---
	141+45	36.0	LT	USH 10	1	---	---	---	48	---	---	---	---	---	---	---	---	---
	141+73	52.9	RT	USH 10	---	1	38	---	---	---	---	---	---	---	---	---	---	---
	141+76	89.9	LT	USH 10	---	1	33	---	---	---	---	---	---	---	---	---	---	---
	141+78	68.7	LT	USH 10	---	1	47	---	---	---	---	---	---	---	---	---	---	---
	141+85	10.5	LT	USH 10	1	---	---	---	---	---	---	---	---	48	---	---	---	---
	141+98	24.6	RT	USH 10	---	1	30	---	---	---	---	---	---	---	---	---	---	---
	142+09	48.2	LT	USH 10	---	1	27	---	---	---	---	---	---	---	---	---	---	---
	142+10	12.7	LT	USH 10	---	1	24	---	---	---	---	---	---	---	---	---	---	---
	142+16	1.2	RT	USH 10	---	1	15	---	---	---	---	---	---	---	---	---	---	---
	142+28	29	LT	USH 10	1	---	---	---	---	---	---	---	---	75	---	---	1	---
	145+00	48.8	LT	USH 10	---	1	---	11	---	---	---	---	---	---	---	---	1	---
	145+04	51.2	RT	USH 10	---	1	38	---	---	---	---	---	---	---	---	---	---	---
	145+31	2.2	RT	USH 10	1	---	---	59	---	---	---	---	---	---	---	---	---	---
	145+40	39.9	RT	USH 10	---	1	40	---	---	---	---	---	---	---	---	---	---	---
	145+61	0.2	RT	USH 10	---	1	32	---	---	---	---	---	---	---	---	---	---	---
	145+78	25.5	RT	USH 10	---	1	30	---	---	---	---	---	---	---	---	---	---	---
	145+93	13.6	LT	USH 10	---	1	35	---	---	---	---	---	---	---	---	---	---	---
	148+19	49.3	RT	USH 10	---	1	25	---	---	---	---	---	---	---	---	---	---	---
	148+25	25.3	RT	USH 10	1	---	286	---	---	---	---	---	---	---	---	---	---	---
	148+27	261	LT	USH 10	1	---	---	---	---	---	---	---	---	---	---	---	---	198
	148+49	54.5	RT	USH 10	---	1	38	---	---	---	---	---	---	---	---	---	---	---
	150+56	24.7	LT	USH 10	---	1	34	---	---	---	---	---	---	---	---	---	---	---
	150+73	51.4	LT	USH 10	---	1	32	---	---	---	---	---	---	---	---	---	---	---
	150+85	8.5	LT	USH 10	---	1	92	---	---	---	---	---	---	---	---	---	---	---
	151+14	25.4	RT	USH 10	---	1	22	---	---	---	---	---	---	---	---	---	---	---
	151+30	40.3	RT	USH 10	---	1	44	---	---	---	---	---	---	---	---	---	---	---
	151+66	50.7	LT	USH 10	1	---		93	---	---	---	---	---	---	---	---	---	7

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

REMOVING AND ABANDONING STORM SEWER CONT.
(NOTE: LOCATION PROVIDED TYPICALLY REFERS TO UPSTREAM STRUCTURE OR REMOVAL LIMIT)

ID	STATION	OFFSET (FT)		LOCATION	204.0210 REMOVING MANHOLES EA	204.0220 REMOVING INLETS EA	204.0245.01 REMOVING STORM SEWER 12-INCH OR LESS LF	204.0245.02 REMOVING STORM SEWER 15-INCH LF	204.0245.03 REMOVING STORM SEWER 18-INCH LF	204.0245.04 REMOVING STORM SEWER 21-INCH LF	204.0245.05 REMOVING STORM SEWER 24-INCH LF	204.0245.06 REMOVING STORM SEWER 36-INCH LT	204.0245.07 REMOVING STORM SEWER 42-INCH LF	204.0245.08 REMOVING STORM SEWER 48-INCH LF	204.0245.09 REMOVING STORM SEWER 60-INCH LF	204.0250 ABANDONING MANHOLES EA	204.0280 SEALING PIPES EA	204.0291.S* ABANDONING SEWER CY
PROJECT 1500-37-74 CONT.																		
	151+68	62.2	RT	USH 10	---	1	35	---	---	---	---	---	---	---	---	---	---	---
	151+68	268	LT	USH 10	---	---	---	---	---	---	---	---	---	---	---	1	---	185
	151+72	27.8	RT	USH 10	1	---	79	---	---	---	---	---	---	---	---	---	---	---
	PROJECT TOTALS				28	50	1884	229	396	430	328	85	730	165	0	1	2	390
PROJECT 4570-12-71																		
	153+12	25	RT	STH 42	---	1	26	---	---	---	---	---	---	---	---	---	---	---
	153+14	48	LT	STH 42	---	1	16	---	---	---	---	---	---	---	---	---	---	---
	153+15	0.8	RT	STH 42	---	1	24	---	---	---	---	---	---	---	---	---	---	---
	153+22	23.2	LT	STH 42	---	1	19	---	---	---	---	---	---	---	---	---	---	---
	153+27	40.7	LT	STH 42	1	---	---	195	---	---	---	---	---	---	---	---	---	---
	153+69	35.1	RT	STH 42	---	---	8	---	---	---	---	---	---	---	---	---	---	---
	153+69	27.1	RT	STH 42	1	---	57	---	---	---	---	---	---	---	---	---	---	---
	155+01	25	RT	STH 42	---	1	26	---	---	---	---	---	---	---	---	---	---	---
	155+08	0.2	RT	STH 42	---	1	24	---	---	---	---	---	---	---	---	---	---	---
	155+15	22.2	LT	STH 42	---	1	26	---	---	---	---	---	---	---	---	---	---	---
	155+22	46.9	LT	STH 42	---	1	---	38	---	---	---	---	---	---	---	---	---	---
	155+50	52.3	RT	STH 42	---	1	25	---	---	---	---	---	---	---	---	---	---	---
	155+52	75	LT	STH 42	---	1	23	---	---	---	---	---	---	---	---	---	---	---
	155+59	53.9	LT	STH 42	1	---	---	50	---	---	---	---	---	---	---	---	---	---
	155+75	52.7	RT	STH 42	---	1	29	---	---	---	---	---	---	---	---	---	---	---
	155+76	75.7	LT	STH 42	---	1	27	---	---	---	---	---	---	---	---	---	---	---
	155+96	112	LT	STH 42	---	---	---	---	---	---	---	---	---	---	60	---	---	270
	155+97	33	RT	STH 42	1	---	---	88	---	---	---	---	---	---	---	---	---	---
	156+08	73.9	LT	STH 42	---	1	20	---	---	---	---	---	---	---	---	---	---	---
	156+08	51.9	RT	STH 42	---	1	22	---	---	---	---	---	---	---	---	---	---	---
	156+33	68.3	LT	STH 42	---	1	26	---	---	---	---	---	---	---	---	---	---	---
	156+33	51.7	RT	STH 42	---	1	26	---	---	---	---	---	---	---	---	---	---	---
	159+20	0.2	LT	STH 42	---	1	23	---	---	---	---	---	---	---	---	---	---	---
	159+20	22.9	LT	STH 42	---	1	59	---	---	---	---	---	---	---	---	---	---	---
	159+46	47.1	LT	STH 42	---	1	38	---	---	---	---	---	---	---	---	---	---	---
	159+48	25.1	RT	STH 42	---	1	38	---	---	---	---	---	---	---	---	---	---	---
	159+71	55.8	RT	STH 42	---	1	31	---	---	---	---	---	---	---	---	---	---	---
	159+71	74.1	LT	STH 42	---	1	7	---	---	---	---	---	---	---	---	---	---	---
	159+78	28.5	LT	STH 42	---	---	---	---	---	---	---	---	---	---	---	1	---	35
	159+78	72	LT	STH 42	1	---	44	---	---	---	---	---	---	---	---	---	---	---
	160+01	47.8	RT	STH 42	---	1	63	---	---	---	---	---	---	---	---	---	---	---
	160+01	73.6	LT	STH 42	---	1	23	---	---	---	---	---	---	---	---	---	---	---
	160+20	12.2	LT	STH 42	---	---	---	---	---	---	---	---	---	---	---	1	---	235
	162+90	0.1	LT	STH 42	---	1	---	24	---	---	---	---	---	---	---	---	---	---

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

REMOVING AND ABANDONING STORM SEWER CONT.

(NOTE: LOCATION PROVIDED TYPICALLY REFERS TO UPSTREAM STRUCTURE OR REMOVAL LIMIT)

ID	STATION	OFFSET (FT)		LOCATION	204.0210 REMOVING MANHOLES EA	204.0220 REMOVING INLETS EA	204.0245.01 REMOVING STORM SEWER 12-INCH OR LESS LF	204.0245.02 REMOVING STORM SEWER 15-INCH LF	204.0245.03 REMOVING STORM SEWER 18-INCH LF	204.0245.04 REMOVING STORM SEWER 21-INCH LF	204.0245.05 REMOVING STORM SEWER 24-INCH LF	204.0245.06 REMOVING STORM SEWER 36-INCH LT	204.0245.07 REMOVING STORM SEWER 42-INCH LF	204.0245.08 REMOVING STORM SEWER 48-INCH LF	204.0245.09 REMOVING STORM SEWER 60-INCH LF	204.0250 ABANDONING MANHOLES EA	204.0280 SEALING PIPES EA	204.0291.S* ABANDONING SEWER CY
PROJECT 4570-12-71 CONT.																		
	162+90	23.1	LT	STH 42	---	1	---	31	---	---	---	---	---	---	---	---	---	---
	163+08	48.1	LT	STH 42	---	1	---	50	---	---	---	---	---	---	---	---	---	---
	163+09	24.8	RT	STH 42	---	1	---	31	---	---	---	---	---	---	---	---	---	---
	163+35	75.9	LT	STH 42	---	---	---	66	---	---	---	---	---	---	---	---	---	---
	163+41	10.7	LT	STH 42	---	---	---	---	---	---	---	---	---	---	---	1	---	230
	166+54	48.1	LT	STH 42	---	1	25	---	---	---	---	---	---	---	---	---	---	---
	166+54	23.3	LT	STH 42	---	1	11	---	---	---	---	---	---	---	---	---	---	---
	166+54	0.1	LT	STH 42	---	1	12	---	---	---	---	---	---	---	---	---	---	---
	166+54	24.7	RT	STH 42	---	1	25	---	---	---	---	---	---	---	---	---	---	---
	166+55	12.2	LT	STH 42	---	---	---	---	---	---	---	---	---	---	---	1	---	195
	169+23	23.3	LT	STH 42	---	1	12	---	---	---	---	---	---	---	---	---	---	---
	169+23	11.1	LT	STH 42	---	---	---	---	---	---	---	---	---	---	10	1	---	160
	169+23	40.9	LT	STH 42	---	1	18	---	---	---	---	---	---	---	---	---	---	---
	169+23	0.9	RT	STH 42	---	1	12	---	---	---	---	---	---	---	---	---	---	---
	169+23	24.8	RT	STH 42	---	1	24	---	---	---	---	---	---	---	---	---	---	---
	171+54	48.1	LT	STH 42	---	1	25	---	---	---	---	---	---	---	---	---	---	---
	171+55	13.7	LT	STH 42	---	---	---	---	---	---	---	---	---	---	10	1	---	160
	171+56	23.1	LT	STH 42	---	1	10	---	---	---	---	---	---	---	---	---	---	---
	171+56	0	RT	STH 42	---	1	14	---	---	---	---	---	---	---	---	---	---	---
	171+56	24.7	RT	STH 42	---	1	25	---	---	---	---	---	---	---	---	---	---	---
	173+84	24.9	RT	STH 42	---	1	30	---	---	---	---	---	---	---	---	---	---	---
	173+85	48	LT	STH 42	---	1	30	---	---	---	---	---	---	---	---	---	---	---
	173+86	12.3	LT	STH 42	---	---	---	---	---	---	---	---	---	---	10	1	---	290
	173+86	5	LT	STH 42	---	1	8	---	---	---	---	---	---	---	---	---	---	---
	173+86	18.6	LT	STH 42	---	1	6	---	---	---	---	---	---	---	---	---	---	---
	177+92	11.3	LT	STH 42	1	---	---	---	---	---	---	---	---	---	130	---	---	---
	177+93	23.3	LT	STH 42	---	1	12	---	---	---	---	---	---	---	---	---	---	---
	177+94	48.1	LT	STH 42	---	1	25	---	---	---	---	---	---	---	---	---	---	---
	177+95	0.1	RT	STH 42	---	1	12	---	---	---	---	---	---	---	---	---	---	---
	177+97	24.9	RT	STH 42	---	1	25	---	---	---	---	---	---	---	---	---	---	---
	179+83	6.9	LT	STH 42	1	---	---	---	59	---	---	---	---	---	---	---	---	---
	181+45	6.5	LT	STH 42	1	---	---	---	163	---	---	---	---	---	---	---	---	---
	181+52	23.7	RT	STH 42	---	1	19	---	---	---	---	---	---	---	---	---	---	---
	181+52	0.8	RT	STH 42	---	1	9	---	---	---	---	---	---	---	---	---	---	---
	181+52	24.4	LT	STH 42	---	1	25	---	---	---	---	---	---	---	---	---	---	---
	181+52	48.2	LT	STH 42	---	1	24	---	---	---	---	---	---	---	---	---	---	---
	184+75	6.7	RT	STH 42	1	---	---	330	---	---	---	---	---	---	---	---	---	---
	184+87	14.7	LT	STH 42	---	1	15	---	---	---	---	---	---	---	---	---	---	---
	184+87	0.5	RT	STH 42	---	1	14	---	---	---	---	---	---	---	---	---	---	---
	184+87	23.7	RT	STH 42	---	1	21	---	---	---	---	---	---	---	---	---	---	---
	184+88	57.6	LT	STH 42	---	1	43	---	---	---	---	---	---	---	---	---	---	---
	184+89	76.4	LT	STH 42	---	---	18	---	---	---	---	---	---	---	---	---	---	---
	189+00	12.6	RT	STH 42	---	1	30	---	---	---	---	---	---	---	---	---	---	---
	189+06	81	RT	STH 42	---	1	34	---	---	---	---	---	---	---	---	---	---	---

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

REMOVING AND ABANDONING STORM SEWER CONT.
(NOTE: LOCATION PROVIDED TYPICALLY REFERS TO UPSTREAM STRUCTURE OR REMOVAL LIMIT)

ID	STATION	OFFSET (FT)		LOCATION	204.0210 REMOVING MANHOLES EA	204.0220 REMOVING INLETS EA	204.0245.01 REMOVING STORM SEWER 12-INCH OR LESS LF	204.0245.02 REMOVING STORM SEWER 15-INCH LF	204.0245.03 REMOVING STORM SEWER 18-INCH LF	204.0245.04 REMOVING STORM SEWER 21-INCH LF	204.0245.05 REMOVING STORM SEWER 24-INCH LF	204.0245.06 REMOVING STORM SEWER 36-INCH LT	204.0245.07 REMOVING STORM SEWER 42-INCH LF	204.0245.08 REMOVING STORM SEWER 48-INCH LF	204.0245.09 REMOVING STORM SEWER 60-INCH LF	204.0250 ABANDONING MANHOLES EA	204.0280 SEALING PIPES EA	204.0291.S* ABANDONING SEWER CY
PROJECT 4570-12-71 CONT.																		
	189+19	34	RT	STH 42	---	1	30	---	---	---	---	---	---	---	---	---	---	---
	189+30	62.1	RT	STH 42	---	1	92	---	---	---	---	---	---	---	---	---	---	---
	189+90	66	LT	STH 42	---	1	71	---	---	---	---	---	---	---	---	---	---	---
	189+92	20.0	RT	STH 42	---	1	25	---	---	---	---	---	---	---	---	---	---	---
	190+03	102	RT	STH 42	---	1	34	---	---	---	---	---	---	---	---	---	---	---
	190+08	2.7	RT	STH 42	---	1	74	---	---	---	---	---	---	---	---	---	---	---
	190+19	74.9	RT	STH 42	---	1	52	---	---	---	---	---	---	---	---	---	---	---
	190+21	74.3	RT	STH 42	---	1	---	---	---	---	75	---	---	---	---	---	---	---
	190+23	116	RT	STH 42	---	1	25	---	---	---	---	---	---	---	---	---	---	---
	190+44	81.5	RT	STH 42	1	---	---	---	---	---	85	---	---	---	---	---	---	---
	190+66	13.2	LT	STH 42	---	1	56	---	---	---	---	---	---	---	---	---	---	---
	192+25	33.8	LT	STH 42	1	---	124	---	---	---	---	---	---	---	---	---	---	---
	192+59	69.7	LT	STH 42	---	1	48	---	---	---	---	---	---	---	---	---	---	---
	192+92	0	LT	STH 42	---	1	72	---	---	---	---	---	---	---	---	---	---	---
	192+95	62.9	LT	STH 42	---	1	30	---	---	---	---	---	---	---	---	---	---	---
PROJECT TOTALS					11	71	2096	903	222	0	160	0	0	0	220	7	0	1575
TOTALS					39	121	3980	1132	618	430	488	85	730	165	220	8	2	1965

*-ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

EARTHWORK SUMMARY

PROJECT	FROM/TO STATION	LOCATION	EXCAVATION COMMON (1) (ITEM # 205.0100) CUT (1)	EBS EXCAVATION (3)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.33	MASS ORDINATE +/- (14)	WASTE	COMMENT:
1500-37-74	131+75 - 152+25	USH 10	14,267		220	293	13,974	13,974	
	9+35 - 9+50	N. 13TH ST	49				49	49	
	8+85 - 9+78	MENASHA AVE (S)	285		13	17	268	268	
	10+44 - 12+11	MENASHA AVE (N)	857		18	24	833	833	
	8+15 - 9+49	N. 12TH ST (S)	581		7	9	572	572	
	10+75 - 10+85	N. 12TH ST (N)	34				34	34	
	9+35 - 9+49	N. 11TH ST (S)	55				55	55	
	10+80 - 11+00	N. 11TH ST (N)	82				82	82	
	9+35 - 9+49	N. 10TH ST	51				51	51	
	9+00 - 9+49	N. 9TH ST (S)	189				189	189	
	10+75 - 11+25	N. 9TH ST (N)	171		1	1	170	170	
	8+50 - 9+50	N. 8TH ST (S)	424		1	1	423	423	
	10+85 - 11+50	N. 8TH ST (N)	291		1	1	290	290	
		UNDISTRIBUTED		2,999			2,999	2,999	LOCATION TO BE DETERMINED BY ENGINEER
PROJECT TOTALS			20,335		261	347	19,988	19,988	
4570-12-71	152+25 - 185+75	STH 42	18,093		464	617	17,476	14,217	EXCESS EXCAVATION TO BE USED IN ROUNDABOUT CIRCLE
	186+00 - 194+89	STH 42, EB	1,903		857	1,140	763	763	
	186+00 - 196+50	STH 42, WB	1,807		537	714	1,093	1,093	
	9+10 - 9+49	W. LINCOLN BLVD (S)	97		2	3	94	94	
	10+75 - 10+85	W. LINCOLN BLVD (N)	27				27	27	
	9+10 - 9+49	E. LINCOLN BLVD (S)	105				105	105	
	10+75 - 10+85	E. LINCOLN BLVD (N)	28				28	28	
	9+35 - 9+49	N. 6TH ST (S)	48				48	48	
	10+75 - 11+00	N. 6TH ST (N)	79				79	79	
	10+51 - 10+60	N. 5TH ST	32				32	32	
	0+00 - 3+77	ROUNDABOUT CIRCLE	599		2,901	3,858	-3,259		
	10+75 - 13+59	MARITIME DR, NB	904		94	125	779	779	
	12+50 - 14+15	MARITIME DR, MEDIAN EAST	372		40	53	319	319	
	11+25 - 13+33	MARITIME DR, SB	514		187	249	265	265	
		UNDISTRIBUTED		1,617			1,617	1,617	LOCATION TO BE DETERMINED BY ENGINEER
PROJECT TOTALS			26,225		5,082	6,759	19,466	19,466	
4570-12-72	20+00-20+69	BAYSHORE DR (NB)	173		15	20	153	153	
	20+00-20+69	BAYSHORE DR (SB)	197		1	1	196	196	
PROJECT TOTALS			370		16	21	349	349	
TOTALS			46,930		5,359	7,127	39,803	39,803	

1) COMMON EXCAVATION INCLUDES EXISTING ASPHALT AND CONCRETE. ITEM NUMBER 205.0100
3) EBS EXCAVATION TO BE BACKFILLED WITH BREAKER RUN
13) EXPANDED FILL FACTOR = 1.33, EXPANED FILL = UNEXPANED FILL * FILL FACTOR
14) THE MASS ORDINATE + OR - QUANTITY CALCULATED FOR THE SECTION. PLUS QUANTITIY INDICATES AN EXCESS OF MATERIAL WITHING THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE SECTION.

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

BACKFILL CONTROLLED LOW STRENGTH

ID	STRUCTURE	TO	STRUCTURE	LOCATION	209.0200.S CY
PROJECT 1500-37-74					
	MH-118.0	-	MH-120.0	USH 10	150
	MH-120.0	-	MH-122.0	USH 10 EB	210
	MH-122.0	-	MH-126.0	USH 10 EB	250
	MH-122.2	-	MH-122.1	9TH STREET	95
	MH-122.2	-	MH-122.0	9TH STREET	45
			PROJECT TOTAL		750
PROJECT 4570-12-71					
	MH-126.0	-	MH-128.0	STH 42	180
	MH-128.0	-	MH-130.0	STH 42	105
			PROJECT TOTAL		285
				TOTAL	1035

TEMPORARY PAVEMENT

ID	PROJECT STAGE	STA.	TO	STA.	OFFSET*	*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	*690.0150 SAWING ASPHALT LF	*690.0250 SAWING CONCRETE LF	REMARKS
PROJECT 1500-37-74												
	2	USH 10/8TH STREET INTERSECTION				360	0.2	150	30	---	---	COVERING UNDERGROUND INSTALLATION; 5" ASPHALTIC SURFACE TEMPORARY & 12" BAD 1 1/4-INCH
	2	USH 10/11TH STREET INTERSECTION				310	0.4	130	60	---	---	COVERING UNDERGROUND INSTALLATION; 5" ASPHALTIC SURFACE TEMPORARY & 12" BAD 1 1/4-INCH
	2	USH 10				230	1.4	100	215	---	---	MAINLINE TRANSITION BETWEEN STAGES; 5" ASPHALTIC SURFACE TEMPORARY & 12" BAD 1 1/4-INCH
	2	USH 10				90	0.2	40	30	---	---	UNDISTRIBUTED
			PROJECT TOTALS			990	2.2	420	335	0	0	
PROJECT 4570-12-71												
	1	190'EB'+33	-	190'EB'+44	RT	55	0.2	22	36	8	55	ROUNDABOUT STAGE 1; 5" ASPHALTIC SURFACE TEMPORARY & 12" BAD 1 1/4-INCH
	1	190'EB'+89	-	191'EB'+73	RT	60	---	25	---	---	145	ROUNDABOUT STAGE 1; 5" ASPHALTIC SURFACE TEMPORARY & 12" BAD 1 1/4-INCH
	1	192'EB'+25	-	192'EB'+40	LT & RT	30	0.1	13	10	6	80	ROUNDABOUT STAGE 1; 5" ASPHALTIC SURFACE TEMPORARY & 12" BAD 1 1/4-INCH
	1	189'EB'+08	-	190'EB'+10	RT	260	---	106	---	---	---	ROUNDABOUT STAGE 2; 5" ASPHALTIC SURFACE TEMPORARY & 12" BAD 1 1/4-INCH
	1	190'EB'+54	-	192'EB'+74	LT	125	---	51	---	---	---	ROUNDABOUT STAGE 2; 5" ASPHALTIC SURFACE TEMPORARY & 12" BAD 1 1/4-INCH
	1	195'EB'+42	-	195'EB'+60	LT	10	---	3	---	---	---	ROUNDABOUT STAGE 2; 5" ASPHALTIC SURFACE TEMPORARY & 12" BAD 1 1/4-INCH
	1	STH 42				55	0.1	25	10	6	30	UNDISTRIBUTED
			PROJECT TOTALS			595	0.4	245	56	20	310	
			TOTALS			1,585	2.6	665	391	20	310	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

BASE AGGREGATE DENSE AND WATER

ID	STATION	TO	STATION	LOCATION	305.0120 * 1 1/4-INCH TON	311.0110 BREAKER RUN TON	624.0100 WATER MGAL	REMARKS
PROJECT 1500-37-74								
	131+00	-	133+75	USH 10, EB	269	450	7	
	131+00	-	134+75	USH 10, WB	430	701	11	
	132+43	-	135+33	USH 10, EB, LT	166	332	5	TURN LANE/MEDIAN
	133+75	-	136+50	USH 10, EB	334	596	9	
	134+75	-	136+50	USH 10, WB	210	384	6	
	136+50	-	141+50	USH 10, EB	620	1,084	17	
	136+50	-	141+50	USH 10, WB	641	1,102	17	
	138+19	-	141+50	USH 10, EB, LT	266	495	8	TURN LANE/MEDIAN
	141+50	-	145+25	USH 10, EB	449	775	15	
	141+50	-	147+69	USH 10, WB, RT	527	973	15	TURN LANE/MEDIAN
	141+50	-	148+35	USH 10, WB	800	1,427	25	
	145+25	-	148+35	USH 10, EB	353	639	10	
	146+40	-	148+35	USH 10, EB, LT	122	245	4	TURN LANE/MEDIAN
	148+35	-	150+11	USH 10, WB, RT	95	191	3	TURN LANE/MEDIAN
	148+35	-	152+25	USH 10, EB	440	799	12	
	148+35	-	152+25	USH 10, WB	454	818	13	
	149+03	-	152+25	USH 10, EB, LT	183	365	5	TURN LANE/MEDIAN
	9+35	-	9+75	13TH ST	67	123	2	
	10+25	-	12+11	MENASHA AVE (NMN)	383	692	11	
	8+15	-	9+75	12TH ST	249	403	7	
	10+49	-	10+85	12TH ST	62	116	2	
	8+85	-	9+86	MENASHA AVE (SMN)	223	358	6	
	9+35	-	9+75	11TH ST	77	144	2	
	10+49	-	11+27	11TH ST	132	250	4	
	9+35	-	9+75	10TH ST	75	150	2	
	9+00	-	9+75	9TH ST	123	219	3	
	10+49	-	12+70	9TH ST	251	450	7	
	8+50	-	9+75	8TH ST	256	430	7	
	10+50	-	12+90	8TH ST	693	559	13	
	10+37	-	11+45	EMERGENCY VEHICLE RR CROSSING	80	-	1	
	UNDISTRIBUTED			EBS BACKFILL	-	2,000	20	
	UNDISTRIBUTED			DUST CONTROL	-	-	76	
	PROJECT TOTALS				9,030	17,270	345	

BASE AGGREGATE DENSE AND WATER (CONTINUED)

ID	STATION	TO	STATION	LOCATION	305.0120 * 1 1/4-INCH TON	311.0110 BREAKER RUN TON	624.0100 WATER MGAL	REMARKS
PROJECT 4570-12-71								
	152+25	-	155+90	STH 42, EB	113	80	2	
	152+25	-	155+90	STH 42, WB	438	756	12	
	155+03	-	156+81	STH 42, EB, LT	356	712	11	MEDIAN
	155+90	-	159+90	STH 42, EB	252	400	7	
	155+90	-	159+90	STH 42, WB	494	900	14	
	159+26	-	160+45	STH 42, EB, LT	388	780	12	MEDIAN
	159+90	-	163+50	STH 42, EB	206	280	5	
	159+90	-	163+50	STH 42, WB	460	818	13	
	162+93	-	164+17	STH 42, EB, LT	351	703	11	MEDIAN
	163+50	-	175+00	STH 42, EB	539	715	15	
	163+50	-	175+00	STH 42, WB	1,530	2,700	45	
	175+00	-	185+00	STH 42, EB	1,401	2,590	40	
	175+00	-	185+00	STH 42, WB	1,400	2,430	38	
	183+63	-	184+92	STH 42, EB, LT	950	1,890	28	MEDIAN
	185+00	-	188+97	STH 42, EB	239	344	6	
	185+00	-	189+01	STH 42, WB	545	966	15	
	190+42	-	194+45	STH 42 (MEMORIAL DR), WB	537	967	15	
	190+44	-	194+90	STH 42 (MEMORIAL DR), EB	768	1,500	23	INCLUDES PARKING LOT
	194+83	-	196+41	STH 42 (MEMORIAL DR), EB, LT	500	995	15	TURN LANE/MEDIAN
	9+10	-	9+75	LINCOLN BLVD, SB (SL)	109	181	3	
	10+49	-	10+85	LINCOLN BLVD, SB (SL)	71	137	2	
	9+10	-	9+75	LINCOLN BLVD, NB (NL)	63	111	2	
	10+49	-	10+85	LINCOLN BLVD, NB (NL)	70	140	2	
	9+35	-	9+75	6TH ST	74	90	2	
	10+49	-	11+00	6TH ST	72	135	2	
	10+25	-	10+60	5TH ST	74	145	2	
	10+75	-	13+59	MARITIME DR, NB (NMI)	200	290	5	INCLUDES MEDIAN
	12+50	-	14+15	MARITIME DR, NB (NME)	401	640	10	INCLUDES MEDIAN
	10+75	-	13+33	MARITIME DR, SB (SMI)	226	385	6	
	0+00	-	3+77	MARITIME RAB (RCC)	373	320	7	
	UNDISTRIBUTED			EBS BACKFILL	-	3,200	32	
	UNDISTRIBUTED			DUST CONTROL	-	-	98	
	PROJECT TOTALS				13,200	26,300	500	
PROJECT 4570-12-72								
	20+00	-	20+69	BAYSHORE DR, NB	105	168	3	
	20+00	-	20+69	BAYSHORE DR, SB	95	132	2	
	PROJECT TOTALS				200	300	5	
	TOTALS				22,430	43,870	850	

* QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

CONCRETE PAVEMENT

ID	CATEGORY	STATION	TO	STATION	LOCATION	320.0155 CONCRETE BASE 9-INCH SY	405.0100 * COLORING CONCRETE WISDOT RED CY	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0085 CONCRETE PAVEMENT 8.5-INCH SY	415.0095 CONCRETE PAVEMENT 9.5-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	415.1080 CONCRETE PAVEMENT HES 8-INCH SY	415.1085 CONCRETE PAVEMENT HES 8.5-INCH SY	415.4100 JOINT FILLING SY	416.0512 TRUCK APRON 12-INCH SY	416.0610 * DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	REMARKS
PROJECT 1500-37-74																		
	0010																	
		131+75	-	133+75	USH 10, EB	-	-	-	556	-	-	-	-	582	-	-	-	
		131+75	-	134+75	USH 10, WB	-	-	-	834	-	-	-	-	899	-	-	-	
		132+43	-	135+33	USH 10, EB	-	-	-	388	-	-	-	-	388	-	-	-	TURN LANE/MEDIAN
		133+75	-	136+50	USH 10, EB	-	-	-	763	-	-	-	-	808	-	-	-	
		134+75	-	136+50	USH 10, WB	-	-	-	487	-	-	-	-	514	-	-	-	
		136+50	-	141+50	USH 10, EB	-	-	-	1,389	-	-	-	-	1,487	-	-	-	
		136+50	-	141+50	USH 10, WB	-	-	-	1,387	-	-	-	-	1,484	-	-	-	
		138+19	-	141+50	USH 10, EB	-	-	-	508	-	-	-	-	508	-	-	-	TURN LANE/MEDIAN
		141+50	-	145+25	USH 10, EB	-	-	-	1,041	-	-	-	-	1,105	-	-	-	
		141+50	-	147+69	USH 10, WB	-	-	-	1,108	-	-	-	-	1,108	-	-	-	TURN LANE/MEDIAN
		141+50	-	148+35	USH 10, WB	-	-	-	1,903	-	-	-	-	2,025	-	-	-	
		145+25	-	148+35	USH 10, EB	-	-	-	861	-	-	-	-	912	-	-	-	
		146+40	-	148+35	USH 10, EB	-	-	-	247	-	-	-	-	247	-	-	-	TURN LANE/MEDIAN
		148+35	-	150+11	USH 10, WB	-	-	-	221	-	-	-	-	221	-	-	-	TURN LANE/MEDIAN
		148+35	-	152+25	USH 10, EB	-	-	-	1,083	-	-	-	-	1,143	-	-	-	
		148+35	-	152+25	USH 10, WB	-	-	-	1,083	-	-	-	-	1,138	-	-	-	
		149+03	-	152+25	USH 10, EB	-	-	-	441	-	-	-	-	445	-	-	-	TURN LANE/MEDIAN
		9+35	-	9+75	13TH ST	-	-	141	-	-	-	-	-	165	-	-	16	
		10+25	-	12+11	MENASHA AVE	-	-	940	-	-	-	-	-	1,029	-	-	29	
		8+15	-	9+75	12TH ST	-	-	487	-	-	-	-	-	542	-	-	16	
		10+49	-	10+85	12TH ST	-	-	135	-	-	-	-	-	157	-	-	16	
		8+85	-	9+86	MENASHA AVE	-	-	432	-	-	-	-	-	480	-	-	22	
		9+35	-	9+75	11TH ST	-	-	170	-	-	-	-	-	192	-	-	20	
		10+49	-	11+27	11TH ST	-	-	316	-	-	-	-	-	346	-	-	24	
		9+35	-	9+75	10TH ST	-	-	165	-	-	-	-	-	189	-	-	18	
		9+00	-	9+75	9TH ST	-	-	250	-	-	-	-	-	290	-	-	16	
		10+49	-	12+70	9TH ST	-	-	250	-	-	-	-	-	354	-	-	16	
		11+25	-	12+70	10TH ST	-	-	404	-	-	-	-	-	508	-	-	17	
		8+50	-	9+75	8TH ST	-	-	506	-	-	-	-	-	567	-	-	23	
		10+50	-	12+90	8TH ST	-	-	508	-	-	-	-	-	564	-	-	26	
					11TH ST INTERSECTION	-	-	-	-	-	1	-	-	-	-	-	-	
					8TH ST INTERSECTION	-	-	-	-	-	1	-	-	-	-	-	-	
					UNDISTRIBUTED	-	-	796	-	-	-	100	100	863	-	-	-	
	CATEGORY 0010 TOTALS					0	0	5,500	14,300	0	2	100	100	21,260	0	0	259	

* QUANTITIES SHOWN ELSEWHERE

NOTE: QUANTITIES FOR JOINT FILLING IN CURB & GUTTER AT TURN LANE / MEDIAN INCLUDED IN MAINLINE QUANTITY
COLORED CROSSWALKS ARE ASSUMED TO BE SLIPPED PAVED THOUGH ON WALDO BLVD AT 8TH, 9TH, AND 11TH STREETS, THEN CUT OUT FOR PLACEMENT OF COLORED CONCRETE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

CONCRETE PAVEMENT (CONTINUED)

ID	CATEGORY	STATION	TO	STATION	LOCATION	320.0155 CONCRETE BASE 9-INCH SY	405.0100 * COLORING CONCRETE WISDOT RED CY	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0085 CONCRETE PAVEMENT 8.5-INCH SY	415.0095 CONCRETE PAVEMENT 9.5-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	415.1080 CONCRETE PAVEMENT HES 8-INCH SY	415.1085 CONCRETE PAVEMENT HES 8.5-INCH SY	415.4100 JOINT FILLING SY	416.0512 TRUCK APRON 12-INCH SY	416.0610 * DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	REMARKS
PROJECT 1500-37-74																		
	0020																	
					11TH ST INTERSECTION	-	43	-	100	-	-	-	-	-	-	-	96	COLORED CROSSWALKS
					9TH ST INTERSECTION	-	39	-	100	-	-	-	-	-	-	-	96	COLORED CROSSWALKS
					8TH ST INTERSECTION	-	45	-	100	-	-	-	-	-	-	-	96	COLORED CROSSWALKS
		CATEGORY 0020 TOTALS				0	127	0	300	0	0	0	0	0	0	0	288	
		PROJECT TOTALS				0	127	5,500	14,600	0	2	100	100	21,260	0	0	547	
PROJECT 4570-12-71																		
	0010																	
		152+25	-	155+90	STH 42, EB	-	-	-	1,016	-	-	-	-	1,084	-	-	-	
		152+25	-	155+90	STH 42, WB	-	-	-	1,014	-	-	-	-	1,082	-	-	-	
		155+03	-	156+81	STH 42, EB	-	-	-	347	-	-	-	-	347	-	-	-	MEDIAN
		155+90	-	159+90	STH 42, EB	-	-	-	1,111	-	-	-	-	1,180	-	-	-	
		155+90	-	159+90	STH 42, WB	-	-	-	1,111	-	-	-	-	1,180	-	-	-	
		159+26	-	160+45	STH 42, EB	-	-	-	193	-	-	-	-	193	-	-	-	MEDIAN
		159+90	-	163+50	STH 42, EB	-	-	-	1,000	-	-	-	-	1,070	-	-	-	
		159+90	-	163+50	STH 42, WB	-	-	-	1,000	-	-	-	-	1,066	-	-	-	
		162+93	-	164+17	STH 42, EB	-	-	-	201	-	-	-	-	201	-	-	-	MEDIAN
		163+50	-	175+00	STH 42, EB	-	-	-	3,194	-	-	-	-	3,446	-	-	-	
		163+50	-	175+00	STH 42, WB	-	-	-	3,194	-	-	-	-	3,441	-	-	-	
		175+00	-	185+00	STH 42, EB	-	-	-	2,912	-	-	-	-	3,113	-	-	-	
		175+00	-	185+00	STH 42, WB	-	-	-	2,778	-	-	-	-	2,976	-	-	-	
		183+63	-	184+92	STH 42, EB	-	-	-	194	-	-	-	-	194	-	-	-	MEDIAN
		185+00	-	188+97	STH 42, EB	-	-	-	1,089	-	-	-	-	1,225	-	-	-	
		185+00	-	189+01	STH 42, WB	-	-	-	1,064	-	-	-	-	1,196	-	-		
		190+42	-	194+45	STH 42, WB	27	-	-	1,233	-	-	-	-	1,393	-	-	22	
		190+44	-	194+90	STH 42, EB	27	-	-	1,371	-	-	-	-	1,543	-	-	23	
		194+83	-	196+41	STH 42, EB	246	-	-	-	-	-	-	-	-	-	110	-	TURN LANE/MEDIAN
		9+10	-	9+75	LINCOLN BLVD, SB	-	-	168	-	-	-	-	-	189	-	-	16	
		10+49	-	10+85	LINCOLN BLVD, SB	-	-	100	-	-	-	-	-	108	-	-	16	
		9+10	-	9+75	LINCOLN BLVD, NB	-	-	167	-	-	-	-	-	188	-	-	16	
		10+49	-	10+85	LINCOLN BLVD, NB	-	-	100	-	-	-	-	-	108	-	-	16	
		9+35	-	9+75	6TH ST	-	-	146	-	-	-	-	-	170	-	-	16	
		10+49	-	11+00	6TH ST	-	-	177	-	-	-	-	-	206	-	-	16	
		10+25	-	10+60	5TH ST	-	-	155	-	-	-	-	-	177	-	-	20	
		10+75	-	13+59	MARITIME DR, NB (NMI)	-	-	-	795	-	-	-	-	884	-	-	24	INCLUDES MEDIAN
		12+50	-	14+15	MARITIME DR, NB (NME)	-	-	-	346	-	-	-	-	458	-	-	-	
		10+75	-	13+33	MARITIME DR, SB (SMI)	-	-	-	537	-	-	-	-	656	-	-	16	
		00+00	-	03+77	MARITIME RAB (RCC)	-	137	-	-	1,430	-	-	-	1,483	410	-	-	RAB CIRCLE & TRUCK APRON
					UNDISTRIBUTED	-	-	112	-	-	-	100	100	128	-	-	-	
		CATEGORY 0010 TOTALS				300	137	1,125	25,700	1,430	0	100	100	30,685	410	110	201	

* QUANTITIES SHOWN ELSEWHERE

NOTE: QUANTITIES FOR JOINT FILLING IN CURB & GUTTER AT TURN LANE / MEDIAN INCLUDED IN MAINLINE QUANTITY
COLORED CROSSWALKS ARE ASSUMED TO BE SLIPPED PAVED THOUGH ON WALDO BLVD AT 8TH, 9TH, AND 11TH STREETS, THEN CUT OUT FOR PLACEMENT OF COLORED CONCRETE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

CONCRETE PAVEMENT (CONTINUED)

ID	CATEGORY	STATION	TO	STATION	LOCATION	320.0155 CONCRETE BASE 9-INCH SY	405.0100 * COLORING CONCRETE WISDOT RED CY	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0085 CONCRETE PAVEMENT 8.5-INCH SY	415.0095 CONCRETE PAVEMENT 9.5-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	415.1080 CONCRETE PAVEMENT HES 8-INCH SY	415.1085 CONCRETE PAVEMENT HES 8.5-INCH SY	415.4100 JOINT FILLING SY	416.0512 TRUCK APRON 12-INCH SY	416.0610 * DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	REMARKS
PROJECT 4570-12-71																		
	0020																	
					MARITIME INTERSECTION	-	44	-	-	-	-	-	-	-	-	-	-	COLORED CROSSWALKS
	CATEGORY 0020 TOTALS					0	44	0	0	0	0	0	0	0	0	0	0	
	PROJECT TOTALS					300	181	1,125	25,700	1,430	0	100	100	30,685	410	110	201	
PROJECT 4570-12-72																		
	0010																	
		20+00	-	20+69	BAYSHORE DR, NB	-	5	-	188	-	-	-	-	227	-	-	-	
		20+00	-	20+69	BAYSHORE DR, SB	-	5	-	147	-	-	-	-	183	-	-	-	
	PROJECT TOTALS					0	10	0	335	0	0	0	0	410	0	0	0	
	TOTALS					300	318	6,625	40,635	1,430	2	200	200	52,355	410	110	748	

* QUANTITIES SHOWN ELSEWHERE

NOTE: QUANTITIES FOR JOINT FILLING IN CURB & GUTTER AT TURN LANE / MEDIAN INCLUDED IN MAINLINE QUANTITY
COLORED CROSSWALKS ARE ASSUMED TO BE SLIPPED PAVED THOUGH ON WALDO BLVD AT 8TH, 9TH, AND 11TH STREETS, THEN CUT OUT FOR PLACEMENT OF COLORED CONCRETE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

CONCRETE COLLARS FOR PIPE

ID	STRUCT.	STA.	OFFSET*	LOCATION	520.8000 EA	REMARKS
PROJECT 1500-37-74						
	MH-101.1	131+43	5.1' RT	USH 10 EB	1	CONNECT EXISTING 21" STORM SEWER TO MH-101.1 WITH CONCRETE COLLAR
	MH-101.2	131+35	2.8' LT	USH 10 EB	1	CONNECT EXISTING 24" STORM SEWER TO MH-101.2 WITH CONCRETE COLLAR
	MH-105.0	10+90	13.5' RT	MENASHA AVE.	1	CONNECT EXISTING 42" STORM SEWER TO MH-105.0 WITH CONCRETE COLLAR
	MH-108.1	136+42	80' RT	USH 10 EB	1	CONNECT EXISTING 24" STORM SEWER TO MH-108.1 WITH CONCRETE COLLAR
	MH-114.3	10+90	12.3' RT	N 11TH ST	1	CONNECT EXISTING 12" STORM SEWER TO MH-114.3 WITH CONCRETE COLLAR
	MH-114.7	09+47	10.4' RT	N 11TH ST	1	CONNECT EXISITING 36" STORM SEWER TO MH-114.7 WITH CONCRETE COLLAR
	CB-120.6	09+47	16.5' RT	N. 10TH STREET	1	CONNECT EXISTING 12" STORMLATERAL TO CB-120.6 WITH CONCRETE COLLAR
	MH-122.2	12+61	8' RT	N. 9TH STREET	2	CONNECT EXISTING 48" AND 24" STORM SEWER TO MH-122.2 WITH CONCRETE COLLAR
	CB-126.1	12+61	20.5' RT	N 8TH ST	1	CONNECT EXISTING 12" STORM SEWER TO CB-126.1 WITH CONCRETE COLLAR
	MH-126.3	12+76	17.2' RT	N 8TH ST	1	CONNECT EXISTING 15" STORM SEWER TO MH-126.3 WITH CONCRETE COLLAR
		PROJECT TOTAL			11	
PROJECT 4570-12-71						
	CB-128.4	153+70	25.5' RT	STH 42 NB	1	CONNECT EXISTING 12" STORM SEWER TO CB-128.4 WITH CONCRETE COLLAR
	MH-132.2	156+03	79.2' RT	STH 42 NB	1	CONNECT EXISTING 60" STORM SEWER TO MH-132.2 WITH CONCRETE COLLAR
	MH-134.2	10+72	8.8' LT	N 6TH ST	1	CONNECT EXISTING 12" STORM SEWER TO MH-134.2 WITH CONCRETE COLLAR
	CB-134.8	9+49	14.5' LT	N 6TH ST	1	CONNECT EXISTING 6" STORM SEWER TO CB-134.8 WITH CONCRETE COLLAR
	CB-164.5	184+87	25.5' RT	STH 42 NB	1	CONNECT EXISTING 4" STORM SEWER TO CB-164.5 WITH CONCRETE COLLAR
		PROJECT TOTAL			5	
				TOTAL	16	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

APRON ENDWALLS

ID	STRUCTURE	STA.	OFFSET*	LOCATION	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EA	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EA	SPV.0060.04 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 72x113-INCH EA	611.9800.S PIPE GRATES EA	650.4000* CONSTRUCTION STAKING STORM SEWER EA	INVERT ELEV.
PROJECT 4570-12-71										
	OF-3	174+70	73.2' RT	EB	---	---	1	1	1	587.10
	OF-3A	174+92	69.3' RT	EB	---	1	---	---	1	582.76
	EW-160.5	179+62	48.4' RT	EB	---	1	---	---	1	581.26
	EW-164.10	184+89	46.1' RT	WB	1	---	---	---	1	587.66
	EW-174.13	13+17	75.1' RT	NB MARITIME DR. OUTSIDE	---	1	---	---	1	583.96
	EW-180.6	192+40	82.9' RT	EB	---	1	---	---	1	583.39
			PROJECT TOTAL		1	4	1	1	6	
			TOTAL		1	4	1	1	6	

*- ADDITIONAL QUANTITIES FOR BID ITEM 650.4000 ARE SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

ASPHALTIC PAVEMENT

ID	STATION	TO	STATION	LOCATION	455.0605 * TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	COMMENT
PROJECT 1500-37-74										
	132+78			USH 10, WB	-	-	-	-	2	PE
	138+73			USH 10, WB	-	-	-	-	1	PE
	143+25			USH 10, EB	-	-	-	-	2	PE
	149+83			USH 10, WB	-	-	-	-	2	
9+35	-		9+40	13TH ST	1	-	2	-	-	
8+15	-		8+20	12TH ST	1	-	2	-	-	
10+80	-		10+85	12TH ST	1	-	2	-	-	
8+85	-		8+90	MENASHA AVE	1	-	2	-	-	
12+65	-		12+70	9TH ST	1	-	2	-	-	
9+00	-		9+05	9TH ST	1	-	2	-	-	
8+50	-		8+55	8TH ST	1	-	2	-	-	
	8+66			8TH ST	-	-	-	-	1	PE
11+50	-		12+90	8TH ST	29	100	71	-	-	
PROJECT TOTALS					36	100	85	0	8	
PROJECT 4570-12-71										
	158+45			USH 10, WB	-	-	-	-	1	PE
	164+03			USH 10, WB	-	-	-	-	1	PE
	164+80			USH 10, EB	-	-	-	-	1	PE
	165+70			USH 10, WB	-	-	-	-	1	PE
	165+70			USH 10, EB	-	-	-	-	1	PE
	166+79			USH 10, WB	-	-	-	-	1	PE
	167+31			USH 10, EB	-	-	-	-	2	PE
	168+83			USH 10, WB	-	-	-	-	2	PE
	169+20			USH 10, EB	-	-	-	-	2	PE
	169+56			USH 10, EB	-	-	-	-	2	PE
	166+79			USH 10, WB	-	-	-	-	1	PE
	167+31			USH 10, EB	-	-	-	-	2	PE
	168+83			USH 10, WB	-	-	-	-	2	PE
	169+20			USH 10, EB	-	-	-	-	2	PE
	169+56			USH 10, EB	-	-	-	-	2	PE
	184+31			USH 10, WB	-	-	-	-	9	PE
193+15	-		194+90	STH 42, EB	-	10	10	-	-	PARK & RIDE LOT
194+83	-		194+90	STH 42, EB	1	-	3	-	-	
194+38	-		194+45	STH 42, WB	1	-	3	-	-	
194+38	-		196+41	STH 42, WB	13	-	31	-	-	MEDIAN / LT TURN LANE
9+10	-		9+15	LINCOLN BLVD, SB	1	-	2	-	-	
10+80	-		10+85	LINCOLN BLVD, SB	1	-	2	-	-	
9+10	-		9+15	LINCOLN BLVD, NB	1	-	2	-	-	
10+80	-		10+85	LINCOLN BLVD, NB	1	-	2	-	-	
13+15	-		16+30	NB MARITIME DRIVE	-	-	-	25	-	MARITIME TRAIL
PROJECT TOTALS					19	10	55	25	32	
TOTALS					55	110	140	25	40	

* QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

CONCRETE CURB AND GUTTER

ID	STATION	TO	STATION	LOCATION	601.0405 18-INCH TYPE A LF	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	601.0413 6-INCH SLOPED 30-INCH TYPE G LF	601.0580 4-INCH SLOPED 36-INCH TYPE R LF	SPV.0090.01 INTEGRAL 18-INCH TYPE D LF	416.0610 * DRILLED TIE BARS EACH
PROJECT 1500-37-74											
	131+75	-	141+50	USH 10, EB	535	-	-	-	-	1,140	-
	131+75	-	141+50	USH 10, WB	75	-	-	-	-	1,565	-
	141+50	-	152+25	USH 10, EB	430	-	-	-	-	1,135	-
	141+50	-	152+25	USH 10, WB	650	-	-	-	-	935	-
	9+35	-	9+75	13TH ST	-	110	-	-	-	-	-
	8+85	-	9+86	MENASHA AVE	-	220	-	-	-	-	-
	10+25	-	12+11	MENASHA AVE	-	400	-	-	-	-	-
	8+15	-	9+75	12TH ST	-	250	-	-	-	-	-
	10+49	-	10+85	12TH ST	-	100	-	-	-	-	-
	9+35	-	9+75	11TH ST	-	100	-	-	-	-	-
	10+49	-	11+27	11TH ST	-	135	-	-	-	-	-
	9+35	-	9+75	10TH ST	-	110	-	-	-	-	-
	9+00	-	9+75	9TH ST	-	180	-	-	-	-	-
	10+49	-	12+70	9TH ST	-	470	-	-	-	-	-
	8+50	-	9+75	8TH ST	-	275	-	-	-	-	-
	10+50	-	12+90	8TH ST	-	180	75	-	-	-	8
	PROJECT TOTALS				1,690	2,530	75	0	0	4,775	8
PROJECT 4570-12-71											
	152+25	-	163+50	STH 42, EB	60	-	-	-	-	1,710	-
	152+25	-	163+50	STH 42, WB	145	-	-	-	-	1,665	-
	163+50	-	188+97	STH 42, EB	190	175	-	-	-	4,600	-
	163+50	-	189+01	STH 42, WB	195	115	-	-	-	4,630	-
	190+42	-	194+45	STH 42, WB	390	370	-	-	-		-
	190+44	-	194+90	STH 42, EB	420	435	185	-	-	-	-
	195+11	-	196+49	STH 42, WB	-	-	-	220	-	-	-
	9+10	-	9+75	LINCOLN BLVD, SB	-	145	-	-	-	-	-
	10+49	-	10+85	LINCOLN BLVD, SB	-	90	-	-	-	-	-
	9+10	-	9+75	LINCOLN BLVD, NB	-	140	-	-	-	-	-
	10+49	-	10+85	LINCOLN BLVD, NB	-	90	-	-	-	-	-
	9+35	-	9+75	6TH ST	-	110	-	-	-	-	-
	10+49	-	11+00	6TH ST	-	130	-	-	-	-	-
	10+25	-	10+60	5TH ST	-	95	-	-	-	-	-
	11+06	-	13+52	MARITIME DR, NB (NMI), LT	-	245	-	-	-	-	-

* QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

CONCRETE CURB AND GUTTER (CONTINUED)

ID	STATION	TO	STATION	LOCATION	601.0405 18-INCH TYPE A LF	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	601.0413 6-INCH SLOPED 30-INCH TYPE G LF	601.0580 4-INCH SLOPED 36-INCH TYPE R LF	SPV.0090.01 INTEGRAL 18-INCH TYPE D LF	416.0610 * DRILLED TIE BARS EACH
PROJECT 4570-12-71											
	12+51	-	14+09	MARITIME DR, NB (NMI), RT	-	155	-	-	-	-	-
	12+56	-	14+08	MARITIME DR, NB (NME), LT	-	150	-	-	-	-	-
	10+75	-	14+27	MARITIME DR, SE RAB QUAD, RT	-	355	-	-	-	-	-
	11+07	-	13+24	MARITIME DR, SB (SMI), RT	-	220	-	-	-	-	-
	13+94	-	16+87	MARITIME DR, SW RAB QUAD, RT	-	290	-	-	-	-	-
	0+00	-	3+77	MARITIME RAB (RCC)	285	120	-	-	365	-	-
	PROJECT TOTALS				1,685	3,430	185	220	365	12,605	0
PROJECT 4570-12-72											
	20+00	-	20+69	BAYSHORE DR, NB	-	200	-	-	-	-	-
	20+00	-	20+69	BAYSHORE DR, SB	-	160	-	-	-	-	-
	PROJECT TOTALS				0	360	0	0	0	0	0
	TOTALS				3,375	6,320	260	220	365	17,380	8

* QUANTITIES SHOWN ELSEWHERE

CONCRETE CURB PEDESTRIAN

ID	STATION	LOCATION	601.0600 LF
PROJECT 1500-37-74			
	145+52	USH 10, EB	23
	151+15	USH 10, EB	30
	151+85	USH 10, EB	28
	PROJECT TOTAL		81
PROJECT 4570-12-71			
	159+50	STH 42, WB	19
	160+25	STH 42, WB	23
	163+85	STH 42, WB	19
	188+67	STH 42, EB	21
	188+77	STH 42, EB	27
	190+95	STH 42, EB	59
	191+05	STH 42, EB	55
	13+28	MARITIME DR, NB (NMI), LT	43
	13+38	MARITIME DR, NB (NMI), LT	45
	13+60	MARITIME DR, NB (NME), LT	34
	13+60	MARITIME DR, NB (NME), LT	34
	PROJECT TOTAL		379
PROJECT 4570-12-72			
	20+21	BAYSHORE DR, NB, LT	17
	20+31	BAYSHORE DR, NB, LT	13
	PROJECT TOTAL		30
	TOTAL		490

CONCRETE MASONRY ENDWALLS

ID	STATION	LOCATION	504.0900 CY	REMARKS
PROJECT 4570-12-71				
	174+80	STH 42, RT	3	FOR CUT OFF WALL
	TOTAL		3	

CONCRETE CURB TYPE A

ID	STATION	LOCATION	601.0105 LF	REMARKS
PROJECT 4570-12-71				
	153+80	STH 42, EB	8	PE
	165+63	STH 42, EB	12	PE
	TOTAL		20	

CONCRETE STEPS

ID	STATION	LOCATION	602.1500 SF
PROJECT 1500-37-74			
	148+97	STH 10 / STH 42, RT	15
	151+95	STH 10 / STH 42, RT	15
	TOTAL		30

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

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CONCRETE SIDEWALK AND DRIVEWAY

ID	CATEGORY	STATION	TO	STATION	LOCATION	405.0100 * COLORING CONCRETE WISDOT RED CY	416.0160 DRIVEWAY 6-INCH SY	602.0405 SIDEWALK 4-INCH SF	602.0410 SIDEWALK 5-INCH SF	602.0415 SIDEWALK 6-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD (YELLOW) SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL (YELLOW) SF	COMMENT
PROJECT 1500-37-74													
	0010												
		131+00	-	133+75	USH 10, EB	-	45	795	-	229	30	-	INCLUDES MEDIAN
		131+00	-	134+75	USH 10, WB	-	112	1,743	-	227	30	-	
		133+75	-	136+50	USH 10, EB	-	15	1,176	-	234	40	-	INCLUDES MEDIAN
		134+75	-	136+50	USH 10, WB	-	-	664	-	146	20	-	
		136+50	-	141+50	USH 10, EB	-	94	1,961	-	160	20	-	
		136+50	-	141+50	USH 10, WB	-	118	2,035	-	155	20	-	
		139+48	-	141+11	USH 10, EB	-	-	805	-	-	-	-	MEDIAN
		141+50	-	145+25	USH 10, EB	-	55	1,470	-	209	20	-	
		141+50	-	148+35	USH 10, WB	-	-	3,147	-	208	30	-	
		142+14	-	144+88	USH 10, EB	-	-	1,358	-	-	-	-	MEDIAN
		145+25	-	148+35	USH 10, EB	-	-	1,346	-	180	20	-	
		145+66	-	147+60	USH 10, EB	-	-	1,323	-	-	-	-	MEDIAN
		148+35	-	152+25	USH 10, EB	-	25	1,301	-	160	40	-	
		148+35	-	152+25	USH 10, WB	-	31	1,245	-	168	30	-	
		148+78	-	151+05	USH 10, EB	-	-	1,979	-	-	-	-	MEDIAN
		9+35	-	9+55	13TH ST	-	-	214	-	-	-	-	
		10+49	-	12+11	MENASHA AVE (NMN)	-	-	1,675	-	-	-	-	
		8+15	-	9+56	12TH ST	-	80	907	-	-	-	-	
		10+68	-	10+85	12TH ST	-	-	169	-	-	-	-	
		8+85	-	9+84	MENASHA AVE (SMN)	-	62	764	-	219	20	-	
		9+35	-	9+58	11TH ST	-	-	215	-	-	-	-	
		10+68	-	11+27	11TH ST	-	-	310	-	-	-	-	
		9+35	-	9+57	10TH ST	-	-	207	-	-	-	-	
		9+00	-	9+56	9TH ST	-	-	549	-	-	-	-	
		10+70	-	12+70	9TH ST	-	46	545	-	-	-	-	
		8+50	-	9+64	8TH ST	-	58	1,032	-	-	-	-	
		10+70	-	12+90	8TH ST	-	13	830	-	-	-	-	
					UNDISTRIBUTED	-	201	-	-	-	-	-	MATCH JOINTS
		PROJECT TOTALS				0	955	29,765	0	2,295	320	0	
PROJECT 4570-12-71													
	0010												
		152+25	-	155+90	STH 42, EB	-	127	1,286	-	134	20	-	
		152+25	-	155+90	STH 42, WB	-	70	1,493	-	132	20	-	
		155+90	-	159+90	STH 42, EB	-	73	1,454	-	263	30	-	
		155+90	-	159+90	STH 42, WB	-	13	1,697	-	270	30	-	
		159+90	-	163+50	STH 42, EB	-	85	1,532	-	159	10	-	
		159+90	-	163+50	STH 42, WB	-	36	1,530	-	236	20	-	
		163+50	-	175+00	STH 42, EB	-	147	5,212	-	120	40	-	INCLUDES MEDIAN
		163+50	-	175+00	STH 42, WB	-	94	5,296	-	96	20	-	
		175+00	-	185+00	STH 42, EB	-	-	4,707	-	60	-	54	
		175+00	-	184+46	STH 42, WB	-	33	4,490	-	-	-	-	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

CONCRETE SIDEWALK AND DRIVEWAY (CONTINUED)

ID	CATEGORY	STATION	TO	STATION	LOCATION	405.0100 * COLORING CONCRETE WISDOT RED CY	416.0160 DRIVEWAY 6-INCH SY	602.0405 SIDEWALK 4-INCH SF	602.0410 SIDEWALK 5-INCH SF	602.0415 SIDEWALK 6-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD (YELLOW) SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL (YELLOW) SF	COMMENT
PROJECT 4570-12-71													
	0010												
		185+00	-	188+97	STH 42, EB	-	-	2,302	-	302	60	-	INCLUDES MEDIAN
		185+00	-	189+01	STH 42, WB	-	-	-	1,051	60	20	-	
		190+42	-	191+75	STH 42 (MEMORIAL DR), WB	-	-	305	184	60	20	-	
		190+42	-	191+75	STH 42 (MEMORIAL DR), WB RT	-	-	440	-	150	40	-	MEDIAN
		190+44	-	191+63	STH 42 (MEMORIAL DR), EB	-	-	260	-	70	20	-	
		9+10	-	9+54	LINCOLN BLVD, SB (SL)	-	-	219	-	-	-	-	
		10+70	-	10+85	LINCOLN BLVD, SB (SL)	-	-	73	-	-	-	-	
		9+10	-	9+56	LINCOLN BLVD, NB (NL)	-	-	299	-	-	-	-	
		10+69	-	10+85	LINCOLN BLVD, NB (NL)	-	-	76	-	-	-	-	
		9+35	-	9+51	6TH ST	-	72	68	-	-	-	-	
		10+72	-	11+00	6TH ST	-	-	182	-	-	-	-	
		10+43	-	10+60	5TH ST	-	-	76	-	-	-	-	
		10+75	-	11+82	MARITIME DR, NB (NMI), RT	-	-	324	-	60	-	-	
		13+22	-	13+38	MARITIME DR, NB (NMI), LT	-	-	296	906	144	40	-	ISLAND
		13+60	-	14+10	MARITIME DR, NB (NME), LT & RT	-	-	208	1171	211	60	-	INCLUDES ISLAND
		10+90	-	13+33	MARITIME DR, SB (SMI), LT	-	-	560	1128	108	20	-	
		00+00	-	3+77	MARITIME RAB (RCC), RT	-	-	-	460	-	-	-	
					UNDISTRIBUTED	-	75	-	-	-	-	-	MATCH JOINTS
					CATEGORY 0010 TOTALS	0	825	34,385	4,900	2,635	470	54	
PROJECT 4570-12-71													
	0020												
		13+60	-	14+10	MARITIME INTERSECTION	40	-	3240	-	-	-	-	COLORED MEDIAN
					CATEGORY 0020 TOTALS	40	0	3240	0	0	0	0	
PROJECT 4570-12-71													
	0040												
		185+00	-	189+01	STH 42, WB	-	-	1,455	-	-	-	-	
					CATEGORY 0040 TOTALS	0	0	1455	0	0	0	0	
					PROJECT TOTALS	40	825	39,080	4,900	2,635	470	54	
PROJECT 4570-12-72													
	0010												
		20+00	-	20+69	BAYSHORE DR, NB	6	-	470	1,150	60	40	-	
		20+00	-	20+69	BAYSHORE DR, SB	-	-	-	950	60	40	-	
					PROJECT TOTALS	6	0	470	2,100	120	80	0	
					TOTALS	46	1,780	69,315	7,000	5,050	870	54	

* QUANTITIES SHOWN ELSEWHERE

NOTE: CURB RAMPS TO BE PAID AS 6-INCH SIDEWALK

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

RIPRAP & GEOTEXTILE FABRIC

ID	STATION			LOCATION	606.0200 RIPRAP MEDIUM CY	606.0300 RIPRAP HEAVY CY	645.0120 GEOTEXTILE FABRIC TYPE HR SY
PROJECT 4570-12-71							
	174+80			STH 42, RT	-	560	650
	179+62			STH 42, RT	2.5	-	5
	192+40			STH 42, EB	2.5	-	5
	TOTALS				5	560	660

SALVAGING RAIL AND GUARDRAIL END TREATMENTS

ID	STATION	TO	STATION	LOCATION	614.0920 RAIL LF	614.0925 END TREATMENT EACH
PROJECT 1500-37-74						
	9+37	-	9+60	N. 11TH ST, LT	25	-
	PROJECT TOTALS				25	
PROJECT 4570-12-71						
	191+79	-	194+82	STH 42, RT	305	2
	PROJECT TOTALS				305	2
	TOTALS				330	2

DUST CONTROL SURFACE TREATMENT

ID	LOCATION	623.0200 SY
1500-37-74		
	UNDISTRIBUTED	25,000
	PROJECT TOTAL	25,000
4570-12-71		
	UNDISTRIBUTED	40,000
	PROJECT TOTAL	40,000
	TOTAL	65,000

CONCRETE CORRUGATED MEDIAN

ID	STATION	TO	STATION	LOCATION	620.0100 SF
PROJECT 1500-37-74					
	139+49	-	141+23	USH 10, EB	865
	141+89	-	143+94	USH 10, WB	1,020
	145+61	-	146+41	USH 10, WB	395
	TOTAL				2,280

FENCE SAFETY

ID	LOCATION	616.0700.S LF
1500-37-74		
	UNDISTRIBUTED	500
	PROJECT TOTAL	500
1500-37-75		
	UNDISTRIBUTED	1,000
	PROJECT TOTAL	1,000
4570-12-71		
	UNDISTRIBUTED	500
	PROJECT TOTAL	500
4570-12-72		
	UNDISTRIBUTED	500
	PROJECT TOTAL	500
	TOTAL	2,500

CONCRETE MEDIAN SLOPE NOSE

ID	STATION	LOCATION	620.0300 SF	COMMENTS
PROJECT 1500-37-74				
	134+30	USH 10, EB	52	TYPE 1
	135+05	USH 10, EB	39	TYPE 1
	141+10	USH 10, EB	12	TYPE 1
	142+13	USH 10, EB	13	TYPE 1
	144+90	USH 10, EB	25	TYPE 1
	145+65	USH 10, EB	13	TYPE 1
	147+90	USH 10, EB	36	TYPE 1
	148+75	USH 10, EB	36	TYPE 1
	151+05	USH 10, EB	44	TYPE 1
	151+85	USH 10, EB	45	TYPE 1
	PROJECT TOTAL		315	
PROJECT 4570-12-71				
	155+35	STH 42, EB	40	TYPE 1
	156+50	STH 42, EB	40	TYPE 1
	159+55	STH 42, EB	40	TYPE 1
	160+15	STH 42, EB	41	TYPE 1
	163+25	STH 42, EB	40	TYPE 1
	163+85	STH 42, EB	41	TYPE 1
	184+00	STH 42, EB	38	TYPE 1
	184+60	STH 42, EB	41	TYPE 1
	188+90	STH 42, EB	24	TYPE 2
	188+95	STH 42, WB	56	TYPE 2
	190+45	STH 42, WB	20	TYPE 2
	190+50	STH 42, EB	60	TYPE 2
	194+80	STH 42, EB	47	TYPE 1
	195+55	STH 42, EB	44	TYPE 1
	11+05	NB MARITIME DR (NMI), LT	52	TYPE 1
	12+50	NB MARITIME DR (NMI), RT	62	TYPE 1
	13+55	NB MARITIME DR (NMI), LT	25	TYPE 2
	13+30	SB MARITIME DR (SMI), RT	38	TYPE 2
	14+05	NB MARITIME DR (NME), LT	66	TYPE 2
	PROJECT TOTAL		815	
PROJECT 4570-12-72				
	20+06	BAYSHORE DR, NB, LT	47	TYPE 1
	20+06	BAYSHORE DR, SB, RT	48	TYPE 1
	20+52	BAYSHORE DR, NB, LT	35	TYPE 2
	PROJECT TOTAL		130	
	TOTAL		1,260	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

STORM SEWER PIPE

ID	FROM STRUCT.	-	TO STRUCT.	608.0312 REINF. CONC. CLASS III 12-INCH LF	608.0315 REINF. CONC. CLASS III 15-INCH LF	608.0318 REINF. CONC. CLASS III 18-INCH LF	608.0324 REINF. CONC. CLASS III 24-INCH LF	608.0330 REINF. CONC. CLASS III 30-INCH LF	608.0336 REINF. CONC. CLASS III 36-INCH LF	608.0348 REINF. CONC. CLASS III 48-INCH LF	608.0360 REINF. CONC. CLASS III 60-INCH LF	608.0366 REINF. CONC. CLASS III 66-INCH LF	608.0372 REINF. CONC. CLASS III 72-INCH LF	608.0412 REINF. CONC. CLASS IV 12-INCH LF	608.0466 REINF. CONC. CLASS IV 66-INCH LF	SPV.0090.03 PVC 6-INCH LF	SPV.0090.04 PVC 12-INCH LF	SPV.0090.02 REINF. CONC. HORIZ. ELLIP. CLASS HE-III 72X113-INCH LF	SPV.0090.07* TELEVISING SEWER LF	INLET ELEV	DISC ELEV	SLOPE FT/FT
PROJECT 1500-37-74																						
	MH-101.2	-	MH-101.1	---	---	---	11	---	---	---	---	---	---	---	---	---	---	---	---	623.11	623.00	0.0100
	MH-101.1	-	MH-101.0	---	---	---	---	---	13	---	---	---	---	---	---	---	---	---	---	621.06	620.93	0.0100
	MH-101.0	-	MH-102.0	---	---	---	---	---	188	---	---	---	---	---	---	---	---	---	188	620.93	619.05	0.0100
	MH-102.0	-	MH-104.0	---	---	---	---	---	65	---	---	---	---	---	---	---	---	---	65	619.05	618.24	0.0124
	CB-102.1	-	CB-102.2	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	622.45	622.32	0.0050
	CB-102.2	-	CB-102.3	12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	622.32	622.26	0.0050
	CB-102.3	-	MH-102.0	22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	622.26	622.15	0.0050
	CB-102.4	-	MH-102.0	16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	621.95	621.87	0.0050
	CB-102.5	-	CB-102.4	31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	622.10	621.95	0.0050
	CB-102.6	-	CB-102.5	28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	622.24	622.10	0.0050
	MH-104.0	-	MH-106.0	---	---	---	---	---	169	---	---	---	---	---	---	---	---	---	169	618.24	616.13	0.0125
	CB-104.1	-	CB-104.2	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	621.55	621.42	0.0050
	CB-104.2	-	CB-104.3	12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	621.42	621.36	0.0050
	CB-104.3	-	MH-104.0	22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	621.36	621.25	0.0051
	MH-105.0	-	MH-106.0	---	---	---	---	---	---	164	---	---	---	---	---	---	---	---	164	616.45	615.30	0.0070
	CB-105.1	-	CB-105.2	9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.94	619.89	0.0051
	CB-105.2	-	MH-105.0	38	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.89	619.70	0.0050
	CB-105.3	-	MH-105.0	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.81	619.76	0.0050
	CB-105.4	-	CB-105.3	11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.86	619.81	0.0050
	MH-106.0	-	MH-108.0	---	---	---	---	---	---	---	64	---	---	---	---	---	---	---	64	615.22	614.74	0.0075
	CB-106.1	-	CB-106.2	44	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.91	618.95	0.0219
	CB-106.2	-	CB-106.3	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	618.95	618.82	0.0050
	CB-106.3	-	CB-106.4	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	618.82	618.71	0.0051
	CB-106.4	-	MH-106.0	---	12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	618.46	618.40	0.0050
	CB-106.5	-	MH-106.0	14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.03	618.96	0.0050
	MH-108.0	-	MH-110.0	---	---	---	---	---	---	---	183	---	---	---	---	---	---	---	183	614.74	613.37	0.0075
	MH-108.1	-	MH-108.0	---	---	---	91	---	---	---	---	---	---	---	---	---	---	---	---	617.16	616.70	0.0050
	CB-108.2	-	MH-108.0	---	---	42	---	---	---	---	---	---	---	---	---	---	---	---	---	617.02	616.81	0.0050
	CB-108.3	-	CB-108.2	---	28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.16	617.02	0.0050
	CB-108.4	-	CB-108.3	---	63	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.48	617.16	0.0050
	CB-108.5	-	CB-108.4	---	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.74	617.48	0.0050
	CB-108.6	-	CB-108.5	---	40	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.94	617.74	0.0050
	CB-108.7	-	CB-108.2	---	130	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.67	617.02	0.0050
	MH-110.0	-	MH-112.0	---	---	---	---	---	---	---	278	---	---	---	---	---	---	---	278	613.37	611.30	0.0075
	CB-110.1	-	CB-110.2	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.28	617.23	0.0050
	CB-110.2	-	CB-110.4	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.23	617.10	0.0050
	CB-110.3	-	CB-110.4	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.15	617.10	0.0051
	CB-110.4	-	CB-110.6	22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.10	616.99	0.0051
	CB-110.5	-	CB-110.6	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.04	616.99	0.0050
	CB-110.6	-	MH-110.0	---	12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	616.74	616.68	0.0050
	CB-110.7	-	CB-110.8	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.29	617.24	0.0050
	CB-110.8	-	MH-110.0	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.24	617.17	0.0050
	MH-112.0	-	MH-114.0	---	---	---	---	---	---	---	43	---	---	---	---	---	---	---	43	611.30	610.98	0.0075
	CB-112.1	-	CB-112.4	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	615.38	615.24	0.0050
	CB-112.2	-	CB-112.1	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	615.42	615.38	0.0050
	CB-112.3	-	CB-112.4	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	615.30	615.24	0.0050

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

STORM SEWER PIPE CONT.

ID	FROM STRUCT.	-	TO STRUCT.	608.0312 REINF. CONC. CLASS III 12-INCH LF	608.0315 REINF. CONC. CLASS III 15-INCH LF	608.0318 REINF. CONC. CLASS III 18-INCH LF	608.0324 REINF. CONC. CLASS III 24-INCH LF	608.0330 REINF. CONC. CLASS III 30-INCH LF	608.0336 REINF. CONC. CLASS III 36-INCH LF	608.0348 REINF. CONC. CLASS III 48-INCH LF	608.0360 REINF. CONC. CLASS III 60-INCH LF	608.0366 REINF. CONC. CLASS III 66-INCH LF	608.0372 REINF. CONC. CLASS III 72-INCH LF	608.0412 REINF. CONC. CLASS IV 12-INCH LF	608.0466 REINF. CONC. CLASS IV 66-INCH LF	SPV.0090.03 PVC 6-INCH LF	SPV.0090.04 PVC 12-INCH LF	SPV.0090.02 REINF. CONC. HORIZ. ELLIP. CLASS HE-III 72X113-INCH LF	SPV.0090.07* TELEVISING SEWER LF	INLET ELEV	DISC ELEV	SLOPE FT/FT
PROJECT 1500-37-74 CONT.																						
	CB-112.4	-	CB-112.6	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	615.24	615.21	0.0050
	CB-112.6	-	CB-112.5	---	21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	614.96	614.85	0.0050
	CB-112.5	-	MH-112.0	---	31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	614.85	614.70	0.0050
	CB-112.7	-	CB-112.8	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	615.49	615.44	0.0050
	CB-112.8	-	MH-112.0	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	615.44	615.37	0.0050
	MH-114.0	-	MH-116.0	---	---	---	---	---	---	---	---	74	---	---	---	---	---	---	---	74	610.98	610.39	0.0080
	CB-114.1	-	CB-114.2	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	615.08	614.97	0.0110
	CB-114.2	-	MH-114.3	33	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	614.97	614.81	0.0050
	MH-114.3	-	MH-114.0	---	---	101	---	---	---	---	---	---	---	---	---	---	---	---	---	---	613.84	613.32	0.0051
	CB-114.4	-	MH-114.3	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	615.02	614.96	0.0070
	CB-114.5	-	CB-114.4	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	615.07	615.02	0.0050
	CB-114.6	-	MH-114.7	29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	615.60	615.46	0.0050
	MH-114.7	-	MH-114.0	---	---	---	---	---	42	---	---	---	---	---	---	---	---	---	---	---	613.65	611.97	0.0400
	CB-114.8	-	MH-114.7	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	615.59	615.55	0.0050
	MH-116.0	-	MH-118.0	---	---	---	---	---	---	---	---	156	---	---	---	---	---	---	---	156	610.39	609.13	0.0080
	CB-116.1	-	CB-116.2	43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	616.06	615.84	0.0050
	CB-116.2	-	CB-116.3	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	615.84	615.81	0.0050
	CB-116.3	-	MH-116.0	12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	615.81	615.75	0.0050
	CB-116.4	-	MH-116.0	14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	616.20	616.13	0.0050
	MH-118.0	-	MH-120.0	---	---	---	---	---	---	---	---	191	---	---	---	---	---	---	---	191	609.13	607.60	0.0080
	CB-118.1	-	CB-118.2	42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.55	617.34	0.0050
	CB-118.2	-	CB-118.3	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.34	617.30	0.0050
	CB-118.3	-	MH-118.0	12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.30	617.25	0.0050
	CB-118.4	-	MH-118.0	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	617.64	617.57	0.0050
	MH-120.0	-	MH-122.0	---	---	---	---	---	---	---	---	---	---	---	---	251	---	---	---	251	607.60	605.59	0.0080
	CB-120.1	-	CB-120.2	43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.89	619.68	0.0049
	CB-120.2	-	CB-120.3	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.68	619.65	0.0050
	CB-120.3	-	MH-120.0	12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.65	619.59	0.0050
	CB-120.4	-	MH-120.0	---	---	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	616.56	616.49	0.0050
	CB-120.5	-	CB-120.4	---	---	37	---	---	---	---	---	---	---	---	---	---	---	---	---	---	616.75	616.56	0.0050
	CB-120.6	-	CB-120.5	---	---	33	---	---	---	---	---	---	---	---	---	---	---	---	---	---	616.92	616.75	0.0050
	MH-122.0	-	MH-126.0	---	---	---	---	---	---	---	---	---	---	---	---	328	---	---	---	328	604.76	601.48	0.0100
	MH-122.2	-	MH-122.1	---	---	---	---	186	---	---	---	---	---	---	---	---	---	---	---	---	607.57	605.71	0.0100
	MH-122.1	-	MH-122.0	---	---	---	---	87	---	---	---	---	---	---	---	---	---	---	---	---	605.71	604.85	0.0100
	CB-122.3	-	MH-122.2	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	621.84	621.73	0.0050
	CB-122.4	-	MH-122.2	9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	621.87	621.83	0.0050
	CB-122.5	-	MH-122.0	42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	625.10	624.89	0.0050
	CB-122.6	-	CB-122.5	---	---	---	---	---	---	---	---	---	---	29	---	---	---	---	---	---	626.24	626.10	0.0050

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

STORM SEWER PIPE CONT.

ID	FROM STRUCT.	-	TO STRUCT.	608.0312 REINF. CONC. CLASS III 12-INCH LF	608.0315 REINF. CONC. CLASS III 15-INCH LF	608.0318 REINF. CONC. CLASS III 18-INCH LF	608.0324 REINF. CONC. CLASS III 24-INCH LF	608.0330 REINF. CONC. CLASS III 30-INCH LF	608.0336 REINF. CONC. CLASS III 36-INCH LF	608.0348 REINF. CONC. CLASS III 48-INCH LF	608.0360 REINF. CONC. CLASS III 60-INCH LF	608.0366 REINF. CONC. CLASS III 66-INCH LF	608.0372 REINF. CONC. CLASS III 72-INCH LF	608.0412 REINF. CONC. CLASS IV 12-INCH LF	608.0466 REINF. CONC. CLASS IV 66-INCH LF	SPV.0090.03 PVC 6-INCH LF	SPV.0090.04 PVC 12-INCH LF	SPV.0090.02 REINF. CONC. HORIZ. ELLIP. CLASS HE-III 72X113-INCH LF	SPV.0090.07* TELEVISING SEWER LF	INLET ELEV	DISC ELEV	SLOPE FT/FT
PROJECT 1500-37-74 CONT.																						
	CB-126.1	-	MH-126.2	17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	610.07	609.99	0.0050
	MH-126.2	-	MH-126.4	---	---	---	210	---	---	---	---	---	---	---	---	---	---	---	---	---	609.99	608.94	0.0050
	MH-126.3	-	MH-126.2	---	27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	612.50	612.23	0.0100
	MH-126.4	-	MH-126.0	---	---	---	61	---	---	---	---	---	---	---	---	---	---	---	---	---	608.94	608.64	0.0050
	CB-126.5	-	MH-126.4	---	67	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	618.68	618.34	0.0050
	CB-126.6	-	CB-126.5	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.06	618.93	0.0050
	CB-126.7	-	CB-126.6	13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.12	619.06	0.0050
	CB-126.8	-	CB-126.7	37	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.31	619.12	0.0050
	CB-126.9	-	MH-126.0	35	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.26	619.09	0.0050
	CB-126.10	-	CB-126.9	42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	619.47	619.26	0.0050
	PROJECT TOTAL			1106	484	228	373	273	477	164	568	421	0	29	579	0	0	0	2154			
PROJECT 4570-12-71																						
	MH-126.0	-	MH-128.0	---	---	---	---	---	---	---	---	---	---	---	225	---	---	---	225	601.48	599.23	0.0100
	MH-128.0	-	MH-130.0	---	---	---	---	---	---	---	---	---	---	---	130	---	---	---	130	599.23	597.93	0.0100
	CB-128.1	-	CB-128.2	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	609.82	609.69	0.0050
	CB-128.2	-	CB-128.3	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	609.69	609.58	0.0050
	CB-128.3	-	MH-128.0	11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	609.58	609.52	0.0050
	CB-128.4	-	MH-128.0	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	610.56	610.49	0.0050
	EX. PIPE	-	CB-128.4	---	---	---	---	---	---	---	---	---	---	---	---	---	8	---	---	MATCH EXISTING		
	MH-130.0	-	MH-132.0	---	---	---	---	---	---	---	---	99	---	---	---	---	---	---	99	597.93	596.94	0.0100
	CB-130.3	-	CB-130.4	---	34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	602.41	602.14	0.0050
	CB-130.4	-	CB-130.5	---	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	602.14	602.02	0.0050
	CB-130.5	-	MH-130.0	---	11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	602.02	601.97	0.0050
	CB-130.6	-	MH-130.0	14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	603.87	603.80	0.0050
	MH-132.0	-	MH-134.0	---	---	---	---	---	---	---	---	---	325	---	---	---	---	---	325	593.88	591.77	0.0065
	CB-130.1	-	CB-130.2	---	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	602.64	602.51	0.0050
	CB-130.2	-	CB-130.3	---	40	---	---	---	---	---	---	---	---	---	---	---	---	---	---	602.51	602.13	0.0050
	MH-132.2	-	CB-132.5	---	---	---	16	---	---	---	---	---	---	---	---	---	---	---	---	594.06	594.03	0.0020
	CB-132.4	-	CB-132.5	27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	602.54	602.41	0.0051
	CB-132.5	-	MH-132.0	---	---	---	76	---	---	---	---	---	---	---	---	---	---	---	---	594.03	593.88	0.0020
	CB-132.6	-	MH-132.0	---	31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	600.35	600.19	0.0050
	CB-132.7	-	CB-132.6	27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	600.73	600.60	0.0050
	CB-132.9	-	CB-132.8	---	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	602.46	602.32	0.0051

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

STORM SEWER PIPE CONT.

ID	FROM STRUCT.	-	TO STRUCT.	608.0312 REINF. CONC. CLASS III 12-INCH LF	608.0315 REINF. CONC. CLASS III 15-INCH LF	608.0318 REINF. CONC. CLASS III 18-INCH LF	608.0324 REINF. CONC. CLASS III 24-INCH LF	608.0330 REINF. CONC. CLASS III 30-INCH LF	608.0336 REINF. CONC. CLASS III 36-INCH LF	608.0348 REINF. CONC. CLASS III 48-INCH LF	608.0360 REINF. CONC. CLASS III 60-INCH LF	608.0366 REINF. CONC. CLASS III 66-INCH LF	608.0372 REINF. CONC. CLASS III 72-INCH LF	608.0412 REINF. CONC. CLASS IV 12-INCH LF	608.0466 REINF. CONC. CLASS IV 66-INCH LF	SPV.0090.03 PVC 6-INCH LF	SPV.0090.04 PVC 12-INCH LF	SPV.0090.02 REINF. CONC. HORIZ. ELLIP. CLASS HE-III 72X113-INCH LF	SPV.0090.07* TELEVISING SEWER LF	INLET ELEV	DISC ELEV	SLOPE FT/FT
PROJECT 4570-12-71 CONT.																						
	CB-132.8	-	CB-132.6	---	34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	602.32	602.15	0.0050
	MH-134.0	-	MH-136.0	---	---	---	---	---	---	---	---	---	366	---	---	---	---	---	366	591.77	588.48	0.0090
	CB-134.1	-	MH-134.2	24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	597.31	597.19	0.0050
	MH-134.2	-	CB-134.3	---	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	596.30	596.25	0.0050
	CB-134.3	-	CB-134.4	---	31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	596.18	595.87	0.0100
	CB-134.4	-	CB-134.5	---	36	---	---	---	---	---	---	---	---	---	---	---	---	---	---	595.87	595.37	0.0140
	CB-134.5	-	CB-134.6	---	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	595.37	595.02	0.0150
	CB-134.6	-	MH-134.0	---	12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	595.02	594.83	0.0160
	CB-134.7	-	MH-134.0	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	597.30	597.23	0.0050
	CB-134.8	-	MH-134.0	62	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	596.37	595.38	0.0160
	CB-134.9	-	CB-134.8	29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	596.60	596.37	0.0080
	EX. PIPE	-	CB-134.8	---	---	---	---	---	---	---	---	---	---	---	---	8	---	---	---	597.96	597.92	0.0050
	MH-136.0	-	MH-138.0	---	---	---	---	---	---	---	---	---	310	---	---	---	---	---	310	588.48	586.35	0.0068
	EX. STR.	-	CB-136.3	---	38	---	---	---	---	---	---	---	---	---	---	---	---	---	---	593.70	592.75	0.0250
	CB-136.3	-	CB-136.4	---	---	31	---	---	---	---	---	---	---	---	---	---	---	---	---	592.50	592.19	0.0100
	CB-136.4	-	CB-136.5	---	---	23	---	---	---	---	---	---	---	---	---	---	---	---	---	592.19	591.96	0.0100
	CB-136.5	-	MH-136.0	---	---	11	---	---	---	---	---	---	---	---	---	---	---	---	---	591.96	591.84	0.0100
	CB-136.6	-	MH-136.0	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	594.24	594.17	0.0050
	MH-138.0	-	MH-140.0	---	---	---	---	---	---	---	---	---	300	---	---	---	---	---	300	586.35	584.30	0.0069
	CB-138.1	-	CB-138.2	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	592.00	591.87	0.0050
	CB-138.2	-	CB-138.3	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	591.87	591.76	0.0050
	CB-138.3	-	MH-138.0	11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	591.76	591.70	0.0050
	CB-138.4	-	MH-138.0	14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	591.93	591.86	0.0050
	MH-140.0	-	MH-142.0	---	---	---	---	---	---	---	---	---	300	---	---	---	---	---	300	584.30	582.24	0.0068
	CB-140.1	-	CB-140.2	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	589.35	589.22	0.0050
	CB-140.2	-	CB-140.3	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	589.22	589.11	0.0050
	CB-140.3	-	MH-140.0	11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	589.11	589.05	0.0050
	CB-140.4	-	MH-140.0	14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	589.35	589.28	0.0050
	MH-142.0	-	MH-144.0	---	---	---	---	---	---	---	---	---	235	---	---	---	---	---	235	582.24	580.63	0.0069
	CB-142.1	-	CB-142.2	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	586.64	586.51	0.0050
	CB-142.2	-	CB-142.3	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	586.51	586.40	0.0050
	CB-142.3	-	MH-142.0	28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	586.40	586.26	0.0050
	MH-144.0	-	OF-3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	57	57	580.63	580.51	0.0020
	CB-150.0	-	OF-3A	---	---	---	45	---	---	---	---	---	---	---	---	---	---	---	45	580.61	580.51	0.0021
	CB-150.1	-	CB-150.2	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.67	583.54	0.0050
	CB-150.2	-	CB-150.3	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.54	583.42	0.0050
	CB-150.3	-	CB-150.0	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.42	583.29	0.0050
	CB-152.0	-	CB-150.0	---	---	---	285	---	---	---	---	---	---	---	---	---	---	---	285	581.09	580.61	0.0017

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

STORM SEWER PIPE CONT.

ID	FROM STRUCT.	-	TO STRUCT.	608.0312 REINF. CONC. CLASS III 12-INCH LF	608.0315 REINF. CONC. CLASS III 15-INCH LF	608.0318 REINF. CONC. CLASS III 18-INCH LF	608.0324 REINF. CONC. CLASS III 24-INCH LF	608.0330 REINF. CONC. CLASS III 30-INCH LF	608.0336 REINF. CONC. CLASS III 36-INCH LF	608.0348 REINF. CONC. CLASS III 48-INCH LF	608.0360 REINF. CONC. CLASS III 60-INCH LF	608.0366 REINF. CONC. CLASS III 66-INCH LF	608.0372 REINF. CONC. CLASS III 72-INCH LF	608.0412 REINF. CONC. CLASS IV 12-INCH LF	608.0466 REINF. CONC. CLASS IV 66-INCH LF	SPV.0090.03 PVC 6-INCH LF	SPV.0090.04 PVC 12-INCH LF	SPV.0090.02 REINF. CONC. HORIZ. ELLIP. CLASS HE-III 72X113-INCH LF	SPV.0090.07* TELEVISING SEWER LF	INLET ELEV	DISC ELEV	SLOPE FT/FT
PROJECT 4570-12-71 CONT.																						
	CB-152.1	-	CB-152.3	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	582.13	582.01	0.0044
	CB-152.2	-	CB-152.1	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	582.17	582.13	0.0044
	CB-152.3	-	CB-152.5	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	582.01	581.91	0.0044
	CB-152.4	-	CB-152.3	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	582.06	582.01	0.0044
	CB-152.5	-	CB-152.7	---	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	581.66	581.55	0.0044
	CB-152.6	-	CB-152.5	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	581.95	581.91	0.0044
	CB-152.7	-	CB-152.0	---	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	581.55	581.50	0.0050
	MH-160.0	-	EW-160.5	---	---	---	46	---	---	---	---	---	---	---	---	---	---	---	---	46	581.49	581.26	0.0050
	CB-160.1	-	CB-160.2	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	582.46	582.33	0.0050
	CB-160.2	-	CB-160.3	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	582.33	582.21	0.0050
	CB-160.3	-	MH-160.0	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	582.21	582.10	0.0050
	CB-160.4	-	CB-160.3	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	582.48	582.35	0.0050
	MH-162.0	-	MH-160.0	---	---	---	246	---	---	---	---	---	---	---	---	---	---	---	---	246	582.72	581.49	0.0050
	CB-162.1	-	CB-162.2	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.69	583.62	0.0030
	CB-162.2	-	CB-162.3	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.62	583.55	0.0030
	CB-162.3	-	MH-162.0	7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.55	583.51	0.0050
	CB-162.4	-	MH-162.0	19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.73	583.64	0.0050
	MH-164.0	-	MH-162.0	---	---	---	259	---	---	---	---	---	---	---	---	---	---	---	---	259	584.02	582.72	0.0050
	EW-164.10	-	CB-164.2	---	---	21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.95	584.80	0.0559
	CB-164.2	-	CB-164.3	---	---	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	584.80	584.67	0.0050
	CB-164.3	-	CB-164.4	---	---	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	584.67	584.56	0.0050
	CB-164.4	-	MH-164.0	---	---	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	584.56	584.52	0.0050
	CB-164.5	-	MH-164.0	19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	584.97	584.88	0.0050
	MH-166.0	-	MH-164.0	---	---	---	170	---	---	---	---	---	---	---	---	---	---	---	---	170	584.86	584.02	0.0050
	CB-166.1	-	CB-166.2	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.53	585.40	0.0050
	CB-166.2	-	CB-166.3	19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.40	585.30	0.0050
	CB-166.3	-	MH-166.0	11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.30	585.25	0.0050
	CB-166.4	-	MH-166.0	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.77	585.70	0.0050
	CB-170.1	-	CB-170.2	43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.39	585.17	0.0050
	CB-170.2	-	CB-172.2	---	---	93	---	---	---	---	---	---	---	---	---	---	---	---	---	---	584.67	584.21	0.0050
	CB-170.3	-	CB-170.2	26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.30	585.17	0.0050
	CB-170.4	-	CB-170.3	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.36	585.30	0.0050
	MH-172.0	-	MH-174.0	---	---	52	---	---	---	---	---	---	---	---	---	---	---	---	---	52	584.03	583.78	0.0050
	CB-172.1	-	MH-172.0	46	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	584.77	584.53	0.0050
	CB-172.2	-	MH-172.0	---	---	35	---	---	---	---	---	---	---	---	---	---	---	---	---	---	584.21	584.03	0.0050
	MH-174.0	-	CB-174.10	---	---	---	12	---	---	---	---	---	---	---	---	---	---	---	---	12	581.36	581.23	0.0100
	CB-174.1	-	CB-174.2	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.89	585.84	0.0051
	CB-174.10	-	CB-174.12	---	---	---	23	---	---	---	---	---	---	---	---	---	---	---	---	23	581.23	581.00	0.0100

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

STORM SEWER PIPE CONT.

ID	FROM STRUCT.	-	TO STRUCT.	608.0312 REINF. CONC. CLASS III 12-INCH LF	608.0315 REINF. CONC. CLASS III 15-INCH LF	608.0318 REINF. CONC. CLASS III 18-INCH LF	608.0324 REINF. CONC. CLASS III 24-INCH LF	608.0330 REINF. CONC. CLASS III 30-INCH LF	608.0336 REINF. CONC. CLASS III 36-INCH LF	608.0348 REINF. CONC. CLASS III 48-INCH LF	608.0360 REINF. CONC. CLASS III 60-INCH LF	608.0366 REINF. CONC. CLASS III 66-INCH LF	608.0372 REINF. CONC. CLASS III 72-INCH LF	608.0412 REINF. CONC. CLASS IV 12-INCH LF	608.0466 REINF. CONC. CLASS IV 66-INCH LF	SPV.0090.03 PVC 6-INCH LF	SPV.0090.04 PVC 12-INCH LF	SPV.0090.02 REINF. CONC. HORIZ. ELLIP. CLASS HE-III 72X113-INCH LF	SPV.0090.07* TELEVISING SEWER LF	INLET ELEV	DISC ELEV	SLOPE FT/FT
PROJECT 4570-12-71 CONT.																						
	CB-174.11	-	CB-174.12	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.14	585.09	0.0050
	CB-174.12	-	EW-174.13	---	---	---	76	---	---	---	---	---	---	---	---	---	---	---	---	76	581.00	579.86	0.0150
	CB-174.2	-	CB-174.4	21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.84	585.74	0.0050
	CB-174.3	-	CB-174.4	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.78	585.74	0.0049
	CB-174.4	-	CB-174.6	39	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.74	585.54	0.0050
	CB-174.5	-	CB-174.6	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.59	585.54	0.0049
	CB-174.6	-	CB-174.8	---	23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.29	585.18	0.0050
	CB-174.7	-	CB-174.8	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.48	585.43	0.0050
	CB-174.8	-	MH-174.0	---	13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.18	585.11	0.0050
	CB-174.9	-	CB-174.10	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.54	585.49	0.0050
	MH-180.0	-	CB-180.4	---	---	---	33	---	---	---	---	---	---	---	---	---	---	---	---	33	582.12	582.02	0.0030
	IN-180.1	-	CB-180.2	---	---	125	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.45	582.82	0.0050
	CB-180.2	-	CB-180.3	---	---	30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	582.82	582.67	0.0050
	CB-180.3	-	MH-180.0	---	---	9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	582.67	582.62	0.0050
	CB-180.4	-	CB-180.5	---	---	---	30	---	---	---	---	---	---	---	---	---	---	---	---	30	582.02	581.93	0.0030
	CB-180.5	-	EW-180.6	---	---	---	54	---	---	---	---	---	---	---	---	---	---	---	---	54	581.93	581.10	0.0155
	CB-182.1	-	CB-182.2	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.16	583.12	0.0040
	CB-182.2	-	CB-182.4	35	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.12	582.98	0.0040
	CB-182.3	-	CB-182.4	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.02	582.98	0.0040
	CB-182.4	-	MH-180.0	---	---	213	---	---	---	---	---	---	---	---	---	---	---	---	---	213	582.98	582.12	0.0040
	CB-182.5	-	CB-182.4	17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.05	582.98	0.0040
	CB-182.6	-	CB-182.5	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.09	583.05	0.0040
	CB-182.7	-	CB-182.5	34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.18	583.05	0.0040
	CB-182.8	-	CB-182.7	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.22	583.18	0.0040
	CB-184.0	-	CB-182.3	110	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	583.57	583.02	0.0050
	EX INLET	-	MH-172.0	---	---	---	---	---	---	---	---	---	---	---	---	---	28	---	---	---	MATCH EXISTING, STG 1A, P1		
	PROJECT TOTAL			1,411	447	700	1,371	0	0	0	0	99	1,836	0	355	8	36	57	3,891			
PROJECT 4570-12-72																						
	CB-190.1	-	CB-190.2	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.73	585.63	0.0100
	CB-190.2	-	CB-190.3	20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.63	585.42	0.0100
	CB-190.3	-	CB-190.4	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.42	585.34	0.0100
	CB-190.4	-	CB-190.6	19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.34	585.15	0.0100
	CB-190.5	-	CB-190.6	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	585.56	585.46	0.0100
	CB-190.6	-	MH-190.7	---	47	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	584.9	584.42	0.0100
	MH-190.7	-	CB-180.2	---	136	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	584.42	583.07	0.0100
	PROJECT TOTAL			67	183	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	TOTAL			2,584	1,114	928	1,744	273	477	164	568	520	1,836	29	934	8	36	57	6,045			

STORM SEWER PIPE PVC 12-INCH AFFIXED TO EXISTING SEWER

ID	FROM		TO	LOCATION	SPV.0090.71 LF	REMARKS
PROJECT 1500-37-74						
	STA. 12'EG'+67, 151' LT	-	CB-126.1	N. 8TH ST.	135	
				TOTALS	135	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

STORM SEWER MANHOLES AND MANHOLE COVERS

ID	STRUCTURE	STA.	OFFSET*	LOCATION	611.0535 MANHOLE COVERS TYPE J-S EA	SPV.0060.03 MANHOLE COVERS BOLTED EA	611.2004 MANHOLES 4-FT DIAMETER EA	611.2005 MANHOLES 5-FT DIA. EA	611.2006 MANHOLES 6-FT DIA. EA	611.2007 MANHOLES 7-FT DIA. EA	611.2008 MANHOLES 8-FT DIA. EA	611.2504 MANHOLES VARIABLE TEE 4-FT DIA. EA	SPV.0060.05 MANHOLES 10-FT DIAMETER SPECIAL EA	SPV.0060.06 MANHOLES 9.5X16-FT SPECIAL EA	650.4000**** CONSTRUCTION STAKING STORM SEWER EA	RIM ELEV.	INVERT** ELEV.	DEPTH*** FT
PROJECT 1500-37-74																		
	MH-101.0	131+55	11' RT	USH 10 EB	1	---	---	1	---	---	---	---	---	---	1	629.39	620.93	7.54
	MH-101.1	131+43	5.1' RT	USH 10 EB	1	---	---	---	1	---	---	---	---	---	1	629.40	621.06	7.42
	MH-101.2	131+35	2.8' LT	USH 10 EB	1	---	1	---	---	---	---	---	---	---	1	629.36	623.11	5.25
	MH-102.0	133+43	10.9' RT	USH 10 EB	1	---	---	---	1	---	---	---	---	---	1	627.33	619.05	7.37
	MH-104.0	134+08	11' RT	USH 10 EB	1	---	---	1	---	---	---	---	---	---	1	626.49	618.24	7.34
	MH-105.0	10+90	13.5' RT	MENASHA AVE.	1	---	---	---	---	1	---	---	---	---	1	624.76	616.45	7.49
	MH-106.0	135+77	11' RT	USH 10 EB	1	---	---	---	---	---	---	---	1	---	1	624.27	615.22	8.31
	MH-108.0	136+41	11' RT	USH 10 EB	1	---	---	---	---	---	1	---	---	---	1	623.56	614.74	8.08
	MH-108.1	10+80	10.4' LT	N. 12TH ST.	1	---	---	1	---	---	---	---	---	---	1	622.82	617.16	4.67
	MH-110.0	138+24	11' RT	USH 10 EB	1	---	---	---	---	---	1	---	---	---	1	622.13	613.37	8.02
	MH-112.0	141+02	11' RT	USH 10 EB	1	---	---	---	---	---	1	---	---	---	1	620.34	611.30	8.31
	MH-114.0	141+45	11' RT	USH 10 EB	1	---	---	---	---	---	---	---	1	---	1	620.37	610.98	8.69
	MH-114.3	10+90	12.3' LT	N. 11TH ST.	1	---	1	---	---	---	---	---	---	---	1	620.03	613.84	5.16
	MH-114.7	9+47	10.4' LT	N. 11TH ST.	1	---	---	1	---	---	---	---	---	---	1	620.39	613.65	5.84
	MH-116.0	142+19	11' RT	USH 10 EB	---	1	---	---	---	---	---	---	1	---	1	621.11	610.39	10.02
	MH-118.0	143+75	11' RT	USH 10 EB	---	1	---	---	---	---	---	1	---	---	1	622.53	609.13	12.15
	MH-120.0	145+66	11' RT	USH 10 EB	1	---	---	---	---	---	---	1	---	---	1	624.82	607.60	15.98
	MH-122.0	148+17	11' RT	USH 10 EB	1	---	---	---	---	---	---	---	1	---	1	629.68	604.76	24.21
	MH-122.1	10+75	8' LT	N. 9TH ST.	1	---	---	1	---	---	---	---	---	---	1	629.32	605.71	22.65
	MH-122.2	12+61	8' LT	N. 9TH ST.	1	---	---	---	---	---	1	---	---	---	1	626.51	607.57	17.99
	MH-126.0	151+45	11' RT	USH 10 EB	1	---	---	---	---	---	---	1	---	---	1	623.85	601.48	21.12
	MH-126.2	12+61	5' LT	N. 8TH ST.	1	---	1	---	---	---	---	---	---	---	1	618.53	609.99	7.55
	MH-126.3	12+76	17.2' RT	N. 8TH ST.	1	---	1	---	---	---	---	---	---	---	1	618.19	612.50	4.64
	MH-126.4	151+46	25.8' LT	USH 10 WB	1	---	1	---	---	---	---	---	---	---	1	623.17	608.94	13.24
		PROJECT TOTALS			22	2	5	5	2	1	4	3	4	0	24			
PROJECT 4570-12-71																		
	MH-128.0	153+70	11' RT	STH 42 NB	---	1	---	---	---	---	---	1	---	---	1	615.45	599.23	14.97
	MH-130.0	155+00	11' RT	STH 42 NB	---	1	---	---	---	---	---	---	1	---	1	609.68	597.93	11.05
	MH-132.0	155+99	11' RT	STH 42 NB	---	1	---	---	---	---	---	---	1	---	1	607.56	593.88	13.01
	MH-132.2	10+79	17.5' LT	E. LINCOLN BLVD.	1	---	---	---	---	---	1	---	---	---	1	608.29	592.06	14.99
	MH-134.0	159+24	11' RT	STH 42 NB	---	1	---	---	---	---	---	---	1	---	1	602.13	591.77	9.71
	MH-134.2	10+72	8.8' LT	N. 6TH ST.	1	---	1	---	---	---	---	---	---	---	1	602.16	596.30	4.80
	MH-136.0	162+90	11' RT	STH 42 NB	---	1	---	---	---	---	---	---	1	---	1	599.13	588.48	10.00
	MH-138.0	166+00	11' RT	STH 42 NB	---	1	---	---	---	---	---	---	1	---	1	596.82	586.35	9.81
	MH-140.0	169+00	11' RT	STH 42 NB	---	1	---	---	---	---	---	---	1	---	1	594.24	584.30	9.29
	MH-142.0	172+00	27.9' RT	STH 42 NB	---	1	---	---	---	---	---	---	1	---	1	591.88	582.24	8.98
	MH-144.0	174+35	27.9' RT	STH 42 NB	---	1	---	---	---	---	---	---	---	1	1	589.76	580.63	8.48

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

STORM SEWER MANHOLES AND MANHOLE COVERS CONT.

ID	STRUCTURE	STA.	OFFSET*	LOCATION	611.0535 MANHOLE COVERS TYPE J-S EA	SPV.0060.03 MANHOLE COVERS BOLTED EA	611.2004 MANHOLES 4-FT DIAMETER EA	611.2005 MANHOLES 5-FT DIA. EA	611.2006 MANHOLES 6-FT DIA. EA	611.2007 MANHOLES 7-FT DIA. EA	611.2008 MANHOLES 8-FT DIA. EA	611.2504 MANHOLES VARIABLE TEE 4-FT DIA. EA	SPV.0060.05 MANHOLES 10-FT DIAMETER SPECIAL EA	SPV.0060.06 MANHOLES 9.5X16-FT SPECIAL EA	650.4000**** CONSTRUCTION STAKING STORM SEWER EA	RIM ELEV.	INVERT** ELEV.	DEPTH*** FT
PROJECT 4570-12-71 CONT.																		
	MH-160.0	179+82	6.8' RT	STH 42 NB	1	---	---	1	---	---	---	---	---	---	1	587.38	581.49	4.89
	MH-162.0	182+28	6.5' RT	STH 42 NB	1	---	1	---	---	---	---	---	---	---	1	588.53	582.72	4.81
	MH-164.0	184+87	6.7' RT	STH 42 NB	1	---	---	1	---	---	---	---	---	---	1	589.78	584.02	4.76
	MH-166.0	186+56	10.8' RT	STH 42 NB	1	---	1	---	---	---	---	---	---	---	1	590.66	584.86	4.80
	MH-172.0	13+59	19' RT	NMW	1	---	1	---	---	---	---	---	---	---	1	591.15	584.03	6.08
	MH-174.0	13+05	14.5' RT	NMW	1	---	---	1	---	---	---	---	---	---	1	590.83	581.36	8.47
	MH-180.0	192+25	33.6' LT	STH 42 NB	1	---	---	1	---	---	---	---	---	---	1	589.98	582.12	6.86
	PROJECT TOTALS				9	9	4	4	0	0	1	1	7	1	18			
PROJECT 4570-12-72																		
	MH-190.7	20+07	45.0' RT	NORTH LEG NB	1	---	1	---	---	---	---	---	---	---	1	590.45	584.42	5.03
	PROJECT TOTALS				1	0	1	0	0	0	0	0	0	0	1			
	TOTALS				32	11	10	9	2	1	5	4	11	1	43			

NOTES:
* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
** FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
*** DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6 -INCH ADJUSTMENT RING HEIGHT
**** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

STORM SEWER CATCH BASINS & INLETS AND COVERS

ID	STRUCT.	STA.	OFFSET*	LOCATION	611.0624	611.0630	611.0639	611.0642	611.0652	SPV.0060.01	SPV.0060.02	611.1004	611.1005	611.1006	611.1230	611.3003	611.3901	650.4000****			
					INLET COVERS TYPE							CATCH BASINS				INLETS	INLETS	CONSTR.			
					H	HM-GJ	H-S	MS	T	DW	BH	4-FT	5-FT	6-FT		3-FT	MEDIAN	STAKING			
												DIA.	DIA.	DIA.	2x3-FT	DIA.	1	STORM			
					EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	GRATE	SEWER	RIM	INVERT**	DEPTH***
																	EA	EA	ELEV.	ELEV.	FT
PROJECT 1500-37-74																					
	CB-102.1	133+42	25.5' LT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	627.03	620.45	5.58
	CB-102.2	133+42	0.5' RT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	627.09	620.32	5.76
	CB-102.3	133+43	11.5' LT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	626.97	620.26	5.71
	CB-102.4	133+43	27' RT	USH 10 EB	1	---	---	---	---	---	---	1	---	---	---	---	---	1	627.51	619.95	6.56
	CB-102.5	9+47	13.8' LT	N. 13TH ST.	---	---	1	---	---	---	---	---	---	---	1	---	---	1	626.62	620.10	5.52
	CB-102.6	9+47	13.9' RT	N. 13TH ST.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	626.82	620.24	5.58
	CB-104.1	134+09	25.5' LT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	626.14	619.55	5.59
	CB-104.2	134+09	0.5' RT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	626.31	619.42	5.89
	CB-104.3	134+08	11.5' LT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	626.30	619.36	5.94
	CB-105.1	10+90	23.5' LT	MENASHA AVE.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	624.51	617.94	5.58
	CB-105.2	10+80	23.5' LT	MENASHA AVE.	---	---	1	---	---	---	---	---	---	---	1	---	---	1	624.47	617.89	5.58
	CB-105.3	10+90	23.5' RT	MENASHA AVE.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	624.49	617.81	5.69
	CB-105.4	10+80	23.5' RT	MENASHA AVE.	---	---	1	---	---	---	---	---	---	---	1	---	---	1	624.47	617.86	5.61
	CB-106.1	135+40	50' LT	USH 10 WB	---	---	---	---	---	---	1	---	---	---	---	1	---	1	624.26	619.91	4.02
	CB-106.2	135+76	25.5' LT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	623.77	616.95	5.82
	CB-106.3	135+76	0.5' RT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	623.83	616.82	6.01
	CB-106.4	135+77	0.5' LT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	624.02	616.46	6.57
	CB-106.5	135+77	25.5' RT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	623.96	617.03	5.93
	CB-108.2	9+47	14.2' LT	N. 12TH STREET	---	---	1	---	---	---	---	1	---	---	---	---	---	1	622.68	615.02	6.66
	CB-108.3	9+47	14.3' RT	N. 12TH STREET	---	---	1	---	---	---	---	1	---	---	---	---	---	1	622.68	615.16	6.52
	CB-108.4	9+69	18.5' RT	S. MENASHA AVE.	1	---	---	---	---	---	---	1	---	---	---	---	---	1	623.08	615.48	6.60
	CB-108.5	9+31	18.5' RT	S. MENASHA AVE.	---	---	1	---	---	---	---	1	---	---	---	---	---	1	623.59	615.74	6.85
	CB-108.6	8+88	18.5' LT	S. MENASHA AVE.	1	---	---	---	---	---	---	1	---	---	---	---	---	1	623.94	615.94	7.00
	CB-108.7	8+18	14.2' LT	N. 12TH STREET	1	---	---	---	---	---	---	1	---	---	---	---	---	1	624.55	615.67	7.88
	CB-110.1	138+33	25.5' LT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	621.74	615.28	5.46
	CB-110.2	138+23	25.5' LT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	621.81	615.23	5.58
	CB-110.3	138+33	0.5' RT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	621.80	615.15	5.65
	CB-110.4	138+23	0.5' RT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	621.87	615.10	5.77
	CB-110.5	138+34	2.3' LT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	622.29	615.04	6.25
	CB-110.6	138+24	1.1' LT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	622.30	614.74	6.56
	CB-110.7	138+34	25.5' RT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	621.75	615.29	5.46
	CB-110.8	138+24	25.5' RT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	621.82	615.24	5.58
	CB-112.1	140+99	25.5' LT	USH 10 WB	---	---	1	---	---	---	---	---	---	---	1	---	---	1	620.02	613.38	5.64
	CB-112.2	140+89	25.5' RT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	620.03	613.42	5.61
	CB-112.3	140+93	0.5' RT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	620.05	613.30	5.75
	CB-112.4	141+03	0.5' RT	USH 10 WB	---	---	1	---	---	---	---	---	---	---	1	---	---	1	620.04	613.24	5.80
	CB-112.5	140+87	7.5' RT	USH 10 WB	1	---	---	---	---	---	---	1	---	---	---	---	---	1	619.98	612.85	6.13
	CB-112.6	141+09	6' RT	USH 10 WB	---	---	1	---	---	---	---	1	---	---	---	---	---	1	620.08	612.96	6.12
	CB-112.7	140+90	25.5' RT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	620.04	613.49	5.55
	CB-112.8	141+00	25.5' RT	USH 10 EB	---	---	1	---	---	---	---	---	---	---	1	---	---	1	620.03	613.44	5.59
	CB-114.1	10+80	20.7' RT	N. 11TH ST.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	619.68	613.08	5.60

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

STORM SEWER CATCH BASINS & INLETS AND COVERS CONT.

ID	STRUCT.	STA.	OFFSET*	LOCATION	611.0624 INLET COVERS TYPE H EA	611.0630 INLET COVERS TYPE HM-GJ EA	611.0639 INLET COVERS TYPE H-S EA	611.0642 INLET COVERS TYPE MS EA	611.0652 INLET COVERS TYPE T EA	SPV.0060.01 INLET COVERS TYPE DW EA	SPV.0060.02 INLET COVERS TYPE BH EA	611.1004 CATCH BASINS 4-FT DIA. EA	611.1005 CATCH BASINS 5-FT DIA. EA	611.1006 CATCH BASINS 6-FT DIA. EA	611.1230 CATCH BASINS 2x3-FT EA	611.3003 INLETS 3-FT DIA. EA	611.3901 INLETS MEDIAN 1 GRATE EA	650.4000**** CONSTR. STAKING STORM SEWER EA	RIM ELEV.	INVERT** ELEV.	DEPTH*** FT
PROJECT 1500-37-74 CONT.																					
	CB-114.2	10+90	20.7' RT	N. 11TH ST.	---	---	1	---	---	---	---	---	---	---	1	---	---	1	619.66	612.97	5.68
	CB-114.4	10+90	20.6' LT	N. 11TH ST.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	619.77	613.02	5.75
	CB-114.5	10+80	20.6' LT	N. 11TH ST.	---	---	1	---	---	---	---	---	---	---	1	---	---	1	619.76	613.07	5.69
	CB-114.6	9+47	18.3' RT	N. 11TH ST.	---	---	1	---	---	---	---	---	---	---	1	---	---	1	620.18	613.60	5.58
	CB-114.8	9+47	18.7' LT	N. 11TH ST.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	620.16	613.59	5.58
	CB-116.1	142+08	25.5' LT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	620.65	614.06	5.59
	CB-116.2	142+19	7.5' LT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	620.74	613.84	5.90
	CB-116.3	142+19	1.4' LT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	620.87	613.81	6.06
	CB-116.4	142+19	25.5' RT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	620.78	614.20	5.58
	CB-118.1	143+75	25.5' LT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	622.14	615.55	5.59
	CB-118.2	143+75	7.5' LT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	622.01	615.34	5.67
	CB-118.3	143+75	0.5' LT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	622.30	615.30	5.99
	CB-118.4	143+75	25.5' RT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	622.20	615.64	5.56
	CB-120.1	145+70	25.5' LT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	624.57	617.89	5.68
	CB-120.2	145+70	6.5' LT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	624.50	617.68	5.82
	CB-120.3	145+70	0.5' LT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	624.66	617.65	6.01
	CB-120.4	145+65	25.5' RT	USH 10 EB	1	---	---	---	---	---	---	1	---	---	---	---	---	1	624.80	614.56	9.23
	CB-120.5	9+49	16.7' RT	N. 10TH ST.	---	---	1	---	---	---	---	1	---	---	---	---	---	1	623.83	614.75	8.08
	CB-120.6	9+47	16.5' LT	N. 10TH ST.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	624.03	614.92	8.12
	CB-122.3	12+67	13.8' RT	N. 9TH ST.	---	---	1	---	---	---	---	---	---	---	1	---	---	1	626.58	619.84	5.74
	CB-122.4	12+67	13.9' LT	N. 9TH ST.	---	---	1	---	---	---	---	---	---	---	1	---	---	1	626.48	619.87	5.61
	CB-122.5	9+47	14.6' LT	N. 9TH ST.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	629.83	623.10	5.73
	CB-122.6	9+47	14.6' RT	N. 9TH ST.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	629.82	624.24	4.58
	CB-126.1	12+67	20.5' LT	N. 8TH ST.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	618.33	610.07	7.26
	CB-126.5	150+79	25.5' LT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	624.53	616.68	6.85
	CB-126.6	150+79	0.5' RT	USH 10 WB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	624.55	617.06	6.49
	CB-126.7	150+83	11.5' LT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	624.74	617.12	6.61
	CB-126.8	150+83	25.5' RT	USH 10 EB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	624.99	617.31	6.68
	CB-126.9	9+58	13.5' LT	N 8TH ST	---	---	1	---	---	---	---	---	---	---	1	---	---	1	623.61	617.26	5.35
	CB-126.10	9+39	23.6' RT	N 8TH ST	1	---	---	---	---	---	---	---	---	---	1	---	---	1	624.05	617.47	5.58
	PROJECT TOTALS				53	0	17	0	0	0	1	11	0	0	59	1	0	71			
PROJECT 4570-12-71																					
	CB-128.1	153+69	25.5' LT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	614.40	607.82	5.58
	CB-128.2	153+69	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	614.46	607.69	5.77
	CB-128.3	153+70	0.5' LT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	615.20	607.58	6.62
	CB-128.4	153+70	25.5' RT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	615.14	608.56	5.58
	CB-130.1	10+66	12.1' RT	W. LINCOLN BLVD.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	607.25	600.64	5.60
	CB-130.2	10+77	12' LT	W. LINCOLN BLVD.	---	---	1	---	---	---	---	1	---	---	---	---	---	1	607.25	600.51	5.74
	CB-130.3	155+21	25.5' LT	STH 42 SB	1	---	---	---	---	---	---	1	---	---	---	---	---	1	608.27	600.31	6.96
	CB-130.4	155+00	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	608.94	600.14	7.80

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

STORM SEWER CATCH BASINS & INLETS AND COVERS CONT.

ID	STRUCT.	STA.	OFFSET*	LOCATION	611.0624 INLET COVERS TYPE H EA	611.0630 INLET COVERS TYPE HM-GJ EA	611.0639 INLET COVERS TYPE H-S EA	611.0642 INLET COVERS TYPE MS EA	611.0652 INLET COVERS TYPE T EA	SPV.0060.01 INLET COVERS TYPE DW EA	SPV.0060.02 INLET COVERS TYPE BH EA	611.1004 CATCH BASINS 4-FT DIA. EA	611.1005 CATCH BASINS 5-FT DIA. EA	611.1006 CATCH BASINS 6-FT DIA. EA	611.1230 CATCH BASINS 2x3-FT EA	611.3003 INLETS 3-FT DIA. EA	611.3901 INLETS MEDIAN 1 GRATE EA	650.4000**** CONSTR. STAKING STORM SEWER EA	RIM ELEV.	INVERT** ELEV.	DEPTH*** FT
PROJECT 4570-12-71 CONT.																					
	CB-130.5	155+00	0.5' LT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	609.43	600.02	8.41
	CB-130.6	155+00	25.5' RT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	609.37	601.87	6.49
	CB-132.4	10+77	12.1' RT	E. LINCOLN BLVD.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	607.03	600.54	5.49
	CB-132.5	10+65	12' LT	E. LINCOLN BLVD.	---	---	1	---	---	---	---	---	---	1	---	---	---	1	606.62	592.03	13.59
	CB-132.6	9+59	12' LT	E. LINCOLN BLVD.	---	---	1	---	---	---	---	1	---	---	---	---	---	1	607.04	598.35	7.69
	CB-132.7	9+47	12' RT	E. LINCOLN BLVD.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	607.41	598.73	7.68
	CB-132.8	9+58	12' RT	W. LINCOLN BLVD.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	608.00	600.32	6.68
	CB-132.9	9+47	12' LT	W. LINCOLN BLVD.	---	---	1	---	---	---	---	---	---	---	1	---	---	1	607.88	600.46	6.42
	CB-134.1	10+76	14.5' RT	N. 6TH ST.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	601.89	595.31	5.58
	CB-134.3	10+66	16.1' LT	N. 6TH ST.	---	---	1	---	---	---	---	1	---	---	---	---	---	1	602.03	594.25	6.78
	CB-134.4	159+43	25.5' LT	STH 42 SB	1	---	---	---	---	---	---	1	---	---	---	---	---	1	602.06	593.87	7.19
	CB-134.5	159+19	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	602.43	593.37	8.06
	CB-134.6	159+20	0.5' LT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	601.95	593.02	7.92
	CB-134.7	159+24	25.5' RT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	601.82	595.30	5.51
	CB-134.8	9+49	14.5' LT	N. 6TH ST.	---	---	---	---	---	1	---	---	---	---	1	---	---	1	601.36	594.37	5.99
	CB-134.9	9+46	14.5' RT	N. 6TH ST.	1	---	---	---	---	---	---	---	---	---	1	---	---	1	601.18	594.60	5.58
	CB-136.3	163+07	25.5' LT	STH 42 SB	1	---	---	---	---	---	---	1	---	---	---	---	---	1	598.96	590.50	7.46
	CB-136.4	162+90	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	599.16	590.19	7.97
	CB-136.5	162+90	0.5' LT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	598.88	589.96	7.92
	CB-136.6	162+90	25.5' RT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	598.82	592.24	5.58
	CB-138.1	166+00	25.5' LT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	596.55	590.00	5.54
	CB-138.2	166+00	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	596.61	589.87	5.73
	CB-138.3	166+00	0.5' LT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	596.57	589.76	5.81
	CB-138.4	166+00	25.5' RT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	596.51	589.93	5.58
	CB-140.1	169+02	25.5' LT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	593.93	587.35	5.58
	CB-140.2	169+00	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	594.00	587.22	5.78
	CB-140.3	169+00	0.5' LT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	593.99	587.11	5.89
	CB-140.4	169+00	25.5' RT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	593.93	587.35	5.58
	MH-142.0	172+00	27.9' RT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	---	---	---	---	591.35	582.24	8.98
	CB-142.1	172+00	25.5' LT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	591.22	584.64	5.58
	CB-142.2	172+00	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	591.28	584.51	5.76
	CB-142.3	172+00	0.5' LT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	591.41	584.40	6.02
	CB-150.0	175+00	25.5' RT	STH 42 NB	1	---	---	---	---	---	---	---	1	---	---	---	---	1	588.65	578.61	9.05
	CB-150.1	174+99	25.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	588.25	581.67	5.58
	CB-150.2	175+00	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	588.30	581.54	5.76
	CB-150.3	175+00	0.5' LT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	588.71	581.42	6.29
	CB-152.0	177+85	25.5' RT	STH 42 NB	1	---	---	---	---	---	---	1	---	---	---	---	---	1	586.44	579.09	6.35
	CB-152.1	177+97	25.5' LT	STH 42 SB	---	---	1	---	---	---	---	---	---	---	1	---	---	1	586.55	580.13	5.42
	CB-152.2	177+87	25.5' LT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	586.55	580.17	5.38
	CB-152.3	177+97	0.5' RT	STH 42 SB	---	---	1	---	---	---	---	---	---	---	1	---	---	1	586.61	580.01	5.60

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

STORM SEWER CATCH BASINS & INLETS AND COVERS CONT.

ID	STRUCT.	STA.	OFFSET*	LOCATION	611.0624 INLET COVERS TYPE H EA	611.0630 HM-GJ EA	611.0639 H-S EA	611.0642 MS EA	611.0652 T EA	SPV.0060.01 DW EA	SPV.0060.02 BH EA	611.1004 CATCH BASINS 4-FT DIA. EA	611.1005 5-FT DIA. EA	611.1006 6-FT DIA. EA	611.1230 2x3-FT EA	611.3003 INLETS 3-FT DIA. EA	611.3901 INLETS MEDIAN 1 GRATE EA	650.4000**** CONSTR. STAKING STORM SEWER EA	RIM ELEV.	INVERT** ELEV.	DEPTH*** FT
PROJECT 4570-12-71 CONT.																					
	CB-152.4	177+87	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	586.61	580.06	5.55
	CB-152.5	177+95	0.5' LT	STH 42 NB	---	---	1	---	---	---	---	---	---	---	1	---	---	1	586.49	579.66	5.83
	CB-152.6	177+85	0.5' LT	STH 42 NB	1	---		---	---	---	---	---	---	---	1	---	---	1	586.50	579.95	5.55
	CB-152.7	177+95	25.5' RT	STH 42 NB	---	---	1	---	---	---	---	---	---	---	1	---	---	1	586.43	579.55	5.88
	CB-160.1	179+59	25.5' LT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	587.04	580.46	5.58
	CB-160.2	179+59	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	587.10	580.33	5.77
	CB-160.3	179+60	0.5' LT	STH 42 NB	1	---	---	---	---	---	---	1	---	---	---	---	---	1	587.12	580.21	5.91
	CB-160.4	179+60	25.5' RT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	587.06	580.48	5.58
	CB-162.1	182+28	25.5' LT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	588.27	581.69	5.58
	CB-162.2	182+28	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	588.33	581.62	5.71
	CB-162.3	182+28	0.5' LT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	588.37	581.55	5.83
	CB-162.4	182+28	25.5' RT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	588.31	581.73	5.58
	CB-164.2	184+89	25.5' LT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	589.38	582.80	5.58
	CB-164.3	184+89	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	589.44	582.67	5.77
	CB-164.4	184+89	0.6' LT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	589.62	582.56	6.06
	CB-164.5	184+87	25.5' RT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	589.55	582.97	5.58
	CB-166.1	186+57	25.5'LT	STH 42 SB	---	---	1	---	---	---	---	---	---	---	1	---	---	1	590.10	583.53	5.57
	CB-166.2	186+56	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	590.16	583.40	5.76
	CB-166.3	186+57	0.5' LT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	590.44	583.30	6.14
	CB-166.4	186+54	25.5' RT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	590.35	583.77	5.58
	CB-170.1	190+49	33.3' LT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	589.97	583.39	5.58
	CB-170.2	2+54	19.5' RT	RCC	---	---	1	---	---	---	---	1	---	---	---	---	---	1	590.64	582.67	6.97
	CB-170.3	2+68	1.7' LT	RCC	---	---	---	---	1	---	---	1	---	---	---	---	---	1	590.44	583.30	6.14
	CB-170.4	2+78	1.7' LT	RCC	---	---	---	---	1	---	---	1	---	---	---	---	---	1	590.43	583.36	6.07
	CB-172.1	1+51	29' RT	RCC	1	---	---	---	---	---	---	---	---	---	1	---	---	1	591.28	582.53	7.75
	CB-172.2	14+03	1.5' RT	NMW	1	---	---	---	---	---	---	1	---	---	---	---	---	1	590.77	582.21	7.57
	CB-174.1	15+07	1.5' RT	SMO	1	---	---	---	---	---	---	---	---	---	1	---	---	1	590.84	583.89	5.95
	CB-174.2	15+17	1.5' RT	SMO	---	---	1	---	---	---	---	---	---	---	1	---	---	1	590.82	583.84	5.98
	CB-174.3	12+79	1.5' RT	SMI	1	---	---	---	---	---	---	---	---	---	1	---	---	1	591.19	583.78	6.41
	CB-174.4	12+69	1.5' RT	SMI	---	---	1	---	---	---	---	---	---	---	1	---	---	1	591.18	583.74	6.44
	CB-174.5	12+99	1.5' LT	NMI	1	---	---	---	---	---	---	---	---	---	1	---	---	1	590.86	583.59	6.27
	CB-174.6	12+88	1.5' LT	NMI	---	---	1	---	---	---	---	---	---	---	1	---	---	1	590.85	583.29	6.56
	CB-174.7	13+14	1.5' RT	NMW	1	---	---	---	---	---	---	---	---	---	1	---	---	1	590.48	583.48	6.01
	CB-174.8	13+04	1.5' RT	NMW	---	---	1	---	---	---	---	---	---	---	1	---	---	1	590.46	583.18	6.28
	CB-174.9	13+29	1.5' LT	NME	1	---	---	---	---	---	---	---	---	---	1	---	---	1	590.12	583.54	5.58
	CB-174.10	13+19	1.5' LT	NME	---	---	1	---	---	---	---	---	---	---	1	---	---	1	590.11	579.23	9.87
	CB-174.11	13+41	1.5' RT	NMO	1	---	---	---	---	---	---	---	---	---	1	---	---	1	589.72	583.14	5.58

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

STORM SEWER CATCH BASINS & INLETS AND COVERS CONT.

ID	STRUCT.	STA.	OFFSET*	LOCATION	611.0624	611.0630	611.0639	611.0642	611.0652	SPV.0060.01	SPV.0060.02	611.1004	611.1005	611.1006	611.1230	611.3003	611.3901	650.4000****	RIM	INVERT**	DEPTH***
					INLET COVERS TYPE							CATCH BASINS				INLETS	INLETS	CONSTR.			
					H	HM-GJ	H-S	MS	T	DW	BH	4-FT	5-FT	6-FT		3-FT	MEDIAN	STAKING			
					EA	EA	EA	EA	EA	EA	EA	DIA. EA	DIA. EA	DIA. EA	2x3-FT EA	DIA. EA	GRATE EA	SEWER EA	ELEV.	ELEV.	FT
PROJECT 4570-12-71 CONT.																					
	CB-174.12	13+31	1.5' RT	NMO	---	---	1	---	---	---	---	---	---	---	1	---	---	1	589.71	579.00	9.71
	IN-180.1	193+15	56.6' LT	STH 42 SB	---	---	---	1	---	---	---	---	---	---	---	---	1	1	586.06	583.45	2.82
	CB-180.2	191+85	29.5' LT	STH 42 SB	1	---	---	---	---	---	---	1	---	---	---	---	---	1	588.55	580.82	6.73
	CB-180.3	191+85	0.5' RT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	1	589.17	580.67	7.49
	CB-180.4	192+30	0.5' LT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	---	1	588.03	580.02	7.00
	CB-180.5	192+34	29.5' RT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	---	1	588.50	579.93	7.56
	CB-182.1	193+90	34.5' LT	STH 42 SB	1	---	---	---	---	---	---	---	---	---	1	---	---	---	1	586.62	581.16	4.46
	CB-182.2	194+00	34.5' LT	STH 42 SB	---	---	1	---	---	---	---	---	---	---	1	---	---	---	1	586.60	581.12	4.48
	CB-182.3	194+08	0.8' RT	STH 42 SB	---	---	1	---	---	---	---	---	---	---	1	---	---	---	1	587.32	581.02	5.30
	CB-182.4	193+98	0.5' RT	STH 42 SB	---	---	1	---	---	---	---	1	---	---		---	---	---	1	587.33	580.98	5.35
	CB-182.5	194+40	0.5' LT	STH 42 NB	---	---	1	---	---	---	---	---	---	---	1	---	---	---	1	587.14	581.05	5.09
	CB-182.6	194+30	0.5' LT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	---	1	587.14	581.09	5.05
	CB-182.7	194+50	31.5' RT	STH 42 NB	---	---	1	---	---	---	---	---	---	---	1	---	---	---	1	586.48	581.18	4.30
	CB-182.8	194+40	30.6' RT	STH 42 NB	1	---	---	---	---	---	---	---	---	---	1	---	---	---	1	586.49	581.22	4.27
	CB-184.0	195+17	11.7' RT	STH 42 SB	---	1	---	---	---	---	---	---	---	---	1	---	---	---	1	587.59	581.57	5.02
	PROJECT TOTALS				73	1	22	1	2	1	0	14	1	1	82	0	1	99			
PROJECT 4570-12-72																					
	CB-190.1	20+66	16.5' LT	NORTH LEG SB	1	---	---	---	---	---	---	---	---	---	1	---	---	---	1	590.11	583.73	5.38
	CB-190.2	20+55	16.8' LT	NORTH LEG SB	---	---	1	---	---	---	---	---	---	---	1	---	---	---	1	590.08	583.63	5.46
	CB-190.3	20+45	1.5' RT	NORTH LEG SB	---	---	1	---	---	---	---	---	---	---	1	---	---	---	1	590.41	585.42	3.99
	CB-190.4	20+49	1.5' LT	NORTH LEG NB	---		1	---	---	---	---	---	---	---	1	---	---	---	1	590.23	583.34	5.89
	CB-190.5	20+55	16.6' RT	NORTH LEG NB	1	---	---	---	---	---	---	---	---	---	1	---	---	---	1	589.94	583.56	5.38
	CB-190.6	20+45	17.3' RT	NORTH LEG NB	---	---	1	---	---	---	---	1	---	---	---	---	---	---	1	589.92	581.07	7.85
	PROJECT TOTALS				2	0	4	0	0	0	0	1	0	0	5	0	0	6			
	TOTALS				128	1	43	1	2	1	1	26	1	1	146	1	1	176			

NOTES

* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

** FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE

*** DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6 -INCH ADJUSTMENT RING HEIGHT

**** ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

ADJUSTING INLET COVERS

ID	STATION	LOCATION	611.8115* EA
PROJECT 4570-12-71			
	10+52, 17' LT	N. 5TH ST	1
	10+53, 17' RT	N. 5TH ST	1
		TOTALS	2

COVER PLATES TEMPORARY

ID	PROJECT STAGE	LOCATION	611.8120.S EA	REMARKS
PROJECT 4570-12-71				
	1	SS STRUCTURE 174.0	1	ROUNDABOUT PHASE 1
	1	SS STRUCTURE 174.9	1	ROUNDABOUT PHASE 1
	1	SS STRUCTURE 174.1	1	ROUNDABOUT PHASE 1
	1	SS STRUCTURE 180.5	1	ROUNDABOUT PHASE 1
	1	SS STRUCTURE 172.1	1	ROUNDABOUT PHASE 2
	1	SS STRUCTURE 174.3	1	ROUNDABOUT PHASE 2
	1	SS STRUCTURE 174.4	1	ROUNDABOUT PHASE 2
	1	SS STRUCTURE 180.3	1	ROUNDABOUT PHASE 2
		TOTAL	8	

PIPE UNDERDRAIN

ID	LOCATION	310.0115 BASE AGGREGATE OPEN-GRADED CY	612.0106 PIPE UNDERDRAIN 6-INCH LF	645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY
PROJECT 1500-37-74				
	STRUCTURE SERIES 112	8	220	125
	PROJECT TOTAL	8	220	125
PROJECT4570-12-71				
	STA. 166+05 - STA. 172+70, EB RT	51	685	535
	STRUCTURE SERIES 152	8	220	125
	STRUCTURE SERIES 174	13	330	180
	STRUCTURE SERIES 170 (RBT CIRCLE)	2	55	30
	STRUCTURE SERIES 182	8	220	125
	PROJECT TOTALS	82	1,510	995
PROJECT 4570-12-72				
	STRUCTURE SERIES 190	5	110	60
	PROJECT TOTALS	5	110	60
	TOTAL	95	1,840	1,180

REMOVING OVERHEAD SIGN SUPPORTS FULL SPAN

ID	STATION	LOCATION	638.3155.01 S-36-025 EACH	638.3155.02 S-36-034 EACH	638.3155.03 S-36-035 EACH
PROJECT 1500-37-74					
	144+77	USH 10 WB	---	1	---
	147+93	USH 10 WB	---	---	1
	149+31	USH 10 EB	1	---	---
		TOTALS	1	1	1

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

TOPSOIL, MULCHING, FERTILIZER, SOD, SEED, AND WATER

ID	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING * SY	629.0210 FERTILIZER, TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	630.0300 SEEDING BORROW PIT LB	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
PROJECT 1500-37-74													
	131+75	-	133+59	USH 10, EB, TERRACE	83	-	0.1	-	-	-	-	2	83
	131+75	-	134+32	USH 10, WB, TERRACE	91	-	0.1	-	-	-	-	2	91
	131+22	-	133+49	USH 10, EB, BACK OF SIDEWALK	85	-	0.1	-	4	-	-	-	-
	131+27	-	134+25	USH 10, WB, BACK OF SIDEWALK	104	-	0.1	-	5	-	-	-	-
	131+31	-	134+27	USH 10, MEDIAN	493	-	0.3	22	-	-	-	11	-
	133+89	-	136+20	USH 10, EB, TERRACE	118	-	0.1	-	-	-	-	3	118
	134+00	-	136+20	USH 10, EB, BACK OF SIDEWALK	120	-	0.1	-	5	-	-	-	-
	135+05	-	136+36	USH 10, WB, TERRACE	66	-	0.1	-	-	-	-	1	66
	135+05	-	136+25	USH 10, WB, BACK OF SIDEWALK	198	-	0.1	-	9	-	-	-	-
	135+06	-	139+48	USH 10, MEDIAN	891	-	0.6	40	-	-	-	20	-
	136+68	-	141+34	USH 10, WB, TERRACE	204	-	0.1	-	-	-	-	5	204
	136+78	-	141+23	USH 10, WB, BACK OF SIDEWALK	217	-	0.1	-	10	-	-	-	-
	136+84	-	141+35	USH 10, RT, TERRACE	198	-	0.1	-	-	-	-	4	198
	136+84	-	141+24	USH 10, EB, BACK OF SIDEWALK	172	-	0.1	-	8	-	-	-	-
	141+74	-	145+03	USH 10, EB, TERRACE	163	-	0.1	-	-	-	-	4	163
	141+77	-	148+19	USH 10, WB, TERRACE	380	-	0.2	-	-	-	-	9	380
	141+87	-	144+93	USH 10, EB, BACK OF SIDEWALK	138	-	0.1	-	6	-	-	-	-
	141+88	-	148+04	USH 10, WB, BACK OF SIDEWALK	208	-	0.1	-	9	-	-	-	-
	145+38	-	148+18	USH 10, EB, TERRACE	184	-	0.1	-	-	-	-	4	184
	145+48	-	148+06	USH 10, EB	172	-	0.1	-	8	-	-	-	-
	148+50	-	151+28	USH 10, WB, TERRACE	204	-	0.1	-	-	-	-	5	204
	148+50	-	151+29	USH 10, EB, TERRACE	236	-	0.2	-	-	-	-	5	236
	148+65	-	148+65	USH 10, WB, BACK OF SIDEWALK	206	-	0.1	-	9	-	-	-	-
	148+65	-	148+65	USH 10, EB, BACK OF SIDEWALK	275	-	0.2	-	12	-	-	-	-
	151+68	-	152+25	USH 10, RT, TERRACE	66	-	0.1	-	-	-	-	1	66
	151+71	-	152+25	USH 10, WB, TERRACE	62	-	0.1	-	-	-	-	1	62
	151+79	-	152+25	USH 10, EB, BACK OF SIDEWALK	60	-	0.1	-	3	-	-	-	-
	151+81	-	152+25	USH 10, WB, BACK OF SIDEWALK	48	-	0.1	-	2	-	-	-	-
	151+90	-	152+25	USH 10, MEDIAN	65	-	0.1	3	-	-	-	1	-
	8+85	-	9+70	S. MENASHA AVE, RT, TERRACE	49	-	0.1	-	-	-	-	1	49
	8+85	-	9+39	S. MENASHA AVE, LT, TERRACE	30	-	0.1	-	-	-	-	1	30
	8+85	-	9+75	S. MENASHA AVE, RT	120	-	0.1	-	5	-	-	-	-
	10+45	-	12+10	N. MENASHA AVE, LT, TERRACE	112	-	0.1	-	-	-	-	3	112
	10+45	-	12+10	N. MENASHA AVE, LT	87	-	0.1	-	4	-	-	-	-
	10+37	-	12+10	N. MENASHA AVE, RT, TERRACE	91	-	0.1	-	-	-	-	2	91
	10+37	-	12+10	N. MENASHA AVE, RT	363	-	0.2	-	16	-	-	-	-
	8+15	-	8+35	N. 12TH ST, RT, TERRACE	12	-	0.1	-	-	-	-	0.5	12
	8+15	-	8+20	N. 12TH ST, RT	14	-	0.1	-	1	-	-	-	-
	8+15	-	9+56	N. 12TH ST, LT, TERRACE	76	-	0.1	-	-	-	-	2	76
	8+15	-	9+56	N. 12TH ST, LT	160	-	0.1	-	7	-	-	-	-
	8+98	-	9+59	N. 12TH ST, RT, TERRACE	39	-	0.1	-	-	-	-	1	39
	8+98	-	9+59	N. 12TH ST, RT	32	-	0.1	-	1	-	-	-	-
	11+25	-	12+70	N. 9TH ST, LT	95	-	0.1	-	4	-	-	-	-
	11+25	-	12+70	N. 9TH ST, EB	69	-	0.1	-	3	-	-	-	-

PROJECT TOTALS

NOTE: ITEMS FOR 13TH STREET 10 STREET, AND 11TH STREET ARE INCLUDED WITH MAINLINE ITEMS.
CONTRACTOR WILL APPLY WATER FOR SODDED AREAS AND PLANTED AREAS IN MEDIAN AT 1-INCH PER WEEK (4 WEEKS)
BORROW PIT SEEDING TO BE USED AT WASTE AREAS FOR FINAL STABILIZATION

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

TOPSOIL, MULCHING, FERTILIZER, SOD, SEED, AND WATER (CONTINUED)

ID	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING * SY	629.0210 FERTILIZER, TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	630.0300 SEEDING BORROW PIT LB	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
PROJECT 1500-37-74													
	12+50	-	12+90	N. 8TH ST, LT	11	-	0.1	-	1	-	-	-	-
	12+55	-	12+90	N. 8TH ST, RT	11	-	0.1	-	1	-	-	-	-
	10+20	-	11+45	EMERGENCY VEHICLE RR CROSSING	208	208	1.1	-	9	-	-	-	-
	WASTE SITE				-	6,000	6.3	-	-	100	140	-	-
	UNDISTRIBUTED				1,714	492	3.9	35	53	50	-	26	636
	PROJECT TOTALS				8,800	6,700	17	100	195	150	140	115	3,100
PROJECT 4570-12-71													
	152+25	-	155+37	STH 42, EB	143	-	0.1	-	6	-	-	-	-
	152+25	-	155+50	STH 42, EB, TERRACE	146	-	0.1	-	-	-	-	3	146
	152+25	-	155+35	STH 42, WB	117	-	0.1	-	5	-	-	-	-
	152+25	-	155+50	STH 42, WB, TERRACE	144	-	0.1	-	-	-	-	3	144
	152+25	-	155+30	STH 42, MEDIAN	699	-	0.4	31	-	-	-	16	-
	155+75	-	156+07	STH 42, EB	87	-	0.1	-	4	-	-	-	-
	155+75	-	156+07	STH 42, EB, TERRACE	14	-	0.1	-	-	-	-	0.5	14
	155+75	-	156+08	STH 42, WB	56	-	0.1	-	3	-	-	-	-
	155+75	-	156+08	STH 42, WB, TERRACE	13	-	0.1	-	-	-	-	0.5	13
	156+33	-	159+70	STH 42, EB, TERRACE	168	-	0.1	-	-	-	-	4	168
	156+35	-	159+71	STH 42, WB, TERRACE	186	-	0.1	-	-	-	-	4	186
	156+46	-	159+53	STH 42, EB	167	-	0.1	-	8	-	-	-	-
	156+47	-	159+55	STH 42, WB	225	-	0.1	-	10	-	-	-	-
	156+53	-	159+53	STH 42, MEDIAN	672	-	0.4	30	-	-	-	15	-
	160+01	-	172+75	STH 42, EB, TERRACE	541	-	0.1	-	-	-	-	12	541
	160+01	-	163+35	STH 42, WB, TERRACE	187	-	0.1	-	-	-	-	4	187
	160+18	-	184+03	STH 42, EB	1,612	-	0.1	-	73	-	-	-	-
	160+19	-	163+27	STH 42, WB	158	-	0.1	-	7	-	-	-	-
	160+18	-	163+20	STH 42, MEDIAN	679	-	0.4	31	-	-	-	15	-
	163+72	-	169+50	STH 42, WB, TERRACE	241	-	0.1	-	-	-	-	5	241
	163+82	-	184+17	STH 42, WB	919	-	0.1	-	41	-	-	-	-
	163+89	-	183+95	STH 42, MEDIAN	4,641	-	2.9	209	-	-	-	104	-
	169+50	-	184+17	STH 42, WB	682	-	0.1	-	31	-	-	-	-
	172+75	-	180+17	STH 42, EB, TERRACE	358	-	0.1	-	-	-	-	8	358
	180+17	-	183+93	STH 42, EB, TERRACE	177	-	0.1	-	-	-	-	4	177
	184+44	-	189+33	STH 42, EB	264	-	0.1	-	12	-	-	-	-
	184+47	-	194+90	STH 42, WB	2,640	-	0.1	-	119	-	-	-	-
	184+47	-	192+07	STH 42, WB, TERRACE	403	-	0.1	-	-	-	-	9	403
	184+54	-	189+33	STH 42, EB, TERRACE	462	-	0.1	-	-	-	-	10	462
	184+50	-	188+67	STH 42, MEDIAN	686	-	0.4	31	-	-	-	-	-
	190+45	-	191+56	STH 42, EB, TERRACE	277	-	0.1	-	-	-	-	6	277
	190+46	-	194+86	STH 42, EB	938	-	0.1	-	42	-	-	-	-
	190+75	-	194+78	STH 42, MEDIAN	874	-	0.6	39	-	-	-	20	-
	195+60	-	196+95	STH 42, MEDIAN	36	-	0.1	2	-	-	-	1	-
	10+75	-	13+24	MARITIME DR, RT	393	-	0.1	-	18	-	-	-	-

NOTE: ITEMS FOR LINCOLN BLVD, 6TH STREET, AND 5TH STREET ARE INCLUDED WITH MAINLINE ITEMS.
CONTRACTOR WILL APPLY WATER FOR SODDED AREAS AND PLANTED AREAS IN MEDIAN AT 1-INCH PER WEEK (4 WEEKS)
BORROW PIT SEEDING TO BE USED AT WASTE AREAS FOR FINAL STABILIZATION

* QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

TOPSOIL, MULCHING, FERTILIZER, SOD, SEED, AND WATER (CONTINUED)

ID	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING * SY	629.0210 FERTILIZER, TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	630.0300 SEEDING BORROW PIT LB	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
	10+89	-	13+08	MARITIME DR, LT	157	-	0.1	-	7	-	-	-	-
	10+96	-	13+08	MARITIME DR, LT, TERRACE	139	-	0.1	-	-	-	-	3	139
	11+13	-	13+30	MARITIME DR, MEDIAN, LT	482	-	0.3	22	-	-	-	-	-
	12+55	-	13+30	MARITIME DR, MEDIAN, RT	203	-	0.1	9	-	-	-	-	-
	WASTE SITE				-	6,000	3.7	-	-	50	90	-	-
	UNDISTRIBUTED				5,404	1,000	3.7	71	74	25	-	53	294
	PROJECT TOTALS				26,390	7,000	16	475	460	75	90	300	3,750
PROJECT 4570-12-72													
	20+00	-	20+69	BAYSHORE DR, NB, TERRACE	62	-	0.1	-	-	-	-	1	64
	20+00	-	20+69	BAYSHORE DR, NB, RT	183	-	0.1	-	8	2.5	-	-	-
	20+00	-	20+69	BAYSHORE DR, SB, TERRACE	53	-	0.1	-	-	-	-	-	-
	20+00	-	20+69	BAYSHORE DR, SB, LT	147	-	0.1	-	7	2.5	-	3	146
	PROJECT TOTALS				445	0	0.4	0	15	5	0	4	210
	TOTALS				35,635	13,700	33.4	575	670	230	230	419	7,060

NOTE: CONTRACTOR WILL APPLY WATER FOR SODDED AREAS AND PLANTED AREAS IN MEDIAN AT 1-INCH PER WEEK (4 WEEKS)
BORROW PIT SEEDING TO BE USED AT WASTE AREAS FOR FINAL STABILIZATION

* QUANTITIES SHOWN ELSEWHERE

SEEDING, MULCHING, AND PLANTING AND SOIL MIX

ID	STATION	TO	STATION	LOCATION	627.0200 MULCHING * SY	630.0400 SEEDING NURSE CROP LB	SPV.0035.01 PLANTING SOIL MIX CY	SPV.0085.01 SEEDING SWITCHGRASS LB	SPV.0180.02 SHREDDED HARDWOOD BARK MULCH SY	REMARKS
PROJECT 4570-12-71										
	187+78	-	188+97	STH 42	210	2	70	8	95	PLANTING BED
	188+97	-	190+44	STH 42	453	4	152	17	235	PLANTING BED
	191+13	-	192+81	STH 42	337	3	113	12	70	PLANTING BED
	TOTALS				1,000	9	335	37	400	

NOTE: PLACE PLANTING SOIL MIX 1-FOOT DEEP IN PLANTING BED

* ADDITONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

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SILT FENCE

ID	STATION	TO	STATION	LOCATION	628.1504 QUANTITY LF	628.1520 MAINTENANCE LF
PROJECT 1500-37-74						
	10+37	-	12+10	N. MENASHA AVE, RT	258	1,548
	8+85	-	9+90	S. MENASHA AVE, RT	107	642
	149+90	-	150+80	USH 10 / STH 42, LT	77	462
	10+20	-	11+45	EMERGENCY RR CROSSING	150	300
	WASTE SITE				1,500	9,000
	UNDISTRIBUTED				408	2,448
	PROJECT TOTALS				2,500	14,400
PROJECT 4570-12-71						
	162+50	-	164+75	STH 42, RT	203	1,218
	169+50	-	179+09	STH 42, LT	959	5,754
	173+00	-	174+70	STH 42, RT	192	1,152
	175+00	-	179+09	STH 42, RT	446	2,676
	179+43	-	184+17	STH 42, LT	458	2,748
	179+43	-	181+00	STH 42, RT	155	930
	182+75	-	184+03	STH 42, RT	129	774
	190+45	-	190+84	STH 42, RT	120	720
	191+08	-	192+23	STH 42, RT	207	1,242
	192+58	-	193+15	STH 42, RT	81	486
	193+62	-	194+32	STH 42, LT	75	450
	10+75	-	11+65	MARITIME DR, RT	97	582
	11+86	-	12+79	MARITIME DR, RT	151	906
	WASTE SITE				500	3,000
	UNDISTRIBUTED				1077	6,462
	PROJECT TOTALS				4,850	29,100
	TOTALS				7,350	43,500

EROSION MAT

ID	STATION	TO	STATION	LOCATION	628.2004 EROSION MAT CLASS I TYPE B SY	628.2006 EROSION MAT URBAN CLASS I, TYPE A SY
PROJECT 1500-37-74						
	131+22	-	133+49	USH 10, EB	-	85
	131+27	-	134+25	USH 10, WB	-	104
	131+31	-	134+27	USH 10, MEDIAN	-	493
	134+00	-	136+20	USH 10, EB	-	120
	10+45	-	12+10	N. MENASHA AVE, WB	-	87
	10+37	-	12+10	N. MENASHA AVE, RT	-	363
	135+05	-	136+25	USH 10, WB	-	198
	135+06	-	139+48	USH 10, MEDIAN	-	891
	8+85	-	975	S. MENASHA AVE, RT	-	120
	8+15	-	8+20	N. 12TH ST, RT	-	14
	8+15	-	9+56	N. 12TH ST, LT	-	160
	8+98	-	9+59	N. 12TH ST, RT	-	32
	136+78	-	141+23	USH 10, LT	-	217
	136+84	-	141+24	USH 10, RT	-	172
	141+87	-	144+93	USH 10, RT	-	138
	141+88	-	148+04	USH 10, LT	-	208
	145+48	-	148+06	USH 10, RT	-	172
	147+36	-	147+91	USH 10, MEDIAN	-	50
	11+25	-	12+70	N. 9TH ST, LT	-	95
	11+25	-	12+70	N. 9TH ST, RT	-	69
	148+65	-	148+65	USH 10, LT	-	206
	148+65	-	148+65	USH 10, RT	-	275
	148+78	-	151+05	USH 10, MEDIAN	-	220
	12+50	-	12+90	N. 8TH ST, LT	-	11
	12+55	-	12+90	N. 8TH ST, RT	-	11
	151+79	-	152+25	USH 10, RT	-	60
	151+81	-	152+25	USH 10, LT	-	48
	151+90	-	152+25	USH 10, MEDIAN	-	65
	10+20	-	11+45	EMERGENCY RR CROSSING	600	-
	UNDISTRIBUTED				150	1,171
	PROJECT TOTALS				750	5,855
PROJECT 4570-12-71						
	152+25	-	155+37	STH 42, RT	-	143
	152+25	-	155+35	STH 42, LT	-	117
	152+25	-	155+30	STH 42, MEDIAN	-	699
	155+75	-	156+07	STH 42, RT	-	87
	155+75	-	156+08	STH 42, LT	-	56
	156+46	-	159+53	STH 42, RT	-	167
	156+47	-	159+55	STH 42, LT	-	225
	156+53	-	159+53	STH 42, MEDIAN	-	672
	160+18	-	184+03	STH 42, RT	-	1,612
	160+19	-	163+27	STH 42, LT	-	158

EROSION MAT (CONTINUED)

ID	STATION	TO	STATION	LOCATION	628.2004 EROSION MAT CLASS I TYPE B SY	628.2006 EROSION MAT URBAN CLASS I, TYPE A SY
PROJECT 4570-12-71						
	160+18	-	163+20	STH 42, MEDIAN	-	679
	163+82	-	184+17	STH 42, LT	-	919
	163+89	-	183+95	STH 42, MEDIAN	-	4,641
	169+50	-	184+17	STH 42, LT, BLVD	-	682
	172+75	-	184+17	STH 42, RT, BLVD	-	358
	184+44	-	189+33	STH 42, RT	-	264
	184+47	-	194+90	STH 42, LT	-	1,935
	184+93	-	193+65	STH 42, LT	705	-
	184+47	-	192+07	STH 42, LT, BLVD	-	403
	184+50	-	188+67	STH 42, MEDIAN	-	686
	190+45	-	191+56	STH 42, RT, BLVD	-	277
	190+46	-	194+86	STH 42, RT	-	938
	190+75	-	194+78	STH 42, MEDIAN	-	874
	195+60	-	196+95	STH 42, MEDIAN	-	36
	10+75	-	13+24	MARITIME DR, RT	-	393
	10+89	-	13+08	MARITIME DR, LT	-	157
	11+13	-	13+30	MARITIME DR, MEDIAN, LT	-	482
	12+55	-	13+30	MARITIME DR, MEDIAN, RT	-	203
	UNDISTRIBUTED				195	4,537
	PROJECT TOTALS				900	22,400
PROJECT 4570-12-72						
	20+00	-	20+69	BAYSHORE DR, NB, RT	-	183
	20+00	-	20+69	BAYSHORE DR, SB, LT	-	147
	PROJECT TOTALS				0	330
	TOTALS				1,650	28,585

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

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EROSION CONTROL

ID	LOCATION	628.1905 MOBILIZATIONS EACH	628.1910 MOBILIZATIONS EMERGENCY EACH
PROJECT 1500-37-74			
	STAGE 2	4	4
	PROJECT TOTALS	4	4
PROJECT 4570-12-71			
	STAGE 1	5	5
	PROJECT TOTALS	5	5
PROJECT 4570-12-72			
	STAGE 1	2	2
	PROJECT TOTALS	2	2
	TOTALS	11	11

TRACKING PADS

ID	LOCATION	628.7560 EACH
1500-37-74		
	UNDISTRIBUTED	6
	PROJECT TOTAL	6
4570-12-71		
	UNDISTRIBUTED	8
	PROJECT TOTAL	8
	TOTAL	14

CULVERT PIPE CHECKS AND ROCK BAGS

ID	STATION	LOCATION	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH
PROJECT 1500-37-74				
		UNDISTRIBUTED	-	100
PROJECT TOTALS			0	100
PROJECT 4570-12-71				
	184+88	STH 42, LT	3	-
		UNDISTRIBUTED	-	100
PROJECT TOTALS			3	100
TOTALS			3	200

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

INLET PROTECTION

ID	STRUCTURE NO.	STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH
PROJECT 1500-37-74							
102.1		133+42	USH 10, WB, LT	1	-	1	-
102.2		133+43	USH 10, WB, MEDIAN	1	-	1	-
102.3		133+43	USH 10, EB, MEDIAN	1	-	1	-
102.4		133+43	USH 10, EB, RT	1	-	1	-
102.5		9+47	N. 13TH ST, LT	1	-	1	-
102.6		9+47	N. 13TH ST, RT	1	-	1	-
104.1		13+09	USH 10, WB, LT	1	-	1	-
104.2		134+09	USH 10, WB, MEDIAN	1	-	1	-
104.3		134+08	USH 10, EB, MEDIAN	1	-	1	-
105.1		134+39	N. MENASHA AVE, LT	1	-	1	-
105.2		10+80	N. MENASHA AVE, LT	1	-	-	1
105.3		134+84	N. MENASHA AVE, RT	1	-	-	1
105.4		10+80	N. MENASHA AVE, RT	1	-	1	-
106.1		135+40	USH 10, LT	1	1	-	-
106.2		135+76	USH 10, WB, LT	1	-	1	-
106.3		135+76	USH 10, WB, MEDIAN	1	-	1	-
106.4		135+77	USH 10, EB, MEDIAN	1	-	1	-
106.5		135+77	USH 10, EB, RT	1	-	1	-
108.2		9+47	N. 12TH ST, LT	1	-	1	-
108.3		9+47	N. 12TH ST, RT	1	-	1	-
108.4		9+69	S. MENASHA AVE, RT	1	-	1	-
108.5		9+31	S. MENASHA AVE, LT	1	-	1	-
108.6		8+88	S. MENASHA AVE, LT	1	-	1	-
108.7		8+18	N. 12TH ST, LT	1	-	1	-
110.1		138+34	USH 10, WB, LT	1	-	1	-
110.2		138+23	USH 10, WB, LT	1	-	-	1
110.3		138+34	USH 10, WB, MEDIAN	1	-	1	-
110.4		138+23	USH 10, WB, MEDIAN	1	-	-	1
110.5		138+34	USH 10, EB, MEDIAN	1	-	1	-
110.6		138+24	USH 10, EB, MEDIAN	1	-	-	1
110.7		138+34	USH 10, EB, RT	1	-	1	-
110.8		138+24	USH 10, EB, RT	1	-	-	1
112.1		140+99	USH 10, WB, LT	1	-	-	1
112.2		140+89	USH 10, WB, LT	1	-	1	-
112.3		140+93	USH 10, WB, MEDIAN	1	-	1	-
112.4		141+03	USH 10, WB, MEDIAN	1	-	-	1
112.5		140+99	USH 10, EB, MEDIAN	1	-	1	-
112.6		141+09	USH 10, EB, MEDIAN	1	-	-	1
112.7		140+90	USH 10, EB, RT	1	-	1	-
112.8		141+00	USH 10, EB, RT	1	-	-	1
114.1		10+80	N. 11TH ST, RT	1	-	1	-
114.2		10+90	N. 11TH ST, RT	1	-	-	1
114.4		10+90	N. 11TH ST, LT	1	-	1	-
114.5		10+80	N. 11TH ST, LT	1	-	-	1
114.6		9+47	N. 11TH ST, RT	1	-	1	-

INLET PROTECTION (CONTINUED)

ID	STRUCTURE NO.	STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH
PROJECT 1500-37-74							
114.8		9+47	N. 11TH ST, LT	1	-	1	-
116.1		142+08	USH 10, WB, LT	1	-	1	-
116.2		142+19	USH 10, WB, MEDIAN	1	-	1	-
116.3		142+19	USH 10, EB, MEDIAN	1	-	1	-
116.4		142+19	USH 10, EB, RT	1	-	1	-
118.1		143+75	USH 10, WB, LT	1	-	1	-
118.2		143+75	USH 10, WB, MEDIAN	1	-	1	-
118.3		143+75	USH 10, EB, MEDIAN	1	-	1	-
118.4		143+75	USH 10, EB, RT	1	-	1	-
120.1		145+70	USH 10, WB, LT	1	-	1	-
120.2		145+70	USH 10, WB, MEDIAN	1	-	1	-
120.3		145+70	USH 10, EB, MEDIAN	1	-	1	-
120.4		145+65	USH 10, EB, RT	1	-	1	-
120.5		9+49	N. 10TH ST, RT	1	-	1	-
120.6		9+47	N. 10TH ST, LT	1	-	1	-
122.3		12+67	N. 9TH ST, RT	1	-	1	-
122.4		12+67	N. 9TH ST, LT	1	-	1	-
122.5		9+47	N. 9TH ST, LT	1	-	1	-
122.6		9+47	N. 9TH ST, RT	1	-	1	-
126.1		12+61	N. 8TH ST, LT	1	-	1	-
126.5		150+79	USH 10, WB, LT	1	-	1	-
126.6		150+79	USH 10, WB, MEDIAN	1	-	1	-
126.7		150+83	USH 10, EB, MEDIAN	1	-	1	-
126.8		150+83	USH 10, EB, RT	1	-	1	-
126.9		9+58	N. 8TH ST, LT	1	-	1	-
126.10		9+39	N. 8TH ST, RT	1	-	1	-
		11+44	EMERGENCY RR CROSSING	-	-	1	-
			HAUL ROUTES			19	16
PROJECT TOTALS				71	1	78	28
PROJECT 4570-12-71							
128.1		153+69	STH 42, WB, LT	1	-	1	-
128.2		153+69	STH 42, WB, MEDIAN	1	-	1	-
128.3		153+70	STH 42, EB, MEDIAN	1	-	1	-
128.4		153+70	STH 42, EB, RT	1	-	1	-
130.1		10+66	LINCOLN BLVD, SB, RT	1	-	1	-
130.2		10+77	LINCOLN BLVD, SB, LT	1	-	1	-
130.3		155+21	STH 42, WB, LT	1	-	1	-
130.4		155+00	STH 42, WB, MEDIAN	1	-	1	-
130.5		155+00	STH 42, EB, MEDIAN	1	-	1	-
130.6		155+00	STH 42, EB, RT	1	-	1	-
132.4		10+77	LINCOLN BLVD, NB, RT	1	-	1	-
132.5		10+65	LINCOLN BLVD, NB, LT	1	-	1	-
132.6		9+59	LINCOLN BLVD, NB, LT	1	-	1	-
132.7		9+47	LINCOLN BLVD, NB, RT	1	-	1	-
132.8		9+58	LINCOLN BLVD, SB, RT	1	-	1	-

INLET PROTECTION (CONTINUED)

ID	STRUCTURE NO.	STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH
PROJECT 4570-12-71							
132.9		9+47	LINCOLN BLVD, SB, LT	1	-	1	-
134.1		10+76	N. 6TH ST, RT	1	-	1	-
134.3		10+66	N. 6TH ST, LT	1	-	1	-
134.4		159+43	STH 42, WB, LT	1	-	1	-
134.5		159+19	STH 42, WB, MEDIAN	1	-	1	-
134.6		159+20	STH 42, EB, MEDIAN	1	-	1	-
134.7		159+24	STH 42, EB, RT	1	-	1	-
134.8		9+49	N. 6TH ST, LT	1	-	1	-
134.9		9+46	N. 6TH ST, RT	1	-	1	-
		10+53	N. 5TH ST, RT	1	-	1	-
		10+52	N. 5TH ST, LT	1	-	1	-
136.3		163+07	STH 42, WB, LT	1	-	1	-
136.4		162+90	STH 42, WB, MEDIAN	1	-	1	-
136.5		162+90	STH 42, EB, MEDIAN	1	-	1	-
136.6		162+90	STH 42, EB, RT	1	-	1	-
138.1		166+00	STH 42, WB, LT	1	-	1	-
138.2		166+00	STH 42, WB, MEDIAN	1	-	1	-
138.3		166+00	STH 42, EB, MEDIAN	1	-	1	-
138.4		166+00	STH 42, EB, RT	1	-	1	-
140.1		169+02	STH 42, WB, LT	1	-	1	-
140.2		169+00	STH 42, WB, MEDIAN	1	-	1	-
140.3		169+00	STH 42, EB, MEDIAN	1	-	1	-
140.4		169+00	STH 42, EB, RT	1	-	1	-
142.1		172+00	STH 42, WB, LT	1	-	1	-
142.2		172+00	STH 42, WB, MEDIAN	1	-	1	-
142.3		172+00	STH 42, EB, MEDIAN	1	-	1	-
142.0		172+00	STH 42, EB, RT	1	-	1	-
150.1		174+99	STH 42, WB, LT	1	-	1	-
150.2		175+00	STH 42, WB, MEDIAN	1	-	1	-
150.3		175+00	STH 42, EB, MEDIAN	1	-	1	-
150.0		175+00	STH 42, EB, RT	1	-	1	-
152.1		177+97	STH 42, WB, LT	1	-	-	1
152.2		177+87	STH 42, WB, LT	1	-	1	-
152.3		177+97	STH 42, WB, MEDIAN	1	-	-	1
152.4		177+87	STH 42, WB, MEDIAN	1	-	1	-
152.5		177+95	STH 42, EB, MEDIAN	1	-	-	1
152.6		177+85	STH 42, EB, MEDIAN	1	-	1	-
152.7		177+95	STH 42, EB, RT	1	-	-	1
152.0		177+85	STH 42, EB, RT	1	-	1	-
160.1		179+59	STH 42, WB, LT	1	-	1	-
160.2		179+59	STH 42, WB, MEDIAN	1	-	1	-
160.3		179+60	STH 42, EB, MEDIAN	1	-	1	-
160.4		179+60	STH 42, EB, RT	1	-	1	-
162.1		182+28	STH 42, WB, LT	1	-	1	-
162.2		182+28	STH 42, WB, MEDIAN	1	-	1	-

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

INLET PROTECTION (CONTINUED)

ID	STRUCTURE NO.	STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH
PROJECT 4570-12-71							
162.3		182+28	STH 42, EB, MEDIAN	1	-	1	-
162.4		182+28	STH 42, EB, RT	1	-	1	-
164.2		184+89	STH 42, WB, LT	1	-	1	-
164.3		184+89	STH 42, WB, MEDIAN	1	-	1	-
164.4		184+89	STH 42, EB, MEDIAN	1	-	1	-
164.5		184+87	STH 42, EB, RT	1	-	1	-
166.1		186+57	STH 42, WB, LT	1	-	1	-
166.2		186+56	STH 42, WB, MEDIAN	1	-	1	-
166.3		186+57	STH 42, EB, MEDIAN	1	-	1	-
166.4		186+54	STH 42, EB, RT	1	-	1	-
170.1		190+49	STH 42, WB, LT	1	-	1	-
170.2		190+50	STH 42, WB, MEDIAN	1	-	1	-
170.3		2+68	STH 42 RAB, LT	1	-	-	1
170.4		2+78	STH 42 RAB, LT	1	-	1	-
172.1		1+51	STH 42 RAB, RT	1	-	1	-
172.2		14+03	MARITIME DR, NB, MEDIAN	1	-	1	-
174.1		15+07	MARITIME DR, SB, LT	1	-	1	-
174.2		15+17	MARITIME DR, SB, LT	1	-	-	1
174.3		12+79	MARITIME DR, SB, RT	1	-	1	-
174.4		12+69	MARITIME DR, SB, RT	1	-	-	1
174.5		12+99	MARITIME DR, NB, LT	1	-	1	-
174.6		12+88	MARITIME DR, NB, LT	1	-	-	1
174.7		13+14	MARITIME DR, NB, LT MEDIAN	1	-	1	-
174.8		13+04	MARITIME DR, NB, LT MEDIAN	1	-	-	1
174.9		13+29	MARITIME DR, NB, RT MEDIAN	1	-	1	-
174.10		13+19	MARITIME DR, NB, RT MEDIAN	1	-	-	1
174.11		13+41	MARITIME DR, NB, RT	1	-	1	-
174.12		13+31	MARITIME DR, NB, RT	1	-	-	1
180.1		193+15	STH 42, LT	1	1	-	-
180.2		191+85	STH 42, WB, LT	1	-	1	-
180.3		191+85	STH 42, WB, MEDIAN	1	-	1	-
180.4		192+30	STH 42, EB, MEDIAN	1	-	1	-
180.5		192+34	STH 42, EB, RT	1	-	1	-
182.1		193+90	STH 42, WB, LT	1	-	1	-
182.2		194+00	STH 42, WB, LT	1	-	-	1
182.3		194+08	STH 42, WB, MEDIAN	1	-	1	-
182.4		193+98	STH 42, WB, MEDIAN	1	-	-	1
182.5		194+40	STH 42, EB, MEDIAN	1	-	-	1
182.6		194+30	STH 42, EB, MEDIAN	1	-	1	-
182.7		194+50	STH 42, EB, RT	1	-	-	1
182.8		194+40	STH 42, EB, RT	1	-	1	-
184		195+17	STH 42, WB, MEDIAN	1	-	1	-
			HAUL ROUTES	1	-	9	5
PROJECT TOTALS				103	1	95	20

INLET PROTECTION (CONTINUED)

ID	STRUCTURE NO.	STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH
PROJECT 4570-12-72							
190.1		20+66	BAYSHORE DR, SB	1	-	1	-
190.2		20+55	BAYSHORE DR, SB	1	-	-	1
190.3		20+45	BAYSHORE DR, SB	1	-	1	-
190.4		20+49	BAYSHORE DR, NB	1	-	1	-
190.5		20+55	BAYSHORE DR, NB	1	-	1	-
190.6		20+45	BAYSHORE DR, NB	1	-	-	1
PROJECT TOTALS				6	0	4	2
TOTALS				180	2	177	50

LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES

ID	LOCATION	632.9101 EACH
1500-37-74		
	UNDISTRIBUTED	10
	PROJECT TOTAL	10
4570-12-71		
	UNDISTRIBUTED	10
	PROJECT TOTAL	10
	TOTAL	20

GEOTEXTILE AND GEOGRID

ID	STATION	LOCATION	645.0140 GEOTEXTILE TYPE SAS SY	645.0220 GEOGRID TYPE SR SY
1500-37-74				
	10+50	EMERGENCY RR CROSSING	50	-
	10+70	EMERGENCY RR CROSSING	50	-
	UNDISTRIBUTED	EBS AREAS	1,000	1,000
	PROJECT TOTALS		1,100	1,000
PROJECT 4570-12-71				
	UNDISTRIBUTED	EBS AREAS	1,000	1,000
	PROJECT TOTALS		1,000	1,000
	TOTALS		2,100	2,000

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

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PLANTS AND TREES

ID	STATION	TO	STATION	LOCATION	DECIDUOUS TREES 632.0101.01 AUTUMN GOLD GINKGO (GI) EACH	632.0101.02 COMMON HACKBERRY (HA) EACH	632.0101.03 ESPRESSO KENTUCKY COFFEETREE (KC) EACH	632.0101.04 REGAL ELM (RE) EACH	632.0101.05 RED MAPLE (RM) EACH	632.0101.06 REDMOND LINDEN (RL) EACH	632.0101.07 SKYLINE HONEYLOCUST (SH) EACH	632.0101.08 SWAMP WHITE OAK (WO) EACH	ORNAMENTAL TREES 632.0101.09 AUTUMN BRILLIANCE SERVICEBERRY (AS) EACH	632.0101.10 COLORADO BLUE SPRUCE (BS) EACH	632.0101.11 CRUSADER THORNLESS COCKSPUR HAWTHORN (CO) EACH	632.0101.12 SPRING SNOW CRABAPPLE (SS) EACH	SHRUBS & PERENNIALS 632.0201.01 PLUMOSA CREEPING JUNIPER (CJ) EACH	SPV.0060.10 WALKER'S LOW BLUE CATMINT (WL) EACH
PROJECT 1500-37-74																		
	131+75	-	135+00	USH 10	-	-	-	-	-	-	1	-	-	-	2	-	-	-
	135+00	-	147+00	USH 10	-	-	-	-	7	2	-	-	2	-	-	-	-	-
	147+00	-	152+00	USH 10	-	-	-	-	2	-	-	-	3	-	-	-	-	-
	PROJECT TOTALS				0	0	0	0	9	2	1	0	5	0	2	0	0	0
PROJECT 4570-12-71																		
	152+00	-	157+00	STH 42	-	-	3	-	-	-	-	-	-	-	2	-	-	-
	157+00	-	163+00	STH 42	3	-	2	-	-	-	-	2	-	-	1	-	-	-
	163+00	-	169+00	STH 42	-	2	-	3	-	2	2	-	-	-	2	-	-	-
	169+00	-	175+00	STH 42	-	2	4	1	-	-	3	2	-	-	-	-	-	-
	175+00	-	181+00	STH 42	-	-	2	2	-	4	1	3	-	-	-	-	-	-
	181+00	-	187+00	STH 42	-	2	-	-	-	-	3	1	3	-	-	2	-	-
	187+00	-	193+00	STH 42	-	-	-	-	-	-	-	-	8	11	3	-	111	228
	PROJECT TOTALS				3	6	11	6	0	6	9	8	11	11	8	2	111	228
	TOTALS				3	6	11	6	9	8	10	8	16	11	10	2	111	228

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

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REMOVAL OF TYPE II SIGNS AND SUPPORTS

ID	SIGN NO.	LOCATION	SIGN CODE	MOUNTED WITH SIGN NO.	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
PROJECT 1500-37-74							
	824A	USH 10 EB	R14-1 MOD.		1	---	BANDED TO LIGHT POLE
	825	N 13TH ST	R1-1		1	1	
	827	USH 10 EB	R8-3		1	---	BANDED TO LIGHTPOLE BELOW
	828	USH 10 EB	S4-51		1	---	BANDED TO LIGHTPOLE
	830A	USH 10 EB	R14-1 MOD.		1	1	TRUCK ROUTE 1 BLOCK
	830B	USH 10 EB	R14-1		1	1	
	830C	USH 10 EB	M6-1	830A	---	---	BANDED BELOW #830A
	831	N 12TH ST	R5-1		1	1	
	832	N 12TH ST	R1-1		1	---	BANDED TO POWER POLE
	833	N 12TH ST	R3-5R MOD.		1	---	BANDED BELOW #832
	834	N 12TH ST	R7-2L		1	---	BANDED TO POWER POLE
	836	N 12TH ST	R5-1		1	1	
	837	N 12TH ST	M6-2	836	---	---	
	838	MENASHA AVE	R6-2R		1	1	
	840	MENASHA AVE	S1-1		1	1	
	841	MENASHA AVE	S16-9P	840	---	---	BANDED BELOW #840
	844	USH 10 EB	R8-3		1	1	
	867	USH 10 WB	R8-3		1	1	
	868	USH 10 WB	S4-51		1	1	
	869	MENASHA AVE	S1-1		1	1	
	870	MENASHA AVE	S16-9P	869	---	---	BANDED BELOW #869
	871	MENASHA AVE	R8-3	870	---	---	BANDED BELOW #870
	872	MENASHA AVE	R1-1		1	1	
	873	MENASHA AVE	R7-2L		1	1	
	874	USH 10 WB	S1-1		1	1	
	875	USH 10 WB	S16-9P	874	---	---	BANDED BELOW #874
	876	N 12TH ST	R1-1		1	1	
	877	USH 10 WB	S1-1		1	1	
	878	USH 10 WB	S16-9P	877	---	---	BANDED BELOW #877
	879	USH 10 EB	J2-2		1	1	
	903	USH 10 EB	S1-1		1	---	BANDED TO LIGHT POLE
	904	USH 10 EB	S16-9P	903	---	---	BANDED TO LIGHT POLE BELOW #903
	905	USH 10 EB	R1-1F	904	---	---	BANDED TO LIGHT POLE BELOW #904
	906A	USH 10 EB	S1-1		1	---	BANDED TO SIGNAL
	906B	USH 10 EB	S16-9P	906A	---	---	BANDED TO SIGNAL BELOW 906A
	906C	USH 10 EB	R1-1F	906B	---	---	BANDED TO SIGNAL BELOW 906B
	907	USH 10 EB	J4-2		1	1	
	908	USH 10 EB	M1-93	907	---	---	BANDED BELOW #907
	909A	USH 10 EB	R14-1		1	---	BANDED TO SIGNAL
	909B	USH 10 EB	M6-1	909A	---	---	BANDED TO SIGNAL BELOW 909A

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

REMOVAL OF TYPE II SIGNS AND SUPPORTS CONT.

ID	SIGN NO.	LOCATION	SIGN CODE	MOUNTED WITH SIGN NO.	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
PROJECT 1500-37-74 CONT.							
	909C	USH 10 EB	R6-2L	909A	---	---	BANDED TO SIGNAL BELOW 909B
	910	USH 10 EB	R6-2R	909A	---	---	BANDED TO SIGNAL
	912	USH 10 EB	R8-4		1	---	BANDED TO LIGHT POLE
	913	USH 10 EB	J1-1		1	---	OVERHEAD SIGN STRUCTURE
	914	N 10TH ST	S5-51		1	1	
	915	N 10TH ST	R5-2	914	---	---	BANDED BELOW #914
	916	N 10TH ST	R1-1		1	1	
	925	USH 10 WB	S4-51		1	---	OVERHEAD SIGN STRUCTURE
	926	USH 10 WB	S4-51		1	1	
	927	N 9TH ST	R1-1		1	1	
	930	USH 10 EB	J12-1		1	---	OVERHEAD SIGN STRUCTURE
	931	USH 10 EB	R8-3		1	1	
	932	USH 10 EB	R3-50L	930	---	---	OVERHEAD SIGN STRUCTURE
	933	USH 10 EB	R3-50A	930	---	---	OVERHEAD SIGN STRUCTURE
	934	USH 10 EB	R3-50A	930	---	---	OVERHEAD SIGN STRUCTURE
	935	USH 10 EB	R3-1		1	---	BANDED TO LIGHT POLE
	936	USH 10 EB	R1-1F	935	---	---	BANDED TO LIGHT POLE
	937	N 8TH ST	R5-1		1	---	BANDED TO SIGNAL
	938	N 8TH ST	R1-1F	937	---	---	BANDED TO SIGNAL
	951	USH 10 WB	J4-2		1	---	BANDED TO POWER POLE
	952	USH 10 WB	J22-1 MOD.		1	---	BANDED BELOW #951
	953	USH 10 WB	R8-3		1	---	BANDED BELOW #952
	956	USH 10 WB	S1-1	903	---	---	BANDED TO SIGNAL
	957	USH 10 WB	S16-7R	956	---	---	BANDED TO SIGNAL BELOW #856
	958	N 11TH ST	R1-1F		1	---	BANDED TO SIGNAL
	959 A	USH 10 WB	S1-1		1	---	BANDED TO SIGNAL BELOW #182B
	959 B	USH 10 WB	S16-7R	959A	---	---	
	959 C	USH 10 WB	R1-1F	959A	---	---	
	961	USH 10 WB	R1-1F		1	---	BANDED TO SIGNAL
	963	USH 10 EB	JV		1	1	
	964	USH 10 EB	JV	963	---	---	BANDED BELOW #963
	965	USH 10 EB	JV	964	---	---	BANDED BELOW #964
	968	USH 10 WB	R3-50L		1	---	OVERHEAD SIGN STRUCTURE
	969	USH 10 WB	R3-50A	968	---	---	OVERHEAD SIGN STRUCTURE
	970	USH 10 WB	R3-60R	968	---	---	OVERHEAD SIGN STRUCTURE
	971	USH 10 WB	R8-3		1	---	BANDED TO LIGHT POLE
	973A	USH 10 WB	J1-1		1	1	
	973B	USH 10 WB	M4-20L	973A	---	---	BANDED BELOW #973A
	974	USH 10 WB	R8-3		1	1	
	975	USH 10 WB	J2-3		1	---	OVERHEAD SIGN STRUCTURE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

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REMOVAL OF TYPE II SIGNS AND SUPPORTS CONT.

ID	SIGN NO.	LOCATION	SIGN CODE	MOUNTED WITH SIGN NO.	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
PROJECT 1500-37-74 CONT.							
	976	USH 10 WB	S4-51	975	---	---	OVERHEAD SIGN STRUCTURE
	977	N 9TH ST	R1-1		1	1	
	982	USH 10 WB	M2-1		1	1	
	983	USH 10 WB	J4-1	982	---	---	BANDED BELOW #982
	984A	USH 10 WB	S1-1		1	1	
	984B	USH 10 WB	S16-9P	984	---	---	BANDED BELOW #984
	986	USH 10 WB	R8-3	985	---	---	BANDED BELOW #985
	987	USH 10 WB	R1-1F		1	---	BANDED TO SIGNAL
	988	USH 10 WB	R3-4	987	---	---	BANDED TO SIGNAL
	989	USH 10 WB	R3-2	988	---	---	BANDED TO SIGNAL
	990	N 8TH ST	J12-1		1	---	BANDED TO SIGNAL
	991	N 8TH ST	R1-1F	990	---	---	BANDED TO SIGNAL
	992	N 8TH ST	R1-1F		1	---	BANDED TO SIGNAL
	1001	N 8TH ST	J4-1	---	1	---	BANDED TO SIGNAL
	1002	N 8TH ST	R1-1F	---	1	---	BANDED TO SIGNAL
	1003	USH 10 WB	J2-3	---	1	2	
	1004	USH 10 WB	R1-1F	---	1	---	BANDED TO SIGNAL
	1005	USH 10 WB	R3-4	1004	---	---	BANDED TO SIGNAL
	1006	USH 10 WB	R3-1	1005	---	---	BANDED TO SIGNAL
	1009A	N 8TH ST	R1-1F	---	1	---	BANDED TO SIGNAL
	1009B	USH 10 EB	J2-1	---	1	---	BANDED TO LIGHT POLE
	1010	USH 10 EB	R3-1	---	1	---	BANDED TO SIGNAL
	1109	N 8TH ST	R1-1F	---	1	---	BANDED TO SIGNAL
	1111	USH 10 EB	R3-1	---	1	---	BANDED TO SIGNAL
	1112A	USH 10 EB	J4-1	---	1	1	
		PROJECT TOTALS			66	32	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

REMOVAL OF TYPE II SIGN AND SUPPORTS CONT.

ID	SIGN NO.	LOCATION	SIGN CODE	MOUNTED WITH SIGN NO.	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
PROJECT 4570-12-71							
	1011	STH 42 NB	R2-1	---	1	1	25 MPH
	1115	LINCOLN BLVD	R1-1	---	1	1	
	1116	LINCOLN BLVD	R1-1	---	1	1	
	1118	N 6TH ST	R1-1	---	1	1	
	1119	STH 42 NB	W11-3	---	1	1	
	1120	STH 42 NB	R8-3	1119	---	---	BANDED BELOW #1119
	1121	STH 42 NB	R2-1	---	1	---	25 MPH - BANDED TO LIGHT POLE
	1123	STH 42 NB	J4-2	---	1	1	HWY 42, LAKE MICHIGAN CIRCLE TOUR, SEE PLAN SHEET
	1124	STH 42 NB	R8-3	1123	---	---	BANDED BELOW #1123
	1138	STH 42 SB	R3-2	---	1	---	BANDED TO LIGHT POLE
	1139	STH 42 SB	R8-3	---	1	1	
	1141	LINCOLN BLVD	R1-1	---	1	1	
	1142	LINCOLN BLVD	R1-1	---	1	1	
	1144	STH 42 SB	J4-2	---	1	1	HWY 42, IH 43, SEE PLAN SHEET
	1146	STH 42 SB	J1-2	---	1	---	USH 10, CTH B, SEE PLAN SHEET - BANDED TO LIGHT POLE
	1148	STH 42 SB	R8-3	---	1	1	
	1149	STH 42 SB	R2-1	---	1	1	25 MPH
	1150	N 6TH ST	R1-1	---	1	1	
	1151	STH 42 SB	J4-1	---	1	1	
	1152	STH 42 SB	R8-3	1151	---	---	BANDED BELOW #1151
	1153	N 5TH ST	R1-1	---	1	1	
	1201	STH 42 NB	R2-1	---	1	1	35 MPH
	1202	STH 42 SB	R2-1	---	1	---	25 MPH - BANDED TO LIGHT POLE
	1203	STH 42 SB	R2-1	---	1	1	25 MPH
	1300	STH 42 NB	R8-3	---	1	1	
	1301	STH 42 NB	R2-1	---	1	1	35 MPH
	1302	STH 42 NB	J2-1	---	1	1	
	1303	STH 42 NB	D1-1	---	1	1	MARITIME DR
	1304	STH 42 NB	R8-3	1303	---	---	BANDED BELOW #1303
	1305	MARITIME DR	R1-2	---	1	1	
	1306	MARITIME DR	R3-2	---	1	1	
	1307	MARITIME DR	R6-2R	---	1	1	
	1308	MARITIME DR	R8-3	---	1	1	
	1309	MARITIME DR	R7-2A	1308	---	---	BANDED BELOW #1308
	1310	MARITIME DR	R8-3	---	1	1	
	1311	MARITIME DR	R3-8E	---	1	1	
	1312	MARITIME DR	W11-2	---	1	1	
	1313	MARITIME DR	W11-2	---	1	1	
	1314	STH 42 NB	R5-1	---	1	1	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

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REMOVAL OF TYPE II SIGN AND SUPPORTS CONT.

ID	SIGN NO.	LOCATION	SIGN CODE	MOUNTED WITH SIGN NO.	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
PROJECT 4570-12-71 CONT.							
	1315	MARITIME DR	M1-6	---	1	1	
	1316	MARITIME DR	W1-6	1315	---	---	BANDED BELOW #1315
	1317	MARITIME DR	JH-1	---	1	---	BANDED ON LIGHT POLE
	1319	MARITIME DR	R1-1	---	1	1	
	1320	MARITIME DR	R1-1	---	1	1	
	1321	MARITIME DR	R1-2	---	1	1	
	1322	STH 42 NB	W4-1R	---	1	1	HWY 42, LAKE MICHIGAN CIRCLE TOUR, SEE PLAN SHEET
	1323	STH 42 NB	J4-2	---	1	1	
	1324	STH 42 SB	W11-3	---	1	1	
	1325	STH 42 SB	R8-3	---	1	---	BANDED BELOW #1324
	1326	STH 42 NB	R2-1	---	1	1	35 MPH
	1327	STH 42 SB	J4-2	---	1	1	
	1328	STH 42 SB	R1-2	---	1	1	
	1329	STH 42 NB	R4-7	---	1	---	BANDED TO LIGHT POLE
	1330	STH 42 SB	R4-7	---	1	1	
	1331	MARITIME DR	R6-2L	---	1	1	
	1332	STH 42 SB	R1-1	---	1	1	
	1333	STH 42 SB	R1-1	---	1	1	
	1334	STH 42 SB	J12-1	---	1	1	
	1403	STH 42 NB	R1-1	---	1	1	
	1412	MARITIME DR	R4-7	---	1	1	
	1502	STH 42 SB	R2-1	---	1	---	BANDED TO POWER POLE
	1503	STH 42 SB	J2-1	---	1	1	HWY 42, SEE PLAN SHEET
	1505	STH 42 SB	R2-1	---	1	1	35 MPH
		PROJECT TOTALS			57	49	
		TOTALS			123	81	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

ERECTION OF TYPE II SIGNS AND SUPPORTS

ID	SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0622 POSTS WOOD 4x6x22 EACH	637.0620 SIGN FLAGS PERMANENT TYPE II EACH	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
PROJECT 1500-37-74																
	823	USH 10 EB	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	824B	USH 10 EB	R14-1	24" X 18"	3.00	---	---	---	1	---	---	---	---	---	---	
	824C	USH 10 EB	M6-1	21" X 21"	3.07	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #824B
	825	N 13TH ST	R1-1	36" X 36"	7.46	---	---	---	---	1	---	---	---	---	---	
	826	USH 10 EB	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	827	USH 10 EB	R8-3	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	
	829A	USH 10 EB	M2-1	21" X 15"	2.19	---	---	---	1	---	---	---	---	---	---	
	829B	USH 10 EB	J4-1	24" X 36"	6.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #829A
	830B	USH 10 EB	R14-1	24" X 18"	3.00	---	---	---	1	---	---	---	---	---	---	
	830C	USH 10 EB	M6-1	21" X 21"	3.07	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #830B
	835	N 12TH ST	R1-1	36" X 36"	7.46	---	---	---	---	1	---	---	---	---	---	
	838	MENASHA AVE	R6-2R	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	839	MENASHA AVE	R1-1	36" X 36"	7.46	---	---	---	---	1	---	---	---	---	---	
	844	USH 10 EB	R8-3	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	
	867	USH 10 WB	R8-3	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	
	868	USH 10 WB	S4-51	24" X 48"	8.00	---	---	---	---	1	---	---	---	---	---	
	869	MENASHA AVE	S1-1	36" X 36"	---	---	6.75	---	---	---	1	---	---	---	---	
	870	MENASHA AVE	S16-9P	30" X 18"	---	---	3.75	---	---	---	---	---	---	---	---	MOUNT BELOW #869
	871	MENASHA AVE	R8-3	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #870
	876	N 12TH ST	R1-1	36" X 36"	7.46	---	---	---	1	---	---	---	---	---	---	
	877	USH 10 WB	S1-1	36" X 36"	---	---	6.75	---	---	1	---	---	---	---	---	
	878	USH 10 WB	S16-9P	30" X 18"	---	---	3.75	---	---	---	---	---	---	---	---	MOUNT BELOW #877
	879	USH 10 EB	J2-2	48" X 57"	19.00	---	---	---	---	1	---	---	---	---	---	
	880	USH 10 EB	R3-20L	24" X 36"	6.00	---	---	---	---	1	---	---	---	---	---	
	881	MENASHA AVE	R1-1	36" X 36"	7.46	---	---	---	1	---	---	---	---	---	---	
	901A	USH 10 EB	R4-7	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO LIGHT POLE
	901B	USH 10 EB	JV	24" X 93"	15.50	---	---	---	---	---	1	---	---	---	---	
	902	USH 10 EB	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	---	---	---	---	MOUNT TO LIGHT POLE
	906A	USH 10 EB	S1-1	36" X 36"	---	---	6.75	---	---	---	---	---	---	---	---	MOUNT TO LIGHT POLE
	906B	USH 10 EB	S16-7L	30" X 18"	---	---	3.75	---	---	---	---	---	---	---	---	MOUNT TO LIGHT POLE BELOW #906A
	906C	USH 10 EB	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	---	---	---	---	MOUNT TO LIGHT POLE BELOW #906B
	907	N 11TH ST	J4-2	48" X 36"	12.00	---	---	---	---	1	---	---	---	---	---	
	908	N 11TH ST	M1-93	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #907
	909A	USH 10 EB	R14-1	24" X 18"	2.63	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	909B	USH 10 EB	M6-1	21" X 21"	3.07	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL BELOW #909B
	909C	USH 10 EB	R6-2L	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL BELOW #909C

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

ERECTION OF TYPE II SIGNS AND SUPPORTS CONT.

ID	SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0622 POSTS WOOD 4x6x22 EACH	637.0620 SIGN FLAGS PERMANENT TYPE II EACH	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
PROJECT 1500-37-74 CONT.																
	910	USH 10 EB	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	911	USH 10 EB	R8-3	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	
	913	USH 10 EB	J1-1	24" X 39"	6.50	---	---	---	---	---	---	---	---	---	---	OVERHEAD SIGN STRUCTURE
	914	N 10TH ST	S4-51	24" X 48"	8.00	---	---	---	---	---	1	---	---	---	---	
	915	N 10TH ST	R5-2	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #914
	916	N 10TH ST	R1-1	36" X 36"	7.46	---	---	---	---	1	---	---	---	---	---	
	919	USH 10 EB	S1-1	36" X 36"	---	---	6.75	---	---	---	---	---	---	---	---	INSTALL ON RAPID FLASHING BEACON BASE AND POLE
	920	USH 10 EB	S16-7R	30" X 18"	---	---	3.75	---	---	---	---	---	---	---	---	MOUNT BELOW #919
	921	USH 10 EB	R3-7L	30" X 30"	6.25	---	---	---	1	---	---	---	---	---	---	
	922	USH 10 WB	R4-7	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #981
	923	USH 10 EB	S1-1	36" X 36"	---	---	6.75	---	---	---	---	---	---	---	---	INSTALL ON RAPID FLASHING BEACON BASE AND POLE
	924	USH 10 EB	S16-7L	30" X 18"	---	---	3.75	---	---	---	---	---	---	---	---	MOUNT BELOW #923
	926	N 9TH ST	S4-51	24" X 48"	8.00	---	---	---	---	1	---	---	---	---	---	
	927	N 9TH ST	R1-1	36" X 36"	7.49	---	---	---	---	1	---	---	---	---	---	
	928	USH 10 EB	R3-7L	30" X 30"	6.25	---	---	---	---	1	---	---	---	---	---	
	929	USH 10 EB	R4-7	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #928
	930	USH 10 EB	J12-1	24" X 45"	7.50	---	---	---	---	---	---	---	---	---	---	OVERHEAD SIGN STRUCTURE
	931	USH 10 EB	R8-3	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	
	954	USH 10 WB	R8-3	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	
	955	USH 10 WB	JV	24" X 72"	12.00	---	---	---	---	---	1	---	---	---	---	
	958	N 11TH ST	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	959A	USH 10 WB	S1-1	36" X 36"	---	---	6.75	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	959B	USH 10 WB	S16-7L	30" X 18"	---	---	3.75	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL BELOW #959A
	959C	USH 10 WB	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL BELOW #959B
	960	USH 10 EB	R4-7	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	961	USH 10 WB	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL BELOW #960
	962	USH 10 WB	JV	24" X 117"	19.50	---	---	---	---	---	---	1	---	---	---	
	966	USH 10 WB	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	967	USH 10 WB	J22-1	24" X 57"	9.50	---	---	---	---	1	---	---	---	---	---	
	972	USH 10 WB	JV	24" X 93"	15.50	---	---	---	---	---	1	---	---	---	---	
	973A	USH 10 WB	J4-1	24" X 36"	6.00	---	---	---	---	1	---	---	---	---	---	
	973B	USH 10 WB	M4-20L	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #973A
	974	USH 10 WB	R8-3	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	
	976	USH 10 WB	S4-51	24" X 48"	8.00	---	---	---	---	1	---	---	---	---	---	
	977	N 9TH ST	R1-1	36" X 36"	7.49	---	---	---	---	1	---	---	---	---	---	
	978	USH 10 WB	S1-1	36" X 36"	---	---	6.75	---	---	---	---	---	---	---	---	INSTALL ON RAPID FLASHING BEACON BASE AND POLE
	979	USH 10 WB	S16-7L	30" X 18"	---	---	3.75	---	---	---	---	---	---	---	---	MOUNT BELOW #878
	980	USH 10 WB	S1-1	36" X 36"	---	---	6.75	---	---	---	---	---	---	---	---	INSTALL ON RAPID FLASHING BEACON BASE AND POLE
	981	USH 10 WB	S16-7R	30" X 18"	---	---	3.75	---	---	---	---	---	---	---	---	MOUNT BELOW #980
	982	USH 10 WB	M2-1	21" X 15"	2.19	---	---	---	---	1	---	---	---	---	---	
	983	USH 10 WB	J4-1	24" X 36"	6.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #982

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

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ERECTION OF TYPE II SIGNS AND SUPPORTS CONT.

ID	SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0622 POSTS WOOD 4x6x22 EACH	637.0620 SIGN FLAGS PERMANENT TYPE II EACH	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
PROJECT 1500-37-74 CONT.																
	984A	USH 10 WB	S1-1	36" X 36"	---	---	6.75	---	---	---	1	---	---	---	---	
	984B	USH 10 WB	S16-9P	30" X 18"	---	---	3.75	---	---	---	---	---	---	---	---	MOUNT BELOW #984A
	985	USH 10 WB	R2-6P	24" X 18"	---	---	3.00	---	---	---	---	---	---	---	---	MOUNT BELOW #984B
	986	USH 10 WB	R8-3	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #985
	1100	USH 10 EB	R3-1	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1101	USH 10 EB	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1102	N 8TH ST	R5-1	30" X 30"	6.25	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1103	N 8TH ST	J2-2	48" X 57"	19.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL BELOW #1132
	1104	USH 10 EB	J2-1	24" X 57"	9.50	---	---	---	---	1	---	---	---	---	---	
	1109	N 8TH ST	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL BELOW #110
	1110	N 8TH ST	R5-1	30" X 30"	6.25	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1111	USH 10 EB	R3-1	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1112A	USH 10 EB	J4-1	24" X 36"	6.00	---	---	---	---	---	1	---	---	---	---	
	1112B	USH 10 EB	M1-93	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #1112A
	1113	USH 10 EB	R8-3	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #1112B
	1127	USH 10 EB	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1128	USH 10 EB	R3-4	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1129	USH 10 EB	R3-2	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1130	USH 10 EB	R4-7	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1131	N 8TH ST	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1132	N 8TH ST	J4-1	24" X 36"	6.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1133	USH 10 WB	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
N/A	EMERGENCY VEHICLE RAILROAD CROSSING		R5-11	30" X 24"	5.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO PERMANENT BARRICADES - SEE CONSTRUCTION DETAIL
N/A	EMERGENCY VEHICLE RAILROAD CROSSING		R5-11	30" X 24"	5.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO PERMANENT BARRICADES - SEE CONSTRUCTION DETAIL
	PROJECT TOTALS				457.46	74.60	97.50	0	17	18	7	1	0	0	0	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

ERECTION OF TYPE II SIGNS AND SUPPORTS CONT.

ID	SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0622 POSTS WOOD 4x6x22 EACH	637.0620 SIGN FLAGS PERMANENT TYPE II EACH	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
PROJECT 4570-12-71																
	1114	STH 42 NB	R6-2R	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	1115	LINCOLN BLVD	R1-1	36" X 36"	7.46	---	---	---	---	1	---	---	---	---	---	
	1116	LINCOLN BLVD	R1-1	36" X 36"	7.46	---	---	---	---	1	---	---	---	---	---	
	1117	LINCOLN BLVD	R5-1	30" X 30"	6.25	---	---	---	---	---	---	---	---	---	---	MOUNT TO BACKSIDE #1116
	1118	N 6TH ST	R1-1	36" X 36"	7.46	---	---	---	---	1	---	---	---	---	---	
	1120	STH 42 NB	R8-3	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	
	1122	STH 42 NB	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	1126	STH 42 NB	R8-3	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	MOUNTBELOW #1125
	1134	STH 42 SB	J12-1	24" X 45"	7.50		---	---	---	1	---	---	---	---	---	
	1135	STH 42 SB	R1-1F	36" X 36"	---	7.46	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1136	STH 42 SB	R3-4	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1137	STH 42 SB	R3-2	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO SIGNAL
	1138	STH 42 SB	R3-2	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT TO LIGHT POLE
	1139	STH 42 SB	R8-3	24" X 24"	4.00	---	---	---	---	1	---	---	---	---	---	
	1140	STH 42 SB	W3-3	36" X 36"	---	---	9.00	---	---	1	---	---	---	---	---	
	1141	LINCOLN BLVD	R1-1	36" X 36"	7.46	---	---	---	---	1	---	---	---	---	---	
	1142	LINCOLN BLVD	R1-1	36" X 36"	7.46	---	---	---	---	1	---	---	---	---	---	
	1143	LINCOLN BLVD	R5-1	30" X 30"	6.25	---	---	---	---	---	---	---	---	---	---	MOUNT TO BACKSIDE #264
	1145	STH 42 SB	R6-2R	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	1147	STH 42 SB	JV	24" X 63"	10.50	---	---	---	---	---	1	---	---	---	---	
	1150	N 6TH ST	R1-1	36" X 36"	7.46	---	---	---	---	1	---	---	---	---	---	
	1152	STH 42 SB	R8-3	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #1151
	1153	N 5TH ST	R1-1	36" X 36"	7.46	---	---	---	---	1	---	---	---	---	---	
	1154	STH 42 SB	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	25 MPH
	1201	STH 42 NB	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	35 MPH
	1203	STH 42 SB	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	25 MPH
	1300	USH 10EB	R8-3	24" X 24"	4.00	---	---	---	---	1	---	---	---	---	---	
	1317	MARITIME DR NB	JH-1	24" X 45"	7.50	---	---	---	1	---	---	---	---	---	---	
	1401	STH 42 NB	W2-6	30" X 30"	---	---	6.25	---	---	1	---	---	---	---	---	
	1402	STH 42 NB	W13-1	18" X 18"	---	---	2.25	---	---	---	---	---	---	---	---	MOUNT BELOW #1401
	1403	STH 42 NB	R1-1	36" X 36"	7.46	---	---	---	1	---	---	---	---	---	---	
	1404	STH 42 NB	J2-1 MOD	24" X 81"	13.50	---	---	---	---	---	1	---	---	---	---	HWY 42, SEE PLAN SHEET
	1405	STH 42 NB	W3-2	36" X 36"	--	---	9.00	---	---	1	---	---	---	---	---	
	1406	WALDO BLVD EB	R6-1R	36" X 12"	3.00	---	---	2	---	---	---	---	---	---	---	
	1407	WALDO BLVD EB	R6-48	60" X 24"	10.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #1406
	1408	STH 42 SB	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	2	---	---	
	1409	STH 42 SB	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	---	---	---	
	1410	MARITIME DR SB	D1-1	84"X 15"	8.75	---	---	---	2	---	---	---	---	---	---	
	1411	MARITIME DR SB	R8-3	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	
	1412	MARITIME DR NB	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	1413	MARITIME DR SB	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

ERECTION OF TYPE II SIGNS AND SUPPORTS CONT.

ID	SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0622 POSTS WOOD 4x6x22 EACH	637.0620 SIGN FLAGS PERMANENT TYPE II EACH	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
PROJECT 4570-12-71 CONT.																
	1414	MARITIME DR NB	J1-1	24" X 39"	6.50	---	---	---	---	1	---	---	---	---	---	
	1415	MARITIME DR NB	W2-6	30" X 30"	---	---	6.25	---	---	1	---	---	---	---	---	
	1416	MARITIME DR NB	W13-1	18" X 18"	---	---	2.25	---	---	---	---	---	---	---	---	MOUNT BELOW #1415
	1417	MARITIME DR NB	R6-7R	30" X 30"	6.25	---	---	---	1	---	---	---	---	---	---	
	1418	MARITIME DR NB	R3-8DD	30" X 36"	7.50	---	---	---	1	---	---	---	---	---	---	
	1419	MARITIME DR NB	W3-2	36" X 36"	--	---	9.00	---	---	1	---	---	---	---	---	
	1420	MARITIME DR NB	W12-1D	24" X 24"	--	---	4.00	---	1	---	---	---	---	---	---	
	1421	MARITIME DR NB	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	2	---	---	
	1422	MARITIME DR NB	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #1421
	1423	MARITIME DR NB	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	2	---	---	
	1424	MARITIME DR NB	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #1423
	1425	MARITIME DR NB	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	---	---	---	
	1426	MARITIME DR NB	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #1425
	1427	STH 42 NB	R6-1R	36" X 12"	3.00	---	---	2	---	---	---	---	---	---	---	
	1428	STH 42 NB	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #1427
	1429	STH 42 NB	D1-2	84" X 30"	17.50	---	---	---	2	---	---	---	---	---	---	
	1430	STH 42 NB	J4-2	48" X 36"	12.00	---	---	---	---	1	---	---	---	---	---	
	1431	STH 42 SB	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	1432	STH 42 SB	J2-1 MOD	24" X 81"	13.50	---	---	---	---	---	1	---	---	---	---	
	1433	STH 42 NB	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	1434	STH 42 SB	R5-2 MOD	---	---	---	---	---	---	---	---	---	---	1	1	LEFT TURN NO TRUCKS
	1435	STH 42 SB	R8-3	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	
	1436	STH 42 SB	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	1437	STH 42 NB	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	1438	STH 42 SB	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	1439	STH 42 NB	R3-6X	42" X 48"	14.00	---	---	---	---	---	---	---	---	---	---	OVERHEAD SIGN STRUCTURE
	1440	STH 42 NB	R3-6R	42" X 48"	14.00	---	---	---	---	---	---	---	---	---	---	OVERHEAD SIGN STRUCTURE
	1441	STH 42 SB	J4-2	48" X 36"	12.00	---	---	---	---	1	---	---	---	---	---	
	1442	STH 42 SB	D1-2	78"X 30"	16.25	---	---	---	2	---	---	---	---	---	---	
	1443	STH 42 NB	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	2	---	---	
	1444	STH 42 NB	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	
	1445	STH 42 SB	R6-1R	36" X 12"	3.00	---	---	2	---	---	---	---	---	---	---	
	1446	STH 42 SB	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #1445
	1447	STH 42 SB	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	2	---	---	
	1448	STH 42 SB	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #1447
	1449	STH 42 SB	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	2	---	---	
	1450	STH 42 SB	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #1449
	1451	STH 42 SB	R3-6R	42" X 48"	14.00	---	---	---	---	---	---	---	---	---	---	OVERHEAD SIGN STRUCTURE
	1452	STH 42 SB	R3-6X	42" X 48"	14.00	---	---	---	---	---	---	---	---	---	---	OVERHEAD SIGN STRUCTURE
	1453	STH 42 SB	W3-2	36" X 36"	---	---	9.00	---	---	1	---	---	---	---	---	
	1501	STH 42 SB	W2-6	30" X 30"	--	---	6.25	---	---	1	---	---	---	---	---	
	1504	STH 42 SB	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	
	1506	STH 42 SB	W13-1	18" X 18"	--	---	2.25	---	---	---	---	---	---	---	---	MOUNT BELOW #1501
		PROJECT TOTALS			471.09	7.46	65.50	6	30	26	3	0	12	1	1	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

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ERECTION OF TYPE II SIGNS AND SUPPORTS CONT.

ID	SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0622 POSTS WOOD 4x6x22 EACH	637.0620 SIGN FLAGS PERMANENT TYPE II EACH	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
PROJECT 4570-12-72																
	1601	BAYSHORE DR	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	2	---	---	
	1602	BAYSHORE DR	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #1601
	1603	BAYSHORE DR	R6-1R	36" X 12"	3.00	---	---	2	---	---	---	---	---	---	---	
	1604	BAYSHORE DR	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	---	---	---	MOUNT BELOW #1603
	1605	BAYSHORE DR	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	2	---	---	
	1606	BAYSHORE DR	R6-2R	24" X 30"	5.00											MOUNT BELOW #1605
	1607	BAYSHORE DR	D1-1	84" X 15"	8.75				2							
		PROJECT TOTALS			37.01	0.00	0.00	2	2	2	0	0	4	0	0	
		TOTALS			965.56	82.06	163.00	8	49	46	10	1	16	1	1	

OVERHEAD SIGN SUPPORTS

ID	STATION	LOCATION	641.8100.01 OVERHEAD SIGN SUPPORT SUPPORT STRUCTURE S-36-0018 LS	641.8100.02 OVERHEAD SIGN SUPPORT SUPPORT STRUCTURE S-36-0019 LS
PROJECT 4570-12-71				
	192+78.4	STH 42 SB	1	---
	186+91.6	STH 42 NB	---	1
		PROJECT TOTALS	1	1

BARRICADES PERMANENT TYPE III

ID	LOCATION	637.5453 EA	REMARKS
PROJECT 1500-37-74			
	EMERGENCY VEHICLE RAILROAD CROSSING	4	SEE CONSTRUCTION DETAIL
	TOTAL	4	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

TRAFFIC CONTROL

STAGE	LOCATION	EST. SERVICE PERIOD DAYS	643.0500 FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 FLEXIBLE TUBULAR MARKER BASES EACH	643.0300 DRUMS NO	DRUMS DAYS	643.0420* BARRICADES TYPE III NO	BARRICADES TYPE III DAYS	643.0705* WARNING LIGHTS TYPE A NO	WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C NO	WARNING LIGHTS TYPE C DAYS	643.0800 ARROW BOARDS NO	ARROW BOARDS DAYS	643.0900* SIGNS NO	SIGNS DAYS	643.1050* SIGNS PCMS NO	SIGNS PCMS DAYS	REMARKS
PROJECT 1500-37-74																			
2	LANE CLOSURES FOR TREE CLEARING	7	0	0	120	840	10	70	20	140	20	140	2	14	8	56	2	14	
2	N. 11TH ST.	145	0	0	0	0	8	1,160	16	2,320	0	0	0	0	8	1,160	0	0	
2	N. 10TH ST.	145	0	0	0	0	2	290	4	580	0	0	0	0	4	580	0	0	
2	N. 9 TH ST.	145	0	0	0	0	4	580	8	1,160	0	0	0	0	8	1,160	0	0	
2	N. 8TH STREET (PHASE 1)	10	0	0	35	350	25	250	50	500	6	60	0	0	43	430	2	14	
2	N. 8TH STREET (PHASE 2)	10	0	0	40	400	25	250	50	500	10	100	0	0	46	460	1	7	
2	USH 10 AT N. 14TH ST.	145	0	0	0	0	8	1,160	16	2,320	0	0	0	0	8	1,160	0	0	
2	N. 14TH ST.	145	0	0	0	0	0	0		0	0	0	0	0	8	1,160	0	0	
2	N. 13TH ST.	145	0	0	0	0	2	290	4	580	0	0	0	0	4	580	0	0	
2	MENASHA AVE.	145	0	0	0	0	8	1,160	16	2,320	0	0	0	0	8	1,160	0	0	
2	N. 12TH ST.	145	0	0	0	0	4	580	8	1,160	0	0	0	0	8	1,160	0	0	
2	N. 11TH ST. (PHASE 1)	75	0	0	28	2,100	21	1,575	48	3,600	6	450	0	0	40	3,000	1	7	
2	N. 11TH ST. (PHASE 2)	70	0	0	26	1,820	20	1,400	45	3,150	0	0	0	0	35	2,450	1	7	
2	UNDISTRIBUTED	145	0	0	150	21,750	0	0	0	0	0	0	0	0	0	0	10	70	
	PROJECT TOTALS		0	0		27,260		8,765		18,330		750		14		14,516		119	

*-ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL CONT.

