WKE

APR 2017

PROJECT ID: 2390-09-70

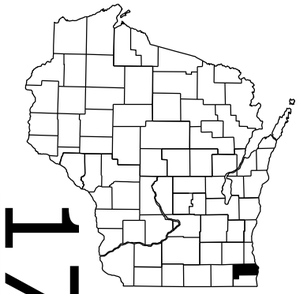
WITH: N/A

COUNTY: RACINE

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 = 522



17

N

DESIGN DESIGNATION

A.A.D.T. 2019	=	35,200
A.A.D.T. 2039	=	39,700
D.H.V.	=	3,970
D.D.	=	59/41
T.	=	5.3%
DESIGN SPEED	=	40 mph
ESALS	=	2,379,800 - 2,883,500

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

GREEN BAY ROAD

STH 20 TO CTH MM

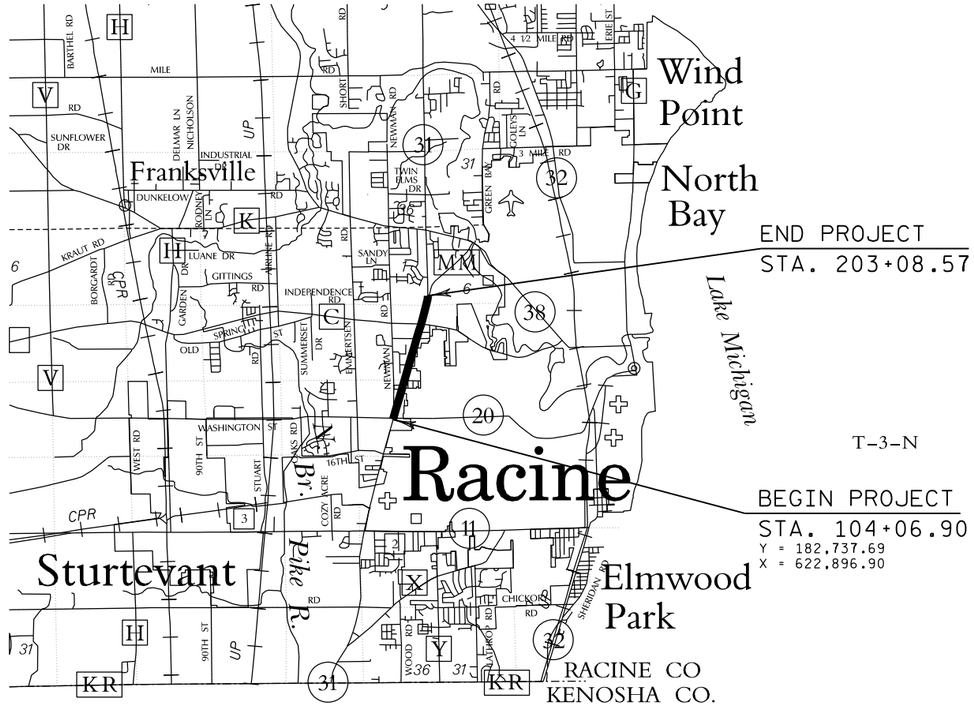
STH 31

RACINE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2390-09-70	WISC 2017163	1

STATE PROJECT NUMBER

2390-09-70



LAYOUT SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 1.858 MI.

Horizontal positions shown on this plan are Wisconsin County coordinates, Racine County, NAD83 (2011), in U.S. Survey Feet. Values are Grid Coordinates, Grid Bearings, and Grid Distances. Grid Distances may be used as Ground Distances.

Elevations shown on the plans are referenced to the North American Vertical Datum, NAVD88 (2012).

ORIGINAL PLANS PREPARED BY

gai consultants
transforming Ideas Into reality®

WISCONSIN
MICHAEL C. GASPER
E-39041
PORT WASHINGTON, WISCONSIN
PROFESSIONAL ENGINEER
12-2016

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	GAI CONSULTANTS
Designer	GAI CONSULTANTS
Project Manager	M. WILFERT
Regional Examiner	
Regional Supervisor	
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 12-1-16 (Signature)

E

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RPUCELY@MTPLEASANTWI.GOV

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

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

WISDOT CONTACT
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mike.ernst@lakesideengineers.com

2

GENERAL NOTES

1. ALL BASE PATCHING LOCATIONS SHOWN IN THE PLAN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE ENGINEER.

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

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

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

5. EROSION CONTROL DEVICES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS AND SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

6. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS ADJUSTED BY THE ENGINEER.

7. THE LOCATIONS OF EXISTING & PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITH IN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK.

8. ALL OPENINGS OF HOLES BELOW SUBGRADE RESULTING FROM REMOVALS OR ABANDONMENTS SHALL BE BACKFILLED WITH GRANULAR MATERIAL. GRANULAR MATERIAL IS INCIDENTAL TO THE REMOVAL ITEM.

9. THE EXACT LOCATION OF PRIVATE ENTRANCES AND DRIVEWAYS IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

10. STATIONING, DISTANCES, AND OFFSETS FOR SIGNS SHOWN ON THE PLANS ARE APPROXIMATE AND THE LOCATIONS OF SIGNS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

11. PAVEMENT REMOVAL WILL BE TO THE NEAREST JOINT, OR AS DIRECTED BY THE ENGINEER.

12. THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

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

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

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

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

17. VERIFY THE EXISTING STORM SEWER SYSTEM CONNECTION LOCATIONS AND ELEVATIONS PRIOR TO ORDERING DRAINAGE STRUCTURES AND PIPES.

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

19. CURB AND GUTTER GRADES ARE GIVEN TO THE FLANGE OF CURB AND GUTTER OR THEORETICAL FLANGE POINT OF CURB AND GUTTER. CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE OF CURB AND GUTTER OR THEORETICAL FLANGE POINT OF CURB AND GUTTER.

20. PROVIDE A TYPICAL SIDEWALK CROSS SLOPE OF 1.5% WITH A CONSTRUCTION TOLERANCE OF +/-0.5%.

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

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

23. SAWCUT ASPHALTIC AND CONCRETE DRIVEWAYS AND/OR PARKING LOTS AT THE MATCHLINE AS SHOWN ON THE PAVING DETAILS OR AS DIRECTED BY THE ENGINEER.

24. PROVIDE A CONCRETE JOINT DETAIL 14 DAYS PRIOR TO PAVING FOR APPROVAL BY THE ENGINEER. 15' MAXIMUM SPACING FOR LONGITUDINAL JOINTS.

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

26. EXISTING BUSINESS SIGNS LOCATED WITHIN THE TLE ARE TO REMAIN UNLESS SHOWN IN THE REMOVAL PLAN.

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

28. ALL PRIVATE EXISTING UTILITIES ARE TO BE ADJUSTED BY THE UTILITIES CONCERNED.

29. TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

30. CONCRETE PAVEMENT GRADES FOR THE NB RIGHT TURN FROM STH 31 TO CTH C, STA 170+81.17, 46'RT TO STA 175+09.12, 46'RT, ARE 3-INCHES HIGHER THAN ADJACENT PAVEMENT. THIS SECTION DOES NOT RECEIVE CONCRETE OVERLAY. DO NOT OPEN TO TRAFFIC UNTIL OVERLAY IS COMPLETE. SEE STAGING PLANS.

31. CTH C DOES NOT RECEIVE ASHPALTIC CONCRETE OVERLAY.

32. GAS MANHOLE ON OHIO STREET, STA 405+45, 43.8'RT WILL NOT BE ADJUSTED. FIELD CURB AND GUTTER GRADES WITH MANHOLE RIM ELEVATION PRIOR TO PLACING CURB AND GUTTER.

33. MAINTAIN PEDESTRIAN MOVEMENTS CROSSING THE CONSTRUCTION ZONE AT ALL INTERSECIONS AT ALL TIMES, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

34. BASE PATCHING IN AREAS WITH AN EXISTING ASPHALT OVERLAY SHALL BE TO THE EXISTING SURFACE ELEVATION.

STANDARD ABBREVIATIONS

AADT	ANNUAL AVERAGE DAILY TRAFFIC
ADT	AVERAGE DAILY TRAFFIC
AH	AHEAD
ASPH	ASPHALTIC
BAD	BASE AGGREGATE DENSE
BK	BACK
BM	BENCH MARK
BOC	BACK OF CURB
CB	CATCH BASIN
CE	COMMERCIAL ENTRANCE
C&G	CURB & GUTTER
℄, CL	CENTER LINE
CONC	CONCRETE
CP	CULVERT PIPE
CTH	COUNTY TRUNK HIGHWAY
CY	CUBIC YARDS
DHV	DESIGN HOUR VOLUME
DWY	DRIVEWAY
EL	ELEVATION
EW	ENDWALL
ESALS	EQUIVALENT SINGLE AXLE LOADS
EX	EXISTING
FO	FIBEROPTIC
FT	FOOT
HMA	HOT MIX ASPHALT
CWT	HUNDRED WEIGHT
HYD	HYDRANT
LT	LEFT
LF	LINEAR FOOT
MH	MANHOLE
NOR	NORMAL
PAVT	PAVEMENT
PC	POINT OF CURVATURE
PE	PRIVATE ENTRANCE
PI	POINT OF INFLECTION
PL	PROPERTY LINE
PT	POINT OF TANGENCY
LB	POUNDS
R	RADIUS
℅, RL	REFERENCE LINE
REQ'D	REQUIRED
RT	RIGHT
R/W	RIGHT-OF-WAY
SF	SQUARE FEET
SY	SQUARE YARDS
SDD	STANDARD DETAIL DRAWINGS
STA	STATION
SS	STORM SEWER
SSD	STOPPING SIGHT DISTANCE
STH	STATE TRUNK HIGHWAY
TEL	TELEPHONE
℆, TL	TRANSIT LINE
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW

TYPICAL SECTIONS

CONSTRUCTION DETAILS

REMOVAL PLANS

PLAN LAYOUT

PLAN DETAILS

EROSION CONTROL

STORM SEWER PLAN

TRAFFIC SIGNAL PLANS

TRAFFIC SIGNAL INTERCONNECT PLANS

PAVEMENT MARKING

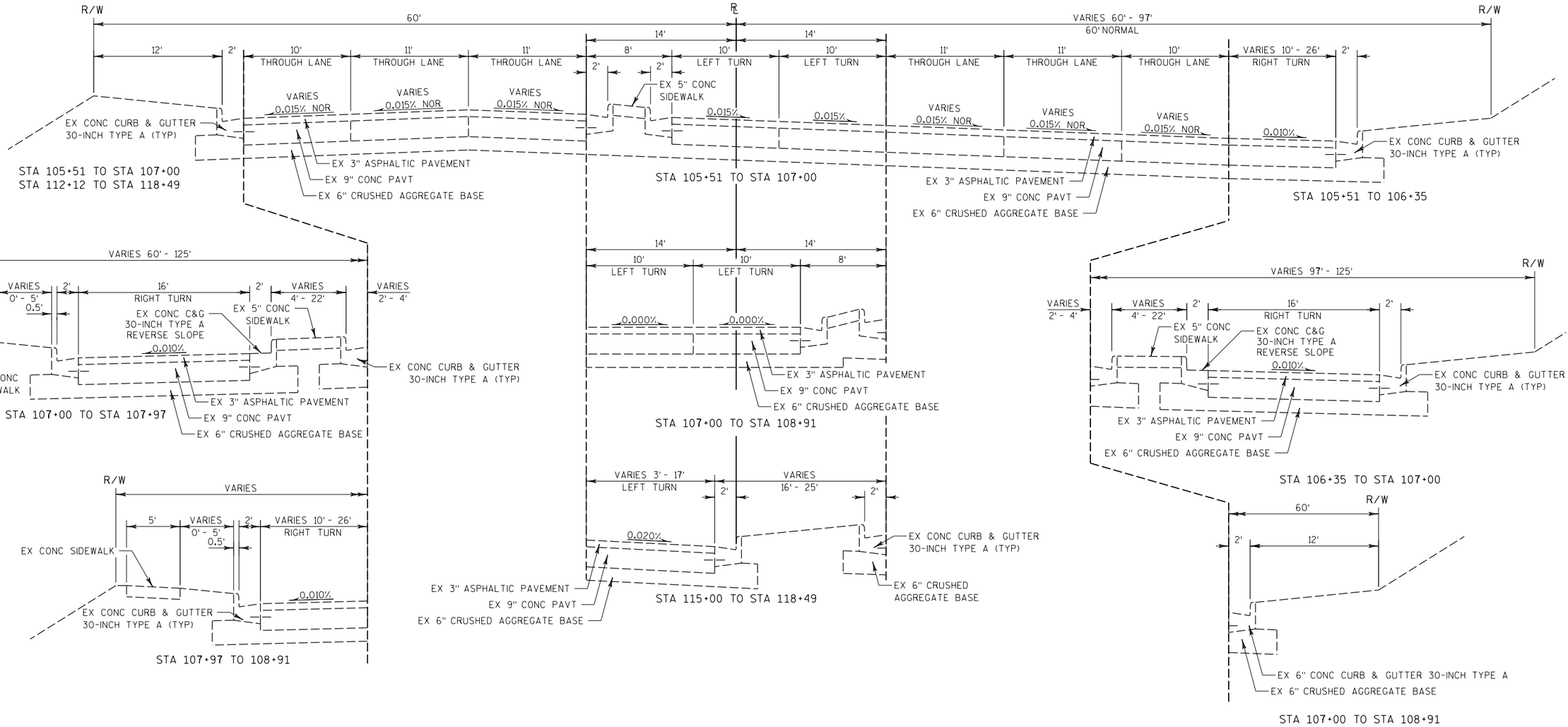
TRAFFIC CONTROL

STAGE CONSTRUCTION LAYOUT

ALIGNMENT

2

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	PROJECT OVERVIEW	SHEET 4	E



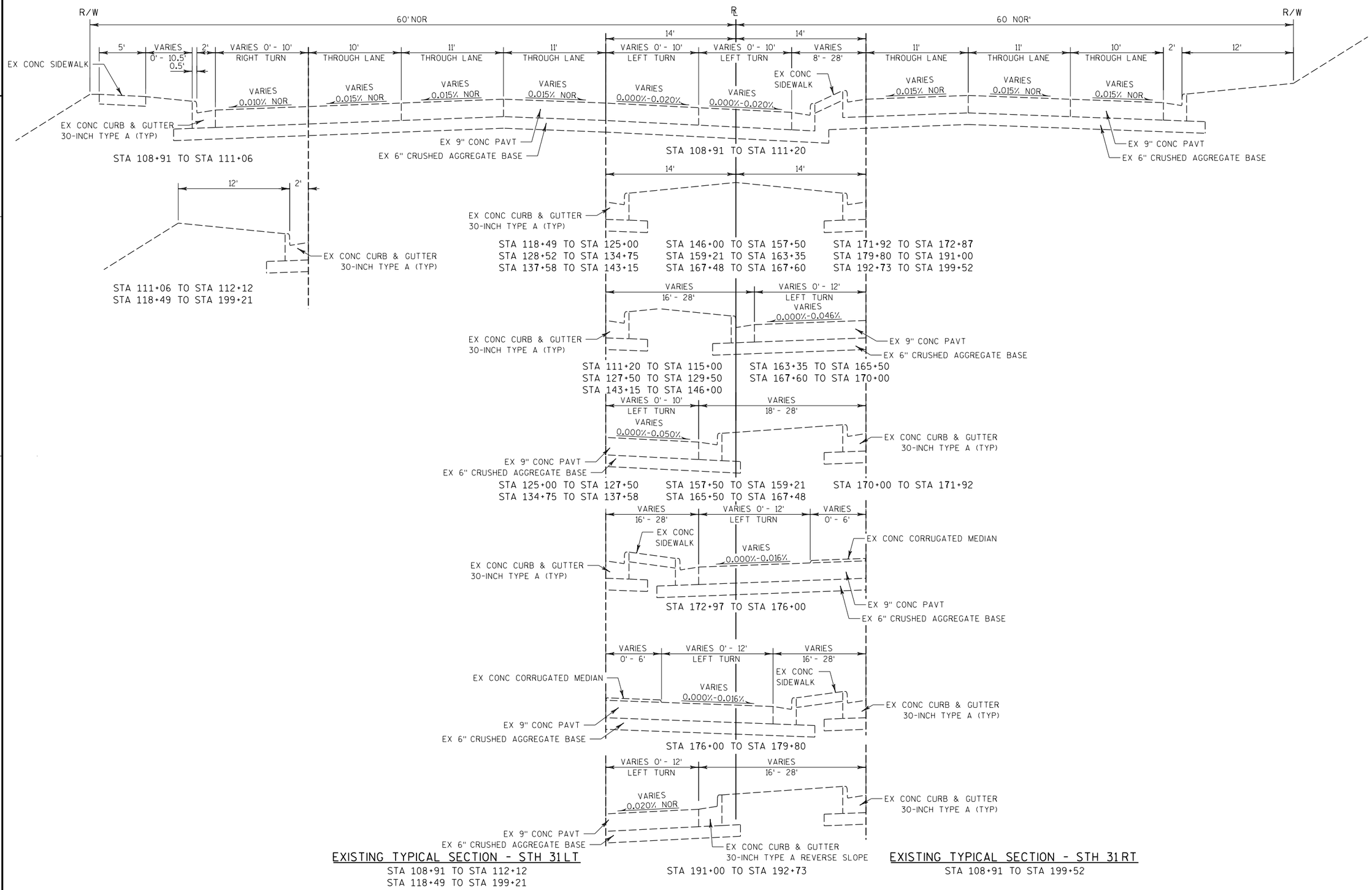
EXISTING TYPICAL SECTION - STH 31 LT

STA 105+51 TO STA 108+91
STA 112+12 TO STA 118+49

EXISTING TYPICAL SECTION - STH 31 RT

STA 105+51 TO STA 108+91

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TYPICAL SECTIONS	SHEET 5	E



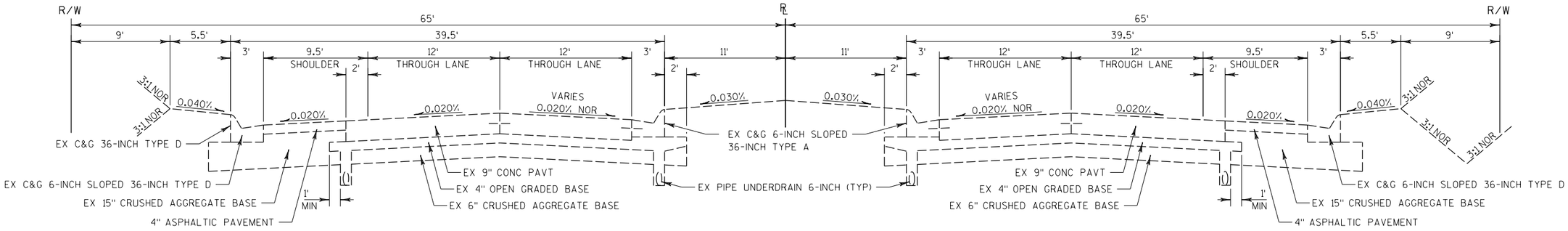
EXISTING TYPICAL SECTION - STH 31 LT

STA 108+91 TO STA 112+12
STA 118+49 TO STA 199+21

EXISTING TYPICAL SECTION - STH 31 RT

STA 108+91 TO STA 199+52

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 6	E

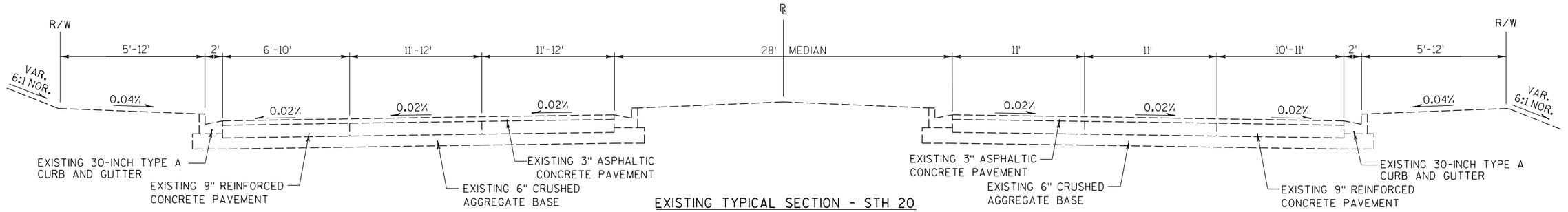


EXISTING TYPICAL SECTION - STH 31 LT
STA 199+21 TO STA 201+75

EXISTING TYPICAL SECTION - STH 31 RT
STA 199+52 TO STA 200+50

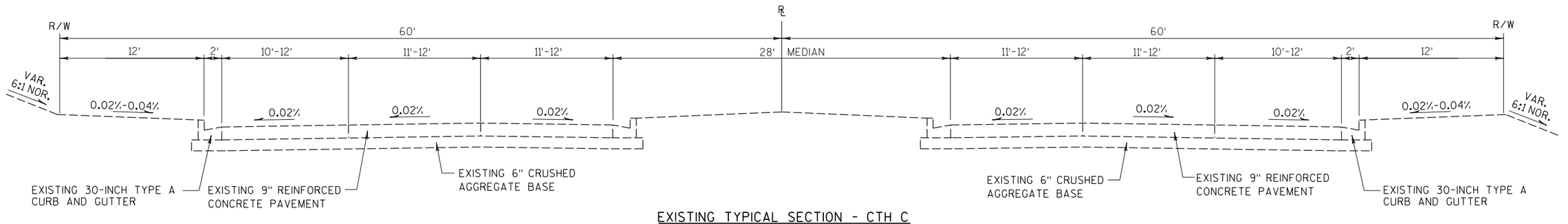
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TYPICAL SECTIONS	SHEET 7	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\020303_ts.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:10
WISDOT/CADDS SHEET 42



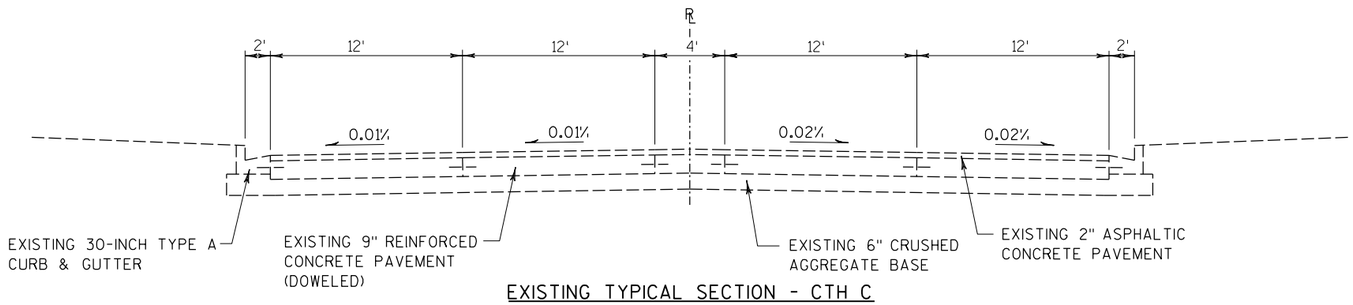
EXISTING TYPICAL SECTION - STH 20

STA 383+30 TO STA 393+82



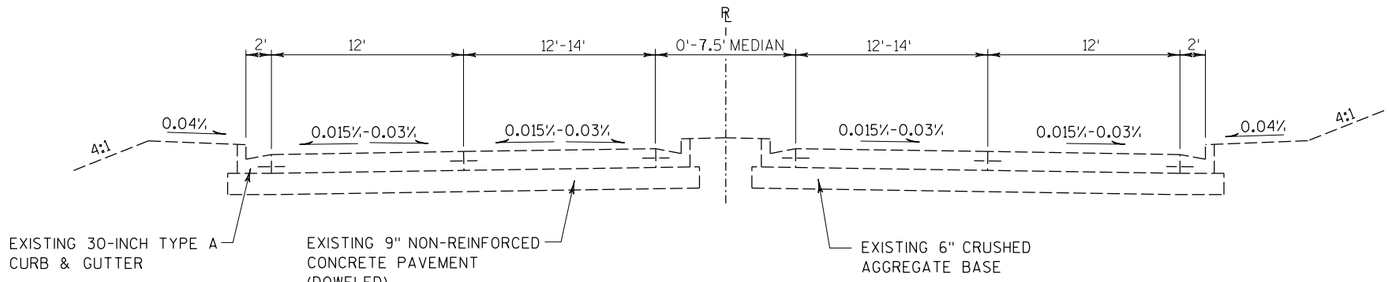
EXISTING TYPICAL SECTION - CTH C

STA 396+77 TO STA 400+00



EXISTING TYPICAL SECTION - CTH C

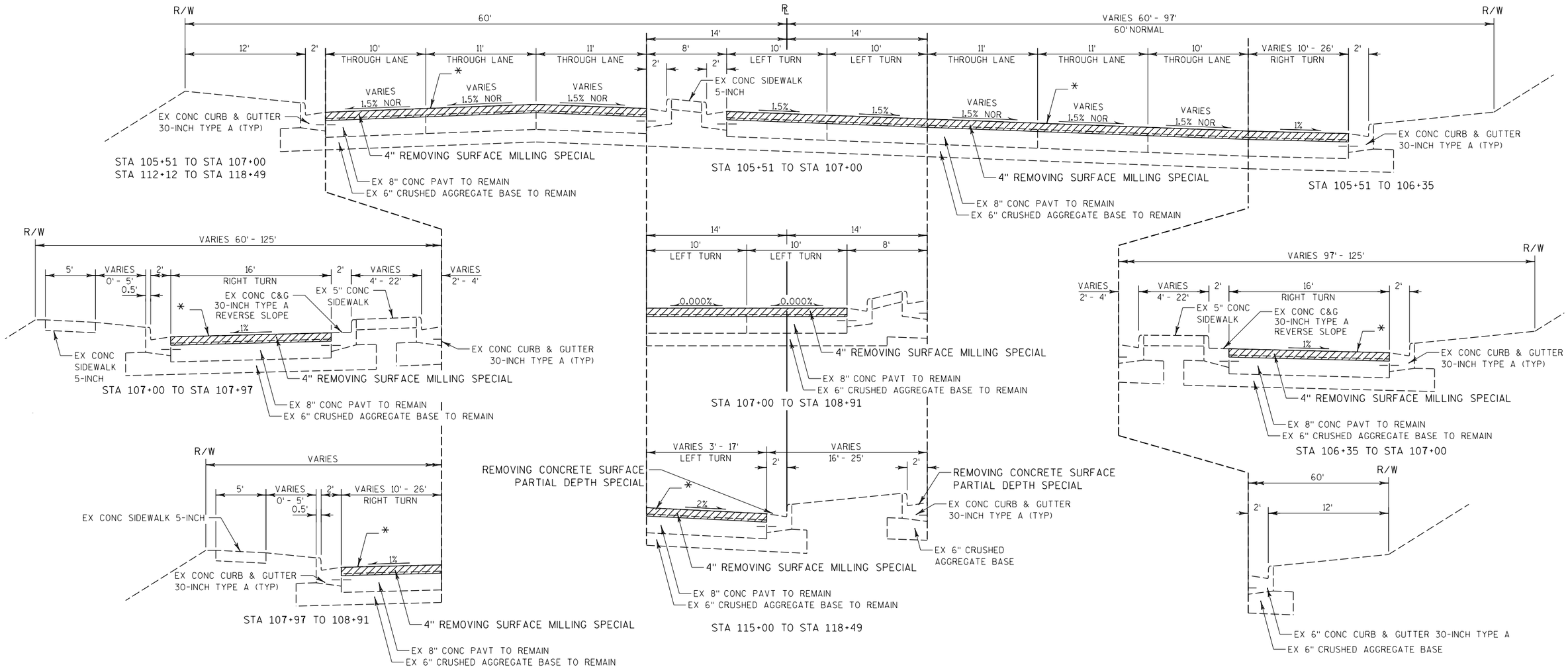
STA 400+00 TO STA 406+88



EXISTING TYPICAL SECTION - CTH MM

STA 614+00 TO STA 616+34

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TYPICAL SECTIONS	SHEET 8	E

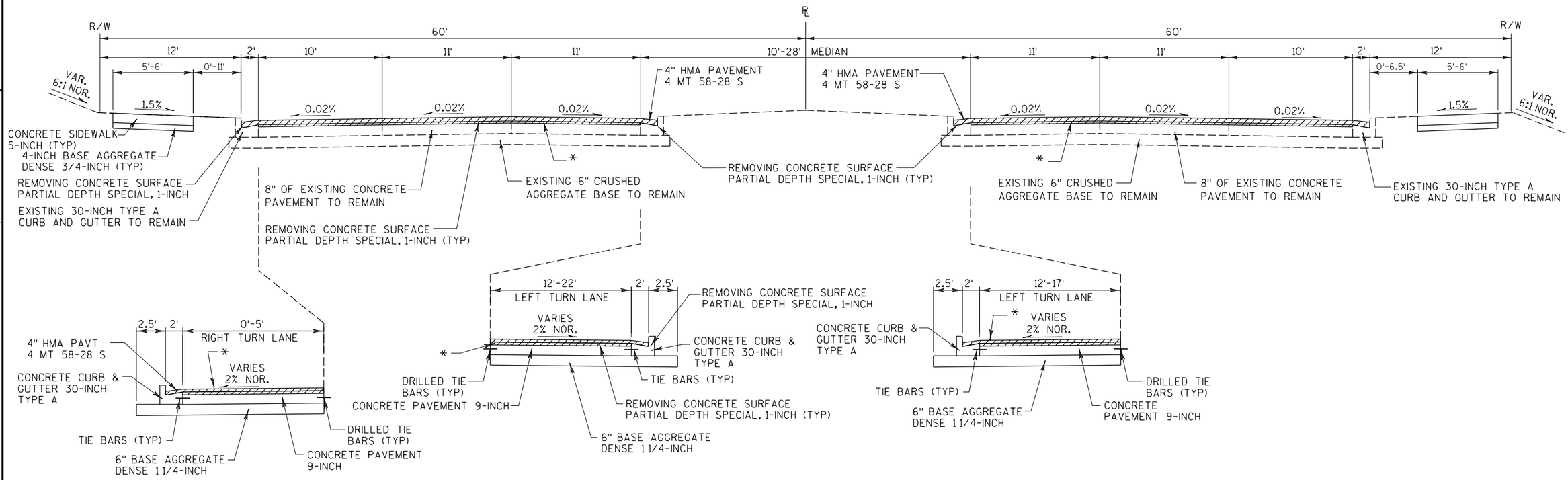


FINISHED STH 31 TYPICAL SECTION

STA 105+51 TO STA 108+91 (LT)
STA 112+12 TO STA 118+49 (LT)
STA 105+51 TO STA 108+91 (RT)

* UPPER LAYER: 1¾" HMA PAVEMENT 4 MT 58-28 S
  LOWER LAYER: 2¼" HMA PAVEMENT 3 MT 58-28 S

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TYPICAL SECTIONS	SHEET 9	E



RIGHT TURN LANE
STA 118+50 TO STA 118+88

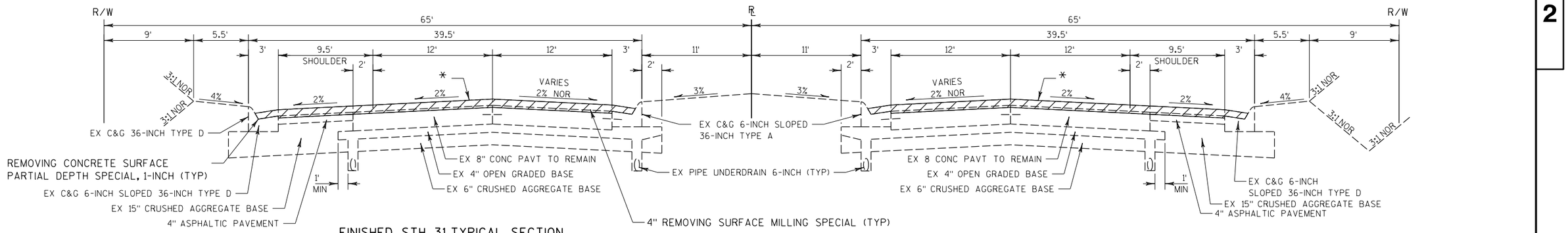
LEFT TURN LANE
STA 118+49 TO STA 118+88
STA 127+62 TO STA 128+68
STA 129+75 TO STA 132+13
STA 135+09 TO STA 137+92
STA 146+30 TO STA 148+71
STA 158+21 TO STA 160+54
STA 166+53 TO STA 168+44
STA 170+48 TO STA 172+83
STA 176+53 TO STA 180+85

LEFT TURN LANE
STA 110+55 TO STA 114+29
STA 121+43 TO STA 124+56
STA 126+37 TO STA 129+14
STA 154+73 TO STA 157+12
STA 162+60 TO STA 164+38
STA 171+34 TO STA 175+24
STA 187+61 TO STA 190+71

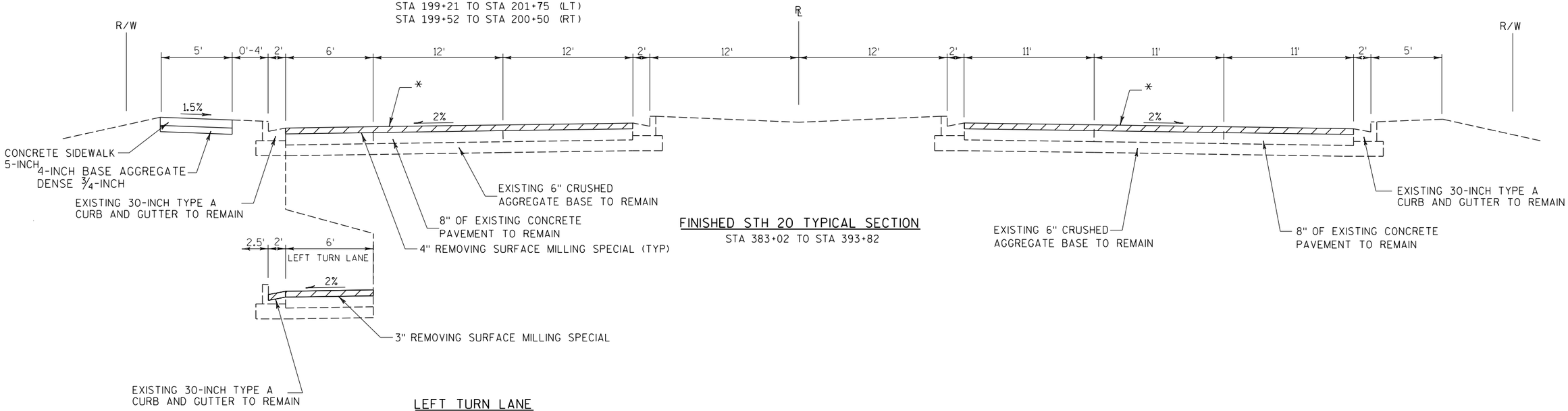
FINISHED STH 31 TYPICAL SECTION
STA 108+91 TO STA 112+12 (LT)
STA 118+49 TO STA 199+20 (LT)
STA 108+91 TO STA 199+55 (RT)

* UPPER LAYER: 1¾" HMA PAVEMENT 4 MT 58-28 S
LOWER LAYER: 2¼" HMA PAVEMENT 3 MT 58-28 S

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 10	E

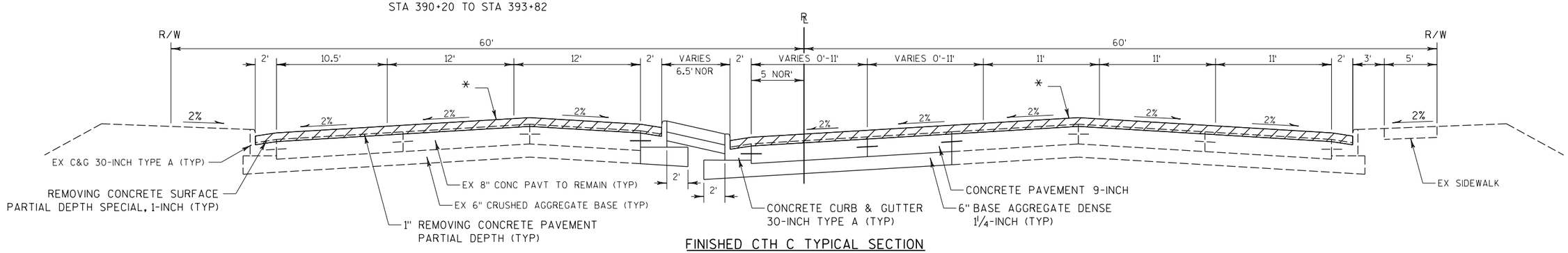


FINISHED STH 31 TYPICAL SECTION
STA 199+21 TO STA 201+75 (LT)
STA 199+52 TO STA 200+50 (RT)



FINISHED STH 20 TYPICAL SECTION
STA 383+02 TO STA 393+82

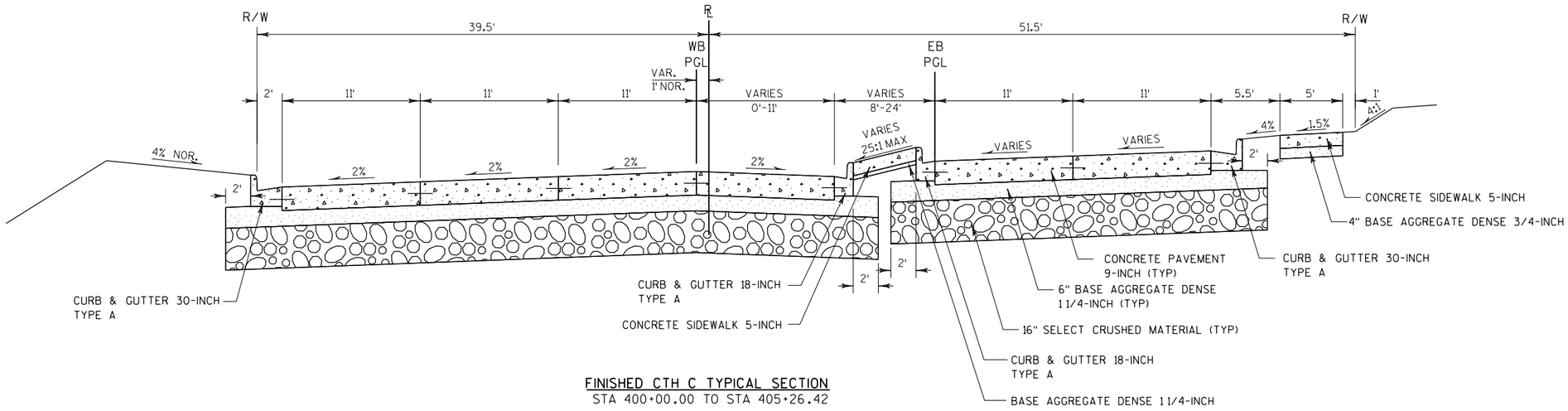
LEFT TURN LANE
STA 390+20 TO STA 393+82



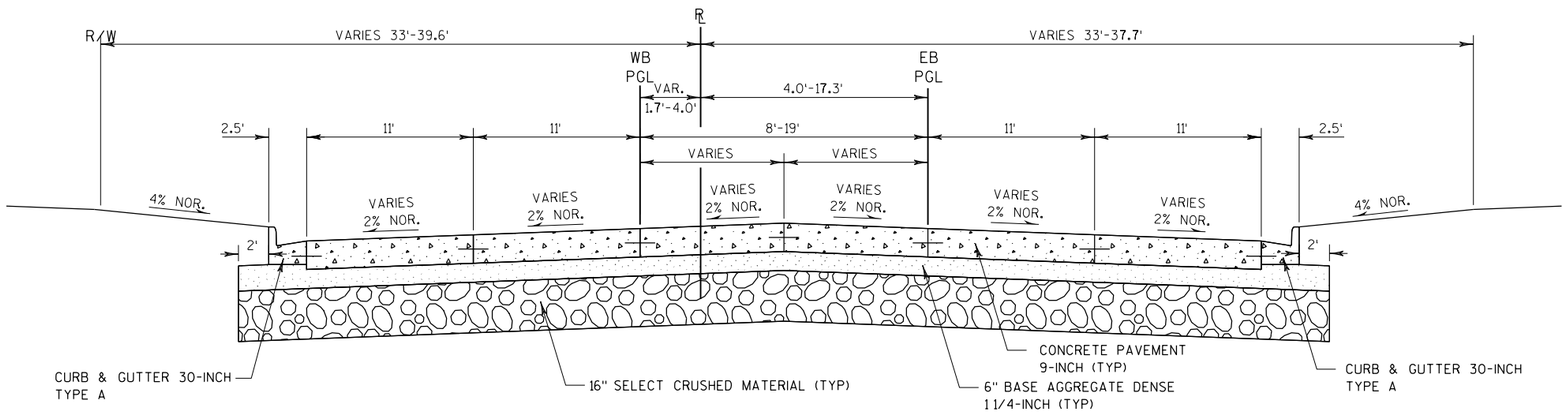
FINISHED CTH C TYPICAL SECTION
STA 396+77 TO STA 400+00

* UPPER LAYER: 1¾" HMA PAVEMENT 4 MT 58-28 S
LOWER LAYER: 2¼" HMA PAVEMENT 3 MT 58-28 S

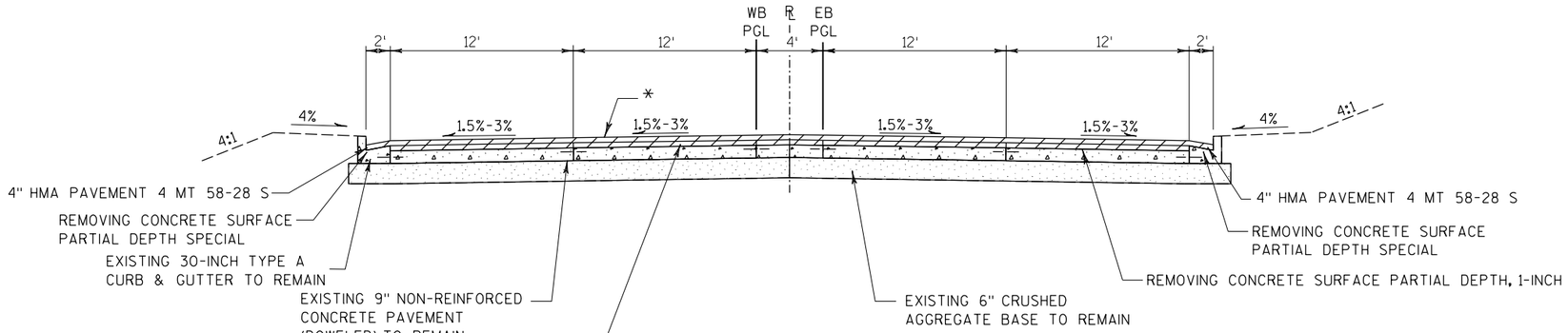
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TYPICAL SECTIONS	SHEET 11	E



FINISHED CTH C TYPICAL SECTION
STA 400+00.00 TO STA 405+26.42



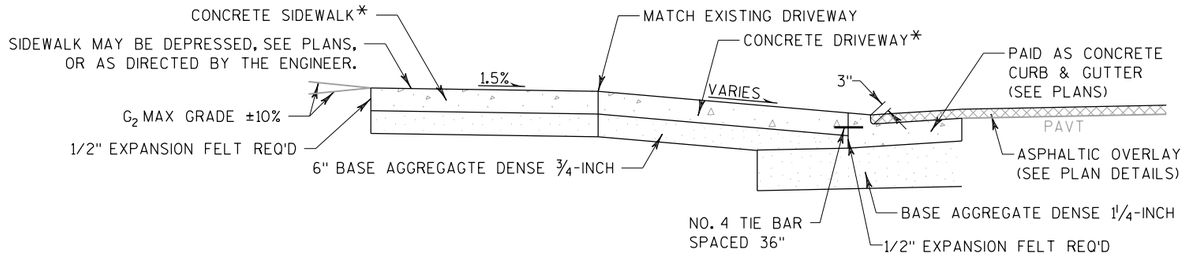
FINISHED CTH C TYPICAL SECTION
STA 405+26.42 TO STA 407+76.26



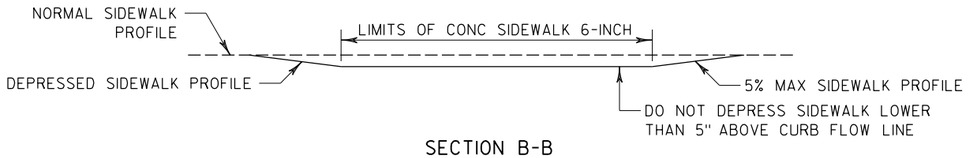
FINISHED CTH C TYPICAL SECTION
STA 614+00 TO STA 616+34

* UPPER LAYER: 1¾" HMA PAVEMENT 4 MT 58-28 S
LOWER LAYER: 2¼" HMA PAVEMENT 3 MT 58-28 S

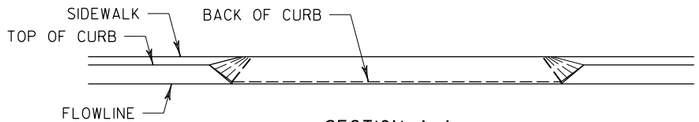
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TYPICAL SECTIONS	SHEET 12	E



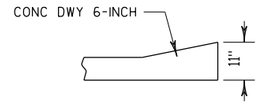
SECTION C-C
PROFILE



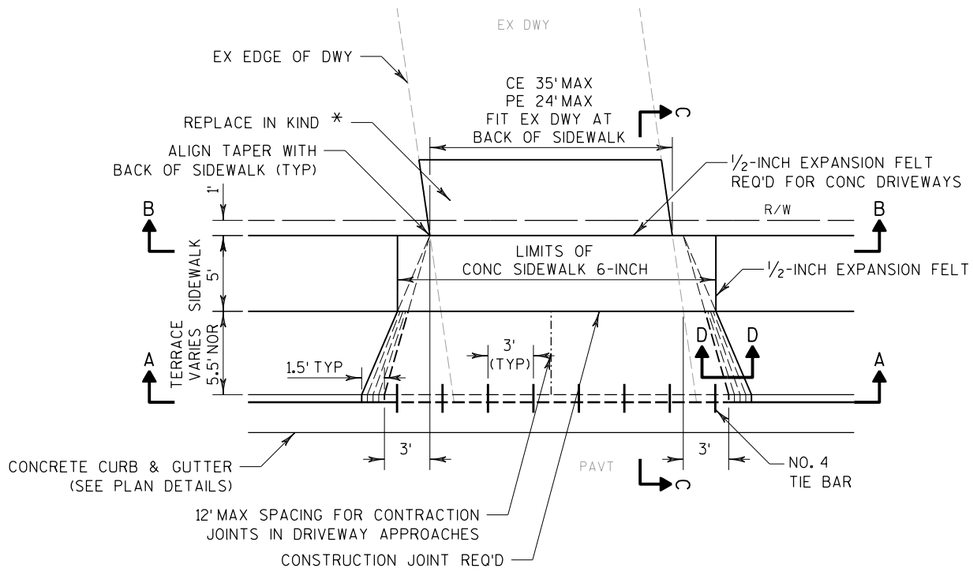
SECTION B-B
DEPRESSED SIDEWALK PROFILE



SECTION A-A



SECTION D-D



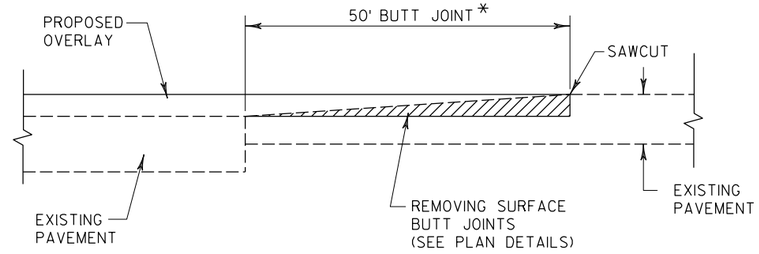
PLAN

NEW DRIVEWAY DETAIL

* ENTRANCES
RESIDENTIAL
- CONCRETE DRIVEWAY 6-INCH
  6" BASE AGGREGATE DENSE 3/4-INCH
- 3" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
  6" BASE AGGREGATE DENSE 3/4-INCH
- 6" BASE AGGREGATE DENSE 3/4-INCH

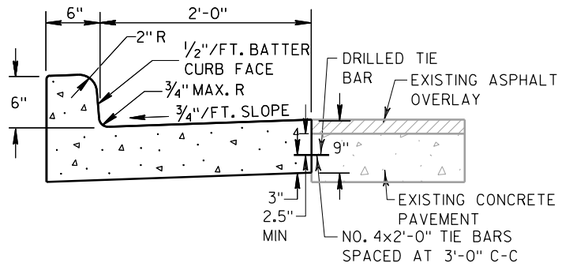
COMMERCIAL
CONCRETE DRIVEWAY 7-INCH
6" BASE AGGREGATE DENSE 3/4-INCH

NOTE:
CONCRETE SIDEWALK IS PAID FOR AS CONCRETE DRIVEWAY ITEMS

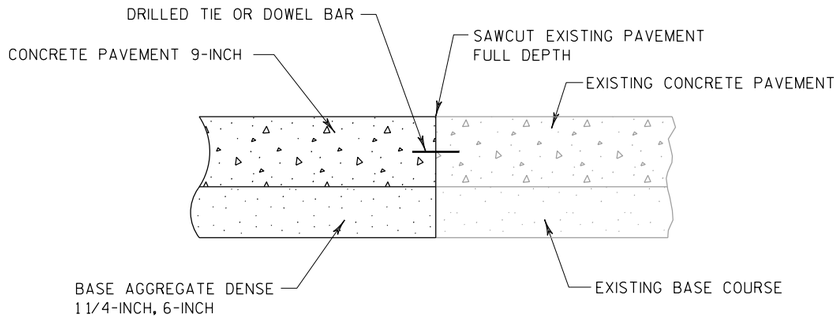


BUTT JOINTS AT MATCH POINT

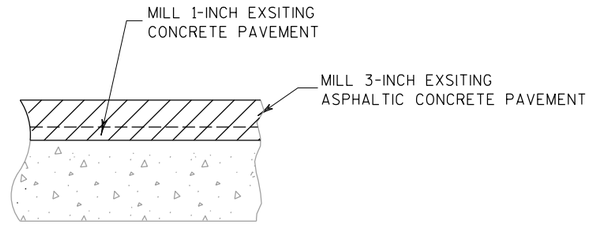
* BUTT JOINT LENGTH VARIES AT SIDEROADS. SEE PLAN DETAILS.



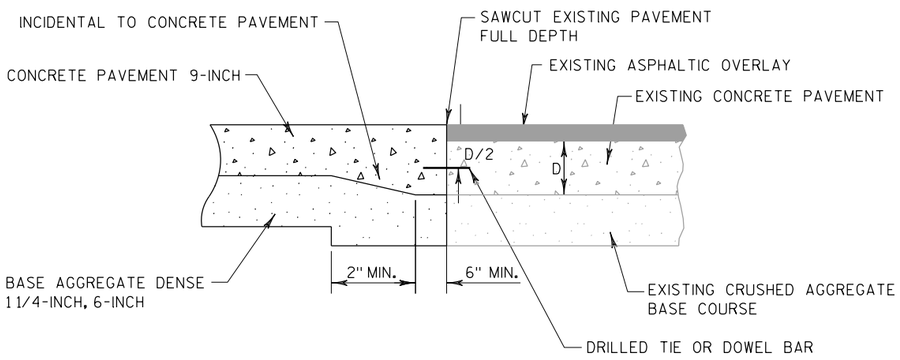
CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL



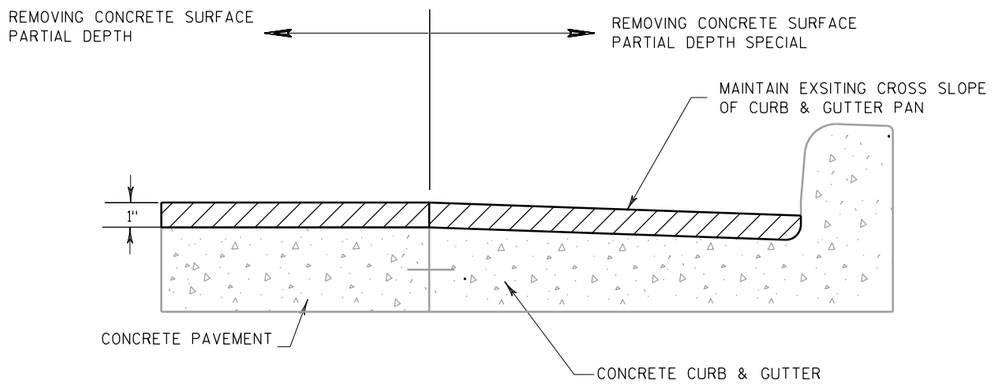
MATCH AT EXISTING CONCRETE PAVEMENT



REMOVING SURFACE MILLING SPECIAL



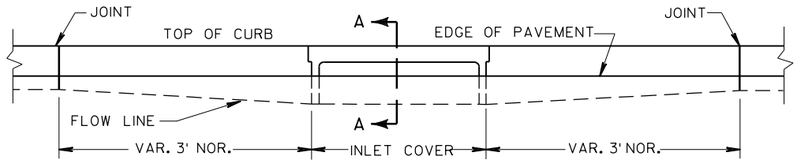
MATCH AT EXISTING CONCRETE PAVEMENT WITH ASPHALT OVERLAY



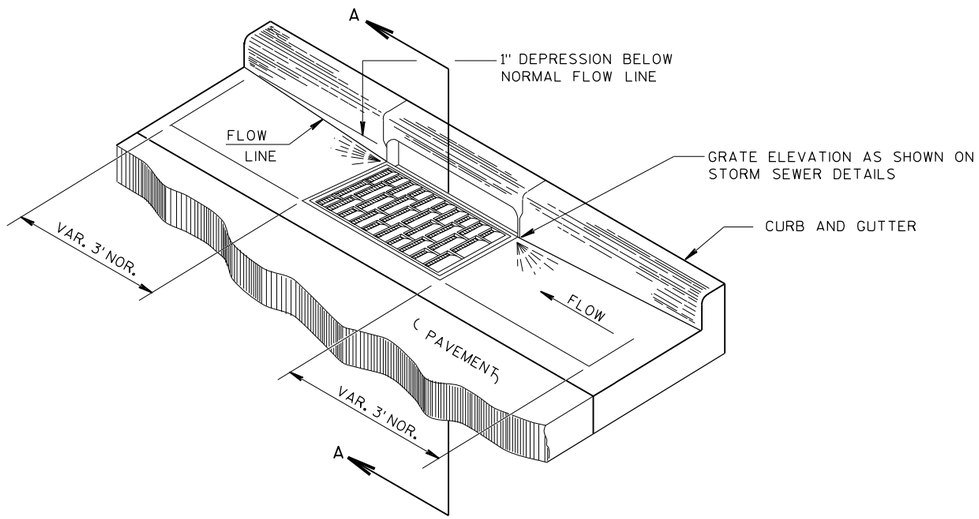
REMOVING CONCRETE SURFACE PARTIAL DEPTH SPECIAL

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	CONSTRUCTION DETAILS	SHEET 14	E

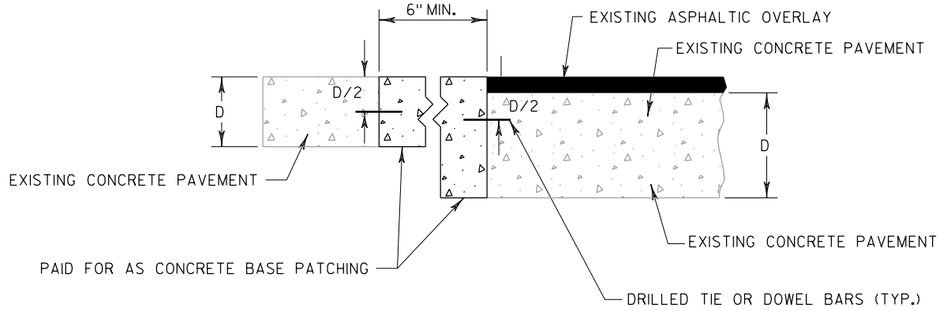
FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021002_cd.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:10



ELEVATION



DETAIL OF CURB AND GUTTER AT CATCH BASINS

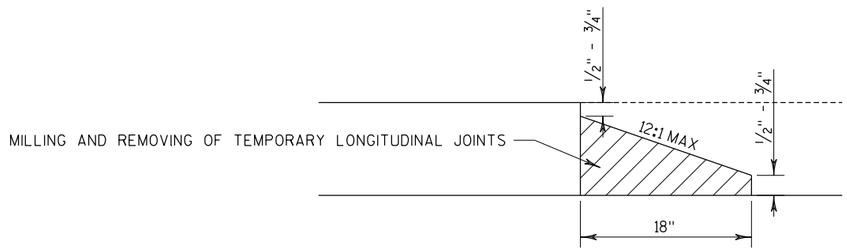


BASE PATCHING TYPICAL HALF SECTIONS

SEE 300 13C15 FOR ADDITIONAL DETAILS

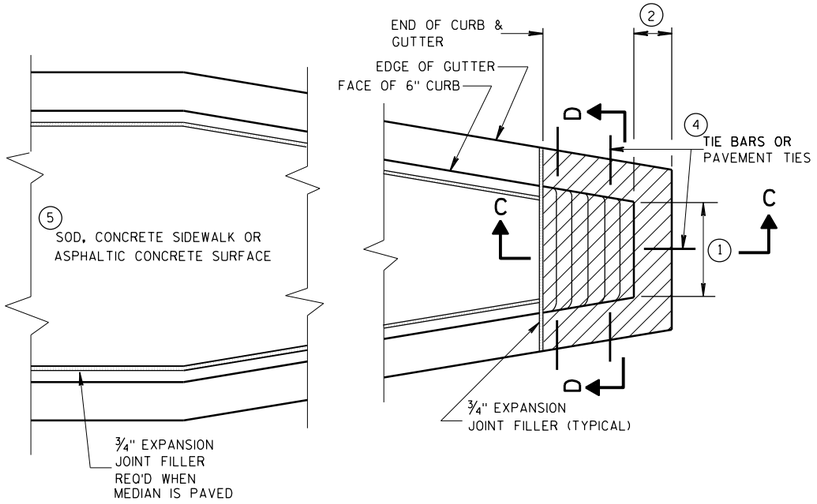
NOTES:
LOCATIONS OF BASE PATCHING SHOWN ON PLANS ARE APPROXIMATE.
PERFORM BASE PATCHING AS DIRECTED BY THE ENGINEER.

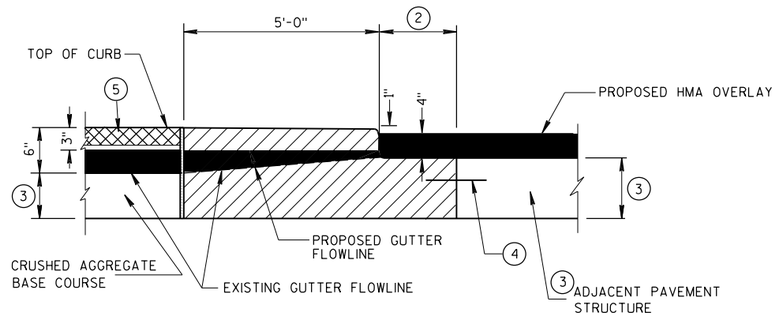
BASE PATCHING SHALL BE CONSTRUCTED TO FINISHED SURFACE AND MILLED OFF. SEE MISCELLANEOUS QUANTITIES FOR MILLING ITEMS.



NOTES:
PLACE TEMPORARY LONGITUDINAL JOINTS AT ALL LOCATIONS WHERE HMA PAVING OPERATIONS IN THE ADJACENT LANES WILL NOT OCCURE DURING THE SAME DAY.

TEMPORARY LONGITUDINAL JOINT DETAIL





SECTION C-C

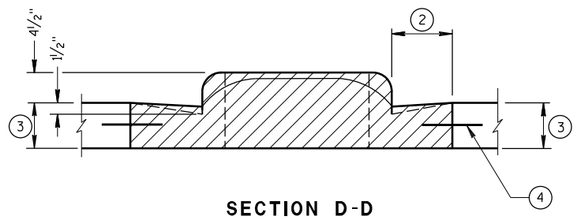
CONCRETE MEDIAN SLOPED NOSE MODIFIED

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:
4. TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

   PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.
5. SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



SECTION D-D

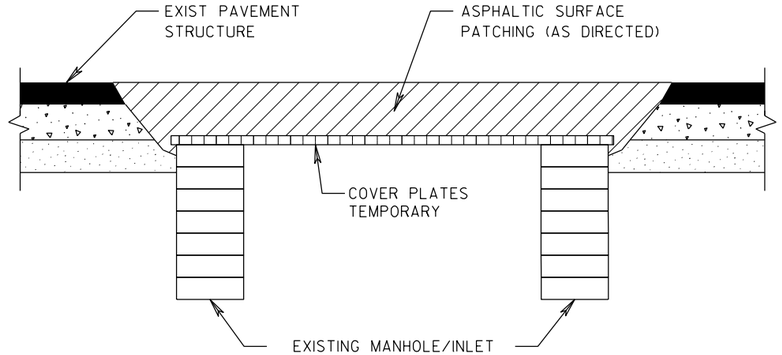
2

PRIOR TO MILLING OPERATIONS

PRIOR TO REMOVING ASPHALT SURFACE

A. REMOVE AND STORE MANHOLE COVER
B. FURNISH AND INSTALL COVER PLATES TEMPORARY
C. BACKFILL USING ASPHALT SURFACE, PATCHING.

STEP 1A MAY BE DONE BY OTHERS (UTILITY CO. OR MUNICIPALITY)
STEP 1B AND 1C BY CONTRACTOR



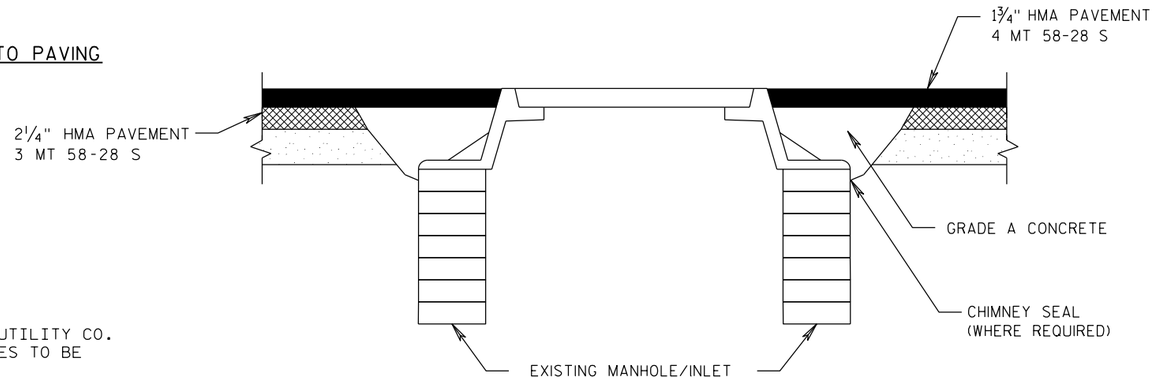
AFTER MILLING OPERATIONS AND PRIOR TO PAVING

AFTER PAVING LOWER LAYER

A. EXCAVATE AND REMOVE COVER PLATES TEMPORARY
B. ADJUST MANHOLE AND REINSTALL MANHOLE FRAME AND COVER TO FINISHED GRADE

(BACKFILL AND OTHER WORK TO BE DONE IN ACCORDANCE WITH ITEM - ADJUSTING MANHOLE COVERS)

ALL WORK DONE MAY BE DONE BY OTHERS (UTILITY CO. OR MUNICIPALITY) TEMPORARY COVER PLATES TO BE RETURNED TO CONTRACTOR.



ADJUSTING MANHOLE AND INLET COVERS

NOTES:
ADJUSTING MANHOLE COVERS WILL NOT BE PAID FOR AS A SEPARATE ITEM OF WORK WHEN ADJUSTMENTS ARE MADE BY OTHERS (UTILITY CO. OR MUNICIPALITY).

MANHOLE AND INLET ADJUSTMENTS ARE PAID AS ADJUSTING MANHOLES, ADJUSTING INLETS, ADJUSTING SANITARY MANHOLE, AND RECONSTRUCTING SANITARY MANHOLE

ALL OTHER WORK SHALL BE CONSIDERED INCIDENTAL TO COVER PLATES TEMPORARY.

COVER PLATES TEMPORARY, ITEM 611.8120.S

A. DESCRIPTION
THIS WORK CONSISTS OF FURNISHING, INSTALLING AND REMOVING A STEEL PLATE TO COVER AND SUPPORT BACKFILL AND TRAFFIC LOADING AT MANHOLES.

B. MATERIALS
MATERIAL FURNISHED AND USED IN THE WORK SHALL BE ¼-INCH MINIMUM THICKNESS STEEL PLATE THAT EXTENDS AT LEAST TO THE OUTSIDE EDGE OF EXISTING MANHOLE MASONRY.

2

2

LEGEND

- CLEARING AND GRUBBING (SY)
- TREE REMOVAL (ID)
- BASE PATCHING
- REMOVING PAVEMENT
- REMOVING CURB AND GUTTER
- REMOVING INLET
- REMOVING MANHOLE
- REMOVING (MATERIAL) BUTT JOINTS
- XXXXXXX SAW CUT CONCRETE
- xx xx SAW CUT ASPHALT
- -------- SLOPE INTERCEPT
- REMOVING CONCRETE SIDEWALK

NOTE:
SEE PLAN DETAILS FOR REMOVING ASPHALTIC SURFACE MILLING AND REMOVING CONCRETE SURFACE PARTIAL DEPTH.

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	REMOVAL PLAN	SHEET 18	E

2

2

EXISTING SIGN TO REMAIN

STH 20/WASHINGTON AVE

REMOVING CONCRETE SIDEWALK

REMOVING STORM SEWER 12-INCH

STH 31 / S GREEN BAY RD

101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116

℄ STH 31

REMOVING ASPHALTIC SURFACE

EXISTING SIGN TO REMAIN

REMOVING CONCRETE SIDEWALK

386

388

1/4 SEC LINE

℄ STH 20

EXISTING SIGN TO REMAIN

REMOVE DRIVEWAY

REMOVING CONCRETE SIDEWALK

EXISTING SIGN TO REMAIN

SAWING ASPHALT 70.44' RT

REMOVING CONCRETE SIDEWALK

ASPHALTIC SURFACE

11 NEWMAN RD

REMOVING CONCRETE SIDEWALK

EXISTING SIGN TO REMAIN

N

REMOVING STORM SEWER 27-INCH

116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131

STH 31 / S GREEN BAY RD

REMOVING STORM SEWER 12-INCH

ASPHALTIC SURFACE

KINZIE AVE

CONCRETE SURFACE BUTT JOINT

WESTMORE DR

REMOVING STORM SEWER 12-INCH

℄ STH 31

CONCRETE SURFACE BUTT JOINT

N

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	REMOVAL PLAN	SHEET 19	E

2

REMOVING STORM SEWER 30-INCH

ASPHALTIC SURFACE

CORTLAND AVE

131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146

STH 31 / S GREEN BAY RD

R STH 31

CONCRETE SURFACE

GRACELAND BLVD

SEC LINE

2

CORTLAND AVE

1/16 SEC LINE

REMOVING STORM SEWER 42-INCH

146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161

R STH 31

STH 31 / S GREEN BAY RD

REMOVE DRIVEWAY

RIDGEWAY AVE

ASPHALTIC SURFACE

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	REMOVAL PLAN	SHEET 20	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021052_rp.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

SHIRLEY AVE

ASPHALTIC SURFACE

STH 31 / S GREEN BAY RD

℄ STH 31

REMOVING STORM SEWER 12-INCH

REMOVING CONCRETE SIDEWALK

CTH C/SPRING ST

ASPHALTIC SURFACE

REMOVING STORM SEWER 12-INCH

EXSITING RETAINING WALL TO BE REMOVE BY OTHERS

ASPHALTIC SURFACE

SUNNYSIDE AVE

REMOVING STORM SEWER 12-INCH

REMOVING STORM SEWER 12-INCH

℄ CTH C

1/4 SEC LINE

CTH C/SPRING ST

HISTORICAL MARKER TO BE REMOVED BY OTHERS

LIGHT POLE AND BASE TO BE REMOVED BY OTHERS

REMOVING STORM SEWER 12-INCH

STH 31 / S GREEN BAY RD

℄ STH 31

REMOVING STORM SEWER 12-INCH

SEALING PIPES

REMOVING CONCRETE SIDEWALK

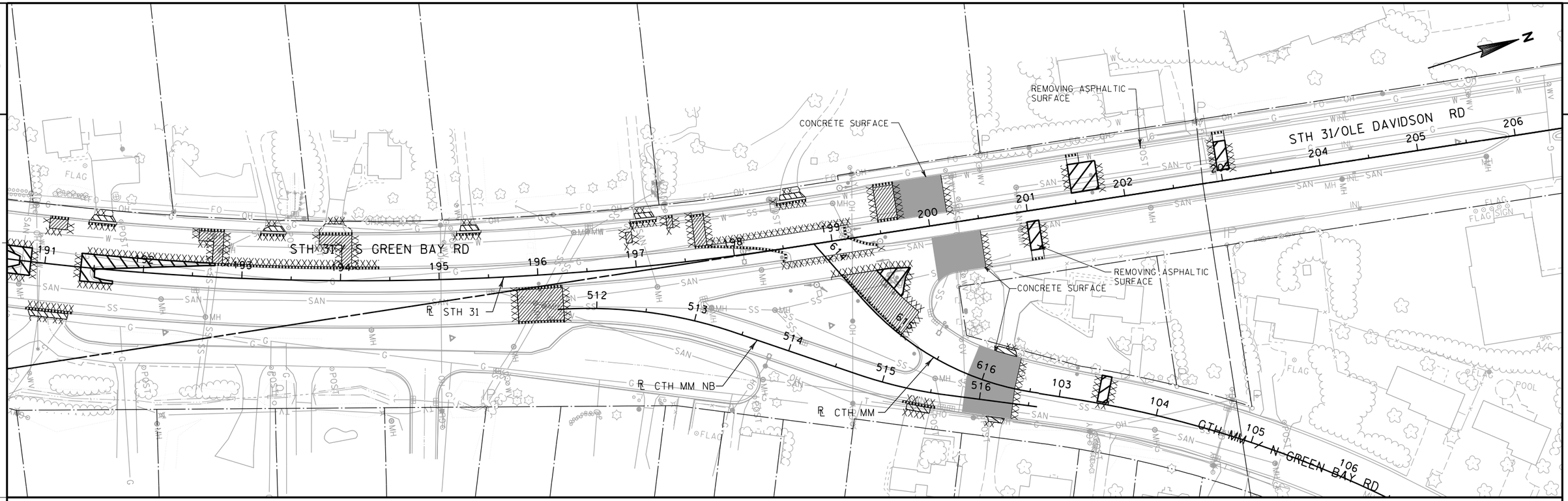
REMOVING STORM SEWER 15-INCH

℄ CTH C

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	REMOVAL PLAN	SHEET 21	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021053_rp.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	REMOVAL PLAN	SHEET 22	E

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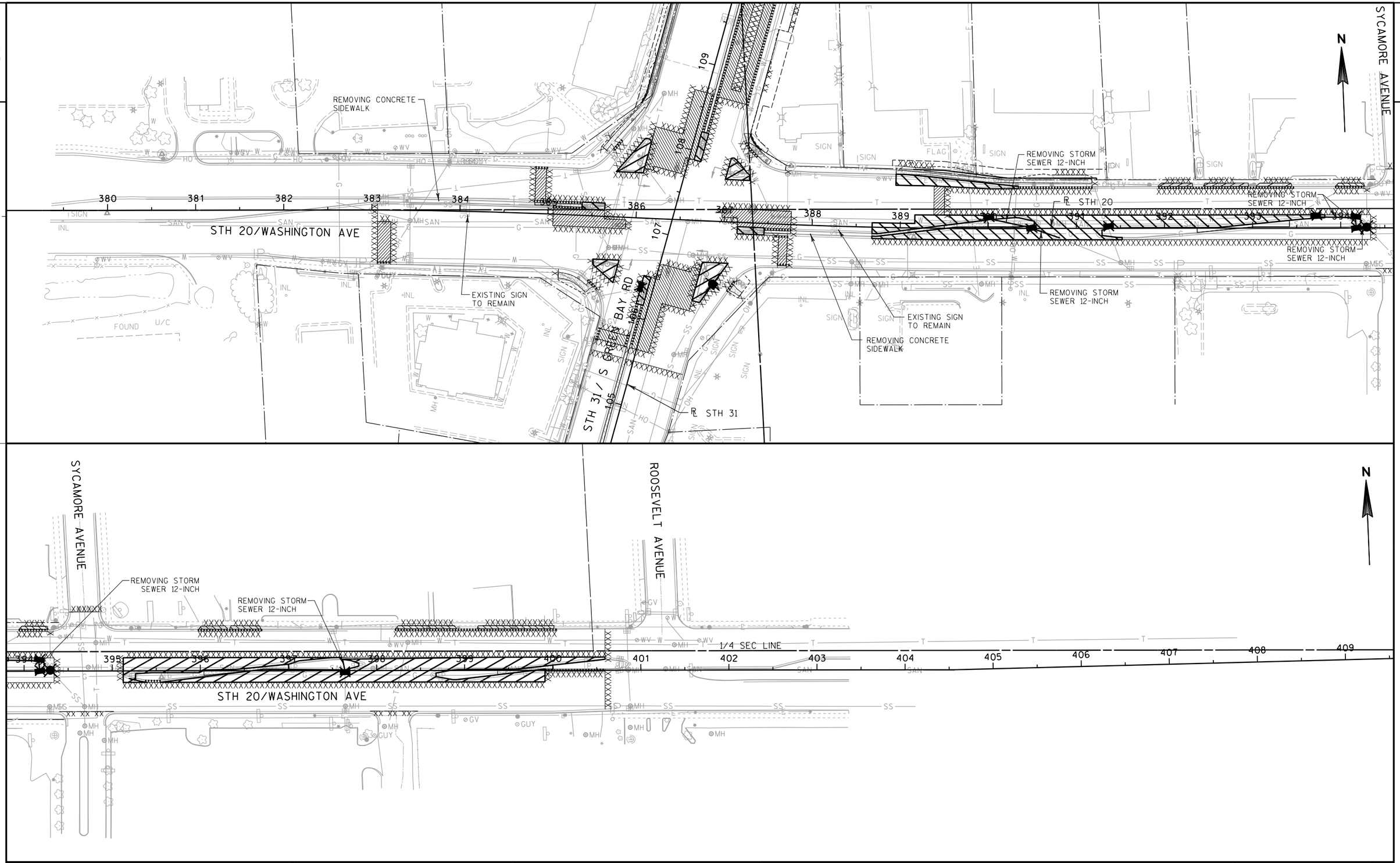
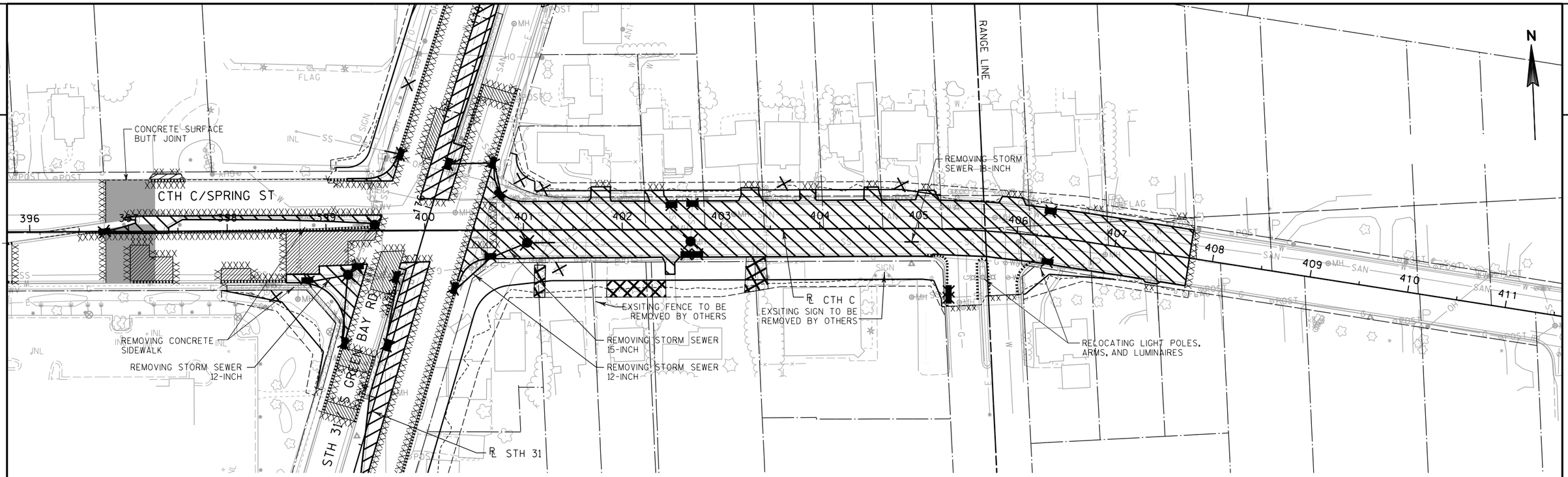
WISDOT/CADDS SHEET 42

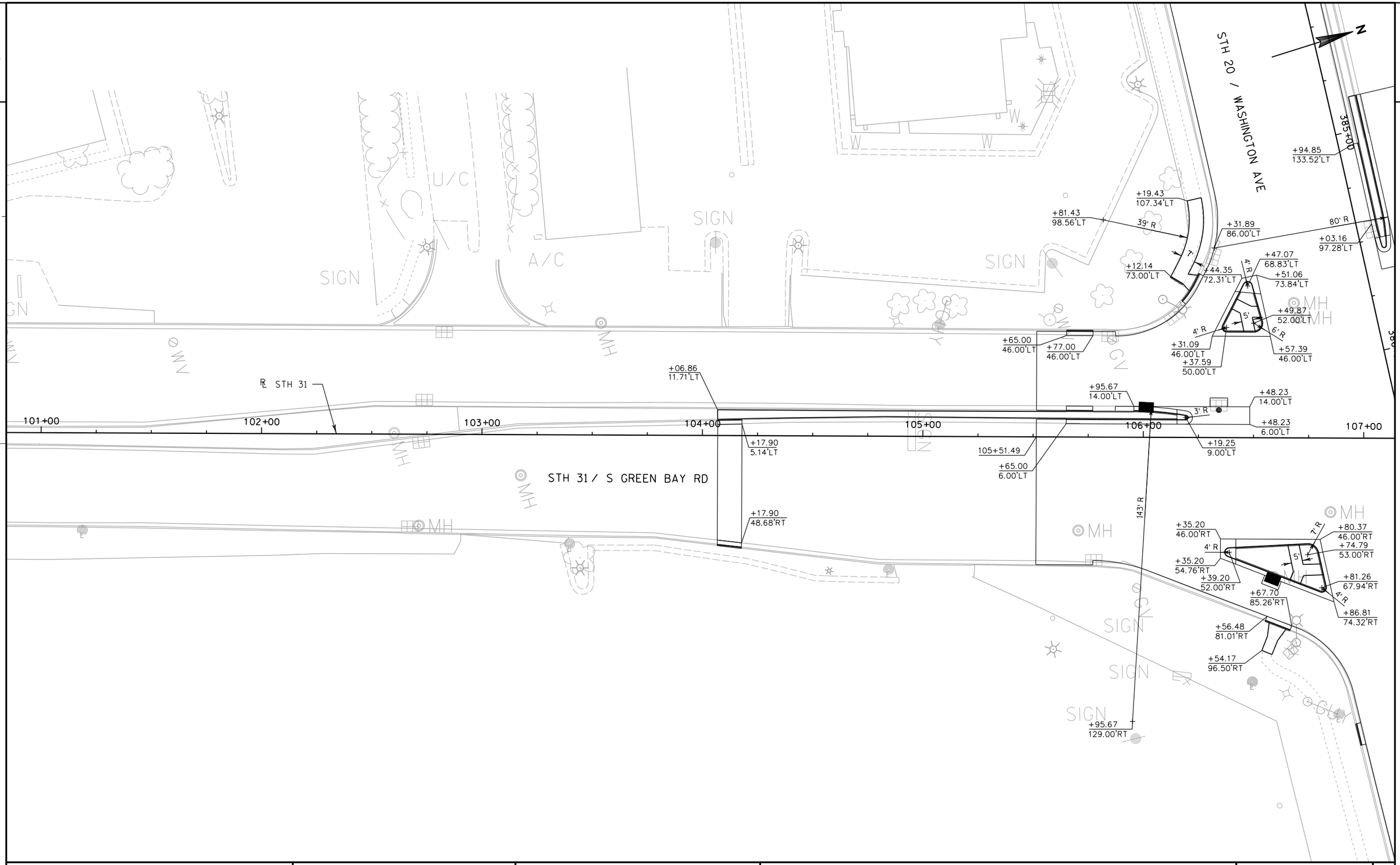


PROJECT NO:2390-09-70	HWY:STH 31	COUNTY:RACINE	REMOVAL PLANS - SIDE ROADS	SHEET 23	E



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	REMOVAL PLANS - SIDE ROADS	SHEET 24	E

2



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 25	E

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2

N

385+00

386+00

387+00

388+00

STH 20 / WASHINGTON AVE

STH 31 / S GREEN BAY RD

STH 31

107+00

108+00

109+00

110+00

111+00

112+00

113+00

+42.60
129.00'LT

+56.25
124.50'LT

60' R

+76.06
97.27'LT

+89.03
91.24'LT

5'

+29.20
70.95'LT

+53.10
76.11'LT

4' R

+58.85
68.86'LT

5'

7' R

+59.95
46.00'LT

+65.53
53.00'LT

+93.47
52.00'LT

+99.47
53.53'LT

4' R

+99.47
46.00'LT

+56.25
64.50'LT

+32.37
64.05'LT

9'

+03.18
64.50'LT

+13.41
63.50'LT

+39.73
64.00'LT

+40.46
64.00'LT

+65.46
56.50'LT

5'

+95.16
14.00'LT

+85.88
14.00'LT

+85.88
12.00'LT

+06.80
14.00'LT

+19.02
6.00'RT

143' R

+67.02
6.00'RT

+95.16
6.00'RT

+42.37
5.94'RT

+89.86
6.00'RT

3' R

+89.86
14.00'RT

+18.51
11.96'RT

+19.02
9.00'RT

+42.60
14.00'RT

+91.59
14.00'RT

+82.56
14.00'RT

+82.56
12.00'RT

+01.22
14.00'RT

+03.06
3.00'LT

+01.22
8.00'RT

+77.80
46.00'RT

6' R

4' R

+03.12
46.00'RT

5'

+87.69
66.94'RT

+83.79
72.33'RT

4' R

+90.14
70.88'RT

+22.23
71.38'RT

+16.64
81.12'RT

+33.66
53.09'RT

+66.00
46.66'RT

5'

6'

+35.24
59.00'RT

31' R

+49.55
87.06'RT

43' R

+12.65
90.49'RT

+54.38
102.77'RT

+26.62
59.00'RT

SIGN

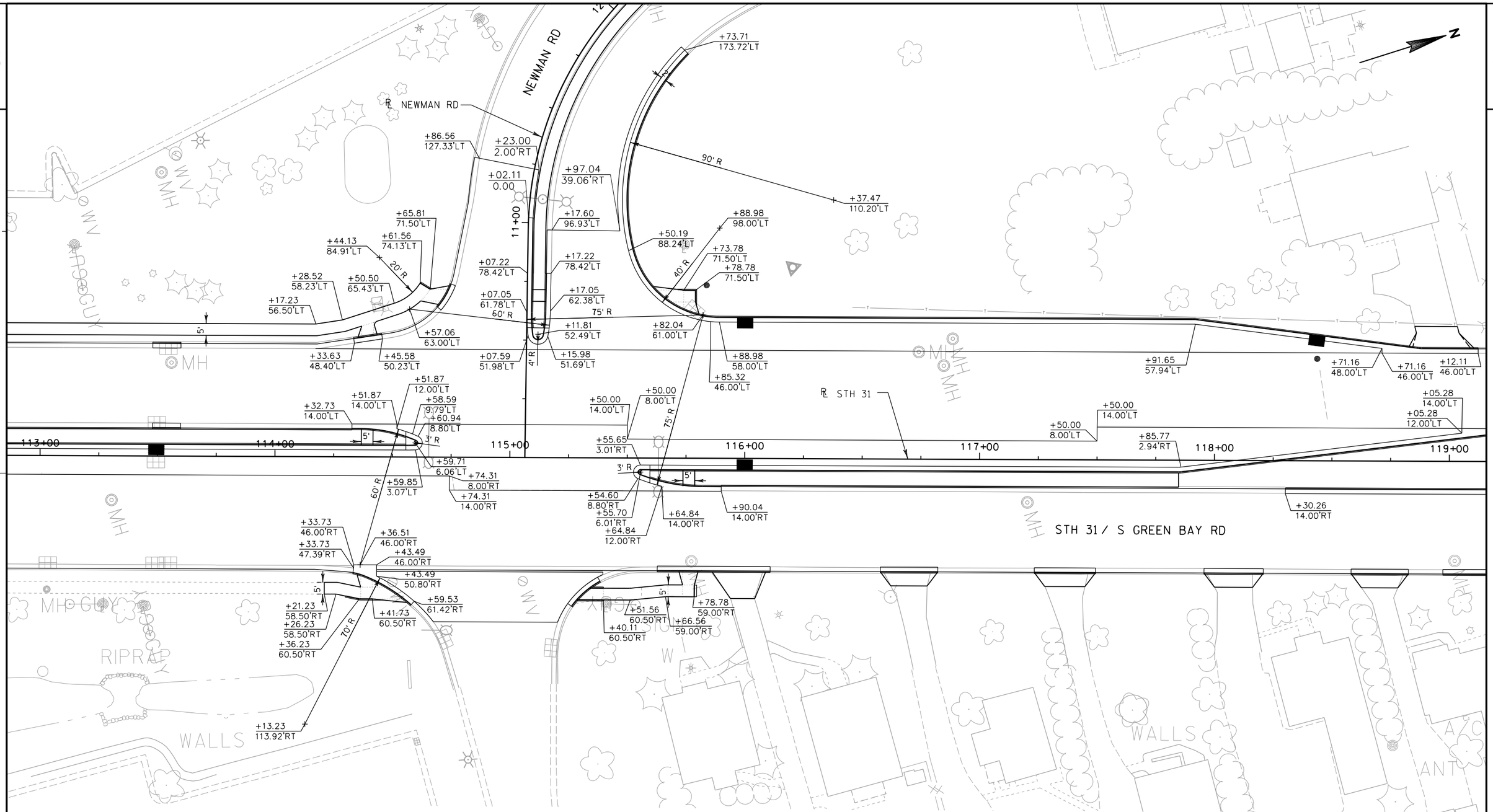
MH

WV

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 26	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021102_id.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

2



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 27	E

2

N

STH 31 / S GREEN BAY RD

℄ STH 31

+05.28
12.00'LT

+05.28
14.00'LT

+58.58
14.00'LT

119+00

120+00

121+00

122+00

123+00

124+00

125+00

+58.00
14.00'RT

+13.07
14.00'RT

+34.20
14.00'RT

+34.20
12.00'RT

+13.70
2.06'RT

+35.92
35.00'LT

+26.34
14.00'LT

37' R

+44.96
14.00'LT

+44.96
11.93'LT

+54.50
8.47'LT

+67.00
14.00'LT

3' R

+54.77
3.16'LT

+35.92
2.00'RT

+53.24
5.75'LT

+67.00
14.00'RT

60' R

+29.34
46.00'RT

+70.77
111.00'RT

+70.78
136.00'RT

KINZIE AVE

A/C

ANT

MH

W

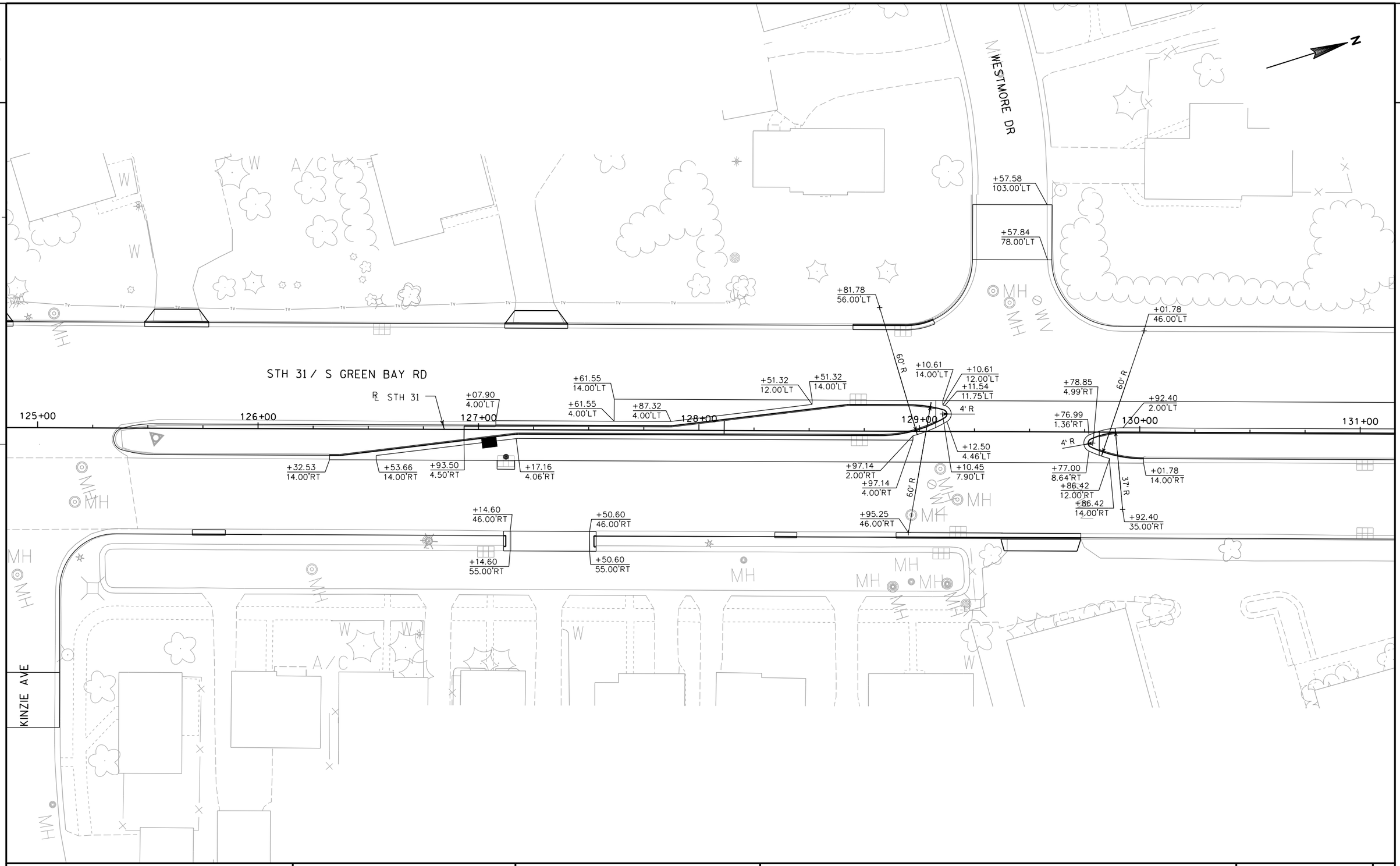
SIGN

TV

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 28	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021104_id.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

2



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 29	E

2

N

STH 31 / S GREEN BAY RD

℄ STH 31

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

+16.95 / 2.06'LT

+96.46 / 12.00'LT

+96.46 / 14.00'LT

+18.21 / 14.00'LT

+04.84 / 14.00'LT

+13.58 / 46.00'LT

+29.88 / 14.00'LT

+29.88 / 12.00'LT

+43.13 / 7.54'LT

60' R

8' R

+28.94 / 12.00'RT

+08.30 / 14.00'RT

+28.94 / 14.00'RT

75' R

+43.87 / 5.79'RT

+40.08 / 0.68'LT

+12.67 / 61.00'RT

+10.87 / 4.15'RT

+29.61 / 46.00'LT

60' R

+38.24 / 4.00'LT

+13.06 / 7.50'RT

4' R

+11.88 / 11.32'RT

+14.24 / 12.00'RT

+14.24 / 14.00'RT

50' R

+48.58 / 14.00'RT

+38.24 / 46.00'RT

+24.44 / 86.60'RT

+31.04 / 110.71'RT

GRACELAND BLVD

MH

GUY

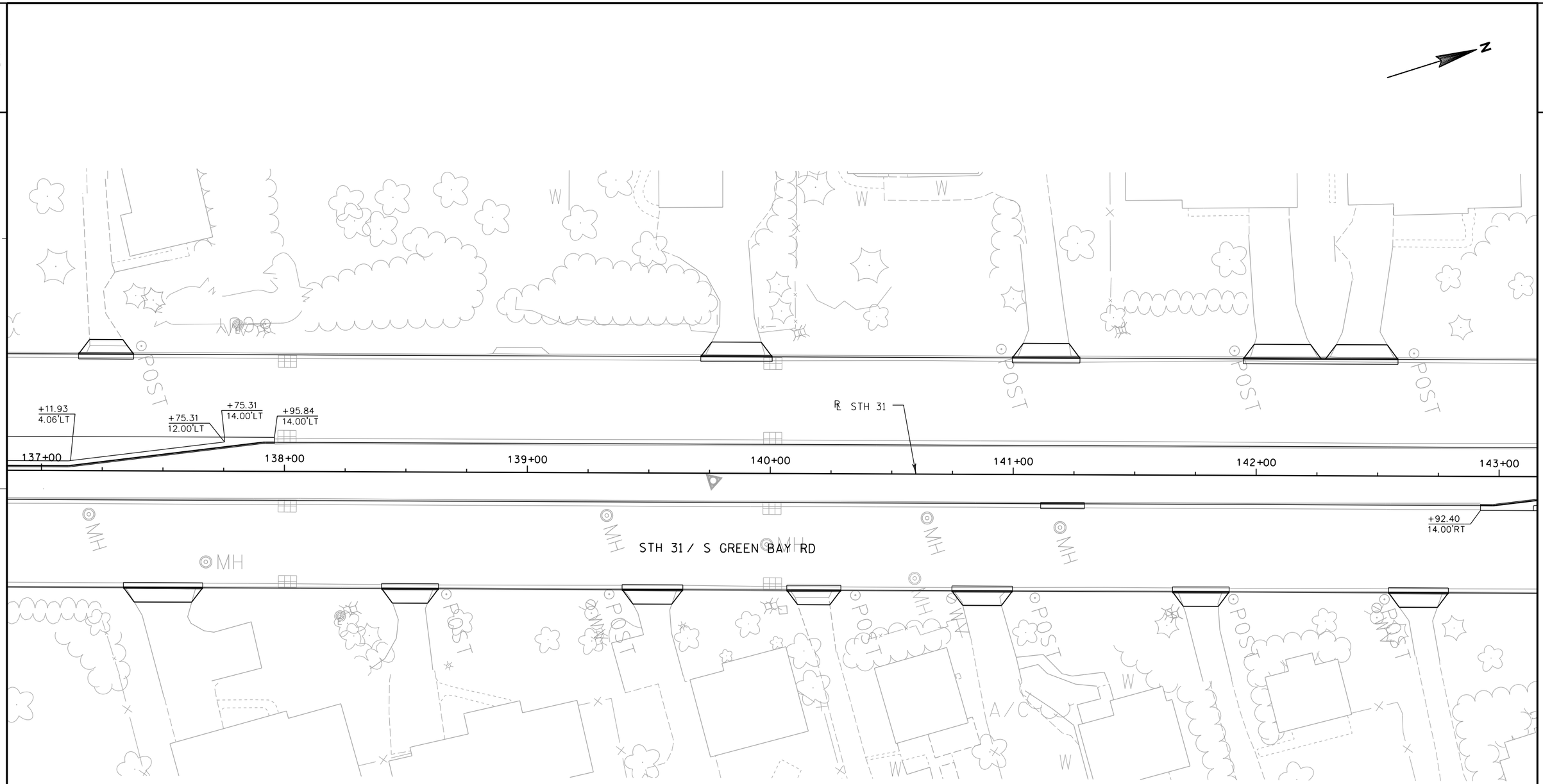
POST

W

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 30	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021106_id.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

2



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 31	E

2

N

CORTLAND AVE

+83.51
117.94'LT

+62.11
86.04'LT

+98.06
91.13'LT

+58.00
51.00'LT

POST

SWL

MH

STH 31 / S GREEN BAY RD

℄ STH 31

143+00 144+00 145+00 146+00 147+00 148+00 149+00

+14.15
14.00'RT

+14.15
12.00'RT

+92.40
14.00'RT

+78.65
4.00'RT

+40.72
4.00'RT

+40.72
14.00'RT

+26.00
14.00'LT

+32.15
1.36'RT

+33.82
5.00'RT

4' R

+32.23
8.67'RT

+26.00
14.00'RT

+42.00
12.00'RT

+42.00
14.00'RT

+47.56
35.00'RT

37' R

65' R

+47.56
2.00'LT

+61.63
2.00'LT

+65.97
14.00'RT

+73.58
2.00'LT

+53.97
14.00'LT

+53.97
11.99'LT

+72.82
14.00'LT

+51.41
46.00'RT

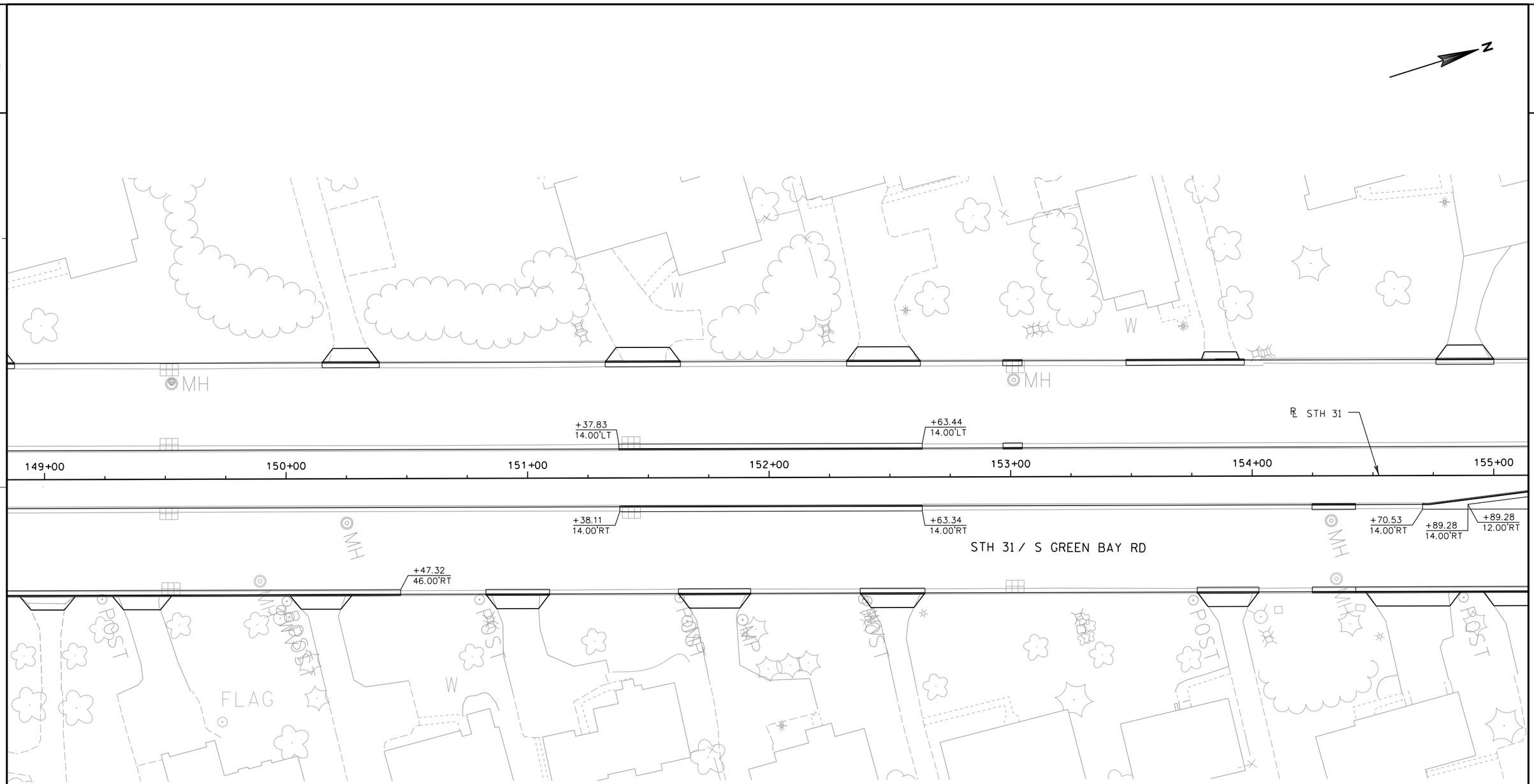
POST

W

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 32	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021108_id.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

2



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 33	E

2

N

+97.53
58.00'LT

60' R

+66.98
14.00'LT

+95.13
12.00'LT

+95.13
14.00'LT

+07.65
2.92'LT

+11.65
14.00'LT

+11.65
5.28'LT

4' R

℄ STH 31

+20.74
14.00'LT

+20.74
4.00'LT

+57.40
4.00'LT

+34.61
14.00'LT

+34.61
12.00'LT

+56.44
14.00'LT

155+00

156+00

157+00

158+00

159+00

160+00

161+00

+11.65
0.31'RT

+69.77
2.00'RT

+97.53
2.00'RT

+11.65
14.00'RT

65' R

STH 31 / S GREEN BAY RD

+79.13
51.00'RT

+74.37
95.12'RT

+80.94
119.24'RT

RIDGEWAY AVE

MH

POST

W

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 34	E

2

2

N

SHIRLEY AVE

+21.73
120.23'LT

+31.92
97.11'LT

ANT

MH

POST

POST

MH

MH

MH

MH

MH

MH

℄ STH 31

161+00

162+00

163+00

164+00

165+00

166+00

167+00

+52.92
14.00'LT

+52.92
4.00'LT

+57.62
14.00'RT

+76.37
14.00'RT

+76.37
12.00'RT

+39.88
4.06'RT

+37.94
4.00'RT

+37.94
14.00'RT

STH 31 / S GREEN BAY RD

MH

MH

MH

POST

POST

+41.03
94.27'RT

+51.71
117.27'RT

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 35	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021111_id.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

N

SIGN

SIGN

MH

MH

MH

MH

MH

MH

MH

MH

℄ STH 31

50' R

50' R

50' R

+57.35
49.64'LT

+27.36
14.00'LT

+27.36
12.00'LT

+62.86
4.00'LT

+01.04
14.00'LT

+01.04
6.39'LT

4.5' R

+92.42
14.00'LT

+61.85
0.16'RT

+92.90
6.39'RT

4.5' R

+92.90
14.00'RT

+30.49
11.50'RT

+82.53
11.50'LT

+47.65
0.65'RT

+18.54
14.00'RT

+15.68
14.00'LT

4.5' R

+15.68
6,45'LT

+07.67
6.45'RT

4.5' R

+07.67
14.00'RT

+74.42
14.00'LT

+74.42
12.00'LT

+88.63
14.00'LT

+50.84
14.00'RT

+50.84
12.00'RT

+83.18
3.00'LT

+97.63
12.00'RT

+97.63
14.00'RT

+52.86
5.50'RT

167+00

168+00

169+00

170+00

171+00

72+00

173+00

STH 31 / S GREEN BAY RD

+89.57
49.31'RT

+02.38
60.81'RT

+52.84
50.38'RT

+51.84
59.00'RT

+81.10
59.00'RT

+81.17
46.00'RT

+97.88
46.00'RT

+97.88
48.00'RT

+77.71
58.00'RT

+18.60
58.00'RT

+76.90
71.00'RT

+18.71
71.00'RT

5'

+44.11
86.49'RT

+45.15
90.25'RT

+22.82
118.28'RT

SUNNYSIDE AVE

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 36	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021112_id.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

POINT	STATION	OFFSET	RADIUS
1	173+36.91	126.00' LT	160'

STH 31 / S GREEN BAY RD

CTH C / SPRING ST

℄ STH 31

℄ CTH C

+93.80 50.00'RT
+99.37 60.00'RT
+08.41 60.00'RT
+08.41 155.00'RT
95' R
+39.64 65.28'RT
+54.00 70.28'RT 144' R
+10.95 194.00'RT
+14.55 117.59'LT
+55.99 116.08'RT
+83.02 69.33'RT
54' R
70' R
+98.41 73.00'LT
+92.48 58.99'LT
+18.35 60.72'LT
+57.74 62.50'LT
+75.47 46.00'LT
+71.00 46.00'LT
+22.10 46.00'LT
+22.10 48.00'LT
4' R
+82.24 50.00'LT
+07.76 53.00'LT
70' R
+34.86 50.00'RT
+34.86 52.00'RT
+59.57 50.00'RT
+59.57 44.00'RT
+66.62 44.00'RT
+93.53 50.00'RT
+93.26 44.00'RT
+92.95 35.89'RT
6' R
+10.57 41.50'RT
+29.06 6.41'LT
5'
+17.14 46.00'LT
+27.46 46.00'LT
7' R
+08.80 5.00'LT
57' R
3' R
399+00
+04.21 50.00'LT
+10.57 15.50'LT
+21.63 50.00'LT
+29.65 12.21'LT
+28.65 9.38'LT
+65.45 46.00'LT
+78.60 46.00'LT
+11.27 63.00'LT
146' R
+37.40 101.00'LT
38' R
+29.52 77.28'LT
+37.40 63.00'LT
+14.74 46.00'LT
+93.73 132.00'LT
+93.07 63.00'LT
+81.57 52.00'LT
+91.23 14.00'LT
+83.92 14.00'LT
+15.36 10.88'LT
3' R
+14.59 7.98'LT
+15.32 5.07'LT
+38.24 14.00'LT
+98.41 3.00'LT
+47.68 14.00'RT
70' R
400+00
+06.30 14.00'LT
+53.79 2.00'RT
+53.79 4.00'RT
+56.07 5.95'RT
+32.07 2.00'RT
3' R
+13.10 14.00'RT
+32.07 14.00'RT
+55.28 8.85'RT
+69.64 14.00'RT
+35.00 14.00'RT
146' R
75' R
+09.12 46.00'RT
+09.12 56.50'RT
95' R
5.5'
5'
+91.23 81.00'RT
+74.59 12.00'RT
+73.93 13.89'RT
2' R
+74.59 10.00'RT
+98.42 57.00'LT
+73.44 52.78'RT
+04.29 46.00'RT
+41.22 46.00'RT
+76.01 65.53'RT
38' R
75' R
401+00
342' R
+80.97 90.03'RT
+67.74 77.00'RT
+05.68 50.45'LT
+14.74 34.82'LT
+78.57 42.97'RT
+98.42 18.00'RT
55' R
+95.26 53.67'RT
+09.12 113.00'RT
161' R
+09.35 40.00'RT
+28.42 50.50'RT
+09.35 201.00'RT
3'
402+00
+41.22 388.00'RT
SIGN
FLAG
POST
ANT
GUY
MH
W

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	PLAN LAYOUT	SHEET 37	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021113_id.dgn
PLOT DATE : 12/1/2016
PLOT BY : gaspemc
PLOT NAME :
PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

2

N

+56.52
52.00'LT

+63.19
48.00'LT

+63.19
46.00'LT

+20.57
46.00'LT

+67.80
12.00'LT

+67.80
14.00'LT

+88.54
14.00'LT

℄ STH 31

179+00

+55.30
2.00'RT

180+00

181+00

182+00

183+00

184+00

185+00

+55.30
11.50'RT

STH 31 / S GREEN BAY RD

GUY

MH

POST

W

SIG

UGV

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 38	E

2

N

STH 31 / S GREEN BAY RD

℄ STH 31

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

+12.81 14.00'LT
+29.53 14.00'LT
+09.13 14.00'RT
+78.43 14.00'RT
+57.56 14.00'RT
+77.66 14.00'RT
+77.66 12.00'RT
+57.59 2.00'RT
+53.26 38.00'LT
+55.44 14.00'LT
+55.44 12.00'LT
+33.29 14.00'LT
40' R
+67.97 4.00'LT
+69.37 6.65'LT
+85.67 14.00'LT
3' R
+69.14 1.24'LT
+85.67 14.00'RT
+53.26 2.00'RT
65' R
+39.45 51.00'RT

SIGN
GUY
POST
MH
ANT
W
X

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 39	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021115_id.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

2

N

FLAG

STREAM

POST

MH

191+00

192+00

193+00

194+00

195+00

196+00

197+00

+57.29
26.00'LT

+36.75
14.00'LT

+59.94
2.00'LT

+36.75
3.45'RT

37.5' R

4' R

+36.75
8.36'RT

+36.75
14.00'RT

+40.74
6.00'RT

+44.77
12.00'RT

+44.77
14.00'RT

53' R

+69.84
14.00'RT

+59.94
51.00'RT

+39.11
2.06'LT

+18.75
14.00'LT

+18.75
12.00'LT

+38.95
14.00'LT

℄ STH 31

STH 31 / S GREEN BAY RD

512+00

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 40	E

2

N

STH 31 / S GREEN BAY RD

STH 31 / OLE DAVIDSON RD.

CTH MM / N. GREEN BAY RD.

℄ STH 31

197+00
198+00
199+00
200+00
201+00
202+00
203+00
513+00
514+00
515+00
516+00
614+00
615+00
616+00
104+00

+71.73 14.00'LT
+99.00 14.00'LT
+99.00 12.00'LT
+07.57 14.00'LT
+07.57 12.00'LT
+18.30 14.00'LT
+11.04 10.00'LT
+08.28 7.10'LT
+56.56 6.44'RT
+49.80 14.00'RT
+54.75 10.00'RT
+58.20 12.00'RT
+58.03 14.00'RT
+03.45 39.91'RT
+93.75 36.00'RT
+93.75 50.00'RT
+29.19 70.20'RT
+61.24 63.00'LT
+69.08 47.00'LT
+19.08 47.60'LT
+63.37 91.32'LT
+75.07 40.00'LT
+75.07 14.00'LT
+30.79 47.65'LT
+30.79 40.00'LT
+30.79 14.00'LT
+00.00 13.95'RT
+50.00 13.92'RT
+10.00 14.00'RT
+10.00 40.00'RT
+10.00 47.50'RT
+44.78 12.22'RT
+52.74 36.00'RT
+66.45 42.00'RT
+40.29 36.00'RT
+73.72 37.91'RT
+51.30 42.00'RT
+60.65 55.73'RT
+60.61 65.75'RT
+62.59 64.22'RT
+29.39 76.97'RT
+55.86 103.28'RT
+84.26 29.40'LT
+34.26 29.77'LT
+92.03 35.97'RT
+36.53 28.67'RT
+71.73 184.00'RT
198' R
77' R
14' R
4' R
284.48' R
70' R

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT	SHEET 41	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021117_id.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

2

2

STH 31 / S GREEN BAY RD

109+00

108+00

107+00

106+00

N

STH 20 / WASHINGTON AVE

+42.96
150.00'LT

+84.52
51.00'LT

+96.45
51.00'LT

+84.52
15.00'LT

+05.82
7.00'LT

+32.71
15.00'LT

+38.15
15.00'LT

143' R

+54.31
13.35'LT

3' R

+53.71
10.41'LT

+53.94
7.42'LT

80' R

383+00

384+00

385+00

386+00

387+00

388+00

389+00

℄ STH 20

+06.59
59.00'RT

+21.59
59.00'RT

+38.15
65.00'RT

+29.66
5.36'RT

81' R

+39.76
5.00'RT

+75.87
5.00'RT

+68.10
5.00'LT

+68.10
5.00'RT

3' R

+29.87
8.35'RT

+29.26
11.29'RT

+45.87
13.00'RT

+68.10
13.00'RT

143' R

+39.76
148.00'RT

+45.87
68.00'LT

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT - STH 20	SHEET 42	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021118_id.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

N

+94.30
65.50'LT

+45.50
65.50'LT

+15.02
56.00'LT

+28.59
51.00'LT

+17.74
56.00'LT

+09.28
64.00'LT

5'

+37.22
58.00'LT

+94.30
58.00'LT

+32.58
48.00'LT

+01.83
45.00'LT

+17.92
45.00'LT

+94.30
48.00'LT

+17.92
47.00'LT

+17.74
45.00'LT

+16.56
15.00'LT

+16.56
5.00'LT

+79.83
5.00'RT

+24.33
13.00'LT

+24.33
15.00'LT

℄ STH 20

+14.82
15.00'LT

+14.82
13.00'LT

+21.74
11.01'LT

+33.95
15.00'LT

60' R

3' R

389+00

390+00

391+00

392+00

393+00

394+00

395+00

+20.78
8.17'LT

+32.95
4.00'LT

+12.95
11.00'RT

+12.95
13.00'RT

+09.28
4.00'LT

+33.95
13.00'RT

+21.38
5.23'LT

75' R

+97.61
60.00'RT

STH 20 / WASHINGTON AVE

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT - STH 20	SHEET 43	E

2

N

STH 20 / WASHINGTON AVE

℄ STH 20

+44.58
62.00'LT

75' R

+12.50
15.00'LT

+22.00
3.64'RT

+37.58
2.00'RT

395+00

396+00

397+00

398+00

+36.19
2.00'RT

399+00

400+00

401+00

+56.19
15.00'LT

+56.19
13.00'LT

+59.32
15.00'LT

3' R

+24.81
1.00'RT

+91.19
1.00'RT

+59.32
1.00'RT

+12.50
13.00'RT

+21.71
9.43'RT

+22.62
6.57'RT

+27.37
11.00'RT

+27.37
13.00'RT

75' R

+37.58
77.00'RT

+44.81
13.00'RT

+44.81
11.00'RT

+91.19
13.00'RT

MH

WV

G

GV

GUY

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT - STH 20	SHEET 44	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021120_id.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

2

N

FLAG
POST
POST
MH
POST
POST
GUY
MH
MH
MH

2

N

CTH C / SPRING ST

402+00
403+00
404+00
405+00
406+00
407+00

10'
11'
11'
11'
11'
3'
5'

+82.94
33.00'LT
+49.32
24.18'LT
+00.44
1.10'LT
+99.08
1.00'LT
+20.21
1.32'RT
+11.77
10.00'RT
+00.58
9.90'RT
8.25' R
+18.10
9.30'RT
+18.33
17.55'RT
+27.86
16.50'RT
70' R
+97.02
39.94'RT
+76.26
26.00'LT
℄ CTH C
+31.97
32.53'RT
+70.50
54.95'RT
+67.44
54.25'RT
+07.97
61.37'RT
+73.55
54.24'RT
+75.18
62.74'RT
33' R
+48.77
42.19'RT
25' R
+33.95
57.46'RT
60' R
+29.21
66.97'RT
+32.39
70.69'RT
+75.52
65.47'RT
+33.06
78.21'RT
+66.02
75.20'RT
+97.36
72.94'RT
+01.38
68.90'RT
1158' R
1222' R
+04.04
1194.53'RT
+63.22
1184.00'RT

MH MP WV GV SIGN FLAG POST

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN LAYOUT - CTH C	SHEET 46	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021122_id.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

2

LEGEND

(CR02) CURB RAMP TYPE 2
(CR03) CURB RAMP TYPE 3
(CR04) CURB RAMP TYPE 4B
(CR05) CURB RAMP TYPE 4B1
(CR06) CURB RAMP TYPE 5
(CR08) CURB RAMP TYPE 7A
(CR09) CURB RAMP TYPE 7B

(APO3) UPPER LAYER: 1 3/4" HMA PAVEMENT 4 MT 58-28 S
LOWER LAYER: 2 1/4" HMA PAVEMENT 3 MT 58-28 S

(CM01) CONCRETE MEDIAN SLOPED NOSE TYPE 1
(CM02) CONCRETE MEDIAN SLOPED NOSE TYPE 2
(CM03) CONCRETE SIDEWALK, 5-INCH

(CP01) CONCRETE PAVEMENT, 9-INCH
(CP02) CONCRETE PAVEMENT, 12-INCH

(DR01) CONCRETE DRIVEWAY 6-INCH
(DR02) ASPHALTIC DRIVEWAYS AND FIELD ENTRANCES, 3-INCH
(DR03) CONCRETE DRIVEWAY 7-INCH

(RM01) REMOVING SURFACE MILLING SPECIAL
(RM02) REMOVING CONCRETE SURFACE PARTIAL DEPTH
(RM03) REMOVING CONCRETE SURFACE PARTIAL DEPTH SPECIAL

(CG01) CONCRETE CURB & GUTTER 30-INCH TYPE A
(CG02) CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL
(CG03) CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A
(CG04) CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
(CG05) CONCRETE CURB & GUTTER 30-INCH TYPE D
(CG06) CONCRETE CURB PEDESTRIAN
(CG07) CONCRETE CURB & GUTTER 18-INCH TYPE A
(CG11) CONCRETE CURB & GUTTER 30-INCH TYPE A, REVERSE SLOPE
(CG12) CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL, REVERSE SLOPE

BASE PATCHING, CONCRETE

GENERAL NOTES:

1. CONTRACTOR TO CONSTRUCT DRILLED TIE BARS FOR ALL LONGITUDINAL JOINTS BETWEEN NEW CONCRETE PAVEMENT AND PERMANENT CONCRETE PAVEMENT AND DRILLED DOWEL BARS FOR ALL TRANSVERSE JOINTS BETWEEN NEW CONCRETE PAVEMENT AND PERMANENT CONCRETE PAVEMENT. THIS INCLUDES BASE PATCHING CONSTRUCTION, AND STAGED OPERATIONS.

2. ON SAW CUTTING OPERATIONS, SQUEEGEE THE SAW CUT SLURRY TO THE CURB APRON AND REMOVE THIS MATERIAL AS APPROVED BY THE ENGINEER.