STAGE	LOCATION	EST. SERVICE PERIOD DAYS	643.0500 FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 FLEXIBLE TUBULAR MARKER BASES EACH	643.0300 DRUMS NO	DRUMS DAYS	643.0420* BARRICADES TYPE III NO	BARRICADES TYPE III DAYS	643.0705* WARNING LIGHTS TYPE A NO	WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C NO	WARNING LIGHTS TYPE C DAYS	643.0800 ARROW BOARDS NO	ARROW BOARDS DAYS	643.0900* SIGNS NO	SIGNS DAYS	643.1050* SIGNS PCMS NO	SIGNS PCMS DAYS	REMARKS
PROJECT 4570-12-71																			
1	LANE CLOSURES FOR TREE CLEARING	7	0	0	120	840	10	70	20	140	20	140	2	14	8	56	1	7	
1	STH 42 AT N. 8TH ST.	175	0	0	0	0	7	1,225	14	2,450	0	0	0	0	6	1,050	1	7	
1	LINCOLN BLVD.	175	0	0	0	0	4	700	8	1,400	0	0	0	0	6	1,050	0	0	
1	N. 6TH ST.	175	0	0	0	0	4	700	8	1,400	0	0	0	0	6	1,050	0	0	
1	N. 5TH ST.	175	0	0	0	0	2	350	4	700	0	0	0	0	3	525	0	0	
1	MARITIME DR & STH 42	80	0	0	0	0	6	480	12	960	0	0	0	0	10	800	2	14	
1	UNDISTRIBUTED	175	0	0	160	28000	0	0	0	0	0	0	0	0	0	0	4	28	
1	ROUNDABOUT/STH 42/MARITIME DR. PH. 1	40	40	40	95	3,800	25	1,000	50	2,000	35	1,400	0	0	47	1,880	2	14	
1	ROUNDABOUT/STH 42/MARITIME DR. PH. 2	30	30	30	160	4,800	55	1,650	105	3,150	50	1,500	0	0	59	1,770	2	14	
1	ROUNDABOUT/STH 42/MARITIME DR. PH. 3	30	0	0	125	3,750	35	1,050	65	1,950	25	750	0	0	55	1,650	2	14	
	PROJECT TOTALS		70	70		41,190		7,225		14,150		3,790		14		9,831		98	
	TOTALS		70	70		68,450		15,990		32,480		4,540		28		24,347		217	

*-ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

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TRAFFIC CONTROL SIGNS FIXED MESSAGE

ID	STAGE	LOCATION	643.1000* SF	REMARKS
PROJECT 1500-37-74				
	2	USH 10/CTH R	16.5	"WALDO BLVD OPEN TO 18TH ST" - SEE SIGN DETAIL
		TOTAL	16.5	

*-ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TEMPORARY PEDESTRIAN ACCOMMODATIONS

ID	PROJECT STAGE	LOCATION	644.1410.S TEMPORARY PEDESTRIAN SURFACE ASPHALT SF	644.1420.S TEMPORARY PEDESTRIAN SURFACE PLYWOOD SF	644.1430.S TEMPORARY PEDESTRIAN SURFACE STEEL PLATE SF	644.1601.S TEMPORARY CURB RAMPS EA	644.1616.S TEMPORARY PEDESTRIAN SAFETY FENCE LF	REMARKS
PROJECT 1500-37-74								
	2	USH 10	1350	---	---	8	1,200	
	2	SIDEROADS	530	---	---	20	---	
	2	UNDISTRIBUTED	2,000	1,000	1,000	---	---	
		PROJECT TOTALS	3,880	1,000	1,000	28	1,200	
PROJECT4570-12-71								
	1	STH 42	815	---	---	4	3,820	
	1	SIDEROADS	315	---	---	9	---	
	1	UNDISTRIBUTED	1,340	1,000	1,000	---	---	
		PROJECT TOTALS	2,470	1,000	1,000	13	3,820	
		TOTALS	6,350	2,000	2,000	41	5,020	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

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TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	Project 4570-12-71 LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 200 DAYS	643.0900 SIGNS * DAYS	643.0420 BARRICADES TYPE III * DAYS	643.0705 WARNING LIGHTS TYPE A * DAYS	643.1000 FIXED MESSAGE SIGN * S.F.	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS *	NO OF CYCLES	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
1	I-43, N. OF CLOVER RD, COVER TYPE I SIGN AS SHOWN										1	1		COVER "HWY 42-10"
2	I-43, N. OF SILVER CREEK RD, PLACE 1/2 MILE N. OF US 151 OFF-RAMP IN MEDIAN	M 3-2	36"X18"	1	200	200								
	"	M 1-4	36"X36"	1	200	200								10
	"	WO 20-2A	48"X48"	1	200	200								
3	I-43, N. OF SILVER CREEK RD, PLACE 1/2 MILE N. OF US 151 OFF-RAMP ON RIGHT SHOULDER	M 3-2	36"X18"	1	200	200								
	"	M 1-4	36"X36"	1	200	200								10
	"	WO 20-2A	48"X48"	1	200	200								
4	I-43, N. OF SILVER CREEK RD, PLACE 1/4 MILE N. OF US 151 OFF-RAMP IN MEDIAN	MO 4-8	36"X18"	1	200	200								
	"	M 3-2	36"X18"	1	200	200								
	"	M 1-4	36"X36"	1	200	200								10
	"	MO 5-2R	30"X30"	1	200	200								
5	I-43, N. OF SILVER CREEK RD, PLACE 1/4 MILE N. OF US 151 OFF-RAMP ON RIGHT SHOULDER	MO 4-8	36"X18"	1	200	200								
	"	M 3-2	36"X18"	1	200	200								
	"	M 1-4	36"X36"	1	200	200								10
	"	MO 5-2R	30"X30"	1	200	200								
6	I-43, AT US 151 OFF-RAMP, PLACE ADJACENT TO EXISTING TYPE I SIGN IN MEDIAN	MO 4-8	36"X18"	1	200	200								
	"	M 3-2	36"X18"	1	200	200								
	"	M 1-4	36"X36"	1	200	200								10
	"	MO 6-2	30"X30"	1	200	200								TILT RIGHT
7	I-43, AT US 151 OFF-RAMP, PLACE ADJACENT TO EXISTING TYPE I SIGN ON RIGHT SHOULDER	MO 4-8	36"X18"	1	200	200								
	"	M 3-2	36"X18"	1	200	200								
	"	M 1-4	36"X36"	1	200	200								10
	"	MO 6-2	30"X30"	1	200	200								TILT RIGHT
8	I-43 OFF-RAMP TO US 151, PLACE 500' PRIOR TO RAMP INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-2	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 5-1R	21"X21"	1	200	200								
9	I-43 OFF-RAMP TO US 151, PLACE 150' PRIOR TO RAMP INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-2	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 6-1	21"X21"	1	200	200								RIGHT
10	US 151, PLACE AT END OF PARAPET WALL FOR I-43 STRUCTURE EAST SIDE	MO 4-5	24"X12"	1	200	200								
	"	M 3-2	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 6-1	21"X21"	1	200	200								AHEAD
11	US 151, PLACE NEXT TO EXISTING J2-2 TYPE II SIGN AT I-43 SB RAMP INTERSECTION	MO 4-5	24"X12"	1	200	200								
	"	M 3-2	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 6-1	21"X21"	1	200	200								AHEAD
12	US 151, E. OF I-43, PLACE 300' E. OF I-43 NB RAMP INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-4	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 6-1	21"X21"	1	200	200								RIGHT
13	US 151, E. OF I-43, PLACE 200' E. OF I-43 NB RAMP INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-2	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
14	US 151, E. OF I-43, PLACE 550' E. OF I-43 NB RAMP INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-4	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 5-1R	21"X21"	1	200	200								
	PAGE SUBTOTALS			49		9,800	0	0	0	0		1	0	

* ADDITONAL QUANTITIES SHOWN ELSEWHERE

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TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	Project 4570-12-71 LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 200 DAYS	643.0900 SIGNS * DAYS	643.0420 BARRICADES TYPE III * DAYS	643.0705 WARNING LIGHTS TYPE A * DAYS	643.1000 FIXED MESSAGE SIGN * S.F.	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS *	NO OF CYCLES	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
15	US 151, W. OF CTH R, PLACE 150' W. OF CTH R INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-2	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 6-1	21"X21"	1	200	200								AHEAD
16	US 151, E. OF CTH R, PLACE 300' E. OF CTH R INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-4	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 6-1	21"X21"	1	200	200								AHEAD
17	US 151, E. OF CTH R, PLACE 100' W. OF DIVISION ST/35TH ST INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-2	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 6-1	21"X21"	1	200	200								AHEAD
18	US 151, E. OF CTH R, PLACE 100' E. OF DIVISION ST/35TH ST INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-4	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 6-1	21"X21"	1	200	200								AHEAD
19	US 151, E. OF CTH R, PLACE 100' W. OF CUSTER ST INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-2	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 6-1	21"X21"	1	200	200								AHEAD
20	US 151, E. OF CTH R, PLACE 100' E. OF CUSTER ST INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-4	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 6-1	21"X21"	1	200	200								AHEAD
21	US 151, W. OF US 10/10TH ST, MODIFY EXISTING J1-1 SIGN AS SHOWN	M 4-8A	24"X18"	1	200	200								
22	US 151, W. OF US 10/10TH ST, PLACE 100' W. OF US 10/10TH ST INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-4	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
23	US 10/10TH ST, AT US 151 INTERSECTION, MODIFY EXISTING J3-1 SIGN AS SHOWN	MO 4-8	24"X12"	1	200	200								
	"	MO 6-1	21"X21"	1	200	200								RIGHT
23A	INTERSECTION OF 8TH & WASHINGTON ST, COVER EXISTING J3-1 SIGN AS SHOWN			1							1		1	COVER "WEST 10 LT"
23B	US 10 WB, N. OF WASHINGTON ST, COVER EXISTING J4-1 SIGN AS SHOWN			1							1		1	COVER "WEST 10"
23C	US 10 WB, S. OF PINE ST, COVER EXISTING J1-2 SIGN AS SHOWN			1							1		1	COVER "JCT 42, JCT B"
23D	US 10 WB, N. OF PINE ST, COVER EXISTING J2-2 SIGN AS SHOWN			1							1		1	COVER "N 42 LT TURN, S 42 RT TURN"
24	US 10/10TH ST, S. OF WALDO BLVD INTERSECTION, PLACE IN TERRACE, FIELD DETERMINED	PCMS								7				
24A	STH 42, N. OF WALDO BLVD INTERSECTION, PLACE ON RIGHT SIDE, FIELD DETERMINED	PCMS								7				
25	US 10/STH 42, E. OF CTH R, PLACE ON RIGHT SIDE, FIELD DETERMINED	PCMS								7				
26	I-43/STH 42, N. OF US 151, PLACE TO RIGHT OF EXISTING J4-2 SIGN	MO 4-8	36"X18"	1	200	200								
	"	M 3-4	36"X18"	1	200	200								
	"	M 1-4	36"X36"	1	200	200								10
27	I-43/STH 42, N. OF CTH CS STRUCTURE, COVER EXISTING TYPE I AS SHOWN										1	1		
28	I-43/STH 42, N. OF MIDDLE RD, PLACE 1/2 MILE S. OF US 10/STH 42 INTERCHANGE ON RIGHT SHOULDER	M 3-1	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
	"	WO 20-2A	48"X48"	1	200	200								
29	I-43/STH 42, N. OF MIDDLE RD, PLACE 1/2 MILE S. OF US 10/STH 42 INTERCHANGE IN MEDIAN	M 3-1	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
	"	WO 20-2A	48"X48"	1	200	200								
30	I-43/STH 42, N. OF MIDDLE RD, PLACE 1/4 MILE S. OF US 10/STH 42 INTERCHANGE ON RIGHT SHOULDER	MO 4-8	36"X18"	1	200	200								
	"	M 3-4	36"X18"	1	200	200								
	"	M 1-4	36"X36"	1	200	200								10
	"	MO 6-1	30"X30"	1	200	200								AHEAD
	"	MO 4-8	36"X18"	1	200	200								
	"	M 3-1	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
	"	MO 6-1	30"X30"	1	200	200								AHEAD
	PAGE SUBTOTALS			51		9,400	0	0	0	21		1	4	

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* ADDITONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	Project 4570-12-71 LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 200 DAYS	643.0900 SIGNS * DAYS	643.0420 BARRICADES TYPE III * DAYS	643.0705 WARNING LIGHTS TYPE A * DAYS	643.1000 FIXED MESSAGE SIGN * S.F.	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS *	NO OF CYCLES	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
31	I-43/STH 42, N. OF MIDDLE RD, PLACE 1/4 MILE S. OF US 10/STH 42 INTERCHANGE IN MEDIAN	MO 4-8	36"X18"	1	200	200								
	"	M 3-4	36"X18"	1	200	200								
	"	M 1-4	36"X36"	1	200	200								10
	"	MO 6-1	30"X30"	1	200	200								AHEAD
	"	MO 4-8	36"X18"	1	200	200								
	"	M 3-1	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
	"	MO 6-1	30"X30"	1	200	200								AHEAD
32	I-43/STH 42, N. OF MIDDLE RD, PLACE 200' S. OF US 10/STH 42 ON-RAMP	M 4-8A	30"X24"	1	200	200								
	"	M 3-3	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
33	CTH JJ, W. OF I-43, PLACE 750' W. OF I-43 SB RAMP INTERSECTION	M 3-2	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	WO 20-2A	48"X48"	1	200	200								
34	CTH JJ, W. OF I-43, PLACE 100' W. OF I-43 SB RAMP INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-2	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 6-1	21"X21"	1	200	200								AHEAD
	"	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								AHEAD
35	CTH JJ, AT I-43 SB RAMP INTERSECTION, MODIFY EXISTING J2-3 AS SHOWN	MO 4-8	24"X12"	1	200	200								
	"	MO 5-1L	21"X21"	1	200	200								
	"	MO 4-8	24"X12"	1	200	200								
	"	MO 5-1L	21"X21"	1	200	200								
36	US 10/STH 42, AT I-43 NB RAMP INTERSECTION, PLACE IN MEDIAN JUST W. OF INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-2	24"X12"	1	200	200								
	"	M 1-4	24"X24"	1	200	200								10
	"	MO 6-1	21"X21"	1	200	200								LEFT
	"	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								LEFT
37	US 10/STH 42, AT I-43 NB RAMP INTERSECTION, PLACE IN MEDIAN JUST E. OF INTERSECTION	R 11-3	60"X30"	1	200	200	200	400						3.3 MILES AHEAD
	"	M 4-9L	30"X24"	1	200	200								
38	US 10/STH 42, E. OF I-43, COVER EXISTING J4-2 AS SHOWN										1		1	COVER "EAST 10-NORTH 42"
39	I-43/US 10, N. OF STH 42/CTH JJ, COVER EXISTING TYPE I SIGN AS SHOWN										1	1		COVER ENTIRE SIGN
40	I-43/US 10, N. OF STH 42/CTH JJ, COVER EXISTING TYPE I SIGN AS SHOWN										1	1		COVER AS SHOWN
40A	I-43/US 10 OFF-RAMP TO STH 42/CTH JJ, COVER EXISTING J3-3 SIGN AS SHOWN										1		1	COVER "EAST 10 LT-NORTH 42 LT"
41	I-43, S. OF US 10/STH 42/CTH JJ, COVER EXISTING TYPE I SIGN AS SHOWN										1	1		COVER AS SHOWN
	PAGE SUBTOTALS			38		7,600	200	400	0	0		3	2	

* ADDITONAL QUANTITIES SHOWN ELSEWHERE

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TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	Project 4570-12-71 LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 200 DAYS	643.0900 SIGNS * DAYS	643.0420 BARRICADES TYPE III * DAYS	643.0705 WARNING LIGHTS TYPE A * DAYS	643.1000 FIXED MESSAGE SIGN * S.F.	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS *	NO OF CYCLES	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
42	US 10/STH 42, AT CTH R INTERSECTION, COVER EXISTING J13-3 AS SHOWN										1		1	COVER "10 AHEAD-42 AHEAD"
43	CTH R, AT US 10/STH 42 INTERSECTION, MODIFY EXISTING J13-3 AS SHOWN	MO 6-1	21"X21"	1	200	200								RIGHT
	"	MO 6-1	21"X21"	1	200	200								RIGHT
44	CTH R, AT US 10/STH 42 INTERSECTION, MODIFY EXISTING J13-3 AS SHOWN	MO 6-1	21"X21"	1	200	200								LEFT
	"	MO 6-1	21"X21"	1	200	200								LEFT
45	US 10/STH 42, AT CTH R INTERSECTION, PLACE IN SE QUADRANT OF INTERSECTION	R 11-3	60"X30"	1	200	200	200	400						1.8 MILES AHEAD
46	US 10/STH 42, E. OF CTH R INTERSECTION, COVER EXISTING J4-2 AS SHOWN										1		1	
47	CTH R, S. OF US 10/STH 42, COVER EXISTING J3-2 AS SHOWN										1		1	
48	US 10/STH 42, E. OF CTH R INTERSECTION, COVER EXISTING J4-3 AS SHOWN										1		1	
49	STH 42, N. OF WALDO BLVD, COVER EXISTING J13-1 AS SHOWN										1		1	
50	STH 42, N. OF WALDO BLVD, COVER EXISTING J2-1 AS SHOWN										1		1	
51	I-43/US 10, N. OF CTH JJ INTERCHANGE, MODIFY EXISTING J4-2 AS SHOWN	M 4-8A	30"X24"	1	200	200								
52	I-43/US 10, N. OF CTH JJ INTERCHANGE, PLACE RIGHT OF EXISTING J4-2 TYPE II SIGN	MO 4-8	36"X18"	1	200	200								
	"	M 3-1	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
53	I-43/US 10, S. OF CTH P, COVER EXISTING TYPE I SIGN AS SHOWN										1	1		COVER "NORTH 42-EAST 10"
53A	I-43/US 10, N. OF CTH P, COVER EXISTING TYPE I SIGN AS SHOWN										1	1		COVER ENTIRE SIGN
54	I-43/US 10, S. OF US 10/STH 310 INTERCHANGE, PLACE 1/4 MILE S. OF US 10 OFF-RAMP IN MEDIAN	MO 4-8	36"X18"	1	200	200								
	"	M 3-1	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
	"	MO 5-2R	30"X30"	1	200	200								
55	I-43/US 10, S. OF US 10/STH 310 INTERCHANGE, PLACE 1/4 MILE S. OF US 10 OFF-RAMP ON RIGHT SHOULDER	MO 4-8	36"X18"	1	200	200								
	"	M 3-1	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
	"	MO 5-2R	30"X30"	1	200	200								
56	I-43/US 10, S. OF US 10/STH 310 INTERCHANGE, PLACE RIGHT OF EXISTING J4-2 TYPE II SIGN	MO 4-8A	36"X18"	1	200	200								
	"	M 3-3	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
57	I-43/US 10, S. OF US 10/STH 310 INTERCHANGE, PLACE LEFT OF EXISTING TYPE I EXIT SIGN	MO 4-8	36"X18"	1	200	200								
	"	M 3-1	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
	"	MO 6-2	30"X30"	1	200	200								TILT RIGHT
58	US 10, W. OF I-43, PLACE 750' W. OF I-43 SB RAMP INTERSECTION ON RIGHT SHOULDER	FMS	84"X36"						21					
58A	I-43, N. OF US 10/STH 310 INTERCHANGE, PLACE 1900' PRIOR TO EXIT RAMP ON RIGHT SHOULDER	FMS	84"X36"						21					
59	US 10, W. OF I-43, PLACE 750' W. OF I-43 SB RAMP INTERSECTION IN MEDIAN	FMS	84"X36"						21					
59A	I-43, N. OF US 10/STH 310 INTERCHANGE, PLACE 1900' PRIOR TO EXIT RAMP IN MEDIAN	FMS	84"X36"						21					
60	US 10, W. OF I-43, PLACE 250' W. OF I-43 SB RAMP INTERSECTION ON RIGHT SHOULDER	M 4-5	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								AHEAD
61	US 10, AT I-43 INTERCHANGE, PLACE IN MEDIAN AT SB RAMP INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								LEFT
PAGE SUBTOTALS				32		6,400	200	400	84	0		2	6	

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TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	Project 4570-12-71 LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 200 DAYS	643.0900 SIGNS * DAYS	643.0420 BARRICADES TYPE III * DAYS	643.0705 WARNING LIGHTS TYPE A * DAYS	643.1000 FIXED MESSAGE SIGN * S.F.	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS *	NO OF CYCLES	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
62	I-43 SB OFF-RAMP TO US 10, PLACE 150' PRIOR TO RAMP INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								LEFT
63	I-43 SB OFF-RAMP TO US 10, PLACE 150' PRIOR TO RAMP INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								LEFT
64	I-43 SB OFF-RAMP TO US 10, PLACE 600' PRIOR TO RAMP INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 5-1L	21"X21"	1	200	200								
65	STH 310, JUST E. OF I-43, PLACE 50' W. OF RAMP INTERSECTION IN MEDIAN	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 5-1L	21"X21"	1	200	200								
66	STH 310, E. OF I-43, PLACE 250' E. OF I-43 NB RAMP INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
67	STH 310, E. OF I-43, PLACE 350' E. OF I-43 NB RAMP INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								AHEAD
68	STH 310, W. OF WAGON WHEEL RD, PLACE 300' W. OF WAGON WHEEL RD INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								AHEAD
69	I-43, N. OF US 10/STH 310 INTERCHANGE, PLACE LEFT, ADJACENT TO EXISTING TYPE I EXIT SIGN	MO 4-8	36"X18"	1	200	200								
	"	M 3-1	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
	"	MO 6-2	30"X30"	1	200	200								TILT RIGHT
70	I-43, N. OF US 10/STH 310 INTERCHANGE, PLACE 1/4 MILE PRIOR TO EXIT RAMP IN MEDIAN	MO 4-8	36"X18"	1	200	200								
	"	M 3-1	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
	"	MO 5-2R	30"X30"	1	200	200								
71	I-43, N. OF US 10/STH 310 INTERCHANGE, PLACE 1/4 MILE PRIOR TO EXIT RAMP ON RIGHT SHOULDER	MO 4-8	36"X18"	1	200	200								
	"	M 3-1	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
	"	MO 5-2R	30"X30"	1	200	200								
72	I-43, N. OF US 10/STH 310 INTERCHANGE, PLACE 1/2 MILE PRIOR TO EXIT RAMP ON RIGHT SHOULDER	M 3-1	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
	"	WO 20-2A	48"X48"	1	200	200								
73	I-43, N. OF US 10/STH 310 INTERCHANGE, PLACE 1/2 MILE PRIOR TO EXIT RAMP IN MEDIAN	M 3-1	36"X18"	1	200	200								
	"	M 1-6	36"X36"	1	200	200								42
	"	WO 20-2A	48"X48"	1	200	200								
	PAGE SUBTOTALS			45		9,000	0	0	0	0		0	0	

* ADDITONAL QUANTITIES SHOWN ELSEWHERE

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TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	Project 4570-12-71 LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 200 DAYS	643.0900 SIGNS * DAYS	643.0420 BARRICADES TYPE III * DAYS	643.0705 WARNING LIGHTS TYPE A * DAYS	643.1000 FIXED MESSAGE SIGN * S.F.	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS *	NO OF CYCLES	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
74	STH 310, W. OF CTH R, PLACE 200' W. OF CTH R ROUNDABOUT	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								AHEAD
75	STH 310, AT CTH R ROUNDABOUT, PLACE ABOVE D1-1 SPLITTER ISLAND SIGN FOR WEST LEG	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-2	21"X21"	1	200	200								TILT RIGHT
76	STH 310, AT CTH R ROUNDABOUT, PLACE ABOVE D1-1 SPLITTER ISLAND SIGN FOR EAST LEG	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-2	21"X21"	1	200	200								TILT RIGHT
77	STH 310, E. OF CTH R, PLACE 200' E. OF CTH R ROUNDABOUT	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								AHEAD
78	STH 310, W. OF CTH Q, PLACE 200' W. OF CTH Q ROUNDABOUT	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								AHEAD
79	STH 310, AT CTH Q ROUNDABOUT, PLACE ABOVE D1-1 SPLITTER ISLAND SIGN FOR WEST LEG	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-2	21"X21"	1	200	200								TILT RIGHT
80	STH 310, AT CTH Q ROUNDABOUT, PLACE ABOVE D1-1 SPLITTER ISLAND SIGN FOR EAST LEG	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-2	21"X21"	1	200	200								TILT RIGHT
81	STH 310, E. OF CTH Q, PLACE 200' E. OF CTH Q ROUNDABOUT	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								AHEAD
82	STH 310, W. OF CTH Q, PLACE 200' W. OF CTH Q ROUNDABOUT	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								AHEAD
83	STH 310, AT CTH B ROUNDABOUT, PLACE ABOVE D1-1 SPLITTER ISLAND SIGN FOR WEST LEG	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-2	21"X21"	1	200	200								TILT RIGHT
84	STH 310, AT CTH B ROUNDABOUT, PLACE ABOVE D1-1 SPLITTER ISLAND SIGN FOR EAST LEG	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-2	21"X21"	1	200	200								TILT RIGHT
85	STH 310, E. OF CTH Q, PLACE 200' E. OF CTH Q ROUNDABOUT	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								AHEAD
	PAGE SUBTOTALS			48		9,600	0	0	0	0		0	0	

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TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	Project 4570-12-71 LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 200 DAYS	643.0900 SIGNS * DAYS	643.0420 BARRICADES TYPE III * DAYS	643.0705 WARNING LIGHTS TYPE A * DAYS	643.1000 FIXED MESSAGE SIGN * S.F.	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS *	NO OF CYCLES	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
86	STH 310, W. OF COLUMBUS ST, PLACE 150' W. OF COLUMBUS ST INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								AHEAD
87	STH 310, E. OF COLUMBUS ST, PLACE 150' E. OF COLUMBUS ST INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								AHEAD
88	STH 310, N. OF 14TH ST, PLACE 175' N. OF 14TH ST INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								LEFT
89	STH 310, E. OF HAWTHORNE AVE, PLACE 75' E. OF HAWTHORNE AVE INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								RIGHT
90	STH 310, W. OF MADISON ST, PLACE 125' W. OF MADISON ST INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-1	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								LEFT
91	STH 310, N. OF 14TH ST, PLACE 90' N. OF 14TH ST INTERSECTION ON SIDEWALK	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								RIGHT
92	STH 310, W. OF STH 42, MODIFY EXISTING J1-1 SIGN AS SHOWN	M 4-8A	24"X18"	1	200	200								
93	STH 310, W. OF STH 42, PLACE 125' W. OF STH 42 INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
94	STH 42, AT STH 310 INTERSECTION, PLACE IN SW QUADRANT OF STH 310 INTERSECTION OFF ROADWAY	R 11-3	60"X30"	1	200	200	200	400						4.8 MILES AHEAD
	"	M 4-9R	30"X24"	1	200	200								
95	STH 42, N. OF STH 310, PLACE 75' N. OF STH 310 INTERSECTION	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 6-1	21"X21"	1	200	200								RIGHT
96	STH 42, S. OF 18TH ST, PLACE JUST S. OF 18TH ST INTERSECTION IN BUMPOUT	MO 4-8	24"X12"	1	200	200								
	"	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	MO 5-1R	21"X21"	1	200	200								
97	STH 42, S. OF 19TH ST, PLACE JUST S. OF 19TH ST INTERSECTION IN BUMPOUT	M 3-3	24"X12"	1	200	200								
	"	M 1-6	24"X24"	1	200	200								42
	"	WO 20-2S	48"X48"	1	200	200								
98	STH 42, S. OF COLUMBUS ST, PLACE IN SW QUADRANT ON PAVED SHOULDER	R 11-3	60"X30"	1	200	200	200	400						3.3 MILES AHEAD
99	US 10, S. OF STH 42, COVER EXISTING SIGNS ON SIGN BRIDGE STRUCTURE AS SHOWN										1		1	COVER ENTIRE SIGN AS NEEDED
	"										1		1	COVER ENTIRE SIGN AS NEEDED
100	US 10, S. OF STH 42, COVER EXISTING SIGNS ON SIGN BRIDGE STRUCTURE AS SHOWN										1		1	COVER ENTIRE SIGN AS NEEDED
101	US 10, S. OF STH 42, COVER EXISTING SIGNS ON SIGN BRIDGE STRUCTURE AS SHOWN										1		1	COVER ENTIRE SIGN AS NEEDED
102	US 10, S. OF STH 42, COVER EXISTING SIGNS ON SIGN BRIDGE STRUCTURE AS SHOWN										1		1	COVER ENTIRE SIGN AS NEEDED
	"										1		1	COVER ENTIRE SIGN AS NEEDED
	PAGE SUBTOTALS			42		8,400	400	800	0	0		0	6	
	PROJECT TOTALS			**305**		**60,200**	**800**	**1,600**	**84**	**21**		**7**	**18**	

* ADDITONAL QUANTITIES SHOWN ELSEWHERE

PLAN SHEET PRODUCED

BY WisDOT - NE REGION

3

MARKING

ID	STATION	TO	STATION	LOCATION	646.1020 EPOXY 4-INCH (YELLOW) LF	646.1020 EPOXY 4-INCH (WHITE) LF	646.3020 EPOXY 8-INCH LF	646.5020 ARROWS EPOXY EACH	646.5120 WORDS EPOXY EACH	646.6120 STOPLINE EPOXY 18-INCH LF	SPV.0090.11 YIELD LINE EPOXY 18-INCH LF	646.7120 DIAGONAL EPOXY 12-INCH LF	646.7420 CROSSWALK TRANSVERSE LINE EPOXY 6-INCH LF	SPV.0090.08 CROSSWALK TRANSVERSE LINE EPOXY 12-INCH LF	646.8120 CURB EPOXY LF	646.8220 ISLAND NOSE EPOXY EACH	REMARKS
PROJECT 1500-37-74																	
	131+75	-	152+25	USH 10, EB	-	420	-	-	-	-	-	-	-	-	-	-	
	131+75	-	152+25	USH 10, WB	-	410	-	-	-	-	-	-	-	-	-	-	
				USH 10, N. 13TH ST INTERSECTION	-	-	-	1	-	-	-	-	70	260	-	-	
				USH 10, N. MENASHA AVE INTERSECTION	340	-	100	-	-	28	-	-	120	-	20	2	
				USH 10, N. 12TH ST INTERSECTION	-	-	-	-	-	30	-	-	155	116	-	-	
				N. 12TH ST, S. MENASHA AVE INTERSECTION	-	25	-	-	-	-	-	-	100	-	-	-	
				USH 10, N. 11TH ST INTERSECTION	130	-	205	6	2	95	-	-	520	-	60	6	
				USH 10, N. 10TH ST INTERSECTION	-	-	165	1	-	17	-	-	85	158	40	4	
				USH 10, N. 9TH ST INTERSECTION	-	-	135	2	-	30	-	-	480	-	20	2	
				USH 10, N. 8TH ST INTERSECTION	160	-	415	10	5	135	-	-	550	-	20	2	
	PROJECT TOTALS				1,485		1,020	20	7	335	0	0	2,080	534	160	16	
PROJECT 4570-12-71																	
	152+25	-	186+92	STH 42, EB	-	830	-	-	-	-	-	-	-	-	-	-	
	152+25	-	187+81	STH 42, WB	-	860	-	-	-	-	-	-	-	-	-	-	
				STH 42, LINCOLN BLVD INTERSECTION	-	-	-	-	-	46	-	-	207	335	20	2	
				STH 42, N. 6TH ST INTERSECTION	-	-	-	-	-	30	-	-	154	165	20	2	
				STH 42, N. 5TH ST INTERSECTION	-	-	-	-	-	19	-	-	89	160	20	2	
	172+55			STH 42, EB & WB	-	-	-	-	-	-	-	-	-	100	-	-	CROSSWALK
	184+00	-	184+50	STH 42, EB	-	-	-	-	-	-	-	-	100	-	20	2	
				ROUNDABOUT	-	1,100	1,420	13	5	-	90	50	340	-	50	4	INCLUDES MARITIME & MEMORIAL DR
	PROJECT TOTALS				2,790		1,420	13	5	95	90	50	890	760	130	12	
PROJECT 4570-12-72																	
	20+00	-	20+69	BAYSHORE DR, NB	36		-	-	-	-	-	-	36	-	10	1	
	20+00	-	20+69	BAYSHORE DR, SB	39		55	-	-	-	20	-	34	-	-	-	
	PROJECT TOTALS				75		55	0	0	0	20	0	70	0	10	1	
	TOTALS				4,350		2,495	33	12	430	110	50	3,040	1,294	300	29	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

MARKING REMOVAL

ID	PROJECT STAGE	LOCATION	646.9000 LINE 4-INCH LF	646.9010 LINE WATER BLASTING 4-INCH LF	646.9100 LINE 8-INCH LF	646.9300 SPECIAL MARKING EA
PROJECT 1500-37-74						
	2	8TH ST	---	---	35	---
		PROJECT TOTALS	0	0	35	0
PROJECT4570-12-71						
	1	STH 42/MARITIME DRIVE ROUNDABOUT - PHASE 1	15	455	375	3
	1	STH 42/MARITIME DRIVE ROUNDABOUT - PHASE 2	---	100	---	---
	1	STH 42/MARITIME DRIVE ROUNDABOUT - PHASE 3	---	65	---	---
		PROJECT TOTALS	15	620	375	3
		TOTAL	15	620	410	3

TEMPORARY MARKING LINE

ID	PROJECT STAGE	LOCATION	649.0105 PAINT 4-INCH LF	649.0150 REMOVABLE TAPE 4-INCH LF
PROJECT 1500-37-74				
	2	8TH ST	---	375
	2	8TH ST (PHASE 1)	---	125
	2	8TH ST (PHASE 2)	---	350
	2	11TH ST (PHASE 1)	---	125
		PROJECT TOTALS	0	975
PROJECT4570-12-71				
	1	STH 42/MARITIME DRIVE ROUNDABOUT - STAGE 1	2,030	2,120
	1	STH 42/MARITIME DRIVE ROUNDABOUT - STAGE 2	675	3,630
	1	STH 42/MARITIME DRIVE ROUNDABOUT - STAGE 3	---	390
		PROJECT TOTALS	2,705	6,140
		TOTALS	2,705	7,115

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

CONSTRUCTION STAKING

ID	CATEGORY	STATION	TO	STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB, GUTTER, AND CURB AND GUTTER LF	650.6500 STRUCTURE LAYOUT LS	650.7000 CONCRETE PAVEMENT LF	650.8500 ELECTRICAL INSTALLATIONS LS	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF	SPV.0105.02 EMERGENCY VEHICLE RR CROSSING LS	SPV.0105.03 TREES AND LANDSCAPING PROJECT 1500-37-74 LS	SPV.0105.04 TREES AND LANDSCAPING PROJECT 4570-12-71 LS
PROJECT 1500-37-74																
	0010															
		131+75	-	152+25	USH 10 / STH 42, EB	2,050	-	-	-	2,050	-	1	2,050	-	1	-
		131+75	-	152+25	USH 10 / STH 42, WB	2,050	-	-	-	2,050	-	-	2,050	-	-	-
		9+35	-	9+75	N. 13TH ST	40	-	-	-	40	-	-	40	-	-	-
		8+85	-	9+86	MENASHA ST (SOUTH)	101	-	-	-	101	-	-	101	-	-	-
		10+25	-	12+11	MENASHA ST (NORTH)	186	-	-	-	186	-	-	186	-	-	-
		8+15	-	9+75	N. 12TH ST	160	-	-	-	160	-	-	160	-	-	-
		10+49	-	10+85	N. 12TH ST	36	-	-	-	36	-	-	36	-	-	-
		9+35	-	9+75	N. 11TH ST	40	-	-	-	40	-	-	40	-	-	-
		10+49	-	11+00	N. 11TH ST	51	-	-	-	51	-	-	51	-	-	-
		9+35	-	9+75	N. 10TH ST	40	-	-	-	40	-	-	40	-	-	-
		9+00	-	9+75	N. 9TH ST	75	-	-	-	75	-	-	75	-	-	-
		10+49	-	11+25	N. 9TH ST	76	-	-	-	76	-	-	76	-	-	-
		11+25	-	12+70	N. 9TH ST	-	-	-	-	145	-	-	-			
		8+50	-	9+75	N. 8TH ST	125	-	-	-	125	-	-	125	-	-	-
		10+50	-	12+90	N. 8TH ST	240	140	75	-	100	-	-	240	-	-	-
		10+20	-	11+45	EMERGENCY RR CROSSING	-	-	-	-	-	-	-	-	1	-	-
		CATEGORY 0010 TOTALS				5,270	140	75	0	5,275	0	1	5,270	1	1	0
	0050															
		131+75	-	152+25	USH 10 / STH 42	-	-	-	-	-	1	-	-	-	-	-
		CATEGORY 0050 TOTALS				0	0	0	0	0	1	0	0	0	0	0
		PROJECT TOTALS				5,270	140	75	0	5,275	1	1	5,270	1	1	0

NOTE: STORM SEWER STAKING IS SHOWN WITH STORM SEWER STRUCTURES.

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

CONSTRUCTION STAKING (CONTINUED)

ID	CATEGORY	STATION	TO	STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB, GUTTER, AND CURB AND GUTTER LF	650.6500 STRUCTURE LAYOUT LS	650.7000 CONCRETE PAVEMENT LF	650.8500 ELECTRICAL INSTALLATIONS LS	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF	SPV.0105.02 EMERGENCY VEHICLE RR CROSSING LS	SPV.0105.03 TREES AND LANDSCAPING PROJECT 1500-37-74 LS	SPV.0105.04 TREES AND LANDSCAPING PROJECT 4570-12-71 LS
PROJECT 4570-12-71																
	0010															
		152+25	-	188+97	STH 42, EB	3,672	-	-	-	3,672	-	1	3,672	-	-	1
		152+25		189+01	STH 42, WB	3,676	-	-	-	3,676	-	-	3,676	-	-	-
		190+44		194+90	STH 42, EB	446	-	185	-	446	-	-	446	-	-	-
		190+42	-	196+49	STH 42, WB	607	-	-	-	607	-	-	607	-	-	-
		9+10	-	9+75	W. LINCOLN BLVD	65	-	-	-	65	-	-	65	-	-	-
		10+49	-	10+85	W. LINCOLN BLVD	36	-	-	-	36	-	-	36	-	-	-
		9+10	-	9+75	E. LINCOLN BLVD	65	-	-	-	65	-	-	65	-	-	-
		10+49	-	10+85	E. LINCOLN BLVD	36	-	-	-	36	-	-	36	-	-	-
		9+35	-	9+75	N. 6TH ST	40	-	-	-	40	-	-	40	-	-	-
		10+49	-	11+00	N. 6TH ST	51	-	-	-	51	-	-	51	-	-	-
		10+25	-	10+60	N. 5TH ST	35	-	-	-	35	-	-	35	-	-	-
		0+00	-	3+77	ROUNDABOUT CIRCLE	377	-	-	-	377	-	-	377	-	-	-
		11+25	-	13+33	MARITIME DR, SB	208	-	-	-	208	-	-	208	-	-	-
		10+75	-	14+09	MARITIME DR, NB	334	-	-	-	334	-	-	334	-	-	-
		12+50	-	14+15	MARITIME DR, MEDIAN EAST	165	-	-	-	165	-	-	165	-	-	-
		CATEGORY 0010 TOTALS				9,813	0	185	0	9,813	0	1	9,813	0	0	1
	0030															
		179+10	-	179+40	B-36-900	-	-	-	1	-	-	-	-	-	-	-
		CATEGORY 0040 TOTALS				0	0	0	1	0	0	0	0	0	0	0
	0050															
		152+25	-	191+86	STH 42	-	-	-	-	-	1	-	-	-	-	-
		CATEGORY 0050 TOTALS				0	0	0	0	0	1	0	0	0	0	0
		PROJECT TOTALS				9,813	0	185	1	9,813	1	1	9,813	0	0	1
PROJECT 4570-12-72																
	0010															
		20+00	-	20+69	BAYSHORE DR, NB	69	-	200	-	69	-	1	69	-	-	-
		20+00	-	20+69	BAYSHORE DR, SB	69	-	160	-	69	-	-	69	-	-	-
		PROJECT TOTALS				138	0	360	0	138	0	1	138	0	0	0
		TOTALS				15,221	140	620	1	15,226	2	3	15,221	1	1	1

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

CONDUIT RIGID NONMETALLIC

ID	CATEGORY	UNIT	TO	UNIT	STATION	TO	STATION	LOCATION	652.0225 * SCHEDULE 40 2-INCH LF
PROJECT 1500-37-74									
	0050								
		1-18	-	1-17	131+75	-	132+14	USH 10, MEDIAN	42
		1-16	-	1-15	135+29	-	137+29	USH 10, MEDIAN	200
		1-15	-	PB-11	137+29	-	138+46	USH 10, MEDIAN	117
		PB-11	-	PB-12		138+46		USH 10, RT	45
		PB-11	-	1-14	138+46	-	139+10	USH 10, MEDIAN	64
		PB-10	-	PB-9	141+31	-	141+81	N. 11TH ST	50
		PB-9	-	PB-8	141+81	-	142+05	N. 11TH ST, RT	55
		PB-8	-	PB-7		142+05		USH 10	85
		PB-7	-	2-5	142+05	-	142+78	USH 10, RT	73
		PB-8	-	2-4	142+05	-	144+28	USH 10, LT	223
		2-5	-	2-3	142+78	-	146+03	USH 10, RT	325
		2-4	-	2-2	144+28	-	147+47	USH 10, LT	319
		2-3	-	2-1	146+03	-	149+15	USH 10, RT	312
			1-17			132+10		USH 10, MEDIAN	10
			1-16			135+25		USH 10, MEDIAN	10
			1-15			137+25		USH 10, MEDIAN	10
			1-14			139+10		USH 10, MEDIAN	5
			2-5			142+75		USH 10, RT	5
			2-4			144+25		USH 10, LT	5
			2-3			146+00		USH 10, RT	5
			2-2			147+50		USH 10, LT	5
			2-1			149+15		USH 10, RT	5
		PROJECT TOTAL							1,970
PROJECT 4570-12-71									
	0050								
		1-13	-	1-12	154+04	-	156+94	STH 42, MEDIAN	290
		1-12	-	1-11	156+94	-	159+29	STH 42, MEDIAN	235
		1-11	-	1-10	159+29	-	161+84	STH 42, MEDIAN	255
		1-10	-	1-9	161+84	-	164+39	STH 42, MEDIAN	255
		1-9	-	PB-6	164+39	-	164+85	STH 42, MEDIAN	46
		PB-6	-	PB-6A		164+85		STH 42, LT	85
		PB-6	-	1-8	164+85	-	166+84	STH 42, MEDIAN	199
		1-7	-	1-6	169+84	-	172+74	STH 42, MEDIAN	290
		1-6	-	1-5	172+74	-	175+74	STH 42, MEDIAN	300
		1-5	-	1-4	175+74	-	178+74	STH 42, MEDIAN	300
		1-4	-	1-3	178+74	-	181+74	STH 42, MEDIAN	305
		1-3	-	PB-5		181+74		STH 42, LT	50
		1-3	-	1-2	181+74	-	184+81	STH 42, MEDIAN	310
		1-2	-	1-1	184+81	-	187+25	STH 42, MEDIAN	244
		3-1	-	3-2	188+25	-	3+73	STH 42, LT	89
		3-2	-	3-3	3+73	-	3+35	STH 42, LT	75
		3-3	-	3-4	3+35	-	2+91	STH 42, LT	82
		3-4	-	3-5	2+91	-	191+80	STH 42, LT	71
		3-5	-	PB-1	191+80	-	192+36	STH 42, LT	44
		3-13	-	3-12	188+00	-	0+85	STH 42, RT	69

CONDUIT RIGID NONMETALLIC (CONTINUED)

ID	CATEGORY	UNIT	TO	UNIT	STATION	TO	STATION	LOCATION	652.0225 * SCHEDULE 40 2-INCH LF
PROJECT 4570-12-71									
	0050								
		3-12	-	3-11	0+85	-	1+07	STH 42, RT	46
		PB-4	-	3-11	187+63	-	1+07	STH 42, RT	120
		3-11	-	PB	1+07	-	1+15	STH 42, RT	30
		3-11	-	3-10	1+15	-	1+41	STH 42, RT	65
		3-10	-	3-9	1+41	-	1+78	STH 42, RT	99
		3-9	-	3-8	1+78	-	190+55	STH 42, RT	42
		3-8	-	3-7	190+55	-	190+80	STH 42, RT	42
		3-7	-	3-6	190+80	-	191+12	STH 42, RT	33
		3-6	-	PB-3	191+12	-	191+12	STH 42, RT	36
		3-6	-	PB-2	191+12	-	191+65	STH 42, RT	58
			1-13			154+00		STH 42, MEDIAN	10
			1-12			156+90		STH 42, MEDIAN	10
			1-11			159+25		STH 42, MEDIAN	10
			1-10			161+80		STH 42, MEDIAN	10
			1-9			164+35		STH 42, MEDIAN	10
			1-8			166+80		STH 42, MEDIAN	10
			1-7			169+80		STH 42, MEDIAN	10
			1-6			172+70		STH 42, MEDIAN	10
			1-5			175+70		STH 42, MEDIAN	10
			1-4			178+70		STH 42, MEDIAN	10
			1-3			181+70		STH 42, MEDIAN	10
			1-2			184+85		STH 42, MEDIAN	10
			1-1			187+25		STH 42, MEDIAN	5
			3-1			188+22		STH 42, LT	5
			3-2			188+71		STH 42, LT	5
			3-3			189+65		STH 42, LT	5
			3-4			190+86		STH 42, LT	5
			3-5			191+76		STH 42, LT	5
			3-13			187+98		STH 42, RT	5
			3-12			0+84		ROUNDABOUT CIRCLE, RT	5
			3-11			189+17		STH 42, RT	5
			3-10			189+86		STH 42, RT	5
			3-9			1+78		ROUNDABOUT CIRCLE, RT	5
			3-8			190+53		STH 42, RT	5
			3-7			190+82		STH 42, RT	5
			3-6			191+15		STH 42, RT	5
		PROJECT TOTAL							4,355
		TOTAL							6,325

* ADDITONAL QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

LIGHTING UNITS, PULL BOXES, CONCRETE BASES, AND POLES

ID	CATEGORY	UNIT	STATION	LOCATION	SPV.0060.20 CONCRETE BASES TYPE 7 SPECIAL EACH	SPV.0060.21 COMPOSITE LIGHT POLES 40-FT EACH	SPV.0060.22 LUMINAIRE ARMS ALUMINUM 6-FT EACH	SPV.0060.23 LUMINAIRE ARMS ALUMINUM 8-FT EACH	SPV.0060.24 LUMINAIRE ARMS ALUMINUM 15-FT EACH	SPV.0060.25 LUMINAIRE LED EACH	SPV.0060.26 LUMINAIRE LED RAB EACH	SPV.0060.27 LIGHTING PULL BOX EACH	655.0610 ELECTRICAL WIRING LIGHTING 12 AWG LF *	REMARKS
PROJECT 1500-37-74														
	0050													
		1-17	132+10	USH 10, MEDIAN	1	1	-	2	-	2	-	1	390	
		1-16	135+25	USH 10, MEDIAN	1	1	-	2	-	2	-	1	390	
		1-15	137+25	USH 10, MEDIAN	1	1	-	2	-	2	-	1	390	
		PB-11	138+46	USH 10, MEDIAN	-	-	-	-	-	-	-	1	-	
		PB-12	138+46	USH 10, RT	-	-	-	-	-	-	-	1	-	INSTALL ADJACENT TO MPU POLE 5G7072
		1-14	139+10	USH 10, MEDIAN	1	1	-	2	-	2	-	1	390	
		PB-10	141+31	N. 11TH ST, LT	-	-	-	-	-		-	1		
		PB-9	141+81	N. 11TH ST, RT	-	-	-	-	-	-	-	1	-	
		PB-8	142+05	USH 10, LT	-	-	-	-	-	-	-	1	-	
		PB-7	142+05	USH 10, RT	-	-	-	-	-	-	-	1	-	
		2-5	142+75	USH 10, RT	1	1	-	1	-	1	-	1	195	
		2-4	144+25	USH 10, LT	1	1	-	1	-	1	-	1	195	
		2-3	146+00	USH 10, RT	1	1	-	1	-	1	-	1	195	
		2-2	147+50	USH 10, LT	1	1	-	1	-	1	-	1	195	
		2-1	149+15	USH 10, RT	1	1	-	1	-	1	-	1	195	
				PROJECT TOTALS	9	9	0	13	0	13	0	15	2,535	
PROJECT 4570-12-71														
	0050													
		1-13	154+00	STH 42, MEDIAN	1	1	-	2	-	2	-	1	390	
		1-12	156+90	STH 42, MEDIAN	1	1	-	2	-	2	-	1	390	
		1-11	159+25	STH 42, MEDIAN	1	1	-	2	-	2	-	1	390	
		1-10	161+80	STH 42, MEDIAN	1	1	-	2	-	2	-	1	390	
		1-9	164+35	STH 42, MEDIAN	1	1	-	2	-	2	-	1	390	
		PB-6	164+85	STH 42, MEDIAN	-	-	-	-	-	-	-	1	-	
		PB-6A	164+85	STH 42, LT	-	-	-	-	-	-	-	1	-	INSTALL ADJACENT TO PAD MOUNT TRANSFORMER
		1-8	166+80	STH 42, MEDIAN	1	1	-	2	-	2	-	1	390	
		1-7	169+80	STH 42, MEDIAN	1	1	-	2	-	2	-	1	390	
		1-6	172+70	STH 42, MEDIAN	1	1	-	2	-	2	-	1	390	
		1-5	175+70	STH 42, MEDIAN	1	1	-	2	-	2	-	1	390	
		1-4	178+70	STH 42, MEDIAN	1	1	-	2	-	2	-	1	390	
		1-3	181+70	STH 42, MEDIAN	1	1	-	2	-	2	-	1	390	
		PB-5	181+74	STH 42, LT	-	-	-	-	-	-	-	1	-	INSTALL ADJACENT TO MPU POLE 5E7336
		1-2	184+85	STH 42, MEDIAN	1	1	-	2	-	2	-	1	390	
		1-1	187+25	STH 42, MEDIAN	1	1	-	2	-	2	-	1	390	
		3-1	188+22	STH 42, LT	1	1	-	-	1	-	1	1	195	
		3-2	188+71	STH 42, LT	1	1	-	-	1	-	1	1	195	
		3-3	189+65	STH 42, LT	1	1	-	-	1	-	1	1	195	
		3-4	190+86	STH 42, LT	1	1	-	-	1	-	1	1	195	
		3-5	191+76	STH 42, LT	1	1	-	-	1	-	1	1	195	
		PB-1	192+36	STH 42, LT	-	-	-	-	-	-	-	1	-	INSTALL ADJACENT TO MPU POLE 5E7973
		3-13	187+98	STH 42, RT	1	1	-	-	1	-	1	1	195	
		3-12	0+84	ROUNDABOUT CIRCLE, RT	1	1	-	-	1	-	1	1	195	
		3-11	189+17	STH 42, RT	1	1	-	-	1	-	1	1	195	

* QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

LIGHTING UNITS, PULL BOXES, CONCRETE BASES, AND POLES (CONTINUED)

ID	CATEGORY	UNIT	STATION	LOCATION	SPV.0060.20 CONCRETE BASES TYPE 7 SPECIAL EACH	SPV.0060.21 COMPOSITE LIGHT POLES 40-FT EACH	SPV.0060.22 LUMINAIRE ARMS ALUMINUM 6-FT EACH	SPV.0060.23 LUMINAIRE ARMS ALUMINUM 8-FT EACH	SPV.0060.24 LUMINAIRE ARMS ALUMINUM 15-FT EACH	SPV.0060.25 LUMINAIRE LED EACH	SPV.0060.26 LUMINAIRE LED RAB EACH	SPV.0060.27 LIGHTING PULL BOX EACH	655.0610 ELECTRICAL WIRING LIGHTING 12 AWG LF *	REMARKS
PROJECT 4570-12-71														
	0050													
		PB-4	187+63	STH 42, RT	-	-	-	-	-	-	-	1	-	INSTALL ADJACENT TO MPU POLE SE6958
		3-10	189+86	STH 42, RT	1	1	1	-	-	-	1	1	195	
		3-9	1+78	ROUNDABOUT CIRCLE, RT	1	1	-	-	1	-	1	1	195	
		3-8	190+53	STH 42, RT	1	1	-	-	1	-	1	1	195	
		3-7	190+82	STH 42, RT	1	1	-	-	1	-	1	1	195	
		3-6	191+15	STH 42, RT	1	1	-	-	1	-	1	1	195	
		PB-2	191+65	STH 42, RT	-	-	-	-	-	-	-	1	-	
		PB-3	191+12	STH 42, LT	-	-	-	-	-	-	-	1	-	
				PROJECT TOTALS	26	26	1	26	12	26	13	33	7605	
				TOTALS	35	35	1	39	12	39	13	48	10,140	

* QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

REMOVING CONCRETE BASES

ID	INTERSECTION	204.0195 EACH
PROJECT 1500-37-74		
	USH 10 & 11TH ST	12
	USH 10 & 8TH ST	12
	TOTAL	24

REMOVING PULL BOXES

ID	INTERSECTION	653.0905 * EACH
PROJECT 1500-37-74		
	USH & 11TH ST	13
	USH 10 & 8TH ST	3
	TOTAL	16

* QUANTITIES SHOWN ELSEWHERE

REMOVE TRAFFIC SIGNALS

ID	LOCATION	SPV.0105.30 LS	SPV.0105.31 LS
PROJECT 1500-37-74			
	USH 10 & 11TH ST.	1	-
	USH 10 & 8TH AVE.	-	1
	TOTALS	1	1

REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE

ID	LOCATION	SPV.0105.32 LS	SPV.0105.33 LS
PROJECT 1500-37-74			
	USH 10 & 11TH ST.	1	-
	USH 10 & 8TH AVE.	-	1
	TOTALS	1	1

CONDUIT NONMETALLIC SCHEDULE 40

INTERSECTION: USH 10 & 11TH ST. ID	FROM	TO	652.0225 * 2-INCH LF	652.0235 3-INCH LF
PROJECT 1500-37-74				
	CABINET (11TH ST.)	PB1	-	78
	CABINET (11TH ST.)	PB14	-	57
	PB1	PB2	105	-
	PB2	PB3	125	-
	PB1	PB4	--	50
	PB4	PB5	-	78
	PB5	PB6	-	68
	PB6	PB7	-	92
	PB7	PB8	-	80
	PB8	PB9	104	-
	PB9	PB10	125	-
	PB8	PB11	-	98
	PB11	PB12	-	70
	PB12	PB13	-	80
	PB13	PB14	-	98
	PB1	SB1	16	-
	PB5	SB2	-	13
	PB6	SB3	6	-
	PB7	SB4	6	-
	PB7	SB5	7	-
	PB8	SB6	19	-
	PB12	SB7	-	13
	PB12	SB8	11	-
	PB13	SB9	16	-
	PB14	SB10	15	-
	SUBTOTAL		555	875
INTERSECTION: USH 10 & 8TH ST.				
	CABINET (8TH ST.)	PB1	-	21
	CABINET (8TH ST.)	PB15	-	21
	PB1	PB2	-	92
	PB2	PB3	-	112
	PB3	PB4	-	64
	PB5	PB6	195	-
	PB4	PB5	-	92
	PB5	PB7	-	76
	PB7	PB8	-	80
	PB8	PB9	-	98
	PB9	PB10	-	80
	PB10	PB11	-	78
	PB11	PB14	-	84
	PB11	PB12	110	-
	PB12	PB13	125	-

CONDUIT NONMETALLIC SCHEDULE 40 (CONTINUED)

INTERSECTION: USH 10 & 8TH ST. ID	FROM	TO	652.0225 * 2-INCH LF	652.0235 3-INCH LF
PROJECT 1500-37-74				
	PB14	PB15	-	90
	PB3	SB1	10	-
	PB4	SB2	6	-
	PB7	SB3	-	7
	PB8	SB4	16	-
	PB9	SB5	5	-
	PB9	SB6	11	-
	PB10	SB7	13	-
	PB14	SB8	-	13
	PB15	SB9	14	-
	SUBTOTAL		505	1008
	TOTALS		1060	1883

* QUANTITIES SHOWN ELSEWHERE

3

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

CONCRETE BASES

ID	BASE NO.	STATION	OFFSET	654.0101 * CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	654.0217 CONCRETE CONTROL CABINET BASE TYPE 9 SPECIAL EACH
INTERSECTION: USH 10 & 11TH ST								
PROJECT 1500-37-74								
	CABINET (11TH ST)	141+93 WB	46' LT	-	-	-	-	1
	SB1	141+96 WB	32' LT	1	-	-	-	-
	SB2	141+93 EB	29' RT	-	-	-	1	-
	SB3	141+78 EB	41' RT	1	-	-	-	-
	SB4	141+33 EB	53' RT	-	1	-	-	-
	SB5	141+29 EB	42' RT	1	-	-	-	-
	SB6	141+17 EB	31' RT	1	-	-	-	-
	SB7	140+95 WB	29' LT	-	-	-	1	-
	SB8	141+15 WB	31' LT	1	-	-	-	-
	SB9	141+28 WB	45' LT	1	-	-	-	-
	SB10	141+84 WB	45' LT	1	-	-	-	-
	SUBTOTAL			7	1	0	2	1
INTERSECTION: USH 10 & 8TH ST								
	CABINET (8TH ST)	151+71 EB	45' RT	-	-	-	-	1
	SB1	151+23 EB	38' RT	-	1	-	-	-
	SB2	151+07 EB	29' RT	1	-	-	-	-
	SB3	151+02 WB	33' LT	-	-	1	-	-
	SB4	151+17 WB	44' LT	-	1	-	-	-
	SB5	151+74 WB	54' LT	-	1	-	-	-
	SB6	151+77 WB	48' LT	1	-	-	-	-
	SB7	151+90 WB	34' LT	1	-	-	-	-
	SB8	151+90 EB	32' RT	-	-	-	1	-
	SB9	151+76 EB	45' RT	1	-	-	-	-
	SUBTOTAL			4	3	1	1	1
	TOTALS			11	4	1	3	2

* QUANTITIES SHOWN ELSEWHERE

PULL BOXES STEEL

ID	PB NO.	STATION	OFFSET	653.0135 24x36-INCH EACH	653.0140 24x42-INCH EACH
INTERSECTION: USH 10 & 11TH ST					
PROJECT 1500-37-74					
	PB1	142+12 WB	29' LT	-	1
	PB2	143+17 WB	29' LT	1	-
	PB3	144+41 WB	29' LT	1	-
	PB4	142+26 WB	20' RT	1	-
	PB5	142+05 EB	29' RT	-	1
	PB6	141+78 EB	47' RT	-	1
	PB7	141+32 EB	48' RT	-	1
	PB8	140+98 EB	29' RT	-	1
	PB9	139+95 EB	29' RT	1	-
	PB10	138+70 EB	29' RT	1	-
	PB11	140+97 WB	4' RT	-	1
	PB12	141+07 WB	29' LT	-	1
	PB13	141+31 WB	61' LT	-	1
	PB14	141+80 WB	60' LT	-	1
	SUBTOTAL			5	9
INTERSECTION: USH 10 & 8TH ST					
	PB1	151+71 EB	74' RT	-	1
	PB2	151+25 EB	74' RT	1	-
	PB3	151+25 EB	48' RT	-	1
	PB4	150+99 EB	29' RT	-	1
	PB5	150+96 WB	8' RT	1	-
	PB6	149+03 EB	8' LT	1	-
	PB7	150+96 WB	30' LT	-	1
	PB8	151+24 WB	58' LT	-	1
	PB9	151+73 WB	59' LT	-	1
	PB10	152+01 WB	29' LT	-	1
	PB11	152+02 WB	10' RT	-	1
	PB12	153+12 WB	10' RT	1	-
	PB13	154+36 WB	10' RT	1	-
	PB14	152+03 EB	28' RT	-	1
	PB15	151+71 EB	60' RT	-	1
	SUBTOTAL			5	10
	TOTALS			10	19

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

TRAFFIC DETECTOR LOOPS

INTERSECTION: USH 10 & 11TH ST.

ID	LOOP NO.	HOME RUN PB.	LOCATION*		SIZE (FT. X FT.)		NO. OF TURNS	PAVEMENT	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR LF	655.0700 * LOOP DETECTOR LEAD-IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
PROJECT 1500-37-74												
	11	PB11	140+88	WB	13' RT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	68	195	252
	12	PB11	141+16	WB	13' RT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	68	195	252
	21	PB3	144+42	WB	12' LT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	68	271	252
	22	PB2	143+17	WB	12' LT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	66	140	248
	41	PB13	141+41	WB	66' LT	6' X 20'	3	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	66	83	189
	42	PB13	141+50	WB	66' LT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	86	83	288
	43	PB13	141+50	WB	38' LT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	86	83	288
	51	PB4	142+38	WB	10' RT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	80	86	276
	52	PB4	142+10	WB	10' RT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	68	86	252
	61	PB10	138+70	EB	12' RT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	66	462	248
	62	PB9	139+94	EB	12' RT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	66	336	248
			SUBTOTAL							788	2020	2793

INTERSECTION: USH 10 & 8TH ST.

	11	PB5	150+78	WB	18' RT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	90	185	296
	12	PB5	151+05	WB	18' RT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	76	185	268
	21	PB13	154+36	WB	13' LT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	80	359	276
	22	PB12	153+11	WB	13' LT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	80	228	276
	41	PB8	151+36	WB	68' LT	6' X 20'	3	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	78	259	207
	42	PB8	151+45	WB	68' LT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	92	259	300
	43	PB8	151+45	WB	41' LT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	88	259	292
	61	PB6	149+03	EB	12' RT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	68	339	252
	81	PB2	151+37	EB	65' RT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	78	65	272
	82	PB2	151+50	EB	65' RT	6' X 20'	3	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	94	65	231
	83	PB3	151+37	EB	38' RT	6' X 20'	4	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	78	98	272
	84	PB3	151+50	EB	39' RT	6' X 20'	3	CONCRETE	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT) SDD 9F9-4	94	98	231
			SUBTOTAL							996	2399	3173
			TOTALS							1784	4419	5966

* QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

CABLE TRAFFIC SIGNAL

INTERSECTION: USH 10 & 11TH ST			655.0230 5-14 AWG	655.0240 7-14 AWG	655.0250 9-14 AWG	655.0260 12-14 AWG	655.0270 15-14 AWG	655.0700 * LOOP DETECTOR LEAD IN
ID	FROM	TO	LF	LF	LF	LF	LF	LF
PROJECT 1500-37-74								
	CABINET (11TH ST)	SB1	-	-	-	45	-	-
	SB1	FACE 4	-	22	-	-	-	-
	SB1	FACE 6	19	-	-	-	-	-
	SB1	FACE 14	14	-	-	-	-	-
	SB1	BUTTON	-	-	-	-	-	6
	CABINET (11TH ST)	SB2	-	-	-	-	145	-
	SB2	FACE 2	48	-	-	-	-	-
	SB2	FACE 3	38	-	-	-	-	-
	SB2	FACE 5		67	-	-	-	-
	SB2	FACE 19	14	-	-	-	-	-
	SB2	BUTTON		-	-	-	-	6
	CABINET (11TH ST)	SB3	-	-	180	-	-	-
	SB3	FACE 12	19	-	-	-	-	-
	SB3	FACE 20	14	-	-	-	-	-
	SB3	BUTTON	19	-	-	-	-	-
	CABINET (11TH ST)	SB4	-	230	-	-	-	-
	SB4	FACE 13	45	-	-	-	-	-
	CABINET (11TH ST)	SB5	-	230	-	-	-	-
	SB5	FACE 17	19	-	-	-	-	-
	SB5	BUTTON	-	-	-	-	-	6
	CABINET (11TH ST)	SB6	-	-	-	240	-	-
	SB6	FACE 1	19	-	-	-	-	-
	SB6	FACE 9		22	-	-	-	-
	SB6	FACE 18	14	-	-	-	-	-
	SB6	BUTTON		-	-	-	-	6
	CABINET (11TH ST)	SB7	-	-	-	-	138	-
	SB7	FACE 7	48	-	-	-	-	-
	SB7	FACE 8	38	-	-	-	-	-
	SB7	FACE 10		67	-	-	-	-
	CABINET (11TH ST)	SB8	-	140	-	-	-	-
	SB8	FACE 15	14	-	-	-	-	-
	SB8	BUTTON	-	-	-	-	-	6
	CABINET (11TH ST)	SB9	-	-	100	-	-	-
	SB9	FACE 11	19	-	-	-	-	-
	SB9	FACE 16	14	-	-	-	-	-
	SB9	BUTTON	-	-	-	-	-	6
	CABINET (11TH ST)	SB10	-	45	-	-	-	-
	SB10	FACE 21	14	-	-	-	-	-
	SB10	BUTTON	-	-	-	-	-	6
	SUBTOTALS		429	823	280	285	283	42

* QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

SIGNAL CABLE (CONTINUED)

INTERSECTION: USH 10 & 8TH AVE			655.0230 5-14 AWG	655.0240 7-14 AWG	655.0250 9-14 AWG	655.0260 12-14 AWG	655.0270 15-14 AWG	655.0700 * LOOP DETECTOR LEAD IN
ID	FROM	TO	LF	LF	LF	LF	LF	LF
PROJECT 1500-37-74								
	CABINET (8TH ST)	SB1	-	-	107	-	-	-
	SB1	FACE 11	47	-	-	-	-	-
	SB1	FACE 21	14	-	-	-	-	-
	SB1	BUTTON	-	-	-	-	-	6
	CABINET (8TH ST)	SB2	-	-	140	-	-	-
	SB2	FACE 1	22	-	-	-	-	-
	SB2	FACE 20	14	-	-	-	-	-
	SB2	BUTTON	-	-	-	-	-	6
	CABINET (8TH ST)	SB3	-	-	-	236	-	-
	SB3	FACE 7	50	-	-	-	-	-
	SB3	FACE 8	-	40	-	-	-	-
	SB3	FACE 18	-	14	-	-	-	-
	SB3	BUTTON	-	-	-	-	-	6
	CABINET (8TH ST)	SB4	-	-	-	-	292	-
	SB4	FACE 9	21	-	-	-	-	-
	SB4	FACE 15	-	21	-	-	-	-
	SB4	FACE 16	-	50	-	-	-	-
	SB4	FACE 19	14	-	-	-	-	-
	SB4	BUTTON	-	-	-	-	-	6
	CABINET (8TH ST)	SB5	-	-	-	210	-	-
	SB5	FACE 13	47	-	-	-	-	-
	SB5	FACE 14	26	-	-	-	-	-
	CABINET (8TH ST)	SB6	-	215	-	-	-	-
	SB6	FACE 24	14	-	-	-	-	-
	SB6	BUTTON	-	-	-	-	-	6
	CABINET (8TH ST)	SB7	-	-	-	176	-	-
	SB7	FACE 4	-	22	-	-	-	-
	SB7	FACE 6	19	-	-	-	-	-
	SB7	FACE 17	14	-	-	-	-	-
	SB7	BUTTON	-	-	-	-	-	6
	CABINET (8TH ST)	SB8	-	-	-	-	78	-
	SB8	FACE 2	51	-	-	-	-	-
	SB8	FACE 3	41	-	-	-	-	-
	SB8	FACE 5	-	65	-	-	-	-
	SB8	FACE 22	14	-	-	-	-	-
	SB8	BUTTON	-	-	-	-	-	6
	CABINET (8TH ST)	SB9	-	-	-	29	-	-
	SB9	FACE 10	-	19	-	-	-	-
	SB9	FACE 12	19	-	-	-	-	-
	SB9	FACE 23	14	-	-	-	-	-
	SB9	BUTTON	-	-	-	-	-	6
	SUBTOTALS		441	446	247	651	370	48
	TOTALS		870	1269	527	936	653	90

* QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

EQUIPMENT GROUNDING CONDUCTORS & PULL BOX JUMPERS

INTERSECTION: USH 10 & 11TH ST			655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS
ID	FROM	TO	10 AWG LF
PROJECT 1500-37-74			
	EQUIPMENT GROUNDING CONDUCTORS		
	CABINET (11TH ST)	SB1	45
	SB1	SB2	135
	SB2	SB3	67
	SB3	SB4	73
	SB4	SB5	18
	SB5	SB6	51
	SB6	SB7	135
	SB7	SB8	29
	SB8	SB9	77
	SB9	SB10	93
	SB10	CABINET (11TH ST)	43
	PULL BOX JUMPERS		
	PB1	SB1	27
	PB4	SB1	76
	PB5	SB2	20
	PB6	SB3	20
	PB7	SB5	16
	PB8	SB6	56
	PB11	SB7	58
	PB12	SB7	22
	PB13	SB9	26
	PB15	SB10	25
	SUBTOTAL		1112
	EQUIPMENT GROUNDING CONDUCTORS		
	CABINET (8TH ST)	SB1	106
	SB1	SB2	59
	SB2	SB3	116
	SB3	SB4	75
	SB4	SB5	88
	SB5	SB6	18
	SB6	SB7	76
	SB7	SB8	124
	SB8	SB9	90
	SB9	CABINET (8TH ST)	28

EQUIPMENT GROUNDING CONDUCTORS & PULL BOX JUMPERS (CONTINUED)

INTERSECTION: USH 10 & 11TH ST			655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS
ID	FROM	TO	10 AWG LF
PROJECT 1500-37-74			
	PULL BOX JUMPERS		
	PB1	SB1	92
	PB2	SB1	46
	PB3	SB2	48
	PB4	SB2	17
	PB6	SB3	55
	PB7	SB3	16
	PB8	SB4	26
	PB9	SB6	21
	PB10	SB7	23
	PB11	SB7	62
	PB14	SB8	25
	PB15	SB9	26
	SUBTOTAL		1237
	TOTAL		2349

3

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

TRAFFIC SIGNAL POLES AND LUMINAIRE ARMS

INTERSECTION: USH 10 & 11TH ST ID	BASE NO.	657.0100 * PED. BASE EACH	657.0255 TRANS. BASE EACH	657.0305 POLE TYPE 2 EACH	657.0310 POLE TYPE 3 EACH	657.0425 * 15-FOOT STAND. EACH	657.0430 10-FOOT STAND. EACH	657.0590 20-FOOT TROMB. EACH	657.0595 25-FOOT TROMB. EACH	657.0350 POLES TYPE 10 EACH	657.0360 POLES TYPE 13 EACH	657.0530 MONOTUBE ARMS 30-FT	657.0535 MONOTUBE ARMS 35-FT	657.0545 MONOTUBE ARMS 45-FT	657.0815 LUMINAIRE ARMS STEEL 15-FT EACH	SPV.0060.25 * LUMINAIRE LED EACH
PROJECT 1500-37-74																
	SB1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
	SB2	-	-	-	-	-	-	-	-	-	1	-		1	1	1
	SB3	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
	SB4	-	1	-	1	-	-	1	-	-	-	-	-	-	-	-
	SB5	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
	SB6	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
	SB7	-	-	-	-	-	-	-	-	-	1	-	-	1	1	1
	SB8	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
	SB9	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
	SB10	1	-	-	-	-	1	-	-	-	1	-	1	-	-	-
	SUBTOTALS	7	1	0	1	4	3	1	0	0	3	0	1	2	2	2
INTERSECTION: USH 10 & 8TH ST																
	SB1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
	SB2	1	1	-	1	1	-	-	-	-	-	-	-	-	-	-
	SB3	-	-	-	-	-	-	-	-	1	-	1	-	-	1	1
	SB4	-	1	1	-	-	-	-	1	-	-	-	-	-	-	-
	SB5	-	1	1	-	-	-	-	1	-	-	-	-	-	-	-
	SB6	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
	SB7	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
	SB8	-	-	-	-	-	-	-	-	-	1	-	-	1	1	1
	SB9	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
	SUBTOTALS	4	3	2	1	3	1	0	3	1	1	1	0	1	2	2
	TOTALS	11	4	2	2	7	4	1	3	1	4	1	1	3	4	4

* QUANTITIES SHOWN ELSEWHERE

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

SIGNAL FACES & LED MODULES

INTERSECTION: USH 10 & 11TH ST			658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	658.0500 PEDESTRIAN PUSH BUTTON EACH
ID	SB NO.	FACE NO.				
PROJECT 1500-37-74						
	SB1	4	-	1	-	-
		6	1	-	-	-
		14	-	-	1	-
		BUTTON	-	-	-	1
	SB2	2	1	-	-	-
		3	1	-	-	-
		5	-	1	-	-
		19	-	-	1	-
		BUTTON	-	-	-	1
	SB3	12	1	-	-	-
		20	-	-	1	-
		BUTTON	-	-	-	1
	SB4	13	1	-	-	-
	SB5	17	-	-	1	-
		BUTTON	-	-	-	1
	SB6	1	1	-	-	-
		9	-	1	-	-
		18	-	-	1	-
		BUTTON	-	-	-	1
	SB7	7	1	-	-	-
		8	1	-	-	-
		10	-	1	-	-
	SB8	15	-	-	1	-
		BUTTON	-	-	-	1
	SB9	11	1	-	-	-
		16	-	-	1	-
		BUTTON	-	-	-	1
	SB10	21	-	-	1	-
		BUTTON	-	-	-	1
SUBTOTALS			9	4	8	8

SIGNAL FACES & LED MODULES (CONTINUED)

INTERSECTION: USH 10 & 8TH ST			658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	658.0500 PEDESTRIAN PUSH BUTTON EACH
ID	SB NO.	FACE NO.				
PROJECT 1500-37-74						
	SB1	11	1	-	-	-
		21	-	-	1	-
		BUTTON	-	-	-	1
	SB2	1	1	-	-	-
		20	-	-	1	-
		BUTTON	-	-	-	1
	SB3	7	1	-	-	-
		8	1	-	-	-
		18	-	-	1	-
		BUTTON	-		-	1
	SB4	9	1	-	-	-
		15	1	-	-	-
		16	1	-	-	-
		19	-	-	1	-
		BUTTON	-	-	-	1
	SB5	13	1	-	-	-
		14	1	-	-	-
	SB6	24	-	-	1	-
		BUTTON	-	-	-	1
	SB7	4	-	1	-	-
		6	1	-	-	-
		17	-	-	1	-
		BUTTON	-	-	-	1
	SB8	2	1	-	-	-
		3	1	-	-	-
		5	-	1	-	-
		22	-	-	1	-
		BUTTON	-	-	-	1
	SB9	10	1	-	-	-
		12	1	-	-	-
		23	-	-	1	-
		BUTTON	-	-	-	1
SUBTOTALS			14	2	8	8
TOTALS			23	6	16	16

3

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

LIGHTING WIRE

INTERSECTION: USH 10 & 11TH ST				
ID	FROM	TO	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF	655.0610 * ELECTRICAL WIRE LIGHTING 12 AWG LF
PROJECT 1500-37-74				
	CAB.	SB2	435	---
	SB2	LUM.	---	144
	CAB.	SB7	405	---
	SB7	LUM.	---	144
	SUBTOTALS		840	288
INTERSECTION: USH 10 & 8TH ST				
	CAB.	SB3	426	---
	SB3	LUM.	---	144
	CAB.	SB7	717	---
	SB7	LUM.	---	144
	SUBTOTALS		1143	288
	TOTALS		1983	576

* QUANTITIES SHOWN ELSEWHERE

ELECTRICAL SERVICE METER BREAKER PEDESTAL

ID	LOCATION	656.0200.01 LS	656.0200.02 LS
PROJECT 1500-37-74			
	USH 10 & 11TH ST.	1	-
	USH 10 & 8TH AVE.	-	1
	TOTALS	1	1

SIGNAL MOUNTING HARDWARE

ID	LOCATION	658.5069.01 LS	658.5069.02 LS
PROJECT 1500-37-74			
	USH 10 & 11TH ST.	1	-
	USH 10 & 8TH AVE.	-	1
	TOTALS	1	1

TRAFFIC SIGNAL IDENTIFICATION PLAQUES (INCIDENTAL TO NEW INSTALLATIONS)

ID	LOCATION	BASE NO.	STRUCTURE NO.
PROJECT 1500-37-74			
	USH 10 & 11TH AVE		
		SB7	S-36-0054
		SB2	S-36-0055
	USH 10 & 8TH AVE		
		SB3	S-36-0056
		SB7	S-36-0057

TRAFFIC SIGNAL CABINET & CONTROLLER FULLY ACTUATED 8 PHASE

ID	LOCATION	SPV.0105.34 LS	SPV.0105.35 LS
PROJECT 1500-37-74			
	USH 10 & 11TH ST.	1	-
	USH 10 & 8TH AVE.	-	1
	TOTALS	1	1

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

SAWING PAVEMENT

ID	CATEGORY	STATION	LOCATION	690.0150 * SAWING ASPHALT LF	690.0250 * SAWING CONCRETE LF	REMARKS
PROJECT 1500-37-74						
	0010					
		131+25	USH 10, EB	-	74	CONSTRUCTION LIMIT
		131+93	USH 10, EB, RT	-	17	PE
		132+18	USH 10, WB, LT	-	35	SIDEWALK TO CHURCH ENTRANCE
		132+40	USH 10, EB, RT	-	10	PE
		132+63	USH 10, EB, RT	-	3	SIDEWALK
		132+69	USH 10, WB, LT	-	5	SIDEWALK
		132+79	USH 10, WB, LT	15	-	CE
		132+96	USH 10, WB, LT	-	19	CHURCH PARKING
		133+20	USH 10, EB, RT	-	3	SIDEWALK
		134+26	USH 10, EB, RT	-	3	SIDEWALK
		134+80	USH 10, EB, RT	-	3	SIDEWALK
		135+02	USH 10, EB, RT	-	9	PE
		137+22	USH 10, WB, LT	-	4	SIDEWALK
		137+46	USH 10, WB, LT	-	3	SIDEWALK
		137+54	USH 10, EB, RT	-	21	PE
		138+10	USH 10, WB, LT	-	12	PE
		138+74	USH 10, WB, LT	11	-	PE
		139+14	USH 10, WB, LT	-	4	SIDEWALK
		139+21	USH 10, EB, RT	-	4	SIDEWALK
		139+46	USH 10, WB, LT	-	22	PE
		139+72	USH 10, WB, LT	-	4	SIDEWALK
		140+11	USH 10, EB, RT	-	11	PE
		140+45	USH 10, WB, LT	-	23	PE
		140+47	USH 10, EB, RT	-	21	PE
		140+76	USH 10, WB, LT	-	3	SIDEWALK
		140+91	USH 10, EB, RT	-	3	SIDEWALK
		142+64	USH 10, EB, RT	-	5	SIDEWALK
		143+25	USH 10, EB, RT	18	-	PE
		144+02	USH 10, EB, RT	-	17	PE
		144+54	USH 10, EB, RT	-	5	SIDEWALK
		148+98	USH 10, EB, RT	-	3	SIDEWALK
		148+98	USH 10, WB, LT	-	3	SIDEWALK
		149+63	USH 10, WB, LT	-	4	SIDEWALK
		149+84	USH 10, WB, LT	9	-	PE
		150+12	USH 10, EB, RT	-	11	PE
		150+16	USH 10, WB, LT	-	11	PE
		150+41	USH 10, WB, LT	-	2	SIDEWALK
		151+98	USH 10, EB, RT	-	5	SIDEWALK
		9+35	N. 13TH ST	-	62	ROAD / SIDEWALK
		9+43	N. 13TH ST, LT	-	4	SIDEWALK
		8+15	N. 12TH ST	-	40	ROAD / SIDEWALK
		8+31	N. 12TH ST, LT	-	10	PE
		8+58	N. 12TH ST, LT	-	4	SIDEWALK
		8+94	N. 12TH ST, LT	-	20	PE
		10+85	N. 12TH ST	-	40	ROAD / SIDEWALK

* QUANTITIES SHOWN ELSEWHERE

SAWING PAVEMENT (CONTINUED)

ID	CATEGORY	STATION	LOCATION	690.0150 * SAWING ASPHALT LF	690.0250 * SAWING CONCRETE LF	REMARKS
PROJECT 1500-37-74						
	0010					
		8+85	S. MENASHA AVE	-	50	ROAD / SIDEWALK
		9+12	S. MENASHA AVE, RT	-	28	PE
		11+69	N. MENASHA AVE, LT	-	6	SIDEWALK
		12+10	N. MENASHA AVE	-	57	ROAD / SIDEWALK
		9+35	N. 11TH ST	-	49	ROAD / SIDEWALK
		11+00	N. 11TH ST	-	107	ROAD / SIDEWALK
		9+35	N. 10TH ST	-	45	ROAD / SIDEWALK
		9+00	N. 9TH ST	-	41	ROAD / SIDEWALK
		11+25	N. 9TH ST	-	10	SIDEWALKS
		12+70	N. 9TH ST	-	31	ROAD
		8+50	N. 8TH ST	-	49	ROAD / SIDEWALK
		8+66	N. 8TH ST, LT	-	8	PE
		8+66	N. 8TH ST, RT	-	8	PE
		8+82	N. 8TH ST, RT	-	16	PE
		9+00	N. 8TH ST, LT	-	5	SIDEWALK
		9+10	N. 8TH ST, RT	-	4	SIDEWALK
		10+88	N. 8TH ST, RT	-	4	SIDEWALK
		11+50	N. 8TH ST	-	15	CURB & GUTTER / SIDEWALK
		12+90	N. 8TH ST	37	-	ROAD
		11+44	EMERGENCY RR CROSSING	-	20	CURB & GUTTER
		CATEGORY 0010 TOTALS		90	1,115	
PROJECT 1500-37-74						
	0020					
			ENTIRE PROJECT	-	1,500	REMOVALS FOR COLORED XWALKS
		CATEGORY 0020 TOTALS		0	1,500	
		PROJECT TOTALS		90	2,615	
PROJECT 4570-12-71						
	0010					
		152+48	STH 42, LT	-	23	PE
		152+63	STH 42, LT	-	5	SIDEWALK
		152+95	STH 42, RT	-	17	PE
		153+90	STH 42, RT	-	22	PE
		153+97	STH 42, LT	-	16	PE
		154+61	STH 42, RT	-	43	PE
		157+12	STH 42, RT	-	14	PE
		157+37	STH 42, RT	-	16	PE
		158+07	STH 42, RT	-	2	SIDEWALK
		158+14	STH 42, LT	-	4	SIDEWALK
		158+43	STH 42, RT	-	13	PE
		158+46	STH 42, LT	10	-	PE
		159+46	STH 42, LT	-	3	SIDEWALK
		160+40	STH 42, RT	-	3	SIDEWALK
		160+81	STH 42, LT	-	3	SIDEWALK

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

SAWING PAVEMENT (CONTINUED)

ID	CATEGORY	STATION	LOCATION	690.0150 * SAWING ASPHALT LF	690.0250 * SAWING CONCRETE LF	REMARKS
PROJECT 4570-12-71						
	0010					
		160+93	STH 42, RT	-	11	PE
		161+77	STH 42, RT	-	11	PE
		162+24	STH 42, LT	-	20	PE
		163+40	STH 42, RT	-	17	PE
		164+04	STH 42, LT	12	-	PE
		164+82	STH 42, RT	-	13	PE
		165+70	STH 42, LT	12	-	PE
		165+72	STH 42, RT	-	14	PE
		156+79	STH 42, LT	12	-	PE
		167+31	STH 42, RT	21	-	PE
		167+45	STH 42, LT	-	8	PE
		168+84	STH 42, LT	18	-	PE
		169+25	STH 42, RT	16	-	PE
		169+53	STH 42, RT	16	-	PE
		170+20	STH 42, RT	-	15	PE
		172+57	STH 42, RT	-	5	SIDEWALK
		180+12	STH 42, RT	9	-	SIDEWALK
		180+89	STH 42, LT	-	15	PE
		184+23	STH 42, RT	36	-	CE
		184+32	STH 42, LT	30	-	CE
		192+40	STH 42, RT	16	-	TRAIL
		194+03	STH 42, RT	175	-	PARKING LOT
		194+90	STH 42, RT	16	35	ROAD
		194+90	STH 42, LT	-	36	ROAD
		195+50	STH 42, MEDIAN	-	277	ROAD / CURB & GUTTER
		9+10	LINCOLN BLVD, SB	-	31	ROAD / SIDEWALK
		9+15	LINCOLN BLVD, SB, LT	-	5	SIDEWALK
		10+85	LINCOLN BLVD, SB	-	31	ROAD / SIDEWALK
		9+10	LINCOLN BLVD, NB	-	31	ROAD / SIDEWALK
		9+31	LINCOLN BLVD, NB, RT	-	8	SIDEWALK
		10+85	LINCOLN BLVD, NB	-	31	ROAD / SIDEWALK
		9+35	N. 6TH ST	-	63	ROAD / SIDEWALK
		9+52	N. 6TH ST, LT	-	16	PE
		11+00	N. 6TH ST	-	42	ROAD / SIDEWALK
		10+60	N. 5TH ST	-	41	ROAD / SIDEWALK
		10+75	MARITIME DR	-	75	ROAD / SIDEWALK
		12+79	MARITIME DR, RT	16	-	TRAIL
	PROJECT TOTALS			415	1,035	
	TOTALS			505	2,150	

* QUANTITIES SHOWN ELSEWHERE

REMOVING BURIED CATTLE PASS, STATION 161+35

ID	STATION	LOCATION	SPV.0035.02 CY
PROJECT 4570-12-71			
	161+35	USH 10	10
	TOTAL		10

UTILITY LINE OPENINGS

ID	STATION	LOCATION	SPV.0060.09 EACH
PROJECT 1500-37-74			
	UNDISTRIBUTED	USH 10	10
	PROJECT TOTAL		10
PROJECT 1500-37-75			
	UNDISTRIBUTED	USH 10	10
	PROJECT TOTAL		10
PROJECT 4570-12-71			
	UNDISTRIBUTED	STH 42	10
	PROJECT TOTAL		10
PROJECT 4570-12-72			
	UNDISTRIBUTED	STH 42	10
	PROJECT TOTAL		10
	TOTAL		20

REMOVING AND REINSTALL CHAIN LINK FENCE

ID	STATION	LOCATION	SPV.0090.09 LF
PROJECT 1500-37-74			
	10+40	EMERGENCY VEHICLE RR CROSSING	30
	TOTAL		30

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

CONCRETE CAP OVER SANITARY SEWER

ID	STATION	OFFSET	LOCATION	SPV.0060.08 EA
PROJECT 4570-12-71				
	159+85	11' RT	EB	1
			TOTAL	1

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

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POLYMER-COATED CHAIN LINK FENCE 6-FT

ID	STATION	TO	STATION	LOCATION	SPV.0090.10 LF
PROJECT 4570-12-71					
	174+20	-	175+25	USH 10, EB	125
PROJECT TOTAL					125
TOTAL					125

GRADING AND SHAPING EMERGENCY VEHICLE RAILROAD CROSSING

ID	STATION	TO	STATION	LOCATION	SPV.0105.01 LS	FOR INFORMATIONAL PURPOSES ONLY CUT CY	FILL CY
PROJECT 1500-37-74							
	10+20	-	11+45	EMERGENCY RR CROSSING	1	26	3
TOTAL					1	26	3

NOTE: CUT AND FILL QUANTITIES FOR INFORMATION ONLY

MONUMENTS

ID	STATION	LOCATION	SPV.0105.05 PRESERVATION OF EXISTING MONUMENTS PROJECT 1500-37-74 LS	SPV.0105.06 PRESERVATION OF EXISTING MONUMENTS PROJECT 4570-12-71 LS	SPV.0105.07 VERIFY AND RESTORING OF EXISTING MONUMENTS PROJECT 1500-37-74 LS	SPV.0105.08 VERIFY AND RESTORING OF EXISTING MONUMENTS PROJECT 4570-12-71 LS
PROJECT 1500-37-74						
	ENTIRE PROJECT	USH 10	1	-	1	-
	PROJECT TOTALS		1	0	1	0
PROJECT 4570-12-71						
	ENTIRE PROJECT	STH 42	-	1	-	1
	PROJECT TOTALS		0	1	0	1
TOTALS			1	1	1	1

RECTANGULAR RAPID FLASHING BEACON

ID	STATION	LOCATION	654.0101 * CONCRETE BASES TYPE 1 EACH	657.0100 * PEDESTAL BASES EACH	657.0425 * TRAFFIC SIGNAL STANDARDS ALUMINIUM 15-FT EACH	SPV.0105.09 SALVAGE AND REINSTALL RECTANGULAR RAPID FLASHING BEACON (RRFB) SYSTEM WITH PEDESTRIAN ACTIVATION LS
PROJECT 1500-37-74						
	148+00	USH 10, EB	3	3	3	1
TOTALS			3	3	3	1

* ADDITONAL QUANTITIES SHOWN ELSEWHERE

GRADING AND SHAPING OUTFALL DISSIPATOR

ID	STATION	LOCATION	SPV.0105.10 LS	FOR INFORMATION PURPOSES ONLY CUT CY	FILL CY
PROJECT 4570-12-71					
	174+70	STH 42	1	600	-
			1	600	0

SALVAGING AND REPLACING CONCRETE RIPRAP

ID	STATION	LOCATION	SPV.0180.01 SY
PROJECT 4570-12-71			
	13+20	MARITIME DR, NB (NME)	60
TOTAL			60

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

REMOVE FIRE HYDRANTS

ID	STATION	LOCATION	SPV.0060.40 EA
PROJECT 1500-37-75			
	71+14	USH 10, LT	1
	99+48	USH 10, LT	1
	102+56	USH 10, LT	1
	122+24	USH 10, LT	1
	125+71	USH 10, RT	1
	128+35	USH 10, RT	1
	131+17	USH 10, RT	1
	133+92	USH 10, RT	1
	148+51	USH 10, RT	1
	PROJECT TOTAL		9
PROJECT 4570-12-72			
	156+52	STH 42, RT	1
	159+52	STH 42, RT	1
	PROJECT TOTAL		2
	TOTAL		11

REMOVING VALVE, VALVE MANHOLES, AND VALVE BOXES

ID	STATION	LOCATION	SPV.0060.41 EA
PROJECT 1500-37-75			
	135+33	USH 10, LT	1
	135+85	USH 10, LT	1
	141+16	USH 10, LT	1
	141+95	USH 10, LT	1
	142+31	USH 10, LT	1
	148+42	USH 10, LT	1
	148+42	USH 10, RT	1
	151+16	USH 10, LT	1
	151+73	USH 10, LT	1
	PROJECT TOTAL		9
PROJECT 4570-12-72			
	156+48	STH 42, LT	1
	155+93	STH 42, LT	1
	160+24	STH 42, LT	1
	163+63	STH 42, LT	1
	PROJECT TOTAL		4
	TOTAL		13

INSTALL FIRE HYDRANTS, WATERMAIN, AND GATE VALVE

ID	STATION	LOCATION	SPV.0090.40 WATER MAIN 6-INCH LF	SPV.0060.42 GATE VALVE AND BOX 6-INCH EA	SPV.0060.46 FIRE HYDRANT EA
PROJECT 1500-37-75					
	131+80	USH 10, LT	11	1	1
	152+04	USH 10, LT	12	1	1
	9+42	N 13TH, RT	9	1	1
	9+53	MENASHA, RT	7	1	1
	9+52	N 9TH, RT	11	1	1
	PROJECT TOTALS		50	5	5
PROJECT 4570-12-72					
	160+94	WALDO	10	1	1
	9+50	LINCOLN BLVD, RT	15	1	1
	PROJECT TOTALS		25	2	2
	TOTALS		75	7	7

3

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

INSTALL WATER MAIN

STATION		TO STATION	LOCATION	SPV.0090.41 INSTALL 8-INCH LF	SPV.0090.42 INSTALL 10-INCH LF	SPV.0090.43 INSTALL 12-INCH LF	SPV.0060.49 CONNECT TO EXISTING EA
PROJECT 1500-37-75							
131+16	-	133+85	USH 10	-	-	249	1
133+85	-	135+71	USH 10	-	-	186	-
135+63	-	135+68	N MENASHA AVE	18	-	-	1
135+71	-	136+33	USH 10	-	-	62	-
136+33	-	136+62	USH 10	-	-	29	-
136+62	-	141+69	USH 10	-	-	507	-
141+69	-	145+32	USH 10	-	-	363	-
145+32	-	148+45	USH 10	-	-	314	-
148+45	-	151+56	USH 10	-	-	320	-
151+56	-	152+25	USH 10	-	-	69	-
9+30	-	10+49	N 13TH ST	122	-	-	1
9+61	-	10+45	N 12TH ST	84	-	-	1
8+93	-	10+66	S MENASHA AVE	199	-	-	2
9+59	-	11+25	N 11TH ST	81	-	87	2
9+71	-	10+45	N 10TH ST	74	-	-	1
9+05	-	10+46	N 9TH ST	292	78	-	2
8+55	-	11+45	N 8TH ST	-	-	294	2
PROJECT TOTALS				870	78	2480	13
PROJECT 4570-12-72							
152+25	-	155+89	STH 42	-	-	363	-
155+89	-	159+95	STH 42	-	-	406	-
159+95	-	163+63	STH 42	-	-	369	-
163+63	-	164+15	STH 42	-	-	63	1
164+15		192+25	STH 42	-	-	154	13
9+43	-	10+99	LINCOLN BLVD	128	-	-	2
9+30	-	10+95	N 6TH ST	120	-	-	2
PROJECT TOTALS				248	0	1,355	18
TOTALS				1,118	78	3,835	31

INSTALL GATE VALVE AND BOX

ID	STATION	LOCATION	SPV.0060.43 8-INCH EA	SPV.0060.44 10-INCH EA	SPV.0060.45 12-INCH EA
PROJECT 1500-37-75					
	131+70	USH 10, LT	-	-	1
	133+85	USH 10, LT	1	-	1
	135+68	USH 10, LT	-	-	1
	135+71	USH 10, LT	-	-	1
	136+33	USH 10, LT	1	-	-
	136+62	USH 10, LT	1	-	1
	141+69	USH 10, LT	1	-	2
	145+32	USH 10, LT	1	-	1
	148+45	USH 10, LT	1	1	1
	151+56	USH 10, LT	-	-	3
	9+61	MENASHA AVE, RT	1	-	-
		PROJECT TOTALS	7	1	11
PROJECT 4570-12-72					
	155+89	STH 42, LT	2	-	1
	159+95	STH 42, LT	2	-	1
	163+63	STH 42, LT	1	-	1
		PROJECT TOTALS	5	0	3
		TOTALS	12	1	14

IMPORTED WATER MAIN TRENCH BACKFILL

STATION		TO STATION	LOCATION	SPV.0195.40 TON
PROJECT 1500-37-75				
UNDISTRIBUTED			USH 10	3000
PROJECT TOTALS				3000
PROJECT 4570-12-72				
UNDISTRIBUTED			STH 42	1000
PROJECT TOTALS				1,000
TOTALS				4,000

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

WATER SERVICES

ID	STATION	LOCATION	SPV.0090.44 WATER SERVICE 1 1/4-INCH LF	SPV.0060.47 INSTALL CORPORATION STOP & CURB STOP AND BOX 1 1/4 -INCH EA	SPV.0060.50 CONNECT TO EXISTING EA	SPV.0165.40 4" TRENCH INSULATION SF
PROJECT 1500-37-75						
	132+16	USH 10, RT	72	1	1	32
	132+70	USH 10, RT	72	1	1	32
	134+87	USH 10, RT	72	1	1	32
	135+54	USH 10, RT	72	1	1	32
	137+17	USH 10, LT	10	1	1	-
	137+93	USH 10, LT	10	1	1	-
	138+08	USH 10, LT	10	1	1	-
	138+68	USH 10, LT	10	1	1	-
	139+40	USH 10, LT	10	1	1	-
	139+95	USH 10, LT	10	1	1	-
	138+85	USH 10, RT	72	1	1	32
	143+10	USH 10, RT	72	1	1	32
	143+60	USH 10, RT	72	1	1	32
	144+62	USH 10, RT	72	1	1	32
	11+98NN	N 9TH ST, RT	10	1	1	-
	12+40NN	N 9TH ST, RT	10	1	1	-
	149+11	USH 10, LT	20	1	1	-
	149+68	USH 10, LT	20	1	1	-
	149+73	USH 10, RT	62	1	1	-
	PROJECT TOTALS		758	19	19	256
PROJECT 4570-12-72						
	152+68	STH 42, LT	8	1	1	-
	153+74	STH 42, LT	8	1	1	-
	154+72	STH 42, LT	8	1	1	-
	153+10	STH 42, RT	72	1	1	-
	154+11	STH 42, RT	72	1	1	32
	158+20	STH 42, LT	8	1	1	-
	159+18	STH 42, LT	8	1	1	-
	157+70	STH 42, RT	72	1	1	32
	158+21	STH 42, RT	72	1	1	32
	162+01	STH 42, LT	8	1	1	-
	161+09	STH 42, RT	72	1	1	32
	162+10	STH 42, RT	72	1	1	32
	162+62	STH 42, RT	72	1	1	32
	PROJECT TOTALS		552	13	13	192
	TOTALS		1,310	32	32	448

WATER VALVE AND CURB STOP ADJUSTMENTS

STATION TO STATION	LOCATION	SPV.0060.51 ADJUSTING WATER VALVE BOX EA	SPV.0060.52 ADJUSTING WATER SERVICE CURB STOP EA
PROJECT 4570-12-71			
152+25 - 194+90	STH 42	7	11
TOTALS		7	11

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

3

MINI STORM SEWER

ID	LOCATION	612.0902.S.01 INSULATION BOARD POLYSTYRENE 2-INCH SY	SPV.0060.07 CLEANOUT EA	SPV.0090.05 6-INCH LF	SPV.0090.06 8-INCH LF
PROJECT 1500-37-75					
	131+70 - 133+43	89	1	200	---
	134+45 - 135+77	60	1	135	---
	137+20 - 138+24	47	1	105	---
	137+30 - 138+33	49	1	110	---
	139+00 - 140+90	87	1	195	---
	139+00 - 140+89	87	1	195	---
	141+98 - 143+00	47	1	105	---
	143+75	7	---	15	---
	10TH ST.	23	---	35	15
	149+20 - 150+79	72	1	160	---
	8TH ST.	7	---	15	---
	PROJECT TOTALS	575	8	1,270	15
PROJECT 4570-12-72					
	152+25 - 153+69	65	1	145	---
	LINCOLN BLVD.	43	---	95	---
	157+75 - 159+25	68	1	150	---
	158+00 - 159+44	65	1	145	---
	6TH ST.	18	---	40	---
	161+50 - 162+90	63	1	140	---
	161+60 - 163+08	67	1	150	---
	164+75 - 166+00	58	1	130	---
	165+05 - 166+00	54		120	---
	167+00 - 169+02	93	---	205	---
	167+50 - 169+00	76	---	170	---
	171+55 - 172+00	25	---	55	---
	PROJECT TOTALS	695	6	1,545	0
	TOTALS	1,270	14	2,815	15

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

SANITARY MANHOLES

ID	STATION	MANHOLE #	LOCATION	SPV.0060.60 CASTING TYPE J EACH	SPV.0060.61 CHIMNEY SEAL EACH	SPV.0060.62 REMOVE MANHOLE EACH	SPV.0200.60 MANHOLE 4-FOOT VF	SPV.0200.61 RECONSTRUCT MANHOLE VF	SPV.0200.62 DROP MANHOLE VF
PROJECT 1500-37-75									
	9+61TH, 0'LT	13A	N 13TH STREET	1	-	-	10.3	-	3.7
	133+75EB, 11'LT	13	USH 10	1	-	1	10.4	-	-
	134+00EN, 2'LT	12A	USH 10	1	-	-	10.7	-	-
	10+58MN	-	N MENASHA AVENUE	1	-	-	-	-	-
	135+59, 35'LT	12	USH 10	1	-	-	16.6	-	5.9
	135+91EB	-	USH 10	-	-	1	-	-	-
	136+51EB	-	USH 10	-	-	1	-	-	-
	136+53EB, 35'LT	11	USH 10	1	-	-	17.1	-	-
	9+26TW	11A	N 12TH STREET	1	-	1	14.4	-	7.25 & 6.6
	138+82EB	-	USH 10	-	-	1	-	-	-
	139+13EB, 35'LT	10	USH 10	1	-	-	17.1	-	-
	141+56EB, 35'LT	9	USH 10	1	-	-	18.3	-	4.9
	141+49EB	-	USH 10	-	-	1	-	-	-
	141+56EB, 22'RT	9B	USH 10	1	-	-	11.7	-	3.3
	145+21EB	-	USH 10	-	-	1	-	-	-
	145+21EB, 22'RT	8	USH 10	1	-	-	8.0	-	-
	147+72EB	-	USH 10	-	-	1	-	-	-
	148+35EB	-	USH 10	-	-	1	-	-	-
	148+35EB,19'RT	-	USH 10	-	-	1	-	-	-
	148+35EB, 21'RT	7A	USH 10	1	-	-	6.3	-	-
	11+80NN	-	N 9TH STREET	1	-	-	-	-	-
	12+52NN	-	N 9TH STREET	1	-	1	29.0	-	19.0 & 14.0
	148+99EB, 41'LT	7	USH 10	1	-	1	6.4	-	-
	151+37EB	-	USH 10	-	-	1	-	-	-
	151+37EB, 21'RT	6A	USH 10	1	-	-	8.0	-	-
	151+37EB, 41'LT	6	USH 10	1	-	1	7.7	-	-
	12+65EG, 15'LT		N 8TH STREET	1	-	-	-	-	-
	152+11EB, 15'RT	-	USH 10	-	-	1	-	-	-
	152+11EB, 35'LT	6B	USH 10	1	-	1	7.2	-	-
	PROJECT TOTAL			19	0	16	199.2	0	64.7
PROJECT 4570-12-72									
	155+15EB, 36'LT	4	STH 42	1	-	1	7.9	-	-
	155+60EB, 19'LT	4B	STH 42	1	-	1	17.7	-	8.5
	155+60EB	-	STH 42	-	-	1	-	-	-
	155+60EB, 21'RT	4A	STH 42	1	-	-	10.1	-	-
	156+23EB, 19'LT	3	STH 42	1	-	1	17.1	-	7.7
	156+23EB, 21'RT	3A	STH 42	1	-	-	10.7	-	-
	159+57EB, 21'RT	1A	STH 42	1	-	-	9.6	-	-
	159+85EB, 20'LT	2	STH 42	1	-	1	13.5	-	5.1
	159+85EB, 35'RT	1	STH 42	1	-	1	13.0	-	-
	160+25EB, 42'LT	-	STH 42	-	-	1	-	-	-
	161+07EB, 53'LT	-	STH 42	-	-	1	-	-	-

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

SANITARY MANHOLES (CONTINUED)

ID	STATION	MANHOLE #	LOCATION	SPV.0060.60 CASTING TYPE J EACH	SPV.0060.61 CHIMNEY SEAL EACH	SPV.0060.62 REMOVE MANHOLE EACH	SPV.0200.60 MANHOLE 4-FOOT VF	SPV.0200.61 RECONSTRUCT MANHOLE VF	SPV.0200.62 DROP MANHOLE VF
PROJECT 4570-12-72									
	163+52EB, 28'RT	16-28	IN DRWY APPROACH SOUTH SIDE OF STH 42	1	-	1	9.5	-	-
	163+52EB	16-135	IN PAV'T NORTH SIDE OF STH 42	1	1	-	-	-	-
	163+52EB	16-136	IN PAV'T NORTH SIDE OF STH 42	1	1	-	-	-	-
	166+90	16-29	IN LAWN SOUTH SIDE OF STH 42	1	-	-	-	-	-
	166+92	16-129	IN SIDEWALK SOUTH SIDE OF STH 42	1	-	-	-	-	-
	166+92	16-130	IN LAWN NORTH SIDE OF STH 42	1	-	-	-	-	-
	168+90	16-33	IN LAWN NORTH SIDE OF STH 42	1	-	-	-	-	-
	170+01	16-30	IN LAWN SOUTH SIDE OF STH 42	1	-	-	-	-	-
	185+40	17-71A	STH 42	1	1	1	13.2	-	-
	189+53	17-71	STH 42 IN FUTURE ROUNDABOUT ISLAND	1	-	-	-	5.9	-
	11+64	17-69	IN LAWN EAST SIDE OF MARITIME DRIVE	1	-	-	-	-	-
	13+16	17-70	IN PAV'T WEST SIDE OF MARITIME DRIVE	1	-	-	-	4.2	-
	PROJECT TOTAL			20	3	10	122.3	10.1	21.3
	TOTAL			39	3	26	321.5	10.1	86.0

FURNISHING AND INSTALLING SANITARY SEWER PIPE

ID	MH	TO	MH	LOCATION	SPV.0090.60 8-INCH LF	SPV.0090.61 12-INCH LF	SPV.0090.62 21-INCH LF
PROJECT 1500-37-72							
	13	-	12A	USH 10	-	35	-
	12A	-	12	USH 10	-	158	-
	12	-	11	USH 10	-	-	94
	11	-	10	USH 10	-	-	260
	10	-	9	USH 10	-	-	244
	9	-	9B	USH 10	-	-	-
	9B	-	8	USH 10	365	-	-
	7A	-	6A	USH 10	301	-	-
	6A	-	152+25	USH 10	88	-	-
	PROJECT TOTAL				754	193	598
PROJECT 4570-12-72							
	152+25	-	4A	STH 42	335	-	-
	4A	-	3A	STH 42	63	-	-
	3A	-	1A	STH 42	335	-	-
	1A	-	1	STH 42	31	-	-
	PROJECT TOTAL				764	0	0
	TOTAL				1,518	193	598

FURNISHING AND RELAYING SANITARY SEWER PIPE

ID	MH	TO	MH	LOCATION	SPV.0090.63 8-INCH LF	SPV.0090.64 12-INCH LF	SPV.0090.65 15-INCH LF	SPV.0090.66 24-INCH LF	REMARKS
PROJECT 1500-37-72									
	14	-	13	USH 10	-	225	-	-	
	-	-	11	N 12TH STREET	-	-	50	-	CONNECTS TO EXISTING FROM NORTH
	9	-	9B	USH 10	57	-	-	-	
	-	-	9B	N 11TH STREET	27	-	-	-	CONNECTS TO EXISTING FROM SOUTH
	15A	-	15	USH 10	48	-	-	-	
	14A	-	14	USH 10	48	-	-	-	
	13A	-	13	USH 10	50	-	-	-	
	11A	-	11	USH 10	109	-	-	-	
	PROJECT TOTAL				339	225	50	0	
PROJECT 4570-12-72									
	1	-	2	STH 42	-	-	-	55	
	PROJECT TOTAL				0	0	0	55	
	TOTAL				339	225	50	55	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

TELEVISING SEWERS

ID	MH	TO	MH	LOCATION	SPV.0090.07 * LF
PROJECT 1500-37-75					
	14	-	13	USH 10	225
	13	-	12A	USH 10	35
	12A	-	12	USH 10	158
	12	-	11	USH 10	94
	11	-	NORTH	N 12TH STREET	50
	11	-	10	#REF!	260
	10	-	9	USH 10	244
	9	-	9B	USH 10	57
	9B	-	SOUTH	N 11TH STREET	27
	9B	-	8	USH 10	365
	7A	-	6A	USH 10	301
	6A	-	152+25	USH 10	88
	15A	-	15	USH 10	48
	14A	-	14	USH 10	48
	13A	-	13	USH 10	50
	11A	-	11	USH 10	109
	7	-	6	USH 10	238
	6B	-	152+25	USH 10	14
PROJECT TOTAL					2,411
PROJECT 4570-12-72					
	152+25	-	4A	STH 42	335
	4A	-	3A	STH 42	63
	3A	-	1A	STH 42	335
	1A	-	1	STH 42	31
	1	-	2	STH 42	55
	152+25	-	4	STH 42	290
	4	-	4B	STH 42	45
	4B	-	3	STH 42	63
	3	-	2	STH 42	362
PROJECT TOTAL					1,579
TOTAL					3,990

* ADDITONAL QUANTITIES SHOWN ELSEWHERE

ABANDONING SANITARY SEWER

ID	STATION	TO	STATION	LOCATION	SPV.0090.70 LF
PROJECT 1500-37-72					
	133+75	-	135+91	USH 10	216
	135+91	-	138+82	USH 10	285
	138+82	-	141+56	USH 10	280
	MH 6	-	MH 6A	USH 10	56
PROJECT TOTAL					837
PROJECT 4570-12-72					
	MH 4A	-	MH 4B	STH 42	40
	MH 3	-	MH 3A	STH 42	40
	159+85	-	161+05	STH 42	125
PROJECT TOTAL					205
TOTAL					1,042

REMOVE EXISTING SANITARY SEWER

ID	STATION	TO	STATION	LOCATION	SPV.0090.67 LF
PROJECT 1500-37-72					
	141+56	-	147+73	USH 10	617
	148+35	-	151+37	USH 10	302
	152+11	-	152+25	USH 10	14
PROJECT TOTAL					933
PROJECT 4570-12-72					
	152+25	-	155+60	STH 42	335
PROJECT TOTAL					335
TOTAL					1,268

SANITARY LATERAL

ID	MH	TO	MH	LOCATION	SPV.0060.63 RECONNECT EACH	SPV.0090.68 6-INCH LF	SPV.0090.69 RISERS LF
PROJECT 1500-37-72							
	14	-	13	USH 10	4	183	-
	12A	-	12	USH 10	2	140	-
	11	-	10	USH 10	5	170	40
	10	-	9	USH 10	2	50	16
	9B	-	8	USH 10	4	60	-
	16-75	-	16-74	N 9TH STREET	2	34	-
	7	-	6	USH 10	2	40	-
	6B	-	152+25	USH 10	1	25	-
	6	-	16-59	N 8TH STREET	5	105	-
PROJECT TOTAL					27	807	56
PROJECT 4570-12-72							
	152+25	-	4	STH 42	3	75	-
	152+25	-	4A	STH 42	2	30	-
	3	-	2	STH 42	4	160	-
	3A	-	1A	STH 42	3	45	-
PROJECT TOTAL					12	310	0
TOTAL					39	1,117	56

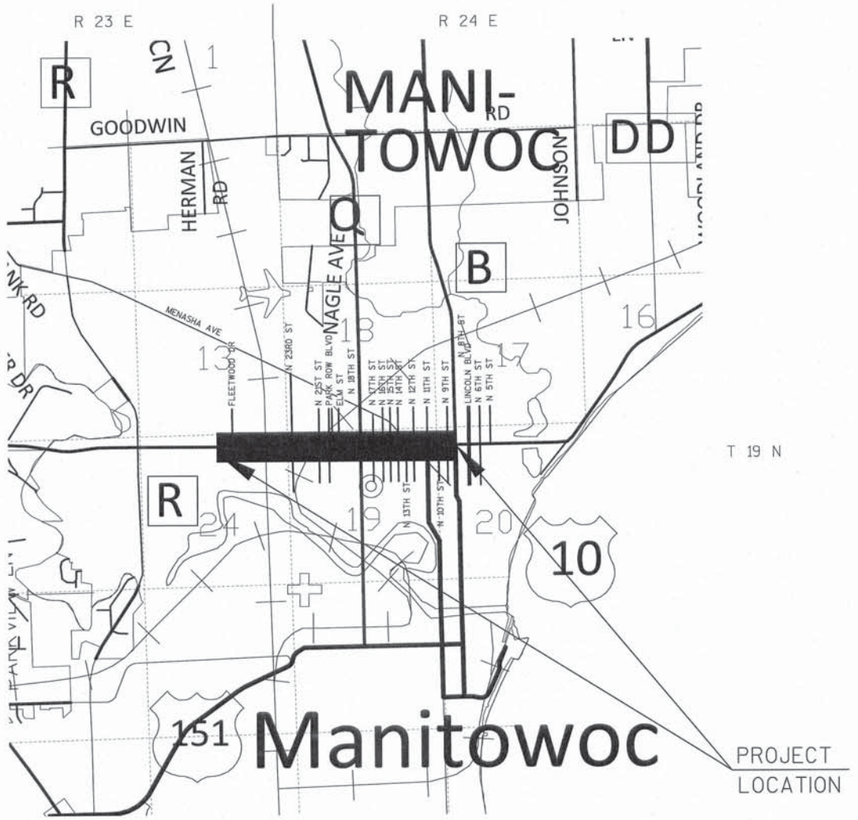
SANITARY SEWER TRENCH BACKFILL & STABILIZATION

ID	STATION		SPV.0195.60 IMPORTED SANITARY SEWER TRENCH BACKFILL TON	SPV.0195.61 SANITARY SEWER TRENCH STABILIZATION TON
PROJECT 1500-37-72				
	UNDISTRIBUTED	USH 10	2,100	200
PROJECT TOTAL			2,100	200
PROJECT 4570-12-72				
	UNDISTRIBUTED	STH 42	800	60
PROJECT TOTAL			800	60
TOTAL			2,900	260

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED

DOC# 1172800

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
1500-37-21
WALDO BLVD, CITY OF MANITOWOC
CTH R - 8TH STREET
USH 10
MANITOWOC COUNTY



CONVENTIONAL SYMBOLS

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

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP
OFF-PREMISE 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)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER (25) UTILITY NUMBER (40)
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
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

LAYOUT
SCALE 0 0.5 MI.

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1500-37-21

NOTES:

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

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPE), 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 USH 10 EASTBOUND CONSTRUCTION REFERENCE LINE.

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.
EXCLUDED FROM THIS EASEMENT IS ANY LAND CURRENTLY OCCUPIED BY BUILDINGS.

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 (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 NECESSARY OR 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.

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT OF WAY FOR USH 10 ESTABLISHED FROM PREVIOUS PROJECT 1474-1-71, 1474-2-71, 4991-00-03, AND FEDERAL AID PROJECTS 424-D AND 424-E.

EXISTING HIGHWAY RIGHT OF WAY FOR SIDE STREETS ESTABLISHED FROM SUBDIVISION PLATS.

REGISTERS OFFICE
MANITOWOC COUNTY, WI
RECEIVED FOR RECORD
2016 SEPT 23 @ 11:32AM
Cabinet D Plats Jacket 78
PRESTON F. JONES-REGISTER

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1500-37-21 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME : N:\C3D\41062900\RW\1500-37-21 040100 RW.DWG
APPRAISAL PLAT DATE :
PLOT DATE : 9/13/2016
PLOT BY :
PLOT NAME :
LAYOUT NAME - 1500-37-21 040100 RW - TPP TITLE 34X22

DOC # 1173021

TRANSPORTATION PROJECT PLAT NO: 1500-37-21 - 4.05

PART OF LOTS 19, 20, 21, AND 22, BLOCK 7, LOTS 19, 20, 21 AND 22, BLOCK 8 AND LOTS 9, 10, 11, 12, 13 AND 14, BLOCK 9 OF WOODS PARK ADDITION NO. 2, PART OF LOTS 1, 2, 3, AND 4, BLOCK 2, LOTS 1, 2, 3 AND 4 BLOCK 1 AND BLOCK K OF WOODS PARK ADDITION, PART OF LOTS 1, 2 AND 13, BLOCK 3 AND LOTS 1, 2, 3, 4 AND 6, BLOCK 2 OF MENCHL'S SUBDIVISION AND PART OF LOT 5 OF ALLEN'S SUBDIVISION OF THE NORTH 1/2 OF THE NORTHEAST 1/4, ALL IN SECTION 19, TOWNSHIP 19 NORTH, RANGE 24 EAST, CITY OF MANITOWOC, MANITOWOC COUNTY, WISCONSIN.

RELOCATION ORDER USH 10, CTH R-8TH STREET, CITY OF MANITOWOC

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY MANITOWOC DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF MANITOWOC 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 NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF MANITOWOC, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT OF WAY FOR USH 10 ESTABLISHED FROM PREVIOUS PROJECT 1474-1-71, FEDERAL AID PROJECTS 424-D AND 424-E.

EXISTING HIGHWAY RIGHT OF WAY FOR SIDE STREETS ESTABLISHED FROM SUBDIVISION PLATS.

R/W POINT TABLE		
POINT	Y COORDS	X COORDS
220	306890.229	231086.704
221	306880.229	231086.606
222	306880.097	231096.605
223	306877.644	231282.894
224	306884.552	231289.969
225	306884.762	231349.975
226	306876.657	231357.888
227	306874.015	231558.519
228	306885.856	231570.658
229	306898.065	231630.805
230	306898.025	231633.805
231	306886.026	231633.665
232	306872.869	231645.511
233	306869.312	231915.621

R/W POINT TABLE		
POINT	Y COORDS	X COORDS
234	306869.519	231926.285
235	306886.308	231939.733
236	306933.361	231925.506
237	306942.393	231921.335
238	306992.303	231981.281
239	306867.133	232085.496
240	306866.757	232116.894
241	306871.660	232124.955
242	306866.661	232124.895
243	306806.165	232124.170
244	306807.222	232035.953
245	306808.783	231917.420
246	306772.286	231916.939
247	306765.405	231907.864

R/W POINT TABLE		
POINT	Y COORDS	X COORDS
248	306767.195	231847.880
249	306773.327	231837.946
250	306775.955	231638.375
251	306769.073	231629.294
252	306769.864	231569.299
253	306776.995	231559.382
254	306779.636	231358.839
255	306772.768	231348.765
256	306773.558	231288.770
257	306780.690	231278.763
258	306783.108	231095.174
259	306776.240	231085.093
260	306783.240	231085.175

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
220-222	S44°20'35"E	14.17'
222-223	S89°14'44"E	186.31'
223-224	N45°41'13"E	9.89'
224-225	N89°47'58"E	60.01'
225-226	S44°18'47"E	11.33'
226-227	S89°14'44"E	200.65'
227-228	N45°42'46"E	16.96'
228-229	N78°31'32"E	61.37'
229-230	S89°14'28"E	3.00'
230-231	S00°40'17"W	12.00'
231-232	S42°00'01"E	17.70'
232-233	S89°14'44"E	270.13'
233-234	N88°53'30"E	10.67'
C4	SEE CURVE TABLE	
C5	SEE CURVE TABLE	
236-237	N24°47'14"W	9.95'
237-238	N50°13'11"E	78.00'
238-239	S39°46'49"E	162.88'
239-240	S89°18'49"E	31.40'
240-241	N58°41'19"E	9.44'
241-242	S00°41'47"W	5.00'

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
242-243	S00°41'12"W	60.50'
243-244	N89°18'48"W	88.22'
244-245	N89°14'44"W	118.54'
245-246	S00°45'16"W	36.50'
246-247	S52°49'49"W	11.39'
247-248	N88°17'27"W	60.01'
248-249	N58°18'59"W	11.67'
249-250	N89°14'44"W	199.59'
250-251	S52°50'37"W	11.39'
251-252	N89°14'40"W	60.00'
252-253	N54°16'52"W	12.21'
253-254	N89°14'44"W	200.56'
254-255	S55°43'01"W	12.19'
255-256	N89°14'43"W	60.00'
256-257	N54°31'16"W	12.29'
257-258	N89°14'44"W	183.60'
258-259	S55°44'03"W	12.20'
259-260	N00°40'06"E	7.00'
260-221	N00°50'43"E	97.00'
221-220	N00°33'34"E	10.00'

SCHEDULE OF LANDS & INTERESTS REQUIRED

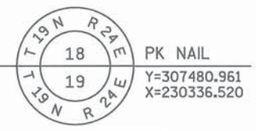
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	TOTAL R/W SF	TLE SF
66	JAVIER AND AURORA SAUCEDO	FEE AND TLE	50	50	1167
67	DAVID A. GILBERT	TLE	------	------	496
---	------	------	------	------	------
69	ROBERT B. AND PATRICIA E. CLARK	FEE AND TLE	25	25	796
70	DENNIS P. AND KATHLEEN A. RYAN	FEE AND TLE	35	35	541
71	YOLANDA F. SHROEDER	TLE	------	------	346
72	THOMAS R. PORTER	TLE	------	------	353
73	BARBARA J. RISTOW ROCKLEWITZ	FEE AND TLE	35	35	517
74	ST. FRANCIS OF ASSISSI	FEE AND TLE	1652	1652	7783
75	WELCOME HOME OF WI LLC	FEE AND TLE	35	35	1262
76	MARILYN M. NEUMEYER	FEE AND TLE	35	35	1162
77	LISA M. SMITH	FEE AND TLE	32	32	780
78	DARLENE E. PATYNSKI	TLE	------	------	415
79	ANDREW TRESTIK	TLE	------	------	339
80	ELAINE M. SCHROEDER	FEE AND TLE	30	30	591
81	THELMA I. AND TRAVIS ERTMAN	FEE AND TLE	20	20	377
82	JANICE JOHNSON	FEE AND TLE	32	32	533
83	JENNIFER HILDEBRANDT	TLE	------	------	408
84	DONNA L. ELLERT	TLE	------	------	812
85	GROELLE INVESTMENTS LLC	TLE	------	------	770
112	ANASTASIA M. CIHLAR	TLE	------	------	835
113	BRANDI L. GAGERMEIER	TLE	------	------	100

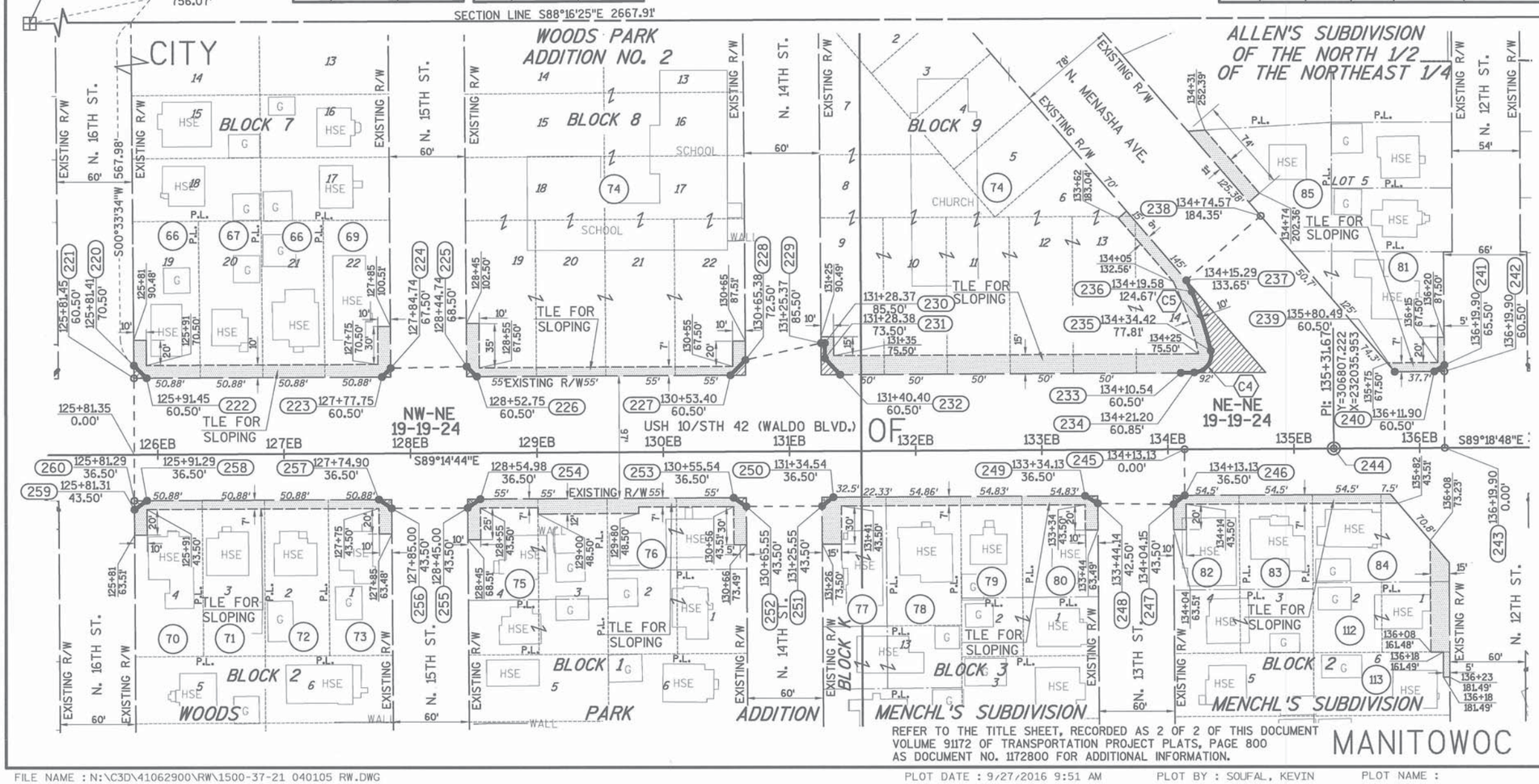
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE CITY.

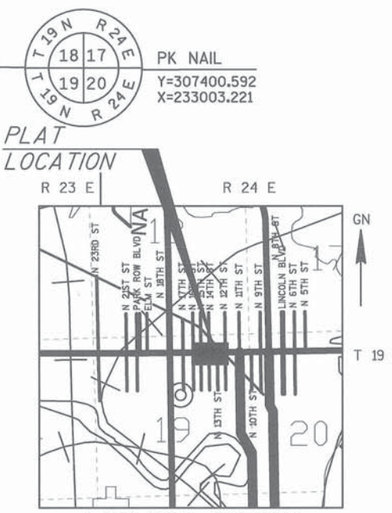
CURVE TABLE					
CURVE	COURSE	LENGTH	RADIUS	LONG CHORD	LONG CHORD BEARING
C4	234-235	24.53'	14.00'	21.51'	N38°41'36"E
C5	235-236	49.23'	265.17'	49.16'	N16°49'23"W

REGISTERS OFFICE
MANITOWOC COUNTY, WI } SS
RECEIVED FOR RECORD
2016 SEPT 29 @ 10:03AM
Cabinet D Plats Jacket 81
PRESTON F. JONES, REGISTER

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1500-37-21-4.05
AMENDMENT NO:____







LOCATION SKETCH
NOT TO SCALE

SCALE, FEET 0 50' 100'

AYRES ASSOCIATES

I, JAMES R. CAPPEART 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 CITY OF MANITOWOC, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: James R. Cappeart DATE: 9/26/2016
PRINT NAME: JAMES R. CAPPEART
REGISTRATION NUMBER: S-3044

WISCONSIN James R. Cappeart S-3044 Green Bay Wis. LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF MANITOWOC

SIGNATURE: _____ DATE: 9-28-16
PRINT NAME: DANIEL KOSKI

REFER TO THE TITLE SHEET, RECORDED AS 2 OF 2 OF THIS DOCUMENT VOLUME 91172 OF TRANSPORTATION PROJECT PLATS, PAGE 800 AS DOCUMENT NO. 1172800 FOR ADDITIONAL INFORMATION.

FILE NAME : N:\C3D\41062900\RW\1500-37-21 040105 RW.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 9/27/2016 9:51 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : ----------

DOC # 1173022

TRANSPORTATION PROJECT PLAT NO: 1500-37-21 - 4.06

PART OF LOT 5 OF ALLEN'S SUBDIVISION OF THE NORTH ONE-HALF OF THE NORTHEAST ONE-QUARTER, PART OF LOTS 1, 2, 3, 4 AND 5 OF HOLZINGER ADDITION, PART OF LOT 1, BLOCK 1 OF MENCHL'S SUBDIVISION, PART OF BLOCK 1 AND LOTS 1, 2, 3, 4, 5 AND 6 OF BLOCK 2 OF THE SCHOOL PLAT, ALL IN SECTION 19, TOWNSHIP 19 NORTH, RANGE 24 EAST, CITY OF MANITOWOC, MANITOWOC COUNTY, WISCONSIN.

RELOCATION ORDER USH 10, CTH R-8TH STREET, CITY OF MANITOWOC

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY MANITOWOC DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE NAMED PROJECT.
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF MANITOWOC 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 NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF MANITOWOC, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

R/W POINT TABLE		
POINT	Y COORDS	X COORDS
282	306857.734	232994.934
283	306795.740	232993.987
284	306759.245	232993.430
285	306752.245	232993.323
286	306759.364	232983.431
287	306762.826	232694.634
288	306759.862	232691.586
289	306753.654	232625.476

R/W POINT TABLE		
POINT	Y COORDS	X COORDS
290	306763.832	232610.640
291	306768.758	232199.680
292	306763.878	232189.619
293	306768.877	232189.681
294	306805.374	232190.118
295	306865.870	232190.888
296	306870.870	232190.951
297	306865.810	232195.888

R/W POINT TABLE		
POINT	Y COORDS	X COORDS
298	306860.817	232612.475
299	306875.635	232627.734
300	306884.843	232693.903
301	306861.167	232708.495
302	306644.324	232185.130
303	306632.796	232194.728
304	306629.325	232184.943

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	TOTAL R/W SF	TLE SF
86	DOUGLAS J. KUBEC	FEE AND TLE	73	73	219
87	JON A. HACKER	FEE AND TLE	13	13	683
88	JANET B. CHERMAK	TLE	------	------	641
89	JOVON W. AND CASSIDY A. SCHLOSEKY	TLE	------	------	647
90	GREG AND MARILYN HAMACHEK	TLE	------	------	657
91	HIPOLITO JR. AND MIKAELA BROOKS	TLE	------	------	663
92	THEODORE AND SUSAN M. HERRMANN	FEE AND TLE	112	112	1250
93	DEAN M. SCHADRIE	FEE AND TLE	25	25	1692
94	LYNN C. DEBAUCH	TLE	------	------	537
95	DANIEL J. AND TRACY A. PAHMEIER	TLE	------	------	522
96	ANTON F. JR. AND HARRIETT LEFKY	TLE	------	------	1249
97	TIMOTHY L. GUMM	FEE AND TLE	75	75	723
98	DAVID W. AND BARBARA L. HEILMAN	FEE AND TLE	5	5	1909
99	ANDREW W. AND HEIDI M. CLEMENTS	TLE	------	------	894
100	LAWRENCE F. AND JAYNE E. HAGMAN	FEE AND TLE	35	35	1029
101	MANITOWOC PUBLIC SCHOOL DISTRICT WOODROW WILSON	FEE AND TLE	176	176	1863

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE CITY.

REGISTERS OFFICE
MANITOWOC COUNTY, WI } SS
RECEIVED FOR RECORD
2016 SEPT 29 @10:04AM
Cabinet D Plats Jacket 82
PRESTON F. JONES, REGISTER

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1500-37-21-4.06
AMENDMENT NO:____

T 19 N R 24 E
18 | 19
PK NAIL
Y=307480.961
X=230336.520

S88°16'25"E 1859.17'

SECTION LINE S88°16'25"E 2667.91'

T 19 N R 24 E
18 | 17
19 | 20
PK NAIL
Y=307400.592
X=233003.221

CITY

ALLEN'S SUBDIVISION OF THE NORTH 1/2 OF THE NORTHEAST 1/4

HOLZINGER ADDITION

ALLEN'S SUBDIVISION OF THE NORTH 1/2 OF THE NORTHEAST 1/4

C MEYERS SUBDIVISION

MENCHL'S SUBDIVISION

SCHOOL PLAT

SCHOOL PLAT BLOCK 1

SCHOOL PLAT BLOCK 2

MANITOWOC

N. 12TH ST. (EXISTING R/W)
N. 11TH ST. (EXISTING R/W)
N. 10TH ST. (EXISTING R/W)
MENASHA AVE. (EXISTING R/W)
USH 10/STH 42 (WALDO BLVD.)

NE-NE 19-19-24
NW-NW 20-19-24

TLE FOR SLOPING

EASEMENT FOR TRAFFIC SIGNALS
CITY OF MANITOWOC-30'X30'
V.1833, P. 331, D.938654

SECTION LINE S00°52'29"W

REFER TO THE TITLE SHEET, RECORDED AS 2 OF 2 OF THIS DOCUMENT VOLUME 91172 OF TRANSPORTATION PROJECT PLATS, PAGE 800 AS DOCUMENT NO. 1172800 FOR ADDITIONAL INFORMATION.

T 19 N R 24 E
19 | 20
PK NAIL
Y=304857.473
X=232964.396

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
282-283	S00°52'29"W	62.00'
283-284	S00°52'29"W	36.50'
284-285	S01°52'29"W	7.00'
285-286	N54°15'34"W	12.19'
286-287	N89°18'48"W	288.82'
287-288	S45°48'37"W	4.25'
288-289	S84°38'07"W	66.40'
289-290	N55°32'50"W	17.99'
290-291	N89°18'48"W	410.99'
291-292	S64°07'37"W	11.18'
292-293	N00°42'48"E	5.00'
293-294	N00°41'12"E	36.50'
294-295	N00°43'46"E	60.50'
295-296	N00°42'48"E	5.00'
296-297	S44°18'00"E	7.07'
297-298	S89°18'48"E	416.62'
298-299	N45°50'20"E	21.27'
299-300	N82°04'41"E	66.81'
300-301	S31°38'48"E	27.81'
301-282	S89°18'48"E	286.45'

R/W COURSE TABLE (PARCEL 86)		
COURSE	BEARING	DISTANCE
302-303	S39°46'54"E	15.00'
303-304	S70°27'57"W	10.38'
304-302	N00°42'48"E	15.00'

SCALE, FEET 0 50' 100'

PLAT LOCATION

R 23 E | R 24 E
T 19 N
GN

LOCATION SKETCH
NOT TO SCALE

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT OF WAY FOR USH 10 ESTABLISHED FROM PREVIOUS PROJECT 1474-1-71, FEDERAL AID PROJECTS 424-D AND 424-E.

EXISTING HIGHWAY RIGHT OF WAY FOR SIDE STREETS ESTABLISHED FROM SUBDIVISION PLATS.

AYRES ASSOCIATES

I, JAMES R. CAPPEART 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 CITY OF MANITOWOC, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: James R. Cappeart DATE: 9/26/2016
PRINT NAME: JAMES R. CAPPEART
REGISTRATION NUMBER: S-3044

WISCONSIN James R. Cappeart S-3044 Green Bay Wis. LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF MANITOWOC

SIGNATURE: _____ DATE: 9-28-16
PRINT NAME: DANIEL KOSKI

FILE NAME : N:\C3D\41062900\RW\1500-37-21 040106 RW.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 9/27/2016 9:07 AM
PLOT BY : SOUFAL, KEVIN
PLOT NAME :
PLOT SCALE : **********

TRANSPORTATION PROJECT PLAT NO: 1500-37-21 - 4.07

PART OF BLOCK 1 AND LOTS 1, 2, 3, 4, AND 5, BLOCK 3 OF THE SCHOOL PLAT, LOTS 12, 13, 14, 15, 16, 21, 22, 23, AND 24, BLOCK F OF REED'S ADDITION, ALL IN SECTION 20, TOWNSHIP 19 NORTH, RANGE 24 EAST, CITY OF MANITOWOC, MANITOWOC COUNTY, WISCONSIN.

RELOCATION ORDER USH 10, CTH R-8TH STREET, CITY OF MANITOWOC

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF MANITOWOC 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 NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF MANITOWOC, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	TOTAL R/W SF	TLE SF
101	MANITOWOC PUBLIC SCHOOL DISTRICT WOODROW WILSON	FEE AND TLE	43	43	2374
102	IMMANUEL EVANGELICAL LUTHERAN CHURCH	FEE AND TLE	75	75	2935
103	VICTOR E. AND ANNE M. MYERS	FEE AND TLE	50	50	1233
104	BREY PROPERTY MANAGEMENT LLC	TLE	------	------	861
---	------	------	------	------	------
106	JEFFREY C. SCHWARK	TLE	------	------	235
107	RICK PIETROSKE	TLE	------	------	1227
108	ORVILLE K. AND JERILYN RASMUSSEN	FEE AND TLE	50	50	1180
109	STEVEN J. AND KIM A. STEENO	TLE	------	------	3150
110	GREGG P. AND JOANNE M. KADOW	TLE	------	------	208

REGISTERS OFFICE
MANITOWOC COUNTY, WI } SS
RECEIVED FOR RECORD
2016 SEPT 29 @10:05AM
Cabinet D Photo Packet 82
PRESTON F. JONES, REGISTER

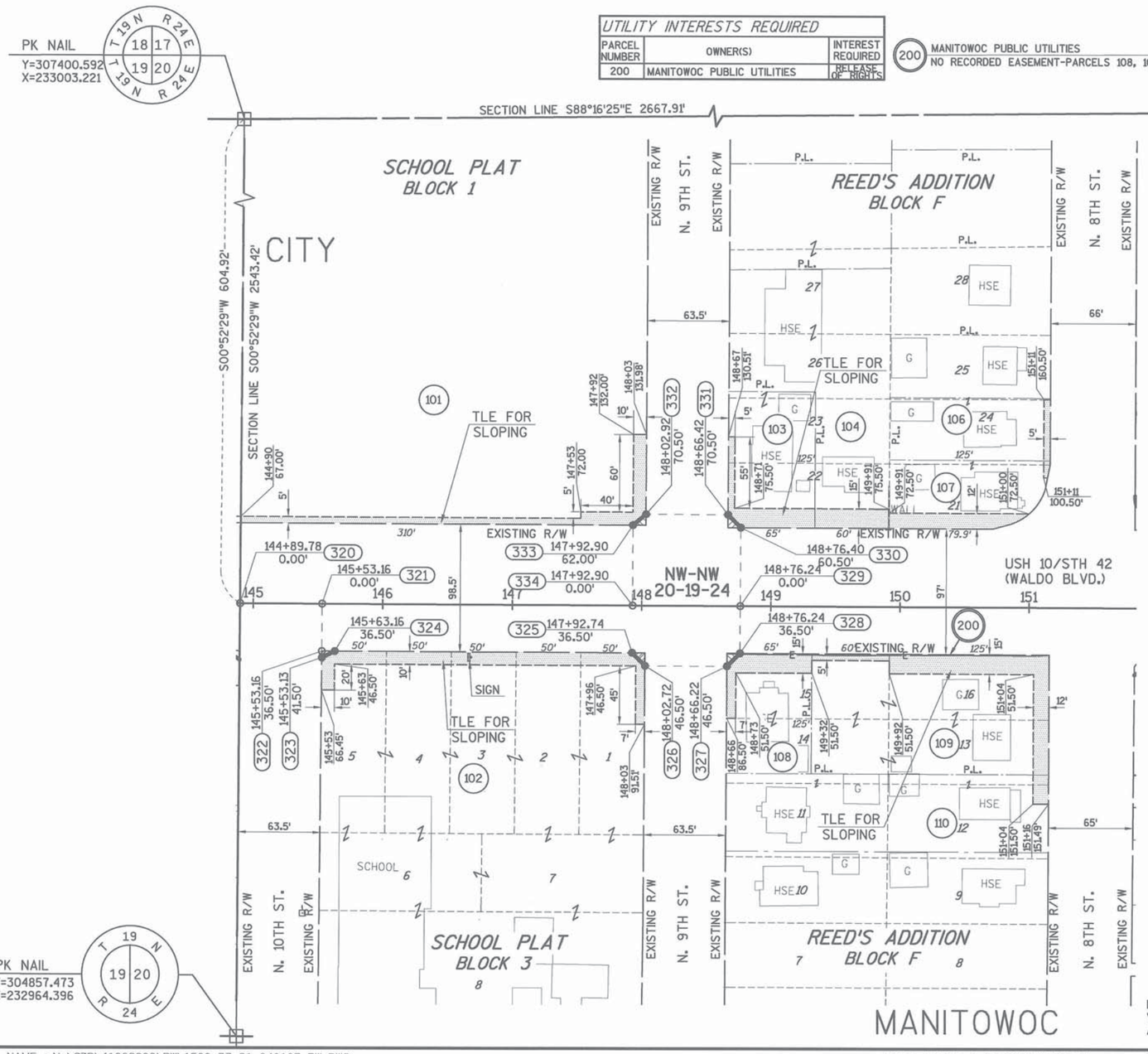
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1500-37-21-4.07
AMENDMENT NO:____

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE CITY.

UTILITY INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED
200	MANITOWOC PUBLIC UTILITIES	RELEASE OF RIGHTS

200 MANITOWOC PUBLIC UTILITIES
NO RECORDED EASEMENT-PARCELS 108, 109



R/W POINT TABLE

POINT	Y COORDS	X COORDS
320	306795.740	232993.987
321	306794.981	233057.363
322	306758.484	233056.926
323	306753.484	233056.840
324	306758.364	233066.925
325	306755.613	233296.487
326	306745.494	233306.349
327	306744.733	233369.845
328	306754.612	233379.981
329	306791.109	233380.418
330	306851.603	233381.309
331	306861.722	233371.447
332	306862.483	233307.951
333	306854.103	233297.836
334	306792.108	233297.090

R/W COURSE TABLE

COURSE	BEARING	DISTANCE
320-321	N89°18'48"W	63.38'
321-322	S00°41'12"W	36.50'
322-323	S00°59'05"W	5.00'
323-324	N64°10'53"E	11.20'
324-325	S89°18'48"E	229.58'
325-326	S44°15'52"E	14.13'
326-327	S89°18'48"E	63.50'
327-328	N45°44'08"E	14.15'
328-329	N00°41'12"E	36.50'
329-330	N00°50'36"E	60.50'
330-331	N44°15'52"W	14.13'
331-332	N89°18'48"W	63.50'
332-333	S50°22'13"W	13.14'
333-334	S00°41'12"W	62.00'
334-321	N89°18'48"W	239.74'

GN

SCALE, FEET 0 50' 100'

PLAT LOCATION

LOCATION SKETCH
NOT TO SCALE

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT OF WAY FOR USH 10 ESTABLISHED FROM PREVIOUS PROJECT 1474-1-71, FEDERAL AID PROJECTS 424-D AND 424-E.

EXISTING HIGHWAY RIGHT OF WAY FOR SIDE STREETS ESTABLISHED FROM SUBDIVISION PLATS.

REFER TO THE TITLE SHEET, RECORDED AS 2 OF 2 OF THIS DOCUMENT VOLUME 91172 OF TRANSPORTATION PROJECT PLATS, PAGE 800 AS DOCUMENT NO. 1172800 FOR ADDITIONAL INFORMATION.

AYRES ASSOCIATES

I, JAMES R. CAPPEART 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 CITY OF MANITOWOC, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: James R. Cappeart DATE: 9/26/2016
PRINT NAME: JAMES R. CAPPEART
REGISTRATION NUMBER: S-3044

WISCONSIN James R. Cappeart S-3044 Green Bay Wis. LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF MANITOWOC

SIGNATURE: _____ DATE: 9-28-16
PRINT NAME: DANIEL KOSKI

300

doc# 1172801

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
4570-12-21
WALDO BLVD, CITY OF MANITOWOC
8TH STREET - MARITIME DRIVE
STH 42
MANITOWOC COUNTY

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING TO BE REMOVED
BRIDGE

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN

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

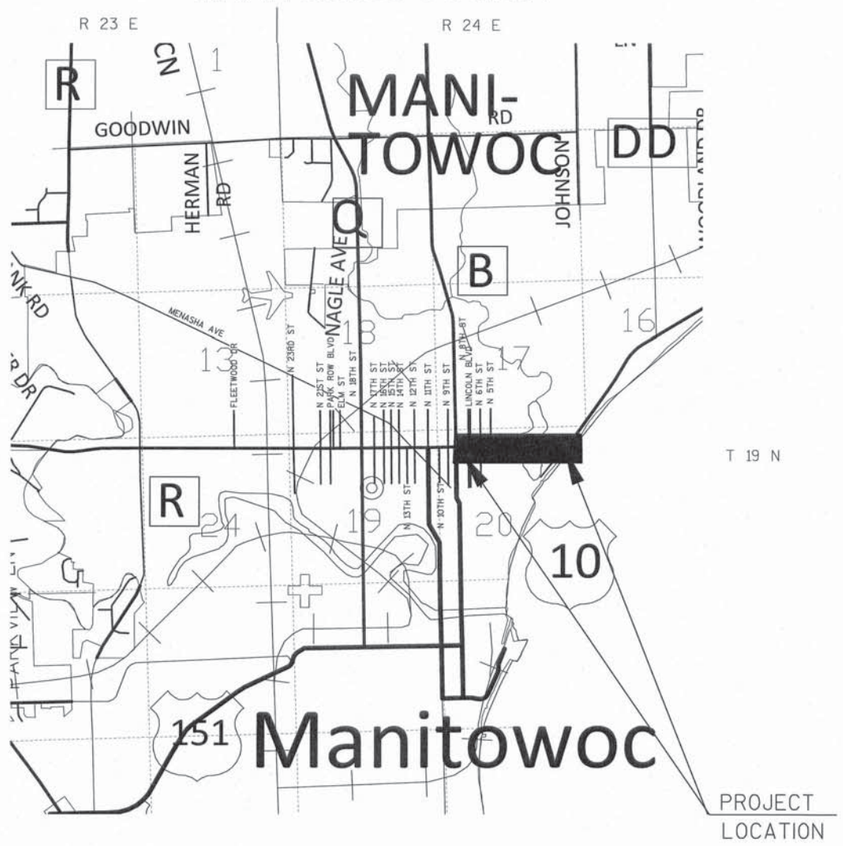
ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25 UTILITY NUMBER 40
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR
ACRES	AC
AHEAD	AH
ALUMINUM	ALUM
AND OTHERS	ET AL
BACK	BK
BLOCK	BLK
CENTERLINE	C/L
CERTIFIED SURVEY MAP	CSM
CONCRETE	CONC
COUNTY	CO
COUNTY TRUNK HIGHWAY	CTH
DISTANCE	DIST
CORNER	COR
DOCUMENT NUMBER	DOC
EASEMENT	EASE
EXISTING	EX
GAS VALVE	GV
GRID NORTH	GN
HIGHWAY EASEMENT	HE
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
POINT OF COMPOUND CURVE	PCC
POINT OF INTERSECTION	PI
PROPERTY LINE	PL
RECORDED AS	100'
REEL / IMAGE	R/I
REFERENCE LINE	R/L
REMAINING	REM
RESTICTIVE DEVELOPMENT EASEMENT	RDE
RIGHT	RT
RIGHT OF WAY	R/W
SECTION	SEC
SEPTIC VENT	SEPV
SQUARE FEET	SF
STATE TRUNK HIGHWAY	STH
STATION	STA
TELEPHONE PEDESTAL	TP
TEMPORARY LIMITED EASEMENT	TLE
TRANSPORTATION PROJECT PLAT	TPP
UNITED STATES HIGHWAY	USH
VOLUME	V

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
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—

LAYOUT
SCALE 0 0.5 MI.

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 4570-12-21

NOTES:

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

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPE), 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 USH 10 EASTBOUND CONSTRUCTION REFERENCE LINE.

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.
EXCLUDED FROM THIS EASEMENT IS ANY LAND CURRENTLY OCCUPIED BY BUILDINGS.

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.

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.

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

EXISTING ACCESS CONTROL ALONG STH 42 ESTABLISHED FROM CONTROLLED ACCESS PROJECT CA 01-4(1).

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT OF WAY FOR STH 42 ESTABLISHED FROM PREVIOUS TRANSPORTATION PROJECT PLAT 1470-26-00-4.01, 1470-23-00-4.02, 1470-23-00-4.03 AND NATIONAL RECOVERY PROJECT NO. N.R.M. 2.

EXISTING HIGHWAY RIGHT OF WAY FOR SIDE STREETS ESTABLISHED FROM SUBDIVISION PLATS AND CERTIFIED SURVEY MAP RECORDED IN VOLUME OF CERTIFIED SURVEY MAPS, PAGE 585, DOCUMENT NO. 530194.

REGISTERS OFFICE
MANITOWOC COUNTY, WI } SS
RECEIVED FOR RECORD
2016 SEPT 23 @11:33AM
Cabinet D Plats Jacket 79
PRESTON F. JONES-REGISTER

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4570-12-21 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME : N:\C3D\41062900\RW\4570-12-21 040100 RW.DWG
APPRAISAL PLAT DATE :
PLOT DATE : 9/13/2016
PLOT BY :
PLOT NAME :
LAYOUT NAME - 4570-12-21 040100 RW - TPP TITLE 34X22

TRANSPORTATION PROJECT PLAT NO: 4570-12-21 - 4.01

PART OF LOTS 16, 17, 18, 19, 20, 21 AND 22, BLOCK 3, LOTS 15, 16, 17, 18, 19 AND 20, BLOCK 4, LOTS 1, 2, 3, 4, 5 AND 6, BLOCK 5 AND LOTS 1, 2, 3, 4, 5, 6 AND 7, BLOCK 6 OF THE LINCOLN PARK SUBDIVISION, PART OF LOT 13 OF THE AUG. BRINKMAN'S RESUBDIVISION IN THE NORTHWEST ONE-QUARTER OF THE NORTHWEST ONE-QUARTER, ALL IN SECTION 20, TOWNSHIP 19 NORTH, RANGE 24 EAST, CITY OF MANITOWOC, MANITOWOC COUNTY, WISCONSIN.

RELOCATION ORDER STH 42, 8TH STREET-MARITIME DRIVE, CITY OF MANITOWOC

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

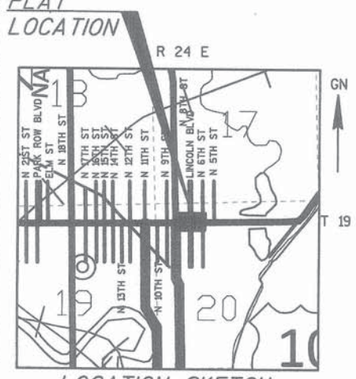
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF MANITOWOC HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF MANITOWOC, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	TOTAL R/W SF	TLE SF
149	RODGER D. WHITESIDE JR.	TLE	-----	-----	175
150	VICTORIA A. HENNING	FEE AND TLE	145	145	1274
151	GILBERTO HERRERA JR.	TLE	-----	-----	521
152	STANLEY J. AND HILDA E. STURA	TLE	-----	-----	826
153	THE DAVID HANSON AND FLORENCE HANSON TRUST	FEE AND TLE	72	72	1116
154	RICHARD W. AND KELLY J. VANDERBLOOMEN	FEE AND TLE	118	118	1848
155	REV. ROBERT M. AND CHERYL L. BLEEKE	TLE	-----	-----	598
156	CONRAD E. BAETZ	TLE	-----	-----	1188
157	STEVEN R. AND KATHLEEN ALPERT	FEE AND TLE	75	75	1622
158	ABEL TRUST	FEE AND TLE	150	150	1447
159	RANDALL K. AND KAREN M. NELSON	TLE	-----	-----	2019
160	CHARLES H. AND KALI M. KELLERMAN	FEE AND TLE	75	75	1126
161	GEORGE A. AND PATRICIA L. SLADKY	FEE AND TLE	35	35	1140
162	WARREN F. KANZELBERGER	TLE	-----	-----	783
163	DANIEL R. AND JENNIFER L. SIMS	TLE	-----	-----	539
164	EDDIE K. AND ANNIE T. MOY	FEE AND TLE	75	75	1540

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE CITY.

PLAT LOCATION



LOCATION SKETCH
NOT TO SCALE

REGISTERS OFFICE
MANITOWOC COUNTY, WI
RECEIVED FOR RECORD
2016 SEPT 23 @11:33AM
Cabinet D Plats Jacket 79
PRESTON F. JONES-REGISTER

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4570-12-21-4.01
AMENDMENT NO:___
SHEET 1 OF 2

CURVE TABLE					
CURVE	COURSE	LENGTH	RADIUS	LONG CHORD	LONG CHORD BEARING
C1	101-103	40.82'	26.00'	36.76'	S44°20'07"E

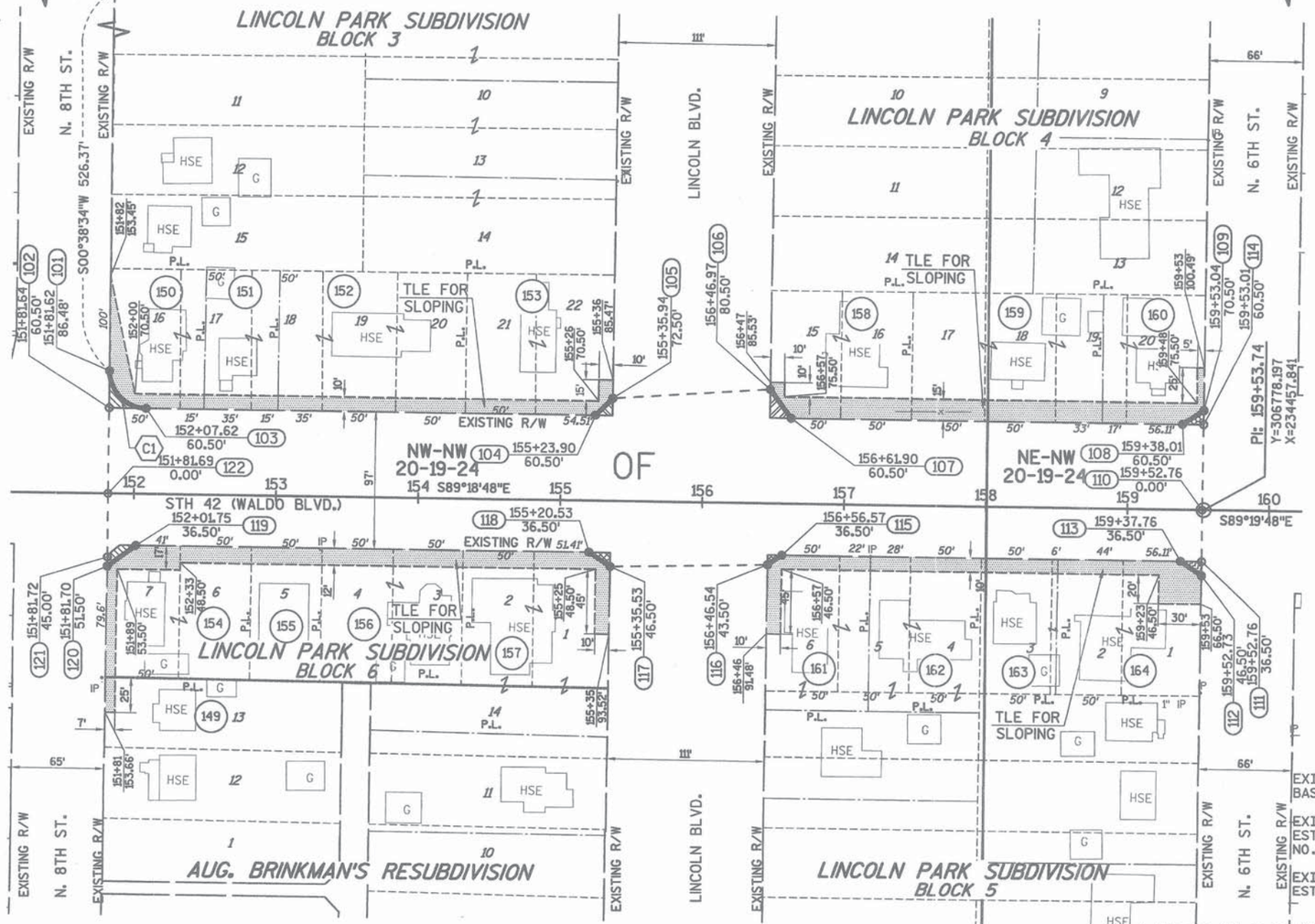
PK NAIL
Y=307400.592
X=233003.221
S89°58'20"E
689.50'

SECTION LINE S89°58'20"E 2616.15'

GN

0 50 100
SCALE, FEET

2" IRON PIPE WITH CAP
Y=307399.325
X=235619.375



R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
C1	SEE CURVE TABLE	
103-104	S89°18'48"E	316.28'
104-105	N45°47'08"E	17.00'
105-106	N86°33'55"E	111.32'
106-107	S36°03'26"E	24.96'
107-108	S89°18'48"E	276.11'
108-109	N57°02'35"E	18.05'
109-114	S00°50'14"W	10.00'
114-110	S00°55'41"W	60.50'
110-111	S00°41'12"W	36.50'
111-112	S00°50'14"W	10.00'
112-113	N55°34'37"W	18.01'
113-115	N89°18'48"W	281.19'
115-116	S55°45'34"W	12.23'
116-117	S89°08'20"W	111.06'
117-118	N55°36'19"W	18.02'
118-119	N89°18'48"W	318.78'
119-120	S53°53'01"W	25.04'
120-121	N00°52'23"E	6.50'
121-122	N00°35'02"E	45.00'
122-102	N00°40'04"E	60.50'
102-101	N00°41'12"E	25.98'

R/W POINT TABLE		
POINT	Y COORDS	X COORDS
101	306873.923	233686.819
102	306847.945	233686.507
103	306847.634	233712.506
104	306843.843	234028.761
105	306855.698	234040.945
106	306862.367	234152.061
107	306842.189	234166.752
108	306838.881	234442.843
109	306848.700	234457.988
110	306778.209	234456.862
111	306741.711	234456.425
112	306731.712	234456.278
113	306741.891	234441.426
114	306838.701	234457.842
115	306745.260	234160.257
116	306738.381	234150.150
117	306736.712	234039.101
118	306746.891	234024.233
119	306750.711	233705.472
120	306735.952	233685.245
121	306742.452	233685.344
122	306787.449	233685.802

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT OF WAY FOR STH 42 ESTABLISHED FROM NATIONAL RECOVERY PROJECT NO. N.R.M. 2.

EXISTING HIGHWAY RIGHT OF WAY FOR SIDE STREETS ESTABLISHED FROM SUBDIVISION PLATS.

REFER TO THE TITLE SHEET RECORDED AS SHEET 2 OF 2 OF THIS DOCUMENT FOR ADDITIONAL INFORMATION.

AYRES ASSOCIATES

I, JAMES R. CAPPEART 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 CITY OF MANITOWOC, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: James Cappeart DATE: 9/22/2016
PRINT NAME: JAMES R. CAPPEART
REGISTRATION NUMBER: S-3044

WISCONSIN James R. Cappeart S-3044 Green Bay Wis. LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF MANITOWOC
SIGNATURE: _____ DATE: 9-23-16
PRINT NAME: David J Kolb

FILE NAME : N:\C3D\41062900\RW\4570-12-21 040101 RW.DWG
APPRAISAL PLAT DATE : _____
PLOT DATE : 9/13/2016 PLOT BY : PLOT NAME : PLOT SCALE : **********

DOC# 1173024

TRANSPORTATION PROJECT PLAT NO: 4570-12-21 - 4.02

PART OF TRACT 1 OF CERTIFIED SURVEY MAP RECORDED IN VOLUME 26, PAGE 255 AS DOCUMENT NO. 1021383 LOCATED IN LOT 1 BLOCK H OF THE SHOREWOOD MANOR NO. 3, PART OF LOT 1 BLOCK G OF SHOREWOOD MANOR NO. 3 AND PART OF THE NORTHWEST ONE-QUARTER OF THE NORTHEAST ONE-QUARTER, ALL IN SECTION 20, TOWNSHIP 19 NORTH, RANGE 24 EAST, CITY OF MANITOWOC, MANITOWOC COUNTY, WISCONSIN.

RELOCATION ORDER STH 42, 8TH STREET-MARITIME DRIVE, CITY OF MANITOWOC

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 62.22, WISCONSIN STATUTES, THE CITY OF MANITOWOC 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 NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF MANITOWOC, PURSUANT TO THE PROVISIONS OF SUBSECTION 62.22, WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	TOTAL R/W SF	PLE SF	TLE SF
167	NICOLE M. AND NIGEL R. ORDIWAY	TLE	-------	-------	-------	673
168	MICKEY VELEKE ET AL	FEE AND TLE	2933	2933	-------	720
169	CITY OF MANITOWOC	PLE	-------	-------	4881	-------
170	MICHAEL A. AND LINDA J. LEFKY	TLE	-------	-------	-------	1184

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE CITY.

REGISTERS OFFICE
MANITOWOC COUNTY, WI } SS
RECEIVED FOR RECORD
2016 SEPT 29 @10:06AM
Cabinet D Plats Jacket 83
PRESTON F. JONES-REGISTER

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4570-12-21-4.02
AMENDMENT NO:____

R/W POINT TABLE		
POINT	Y COORDS	X COORDS
121	306764.656	235615.520
122	306761.165	235914.005
123	306723.168	235913.561
124	306650.566	235964.614
125	306650.393	235979.385
126	306722.387	235980.267
127	306760.384	235980.733

R/W POINT TABLE		
POINT	Y COORDS	X COORDS
128	306649.805	236029.612
129	306721.805	236030.100
131	306754.829	236455.763
132	306716.830	236455.447
133	306674.831	236455.098
134	306674.621	236473.031
135	306716.326	236498.521

T 19 N R 24 E
17 16
20 21
T 19 N R 24 E

Y=307425.121
X=238285.617

2" IRON PIPE WITH CAP
Y=307399.325
X=235619.375

SECTION LINE N88°26'44"E 2666.37'

CITY

S00°20'53"W 634.68'
P.L.
ONE-QUARTER LINE S00°20'53"W 2642.71'

OF

NE-NW 20-19-24

NW-NE 20-19-24

STH 42 (WALDO BLVD.)

EXISTING R/W

S89°19'48"E

TLE FOR SLOPING

PERMANENT LIMITED EASEMENT FOR DRAINAGE

PEDESTRIAN WALKWAY

WALL

HSE

BLOCK G

BLOCK H

TRACT 1 OF CSM V.26, P.255, DOC. 1021383

SHOREWOOD MANOR NO.3

MANITOWOC

T 19 N R 24 E
20
R 24 E T 19 N

2" IRON PIPE WITH CAP
Y=304756.660
X=235603.321

EXISTING ACCESS CONTROL ALONG STH 42 ESTABLISHED FROM CONTROLLED ACCESS PROJECT CA 01-4(1).

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT OF WAY FOR STH 42 ESTABLISHED FROM PREVIOUS TRANSPORTATION PROJECT PLAT 1470-26-00-4.01 AND NATIONAL RECOVERY PROJECT NO. N.R.M. 2.

REFER TO THE TITLE SHEET, RECORDED AS 2 OF 2 OF THIS DOCUMENT VOLUME 91172 OF TRANSPORTATION PROJECT PLATS, PAGE 801 AS DOCUMENT NO. 1172801 FOR ADDITIONAL INFORMATION.

R/W COURSE TABLE (PARCEL 169) PLE		
COURSE	BEARING	DISTANCE
121-131	S89°19'48"E	840.30'
131-132	S00°28'36"W	38.00'
132-133	S00°28'34"W	42.00'
133-134	S89°19'48"E	17.93'
134-135	N31°25'58"E	48.88'
135-132	N89°19'48"W	43.08'

R/W COURSE TABLE (PARCEL 168)		
COURSE	BEARING	DISTANCE
121-122	S89°19'48"E	298.51'
122-123	S00°40'12"W	38.00'
123-124	S35°06'52"E	88.76'
124-125	S89°19'48"E	14.77'
125-126	N00°42'08"E	72.00'
126-123	N89°19'48"W	66.71'

R/W COURSE TABLE (PARCEL 169 PLE)		
COURSE	BEARING	DISTANCE
121-127	S89°19'48"E	365.24'
127-126	S00°42'08"W	38.00'
126-125	S00°42'08"W	72.00'
125-128	S89°19'48"E	50.23'
128-129	N00°23'20"E	72.00'
129-126	N89°19'48"W	49.84'

GN

SCALE, FEET 0 50' 100'

PLAT LOCATION

R 19 E

T 24 N

LOCATION SKETCH
NOT TO SCALE

AYRES ASSOCIATES

I, JAMES R. CAPPEART 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 CITY OF MANITOWOC, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: James R. Cappeart DATE: 9/26/2016
PRINT NAME: JAMES R. CAPPEART
REGISTRATION NUMBER: S-3044

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF MANITOWOC

SIGNATURE: _____ E: 9-28-16
PRINT NAME: DANIEL KOSKI

WISCONSIN James R. Cappeart S-3044 Green Bay Wis. LAND SURVEYOR

FILE NAME : N:\C3D\41062900\RW\4570-12-21 040102 RW.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 9/27/2016 8:14 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : **********

DOC # 1173025

TRANSPORTATION PROJECT PLAT NO: 4570-12-21 - 4.03

PART OF TRACT 8 OF CSM RECORDED IN VOLUME 8, PAGE 577, AS DOCUMENT NO. 547388 LOCATED AND INCLUDING NORTHWEST 1/4 OF THE NORTHEAST 1/4, PART OF TRACTS 1 AND 4 OF CSM RECORDED VOLUME 7, PAGE 585 AS DOCUMENT NO. 530194 LOCATED IN AND INCLUDING THE NORTHEAST 1/4 OF THE NORTHEAST 1/4, ALL IN SECTION 20, TOWNSHIP 19 NORTH, RANGE 24 EAST, CITY OF MANITOWOC, MANITOWOC COUNTY, WISCONSIN.

RELOCATION ORDER STH 42, 8TH STREET-MARITIME DRIVE, CITY OF MANITOWOC

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF MANITOWOC 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 NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF MANITOWOC, PURSUANT TO THE PROVISIONS OF SECTION 62.22, WISCONSIN STATUTES.

CITY

REFER TO THE TITLE SHEET, RECORDED AS 2 OF 2 OF THIS DOCUMENT VOLUME 91172 OF TRANSPORTATION PROJECT PLATS, PAGE 801 AS DOCUMENT NO. 1172801 FOR ADDITIONAL INFORMATION.

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
145-143	N00°39'41"E	61.98'
143-144	N00°39'41"E	28.04'
144-146	S89°21'13"E	131.43'
146-147	N80°23'14"E	214.56'
147-148	N64°28'22"E	178.28'
148-149	S74°29'14"E	98.66'
149-150	N56°06'07"E	191.00'
150-151	N67°31'48"E	57.60'

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
151-152	S52°13'36"E	61.55'
152-153	S37°46'02"W	144.92'
C5	SEE CURVE TABLE	
C4	SEE CURVE TABLE	
154-155	S65°57'31"W	59.07'
155-157	N84°34'12"W	147.40'
C3	SEE CURVE TABLE	
158-159	S75°03'48"W	73.99'
C2	SEE CURVE TABLE	
160-145	N89°19'47"W	131.45'

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	NEW R/W SF	TOTAL R/W SF	TLE SF
170	MICHAEL A. AND LINDA J. LEFKY	TLE	------	------	2636
171	ONE EAST WALDO PROPERTIES, LLP	TLE	------	------	4359
172	WALDO PARTNERSHIP INVESTMENTS, LLC	TLE	------	------	728
173	201 WALDO, LLC	TLE	------	------	1526
174	RED ARROW PRODUCTS COMPANY LLC	FEE AND TLE	40,323	40,323	1410

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE CITY.

UTILITY INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED
200	CITY OF MANITOWOC	RELEASE OR RIGHTS
201	MANITOWOC PUBLIC UTILITIES	RELEASE OR RIGHTS
202	AT&T	RELEASE OR RIGHTS

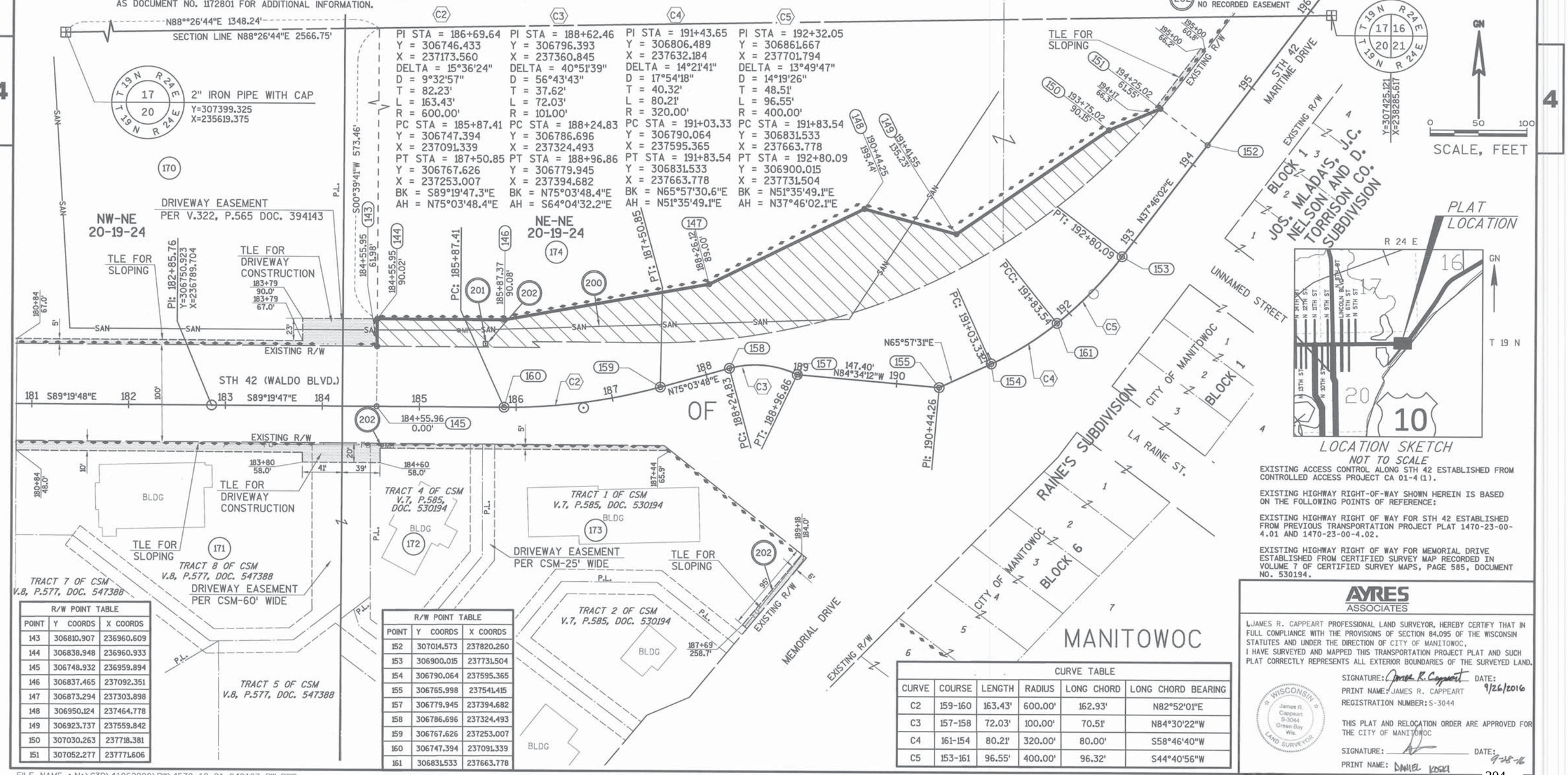
200 CITY OF MANITOWOC
V.2837, P.459, DOC. NO. 1135544-PARCEL 170
V.1061, P.515, DOC. NO. 477491-PARCEL 174
V.1062, P.512, DOC. NO. 477490-PARCEL 174

201 MANITOWOC PUBLIC UTILITIES
NO RECORDED EASEMENT

202 AT&T
NO RECORDED EASEMENT

REGISTERS OFFICE
MANITOWOC COUNTY, WI
RECEIVED FOR RECORD
2016 SEPT 29 @10:07AM
Cabinet D Plats Packed 83
PRESTON F. JONES, REGISTER

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4570-12-21-4.03
AMENDMENT NO:____



R/W POINT TABLE		
POINT	Y COORDS	X COORDS
143	306810.907	236960.609
144	306838.948	236960.933
145	306748.932	236959.894
146	306837.465	237092.351
147	306873.294	237303.898
148	306950.124	237464.778
149	306923.737	237559.842
150	307030.263	237718.381
151	307052.277	237771.606

R/W POINT TABLE		
POINT	Y COORDS	X COORDS
152	307014.573	237820.260
153	306900.015	237731.504
154	306790.064	237595.365
155	306765.998	237541.415
157	306779.945	237394.682
158	306786.696	237324.493
159	306767.626	237253.007
160	306747.394	237091.339
161	306831.533	237663.778

CURVE TABLE					
CURVE	COURSE	LENGTH	RADIUS	LONG CHORD	LONG CHORD BEARING
C2	159-160	163.43'	600.00'	162.93'	N82°52'01"E
C3	157-158	72.03'	100.00'	70.51'	N84°30'22"W
C4	161-154	80.21'	320.00'	80.00'	S58°46'40"W
C5	153-161	96.55'	400.00'	96.32'	S44°40'56"W

LOCATION SKETCH

NOT TO SCALE

EXISTING ACCESS CONTROL ALONG STH 42 ESTABLISHED FROM CONTROLLED ACCESS PROJECT CA 01-4 (1).

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT OF WAY FOR STH 42 ESTABLISHED FROM PREVIOUS TRANSPORTATION PROJECT PLAT 1470-23-00-4.01 AND 1470-23-00-4.02.

EXISTING HIGHWAY RIGHT OF WAY FOR MEMORIAL DRIVE ESTABLISHED FROM CERTIFIED SURVEY MAP RECORDED IN VOLUME 7 OF CERTIFIED SURVEY MAPS, PAGE 585, DOCUMENT NO. 530194.

AYRES ASSOCIATES

I, JAMES R. CAPPEART 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 CITY OF MANITOWOC, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

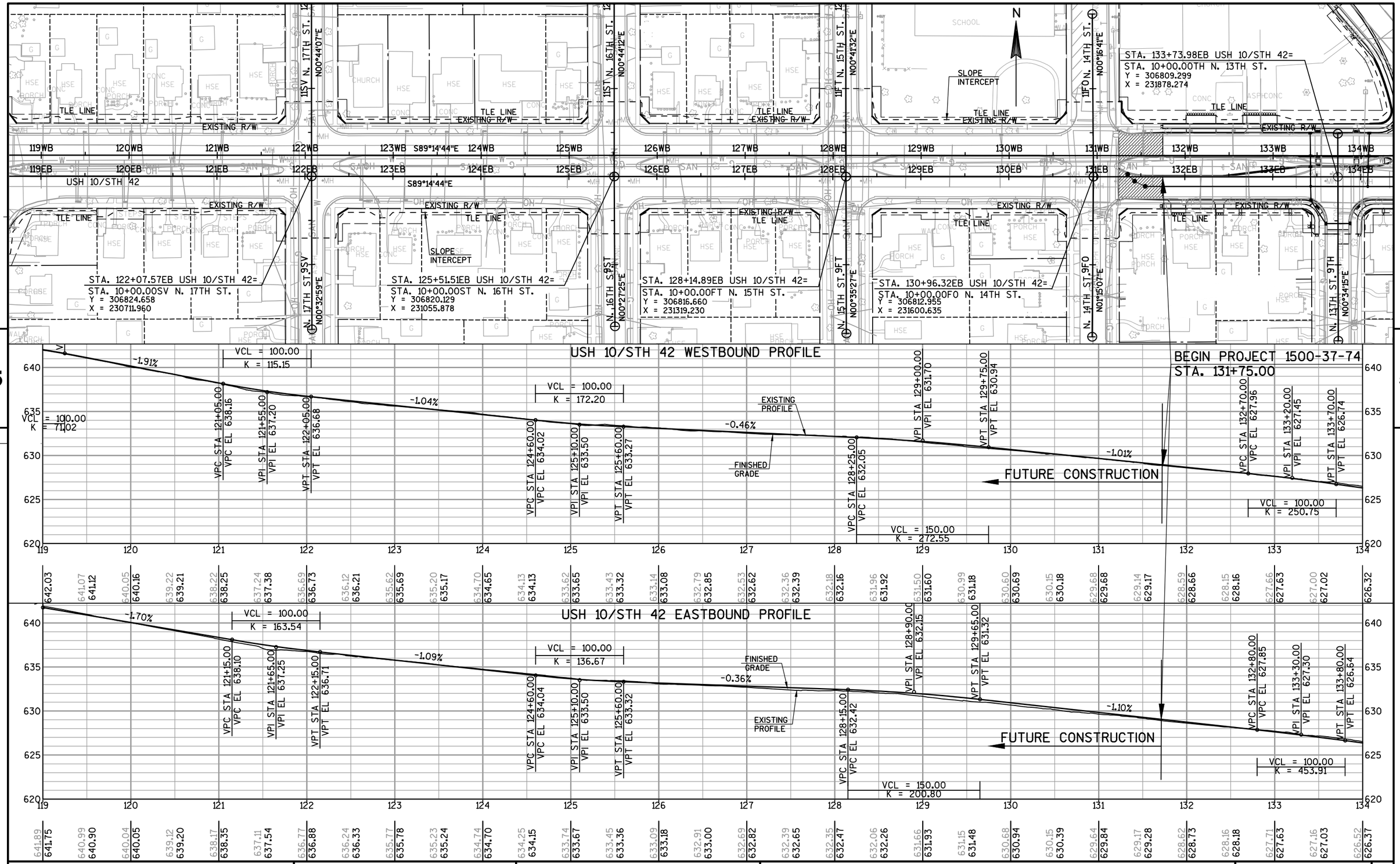
SIGNATURE: James R. Cappeart DATE: 9/26/2016
PRINT NAME: JAMES R. CAPPEART
REGISTRATION NUMBER: S-3044

WISCONSIN James R. Cappeart S-3044 Green Bay Wis. LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF MANITOWOC

SIGNATURE: _____ DATE: 9-28-16
PRINT NAME: DANIEL KOSKI

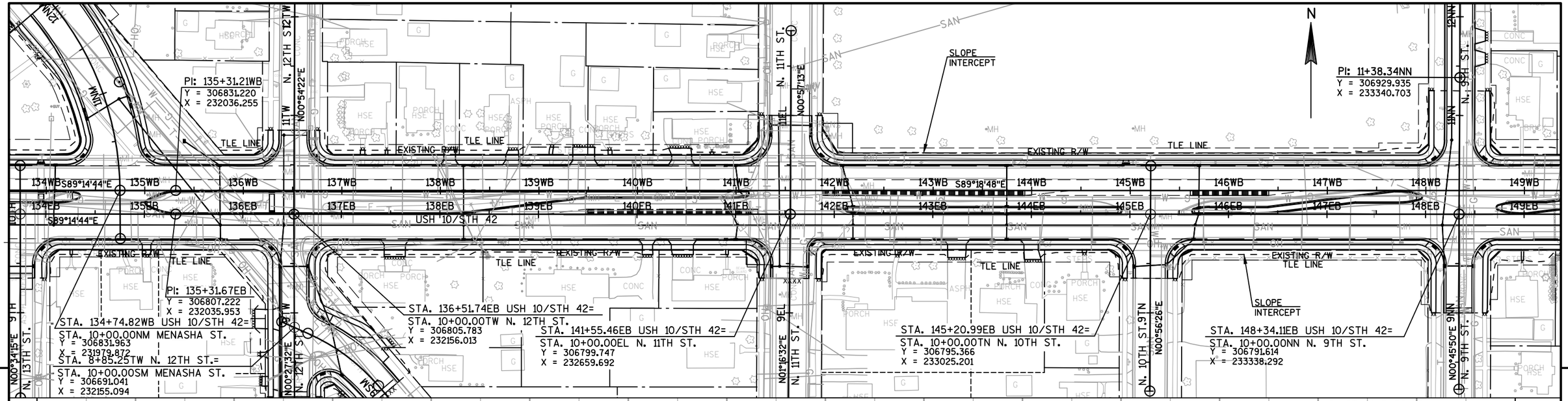
FILE NAME : N:\C3D\41062900\RW\4570-12-21 040103 RW.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 9/27/2016 8:17 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : **********

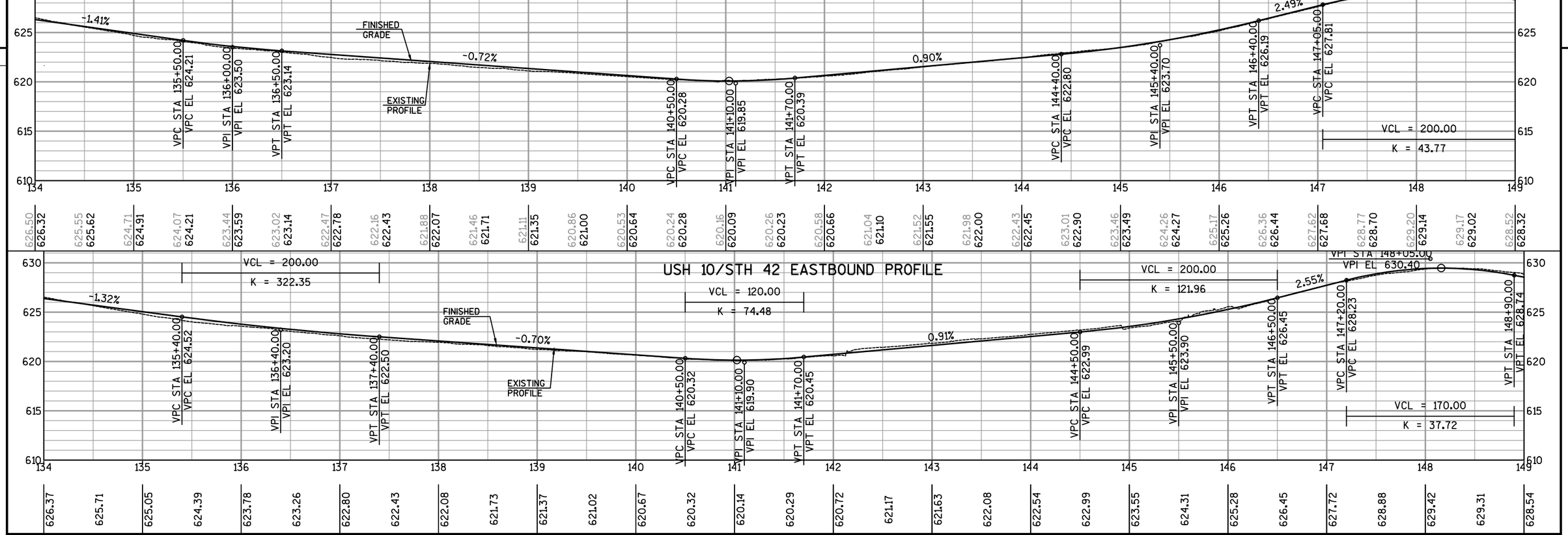


USH 10/STH 42 WESTBOUND PROFILE

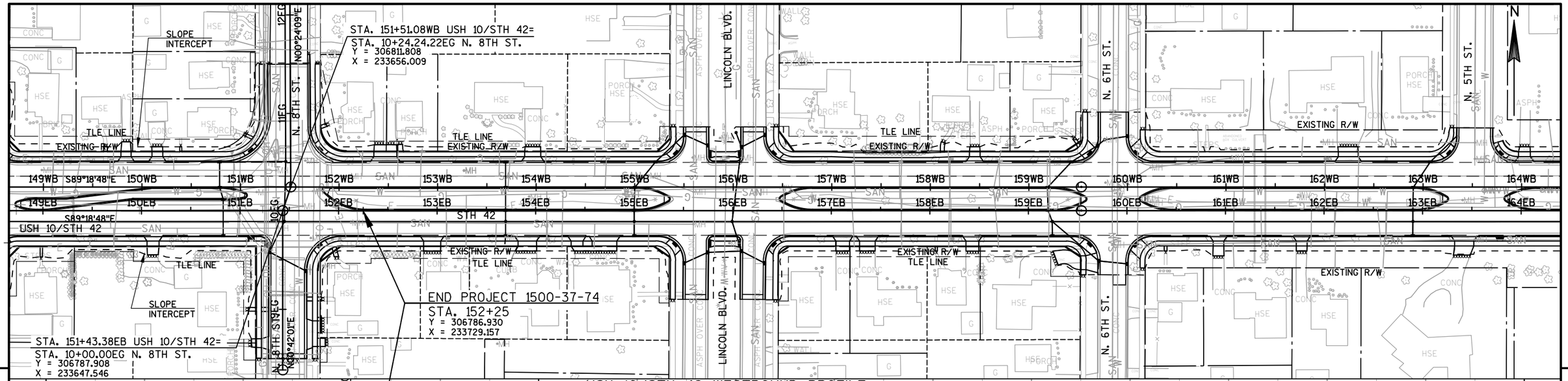
USH 10/STH 42 EASTBOUND PROFILE

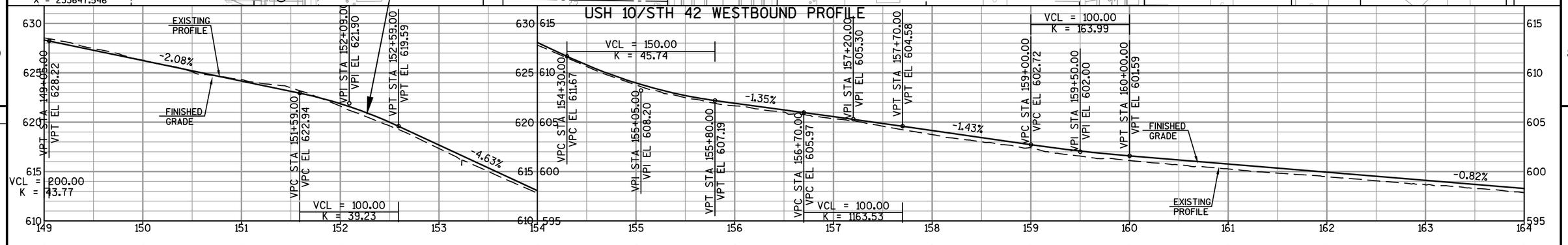
PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE	SHEET 305 E

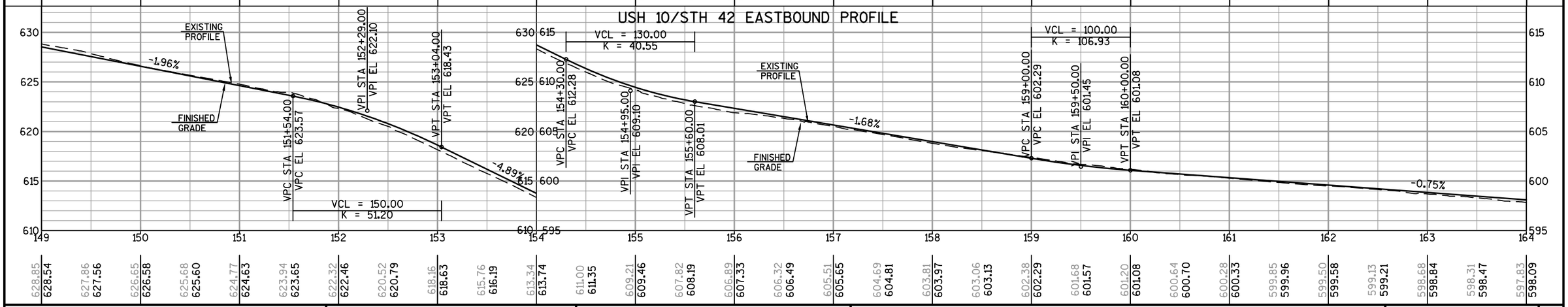




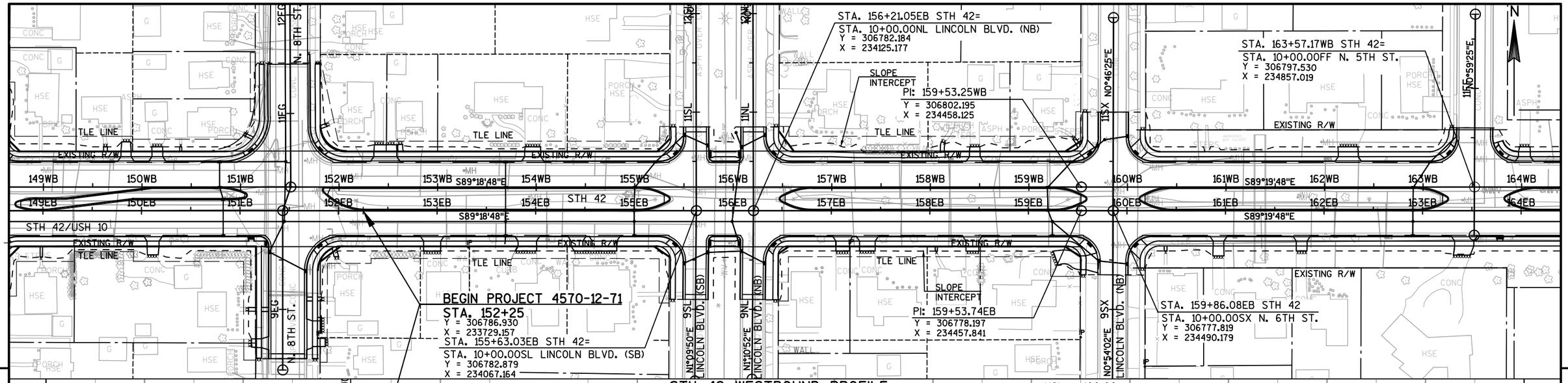
PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE	SHEET 306	E



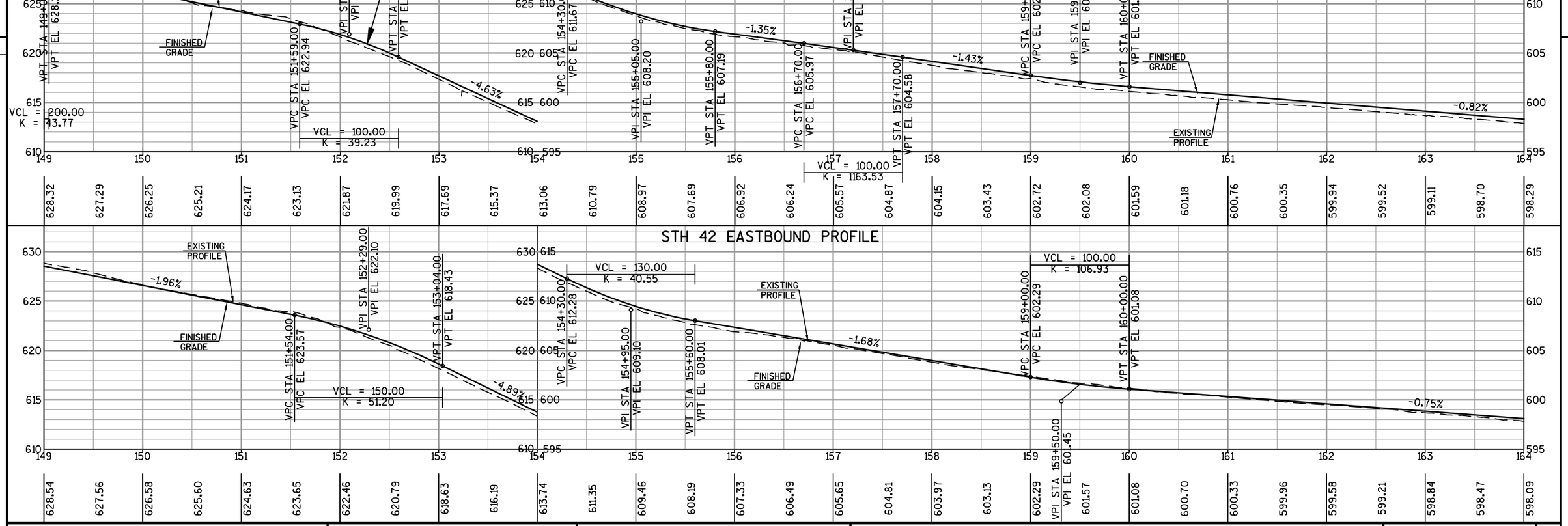




PROJECT NO: 1500-37-74	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE	SHEET 307	E

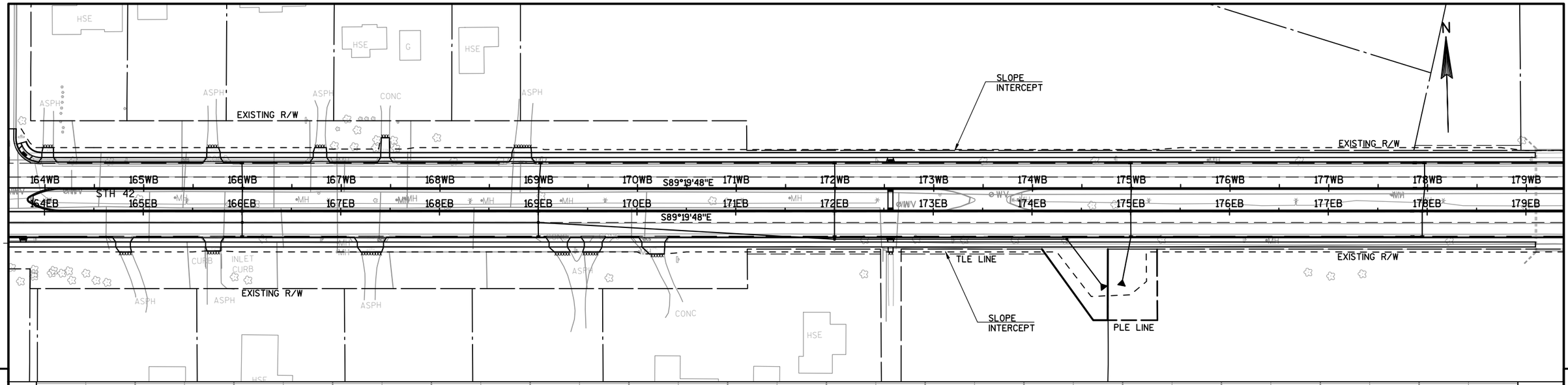


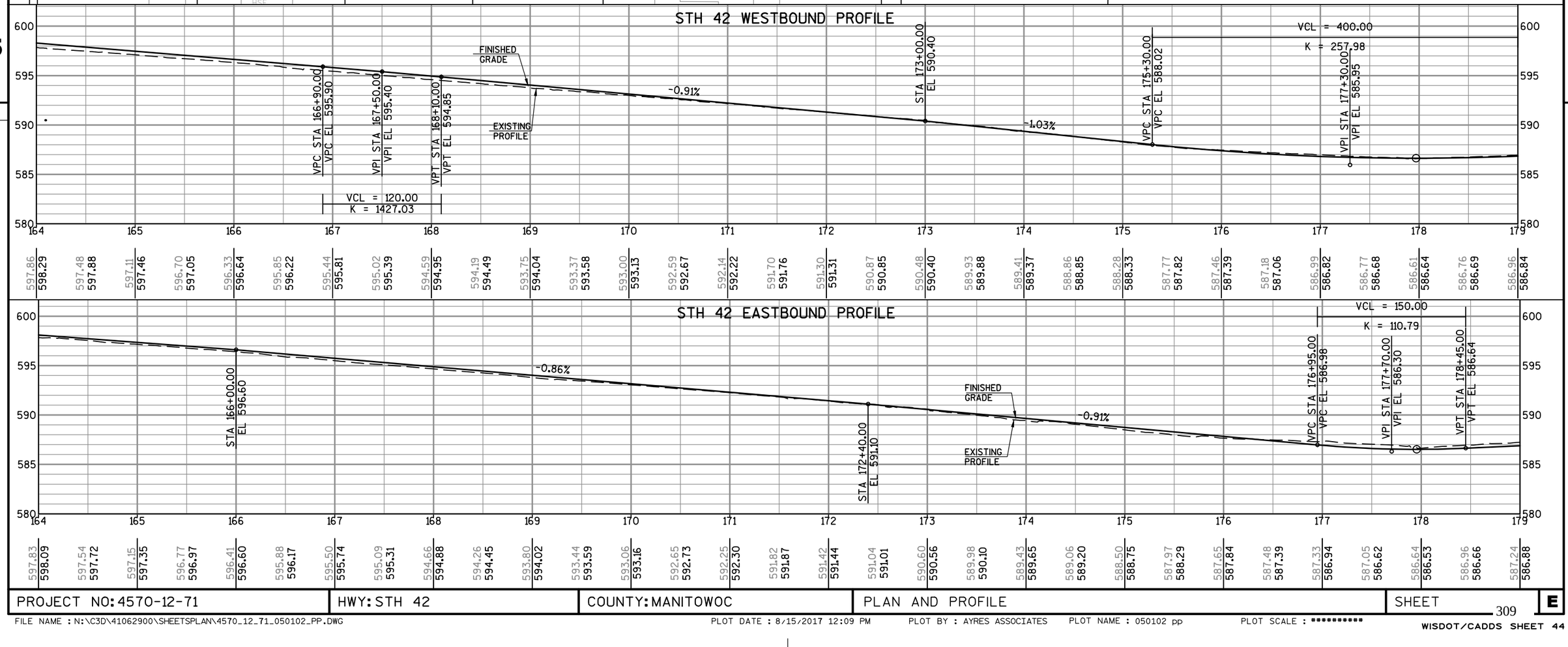
STH 42 WESTBOUND PROFILE



STH 42 EASTBOUND PROFILE

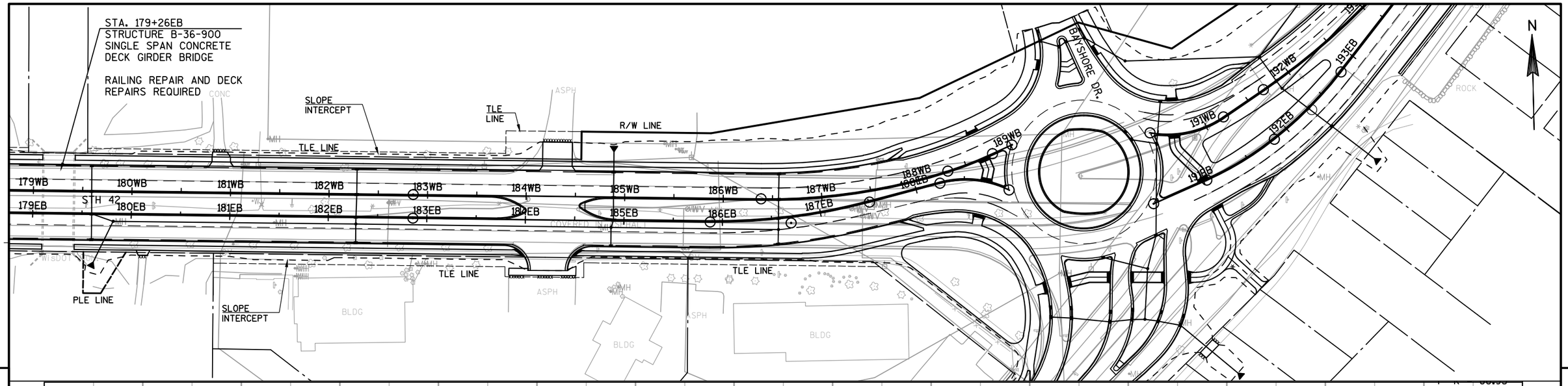
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PLAN AND PROFILE	SHEET 308 E





PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PLAN AND PROFILE	SHEET	E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\4570_12_71_050102_PP.DWG PLOT DATE : 8/15/2017 12:09 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : 050102 pp PLOT SCALE : **********
WISDOT/CADDS SHEET 44



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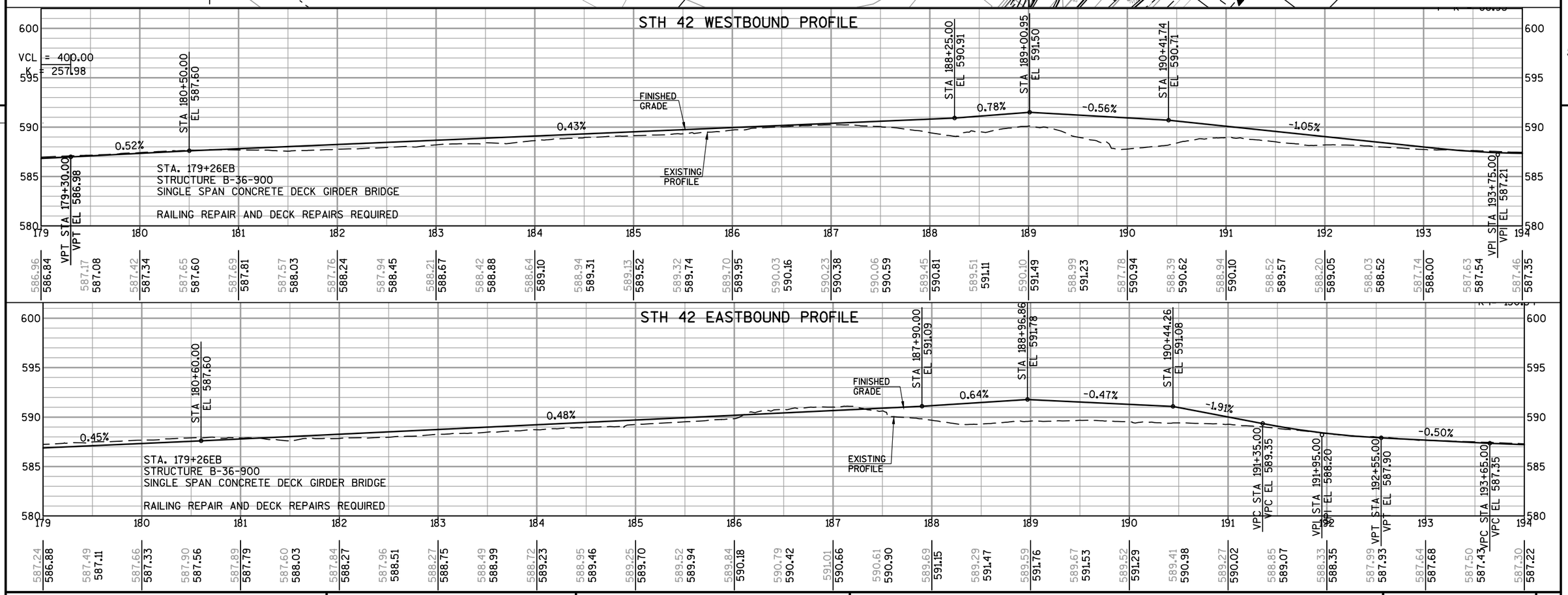

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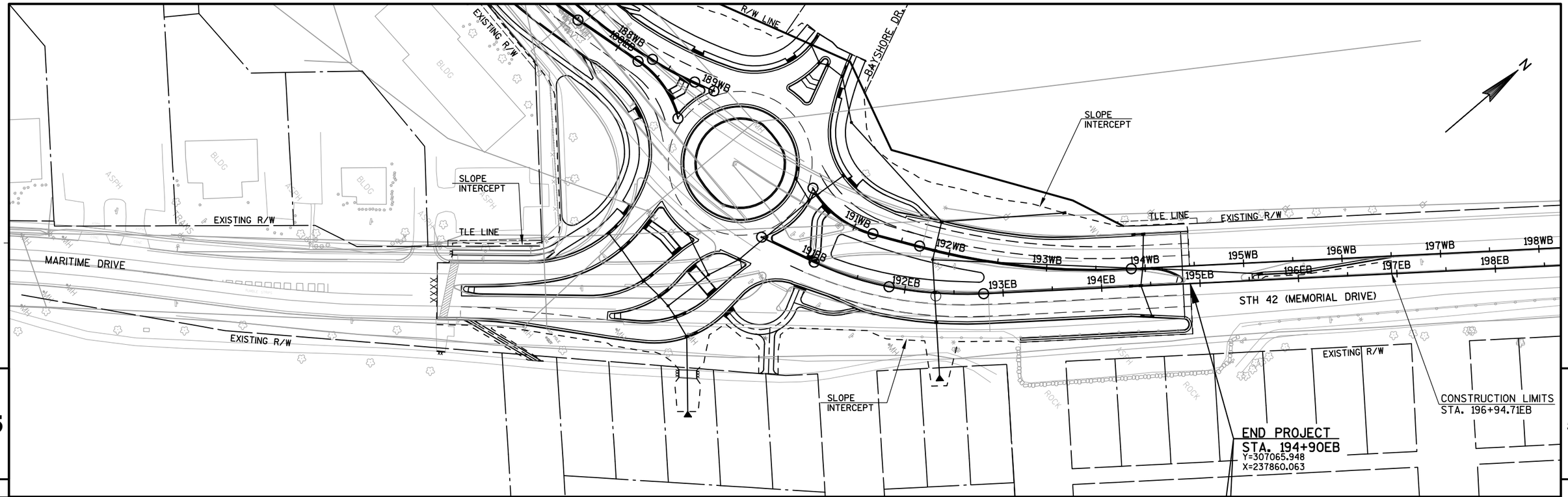
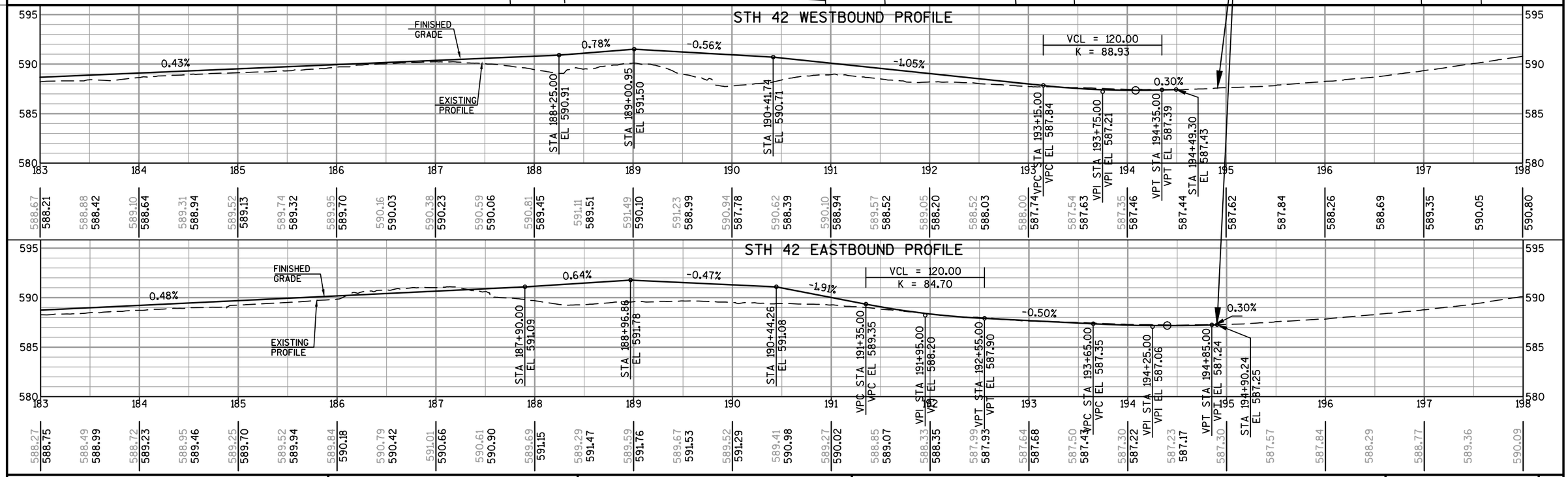
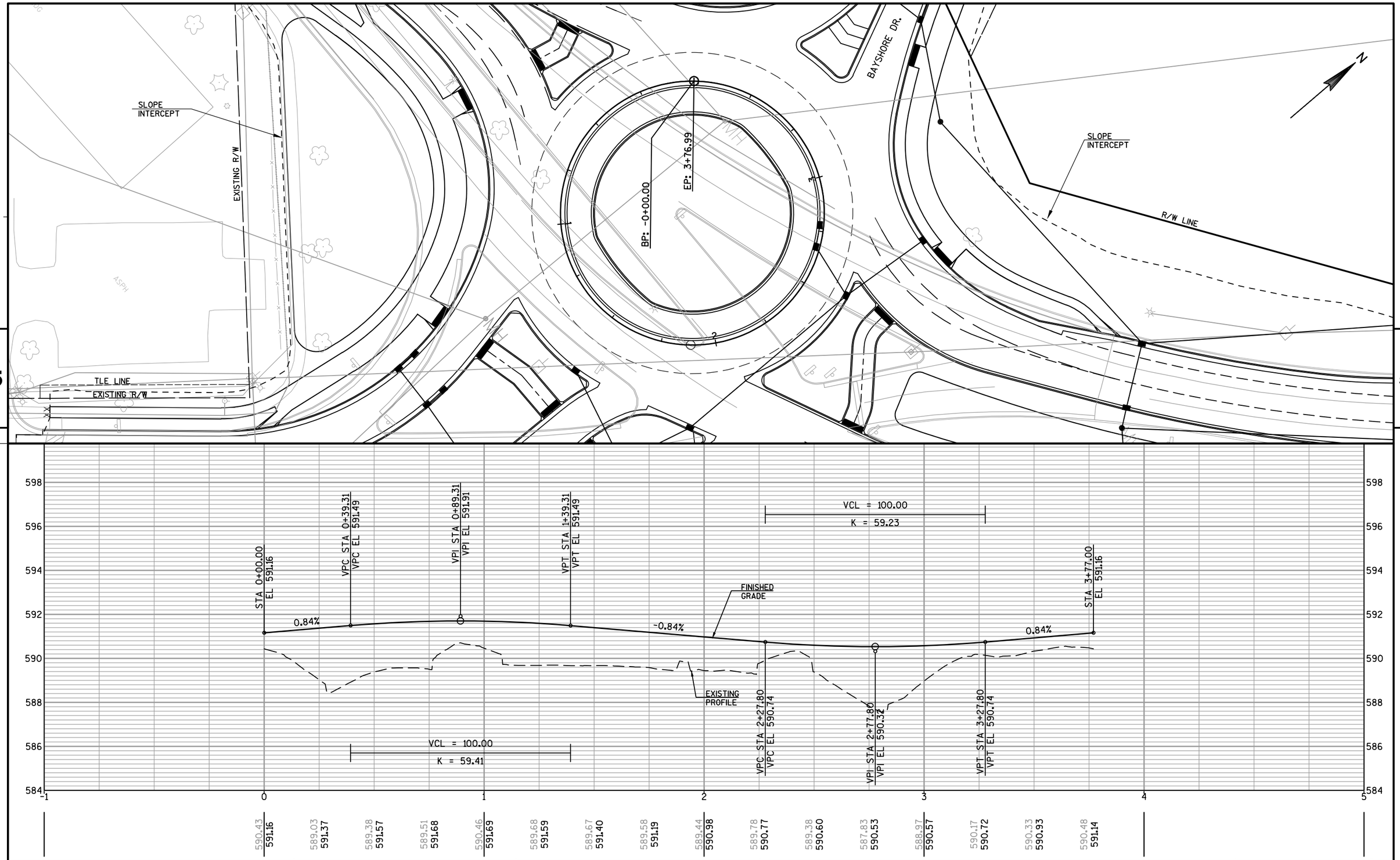
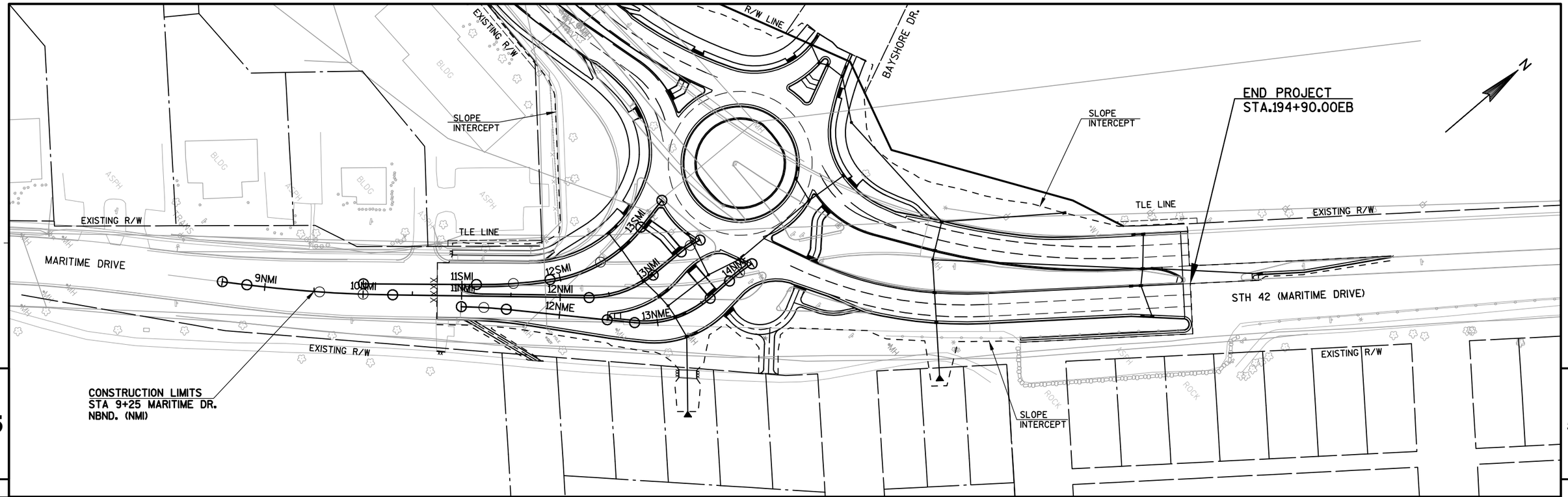


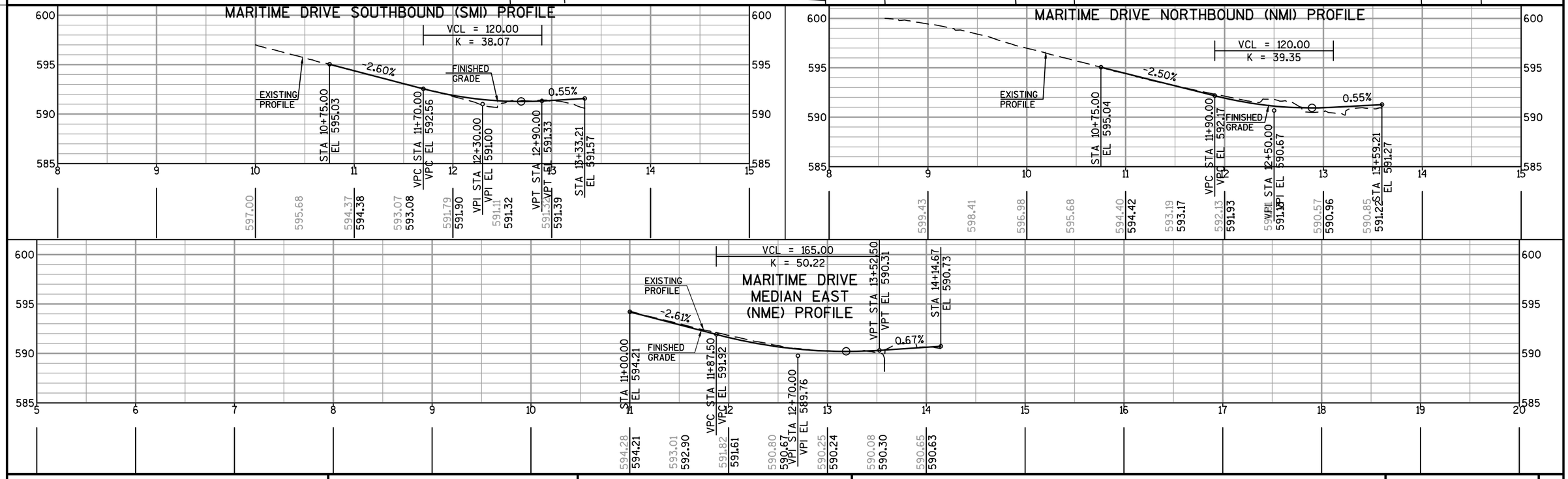


PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PLAN AND PROFILE: STH 42	SHEET 311	E



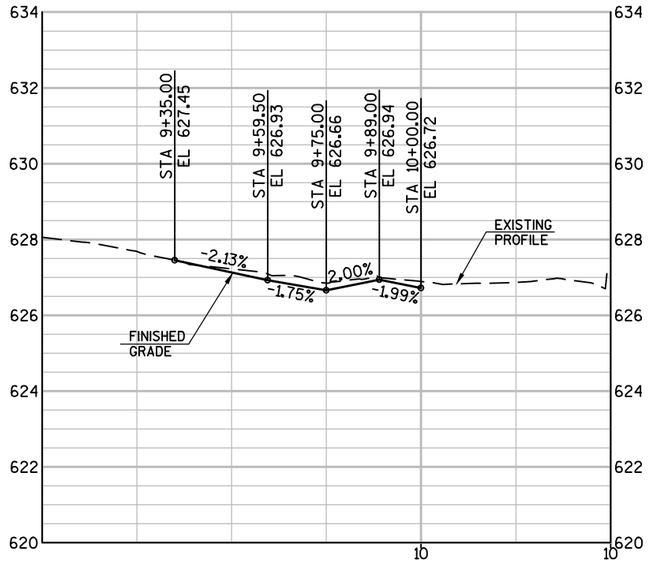
PROJECT NO: 4570-14-71	HWY: STH 42	COUNTY: MANITOWOC	PLAN AND PROFILE: ROUNDABOUT CIRCLE	SHEET 312	E



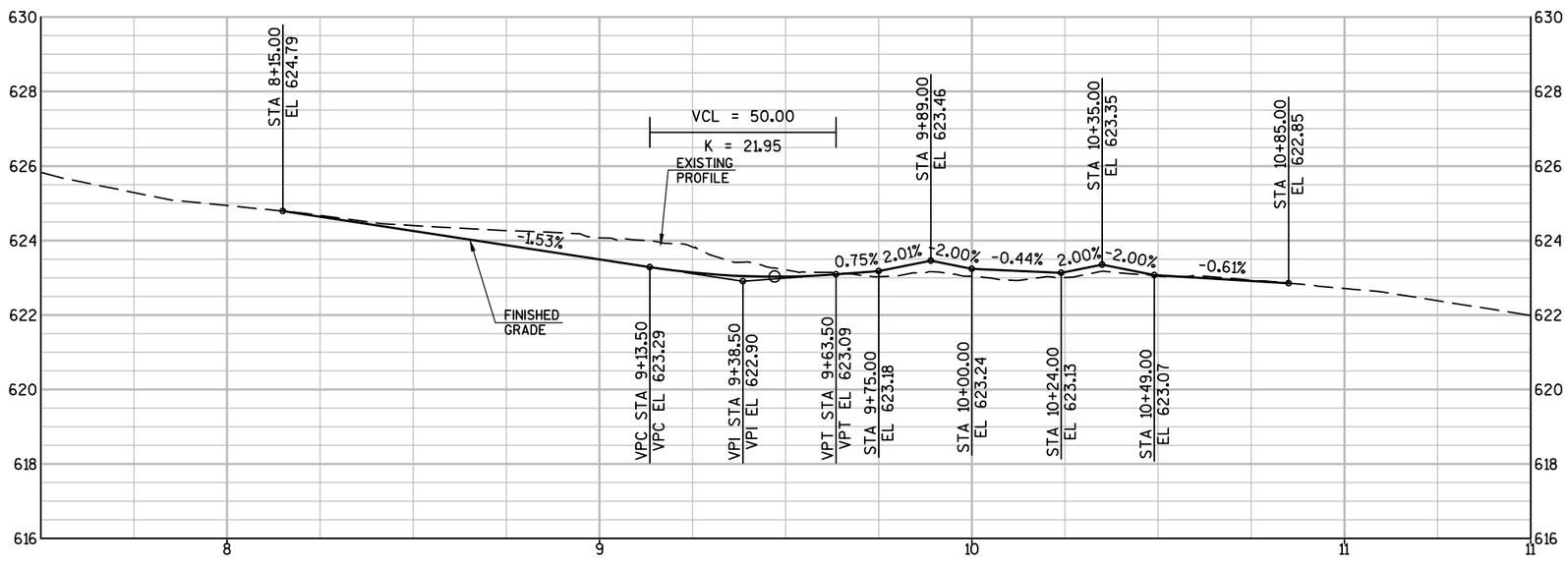


PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PLAN AND PROFILE: STH 42	SHEET 313	E

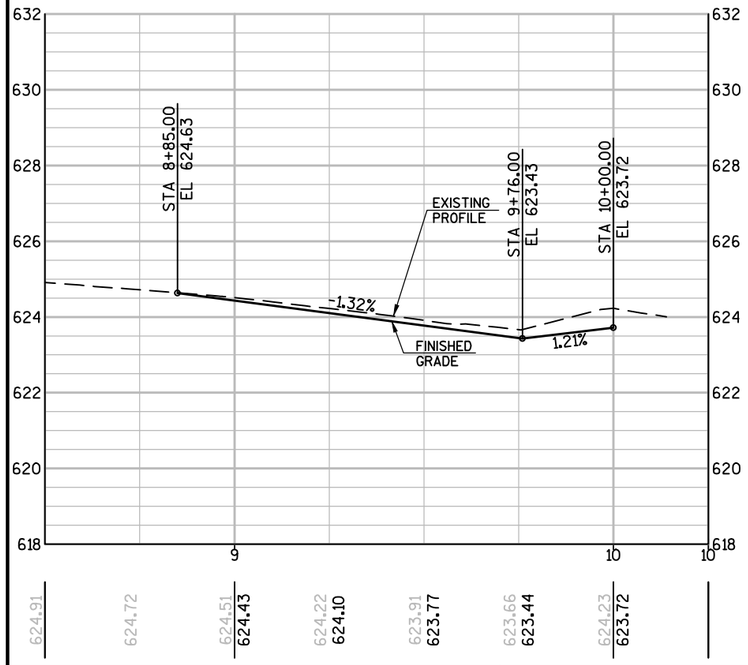
N. 13TH ST. PROFILE



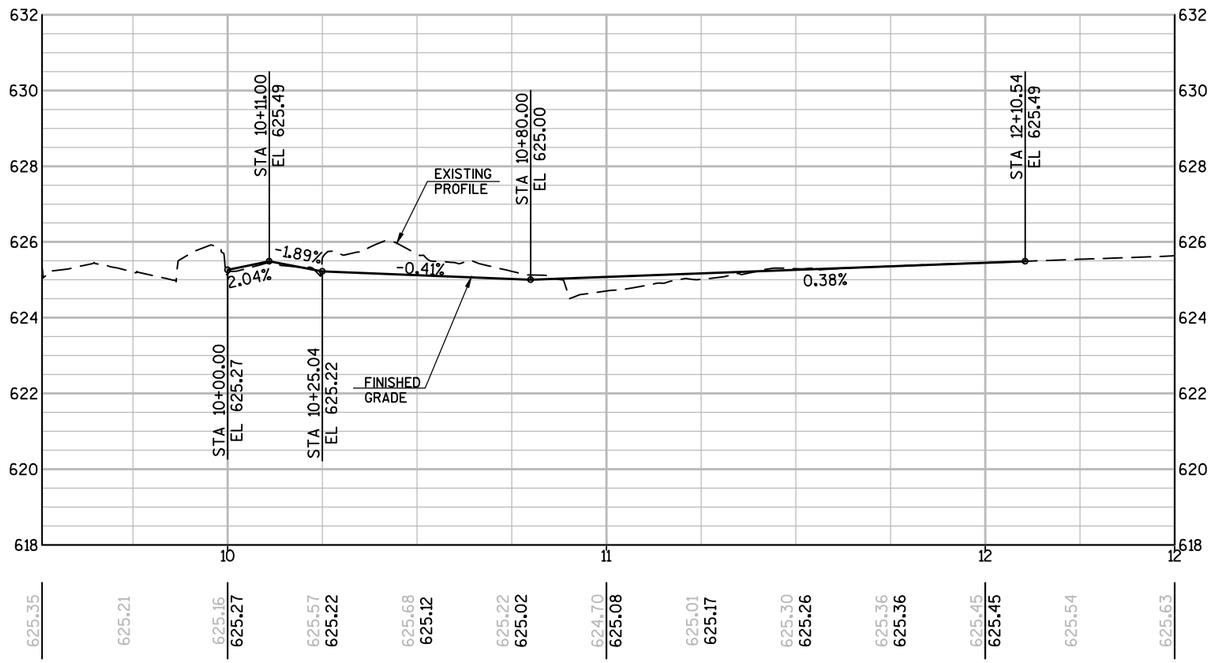
N. 12TH ST. PROFILE



MENASHA AVE. (SOUTH)

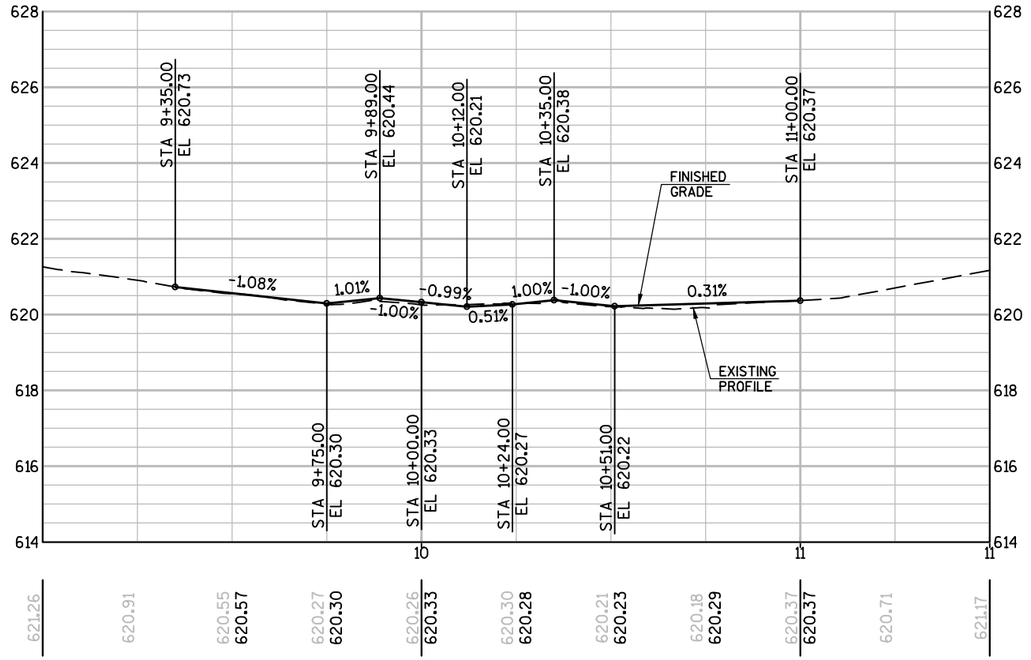


MENASHA AVE. (NORTH)

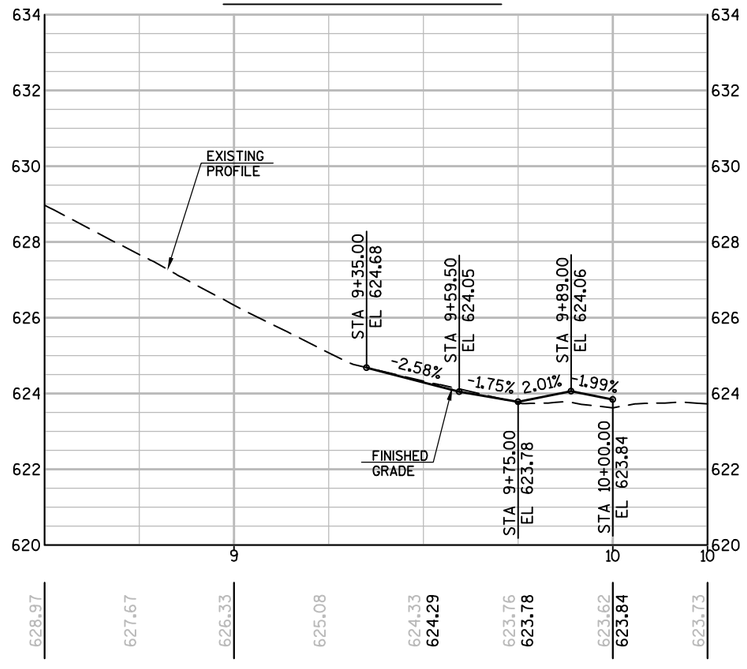


PROJECT NO: 1500-37-71	HWY: USH 10	COUNTY: MANITOWOC	SIDE STREET PROFILES	SHEET 314 E

N. 11TH ST. PROFILE

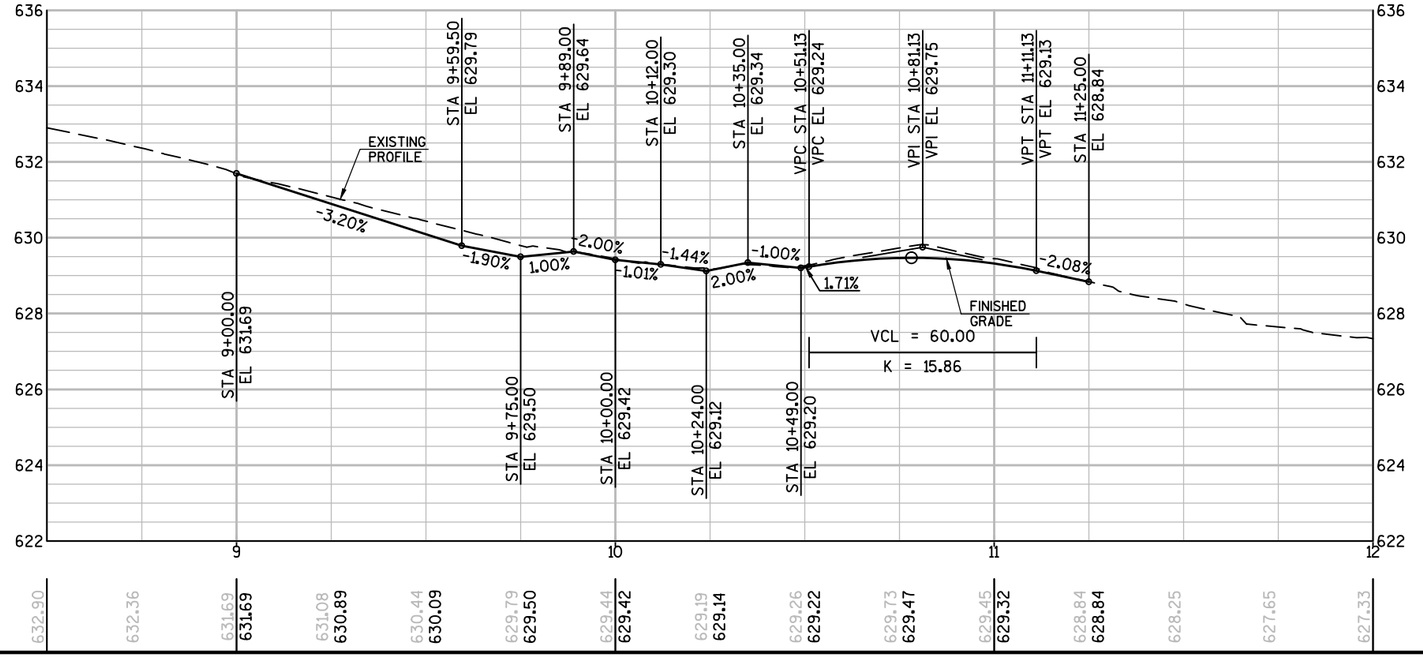


N. 10TH ST. PROFILE

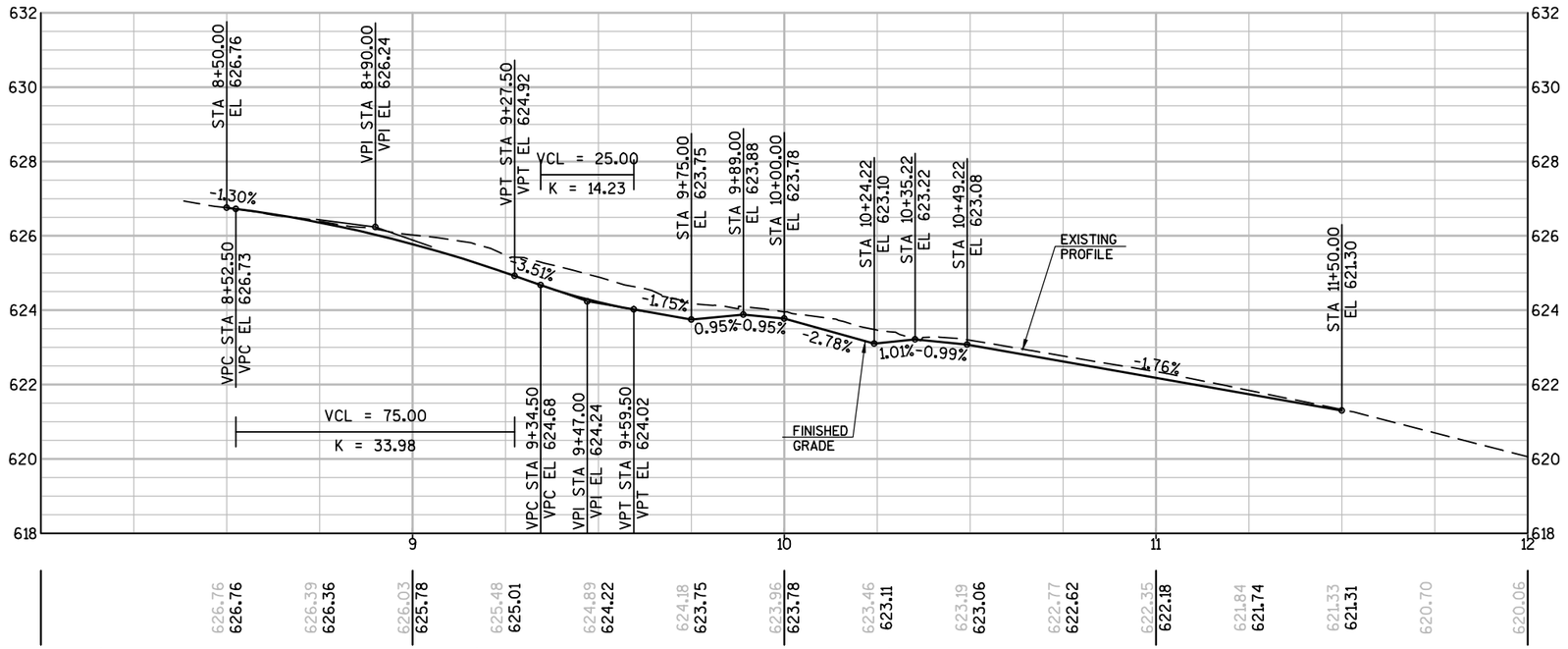


PROJECT NO: 1500-37-71	HWY: USH 10	COUNTY: MANITOWOC	SIDE STREET PROFILES	SHEET 315 E

N. 9TH ST. PROFILE

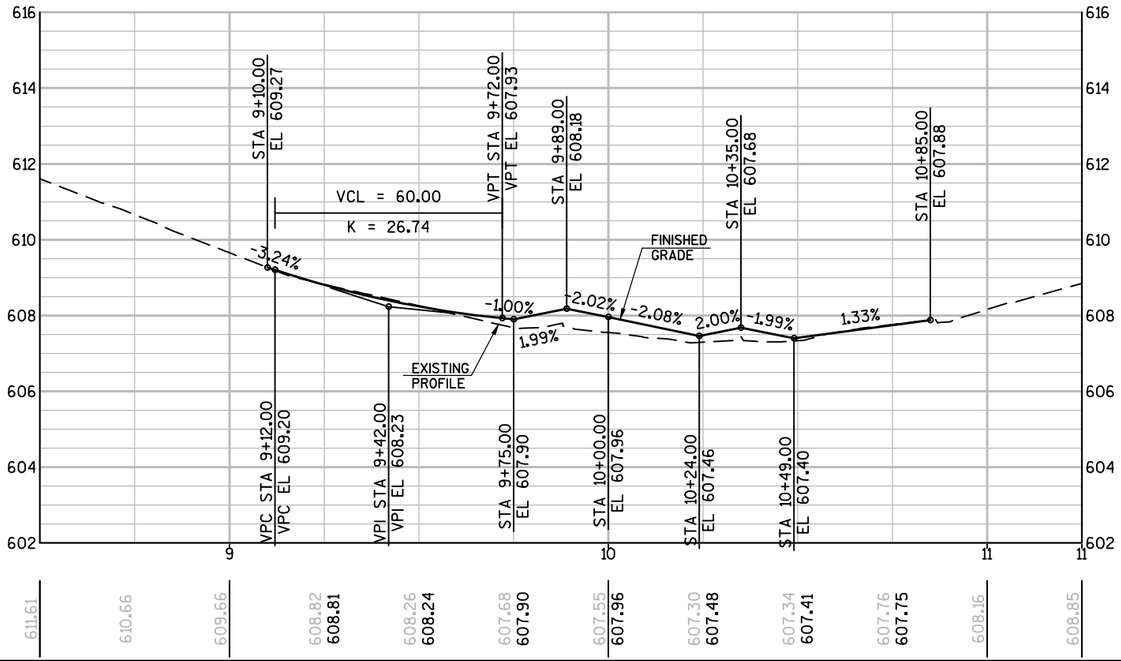


N. 8TH ST. PROFILE

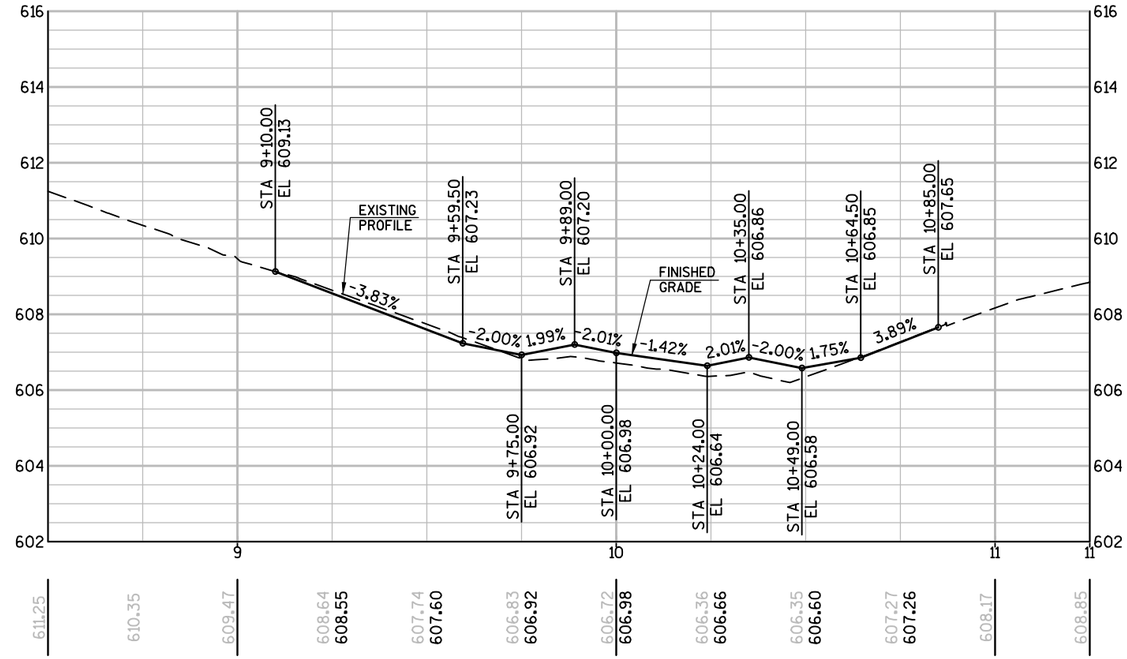


PROJECT NO: 1500-37-71	HWY: USH 10	COUNTY: MANITOWOC	SIDE STREET PROFILES	SHEET 316 E

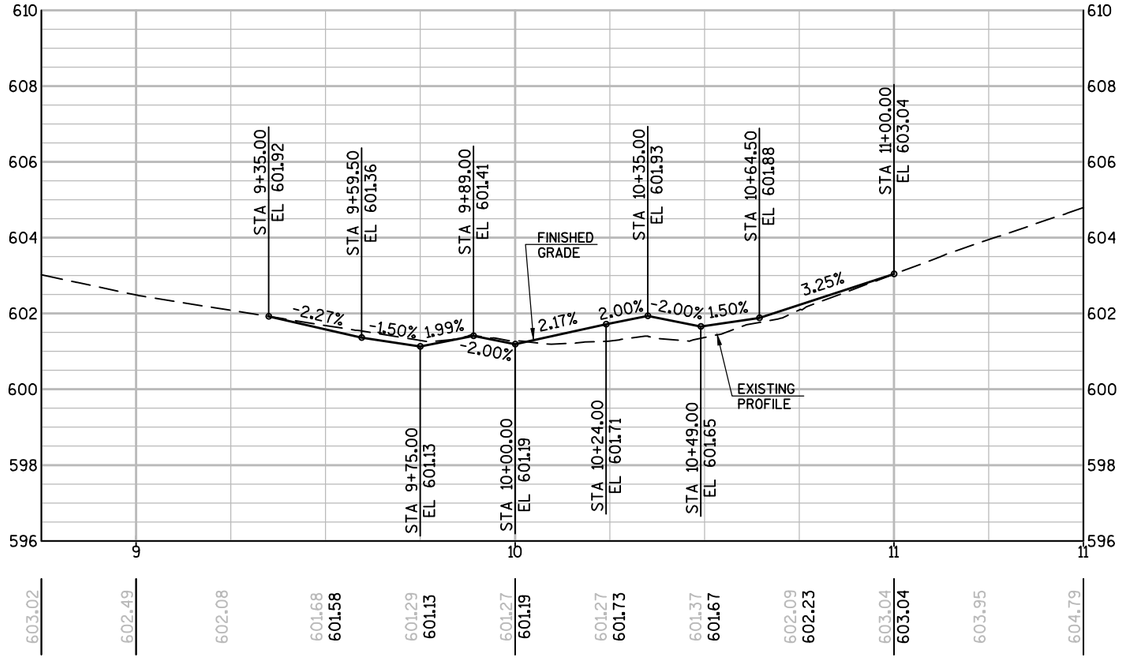
LINCOLN BLVD. (WEST) PROFILE



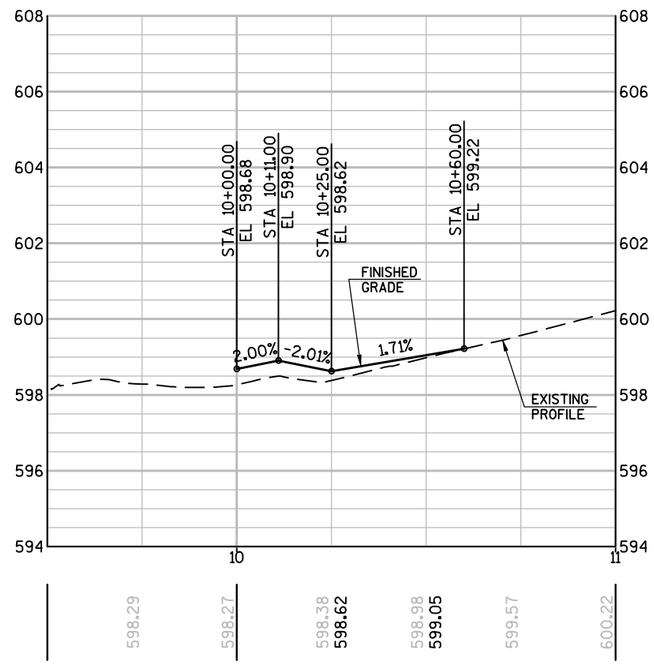
LINCOLN BLVD. (EAST) PROFILE



N. 6TH ST. PROFILE

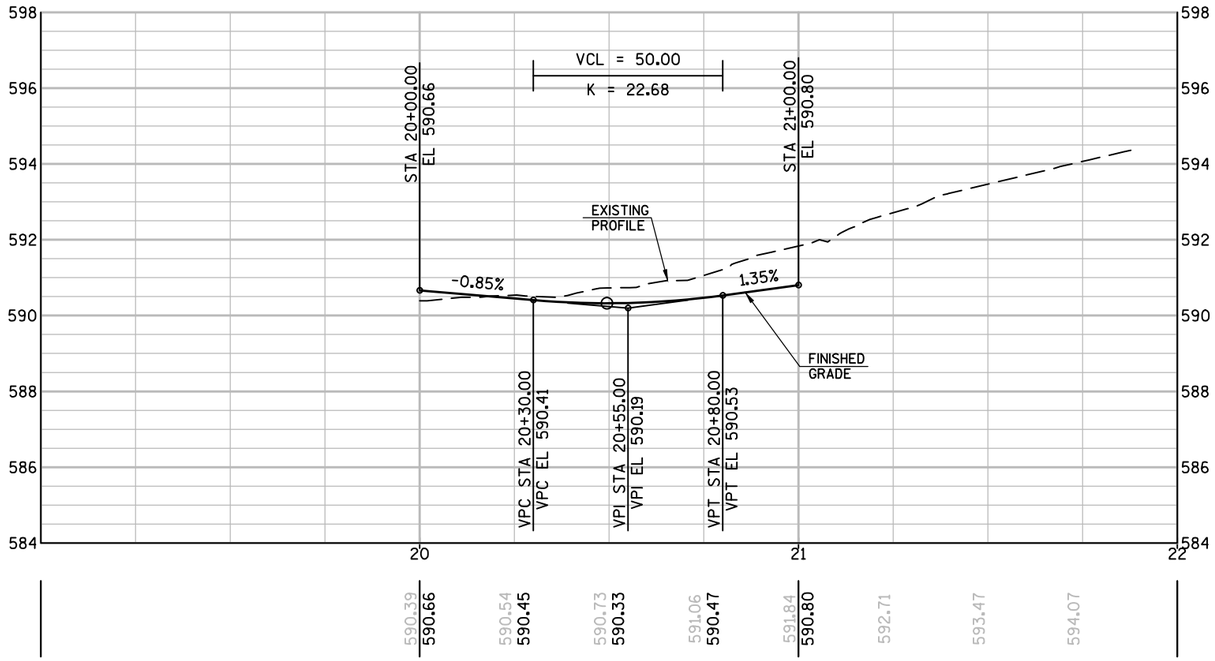


N. 5TH ST. (PROFILE)

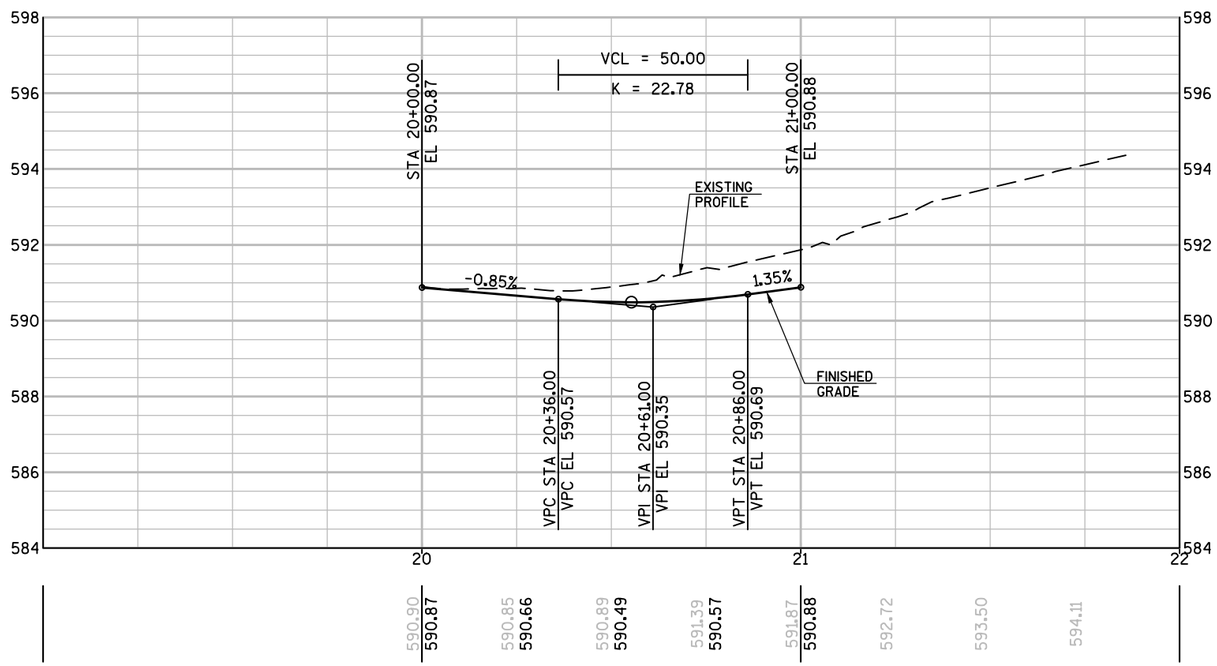


PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	SIDE ROAD PROFILES	SHEET 317 E

BAYSHORE DRIVE NORTHBOUND PROFILE



BAYSHORE DRIVE SOUTHBOUND PROFILE



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	SIDE ROAD PROFILES	SHEET 318	E

FUTURE CONSTRUCTION
2019 CONSTRUCTION
HYDRANT STA 131+80, 53'LT
RELAY AND CAP AT R/W 6"SAN LATERAL FOR FUTURE
12" GV & BOX STA 131+70, 44'LT
LIGHT POLE TO REMAIN
TEMPORARY 12"WM CONNECTION W/ (2) 12"-45° BENDS
TEMPORARY 12"SAN CONNECTION
12" X 6" TEE STA 131+80, 44'LT 6" GV & BOX
RECONNECT TO EX W/ 1 1/4" OD WATER SERVICE, CURB STOP & BOX, CORP STOP (TYP)
RECONNECT TO EX W/ 6"SAN LATERAL (TYP)
REMOVE AND NEW MANHOLE *13 STA 133+75EB, 11'LT
MANHOLE *13A
MANHOLE *12A STA 134+00EB, 35'LT
12" x 8" TEE STA 133+85EB, 44'LT 8" GV & BOX (S) 12" GV & BOX (W)
RELAY AND CAP AT R/W 6"SAN LATERAL FOR FUTURE
USH 10/STH 42 (WALDO BLVD)
N 14TH ST
N 13TH ST
MEMASHA AVE
CONNECT TO EX 12"WM STA 135+63EB, 59'LT 12"-45° BEND 12" GV & BOX STA 135+68EB, 54'LT
ABANDON-IN-PLACE EX 12"SAN SEWER
MANHOLE *12 STA 135+59, 35'LT CONNECT TO EX SANITARY W/ COUPLING
12" TEE, STA 135EB+71, 44'LT 12" GV & BOX (W)
LIMITS OF CONSTRUCTION
12" X 8" TEE STA 136+62EB, 44'LT 8" GV & BOX (N) 12" GV & BOX (E)
REMOVE EX SANITARY MANHOLE
12" X 8" TEE STA 136+33EB, 44'LT 8" GV & BOX (S)
MANHOLE *11 STA 136+53EB, 35'LT
REMOVE EX SANITARY MANHOLE
ABANDON
REMOVE & NEW MANHOLE *11A
N 12TH ST
131WB 132WB 133WB 134WB 135WB 136WB 137WB
131EB 132EB 133EB 134EB 135EB 136EB 137EB
1045 1311 1305 1303 1215 1211 1044
12"WM 12"SAN 8"WM 8"SAN 10"SAN 10"WM 21"SAN 24"SS 21"SS
N

PROPOSED STORM SEWER
EXISTING GRADE
6' MINIMUM COVER
PROPOSED GRADE
12"WM
RELAY 225LF OF 12" PVC @ 0.85%
158LF OF 12" PVC @ 0.88%
35LF OF 12" PVC @ 0.85%
94LF OF 21" PVC @ 1.59%
260LF OF 21" PVC @ 0.73%
12"SS
24"SS
MANHOLE *13
RIM 626.57
INV 8" S 615.71
INV 12" W 615.55
INV 12" NE 615.45
MANHOLE *12A
RIM 626.54
INV 12" SW 615.14
INV 12" E 615.14
MANHOLE *12
RIM 624.31
INV 12" W 613.75
INV 12" W 607.84 DROP
INV 15" NW 607.80 (EX VCP LINED)
INV 21" E 607.00
MANHOLE *11
RIM 623.34
INV 15" N 605.90 (EX VCP)
INV 8" S 606.37
INV 21" W 605.50
INV 21" E 605.50
635 630 625 620 615 610 605 600 595
0 40 80
131+00 131+25 131+50 131+75 132+00 132+25 132+50 132+75 133+00 133+25 133+50 133+75 134+00 134+25 134+50 134+75 135+00 135+25 135+50 135+75 136+00 136+25 136+50 136+75 137+00

NOTES:

1. ALL UTILITIES WITHIN WALDO BOULEVARD R/W ARE STATIONED FROM THE EAST BOUND ALIGNMENT. ALL UTILITIES OUTSIDE WALDO BOULEVARD R/W ARE STATIONED FROM SIDE ROAD ALIGNMENTS.
2. ELEVATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND NEED TO BE FIELD VERIFIED DURING CONSTRUCTION.
3. ALL HYDRANTS TO BE INSTALLED 1-FOOT FROM FACE OF SIDEWALK. ALL HYDRANT LEAD VALVES ON WALDO BLVD TO BE INSTALLED BETWEEN 12-INCH TEE AND PAN OF CURB. ALL HYDRANT LEAD VALVES ON SIDE STREETS TO BE INSTALLED BETWEEN BACK OF CURB AND HYDRANT.
4. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

PROJECT NO: 1500-37-75	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 319 E

RECONNECT TO EX W/ 6"SAN LATERAL (TYP)

RECONNECT TO EX W/ 1 ¼" OD WATER SERVICE, CURB STOP & BOX, CORP STOP (TYP)

MANHOLE #10 STA 139+13EB, 35'LT

MANHOLE #9 STA 141+56EB, 35'LT CONNECT TO EX SANITARY W/ COUPLING

12" CROSS STA 141+69EB, 44'LT 12" GV & BOX (W & S) 12" X 8" REDUCER (N) 8" GV & BOX (N)

N

WILSON JR HIGH SCHOOL

N 11TH ST

USH 10/STH 42 (WALDO BLVD)

ABANDON

ABANDON

REMOVE

REMOVE EX SANITARY MANHOLE

REMOVE EX SANITARY MANHOLE

MANHOLE #9B STA 141+56EB, 22'RT CONNECT TO EX SANITARY W/ COUPLING

ABANDON-IN-PLACE EX WATER MAIN

0 40 80

NOTES:

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3. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

PROPOSED GRADE

PROPOSED STORM SEWER

6' MINIMUM COVER

EXISTING GRADE

260LF OF 21" PVC @ 0.73%

244LF OF 21" PVC @ 0.66%

365LF OF 8" PVC @ 1.37%

MANHOLE #10
RIM 621.48
INV 21" W 603.60
INV 21" E 603.60

MANHOLE #9
RIM 620.25
INV 8" S 606.95
INV 8" S 602.04 DROP
INV 21" W 602.00
INV 21" N 602.00 (EX VCP LINED)

MANHOLE #9B
RIM 620.33
INV 8" S 611.27 EX PVC)
INV 8" S 607.97 DROP
INV 8" E 610.00
INV 8" N 607.93

PROJECT NO: 1500-37-75	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 320 E

12" X 8" TEE
STA 145+32EB, 44'LT
12" GV & BOX (W)
8" GV & BOX (S)

12" X 10" CROSS
STA 148+45EB, 44'LT
12" GV & BOX (W)
10" GV & BOX (N)
10" X 8" REDUCER (S)
8" GV & BOX (S)
(2) 12"-45° BENDS (E)
STA 148+53EB, 44'LT
STA 148+64EB, 33'LT

REMOVE AND NEW
MANHOLE *7
STA 148+99EB, 41'LT
CONNECT TO EX
SANITARY W/COUPLING

N

WILSON JR HIGH SCHOOL

N 9TH ST

USH 10/STH 42 (WALDO BLVD)

12"WM

8"WM

10"WM

143WB 144WB 145WB 146WB 147WB 148WB 149WB

143EB 144EB 145EB 146EB 147EB 148EB 149EB

REMOVE

8"SAN

REMOVE

8"SAN

1009

1003

820

819

817

RECONNECT TO EX
W/ 6"SAN LATERAL
(TYP)

REMOVE EX SANITARY
MANHOLE

RECONNECT TO EX
W/ 1 ¼" OD WATER SERVICE,
CURB STOP & BOX, CORP
STOP (TYP)

REMOVE EX SANITARY
MANHOLE

MANHOLE *7A
STA 148+35EB, 21'RT
CONNECT TO EX
SANITARY W/COUPLING

MANHOLE *8
STA 145+21EB, 22'RT
CONNECT TO EX
SANITARY W/ COUPLING

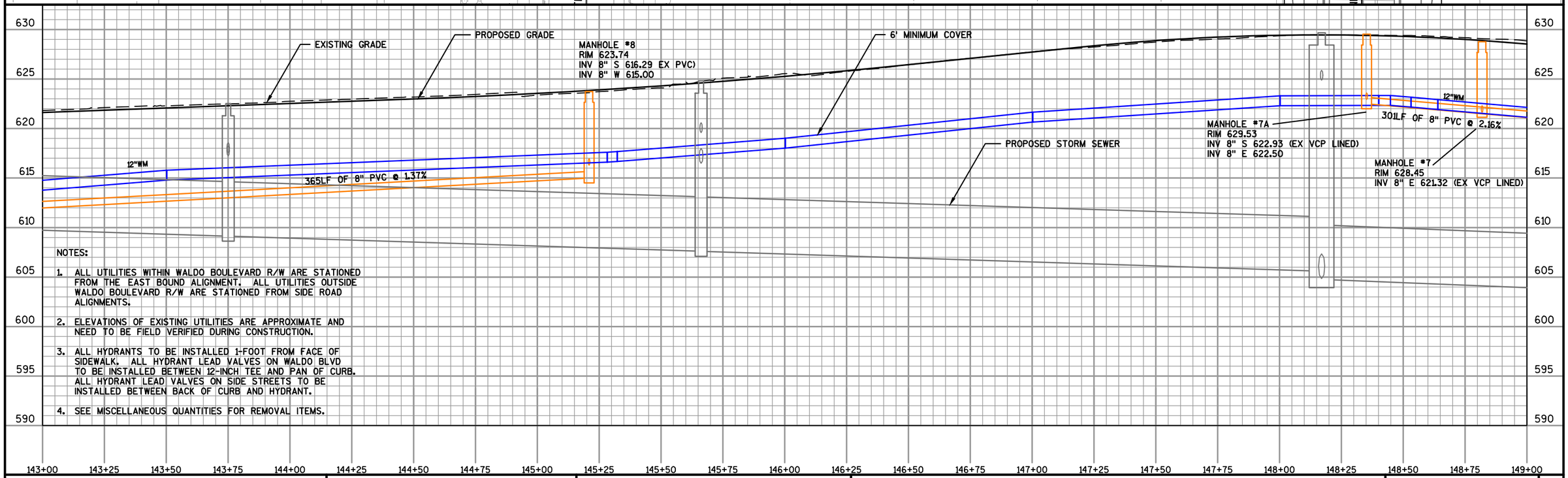
IMMANUEL SCHOOL & CHURCH

N 10TH ST

0 40 80

5

5



NOTES:

1. ALL UTILITIES WITHIN WALDO BOULEVARD R/W ARE STATIONED FROM THE EAST BOUND ALIGNMENT. ALL UTILITIES OUTSIDE WALDO BOULEVARD R/W ARE STATIONED FROM SIDE ROAD ALIGNMENTS.
2. ELEVATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND NEED TO BE FIELD VERIFIED DURING CONSTRUCTION.
3. ALL HYDRANTS TO BE INSTALLED 1-FOOT FROM FACE OF SIDEWALK. ALL HYDRANT LEAD VALVES ON WALDO BLVD TO BE INSTALLED BETWEEN 12-INCH TEE AND PAN OF CURB. ALL HYDRANT LEAD VALVES ON SIDE STREETS TO BE INSTALLED BETWEEN BACK OF CURB AND HYDRANT.
4. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

PROJECT NO: 1500-37-75	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 321	E

RECONNECT TO EX W/ 6"SAN LATERAL (TYP)

REMOVE AND NEW MANHOLE *6 STA 151+37EB, 41'LT CONNECT TO EX SANITARY W/COUPLINGS

12" TEE STA 151+56EB, 44'LT 12" GV & BOX (N & S)

HYDRANT STA 152+04EB, 53'LT SEE NOTE 3

CONTRACT 1500-37-75 CONTRACT 4570-12-72

N

N 8TH ST

ABANDON 10"SAN

USH 10/STH 42 (WALDO BLVD)

REMOVE

RECONNECT TO EX W/ 1 1/4" OD WATER SERVICE, CURB STOP & BOX, CORP STOP (TYP)

REMOVE EX SANITARY MANHOLE

MANHOLE *6A STA 151+37EB, 21'RT CONNECT TO EX SANITARY W/COUPLING

12" TEE STA 151+56EB 33'RT 12" GV & BOX (W)

12" X 6" TEE STA 152+04EB, 44'LT 6" GV & BOX

REMOVE AND NEW MANHOLE *6B STA 152+11EB, 35'LT CONNECT TO EX SANITARY W/COUPLING

REMOVE EX SANITARY MANHOLE

0 40 80

5

5

625 620 615 610 605 600 595 590 585

EXISTING GRADE

6' MINIMUM COVER

PROPOSED GRADE

12"WM
301LF OF 8" PVC @ 2.16%

423LF OF 8" PVC @ 4.24%

PROPOSED STORM SEWER

MANHOLE *6A
RIM 623.91
INV 8" S 616.33 (EX VCP LINED)
INV 8" W 616.00
INV 8" E 615.12

MANHOLE *6
RIM 623.47
INV 8" W 615.08 (EX VCP LINED)
INV 8" N 615.01 (EX VCP LINED)

MANHOLE *6B
RIM 621.72
INV 8" E 613.74 (EX VCP LINED)

CONTRACT 1500-37-75 CONTRACT 4570-12-72

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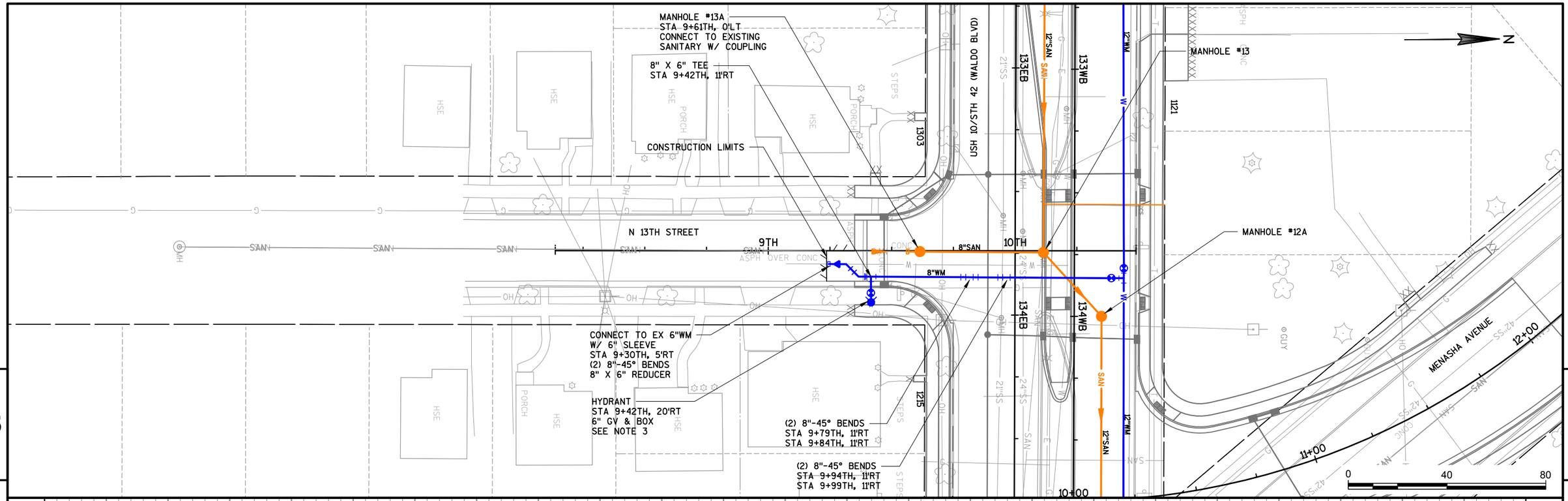
4. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

149+00 149+25 149+50 149+75 150+00 150+25 150+50 150+75 151+00 151+25 151+50 151+75 152+00 152+25 152+50 152+75 153+00 153+25 153+50 153+75 154+00 154+25 154+50 154+75 155+00

PROJECT NO: 1500-37-75	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 322	E



5

5

NOTES:

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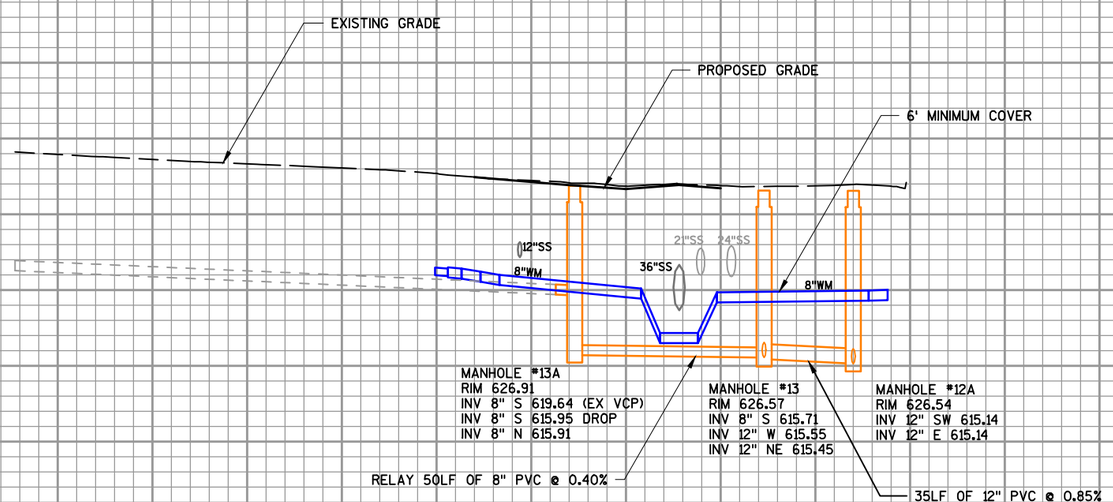
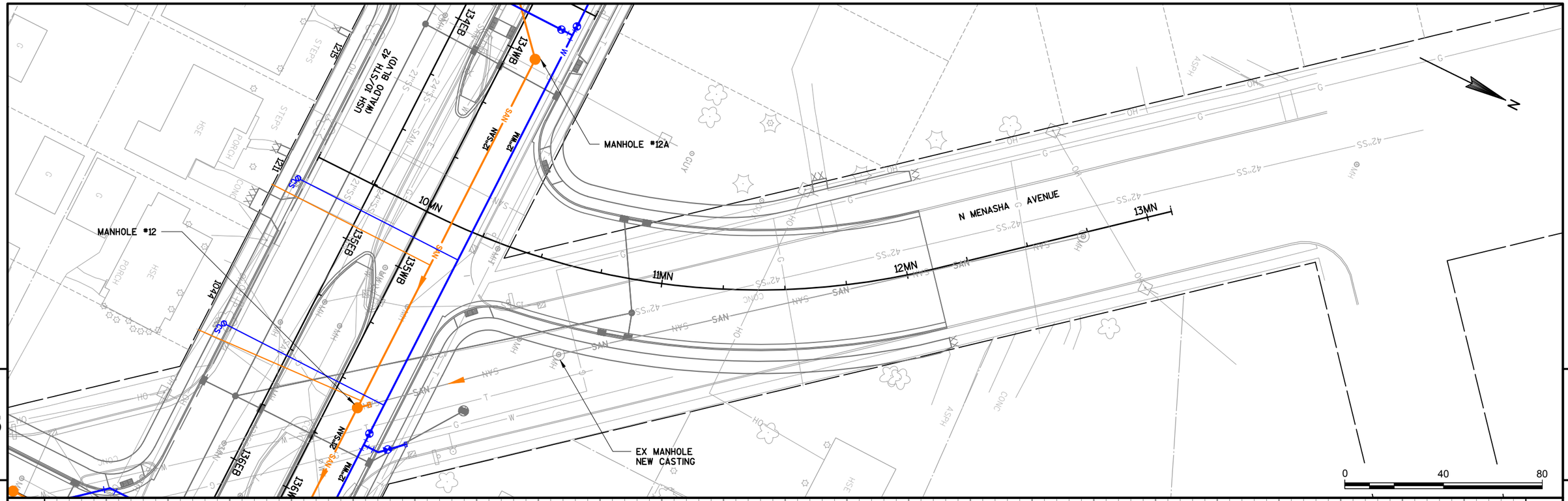
4. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

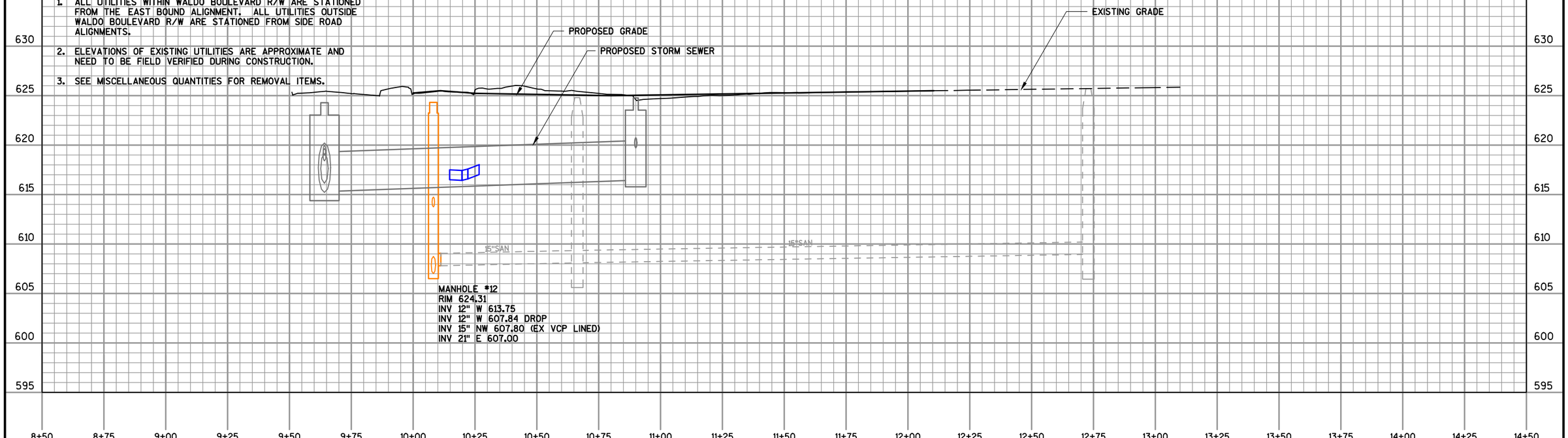


640 635 630 625 620 615 610 605 600

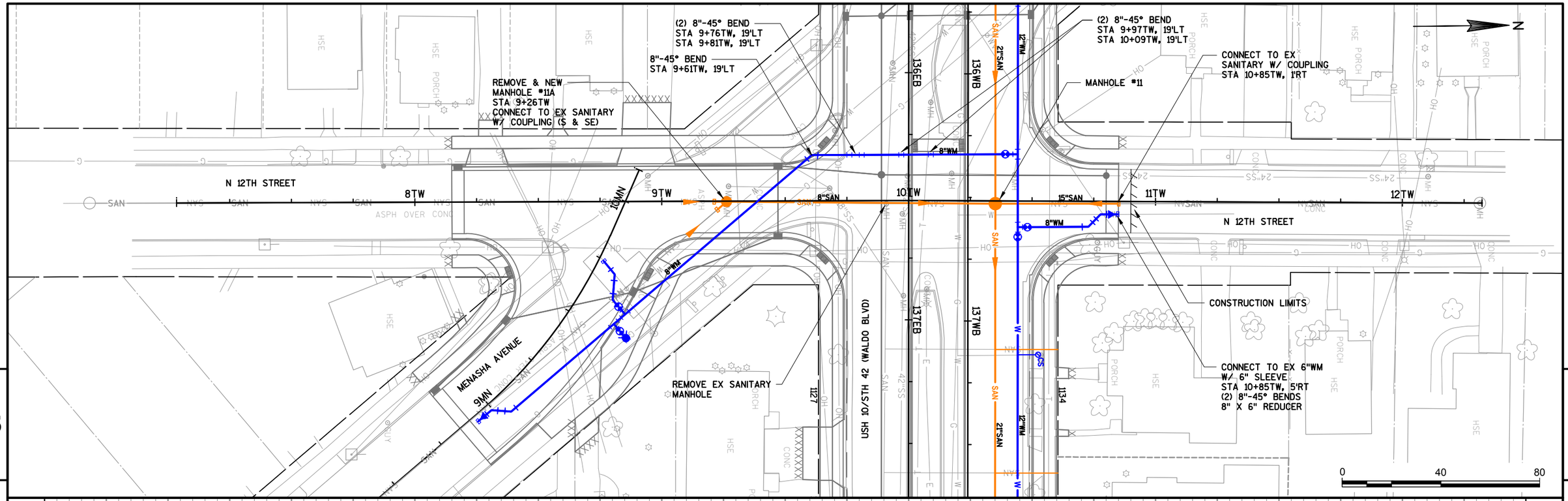
6+00 6+25 6+50 6+75 7+00 7+25 7+50 7+75 8+00 8+25 8+50 8+75 9+00 9+25 9+50 9+75 10+00 10+25 10+50 10+75 11+00 11+25 11+50 11+75 12+00

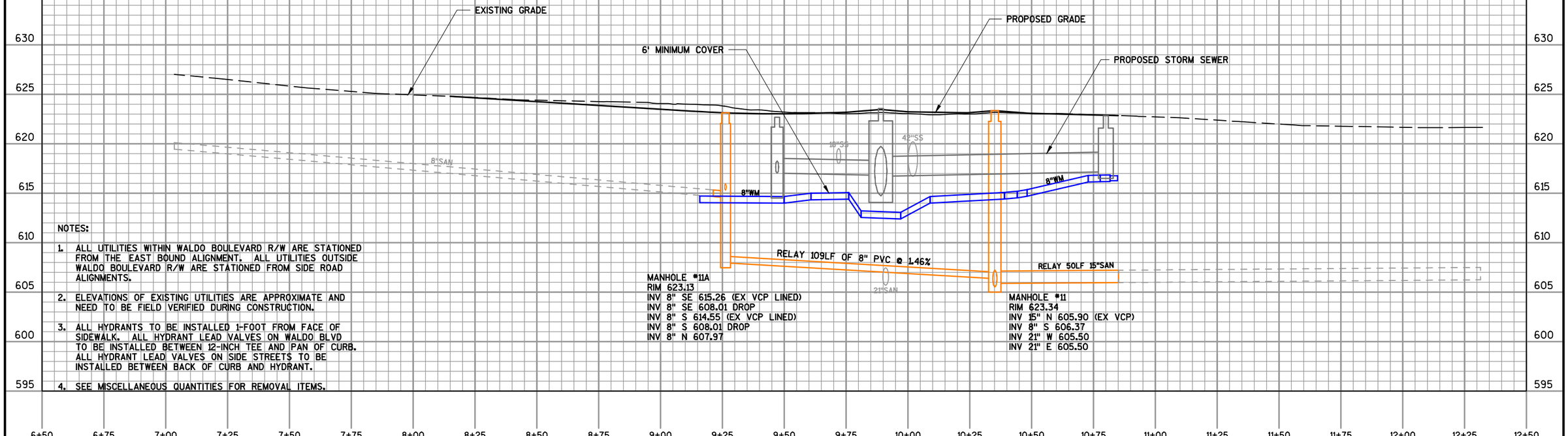
PROJECT NO: 1500-37-75	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 323 E





PROJECT NO: 1500-37-75	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 324 E





NOTES:

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4. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

PROJECT NO: 1500-37-75	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 325 E

CONNECT TO EX 8"WM
W/ 8" SLEEVE
STA 9+75MN, 2'RT
(2) 8"-45° BENDS

8" X 6" TEE
STA 9+55MN, 18'RT

CONNECT TO EX 6"WM
W/ 6" SLEEVE
STA 8+93MN, 18'RT
(2) 8"-45° BENDS
8" X 6" REDUCER

HYDRANT
STA 9+53MN, 25'RT
6" GV & BOX (S)
SEE NOTE 3

8" TEE
STA 9+61MN, 20'RT
8" GV & BOX (S)

N 12TH STREET

MENASHA AVENUE

USH 10/STH 42 (WALDO BLVD)

0 40 80

PROPOSED GRADE

EXISTING GRADE

6' MINIMUM COVER

8"SAN

8"WM

15"SS

NOTES:

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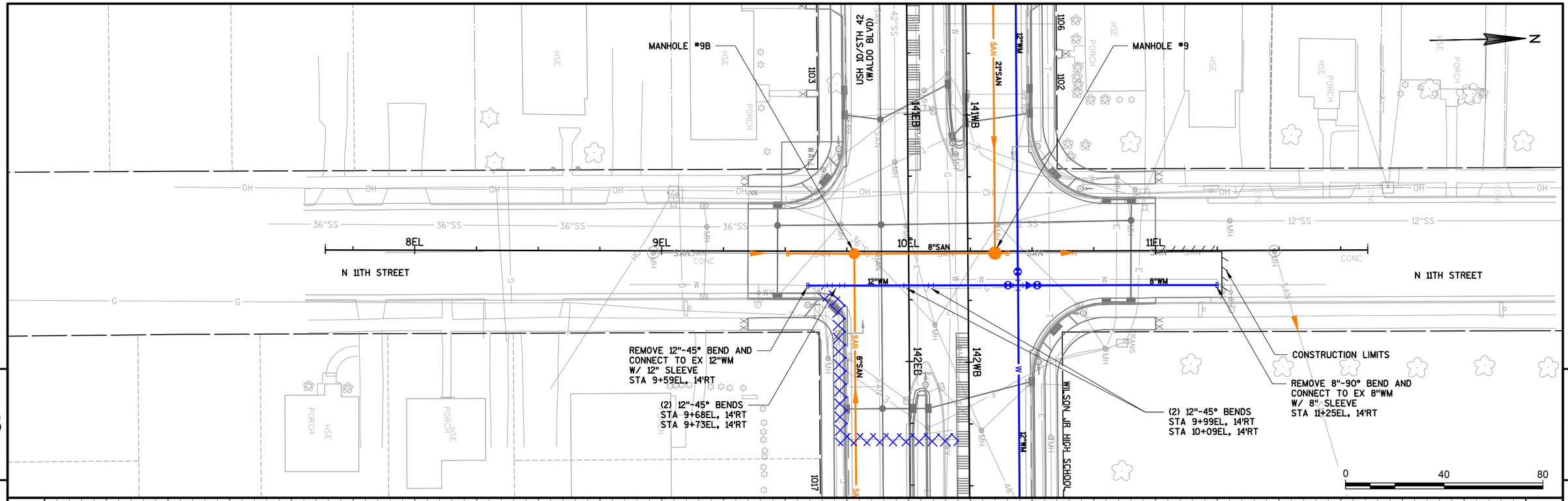
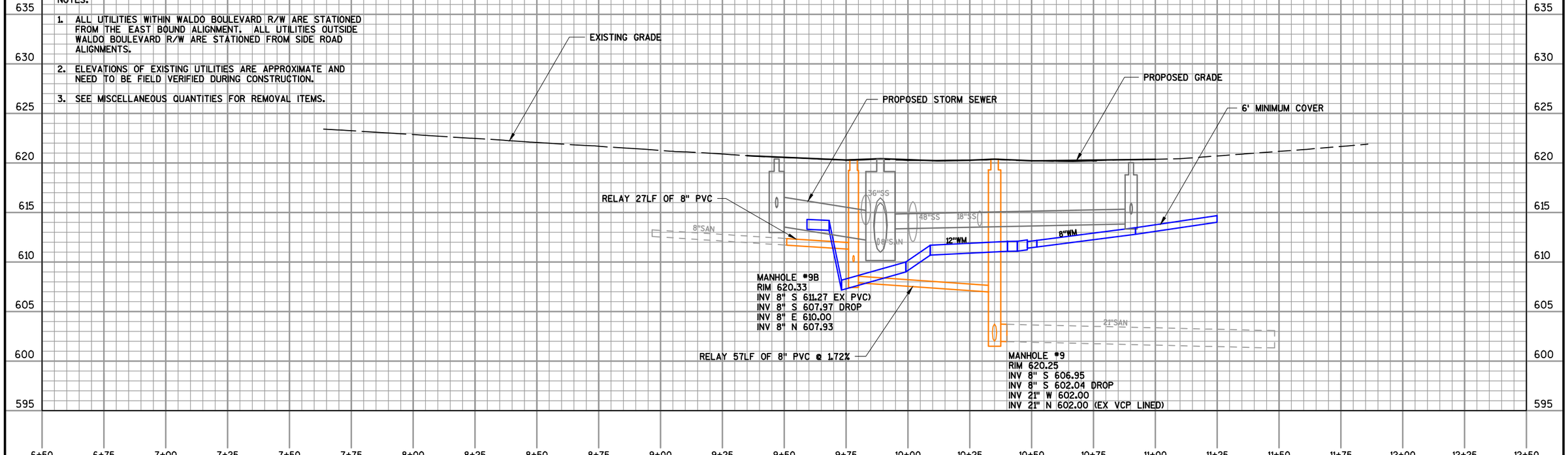
4. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

PROJECT NO: 1500-37-75	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 326 E



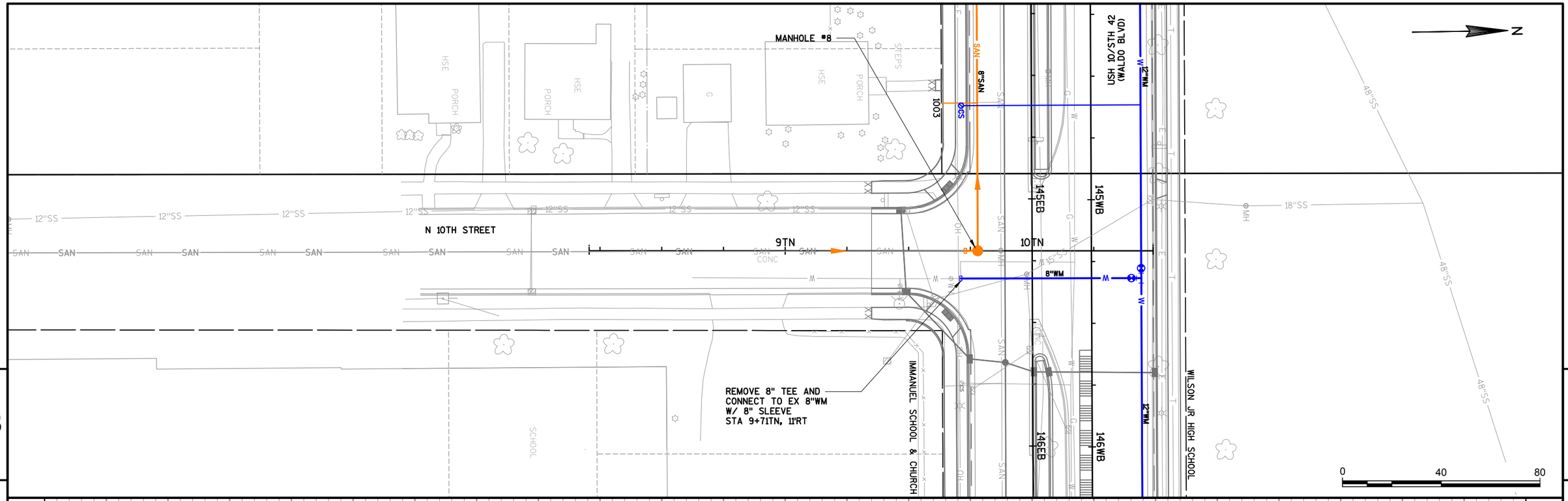


PROJECT NO: 1500-37-75	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 327 E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\WM_SAN_N_11TH_STREET.DWG
LAYOUT NAME - 1500_37_75_023032_UP

PLOT DATE : 1/2/2019 8:05 AM PLOT BY : SHALLOW, JON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



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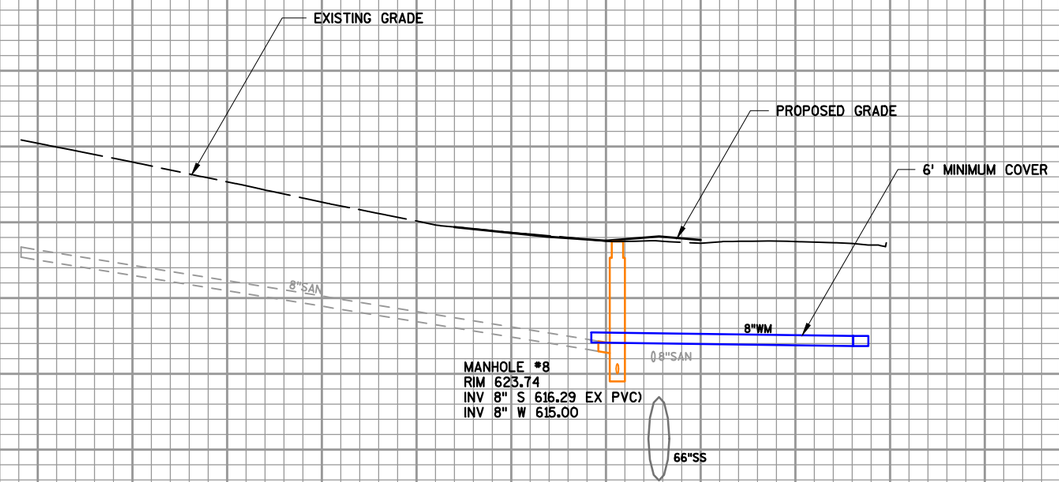
NOTES:

1. ALL UTILITIES WITHIN WALDO BOULEVARD R/W ARE STATIONED FROM THE EAST BOUND ALIGNMENT. ALL UTILITIES OUTSIDE WALDO BOULEVARD R/W ARE STATIONED FROM SIDE ROAD ALIGNMENTS.
2. ELEVATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND NEED TO BE FIELD VERIFIED DURING CONSTRUCTION.
3. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.



640 635 630 625 620 615 610 605 600

6+00 6+25 6+50 6+75 7+00 7+25 7+50 7+75 8+00 8+25 8+50 8+75 9+00 9+25 9+50 9+75 10+00 10+25 10+50 10+75 11+00 11+25 11+50 11+75 12+00

PROJECT NO: 1500-37-75	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 328 E

MANHOLE *7A

8" X 6" TEE
STA 9+52NN, 11'RT

CONNECT TO EXISTING 6"WM
W/ 6" SLEEVE, 8"X6" REDUCER
AND (2) 8"-45° BENDS
STA 9+05NN, 6'RT

USH 10/STH 42 (WALDO BLVD)

148EB

148WB

N 9TH STREET

9NN

10NN

11NN

12NN

8"SAN

8"WM

10"WM

21"SAN

10"SAN

REMOVE & NEW
MANHOLE *16-74

NEW CASTING
MANHOLE *16-75

REMOVE EXISTING HYDRANT
HYDRANT
STA 9+52NN, 22'RT
6" GV & BOX (E)
SEE NOTE 3

(2) 8"-45° BEND
STA 9+67NN, 11'RT
STA 9+75NN, 11'RT

(2) 8"-45° BEND
STA 9+85NN, 11'RT
STA 9+96NN, 11'RT

819

817

149EB

149WB

820

MANHOLE *7

1109

1115

CONNECT TO EXISTING 10"WM
W/ 10" SLEEVE AND
(2) 10"-45° BENDS
STA 12+67NN, 8'RT

N

0 40 80

5

5

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4. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

MANHOLE *7A
RIM 629.53
INV 8" S 622.93 (EX VCP LINED)
INV 8" E 622.50

PROPOSED GRADE

6' MINIMUM COVER

EXISTING GRADE

8"SAN

8"WM

10"WM

PROPOSED STORM SEWER

MANHOLE *16-74
RIM 626.98
INV 8" S 618.00 (EX CONC LINED)
INV 10" N 613.60 (EX CONC LINED)
INV 10" N 599.00 (DROP)
INV 8" S 599.00 (DROP)
INV 21" W 597.28 (EX VCP LINED)
INV 21" E 597.23 (EX VCP LINED)

635 630 625 620 615 610 605 600 595

7+00 7+25 7+50 7+75 8+00 8+25 8+50 8+75 9+00 9+25 9+50 9+75 10+00 10+25 10+50 10+75 11+00 11+25 11+50 11+75 12+00 12+25 12+50 12+75 13+00

PROJECT NO: 1500-37-75	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 329	E

REMOVE EX SANITARY MANHOLE

MANHOLE #6A

USH 10/STH 42 (WALDO BLVD)

MANHOLE #6

MANHOLE #16-59 NEW CASTING

RECONNECT TO EX W/ 6"SAN LATERAL (TYP)

ABANDON

N 8TH STREET

N 8TH STREET

9EG

10EG

11EG

12EG

1104

1108

1110

1116

1109

CONNECT TO EXISTING 12"WM W/ 12" SLEEVE AND (2) 12"-45° BENDS STA 8+55EG, 12'RT

CONNECT TO EXISTING 12"WM W/ 12" SLEEVE AND (2) 12"-45° BENDS STA 11+45EG, 8'RT

MANHOLE #6B

0 40 80

NOTES:

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3. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

PROPOSED GRADE

EXISTING GRADE

6' MINIMUM COVER

PROPOSED STORM SEWER

MANHOLE #6
RIM 623.47
INV 8" W 615.08 (EX VCP LINED)
INV 8" N 615.01 (EX VCP LINED)

MANHOLE #6A
RIM 623.91
INV 8" S 616.33 (EX VCP LINED)
INV 8" W 616.00
INV 8" E 615.12

630 625 620 615 610 605 600 595 590

7+50 7+75 8+00 8+25 8+50 8+75 9+00 9+25 9+50 9+75 10+00 10+25 10+50 10+75 11+00 11+25 11+50 11+75 12+00 12+25 12+50 12+75 13+00 13+25 13+50

PROJECT NO: 1500-37-75	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 330 E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\WM_SAN_N_8TH_STREET.DWG
LAYOUT NAME - 1500_37_75_023035_UP

PLOT DATE : 1/2/2019 8:11 AM PLOT BY : SHALLOW, JON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

MANHOLE #6

N 8TH ST

MANHOLE 6B

RECONNECT TO EXISTING W/ 6" SANITARY LATERAL (TYP)

CONTRACT 1500-37-72
CONTRACT 4570-12-72

USH 10/STH 42 (WALDO BLVD)

MANHOLE #6A

RECONNECT TO EXISTING W/ 1 ¼" OD WATER SERVICE, CURB STOP & BOX, CORP STOP (TYP)

N

0 40 80

5

5

EXISTING GRADE

PROPOSED GRADE

6' MINIMUM COVER

12"WM

423LF OF 8" PVC @ 4.24%

PROPOSED STORM SEWER

MANHOLE #6B
RIM 621.72
INV 8" E 613.74 (EX VCP LINED)

MANHOLE #6A
RIM 623.91
INV 8" S 616.33 (EX VCP LINED)
INV 8" W 616.00
INV 8" E 615.12

MANHOLE #6
RIM 623.47
INV 8" W 615.08 (EX VCP LINED)
INV 8" N 615.01 (EX VCP LINED)

NOTES:

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4. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

PROJECT NO: 4570-12-72	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 331 E

REMOVE & NEW MANHOLE *4 STA 155+15EB, 36'LT CONNECT TO EX SAN W/ COUPLING

12" X 8" CROSS STA 155+89EB, 44'LT 8" GV & BOX (N & S) 12" GV & BOX (W)

REMOVE AND NEW MANHOLE *3 STA 156+23EB, 19'LT CONNECT TO EX SANITARY W/ COUPLINGS

RECONNECT TO EX W/ 6"SAN LATERAL (TYP)

REMOVE AND NEW MANHOLE *2 STA 159+85EB, 20'LT CONNECT TO EX SANITARY W/ COUPLINGS

12" X 8" CROSS STA 159+95EB, 44'LT 8" GV & BOX (N & S) 12" GV & BOX (W)

HYDRANT STA 160+94EB, 53'LT SEE NOTE 3

ABANDON

12" X 6" TEE STA 160+94EB, 44'LT 6" GV & BOX

USH 10/STH 42 (WALDO BLVD)

SB LINCOLN BLVD

NB LINCOLN BLVD

N 6TH ST

REMOVE EX SANITARY MANHOLE

REMOVE AND NEW MANHOLE *4B STA 155+60EB, 19'LT CONNECT TO EX SAN W/ COUPLINGS

REMOVE EX SANITARY MANHOLE

MANHOLE *4A STA 155+60EB, 21'RT CONNECT TO EX SAN W/ COUPLING

MANHOLE *3A STA 156+23EB, 21'RT CONNECT TO EX SANITARY W/ COUPLING

RECONNECT TO EX W/ 1 1/4" OD WATER SERVICE, CURB STOP & BOX, CORP STOP (TYP)

MANHOLE *1A STA 159+57EB, 21'RT

REMOVE AND NEW MANHOLE *1 STA 159+85EB, 35'RT CONNECT TO EX SANITARY W/ COUPLINGS

0 40 80

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4. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

EXISTING GRADE

PROPOSED GRADE

6' MINIMUM COVER

PROPOSED STORM SEWER

423LF OF 8" PVC @ 4.24%

63LF OF 8" PVC @ 2.54%

335LF OF 8" PVC @ 1.30%

31LF OF 8" PVC @ 1.29%

MANHOLE *4
RIM 608.77
INV 8" W 603.80 (LINED)
INV 8" SE 600.16 (LINED)

MANHOLE *4A
RIM 608.03
INV 8" S 599.33 (EX VCP LINED)
INV 8" W 597.18
INV 8" E 597.14

MANHOLE *4B
RIM 607.61
INV 8" W 598.51 (EX VCP LINED)
INV 8" W 590.06 DROP
INV 24" E 589.16 (EX VCP LINED)
INV 24" N 589.24 (EX VCP LINED)

MANHOLE *3A
RIM 606.97
INV 8" S 597.64 (EX VCP LINED)
INV 8" W 595.54
INV 8" E 595.50

MANHOLE *3
RIM 606.69
INV 8" N 597.58 (EX VCP LINED)
INV 8" N 589.93 DROP
INV 24" W 588.83 (LINED)
INV 24" E 588.83 (LINED)

MANHOLE *1A
RIM 601.50
INV 8" W 591.20
INV 8" SE 591.20

MANHOLE *1A
RIM 601.50
INV 8" W 591.15
INV 8" SE 591.11

MANHOLE *1
RIM 601.31
INV 8" NW 590.71
INV 8" E 587.71 (EX VCP LINED)
INV 24" N 587.60
INV 24" S 587.58 (EX VCP LINED)

MANHOLE *2
RIM 601.94
INV 8" N 593.76 (EX VCP LINED)
INV 8" N 588.70 DROP
INV 24" W 587.89 (EX VCP LINED)
INV 24" S 587.70

155+00 155+25 155+50 155+75 156+00 156+25 156+50 156+75 157+00 157+25 157+50 157+75 158+00 158+25 158+50 158+75 159+00 159+25 159+50 159+75 160+00 160+25 160+50 160+75 161+00

PROJECT NO: 4570-12-72	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 332 E

FILE NAME : N:\C3D\41062900\SHEETSPLAN\WM_SAN_WALDO_45701272-1.DWG
LAYOUT NAME - 4570_12_72_023002_UP

PLOT DATE : 1/2/2019 8:15 AM PLOT BY : SHALLOW, JON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

(2) 8"-45° BEND
STA 161+11EB, 44'LT
STA 161+16EB, 44'LT

(2) 12"-45° BEND
STA 161+55EB, 44'LT
STA 161+60EB, 44'LT

CONNECT TO EXISTING 8"WM
W/ 8" SLEEVE
STA 163+63EB, 51'LT
12" X 8" TEE
STA 163+63EB, 44'LT
8" GV & BOX (N)
12" GV & BOX (W)

MANHOLE #16-135
NEW CASTING &
CHIMNEY SEAL

MANHOLE #16-136
NEW CASTING &
CHIMNEY SEAL

12"-45° BEND
STA 163+78EB, 44'LT

MANHOLE #16-130
NEW CASTING

USH 10/STH 42 (WALDO BLVD)

N 5TH ST

161WB 162WB 163WB 164WB 165WB 166WB 167WB

161EB 162EB 163EB 164EB 165EB 166EB 167EB

12"WM

8"SAN

CONNECT TO EXISTING 12"WM
W/ 12" SLEEVE
STA 164+15EB, 21'LT
12"-45° BEND
STA 164+01EB, 20'LT

MANHOLE #16-129
NEW CASTING

MANHOLE #16-29
NEW CASTING

RECONNECT TO EXISTING
W/ 1 ¼" OD WATER SERVICE,
CURB STOP & BOX, CORP
STOP (TYP)

REMOVE & NEW
MANHOLE #16-28
STA 163+52, 28'RT

0 40 80

6' MINIMUM COVER

PROPOSED GRADE

PROPOSED STORM SEWER

EXISTING GRADE

12"WM

MANHOLE #16-28
RIM 598.86
INV 8" E 588.69 (EX VCP LINED)
INV 8" W 588.61 (EX VCP LINED)

605 600 595 590 585 580 575 570 565

161+00 161+25 161+50 161+75 162+00 162+25 162+50 162+75 163+00 163+25 163+50 163+75 164+00 164+25 164+50 164+75 165+00 165+25 165+50 165+75 166+00 166+25 166+50 166+75 167+00

NOTES:

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4. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

PROJECT NO: 4570-12-72	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 333 E

REMOVE EX SANITARY MANHOLE
MANHOLE *4A
(2) 8"-45° BENDS
STA 9+67SL, 29'RT
STA 9+70SL, 26'RT
8" X 6" TEE
STA 9+50SL, 29'RT
USH 10/STH 42 (WALDO BLVD)
155EB
155WB
156EB
156WB
REMOVE & NEW MANHOLE *4
REMOVE & NEW MANHOLE *4B
(2) 8"-45° BENDS
STA 10+25SL, 26'RT
STA 10+36SL, 26'RT
9SL
10SL
11SL
12SL
8"SAN
SB LINCOLN BLVD
ASPH OVER CONC
8"WM
9NL
10NL
11NL
12NL
CONNECT TO EXISTING 6"WM
W/ 6" SLEEVE
8" X 6" REDUCER
STA 9+43SL, 29'RT
HYDRANT
STA 9+50SL, 43'RT
6" GV & BOX
MANHOLE *3A
REMOVE & NEW MANHOLE *3
CONNECT TO EXISTING 6"WM
W/ 6" SLEEVE, 8"X6" REDUCER
AND (2) 8"-45° BENDS
STA 10+99SL, 30'RT
1025
0 40 80

5 5

620 615 610 605 600 595 590 585 580

NOTES:

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3. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

EXISTING GRADE
PROPOSED GRADE
6' MINIMUM COVER

MANHOLE *4A
RIM 608.03
INV 8" S 599.33 (EX VCP LINED)
INV 8" W 597.18
INV 8" E 597.14

MANHOLE *4B
RIM 607.61
INV 8" W 598.51 (EX VCP LINED)
INV 8" W 590.06 DROP
INV 24" E 589.16 (EX VCP LINED)
INV 24" N 589.24 (EX VCP LINED)

8"SAN
66"SS
8"SAN
15"SS
8"SAN
8"WM
24"SAN
8"SAN

7+00 7+25 7+50 7+75 8+00 8+25 8+50 8+75 9+00 9+25 9+50 9+75 10+00 10+25 10+50 10+75 11+00 11+25 11+50 11+75 12+00 12+25 12+50 12+75 13+00

PROJECT NO: 4570-12-72	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 334	E

MANHOLE *4A

REMOVE & NEW MANHOLE *4B

NB LINCOLN BLVD

NB LINCOLN BLVD

MANHOLE *3A

REMOVE & NEW MANHOLE *3

USH 10 (WALDO BLVD)

9SL 10SL 11SL 12SL

9NL 10NL 11NL 12NL

156EB 156WB 157EB 157WB

8"SAN 8"WM 12"WM 12"SS 54"SS 66"SS 60"SS

ASPH OVER CONC

0 40 80

5 5

620 615 610 605 600 595 590 585 580

7+00 7+25 7+50 7+75 8+00 8+25 8+50 8+75 9+00 9+25 9+50 9+75 10+00 10+25 10+50 10+75 11+00 11+25 11+50 11+75 12+00 12+25 12+50 12+75 13+00

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4. SEE MISCELLANEOUS QUANTITIES FOR REMOVAL ITEMS.

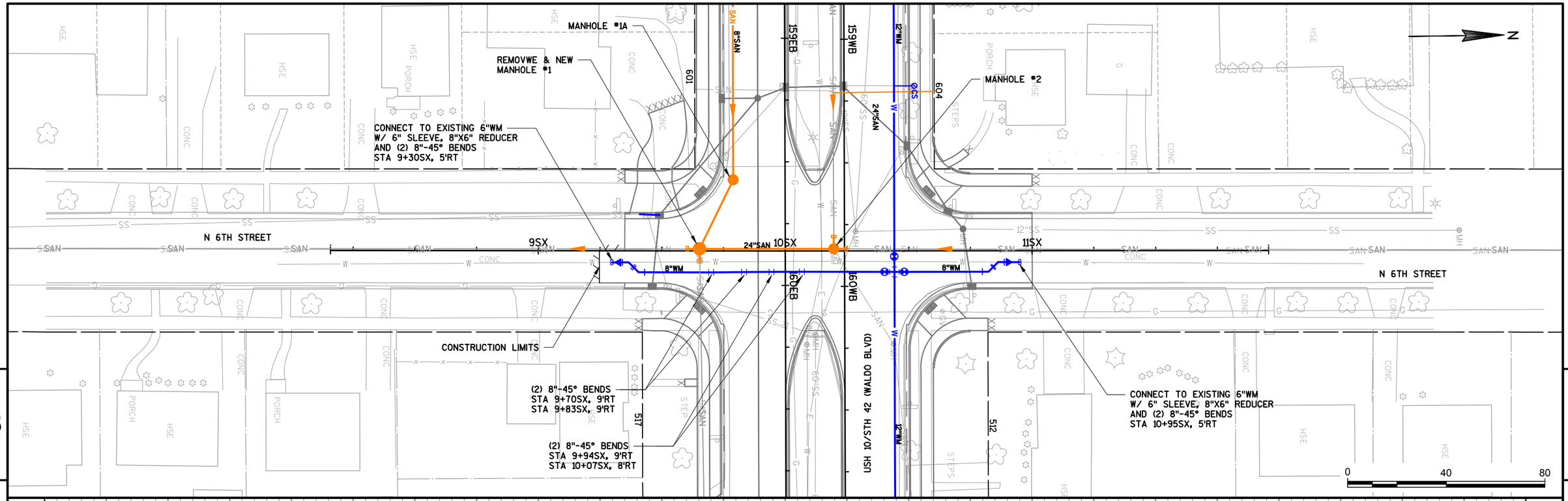
EXISTING GRADE

PROPOSED GRADE

MANHOLE *3A
RIM 606.97
INV 8" S 597.64 (EX VCP LINED)
INV 8" W 595.54
INV 8" E 595.50

MANHOLE *3
RIM 606.69
INV 8" N 597.58 (EX VCP LINED)
INV 24" W 588.83 (LINED)
INV 24" E 588.83 (LINED)

PROJECT NO: 4570-12-72	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 335	E



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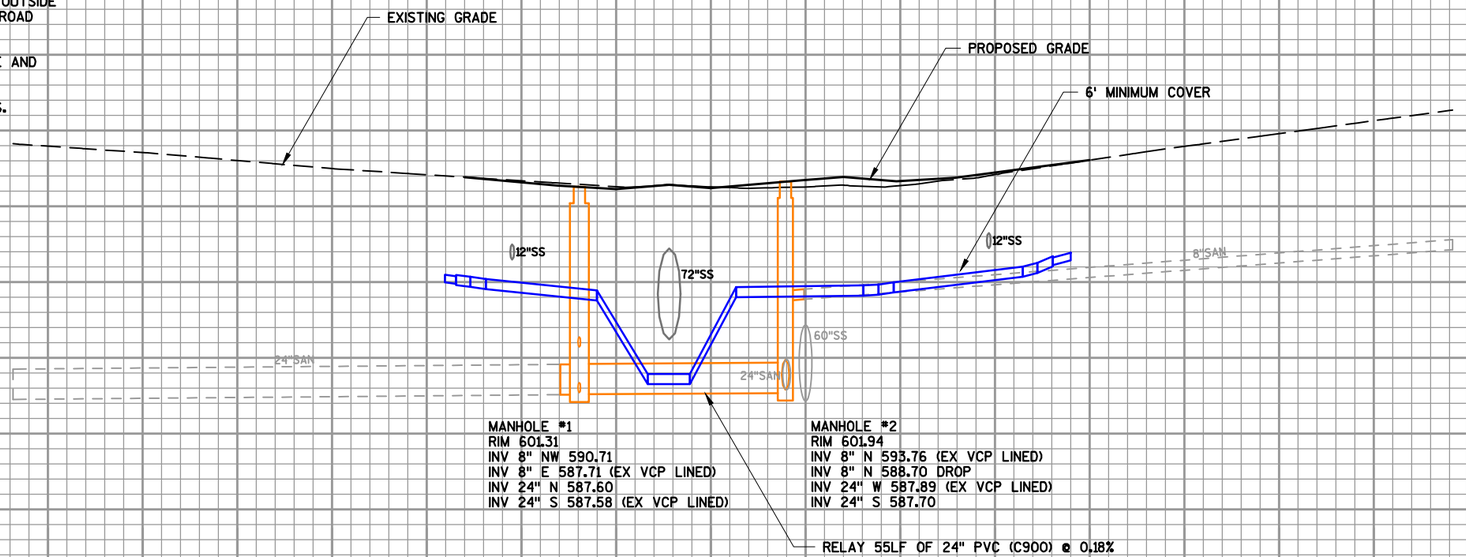


615 610 605 600 595 590 585 580 575

7+00 7+25 7+50 7+75 8+00 8+25 8+50 8+75 9+00 9+25 9+50 9+75 10+00 10+25 10+50 10+75 11+00 11+25 11+50 11+75 12+00 12+25 12+50 12+75 13+00

PROJECT NO: 4570-12-72	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: SANITARY SEWER AND WATER MAIN	SHEET 336	E

N 5TH ST

MANHOLE #16-136
NEW CASTING &
CHIMNEY SEAL

MANHOLE #16-135
NEW CASTING &
CHIMNEY SEAL

LOWER WATER MAIN BELOW INLET
LEAD PER CONSTRUCTION DETAILS

MANHOLE #16-130
NEW CASTING

MANHOLE #16-33
NEW CASTING

USH 10/STH 42 (WALDO BLVD)

163WB 164WB 165WB 166WB 167WB 168WB 169WB

163EB 164EB 165EB 166EB 167EB 168EB 169EB

REMOVE & NEW
MANHOLE #16-28
STA 163+52, 28'RT
RIM 598.86
INV 8" E 588.69 (EX VCP LINED)
INV 8" W 588.61 (EX VCP LINED)

MANHOLE #16-129
NEW CASTING

MANHOLE #16-29
NEW CASTING

LOWER WATER MAIN BELOW INLET
LEAD PER CONSTRUCTION DETAILS

0 40 80

N

LOWER WATER MAIN BELOW INLET
LEAD PER CONSTRUCTION DETAILS

LOWER WATER MAIN BELOW INLET
LEAD PER CONSTRUCTION DETAILS

USH 10/STH 42 (WALDO BLVD)

170WB 171WB 172WB 173WB 174WB 175WB

170EB 171EB 172EB 173EB 174EB 175EB

MANHOLE #16-30
NEW CASTING

0 40 80

PROJECT NO: 4570-12-72	HWY: USH 10	COUNTY: MANITOWOC	SANITARY SEWER AND WATER MAIN	SHEET 337	E

LOWER WATER MAIN BELOW INLET
LEAD PER CONSTRUCTION DETAILS

LOWER WATER MAIN BELOW INLET
LEAD PER CONSTRUCTION DETAILS

USH 10/STH 42 (WALDO BLVD)

176WB 177WB 178WB 179WB 180WB 181WB

176EB 177EB 178EB 179EB 180EB 181EB

WISDOT MON.

0 40 80

REMOVE & NEW MANHOLE #17-71A
WITH CHIMNEY SEAL
STA 185+40, 75'LT
RIM 589.57
INV 8" E 575.66 (EX AC LINED)
INV 8" W 575.66 (EX AC)

LOWER WATER MAIN BELOW INLET
LEAD PER CONSTRUCTION DETAILS

LOWER WATER MAIN BELOW INLET
LEAD PER CONSTRUCTION DETAILS

USH 10/STH 42 (WALDO BLVD)

182WB 183WB 184WB 185WB 186WB 187WB 188WB

182EB 183EB 184EB 185EB 186EB 187EB 188EB

0 40 80

PROJECT NO: 4570-12-72	HWY: USH 10	COUNTY: MANITOWOC	SANITARY SEWER AND WATER MAIN	SHEET 338	E

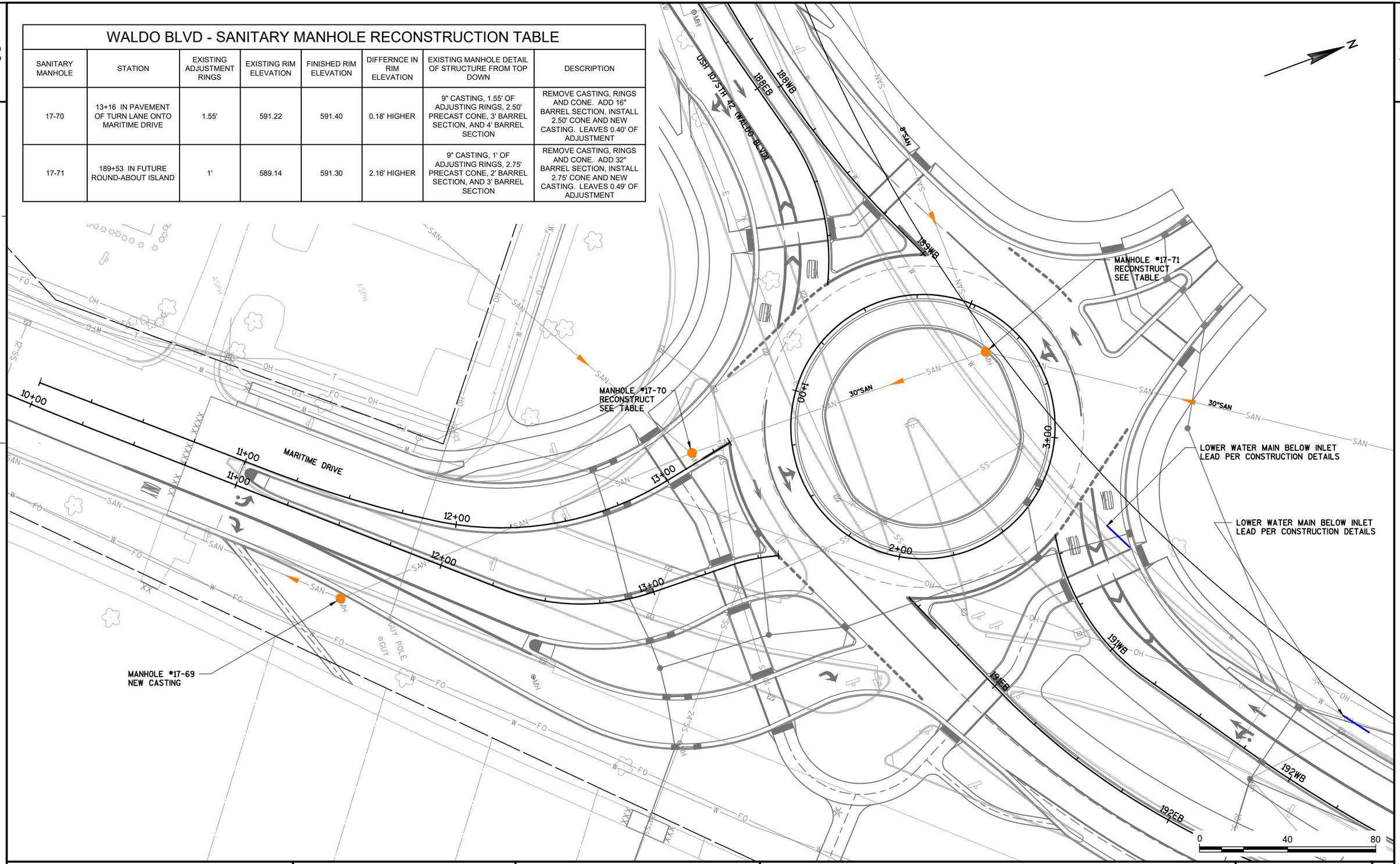
FILE NAME : N:\C3D\41062900\SHEETSPLAN\WM_SAN_WALDO_45701272-2.DWG
LAYOUT NAME - 4570_12_72_023008_UP

PLOT DATE : 1/2/2019 8:30 AM PLOT BY : SHALLOW, JON PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 42

WALDO BLVD - SANITARY MANHOLE RECONSTRUCTION TABLE

SANITARY MANHOLE	STATION	EXISTING ADJUSTMENT RINGS	EXISTING RIM ELEVATION	FINISHED RIM ELEVATION	DIFFERNCE IN RIM ELEVATION	EXISTING MANHOLE DETAIL OF STRUCTURE FROM TOP DOWN	DESCRIPTION
17-70	13+16 IN PAVEMENT OF TURN LANE ONTO MARITIME DRIVE	1.55'	591.22	591.40	0.18' HIGHER	9" CASTING, 1.55' OF ADJUSTING RINGS, 2.50' PRECAST CONE, 3' BARREL SECTION, AND 4' BARREL SECTION	REMOVE CASTING, RINGS AND CONE. ADD 16" BARREL SECTION, INSTALL 2.50' CONE AND NEW CASTING. LEAVES 0.40' OF ADJUSTMENT
17-71	189+53 IN FUTURE ROUND-ABOUT ISLAND	1'	589.14	591.30	2.16' HIGHER	9" CASTING, 1' OF ADJUSTING RINGS, 2.75' PRECAST CONE, 2' BARREL SECTION, AND 3' BARREL SECTION	REMOVE CASTING, RINGS AND CONE. ADD 32" BARREL SECTION, INSTALL 2.75' CONE AND NEW CASTING. LEAVES 0.49' OF ADJUSTMENT



PROJECT NO: 4570-12-72	HWY: USH 10	COUNTY: MANITOWOC	SANITARY SEWER AND WATER MAIN	SHEET 339	E

Standard Detail Drawing List

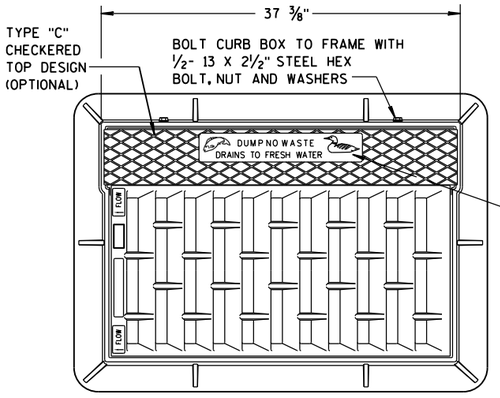
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08A09-02	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
08B11-02	MANHOLES VARIABLE TEE AND SPECIAL 4-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-19F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-19G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-10	CONCRETE BASE TYPE 10
09C12-09A	CONCRETE BASE TYPE 13
09C12-09B	CONCRETE BASE TYPE 13
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-14A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-14B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E05-06	TRAFFIC SIGNAL STANDARD ORNAMENTAL BRACKET MOUNTINGS TYPICAL FOR 13 FT. OR 15 FT.
09E08-08A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-08B	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-08C	TYPE 12 POLE 35'-55' MONOTUBE ARM
09E08-08D	TYPE 13 POLE 35'-55' MONOTBE ARM
09E08-08E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F09-04	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)
11B01-05	CONCRETE CORRUGATED MEDIAN
11B02-02	CONCRETE MEDIAN NOSE
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C04-17	URBAN NON-DOWELED CONCRETE PAVEMENT
13C15-06A	CONCRETE BASE
13C15-06B	CONCRETE BASE
13C18-06A	CONCRETE PAVEMENT JOINTING
13C18-06B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-06C	CONCRETE PAVEMENT JOINT TYPES
13C18-06D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C18-06E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
13C18-06F	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
14A02-01	TREE PLANTING DETAIL
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
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-14A	PAVEMENT MARKING SYMBOLS
15C07-14B	PAVEMENT MARKING WORDS

6

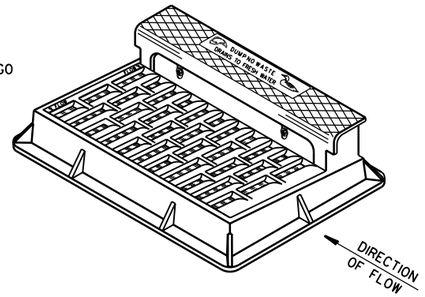
Standard Detail Drawing List

15C07-14C	PAVEMENT MARKING ARROWS
15C07-14D	ROUNDABOUT ARROWS
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C08-19B	PAVEMENT MARKING (TURN LANES)
15C08-19C	PAVEMENT MARKING (TURN LANES)
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-06	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C24-04	36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE
15C27-03B	PAVEMENT MARKING (ISLANDS)
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D06-03	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D11-07	TRAFFIC CONTROL, SINGLE LANE CROSSOVER
15D12-06A	TRAFFIC CONTROL, LANE CLOSURE
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D30-04A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-04B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-04C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

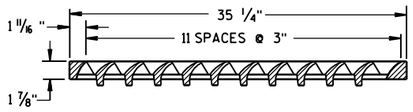
6

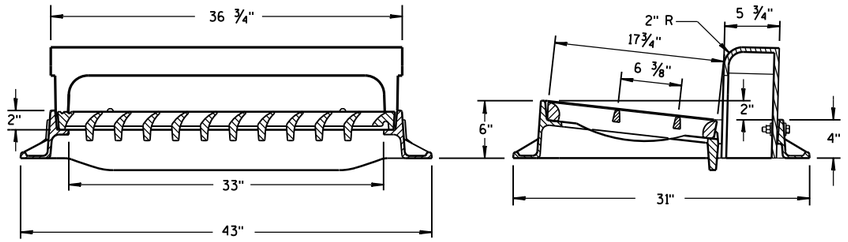


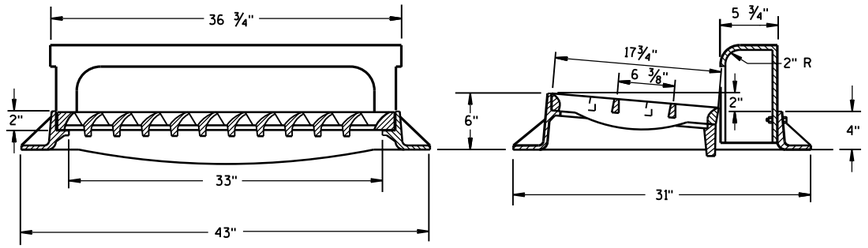
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

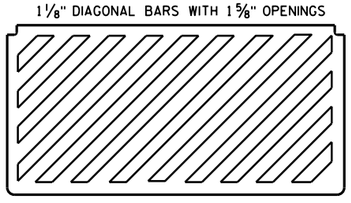






TYPE "H"

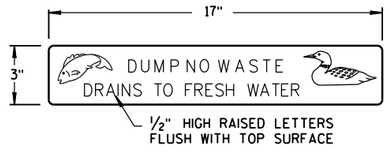
NOTE: EITHER CASTING IS ACCEPTABLE



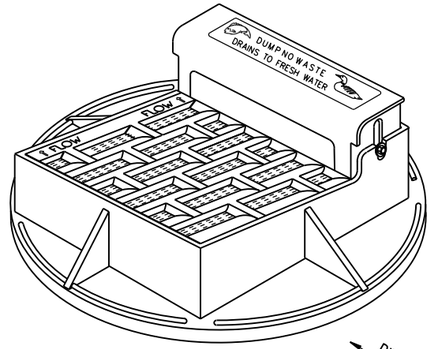
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

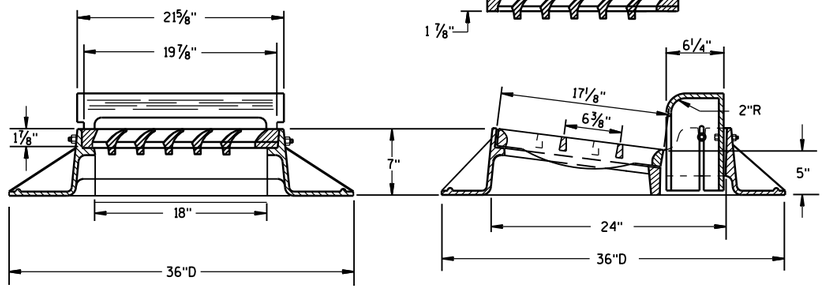


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



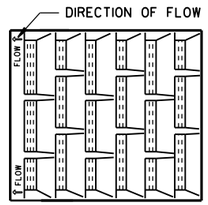
TYPE "A"

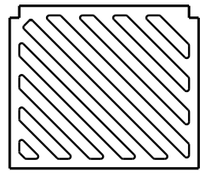
GENERAL NOTES

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.

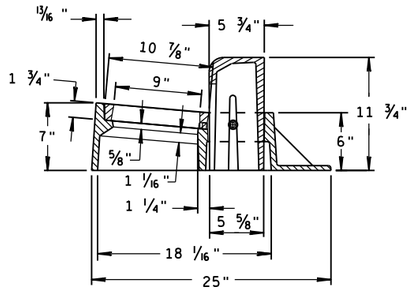


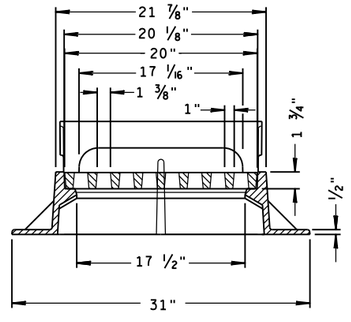


SPECIAL GRATE FOR TYPE "A" COVER

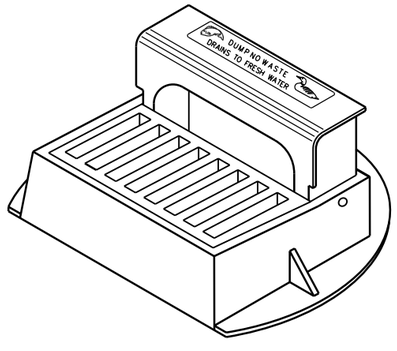
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



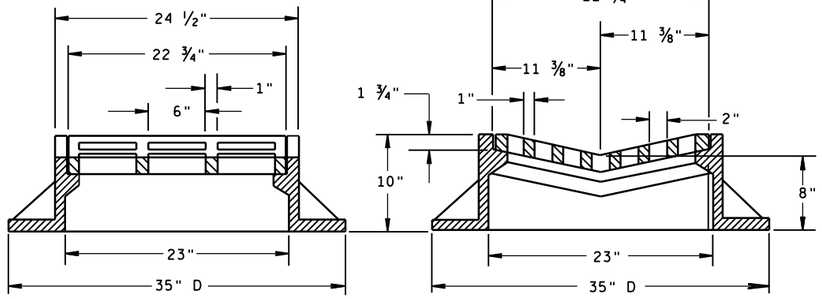
INLET COVERS TYPE A, H, A-S, H-S & Z

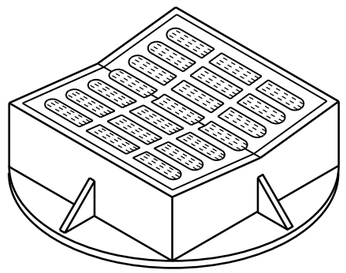
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

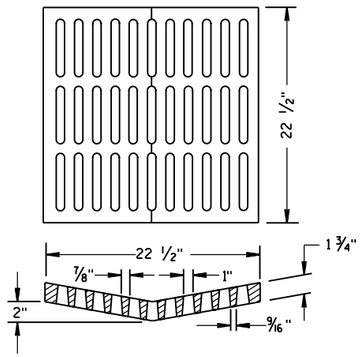
6

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



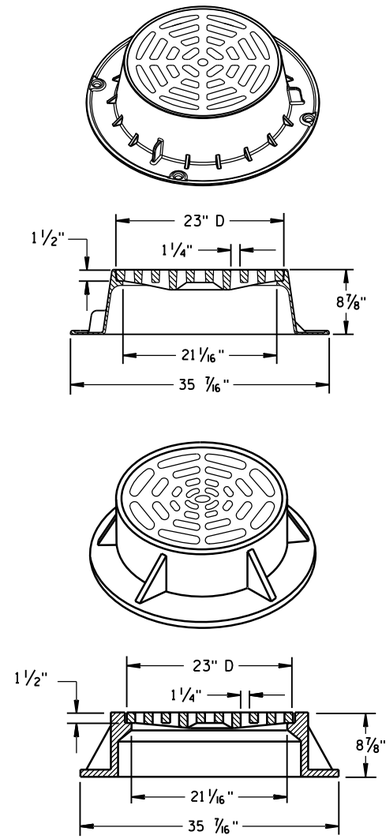


TYPE "B"



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"

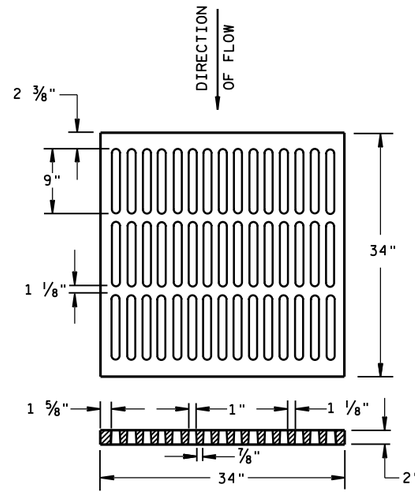
NOTE: EITHER CASTING IS ACCEPTABLE

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.

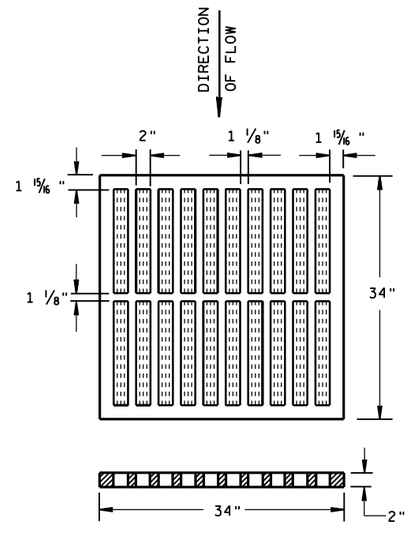
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



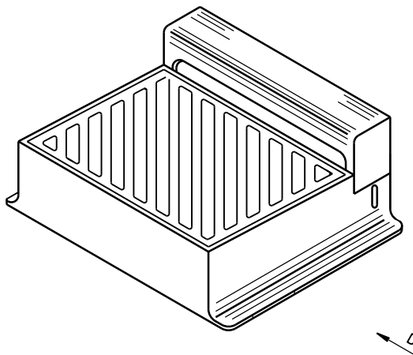
ALTERNATIVE TYPE "MS"

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



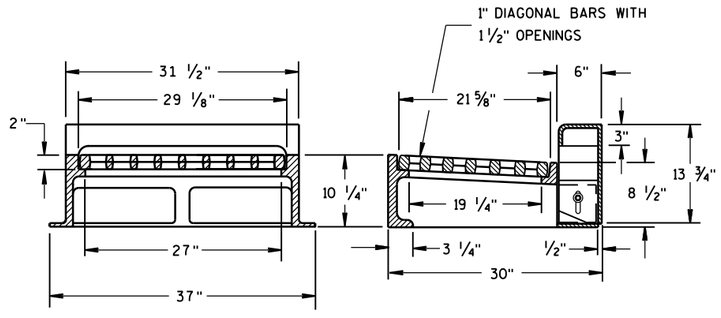
TYPE "MS"

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



DIRECTION OF FLOW

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"

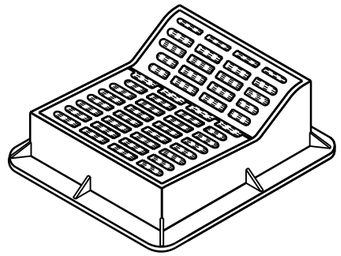
INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

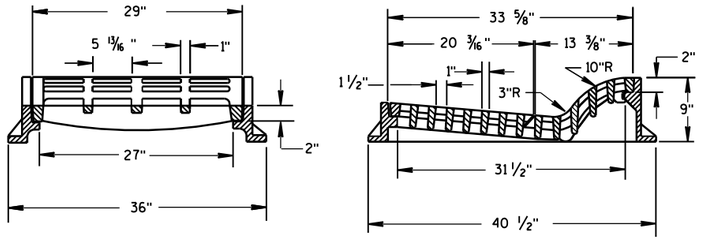
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

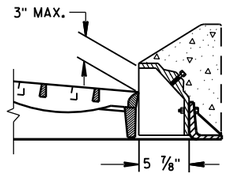
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

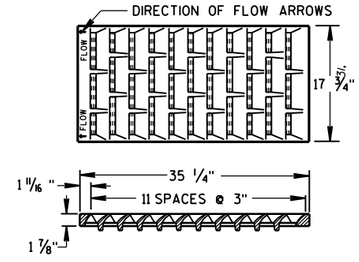
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

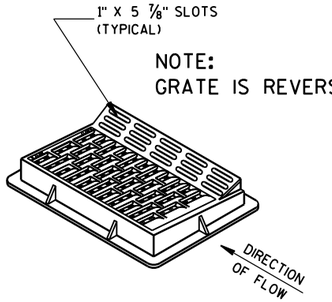
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

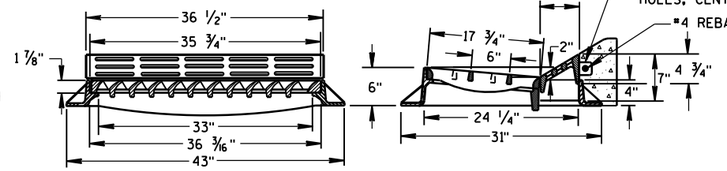
GENERAL NOTES

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

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



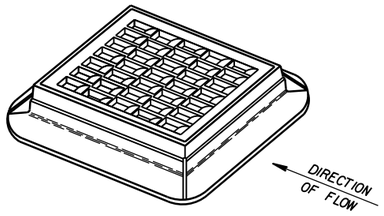


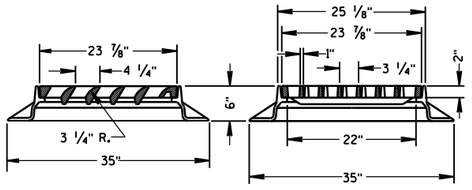


TYPE "HM"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE





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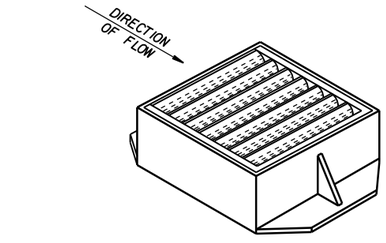

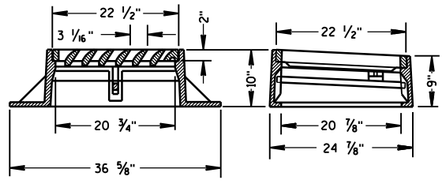

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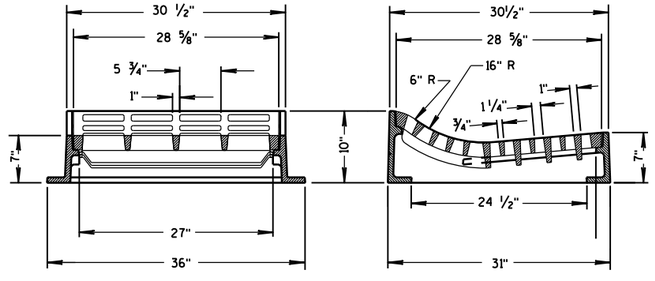
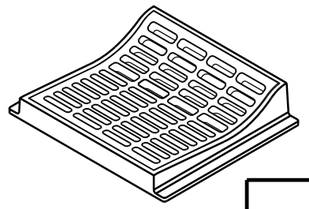


TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

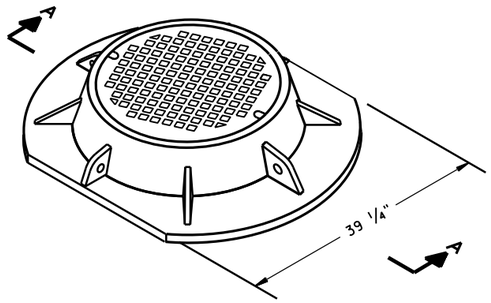
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

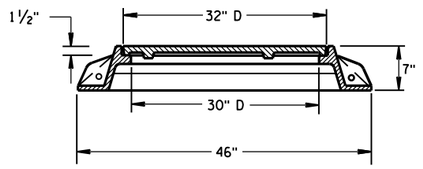
APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

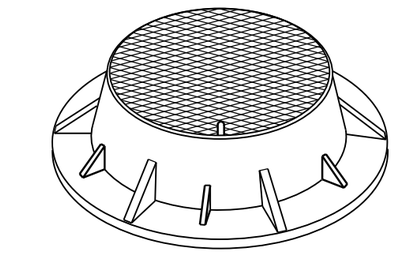
FHWA

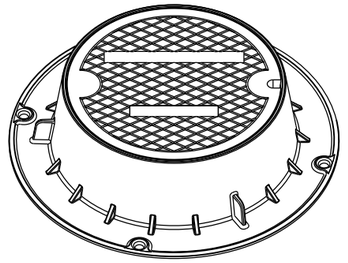
6
S.D.D. 8 A 5-19c

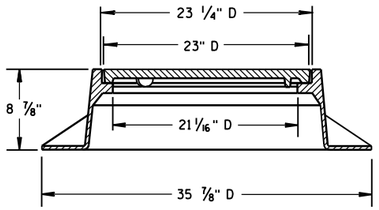


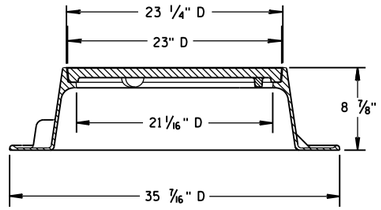


SECTION A-A
TYPE "K"









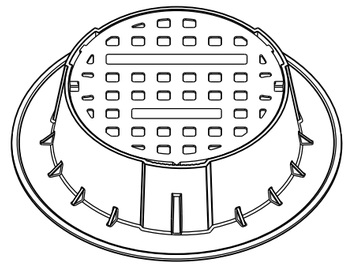
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

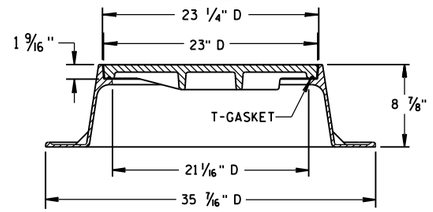
GENERAL NOTES

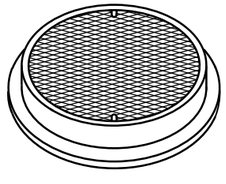
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

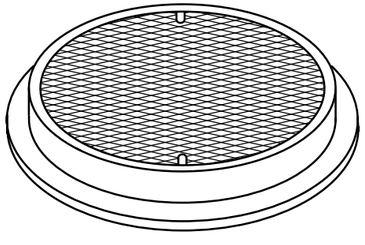
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

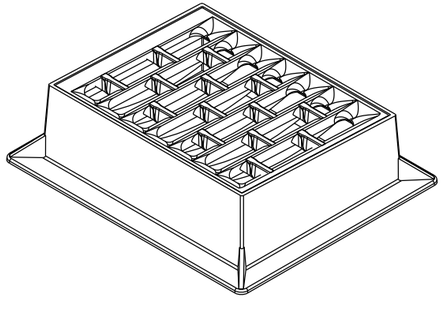
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

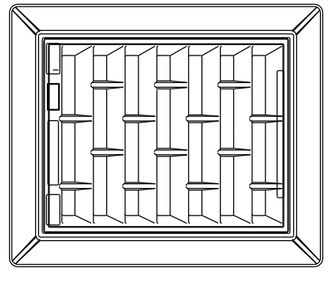


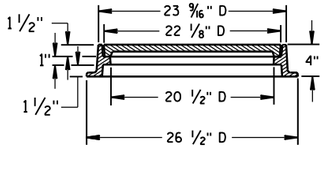




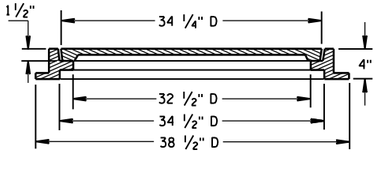




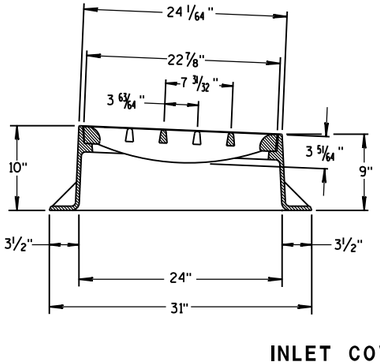


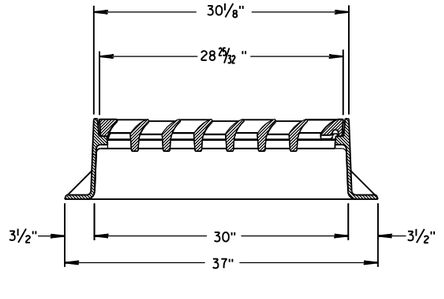


TYPE "L"

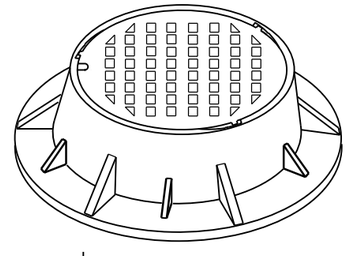


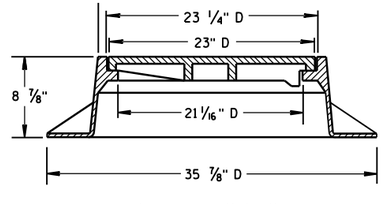
TYPE "M"





INLET COVER TYPE "BW"





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

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

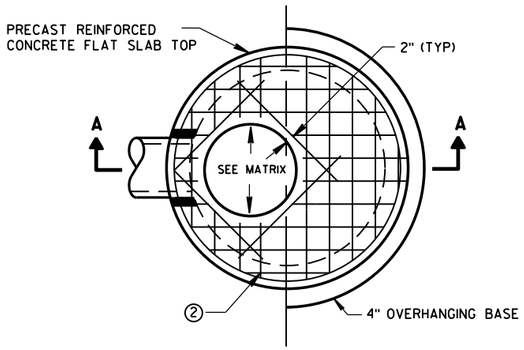
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

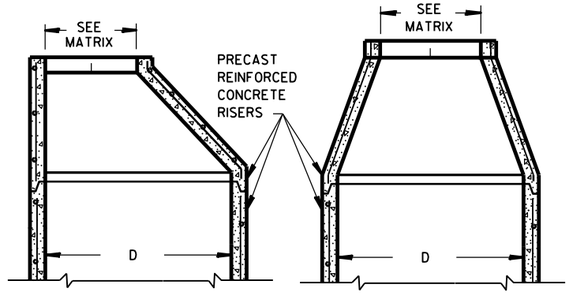
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

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

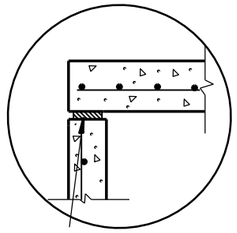


PLAN VIEW CIRCULAR OPENING

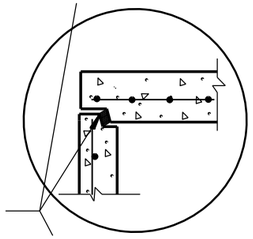


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

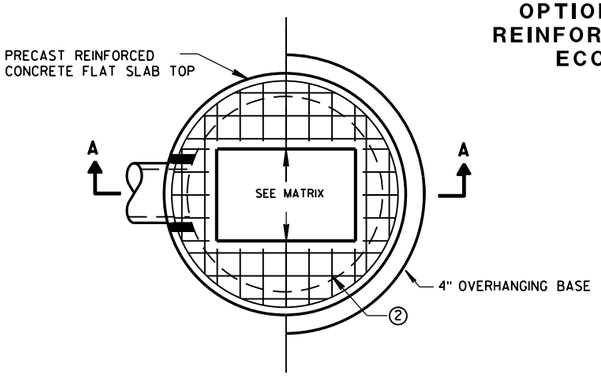
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



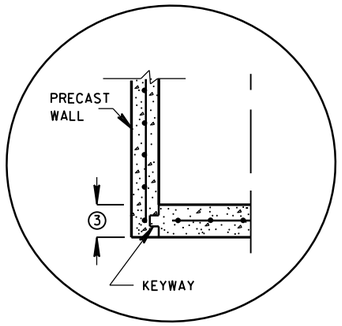
TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



PLAN VIEW RECTANGULAR OPENING

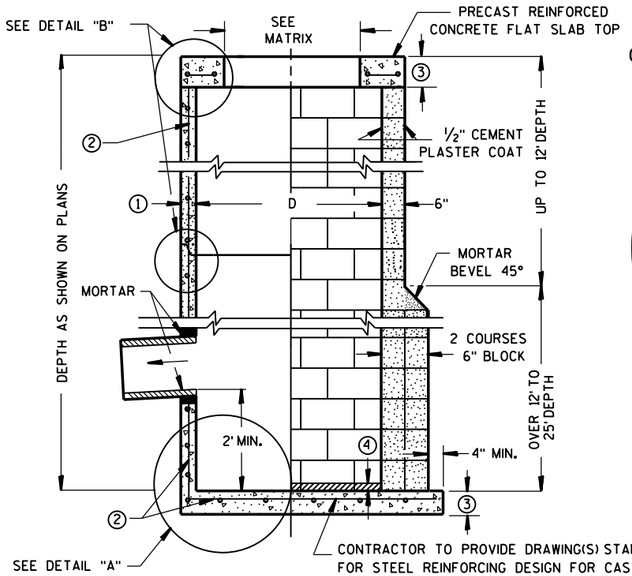


JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

RISER WITH TONGUE AND GROOVE JOINT

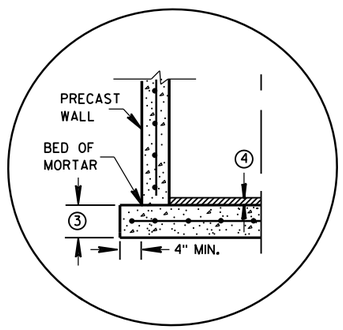
DETAIL "B"



SECTION A-A

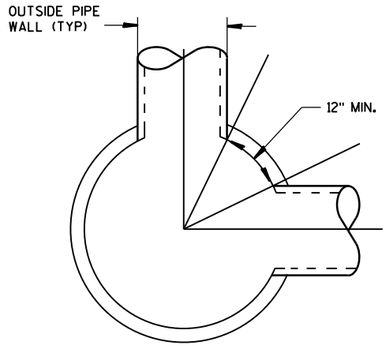
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

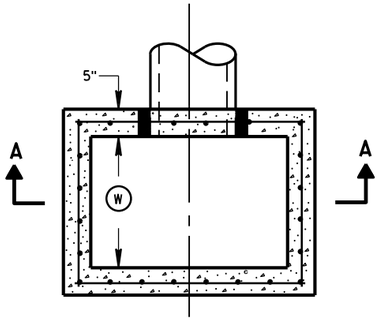
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

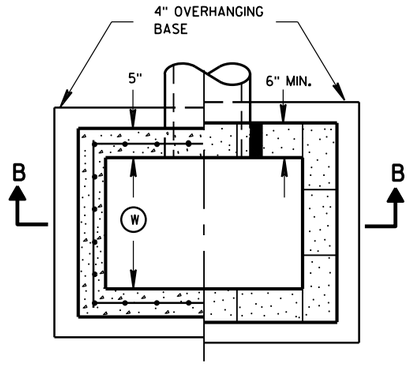
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVI...
FHWA

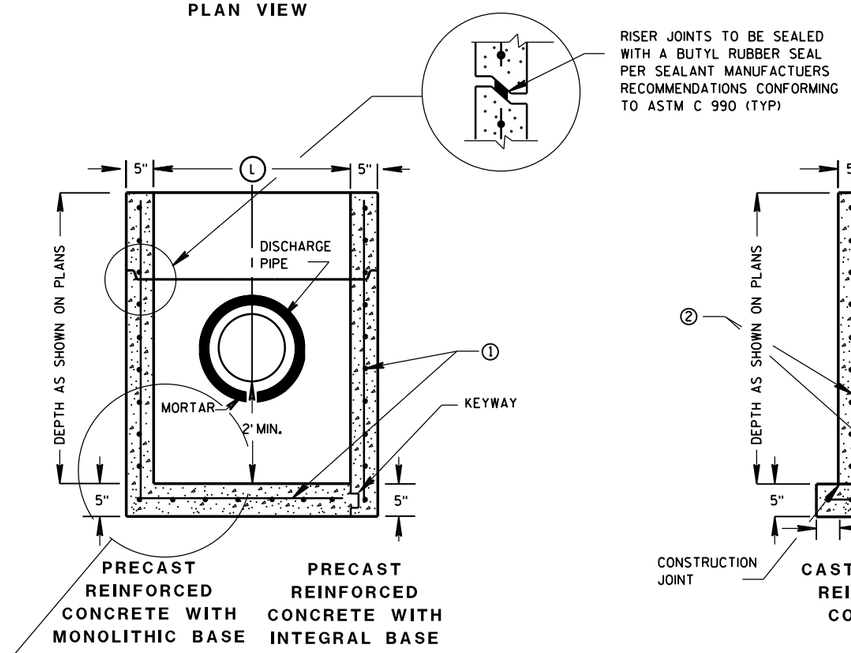
S.D.D. 8 A 8-2



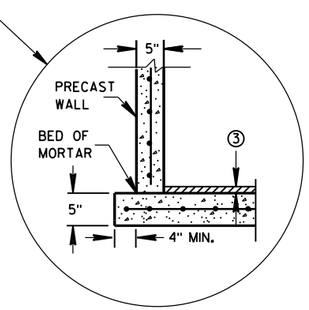
PLAN VIEW



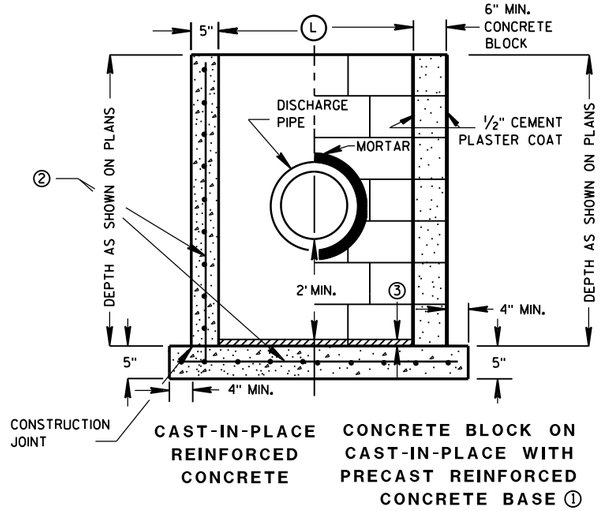
PLAN VIEW



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.

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 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.

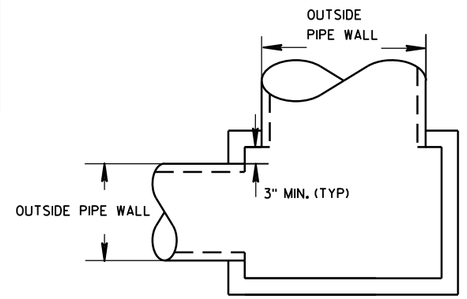
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

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
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

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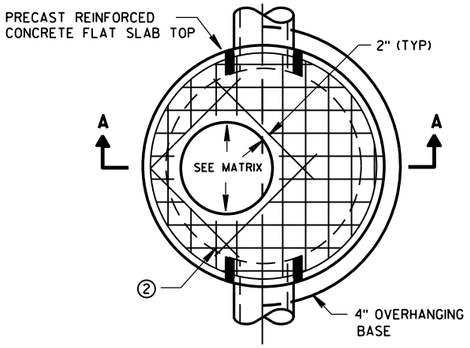
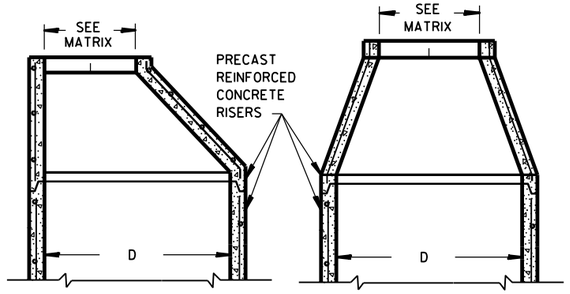
S.D.D. 8 A 9-2

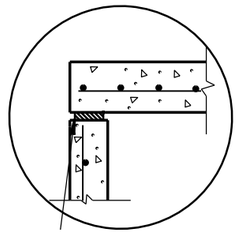


PLAN VIEW CIRCULAR OPENING

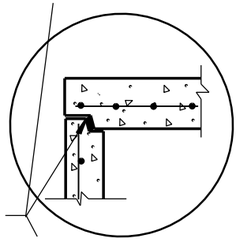


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

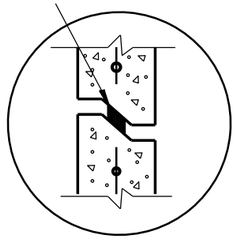


TOP WITH PLAIN END JOINT



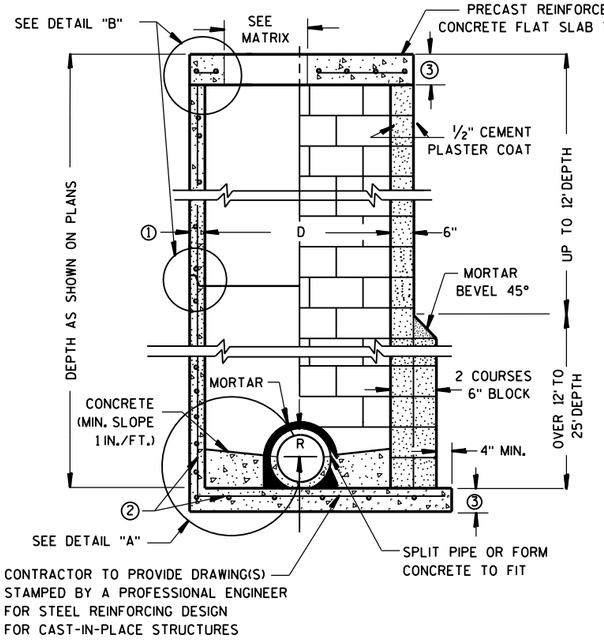
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



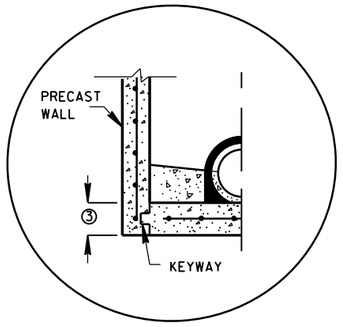
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

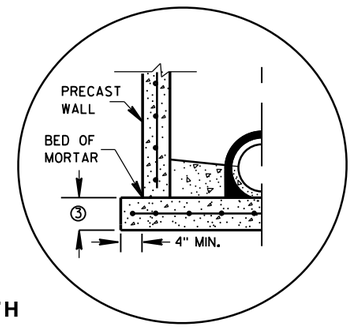


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

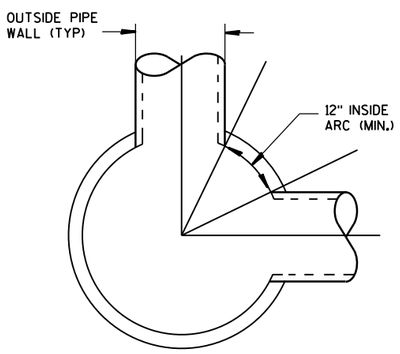


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

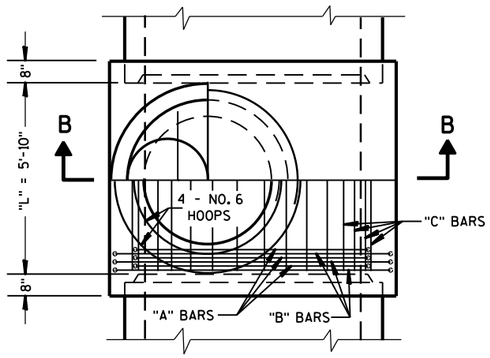
APPROVED

Sept., 2016
DATE

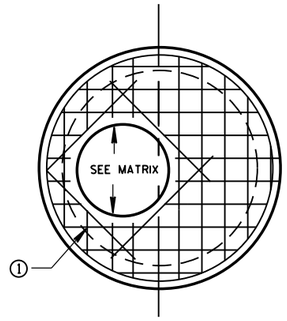
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

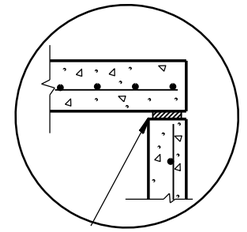
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER



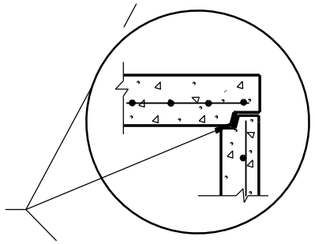
HALF SECTION A-A



PLAN VIEW PRECAST REINFORCED CONCRETE FLAT SLAB TOP WITH ECCENTRIC OPENING

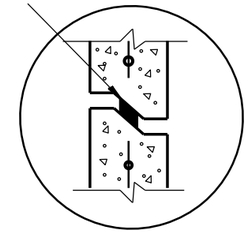


TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "A"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 4T-L", "MANHOLES 4S-M", ETC. THE VARIABLE TEE IS DENOTED BY 4T AND THE VARIABLE SPECIAL IS DENOTED BY 4S. THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

STEPS MEETING 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 $\frac{1}{2}$ 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.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE OR CONCRETE BLOCK STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

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.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

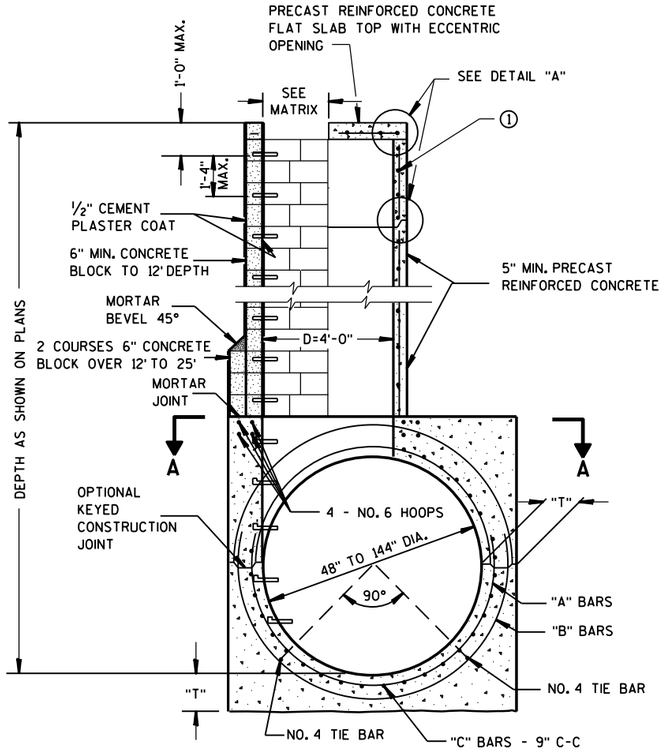
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST MANHOLES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE WITH AASHTO M 199.

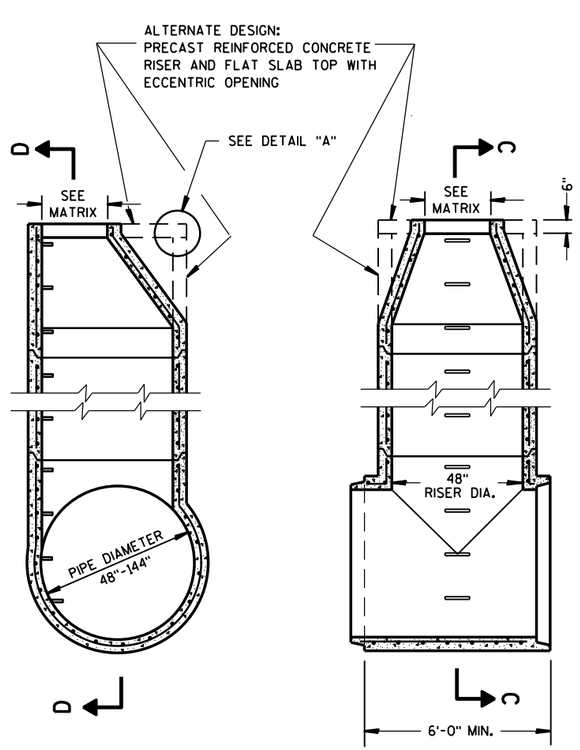
MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X



SECTION B-B

MANHOLE VARIABLE SPECIAL 4-FT DIAMETER



SECTION C-C

SECTION D-D

MANHOLE VARIABLE TEE 4-FT DIAMETER

NOTES FOR MANHOLE VARIABLE SPECIAL 4-FT DIAMETER

NOTE: ALL "A", "B", AND "C" BAR STEEL REINFORCING IS THE SAME DIAMETER WHICH VARIES WITH DEPTH.
NO. 5 BARS TO 20' DEPTH
NO. 6 BARS OVER 20' TO 30' DEPTH
NO. 7 BARS OVER 30' TO 40' DEPTH

THE "A" AND "B" BARS MAY BE PLACED IN ONE OR TWO SEGMENTS, AND SHALL LAP 24 BAR DIAMETERS.

"C" BARS SHALL HAVE STANDARD HOOKED ENDS.

NOTE: "T" THROUGHOUT LENGTH "L" SHALL BE 13" FOR PIPE DIAMETER 48" TO 84" AND 15" FOR PIPE DIAMETER GREATER THAN 84".

MANHOLE VARIABLE TEE AND SPECIAL 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2016 — DATE

/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR

FHWA

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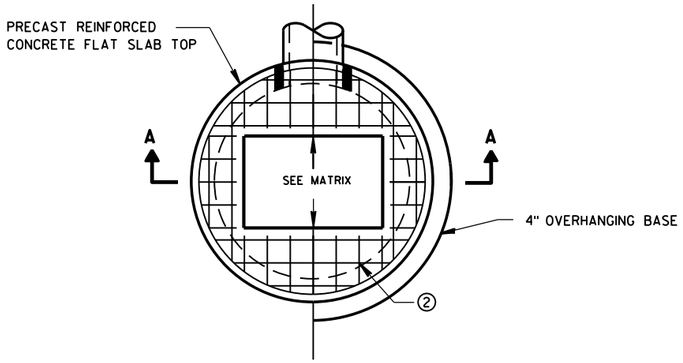
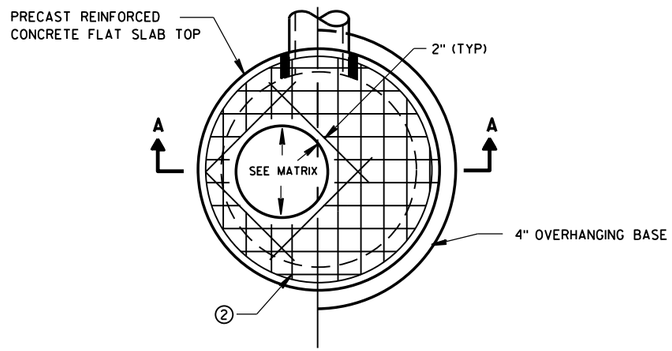
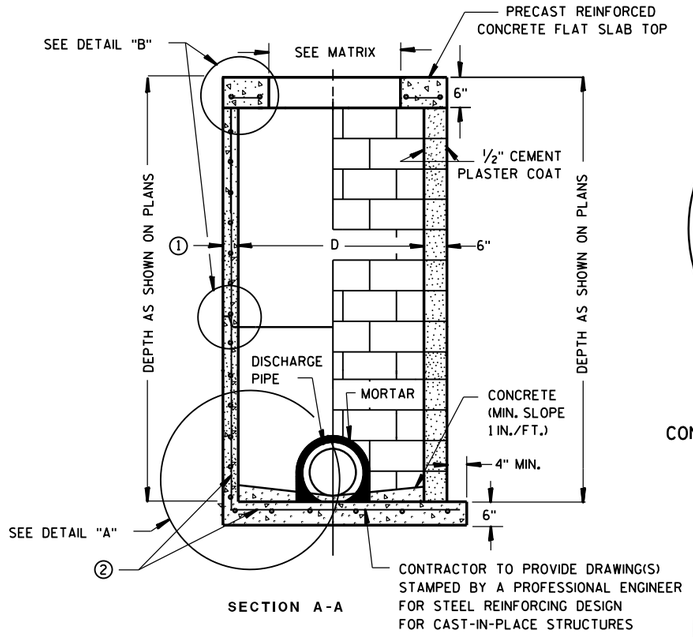
S.D.D. 8 B 11-2



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

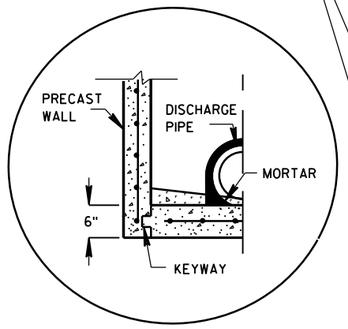


SECTION A-A

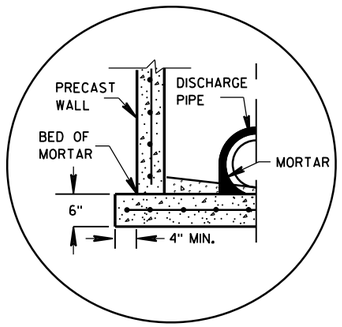
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

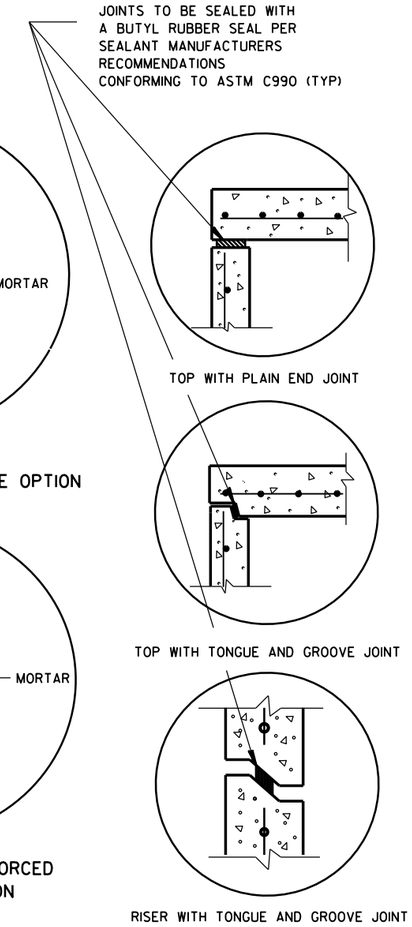


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



TOP WITH PLAIN END JOINT

TOP WITH TONGUE AND GROOVE JOINT

RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

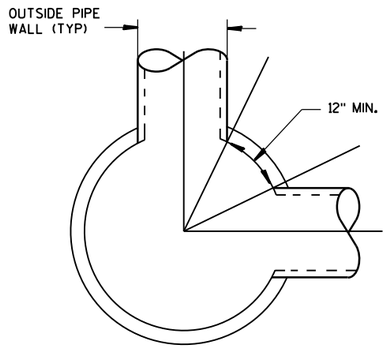
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS | UNIT SUPERVI ENT
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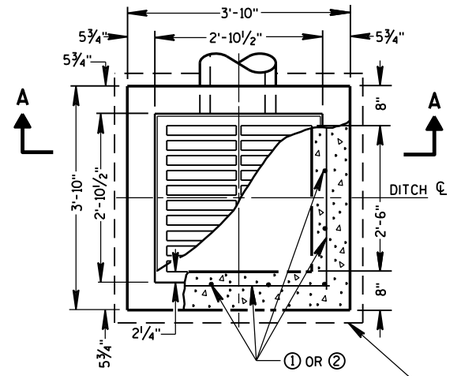
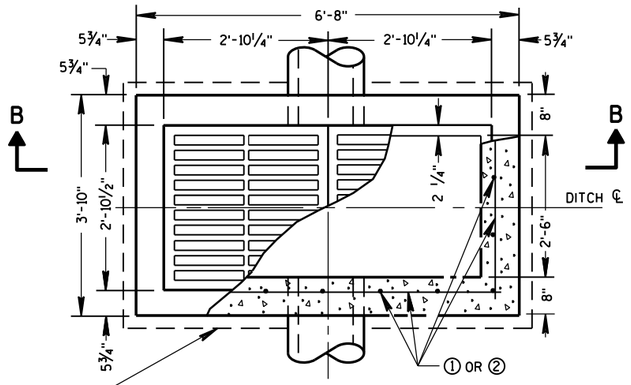
INLETS 3-FT AND 4-FT DIAMETER

6

S.D.D. 8 C 6-2

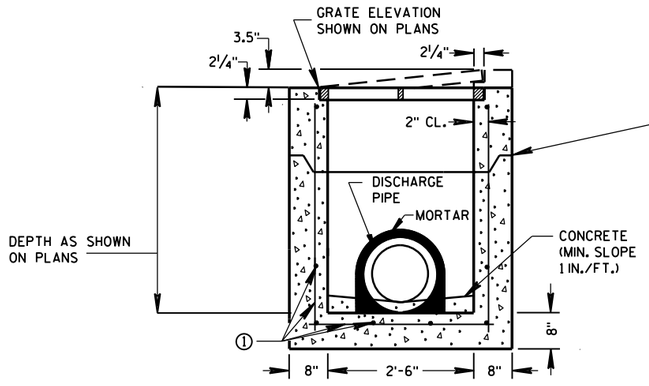


PLAN VIEW

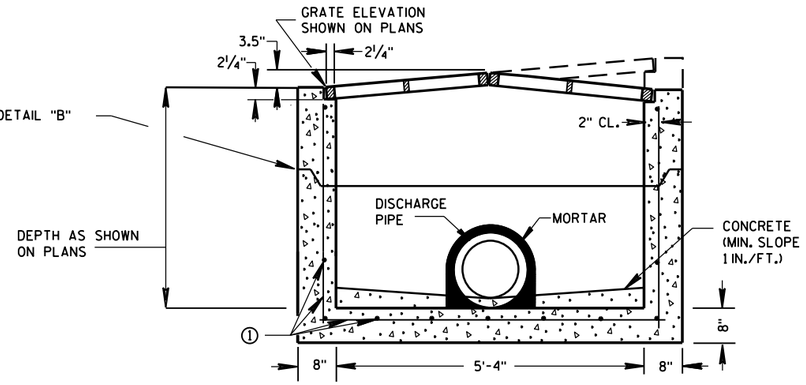


PLAN VIEW

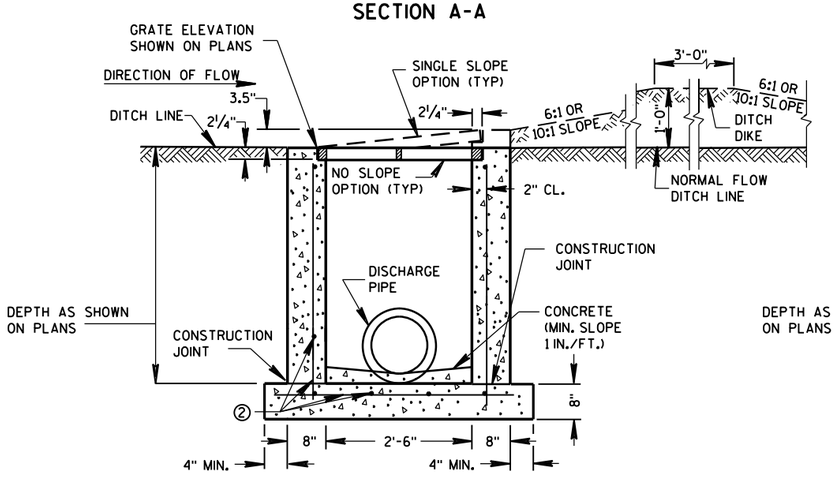
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



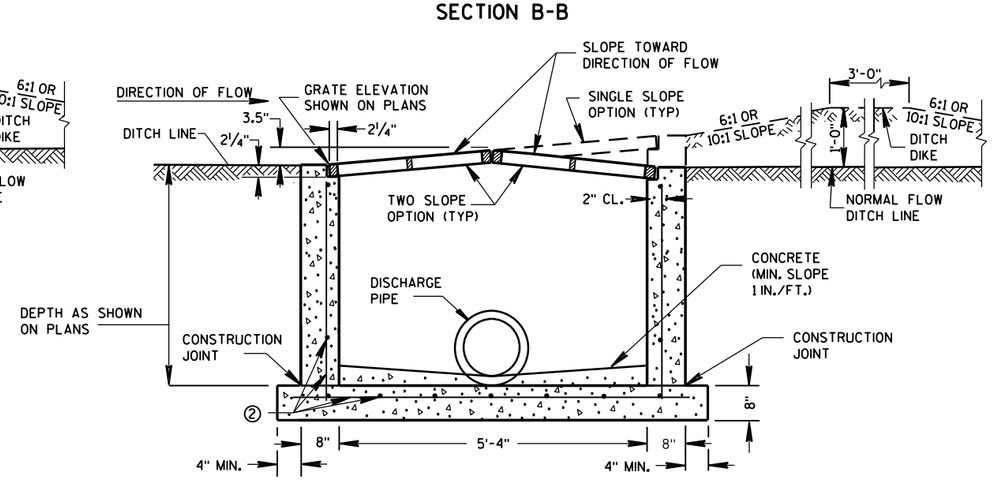
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE 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.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

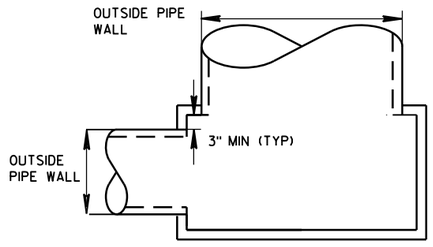
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

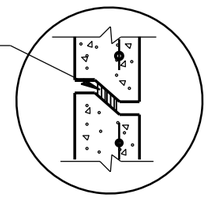
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

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



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
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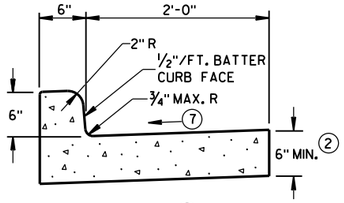
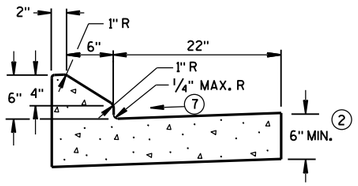
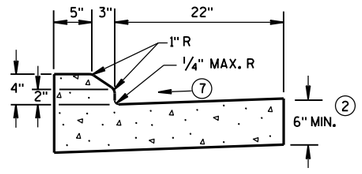


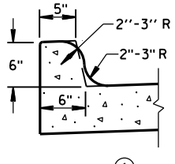
TYPES A (1) & D



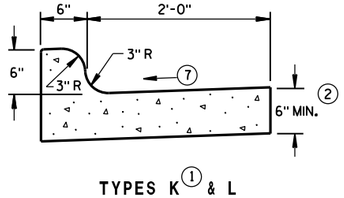
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

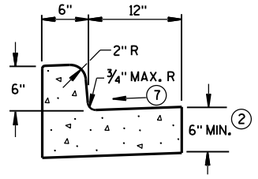


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



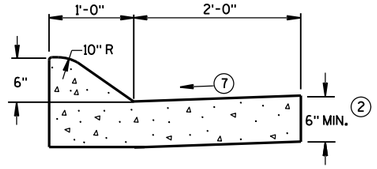
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

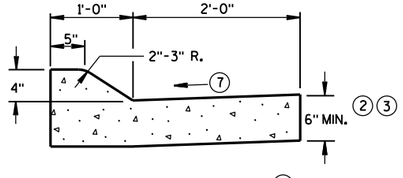


TYPES A (1) & D

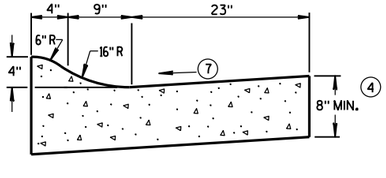
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

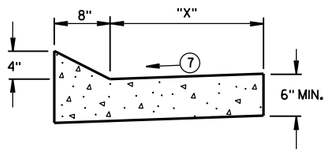


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

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.

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.

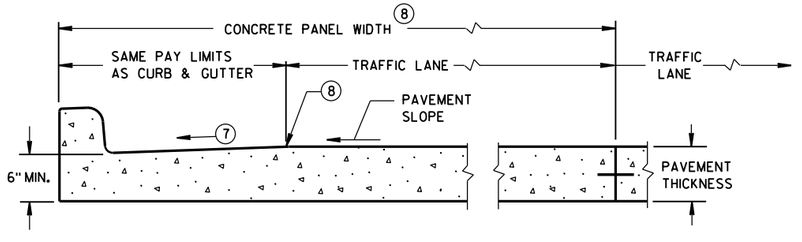
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

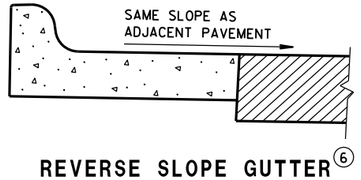
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER

* BIKE LANE IS NOT SHOWN.



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB & GUTTER

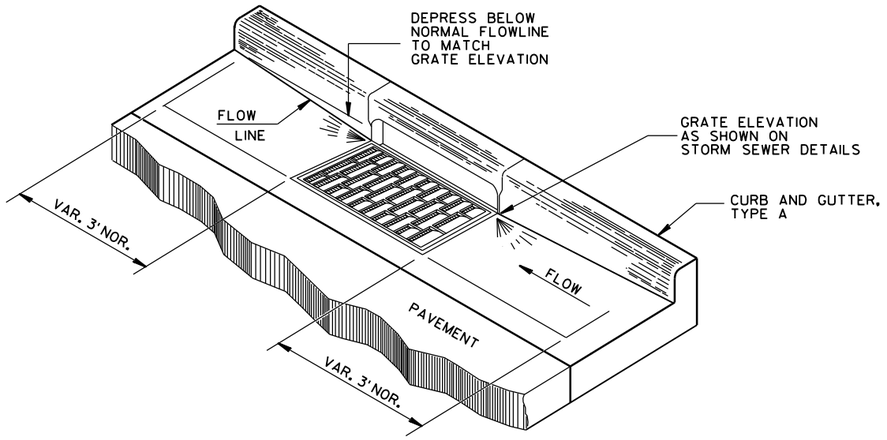
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 1-20a

6

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

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

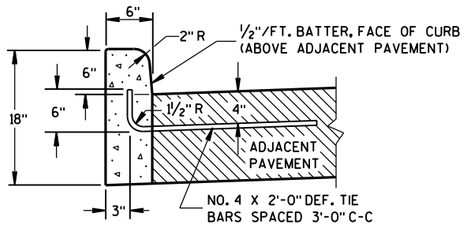
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

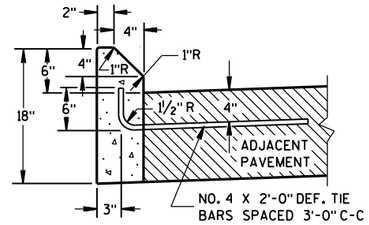
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

(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.

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

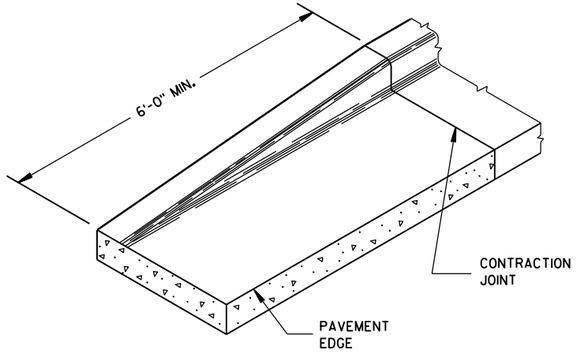


TYPES A (1) & D

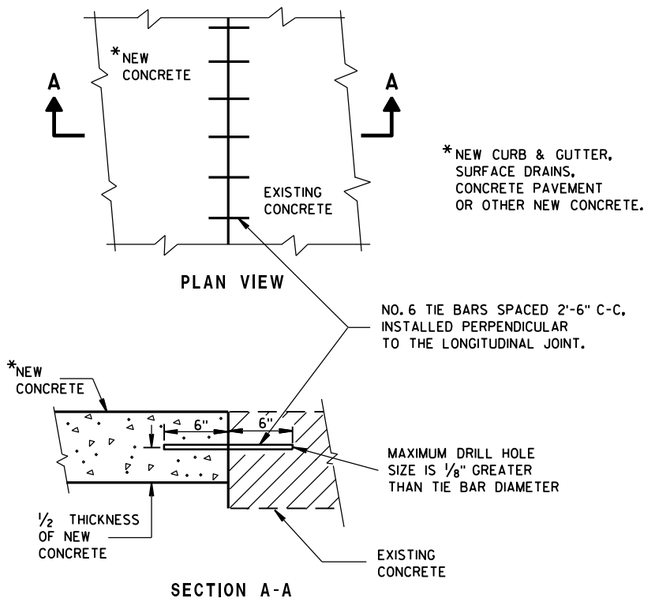


TYPES G (1) & J

CONCRETE CURB

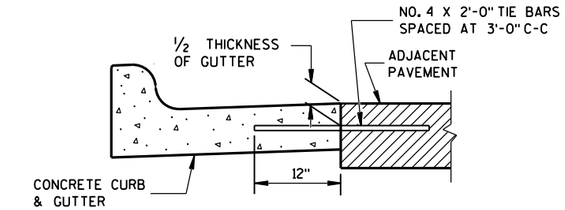


END SECTION CURB & GUTTER

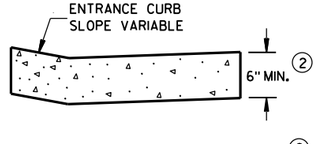


SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
353 — ENT
FHWA

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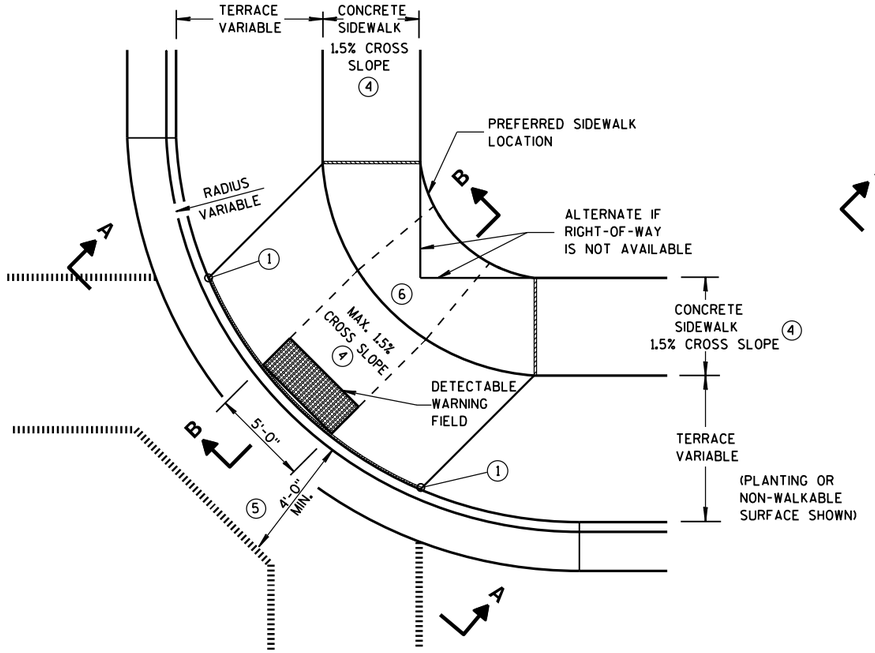
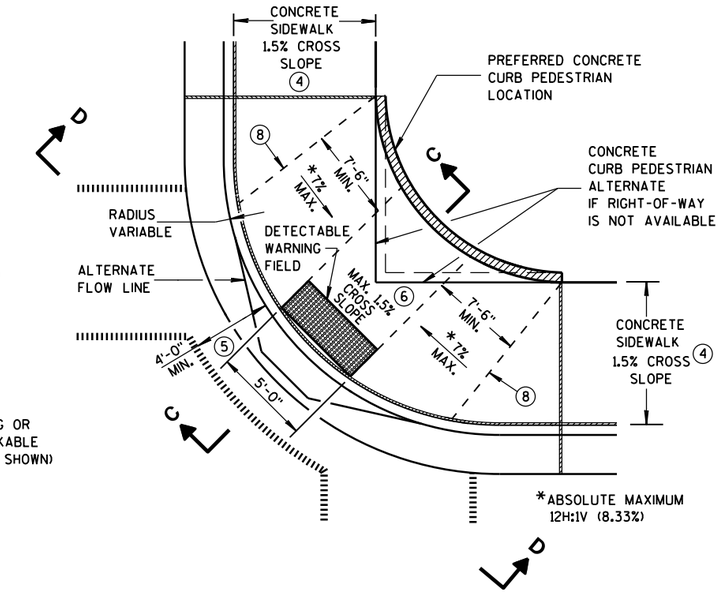
S.D.D. 8 D 1-20b



PLAN VIEW

TYPE 1 RAMP

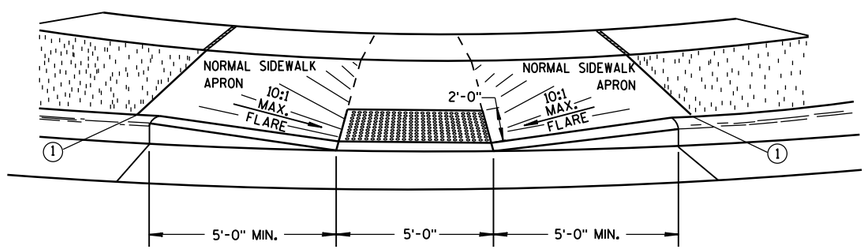
(CENTER OF CORNER RADIUS)



PLAN VIEW

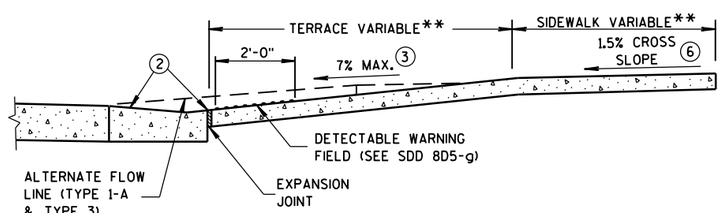
TYPE 1-A RAMP

(NO TERRACE)

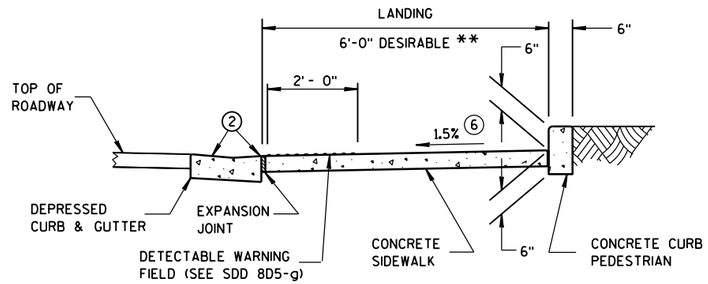


VIEW A-A

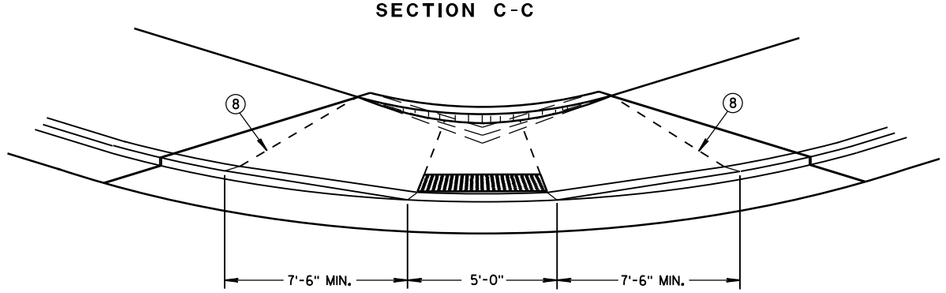
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 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 MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) 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

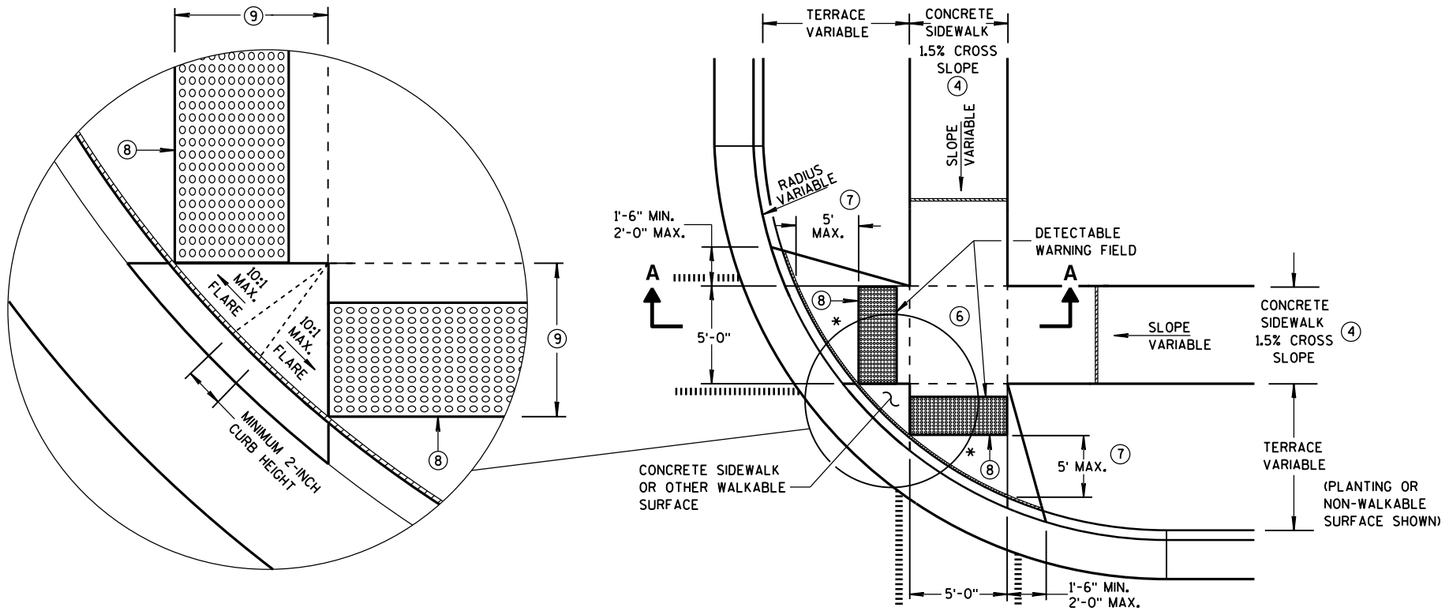
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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



PLAN VIEW

TYPE 2 RAMP

(ON LINE WITH SIDEWALK)

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 MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) 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.

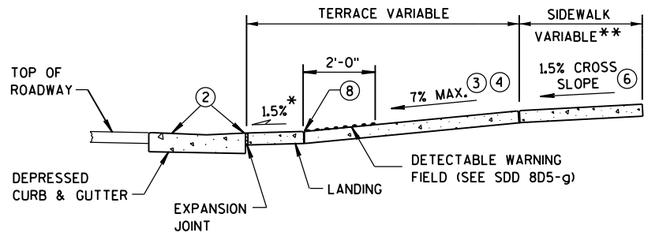
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

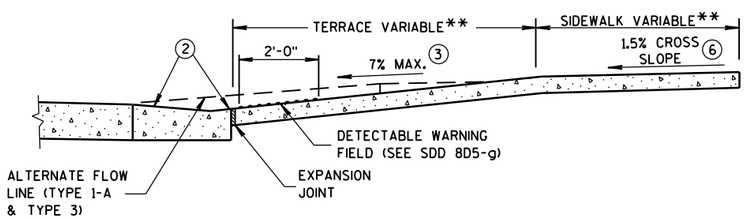
(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

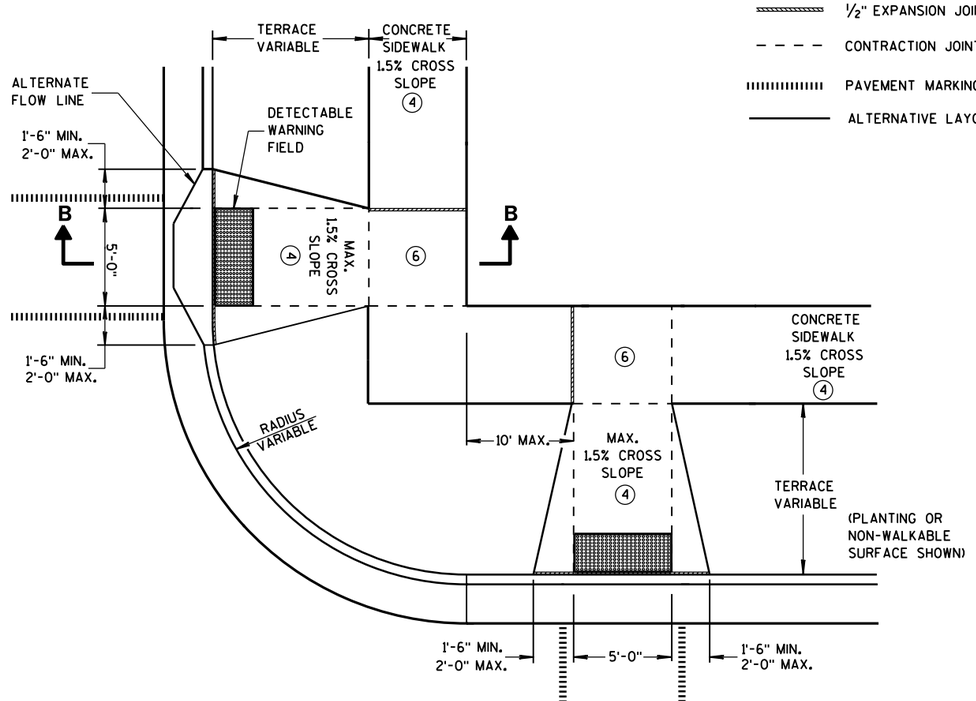


SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



PLAN VIEW

TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

LEGEND

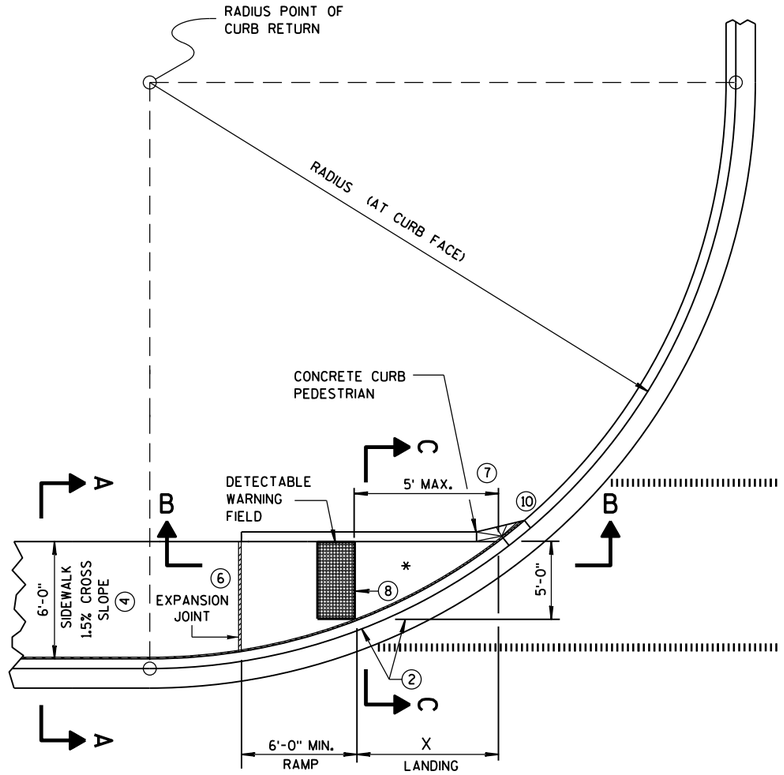
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

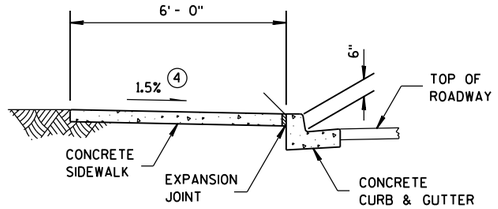
S.D.D. 8 D 5-19b



CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X
10 FEET	4'-7"
15 FEET	6'-5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

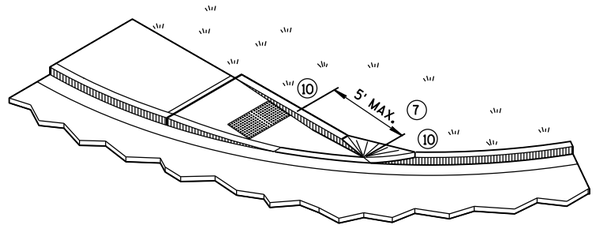
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

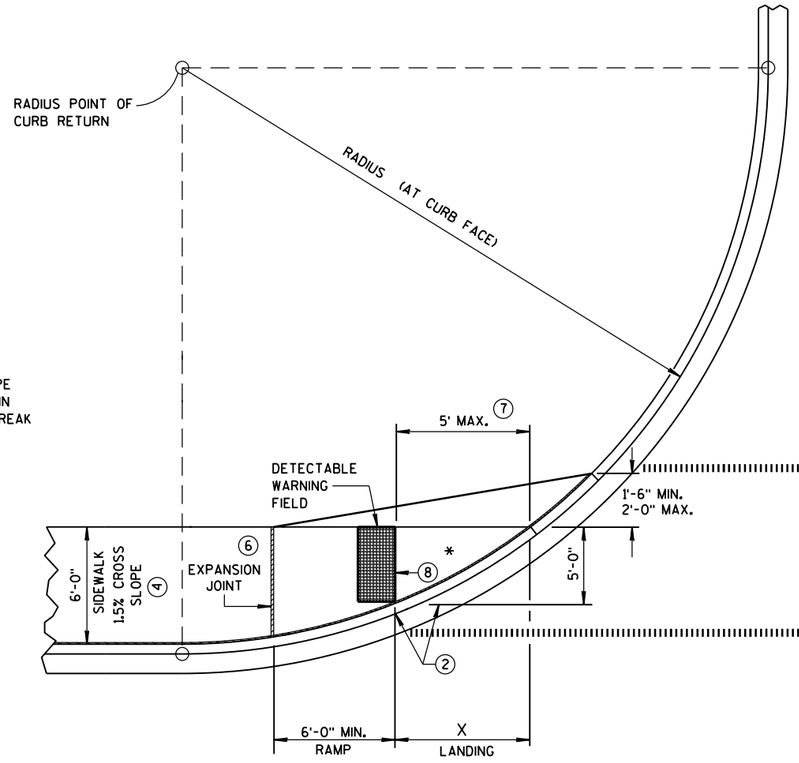
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

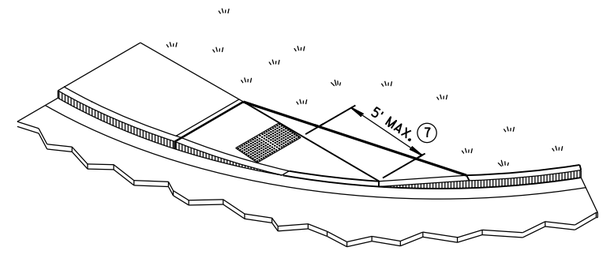


ISOMETRIC VIEW FOR TYPE 4A

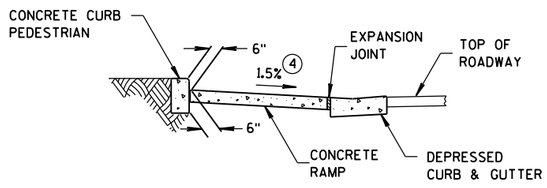


* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

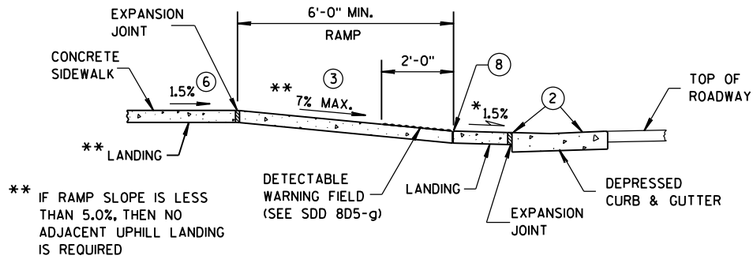
CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1



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

LEGEND

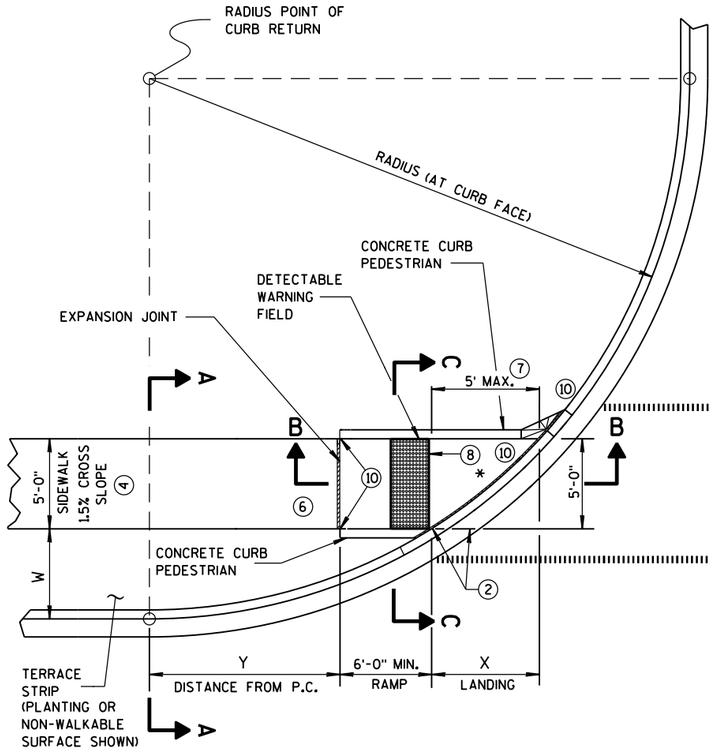
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 4A AND 4A1

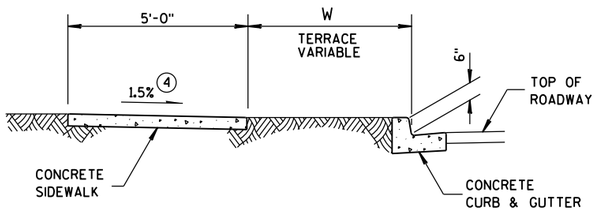
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

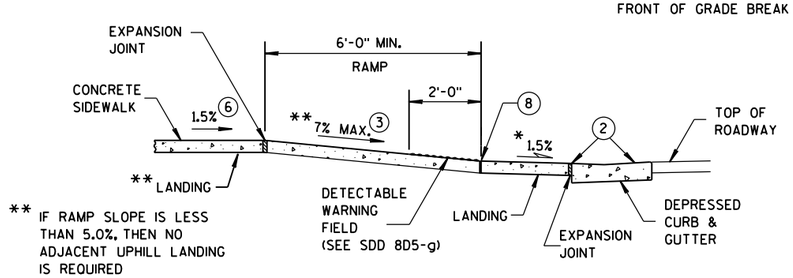
S.D.D. 8 D 5-19c



CURB RAMP TYPE 4B
PLAN VIEW



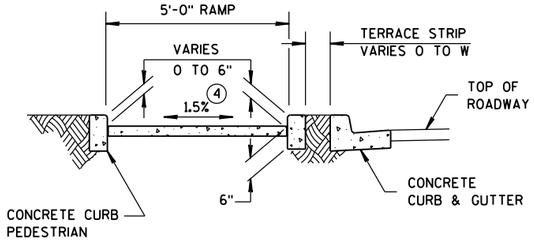
SECTION A-A FOR TYPE 4B



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4B



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"		W = 8'-0"		W = 9'-0"		W = 10'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2'-10¼"	0'-5"	2'-1"	1'-4½"	1'-5"	2'-1"	0'-10"	2'-7½"	0'-3¼"	3'-0¼"						
15 FEET	4'-6¾"	2'-1¾"	3'-9"	3'-5¼"	3'-1¼"	4'-6"	2'-6¾"	5'-4½"	2'-1"	6'-1"	1'-8"	6'-8½"	1'-3¼"	7'-2½"	0'-10¾"	7'-7¼"
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-7"	3'-3"	8'-6½"	2'-10"	9'-4½"	2'-5½"	10'-1¼"	2'-1¼"	10'-9"
30 FEET			6'-9¼"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"	4'-5½"	13'-7¾"	4'-0¾"	14'-8½"	3'-8½"	15'-8¼"
40 FEET									6'-1¾"	15'-8½"	5'-8"	17'-2"	5'-3"	18'-5¾"	4'-10¾"	19'-8¼"
50 FEET															5'-10¼"	23'-2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

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 MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

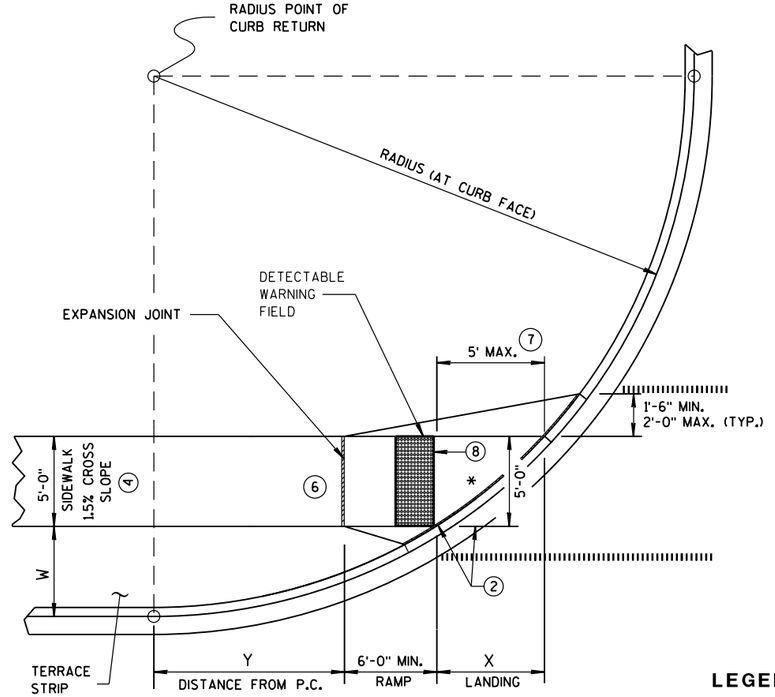
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

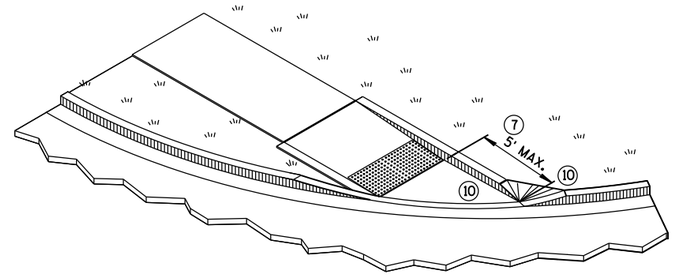
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

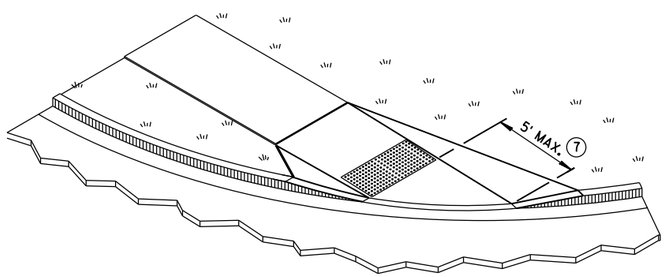
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

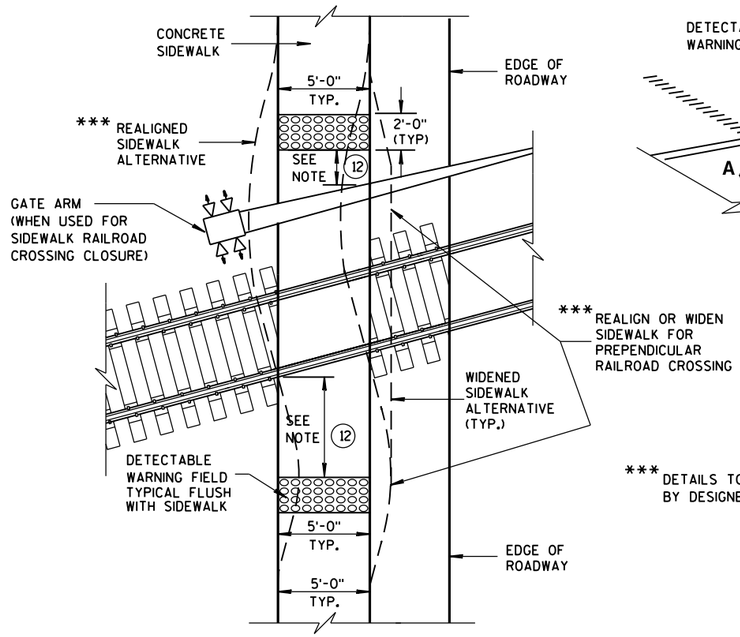
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

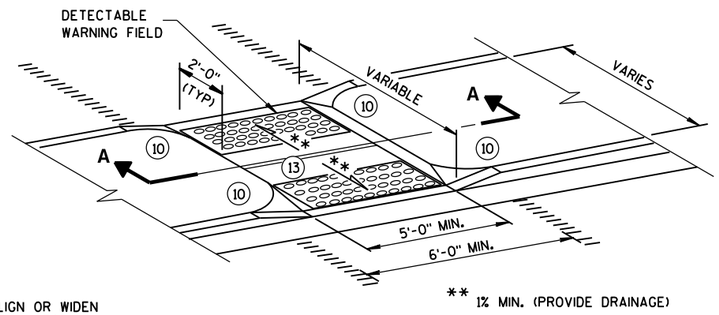
6

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



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING
TYPE 5

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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 MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) 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.

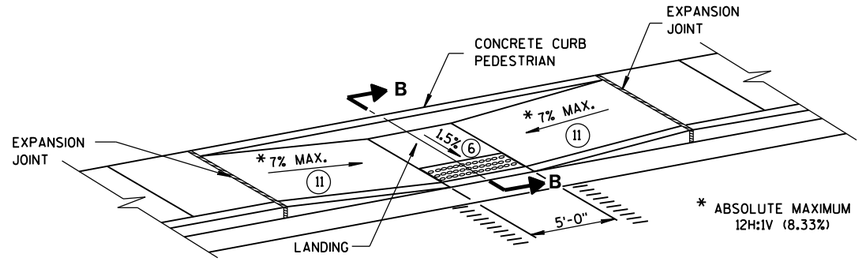
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

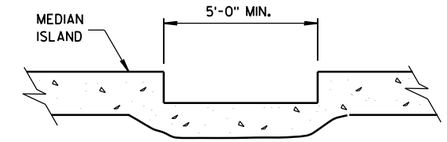
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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.

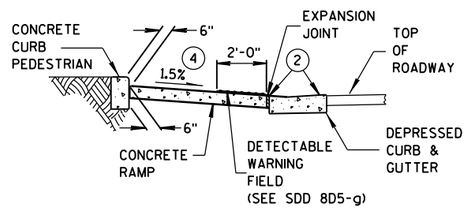
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.



MID-BLOCK CROSSING
TYPE 7A

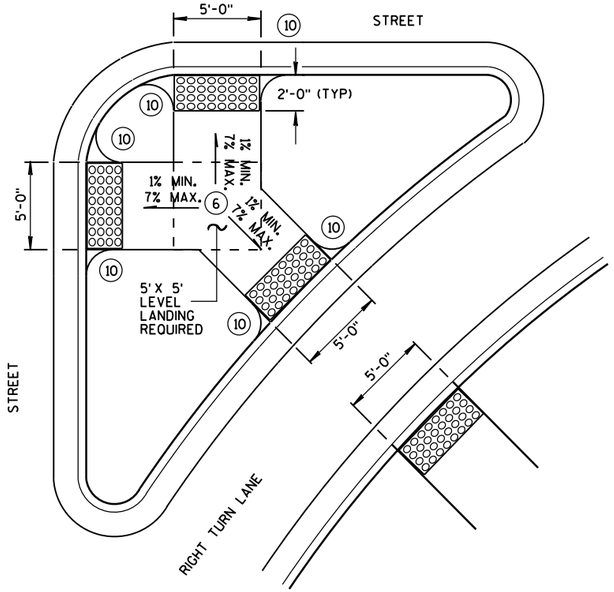


SECTION A-A

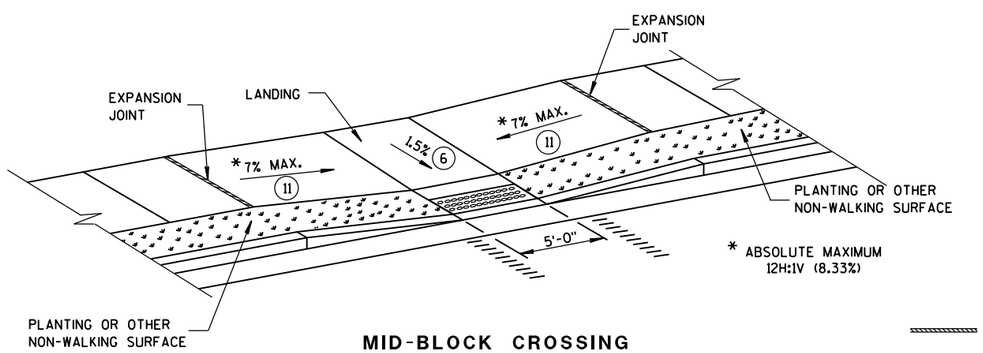


SECTION B-B

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

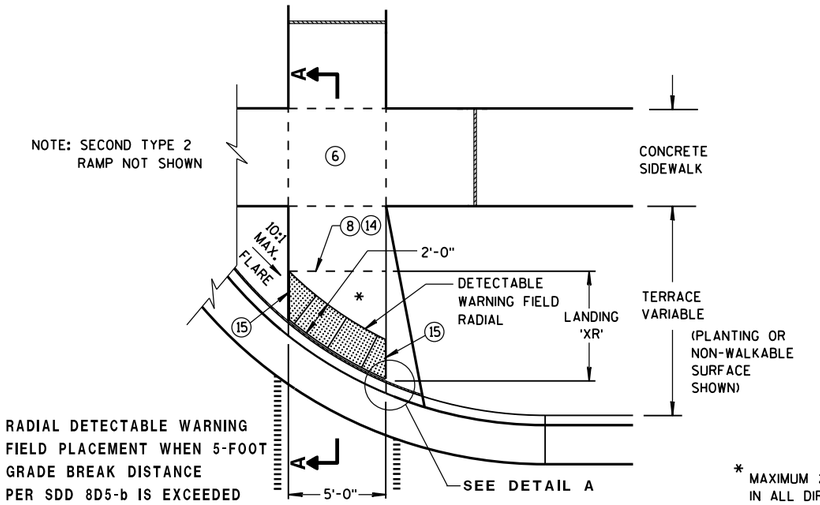
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-19e

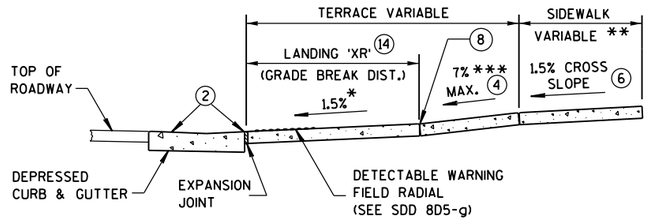


TYPE 2 RAMP
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION A-A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS (DWFs) THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) 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.

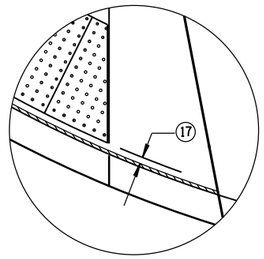
(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION 'XR') REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

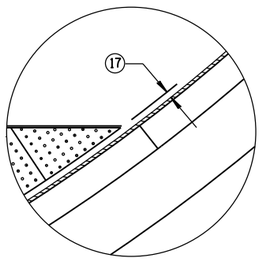
(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1'X 2' RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2'-0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

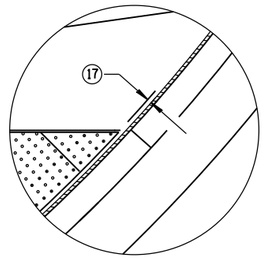
(17) A MAXIMUM 3-INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.



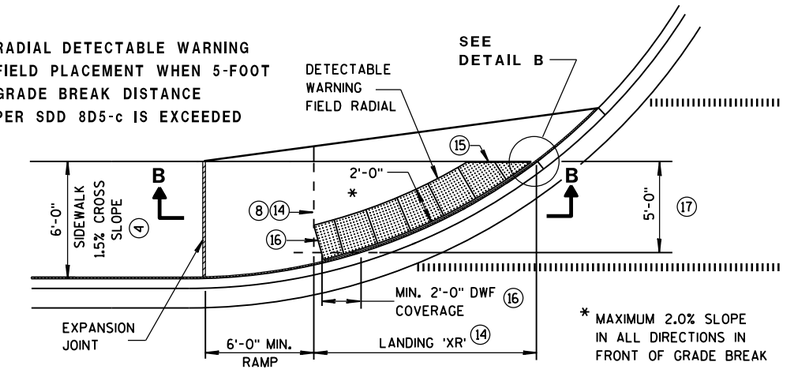
DETAIL A



DETAIL B

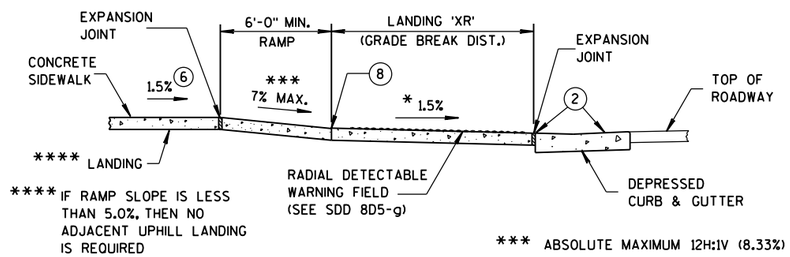


DETAIL C



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

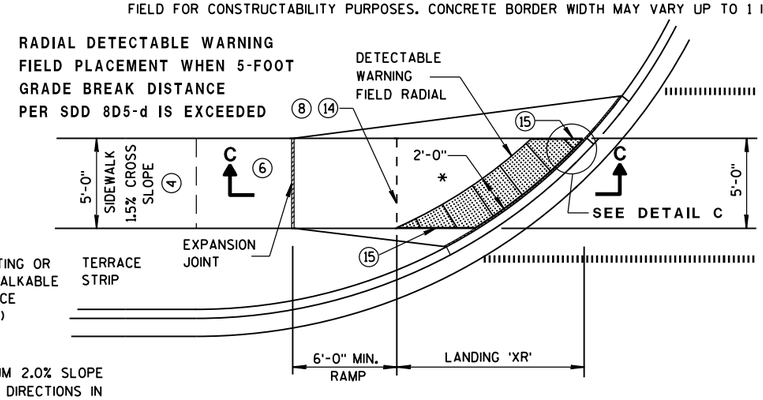
CURB RAMP TYPE 4A1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

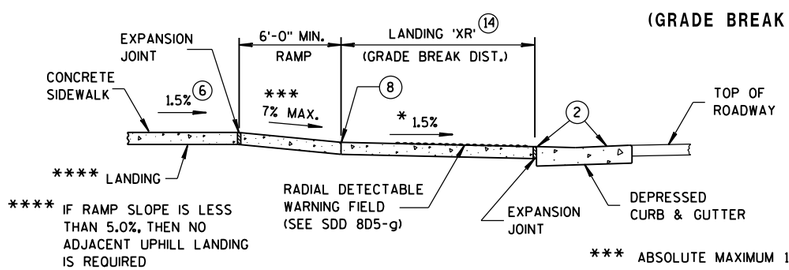
*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION B-B FOR TYPE 4A1



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

CURB RAMP TYPE 4B1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION C-C FOR TYPE 4B1

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-19f

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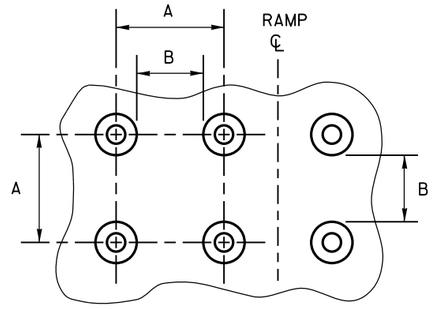
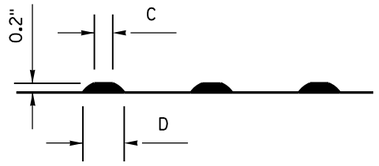
S.D.D. 8 D 5-19f

	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

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

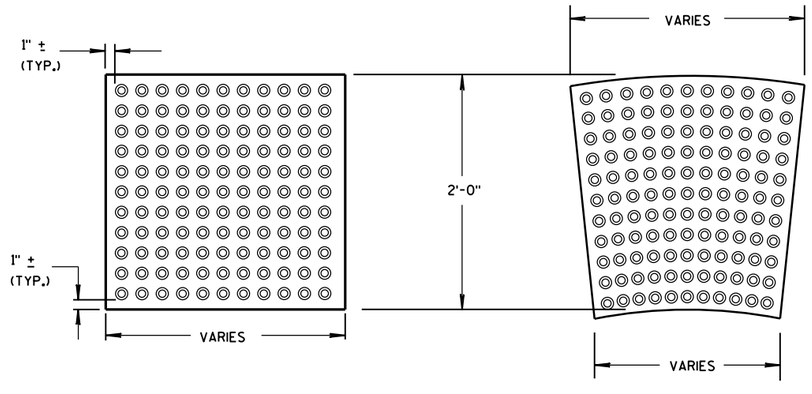
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGES IN COMBINATION WITH SQUARE PANELS ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

⑮ FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

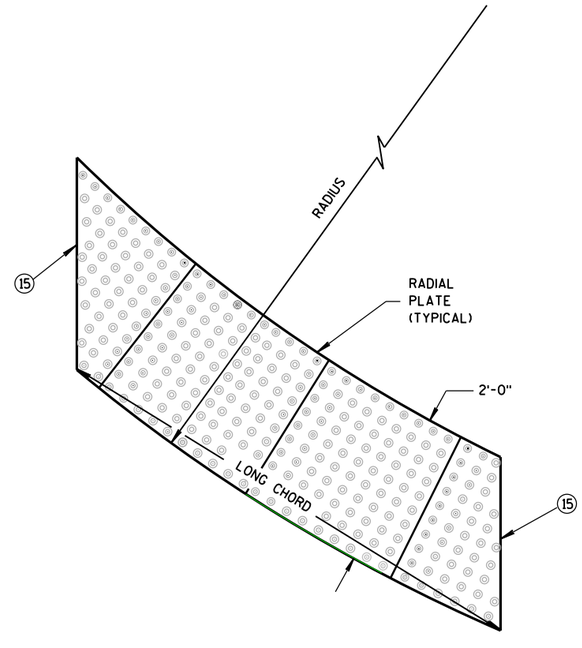


RECTANGULAR PLATES

RADIAL PLATES

DETECTABLE WARNING FIELDS (TYPICAL)

PLAN VIEW



RADIAL DETECTABLE WARNING FIELD ATTRIBUTES

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

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S.D.D. 8 D 5-19g

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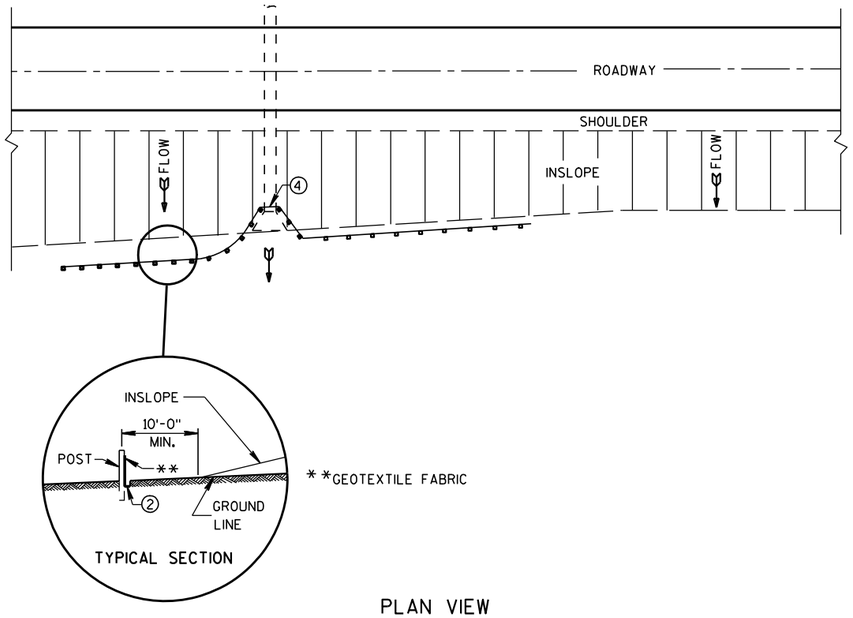
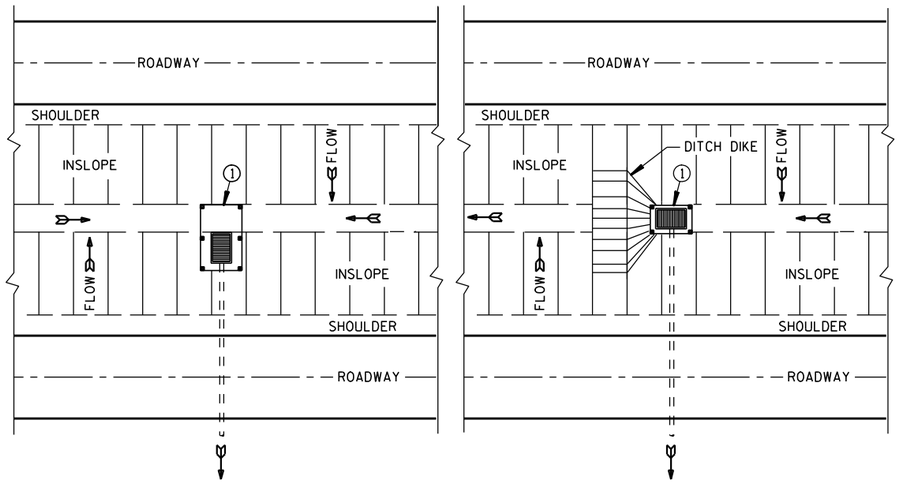
S.D.D. 8 D 5-19g



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



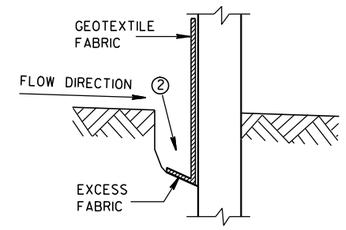
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

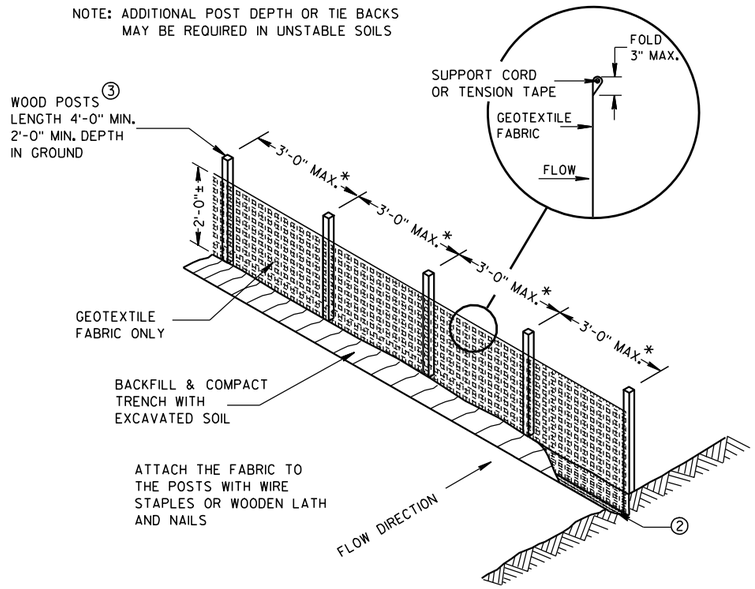
GENERAL NOTES

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

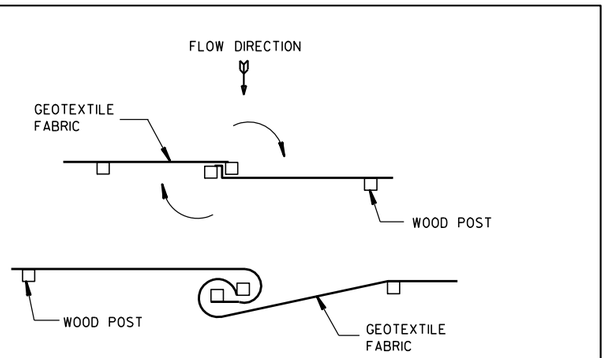
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



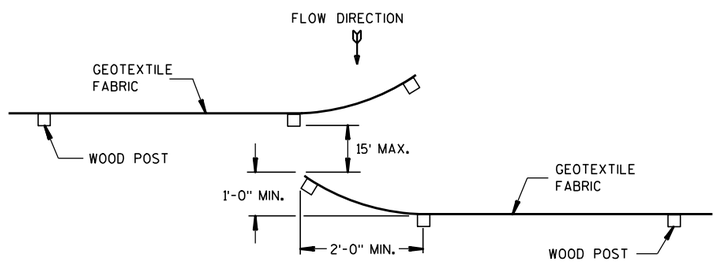
TRENCH DETAIL



SILT FENCE

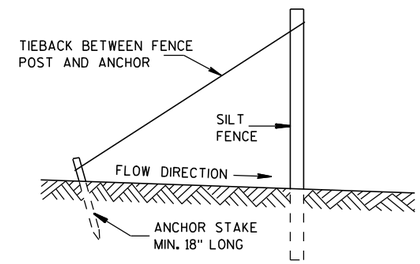


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 E 9-6

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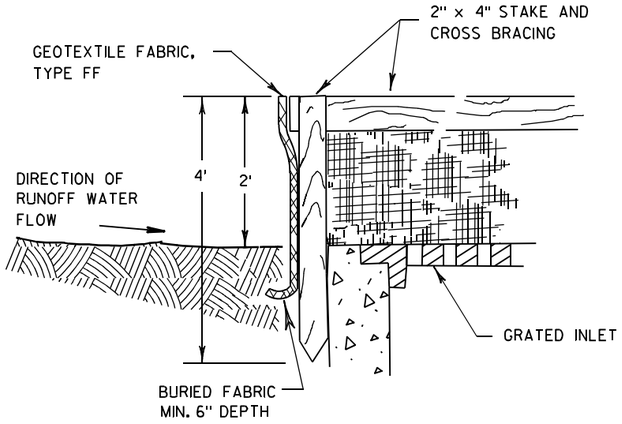
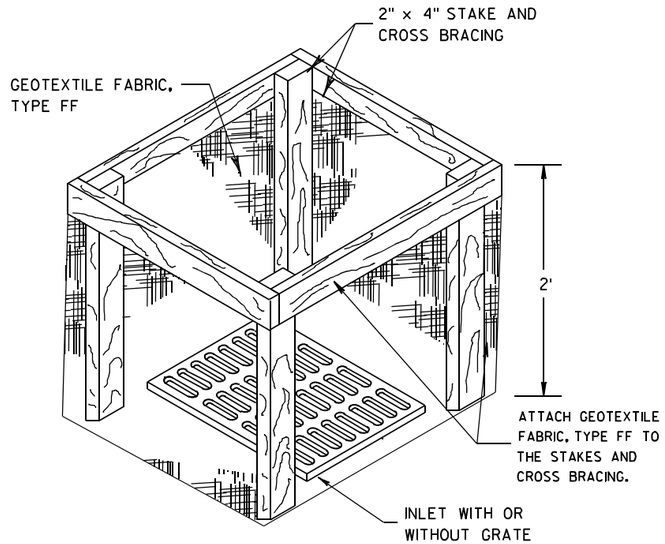
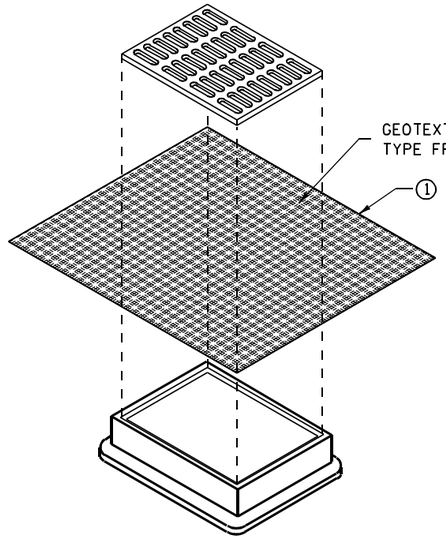
S.D.D. 8 E 9-6



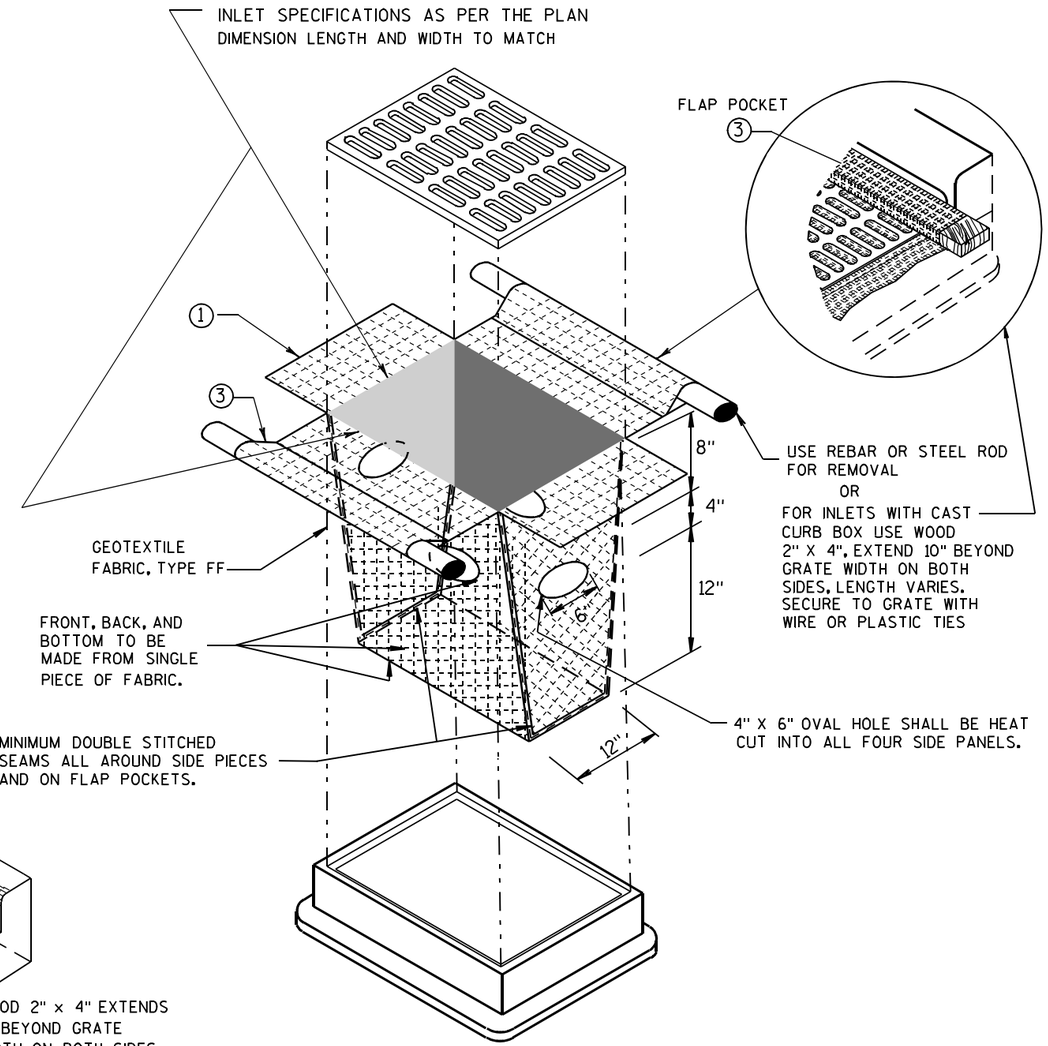


INLET PROTECTION, TYPE A



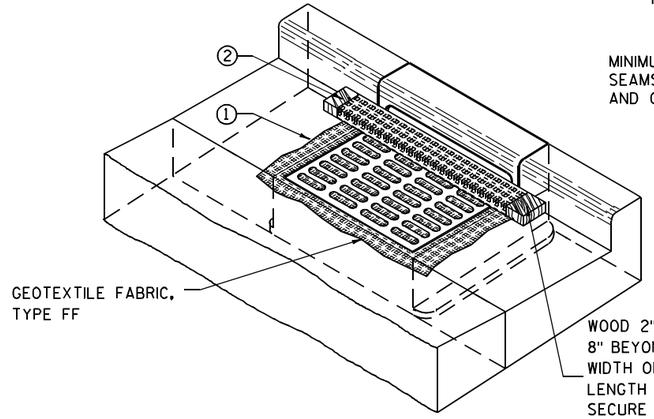
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

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

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

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

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

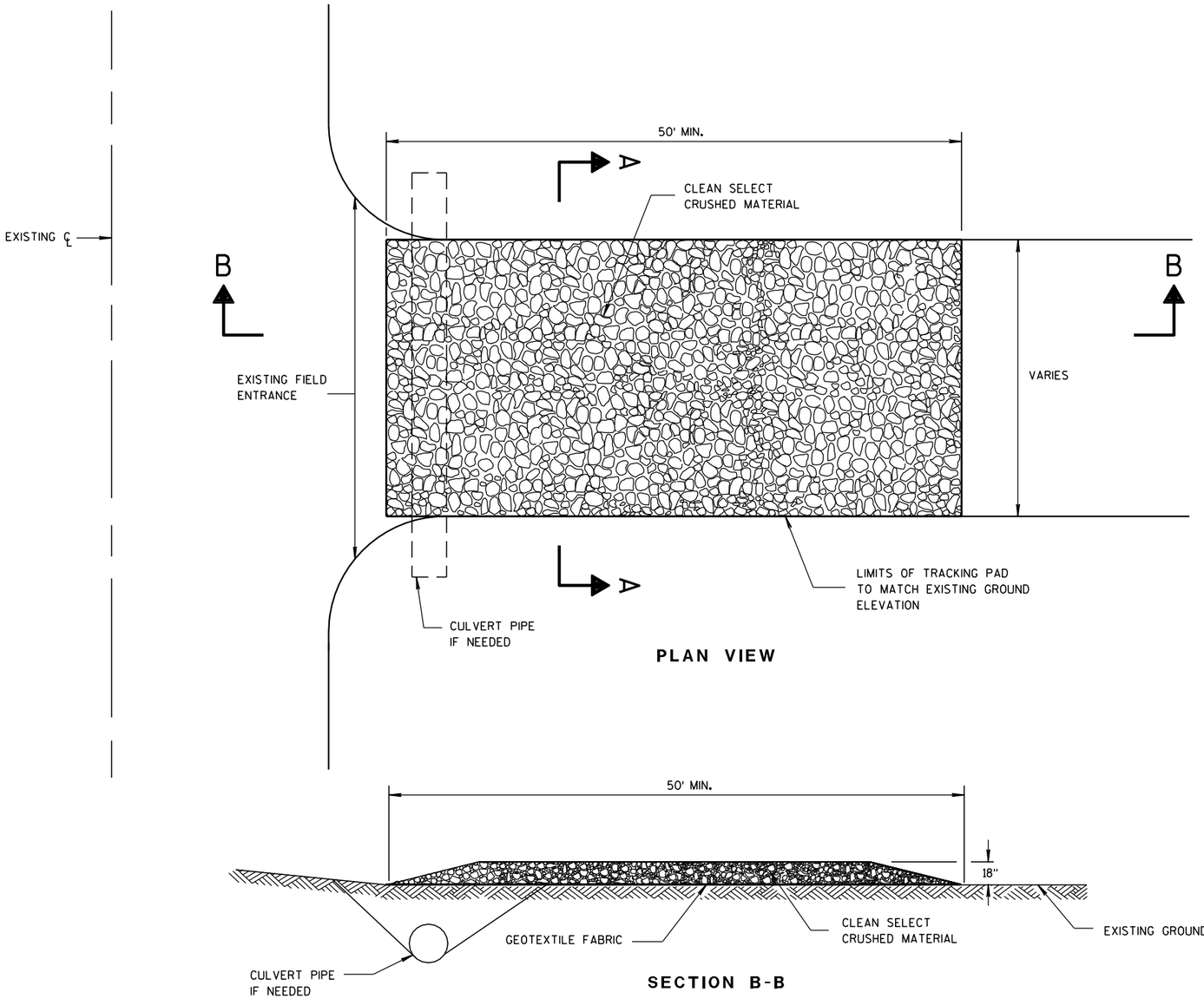
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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.

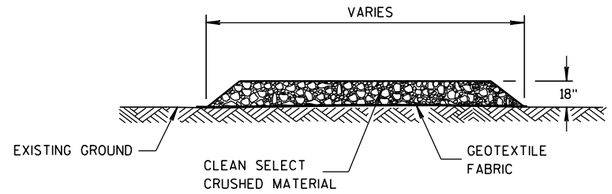
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

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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S.D.D. 8 E 14-1

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

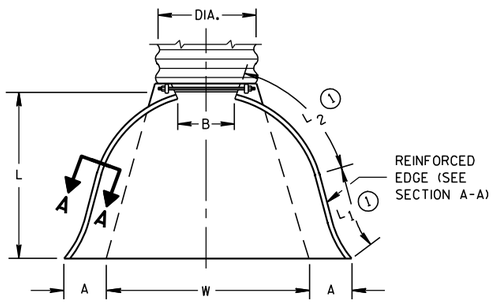
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

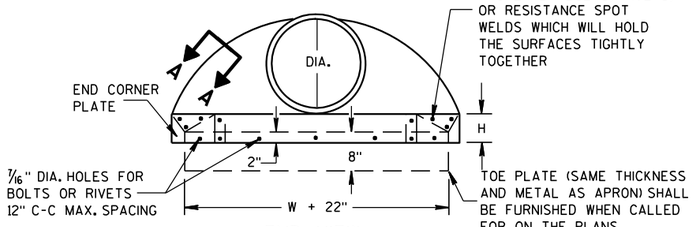
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

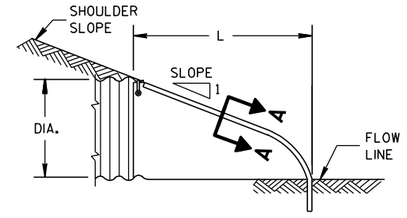
*MINIMUM
**MAXIMUM



PLAN VIEW

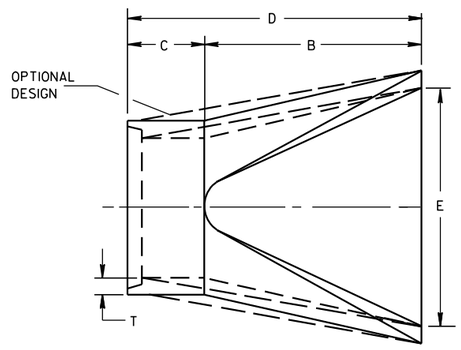


END VIEW

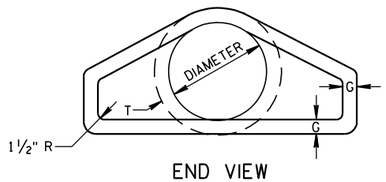


SIDE ELEVATION

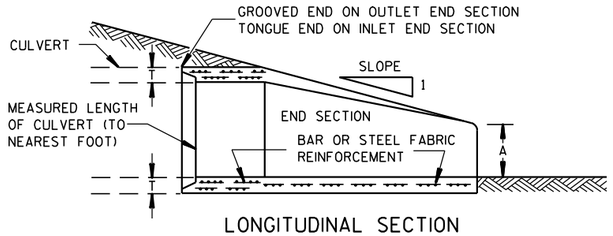
METAL ENDWALLS



PLAN

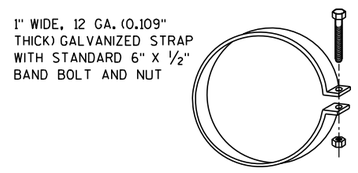


END VIEW



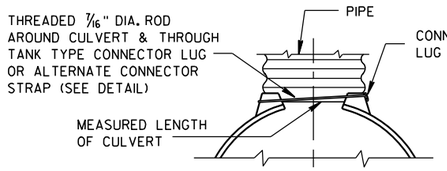
LONGITUDINAL SECTION

CONCRETE ENDWALLS

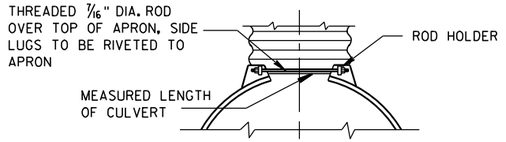


ALTERNATE FOR TYPE 1 CONNECTION

END SECTION CONNECTOR STRAP

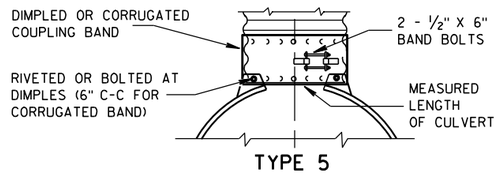


TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE

TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

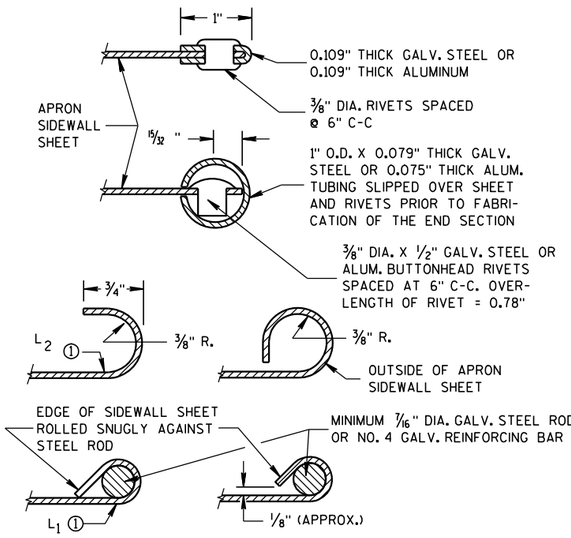
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

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.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

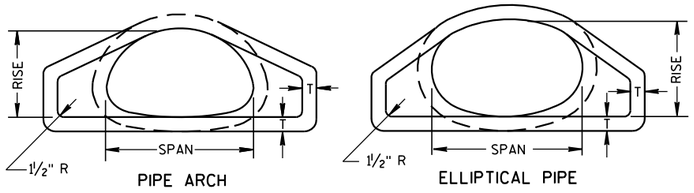
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

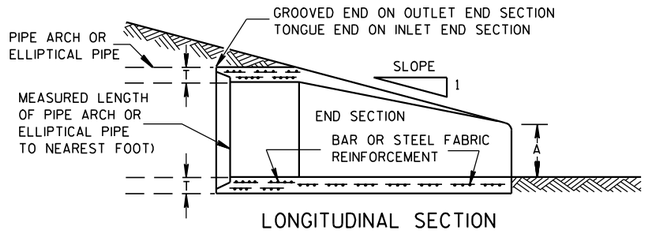
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

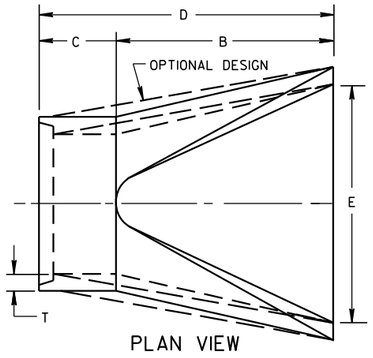
6
S.D.D. 8 F 1-11



END VIEW

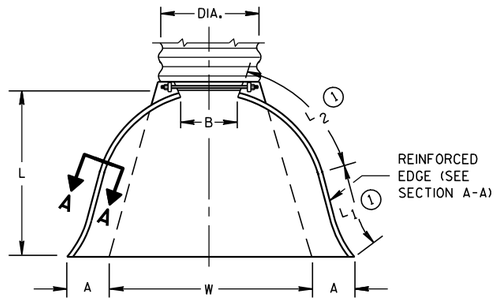


LONGITUDINAL SECTION

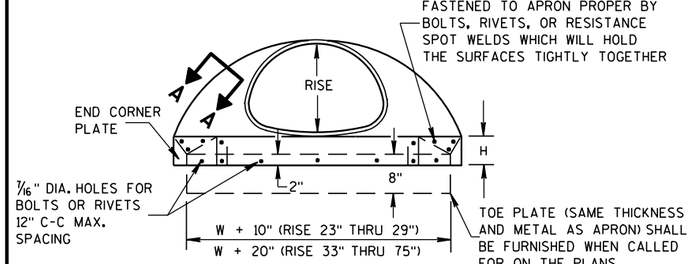


PLAN VIEW

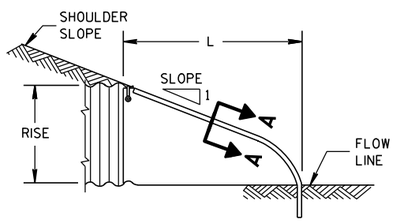
CONCRETE ENDWALLS



PLAN VIEW

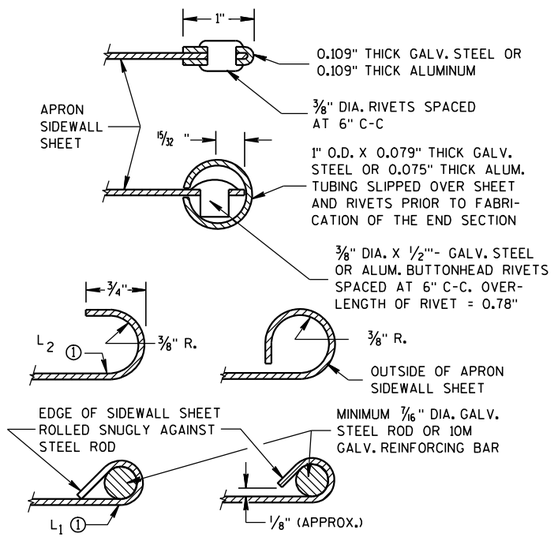


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

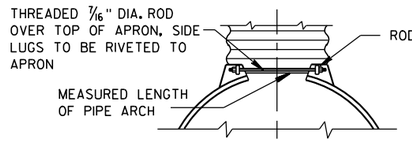
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

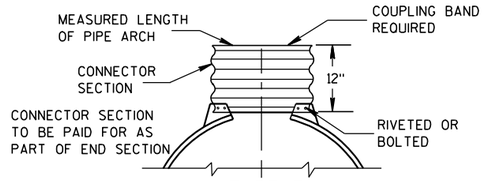
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



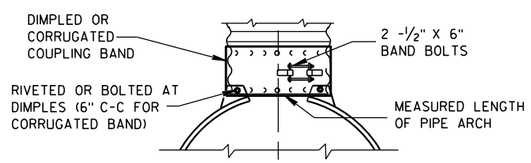
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

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.

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

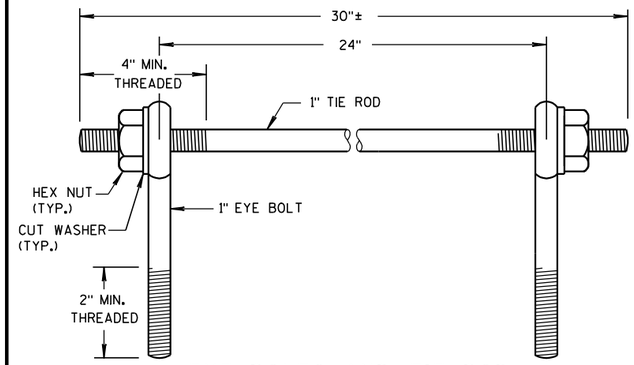
FHWA

6

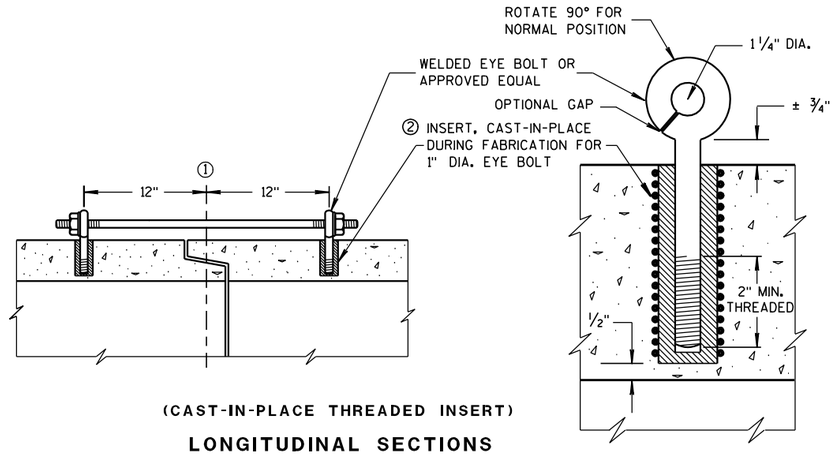
S.D.D. 8 F 2-1

6

S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

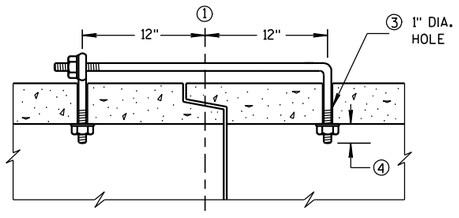
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

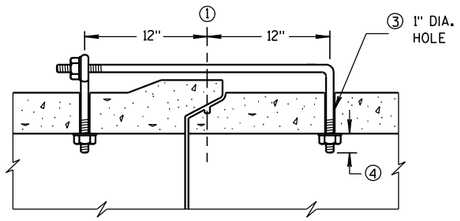
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

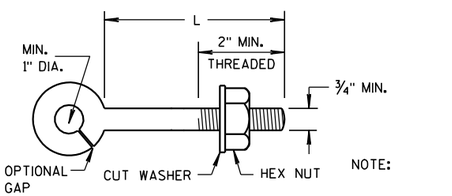


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

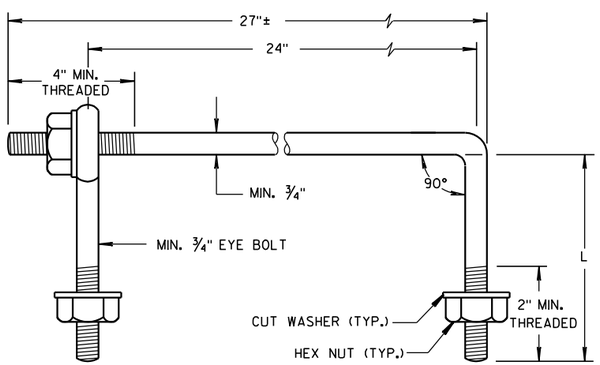
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

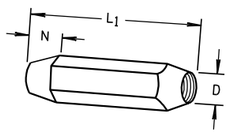
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



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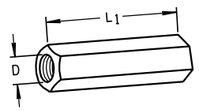
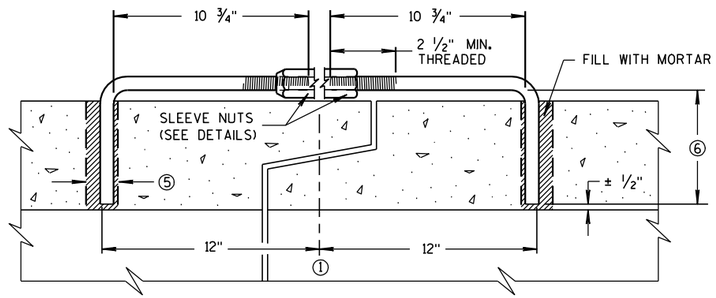


PLAIN

RIGHT AND LEFT THREADS

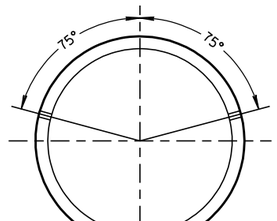
SLEEVE NUTS



LONGITUDINAL SECTION

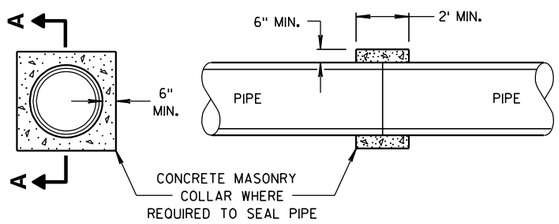
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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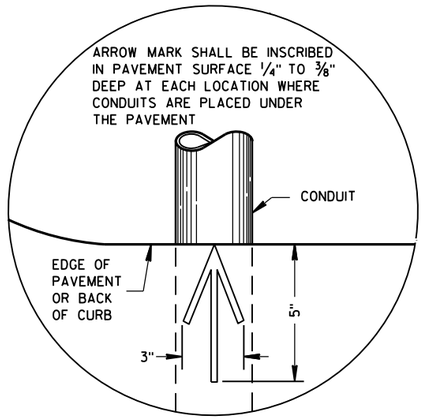
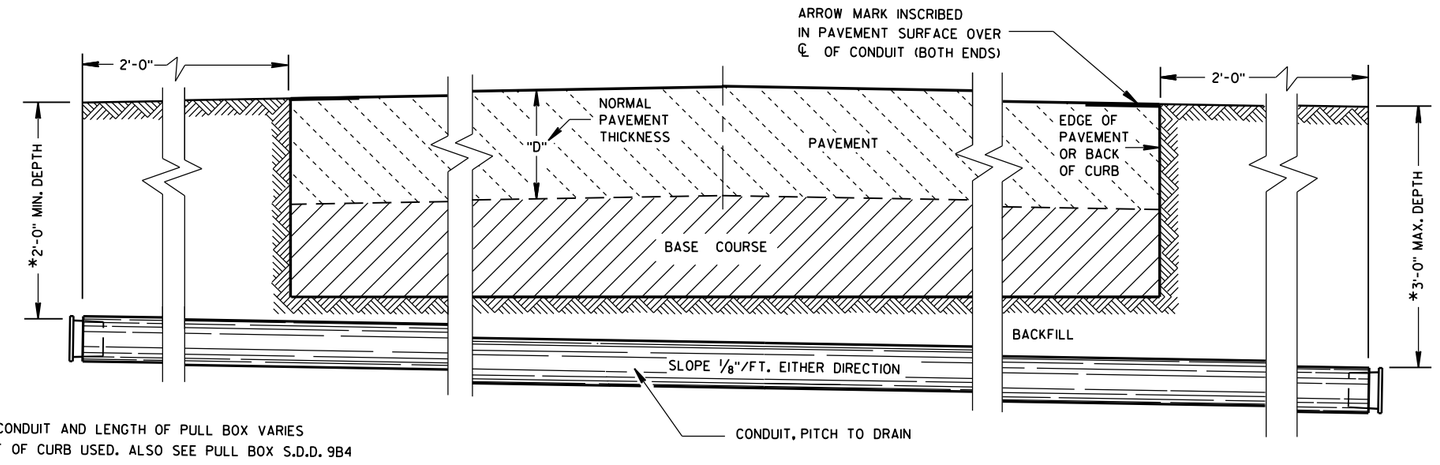


PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 367
FHWA

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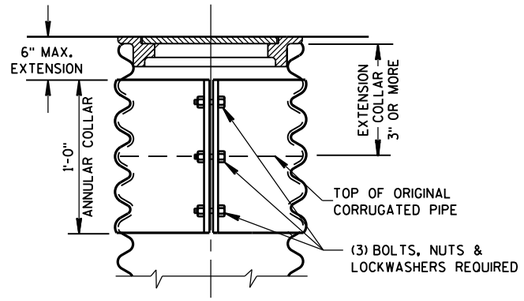
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

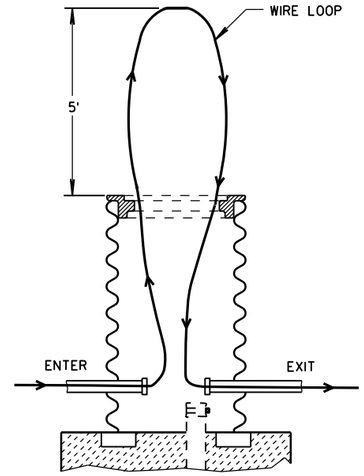
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

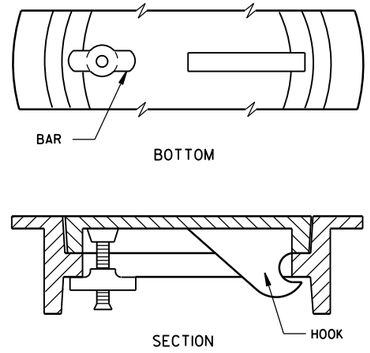
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

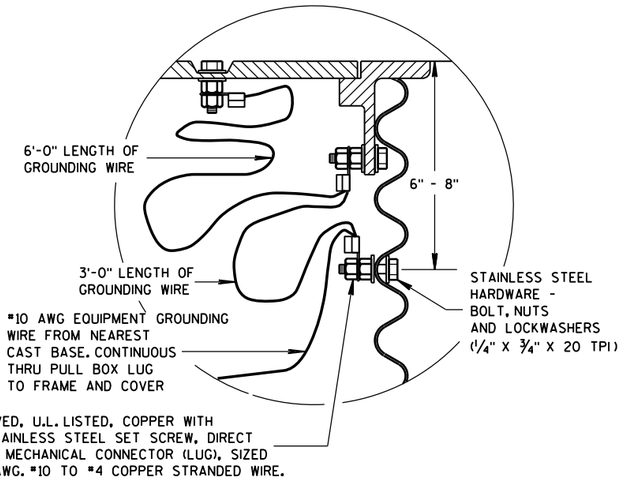


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

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.

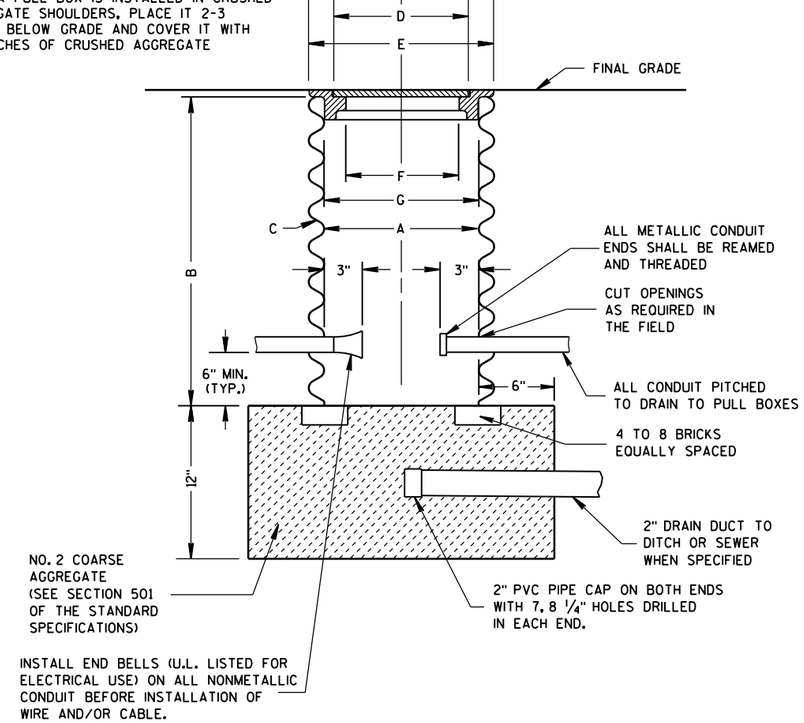
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

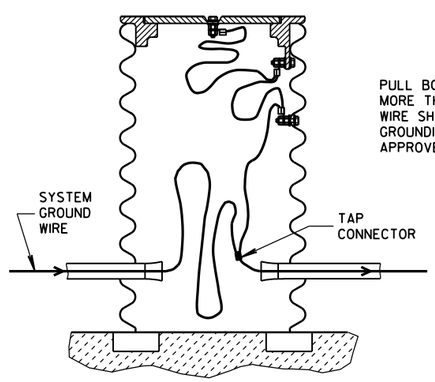
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

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



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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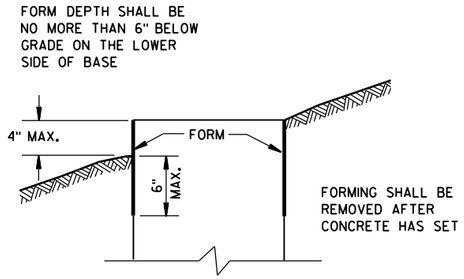
S.D.D. 9 B 4-11



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.

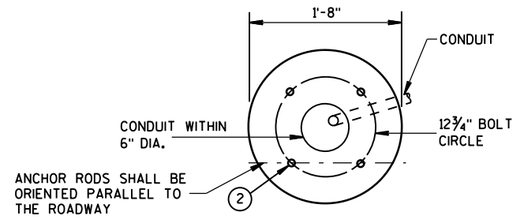
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

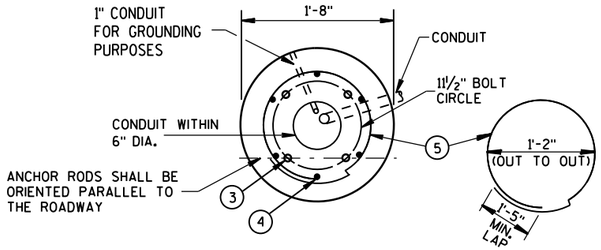
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

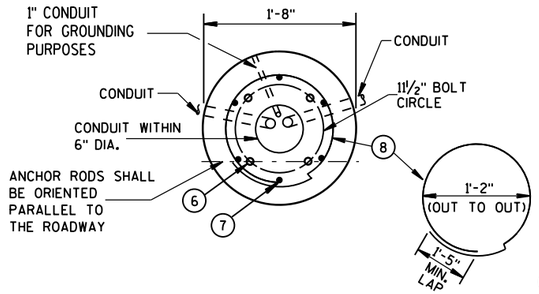
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

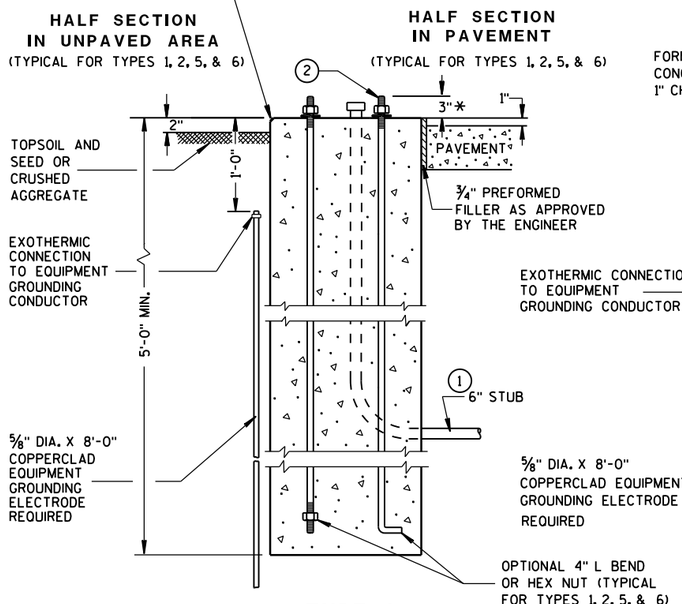






HALF SECTION IN UNPAVED AREA

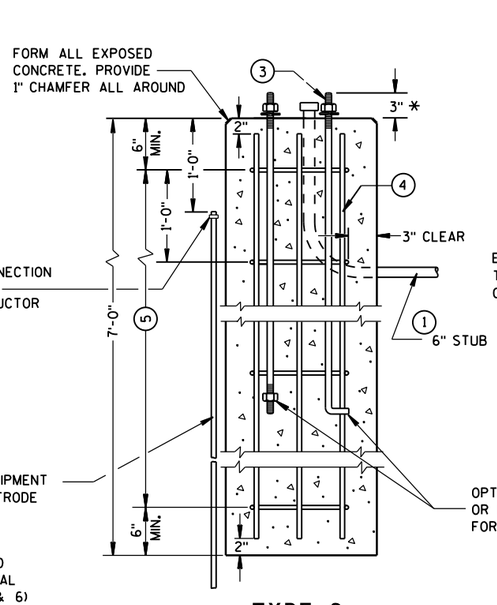
(TYPICAL FOR TYPES 1, 2, 5, & 6)



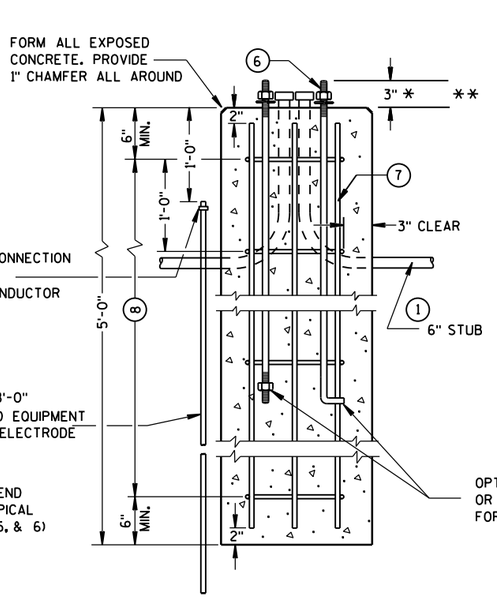
TYPE 1

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 369

FHWA

6
S.D.D. 9 C 2-7

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.