3. USE CONCRETE PAVEMENT HES (INCH) AND BASE PATCHING CONCRETE HES AT TEMPORARY LANE CLOSURES, AND FOR GAPPING.

2

STH 20 / WASHINGTON AVE

N

385+00

386

U/C

A/C

MH

℄ STH 31

101+00

102+00

103+00

104+00

105+00

106+00

107+00

STH 31 / S GREEN BAY RD

CG05

APO3

CG06

CG02

CRO3

CMO1

CRO6

CMO3

CPO2

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 48	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021201_pd.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

2

N

385+00

386+00

387+00

388+00

STH 20 / WASHINGTON AVE

STH 31 / S GREEN BAY RD

STH 31

+90.00
CG02 CG12

+91.39
RM01 RM02 RM03
AP03 AP03
CG02 CG01

+91.39
CG02 CG01

+92.11
RM01 RM02
AP03 AP03
CG02 CG01

+11.75
RM03 RM02 RM01
AP03 AP03

CR03
CM03
CM03
CG02
CG02
CR06
CM01
10' TRANSITION

CM01
CG02
CR06
10' TRANSITION
CM03
CM03
CM01
CG02
CG12
CG02
CR08
CG06

CG01
RM03
AP03
CP01
CG01
CP01
AP03 RM01
CG01
CM03
CP01
AP03
CG01
AP03 RM02
RM03
DR02
DR01
RM03

107+00
108+00
109+00
110+00
111+00
112+00
113+00

724.65 723.50 722.51 721.64 720.78 719.91 719.17 718.54
721.68 720.96 720.19 719.51 718.90 718.34 718.03 717.73 717.48

MH
IP

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 49	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021202_pd.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

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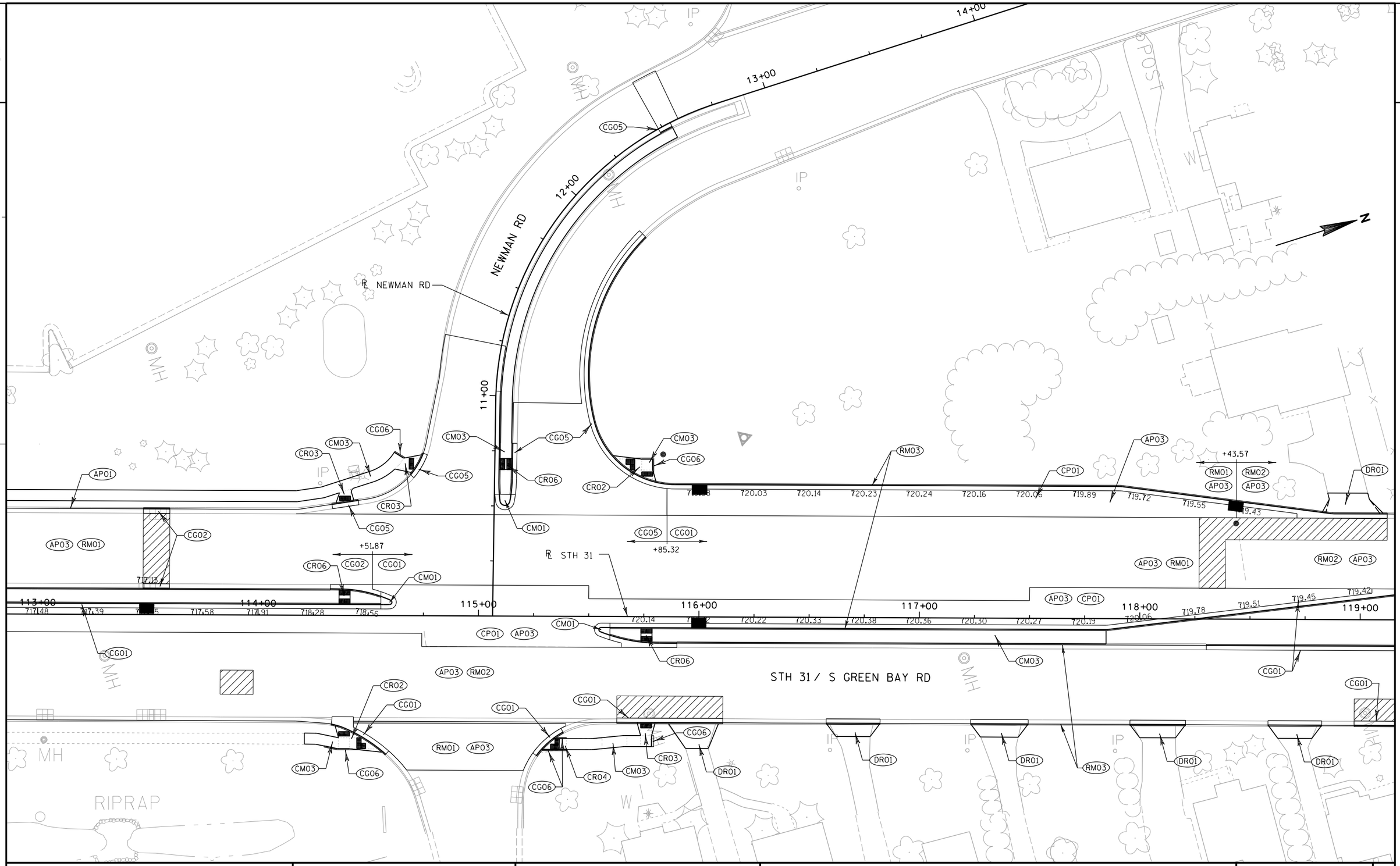

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 50	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021203_pd.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

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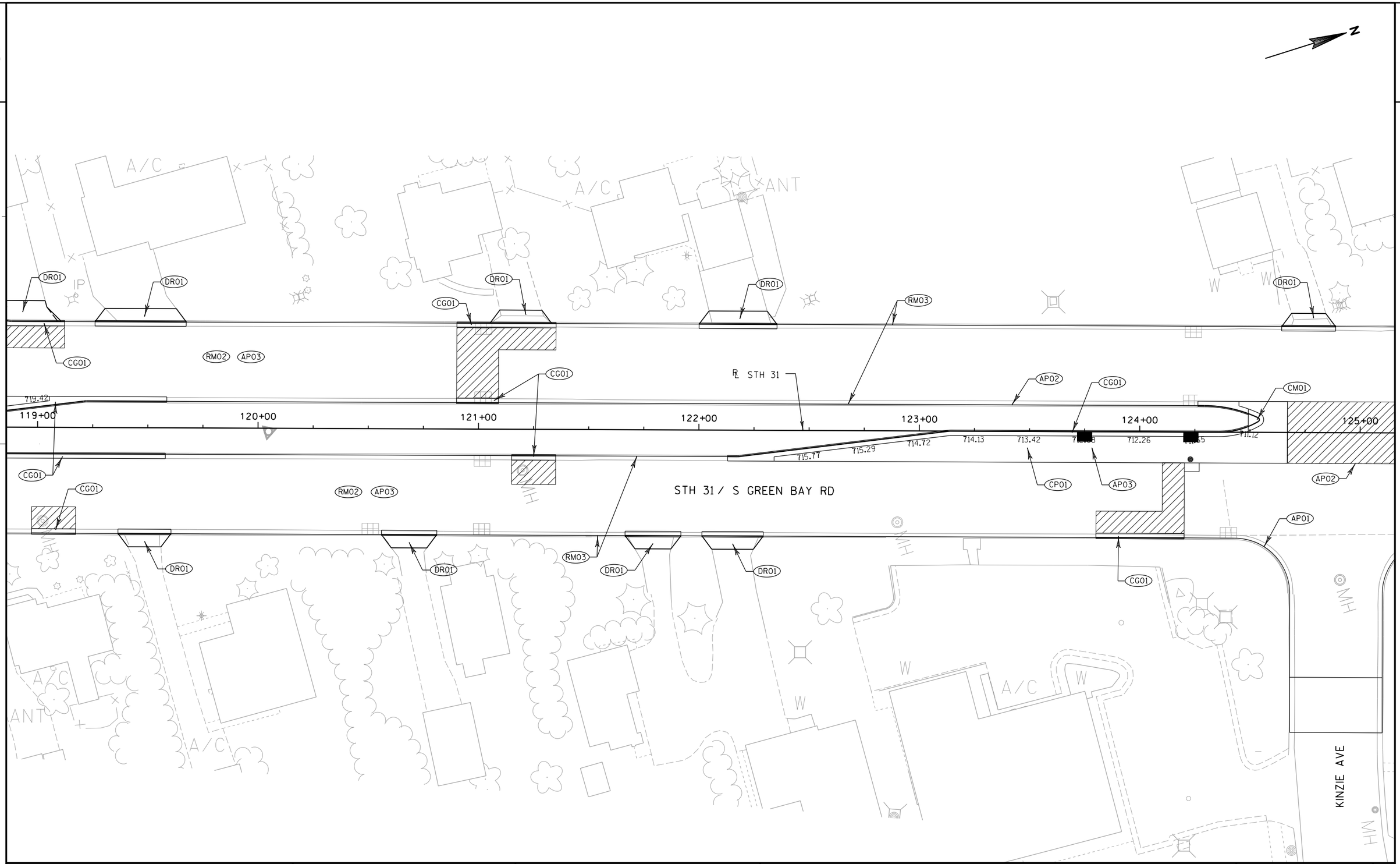


PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 51	E

2

N

WESTMORE DR

DR01 DR01

RM03 RM02 AP03

CG01

CP01 AP03 CM03 CG01

℄ STH 31

CM01 CM01

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

701.20 700.41 699.80 699.25 698.74 698.44 697.69 697.33 697.18 697.01 696.86 696.76

702.76 702.14 701.37 700.81 700.27 699.88 699.46 699.04

CP01 AP03 CP01 AP03

CG01

STH 31 / S GREEN BAY RD

RM03 RM03

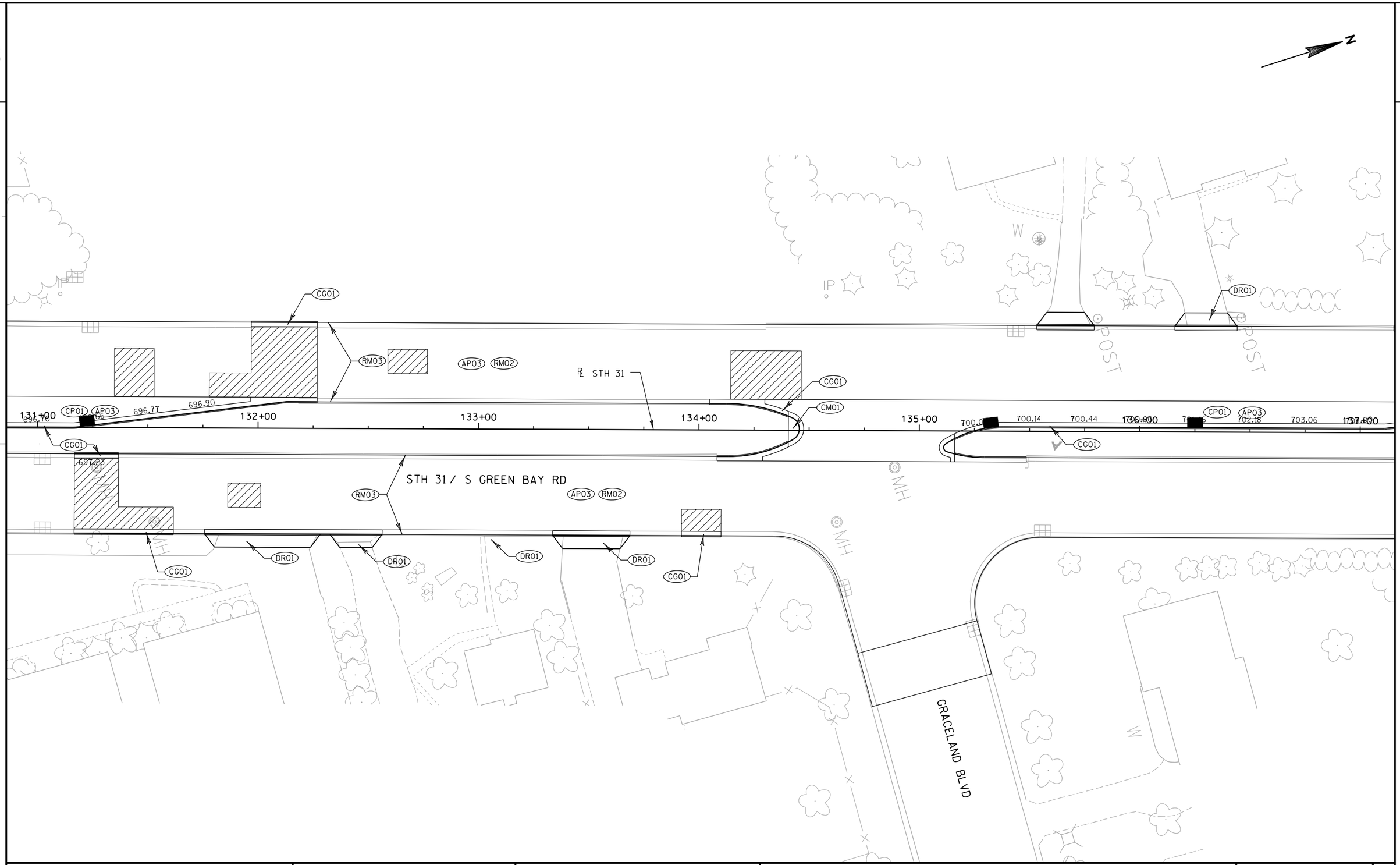
CG01 AP03 RM02 CG01

CG01 CG01 DR01

KINZIE AVE

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 52	E

2



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 53	E

2

N

DR01 DR01 DR01 DR01 DR01

POST POST POST POST

AP03 RM02 RM03

℄ STH 31

CP01 AP03 705.10 706.32

137+00 138+00 139+00 140+00 141+00 142+00 143+00

CG01 CG01 CG01

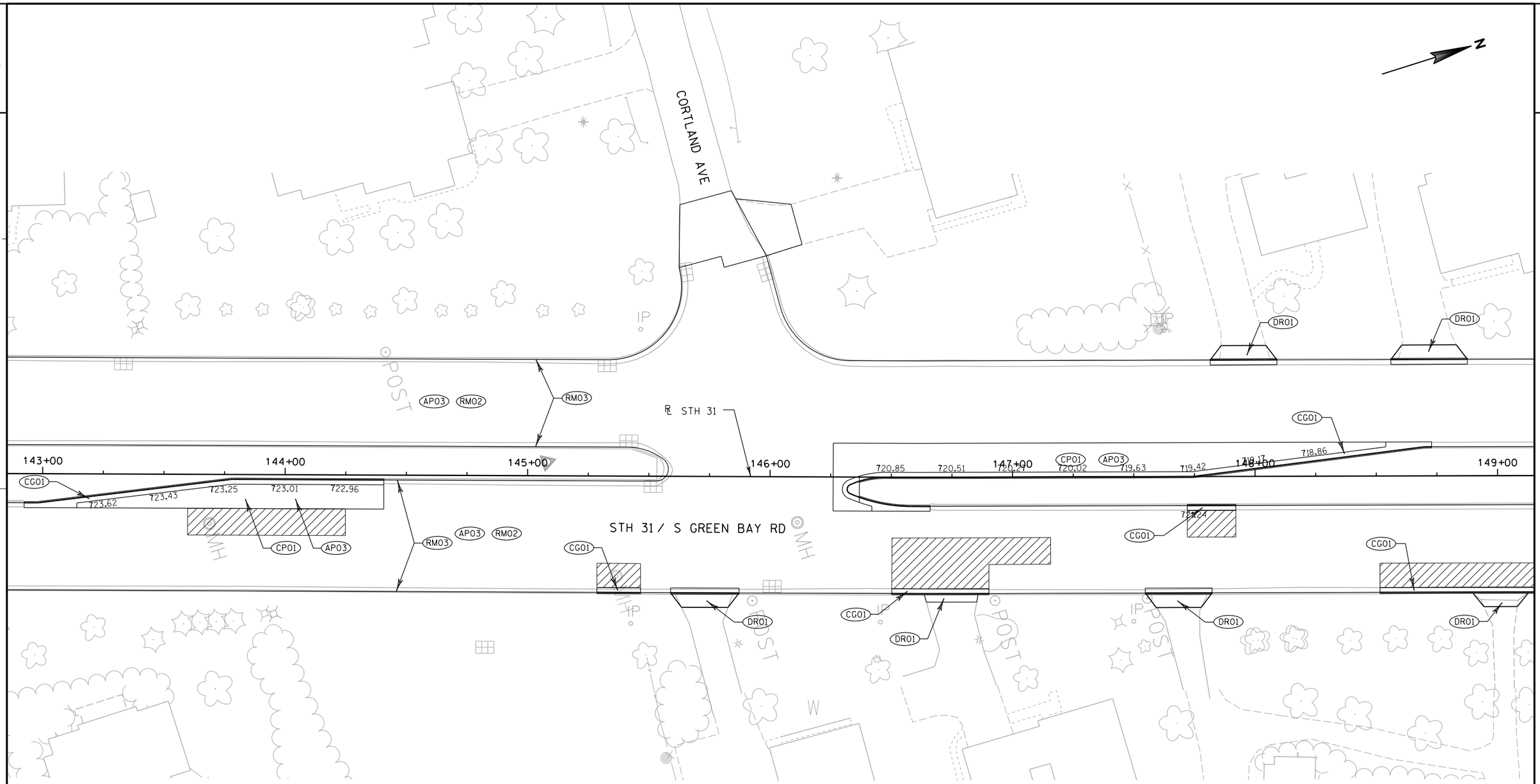
RM03 AP03 RM02

STH 31 / S GREEN BAY RD

DR01 DR01 DR01 DR01 DR01 DR01 DR01

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	PLAN DETAILS	SHEET 54	E

2



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 55	E

2

N

DR01 DR01 DR01 CG01 DR01 DR01

RM02 AP03 RM03 CG01 CG01

℄ STH 31 AP02

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

706.45

CG01 RM02 AP03 RM03

STH 31 / S GREEN BAY RD

CG01

DR01 DR01 DR01 DR01 DR01 DR01 DR01 DR01 DR01

FLAG

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 56	E

2

2

N

DR01

CG01

RM02 AP03

℄ STH 31

RM03

CP01 AP03

CM01

155+00 156+00 157+00 158+00 159+00 160+00 161+00

706.45 705.89 705.51 705.17 705.07 704.98 704.91 705.20 705.70 706.21 708.71 709.31 709.87 710.44 710.94 711.09 711.18 711.23

POST

IP

MH

STH 31 / S GREEN BAY RD

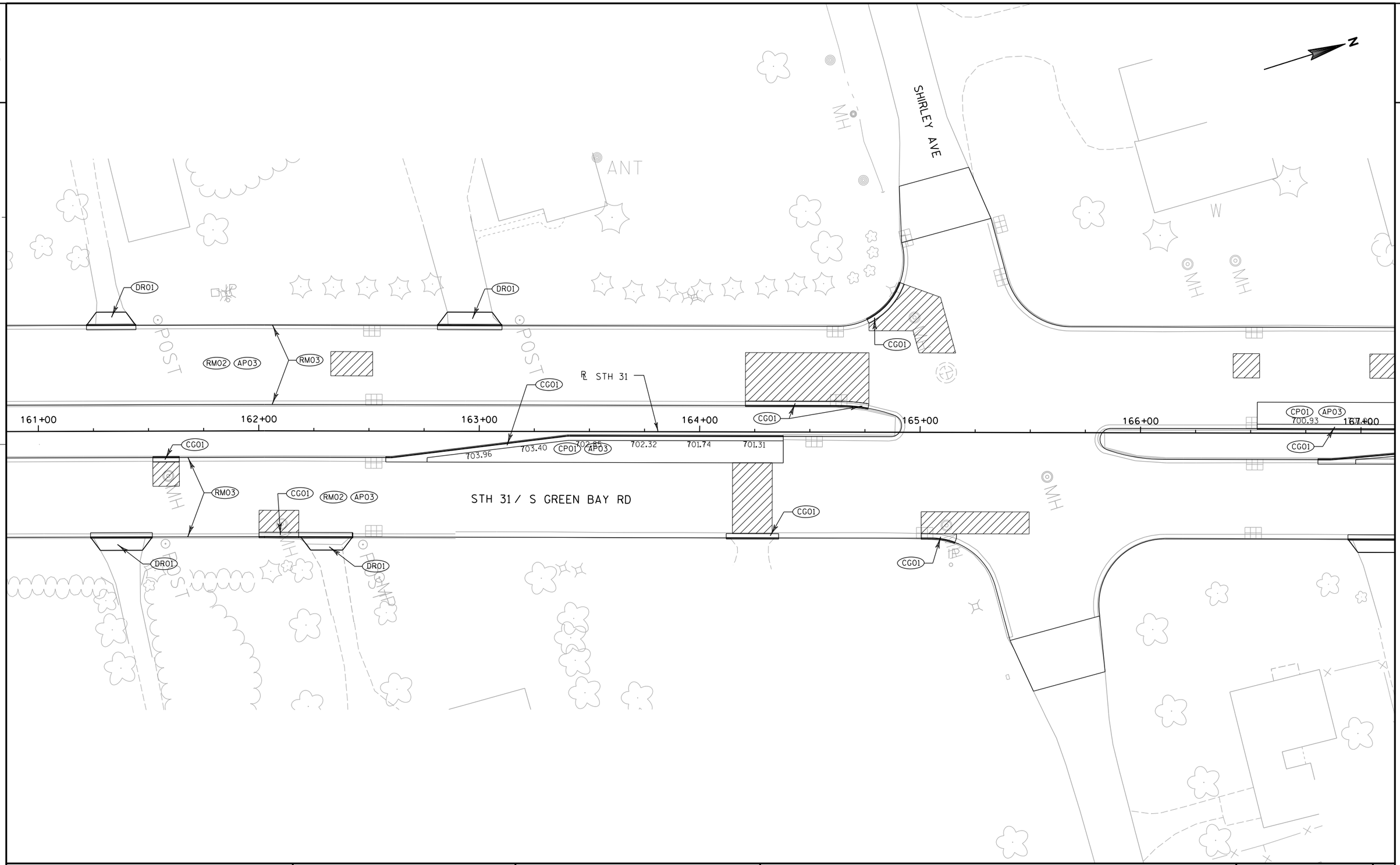
RIDGEWAY AVE

W

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 57	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021210_pd.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 58	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021211_pd.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

N

DR01 DR02 CG01 RM02 AP03 RM03 RM03 ℄ STH 31 CG01 CP01 AP03 CM01 CG07 CG07 CM01 CP01 AP03 CM03

167+00 168+00 169+00 170+00 171+00 172+00 173+00

701.09 701.18 701.45 701.76 702.16 702.79 702.27 701.76 701.26 701.00 700.83 704.15 704.48 705.13 706.01 706.63 707.16 707.56 707.96 708.42 708.79 709.19 708.88 708.68 708.68 708.58 709.21 709.46 709.63 709.90 709.96 710.02

STH 31 / S GREEN BAY RD

RM02 AP03 RM03 CG01 DR01 DR01 DR01 CG01 CR04 CG06 CR04 CG06 CG01 CM03

709.62 709.79 709.93 709.93 709.94 709.83 709.41

POST POST SUNNYSIDE AVE

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 59	E

2

CTH C / SPRING ST

FLAG

STH 31 / S GREEN BAY RD

℄ CTH C

℄ STH 31

10' TRANSITION

+00.00

+41.22

173+00 174+00 175+00 176+00 177+00 178+00 179+00

400+00 401+00 402+00

CM01 CM03 CG01 CG06 CR03 CR06 CR07 CR09 CG11 RM02 RM03 AP02 AP03 CP01 CP02 DR01

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 60	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021213_pd.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

2

2

N

DR01
DR02
DR01
DR01
DR01
706.10
705.84
705.57
705.34
705.13
704.95
704.82
RM02
AP03
CG01
RM03
CP01
AP03
179+00
705.99
705.73
705.45
705.26
180+00
704.99
704.92
181+00
182+00
183+00
184+00
185+00
℄ STH 31
CM03
CG01
STH 31 / S GREEN BAY RD
RM02
AP03
RM03
CG01
DR01
DR01
DR01
DR01
DR01
DR01
IP
POST

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 61	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021214_pd.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

2

2

N

DR01 DR01 DR01

AP03 RM02 RM03

CG01 ℄ STH 31 CG01

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

689.20 688.83 688.53 688.23 688.04 687.84 687.65 687.51

690.16 689.61 AP03 CP01 CP01 AP03

CG01 CG01 CG01

STH 31 / S GREEN BAY RD

AP03 RM02 RM03

DR01 DR01 DR01 DR01 DR01 DR01 DR02

MH MH MH MH MH

POST POST POST POST POST POST

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	PLAN DETAILS	SHEET 62	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021215_pd.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

2

N

STREAM

FLAG

DR01

CG01

RM02 AP03

RM03

CP01 AP03

CM01

191+00

192+00

193+00

194+00

195+00

196+00

197+00

687.47 687.38 687.32 687.29 687.22 687.38 687.47 687.64

℄ STH 31

CG01 REVERSE SLOPE

STH 31 / S GREEN BAY RD

512+00

MH

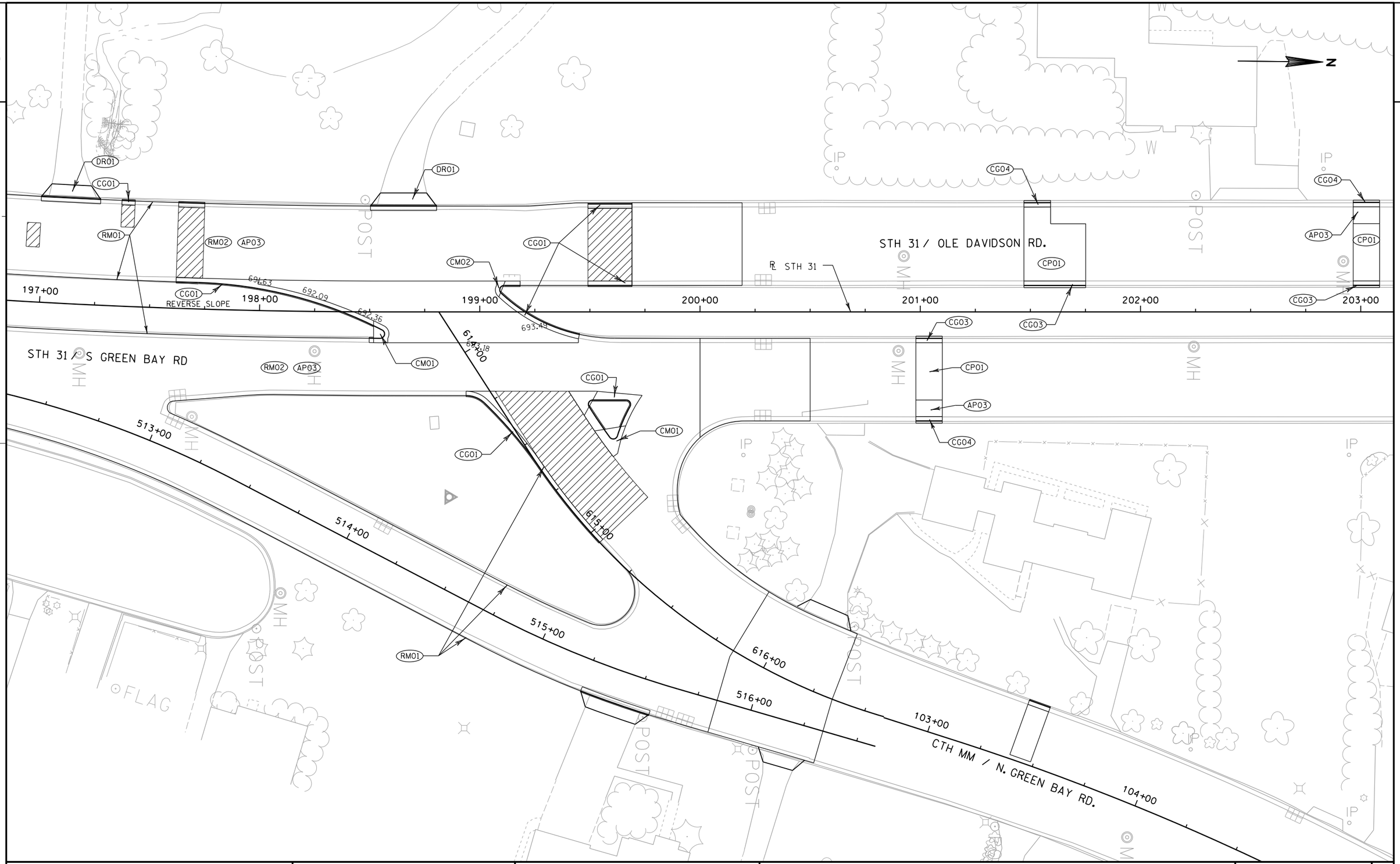
POST

IP

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 63	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021216_pd.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

2



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS	SHEET 64	E

2

2

N

STH 20 / WASHINGTON AVE

R STH 20

383+00 384+00 385+00 386+00 387+00 388+00 389+00

109+00 108+00 107+00 106+00

CG02 RM02 CM03 CP02 CM02 CG01 CP01 RM01 AP03

728.77 728.55 728.97 727.74

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAIL - STH 20	SHEET 65	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\021218_pd.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

N

390+17.92
CG01 CG02

FLAG

CG01
CM03
DR02
DR01
DR01
DR01
DR01
DR01
IP
W
WP
727.74 727.55 727.36 727.18 727.00
CP02
CG02
RM01 AP03
RM02

392+24.33
CG01 CG02
RM01 AP03
℄ STH 20

CG01
CP01
723.59 724.04 724.50 724.93 725.36 725.79 726.21 726.68 727.02 727.36 727.72 728.07 728.33 728.55
389+00 390+00 391+00 392+00 393+00 394+00 395+00
MH MH
723.43 722.95 722.50 724.04 721.55 721.05 720.56 720.14
CP01
725.58 724.97 724.46 723.94
RM01 AP03
CR02
CG02
CG01
RM01 AP03
CG01
CG02

STH 20 / WASHINGTON AVE

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS - STH 20	SHEET 66	E

2

N

DR02 DR02 DR02 DR02 DR02 DR02

RM01 AP03

STH 20 / WASHINGTON AVE

399+56.19

CG01 CG02

CM03

708.09 708.65 709.25 709.82 710.36 710.88 711.39 711.90 712.42 712.94 713.47 714.01 714.54 715.15 715.79 716.31 716.83 717.44

708.30 708.82 709.50 710.06 710.66

707.96

CP01

395+00 396+00 397+00 398+00 399+00 400+00 401+00

CG01 CG02

395+27.13

℄ STH 20

CG01

CG02 CG01

398+44.81

CG01 CG02

399+91.19

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS - STH 20	SHEET 67	E

2

N

FLAG

IP

POST

MH

393+00

394+00

395+00

396+00

397+00

398+00

705.79

705.70

705.61

705.37

705.11

704.84

704.69

705.89

DR02

RM02

AP03

CG01

CM03

CP01

CTH C / SPRING ST

CTH C

2

N

DRO1 DRO1 CGO1 DRO1 DRO1 DRO1 DRO1 DRO1 DRO1 DRO1 DRO1

CPO1 CGO7 CGO1 CMO1

402+00 403+00 404+00 405+00 406+00 407+00 408+00

R CTH C

CTH C / SPRING ST

CMO3 CGO1 CPO1 CRO4 CRO4 CGO1 CMO3 CGO6 CGO6 DRO1

MH MH MH MP

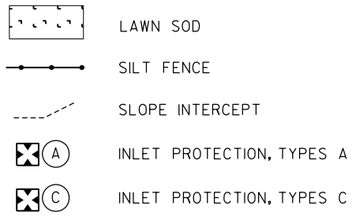
FLAG POST FLAG POST

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN DETAILS - CTH C	SHEET 69	E

2

2

LEGEND

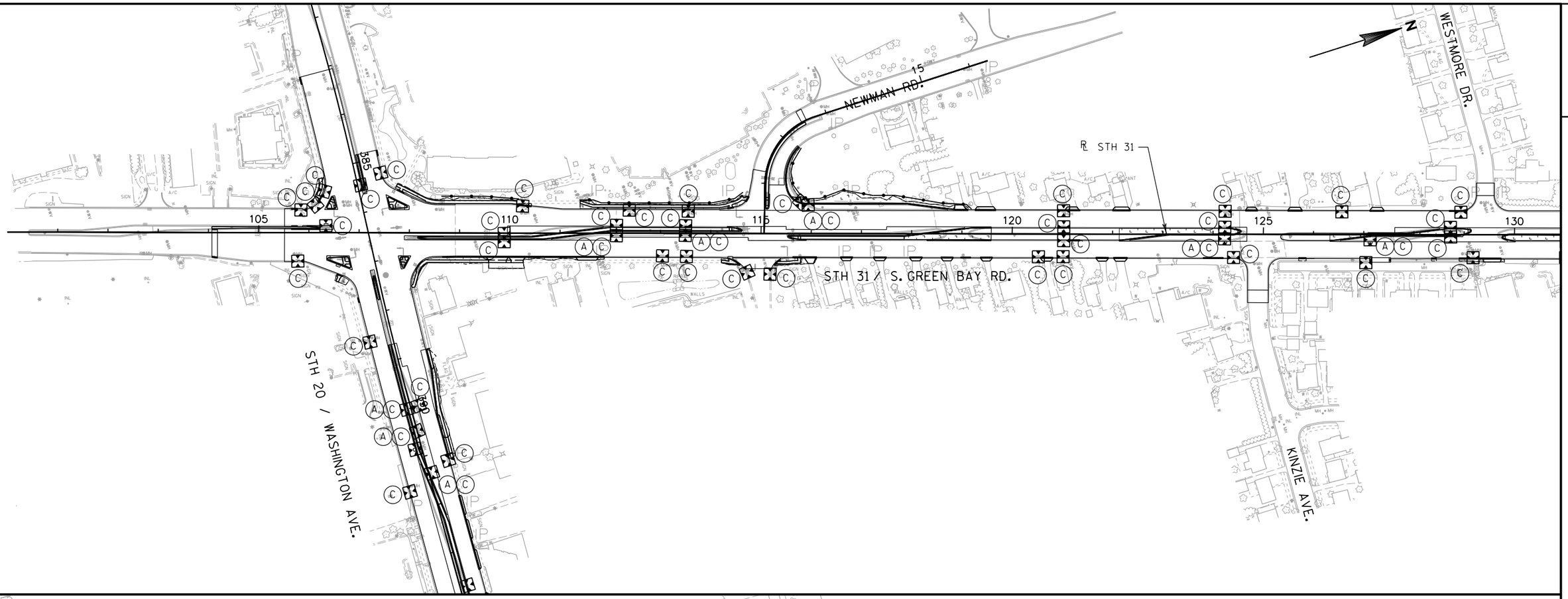


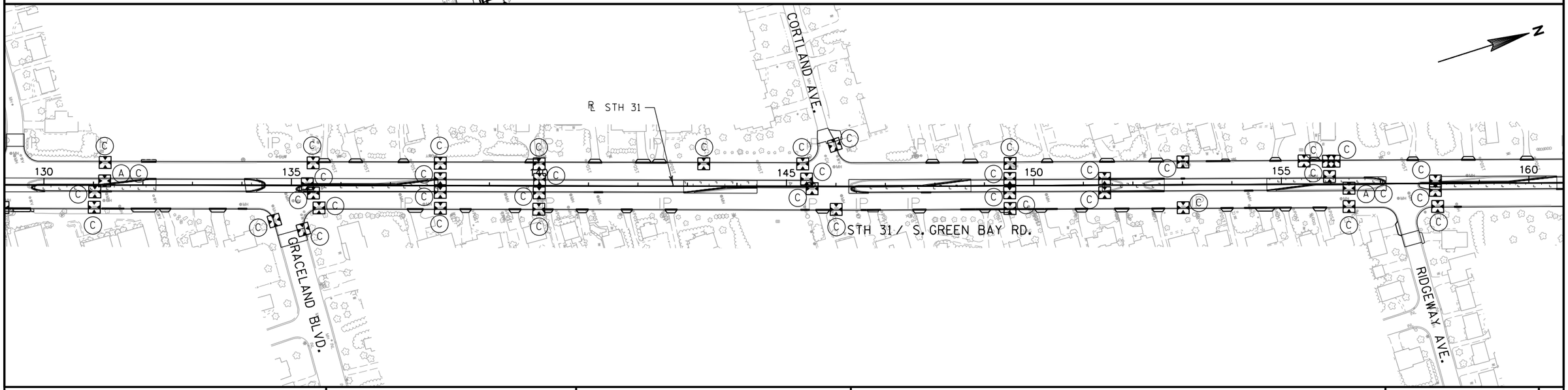
NOTES

PLACE INLET PROTECTION TYPE A AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

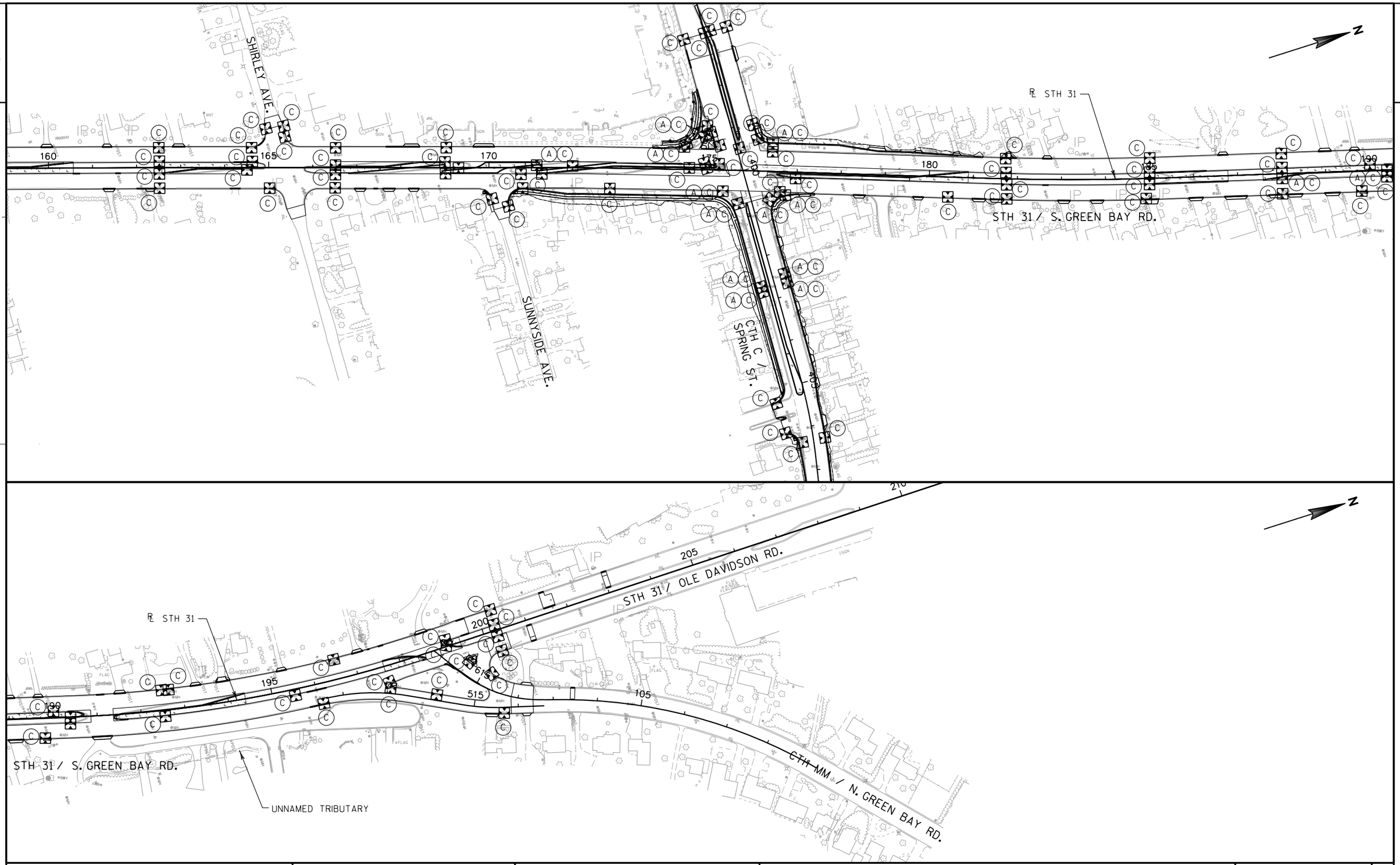
PLACE INLET PROTECTION TYPE C OR D UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

2





PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	EROSION CONTROL	SHEET 71	E



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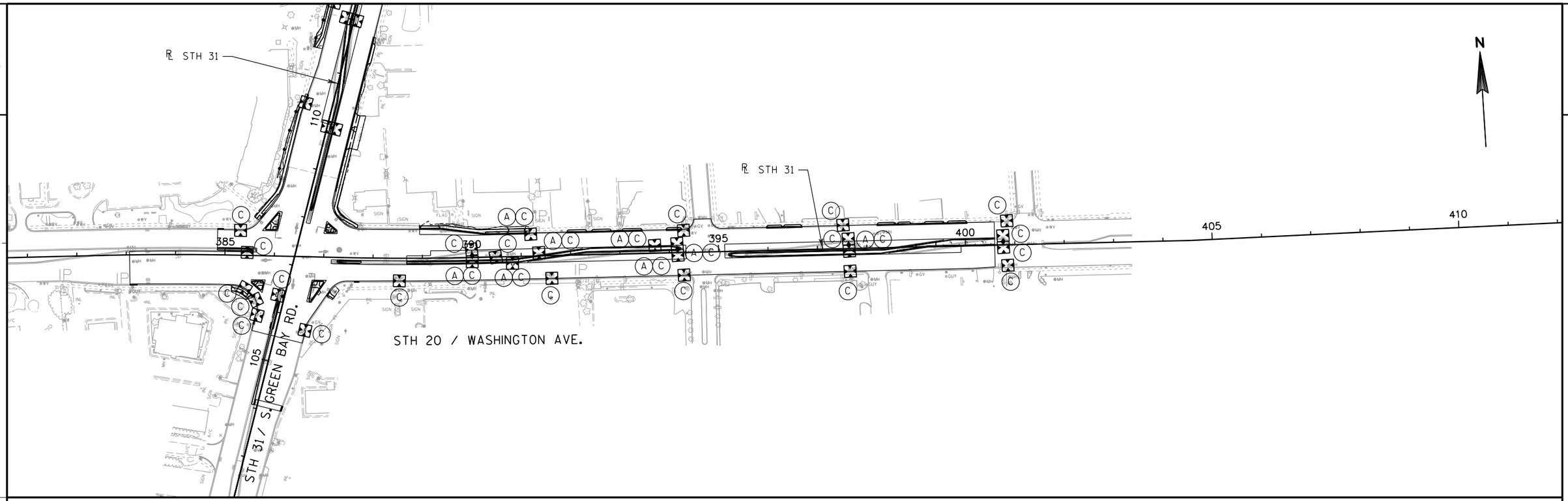
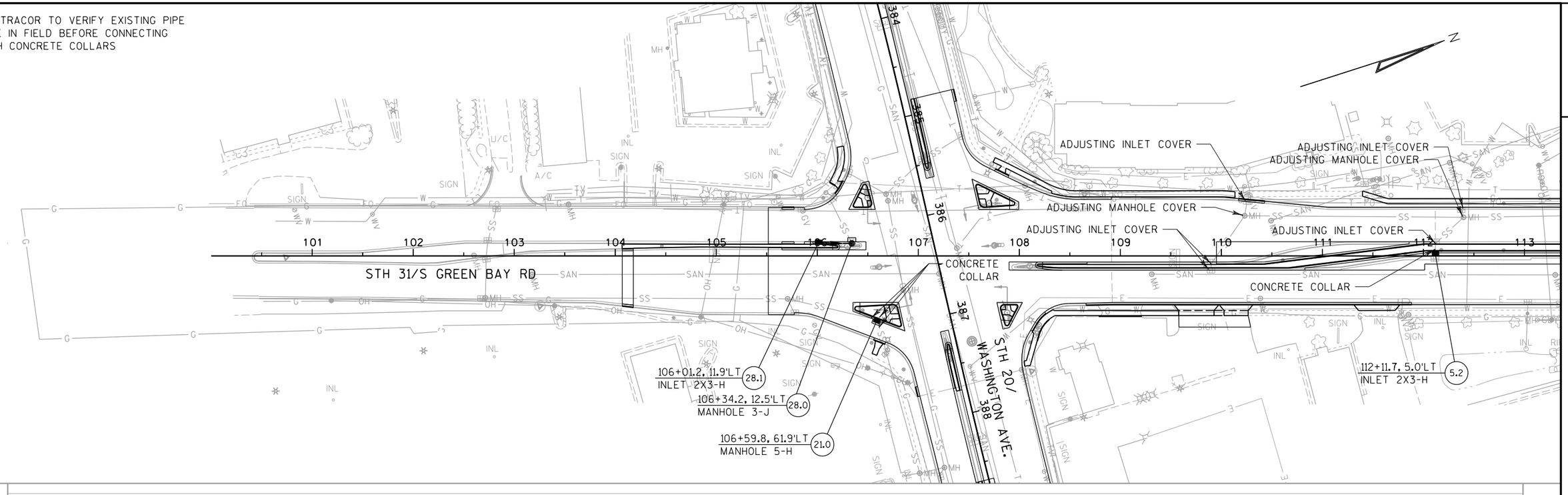
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	EROSION CONTROL	SHEET 72	E

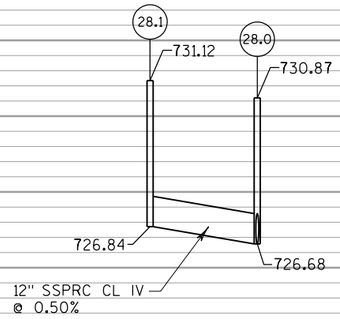


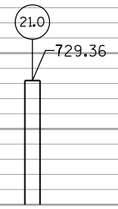
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	EROSION CONTROL	SHEET 73	E

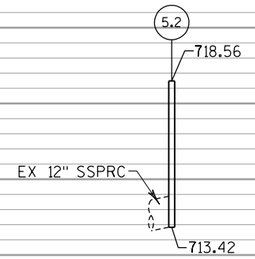
FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\022003_ec.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:200

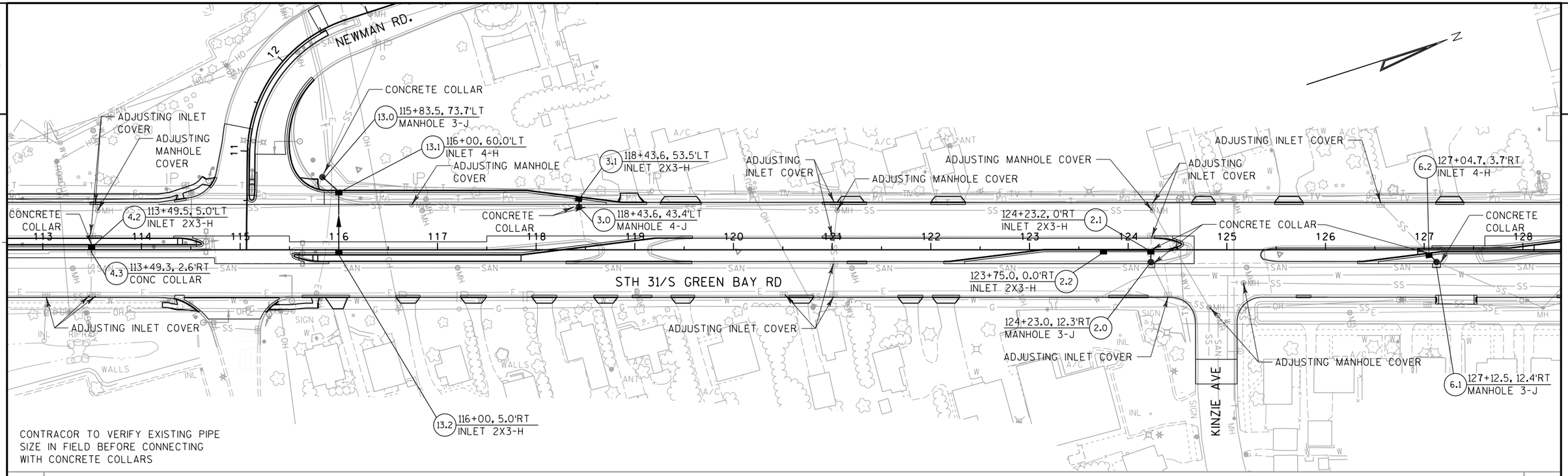
CONTRACOR TO VERIFY EXISTING PIPE
SIZE IN FIELD BEFORE CONNECTING
WITH CONCRETE COLLARS



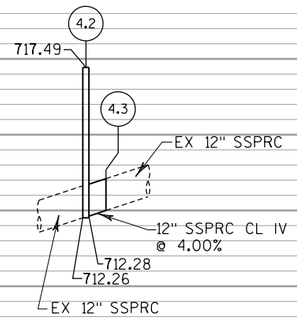


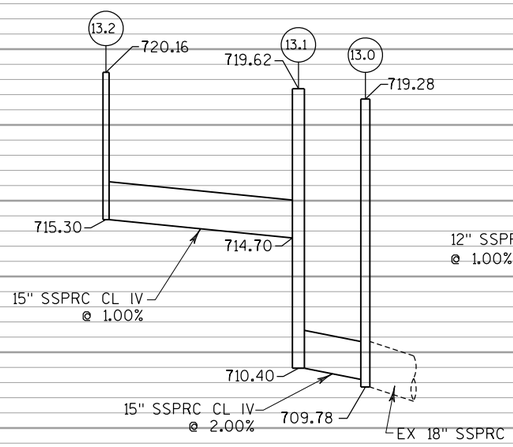


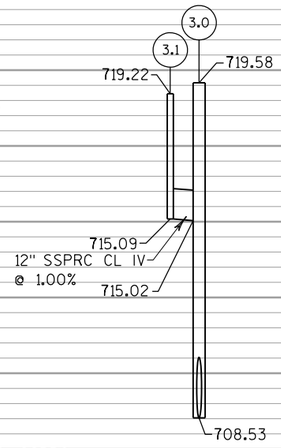


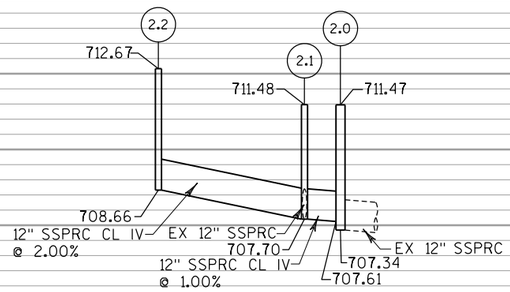


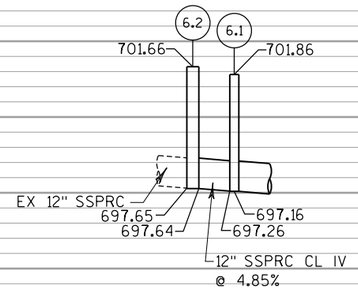
CONTRACOR TO VERIFY EXISTING PIPE SIZE IN FIELD BEFORE CONNECTING WITH CONCRETE COLLARS





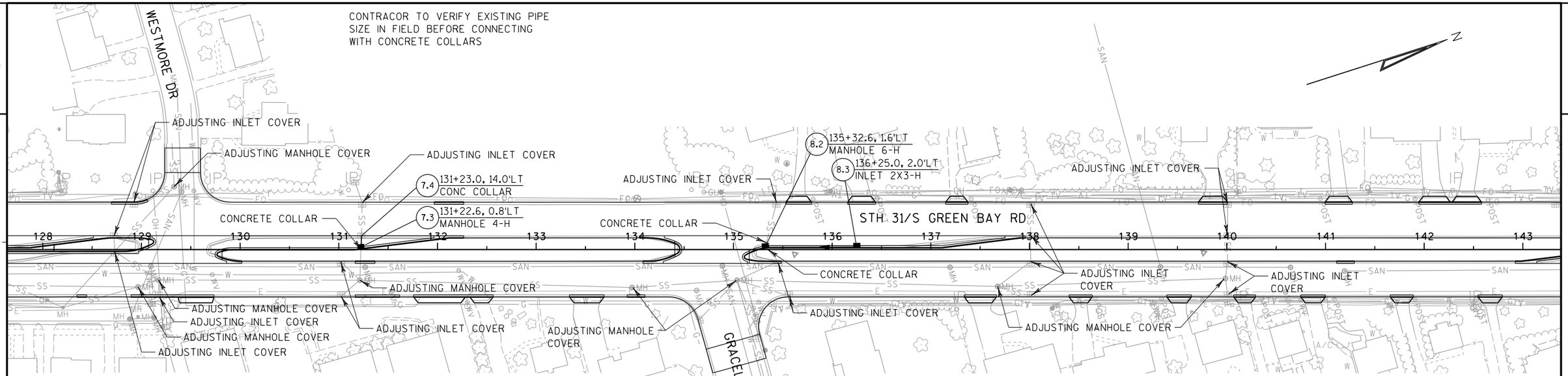


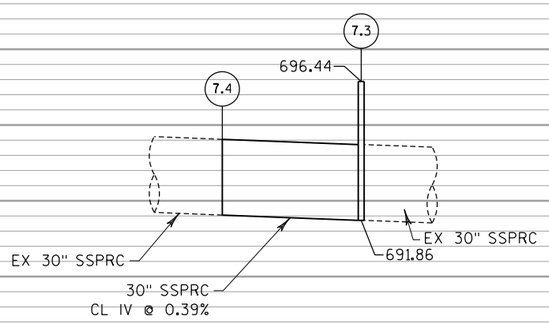


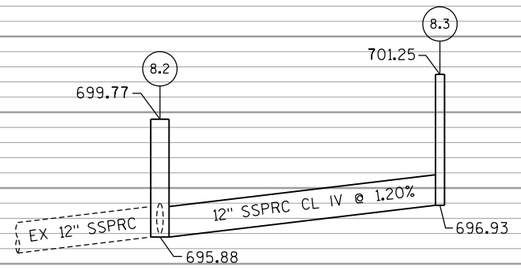


PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STORM SEWER	SHEET 75	E

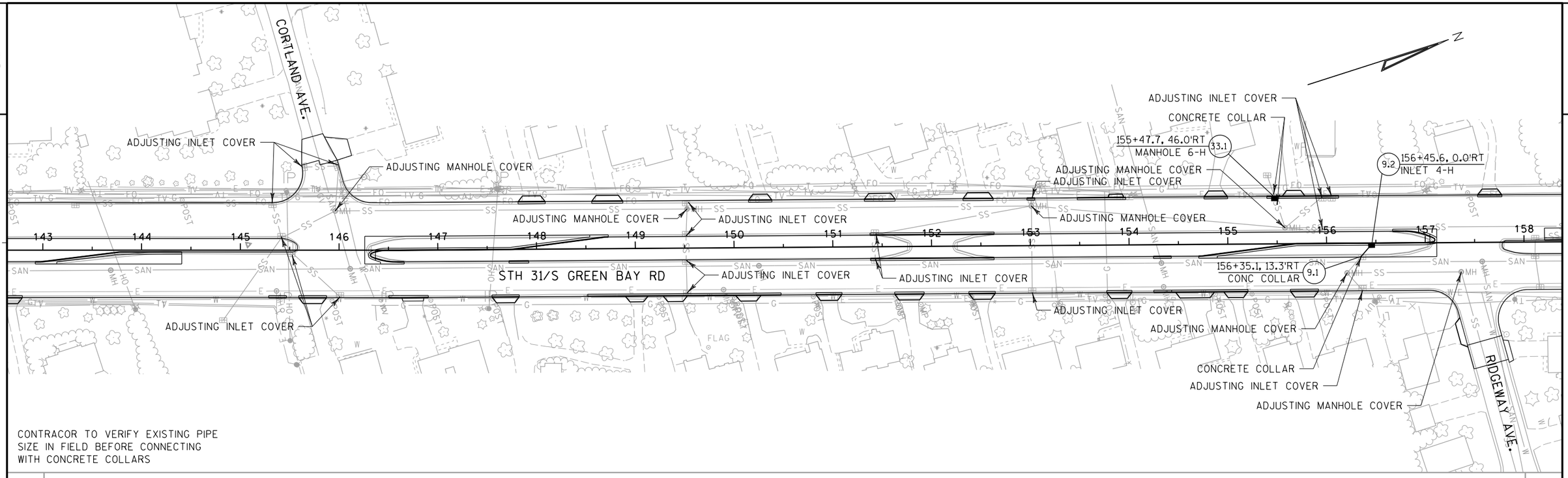
CONTRACOR TO VERIFY EXISTING PIPE
SIZE IN FIELD BEFORE CONNECTING
WITH CONCRETE COLLARS



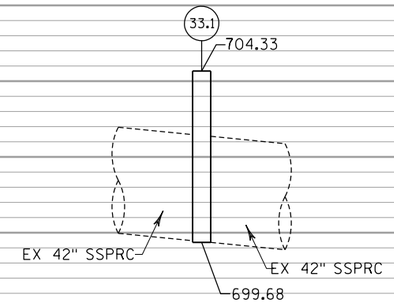


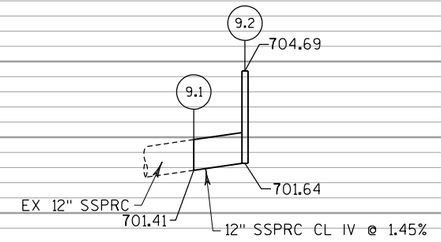


PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STORM SEWER	SHEET 76	E



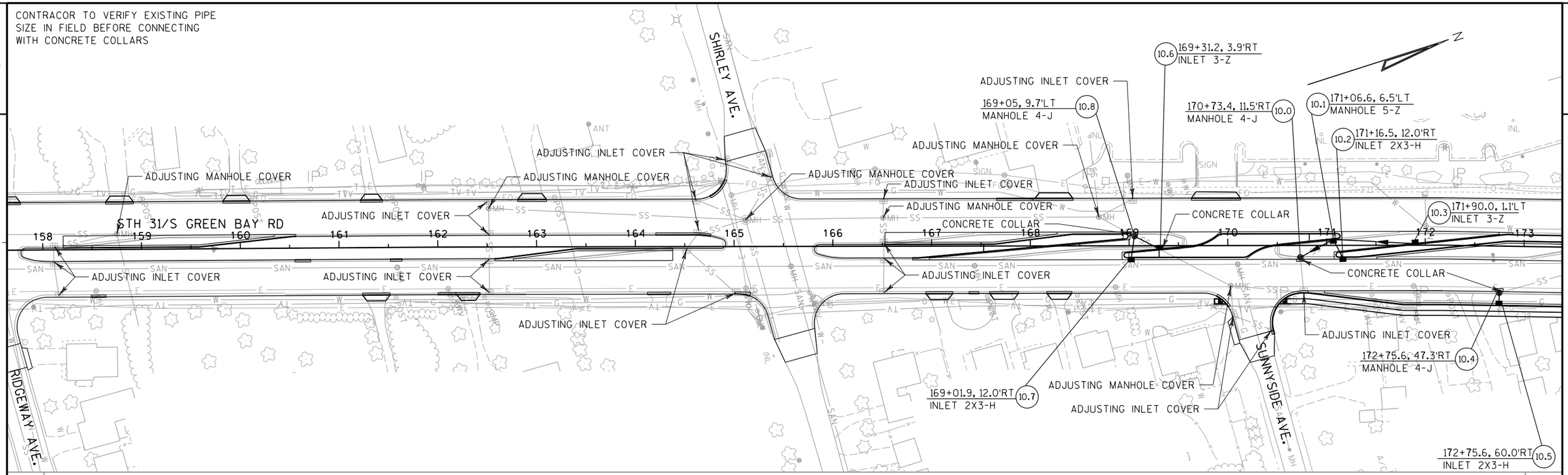
CONTRACOR TO VERIFY EXISTING PIPE SIZE IN FIELD BEFORE CONNECTING WITH CONCRETE COLLARS

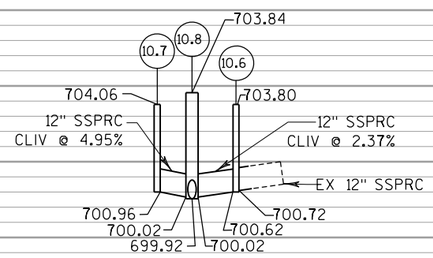


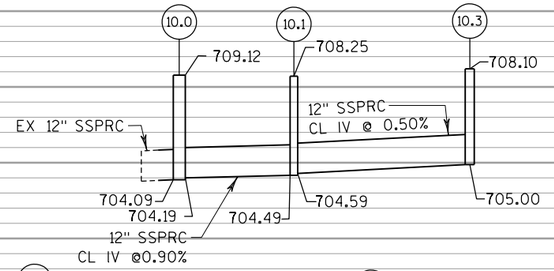


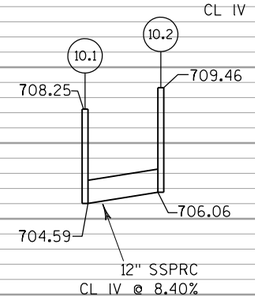
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STORM SEWER	SHEET 77	E

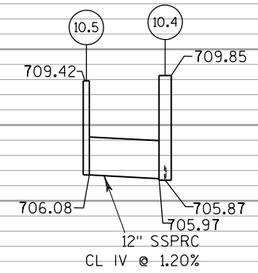
CONTRACOR TO VERIFY EXISTING PIPE
SIZE IN FIELD BEFORE CONNECTING
WITH CONCRETE COLLARS



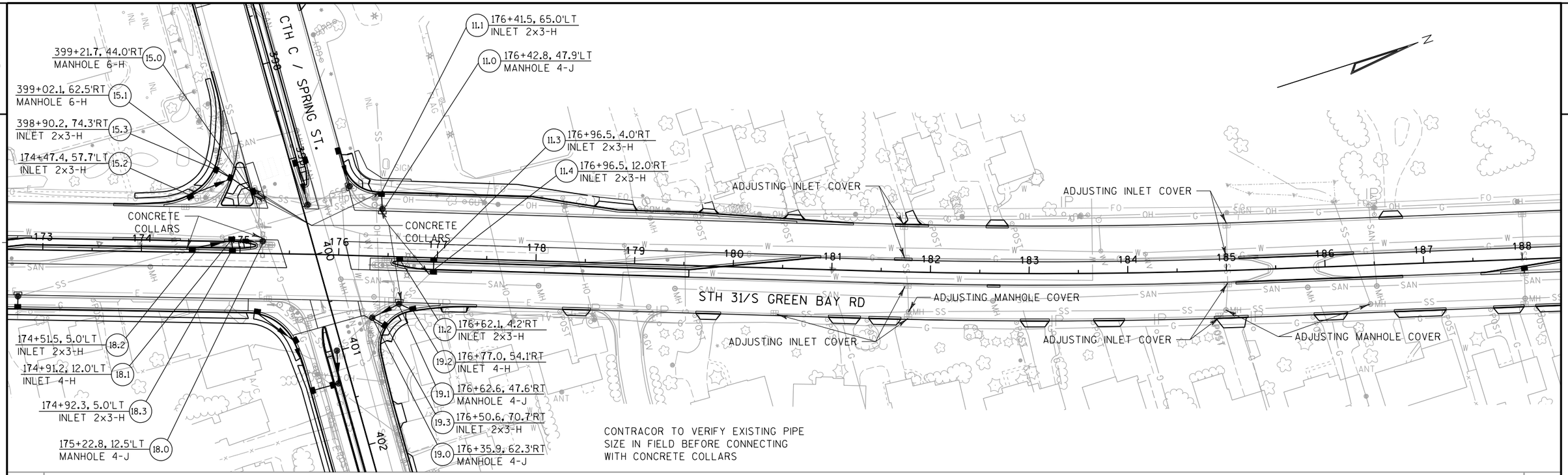


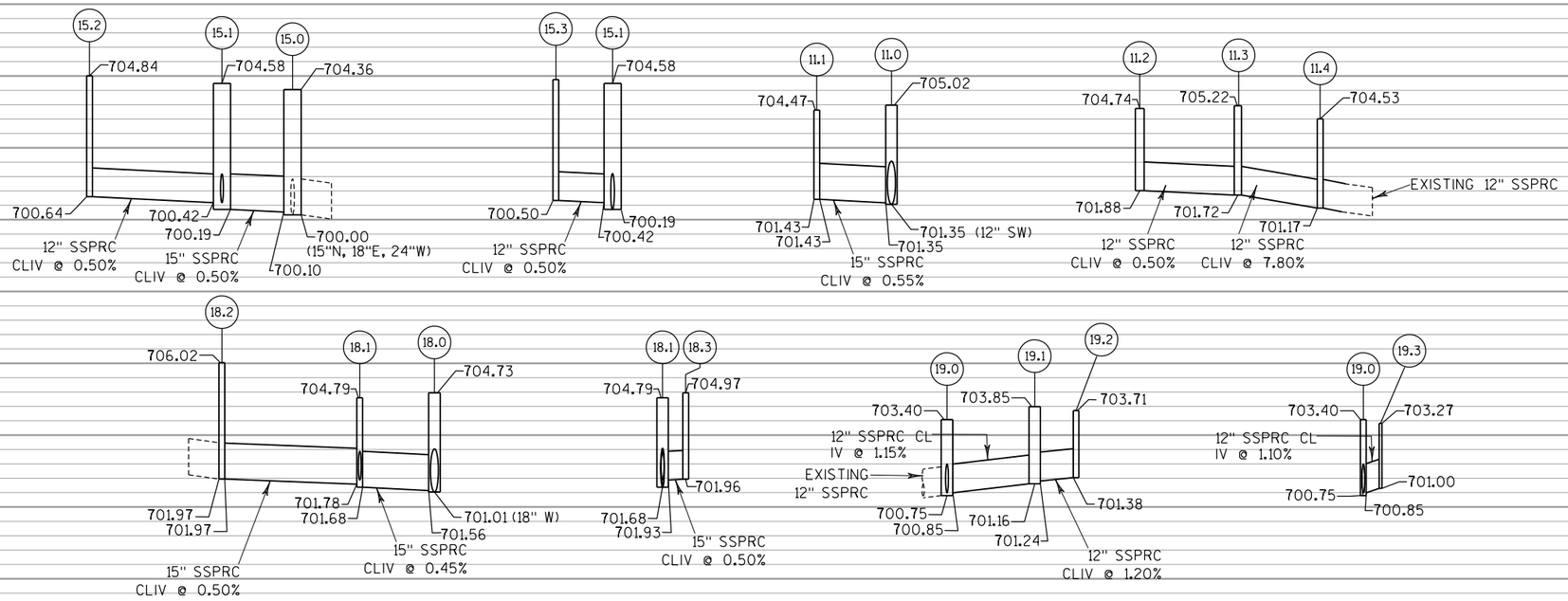






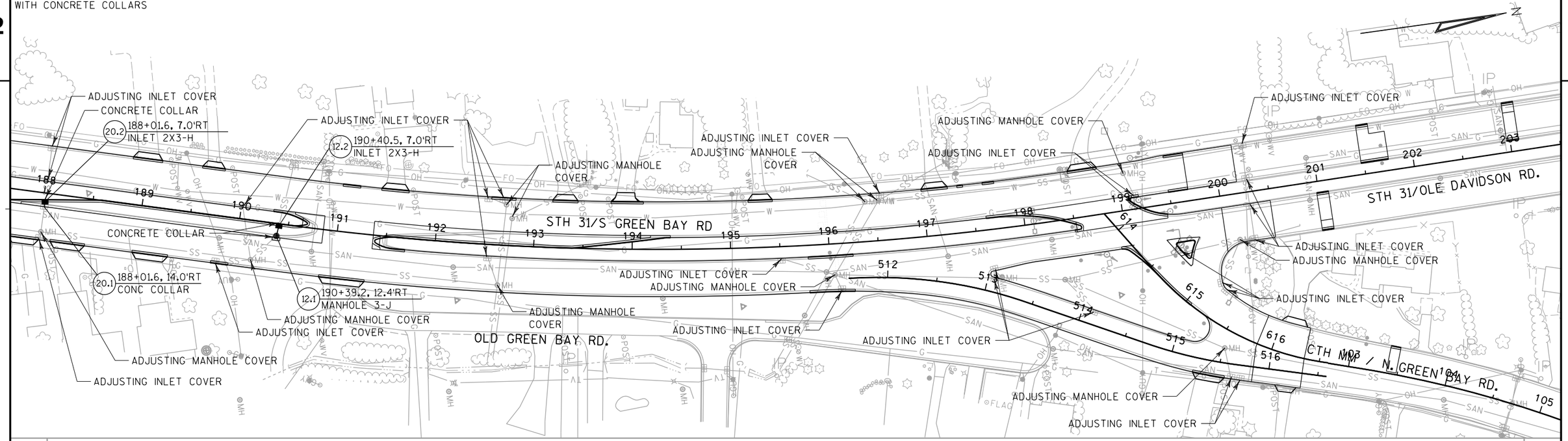
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STORM SEWER	SHEET 78	E

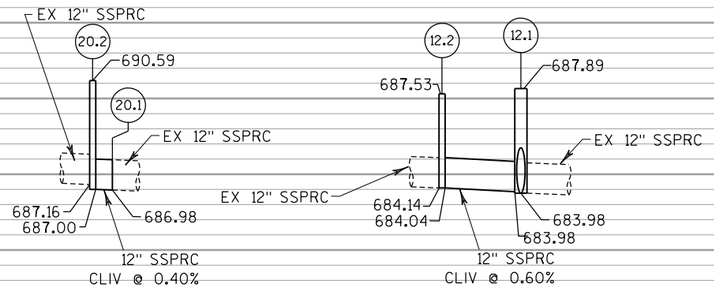




PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STORM SEWER	SHEET 79	E

CONTRACOR TO VERIFY EXISTING PIPE
SIZE IN FIELD BEFORE CONNECTING
WITH CONCRETE COLLARS



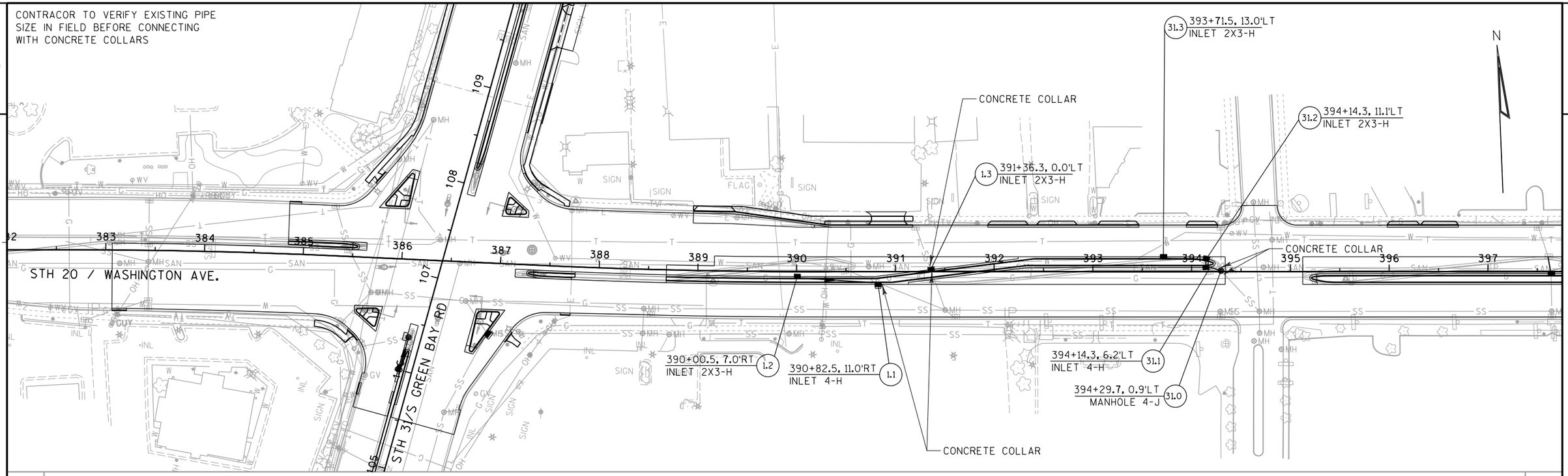


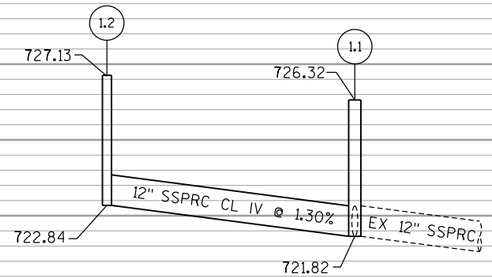
PROJECT NO:2390-09-70	HWY:STH 31	COUNTY:RACINE	STORM SEWER	SHEET 80	E

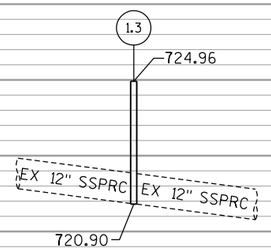
FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\022507_ss.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:100

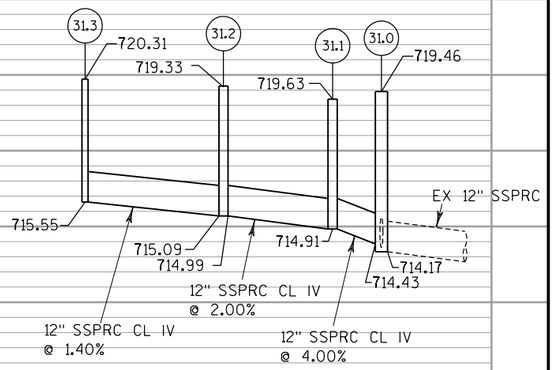
WISDOT/CADDS SHEET 41

CONTRACOR TO VERIFY EXISTING PIPE SIZE IN FIELD BEFORE CONNECTING WITH CONCRETE COLLARS



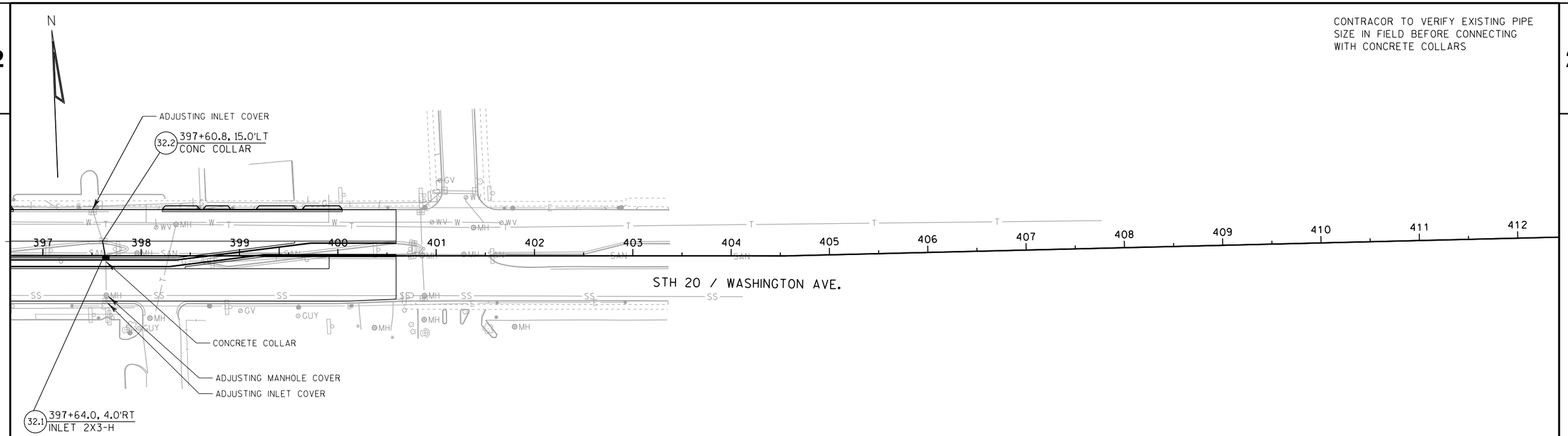


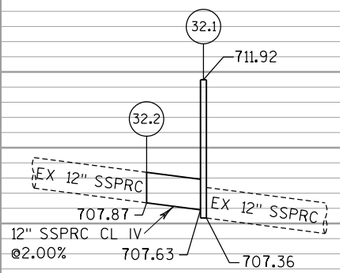




PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STORM SEWER	SHEET 81	E

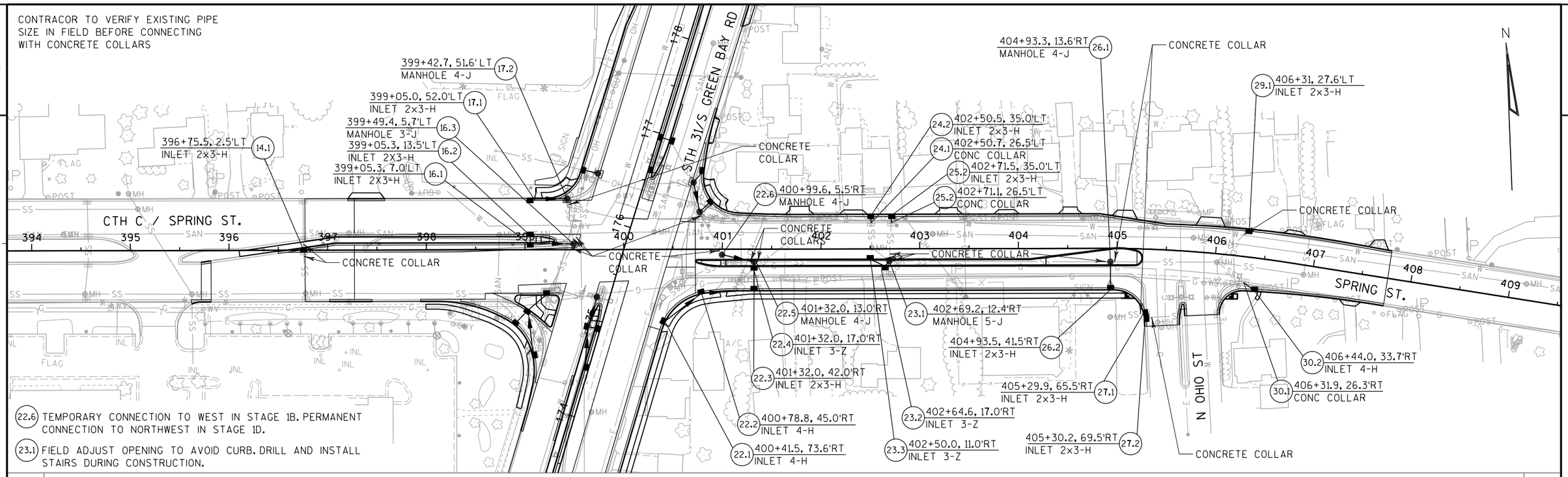
CONTRACOR TO VERIFY EXISTING PIPE SIZE IN FIELD BEFORE CONNECTING WITH CONCRETE COLLARS





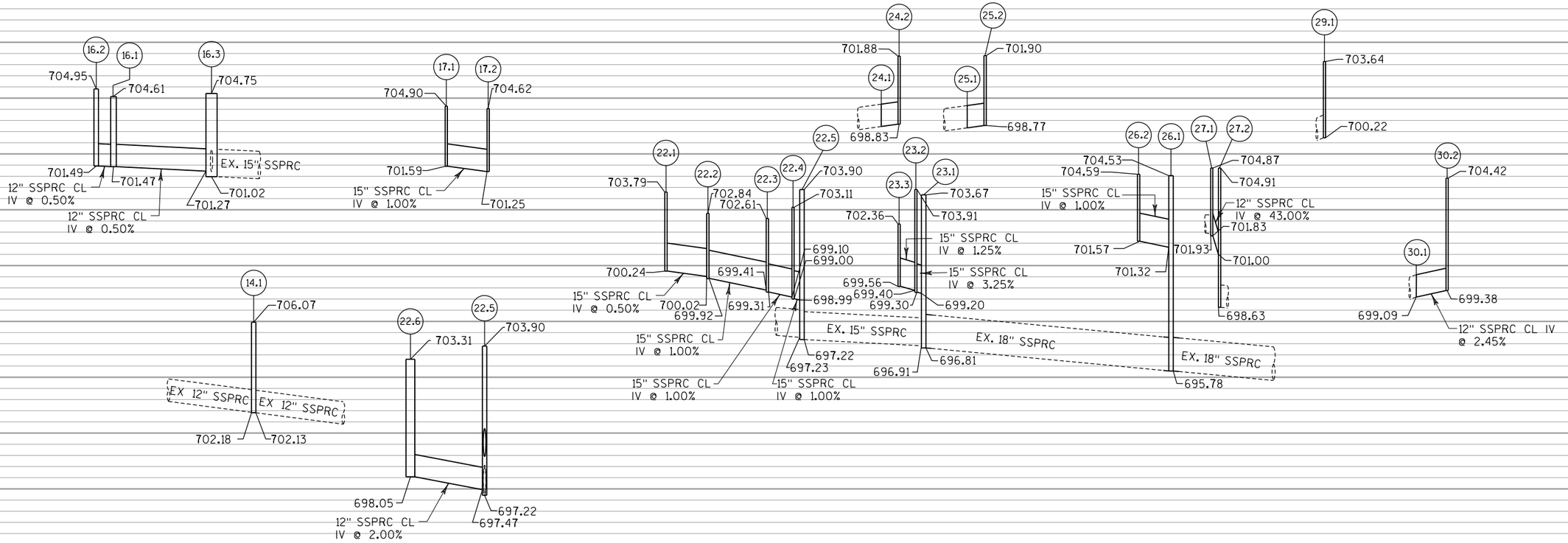
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STORM SEWER	SHEET 82	E

CONTRACOR TO VERIFY EXISTING PIPE SIZE IN FIELD BEFORE CONNECTING WITH CONCRETE COLLARS



(22.6) TEMPORARY CONNECTION TO WEST IN STAGE 1B. PERMANENT CONNECTION TO NORTHWEST IN STAGE 1D.

(23.1) FIELD ADJUST OPENING TO AVOID CURB. DRILL AND INSTALL STAIRS DURING CONSTRUCTION.



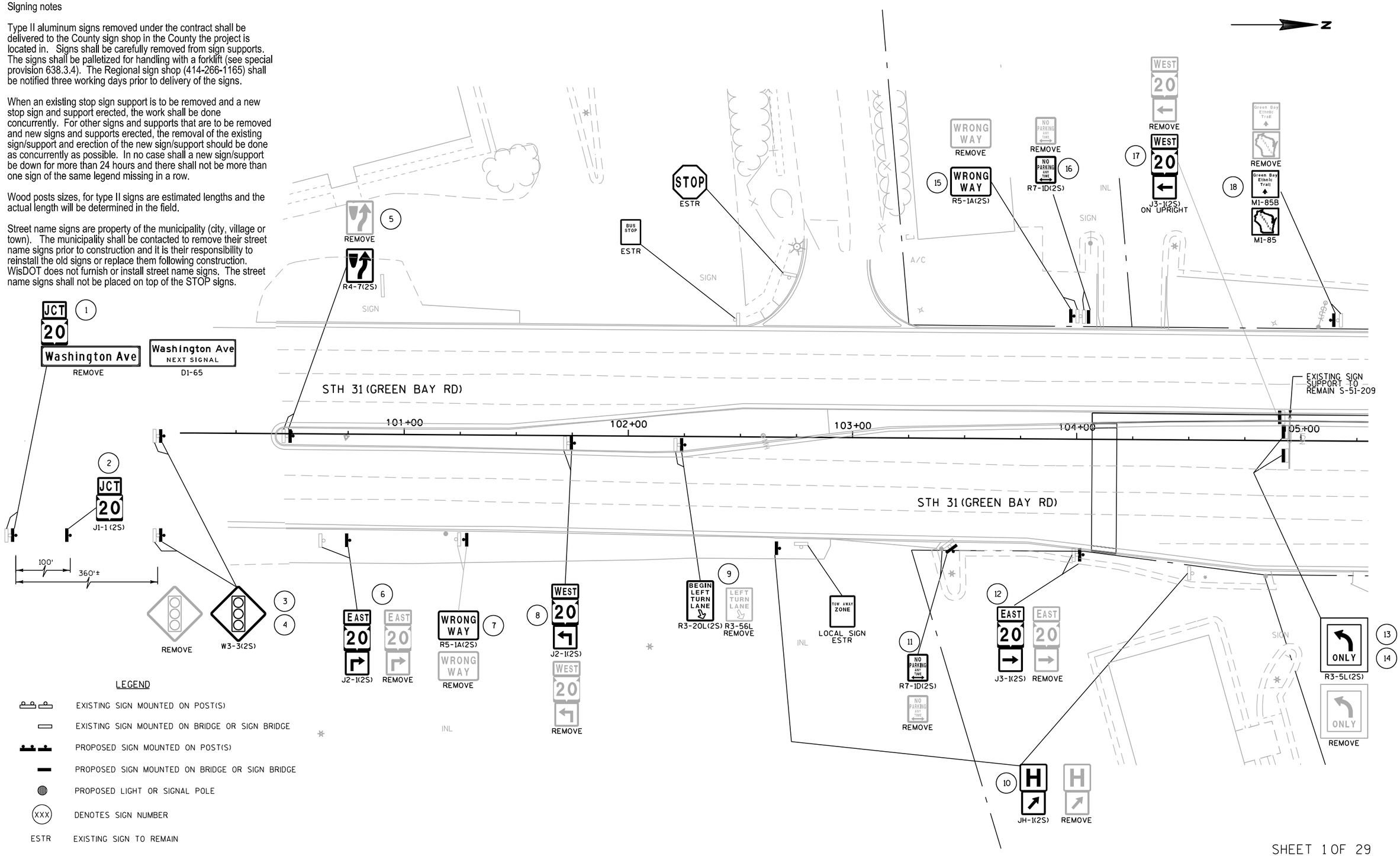
Signing notes

Type II aluminum signs removed under the contract shall be delivered to the County sign shop in the County the project is located in. Signs shall be carefully removed from sign supports. The signs shall be palletized for handling with a forklift (see special provision 638.3.4). The Regional sign shop (414-266-1165) shall be notified three working days prior to delivery of the signs.

When an existing stop sign support is to be removed and a new stop sign and support erected, the work shall be done concurrently. For other signs and supports that are to be removed and new signs and supports erected, the removal of the existing sign/support and erection of the new sign/support should be done as concurrently as possible. In no case shall a new sign/support be down for more than 24 hours and there shall not be more than one sign of the same legend missing in a row.

Wood posts sizes, for type II signs are estimated lengths and the actual length will be determined in the field.

Street name signs are property of the municipality (city, village or town). The municipality shall be contacted to remove their street name signs prior to construction and it is their responsibility to reinstall the old signs or replace them following construction. WisDOT does not furnish or install street name signs. The street name signs shall not be placed on top of the STOP signs.



LEGEND

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

SHEET 1 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

2

LEGEND

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

19 SOUTH 31 SOUTH 31 REMOVE J3-1(2S)
20 REMOVE
21 ONE WAY R6-2L(2M)
22 20 Washington Ave M1-94S ON MAST ARM
410 STOP REMOVE
STOP R1-1F(3)
YIELD R1-2(2S) ON LIGHT POLE
23 REMOVE W12-1D(2S) 2' MOUNT HEIGHT
24 DO NOT ENTER R5-1(2S) ON SIGNAL POLE
25 REMOVE R4-7(2S)
26 STOP R1-1F(3)
STOP REMOVE
58 WEST 20 REMOVE J4-1(2S)
56 31 S Green Bay Rd M1-94S ON MAST ARM
YIELD REMOVE
55 YIELD R1-2(2S) ON LIGHT POLE
57 ONE WAY R6-2L(2M) ON SIGNAL POLE
54 REMOVE W12-1D(2S) 2' MOUNT HEIGHT
59 ONLY REMOVE
60 ONLY R3-5L(2S)
SIGN
385+00
386+00
387+00
388+00
55'
INL
ONLY
STH 20 (WASHINGTON AVE)
STH 31 (GREEN BAY RD)
29 REMOVE R4-7(2S)
27 DO NOT ENTER
28 REMOVE
53 DO NOT ENTER R5-1(2S) ON SIGNAL POLE
52 STOP R1-1F(3)
STOP REMOVE
51 R4-7(2S) REMOVE
EXISTING SIGN SUPPORT TO REMAIN S-51-210
61 EAST 20 J3-1(2S) ON UPRIGHT
EAST 20 REMOVE
63 BEGIN LEFT TURN LANE R3-20L(2S)
105+00
106+00
107+00
108+00
109+00
110+00
30 STOP REMOVE
STOP R1-1F(3)
31 STOP REMOVE
R1-1F(3) ON SIGNAL POLE
32 REMOVE W12-1D(2S) 2' MOUNT HEIGHT
36 31 S Green Bay Rd M1-94S ON MAST ARM
47
48
DO NOT ENTER REMOVE
STOP REMOVE
50 ONE WAY R6-2L(2M) ON SIGNAL POLE
49 STOP R1-1F(3)
STOP REMOVE
M1-94S ON MAST ARM
20 Washington Ave
45
62 SPEED LIMIT 35 R2-1(2S)
SPEED LIMIT 35 REMOVE
STH 31 (GREEN BAY RD)
TOW AWAY ZONE LOCAL SIGN ESTR
33 DO NOT ENTER R5-1 REMOVE
34 YIELD R1-2 ON LIGHT POLE
SIGN
YIELD R1-2 REMOVE
35 DO NOT ENTER R5-1 ON SIGNAL POLE
SPEED LIMIT 35 REMOVE
37 SPEED LIMIT 35 R2-1(2S)
38 ONE WAY R6-2L(2M) ON SIGNAL POLE
39 R4-7(2S) REMOVE
40 STOP R1-1F(3)
STOP REMOVE
41 W12-1D(2S) 2' MOUNT HEIGHT
REMOVE
42 STOP R1-1F(3)
STOP REMOVE
43 YIELD R1-2(2S) ON LIGHT POLE
YIELD REMOVE
44 DO NOT ENTER R5-1(2S) ON SIGNAL POLE
46 NORTH 31 J4-1(2S) REMOVE
NORTH 31
M1-85
Green Bay Ethnic Trail
M1-85B REMOVE NO LONGER ALLOWED PER STATEWIDE POLICY
64 SPEED LIMIT 35 R2-1(2S)
65 NO PARKING ANY TIME R7-1D(2S)
SPEED LIMIT 35 NO PARKING ANY TIME REMOVE

SHEET 2 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

2

N

STH 31 (GREEN BAY RD)

111+00 112+00 113+00 114+00 115+00 116+00

11+00 12+00

S. NEWMAN ROAD

S GREEN BAY RD
NEWMAN RD
STREET NAME SIGNS BY OTHERS

66 BEGIN LEFT TURN LANE R3-20L(2S)
REMOVE LEFT TURN LANE

67 EAST WEST 20 20 J2-2 (2S)
REMOVE EAST WEST 20 20

68 ONLY ONLY ONLY REMOVE

69 WRONG WAY R5-1A(2S)

70 JCT 20 J1-1 (2S)

71 JCT 20 J1-1 (2S)

72 Newman Rd M1-94S ON MAST ARM

73 ONE WAY R6-2L(2S) ON SIGNAL POLE

74 REMOVE

75 DO NOT ENTER R5-1(2S) ON SIGNAL POLE

76 ONLY REMOVE
ONLY R3-8A(2S)

77 STOP REMOVE

78 STOP R1-1F(3) ON SIGNAL POLE

79 REMOVE
R4-7(2S) ON SIGNAL POLE

80 STOP REMOVE

81 STOP R1-1F(3) ON SIGNAL POLE
R4-7(2S) ON SIGNAL POLE
REMOVE

82 STOP REMOVE

STOP R1-1F(3) ON SIGNAL POLE

83 DO NOT ENTER R5-1(2S) ON SIGNAL POLE

84 31 S Green Bay Rd M1-94S ON MAST ARM

85 LEFT TURN YIELD ON FLASHING YELLOW ARROW

86 R10-50(2S) ON MAST ARM

87 DIVIDED HIGHWAY R6-3(2S)
DIVIDED HIGHWAY REMOVE

88 STOP R1-1F(3) ON SIGNAL POLE
STOP REMOVE

89 Newman Rd M1-94H ON MAST ARM

90 ONE WAY R6-2L(2S)

91 REMOVE
R4-7(2S) ON SIGNAL POLE

92 STOP R1-1F(3) ON SIGNAL POLE
STOP REMOVE

93 31 S Green Bay Rd M1-94S ON MAST ARM

94 STOP REMOVE
STOP R1-1F(3) ON SIGNAL POLE

95 DO NOT ENTER R5-1(2S) ON SIGNAL POLE

96 ONLY ONLY R3-8E ON LIGHT POLE
ONLY ONLY REMOVE

411 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50(2S) ON MAST ARM

412 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50(2S) ON MAST ARM

NO PARKING ESTR (VILLAGE SIGN)

INL

LEGEND

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

SHEET 3 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

2

LEFT TURN LANE
REMOVE

98
BEGIN LEFT TURN LANE
R3-20L(2S)

REMOVE

99
100
W3-3
36" X 36"

SPEED LIMIT 35
REMOVE

SPEED LIMIT 35
101
R2-1(2S)

97
WRONG WAY
R5-1A(2S)

NO PARKING ANY TIME
102
REMOVE

STH 31 (GREEN BAY RD)

117+00 118+00 119+00 120+00 121+00 122+00

SPEED LIMIT 35
REMOVE

SPEED LIMIT 35
103
R2-1(2S)

STH 31 (GREEN BAY RD)

104
SPEED LIMIT 35
R2-1(2S)

SPEED LIMIT 35
REMOVE

105
NO PARKING ANY TIME
MOVE

SPEED LIMIT 35
106
R2-1(2S)

SPEED LIMIT 35
REMOVE

LEGEND

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

SHEET 4 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023204_ps.dgn PLOT DATE : 27-JUL-2016 07:48 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

2

2

LEGEND

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

N

STH 31 (GREEN BAY RD)

123+00 V 124+00 125+00 126+00 127+00 128+00

NO PARKING ANY TIME ESTR

ONE WAY 109 R6-2L(2S)

110 R4-7(2S)

ONE WAY 117 R6-2R(2S)

NO PARKING ANY TIME ESTR

108 R4-7(2S)

REMOVE

NO PARKING ANY TIME REMOVE

NO PARKING ANY TIME ESTR

NO PARKING ANY TIME 113 R7-1D (2S)

KINZIE AVE
S GREEN BAY RD
STREET NAME SIGN BY OTHERS

115 MOVE

STH 31 (GREEN BAY RD)

NO PARKING ANY TIME ESTR

DO NOT ENTER 107 R5-1(2S)

TRUCK ROUTE LOCAL SIGN ESTR

111 STOP R1-1(3)

STOP REMOVE

112 DIVIDED HIGHWAY R6-3(2S)

DIVIDED HIGHWAY REMOVE

114 STOP R1-1(3)

STOP REMOVE

116 STOP R1-1(3)

STOP REMOVE

KINZIE AVE

SHEET 5 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023205_ps.dgn PLOT DATE : 27-JUL-2016 07:48 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

2

WESTMORE DR

N

LEGEND

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

R5-2
DEAF CHILD AREA
ESTR

118 STOP REMOVE
STOP R1-1(3)

119 DIVIDED HIGHWAY REMOVE
DIVIDED HIGHWAY R6-3(2S)

122 DO NOT ENTER R5-1(2S)

131 SPEED LIMIT 35 R2-1(2S)
SPEED LIMIT 35 REMOVE

130 NO PARKING ANY TIME MOVE

WESTMORE DR
S GREEN BAY RD
STREET NAME SIGNS ESTR

120 R4-7(2S)

STH 31 (GREEN BAY RD)

125 SPEED LIMIT 35 REMOVE
SPEED LIMIT 35 R2-1(2S)

129 SPEED LIMIT 35 REMOVE
SPEED LIMIT 35 R2-1(2S)

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

ESTR

121 REMOVE R4-7(2S)

123 ONE WAY R6-2L(2S)

124 ONE WAY REMOVE

128 ONE WAY R6-2R (2S)

STH 31 (GREEN BAY RD)

132 REMOVE R4-7(2S)

126 SPEED LIMIT 35 REMOVE
SPEED LIMIT 35 R2-1(2S)

127 NO PARKING ANY TIME MOVE

133 DO NOT ENTER R5-1(2S)

SHEET 6 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023206_ps.dgn PLOT DATE : 27-JUL-2016 07:48 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

LEGEND

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

N

134 ONE WAY R6-2L(2S)

NO PARKING ANY TIME ESTR

SPEED LIMIT 35 REMOVE

139 SPEED LIMIT 35 R2-1(2S)

140 NO PARKING ANY TIME MOVE

141 SPEED LIMIT 35 R2-1(2S)

SPEED LIMIT 35 REMOVE

STH 31 (GREEN BAY RD)

135+00 136+00 137+00 138+00 139+00 140+00

S GREEN BAY RD

GRACELAND BLVD

STREET NAME SIGNS BY OTHERS

138 R4-7(2S)

135 DIVIDED HIGHWAY R6-3(2S)

136 137 STOP R1-1(3)

STOP REMOVE

NO PARKING ANY TIME ESTR

STH 31 (GREEN BAY RD)

SPEED LIMIT 35 REMOVE

142 SPEED LIMIT 35 R2-1(2S)

SPEED LIMIT 35 REMOVE

143 SPEED LIMIT 35 R2-1(2S)

144 NO PARKING ANY TIME MOVE

GRACELAND BLVD

SHEET 7 OF 29

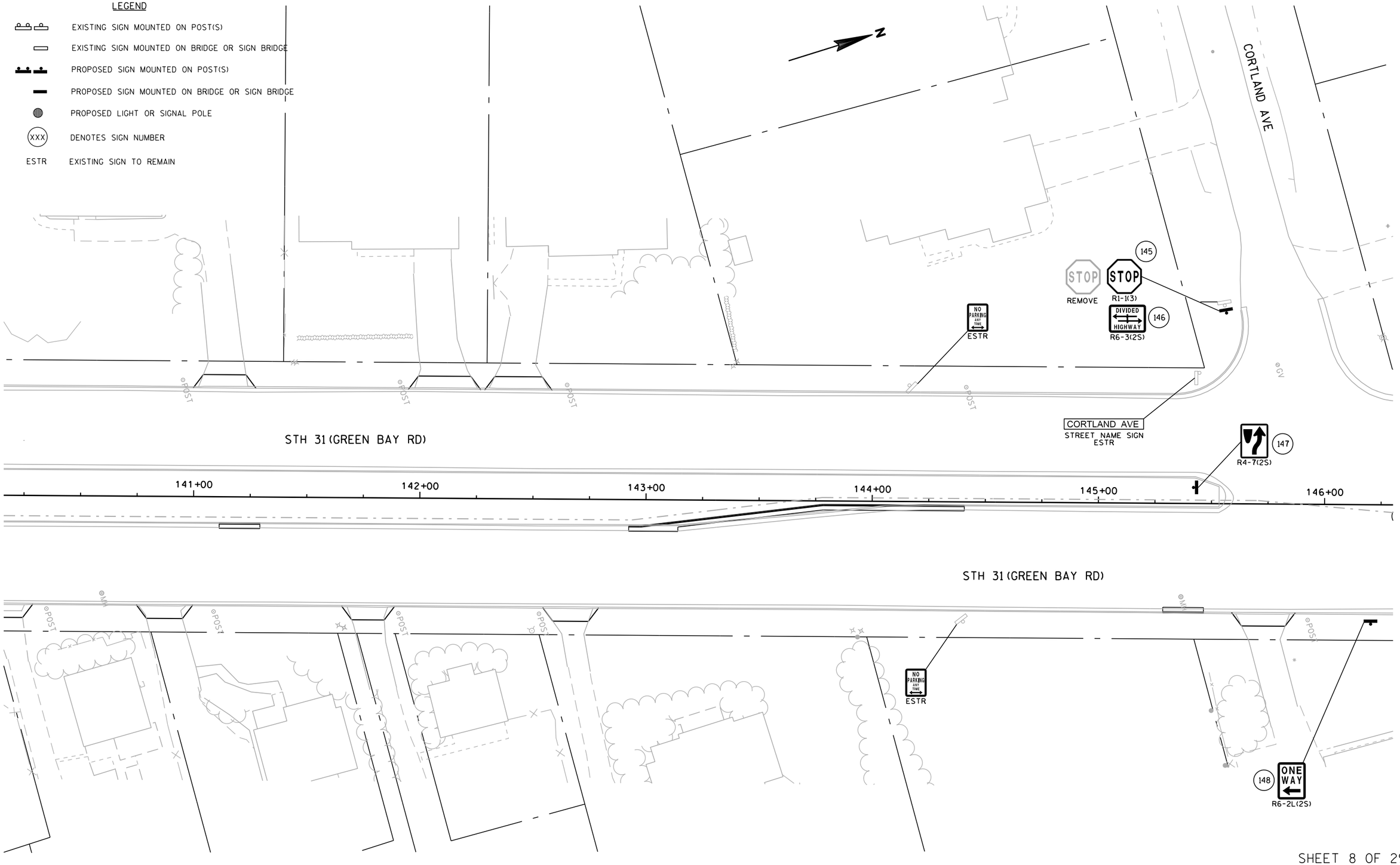
PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023207_ps.dgn PLOT DATE : 27-JUL-2016 07:48 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

2

LEGEND

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



SHEET 8 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023208_ps.dgn PLOT DATE : 27-JUL-2016 07:48 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

2

2

LEGEND

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

N

DO NOT ENTER 149 R5-1(2S)

NO PARKING ANY TIME ESTR

SPEED LIMIT 35 REMOVE

SPEED LIMIT 35 151 R2-1(2S)

NO PARKING ANY TIME 152 MOVE

STH 31 (GREEN BAY RD)

0 147+00 148+00 149+00 150+00 151+00 152+00

R4-7(2S) REMOVE 150

SPEED LIMIT 35 REMOVE SPEED LIMIT 35 153 R2-1(2S)

156 SPEED LIMIT 35 R2-1(2S) SPEED LIMIT 35 REMOVE

STH 31 (GREEN BAY RD)

NO PARKING ANY TIME ESTR

SPEED LIMIT 35 REMOVE SPEED LIMIT 35 154 R2-1(2S)

NO PARKING ANY TIME 155 MOVE

SHEET 9 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023209_ps.dgn PLOT DATE : 27-JUL-2016 07:48 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

2

2

LEGEND

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

N

ONE WAY 162
R6-2L(2S)

NO PARKING ANY TIME
ESTR

POST

REMOVE R4-7(2S) 161

REMOVE R4-7(2S) 163

STH 31 (GREEN BAY RD)

52+00 153+00 154+00 155+00 156+00 157+08 158+00

S GREEN BAY RD
RIDGEWAY AVE
STREET NAME SIGNS
ESTR

NEIGHBORHOOD WATCH
ESTR

STH 31 (GREEN BAY RD)

POST POST POST POST POST

LUTHERAN CHURCH RESURRECTION 1 BLOCK 158
REMOVE ILLEGAL SIGN

NO PARKING ANY TIME 159
MOVE

DO NOT ENTER 160
R5-1(2S)

RIDGEWAY AVE

STOP REMOVE

STOP 164
R1-1(3)

DIVIDED HIGHWAY 165
R6-3(2S)

SHEET 10 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

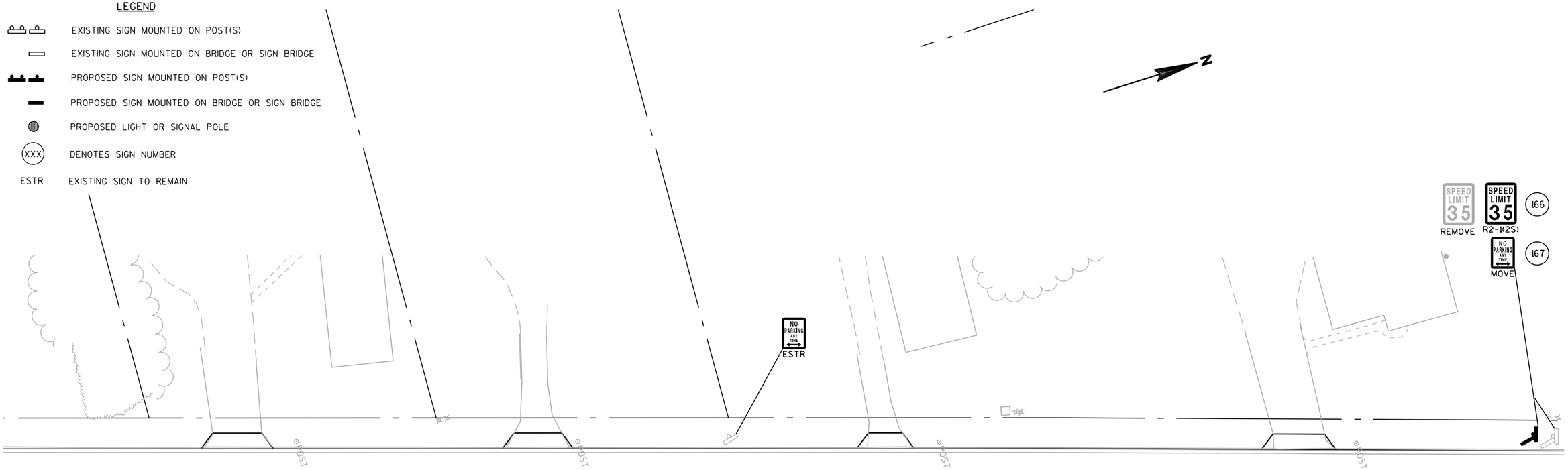
PROPOSED SIGN MOUNTED ON POST(S)

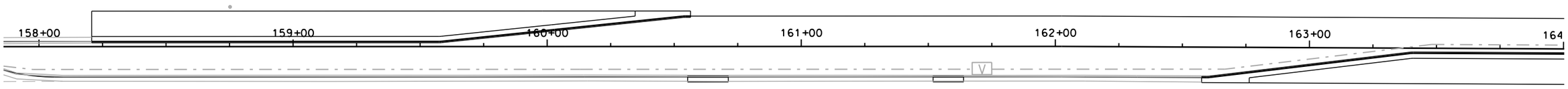
PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

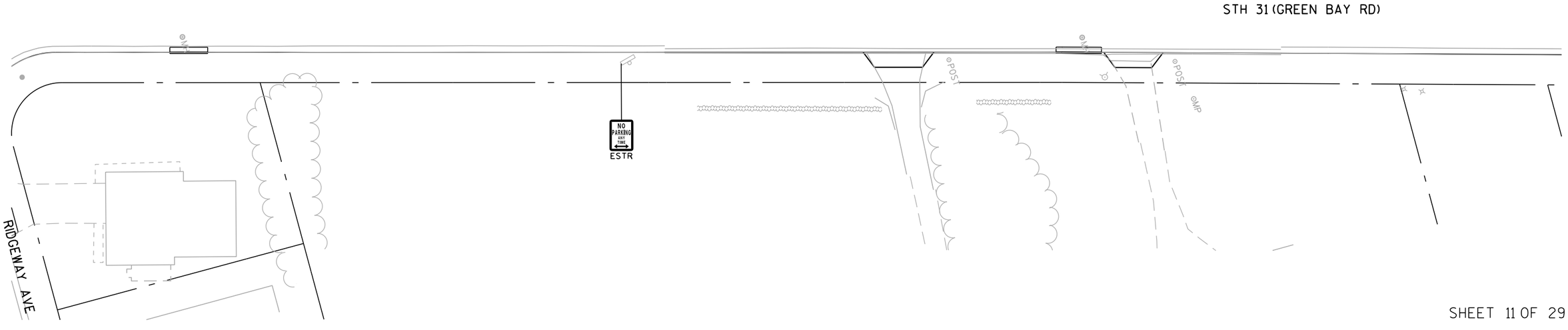
PROPOSED LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

ESTR EXISTING SIGN TO REMAIN







SHEET 11 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023211_ps.dgn PLOT DATE : 27-JUL-2016 07:48 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

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

SHIRLEY AVE

STH 31 (GREEN BAY RD)

SHIRLEY AVE
S GREEN BAY RD
STREET NAME SIGN BY OTHERS

SHIRLEY AVE
STREET NAME SIGN BY OTHERS

Spring St
NEXT SIGNAL

Spring St

STH 31 (GREEN BAY RD)

SHIRLEY AVE

INL

POS

MH

D1-65

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

169 SPEED LIMIT 35 R2-1(2S)
SPEED LIMIT 35 REMOVE

170 STOP R1-1(3) ON SIGNAL POLE
STOP REMOVE

171 DIVIDED HIGHWAY R6-3(2S)

172 ONE WAY R6-2L(2S)

173 R4-7(2S)
REMOVE

174 SPEED LIMIT 35 R2-1(2S)
SPEED LIMIT 35 REMOVE

175 NO PARKING TIME MOVE

176 DO NOT ENTER R5-1(2S)

177 DO NOT ENTER R5-1(2S)

178 R4-7(2S)
REMOVE

179 ONE WAY R6-2L(2S)

180 STOP R1-1(3)
STOP REMOVE

181 DIVIDED HIGHWAY R6-3(2S)

182 JCT COUNTY C

183 JCT COUNTY C J1-1(2S)

184 Spring St NEXT SIGNAL

185 JCT COUNTY C

186 Spring St NEXT SIGNAL D1-65

187 ONE WAY R6-2R(2S)

188 W3-3 36" X 36"

189 W3-3 36" X 36"
REMOVE

190 W12-1D(2S) 2' MOUNT HEIGHT

191 ONE WAY R6-2R(2S)

192 DO NOT ENTER R5-1(2S)

193 R4-7(2S)

194 R3-2(2S)

195 R4-7(2S)
REMOVE

SHEET 12 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023212_ps.dgn PLOT DATE : 12-SEP-2016 13:35 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

LEGEND

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

N

STH 31 (GREEN BAY RD)

CTH C (SPRING ST)

SUNNYSIDE AVE

S GREEN BAY RD

STREET NAME SIGN BY OTHERS

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

196 DO NOT ENTER R5-1(2S)

197 REMOVE

198 W12-1D(2S) 2' MOUNT HEIGHT

199 NO PARKING (TIME) MOVE

200 SPEED LIMIT 35 R2-1(2S)

201 SPEED LIMIT 35 REMOVE

202 BEGIN LEFT TURN LANE R3-20L(2S)

203 SPONSOR 155-56 MOVE

204 SOUTH 31 REMOVE

204 SOUTH 31 J4-1(2S)

205 NO PARKING (TIME) MOVE

206 YIELD REMOVE

206 YIELD R1-2 ON LIGHT POLE

207 W12-1D(2S) 2' MOUNT HEIGHT

208 DO NOT ENTER R5-1(2S) ON SIGNAL POLE

209 STOP REMOVE

209 STOP R1-1F(3) ON SIGNAL POLE

210 © Spring St

211 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50(2S)

212 STOP REMOVE

212 STOP R1-1F(3) ON SIGNAL POLE

213 25'

214 50'

215 ONE WAY R6-2L(2M)

216 STOP R1-1F(3) ON SIGNAL POLE

216 STOP REMOVE

217 DO NOT ENTER R5-1(2S) ESTR

218 ONE WAY R6-2L(2M)

219 STOP R1-1F(3) ON SIGNAL POLE

219 STOP REMOVE

220 WEST EAST COUNTY C C J3-2(2S) ON SIGNAL POLE

221 WRONG WAY R5-1A(2S)

222 BEGIN LEFT TURN LANE R3-20L(2S)

222 BEGIN LEFT TURN LANE REMOVE

223 NO PARKING (TIME) REMOVE

224 WEST EAST COUNTY C C J2-2(2S)

224 WEST EAST COUNTY C C REMOVE

225 R4-7(2S)

226 R3-2(2S)

227 STOP R1-1(3)

227 STOP REMOVE

228 RIGHT TURN ONLY R3-53R(2S)

SHEET 13 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

2

LEGEND

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

N

SPRING ST

176+00 177+00 178+00 179+00 180+00 181+00

400+00 401+00

STH 31 (GREEN BAY RD)

COUNTRY CLUB DR

229 230 S Green Bay Rd M1-94S ON MAST ARM

231 ONE WAY R6-2L(2M)

232 DO NOT ENTER R5-1(2S) ON SIGNAL POLE

233 STOP R1-1F(3) ON SIGNAL POLE; STOP REMOVE

234 STOP R1-1F(3); STOP REMOVE

235 REMOVE; R4-7(2S)

236 EAST COUNTY C; WEST COUNTY C J3-2 REMOVE

237 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50(2S) ON MAST ARM

238 WRONG WAY R5-1A(2S)

239 WEST COUNTY C J3-1(2S)

240 EAST COUNTY C J3-1(2S)

241 BEGIN LEFT TURN LANE REMOVE; BEGIN LEFT TURN LANE R3-20L

242 WEST COUNTY C; EAST COUNTY C REMOVE

243 NO PARKING (TIME) MOVE FROM STA. 182+25

244 H JH-1(2S)

245 ONLY ONLY R3-8Y(2S)

246 SPEED LIMIT 35 R2-1(2S)

247 SPEED LIMIT 35 REMOVE

248 SPONSOR MOVE

249 NORTH 31 J4-1(2S)

250 ONE WAY R6-2L(2S) ON SIGNAL POLE

251 C Spring St M1-94S ON MAST ARM

252 DO NOT ENTER R5-1(2S) ON SIGNAL POLE

253 STOP R1-1F(3) ON SIGNAL POLE; STOP REMOVE

254 STOP R1-1F(3) ON SIGNAL POLE

255 R4-7(2S) ON SIGNAL POLE

LOCAL SIGN

COUNTRY CLUB DR
PRIVATE
STREET NAME SIGN BY OTHERS

SHEET 14 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023214_ps.dgn PLOT DATE : 27-JUL-2016 07:48 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

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

256 257 EAST COUNTY C WEST COUNTY C
J2-2(2S)

NO PARKING (TIME) 243
MOVE TO STA 181+25

REMOVE
258 259
W3-3(2S)

JCT COUNTY C
Spring St
REMOVE

264 SPEED LIMIT 35 R2-1(2S) SPEED LIMIT 35 REMOVE

NO PARKING (TIME) 265
MOVE

STH 31 (GREEN BAY RD)

Spring St NEXT SIGNAL 260 261
D1-65

JCT COUNTY C 262 263
J1-1(2S)

SPEED LIMIT 35 R2-1(2S) SPEED LIMIT 35 REMOVE 266 267

182+00 183+00 184+00 185+00 186+00 187+00

STH 31 (GREEN BAY RD)

NO PARKING (TIME)
ESTR

268
SPEED LIMIT 35 R2-1(2S) SPEED LIMIT 35 REMOVE

SHEET 15 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

2

LEGEND

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

N

NO PARKING (TIME) ESTR

STH 31 (GREEN BAY RD)

269 JCT COUNTY MM J1-1(2S)

188+00 189+00 190+00 191+00 192+00 193+00

277 R3-6R(2S)

REMOVE

279 280 W3-3(2S)

STH 31 (GREEN BAY RD)

REMOVE 273 R4-7(2S)

275 R4-7(2S)

278 ONLY R3-5R(2S)

OVERHEAD SIGN SUPPORT STA 191+85 S-51-239

OLD GREEN BAY ROAD

274 STOP REMOVE STOP R1-1(3)

HWY 38 EASTBOUND TRUCK TRAFFIC FOLLOW HWY 31 TO HWY 38 272 MOVE

270 JCT COUNTY MM J1-1(2S) JCT COUNTY MM REMOVE

271 NO PARKING (TIME) MOVE

W1-6 ESTR

W1-6 ESTR

276 NORTH COUNTY MM J2-1(2S) ON UPRIGHT

North COUNTY MM REMOVE

RIGHT LANE MUST TURN RIGHT 281 R3-7R(3)

RIGHT LANE MUST TURN RIGHT REMOVE

SHEET 16 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023216_ps.dgn PLOT DATE : 27-JUL-2016 13:51 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

ESTR EXISTING SIGN TO REMAIN

N

STH 31 (GREEN BAY RD)

193+00

194+00

195+00

196+00

197+00

198+00

199

OLD GREEN BAY ROAD

512+00

513+00

514+00

CTH MM (N GREEN BAY RD)

STH 31 (OLE DAVIDSON RD)

GREENBAY RD

STREET NAME SIGN BY OTHERS

NO PARKING (TIME) ESTR

NO PARKING (TIME) ESTR

RIGHT LANE MUST TURN RIGHT 282

R3-7R(3)

SPEED LIMIT 35 285

R2-1(2S) OVERSIZED - FIRST SIGN IN REDUCED SPEED ZONE

SPEED LIMIT 35 286

REMOVE

STOP 290

REMOVE

STOP

R1-1F(3) ON SIGNAL POLE

REMOVE 296

R4-7(2S)

WRONG WAY

REMOVE

WRONG WAY 287

R5-1A(2S)

NO TURNS 291

R3-3(2S)

STOP 292

R1-1F(3) ON SIGNAL POLE

NORTH COUNTY MM

REMOVE

NORTH COUNTY MM 283

J3-1(2S)

CLASS B WEIGHT LIMIT 284

MOVE

NORTH COUNTY MM

REMOVE

NORTH COUNTY MM 288

W12-1D(2S) 2' MOUNT HEIGHT 289

293 294 295

W1-8(2S) 2' MOUNT HEIGHT

REMOVE

DO NOT ENTER 297

R5-1(2S)

SHEET 17 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023217_ps.dgn PLOT DATE : 27-JUL-2016 07:49 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

N

299 SOUTH 31 J3-1(2S)

REMOVE SOUTH 31

298 ONE WAY R6-2L(2S)

STOP REMOVE

301 STOP R1-1F(3) ON SIGNAL POLE

302 R8-18(2S) REMOVE

303 STOP R1-1F(3) ON SIGNAL POLE

STOP REMOVE

DO NOT ENTER REMOVE

300 DO NOT ENTER R5-1(2S)

WRONG WAY REMOVE

321 WRONG WAY R5-1A(2S)

322 NO PARKING ANY TIME R7-1D

323 NO PARKING ANY TIME REMOVE

EXCEPT LEGAL HOLIDAYS MOVE

ONE WAY R6-2R ESTR

198+00 199+00 200+00 201+00 202+00 203+00

STH 31 (OLE DAVIDSON RD)

DO NOT ENTER REMOVE

304 DO NOT ENTER R5-1(2S)

305 R4-7(2S)

OLE DAVIDSON RD

STREET NAME SIGN BY OTHERS

307 STOP R1-1F(3) ON SIGNAL POLE

STOP REMOVE

306 ONE WAY R6-2R(2S)

317 YIELD R1-2(2S)

YIELD REMOVE

309 NO TURNS STOP REMOVE

DO NOT ENTER REMOVE

308 W12-1D(2S) 2' MOUNT HEIGHT

310 311 312 W1-8(2S) 2' MOUNT HEIGHT REMOVE

514+00 515+00 516+00 615+00 616+00

316 R4-7(2S) REMOVE

319 CURB LANE BICYCLES AND RIGHT TURNS ONLY R3-52

CURB LANE BICYCLES AND RIGHT TURNS ONLY REMOVE

320 NORTH 31 J4-1(3)

313 CLASS B WEIGHT LIMIT MOVE

318 Green Bay Ethnic Trail REMOVE NO LONGER ALLOWED PER STATE WIDE POLICY

CTH MM (N GREEN BAY RD)

DO NOT ENTER R5-1(2S)

314

DO NOT ENTER REMOVE

SPEED LIMIT 35 REMOVE

315 SPEED LIMIT 35 R2-1(2S)

LEGEND

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

SHEET 18 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023218_ps.dgn PLOT DATE : 27-JUL-2016 13:54 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

2

N

INL

INL

W3-3(3)

REMOVE

324

325

+00

204+00

205+00

206+00

207+00

208+00

209+00

INL

STH 31 (OLE DAVIDSON RD)

INL

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

ESTR EXISTING SIGN TO REMAIN

SHEET 19 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023219_ps.dgn PLOT DATE : 27-JUL-2016 07:49 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

2

STH 31 (OLE DAVIDSON RD)

SOUTH NORTH
31 31
REMOVE

SOUTH NORTH
31 31
326
J2-2 (2S)

NO PARKING ANY TIME
ESTR

REMOVE
327
W3-3(2S)

CTH MM (N GREEN BAY RD)

616+00

516+00

POST

INL

N

LEGEND

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

SHEET 20 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023220_ps.dgn PLOT DATE : 27-JUL-2016 07:49 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

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

N

STH 20 (WASHINGTON AVE)

380+00 381+00 382+00 383+00 384+00

330 NORTH 31 REMOVE

NORTH 31 / EAST 20 / SOUTH 31 — J2-3 ESTR

328 329 JCT 31 J1-1(2S) — JCT 31 REMOVE

NORTH 31 / SOUTH 31 — J2-2 ESTR

331 EAST 20 J3-1(2S) — EAST 20 REMOVE

332 BEGIN LEFT TURN LANE R3-20L(2S) — LEFT TURN LANE REMOVE

333 WRONG WAY R5-1A(2S)

Racine
Milwaukee
Kenosha
ESTR

NORTH 31 REMOVE — NORTH 31 J3-1(2S) ON UPRIGHT — 334

335 SPEED LIMIT 35 R2-1(2S) ON LIGHT POLE

EXISTING SIGN SUPPORT TO REMAIN S-51-215

ONLY REMOVE — ONLY R3-5L(2S) — 336 337

338 SPEED LIMIT 35 R2-1(2S) — SPEED LIMIT 35 REMOVE

SIGN

INL

FOUND

W

MH

SHEET 21 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023221_ps.dgn PLOT DATE : 12-SEP-2016 13:39 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

2

LEGEND

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

STH 31 (GREEN BAY RD)

STH 20 (WASHINGTON AVE)

388+00 389+00 390+00 391+00 392+00

343 WEST NORTH 20 31 J3-2(2S)

REMOVE WEST NORTH 20 31

344 LEFT TURN LANE REMOVE

345 SOUTH 31 REMOVE

346 347 ONLY R3-5L(2S)

348 BEGIN LEFT TURN LANE R3-20L(2S)

349 W3-3(2S)

REMOVE

340 341 ONLY REMOVE

342 WRONG WAY R5-1A(2S)

353 REMOVE

352 ONE WAY R6-2R(2S)

354 REMOVE

REMOVE OVERHEAD SIGN SUPPORT S-51-208

OVERHEAD SIGN SUPPORT S-51-XXX

351 ONE WAY R6-2R(2S)

339 SOUTH 31 REMOVE

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

350 NO PARKING ANY TIME R7-1D REMOVE

Harbor	4
Downtown	4

ESTR

SHEET 22 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

2

LEGEND

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

N

SYCAMORE AVE

STH 20 (WASHINGTON AVE)

394+00 395+00 396+00 397+00 398+00 399+00

REMOVE STOP

REMOVE STOP (358) R1-1(3)

REMOVE (357) R4-7(2S)

ESTR

(360) ONE WAY R6-2L(2S) ON LIGHT POLE

(361) DO NOT ENTER R5-1(2S)

REMOVE JCT 31

(367) JCT 31 J1-1(2S)

REMOVE JCT 31

(368) JCT 31 J1-1(2S) ON LIGHT POLE

ESTR

(369) (370) REMOVE

(364) (365) SPEED LIMIT 35 R2-1(2S)

SPEED LIMIT 35 REMOVE

REMOVE (362) R4-7(2S)

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

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

WELCOME TO RACINE

ESTR

(359) DO NOT ENTER R5-1(2S)

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

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

NO PARKING ANY TIME REMOVE

WEST RACINE UPTOWN DOWNTOWN HARBOR

ESTR

SOUTH WEST NORTH 31 20 31 REMOVE

SOUTH NORTH 31 31 (356) J2-2(2S)

SHEET 23 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

2

LEGEND

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

N

ROOSEVELT AVE

Greater Racine Area
Racine On The Lake
ESTR

STOP
ESTR

ESTR

GV

MH

STH 20 (WASHINGTON AVE)

399+00 400+00 401+00 402+00 403+00 404+00

373
R4-7(2S) REMOVE

ESTR

STH 20 (WASHINGTON AVE)

GV

GUY

ESTR

ALTERNATE SIDE PARKING ORDINANCE

SPEED WAVE SPEED ENFORCEMENT AREA

ESTR

RACINE
POPULATION 78,860
ESTR

SHEET 24 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

2

N

REMOVE

375

W3-3(2S)
ON POWER
POLE

REMOVE

ONLY

374

R3-8A(2S)
ON POWER
POLE

13+00

14+00

15+00

16+00

S. NEWMAN RD

12+00

POST

POST

ESTR

DO NOT
ENTER

ESTR

LEGEND

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

SHEET 25 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023225_ps.dgn PLOT DATE : 27-JUL-2016 07:49 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

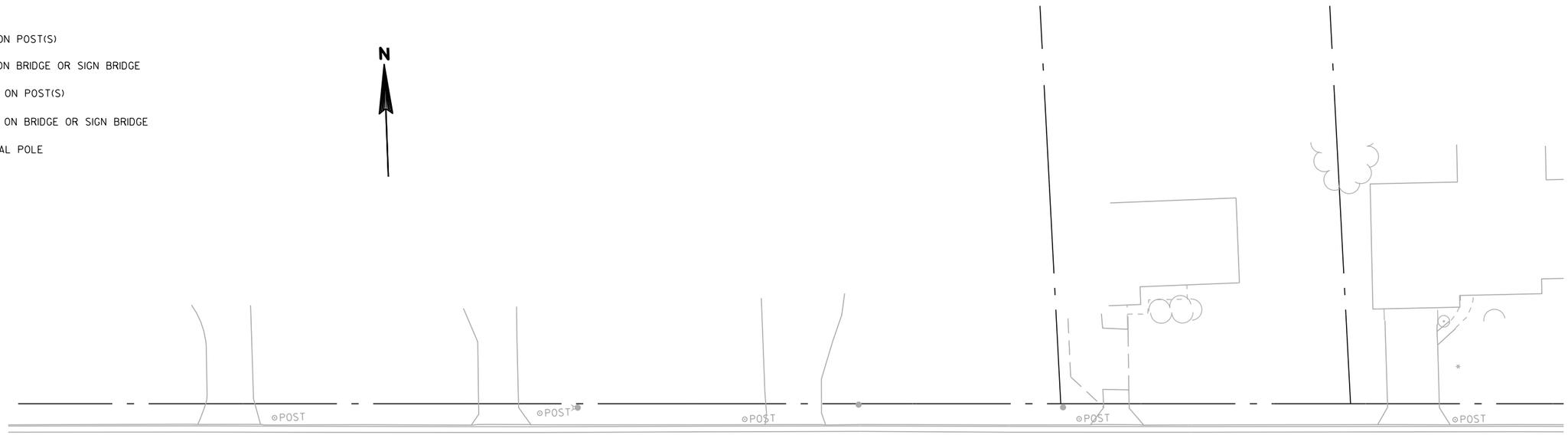
PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

ESTR EXISTING SIGN TO REMAIN



SHEET 26 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023226_ps.dgn PLOT DATE : 27-JUL-2016 07:49 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

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

N

CTH C (SPRING ST)

4+00 395+00 396+00 397+00 398+00 399+00 400+00 176+00

383 384 REMOVE

WEST COUNTY C SPEED LIMIT 40 ESTR

385 NORTH 31 J3-1(2S)

387 ONLY ONLY R3-8Y(2S)

386 ONE WAY R6-2R(2S)

389 NO PARKING ANY TIME R7-1R(2S)

NO PARKING ANY TIME REMOVE

LEFT TURN LANE REMOVE

382 BEGIN LEFT TURN LANE R3-20L(2S)

RIGHT LANE MUST TURN RIGHT ESTR

388 RIGHT LANE MUST TURN RIGHT R3-7R(3)

RIGHT LANE MUST TURN RIGHT REMOVE

390 SOUTH 31 J3-1(2S)

SOUTH 31 REMOVE

INL

POST

STH 31 (GREEN BAY RD)

SHEET 27 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023227_ps.dgn PLOT DATE : 27-JUL-2016 07:49 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

LEGEND

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

N

CTH C (SPRING ST)

176+00 400+00 401+00 402+00 403+00 404+00 405+00 406+

55'

50'

391 RIGHT LANE MUST TURN RIGHT R3-7R(3)

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

REMOVE NO PARKING ANY TIME

393 JCT 31 ONLY ONLY REMOVE

394 RIGHT LANE MUST TURN RIGHT R3-7R(3)

393 JCT 31 J1-1(2S)

395 R4-7(2S)

CTH C (SPRING ST)

STH 31 (GREEN BAY RD)

403 NO PARKING ANY TIME R7-1D

REMOVE NO PARKING ANY TIME

401 EAST COUNTY C J4-1(2S)

402 SPEED LIMIT 35 R2-1(2S)

REMOVE EAST COUNTY C

REMOVE SPEED LIMIT 35

400 CENTER LANE ONLY R3-9B REMOVE

399 NO PARKING ANY TIME R7-1R(2S)

REMOVE NO PARKING ANY TIME

397 R5-2(2S)

398 R4-7(2S)

SPRING ST
OHIO ST
STREET NAME SIGN BY OTHERS

396 STOP R1-1(3)

REMOVE STOP

SHEET 28 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\SIGN\023228_ps.dgn PLOT DATE : 27-JUL-2016 08:06 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

PROPOSED LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

ESTR EXISTING SIGN TO REMAIN

N

404 COUNTY C — J13-1(2S)

COUNTY C — REMOVE

405 W1-7(2S)

REMOVE

406+00

CTH C (SPRING ST)

407+00

408+00

409+00

410+00

411+00

406 NO PARKING DURING SNOW EMERGENCY — MOVE

BUS STOP — BY OTHERS

NO PARKING 6AM - 5PM EXCEPT SUNDAYS AND HOLIDAYS — ESTR

407 STOP — R1-1 MOVE

SOLAR BLINKER STOP SIGN PROPERTY OF CITY

408 STOP SCHOOL BUS FLASHING RED LIGHTS STATE LAW — R59-51(2S)

STOP SCHOOL BUS FLASHING RED LIGHTS STATE LAW — REMOVE

409 NO PARKING 01:00 AM TO 9:00 PM — MOVE

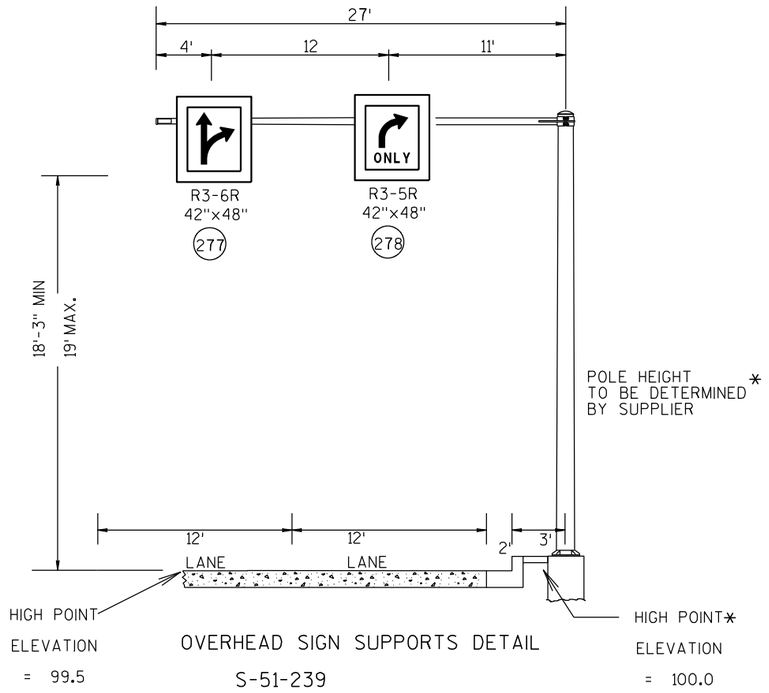
POST FLAG GMP GV MH

SHEET 29 OF 29

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	PERMANENT SIGNING	SHEET	E

2

N



OVERHEAD SIGN SUPPORTS DETAIL

S-51-239

STH 31 @ CTH MM

NOTE, CONTRACTOR SHALL:
1.) SUBMIT SHOP DRAWINGS TO TOM HEYDEL, TRAFFIC OPS WISDOT OF OVERHEAD SIGN SUPPORT. FOOTING IS INCIDENTAL TO OVERHEAD SIGN SUPPORT.
2.) PROVIDE DESIGN CALCULATIONS.
3.) SHOW SIGNS ON SHOP DRAWINGS.
4.) I.D. PLAQUE INCIDENTAL TO SIGN SUPPORT
5.) 6ANCHER RODS SHALL BE USED PER SDD

DESIGNER NOTE:

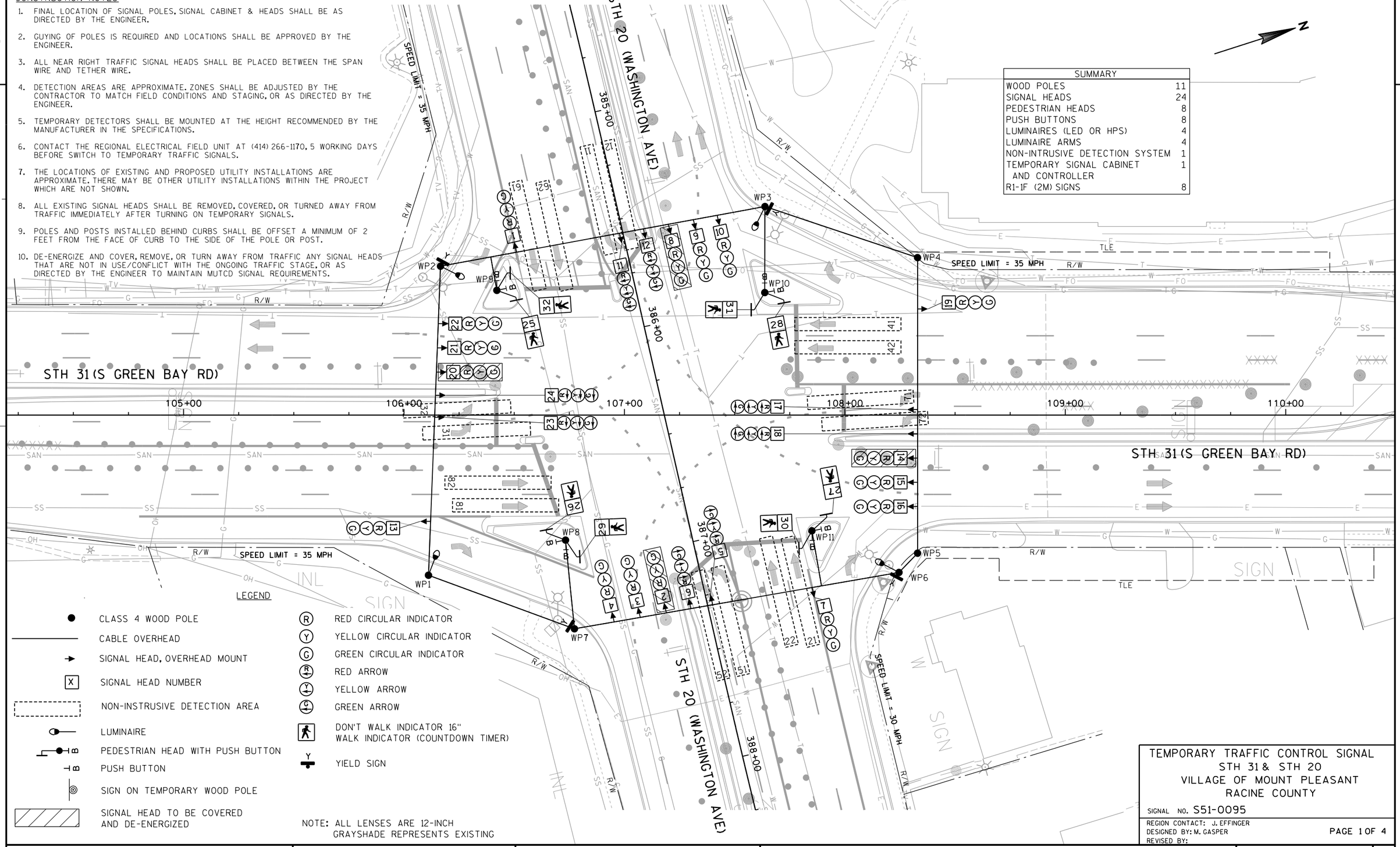
CONTRACTOR TO USE SDD 36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

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

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET & HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS AND STAGING, OR AS DIRECTED BY THE ENGINEER.
5. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
6. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170, 5 WORKING DAYS BEFORE SWITCH TO TEMPORARY TRAFFIC SIGNALS.
7. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
8. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
9. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
10. DE-ENERGIZE AND COVER, REMOVE, OR TURN AWAY FROM TRAFFIC ANY SIGNAL HEADS THAT ARE NOT IN USE/CONFLICT WITH THE ONGOING TRAFFIC STAGE, OR AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.