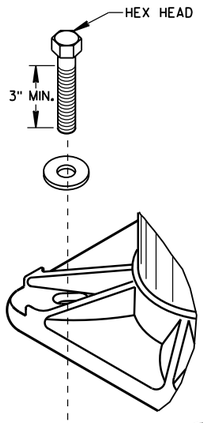
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

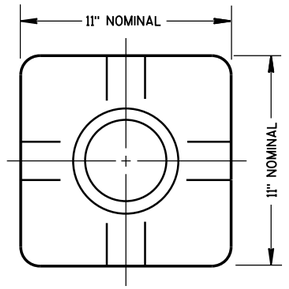
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

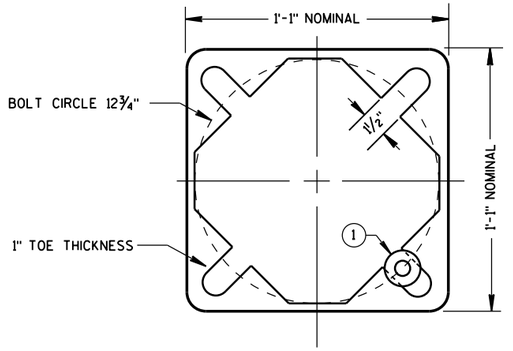
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

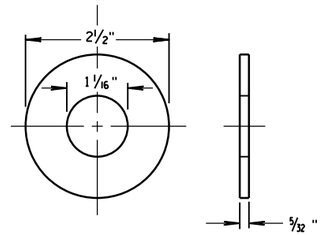




TOP VIEW
(PEDESTAL BASE)

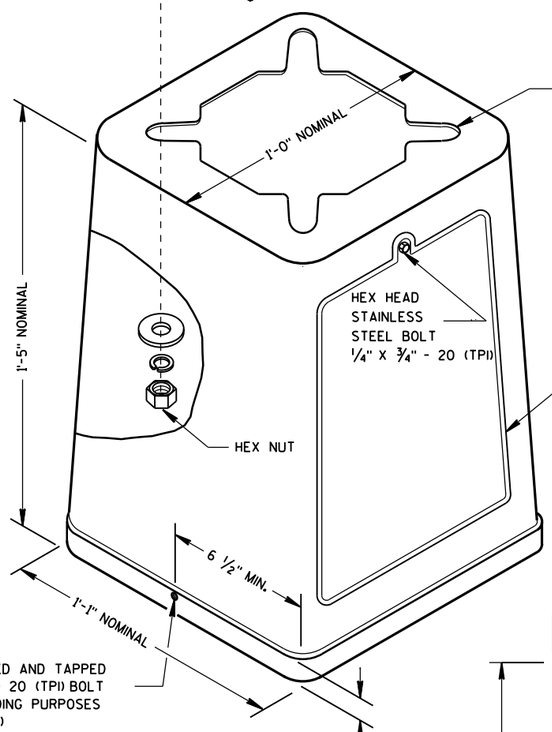


BOTTOM VIEW
(PEDESTAL BASE)

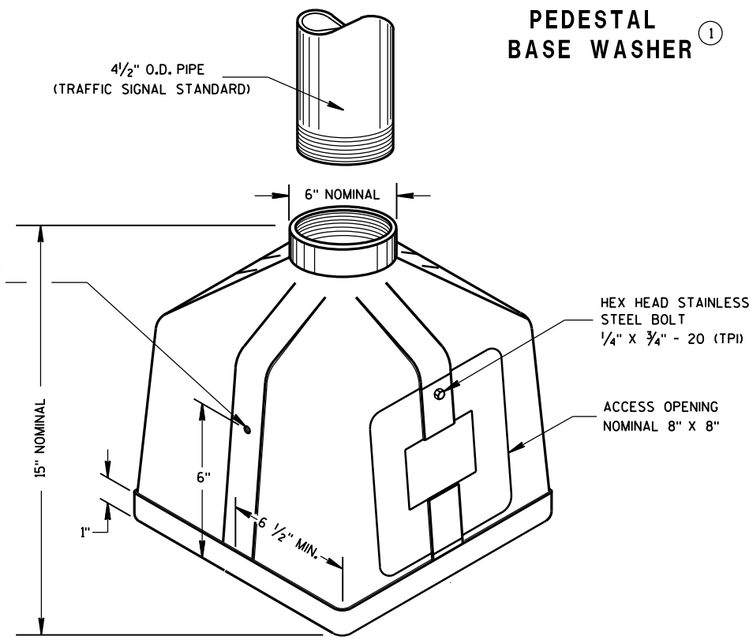


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

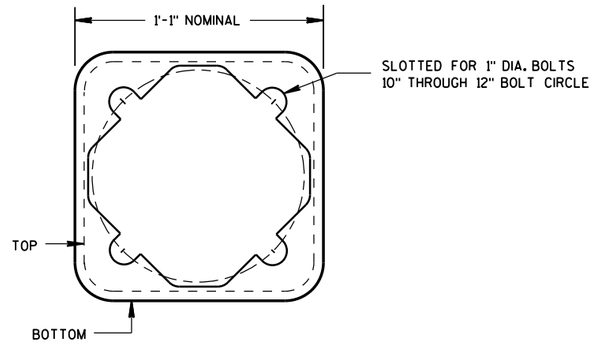


ISOMETRIC VIEW

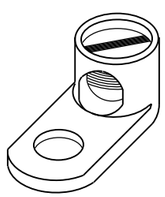


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

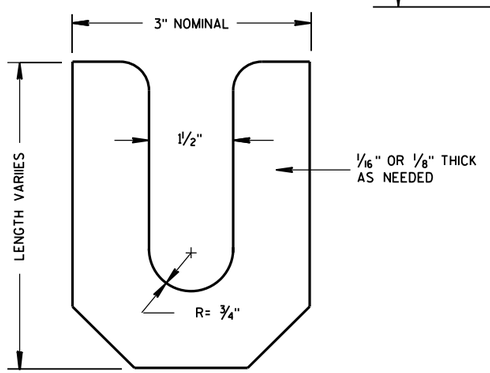


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

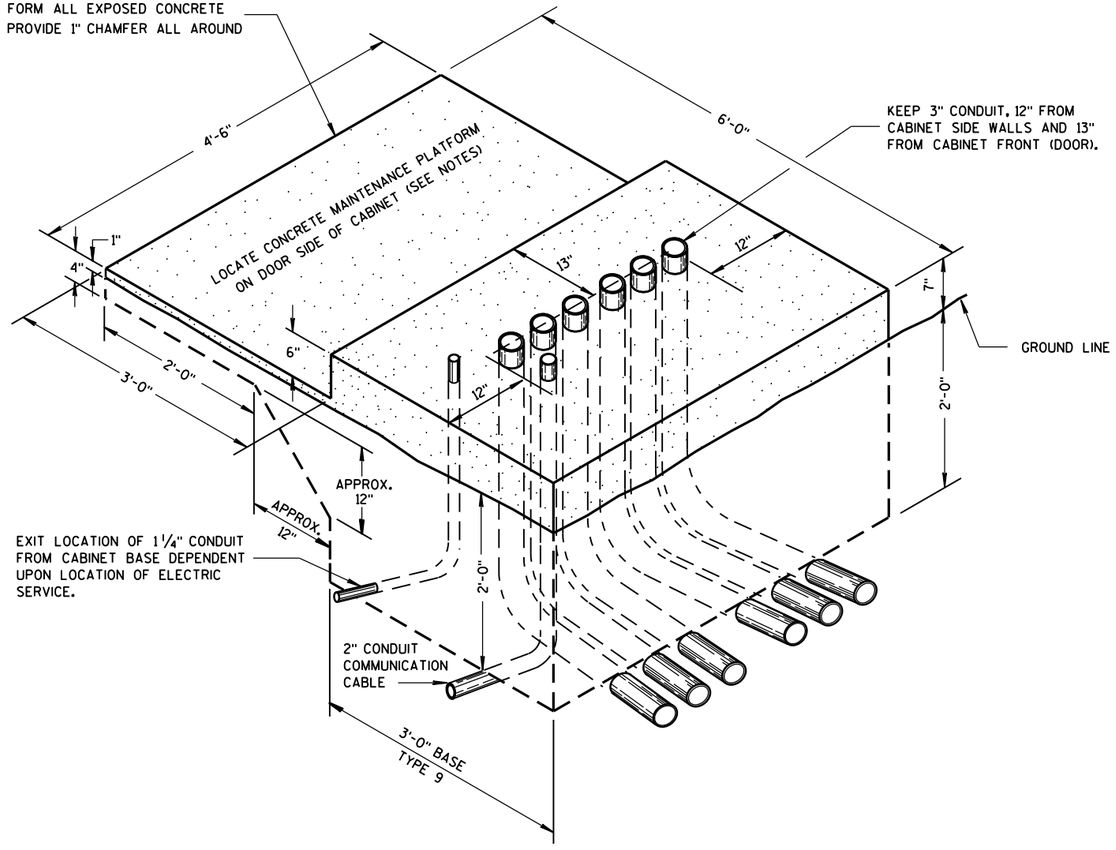
TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

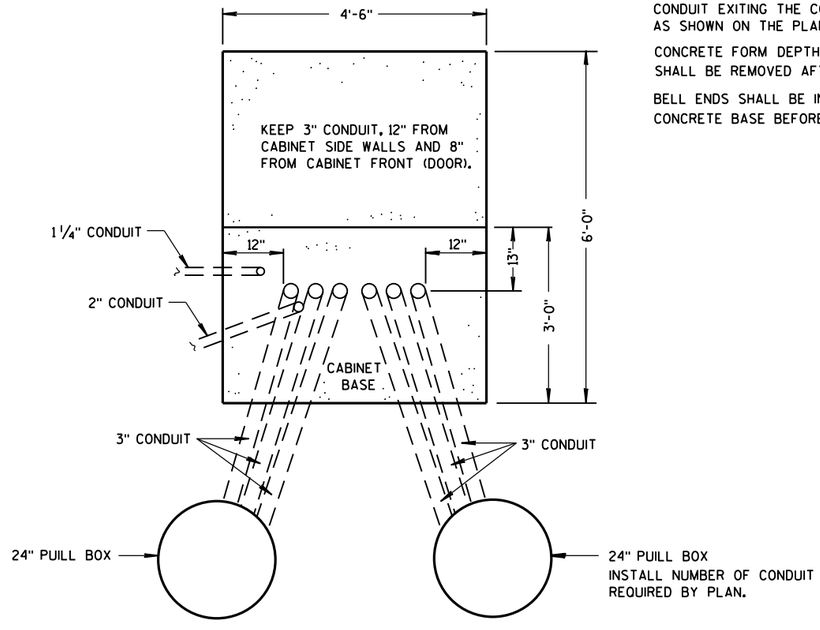
S.D.D. 9 C 3-4



ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS 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 (SIX THREE INCH) 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 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 C 6-7

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 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 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

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. CONDUIT IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION 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).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE 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.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

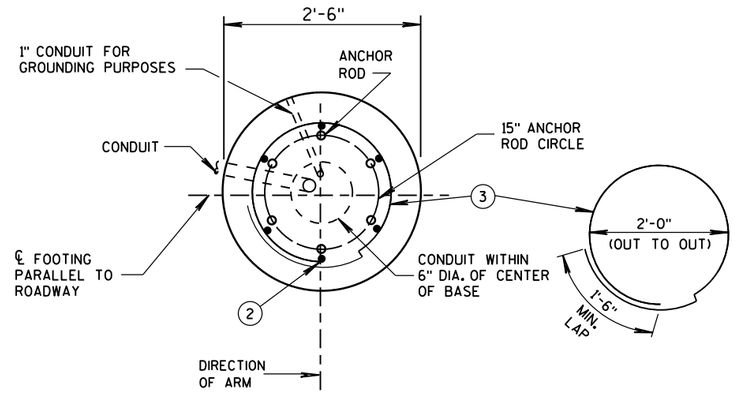
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

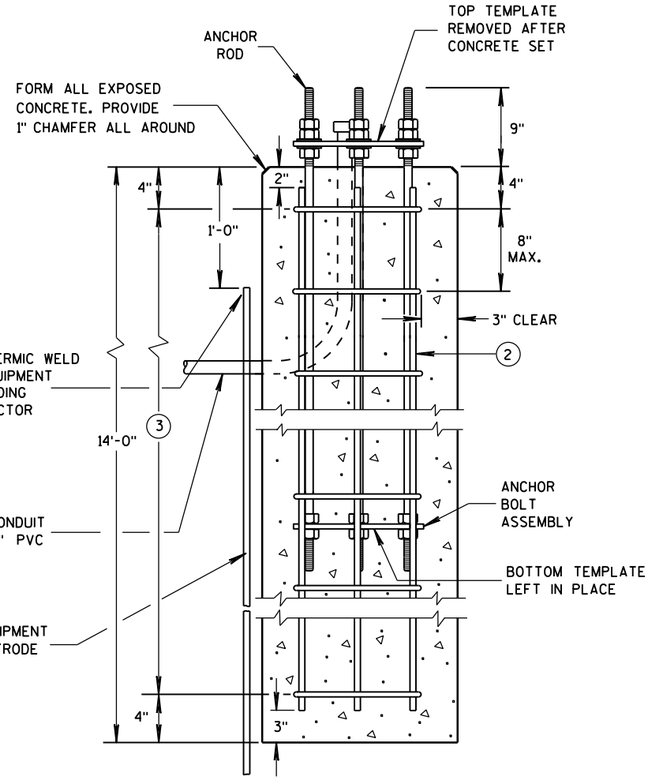
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATION)	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.

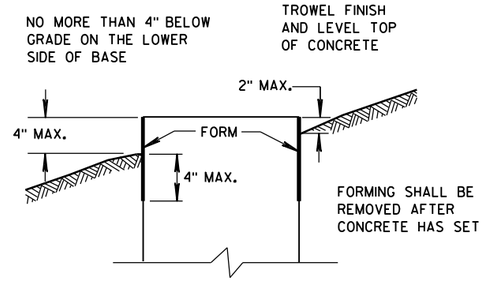




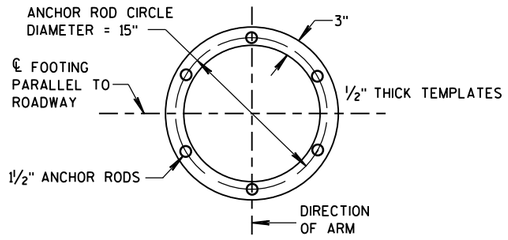
CONCRETE BASE TYPE 10

(FOR TYPE 9 & 10 & OVER HEIGHT (OH) POLES)

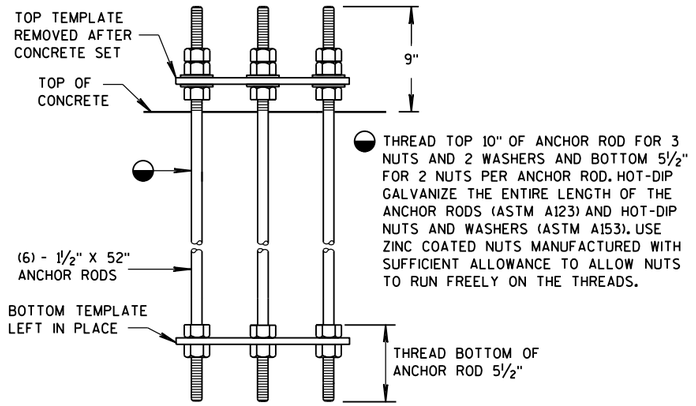
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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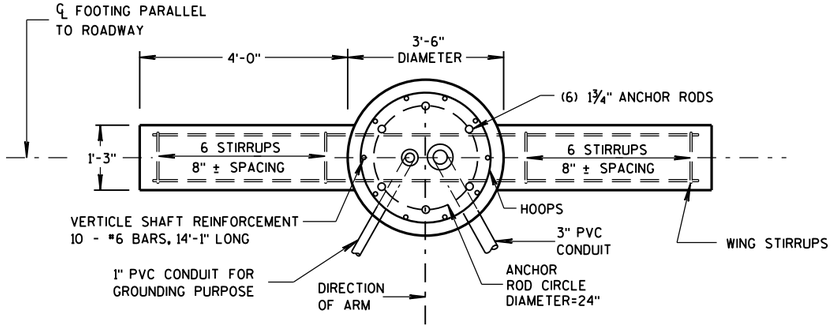
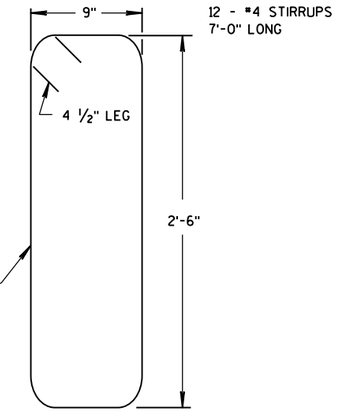
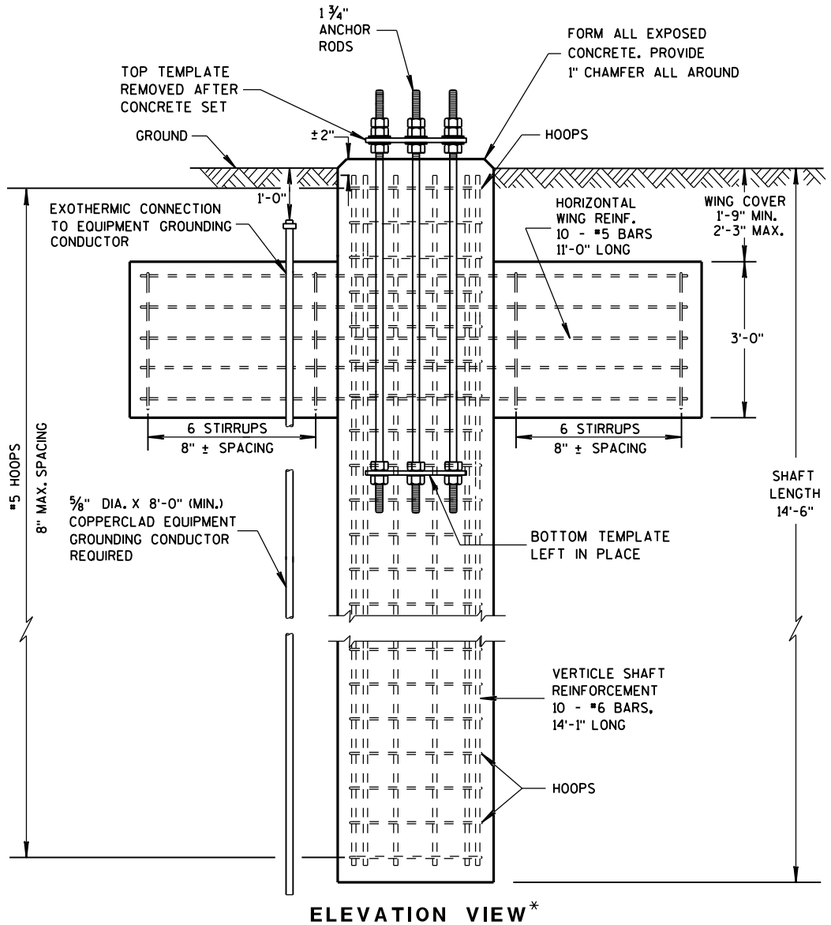
S.D.D. 9 C 11-10



PLAN VIEW

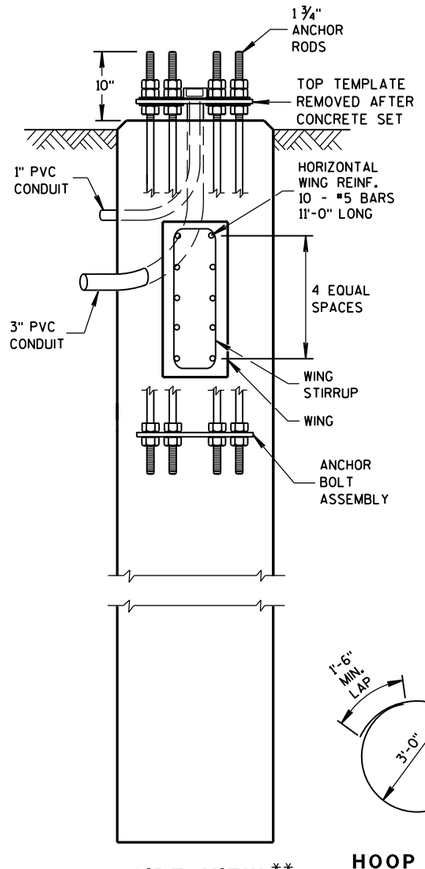


WING STIRRUP



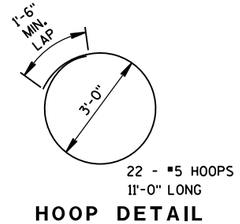
ELEVATION VIEW*

* CONDUITS ARE NOT SHOWN ON THIS VIEW FOR CLARITY



SIDE VIEW**

** HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY



HOOP DETAIL

GENERAL NOTES

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

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF THE 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.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE 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.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL 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, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATIONS	fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36	fy=36,000 p.s.i.

(FOR TYPE 12 & 13 & OVER HEIGHT (OH) POLES)

CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 635 LBS.

TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.
SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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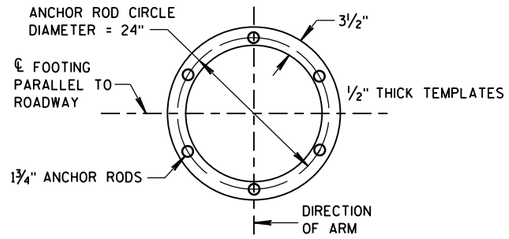
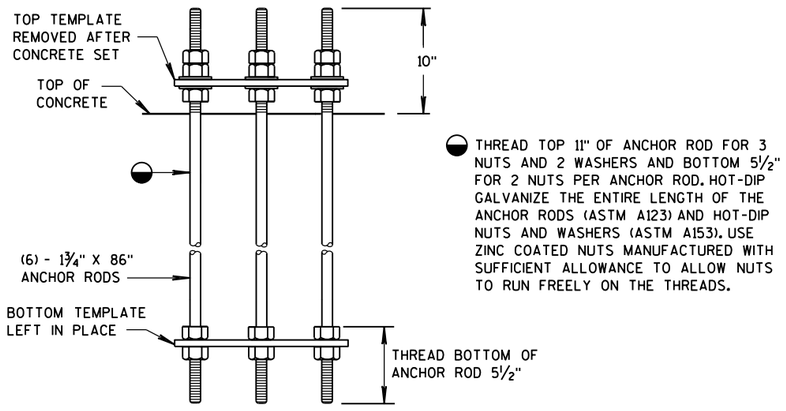
S.D.D. 9 C 12-9a

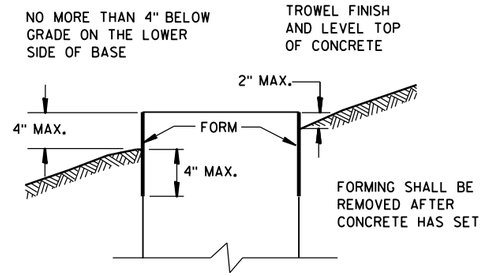


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



FORMING DETAIL

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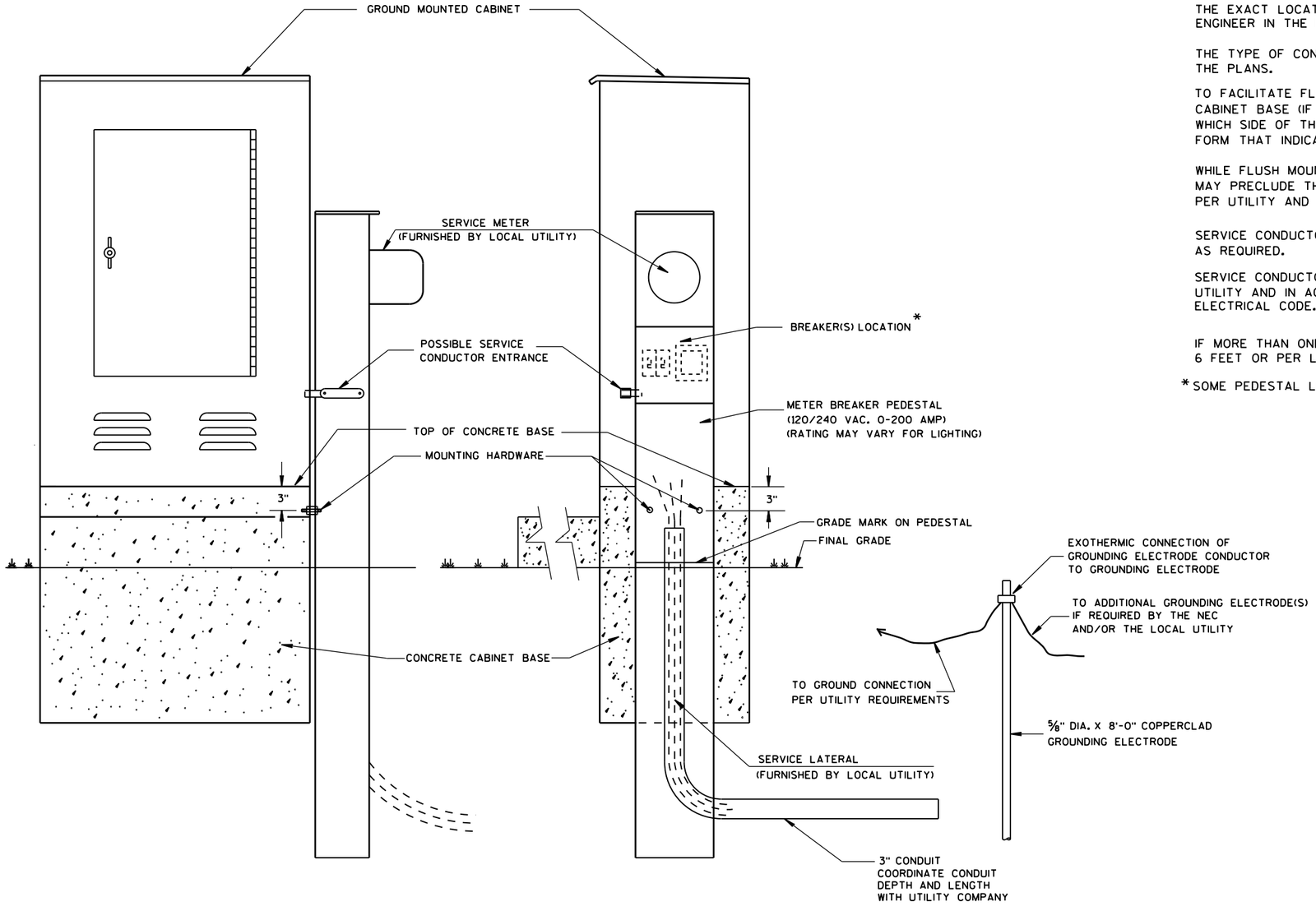
S.D.D. 9 C 12-9b

S.D.D. 9 C 12-9b

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA



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.

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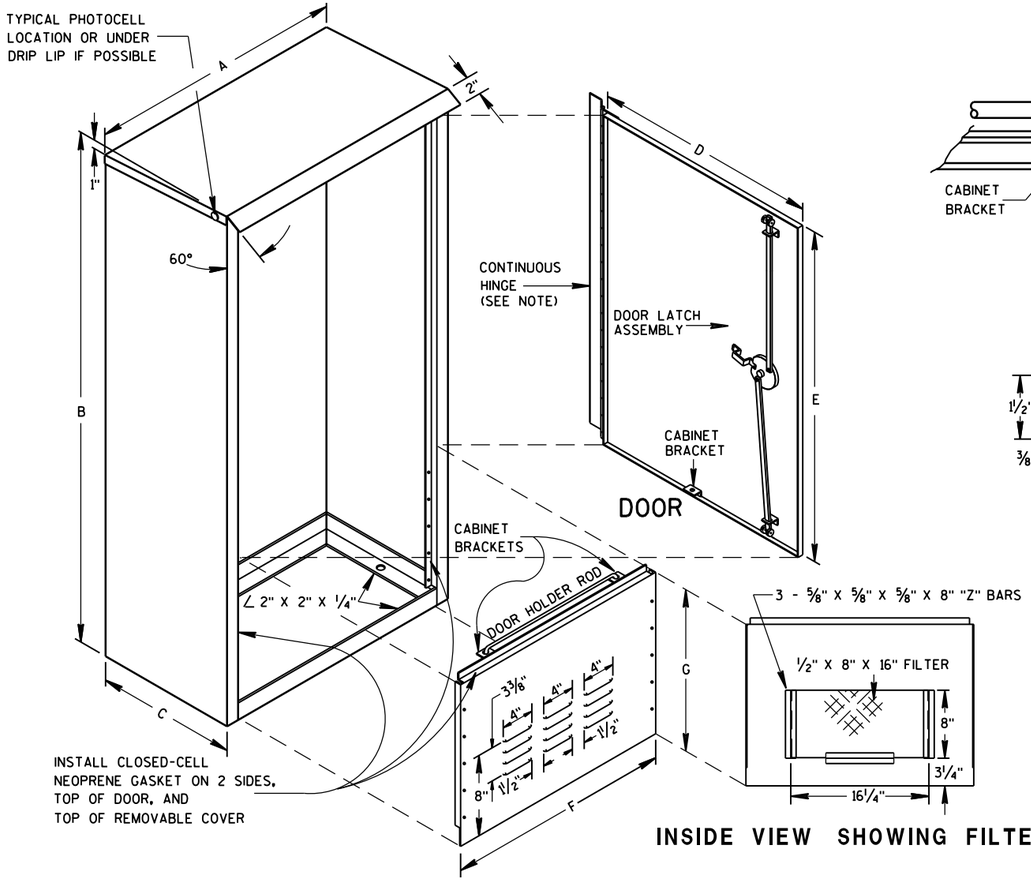
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

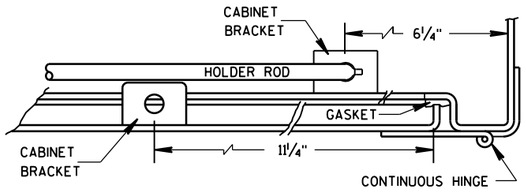
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

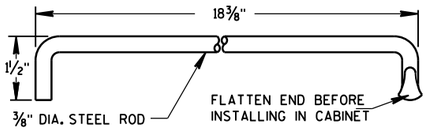


INSIDE VIEW SHOWING FILTER

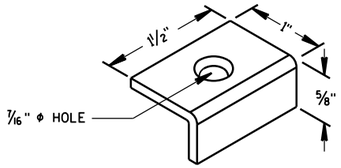
REMOVABLE COVER



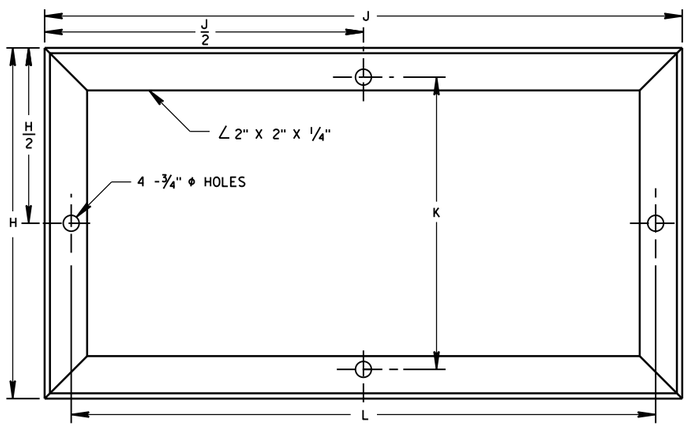
HINGE & DOOR HOLDER



HOLDER ROD



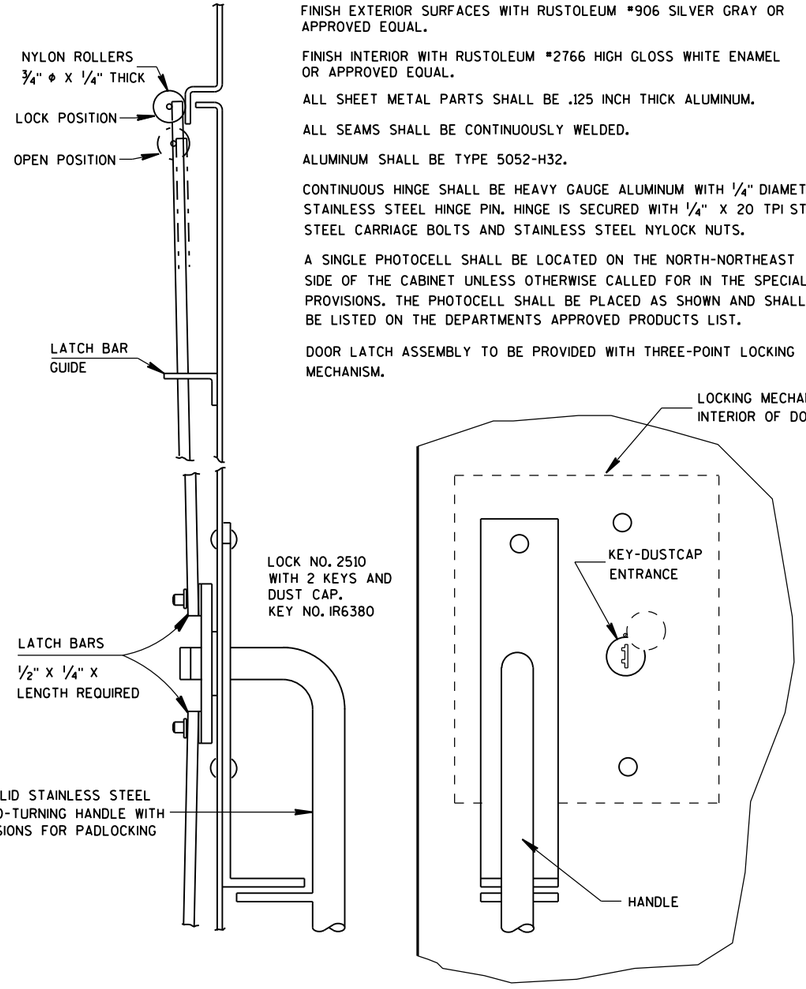
CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

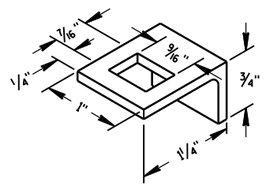
MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

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.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

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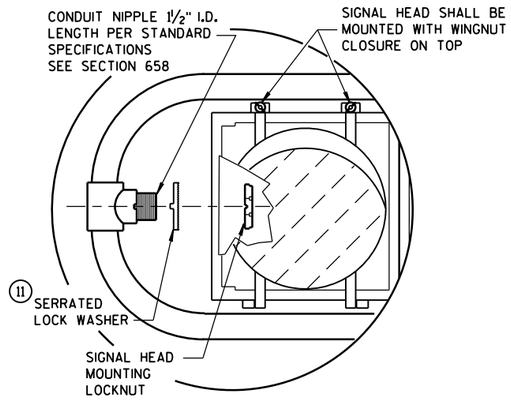
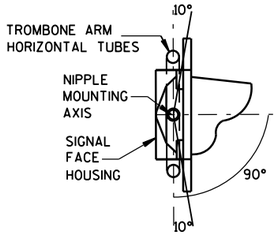


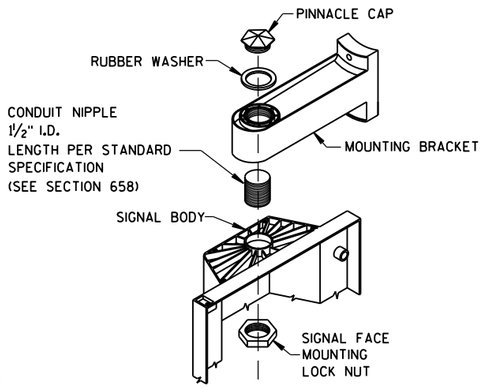
HORIZONTAL SIGNAL HEAD MOUNTING DETAIL *

* SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR



SECTION A-A

(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

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

POLES SHALL BE EITHER ALUMINUM OR GALVANIZED STEEL AS CALLED FOR IN THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652 SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS 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) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACES.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(7) MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658).

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" LONG - 20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

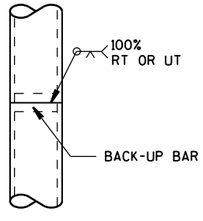
(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

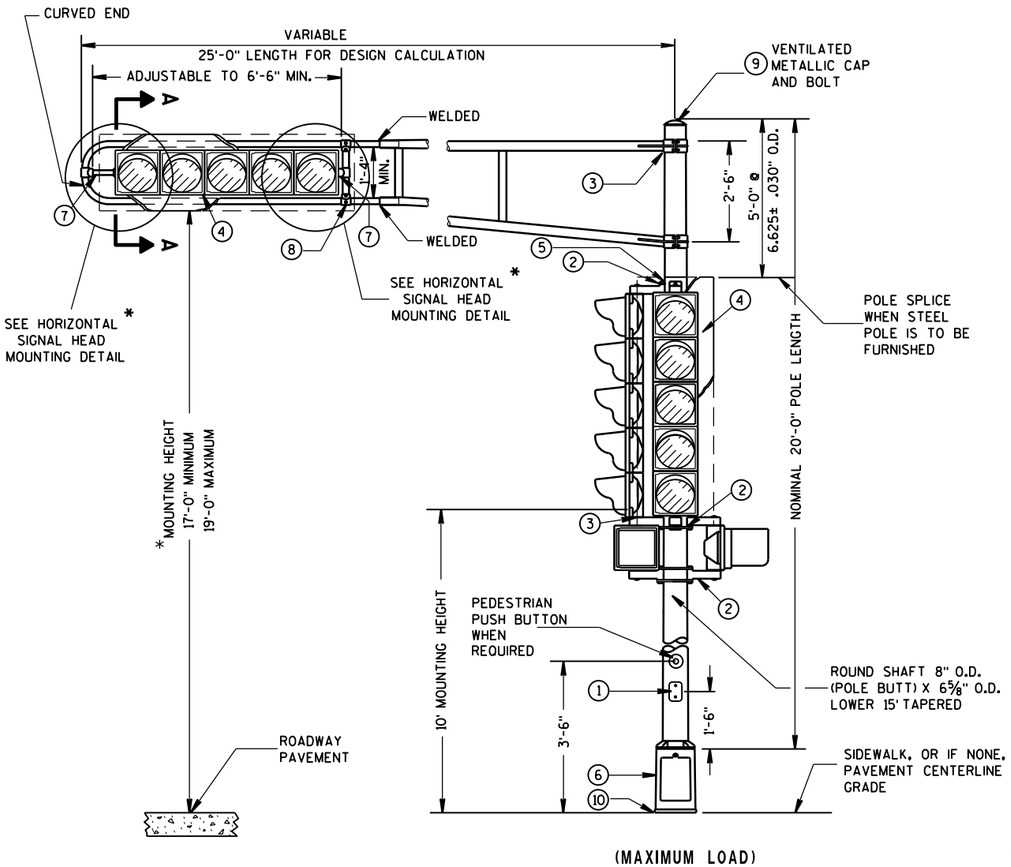
*MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE/NON-USE OF A TRANSFORMER BASE.

FOR MANUFACTURERS USE ONLY

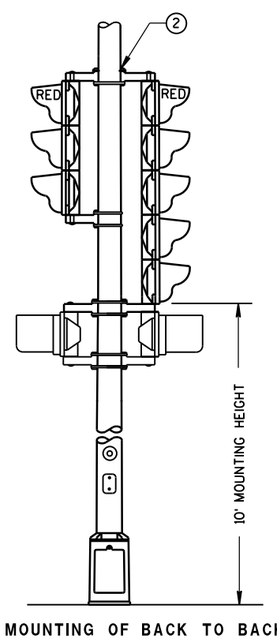
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.



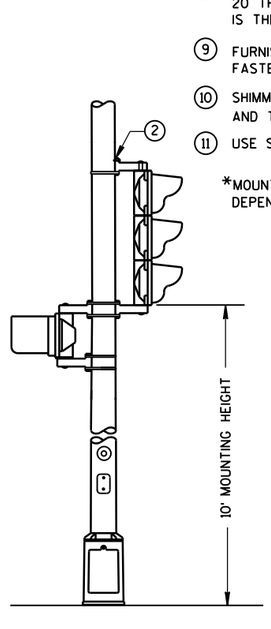
POLE SPLICE DETAIL



(MAXIMUM LOAD)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 2 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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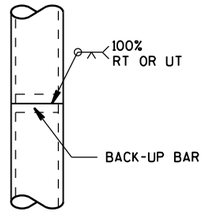
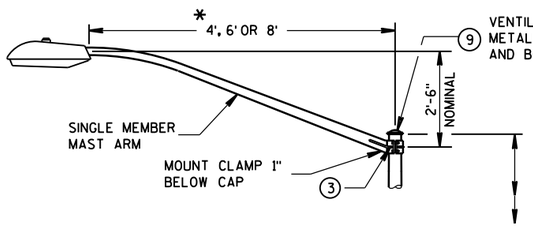
S.D.D. 9 E 1-14a

FOR MANUFACTURERS USE ONLY

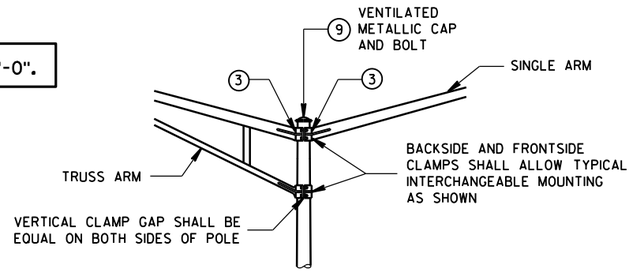
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.

*RISE FOR 4' ARM SHALL BE 2'-0".





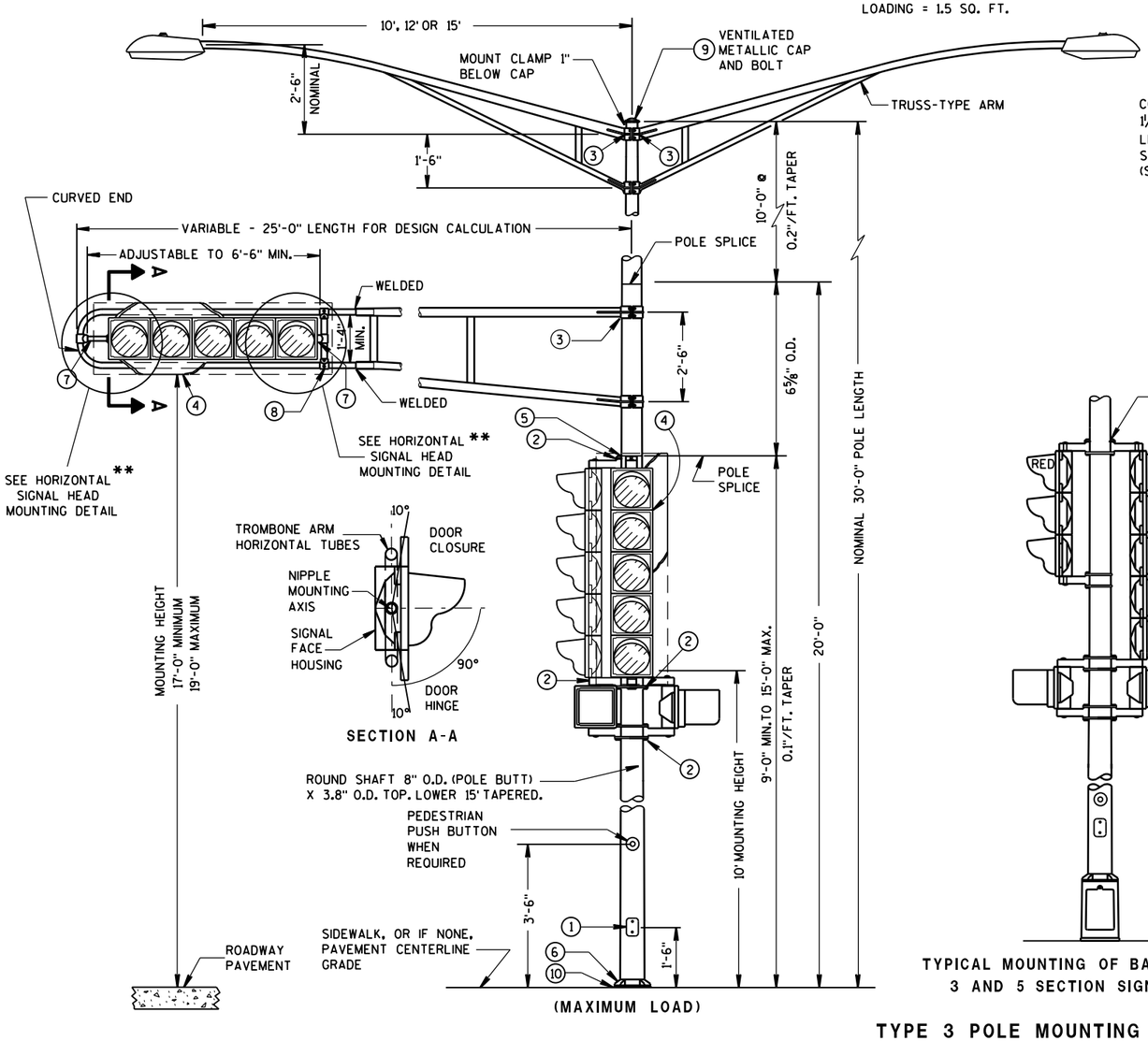
POLE SPLICE DETAIL



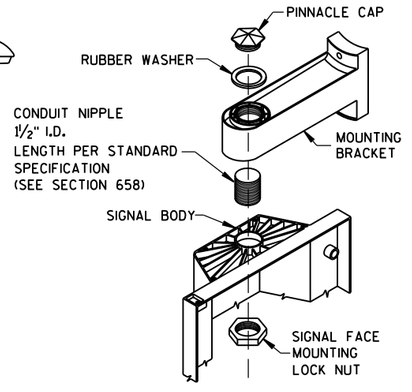
INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

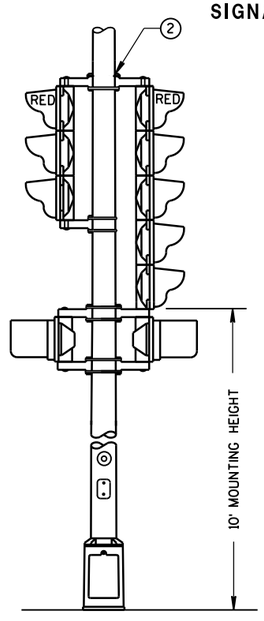
WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.



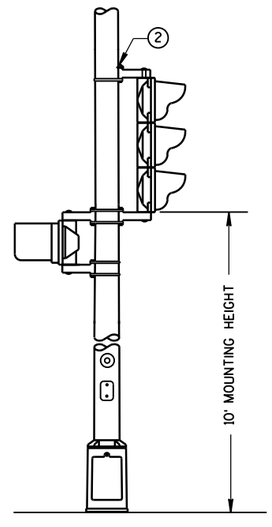
TYPE 3 POLE MOUNTING CONFIGURATION



SIGNAL FACE MOUNTING DETAIL
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK
3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION
SIGNAL FACE

GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652, SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

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 MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS 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) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) TYPE 3 POLE CONFIGURATIONS SHALL BE MOUNTED DIRECTLY TO THEIR CONCRETE BASES.

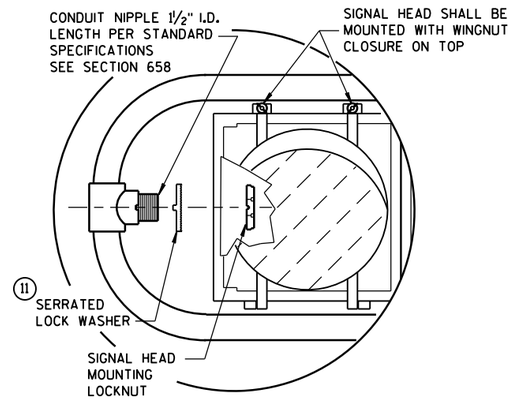
(7) MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658)

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4 " X ¾" -20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.



HORIZONTAL SIGNAL HEAD MOUNTING DETAIL**

** SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR

POLE MOUNTINGS FOR
TRAFFIC SIGNALS AND
LIGHTING UNITS, TYPE 3
(HEAVY DUTY)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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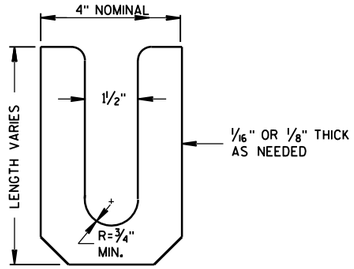
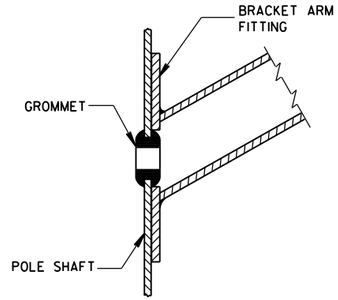
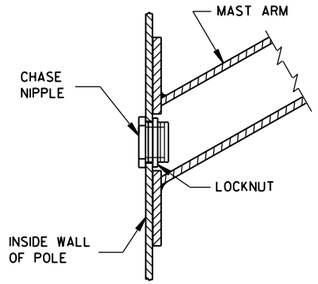


LEVELING SHIM (13)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

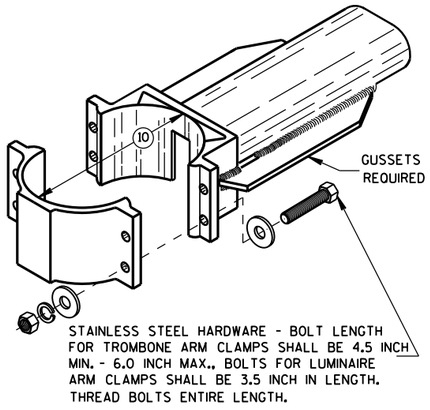
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

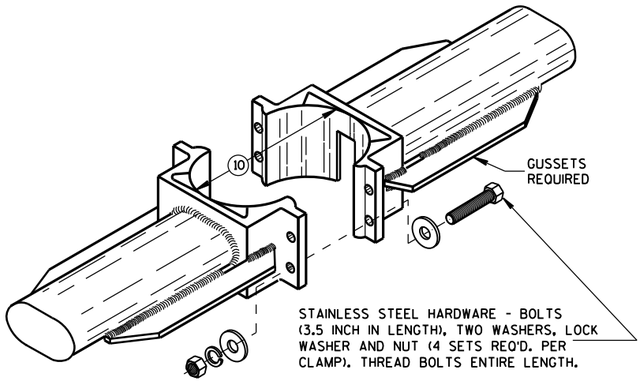
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

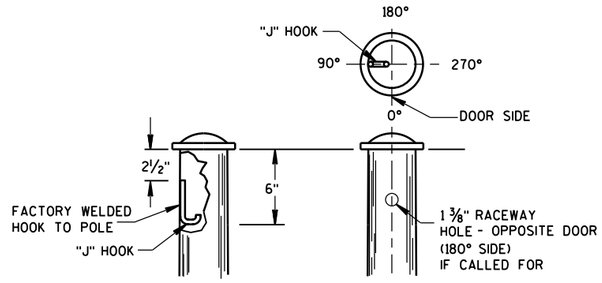
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



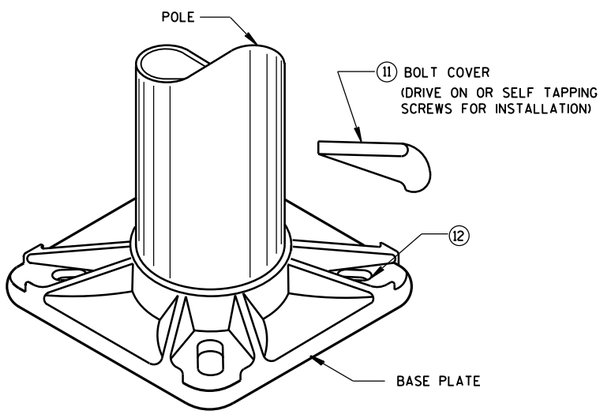
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



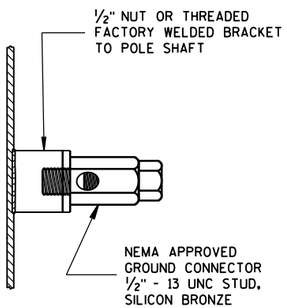
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

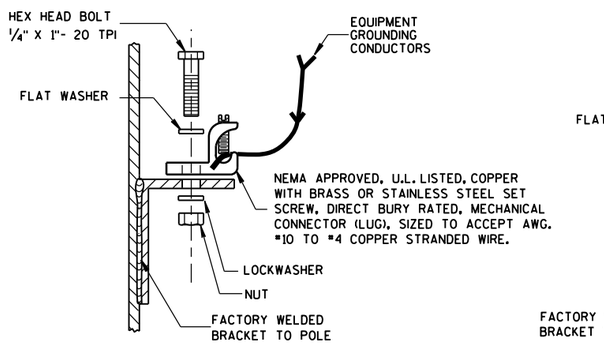


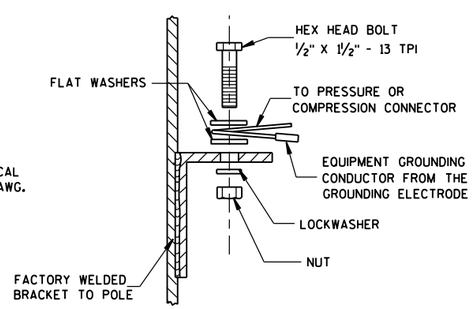
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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Feb. 2015
DATE

/S/ Ahmet Demirbilek
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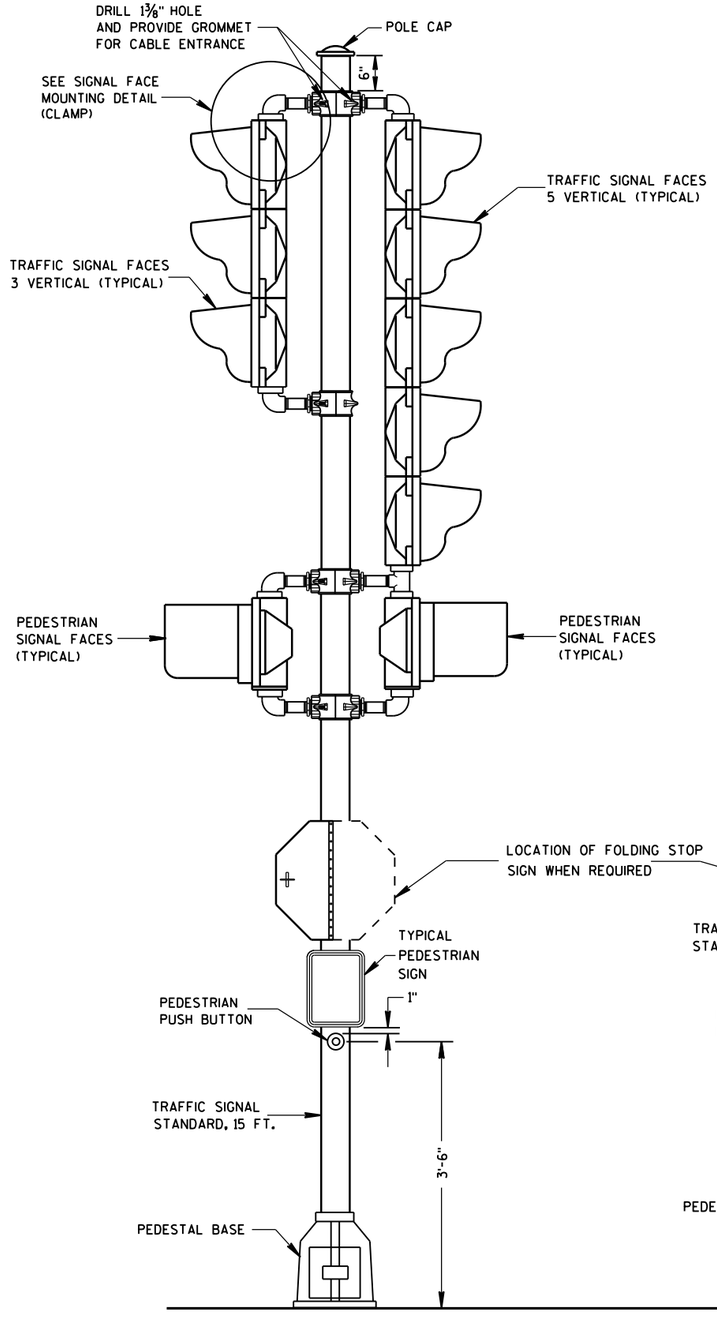
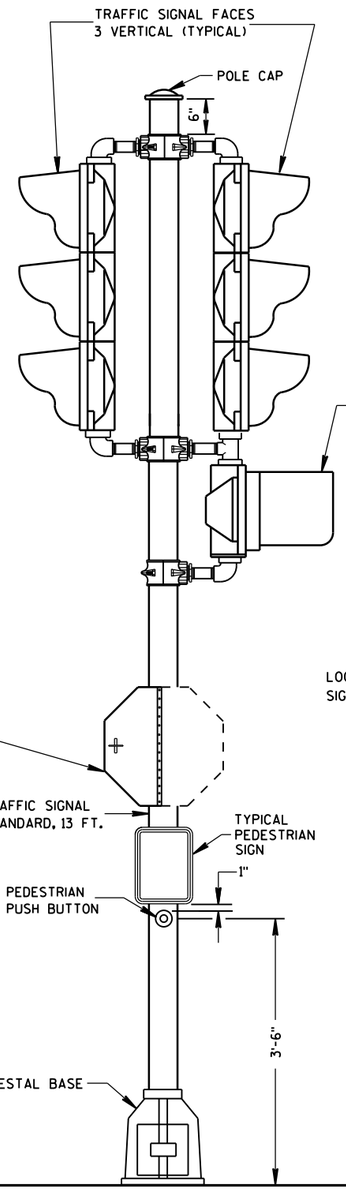
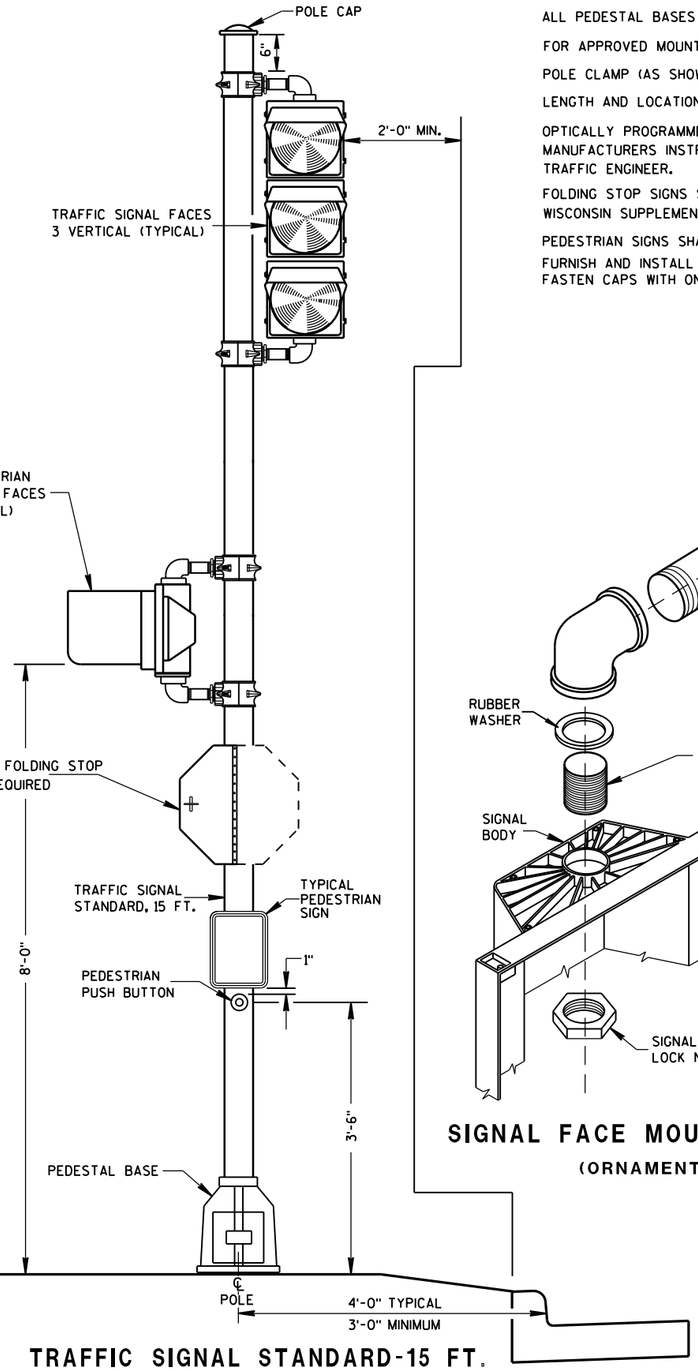


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLE CLAMP (AS SHOWN) MOUNTING BRACKETS SHALL BE USED.

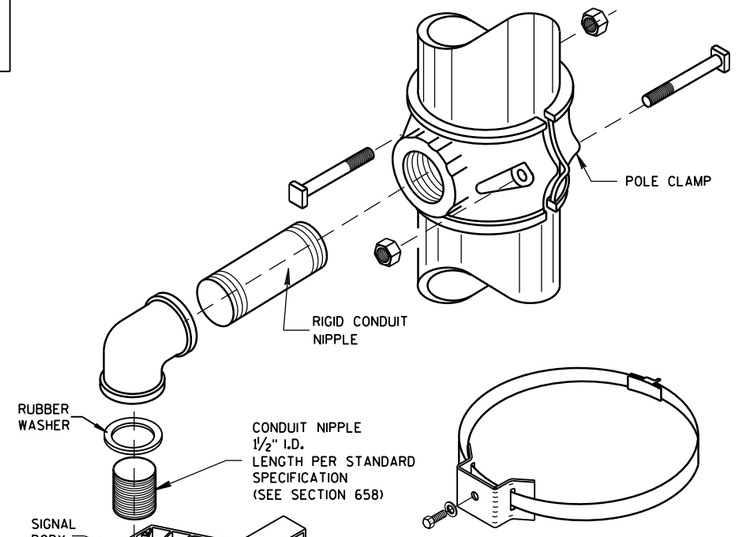
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

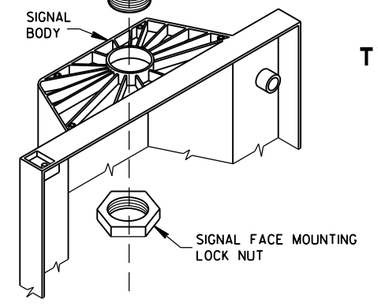
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL
(ORNAMENTAL)

TRAFFIC SIGNAL STANDARD
ORNAMENTAL BRACKET MOUNTINGS
TYPICAL FOR 13 FT. OR 15 FT.

STATE OF WISCONSIN
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2/28/2013
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/S/ Ahmet Demirbilek
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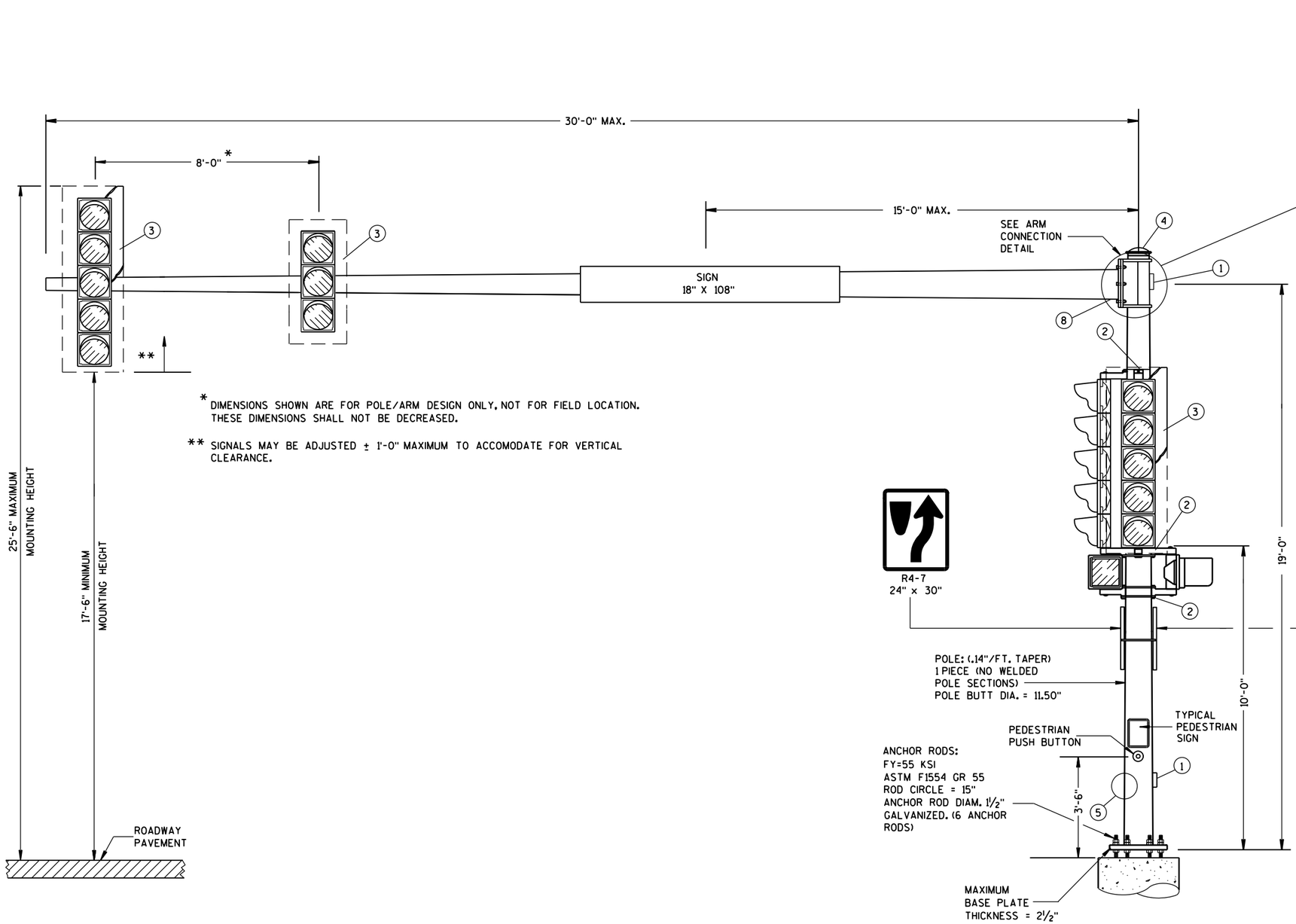
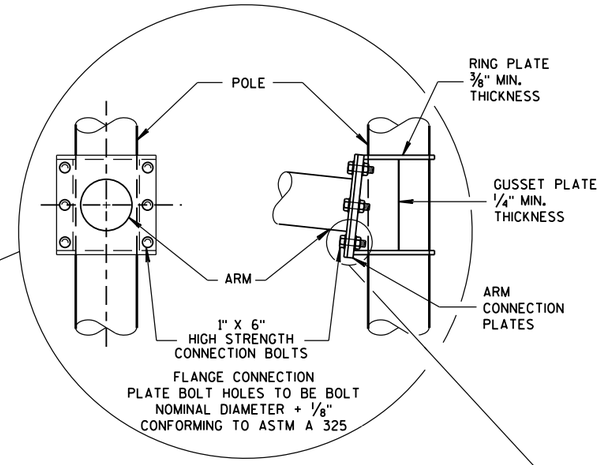
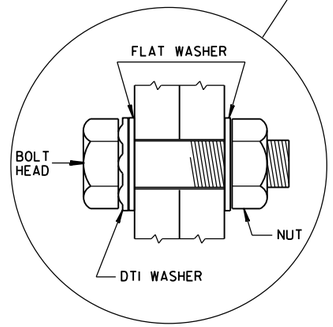


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

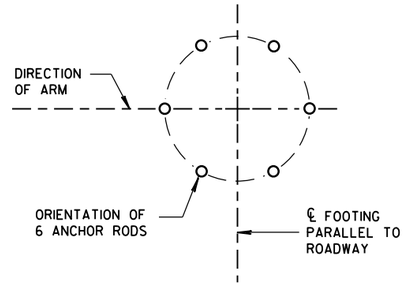
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL



ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 9 POLE 15'- 30' MONOTUBE ARM

TYPE 9 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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May, 2016 — DATE
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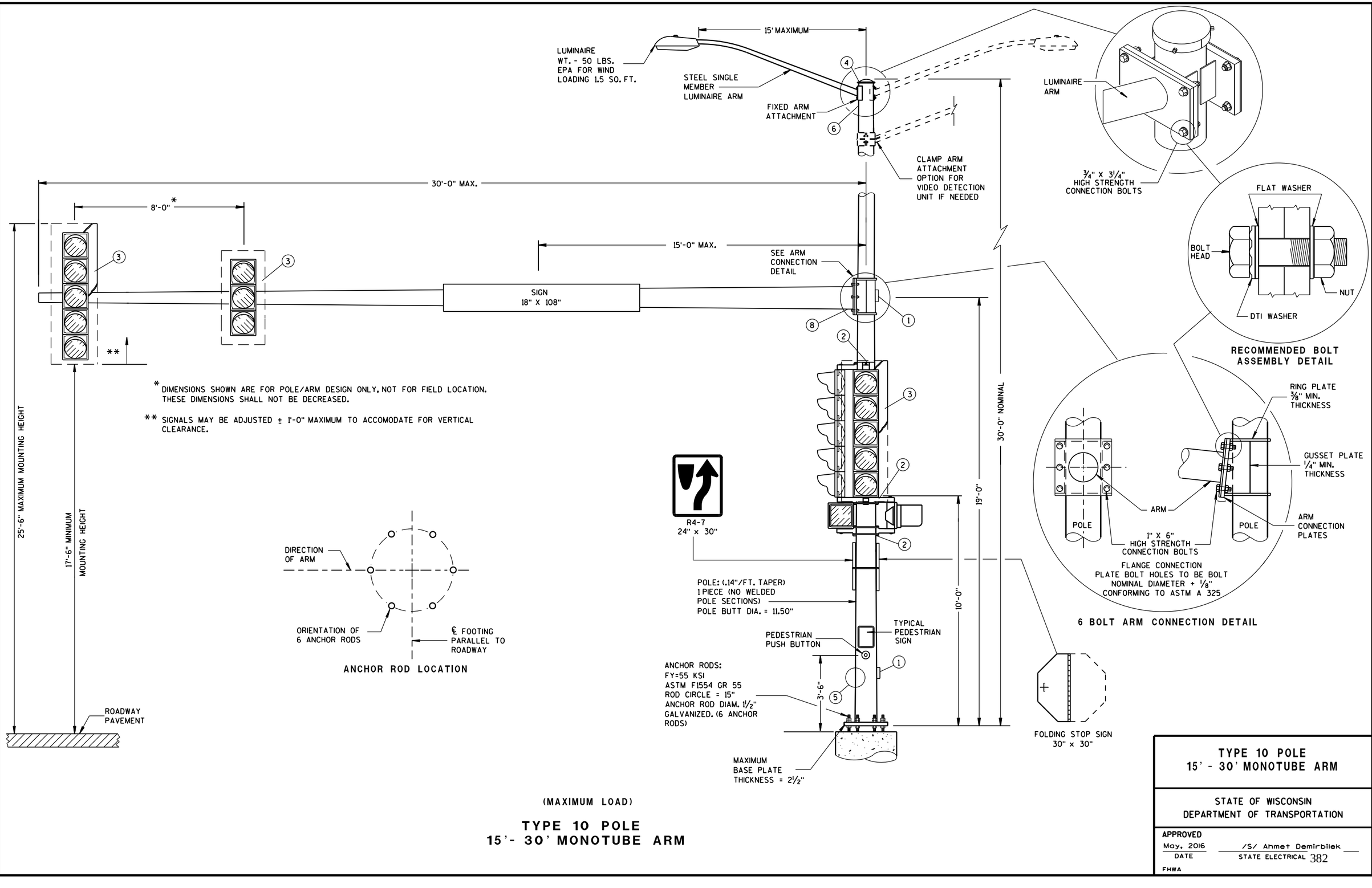

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** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

(MAXIMUM LOAD)

TYPE 10 POLE
15'- 30' MONOTUBE ARM

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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May, 2016 — DATE
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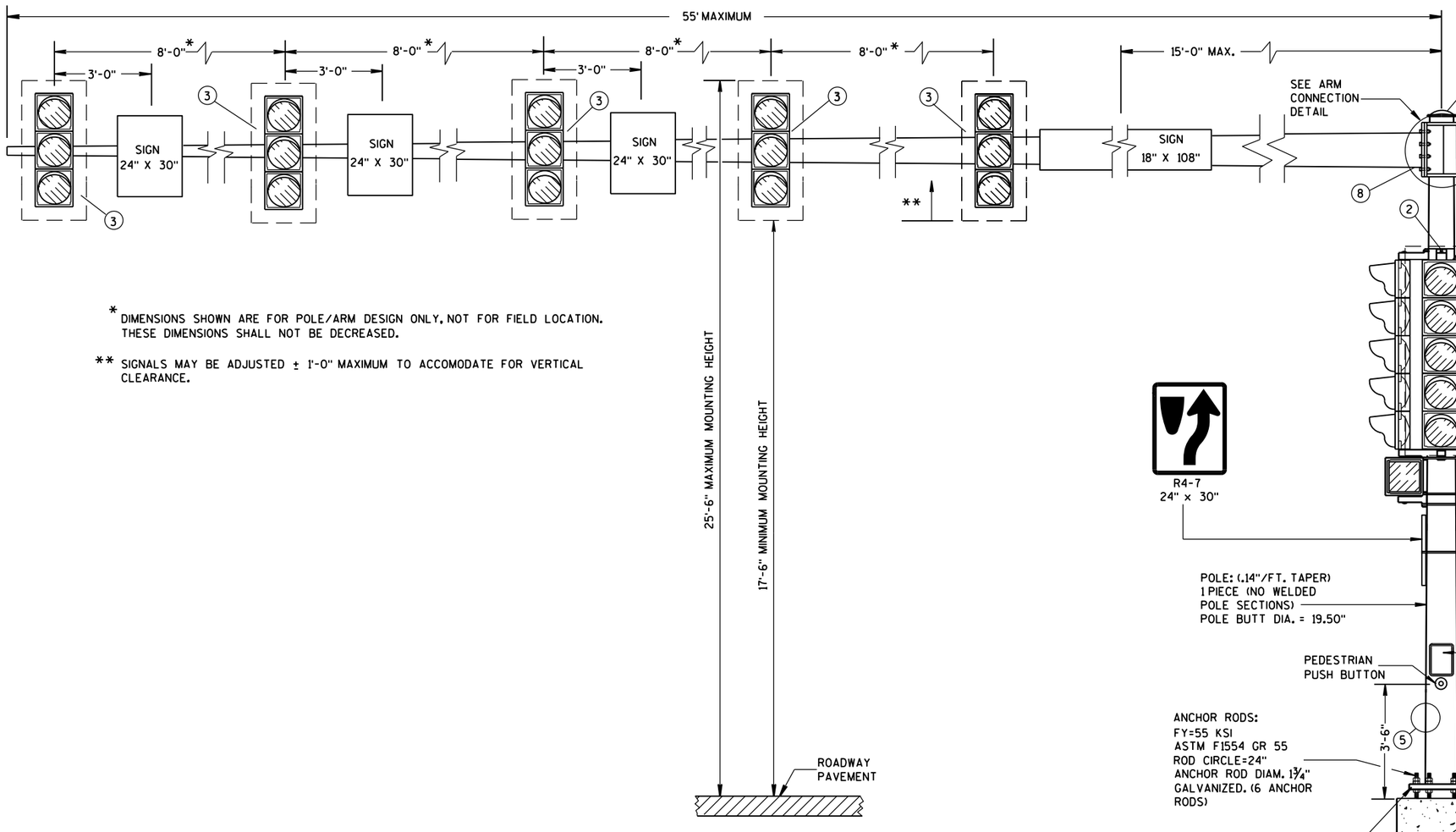
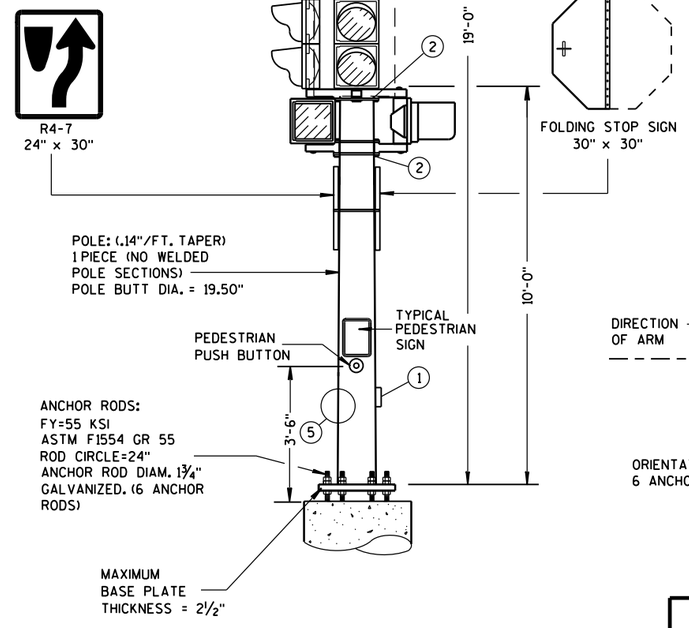
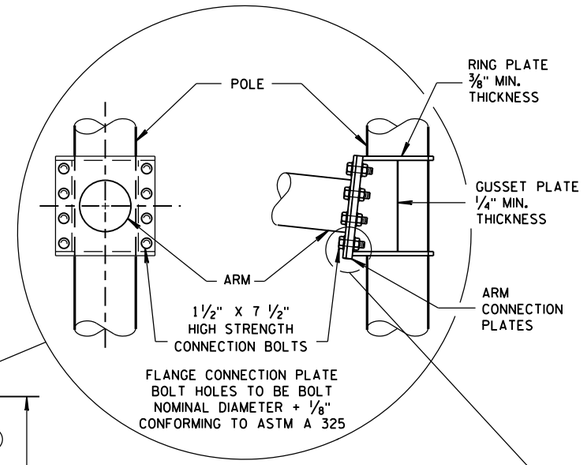


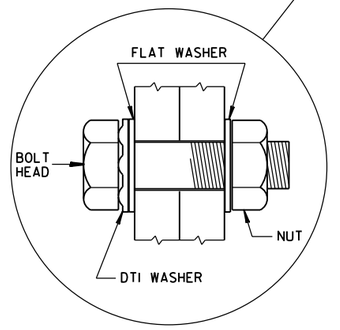
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

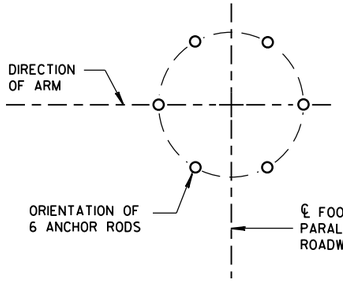




8 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL



ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 12 POLE 35'- 55' MONOTUBE ARM

TYPE 12 POLE 35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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May, 2015 — DATE
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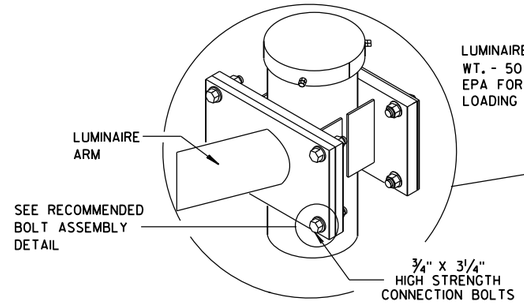
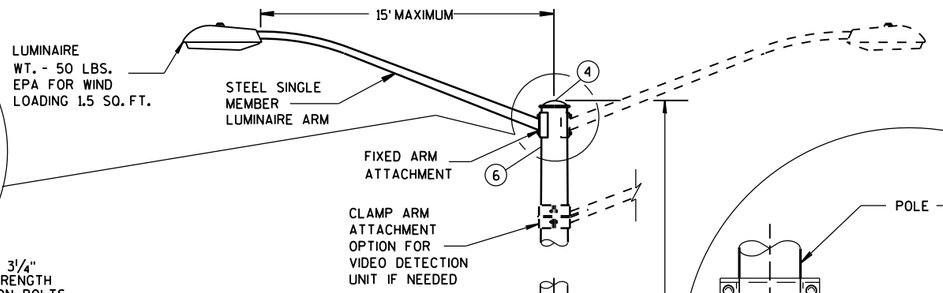
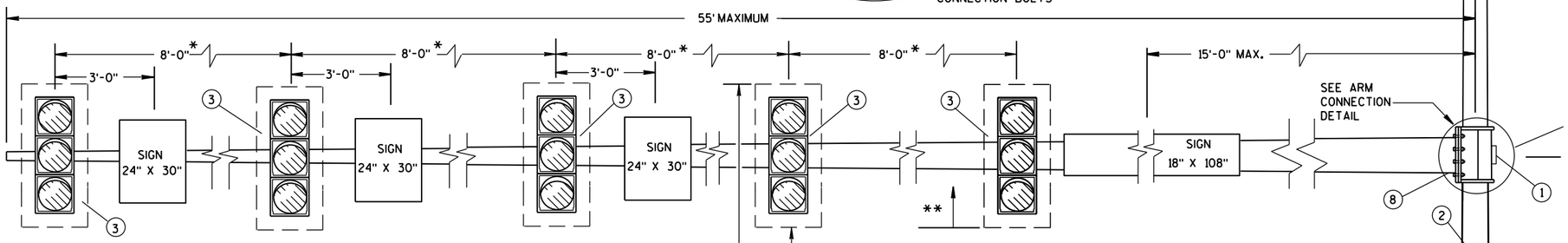
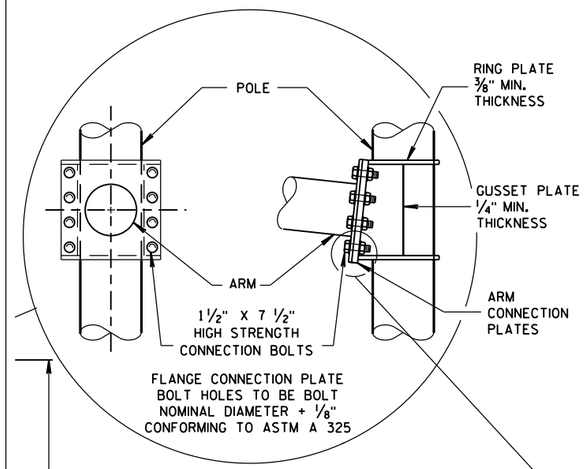




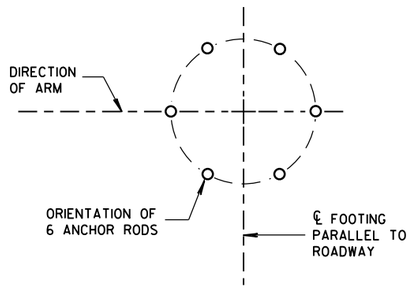




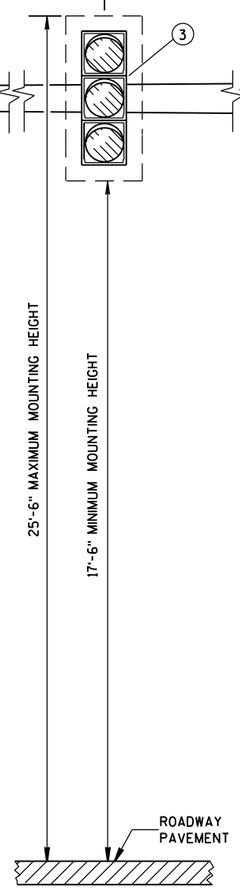
8 BOLT ARM CONNECTION DETAIL

* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

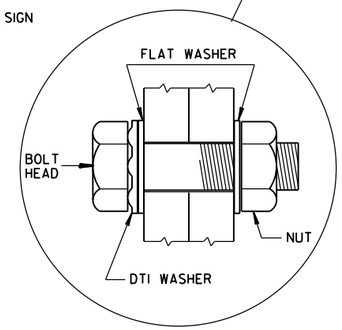
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



ANCHOR ROD LOCATION



(MAXIMUM LOAD)



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 13 POLE 35'- 55' MONOTUBE ARM

TYPE 13 POLE
35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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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.

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

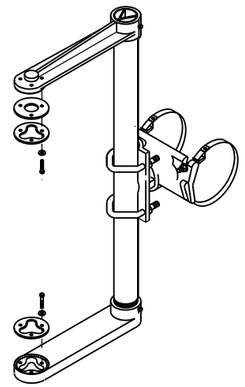
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

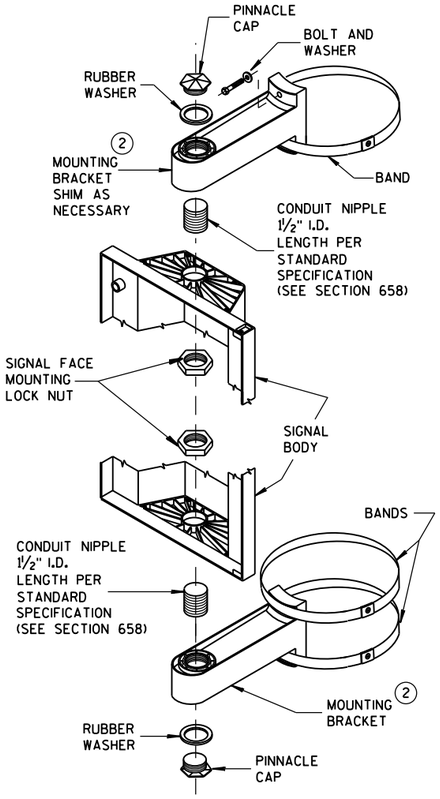
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

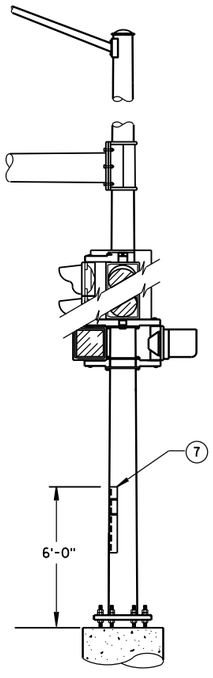


SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM

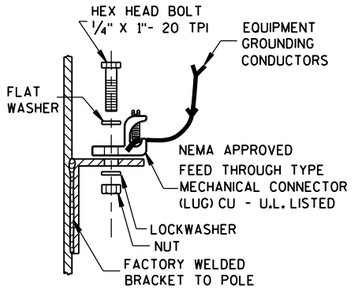
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE
VERTICAL MOUNTING DETAIL

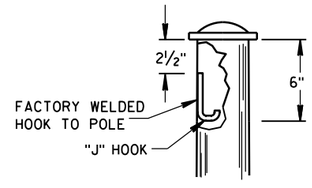


STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL
BE STAINLESS STEEL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL 385

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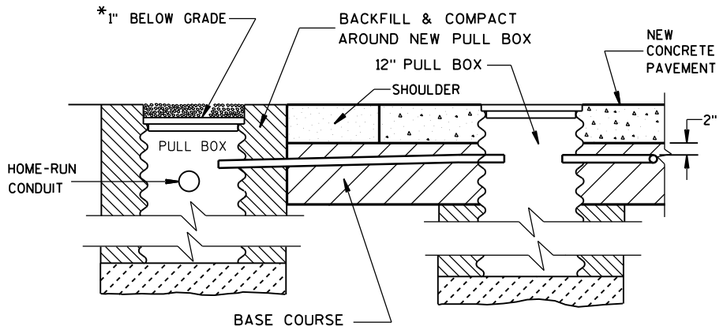


SECTION A-A

NO CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

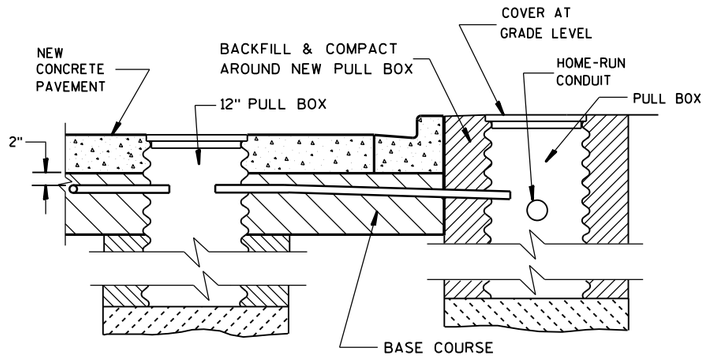
THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT, CONDULET AND PULL BOX SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE NEW CONCRETE PAVEMENT IS PLACED.

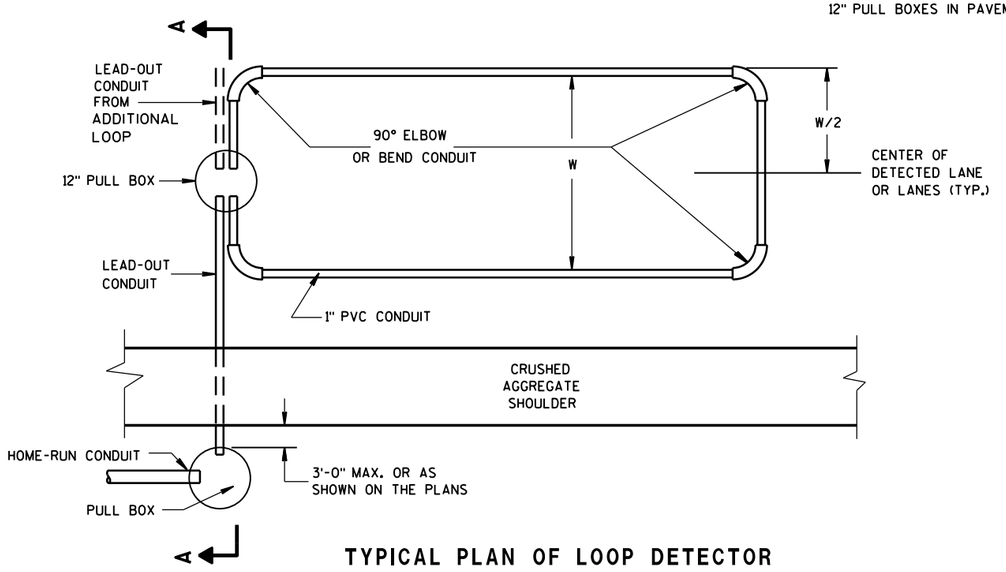
12" PULL BOXES IN PAVEMENT SHALL BE CORRUGATED STEEL ONLY.



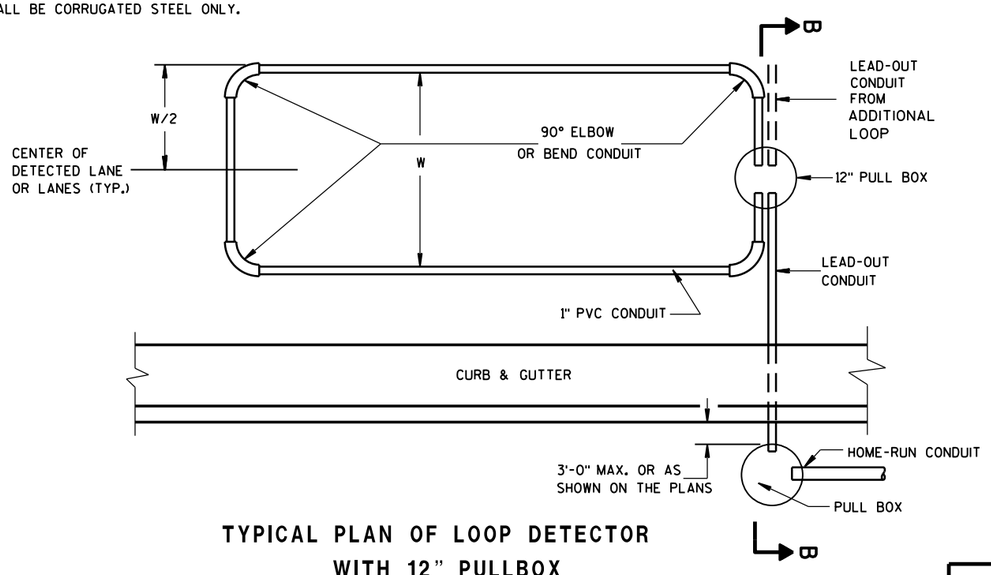
SECTION B-B

CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS



TYPICAL PLAN OF LOOP DETECTOR WITH 12" PULLBOX



TYPICAL PLAN OF LOOP DETECTOR WITH 12" PULLBOX

LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2014 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL

FHWA

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S.D.D. 9 F 9-4

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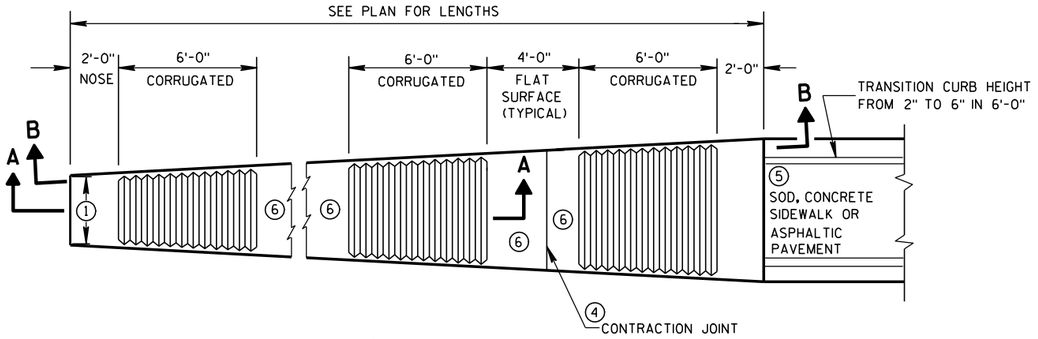
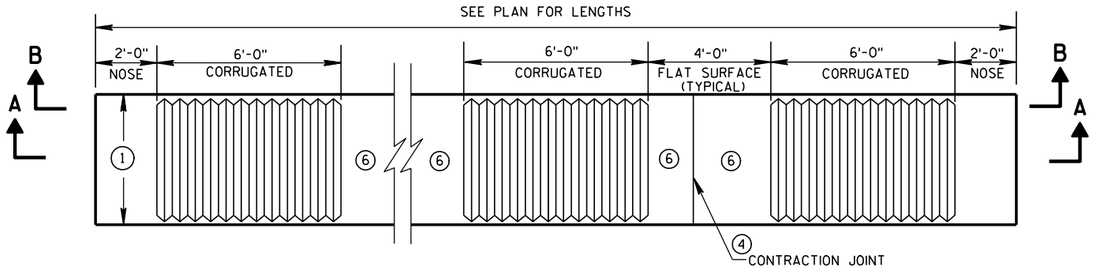
S.D.D. 9 F 9-4



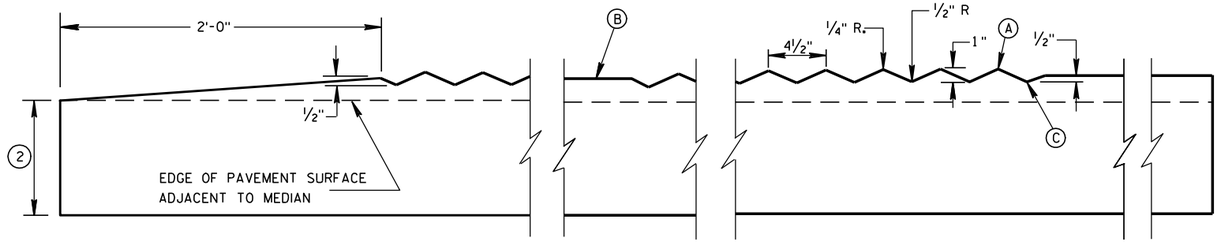
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

GENERAL NOTES

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

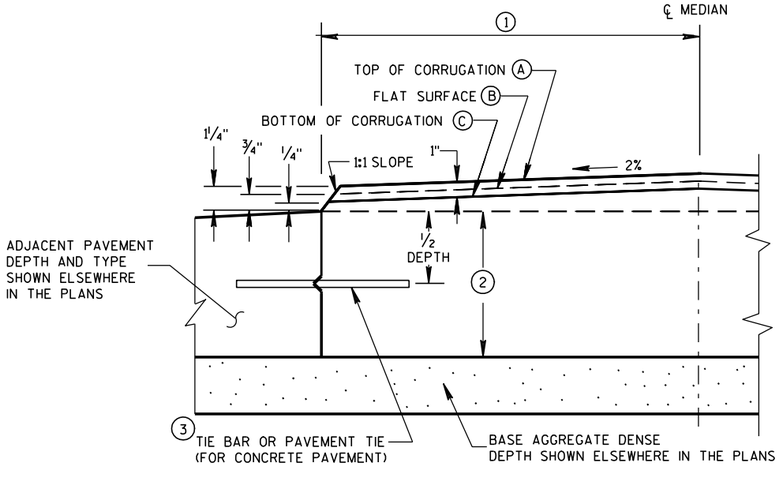
(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.
ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:
(1) NEW OR EXISTING CONCRETE PAVEMENT.
(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.
(3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.

(3) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE, PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(4) CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

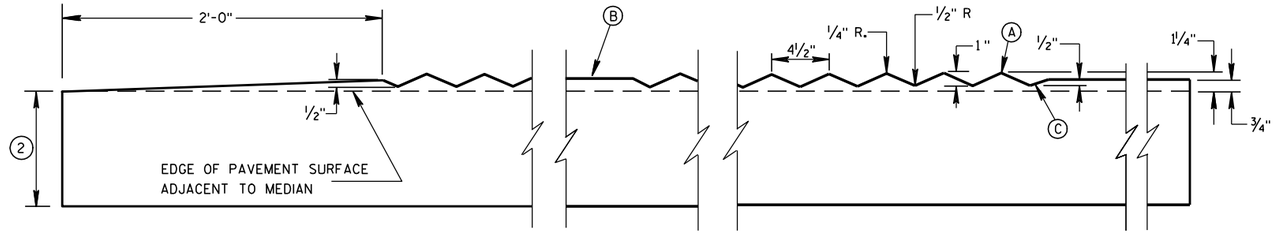
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(6) YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



SECTION B-B

LONGITUDINAL SECTION

CONCRETE CORRUGATED MEDIAN	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
12/17/07 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER
FHWA	

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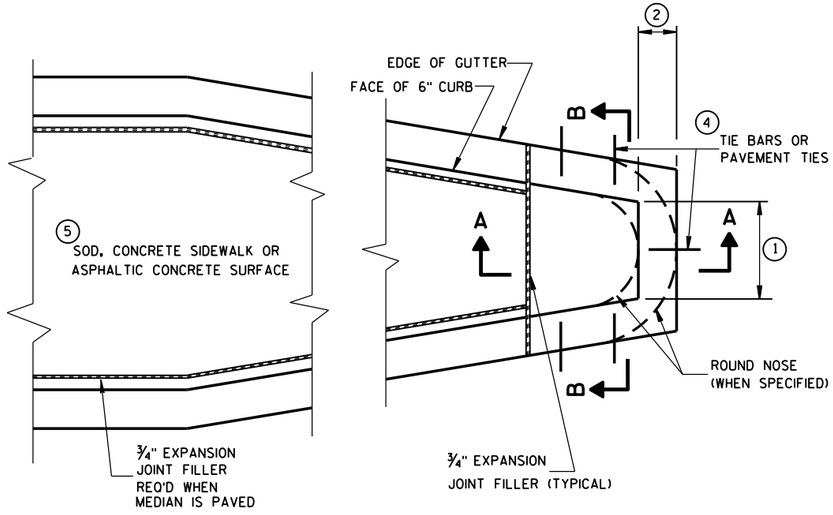
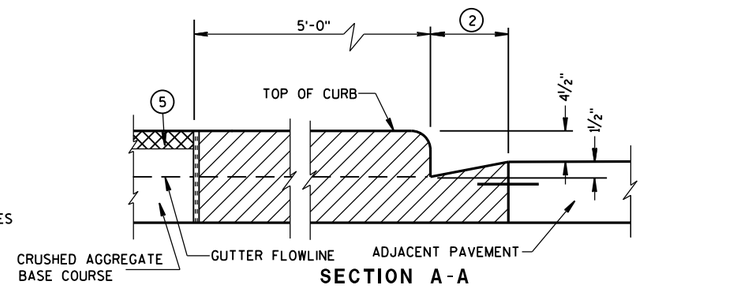
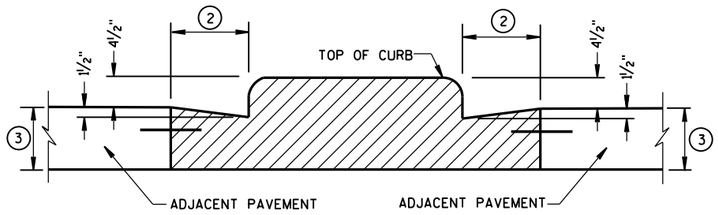
S.D.D. 11 B 1-5







CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

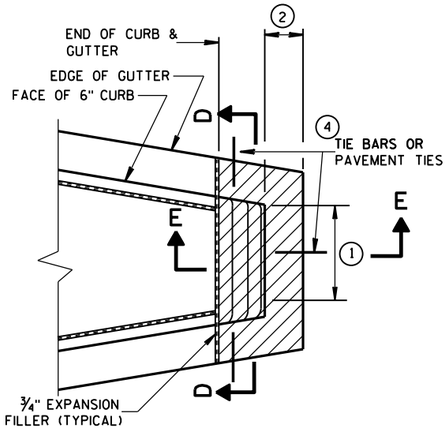
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

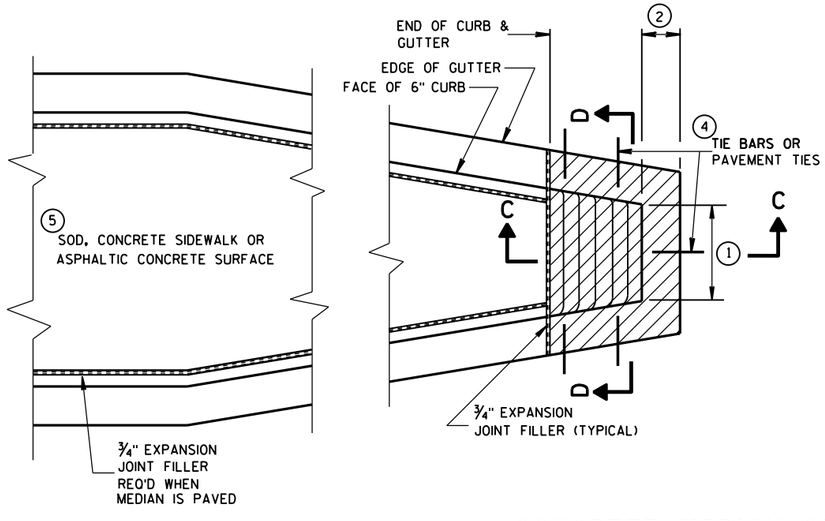
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

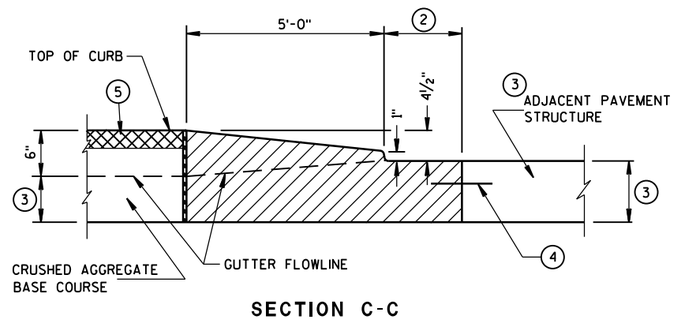
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

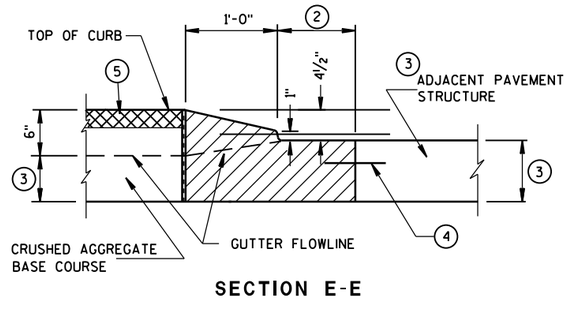
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



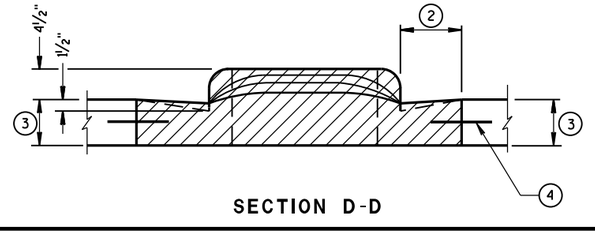






CONCRETE MEDIAN SLOPED NOSE TYPE 2

CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
388
FHWA

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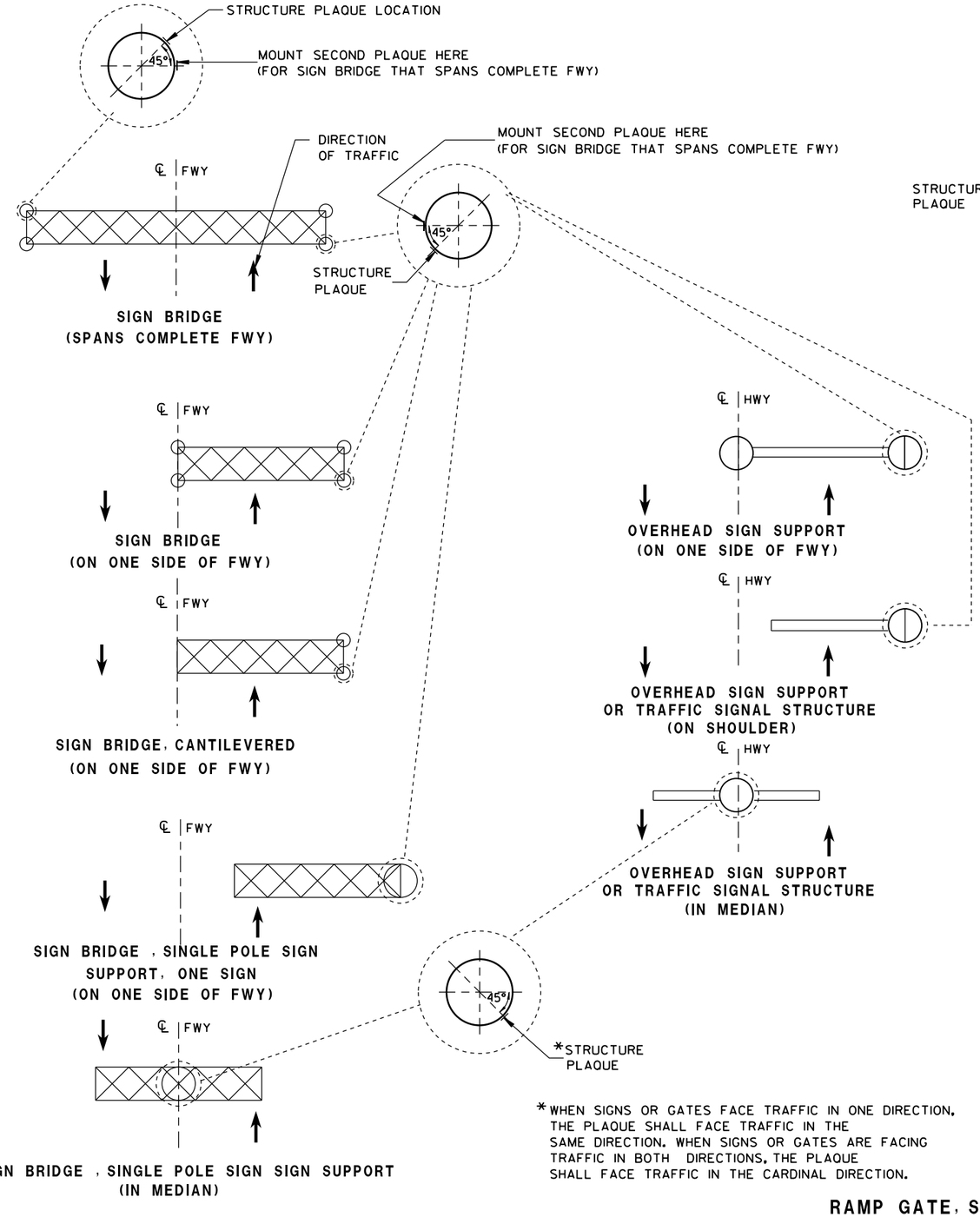
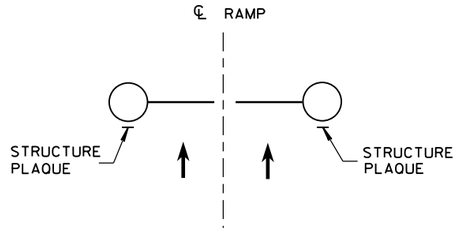
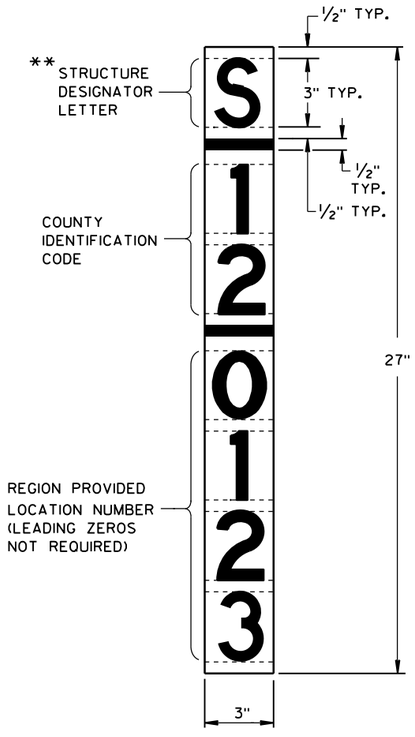


LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

* WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.



RAMP GATE
(ACROSS FWY ON-RAMP)



RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

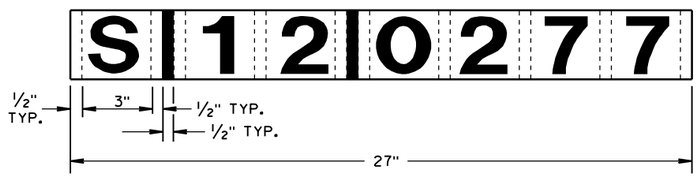
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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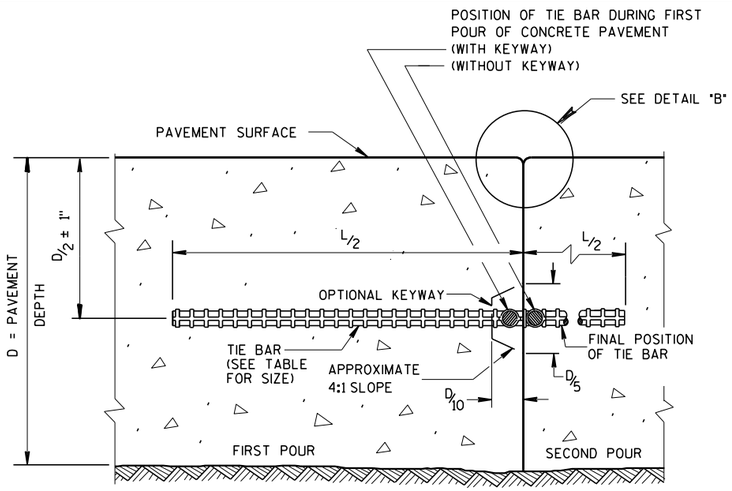
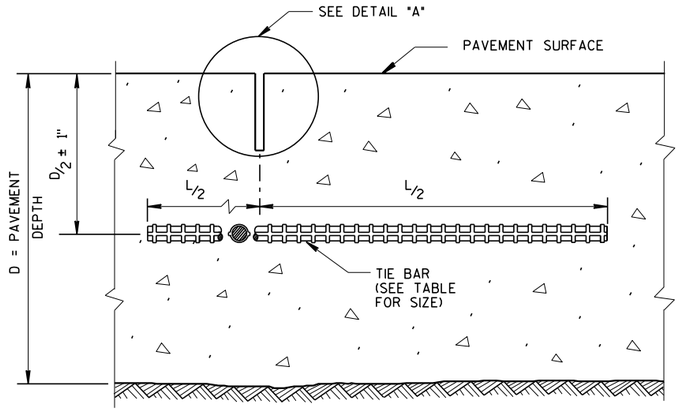


CONSTRUCTION JOINT



SAWED JOINT

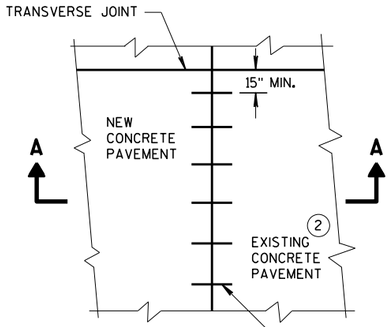
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

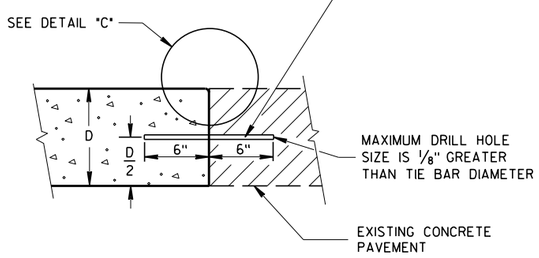
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

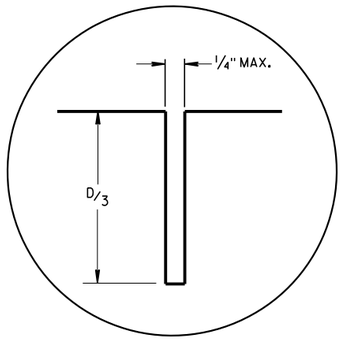


PLAN VIEW

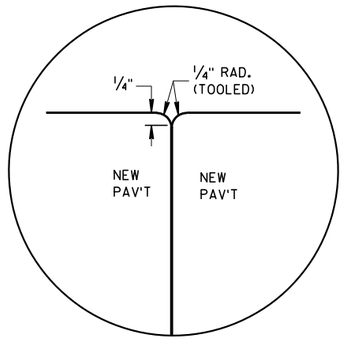


SECTION A-A

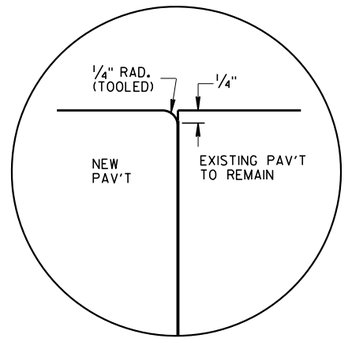
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



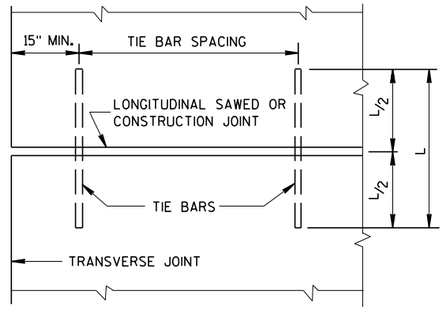
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp PE — PAVEMENT SUPE
FHWA

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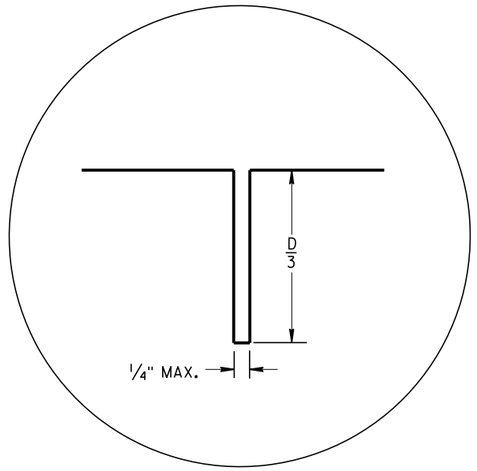
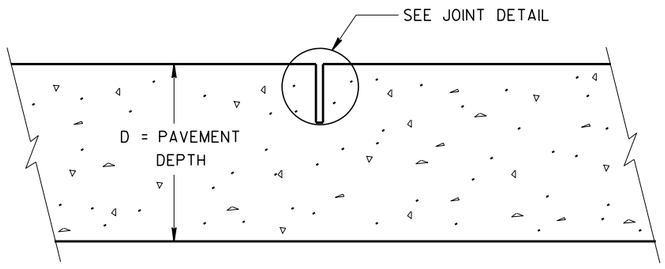
S.D.D. 13 C 1-19



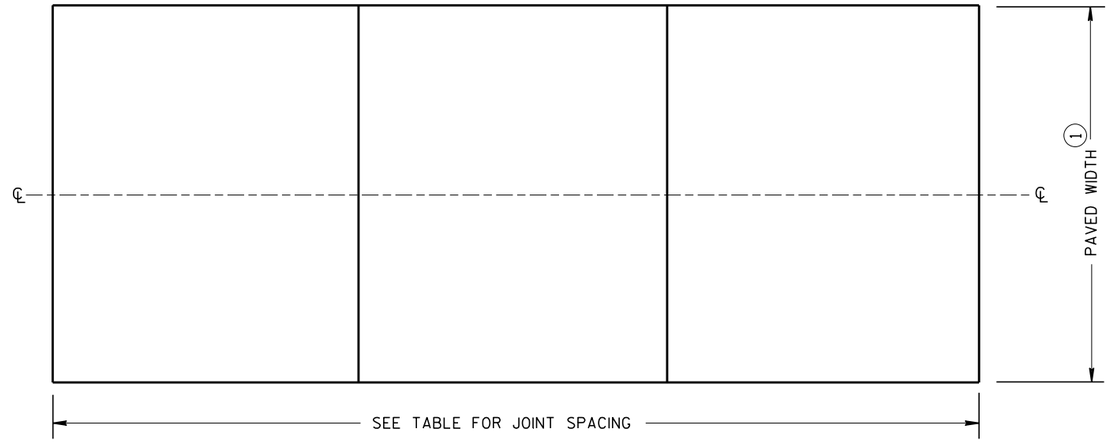
JOINT DETAIL



CONTRACTION JOINT

PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 1/2"	12'
7", 7 1/2"	14'
8" & ABOVE	15'



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE.

LOCATE AND ORIENT CONTRACTION JOINTS THROUGH INTERSECTIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

CONSTRUCTION JOINTS

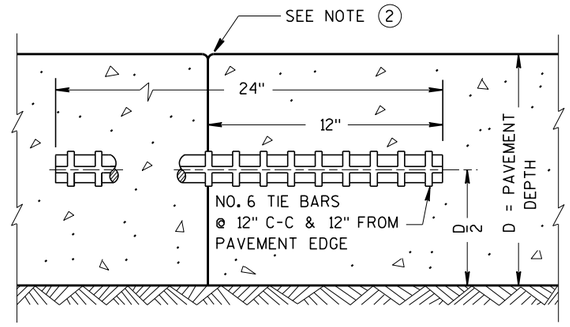
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

FORM OR SAW CONSTRUCTION JOINTS.

THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

(1) REFER TO TYPICAL CROSS SECTIONS FOR PAVED WIDTH AND LOCATION OF LONGITUDINAL JOINTS.

(2) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.



TIED TRANSVERSE CONSTRUCTION JOINT

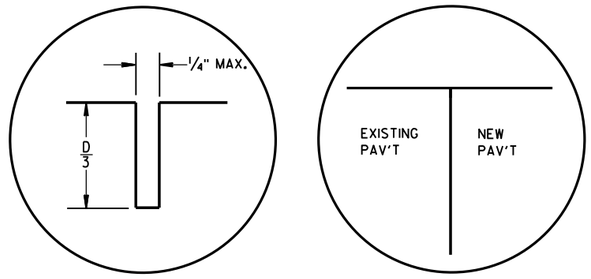
URBAN
NON-DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

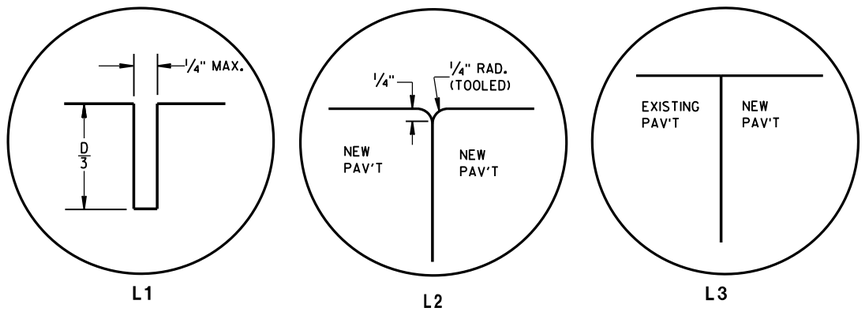
APPROVED
March 2018
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPT
FHWA

6

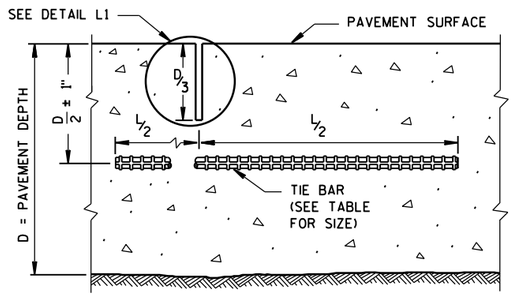
S.D.D. 13 C 4-17



TRANSVERSE JOINTS

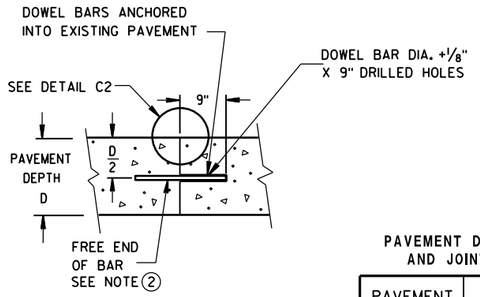


LONGITUDINAL JOINTS



SECTION C-C

SAWED JOINT



SECTION D-D

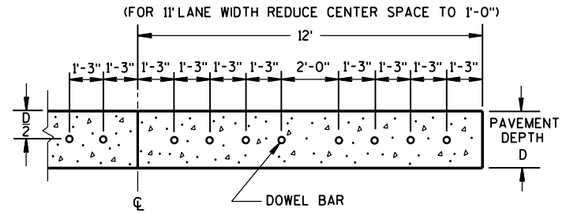
GENERAL NOTES

ANCHOR TIE BARS AND DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

(2) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.



SECTION E-E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

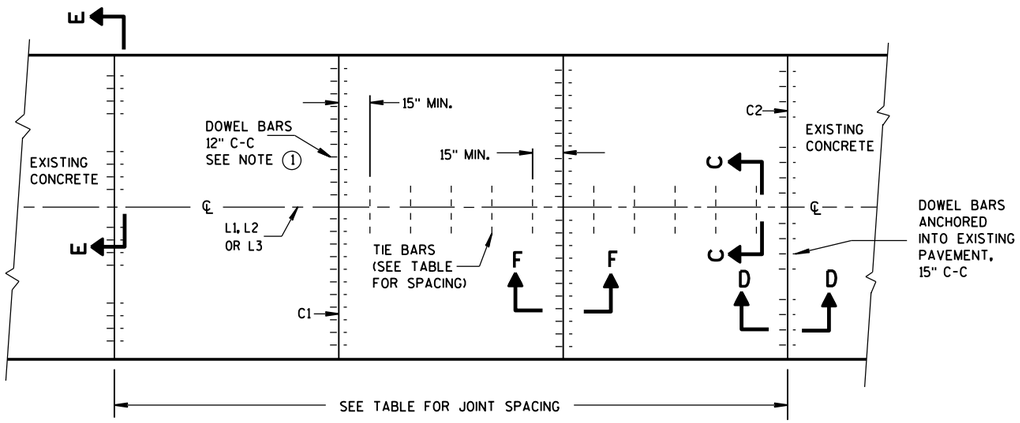
PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5½", 6, 6 ½"	NONE	12'
7, 7 ½"	1"	14'
8, 8 ½"	1 ¼"	15'
9, 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

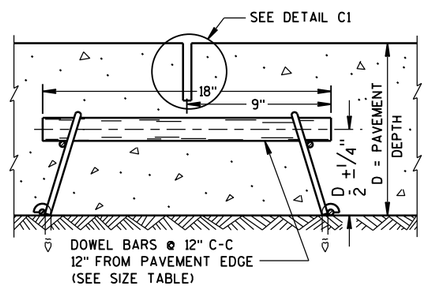
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW

CONCRETE BASE CONTRACTION JOINT LOCATIONS



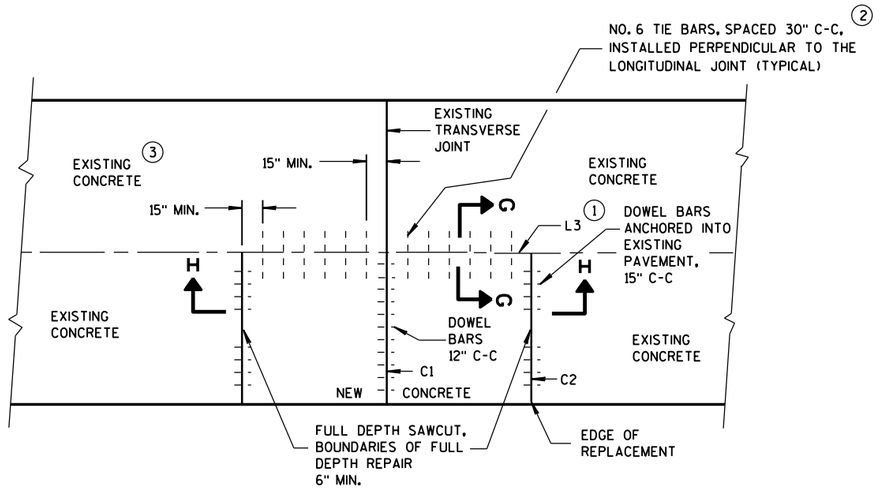
SECTION F-F

CONTRACTION JOINT

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 13 C 15-6a



PLAN VIEW

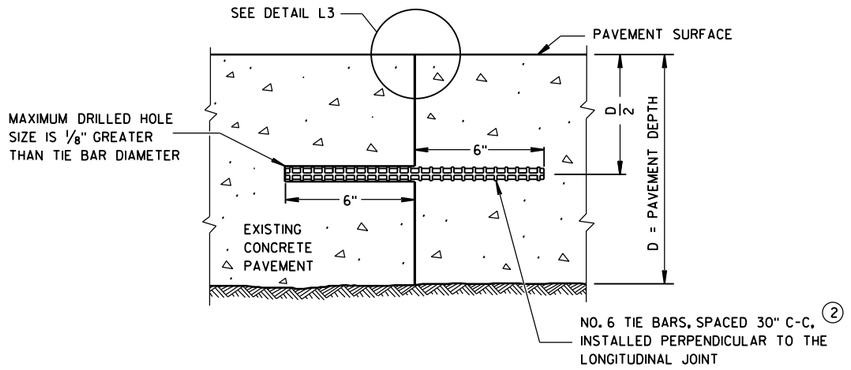
SINGLE LANE CONCRETE BASE REPAIR

GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) AT THE LONGITUDINAL JOINT IN LIEU OF TIE BARS FOR SINGLE LANE CONCRETE BASE REPAIRS UP TO 15 FEET IN LENGTH.

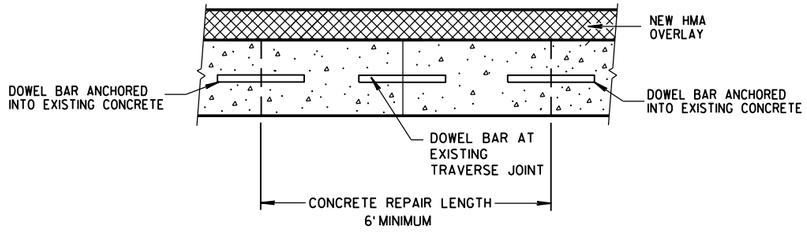
(2) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(3) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



SECTION G-G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



SECTION H-H

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPEI
FHWA

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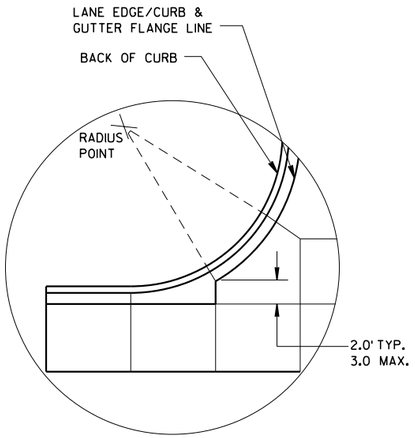
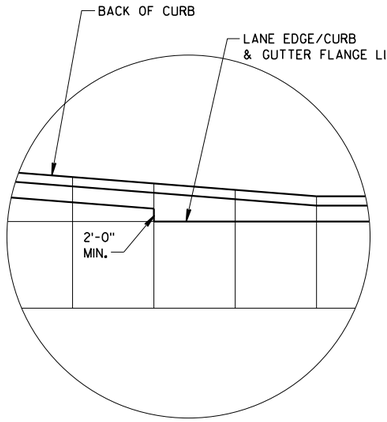
S.D.D. 13 C 15-6b



DETAIL "A"



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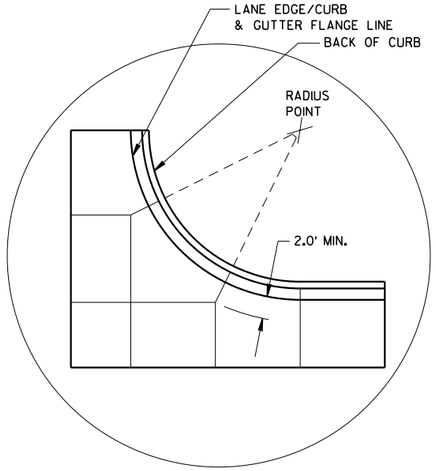
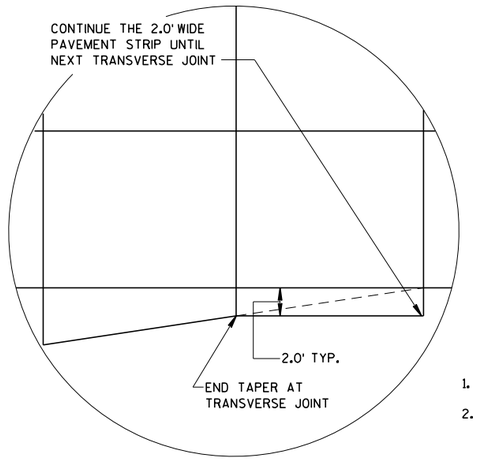


DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

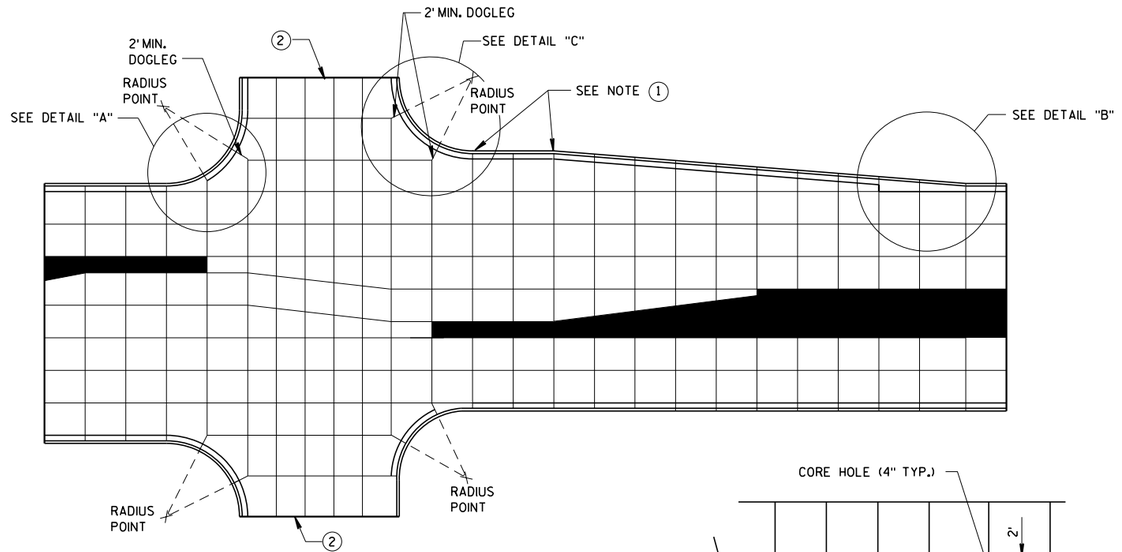
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

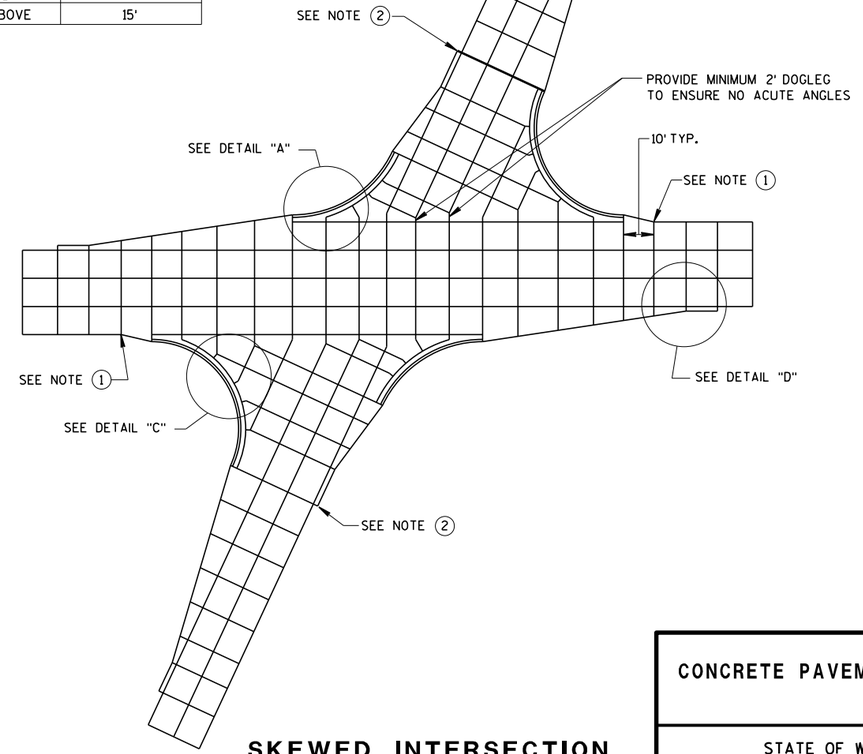
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



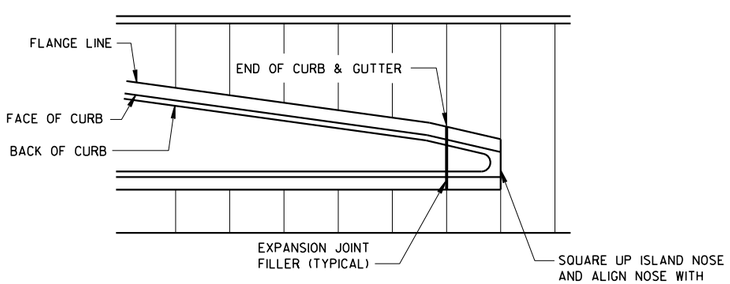
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

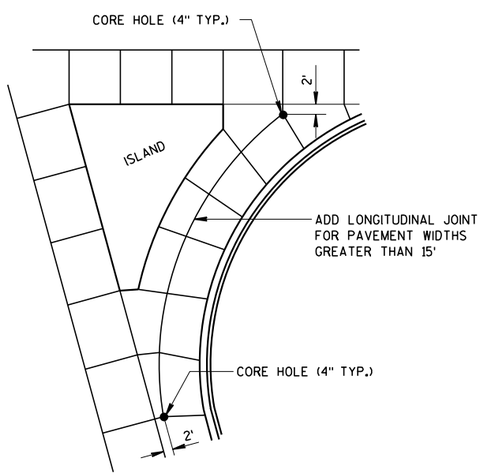
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

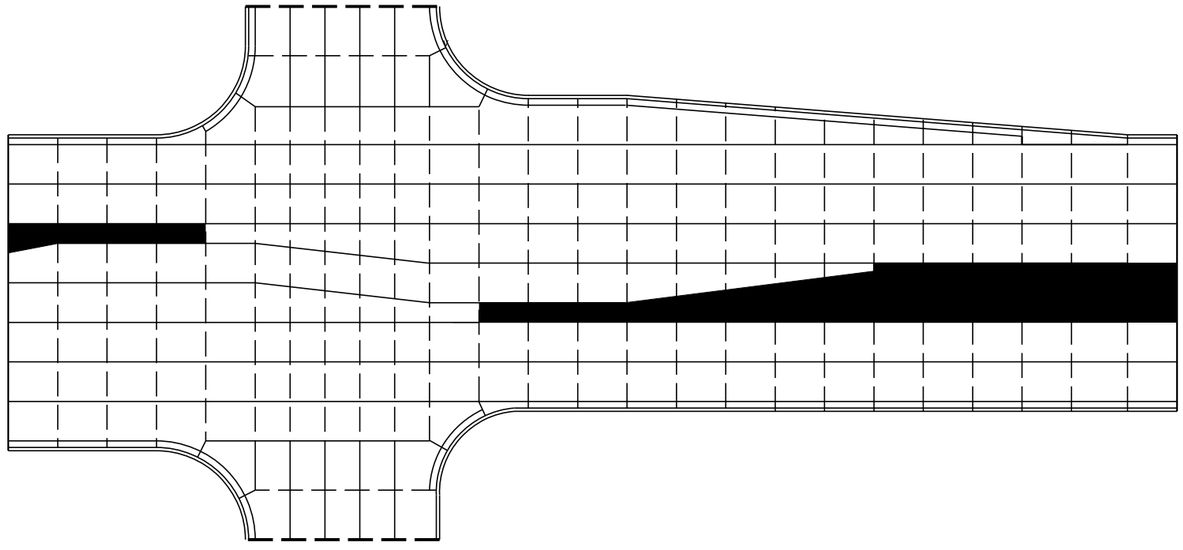
6
S.D.D. 13 C 18-6a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

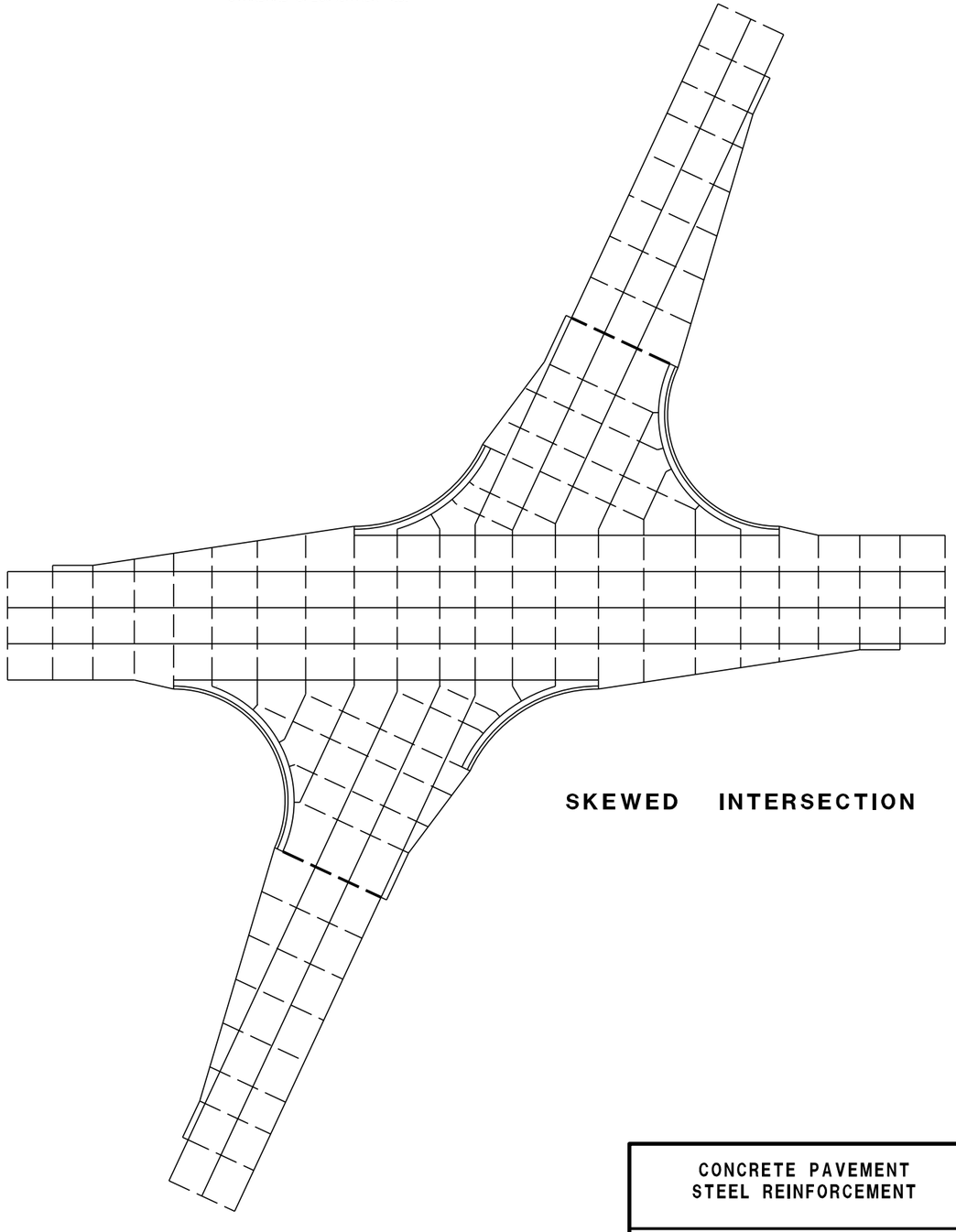
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

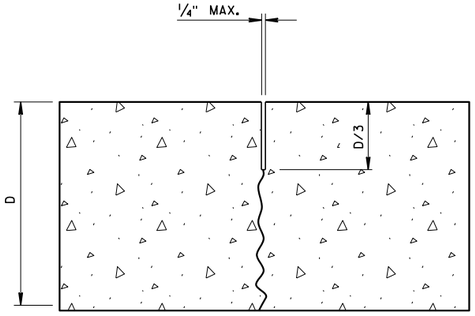
6

S.D.D. 13 C 18-6b

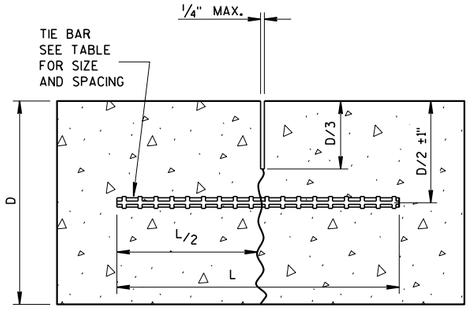
CONCRETE PAVEMENT
STEEL REINFORCEMENT

6

S.D.D. 13 C 18-6b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

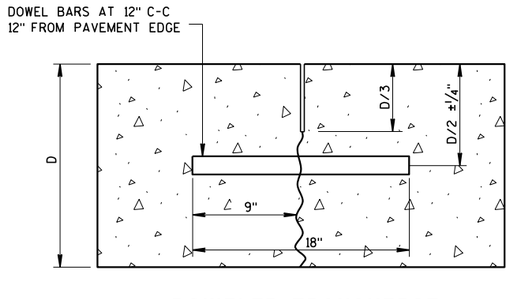
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

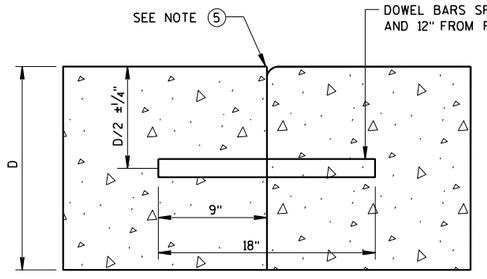
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



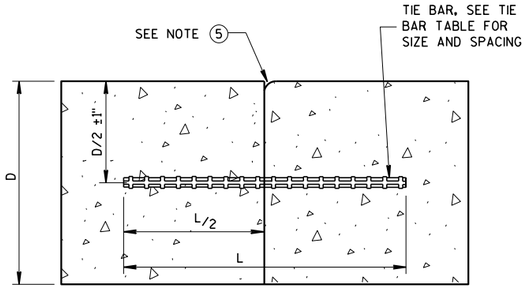
DOWELED-TRANSVERSE

CONTRACTION JOINTS

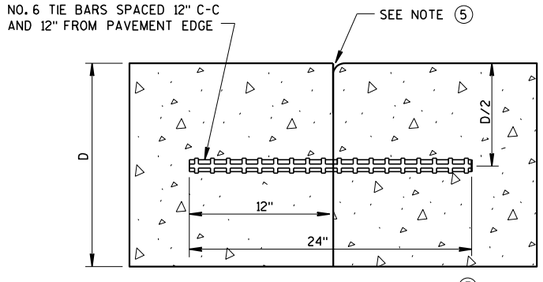
SEE NOTE (2)



DOWELED TRANSVERSE (3)

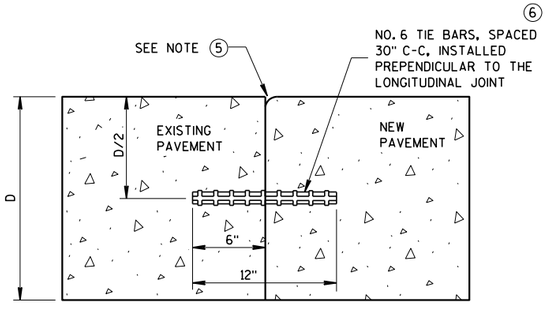


TIED LONGITUDINAL



TIED TRANSVERSE (3)

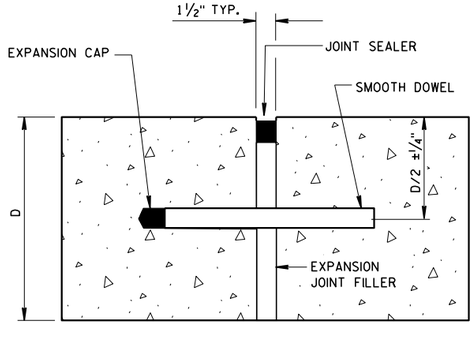
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

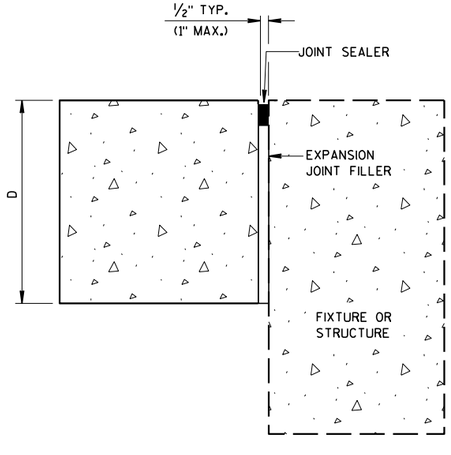
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

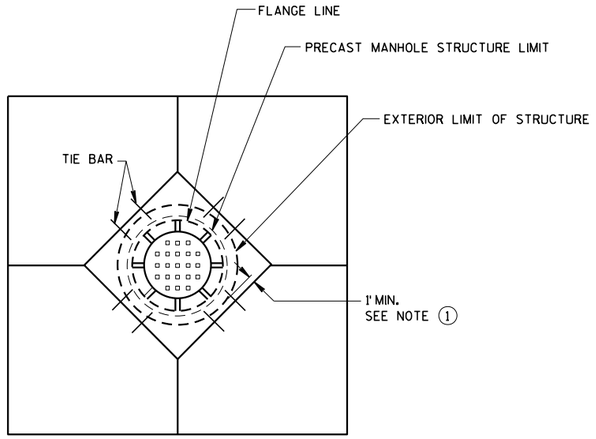
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

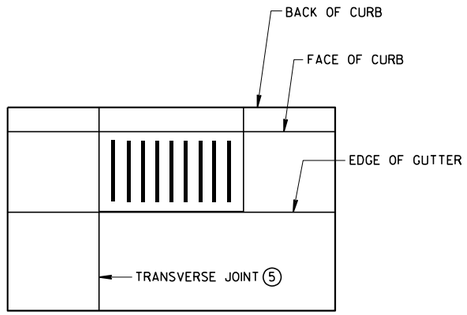
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

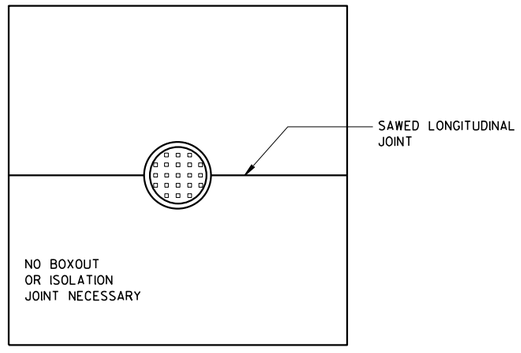
S.D.D. 13 C 18-6c



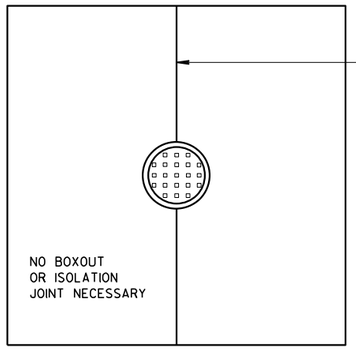
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



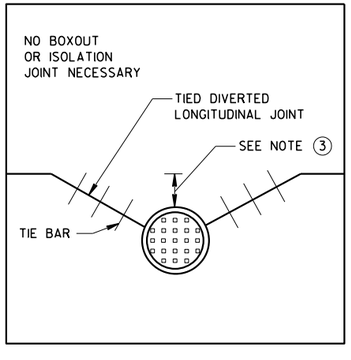
INLET WITH TRANSVERSE JOINT



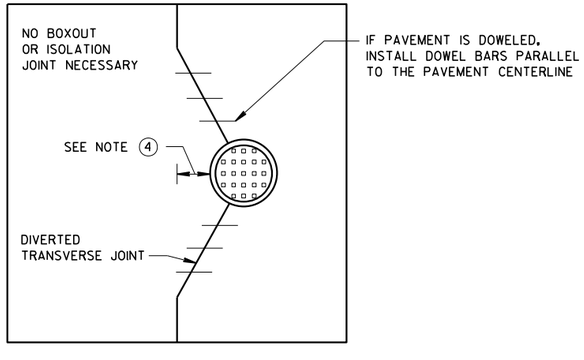
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

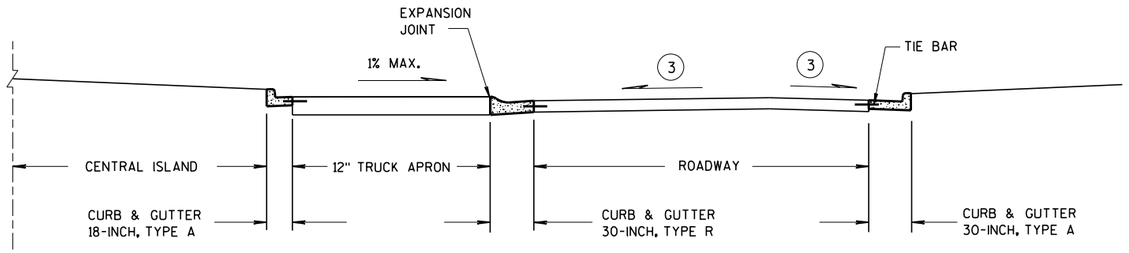
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

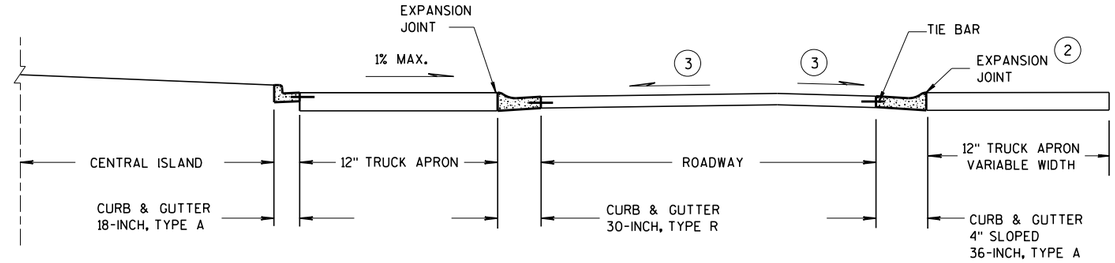
APPROVED
March 2018 — DATE
/S/ Peter K... P.E. — PAVEMENT SUPT
FHWA

6

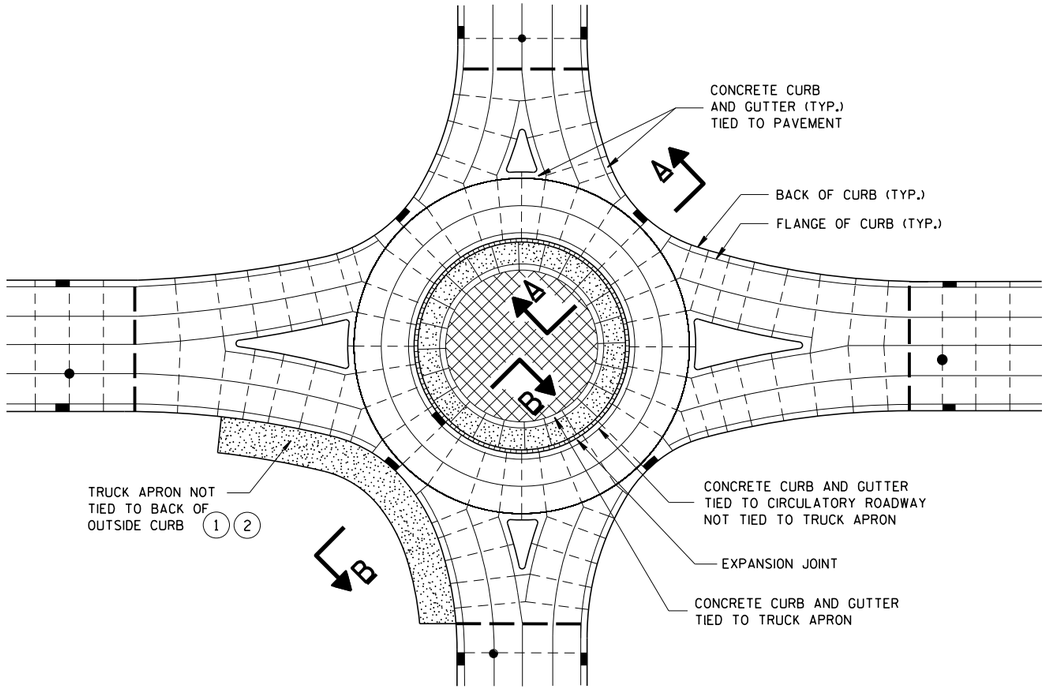
S.D.D. 13 C 18-6d



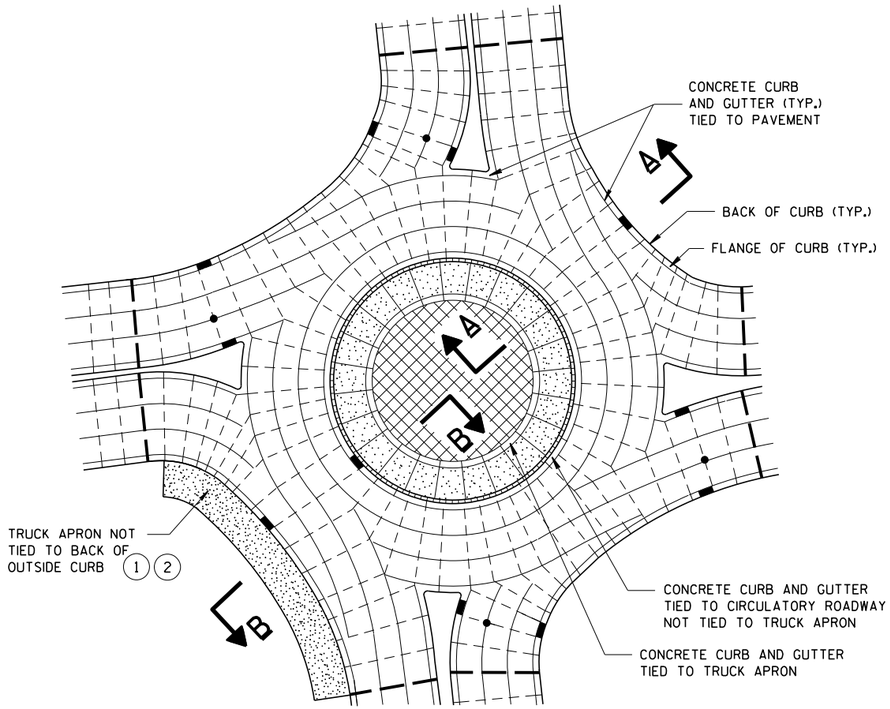
SECTION A-A



SECTION B-B



ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS



PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 SHEET "a".

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

(1) DESIGNER DETERMINES SIZE AND LOCATION(S) OF TRUCK APRON TO ACCOMMODATE TRACKING OF OVERSIZE/OVERWEIGHT VEHICLES.

(2) TIE THE OUTSIDE TRUCK APRON TO THE BACK SIDE OF CURB ONLY WHEN ENTIRE TRUCK APRON WIDTH IS LESS THAN 3 FEET.

(3) CONFORM TO PLAN CONSTRUCTION DETAILS FOR CIRCULATORY ROADWAY CROSS SLOPE.

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES

CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS

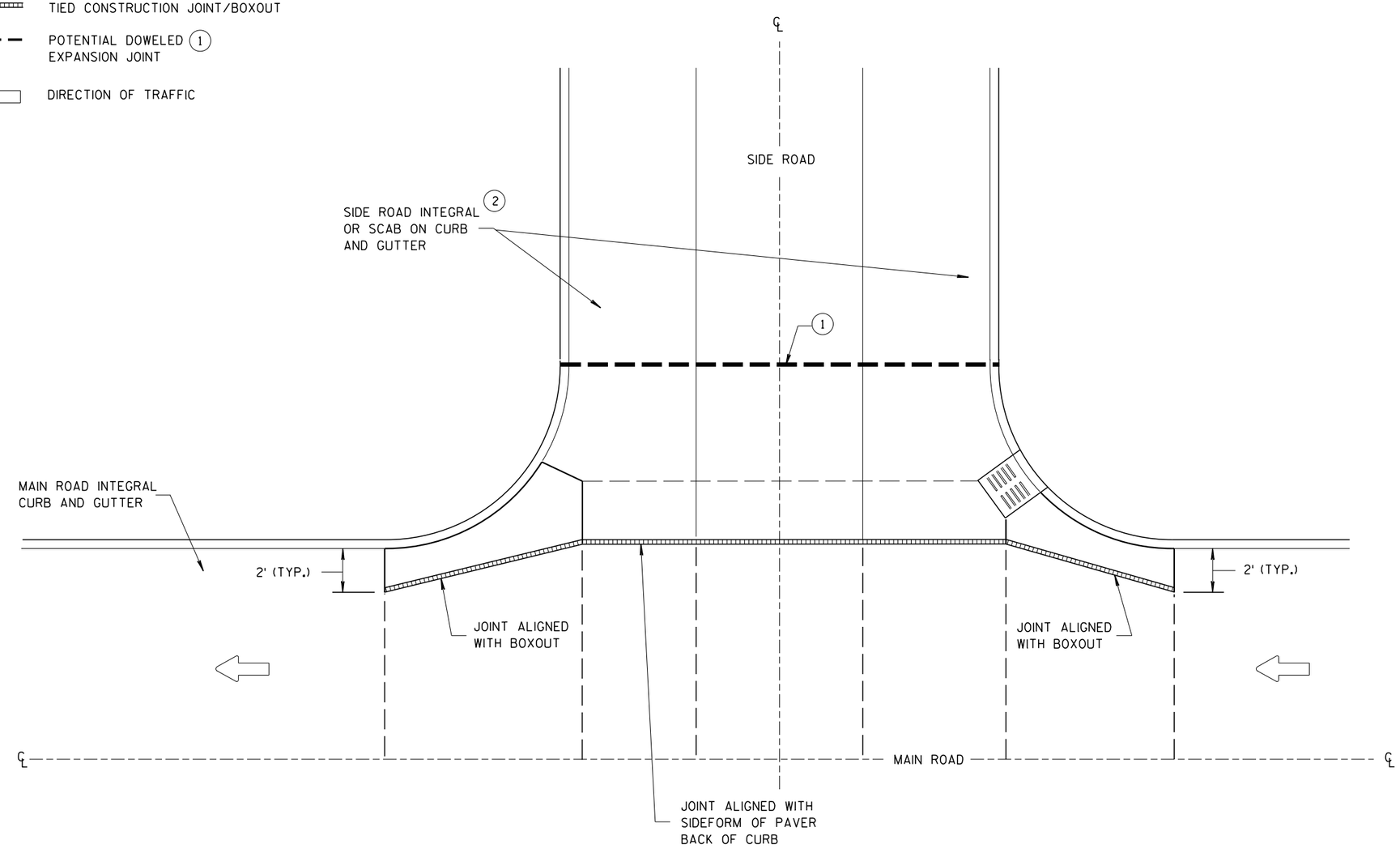
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE
/S/ Peter Ke
PAVEMENT SUF
FHWA

6
S.D.D. 13 C 18-6e

LEGEND

- DOWELED JOINT
- TIED JOINT
- TIED CONSTRUCTION JOINT/BOXOUT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

1. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH, ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.

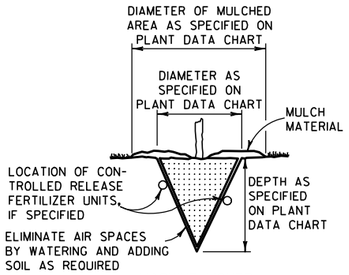
2. PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USED.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

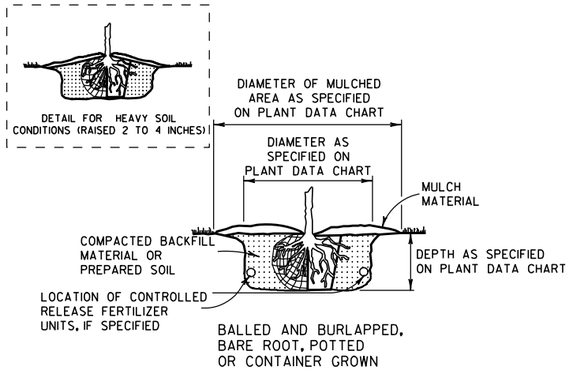
CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
March 2018 DATE	/S/ Peter Kerr P.E. PAVEMENT SUP
FHWA	

6

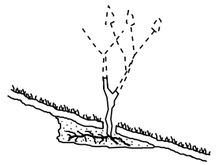
S.D.D. 13 C 18-6f



MACHINE MOVED

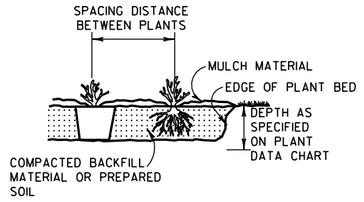


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



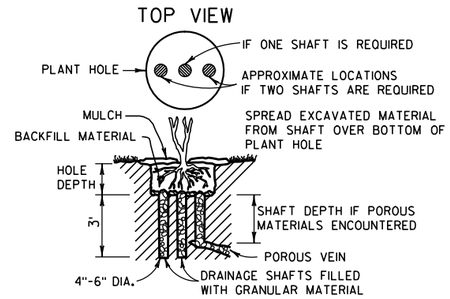
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



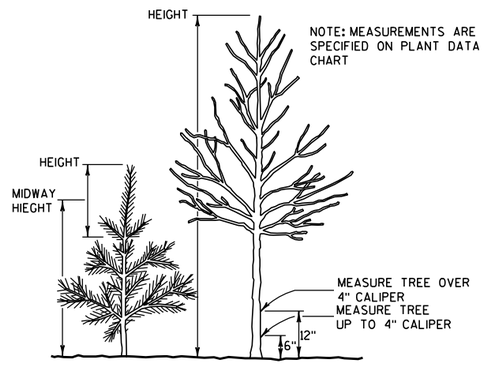
PREPARED BED (BARE ROOT AND POTTED)

PLANTING

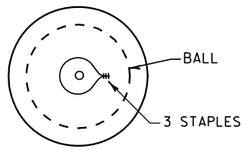


NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

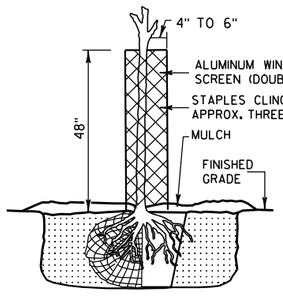
DRAINING



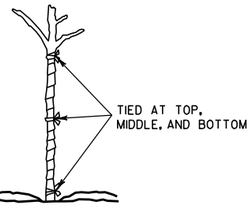
MEASURING



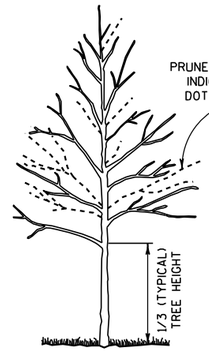
TOP VIEW



RODENT PROTECTION



WRAPPING



TALL DECIDUOUS TREES (ASH, MAPLE, LINDEN, OAK)

SINGLE STEMMED LOW DECIDUOUS TREES (CRABS AND OTHER SINGLE STEM TYPE)

MULTI-STEMMED LOW DECIDUOUS TREES OR LARGE SHRUBS (HAWTHORN, SERVICEBERRY)

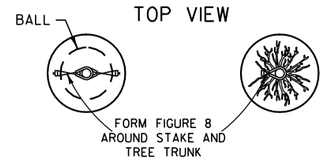
NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES

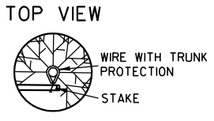
SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

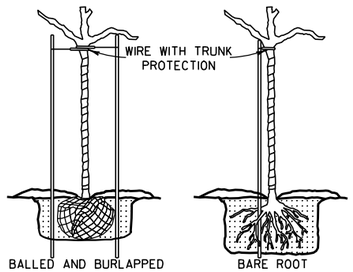
SUMAC

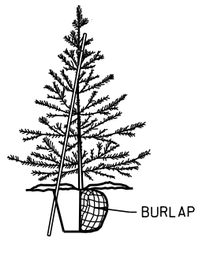
TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

PRUNING



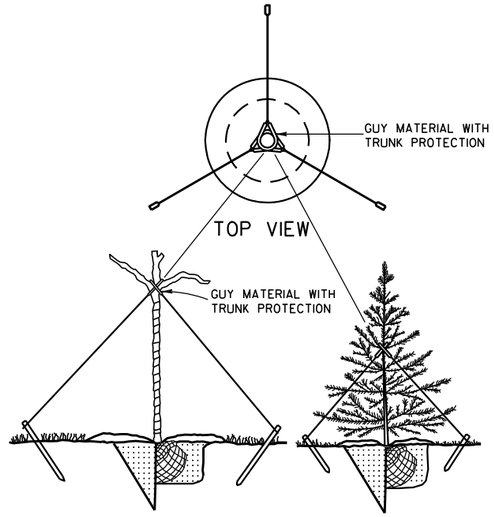






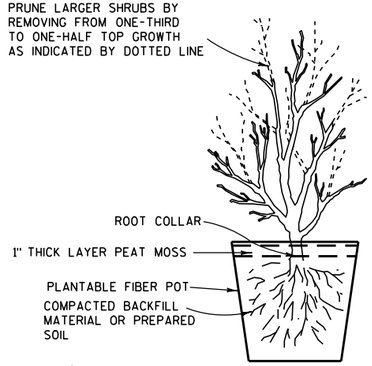
NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING

PRUNE LARGER SHRUBS BY REMOVING FROM ONE-THIRD TO ONE-HALF TOP GROWTH AS INDICATED BY DOTTED LINE



POTTING

NOTES

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

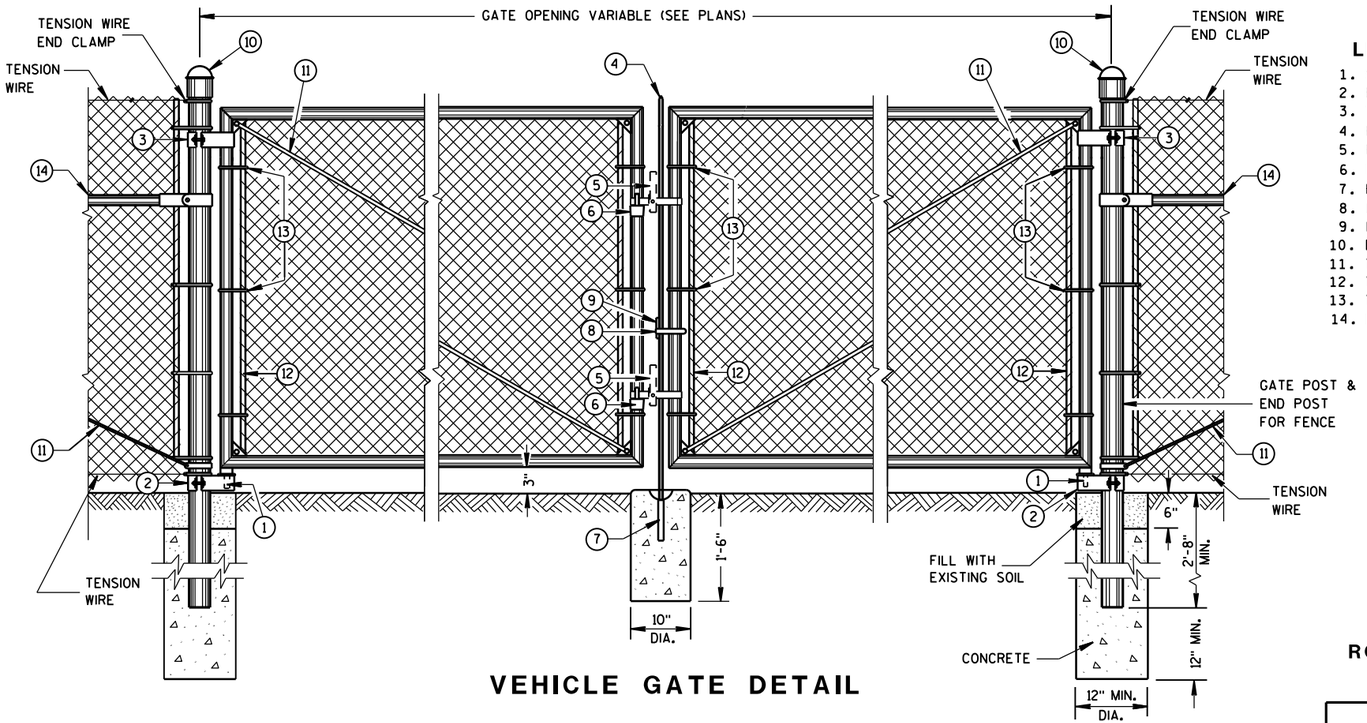
BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

TREE PLANTING DETAIL

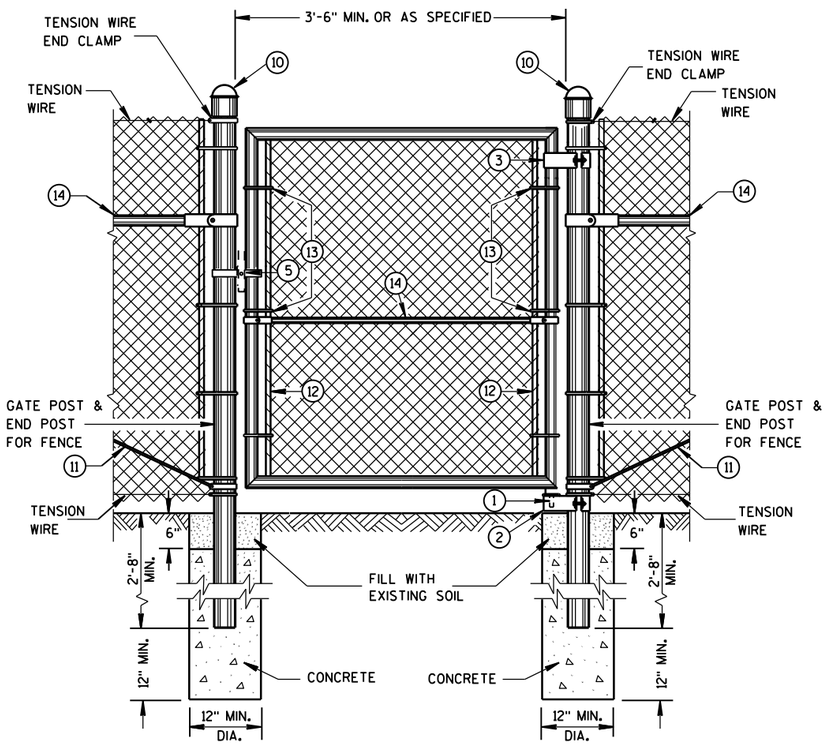
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/11/94
DATE
/S/ Rory L. Rhinesmith
CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 14 A 2-1
6



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.

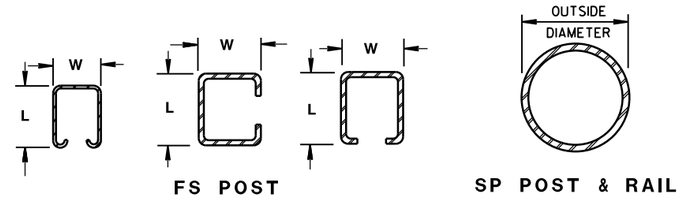
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

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.



FS POST

SP POST & RAIL

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

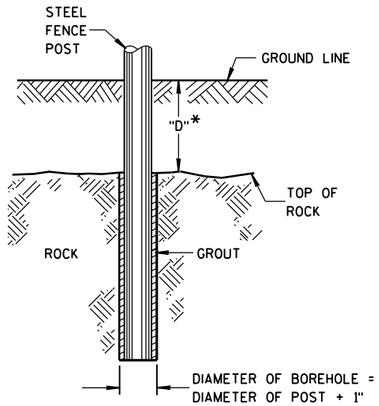
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 B 3-15a

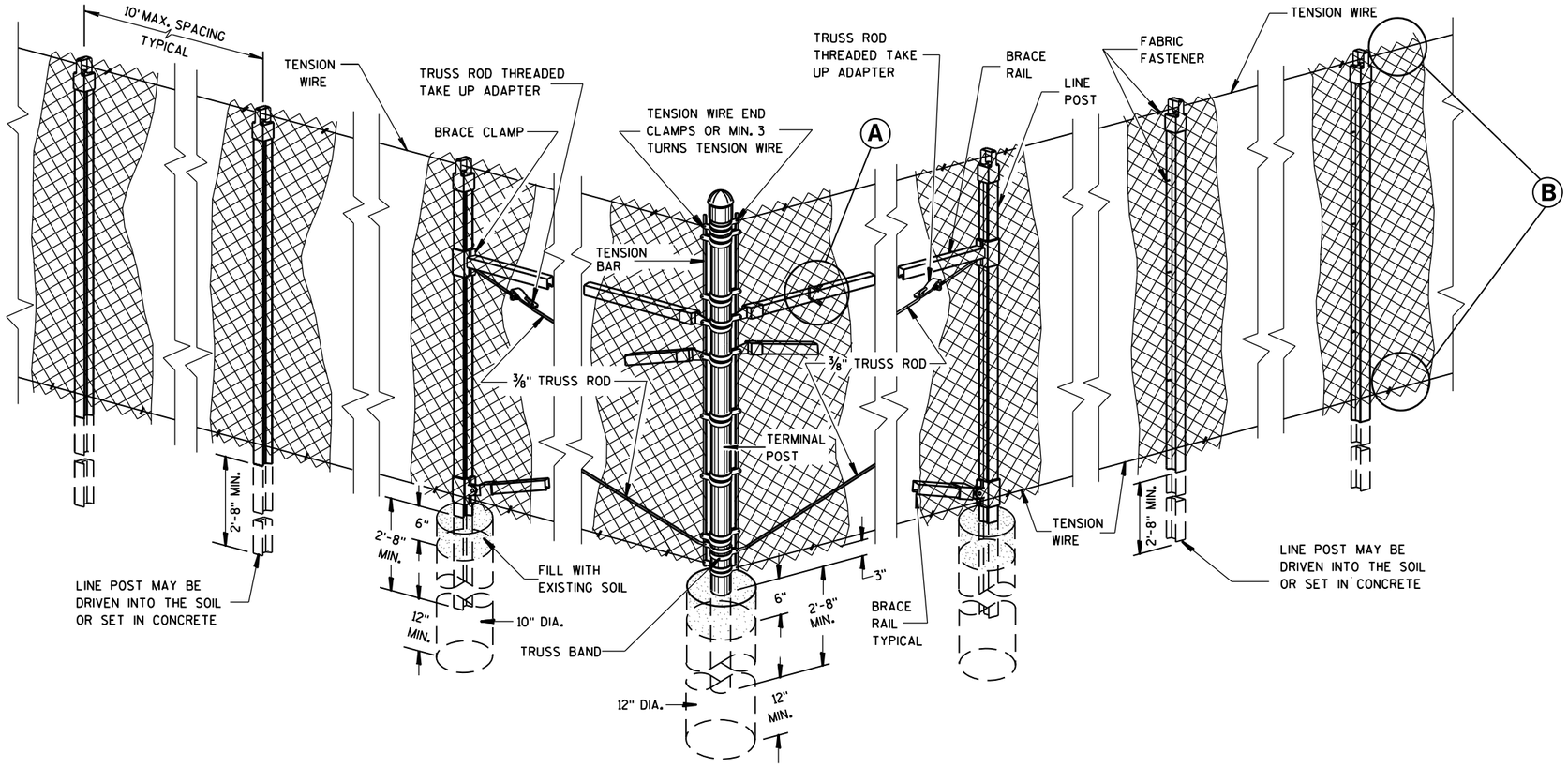
6

S.D.D. 15 B 3-15a

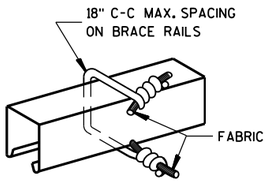


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



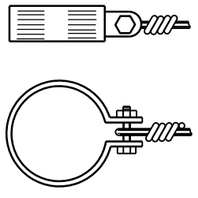
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



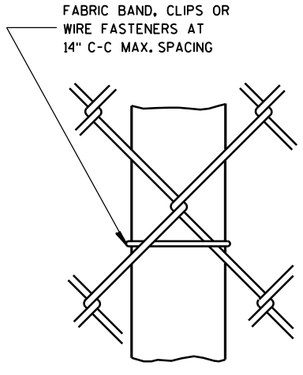
BRACE RAIL

FABRIC FASTENER

Ⓐ



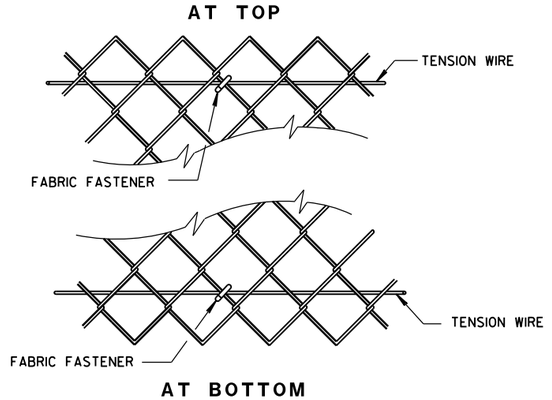
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

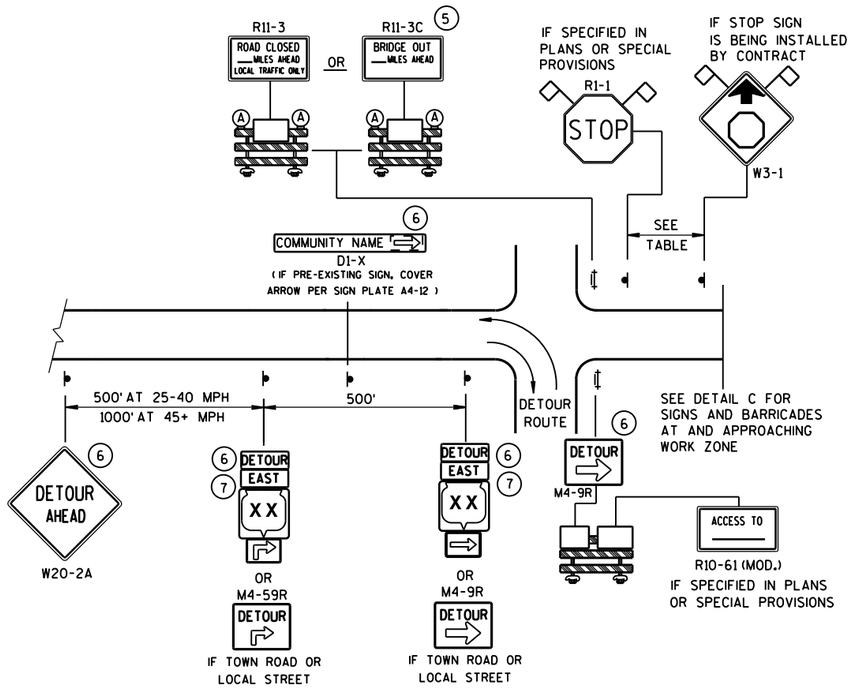
FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
FEB. 2015 DATE
FHWA
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

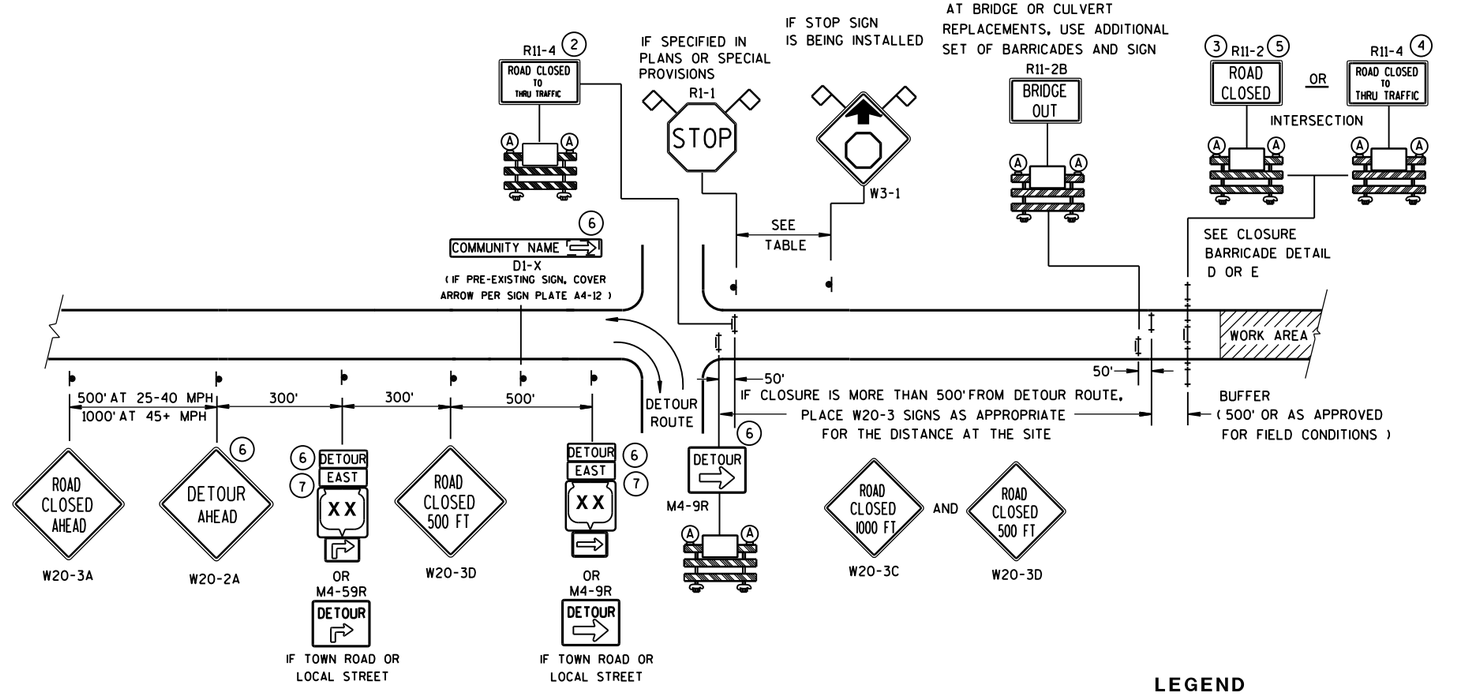
S.D.D. 15 B 3-15b



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

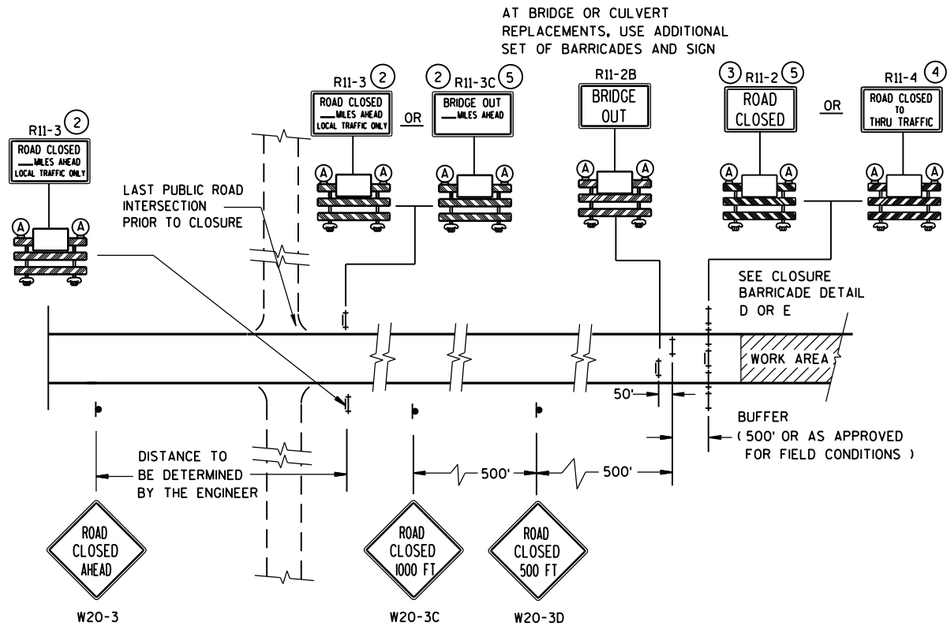
WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



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

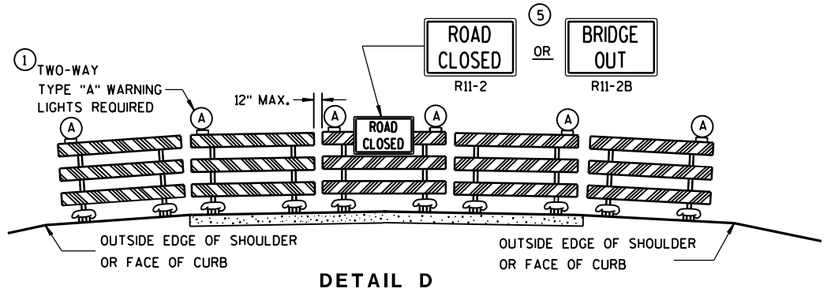
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

S.D.D. 15 C 2-6a

6

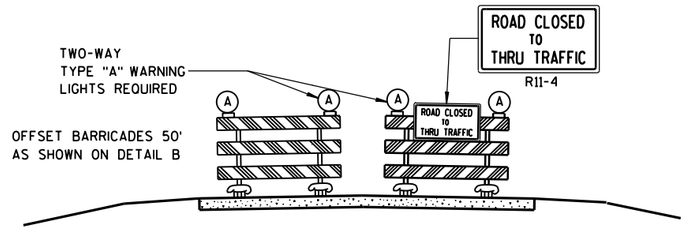
S.D.D. 15 C 2-6a



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 SAFETY ENGI

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S.D.D. 15 C 2-6b

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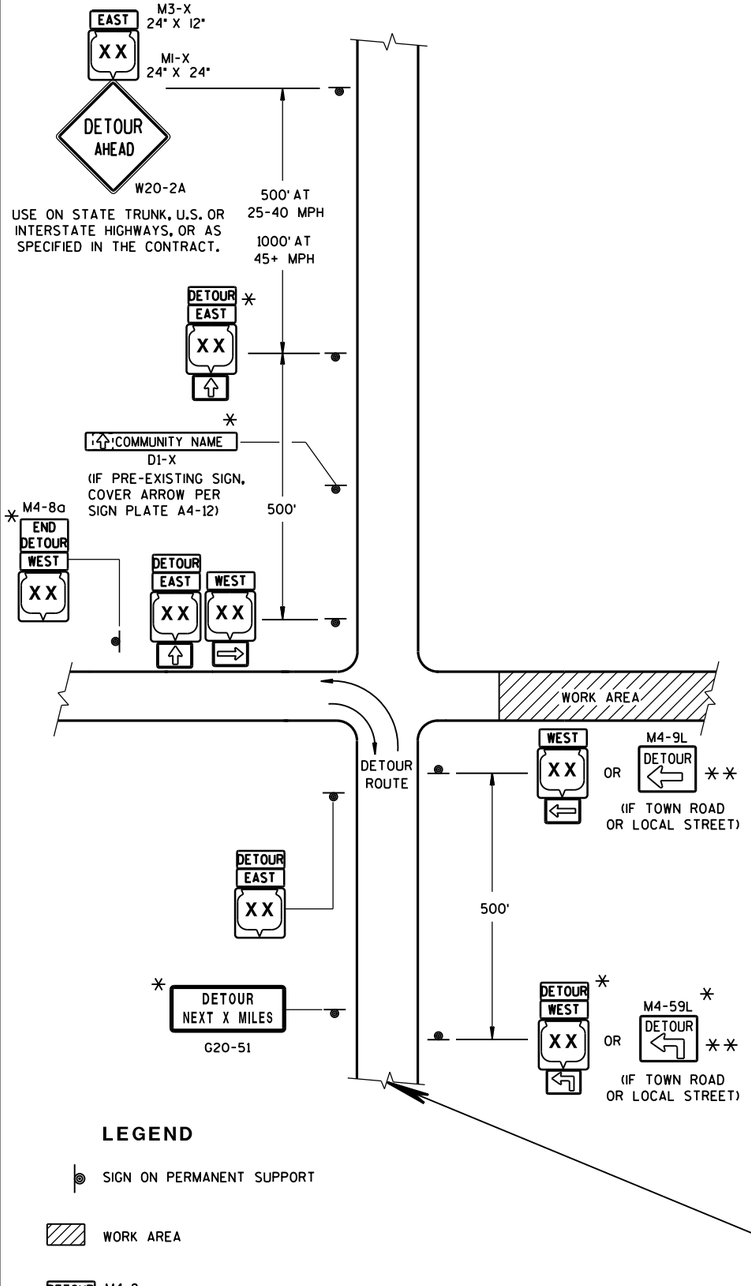
S.D.D. 15 C 2-6b



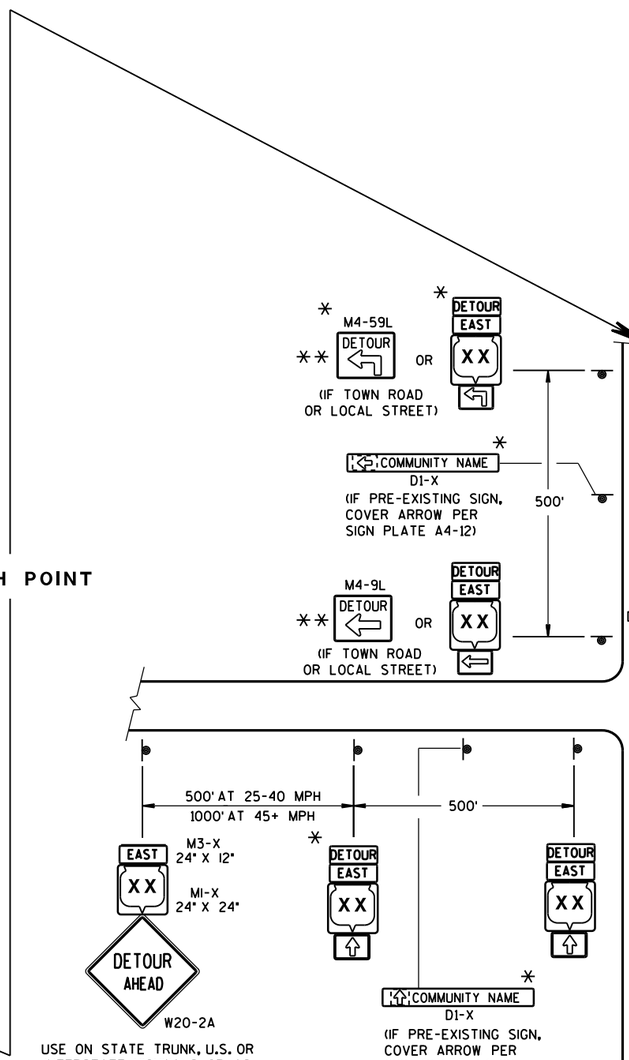
SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- M1-4 OR M1-5A OR M1-6
- M05-1 OR M06-1 OR M06-1

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

MATCH POINT



DETAIL F

DETOUR SIGNING

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

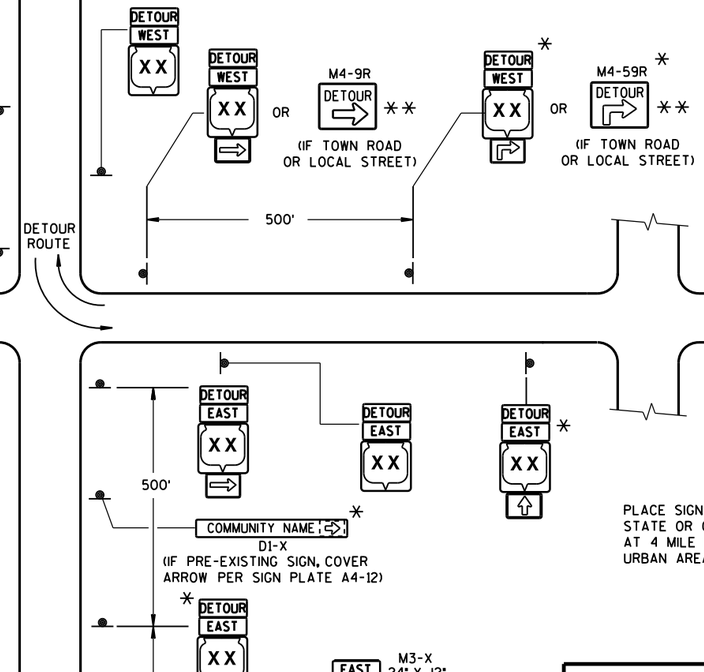
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (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.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

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S.D.D. 15 C 2-6c

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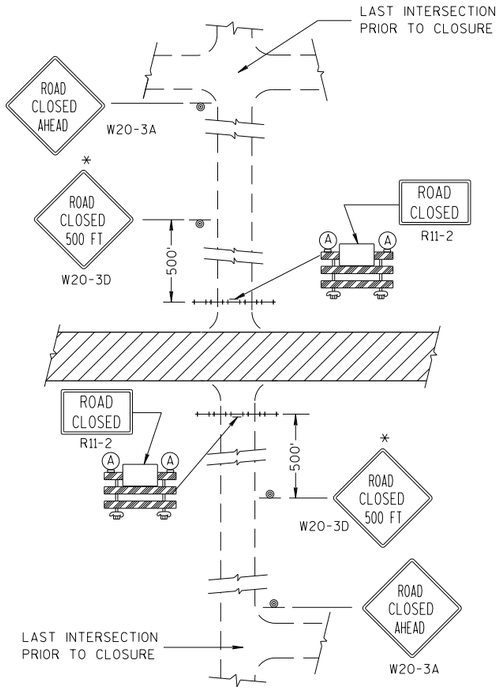
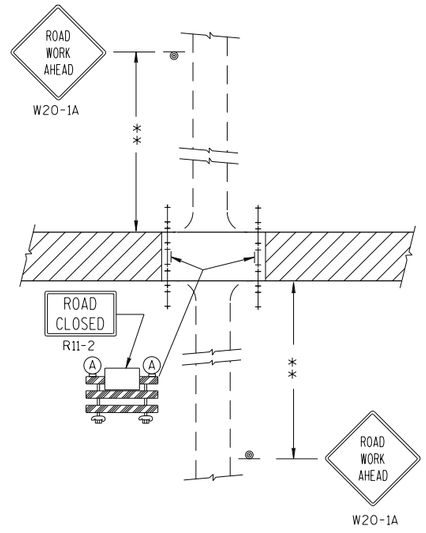


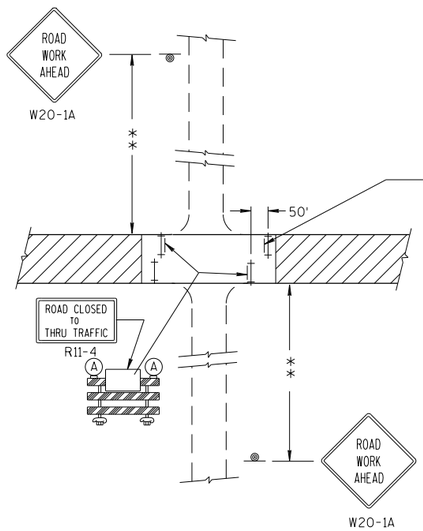
DETAIL 1

(NO ACCESS TO PROJECT)



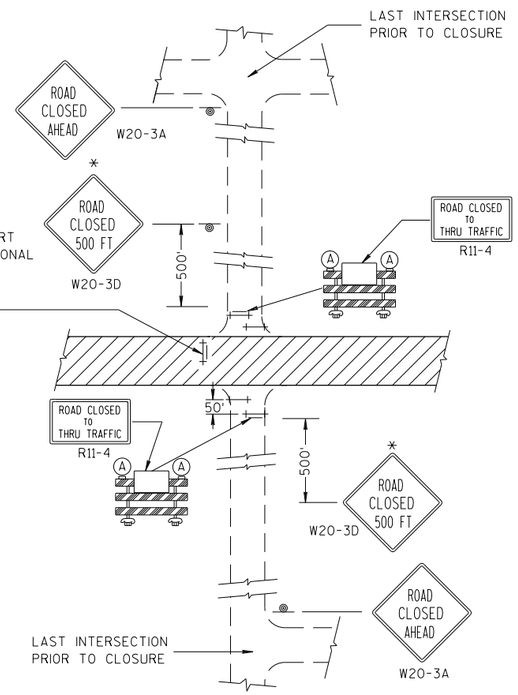
DETAIL 2

(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

7/2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGI

FHWA

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S.D.D. 15 C 3-5

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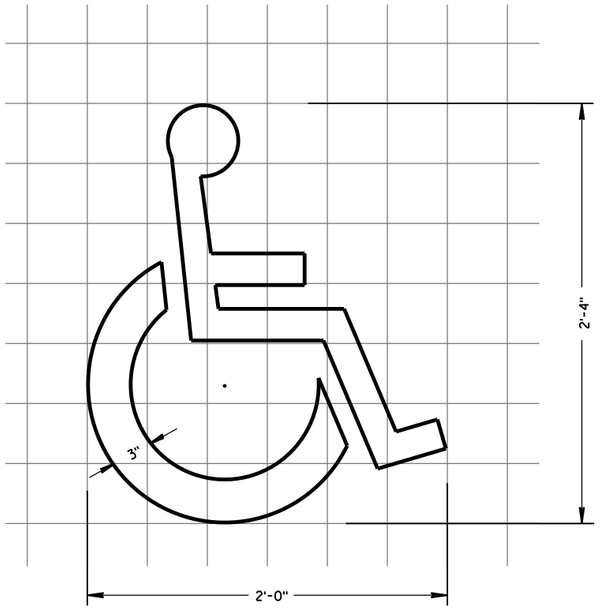
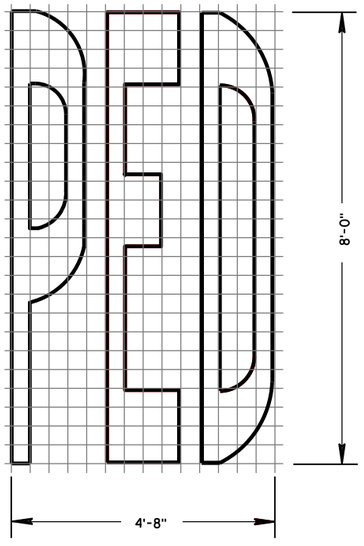
S.D.D. 15 C 3-5

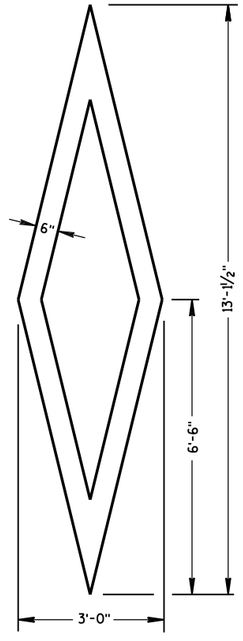
GENERAL NOTES

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



HANDICAP SYMBOL





PREFERENTIAL LANE SYMBOL

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S.D.D. 15 C 7-14a

S.D.D. 15 C 7-14a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MARK

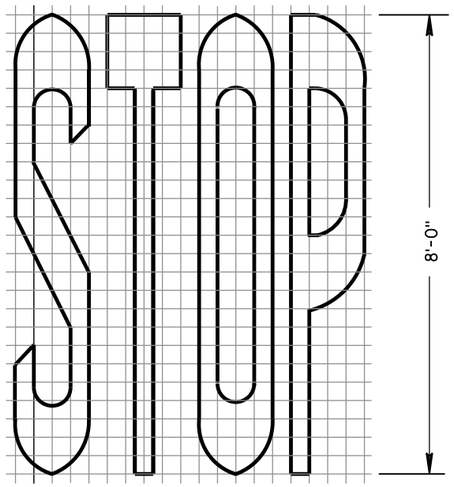
407

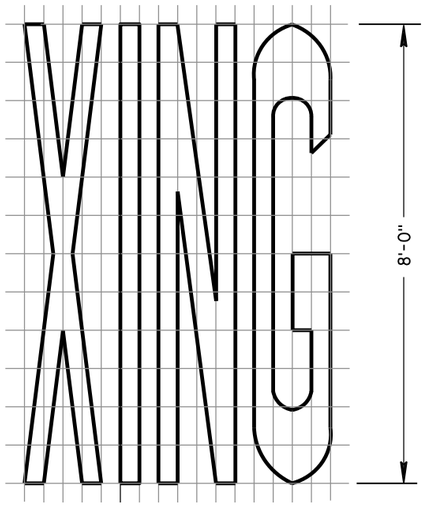
EER

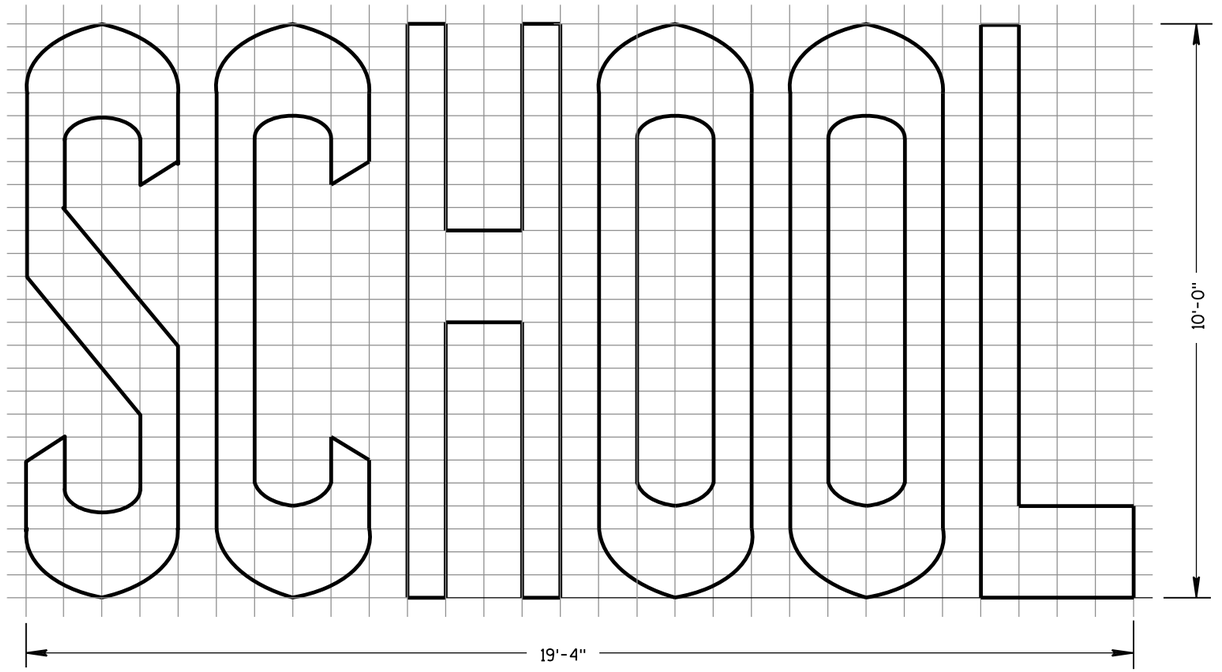
FHWA

GENERAL NOTES

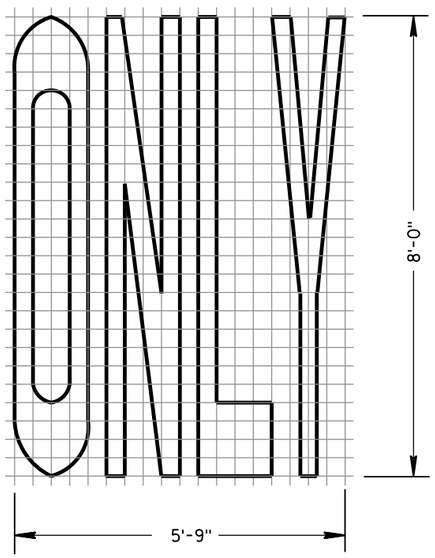
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

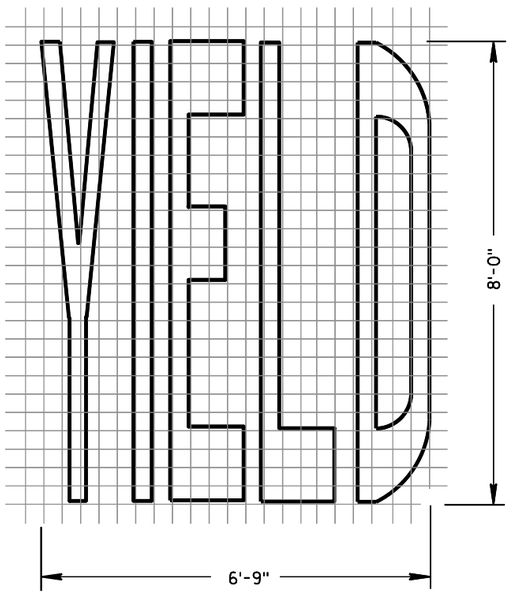


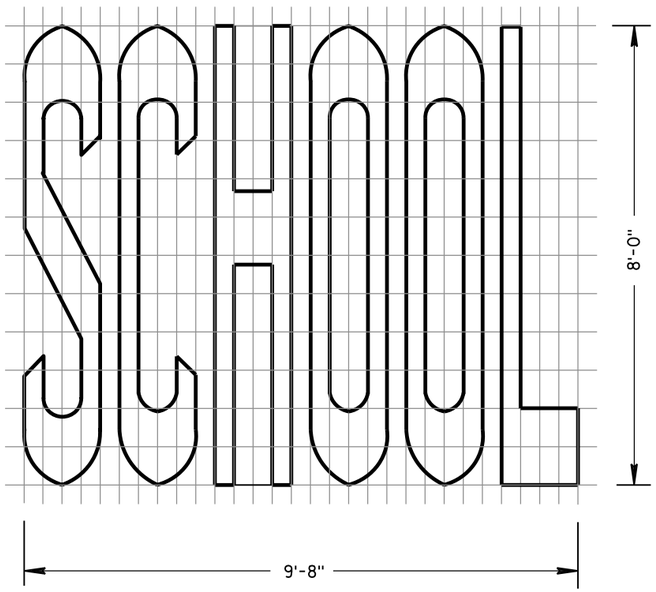




TWO-LANE







SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
EER
FHWA

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S.D.D. 15 C 7-14b

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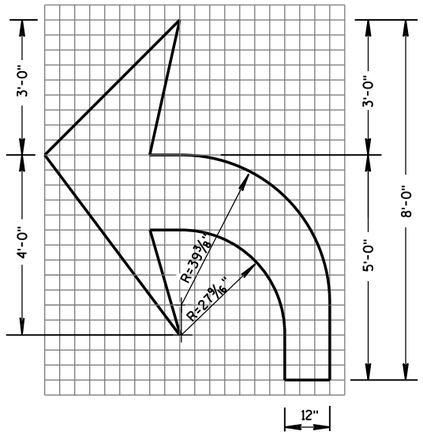
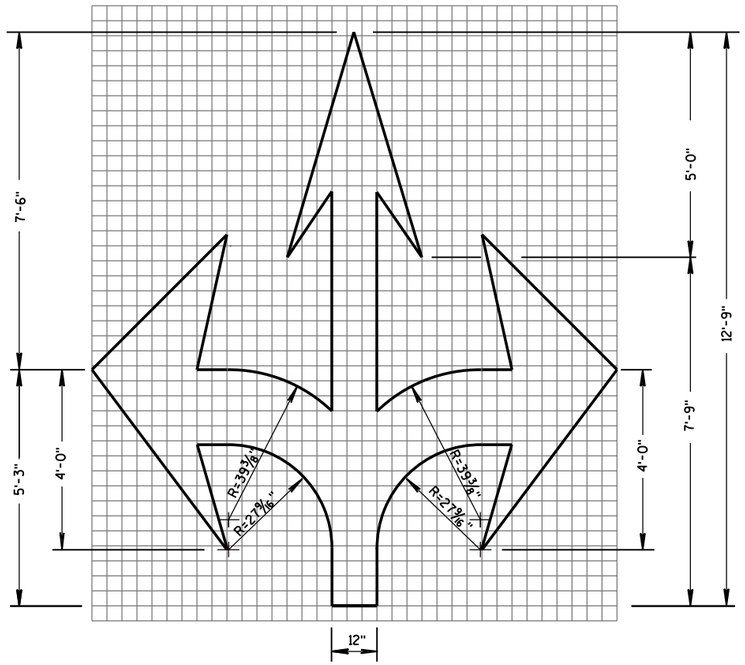
S.D.D. 15 C 7-14b

GENERAL NOTES

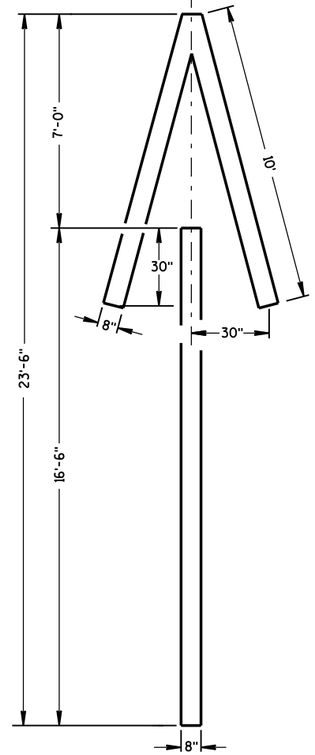
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



TYPE 2



TYPE 6



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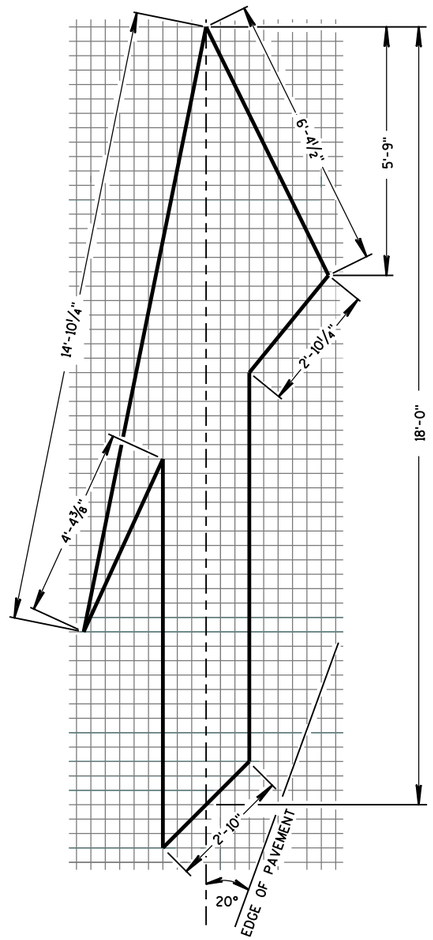
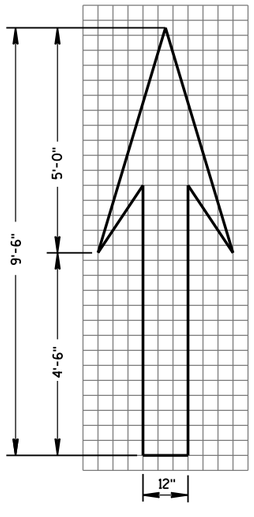
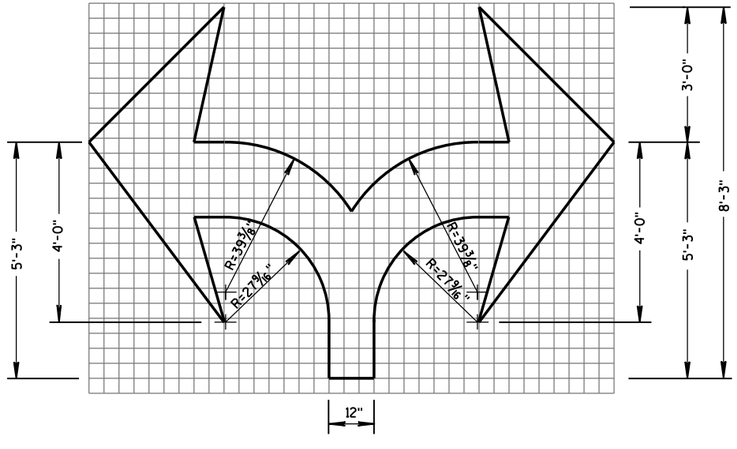


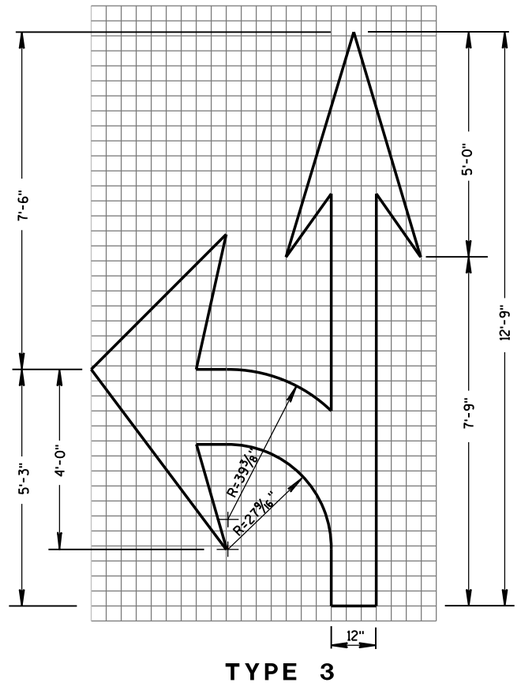
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]NEER
FHWA

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S.D.D. 15 C 7-14c

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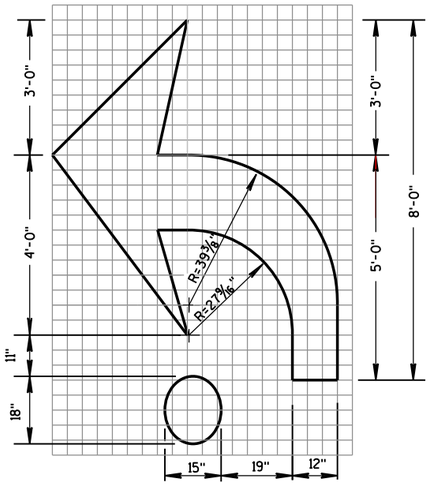
S.D.D. 15 C 7-14c

GENERAL NOTES

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



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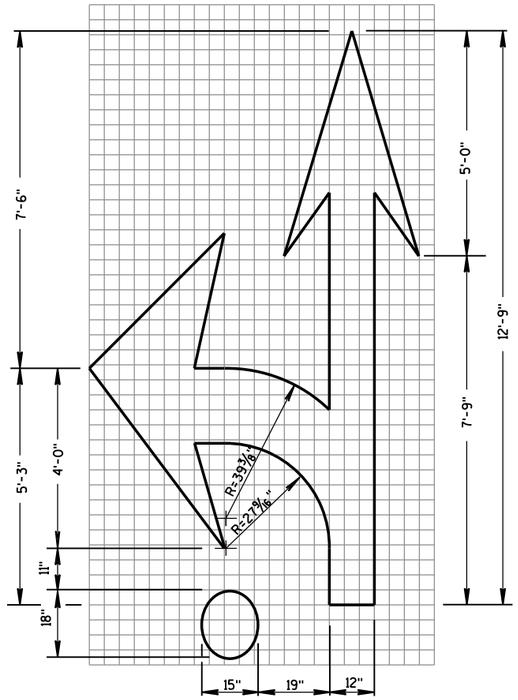
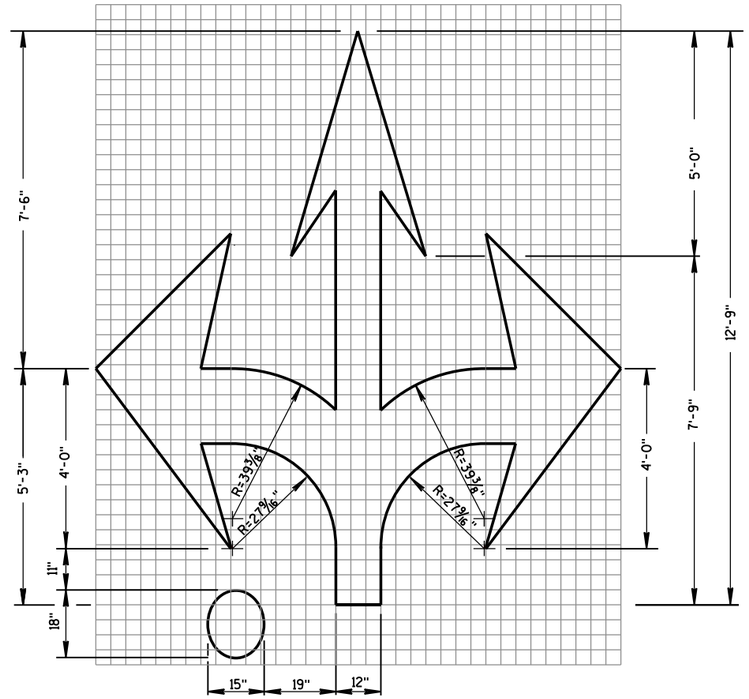


TYPE 3R



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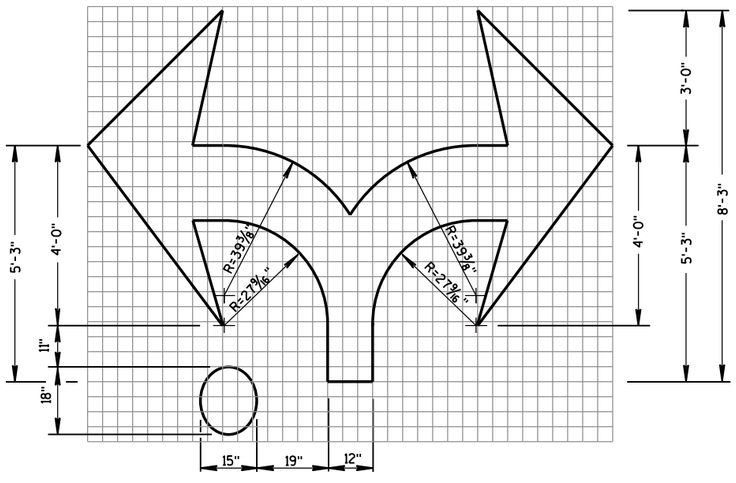

TYPE 7R

ROUNDABOUT ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR[illegible] NEER

FHWA

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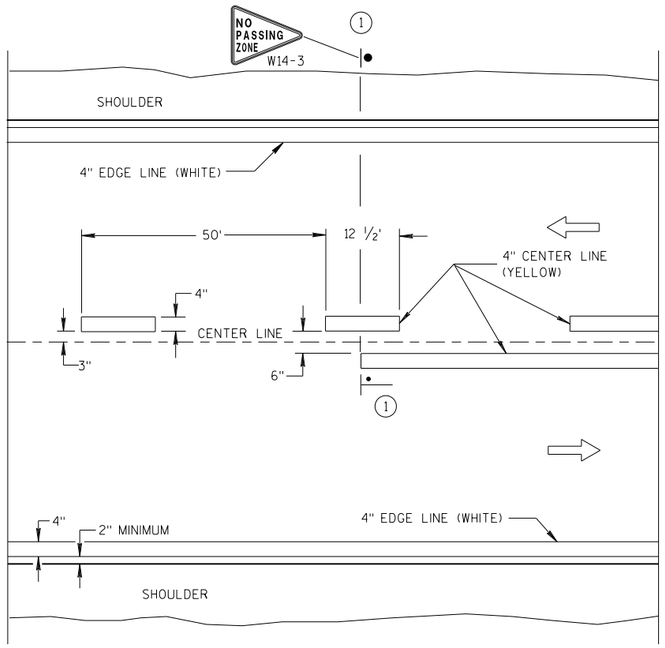
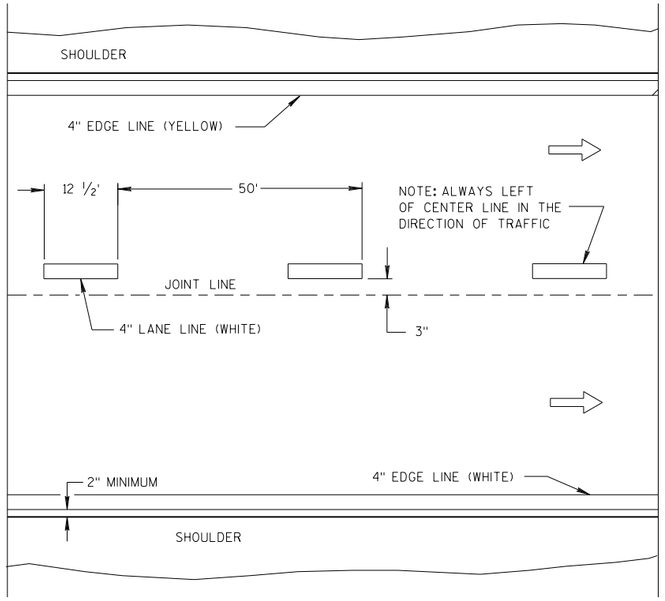
S.D.D. 15 C 7-14d



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

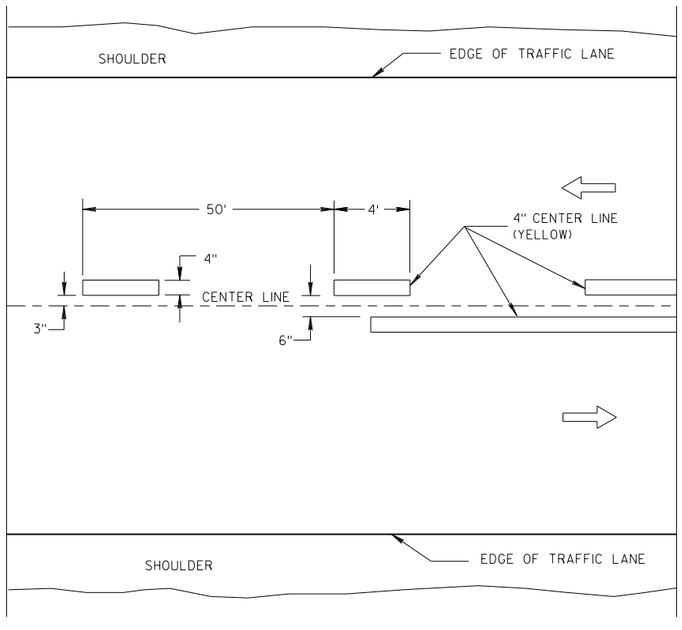
GENERAL NOTES

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

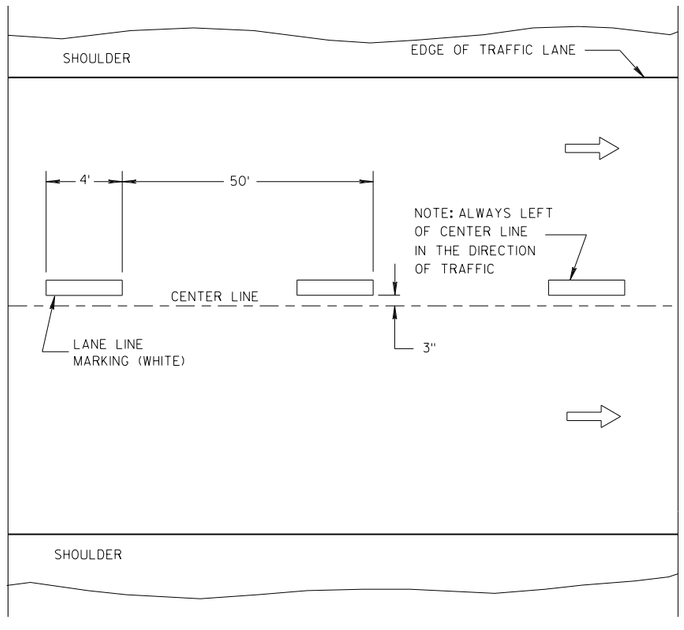
(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LEGEND

"T" MARKING

POST MOUNTED SIGN

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

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S.D.D. 15 C 8-19a

6

S.D.D. 15 C 8-19a

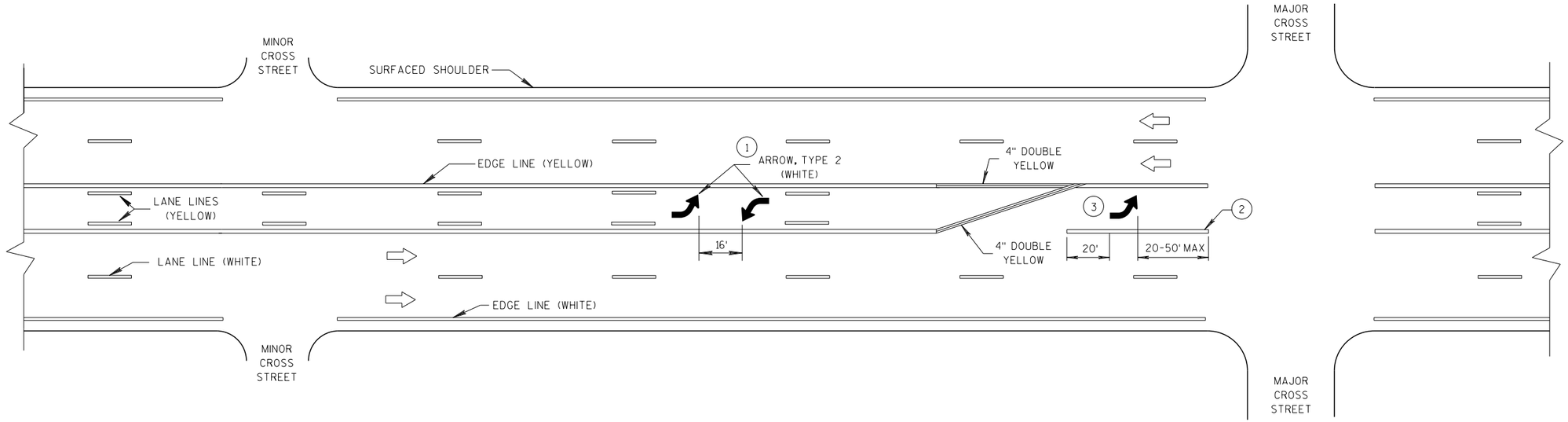
GENERAL NOTES

(1) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(2) 8" WHITE

(3) TURN BAY LENGTH OF LESS THAN 48'DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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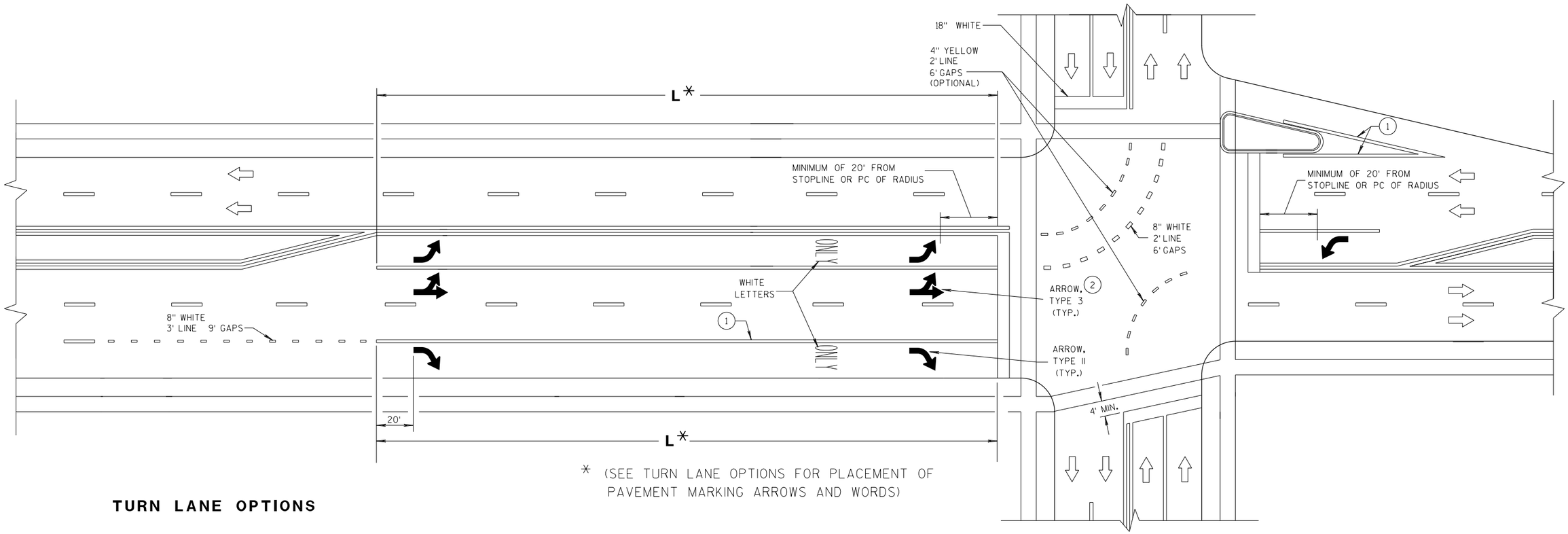
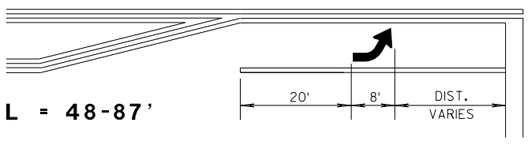
S.D.D. 15 C 8-19b



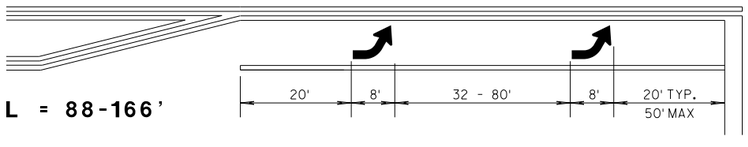
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

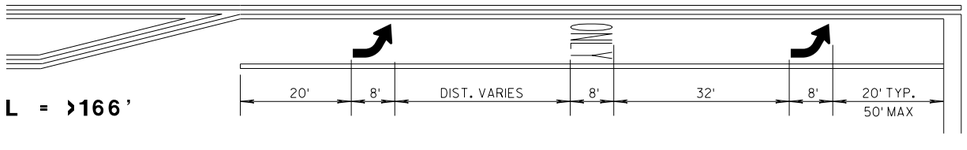
LENGTH OF TURN BAY (**L**) OF 0-47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48-87'



L = 88-166'



L = >166'

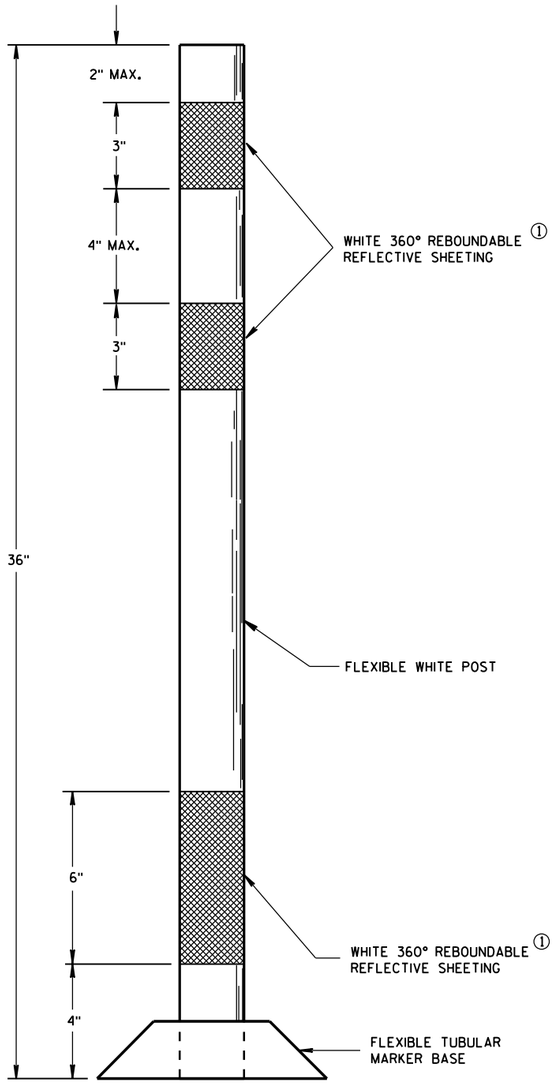
GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROW ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION, THE ARROWS AND ONLY MARKING ARE ELIMINATED.