SUMMARY	
WOOD POLES	11
SIGNAL HEADS	24
PEDESTRIAN HEADS	8
PUSH BUTTONS	8
LUMINAIRES (LED OR HPS)	4
LUMINAIRE ARMS	4
NON-INTRUSIVE DETECTION SYSTEM	1
TEMPORARY SIGNAL CABINET AND CONTROLLER	1
R1-1F (2M) SIGNS	8



LEGEND

- CLASS 4 WOOD POLE
- CABLE OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- X — SIGNAL HEAD NUMBER
- NON-INSTRUSIVE DETECTION AREA
- LUMINAIRE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- SIGN ON TEMPORARY WOOD POLE
- SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- 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 (COUNTDOWN TIMER)
- Y — YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 31 & STH 20
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0095

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 1 OF 4

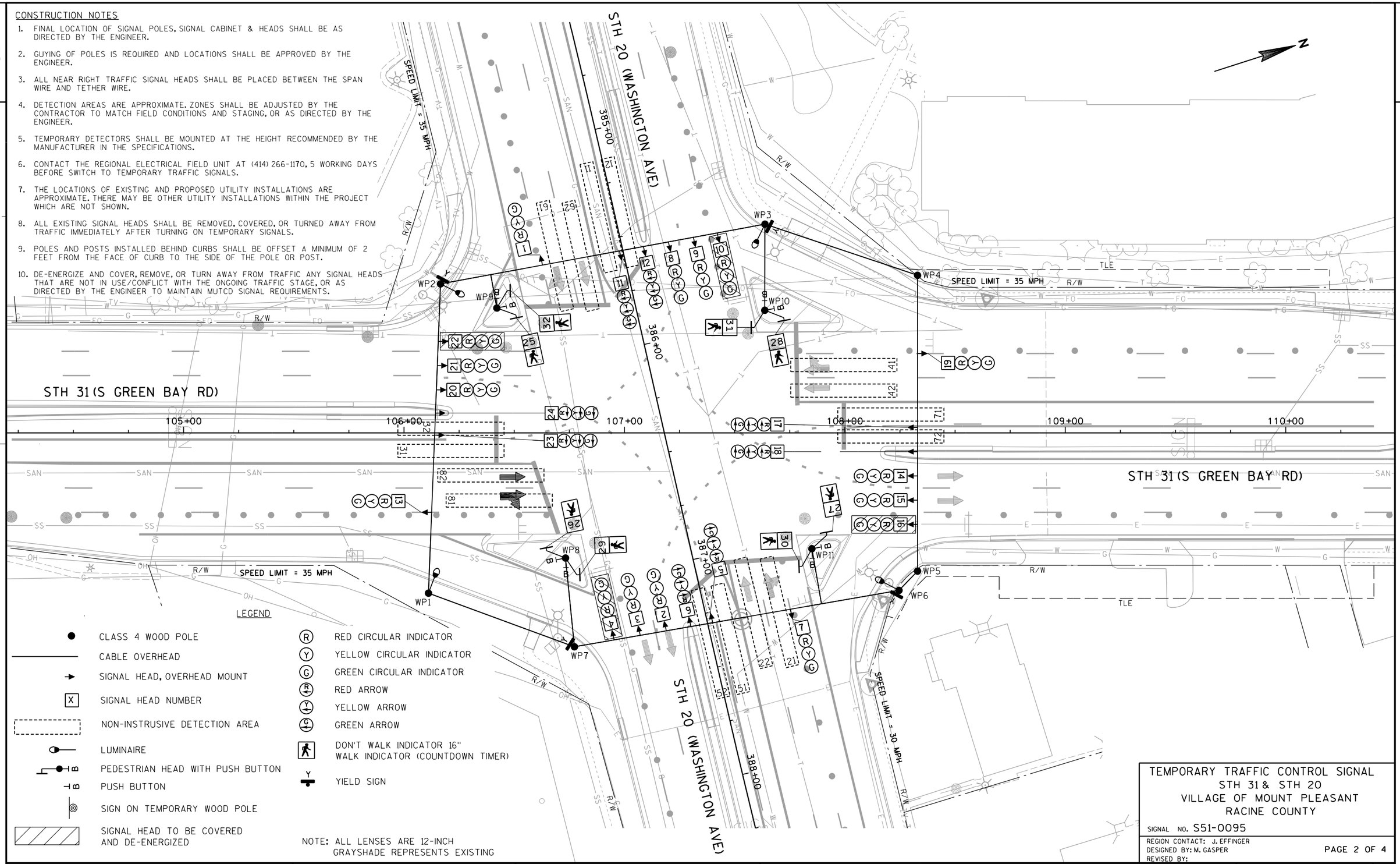
PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1A	SHEET 114	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024010_sp_tmp.dgn | PLOT DATE : 2/6/2017 | PLOT BY : GaspeMC | PLOT NAME : | PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET & HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS AND STAGING, OR AS DIRECTED BY THE ENGINEER.
5. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
6. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170, 5 WORKING DAYS BEFORE SWITCH TO TEMPORARY TRAFFIC SIGNALS.
7. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
8. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
9. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
10. DE-ENERGIZE AND COVER, REMOVE, OR TURN AWAY FROM TRAFFIC ANY SIGNAL HEADS THAT ARE NOT IN USE/CONFLICT WITH THE ONGOING TRAFFIC STAGE, OR AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.



LEGEND

- CLASS 4 WOOD POLE
- CABLE OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- X — SIGNAL HEAD NUMBER
- NON-INSTRUSIVE DETECTION AREA
- LUMINAIRE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- SIGN ON TEMPORARY WOOD POLE
- SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- 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 (COUNTDOWN TIMER)
- Y — YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 31 & STH 20
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0095

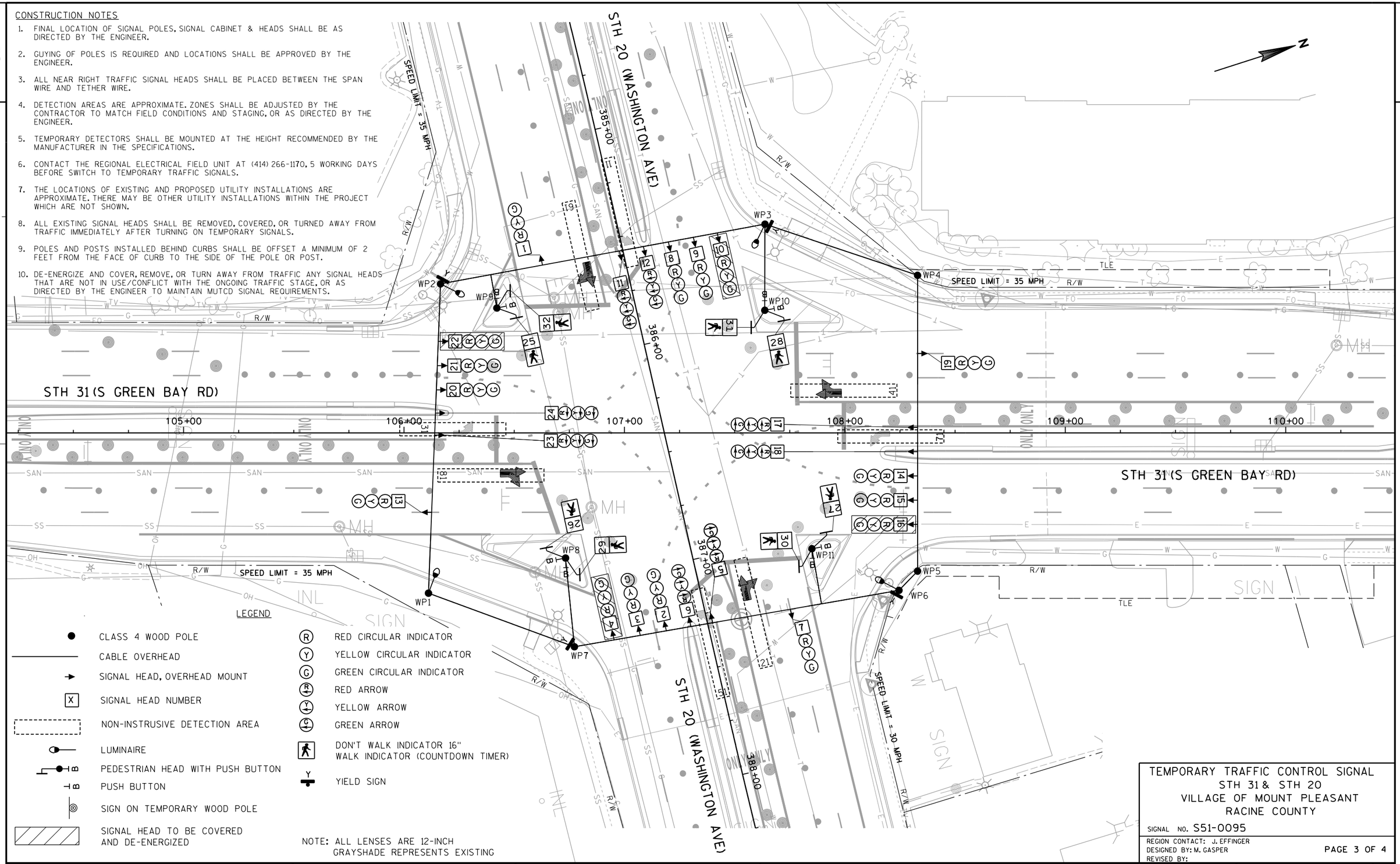
REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 2 OF 4

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1B	SHEET 115	E

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET & HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS AND STAGING, OR AS DIRECTED BY THE ENGINEER.
5. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
6. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170, 5 WORKING DAYS BEFORE SWITCH TO TEMPORARY TRAFFIC SIGNALS.
7. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
8. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
9. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
10. DE-ENERGIZE AND COVER, REMOVE, OR TURN AWAY FROM TRAFFIC ANY SIGNAL HEADS THAT ARE NOT IN USE/CONFLICT WITH THE ONGOING TRAFFIC STAGE, OR AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.



LEGEND

- CLASS 4 WOOD POLE
- CABLE OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- [X] SIGNAL HEAD NUMBER
- NON-INSTRUSIVE DETECTION AREA
- LUMINAIRE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- SIGN ON TEMPORARY WOOD POLE
- SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

- (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 (COUNTDOWN TIMER)
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 31 & STH 20
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0095

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 3 OF 4

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1C	SHEET 116	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024010C_sp_tmp.dgn | PLOT DATE : 2/6/2017 | PLOT BY : GaspeMC | PLOT NAME : | PLOT SCALE : 1:40

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 *	Ø1 *	Ø2 R/W	Ø2 *	Ø2 *	Ø3 R/W	Ø3 *	Ø3 *	Ø4 R/W	Ø4 *	Ø4 *	FLASH
Ø1	5,6	G ←	Y ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
Ø2	7,8,9,10	R	R	R	G	Y	R	R	R	R	R	R	R	R
Ø3	17,18	R ←	R ←	R ←	R ←	R ←	R ←	G ←	Y ←	R ←	R ←	R ←	R ←	R ←
Ø4	19,20,21,22	R	R	R	R	R	R	R	R	R	G	Y	R	R
Ø5	11,12	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
Ø6	1,2,3,4	R	R	R	R	R	R	R	R	R	R	R	R	R
Ø7	23,24	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
Ø8	13,14,15,16	R	R	R	R	R	R	R	R	R	R	R	R	R
Ø2P	27,28	D	D	D	*	D	D	D	D	D	D	D	D	
Ø4P	31,32	D	D	D	D	D	D	D	D	D	*	D	D	
Ø6P	25,26	D	D	D	D	D	D	D	D	D	D	D	D	
Ø8P	29,30	D	D	D	D	D	D	D	D	D	D	D	D	

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 *	Ø5 *	Ø6 R/W	Ø6 *	Ø6 *	Ø7 R/W	Ø7 *	Ø7 *	Ø8 R/W	Ø8 *	Ø8 *
Ø1	5,6	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
Ø2	7,8,9,10	R	R	R	R	R	R	R	R	R	R	R	R
Ø3	17,18	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
Ø4	19,20,21,22	R	R	R	R	R	R	R	R	R	R	R	R
Ø5	11,12	G ←	Y ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
Ø6	1,2,3,4	R	R	R	G	Y	R	R	R	R	R	R	R
Ø7	23,24	R ←	R ←	R ←	R ←	R ←	R ←	G ←	Y ←	R ←	R ←	R ←	R ←
Ø8	13,14,15,16	R	R	R	R	R	R	R	R	R	G	Y	R
Ø2P	27,28	D	D	D	D	D	D	D	D	D	D	D	D
Ø4P	31,32	D	D	D	D	D	D	D	D	D	D	D	D
Ø6P	25,26	D	D	D	*	D	D	D	D	D	D	D	D
Ø8P	29,30	D	D	D	D	D	D	D	D	D	*	D	D

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH TERE IS NOT CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY CONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT RIGHT).

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11	1	X			1	1					
12	1	X			1	1					
21	4	X			2						
22	4	X			2						
31	5	X			3	3					
32	5	X			3	3					
41	8	X			4						
42	8	X			4						
51	9	X			5	5					
52	9	X			5	5					
61	12	X			6						
61	12	X			6						
71	13	X			7	7					
72	13	X			7	7					
81	16	X			8						
82	16	X			8						

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W/ Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4	X	8	MIN	X
5		2		X
6	X	2	MIN	X
7		4		X
8	X	4	MIN	X

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
RADIO	
* LOCATION OF MASTER	
CONTROLLER NO:	S-
SIGNAL SYSTEM #:	S- -

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

N

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2, 3, 4, 7, 8
2	5 OR 6	1, 3, 4, 7, 8
3	7 OR 8	1, 2, 4, 5, 6
4	7 OR 8	1, 2, 3, 5, 6
5	1 OR 2	3, 4, 6, 7, 8
6	1 OR 2	3, 4, 5, 7, 8
7	3 OR 4	1, 2, 5, 6, 8
8	3 OR 4	1, 2, 5, 6, 7

STH 31 & STH 20
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0095

CONTROLLER TYPE: TEMP

DATE FEBRUARY 2017 PAGE NO. 4 OF 4

PROJECT NO: 2390-09-70 | HWY: STH 31 | COUNTY: RACINE | SEQUENCE OF OPERATIONS | SHEET 117 | E

CONSTRUCTION NOTES:

1. THE LOCATIONS OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. EXISTING CONDUIT RUNS NO LONGER USED FOR THE PROPOSED TRAFFIC SIGNAL INSTALLATION TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE AND 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 CONTRACTOR.
4. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING TO REMAIN
BOLD REPRESENTS EXISTING TO BE REMOVED

LEGEND CONT.

- 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 (COUNTDOWN TIMER)

TRAFFIC CONTROL SIGNAL
STH 31 & STH 20
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0095

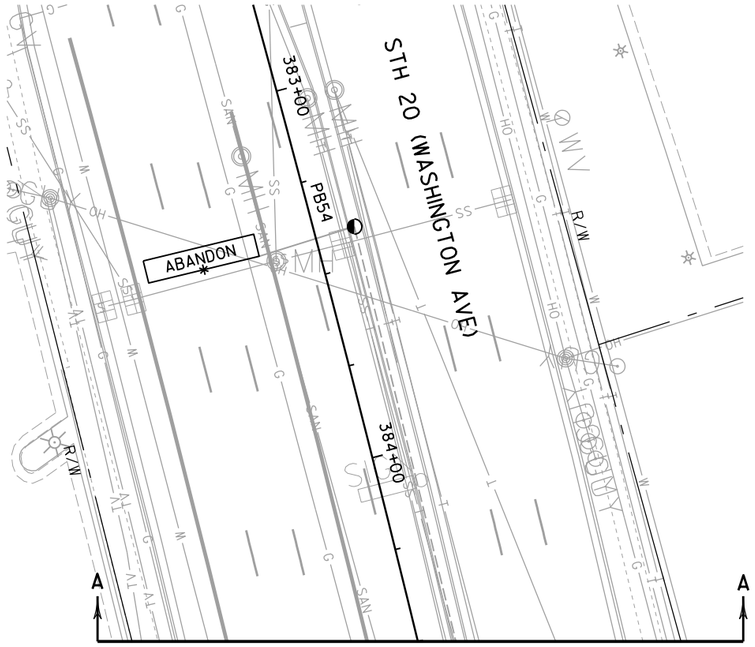
REGION CONTACT: J. EFFINGER
DESIGNED BY:
REVISED BY:

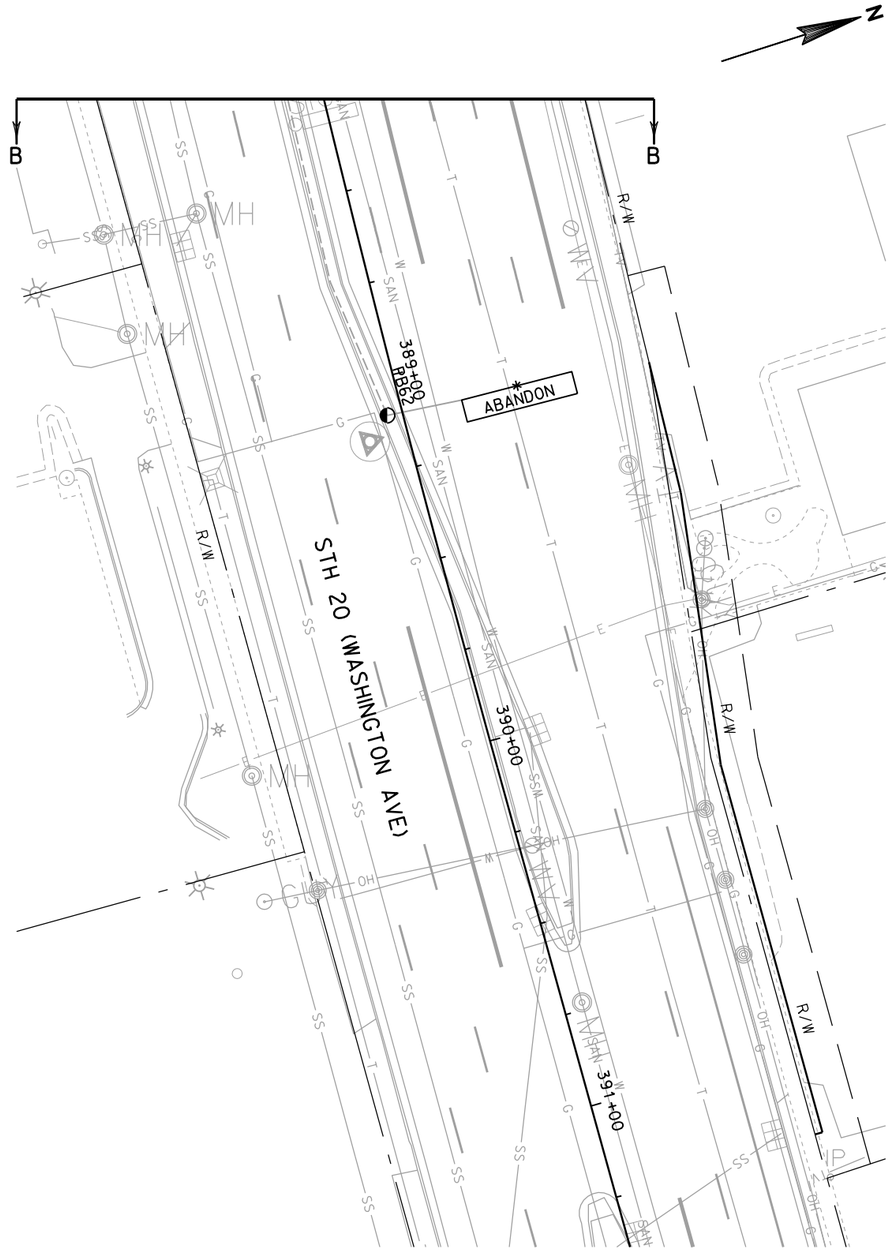
PAGE 1 OF 2

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 118	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024011_sp_Rm.dgn | PLOT DATE : 2/6/2017 | PLOT BY : GaspeMC | PLOT NAME : | PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42





2

TRAFFIC CONTROL SIGNAL
STH 31 & STH 20
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0095

REGION CONTACT: J. EFFINGER
DESIGNED BY:
REVISED BY:

PAGE 2 OF 2

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 119	E

CONSTRUCTION NOTES

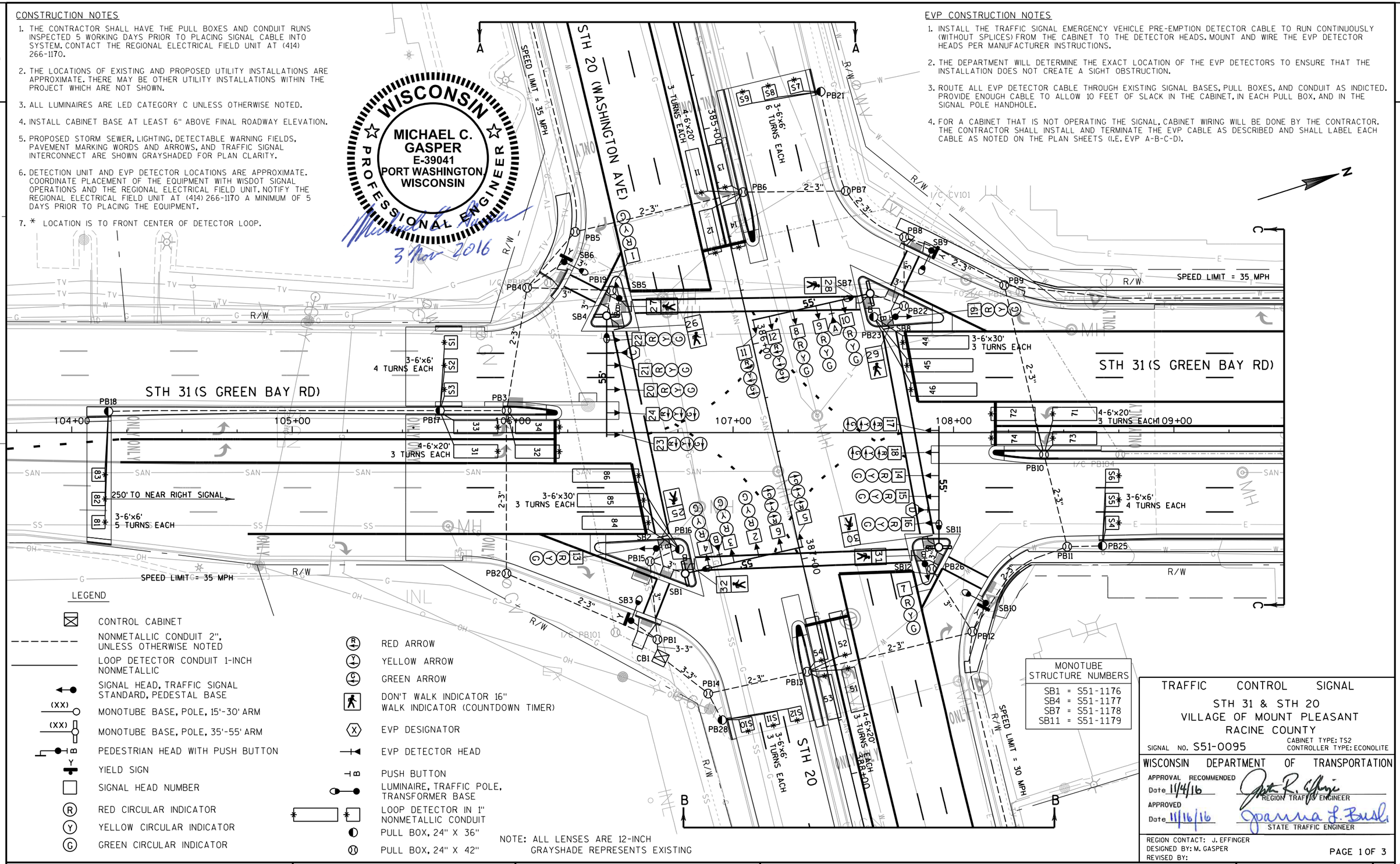
1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. ALL LUMINAIRES ARE LED CATEGORY C UNLESS OTHERWISE NOTED.
4. INSTALL CABINET BASE AT LEAST 6" ABOVE FINAL ROADWAY ELEVATION.
5. PROPOSED STORM SEWER, LIGHTING, DETECTABLE WARNING FIELDS, PAVEMENT MARKING WORDS AND ARROWS, AND TRAFFIC SIGNAL INTERCONNECT ARE SHOWN GRAYSHADED FOR PLAN CLARITY.
6. DETECTION UNIT AND EVP DETECTOR LOCATIONS ARE APPROXIMATE. COORDINATE PLACEMENT OF THE EQUIPMENT WITH WISDOT SIGNAL OPERATIONS AND THE REGIONAL ELECTRICAL FIELD UNIT. NOTIFY THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170 A MINIMUM OF 5 DAYS PRIOR TO PLACING THE EQUIPMENT.
7. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.

WISCONSIN
PROFESSIONAL ENGINEER
MICHAEL C. GASPER
E-39041
PORT WASHINGTON, WISCONSIN

3 Nov 2016

EVP CONSTRUCTION NOTES

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT AND WIRE THE EVP DETECTOR HEADS PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ROUTE ALL EVP DETECTOR CABLE THROUGH EXISTING SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICTED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D).



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1-INCH NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- YIELD SIGN
- 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 (COUNTDOWN TIMER)
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

MONOTUBE STRUCTURE NUMBERS

SB1	S51-1176
SB4	S51-1177
SB7	S51-1178
SB11	S51-1179

TRAFFIC CONTROL SIGNAL

STH 31 & STH 20
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0095
CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 11/4/16
REGION TRAFFIC ENGINEER

APPROVED
Date 11/16/16
STATE TRAFFIC ENGINEER

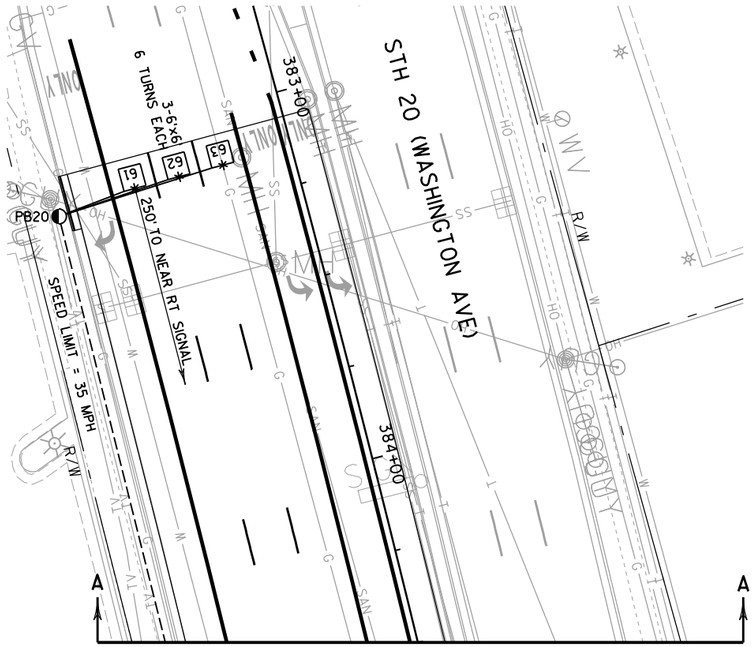
REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

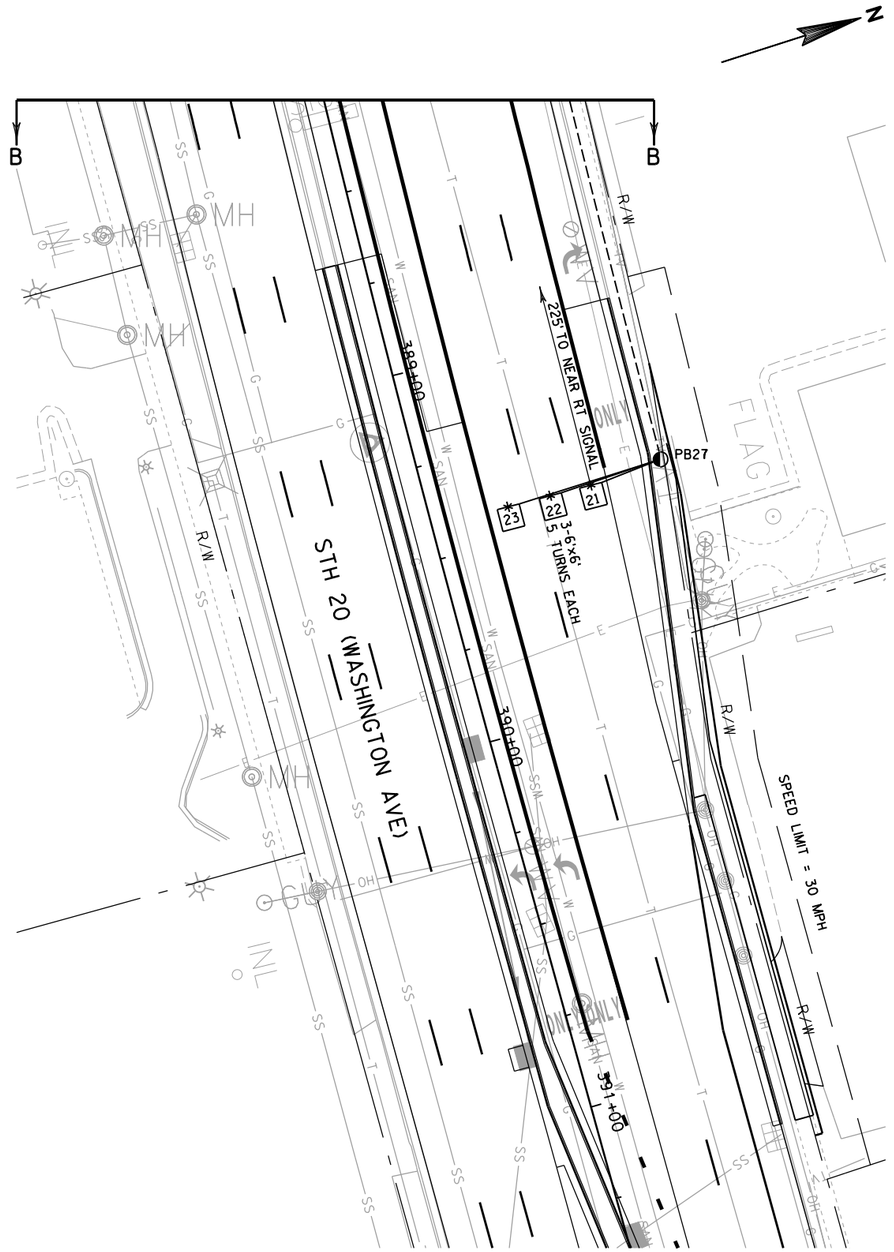
PAGE 1 OF 3

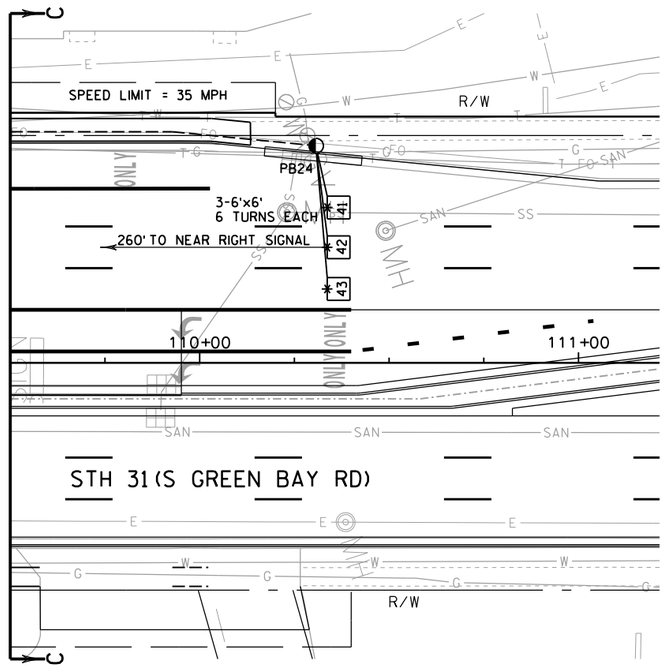
PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 120	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024013_sp.dgn
PLOT DATE : 12/2/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

11/4/16 Date







TRAFFIC CONTROL SIGNAL
STH 31 & STH 20
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

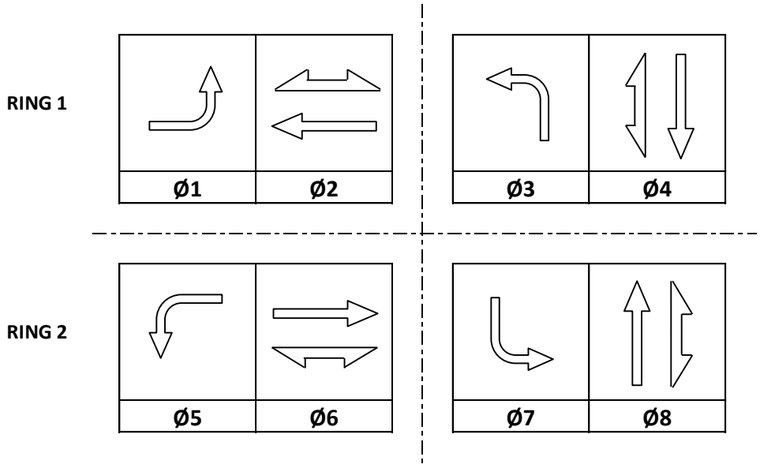
SIGNAL NO. S51-0095

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 121	E

	HEAD NUMBERS	FLASH
Ø1	5,6	R ←
Ø2	7,8,9,10	R
Ø3	17,18	R ←
Ø4	19,20,21,22	R
Ø5	11,12	R ←
Ø6	1,2,3,4	R
Ø7	23,24	R ←
Ø8	13,14,15,16	R
Ø2P	29,30	
Ø4P	27,28	
Ø6P	25,26	
Ø8P	31,32	
OLE		
OLF		
OLG		
OLH		



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	→	↓	↑
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	X
RADIO	
CELL MODEM	X

TYPE OF COORDINATION	
NONE	
TBC	
TRAFFIC RESPONSIVE	X
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	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
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	35	33	39	37	43	41	47	45	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	13	21	23	32	34	42	44	46	52	54	62	71	73	81	83	85	S1	S3	S5	S7	S9	S11		PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	1	2	2	3	3	4	4	4	5	5	6	7	7	8	8	8								CALLED PHASE
CALL OPTION	X	X	X	X	X	X		X	X	X	X	X	X	X			X								CALL OPTION
DELAY TIME																									DELAY TIME
EXTENSION OPTION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								EXTENSION OPTION
EXTEND TIME							X								X	X									EXTEND TIME
USE ADDED INITIAL			X	X								X													USE ADDED INITIAL
CROSS SWITCH PHASE																									CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	36	34	40	38	44	42	48	46	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	12	14	22	31	33	41	43	45	51	53	61	63	72	74	82	84	86	S2	S4	S6	S8	S10	S12		PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	1	2	3	3	4	4	4	5	5	6	6	7	7	8	8	8								CALLED PHASE
CALL OPTION	X	X	X	X	X			X	X	X	X	X	X	X		X	X								CALL OPTION
DELAY TIME																									DELAY TIME
EXTENSION OPTION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								EXTENSION OPTION
EXTEND TIME						X	X								X										EXTEND TIME
USE ADDED INITIAL			X								X	X													USE ADDED INITIAL
CROSS SWITCH PHASE																									CROSS SWITCH PHASE

STH 31 & STH 20
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO: S51-0095 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: NOVEMBER 2016 PAGE NO. 3 OF 3

SIGNAL WIRING CONDUCTOR TABLE

PROJECT ID:	2390-09-70
INTERSECTION:	STH 31 & STH 20

SIGNAL WIRE	BLK – BLACK	RED – RED	GRN – GREEN
COLOR CODING	WHT – WHITE	BLU – BLUE	ORG – ORANGE

CB1 TO	NO. OF CONDUCTORS	HEAD NO.	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	FLASHING <YELLOW>	D/WALK	WALK	PED BUTTON	OTHER
SB1	12	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		4	RED	ORG	GRN								
		5				RED/BLK	ORG/BLK	GRN/BLK					
		6				RED/BLK	ORG/BLK	GRN/BLK					
		32								BLK	BLU		
		B										WHT/BLK	
SB2	12	13	RED	ORG	GRN								
		25								BLK	BLU		
		B										WHT/BLK	
SB4	12	20	RED	ORG	GRN								
		21	RED	ORG	GRN								
		22	RED	ORG	GRN								
		23				RED/BLK	ORG/BLK	GRN/BLK					
		24				RED/BLK	ORG/BLK	GRN/BLK					
		26								BLK	BLU		
		B										WHT/BLK	
SB5	12	1	RED	ORG	GRN								
		27								BLK	BLU		
		B										WHT/BLK	
SB7	12	8	RED	ORG	GRN								
		9	RED	ORG	GRN								
		10	RED	ORG	GRN								
		11				RED/BLK	ORG/BLK	GRN/BLK					
		12				RED/BLK	ORG/BLK	GRN/BLK					
		28								BLK	BLU		
		B										WHT/BLK	
SB8	12	19	RED	ORG	GRN								
		29								BLK	BLU		
		B										WHT/BLK	
SB11	12	14	RED	ORG	GRN								
		15	RED	ORG	GRN								
		16	RED	ORG	GRN								
		17				RED/BLK	ORG/BLK	GRN/BLK					
		18				RED/BLK	ORG/BLK	GRN/BLK					
		30								BLK	BLU		
		B										WHT/BLK	
SB12	12	7	RED	ORG	GRN								
		31								BLK	BLU		
		B										WHT/BLK	

EQUIPMENT GROUNDING CONDUCTOR
10 AWG GRN XLP

FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	CB1

PULL BOX JUMPER
10 AWG GRN XLP

FROM	TO
PB1	CB1
PB2	CB1
PB3	SB6
PB4	SB6
PB5	SB6
PB6	SB9
PB7	SB9
PB8	SB9
PB9	SB9
PB10	SB10
PB11	SB10
PB12	SB10
PB13	CB1
PB14	CB1
PB15	SB2
PB19	SB5
PB22	SB8
PB26	SB12

LIGHTING UF 12 AWG
W/GROUND

FROM	TO
CB1	SB1
SB1	SB3
SB3	SB6
SB6	SB4
CB1	SB11
SB11	SB10
SB10	SB9
SB9	SB7

EMERGENCY VEHICLE
PREEMPTION

FROM	TO
CB1	"B" (SB1)
CB1	C' (SB4)
CB1	A' (SB7)
CB1	D' (SB11)

NOTES: USE WHITE CONDUCTOR IN THE SIGNAL CABLE 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 ON TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

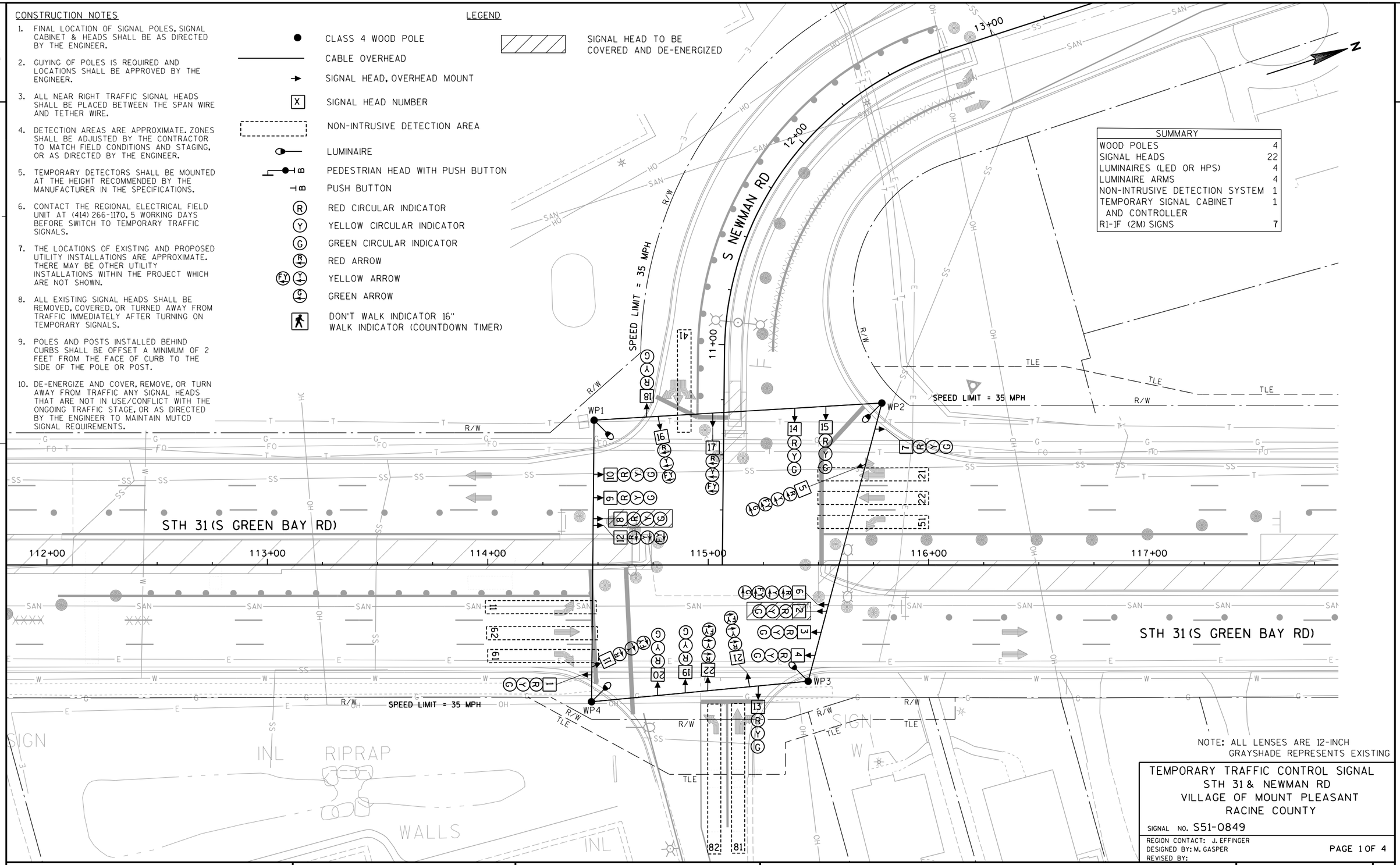
CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET & HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS AND STAGING, OR AS DIRECTED BY THE ENGINEER.
5. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
6. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170, 5 WORKING DAYS BEFORE SWITCH TO TEMPORARY TRAFFIC SIGNALS.
7. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
8. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
9. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
10. DE-ENERGIZE AND COVER, REMOVE, OR TURN AWAY FROM TRAFFIC ANY SIGNAL HEADS THAT ARE NOT IN USE/CONFLICT WITH THE ONGOING TRAFFIC STAGE, OR AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.

LEGEND

- CLASS 4 WOOD POLE
- CABLE OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- X — SIGNAL HEAD NUMBER
- NON-INTRUSIVE DETECTION AREA
- LUMINAIRE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- R — RED CIRCULAR INDICATOR
- Y — YELLOW CIRCULAR INDICATOR
- G — GREEN CIRCULAR INDICATOR
- R — RED ARROW
- FY Y — YELLOW ARROW
- G — GREEN ARROW
- DON'T WALK INDICATOR 16" WALK INDICATOR (COUNTDOWN TIMER)
- SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

SUMMARY	
WOOD POLES	4
SIGNAL HEADS	22
LUMINAIRES (LED OR HPS)	4
LUMINAIRE ARMS	4
NON-INTRUSIVE DETECTION SYSTEM	1
TEMPORARY SIGNAL CABINET AND CONTROLLER	1
R1-1F (2M) SIGNS	7



NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 31 & NEWMAN RD
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0849

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 1 OF 4

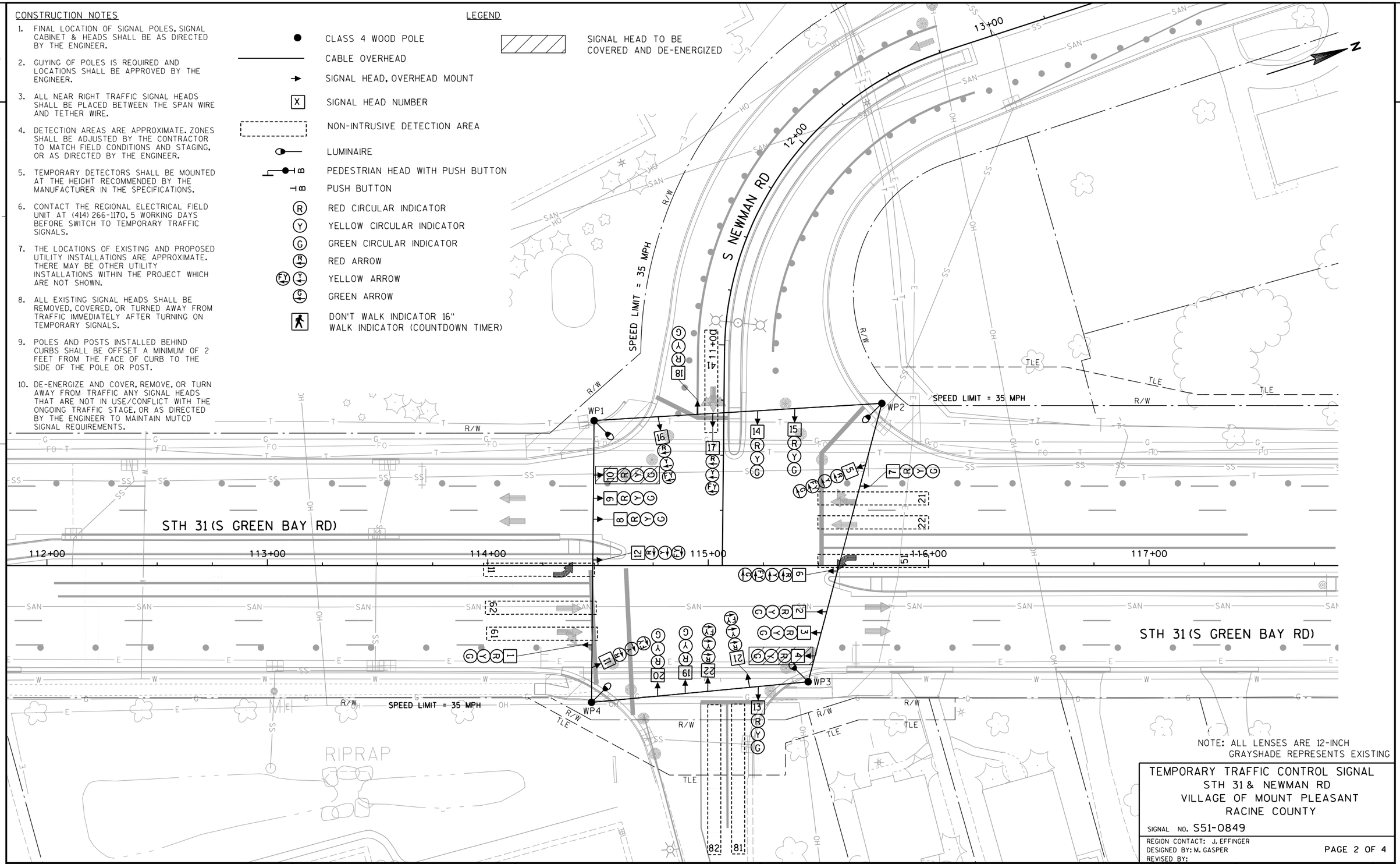
PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1A	SHEET 124	E

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET & HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS AND STAGING, OR AS DIRECTED BY THE ENGINEER.
5. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
6. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170, 5 WORKING DAYS BEFORE SWITCH TO TEMPORARY TRAFFIC SIGNALS.
7. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
8. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
9. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
10. DE-ENERGIZE AND COVER, REMOVE, OR TURN AWAY FROM TRAFFIC ANY SIGNAL HEADS THAT ARE NOT IN USE/CONFLICT WITH THE ONGOING TRAFFIC STAGE, OR AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.

LEGEND

- CLASS 4 WOOD POLE
- CABLE OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- X — SIGNAL HEAD NUMBER
- NON-INTRUSIVE DETECTION AREA
- LUMINAIRE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- R — RED CIRCULAR INDICATOR
- Y — YELLOW CIRCULAR INDICATOR
- G — GREEN CIRCULAR INDICATOR
- R — RED ARROW
- FY Y — YELLOW ARROW
- G — GREEN ARROW
- DON'T WALK INDICATOR 16"
  WALK INDICATOR (COUNTDOWN TIMER)
- SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED



NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 31 & NEWMAN RD
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0849

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 2 OF 4

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1B	SHEET 125	E

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET & HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
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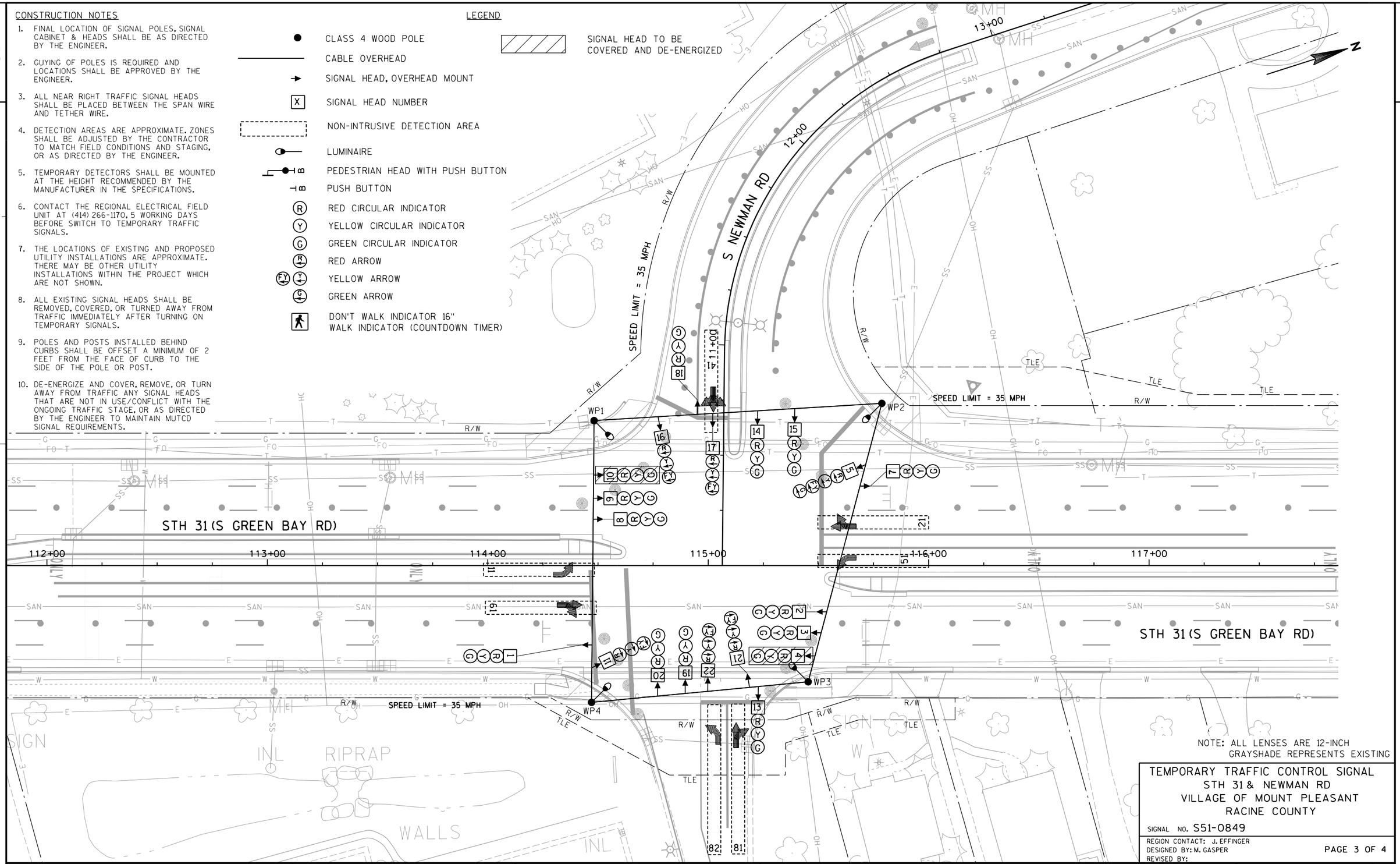
LEGEND

- CLASS 4 WOOD POLE
- CABLE OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- X — SIGNAL HEAD NUMBER
- NON-INTRUSIVE DETECTION AREA
- LUMINAIRE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- R — RED CIRCULAR INDICATOR
- Y — YELLOW CIRCULAR INDICATOR
- G — GREEN CIRCULAR INDICATOR
- R — RED ARROW
- FY Y — YELLOW ARROW
- G — GREEN ARROW
- DON'T WALK INDICATOR 16" WALK INDICATOR (COUNTDOWN TIMER)
- SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED



NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 31 & NEWMAN RD
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0849

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

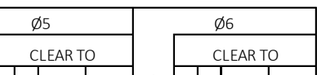
PAGE 3 OF 4

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1C	SHEET 126	E

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 *	Ø1 *	Ø2 R/W	Ø2 *	Ø2 *	Ø3 R/W	Ø3 *	Ø3 *	Ø4 R/W	Ø4 *	Ø4 *	FLASH
			CLEAR TO			CLEAR TO			CLEAR TO			CLEAR TO		
Ø1	5,6	G ←	-	-	-	-	-				-	-	-	-
Ø2	7,8,9,10	R	R	R	G	Y	R				R	R	R	R
Ø3														
Ø4	18,19,20	R	R	R	R	R	R				G	Y	R	R
Ø5	11,12	-	-	-	-	-	-				-	-	-	-
Ø6	1,2,3,4	R	R	R	R	R	R				R	R	R	R
Ø7														
Ø8	13,14,15	R	R	R	R	R	R				R	R	R	R
OLA	5,6	-	-	-	FY ←	Y ←	R ←				R ←	R ←	R ←	R ←
OLB	16,17	R ←	R ←	R ←	R ←	R ←	R ←				FY ←	Y ←	R ←	R ←
OLC	11,12	R ←	R ←	R ←	R ←	R ←	R ←				R ←	R ←	R ←	R ←
OLD	21,22	R ←	R ←	R ←	R ←	R ←	R ←				R ←	R ←	R ←	R ←
Ø2P														
Ø4P														
Ø6P														
Ø8P														



RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 *	Ø5 *	Ø6 R/W	Ø6 *	Ø6 *	Ø7 R/W	Ø7 *	Ø7 *	Ø8 R/W	Ø8 *	Ø8 *
			CLEAR TO			CLEAR TO			CLEAR TO			CLEAR TO	
Ø1	5,6	-	-	-	-	-	-				-	-	-
Ø2	7,8,9,10	R	R	R	R	R	R				R	R	R
Ø3													
Ø4	18,19,20	R	R	R	R	R	R				R	R	R
Ø5	11,12	G ←	-	-	-	-	-				-	-	-
Ø6	1,2,3,4	R	R	R	G	Y	R				R	R	R
Ø7													
Ø8	13,14,15	R	R	R	R	R	R				G	Y	R
OLA	5,6	R ←	R ←	R ←	R ←	R ←	R ←				R ←	R ←	R ←
OLB	16,17	R ←	R ←	R ←	R ←	R ←	R ←				R ←	R ←	R ←
OLC	11,12	-	-	-	FY ←	Y ←	R ←				R ←	R ←	R ←
OLD	21,22	R ←	R ←	R ←	R ←	R ←	R ←				FY ←	Y ←	R ←
Ø2P													
Ø4P													
Ø6P													
Ø8P													

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11	1	X			1	1					
21	2	X			2	2					
22	2	X			2	2					
41	4	X			4	4		X			
51	5	X			5	5		X			
61	6	X			6	6					
62	6	X			6	6					
81	8	X			8	8		X			
82	8	X			8	8		X			

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		2		X
6	X	2	MIN	X
7				
8		4		X

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
TBC	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
RADIO	
* LOCATION OF MASTER	
CONTROLLER NO:	S-
SIGNAL SYSTEM #:	S- -

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

OVERLAP SPECIAL

OVERLAP	PROTECTED	PERMISSIVE
OL"A"	1	2
OL"B"		4
OL"C"	5	6
OL"D"		8

N

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH TERE IS NOT CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY CONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 BELOW).

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5,6	2, 4, 7
2	5,6	1, 4, 7
3		
4	8	1, 2, 5, 6
5	1,2	4, 6, 8
6	1,2	4, 5, 8
7		
8	4	1, 2, 5, 6, 7

STH 31 & NEWMAN RD
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. **S51-0849**

CONTROLLER TYPE: **TEMP**

DATE **FEBRUARY 2017** PAGE NO. 4 OF 4

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (Y) YELLOW ARROW
- (G) GREEN ARROW

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING TO REMAIN
BOLD REPRESENTS EXISTING TO BE REMOVED

CONSTRUCTION NOTES:

1. THE LOCATIONS OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. EXISTING CONDUIT RUNS NO LONGER USED FOR THE PROPOSED TRAFFIC SIGNAL INSTALLATION TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE AND 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 CONTRACTOR.
4. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.

S NEWMAN RD
STH 31 (S GREEN BAY RD)
R/W
TLE
IP
ABANDON
SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB11 SB12 SB13
PB1 PB2 PB3 PB4 PB5 PB6 PB7 PB8 PB9 PB10 PB11 PB12 PB13 PB14 PB15 PB16 PB17 PB18 PB19 PB20
I/C PB1 I/C PB2
CB1
12+00 13+00 112+00 113+00 114+00 115+00 116+00 117+00
2-3"
3"
82 83 84

TRAFFIC CONTROL SIGNAL
STH 31 & S NEWMAN RD
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0849

REGION CONTACT: J. EFFINGER
DESIGNED BY:
REVISED BY:

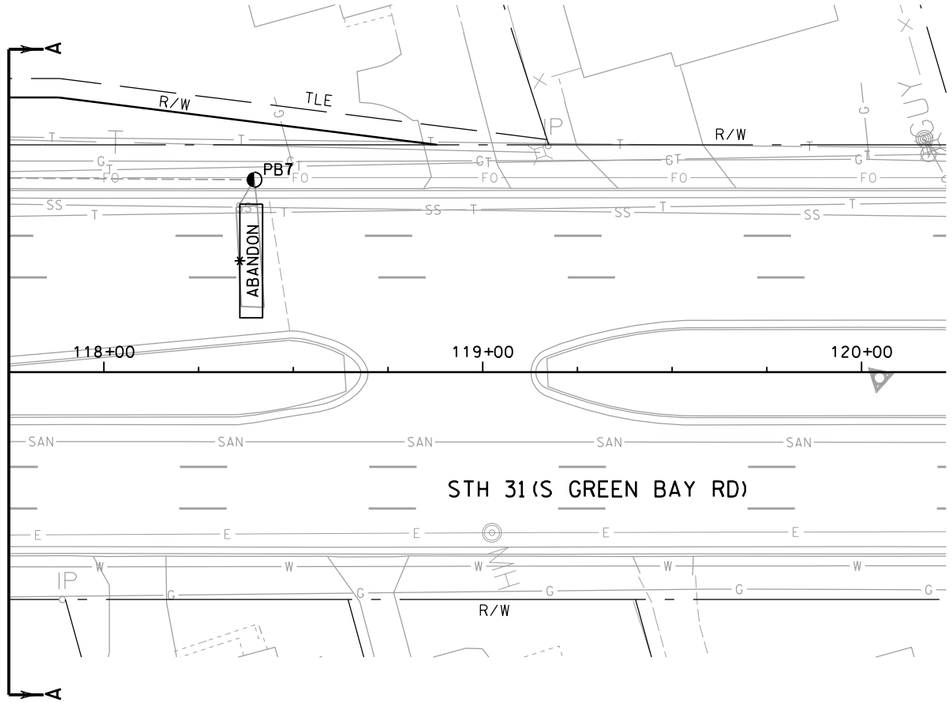
PAGE 1 OF 2

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 128 E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024021_sp_Rm.dgn PLOT DATE : 12/2/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2



TRAFFIC CONTROL SIGNAL
STH 31 & S NEWMAN RD
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0849

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 2 OF 2

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 129	E

2

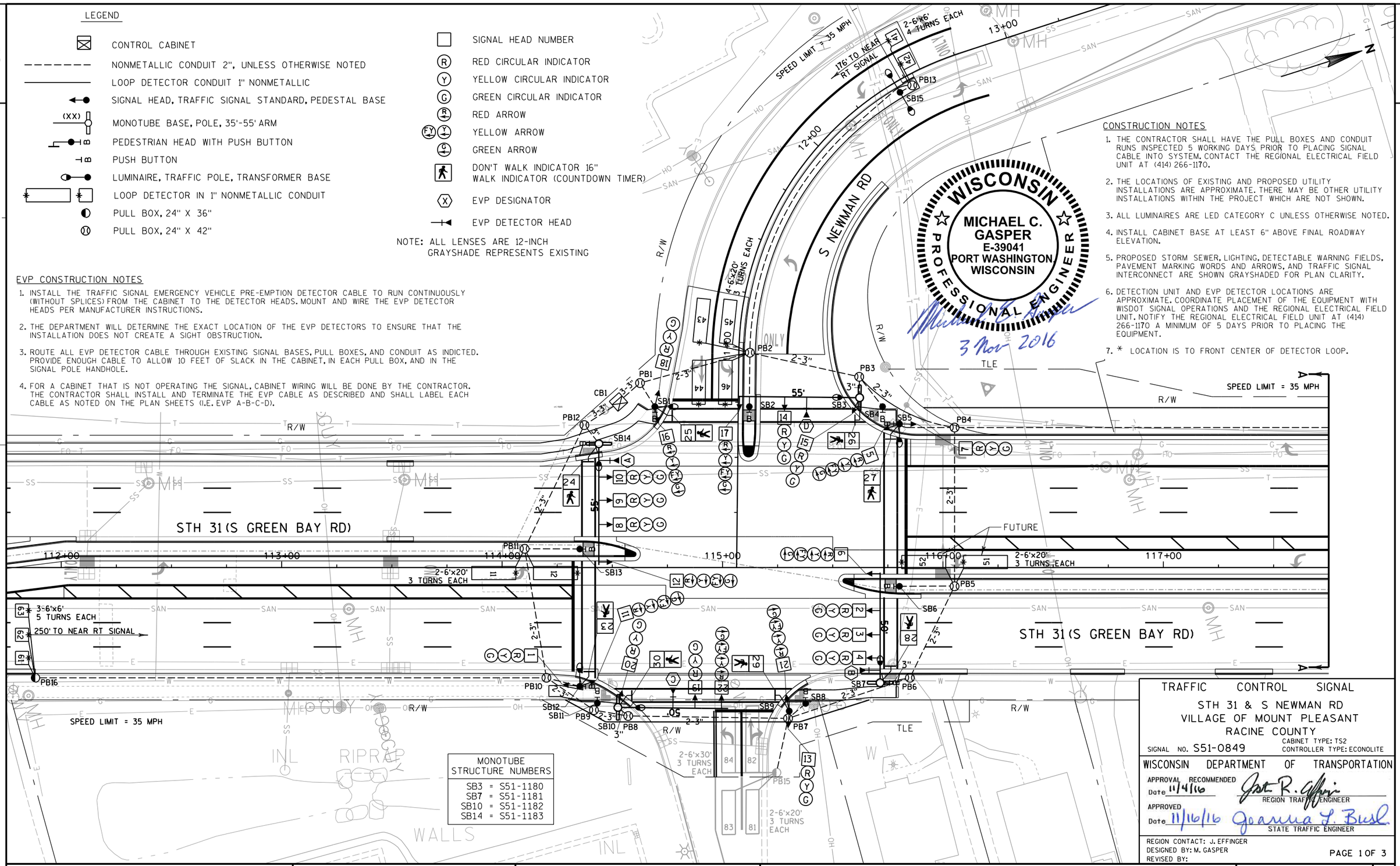
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (FY)(Y) YELLOW ARROW
- (G) GREEN ARROW
- DON'T WALK INDICATOR 16" WALK INDICATOR (COUNTDOWN TIMER)
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

EVP CONSTRUCTION NOTES

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT AND WIRE THE EVP DETECTOR HEADS PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ROUTE ALL EVP DETECTOR CABLE THROUGH EXISTING SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICTED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D).



CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. ALL LUMINAIRES ARE LED CATEGORY C UNLESS OTHERWISE NOTED.
4. INSTALL CABINET BASE AT LEAST 6" ABOVE FINAL ROADWAY ELEVATION.
5. PROPOSED STORM SEWER, LIGHTING, DETECTABLE WARNING FIELDS, PAVEMENT MARKING WORDS AND ARROWS, AND TRAFFIC SIGNAL INTERCONNECT ARE SHOWN GRAYSHADED FOR PLAN CLARITY.
6. DETECTION UNIT AND EVP DETECTOR LOCATIONS ARE APPROXIMATE. COORDINATE PLACEMENT OF THE EQUIPMENT WITH WISDOT SIGNAL OPERATIONS AND THE REGIONAL ELECTRICAL FIELD UNIT. NOTIFY THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170 A MINIMUM OF 5 DAYS PRIOR TO PLACING THE EQUIPMENT.
7. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.

WISCONSIN
MICHAEL C. GASPER
E-39041
PORT WASHINGTON, WISCONSIN
PROFESSIONAL ENGINEER
3 Nov 2016

TRAFFIC CONTROL SIGNAL
STH 31 & S NEWMAN RD
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0849
CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED Date 11/4/16 — REGION TRAFFIC ENGINEER
APPROVED Date 11/16/16 — STATE TRAFFIC ENGINEER

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 1 OF 3

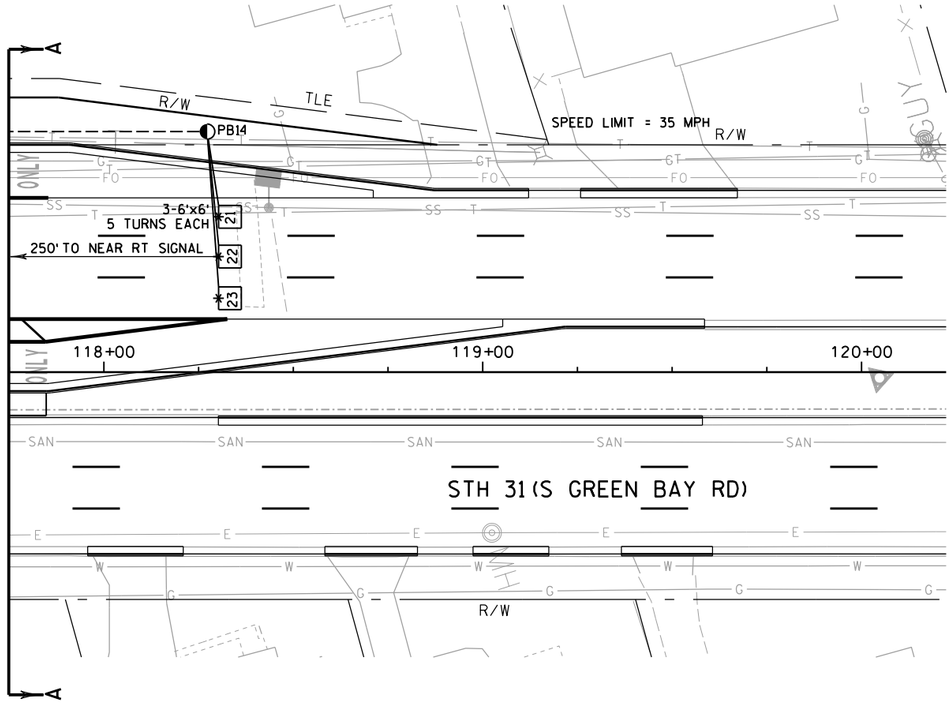
PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 130	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024023_sp.dgn | PLOT DATE : 12/2/2016 | PLOT BY : gaspemc | PLOT NAME : | PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

11/4/16 SAB

2



TRAFFIC CONTROL SIGNAL
STH 31 & S NEWMAN RD
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

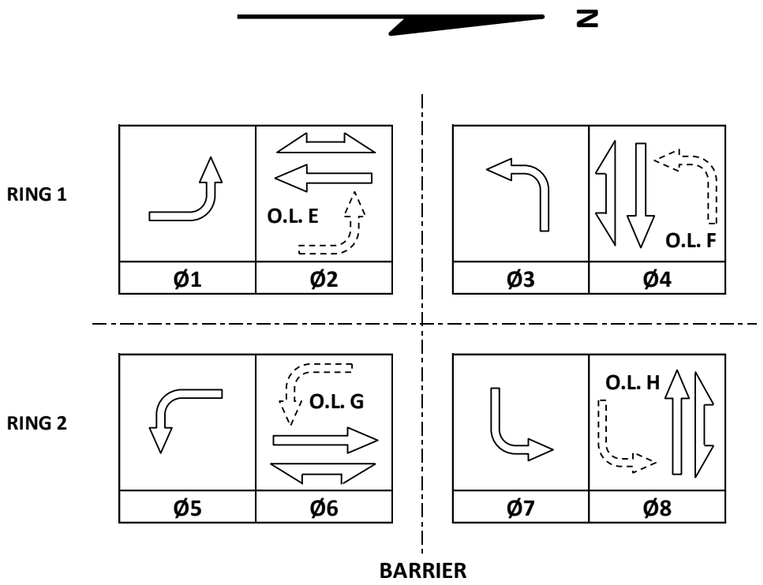
SIGNAL NO. S51-0849

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 2 OF 3

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TRAFFIC SIGNAL PLAN	SHEET 131	E

	HEAD NUMBERS	FLASH
Ø1	5,6	R ←
Ø2	7,8,9,10	R
Ø3	16,17	R ←
Ø4	18,19,20	R
Ø5	11,12	R ←
Ø6	1,2,3,4	R
Ø7	21,22	R ←
Ø8	13,14,15	R
Ø2P	25,26	
Ø4P	23,24	
Ø6P	29,30	
Ø8P	27,28	
OLE	5,6	-
OLF	16,17	-
OLG	11,12	-
OLH	21,22	-



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	X
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	
TRAFFIC RESPONSIVE	X
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	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
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	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	21	23	42	44	46	52	62	81	83							PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	4	4	4	FUTURE	6	8	8							CALLED PHASE
CALL OPTION	X	X	X		X	X		X	X	X							CALL OPTION
DELAY TIME					X												DELAY TIME
EXTENSION OPTION	X	X	X	X	X	X		X	X	X							EXTENSION OPTION
EXTEND TIME				X													EXTEND TIME
USE ADDED INITIAL		X	X					X									USE ADDED INITIAL
CROSS SWITCH PHASE	2																CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	12	22	41	43	45	51	61	63	82	84							PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	4	4	4	FUTURE	6	6	8	8							CALLED PHASE
CALL OPTION	X	X		X	X		X	X	X	X							CALL OPTION
DELAY TIME									X	X							DELAY TIME
EXTENSION OPTION	X	X	X	X	X		X	X	X	X							EXTENSION OPTION
EXTEND TIME			X														EXTEND TIME
USE ADDED INITIAL		X					X	X									USE ADDED INITIAL
CROSS SWITCH PHASE	2																CROSS SWITCH PHASE

STH 31 & NEWMAN ROAD
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO: S51-0849 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: NOVEMBER 2016 PAGE NO. 3 OF 3

SIGNAL WIRING CONDUCTOR TABLE

PROJECT ID:	2390-09-70
INTERSECTION:	STH 31 & NEWMAN ROAD

SIGNAL WIRE	BLK – BLACK	RED – RED	GRN – GREEN
COLOR CODING	WHT – WHITE	BLU – BLUE	ORG – ORANGE

CB1 TO	NO. OF CONDUCTORS	HEAD NO.	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	FLASHING <YELLOW>	D/WALK	WALK	PED BUTTON	OTHER
SB1	12	16				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		18	RED	ORG	GRN								
		25								BLK	BLU		
		B										WHT/BLK	
SB2	7	B										WHT/BLK	
SB3	12	14	RED	ORG	GRN								
		15	RED	ORG	GRN								
		17				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		26								BLK	BLU		
SB4	7	B										WHT/BLK	
SB5	12	5				RED	ORG	GRN	BLK/WHT				
		7	RED/BLK	ORG/BLK	GRN/BLK								
		27								BLK	BLU		
		B										WHT/BLK	
SB6	7	B										WHT/BLK	
SB7	12	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		4	RED	ORG	GRN								
		6				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		28								BLK	BLU		
		B										WHT/BLK	
SB8	7	B										WHT/BLK	
SB9	12	13	RED/BLK	ORG/BLK	GRN/BLK								
		21				RED	ORG	GRN	BLK/WHT				
		29								BLK	BLU		
SB10	12	19	RED	ORG	GRN								
		20	RED	ORG	GRN								
		22				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		30								BLK	BLU		
SB11	7	B										WHT/BLK	
SB12	12	1	RED	ORG	GRN								
		11				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		23								BLK	BLU		
		B										WHT/BLK	
SB13	7	B										WHT/BLK	
SB14	12	8	RED	ORG	GRN								
		9	RED	ORG	GRN								
		10	RED	ORG	GRN								
		12				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		24								BLK	BLU		
		B										WHT/BLK	

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	SB14
SB14	CB1

PULL BOX JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	CB1
PB2	SB2
PB3	SB3
PB4	SB5
PB5	SB6
PB6	SB7
PB7	SB9
PB8	SB10
PB9	SB11
PB10	SB12
PB11	SB13
PB12	SB14
PB13	SB15

LIGHTING UF 12 AWG W/GROUND	
FROM	TO
CB1	SB1
SB1	SB15
SB15	SB3
SB3	SB5
CB1	SB14
SB14	SB12
SB12	SB10
SB10	SB7

EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	"D" (SB3)
CB1	"B" (SB7)
CB1	"C" (SB10)
CB1	"A" (SB14)

NOTES: USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.

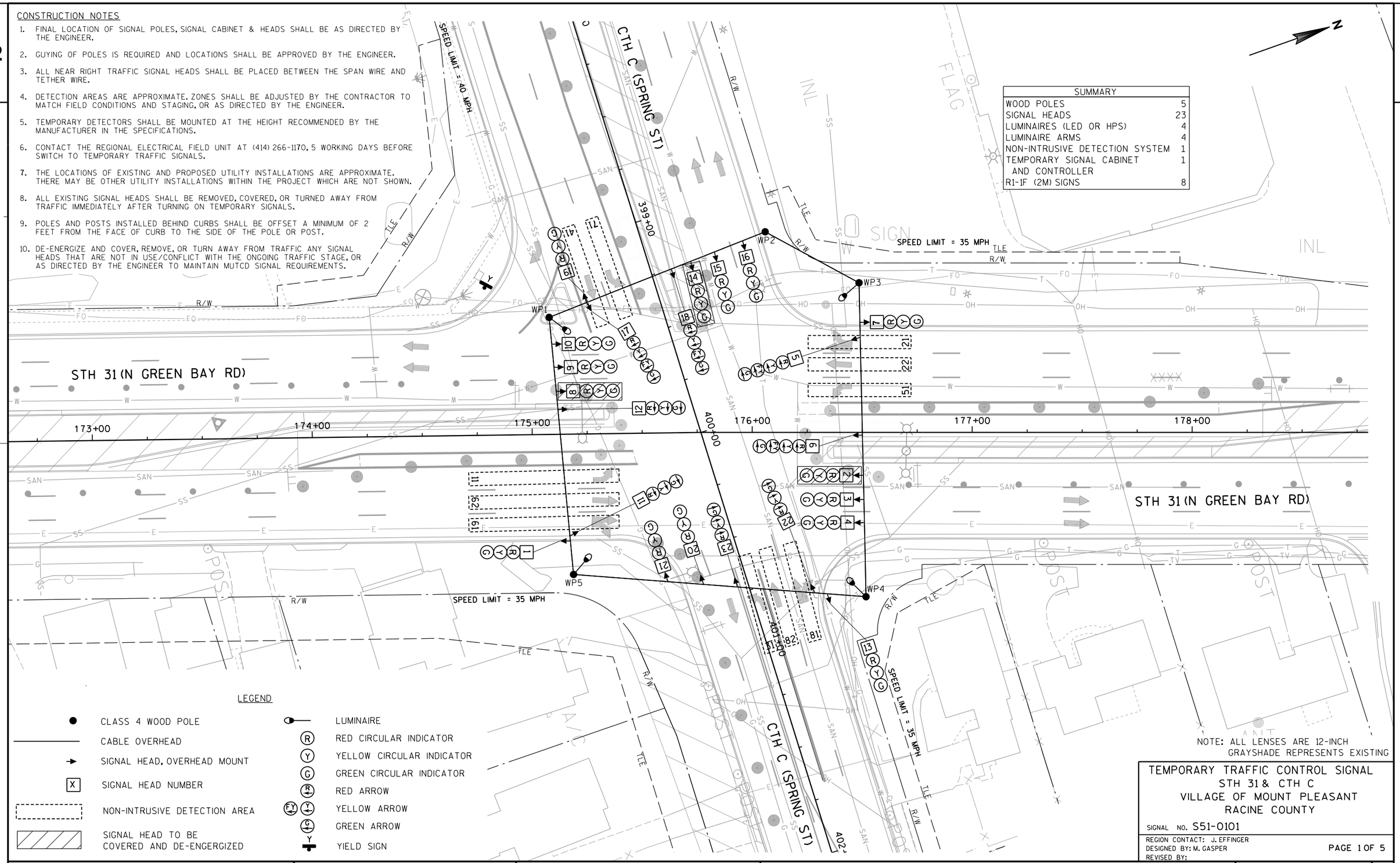
ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.

AT THE SIGNAL BASES, CONNECT ON TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET & HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS AND STAGING, OR AS DIRECTED BY THE ENGINEER.
5. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
6. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170, 5 WORKING DAYS BEFORE SWITCH TO TEMPORARY TRAFFIC SIGNALS.
7. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
8. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
9. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
10. DE-ENERGIZE AND COVER, REMOVE, OR TURN AWAY FROM TRAFFIC ANY SIGNAL HEADS THAT ARE NOT IN USE/CONFLICT WITH THE ONGOING TRAFFIC STAGE, OR AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.

SUMMARY	
WOOD POLES	5
SIGNAL HEADS	23
LUMINAIRES (LED OR HPS)	4
LUMINAIRE ARMS	4
NON-INTRUSIVE DETECTION SYSTEM	1
TEMPORARY SIGNAL CABINET AND CONTROLLER	1
R1-1F (2M) SIGNS	8



LEGEND

- CLASS 4 WOOD POLE
- CABLE OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- [X] SIGNAL HEAD NUMBER
- NON-INTRUSIVE DETECTION AREA
- SIGNAL HEAD TO BE COVERED AND DE-ENGERGIZED
- LUMINAIRE
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (FY) (Y) YELLOW ARROW
- (G) GREEN ARROW
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 31 & CTH C
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0101

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 1 OF 5

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1A	SHEET 134	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024030_sp_tmp.dgn PLOT DATE : 2/7/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES

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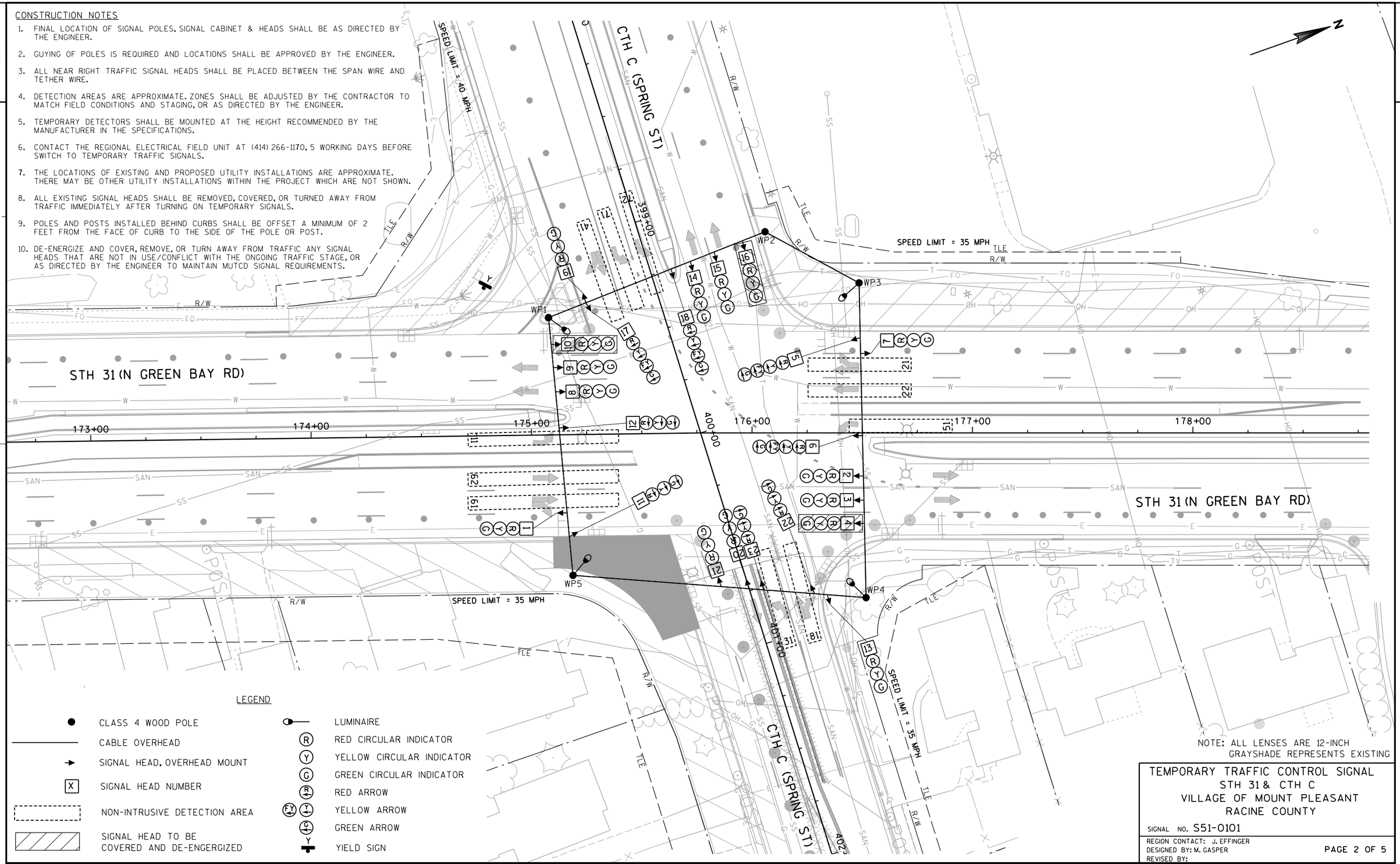

LEGEND

- CLASS 4 WOOD POLE
- CABLE OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- X — SIGNAL HEAD NUMBER
- NON-INTRUSIVE DETECTION AREA
- SIGNAL HEAD TO BE COVERED AND DE-ENGERGIZED
- LUMINAIRE
- R — RED CIRCULAR INDICATOR
- Y — YELLOW CIRCULAR INDICATOR
- G — GREEN CIRCULAR INDICATOR
- R — RED ARROW
- FY Y — YELLOW ARROW
- G — GREEN ARROW
- Y — YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 31 & CTH C
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0101

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 2 OF 5

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1B	SHEET 135	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024030B_sp_tmp.dgn | PLOT DATE : 2/7/2017 | PLOT BY : GaspeMC | PLOT NAME : | PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES

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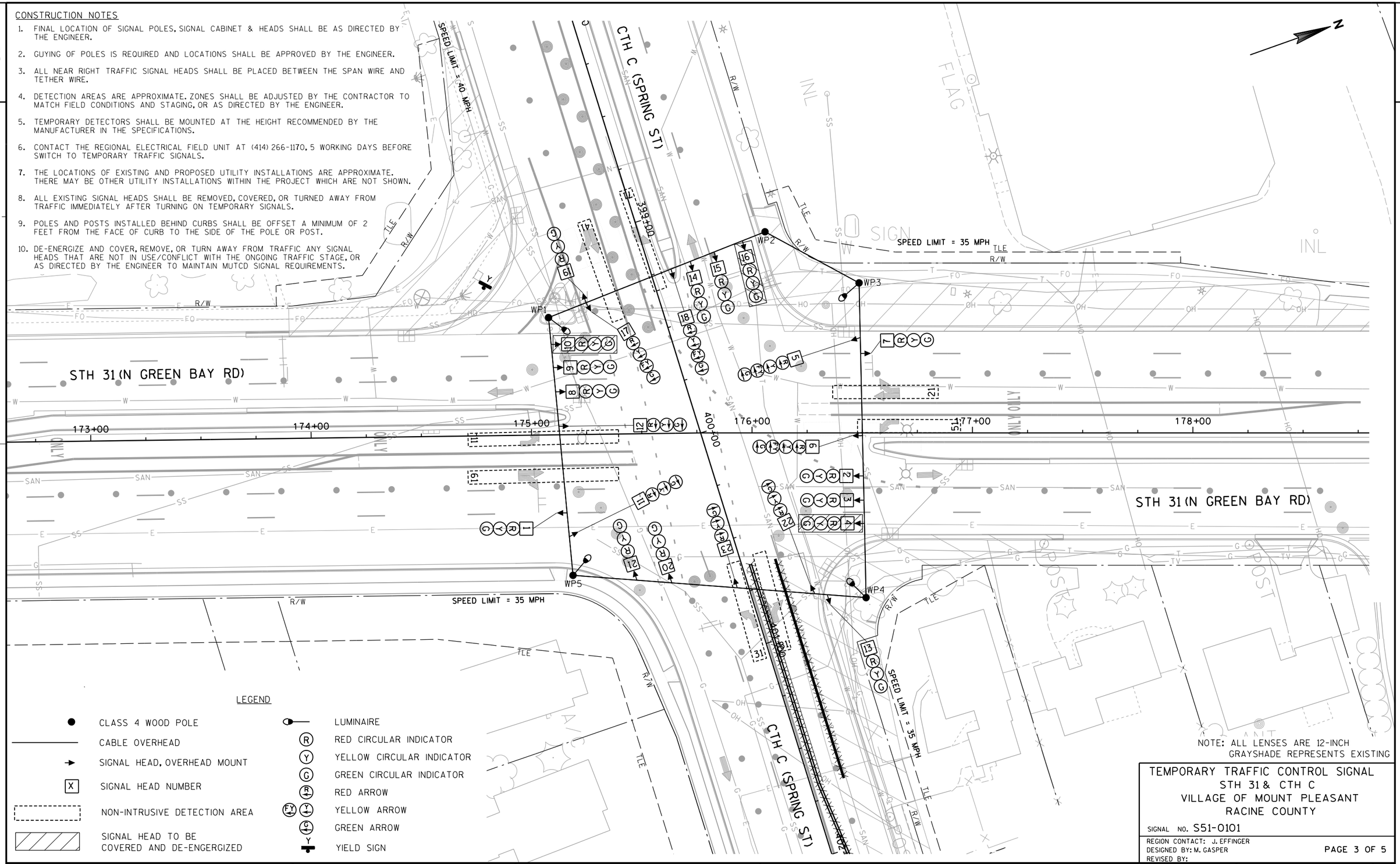

LEGEND

- CLASS 4 WOOD POLE
- CABLE OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- X — SIGNAL HEAD NUMBER
- NON-INTRUSIVE DETECTION AREA
- SIGNAL HEAD TO BE COVERED AND DE-ENGERGIZED
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- R — RED CIRCULAR INDICATOR
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NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 31 & CTH C
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0101

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 3 OF 5

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1C	SHEET 136	E

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET & HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
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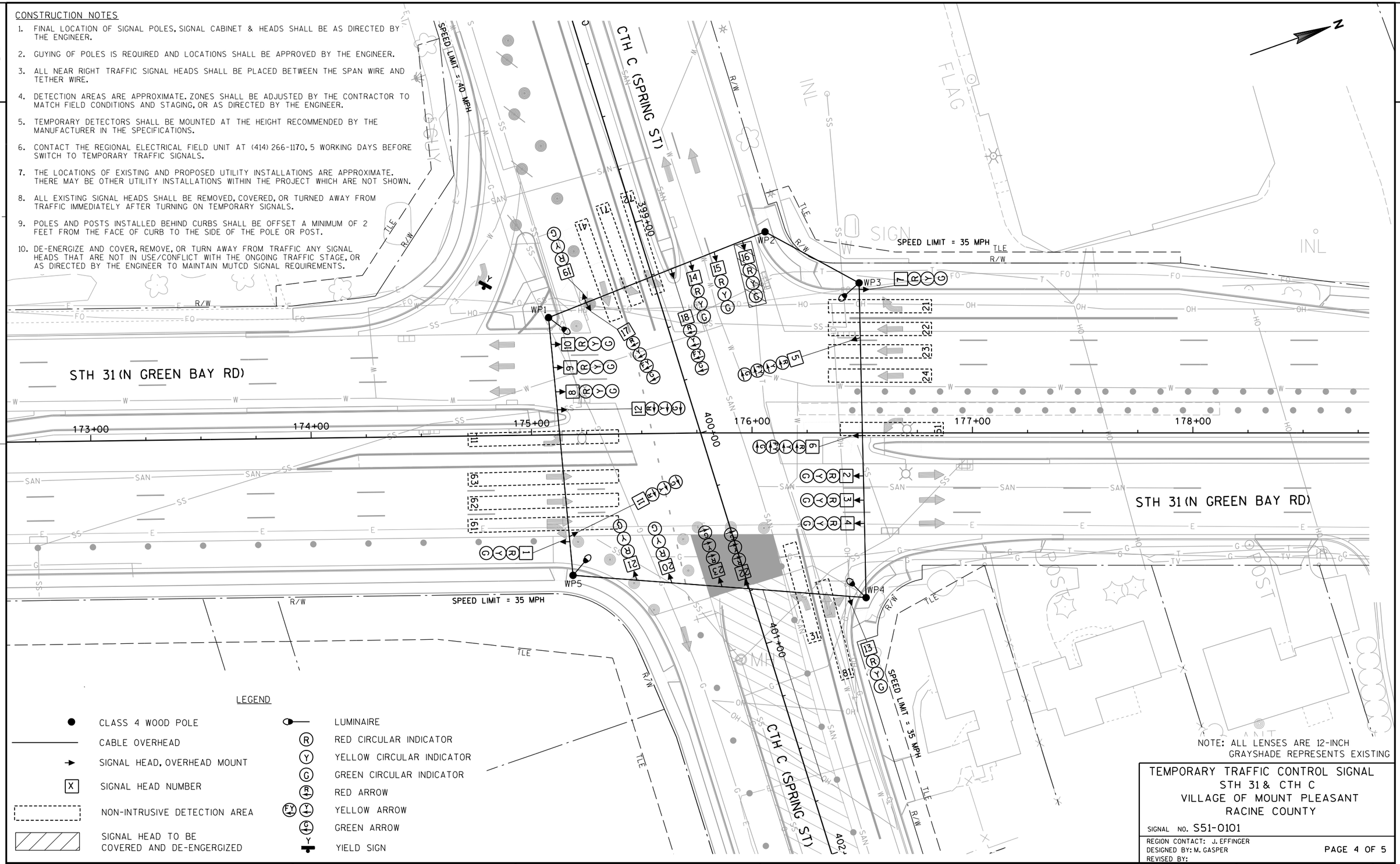

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GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 31 & CTH C
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0101

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1D	SHEET 137	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024030D_sp_tmp.dgn
PLOT DATE : 2/7/2017
PLOT BY : GaspeMC
PLOT NAME :
PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

2

SEQUENCE OF OPERATION

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO *	Ø1 CLEAR TO *	Ø2 R/W	Ø2 CLEAR TO *	Ø2 CLEAR TO *	Ø3 R/W	Ø3 CLEAR TO *	Ø3 CLEAR TO *	Ø4 R/W	Ø4 CLEAR TO *	Ø4 CLEAR TO *	FLASH
Ø1	5,6	G ←	-	-	-	-	-	-	-	-	-	-	-	-
Ø2	7,8,9,10	R	R	R	G	Y	R	R	R	R	R	R	R	R
Ø3	17,18	-	-	-	-	-	-	G ←	-	-	-	-	-	-
Ø4	19,20,21	R	R	R	R	R	R	R	R	R	G	Y	R	R
Ø5	11,12	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
Ø6	1,2,3,4	R	R	R	R	R	R	R	R	R	R	R	R	R
Ø7	22,23	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
Ø8	13,14,15,16	R	R	R	R	R	R	R	R	R	R	R	R	R
OLA	5,6	-	-	-	FY ←	Y ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
OLB	17,18	R ←	R ←	R ←	R ←	R ←	R ←	-	-	-	FY ←	Y ←	R ←	R ←
OLC														
OLD														
Ø2P														
Ø4P														
Ø6P														
Ø8P														

RING 1

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO *	Ø5 CLEAR TO *	Ø6 R/W	Ø6 CLEAR TO *	Ø6 CLEAR TO *	Ø7 R/W	Ø7 CLEAR TO *	Ø7 CLEAR TO *	Ø8 R/W	Ø8 CLEAR TO *	Ø8 CLEAR TO *
Ø1	5,6	-	-	-	-	-	-	-	-	-	-	-	-
Ø2	7,8,9,10	R	R	R	R	R	R	R	R	R	R	R	R
Ø3	17,18	-	-	-	-	-	-	-	-	-	-	-	-
Ø4	19,20,21	R	R	R	R	R	R	R	R	R	R	R	R
Ø5	11,12	G ←	Y ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
Ø6	1,2,3,4	R	R	R	G	Y	R	R	R	R	R	R	R
Ø7	22,23	R ←	R ←	R ←	R ←	R ←	R ←	G ←	Y ←	R ←	R ←	R ←	R ←
Ø8	13,14,15,16	R	R	R	R	R	R	R	R	R	G	Y	R
OLA	5,6	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
OLB	17,18	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←	R ←
OLC													
OLD													
Ø2P													
Ø4P													
Ø6P													
Ø8P													

RING 2

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

* WHEN CALLED, TIMED STEADY WALK, THEN FLASHING DON'T WALK, THEN GOES TO STEADY DON'T WALK

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
11	1	X			1	1					
21	2	X			2	2					
22	2	X			2	2					
23	2	X			2	2					
24	2	X			2	2					
31	3	X			3	3					
41	4	X			4	4					
42	4	X			4	4					
51	5	X			5	5					
61	6	X			6	6					
62	6	X			6	6					
63	6	X			6	6					
71	7	X			7	7					
72	7	X			7	7					
81	8	X			8	8					
82	8	X			8	8					

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W/ Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
RADIO	
* LOCATION OF MASTER	
CONTROLLER NO:	S-
SIGNAL SYSTEM #:	S- -

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

OVERLAP SPECIAL

OVERLAP	PROTECTED	PERMISSIVE
OL"A"	1	2
OL"B"	3	4

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH TERE IS NOT CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY CONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 BELOW).

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2, 3, 4, 7, 8
2	5 OR 6	1, 3, 4, 7, 8
3	7 OR 8	1, 2, 4, 5, 6
4	7 OR 8	1, 2, 3, 5, 6
5	1 OR 2	3, 4, 6, 7, 8
6	1 OR 2	3, 4, 5, 7, 8
7	3 OR 4	1, 2, 5, 6, 8
8	3 OR 4	1, 2, 5, 6, 7

STH 31 & CTH C
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. **S51-0101**

CONTROLLER TYPE: **TEMP**

DATE **FEBRUARY 2017** PAGE NO. 5 OF 5

CONSTRUCTION NOTES:

1. THE LOCATIONS OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. EXISTING CONDUIT RUNS NO LONGER USED FOR THE PROPOSED TRAFFIC SIGNAL INSTALLATION TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE AND 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 CONTRACTOR.
4. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.

LEGEND CONT.

- 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 (COUNTDOWN TIMER)
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- PULL BOX

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT WITH 12" PULL BOX

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING TO REMAIN
BOLD REPRESENTS EXISTING TO BE REMOVED

CTH C (SPRING ST)

STH 31 (N GREEN BAY RD)

TRAFFIC CONTROL SIGNAL
STH 31 & CTH C
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

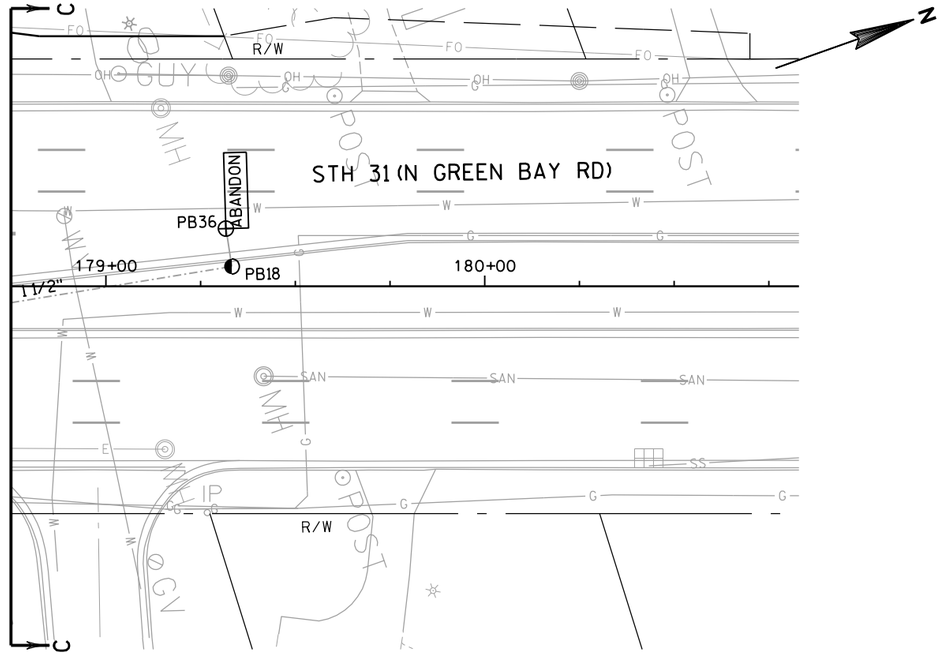
SIGNAL NO. S51-0101

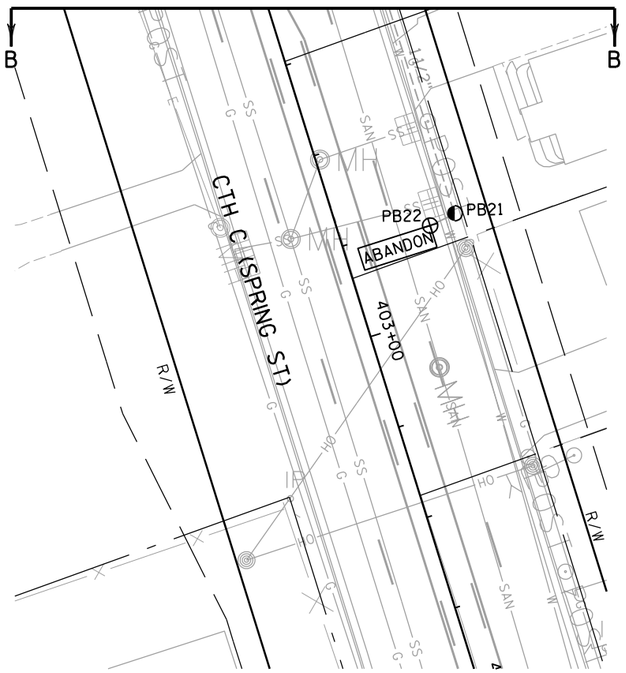
REGION CONTACT: J. EFFINGER
DESIGNED BY:
REVISED BY:

PAGE 1 OF 2

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 139	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024031_sp_Rm.dgn | PLOT DATE : 2/7/2017 | PLOT BY : GaspeMC | PLOT NAME : | PLOT SCALE : 1:40





TRAFFIC CONTROL SIGNAL
STH 31 & CTH C
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0101

REGION CONTACT: J.EFFINGER
DESIGNED BY:
REVISED BY:

PAGE 2 OF 2

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 140	E

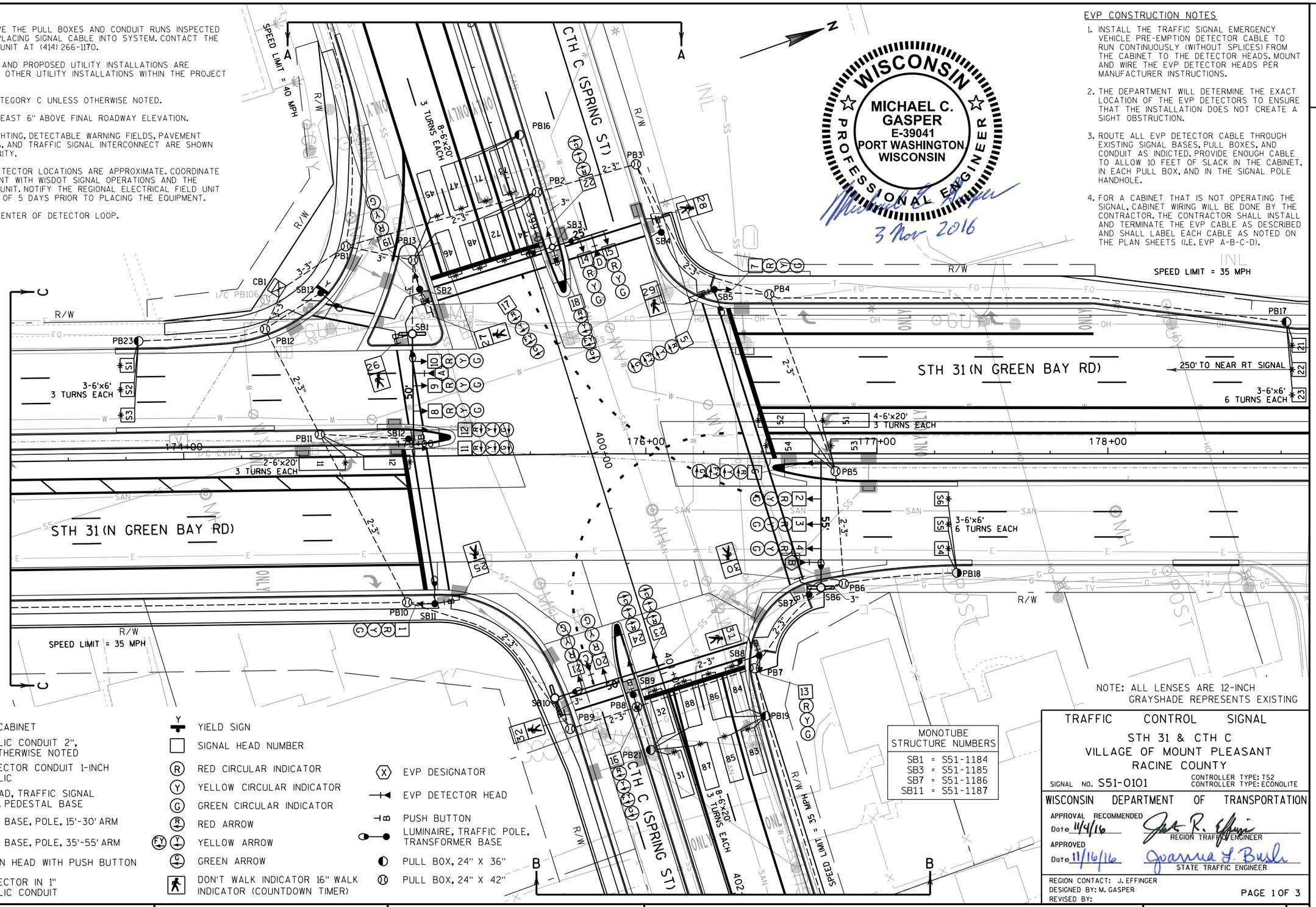
CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. ALL LUMINAIRES ARE LED CATEGORY C UNLESS OTHERWISE NOTED.
4. INSTALL CABINET BASE AT LEAST 6" ABOVE FINAL ROADWAY ELEVATION.
5. PROPOSED STORM SEWER, LIGHTING, DETECTABLE WARNING FIELDS, PAVEMENT MARKING WORDS AND ARROWS, AND TRAFFIC SIGNAL INTERCONNECT ARE SHOWN GRAYSHADED FOR PLAN CLARITY.
6. DETECTION UNIT AND EVP DETECTOR LOCATIONS ARE APPROXIMATE. COORDINATE PLACEMENT OF THE EQUIPMENT WITH WISDOT SIGNAL OPERATIONS AND THE REGIONAL ELECTRICAL FIELD UNIT. NOTIFY THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170 A MINIMUM OF 5 DAYS PRIOR TO PLACING THE EQUIPMENT.
7. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.

EVP CONSTRUCTION NOTES

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT AND WIRE THE EVP DETECTOR HEADS PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ROUTE ALL EVP DETECTOR CABLE THROUGH EXISTING SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICTED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D).

WISCONSIN
MICHAEL C. GASPER
E-39041
PORT WASHINGTON
WISCONSIN
PROFESSIONAL ENGINEER
3 Nov 2016



NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1-INCH NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- YIELD SIGN
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- DON'T WALK INDICATOR 16" WALK INDICATOR (COUNTDOWN TIMER)
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"

MONOTUBE STRUCTURE NUMBERS

SB1	= S51-1184
SB3	= S51-1185
SB7	= S51-1186
SB11	= S51-1187

TRAFFIC CONTROL SIGNAL

STH 31 & CTH C
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0101
CONTROLLER TYPE: TS2
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED Date 11/4/16 — REGION TRAFFIC ENGINEER
APPROVED Date 11/16/16 — STATE TRAFFIC ENGINEER

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 1 OF 3

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 141 E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024033_sp.dgn
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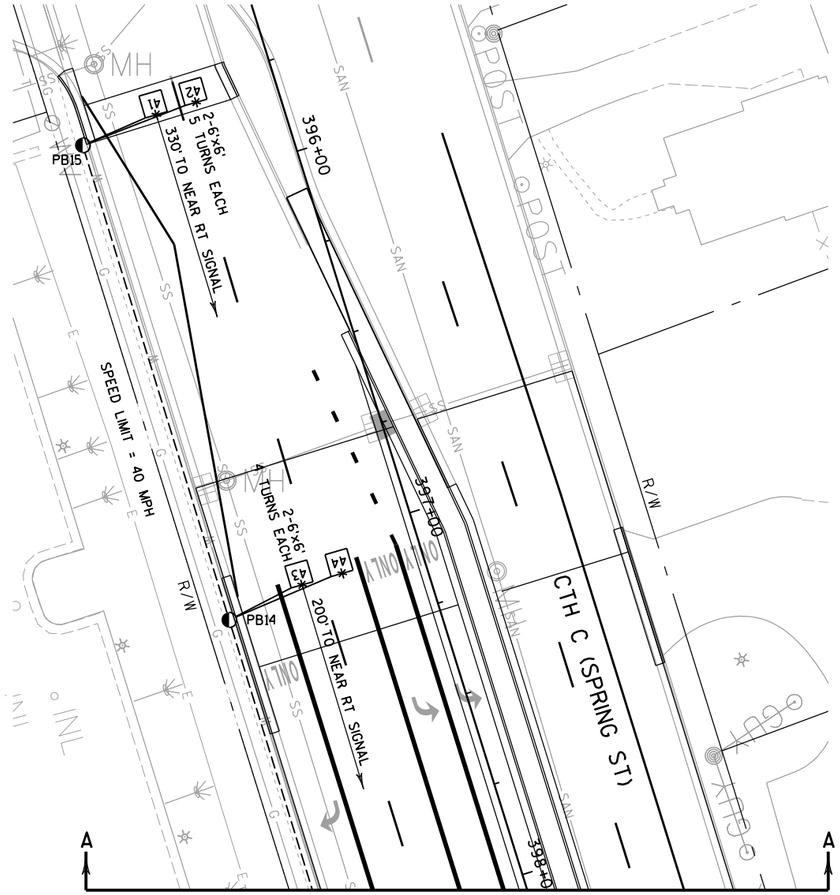
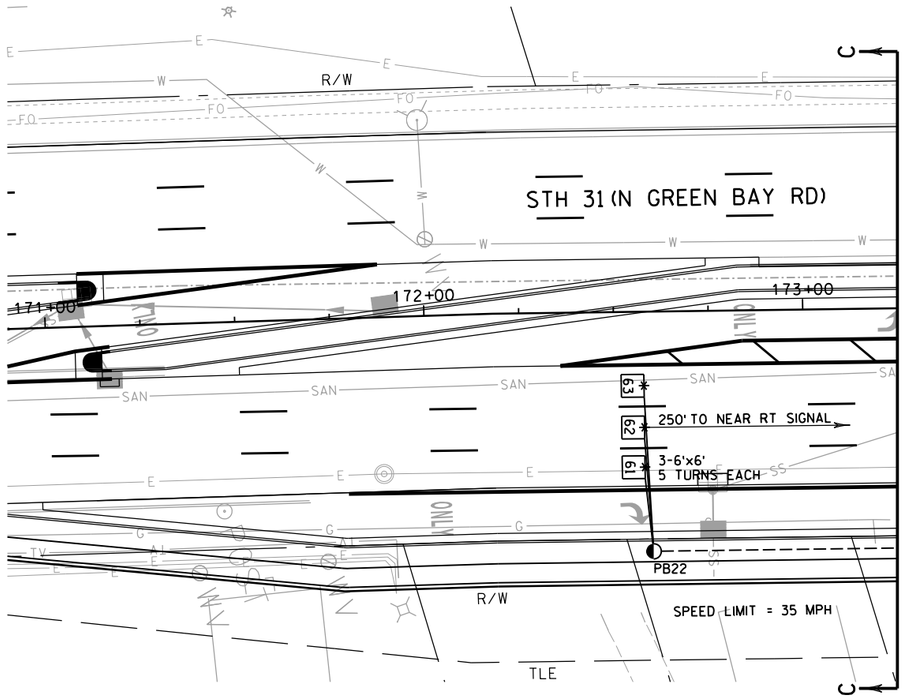
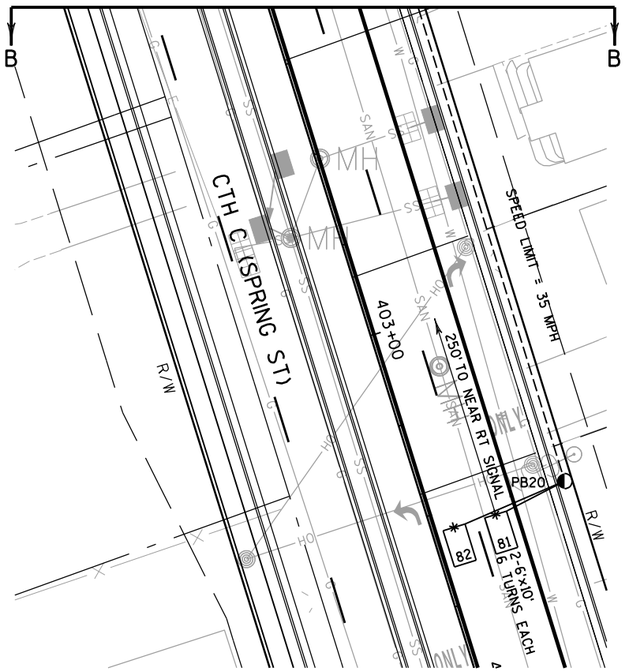
WISDOT/CADDS SHEET 42

11/4/16 DAB







TRAFFIC CONTROL SIGNAL
STH 31 & CTH C
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

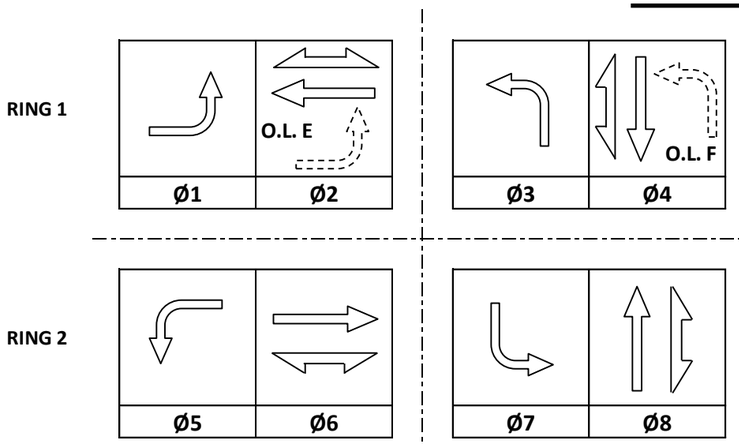
SIGNAL NO. S51-0101

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 142	E

	HEAD NUMBERS	FLASH
Ø1	5,6	R ←
Ø2	7,8,9,10	R
Ø3	16,17,18	R ←
Ø4	19,20,21	R
Ø5	11,12	R ←
Ø6	1,2,3,4	R
Ø7	22,23,24	R ←
Ø8	13,14,15	R
Ø2P	27,28	
Ø4P	25,26	
Ø6P	31,32	
Ø8P	29,30	
OLE	5,6	-
OLF	16,17,18	-
OLG		
OLH		



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	X
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	
TRAFFIC RESPONSIVE	X
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	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
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	35	33	39	37	43	41	47	45	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	21	23	32	42	44	46	48	52	54	62	71	73	81	83	85	S1	S3	S5						PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	3	4	4	4	4	5	5	6	7	7	8	8	8									CALLED PHASE
CALL OPTION	X	X	X	X			X	X	X	X	X	X	X		X	X									CALL OPTION
DELAY TIME																									DELAY TIME
EXTENSION OPTION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									EXTENSION OPTION
EXTEND TIME					X	X								X											EXTEND TIME
USE ADDED INITIAL		X	X								X														USE ADDED INITIAL
CROSS SWITCH PHASE	2			4																					CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	36	34	40	38	44	42	48	46	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	12	22	31	41	43	45	47	51	53	61	63	72	74	82	84	86	S2	S4	S6						PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	3	4	4	4	4	5	5	6	6	7	7	8	8	8									CALLED PHASE
CALL OPTION	X	X	X			X	X	X	X	X	X	X	X		X	X									CALL OPTION
DELAY TIME															X										DELAY TIME
EXTENSION OPTION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									EXTENSION OPTION
EXTEND TIME				X	X									X											EXTEND TIME
USE ADDED INITIAL		X								X	X														USE ADDED INITIAL
CROSS SWITCH PHASE	2		4																						CROSS SWITCH PHASE

STH 31 & CTH C
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY COUNTY

SIGNAL NO: S51-0101 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: NOVEMBER 2016 PAGE NO. 3 OF 3

SIGNAL WIRING CONDUCTOR TABLE

PROJECT ID:	2390-09-70
INTERSECTION:	STH 31 & CTH C

SIGNAL WIRE	BLK – BLACK	RED – RED	GRN – GREEN
COLOR CODING	WHT – WHITE	BLU – BLUE	ORG – ORANGE

CB1 TO	NO. OF CONDUCTORS	HEAD NO.	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	FLASHING <YELLOW>	D/WALK	WALK	PED BUTTON	OTHER
SB1	12	8	RED	ORG	GRN								
		9	RED	ORG	GRN								
		10	RED	ORG	GRN								
		11				RED/BLK	ORG/BLK	GRN/BLK					
		12				RED/BLK	ORG/BLK	GRN/BLK					
		26								BLK	BLU		
		B										WHT/BLK	
SB2	12	17				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		19	RED	ORG	GRN								
		27								BLK	BLU		
		B										WHT/BLK	
SB3	15	14	RED/BLK	ORG/BLK	GRN/BLK								
		15	RED/BLK	ORG/BLK	GRN/BLK								
		18				WHT	BLU/WHT	GRN/WHT	BLK/WHT				
		22				RED	ORG	GRN					
		B										WHT/BLK	
SB4	7	28								BLK	BLU		
		B										WHT/BLK	
SB5	12	5				RED	ORG	GRN	BLK/WHT				
		7	RED/BLK	ORG/BLK	GRN/BLK								
		29								BLK	BLU		
		B										WHT/BLK	
SB6	12	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		4	RED	ORG	GRN								
		6				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		30								BLK	BLU		
SB7	7	B										WHT/BLK	
SB8	12	13	RED	ORG	GRN								
		31								BLK	BLU		
		B										WHT/BLK	
SB9	7	16				RED	ORG	GRN	BLK				
		B										WHT/BLK	
SB10	12	20	RED	ORG	GRN								
		21	RED	ORG	GRN								
		23				RED/BLK	ORG/BLK	GRN/BLK					
		24				RED/BLK	ORG/BLK	GRN/BLK					
		32								BLK	BLU		
		B										WHT/BLK	
SB11	12	1	RED	ORG	GRN								
		25								BLK	BLU		
		B										WHT/BLK	
SB12	7	B										WHT/BLK	

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	CB1

PULL BOX JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	CB1
PB2	SB3
PB3	SB4
PB4	SB5
PB5	SB6
PB6	SB6
PB7	SB8
PB8	SB9
PB9	SB10
PB10	SB11
PB11	SB12
PB12	CB1
PB13	SB2

LIGHTING UF 12 AWG W/GROUND	
FROM	TO
CB1	SB13
SB13	SB11
SB11	SB10
SB10	SB8
CB1	SB1
SB1	SB3
SB3	SB5
SB5	SB6

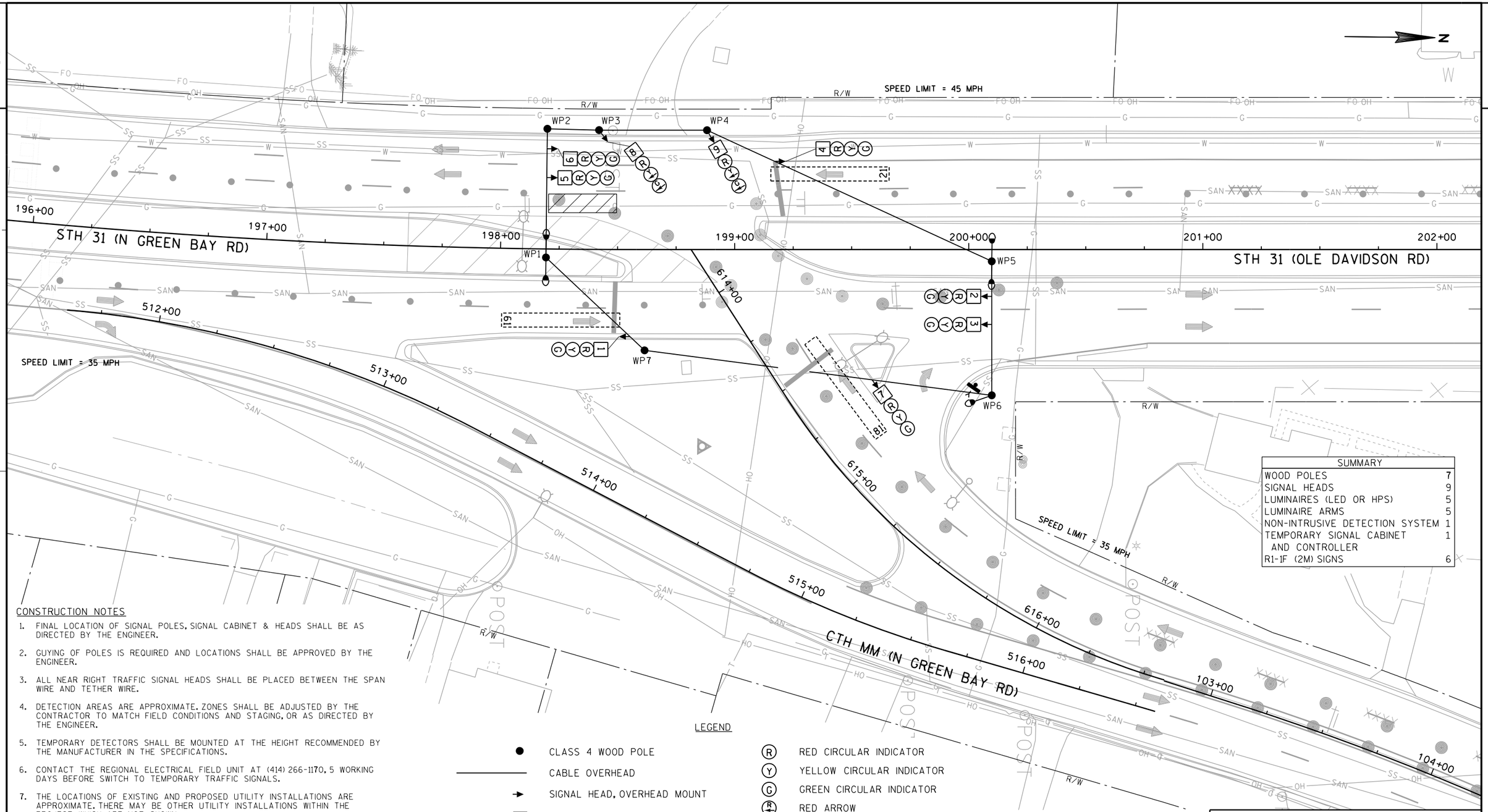
EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	"A" (SB1)
CB1	"D" (SB3)
CB1	"B" (SB6)
CB1	"C" (SB10)

NOTES: USE WHITE CONDUCTOR IN THE SIGNAL CABLE 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 ON TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

2



SUMMARY	
WOOD POLES	7
SIGNAL HEADS	9
LUMINAIRES (LED OR HPS)	5
LUMINAIRE ARMS	5
NON-INTRUSIVE DETECTION SYSTEM	1
TEMPORARY SIGNAL CABINET AND CONTROLLER	1
R1-1F (2M) SIGNS	6

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET & HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. DETECTION AREAS ARE APPROXIMATE. ZONES SHALL BE ADJUSTED BY THE CONTRACTOR TO MATCH FIELD CONDITIONS AND STAGING, OR AS DIRECTED BY THE ENGINEER.
5. TEMPORARY DETECTORS SHALL BE MOUNTED AT THE HEIGHT RECOMMENDED BY THE MANUFACTURER IN THE SPECIFICATIONS.
6. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170, 5 WORKING DAYS BEFORE SWITCH TO TEMPORARY TRAFFIC SIGNALS.
7. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
8. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
9. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
10. DE-ENERGIZE AND COVER, REMOVE, OR TURN AWAY FROM TRAFFIC ANY SIGNAL HEADS THAT ARE NOT IN USE/CONFLICT WITH THE ONGOING TRAFFIC STAGE, OR AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.