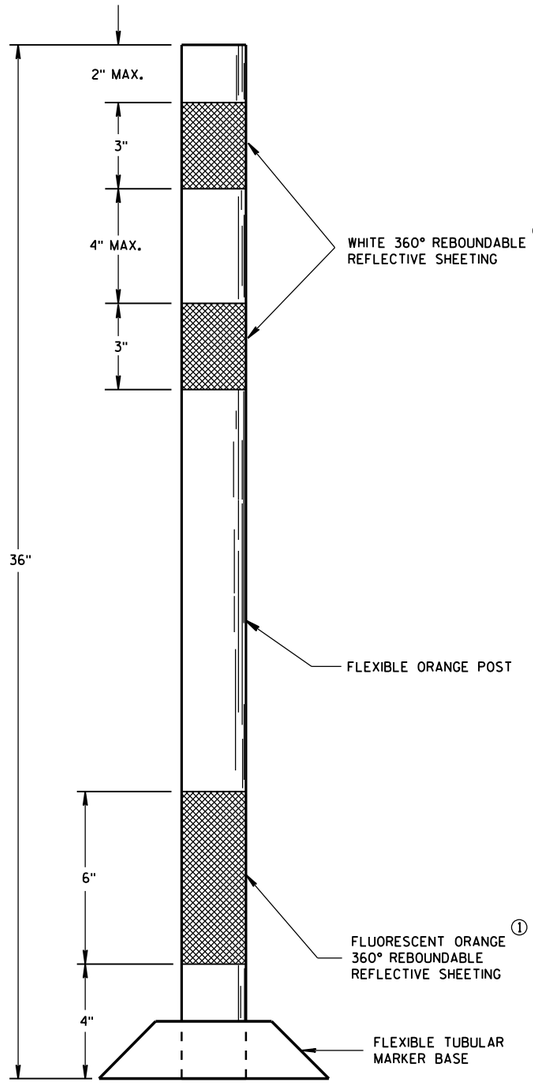
⇨ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)



FLEXIBLE
TUBULAR MARKER POST
PERMANENT CROSSOVER



FLEXIBLE
TUBULAR MARKER POST
WORK ZONE

GENERAL NOTES

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

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

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

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

CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENGR
FHWA

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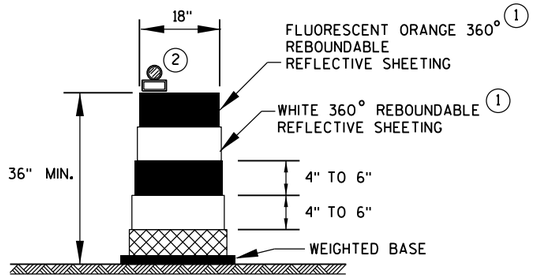
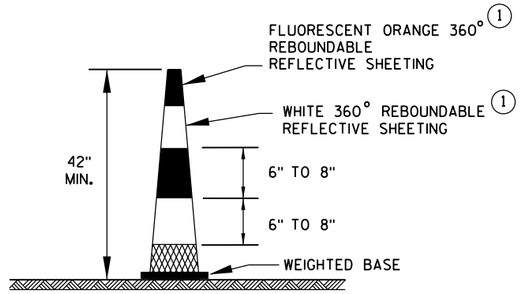
S.D.D. 15 C 11-7a



DRUM

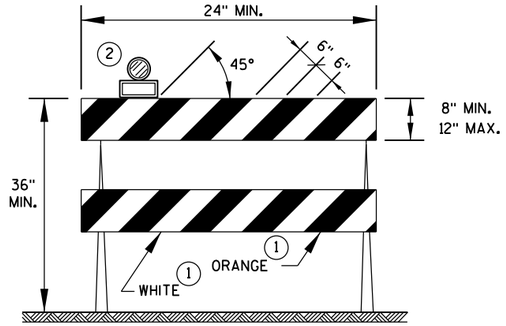


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

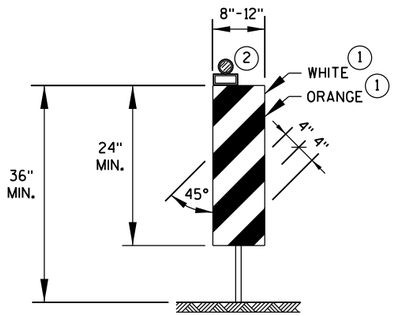
GENERAL NOTES

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



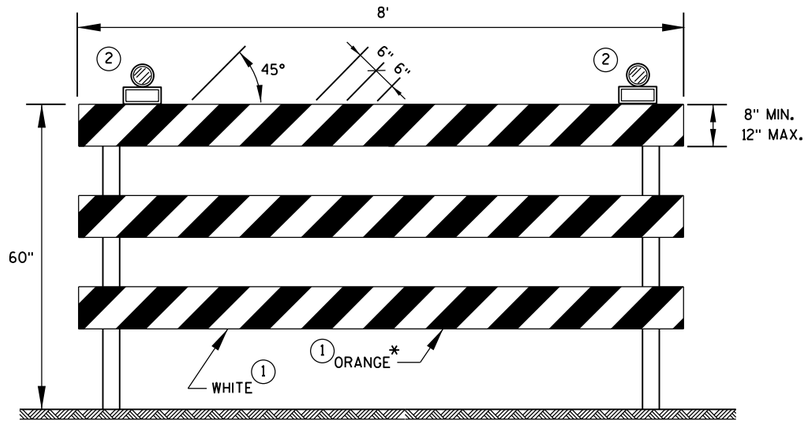
TYPE 2 BARRICADE

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



VERTICAL PANEL

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



TYPE 3 BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
June 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENG
FHWA	

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S.D.D. 15 C 11-7b

LEGEND

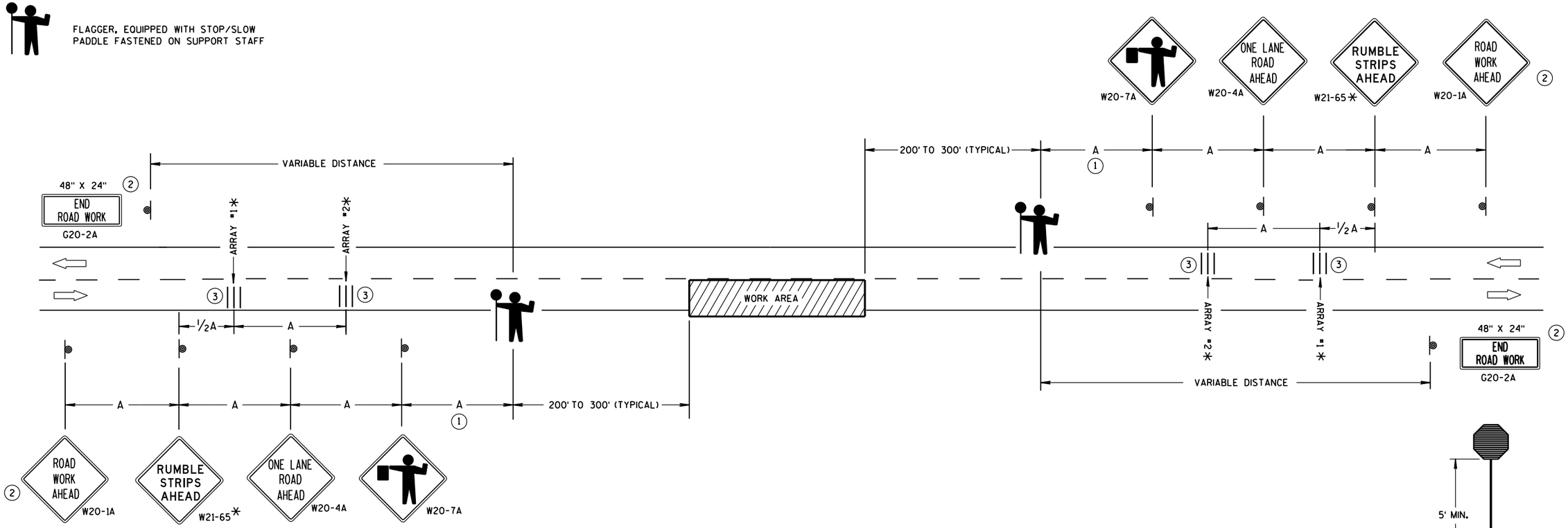
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

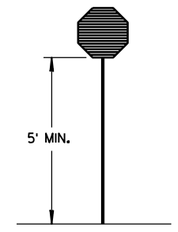
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

W03-4

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.





STOP/SLOW PADDLE ON SUPPORT STAFF

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
June 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENG
FHWA

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S.D.D. 15 C 12-6

GENERAL NOTES

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER FABRICATION DRAWING.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

SIGN SUPPORTS SHALL BE LOCATED NORMAL TO ROADWAY.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR CAGE TO BE ASSEMBLED USING TIE WIRES ONLY, NO WELDING.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACK FILLING AROUND THE BASE. ANY REQUIRED BACKFILL SHALL BE WELL COMPACTED IN LAYERS OF 1 FOOT OR LESS. COMPACTION SHALL BE BY MECHANICAL MEANS. CARE SHALL BE TAKEN SO NO DAMAGE OCCURS TO THE CONCRETE BASE DURING COMPACTION.

EXCAVATION OF MATERIALS NOT OCCUPIED BY CONCRETE SHALL BE MINIMIZED TO REDUCE DISTURBANCE OF THE SURROUNDING SOILS.

THE BOTTOM OF THE DRILLED HOLE SHALL BE FIRM AND THOROUGHLY CLEANED SO NO LOOSE OR COMPRESSIBLE MATERIALS ARE PRESENT AT THE TIME OF THE CONCRETE PLACEMENT.

IF THE DRILLED HOLE CONTAINS STANDING WATER, THE CONCRETE SHALL BE PLACED USING A TREMIE TO DISPLACE THE WATER.

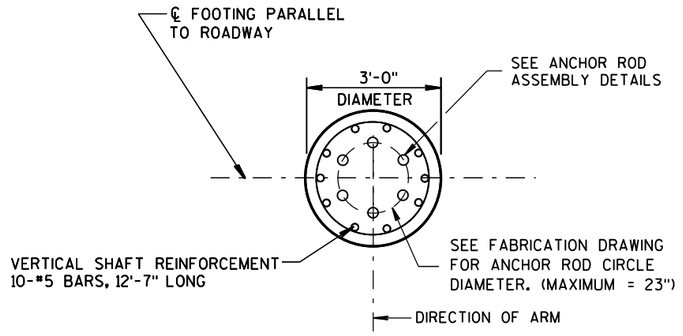
THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

FORM ALL EXPOSED CONCRETE CORNERS WITH ¾" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

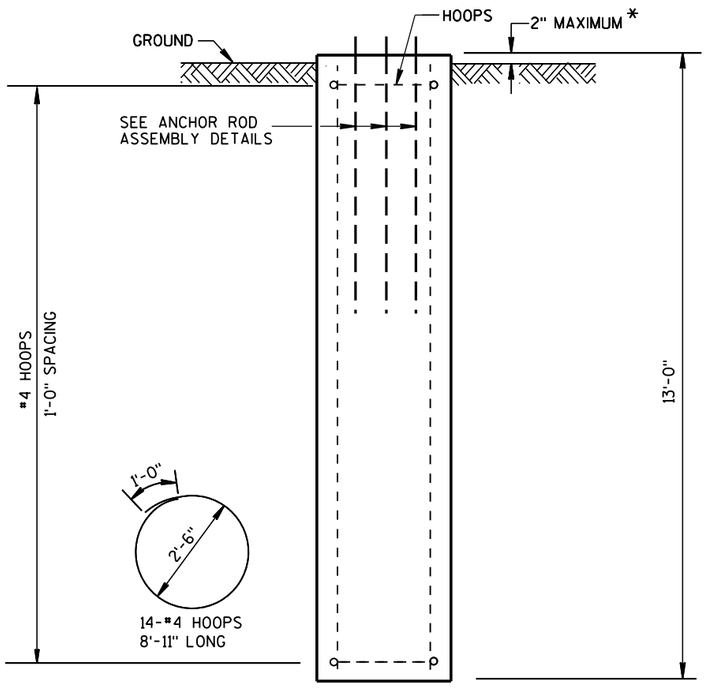
ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554, GRADE 55	fy=55,000 p.s.i.
ASTM A563A HEAVY HEX NUTS, AND ASTM F436 WASHERS.	
PLATES, ASTM A709, GRADE 36	fy=36,000 p.s.i.

THIS FOOTING HAS BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 20 DEGREES (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 350 PSF (COHESIVE SOILS).

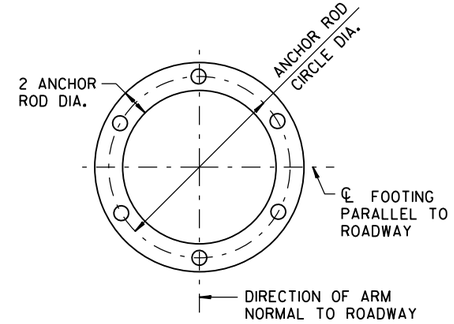


PLAN VIEW

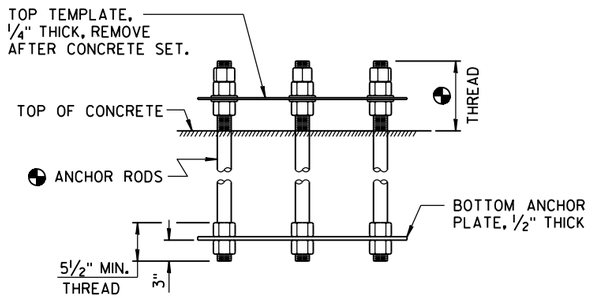


ELEVATION VIEW

* FOR OVERHEAD SIGN SUPPORTS THAT ARE INSTALLED ADJACENT TO SIDEWALKS, THE TOP OF THE BASE SHALL BE POURED FLUSH WITH THE GROUND.



TOP TEMPLATE AND BOTTOM ANCHOR PLATE



ANCHOR ROD ASSEMBLY DETAILS

⊕ MINIMUM OF 6 ANCHOR RODS, EXACT NUMBER, SIZE, DIMENSION AND ORIENTATION AS SHOWN ON FABRICATION DRAWING.

CONCRETE - 3.4 C.Y. PER FOOTING
H.S. REINFORCEMENT - 215 LBS. PER FOOTING

36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
FHWA

/S/ Vu Thao
WIND LOADED STRU PROGRAM LEAD

6

S.D.D. 15 C 24-4

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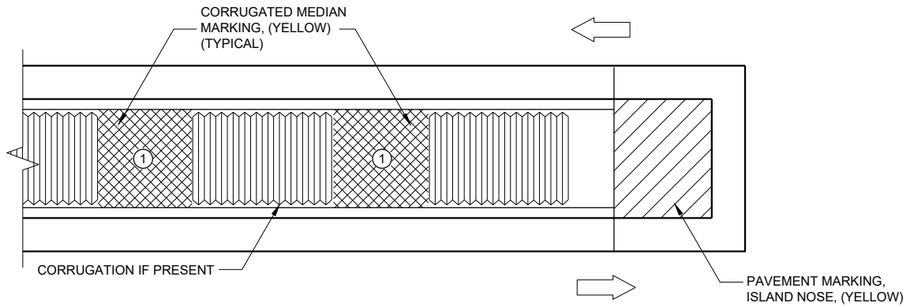
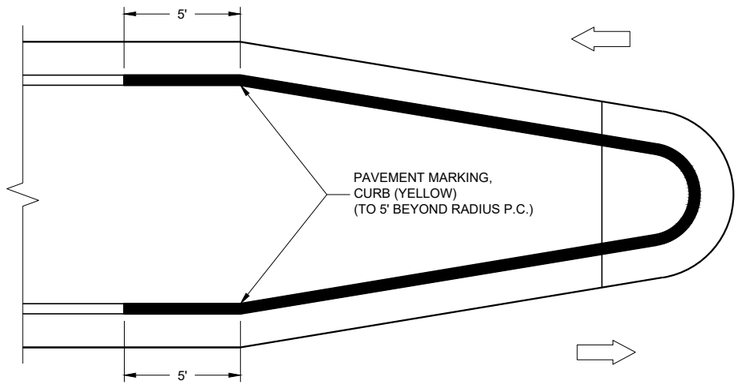
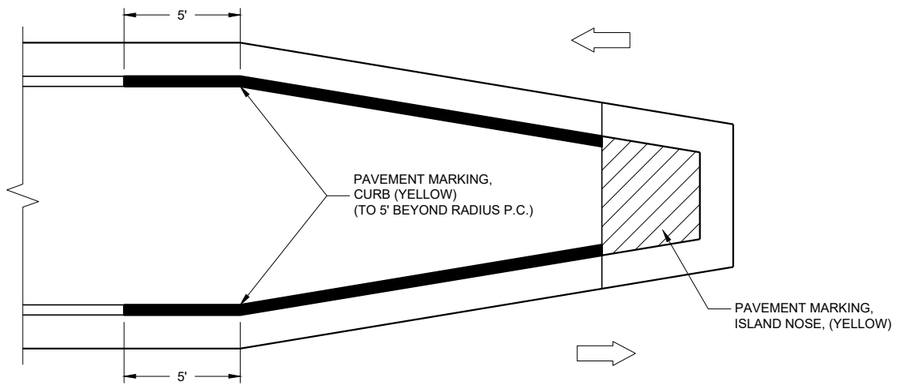
S.D.D. 15 C 24-4



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS (ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

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SDD 15C27 - 03b

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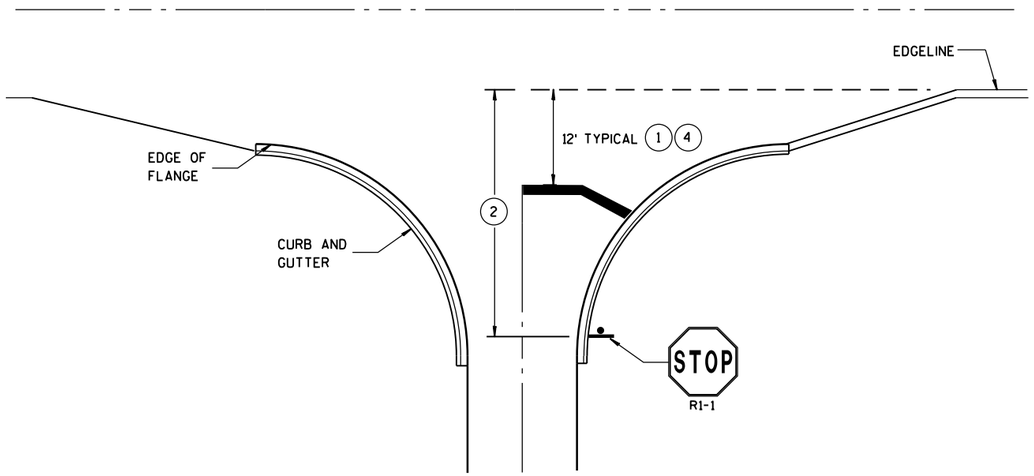
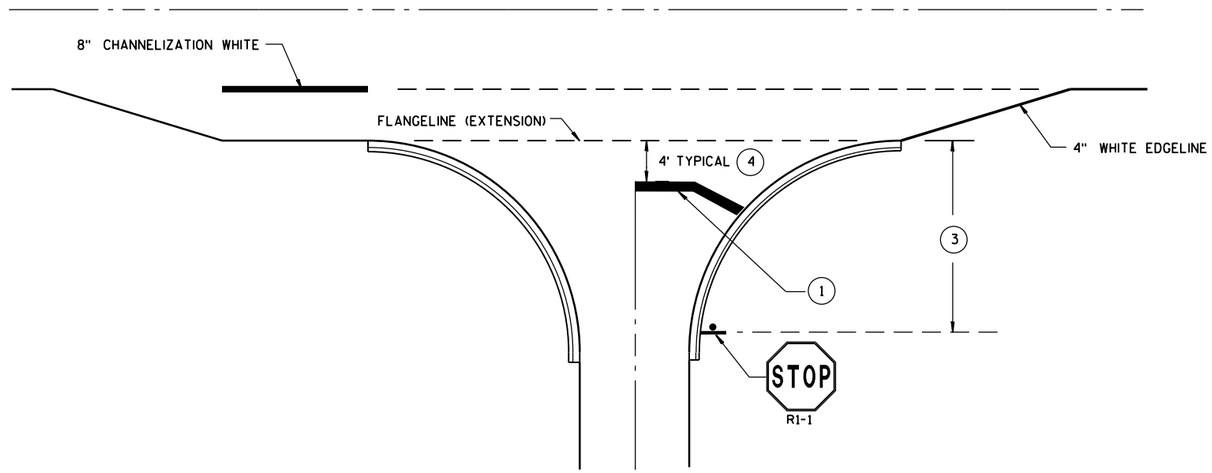
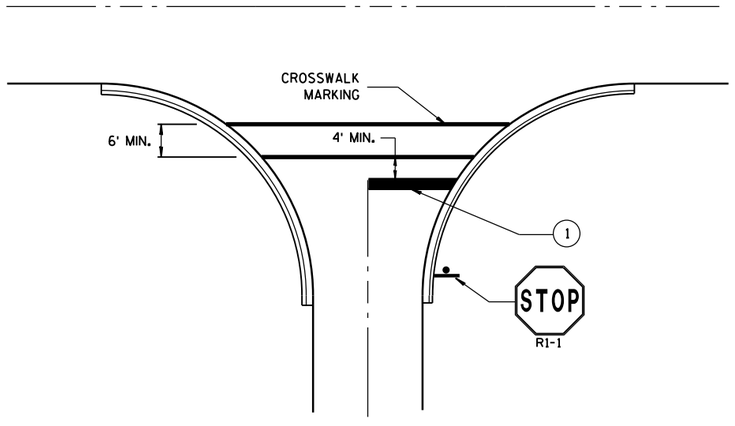
SDD15C27 - 03b



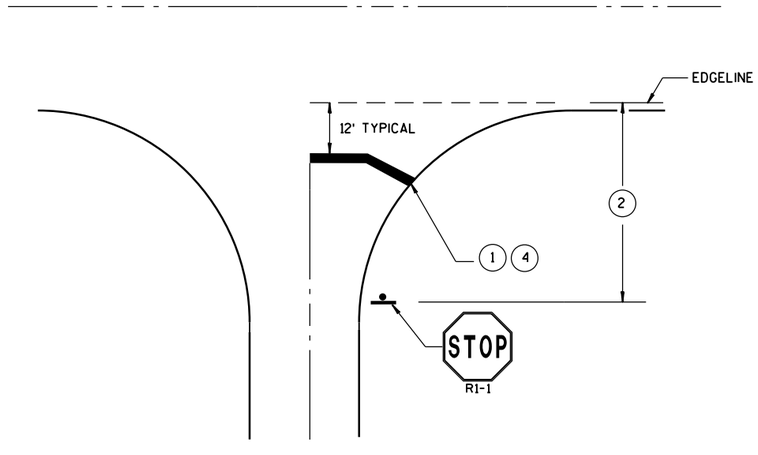
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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

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

(1) 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE 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

Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]NEER

FHWA

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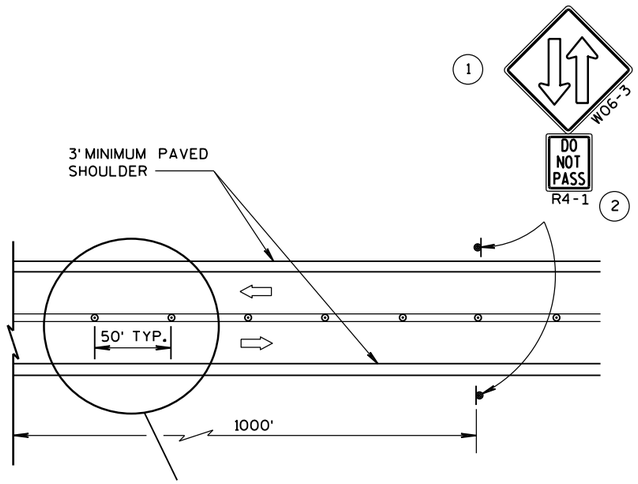
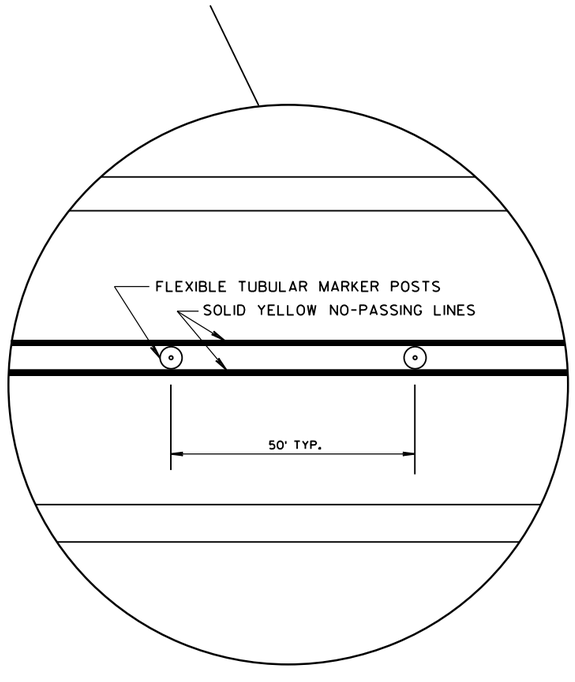
S.D.D. 15 C 33-3



TWO LANE, TWO WAY OPERATION



LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"x48" UNLESS OTHERS NOTED.

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

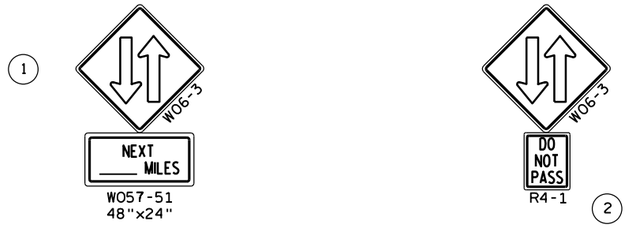
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

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

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50-FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW.



THE W06-3 WITH THE W057-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND/OR 500 FEET BEYOND ANY SIDEROAD. THE W06-3 WITH THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE W06-3 AND THE W057-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN W06-3 SIGNS.

(2) CONVENTIONAL: 24"x30"
FREEWAY AND EXPRESSWAY: 36"x48"

TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 DATE — /S/ Travis Feltes STATE TRAFFIC ENGINEER — SIGN

FHWA

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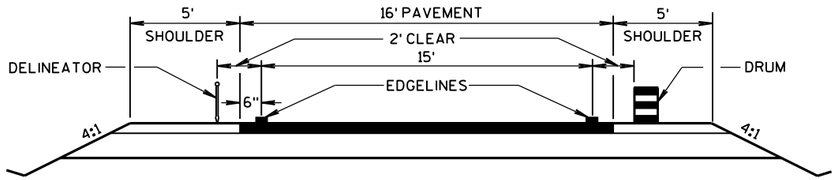
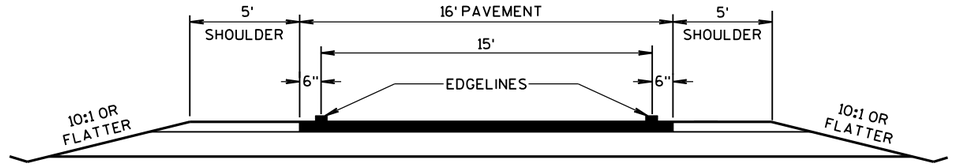
S.D.D. 15 D 6-3



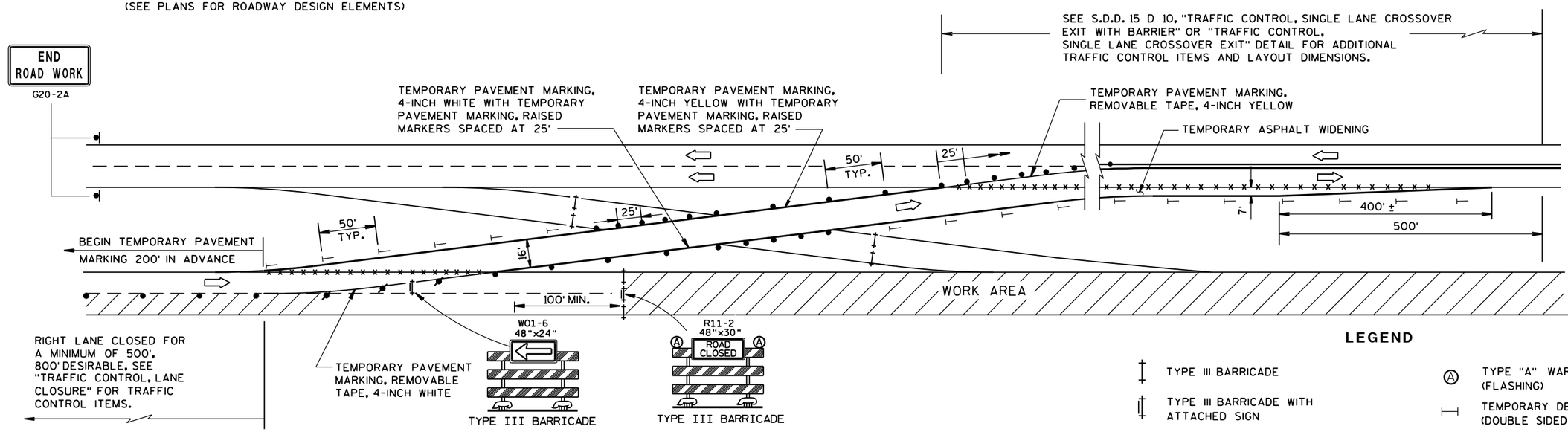
TYPICAL TEMPORARY CROSSOVER ROADWAY DIMENSIONS

(SEE PLANS FOR ROADWAY DESIGN ELEMENTS)



TYPICAL CROSSOVER TO REMAIN IN PLACE ROADWAY DIMENSIONS

(SEE PLANS FOR ROADWAY DESIGN ELEMENTS)



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- TYPE "A" WARNING LIGHT (FLASHING)
- TEMPORARY DELINEATOR (DOUBLE SIDED)
- REMOVING PAVEMENT MARKINGS
- DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DIRECTION OF TRAFFIC
- WORK AREA
- SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USE OF CROSSOVER AND TEMPORARY PAVEMENT MARKING WHERE USED.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

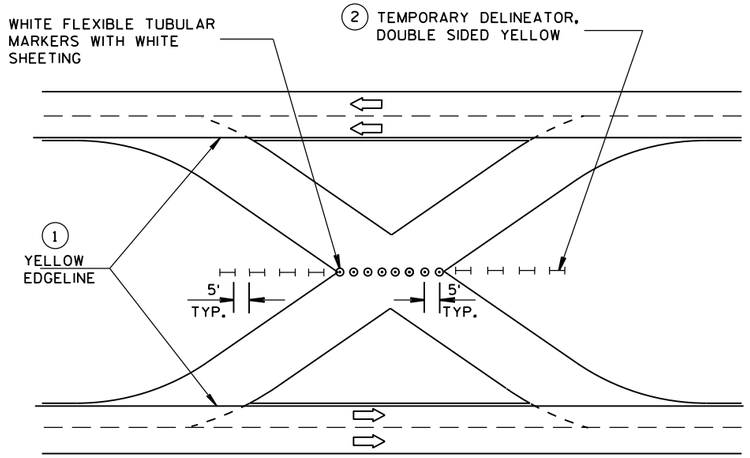
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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

REVERSE DEVICES WHEN OTHER LEG OF CROSSOVER IS IN USE.

(1) FOR PERMANENT CROSSOVER, PAVEMENT MARKING SHOULD CONFORM TO SECTION 646 OF THE STANDARD SPECIFICATIONS.

(2) FOR PERMANENT CROSSOVER, INSTALL PERMANENT DELINEATORS ACCORDING TO SECTION 633 OF THE STANDARD SPECIFICATIONS.



TRAFFIC CONTROL FOR CROSSOVER THAT IS NOT IN USE

TRAFFIC CONTROL, SINGLE LANE CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENGI
FHWA

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S.D.D. 15 D 11-7

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

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

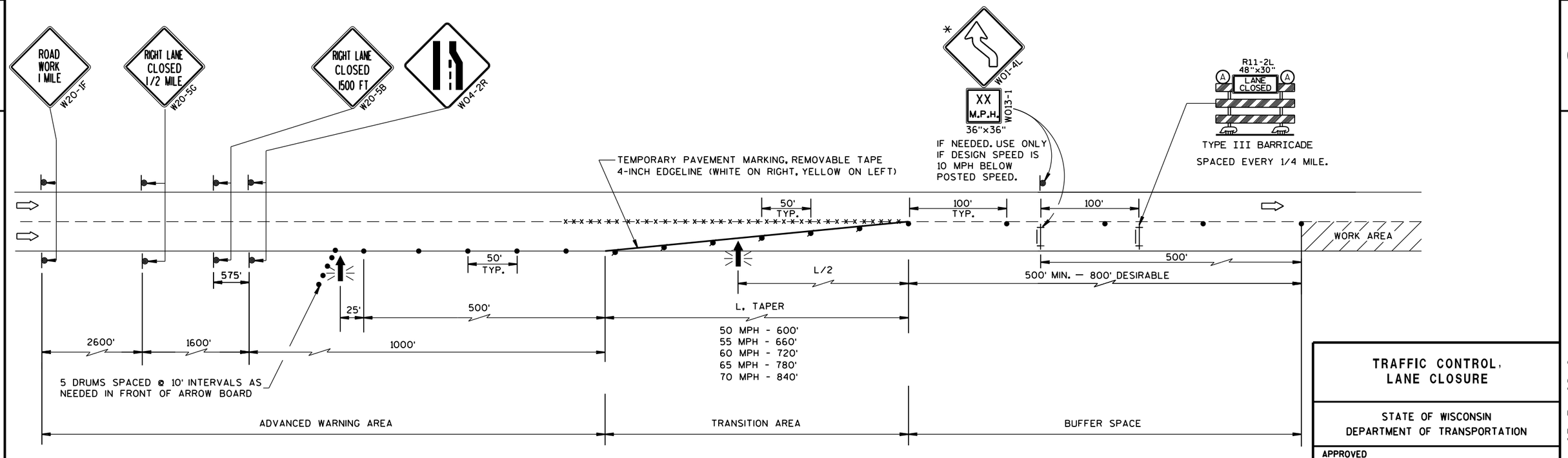
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

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S.D.D. 15 D 12-6a

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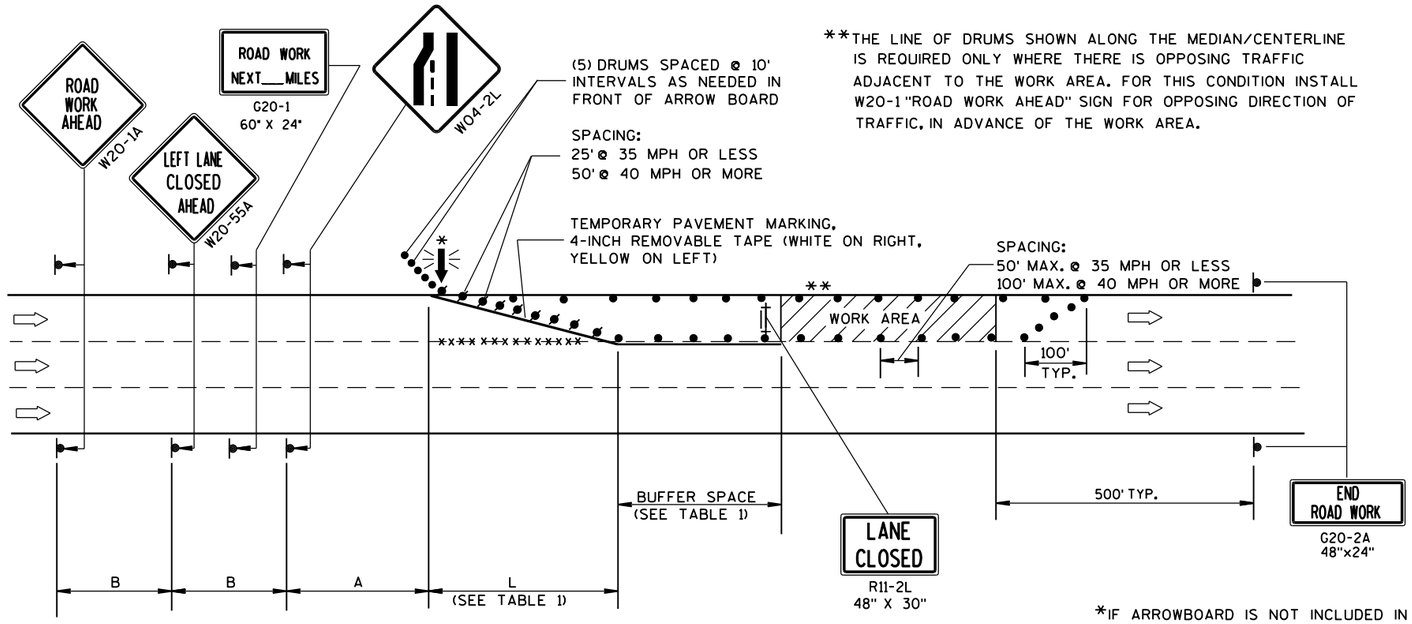
S.D.D. 15 D 12-6a



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

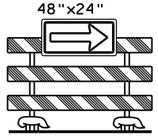


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

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

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

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

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

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

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

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

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

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S.D.D. 15 D 20-4

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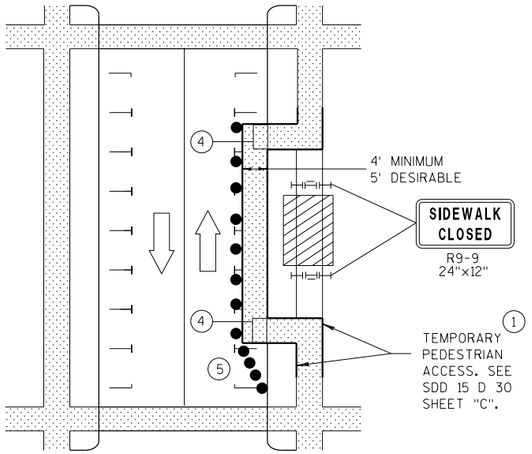
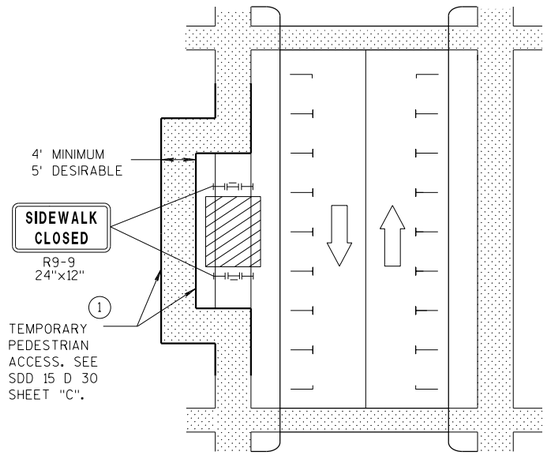
S.D.D. 15 D 20-4

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

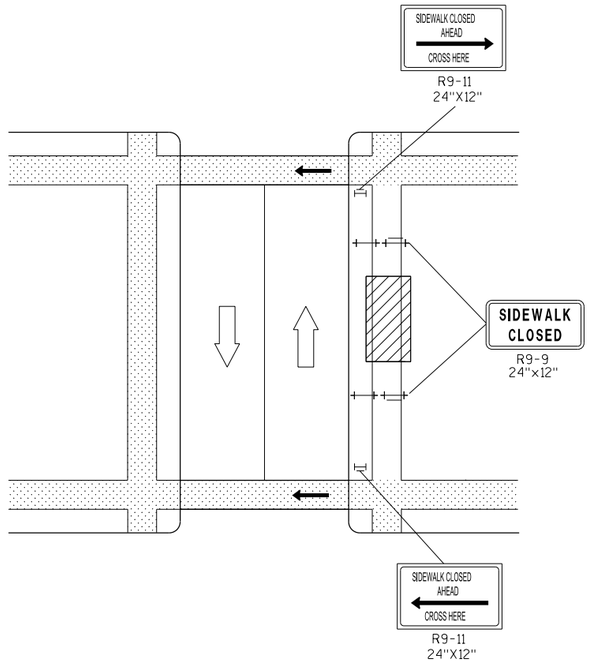


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

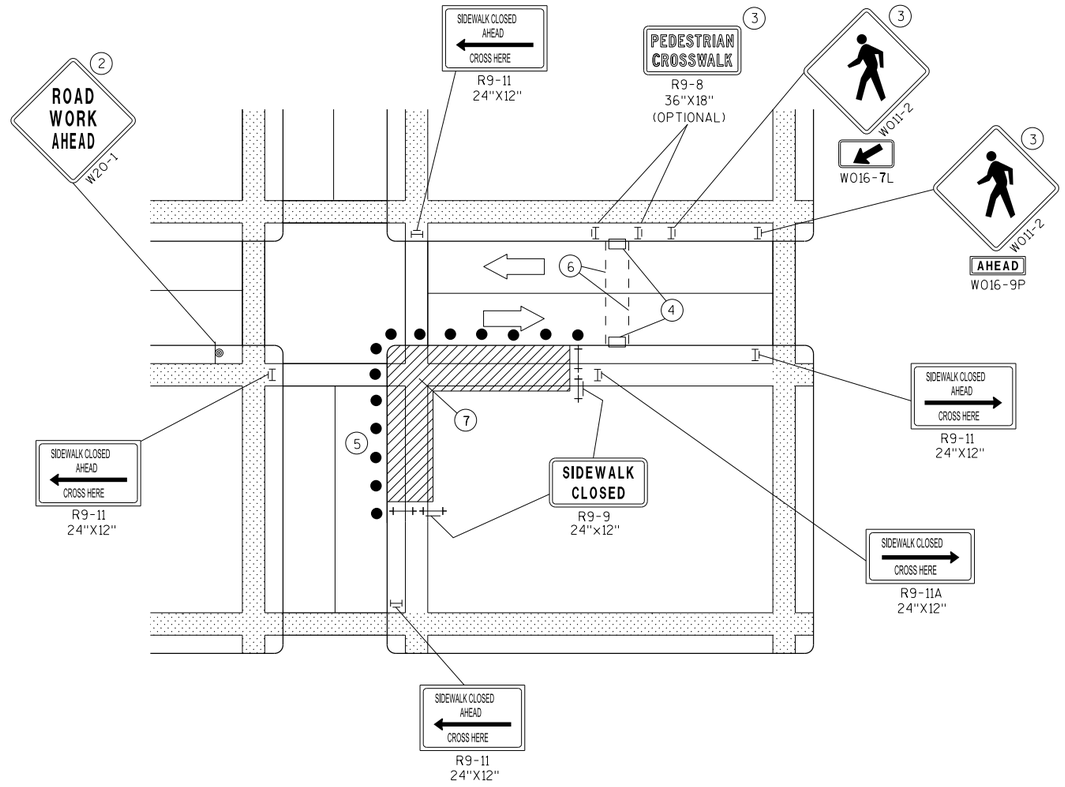
NOTE: LAYOUT SAME AS ABOVE.



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.

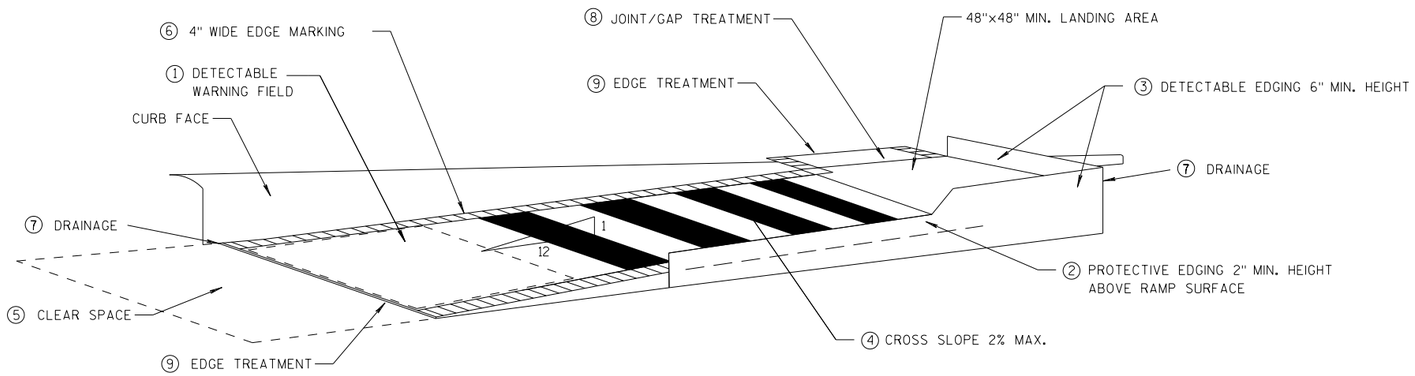
LEGEND

- 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

6

S.D.D. 15 D 30-4a



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.

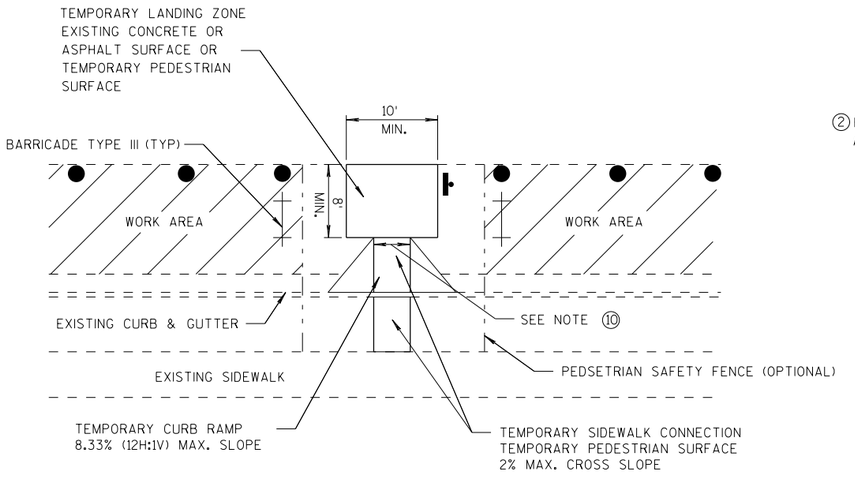
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

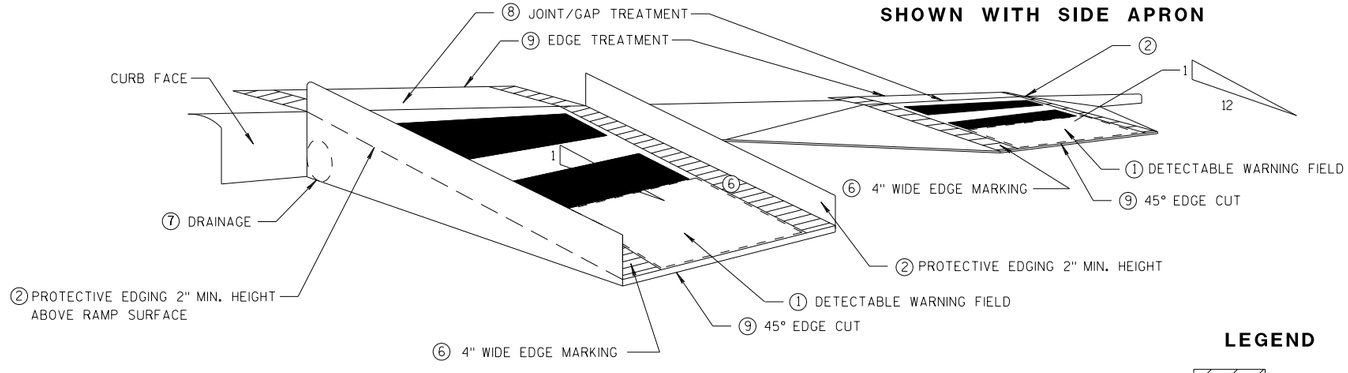
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

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 SIDE APRON

SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 DATE

/S/ Andrew Heidtke
WORK ZONE ENG

425

FHWA

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S.D.D. 15 D 30-4b

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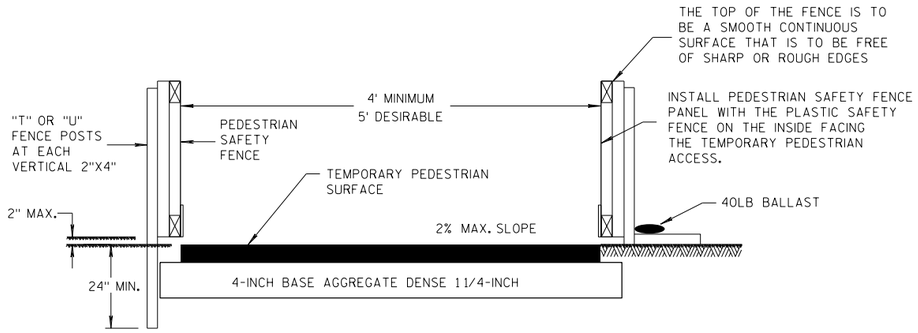
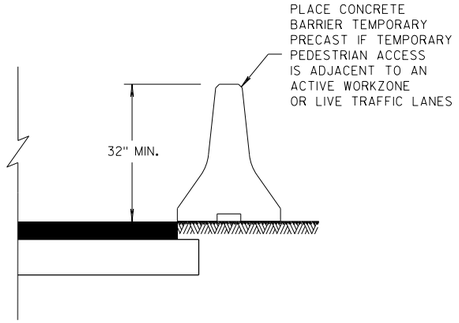
S.D.D. 15 D 30-4b

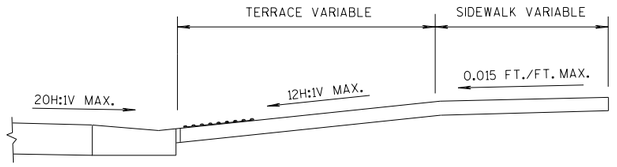




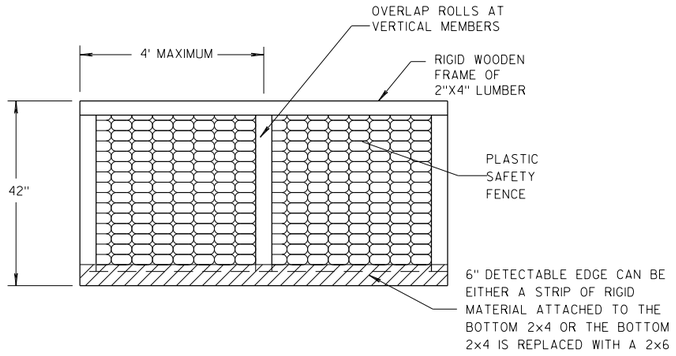
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

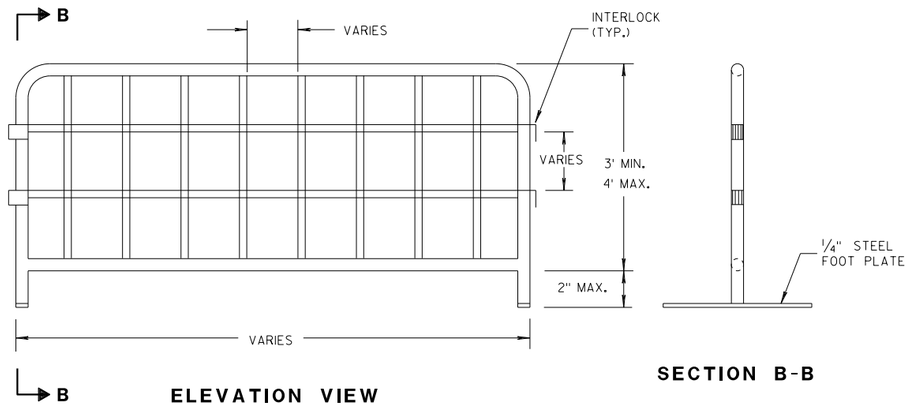
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



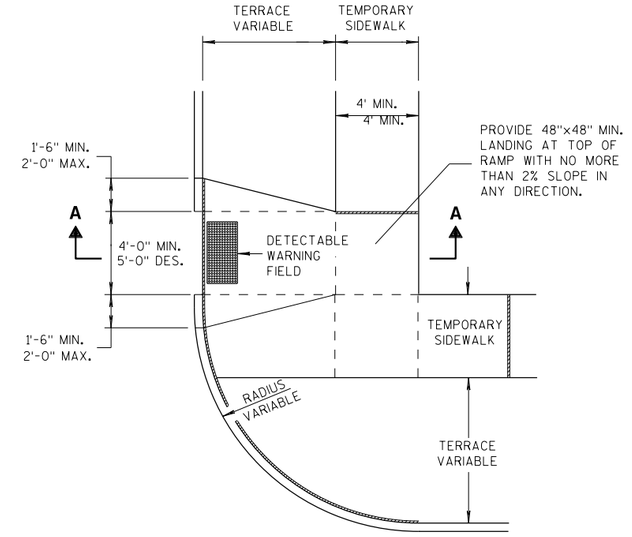
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

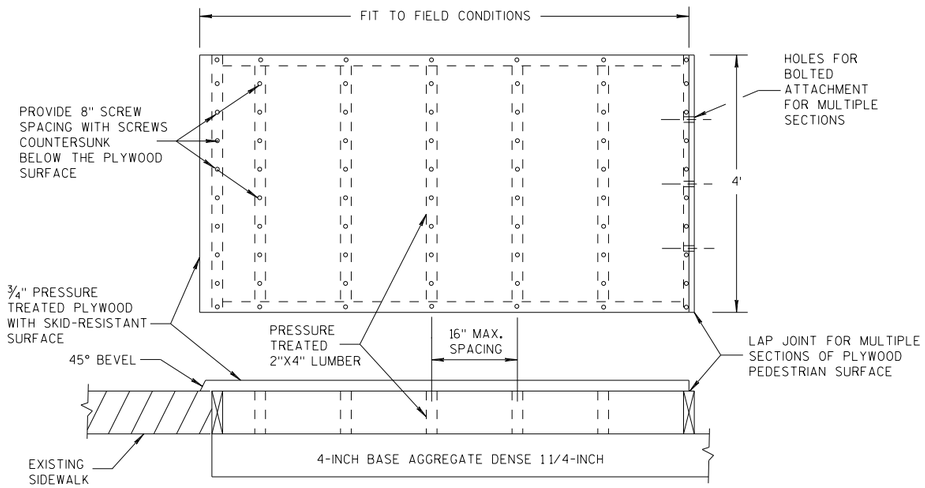
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



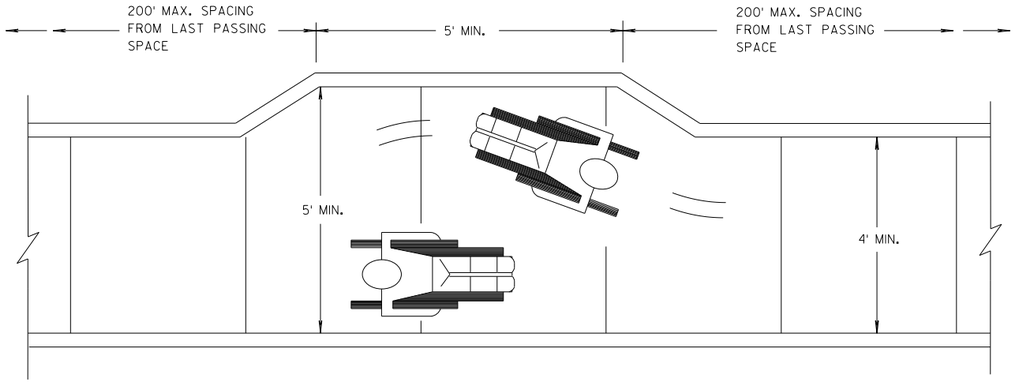
PLAN VIEW

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

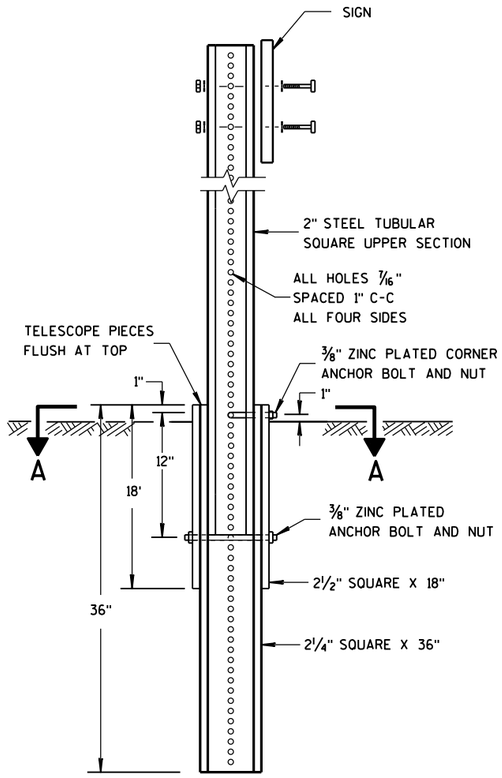
APPROVED

7/2018
DATE

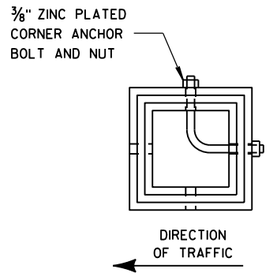
/S/ Andrew Heidtke
WORK ZONE ENG

FHWA

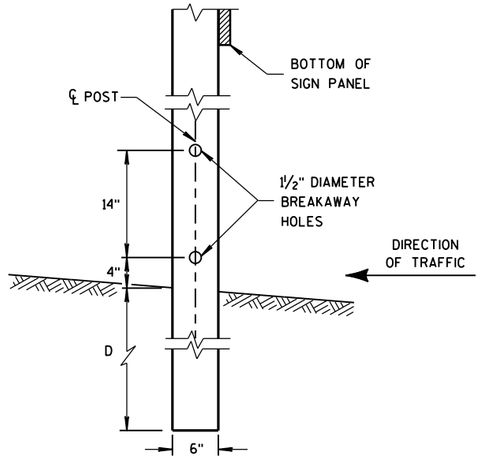
6
S.D.D. 15 D 30-4c



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



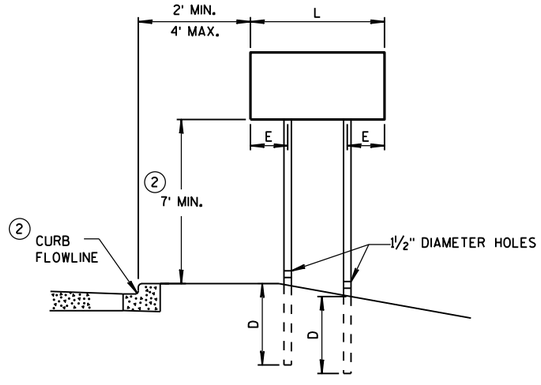
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

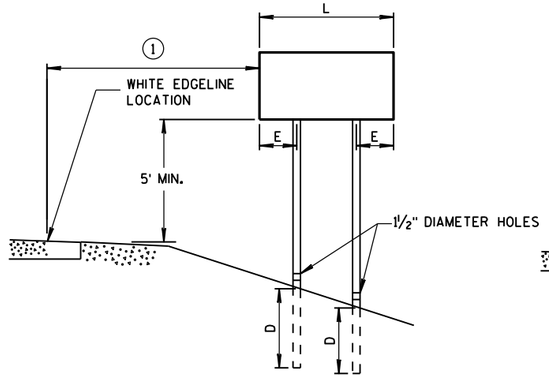
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

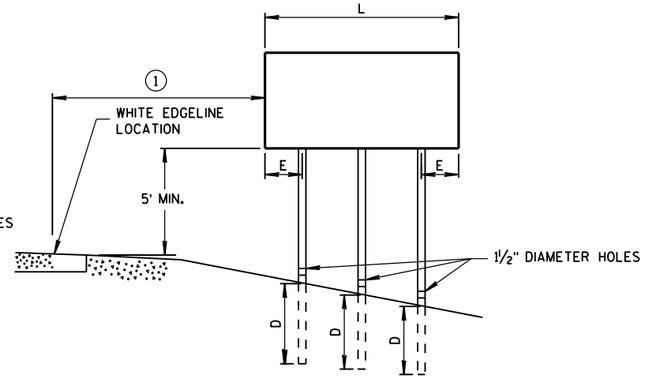
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

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

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

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

WOOD POST EMBEDMENT DEPTH

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

4" X 6" WOOD POST

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

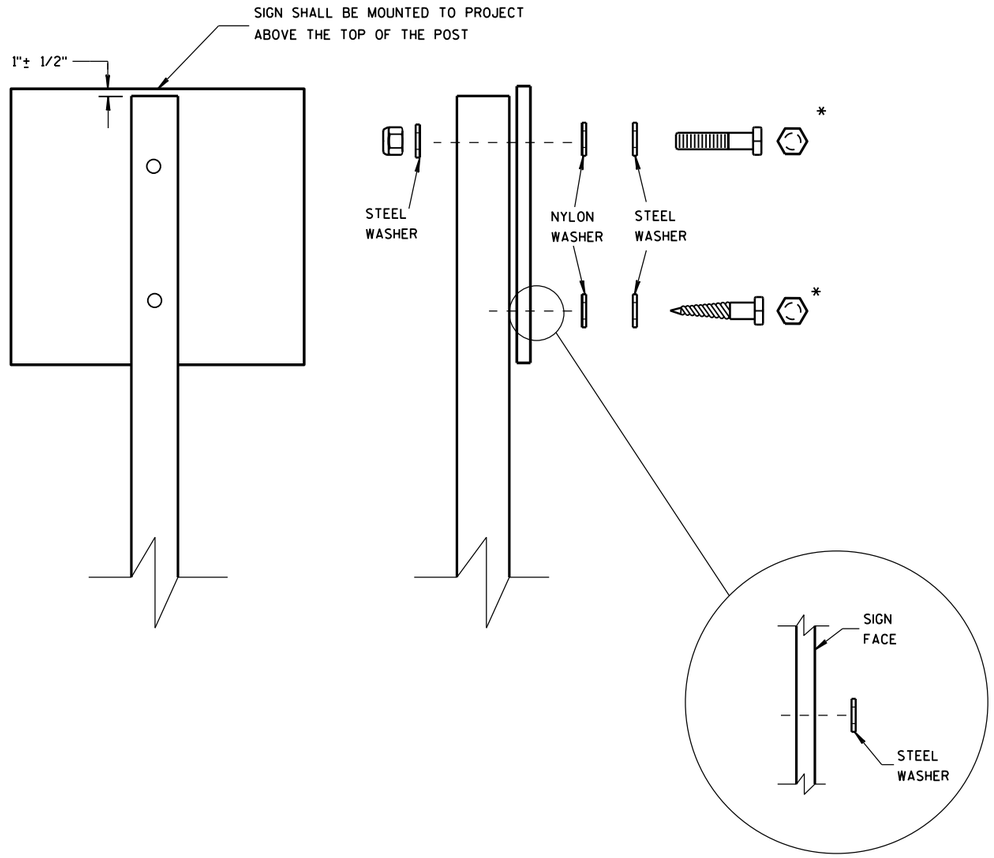
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

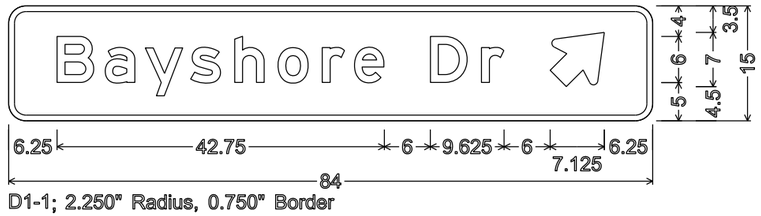
June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

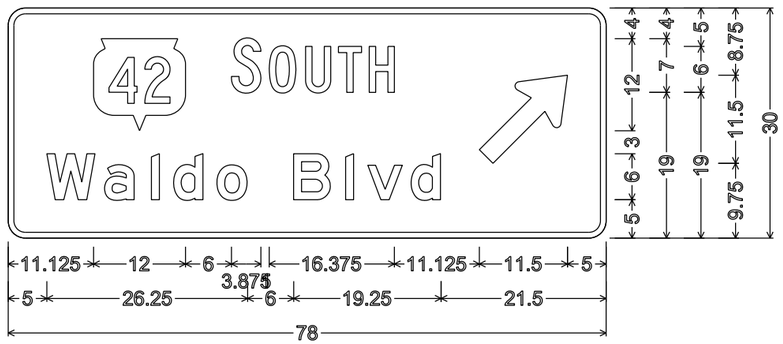
NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted

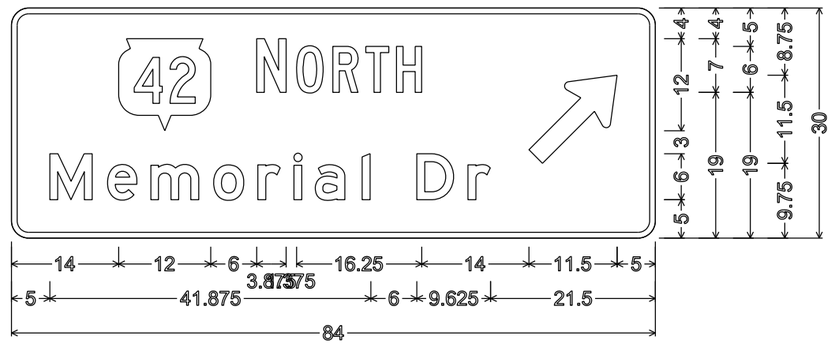


D1-1; 2.250" Radius, 0.750" Border

D1-1; 2.250" Radius, 0.750" Border



D1-2; 2.250" Radius, 0.750" Border
"SOUTH" C; "Waldo" E; "Blvd" E



D1-2; 2.250" Radius, 0.750" Border
"NORTH" C; "Memorial" E; "Dr" E

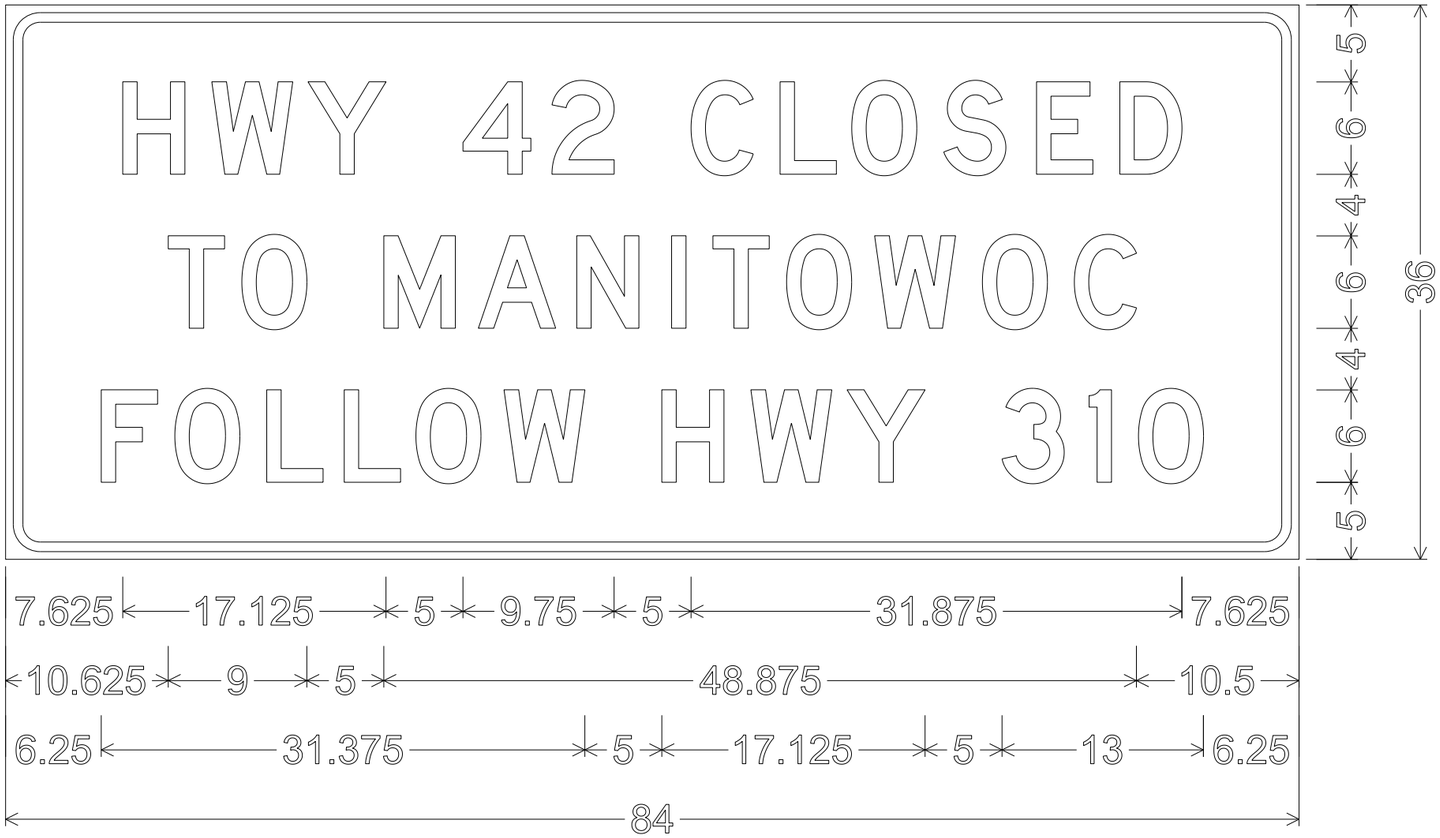
7

7

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	PERMANENT SIGNING	SHEET NO: 429	E

NOTES

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

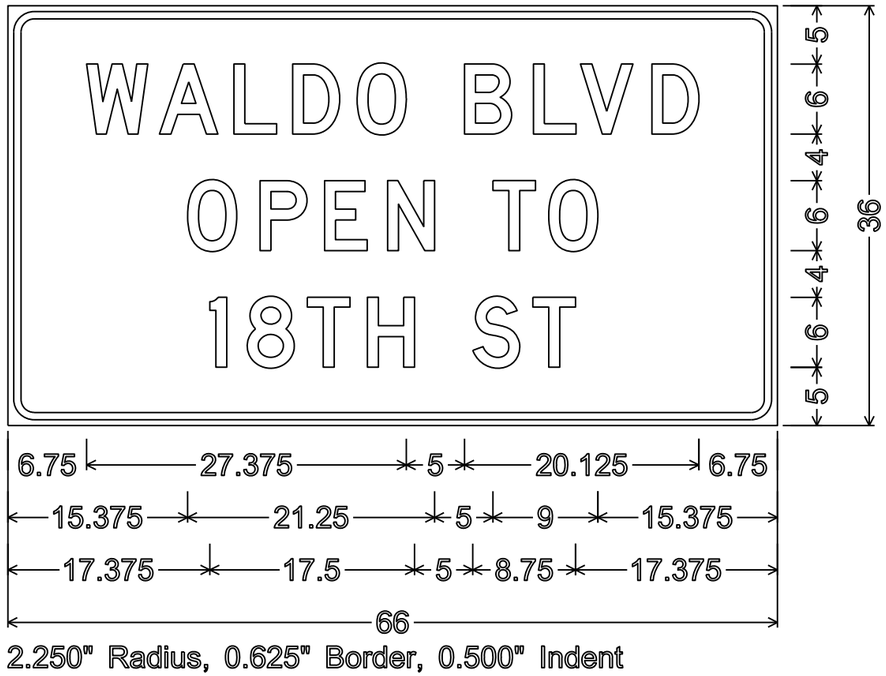


2.250" Radius, 0.625" Border, 0.500" Indent

7

7

PROJECT NO: 1500-37-74, 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	FIXED MESSAGE SIGN DETAIL	SHEET NO: 430	E



2.250" Radius, 0.625" Border, 0.500" Indent

NOTES

1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D

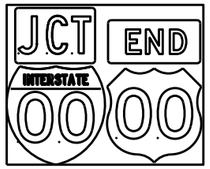
7

7

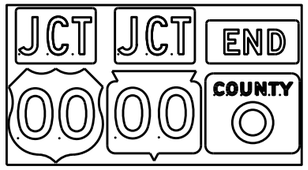
PROJECT NO: 1500-37-74, 4570-12-71	HWY: USH 10	COUNTY: MANITOWOC	TEMPORARY SIGNING	SHEET NO: 431	E

TYPICAL ASSEMBLIES

J1-1

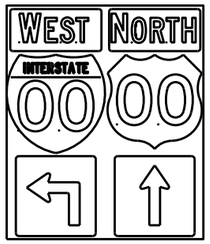


J1-2

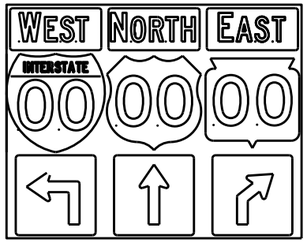


J1-3

J2-1



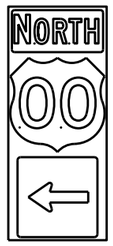
J2-2



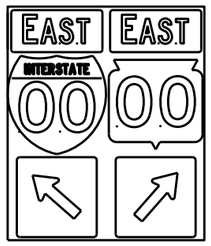
J2-3

JV

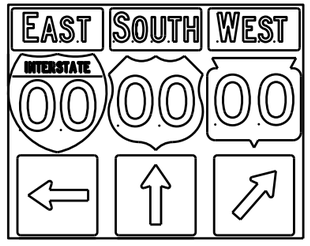
(Typical Vertical J-Assembly
See Note 10 and 11)



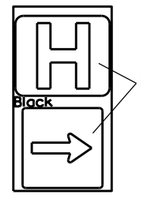
J3-1



J3-2



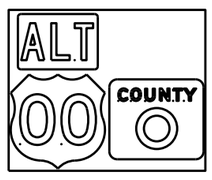
J3-3



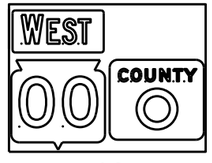
Blue Background

JH-1

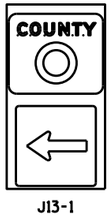
J4-1



J4-2



J4-2



J13-1

J12-1

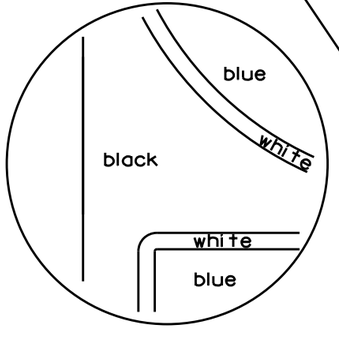
J32-1

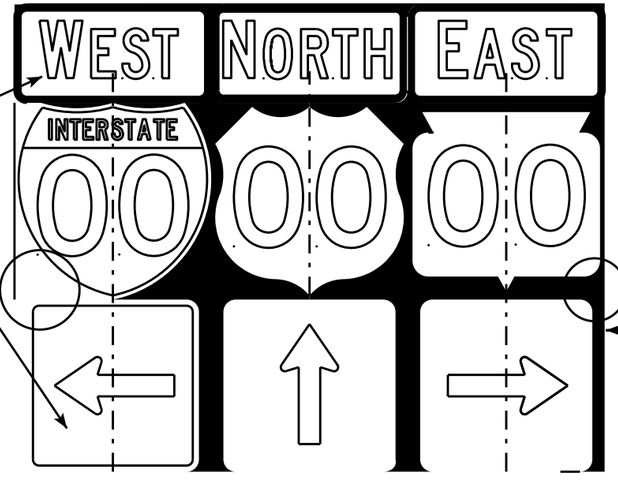
J33-1

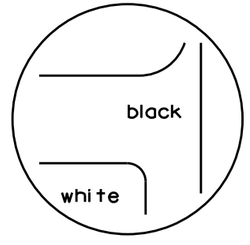
J23-1

J22-1

blue background
with interstate







black background

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

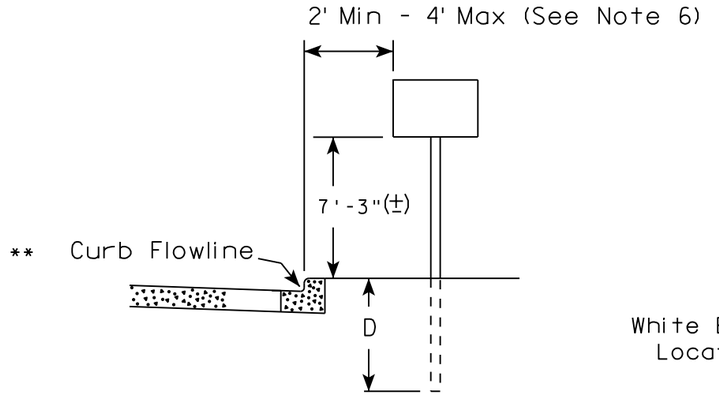
PROJECT NO:

SHEET NO: E

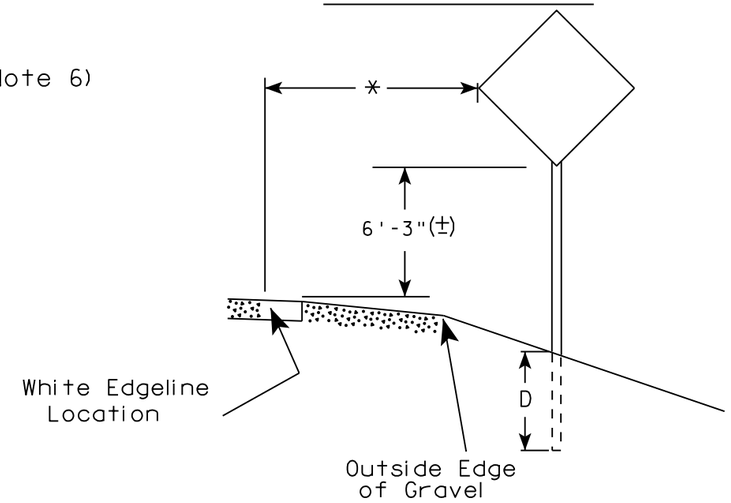
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

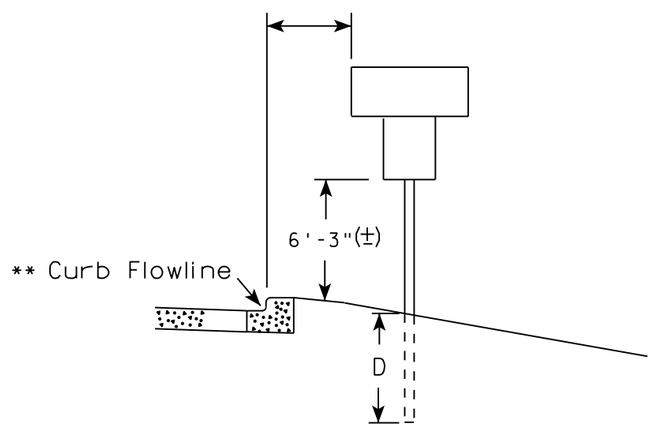
WISDOT/CADDS SHEET 42

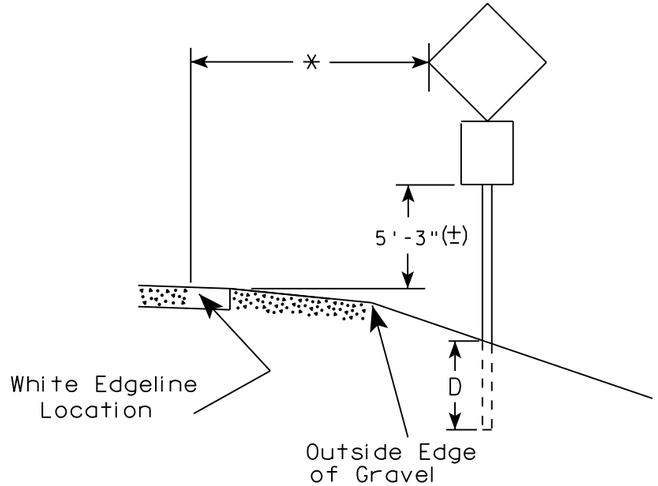
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

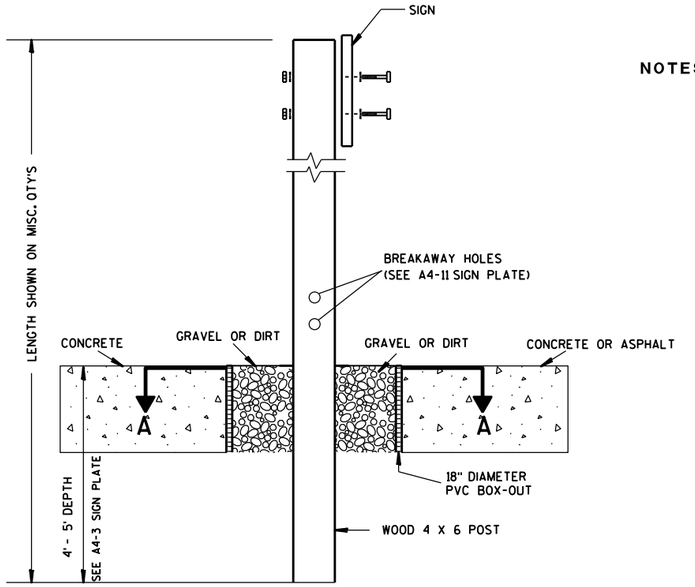
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

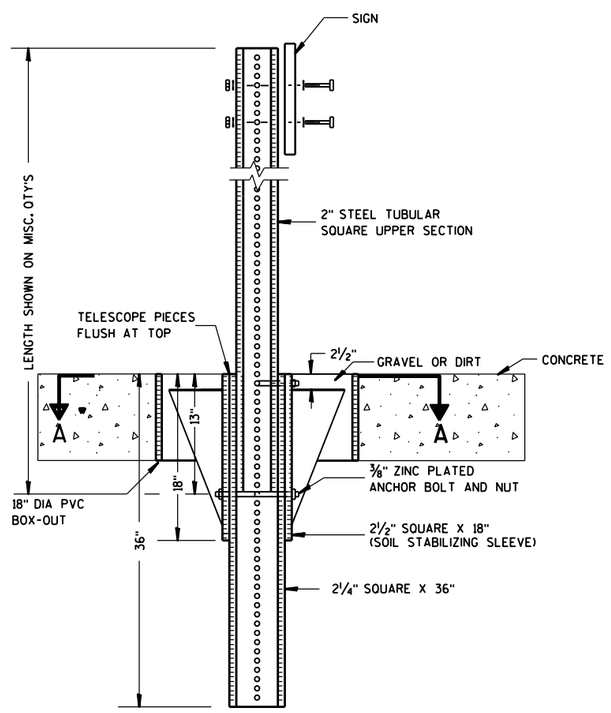
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 433	E



ELEVATION VIEW

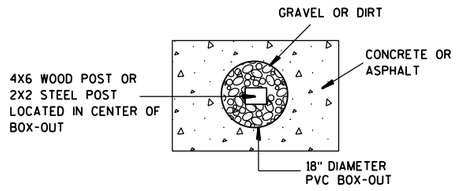
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

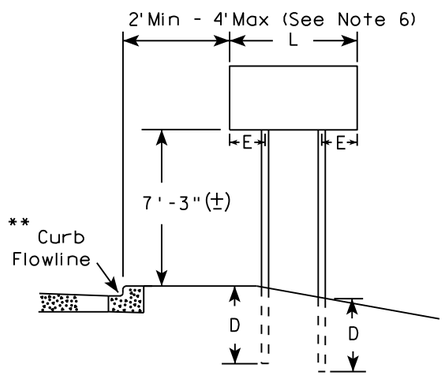
APPROVED Matthew R Rauch
for State Traffic Engineer

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

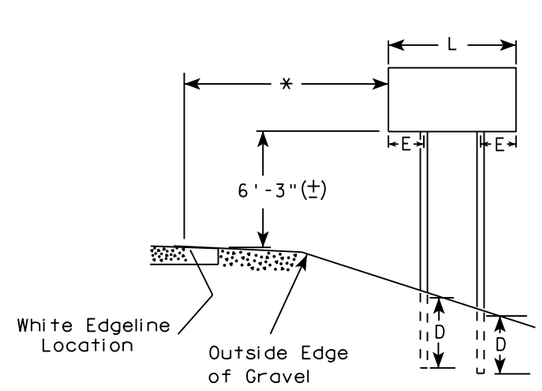
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

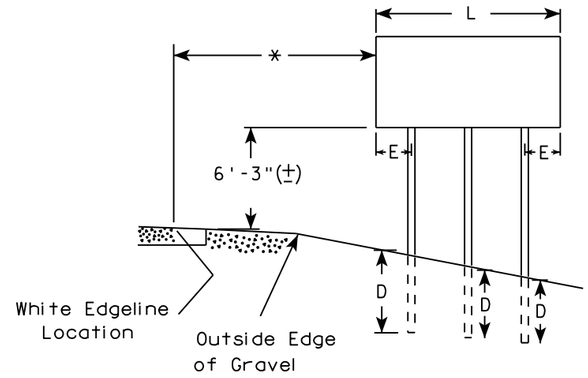
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

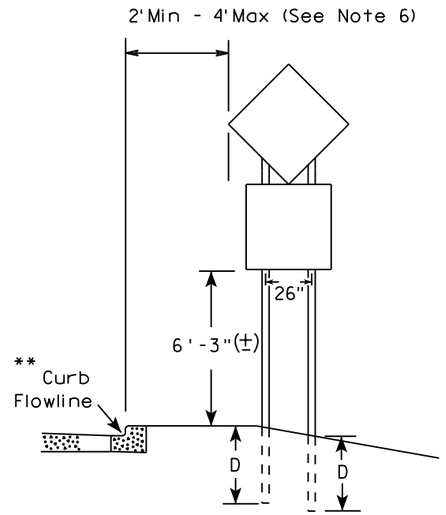
URBAN AREA



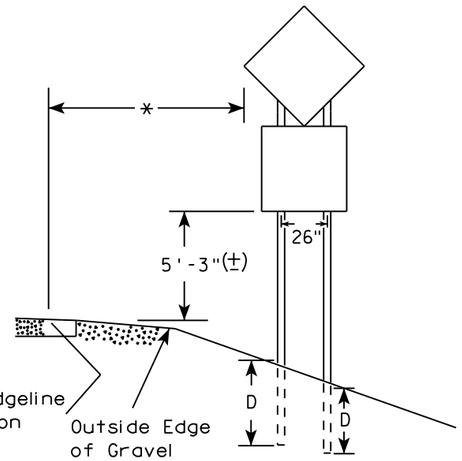
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

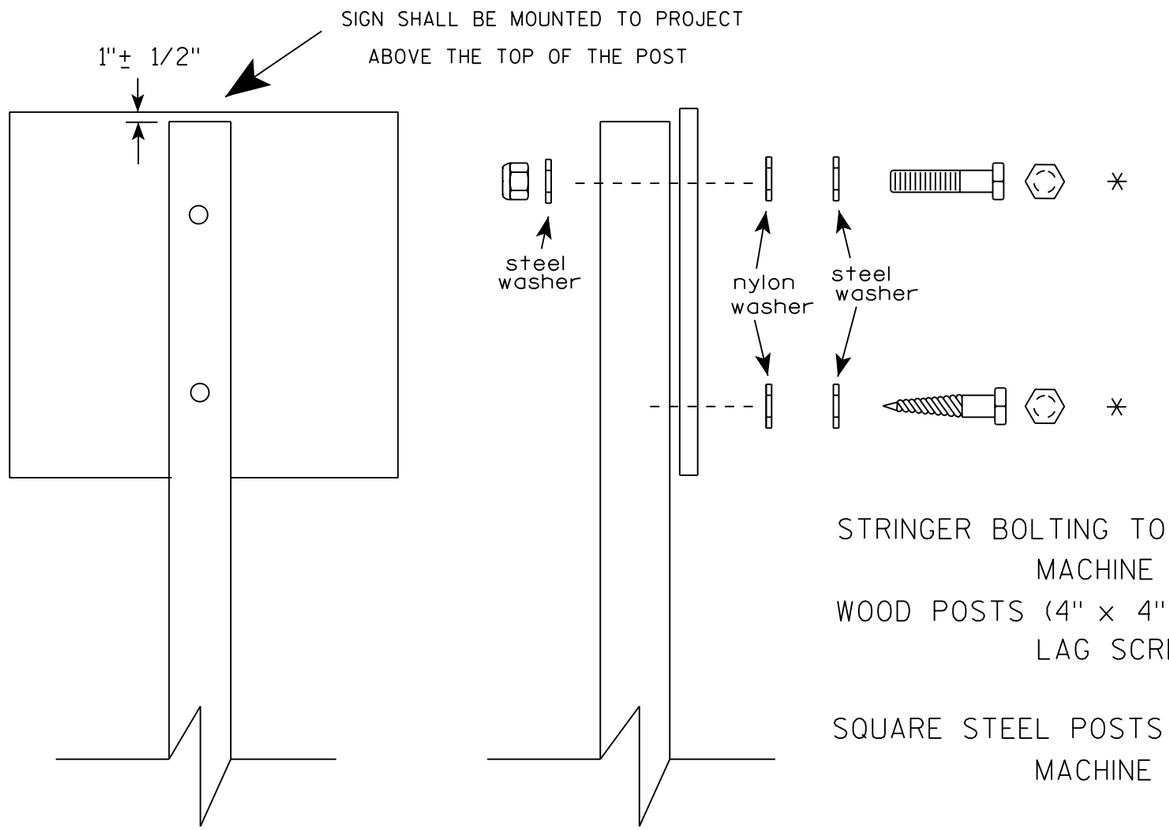
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 435	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 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

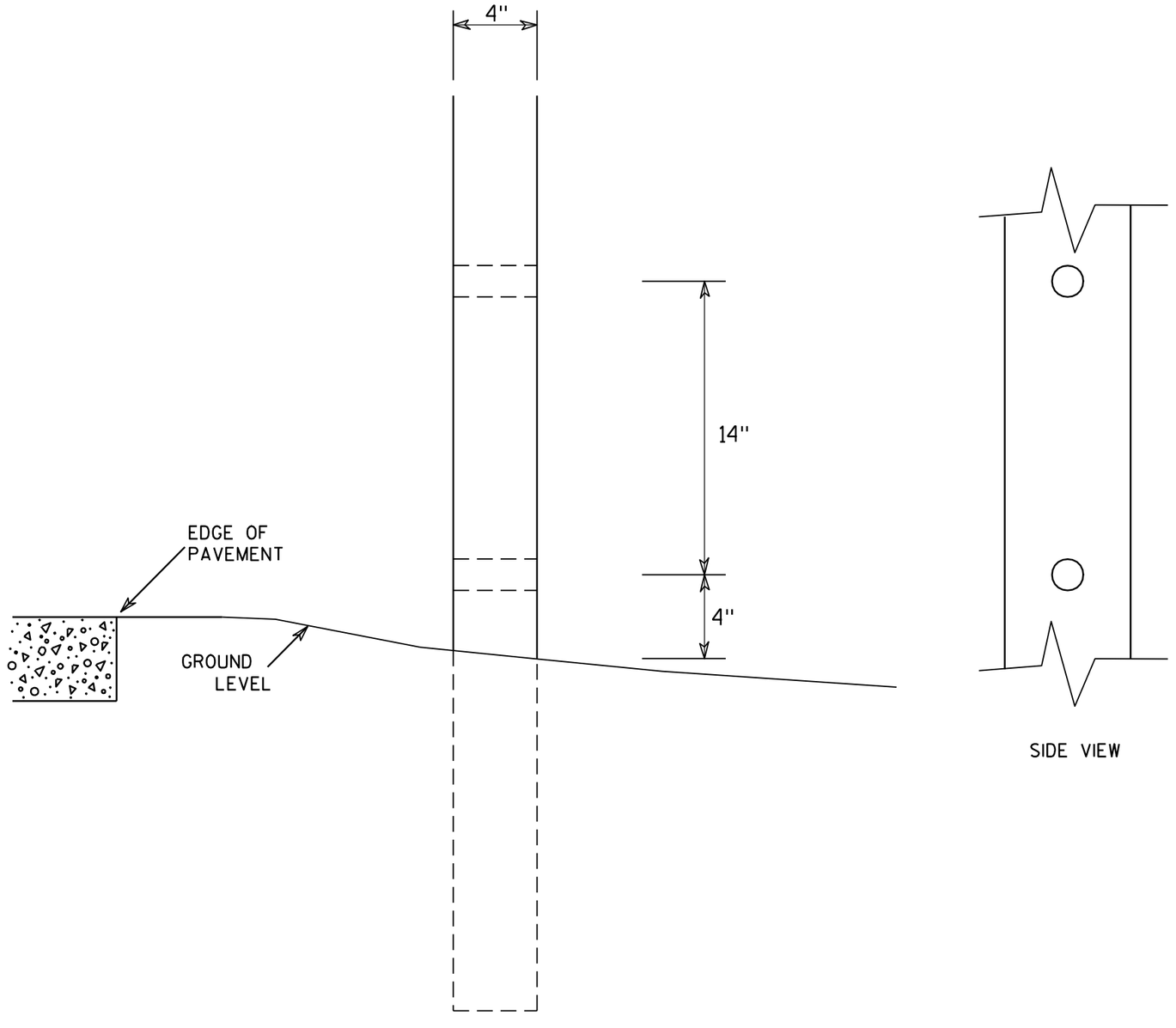
APPROVED Matthew R Rauch
For State Traffic Engineer

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 : $$ plotuser $$



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.

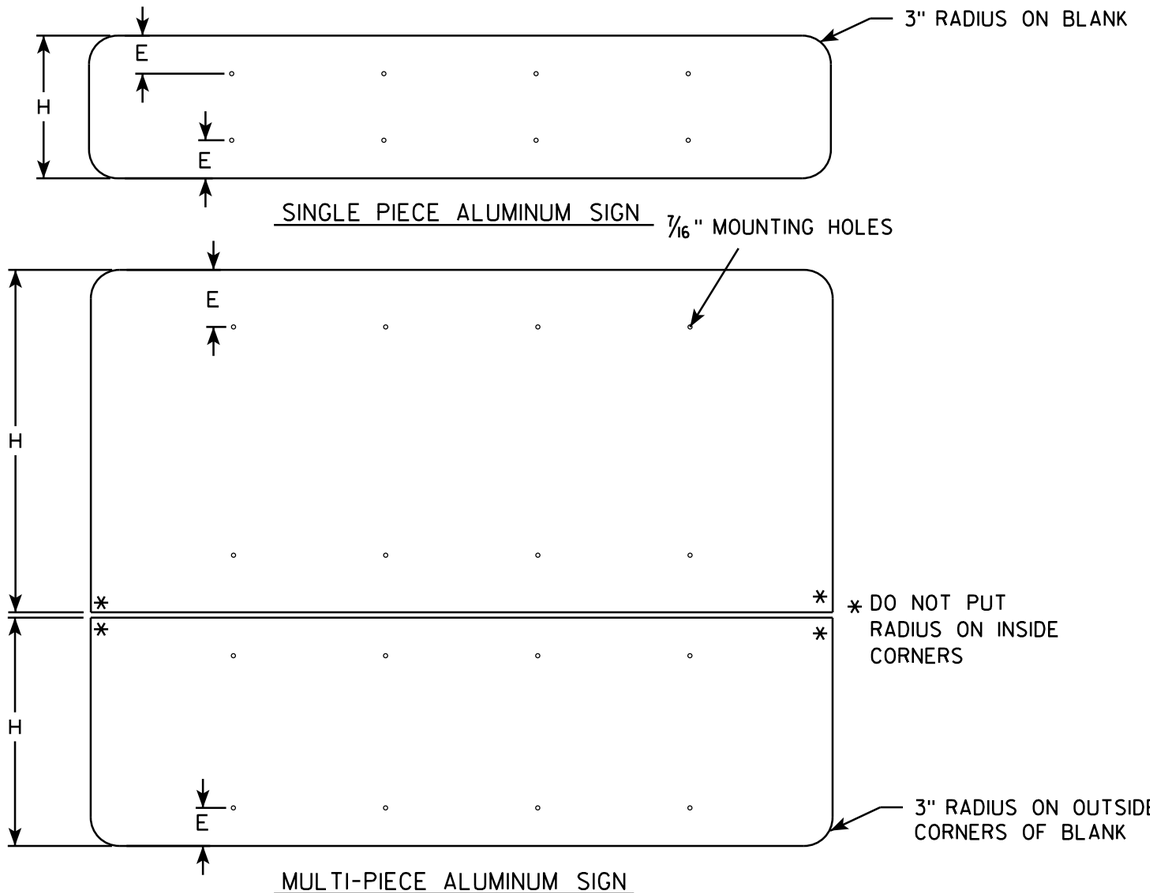
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

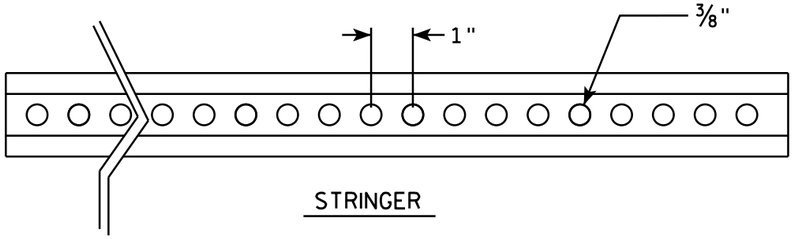
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 437	E



GENERAL NOTES

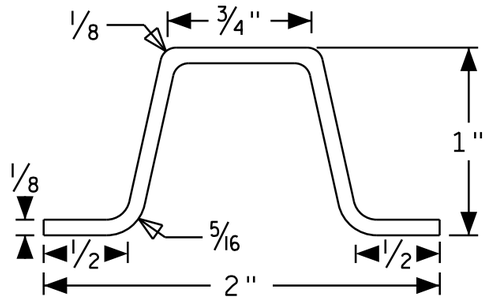
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

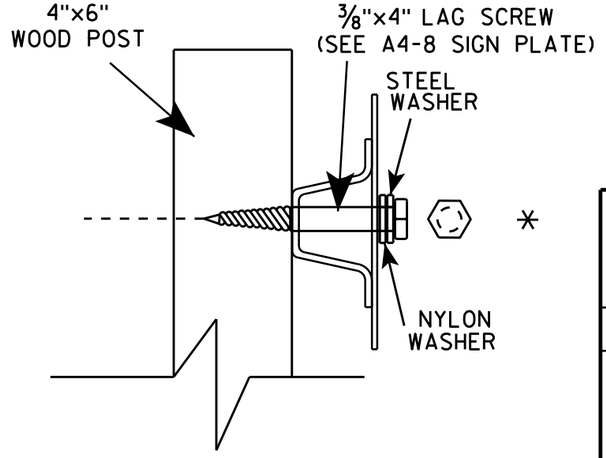


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

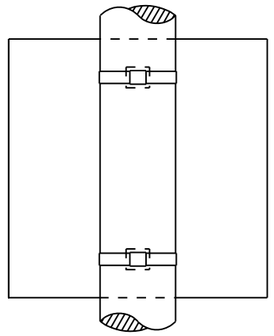
DATE 4/26/16 PLATE NO A4-18.1

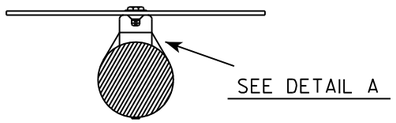
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

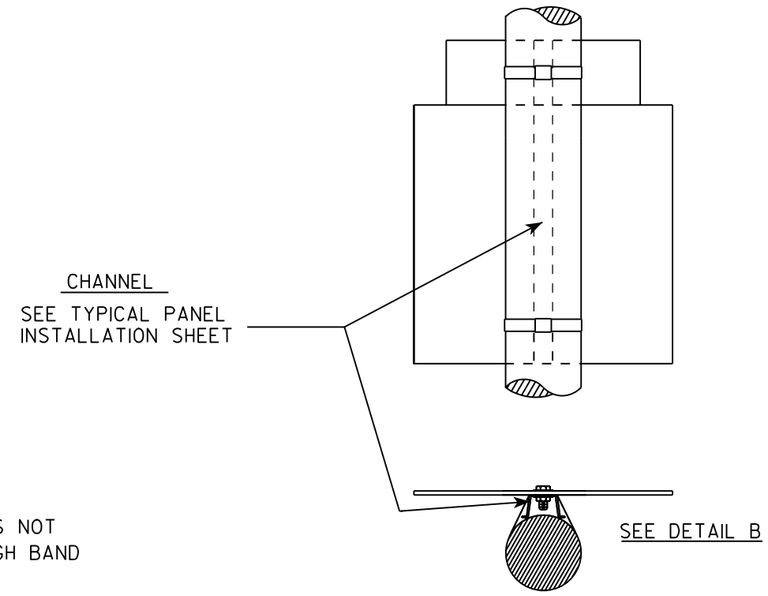
BANDING

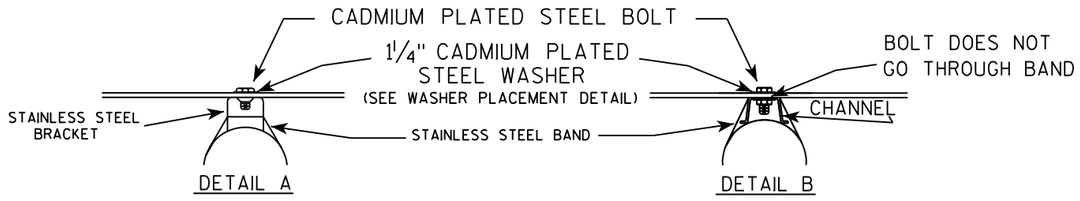
SINGLE SIGN



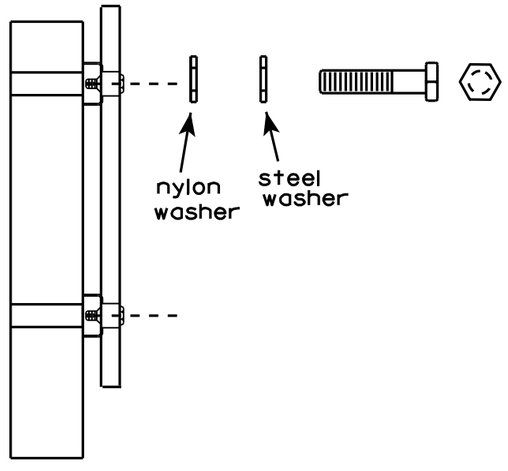


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

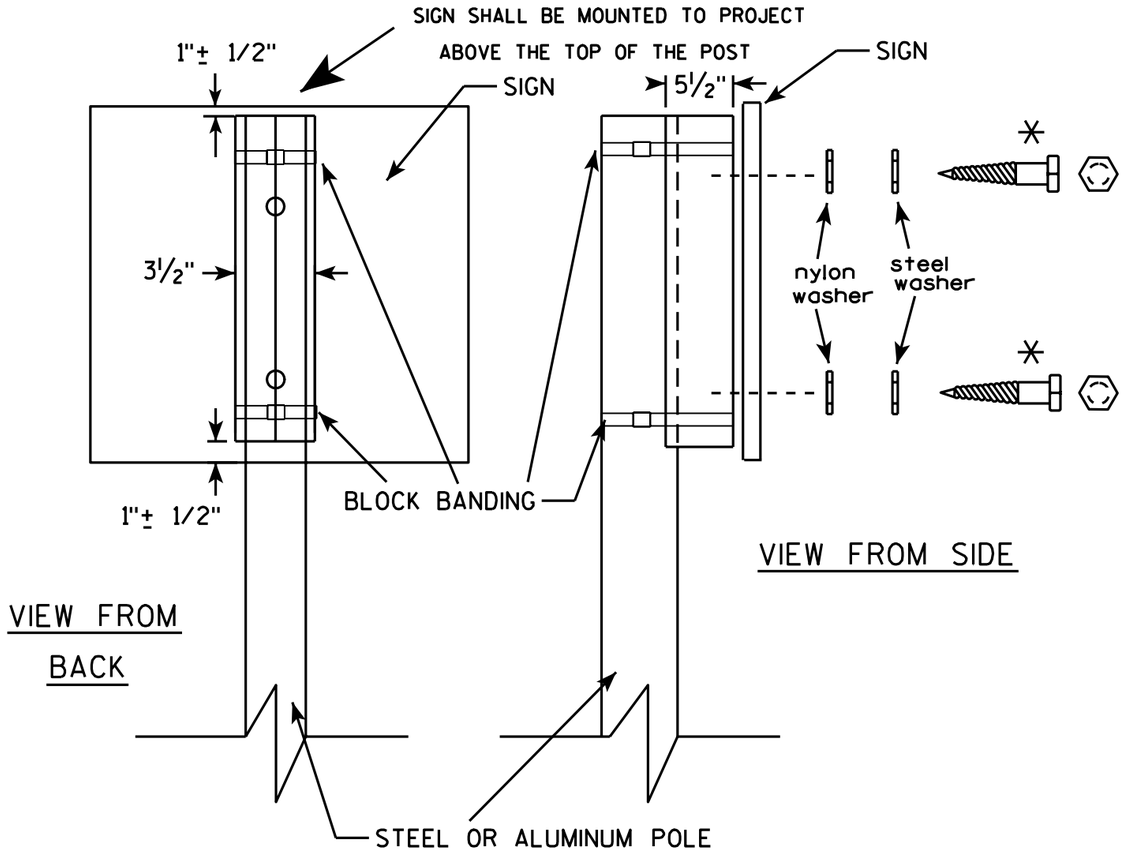
STANDARD SIGN
SIGN BANDING DETAILS

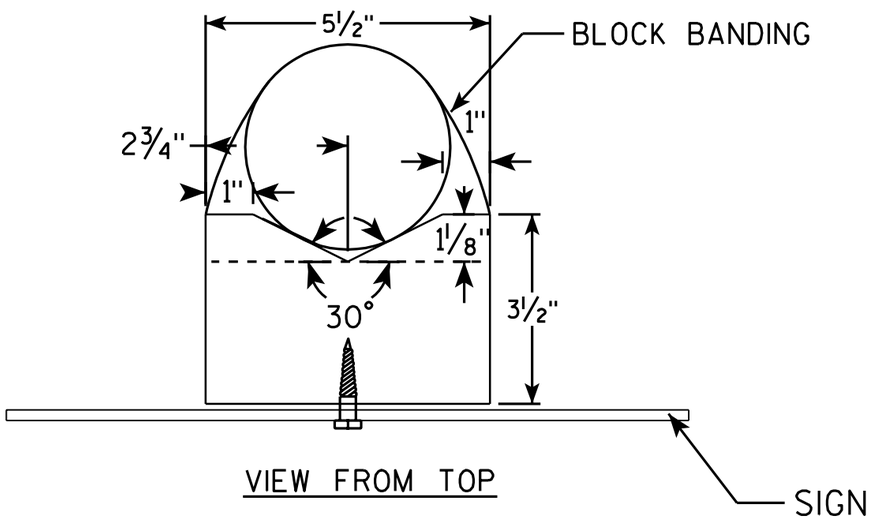
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 439	E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

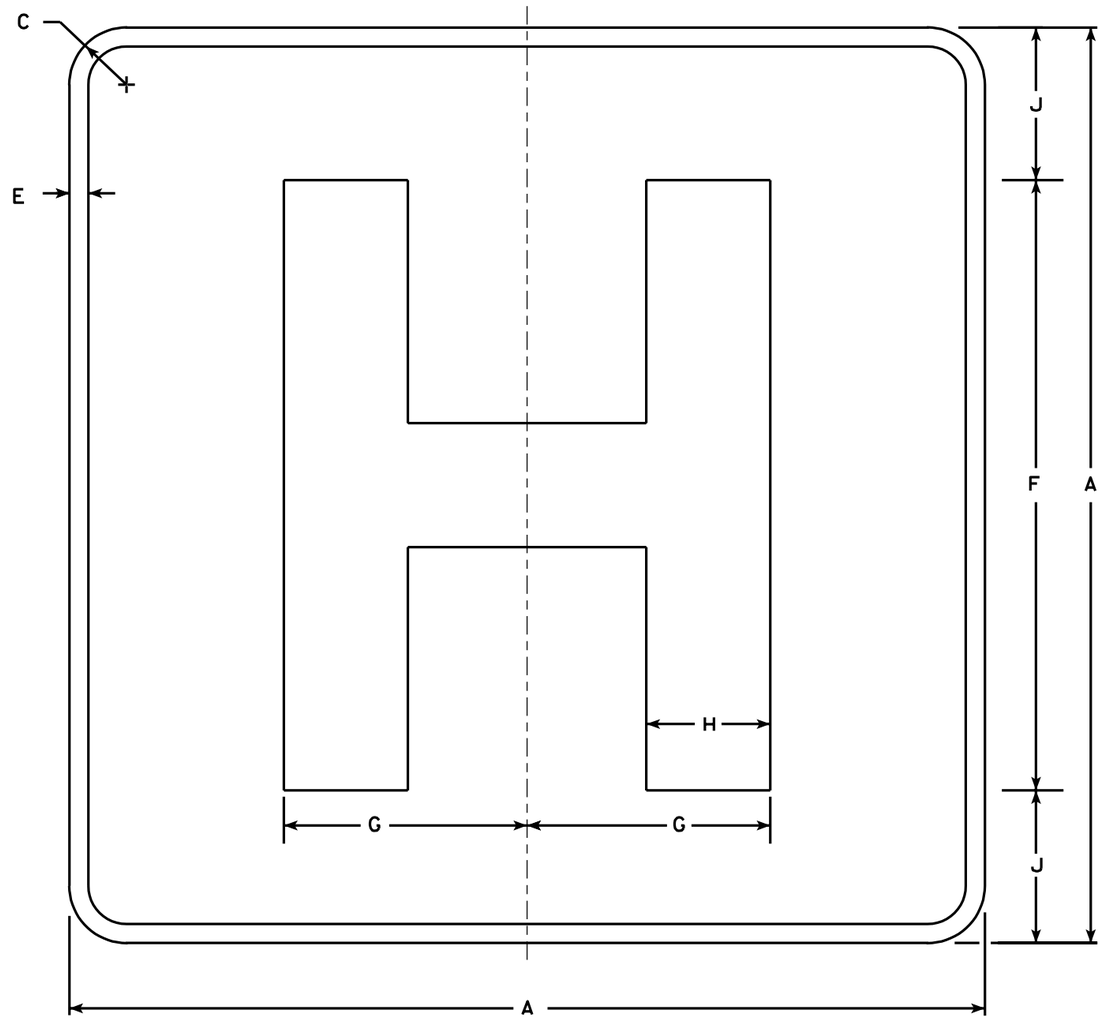
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 440 E



D9-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White - Type H Reflective
3. Message Series - E Modified
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	450 mmX 450 mm
2	600 mmX 600 mm
3	900 mmX 900 mm
4	X
5	X

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8		1/2	12	4 3/4	2 3/8		3																	4.0
2	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

STANDARD SIGN
D9-2

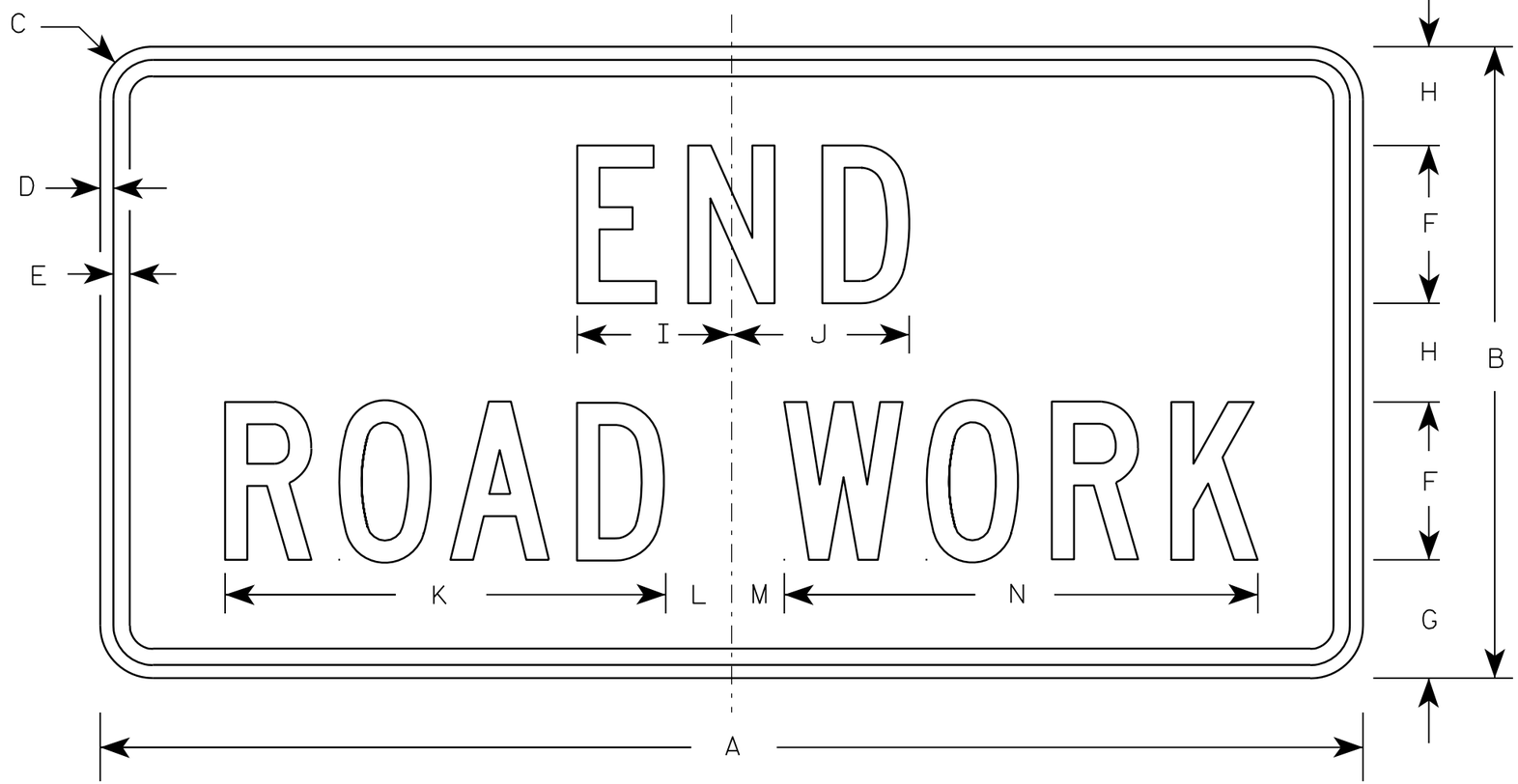
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spong
for State Traffic Engineer

DATE 1/15/02 PLATE NO. D9-2.4

PROJECT NO:

SHEET NO: 441 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

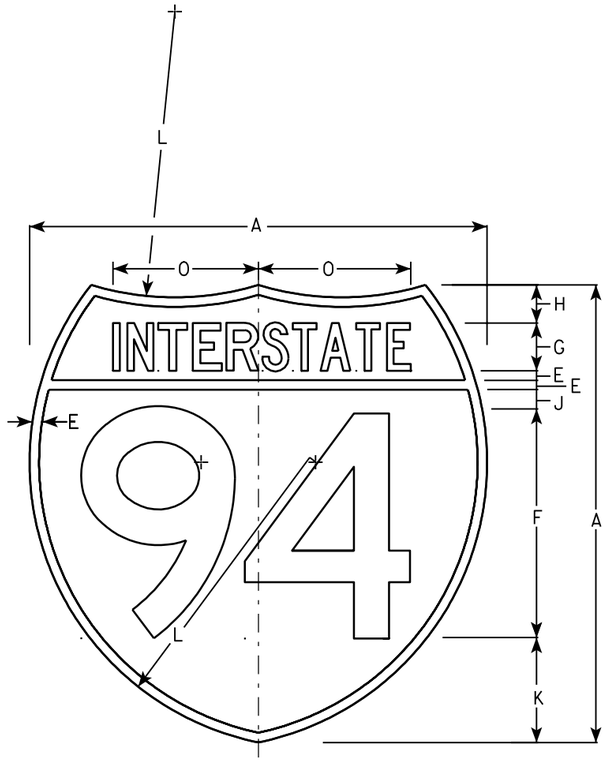
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

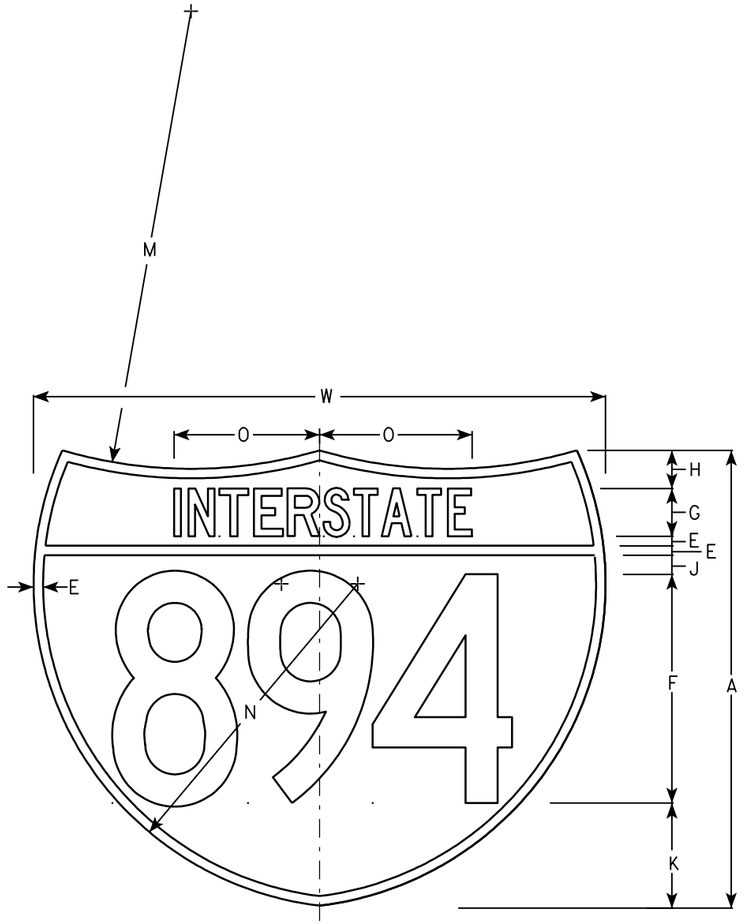
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 442	E



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

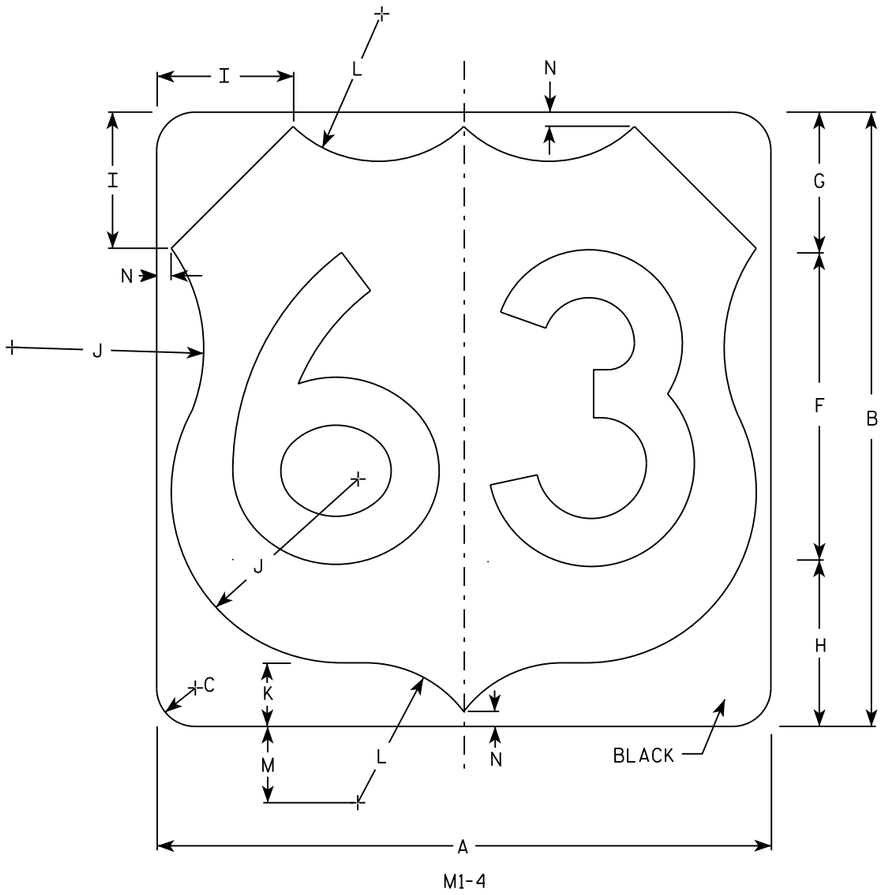
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

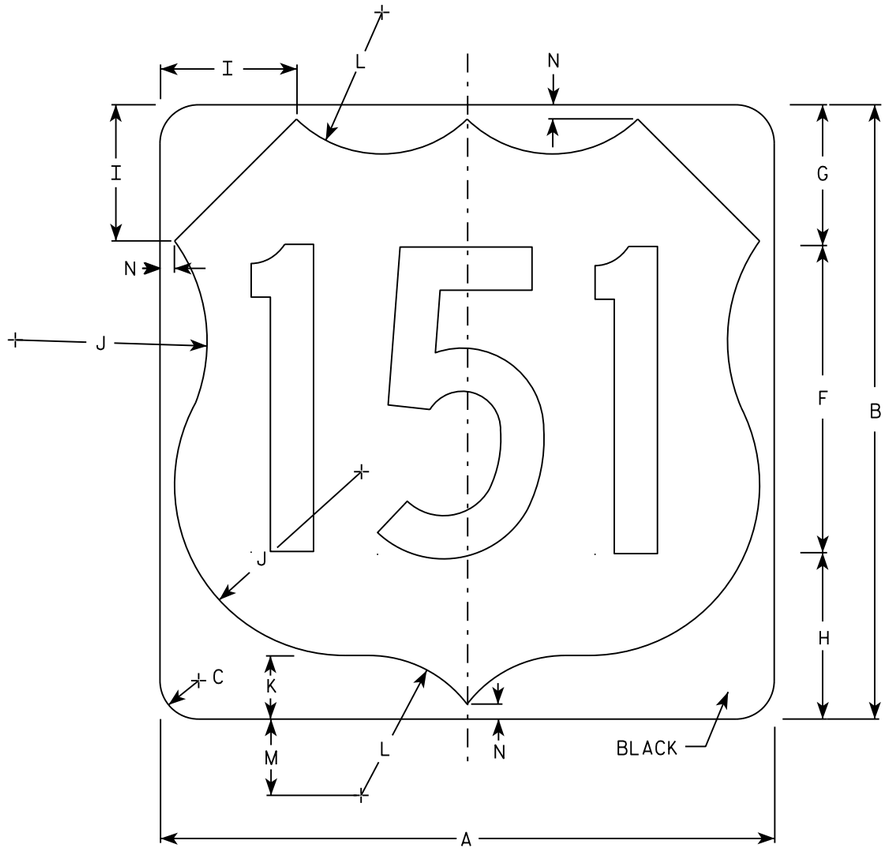
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 443	E

NOTES

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



M1-4



M1-4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area Sq. ft.
1																											
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0

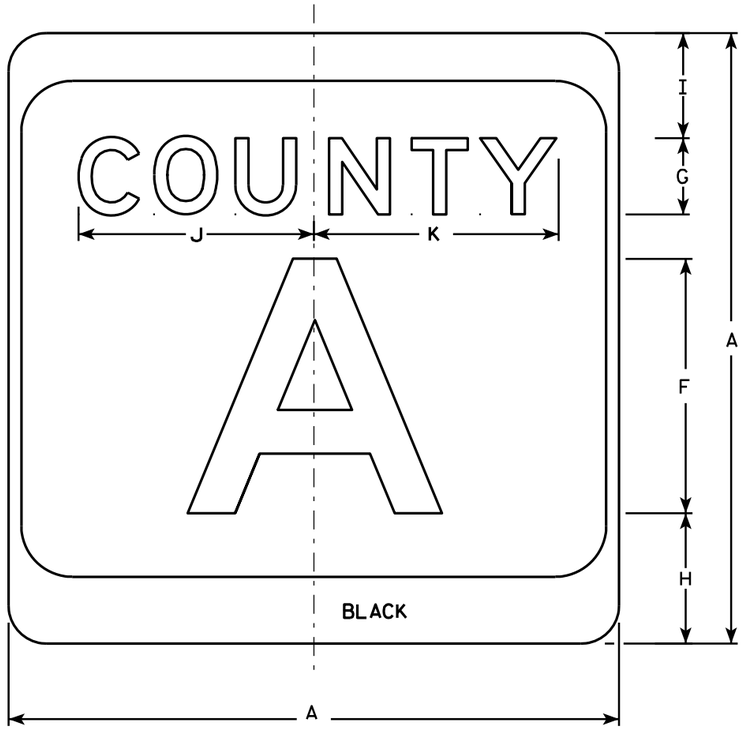
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

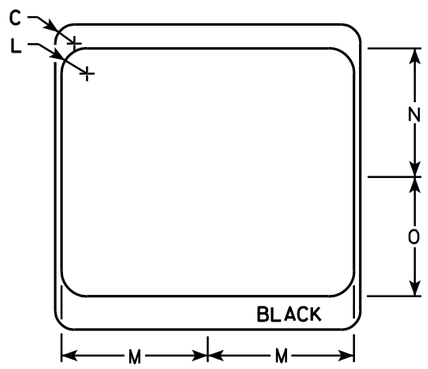
APPROVED Matthew R Rauch
for State Traffic Engineer

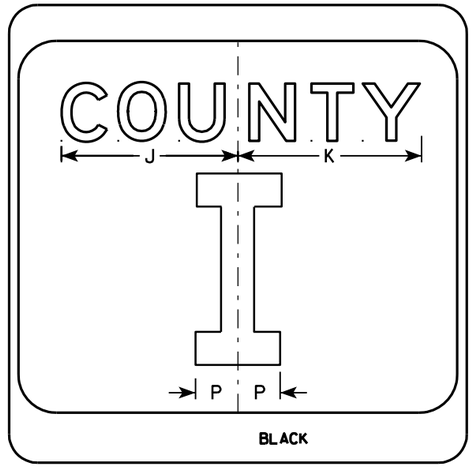
DATE 3/16/18 PLATE NO. M1-4.10

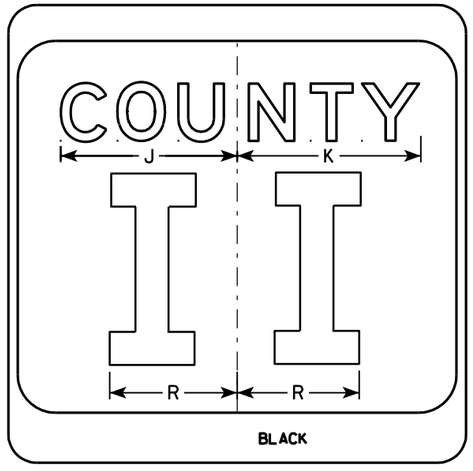
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 444	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

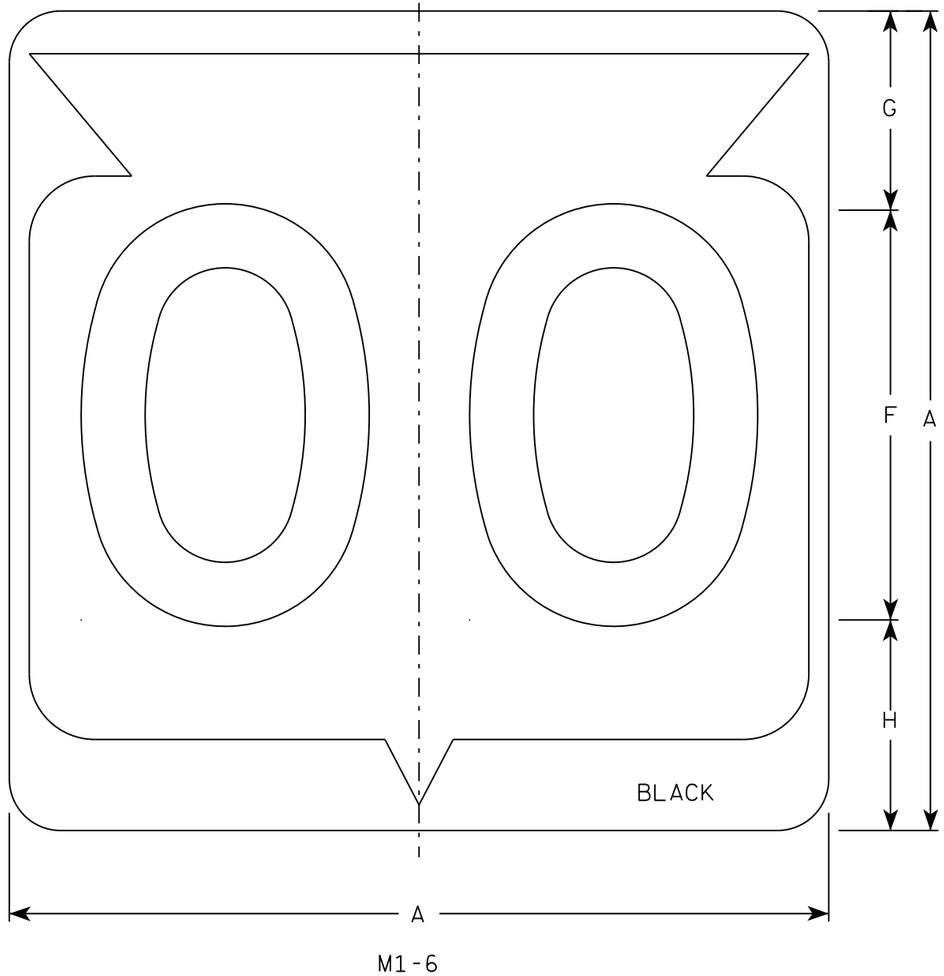
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

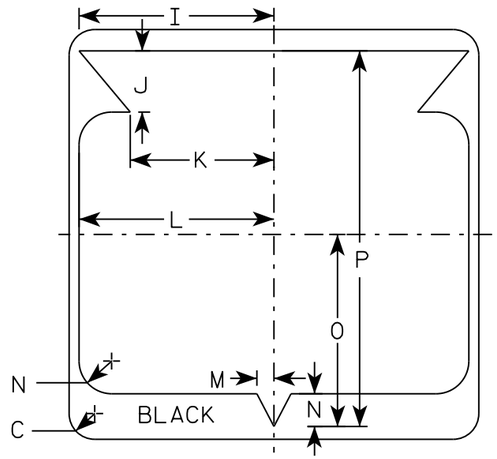
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 445	E



M1-6

NOTES

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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 446 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 - Green
   Message - White - Graphics - White
   Circle Tour Message is Green
3. Message Series - Special
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.	Area m2
1																												
2	24			1 1/8	1/2																						4.0	.36
3																												
4	36			1 5/8	3/4																						9.0	.81
5																												

STANDARD SIGN
M1-93

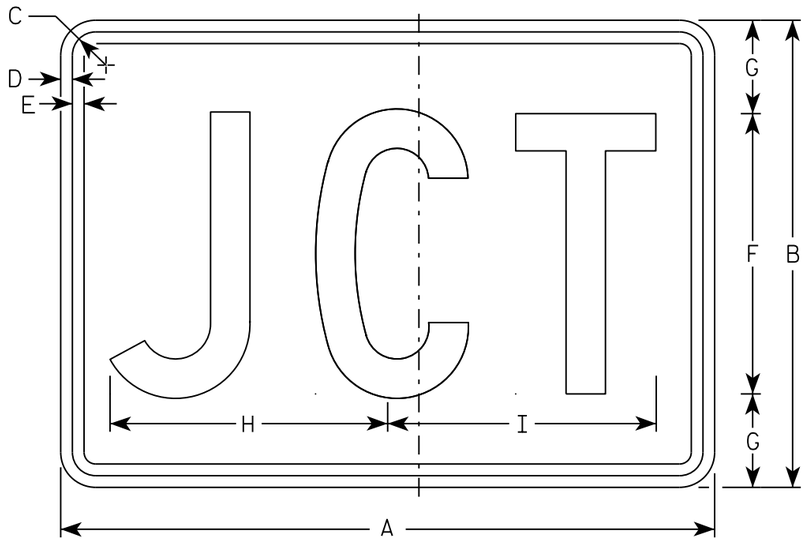
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

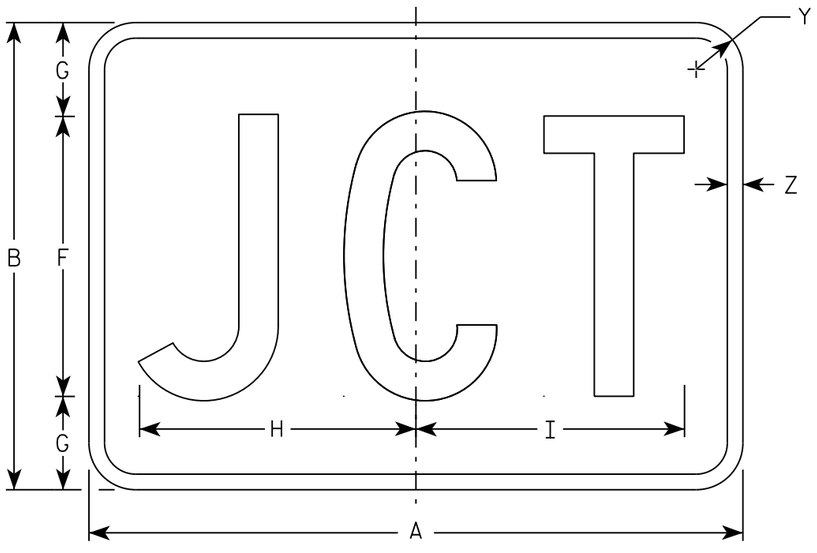
DATE 11/5/15 PLATE NO. M1-93.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M193.DGN PLOT DATE : 01-DEC-2015 18:00 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.837526:1.000000



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

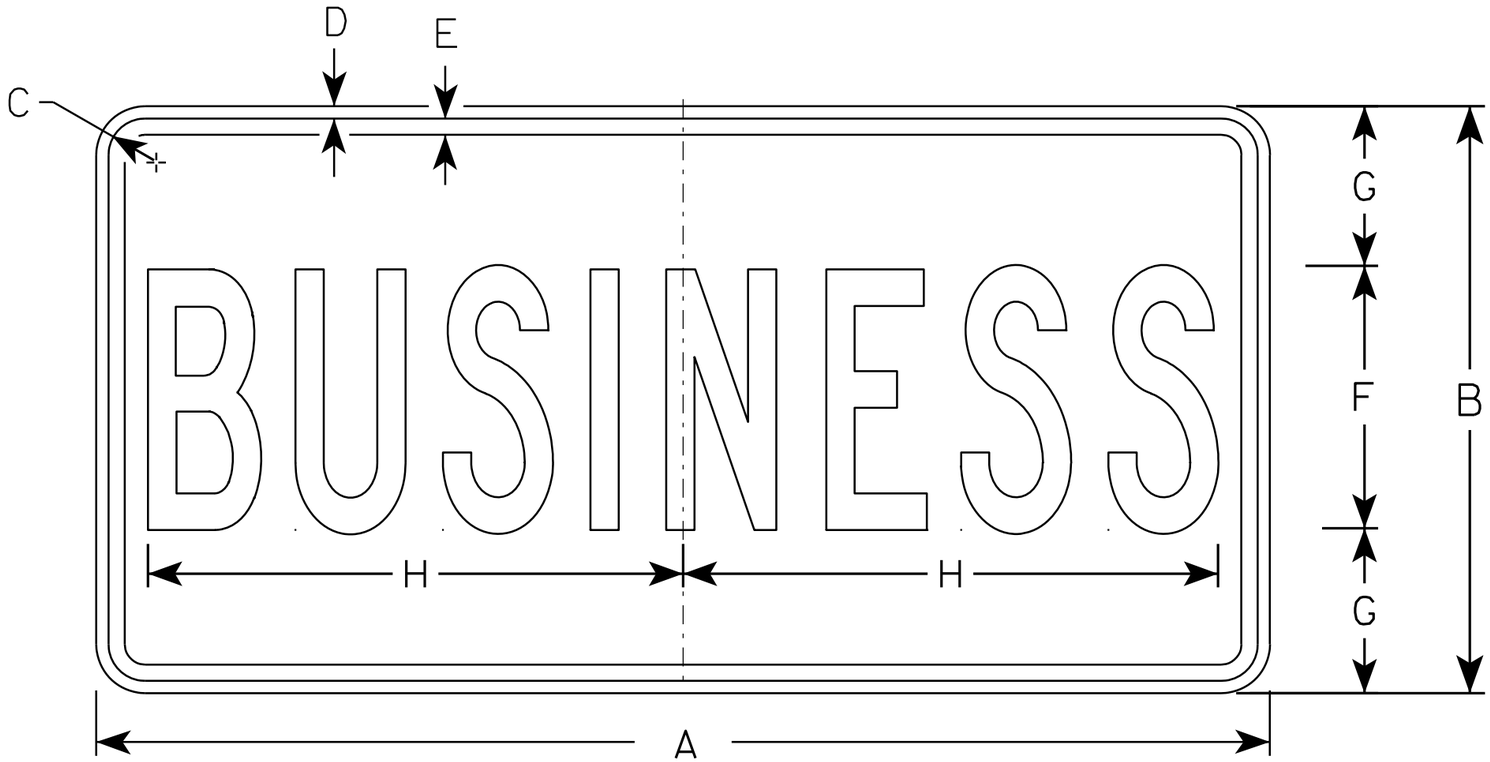
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 448 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M4-3

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White - See Note 5
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	5	3 1/2	9 5/8																			2.0
3	36	18	1 1/8	3/8	1/2	8	5	16 3/8																			4.5
4																											
5																											

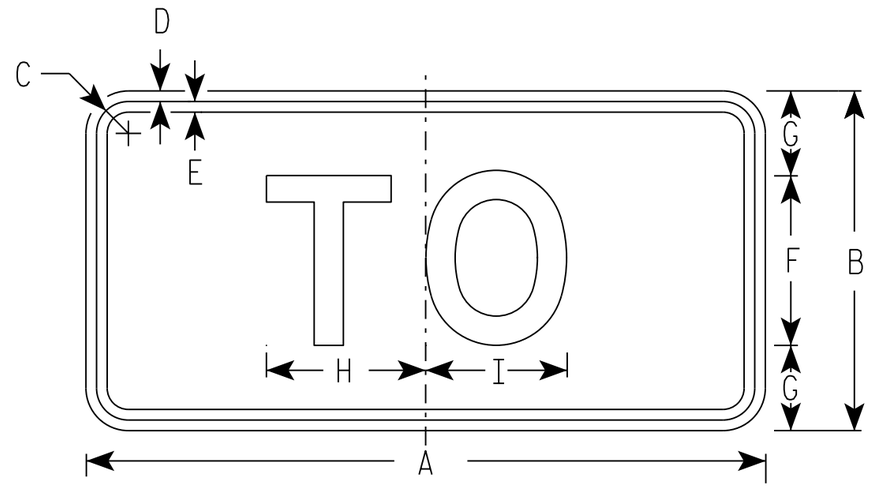
STANDARD SIGN
M4-3

WISCONSIN DEPT OF TRANSPORTATION

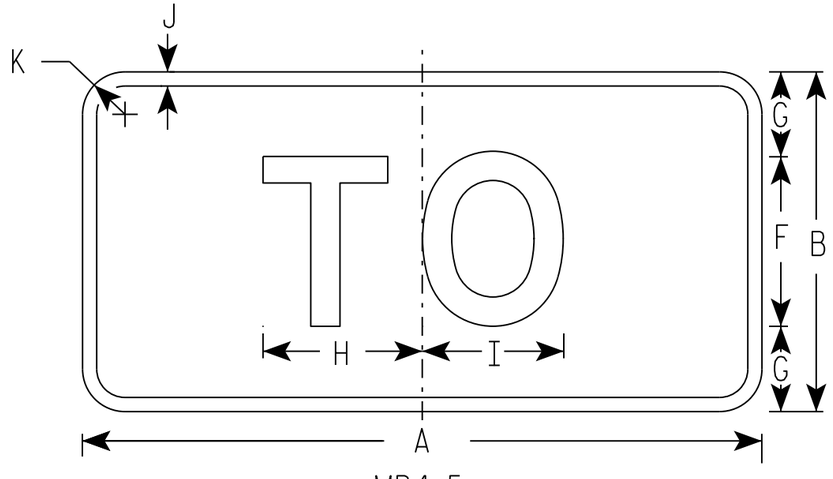
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-3.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 449 | E



M4-5
MM4-5
MP4-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

STANDARD SIGN
M4-5

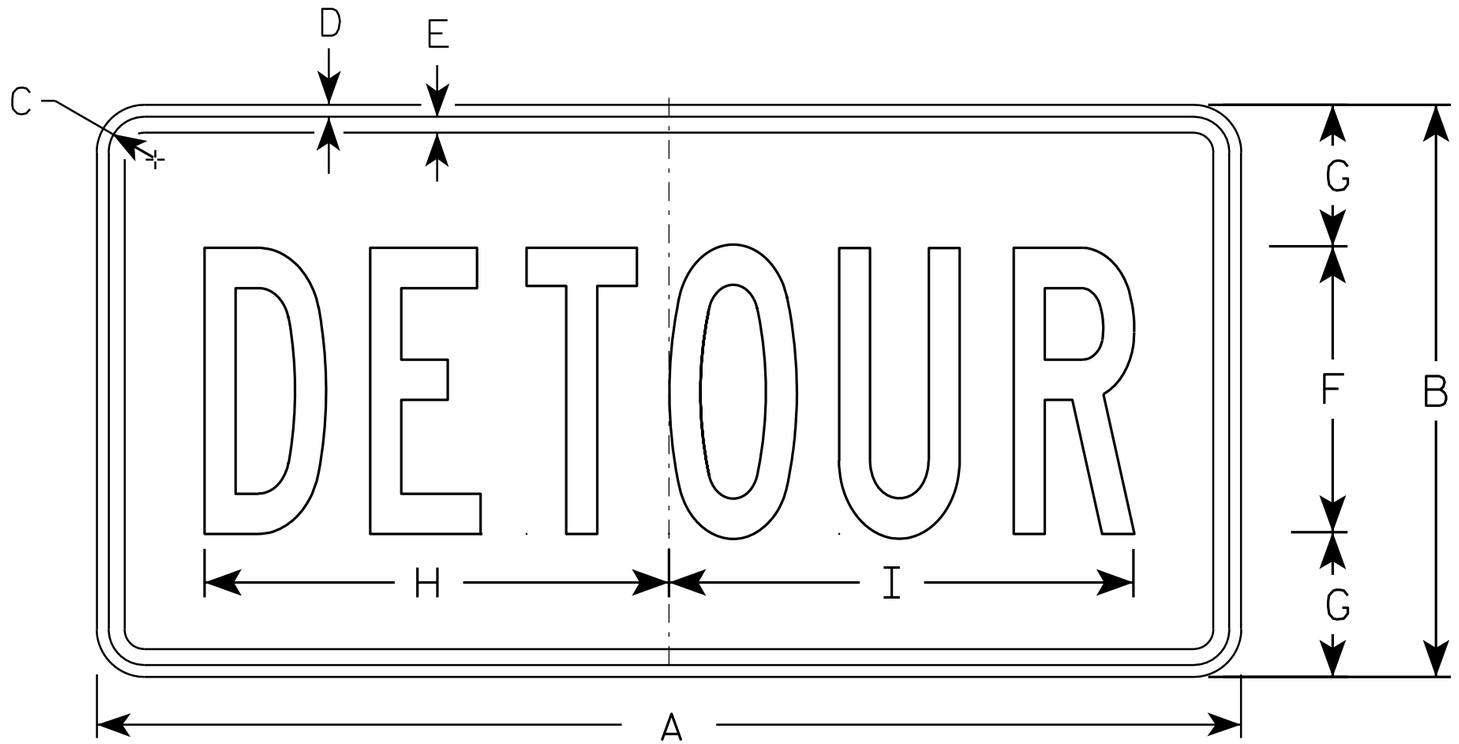
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 450 M4-5.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M45.DGN PLOT DATE : 01-DEC-2015 17:55 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.351066:1.000000



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

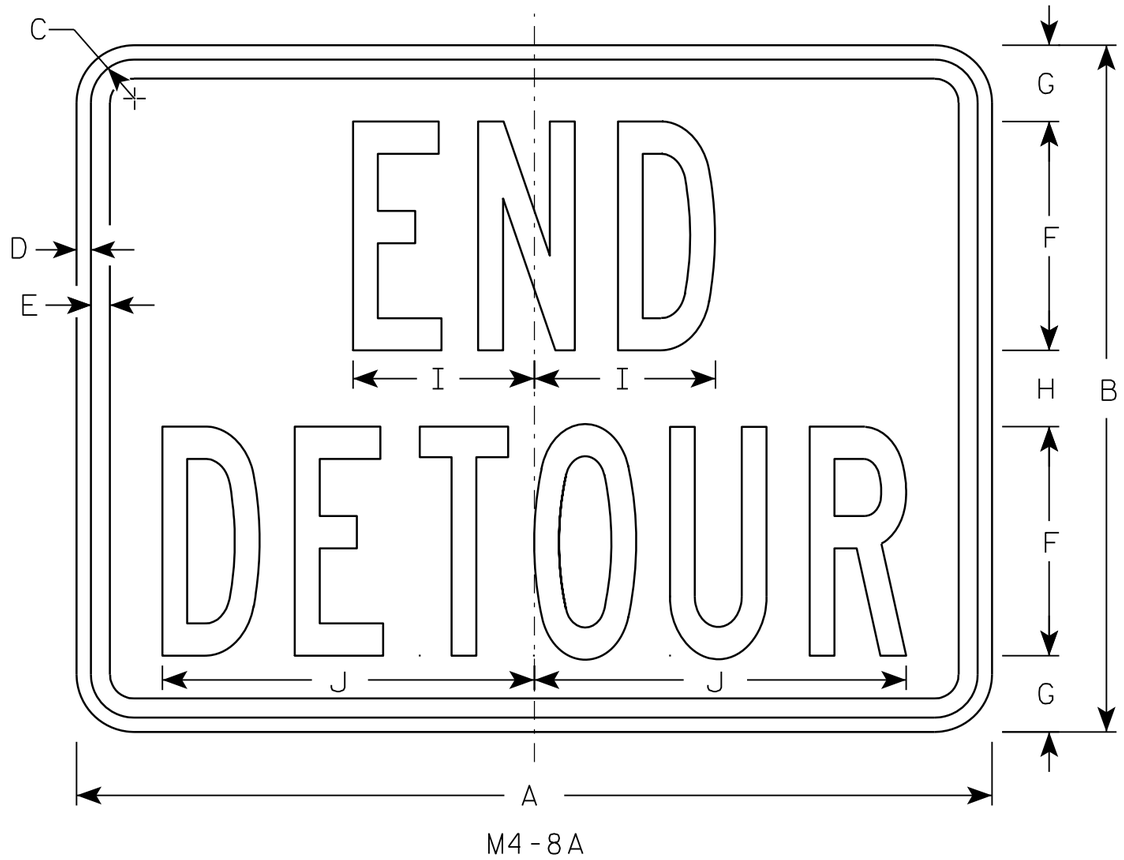
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 451	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

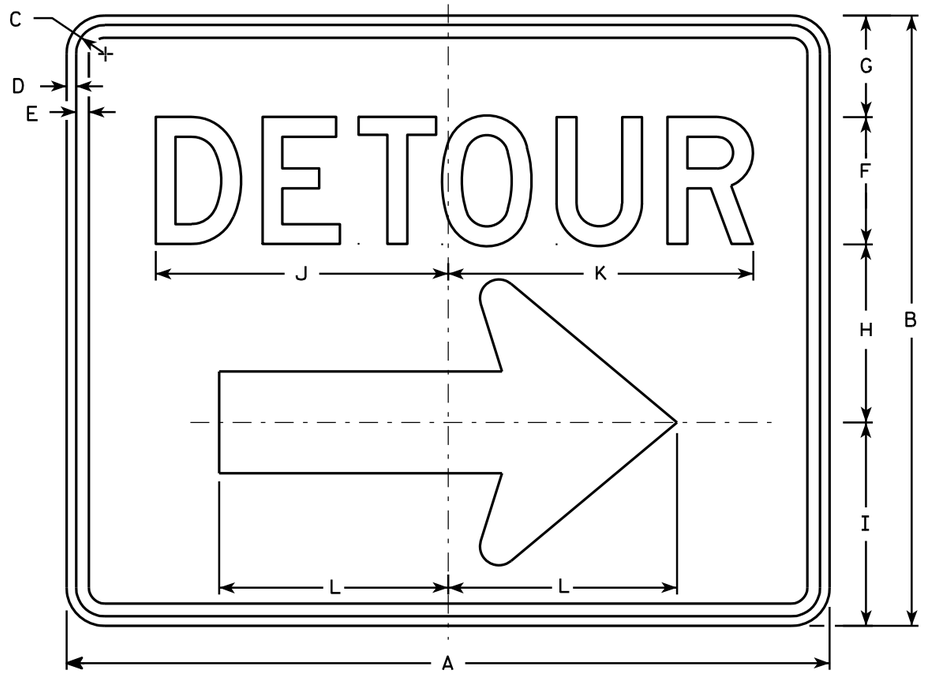
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

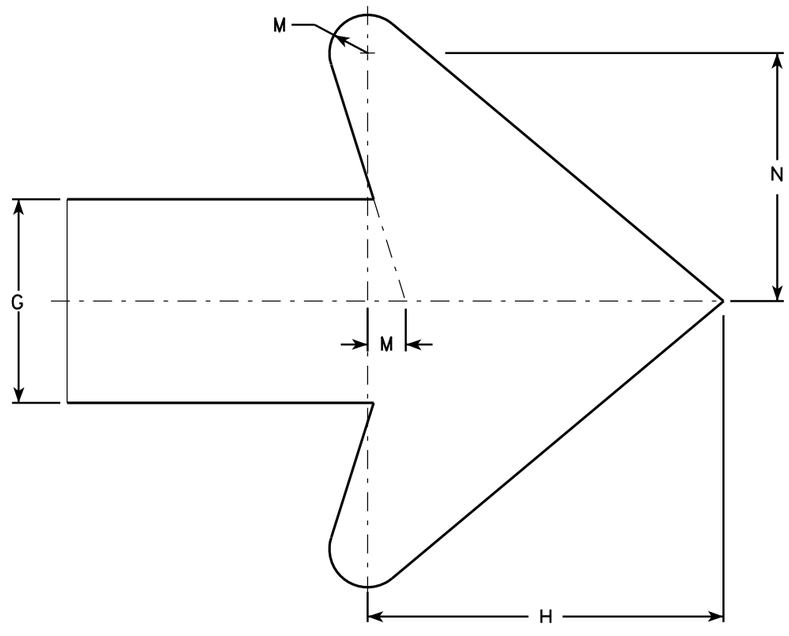
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 452	E



M4-9R

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 - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

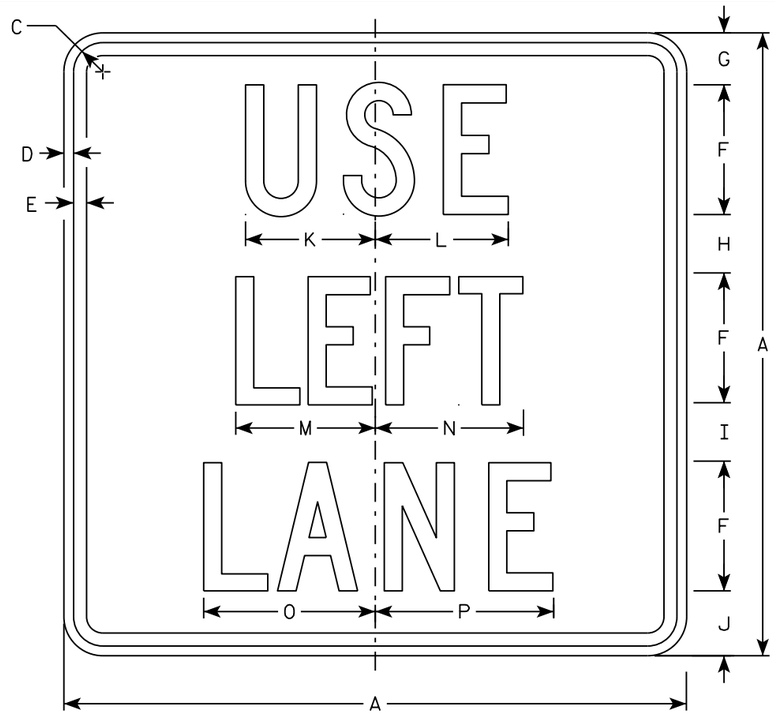
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

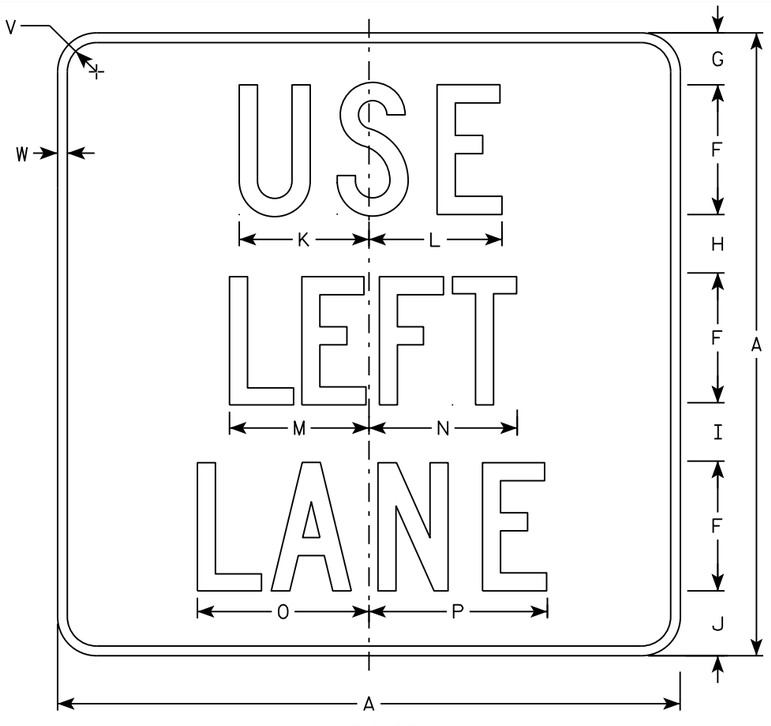
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 453	E



M4-20L

A

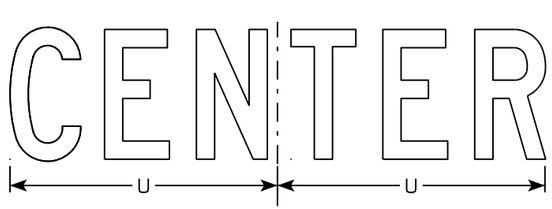
M4-20L
MM4-20L
M04-20L
MP4-20L



MB4-20L

A

MB4-20L
MK4-20L
MN4-20L
MR4-20L



M4-20C
MB4-20C
MK4-20C
MM4-20C
MN4-20C
M04-20C
MP4-20C
MR4-20C

M4-20R
MB4-20R
MK4-20R
MM4-20R
MN4-20R
M04-20R
MP4-20R
MR4-20R

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-20 Background - White
   Message - Black
   MB4-20 Background - Blue
   Message - White
   MK4-20 Background - Green
   Message - White
   MM4-20 Background - White
   Message - Green
   MN4-20 Background - Brown
   Message - White
   M04-20 Background - Orange - Type F Reflective
   Message - Black
   MP4-20 Background - White
   Message - Blue
   MR4-20 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/8	3/8	1/2	5	2	2 1/4	2 1/4	2 1/2	5	5 1/8	5 3/8	5 3/4	6 5/8	6 7/8			7	7 5/8	10 1/4	1 1/2	1/2				4.0
3	36		1 5/8	5/8	3/4	7	4	3	3 1/2	4 1/2	7 1/2	7 3/4	8	8 5/8	9 7/8	10 1/4			10 3/8	11 3/8	14 3/8	1 7/8	1/2				9.0
4																											
5																											

STANDARD SIGN
M4-20

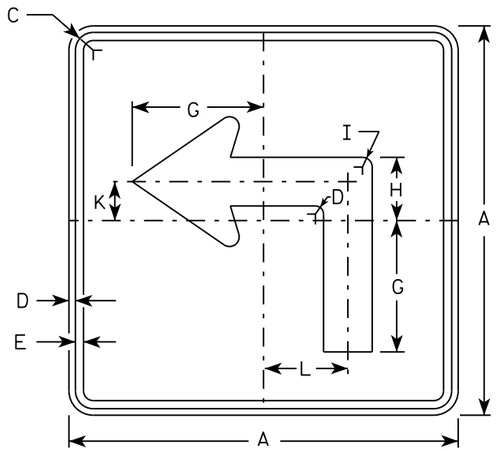
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

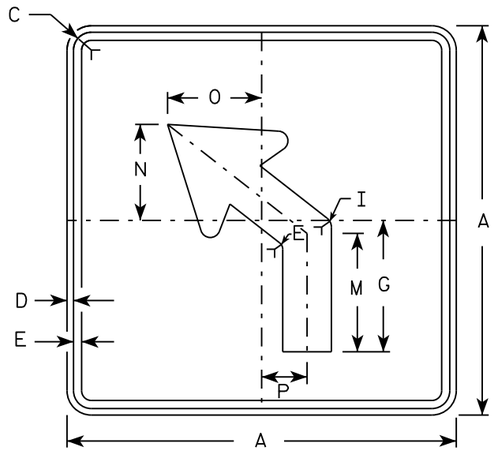
DATE 10/15/15 PLATE NO M4-20.5
454

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

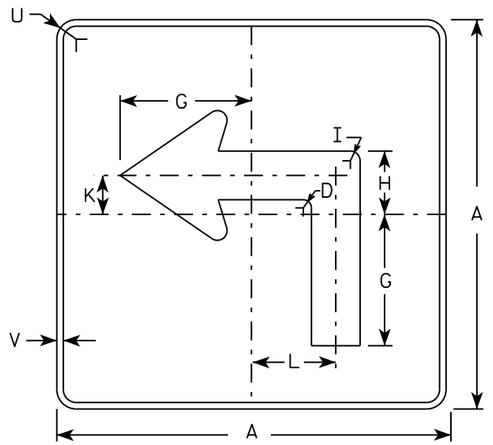
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M420.DGN PLOT DATE : 01-DEC-2015 18:03 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.837526:1.000000



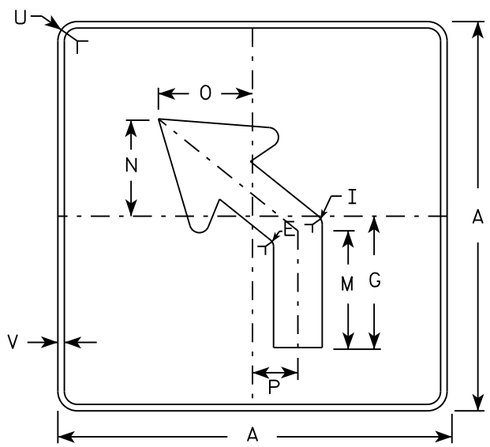
M5-1L
MM5-1L
MO5-1L
MP5-1L



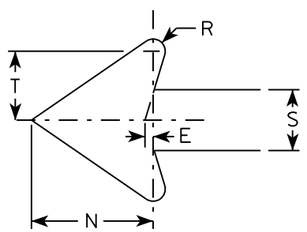
M5-2L
MM5-2L
MO5-2L
MP5-2L



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



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



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

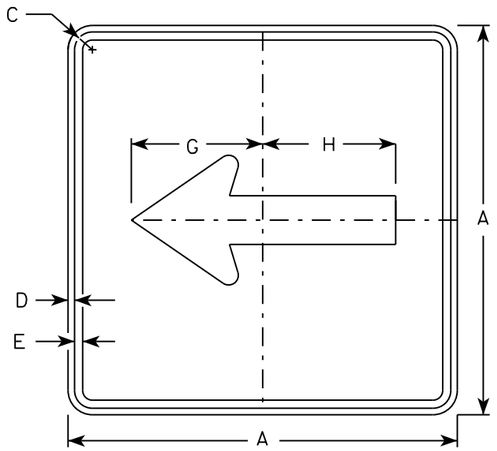
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

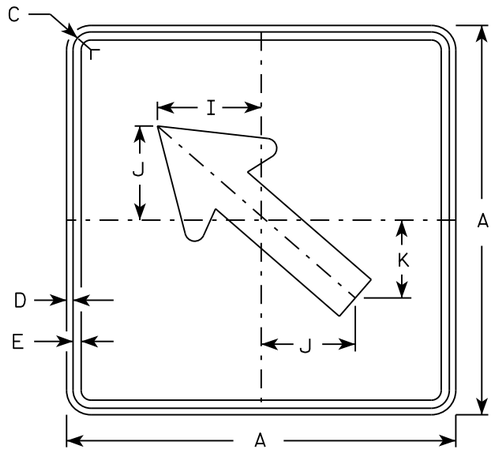
DATE 10/15/15 PLATE NO. M5-1.13

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



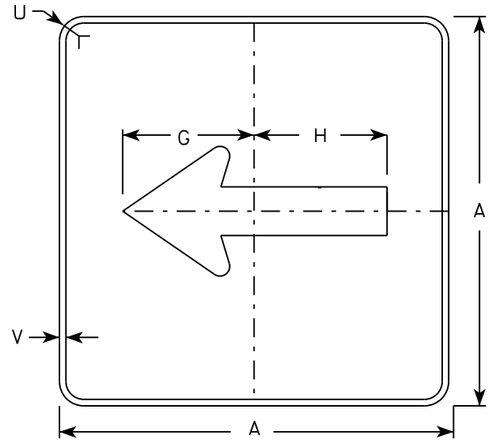
M6-1
MM6-1
MO6-1
MP6-1



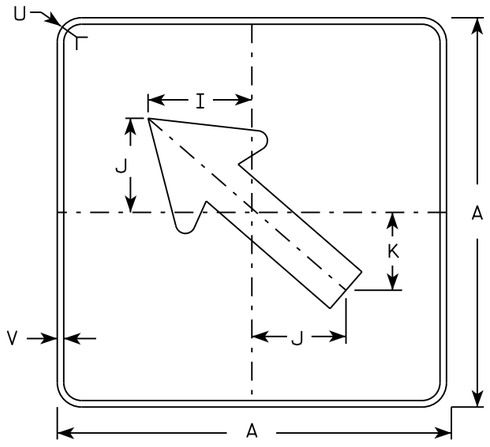
M6-2
MM6-2
MO6-2
MP6-2

NOTES

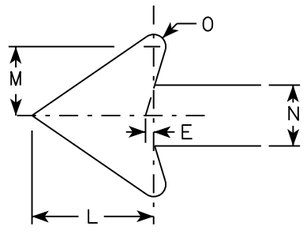
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



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



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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

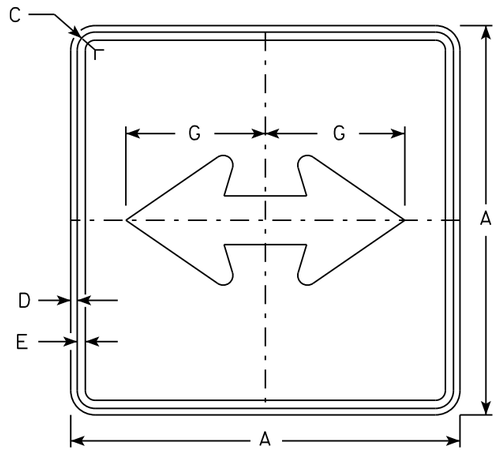
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

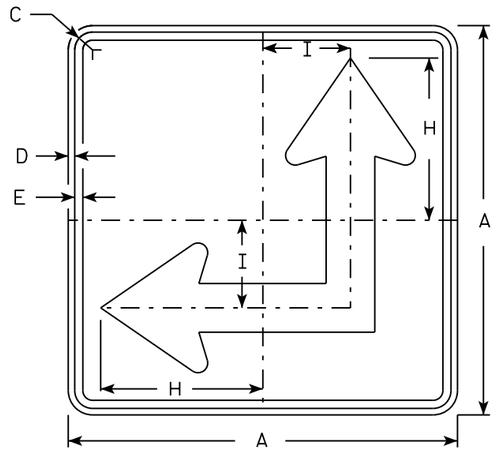
DATE 10/15/15 PLATE 456 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



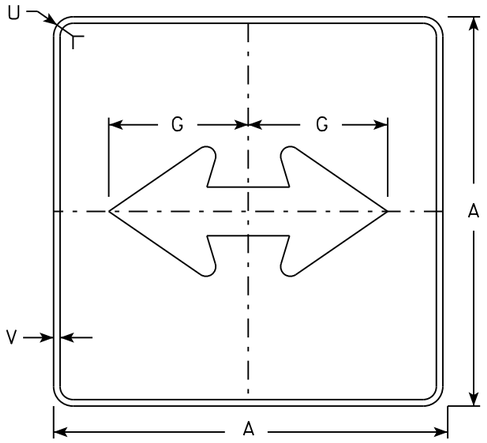
M6-4
MM6-4
MO6-4
MP6-4



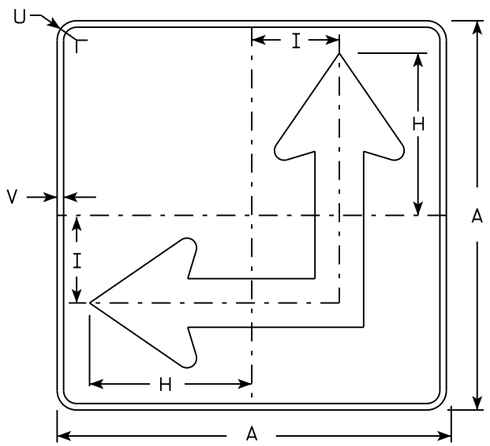
M6-6
MM6-6
MO6-6
MP6-6

NOTES

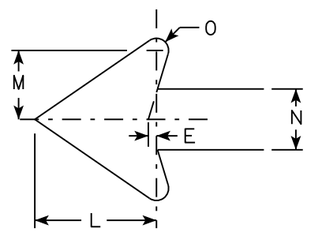
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

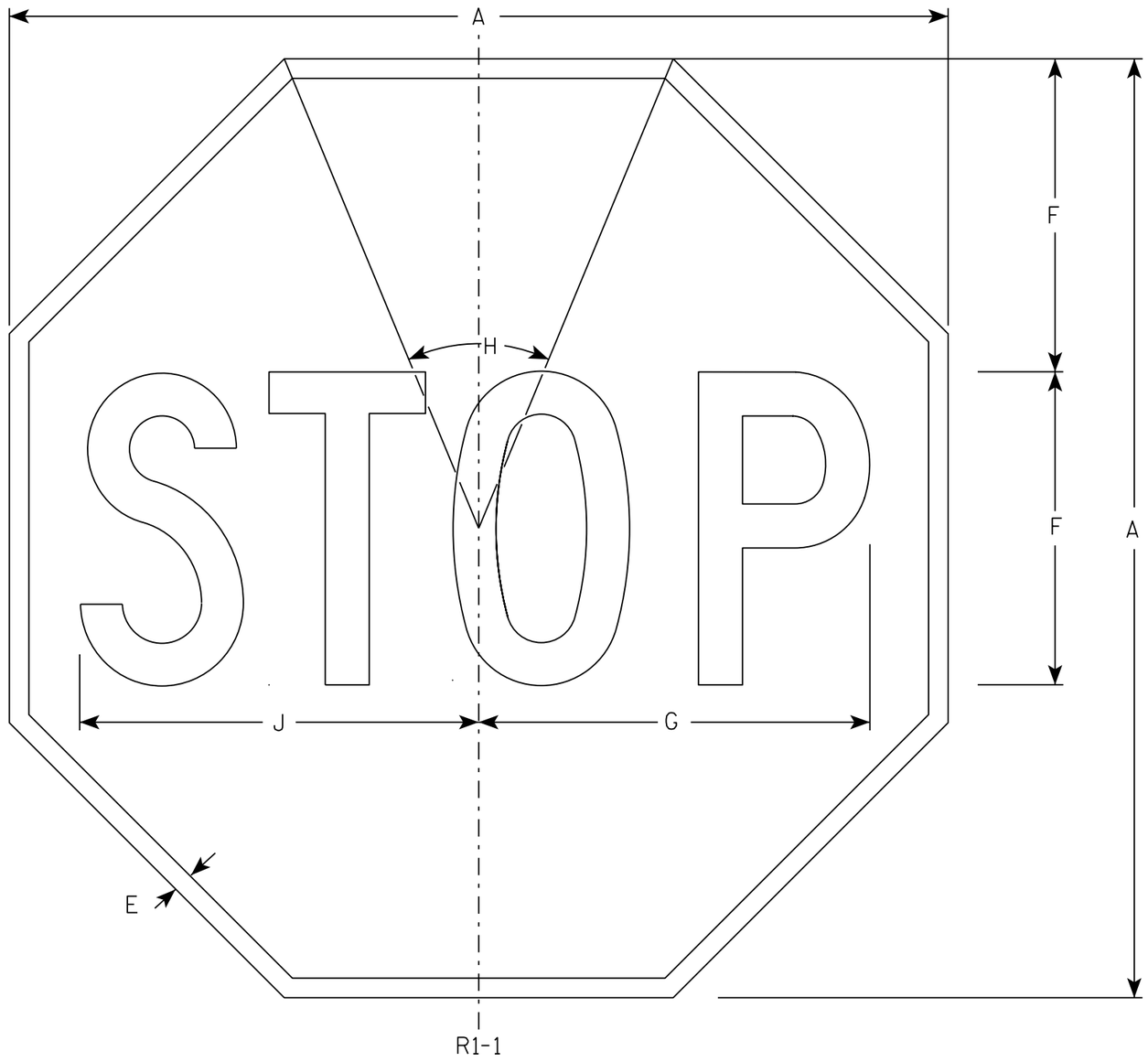
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATI 457 M6-4.10

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

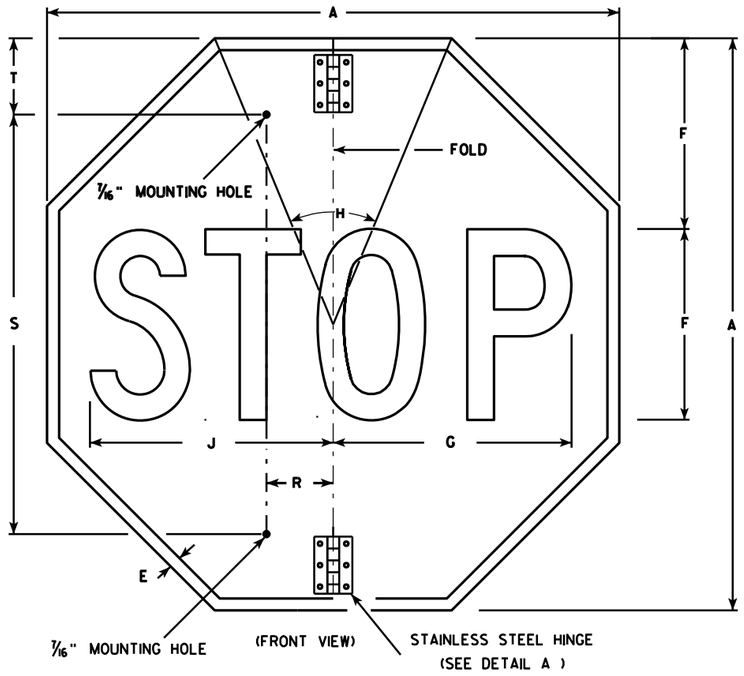
STANDARD SIGN
R1-1

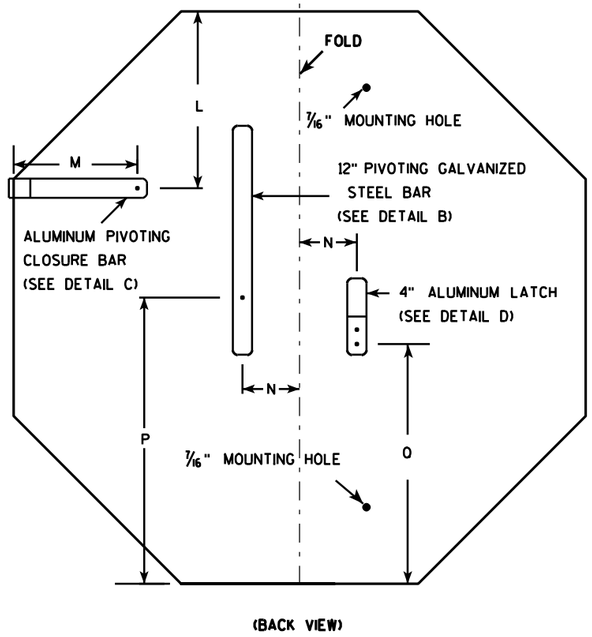
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

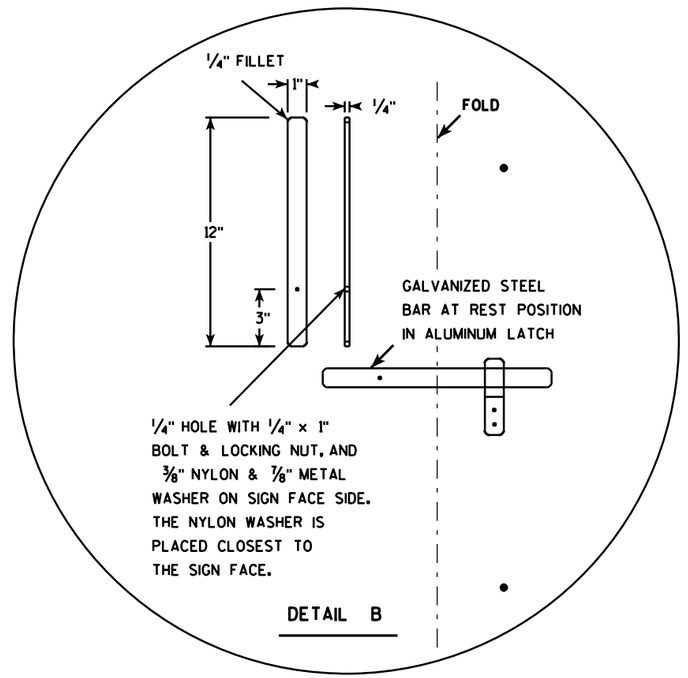
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 458	E

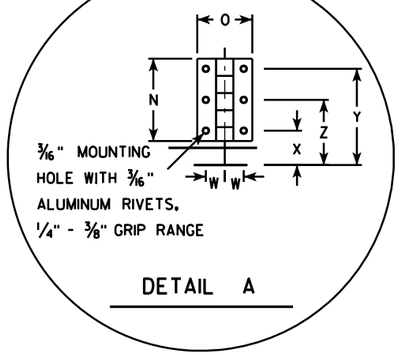


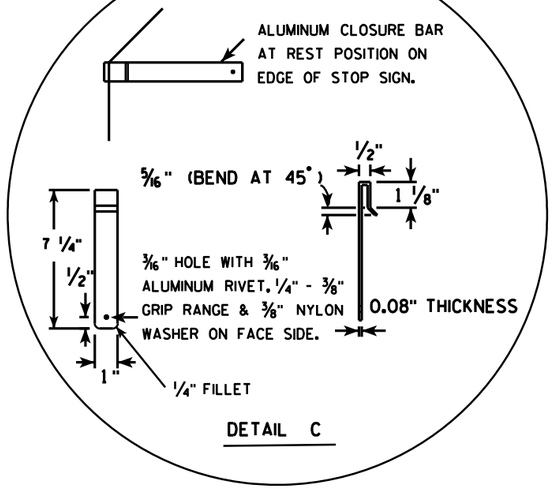


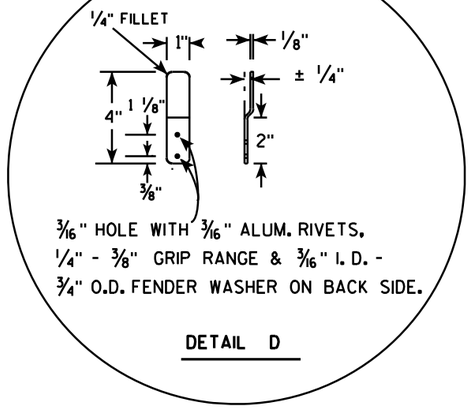
NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.









SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

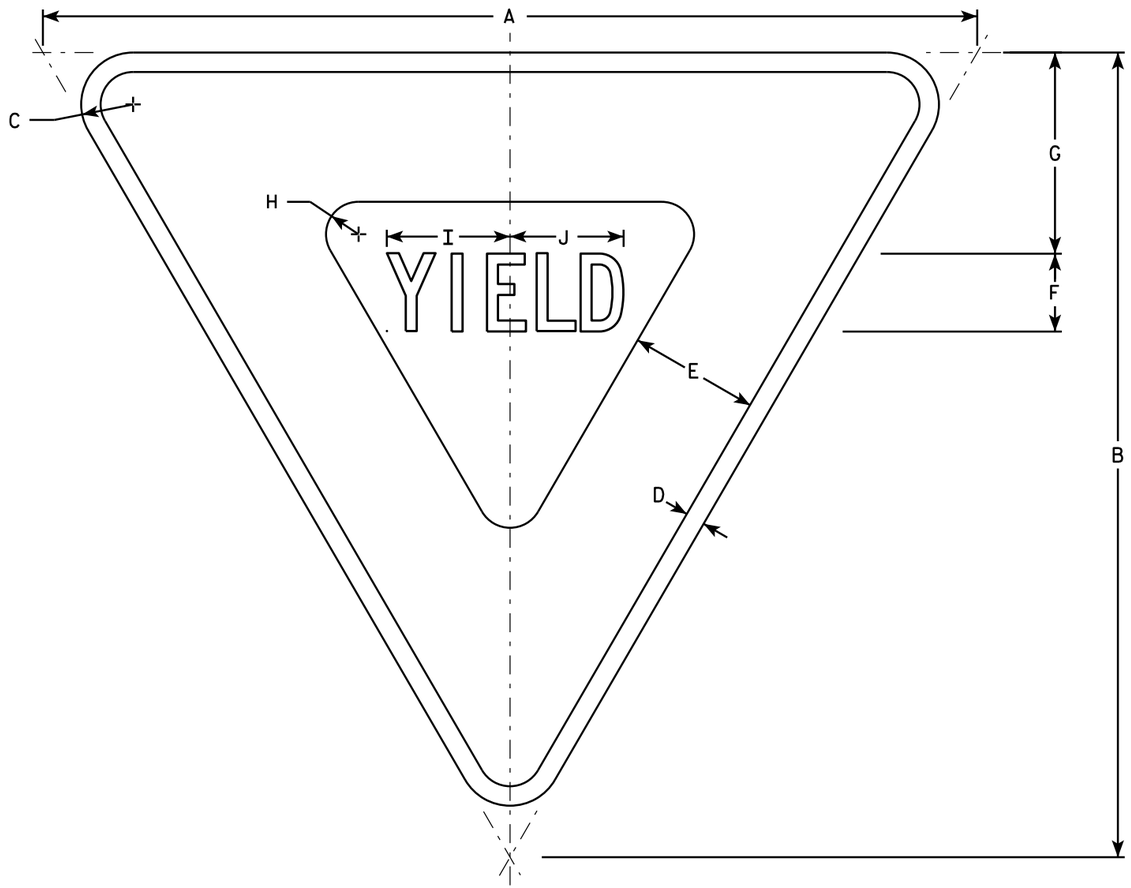
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 459	E



R1-2

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 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

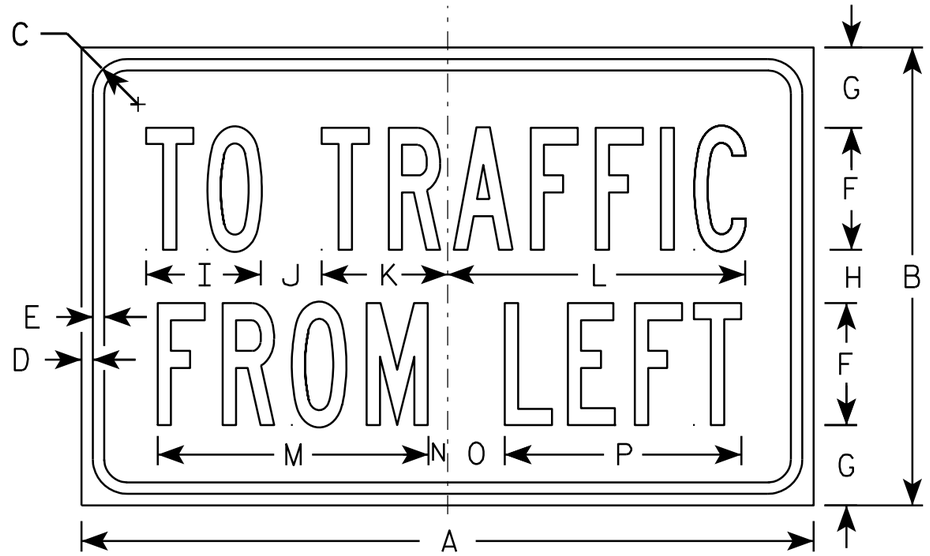
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R1-54

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - B

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	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
2M	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
3																											
4																											
5																											

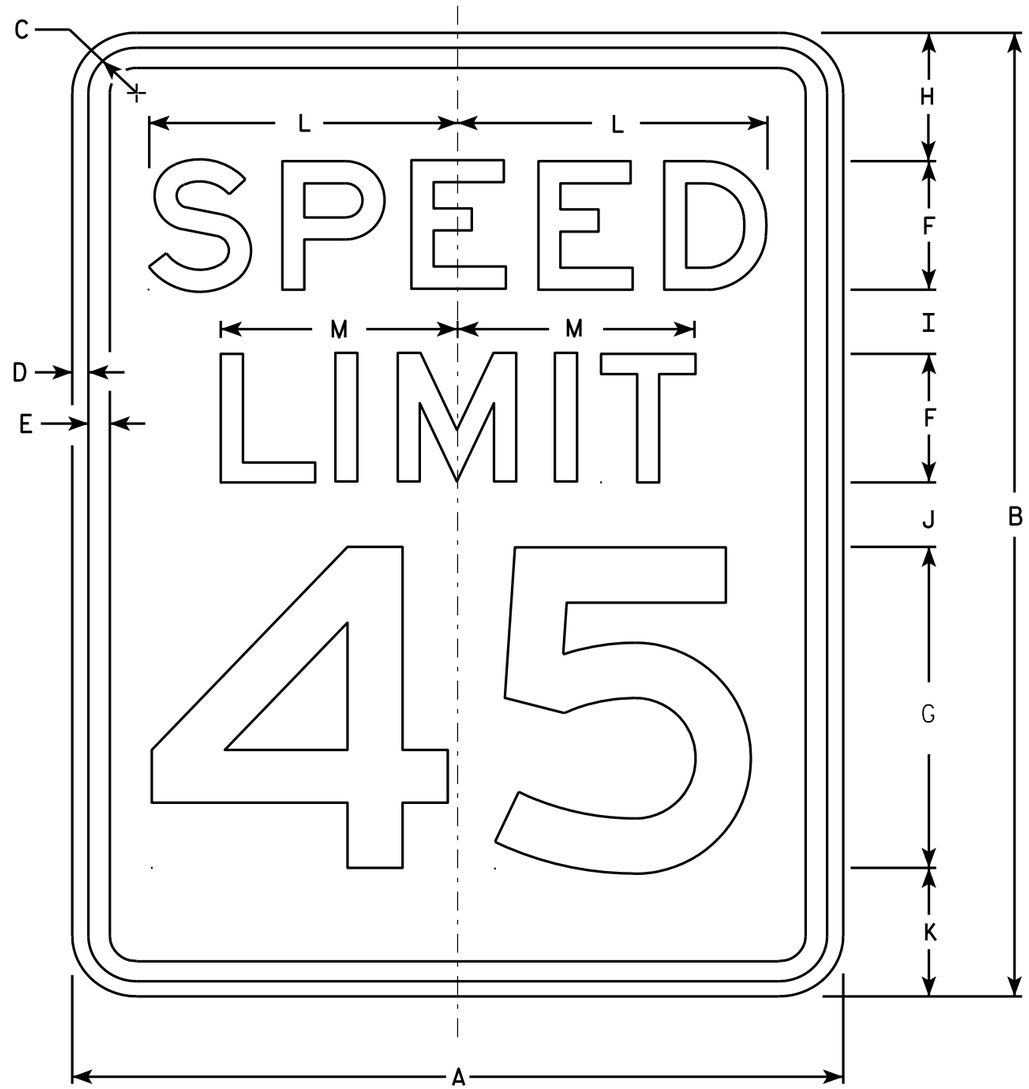
STANDARD SIGN
R1-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-54.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 461	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN
R2-1

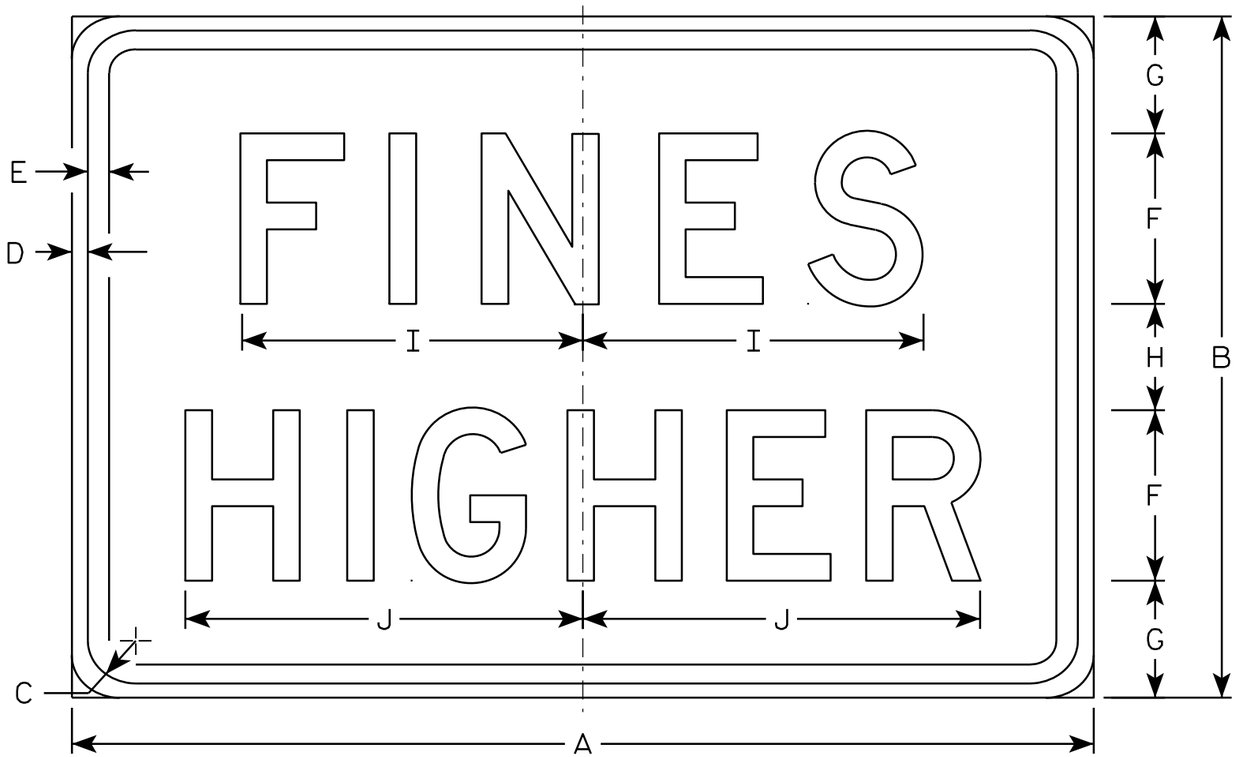
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 462 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000
WISDOT/CADDS SHEET 42



R2-6P

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

STANDARD SIGN
R2-6P

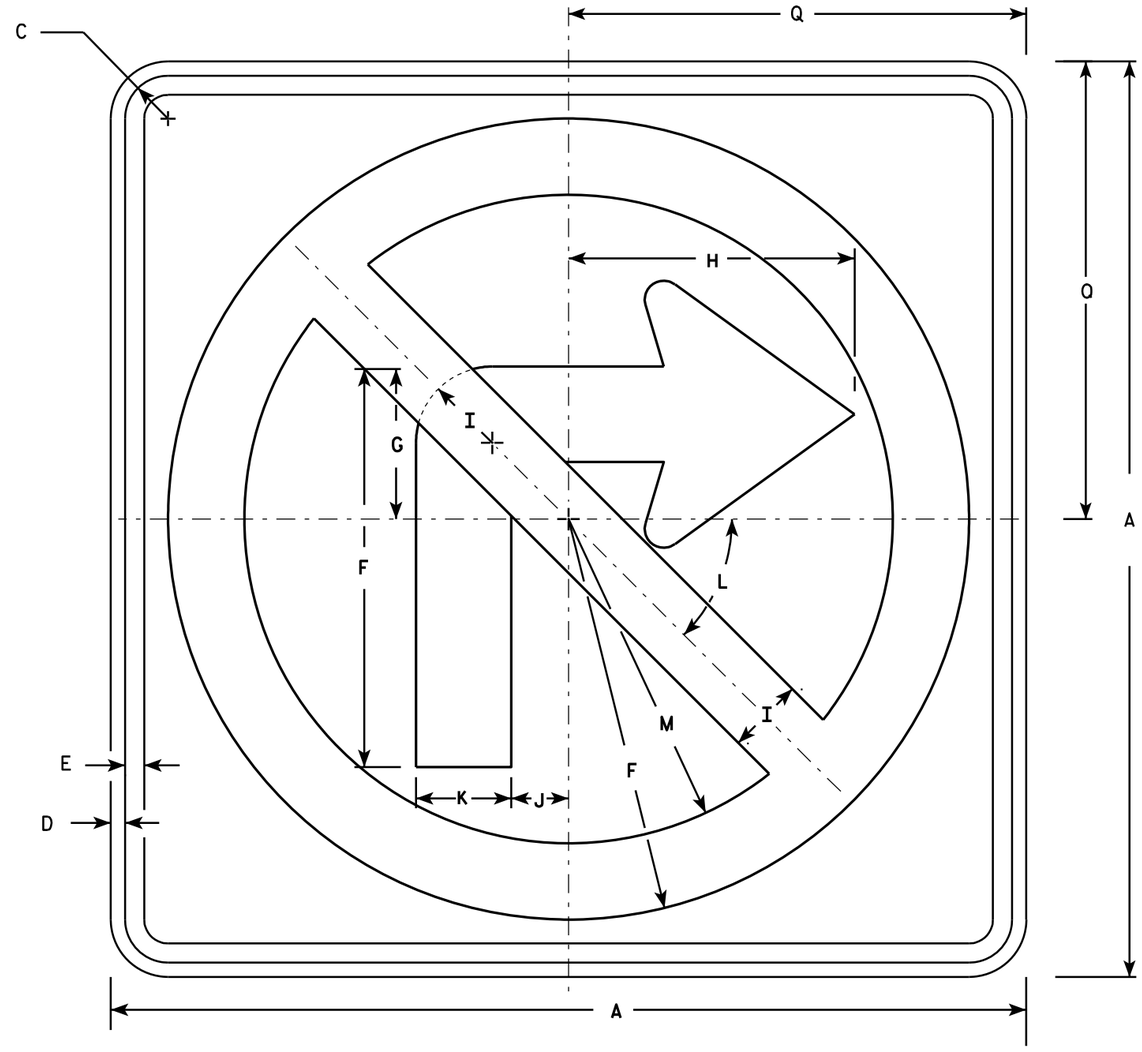
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 463 | E

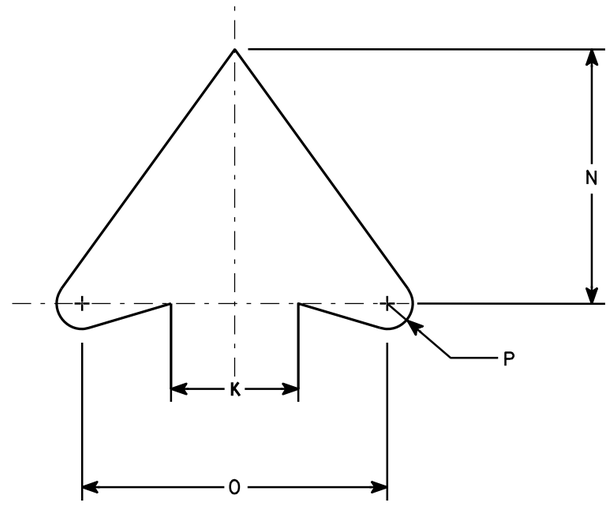
7



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

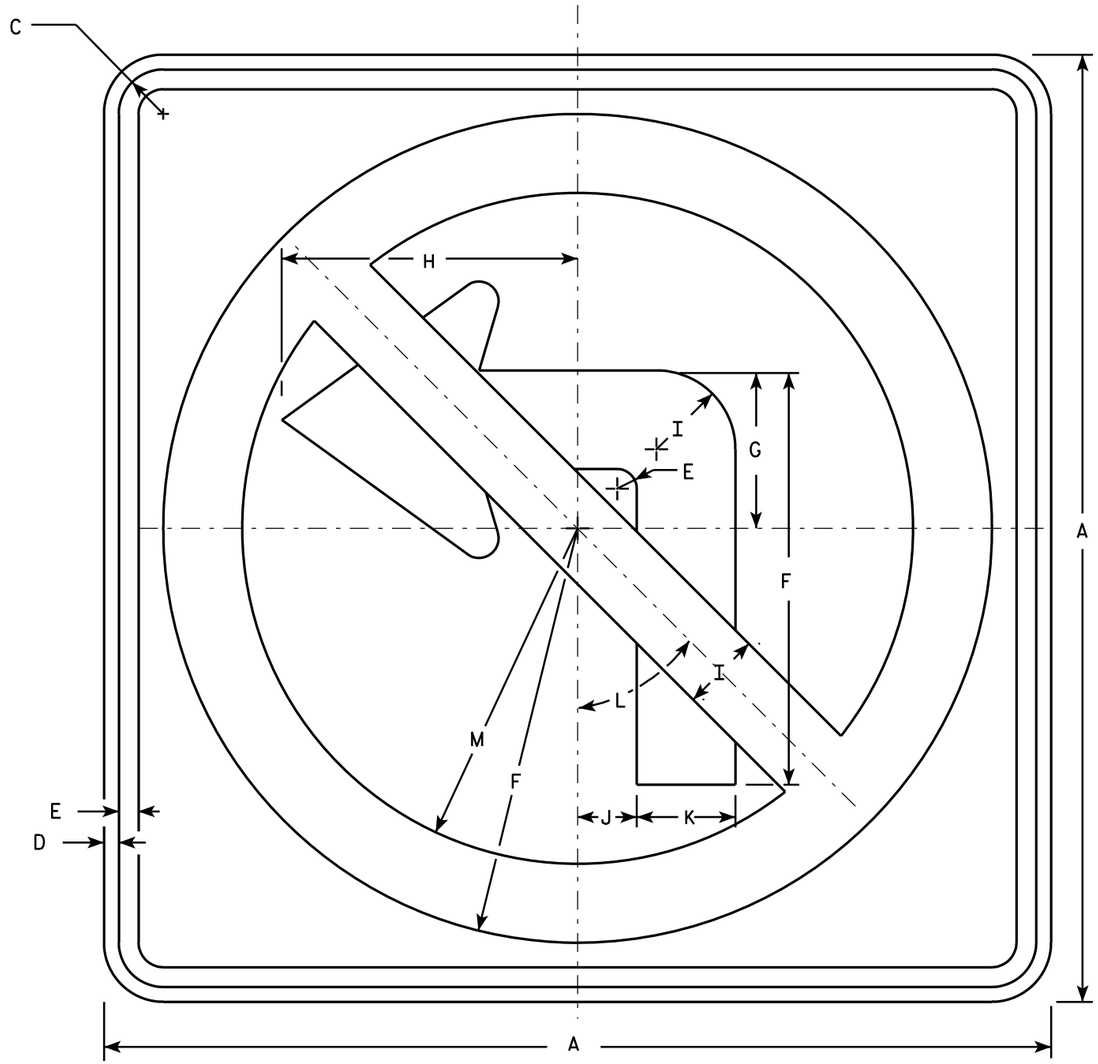
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

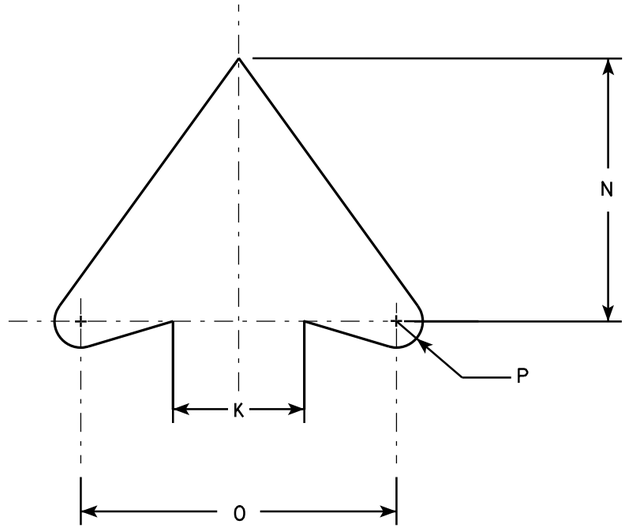
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 464	E



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

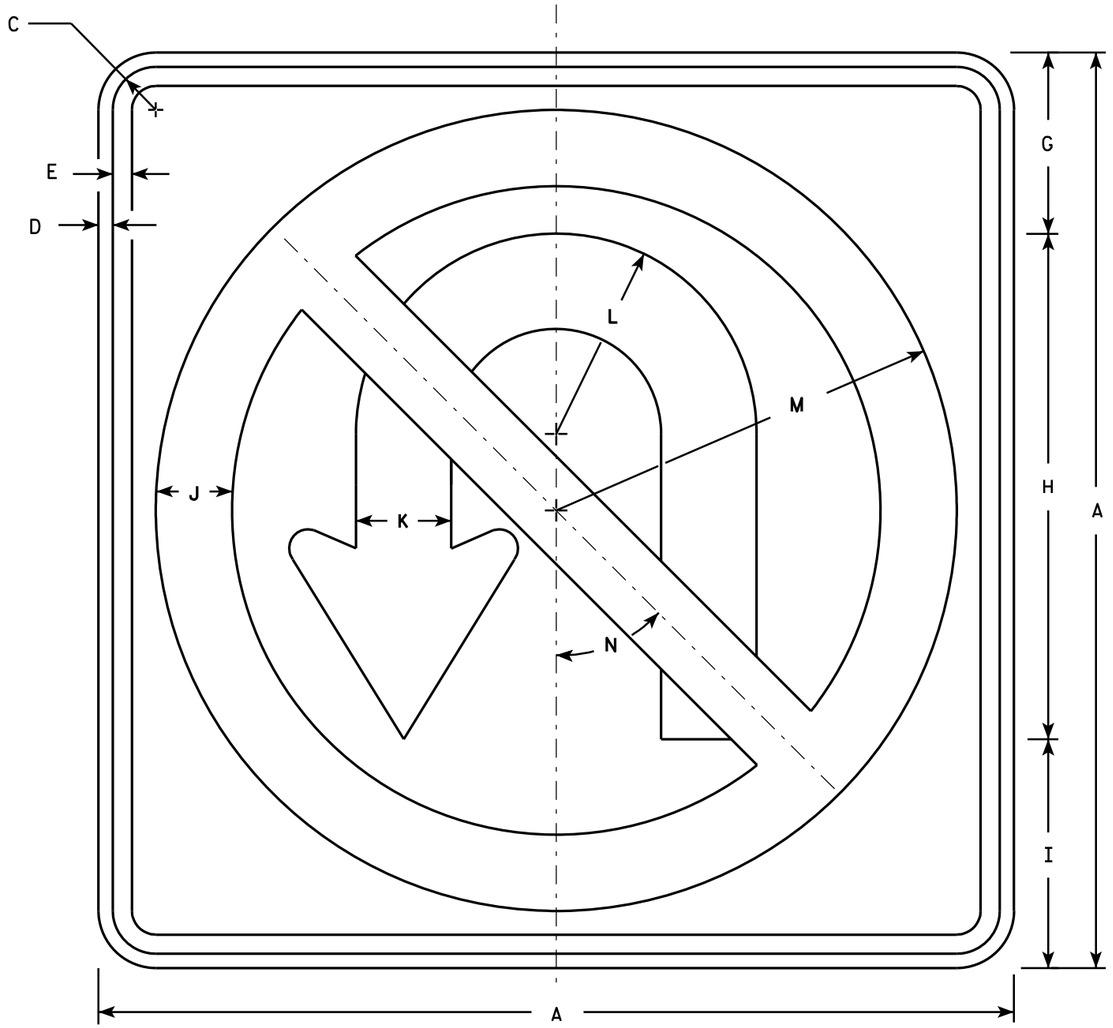
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

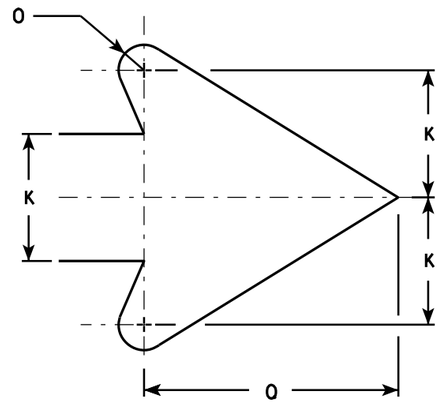
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 465	E



R3-4

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	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		4 3/4	13 1/4	6	2	2 1/2	5 1/4	10 1/2	45°	1/2		5										4.0
2M	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
3	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
4	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
5	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0

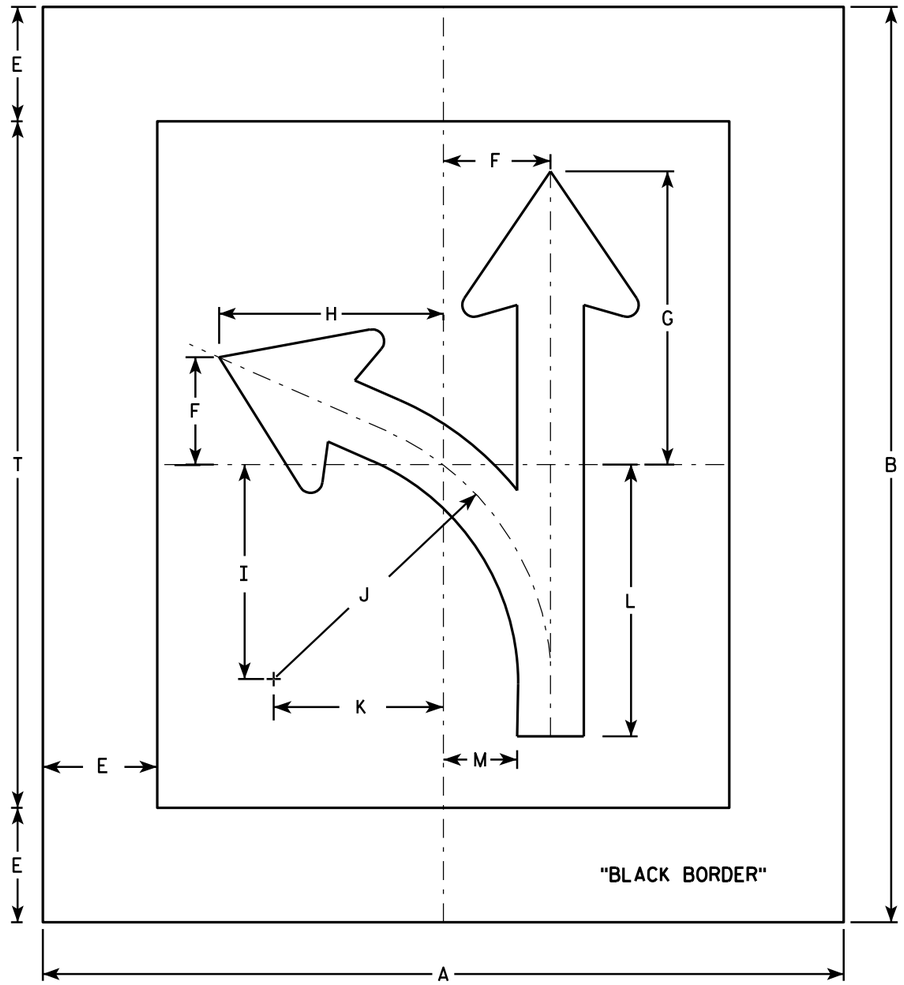
STANDARD SIGN
R3-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

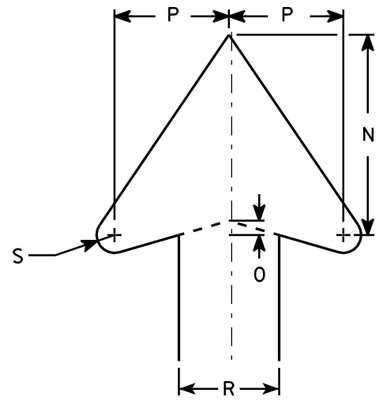
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 466	E



R3-6L

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. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
4. R3-6R is the same as R3-6L except curved portion of arrow points right.
5. The 6" border is non-reflective black.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	42	48			6	5 5/8	15 3/8	11 3/4	11 1/4	14 1/2	8 7/8	14 1/4	3 7/8	7	1/2	4		3 1/2	5/8	36							14.0
2M	42	48			6	5 5/8	15 3/8	11 3/4	11 1/4	14 1/2	8 7/8	14 1/4	3 7/8	7	1/2	4		3 1/2	5/8	36							14.0
3																											
4																											
5																											

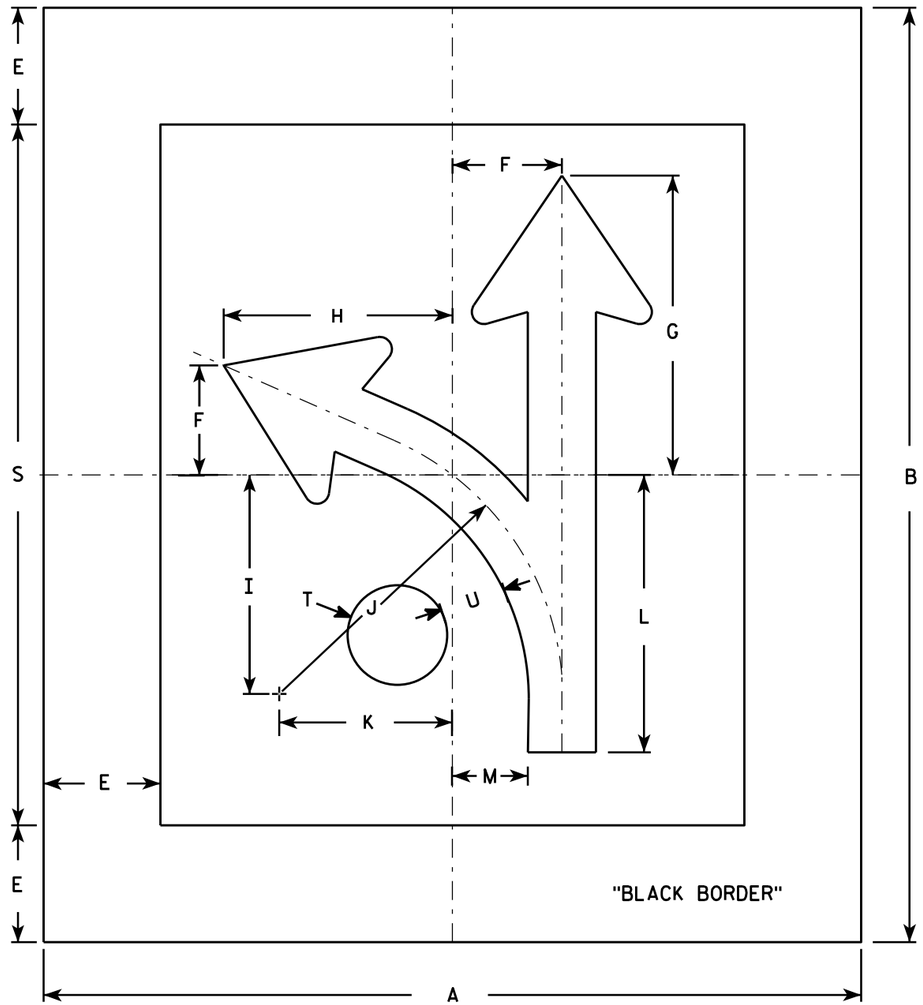
STANDARD SIGN
R3-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/17/2011 PLATE NO. R3-6.5

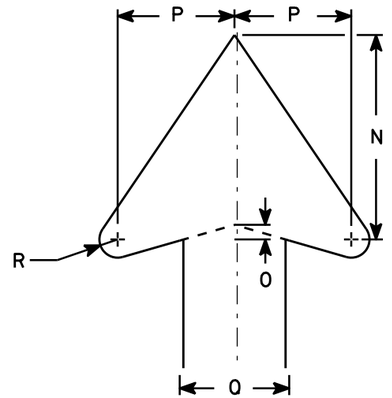
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 467 | E



R3-6X

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
4. The 6" border is non-reflective black.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	42	48			6	5 5/8	15 3/8	11 3/4	11 1/4	14 1/2	8 7/8	14 1/4	3 7/8	7	1/2	4	3 1/2	5/8	36	5	3 1/2						14.0
2M	42	48			6	5 5/8	15 3/8	11 3/4	11 1/4	14 1/2	8 7/8	14 1/4	3 7/8	7	1/2	4	3 1/2	5/8	36	5	3 1/2						14.0
3																											
4																											
5																											

STANDARD SIGN
R3-6X

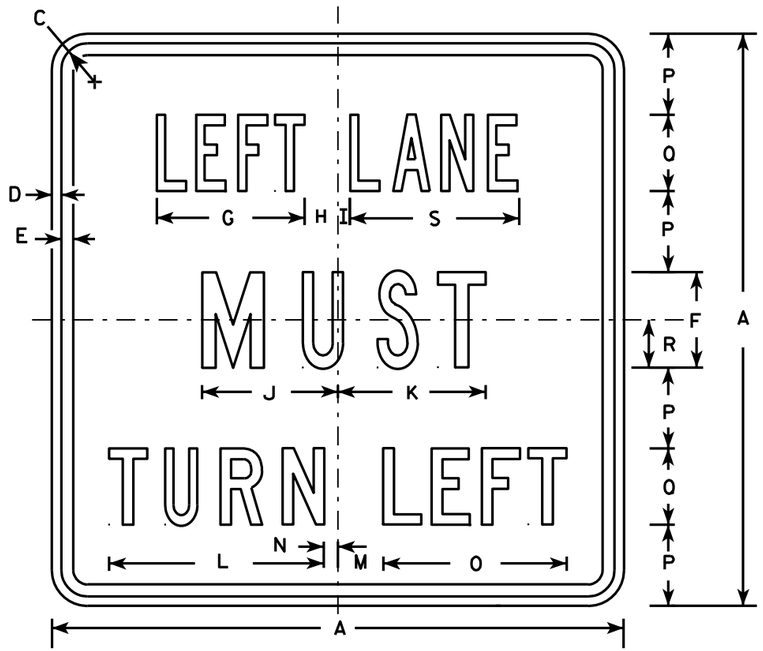
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

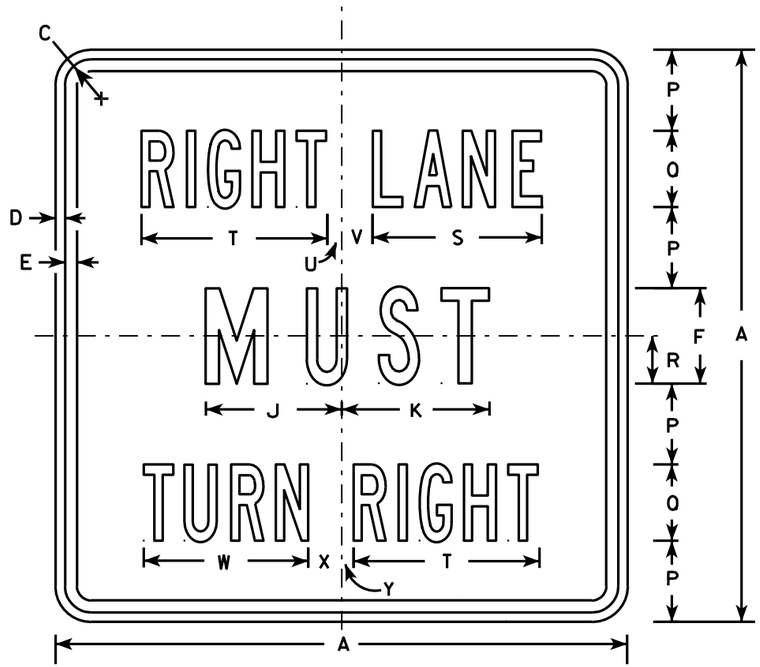
DATE 2/05/15 PLATE NO. R3-6X.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R36X.DGN PLOT DATE : 05-FEB-2015 14:49 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 7.783368:1.000000 WISDOT/CADDS SHEET 42



R3-7L



R3-7R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

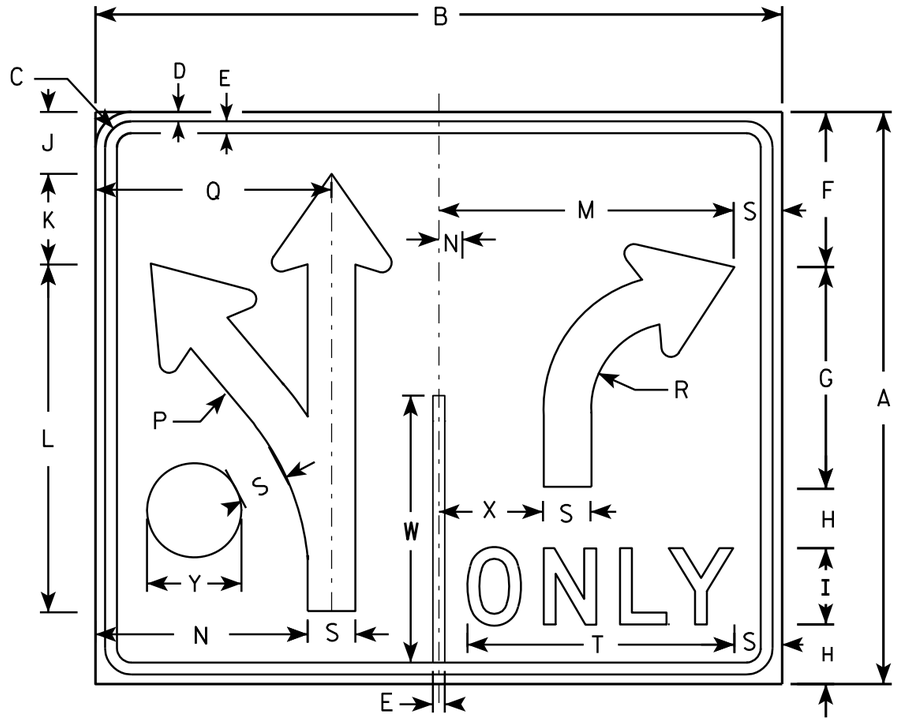
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

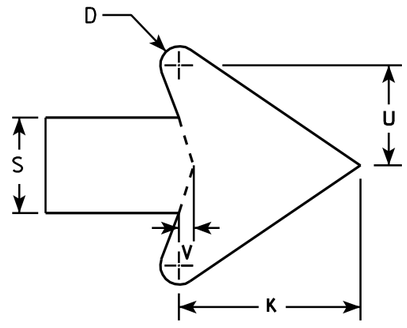
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 469 | E



R3-8DD

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. R3-8B & R3-8C is the same but reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	15 1/2	1 1/4		13 1/4	12 3/8	4 1/2	2 1/2	14	2 5/8	3/8	14	5 1/4	4 1/4		7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	15 1/2	1 1/4		13 1/4	12 3/8	4 1/2	2 1/2	14	2 5/8	3/8	14	5 1/4	4 1/4		7.5
3																											

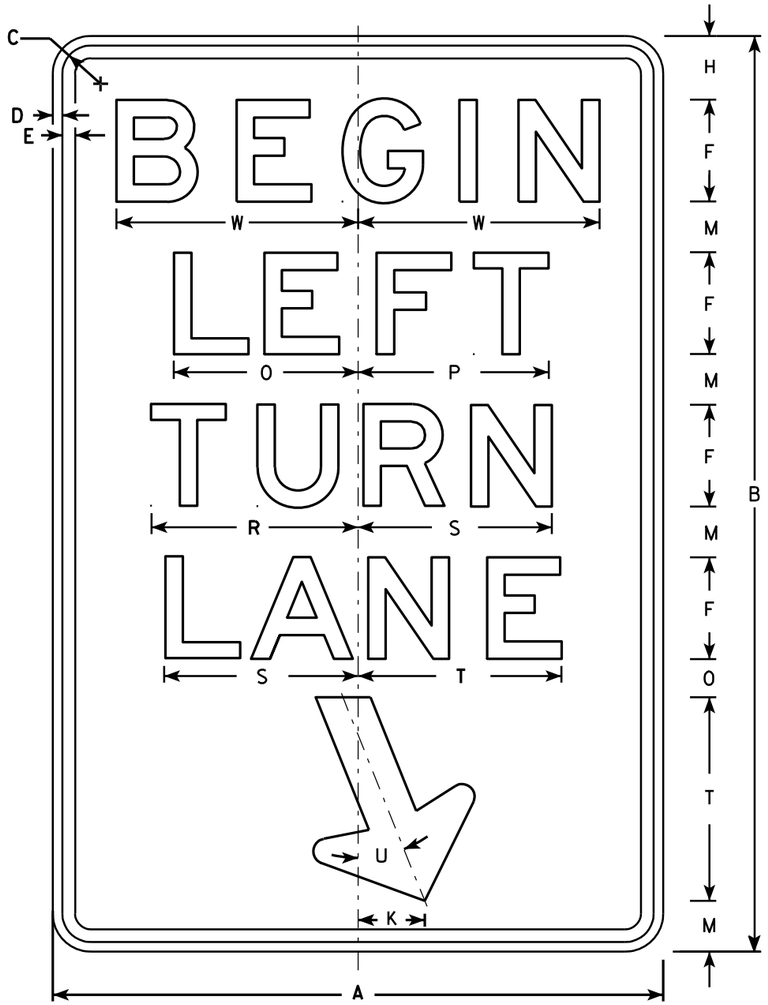
STANDARD SIGN
R3-8DD

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8DD.2

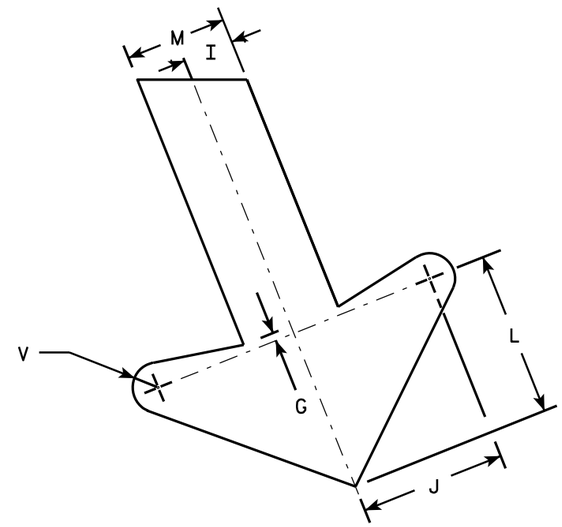
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 470 | E



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

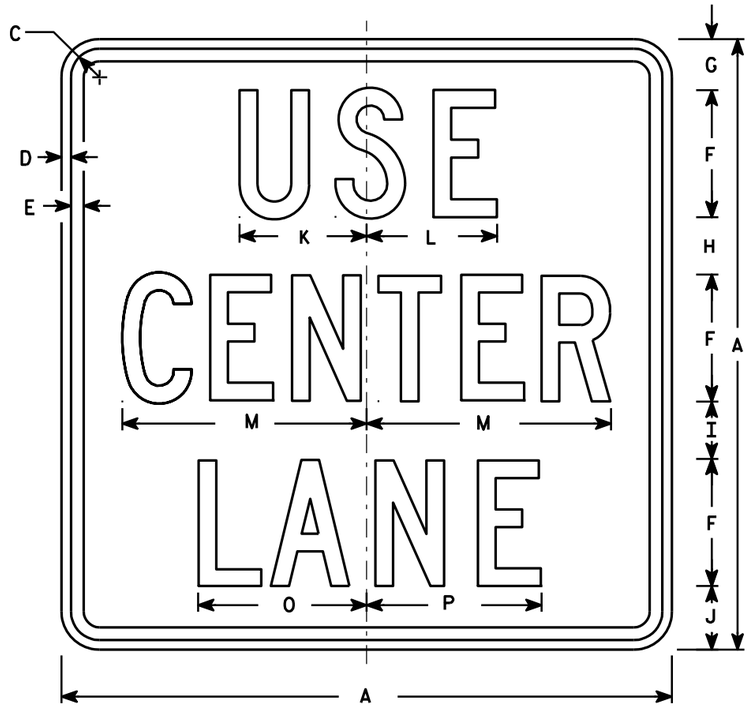
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

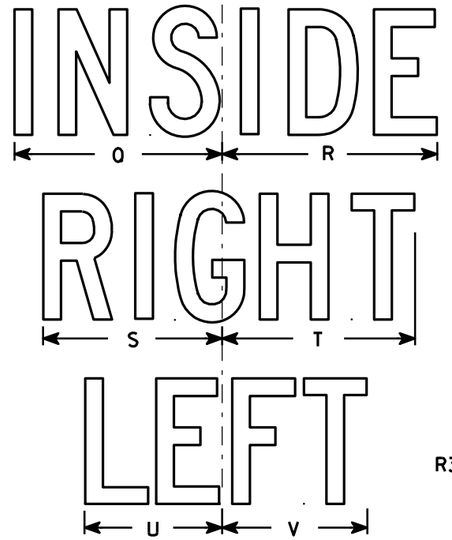
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 471 | E



R3-54C

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.