LEGEND

- CLASS 4 WOOD POLE
- CABLE OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- [X] SIGNAL HEAD NUMBER
- NON-INTRUSIVE DETECTION AREA
- LUMINAIRE
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y) YELLOW ARROW
- (G) GREEN ARROW
- Y YIELD SIGN
- SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

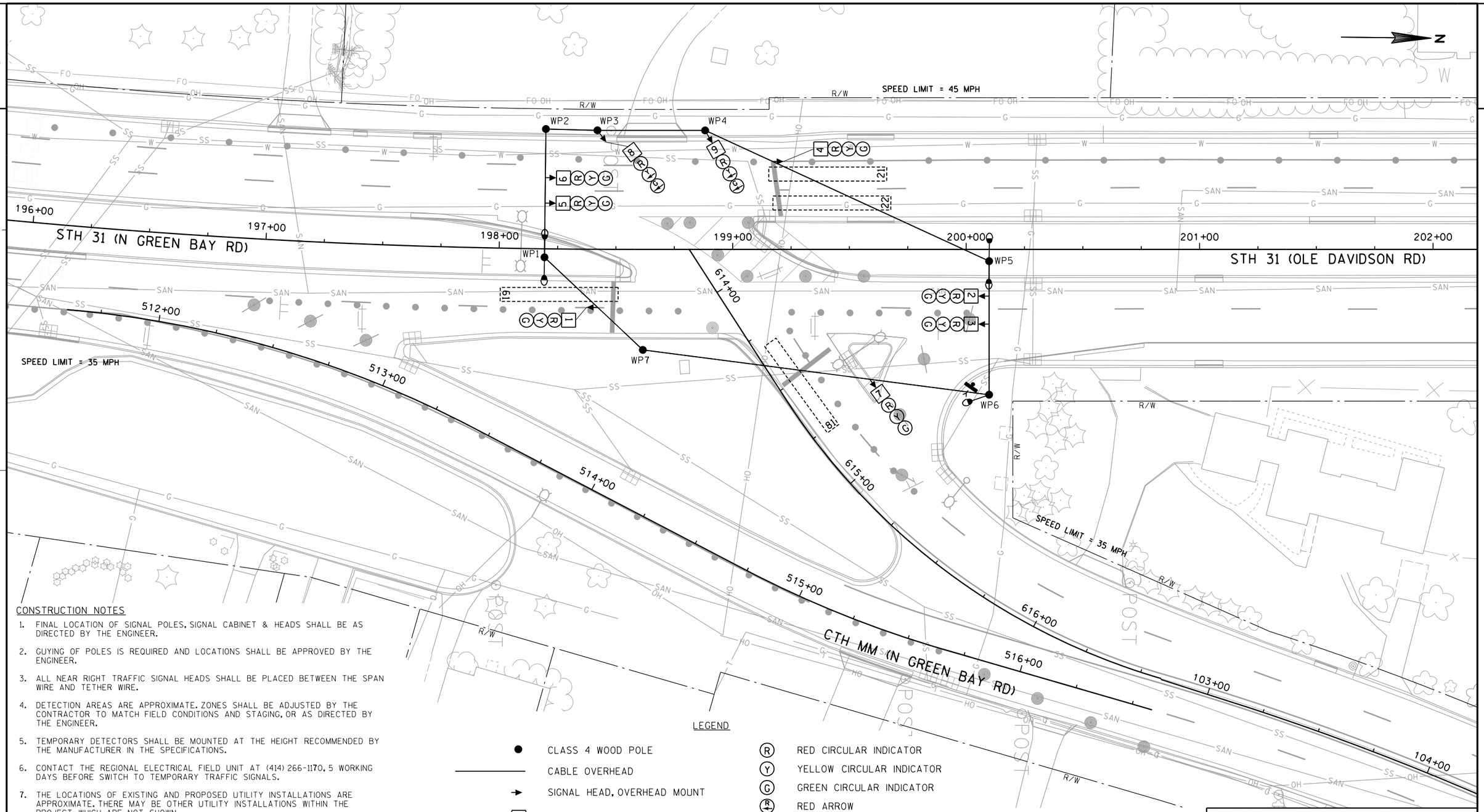
TEMPORARY TRAFFIC CONTROL SIGNAL
STH 31 & CTH MM
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 1 OF 4

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1A	SHEET 145	E



CONSTRUCTION NOTES

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LEGEND

- CLASS 4 WOOD POLE
- CABLE OVERHEAD
- SIGNAL HEAD, OVERHEAD MOUNT
- X — SIGNAL HEAD NUMBER
- NON-INTRUSIVE DETECTION AREA
- LUMINAIRE
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y) YELLOW ARROW
- (G) GREEN ARROW
- Y — YIELD SIGN
- SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

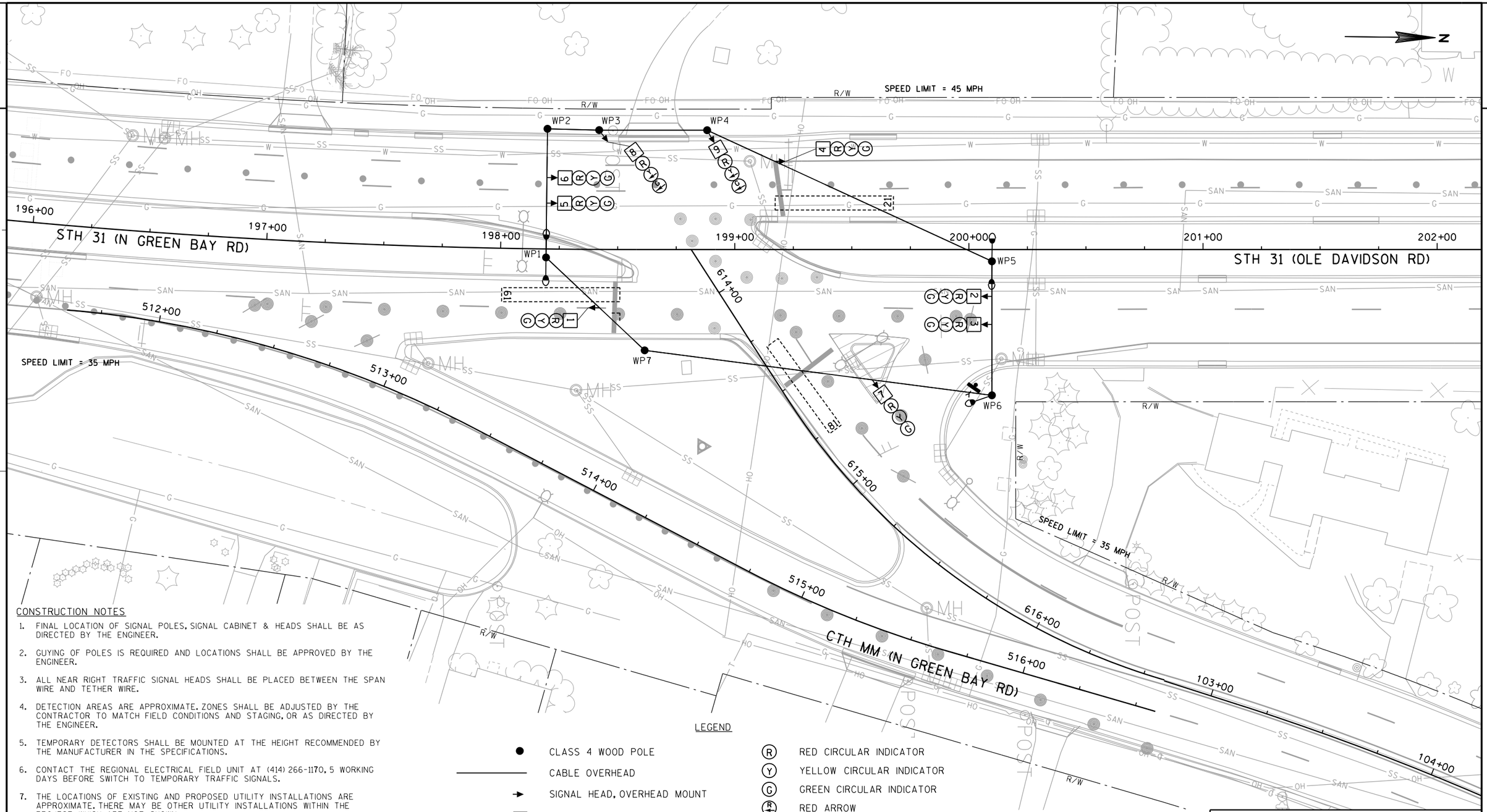
TEMPORARY TRAFFIC CONTROL SIGNAL
STH 31 & CTH MM
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 2 OF 4

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1B	SHEET 146	E



CONSTRUCTION NOTES

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6. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170, 5 WORKING DAYS BEFORE SWITCH TO TEMPORARY TRAFFIC SIGNALS.
7. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
8. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
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LEGEND

●	CLASS 4 WOOD POLE	(R)	RED CIRCULAR INDICATOR
———	CABLE OVERHEAD	(Y)	YELLOW CIRCULAR INDICATOR
→	SIGNAL HEAD, OVERHEAD MOUNT	(G)	GREEN CIRCULAR INDICATOR
[X]	SIGNAL HEAD NUMBER	(R)	RED ARROW
▭	NON-INTRUSIVE DETECTION AREA	(Y)	YELLOW ARROW
⊶	LUMINAIRE	(G)	GREEN ARROW
		Y	YIELD SIGN
▨	SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED		

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 31 & CTH MM
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 3 OF 4

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1C	SHEET 147	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024040C_sp_tmp.dgn PLOT DATE : 2/7/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION

N

NOT USED | NOT USED | NOT USED

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO *	*			Ø2 R/W	Ø2 CLEAR TO *	*			Ø3 R/W	Ø3 CLEAR TO *	*			Ø4 R/W	Ø4 CLEAR TO *	*			FLASH
Ø1																						
Ø2	4,5,6						G	Y	R													R
Ø3																						
Ø4																						
Ø5																						
Ø6	1,2,3						R	R	R													R
Ø7																						
Ø8	7,8,9						R	R	R													R
Ø2P																						
Ø4P																						
Ø6P																						
Ø8P																						

RING 1

NOT USED | NOT USED | NOT USED

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO *	*			Ø6 R/W	Ø6 CLEAR TO *	*			Ø7 R/W	Ø7 CLEAR TO *	*			Ø8 R/W	Ø8 CLEAR TO *	*		
Ø1																					
Ø2	4,5,6						R	R	R								R	R	R		
Ø3																					
Ø4																					
Ø5																					
Ø6	1,2,3						G	Y	R								R	R	R		
Ø7																					
Ø8	7,8,9						R	R	R								G	Y	R		
Ø2P																					
Ø4P																					
Ø6P																					
Ø8P																					

RING 2

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH TERE IS NOT CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY CONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT RIGHT).

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	SIZE	NUMBER OF TURNS
21	1	X			2	2					VIDEO
22	1	X			2	2					VIDEO
61	2	X			6	6					VIDEO
81	4	X			8	8					VIDEO

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W/ Ø	PHASE RECALL	PHASE ACTIVE
1				
2	X	6	MIN	X
3				
4				
5				
6	X	2	MIN	X
7				
8				X

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
RADIO	
* LOCATION OF MASTER	
CONTROLLER NO:	S-
SIGNAL SYSTEM #:	S- -

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

CHART 1

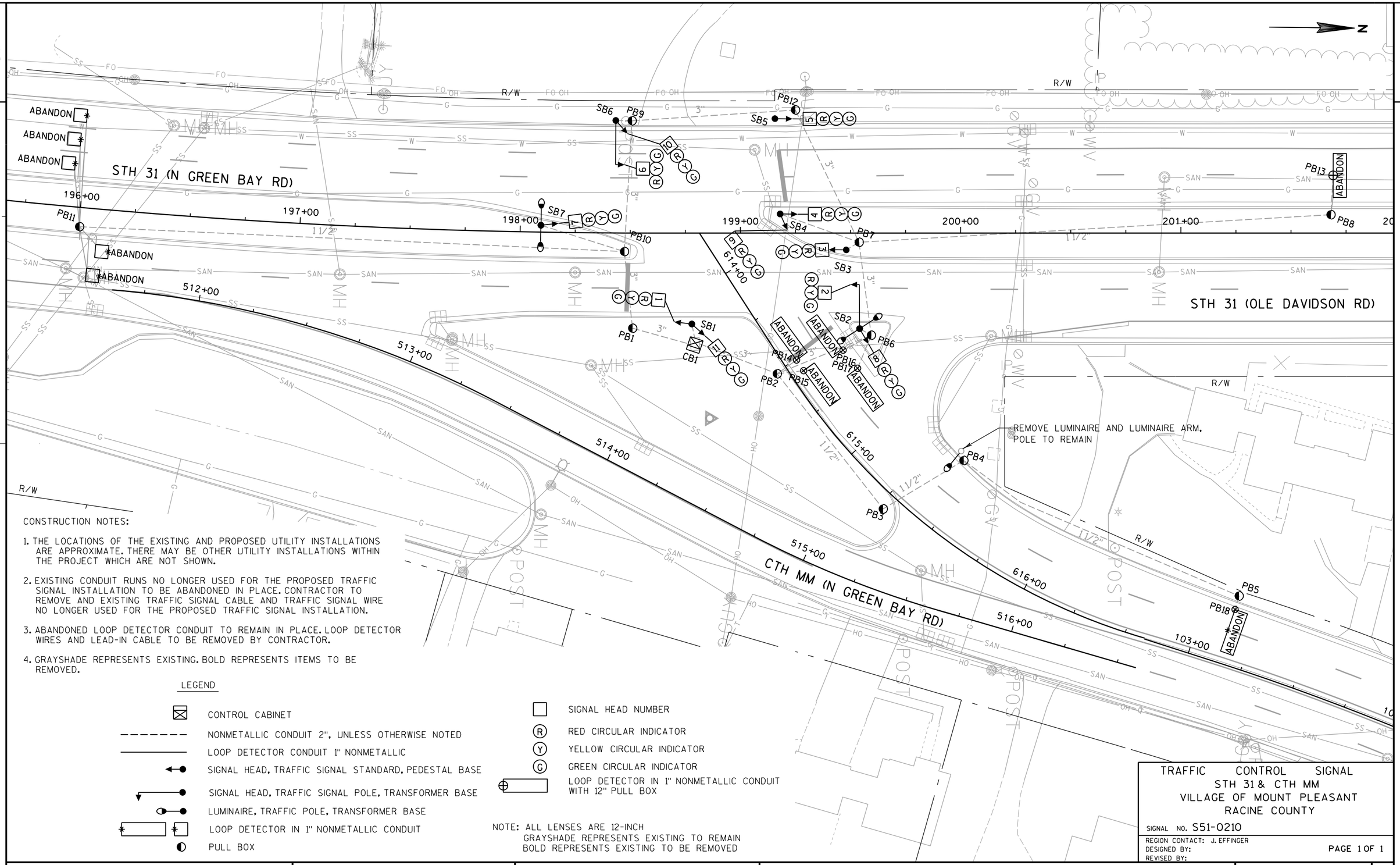
PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1		
2	6	8
3		
4		
5		
6	2	8
7		
8	-	2,6

STH 31 & CTH C
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. **S51-0210**

CONTROLLER TYPE: **TEMP**

DATE **FEBRUARY 2017** PAGE NO. 4 OF 4



CONSTRUCTION NOTES:

1. THE LOCATIONS OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. EXISTING CONDUIT RUNS NO LONGER USED FOR THE PROPOSED TRAFFIC SIGNAL INSTALLATION TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE AND 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 CONTRACTOR.
4. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT WITH 12" PULL BOX

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING TO REMAIN
BOLD REPRESENTS EXISTING TO BE REMOVED

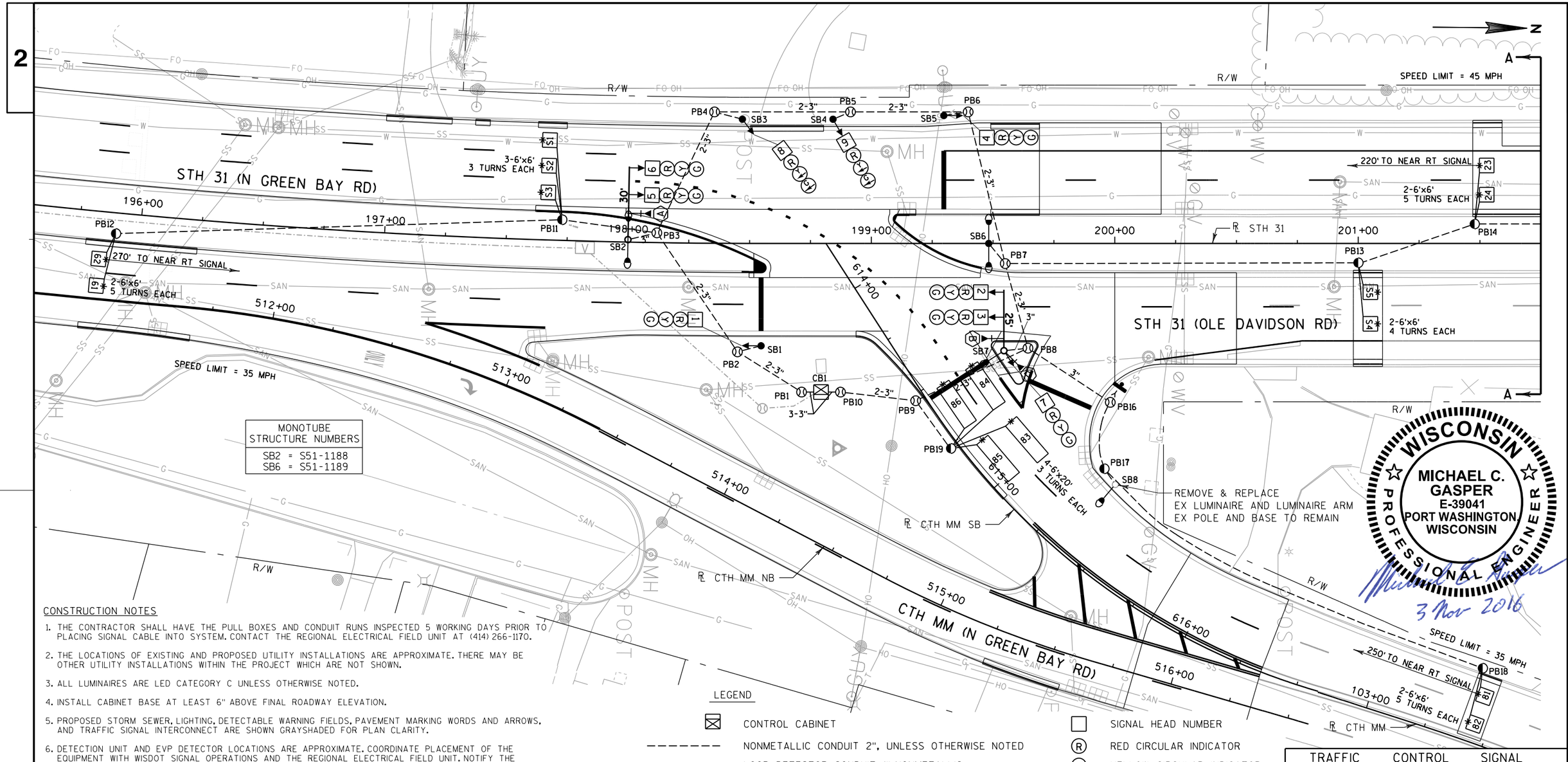
TRAFFIC CONTROL SIGNAL
STH 31 & CTH MM
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY:
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 149	E



MONOTUBE STRUCTURE NUMBERS

SB2	= S51-1188
SB6	= S51-1189

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. ALL LUMINAIRES ARE LED CATEGORY C UNLESS OTHERWISE NOTED.
4. INSTALL CABINET BASE AT LEAST 6" ABOVE FINAL ROADWAY ELEVATION.
5. PROPOSED STORM SEWER, LIGHTING, DETECTABLE WARNING FIELDS, PAVEMENT MARKING WORDS AND ARROWS, AND TRAFFIC SIGNAL INTERCONNECT ARE SHOWN GRAYSHADED FOR PLAN CLARITY.
6. DETECTION UNIT AND EVP DETECTOR LOCATIONS ARE APPROXIMATE. COORDINATE PLACEMENT OF THE EQUIPMENT WITH WISDOT SIGNAL OPERATIONS AND THE REGIONAL ELECTRICAL FIELD UNIT. NOTIFY THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170 A MINIMUM OF 5 DAYS PRIOR TO PLACING THE EQUIPMENT.
7. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.

EVP CONSTRUCTION NOTES

1. INSTALL THE TRAFFIC SIGNAL EMERGENCY VEHICLE PRE-EMPTION DETECTOR CABLE TO RUN CONTINUOUSLY (WITHOUT SPLICES) FROM THE CABINET TO THE DETECTOR HEADS. MOUNT AND WIRE THE EVP DETECTOR HEADS PER MANUFACTURER INSTRUCTIONS.
2. THE DEPARTMENT WILL DETERMINE THE EXACT LOCATION OF THE EVP DETECTORS TO ENSURE THAT THE INSTALLATION DOES NOT CREATE A SIGHT OBSTRUCTION.
3. ROUTE ALL EVP DETECTOR CABLE THROUGH EXISTING SIGNAL BASES, PULL BOXES, AND CONDUIT AS INDICTED. PROVIDE ENOUGH CABLE TO ALLOW 10 FEET OF SLACK IN THE CABINET, IN EACH PULL BOX, AND IN THE SIGNAL POLE HANDHOLE.
4. FOR A CABINET THAT IS NOT OPERATING THE SIGNAL, CABINET WIRING WILL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL INSTALL AND TERMINATE THE EVP CABLE AS DESCRIBED AND SHALL LABEL EACH CABLE AS NOTED ON THE PLAN SHEETS (I.E. EVP A-B-C-D).

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

WISCONSIN
MICHAEL C. GASPER
E-39041
PORT WASHINGTON, WISCONSIN
PROFESSIONAL ENGINEER
3 Nov 2016

TRAFFIC CONTROL SIGNAL

STH 31 & CTH MM
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0210
CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED Date 11/4/16 — REGION TRAFFIC ENGINEER
APPROVED Date 11/16/16 — STATE TRAFFIC ENGINEER

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 1 OF 3

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 150	E

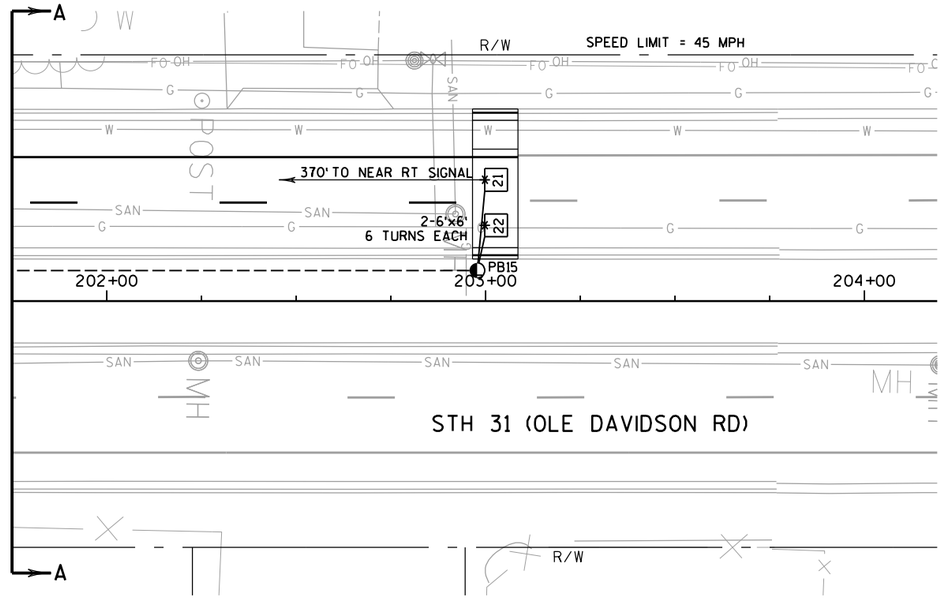
FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024043_sp.dgn | PLOT DATE : 12/2/2016 | PLOT BY : gaspemc | PLOT NAME : | PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

11/4/16 TAB

2

N



TRAFFIC CONTROL SIGNAL
STH 31 & CTH MM
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

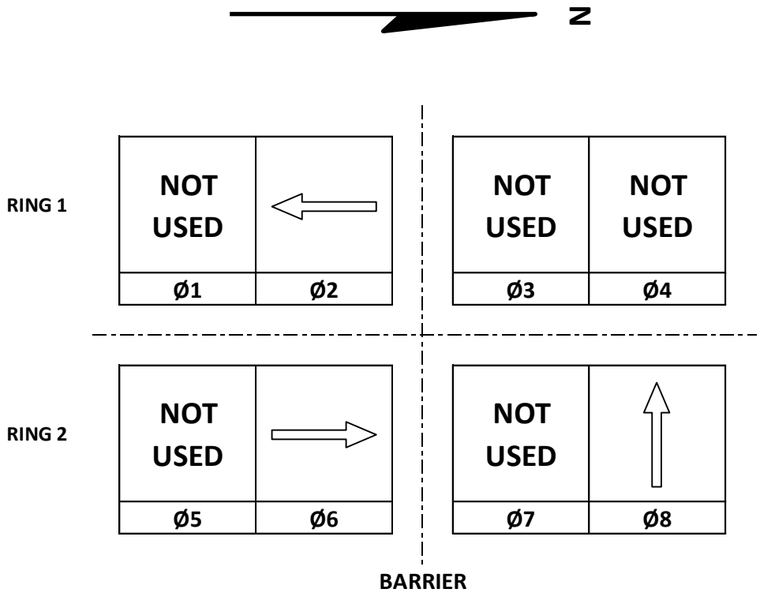
SIGNAL NO. S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: M. GASPER
REVISED BY:

PAGE 2 OF 3

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TRAFFIC SIGNAL PLAN	SHEET 151	E

	HEAD NUMBERS	FLASH
Ø1		
Ø2	4,5,6	R
Ø3		
Ø4		
Ø5		
Ø6	1,2,3	R
Ø7		
Ø8	7,8,9	R
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLE		
OLF		
OLG		
OLH		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2	X	6	MIN	X
3				
4				
5				
6	X	2	MIN	X
7				
8				X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	D
MOVEMENT	← →	← →	↑
PHASE	2+6	6+2	8

AFTER PREEMPTION SEQUENCE 2+6 OR 6+2, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 8, CONTROLLER SHALL RETURN TO PHASE 8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	X
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	
TRAFFIC RESPONSIVE	X
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	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	21	23	61	81	83	85	S1	S3
CALLED PHASE	2	2	6	8	8	8		
CALL OPTION	X	X	X		X	X		
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X		
EXTEND TIME				X				
USE ADDED INITIAL	X	X	X					
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29	DETECTOR INPUT
S5								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	22	24	62	82	84	86	S2	S4
CALLED PHASE	2	2	6	8	8	8		
CALL OPTION	X	X	X		X	X		
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X		
EXTEND TIME				X				
USE ADDED INITIAL	X	X	X					
CROSS SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

STH 31 & CTH MM
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY COUNTY

SIGNAL NO: S51-0210 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: NOVEMBER 2016 PAGE NO. 3 OF 3

SIGNAL WIRING CONDUCTOR TABLE

PROJECT ID:	2390-09-70
INTERSECTION:	STH 31 & CTH MM

SIGNAL WIRE COLOR CODING	BLK – BLACK	RED – RED	GRN – GREEN
	WHT – WHITE	BLU – BLUE	ORG – ORANGE

CB1 TO	NO. OF CONDUCTORS	HEAD NO.	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	FLASHING <YELLOW>	D/WALK	WALK	PED BUTTON	OTHER
SB1	7	1	RED	ORG	GRN								
SB2	7	5	RED	ORG	GRN								
		6	RED	ORG	GRN								
SB3	7	8	RED				ORG	GRN					
SB4	7	9	RED				ORG	GRN					
SB5	7	4	RED	ORG	GRN								
SB7	12	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		7	RED/BLK	ORG/BLK	GRN/BLK								

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	CB1

PULL BOX JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	CB1
PB2	SB1
PB3	SB2
PB4	SB3
PB5	SB4
PB6	SB5
PB7	SB6
PB8	SB7
PB9	CB1
PB10	CB1
PB16	SB8
PB17	SB8

LIGHTING UF 12 AWG W/GROUND	
FROM	TO
CB1	SB2
CB1	SB7
SB7	SB8
SB8	SB6

EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	"A" (SB2)
CB1	"B" (SB7)
CB1	"D" (SB7)

NOTES: USE WHITE CONDUCTOR IN THE SIGNAL CABLE 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.

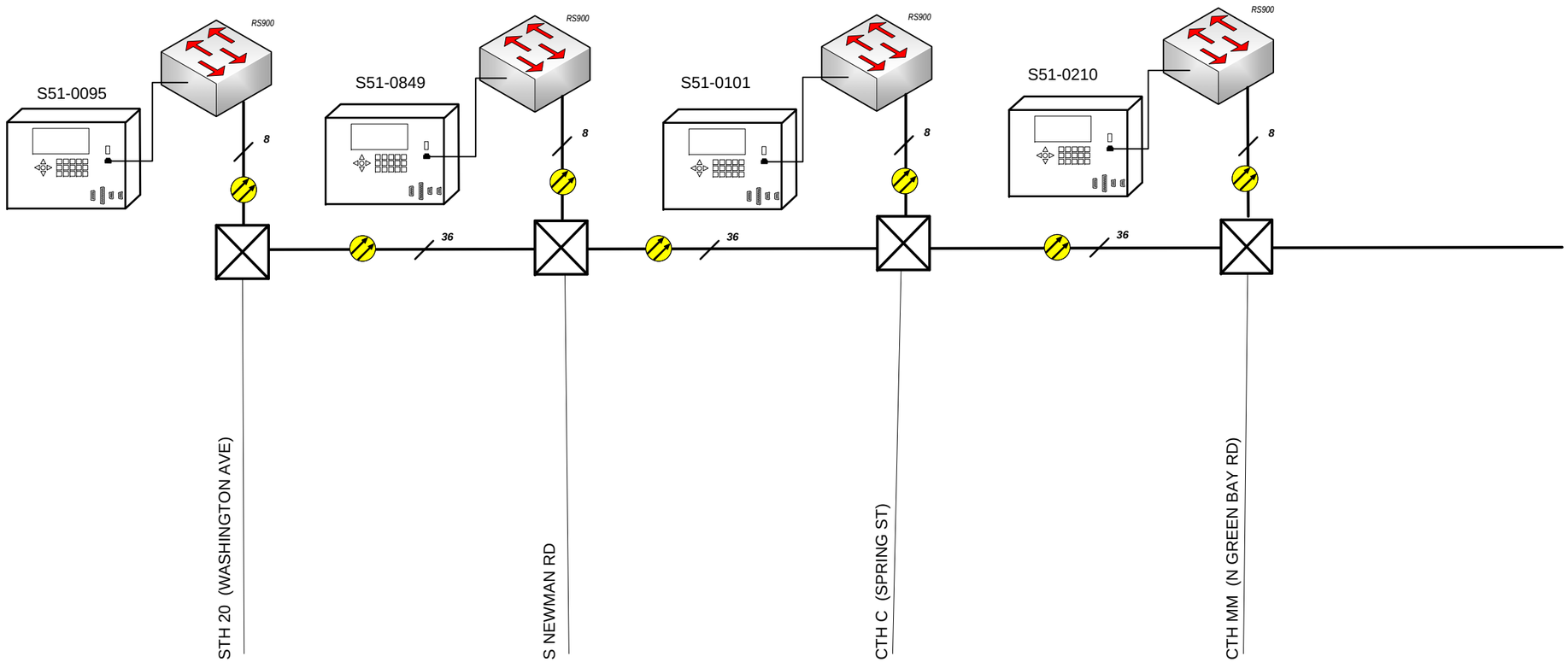
AT THE SIGNAL BASES, CONNECT ON TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

NOTES:
1. MAXIMUM SPLICE LOSS SHALL BE 0.1dB.
2. NO INTERMEDIATE SPLICES ALLOWED.
3. ALL SPLICES SHALL BE FUSION SPLICES.
4. COORDINATE FIBER ASSIGNMENTS WITH THE STOC AT (414) 227-2166 BEFORE SPLICING FIBER OPTIC CABLE.
5. THE ENTIRE MAINLINE FIBER OPTIC CABLE SHALL NOT BE CUT AND/OR SPLICED IN THE VAULTS NEAREST THE TRAFFIC SIGNAL CABINET WHILE MAKING THE PIGTAIL CONNECTION. ONLY THE REQUIRED BUFFER TUBE SHALL BE CUT AND SPLICED WITH THE PIGTAIL CONNECTION.

LEGEND

- 36 — SM FIBER OPTIC CABLE (# STRANDS)
- SPLICE ENCLOSURE
- HARDENED ETHERNET SWITCH
- TRAFFIC SIGNAL CONTROLLER

N



PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT - OVERVIEW	SHEET 154	E

2

TRAFFIC SIGNAL CABINET, CB1 (S51-0095)

SIGNAL CONTROLLER

MMU

RS900
E-NET
SWITCH

TX
RX
10/100
RX
TX
10/100

SDLC BUS

DETECTOR
MVP/BIU

BIU

LOAD SWITCHES

BLU ORG
GR BR
SL WH
RE BLA

LEGEND

CAT 5E PATCH CORD

SM FIBER JUMPER

36 — SM FIBER OPTIC CABLE (# STRANDS)

8

CV101 FIBER OPTIC SPLICE TRAY

BLUE
ORANGE
GREEN
BROWN
SLATE
WHITE
RED
BLACK

BLUE
ORANGE
GREEN
BROWN
SLATE
WHITE

BLUE TUBE

ORANGE TUBE

GREEN TUBE

BROWN TUBE

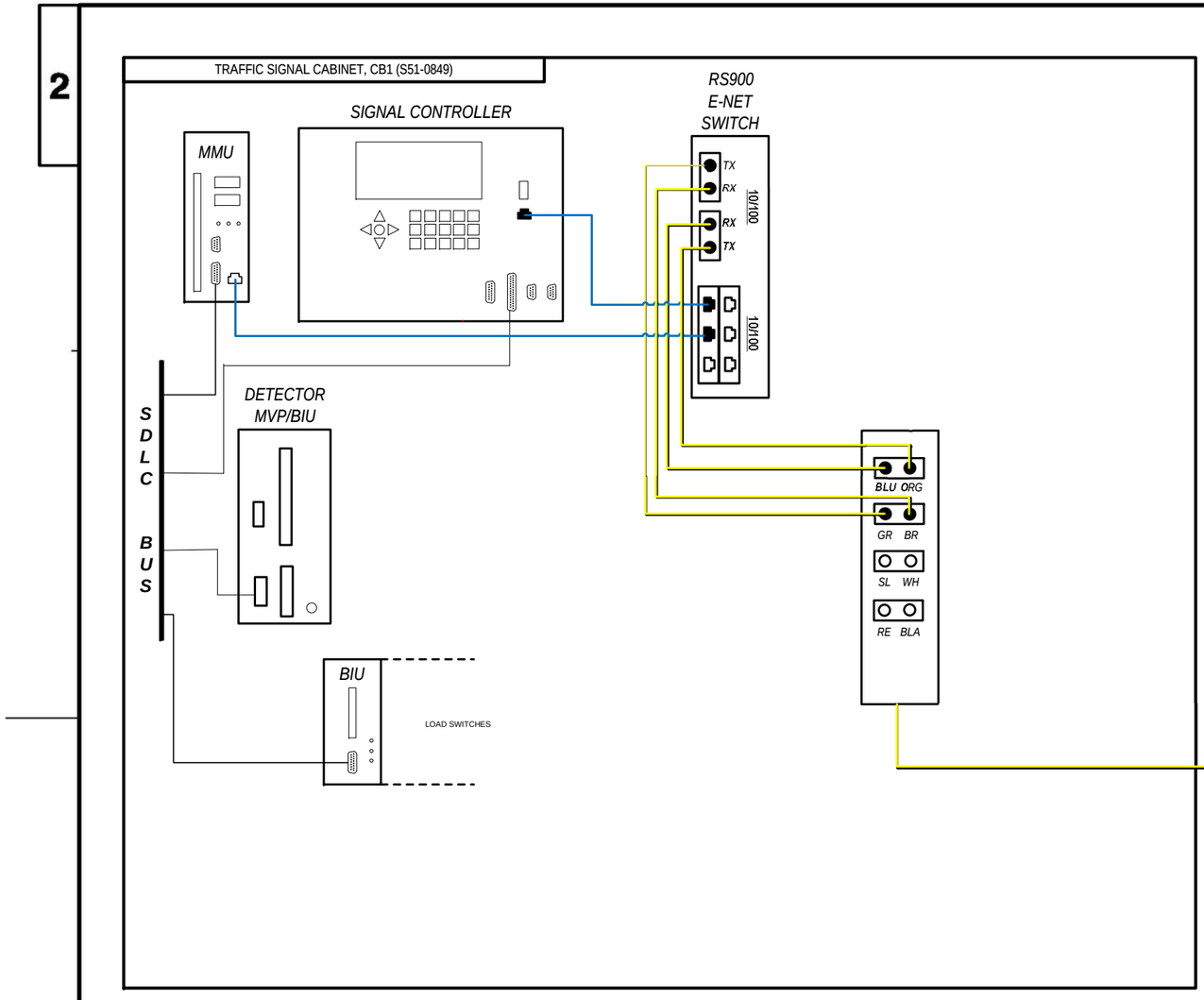
SLATE TUBE

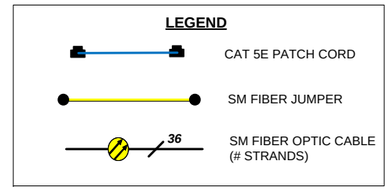
WHITE TUBE

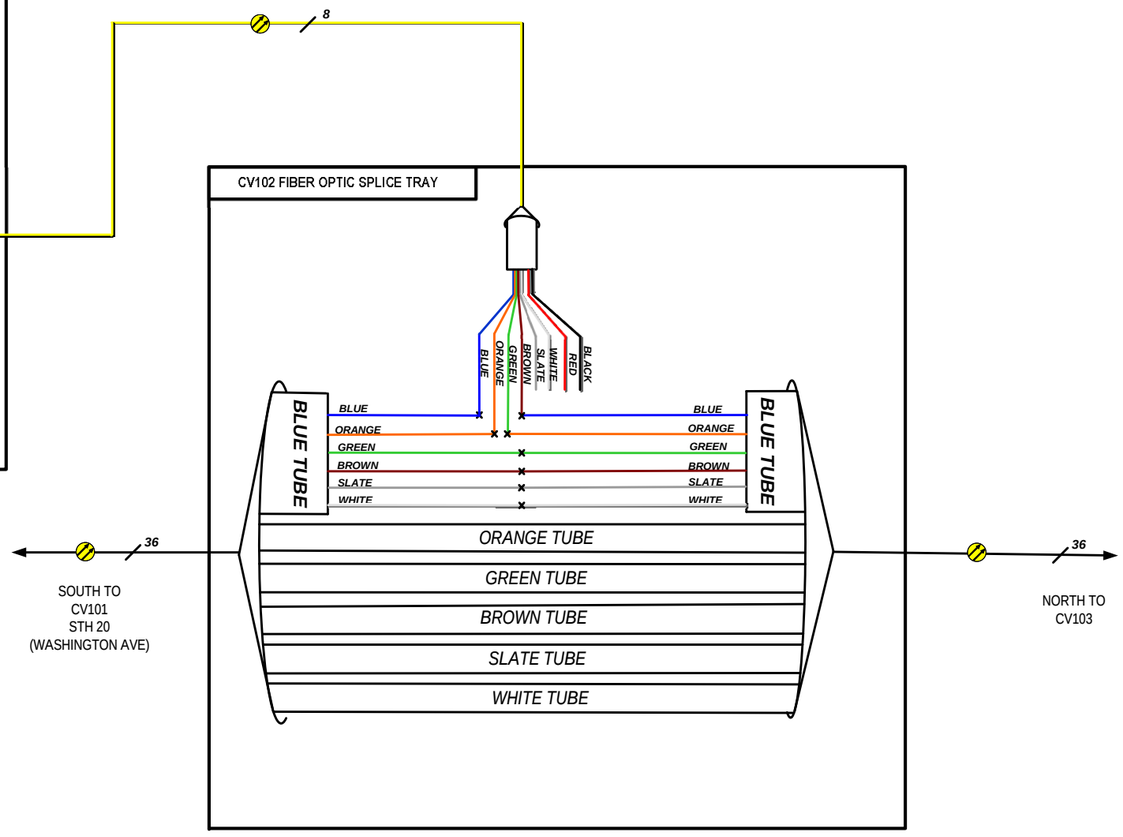
36

NORTH TO CV102
S NEWMAN RD

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT	SHEET 155	E







PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT	SHEET 156	E

2

TRAFFIC SIGNAL CABINET, CB1 (S51-0101)

MMU

SIGNAL CONTROLLER

RS900
E-NET
SWITCH

TX
RX
10/100
RX
TX
10/100

S
D
L
C

B
U
S

DETECTOR
MVP/BIU

BIU

LOAD SWITCHES

BLU ORG
GR BR
SL WH
RE BLA

LEGEND

CAT 5E PATCH CORD

SM FIBER JUMPER

36 — SM FIBER OPTIC CABLE (# STRANDS)

8

CV107 FIBER OPTIC SPLICE TRAY

BLUE
ORANGE
GREEN
BROWN
SLATE
WHITE
RED
BLACK

BLUE TUBE

BLUE
ORANGE
GREEN
BROWN
SLATE
WHITE

BLUE TUBE

ORANGE TUBE
GREEN TUBE
BROWN TUBE
SLATE TUBE
WHITE TUBE

36

SOUTH TO
CV106

36

NORTH TO
CV108

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT	SHEET 157	E

2

TRAFFIC SIGNAL CABINET, CB1 (S51-0210)

MMU

SIGNAL CONTROLLER

RS900
E-NET
SWITCH

TX
RX
10/100
RX
TX
10/100

SDLC BUS

DETECTOR
MVP/BIU

BIU

LOAD SWITCHES

BLU ORG
GR BR
SL WH
RE BLA

8

CV109 FIBER OPTIC SPLICE TRAY

BLUE
ORANGE
GREEN
BROWN
SLATE
WHITE
RED
BLACK

BLUE TUBE

BLUE
ORANGE
GREEN
BROWN
SLATE
WHITE

ORANGE TUBE
GREEN TUBE
BROWN TUBE
SLATE TUBE
WHITE TUBE

36

SOUTH TO
CV108

LEGEND

CAT 5E PATCH CORD

SM FIBER JUMPER

36 SM FIBER OPTIC CABLE (# STRANDS)

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT	SHEET 158	E

2

LEGEND

- COMMUNICATIONS VAULT
- PULL BOX, 24" X 42"
- NONMETALLIC INTERCONNECT CONDUIT 2", UNLESS OTHERWISE NOTED

STH 20 (WASHINGTON AVE)

385+00

386+00

387+00

388+00

STH 31 (GREEN BAY RD)

105+00

106+00

107+00

108+00

109+00

110+00

INSTALL FO CABLE PIGTAIL 8-CT
INSTALL FIBER OPTIC TRACER CABLE

I/C CV101

3-2" HDPE FO I/C

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

I/C PB103

I/C PB102

I/C PB104

I/C PB101

CB1 (S51-0095)

INSTALL FO CABLE PIGTAIL 8-CT
INSTALL FIBER OPTIC TRACER CABLE

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 1 OF 17

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

2

N

S NEWMAN RD

INSTALL FO CABLE PIGTAIL 8-CT
INSTALL FIBER OPTIC TRACER CABLE

CB1 (S51-0849)

I/C PB105

I/C CV102

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

STH 31 (GREEN BAY RD)

111+00 112+00 113+00 114+00 115+00 116+00

3-2" HDPE FO I/C

55'

50'

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024502_ic.dgn PLOT DATE : 28-NOV-2016 07:04 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

N

STH 31 (GREEN BAY RD)

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

117+00 118+00 119+00 120+00 121+00 122+00

3-2" HDPE FO I/C

STH 31 (GREEN BAY RD)

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

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PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024503_ic.dgn PLOT DATE : 28-NOV-2016 07:04 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

STH 31 (GREEN BAY RD)

I/C CV103

3-2" HDPE FO I/C

123+00

124+00

125+00

126+00

127+00

128+00

STH 31 (GREEN BAY RD)

KINZIE AVE

N

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 4 OF 17

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024504_ic.dgn PLOT DATE : 28-NOV-2016 07:04 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

WESTMORE DR

STH 31 (GREEN BAY RD)

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

3-2" HDPE FO I/C

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

3-2" HDPE FO I/C

STH 31 (GREEN BAY RD)

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

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PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024505_ic.dgn PLOT DATE : 28-NOV-2016 07:04 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

STH 31 (GREEN BAY RD)

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

135+00 136+00 137+00 138+00 139+00 140+00

3-2" HDPE FO I/C

I/C CV104

3-2" HDPE FO I/C

STH 31 (GREEN BAY RD)

GRACELAND BLVD

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 6 OF 17

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024506_ic.dgn PLOT DATE : 28-NOV-2016 07:04 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

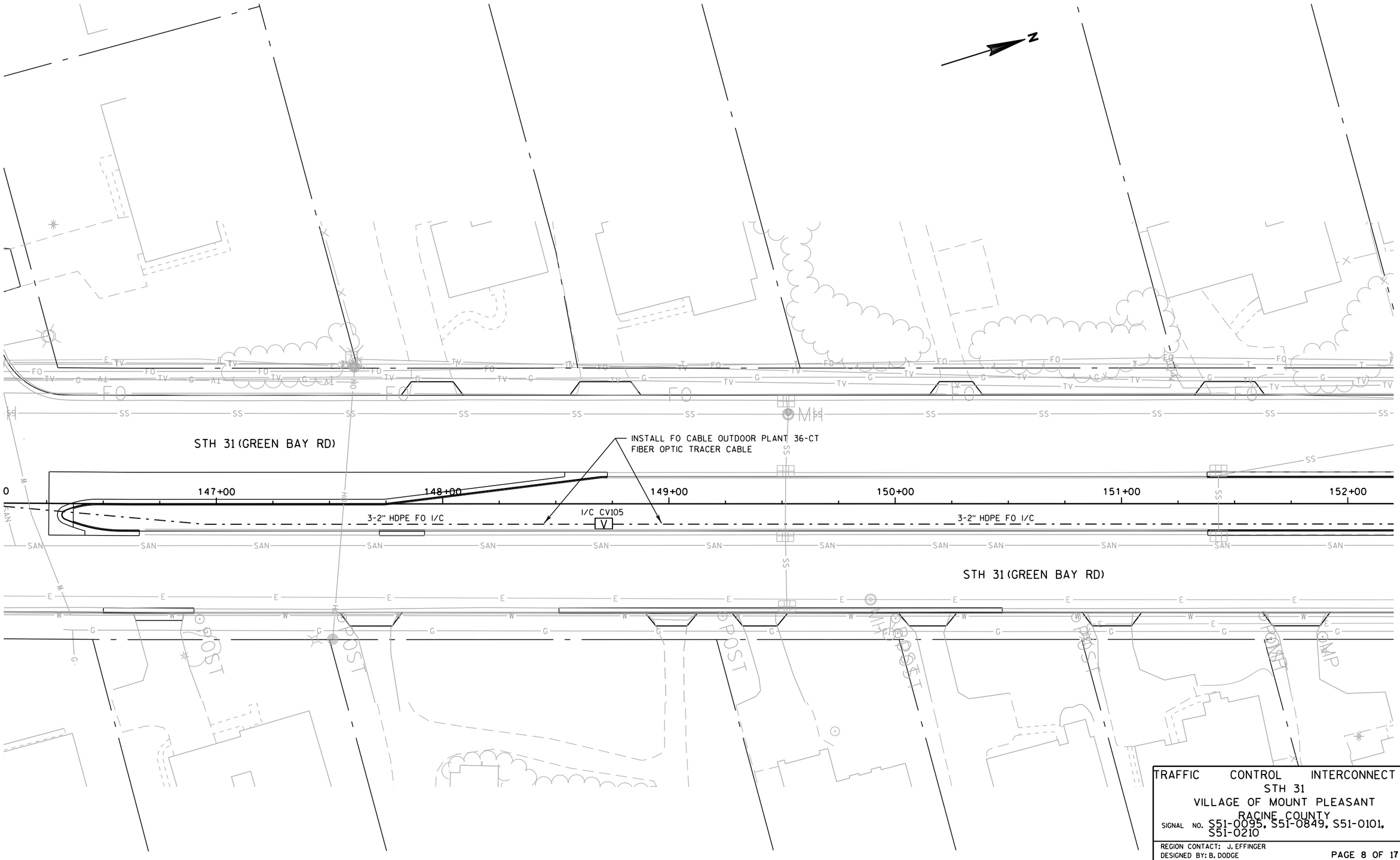
PAGE 7 OF 17

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024507_ic.dgn PLOT DATE : 28-NOV-2016 07:04 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

2

2



TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 8 OF 17

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024508_ic.dgn PLOT DATE : 28-NOV-2016 07:04 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

2

2

N

STH 31 (GREEN BAY RD)

152+00 153+00 154+00 155+00 156+00 157+00 158+00

3-2" HDPE FO I/C

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

STH 31 (GREEN BAY RD)

RIDGEWAY AVE

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

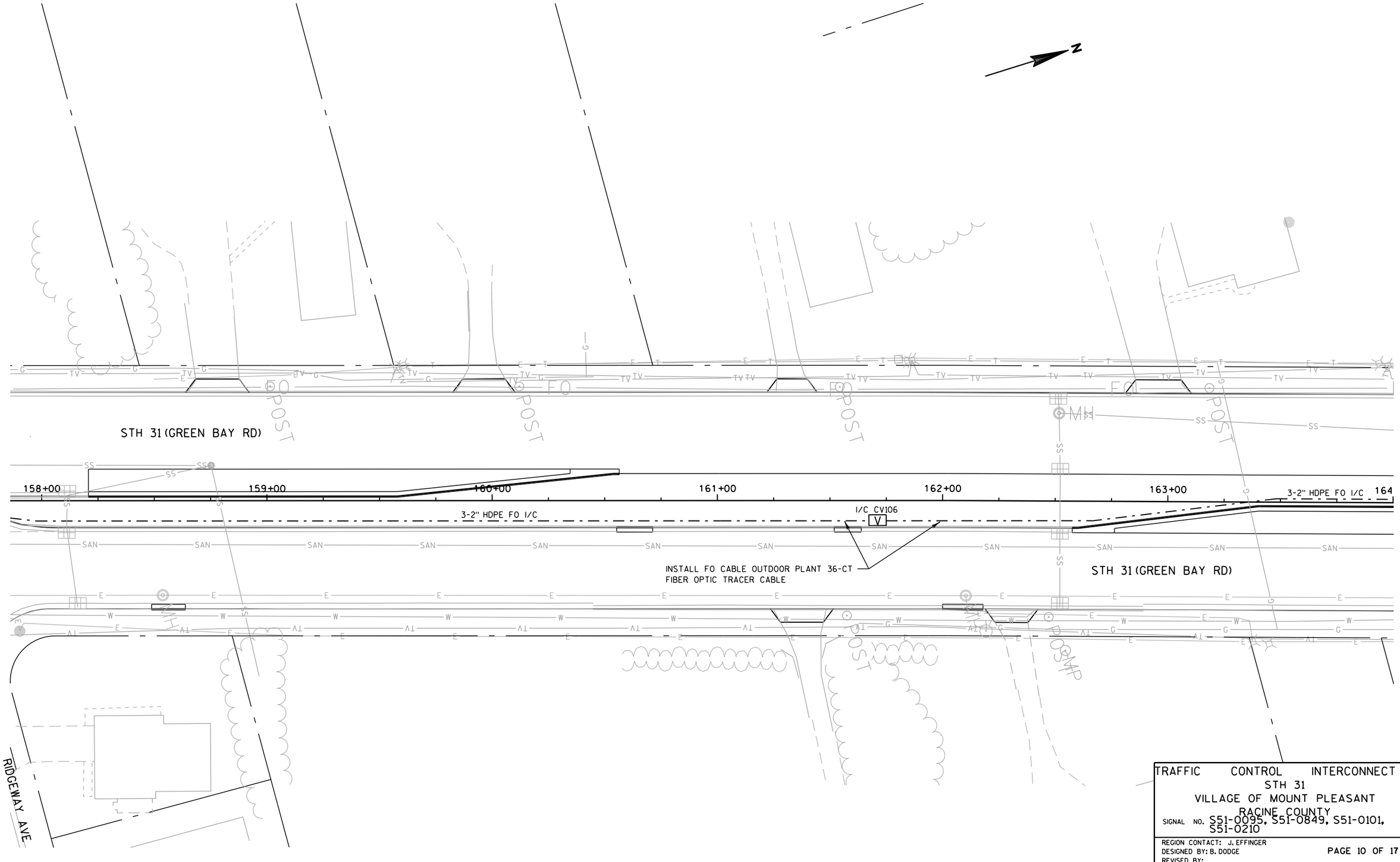
PAGE 9 OF 17

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024509_ic.dgn PLOT DATE : 28-NOV-2016 07:04 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2



TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

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PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

2

2

N

SHIRLEY AVE

STH 31 (GREEN BAY RD)

164+00

165+00

166+00

167+00

168+00

169+00

3-2" HDPE FO I/C

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

STH 31 (GREEN BAY RD)

SHIRLEY AVE

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 11 OF 17

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024511_ic.dgn PLOT DATE : 28-NOV-2016 07:04 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

N

CTH C (SPRING ST)

INSTALL FO CABLE PIGTAIL 8-CT
INSTALL FIBER OPTIC TRACER CABLE

CB1 (S51-0101)

I/C PB106

STH 31 (GREEN BAY RD)

170+00

171+00

172+00

3-2" HDPE FO I/C

173+00

174+00

I/C CV107

175+00

3-2" HDPE FO I/C

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

STH 31 (GREEN BAY RD)

SUNNYSIDE AVE

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

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PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024512_ic.dgn PLOT DATE : 28-NOV-2016 07:04 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

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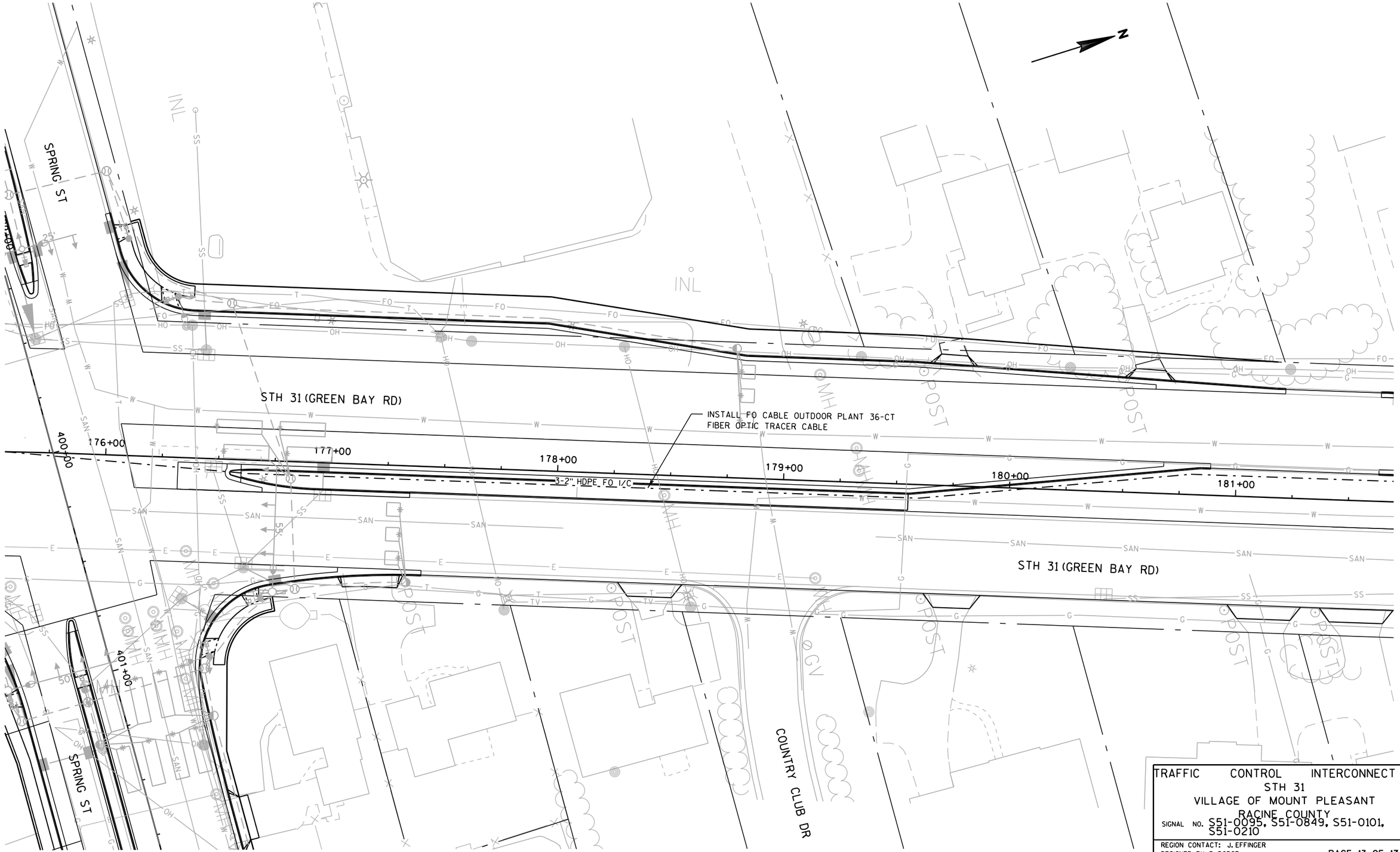

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 13 OF 17

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET E

FILE NAME : J:\projects\d2_23900931\70\IC\024513_ic.dgn PLOT DATE : 28-NOV-2016 07:05 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

N

STH 31 (GREEN BAY RD)

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

182+00 183+00 3-2" HDPE FO I/C 184+00 185+00 I/C CV108 186+00 3-2" HDPE FO I/C 187+00

POST

MH

STH 31 (GREEN BAY RD)

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 14 OF 17

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024514_ic.dgn PLOT DATE : 28-NOV-2016 07:05 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

N

STH 31 (GREEN BAY RD)

188+00

3-2" HDPE FO I/C

189+00

190+00

191+00

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

192+00

193+00

3-2" HDPE FO I/C

STH 31 (GREEN BAY RD)

OLD GREEN BAY ROAD

MH

POST

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

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PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024515_ic.dgn PLOT DATE : 28-NOV-2016 07:05 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

N

STH 31 (GREEN BAY RD)

193+00

194+00

195+00

196+00

197+00

198+00

199

3-2" HDPE FO I/C

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

I/C CV109

INSTALL FO CABLE PIGTAIL 8-CT
INSTALL FIBER OPTIC TRACER CABLE

STH 31 (OLE DAVIDSON RD)

512+00

513+00

514+00

CTH MM (N GREEN BAY RD)

OLD GREEN BAY ROAD

2"

CB1 (S51-0210)
I/C PB107

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 16 OF 17

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024516_ic.dgn PLOT DATE : 28-NOV-2016 07:05 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

INSTALL FO CABLE OUTDOOR PLANT 36-CT
FIBER OPTIC TRACER CABLE

3-2" HDPE
FO I/C
I/C CV109

INSTALL FO CABLE PIGTAIL 8-CT
INSTALL FIBER OPTIC TRACER CABLE

2"
2"
CB1 (S51-0210)
I/C PB107

198+00
199+00
200+00
201+00
202+00
203+00
514+00
515+00
516+00
615+00
616+00

STH 31 (OLE DAVIDSON RD)

CTH MM (N GREEN BAY RD)

TRAFFIC CONTROL INTERCONNECT
STH 31
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY
SIGNAL NO. S51-0095, S51-0849, S51-0101, S51-0210

REGION CONTACT: J. EFFINGER
DESIGNED BY: B. DODGE
REVISED BY:

PAGE 17 OF 17

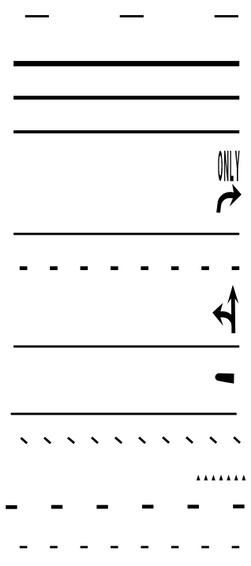
PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	TRAFFIC SIGNAL INTERCONNECT PLAN	SHEET	E

FILE NAME : J:\projects\d2_23900931\70\IC\024517_ic.dgn PLOT DATE : 28-NOV-2016 07:05 PLOT BY : MSCBXD PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

LEGEND

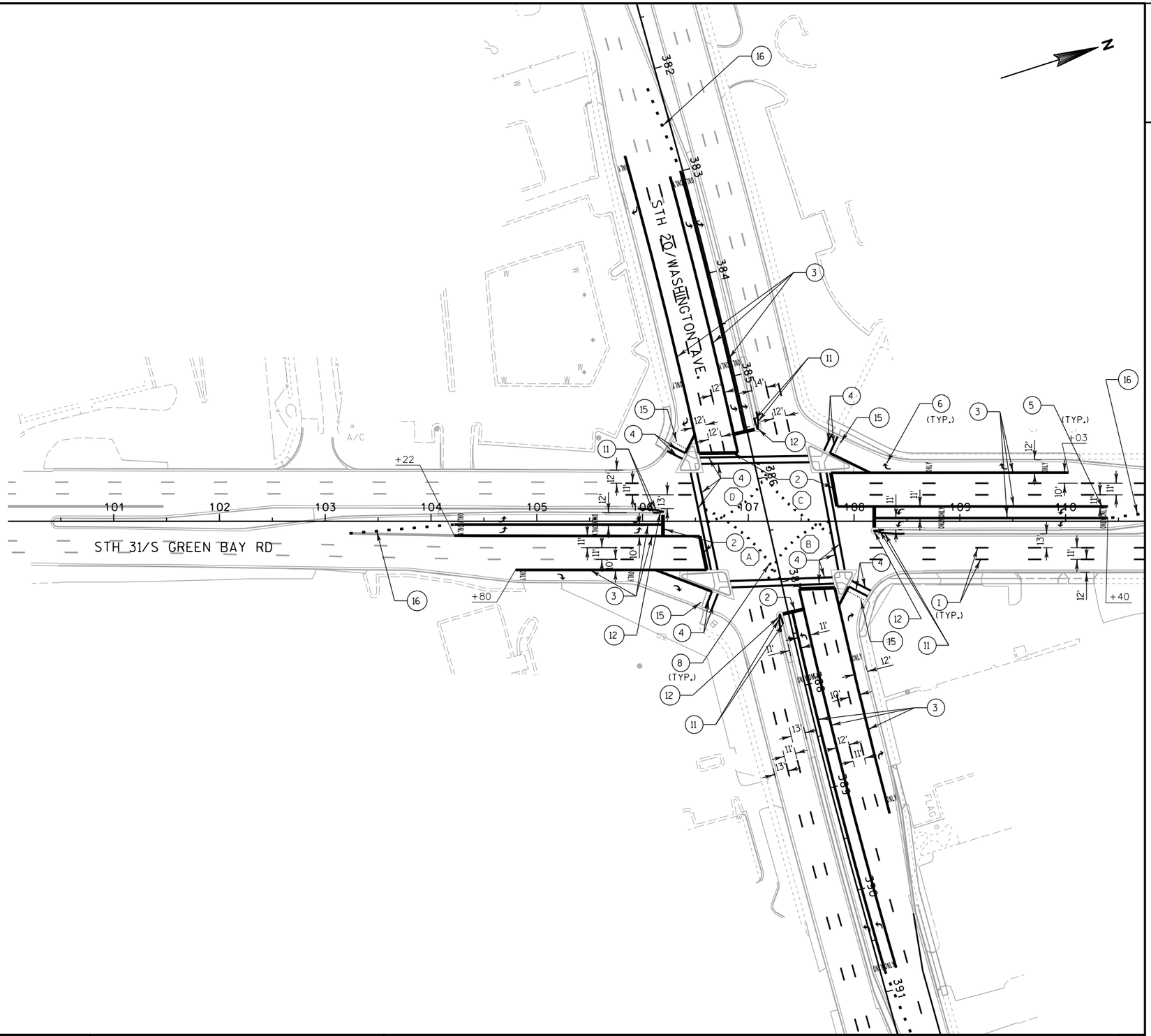


1. PAVEMENT MARKING EPOXY 4-INCH (DASHED WHITE) (12.5-FT LINE 37.5-FT SKIP)
2. PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
3. PAVEMENT MARKING EPOXY 8-INCH (SOLID WHITE)
4. PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
5. PAVEMENT MARKING WORDS EPOXY (WHITE)
6. PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
7. PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
8. PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE) (2-FT LINE 6-FT SKIP)
10. PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
11. PAVEMENT MARKING CURB EPOXY
12. PAVEMENT MARKING ISLAND NOSE EPOXY
13. PAVEMENT MARKING EPOXY 4-INCH (SOLID WHITE)
14. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH
15. PAVEMENT MARKING YIELD LINE SYMBOLS EPOXY 18-INCH
16. PAVEMENT MARKING EPOXY 8-INCH (DOT PATTERN WHITE) (3-FT LINE 9-FT SKIP)
17. PAVEMENT MARKING EPOXY 4-INCH (DOT PATTERN WHITE) (2-FT LINE 6-FT SKIP)

NOTE

PAVEMENT MARKING DIMENSIONS IN MILL & OVERLAY SECTION IS GIVEN TO THE FACE OF CURB WHEN ADJACENT TO CURB AND GUTTER.

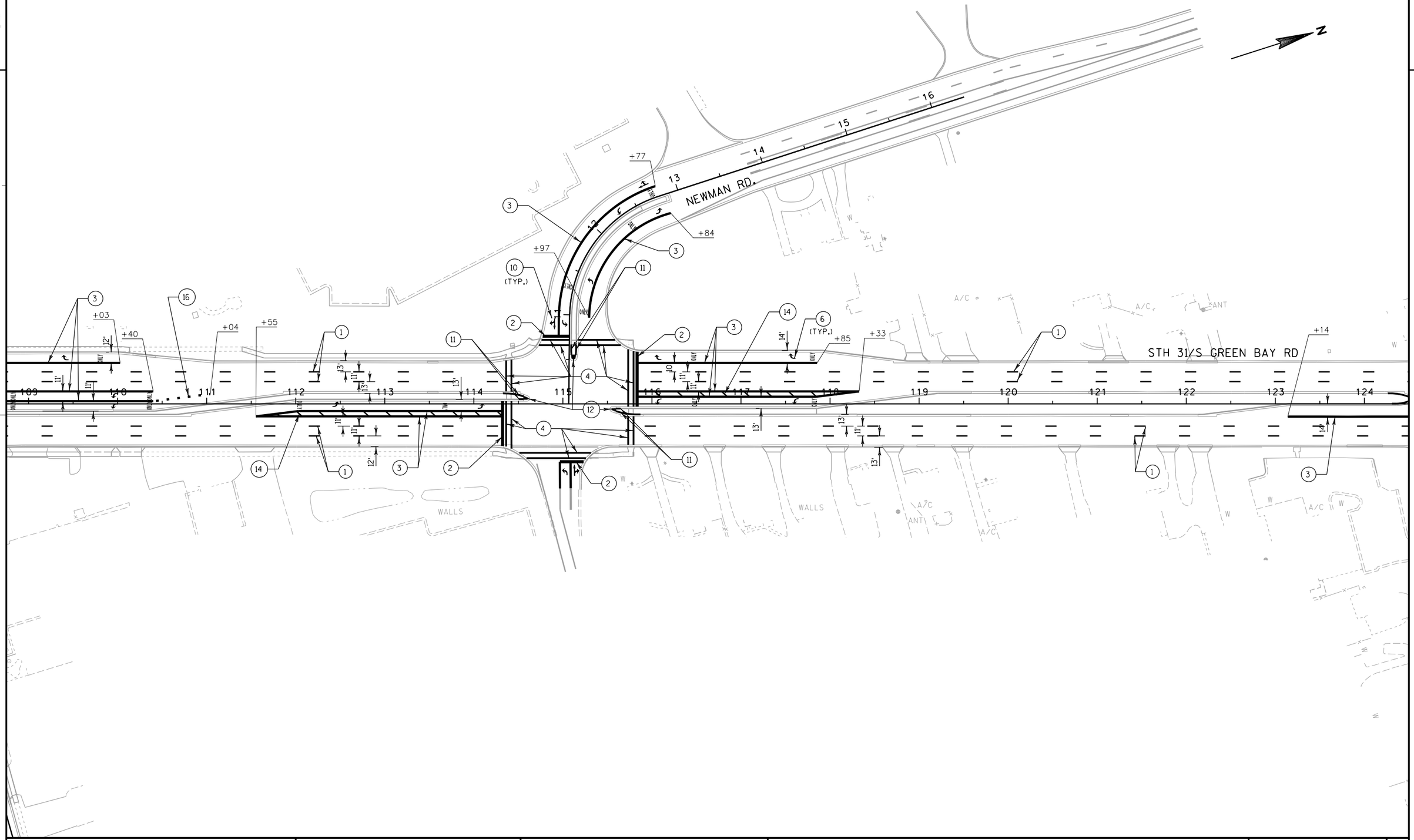
DUAL LEFT TURN PAVEMENT MARKING TABLE		
TURN	RADIUS	CENTER
A	150.00 FT	STA 105+96.81, 125.00 FT RT
B	85.00 FT	STA 107+99.32, 82.00 FT LT
C	150.00 FT	STA 108+41.46, 125.00 FT LT
D	84.00 FT	STA 106+41.23, 81.00 FT LT



NOTE:
SEE SIGNAL PLANS FOR STOP BAR LOCATIONS.

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PAVEMENT MARKING	SHEET 177	E

2



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PAVEMENT MARKING	SHEET 178	E

2

2

N

WESTMORE DR

STH 31/S GREEN BAY RD

KINZIE AVE

LILAC LN

OSTERGAARD AVE

GRACELAND BLVD

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PAVEMENT MARKING	SHEET 179	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024503_pm.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:100

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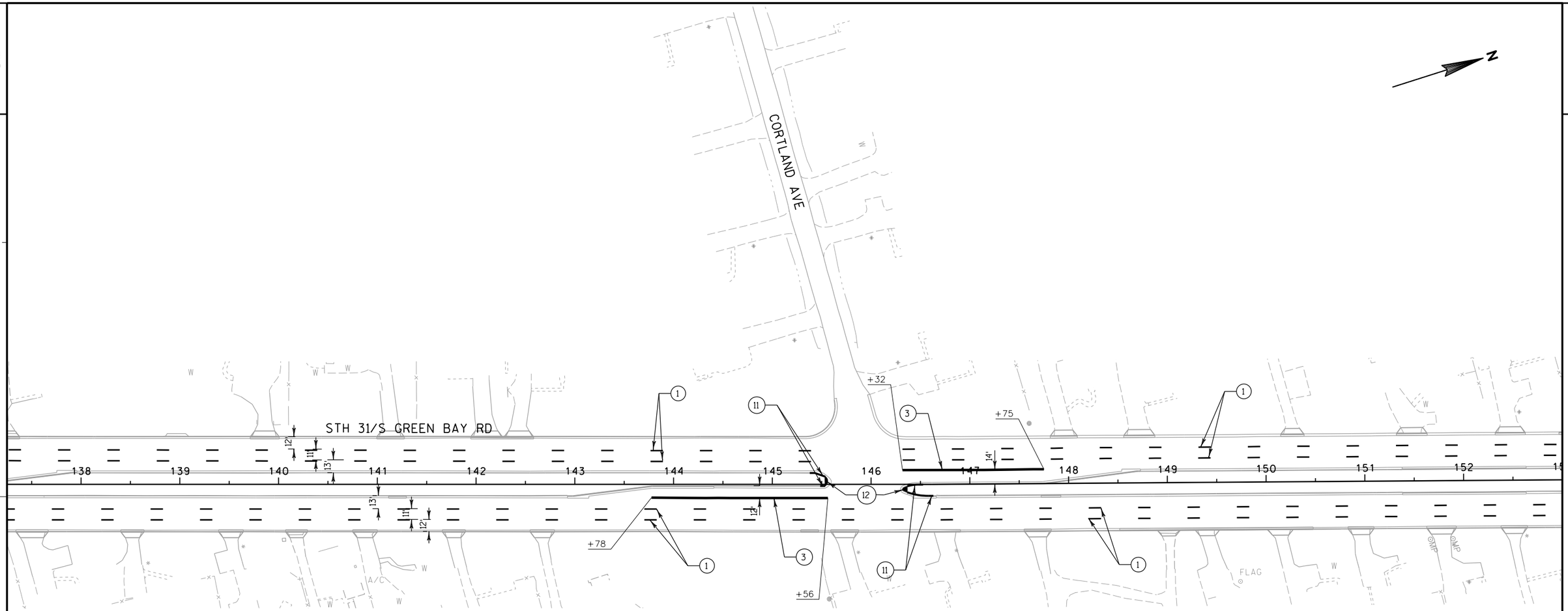


PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	PAVEMENT MARKING	SHEET 180	E

2

N

SHIRLEY AVE

FLAG

ANT

STH 31/S GREEN BAY RD

+77 +58 +81 +64

+69 +10 +40 +91

RIDGEWAY AVE

SHIRLEY AVE

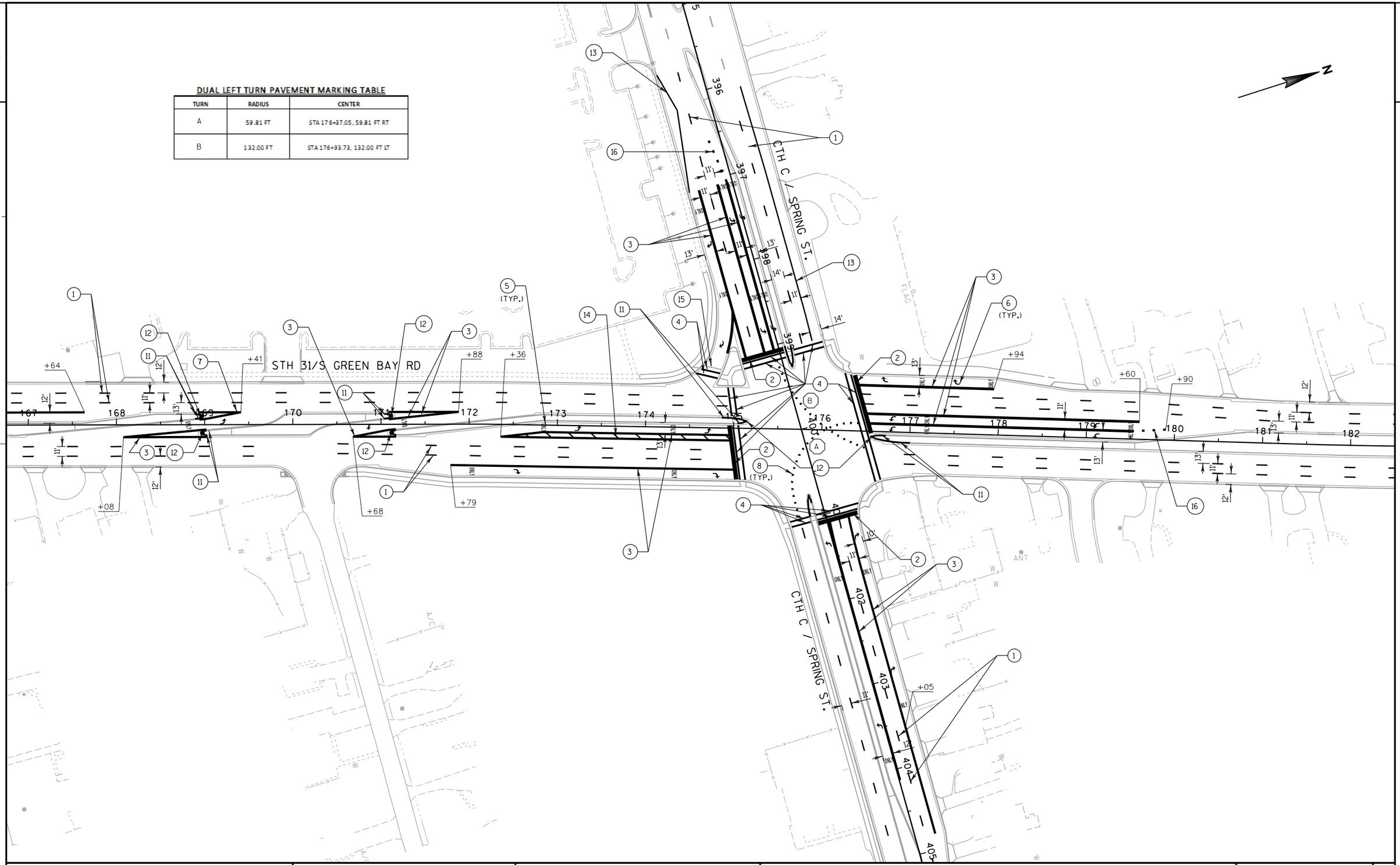
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PAVEMENT MARKING	SHEET 181	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024505_pm.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:100

2

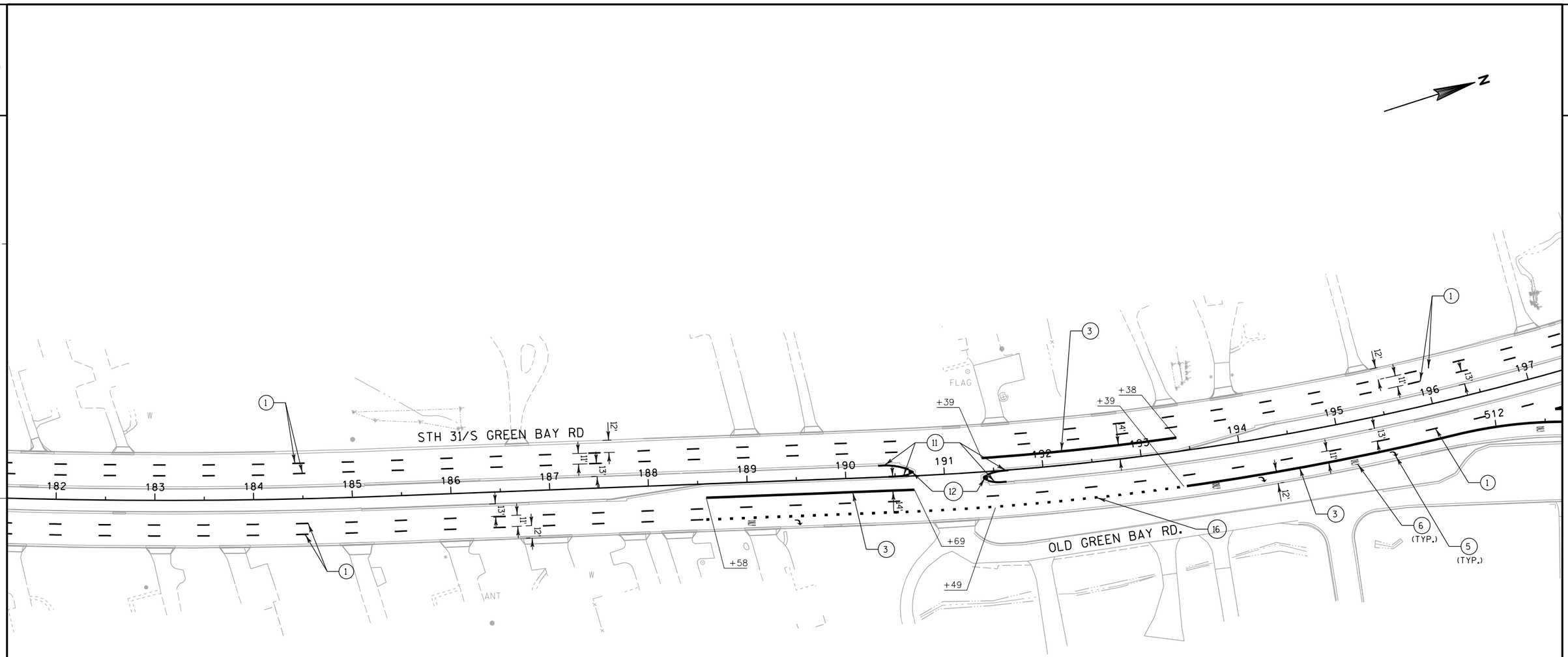
DUAL LEFT TURN PAVEMENT MARKING TABLE

TURN	RADIUS	CENTER
A	59.81 FT	STA 176+37.05, 59.81 FT RT
B	132.00 FT	STA 176+93.73, 132.00 FT LT



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PAVEMENT MARKING	SHEET 182	E

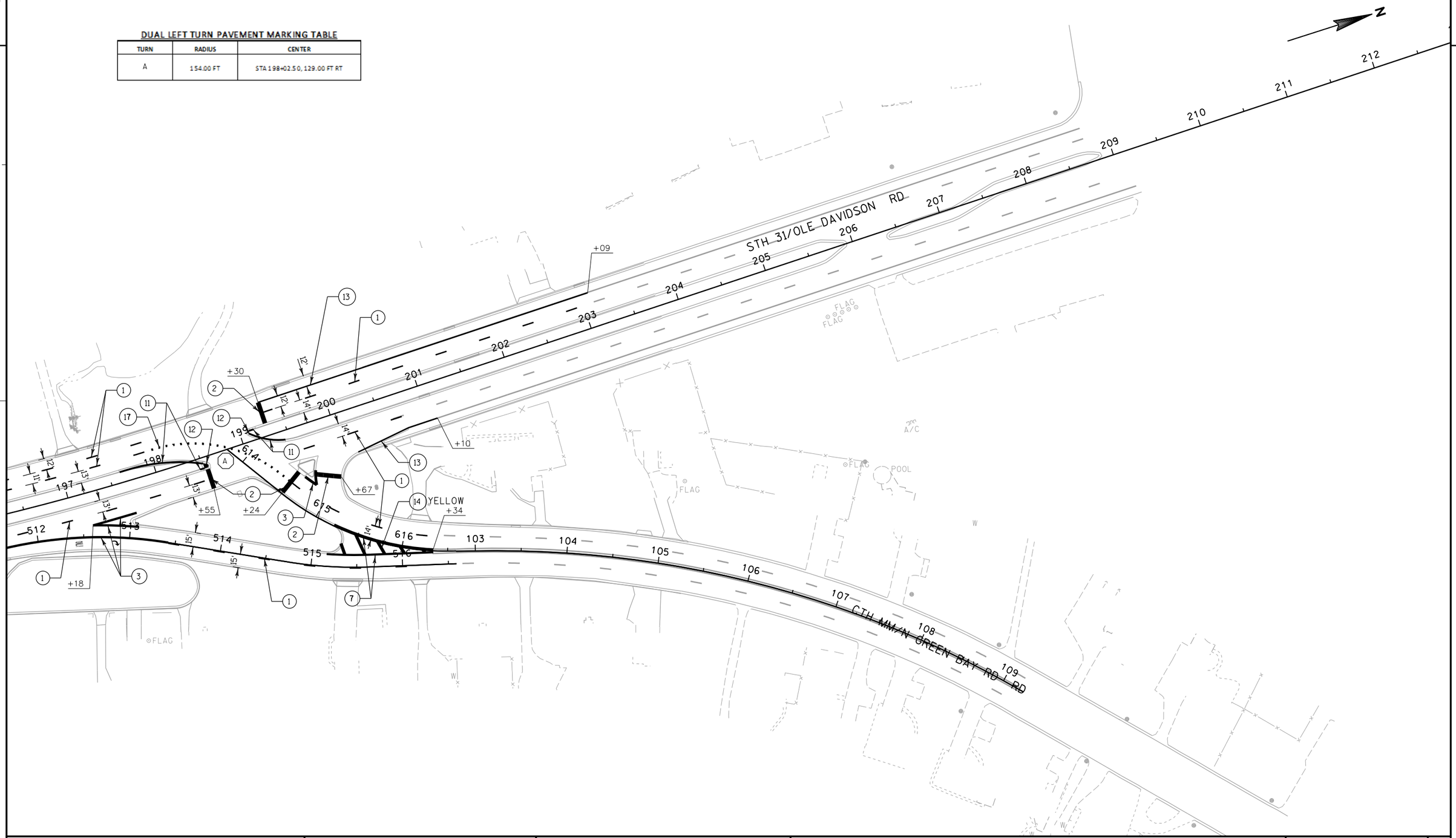
2



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PAVEMENT MARKING	SHEET 183	E

DUAL LEFT TURN PAVEMENT MARKING TABLE

TURN	RADIUS	CENTER
A	154.00 FT	STA 198+02.50, 129.00 FT RT



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	PAVEMENT MARKING	SHEET 184	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024508_pm.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

N

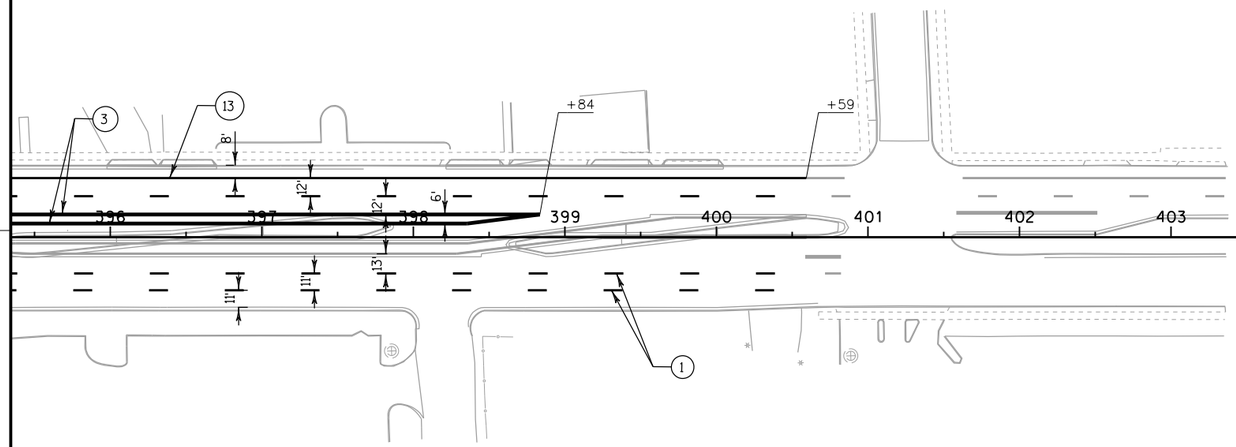
STH 20 / WASHINGTON AVE.

STH 31 / S GREEN BAY RD.

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PAVEMENT MARKING	SHEET 185	E

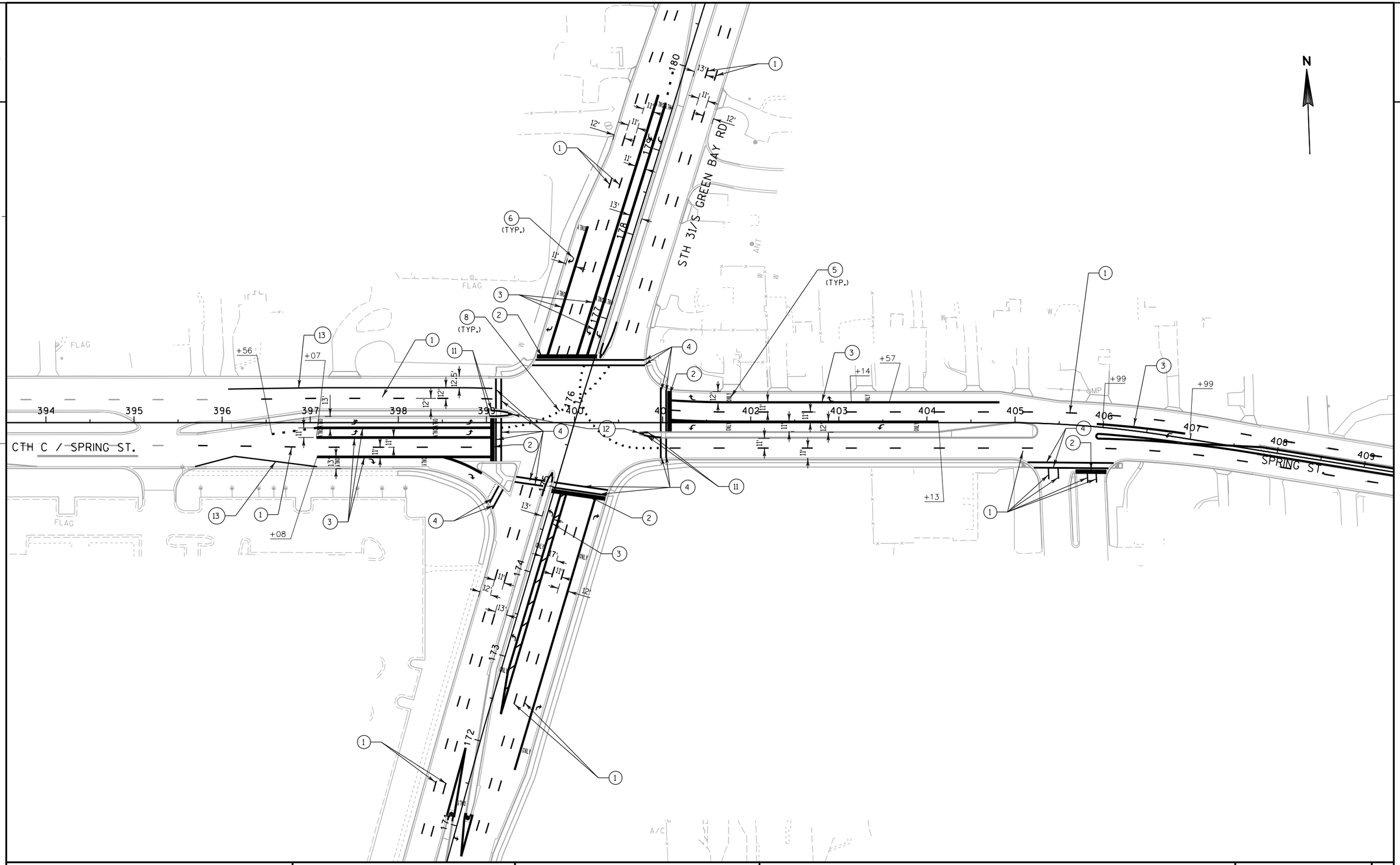
2

N



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PAVEMENT MARKING	SHEET 186	E

2



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PAVEMENT MARKING	SHEET 187	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\024511_pm.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:100

2

GENERAL NOTES TRAFFIC CONTROL

THE EXACT LOCATION AND SPACING OF ALL SIGNS AND DEVICES 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.

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

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

FOR A LANE CLOSURE THAT IS IN PLACE FEWER THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS. SIGNS MUST BE PLACED AT THE HEIGHT SHOWN IN THE MUTCD.

WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO LOCATE THE ARROWBOARD SHOWN, PLACE THE ARROWBOARD IN THE LANE CLOSURE TAPER AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE TAPER.

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 THE WORK DAY.

TRAFFIC CONTROL DRUMS IN TAPERS SHALL BE EQUIPPED WITH WARNING LIGHTS TYPE "C" ONE-WAY LIGHTS IN TAPERS ONLY UNLESS OTHERWISE SHOWN.

CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING.

CONTRACTOR MAY CLOSE INSIDE LEFT-TURN LANE FOR MEDIAN WORK, BUT MUST REOPEN ONCE CONSTRUCTION ACTIVITY IS COMPLETE.

PLACE PERMANENT SIGNING IN MEDIANS AS WORK IS COMPLETED.

THE CITY OF RACINE WILL BE REPLACING WATERMAIN CONCURRENTLY WITH THIS PROJECT. COORDINATE TRAFFIC CONTROL STAGING WITH THE CITY.

SETUP TEMPORARY TRAFFIC SIGNALS PRIOR TO STAGE 1A. A SINGLE LANE IN EACH DIRECTION MAY BE CLOSED DURING OFF-PEAK PERIODS, USE STANDARD DETAIL DRAWINGS FOR LANE CLOSURES.

STAGING NOTES

TRAFFIC CONTROL ITEMS SHOWN IN EACH STAGE SHALL BE IN PLACE AT THE START OF THAT STATE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

ALL TRAFFIC CONTROL DEVICES SHALL REMAIN IN PLACE, AS SHOWN, THROUGH THE DURATION OF EACH STAGE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

SEE SPECIAL PROVISIONS FOR TRAFFIC STAGING REQUIREMENTS.

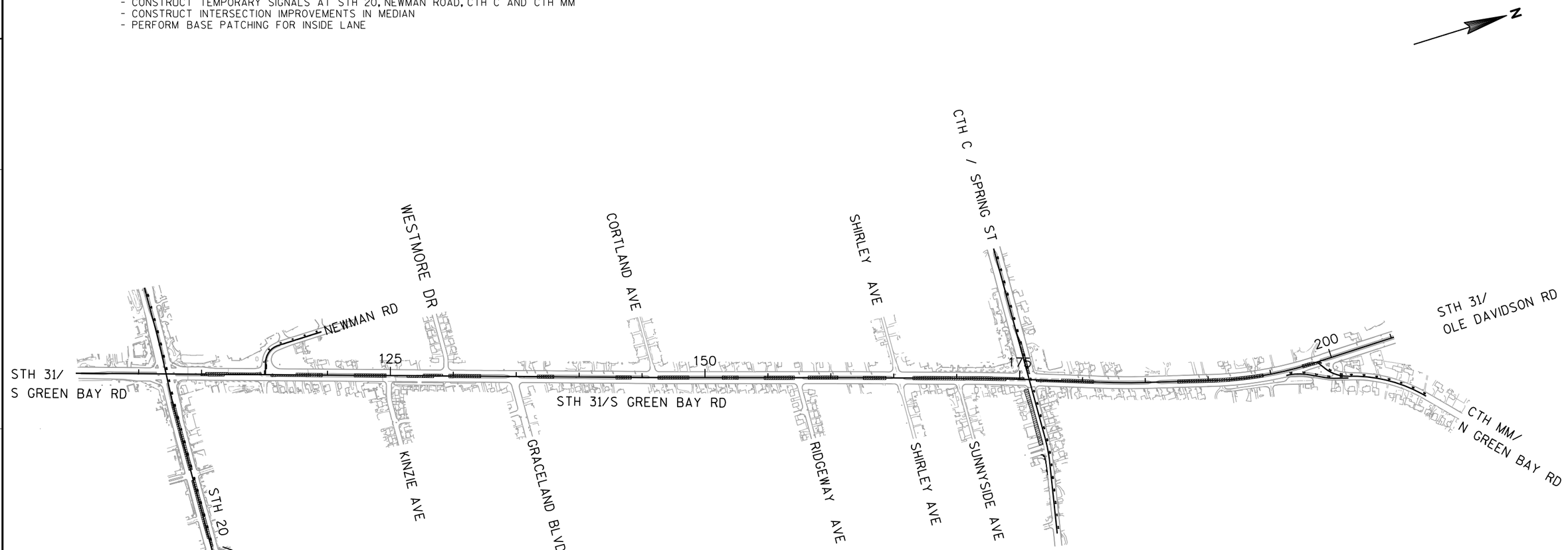
LEGEND

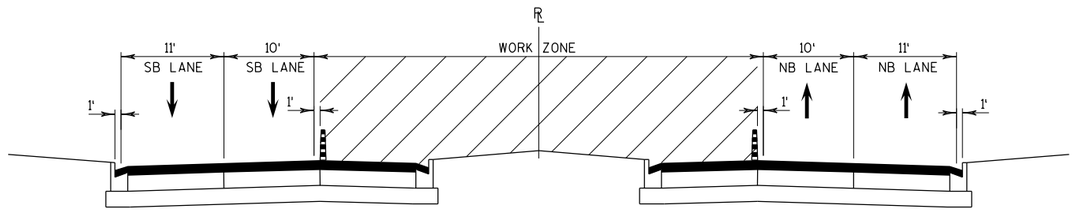
- TRAFFIC CONTROL BARRICADE TYPE III WITH LIGHTS TYPE A
- TRAFFIC CONTROL BARRICADE TYPE III WITH LIGHTS TYPE A AND ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH LIGHT TYPE C
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- TRAFFIC FLOW ARROW
- MB — TRAFFIC CONTROL SIGN PORTABLE CHANGEABLE MESSAGE
- TEMPORARY PAVEMENT MARKING 4-INCH 12.5' DASH, 37.5' SKIP (WHITE)
- TEMPORARY PAVEMENT MARKING 4-INCH (DOT PATTERN WHITE) 2.0' DASH, 6.0' SKIP (WHITE)
- (A) TEMPORARY PAVEMENT MARKING PAINT 8-INCH LINE (WHITE)
- (B) TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)
- xxxxxxxxxxxxxxxxxxxxxxxx — PAVEMENT MARKING REMOVAL
- EXISTING BUS STOP LOCATION
- GRABBER CONE

2

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TRAFFIC CONTROL GENERAL NOTES	SHEET 188	E

STAGE 1A CONSTRUCTION
- CLOSE INSIDE LANE ADJACENT TO MEDIAN WORK
- SHIFT TRAFFIC ONTO TWO OUTSIDE LANES ALONG STH 31, STH 20, AND CTH C WEST OF STH 31
- CONSTRUCT TEMPORARY SIGNALS AT STH 20, NEWMAN ROAD, CTH C AND CTH MM
- CONSTRUCT INTERSECTION IMPROVEMENTS IN MEDIAN
- PERFORM BASE PATCHING FOR INSIDE LANE





TRAFFIC CONTROL TYPICAL SECTION
STAGE 1A

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TRAFFIC CONTROL STAGE 1A CONSTRUCTION	SHEET 189	E

2

N

STH 20 / WASHINGTON AVE

STH 31 / S GREEN BAY RD

TEMPORARAY LANE CLOSURE
TO REMOVE ISLAND

TEMPORARY LANE CLOSURE
TO REMOVE ISLAND

W01-6
48" X 24"
TYPE III BARRICADE

END
ROAD WORK
G20-2A
48" X 24"

ROAD WORK
NEXT 2 MILES
G20-1
60" X 24"

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

BEGIN
LEFT
TURN
LANE
R3-20L
24" X 36"

700' 700' 350' 245' 120' 50'

ROAD
WORK
AHEAD
W20-1A

LEFT LANE
CLOSED
AHEAD
W20-5

W04-2L

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1A CONSTRUCTION	SHEET 190	E

2

W01-6
48" X 24"
TYPE III BARRICADE

350' 700' 700'

N

ROAD WORK AHEAD
W20-1A

W01-4R

LEFT LANE CLOSED AHEAD
W20-5

END ROAD WORK
G20-2A
48" X 24"

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

NEWMAN RD.

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

ONLY ONLY
R3-8M
54" X 30"

STH 31/S GREEN BAY RD

RIPRAP

WALLS

SIGN

INL

A/C

ANT

W

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1A CONSTRUCTION	SHEET 191	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025003_s1a.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

2

N

WESTMORE DR

STH 31/S GREEN BAY RD

KINZIE AVE

LILAC LN

OSTERGAARD AVE

GRACELAND BLVD

ROAD WORK AHEAD
W20-1AA

W01-6
48" X 24"
TYPE III BARRICADE

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

END ROAD WORK
G20-2A
48" X 24"

R3-4
24" X 24"

ONLY
R3-8G
36" X 30"

R11-2L
48" X 30"
LANE CLOSED

123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1A CONSTRUCTION	SHEET 192	E

2

2

N

CORTLAND AVE

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48" X 24"

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

W01-6
48" X 24"
TYPE III BARRICADE

R3-4
24" X 24"

R3-8G
36" X 30"
ONLY

STH 31/S GREEN BAY RD

138 139 140 141 142 143 144 145 146 147 148 149 150 151 152

POST

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

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

W01-6
48" X 24"
TYPE III BARRICADE

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

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1A CONSTRUCTION	SHEET 193	E

2

N

W01-6
48" X 24"
TYPE III BARRICADE

R3-20L
24" X 36"

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

W01-6
48" X 24"
TYPE III BARRICADE

ROAD WORK AHEAD
W20-1A

SHIRLEY AVE

END ROAD WORK
G20-2A
48" X 24"

R3-8M
54" X 30"

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

STH 31/S GREEN BAY RD

152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167

R3-8C
36" X 30"

END ROAD WORK
G20-2A
48" X 24"

RIDGEWAY AVE

W01-6
48" X 24"
TYPE III BARRICADE

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

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

R3-8M
54" X 30"

END ROAD WORK
G20-2A
48" X 24"

W01-6
48" X 24"
TYPE III BARRICADE

SHIRLEY AVE

ROAD WORK AHEAD
W20-1A

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1A CONSTRUCTION	SHEET 194	E

2

2

N

W01-6
48" X 24"
TYPE III BARRICADE

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

W01-6
48" X 24"
TYPE III BARRICADE

R3-8M
54" X 30"

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

W01-6
48" X 24"
TYPE III BARRICADE

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

R3-8G
36" X 30"

W01-6
48" X 24"
TYPE III BARRICADE

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

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

R3-8M
54" X 30"

W01-6
48" X 24"
TYPE III BARRICADE

W01-6
48" X 24"
TYPE III BARRICADE

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

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1A

STH 31/S GREEN BAY RD

CTH C / SPRING ST

CTH C / SPRING ST

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	STAGE 1A CONSTRUCTION	SHEET 195	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025007_s1a.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

PROVIDE LEFT TURN BAY UNTIL WORK AT STA 190+00 IS COMPLETE.

COMPLETE WORK PRIOR TO CLOSING MEDIAN OPENING AT 185+50. UPON COMPLETION, OPEN LEFT TURN LANE. (SEE INSET)

N

STH 31/S GREEN BAY RD

182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 512

OLD GREEN BAY RD.

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

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

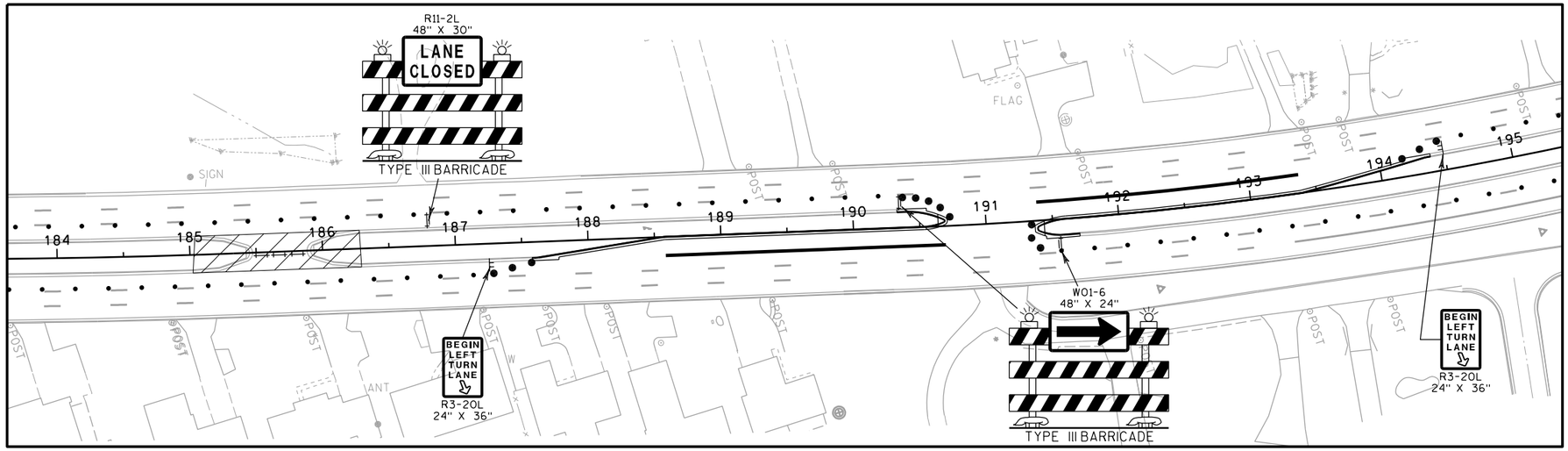
R3-4
24" X 24"

WO1-6
48" X 24"

RIGHT TURN ONLY
R3-53R
24" X 30"

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1A



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1A CONSTRUCTION	SHEET 196	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025008_s1a.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

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

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

R3-2
24" X 24"

R3-2
24" X 24"

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

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

W01-6
48" X 24"
TYPE III BARRICADE

W04-2L
LEFT LANE CLOSED AHEAD
W20-5
ROAD WORK AHEAD
W20-1

W04-2L
LEFT LANE CLOSED AHEAD
W20-5
ROAD WORK AHEAD
W20-1

END ROAD WORK
G20-2A
48" X 24"

END ROAD WORK
G20-2A
48" X 24"

280' 600' 500' 1000' 1000'

170' 320' 350' 700' 700'

STH 31/OLE DAVIDSON RD

CTH MM/N GREEN BAY RD RD

N

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1A CONSTRUCTION	SHEET 197	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025009_s1a.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

2

N

W01-6
48" X 24"
TYPE III BARRICADE

END
ROAD WORK
G20-2A
48" X 24"

BEGIN
LEFT
TURN
LANE
R3-20L
24" X 36"

W01-6
48" X 24"
TYPE III BARRICADE

STH 31 / S GREEN BAY RD.

TEMPORARY LANE CLOSURE
TO REMOVE ISLAND

BEGIN
LEFT
TURN
LANE
R3-20L
24" X 36"

W01-6
48" X 24"
TYPE III BARRICADE

380 381 382 383 384 385 386 387 388 389 390 391 392

STH 20 / WASHINGTON AVE.

245' 50'

MATCHLINE

R11-2L
48" X 30"
LANE
CLOSED

W01-6
48" X 24"
TYPE III BARRICADE

W01-6
48" X 24"
TYPE III BARRICADE

TEMPORARY LANE CLOSURE
TO REMOVE ISLAND

W01-6
48" X 24"
TYPE III BARRICADE

BEGIN
LEFT
TURN
LANE
R3-20L
24" X 36"

ROAD
WORK
NEXT 2 MILES
G20-1
60" X 24"

700' 700' 350'

ROAD
WORK
AHEAD
W20-1A

LEFT LANE
CLOSED
AHEAD
W20-5

W04-2L

W01-6
48" X 24"
TYPE III BARRICADE

R3-8K
36" X 30"

W01-6
48" X 24"
TYPE III BARRICADE

W01-6
48" X 24"
TYPE III BARRICADE

W01-6
48" X 24"
TYPE III BARRICADE

W1-4B

ROAD
WORK
AHEAD
W20-1A

350'

393 394 395 396 397 398 399 400 401 402 403 404 405

MATCHLINE

STH 20 / WASHINGTON AVE.

500'

END
ROAD WORK
G20-2A
48" X 24"

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1A CONSTRUCTION	SHEET 198	E

2

N

END ROAD WORK
G20-2A
48" X 24"

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

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

W01-6
48" X 24"
TYPE III BARRICADE

STH 31/S. GREEN BAY RD

ROAD WORK AHEAD
W20-1A

350'

CTH C / SPRING ST.

SPRING ST.

MATCHLINE

500'

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK NEXT 1/2 MILES
G20-1
60" X 24"

700'

700'

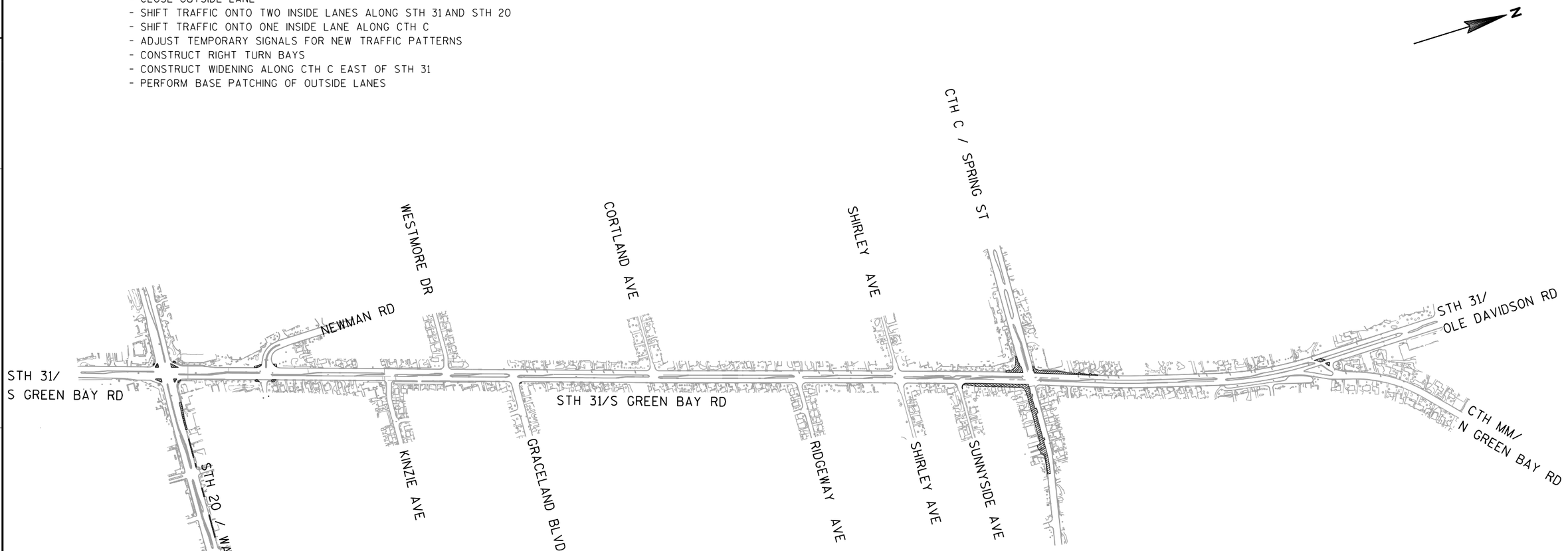
350'

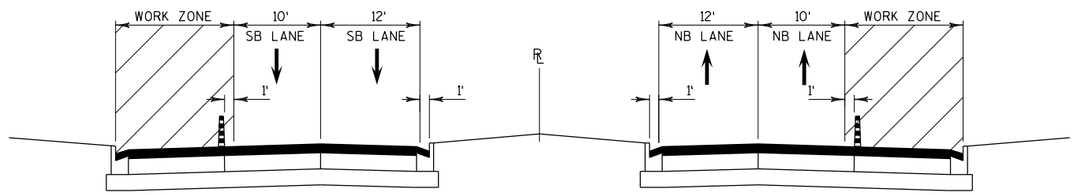
LEFT LANE CLOSED AHEAD
W20-5

W04-2L

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1A CONSTRUCTION	SHEET 199	E

STAGE 1B CONSTRUCTION
- OPEN INSIDE LANE ADJACENT TO MEDIAN WORK COMPLETED IN STAGE 1A
- CLOSE OUTSIDE LANE
- SHIFT TRAFFIC ONTO TWO INSIDE LANES ALONG STH 31 AND STH 20
- SHIFT TRAFFIC ONTO ONE INSIDE LANE ALONG CTH C
- ADJUST TEMPORARY SIGNALS FOR NEW TRAFFIC PATTERNS
- CONSTRUCT RIGHT TURN BAYS
- CONSTRUCT WIDENING ALONG CTH C EAST OF STH 31
- PERFORM BASE PATCHING OF OUTSIDE LANES





TRAFFIC CONTROL TYPICAL SECTION
STAGE 1B

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TRAFFIC CONTROL STAGE 1B CONSTRUCTION	SHEET 200	E

2

N

STH 20 / WASHINGTON AVE.

STH 31/S GREEN BAY RD

382 383 384 385 386 387 388 389 390 391

101 102 103 104 105 106 107 108 109 110

MH

u/c

TV

A

ROAD WORK NEXT 2 MILES
G20-1
60" X 24"

700' 700' 350' 245' 120'

ROAD WORK AHEAD
W20-1A

RIGHT LANE CLOSED AHEAD
W20-5

W04-2R

W01-6
48" X 24"
TYPE III BARRICADE

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

ONLY
R3-8G
36" X 30"

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

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1B CONSTRUCTION	SHEET 201	E

2

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

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

BEGIN RIGHT TURN LANE
R3-20R
24" X 36"

BEGIN RIGHT TURN LANE
R3-20R
24" X 36"

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1A

N

NEWMAN RD.

ONLY ONLY
R3-8M
54" X 30"

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

STH 31/S GREEN BAY RD

RIPRAP

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

ONLY ONLY
R3-8M
54" X 30"

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1A

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

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1B CONSTRUCTION	SHEET 202	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025015_s1b.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

2

2

N

WESTMORE DR

ROAD WORK AHEAD W20-1A

END ROAD WORK G20-2A 48" X 24"

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

R3-8M 54" X 30" ONLY ONLY

A

STH 31/S GREEN BAY RD

123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138

R3-8G 36" X 30" ONLY

KINZIE AVE

LILAC LN

OSTERGAARD AVE

GRACELAND BLVD

MH

TV

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1B CONSTRUCTION	SHEET 203	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025016_s1b.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

N

CORTLAND AVE.

ROAD WORK AHEAD
W20-1A

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

END ROAD WORK
G20-2A
48" X 24"

ONLY ONLY
R3-8M
54" X 30"

A

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

STH 31/S GREEN BAY RD

138 139 140 141 142 143 144 145 146 147 148 149 150 151 152

POST

A

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

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

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1B CONSTRUCTION	SHEET 204	E

2

2

N

SHIRLEY AVE

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48" X 24"

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

R3-8M
54" X 30"
ONLY ONLY

A

STH 31/S GREEN BAY RD

152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167

LEFT TURN LANE
R3-55L
24" X 30"

PERRY AVE

RIDGEWAY AVE

SHIRLEY AVE

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1B CONSTRUCTION	SHEET 205	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025018_s1b.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

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

A

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

ONLY ONLY
R3-8M
54" X 30"

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

A

STH 31/S GREEN BAY RD

167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182

396 397 398 399 400 401 402 403 404 405 406

CTH C/V SPRING ST

SPRING ST

ONLY
R3-8G
36" X 30"

END
ROAD WORK
G20-2A
48" X 24"

SUNNYSIDE AVE

ROAD
WORK
AHEAD
W20-1A

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

A

ONLY ONLY
R3-8M
54" X 30"

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

B (DOUBLE YELLOW)

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1B CONSTRUCTION	SHEET 206	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025019_s1b.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

N

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

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

A

STH 31/S GREEN BAY RD

182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197

512

OLD GREEN BAY ROAD

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

A

RIGHT LANE MUST TURN RIGHT
R3-7R
30" X 30"

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1A

RIGHT LANE MUST TURN RIGHT
R3-7R
30" X 30"

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

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1B CONSTRUCTION	SHEET 207	E

2

W01-6
48" X 24"
TYPE III BARRICADE

RIGHT SHOULDER CLOSED
W21-5A

RIGHT SHOULDER CLOSED AHEAD
W21-5B

ROAD WORK AHEAD
W20-1A

W01-6
48" X 24"
TYPE III BARRICADE

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

R3-2
24" X 24"

W4-3R
30" X 30"

RIGHT LANE MUST TURN RIGHT
R3-7R
30" X 30"

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48" X 24"

W12-1D
24" X 24"

W12-1D
24" X 24"

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

END ROAD WORK
G20-2A
48" X 24"

225' 200' 500' 1000' 1600'

STH 31/OLE DAVIDSON RD

CTH MM/N GREEN BAY RD

POST POOL MH

N

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	STAGE 1B CONSTRUCTION	SHEET 208	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025021_s1b.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

2

N

END ROAD WORK
G20-2A
48" X 24"

RIGHT LANE CLOSED AHEAD
W20-5

W04-2R

700'
700'
400'
350'
245'
120'

ROAD WORK NEXT ½ MILES
G20-1
60" X 24"

ROAD WORK AHEAD
W20-1A

W01-6
48" X 24"

TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

A

STH 31 / S. GREEN BAY RD.

108
109
110

R3-8G
36" X 30"
ONLY

380 381 382 383 384 385 386 387 388 389 390 391 392

STH 20 / WASHINGTON AVE.

107
106

MATCHLINE

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

R3-8G
36" X 30"
ONLY

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

R3-8M
54" X 30"
ONLY ONLY

394 395 396 397 398 399 400 401 402 403 404 405

STH 20 / WASHINGTON AVE.

MATCHLINE

R3-8M
54" X 30"
ONLY ONLY

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

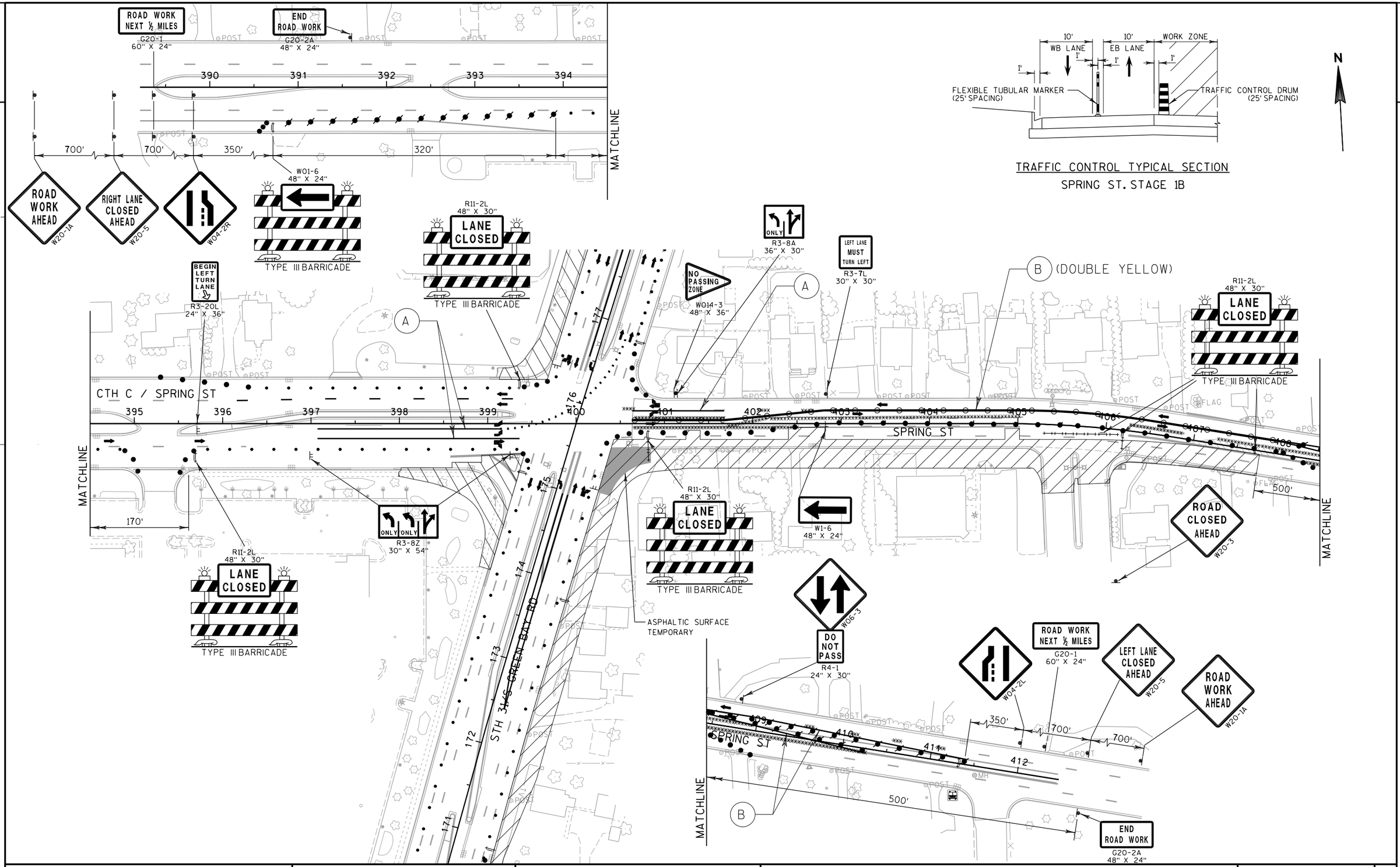
ROAD NARROWS
W05-1

ROAD WORK AHEAD
W20-1A

200'
400'
500'

END ROAD WORK
G20-2A
48" X 24"

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	STAGE 1B CONSTRUCTION	SHEET 209	E



TRAFFIC CONTROL TYPICAL SECTION

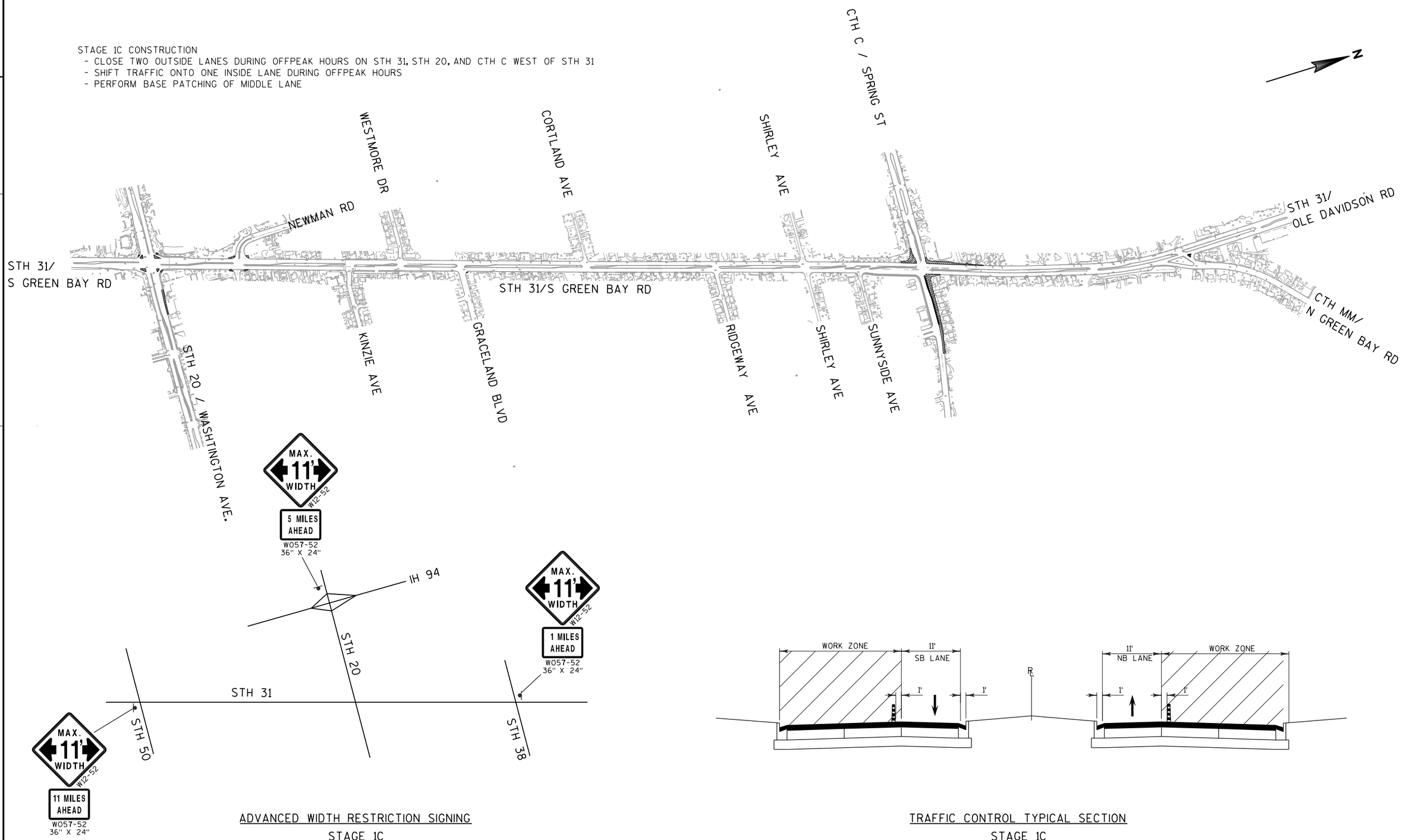
SPRING ST. STAGE 1B

N

2

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1B CONSTRUCTION	SHEET 210	E

STAGE 1C CONSTRUCTION
- CLOSE TWO OUTSIDE LANES DURING OFFPEAK HOURS ON STH 31, STH 20, AND CTH C WEST OF STH 31
- SHIFT TRAFFIC ONTO ONE INSIDE LANE DURING OFFPEAK HOURS
- PERFORM BASE PATCHING OF MIDDLE LANE



ADVANCED WIDTH RESTRICTION SIGNING
STAGE 1C

TRAFFIC CONTROL TYPICAL SECTION
STAGE 1C

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TRAFFIC CONTROL STAGE 1C CONSTRUCTION	SHEET 211	E

2

N

STH 31/S GREEN BAY RD

STH 20 / WASHINGTON AVE

MAX. 11' WIDTH
W12-52

ROAD WORK NEXT 2 MILES
G20-1
60" X 24"

END ROAD WORK
G20-2A
48" X 24"

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

R3-60R
30" X 36"

700' 700' 350' 245' 490' 245' 120'

ROAD WORK AHEAD
W20-1A

RIGHT TWO LANES CLOSED AHEAD
W20-5A

W04-2R

W01-6
48" X 24"
TYPE III BARRICADE

W01-6
48" X 24"
TYPE III BARRICADE

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

R3-60R
30" X 36"

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

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1C CONSTRUCTION	SHEET 212	E

2

N

BEGIN RIGHT TURN LANE
R3-20R
24" X 36"

BEGIN RIGHT TURN LANE
R3-20R
24" X 36"

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48" X 24"

W01-6
48" X 24"
TYPE III BARRICADE

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

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

R3-8A
36" X 30"
ONLY

R3-8A
36" X 30"
ONLY

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

NEWMAN RD.

STH 31/S GREEN BAY RD

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1C CONSTRUCTION	SHEET 213	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025027_s1c.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

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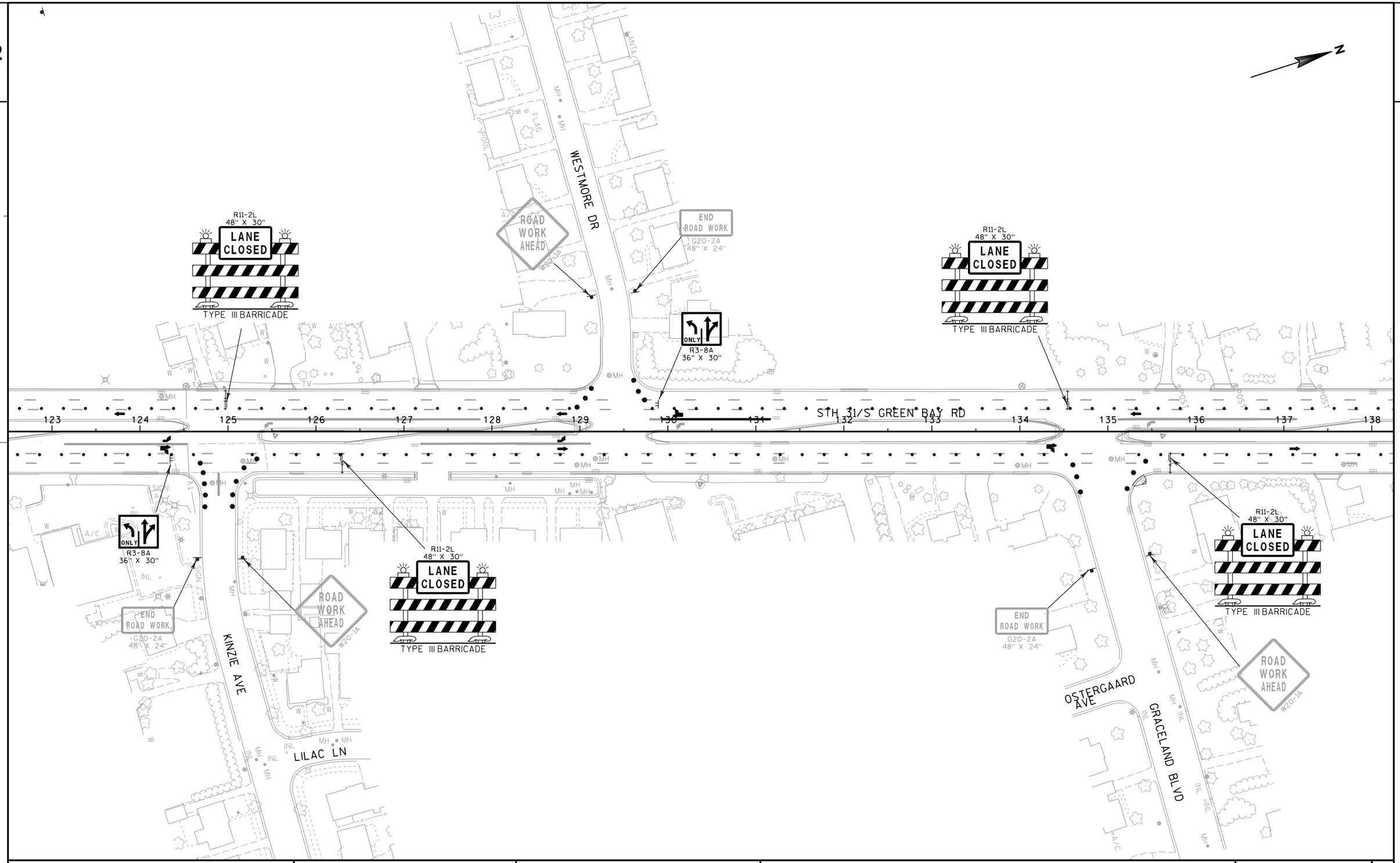

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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	STAGE 1C CONSTRUCTION	SHEET 214	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025028_s1c.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

2

2

N

CORTLAND AVE.