R3-54I

R3-54R

R3-54L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2	5	2	2 1/4	2 1/4	2 1/2	5	5 1/8	9 5/8		6 5/8	6 7/8	8 1/8	8 1/2	7	7 5/8	5 3/8	5 3/4					4.0
2M	24		1 1/8	3/8	1/2	5	2	2 1/4	2 1/4	2 1/2	5	5 1/8	9 5/8		6 5/8	6 7/8	8 1/8	8 1/2	7	7 5/8	5 3/8	5 3/4					4.0
3	36		1 5/8	5/8	3/4	7	4	3	3 1/2	4 1/2	7 1/2	7 3/4	14 3/8		9 7/8	10 1/4	12 1/8	12 3/4	10 3/8	11 3/8	8	8 5/8					9.0
4																											
5																											

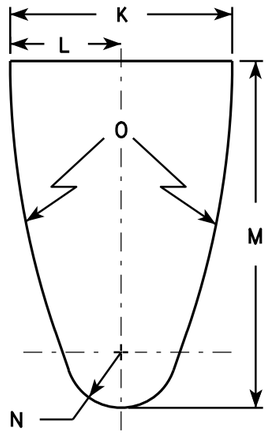
STANDARD SIGN
R3-54C, I ,L & R

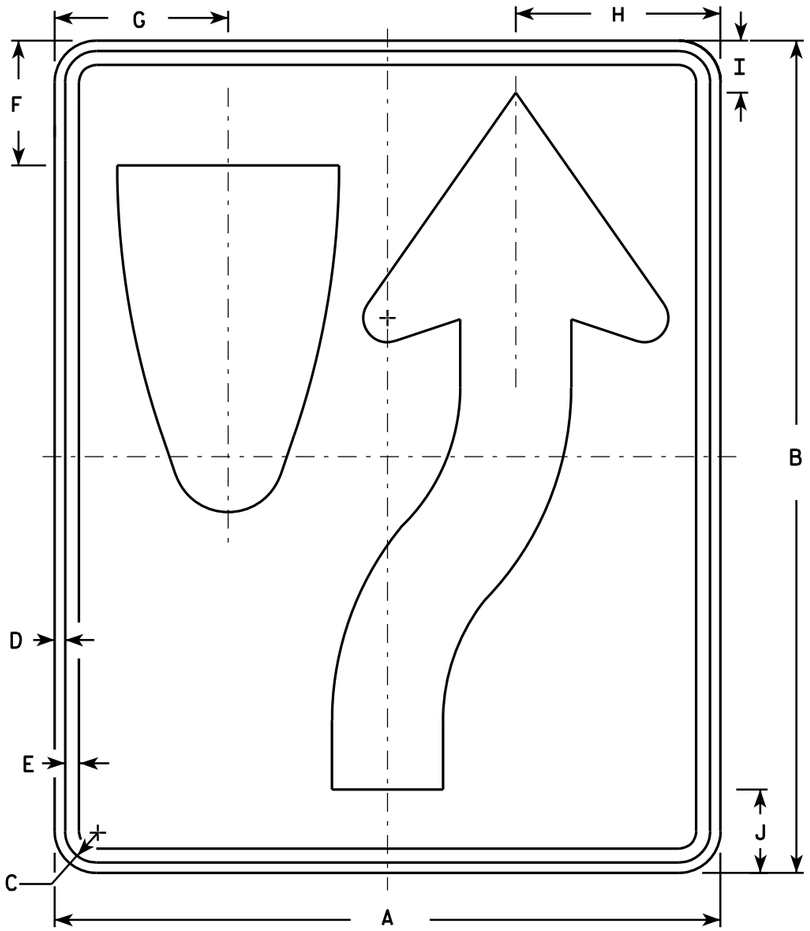
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-54.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 472 | E

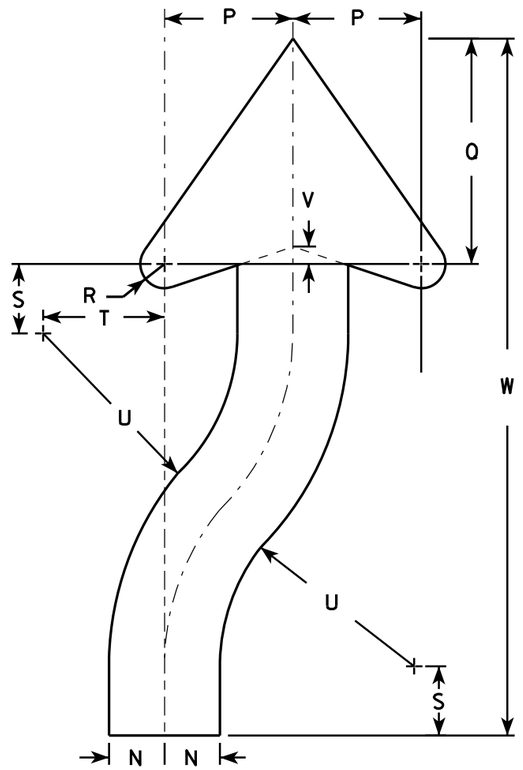




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

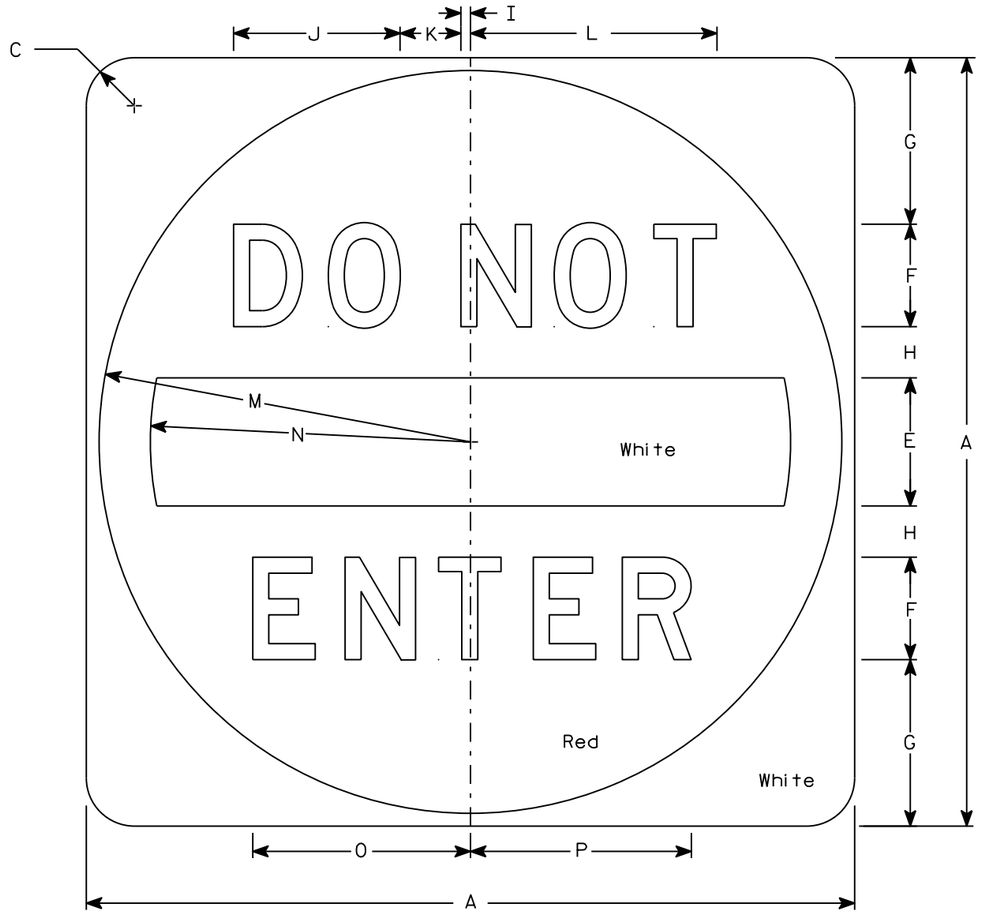
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 473	E



R5-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	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											6.25
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

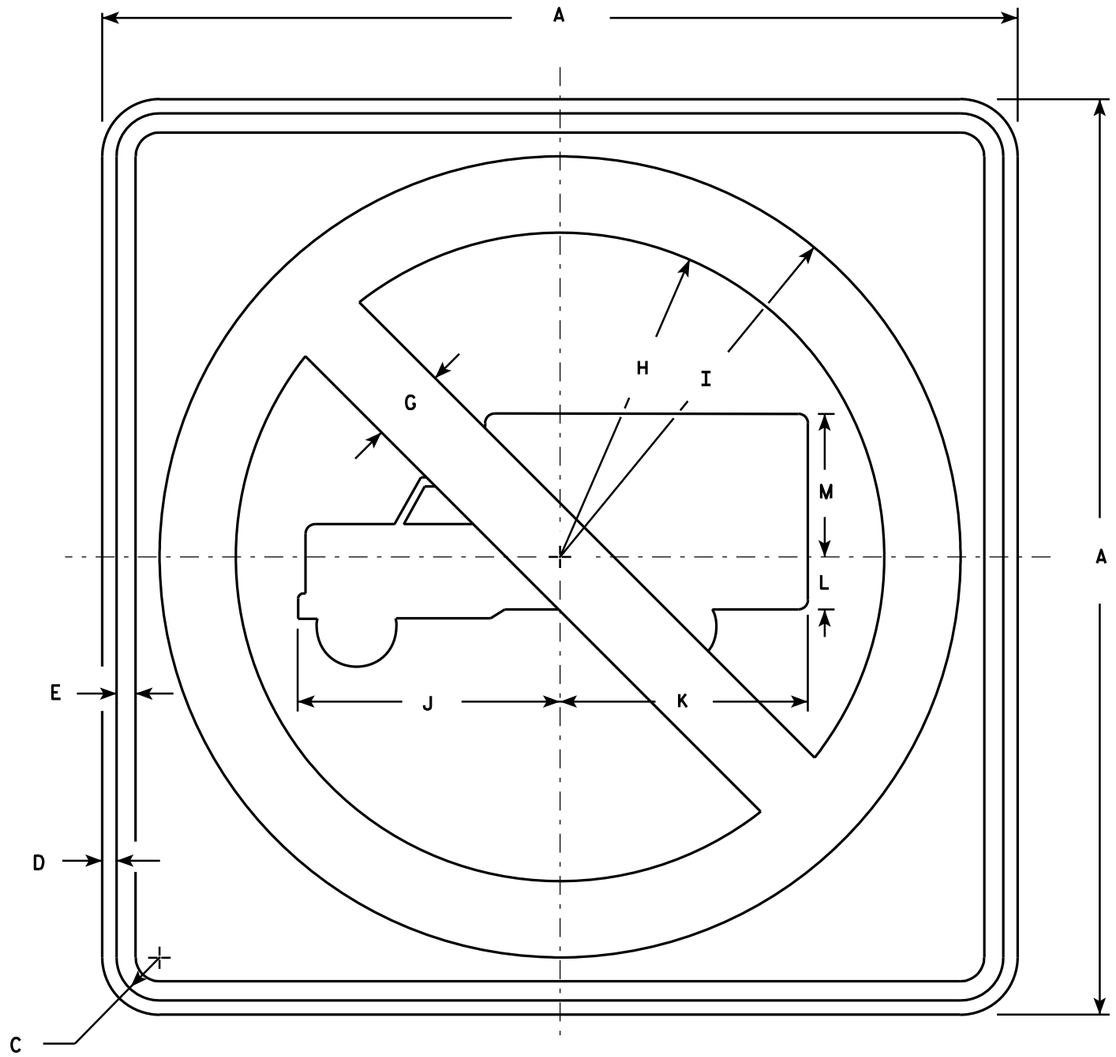
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 474 | E



R5-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Circle & Diagonal - Reflective red.
   Truck Symbol & Border - Non-reflective black.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
2M	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
3	30		1 3/8	1/2	5/8		2 1/2	10 5/8	13 1/8	8 1/2	8 1/8	1 5/8	4 3/4														6.25
4	36		1 5/8	5/8	3/4		3	12 3/4	15 3/4	10 1/4	9 3/4	2	5 3/4														9.0
5	48		2 1/4	3/4	1		4	17	21	13 5/8	13	2 5/8	7 5/8														16.0

STANDARD SIGN
R5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-2.6

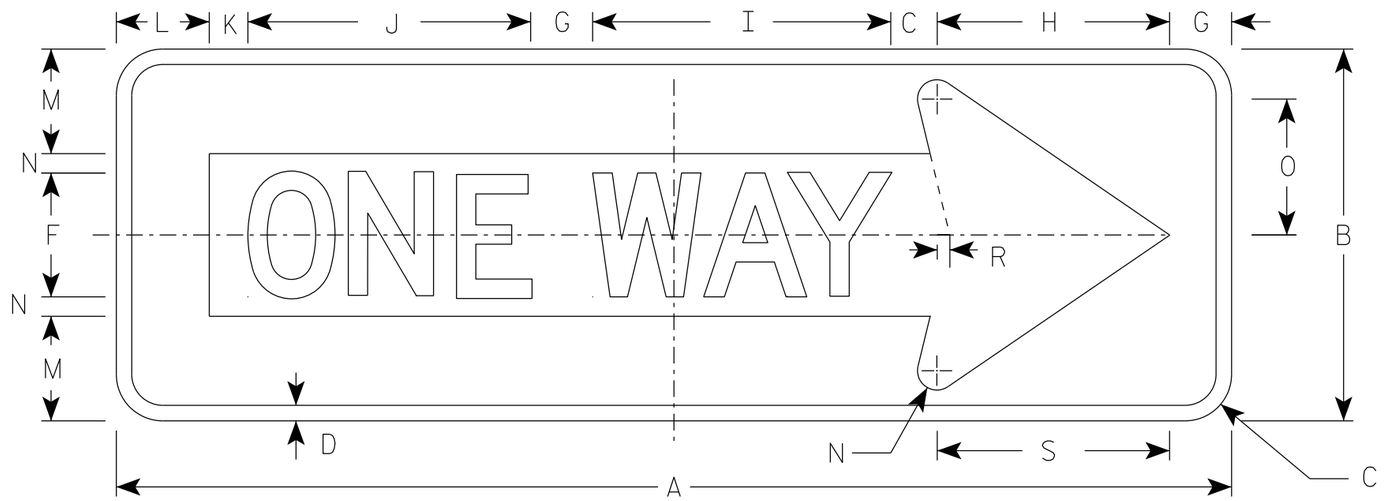
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 475	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R52.DGN PLOT DATE : 29-MAR-2011 11:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

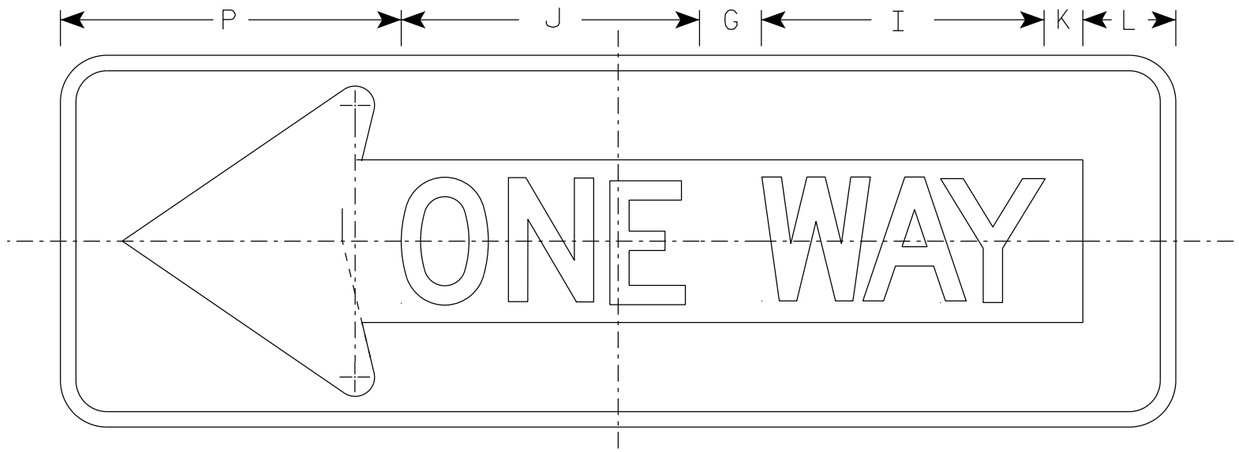
7



R6-1R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D



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 1/2	1/2		4	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4 3/8	11		3/8	7 1/2								3.0
2M	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
3	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
4	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
5																											

STANDARD SIGN
R6-1 L & R

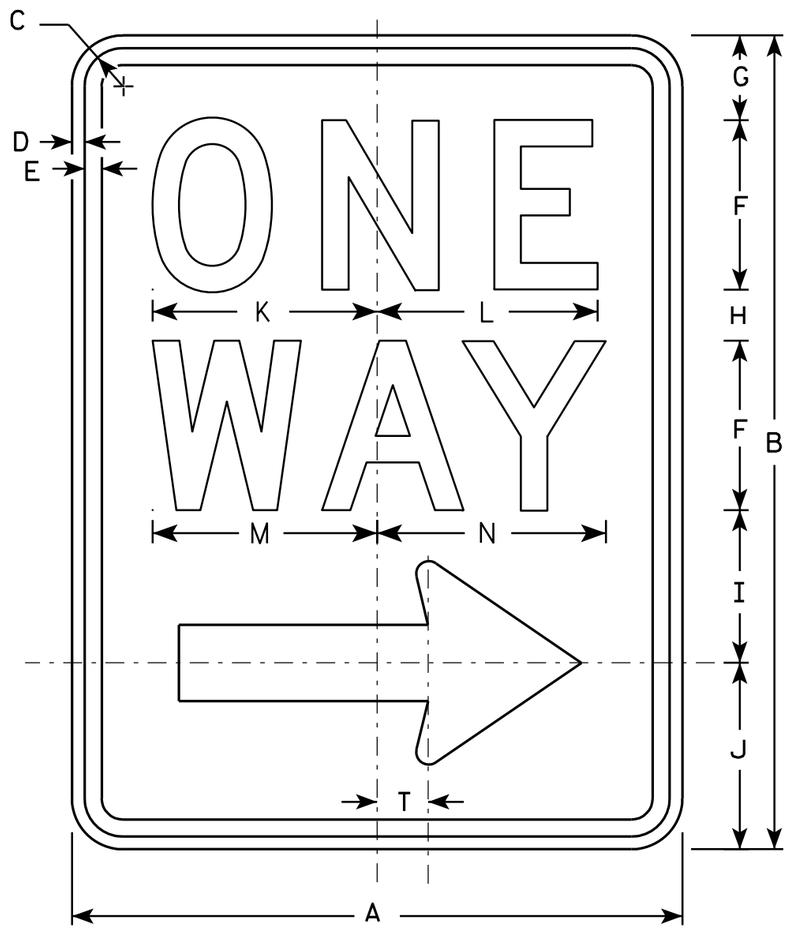
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 07/11/18 PLATE NO. R6-1.3

PROJECT NO:

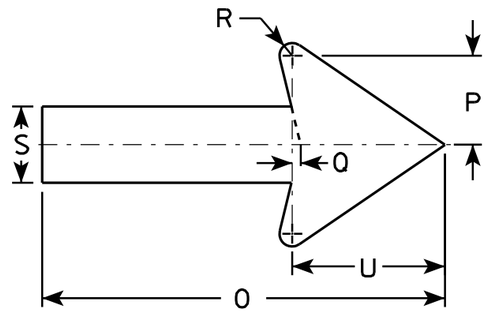
SHEET NO: 476 E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

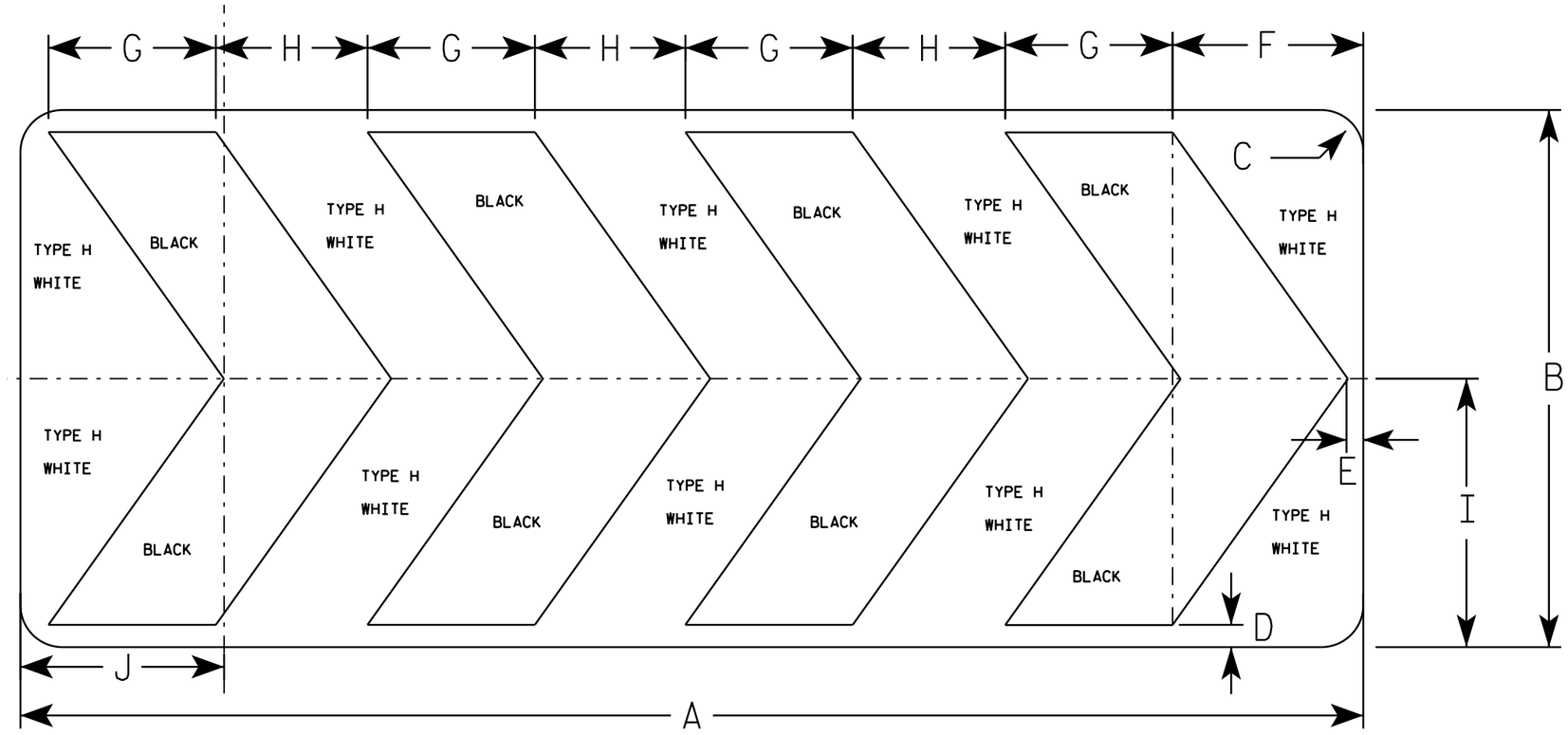
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 477	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   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.



R6-4B

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	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
R6-4B

WISCONSIN DEPT OF TRANSPORTATION

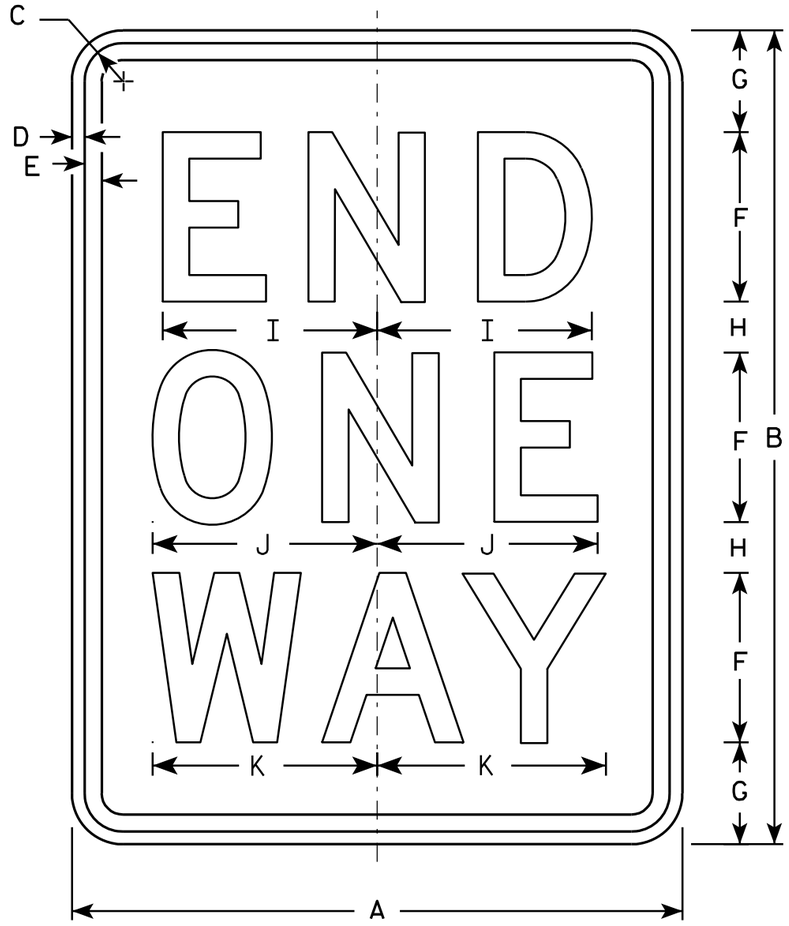
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/14 PLATE NO. R6-4.3

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R64B.DGN PLOT DATE : 21-AUG-2014 15:01 PLOT BY : mscsja

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																										

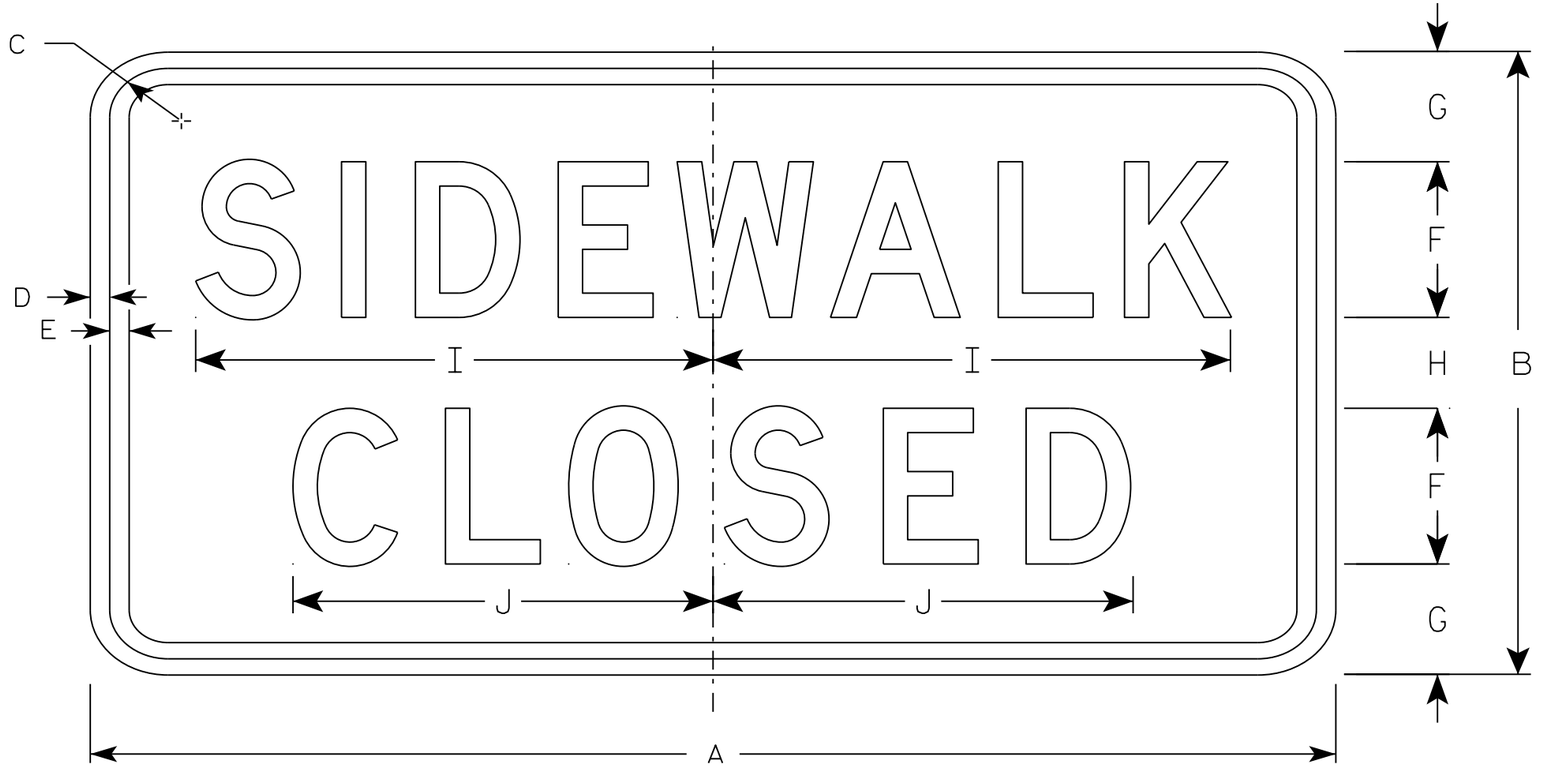
STANDARD SIGN
R6-7

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: 479	E



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

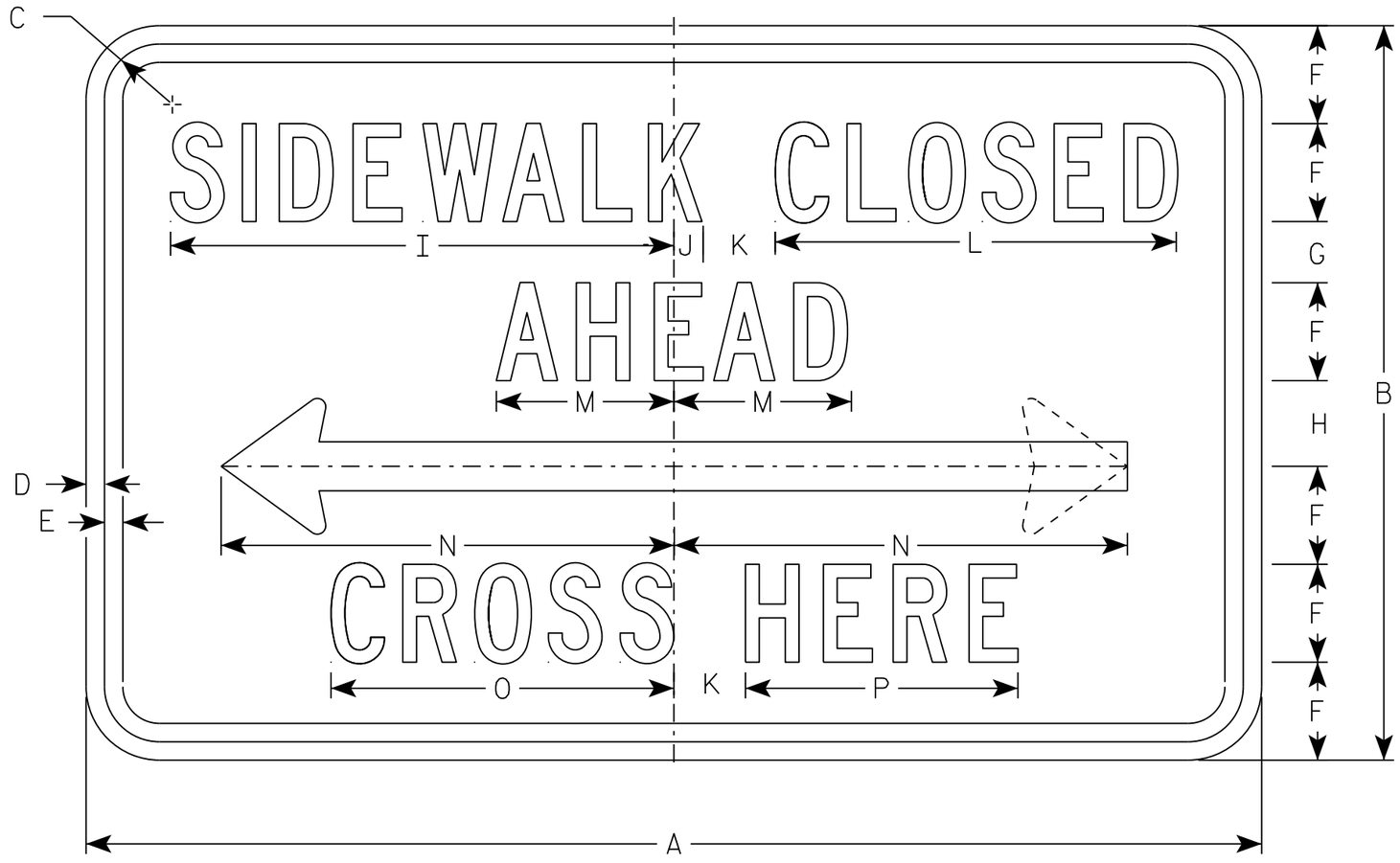
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

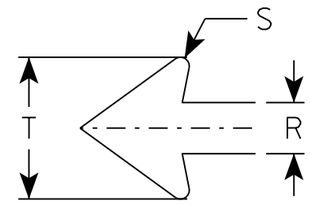
DATE 8/11/16 PLATE 480 R9-9.6

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-11



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C except Size 1 is Series D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2M	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
3	30	15	1 1/8	3/8	1/2	2	1 1/2	1 1/2	13	3/4	2	10 1/4	4 5/8	12 3/8	8 7/8	6 7/8		1 1/4	1/4	3 5/8							3.125
4																											
5																											

STANDARD SIGN
R9-11

WISCONSIN DEPT OF TRANSPORTATION

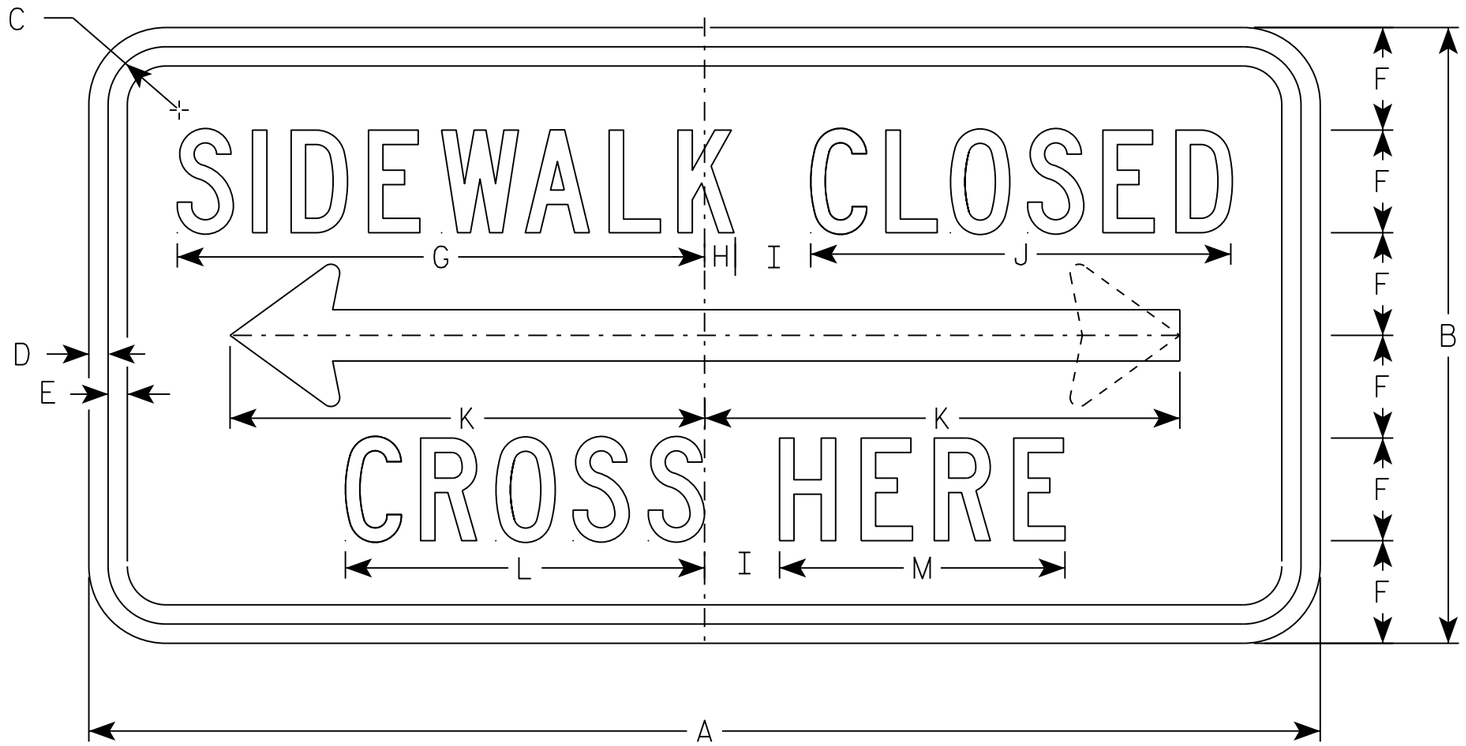
APPROVED Matthew R Rauch
for State Traffic Engineer

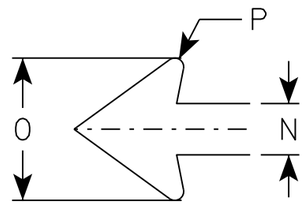
DATE 11/29/16 PLATE NO. R9-11.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 481	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for paths and Trails.





R9-11A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	2	10 1/4	5/8	1 1/2	8 1/4	9 1/4	7	5 5/8	1	2 3/4	1/8											2.0
2M	24	12	1 1/8	3/8	3/8	2	10 1/4	5/8	1 1/2	8 1/4	9 1/4	7	5 5/8	1	2 3/4	1/8											2.0
3	30	15	1 1/8	3/8	1/2	2	13	3/4	2	10 1/4	12 3/8	8 7/8	6 7/8	1 1/4	3 5/8	1/4											3.125
4																											
5																											

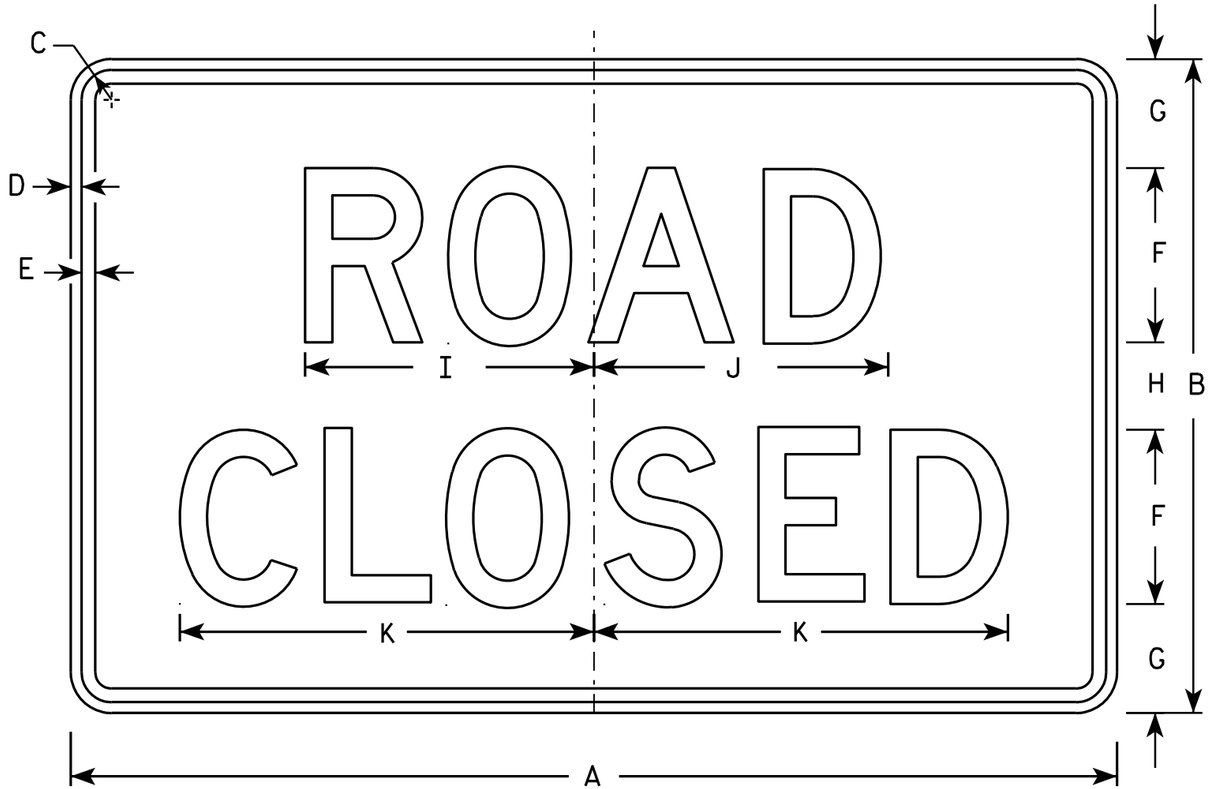
STANDARD SIGN
R9-11A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R9-11A.3

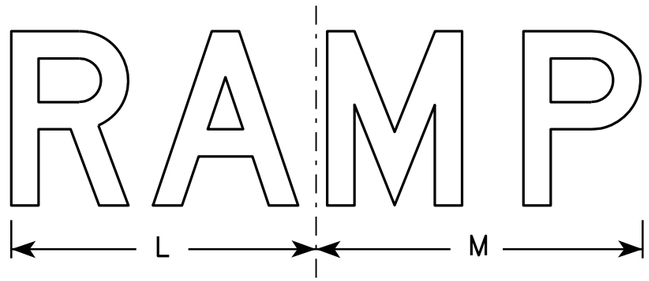
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 482 E



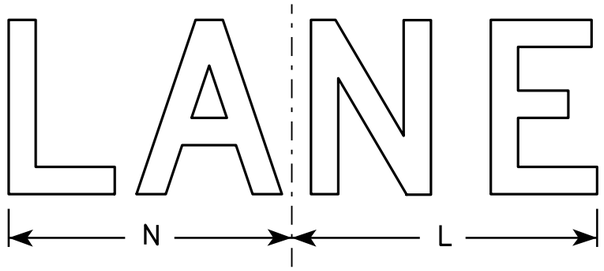
R11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

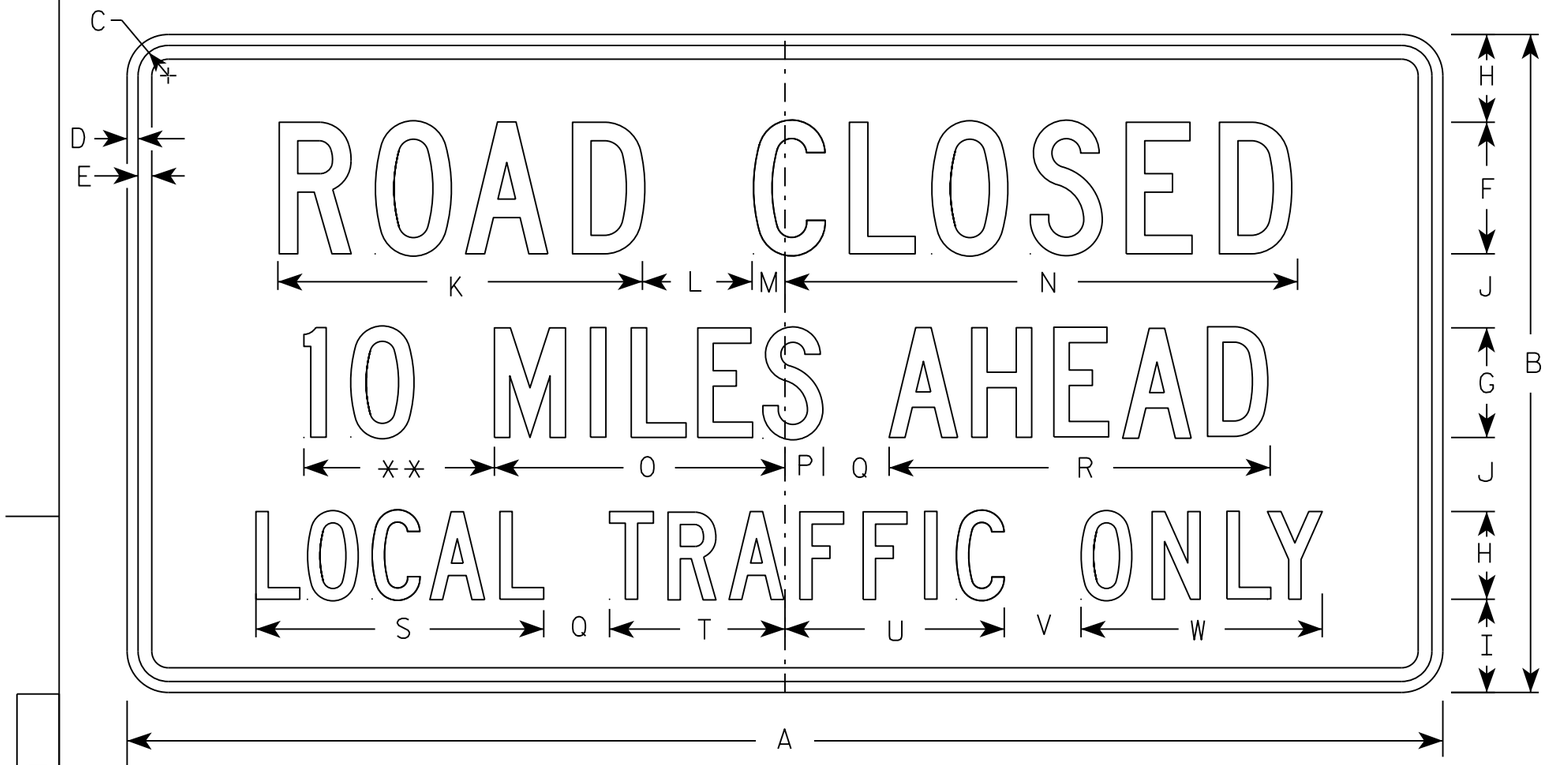
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

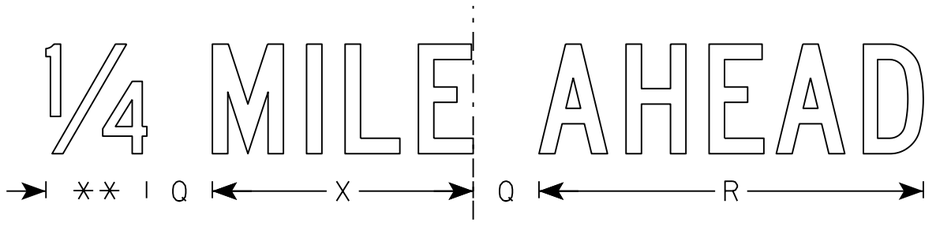
DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 483 | E



R11-3

** See Note 5



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

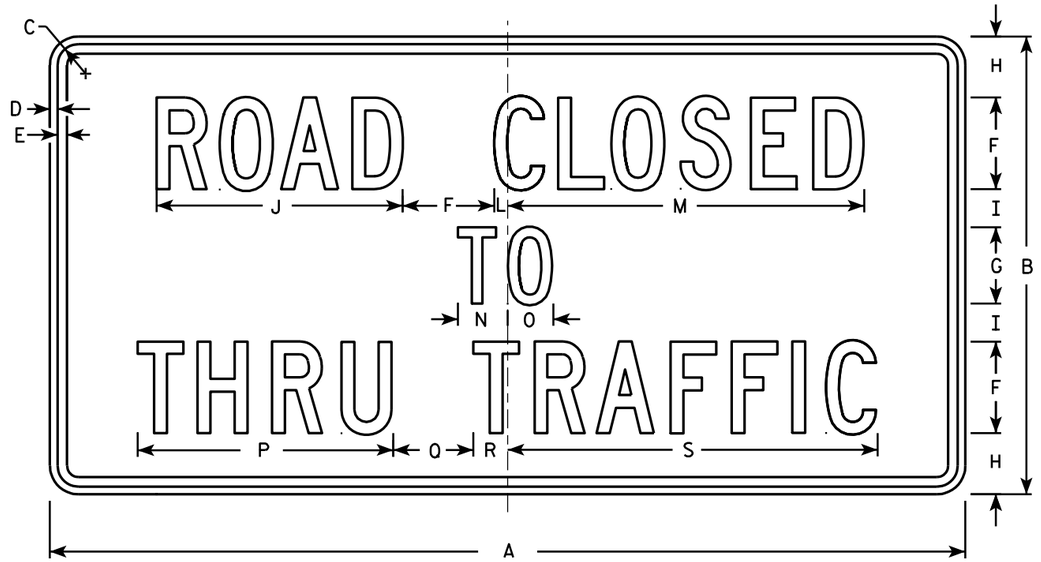
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/17 PLATE NO. R11-3.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 484	E



R11-4

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																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

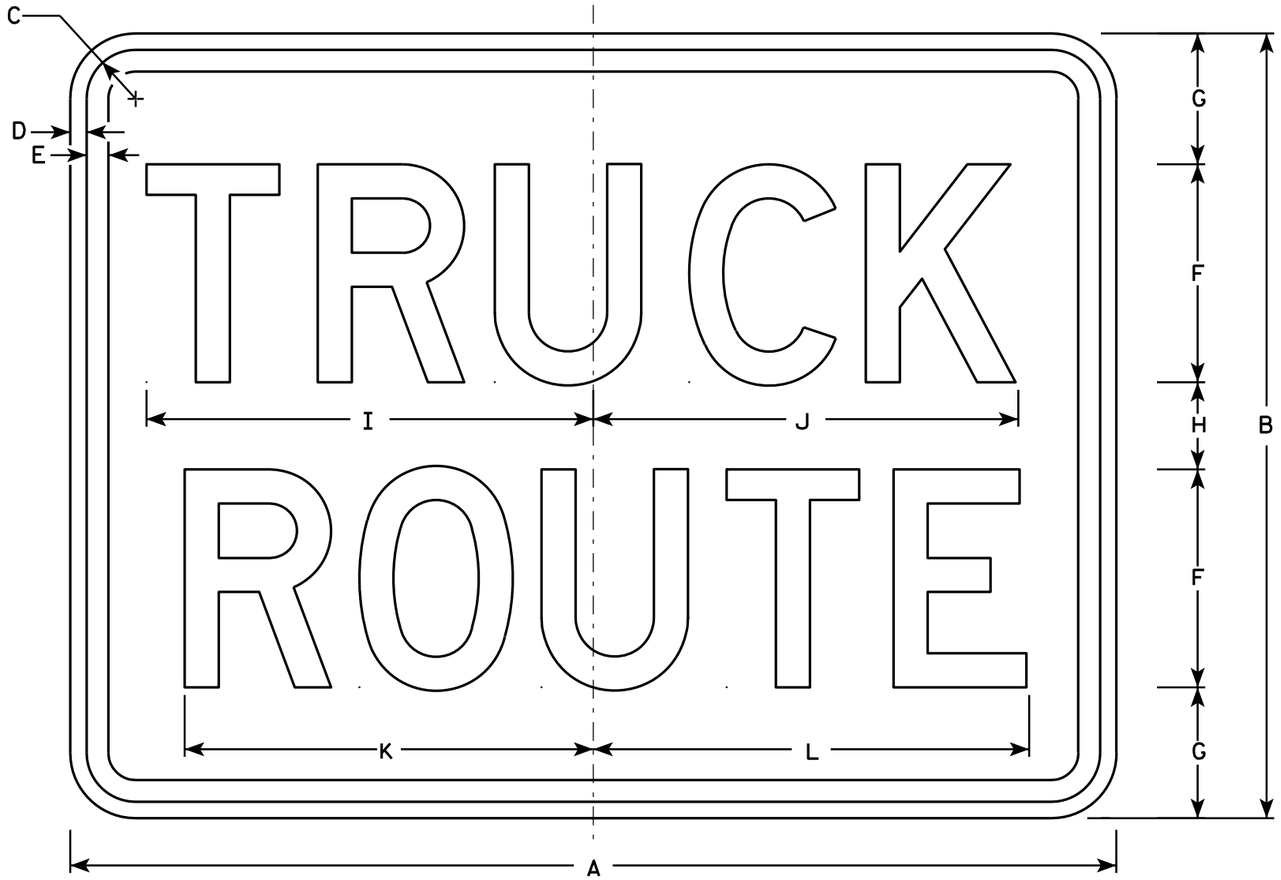
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 485 | E



R14-1

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 - 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																											
2	24	18	1 1/8	3/8	1/2	5	3	2	10 1/4	9 3/4	9 3/8	10															3.0
2	24	18	1 1/8	3/8	1/2	5	3	2	10 1/4	9 3/4	9 3/8	10															3.0
3	30	24	1 1/8	3/8	1/2	6	4	4	12 1/4	11 3/4	11 1/4	12															5.0
4																											
5																											

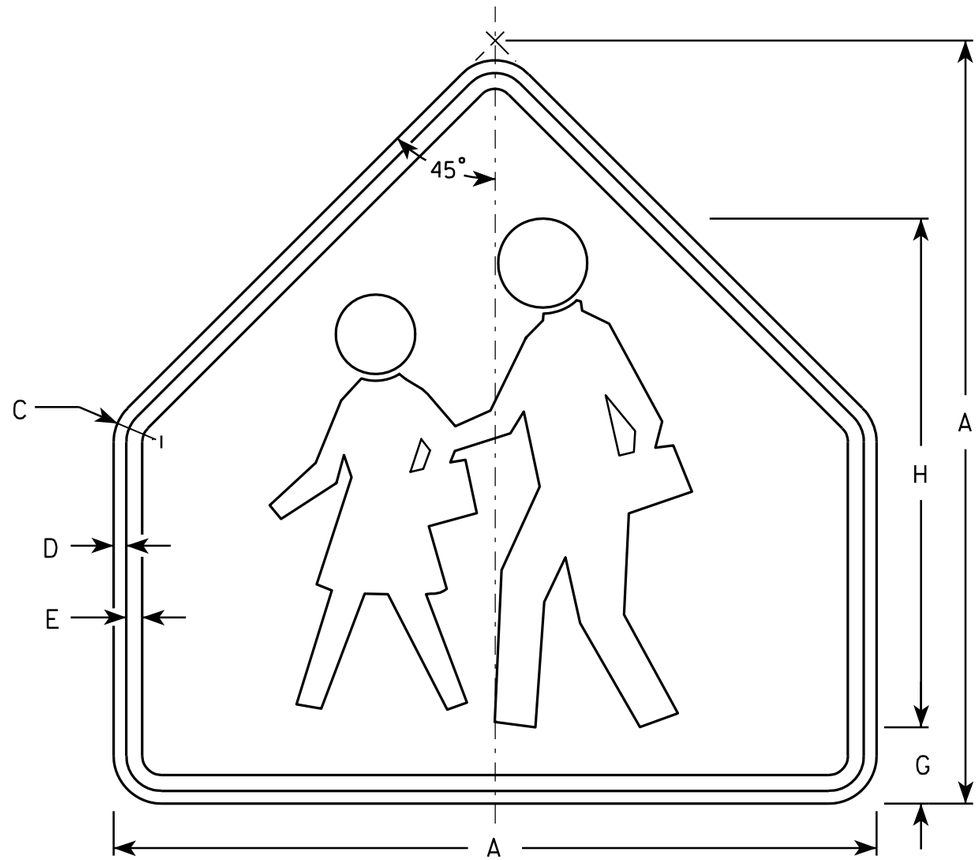
STANDARD SIGN
R14-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R14-1.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 486	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																											

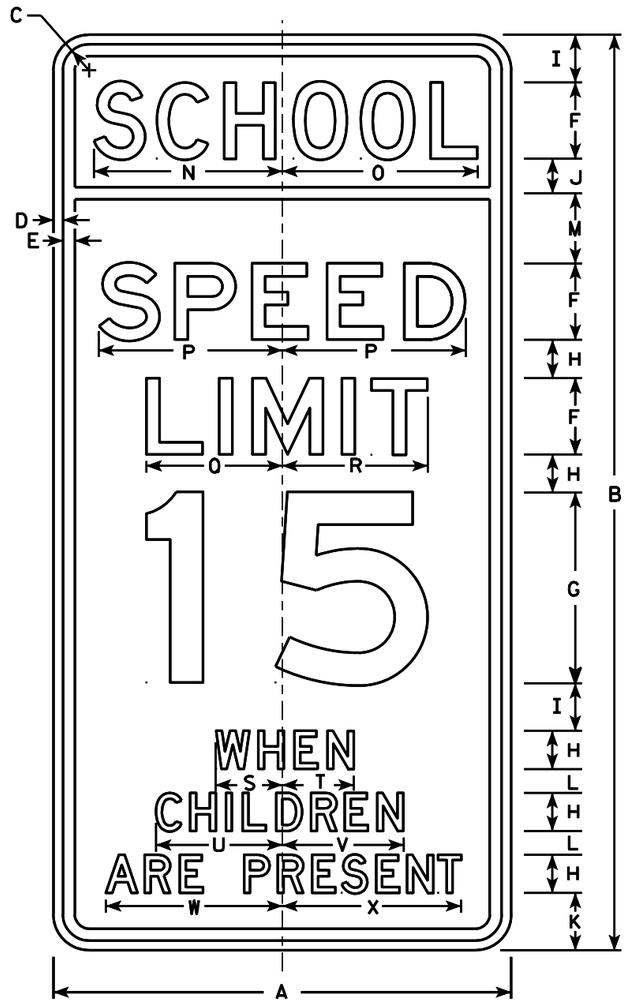
STANDARD SIGN
S1-1

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: 487	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																												

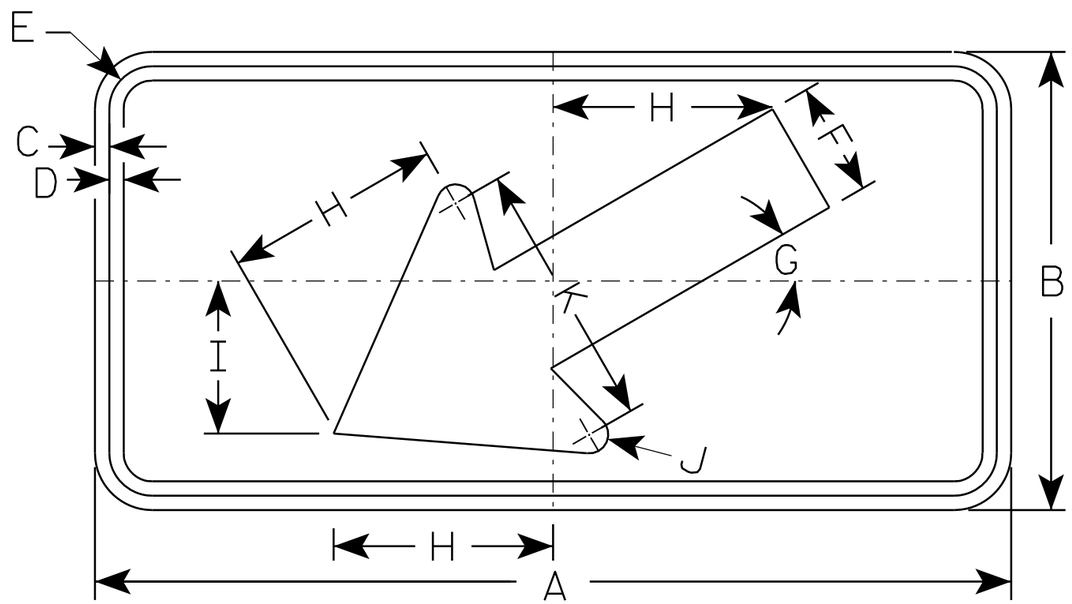
STANDARD SIGN
S4-51

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: 488	E



S16-7L

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. S16-7R are the same as S16-7L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

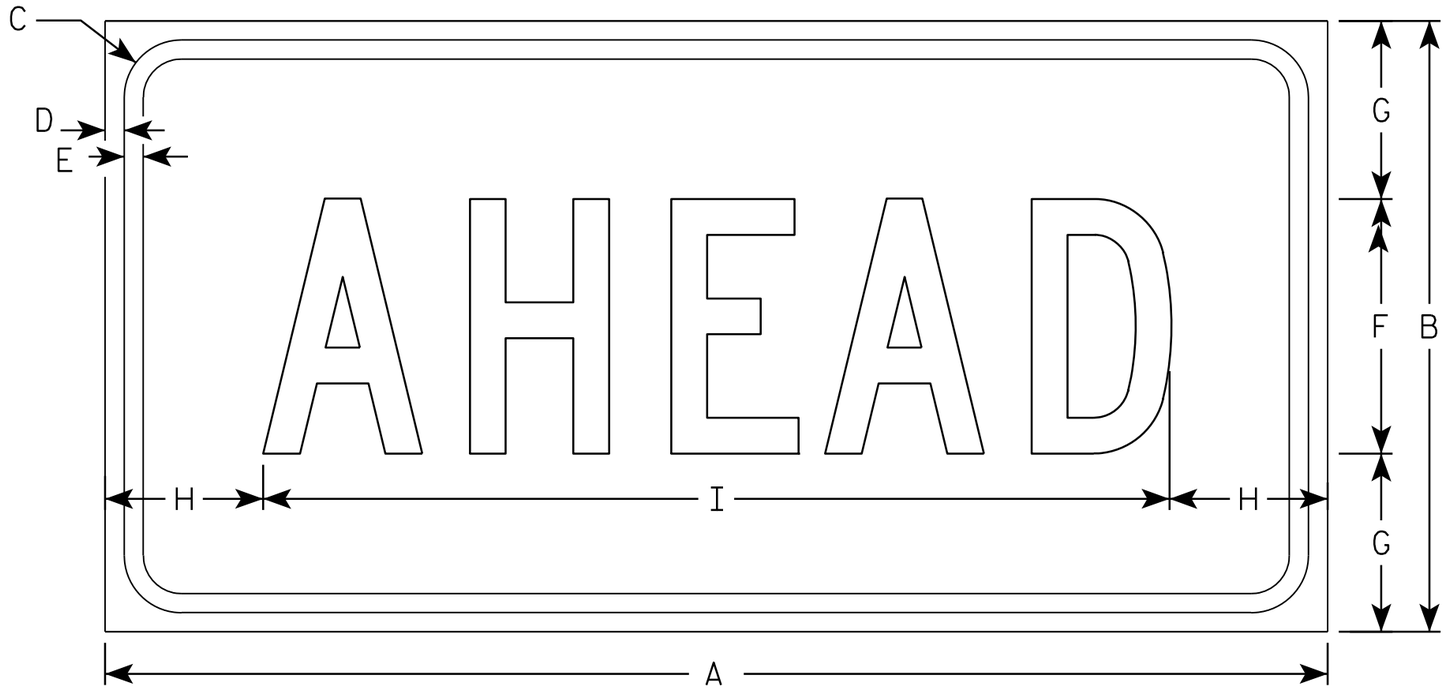
STANDARD SIGN
S16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-7.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 489 | 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																											

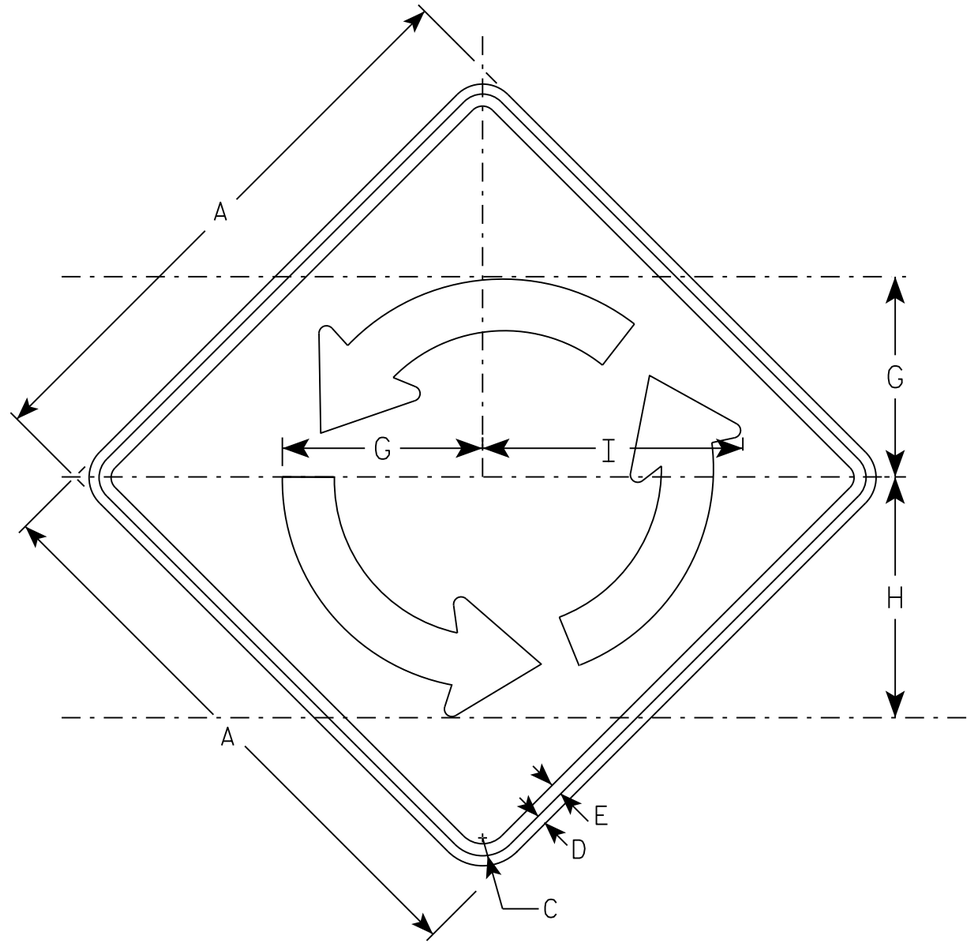
STANDARD SIGN
S16-9P

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: 490 | E



W2-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - YELLOW
   Message - BLACK

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Area sq. ft.
1																									
2S	30		1 3/8	1/2	5/8		10 3/8	12 1/2	13 1/2																6.25
2M	30		1 3/8	1/2	5/8		10 3/8	12 1/2	13 1/2																6.25
3	36		1 5/8	5/8	3/4		12 1/2	15	16 1/4																9.00
4	48		2 1/4	3/4	1		16 5/8	20	16 1/4																16.0
5																									

STANDARD SIGN
W2-6

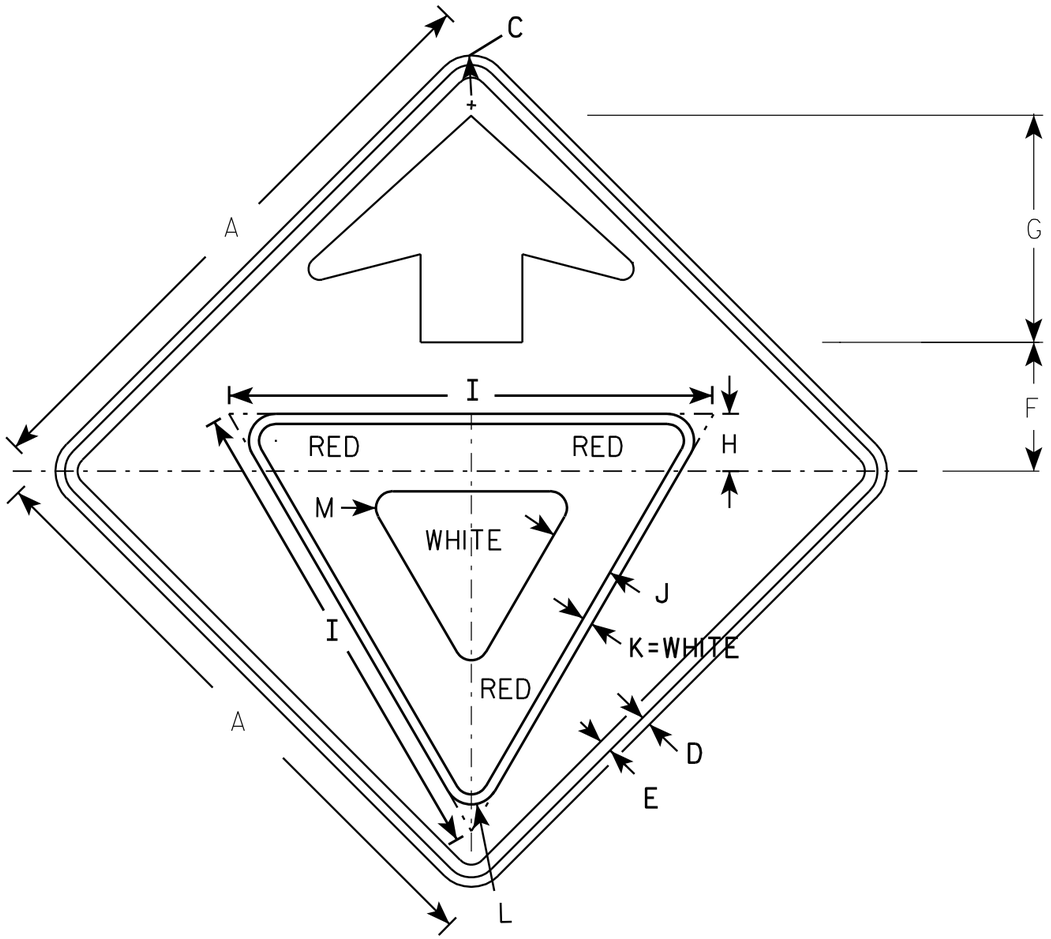
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. W2-6.6

PROJECT NO:

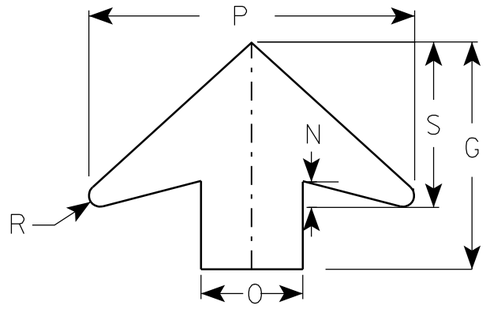
SHEET NO: 491 E



W3-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Yield Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	3	25	3 3/8	1/2	1 3/8	7/8	1 1/4	5	16		1/2	8								6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

STANDARD SIGN
W3-2

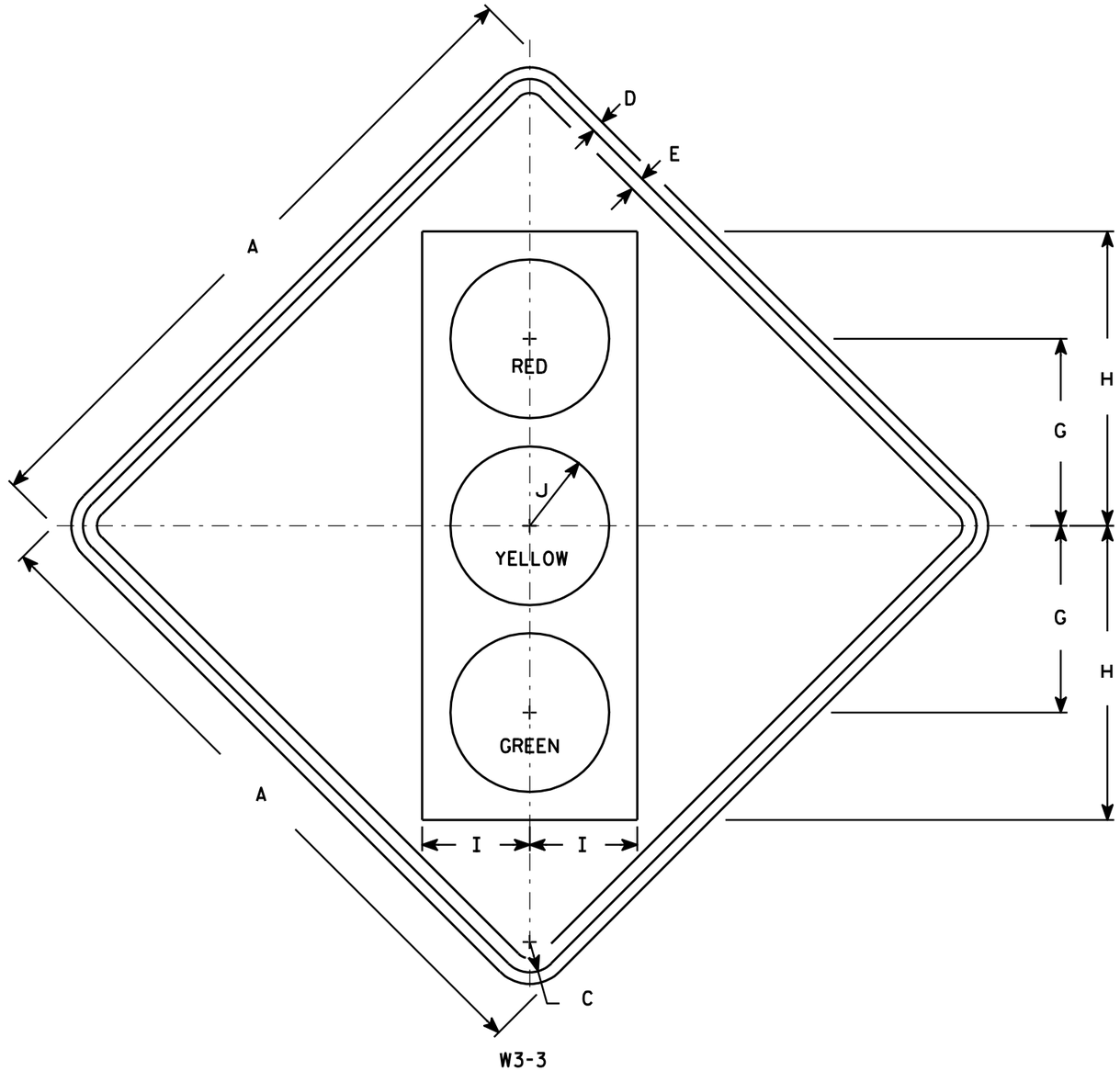
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-2..9

PROJECT NO:

SHEET NO: 492 E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 493 | E

W4-4P

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 - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	3	2 1/4	1 1/2	8	1 1/2	3/8	10	6 1/4	2 1/4	2 1/4	6 1/4											2.0
2M	24	12	1 1/8	3/8	3/8	3	2 1/4	1 1/2	8	1 1/2	3/8	10	6 1/4	2 1/4	2 1/4	6 1/4											2.0
3	36	15	1 1/8	3/8	1/2	4	2 5/8	1 3/4	10 3/4	2 3/8	3/8	13 1/2	8 3/8	3	3 1/8	8 3/8											3.75
4	42	18	1 1/8	3/8	1/2	5	3	2	13 3/8	3 1/8	3/8	16 7/8	10 1/2	3 5/8	3 7/8	10 3/8											5.25
5																											

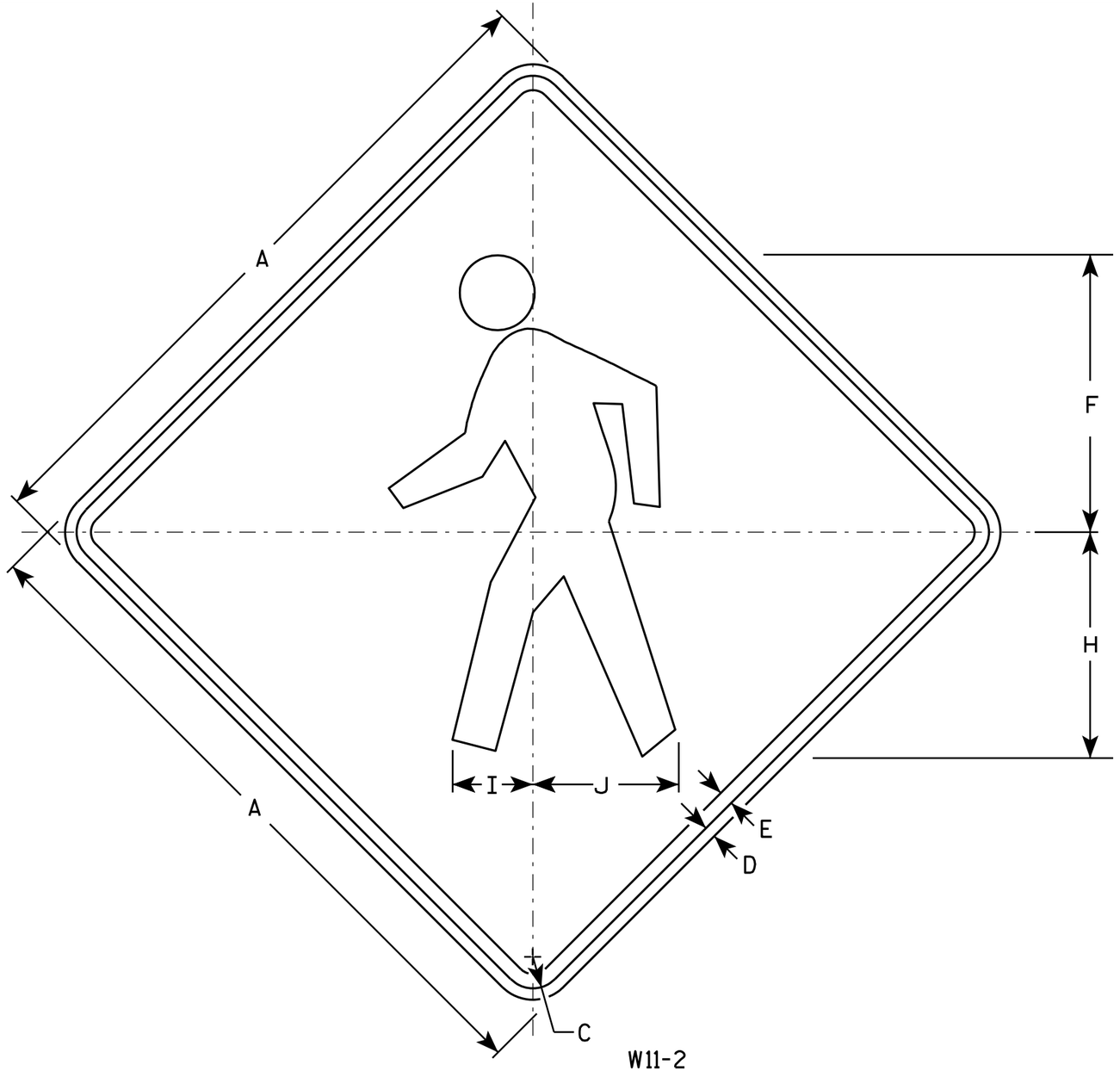
STANDARD SIGN
W4-4P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-4P.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 494 | E



W11-2

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

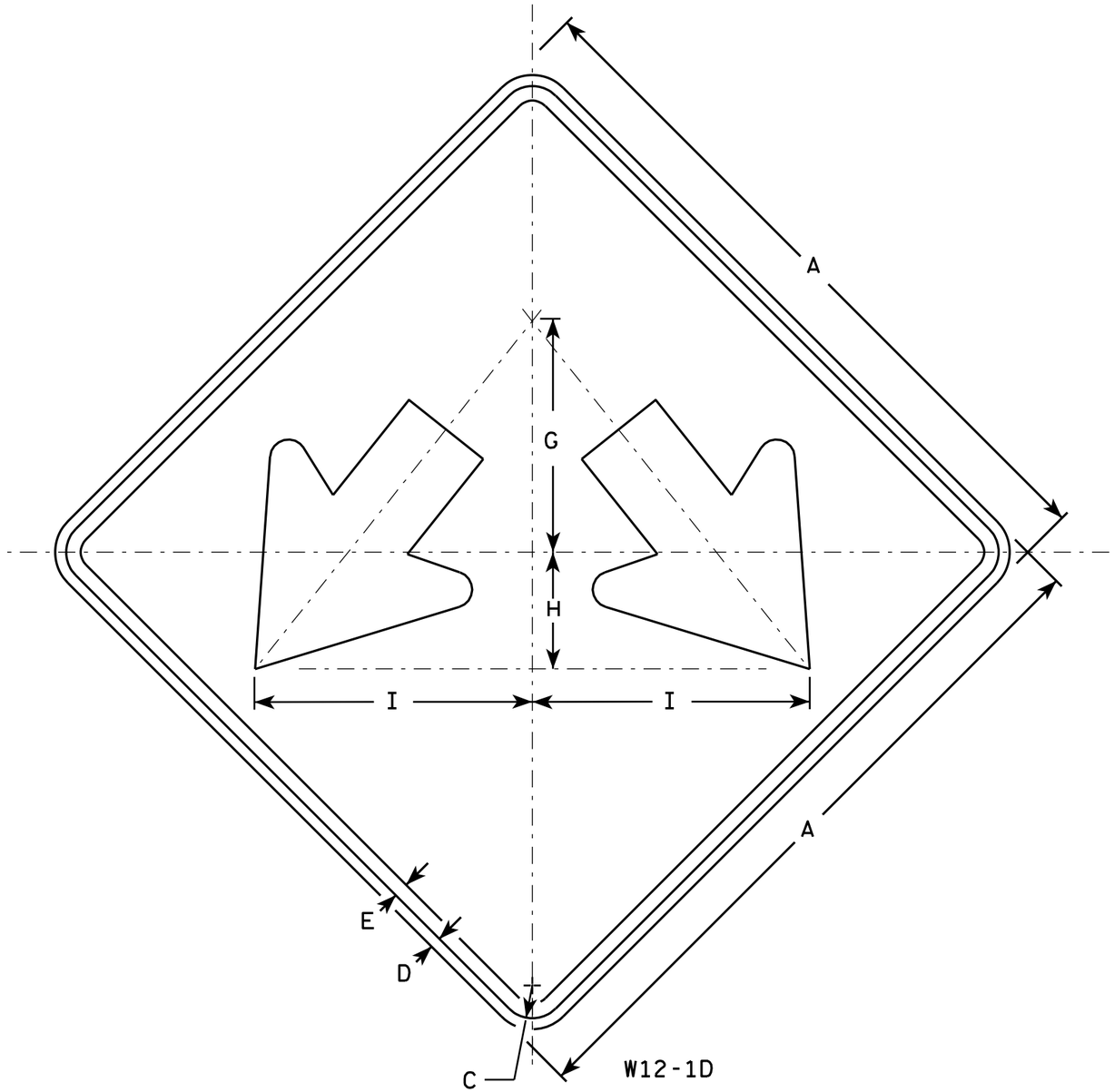
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

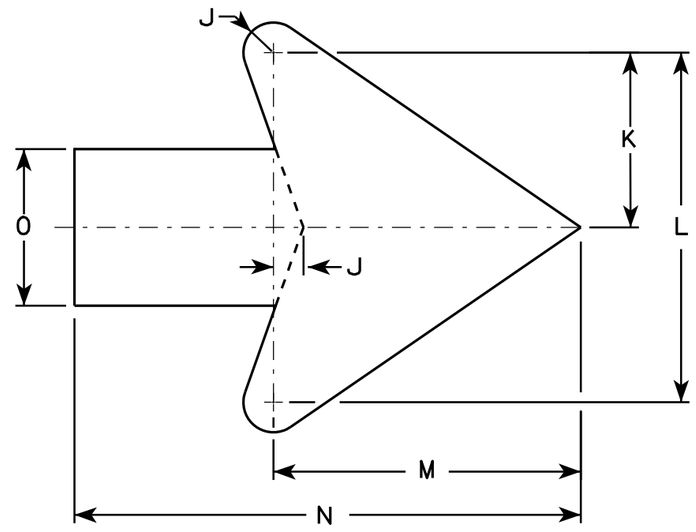
DATE 6/7/10 PLATE NO. W11-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 495	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

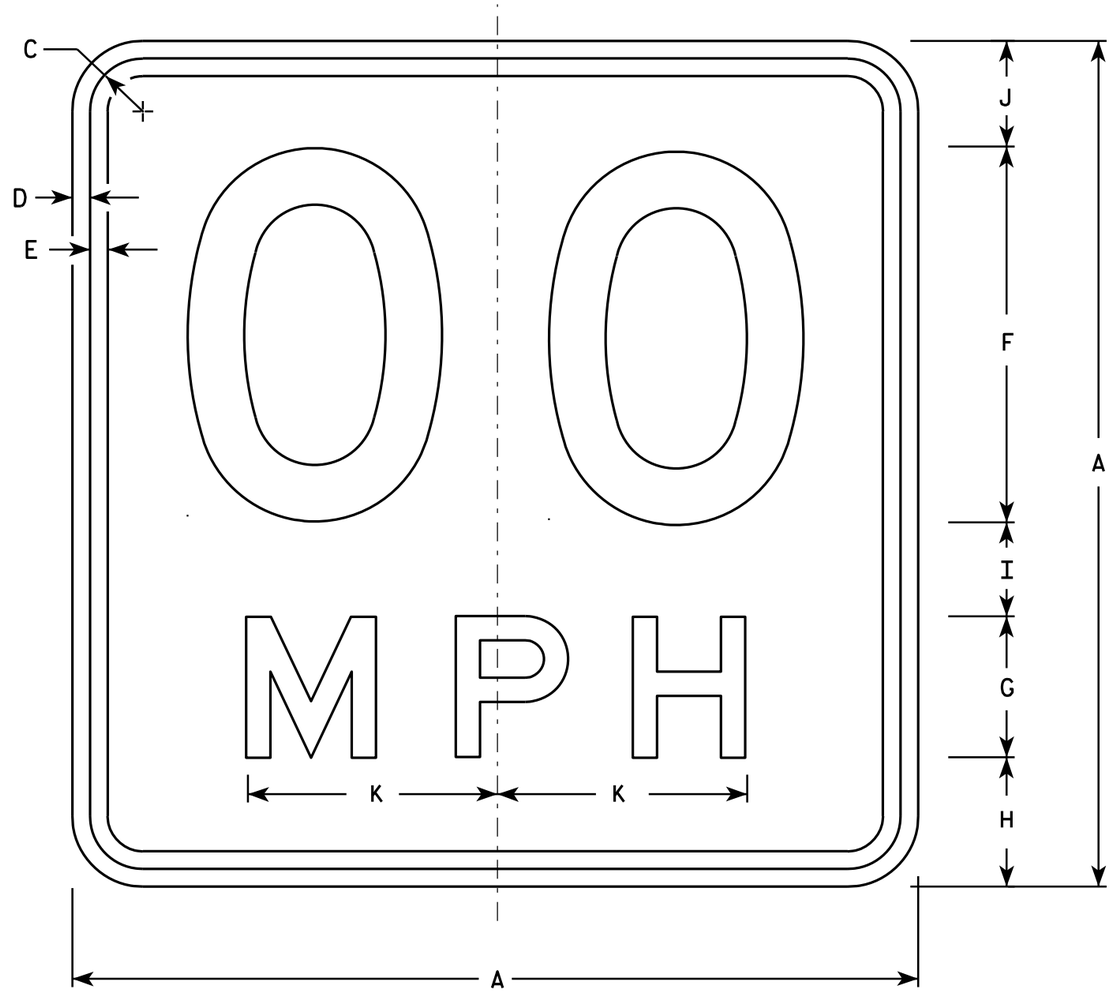
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 496	E



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

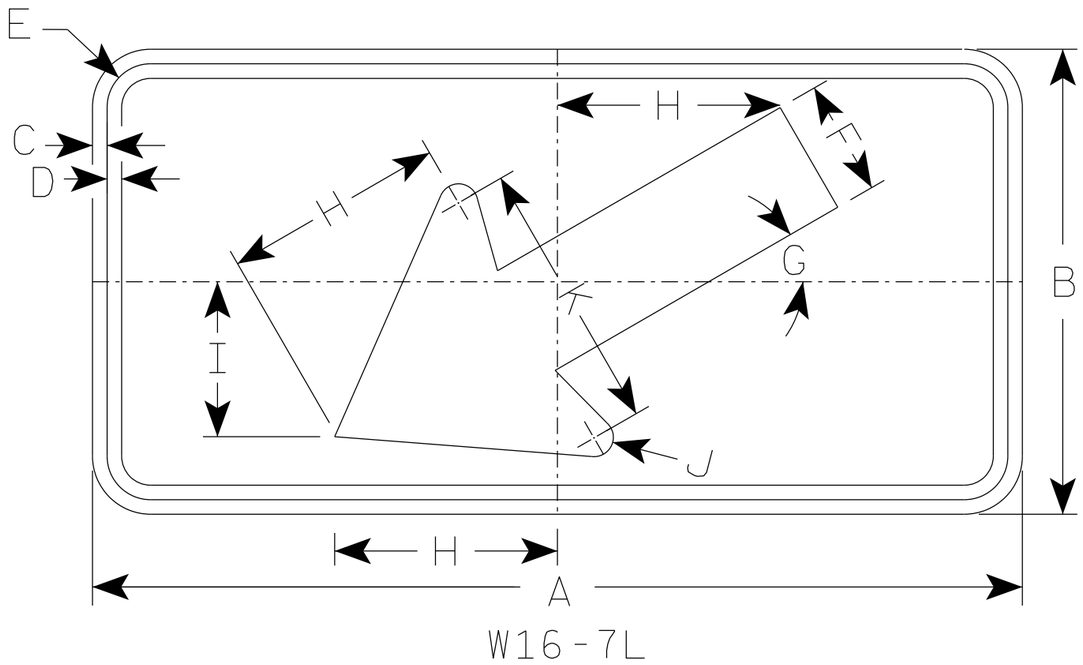
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 497 | E



W16-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W16-7R is the same as W16-L
   except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

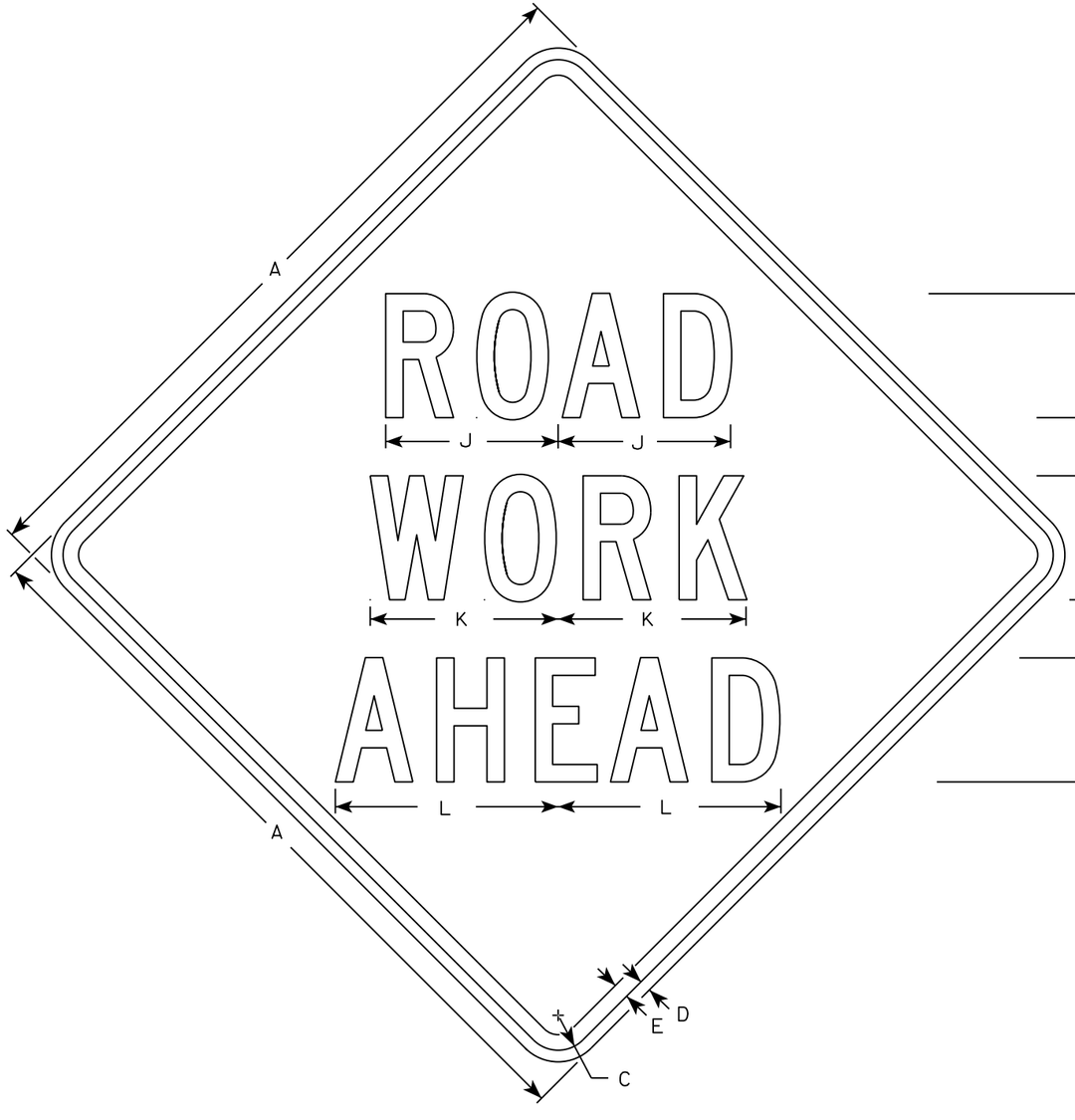
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

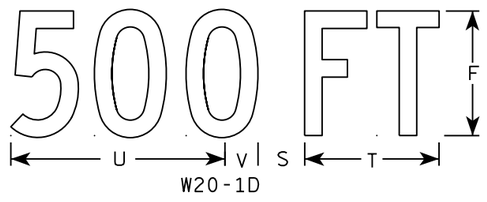
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 7/11/18 PLATE NO. W16-7.6

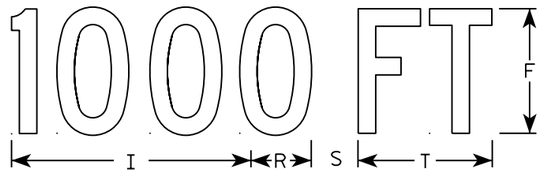
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 498 | E



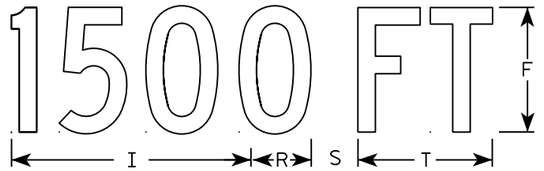
W20-1A



W20-1D

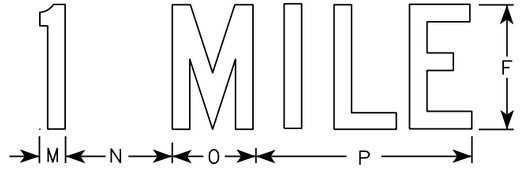


W20-1C

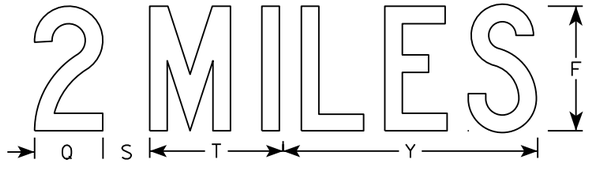


W20-1B

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

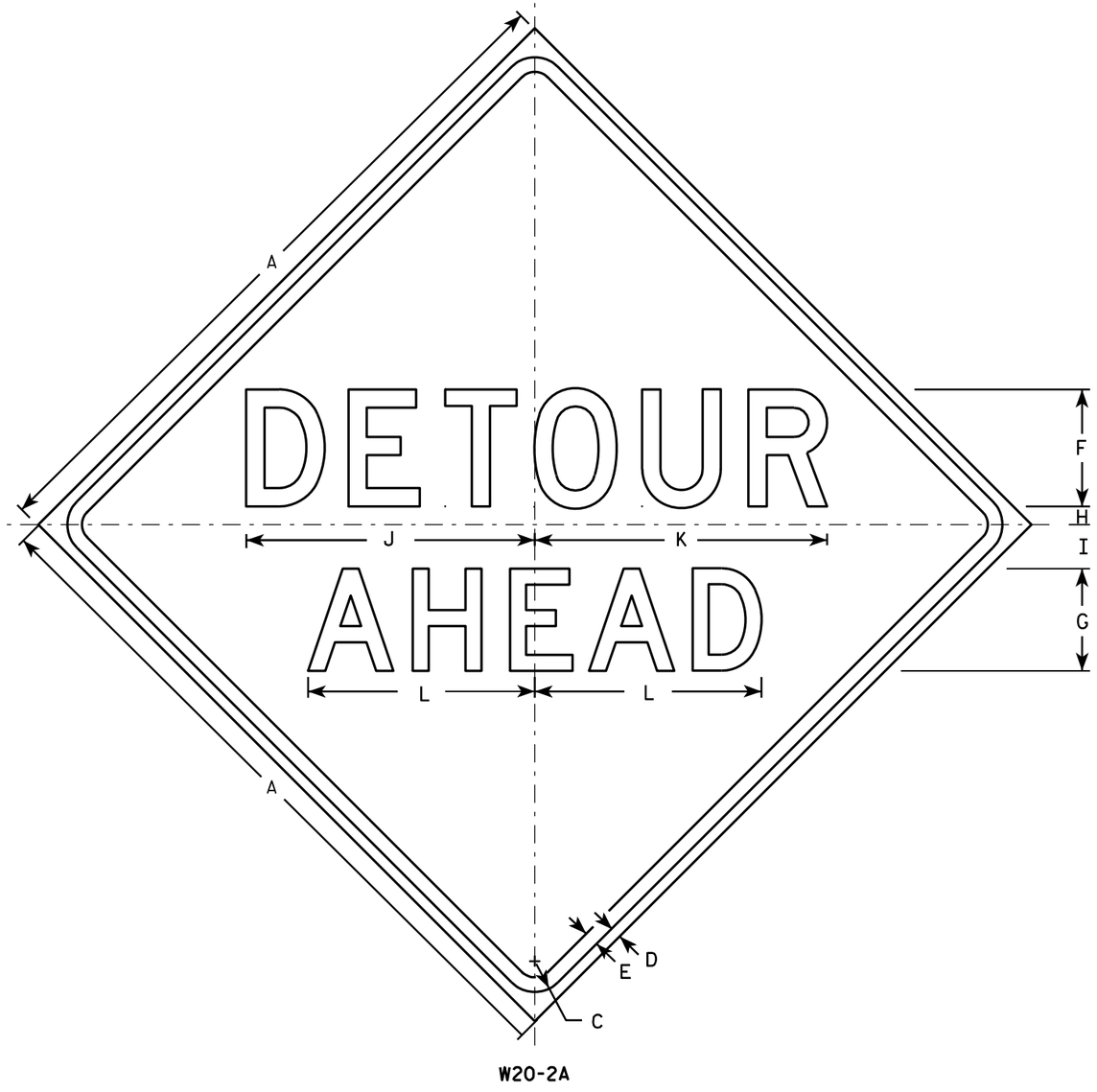
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

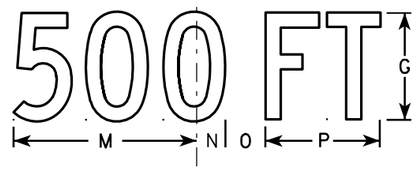
PROJECT NO:

SHEET NO: E

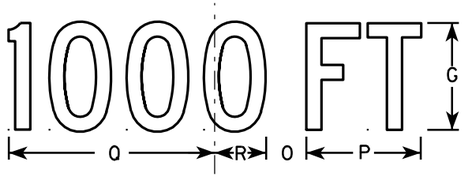
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



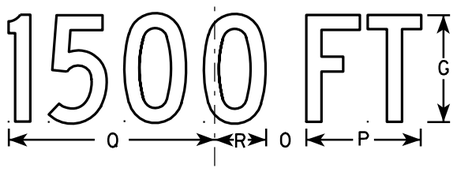
W20-2A



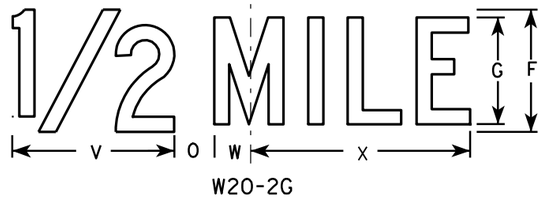
W20-2D



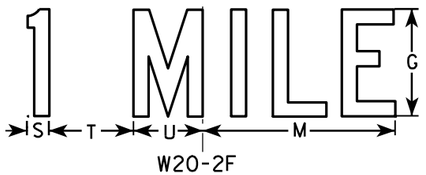
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

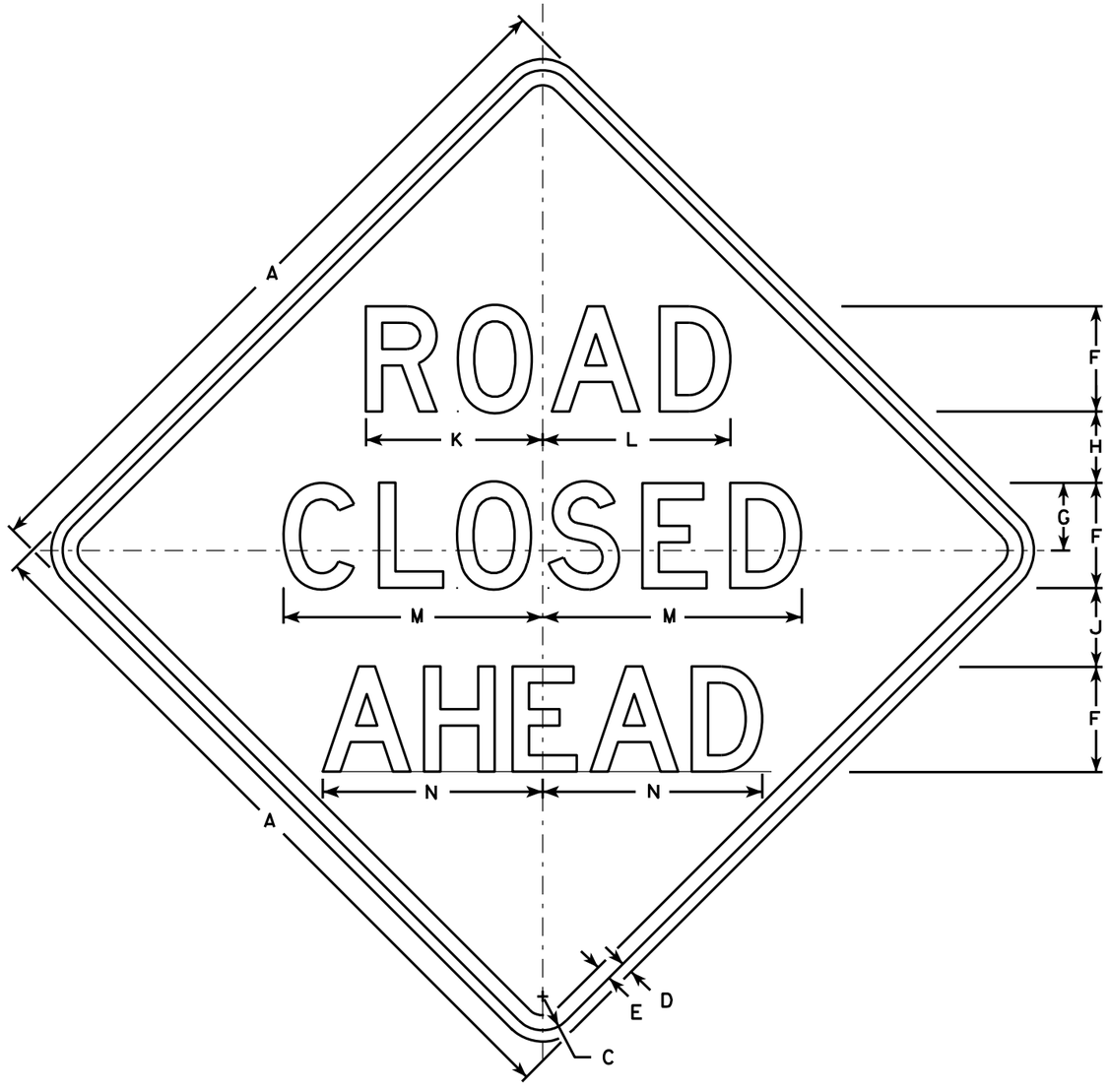
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

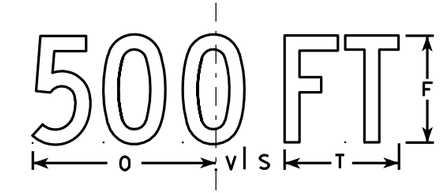
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 500 | E

7

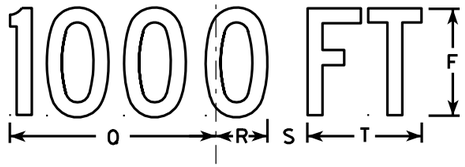
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN PLOT DATE : 18-MAR-2011 10:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



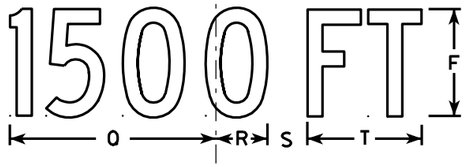
W20-3A



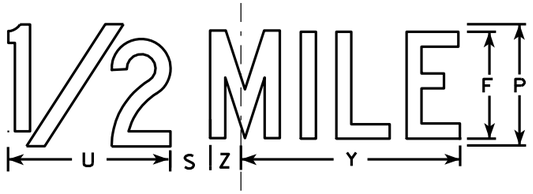
W20-3D



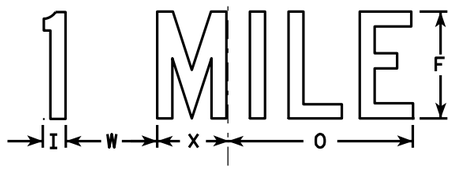
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - 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

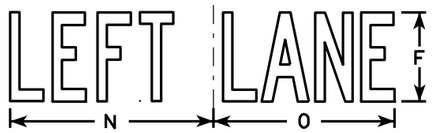
STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

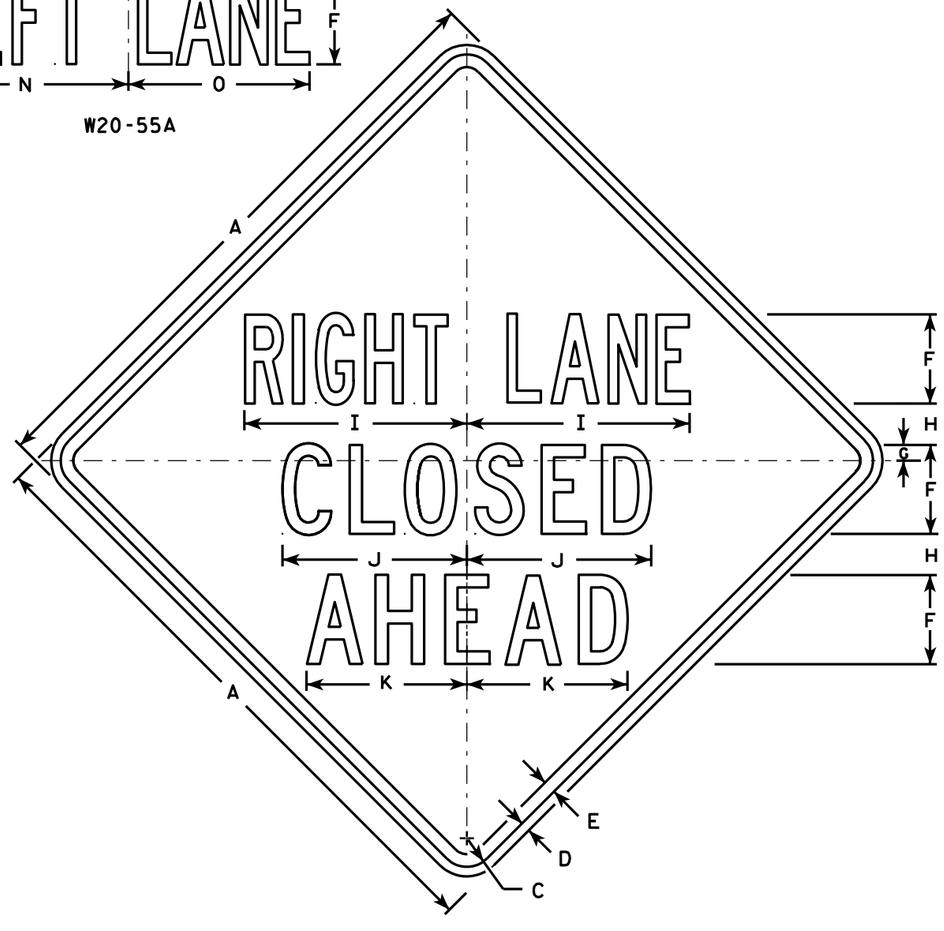
APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 501 | E

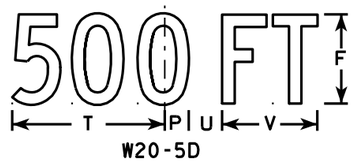
W20-56A



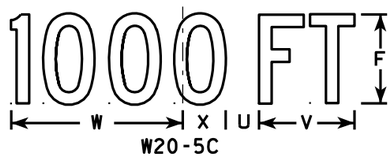
W20-55A



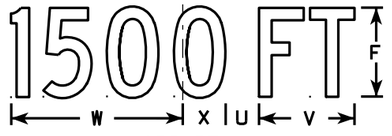
W20-5A



W20-5D



W20-5C



W20-5B

W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

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

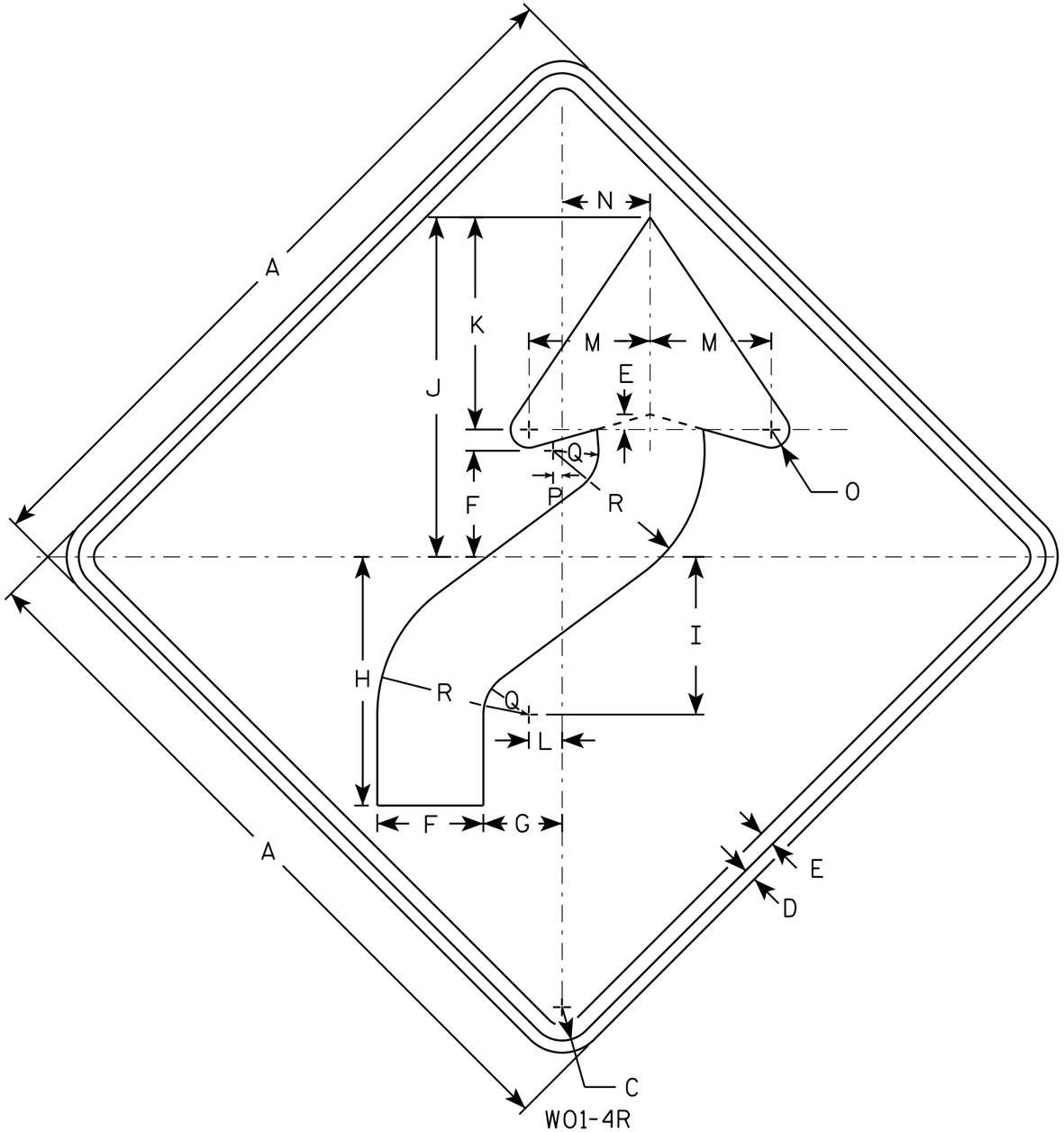
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 502	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



WO1-4R

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. WO1-4L is the same as WO1-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		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
WO1-4

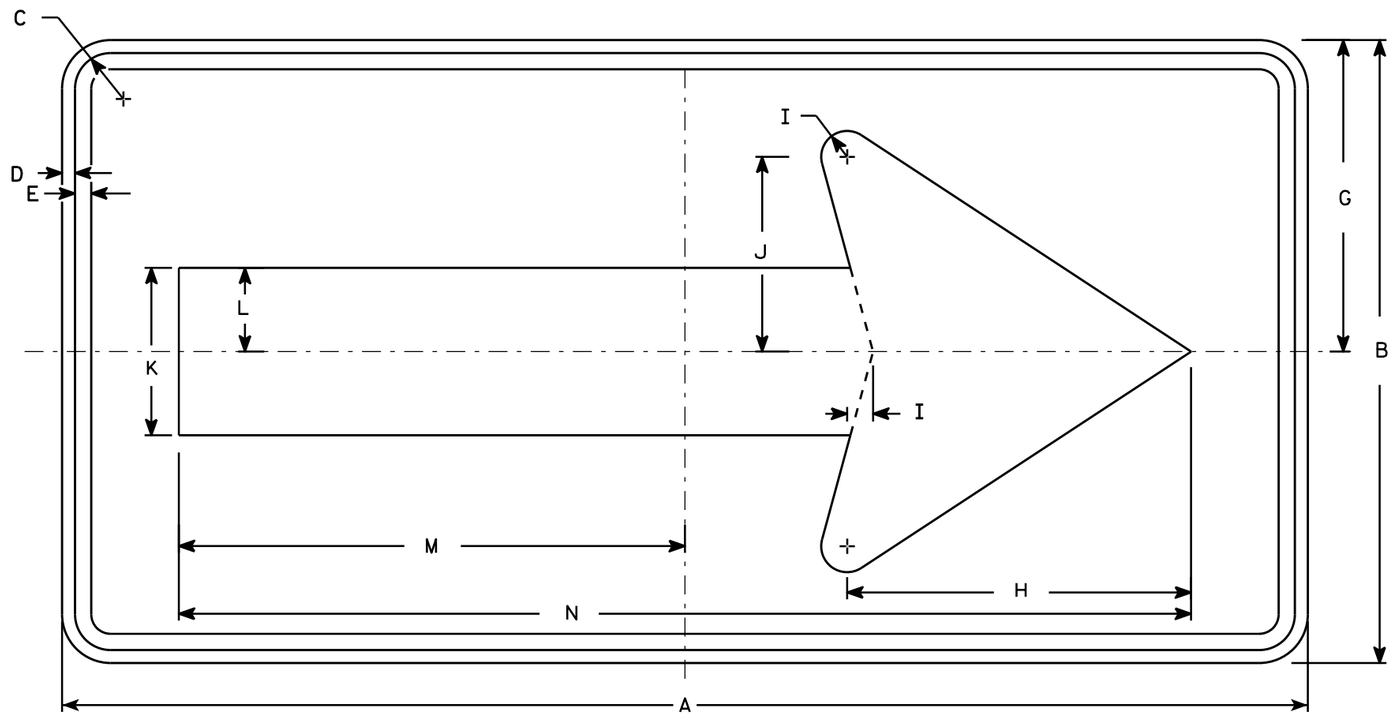
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO WO1-4.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\WO14.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

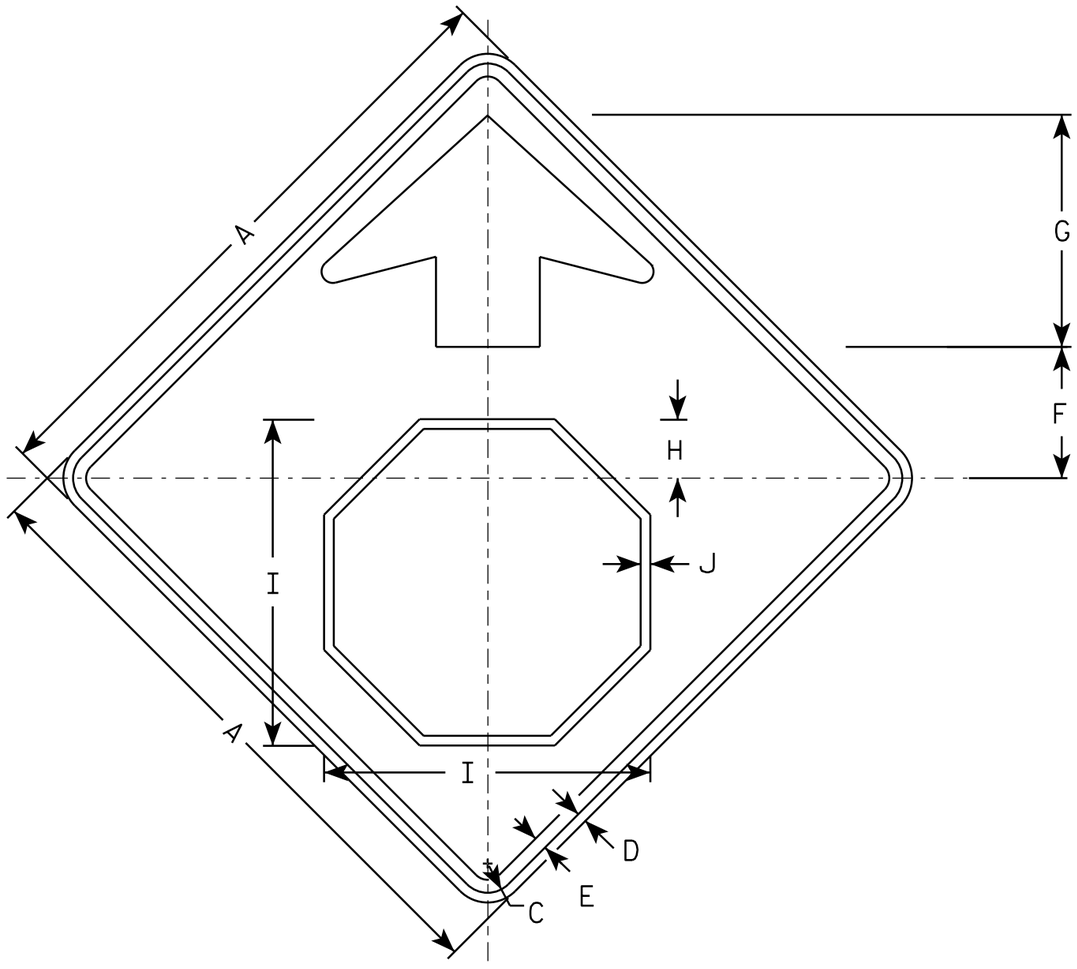
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-6.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

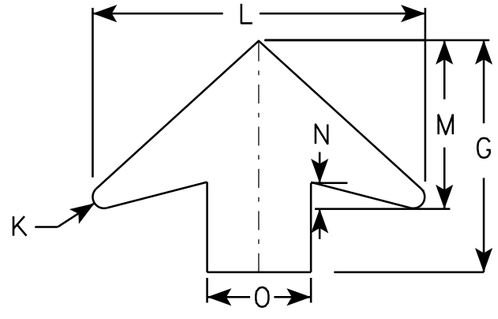
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



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

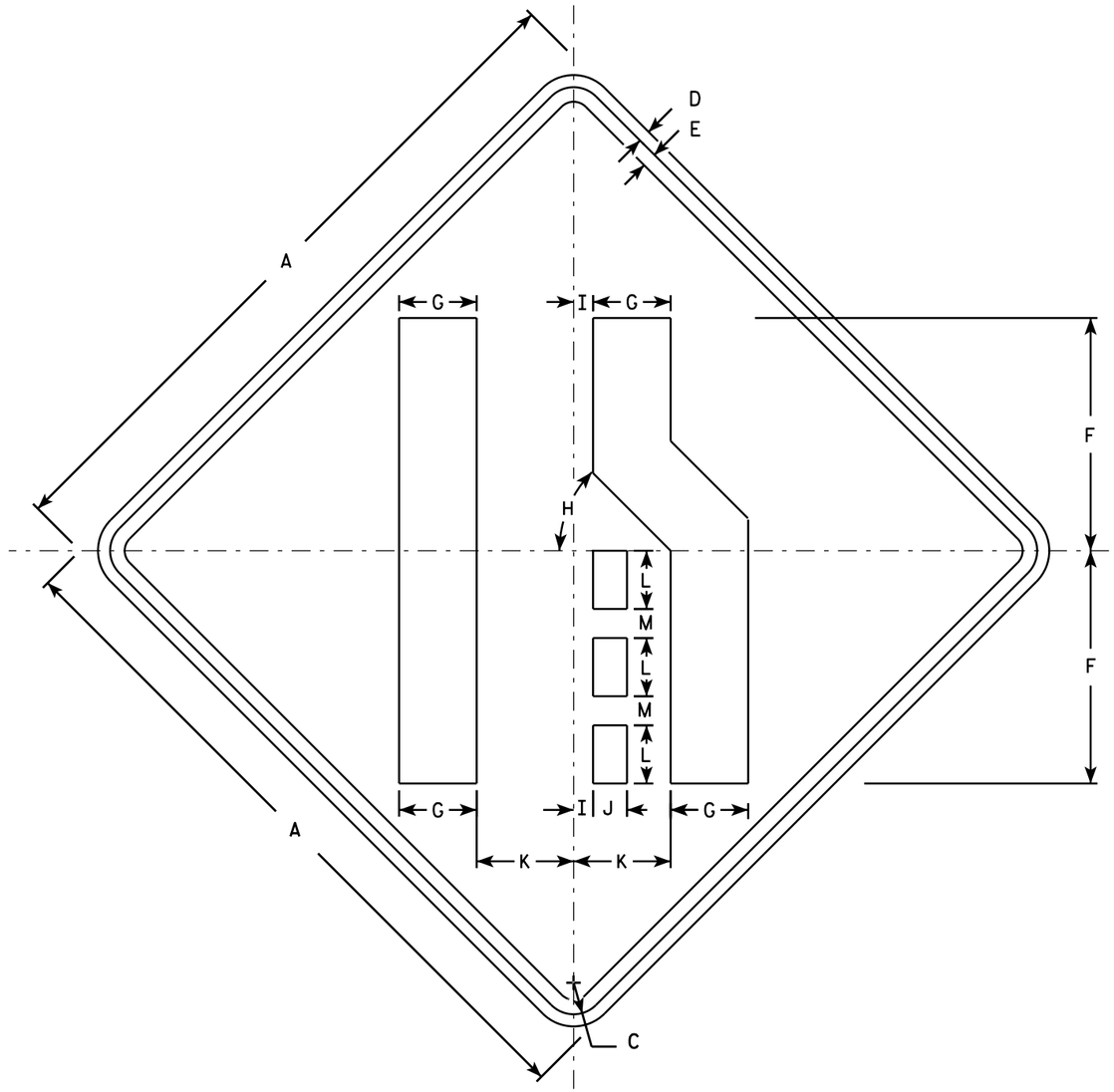
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 505 03-1.1

PROJECT NO: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W031.DGN PLOT DATE : 20-NOV-2013 10:54 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

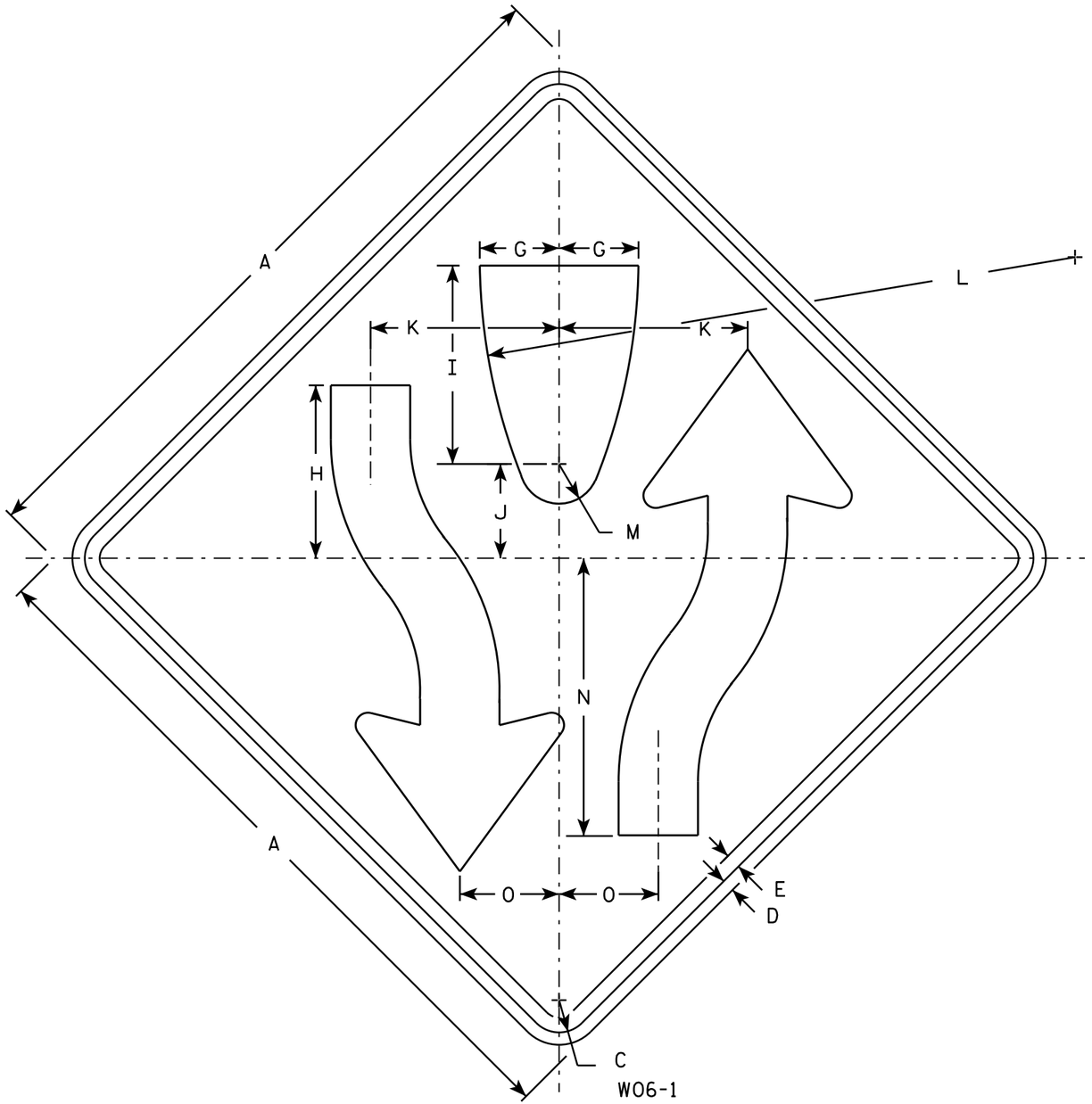
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 506 W04-2.1

PROJECT NO:

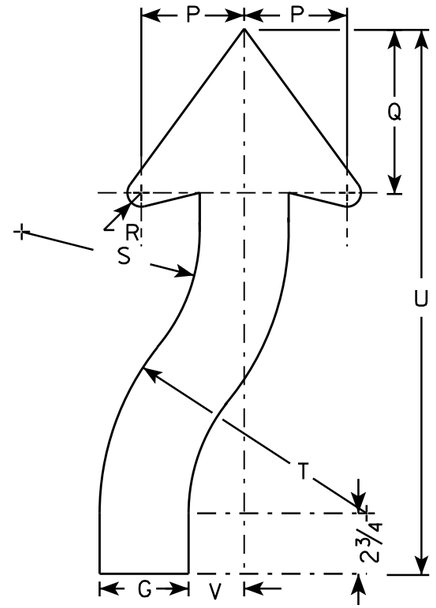
SHEET NO: E



W06-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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. W06-2 same as W06-1 but is rotated 180° when mounted.



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		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2S	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
2M	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
3	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W06-1 & W06-2

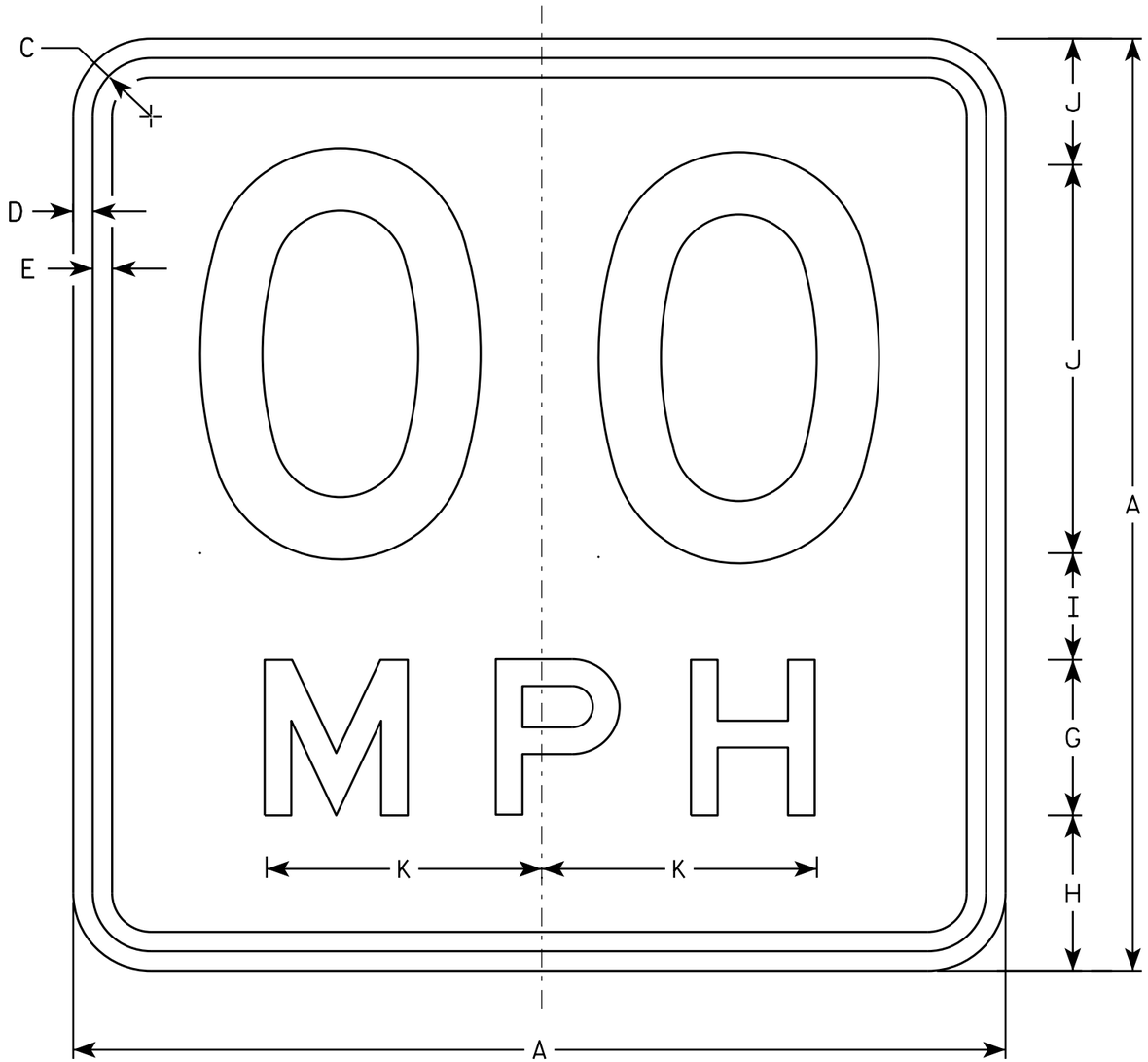
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO W06-1.1

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W061.DGN PLOT DATE : 20-NOV-2013 12:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.810449:1.000000
WISDOT/CADDS SHEET 42



W013-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W013-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/13 PLATE 508 W013-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

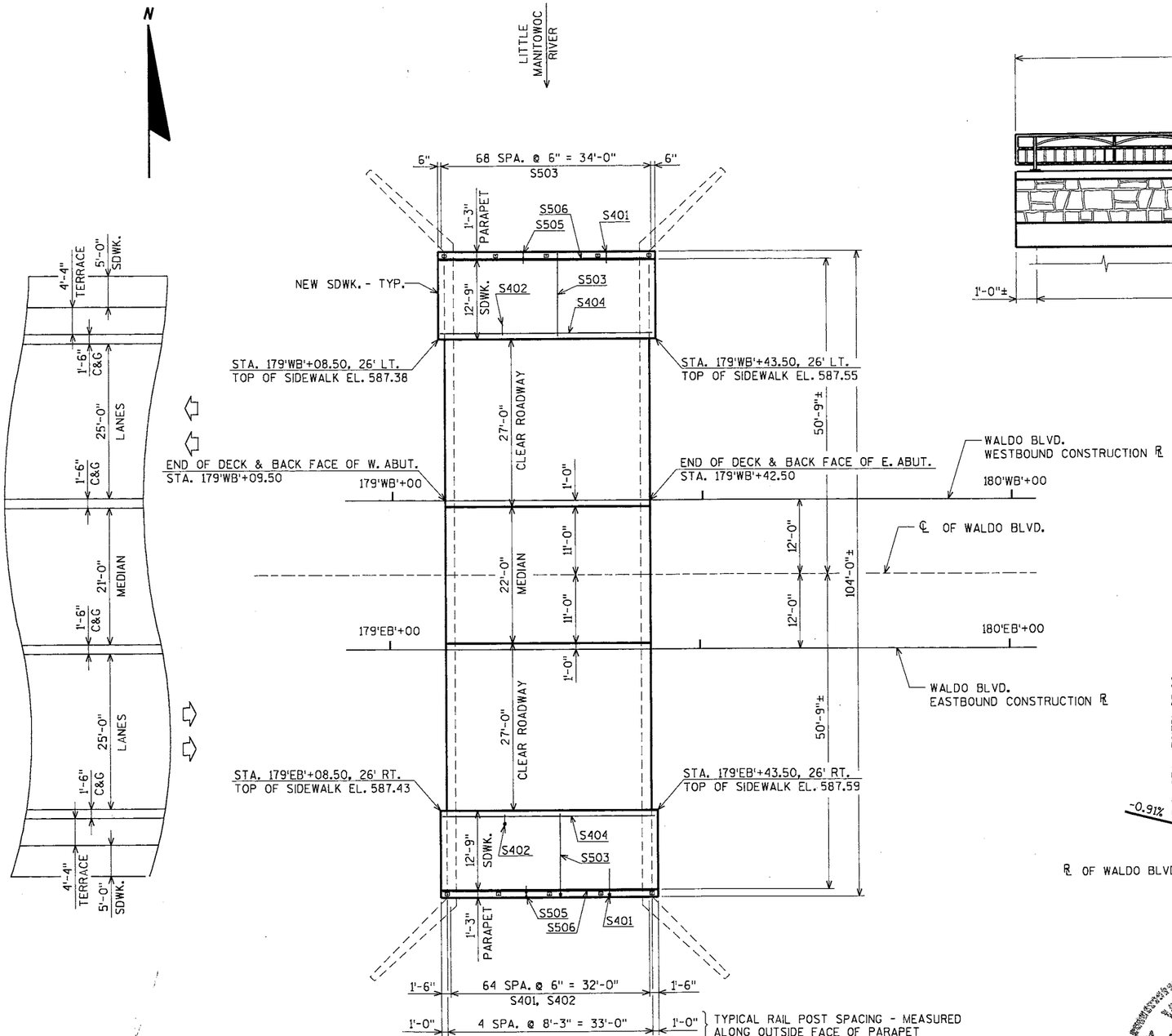
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W0131.DGN PLOT DATE : 02-DEC-2013 13:55 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.794391:1.000000
WISDOT/CADDS SHEET 42

$PRFNAME$
U:\41-0629.00 - Manitowoc County, Waldo Blvd\Bridge over Little Manitowoc River\BRIDGE 2019\41

DATE:
DRAWN BY:
DATE:
CHECKED BY:
BACK CHECKED BY:
CORRECTED BY:

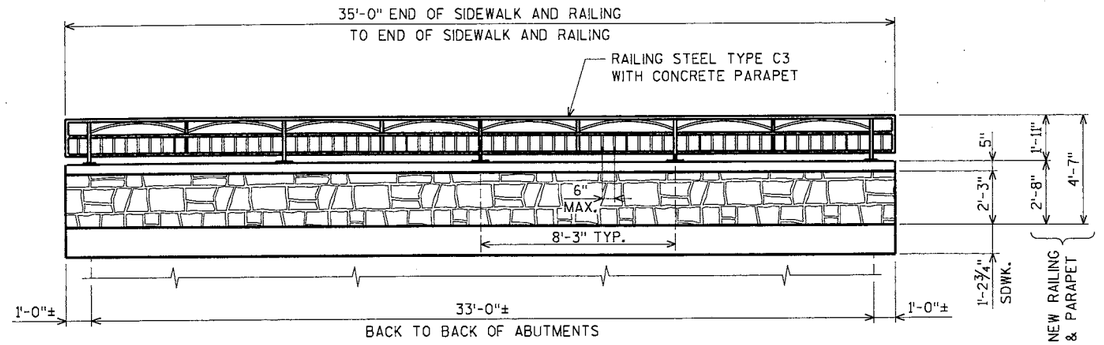
STATE PROJECT NUMBER

4570-12-71



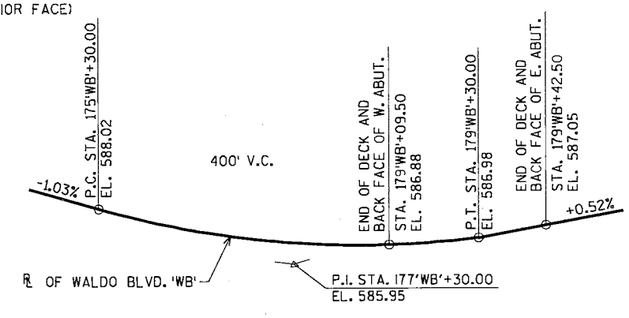
PLAN

SINGLE-SPAN CONCRETE DECK GIRDER BRIDGE
(RAILING REPLACEMENT AND DECK REPAIRS)



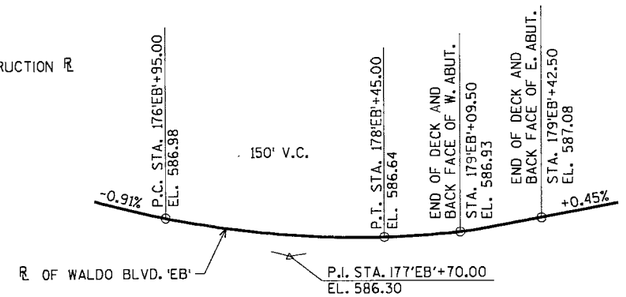
ELEVATION OF RAILING

(EXTERIOR FACE)



PROFILE GRADE LINE

(WALDO BLVD. 'WB')



PROFILE GRADE LINE

(WALDO BLVD. 'EB')

FOR TYPICAL SECTION AND DESIGN DATA SEE SHEET 2

LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION AND DESIGN DATA
3. SIDEWALK DETAILS
4. RAILING STEEL TYPE C3 AND PARAPET DETAILS
5. RAILING STEEL TYPE C3 DETAILS

WISCONSIN
CHRISTOPHER B. McMAHON
E-28454
EAU CLAIRE
PROFESSIONAL ENGINEER
1/3/19

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
CHRIS MCMAHON
(715)-834-3161

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 01/03/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-36-900

WALDO BLVD. OVER THE LITTLE MANITOWOC RIVER

COUNTY MANITOWOC | ~~TOWN~~/CITY/~~VILLAGE~~ MANITOWOC

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY JWZ	DESIGN CK'D. JLB	DRAWN BY CLS	PLANS CK'D. CBM

GENERAL PLAN

SHEET 509 OF 5

8

8

1/3/2019

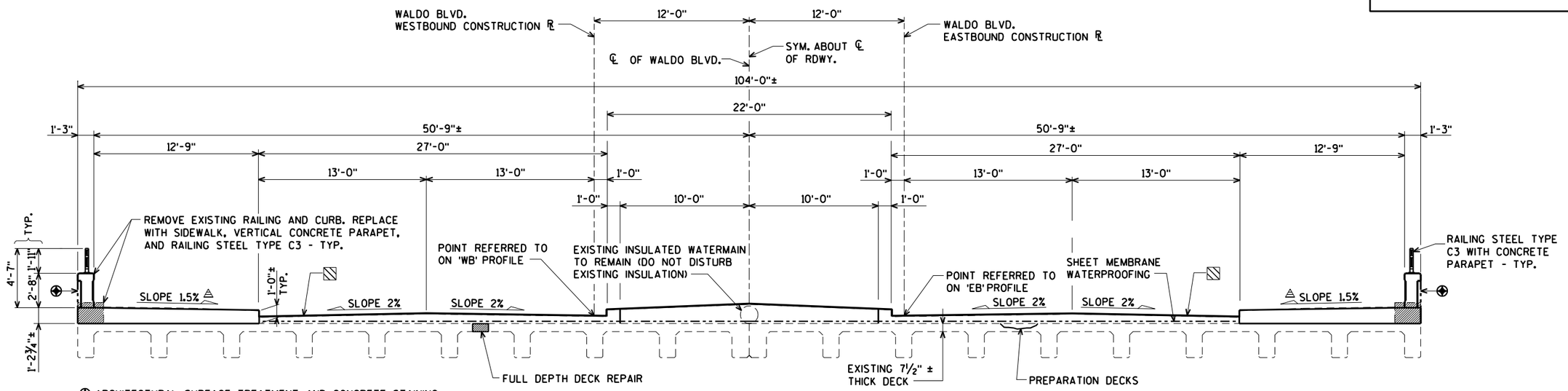
PENTABLE:BReau_shd_util.tbl

I.D.

DATE:

STATE PROJECT NUMBER

4570-12-71



⊕ ARCHITECTURAL SURFACE TREATMENT AND CONCRETE STAINING

△ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

CROSS SECTION THRU ROADWAY

(LOOKING EAST)

▨ REMOVE AND RECONSTRUCT ROADWAY. ROADWAY PAVEMENT WILL BE 8½" OF CONCRETE OVER BASE AGGREGATE DENSE. INCREASE PAVEMENT THICKNESS ON BRIDGE AS NECESSARY AT THE CROWN. REDUCE PAVEMENT THICKNESS ON BRIDGE AS NECESSARY AT CURBS. BASE AGGREGATE DENSE WILL NOT BE ALLOWED TO BE PLACED ON THE DECK. - SEE ROAD PLANS

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTAL	CATEGORY 0030	CATEGORY 0020
203.0200	REMOVING OLD STRUCTURE STATION 179'EB'+26.00	LS	1	1	-----
502.0100	CONCRETE MASONRY BRIDGES	CY	50	50	-----
502.3200	PROTECTIVE SURFACE TREATMENT	SY	110	110	-----
502.3210	PIGMENTED SURFACE SEALER	SY	35	35	-----
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	260	260	-----
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	4,540	4,540	-----
509.0301	PREPARATION DECKS TYPE 1	SY	30	30	-----
509.0302	PREPARATION DECKS TYPE 2	SY	15	15	-----
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	60	60	-----
◨ 509.1500	CONCRETE SURFACE REPAIR	SF	50	50	-----
509.2000	FULL DEPTH DECK REPAIR	SY	5	5	-----
509.2100.S	CONCRETE MASONRY DECK REPAIR	CY	5	5	-----
513.7016	RAILING STEEL TYPE C3	LF	70	-----	70
516.0610.S	SHEET MEMBRANE WATERPROOFING FOR TOP SLAB B-36-900	SY	280	280	-----
517.1010.S	CONCRETE STAINING B-36-900	SF	460	-----	460
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-36-900	SF	160	-----	160

◨ UNDISTRIBUTED QUANTITY FOR ABUTMENTS AS DIRECTED BY THE ENGINEER, IF NECESSARY.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ANY EXCAVATION NECESSARY TO COMPLETE THE WORK IS CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY BRIDGES".

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT UNLESS SHOWN OR NOTED OTHERWISE.

BAR STEEL REINFORCEMENT SHALL BE EMBEDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2, CONCRETE SURFACE REPAIR AND FULL DEPTH DECK REPAIR AREAS SHALL BE DETERMINED BY THE FIELD ENGINEER.

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

REMOVAL OF THE EXISTING RAILING AND PARAPET IS INCLUDED IN THE BID ITEM "REMOVING OLD STRUCTURE STATION 179'EB'+26.00.

PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE FACE OF CURB AND TOP OF SIDEWALK. PIGMENTED SURFACE SEALER IS TO BE APPLIED TO THE TOP AND INSIDE FACES OF PARAPETS, AS SHOWN IN DETAIL ON SHEET 3.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

ORIGINAL CONSTRUCTION YEAR IS 1934.

PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2, AND FULL DEPTH DECK REPAIR AREAS WILL BE FILLED WITH CONCRETE MASONRY DECK REPAIR.

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS-20
INVENTORY RATING: HS-20
OPERATING RATING: HS-34

WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 220 KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY { SUPERSTRUCTURE _____ f'c = 4,000 p.s.i.
ALL OTHER _____ f'c = 3,500 p.s.i.

HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) _____ fy = 60,000 p.s.i.

TRAFFIC DATA:

A.D.T. = 11,700 (2019)
A.D.T. = 13,600 (2039)
R.D.S. = 40 M.P.H.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-36-900

DRAWN BY CLS | PLANS CK'D. CBM

TYPICAL SECTION AND DESIGN DATA

SHEET 2 OF 5
510

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

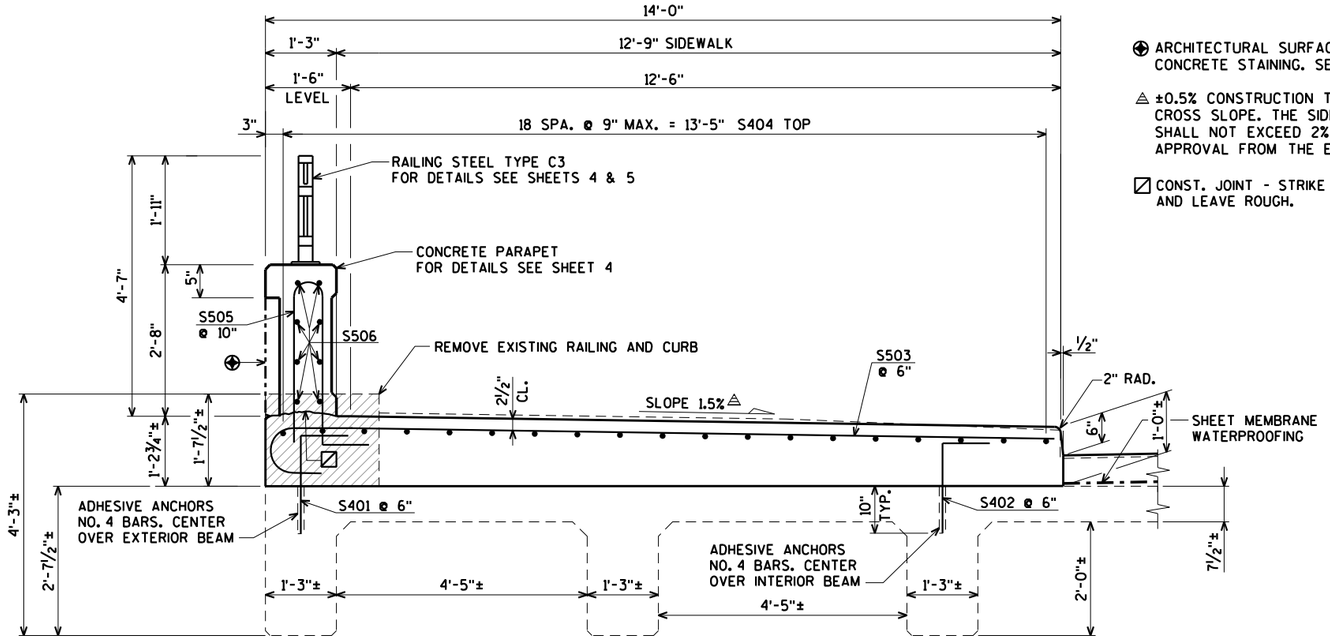
$PRFNAME$
U:\41-0629.00 - Manitowoc County, Waldo Blvd\Bridge over Little Manitowoc River\BRIDGE 2019\410629 gp rail 2019.dgn

8

8

STATE PROJECT NUMBER

4570-12-71



TYPICAL SECTION THRU SIDEWALK

⊕ ARCHITECTURAL SURFACE TREATMENT AND CONCRETE STAINING. SEE DETAILS ON THIS SHEET.

△ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

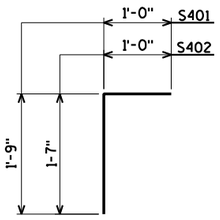
☒ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

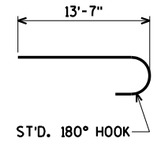
BILL OF BARS

	BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	4,540# COATED LOCATION
▲	S401	X	130	2-8	X		EXISTING SLAB @ SIDEWALK
▲	S402	X	130	2-6	X		EXISTING SLAB @ SIDEWALK
	S503	X	138	14-2	X		SIDEWALK TRANS.
	S404	X	38	34-8			SIDEWALK LONG.
	S505	X	84	6-9	X		PARAPET VERT.
	S506	X	16	34-8			SDWK. @ PARAPET HORIZ.

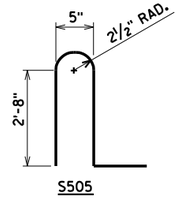
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

▲ ADHESIVE ANCHORS NO. 4 BAR

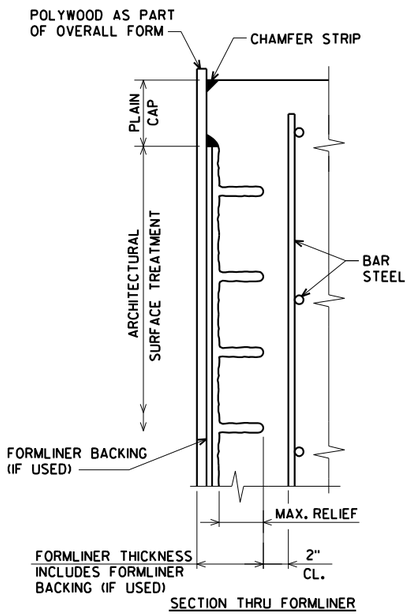




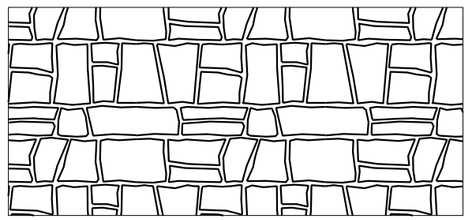
S503



S505



SECTION THRU FORMLINER

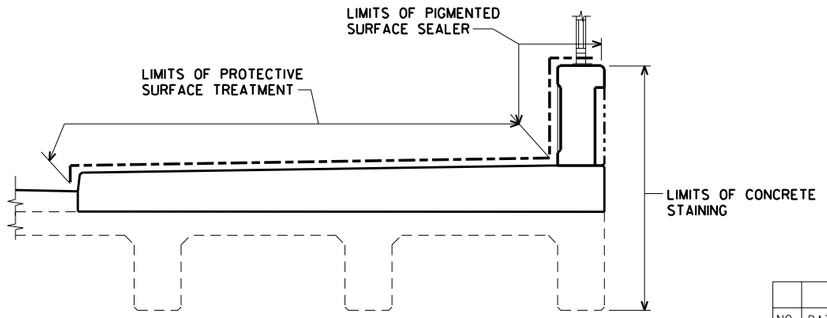


RUSTIC ASHLAR

FORMLINER THICKNESS = 3"
SIZE = 8" & 32"
MAX. RELIEF = 2"

PARAPET NOTES

FORMLINER COURSING ON PARAPETS SHALL BE PARALLEL TO TOP OF PARAPET.



SURFACE TREATMENT DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-36-900

DRAWN BY CLS | PLANS CK'D. CBM

SIDEWALK DETAILS

SHEET 3 OF 5
511

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

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ecpdf.plt
410629 gp rail.dgn

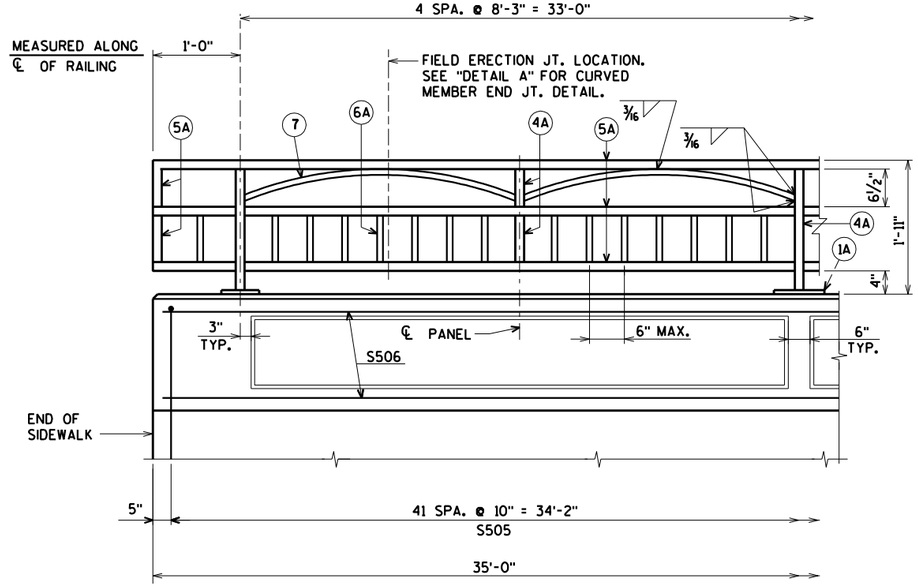
6/22/2018

black.tbl

$PRFNAME$
U:\41-0629.00 - Manitowoc County, Waldo Blvd\Bridge over Little Manitowoc River\BRIDGE\410629 C3 rail.dgn

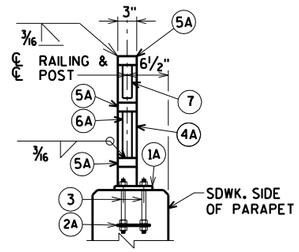
STATE PROJECT NUMBER

4570-12-71

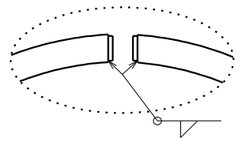


ELEVATION OF RAILING

(LOOKING AT INSIDE FACE OF PARAPET)

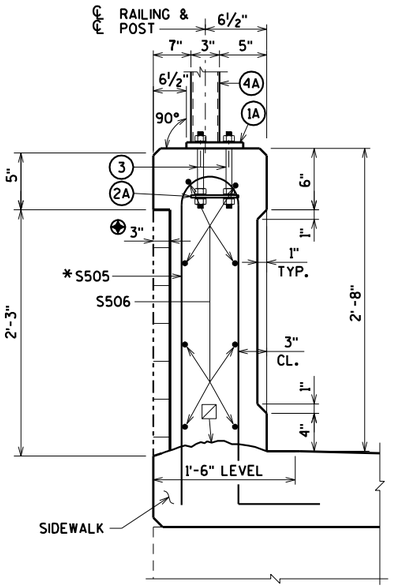


END VIEW



DETAIL A

SEAL ENDS ON CURVED STRUCTURAL TUBING WITH 1/4" PLATE. WELD AND GRIND SMOOTH.



SECTION THRU PARAPET ON BRIDGE

* ADJUST LOCATIONS OF BARS TO ALLOW PLACEMENT OF ANCHOR ASSEMBLY FOR RAILING

☒ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

⊕ ARCHITECTURAL SURFACE TREATMENT FOR DETAILS SEE SHEET 3.

WORK THIS SHEET WITH SHEET 5.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-36-900

DRAWN BY CLS | PLANS CK'D. CBM

RAILING STEEL TYPE C3 AND PARAPET DETAILS

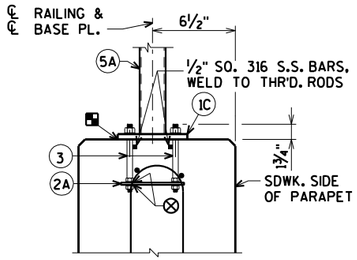
SHEET 4 OF 5
512

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

8

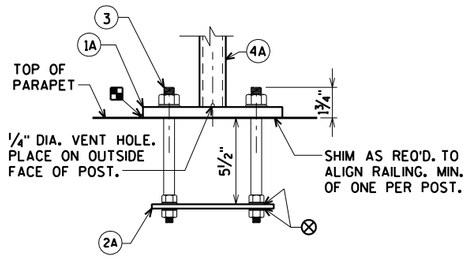
8

$PRFNAME$
U:\41-0629.00 - Manitowoc County, Waldo Blvd\Bridge over Little Manitowoc River\BRIDGE\410629 C3 Railing Steel Type C3 Details.dgn



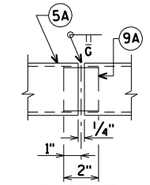
ANCHORAGE FOR END RAIL

NOTE: ANCHOR PLATES NOT REQ'D. WHEN ADHESIVE ANCHORS ARE USED.



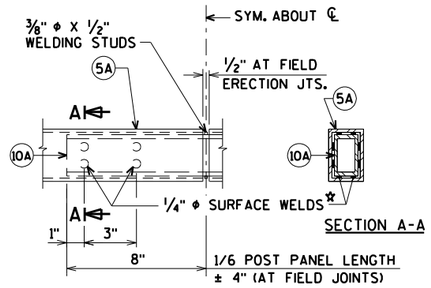
ANCHORAGE FOR RAIL POSTS

NOTE: ANCHOR PLATES NOT REQ'D. WHEN ADHESIVE ANCHORS ARE USED.



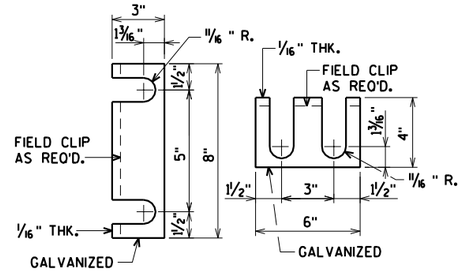
SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



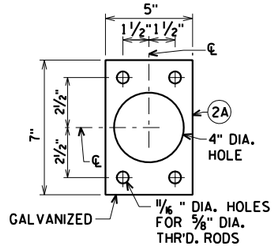
FIELD ERECTION JOINT DETAIL

☆ MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



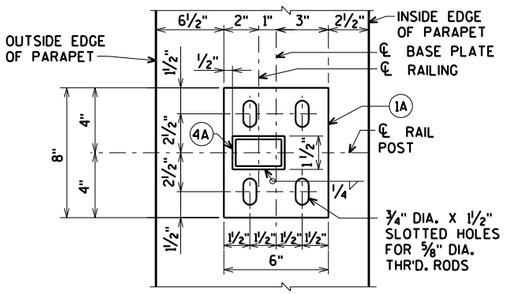
RAIL POST SHIM DETAIL

(2 SETS PER POST)



ANCHOR PLATE

FOR 3" X 1½" X 3/16" POSTS (4A)



TYP. RAIL POST BASE PLATE

FOR 3" X 1½" X 3/16" POSTS (4A)

LEGEND

(1A) PLATE ⅝" x 6" x 8" WITH ¾" x 1½" SLOTTED HOLES.

(2A) ¼" x 5" x 7" ANCHOR PLATE WITH 1 1/16" DIA. HOLES FOR THR'D. RODS NO. 3.

(3) ⅝" DIA. x 9" LONG, TYPE 316 STAINLESS STEEL THR'D. 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 502.2.12 OF THE STANDARD SPECIFICATIONS.

(4A) STRUCTURAL TUBING 3" x 1½" 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 JOINTS.

(6A) BAR 1" x 1" PICKETS. WELD TO NO. 5. (SPACE AT 6" MAX. ℄ TO ℄ SPACING). PLACE VERTICAL.

(7) BAR 1" x 1". BEND TO REQUIRED RADIUS. WELD TO NO. 4 & 5.

(9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.)

NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C3" 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 ASTM A709 GRADE 36. 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 GREY 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 SHAL 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.

⊗ PLASTIC WASHERS USED TO SEPARATE S.S. WASHER AND GALVANIZED STEEL ANCHOR PLATE.

WORK THIS SHEET WITH SHEET 4.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-36-900

DRAWN BY CLS | PLANS CK'D. CBM

RAILING STEEL TYPE C3 DETAILS

SHEET 5 OF 5
513

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

EARTHWORK - USH 10 / STH 42

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
131+75	148.83	1.29					
132+00	154.59	0.39	140	1	140	1	139
132+25	153.90	0.20	143	0	283	1	282
132+50	161.66	0.02	146	0	429	2	428
132+75	176.72	0.01	157	0	586	2	584
133+00	188.12	0.00	169	0	755	2	753
133+25	194.16	0.01	177	0	932	2	930
133+50	179.48	3.90	173	2	1,105	4	1,101
133+75	234.01	2.53	191	3	1,296	8	1,288
134+00	182.62	3.24	193	3	1,489	11	1,478
134+25	185.69	0.27	171	2	1,660	14	1,646
134+50	288.90	0.01	220	0	1,879	14	1,866
134+75	229.88	0.00	240	0	2,120	14	2,106
135+00	185.63	0.00	192	0	2,312	14	2,298
135+25	133.44	24.03	148	11	2,460	29	2,431
135+50	129.26	24.99	122	23	2,581	59	2,523
135+75	130.02	19.13	120	20	2,701	86	2,615
136+00	125.09	21.04	118	19	2,819	111	2,709
136+25	124.58	13.85	116	16	2,935	132	2,803
136+50	231.99	14.72	165	13	3,100	150	2,950
136+75	135.49	16.18	170	14	3,270	169	3,101
137+00	137.01	13.23	126	14	3,396	187	3,210
137+25	142.85	10.99	130	11	3,526	202	3,324
137+50	146.70	10.28	134	10	3,660	215	3,445
137+75	146.57	10.22	136	9	3,796	228	3,568
138+00	146.81	9.41	136	9	3,932	240	3,692
138+25	146.23	8.97	136	9	4,067	251	3,816
138+50	154.37	5.77	139	7	4,207	260	3,946
138+75	163.57	2.75	147	4	4,354	265	4,088
139+00	190.87	0.00	164	1	4,518	267	4,251
139+25	191.89	0.00	177	0	4,695	267	4,428
139+50	196.38	0.00	180	0	4,875	267	4,608
139+75	196.05	0.00	182	0	5,056	267	4,789
140+00	196.30	0.00	182	0	5,238	267	4,971
140+25	196.39	0.00	182	0	5,420	267	5,153
140+50	199.90	0.00	183	0	5,603	267	5,336
140+75	196.73	0.01	184	0	5,787	267	5,520
141+00	189.83	0.21	179	0	5,966	267	5,699
141+25	184.59	0.00	173	0	6,139	267	5,872
141+50	284.72	0.00	217	0	6,357	267	6,089
141+75	227.55	0.00	237	0	6,594	267	6,326
142+00	161.57	1.14	180	1	6,774	268	6,506
142+25	177.27	1.14	157	1	6,931	269	6,661
142+50	182.33	0.49	166	1	7,097	270	6,827
142+75	185.48	0.30	170	0	7,267	271	6,997

EARTHWORK - USH 10 / STH 42 (CONTINUED)

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
143+00	187.87	0.35	173	0	7,440	271	7,169
143+25	192.18	0.01	176	0	7,616	271	7,345
143+50	186.92	0.20	176	0	7,792	272	7,520
143+75	186.63	0.37	173	0	7,965	272	7,693
144+00	194.62	0.07	177	0	8,141	272	7,869
144+25	192.83	0.05	179	0	8,321	272	8,048
144+50	191.62	0.23	178	0	8,499	272	8,226
144+75	186.68	0.30	175	0	8,674	273	8,401
145+00	190.11	0.03	174	0	8,848	273	8,575
145+25	217.86	0.18	189	0	9,037	273	8,764
145+50	170.99	0.18	180	0	9,217	273	8,944
145+75	183.00	0.26	164	0	9,381	274	9,107
146+00	189.80	0.08	173	0	9,554	274	9,280
146+25	194.51	0.00	178	0	9,731	274	9,458
146+50	198.18	0.00	182	0	9,913	274	9,639
146+75	201.51	0.00	185	0	10,098	274	9,824
147+00	204.66	0.00	188	0	10,286	274	10,013
147+25	200.03	0.00	187	0	10,474	274	10,200
147+50	190.99	0.00	181	0	10,655	274	10,381
147+75	180.16	0.44	172	0	10,827	274	10,552
148+00	122.99	1.13	140	1	10,967	275	10,692
148+25	290.43	0.00	191	1	11,158	276	10,883
148+50	233.18	0.00	242	0	11,401	276	11,125
148+75	195.12	0.01	198	0	11,599	276	11,323
149+00	215.03	0.91	190	0	11,789	276	11,513
149+25	218.09	0.38	201	1	11,989	277	11,712
149+50	209.03	0.31	198	0	12,187	278	11,910
149+75	197.65	0.94	188	1	12,375	278	12,097
150+00	189.74	0.96	179	1	12,555	279	12,275
150+25	187.63	1.27	175	1	12,729	281	12,449
150+50	181.95	2.04	171	2	12,901	283	12,618
150+75	179.45	2.00	167	2	13,068	285	12,782
151+00	174.62	1.93	164	2	13,232	288	12,944
151+25	244.94	0.00	194	1	13,426	289	13,137
151+50	364.85	0.00	282	0	13,708	289	13,419
151+75	231.53	0.00	276	0	13,984	289	13,695
152+00	123.77	1.25	164	1	14,149	290	13,859
152+25	130.24	2.71	118	2	14,267	292	13,974
			14,267	220			

Notes:	
1 - Cut	Cut includes existing aspahlt and concrete
2 - Fill	Unexpanded
3 - Mass Ordinate	Cut - (Fill * Fill Factor)

EARTHWORK - N 13TH ST

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
9+35	85.00	0.00					
9+50	90.20	1.29	49	0	49	0	49
			49	0			

EARTHWORK - MENASHA AVE (SOUTH)

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
8+85	103.04	0.00					
9+00	103.12	0.57	57	0	57	0	57
9+25	103.29	3.00	96	2	153	2	150
9+50	53.79	6.25	73	4	226	8	217
9+75	61.33	8.13	53	7	279	17	262
9+77.6	61.85	0.71	6	0	285	17	268
			285	13			

EARTHWORK - MENASHA AVE (NORTH)

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
10+43.7	71.49	10.83					
10+61	164.72	5.88	76	5	76	7	69
10+75	161.14	3.73	84	2	160	10	150
11+00	148.29	4.44	143	4	303	15	288
11+25	141.33	2.54	134	3	437	20	418
11+50	136.04	0.99	128	2	566	22	544
11+75	129.54	0.36	123	1	689	23	666
12+00	127.05	0.67	119	0	808	23	784
12+10.5	124.91	0.22	49	0	857	24	833
			857	18			

EARTHWORK - N 12TH ST (SOUTH)

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
8+15	83.94	0.70					
8+25	74.58	0.07	29	0	29	0	29
8+50	178.15	0.00	117	0	146	0	146
8+75	109.83	0.00	133	0	280	0	279
9+00	122.11	0.00	107	0	387	0	387
9+25	102.28	5.07	104	2	491	3	488
9+49	100.06	5.26	90	5	581	9	572
			581	7			

EARTHWORK - N 12TH ST (NORTH)

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
10+75	91.80	0.47					
10+85	89.52	0.19	34	0	34	0	34
			34	0			

EARTHWORK - N 11TH ST (SOUTH)

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
9+35	104.38	0.00					
9+49	106.11	0.00	55	0	55	0	55
			55	0			

EARTHWORK - N 11TH ST (NORTH)

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
10+80	107.83	0.10					
11+00	112.64	0.00	82	0	82	0	82
			82	0			

Notes:	
1 - Cut	Cut includes existing aspahlt and concrete
2 - Fill	Unexpanded
3 - Mass Ordinate	Cut - (Fill * Fill Factor)

EARTHWORK - N 10TH ST

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
9+35	94.30	0.06					
9+49	101.52	0.00	51	0	51	0	51
			51	0			

EARTHWORK - N 9TH ST (SOUTH)

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
9+00	85.01	0.13					
9+25	107.65	0.00	89	0	89	0	89
9+49	116.40	0.00	100	0	189	0	189
			189	0			

EARTHWORK - N 9TH ST (NORTH)

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
10+75	106.56	0.00					
11+00	90.66	0.60	91	0	91	0	91
11+25	80.82	1.03	79	1	171	1	170
			171	1			

EARTHWORK - N 8TH ST (SOUTH)

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
8+50	103.78	0.00					
8+75	105.40	0.36	97	0	97	0	97
9+00	112.99	0.37	101	0	198	1	197
9+25	133.94	0.34	114	0	312	1	311
9+39	141.14	0.00	71	0	384	1	382
9+50	57.59	0.03	40	0	424	1	423
			424	1			

EARTHWORK - N 8TH ST (NORTH)

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
10+85	122.55	0.64					
11+00	122.94	0.14	68	0	68	0	68
11+25	120.72	0.19	113	0	181	0	181
11+50	115.95	0.00	110	0	291	1	290
			291	0			

Notes:	
1 - Cut	Cut includes existing aspahlt and concrete
2 - Fill	Unexpanded
3 - Mass Ordinate	Cut - (Fill * Fill Factor)

EARTHWORK - STH 42

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
152+25	130.24	2.71					
152+50	139.78	1.02	125	2	125	2	123
152+75	134.00	3.04	127	2	252	5	247
153+00	131.93	4.47	123	3	375	9	365
153+25	127.77	4.02	120	4	495	14	481
153+50	133.41	1.36	121	2	616	18	598
153+75	133.84	1.52	124	1	740	19	720
154+00	144.24	1.00	129	1	869	21	847
154+25	140.00	0.73	132	1	1,000	22	978
154+50	146.07	0.19	132	0	1,133	23	1,110
154+75	144.71	0.27	135	0	1,267	23	1,244
155+00	139.63	1.19	132	1	1,399	24	1,375
155+25	129.12	1.84	124	1	1,523	26	1,498
155+50	201.25	0.00	153	1	1,676	27	1,649
155+75	144.79	0.00	160	0	1,836	27	1,810
156+00	159.49	1.14	141	1	1,977	28	1,950
156+25	253.28	0.00	191	1	2,168	28	2,140
156+50	125.51	0.00	175	0	2,344	28	2,315
156+75	140.82	0.60	123	0	2,467	29	2,438
157+00	148.04	1.83	134	1	2,601	30	2,571
157+25	142.84	2.29	135	2	2,735	33	2,703
157+50	139.35	2.52	131	2	2,866	36	2,830
157+75	136.82	3.73	128	3	2,994	39	2,954
158+00	136.01	3.06	126	3	3,120	44	3,077
158+25	136.55	5.02	126	4	3,246	49	3,198
158+50	140.70	2.46	128	3	3,375	53	3,322
158+75	141.10	1.65	130	2	3,505	56	3,449
159+00	154.03	0.15	137	1	3,642	57	3,585
159+25	149.43	2.88	140	1	3,782	59	3,724
159+50	125.85	2.58	127	3	3,910	62	3,848
159+75	269.86	0.00	183	1	4,093	64	4,029
160+00	219.78	0.00	227	0	4,320	64	4,256
160+25	115.03	2.72	155	1	4,475	65	4,409
160+50	133.74	4.69	115	3	4,590	70	4,520
160+75	134.58	3.96	124	4	4,714	75	4,639
161+00	132.28	5.55	124	4	4,838	81	4,757
161+25	133.38	5.69	123	5	4,961	88	4,873
161+50	134.83	5.30	124	5	5,085	95	4,990
161+75	138.45	5.61	127	5	5,211	101	5,110
162+00	137.86	3.95	128	4	5,339	107	5,232

EARTHWORK - STH 42 (CONTINUED)

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
162+25	139.71	4.71	129	4	5,468	113	5,355
162+50	137.29	4.58	128	4	5,596	118	5,478
162+75	136.42	4.42	127	4	5,723	124	5,599
163+00	127.40	2.78	122	3	5,845	128	5,716
163+25	133.59	0.64	121	2	5,966	131	5,835
163+50	206.23	0.67	157	1	6,123	131	5,992
163+75	166.94	0.84	173	1	6,296	132	6,163
164+00	133.18	3.87	139	2	6,435	135	6,300
164+25	133.51	5.27	123	4	6,558	141	6,417
164+50	135.15	4.83	124	5	6,683	147	6,536
164+75	137.42	5.20	126	0	6,809	147	6,662
165+00	138.08	6.12	128	5	6,936	154	6,782
165+25	137.55	3.51	128	4	7,064	160	6,904
165+50	139.06	4.01	128	3	7,192	165	7,027
165+75	139.80	5.42	129	4	7,321	170	7,151
166+00	135.90	6.10	128	5	7,449	177	7,271
166+25	136.04	4.19	126	5	7,575	184	7,391
166+50	133.54	3.78	125	4	7,699	189	7,511
166+75	136.07	4.75	125	4	7,824	194	7,630
167+00	132.34	4.79	124	4	7,948	200	7,749
167+25	137.43	4.47	125	4	8,073	206	7,868
167+50	134.14	5.62	126	5	8,199	212	7,987
167+75	132.87	4.85	124	5	8,323	218	8,105
168+00	133.36	7.89	123	6	8,446	226	8,220
168+25	134.03	6.88	124	7	8,570	235	8,335
168+50	136.09	4.86	125	5	8,695	242	8,452
168+75	139.75	5.14	128	5	8,822	248	8,574
169+00	137.72	3.46	128	4	8,951	254	8,697
169+25	145.05	3.56	131	3	9,082	258	8,824
169+50	147.68	3.59	136	3	9,217	262	8,955
169+75	142.67	3.12	134	3	9,352	267	9,085
170+00	143.61	3.07	133	3	9,484	270	9,214
170+25	150.70	0.55	136	2	9,621	273	9,348
170+50	148.51	0.61	139	1	9,759	273	9,486
170+75	156.71	0.39	141	0	9,900	274	9,626
171+00	155.46	0.55	145	0	10,045	275	9,770
171+25	150.57	0.44	142	0	10,187	275	9,911
171+50	149.40	0.51	139	0	10,325	276	10,050
171+75	150.46	0.26	139	0	10,464	276	10,188
172+00	149.19	0.43	139	0	10,603	277	10,326

Notes:	
1 - Cut	Cut includes existing aspahlt and concrete
2 - Fill	Unexpanded
3 - Mass Ordinate	Cut - (Fill * Fill Factor)

EARTHWORK - STH 42 (CONTINUED)

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) Cut Note 1	Incremental Vol (CY) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
172+25	150.55	1.05	139	0	10,742	277	10,465
172+50	152.10	0.69	140	1	10,882	278	10,604
172+75	153.56	0.00	142	0	11,023	278	10,745
173+00	154.19	0.09	142	0	11,166	278	10,888
173+25	150.34	4.85	141	2	11,307	281	11,026
173+50	151.12	12.72	140	8	11,446	292	11,154
173+75	147.50	13.11	138	12	11,585	308	11,277
174+00	146.94	1.43	136	7	11,721	317	11,404
174+25	146.26	0.52	136	1	11,857	318	11,539
174+50	142.95	1.02	134	1	11,991	319	11,672
174+75	138.81	1.80	130	1	12,121	321	11,800
175+00	133.35	2.73	126	2	12,247	324	11,923
175+25	129.20	4.04	122	3	12,369	328	12,041
175+50	131.79	3.35	121	3	12,489	332	12,157
175+75	136.71	2.97	124	3	12,614	336	12,278
176+00	143.45	1.77	130	2	12,743	339	12,404
176+25	148.19	1.94	135	2	12,878	341	12,537
176+50	154.44	1.12	140	1	13,019	343	12,675
176+75	160.17	1.17	146	1	13,164	345	12,820
177+00	163.58	0.75	150	1	13,314	346	12,968
177+25	166.59	0.54	153	1	13,467	347	13,120
177+50	164.08	0.66	153	1	13,620	347	13,273
177+75	163.74	0.35	152	0	13,772	348	13,424
178+00	164.62	0.04	152	0	13,924	348	13,576
178+25	166.30	0.00	153	0	14,077	348	13,729
178+50	166.09	0.00	154	0	14,231	348	13,883
178+75	168.15	0.04	155	0	14,386	348	14,037
179+00	173.77	0.00	158	0	14,544	348	14,196
179+25	184.51	0.00	166	0	14,710	348	14,362
179+50	172.46	0.03	165	0	14,875	348	14,527
179+75	173.91	0.00	160	0	15,036	348	14,687
180+00	170.99	0.10	160	0	15,195	348	14,847
180+25	170.32	0.00	158	0	15,353	349	15,005
180+50	170.62	0.00	158	0	15,511	349	15,163
181+00	150.35	2.19	297	2	15,808	351	15,457
181+25	138.11	3.44	134	3	15,942	355	15,587
181+50	127.69	7.51	123	5	16,065	361	15,703
181+75	124.48	8.49	117	7	16,182	371	15,810
182+00	122.55	7.89	114	8	16,296	381	15,915
182+25	123.57	6.66	114	0	16,410	381	16,029

EARTHWORK - STH 42 (CONTINUED)

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
182+50	120.06	10.38	113	8	16,523	392	16,131
182+75	117.18	13.76	110	11	16,633	407	16,226
183+00	119.51	13.68	110	13	16,742	424	16,318
183+25	118.22	14.59	110	13	16,852	441	16,411
183+50	117.64	15.79	109	14	16,961	460	16,502
183+75	112.37	17.40	106	15	17,068	480	16,588
184+00	131.19	5.97	113	11	17,181	495	16,686
184+25	194.49	10.45	151	8	17,331	505	16,827
184+50	147.88	9.56	159	9	17,490	517	16,973
184+75	115.70	16.87	122	12	17,612	533	17,079
185+00	125.21	21.34	112	18	17,723	557	17,167
185+25	133.13	18.36	120	18	17,843	581	17,262
185+50	134.51	14.72	124	15	17,967	602	17,365
185+75	137.97	10.75	126	12	18,093	617	17,476
			18,093	464			

Notes:	
1 - Cut	Cut includes existing aspahlt and concrete
2 - Fill	Unexpanded
3 - Mass Ordinate	Cut - (Fill * Fill Factor)

EARTHWORK - STH 42 'EB'

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
186+00	68.65	1.47					
186+25	68.97	0.01	64	1	64	1	63
186+50	69.53	0.39	64	0	128	1	127
186+75	71.14	3.65	65	2	193	4	189
187+00	72.06	10.71	66	7	259	12	247
187+25	70.69	17.44	66	13	325	30	296
187+50	67.25	29.20	64	22	389	59	331
187+75	61.33	43.55	60	34	449	103	345
188+00	43.08	93.91	48	64	497	188	309
188+25	27.25	119.45	33	99	530	319	210
188+50	19.54	127.80	22	114	551	472	80
188+75	21.81	156.34	19	132	570	647	-76
188+96.86 ROUNDABOUT	25.91	139.53	19	120	590	806	-216
190+44.26	33.45	0.00	0	0	590	806	-216
190+50	38.89	0.00	8	0	597	806	-208
190+75	46.32	61.62	39	29	637	844	-207
191+00	63.34	58.67	51	56	688	918	-230
191+25	79.35	51.24	66	51	754	986	-232
191+50	85.05	33.11	76	39	830	1,037	-208
191+75	89.49	16.27	81	23	911	1,068	-157
192+00	93.10	8.38	85	11	995	1,083	-88
192+25	85.22	6.35	83	7	1,078	1,092	-14
192+50	80.61	5.66	77	6	1,154	1,100	55
192+75	77.44	5.88	73	5	1,228	1,107	121
193+00	74.93	9.44	71	7	1,298	1,116	182
193+25	76.99	5.38	70	7	1,369	1,125	243
193+50	81.61	3.32	73	4	1,442	1,131	311
193+75	86.43	2.20	78	3	1,520	1,134	386
194+00	88.73	1.08	81	2	1,601	1,136	465
194+25	89.07	0.91	82	1	1,683	1,137	546
194+50	94.57	0.82	85	1	1,768	1,138	630
194+75	95.65	1.07	88	1	1,856	1,139	717
194+88.66	87.85	0.00	46	0	1,903	1,140	763
			1,903	857			

EARTHWORK - STH 42 'WB'

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
186+00	77.94	5.33					
186+25	82.98	2.80	75	4	75	5	69
186+50	83.83	3.04	77	3	152	9	143
186+75	81.21	3.09	76	3	228	12	216
187+00	80.46	4.22	75	3	303	17	286
187+25	82.69	4.37	76	4	379	22	356
187+50	71.85	5.01	72	4	450	28	422
187+75	63.74	7.24	63	6	513	35	477
188+00	51.82	15.43	53	10	566	49	517
188+25	52.75	20.04	48	16	615	71	543
188+50	54.25	34.20	50	25	664	105	560
188+75	66.72	48.34	56	38	720	156	565
189+00	73.21	4.07	65	24	785	188	597
189+00.95 ROUNDABOUT	73.44	4.10	3	0	788	188	600
190+41.8	11.53	37.62	0	0	788	188	600
190+50	11.66	37.71	4	11	791	203	588
190+75	21.33	51.07	15	41	806	258	549
191+00	33.95	58.42	26	51	832	325	507
191+25	35.17	60.14	32	55	864	398	466
191+50	29.33	55.34	30	53	894	469	425
191+75	25.94	34.41	26	42	919	525	395
192+00	29.01	29.90	25	30	945	564	381
192+25	34.69	27.66	29	27	974	600	375
192+50	40.61	29.83	35	27	1,009	635	374
192+75	51.27	21.85	43	24	1,052	667	385
193+00	58.27	15.89	51	17	1,103	690	412
193+25	70.69	5.74	60	10	1,162	703	459
193+50	82.38	3.27	71	4	1,233	709	524
193+75	91.22	0.61	80	2	1,313	711	602
194+00	94.24	1.22	86	1	1,399	713	687
194+25	107.92	0.38	94	1	1,493	714	779
194+50	39.30	0.00	68	0	1,561	714	847
194+75	39.66	0.00	37	0	1,598	714	884
195+00	41.00	0.00	37	0	1,635	714	921
195+25	36.22	0.00	36	0	1,671	714	957
195+50	39.25	0.00	35	0	1,706	714	992
195+75	37.53	0.00	36	0	1,741	714	1,027
196+00	27.71	0.00	30	0	1,771	714	1,058
196+25	18.72	0.00	21	0	1,793	714	1,079
196+49.62	11.47	0.00	14	0	1,807	714	1,093

Notes:	
1 - Cut	Cut includes existing aspahlt and concrete
2 - Fill	Unexpanded
3 - Mass Ordinate	Cut - (Fill * Fill Factor)

EARTHWORK - W. LINCOLN BLVD (SOUTH)

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
9+10	75.11	0.08					
9+25	68.47	1.79	40	1	40	1	39
9+48.65	62.07	1.98	57	2	97	3	94
			97	3			

EARTHWORK - N 6TH ST (SOUTH)

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
9+35	89.93	0.07					
9+49	93.48	0.75	48	0	48	0	48
			48	0			

EARTHWORK - W. LINCOLN BLVD (NORTH)

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
10+75	75.41	0.00					
10+85	71.37	0.03	27	0	27	0	27
			27	0			

EARTHWORK - N 6TH ST (NORTH)

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
10+75	84.46	0.48					
11+00	86.21	0.27	79	0	79	0	79
			79	0			

EARTHWORK - E. LINCOLN BLVD (SOUTH)

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
9+10	70.91	0.00					
9+25	72.39	0.40	40	0	40	0	40
9+49	75.28	0.41	66	0	105	0	105
			105	0			

EARTHWORK - N 5TH ST

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
10+51	96.58	0.00					
10+60	94.07	0.00	32	0	32	0	32
			32	0			

EARTHWORK - E. LINCOLN BLVD (NORTH)

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
10+75	74.59	0.08					
10+85	77.36	0.02	28	0	28	0	28
			28	0			

Notes:	
1 - Cut	Cut includes existing aspahlt and concrete
2 - Fill	Unexpanded
3 - Mass Ordinate	Cut - (Fill * Fill Factor)

EARTHWORK - ROUNDABOUT CIRCLE

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
00+00	52.50	227.69					
00+25	5.80	232.12	27	213	27	283	-256
00+50	1.89	214.61	4	207	31	558	-528
00+75	15.41	201.00	8	192	39	814	-776
01+25	38.28	196.71	25	184	63	1,059	-996
01+25	30.24	189.32	32	179	95	1,297	-1,202
01+50	49.59	187.61	37	175	132	1,529	-1,397
01+75	60.23	202.85	51	181	183	1,769	-1,586
02+00	35.71	182.75	44	179	227	2,007	-1,779
02+25	44.79	160.83	37	159	265	2,218	-1,954
02+50	39.00	188.30	39	162	303	2,433	-2,130
02+75	0.00	232.49	18	195	321	2,692	-2,371
03+00	63.51	240.64	29	219	351	2,984	-2,633
03+25	92.59	232.49	72	219	423	3,275	-2,852
03+50	109.69	225.32	94	212	517	3,557	-3,040
03+75	55.83	227.22	77	210	593	3,835	-3,242
03+76.99	91.66	228.89	5	17	599	3,858	-3,259
			599	2,901			

EARTHWORK - MARITIME DR, MEDIAN EAST

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
12+50	54.08	0.46					
12+75	55.53	4.21	51	2	51	3	48
13+00	54.63	8.60	51	6	102	11	91
13+25	61.12	10.59	54	9	155	23	133
13+50	62.31	9.30	57	9	212	35	178
13+75	67.86	7.31	60	8	273	45	228
14+00	70.19	2.68	64	5	337	51	285
14+14.67	58.54	1.68	35	1	372	53	319
			372	40			

EARTHWORK - MARITIME DR, NB

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
10+75	140.69	0.41					
11+00	154.83	0.26	137	0	137	0	136
11+25	75.10	0.13	106	0	243	1	243
11+50	82.38	0.02	73	0	316	1	315
11+75	93.10	0.00	81	0	397	1	397
12+00	106.88	0.00	93	0	490	1	489
12+25	114.24	2.24	102	1	592	2	590
12+50	66.37	10.19	84	6	676	10	666
12+75	64.53	23.52	61	16	737	31	706
13+00	58.75	30.57	57	25	794	64	730
13+25	49.14	24.09	50	25	844	98	746
13+50	48.01	11.00	45	16	889	119	769
13+59.2	40.42	12.64	15	4	904	125	779
			904	94			

EARTHWORK - MARITIME DR, SB

STATION	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Fill Note 2	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.33	Mass Ordinate Note 3
11+25	78.81	0.02					
11+50	74.93	0.00	71	0	71	0	71
11+75	67.62	1.00	66	0	137	1	137
12+00	65.90	2.28	62	2	199	3	196
12+25	63.06	12.20	60	7	259	12	247
12+50	72.46	24.91	63	17	321	34	287
12+75	73.32	23.66	67	22	389	64	325
13+00	59.91	45.74	62	32	451	107	344
13+25	48.57	107.34	50	71	501	201	300
13+33.21	35.33	124.73	13	35	514	249	265
			514	187			

Notes:	
1 - Cut	Cut includes existing aspahlt and concrete
2 - Fill	Unexpanded
3 - Mass Ordinate	Cut - (Fill * Fill Factor)

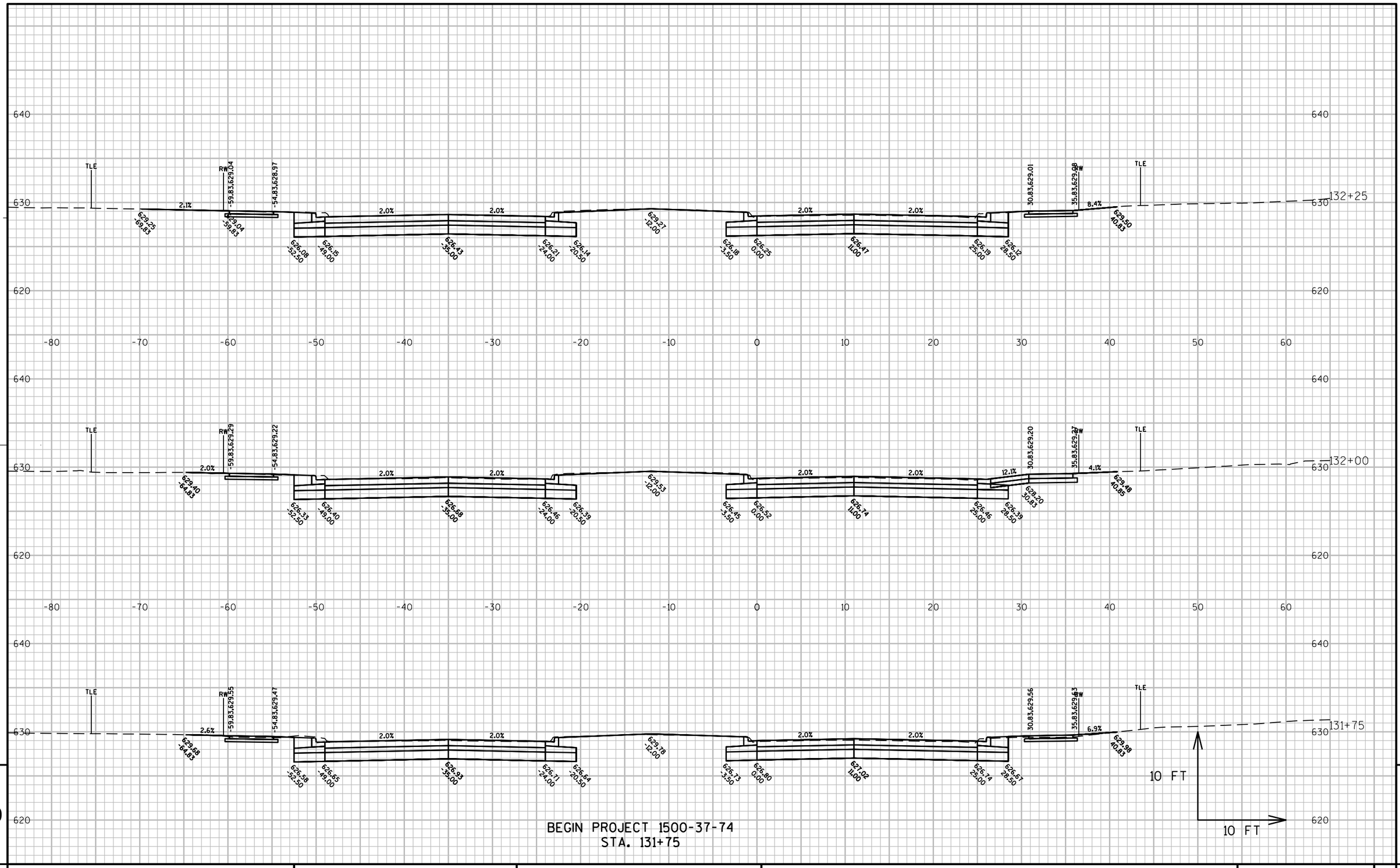
EARTHWORK - BAYSHORE DR (NB)

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
20+00	65.87	10.51					
20+25	66.04	6.60	61	8	61	11	51
20+50	65.67	3.72	61	5	122	17	105
20+69	77.76	3.18	50	2	173	20	152
			173	15			

EARTHWORK - BAYSHORE DR (SB)

	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Cut	Fill	Cut Note 1	Fill Note 2	Cut 1.00 Note 1	Expanded Fill 1.33	Mass Ordinate Note 3
20+00	61.16	0.97					
20+25	77.07	0.00	64	0	64	1	63
20+50	85.54	0.00	75	0	139	1	139
20+69	79.73	0.00	58	0	197	1	197
			197	0			

Notes:	
1 - Cut	Cut includes existing aspahlt and concrete
2 - Fill	Unexpanded
3 - Mass Ordinate	Cut - (Fill * Fill Factor)



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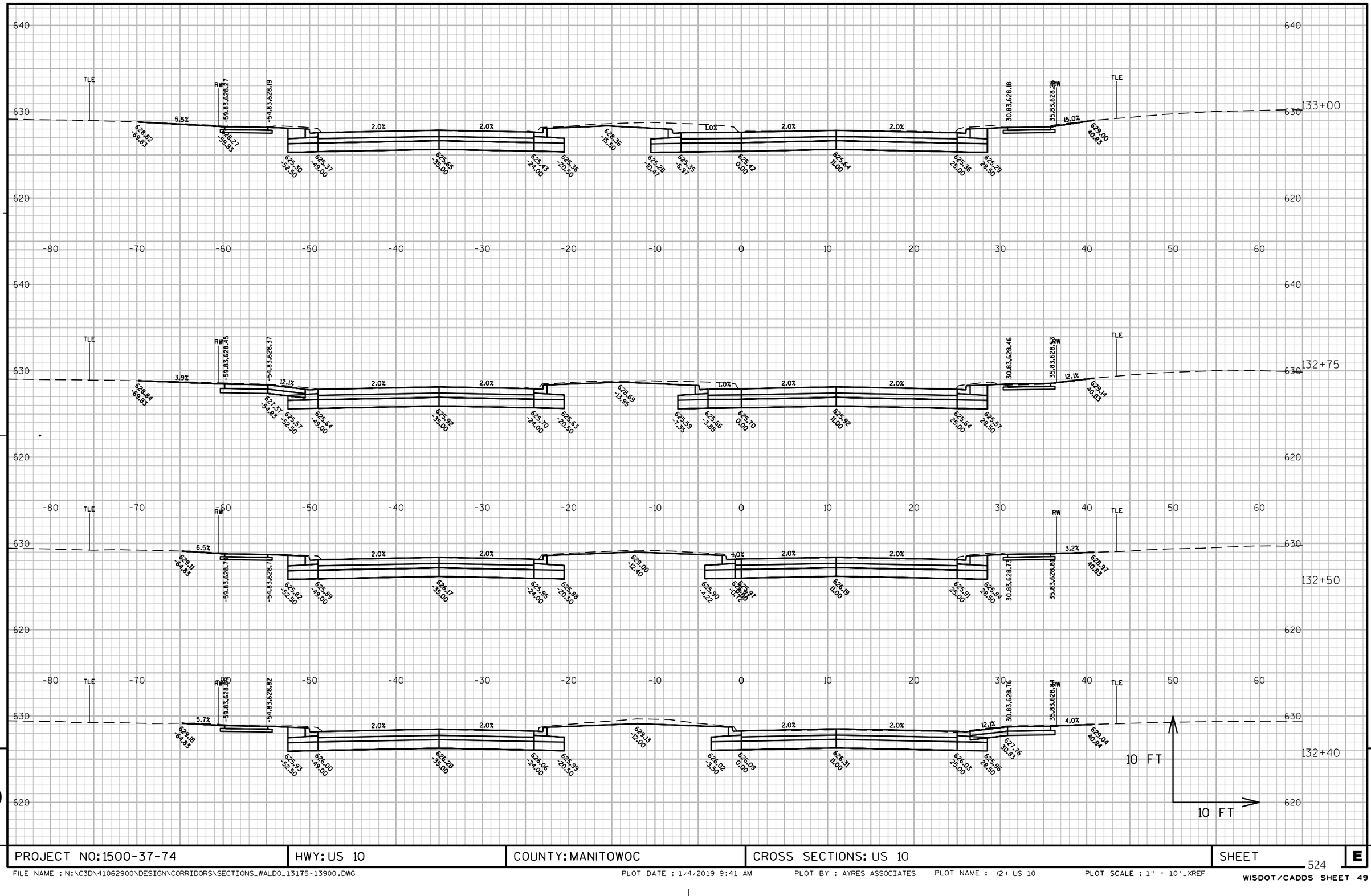
WISDOT/CADDS SHEET 49



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PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET	E

524

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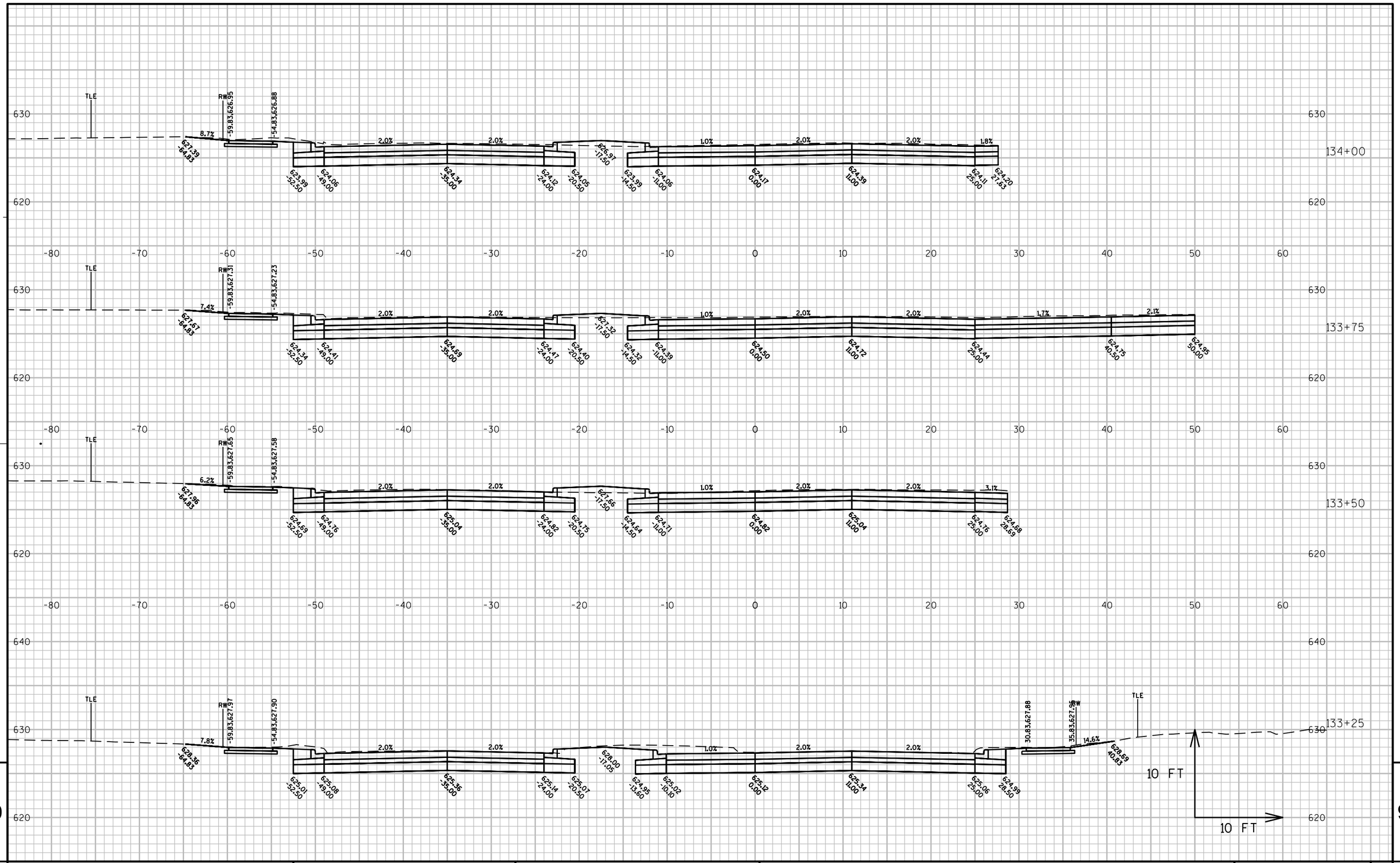
WISDOT/CADDS SHEET 49

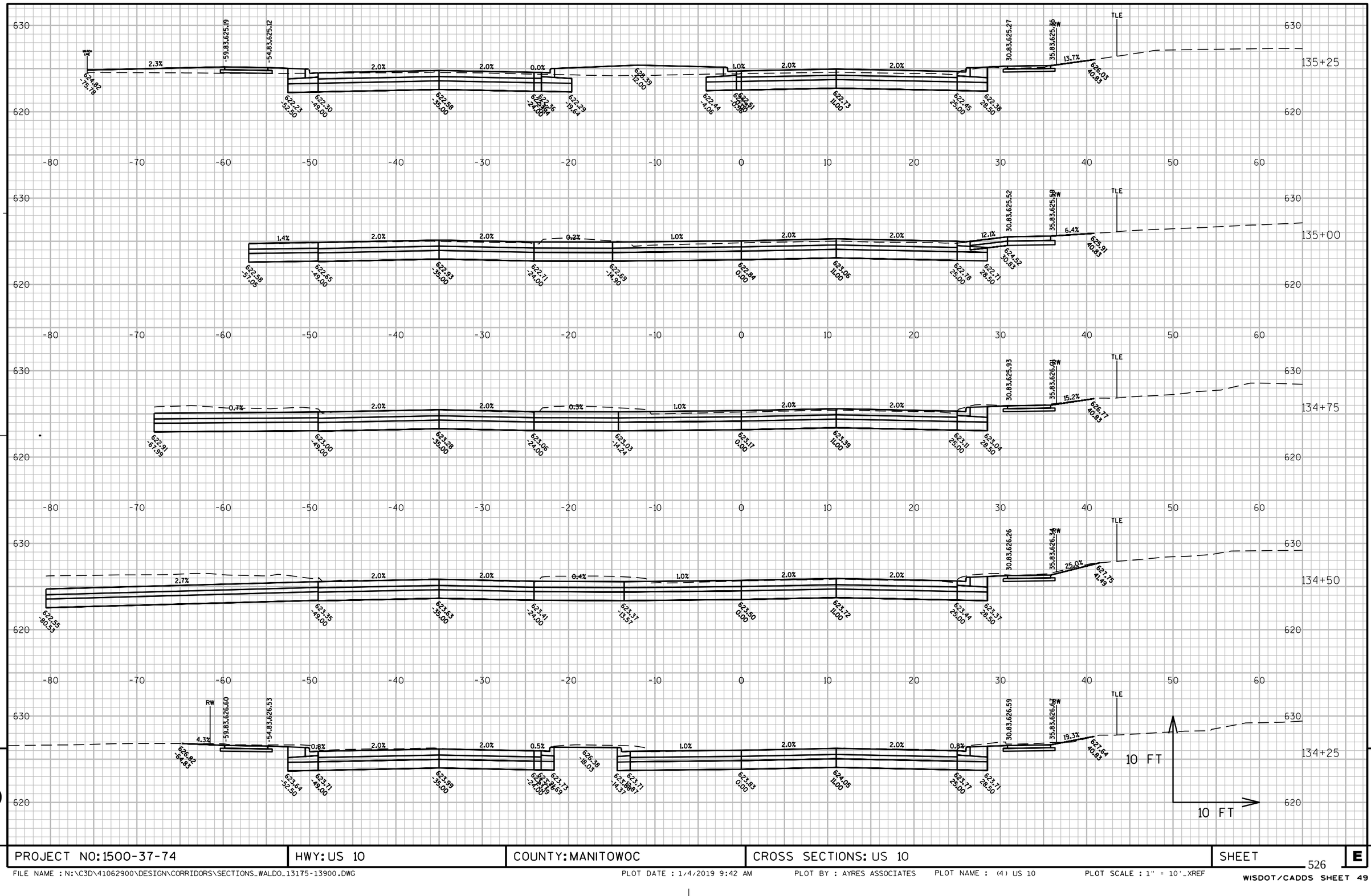
9



PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13175-13900.DWG PLOT DATE : 1/4/2019 9:42 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (3) US 10 PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

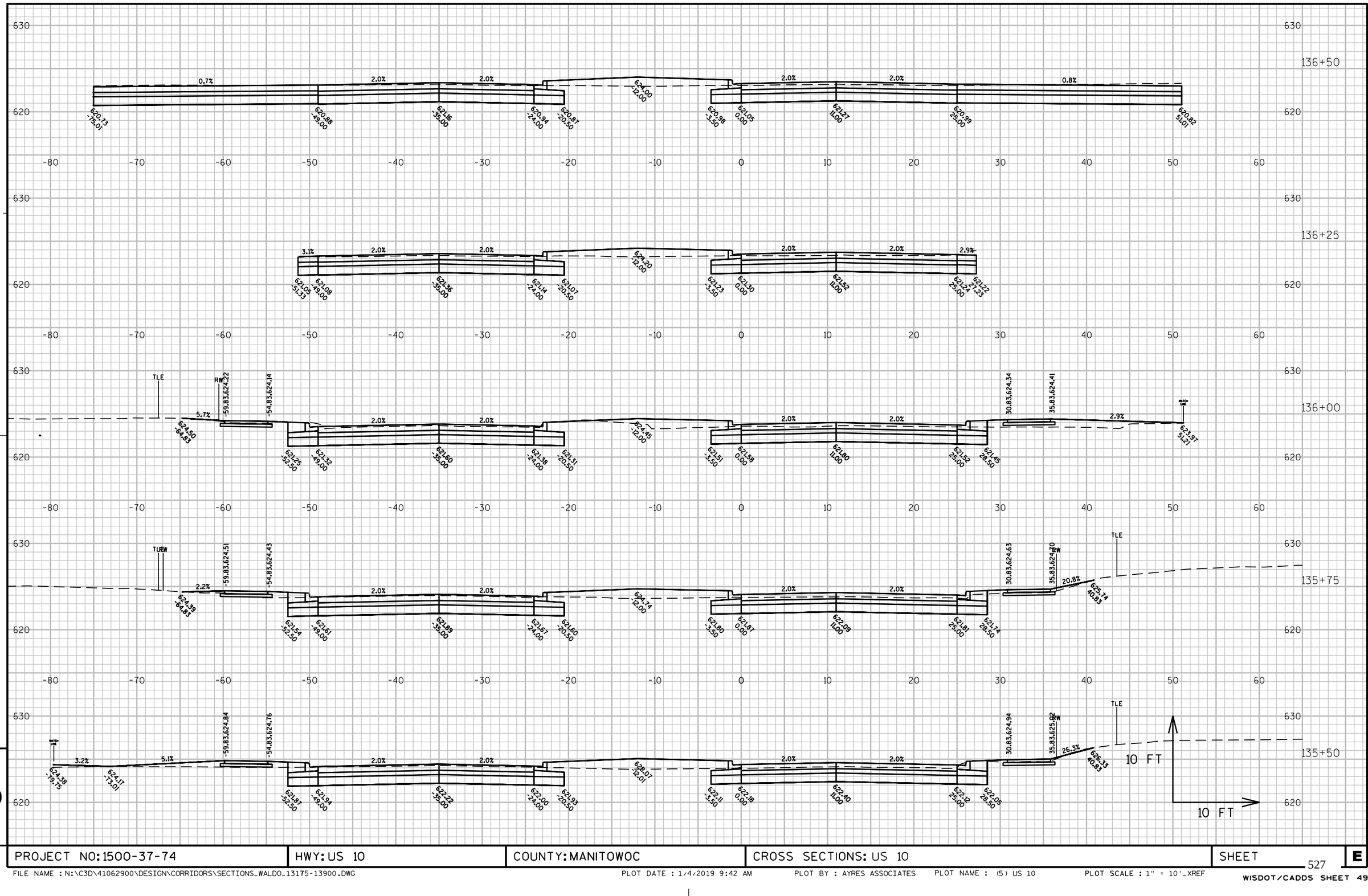


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET	E

9 9

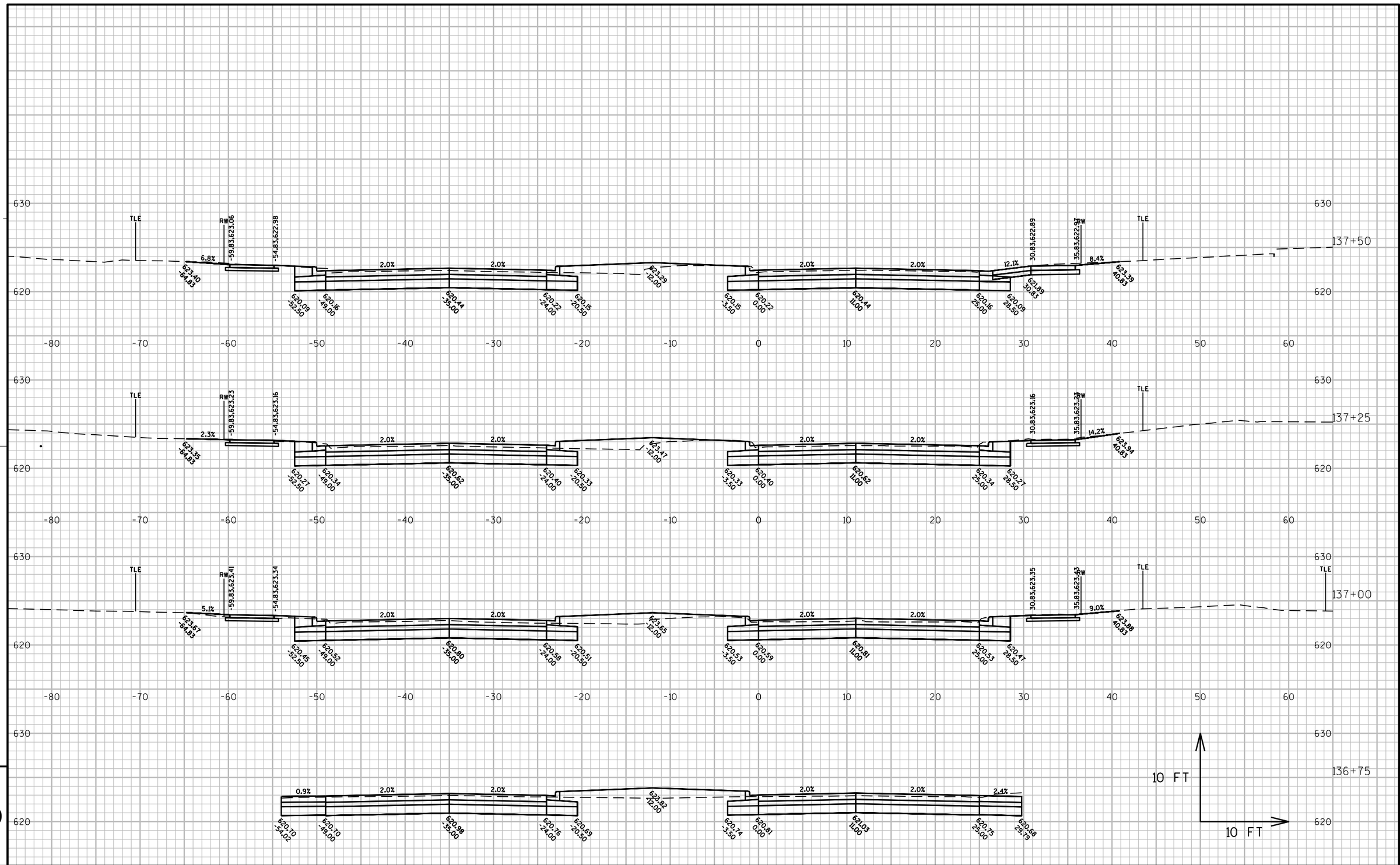
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13175-13900.DWG PLOT DATE : 1/4/2019 9:42 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (4) US 10 PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13175-13900.DWG PLOT DATE : 1/4/2019 9:42 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (5) US 10 PLOT SCALE : 1" = 10'_XREF



PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13175-13900.DWG PLOT DATE : 1/4/2019 9:42 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (6) US 10 PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

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PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET	E

529

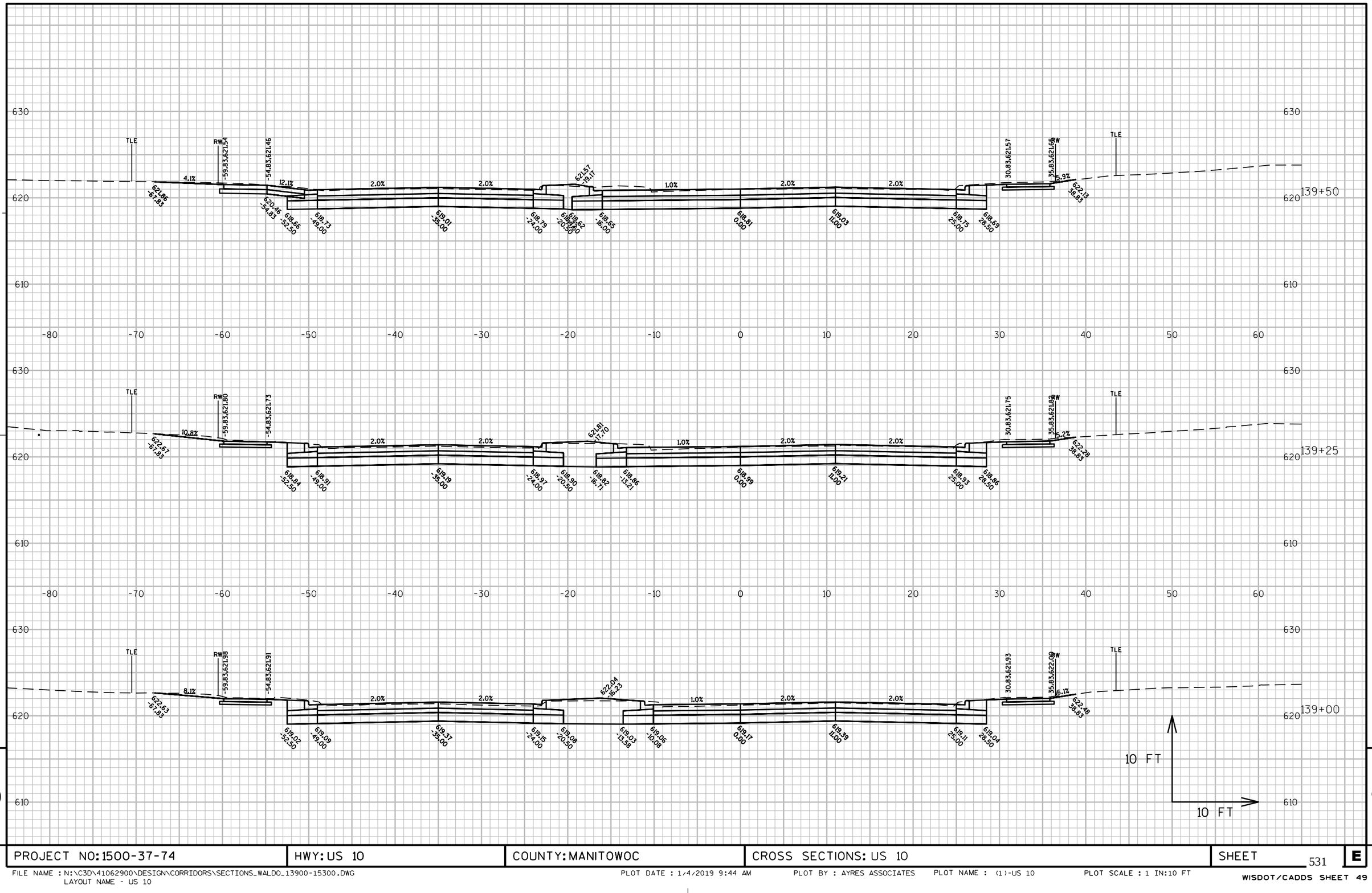
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13175-13900.DWG PLOT DATE : 1/4/2019 9:42 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (7) US 10 PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 530	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13175-13900.DWG PLOT DATE : 1/4/2019 9:43 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (8) US 10 PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