ROAD WORK AHEAD
W20-1A

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

END ROAD WORK
G20-2A
48" X 24"

ONLY
R3-8A
36" X 30"

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

STH 31/S GREEN BAY RD

138 139 140 141 142 143 144 145 146 147 148 149 150 151 152

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

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

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1C CONSTRUCTION	SHEET 215	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025029_s1c.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

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

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

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48" X 24"

SHIRLEY AVE

R3-8A
36" X 30"
ONLY

STH 31/S GREEN BAY RD

152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167

R3-8A
36" X 30"
ONLY

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

END ROAD WORK
G20-2A
48" X 24"

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

END ROAD WORK
G20-2A
48" X 24"

PERRY AVE

RIDGEWAY AVE

ROAD WORK AHEAD
W20-1A

SHIRLEY AVE

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1C CONSTRUCTION	SHEET 216	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025030_s1c.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

2

N

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

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

R3-8A
36" X 30"
ONLY

STH 31/S GREEN BAY RD

CTH C / SPRING ST

SUNNYSIDE AVE

SPRING ST

END ROAD WORK
G20-2A
48" X 24"

ROAD WORK AHEAD
W20-1A

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

R3-8A
36" X 30"
ONLY

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

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1C CONSTRUCTION	SHEET 217	E

2

N

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

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

STH 31/S GREEN BAY RD

182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 512

OLD GREEN BAY ROAD

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

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

END ROAD WORK
G20-2A
48" X 24"

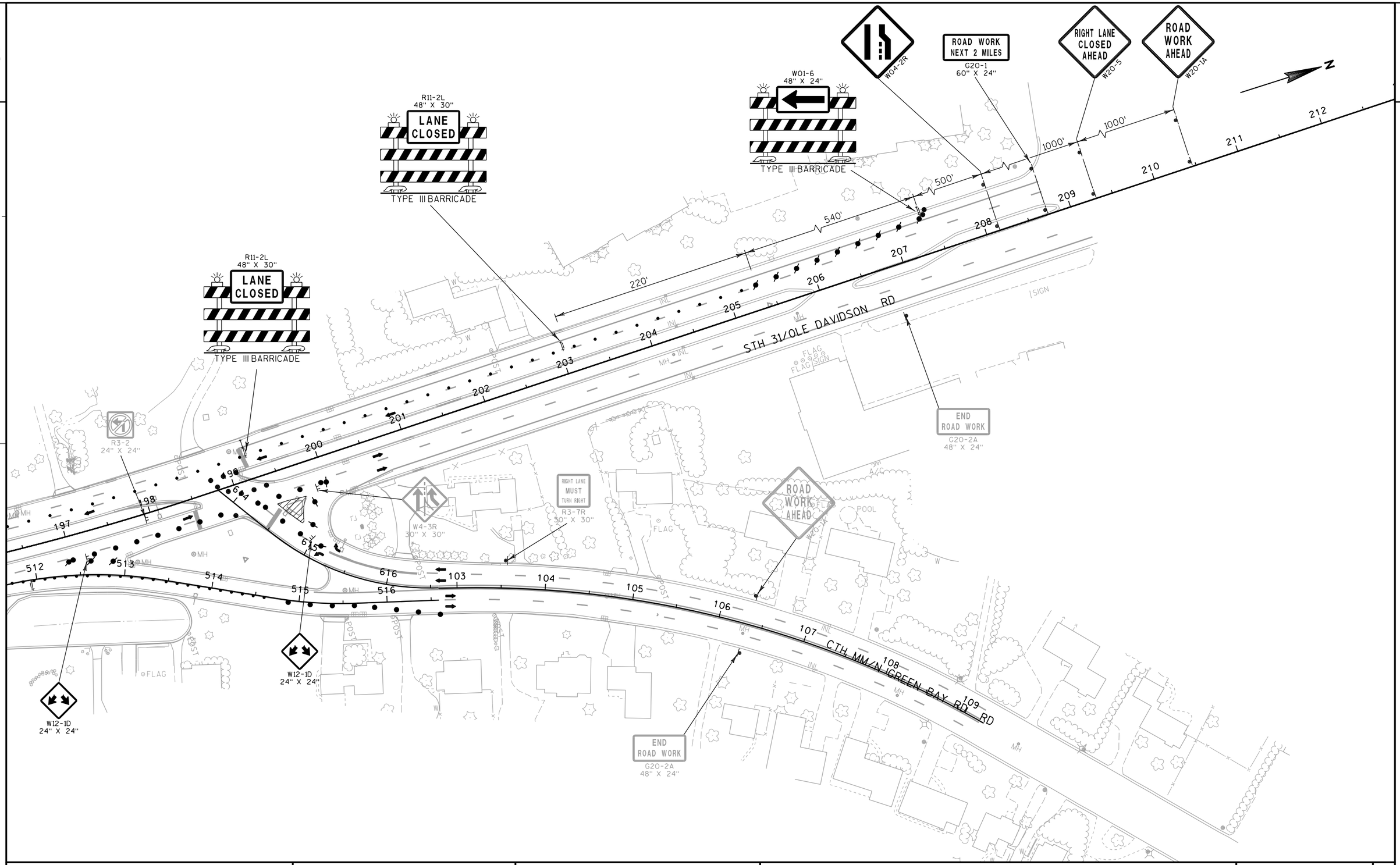
ROAD WORK AHEAD
W20-1A

BEGIN RIGHT TURN LANE
R3-20R
24" X 36"

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

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1C CONSTRUCTION	SHEET 218	E

2



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1C CONSTRUCTION	SHEET 219	E

2

N

ROAD WORK AHEAD W20-1A

RIGHT TWO LANES CLOSED AHEAD W20-5A

ROAD WORK NEXT ¼ MILES G20-1 60" X 24"

W04-2R

END ROAD WORK G20-2A 48" X 24"

700' 700' 350' 245' 490'

MATCHLINE

STH 31 / S GREEN BAY RD.

W01-6 48" X 24"

TYPE III BARRICADE

R11-2L 48" X 30" LANE CLOSED

BEGIN LEFT TURN LANE R3-20L 24" X 36"

R3-60R 30" X 36"

STH 20 / WASHINGTON AVE.

245' 120'

R3-8A 36" X 30" ONLY

200' 400' 400'

RIGHT LANE CLOSED AHEAD W20-5

ROAD WORK AHEAD W20-1A

500'

END ROAD WORK G20-2A 48" X 24"

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1C CONSTRUCTION	SHEET 220	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025034_s1c.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

2

ROAD WORK NEXT ½ MILES
G20-1
60" X 24"

700'
700'
350'

ROAD WORK AHEAD
W20-1A

RIGHT LANE CLOSED AHEAD
W20-5

W04-2R

W01-6
48" X 24"

TYPE III BARRICADE

MATCHLINE

391 392 393 394

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

END ROAD WORK
G20-2A
48" X 24"

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

CTH C / SPRING ST

395 396 397 398 399 400 401 402 403 404 405 406 407 408

ASPHALTIC SURFACE TEMPORARY

ONLY
R3-8A
36" X 30"

R11-2L
48" X 30"
LANE CLOSED

W01-6
48" X 24"

TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

W01-6
48" X 24"

TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

SPRING ST

500'

ROAD WORK AHEAD
W20-1A

MATCHLINE

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

R3-60R
30" X 36"

STH 31 / S GREEN BAY RD

171 172 173 174 175 176 177

W01-6
48" X 24"

TYPE III BARRICADE

END ROAD WORK
G20-2A
48" X 24"

W04-2R

RIGHT LANE CLOSED AHEAD
W20-5

ROAD WORK AHEAD
W20-1A

350'
700'
700'

SPRING ST

409 410 411 412

500'

MATCHLINE

END ROAD WORK
G20-2A
48" X 24"

N

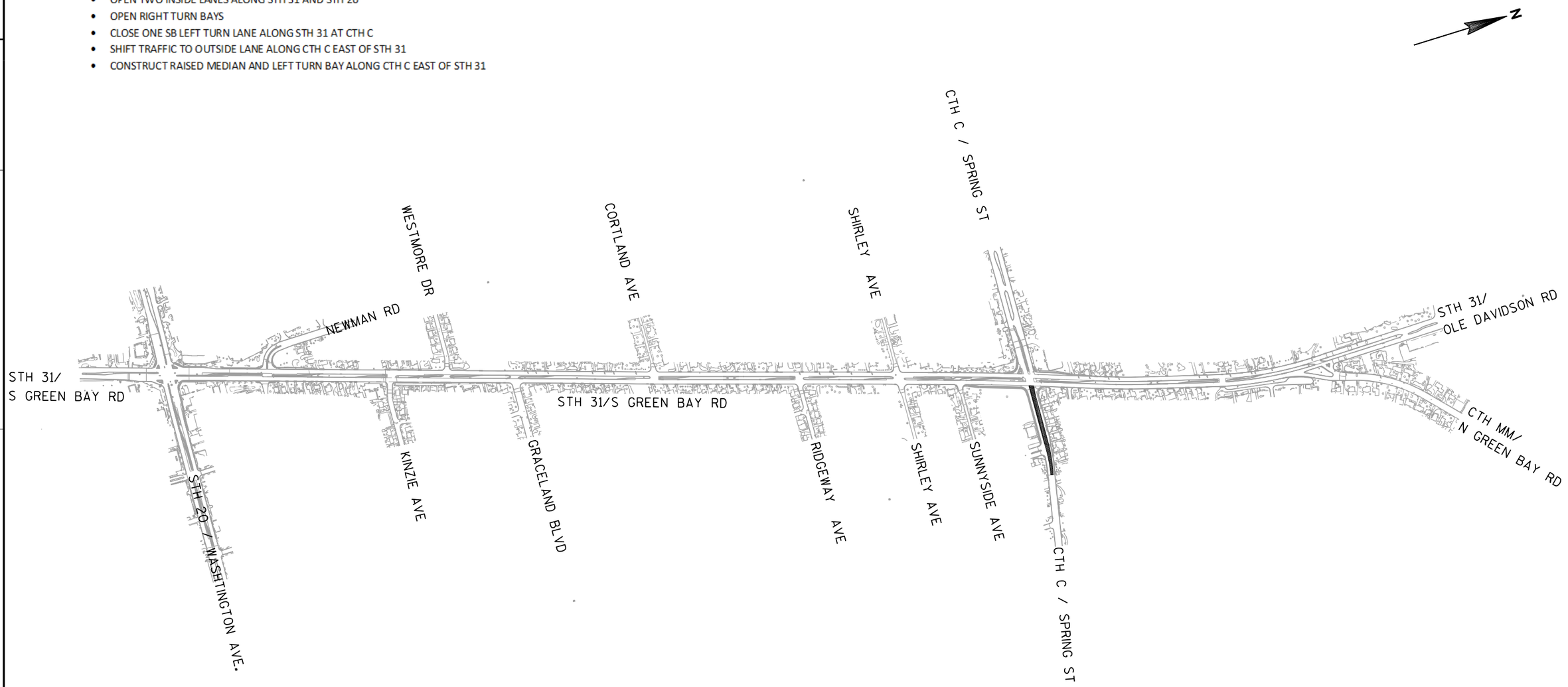
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	STAGE 1C CONSTRUCTION	SHEET 221	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\025035_s1c.dgn PLOT DATE : 1/31/2017 PLOT BY : GaspeMC PLOT NAME : PLOT SCALE : 1:100

2

STAGE 1D CONSTRUCTION

- OPEN TWO INSIDE LANES ALONG STH 31 AND STH 20
- OPEN RIGHT TURN BAYS
- CLOSE ONE SB LEFT TURN LANE ALONG STH 31 AT CTH C
- SHIFT TRAFFIC TO OUTSIDE LANE ALONG CTH C EAST OF STH 31
- CONSTRUCT RAISED MEDIAN AND LEFT TURN BAY ALONG CTH C EAST OF STH 31



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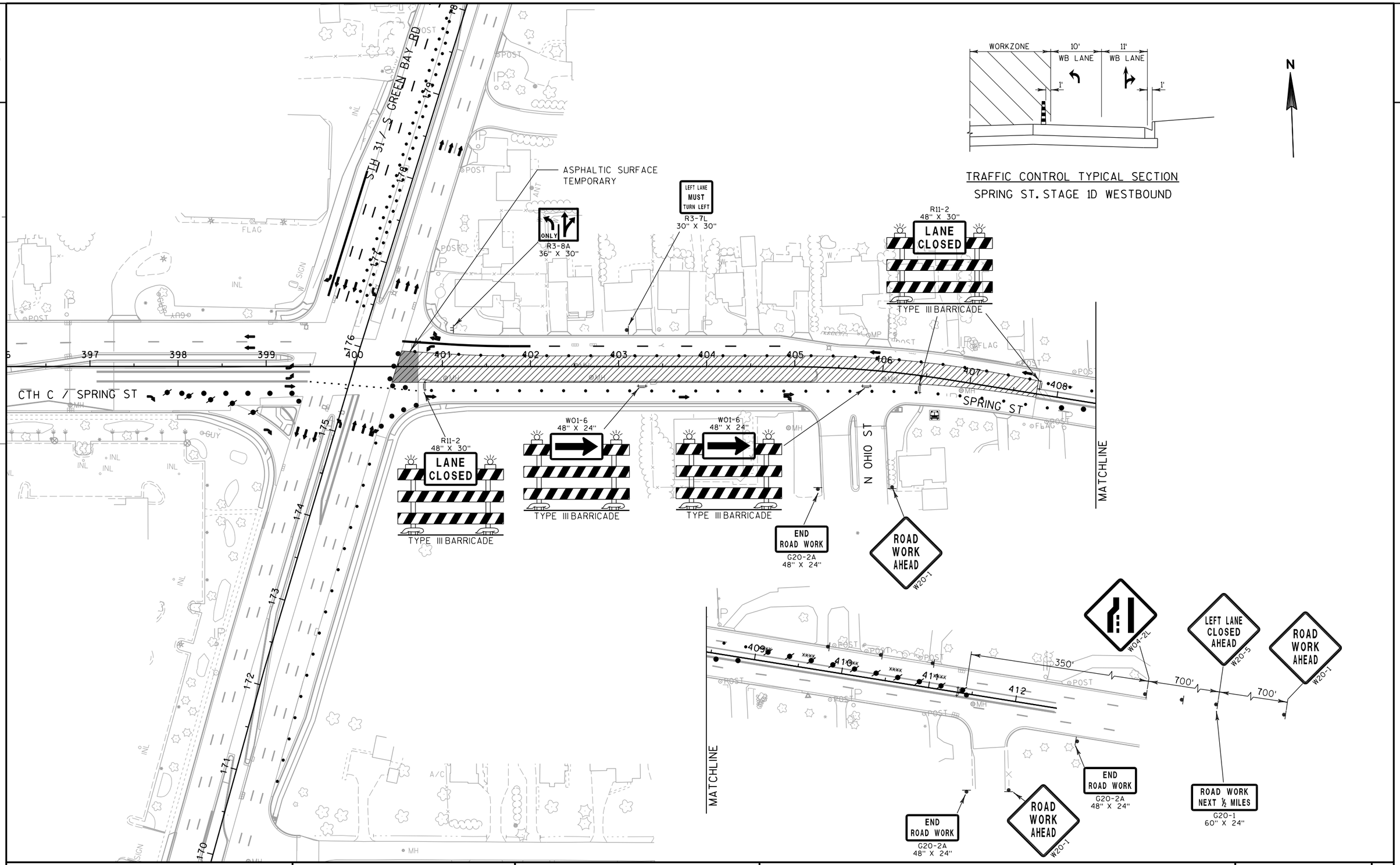
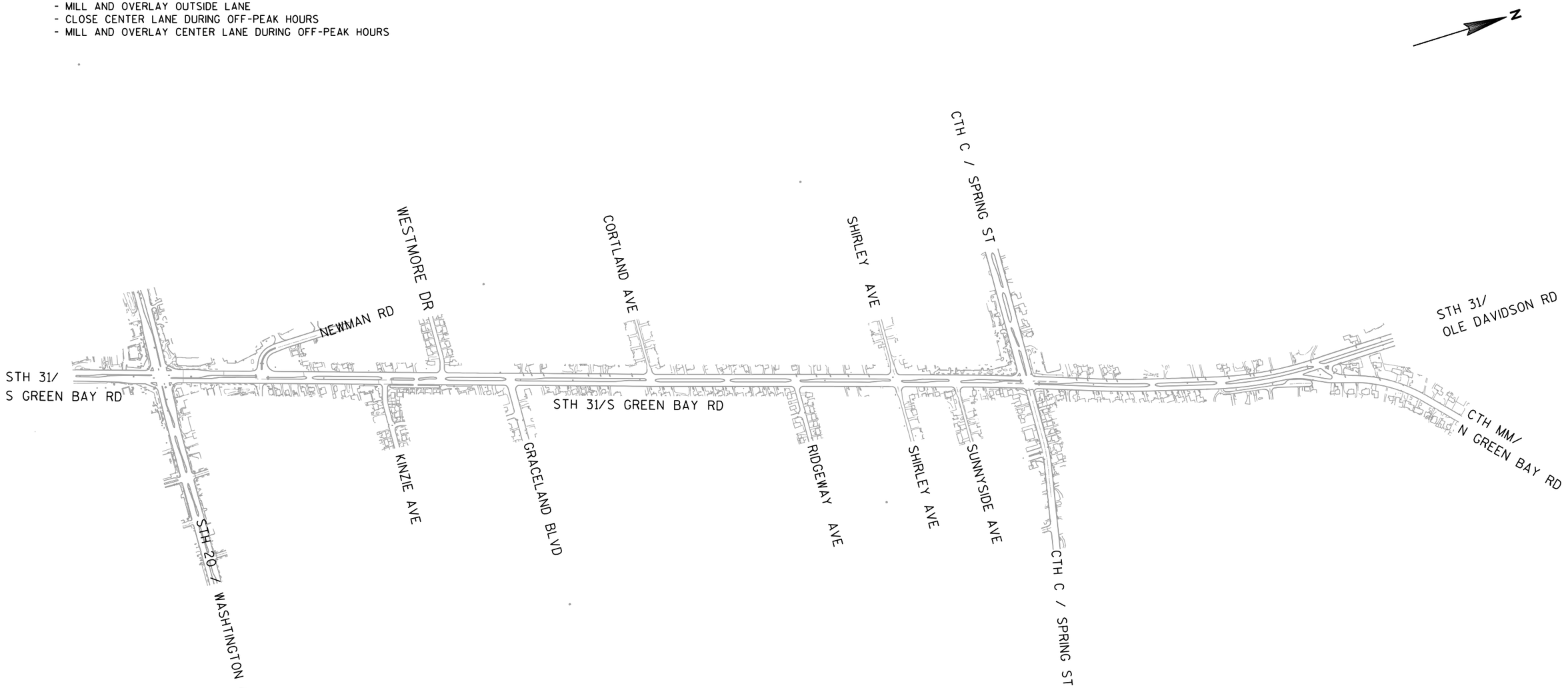
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TRAFFIC CONTROL STAGE 1D CONSTRUCTION	SHEET 222	E



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	STAGE 1D CONSTRUCTION	SHEET 223	E

2

STAGE 2A CONSTRUCTION
- CLOSE OUTSIDE LANE (SEE SDD 15D12 SHEET A, "TRAFFIC CONTROL LANE CLOSURE", AND SDD 15D22 "TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY")
- MILL AND OVERLAY OUTSIDE LANE
- CLOSE CENTER LANE DURING OFF-PEAK HOURS
- MILL AND OVERLAY CENTER LANE DURING OFF-PEAK HOURS



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TRAFFIC CONTROL STAGE 2A CONSTRUCTION	SHEET 224	E

2

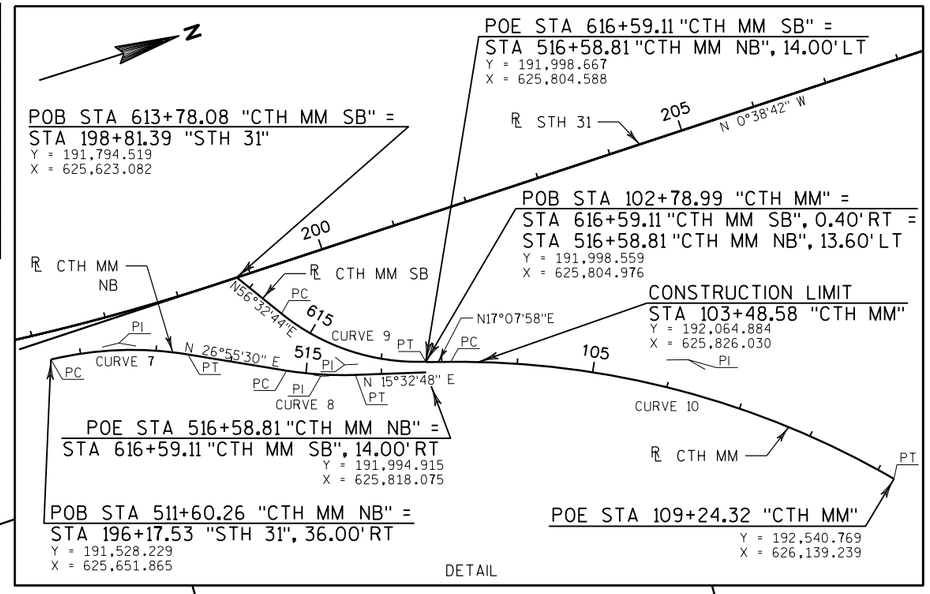
STAGE 2B CONSTRUCTION
- CLOSE INSIDE LANE (SEE SDD 15D12 SHEET A, "TRAFFIC CONTROL LANE CLOSURE")
- MILL AND OVERLAY INSIDE LANE

2

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	TRAFFIC CONTROL STAGE 2B CONSTRUCTION	SHEET 225	E

CURVE DATA

ALIGNMENT	CURVE NO.	PI STA	PI X	PI Y	DELTA	DEGREE OF CURVE	TANGENT	LENGTH	LONG CHORD	MIDDLE ORDINATE	EXTERNAL	RADIUS	PC STA	PT STA	BACK DIRECTION	AHEAD DIRECTION
STH 31	CURVE 1	183+38.05	625,328.27	190,286.54	3°53'53" LEFT	1°00'00"	194.98	389.81	389.73	3.31	3.32	5,729.58	181+43.08	185+32.88	N19°26'41"E	N15°32'48"E
STH 31	CURVE 2	194+55.95	625,627.93	191,363.68	16°11'30" LEFT	2°00'00"	407.51	809.58	806.89	28.55	28.84	2,864.79	190+48.45	198+58.03	N15°32'48"E	N0°38'42"W
STH 20	CURVE 3	383+99.93	622,751.37	183,054.81	2°39'22" RIGHT	1°00'00"	132.83	265.61	265.59	1.54	1.54	5,729.58	382+67.10	385+32.71	S87°43'50"E	S85°04'28"E
STH 20	CURVE 4	388+74.81	623,224.54	183,014.03	2°39'09" LEFT	1°00'00"	132.65	265.26	265.23	1.53	1.54	5,729.58	387+42.16	390+07.41	S85°04'28"E	S87°43'37"E
NEWMAN	CURVE 5	12+01.06	623,041.09	183,848.16	71°23'30" RIGHT	39°34'24"	104.02	180.40	168.96	27.20	33.49	144.78	10+97.04	12+77.44	N71°39'45"W	N0°16'15"W
CTH C	CURVE 6	405+80.86	625,655.27	189,546.98	9°08'01" RIGHT	4°47'00"	95.67	190.94	190.74	3.80	3.81	1,197.82	404+85.19	406+76.13	S87°51'56"E	S78°43'55"E
CTH MM NB	CURVE 7	512+52.52	625,658.57	191,620.24	22°45'35" RIGHT	12°30'00"	92.26	182.08	180.88	9.01	9.19	458.37	511+60.26	513+42.34	N4°09'35"E	N26°55'30"E
CTH MM NB	CURVE 8	515+20.00	625,780.79	191,860.90	11°22'42" LEFT	12°30'00"	45.66	91.03	90.88	2.26	2.27	458.37	514+74.34	515+65.36	N26°55'30"E	N15°32'48"E
CTH MM SB	CURVE 9	615+61.22	625,775.88	191,895.48	40°59'56" LEFT	20°00'00"	107.11	204.99	200.65	18.14	19.37	286.48	614+54.11	616+59.11	N56°32'44"E	N15°32'48"E
CTH MM	CURVE 10	106+25.70	625,907.11	192,329.88	30°36'43" RIGHT	5°00'00"	313.62	612.24	604.99	40.65	42.14	1,145.92	103+12.08	109+24.32	N17°07'58"E	N47°44'41"E



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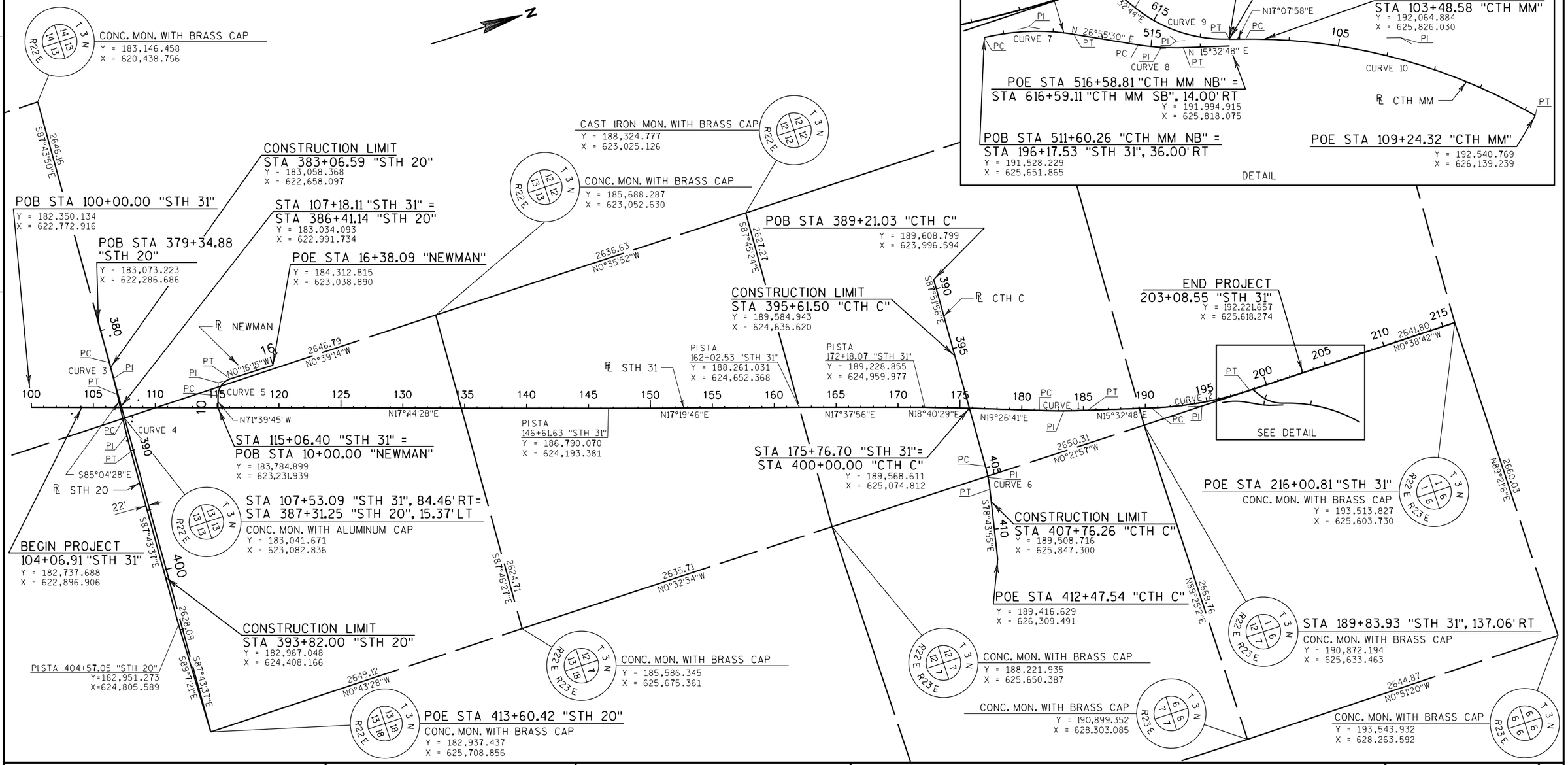

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	ALIGNMENT	SHEET 226	E

2390-09-70

Line	Item	Item Description	Unit	Total	Qty
0010	108.4400	CPM Progress Schedule	EACH	1.000	1.000
0020	201.0110	Clearing	SY	563.000	563.000
0030	201.0120	Clearing	ID	169.000	169.000
0040	201.0210	Grubbing	SY	563.000	563.000
0050	201.0220	Grubbing	ID	169.000	169.000
0060	204.0100	Removing Pavement	SY	15,180.000	15,180.000
0070	204.0105	Removing Pavement Butt Joints	SY	1,610.000	1,610.000
0080	204.0109.S	Removing Concrete Surface Partial Depth	SF	735,604.000	735,604.000
0090	204.0115	Removing Asphaltic Surface Butt Joints	SY	772.000	772.000
0100	204.0150	Removing Curb & Gutter	LF	10,764.000	10,764.000
0110	204.0155	Removing Concrete Sidewalk	SY	1,183.000	1,183.000
0120	204.0195	Removing Concrete Bases	EACH	55.000	55.000
0130	204.0210	Removing Manholes	EACH	7.000	7.000
0140	204.0220	Removing Inlets	EACH	39.000	39.000
0150	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	508.000	508.000
0160	204.0245	Removing Storm Sewer (size) 02. 15-Inch	LF	72.000	72.000
0170	204.0245	Removing Storm Sewer (size) 03. 18-Inch	LF	14.000	14.000
0180	204.0245	Removing Storm Sewer (size) 04. 27-Inch	LF	15.000	15.000
0190	204.0245	Removing Storm Sewer (size) 05. 42-Inch	LF	10.000	10.000
0200	204.0280	Sealing Pipes	EACH	2.000	2.000
0210	205.0100	Excavation Common	CY	16,665.000	16,665.000
0220	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	150.000	150.000
0230	213.0100	Finishing Roadway (project) 01. 2390-09-70	EACH	1.000	1.000
0240	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,100.000	1,100.000
0250	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	10,400.000	10,400.000
0260	312.0110	Select Crushed Material	TON	4,897.000	4,897.000
0270	390.0303	Base Patching Concrete	SY	5,590.000	5,590.000
0280	390.0403	Base Patching Concrete Shes	SY	951.000	951.000
0290	415.0090	Concrete Pavement 9-Inch	SY	17,059.000	17,059.000
0300	415.0120	Concrete Pavement 12-Inch	SY	74.000	74.000
0310	415.0210	Concrete Pavement Gaps	EACH	4.000	4.000
0320	416.0160	Concrete Driveway 6-Inch	SY	1,624.000	1,624.000
0330	416.0170	Concrete Driveway 7-Inch	SY	592.000	592.000
0340	416.0610	Drilled Tie Bars	EACH	6,478.000	6,478.000
0350	416.0620	Drilled Dowel Bars	EACH	3,953.000	3,953.000
0360	416.0750.S	Concrete Pavement Partial Depth Repair Joint Repair	LF	2,000.000	2,000.000
0370	416.0752.S	Concrete Pavement Partial Depth Repair Crack Repair	LF	200.000	200.000
0380	440.4410	Incentive IRI Ride	DOL	26,666.000	26,666.000
0390	450.4000	HMA Cold Weather Paving	TON	6,228.000	6,228.000

2390-09-70

Line	Item	Item Description	Unit	Total	Qty
0400	455.0605	Tack Coat	GAL	13,430.000	13,430.000
0410	460.2000	Incentive Density HMA Pavement	DOL	15,944.000	15,944.000
0420	460.6223	HMA Pavement 3 MT 58-28 S	TON	14,008.000	14,008.000
0430	460.6224	HMA Pavement 4 MT 58-28 S	TON	10,896.000	10,896.000
0440	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	247.000	247.000
0450	465.0125	Asphaltic Surface Temporary	TON	66.000	66.000
0460	520.8000	Concrete Collars for Pipe	EACH	67.000	67.000
0470	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	1,448.000	1,448.000
0480	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	16,557.000	16,557.000
0490	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	282.000	282.000
0500	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	40.000	40.000
0510	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	36.000	36.000
0520	601.0600	Concrete Curb Pedestrian	LF	176.000	176.000
0530	602.0410	Concrete Sidewalk 5-Inch	SF	35,964.000	35,964.000
0540	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	525.000	525.000
0550	603.8000	Concrete Barrier Temporary Precast Delivered	LF	100.000	100.000
0560	603.8125	Concrete Barrier Temporary Precast Installed	LF	100.000	100.000
0570	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	942.000	942.000
0580	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	378.000	378.000
0590	608.0430	Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	LF	13.000	13.000
0600	611.0420	Reconstructing Manholes	EACH	20.000	20.000
0610	611.0430	Reconstructing Inlets	EACH	20.000	20.000
0620	611.0530	Manhole Covers Type J	EACH	19.000	19.000
0630	611.0624	Inlet Covers Type H	EACH	55.000	55.000
0640	611.0666	Inlet Covers Type Z	EACH	6.000	6.000
0650	611.2003	Manholes 3-FT Diameter	EACH	5.000	5.000
0660	611.2004	Manholes 4-FT Diameter	EACH	12.000	12.000
0670	611.2005	Manholes 5-FT Diameter	EACH	4.000	4.000
0680	611.2006	Manholes 6-FT Diameter	EACH	4.000	4.000
0690	611.3003	Inlets 3-FT Diameter	EACH	5.000	5.000
0700	611.3004	Inlets 4-FT Diameter	EACH	10.000	10.000
0710	611.3230	Inlets 2x3-FT	EACH	40.000	40.000
0720	611.8110	Adjusting Manhole Covers	EACH	62.000	62.000
0730	611.8115	Adjusting Inlet Covers	EACH	163.000	163.000
0740	611.8120.S	Cover Plates Temporary	EACH	126.000	126.000
0750	612.0106	Pipe Underdrain 6-Inch	LF	2,115.000	2,115.000
0760	618.0100	Maintenance And Repair of Haul Roads (project) 01. 2390-09-70	EACH	1.000	1.000

2390-09-70

Line	Item	Item Description	Unit	Total	Qty
0770	619.1000	Mobilization	EACH	1.000	1.000
0780	620.0300	Concrete Median Sloped Nose	SF	856.000	856.000
0790	624.0100	Water	MGAL	260.000	260.000
0800	625.0100	Topsoil	SY	11,886.000	11,886.000
0810	628.1504	Silt Fence	LF	1,330.000	1,330.000
0820	628.1520	Silt Fence Maintenance	LF	1,330.000	1,330.000
0830	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0840	628.1910	Mobilizations Emergency Erosion Control	EACH	5.000	5.000
0850	628.7005	Inlet Protection Type A	EACH	25.000	25.000
0860	628.7010	Inlet Protection Type B	EACH	2.000	2.000
0870	628.7015	Inlet Protection Type C	EACH	175.000	175.000
0880	628.7020	Inlet Protection Type D	EACH	10.000	10.000
0890	629.0205	Fertilizer Type A	CWT	8.000	8.000
0900	630.0200	Seeding Temporary	LB	30.000	30.000
0910	631.0300	Sod Water	MGAL	800.000	800.000
0920	631.1000	Sod Lawn	SY	11,886.000	11,886.000
0930	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	227.000	227.000
0940	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	2.000	2.000
0950	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	6.000	6.000
0960	637.2210	Signs Type II Reflective H	SF	2,055.970	2,055.970
0970	637.2215	Signs Type II Reflective H Folding	SF	209.880	209.880
0980	637.2230	Signs Type II Reflective F	SF	215.000	215.000
0990	638.2102	Moving Signs Type II	EACH	26.000	26.000
1000	638.2602	Removing Signs Type II	EACH	216.000	216.000
1010	638.3000	Removing Small Sign Supports	EACH	173.000	173.000
1020	641.8100	Overhead Sign Support (structure) 01. S-51-239	LS	1.000	1.000
1030	642.5401	Field Office Type D	EACH	1.000	1.000
1040	643.0200.S	Traffic Control Surveillance and Maintenance (project) 01. 2390-09-70	DAY	164.000	164.000
1050	643.0300	Traffic Control Drums	DAY	58,964.000	58,964.000
1060	643.0420	Traffic Control Barricades Type III	DAY	12,220.000	12,220.000
1070	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	22.000	22.000
1080	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	22.000	22.000
1090	643.0705	Traffic Control Warning Lights Type A	DAY	26,304.000	26,304.000
1100	643.0715	Traffic Control Warning Lights Type C	DAY	9,230.000	9,230.000
1110	643.0900	Traffic Control Signs	DAY	27,246.000	27,246.000
1120	643.0920	Traffic Control Covering Signs Type II	EACH	20.000	20.000
1130	643.1050	Traffic Control Signs PCMS	DAY	820.000	820.000
1140	644.1430.S	Temporary Pedestrian Surface Plate	SF	100.000	100.000
1150	644.1601.S	Temporary Curb Ramp	EACH	2.000	2.000

2390-09-70

Line	Item	Item Description	Unit	Total	Qty
1160	644.1616.S	Temporary Pedestrian Safety Fence	LF	50.000	50.000
1170	646.0106	Pavement Marking Epoxy 4-Inch	LF	15,203.000	15,203.000
1180	646.0126	Pavement Marking Epoxy 8-Inch	LF	13,044.000	13,044.000
1190	646.0690.S	Removing Pavement Markings Water Blasting	LF	2,810.000	2,810.000
1200	646.0900.S	Pavement Marking Late Season	LF	29,155.000	29,155.000
1210	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	59.000	59.000
1220	647.0176	Pavement Marking Arrows Epoxy Type 3	EACH	2.000	2.000
1230	647.0356	Pavement Marking Words Epoxy	EACH	57.000	57.000
1240	647.0456	Pavement Marking Curb Epoxy	LF	1,131.000	1,131.000
1250	647.0526	Pavement Marking Yield Line Symbols Epoxy 18-Inch	EACH	42.000	42.000
1260	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	908.000	908.000
1270	647.0606	Pavement Marking Island Nose Epoxy	EACH	31.000	31.000
1280	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	257.000	257.000
1290	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	2,386.000	2,386.000
1300	647.0990.S	Removing Special Pavement Markings Water Blasting	EACH	10.000	10.000
1310	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	2,862.000	2,862.000
1320	649.0802	Temporary Pavement Marking Paint 8-Inch	LF	7,770.000	7,770.000
1330	650.4000	Construction Staking Storm Sewer	EACH	147.000	147.000
1340	650.4500	Construction Staking Subgrade	LF	7,471.000	7,471.000
1350	650.5000	Construction Staking Base	LF	208.000	208.000
1360	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	21,099.000	21,099.000
1370	650.7000	Construction Staking Concrete Pavement	LF	7,471.000	7,471.000
1380	650.8500	Construction Staking Electrical Installations (project) 01. 2390-09-70	LS	1.000	1.000
1390	650.9910	Construction Staking Supplemental Control (project) 01. 2390-09-70	LS	1.000	1.000
1400	650.9920	Construction Staking Slope Stakes	LF	1,066.000	1,066.000
1410	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	3,733.000	3,733.000
1420	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	2,286.000	2,286.000
1430	652.0605	Conduit Special 2-Inch	LF	759.000	759.000
1440	652.0615	Conduit Special 3-Inch	LF	3,278.000	3,278.000
1450	652.0700.S	Install Conduit into Existing Item	EACH	2.000	2.000
1460	652.0800	Conduit Loop Detector	LF	8,953.000	8,953.000
1470	653.0135	Pull Boxes Steel 24x36-Inch	EACH	29.000	29.000
1480	653.0140	Pull Boxes Steel 24x42-Inch	EACH	62.000	62.000
1490	653.0905	Removing Pull Boxes	EACH	100.000	100.000
1500	654.0101	Concrete Bases Type 1	EACH	20.000	20.000
1510	654.0102	Concrete Bases Type 2	EACH	6.000	6.000
1520	654.0105	Concrete Bases Type 5	EACH	9.000	9.000
1530	654.0110	Concrete Bases Type 10	EACH	3.000	3.000

2390-09-70

Line	Item	Item Description	Unit	Total	Qty
1540	654.0113	Concrete Bases Type 13	EACH	11.000	11.000
1550	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	4.000	4.000
1560	655.0230	Cable Traffic Signal 5-14 AWG	LF	3,255.000	3,255.000
1570	655.0240	Cable Traffic Signal 7-14 AWG	LF	4,464.000	4,464.000
1580	655.0260	Cable Traffic Signal 12-14 AWG	LF	6,718.000	6,718.000
1590	655.0270	Cable Traffic Signal 15-14 AWG	LF	192.000	192.000
1600	655.0305	Cable Type UF 2-12 AWG Grounded	LF	5,022.000	5,022.000
1610	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	10,013.000	10,013.000
1620	655.0610	Electrical Wire Lighting 12 AWG	LF	4,176.000	4,176.000
1630	655.0700	Loop Detector Lead In Cable	LF	33,889.000	33,889.000
1640	655.0800	Loop Detector Wire	LF	35,044.000	35,044.000
1650	655.0900	Traffic Signal EVP Detector Cable	LF	4,984.000	4,984.000
1660	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STH 31 & STH 20	LS	1.000	1.000
1670	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. STH 31 & Newman Road	LS	1.000	1.000
1680	656.0200	Electrical Service Meter Breaker Pedestal (location) 03. STH 31 & CTH C	LS	1.000	1.000
1690	656.0200	Electrical Service Meter Breaker Pedestal (location) 04. STH 31 & CTH MM	LS	1.000	1.000
1700	657.0100	Pedestal Bases	EACH	20.000	20.000
1710	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	13.000	13.000
1720	657.0310	Poles Type 3	EACH	6.000	6.000
1730	657.0322	Poles Type 5-Aluminum	EACH	7.000	7.000
1740	657.0405	Traffic Signal Standards Aluminum 3.5-FT	EACH	8.000	8.000
1750	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	8.000	8.000
1760	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	3.000	3.000
1770	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	1.000	1.000
1780	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	7.000	7.000
1790	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	9.000	9.000
1800	657.1350	Install Poles Type 10	EACH	3.000	3.000
1810	657.1360	Install Poles Type 13	EACH	11.000	11.000
1820	657.1525	Install Monotube Arms 25-FT	EACH	2.000	2.000
1830	657.1530	Install Monotube Arms 30-FT	EACH	1.000	1.000
1840	657.1550	Install Monotube Arms 50-FT	EACH	4.000	4.000
1850	657.1555	Install Monotube Arms 55-FT	EACH	7.000	7.000
1860	657.1815	Install Luminaire Arms Steel 15-FT	EACH	15.000	15.000
1870	658.0110	Traffic Signal Face 3-12 Inch Vertical	EACH	66.000	66.000
1880	658.0115	Traffic Signal Face 4-12 Inch Vertical	EACH	13.000	13.000
1890	658.0215	Backplates Signal Face 3 Section 12-Inch	EACH	66.000	66.000
1900	658.0220	Backplates Signal Face 4 Section 12-Inch	EACH	13.000	13.000

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Line	Item	Item Description	Unit	Total	Qty
1910	658.0416	Pedestrian Signal Face 16-Inch	EACH	24.000	24.000
1920	658.0500	Pedestrian Push Buttons	EACH	29.000	29.000
1930	658.0600	Led Modules 12-Inch Red Ball	EACH	53.000	53.000
1940	658.0605	Led Modules 12-Inch Yellow Ball	EACH	51.000	51.000
1950	658.0610	Led Modules 12-Inch Green Ball	EACH	51.000	51.000
1960	658.0615	Led Modules 12-Inch Red Arrow	EACH	26.000	26.000
1970	658.0620	Led Modules 12-Inch Yellow Arrow	EACH	41.000	41.000
1980	658.0625	Led Modules 12-Inch Green Arrow	EACH	28.000	28.000
1990	658.0635	Led Modules Pedestrian Countdown Timer 16-Inch	EACH	24.000	24.000
2000	658.5069	Signal Mounting Hardware (location) 01. STH 31 & STH 20	LS	1.000	1.000
2010	658.5069	Signal Mounting Hardware (location) 02. STH 31 & Newman Road	LS	1.000	1.000
2020	658.5069	Signal Mounting Hardware (location) 03. STH 31 & CTH C	LS	1.000	1.000
2030	658.5069	Signal Mounting Hardware (location) 04. STH 31 & CTH MM	LS	1.000	1.000
2040	659.1125	Luminaires Utility LED C	EACH	26.000	26.000
2050	661.0200	Temporary Traffic Signals for Intersections (location) 01. STH 31 & STH 20	LS	1.000	1.000
2060	661.0200	Temporary Traffic Signals for Intersections (location) 02. STH 31 & Newman Road	LS	1.000	1.000
2070	661.0200	Temporary Traffic Signals for Intersections (location) 03. STH 31 & CTH C	LS	1.000	1.000
2080	661.0200	Temporary Traffic Signals for Intersections (location) 04. STH 31 & CTH MM	LS	1.000	1.000
2090	670.0100	Field System Integrator 01. 2390-09-70 Traffic Signals	LS	1.000	1.000
2100	670.0200	ITS Documentation 01. 2390-09-70 Traffic Signals	LS	1.000	1.000
2110	671.0132	Conduit HDPE 3-Duct 2-Inch	LF	6,323.000	6,323.000
2120	671.0232	Conduit HDPE Directional Bore 3-Duct 2-Inch	LF	2,764.000	2,764.000
2130	673.0105	Communication Vault Type 1	EACH	9.000	9.000
2140	678.0036	Install Fiber Optic Cable Outdoor Plant 36-CT	LF	10,721.000	10,721.000
2150	678.0200	Fiber Optic Splice Enclosure	EACH	9.000	9.000
2160	678.0300	Fiber Optic Splice	EACH	36.000	36.000
2170	678.0500	Communication System Testing 01. 2390-09-70 Traffic Signals	LS	1.000	1.000
2180	690.0150	Sawing Asphalt	LF	1,674.000	1,674.000
2190	690.0250	Sawing Concrete	LF	22,011.000	22,011.000
2200	715.0415	Incentive Strength Concrete Pavement	DOL	5,141.000	5,141.000
2210	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,500.000	1,500.000
2220	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,800.000	1,800.000

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Line	Item	Item Description	Unit	Total	Qty
2230	SPV.0045	Special 01. Grabber Cones	DAY	149,109.000	149,109.000
2240	SPV.0060	Special 20. Adjusting Sanitary Manhole	EACH	24.000	24.000
2250	SPV.0060	Special 21. Reconstructing Sanitary Manhole	EACH	20.000	20.000
2260	SPV.0060	Special 30. Relocating Light Poles, Arms, and Luminaires	EACH	2.000	2.000
2270	SPV.0090	Special 01. Concrete Curb & Gutter 30-Inch Type A Special	LF	2,334.000	2,334.000
2280	SPV.0090	Special 02. Fiber Optic Tracer Wire	LF	9,726.000	9,726.000
2290	SPV.0090	Special 03. Fiber Optic Warning Tape	LF	6,390.000	6,390.000
2300	SPV.0090	Special 04. Milling And Removing Temporary Longitudinal Joint	LF	46,690.000	46,690.000
2310	SPV.0105	Special 02. Remove Traffic Signals STH 31 & STH 20	LS	1.000	1.000
2320	SPV.0105	Special 03. Remove Traffic Signals STH 31 & Newman Road	LS	1.000	1.000
2330	SPV.0105	Special 04. Remove Traffic Signals STH 31 & CTH C	LS	1.000	1.000
2340	SPV.0105	Special 05. Remove Traffic Signals STH 31 & CTH MM	LS	1.000	1.000
2350	SPV.0105	Special 06. Install Fiber Optic Communications in Cabinet CB1 S51-0095	LS	1.000	1.000
2360	SPV.0105	Special 07. Install Fiber Optic Communications in Cabinet CB1 S51-0849	LS	1.000	1.000
2370	SPV.0105	Special 08. Install Fiber Optic Communications in Cabinet CB1 S51-0101	LS	1.000	1.000
2380	SPV.0105	Special 09. Install Fiber Optic Communications in Cabinet CB1 S51-0210	LS	1.000	1.000
2390	SPV.0105	Special 10. Install State Furnished Traffic Signal Cabinet STH 31 & STH 20	LS	1.000	1.000
2400	SPV.0105	Special 11. Install State Furnished Traffic Signal Cabinet STH 31 & Newman Road	LS	1.000	1.000
2410	SPV.0105	Special 12. Install State Furnished Traffic Signal Cabinet STH 31 & CTH C	LS	1.000	1.000
2420	SPV.0105	Special 13. Install State Furnished Traffic Signal Cabinet STH 31 & CTH MM	LS	1.000	1.000
2430	SPV.0105	Special 14. Transporting Signal and Lighting Materials STH 31 & STH 20	LS	1.000	1.000
2440	SPV.0105	Special 15. Transporting Signal and Lighting Materials STH 31 & Newman Road	LS	1.000	1.000
2450	SPV.0105	Special 16. Transporting Signal and Lighting Materials STH 31 & CTH C	LS	1.000	1.000
2460	SPV.0105	Special 17. Transporting Signal and Lighting Materials STH 31 & CTH MM	LS	1.000	1.000
2470	SPV.0105	Special 18. Temporary Non-Intrusive Vehicle Detection System for Intersections STH 31 & STH 20	LS	1.000	1.000
2480	SPV.0105	Special 19. Temporary Non-Intrusive Vehicle Detection	LS	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
		System for Intersections STH 31 & Newman Road			
2490	SPV.0105	Special 20. Temporary Non-Intrusive Vehicle Detection System for Intersections STH 31 & CTH C	LS	1.000	1.000
2500	SPV.0105	Special 21. Temporary Non-Intrusive Vehicle Detection System for Intersections STH 31 & CTH MM	LS	1.000	1.000
2510	SPV.0105	Special 22. Transporting and Install State Furnished Emergency Vehicle Preemption (EVP) Detector Heads STH 31 & STH 20	LS	1.000	1.000
2520	SPV.0105	Special 23. Transporting and Install State Furnished Emergency Vehicle Preemption (EVP) Detector Heads STH 31 & Newman Road	LS	1.000	1.000
2530	SPV.0105	Special 24. Transporting and Install State Furnished Emergency Vehicle Preemption (EVP) Detector Heads STH 31 & CTH C	LS	1.000	1.000
2540	SPV.0105	Special 25. Transporting and Install State Furnished Emergency Vehicle Preemption (EVP) Detector Heads STH 31 & CTH MM	LS	1.000	1.000
2550	SPV.0105	Special 26. Remove Loop Detector Wire and Lead-in Cable STH 31 & STH 20	LS	1.000	1.000
2560	SPV.0105	Special 27. Remove Loop Detector Wire and Lead-in Cable STH 31 & Newman Road	LS	1.000	1.000
2570	SPV.0105	Special 28. Remove Loop Detector Wire and Lead-in Cable STH 31 & CTH C	LS	1.000	1.000
2580	SPV.0105	Special 29. Remove Loop Detector Wire and Lead-in Cable STH 31 & CTH MM	LS	1.000	1.000
2590	SPV.0165	Special 01. Removing Concrete Surface Partial Depth Special	SF	68,680.000	68,680.000
2600	SPV.0180	Special 01. Removing Surface Milling Special	SY	19,101.000	19,101.000
2610	SPV.0195	Special 01. Excavation, Hauling, and Disposal of VOC Contaminated Soil	TON	75.000	75.000

CLEARING AND GRUBBING ITEMS

CATEGORY	ROADWAY	201.0110 CLEARING SY	201.0120 CLEARING ID	201.0210 GRUBBING SY	201.0220 GRUBBING ID
0010					
	STH 31	327	58	327	58
	CTH C	235	111	235	111
	TOTAL	563	169	563	169

EXCAVATION, HAULING AND DISPOSAL OF CONTAMINATED SOIL

				205.0501.S EXCAVATION, HAULING AND DISPOSAL OF CONTAMINATED SOIL	SPV.0195.01
				PETROLEUM	VOC
CATEGORY	SITE ID	LOCATION	INTERSECTON	TON	TON
0010					
	1	SW QUAD	STH31/20	132	--
	6	NW QUAD	STH31/20	18	--
	13	SW QUAD	STH31/CTH C	--	75
		TOTAL		150	75

PAVEMENT REMOVALS

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	O/S	204.0150 REMOVING CURB & GUTTER LF	204.0100 REMOVING PAVEMENT SY
0010	1	STH 31						
			104+22	-	115+06	LT	117	133
			104+22	-	115+06	RT	398	145
			104+22	-	115+06	MEDIAN	527	845
			115+06	-	175+77	LT	1,551	641
			115+06	-	175+77	RT	2096	479
			115+06	-	175+77	MEDIAN	2187	3,376
			175+77	-	202+31	LT	863	202
			175+77	-	202+31	RT	672	326
			175+77	-	202+31	MEDIAN	897	1,169
						SUBTOTAL	9,308	7,316
		STH 20						
			383+02	-	385+75	LT	13	--
			383+02	-	385+75	RT	15	--
			383+02	-	385+75	MEDIAN	106	24
			387+00	-	400+75	LT	523	129
			387+00	-	400+75	RT	14	--
			387+00	-	400+75	MEDIAN	133	2,538
			387+00	-	400+75	DRIVEWAYS	440	135
						SUBTOTAL	804	2,691
		NEWMAN ROAD						
			10+50	-	12+58	LT/RT	--	--
			10+50	-	12+58	MEDIAN	42	--
						SUBTOTAL	42	--
		CTH C						
			396+25	-	399+50	LT	59	20
			396+25	-	399+50	RT	126	--
			396+25	-	399+50	MEDIAN	234	265
			400+48	-	407+76	LT	--	14
			400+48	-	407+76	RT	191	9
			400+48	-	407+76	MEDIAN	--	4,865
						SUBTOTAL	610	5,173
TOTAL							10,764	15,180

REMOVING PAVEMENT BUTT JOINTS

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	O/S	204.0105 REMOVING PAVEMENT BUTT JOINTS SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY
0010	2	STH 31						
			114+43	-	115+40	RT	--	171
			124+68	-	125+11	RT	--	117
			127+11	-	127+53	RT	37	--
			129+23	-	129+60	LT	100	--
			134+69	-	135+26	RT	156	--
			145+62	-	145+98	LT	--	88
			157+42	-	157+80	RT	--	100
			164+90	-	165+33	LT	--	104
			165+40	-	165+82	RT	--	105
			170+11	-	170+47	RT	--	87
			199+69	-	200+19	LT	208	--
			199+99	-	200+50	RT	214	--
		STH 20						
			STA	-	STA	--	--	--
			STA	-	STA	--	--	--
		CTH C						
			397+27	-	396+77	LT	219	--
			397+27	-	396+77	RT	323	--
		CTH MM						
			615+83		616+35	MEDIAN	354	--
TOTAL							1,610	772

EARTHWORK SUMMARY

Division	From/To Station	Location	Common Excavation (1) (item # 205.0100)		Salvaged/Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate +/- (14)
			Cut (2)	EBS Excavation (3)				Factor 1.25	
1	108+29 TO 199+45	STH 31	8297	0	7316	981	178	222	759
	388+68 TO 400+59	STH 20	1629	0	2667	-1038	7	9	-1047
	396+50 TO 407+76	CTH C	6739	0	5173	1566	4	5	1561
Division 1 Subtotal			16665	0	15156	1509	189	237	1272
Grand Total			16665	0	15156	1509	189	237	1272
			Total Common Exc	16665					

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Select Borrow material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Marsh Excavation - to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well. Item number 205.0500
7) Rock Excavation item number 205.0200
8) Reduced Marsh in Fill - Excavated Marsh material is usuable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
9) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor = 1.5. Item number 208.11
11) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.3. Item number 208.11
12) Expanded Rock - Factor = 1.1.
13) Expanded Fill. Factor = 1.25
Depending on selections:

Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor

Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced EBS) * Fill Factor

Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh) * Fill Factor

Or Expanded Fill = (Unexpanded Fill - Rock* Rock Factor) * Fill Factor

14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.
15) Use 113,641 CY of material from Division 1. Borrow Excavation item number 208.0100

REMOVING CONCRETE SIDEWALK

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	O/S	204.0155 REMOVING CONCRETE SIDEWALK SY
0010	2	STH 31					
			104+22	-	115+06	LT	204
			104+22	-	115+06	RT	57
			104+22	-	115+06	MEDIAN	138
			115+06	-	175+77	LT	109
			115+06	-	175+77	RT	14
			115+06	-	175+77	MEDIAN	60
			175+77	-	202+31	MEDIAN	131
						SUBTOTAL	713
		STH 20					
			383+02	-	385+75	LT	--
			383+02	-	385+75	RT	31
			383+02	-	385+75	MEDIAN	26
			387+00	-	400+75	LT	103
			387+00	-	400+75	MEDIAN	185
						SUBTOTAL	343
		NEWMAN ROAD					
			10+50	-	12+58	MEDIAN	127
						SUBTOTAL	127
TOTAL							1,183

ASPHALTIC PAVING

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	O/S	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	460.2000 INCENTIVE DENSITY HMA PAVMENT DOL	450.4000 HMA COLD WEATHER PAVING TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON
0010	2	STH 31											
			104+22	-	115+06	LT	415	436	339	496	194	--	--
			104+22	-	115+06	RT	418	436	339	496	194	7	--
			115+06	-	175+77	LT	3,547	3,697	2,875	4,207	1,643	73	--
			115+06	-	175+77	RT	3,553	3,697	2,875	4,207	1,643	91	--
			175+77	-	202+31	LT	1,470	1,534	1,193	1,746	682	24	--
			175+77	-	202+31	RT	1,479	1,534	1,193	1,746	682	48	--
						SUBTOTAL	10,882	11,334	8,814	12,898	5,038	243	--
	2	STH 20											
			383+02	-	385+75	LT	280	294	229	335	131	--	--
			383+02	-	385+75	RT	280	294	229	335	131	--	--
			387+00	-	400+75	LT	786	825	642	939	367	--	--
			387+00	-	400+75	RT	786	825	642	939	367	--	--
						SUBTOTAL	2,132	2,238	1,742	2,548	996	--	--
	2	NEWMAN ROAD											
			10+50	-	12+58	LT/RT	--	--	--	--	--	--	--
						SUBTOTAL	--	--	--	--	--	--	--
	2	CTH C											
			396+25	-	399+50	LT	209	218	170	249	97	4	--
			396+25	-	399+50	RT	208	218	170	249	97	--	--
	1		400+48	-	407+76	LT	--	--	--	--	--	--	27
	1		400+48	-	407+76	RT	--	--	--	--	--	--	39
						SUBTOTAL	417	436	340	498	194	4	66
		UNDISTRIBUTED					--	--	--	--	--	--	--
		TOTAL					13,430	14,008	10,896	15,944	6,228	247	66

INCENTIVE IRI RIDE

CATEGORY	ROADWAY	440.4410 DOL
0010		
	STH 31	22,296
	STH 20	3,584
	CTH C	352
	CTH MM	434
	TOTAL	26,666

PAVEMENT MILLING

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	O/S	SPV.0180.01 REMOVING SURFACE MILLING SPECIAL SY	204.0109.S REMOVING CONCRETE SURFACE PARTIAL DEPTH 1-INCH SF	4-INCH SF	SPV.0165.01 SPECIAL SF
0010	2	STH 31								
			104+22	-	115+06	LT	1,294	16,494	770	642
			104+22	-	115+06	RT	--	27,588	--	1,162
			104+22	-	115+06	MEDIAN	--	--	6,707	1,782
			115+06	-	175+77	LT	1,592	226,577	--	11,326
			115+06	-	175+77	RT	--	225,697	--	11,614
			115+06	-	175+77	MEDIAN	--	6,566	--	21,698
			175+77	-	202+31	LT	--	98,018	--	4,796
			175+77	-	202+31	RT	--	98,018	--	6,288
			175+77	-	202+31	MEDIAN	--	--	--	9,090
						SUBTOTAL	2,886	706,435		68,398
		STH 20								
			383+02	-	386+48	LT	1,923	--	1,962	--
			383+02	-	386+48	RT	1,923	--	690	--
			386+48	-	400+75	LT	6,183	--	1,933	--
			386+48	-	400+75	RT	6,186	--	340	--
						SUBTOTAL	16,215	4,925		--
		CTH C								
			396+25	-	399+50	LT	--	12,122	--	56
			396+25	-	399+50	RT	--	12,122	--	102
			396+25	-	399+50	MEDIAN	--		--	124
						SUBTOTAL	--	24,244		282
TOTALS							19,101	735,604		68,680

RELOCATING LIGHT POLES

CATEGORY	STAGE	ROADWAY	LOCATION EXISTING	LOCATION FINISHED	204.0195* REMOVING CONCRETE BASES EA	654.0105* CONCRETE BASES TYPE 5 EA	SPV.0060.30 RELOCATING LIGHT POLES, ARMS, AND LUMINAIRES EA
0010	1	CTH C					
			405+68.3 47.1' RT	405+70.4 67.3' RT	1	1	1
			406+26.8 30.4' RT	406+32.4 37.5' RT	1	1	1
		TOTAL			2	2	2

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

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REMOVING STORM SEWER STRUCTURES

CATEGORY	STAGE	ROADWAY	STATION	OFFSET	204.0220 REMOVING INLETS EA	204.0210 REMOVING MANHOLES EA
0010	1	STH 31	106+37	4.5' LT	1	--
			106+59	63.2' RT	--	1
			112+12	2.5' RT	1	--
			113+49	3.0' RT	1	--
			115+80	36.0' LT	1	--
			124+22	13.5' RT	--	1
			127+12	16.0' RT	1	--
			131+22	13.5' LT	1	--
			135+32	4.5' LT	1	--
			156+36	12.3' RT	1	--
			169+00	14.0' LT	1	--
			170+73	14.5' RT	1	--
			172+75	46.5' RT	1	--
			174+44	46.5' LT	1	--
			174+55	3.5' LT	1	--
			175+12	62.0' LT	--	1
			175+23	14.5' LT	1	--
			175+23	54.0' LT	1	--
			175+26	46.5' RT	1	--
			175+68	48.0' LT	--	1
			176+34	63.0' RT	1	--
			176+43	48.0' LT	1	--
			176+48	3.0' RT	1	--
			176+63	48.0' RT	1	--
			188+02	15.0' RT	1	--
			190+39	15.0' RT	1	--
0010	1	STH 20	390+01	13.0' LT	1	--
			390+49	0.0' LT	1	--
			391+36	3.0' LT	1	--
			393+73	15.0' LT	1	--
			394+18	12.0' LT	1	--
			394+18	1.0' LT	1	--
			394+30	0.9' LT	--	1
			397+64	2.0' RT	1	--
0010	1	CTH C	396+76	0.0' LT	1	--
			398+81	52.1' RT	1	--
			401+04	12.0' RT	--	1
			402+50	23.0' LT	1	--
			402+65	26.0' RT	1	--
			402+70	13.0' RT	--	1
			402+71	25.0' LT	1	--
			402+76	26.0' RT	1	--
			405+33	68.0' RT	2	--
			406+34	26.0' RT	1	--
			406+31	27.0' LT	1	--
		TOTAL			39	7

REMOVING STORM SEWER

CATEGORY	STAGE	ROADWAY	STATION	OFFSET	TO	STATION	OFFSET	204.0245.01 REMOVING STORM SEWER 12-INCH LF	205.0245.02 REMOVING STORM SEWER 15-INCH LF	205.0245.03 REMOVING STORM SEWER 18-INCH LF	205.0245.04 REMOVING STORM SEWER 27-INCH LF	205.0245.05 REMOVING STORM SEWER 42-INCH LF
0010												
	1	STH 31										
			112+12	12.0' LT	TO	112+12	4.5' LT	8	--	--	--	--
			113+49	7.0' LT	TO	113+49	3.0' RT	10	--	--	--	--
			115+80	63.0' LT	TO	115+84	49.0' LT	17	--	--	--	--
			118+37	44.0' LT	TO	118+51	43.0' LT	--	--	--	15	--
			124+23	5.0' LT	TO	124+23	12.0' RT	16	--	--	--	--
			127+06	6.0' RT	TO	127+12	12.0' RT	10	--	--	--	--
			131+23	15.0' LT	TO	131+23	4.0' LT	12	--	--	--	--
			155+47	42.0' LT	TO	155+47	52.0' LT	--	--	--	--	10
			169+00	12.0' LT	TO	169+28	3.0' RT	38	--	--	--	--
			170+73	12.0' RT	TO	171+08	6.0' LT	39	--	--	--	--
			174+46	78.0' LT	TO	175+12	62.0' LT	67	--	--	--	--
			174+55	3.5' LT	TO	175+23	14.5' LT	69	--	--	--	--
			176+43	48.0' LT	TO	176+42	63.0' LT	17	--	--	--	--
			176+34	63.0' LT	TO	176+63	48.0' RT	--	30	--	--	--
			188+02	10.0' RT	TO	188+02	15.0' RT	5	--	--	--	--
			190+39	10.0' RT	TO	190+39	15.0' RT	5	--	--	--	--
0010	1	STH 20	390+01	13.0' LT	TO	390+49	0.0' LT	50	--	--	--	--
			390+49	0.0' LT	TO	390+81	11.5' RT	39	--	--	--	--
			394+18	1.0' LT	TO	394+28	0.0' RT	11	--	--	--	--
			399+22	45.0' RT	TO	399+32	38.0' RT	13	--	--	--	--
0010	1	CTH C	398+81	52.1' RT	TO	399+22	45.0' RT	42	--	--	--	--
			400+32	59.5' RT	TO	401+04	12.0' RT	40	--	--	--	--
			401+04	12.0' RT	TO	401+31	12.5' RT	--	28	--	--	--
			401+05	12.0' RT	TO	400+99	2.0' RT	--	14	--	--	--
			404+86	14.5' RT	TO	405+00	14.5' RT	--	--	14	--	--
TOTAL								508	72	14	15	10

SEALING PIPES

CATEGORY	STAGE	ROADWAY	STATION	OFFSET	204.028 EA
0010	1				
		STH 31	176+48	5.5' LT	1
			176+63	47.6' RT	1
		TOTAL			2

3

BASE AGGREGATE ITEMS

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	305.0110 BASE AGGREGATE DENSE ¾-INCH TON	305.0120 BASE AGGREGATE DENSE 1¼-INCH TON	312.0110 SELECT CRUSHED TON	624.0100 WATER MGAL
0010	STH 31								
		104+22	-	115+06	LT	106	55	--	3
		104+22	-	115+06	RT	78	137	--	4
		104+22	-	115+06	MEDIAN	96	555	--	10
		115+06	-	175+77	LT	61	551	--	10
		115+06	-	175+77	RT	147	790	--	15
		115+06	-	175+77	MEDIAN	139	2,705	--	43
		175+77	-	202+31	LT	26	442	--	8
		175+77	-	202+31	RT	25	213	--	4
		175+77	-	202+31	MEDIAN	52	1,036	--	17
					SUBTOTAL	730	6,484	--	114
	STH 20								
		383+02	-	385+75	LT	--	3	--	1
		383+02	-	385+75	RT	--	8	--	1
		383+02	-	385+75	MEDIAN	5	30	--	1
		387+00	-	400+75	LT	71	208	--	5
		387+00	-	400+75	RT	--	3	--	1
		387+00	-	400+75	MEDIAN	129	1,230	--	21
					SUBTOTAL	205	1,482	--	30
	NEWMAN ROAD								
		10+50	-	12+58	LT/RT	--	40	--	1
		10+50	-	12+58	MEDIAN	25	19	--	1
					SUBTOTAL	25	59	--	2
	CTH C								
		396+25	-	399+50	LT	--	20	--	1
		396+25	-	399+50	RT	--	118	--	2
		396+25	-	399+50	MEDIAN	52	189	--	4
		400+48	-	407+76	LT	39	173	293	8
		400+48	-	407+76	RT	2	171	288	7
		400+48	-	407+76	MEDIAN	47	1,704	4,316	92
					SUBTOTAL	140	2,375	4,897	114
TOTALS						1,100	10,400	4,897	260

3

CONCRETE ITEMS

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	415.0090 CONCRETE PAVEMENT 9-INCH SY	415.0120 CONCRETE PAVEMENT 12-INCH SY	416.0160 CONCRETE DRIVEWAY 6-INCH SY	416.0170 CONCRETE DRIVEWAY 7-INCH SY	715.0415 INCENTIVE STRENGTH CONCRETE PAVEMENT DOL
0010	STH 31									
		104+22	-	115+06	RT	--	--	--	108	--
		104+22	-	115+06	MEDIAN	857	52	--	--	273
		115+06	-	175+77	LT	533	--	450	42	160
		115+06	-	175+77	RT	651	--	548	49	195
		115+06	-	175+77	MEDIAN	4,717	--	--	--	1,415
		175+77	-	202+31	LT	695	--	168	51	209
		175+77	-	202+31	RT	285	--	260	41	86
		175+77	-	202+31	MEDIAN	1,791	--	--	--	537
					SUBTOTAL	9,529	52	1,426	291	2,875
	STH 20									
		383+02	-	385+75	MEDIAN	--	9	--	--	3
		387+00	-	400+75	LT	109	--	--	190	33
		387+00	-	400+75	MEDIAN	2,004	13	--	--	605
					SUBTOTAL	2,113	22	--	190	641
	CTH C									
		396+25	-	399+50	LT	--	--	20	--	
		396+25	-	399+50	RT	88	--	--	--	26
		396+25	-	399+50	MEDIAN	190	--	--	--	57
		400+48	-	406+88	LT/RT	5,112	--	134	111	1,534
					SUBTOTAL	5390	--	154	111	1,617
	CTH MM									
		614+25	-	616+25	LT	27	--	15	--	8
		614+25	-	616+25	RT	--	--	29	--	--
					SUBTOTAL	27	--	44	--	8
TOTALS						17059	74	1,624	592	5,141

CONCRETE PAVEMENT REPAIR

CATEGORY	LOCATION	416.0750.S CONCRETE PAVEMENT PARTIAL DEPTH REPAIR JOINT REPAIR LF	416.0752.S CONCRETE PAVEMENT PARTIAL DEPTH REPAIR CRACK REPAIR LF
0010			
	UNDISTRIBUTED	2,000	200
	TOTALS	2,000	200

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

CATEGORY	ROADWAY	STATION	O/S	602.0515 SF
0010	STH 31			
		106+22	LT	10
		106+46	LT	30
		106+61	RT	10
		106+72	RT	30
		107+66	LT	30
		107+84	LT	10
		107+87	RT	30
		108+17	RT	10
		114+39	LT	10
		114+69	LT	10
		114+42	RT	25
		114+39	MEDIAN	20
		115+73	LT	25
		115+34	RT	15
		115+75	RT	10
		115+76	MEDIAN	20
		169+92	RT	15
		174+54	LT	15
		174+94	LT	30
		175+11	RT	10
		175+63	RT	10
		175+01	MEDIAN	20
		176+25	LT	10
		176+03	LT	10
		176+48	RT	10
		176+66	RT	10
	STH 20			
		-		-
	NEWMAN ROAD			
		10+69	MEDIAN	20
	CTH C			
		401+01	MEDIAN	20
		399+13	MEDIAN	20
		405+10	RT	15
		406+21	RT	15
TOTAL				525

FINISHING ROADWAY 2390-09-70

CATEGORY	LOCATION	213.0100 EA
0010		
	PROJECT	1
	TOTAL	1

MILLING AND REMOVING TEMPORARY LONGITUDINAL JOINT

CATEGORY	ROADWAY	SPV.0090.04 LF
0010	STH 31	38,300
	STH 20	6,640
	CTH C	1,250
	CTH MM	500
	TOTAL	46,690

CONCRETE CURB & GUTTER

						601.0405	601.0409	601.0411	601.0555	601.0557	SPV.0090.01	601.0600
						CONCRETE CURB & GUTTER						CONCRETE
						18-INCH	30-INCH		6-INCH SLOPED 36-INCH		30-INCH	CURB
						TYPE A	TYPE A	TYPE D	TYPE A	TYPE D	TYPE A SPECIAL	PEDESTRIAN
CATEGORY	ROADWAY	STATION	TO	STATION	O/S	LF	LF	LF	LF	LF	LF	LF
0010	STH 31											
		104+22	-	115+06	LT	--	26	--	--	--	195	10
		104+22	-	115+06	RT	--	308	29	--	--	209	42
		104+22	-	115+06	MEDIAN	--	778	--	--	--	230	--
		115+06	-	175+77	LT	--	1,493	--	--	--	--	--
		115+06	-	175+77	RT	--	2,278	16	--	--	--	61
		115+06	-	175+77	MEDIAN	564	4,651	--	--	--	--	--
		175+77	-	202+31	LT	--	890	--	--	24	--	5
		175+77	-	202+31	RT	--	660	--	--	12	--	5
		175+77	-	202+31	MEDIAN	--	1,712	--	40	--	--	--
					SUBTOTAL	564	12,796	45	40	36	634	123
	STH 20											
		383+02	-	385+75	LT	--	--	--	--	--	12	--
		383+02	-	385+75	RT	--	--	--	--	--	30	--
		383+02	-	385+75	MEDIAN	--	--	--	--	--	109	--
		387+00	-	400+75	LT	--	139	--	--	--	547	--
		387+00	-	400+75	RT	--	--	--	--	--	10	--
		387+00	-	400+75	MEDIAN	--	1,256	--	--	--	992	--
					SUBTOTAL	--	1,395	--	--	--	1,700	--
	NEWMAN ROAD											
		10+50	-	12+58	LT/RT	--	--	161	--	--	--	--
		10+50	-	12+58	MEDIAN	--	--	76	--	--	--	--
					SUBTOTAL	--	--	237	--	--	--	--
	CTH C											
		396+25	-	399+50	LT	--	79	--	--	--	--	5
		396+25	-	399+50	RT	--	273	--	--	--	--	--
		396+25	-	399+50	MEDIAN	--	504	--	--	--	--	--
		400+48	-	407+76	LT	--	693	--	--	--	--	5
		400+48	-	407+76	RT	--	683	--	--	--	--	43
		400+48	-	407+76	MEDIAN	884	--	--	--	--	--	--
					SUBTOTAL	884	2,232	--	--	--	--	53
	CTH MM											
		614+00	-	103+50	LT/RT/MED	--	134	--	--	--	--	--
					SUBTOTAL	--	134	--	--	--	--	--
TOTALS						1,448	16,557	282	40	36	2,334	176

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DRILLED BAR ITEMS

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
0010	STH 31						
		104+22	-	115+06	LT	208	336
		104+22	-	115+06	RT	479	190
		115+06	-	175+77	LT	180	241
		115+06	-	175+77	RT	352	336
		115+06	-	175+77	MEDIAN	2,456	1,107
		175+77	-	202+31	LT	220	48
		175+77	-	202+31	RT	70	45
		175+77	-	202+31	MEDIAN	810	839
					SUBTOTAL	4,775	3,142
	STH 20						
		383+02	-	385+75	LT	39	70
		383+02	-	385+75	RT	78	117
		387+00	-	400+75	LT	771	101
		387+00	-	400+75	RT	476	30
					SUBTOTAL	1,364	318
	NEWMAN ROAD						
		10+50	-	12+58	LT	--	10
		10+50	-	12+58	RT	--	4
					SUBTOTAL	--	14
	CTH C						
		396+25	-	399+50	LT	145	18
		396+25	-	399+50	RT	160	212
		400+48	-	407+76	LT	--	111
		400+48	-	407+76	RT	--	108
					SUBTOTAL	305	449
	CTH MM						
		614+25	-	616+25	LT	21	26
		614+25	-	616+25	RT	13	4
					SUBTOTAL	34	30
TOTALS						6,478	3,953

CONCRETE SIDEWALK 5-INCH

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	602.0410 CONCRETE SIDEWALK 5-INCH SF
0010	STH 31					
		104+22	-	115+06	LT	4,081
		104+22	-	115+06	RT	2,039
		104+22	-	115+06	MEDIAN	3,713
		115+06	-	175+77	LT	1,777
		115+06	-	175+77	RT	2,759
		115+06	-	175+77	MEDIAN	5,439
		175+77	-	202+31	LT	304
		175+77	-	202+31	RT	428
		175+77	-	202+31	MEDIAN	2,021
					SUBTOTAL	22,561
	STH 20					
		383+02	-	385+75	MEDIAN	192
		387+00	-	400+75	LT	1,049
		387+00	-	400+75	MEDIAN	4,971
					SUBTOTAL	6,212
	NEWMAN ROAD					
		10+50	-	12+58	MEDIAN	966
					SUBTOTAL	966
	CTH C					
		396+25	-	399+50	MEDIAN	2,002
		400+48	-	407+76	RT	2,414
		400+48	-	407+76	MEDIAN	1,809
					SUBTOTAL	6,225
TOTALS						35,964

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BASE PATCHING CONCRETE

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	390.0303 BASE PATCHING CONCRETE SY	390.0403 BASE PATCHING CONCRETE SHES SY
0010	STH 31						
		104+22	-	115+06	LT	450	80
		104+22	-	115+06	RT	890	157
		104+22	-	115+06	MEDIAN	--	--
		115+06	-	175+77	LT	1,043	184
		115+06	-	175+77	RT	1,261	223
		115+06	-	175+77	MEDIAN	186	--
		175+77	-	202+31	LT	387	69
		175+77	-	202+31	RT	475	84
		175+77	-	202+31	MEDIAN	--	--
					SUBTOTAL	4692	797
	STH 20						
		383+02	-	387+00	LT	41	8
		383+02	-	387+00	RT	198	35
		383+02	-	387+00	MEDIAN	33	--
		387+00	-	400+75	LT	169	30
		387+00	-	400+75	RT	33	6
		387+00	-	400+75	MEDIAN	--	--
					SUBTOTAL	474	79
	NEWMAN ROAD						
		10+50	-	12+58	LT/RT	--	--
		10+50	-	12+58	MEDIAN	--	--
					SUBTOTAL	0	0
	CTH C						
		396+25	-	399+50	LT	--	--
		396+25	-	399+50	RT	424	75
		396+25	-	399+50	MEDIAN	--	--
		400+48	-	407+76	LT	--	--
		400+48	-	407+76	RT	--	--
		400+48	-	407+76	MEDIAN	--	--
					SUBTOTAL	424	75
TOTALS						5590	951

CONCRETE MEDIAN SLOPED NOSE

CATEGORY	STAGE	ROADWAY	STATION	TO	STATION	O/S	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
0010	2	STH 31					
			104+22	-	115+06	LT	87
			104+22	-	115+06	RT	140
			104+22	-	115+06	MEDIAN	121
			115+06	-	175+77	LT	--
			115+06	-	175+77	RT	--
			115+06	-	175+77	MEDIAN	569
			175+77	-	202+31	LT	--
			175+77	-	202+31	RT	--
			175+77	-	202+31	MEDIAN	324
						SUBTOTAL	348
		STH 20					
			383+02	-	387+00	LT	--
			383+02	-	387+00	RT	67
			383+02	-	387+00	MEDIAN	40
			387+00	-	400+75	LT	69
			387+00	-	400+75	RT	--
			387+00	-	400+75	MEDIAN	40
						SUBTOTAL	216
		NEWMAN ROAD					
			10+50	-	12+58	LT/RT	--
			10+50	-	12+58	MEDIAN	53
						SUBTOTAL	53
		CTH C					
			396+25	-	399+50	LT	--
			396+25	-	399+50	RT	172
			396+25	-	399+50	MEDIAN	42
			400+48	-	407+76	LT	--
			400+48	-	407+76	RT	--
			400+48	-	407+76	MEDIAN	25
						SUBTOTAL	239
TOTALS							856

ADJUSTING STRUCTURES

CATEGORY	STAGE	ROADWAY	STATION	OFFSET	611.8110 ADJUSTING COVERS MANHOLE EA	611.8115 ADJUSTING COVERS INLET EA	611.8120.S* COVER PLATES TEMPORARY EA
0010							
		STH 31	105+71	42.4 'RT	1	--	1
			105+78	55.8 'RT	--	1	--
			105+85	45.8 'LT	--	1	--
			106+14	54.8 'LT	--	1	--
			106+32	82.1 'LT	--	1	--
			106+34	14.5 'LT	--	1	--
			106+59	63.2 'RT	1	--	1
			106+85	33.6 'RT	1	--	1
			109+90	5.7 'RT	--	1	--
			109+90	5.7 'RT	--	1	--
			109+90	14.5 'RT	--	1	--
			110+23	39.7 'LT	1	--	1
			110+26	53.4 'LT	--	1	--
			112+11	2.8 'RT	--	1	--
			112+12	14.3 'LT	--	1	--
			112+37	45.6 'LT	--	1	--
			113+04	45.6 'RT	--	1	--
			113+49	2.6 'RT	--	1	--
			113+49	45.6 'RT	--	1	--
			113+50	14.3 'LT	--	1	--
			113+54	45.7 'LT	--	1	--
			113+55	45.4 'RT	--	1	--
			113+56	39.8 'LT	1	--	1
			116+74	45.6 'LT	1	--	1
			120+51	45.4 'RT	--	1	--
			121+02	14.4 'LT	--	1	--
			121+02	14.4 'RT	--	1	--
			121+02	45.3 'RT	--	1	--
			121+02	45.5 'LT	--	1	--
			121+05	40 'LT	1	--	1
			124+23	14.3 'LT	--	1	--
			124+23	14.3 'RT	--	1	--
			124+24	45.3 'LT	--	1	--
			124+25	39.8 'LT	1	--	1
			124+40	45.6 'RT	--	1	--
			124+82	58.3 'RT	1	--	1
			125+17	33.6 'RT	1	--	1
			126+56	45.4 'LT	--	1	--
			127+13	14.3 'RT	--	1	--
			128+72	14.4 'LT	--	1	--
			128+73	4.1 'RT	--	1	--
			128+92	45.6 'LT	--	1	--
			128+97	38 'RT	1	--	1
			129+17	30.9 'RT	1	--	1
			129+18	45.5 'RT	--	1	--
			129+33	63.8 'LT	1	--	1
			131+02	14.3 'RT	--	1	--
			131+02	45.4 'RT	--	1	--
			131+21	31.1 'RT	1	--	1
			131+23	14.3 'LT	--	1	--
			131+24	45.5 'LT	--	1	--
			133+97	38.5 'RT	1	--	1
			135+04	31.1 'RT	1	--	1
			135+32	4.4 'LT	--	1	--
			135+44	45.4 'LT	--	1	--
			135+46	14.1 'RT	--	1	--
			135+56	45 'RT	--	1	--
			137+68	37.4 'RT	1	--	1
			138+01	14.4 'LT	--	1	--
			138+01	14.2 'RT	--	1	--
			138+01	45.4 'RT	--	1	--
			138+01	45.3 'LT	--	1	--
			139+99	29.2 'RT	1	--	1
			140+01	14.5 'LT	--	1	--
			140+01	14.4 'RT	--	1	--
			140+01	45.4 'RT	--	1	--
			140+01	45.3 'LT	--	1	--
			143+33	45.5 'LT	--	1	--
			145+33	45.5 'LT	--	1	--
			145+42	14.5 'LT	--	1	--
			145+52	4.2 'RT	--	1	--
			145+65	84.2 'LT	--	1	--
			145+96	39.7 'LT	1	--	1
			145+98	84.6 'LT	--	1	--
			146+01	45.2 'RT	--	1	--
			149+51	14.2 'RT	--	1	--
			149+52	14.4 'LT	--	1	--
			149+52	45.4 'RT	--	1	--
			149+52	45.3 'LT	--	1	--
			149+53	39.6 'LT	1	--	1
			151+43	14.6 'LT	--	1	--
			151+43	14.3 'RT	--	1	--
			153+01	40.1 'LT	1	--	1
			153+02	45.4 'RT	--	1	--
			153+02	45.6 'LT	--	1	--
			155+58	16.2 'LT	1	--	1
			155+96	45.5 'LT	--	1	--
			155+97	14.5 'LT	--	1	--
			156+06	45.4 'LT	--	1	--
			156+21	29.9 'RT	1	--	1
			156+36	14.3 'RT	--	1	--
			156+36	45.4 'RT	--	1	--
			157+36	29.7 'RT	1	--	1
			158+11	4.3 'LT	--	1	--
			158+11	14.2 'RT	--	1	--
			158+16	45.5 'RT	--	1	--
			158+75	15.6 'LT	1	--	1
			162+51	45.5 'LT	--	1	--
			162+52	39 'LT	1	--	1
			162+23	38.5 'RT	--	1	--
			162+83	31.1 'RT	--	1	--
			163+44	4.4 'LT	--	1	--
			164+04	45.4 'RT	--	1	--
			164+64	14.1 'RT	--	1	--
			164+63	14.5 'LT	--	1	--
			164+93	88 'LT	--	1	--
			165+02	45.6 'RT	--	1	--
			165+12	27.1 'LT	1	--	1
			165+36	94.4 'LT	--	1	--
			165+37	70.4 'LT	--	1	--
			166+51	28.8 'LT	1	--	1
			166+51	45.3 'RT	--	1	--
			166+51	45.5 'LT	--	1	--
			166+52	4.7 'LT	--	1	--
			166+52	14.2 'RT	--	1	--
			168+70	29.2 'LT	1	--	1
			169+00	14.4 'LT	--	1	--
			169+04	45.5 'LT	--	1	--
			170+03	40.7 'RT	1	--	1
			170+73	14 'RT	--	1	--
			170+77	45.5 'RT	--	1	--
			171+09	7.6 'LT	--	1	--
			172+76	45.3 'RT	--	1	--
			174+44	45.8 'LT	--	1	--
			175+23	14.5 'LT	--	1	--
			175+23	54.7 'LT	--	1	--
			175+29	45.6 'RT	--	1	--
			175+68	50.2 'LT	--	1	--
			176+43	45.9 'LT	--	1	--
			176+48	3.5 'RT	--	1	--
			176+63	45.6 'RT	--	1	--
			176+96	14.4 'RT	--	1	--
			180+43	45.4 'RT	--	1	--
			181+72	45.4 'LT	--	1	--
			181+74	14.4 'LT	--	1	--
			181+77	14.1 'RT	--	1	--
			181+78	45.2 'RT	--	1	--
			181+79	40.3 'RT	1	--	1
			184+91	45.3 'RT	--	1	--
			184+98	40 'RT	1	--	1
			185+01	14.5 'LT	--	1	--
			185+01	14.2 'RT	--	1	--
			185+02	45.6 'LT	--	1	--
			186+45	39.3 'RT	1	--	1
			188+01	39.7 'RT	1	--	1
			188+01	45.3 'RT	--	1	--
			188+02	14.6 'LT	--	1	--
			188+02	14.2 'RT	--	1	--
			188+02	45.5 'LT	--	1	--
			189+81	45.3 'RT	--	1	--
			190+02	14.1 'LT	--	1	--
			190+16	39.9 'RT	1	--	1
			190+39	14.4 'RT	--	1	--
			192+51	45.7 'LT	--	1	--
			192+54	14.3 'RT	--	1	--
			192+65	40.8 'RT	1	--	1
			192+67	45.7 'LT	--	1	--
			192+70	41.2 'LT	1	--	1
			192+77	27.5 'LT	1	--	1

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ADJUSTING STRUCTURES

CATEGORY	STAGE	ROADWAY	STATION	OFFSET	611.8110 ADJUSTING COVERS MANHOLE EA	611.8115 ADJUSTING COVERS INLET EA	611.8120.S* COVER PLATES TEMPORARY EA
0010							
			195+51	14.3 'RT	--	1	--
			196+04	31.5 'RT	1	--	1
			196+10	45.6 'RT	--	1	--
			196+40	40.5 'LT	1	--	1
			196+53	40.4 'LT	1	--	1
			196+56	45.5 'LT	--	1	--
			197+64	39.5 'RT	--	1	--
			199+06	37.7 'LT	1	--	1
			199+12	2.7 'LT	--	1	--
			199+15	14.4 'LT	--	1	--
			200+14	46.6 'RT	1	--	1
			200+28	47.1 'RT	--	1	--
			200+29	14.4 'LT	--	1	--
			200+29	14.6 'RT	--	1	--
			200+30	47.1 'LT	--	1	--
		STH 20					
			383+43	11.6 'RT	1	--	1
			383+43	50.5 'LT	--	1	--
			383+43	6.2 'LT	--	1	--
			383+44	50.7 'RT	--	1	--
			383+44	58.6 'RT	--	1	--
			385+31	50.4 'LT	--	1	--
			385+45	6.1 'LT	--	1	--
			385+70	35.2 'RT	1	--	1
			385+77	34.8 'RT	1	--	1
			388+46	39.9 'RT	1	--	1
			388+54	45.4 'RT	--	1	--
			390+00	12.8 'LT	--	1	--
			390+49	0.2 'LT	--	1	--
			391+20	44.5 'LT	--	1	--
			391+36	2.5 'LT	--	1	--
			391+50	39 'RT	1	--	1
			391+61	45.8 'RT	--	1	--
			394+17	13.1 'LT	--	1	--
			394+18	0.2 'RT	--	1	--
			394+29	40.4 'RT	1	--	1
			394+29	44.5 'LT	--	1	--
			394+30	0.9 'LT	1	--	1
			394+30	45.8 'RT	--	1	--
			394+63	70.3 'RT	1	--	1
			394+63	70.4 'LT	1	--	1
			394+68	40.4 'RT	1	--	1
			394+69	62.3 'RT	1	--	1
			394+91	78.8 'RT	1	--	1
			397+51	44.4 'LT	--	1	--
			397+62	15.4 'LT	--	1	--
			397+64	2 'RT	--	1	--
			397+65	40.2 'RT	1	--	1
			397+65	45.7 'RT	--	1	--
			398+09	63.3 'RT	1	--	1
			398+62	44.3 'RT	1	--	1
			396+75	49.7 'LT	--	1	--
			396+75	11.6 'LT	--	1	--
			396+76	2.2 'RT	--	1	--
			396+78	43.6 'RT	1	--	1
			396+78	49.7 'RT	--	1	--
			398+81	50.1 'RT	--	1	--
			399+22	45 'RT	1	--	1
			399+43	49.6 'LT	--	1	--
			400+67	26.1 'RT	--	1	--
			400+76	36.7 'LT	--	1	--
		CTH MM NB					
			513+07	12.5'LT	--	1	--
			513+13	16.4'LT	1	--	1
			514+12	12.8'LT	--	1	--
			515+52	15'LT	1	--	1
			515+63	12.5'RT	--	1	--
			515+72	12.8'RT	--	1	--
		CTH MM SB					
			615+17	36.2'LT	--	1	--
			615+27	32'LT	--	1	--
		TOTAL			62	163	62

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

RECONSTRUCTING STRUCTURES

CATEGORY	STAGE	LOCATION	611.0420 RECONSTRUCTING INLETS	611.0430 RECONSTRUCTING MANHOLES	611.8120.S* COVER PLATES TEMPORARY
0010		UNDISTRIBUTED	20	20	20
		TOTAL	20	20	20

* ADDITIONAL ITEMS SHOWN ELSEWHERE

MAINTENANCE AND REPAIR OF HAUL ROADS 2390-09-70

CATEGORY	LOCATION	618.0100 EA
0010		
	PROJECT	1
	TOTAL	1

MOBILIZATION

CATEGORY	ROADWAY	619.1000 EA
0010		
	PROJECT	1
TOTAL		1

FIELD OFFICE

CATEGORY	ROADWAY	642.5401 FIELD OFFICE TYPE D EA
0010		
	PROJECT	1
	TOTAL	1

STORM SEWER

CATEGORY	STRUCT ID	ROADWAY	STATION	OFFSET	RIM ELEV	STRUCT DEPTH	520.8000 CONCRETE COLLARS FOR PIPE EA	611.2003 MANHOLES 3-FT DIA EA	611.2004 MANHOLES 4-FT DIA EA	611.2005 MANHOLES 5-FT DIA EA	611.2006 MANHOLES 6-FT DIA EA	611.3003 INLETS 3-FT DIA EA	611.3004 INLETS 4-FT DIA EA	611.3230 INLETS 2X3-FT EA	611.0530 COVERS MANHOLE TYPE J EA	611.0624 COVERS INLET TYPE H EA	611.0666 COVERS INLET TYPE Z EA	PIPE ID	STRUCTURE FROM	STRUCTURE TO	ELEVATION INLET	ELEVATION DISCH	SLOPE	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0430 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF
0010	1.1	STH 20	390+82.5	11.0' RT	726.32	4.33	1	--	--	--	--	--	1	--	--	1	--	--	--	--	721.82	--	--	--	--	--
	1.2	STH 20	390+00.5	7.0' RT	727.13	4.13	1	--	--	--	--	--	--	1	--	1	--	P1.2	1.2	1.1	722.84	721.82	1.30%	82	--	--
	1.3	STH 20	391+36.3	0.0' LT	724.96	3.89	2	--	--	--	--	--	--	1	--	1	--	--	--	--	720.90	--	--	--	--	--
	2.0	STH 31	124+23.0	12.3' RT	711.47	3.56	1	1	--	--	--	--	--	--	1	--	--	--	--	--	707.34	--	--	--	--	--
	2.1	STH 31	124+23.2	0.0' RT	711.48	3.62	1	--	--	--	--	--	--	1	--	1	--	P2.1	2.1	2.0	707.70	707.61	1.00%	12	--	--
	2.2	STH 31	123+75.0	0.0' RT	712.67	3.84	--	--	--	--	--	--	--	1	--	1	--	P2.2	2.2	2.1	708.66	707.70	2.00%	48	--	--
	3.0	STH 31	118+43.6	43.4' LT	719.58	10.48	2	--	1	--	--	--	--	--	1	--	--	--	--	--	708.53	--	--	--	--	--
	3.1	STH 31	118+43.6	53.5' LT	719.22	3.96	--	--	--	--	--	--	--	1	--	1	--	--	--	--	715.09	715.02	1.00%	10	--	--
	4.2	STH 31	113+49.5	5.0' LT	717.49	5.07	1	--	--	--	--	--	--	1	--	1	--	--	--	--	712.26	--	--	--	--	--
	4.3	STH 31	113+49.3	2.6' RT	--	--	1	--	--	--	--	--	--	--	--	--	--	P4.3	4.3	4.2	712.50	712.28	4.00%	7	--	--
	5.2	STH 31	112+11.7	5.0' LT	718.56	4.98	1	--	--	--	--	--	--	1	--	1	--	--	--	--	713.42	--	--	--	--	--
	6.1	STH 31	127+15.5	12.4' RT	701.86	4.13	1	1	--	--	--	--	--	--	1	--	--	--	--	--	697.16	--	--	--	--	--
	6.2	STH 31	127+04.7	3.7' RT	701.66	3.86	1	--	--	--	--	--	1	--	--	1	--	--	--	--	697.64	697.26	4.85%	11	--	--
	7.3	STH 31	131+22.6	1.3' LT	696.44	4.54	1	--	--	--	--	--	--	1	--	1	--	--	--	--	691.86	--	--	--	--	--
	7.4	STH 31	131+23.0	14.0' LT	--	--	1	--	--	--	--	--	--	--	--	--	--	P7.4	7.4	7.3	691.90	691.86	0.39%	--	--	13
	8.2	STH 31	135+32.6	1.6' LT	699.77	3.72	1	--	--	--	1	--	--	--	--	1	--	--	--	--	695.88	--	--	--	--	--
	8.3	STH 31	136+25.0	2.0' LT	701.25	4.15	1	--	--	--	--	--	--	1	--	1	--	P8.3	8.3	8.2	696.93	695.88	1.20%	92	--	--
	9.1	STH 31	156+35.1	13.3' RT	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	701.41	--	--	--	--	--
	9.2	STH 31	156+45.6	0.0' RT	704.69	2.89	--	--	--	--	--	--	1	--	--	1	--	P9.2	9.2	9.1	701.64	701.41	1.45%	17	--	--
	10.0	STH 31	170+73.4	11.5' RT	709.12	4.46	1	--	1	--	--	--	--	--	1	--	--	--	--	--	704.09	--	--	--	--	--
	10.1	STH 31	171+06.6	6.5' LT	708.25	3.43	--	--	--	1	--	--	--	--	--	--	1	P10.1	10.1	10.0	704.49	704.19	0.90%	38	--	--
	10.2	STH 31	171+16.5	12.0' RT	709.46	3.23	--	--	--	--	--	--	--	1	--	1	--	P10.2	10.2	10.1	706.06	704.59	8.40%	21	--	--
	10.3	STH 31	171+90.0	1.1' LT	708.10	2.77	--	--	--	--	--	1	--	--	--	--	1	P10.3	10.3	10.1	705.00	704.59	0.50%	83	--	--
	10.4	STH 31	172+75.6	47.3' RT	709.85	3.41	1	--	1	--	--	--	--	--	1	--	--	--	--	--	705.87	--	--	--	--	--
	10.5	STH 31	172+75.6	60.0' RT	709.42	3.17	--	--	--	--	--	--	--	1	--	1	--	P10.5	10.5	10.4	706.08	705.97	1.20%	12	--	--
	10.6	STH 31	169+31.2	3.9' RT	703.80	2.85	1	--	--	--	--	1	--	--	--	--	1	P10.6	10.6	10.8	700.62	700.02	2.37%	29	--	--
	10.7	STH 31	169+01.9	12.0' RT	704.06	2.93	--	--	--	--	--	--	--	1	--	1	--	P10.7	10.7	10.8	700.96	700.02	4.95%	22	--	--
	10.8	STH 31	169+05.0	9.7' LT	703.84	3.75	1	--	--	--	--	--	--	1	--	1	--	--	--	--	699.92	--	--	--	--	--
	11.0	STH 31	176+42.8	47.9' LT	705.02	3.10	1	--	1	--	--	--	--	--	1	--	--	--	--	--	701.35	--	--	--	--	--
	11.1	STH 31	176+41.5	65.0' LT	704.47	2.88	1	--	--	--	--	--	--	1	--	1	--	P11.1	11.1	11.0	701.43	701.35	0.55%	--	17	--
	11.2	STH 31	176+62.1	4.2' RT	704.74	2.69	--	--	--	--	--	--	--	1	--	1	--	P11.2	11.2	11.3	701.88	701.72	0.50%	34	--	--
	11.3	STH 31	176+96.5	4.0' RT	705.22	3.33	--	--	--	--	--	--	--	1	--	1	--	P11.3	11.3	11.4	701.72	701.17	7.80%	9	--	--
	11.4	STH 31	176+96.5	12.0' RT	704.53	3.19	1	--	--	--	--	--	--	1	--	1	--	--	--	--	701.17	--	--	--	--	--
	12.1	STH 31	190+39.2	12.4' RT	687.89	3.34	1	1	--	--	--	--	--	--	1	--	--	--	--	--	683.98	--	--	--	--	--
	12.2	STH 31	190+40.5	0.0' RT	687.53	3.32	1	--	--	--	--	--	--	1	--	1	--	P12.2	12.2	12.1	684.04	683.98	0.60%	12	--	--
	13.0	STH 31	115+83.5	73.7' LT	719.28	8.97	1	1	--	--	--	--	--	--	1	--	--	--	--	--	709.78	--	--	--	--	--
	13.1	STH 31	116+00.0	60.0' LT	719.62	9.08	--	--	--	--	--	--	1	--	--	1	--	P13.1	13.1	13.0	710.40	710.03	2.00%	--	19	--
	13.2	STH 31	116+00.0	5.0' RT	720.16	4.71	--	--	--	--	--	--	--	1	--	1	--	P13.2	13.2	13.1	715.31	714.70	1.00%	--	64	--
	14.1	CTH C	396+75.5	2.5' LT	706.07	3.77	2	--	--	--	--	--	--	1	--	1	--	--	--	--	702.13	--	--	--	--	--
	15.0	CTH C	399+21.7	44.0' RT	704.36	4.19	3	--	--	--	1	--	--	--	--	1	--	--	--	--	700.00	--	--	--	--	--
	15.1	CTH C	399+02.1	62.5' RT	704.58	4.06	--	--	--	--	1	--	--	--	--	1	--	P15.1	15.1	15.0	700.19	700.10	0.50%	--	25	--
	15.2	STH 31	174+47.4	57.7' LT	704.84	4.04	--	--	--	--	--	--	--	1	--	1	--	P15.2	15.2	15.1	700.64	700.42	0.50%	46	--	--
	15.3	CTH C	398+90.2	74.3' RT	704.21	3.54	--	--	--	--	--	--	--	1	--	1	--	P15.3	15.3	15.1	700.50	700.42	0.50%	20	--	--
	16.1	CTHC	399+05.3	13.5' LT	704.61	2.97	--	--	--	--	--	--	--	1	--	1	--	P16.1	16.1	16.3	701.47	701.27	0.50%	44	--	--
	16.2	CTHC	399+49.4	5.7' LT	704.95	3.30	--	--	--	--	--	--	--	1	--	1	--	P16.2	16.2	16.1	701.49	701.47	0.50%	8	--	--
	16.3	CTHC	399+05.3	7.0' LT	704.75	3.18	3	--	--	1	--	--	--	--	1	--	--	--	--	--	701.02	--	--	--	--	--
	17.1	CTH C	399+05.0	52.0' LT	704.90	3.14	--	--	--	--	--	--	--	1	--	1	--	P17.1	17.1	17.2	701.59	701.25	1.00%	38	--	--
	17.2	CTH C	399+42.7	51.6' LT	704.62	2.80	1	--	1	--	--	--	--	--	1	--	--	--	--	--	701.25	--	--	--	--	--
	18.0	STH 31	175+22.8	12.5' LT	704.73	3.15	1	--	1	--	--	--	--	--	1	--	--	--	--	--	701.01	--	--	--	--	--
	18.1	STH 31	174+91.2	12.0' LT	704.79	2.94	--	--	--	--	--	--	1	--	--	1	--	P18.1	18.1	18.0	701.68	701.56	0.45%	--	32	--
	18.2	STH 31	174+51.5	5.0' LT	706.02	3.88	1	--	--	--	--	--	--	1	--	1	--	P18.2	18.2	18.1	701.97	701.78	0.50%	--	41	--
	18.3	STH 31	174+92.3	5.0' LT	704.97	2.84	--	--	--	--	--	--	--	1	--	1	--	P18.3	18.3	18.1	701.96	701.93	0.50%	8	--	--
	19.0	STH 31	176+35.9	62.3' RT	703.40	2.08	1	--	1	--	--	--	--	--	1	--	--	--	--	--	700.75	--	--	--	--	--
	19.1	STH 31	176+62.6	47.6' RT	703.85	2.12	1	--	1	--	--	--	--	--	1	--	--	P19.1	19.1	19.0	701.16	700.85	1.15%	31	--	--
	19.2	STH 31	176+77.0	54.1' RT	703.71	2.16	--	--	--	--	--	--	1	--	--	1	--	P19.2	19.2	19.1	701.38	701.24	1.20%	--	--	--
	19.3	STH 31	176+50.6	70.7' RT	703.27	2.10	--	--	--	--	--	--	--	1	--	1	--	P19.3	19.3	19.0	701.00	700.85	1.10%	16	--	--

STORM SEWER

CATEGORY	STRUCT ID	ROADWAY	STATION	OFFSET	RIM ELEV	STRUCT DEPTH	520.8000 CONCRETE COLLARS FOR PIPE EA	611.2003 MANHOLES 3-FT DIA EA	611.2004 MANHOLES 4-FT DIA EA	611.2005 MANHOLES 5-FT DIA EA	611.2006 MANHOLES 6-FT DIA EA	611.3003 INLETS 3-FT DIA EA	611.3004 INLETS 4-FT DIA EA	611.3230 INLETS 2X3-FT EA	611.0530 COVERS MANHOLE TYPE J EA	611.0624 COVERS INLET TYPE H EA	611.0666 COVERS INLET TYPE Z EA	PIPE ID	STRUCTURE FROM	STRUCTURE TO	ELEVATION INLET	ELEVATION DISCH	SLOPE	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0430 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF
	18.0	STH 31	175+22.8	12.5' LT	704.73	3.15	1	--	1	--	--	--	--	--	1	--	--	--	--	--	701.01	--	--	--	--	--
	18.1	STH 31	174+91.2	12.0' LT	704.79	2.94	--	--	--	--	--	--	1	--	--	1	--	P18.1	18.1	18.0	701.68	701.56	0.45%	--	32	--
	18.2	STH 31	174+51.5	5.0' LT	706.02	3.88	1	--	--	--	--	--	--	1	--	1	--	P18.2	18.2	18.1	701.97	701.78	0.50%	--	41	--
	18.3	STH 31	174+92.3	5.0' LT	704.97	2.84	--	--	--	--	--	--	--	1	--	1	--	P18.3	18.3	18.1	701.96	701.93	0.50%	8	--	--
	19.0	STH 31	176+35.9	62.3' RT	703.40	2.08	1	--	1	--	--	--	--	--	1	--	--	--	--	--	700.75	--	--	--	--	--
	19.1	STH 31	176+62.6	47.6' RT	703.85	2.12	1	--	1	--	--	--	--	--	1	--	--	P19.1	19.1	19.0	701.16	700.85	1.15%	31	--	--
	19.2	STH 31	176+77.0	54.1' RT	703.71	2.16	--	--	--	--	--	--	1	--	--	1	--	P19.2	19.2	19.1	701.38	701.24	1.20%	--	--	--
	19.3	STH 31	176+50.6	70.7' RT	703.27	2.10	--	--	--	--	--	--	--	1	--	1	--	P19.3	19.3	19.0	701.00	700.85	1.10%	16	--	--
	20.1	STH 31	188+01.6	14.0' RT	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	686.98	--	--	--	--	--
	20.2	STH 31	188+01.6	7.0' RT	690.59	3.42	1	--	--	--	--	--	--	1	--	1	--	P20.2	20.2	20.1	687.00	686.98	0.40%	7	--	--
	21.0	STH 31	106+59.8	61.9' RT	729.36	########	3	--	--	1	--	--	--	--	--	1	--	--	--	--	?	--	--	--	--	--
	22.1	CTH C	400+41.5	73.6' RT	703.79	3.39	--	--	--	--	--	--	1	--	--	1	--	P22.1	22.1	22.2	700.24	700.02	0.50%	--	47	--
	22.2	CTH C	400+78.8	45.0' RT	702.84	2.76	--	--	--	--	--	--	1	--	--	1	--	P22.2	22.2	22.3	699.92	699.41	1.00%	--	53	--
	22.3	CTH C	401+32.0	42.0' RT	702.61	3.13	--	--	--	--	--	--	--	1	--	1	--	P22.3	22.3	22.4	699.31	699.10	1.00%	--	24	--
	22.4	CTH C	401+32.0	17.0' RT	703.11	3.78	--	--	--	--	--	1	--	--	--	--	1	P22.4	22.4	22.5	699.00	698.99	1.00%	--	5	--
	22.5	CTH C	401+32.0	13.0' RT	703.90	6.13	2	--	1	--	--	--	--	--	1	--	--	--	--	--	697.22	--	--	--	--	--
	22.6	CTH C	400+99.6	5.5' RT	703.31	4.68	1	--	1	--	--	--	--	--	1	--	--	P22.6	22.6	22.5	698.05	697.47	2.00%	33	--	--
	23.1	CTH C	402+69.2	12.4' RT	703.67	6.29	3	--	--	1	--	--	--	--	1	--	--	--	--	--	696.81	--	--	--	--	--
	23.2	CTH C	402+64.6	17.0' RT	703.91	4.28	--	--	--	--	--	1	--	--	--	--	1	P23.2	23.2	23.1	699.30	699.20	3.25%	--	7	--
	23.3	CTH C	402+50.0	11.0' RT	702.36	2.46	--	--	--	--	--	1	--	--	--	--	1	P23.3	23.3	23.2	699.56	699.40	1.25%	--	16	--
	24.1	CTH C	402+50.7	26.5' LT	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	698.76	--	--	--	--	--
	24.2	CTH C	402+50.7	35.0' LT	701.88	2.88	--	--	--	--	--	--	--	1	--	1	--	P24.2	24.2	24.1	698.83	698.76	1.00%	8	--	--
	25.1	CTH C	402+71.1	26.5' LT	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	698.70	--	--	--	--	--
	25.2	CTH C	402+71.5	35.0' LT	701.90	2.96	--	--	--	--	--	--	--	1	--	1	--	P25.2	25.2	25.1	698.77	698.70	1.00%	8	--	--
	26.1	CTH C	404+93.3	13.6' RT	704.53	8.18	2	--	1	--	--	--	--	--	1	--	--	--	--	--	695.78	--	--	--	--	--
	26.2	CTH C	404+93.5	42.0' RT	704.59	2.88	--	--	--	--	--	--	--	1	--	1	--	P26.2	26.2	26.1	701.57	701.32	1.00%	--	28	--
	27.1	CTH C	405+29.9	65.5' RT	704.87	2.77	1	--	--	--	--	--	--	1	--	1	--	P27.1	27.1	27.2	701.93	701.00	######	5	--	--
	27.2	CTH C	405+30.2	69.5' RT	704.91	6.11	1	--	--	--	--	--	--	1	--	1	--	--	--	--	698.63	--	--	--	--	--
	28.0	STH 31	106+34.2	12.5' LT	730.87	3.62	1	1	--	--	--	--	--	--	1	--	--	--	--	--	726.68	--	--	--	--	--
	28.1	STH 31	106+01.2	11.9' LT	731.12	4.12	--	--	--	--	--	--	--	1	--	1	--	P28.1	28.1	28.0	726.84	726.68	0.50%	33	--	--
	29.1	CTH C	406+30.9	28.1' LT	703.64	3.25	1	--	--	--	--	--	--	1	--	1	--	--	--	--	700.22	--	--	--	--	--
	30.1	CTH C	406+44.5	33.6' RT	704.42	5.50	1	--	--	--	--	--	--	--	--	--	--	--	--	--	699.09	--	--	--	--	--
	30.2	CTH C	406+44.0	33.7' RT	704.42	4.88	--	--	--	--	--	--	1	--	--	1	--	P30.2	30.2	30.1	699.38	699.09	2.45%	14	--	--
	31.0	STH 20	394+29.7	0.9' LT	719.46	4.46	2	--	1	--	--	--	--	--	1	--	--	--	--	--	714.43	--	--	--	--	--
	31.1	STH 20	394+14.3	6.2' LT	719.63	4.55	--	--	--	--	--	--	1	--	--	1	--	P31.1	31.1	31.0	714.91	714.43	4.00%	16	--	--
	31.2	STH 20	394+14.3	11.1' LT	719.33	4.18	--	--	--	--	--	--	--	1	--	1	--	P31.2	31.2	31.1	714.99	714.91	2.00%	6	--	--
	31.3	STH 20	393+71.5	13.0' LT	720.31	4.59	--	--	--	--	--	--	--	1	--	1	--	P31.3	31.3	31.2	715.55	714.99	1.40%	43	--	--
	32.1	STH 20	394+64.0	4.0' RT	711.92	4.39	1	--	--	--	--	--	--	1	--	1	--	--	--	--	707.36	--	--	--	--	--
	32.2	STH 20	397+60.8	15.0' LT	--	--	1	--	--	--	--	--	--	--	--	--	--	P32.2	32.2	32.1	707.87	707.51	2.00%	19	--	--
	33.1	STH 31	155+47.7	46.0' LT	705.33	5.48	2	--	--	--	1	--	--	--	--	1	--	--	--	--	699.68	--	--	--	--	--
TOTAL							67	5	12	4	4	5	10	40	19	55	6							942	378	13

NOTE: USE CLASS "B" BEDDING (SEE SDD "CLASS 'B' BEDDING FOR CULVERT PIPE OR STORM SEWER") FOR ALL PIPES; COST INCIDENTAL TO PIPE.
MANHOLE AND INLET STRUCTURE DEPTHS ASSUME USE OF WALL B PIPES.
LOCATION OF STRUCTURES IN CURB AND GUTTER SECTION REFER TO FLOW LINE. LOCATION OF STRUCTURES NOT IN CURB AND GUTTER SECTION REFER TO CENTER OS STRUCTURE.
RIM ELEVATIONS ARE TO THE FLOWLINE OF THE CASTING.
STRUCTURE DEPTHS GIVEN ARE TO BOTTOM OF CASTING.

RESTORATION

CATEGORY	ROADWAY	625.0100 TOPSOIL SY	629.0205 FERTILIZER TYPE A CWT	630.0200 SEEDING TEMPORARY LB	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
0010						
	STH 31	9,875	6.22	--	665	9,875
	STH 20	350	.22	--	24	350
	NEWMAN ROAD	78	.05	--	5	78
	CTH C	1,027	.65	--	69	1,027
	UNDISTRIBUTED	556	.86	30	37	556
	TOTAL	11,886	8.00	30	800	11,886

EROSION CONTROL

		628.1504	628.1520	628.1905 MOBILIZATIONS	628.1910 MOBILIZATIONS	628.7005 INLET PROTECTION	628.7010 INLET PROTECTION	628.7015 INLET PROTECTION	628.7020 INLET PROTECTION
		SILT FENCE	SILT FENCE MAINTENANCE	EROSION CONTROL	EMERGENCY EROSION CONTROL	TYPE A	TYPE B	TYPE C	TYPE D
CATEGORY	ROADWAY	LF	LF	EA	EA	EA	EA	EA	EA
0010									
	STH 31	1,106	1,106	--	--	15	1	147	--
	STH 20	--	--	--	--	3	--	12	--
	NEWMAN ROAD	--	--	--	--	--	--	--	--
	CTH C	--	--	--	--	4	--	13	--
	UNDISTRIBUTED	224	224	5	5	3	1	3	10
	TOTAL	1,330	1,330	5	5	25	2	175	10

TEMPORARY PEDESTRIAN ITEMS

CATEGORY	STAGE	LOCATION	644.1430.S TEMPORARY PEDESTRIAN SURFACE PLATE SF	644.1601.S TEMPORARY CURB RAMP EA	644.1616.S TEMPORARY PEDESTRIAN SAFETY FENCE EA
0010	1				
		STH 31/STH 20	50	1	25
		CTH C	50	1	25
		TOTALS	100	2	50

TEMPORARY CONCRETE BARRIER ITEMS

CATEGORY	LOCATION	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED LF	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED LF
1000	UNDISTRIBUTED	100	100
	TOTAL	100	100

TRAFFIC CONTROL

CATEGORY	STAGE	ROADWAY	643.0200 SURVEILLANCE & MAINTENANCE DAY	643.0300 DRUMS EACH	643.0300 DRUMS DAYS	643.0420 BARRICADES TYPE III EACH	643.0420 BARRICADES TYPE III DAYS	643.0500 FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 WARNING LIGHTS TYPE A EACH	643.0705 WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C EACH	643.0715 WARNING LIGHTS TYPE C DAYS	643.0900 SIGNS EACH	643.0900 SIGNS DAYS	643.0920* COVERING SIGNS TYPE II EACH	643.1050 SIGNS PCMS EACH	643.1050 SIGNS PCMS DAYS	649.0402 TEMPORARY PAVEMENT MARKING PAINT 4-INCH LF	649.0802 TEMPORARY PAVEMENT MARKING PAINT 8-INCH LF	SPV.0045.01 GRABBER CONES EACH	SPV.0045.01 GRABBER CONES DAYS
0010	1A																					
		STH 31	--	253	11,385	56	2,520	--	--	111	4,995	31	1,395	131	5,895	--	--	--	--	1,129	764	34,380
		STH 20	--	54	2,430	21	945	--	--	37	1,665	10	450	34	1,530		--	--	392	111	160	7,200
		NEWMAN ROAD	--	22	990	4	180	--	--	9	405	7	315	9	405	--	--	--	--	--	76	3,420
		CTH C	--	87	3,915	8	360	--	--	15	675	10	450	22	990	--	--	--	147	201	--	--
		SUBTOTAL	--	416	18,720	89	4,005	--	--	172	7,740	58	2,610	196	8,820	--		--	539	1,441	1,000	45,000
	1B																					
		STH 31	--	253	11,385	56	2,520	--	--	111	4,995	31	1,395	131	5,895	--	--	--	--	3,841	764	34,380
		STH 20	--	54	2,430	21	945	--	--	37	1,665	10	450	34	1,530	--	--	--	--	1,248	160	7,200
		NEWMAN ROAD	--	22	990	4	180	--	--	9	405	--	--	9	405	--	--	--	--	220	76	3,420
		CTH C	--	94	4,230	14	630	22	22	35	1,575	36	1,620	31	1,395	--	--	--	2,213	482	32	1,440
		SUBTOTAL	--	423	19,035	95	4,275	22	22	192	8,640	77	3,465	205	9,225	--		--	2,213	5,791	1,032	46,440
	1C																					
		STH 31	--	253	8,349	50	1,650	--	--	111	3,663	31	1,023	131	4,323	--	--	--	--	--	764	25,212
		STH 20	--	54	1,782	4	132	--	--	37	1,221	10	330	34	1,122	--	--	--	--	--	160	5,280
		NEWMAN ROAD	--	22	726	--	--	--	--	9	297	--	--	9	297	--	--	--	--	--	76	2,508
		CTH C	--	71	2,343	11	363	--	--	24	792	23	746	30	990	--	--	--	--	242	117	3,861
		SUBTOTAL	--	400	13,200	65	2,145	--	--	181	5,973	64	2,099	204	6,732	--		--	--	242	1,117	36,861
	1D																					
		STH 31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	39	150	--	--
		STH 20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		NEWMAN ROAD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		CTH C	--	37	888	10	240	--	--	22	528	15	360	22	528	--	--	--	71	146	136	3,264
		SUBTOTAL	--	37	888	10	240	--	--	22	528	15	360	22	528	--		--	110	296	136	3,264
	2A																					
		STH 31	--	253	2,530	56	560	--	--	123	1,230	23	230	44	440	--	--	--	--	--	764	7,640
		STH 20	--	54	540	21	210	--	--	46	460	10	100	15	150	--	--	--	--	--	160	1,600
		NEWMAN ROAD	--	22	220	4	40	--	--	9	90	--	--	3	30	--	--	--	--	--	76	760
		CTH C	--	87	870	8	80	--	--	18	180	13	130	18	180	--	--	--	--	--	32	320
		SUBTOTAL	--	416	4,160	89	890	--	--	196	1,960	46	460	80	800	--		--	--	--	1,032	10,320
	2B																					
		STH 31	--	253	1,771	56	392	--	--	123	861	21	146	114	798	--	--	--	--	--	764	5,348
		STH 20	--	54	378	21	147	--	--	46	322	5	35	23	161	--	--	--	--	--	160	1,120
		NEWMAN ROAD	--	22	154	4	28	--	--	9	63	8	56	11	77	--	--	--	--	--	76	532
		CTH C	--	94	658	14	98	--	--	31	217	--	--	15	105	--	--	--	--	--	32	224
		SUBTOTAL	--	423	2,961	95	665	--	--	209	1,463	34	237	163	1,141	--		--	--	--	1,032	7,224
		UNDISTRIBUTED	164	--	--	--	--	--	--	--	--	--	--	--	--	20	5	820	--	--	--	--
		TOTALS	164	2,115	58,964	443	12,220	22	22	972	26,304	293	9,230	870	27,246	20	5	820	2,862	7,770	5,349	149,109

* "COVERING SIGNS TYPE II" IS INCLUDED AS UNDISTRIBUTED, AND IS TO BE USED AS ACCORDING TO THE ENGINEER.

3

PAVEMENT MARKING

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	646.0106 EPOXY 4-INCH (SOLID) (YELLOW) LF	646.0106 EPOXY 4-INCH (12.5' LINE, 37.5' SKIP) (WHITE) LF	646.0106 EPOXY 4-INCH (SOLID) (WHITE) LF	646.0126 EPOXY 8-INCH (2' LINE, 6' SKIP) (WHITE) LF	646.0126 EPOXY 8-INCH (3' LINE, 9' SKIP) (WHITE) LF	646.0126 EPOXY 8-INCH (SOLID) (WHITE) LF	646.0900.S LATE SEASON LF	647.0166 ARROWS EPOXY TYPE 2 (WHITE) EA	647.0176 ARROWS EPOXY TYPE 3 (WHITE) EA	647.0356 WORDS EPOXY (WHITE) EA	647.0456 CURB EPOXY (YELLOW) LF	647.0526 YIELD LINE SYMBOLS EPOXY 18-INCH (WHITE) EA	647.0566 STOP LINE EPOXY 18-INCH (WHITE) LF	647.0606 ISLAND NOSE EPOXY (YELLOW) EA	647.0726 DIAGONAL EPOXY 12-INCH (WHITE) LF	647.0726 DIAGONAL EPOXY 12-INCH (YELLOW) LF	647.0766 CROSSWALK EPOXY 6-INCH (WHITE) LF
0010	STH 31																					
		104+22	-	115+06	LT	--	354	--	46	16	744	1,192	6	--	6	54	--	32	2	--	--	465
		104+22	-	115+06	RT	--	359	--	46	--	1,464	1,971	9	1	8	30	--	103	1	99	--	486
		115+06	-	175+77	LT	--	2,849	--	46	--	2,055	5,011	4	--	4	274	--	61	8	--	--	192
		115+06	-	175+77	RT	--	2,760	--	46	--	1,938	4,804	4	--	4	360	--	61	10	90	--	188
		175+77	-	202+31	LT	--	1,138	379	37	10	765	2,422	6	--	6	98	--	93	2	--	--	129
		175+77	-	202+31	RT	--	898	94	39	51	771	1,875	3	--	3	191	--	22	3	--	--	129
					SUBTOTAL	--	8,357	473	259	77	7,737	17,275	32	1	31	1,007	--	372	26	189	--	1,589
					TOTAL		8,830			8,073										189		
	STH 20																					
		383+02	-	385+75	LT	--	57	--	--	--	--	57	--	--	--	18	8	--	1	--	--	36
		383+02	-	385+75	RT	--	132	--	--	--	867	1,056	6	--	6	--	7	57	--	--	--	32
		387+00	-	400+75	LT	--	373	949	--	21	1,663	3,060	6	--	6	17	9	54	1	--	--	40
		387+00	-	400+75	RT	--	639	--	--	--	472	1,111	--	--	--	--	8	--	--	--	--	34
					SUBTOTAL	--	1,201	949	--	21	3,002	5,284	12	--	12	35	32	111	2	--	--	142
					TOTAL		2,150			3,023										--		
	NEWMAN ROAD																					
		10+50	-	12+58	LT	--	--	--	--	--	216	246	2	1	2	--	--	30	--	--	--	138
		10+50	-	12+58	RT	--	--	--	--	--	160	187	2	--	2	24	--	27	1	--	--	162
					SUBTOTAL	--	--	--	--	--	376	433	4	1	4	24	--	57	1	--	--	300
					TOTAL		--			376										--		
	CTH C																					
		396+25	-	399+50	LT	--	72	300	--	--	--	372	--	--	--	40	--	--	1	--	--	69
		396+25	-	399+50	RT	--	78	141	--	13	638	919	6	--	6	--	10	49	--	--	--	145
		400+48	-	412+30	LT	1,260	281	--	--	--	850	2,437	3	--	2	--	--	46	--	--	--	97
		400+48	-	412+30	RT	1,260	259	--	--	--	--	1,736	2	--	2	25	--	217	1	--	--	44
					SUBTOTAL	2,520	689	441	--	13	1,488	5,463	11	--	10	65	10	312	2	--	--	355
					TOTAL		1,130			1,501										--		
	CTH MM																					
		614+25	-	616+25	LT	224	43	--	--	--	31	354	--	--	--	--	--	56	--	--	--	--
		614+25	-	616+25	RT	233	73	--	41	--	--	347	--	--	--	--	--	--	--	--	68	--
					SUBTOTAL	457	116	--	41	--	31	700	--	--	--	--	--	56	--	--	68	--
					TOTAL		116			72										68		
TOTALS						2,977	12,226			13,044		29,155	59	2	57	1,131	42	908	31	257		2,386
							15,203															

REMOVING PAVEMENT MARKINGS

CATEGORY	STAGE	LOCATION	646.0690.S REMOVING PAVEMENT MARKINGS WATER BLASTING LF	647.0990.S REMOVING SPECIAL PAVEMENT MARKINGS WATER BLASTING EA
0010	1A			
		STH 31	660	0
		STH 20	840	0
		NEWMAN ROAD	160	0
		CTH C	20	0
		CTH MM	50	0
		SUBTOTAL	1730	0
	1B			
		CTH C	1020	0
		SUBTOTAL	1020	0
	1D			
		CTH C	60	0
		SUBTOTAL	60	0
		UNDISTRIBUTED	0	10
		TOTALS	2810	10

PIPE UNDERDRAIN

CATEGORY	STAGE	ROADWAY	BEGIN STATION	END STRUCTURE	OFFSET	612.0106 PIPE UNDERDRAIN 6-INCH LF
0010						
		CTH C	400+75	22.3	RT	57
			404+01	22.3	RT	269
			404+01	26.2	RT	92
			407+76	30.2	RT	132
			400+75	22.4	MED RT	57
			402+64	22.4	MED RT	132
			404+01	23.2	MED RT	137
			404+01	26.1	MED RT	92
			400+75	23.3	MED LT	175
			405+25	23.3	MED LT	275
			400+90	24.2	LT	166
			402+71	24.2	LT	21
			406+30	25.2	LT	363
			407+76	29.1	LT	147
		TOTAL				2,115

CONSTRUCTION STAKING

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	650.4000 STORM SEWER EA	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB AND GUTTER LF	650.7000 CONCRETE PAVEMENT LF	650.8500 ELECTRICAL INSTALLATION 2390-09-70 LS	650.9920 SLOPES STAKES LF
0010												
	STH 31	104+22	-	202+31	LT/RT	--	5,405	--	14,423	5,405	--	--
	STH 20	383+02	-	385+75	LT/RT	--	1,040	--	3,506	1,040	--	210
	NEWMAN ROAD	10+50	-	12+58	LT/RT	--	--	208	236	--	--	--
	CTH C	396+25	-	407+76	LT/RT	--	1,026	--	2,934	1,026	--	856
	UNDISTRIBUTED					147	--	--	--	--	1	--
	TOTAL					147	7,471	208	21,099	7,471	1	1,066

REMOVING CONCRETE BASES

CATEGORY	INTERSECTION	NO.	ALIGNMENT	STATION	OFFSET	204.0195* EA
0020						
	STH 31 & STH 20	CB1	STH 31	106+68	97' RT	1
		SB13	STH 31	106+69	53' RT	1
		SB14	STH 31	106+61	11' RT	1
		SB15	STH 31	106+30	10' LT	1
		SB16	STH 31	106+50	58' LT	1
		SB17	STH 31	106+96	55' LT	1
		SB18	STH 31	107+08	91' LT	1
		SB19	STH 31	107+70	52' LT	1
		SB20	STH 31	107+75	10' LT	1
		SB21	STH 31	108+10	10' RT	1
		SB22	STH 31	107+88	56' RT	1
		SB23	STH 31	107+42	57' RT	1
		SB24	STH 31	107+30	97' RT	1
		SB25	STH 31	106+70	93' RT	1
		SB26	STH 31	106+09	63' LT	1
		SB27	STH 31	107+73	91' LT	1
		SB28	STH 31	108+20	68' RT	1
	STH 31 & NEWMAN ROAD	CB1	STH 31	114+44	64' LT	1
		SB1	STH 31	114+68	70' LT	1
		SB2	STH 31	115+12	67' LT	1
		SB3	NEWMAN	11+11	5' RT	1
		SB4	NEWMAN	12+34	5' RT	1
		SB5	NEWMAN	11+18	52' RT	1
		SB6	STH 31	115+95	61' LT	1
		SB7	STH 31	115+63	4' RT	1
		SB8	STH 31	115+53	52' RT	1
		SB9	STH 31	115+29	65' RT	1
		SB10	STH 31	114+63	74' RT	1
		SB11	STH 31	114+31	52' RT	1
		SB12	STH 31	114+65	8' LT	1
		SB13	STH 31	114+51	58' LT	1
	STH 31 & CTH C	CB1	STH 31	174+77	73' LT	1
		SB1	STH 31	175+19	52' LT	1
		SB2	STH 31	175+65	60' LT	1
		SB3	STH 31	176+13	68' LT	1
		SB4	STH 31	176+35	52' LT	1
		SB5	STH 31	176+43	9' RT	1
		SB6	STH 31	176+57	51' RT	1
		SB7	CTH C	400+94	31' LT	1
		SB8	CTH C	400+59	33' RT	1
		SB9	STH 31	175+41	52' RT	1
		SB10	STH 31	175+23	9' LT	1
		SB11	STH 31	176+70	8' RT	1
	STH 31 & CTH MM	CB1	STH 31	198+80	50' RT	1
		SB1	STH 31	198+78	41' RT	1
		SB2	STH 31	199+54	43' RT	1
		SB3	STH 31	199+48	8' RT	1
		SB4	STH 31	199+18	9' LT	1
		SB5	STH 31	199+16	52' LT	1
		SB6	STH 31	198+43	51' LT	1
		SB7	STH 31	198+09	3' LT	1
	UNDISTRIBUTED					3
	TOTAL					53

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

REMOVING PULL BOXES

CATEGORY	INTERSECTION	NO.	653.0905 EA
0020			
	STH 31 & STH 20	PB46	1
		PB47	1
		PB48	1
		PB49	1
		PB50	1
		PB51	1
		PB52	1
		PB53	1
		PB54	1
		PB55	1
		PB56	1
		PB57	1
		PB58	1
		PB59	1
		PB60	1
		PB61	1
		PB62	1
		PB63	1
		PB64	1
		PB65	1
		PB66	1
		PB67	1
		PB68	1
		PB69	1
	STH 31 & NEWMAN ROAD	I/C PB1	1
		I/C PB2	1
		PB1	1
		PB2	1
		PB3	1
		PB4	1
		PB5	1
		PB6	1
		PB7	1
		PB8	1
		PB9	1
		PB10	1
		PB12	1
		PB13	1
		PB14	1
		PB15	1
		PB16	1
		PB17	1
		PB18	1
		PB19	1
		PB20	1

CATEGORY	INTERSECTION	NO.	653.0905 EA
0020			
	STH 31 & CTH C	PB1	1
		PB2	1
		PB3	1
		PB4	1
		PB5	1
		PB6	1
		PB7	1
		PB9	1
		PB10	1
		PB11	1
		PB12	1
		PB13	1
		PB14	1
		PB15	1
		PB16	1
		PB17	1
		PB18	1
		PB19	1
		PB20	1
		PB21	1
		PB22	1
		PB24	1
		PB25	1
		PB26	1
		PB27	1
		PB28	1
		PB29	1
		PB30	1
		PB31	1
		PB32	1
		PB33	1
		PB34	1
		PB35	1
		PB36	1
	STH 31 & CTH MM	PB1	1
		PB2	1
		PB3	1
		PB4	1
		PB5	1
		PB6	1
		PB7	1
		PB8	1
		PB9	1
		PB10	1
		PB11	1
		PB12	1
		PB13	1
		PB14	1
		PB15	1
		PB16	1
		PB17	1
		PB18	1
	UNDISTRIBUTED		3
	TOTAL		100

TRAFFIC SIGNAL REMOVAL ITEMS

		SPV.0105.02	SPV.0105.03	SPV.0105.04	SPV.0105.05	SPV.0105.26	SPV.0105.27	SPV.0105.28	SPV.0105.29
		REMOVE TRAFFIC SIGNALS				REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE			
CATEGORY	INTERSECTION	STH 31 & STH 20 LS	STH 31 & NEWMAN ROAD LS	STH 31 & CTH C LS	STH 31 & CTH MM LS	STH 31 & STH 20 LS	STH 31 & NEWMAN ROAD LS	STH 31 & CTH C LS	STH 31 & CTH MM LS
0020									
	STH 31 & STH 20	1	--	--	--	1	--	--	--
	STH 31 & NEWMAN ROAD	--	1	--	--	--	1	--	--
	STH 31 & CTH C	--	--	1	--	--	--	1	--
	STH 31 & CTH MM	--	--	--	1	--	--	--	1
		1	1	1	1	1	1	1	1

LOOP DETECTOR SCHEDULE

CATEGORY	INTERSECTION	LOOP NUMBER	HOMERUN PB	ROADWAY	STATION	OFFSET	SIZE (FT) x (FT)	NO OF TURNS	PAVEMENT TYPE	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
0020	STH 31 & STH 20												
		11	PB6	STH 20	385+27.9	7.5' RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	84	335	252
		12	PB6	STH 20	385+56.5	7.5' RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	88	335	264
		13	PB6	STH 20	385+27.9	3.5' LT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	335	192
		14	PB6	STH 20	385+55.7	3.5' LT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	335	192
		21	PB27	STH 20	389+41.3	43.5' LT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	57	350	285
		22	PB27	STH 20	389+41.3	32.5' LT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	79	350	395
		23	PB27	STH 20	389+41.3	21.0' LT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	98	350	490
		31	PB17	STH 31	105+93.3	8.5' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	85	197	255
		32	PB3	STH 31	106+21.2	8.6' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	84	167	252
		33	PB17	STH 31	105+93.3	2.5' LT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	197	204
		34	PB3	STH 31	106+21.3	2.5' LT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	167	192
		41	PB24	STH 31	110+33.7	41.0' LT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	51	551	306
		42	PB24	STH 31	110+33.7	30.5' LT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	72	551	432
		43	PB24	STH 31	110+33.7	19.5' LT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	94	551	564
		44	PB23	STH 31	107+76.9	41.0' LT	6 x 30	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	103	441	309
		45	PB23	STH 31	107+78.8	30.5' LT	6 X 30	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	120	441	360
		46	PB23	STH 31	107+80.6	19.5' LT	6 X 30	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	141	441	423
		51	PB13	STH 20	387+52.9	9.5' LT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	83	84	249
		52	PB13	STH 20	387+46.8	9.5' LT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	84	84	252
		53	PB13	STH 20	387+53.9	1.6' RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	63	84	189
		54	PB13	STH 20	387+46.8	1.6' RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	84	192
		61	PB20	STH 20	383+29.4	43.0' RT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	61	471	366
		62	PB20	STH 20	383+29.4	31.0' RT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	85	471	510
		63	PB20	STH 20	383+28.9	19.0' RT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	109	471	654
		71	PB10	STH 31	108+45.0	8.5' LT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	84	264	252
		72	PB10	STH 31	108+17.0	8.5' LT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	84	264	252
		73	PB10	STH 31	108+45.0	2.5' RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	264	192
		74	PB10	STH 31	108+17.1	2.4' RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	264	192
		81	PB18	STH 31	104+15.1	40.8' RT	6 x 6	5	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	119	348	595
		82	PB18	STH 31	104+15.1	30.1' RT	6 x 6	5	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	98	348	490
		83	PB18	STH 31	104+15.1	19.1' RT	6 x 6	5	ASPHALT	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)	76	348	380
		84	PB16	STH 31	106+61.6	41.0' RT	6 X 30	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	105	69	315
		85	PB16	STH 31	106+59.4	30.5' RT	6 X 30	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	122	69	366
		86	PB16	STH 31	106+57.1	19.5' RT	6 X 30	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	143	69	429
		S1	PB17	STH 31	105+69.0	41.0' LT	6 x 6	4	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	80	197	320
		S2	PB17	STH 31	105+68.9	30.5' LT	6 x 6	4	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	59	197	236
		S3	PB17	STH 31	105+69.0	19.6' LT	6 x 6	4	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	38	197	152
		S4	PB25	STH 31	108+75.2	41.2' RT	6 x 6	4	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	40	237	160
		S5	PB25	STH 31	108+75.0	30.5' RT	6 x 6	4	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	60	237	240
		S6	PB25	STH 31	108+75.0	19.5' RT	6 x 6	4	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	78	237	312
		S7	PB21	STH 20	384+87.5	45.0' LT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	40	429	240
		S8	PB21	STH 20	384+87.5	33.0' LT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	63	429	378
		S9	PB21	STH 20	384+87.5	21.0' LT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	87	429	522
		S10	PB28	STH 20	387+70.6	41.0' LT	6 x 6	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	39	52	117
		S11	PB28	STH 20	387+70.6	29.5' LT	6 x 6	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	63	52	189
		S12	PB28	STH 20	387+70.6	18.5' LT	6 x 6	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	85	52	255
0010	STH 31 & NEWMAN ROAD												
		11	PB11	STH 31	114+06.3	2.5' RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	92	210
		12	PB11	STH 31	114+34.3	2.5' RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	92	210
		21	PB14	STH 31	117+83.6	41.0' LT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	63	399	315
		22	PB14	STH 31	117+83.4	30.5' LT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	84	399	420
		23	PB14	STH 31	117+83.2	19.5' LT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	106	399	636
		41	PB13	NEWMAN	12+51.6	18.0' RT	6 x 6	4	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	65	225	260

LOOP DETECTOR SCHEDULE

CATEGORY	INTERSECTION	LOOP NUMBER	HOMERUN PB	ROADWAY	STATION	OFFSET	SIZE (FT) x (FT)	NO OF TURNS	PAVEMENT TYPE	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
		42	PB13	NEWMAN	12+51.5	6.0' RT	6 x 6	4	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	40	225	160
		43	PB2	NEWMAN	11+01.4	18.0' RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	93	76	279
		44	PB2	NEWMAN	10+74.0	19.8' RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	93	76	279
		45	PB2	NEWMAN	11+01.6	6.0' RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	76	210
		46	PB2	NEWMAN	10+74.0	7.8' RT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	76	210
		51	PB5	STH 31	116+09.4	2.5' LT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	249	210
		52	PB5	STH 31	115+81.2	2.5' LT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	249	210
		61	PB16	STH 31	111+97.1	41.0' RT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	37	383	185
		62	PB16	STH 31	111+97.0	30.5' RT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	58	383	290
		63	PB16	STH 31	111+97.3	19.5' RT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	79	383	395
		81	PB15	DRIVEWAY			6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	--	291	--
		82	PB15	DRIVEWAY			6 x 30	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	--	291	--
		83	PB15	DRIVEWAY			6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	--	291	--
		84	PB15	DRIVEWAY			6 x 30	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	--	291	--
0010	STH 31 & CTH C												
		11	PB11	STH 31	174+69.9	2.5' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	81	80	243
		12	PB11	STH 31	174+97.9	2.5' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	80	282
		21	PB17	STH 31	178+79.7	47.0' LT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	39	486	234
		22	PB17	STH 31	178+79.7	36.5' LT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	60	486	360
		23	PB17	STH 31	178+79.7	25.5' LT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	78	486	468
		31	PB21	CTH C	401+33.9	4.5' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	67	305	201
		32	PB21	CTH C	401+05.9	4.5' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	67	305	201
		41	PB15	CTH C	395+79.8	32.6' RT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	60	349	300
		42	PB15	CTH C	395+79.8	21.6' RT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	82	349	410
		43	PB14	CTH C	397+09.8	32.8' RT	6 x 6	4	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	61	218	244
		44	PB14	CTH C	397+09.8	21.8' RT	6 x 6	4	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	83	218	332
		45	PB13	CTH C	398+81.8	33.4' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	91	75	273
		46	PB13	CTH C	399+08.8	33.4' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	75	246
		47	PB16	CTH C	398+81.8	22.4' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	113	157	339
		48	PB2	CTH C	399+08.8	22.4' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	113	157	339
		51	PB5	STH 31	176+76.7	14.5' LT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	92	343	276
		52	PB5	STH 31	176+48.7	14.5' LT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	99	343	297
		53	PB5	STH 31	176+80.1	3.5' LT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	69	343	207
		54	PB5	STH 31	176+52.1	3.5' LT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	343	234
		61	PB22	STH 31	172+57.8	41.0' RT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	63	398	315
		62	PB22	STH 31	172+57.8	30.5' RT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	84	398	420
		63	PB22	STH 31	172+57.8	19.5' RT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	106	398	636
		71	PB16	CTH C	398+81.8	11.4' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	91	157	273
		72	PB2	CTH C	399+08.8	11.4' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	92	131	276
		73	PB16	CTH C	398+81.8	0.4' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	70	157	210
		74	PB2	CTH C	399+08.8	0.4' RT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	71	131	213
		81	PB20	CTH C	402+89.8	17.5' LT	6 x 10	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	67	582	402
		82	PB20	CTH C	402+89.9	6.0' LT	6 x 10	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	89	582	534
		83	PB19	CTH C	401+33.9	28.9' LT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	66	361	198
		84	PB19	CTH C	401+05.9	30.4' LT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	67	361	201
		85	PB19	CTH C	401+33.9	18.4' LT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	86	361	258
		86	PB19	CTH C	401+05.9	19.8' LT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	86	361	258
		87	PB21	CTH C	401+33.9	7.3' LT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	90	305	270
		88	PB21	CTH C	401+05.9	8.8' LT	6 x 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	90	305	270
		S1	PB23	STH 31	173+73.0	41.0' LT	6 x 6	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	40	84	120
		S2	PB23	STH 31	173+73.0	30.5' LT	6 x 6	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	60	84	180
		S3	PB23	STH 31	173+73.0	19.5' LT	6 x 6	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	82	84	246
		S4	PB18	STH 31	177+31.0	41.0' RT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	41	442	246
		S5	PB18	STH 31	177+31.0	30.5' RT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	61	442	366

LOOP DETECTOR SCHEDULE

CATEGORY	INTERSECTION	LOOP NUMBER	HOMERUN PB	ROADWAY	STATION	OFFSET	SIZE (FT) x (FT)	NO OF TURNS	PAVEMENT TYPE	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
		S6	PB18	STH 31	177+31.0	19.5' RT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	83	442	498
0010	STH 31 & CTH MM												
		21	PB15	STH 31	202+99.8	32.0' LT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	66	482	396
		22	PB15	STH 31	202+99.8	20.0' LT	6 x 6	6	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	42	482	252
		23	PB14	STH 31	201+49.8	32.0' LT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	66	328	330
		24	PB14	STH 31	201+49.8	20.0' LT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	42	328	210
		61	PB12	STH 31	195+87.1	30.5' RT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	62	332	310
		62	PB12	STH 31	195+87.1	19.5' RT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	41	332	205
		81	PB18	CTH MM	103+41.4	19.8' LT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	40	348	200
		82	PB18	CTH MM	103+41.3	7.7' LT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	63	348	315
		83	PB19	CTH MM SB	614+83.0	23.2' LT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	101	74	303
		84	PB19	CTH MM SB	614+52.8	23.0' LT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	99	74	297
		85	PB19	CTH MM SB	614+81.5	9.2' LT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	74	222
		86	PB19	CTH MM SB	614+52.5	9.2' LT	6 X 20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	74	216
		S1	PB11	STH 31	197+63.8	41.0' LT	6 x 6	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	83	148	249
		S2	PB11	STH 31	197+63.7	30.5' LT	6 x 6	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	62	148	186
		S3	PB11	STH 31	197+63.6	19.5' LT	6 x 6	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	41	148	123
		S4	PB13	STH 31	201+08.0	33.0' RT	6 x 6	5	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	68	282	340
		S5	PB13	STH 31	201+08.0	20.0' RT	6 x 6	4	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	43	282	172
				TOTAL							8,953	33,889	35,044

TEMPORARY TRAFFIC SIGNAL ITEMS

CATEGORY	INTERSECTION	661.0200.01 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS STH 31 & STH 20 LS	661.0200.02 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS STH 31 & NEWMAN ROAD LS	661.0200.03 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS STH 31 & CTH C LS	661.0200.04 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS STH 31 & CTH MM LS	SPV.0105.18 TEMPORARY NON-INTRUSIVE VEHICLE DETECTION SYTEM FOR INTERSECTIONS STH 31 & STH 20 LS	SPV.0105.19 TEMPORARY NON-INTRUSIVE VEHICLE DETECTION SYTEM FOR INTERSECTIONS STH 31 & NEWMAN ROAD LS	SPV.0105.20 TEMPORARY NON-INTRUSIVE VEHICLE DETECTION SYTEM FOR INTERSECTIONS STH 31 & CTH C LS	SPV.0105.21 TEMPORARY NON-INTRUSIVE VEHICLE DETECTION SYTEM FOR INTERSECTIONS STH 31 & CTH MM LS
0020									
	STH 31 & STH 20	1	--	--	--	1	--	--	--
	STH 31 & NEWMAN ROAD	--	1	--	--	--	1	--	--
	STH 31 & CTH C	--	--	1	--	--	--	1	--
	STH 31 & CTH MM	--	--	--	1	--	--	--	1
		1	1	1	1	1	1	1	1

PULL BOXES

CATEGORY	INTERSECTION	NO.	ALIGNMENT	STATION	OFFSET	653.0135 PULL BOXES STEEL 24x36-INCH EA	653.0140 PULL BOXES STEEL 24x42-INCH EA
0010							
	STH 31 & STH 20						
		PB1	STH 31	106+65.7	93.9' RT	--	1
		PB2	STH 31	105+97.2	63.9' RT	--	1
		PB3	STH 31	105+97.3	10.0' LT	--	1
		PB4	STH 31	106+06.5	65.7' LT	--	1
		PB5	STH 20	385+32.4	67.3' RT	--	1
		PB6	STH 20	385+31.8	11.0' LT	--	1
		PB7	STH 20	385+41.6	56.6' LT	--	1
		PB8	STH 31	107+77.6	88.6' LT	--	1
		PB9	STH 31	108+23.0	66.9' LT	--	1
		PB10	STH 31	108+41.1	10.0' RT	--	1
		PB11	STH 31	108+51.6	51.8' RT	--	1
		PB12	STH 20	387+49.3	68.2' LT	--	1
		PB13	STH 20	387+50.4	9.0' RT	--	1
		PB14	STH 20	387+50.0	54.9' RT	--	1
		PB15	STH 31	106+62.3	58.4' RT	--	1
		PB16	STH 31	106+75.6	52.9' RT	1	--
		PB17	STH 31	105+67.0	10.0' LT	1	--
		PB18	STH 31	104+16.6	9.6' LT	1	--
		PB19	STH 20	385+62.0	57.1' RT	--	1
		PB20	STH 20	383+16.9	64.1' RT	1	--
		PB21	STH 20	384+95.4	55.5' LT	1	--
		PB22	STH 31	107+77.5	57.4' LT	--	1
		PB23	STH 31	107+63.7	52.5' LT	1	--
		PB24	STH 31	110+30.7	57.3' LT	1	--
		PB25	STH 31	108+67.5	51.4' RT	1	--
		PB26	STH 20	387+17.4	56.5' LT	--	1
		PB27	STH 20	389+39.4	62.8' LT	1	--
		PB28	STH 20	387+63.0	51.5' RT	1	--
	STH 31 & NEWMAN ROAD						
		PB1	NEWMAN	10+83.2	44.7' LT	--	1
		PB2	NEWMAN	10+97.5	5.0' RT	--	1
		PB3	NEWMAN	10+87.1	54.7' RT	--	1
		PB4	STH 31	116+05.3	63.5' LT	--	1
		PB5	STH 31	116+05.3	8.5' RT	--	1
		PB6	STH 31	115+85.0	50.0' RT	--	1
		PB7	STH 31	115+29.8	68.4' RT	--	1
		PB8	STH 31	114+57.2	67.3' RT	--	1
		PB9	STH 31	114+41.7	64.6' RT	--	1
		PB10	STH 31	114+20.1	50.0' RT	--	1
		PB11	STH 31	114+10.2	8.5' LT	--	1
		PB12	STH 31	114+37.3	64.6' LT	--	1
		PB13	NEWMAN	12+51.6	5.0' RT	--	1
		PB14	STH 31	118+27.3	63.5' LT	1	--
		PB16	STH 31	111+88.2	50.0' RT	1	--
	STH 31 & CTH C						
		PB1	CTH C	398+82.5	75.0' RT	--	1
		PB2	CTH C	398+84.8	11.0' LT	--	1
		PB3	CTH C	398+85.9	55.5' LT	--	1
		PB4	STH 31	176+53.4	69.1' LT	--	1
		PB5	STH 31	176+82.1	7.5' RT	--	1
		PB6	STH 31	176+85.7	56.2' RT	--	1
		PB7	CTH C	401+09.6	39.6' LT	--	1
		PB8	CTH C	401+10.4	14.0' RT	--	1
		PB9	CTH C	401+10.9	44.5' RT	--	1
		PB10	STH 31	174+95.8	63.3' RT	--	1
		PB11	STH 31	174+59.0	10.0' LT	--	1
		PB12	STH 31	174+35.9	55.9' LT	--	1
		PB13	CTH C	398+96.9	49.0' RT	--	1
		PB14	CTH C	397+12.8	53.9' RT	1	--
		PB15	CTH C	395+81.7	53.6' RT	1	--
		PB16	CTH C	398+58.8	11.0' LT	1	--
		PB17	STH 31	178+77.2	57.2' LT	1	--
		PB18	STH 31	177+34.8	51.6' RT	1	--
		PB19	CTH C	401+30.7	38.0' LT	1	--
		PB20	CTH C	403+51.9	37.5' LT	1	--
		PB21	CTH C	401+29.9	14.0' RT	1	--
		PB22	STH 31	172+59.8	63.2' RT	1	--
		PB23	STH 31	173+81.0	51.5' LT	1	--
	STH 31 & CTH MM						
		PB1	STH 31	198+71.3	61.0' RT	--	1
		PB2	STH 31	198+45.2	44.5' RT	--	1
		PB3	STH 31	198+11.8	4.0' LT	--	1
		PB4	STH 31	198+35.2	53.9' LT	--	1
		PB5	STH 31	198+91.4	54.0' LT	--	1
		PB6	STH 31	199+39.8	54.0' LT	--	1
		PB7	STH 31	199+55.0	8.2' RT	--	1
		PB8	STH 31	199+64.4	43.0' RT	--	1
		PB9	CTH MM SB	614+52.3	4.0' RT	--	1
		PB10	STH 31	198+87.3	61.0' RT	--	1
		PB11	STH 31	197+72.7	8.5' LT	1	--
		PB12	STH 31	195+90.1	8.5' RT	1	--
		PB13	STH 31	201+00.0	7.9' RT	1	--
		PB14	STH 31	201+47.8	8.0' LT	1	--
		PB15	STH 31	202+97.8	8.1' LT	1	--
		PB16	CTH MM SB	615+07.4	58.9' LT	--	1
		PB17	CTH MM SB	615+28.2	37.7' LT	1	--
		PB18	CTH MM	103+39.8	30.4' LT	1	--
TOTAL						29	55

SIGNAL CONTROL CABINETS

CATEGORY	INTERSECTION	NO.	ALIGNMENT	STATION	OFFSET	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EA	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL STH 31 & STH 20 LS	656.0200.02 STH 31 & NEWMAN ROAD LS	656.0200.03 STH 31 & CTH C LS	656.0200.04 STH 31 & CTH MM LS	SPV.0105.10 INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET STH 31 & STH 20 LS	SPV.0105.11 STH 31 & NEWMAN ROAD LS	SPV.0105.12 STH 31 & CTH C LS	SPV.0105.13 STH 31 & CTH MM LS
0020														
	STH 31 & STH 20	CB1	STH 31	106+65.7	93.9' RT	1	1	--	--	--	1	--	--	--
	STH 31 & NEWMAN ROAD	CB1	NEWMAN	10+83.2	44.7' LT	1	--	1	--	--	--	1	--	--
	STH 31 & CTH C	CB1	CTH C	398+82.5	75.0' RT	1	--	--	1	--	--	--	1	--
	STH 31 & CTH MM	CB1	STH 31	198+79.3	61.0' RT	1	--	--	--	1	--	--	--	1
		TOTAL				4	1	1	1	1	1	1	1	1

MISCELLANOUS SIGNAL ITEMS

CATEGORY	INTERSECTION	658.5069.01 SIGNAL MOUNTING HARDWARE STH 31 & STH 20 LS	658.5069.02 STH 31 & NEWMAN ROAD LS	658.5069.03 STH 31 & CTH C LS	658.5069.04 STH 31 & CTH MM LS	SPV.0105.14 TRANSPORTING SIGNAL AND LIGHTING MATERIALS STH 31 & STH 20 LS	SPV.0105.15 STH 31 & NEWMAN ROAD LS	SPV.0105.16 STH 31 & CTH C LS	SPV.0105.17 STH 31 & CTH MM LS	SPV.0105.22 TRANSPORTING AND INSTALL STATE FURNISHED EVP DETECTOR HEADS STH 31 & STH 20 LS	SPV.0105.23 STH 31 & NEWMAN ROAD LS	SPV.0105.24 STH 31 & CTH C LS	SPV.0105.25 STH 31 & CTH MM LS
0020													
	STH 31 & STH 20	1	--	--	--	1	--	--	--	1	--	--	--
	STH 31 & NEWMAN ROAD	--	1	--	--	--	1	--	--	--	1	--	--
	STH 31 & CTH C	--	--	1	--	--	--	1	--	--	--	1	--
	STH 31 & CTH MM	--	--	--	1	--	--	--	1	--	--	--	1
	TOTALS	1	1	1	1	1	1	1	1	1	1	1	1

TRAFFIC SIGNAL BASES, POLES & LUMINAIRES

CATEGORY	INTERSECTION	NO.	ALIGNMENT	STATION	OFFSET	654.0101 CONCRETE BASES TYPE 1 EA	654.0102 CONCRETE BASES TYPE 2 EA	654.0105* CONCRETE BASES TYPE 5 EA	654.0110 CONCRETE BASES TYPE 10 EA	654.0113 CONCRETE BASES TYPE 13 EA	657.0100 BASES PEDESTAL EA	657.0255 BASES TRANSFORMER BREAKAWAY 11½-INCH BOLT CIRCLE EA	657.0310 POLES TYPE 3 EA	657.0322 POLES TYPE 5-ALUMINUM EA	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT EA	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EA	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EA	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EA	657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT EA	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4½-INCH CLAMP 6-FT EA	657.1350 INSTALL POLES TYPE 10 EA	657.1360 INSTALL POLES TYPE 13 EA	657.1525 INSTALL MONOTUBE ARMS 25-FT EA	657.1530 INSTALL MONOTUBE ARMS 30-FT EA	657.1550 INSTALL MONOTUBE ARMS 50-FT EA	657.1555 INSTALL MONOTUBE ARMS 55-FT EA	657.1815 INSTALL LUMINAIRE ARMS STEEL 15-FT EA	658.0500 PEDESTRIAN PUSH BUTTONS EA	659.1125 LUMINAIRES UTILITY LED C EA
0020																													
	STH 31 & STH 20																												
		SB1	STH 20	386+94.68	53.00' RT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	1	1	1
		SB2	STH 31	106+65.10	52.54' RT	1	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--
		SB3	STH 31	106+53.74	85.32' RT	--	--	1	--	--	--	1	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--
		SB4	STH 31	106+42.65	53.00' LT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	1	1	1
		SB5	STH 20	385+66.21	54.53' RT	1	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--
		SB6	STH 20	385+44.63	75.16' RT	--	--	1	--	--	--	1	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--
		SB7	STH 20	385+89.37	57.00' LT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	1	1	1
		SB8	STH 31	107+73.67	52.58' LT	1	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--
		SB9	STH 31	107+89.99	82.62' LT	--	--	1	--	--	--	1	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--
		SB10	STH 20	387+37.96	76.91' LT	--	--	1	--	--	--	1	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--
		SB11	STH 31	107+93.37	52.00' RT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	1	1	1
		SB12	STH 20	387+14.55	54.00' LT	1	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--
	STH 31 & NEWMAN ROAD																												
		SB1	NEWMAN	10+72.61	37.87' LT	--	1	--	--	--	--	1	1	--	--	--	--	--	--	1	--	--	--	--	--	--	1	1
		SB2	NEWMAN	10+73.06	5.00' RT	1	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--
		SB3	NEWMAN	10+77.61	55.00' RT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	1	--	1
		SB4	STH 31	115+72.59	73.00' LT	1	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--
		SB5	STH 31	115+80.28	65.13' LT	--	1	--	--	--	--	1	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1
		SB6	STH 31	115+80.28	8.49' RT	1	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--
		SB7	STH 31	115+71.49	52.25' RT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	1	--	1	1	1
		SB8	STH 31	115+37.72	61.65' RT	1	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--
		SB9	STH 31	115+30.26	65.08' RT	1	--	--	--	--	1	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--
		SB10	STH 31	114+52.56	63.43' RT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	1	--	1	--	1
		SB11	STH 31	114+43.22	61.49' RT	1	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--
		SB12	STH 31	114+35.23	53.89' RT	--	1	--	--	--	--	1	1	--	--	--	--	--	--	1	--	--	--	--	--	--	1	1
		SB13	STH 31	114+35.23	8.41' LT	1	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--
		SB14	STH 31	114+43.90	56.17' LT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	1	1	1
		SB15	NEWMAN	12+45.00	5.00' RT	--	--	1	--	--	--	1	--	1	--	--	--	--	--	2	--	--	--	--	--	--	--	2
	STH 31 & CTH C																												
		SB1	STH 31	174+99.63	53.00' LT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	1	--	1	1	1
		SB2	CTH C	399+09.77	50.00' RT	1	--	--	--	--	1	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--
		SB3	CTH C	399+09.37	10.25' LT	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	1	--	--	--	2	1	2
		SB4	CTH C	399+17.36	57.17' LT	1	--	--	--	--	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1	--
		SB5	STH 31	176+29.65	71.16' LT	--	1	--	--	--	--	1	1	--	--	--	--	--	1	--	--	--	--	--	--	--	1	1
		SB6	STH 31	176+75.83	57.91' RT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	1	--	1
		SB7	STH 31	176+70.70	60.96' RT	1	--	--	--	--	1	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	1	--
		SB8	CTH C	401+04.92	43.11' LT	--	1	--	--	--	--	1	1	--	--	--	--	--	1	--	--	--	--	--	--	--	1	1
		SB9	CTH C	401+04.92	14.00' RT	1	--	--	--	--	1	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	1	--
		SB10	CTH C	400+96.17	46.80' RT	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	1	--	1	1	1
		SB11	STH 31	175+07.81	64.00' RT	--	1	--	--	--	--	1	1	--	--	--	--	--	--	1	--	--	--	--	--	--	1	1
		SB12	STH 31	174+97.41	7.52' LT	1	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--
		SB13	CTH C	398+98.55	91.35' RT	--	--	1	--	--	--	1	--	1	--	--	--	--	--	1	--	--	--	--	--	--	--	--
	STH 31 & CTH MM																												
		SB1	STH 31	198+54.75	42.00' RT	1	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--
		SB2	STH 31	198+00.00	1.00' LT	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1	--	--	2	--	2
		SB3	STH 31	198+46.85	51.00' LT	1	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--
		SB4	STH 31	198+84.27	51.00' LT	1	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--
		SB5	STH 31	199+29.79	52.52' LT	1	--	--	--	--	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--
		SB6	STH 31	199+48.24	0.00' RT	--	--	1	--	--	--	1	--	1	--	--	--	--	--	2	--	--	--	--	--	--	--	--	2
		SB7	STH 31	199+54.47	44.00' RT	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--
		SB8	CTH MM SB	615+37.00	35.86' LT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	1
	TOTAL					20	6	7	3	11	20	13	6	7	8	8	3	1	7	9	3	11	2	1	4	7	15	29	26

TRAFFIC SIGNAL AND PEDESTRIAN FACES AND BACKPLATES

				658.0110	658.0115	658.0215	658.0220	658.0416	658.0600	658.0605	658.0610	658.0615	658.0620	658.0625	658.0635
						BACKPLATES			LED MODULES						
				TRAFFIC SIGNAL FACE		SIGNAL FACE			12-INCH						
		SIGNAL		3-12 INCH	4-12 INCH	3 SECTION	4 SECTION	PEDESTRIAN SIGNAL FACE	BALL			ARROW			PEDESTRIAN COUNTDOWN
		HEAD	BASE	VERTICAL	VERTICAL	12-INCH	12-INCH	16-INCH	RED	YELLOW	GREEN	RED	YELLOW	GREEN	TIMER 16-INCH
CATEGORY	INTERSECTION	NO.	NO.	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
0020															
	STH 31 & STH 20														
		1	SB5	1	--	1	--	--	1	1	1	--	--	--	--
		2	SB1	1	--	1	--	--	1	1	1	--	--	--	--
		3	SB1	1	--	1	--	--	1	1	1	--	--	--	--
		4	SB1	1	--	1	--	--	1	1	1	--	--	--	--
		5	SB1	1	--	1	--	--	--	--	--	1	1	1	--
		6	SB1	1	--	1	--	--	--	--	--	1	1	1	--
		7	SB12	1	--	1	--	--	1	1	1	--	--	--	--
		8	SB7	1	--	1	--	--	1	1	1	--	--	--	--
		9	SB7	1	--	1	--	--	1	1	1	--	--	--	--
		10	SB7	1	--	1	--	--	1	1	1	--	--	--	--
		11	SB7	1	--	1	--	--	--	--	--	1	1	1	--
		12	SB7	1	--	1	--	--	--	--	--	1	1	1	--
		13	SB2	1	--	1	--	--	1	1	1	--	--	--	--
		14	SB11	1	--	1	--	--	1	1	1	--	--	--	--
		15	SB11	1	--	1	--	--	1	1	1	--	--	--	--
		16	SB11	1	--	1	--	--	1	1	1	--	--	--	--
		17	SB11	1	--	1	--	--	--	--	--	1	1	1	--
		18	SB11	1	--	1	--	--	--	--	--	1	1	1	--
		19	SB8	1	--	1	--	--	1	1	1	--	--	--	--
		20	SB4	1	--	1	--	--	1	1	1	--	--	--	--
		21	SB4	1	--	1	--	--	1	1	1	--	--	--	--
		22	SB4	1	--	1	--	--	1	1	1	--	--	--	--
		23	SB4	1	--	1	--	--	--	--	--	1	1	1	--
		24	SB4	1	--	1	--	--	--	--	--	1	1	1	--
		25	SB2	--	--	--	--	1	--	--	--	--	--	--	1
		26	SB4	--	--	--	--	1	--	--	--	--	--	--	1
		27	SB5	--	--	--	--	1	--	--	--	--	--	--	1
		28	SB7	--	--	--	--	1	--	--	--	--	--	--	1
		29	SB8	--	--	--	--	1	--	--	--	--	--	--	1
		30	SB11	--	--	--	--	1	--	--	--	--	--	--	1
		31	SB12	--	--	--	--	1	--	--	--	--	--	--	1
		32	SB1	--	--	--	--	1	--	--	--	--	--	--	1
	STH 31 & NEWMAN ROAD														
		1	SB12	1	--	1	--	--	1	1	1	--	--	--	--
		2	SB7	1	--	1	--	--	1	1	1	--	--	--	--
		3	SB7	1	--	1	--	--	1	1	1	--	--	--	--
		4	SB7	1	--	1	--	--	1	1	1	--	--	--	--
		5	SB5	--	1	--	1	--	--	--	--	1	2	1	--
		6	SB7	--	1	--	1	--	--	--	--	1	2	1	--
		7	SB5	1	--	1	--	--	1	1	1	--	--	--	--
		8	SB14	1	--	1	--	--	1	1	1	--	--	--	--
		9	SB14	1	--	1	--	--	1	1	1	--	--	--	--
		10	SB14	1	--	1	--	--	1	1	1	--	--	--	--
		11	SB12	--	1	--	1	--	--	--	--	1	2	1	--
		12	SB14	--	1	--	1	--	--	--	--	1	2	1	--
		13	SB9	1	--	1	--	--	1	1	1	--	--	--	--
		14	SB3	1	--	1	--	--	1	1	1	--	--	--	--
		15	SB3	1	--	1	--	--	1	1	1	--	--	--	--
		16	SB1	--	1	--	1	--	--	--	--	1	2	1	--
		17	SB3	--	1	--	1	--	--	--	--	1	2	1	--
		18	SB1	1	--	1	--	--	1	1	1	--	--	--	--

TRAFFIC SIGNAL AND PEDESTRIAN FACES AND BACKPLATES

CATEGORY	INTERSECTION	SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EA	658.0115 TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL EA	658.0215 BACKPLATES SIGNAL FACE 3 SECTION 12-INCH EA	658.0220 BACKPLATES SIGNAL FACE 4 SECTION 12-INCH EA	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EA	658.0600 LED MODULES 12-INCH BALL RED EA	658.0605 LED MODULES 12-INCH BALL YELLOW EA	658.0610 LED MODULES 12-INCH BALL GREEN EA	658.0615 LED MODULES 12-INCH ARROW RED EA	658.0620 LED MODULES 12-INCH ARROW YELLOW EA	658.0625 LED MODULES 12-INCH ARROW GREEN EA	658.0635 PEDESTRIAN COUNTDOWN TIMER 16-INCH EA
		19	SB10	1	--	1	--	--	1	1	1	--	--	--	--
		20	SB10	1	--	1	--	--	1	1	1	--	--	--	--
		21	SB9	--	1	--	1	--	--	--	--	1	2	1	--
		22	SB10	--	1	--	1	--	--	--	--	1	2	1	--
		23	SB12	--	--	--	--	1	--	--	--	--	--	--	1
		24	SB14	--	--	--	--	1	--	--	--	--	--	--	1
		25	SB1	--	--	--	--	1	--	--	--	--	--	--	1
		26	SB3	--	--	--	--	1	--	--	--	--	--	--	1
		27	SB5	--	--	--	--	1	--	--	--	--	--	--	1
		28	SB7	--	--	--	--	1	--	--	--	--	--	--	1
		29	SB9	--	--	--	--	1	--	--	--	--	--	--	1
		30	SB10	--	--	--	--	1	--	--	--	--	--	--	1
	STH 31 & CTH C														
		1	SB11	1	--	1	--	--	1	1	1	--	--	--	--
		2	SB6	1	--	1	--	--	1	1	1	--	--	--	--
		3	SB6	1	--	1	--	--	1	1	1	--	--	--	--
		4	SB6	1	--	1	--	--	1	1	1	--	--	--	--
		5	SB5	--	1	--	1	--	--	--	--	1	2	1	--
		6	SB6	--	1	--	1	--	--	--	--	1	2	1	--
		7	SB5	1	--	1	--	--	1	1	1	--	--	--	--
		8	SB1	1	--	1	--	--	1	1	1	--	--	--	--
		9	SB1	1	--	1	--	--	1	1	1	--	--	--	--
		10	SB1	1	--	1	--	--	1	1	1	--	--	--	--
		11	SB1	1	--	1	--	--	--	--	--	1	1	1	--
		12	SB1	1	--	1	--	--	--	--	--	1	1	1	--
		13	SB8	1	--	1	--	--	1	1	1	--	--	--	--
		14	SB3	1	--	1	--	--	1	1	1	--	--	--	--
		15	SB3	1	--	1	--	--	1	1	1	--	--	--	--
		16	SB9	--	1	--	1	--	--	--	--	1	2	1	--
		17	SB2	--	1	--	1	--	--	--	--	1	2	1	--
		18	SB3	--	1	--	1	--	--	--	--	1	2	1	--
		19	SB2	1	--	1	--	--	1	1	1	--	--	--	--
		20	SB10	1	--	1	--	--	1	1	1	--	--	--	--
		21	SB10	1	--	1	--	--	1	1	1	--	--	--	--
		22	SB3	1	--	1	--	--	--	--	--	1	1	1	--
		23	SB10	1	--	1	--	--	--	--	--	1	1	1	--
		24	SB10	1	--	1	--	--	--	--	--	1	1	1	--
		25	SB11	--	--	--	--	1	--	--	--	--	--	--	1
		26	SB1	--	--	--	--	1	--	--	--	--	--	--	1
		27	SB2	--	--	--	--	1	--	--	--	--	--	--	1
		28	SB4	--	--	--	--	1	--	--	--	--	--	--	1
		29	SB5	--	--	--	--	1	--	--	--	--	--	--	1
		30	SB6	--	--	--	--	1	--	--	--	--	--	--	1
		31	SB8	--	--	--	--	1	--	--	--	--	--	--	1
		32	SB10	--	--	--	--	1	--	--	--	--	--	--	1
	STH 31 & CTH MM														
		1	SB1	1	--	1	--	--	1	1	1	--	--	--	--
		2	SB7	1	--	1	--	--	1	1	1	--	--	--	--
		3	SB7	1	--	1	--	--	1	1	1	--	--	--	--
		4	SB5	1	--	1	--	--	1	1	1	--	--	--	--
		5	SB2	1	--	1	--	--	1	1	1	--	--	--	--
		6	SB2	1	--	1	--	--	1	1	1	--	--	--	--

TRAFFIC SIGNAL AND PEDESTRIAN FACES AND BACKPLATES

CATEGORY	INTERSECTION	SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EA	658.0115 TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL EA	658.0215 BACKPLATES SIGNAL FACE 3 SECTION 12-INCH EA	658.0220 BACKPLATES SIGNAL FACE 4 SECTION 12-INCH EA	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EA	658.0600 LED MODULES 12-INCH BALL RED EA	658.0605 LED MODULES 12-INCH BALL YELLOW EA	658.0610 LED MODULES 12-INCH BALL GREEN EA	658.0615 LED MODULES 12-INCH ARROW RED EA	658.0620 LED MODULES 12-INCH ARROW YELLOW EA	658.0625 LED MODULES 12-INCH ARROW GREEN EA	658.0635 PEDESTRIAN COUNTDOWN TIMER 16-INCH EA
		7	SB7	1	--	1	--	--	1	1	1	--	--	--	--
		8	SB3	1	--	1	--	--	1	--	--	--	1	1	--
		9	SB4	1	--	1	--	--	1	--	--	--	1	1	--
			TOTAL	66	13	66	13	24	53	51	51	26	41	28	24

CONDUIT

CATEGORY	INTERSECTION	FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0605 CONDUIT SPECIAL 2-INCH LF	652.0615 CONDUIT SPECIAL 3-INCH LF
0020							
	STH 31 & STH 20						
		CB1	PB1	--	27	--	--
		PB1	PB2	--	145	--	--
		PB2	PB3	--	--	--	144
		PB3	PB4	--	--	--	109
		PB4	PB5	--	63	--	--
		PB5	PB6	--	--	--	153
		PB6	PB7	--	--	--	89
		PB7	PB8	--	65	--	--
		PB8	PB9	--	97	--	--
		PB9	PB10	--	--	--	154
		PB10	PB11	--	--	--	82
		PB11	PB12	--	116	--	--
		PB12	PB13	--	--	--	150
		PB13	PB14	--	--	--	88
		PB14	CB1	--	84	--	--
		PB1	SB3	14	--	--	--
		PB1	PB15	--	--	--	34
		PB15	SB1	--	16	--	--
		PB15	SB2	6	--	--	--
		PB15	PB16	12	--	--	--
		PB3	PB17	28	--	--	--
		PB17	PB18	148	--	--	--
		PB4	PB19	--	--	--	36
		PB19	SB4	--	11	--	--
		PB19	SB5	4	--	--	--
		PB4	SB6	20	--	--	--
		PB5	PB20	212	--	--	--
		PB7	PB21	45	--	--	--
		PB8	SB9	13	--	--	--
		PB8	PB22	--	--	--	29
		PB22	SB7	--	16	--	--
		PB22	PB23	13	--	--	--
		PB22	SB8	5	--	--	--
		PB9	PB24	206	--	--	--
		PB11	PB25	14	--	--	--
		PB12	SB10	13	--	--	--
		PB12	PB26	--	--	--	32
		PB26	SB11	--	10	--	--
		PB26	SB12	3	--	--	--
		PB12	PB27	--	--	187	--
		PB14	PB28	12	--	--	--
	STH 31 & NEWMAN ROAD						
		CB1	PB1	--	41	--	--
		PB1	PB2	--	--	--	99
		PB2	PB3	--	--	--	98
		PB3	PB4	--	96	--	--
		PB4	PB5	--	--	--	140
		PB5	PB6	--	--	--	88
		PB6	PB7	--	113	--	--
		PB7	PB8	--	--	--	141
		PB8	PB9	--	28	--	--
		PB9	PB10	--	48	--	--
		PB10	PB11	--	--	--	115
		PB11	PB12	--	--	--	121
		PB12	CB1	--	59	--	--
		PB1	SB1	12	--	--	--
		PB2	SB2	24	--	--	--
		PB2	PB13	148	--	--	--
		PB13	SB15	5	--	--	--
		PB3	SB3	--	9	--	--
		PB3	SB4	16	--	--	--
		PB4	SB5	25	--	--	--
		PB4	PB14	220	--	--	--
		PB5	SB6	24	--	--	--
		PB6	SB7	--	13	--	--
		PB7	SB8	10	--	--	--
		PB7	SB9	2	--	--	--
		PB8	SB10	--	5	--	--
		PB9	SB11	3	--	--	--
		PB10	SB12	15	--	--	--
		PB10	PB16	230	--	--	--
		PB11	SB13	24	--	--	--
		PB12	SB14	--	10	--	--
	STH 31 & CTH C						
		CB1	PB1	--	106	--	--
		PB1	PB2	--	--	--	168
		PB2	PB3	--	--	--	85
		PB3	PB4	--	168	--	--
		PB4	PB5	--	--	--	160
		PB5	PB6	--	--	--	94
		PB6	PB7	--	105	--	--
		PB7	PB8	--	--	--	103
		PB8	PB9	--	--	--	57
		PB9	PB10	--	182	--	--
		PB10	PB11	--	--	--	160
		PB11	PB12	--	99	--	--
		PB12	CB1	--	57	--	--
		PB1	PB13	--	28	--	--
		PB13	SB1	--	31	--	--
		PB13	SB2	12	--	--	--
		PB1	PB14	171	--	--	--
		PB14	PB15	129	--	--	--
		PB2	SB3	--	24	--	--
		PB2	PB16	24	--	--	--
		PB3	SB4	31	--	--	--
		PB4	SB5	23	--	--	--
		PB4	PB17	223	--	--	--
		PB6	PB18	47	--	--	--
		PB6	SB6	--	9	--	--
		PB6	SB7	18	--	--	--
		PB7	SB8	5	--	--	--
		PB7	PB19	19	--	--	--
		PB19	PB20	219	--	--	--
		PB8	SB9	5	--	--	--
		PB8	PB21	18	--	--	--
		PB9	SB10	--	14	--	--
		PB10	SB11	11	--	--	--
		PB10	PB22	234	--	--	--
		PB11	SB12	38	--	--	--
		PB12	SB13	28	--	--	--
		PB12	PB23	53	--	--	--
	STH 31 & CTH MM						
		CB1	PB1	--	26	--	--
		PB1	PB2	--	58	--	--
		PB2	PB3	--	--	--	114
		PB3	PB4	--	--	--	106
		PB4	PB5	--	108	--	--
		PB5	PB6	--	93	--	--
		PB6	PB7	--	--	--	124
		PB7	PB8	--	--	--	68
		PB8	PB9	--	--	--	98
		PB9	PB10	--	58	--	--
		PB10	CB1	--	26	--	--
		PB2	SB1	9	--	--	--
		PB3	SB2	--	12	--	--
		PB3	PB11	37	--	--	--
		PB11	PB12	181	--	--	--
		PB4	SB3	11	--	--	--
		PB5	SB4	5	--	--	--
		PB6	SB5	9	--	--	--
		PB7	SB6	10	--	--	--
		PB7	PB13	143	--	--	--
		PB13	PB14	48	--	--	--
		PB14	PB15	148	--	--	--
		PB8	SB7	--	10	--	--
		PB8	PB16	--	--	--	39
		PB16	PB17	26	--	--	--
		PB17	PB18	176	--	--	--
		PB17	SB8	7	--	--	--
		PB9	PB19	22	--	--	--
			TOTAL	3,666	2,286	187	3,278

INSTALL CONDUIT INTO EXISTING ITEM

CATEGORY	INTERSECTION	ITEM	652.0700.S EA
0020			
	STH 31 & NEWMAN ROAD		
		PB15	1
	STH 31 & CTH MM		
		SB8	1
	TOTAL		2

TRAFFIC SIGNAL CABLE—UNDERGROUND

CATEGORY	INTERSECTION	FROM	TO	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG LF
0020						
	STH 31 & STH 20					
		CB1	SB1	--	107	--
		CB1	SB2	--	96	--
		CB1	SB4	--	357	--
		CB1	SB5	--	350	--
		CB1	SB7	--	573	--
		CB1	SB8	--	562	--
		CB1	SB11	--	273	--
		CB1	SB12	--	266	--
	STH 31 & NEWMAN ROAD					
		CB1	SB1	--	56	--
		CB1	SB2	136	--	--
		CB1	SB3	--	188	--
		CB1	SB4	255	--	--
		CB1	SB5	--	269	--
		CB1	SB6	357	--	--
		CB1	SB7	--	408	--
		CB1	SB8	376	--	--
		CB1	SB9	--	369	--
		CB1	SB10	--	283	--
		CB1	SB11	248	--	--
		CB1	SB12	--	217	--
		CB1	SB13	152	--	--
		CB1	SB14	--	60	--
	STH 31 & CTH C					
		CB1	SB1	--	142	--
		CB1	SB2	--	123	--
		CB1	SB3	--	--	192
		CB1	SB4	258	--	--
		CB1	SB5	--	353	--
		CB1	SB6	--	502	--
		CB1	SB7	510	--	--
		CB1	SB8	--	445	--
		CB1	SB9	375	--	--
		CB1	SB10	--	338	--
		CB1	SB11	--	218	--
		CB1	SB12	154	--	--
	STH 31 & CTH MM					
		CB1	SB1	88	--	--
		CB1	SB2	165	--	--
		CB1	SB3	234	--	--
		CB1	SB4	305	--	--
		CB1	SB5	286	--	--
		CB1	SB7	--	163	--
			TOTAL	3,899	6,718	192

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL CABLE—ABOVE GROUND

CATEGORY	INTERSECTION	FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG LF
0020	STH 31 & STH 20				
		SB1	HEAD 2	59	--
			HEAD 3	48	--
			HEAD 4	36	--
			HEAD 5	80	--
			HEAD 6	70	--
			HEAD 32	15	--
		SB2	HEAD 13	19	--
			HEAD 25	15	--
		SB4	HEAD 20	59	--
			HEAD 21	48	--
			HEAD 22	36	--
			HEAD 23	79	--
			HEAD 24	69	--
			HEAD 26	15	--
		SB5	HEAD 1	19	--
			HEAD 27	15	--
		SB7	HEAD 8	61	--
			HEAD 9	50	--
			HEAD 10	38	--
			HEAD 11	80	--
			HEAD 12	72	--
			HEAD 28	15	--
		SB8	HEAD 19	19	--
			HEAD 29	15	--
		SB11	HEAD 14	58	--
			HEAD 15	48	--
			HEAD 16	36	--
			HEAD 17	78	--
			HEAD 18	68	--
			HEAD 30	15	--
		SB12	HEAD 7	19	--
			HEAD 31	15	--

CATEGORY	INTERSECTION	FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG LF
0020	STH 31 & NEWMAN ROAD				
		SB1	HEAD 16	--	22
			HEAD 18	19	--
			HEAD 25	15	--
		SB3	HEAD 14	59	--
			HEAD 15	19	--
			HEAD 17	--	80
			HEAD 26	15	--
		SB5	HEAD 5	--	22
			HEAD 7	19	--
			HEAD 27	15	--
		SB7	HEAD 2	58	--
			HEAD 3	47	--
			HEAD 4	36	--
			HEAD 6	--	76
			HEAD 28	15	--
		SB9	HEAD 13	19	--
			HEAD 21	--	22
			HEAD 29	15	--
		SB10	HEAD 19	60	--
			HEAD 20	19	--
			HEAD 22	--	73
			HEAD 30	15	--
		SB12	HEAD 1	19	--
			HEAD 11	--	22
			HEAD 23	15	--
		SB14	HEAD 8	62	--
			HEAD 9	51	--
			HEAD 10	40	--
			HEAD 12	--	80
			HEAD 24	15	--

CATEGORY	INTERSECTION	FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG LF
0020	STH 31 & CTH C				
		SB1	HEAD 8	59	--
			HEAD 9	48	--
			HEAD 10	37	--
			HEAD 11	74	--
			HEAD 12	66	--
			HEAD 26	15	--
		SB2	HEAD 17	--	22
			HEAD 19	19	--
			HEAD 27	15	--
		SB3	HEAD 14	37	--
			HEAD 15	48	--
			HEAD 18	--	22
			HEAD 22	17	--
		SB4	HEAD 28	15	--
		SB5	HEAD 5	--	22
			HEAD 7	19	--
			HEAD 29	15	--
		SB6	HEAD 2	63	--
			HEAD 3	52	--
			HEAD 4	42	--
			HEAD 6	--	80
			HEAD 30	15	--
		SB8	HEAD 13	19	--
			HEAD 31	15	--
		SB9	HEAD 16	--	22
		SB10	HEAD 20	49	--
			HEAD 21	38	--
			HEAD 23	71	--
			HEAD 24	60	--
			HEAD 32	15	--
		SB11	HEAD 1	19	--
			HEAD 25	15	--

CATEGORY	INTERSECTION	FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0240* CABLE TRAFFIC SIGNAL 7-14 AWG LF
0020	STH 31 & CTH MM				
		SB1	HEAD 1	19	--
		SB2	HEAD 5	44	--
			HEAD 6	55	--
		SB3	HEAD 8	19	--
		SB4	HEAD 9	19	--
		SB5	HEAD 4	19	--
		SB7	HEAD 2	49	--
			HEAD 3	39	--
			HEAD 7	19	--
			TOTAL	3,255	565

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL GROUND WIRE

CATEGORY	INTERSECTION	FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
0020				
	STH 31 & STH 20			
		CB1	SB1	100
		SB1	SB2	52
		SB2	SB3	101
		SB3	SB4	354
		SB4	SB5	45
		SB5	SB6	108
		SB6	SB7	359
		SB7	SB8	51
		SB8	SB9	95
		SB9	SB10	347
		SB10	SB11	101
		SB11	SB12	42
		SB12	CB1	258
		PB1	CB1	29
		PB2	CB1	118
		PB3	SB6	115
		PB4	SB6	45
		PB5	SB6	92
		PB6	SB9	147
		PB7	SB9	86
		PB8	SB9	38
		PB9	SB9	102
		PB10	SB10	169
		PB11	SB10	112
		PB12	SB10	38
		PB13	CB1	109
		PB14	CB1	49
		PB15	SB2	30
		PB19	SB5	29
		PB22	SB8	30
		PB26	SB12	28

CATEGORY	INTERSECTION	FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
0020				
	STH 31 & NEWMAN ROAD			
		CB1	SB1	54
		SB1	SB2	133
		SB2	SB15	224
		SB15	SB3	272
		SB3	SB4	55
		SB4	SB5	137
		SB5	SB6	166
		SB6	SB7	127
		SB7	SB8	125
		SB8	SB9	44
		SB9	SB10	124
		SB10	SB11	68
		SB11	SB12	89
		SB12	SB13	144
		SB13	SB14	140
		SB14	CB1	56
		PB1	CB1	35
		PB2	SB2	48
		PB3	SB3	32
		PB4	SB5	49
		PB5	SB6	49
		PB6	SB7	36
		PB7	SB9	27
		PB8	SB10	28
		PB9	SB11	28
		PB10	SB12	40
		PB11	SB13	49
		PB12	SB14	33
		PB13	SB15	30

CATEGORY	INTERSECTION	FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
0020				
	STH 31 & CTH C			
		CB1	SB1	136
		SB1	SB2	73
		SB2	SB3	210
		SB3	SB4	143
		SB4	SB5	186
		SB5	SB6	221
		SB6	SB7	57
		SB7	SB8	123
		SB8	SB9	109
		SB9	SB10	93
		SB10	SB11	162
		SB11	SB12	176
		SB12	SB13	163
		SB13	CB1	75
		PB1	CB1	56
		PB2	SB3	47
		PB3	SB4	55
		PB4	SB5	48
		PB5	SB6	95
		PB6	SB6	32
		PB7	SB8	30
		PB8	SB9	30
		PB9	SB10	37
		PB10	SB11	36
		PB11	SB12	62
		PB12	CB1	40
		PB13	SB2	37

CATEGORY	INTERSECTION	FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
0020				
	STH 31 & CTH MM			
		CB1	SB1	91
		SB1	SB2	124
		SB2	SB3	122
		SB3	SB4	118
		SB4	SB5	109
		SB5	SB6	129
		SB6	SB7	99
		SB7	SB8	142
		SB8	CB1	250
		PB1	CB1	30
		PB2	SB1	34
		PB3	SB2	35
		PB4	SB3	36
		PB5	SB4	30
		PB6	SB5	34
		PB7	SB6	35
		PB8	SB7	33
		PB9	CB1	75
		PB10	CB1	30
		PB16	SB8	73
		PB17	SB8	31
			TOTAL	10,013

LIGHTING WIRE

CATEGORY	INTERSECTION	FROM	TO	655.0305 CABLE TYPE UF 2-12 AWG GROUNDED (UNDERGROUND) LF	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG (POLE) LF
0020					
	STH 31 & STH 20				
		CB1	SB1	104	144
		SB1	SB3	114	117
		SB3	SB6	320	117
		SB6	SB4	117	144
		CB1	SB11	271	144
		SB11	SB10	105	117
		SB10	SB9	357	117
		SB9	SB7	108	144
	STH 31 & NEWMAN ROAD				
		CB1	SB1	56	117
		SB1	SB15	284	234
		SB15	SB3	278	144
		SB3	SB5	131	117
		CB1	SB14	58	144
		SB14	SB12	210	117
		SB12	SB10	126	144
		SB10	SB7	211	144
	STH 31 & CTH C				
		CB1	SB13	77	117
		SB13	SB11	238	117
		SB11	SB10	166	144
		SB10	SB8	167	117
		CB1	SB1	140	144
		SB1	SB3	233	288
		SB3	SB5	242	117
		SB5	SB6	227	144
	STH 31 & CTH MM				
		CB1	SB2	171	288
		CB1	SB7	161	144
		SB7	SB8	148	117
		SB8	SB6	202	234
			TOTALS	5,022	4,176

TRAFFIC SIGNAL EVP DETECTOR CABLE

CATEGORY	INTERSECTION	FROM	TO	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE LF
0020				
	STH 31 & STH 20			
		CB1	SB7 (HEAD A)	653
		CB1	SB1 (HEAD B)	189
		CB1	SB4 (HEAD C)	440
		CB1	SB11 (HEAD D)	354
	STH 31 & NEWMAN ROAD			
		CB1	SB14 (HEAD A)	142
		CB1	SB7 (HEAD B)	486
		CB1	SB10 (HEAD C)	359
		CB1	SB3 (HEAD D)	269
	STH 31 & CTH C			
		CB1	SB1 (HEAD A)	219
		CB1	SB6 (HEAD B)	584
		CB1	SB10 (HEAD C)	414
		CB1	SB3 (HEAD D)	243
	STH 31 & CTH MM			
		CB1	SB2 (HEAD A)	229
		CB1	SB7 (HEAD B)	214
		CB1	SB7 (HEAD D)	189
			TOTALS	4,984

CONCRETE PAVEMENT GAPS

CATEGORY	STAGE	STAGE	ROADWAY	LOCATION	415.0210 CONCRETE PAVEMENT GAPS EACH
0010			CTH C		
				UNDISTRIBUTED	2
			OHIO STREET		
				UNDISTRIBUTED	2
			TOTAL		4

SAWING

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	STH 31						
		104+22	-	115+06	LT	--	506
		104+22	-	115+06	RT	106	1,099
		104+22	-	115+06	MEDIAN	--	1,199
		115+06	-	175+77	LT	279	2,178
		115+06	-	175+77	RT	501	2,797
		115+06	-	175+77	MEDIAN	--	5,340
		175+77	-	202+31	LT	129	1,348
		175+77	-	202+31	RT	124	1,071
		175+77	-	202+31	MEDIAN	--	1,994
					SUBTOTAL	1,139	17,532
	STH 20						
		383+02	-	385+75	LT	--	88
		383+02	-	385+75	RT	--	132
		383+02	-	385+75	MEDIAN	--	220
		387+00	-	400+75	LT	--	447
		387+00	-	400+75	RT	155	125
		387+00	-	400+75	MEDIAN	--	2,351
					SUBTOTAL	155	3,363
	NEWMAN ROAD						
		10+50	-	12+58	LT/RT	178	--
		10+50	-	12+58	MEDIAN	99	--
					SUBTOTAL	277	--
	CTH C						
		396+25	-	399+50	LT	28	106
		396+25	-	399+50	RT	--	375
		396+25	-	399+50	MEDIAN	--	503
		400+48	-	407+76	LT	13	132
		400+48	-	407+76	RT	62	--
		400+48	-	407+76	MEDIAN	--	--
					SUBTOTAL	103	1,116
	UNDISTRIBUTED					--	--
TOTALS						1,674	22,011

SANITARY SEWER ITEMS

CATEGORY	ROADWAY	STATION	O/S	SPV.0060.20 ADJUSTING SANITARY MANHOLE EA	SPV.0060.21 RECONSTRUCT SANITARY MANHOLE EA	611.8120.S* COVER PLATES TEMPORARY EA
0030	STH 31	109+31	18' RT	--	1	1
		113+30	19' RT	--	1	1
		117+20	18' RT	--	1	1
		121+20	19' RT	--	1	1
		125+20	18' RT	--	1	1
		129+10	17' RT	--	1	1
		129+40	59' LT	1	--	1
		131+27	18' RT	--	1	1
		134+89	17' RT	--	1	1
		137+20	18' RT	--	1	1
		139+33	18' RT	--	1	1
		140+64	18' RT	--	1	1
		141+19	22' RT	--	1	1
		143+69	20' RT	--	1	1
		146+11	19' RT	--	1	1
		150+25	18' RT	--	1	1
		154+33	19' RT	--	1	1
		157+58	19' RT	--	1	1
		161+59	20' RT	--	1	1
		165+58	20' RT	1	--	1
		167+44	20' RT	1	--	1
		170+10	19' RT	1	--	1
		174+09	15' RT	1	--	1
		176+03	24 'RT	1	--	1
		178+03	25' RT	1	--	1
		179+42	24' RT	1	--	1
		182+64	28' RT	1	--	1
		185+82	20' RT	1	--	1
		186+52	21'RT	1	--	1
		189+82	22' RT	1	--	1
		190+76	24' RT	1	--	1
		192+20	25' RT	1	--	1
		195+96	28' RT	1	--	1
		197+19	22' RT	1	--	1
		198+25	18' RT	1	--	1
		200+90	18' RT	1	--	1
		200+93	25' LT	1	--	1
		202+24	16' RT	1	--	1
				--	--	--
			SUBTOTAL	20	18	38
STH 20		386+59	2' RT	--	1	1
		390+73	5' LT	--	1	1
			SUBTOTAL	--	2	2
CTH C		397+22	17' LT	1	--	1
		398+74	15' LT	1	--	1
		403+13	15' LT	1	--	1
		405+77	14' LT	1	--	1
			SUBTOTAL	4	--	4
TOTALS				24	20	44

* ADDITIONAL QUANTITIES SHOWN ELSEWHEI

STH 31 CORRIDOR
RACINE COUNTY
CATEGORY 0040
COMMUNICATIONS

3

CONDUIT

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0605 CONDUIT SPECIAL 2-INCH L.F.	671.0132 CONDUIT HDPE 3-DUCT 2-INCH L.F.	671.0232 CONDUIT HDPE DIRECTIONAL BORE 3-DUCT 2-INCH L.F.
CB1 (S51-0095)	I/C PB101	24			
I/C PB101	I/C PB102		162		
I/C PB102	I/C CV101		160		
I/C CV101	I/C PB103			72	
I/C PB103	I/C PB104				87
IC/PB104	I/C CV102			530	
I/C CV102	I/C PB105		79		
I/C PB105	CB1 (S51-0849)	8			
I/C CV102	I/C CV103			914	
I/C CV103	I/C CV104			928	360
I/C CV104	I/C CV105			207	1068
I/C CV105	I/C CV106			595	708
I/C CV106	I/C CV107			1026	204
I/C CV107	I/C PB106		72		
I/C PB106	CB1 (S51-0101)	8			
I/C CV107	I/C CV108			919	217
I/C CV108	I/C CV109			1132	120
I/C CV109	I/C PB107		99		
I/C PB107	CB1 (S51-0210)	27			
	***TOTAL	67	572	6323	2764

***QUANTITIES SHOWN ELSEWHERE ON PLAN

PULL BOXES

PULL BOX NO.	LOCATION*	653.0140 PULL BOXES STEEL 24x42-INCH EACH
I/C PB101	106+46.7, 90.6' RT	1
I/C PB102	106+16.4, 68.1' LT	1
I/C PB103	108+30.4, 63.8' LT	1
I/C PB104	108+75.7, 9.9' RT	1
I/C PB105	114+46.4, 71.6' LT	1
I/C PB106	174+36.2, 68.7' LT	1
I/C PB107	198+55.3, 67.7' RT	1
	***TOTAL	7

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
***QUANTITY SHOWN ELSEWHERE ON PLAN

FIELD SYSTEM INTEGRATOR

LOCATION	670.0100.01 FIELD SYSTEM INTEGRATOR L.S.	670.0200.01 ITS DOCUMENTATION L.S.	678.0500.01 COMMUNICATION SYSTEM TESTING L.S.
2390-09-70	1	1	1
TOTAL	1	1	1

3

INTERCONNECT CABLE

FROM	TO	678.0036 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 36-CT L.F.
I/C CV101	I/C CV102	948
I/C CV102	I/C CV103	1114
I/C CV103	I/C CV104	1488
I/C CV104	I/C CV105	1474
I/C CV105	I/C CV106	1503
I/C CV106	I/C CV107	1404
I/C CV107	I/C CV108	1337
I/C CV108	I/C CV109	1453
	TOTAL	10721

COMMUNICATION VAULTS

VAULT NO.	LOCATION*	673.0105 COMMUNICATION VAULT TYPE 1 EACH
I/C CV101	107+72.1, 102.1' LT	1
I/C CV102	114+04.1, 7.5' LT	1
I/C CV103	123+13.8, 3.5' LT	1
I/C CV104	136+00.0, 9.0' RT	1
I/C CV105	148+71.2, 9.0' RT	1
I/C CV106	161+71.1, 9.0' RT	1
I/C CV107	173+97.8, 8.0' LT	1
I/C CV108	185+32.9, 9.0' LT'	1
I/C CV109	197+82.4, 3.0' RT	1
	TOTAL	9

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

FIBER OPTIC SPLICE

LOCATION	678.0200 FIBER OPTIC SPLICE ENCLOSURE EACH	678.0300 FIBER OPTIC SPLICE EACH
I/C CV101	1	4
I/C CV102	1	4
I/C CV103	1	4
I/C CV104	1	4
I/C CV105	1	4
I/C CV106	1	4
I/C CV107	1	4
I/C CV108	1	4
I/C CV109	1	4
TOTAL	9	36

FIBER OPTIC TRACER WIRE

FROM	TO	SPV.0090.02 FIBER OPTIC TRACER WIRE L.F.
CB1 (S51-0095)	I/C PB101	24
I/C PB101	I/C PB102	162
I/C PB102	I/C CV101	160
I/C CV101	I/C PB103	72
I/C PB103	I/C PB104	87
I/C PB104	I/C CV102	530
I/C CV102	I/C PB105	79
I/C PB105	CB1 (S51-0849)	8
I/C CV102	I/C CV103	914
I/C CV103	I/C CV104	1288
I/C CV104	I/C CV105	1275
I/C CV105	I/C CV106	1303
I/C CV106	I/C CV107	1230
I/C CV107	I/C PB106	72
I/C PB106	CB1 (S51-0101)	8
I/C CV107	I/C CV108	1136
I/C CV108	I/C CV109	1252
I/C CV109	I/C PB107	99
I/C PB107	CB1 (S51-0210)	27
	TOTAL	9726

FIBER OPTIC WARNING TAPE

FROM	TO	SPV.0090.03 FIBER OPTIC WARNING TAPE L.F.
CB1 (S51-0095)	I/C PB101	24
I/C CV101	I/C PB103	72
I/C PB104	I/C CV102	530
I/C PB105	CB1 (S51-0849)	8
I/C CV102	I/C CV103	914
I/C CV103	I/C CV104	928
I/C CV104	I/C CV105	207
I/C CV105	I/C CV106	595
I/C CV106	I/C CV107	1026
I/C PB106	CB1 (S51-0101)	8
I/C CV107	I/C CV108	919
I/C CV108	I/C CV109	1132
I/C PB107	CB1 (S51-0210)	27
	TOTAL	6390

FILE NAME : J:\Projects\D2_23900931\70\IC\2390-09-70_IC_mq.pptx PLOT DATE : 11/22/2016 PLOT BY : DOTCMV PLOT NAME : 2390-09-70_IC_mq.pdf PLOT SCALE : 1:1

STH 31 CORRIDOR
RACINE COUNTY
CATEGORY 0040
COMMUNICATIONS

FIBER OPTIC COMMUNICATIONS EQUIPMENT

LOCATION		**SPV.0105.06 INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET L.S.	ST-ST SINGLE MODE FIBER JUMPER 2-CT CONTRACTOR FURNISHED L.F.	CAT-5E CABLE 1-METER CONTRACTOR FURNISHED EACH	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT STATE FURNISHED L.F.	ETHERNET SWITCH 6-PORT STATE FURNISHED EACH
CB1 (S51-0095)		1	2	2	505	1
	TOTAL	1	2	2	505	1

**PAY ITEM INCLUDES INSTALLATION OF BOTH CONTRACTOR FURNISHED AND STATE FURNISHED MATERIALS

STATE FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
1	EACH	ETHERNET SWITCH 6-PORT
505	L.F.	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT

CONTRACTOR FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
2	EACH	CAT-5E CABLE 1-METER
2	L.F.	ST-ST SINGLE MODE FIBER OPTIC JUMBER 2-CT

FIBER OPTIC COMMUNICATIONS EQUIPMENT

LOCATION		**SPV.0105.07 INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET L.S.	ST-ST SINGLE MODE FIBER JUMPER 2-CT CONTRACTOR FURNISHED L.F.	CAT-5E CABLE 1-METER CONTRACTOR FURNISHED EACH	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT STATE FURNISHED L.F.	ETHERNET SWITCH 6-PORT STATE FURNISHED EACH
CB1 (S51-0849)		1	2	2	217	1
	TOTAL	1	2	2	217	1

**PAY ITEM INCLUDES INSTALLATION OF BOTH CONTRACTOR FURNISHED AND STATE FURNISHED MATERIALS

STATE FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
1	EACH	ETHERNET SWITCH 6-PORT
217	L.F.	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT

CONTRACTOR FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
2	EACH	CAT-5E CABLE 1-METER
2	L.F.	ST-ST SINGLE MODE FIBER OPTIC JUMBER 2-CT

STH 31 CORRIDOR
RACINE COUNTY
CATEGORY 0040
COMMUNICATIONS

FIBER OPTIC COMMUNICATIONS EQUIPMENT

LOCATION		**SPV.0105.08 INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET L.S.	ST-ST SINGLE MODE FIBER JUMPER 2-CT CONTRACTOR FURNISHED L.F.	CAT-5E CABLE 1-METER CONTRACTOR FURNISHED EACH	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT STATE FURNISHED L.F.	ETHERNET SWITCH 6-PORT STATE FURNISHED EACH
CB1 (S51-0101)		1	2	2	209	1
	TOTAL	1	2	2	209	1

**PAY ITEM INCLUDES INSTALLATION OF BOTH CONTRACTOR FURNISHED AND STATE FURNISHED MATERIALS

STATE FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
1	EACH	ETHERNET SWITCH 6-PORT
209	L.F.	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT

CONTRACTOR FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
2	EACH	CAT-5E CABLE 1-METER
2	L.F.	ST-ST SINGLE MODE FIBER OPTIC JUMBER 2-CT

FIBER OPTIC COMMUNICATIONS EQUIPMENT

LOCATION		**SPV.0105.09 INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET L.S.	ST-ST SINGLE MODE FIBER JUMPER 2-CT CONTRACTOR FURNISHED L.F.	CAT-5E CABLE 1-METER CONTRACTOR FURNISHED EACH	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT STATE FURNISHED L.F.	ETHERNET SWITCH 6-PORT STATE FURNISHED EACH
CB1 (S51-0210)		1	2	2	254	1
	TOTAL	1	2	2	254	1

**PAY ITEM INCLUDES INSTALLATION OF BOTH CONTRACTOR FURNISHED AND STATE FURNISHED MATERIALS

STATE FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
1	EACH	ETHERNET SWITCH 6-PORT
254	L.F.	PATCH PANEL WITH FIBER OPTIC CABLE PIGTAIL 8-CT

CONTRACTOR FURNISHED MATERIALS SUMMARY

QUANTITY	UNIT	DESCRIPTION
2	EACH	CAT-5E CABLE 1-METER
2	L.F.	ST-ST SINGLE MODE FIBER OPTIC JUMBER 2-CT

3

OVERHEAD SIGN SUPPORTS - MISC QUANTITIES 2390-09-70

LOCATION	OVERHEAD SIGN SUPPORT STRUCTURE S-51-239 L.S. 641.8100.01
STH 31 AT CTH MM	1
TOTALS	1

3

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1	D1-65	WASHINGTON AVE NEXT SIGNAL	84 x 21	12.250	--	--	1	2	2	--	--	--	--	ALSO REMOVE J ASSEMBLY
2	J1-1(2S)	--	24 x 39	6.500	--	--	--	--	1	--	--	--	--	--
	M2-1	--	21 x 15											
	M1-6	STH 20	24 x 24											
3	W3-3(2S)	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--
4	W3-3(2S)	--	36 x 36	--	9.000	--	1	1	1	--	--	--	--	--
5	R4-7(2S)	--	24 x 30	5.000	--	--	1	1	1	--	--	--	--	--
6	J2-1(2S)	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--
	M3-2	--	24 x 12											
	M1-6	STH 20	24 x 24											
	M5-1R	--	21 x 21											
7	R5-1A(2S)	--	36 x 24	6.000	--	--	1	1	1	--	--	--	--	--
8	J2-1(2S)	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--
	M3-4	--	24 x 12											
	M1-6	STH 20	24 x 24											
	M5-1L	--	21 x 21											
9	R3-20L(2S)	--	24 x 36	6.000	--	--	1	1	1	--	--	--	--	--
10	JH-1(2S)	--	24 x 45	7.500	--	--	1	1	1	--	--	--	--	--
	D9-2	--	24 x 24											
	MB6-2	--	21 x 21											
11	R7-1D(2S)	--	18 x 24	3.000	--	--	1	1	1	--	--	--	--	ANGLE SIGN
12	J3-1(2S)	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--
	M3-2	--	24 x 12											
	M1-6	STH 20	24 x 24											
	M6-1	--	21 x 21											
13	R3-5L(2S)	--	42 x 48	14.000	--	--	1	--	--	--	--	--	--	INSTALL ON S-51-209
14	R3-5L(2S)	--	42 x 48	14.000	--	--	1	--	--	--	--	--	--	INSTALL ON S-51-209
15	R5-1A(2S)	--	36 x 24	6.000	--	--	1	1	1	--	--	--	--	--
16	R7-1D(2S)	--	18 x 24	3.000	--	--	--	--	--	--	--	--	15	BEHIND SIGN #15 - ANGLE SIGN
17	J3-1(2S)	--	24 x 57	9.500	--	--	1	--	--	--	--	--	--	MOUNT ON UPRIGHT OF S-51-209
	M3-4	--	24 x 12											
	M1-6	STH 20	24 x 24											
	M6-1	--	21 x 21											
18	J4-1(2S)	--	24 x 36	6.000	--	--	1	--	1	--	--	--	--	ALSO REMOVE HERITAGE SIGNS
	M3-3	--	24 x 12											FROM POWER POLE
	M1-6	STH 31	24 x 24											
19	J3-1(2S)	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--
	M3-3	--	24 x 12											
	M1-6	STH 31	24 x 24											
	M6-1	--	21 x 21											

3

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
20	R1-2(2S)	--	36	x	31	3.880	--	--	1	1	--	--	--	--	--	MOUNT ON LIGHT POLE
21	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
22	M1-94S	[20] WASHINGTON AVE	96	x	18	12.000	--	--	--	--	--	--	--	--	--	ON MAST ARM
23	W12-1D(2S)	--	24	x	24	--	4.000	--	1	1	1	--	--	--	--	2 FT MOUNTING HEIGHT
24	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
25	R4-7(2S)	--	24	x	30	5.000	--	--	1	--	1	--	--	--	--	--
26	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	25	BACK OF SIGN #25
27	R5-1	--	--	x	--	--	--	--	1	--	--	--	--	--	--	ALSO REMOVE FOLDING STOP
28	R5-1	--	--	x	--	--	--	--	1	--	--	--	--	--	--	ALSO REMOVE FOLDING STOP
29	R4-7(2S)	--	24	x	30	5.000	--	--	1	--	1	--	--	--	--	ALSO REMOVE FOLDING STOP
30	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	29	BACK OF SIGN #29
31	R1-1F(3)	--	36	x	36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
32	W12-1D(2S)	--	24	x	24	--	4.000	--	1	1	1	--	--	--	--	2 FT MOUNTING HEIGHT
33	R5-1	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
34	R1-2(2S)	--	36	x	31	3.880	--	--	1	1	--	--	--	--	--	MOUNT ON LIGHT POLE
35	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
36	M1-94S	[31] S GREEN BAY RD	96	x	18	12.000	--	--	--	--	--	--	--	--	--	ON MAST ARM
37	R2-1(2S)	30 MPH	24	x	30	5.000	--	--	1	--	1	--	--	--	--	--
38	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
39	R4-7(2S)	--	24	x	30	5.000	--	--	1	--	--	--	--	--	--	ALSO REMOVE FOLDING STOP
40	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	39	BACK OF SIGN #39
41	W12-1D(2S)	--	24	x	24	--	4.000	--	1	1	1	--	--	--	--	2 FT MOUNTING HEIGHT
42	R1-1F(3)	--	36	x	36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
43	R1-2(2S)	--	36	x	31	3.880	--	--	1	--	--	--	--	--	--	MOUNT ON LIGHT POLE
44	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
45	M1-94S	[20] WASHINGTON AVE	96	x	18	12.000	--	--	--	--	--	--	--	--	--	ON MAST ARM
46	J4-1(2S)	--	24	x	36	6.000	--	--	1	1	1	--	--	--	--	ALSO REMOVE HERITAGE SIGNS
	M3-1	--	24	x	12											
	M1-6	STH 20	24	x	24											
47	R5-1	--	30	x	30	6.250	--	--	1	--	--	--	--	--	--	ALSO REMOVE FOLDING STOP
48	R5-1	--	30	x	30	6.250	--	--	1	--	--	--	--	--	--	ALSO REMOVE FOLDING STOP
49	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	1	--	--	--	--	--
50	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
51	R4-7(2S)	--	24	x	30	5.000	--	--	--	--	--	--	--	--	49	BACK OF SIGN #49
52	R1-1F(3)	--	36	x	36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
53	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
54	W12-1D(2S)	--	24	x	24	--	4.000	--	1	1	1	--	--	--	--	2 FT MOUNTING HEIGHT
55	R1-2(2S)	--	36	x	31	3.880	--	--	1	--	--	--	--	--	--	MOUNT ON LIGHT POLE
56	M1-94S	[31] S GREEN BAY RD	96	x	18	12.000	--	--	--	--	--	--	--	--	--	ON MAST ARM
57	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
58	J4-1(2S)	--	24 x 36	6.000	--	--	1	1	1	--	--	--	--	--
	M3-4	--	24 x 12											
	M1-6	STH 20	24 x 24											
59	R3-5L(2S)	--	42 x 48	14.000	--	--	1	--	--	--	--	--	--	INSTALL ON S-51-210
60	R3-5L(2S)	--	42 x 48	14.000	--	--	1	--	--	--	--	--	--	INSTALL ON S-51-210
61	J3-1(2S)	--	24 x 57	9.500	--	--	1	--	--	--	--	--	--	MOUNT ON UPRIGHT OF S-51-210
	M3-2	--	24 x 12											
	M1-6	STH 20	24 x 24											
	M6-1	--	21 x 21											
62	R2-1(2S)	35 MPH	24 x 30	5.000	--	--	1	1	--	--	--	--	--	MOUNT ON UPRIGHT OF S-51-210
63	R3-20L(2S)	--	24 x 36	6.000	--	--	--	--	1	--	--	--	--	--
64	R2-1(2S)	35 MPH	24 x 30	5.000	--	--	1	1	1	--	--	--	--	ALSO REMOVE NO PARKING SIGN
65	R7-1D(2S)	--	18 x 24	3.000	--	--	--	--	--	--	--	--	64	ANGLE SIGN
66	R3-20L(2S)	--	24 x 36	6.000	--	--	1	1	1	--	--	--	--	--
67	J2-2(2S)	--	48 x 57	19.000	--	--	1	1	1	--	--	--	--	--
	M3-2	--	24 x 12											
	M1-6	STH 20	24 x 24											
	M5-1L	--	21 x 21											
	M3-4	--	24 x 12											
	M1-6	STH 20	24 x 24											
	M5-1R	--	21 x 21											
68	R3-8(MOD)	--	-- x --	--	--	--	1	2	--	--	--	--	--	--
69	R5-1A(2S)	--	36 x 24	6.000	--	--	--	--	1	--	--	--	--	--
70	J1-1(2S)	--	24 x 39	6.500	--	--	--	--	1	--	--	--	--	--
	M2-1	--	21 x 15											
	M1-6	STH 20	24 x 24											
71	J1-1(2S)	--	24 x 39	6.500	--	--	--	--	1	--	--	--	--	--
	M2-1	--	21 x 15											
	M1-6	STH 20	24 x 24											
72	M1-94H	NEWMAN RD	66 x 18	8.250	--	--	--	--	--	--	--	--	--	ON MAST ARM
73	R6-2L(2S)	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
74	W3-3	--	-- x --	--	--	--	1	1	--	--	--	--	--	--
75	R5-1(2S)	--	30 x 30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
76	R3-8A(2S)	--	36 x 30	7.500	--	--	1	1	1	--	--	--	--	--
77	R1-1F(3)	--	36 x 36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
78	R1-1F(3)	--	36 x 36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
79	R4-7(2S)	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
80	R1-1F(3)	--	36 x 36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
81	R4-7(2S)	--	24 x 30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
82	R1-1F(3)	--	36 x 36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
83	R5-1(2S)	--	30 x 30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
84	M1-94S	[31] S GREEN BAY RD	96 x 18	12.000	--	--	--	--	--	--	--	--	--	ON MAST ARM
85	R10-50(2S)	--	30 x 36	7.500	--	--	--	--	--	--	--	--	--	ON MAST ARM
86	R10-50(2S)	--	30 x 36	7.500	--	--	--	--	--	--	--	--	--	ON MAST ARM

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
87	R6-3(2S)	--	30	x	24	5.000	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
88	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
89	M1-94H	NEWMAN RD	66	x	18	8.250	--	--	--	--	--	--	--	--	--	ON MAST ARM
90	R6-2L(2S)	--	24	x	30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
91	R4-7(2S)	--	24	x	30	5.000	--	1.000	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
92	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
93	M1-94S	[31] S GREEN BAY RD	96	x	18	12.000	--	--	--	--	--	--	--	--	--	ON MAST ARM
94	R1-1F(3)	--	36	x	36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
95	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
96	R3-8E(2S)	--	36	x	30	7.500	--	--	1	--	--	--	--	--	--	MOUNT ON LIGHT POLE
97	R5-1A(2S)	--	36	x	24	6.000	--	--	--	--	1	--	--	--	--	--
98	R3-20L(2S)	--	24	x	36	6.000	--	--	1	1	1	--	--	--	--	--
99	W3-3(2S)	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--
100	W3-3(2S)	--	36	x	36	--	9.000	--	--	--	1	--	--	--	--	--
101	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
102	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	1	1	--	--	1	--	ANGLE SIGN
103	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
104	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
105	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	--	--	--	--	1	104	ANGLE SIGN
106	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
107	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	1	--	--	--	--	--
108	R4-7(2S)	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
109	R6-2L(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
110	R4-7(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
111	R1-1(3)	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	ALSO REMOVE DIVIDED HWY SIGN
112	R6-3A(2S)	--	30	x	24	5.000	--	--	--	--	--	--	--	--	112	--
113	R7-1D(2S)	--	18	x	24	3.000	--	--	1	1	1	--	--	--	--	ANGLE SIGN
114	R1-1(3)	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	--
115	--	NO PARKING	--	x	--	--	--	--	--	--	--	--	1	1	--	--
116	R1-1(3)	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	--
117	R6-2R(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
118	R1-1(3)	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	--
119	R6-3A(2S)	--	30	x	24	5.000	--	--	--	--	--	--	--	--	118	--
120	R4-7(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
121	R4-7(2S)	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
122	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	1	--	--	--	--	--
123	R6-2L(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
124	R6-2L	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
125	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	--	--	--	--	--	ALSO REMOVE SIGN ON BACK
126	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
127	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	--	--	--	--	1	126	ANGLE SIGN
128	R6-2R(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
129	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
130	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	--	1	--	--	1	--	ANGLE SIGN
131	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
132	R4-7(2S)	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
133	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	1	--	--	--	--	--
134	R6-2L(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
135	R6-3A(2S)	--	30	x	24	5.000	--	--	--	--	1	--	--	--	--	BELOW STOP SIGN
136	R1-1(3)	--	36	x	36	7.460	--	--	--	--	--	--	--	--	--	--
137	R1-1(3)	--	36	x	36	7.460	--	--	--	--	--	--	--	--	135	--
138	R4-7(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
139	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
140	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	--	--	--	--	1	139	ANGLE SIGN
141	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
142	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	--	--	--	--	--	141	BACK OF SIGN #141
143	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
144	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	--	--	--	--	1	143	ANGLE SIGN
145	R1-1(3)	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	--
146	R6-3A(2S)	--	30	x	24	5.000	--	--	--	--	--	--	--	--	145	BELOW STOP SIGN
147	R4-7(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
148	R6-2L(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
149	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	1	--	--	--	--	--
150	R4-7(2S)	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
151	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
152	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	--	--	--	--	1	151	ANGLE SIGN
153	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
154	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
155	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	--	--	--	--	1	154	ANGLE SIGN
156	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	--	--	--	--	--	153	BACK OF SIGN #153
157	NOT USED	--	--	x	--	--	--	--	--	--	--	--	--	--	--	--
158	--	CHURCH SIGN	--	x	--	--	--	--	1	1	--	--	--	--	--	--
159	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	--	1	--	--	1	--	ANGLE SIGN
160	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	1	--	--	--	--	--
161	R4-7(2S)	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
162	R6-2L(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
163	R4-7(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
164	R1-1(3)	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	--
165	R6-3A(2S)	--	30	x	24	5.000	--	--	--	--	--	--	--	--	164	BELOW STOP SIGN
166	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
167	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	--	--	--	--	1	166	ANGLE SIGN
168	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	ALSO REMOVE SIGN ON BACK
169	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	--	--	--	--	--	168	BACK OF SIGN #168
170	R1-1(3)	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	--
171	R6-3(2S)	--	30	x	24	5.000	--	--	--	--	--	--	--	--	170	BELOW STOP SIGN
172	R6-2L(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
173	R4-7(2S)	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
174	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
175	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	--	--	--	--	1	174	ANGLE SIGN
176	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	1	--	--	--	--	--
177	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	1	--	--	--	--	--
178	R4-7(2S)	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
179	R6-2L(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
180	R1-1(3)	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	--
181	R6-3(2S)	--	30	x	24	5.000	--	--	--	--	--	--	--	--	180	BELOW STOP SIGN
182	J1-1	--	--	x	--	--	--	--	1	2	--	--	--	--	--	ALSO REMOVE ADVANCE STREET NAME SIGN
183	J1-1(2S)	--	24	x	39	6.500	--	--	--	--	--	--	--	--	184	--
	M2-1	--	21	x	15											
	M1-5A	CTH C	24	x	24											
184	D1-65	SPRING ST NEXT SIGNAL	54	x	21	7.875	--	--	--	--	2	--	--	--	--	--
185	J1-1(2S)	--	24	x	39	6.500	--	--	--	--	--	--	--	--	186	--
	M2-1	--	21	x	15											
	M1-5A	CTH C	24	x	24											
186	D1-65	SPRING ST NEXT SIGNAL	54	x	21	7.875	--	--	--	--	2	--	--	--	--	--
187	R6-2R(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
188	W3-3(2S)	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--
189	W3-3(2S)	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--
190	W12-1D(2S)	--	24	x	24	--	4.000	--	--	--	1	--	--	--	--	2 FT MOUNTING HEIGHT
191	R6-2R(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
192	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	1	--	--	--	--	--
193	R4-7(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
194	R3-2(2S)	--	24	x	24	4.000	--	--	--	--	--	--	--	--	193	--
195	R4-7	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
196	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	1	--	--	--	--	--
197	R4-7	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
198	W12-1D(2S)	--	24	x	24	--	4.000	--	--	--	1	--	--	--	--	2 FT MOUNTING HEIGHT
199	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	1	1	--	--	1	--	ANGLE SIGN
200	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
201	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
202	R3-20L(2S)	--	24	x	36	6.000	--	--	--	--	1	--	--	--	--	--
203	I55-56	--	--	x	--	--	--	--	--	1	1	--	--	1	--	--
204	J4-1(2S)	--	24	x	36	6.000	--	--	1	1	1	--	--	--	--	--
	M3-3	--	24	x	12											
	M1-6	STH 31	24	x	24											
205	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	--	--	--	--	1	204	ANGLE SIGN
206	R1-2(2S)	--	36	x	31	3.880	--	--	1	1	--	--	--	--	--	MOUNT ON LIGHT POLE
207	W12-1D(2S)	--	24	x	24	--	4.000	--	--	--	1	--	--	--	--	2 FT MOUNTING HEIGHT
208	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
209	R1-1F(3)	--	36	x	36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
210	M1-94S	[C] SPRING ST	66	x	18	8.250	--	--	--	--	--	--	--	--	--	ON MAST ARM
211	R10-50(2S)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	--	ON SIGNAL POLE ABOVE SIGNAL HEAD
212	R1-1F(3)	--	36	x	36	--	--	7.460	1	--	--	--	--	--	--	ON SIGNAL POLE; ALSO REMOVE KEEP RIGHT
213	R4-7(2S)	--	24	x	30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
214	R4-7(2S)	--	24	x	30	5.000	--	--	1	--	--	--	--	--	--	ON SIGNAL POLE; ALSO REMOVE FOLDING STOP
215	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
216	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
217	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
218	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	1	--	--	--	--	--
219	R1-1F(3)	--	36	x	36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
220	J3-2(2S)	--	48	x	57	19.000	--	--	1	--	--	--	--	--	--	MOUNT HIGH ON SIGNAL POLE
	M3-4	--	24	x	12											
	M1-5A	CTH C	24	x	24											
	M6-1	--	21	x	21											
	M3-2	--	24	x	12											
	M1-5A	CTH C	24	x	24											
	M6-1	--	21	x	21											
221	R5-1A(2S)	--	36	x	24	6.000	--	--	--	--	1	--	--	--	--	--
222	R3-20L(2S)	--	24	x	36	6.000	--	--	1	1	1	--	--	--	--	--
223	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	1	1	--	--	--	--	--	--
224	J2-2(2S)	--	48	x	57	19.000	--	--	1	1	1	--	--	--	--	--
	M3-4	--	24	x	12											
	M1-5A	CTH C	24	x	24											
	M5-1L	--	21	x	21											
	M3-2	--	24	x	12											
	M1-5A	CTH C	24	x	24											
	M5-1R	--	21	x	21											
225	R4-7(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
226	R3-2(2S)	--	24	x	24	4.000	--	--	--	--	--	--	--	--	225	--
227	R1-1(3)	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	--
228	R3-53R(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
229	M1-94S	[31] S GREEN BAY RD	96	x	18	12.000	--	--	--	--	--	--	--	--	--	ON MAST ARM

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
230	M1-94S	[31] S GREEN BAY RD	96	x	18	12.000	--	--	--	--	--	--	--	--	--	ON MAST ARM
231	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	1	--	--	--	--	--
232	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
233	R1-1F(3)	--	36	x	36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
234	R1-1F(3)	--	36	x	36	--	--	7.460	1	--	1	--	--	--	--	ALSO REMOVE KEEP RIGHT
235	R4-7(2S)	--	24	x	30	5.000	--	--	--	--	--	--	--	--	234	--
236	J3-2	--	--	x	--	--	--	--	1	--	--	--	--	--	--	REMOVE FROM LIGHT POLE
237	R10-50(2S)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	--	ON MAST ARM
238	R5-1A(2S)	--	36	x	24	6.000	--	--	--	--	1	--	--	--	--	--
239	J3-1(2S)	--	24	x	57	9.500	--	--	--	--	--	--	--	--	238	BACK OF SIGN #238
	M3-4	--	24	x	12											
	M1-5A	CTH C	24	x	24											
	M6-1	--	21	x	21											
240	J3-1(2S)	--	24	x	57	9.500	--	--	--	--	1	--	--	--	--	--
	M3-2	--	24	x	12											
	M1-5A	CTH C	24	x	24											
	M6-1	--	21	x	21											
241	R3-20L(2S)	--	24	x	36	6.000	--	--	1	1	1	--	--	--	--	--
242	J2-2	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
243	--	NO PARKING 6AM-3PM...	--	x	--	--	--	--	--	1	1	--	--	1	--	MOVE TO STA 181+25 - ANGLE SIGN
244	JH-1(2S)	--	24	x	45	7.500	--	--	1	1	1	--	--	--	--	--
	D9-2	--	24	x	24											
	MB6-1	--	21	x	21											
245	R3-8Y(2S)	--	36	x	30	7.500	--	--	--	--	1	--	--	--	--	--
246	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	--	--	--	--	245	BACK OF SIGN #245
247	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
248	I55-56	--	--	x	--	--	--	--	--	1	1	--	--	1	--	--
249	J4-1(2S)	--	24	x	36	6.000	--	--	--	--	1	--	--	--	--	--
	M3-1	--	24	x	12											
	M1-6	STH 31	24	x	24											
250	R6-2L(2M)	--	30	x	36	7.500	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
251	M1-94S	[C] SPRING ST	66	x	18	8.250	--	--	--	--	--	--	--	--	--	ON MAST ARM
252	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
253	R1-1F(3)	--	36	x	36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
254	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	1	--	--	--	--	--
255	R4-7(2S)	--	24	x	30	5.000	--	--	--	--	--	--	--	--	254	BACK OF SIGN #254
256	J2-2(2S)	--	48	x	57	19.000	--	--	--	--	1	--	--	--	--	--
	M3-2	--	24	x	12											
	M1-5A	CTH C	24	x	24											
	M5-1L	--	21	x	21											
	M3-4	--	24	x	12											
	M1-5A	CTH C	24	x	24											
	M5-1R	--	21	x	21											

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SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
257	J2-2(2S)	--	48	x	57	19.000	--	--	--	--	1	--	--	--	--	--
	M3-2	--	24	x	12											
	M1-5A	CTH C	24	x	24											
	M5-1L	--	21	x	21											
	M3-4	--	24	x	12											
	M1-5A	CTH C	24	x	24											
	M5-1R	--	21	x	21											
258	W3-3(2S)	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--
259	W3-3(2S)	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--
260	D1-65	SPRING ST NEXT SIGNAL	54	x	21	7.875	--	--	1	2	2	--	--	--	--	ALSO REMOVE J ASSEMBLY
261	D1-65	SPRING ST NEXT SIGNAL	54	x	21	7.875	--	--	--	--	2	--	--	--	--	--
262	J1-1(2S)	--	24	x	39	6.500	--	--	--	--	1	--	--	--	--	--
	M2-1	--	21	x	15											
	M1-5A	CTH C	24	x	24											
263	J1-1(2S)	--	24	x	39	6.500	--	--	--	--	1	--	--	--	--	--
	M2-1	--	21	x	15											
	M1-5A	CTH C	24	x	24											
264	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
265	--	NO PARKING 6AM-3PM…	--	x	--	--	--	--	--	--	--	--	--	1	264	ANGLE SIGN
266	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
267	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	--	--	--	--	--	266	BACK OF SIGN #266
268	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
269	J1-1(2S)	--	24	x	39	6.500	--	--	--	--	1	--	--	--	--	--
	M2-1	--	21	x	15											
	M1-5A	CTH MM	24	x	24											
270	J1-1(2S)	--	24	x	39	6.500	--	--	1	1	1	--	--	--	--	--
	M2-1	--	21	x	15											
	M1-5A	CTH MM	24	x	24											
271	--	NO PARKING 6AM-3PM…	--	x	--	--	--	--	--	--	--	--	--	1	270	ANGLE SIGN
272	--	HWY 38 EASTBOUND TRUCK…	--	x	--	--	--	--	--	2	--	2	--	1	--	--
273	R4-7(2S)	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
274	R1-1(3)	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	--
275	R4-7(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
276	J2-1(2S)	--	24	x	57	9.500	--	--	1	1	--	--	--	--	--	MOUNT ON UPRIGHT
	M3-1	--	24	x	12											
	M1-5A	CTH MM	24	x	24											
	M5-2R	--	21	x	21											
277	R3-6R(2S)	--	42	x	48	14.000	--	--	--	--	--	--	--	--	--	INSTALL ON S-51-XXX
278	R3-5R(2S)	--	42	x	48	14.000	--	--	--	--	--	--	--	--	--	INSTALL ON S-51-XXX
279	W3-3(2S)	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--
280	W3-3(2S)	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--
281	R3-7R(3)	--	36	x	36	9.000	--	--	1	1	1	--	--	--	--	--

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SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
282	R3-7R(3)	--	36	x	36	9.000	--	--	--	--	1	--	--	--	--	--
283	J3-1(2S)	--	24	x	57	9.500	--	--	1	1	1	--	--	--	--	--
	M3-1	--	24	x	12											
	M1-5A	CTH MM	24	x	24											
	M6-2	--	21	x	21											
284	--	CLASS B WEIGHT LIMIT	--	x	--	--	--	--	--	--	--	--	--	1	283	--
285	R2-1(3)	35 MPH	36	x	48	12.000	--	--	1	1	1	--	--	--	--	--
286	R2-1(3)	35 MPH	36	x	48	12.000	--	--	1	1	1	--	--	--	--	--
287	R5-1A(2S)	--	36	x	24	6.000	--	--	--	--	--	--	--	--	288	BACK OF SIGN #288
288	J3-1(2S)	--	24	x	57	9.500	--	--	1	1	1	--	--	--	--	--
	M3-1	--	24	x	12											
	M1-5A	CTH MM	24	x	24											
	M6-2	--	21	x	21											
289	W12-1D(2S)	--	24	x	24	--	4.000	--	--	--	--	--	--	--	288	2 FT MOUNTING HEIGHT
290	R1-1F(3)	--	36	x	36	--	--	7.460	1	--	1	--	--	--	--	--
291	R3-3(2S)	--	24	x	24	4.000	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
292	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	291	MOUNT ON SIGNAL POLE
293	W1-8(2S)	--	18	x	24	--	3.000	--	1	1	1	--	--	--	--	2 FT MOUNTING HEIGHT
294	W1-8(2S)	--	18	x	24	--	3.000	--	1	1	1	--	--	--	--	2 FT MOUNTING HEIGHT
295	W1-8(2S)	--	18	x	24	--	3.000	--	1	1	1	--	--	--	--	2 FT MOUNTING HEIGHT
296	R4-7(2S)	--	24	x	30	5.000	--	--	1	1	--	--	--	--	290	BACK OF SIGN #290
297	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
298	R6-2L(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
299	J3-1(2S)	--	24	x	57	9.500	--	--	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
	M3-4	--	24	x	12											
	M1-6	STH 31	24	x	24											
	M6-1	--	21	x	21											
300	R5-1(2S)	--	30	x	30	6.250	--	--	1	1	--	--	--	--	--	MOUNT ON SIGNAL POLE
301	R1-1F(3)	--	36	x	36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
302	R3-18(2S)	--	24	x	24	4.000	--	--	1	--	1	--	--	--	--	--
303	R1-1F(3)	--	36	x	36	--	--	7.460	--	--	--	--	--	--	302	--
304	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	--	302	BACK OF SIGN #302
305	R4-7(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
306	R6-2R(2S)	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
307	R1-1F(3)	--	36	x	36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
308	W12-1D(2S)	--	24	x	24	--	4.000	--	--	--	1	--	--	--	--	2 FT MOUNTING HEIGHT
309	R3-3	--	--	x	--	--	--	--	1	--	--	--	--	--	--	ALSO REMOVE FOLDING STOP AND DO NOT ENTER
310	W1-8(2S)	--	18	x	24	--	3.000	--	1	1	1	--	--	--	--	2 FT MOUNTING HEIGHT
311	W1-8(2S)	--	18	x	24	--	3.000	--	1	1	1	--	--	--	--	2 FT MOUNTING HEIGHT
312	W1-8(2S)	--	18	x	24	--	3.000	--	1	1	1	--	--	--	--	2 FT MOUNTING HEIGHT

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
313	--	CLASS B WEIGHT LIMIT	--	x	--	--	--	--	--	1	1	--	--	1	--	--
314	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	--	--	--	--	313	BACK OF SIGN #313
315	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
316	R4-7(2S)	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
317	R1-2(2S)	--	36	x	31	3.880	--	--	1	1	1	--	--	--	--	--
318	M1-85	--	--	x	--	--	--	--	1	--	--	--	--	--	--	ALSO REMOVE MI-85B FROM POLE
319	R3-52	--	30	x	36	7.500	--	--	1	1	1	--	--	--	--	--
320	J4-1(3)	--	36	x	54	13.500	--	--	1	1	1	--	--	--	--	--
	M3-1	--	36	x	18											
	M1-6	STH 31	36	x	36											
321	R5-1A(2S)	--	36	x	24	6.000	--	--	1	1	1	--	--	--	--	--
322	R7-53(2M)	--	24	x	30	5.000	--	--	--	--	--	--	--	--	321	ANGLE SIGN
323	--	EXCEPT LEGAL HOLIDAYS	--	x	--	--	--	--	--	--	--	--	--	1	321	ANGLE SIGN
324	W3-3(3)	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--
325	W3-3(3)	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--
326	J2-2(2S)	--	48	x	57	19.000	--	--	1	1	1	--	--	--	--	--
	M3-3	--	24	x	12											
	M1-6	STH 31	24	x	24											
	M5-1L	--	21	x	21											
	M3-1	--	24	x	12											
	M1-6	STH 31	24	x	24											
	M5-1R	--	21	x	21											
327	W3-3(2S)	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--
328	J1-1(2S)	--	24	x	39	6.500	--	--	1	1	1	--	--	--	--	--
	M2-1	--	21	x	15											
	M1-6	STH 31	24	x	24											
329	J1-1(2S)	--	24	x	39	6.500	--	--	1	1	1	--	--	--	--	--
	M2-1	--	21	x	15											
	M1-6	STH 31	24	x	24											
330	J3-1	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
	--	--	--	x	--											
	--	--	--	x	--											
	--	--	--	x	--											
331	J3-1(2S)	--	24	x	57	9.500	--	--	1	1	1	--	--	--	--	--
	M3-2	--	24	x	12											
	M1-6	STH 20	24	x	24											
	M6-1	--	21	x	21											
332	R3-20L(2S)	--	24	x	36	6.000	--	--	1	1	1	--	--	--	--	--
333	R5-1A(2S)	--	36	x	24	6.000	--	--	--	--	1	--	--	--	--	--
334	J3-1(2S)	--	24	x	57	9.500	--	--	1	--	--	--	--	--	--	MOUNT ON UPRIGHT OF S-51-215
	M3-1	--	24	x	12											ALSO REMOVE SPEED LIMIT SIGN BEHIND
	M1-6	STH 31	24	x	24											
	M6-1	--	21	x	21											

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
335	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	1	--	--	--	--	--	--	MOUNT ON LIGHT POLE
336	R3-5L(2S)	--	42	x	48	14.000	--	--	1	--	--	--	--	--	--	INSTALL ON S-51-215
337	R3-5L(2S)	--	42	x	48	14.000	--	--	1	--	--	--	--	--	--	INSTALL ON S-51-215
338	R2-1(2S)	35 MPH	24	x	30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON UPRIGHT OF S-51-215
339	J3-1	--	--	x	--	--	--	--	1	--	--	--	--	--	--	REMOVE FROM UPRIGHT
340	R3-5L	--	--	x	--	--	--	--	1	--	--	--	--	--	--	REMOVE FROM OVERHEAD SIGN SUPPORT
341	R3-5L	--	--	x	--	--	--	--	1	--	--	--	--	--	--	REMOVE FROM OVERHEAD SIGN SUPPORT
342	R5-1A(2S)	--	--	x	--	--	--	--	--	--	--	--	--	--	343	BACK OF SIGN #343
343	J3-2(2S)	--	48	x	57	19.000	--	--	1	1	1	--	--	--	--	--
	M3-4	--	24	x	12											
	M1-6	STH 20	24	x	24											
	M6-1	--	21	x	21											
	M3-1	--	24	x	12											
	M1-6	STH 31	24	x	24											
	M6-1	--	21	x	21											
344	R3-55L	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
345	J3-1	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
346	R3-5L(2S)	--	42	x	48	14.000	--	--	--	--	--	--	--	--	--	INSTALL ON S-51-XXX
347	R3-5L(2S)	--	42	x	48	14.000	--	--	--	--	--	--	--	--	--	INSTALL ON S-51-XXX
348	R3-20L(2S)	--	24	x	36	6.000	--	--	--	--	1	--	--	--	--	--
349	W3-3(2S)	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--
350	R7-1D(2S)	--	18	x	24	3.000	--	--	1	1	1	--	--	--	--	ANGLE SIGN
351	R6-2R(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
352	R6-2R(2S)	--	24	x	30	5.000	--	--	--	--	--	--	--	--	351	BACK OF SIGN #351
353	R4-7	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
354	R4-7	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
355	R7-1D(2S)	--	18	x	24	3.000	--	--	1	1	1	--	--	--	--	ANGLE SIGN
356	J2-2(2S)	--	48	x	57	19.000	--	--	1	2	1	--	--	--	--	--
	M3-3	--	24	x	12											
	M1-6	STH 31	24	x	24											
	M5-1L	--	21	x	21											
	M3-1	--	24	x	12											
	M1-6	STH 31	24	x	24											
	M5-1R	--	21	x	21											
357	R4-7(2S)	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
358	R1-1(3)	--	36	x	36	7.460	--	--	1	1	1	--	--	--	--	--
359	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	1	--	--	--	--	--
360	R6-2L(2S)	--	24	x	30	5.000	--	--	--	--	--	--	--	--	--	MOUNT ON LIGHT POLE
361	R5-1(2S)	--	30	x	30	6.250	--	--	--	--	1	--	--	--	--	--
362	R4-7(2S)	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
363	R6-2L(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
364	R2-1(2S)	30 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
365	R2-1(2S)	30 MPH	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
366	R7-1D(2S)	--	18	x	24	3.000	--	--	1	1	1	--	--	--	--	ANGLE SIGN

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
367	J1-1(2S)	--	24	x	39	6.500	--	--	1	1	1	--	--	--	--	--
	M2-1	--	21	x	15											
	M1-6	STH 31	24	x	24											
368	J1-1(2S)	--	24	x	39	6.500	--	--	1	--	--	--	--	--	--	MOUNT ON LIGHT POLE
	M2-1	--	21	x	15											
	M1-6	STH 31	24	x	24											
369	R4-7	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
370	R4-7	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
371	R6-2R(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
372	R6-2R(2S)	--	24	x	30	5.000	--	--	--	--	--	--	--	--	371	BACK OF SIGN #371
373	R4-7(2S)	--	24	x	30	5.000	--	--	1	1	1	--	--	--	--	--
374	R3-8A(2S)	--	36	x	30	7.500	--	--	1	--	--	--	--	--	--	MOUNT ON POWER POLE
375	W3-3(2S)	--	36	x	36	--	9.000	--	1	--	--	--	--	--	--	MOUNT ON POWER POLE
376	J1-1(2S)	--	24	x	39	6.500	--	--	1	1	1	--	--	--	--	--
	M2-1	--	21	x	15											
	M1-6	STH 31	24	x	24											
377	J1-1(2S)	--	24	x	39	6.500	--	--	1	1	1	--	--	--	--	--
	M2-1	--	21	x	15											
	M1-6	STH 31	24	x	24											
378	W3-3(2S)	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--
379	W3-3(2S)	--	36	x	36	--	9.000	--	1	1	1	--	--	--	--	--
380	J2-3(2S)	--	72	x	57	28.500	--	--	1	2	2	--	--	--	--	ALSO REMOVE DESINATION SIGN
	M3-1	--	24	x	12											
	M1-6	STH 31	24	x	24											
	M5-1L	--	21	x	21											
	M3-2	--	24	x	12											
	M1-5A	CTH C	24	x	24											
	M6-1	--	21	x	21											
	M3-3	--	24	x	12											
	M1-6	STH 31	24	x	24											
	M5-1R	--	21	x	21											
381	D2-2	HARBOR 3 DOWNTOWN 3	72	x	24	12.000	--	--	--	--	--	--	--	--	380	--
382	R3-20L(2S)	--	24	x	36	6.000	--	--	1	1	1	--	--	--	--	--
383	R3-2	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
384	R3-2	--	--	x	--	--	--	--	1	1	--	--	--	--	--	--
385	J3-1(2S)	--	24	x	57	9.500	--	--	--	--	1	--	--	--	--	--
	M3-1	--	24	x	12											
	M1-6	STH 31	24	x	24											
	M6-1	--	21	x	21											
386	R6-2R(2S)	--	24	x	30	5.000	--	--	--	--	1	--	--	--	--	--
387	R3-8Y(2S)	--	36	x	30	7.500	--	--	--	--	1	--	--	--	--	--
388	R3-7R(3)	--	36	x	36	9.000	--	--	1	1	1	--	--	--	--	--
389	R7-1R(2S)	--	18	x	24	3.000	--	--	1	1	--	--	1	--	--	ANGLE SIGN

FILE NAME : N:\SPO\Operations\Signing\Miscellaneous Quantities\2390-09-70\030501_mq.pptx PLOT DATE : 12-SEP-2016 PLOT BY : DOTKLM PLOT NAME : 030501_mq.pdf PLOT SCALE : 1:1

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	638.2602 REM SIGNS TYPE II [EA]	638.3000 REM SMALL SIGN SUP [EA]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	634.0622 WOOD POSTS 4"X 6"x22' [EA]	634.0814 TUBULAR STEEL POSTS 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
390	J3-1(2S)	--	24 x 57	9.500	--	--	1	1	1	--	--	--	--	--
	M3-3	--	24 x 12											
	M1-6	STH 31	24 x 24											
	M6-2	--	21 x 21											
391	R3-7R(3)	--	36 x 36	9.000	--	--	--	--	1	--	--	--	--	--
392	R7-1D(2S)	--	18 x 24	3.000	--	--	1	1	--	--	1	--	--	ANGLE SIGN
393	J1-1(2S)	--	24 x 39	6.500	--	--	1	--	1	--	--	--	--	ALSO REMOVE R3-8 SIGN
	M2-1	--	21 x 15											
	M1-6	STH 31	24 x 24											
394	R3-7R(3)	--	36 x 36	9.000	--	--	--	--	1	--	--	--	--	--
395	R4-7(2S)	--	24 x 30	5.000	--	--	--	--	1	--	--	--	--	--
396	R1-1(3)	--	36 x 36	7.460	--	--	--	--	1	--	--	--	--	--
397	R5-2(2S)	--	24 x 24	4.000	--	--	--	--	--	--	--	--	396	POSITION BEHIND STOP SIGN WITHIN EDGES
398	R4-7(2S)	--	24 x 30	5.000	--	--	--	--	--	--	--	--	396	--
399	R7-1R(2S)	--	18 x 24	3.000	--	--	1	1	--	--	1	--	--	ANGLE SIGN
400	R3-9B	--	-- x --	--	--	--	1	1	--	--	--	--	--	--
401	J4-1(2S)	--	24 x 36	6.000	--	--	1	--	1	--	--	--	--	ALSO REMOVE SPEED LIMIT SIGN
	M3-2	--	24 x 12											
	M1-5A	CTH C	24 x 24											
402	R2-1(2S)	35 MPH	24 x 30	5.000	--	--	--	--	--	--	--	--	401	--
403	R7-1D(2S)	--	18 x 24	3.000	--	--	1	--	--	--	1	--	--	ANGLE SIGN
404	J13-1(2S)	--	24 x 45	7.500	--	--	1	1	1	--	--	--	--	ALSO REMOVE DOUBLE ARROW AND
	M1-5A	CTH C	24 x 24											OBJECT MARKER SIGNS
	M6-4	--	21 x 21											
405	W1-7(2S)	--	48 x 24	--	8.000	--	--	--	--	--	--	--	404	--
406	--	NO PARKING DURING SNOW...	-- x --	--	--	--	1	--	--	--	1	1	--	--
407	R1-1	--	-- x --	--	--	--	--	1	--	--	--	1	--	MOVE CITY OWNED SOLAR BLINKER SIGN
408	R59-51(2S)	--	36 x 36	9.000	--	--	1	1	1	--	--	--	--	--
409	R7-2	NO PARKING	-- x --	--	--	--	--	--	--	--	--	1	408	ANGLE SIGN
410	R1-1F(3)	--	36 x 36	--	--	7.460	1	--	--	--	--	--	--	MOUNT ON SIGNAL POLE
411	R10-50(2S)	--	30 x 36	7.500	--	--	--	--	--	--	--	--	--	ON MAST ARM
412	R10-50(2S)	--	30 x 36	7.500	--	--	--	--	--	--	--	--	--	ON MAST ARM
--	--	--	-- x --	--	--	--	--	--	--	--	--	--	--	--
TOTALS				2055.970	215.000	209.880	216	173	227	2	6	26		

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

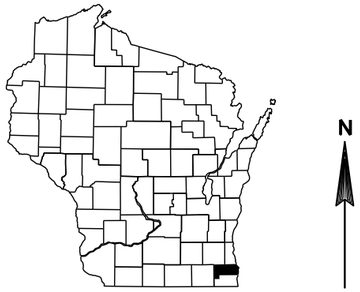
TRANSPORTATION PROJECT PLAT TITLE SHEET

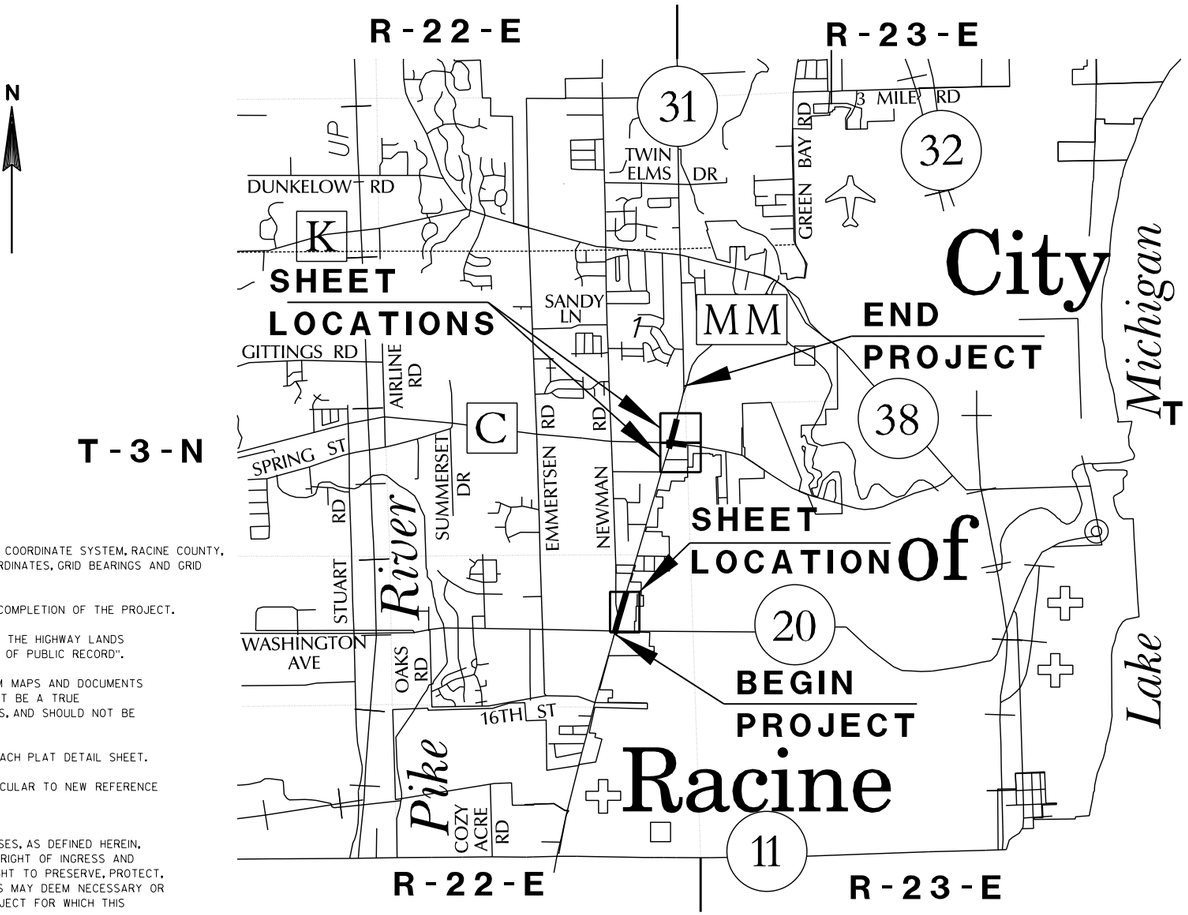
PROJECT NO. 2390-09-20
GREEN BAY ROAD

STH 20 TO CTH MM

STH 31

RACINE COUNTY





NOTES:

POSITIONS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD83, (2011) ADJUSTMENT, IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS NOTED ON EACH PLAT DETAIL SHEET.

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

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON 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 NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	℄
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CONCRETE	CONC.	TEMPORARY LIMITED EASEMENT	TLE
CORNER	COR.	VILLAGE	VILL.
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	WITNESS	WIT.
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC	**CURVE DATA**	
MONUMENT	MON.	POINT OF INTERSECTION	PI
PAGE	P.	LONG CHORD	LCH
PERMANENT LIMITED EASEMENT	PLE	LONG CHORD BEARING	LCB
PROPERTY LINE	PL	RADIUS	R
RECORDED AS	(100')	DEGREE OF CURVE	D
		CENTRAL ANGLE OR DELTA	DELTA
		LENGTH OF CURVE	L
		TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	Ø (1" UNLESS NOTED)	BUILDING	
		PROPOSED R/W LINE	
R/W MONUMENT	•(SET)	EXISTING H.E. LINE	
R/W STANDARD	▲(SET)	PROPERTY LINE	
SIGN	ISIGN	LOT & TIE LINES	
SECTION CORNER MONUMENT		SLOPE INTERCEPTS	
SECTION CORNER SYMBOL		CORPORATE LIMITS	
		NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		NO ACCESS (BY ACQUISTION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
PROPOSED R/W POINT	PRW100	QUARTER LINE	
TEMPORARY LIMITED EASEMENT POINT	T1	SIXTEENTH LINE	
PARCEL NUMBER	1	EXISTING CENTERLINE	
UTILITY PARCEL NUMBER	80	PROPOSED REFERENCE LINE	
SIGN NUMBER (OFF PREMISE)	21-P	PARALLEL OFFSET	

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

	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2390-09-20 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\040100_rp.dgn
PLOT DATE : 3/30/2016
PLOT BY : gaspemc
PLOT NAME :
PLOT SCALE : 1:100

HIGHWAY	BASIS OF EXISTING R/W	YEAR	WIDTH
STH 31	PROJECT 2390-3-22	1979	120'
STH 20	PROJECT 2440-01-20	1997	VARIES
NEWMAN ROAD	CSM 2356	2001	VARIES

TRANSPORTATION PROJECT PLAT NO: 2390-09-20 - 4.01

AMENDMENT 1 - AMENDS PARCEL 4 OF TRANSPORTATION PROJECT PLAT 2390-09-20 - 4.01. RECORDED AS DOC. NO. 2432035.

THAT PART OF OUTLOT 1 OF CSM 2356 IN AND INCLUDING THAT PART OF THE SE 1/4 OF THE NW 1/4 AND THE SW 1/4 OF THE NE 1/4 OF SECTION 13, TOWN 3 NORTH, RANGE 22 EAST, VILLAGE OF MOUNT PLEASANT, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER GREEN BAY ROAD (STH 20 TO CTH MM), STH 31 RACINE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

Document #: **2444934**
Date: 09-13-2016 Time: 03:10 PM Pages: 1
Fee: $25.00 County: RACINE State: WI
Requesting Party: WiDotSeRegionWaukesha
Register of Deeds: TYSON FETTES
~~RACINE COUNTY REGISTER OF DEEDS~~

The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegionWaukesha

292

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2390-09-20 -4.01
AMENDMENT NO: 1

This is a copy. The original is at the ROD office

TLE COURSE TABLE

COURSE	BEARING	DISTANCE
T1-T2	N17°44'28"E	86.82'
T2-T3	N29°30'33"E	61.29'
T3-T4	N17°44'28"E	66.31'
T4-T5	N24°51'58"E	129.68'
T5-T6	N89°49'49"E	1.49'
T7-T8	S72°15'32"E	5.00'
T8-T9	S17°44'28"W	43.84'
T9-T10	S00°11'16"W	33.16'
T10-T11	S72°15'32"E	14.51'
T11-T12	S17°44'28"W	52.54'
T12-T13	S46°18'19"W	73.20'
T14-T15	S72°15'32"E	15.00'
T15-T16	S17°44'28"W	170.00'
T16-T17	N72°15'32"W	10.00'
T17-T18	S17°44'28"W	33.00'
T18-T19	S27°15'32"E	9.90'
T19-T20	S45°47'45"E	13.81'
T20-T21	S33°39'49"W	5.00'
T22-T23	N03°26'50"E	10.00'
T23-T24	S85°57'48"E	59.51'
T24-T25	S80°36'07"E	72.47'
T25-T26	S87°43'37"E	111.43'
T26-T27	S00°27'09"E	12.01'
T28-T29	N17°44'28"E	190.50'
T29-PRW102	S17°15'32"E	8.00'

TLE POINT STATION & OFFSET TABLE

POINT	STATION	OFFSET
T1	115+75.19	90.00'
T2	116+62.00	90.00'
T3	117+22.00	77.50'
T4	117+88.31	77.50'
T5	119+16.99	61.42'
T6	119+17.45	60.00'
T7	116+12.00	60.00'
T8	116+12.00	70.00'
T9	115+68.16	70.00'
T10	115+35.00	80.49'
T11	115+35.00	95.00'
T12	114+82.46	95.00'
T13	114+18.17	60.00'
T14	110+40.00	60.00'
T15	110+40.00	75.00'
T16	108+70.00	75.00'
T17	108+70.00	65.00'
T18	108+37.00'	65.00'
T19	108+30.00	72.00'
T20	108+23.85	84.36'
T21	108+19.04	82.99'
T22	388+90.00	66.63'
T23	388+90.00	76.63'
T24	389+50.30	75.71'
T25	390+22.97	67.00'
T26	391+34.41	67.00'
T27	391+34.98	55.00'
T28	108+29.50	74.00'
T29	110+20.00	74.00'

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
80	WE ENERGIES - ELECTRIC	ROR
82	AT&T WISCONSIN	ROR
83	VILLAGE OF MOUNT PLEASANT	ROR
84	TIME WARNER CABLE	ROR
85	RACINE WATER UTILITY	ROR
86	WINDSTREAM PAETEC	ROR

(80) WE ENERGIES - ELECTRIC
V. 1154, P. 456, DOC. 910228 - PARCEL 2 8' ELECTRIC EASEMENT.
V. 2012, P. 92, DOC. 1720615 - PARCEL 2 8' ELECTRIC EASEMENT.
DOC. 2170389 - PARCEL 4 20' & 24' ELECTRIC EASEMENT.
NO RECORD OF EASEMENT. - PARCEL 55 POWER POLE
V. 3343, P. 352, DOC. 1809601 - PARCEL 13 12' ELECTRIC EASEMENT.

(82) AT&T WISCONSIN
V. 2012, P. 92, DOC. 1720615 - PARCEL 2 8' TELECOMMUNICATION EASEMENT.
DOC. 2170389 - PARCEL 4 20' & 24' TELECOMMUNICATION EASEMENT.
V. 3343, P. 352, DOC. 1809601 - PARCEL 13 12' TELECOMMUNICATION EASEMENT.

(83) VILLAGE OF MOUNT PLEASANT
V. 7, P. 9286, DOC. 1800907 (CSM 2356) - PARCEL 13 20' STORM SEWER EASEMENT.

(84) TIME WARNER CABLE
NO RECORD OF EASEMENT PARCEL 2.

(85) RACINE WATER UTILITY
NO RECORD OF EASEMENT.- PARCEL 4 HYDRANT

(86) WINDSTREAM PAETEC
NO RECORD OF EASEMENT.- PARCEL 4 FIBER OPTIC LINE

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, WHICH IS SHEET 2 OF 2 OF DOCUMENT NO. 2432035.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

POSITIONS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD 83, (2011) ADJUSTMENT, IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES. GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE DEPARTMENT OF TRANSPORTATION REGION OFFICE IN WAUKESHA.

EXISTING ACCESS CONTROL ALONG STH 31 AND STH 20 ESTABLISHED FROM PREVIOUS PROJECTS T065-1(3) AND 2440-01-20.