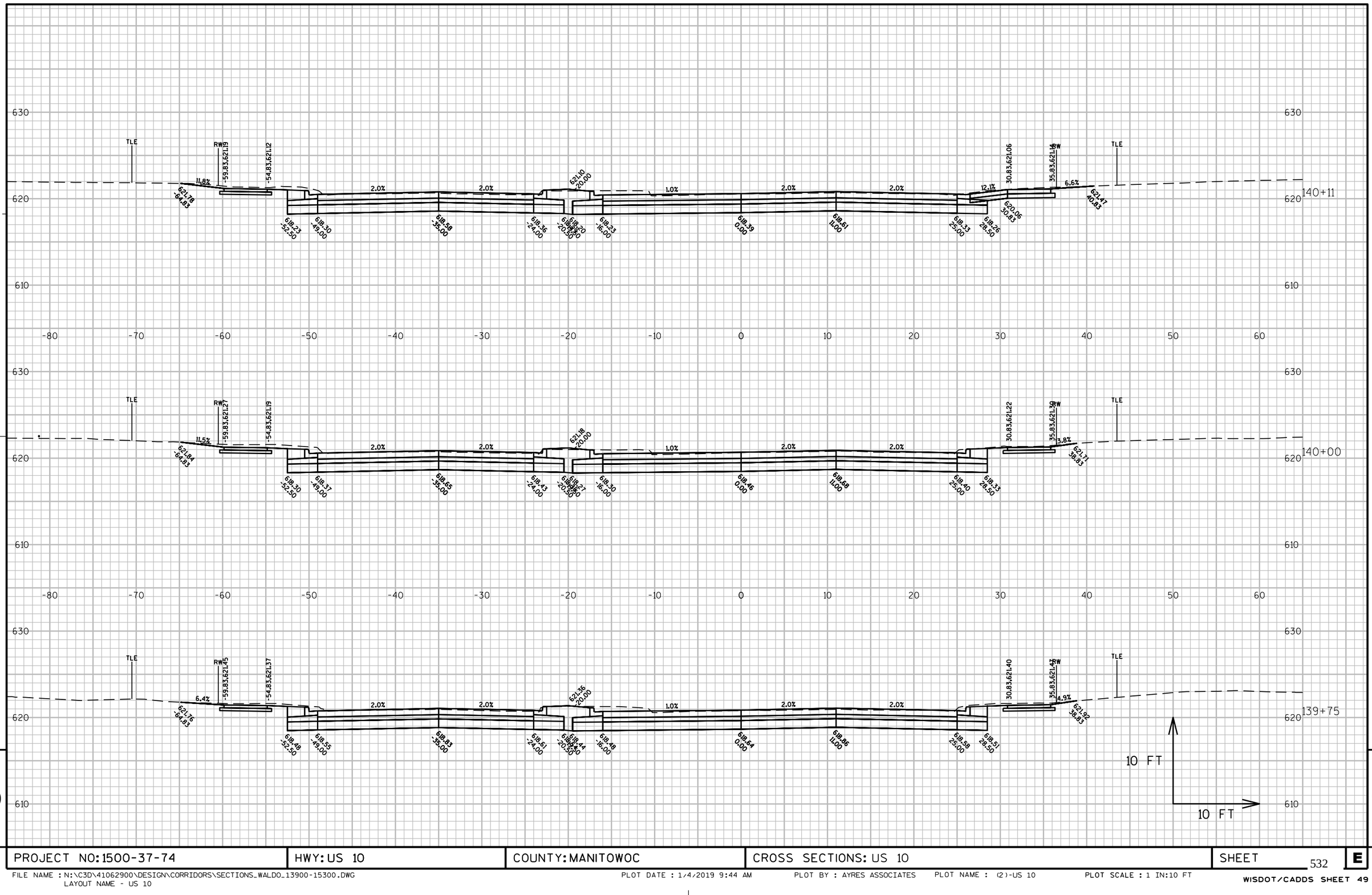


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 531	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:44 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1)-US 10 PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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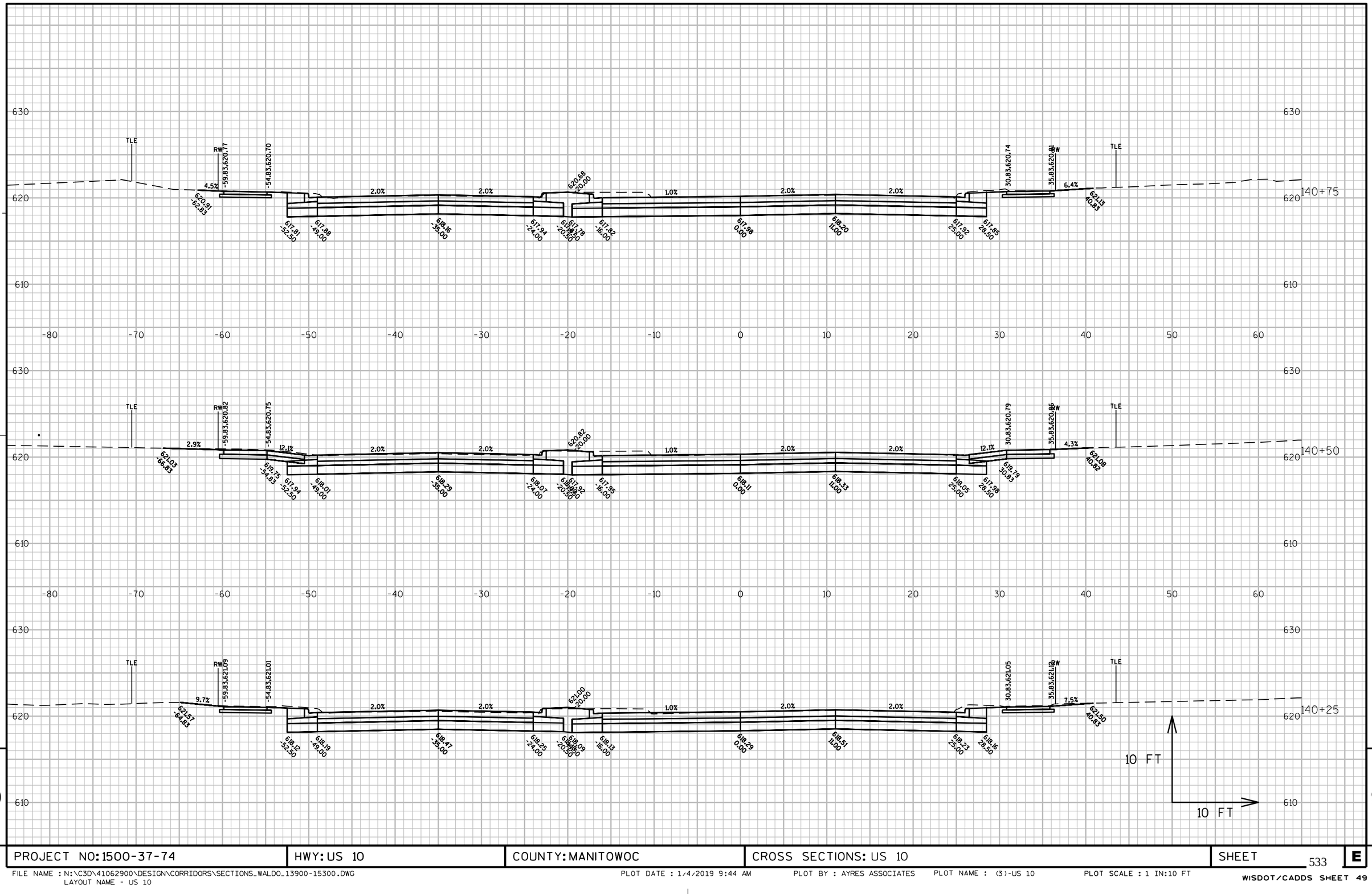
PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 532	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:44 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2)-US 10 PLOT SCALE : 1 IN:10 FT



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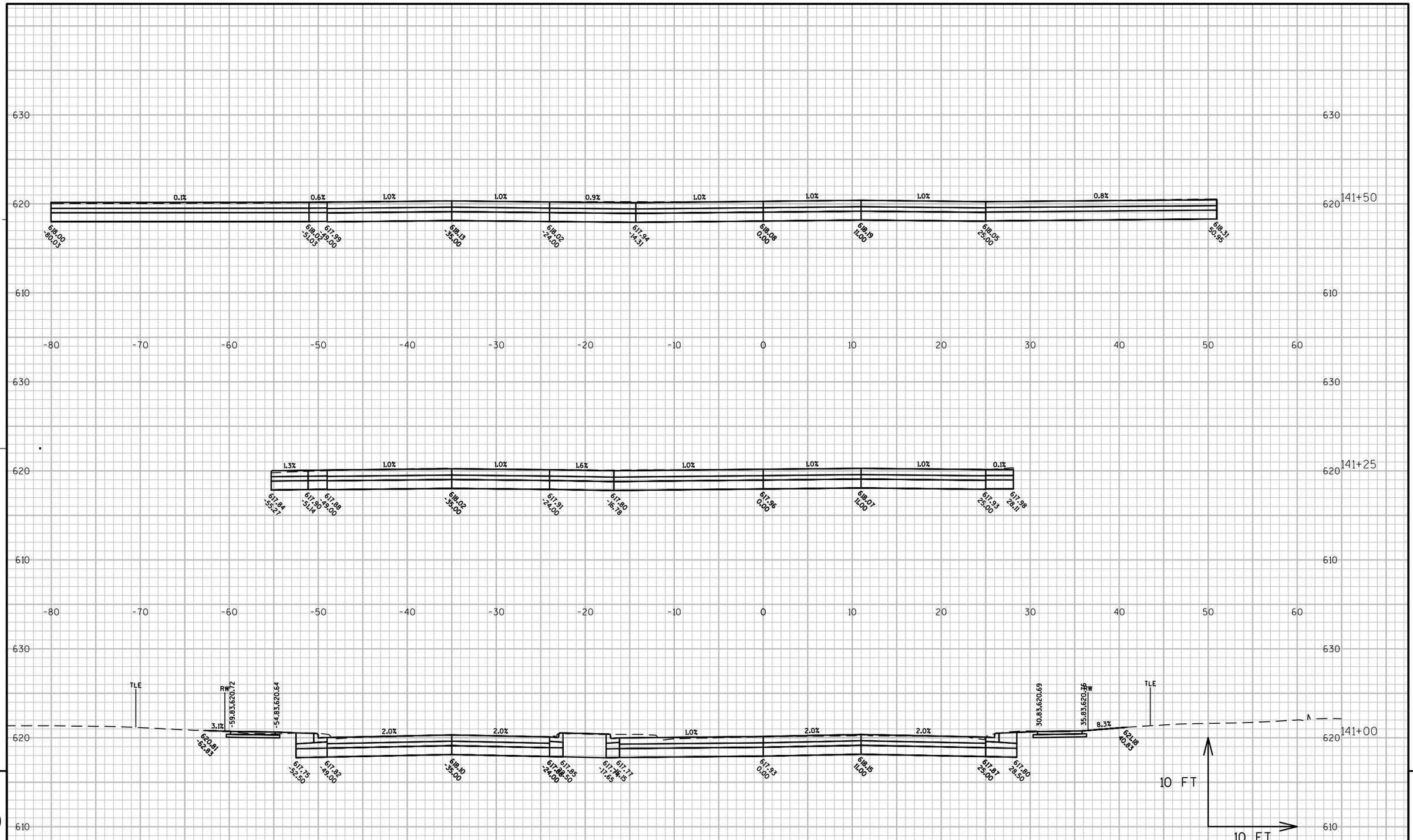
PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 533	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:44 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (3)-US 10 PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

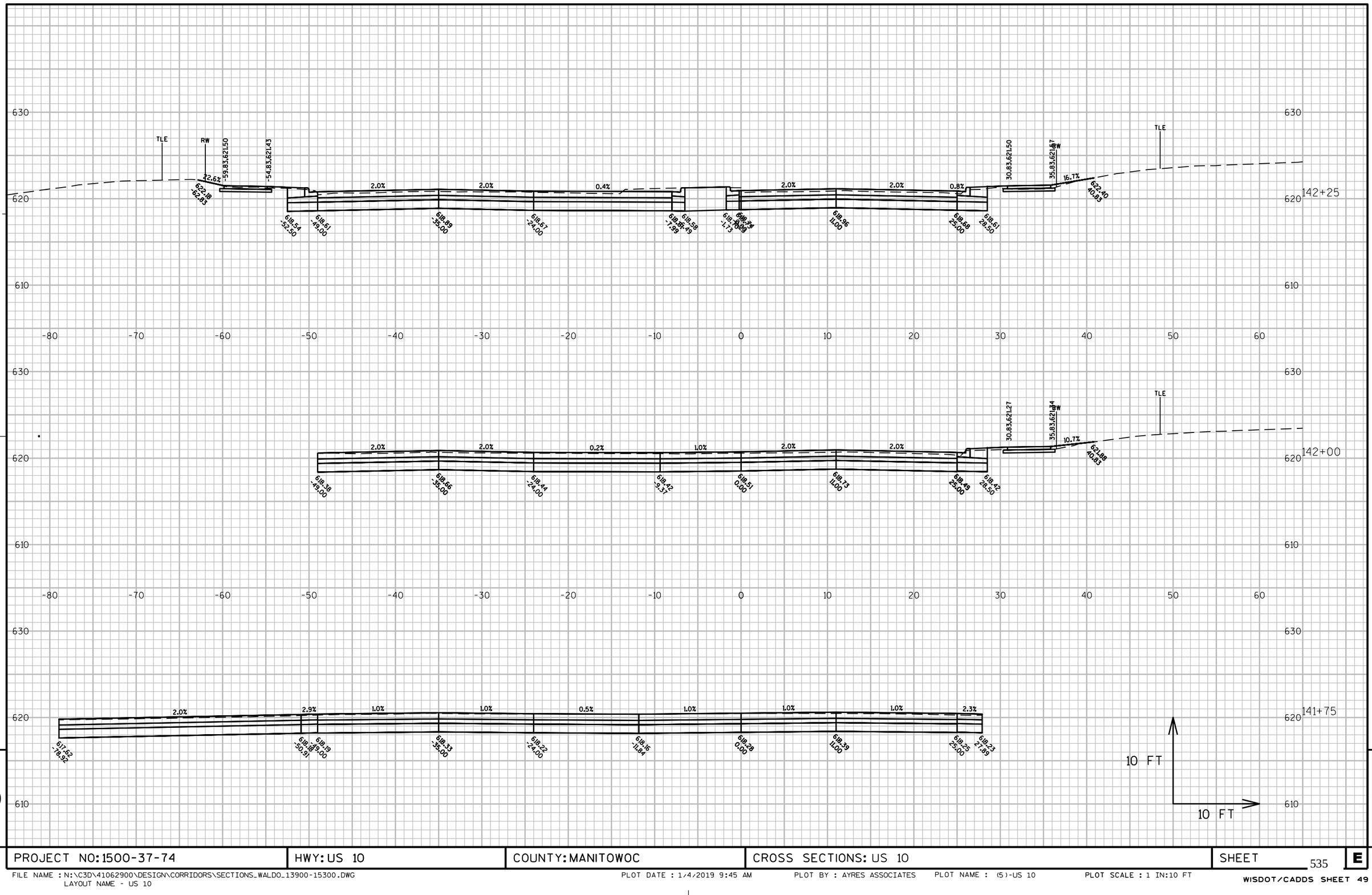


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 534	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:45 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (4)-US 10 PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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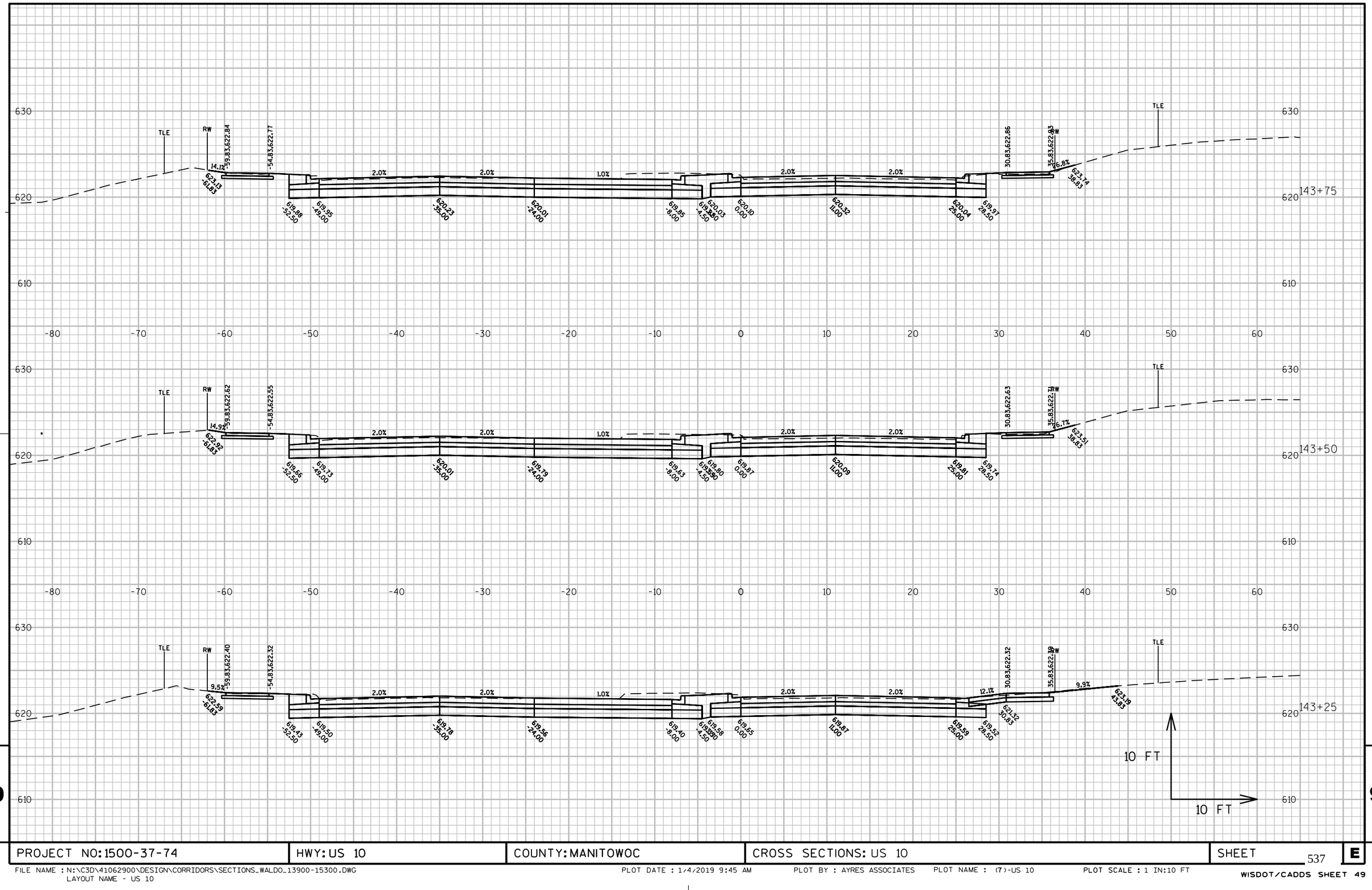
PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 535	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:45 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (5)-US 10 PLOT SCALE : 1 IN:10 FT

PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 536	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10
PLOT DATE : 1/4/2019 9:45 AM
PLOT BY : AYRES ASSOCIATES
PLOT NAME : (6)-US 10
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49

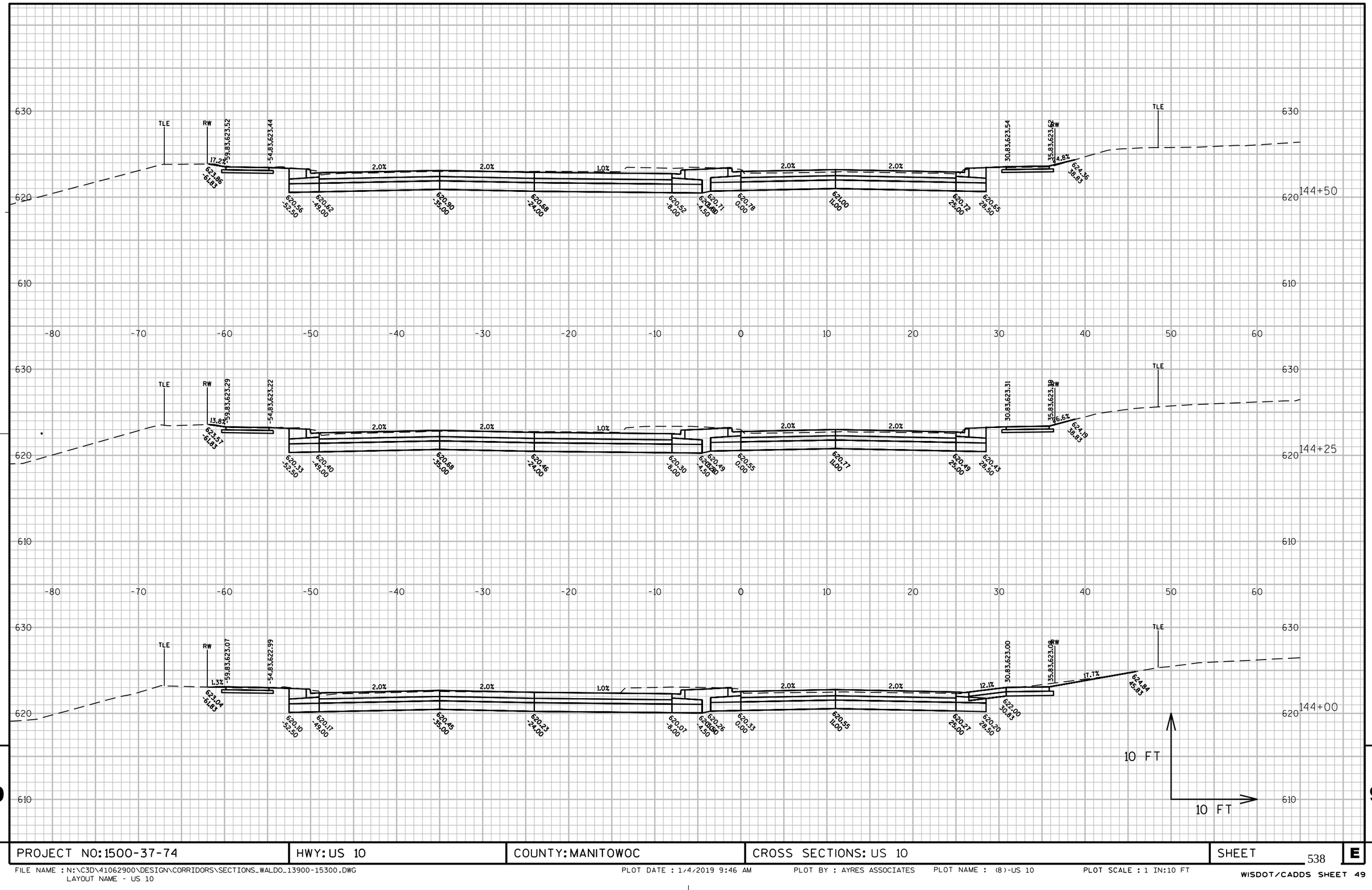


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 537	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:45 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (7)-US 10 PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

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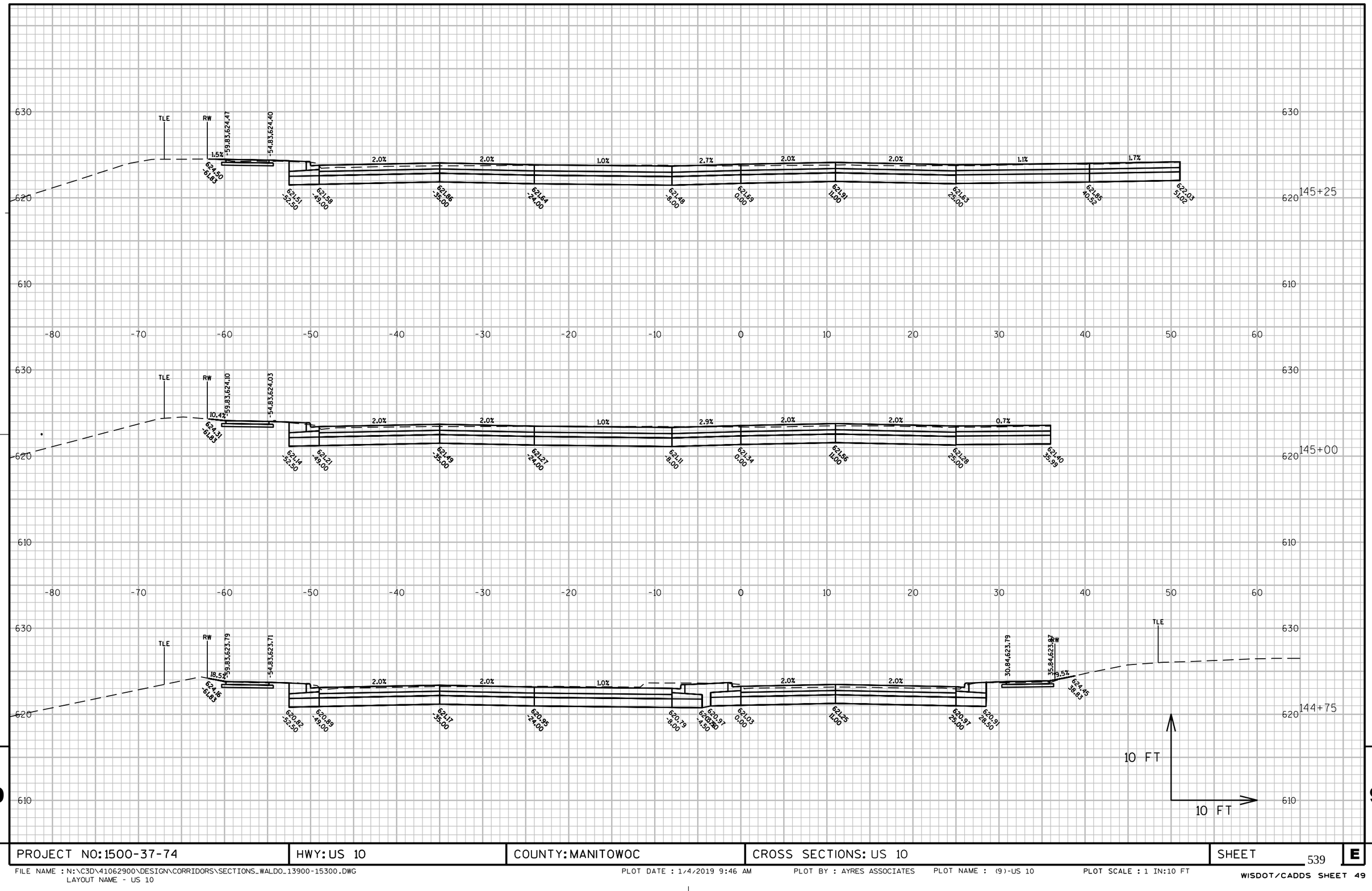
PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 538	E



9

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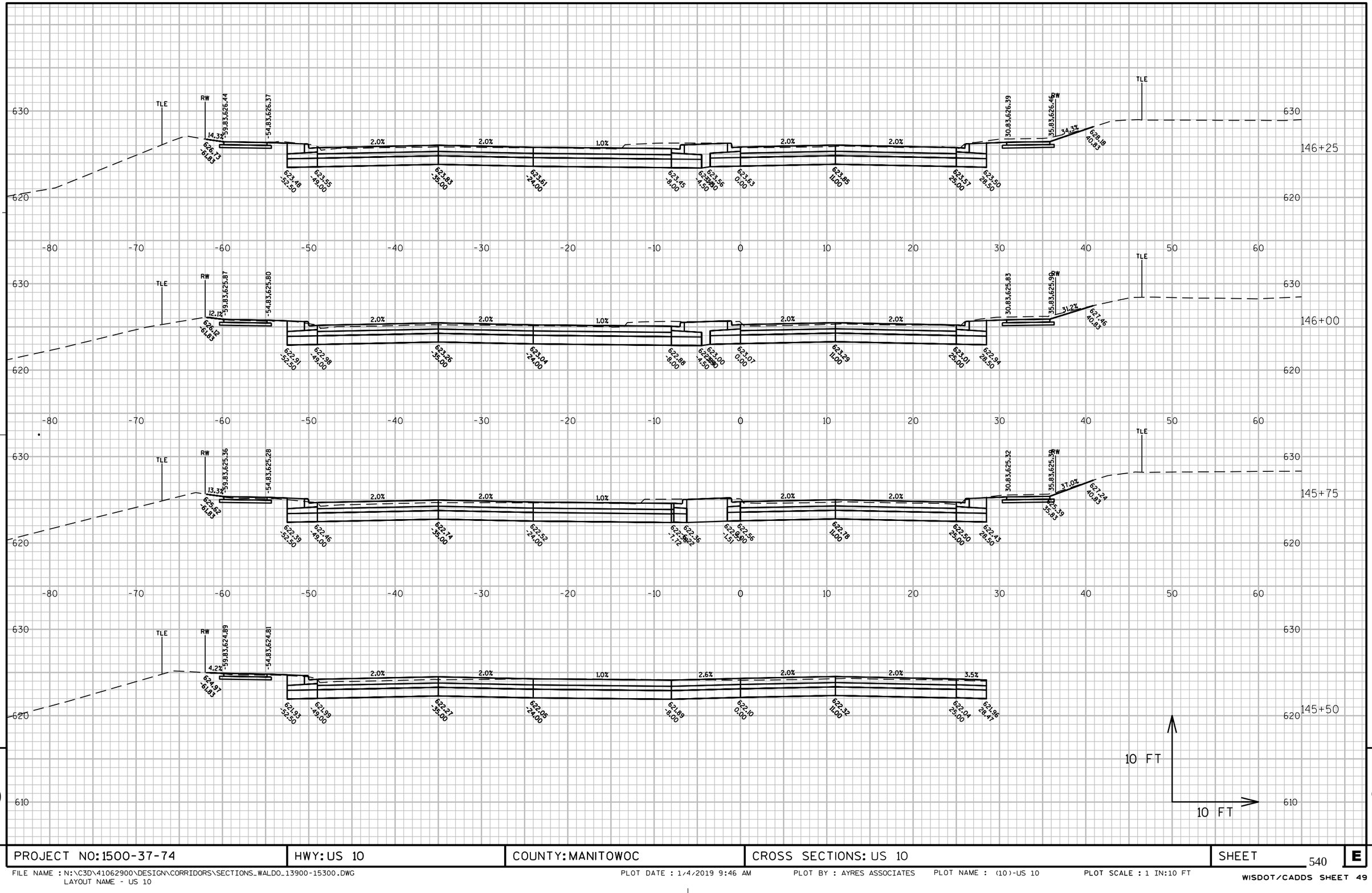
PROJECT NO:1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 539	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:46 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (9)-US 10 PLOT SCALE : 1 IN:10 FT

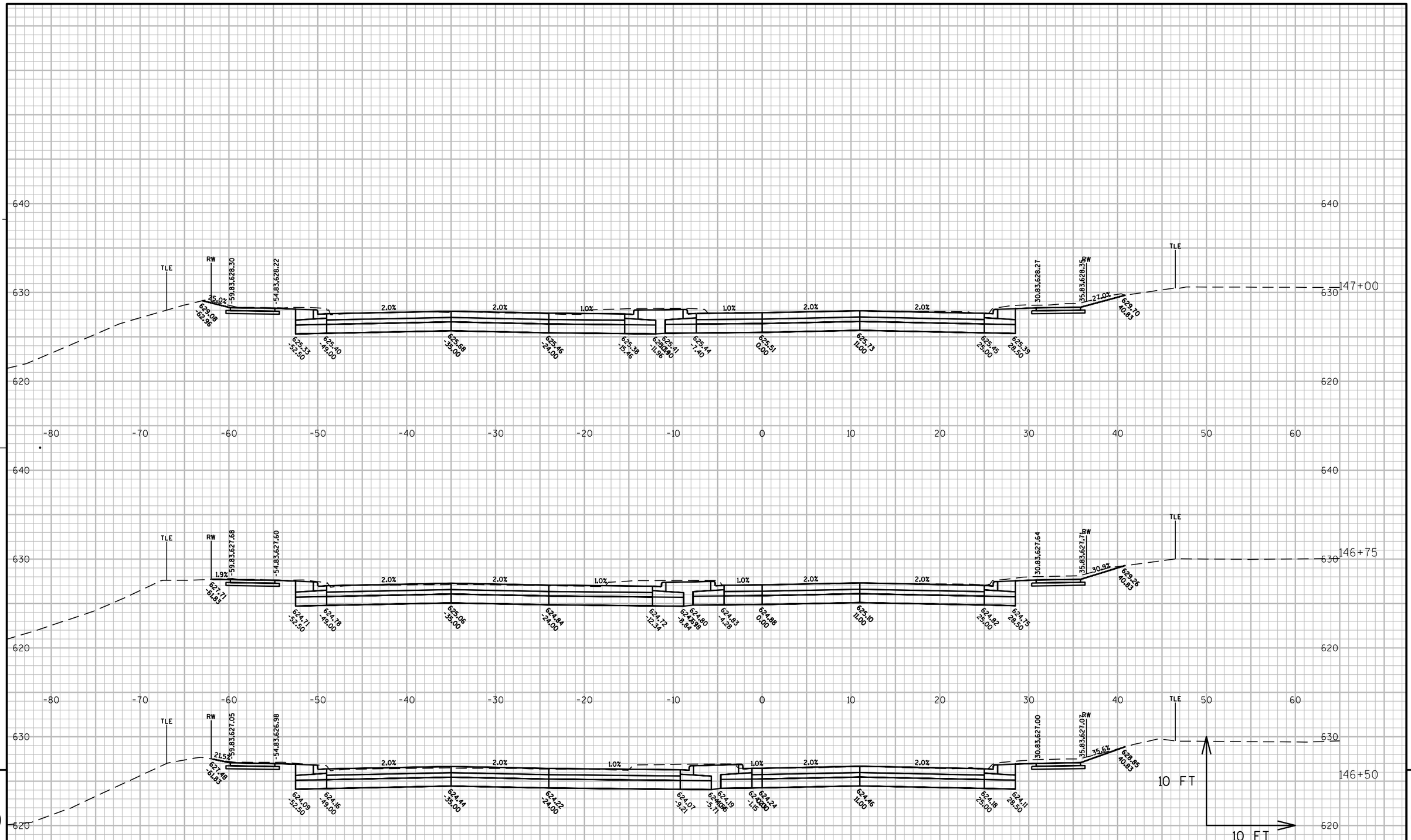


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 540	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:46 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (10)-US 10 PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

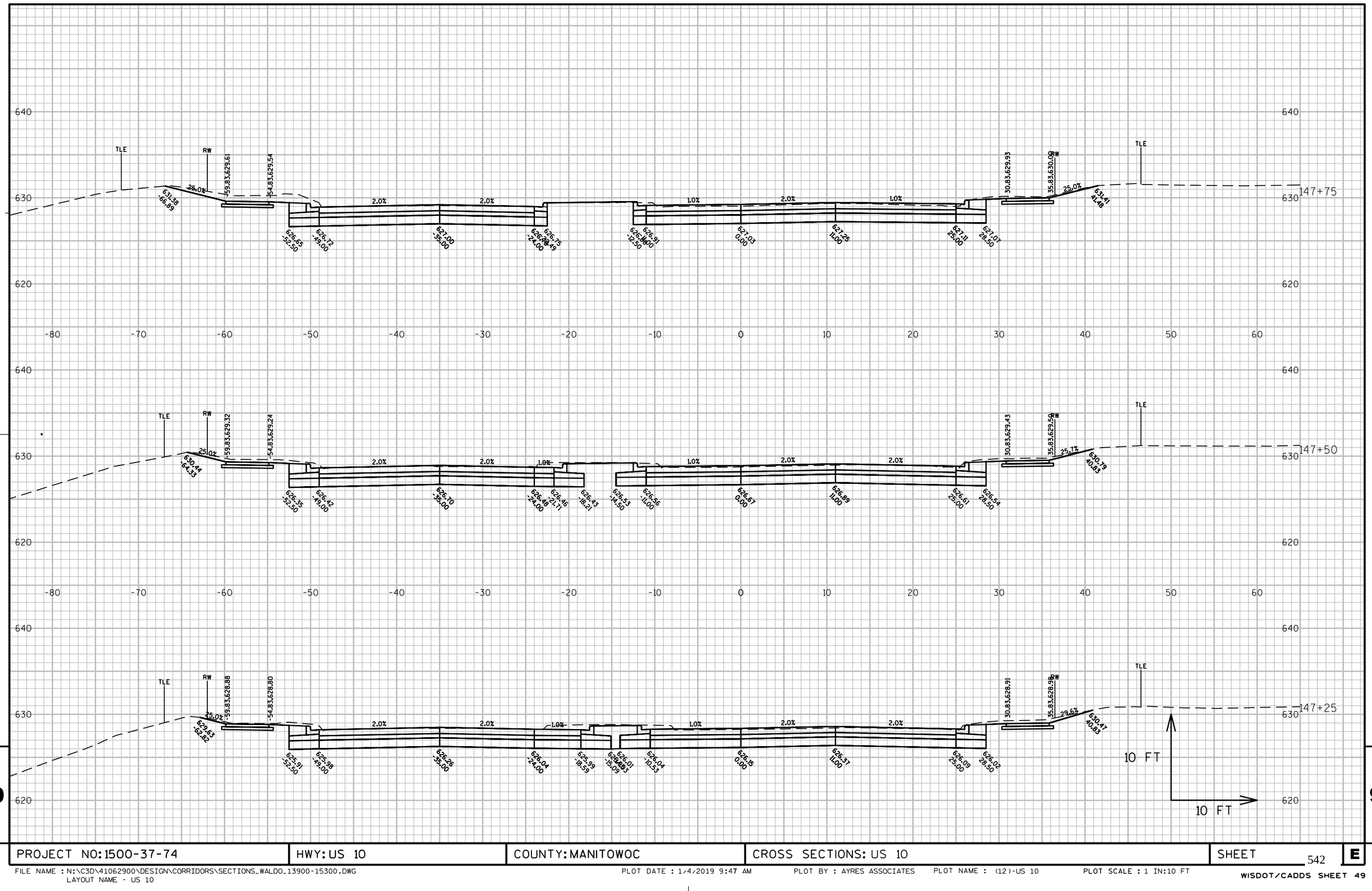


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 541	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:46 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (11)-US 10 PLOT SCALE : 1 IN:10 FT

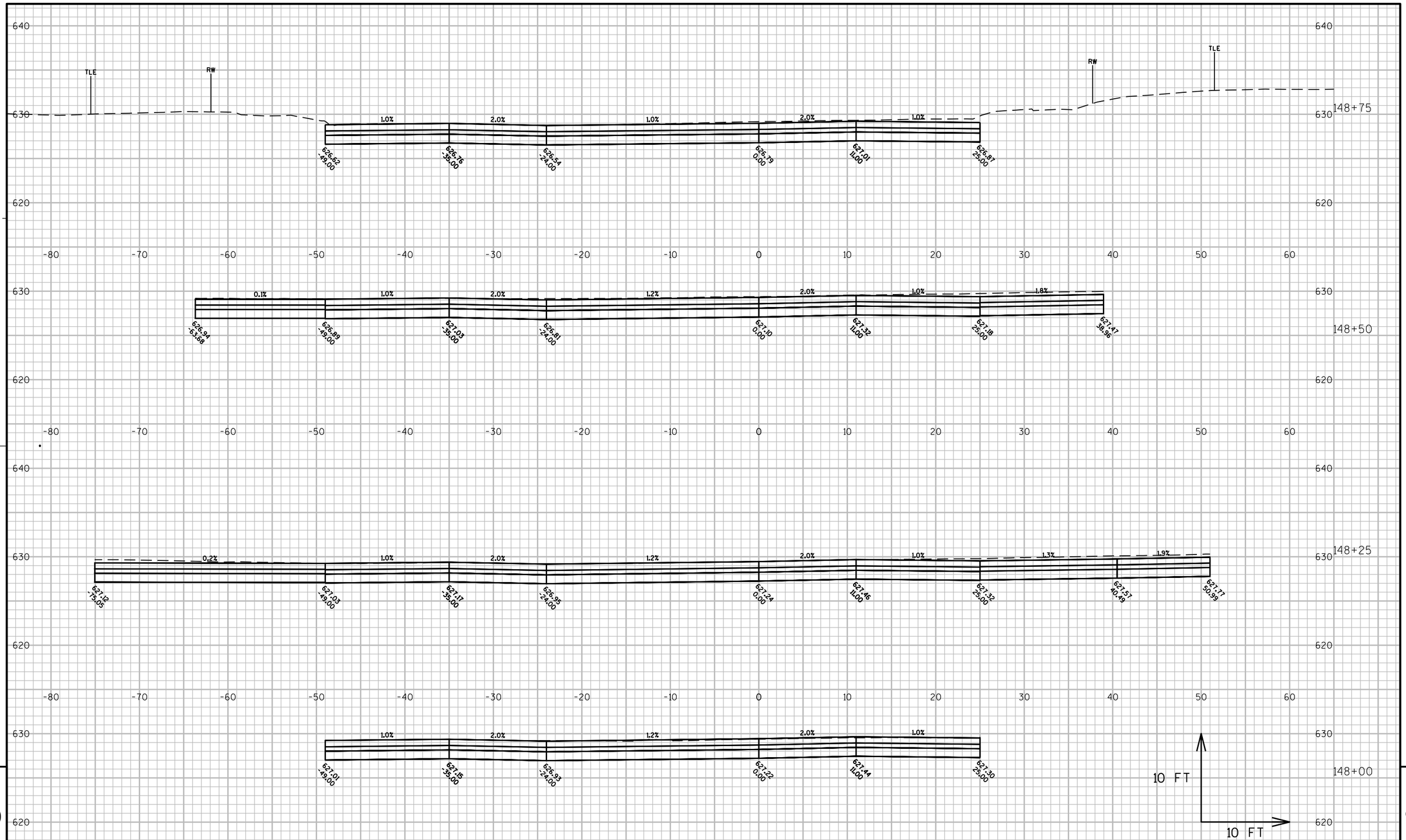
WISDOT/CADDS SHEET 49



PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 542	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:47 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (12)-US 10 PLOT SCALE : 1 IN:10 FT

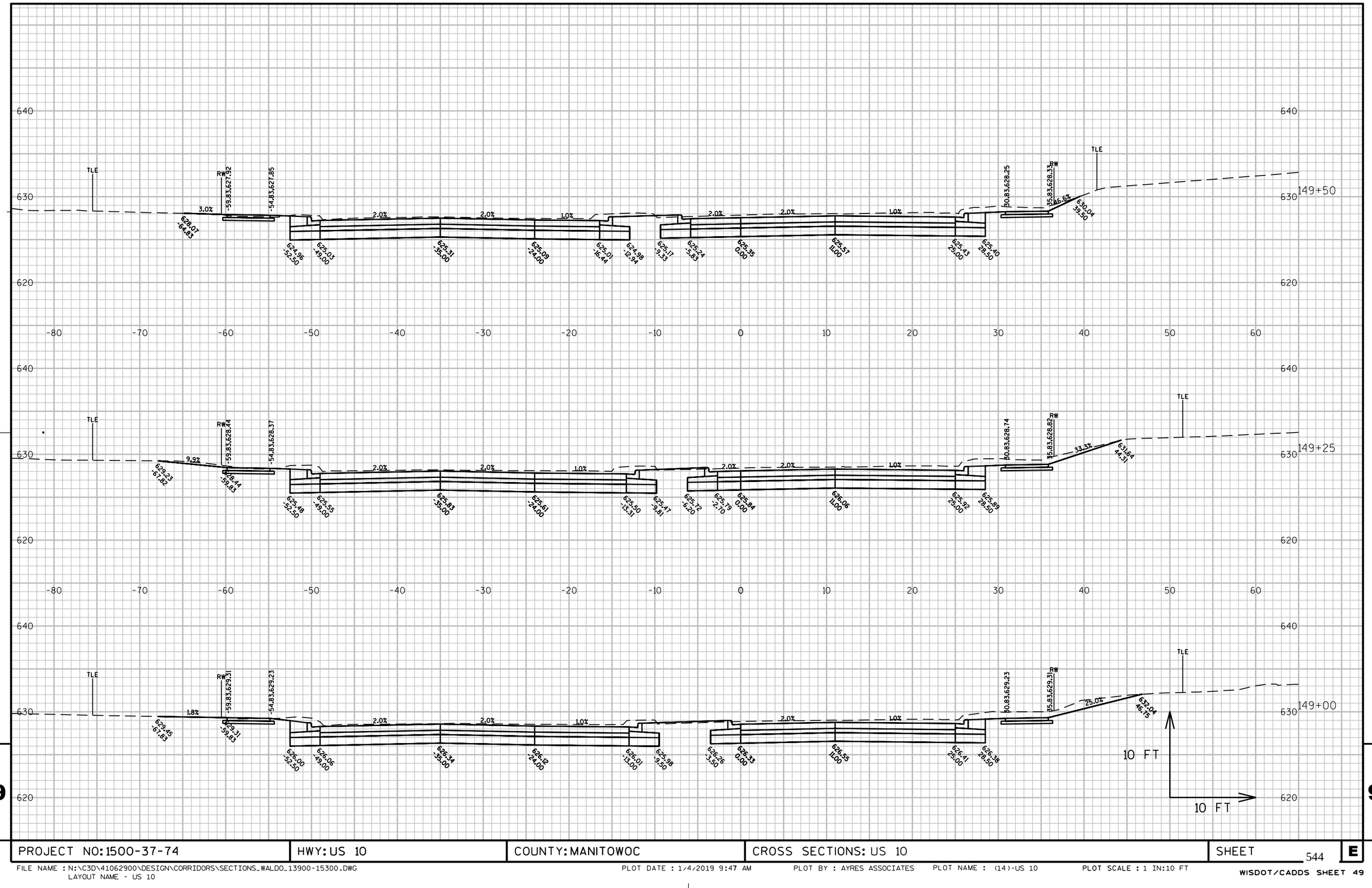


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 543	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:47 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (13)-US 10 PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

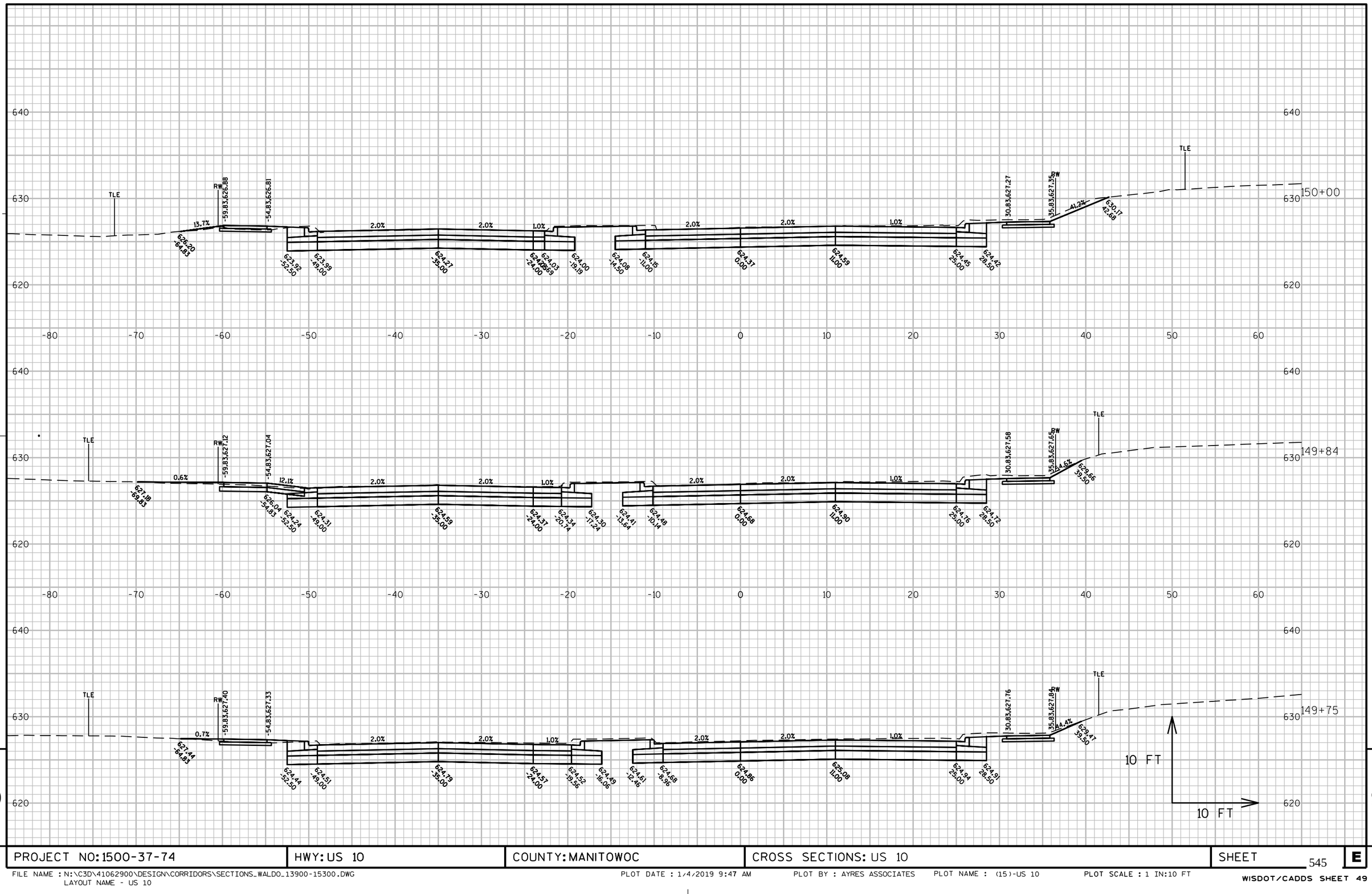


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 544	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:47 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (14)-US 10 PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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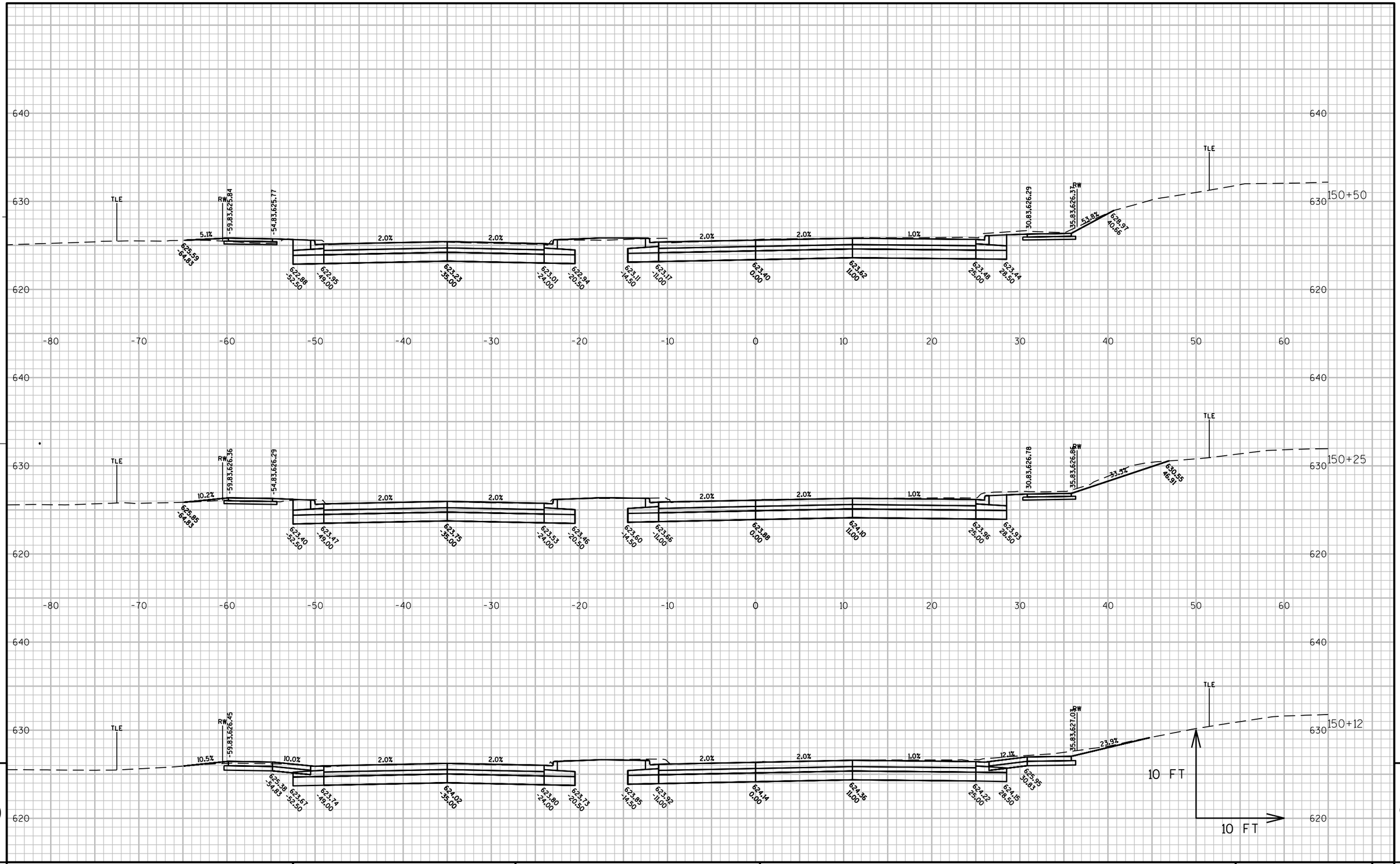
PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 545	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:47 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (15)-US 10 PLOT SCALE : 1 IN:10 FT

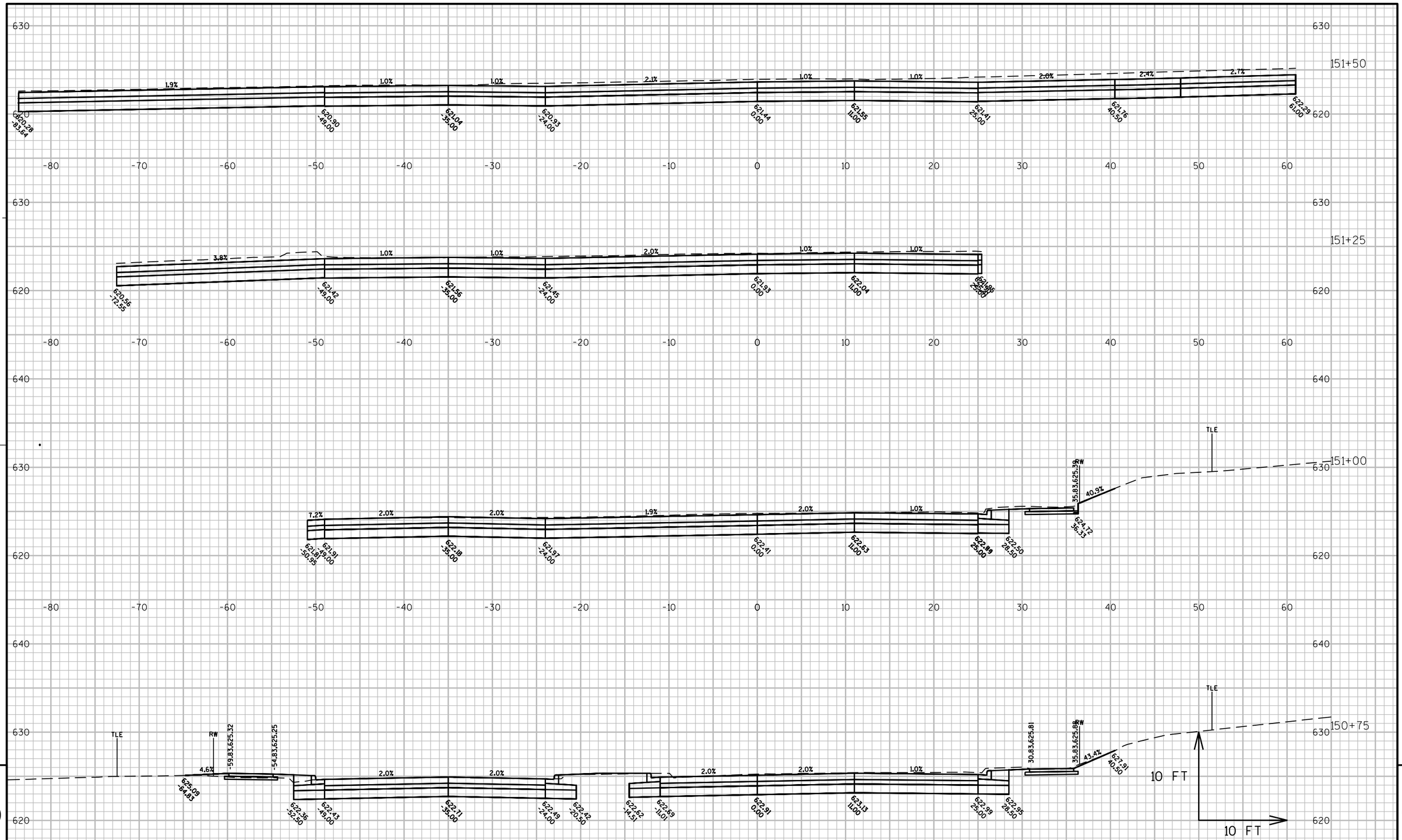


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 546	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:48 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (16)-US 10 PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



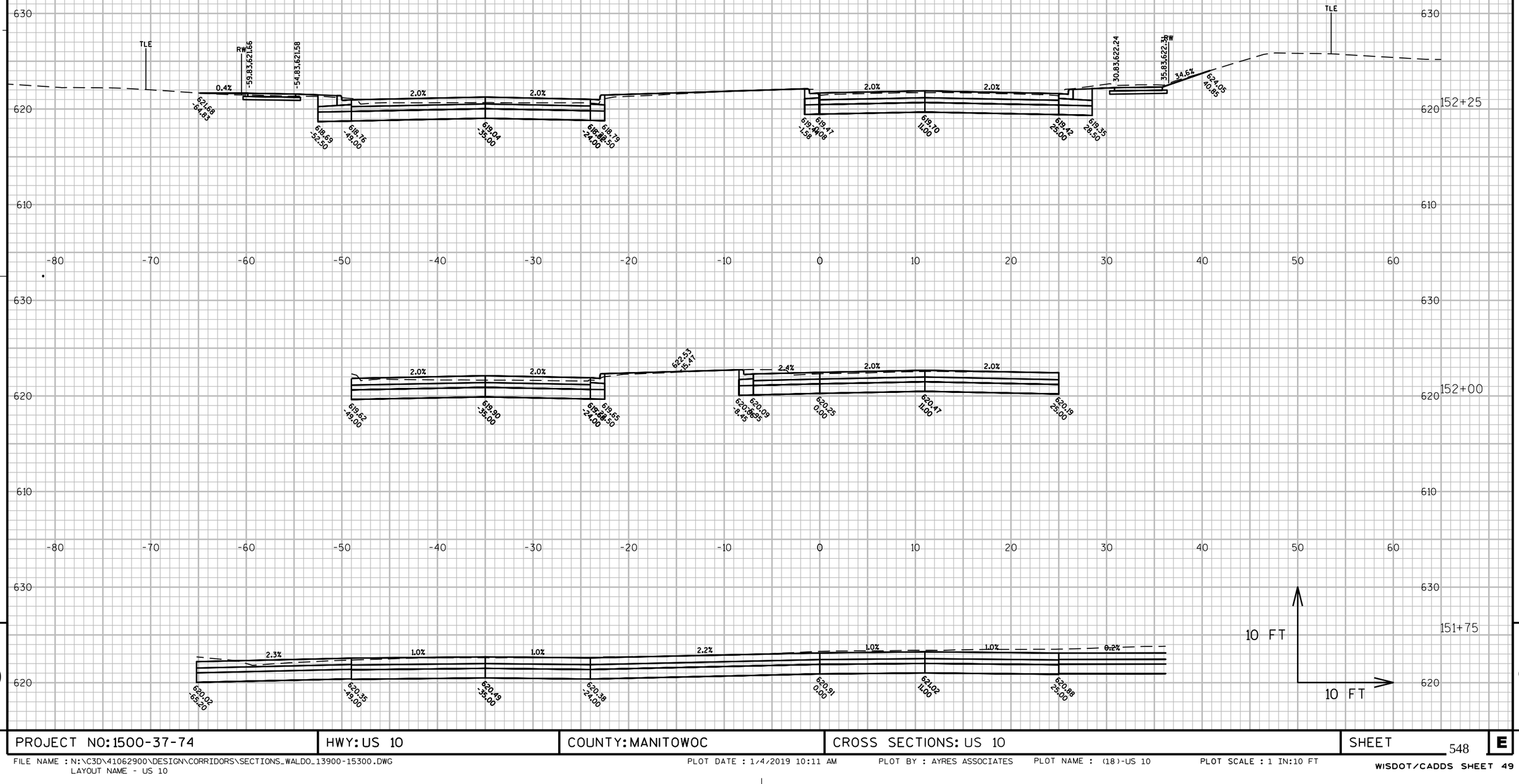
PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 547	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 9:48 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (17)-US 10 PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

END PROJECT 1500-37-74
STA. 152+25

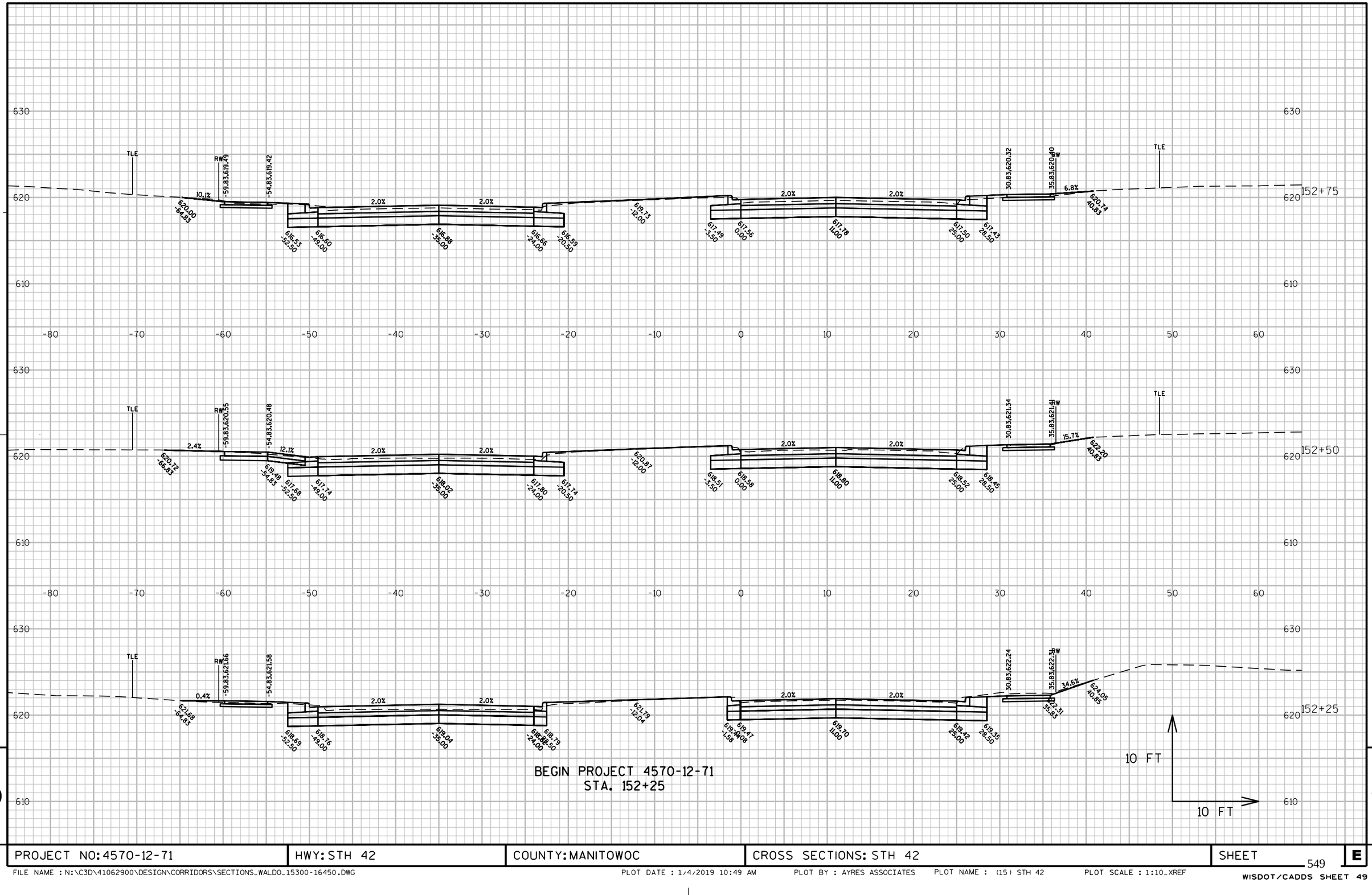


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: US 10	SHEET 548	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - US 10

PLOT DATE : 1/4/2019 10:11 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (18)-US 10 PLOT SCALE : 1 IN:10 FT

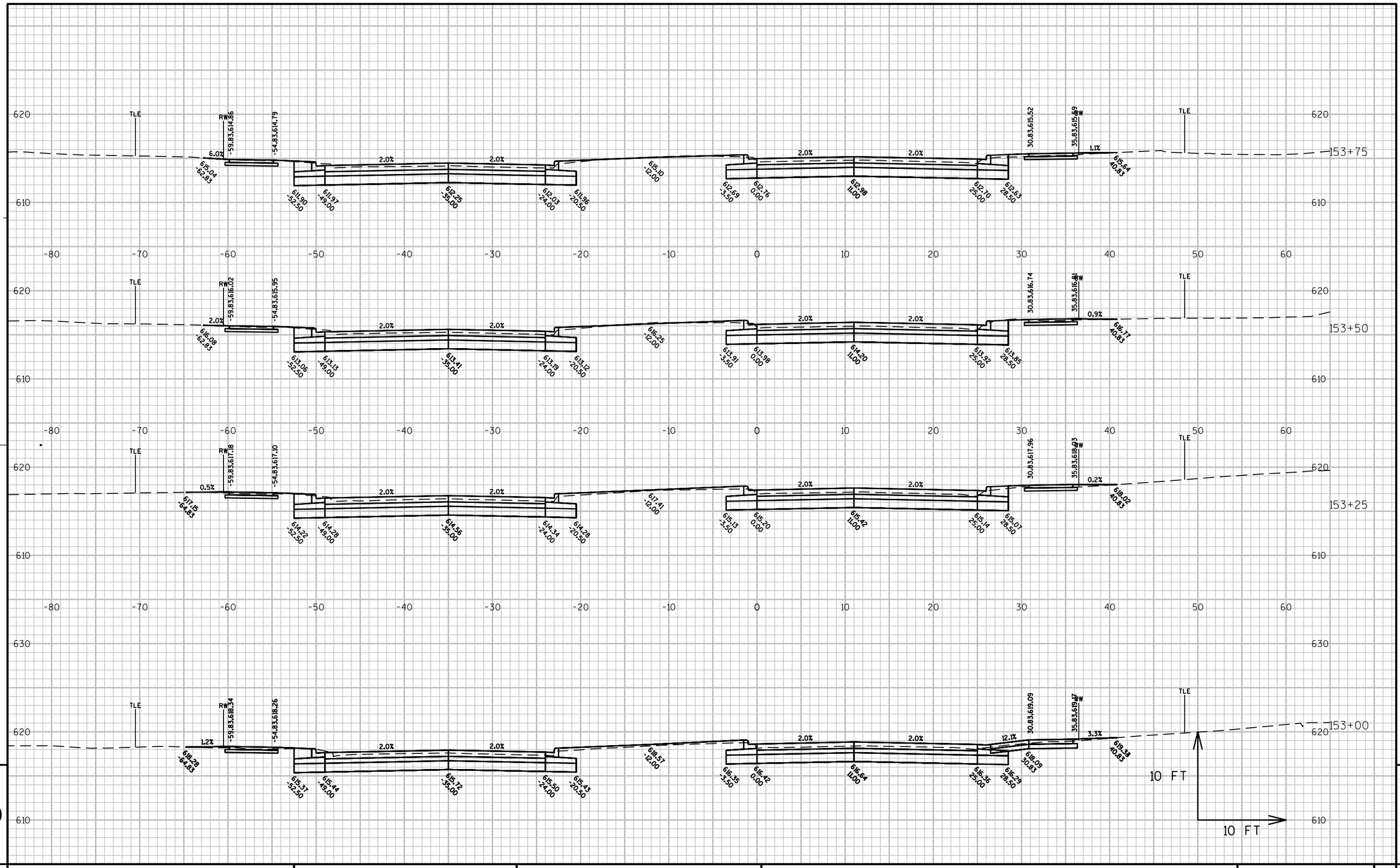
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 549

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG PLOT DATE : 1/4/2019 10:49 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (15) STH 42 PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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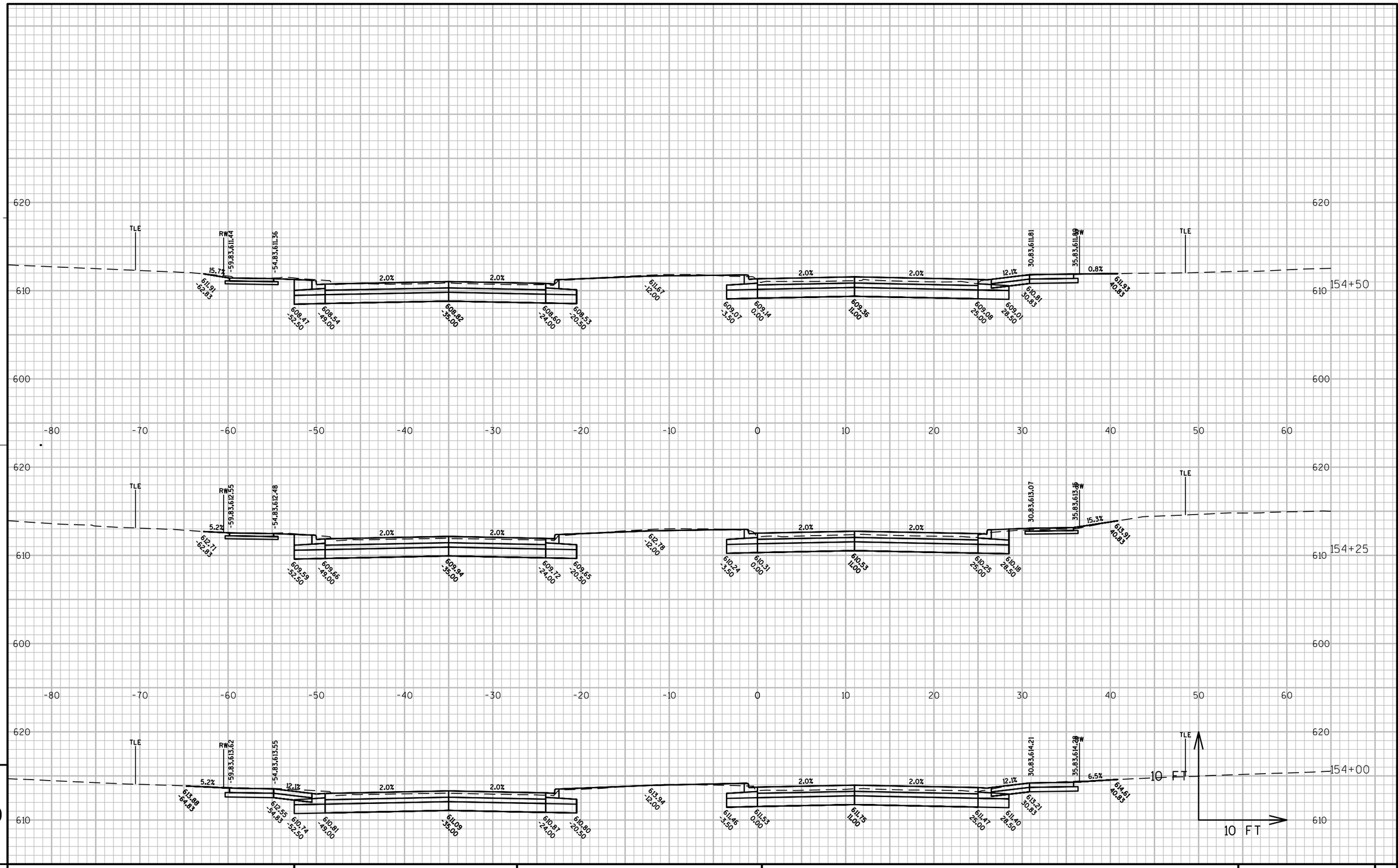
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 550	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG PLOT DATE : 1/4/2019 10:50 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (16) STH 42 PLOT SCALE : 1:10_XREF



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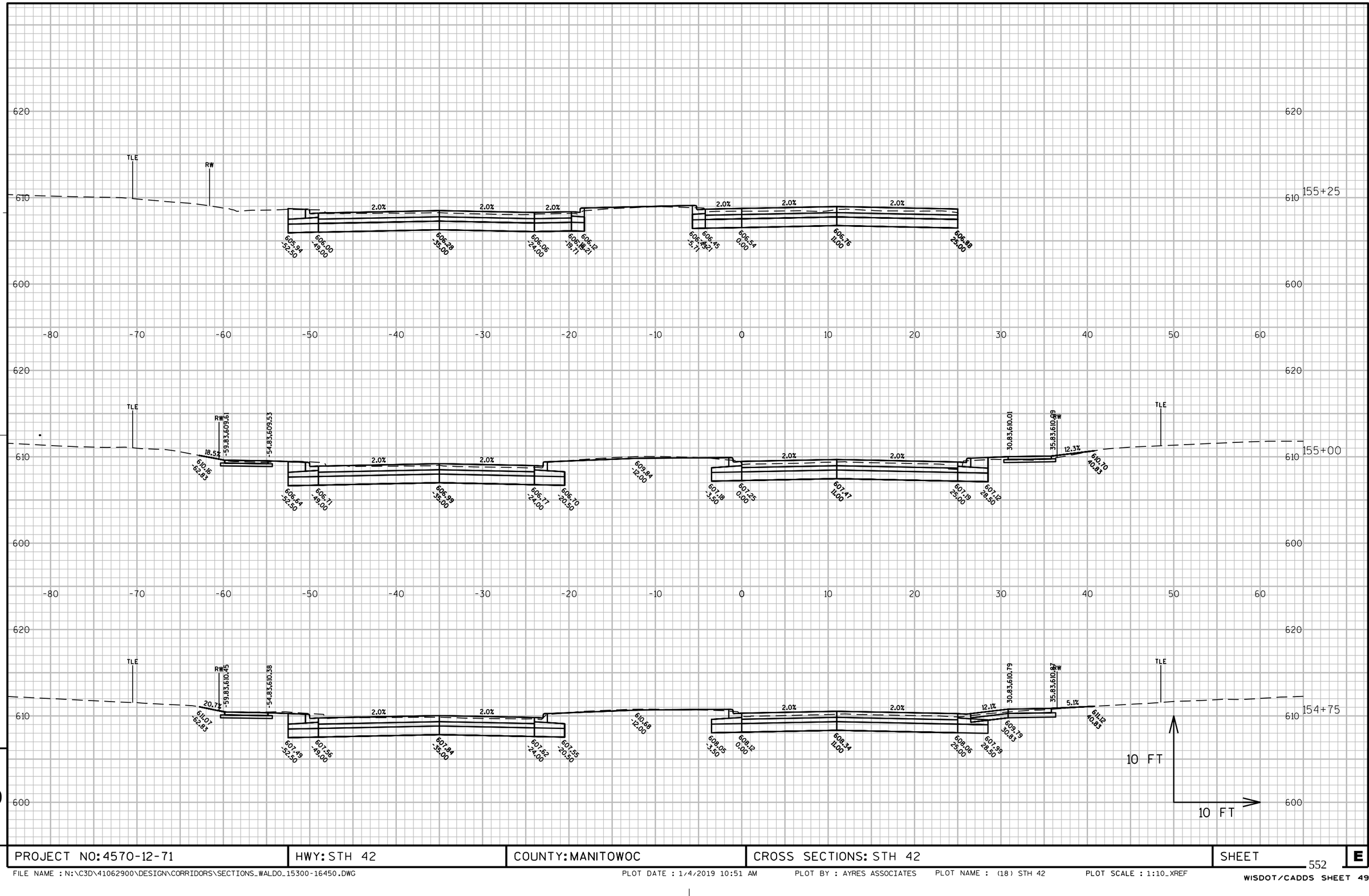
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

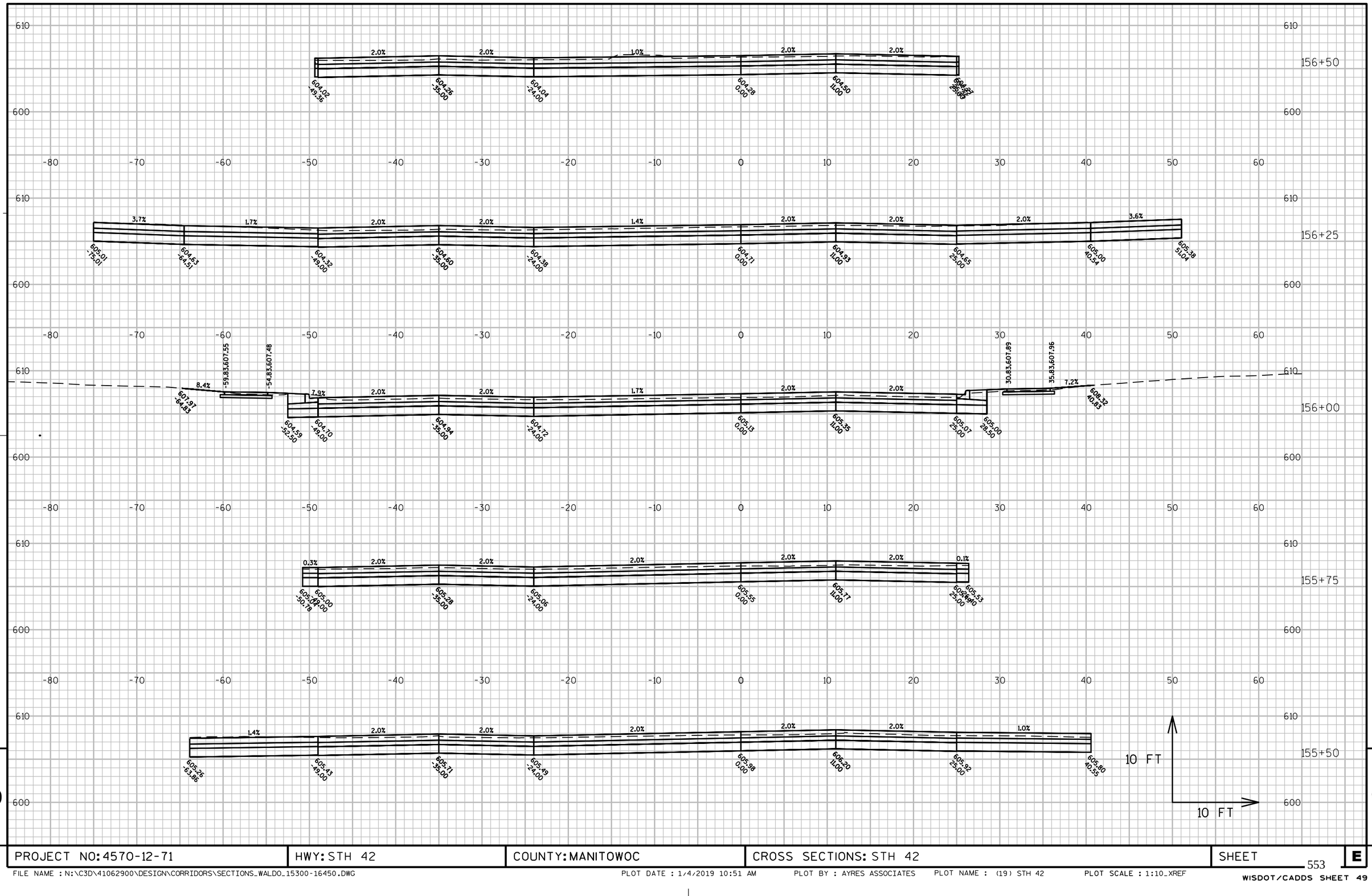
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG
PLOT DATE : 1/4/2019 10:50 AM
PLOT BY : AYRES ASSOCIATES
PLOT NAME : (17) STH 42
PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 552 E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG PLOT DATE : 1/4/2019 10:51 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (18) STH 42 PLOT SCALE : 1:10_XREF

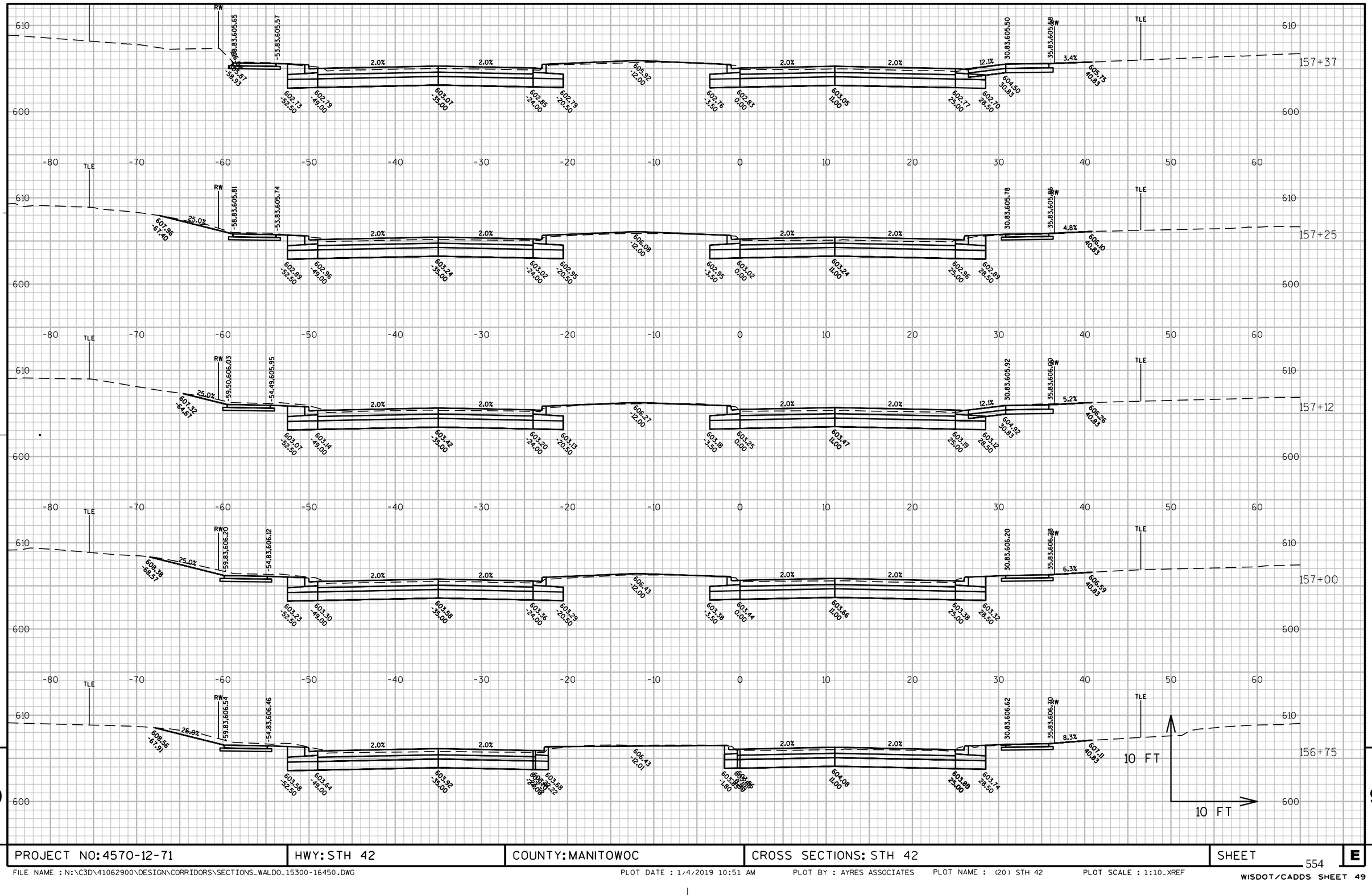
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 553	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG PLOT DATE : 1/4/2019 10:51 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (19) STH 42 PLOT SCALE : 1:10_XREF

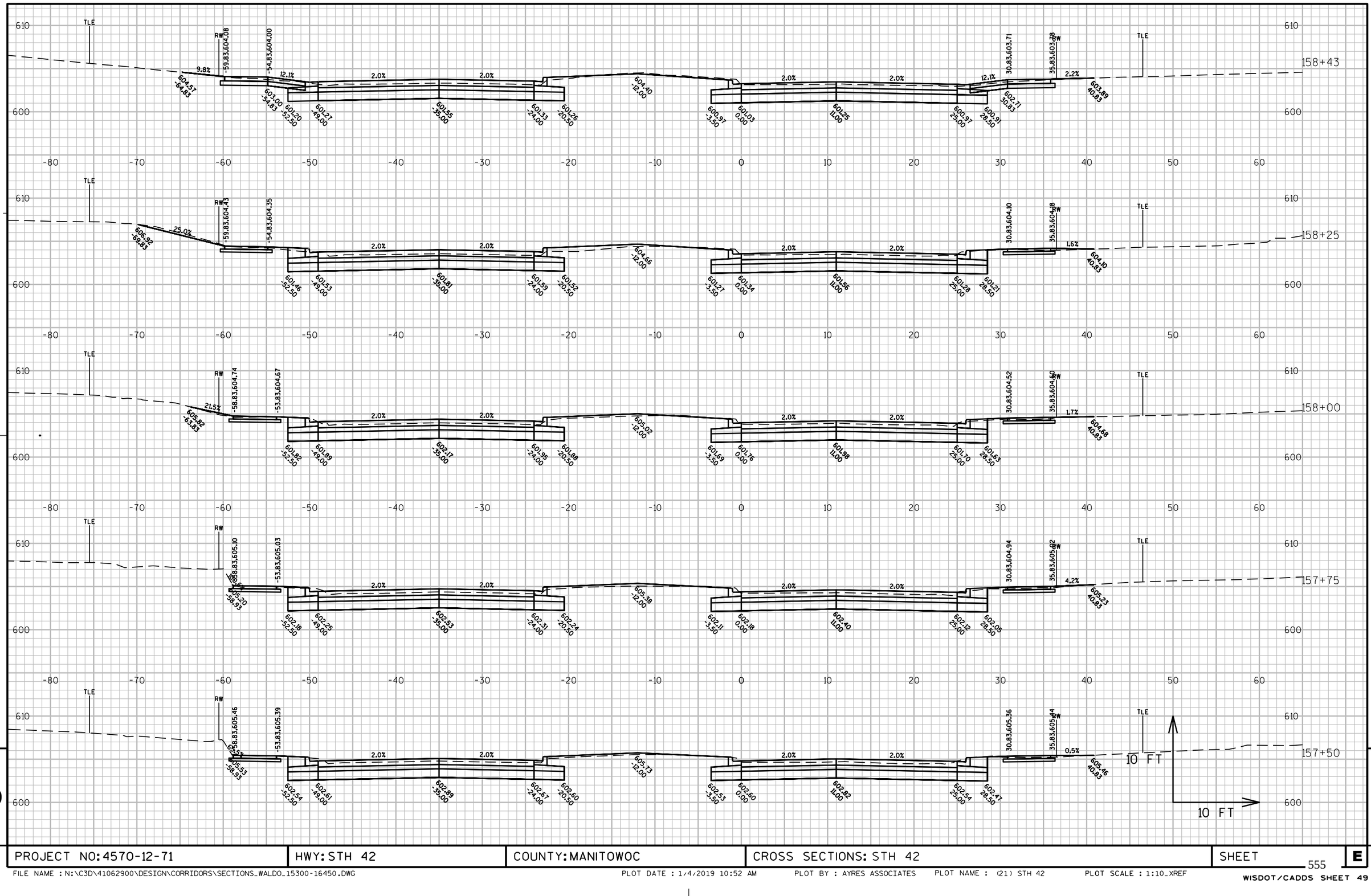
WISDOT/CADDS SHEET 49



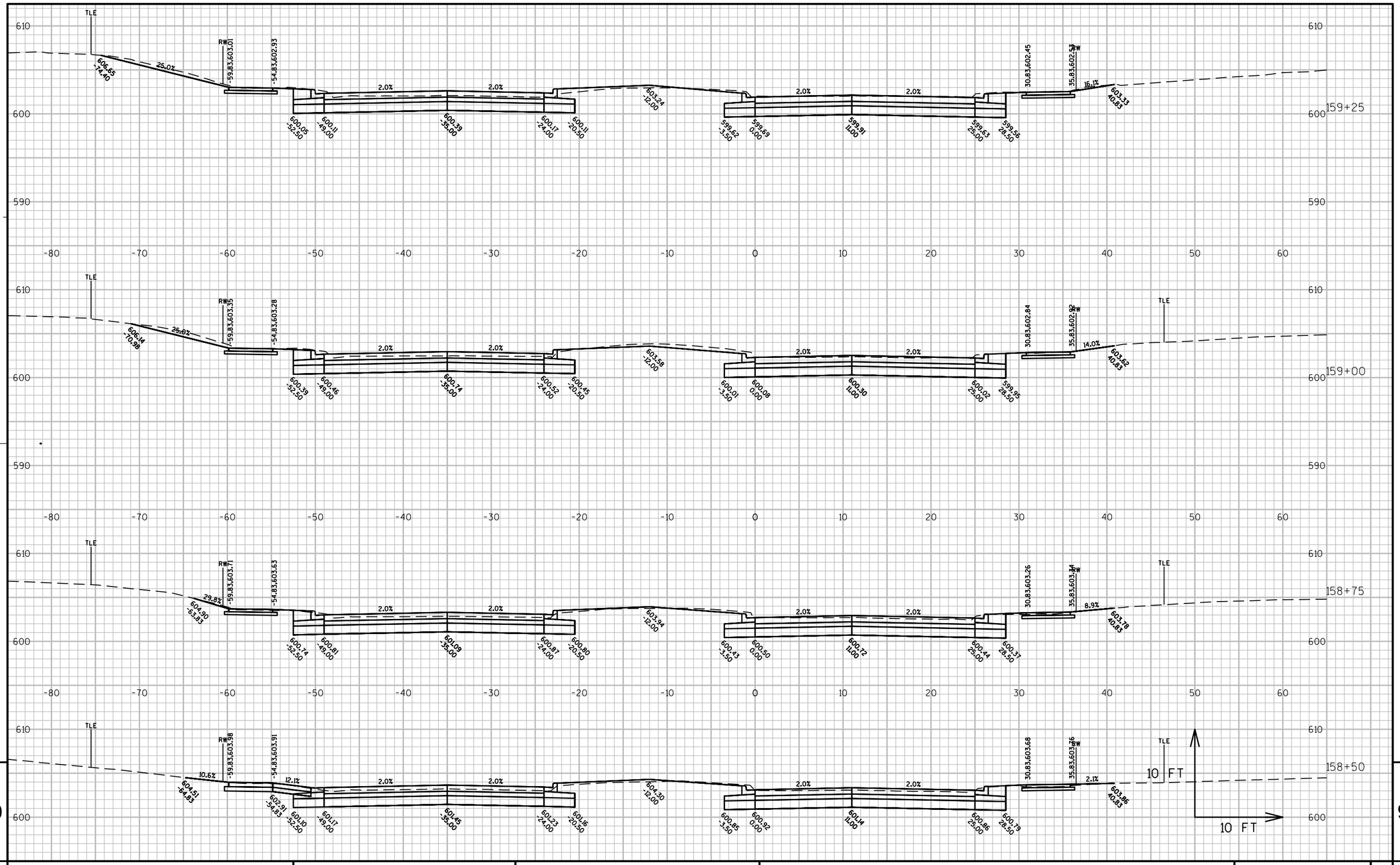
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 554	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG PLOT DATE : 1/4/2019 10:51 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (20) STH 42 PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



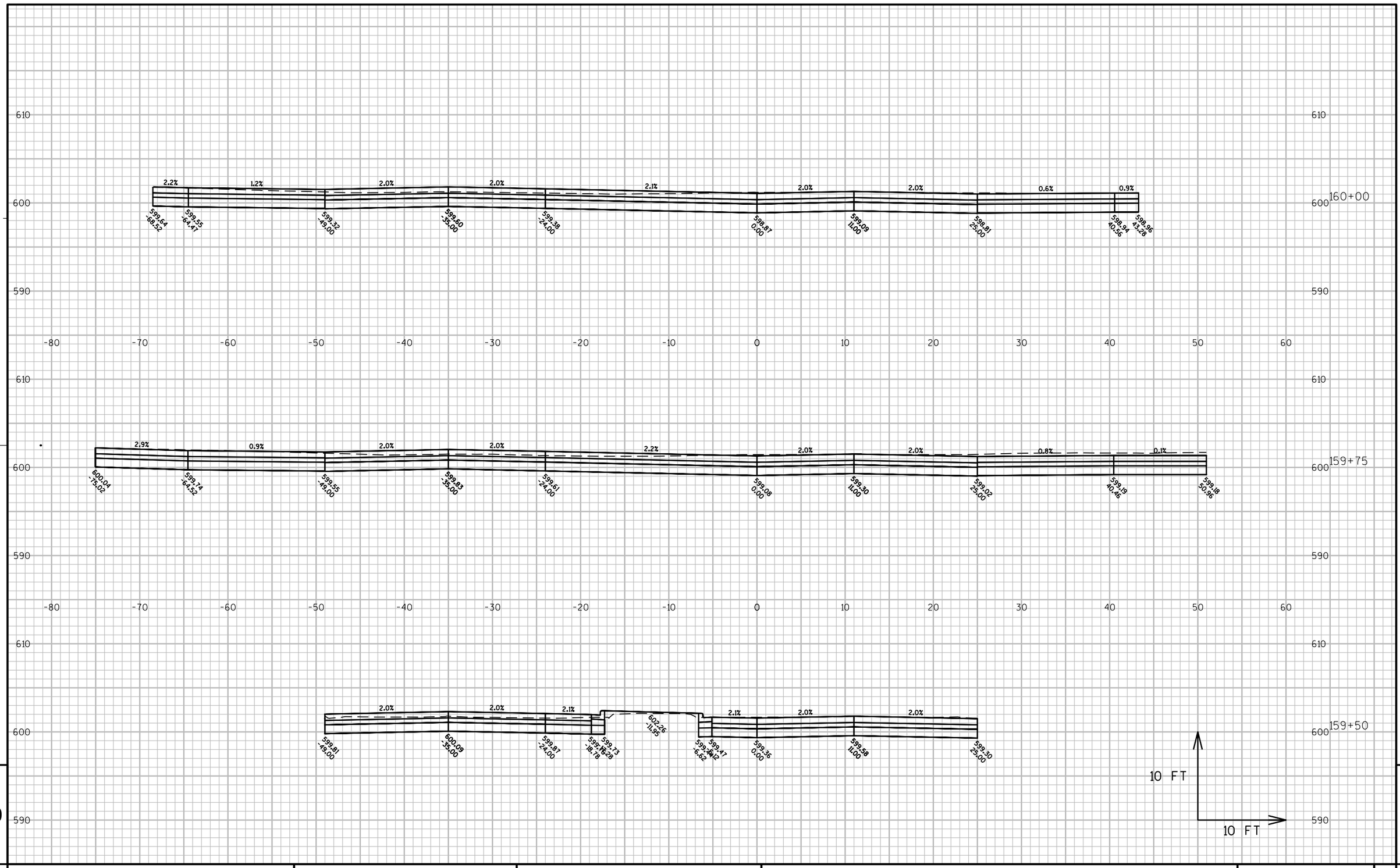
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 555	E



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 556	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG PLOT DATE : 1/4/2019 10:52 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (22) STH 42 PLOT SCALE : 1:10_XREF

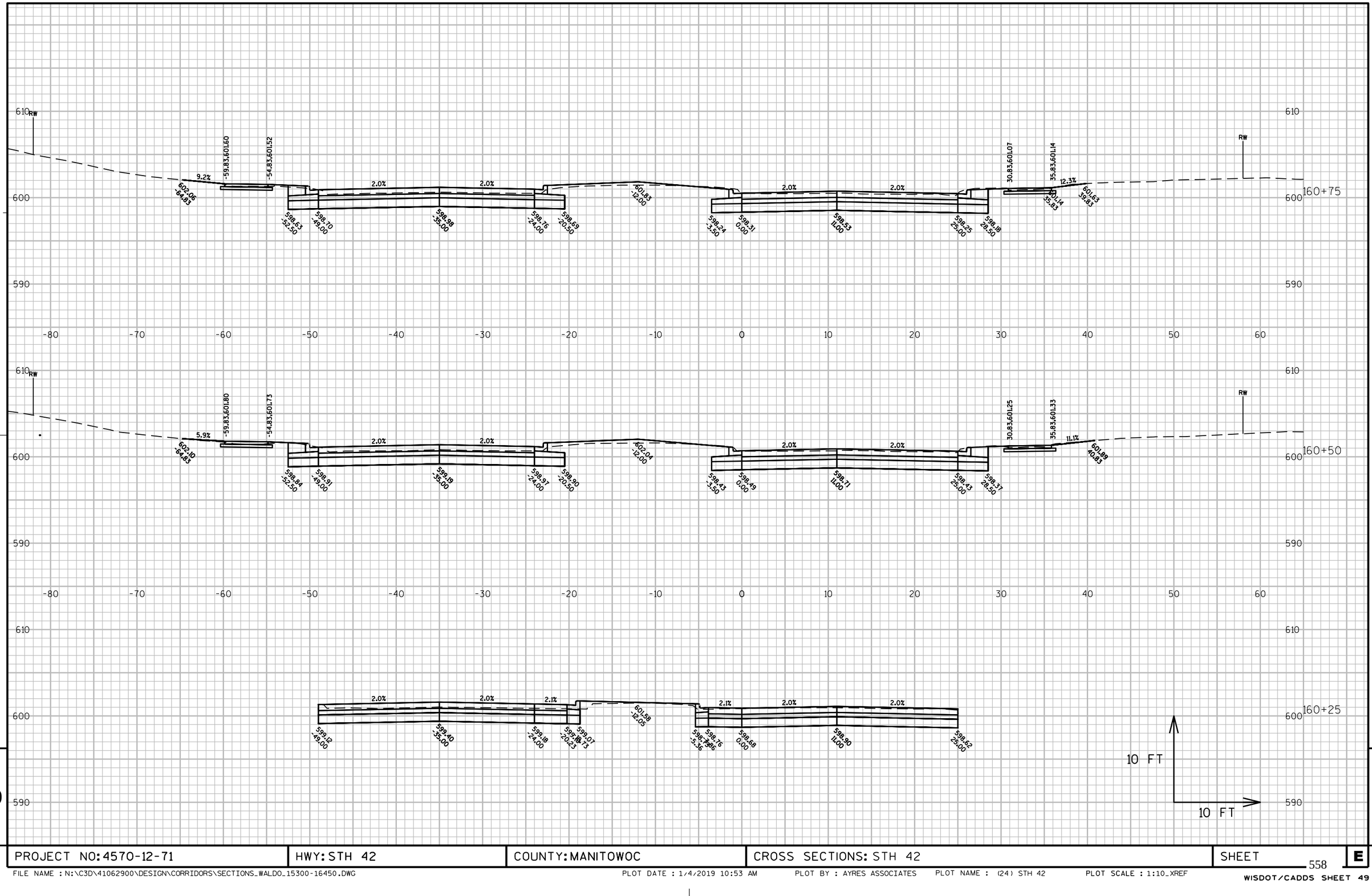
WISDOT/CADDS SHEET 49



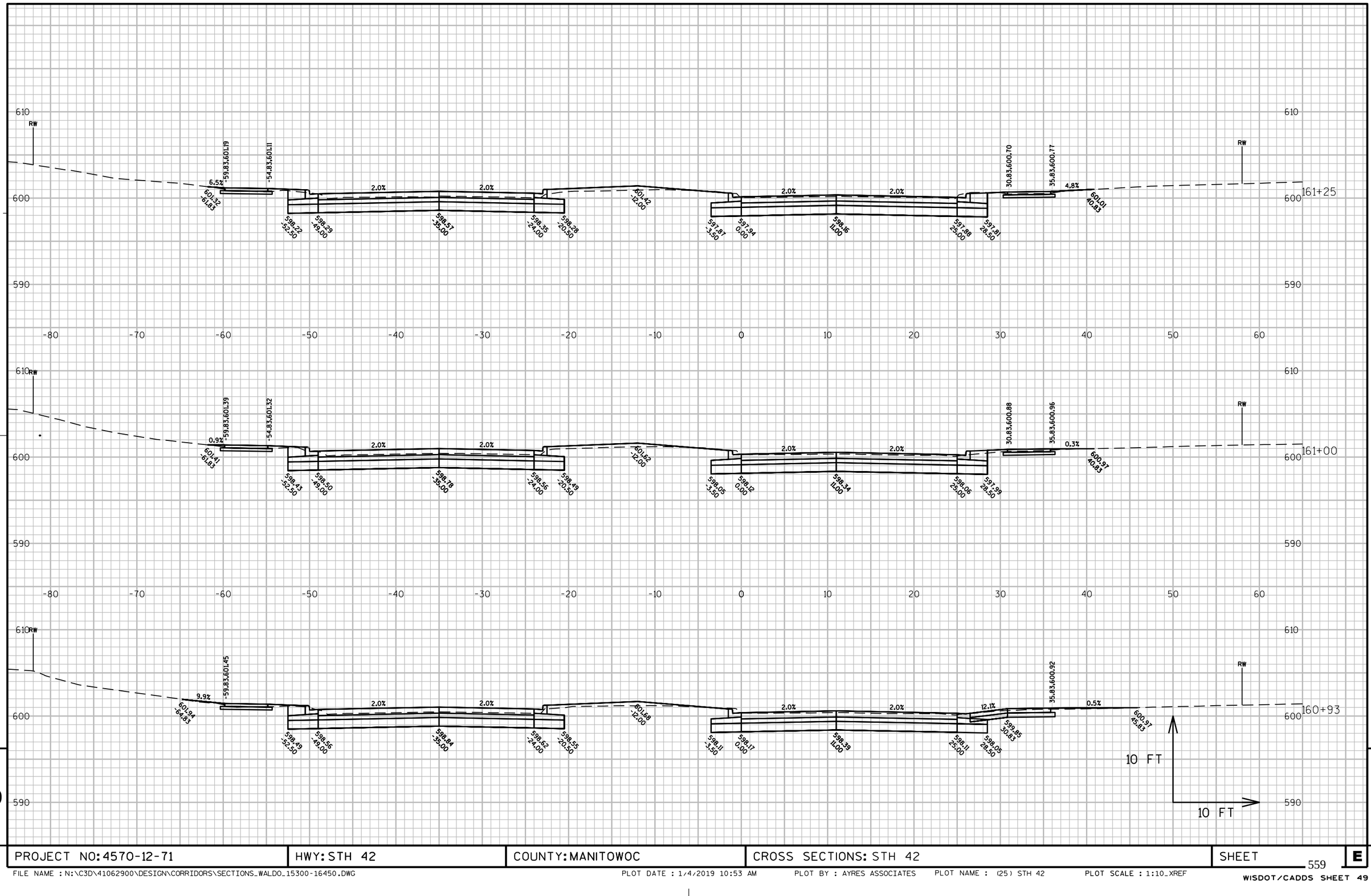
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 557	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG PLOT DATE : 1/4/2019 10:52 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (23) STH 42 PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 558	E



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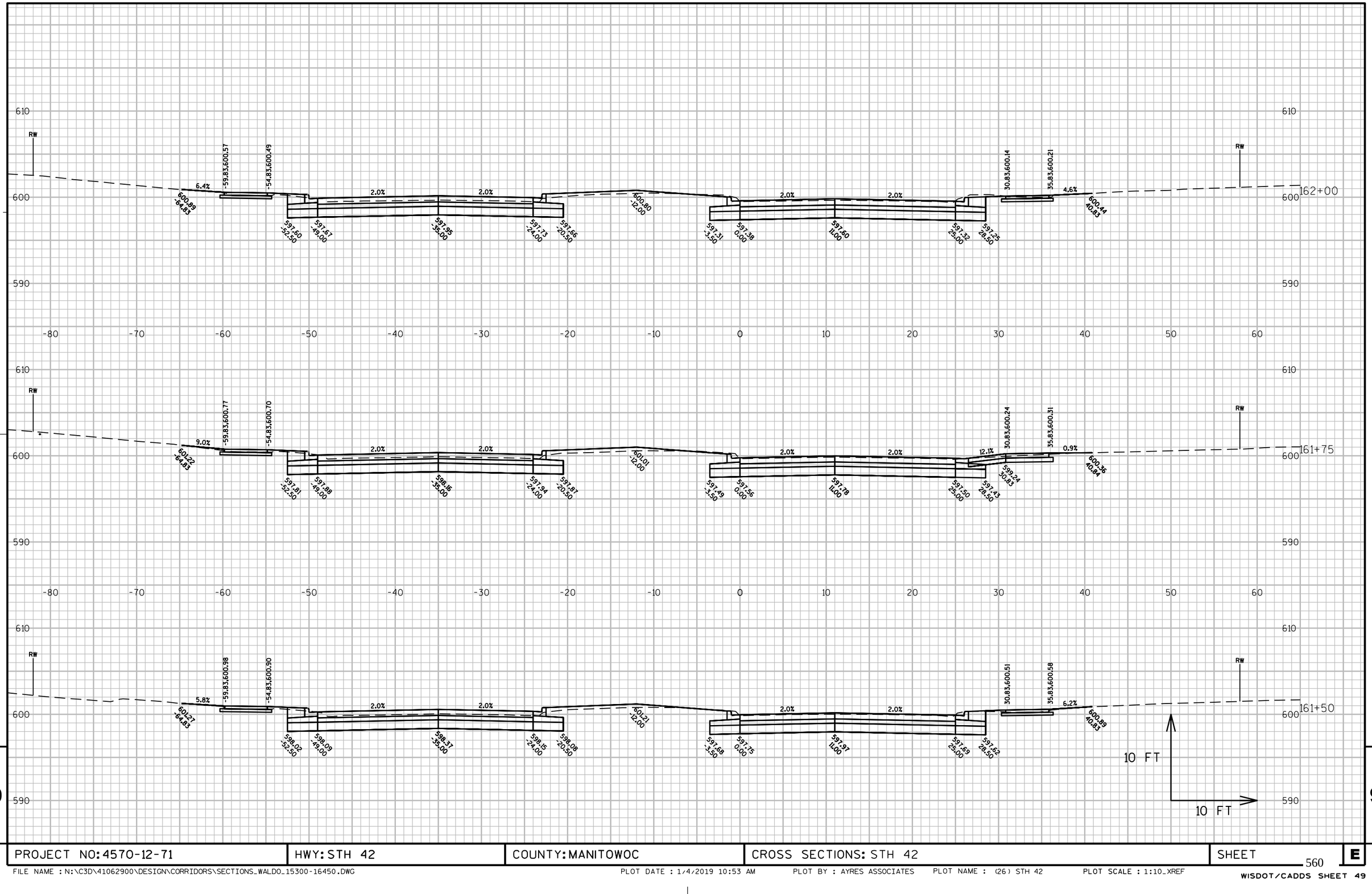
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 559	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG PLOT DATE : 1/4/2019 10:53 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (25) STH 42 PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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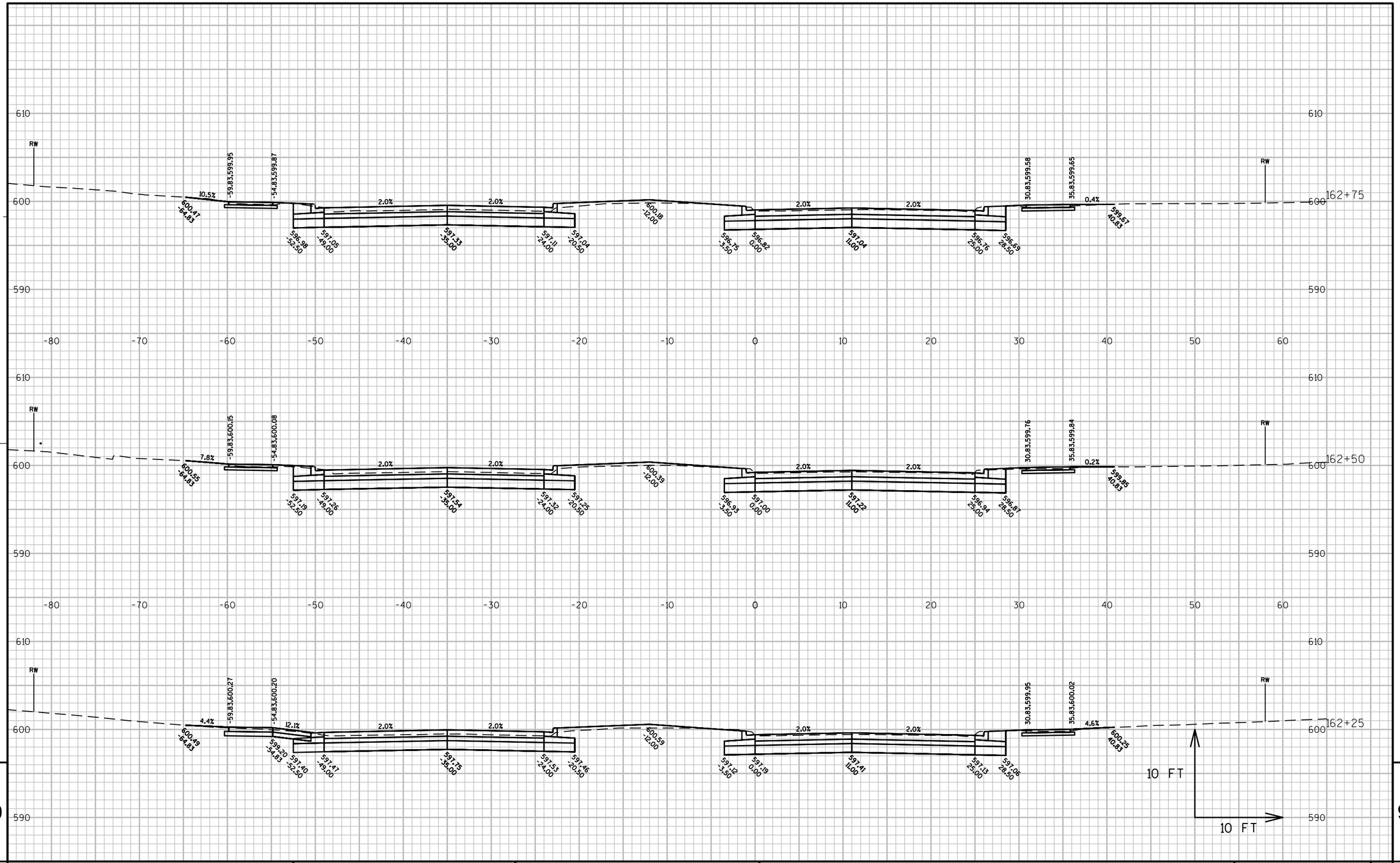
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 560	E



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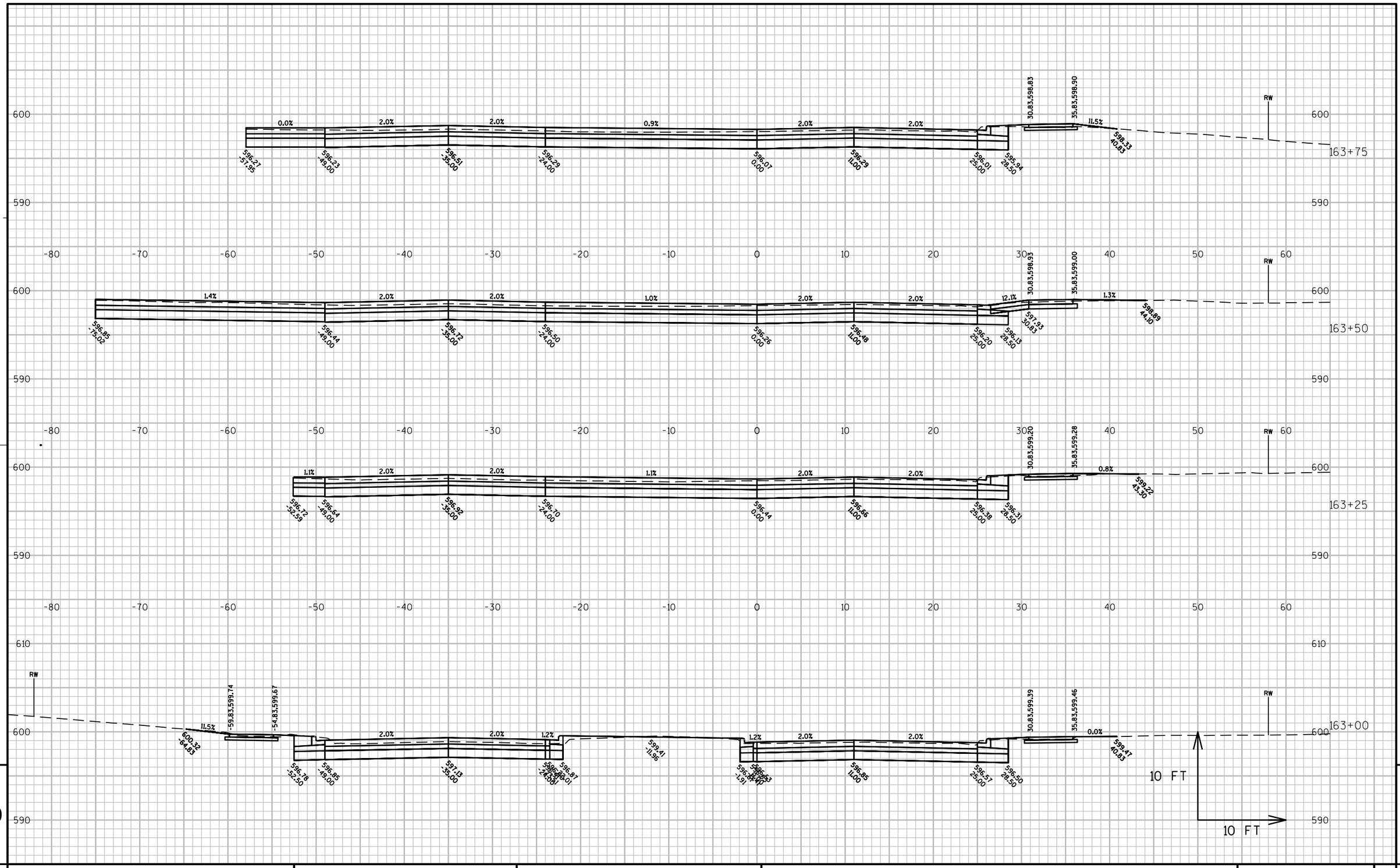
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

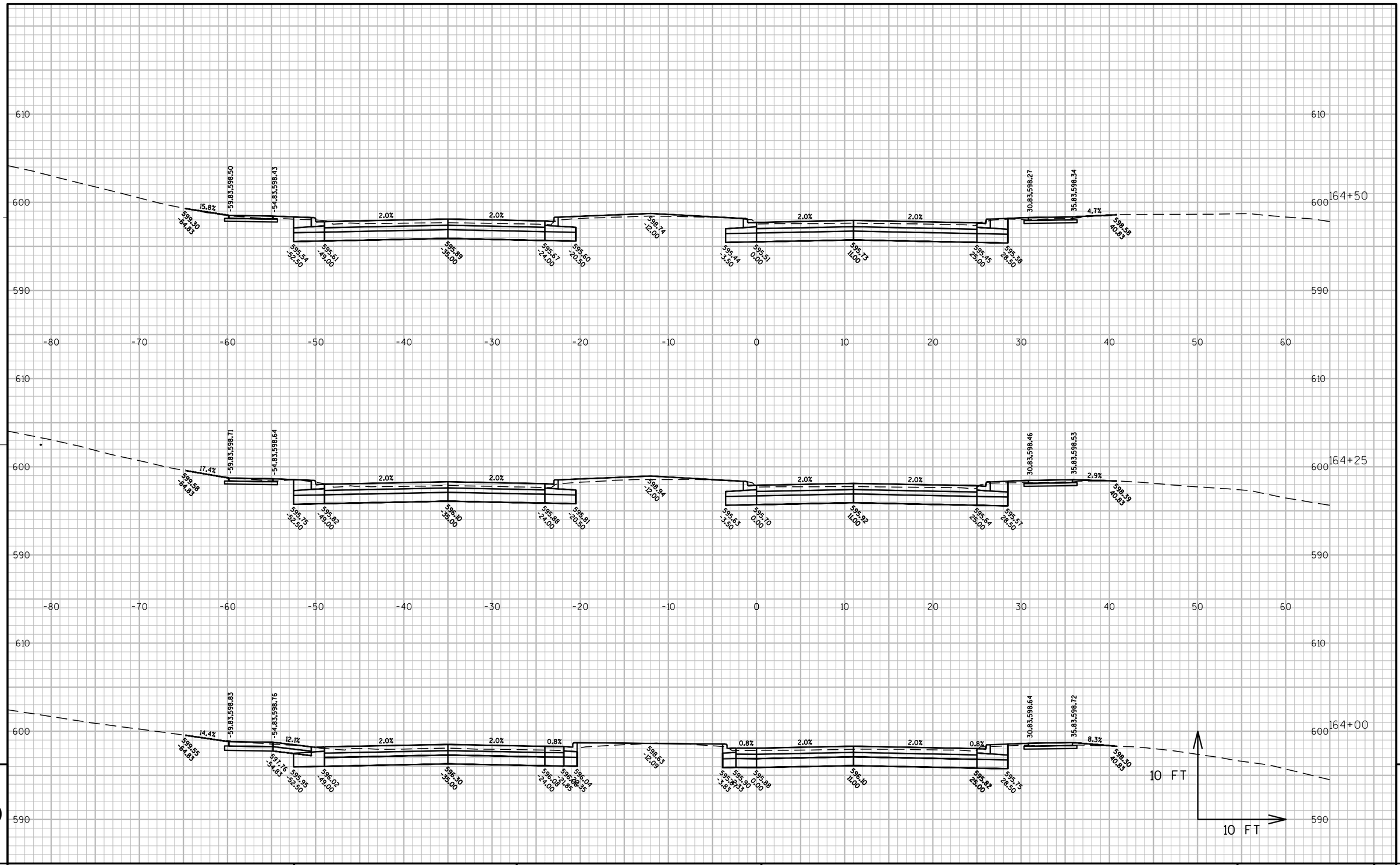
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG PLOT DATE : 1/4/2019 10:54 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (27) STH 42 PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG PLOT DATE : 1/4/2019 10:54 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (28) STH 42 (2) PLOT SCALE : 1:10_XREF

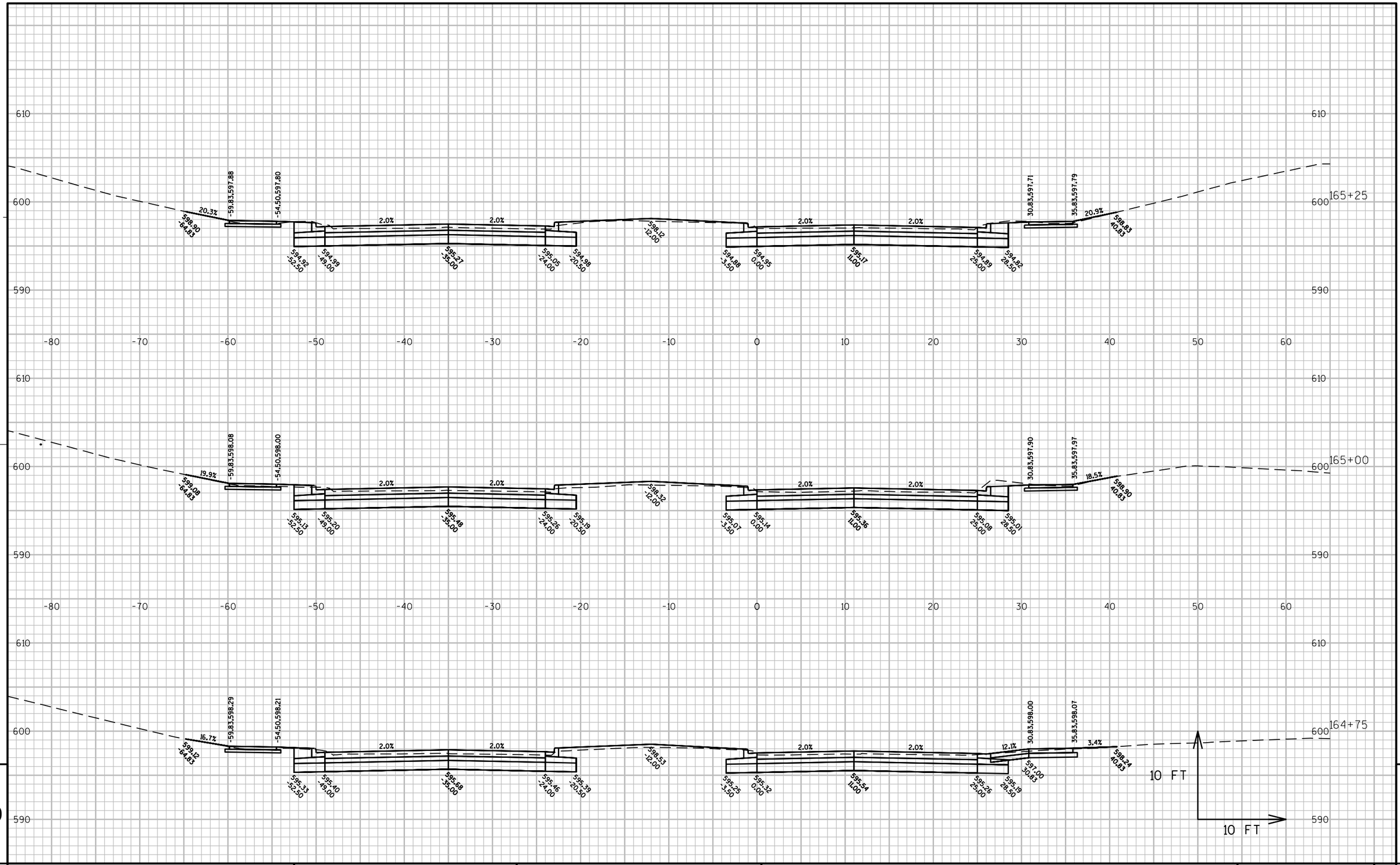
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG PLOT DATE : 1/4/2019 10:55 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (28) STH 42 PLOT SCALE : 1:10_XREF

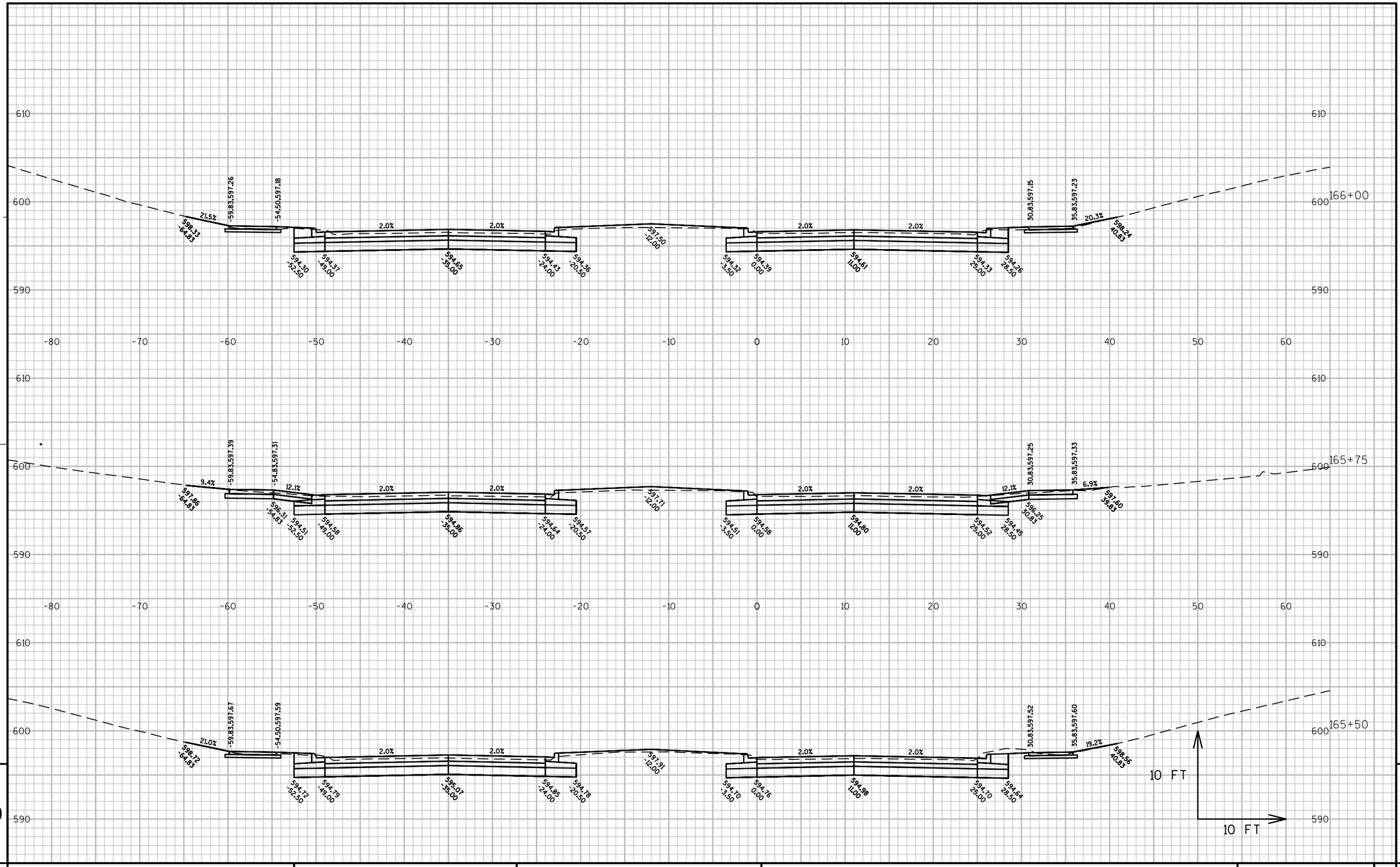
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_16450-17200.DWG PLOT DATE : 1/4/2019 10:56 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (11) STH 42 PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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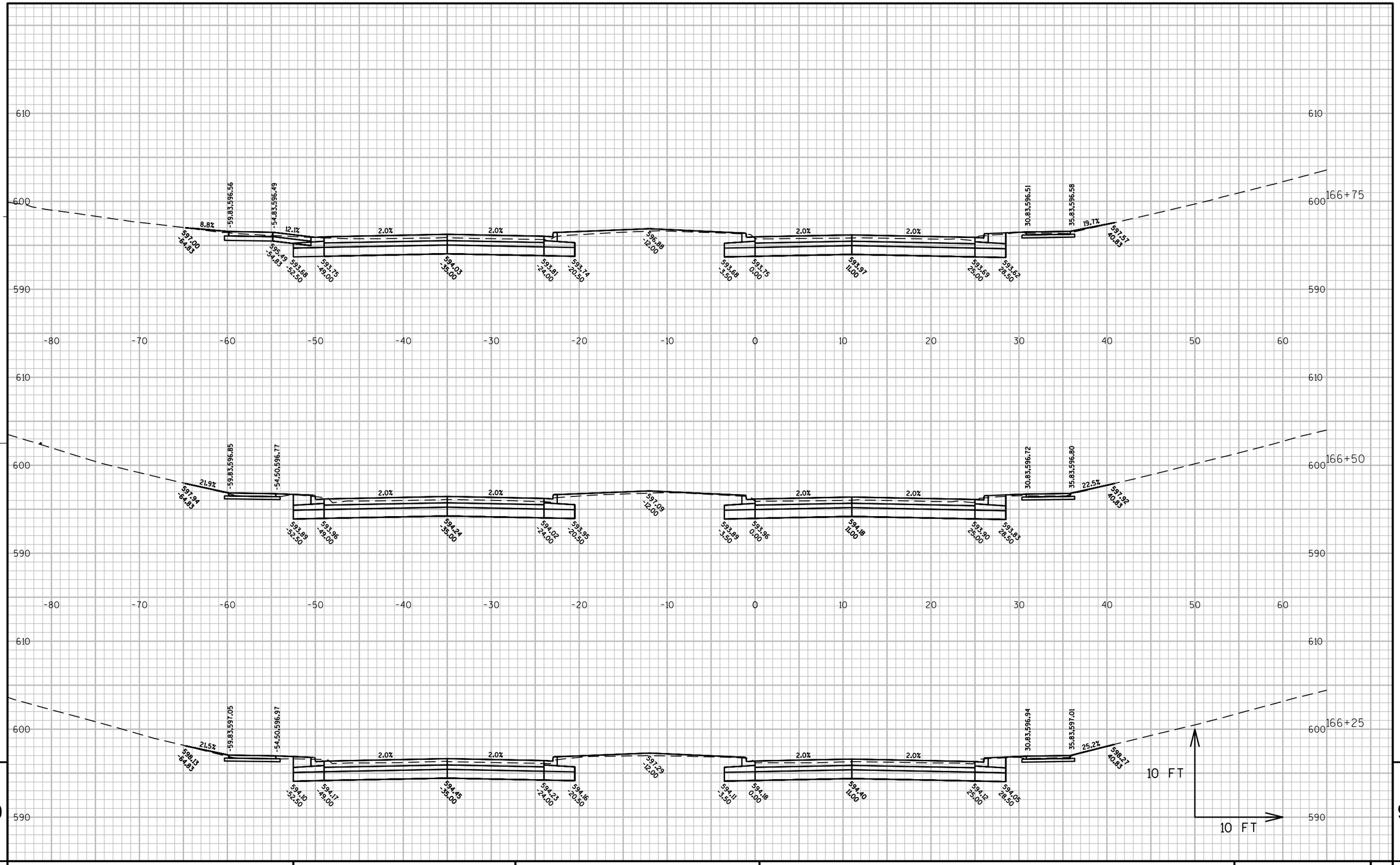
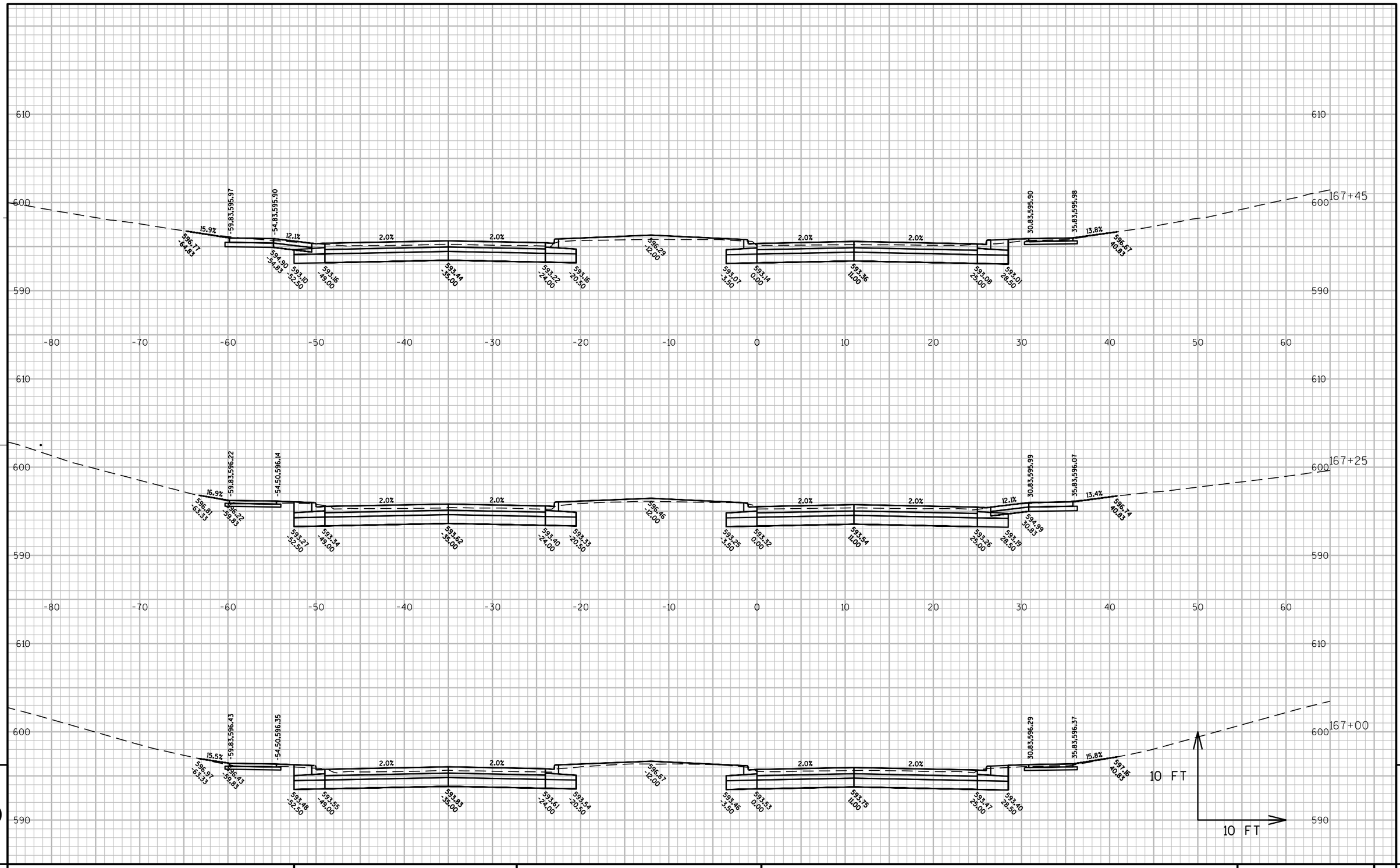
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_16450-17200.DWG
PLOT DATE : 1/4/2019 10:56 AM
PLOT BY : AYRES ASSOCIATES
PLOT NAME : (12) STH 42
PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

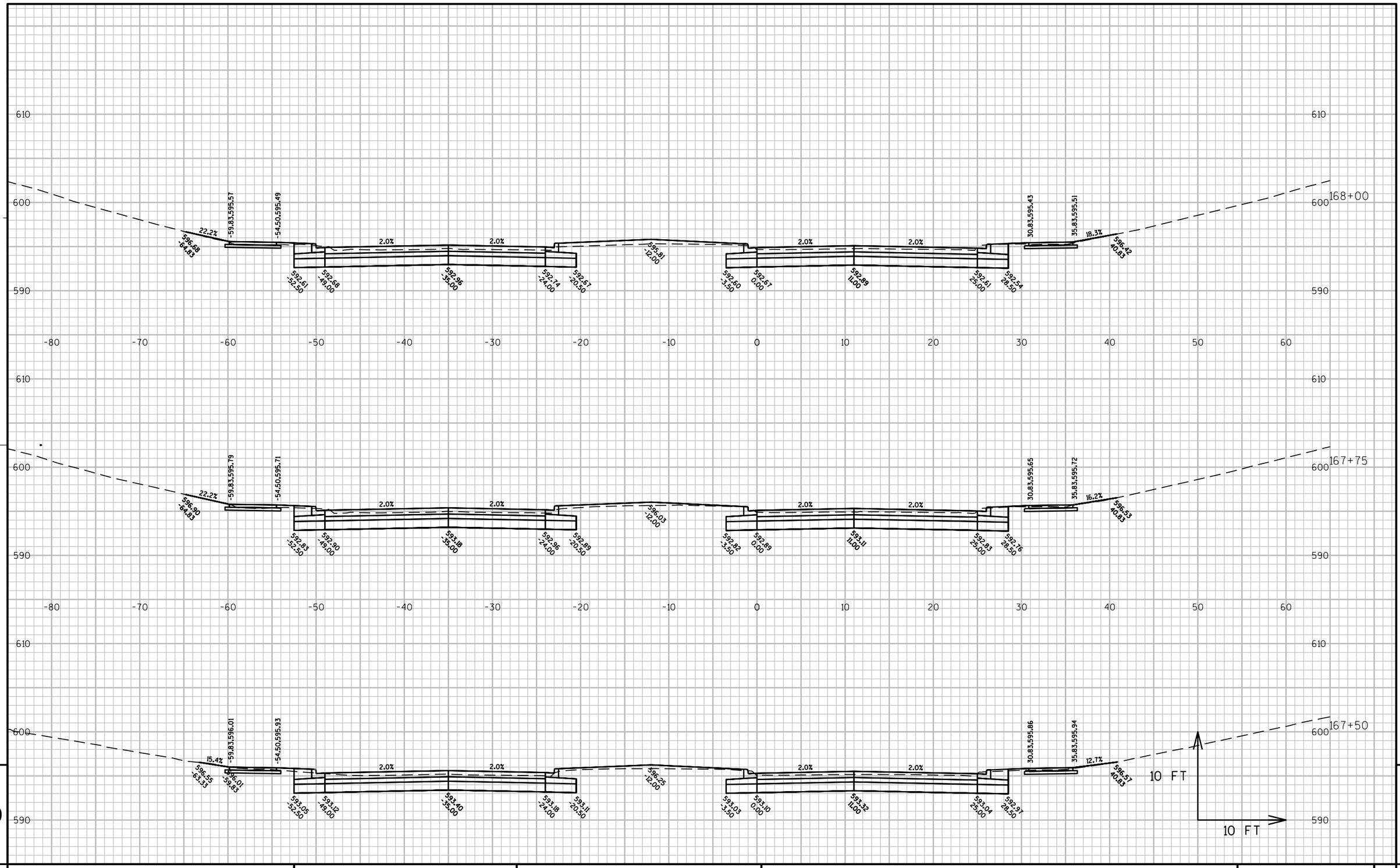
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_16450-17200.DWG PLOT DATE : 1/4/2019 10:56 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (13) STH 42 PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 567	E

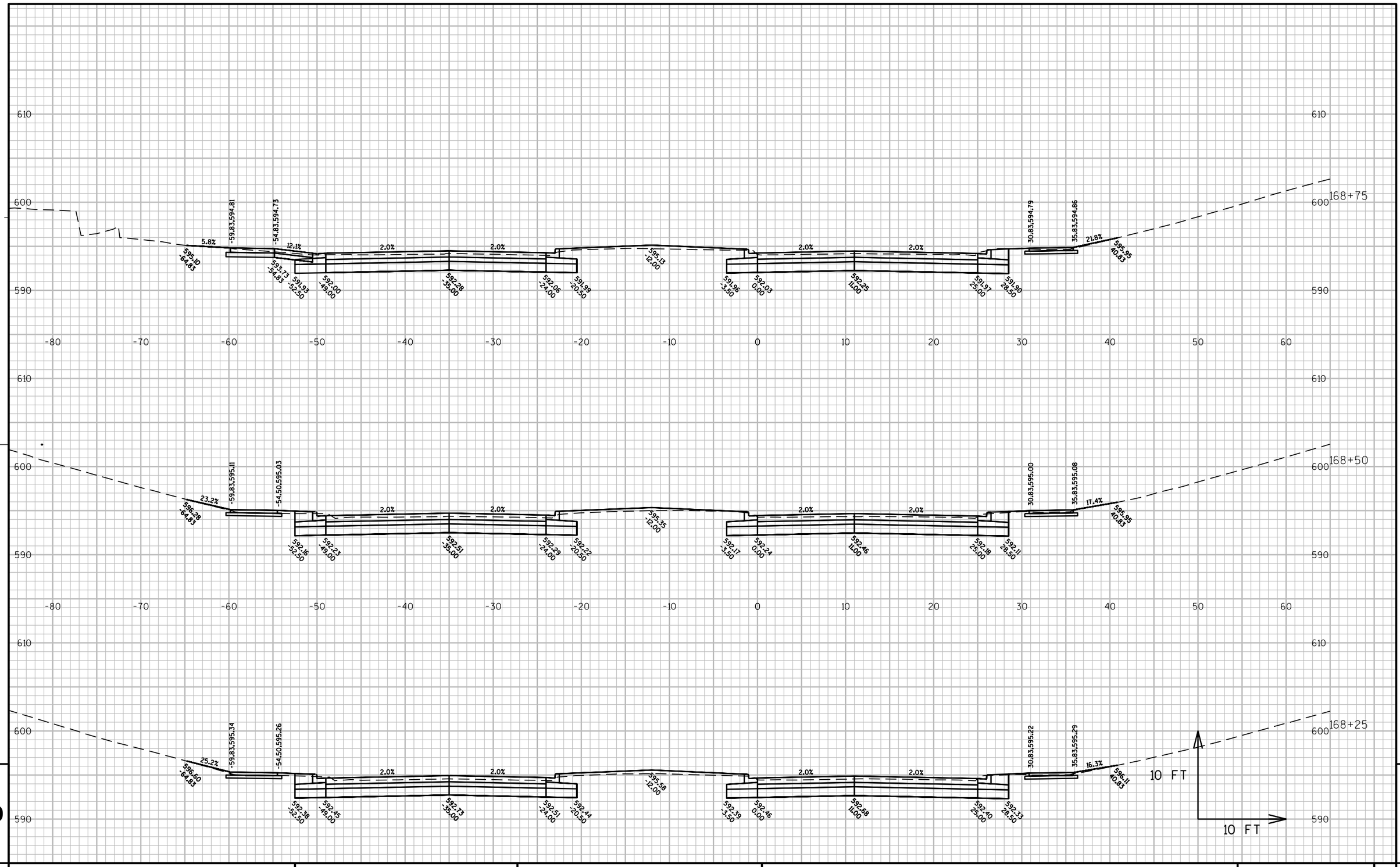
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_16450-17200.DWG PLOT DATE : 1/4/2019 10:56 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (14) STH 42 PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

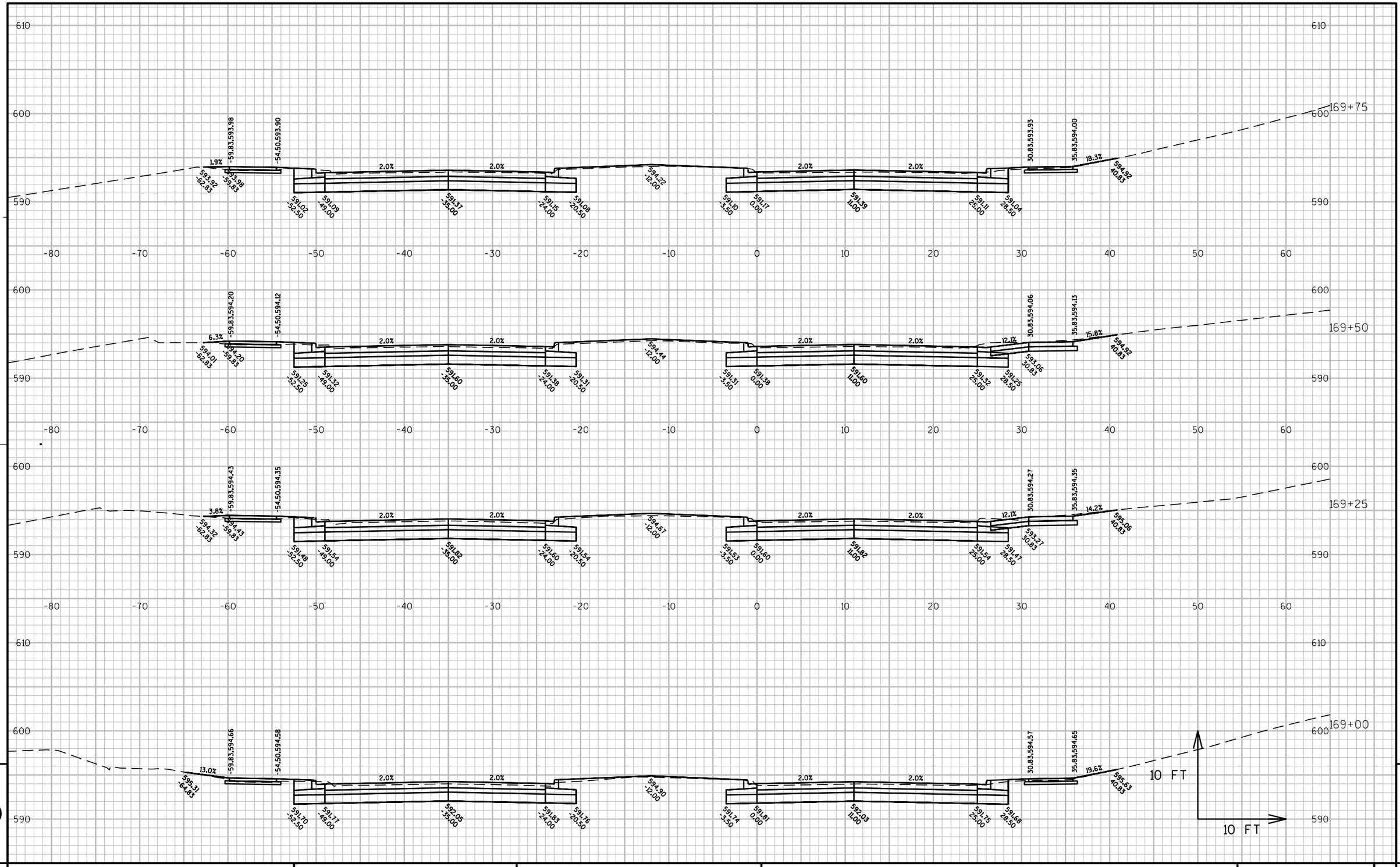
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_16450-17200.DWG
PLOT DATE : 1/4/2019 10:57 AM
PLOT BY : AYRES ASSOCIATES
PLOT NAME : (15) STH 42
PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 569	E

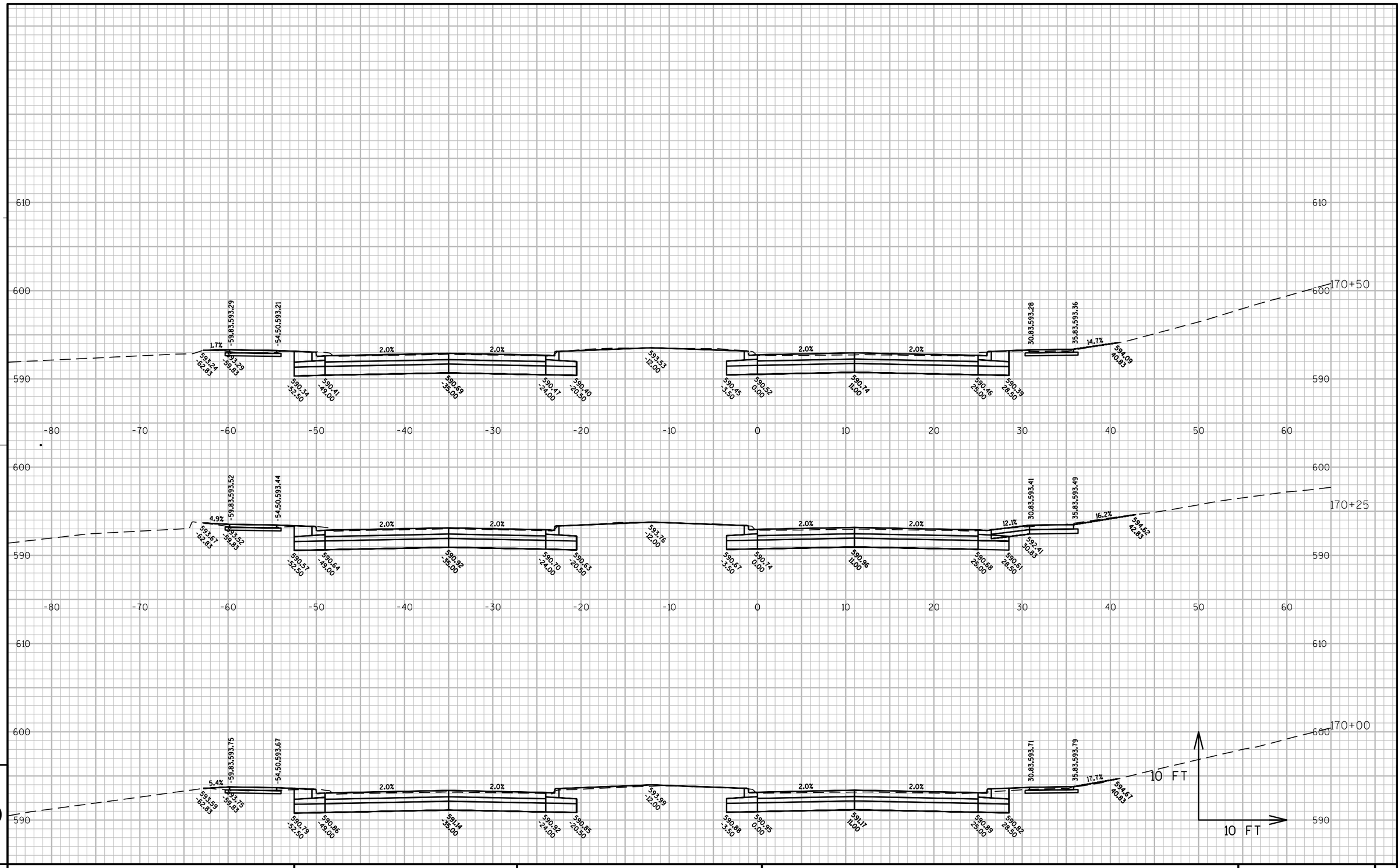
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_16450-17200.DWG PLOT DATE : 1/4/2019 10:57 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (16) STH 42 PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



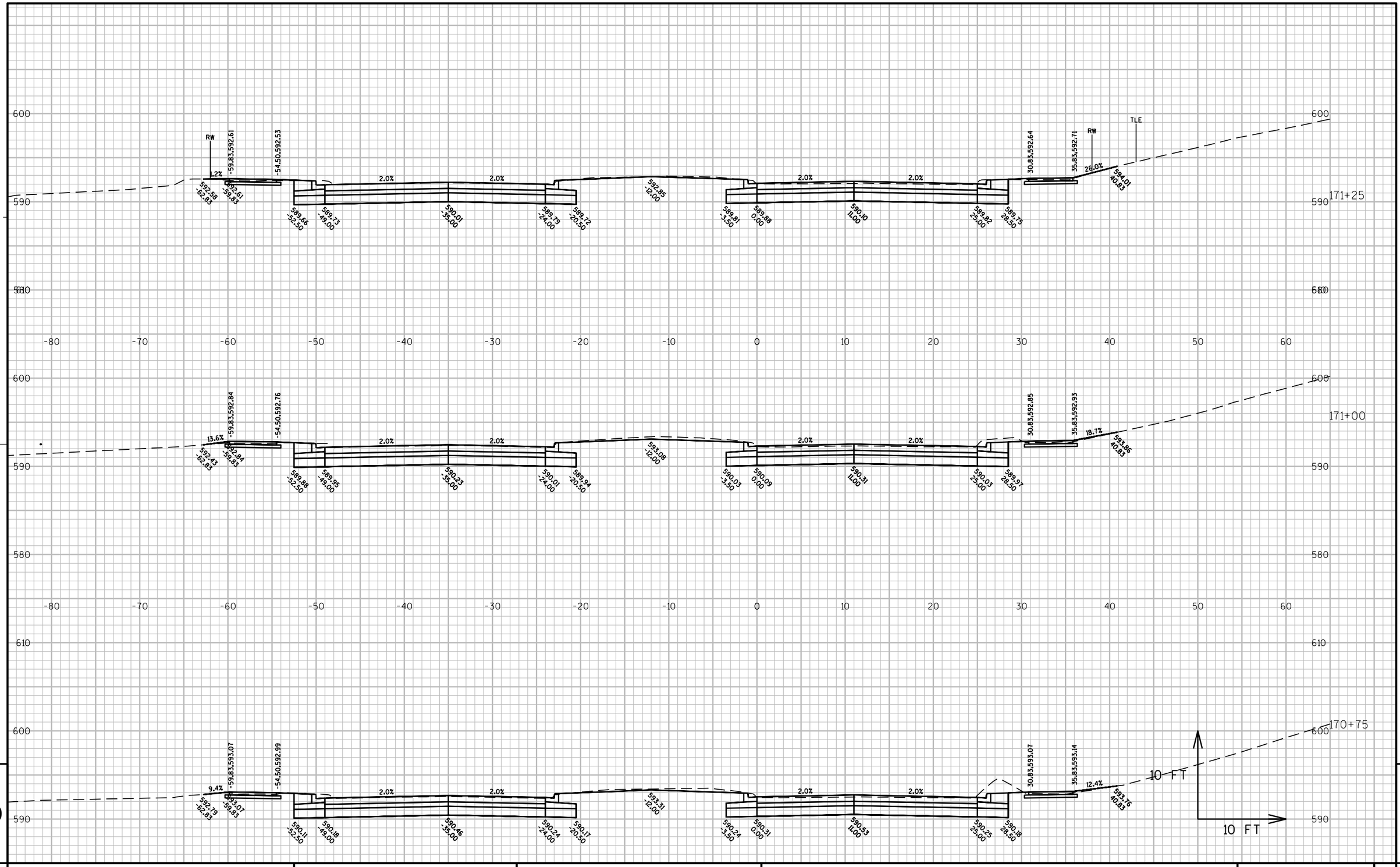
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_16450-17200.DWG PLOT DATE : 1/4/2019 10:57 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (17) STH 42 PLOT SCALE : 1:10_XREF



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

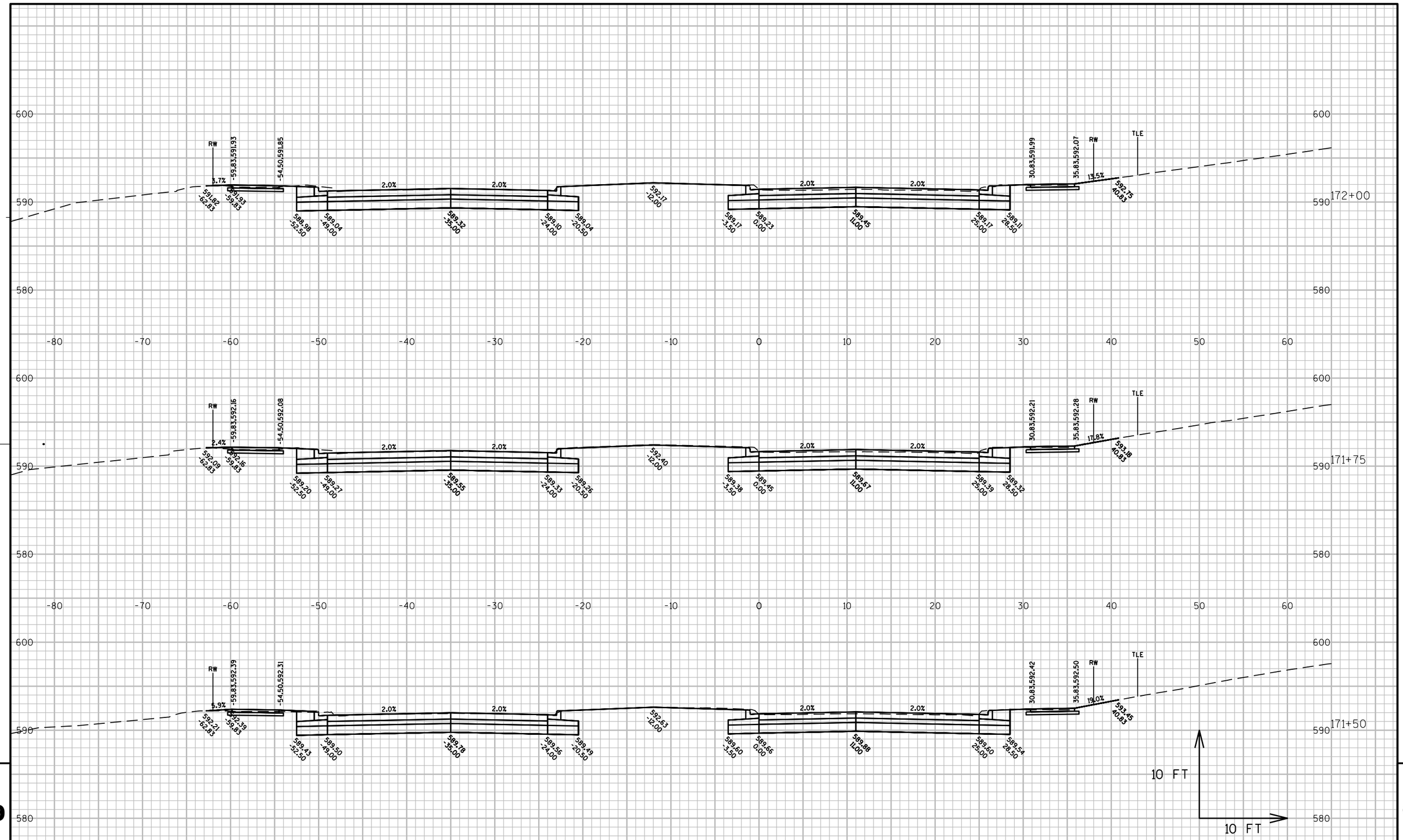
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_16450-17200.DWG PLOT DATE : 1/4/2019 10:57 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (18) STH 42 PLOT SCALE : 1:10_XREF



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 572	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_16450-17200.DWG PLOT DATE : 1/4/2019 10:57 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (19) STH 42 PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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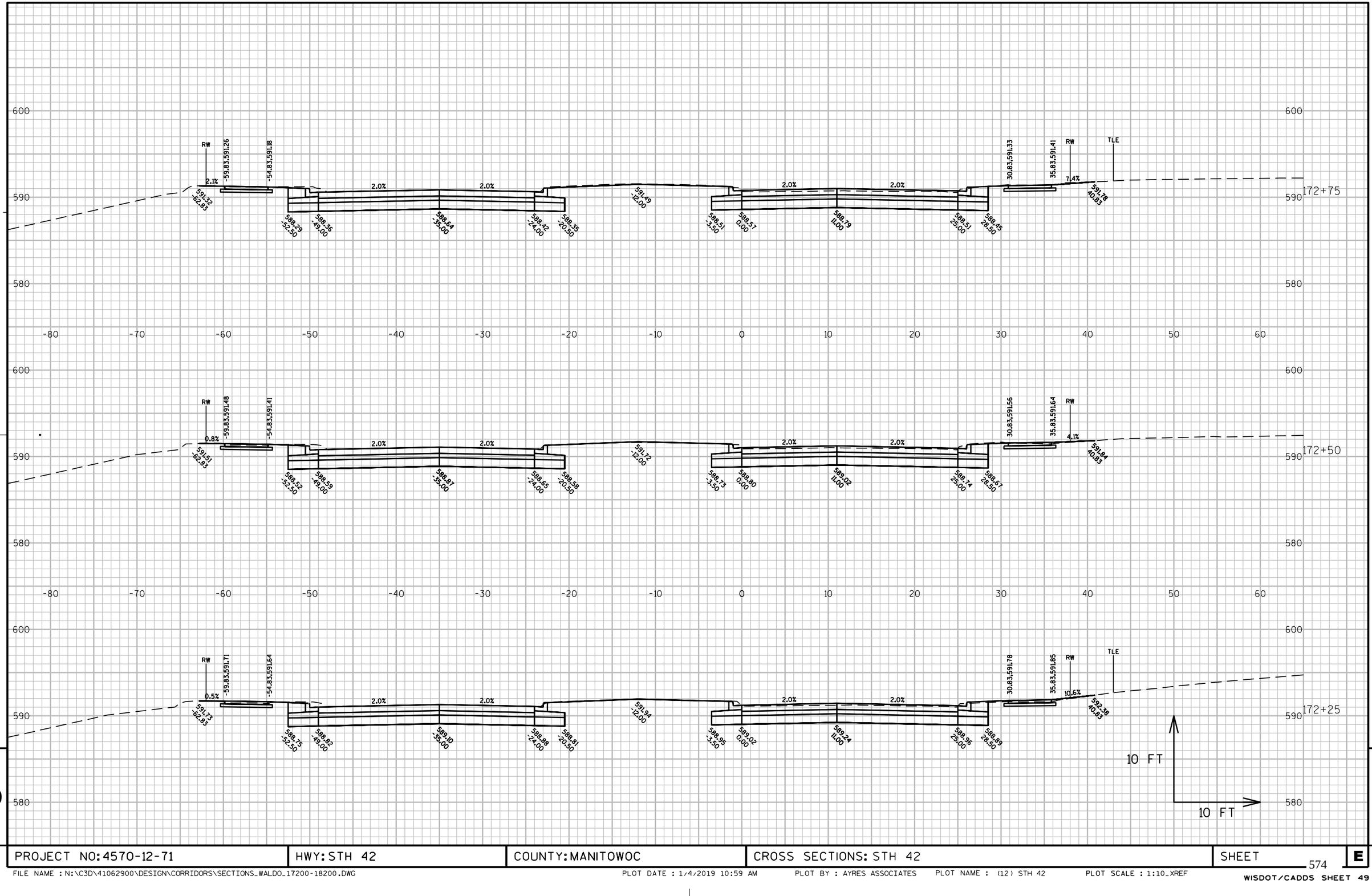
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 573	E

9

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_16450-17200.DWG PLOT DATE : 1/4/2019 10:57 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (20) STH 42 PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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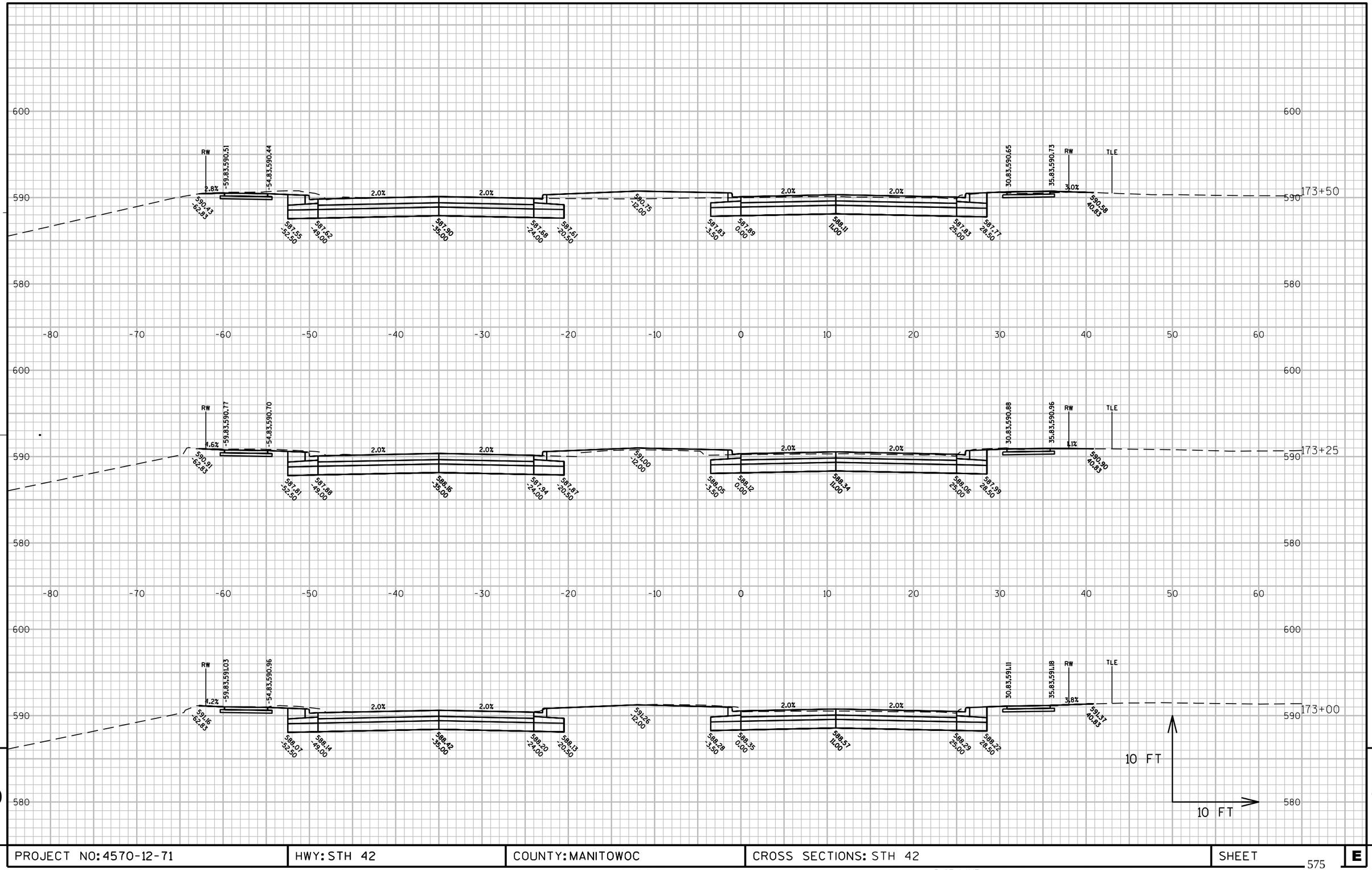
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 574	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_17200-18200.DWG PLOT DATE : 1/4/2019 10:59 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (12) STH 42 PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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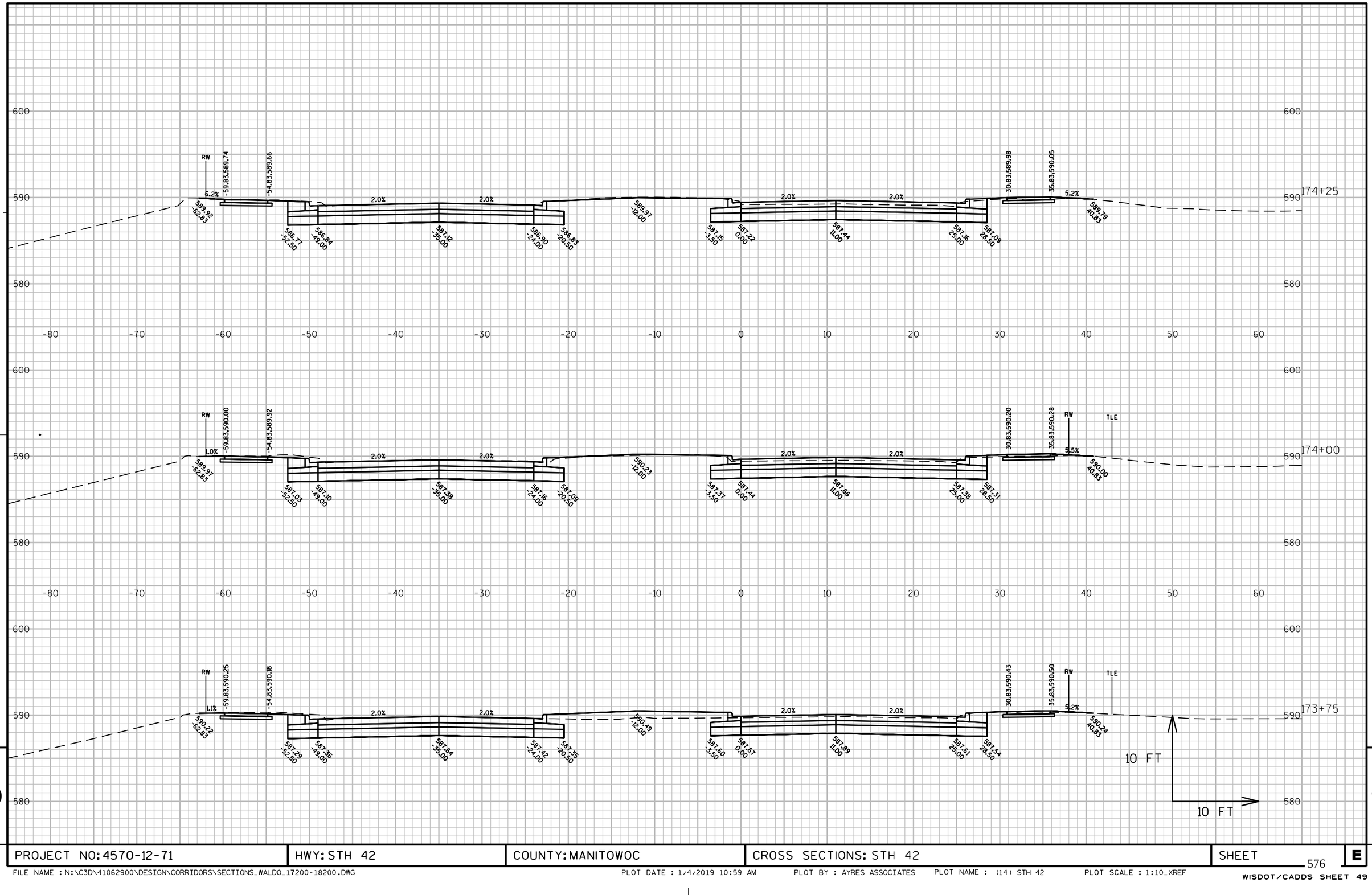
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_17200-18200.DWG PLOT DATE : 1/4/2019 10:59 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (13) STH 42 PLOT SCALE : 1:10_XREF

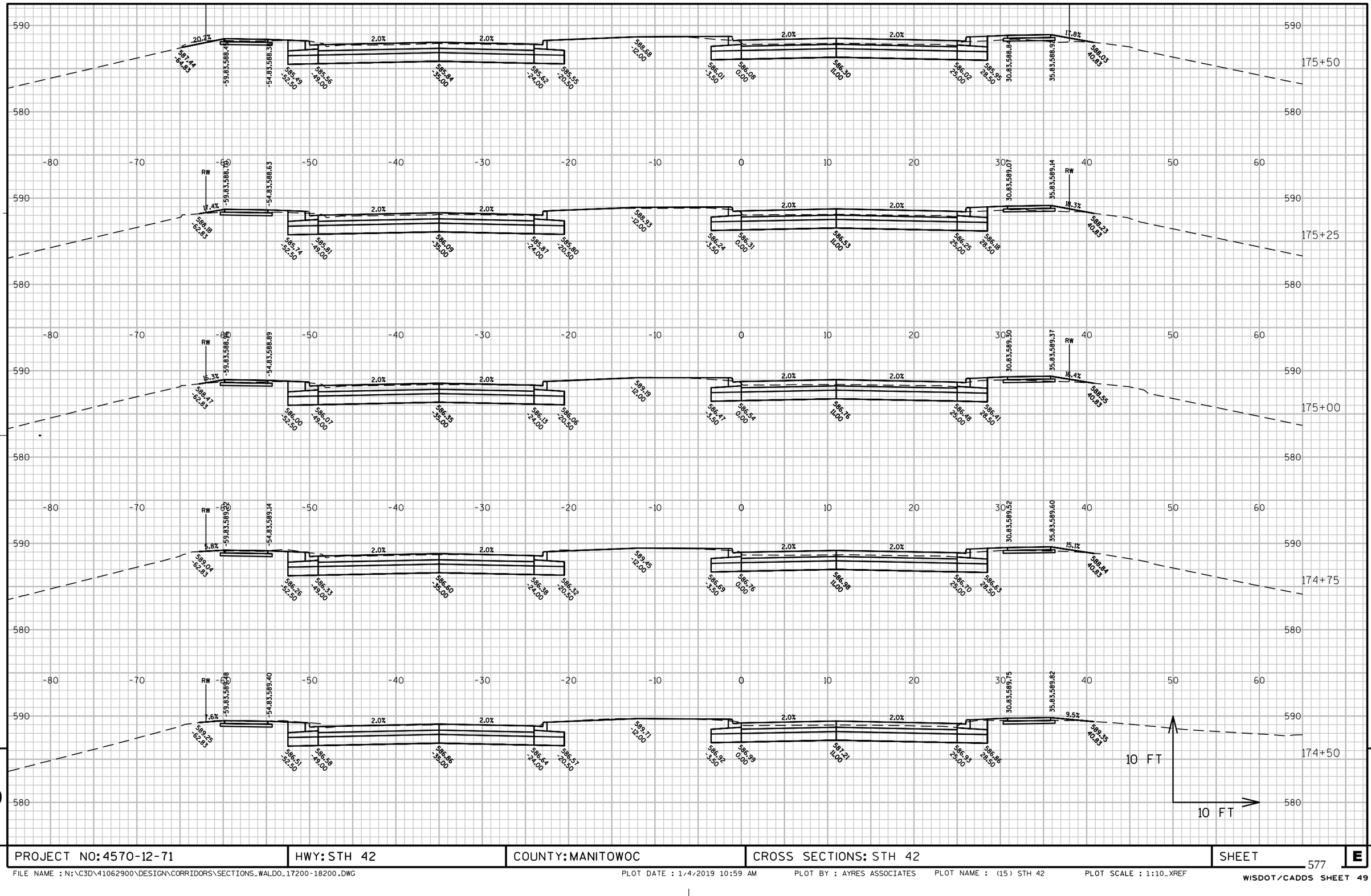
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 576	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_17200-18200.DWG PLOT DATE : 1/4/2019 10:59 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (14) STH 42 PLOT SCALE : 1:10_XREF

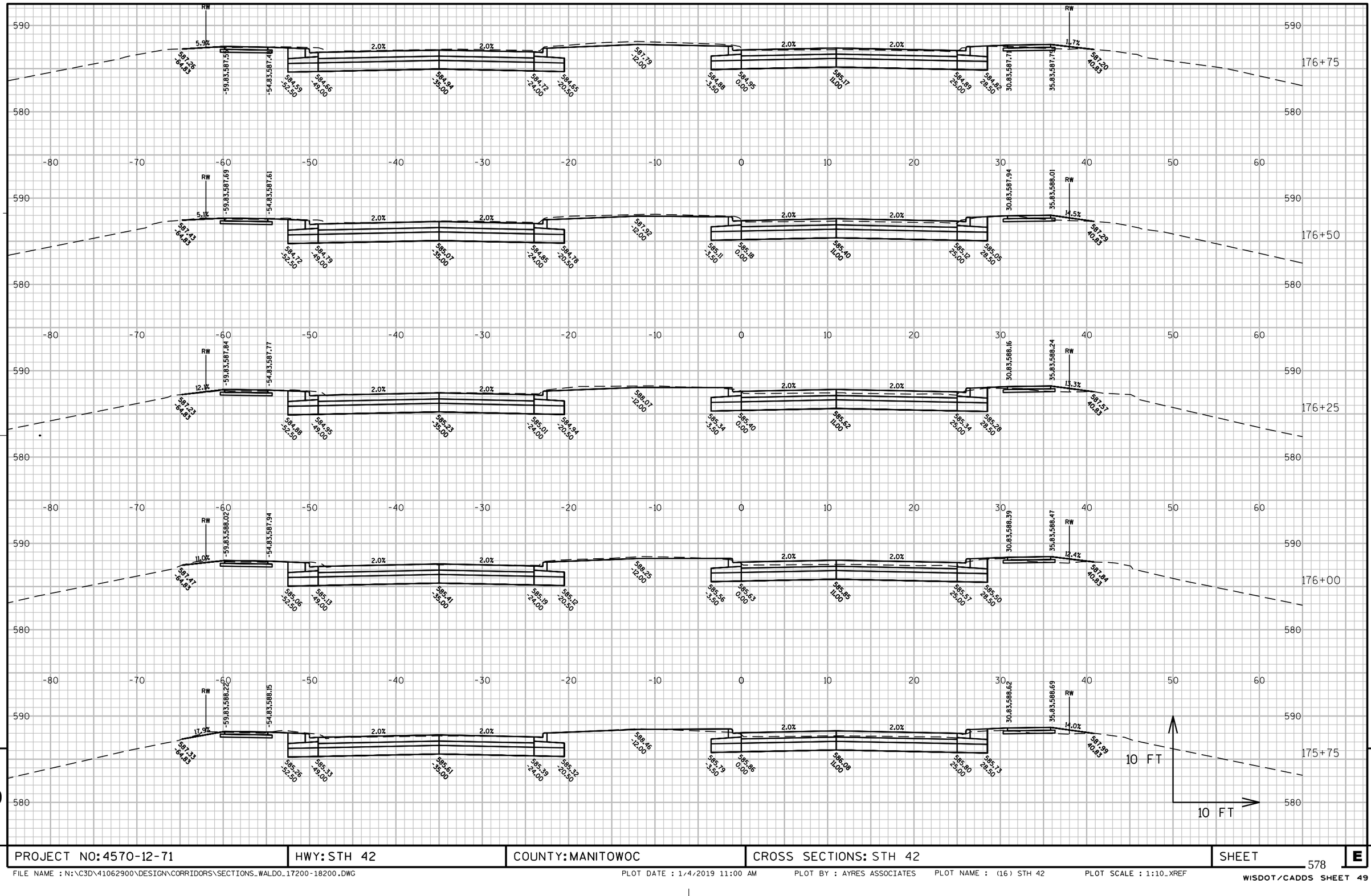
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 577	E

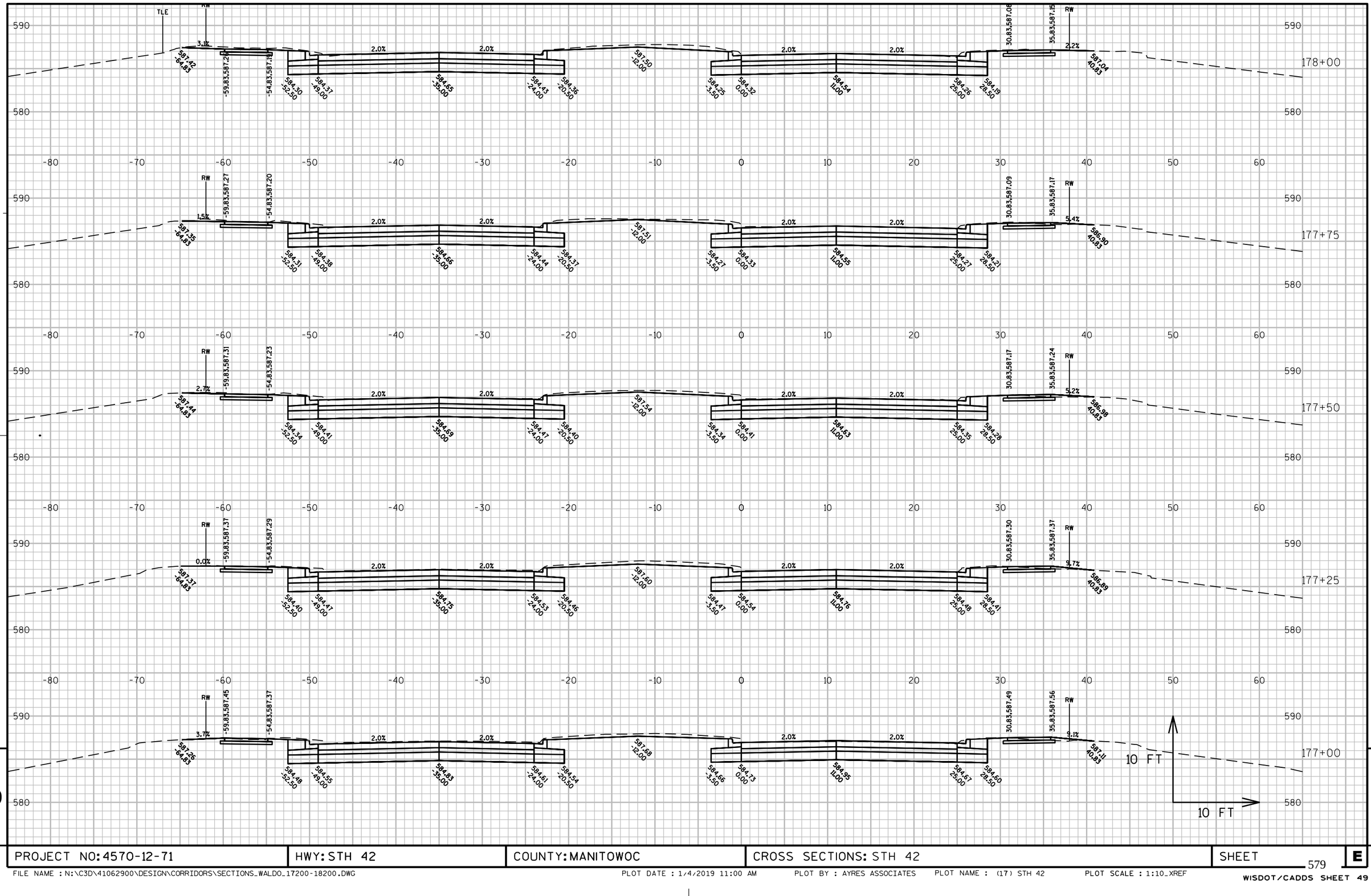
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_17200-18200.DWG PLOT DATE : 1/4/2019 10:59 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (15) STH 42 PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

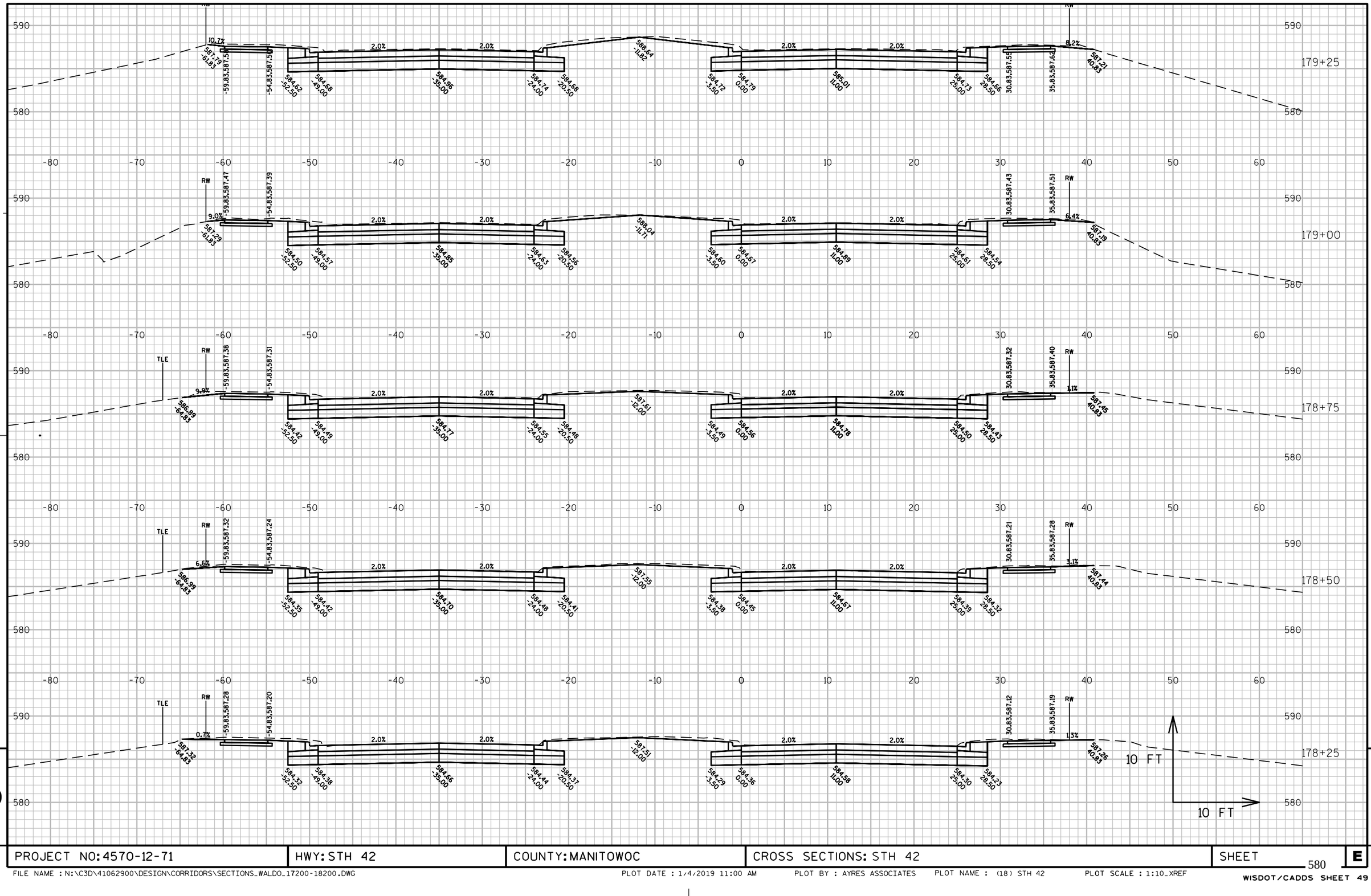
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_17200-18200.DWG PLOT DATE : 1/4/2019 11:00 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (16) STH 42 PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 579	E

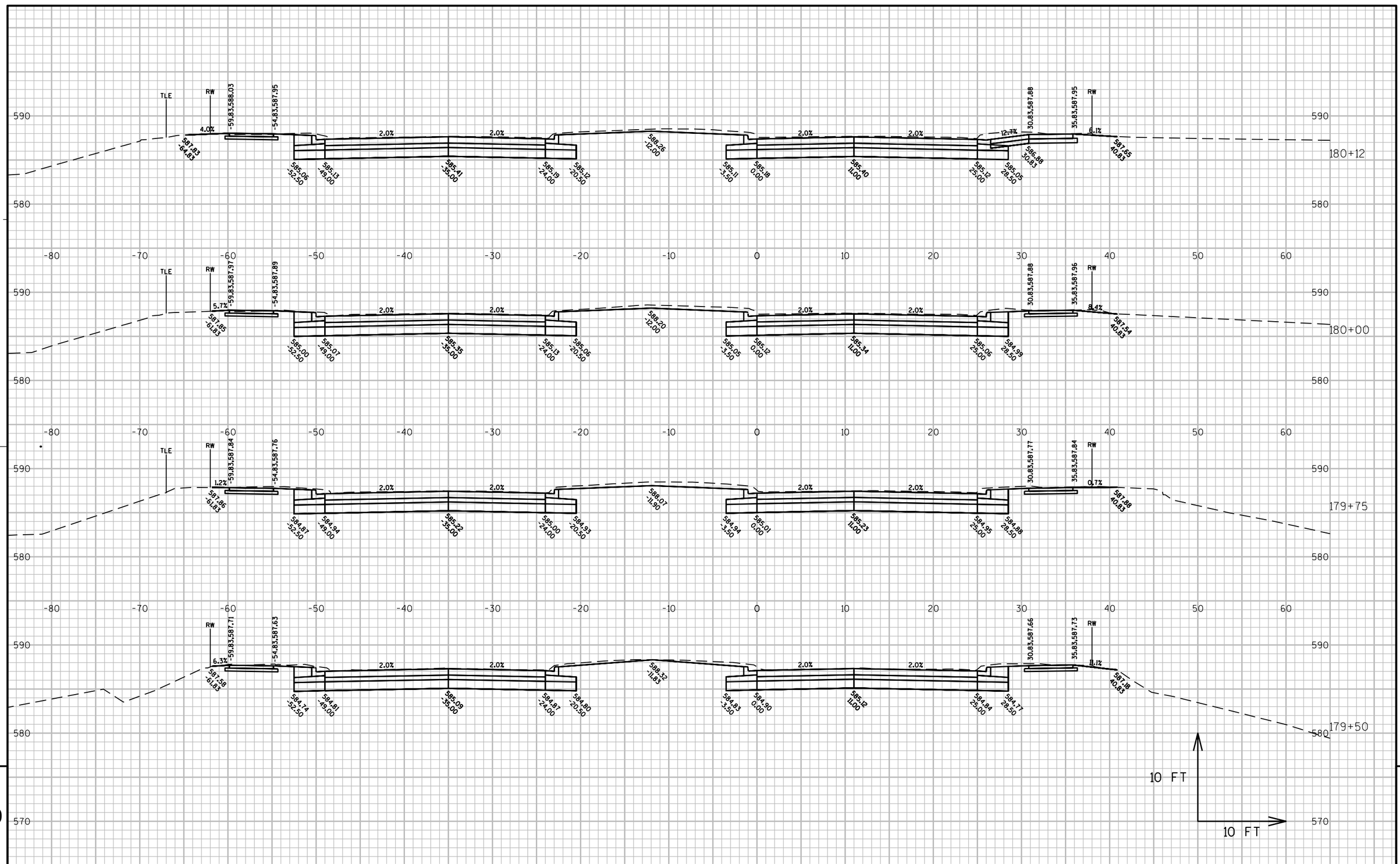
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_17200-18200.DWG PLOT DATE : 1/4/2019 11:00 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (17) STH 42 PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

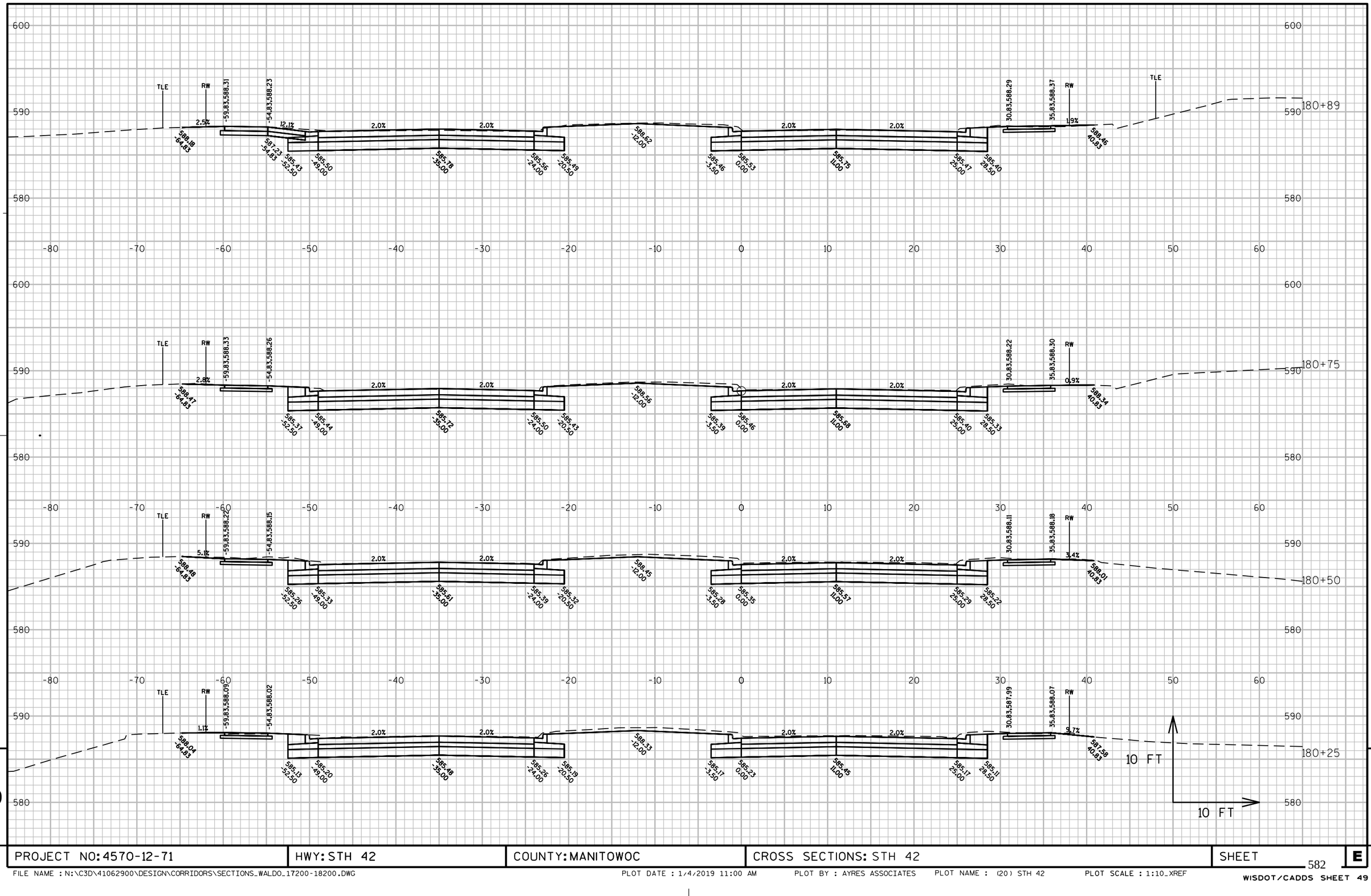
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_17200-18200.DWG PLOT DATE : 1/4/2019 11:00 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (18) STH 42 PLOT SCALE : 1:10_XREF



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

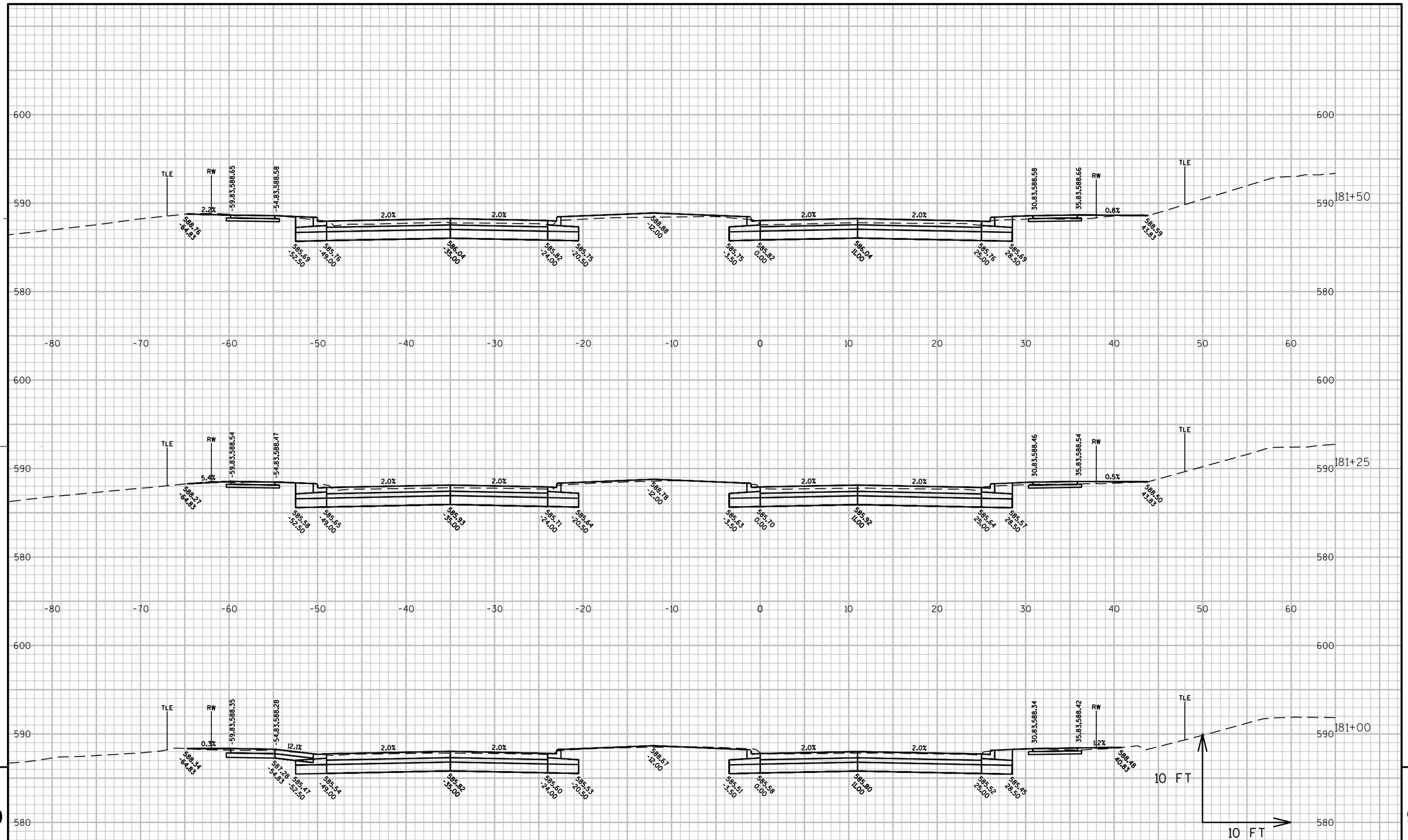
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_17200-18200.DWG PLOT DATE : 1/4/2019 11:00 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (19) STH 42 PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



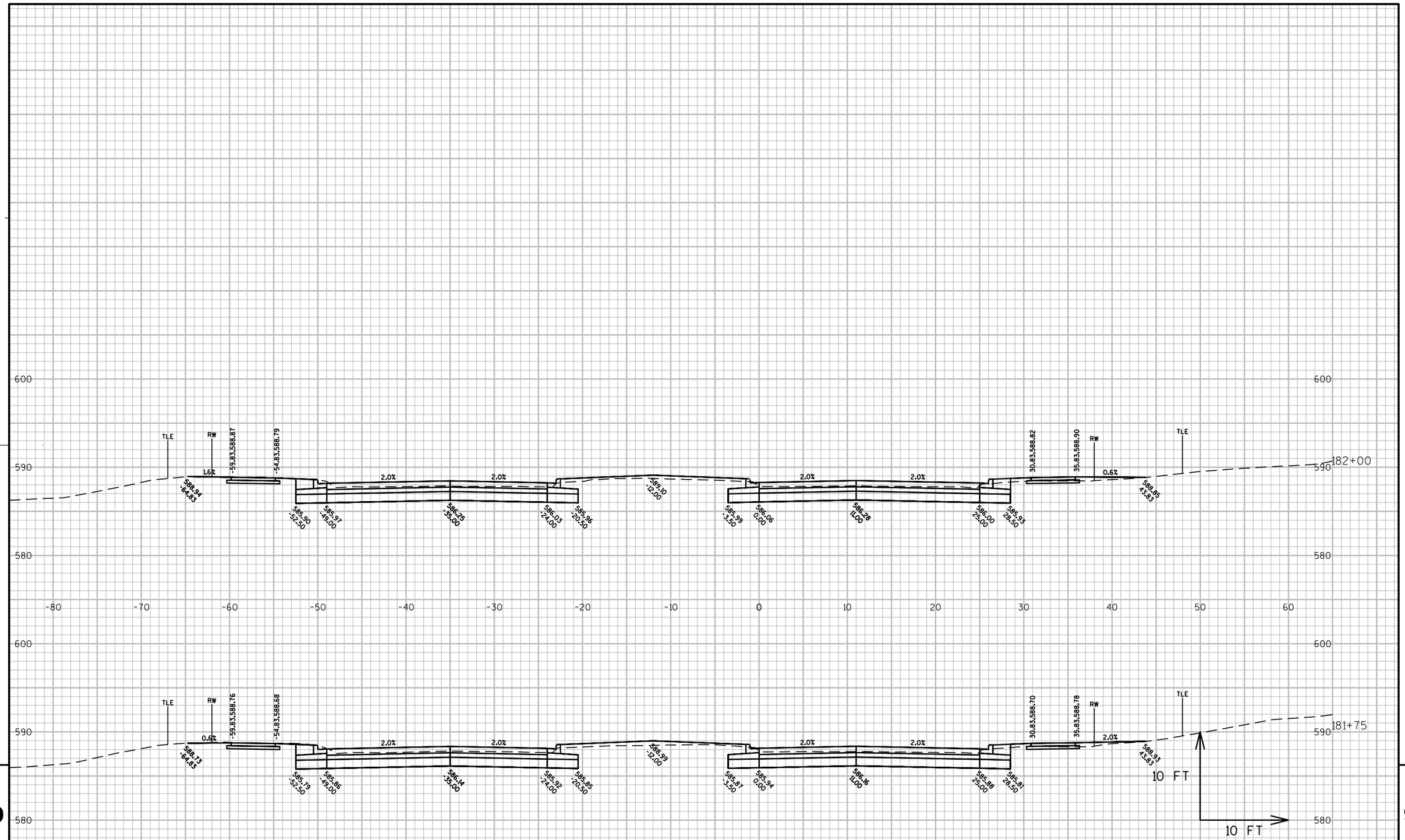
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_17200-18200.DWG PLOT DATE : 1/4/2019 11:00 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (20) STH 42 PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 583	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_17200-18200.DWG PLOT DATE : 1/4/2019 11:50 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (21) STH 42 PLOT SCALE : 1:10_XREF



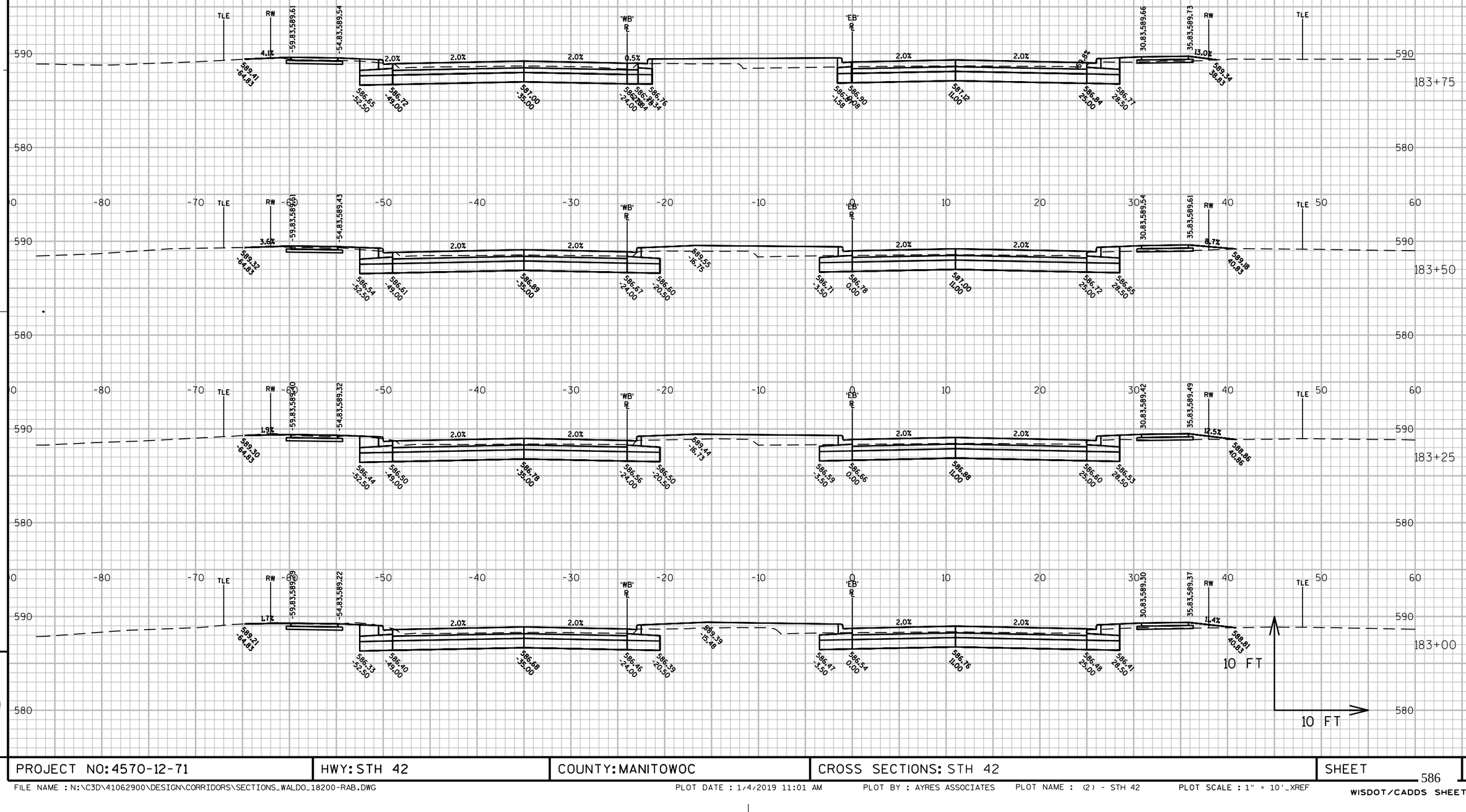
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 584	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_17200-18200.DWG PLOT DATE : 1/4/2019 11:51 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (22) STH 42 PLOT SCALE : 1:10_XREF

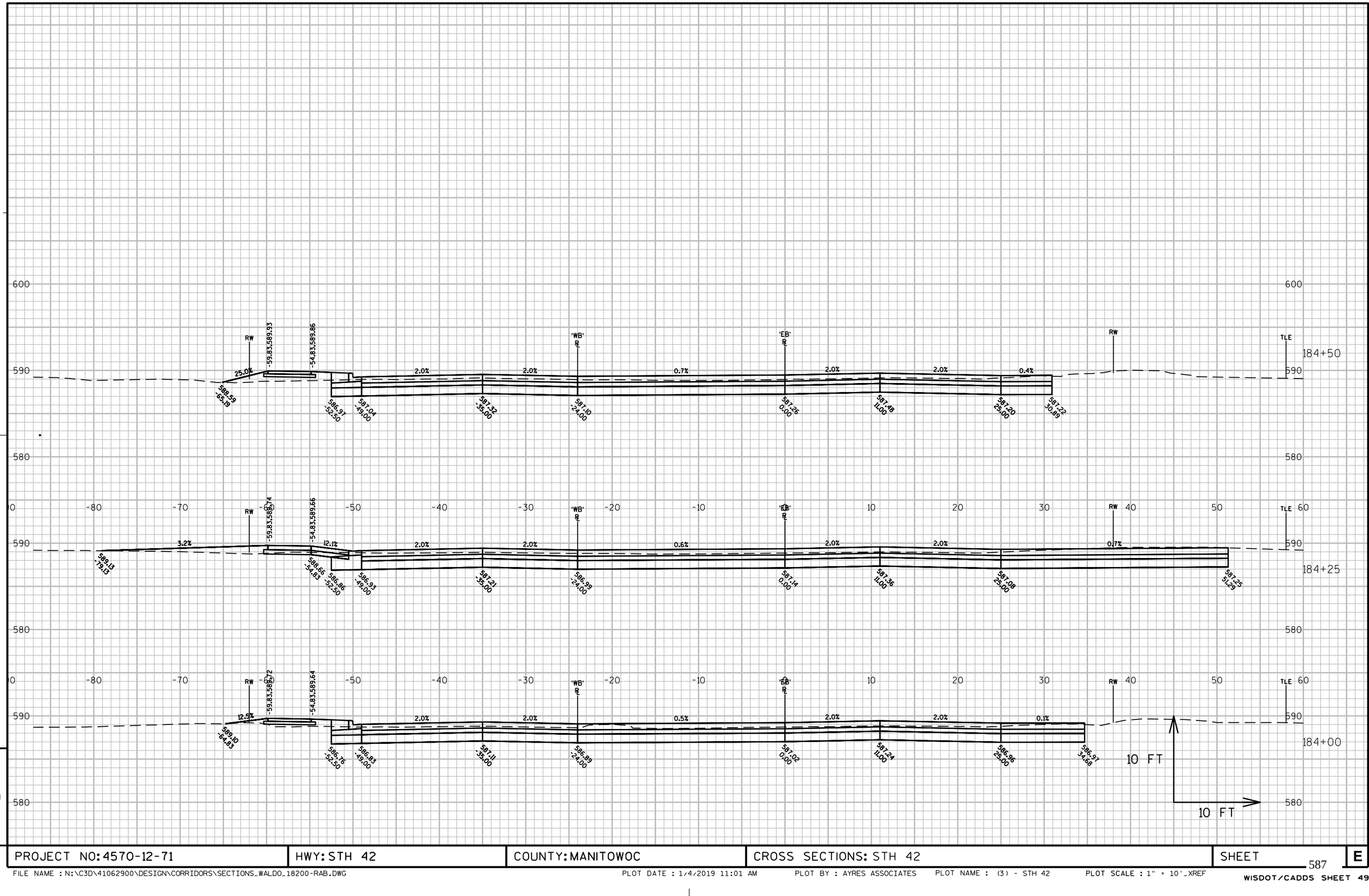
WISDOT/CADDS SHEET 49

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 11:01 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1) - STH 42 PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 587	E

9

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FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 11:01 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (3) - STH 42 PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49

PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET 588 E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 11:01 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (4) - STH 42 PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

9

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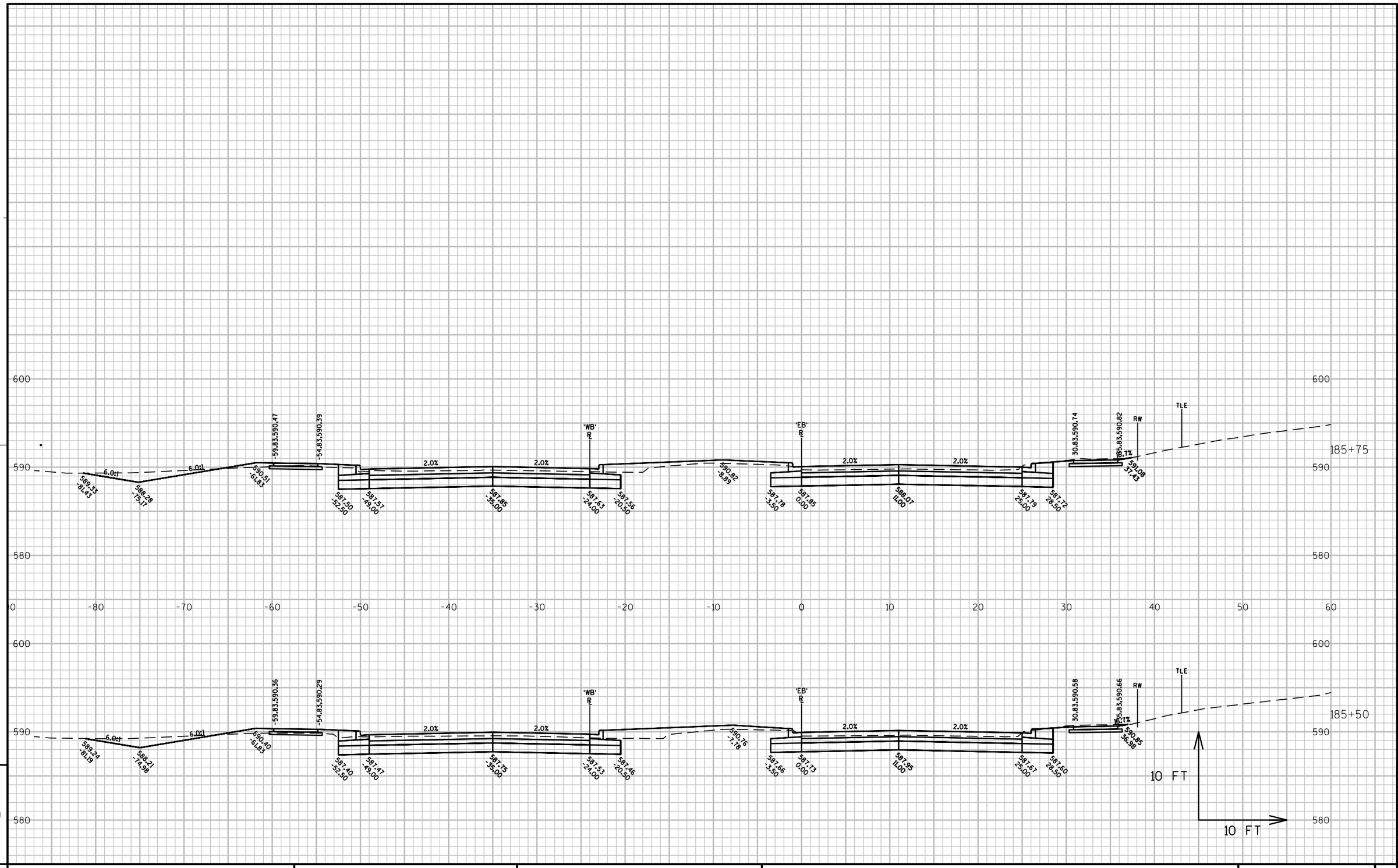

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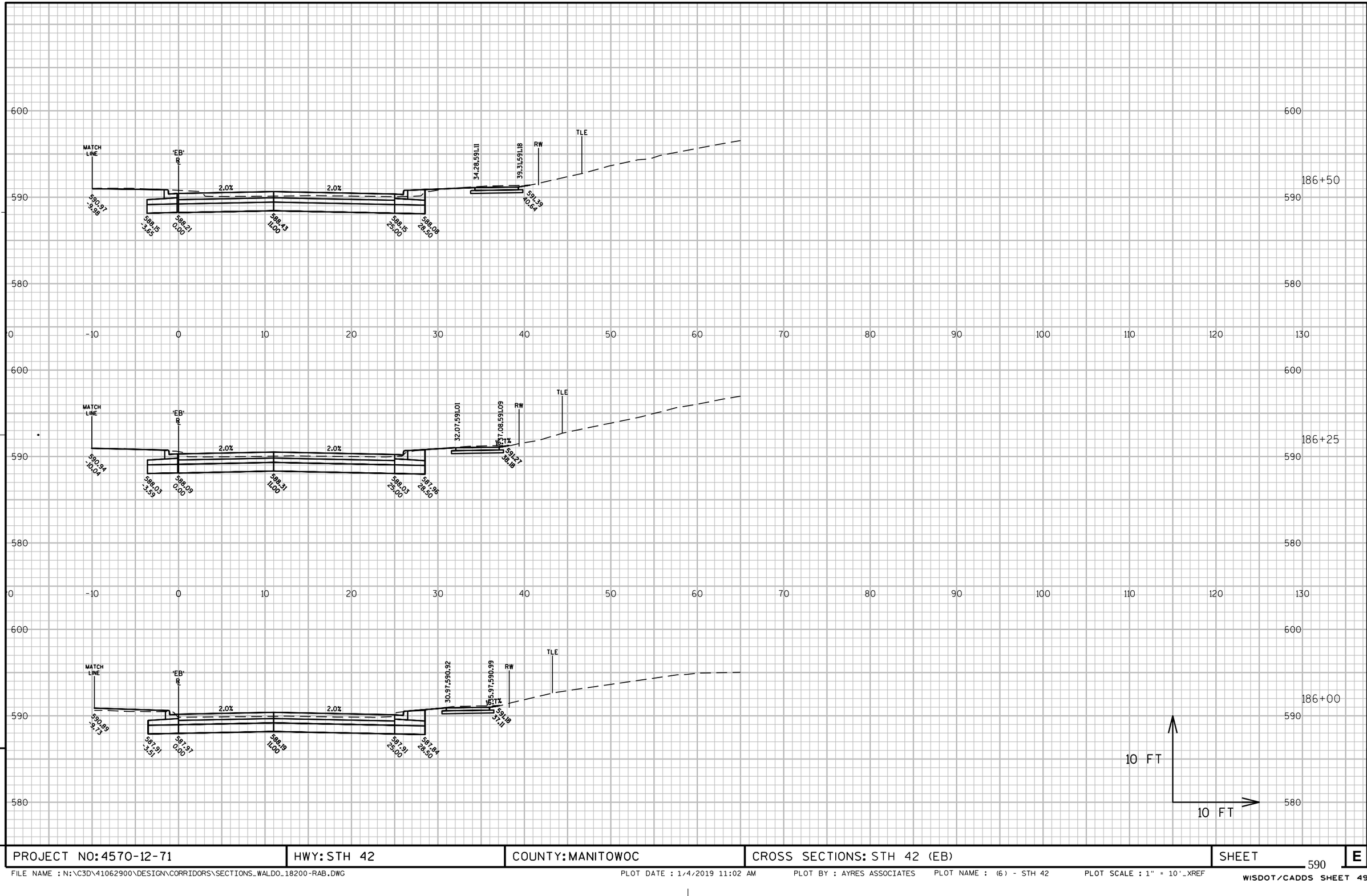
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42	SHEET	E

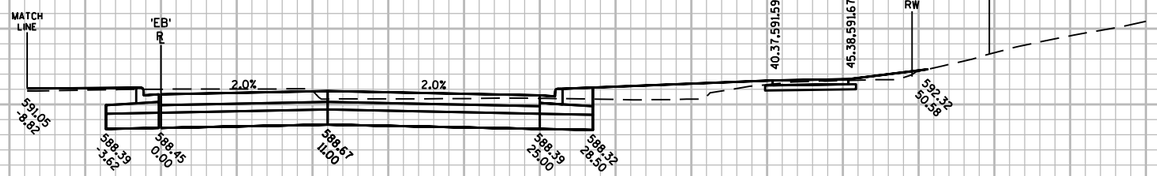
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 11:02 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (5) - STH 42 PLOT SCALE : 1" = 10'_XREF



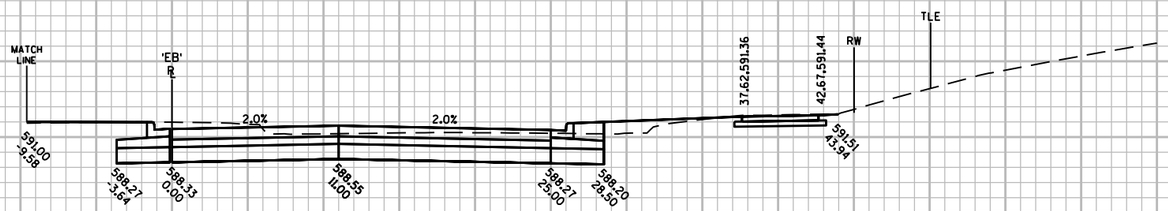
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (EB)	SHEET 590	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 11:02 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (6) - STH 42 PLOT SCALE : 1" = 10'_XREF

187+25



187+00



186+75

10 FT

10 FT

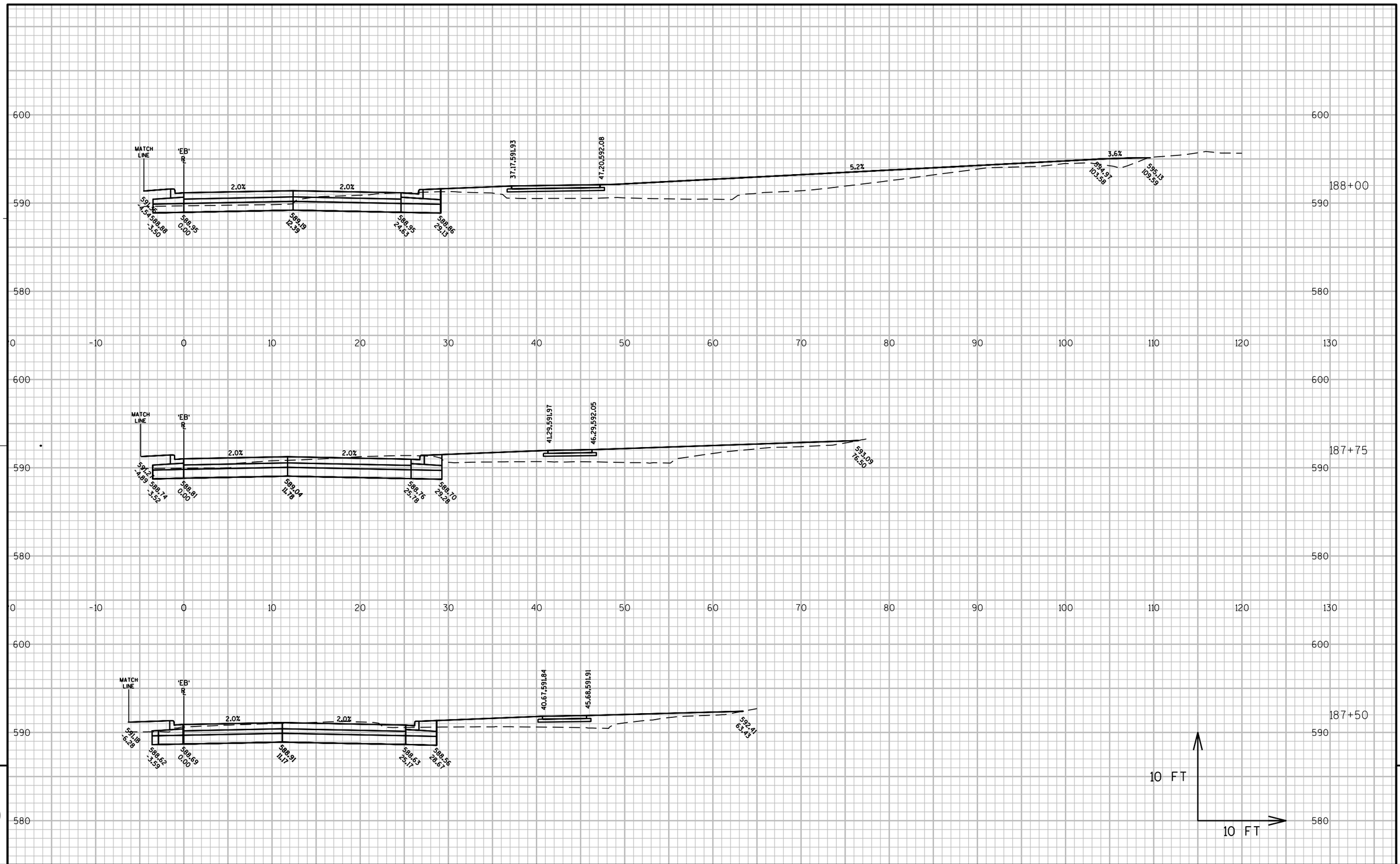
9

9

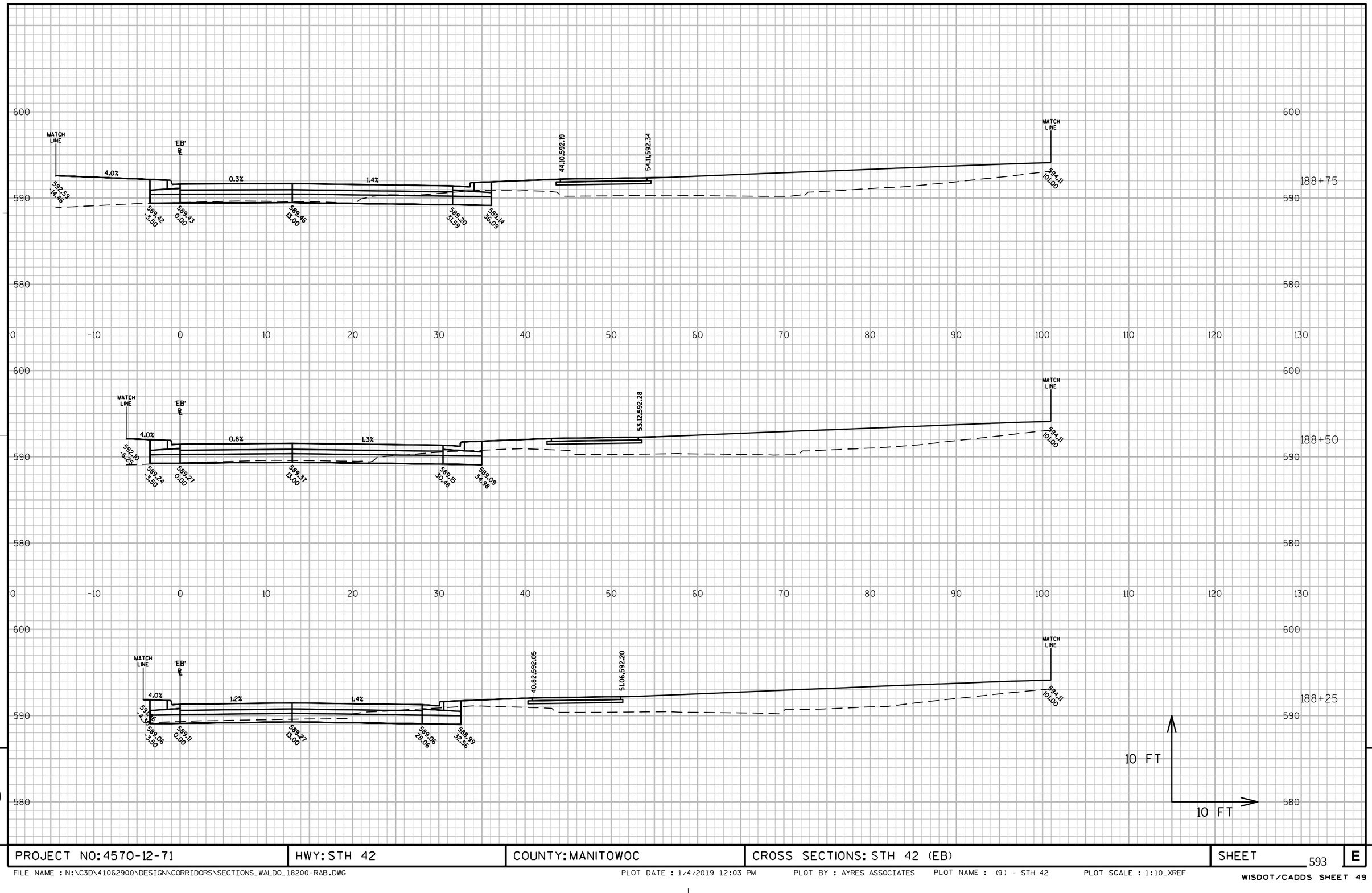
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (EB)	SHEET 591	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 11:02 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (7) - STH 42 PLOT SCALE : 1" = 10'_XREF

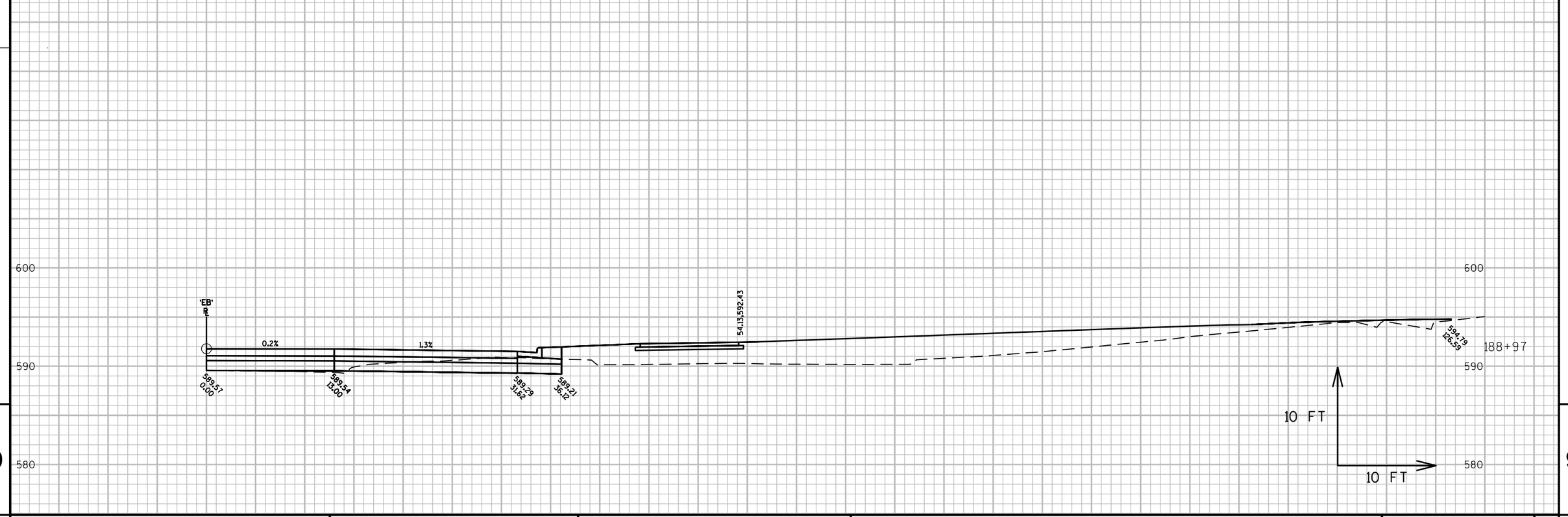
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (EB)	SHEET 592	E