SCHEDULE OF LANDS AND INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	TLE
1	MILLS ENTERPRISES, LLC	FEE/TLE	0.007	0.000	0.007	0.035
2	KIWILAND, LLC	FEE/TLE	0.004	0.000	0.004	0.031
3	W/S AIRWAVES, LTD. n/k/a FASTRACK, INC.	FEE/TLE	0.001	0.000	0.001	0.053
4	RUTH P. GUENTHER AND HER SUCCESSORS IN OFFICE, AS TRUSTEE OF THE HENRY PINEKENSTEIN JR. FAMILY TRUST DATED DECEMBER 30, 1997, et al.	FEE/TLE	0.041	0.000	0.041	0.034
5	MARVIN HOLDINGS LLC	TLE	____	____	____	0.005
9	WISCONSIN RETAIL STORES, LLC	FEE/TLE	0.002	0.000	0.002	0.003
11	PEGGY L. SHUMWAY & MARK A. SHUMWAY	FEE/TLE	0.002	0.000	0.002	0.013
12	PEGGY L. SHUMWAY & MARK A. SHUMWAY	TLE	____	____	____	0.002
13	ORIX BRADFORD MT. PLEASANT VENTURE	FEE/TLE	0.021	0.000	0.021	0.036
14	LAVERNE E. KERKMAN	FEE/TLE	0.046	0.000	0.046	0.033
55	PINNACLE REALTY SERVICES, LLC.	FEE/TLE	0.022	0.000	0.022	0.045

PRW COURSE TABLE

COURSE	BEARING	DISTANCE
PRW102-PRW117	S72°15'32"E	1.00'
PRW115-PRW116	S02°16'23"W	2.00'
PRW118-PRW119	S87°44'04"E	5.19'

PRW110-PRW111
L 23.25'
R 30.50'
LCH 22.69'
LCB S31°35'05"E

gai consultants
transforming ideas into reality
W175 N11081 STONEWOOD DR, SUITE 103
GERMANTOWN, WI 53022
262.250.8000 • Fax 262.250.8011

I, STEVEN R. BOLL, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 2390-09-20-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN STEVEN R. BOLL S-1217 SHEBOYGAN, WIS. LAND SURVEYOR

DATE 8-25-16
STEVEN R. BOLL S-1217

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

DATE 09/07/16
ROBERT L. DUFFECK, PLS

BEGINNING LIMITS RELOCATION ORDER
STA. 107+18.11 (STH 31)=
STA. 386+41.14 (STH 20)
X=183,034.09
Y=622,991.73

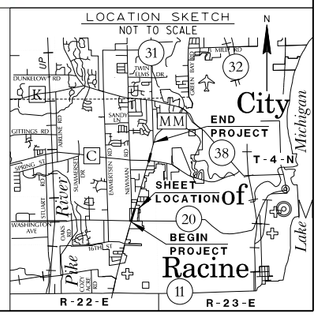
EAST LIMITS RELOCATION ORDER
STA. 391+34.98
X=183,025.69
Y=623,485.43

WIT. MON. 174209
CONC. MON. W/BRASS CAP
Y=183,037.43
X=625,707.59

STH 20 &
PI STA. 388+74.79
Y 183,014.03
X 623,224.55
PC STA. 387+42.16
PT STA. 390+07.41
DELTA 02°39'09"
D 01°00'00"
L 265.25'
R 5729.58'
LCH 265.23'
LCB S86°24'02"E

TRUE COR. CALCULATED
Y=182,937.44
X=625,708.86

LOCATION SKETCH
NOT TO SCALE



SCALE, FEET
0 50 100

FILE NAME : I:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\040101_rp.dgn
PLOT DATE : PLOT DATE : 9/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:150
STH 31 2390-09-20 4.01

TRANSPORTATION PROJECT PLAT NO: 2390-09-20 - 4.02

THAT PART OF LOT 1 OF CSM 2667 AND LOTS 1, 2, 3, AND 4 OF BLOCK 1 OF LARSEN'S SUBDIVISION IN HIGHLAND PARK IN AND INCLUDING THAT PART OF THE SE 1/4 OF THE NE 1/4 OF SECTION 12, TOWN 3 NORTH, RANGE 22 EAST, AND THAT PART OF THE SW OF THE NW 1/4 OF SECTION 7, TOWN 3 NORTH, RANGE 23 EAST, VILLAGE OF MOUNT PLEASANT, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER GREEN BAY ROAD (STH 20 TO CTH MM), STH 31 RACINE COUNTY

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

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

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

Document #: **2438975**
Date: 07-06-2016 Time: 02:41 PM Pages: 1
Fee: $25.00 County: RACINE State: WI
Requesting Party: WiDotSeRegionWaukesha
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2390-09-20 -4.02

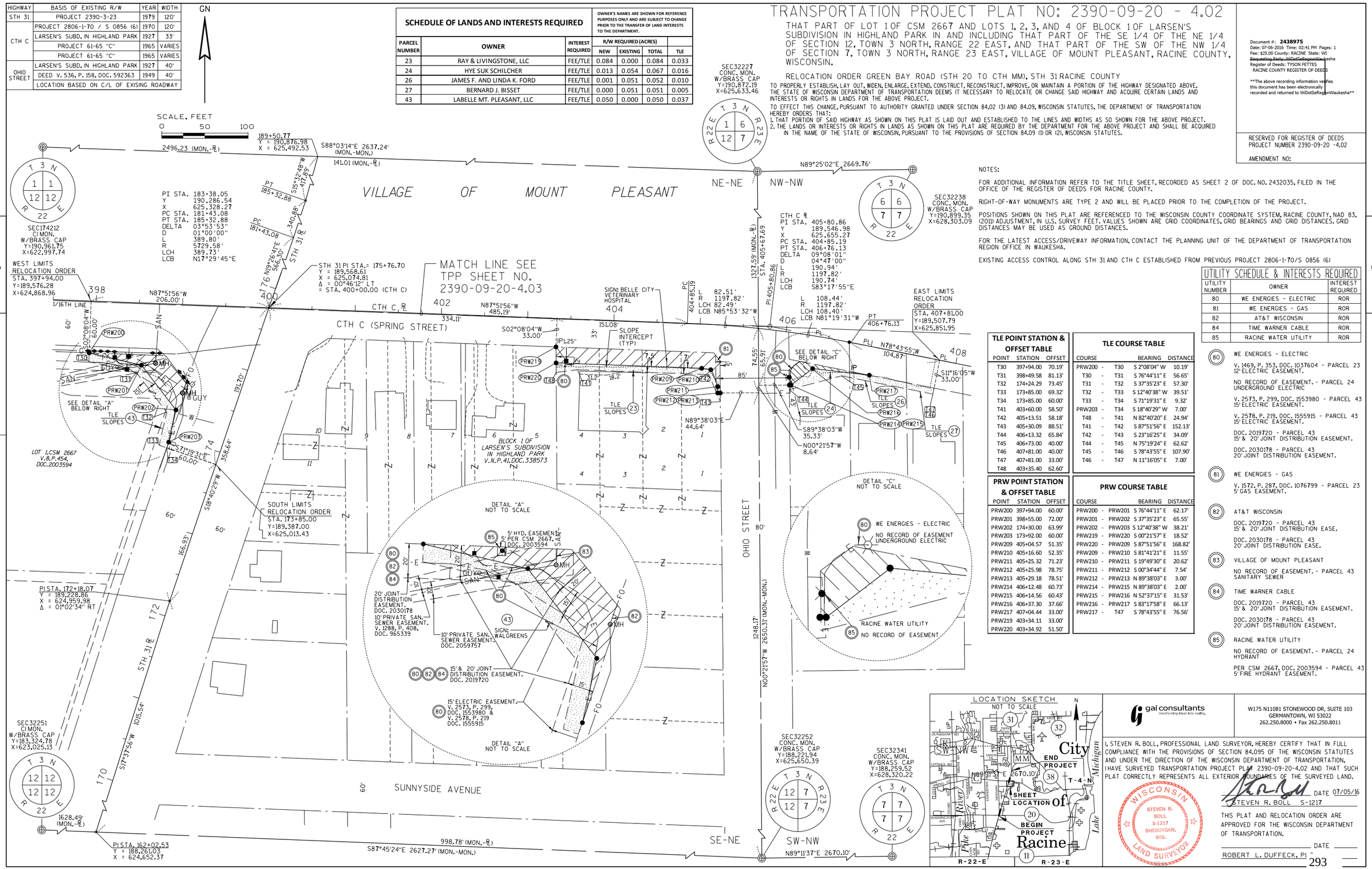
AMENDMENT NO:

HIGHWAY	BASIS OF EXISTING R/W	YEAR	WIDTH
STH 31	PROJECT 2390-3-23	1979	120'
CTH C	PROJECT 2806-1-70 / S 0856 (6)	1970	120'
	LARSEN'S SUBD, IN HIGHLAND PARK	1927	33'
	PROJECT 61-65 "C"	1965	VARIES
	PROJECT 61-65 "C"	1965	VARIES
OHIO STREET	LARSEN'S SUBD, IN HIGHLAND PARK	1927	40'
	DEED V. 536, P. 158, DOC. 592363	1949	40'
	LOCATION BASED ON C/L OF EXISING ROADWAY		

SCHEDULE OF LANDS AND INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	TLE
23	RAY & LIVINGSTONE, LLC	FEE/TLE	0.084	0.000	0.084	0.033
24	HYE SUK SCHILCHER	FEE/TLE	0.013	0.054	0.067	0.016
26	JAMES F. AND LINDA K. FORD	FEE/TLE	0.001	0.051	0.052	0.010
27	BERNARD J. BISSET	FEE/TLE	0.000	0.051	0.051	0.005
43	LABELLE MT. PLEASANT, LLC	FEE/TLE	0.050	0.000	0.050	0.037



TLE POINT STATION & OFFSET TABLE

POINT	STATION	OFFSET
T30	397+94.00	70.19'
T31	398+49.58	81.13'
T32	174+24.29	73.45'
T33	173+85.00	69.32'
T34	173+85.00	60.00'
T41	403+60.00	58.50'
T42	405+13.51	58.18'
T43	405+30.09	88.51'
T44	406+13.32	65.84'
T45	406+73.00	40.00'
T46	407+81.00	40.00'
T47	407+81.00	33.00'
T48	403+35.40	62.60'

TLE COURSE TABLE

COURSE			BEARING	DISTANCE
PRW200 -	T30		S 2°08'04" W	10.19'
T30 -	T31		S 76°44'11" E	56.65'
T31 -	T32		S 37°35'23" E	57.30'
T32 -	T33		S 12°40'38" W	39.51'
T33 -	T34		S 71°19'31" E	9.32'
PRW203 -	T34		S 18°40'29" W	7.00'
T48 -	T41		N 82°40'20" E	24.94'
T41 -	T42		S 87°51'56" E	152.13'
T42 -	T43		S 23°16'25" E	34.09'
T44 -	T45		N 75°19'24" E	62.62'
T45 -	T46		S 78°43'55" E	107.90'
T46 -	T47		N 11°16'05" E	7.00'

PRW POINT STATION & OFFSET TABLE

POINT	STATION	OFFSET
PRW200	397+94.00	60.00'
PRW201	398+55.00	72.00'
PRW202	174+30.00	63.99'
PRW203	173+92.00	60.00'
PRW209	405+04.57	51.35'
PRW210	405+16.60	52.35'
PRW211	405+25.32	71.23'
PRW212	405+25.98	78.75'
PRW213	405+29.18	78.51'
PRW214	406+12.48	60.73'
PRW215	406+14.56	60.43'
PRW216	406+37.30	37.66'
PRW217	407+04.44	33.00'
PRW219	403+34.11	33.00'
PRW220	403+34.92	51.50'

PRW COURSE TABLE

COURSE			BEARING	DISTANCE
PRW200 -	PRW201		S 76°44'11" E	62.17'
PRW201 -	PRW202		S 37°35'23" E	65.55'
PRW202 -	PRW203		S 12°40'38" W	38.21'
PRW219 -	PRW220		S 00°21'57" E	18.52'
PRW220 -	PRW209		S 87°51'56" E	168.82'
PRW209 -	PRW210		S 81°41'21" E	11.55'
PRW210 -	PRW211		S 19°49'30" E	20.62'
PRW211 -	PRW212		S 00°34'44" E	7.54'
PRW212 -	PRW213		N 89°38'03" E	3.00'
PRW214 -	PRW215		N 89°38'03" E	2.00'
PRW215 -	PRW216		N 52°37'15" E	31.53'
PRW216 -	PRW217		S 83°17'58" E	66.13'
PRW217 -	T47		S 78°43'55" E	76.56'

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
80	WE ENERGIES - ELECTRIC	ROR
81	WE ENERGIES - GAS	ROR
82	AT&T WISCONSIN	ROR
84	TIME WARNER CABLE	ROR
85	RACINE WATER UTILITY	ROR

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF DOC. NO. 2432035, FILED IN THE OFFICE OF THE REGISTER OF DEEDS FOR RACINE COUNTY.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

POSITIONS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD 83, (2011) ADJUSTMENT, IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE DEPARTMENT OF TRANSPORTATION REGION OFFICE IN WAUKESHA.

EXISTING ACCESS CONTROL ALONG STH 31 AND CTH C ESTABLISHED FROM PREVIOUS PROJECT 2806-1-70/S 0856 (6)

(80) WE ENERGIES - ELECTRIC

V. 1469, P. 353, DOC. 1037604 - PARCEL 23 12' ELECTRIC EASEMENT.

NO RECORD OF EASEMENT. - PARCEL 24 UNDERGROUND ELECTRIC

V. 2573, P. 299, DOC. 1553980 - PARCEL 43 15' ELECTRIC EASEMENT.

V. 2578, P. 219, DOC. 1555915 - PARCEL 43 15' ELECTRIC EASEMENT.

DOC. 2019720 - PARCEL 43 15' & 20' JOINT DISTRIBUTION EASEMENT.

DOC. 2030178 - PARCEL 43 20' JOINT DISTRIBUTION EASEMENT.

(81) WE ENERGIES - GAS

V. 1572, P. 287, DOC. 1076799 - PARCEL 23 5' GAS EASEMENT.

(82) AT&T WISCONSIN

DOC. 2019720 - PARCEL 43 15' & 20' JOINT DISTRIBUTION EASE.

DOC. 2030178 - PARCEL 43 20' JOINT DISTRIBUTION EASE.

(83) VILLAGE OF MOUNT PLEASANT

NO RECORD OF EASEMENT. - PARCEL 43 SANITARY SEWER

(84) TIME WARNER CABLE

DOC. 2019720 - PARCEL 43 15' & 20' JOINT DISTRIBUTION EASEMENT.

DOC. 2030178 - PARCEL 43 20' JOINT DISTRIBUTION EASEMENT.

(85) RACINE WATER UTILITY

NO RECORD OF EASEMENT. - PARCEL 24 HYDRANT

PER CSM 2667, DOC. 2003594 - PARCEL 43 5' FIRE HYDRANT EASEMENT.

LOCATION SKETCH
NOT TO SCALE

gai consultants
Transforming Ideas Into Reality

W175 N11081 STONEWOOD DR, SUITE 103
GERMANTOWN, WI 53022
262.250.8000 • Fax 262.250.8011

I, STEVEN R. BOLL, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 2390-09-20-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 07/05/16
STEVEN R. BOLL S-1217

WISCONSIN LAND SURVEYOR
STEVEN R. BOLL S-1217 SHEBOYGAN, WIS.

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

DATE _____
ROBERT L. DUFFECK, PE

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\040102_rp.dgn

1:50

STH 31 2390-09-20 4.02

TRANSPORTATION PROJECT PLAT NO: 2390-09-20 - 4.03

THAT PART OF THE NE 1/4 OF THE NE 1/4 OF SECTION 12, TOWN 3 NORTH, RANGE 22 EAST, AND THAT PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 7, TOWN 3 NORTH, RANGE 23 EAST, VILLAGE OF MOUNT PLEASANT, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER GREEN BAY ROAD (STH 20 TO CTH MM), STH 31 RACINE COUNTY

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

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

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

Document #: **2438976**
Date: 07-06-2016 Time: 02:42 PM Pages: 1
Fee: $25.00 County: RACINE State: WI
Requesting Party: WiDotSeRegionWaukesha
Register of Deeds: TYSON FETTES
RACINE COUNTY REGISTER OF DEEDS

The above recording information verifies this document has been electronically recorded and returned to WiDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 2390-09-20 -4.03

AMENDMENT NO:

HIGHWAY	BASIS OF EXISTING R/W	YEAR	WIDTH
STH 31	PROJECT 2390-3-00	1975	60'
	PROJECT 2390-3-23	1979	120'
CTH C	PROJECT 2806-1-70 / S 0856 (6)	1970	120'
	LARSEN'S SUBD. IN HIGHLAND PARK	1927	33'
	PROJECT 61-65 "C"	1965	VARIES
	PROJECT 61-65 "C"	1965	VARIES

SEC174212 CI MON. W/BRASS CAP Y=190,961.75 X=622,997.74

2496.23 (MON.-R)

S88°03'14"E 2637.24' (MON.-MON.)

189+50.77 Y = 190,876.98 X = 625,492.53

N88°03'14"W 141.01 (MON.-R)

SEC32227 CONC. MON. W/BRASS CAP Y=190,872.19 X=625,633.46

N89°25'02"E 2669.76'

NE-NE SEC 12

NW-NW SEC 7

SEC32238 CONC. MON. W/BRASS CAP Y=190,899.35 X=628,303.09

PT 185+32.88

S15°32'48"W 417.89

T89-T92
L 26.72'
R 5669.58'
LCH 26.72'
LCB N19°05'26"E

PI STA. 183+38.05
Y 190,286.54
X 625,328.27
PC STA. 181+43.08
PT STA. 185+32.88
DELTA 03°53'53"
D 01°00'00"
L 389.80'
R 5729.58'
LCH 389.73'
LCB N17°29'45"E

T91-92
T91-T89
TLE SLOPES (54)
60.00'
S71°02'40"E
340.88'

L 340.88'
R 5729.58'
LCH 340.83'
LCB N17°15'04"E

ENDING LIMITS RELOCATION ORDER
STA. 181+92.00
Y=190,148.88
X=625,279.45

L 48.92'
R 5729.58'
LCH 48.92'
LCB S19°12'01"W

L 21.69'
R 5669.58'
LCH 21.69'
LCB N19°20'07"E

PC 181+43.08

N19°26'41"E 73.08'

T86-T87

TLE SLOPES (53)

TLE SLOPES (52)

T85

PRW306 PRW307

PRW305

SLOPE INTERCEPT (TYP)

PRW304

T84

TLE SLOPES (51)

S19°26'41"W 437.54'

IP 0.75"

30' FORCE MAIN EASE. v.3317, P.123, NO DOC. NO. GIVEN

DETAIL "B" NOT TO SCALE

DETAIL "B" NOT TO SCALE

VILLAGE OF MOUNT PLEASANT

PRW309-PRW311
L 35.70'
R 24.00'
LCH 32.50'
LCB S32°12'51"E

SEE DETAIL "B" ABOVE RIGHT

PRW302-PRW303
L 30.45'
R 24.00'
LCH 28.45'
LCB N55°47'23"E

S70°33'19"E 60.00'

PRW300 PRW301 T82 T83 T80

IP 0.75"

CTH C (SPRING STREET)

60.00' N02°08'04"E

CTH C R 1/16TH LINE

95.00' N87°51'56"W

WEST LIMITS RELOCATION ORDER
STA. 399+05.00
Y=189,572.15
X=624,979.88

SEC32251 CI MON. W/BRASS CAP Y=183,324.78 X=623,025.13

S18°40'29"W 358.63'

S17°37'56"W 1015.54'

PI STA. 172+18.07
Y = 189,228.86
X = 624,959.98
Δ = 01°02'34" RT

PI STA. 162+02.53
Y = 188,261.03
X = 624,652.37

1628.49' (MON.-R)

STH 31 PI STA.= 175+76.70
Y = 189,568.61
X = 625,074.81
Δ = 00°46'12" LT
= STA. 400+00.00 (CTH C)

MATCH LINE SEE TPP SHEET NO. 2390-09-20-4.02

CTH C R 398 400 402 404 406 408

N87°51'56"W 485.19'

PC 404+85.19

L 82.51'
R 1197.82'
LCH 82.49'
LCB N85°53'32"W

SEC32252 CONC. MON. W/BRASS CAP Y=188,221.94 X=625,650.39

SE-NE SEC 12

SEC 7 SW-NW

PT 406+76.13

L 108.44'
R 1197.82'
LCH 108.40'
LCB N81°19'31"W

EAST LIMITS RELOCATION ORDER
STA. 407+76.63
Y=189,508.64
X=625,847.66

S87°51'56"E 60.98'

S11°16'05"W 100.50'

33.00' N78°43'55"W

1/16TH LINE

N00°21'57"W 2650.31' (MON.-MON.)

N00°21'57"W 1322.72' (MON.-E)

1327.59' (MON.-R)
STA. 405+67.69

CTH C R
PI STA. 405+80.86
Y 189,546.98
X 625,655.27
PC STA. 404+85.19
PT STA. 406+76.13
DELTA 09°08'01"
D 04°47'00"
L 190.94'
R 1197.82'
LCH 190.74'
LCB S83°17'55"E

S78°43'55"E 198.81'

SEC32341 CONC. MON. W/BRASS CAP Y=188,259.52 X=628,320.22

998.78' (MON.-R)

S87°45'24"E 2627.27' (MON.-MON.)

N89°11'37"E 2670.10'

GN

SCALE, FEET
0 50 100

PRW POINT STATION & OFFSET TABLE		
POINT	STATION	OFFSET
PRW300	399+10.27	60.00'
PRW301	399+10.27	64.00'
PRW302	399+21.63	64.00'
PRW303	176+37.40	77.00'
PRW304	177+94.44	77.00'
PRW305	178+82.44	66.00'
PRW306	179+31.23	66.00'
PRW307	179+33.45	60.00'
PRW308	176+77.19	60.00'
PRW309	176+77.19	66.33'
PRW311	401+11.56	49.37'
PRW312	401+11.56	39.50'
PRW313	404+83.44	39.50'
PRW314	405+21.48	33.96'
PRW315	405+21.51	33.57'

PRW COURSE TABLE		
COURSE	BEARING	DISTANCE
T80-PRW300	S87°51'56"E	5.27'
PRW300-PRW301	N02°08'04"E	4.00'
PRW301-PRW302	S87°51'56"E	11.36'
PRW302-PRW303	CURVE	30.45'
PRW303-PRW304	N19°26'41"E	157.04'
PRW304-PRW305	N26°34'12"E	88.68'
PRW305-PRW306	N19°26'41"E	48.78'
PRW306-PRW307	N89°06'33"E	6.40'
PRW307-T87	N19°26'41"E	136.55'
T89-T92	CURVE	26.72'
T93-PRW308	S19°26'41"W	28.34'
PRW308-PRW309	S70°33'19"E	6.33'
PRW309-PRW311	CURVE	35.70'
PRW311-PRW312	S02°08'04"W	9.87'
PRW312-PRW313	S87°51'56"E	371.88'
PRW313-PRW314	S78°59'04"E	39.53'
PRW314-PRW315	S0°22'55"E	0.40'

TLE POINT STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T80	399+05.00	60.00'
T81	399+05.00	71.38
T82	176+28.85	87.62'
T83	176+65.00	82.00'
T84	177+94.44	82.00'
T85	179+60.00	70.88'
T86	180+70.00	66.76'
T87	180+70.00	60.00'
T89	181+65.00	60.00'
T90	181+65.00	68.00'
T91	181+92.00	68.00'
T92	181+92.00	60.00'
T93	177+05.53	60.00'
T94	176+66.00	82.00'
T95	401+28.55	47.50'
T96	404+72.00	47.50'
T97	406+62.00	45.09'
T98	406+84.16	45.00'
T99	406+85.19	40.00'
T100	407+75.19	40.00'
T101	407+76.33	33.00'

TLE COURSE TABLE		
COURSE	BEARING	DISTANCE
T80-T81	N02°08'04"E	11.38'
T81-T82	N82°40'03"E	27.24'
T82-T83	N28°17'07"E	36.58'
T83-T84	N19°26'41"E	129.44'
T84-PRW304	S70°33'19"E	5.00'
PRW306-T85	N09°48'49"E	29.19'
T85-T86	N21°35'33"E	110.08'
T86-T87	S70°33'19"E	6.76'
T89-T90	N70°46'28"W	8.00'
T90-T91	N19°05'26"E	26.68'
T91-T92	S71°02'40"E	8.00'
T93-T94	S09°39'02"E	45.24'
T94-T95	S58°27'32"E	27.20'
T95-T96	S87°51'56"E	343.45'
T96-T97	S83°13'07"E	196.64'
T97-T98	S78°43'55"E	22.69'
T98-T99	S00°21'57"E	5.10'
T99-T100	S78°43'55"E	90.00'
T100-T101	S00°21'57"E	7.15'

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
81	WE ENERGIES - GAS	ROR
82	AT&T WISCONSIN	ROR
86	WINDSTREAM PAETEC	ROR

(81) WE ENERGIES - GAS

NO RECORD OF EASE. - PARCELS 39
GAS MAIN

(82) AT&T WISCONSIN

NO RECORD OF EASE. - PARCELS 39 & 52
PEDESTAL & TELECOMMUNICATION LINES

(86) WINDSTREAM PAETEC

NO RECORD OF EASE. - PARCELS 51, 52 & 53
FIBER OPTIC LINES

NOTES:

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF DOC. NO. 2432035, FILED IN THE OFFICE OF THE REGISTER OF DEEDS FOR RACINE COUNTY.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

POSITIONS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE COUNTY, NAD 83, (2011) ADJUSTMENT, IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE DEPARTMENT OF TRANSPORTATION REGION OFFICE IN WAUKESHA.

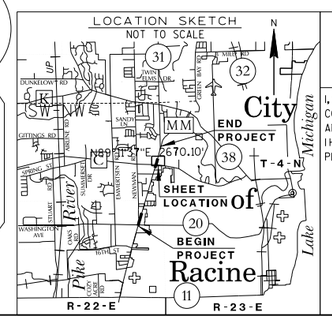
EXISTING ACCESS CONTROL ALONG STH 31 AND CTH C ESTABLISHED FROM PREVIOUS PROJECT 2806-1-70/S 0856 (6)

SCHEDULE OF LANDS AND INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED (ACRES) NEW	EXISTING	TOTAL	TLE
29	TIMOTHY C. BALL	FEE/TLE	____	0.068	0.068	0.014
31	WELLS FARGO BANK, NA	FEE/TLE	____	0.061	0.061	0.019
32	THE CHARLES M. HAAKMA REVOCABLE TRUST	FEE/TLE	____	0.068	0.068	0.015
33	THE CHARLES M. HAAKMA REVOCABLE TRUST	FEE/TLE	0.006	0.046	0.052	0.011
34	THE CHARLES M. HAAKMA REVOCABLE TRUST	FEE/TLE	0.009	0.046	0.055	0.011
36	ROBIN R. ROBBINS	FEE/TLE	0.009	0.046	0.055	0.011
37	ANDRE MCWHORTER & RAJEEYAH WCWHORTER	FEE/TLE	0.009	0.046	0.055	0.011
38	WALTER J. FORTIER & DOREEN J. FORTIER	FEE/TLE	0.009	0.046	0.055	0.011
39	JAMES A. FOX	FEE/TLE	0.030	____	0.030	0.033
51	EAGLE OF SOUTHEASTERN WISCONSIN, LLC	FEE/TLE	0.103	____	0.103	0.029
52	MARGARET G. WEMMERT	TLE	____	____	____	0.020
53	RODNEY D. VAN SWOL & WENDEY M. VAN SWOL	TLE	____	____	____	0.008
54	JEFF A. PERKINS	TLE	____	____	____	0.005

LOCATION SKETCH
NOT TO SCALE



gai consultants
Transforming Ideas Into Reality

W175 N11081 STONEWOOD DR, SUITE 103
GERMANTOWN, WI 53022
262.250.8000 • Fax 262.250.8011

I, STEVEN R. BOLL, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 2390-09-20-4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 07/05/16
STEVEN R. BOLL S-1217

WISCONSIN LAND SURVEYOR STEVEN R. BOLL S-1217 SHEBOYGAN, WIS.

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

DATE _____
ROBERT L. DUFFECK, PE

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\040103_rp.dgn

1:50

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
CP1	100+74.15 1.95' RT	BERNTSEN FENO 1000 MM WITH 2" ALUMINUM CAP	740.30
CP5	125+53.66 9.28' RT	BERNTSEN FENO 1000 MM WITH 2" ALUMINUM CAP	708.04

CONSTRUCTION LIMIT
STA 12+58.21

BEGIN PROJECT
STA 104+06.09
SAWCUT & MATCH EXISTING

STH 31 / S GREEN BAY RD

STH 20/WASHINGTON AVE

11NEWMAN RD 12

EXISTING SIGN TO REMAIN

APPROXIMATE LIMITS OF EXCAVATION HAULING AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL

SLOPE INTERCEPT

1/4 SEC LINE

1/16 SEC LINE

KINZIE AVE

WESTMORE DR

THE ROAD REALESTATE LLC

PINEKENSTEIN ETAL

PINEKENSTEIN JR TRUST ETAL

NORMA M PINEKENSTEIN

DDRM VILLAGE CENTER LLC

AKA FASTRACK INC

B & K ENTERPRISES INC

KIWILAND LLC

MARVIN HOLDINGS LLC

WISCONSIN RETAIL STORES LLC

ORIX BRADFORD MT PLEASANT VENT

LA VERNE E KERKMAN

BENITES & MANUEL JR CRUZ

GORDON HANSEN

ANTHONY G & DIANE M SCIORTINO

STEVEN J GOURIS

JOHN E & MARY GOURIS

DAVID P & HOPE G OWSICHEK

RONALD J CHRISTENSEN

DANIEL L & JACKIE VOISIN

BRENDA M NAGY

PEGGY L & MARK A SHUMWAY

TIMOTHY TYLLO

TIMOTHY J & CHERYL L TYLLO

PEDRO L & MARIA H MURILLO

GLEN M MELDGAARD

RICHARD SCHOMMER

KELLY C DOYLE

HUD

ROBERT E & MARGARE VOGEL TRUST

KINZIE CENTRE LLC

MICHAEL E & SHEILA M CANFIELD

DONALD I & JANE CHRISTENSEN

ALONSO CHAIRES

ROBERTO R & LORENZA L FUENTES

NANCY JASKULSKE

LEO M MILLER

LOIS L LEONARD

J ROGOWSKI PROPERTIES LLC

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	PLAN SHEETS	SHEET 295	E

BENCH MARKS

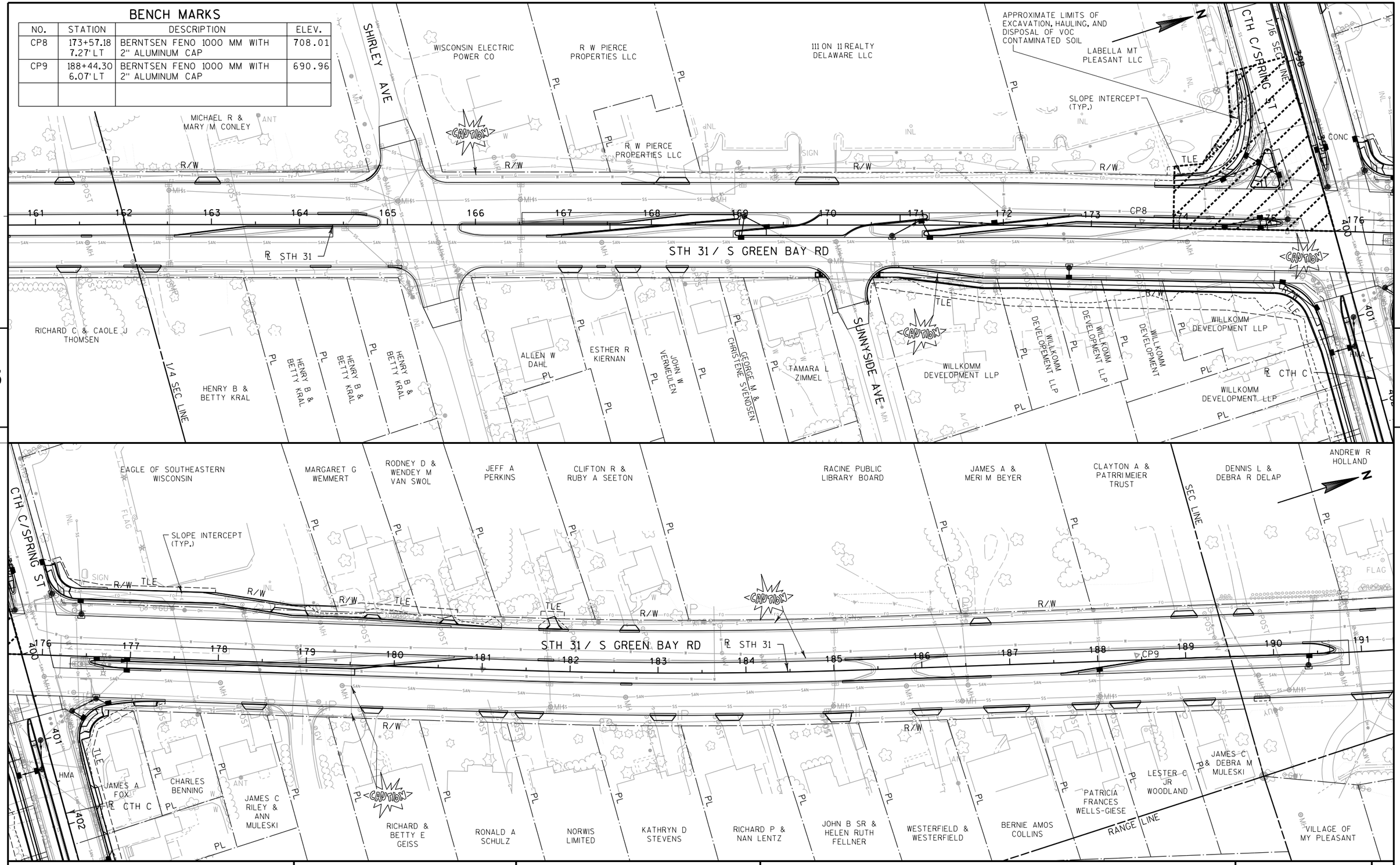
NO.	STATION	DESCRIPTION	ELEV.
CP6	145+07.98 2.59'RT	BERNTSEN FENO 1000 MM WITH 2" ALUMINUM CAP	721.77
CP7	159+73.54 1.53'RT	BERNTSEN FENO 1000 MM WITH 2" ALUMINUM CAP	709.51

HILLARY & PAMELA DESKINS
WILLIAM T & PENNY C ATKINSON
PATRICK J DAILEY
WISCONSIN STATE OF-DOT
LINDA J BORNERMAN
LORENCIA BLAS & F GARZA-BLAS
KEVIN A & LINDA K RATTLE
BRIAN J GILL
BERNARD J JR & WF GRIESE
MT PLEASANT WINDSOR HOOSE LTD
CORTLAND AVE
CAUTION
R/W
131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 CP6 146
STH 31 / S GREEN BAY RD
STH 31
GRACELAND BLVD
SEC LINE
DJORDJEVIC FAMILY TRUST T.N.D
RICHARD & NANCY MUNSON
DEBRA LOCK
J ROGOWSKI PROPERTIES LLC
J ROGOWSKI PROPERTIES LLC
GARY E BECKER
JOHN H & JENNIFER L PAAR
RUBEN R & M IRENE REYES
ANTHONY E & CATHERINE OSWALD
DAVID S & THERESA A NOVAK
PAUL FOLTS
ARNOLD FOX
LUTHERAN CHURCH OF THE RESURR
5
1/16 SEC LINE
PAUL B ANTHONY
JOHN D DUFFEY
JAMES K HYDUKE
WILLIAM R & MARY A KOKE
JUSTIN P & JENNIFER L EVANCY
CHARLES R & JEANETTE VAIL
KYLE MICHAEL LUCIER
DENNIS J & AUDREY D STROO
BRIAN P THELLEFESEN
TIMOTHY A GALUSKA
JACOB J JR & KARYNE L FRANK
NIRDIP S DULAI & BERGSTROM
JAMES & KATHLEEN PUCCI
146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 CP7
STH 31 / S GREEN BAY RD
STH 31
FLAG
BANKS OF WISCONSIN
RIDGEWAY AVE
RONALD J & JULIE M KIMBERLAIN
GEORGE A VANHAVERBEKE TRUST
CHARLES E RIZZO
TAMI A RAYNE
HARLAND & DOROTHY SOHR TRUST
THOMAS S & VICKIL ROHLEDER
RONALD H & REBECCA S GREENBURG
WILLY L & NANCY L CHRISTENSEN
BETTY J SEEGER
LYNN TEMPLETON
SHARON LYNN JOHNSTON
JOHN P & ANN J WIECZOREK
ROBERT N & ROBIN CHRISTENSEN
RICHARD C & CAOLEJ THOMSEN

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	PLAN SHEETS	SHEET 296	E

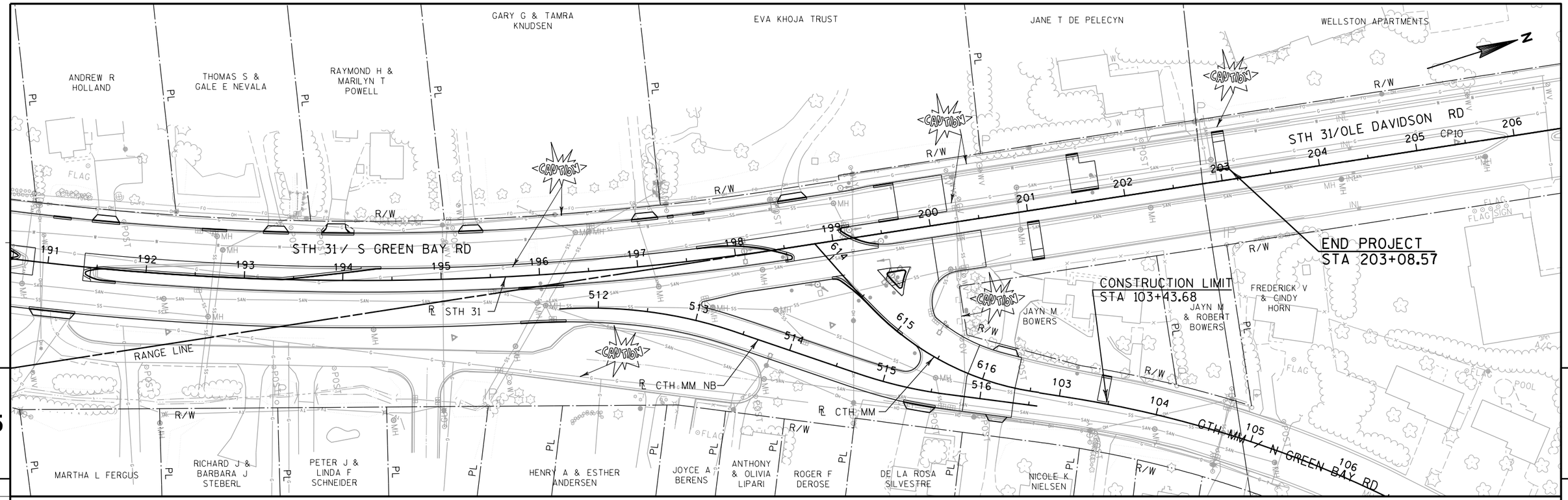
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
CP8	173+57.18 7.27' LT	BERNTSEN FENO 1000 MM WITH 2" ALUMINUM CAP	708.01
CP9	188+44.30 6.07' LT	BERNTSEN FENO 1000 MM WITH 2" ALUMINUM CAP	690.96



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN SHEETS	SHEET 297 E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\050203_pn.dgn | PLOT DATE : 12/1/2016 | PLOT BY : gaspemc | PLOT NAME : | PLOT SCALE : 1:100



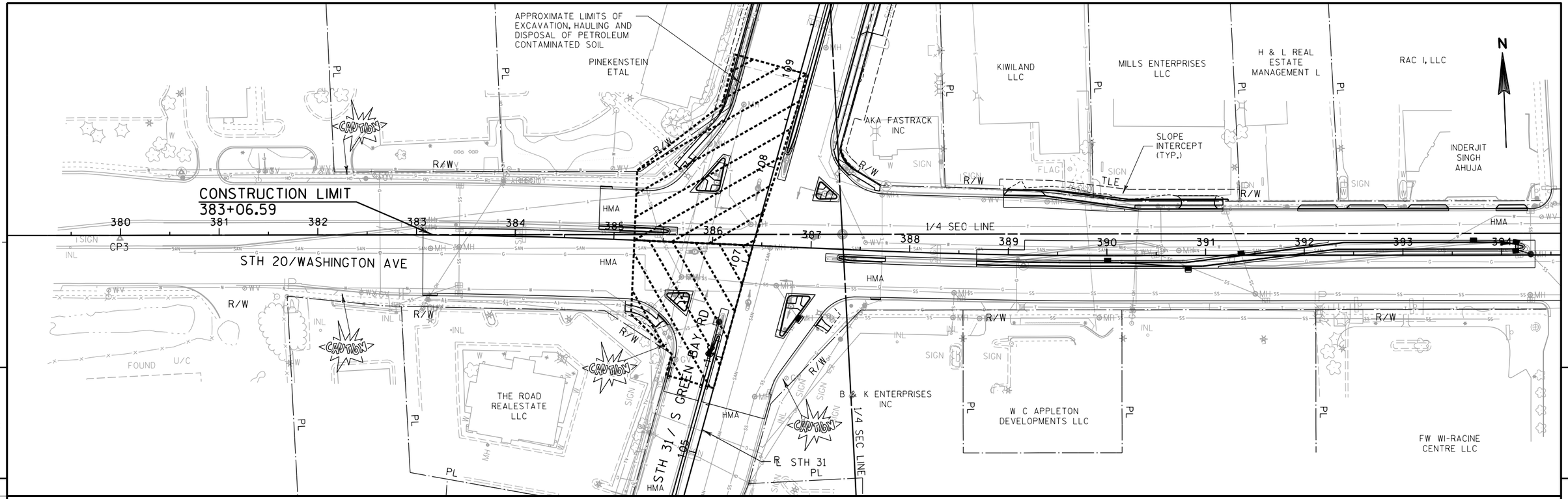
5

5

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
CP10	205+41.59 3.57' LT	BERNTSEN FENO 1000 MM WITH 2" ALUMINUM CAP	712.72

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN SHEETS	SHEET 298	E

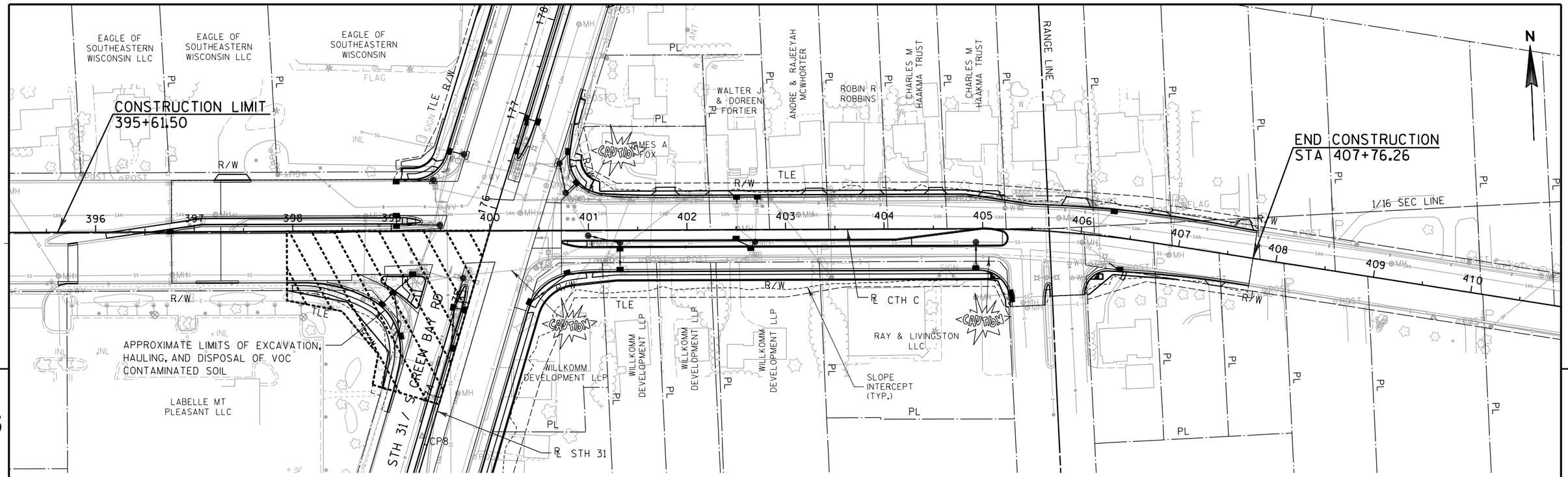


BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
CP2	395+55.98 7.07' RT	BERNTSEN FENO 1000 MM WITH 2" ALUMINUM CAP	717.23
CP3	379+99.47 3.21' RT	BERNTSEN FENO 1000 MM WITH 2" ALUMINUM CAP	737.90

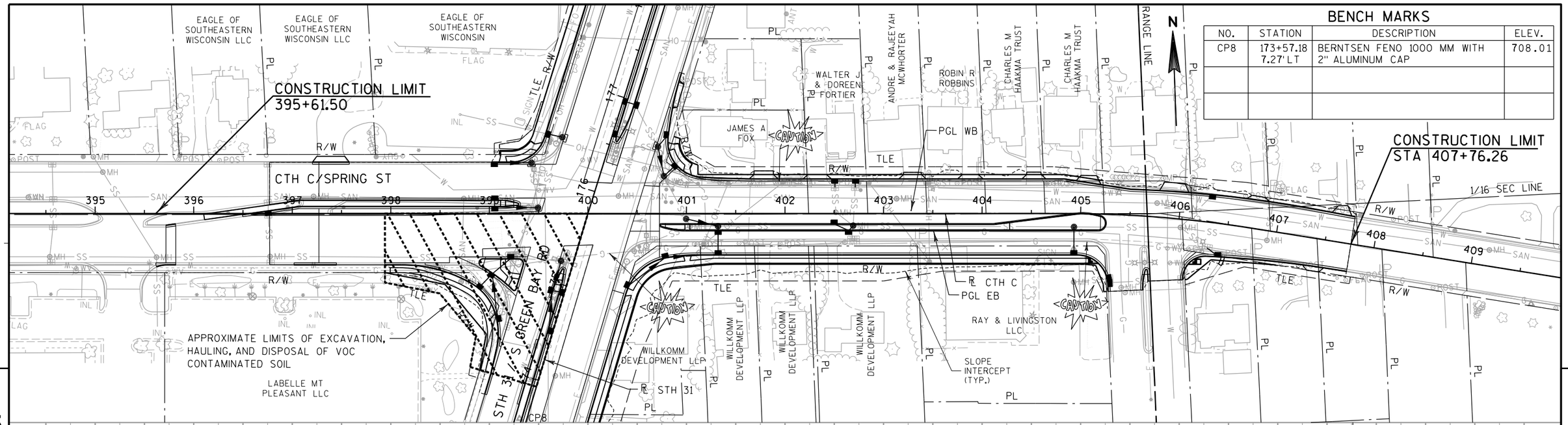
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN SHEETS - SIDE ROADS	SHEET 299	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\050205_pn.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:100



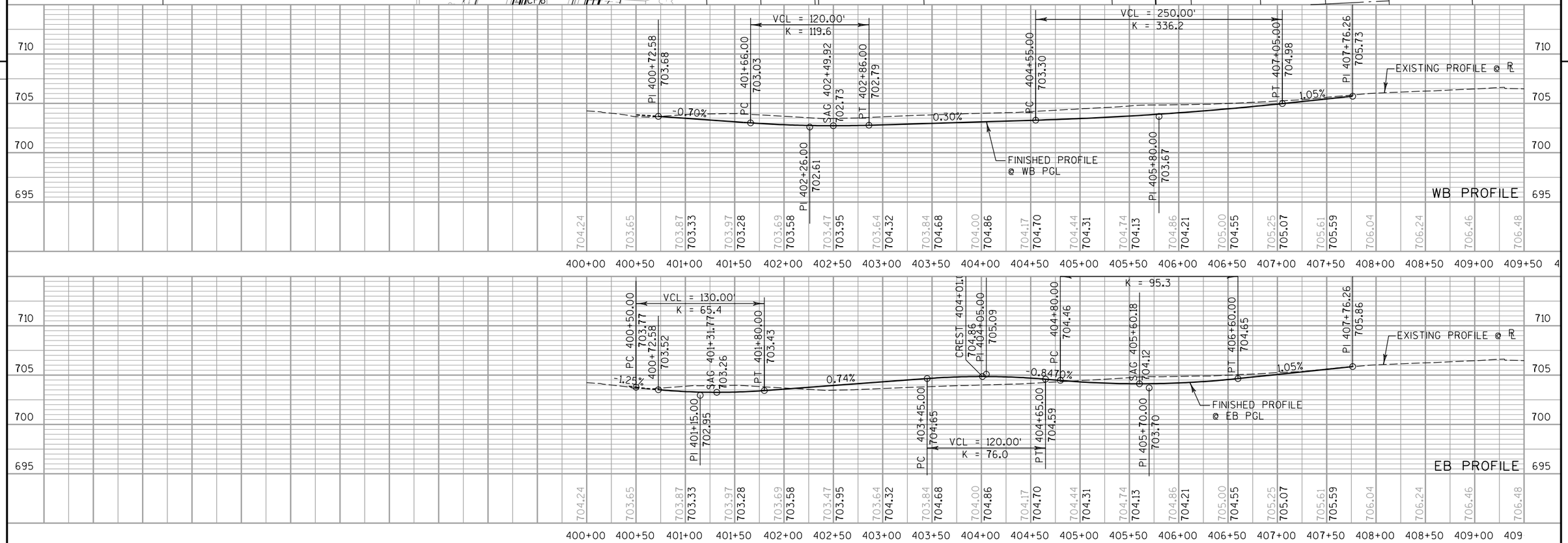
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
CP8	173+57.18 7.27' LT	BERNTSEN FENO 1000 MM WITH 2" ALUMINUM CAP	708.01



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
CP8	173+57.18 7.27' LT	BERNTSEN FENO 1000 MM WITH 2" ALUMINUM CAP	708.01



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY:RACINE	PLAN AND PROFILE	SHEET 301	E

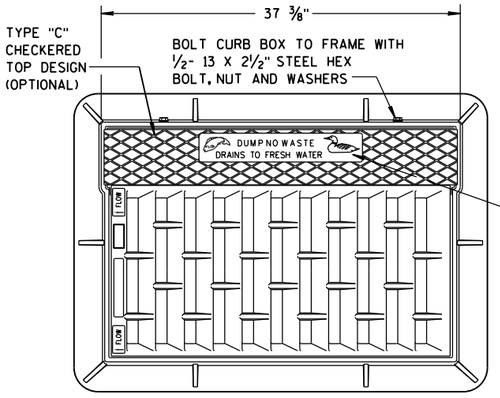
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-01	INLETS 3-FT AND 4-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-19	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-17A	CURB RAMPS TYPES 1 AND 1-A
08D05-17B	CURB RAMPS TYPES 2 AND 3
08D05-17C	CURB RAMPS TYPES 4A AND 4A1
08D05-17D	CURB RAMPS TYPE 4B AND 4B1
08D05-17E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-09	CONCRETE BASE TYPE 10
09C12-08A	CONCRETE BASE TYPE 13
09C12-08B	CONCRETE BASE TYPE 13
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-14B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-14D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-08B	TYPE 10 POLE 15'-30' 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
09F08-04	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)
09F09-04	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)
09G01-04A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09H09-01	COMMUNICATION VAULT
11B02-02	CONCRETE MEDIAN NOSE
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C08-02	CONCRETE PAVEMENT PARTIAL DEPTH REPAIR
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C14-06A	BASE PATCHING CONCRETE
13C14-06B	BASE PATCHING CONCRETE
13C14-06C	BASE PATCHING CONCRETE
13C18-03A	CONCRETE PAVEMENT JOINTING
13C18-03B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-03C	CONCRETE PAVEMENT JOINT TIES
13C18-03D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14B07-14A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
15C07-13B	PAVEMENT MARKING WORDS
15C07-13C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C11-06	FLEXIBLE TUBULAR MARKER POST
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C18-03	MEDIAN ISLAND MARKING
15C19-03B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C20-02	YIELD MARKING
15C24-04	36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

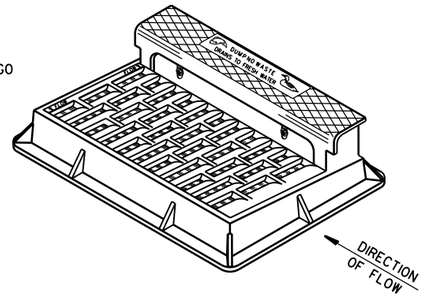
6

Standard Detail Drawing List

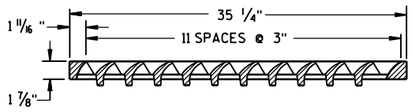
15C27-01	DOUBLE ARROW WARNING SIGN PLACEMENT
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D06-03	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D22-03	TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D23-03	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D23-04	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

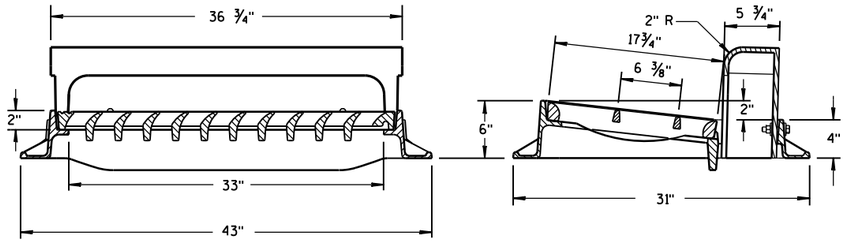


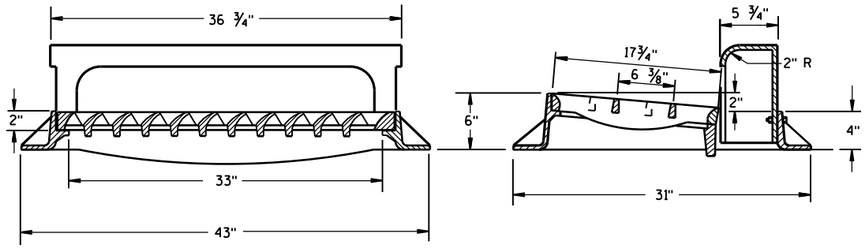
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

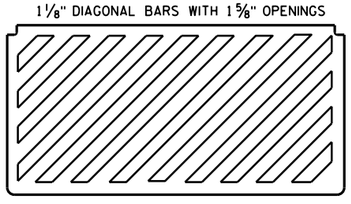






TYPE "H"

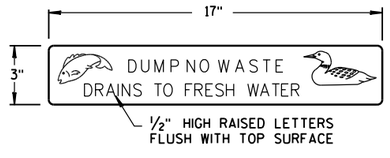
NOTE: EITHER CASTING IS ACCEPTABLE



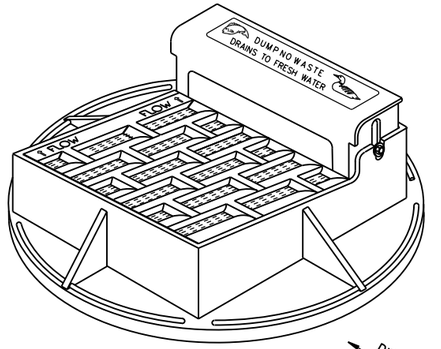
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

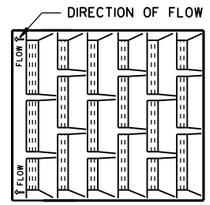
NOTE:
GRATE IS REVERSIBLE.

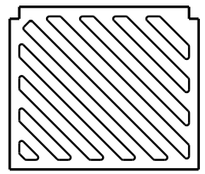
GENERAL NOTES

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

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

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

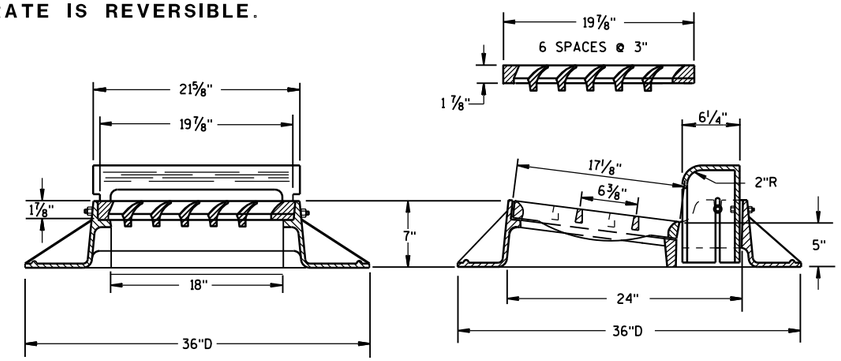




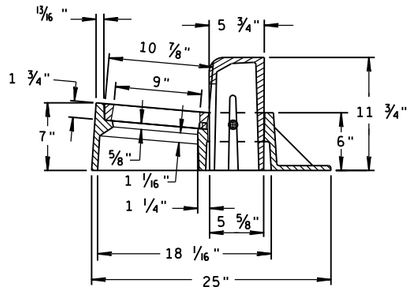
SPECIAL GRATE FOR TYPE "A" COVER

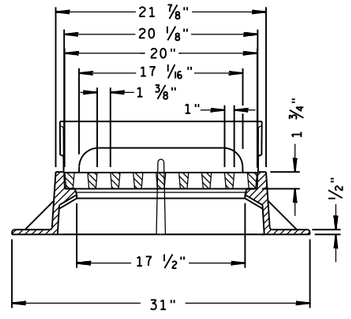
(MEASURES 19 3/4" X 17" X 1 7/8")

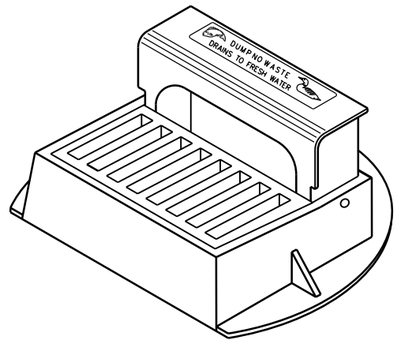
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"







TYPE "Z"

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

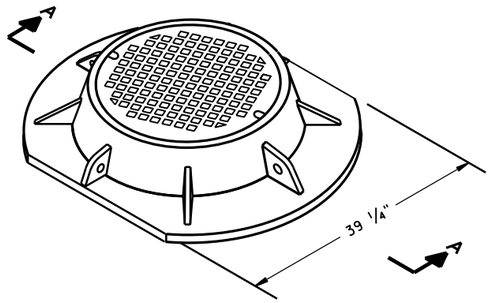
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

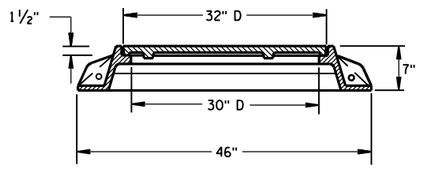
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

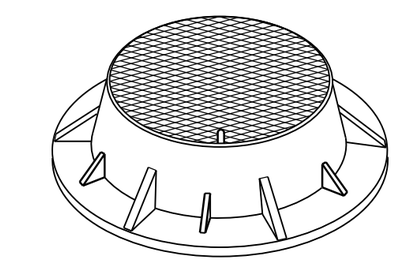
S.D.D. 8 A 5-19a

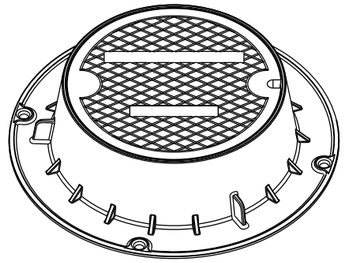
S.D.D. 8 A 5-19a

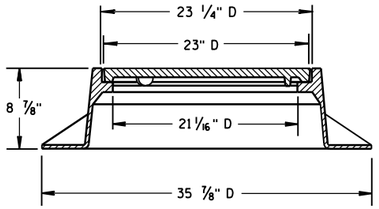


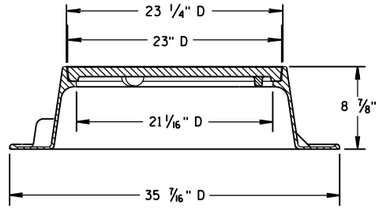


SECTION A-A
TYPE "K"









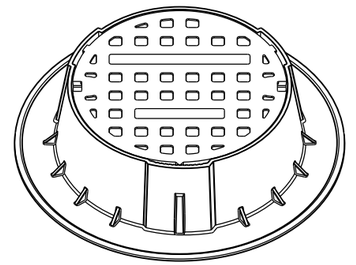
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

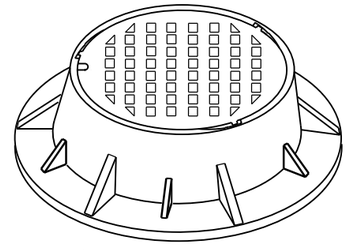
GENERAL NOTES

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

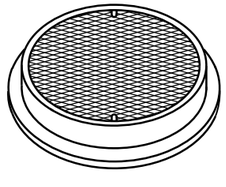
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

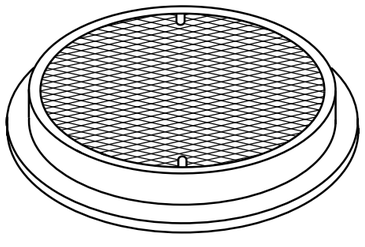
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

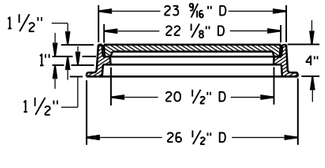




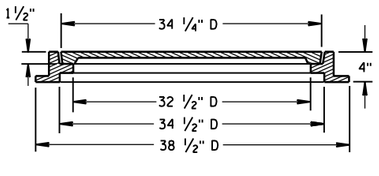
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



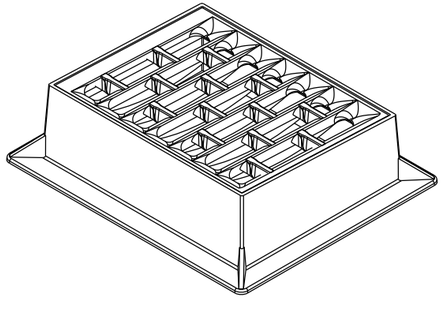


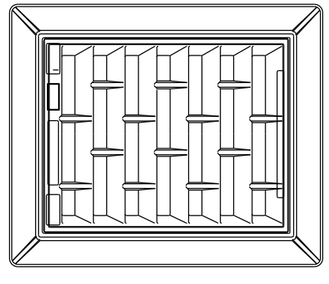


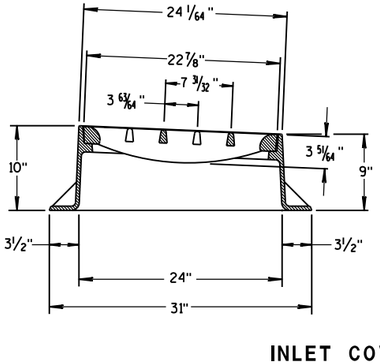
TYPE "L"

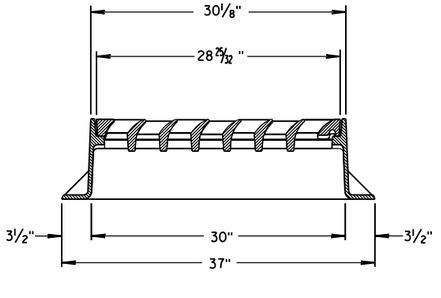


TYPE "M"









INLET COVER TYPE "BW"

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

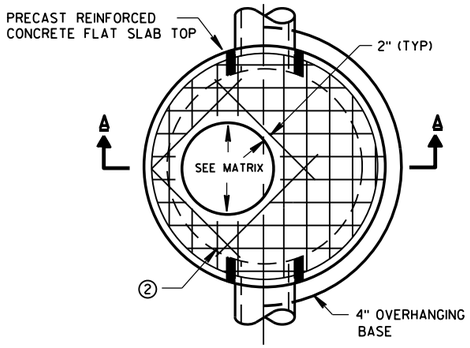
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

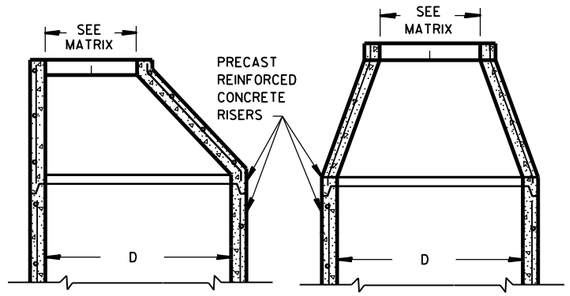
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

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

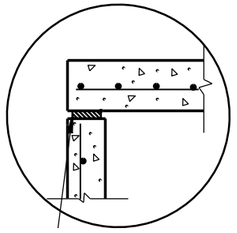


PLAN VIEW CIRCULAR OPENING

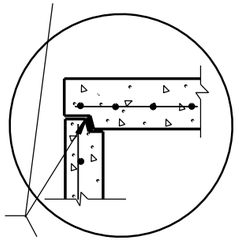


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

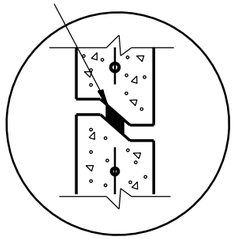


TOP WITH PLAIN END JOINT



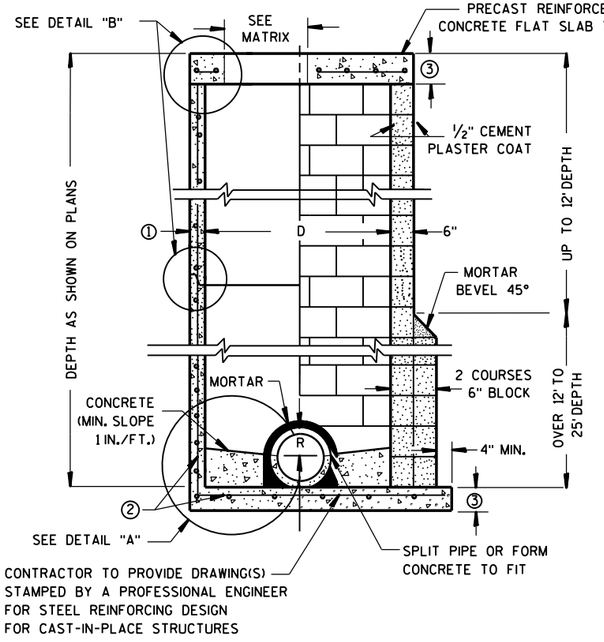
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



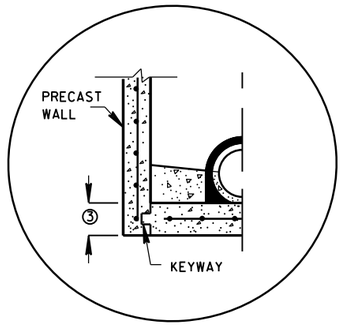
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

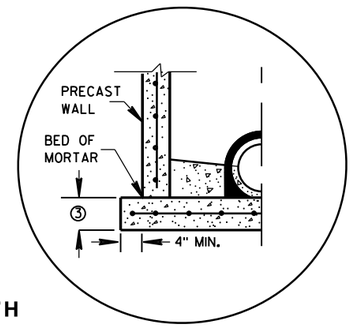


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

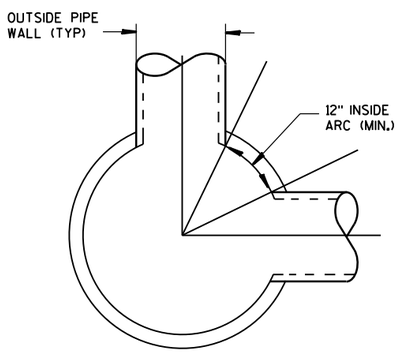


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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 GRANULAR 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. THE CONE 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.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

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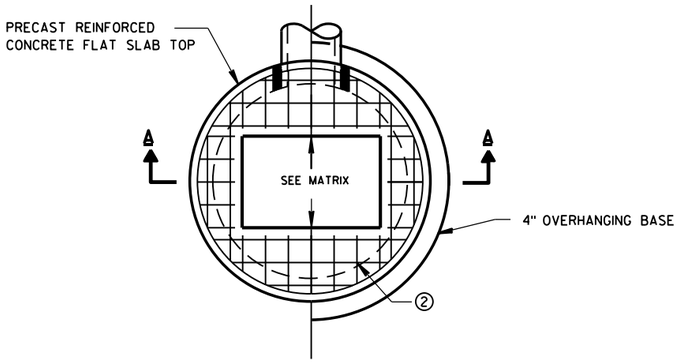
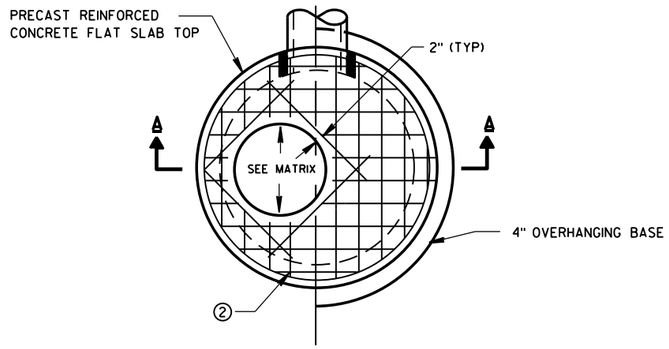
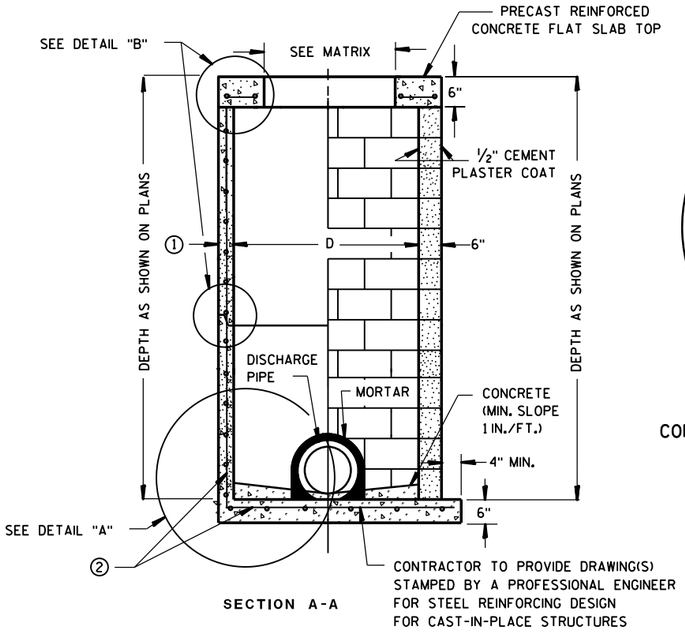


PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

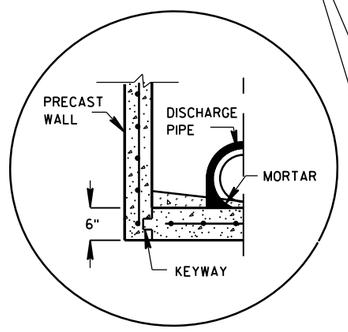


SECTION A-A

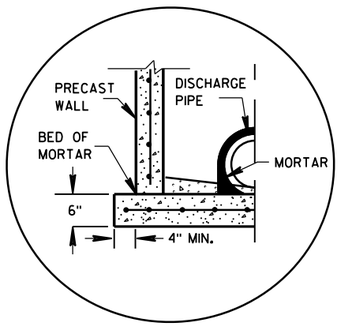
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

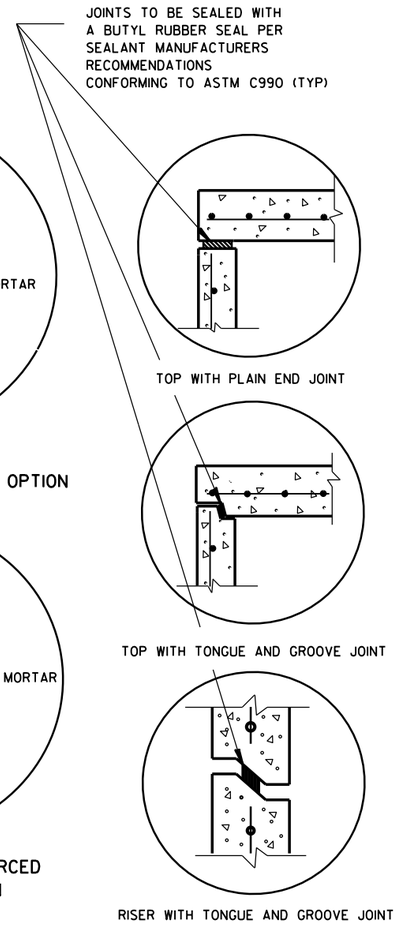


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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 GRANULAR 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.

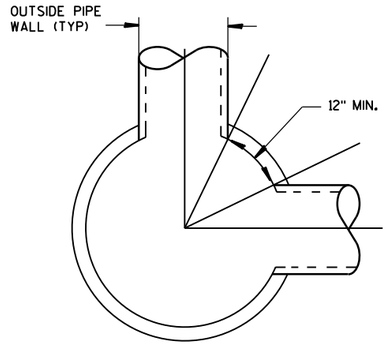
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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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6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

INLETS 3-FT AND 4-FT DIAMETER

6

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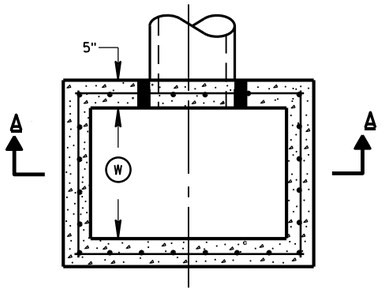
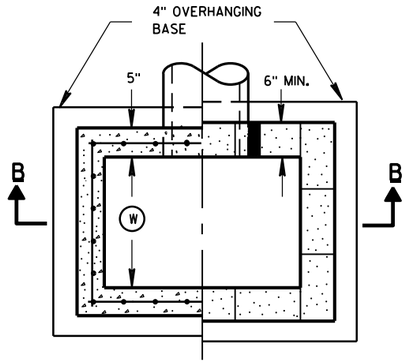
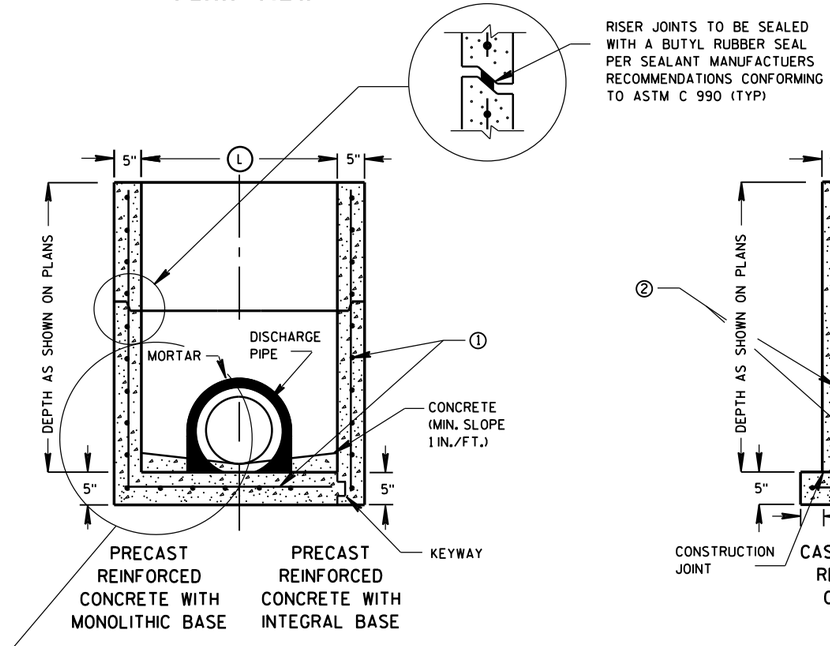


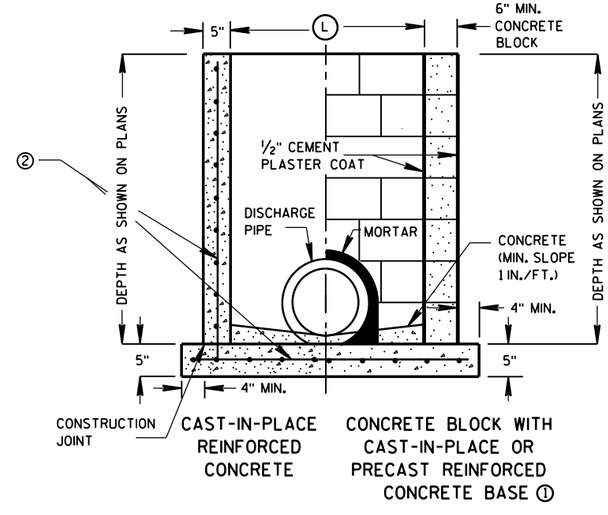
PLAN VIEW



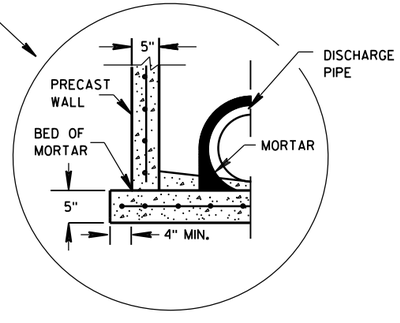
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

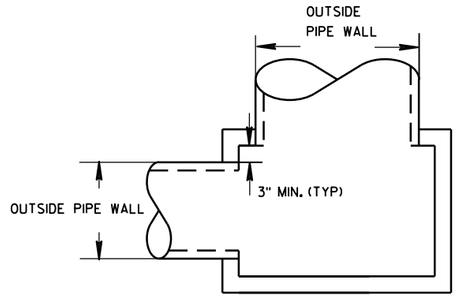
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
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6/5/2012
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FHWA

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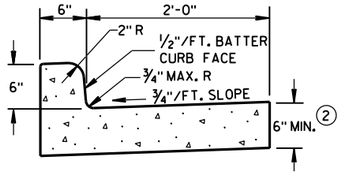
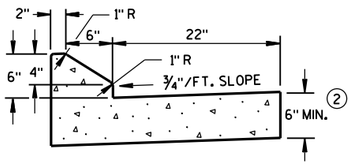
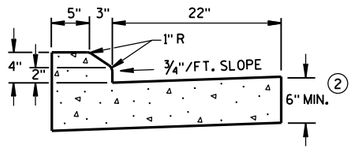


TYPES A & D ①

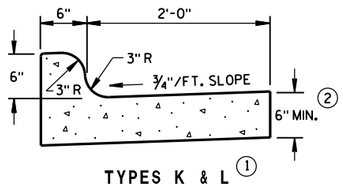


6" SLOPED CURB TYPES G & J ①

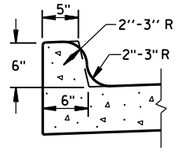


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

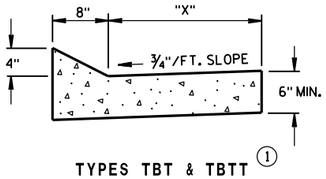


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

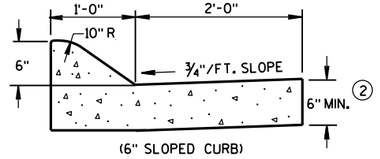
CONCRETE CURB & GUTTER 30"



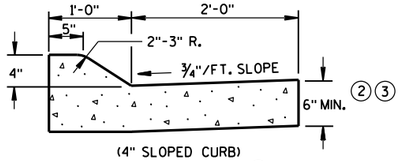
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

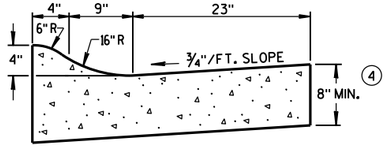


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ①⑤

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

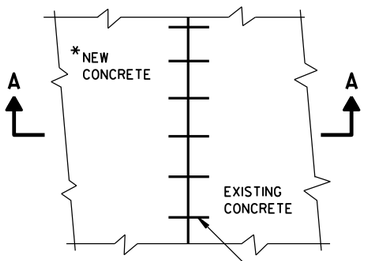
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

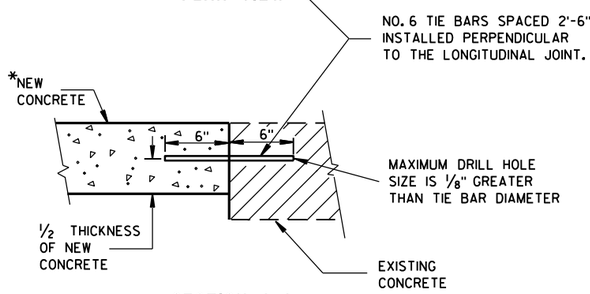
⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



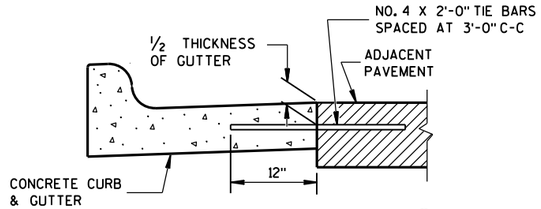
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

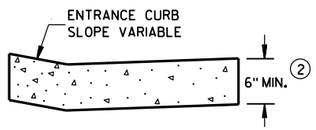


SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT

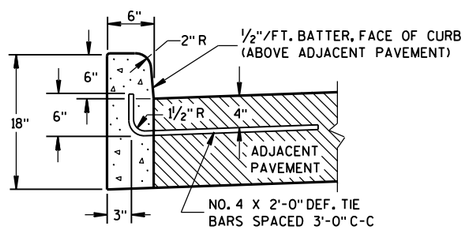


TYPICAL TIE BAR LOCATION ①

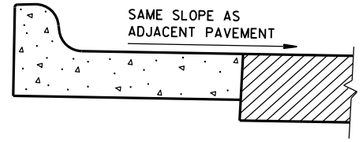


DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)

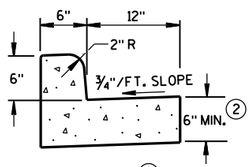


① TYPES A & D



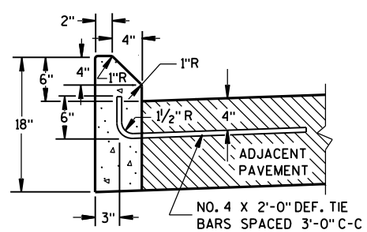
⑥ REVERSE SLOPE GUTTER

(TYPICAL FOR ALL CURB & GUTTER TYPES)



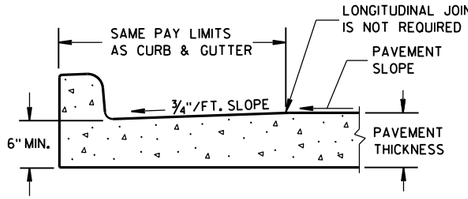
① TYPES A & D

CONCRETE CURB & GUTTER 18"

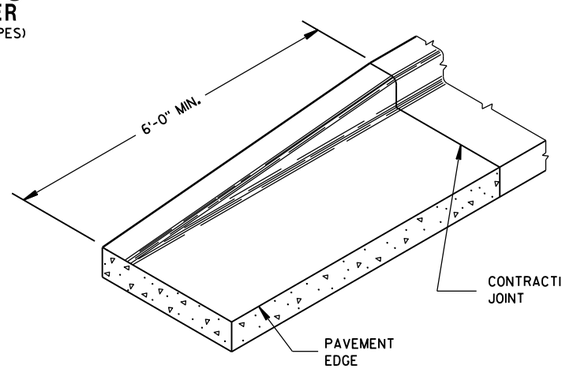


① TYPES G & J

CONCRETE CURB



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2016 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

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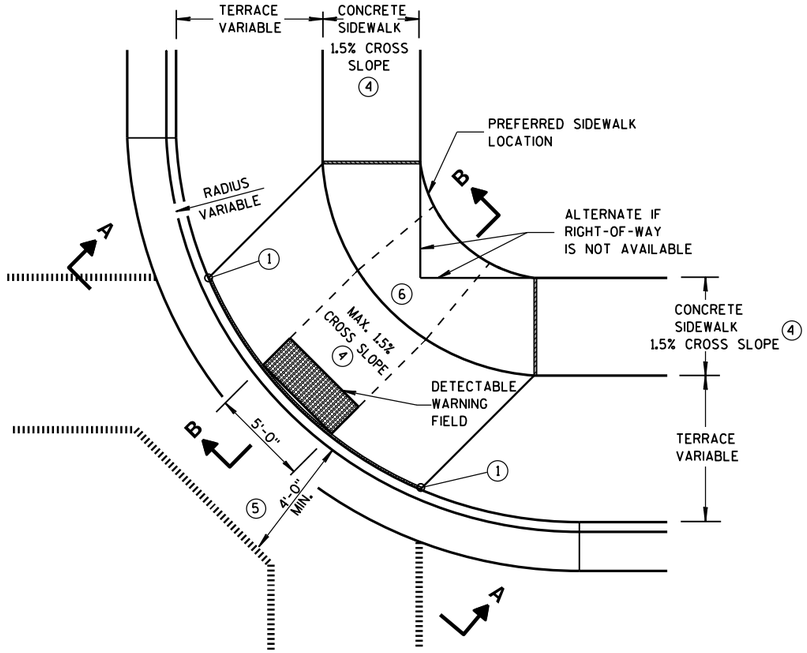
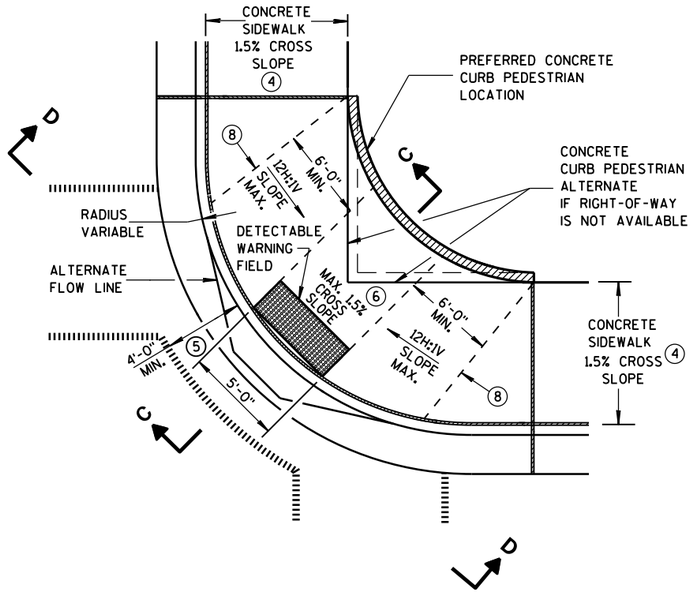
S.D.D. 8 D 1-19



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

GENERAL NOTES

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

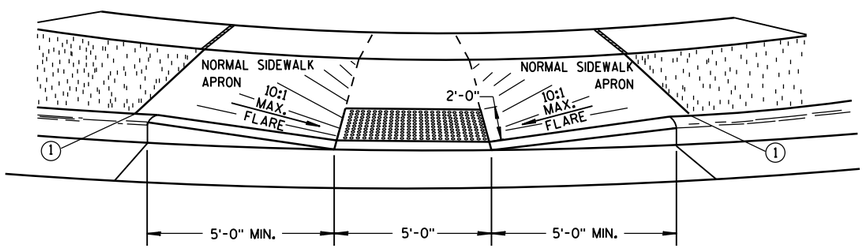
(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

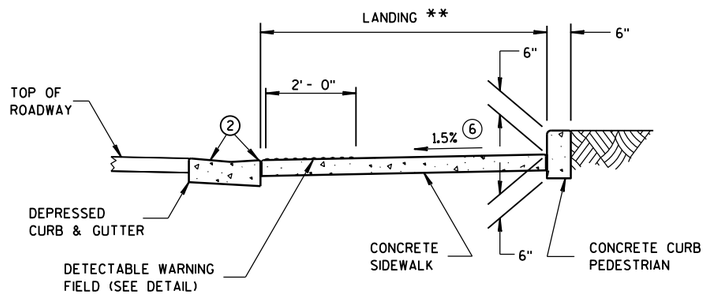
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.



VIEW A-A

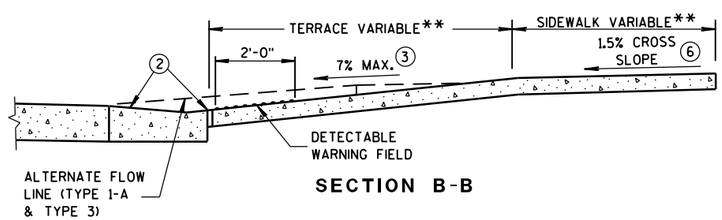
** WIDTH SHOWN ELSEWHERE IN THE PLANS



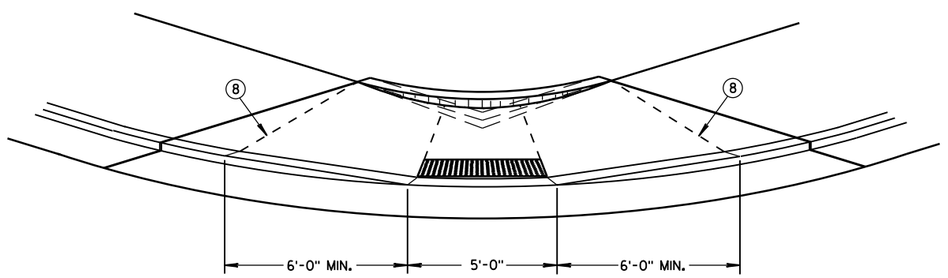
SECTION C-C

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



SECTION B-B



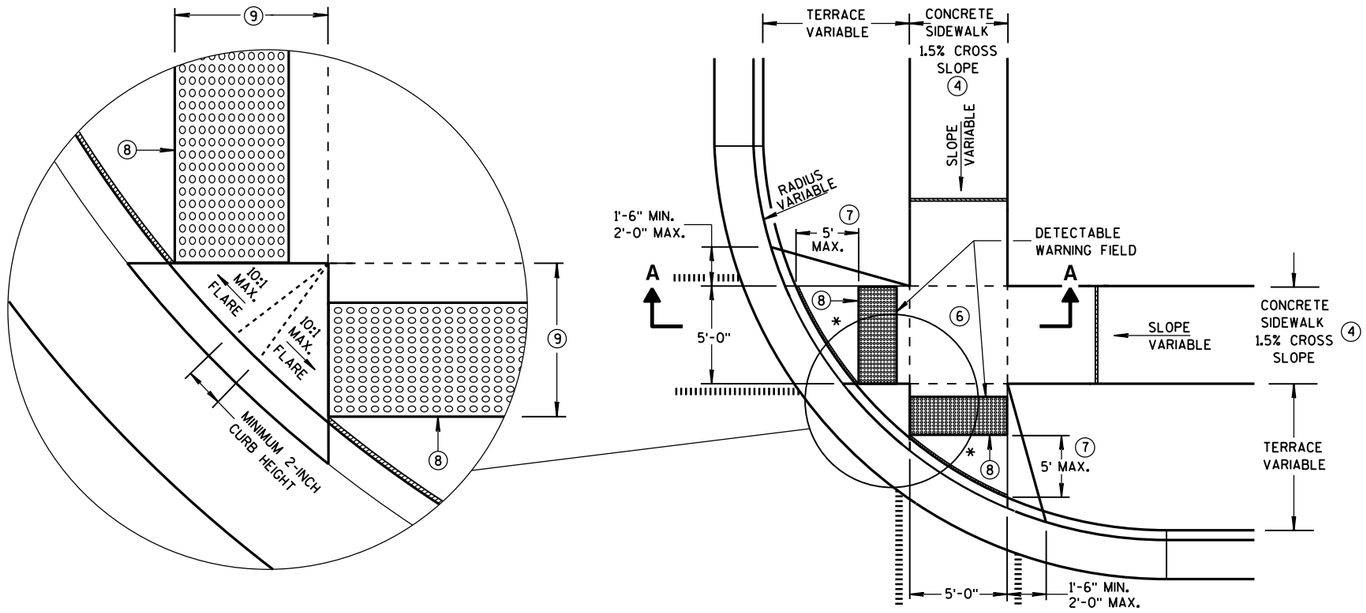
VIEW D-D

CURB RAMPS
TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 5-17a

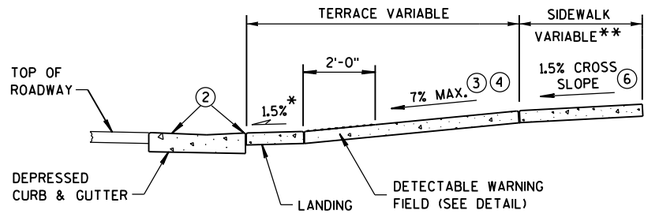


PLAN VIEW

TYPE 2 RAMP

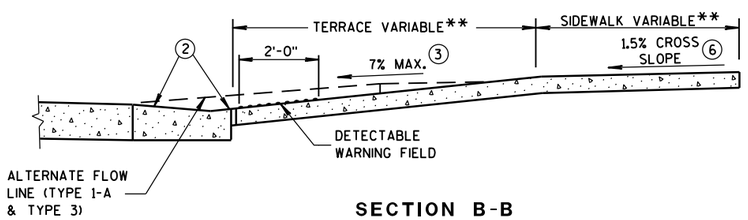
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

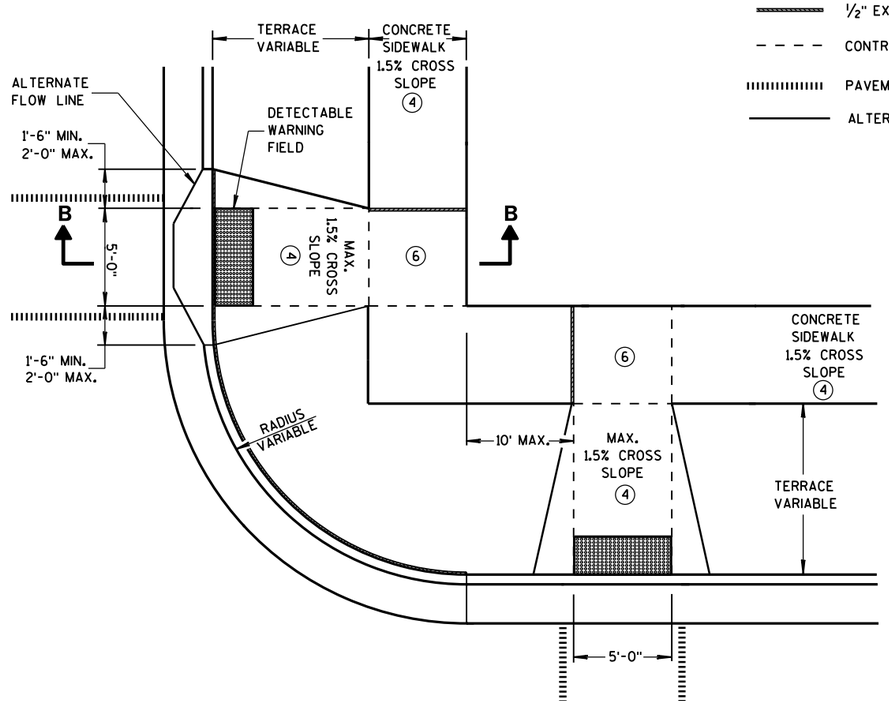
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

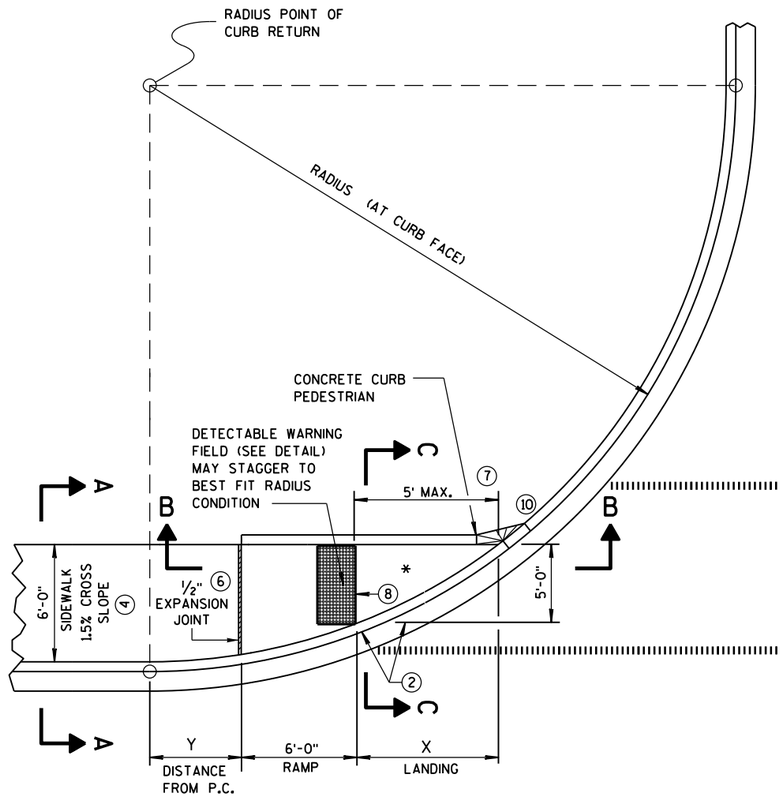
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

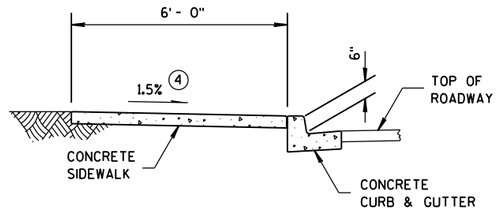
S.D.D. 8 D 5-17b



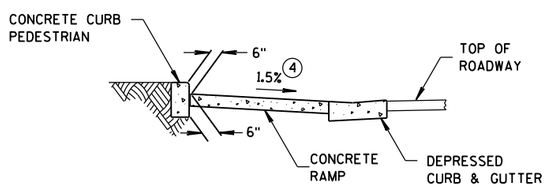
CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X	Y
20 FEET	7'-11"	0'-2"
30 FEET	10'-2¾"	1'-7½"
40 FEET	12'-1¼"	2'-10"
50 FEET	13'-8¾"	3'-10¾"
60 FEET	15'-2"	4'-10¼"

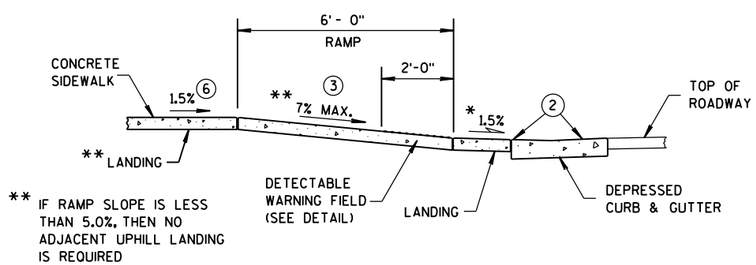
INTERMEDIATE RADII CAN BE INTERPOLATED



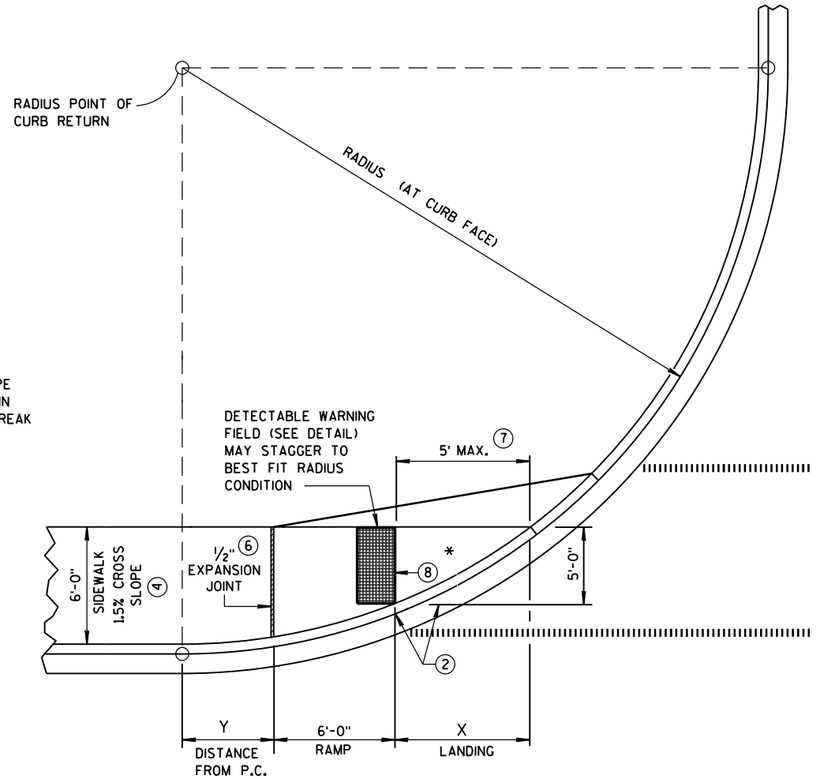
SECTION A-A FOR TYPE 4A



SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

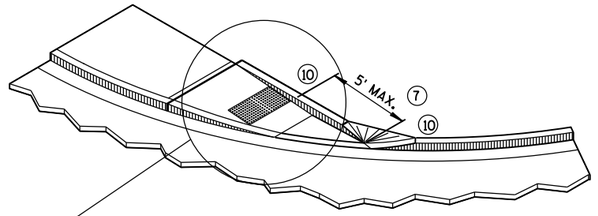
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

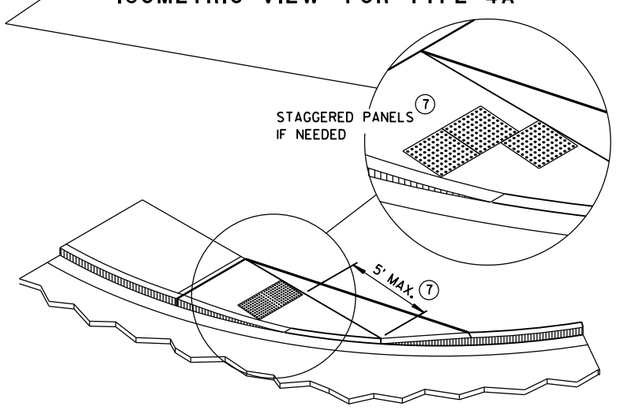
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

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



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

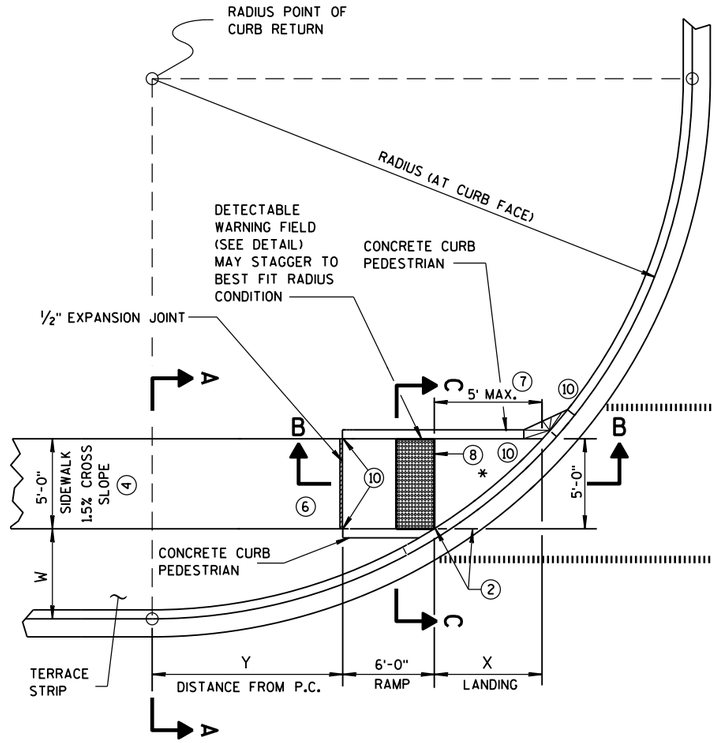
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

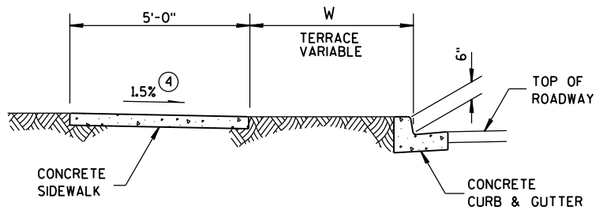
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

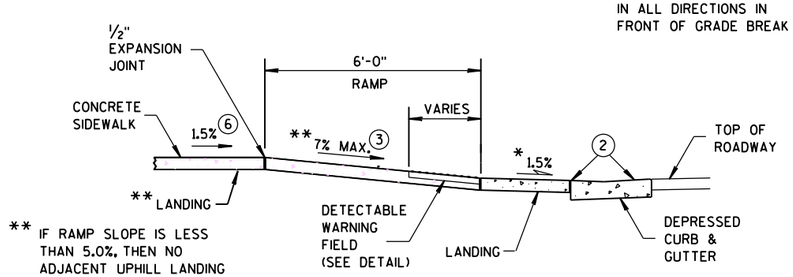
S.D.D. 8 D 5-17c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



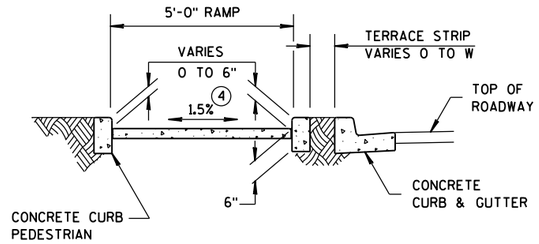
SECTION B-B FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-6¾"	3'-3"	8'-6¼"
30 FEET	7'-9¼"	5'-10½"	6'-9½"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"
40 FEET	9'-4"	7'-10"	8'-2¾"	10'-3"	7'-4¾"	12'-3¾"	6'-8½"	14'-1¼"	6'-1¾"	15'-8½"
50 FEET	10'-8"	9'-6½"	9'-5½"	12'-3¼"	8'-6½"	14'-7½"	7'-9¾"	16'-8¼"	7'-2½"	18'-6¼"
60 FEET	11'-10¼"	11'-0¾"	10'-6½"	14'-1¼"	9'-6½"	16'-8½"	8'-9¼"	18'-11¾"	8'-1½"	21'-0½"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

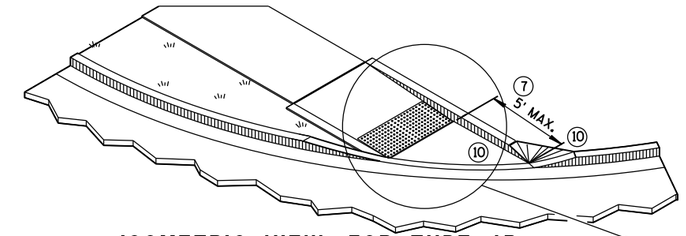
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

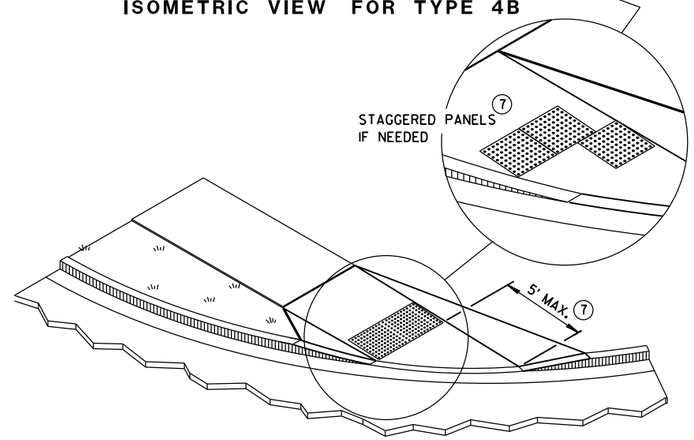
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, STAGGER ADDITIONAL DETECTABLE WARNING PANEL FORWARD TO REDUCE THIS DISTANCE. PROVIDE MINIMUM 12-INCH ROW OVERLAP TO AVOID SIDESTEP OF DOME DETECTION. ALIGN DOMES BETWEEN OVERLAPPING ROWS AND IN DIRECTION OF PEDESTRIAN TRAVEL.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

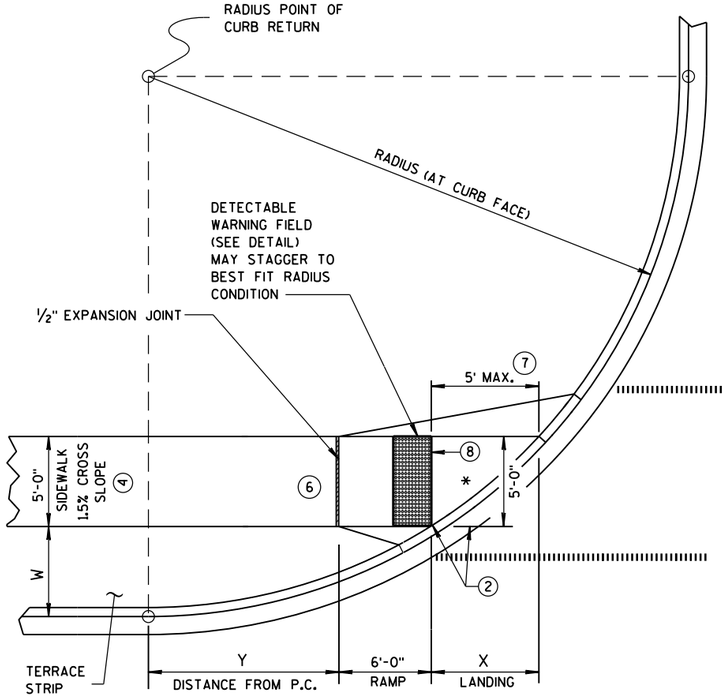
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1



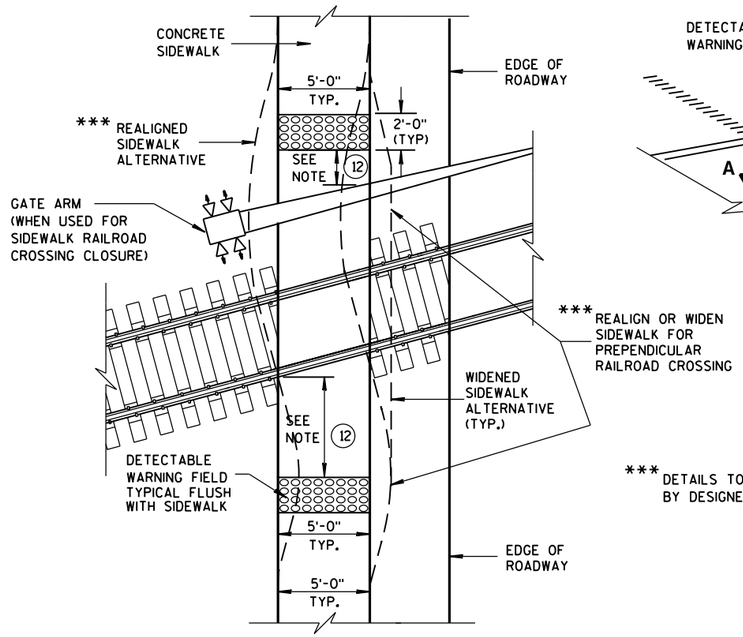
CURB RAMP TYPE 4B1
PLAN VIEW

CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

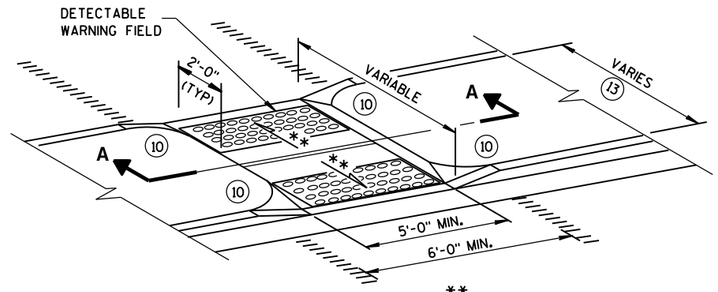
6

S.D.D. 8 D 5-17d



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL NOT EXCEED 7%.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

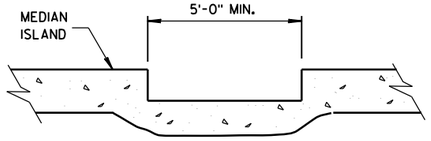
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

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

(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

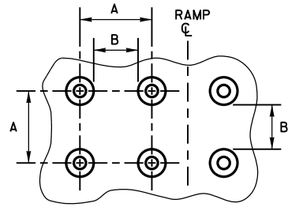
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



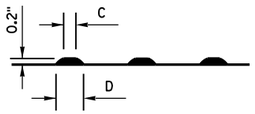
SECTION A-A

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

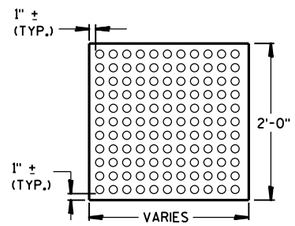


PLAN VIEW

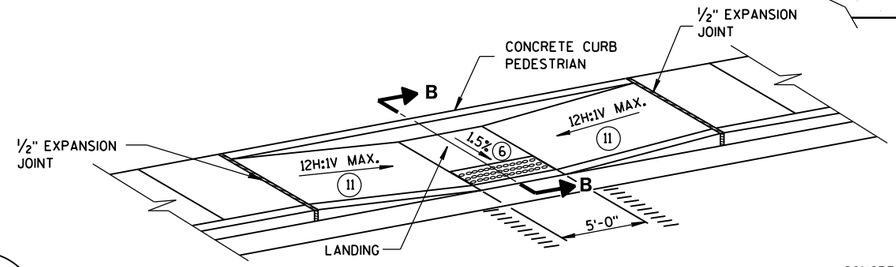


ELEVATION VIEW

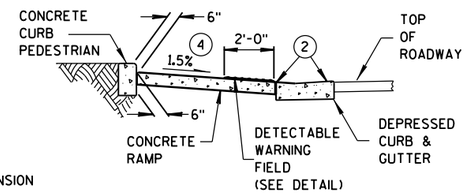
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING FIELD (TYPICAL)

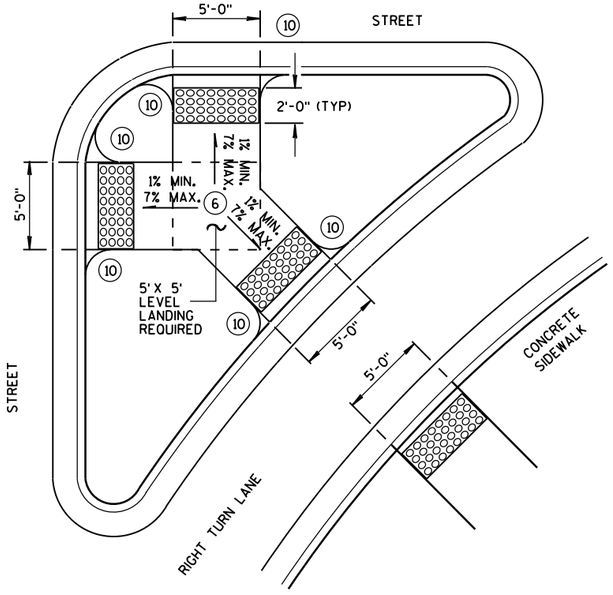


MID-BLOCK CROSSING
TYPE 7A

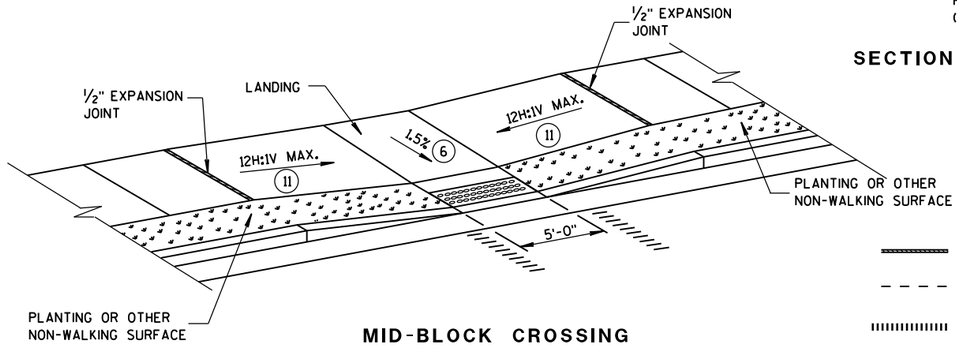


SECTION B-B

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2016 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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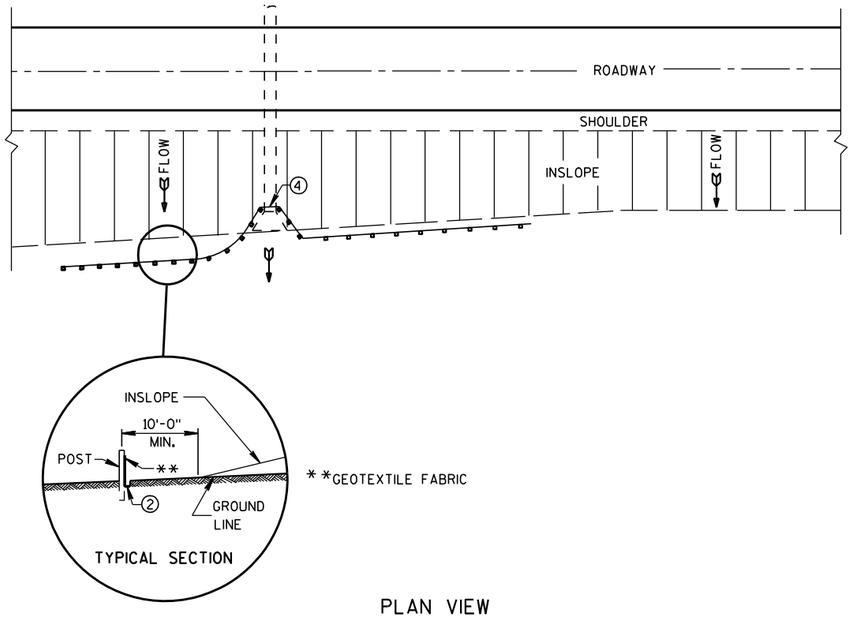
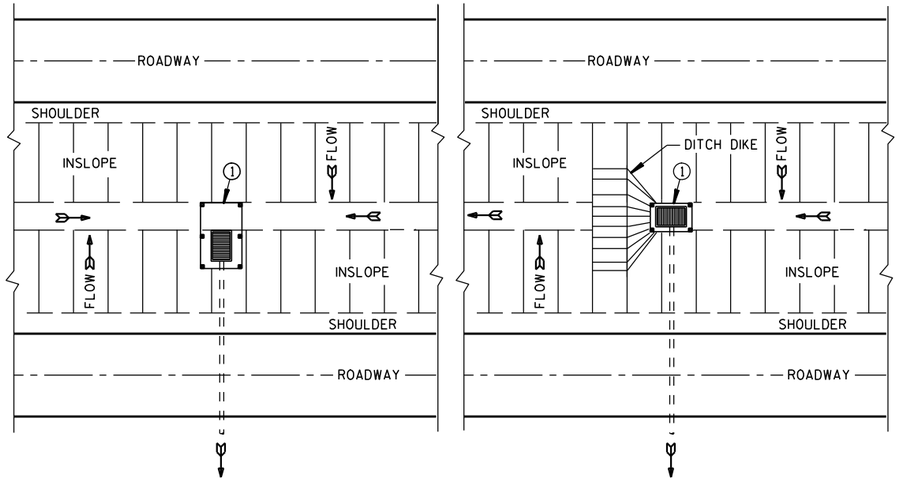
S.D.D. 8 D 5-17e



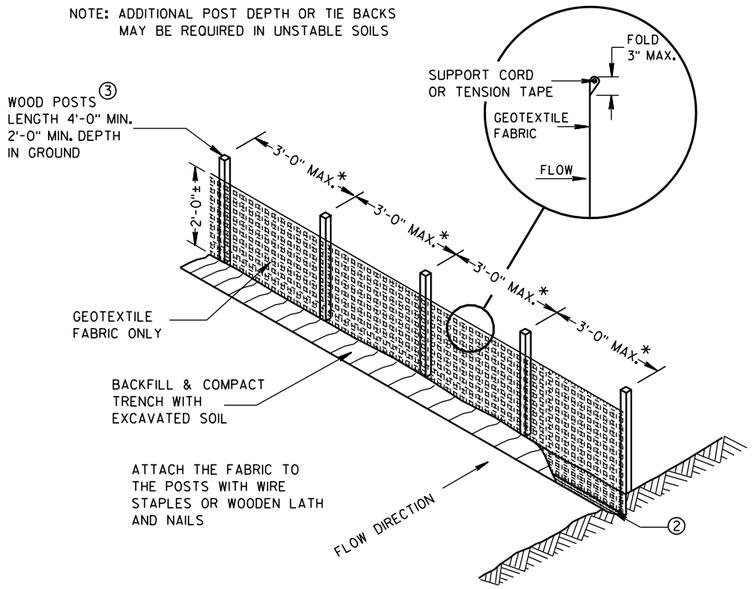
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE

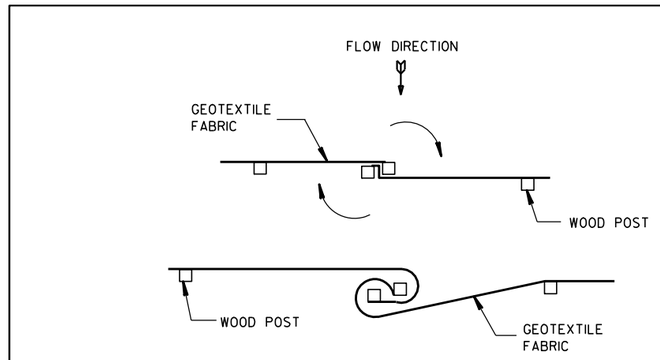


PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS



SILT FENCE

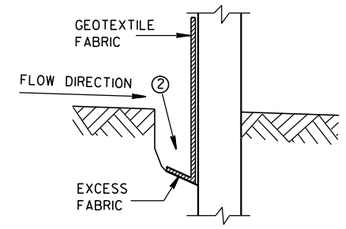


JOINING TWO LENGTHS OF SILT FENCE 5

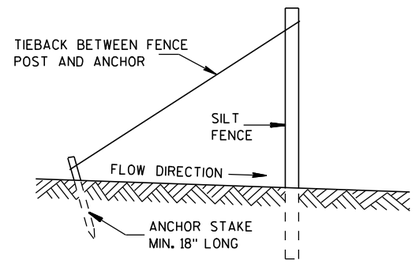
GENERAL NOTES

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 TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 9-6

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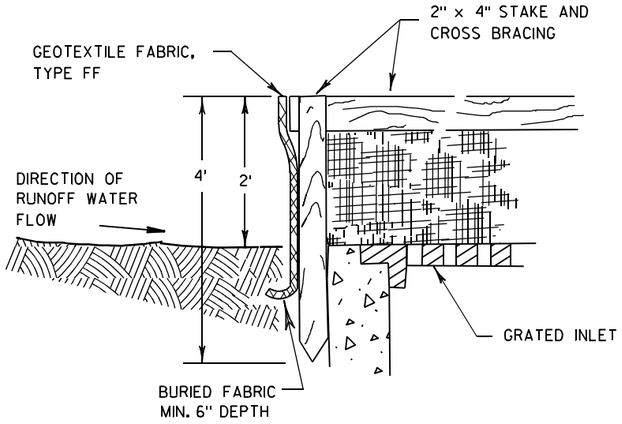
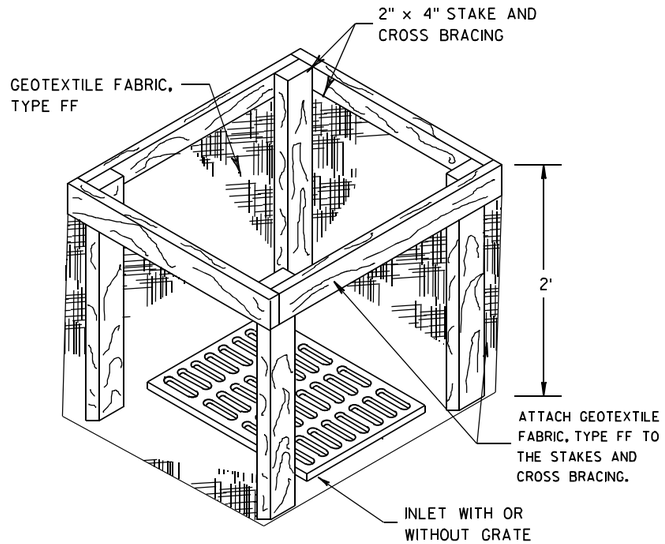
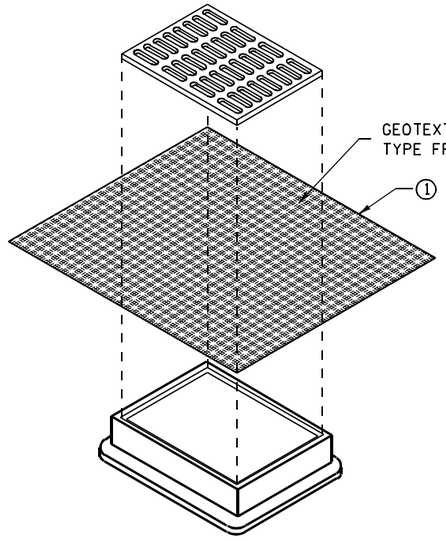
S.D.D. 8 E 9-6



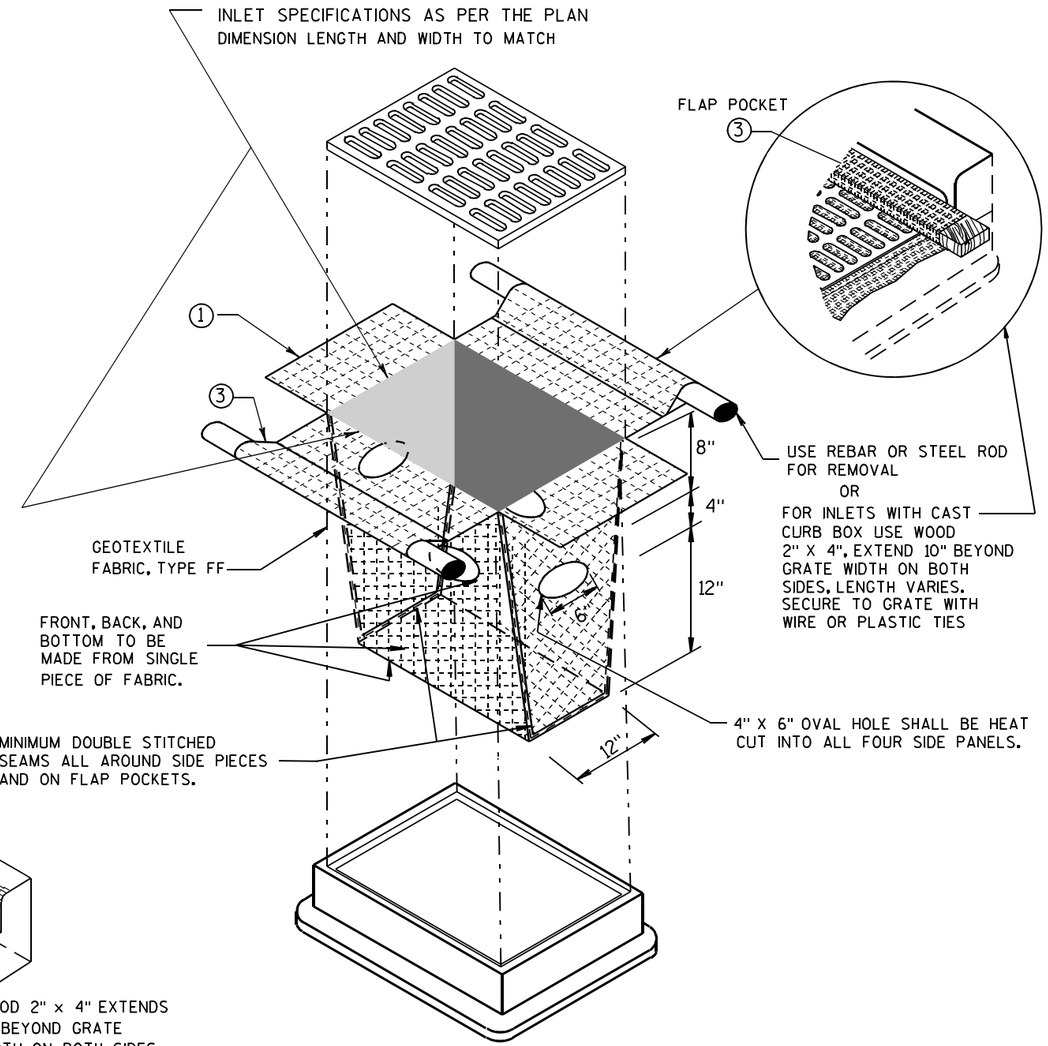


INLET PROTECTION, TYPE A



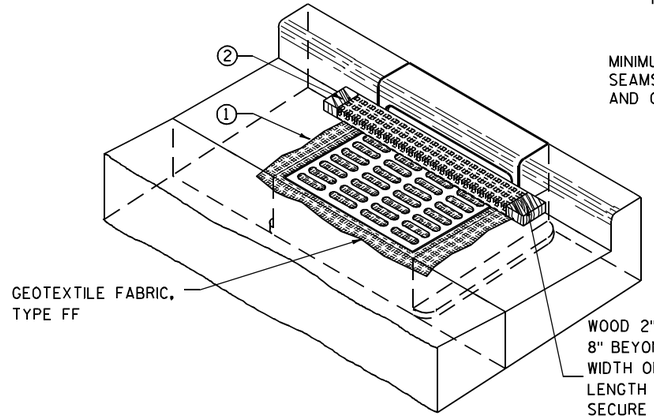
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

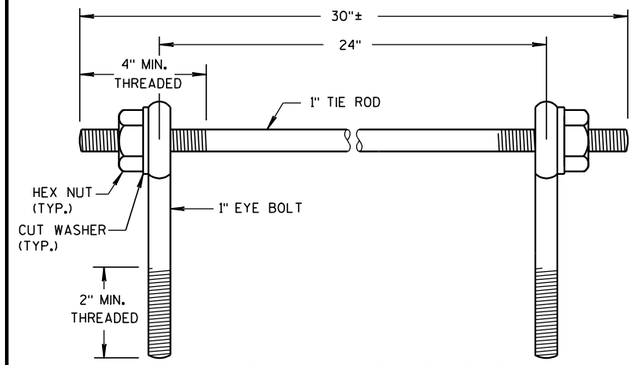
APPROVED

10/16/02
DATE

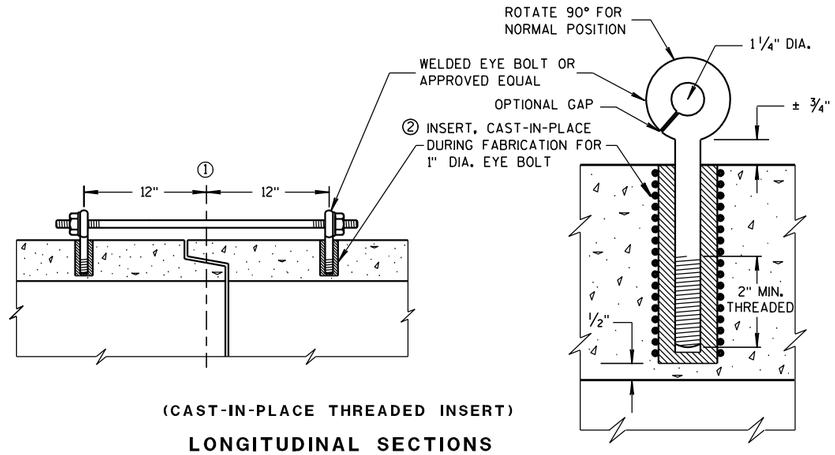
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 8 E 10-2



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.