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (EB)	SHEET 593	E



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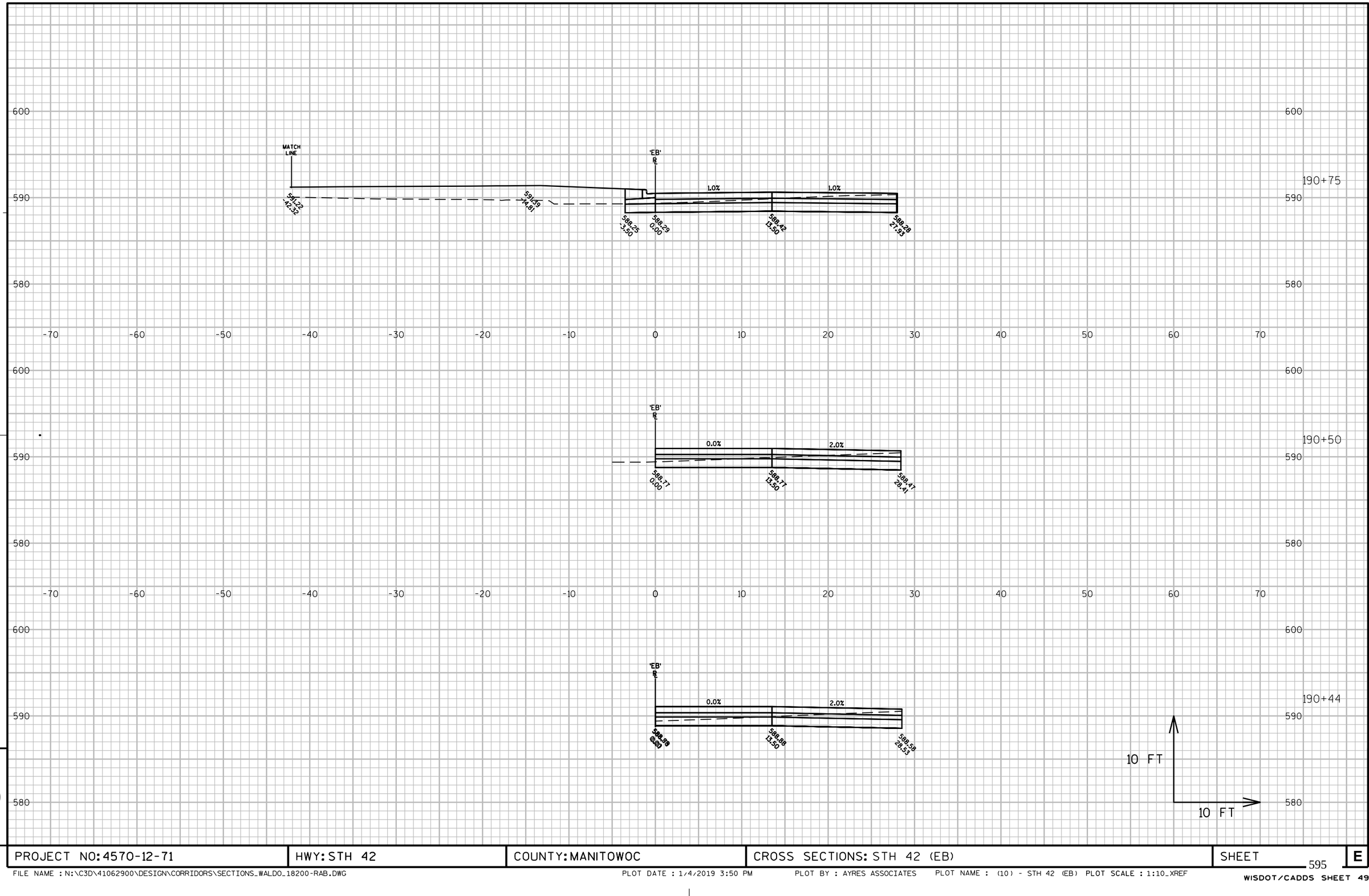
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (EB)	SHEET 594	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 12:03 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : STH 42 (EB) PLOT SCALE : 1:10_XREF



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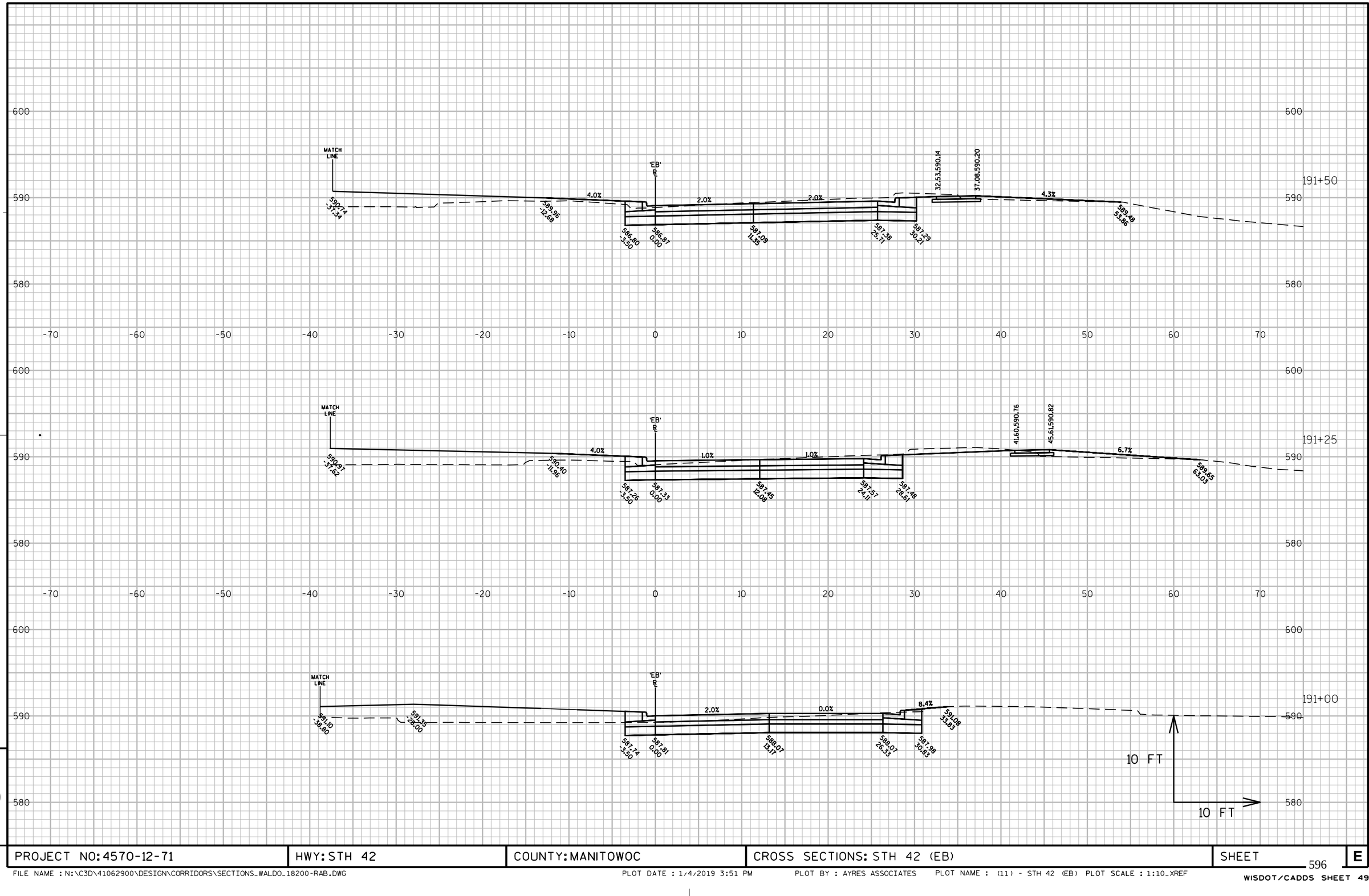
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (EB)	SHEET 595	E

9

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 3:50 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (10) - STH 42 (EB) PLOT SCALE : 1:10_XREF

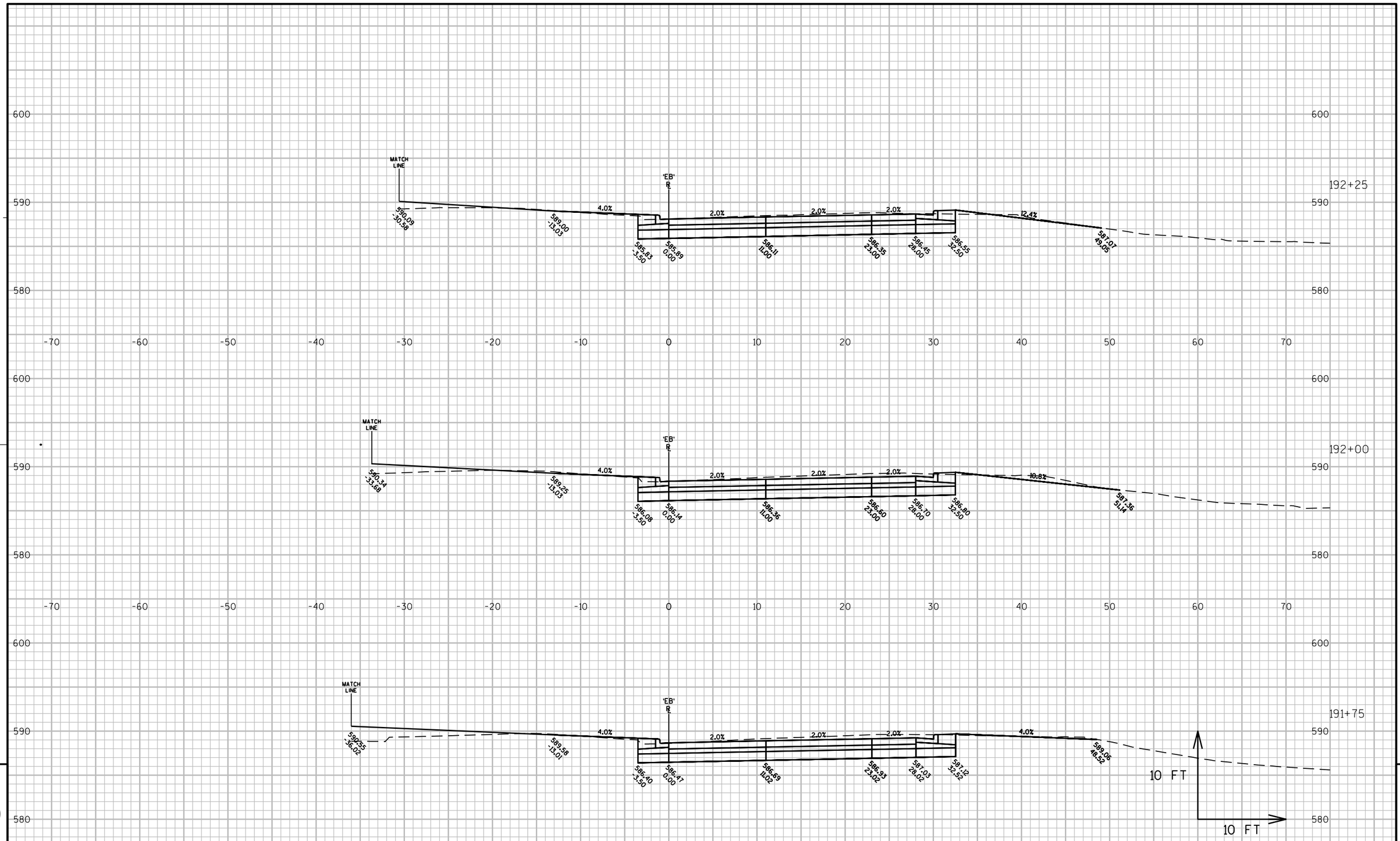
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (EB)	SHEET 596 E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 3:51 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (11) - STH 42 (EB) PLOT SCALE : 1:10_XREF

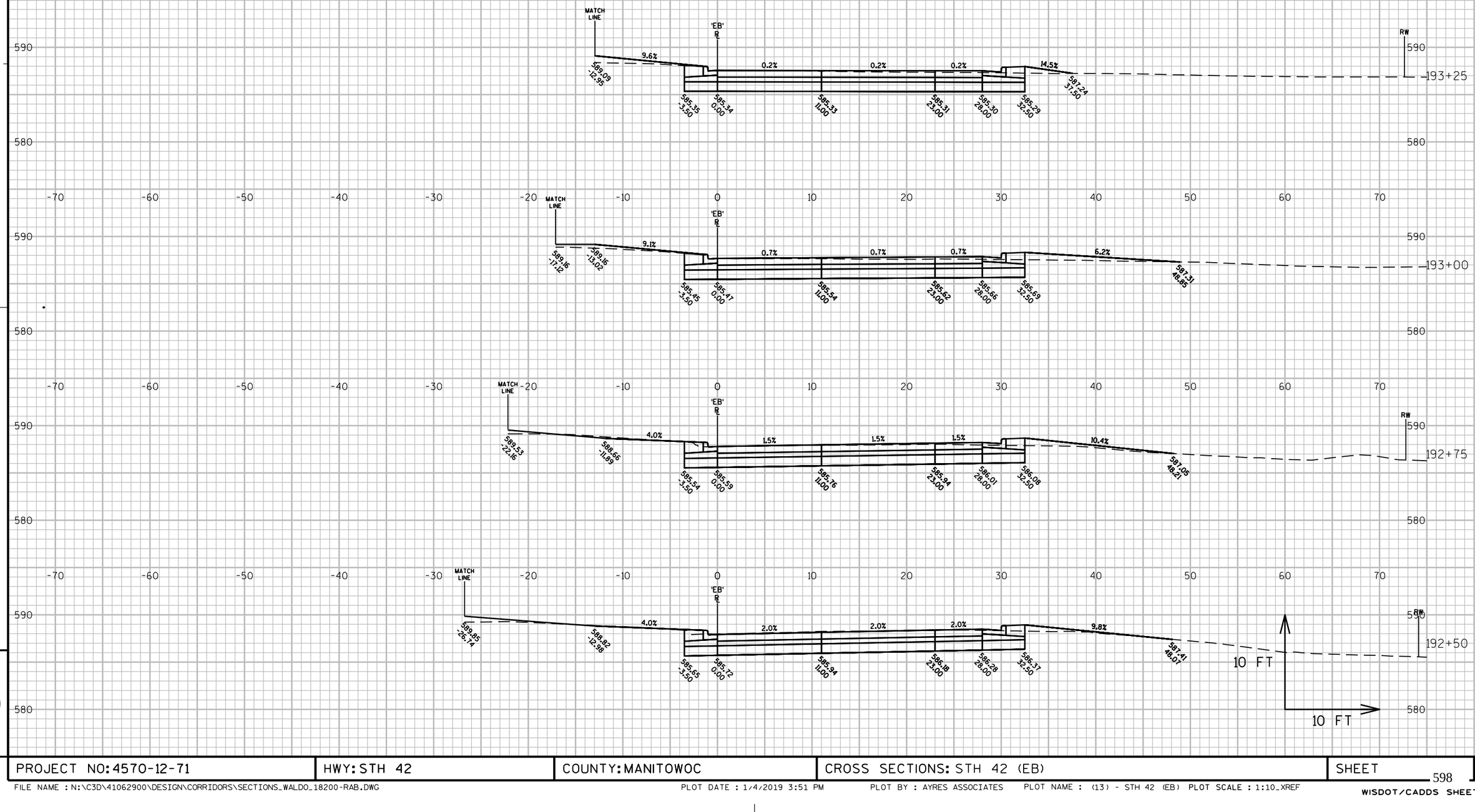
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (EB)	SHEET 597	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 3:51 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (12) - STH 42 (EB) PLOT SCALE : 1:10_XREF

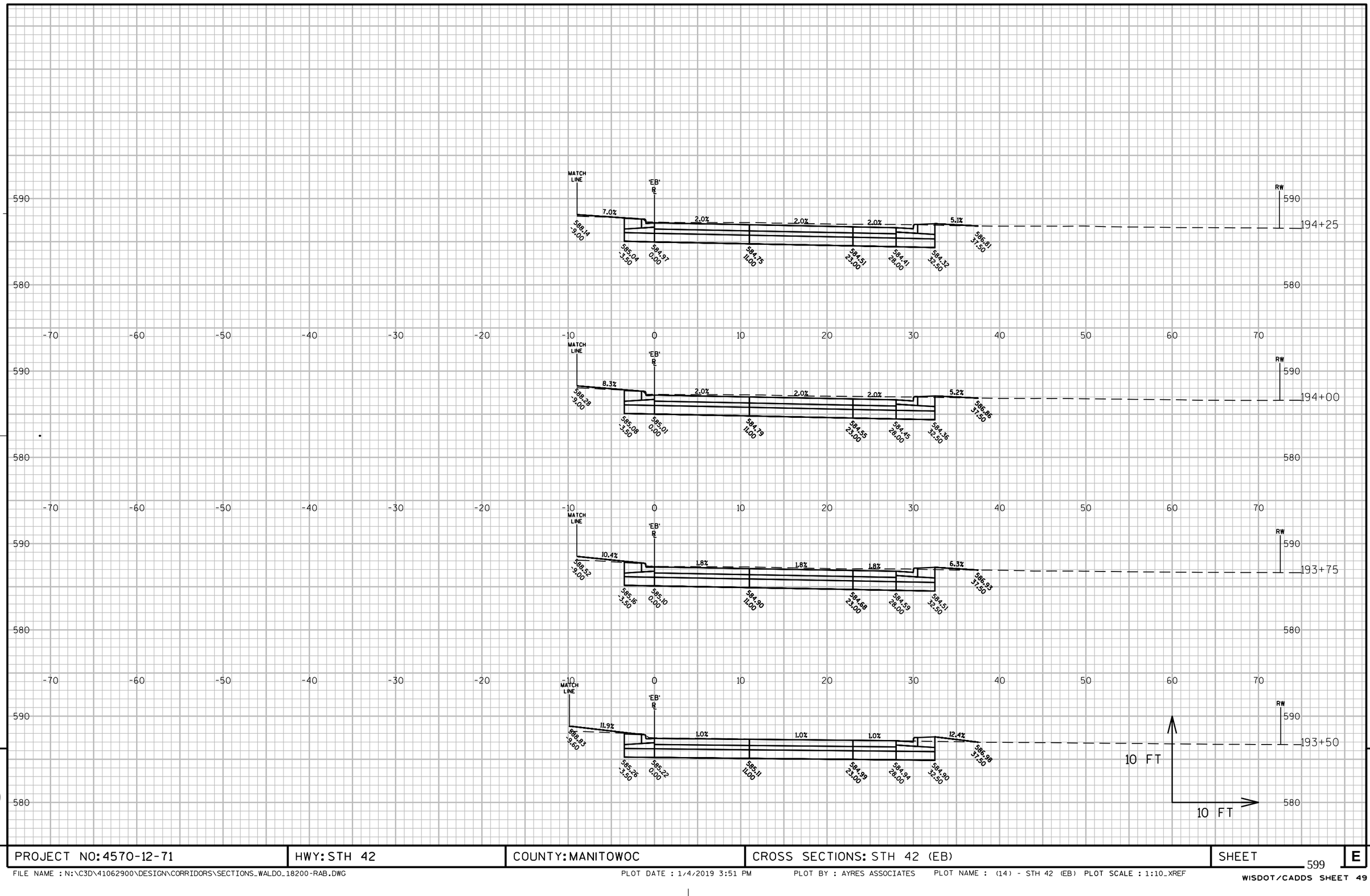
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (EB)	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 3:51 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (13) - STH 42 (EB) PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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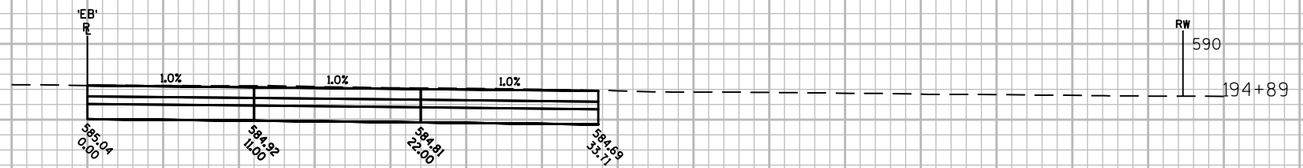
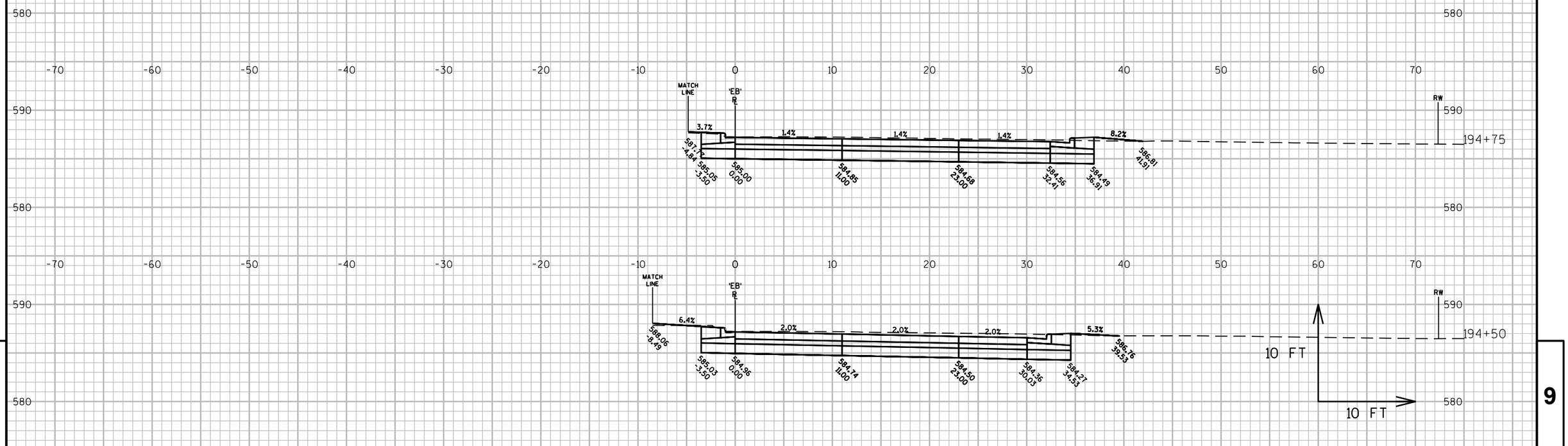
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (EB)	SHEET 599	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 3:51 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (14) - STH 42 (EB) PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49





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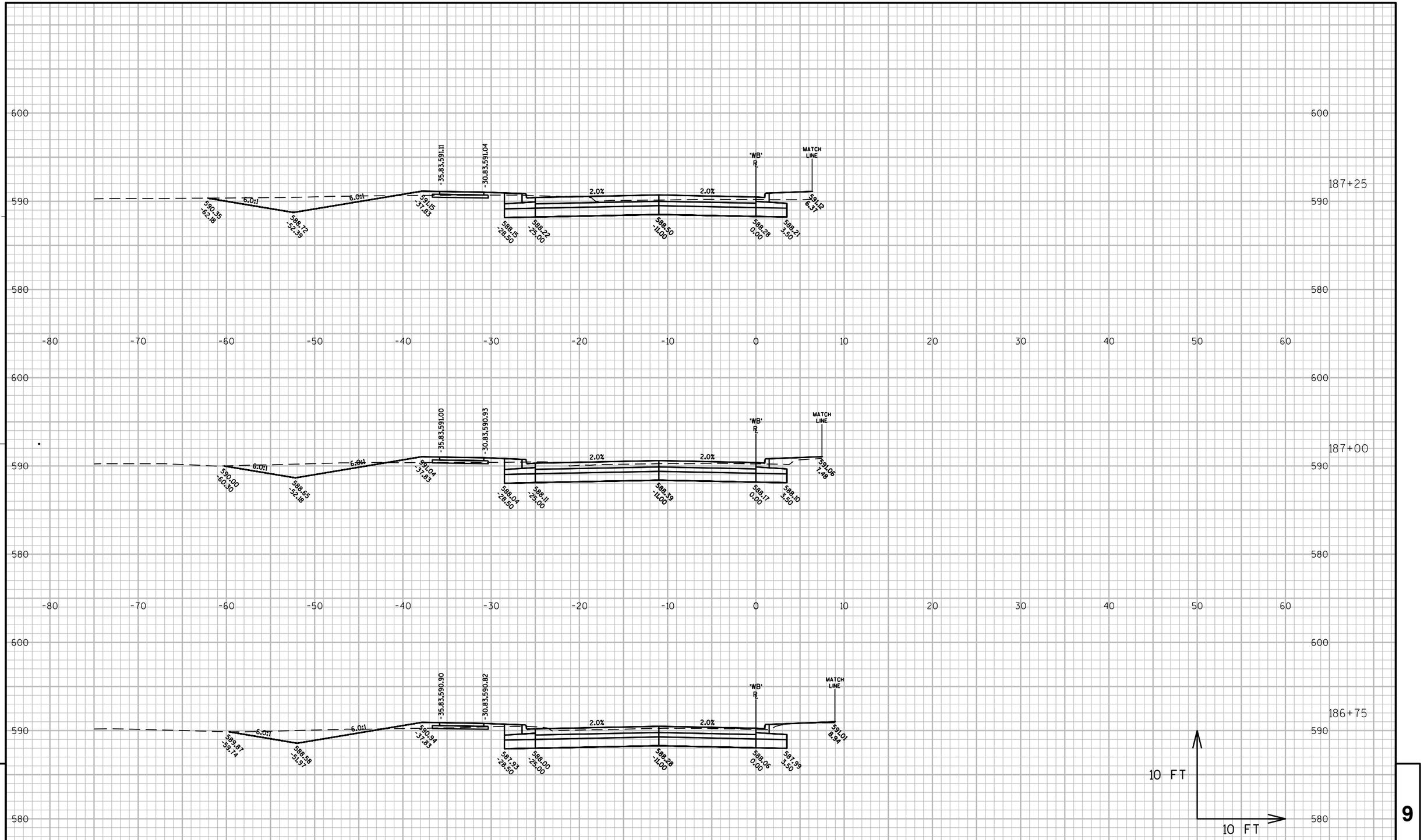
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (EB)	SHEET 600	E

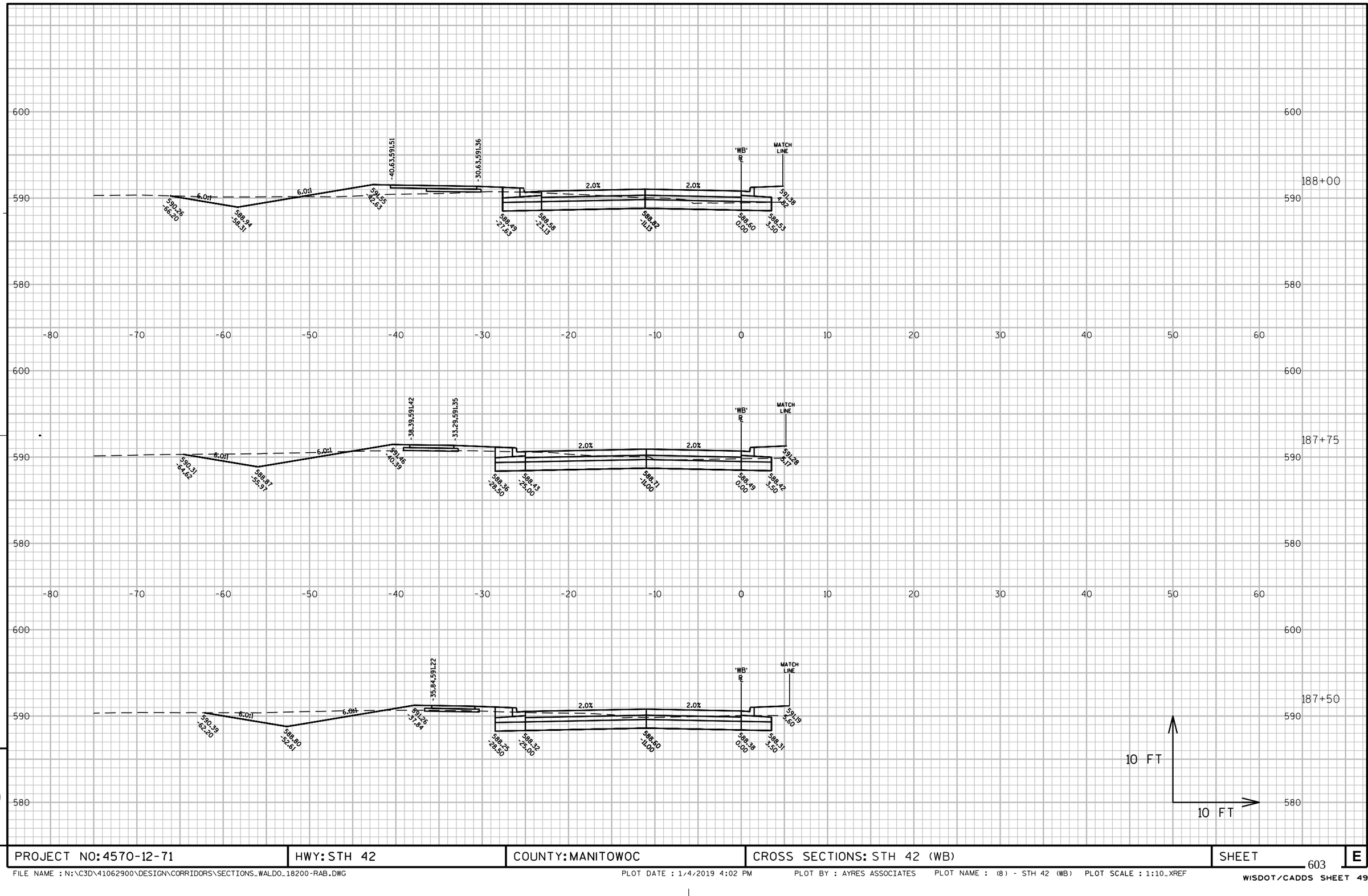
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (WB)	SHEET 601	E



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (WB)	SHEET 602	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:02 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (7) - STH 42 (WB) PLOT SCALE : 1:10_XREF

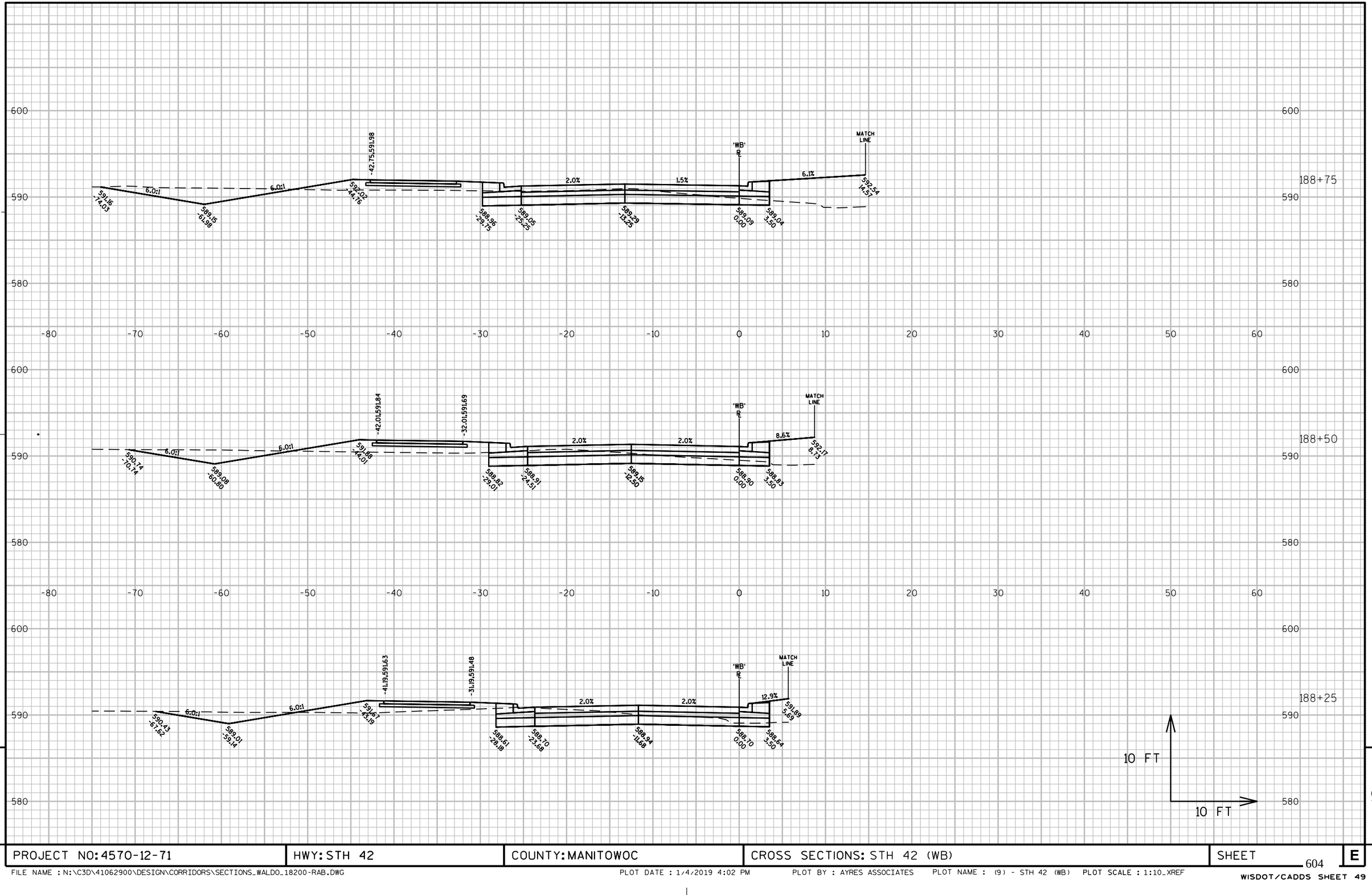
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (WB)	SHEET	E

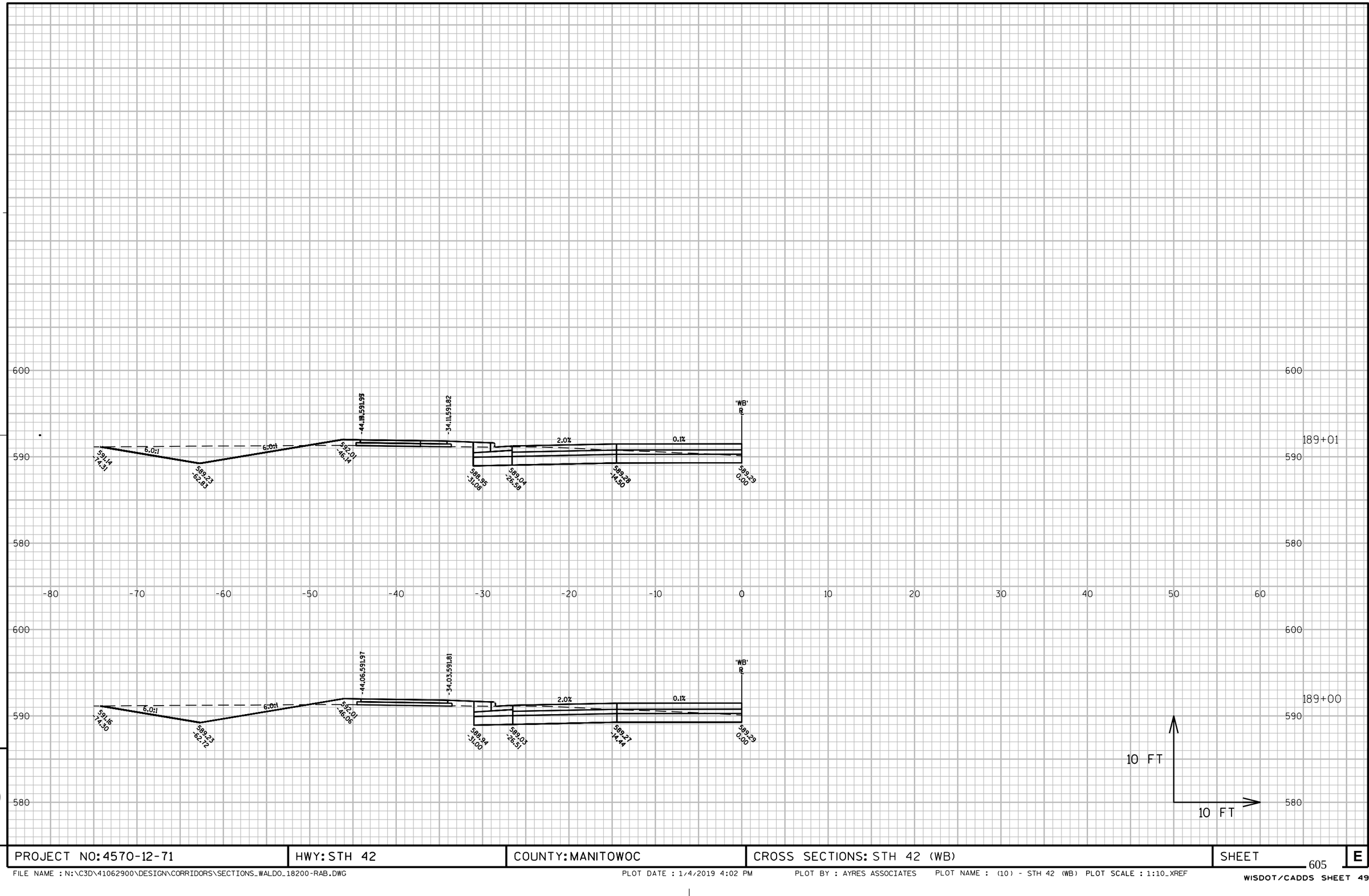
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:02 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (8) - STH 42 (WB) PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (WB)	SHEET 604	E

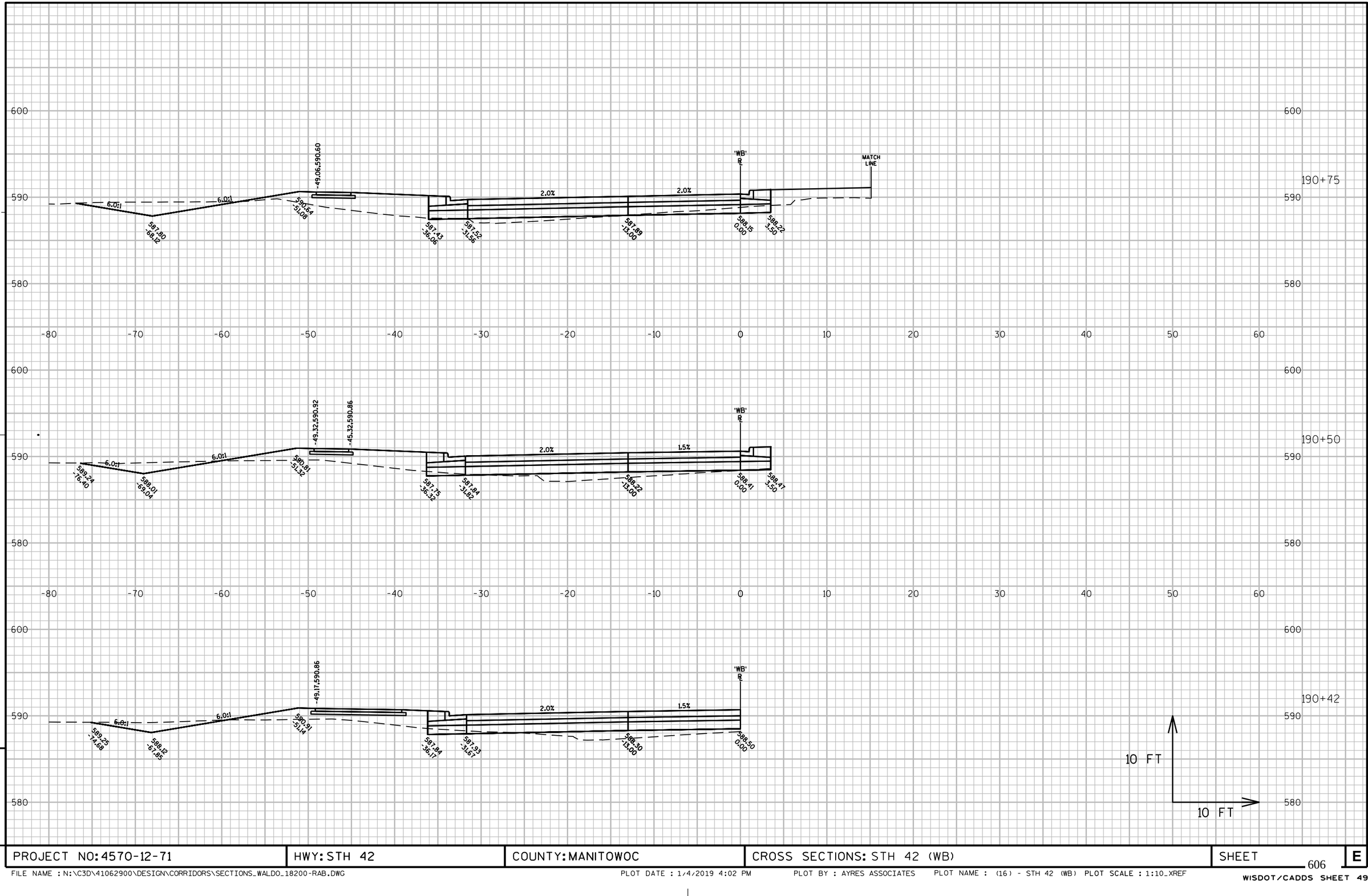
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:02 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (9) - STH 42 (WB) PLOT SCALE : 1:10_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (WB)	SHEET 605	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:02 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (10) - STH 42 (WB) PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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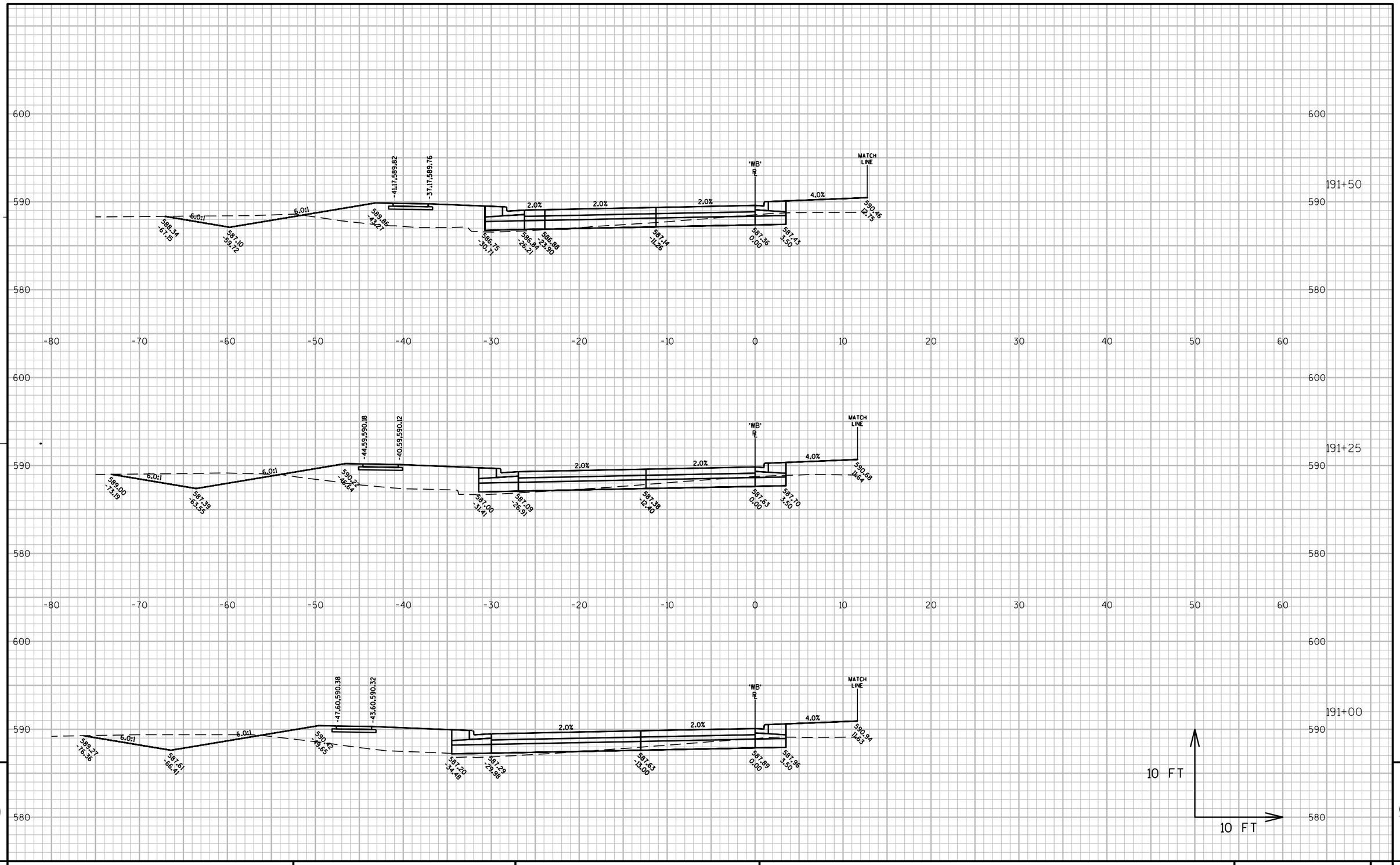
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (WB)	SHEET	E

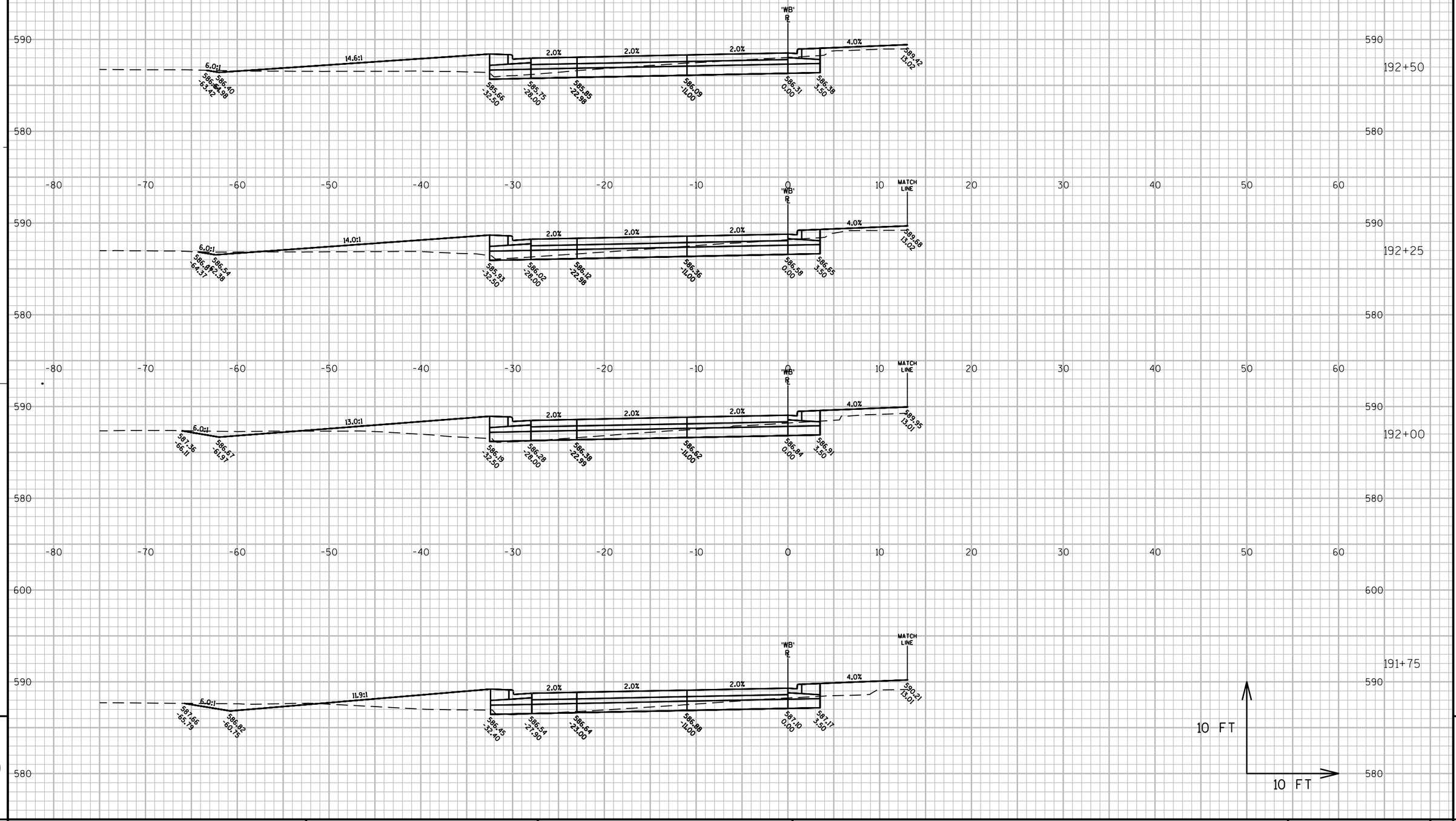
606

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:02 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (16) - STH 42 (WB) PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



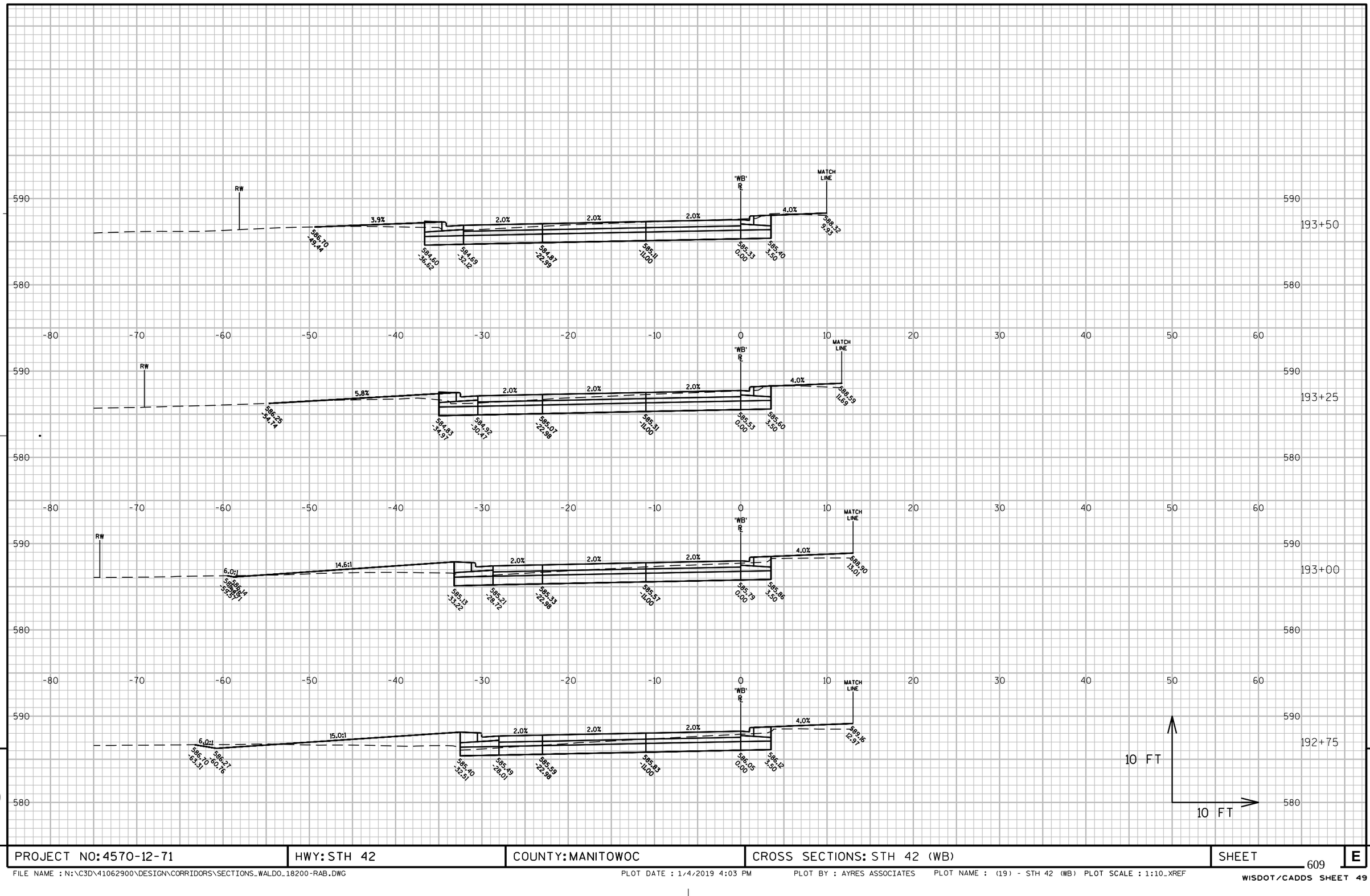
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (WB)	SHEET 607	E



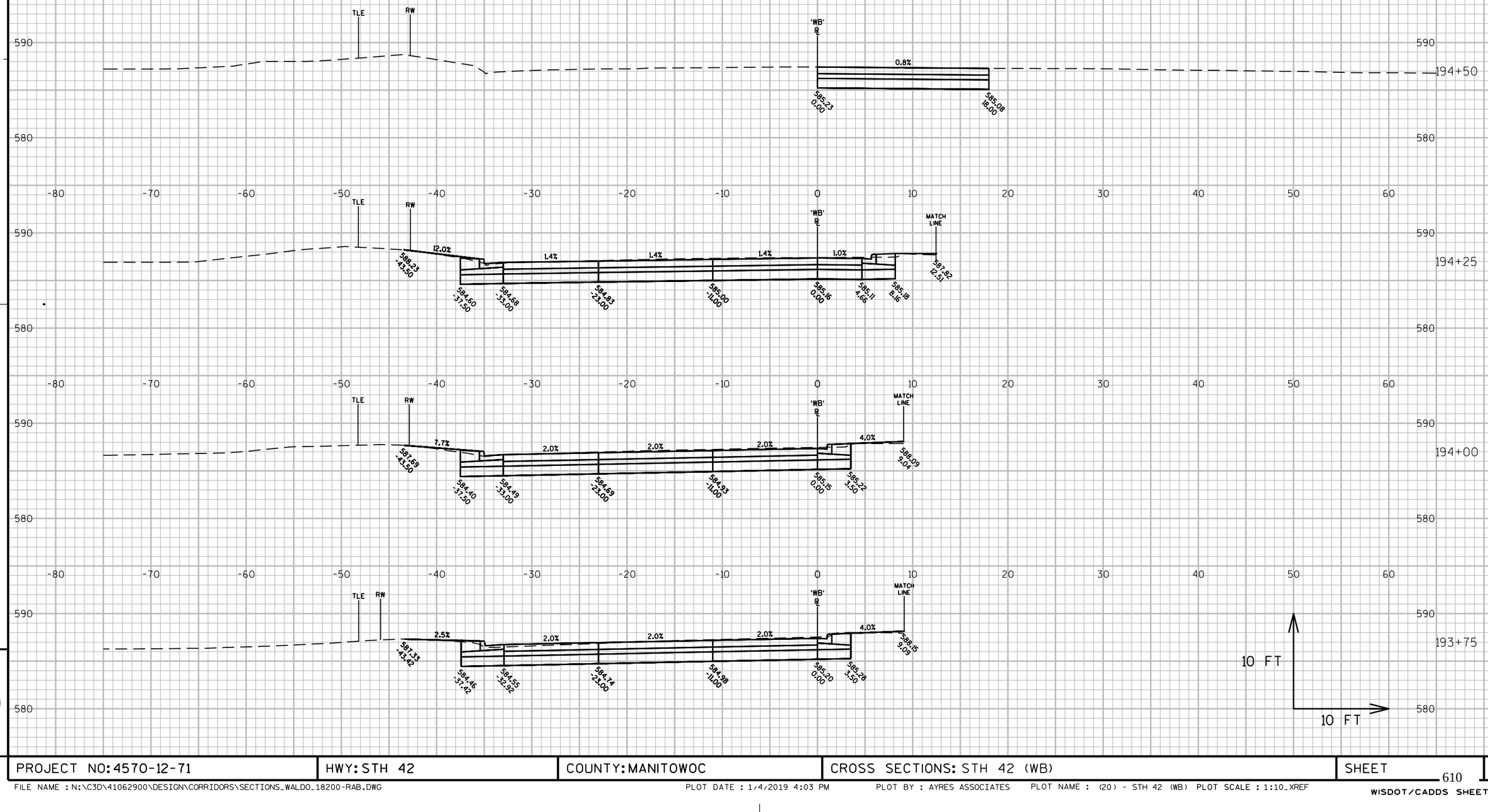
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (WB)	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:03 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (18) - STH 42 (WB) PLOT SCALE : 1:10_XREF

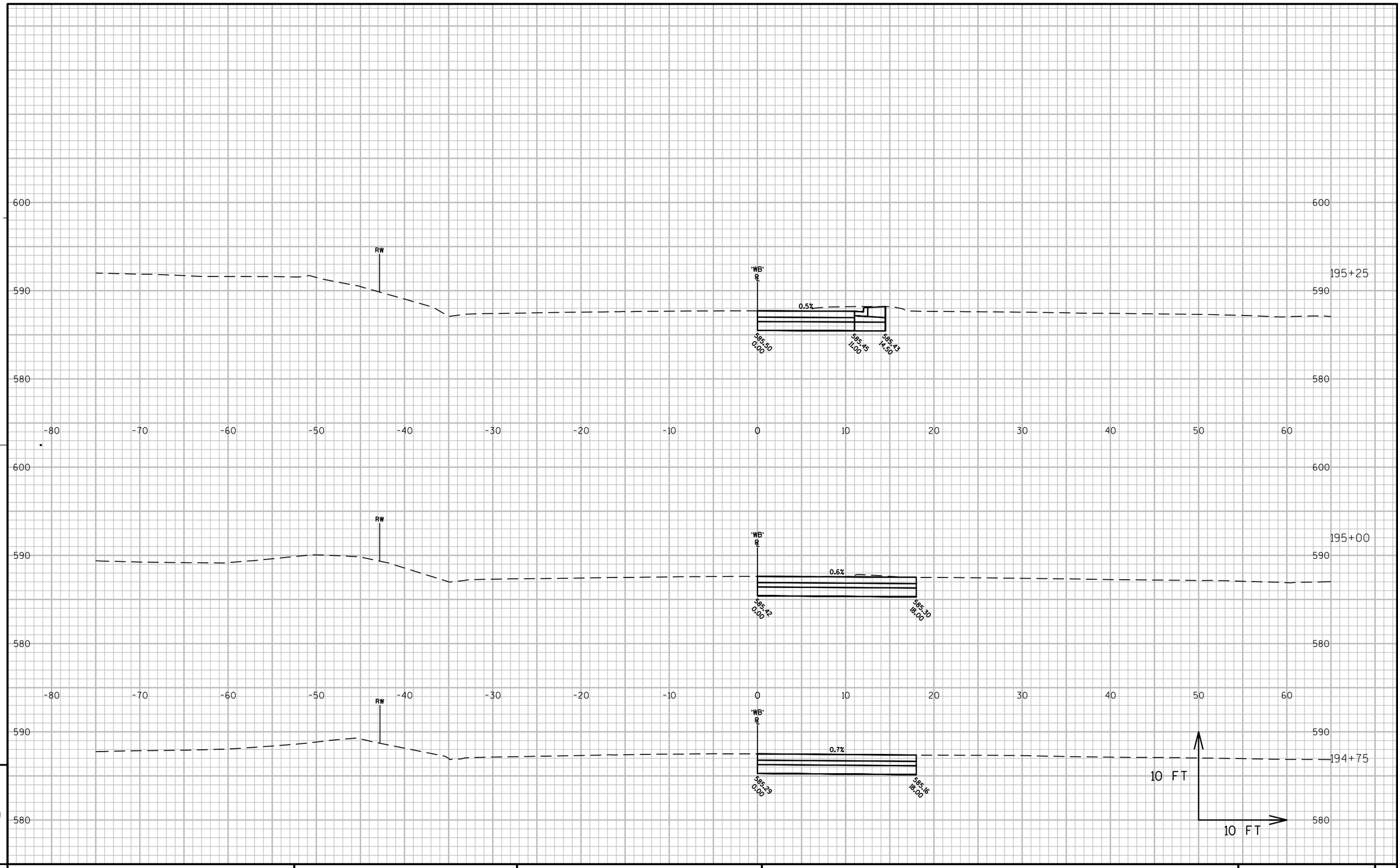
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (WB)	SHEET 609	E



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (WB)	SHEET 610	E



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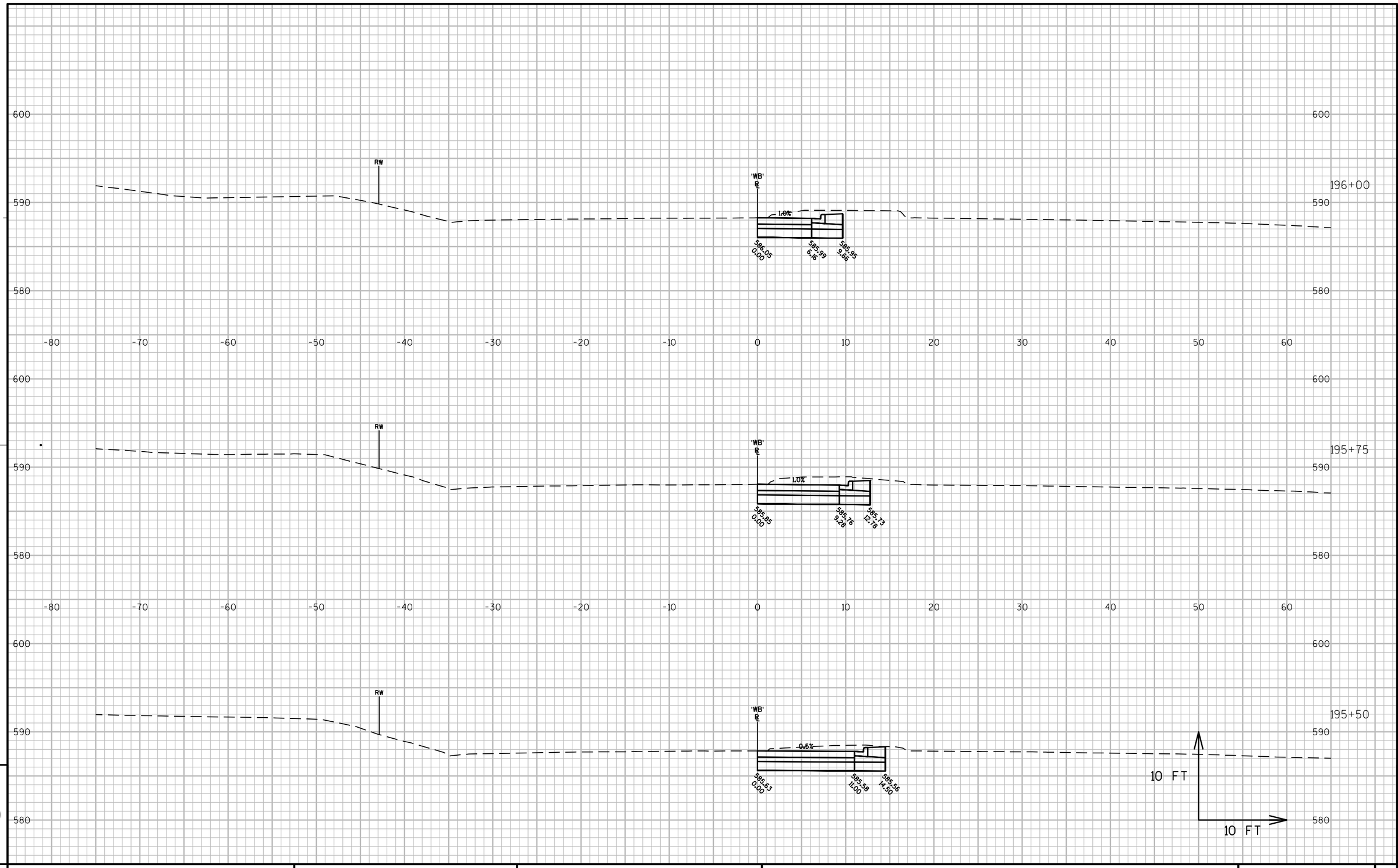
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (WB)	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:03 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (21) - STH 42 (WB) PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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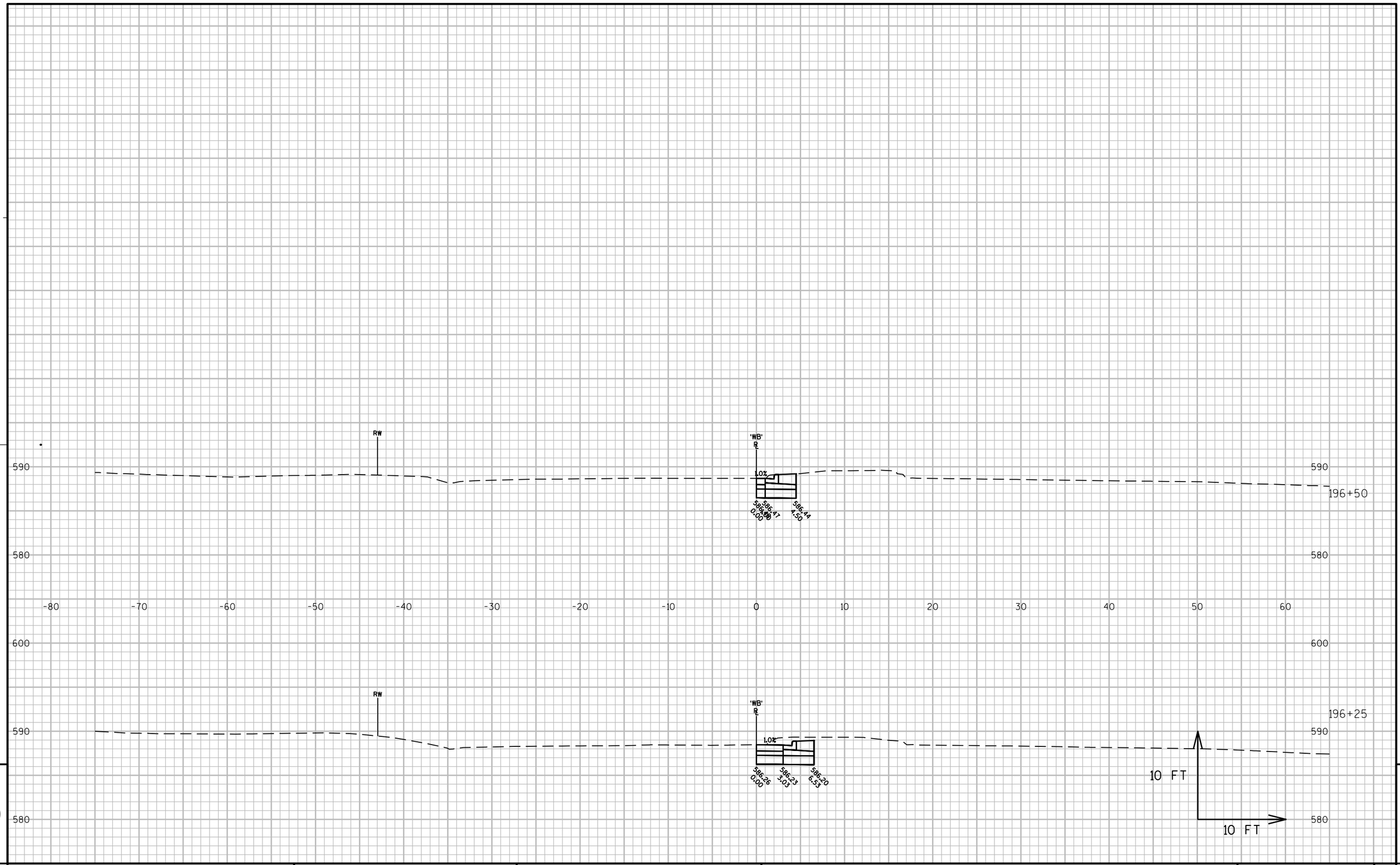
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (WB)	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:03 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (22) - STH 42 (WB) PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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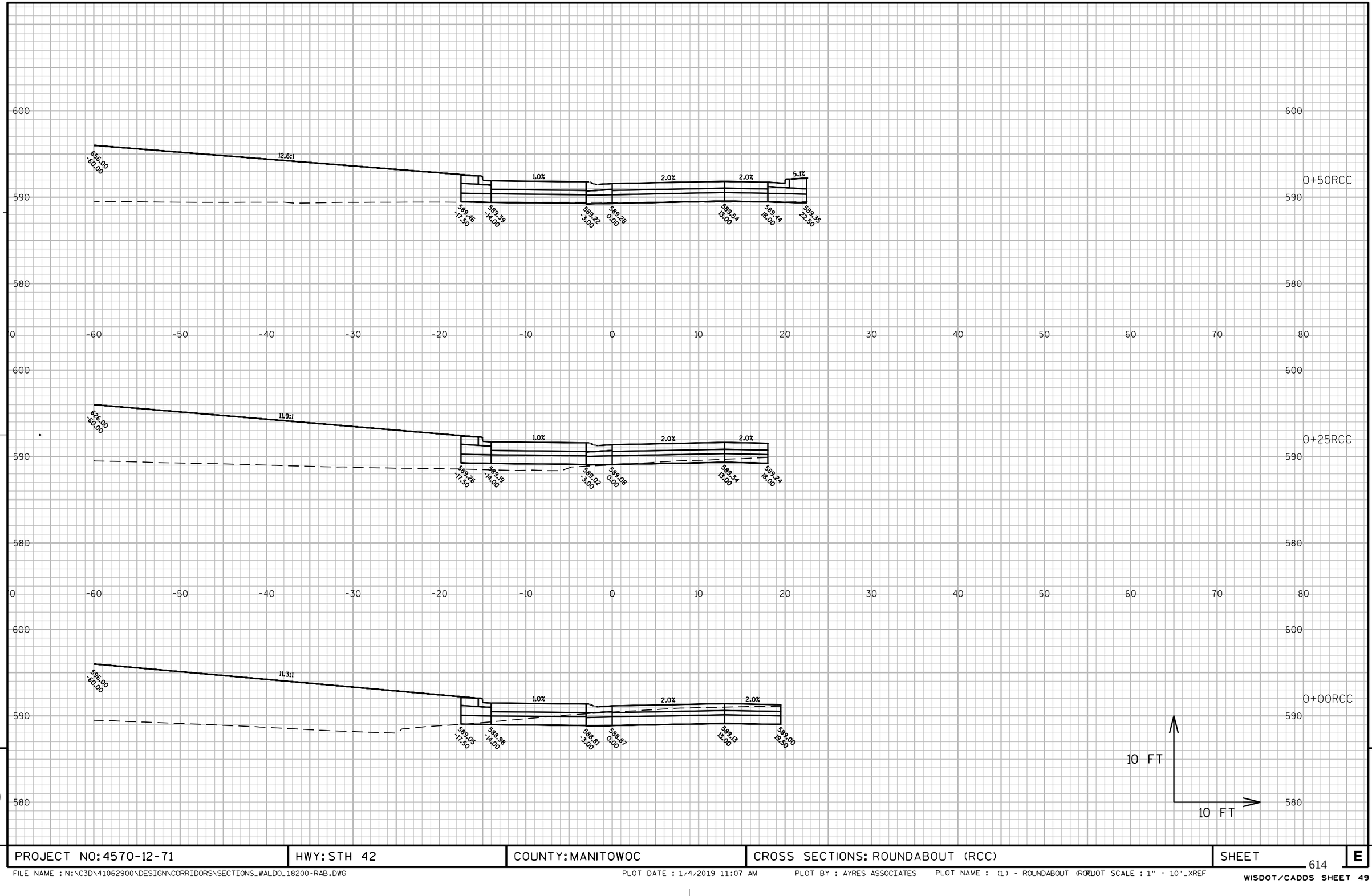
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: STH 42 (WB)	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:03 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (22) - STH 42 (WB) PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



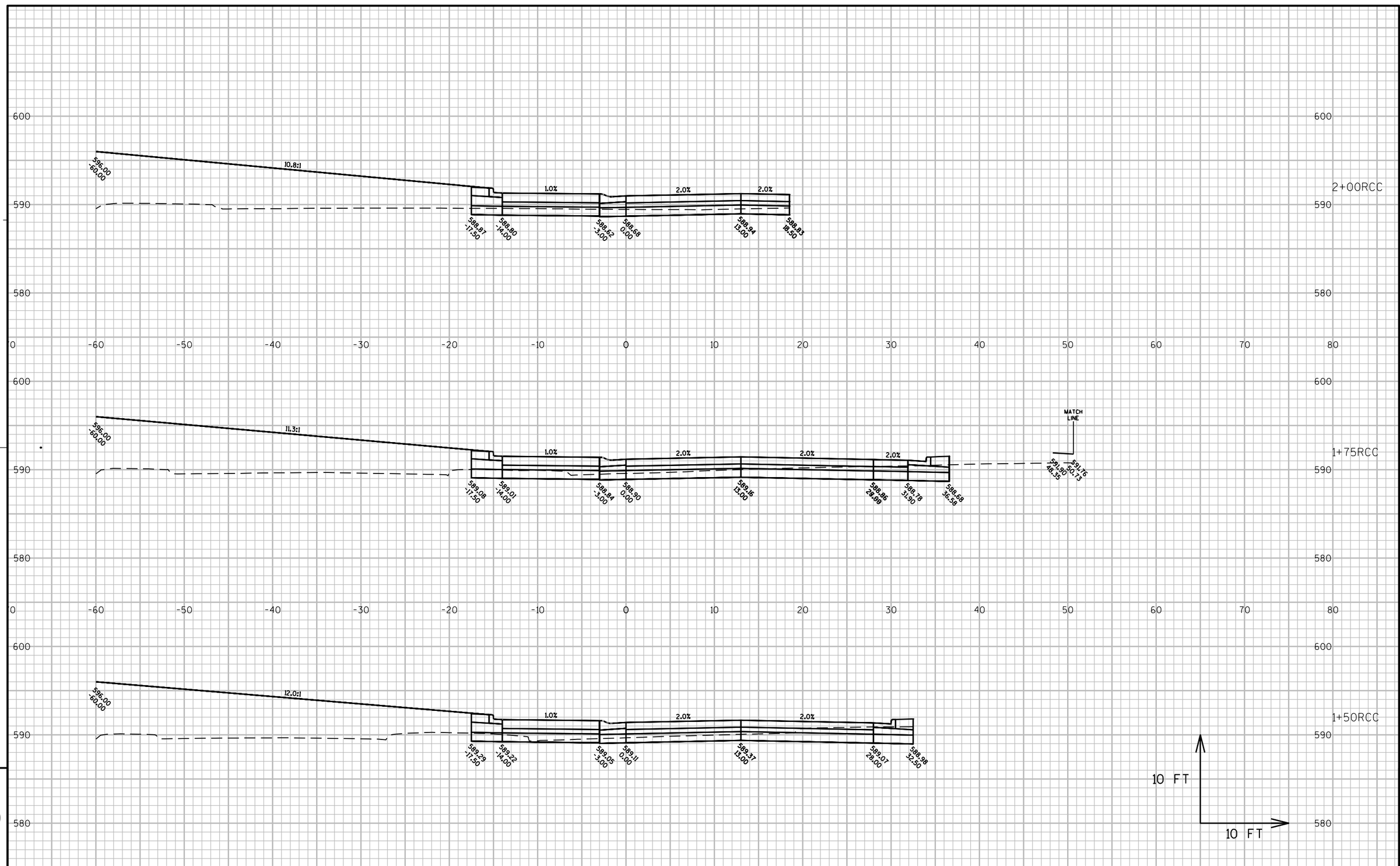
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: ROUNDABOUT (RCC)	SHEET 614	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 11:07 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1) - ROUNDABOUT (RCC).DWG PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49

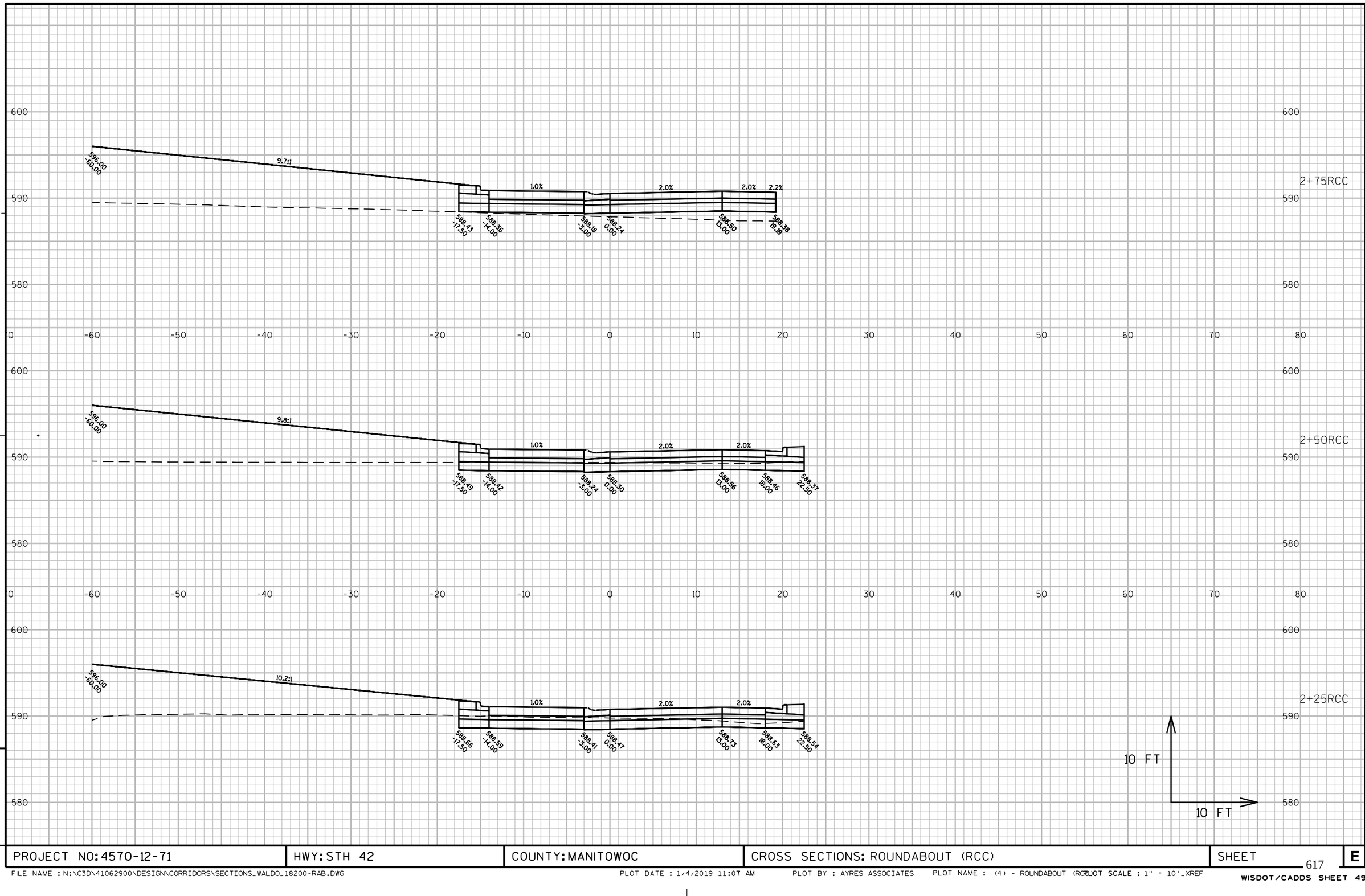
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: ROUNDABOUT (RCC)	SHEET 615	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 11:07 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2) - ROUNDABOUT (RCC).DWG PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

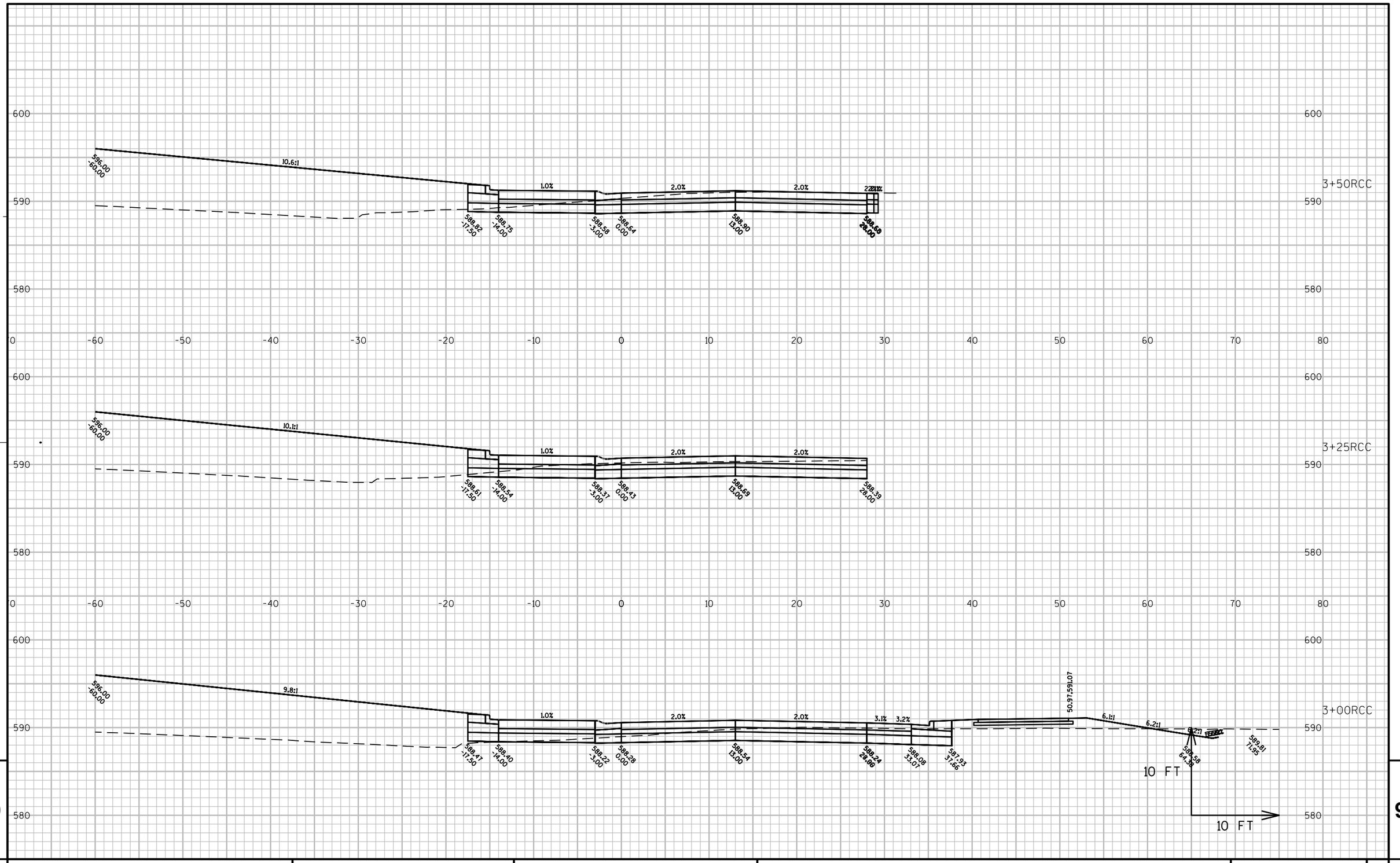


PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: ROUNDABOUT (RCC)	SHEET	E



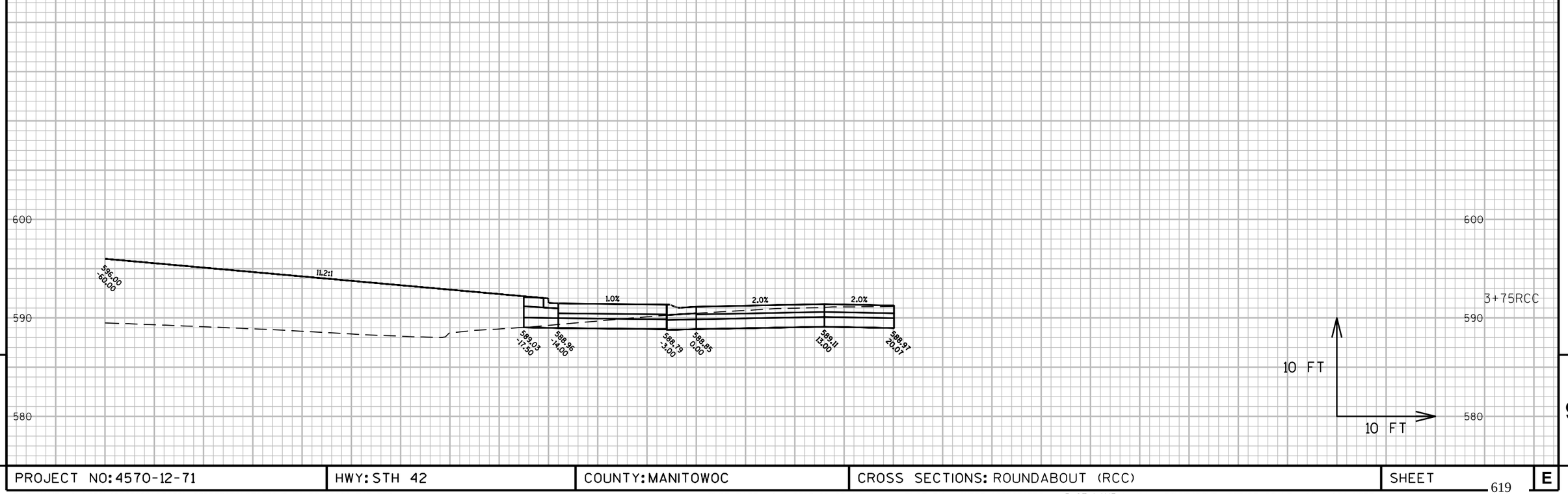
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: ROUNDABOUT (RCC)	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 11:07 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (4) - ROUNDABOUT (RCC).DWG PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: ROUNDABOUT (RCC)	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 11:08 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (5) - ROUNDABOUT (RCC).DWG PLOT SCALE : 1" = 10'_XREF
WISDOT/CADDS SHEET 49



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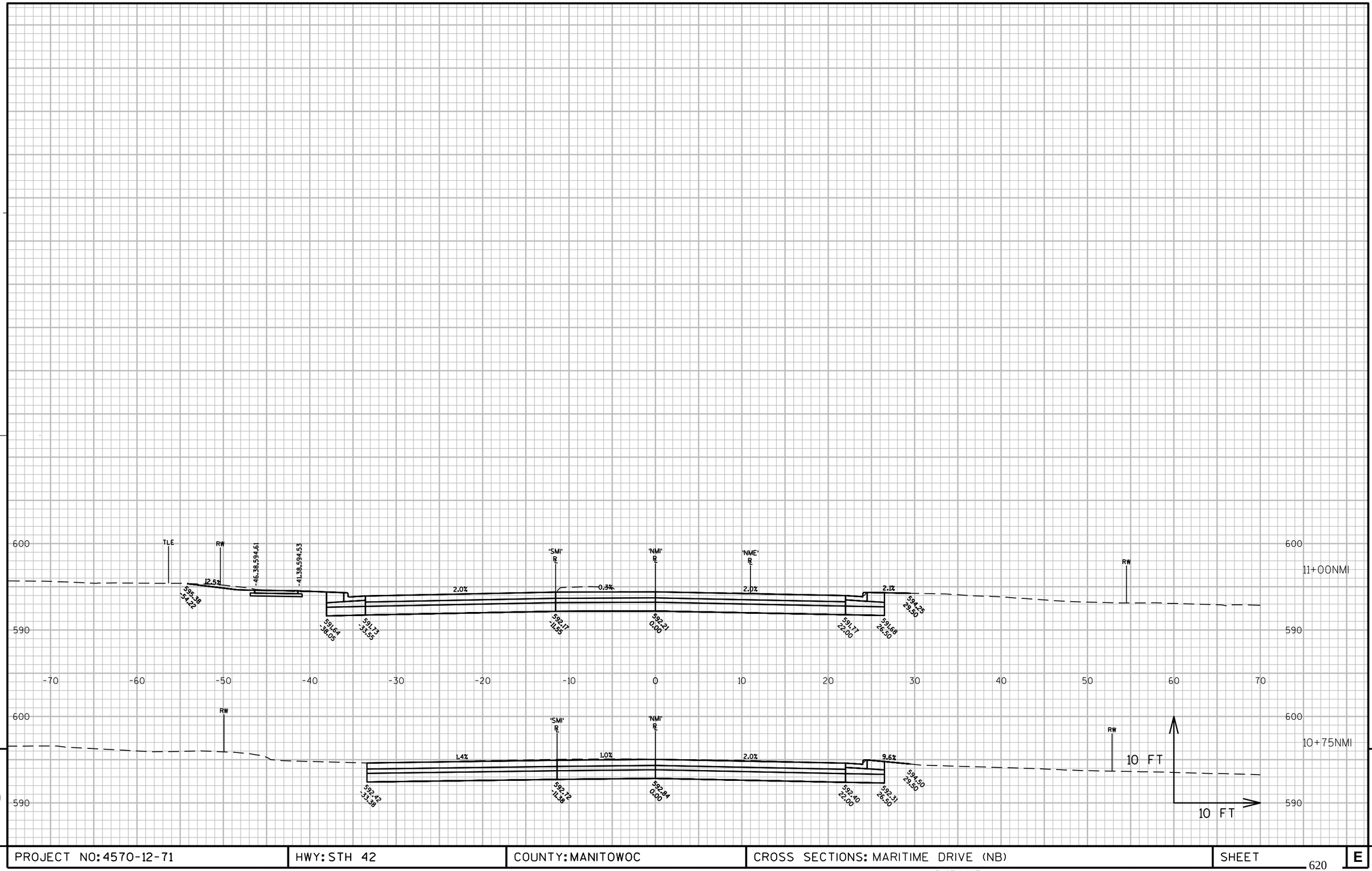
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: ROUNDABOUT (RCC)	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 11:08 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (6) - ROUNDABOUT (RCC).DWG PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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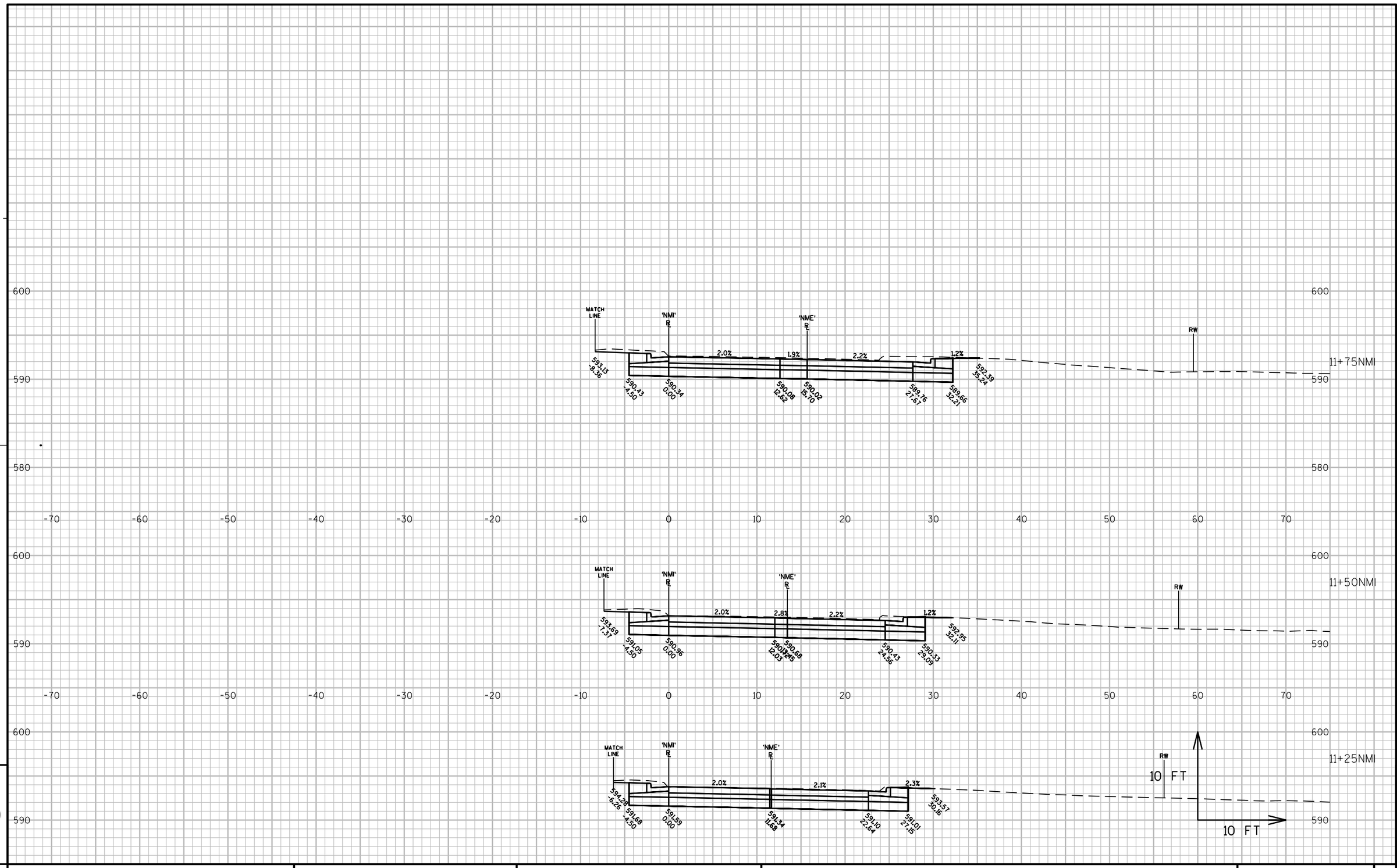
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: MARITIME DRIVE (NB)	SHEET	E

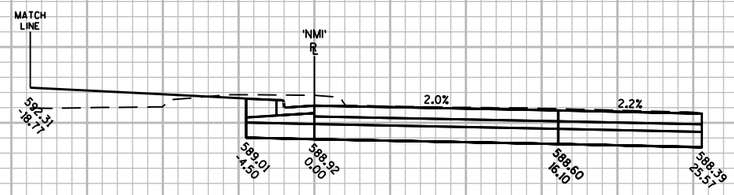
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:19 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1) - MARITIME DRIVEPLOT SCALE : 1:10_XREF



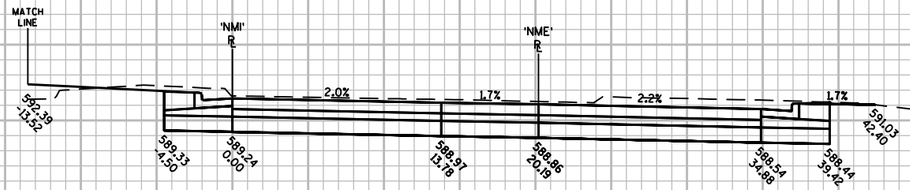
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: MARITIME DRIVE (NB)	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:19 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1) - MARITIME DRIVE.DWG PLOT SCALE : 1:10_XREF

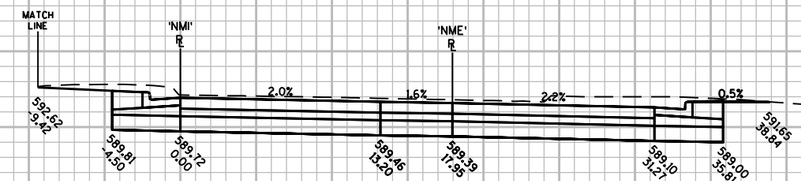
WISDOT/CADDS SHEET 49



12+50NMI



12+25NMI



12+00NMI

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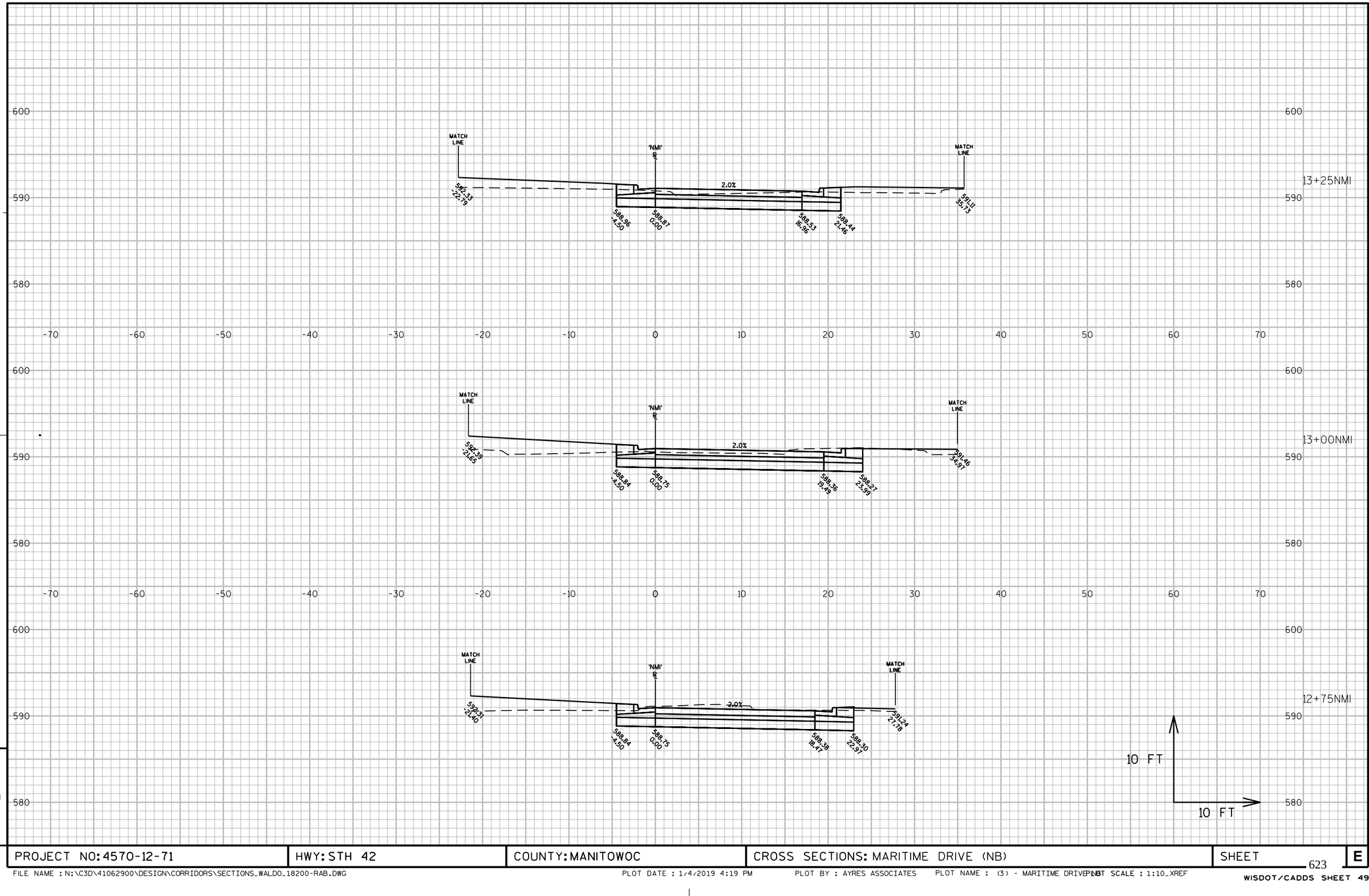
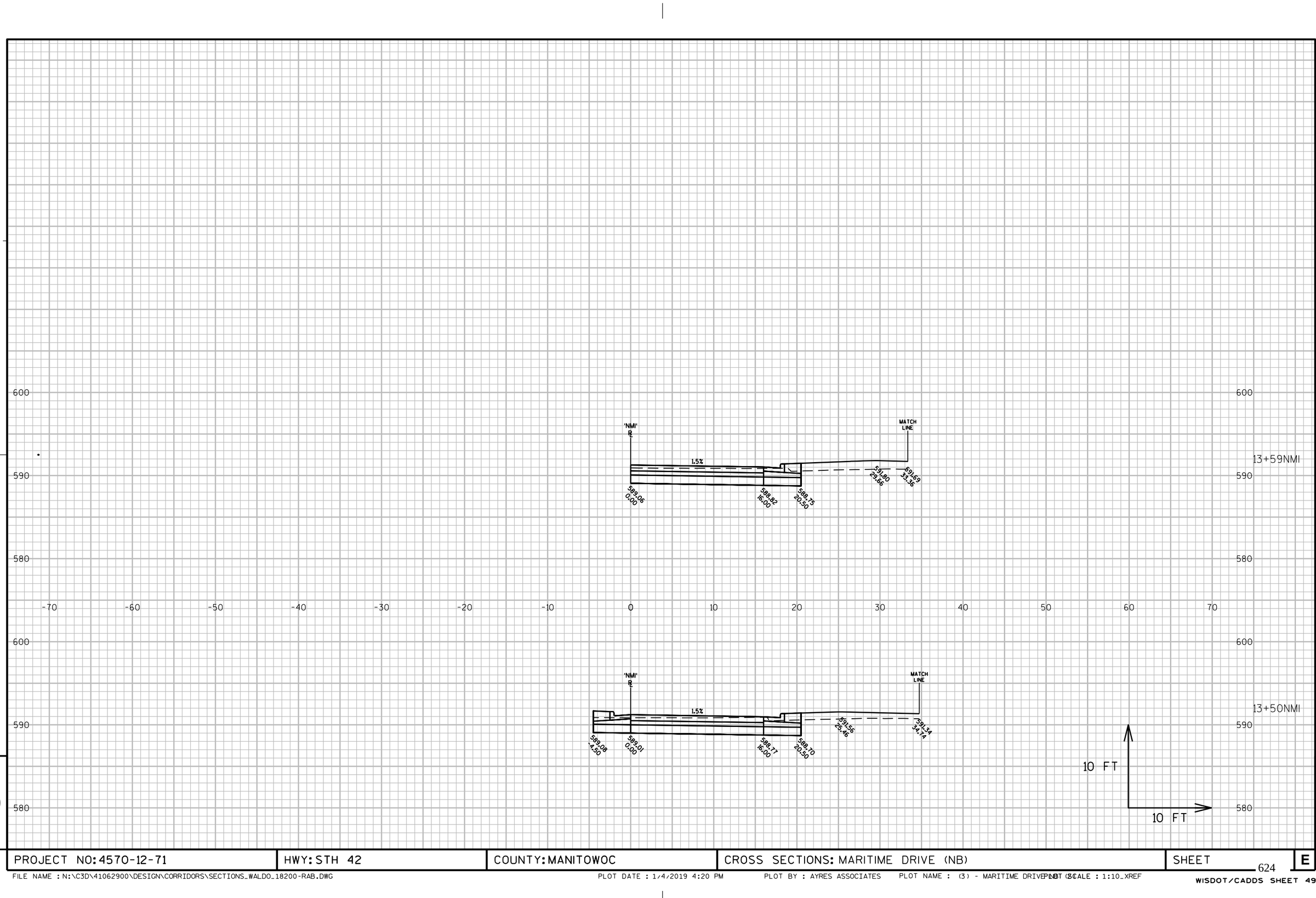
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: MARITIME DRIVE (NB)	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:19 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2) - MARITIME DRIVE.PNG PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: MARITIME DRIVE (NB)	SHEET 623	E



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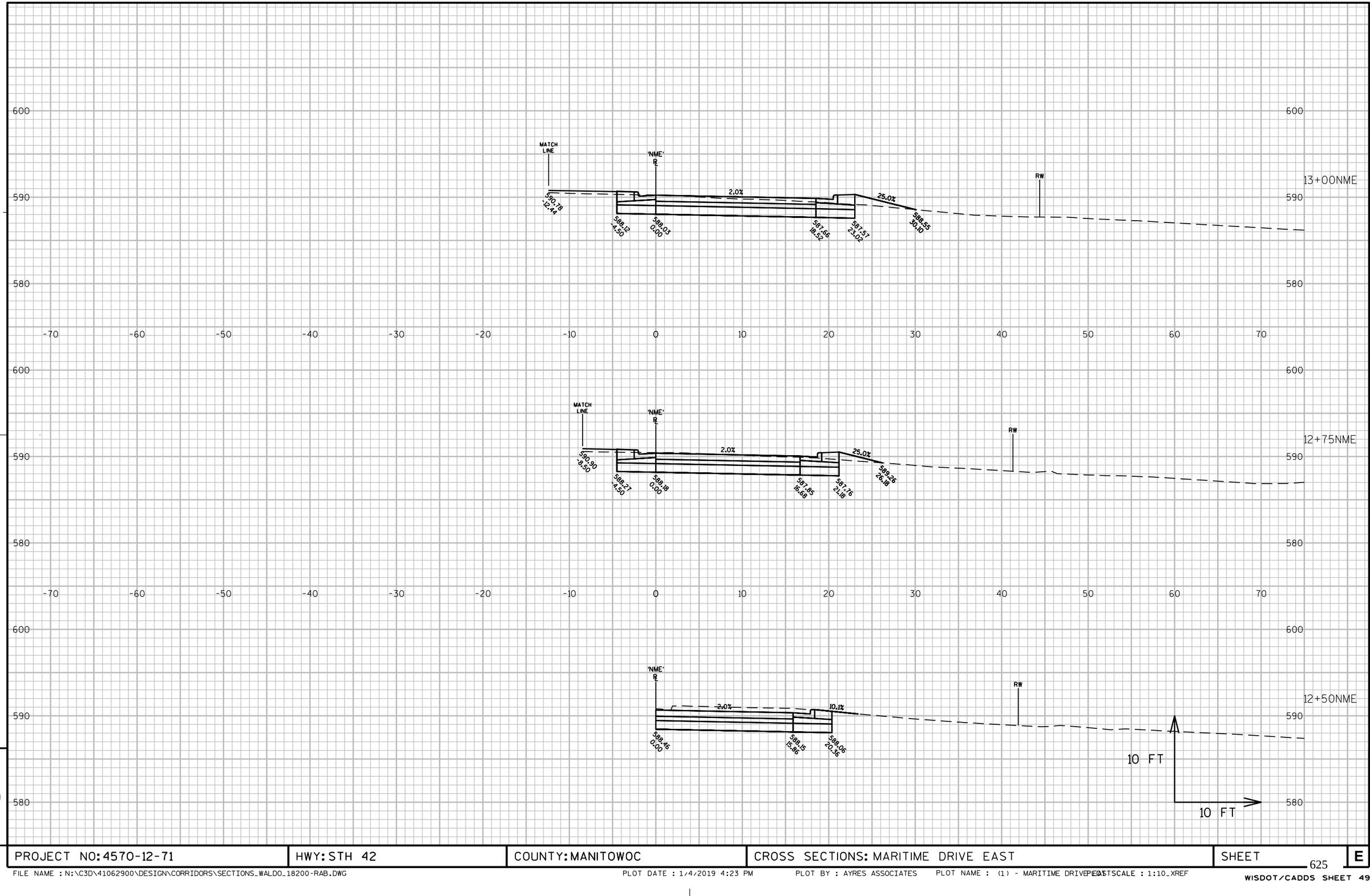
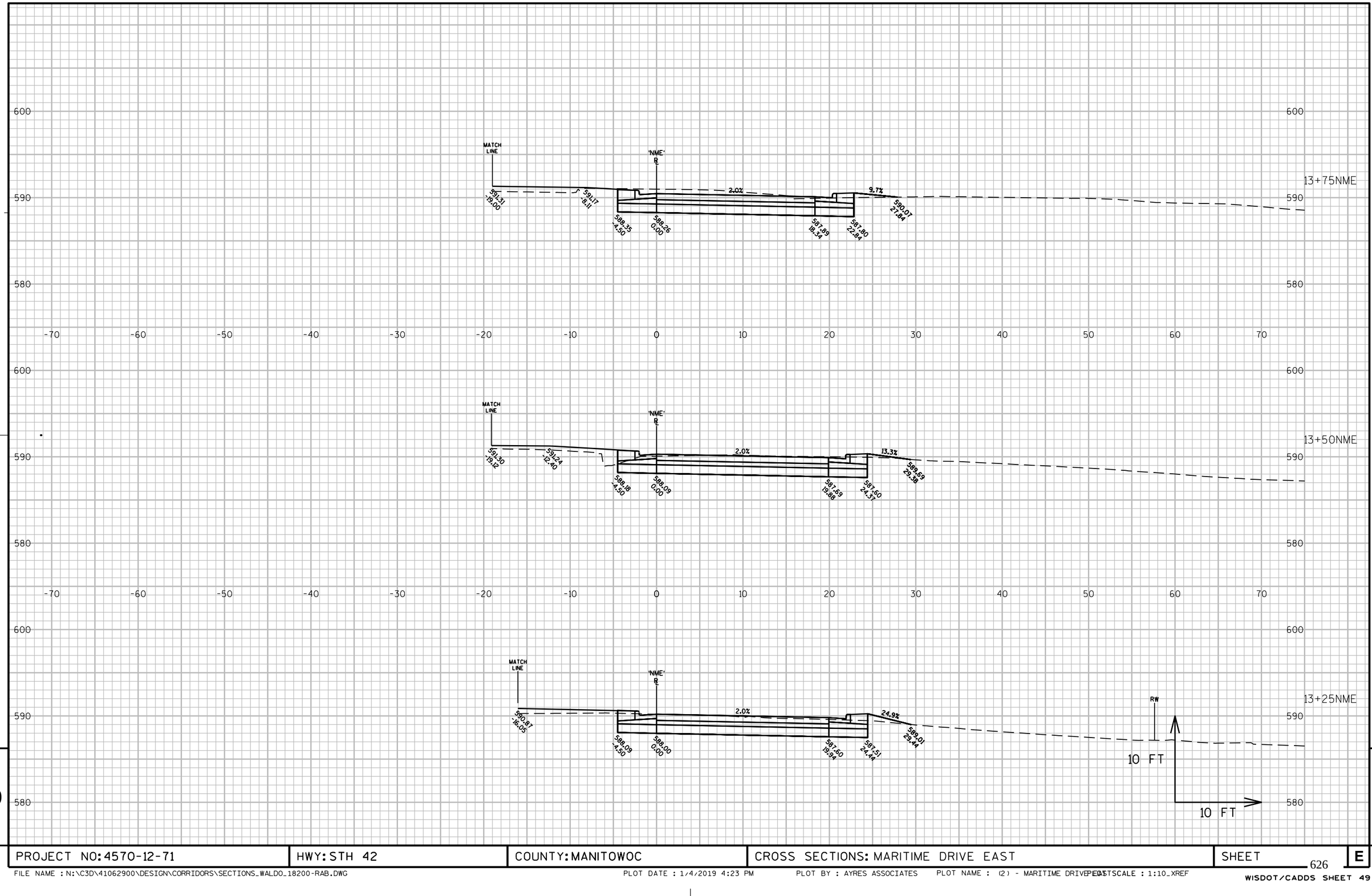
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: MARITIME DRIVE (NB)	SHEET 624	E



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: MARITIME DRIVE EAST	SHEET 625	E



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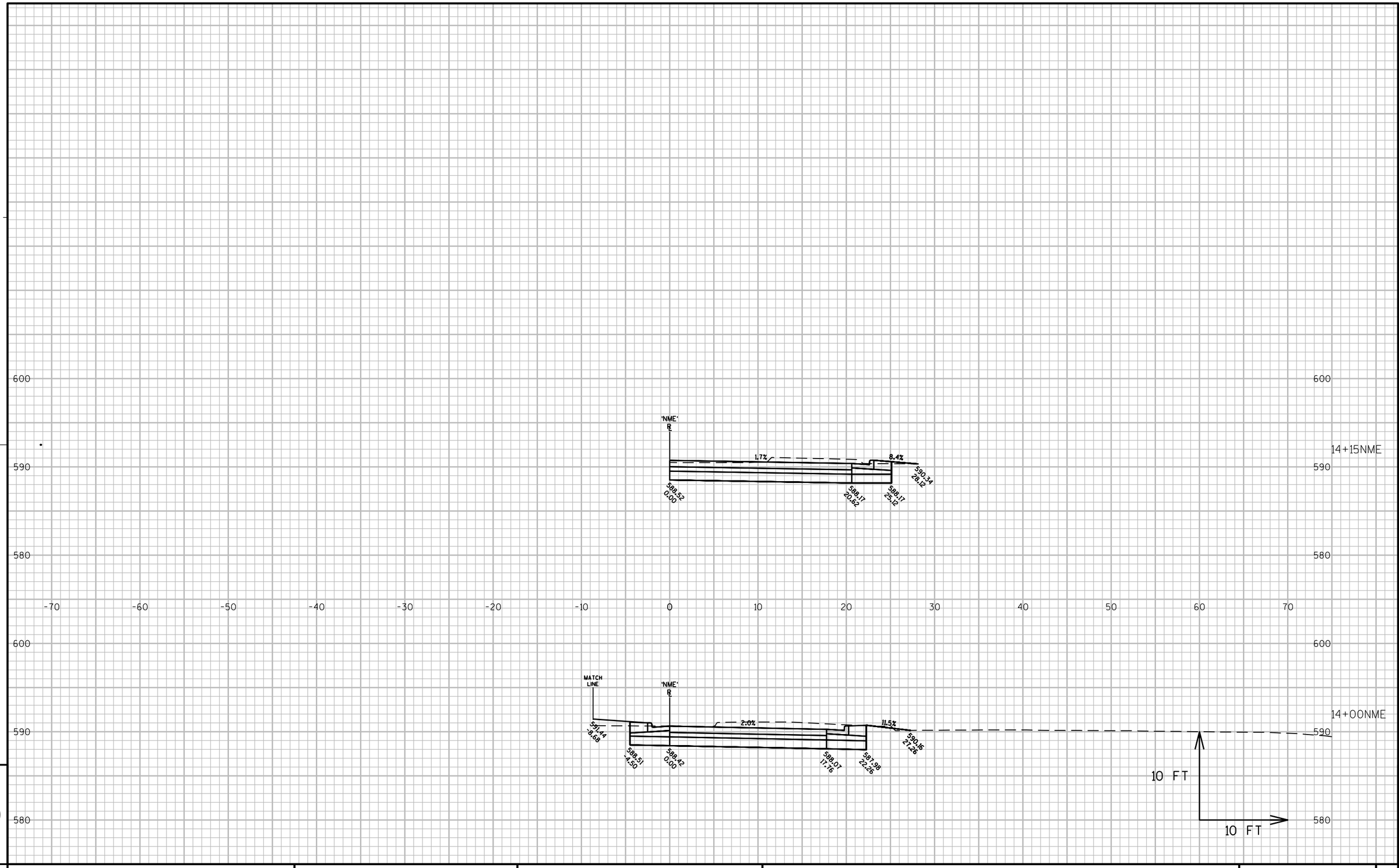
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: MARITIME DRIVE EAST	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:23 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2) - MARITIME DRIVE EAST.TSCALE : 1:10_XREF

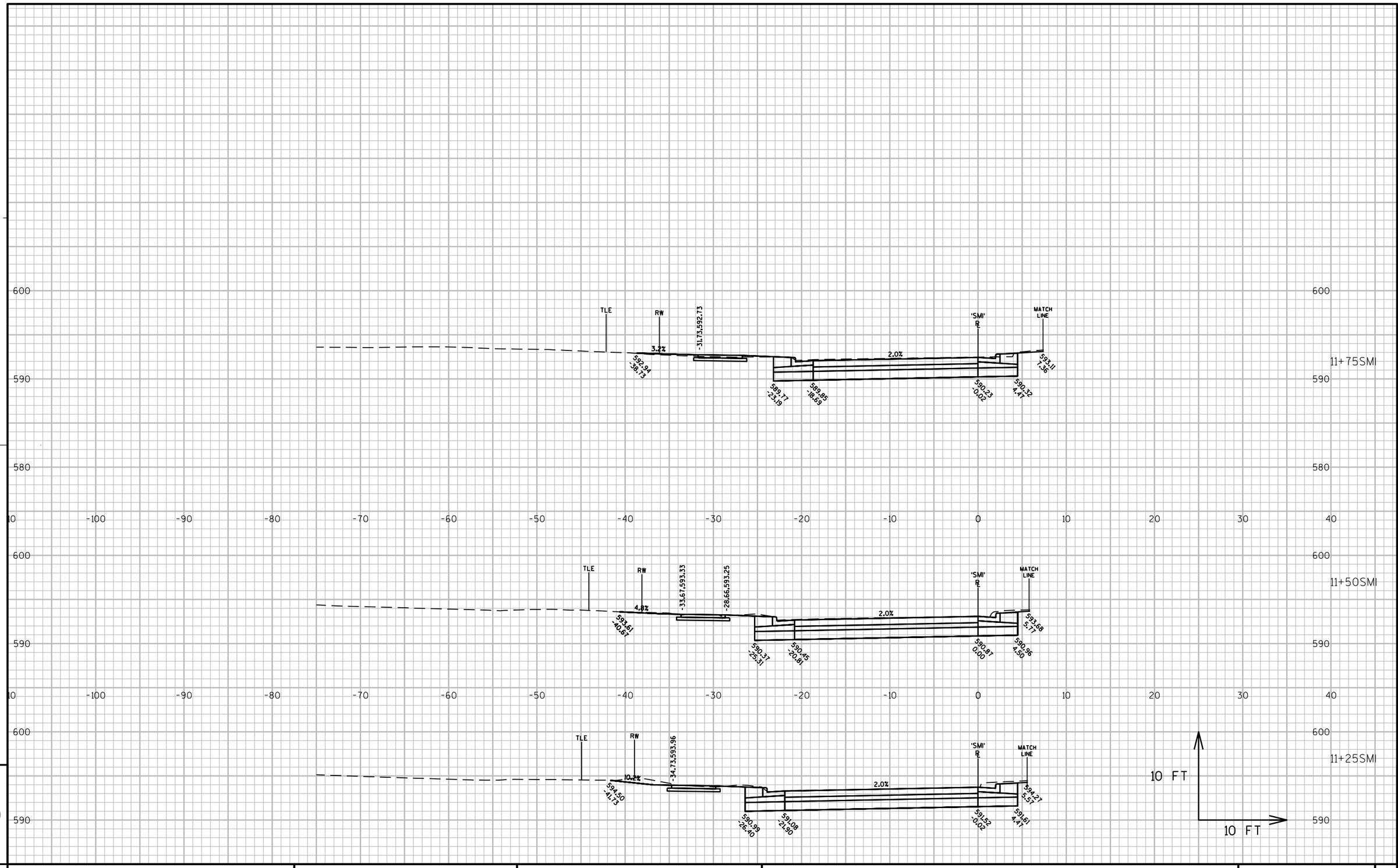
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: MARITIME DRIVE EAST	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:23 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (3) - MARITIME DRIVE EAST.PLT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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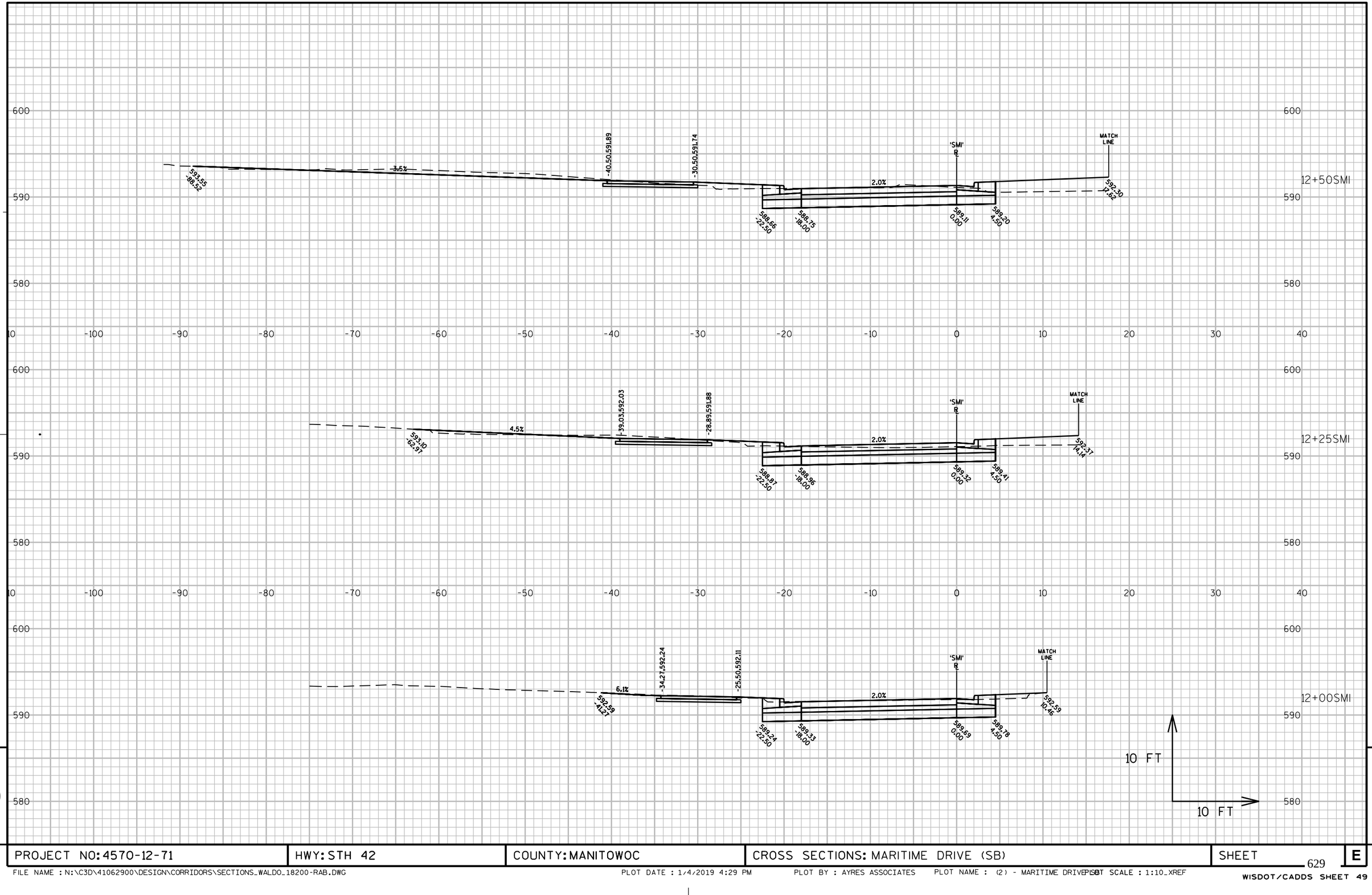
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: MARITIME DRIVE (SB)	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:29 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1) - MARITIME DRIVE.PLOT PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



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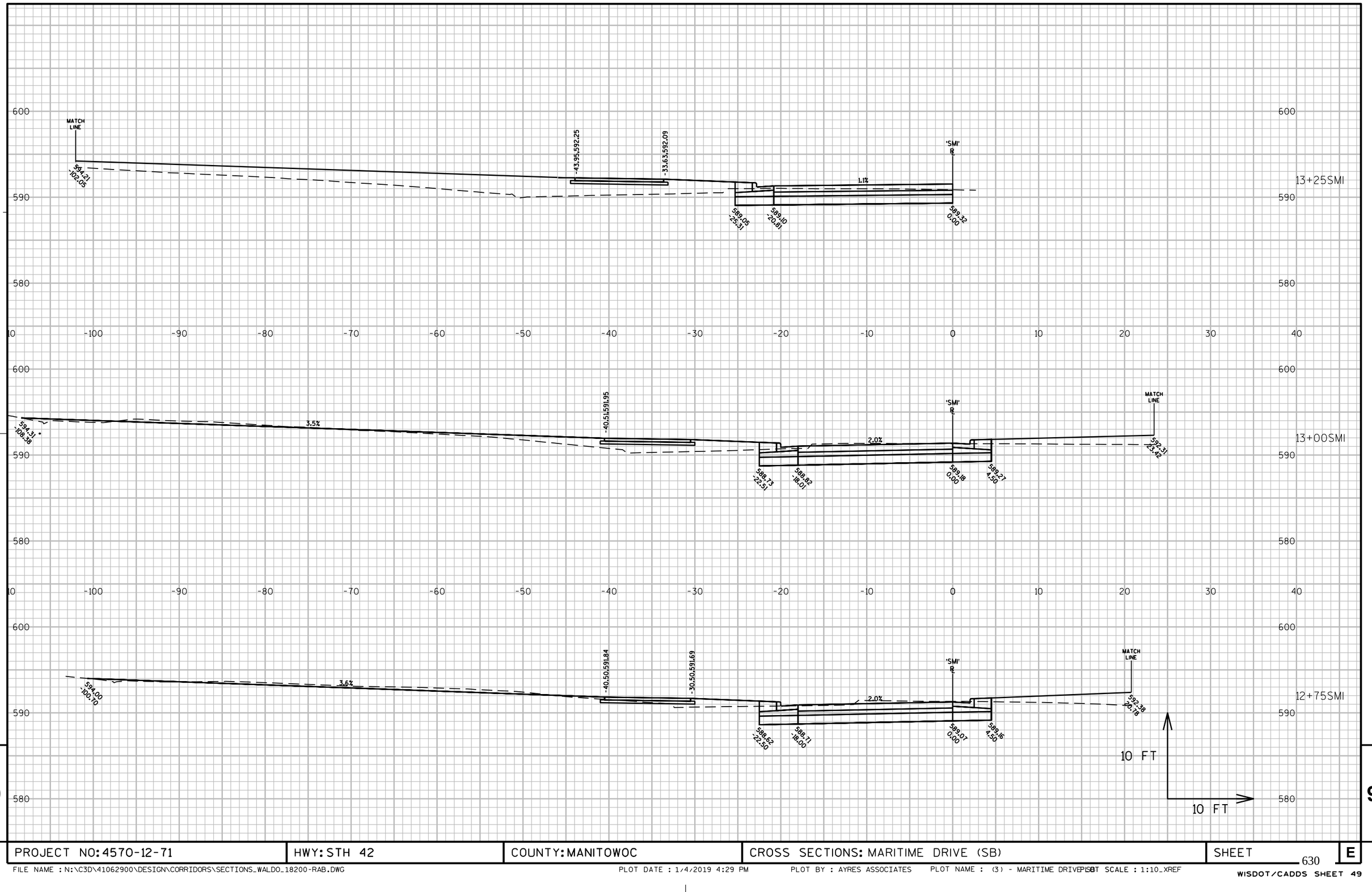
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: MARITIME DRIVE (SB)	SHEET	E

9

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:29 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2) - MARITIME DRIVE.PLT PLOT SCALE : 1:10_XREF

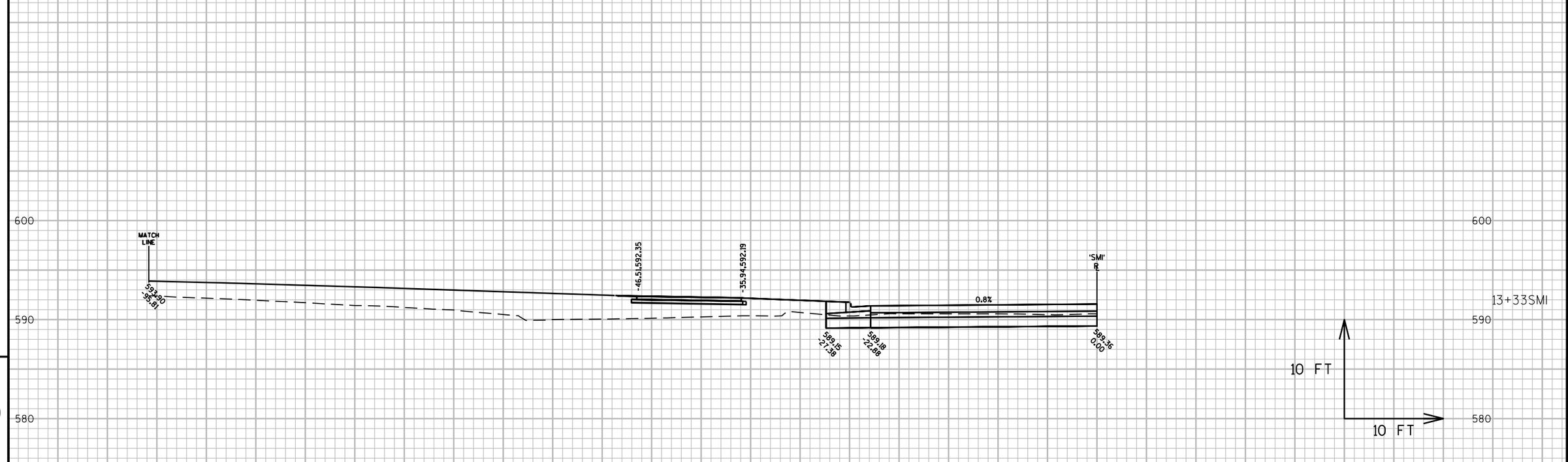
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: MARITIME DRIVE (SB)	SHEET 630	E

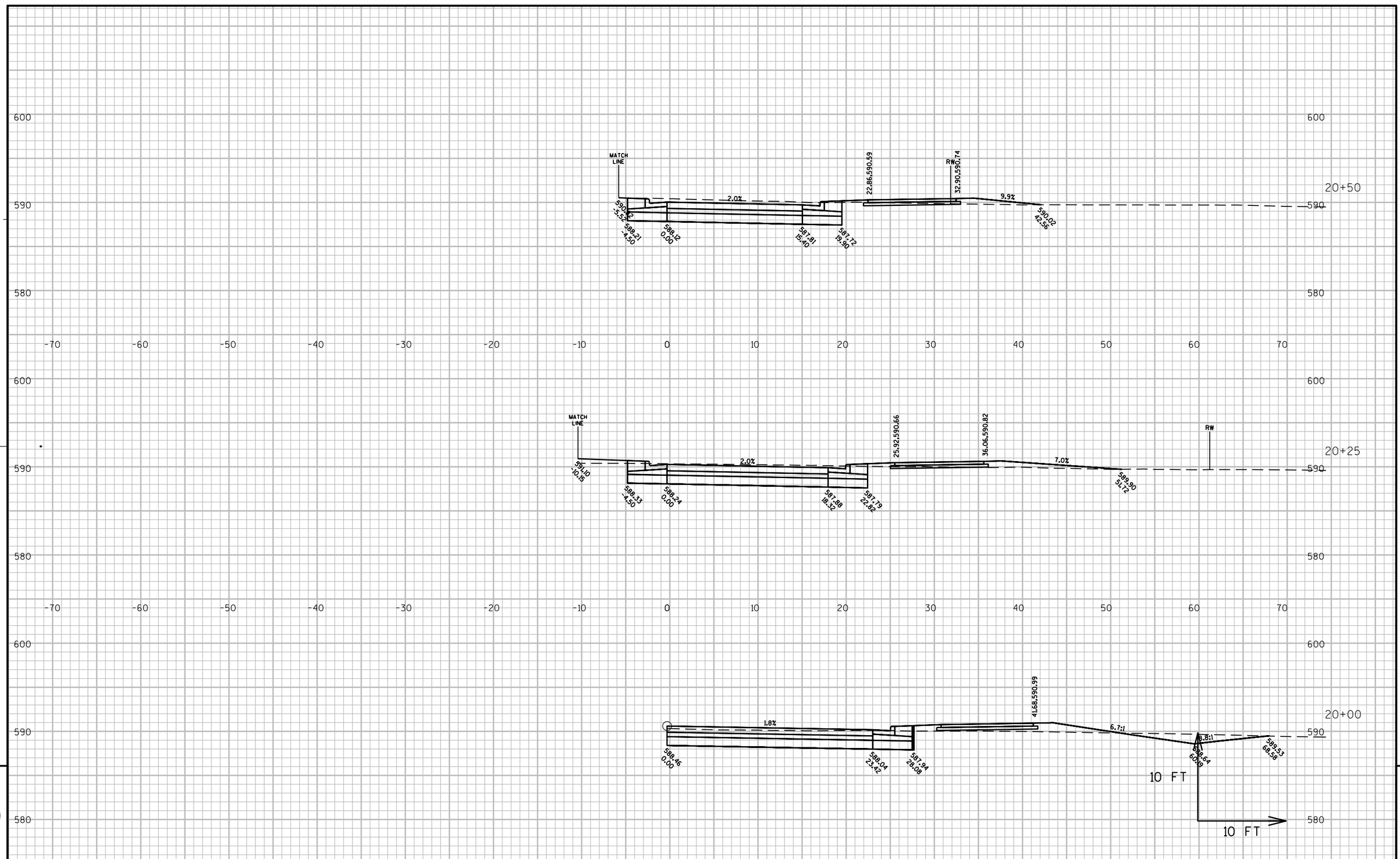
FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG
PLOT DATE : 1/4/2019 4:29 PM
PLOT BY : AYRES ASSOCIATES
PLOT NAME : (3) - MARITIME DRIVE.PLT
PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49

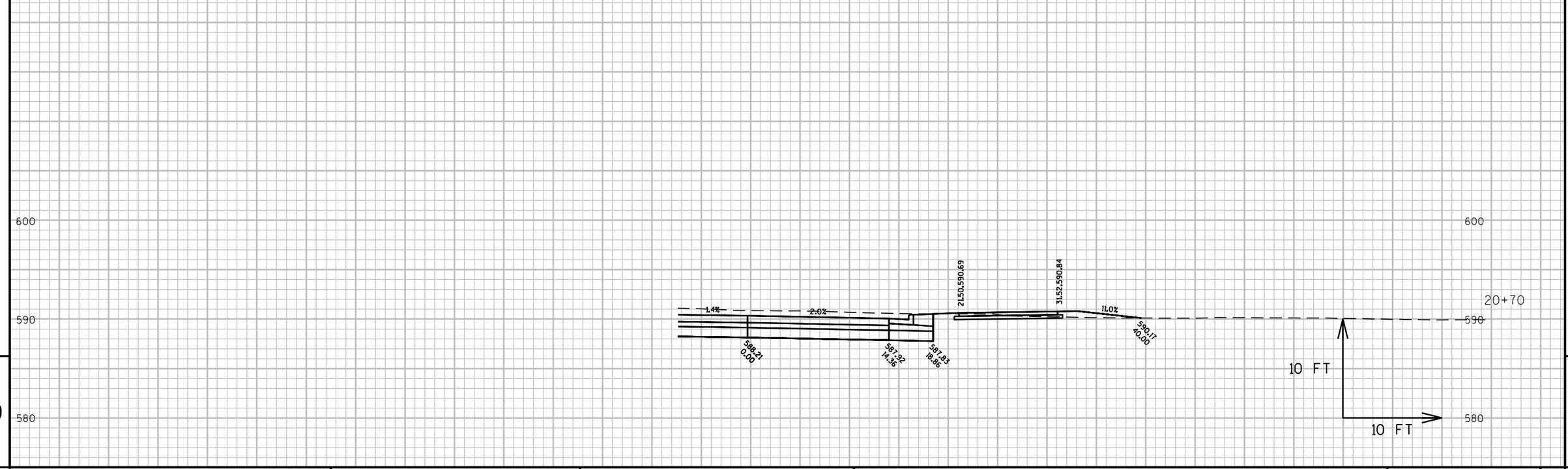


PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: MARITIME DRIVE (SB)	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 4:29 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : (4) - MARITIME DRIVE.DWG PLOT SCALE : 1:10_XREF



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: BAYSHORE DRIVE (NB)	SHEET 632	E



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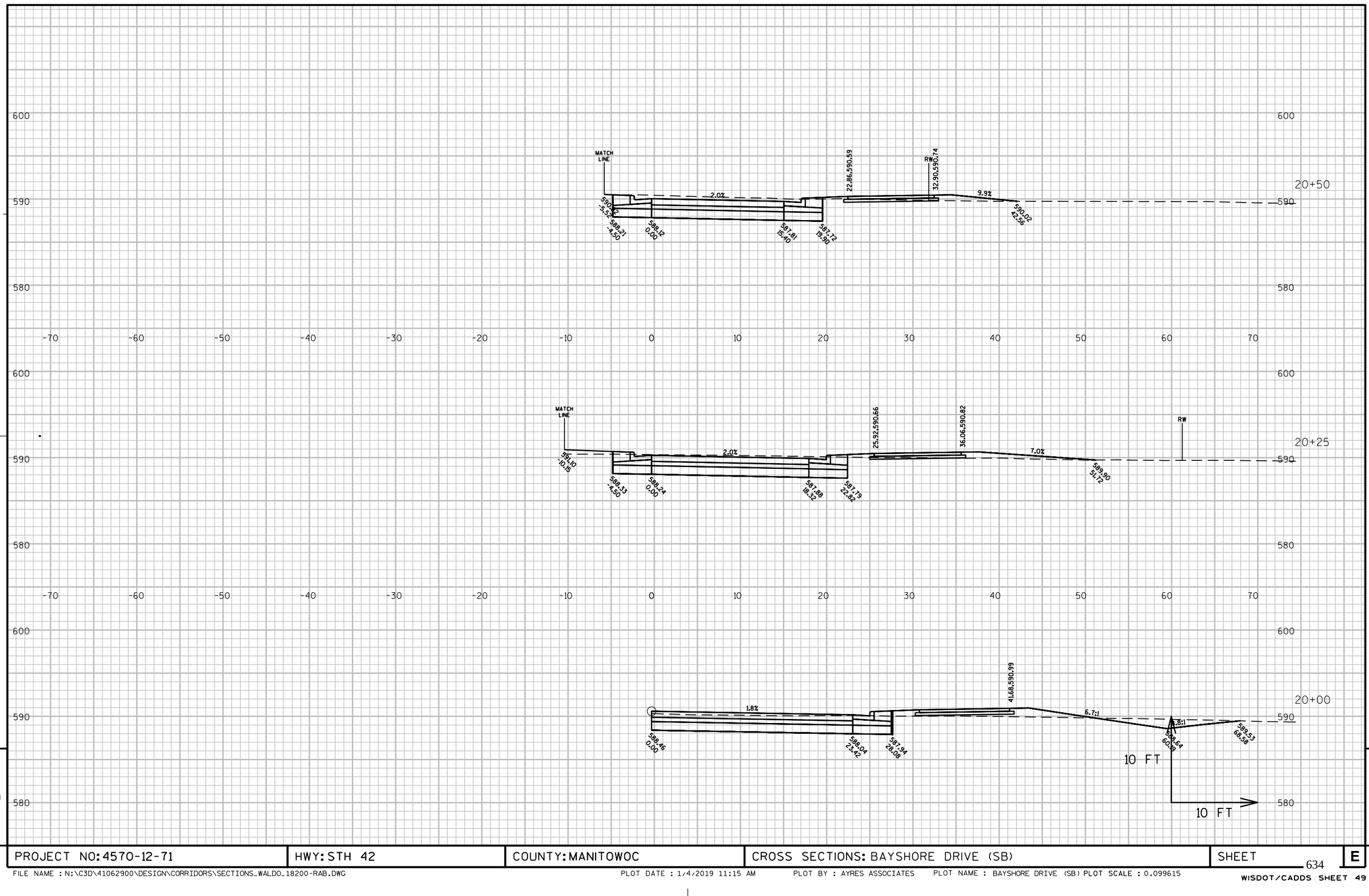
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: BAYSHORE DRIVE (NB)	SHEET	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 11:14 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2) - NORTH LEG (NB)PLOT SCALE : 0.099615

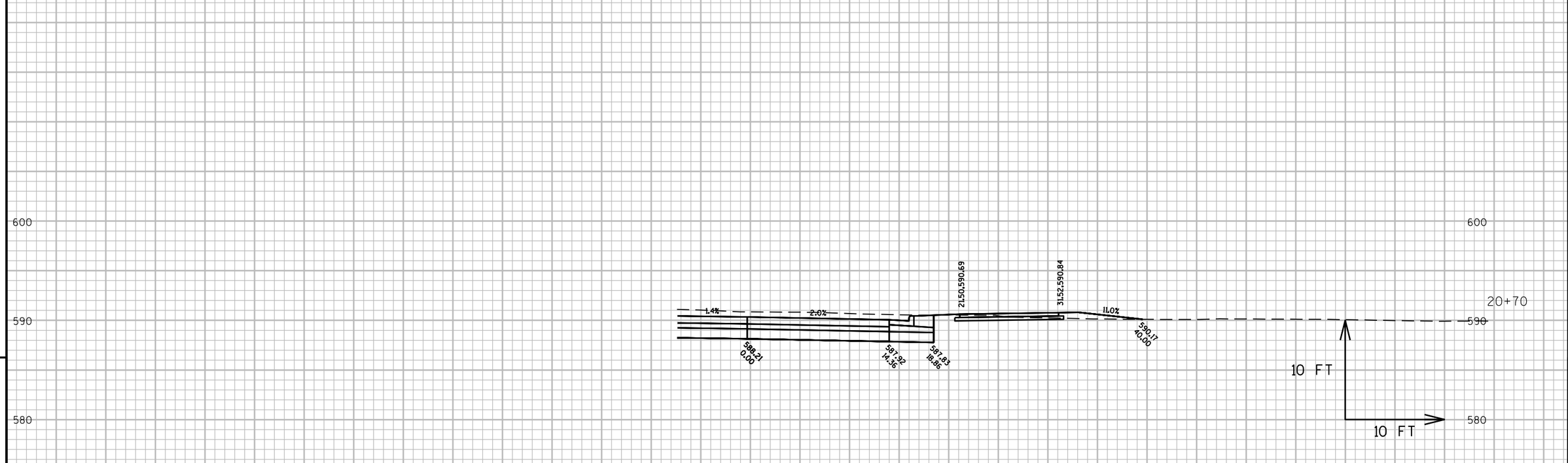
WISDOT/CADDS SHEET 49



PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: BAYSHORE DRIVE (SB)	SHEET 634	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_18200-RAB.DWG PLOT DATE : 1/4/2019 11:15 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : BAYSHORE DRIVE (SB) PLOT SCALE : 0.099615

WISDOT/CADDS SHEET 49



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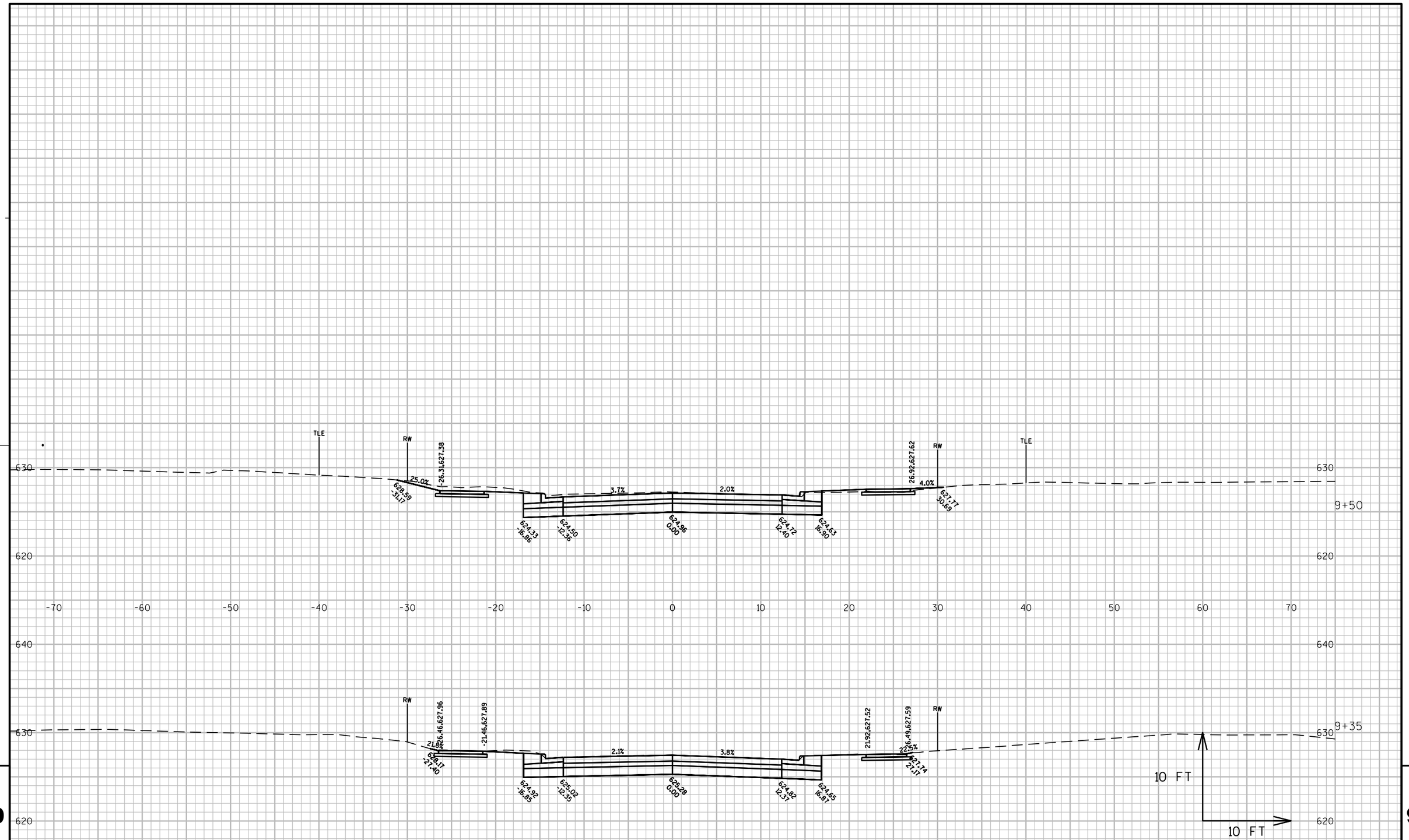
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: BAYSHORE DRIVE (SB)	SHEET 635	E

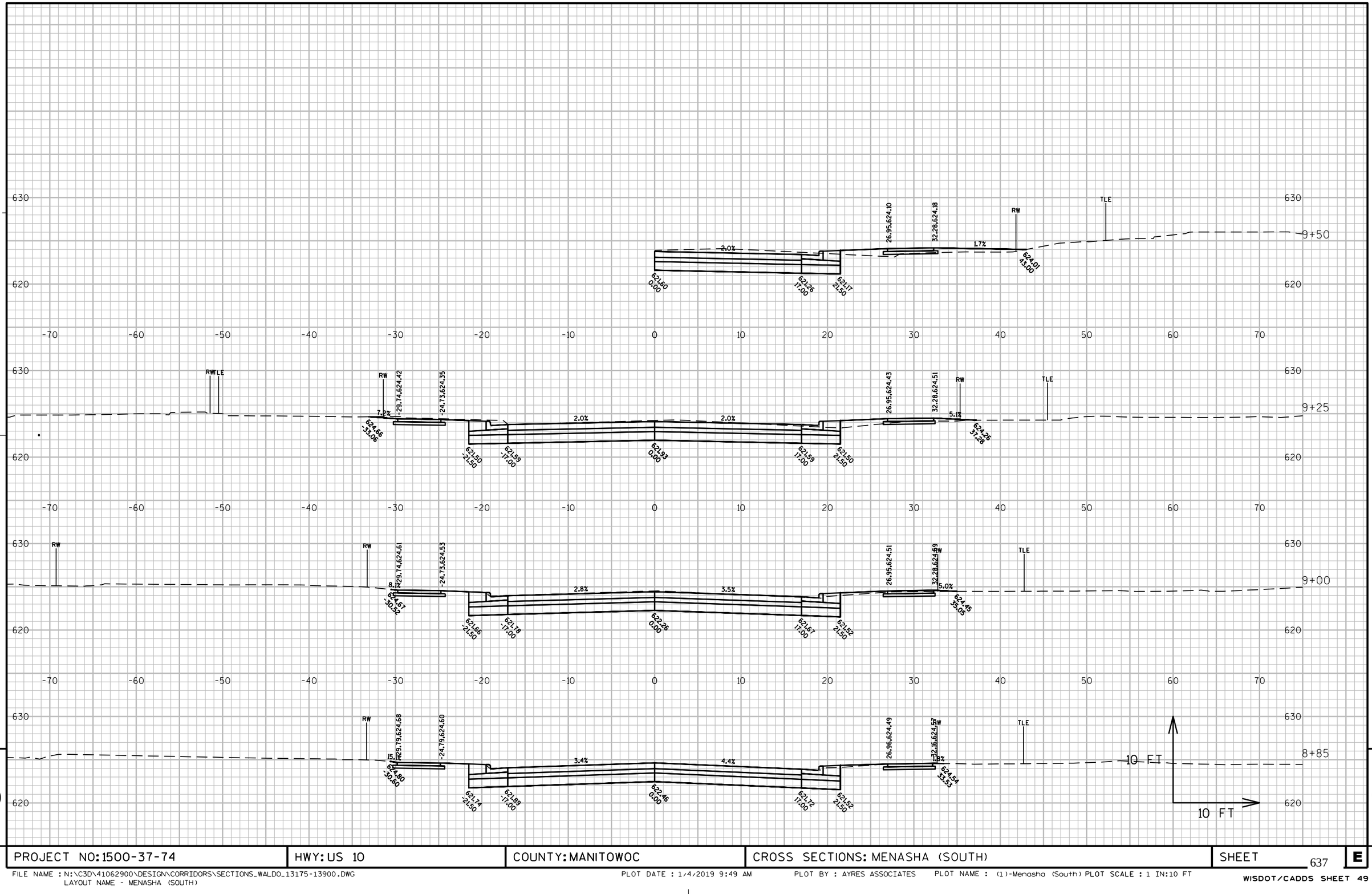


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: 13TH STREET	SHEET 636	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13175-13900.DWG
LAYOUT NAME - 13TH STREET

PLOT DATE : 1/4/2019 9:48 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1)-13th Street PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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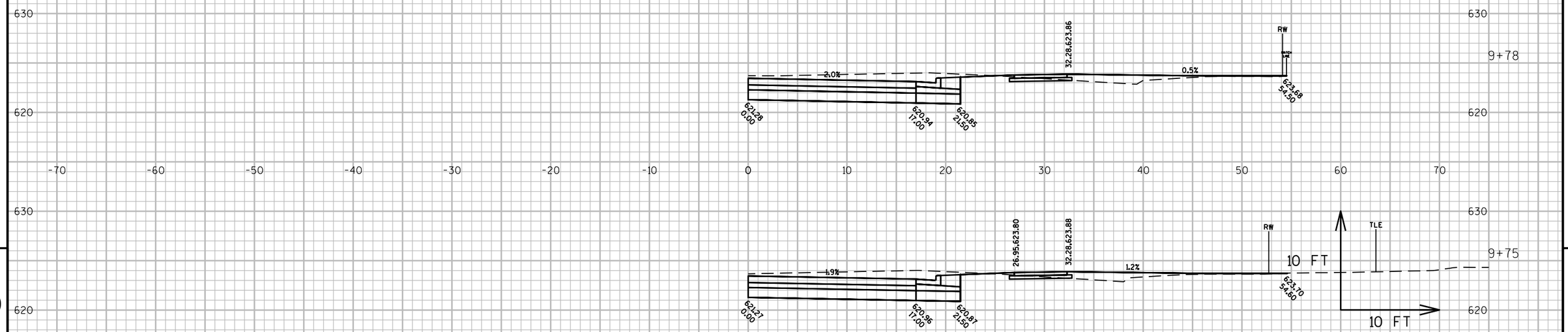
PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: MENASHA (SOUTH)	SHEET 637	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13175-13900.DWG
LAYOUT NAME - MENASHA (SOUTH)

PLOT DATE : 1/4/2019 9:49 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1)-Menasha (South) PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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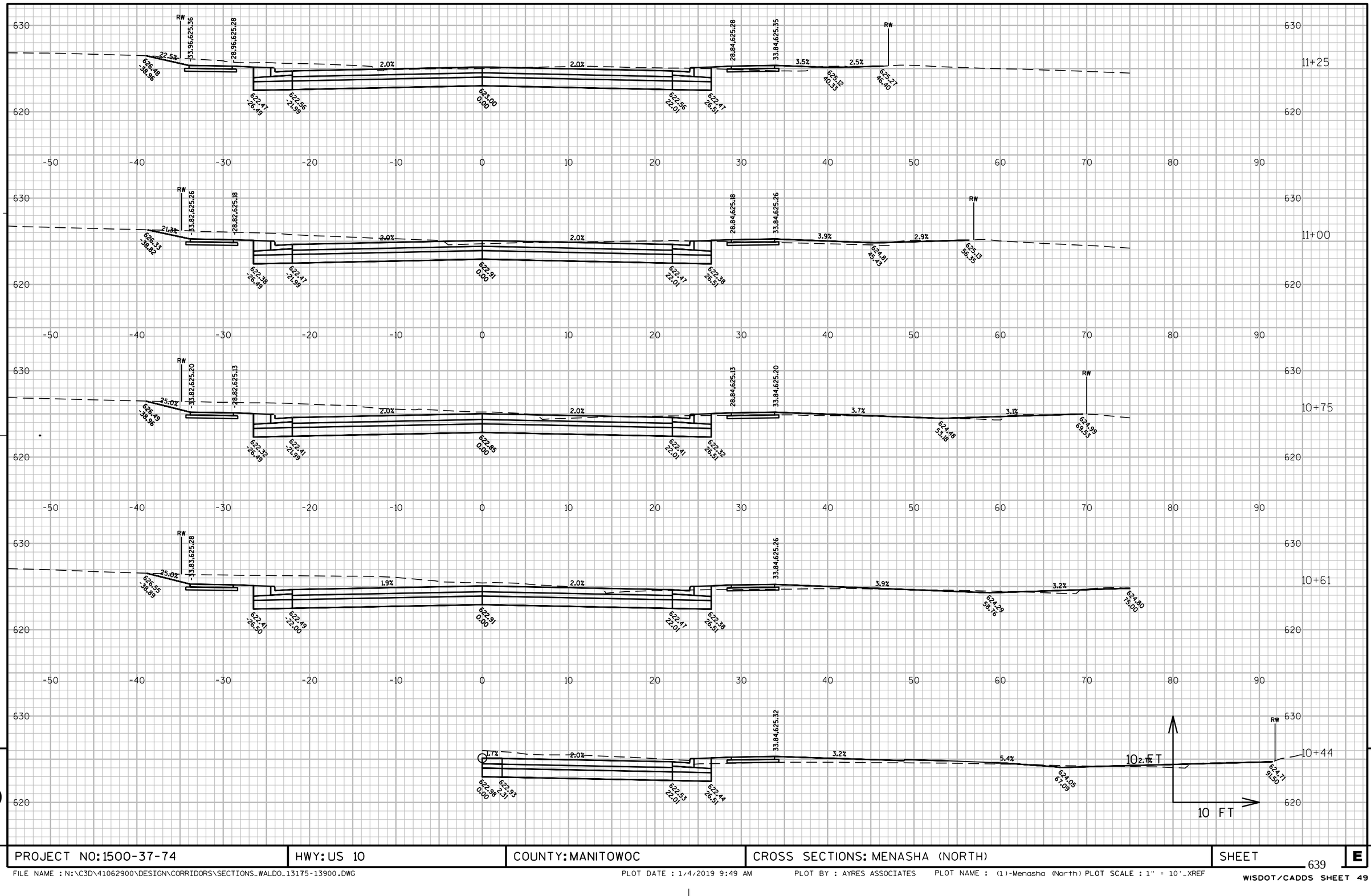
PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: MENASHA (SOUTH)	SHEET 638	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13175-13900.DWG
LAYOUT NAME - MENASHA (SOUTH)

PLOT DATE : 1/4/2019 9:49 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2)-Menasha (South) PLOT SCALE : 1 IN:10 FT

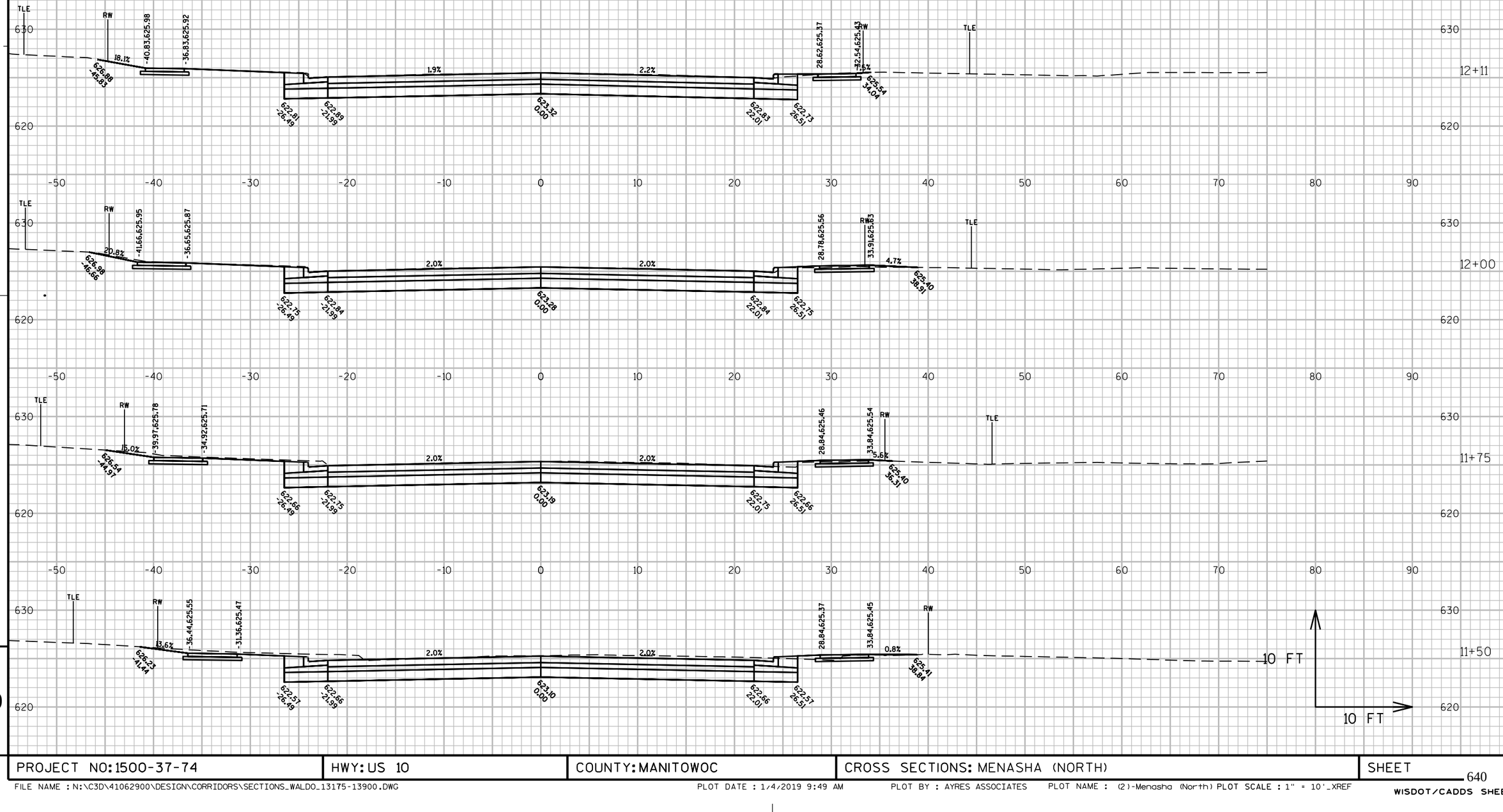
WISDOT/CADDS SHEET 49



PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: MENASHA (NORTH)	SHEET 639	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13175-13900.DWG PLOT DATE : 1/4/2019 9:49 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1)-Menasha (North) PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49



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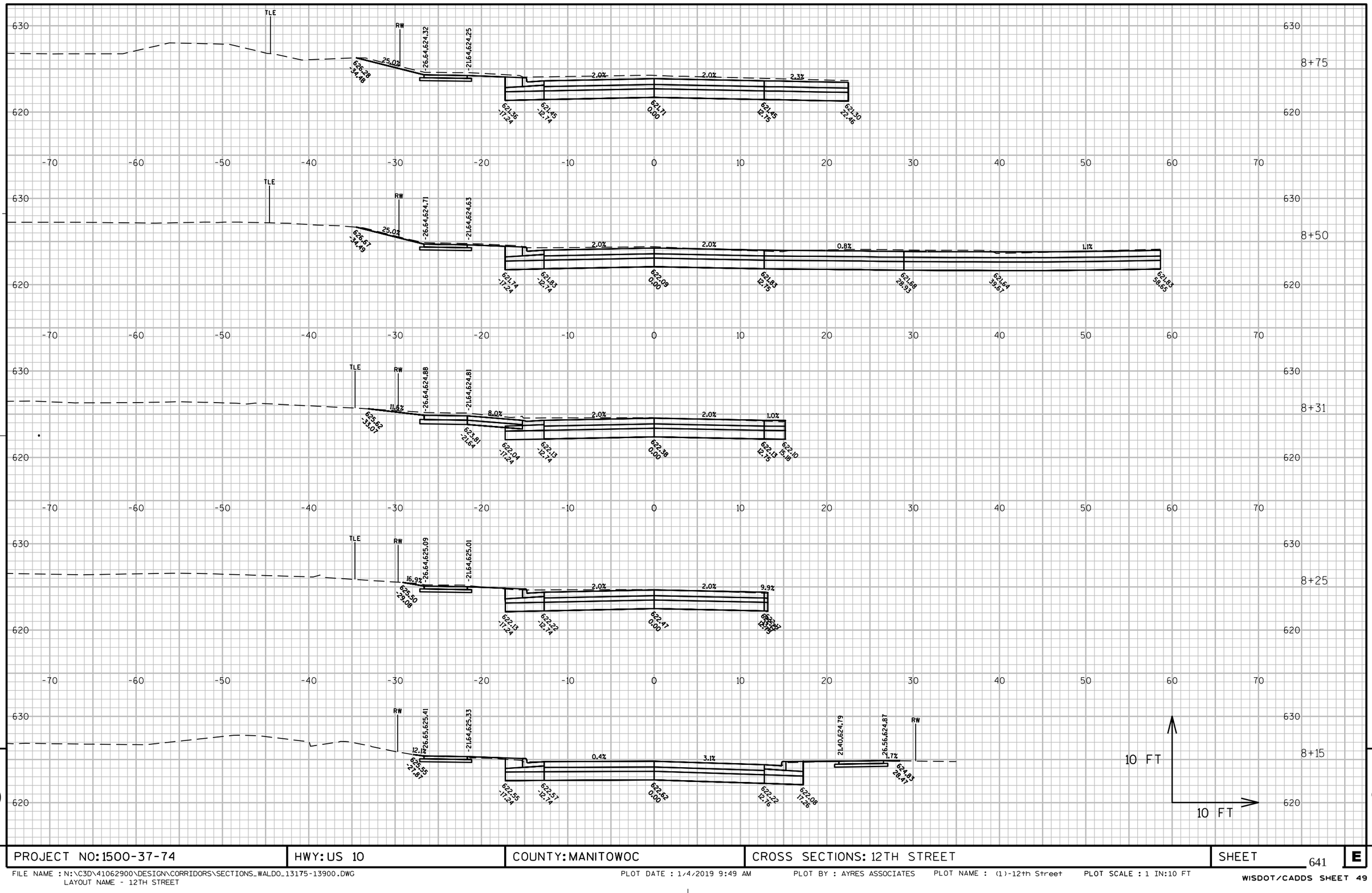
PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: MENASHA (NORTH)	SHEET 640	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13175-13900.DWG PLOT DATE : 1/4/2019 9:49 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2)-Menasha (North) PLOT SCALE : 1" = 10'_XREF

WISDOT/CADDS SHEET 49

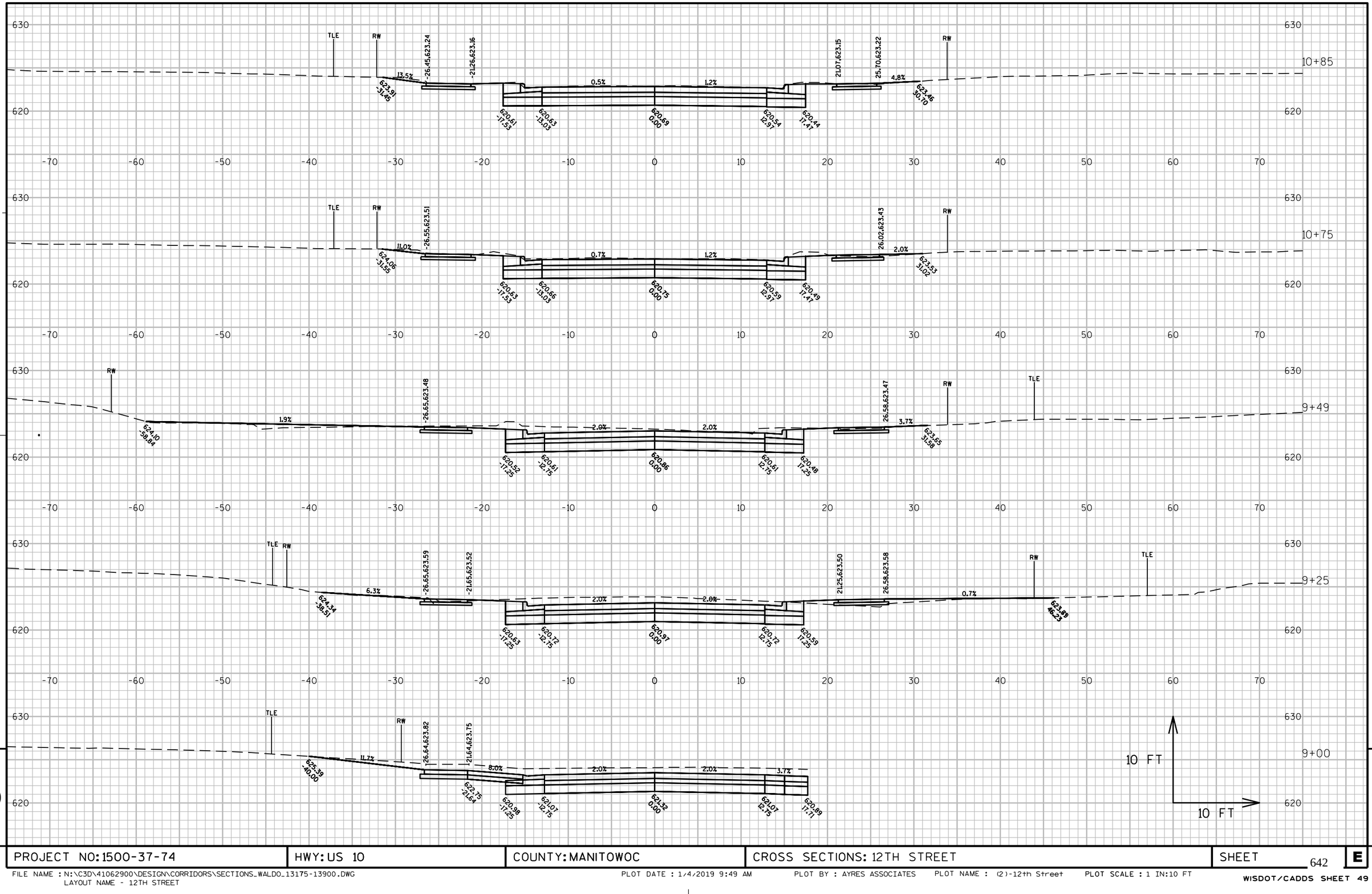


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: 12TH STREET	SHEET 641	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13175-13900.DWG
LAYOUT NAME - 12TH STREET

PLOT DATE : 1/4/2019 9:49 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1)-12th Street PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

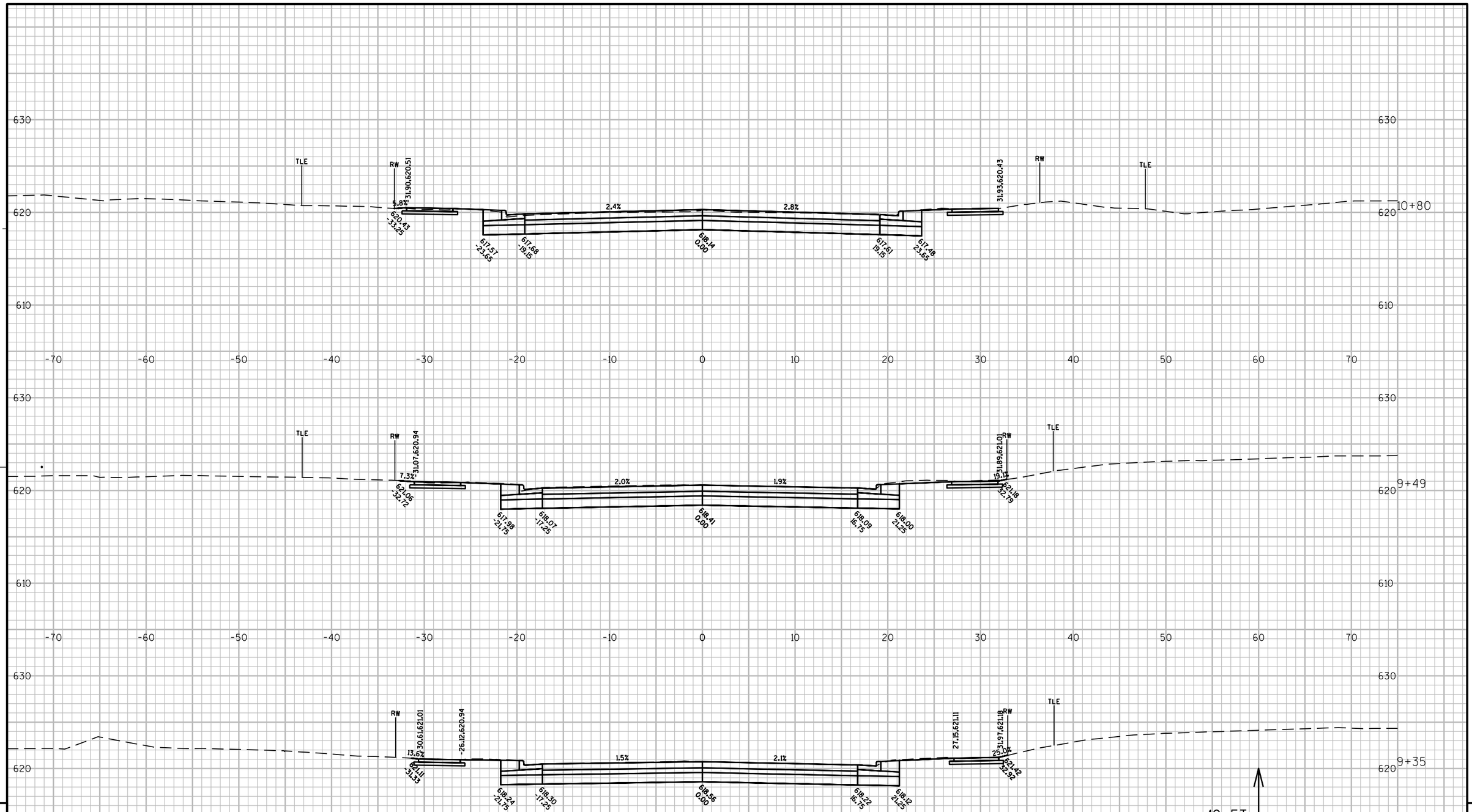


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: 12TH STREET	SHEET 642	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13175-13900.DWG
LAYOUT NAME - 12TH STREET

PLOT DATE : 1/4/2019 9:49 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2)-12th Street PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

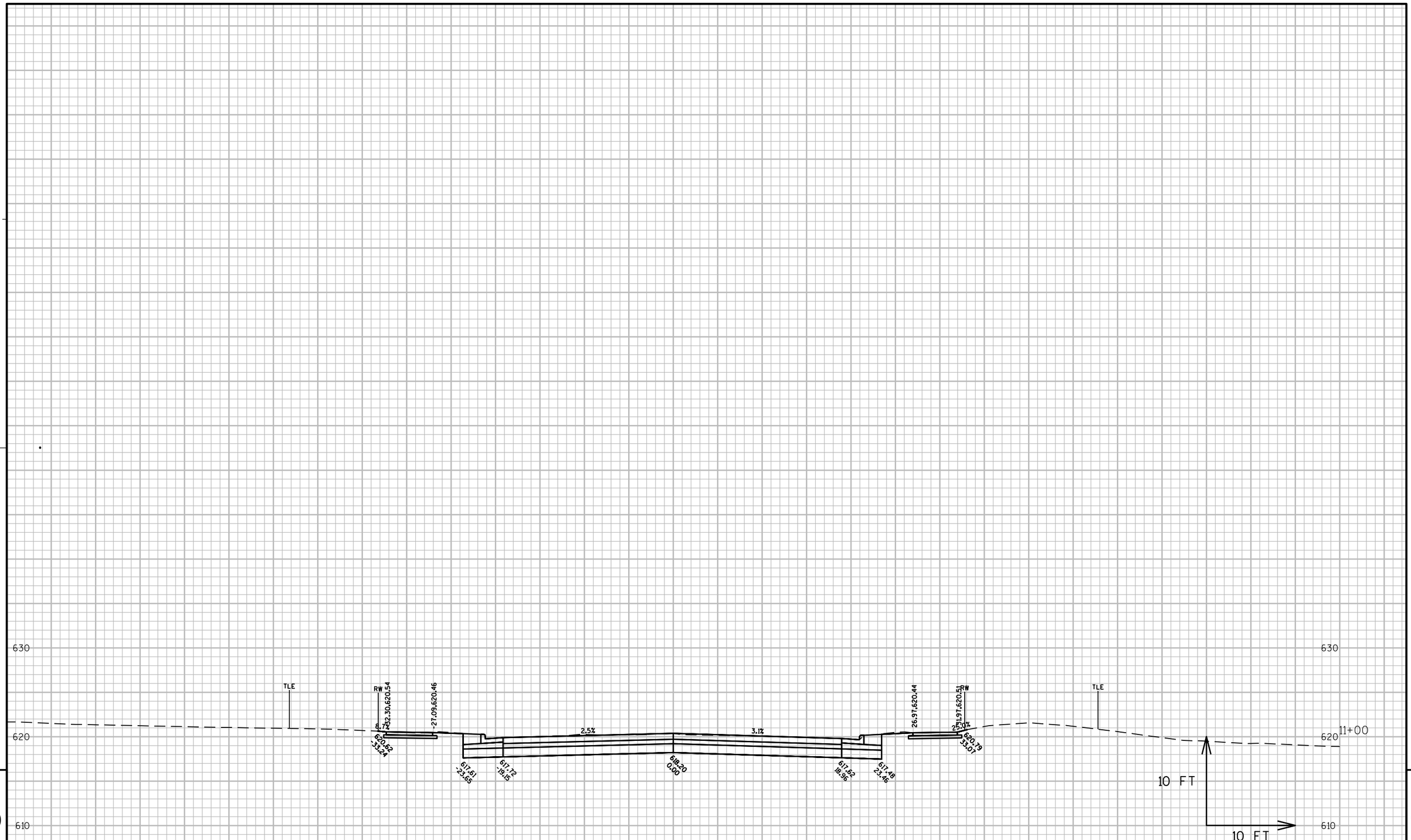


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: 11TH STREET	SHEET 643	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - 11TH STREET

PLOT DATE : 1/4/2019 9:50 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1)-11th Street PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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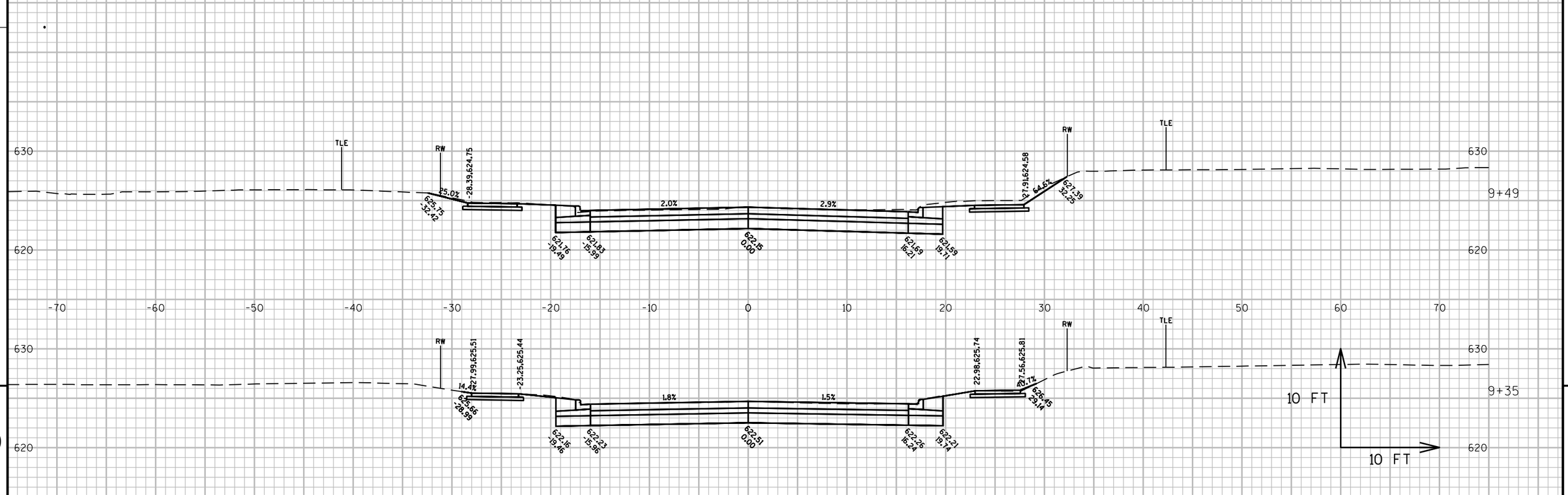
PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: 11TH STREET	SHEET 644	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - 11TH STREET

PLOT DATE : 1/4/2019 9:50 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2)-11th Street PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

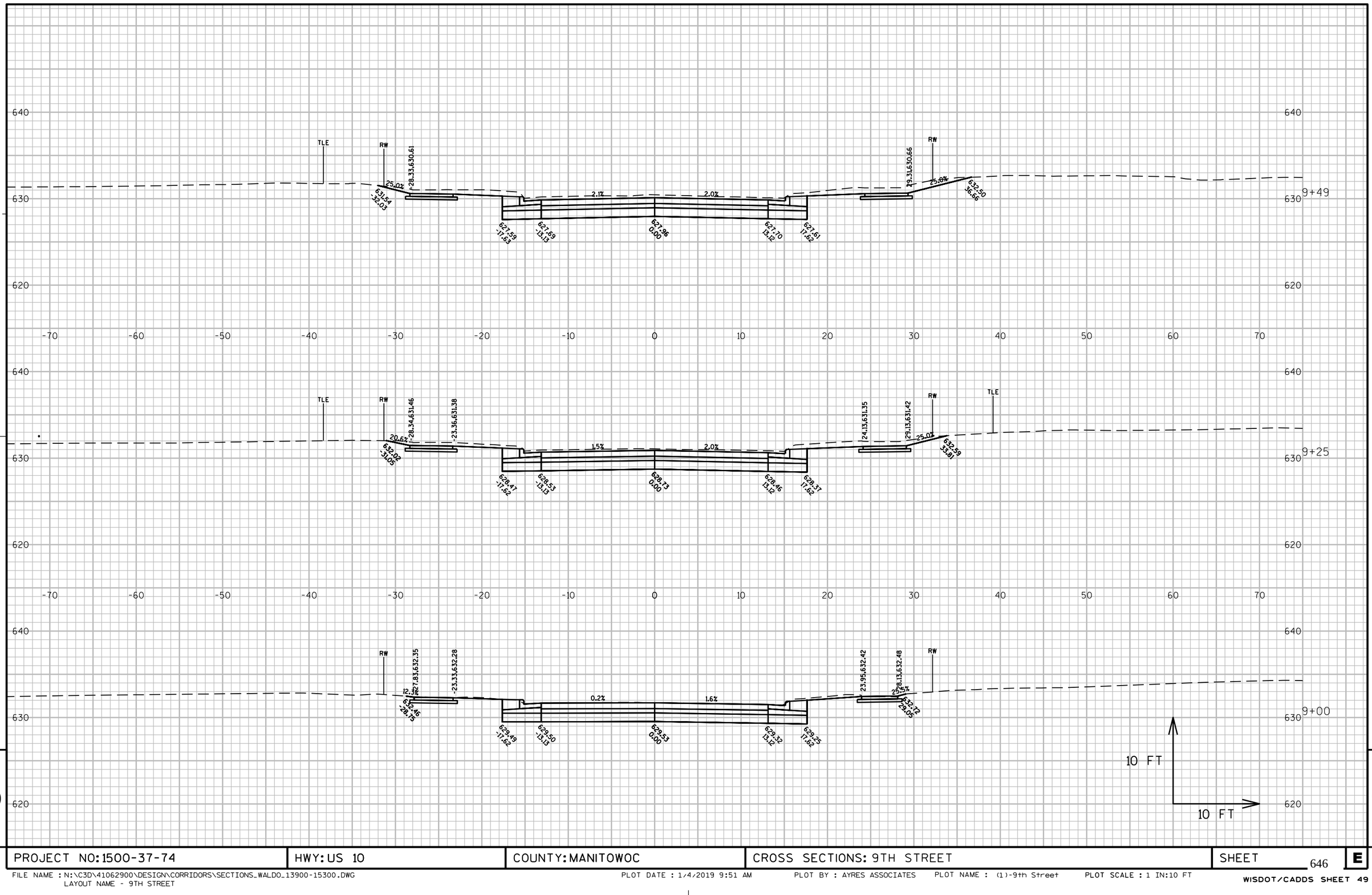


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: 10TH STREET	SHEET 645	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - 10TH STREET

PLOT DATE : 1/4/2019 9:50 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1)-10th Street PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

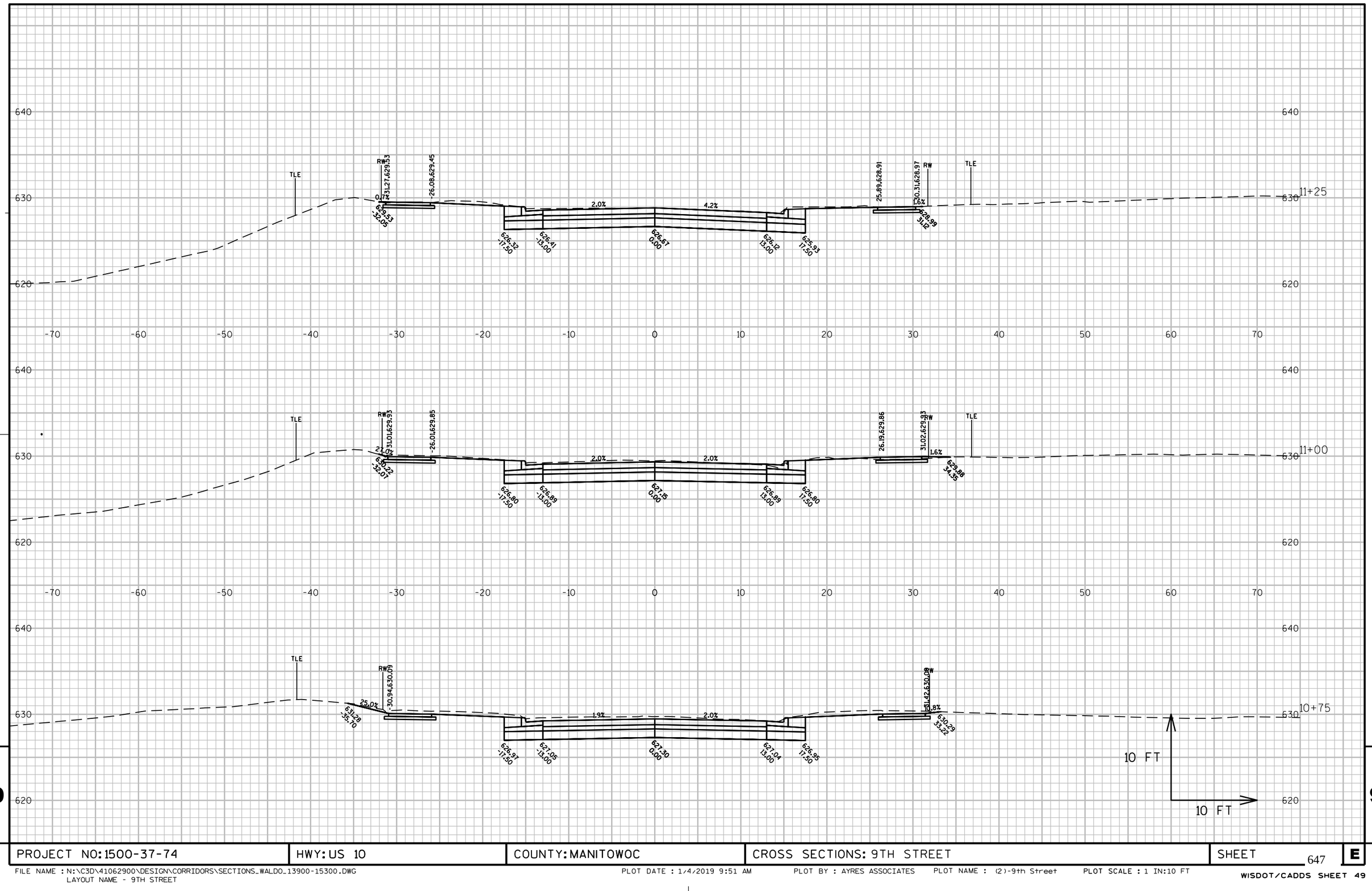


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: 9TH STREET	SHEET 646	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - 9TH STREET

PLOT DATE : 1/4/2019 9:51 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1)-9th Street PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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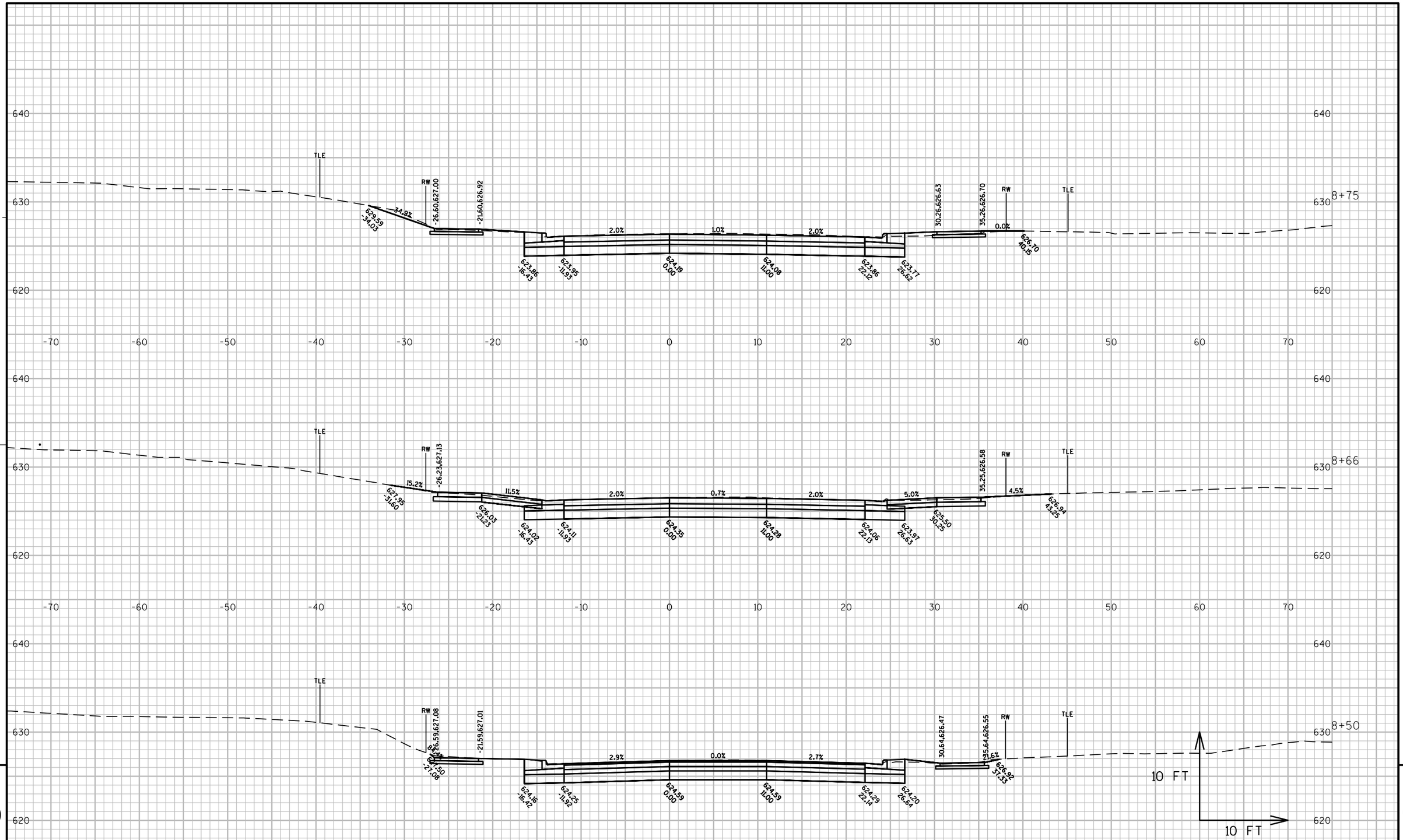
PROJECT NO:1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: 9TH STREET	SHEET 647	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - 9TH STREET

PLOT DATE : 1/4/2019 9:51 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2)-9th Street PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

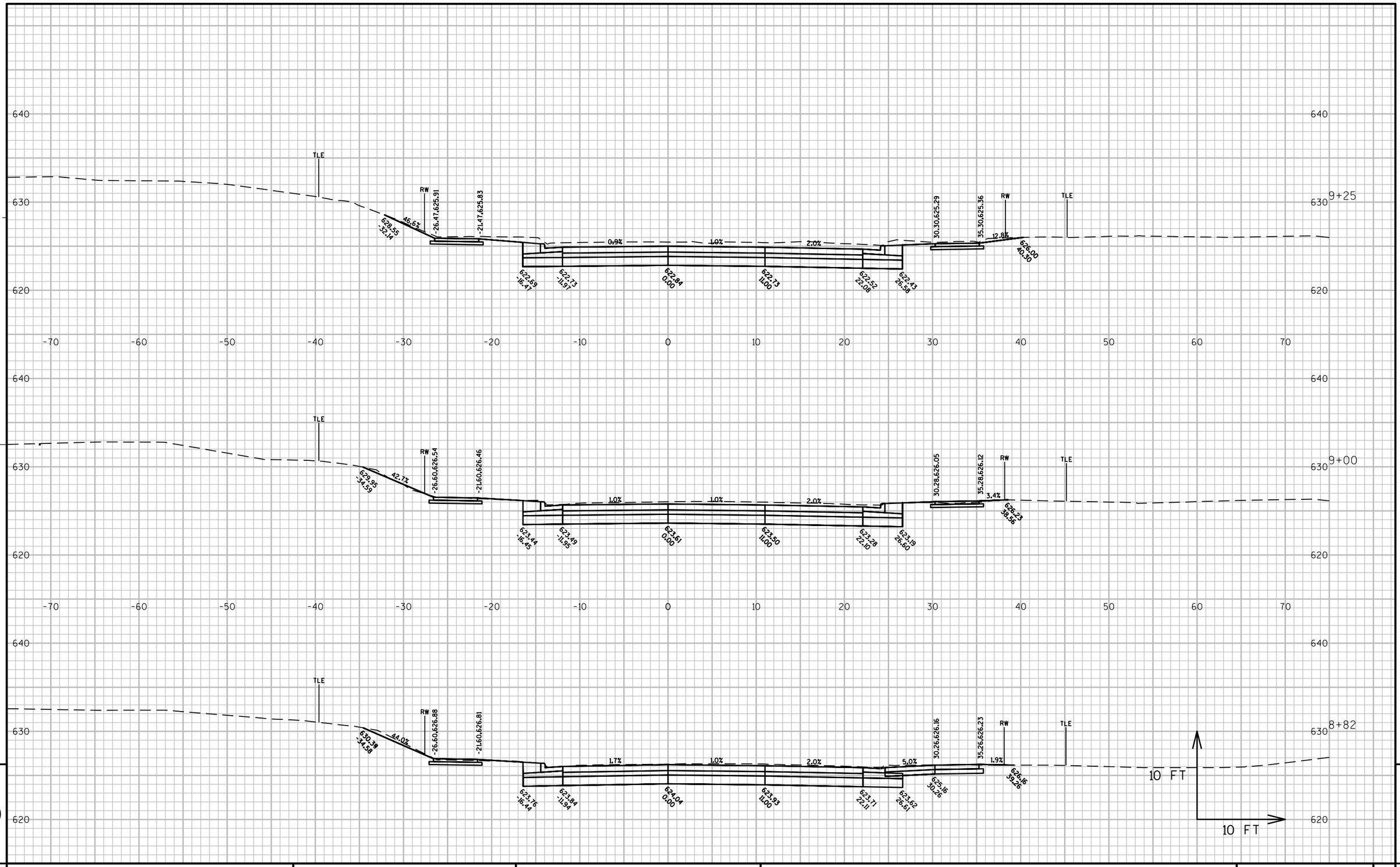


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: 8TH STREET	SHEET 648	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - 8TH STREET

PLOT DATE : 1/4/2019 9:51 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1)-8th Street PLOT SCALE : 1 IN:10 FT

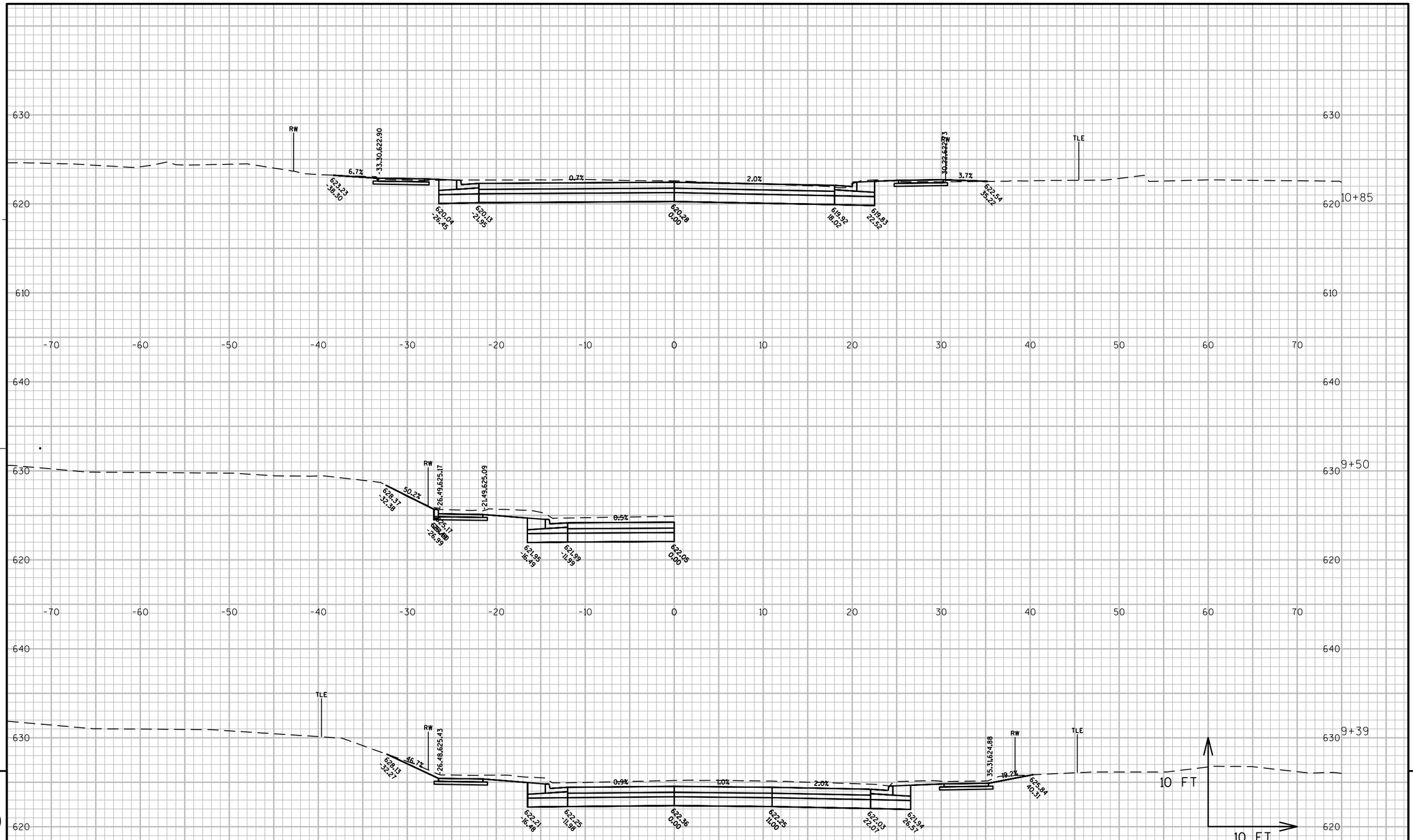
WISDOT/CADDS SHEET 49



PROJECT NO:1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: 8TH STREET	SHEET 649	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - 8TH STREET

PLOT DATE : 1/4/2019 9:52 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2)-8th Street PLOT SCALE : 1 IN:10 FT

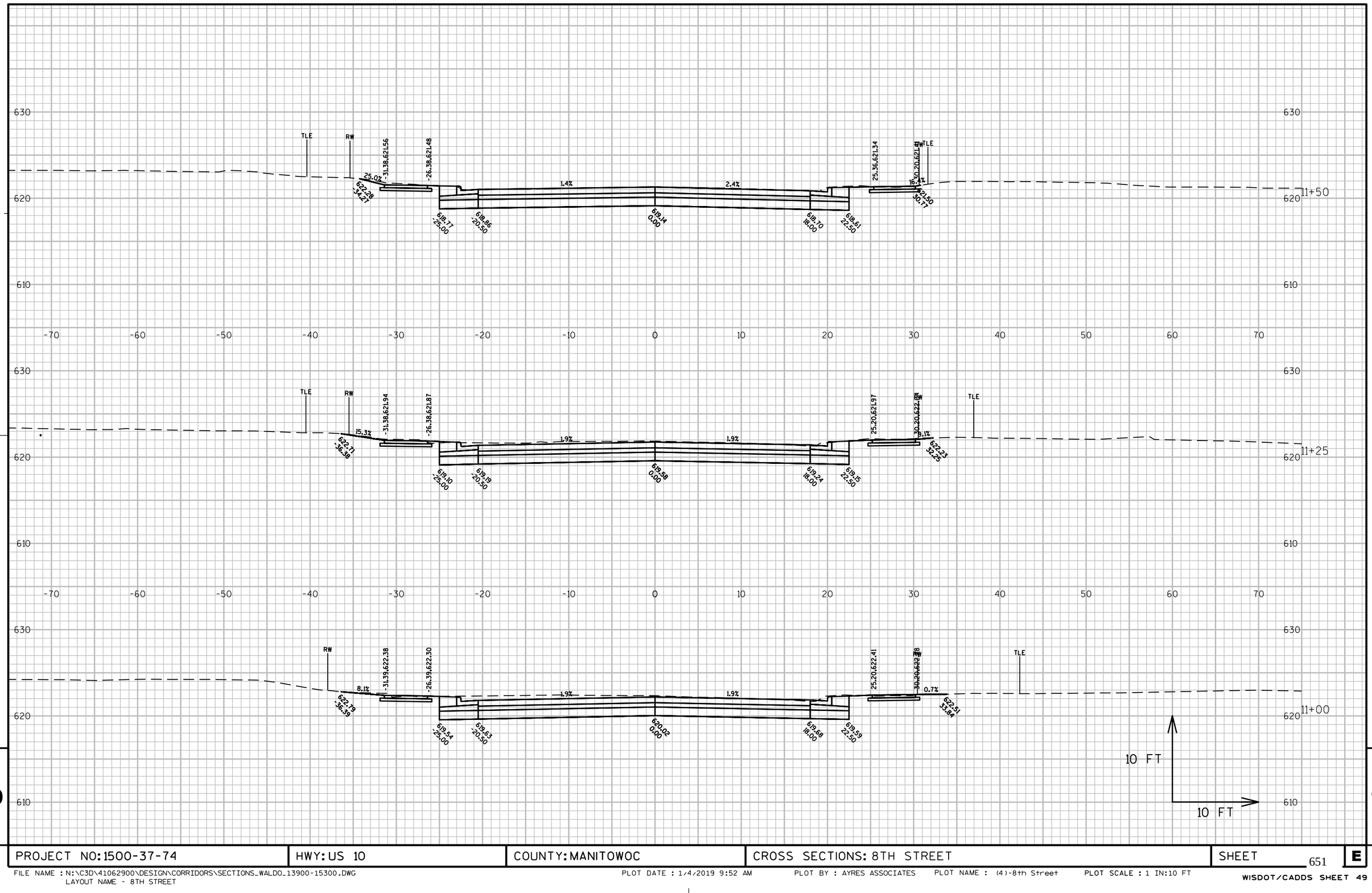


PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: 8TH STREET	SHEET 650	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - 8TH STREET

PLOT DATE : 1/4/2019 9:52 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (3)-8th Street PLOT SCALE : 1 IN:10 FT

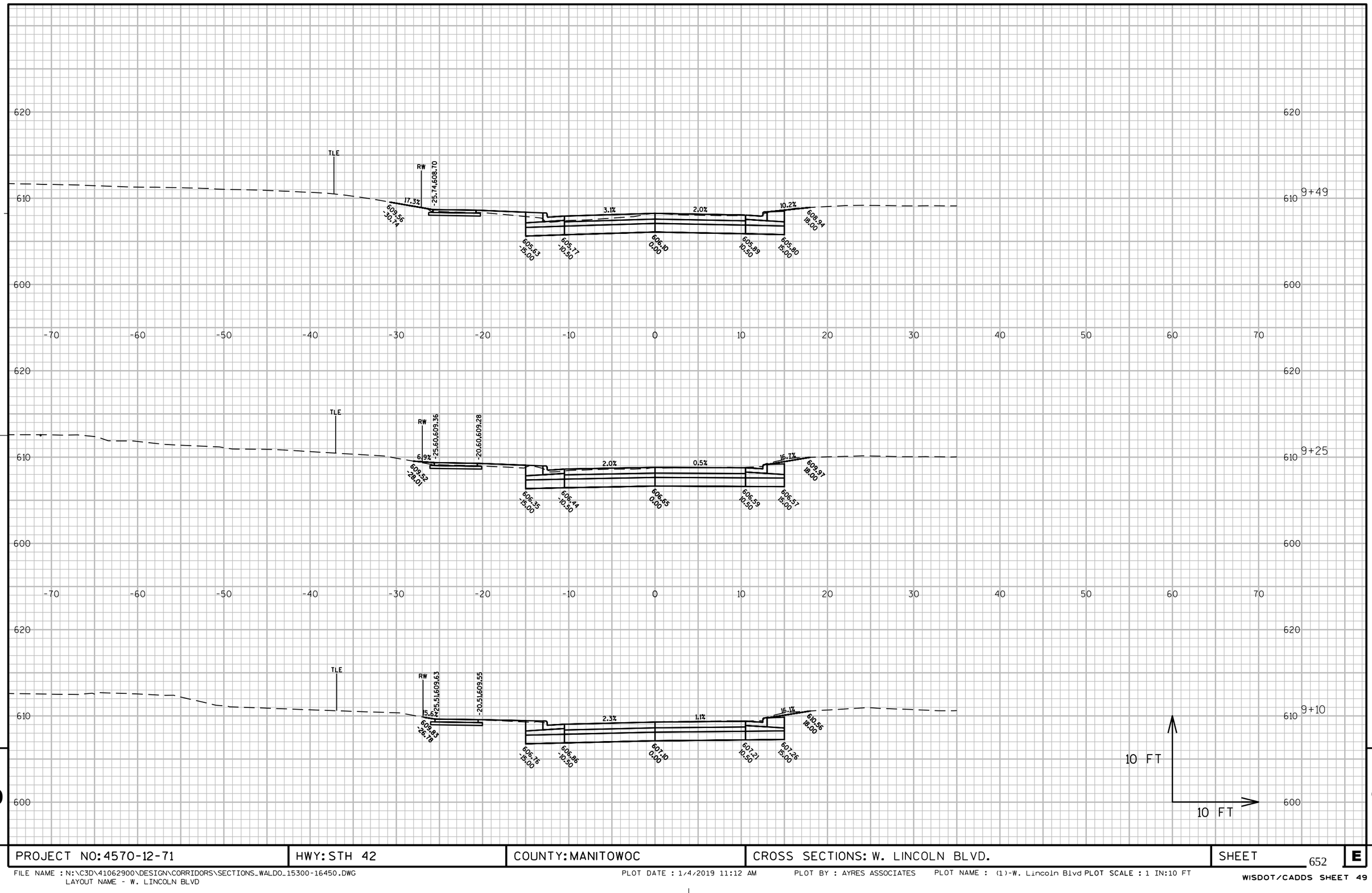
WISDOT/CADDS SHEET 49



PROJECT NO: 1500-37-74	HWY: US 10	COUNTY: MANITOWOC	CROSS SECTIONS: 8TH STREET	SHEET 651	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_13900-15300.DWG
LAYOUT NAME - 8TH STREET

PLOT DATE : 1/4/2019 9:52 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (4)-8th Street PLOT SCALE : 1 IN:10 FT

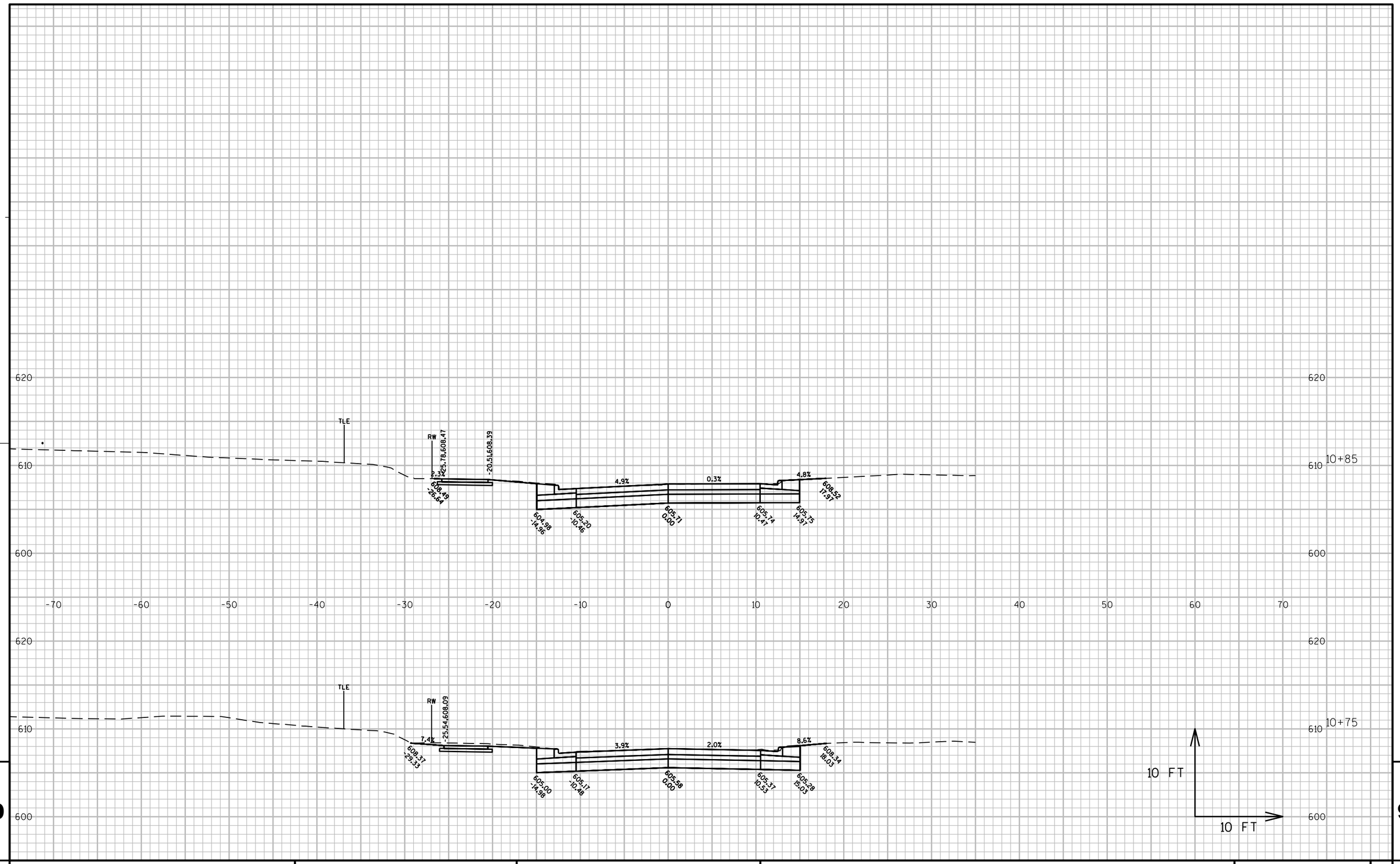


PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: W. LINCOLN BLVD.	SHEET 652	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG
LAYOUT NAME - W. LINCOLN BLVD

PLOT DATE : 1/4/2019 11:12 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1)-W. Lincoln Blvd PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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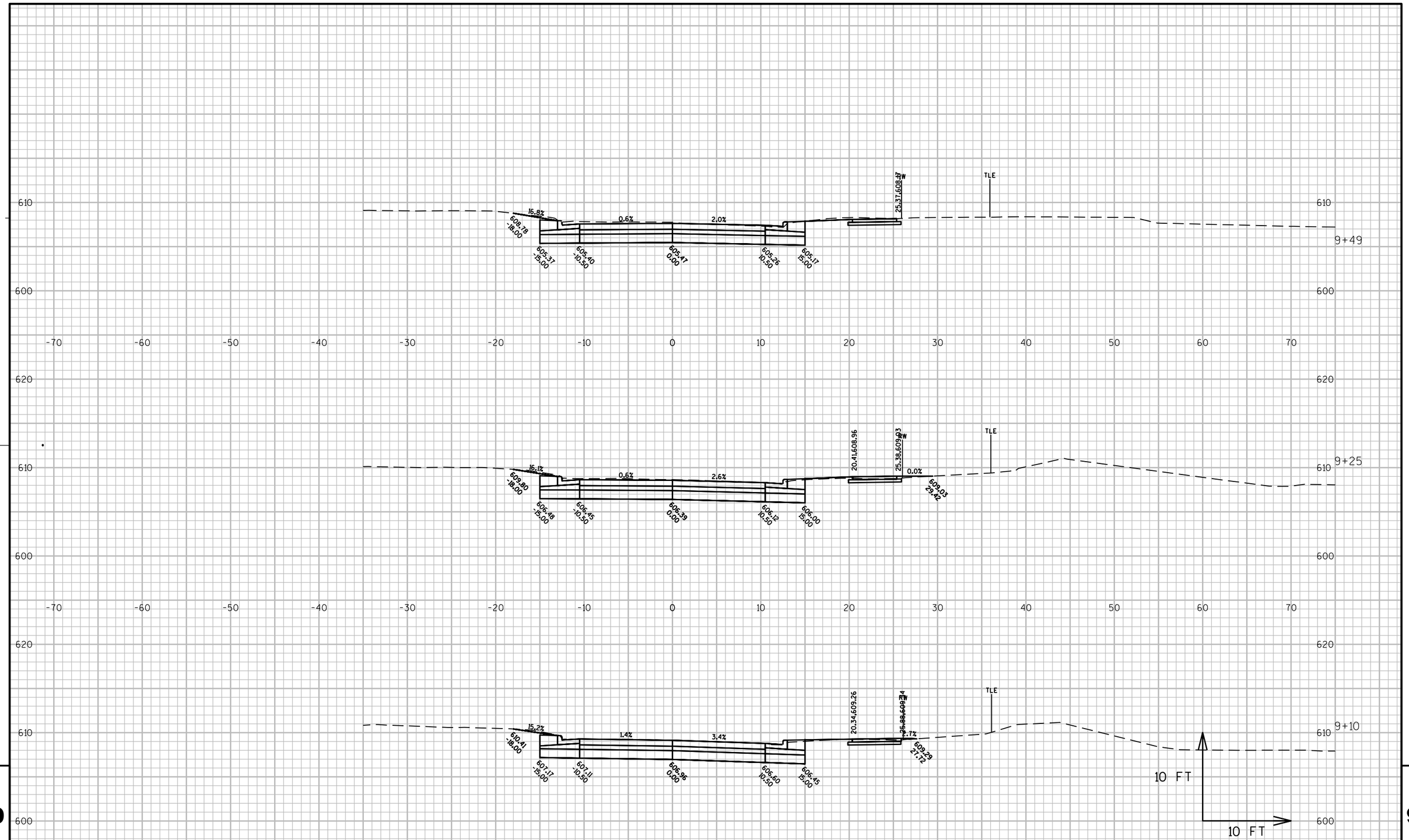
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: W. LINCOLN BLVD.	SHEET 653	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG
LAYOUT NAME - W. LINCOLN BLVD

PLOT DATE : 1/4/2019 11:12 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2)-W. Lincoln Blvd PLOT SCALE : 1 IN:10 FT



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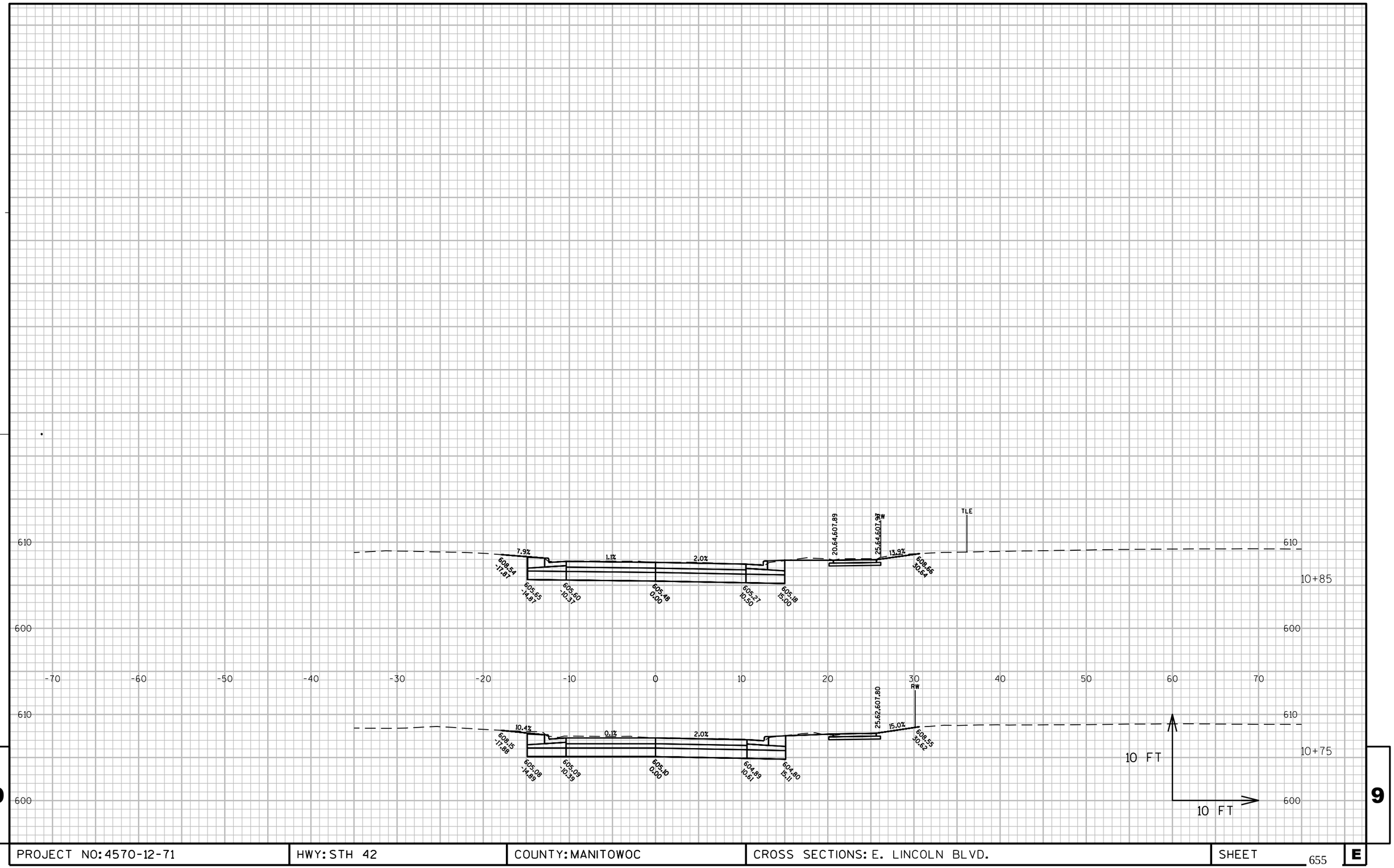
PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: E. LINCOLN BLVD.	SHEET 654	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG
LAYOUT NAME - E. LINCOLN BLVD

PLOT DATE : 1/4/2019 11:12 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1)-E. Lincoln Blvd PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

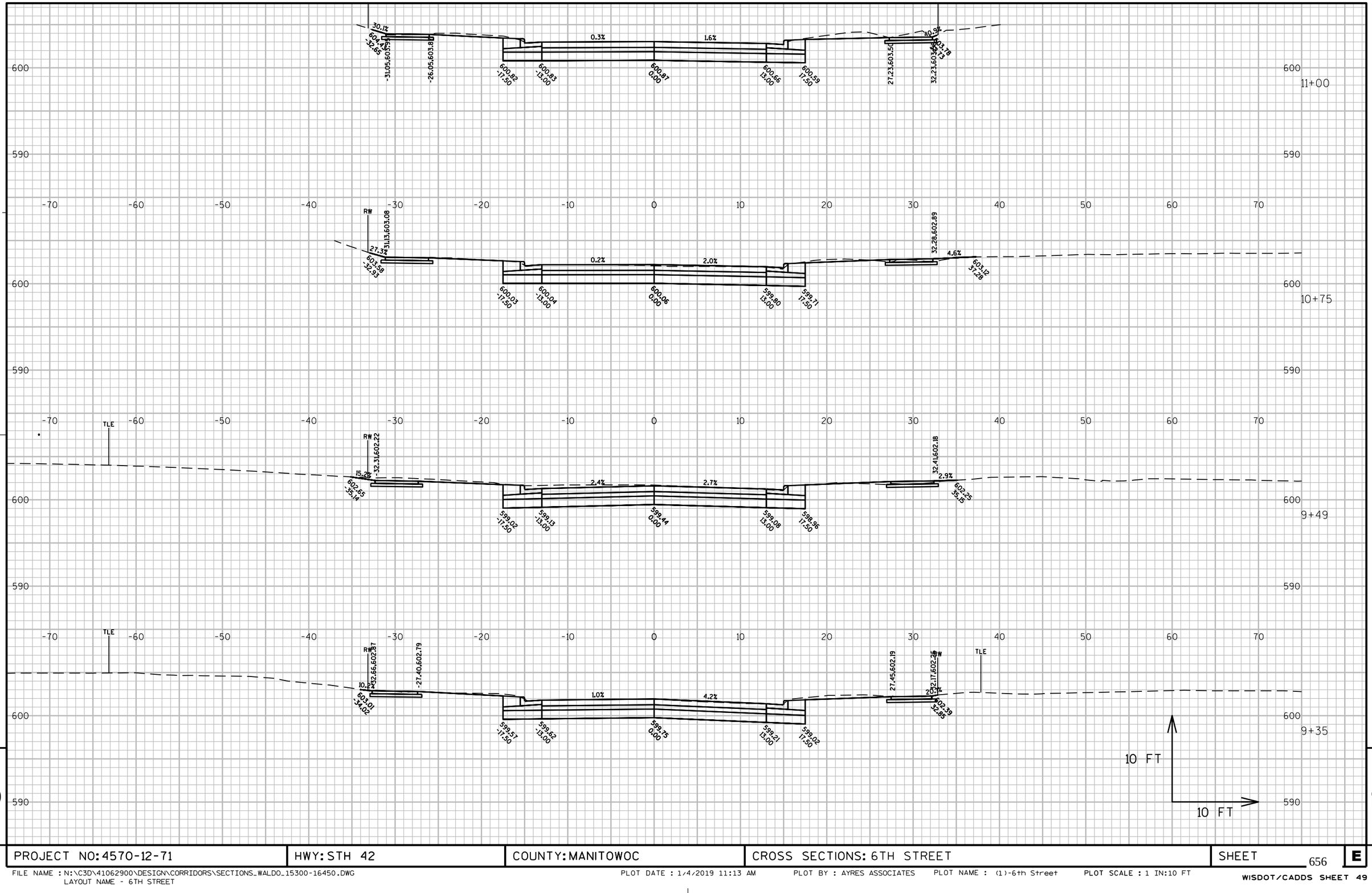


PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: E. LINCOLN BLVD.	SHEET 655	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG
LAYOUT NAME - E. LINCOLN BLVD

PLOT DATE : 1/4/2019 11:13 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (2)-E. Lincoln Blvd PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

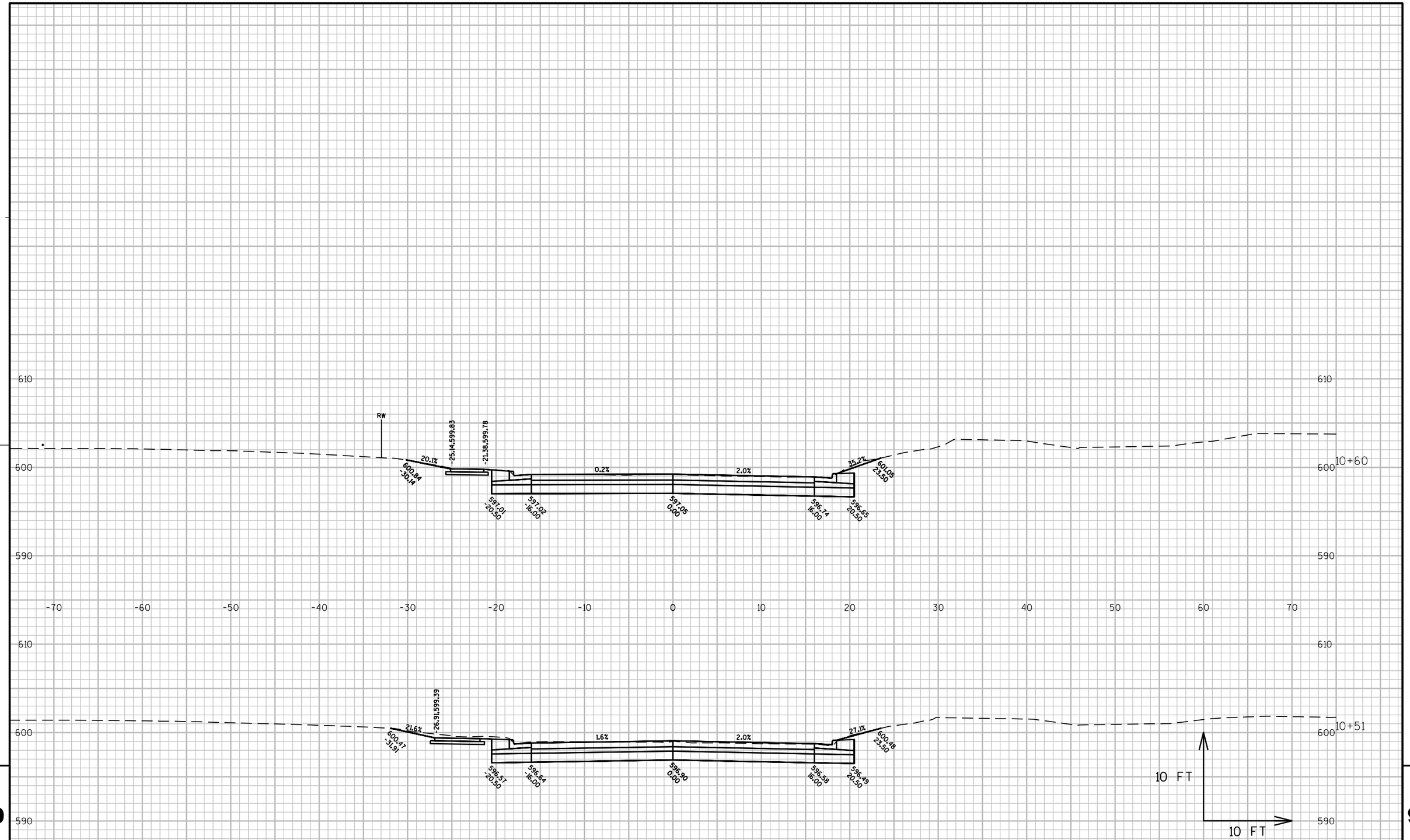


PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: 6TH STREET	SHEET 656	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG
LAYOUT NAME - 6TH STREET

PLOT DATE : 1/4/2019 11:13 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1)-6th Street PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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PROJECT NO: 4570-12-71	HWY: STH 42	COUNTY: MANITOWOC	CROSS SECTIONS: 5TH STREET	SHEET 657	E

FILE NAME : N:\C3D\41062900\DESIGN\CORRIDORS\SECTIONS_WALDO_15300-16450.DWG
LAYOUT NAME - 5TH STREET

PLOT DATE : 1/4/2019 11:13 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : (1)-5th Street PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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