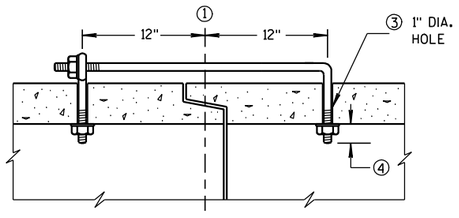
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

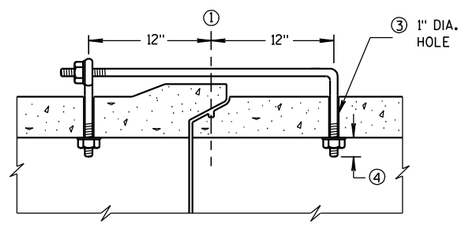
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

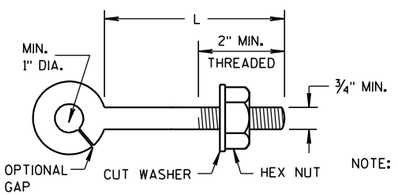


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

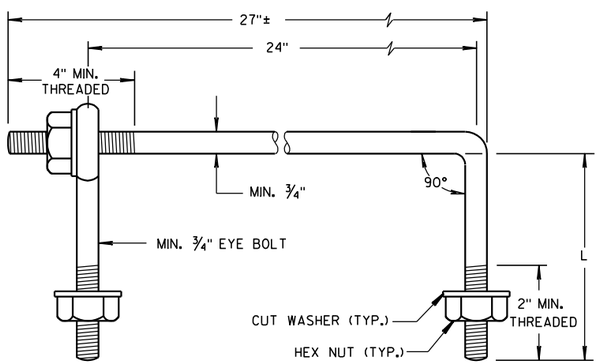
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

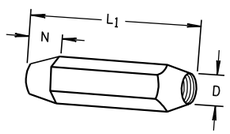
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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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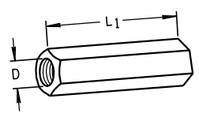
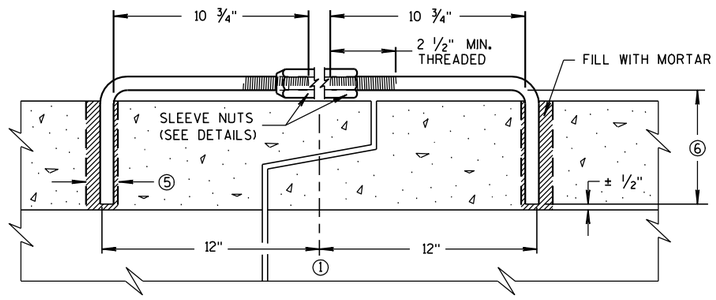


PLAIN

RIGHT AND LEFT THREADS

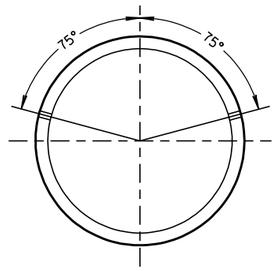
SLEEVE NUTS



LONGITUDINAL SECTION

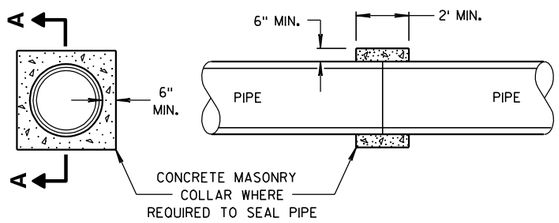
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

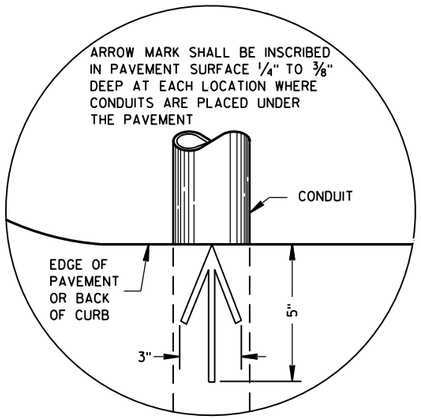
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
317
FHWA

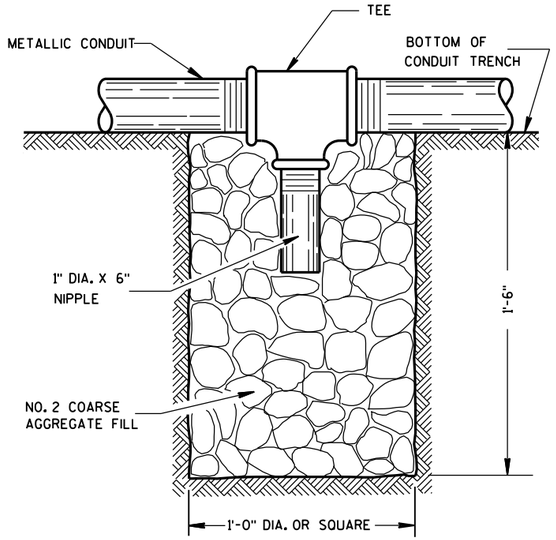
6

S.D.D. 8 F 4-7



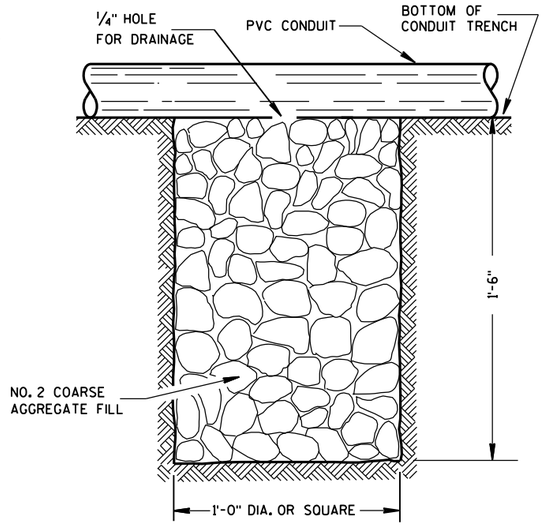
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

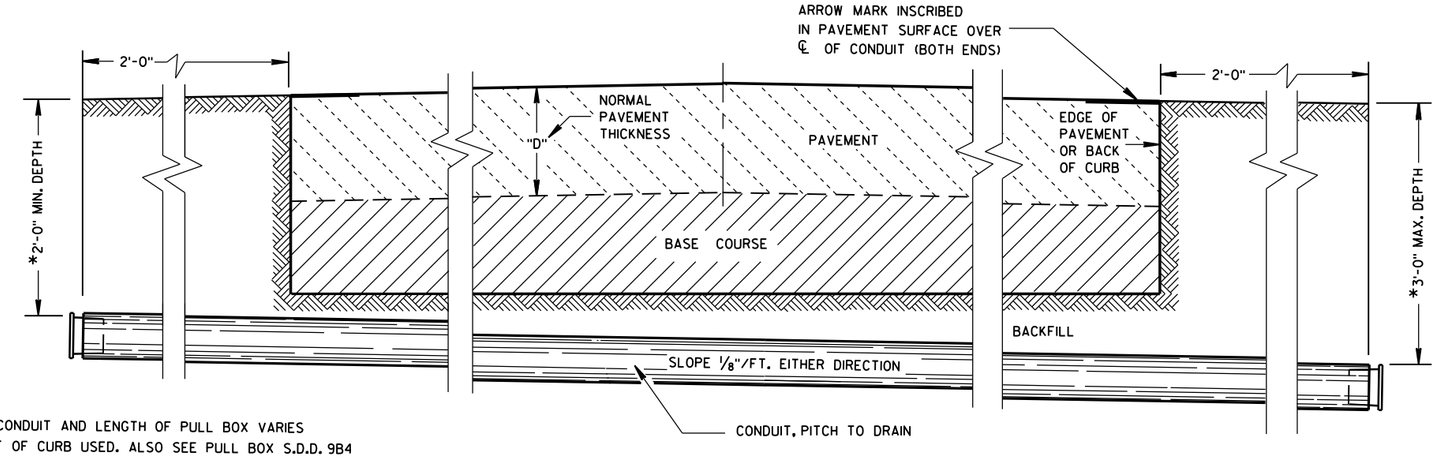
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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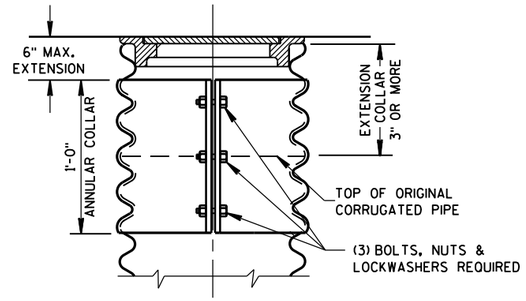
S.D.D. 9 B 2-9

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

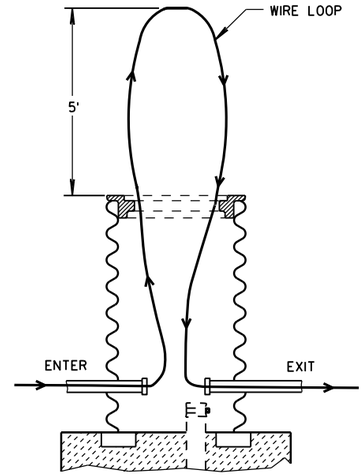
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

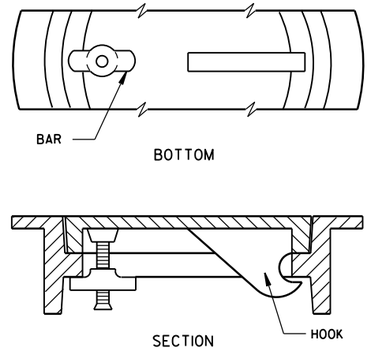
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

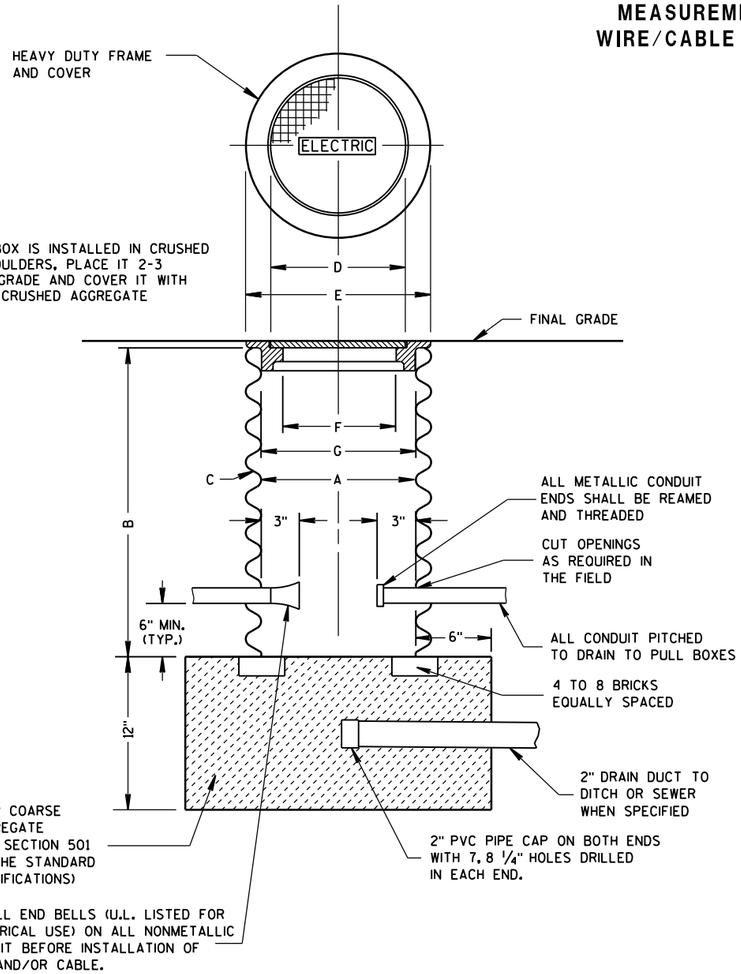


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



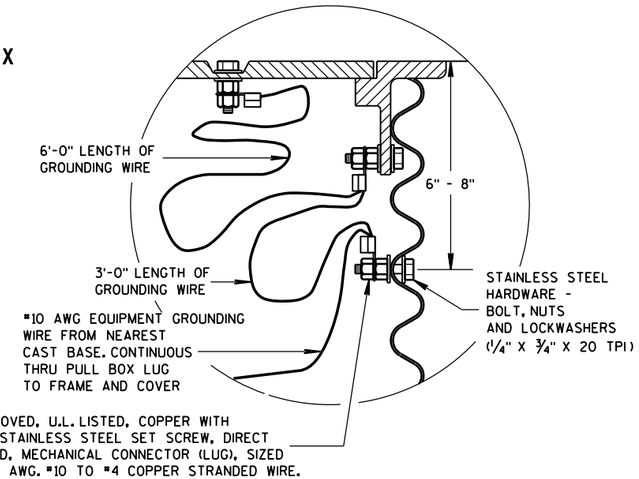
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

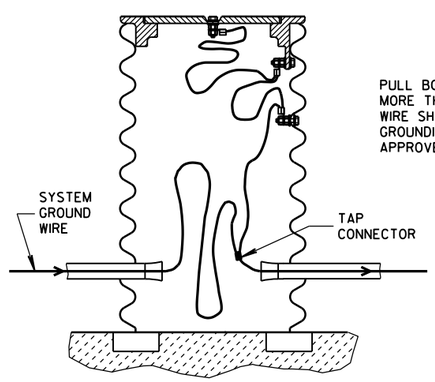
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL 319
FHWA

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S.D.D. 9 B 4-11

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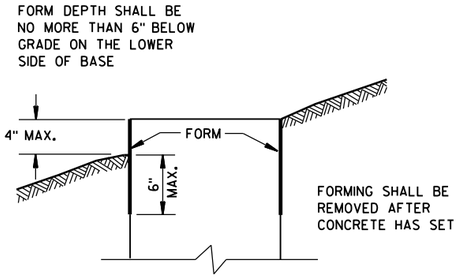
S.D.D. 9 B 4-11



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.

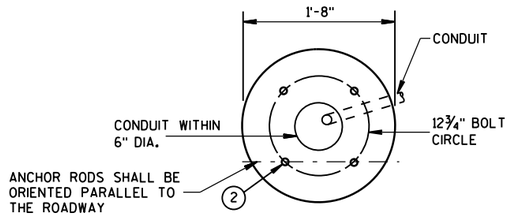
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

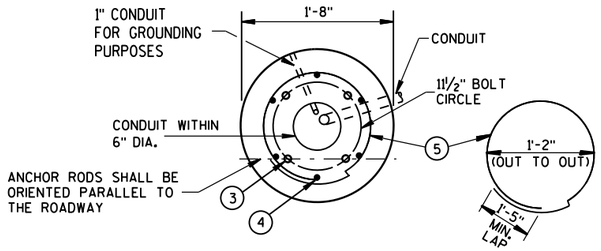
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

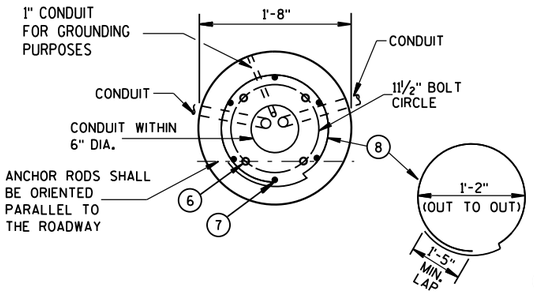
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

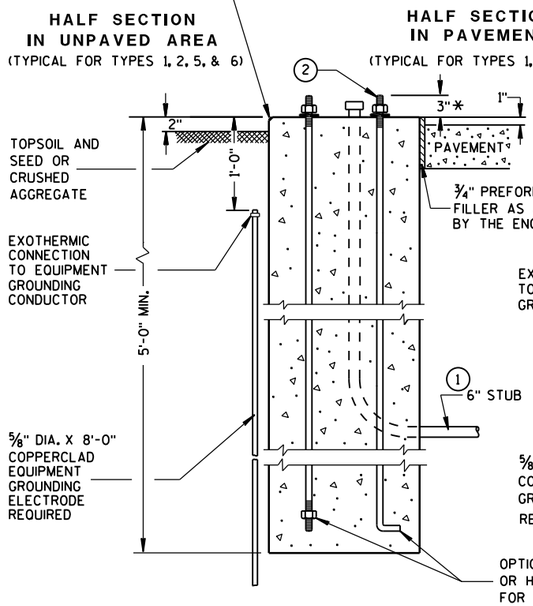
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

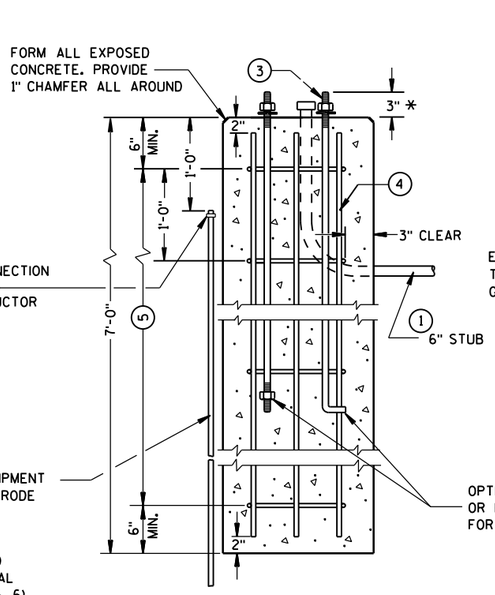
(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



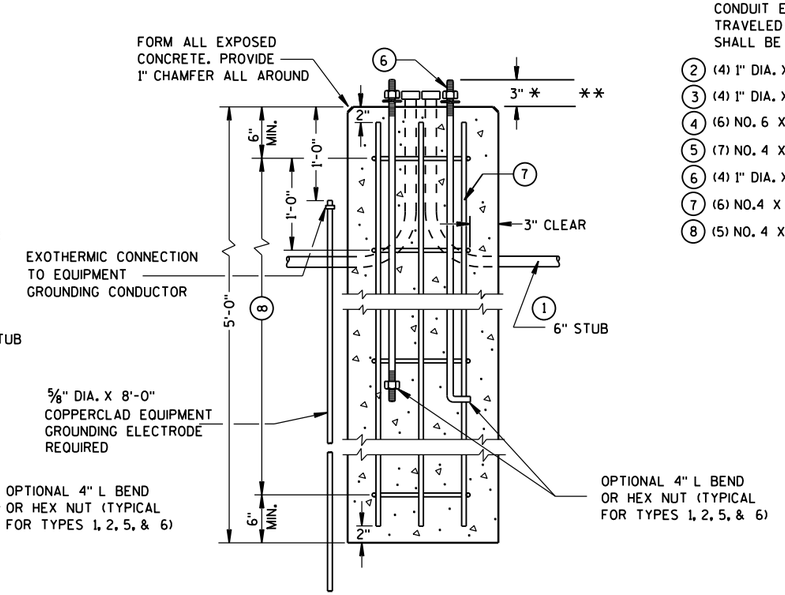








TYPE 2



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
FHWA

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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.

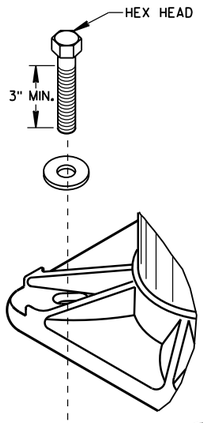
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

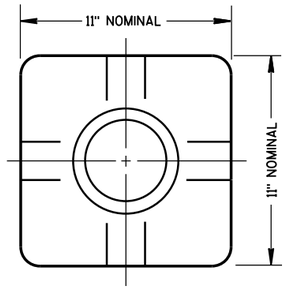
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

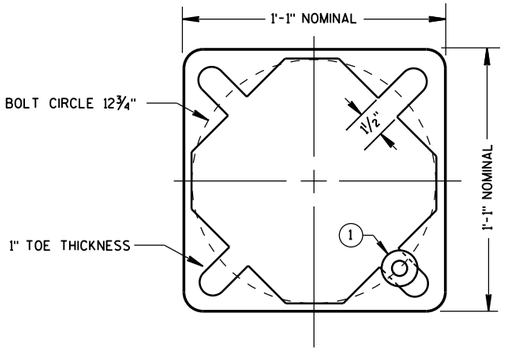
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

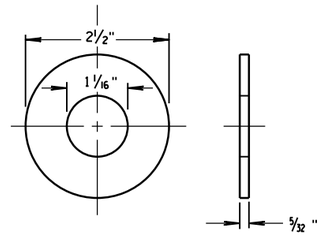




TOP VIEW
(PEDESTAL BASE)

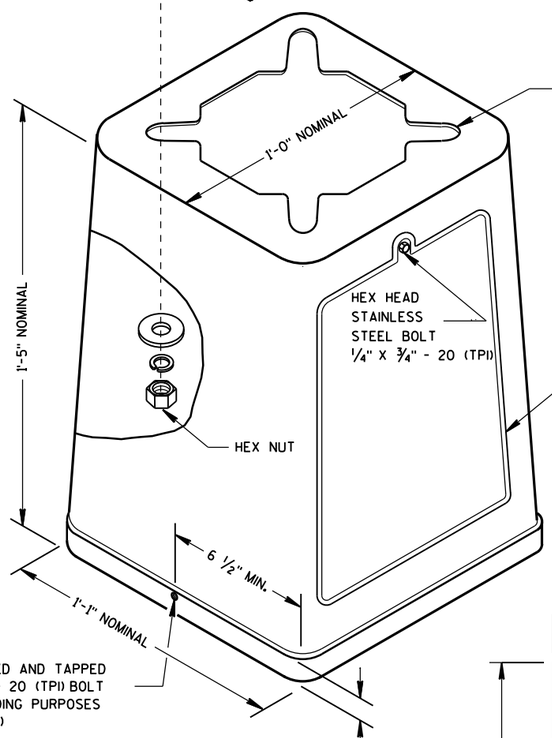


BOTTOM VIEW
(PEDESTAL BASE)

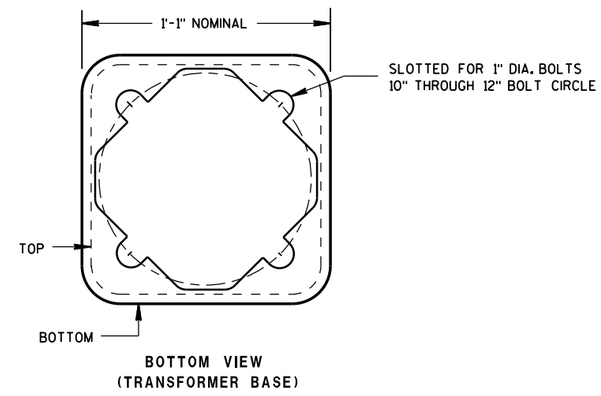


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

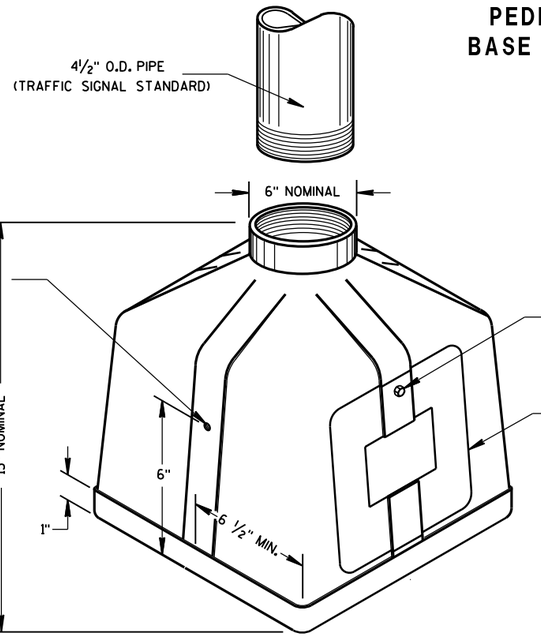
PEDESTAL BASE WASHER (1)



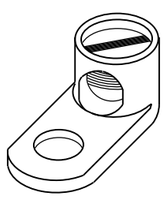
ISOMETRIC VIEW



BOTTOM VIEW
(TRANSFORMER BASE)

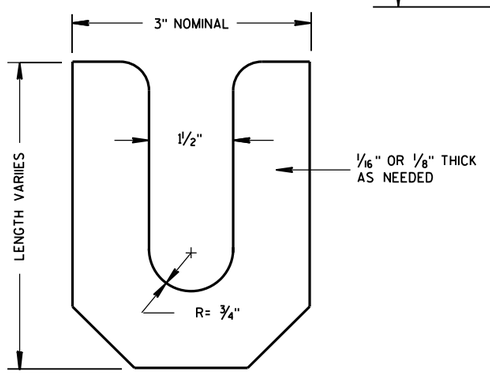


ISOMETRIC VIEW
PEDESTAL BASE



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
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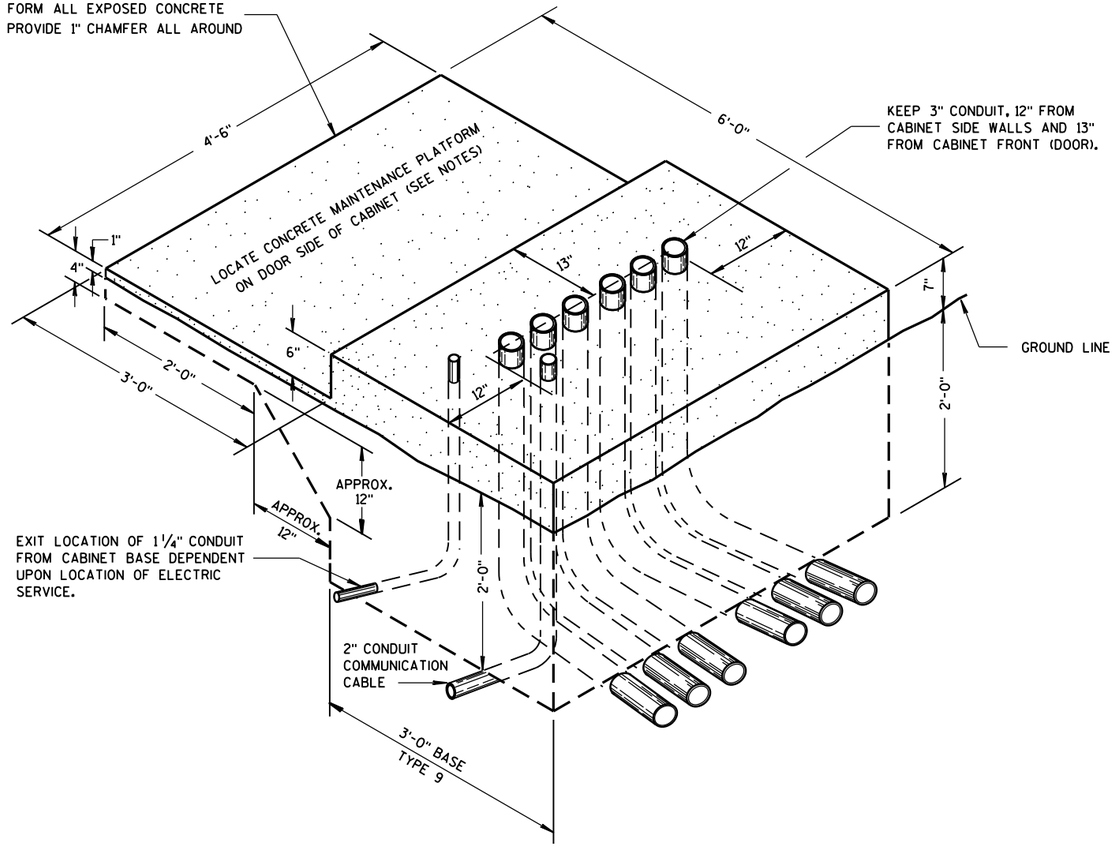
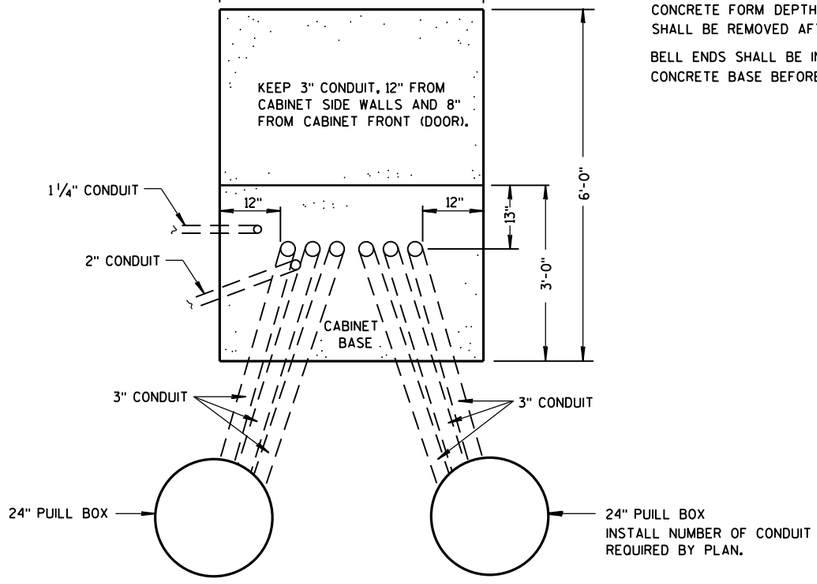


ISOMETRIC VIEW

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 322
FHWA

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).

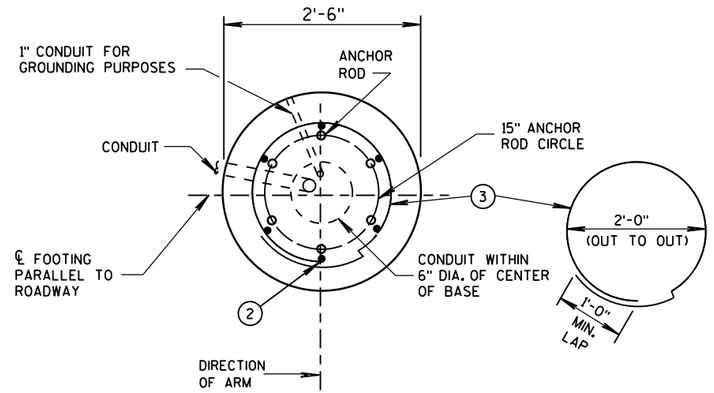
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

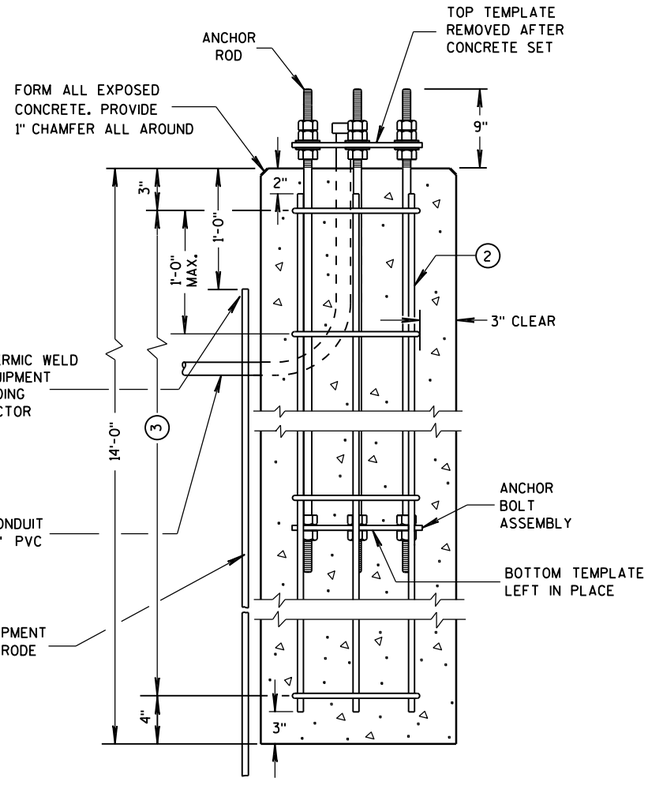
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 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) (15) NO. 4 X 7'-4" BAR STEEL REINFORCEMENT @ 1'-0" MAX. C-C.

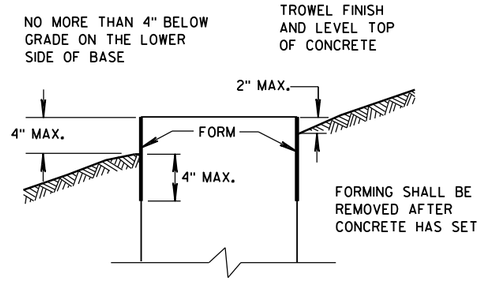
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATION)	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.



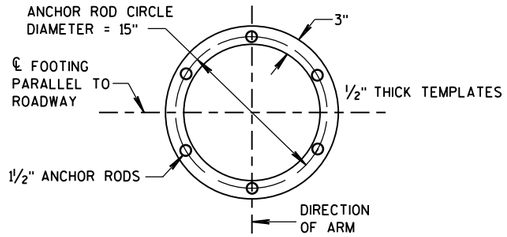


CONCRETE BASE TYPE 10
(FOR TYPE 9 & 10 POLES)

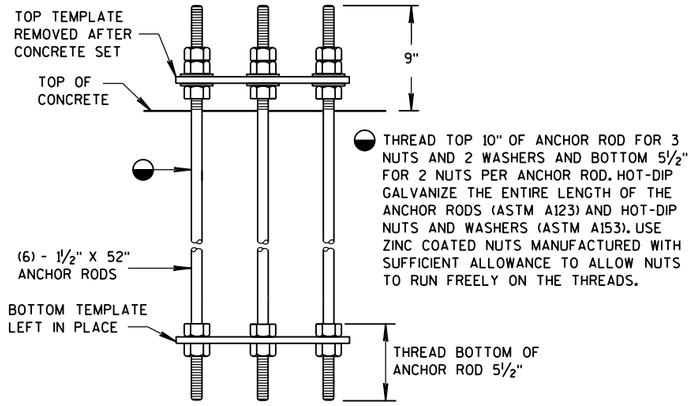
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



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	69
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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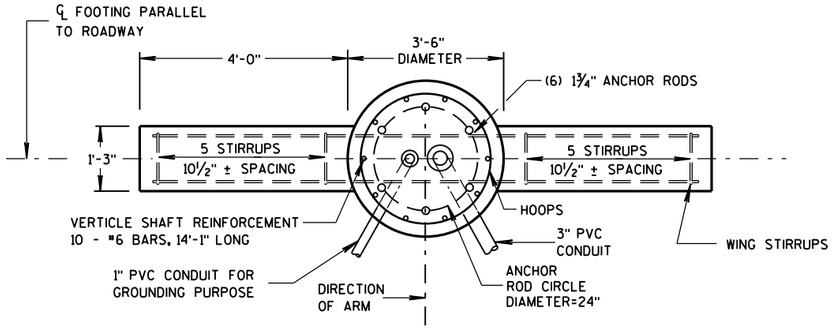
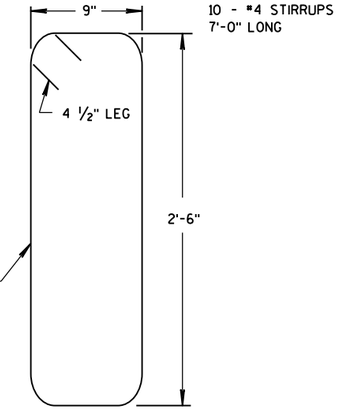
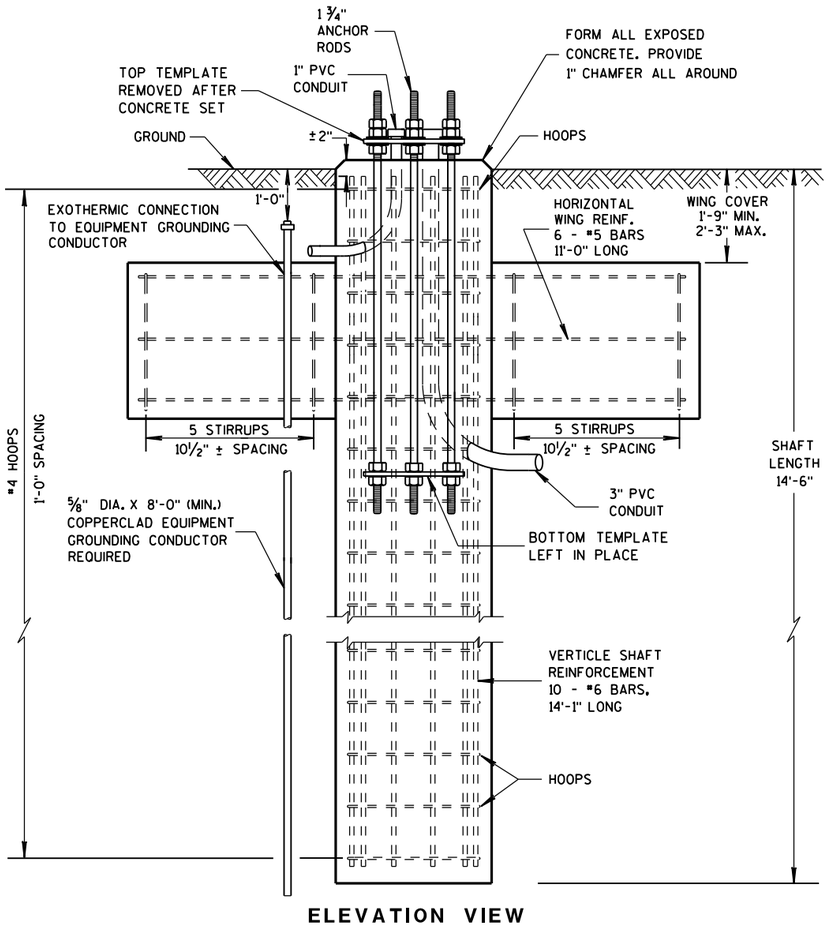
S.D.D. 9 C 11-9



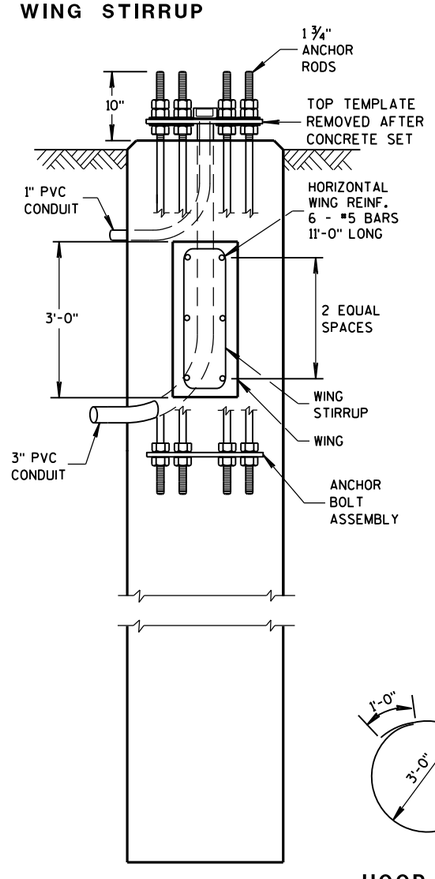
PLAN VIEW



WING STIRRUP

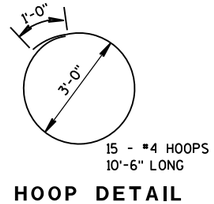


ELEVATION VIEW



SIDE VIEW

DOES NOT SHOW HOOPS OR VERTICAL SHAFT REINFORCEMENT



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 POLES)

CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 433 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 TRANSPOI

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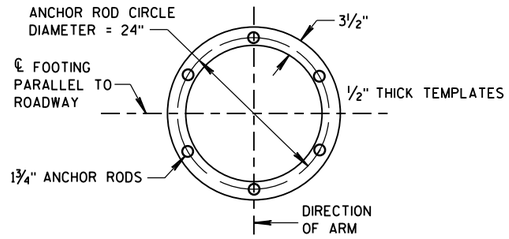
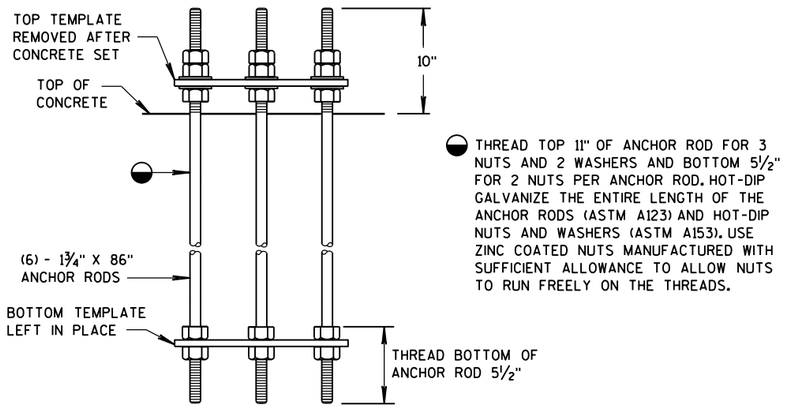
S.D.D. 9 C 12-8a

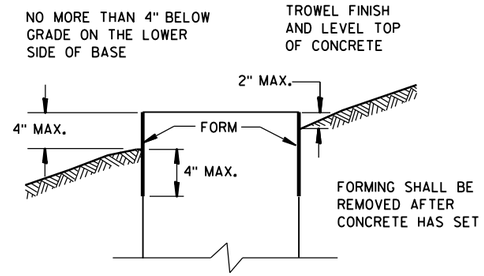


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



FORMING DETAIL

CONCRETE BASE TYPE 13	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2016 DATE FHWA	/S/ Ahmet Demirbilek STATE ELECTRICAL

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S.D.D. 9 C 12-8b

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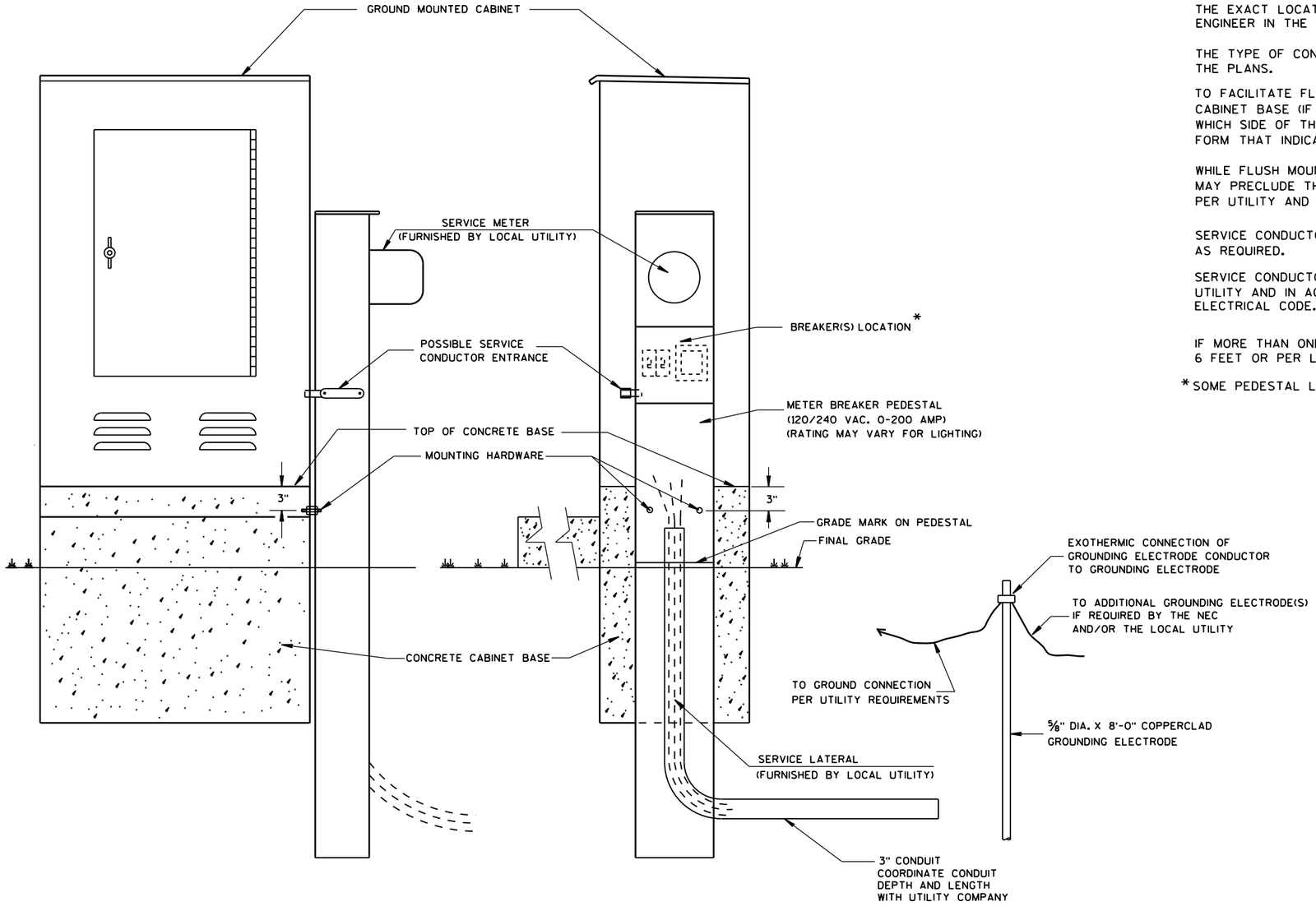
S.D.D. 9 C 12-8b



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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S.D.D. 9 D 1-5

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S.D.D. 9 D 1-5

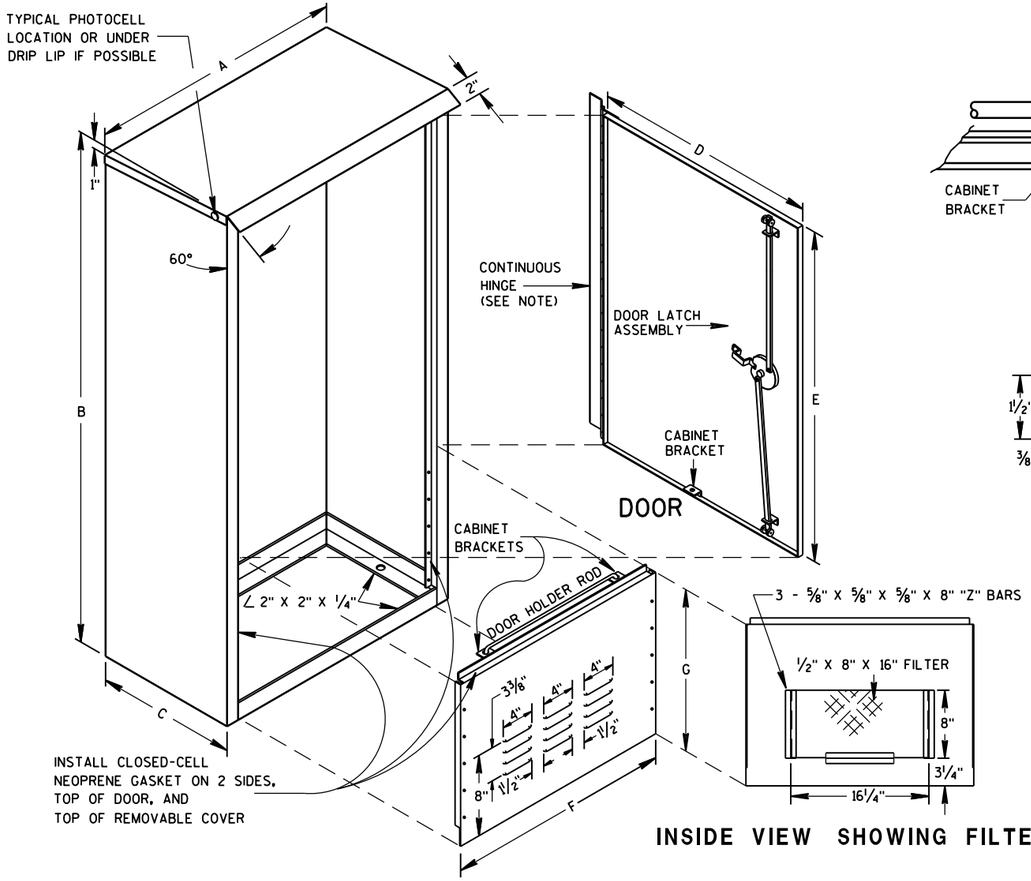
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

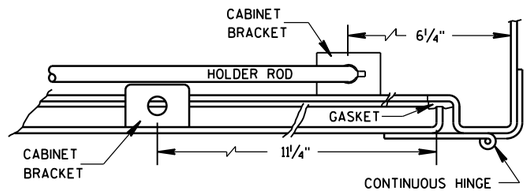
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

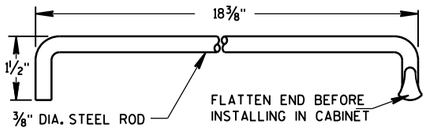


REMOVABLE COVER

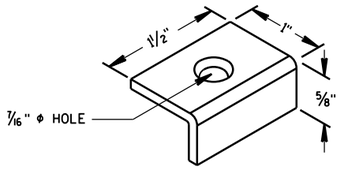
INSIDE VIEW SHOWING FILTER



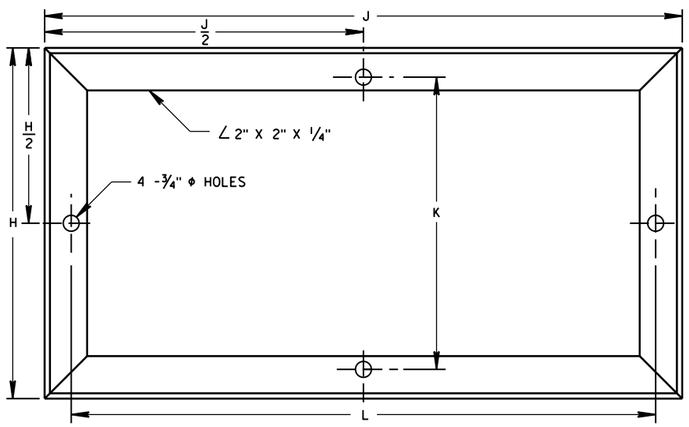
HINGE & DOOR HOLDER



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

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.

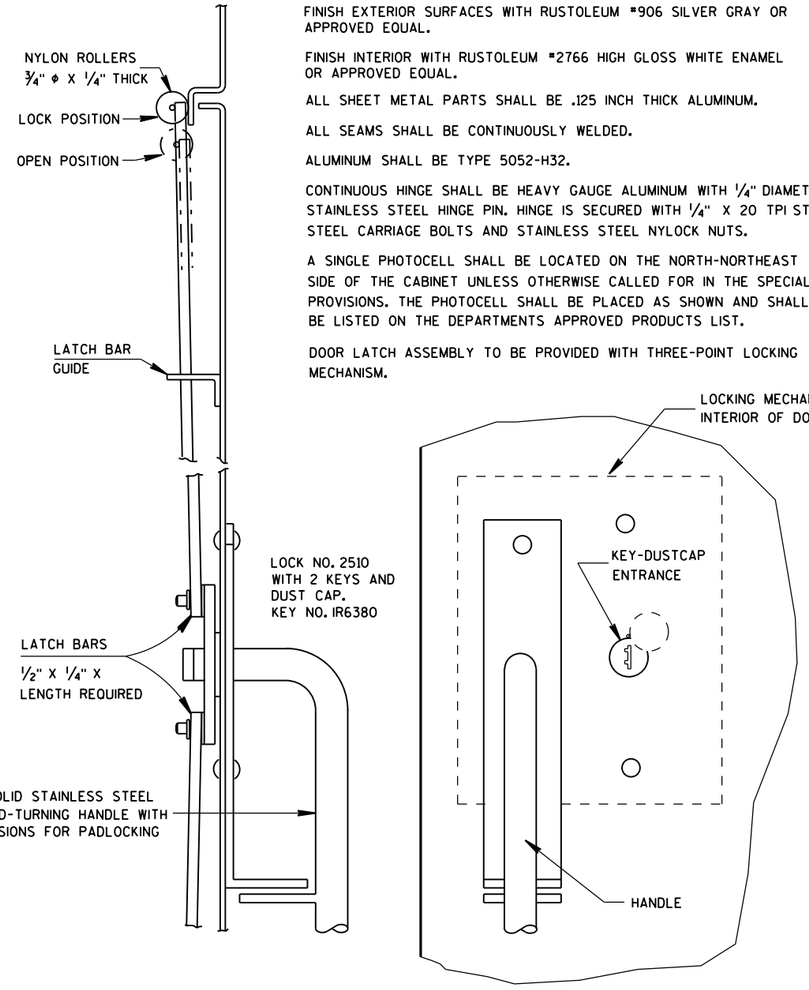
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

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.

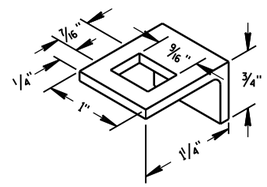
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL 327

FHWA

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S.D.D. 9 D 2-3

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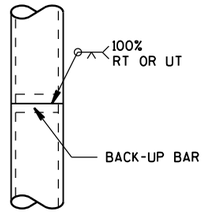
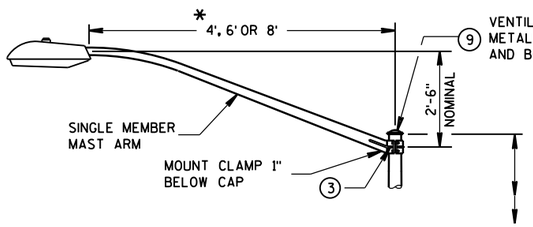
S.D.D. 9 D 2-3

FOR MANUFACTURERS USE ONLY

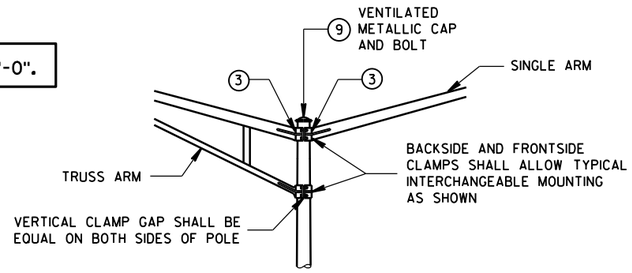
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.

*RISE FOR 4' ARM SHALL BE 2'-0".





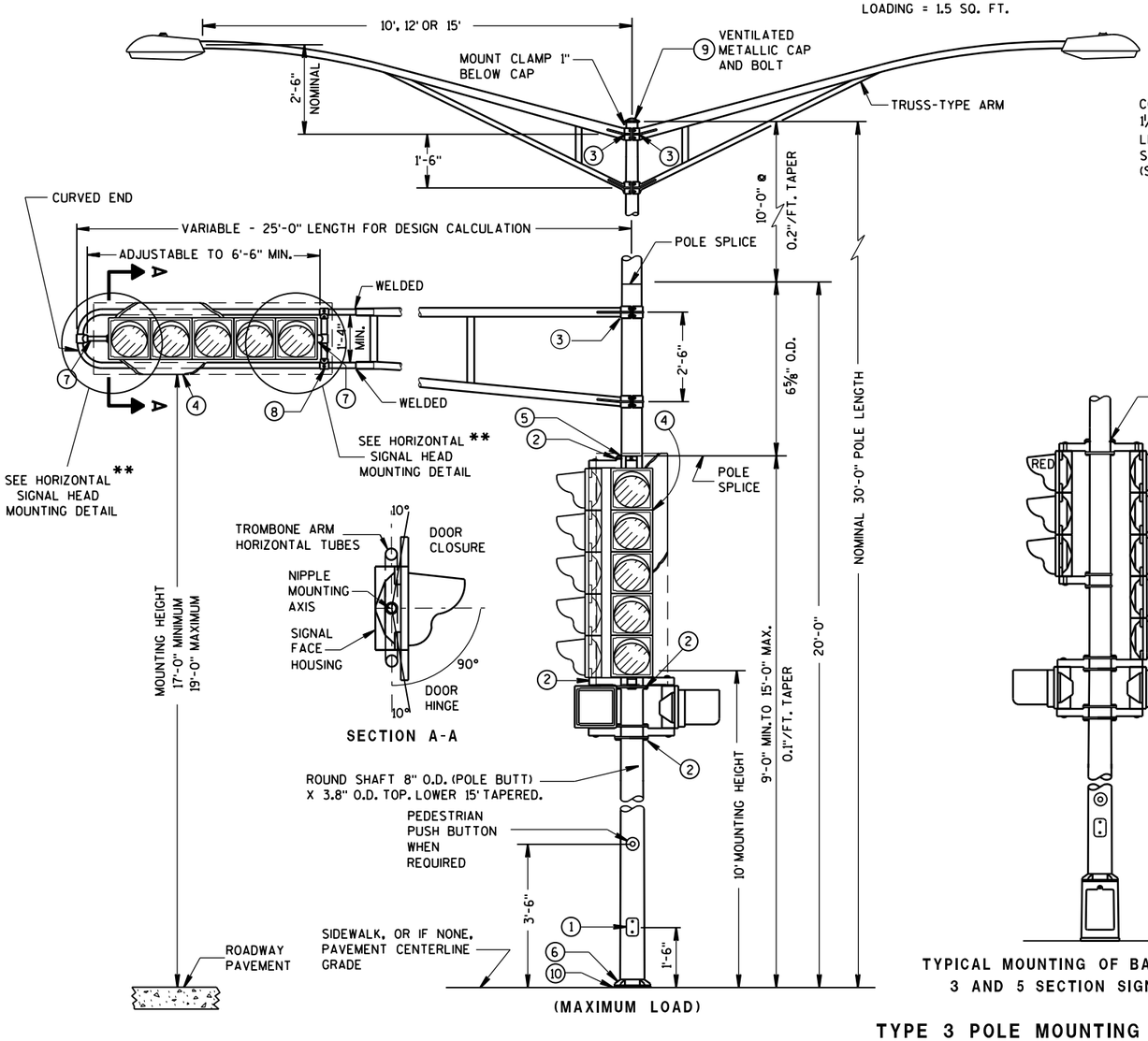
POLE SPLICE DETAIL



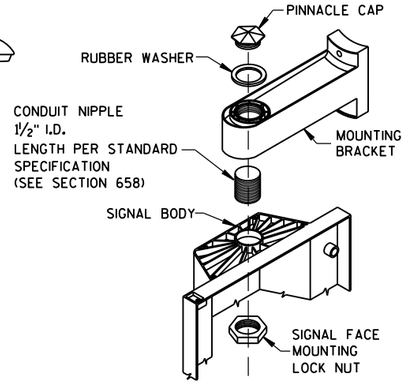
INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

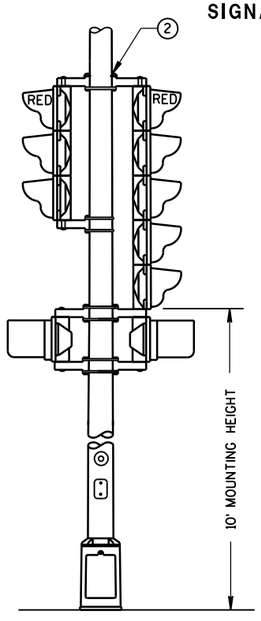
WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.



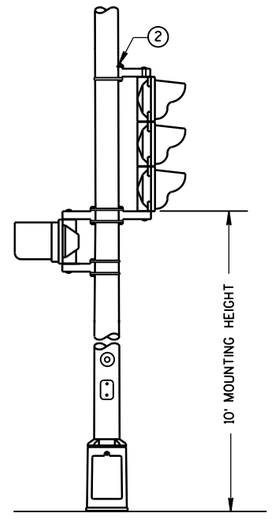
(MAXIMUM LOAD)



SIGNAL FACE MOUNTING DETAIL
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK
3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION
SIGNAL FACE

TYPE 3 POLE MOUNTING CONFIGURATION

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.

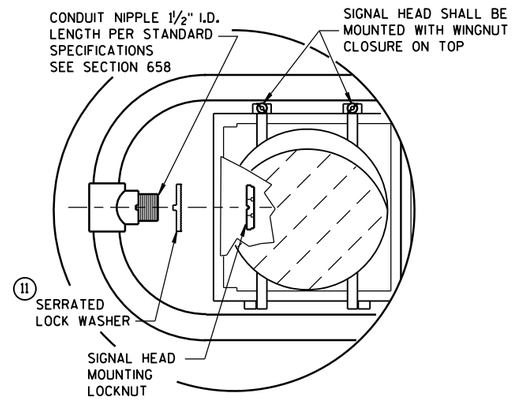
(7) MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658)

(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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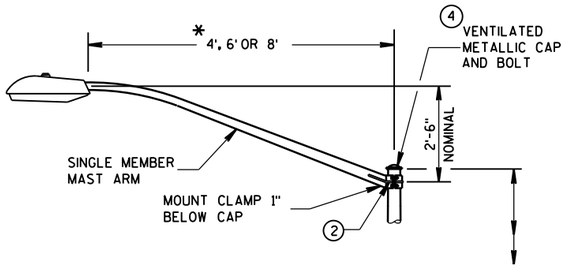
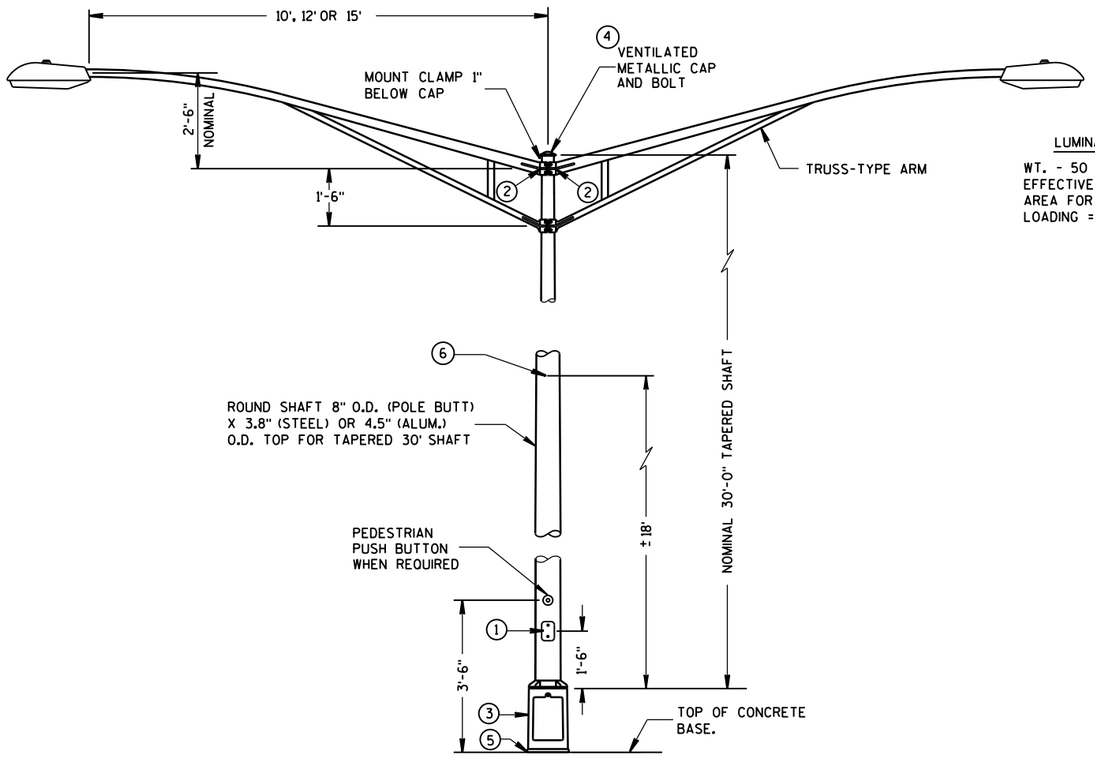
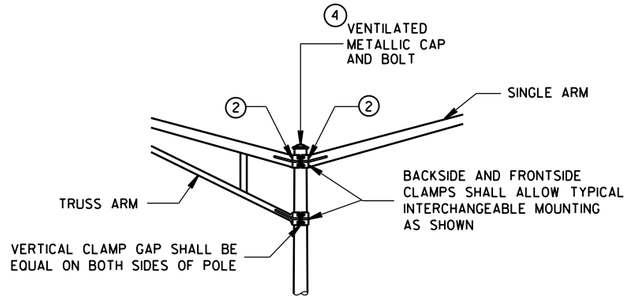
S.D.D. 9 E 1-14b

*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

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S.D.D. 9 E 1-14d

POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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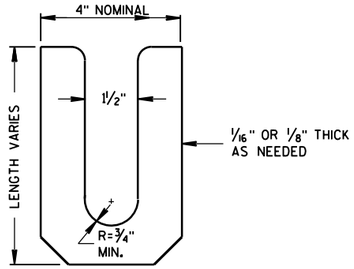
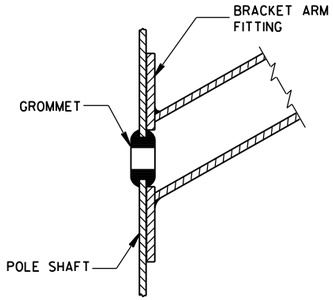
S.D.D. 9 E 1-14d

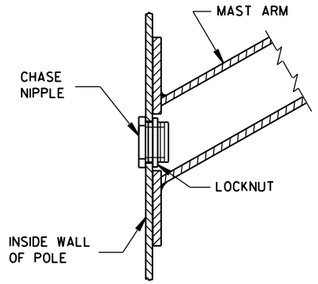


LEVELING SHIM (13)

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.

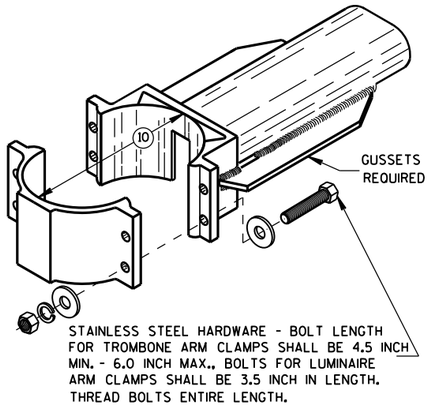
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

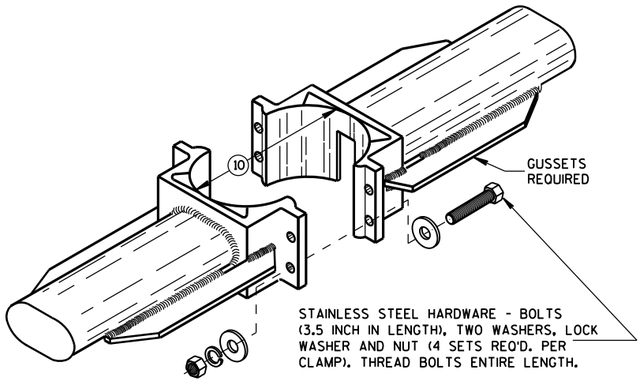
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

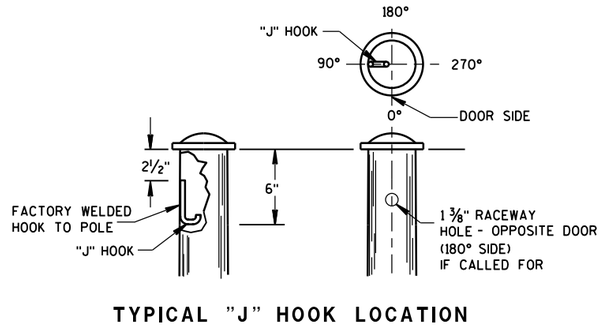
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



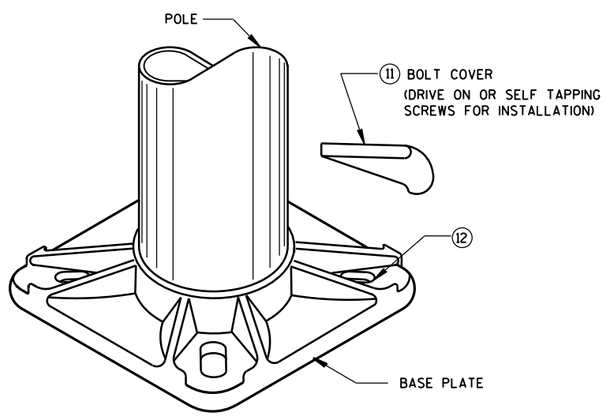
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



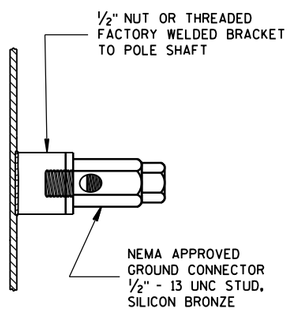
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

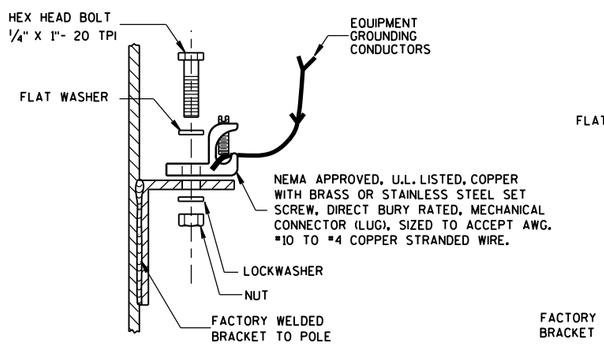


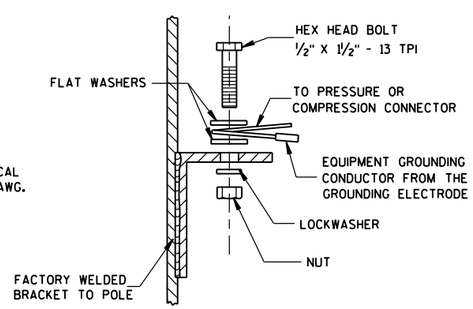
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

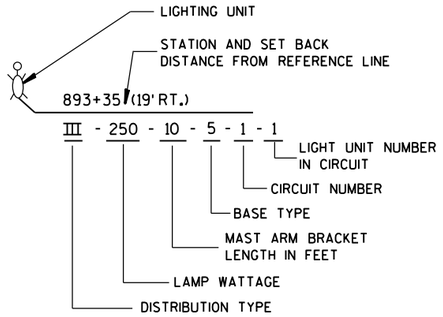
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

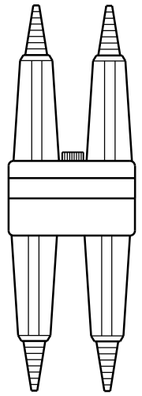
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

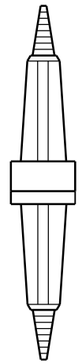
6
S.D.D. 9 E 1-14g



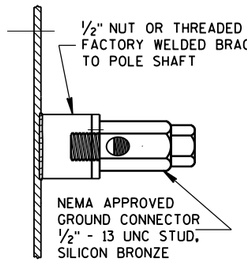
LIGHTING UNIT CODE
(TYPICAL)

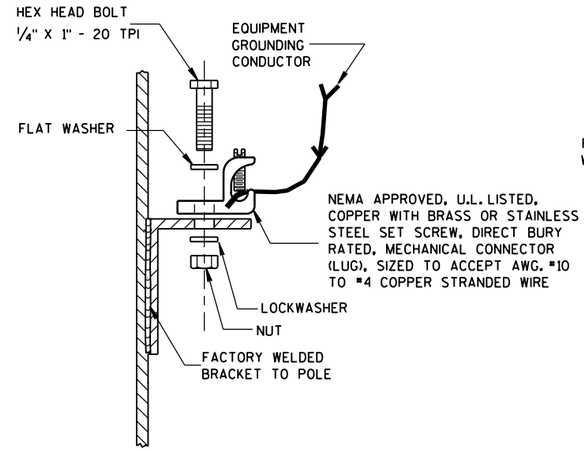


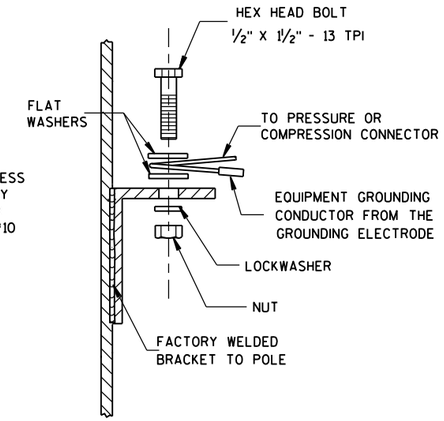
DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



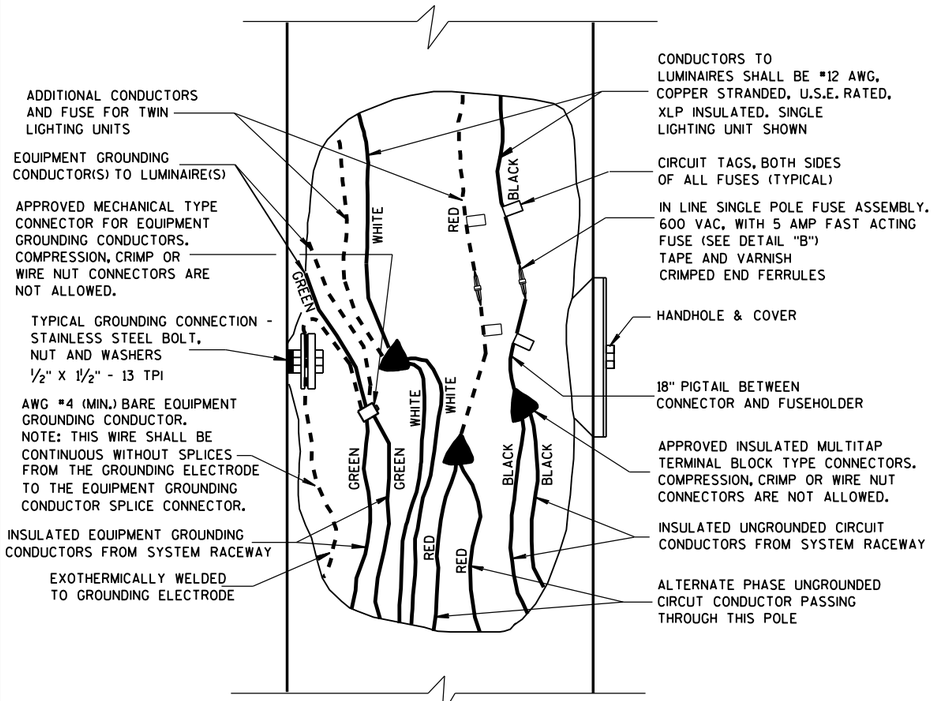
DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT



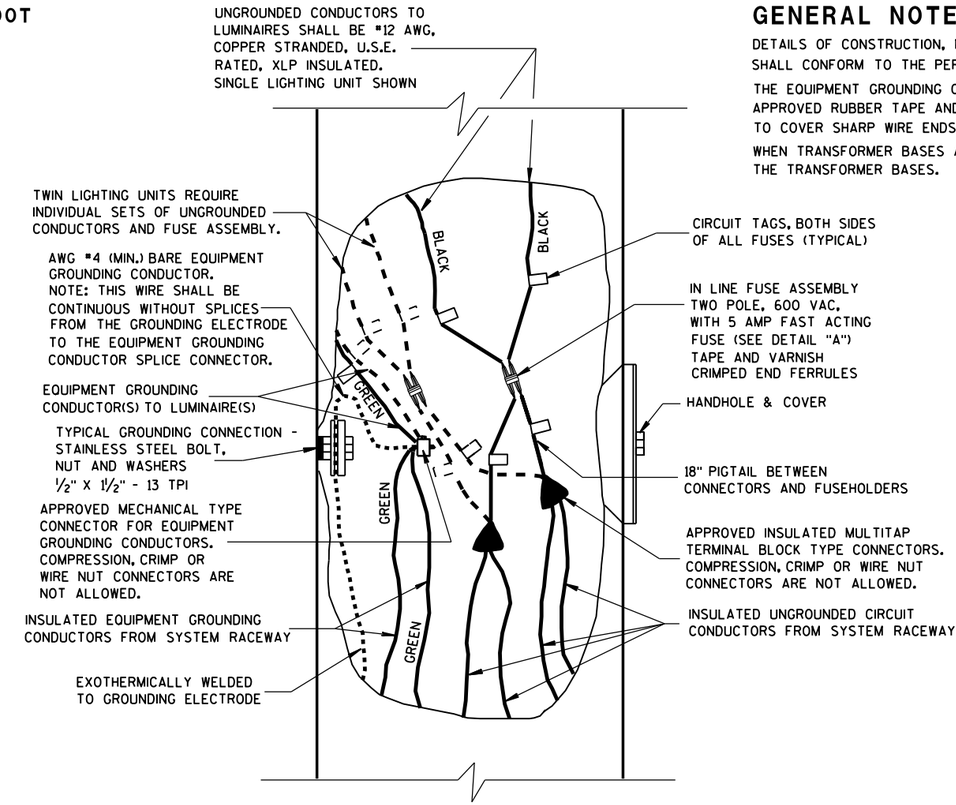




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

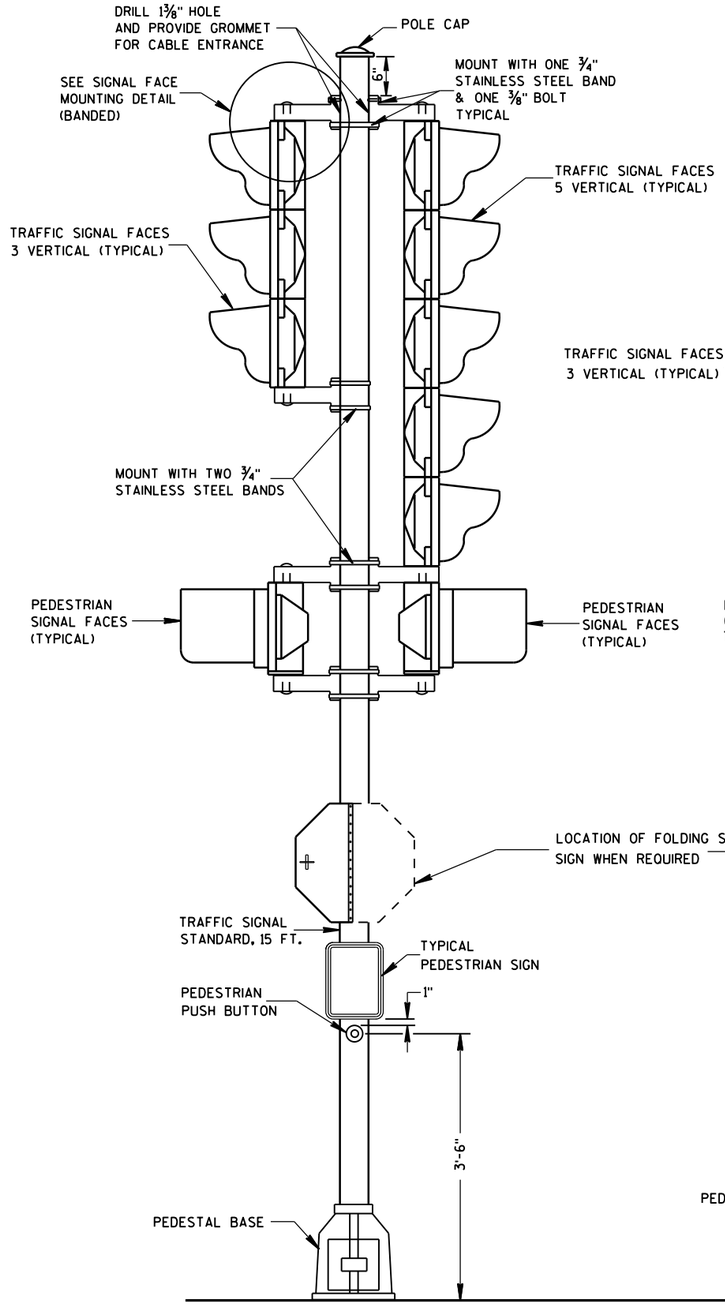
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

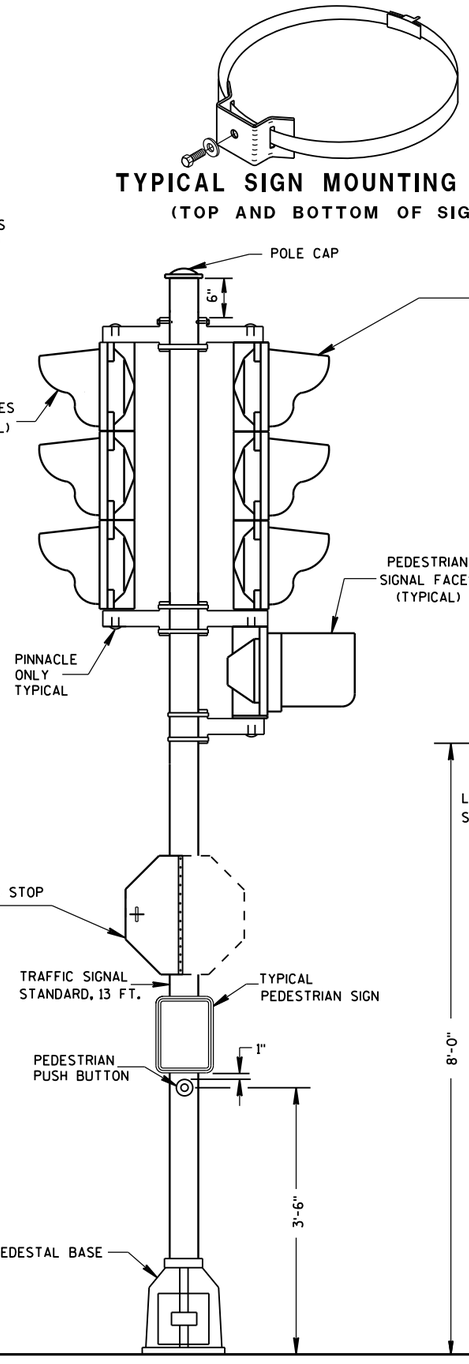
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 E 3-5



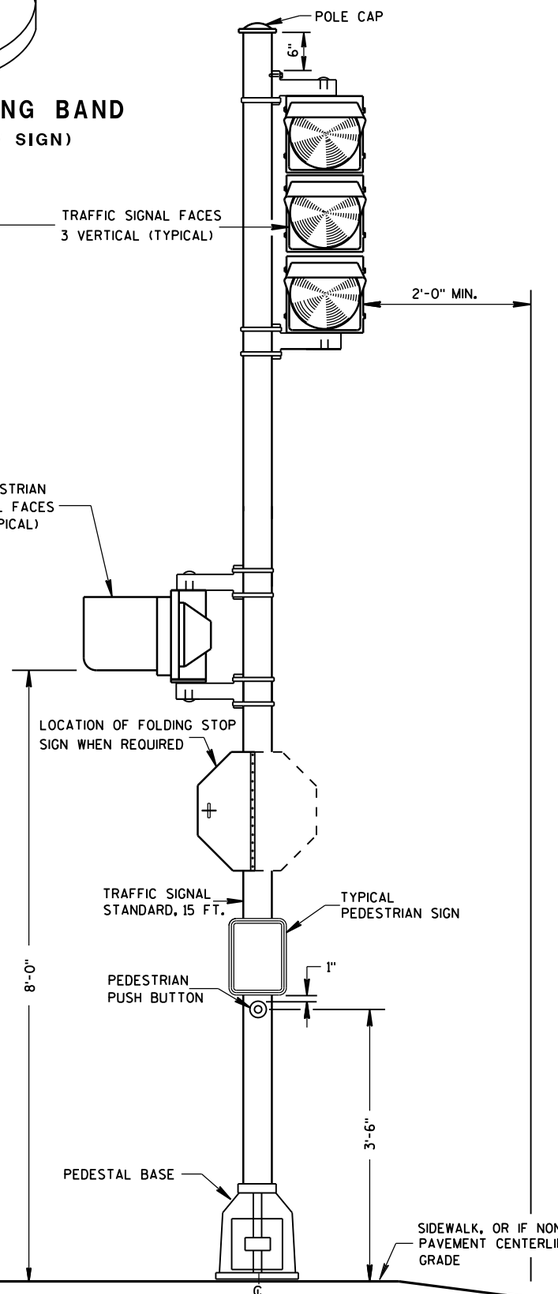
TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND

(TOP AND BOTTOM OF SIGN)



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.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

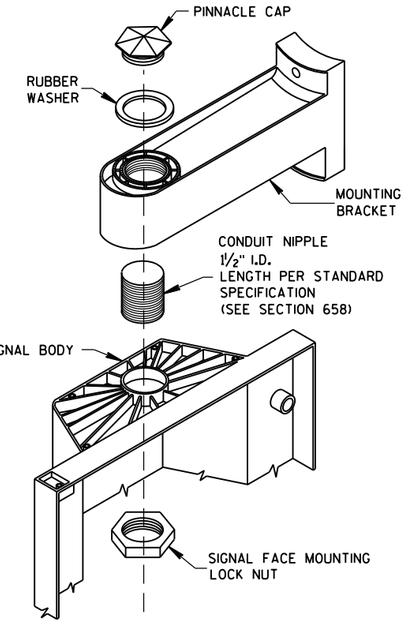
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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 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) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SIGNAL FACE MOUNTING DETAIL

(BANDED)

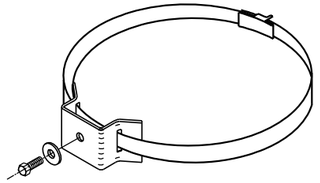
TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

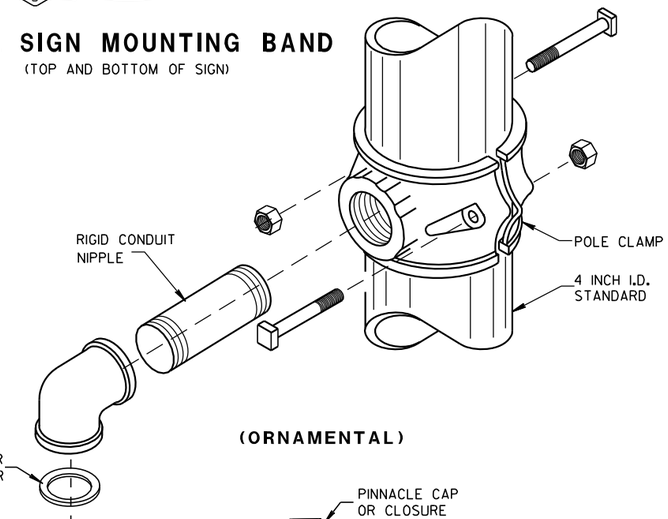
APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 E 6-5



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



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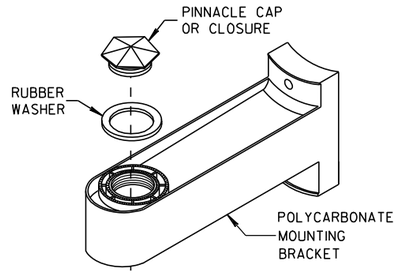
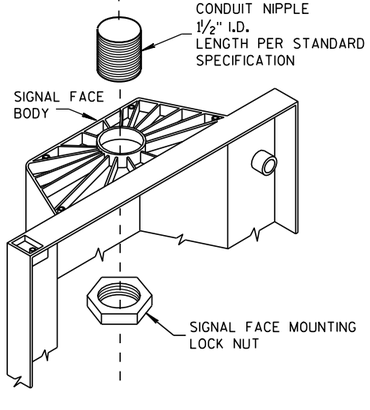
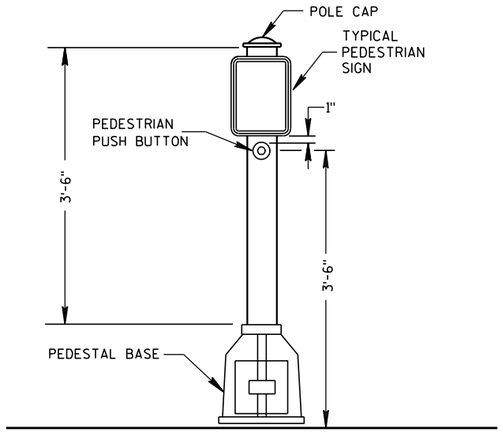


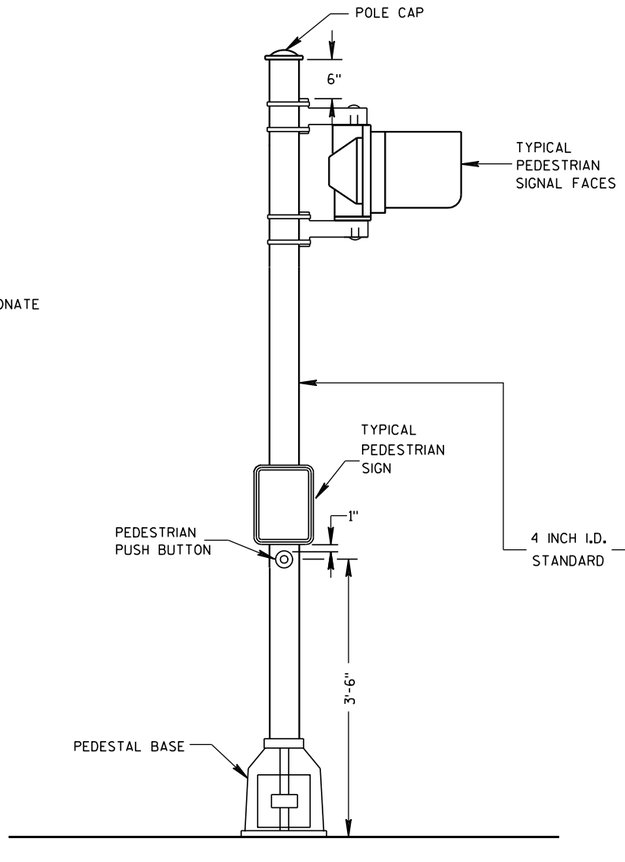
(BANDED)



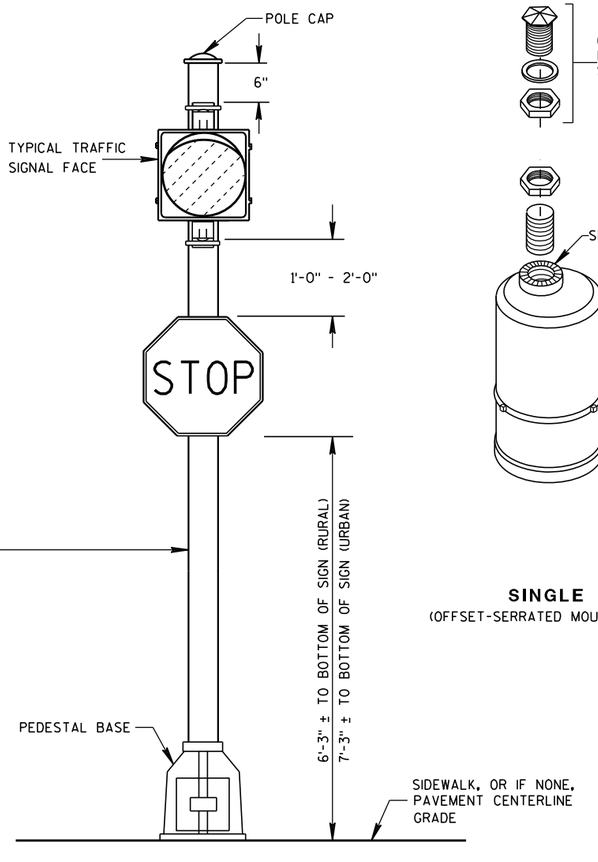
SIGNAL FACE MOUNTING DETAILS



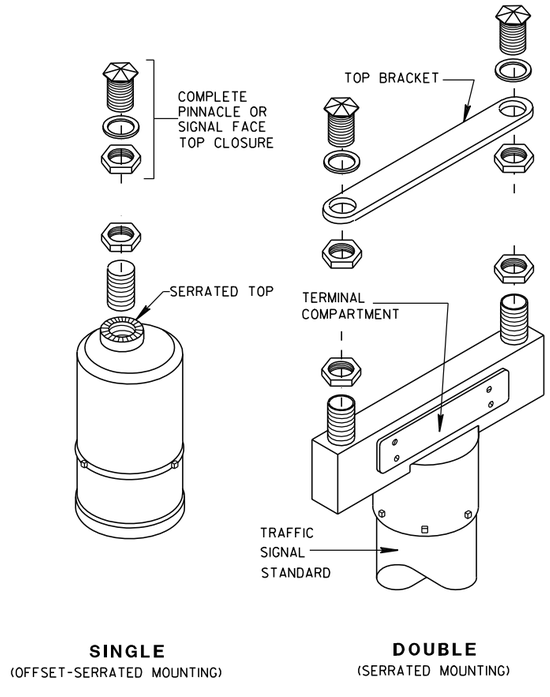
PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING



PEDESTRIAN FACE STANDARD-10 FT.
(WALK-DON'T WALK)



STANDARD FLASHER.
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET-SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

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.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/11/10
DATE

/S/ John Corbin
STATE ELECTRICAL ENGI 333

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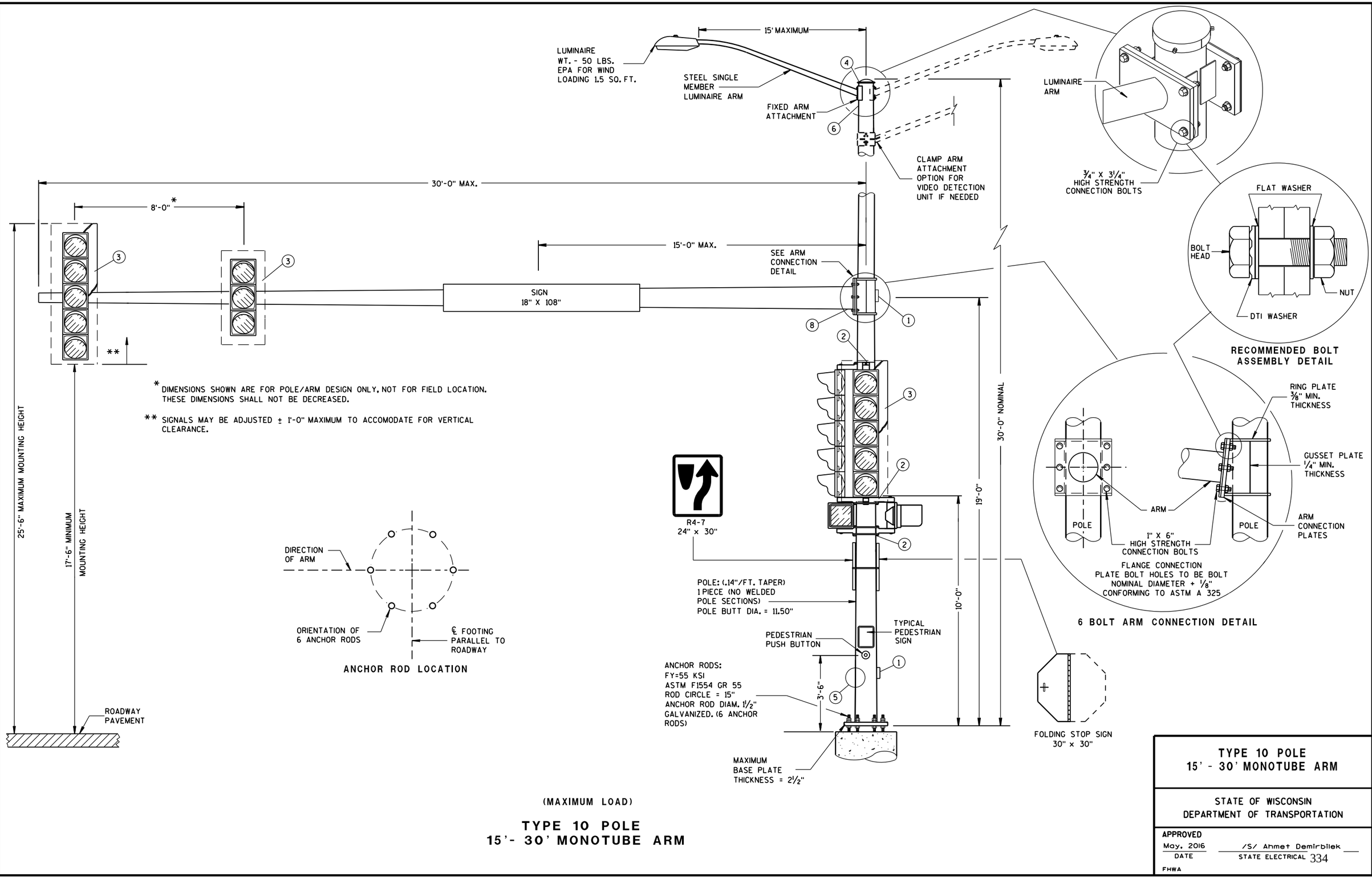

* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

(MAXIMUM LOAD)

TYPE 10 POLE
15'- 30' MONOTUBE ARM

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 334
FHWA

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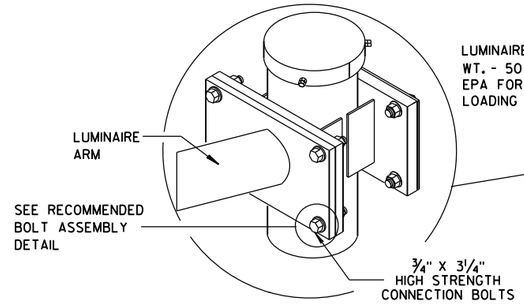
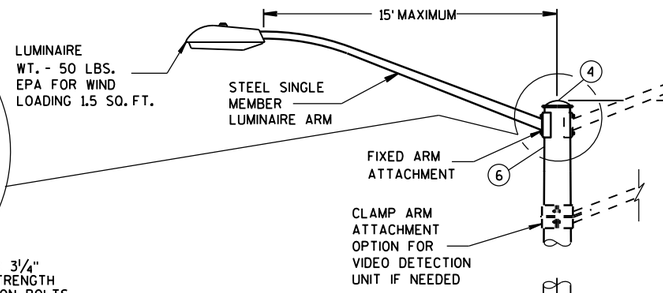
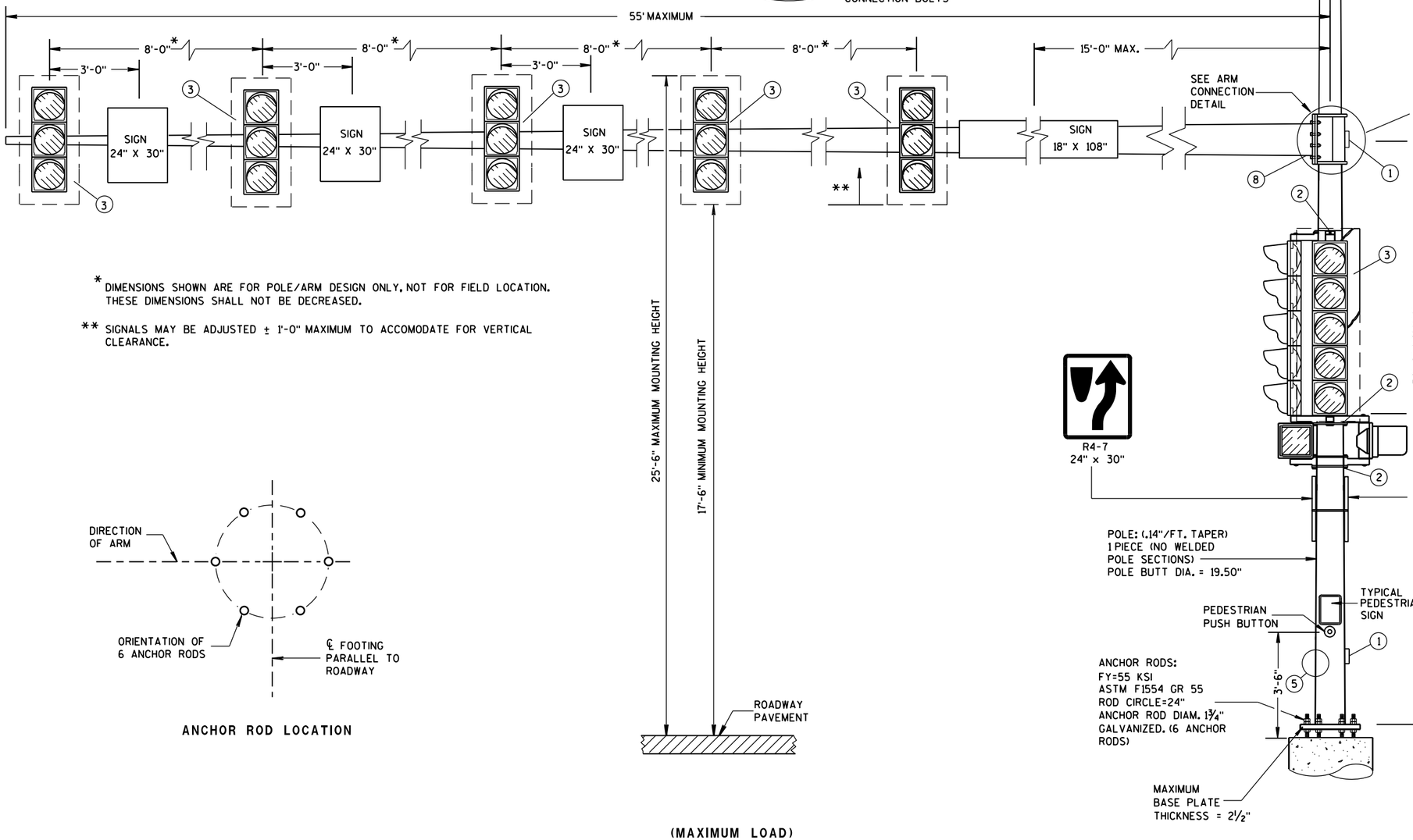
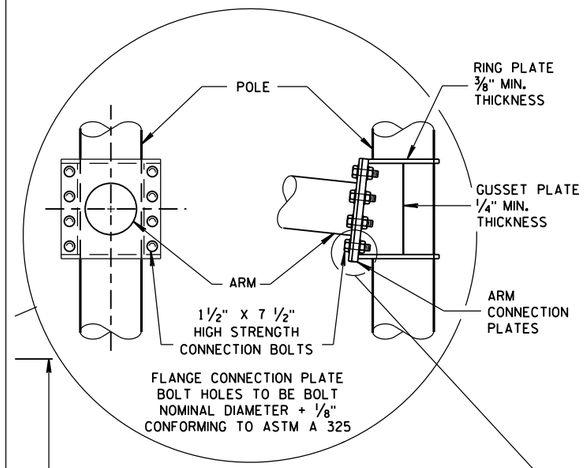
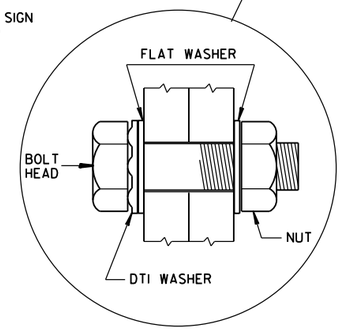








8 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY 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)

TYPE 13 POLE 35'- 55' MONOTUBE ARM

TYPE 13 POLE 35' - 55' MONOTUBE ARM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2016 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA	335

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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.

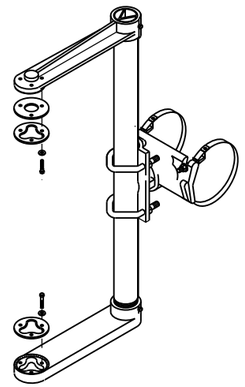
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

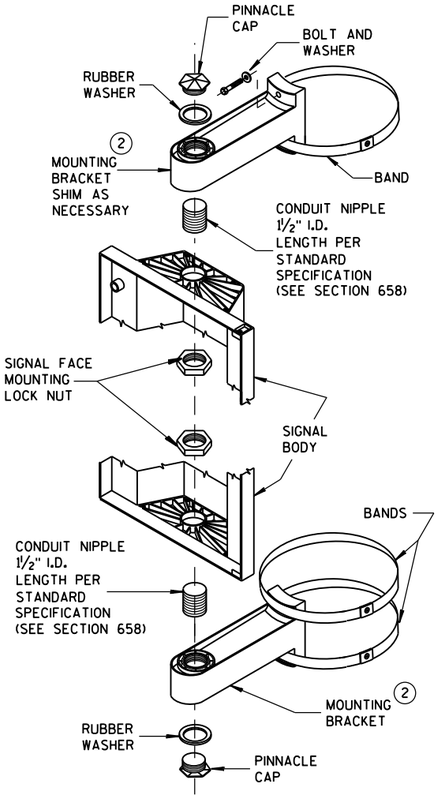
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

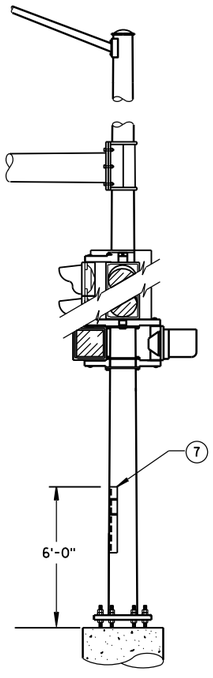


SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM

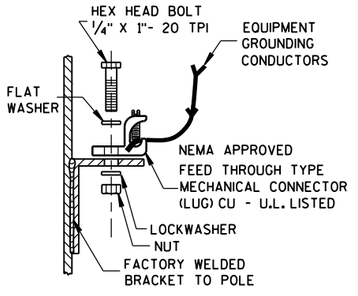
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE
VERTICAL MOUNTING DETAIL

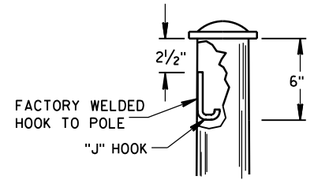


STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT



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

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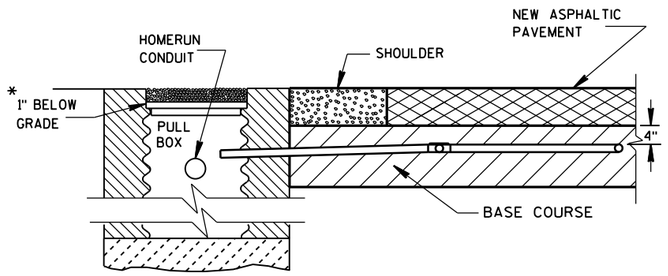
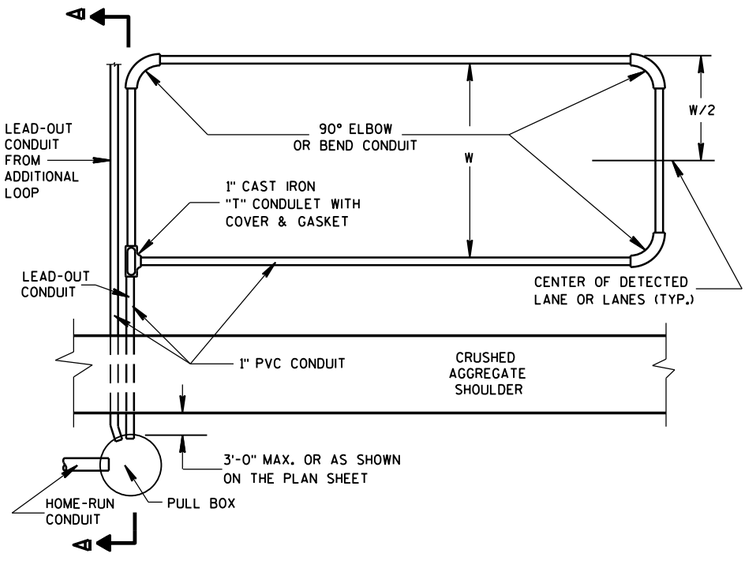


SECTION A-A
NO CURB & GUTTER

DETECTOR LOOP INSTALLATION DETAIL

*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.



TYPICAL PLAN OF LOOP DETECTOR

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.

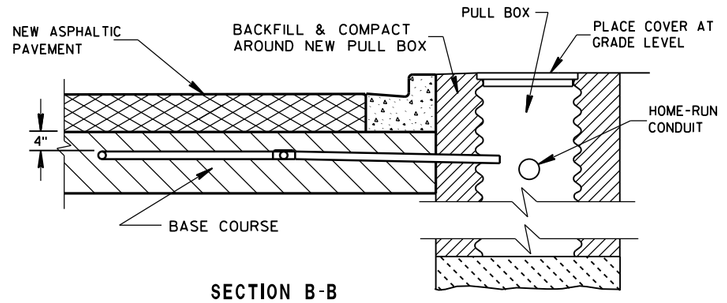
SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

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 AND CONDULET SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE ASPHALTIC PAVEMENT IS PLACED.

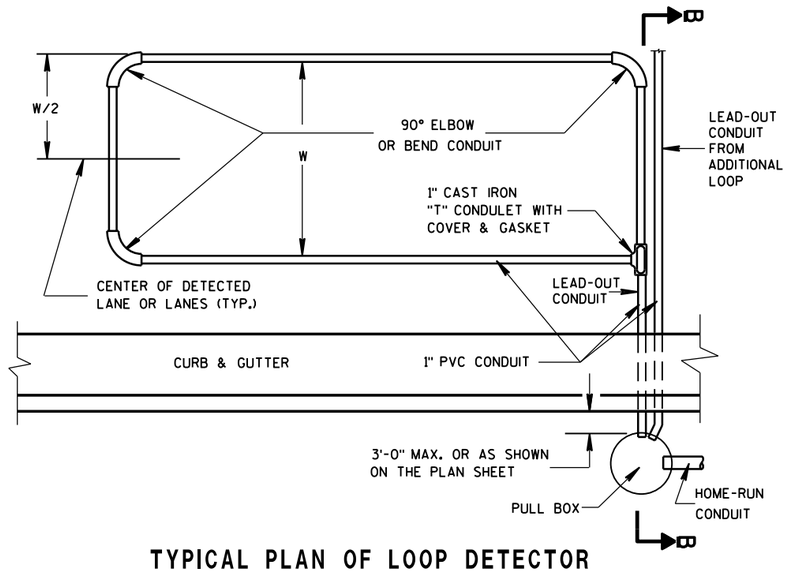
WHEN MULTIPLE LAYERS OF ASPHALTIC PAVEMENT ARE TO BE PLACED, LOOPS MAY BE INSTALLED BY SAWING A TWO INCH WIDE SLOT IN THE FIRST LAYER, DIG OUT THE ASPHALTIC MATERIAL AND BASE COURSE, PLACE THE LOOP, FILL THE SLOT WITH BASE COURSE MATERIAL AND NEW ASPHALTIC MATERIAL AND TAMP THE ASPHALTIC MATERIAL IN PLACE.

SHOULD TRAFFIC BE ALLOWED TO USE THE AREA OF ROADWAY WITH THE NEWLY INSTALLED LOOP BEFORE THE PLACEMENT OF THE NEXT LAYER OF ASPHALTIC PAVEMENT, THE SLOT/PAVEMENT OPENING SHALL BE SEALED WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".



SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL

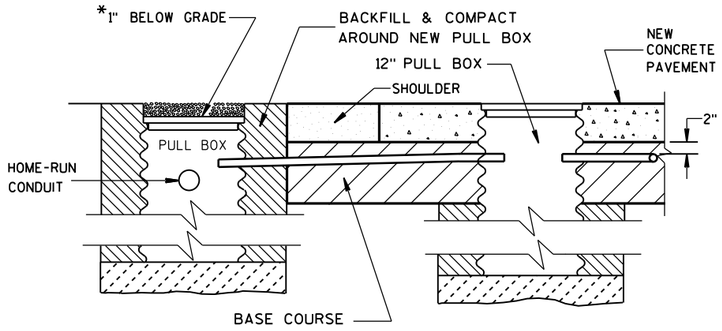


TYPICAL PLAN OF LOOP DETECTOR

LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 337
FHWA



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.

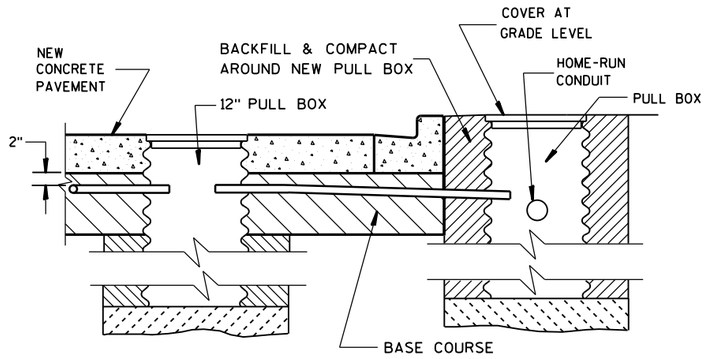
THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

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.

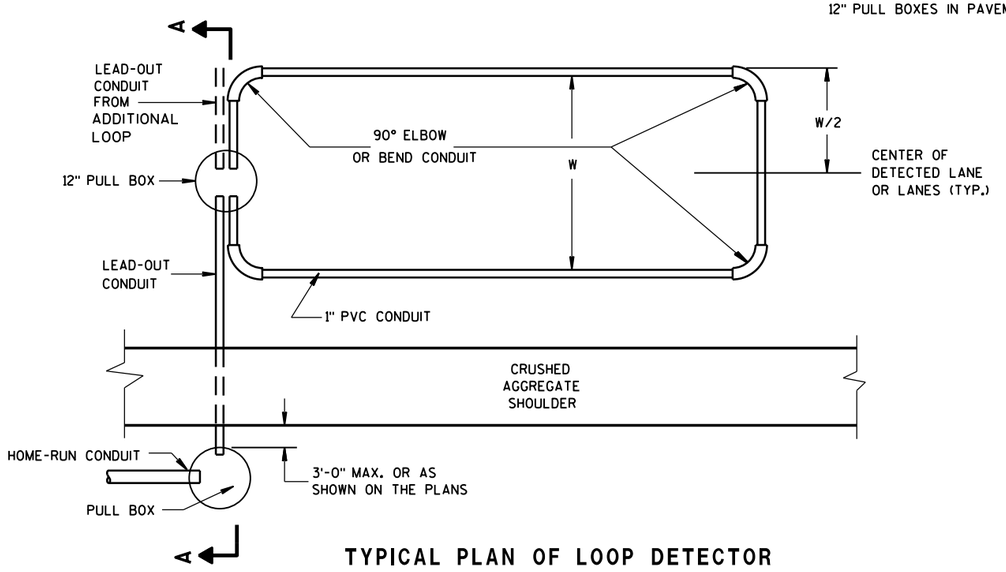
12" PULL BOXES IN PAVEMENT SHALL BE CORRUGATED STEEL ONLY.



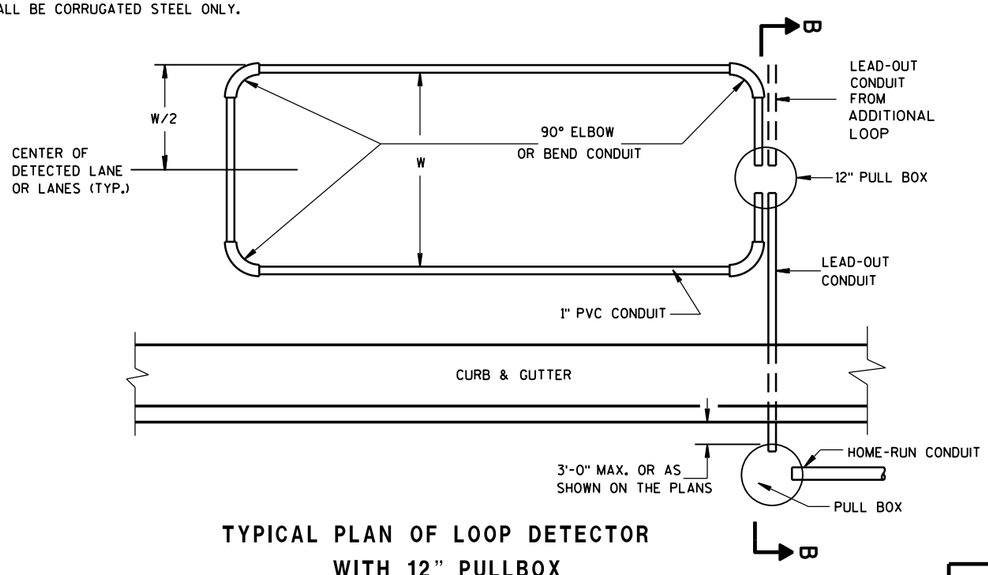
SECTION B-B

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

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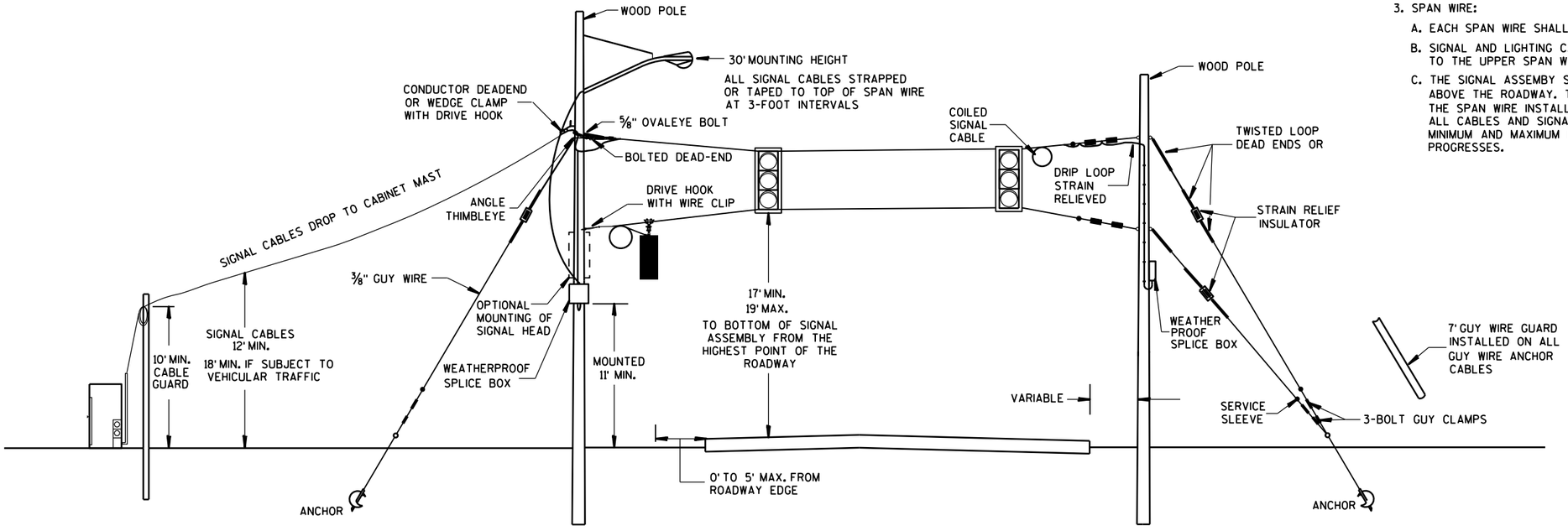
GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

MINIMUM POLE LENGTHS	POLE BURIEL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 G 1-4a

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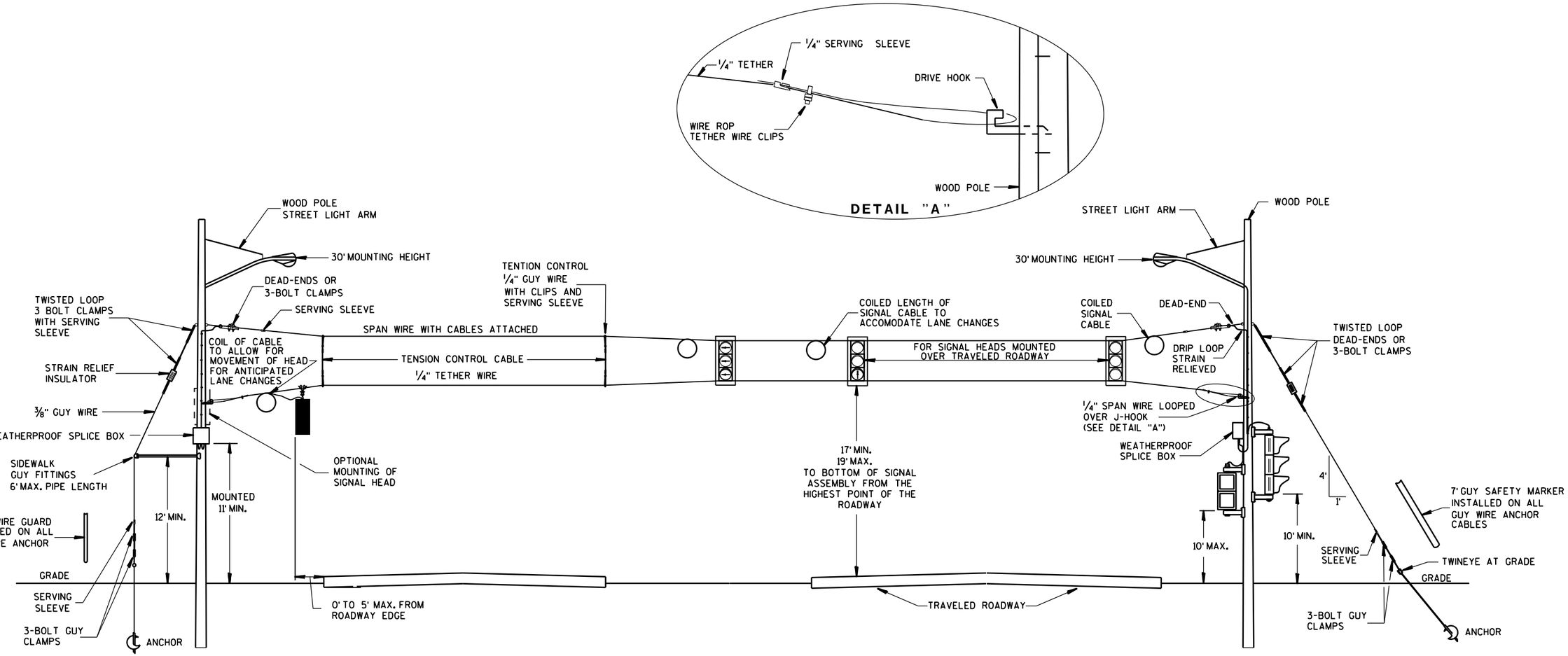
S.D.D. 9 G 1-4a



GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 G 1-4b

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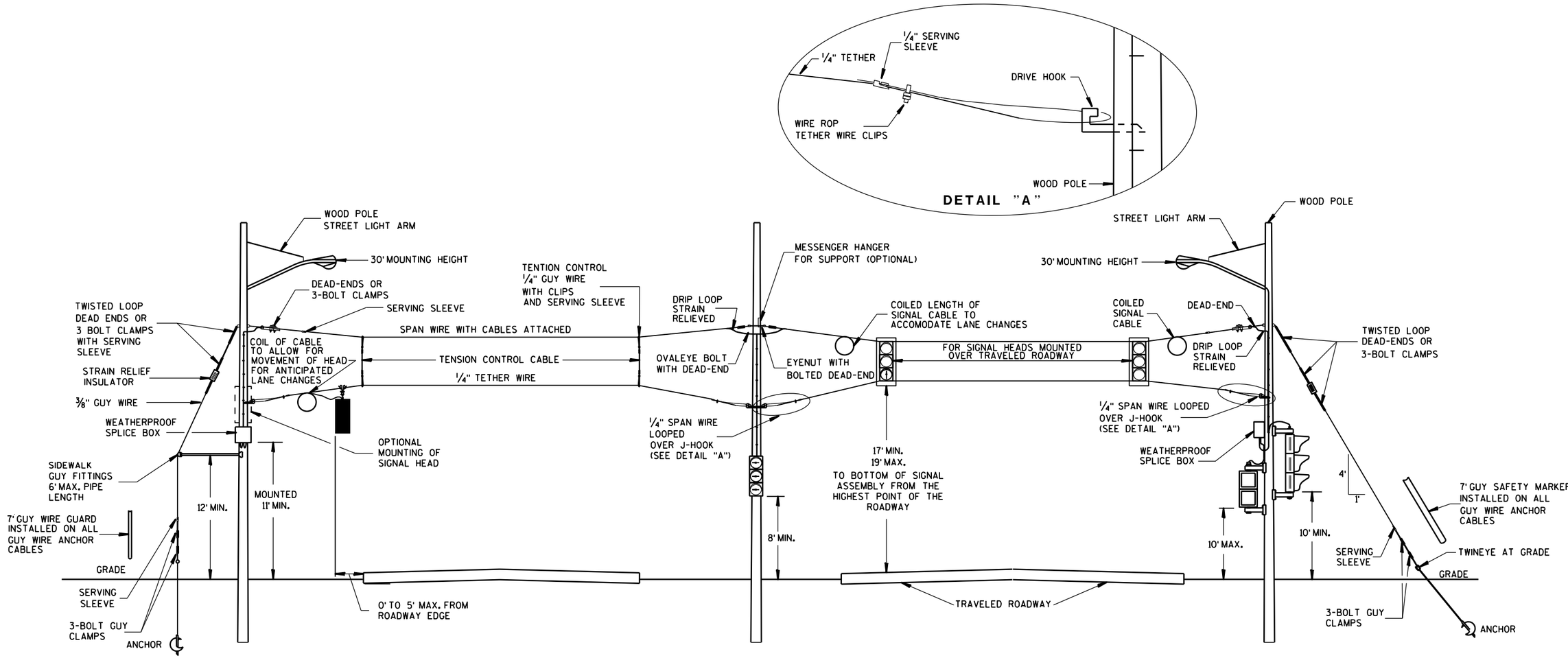
S.D.D. 9 G 1-4b



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
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   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June. 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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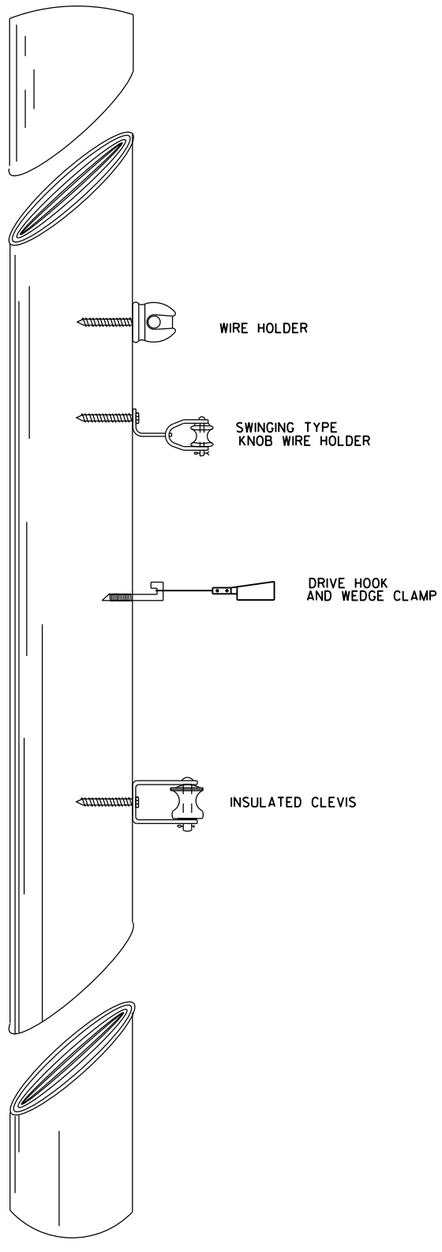
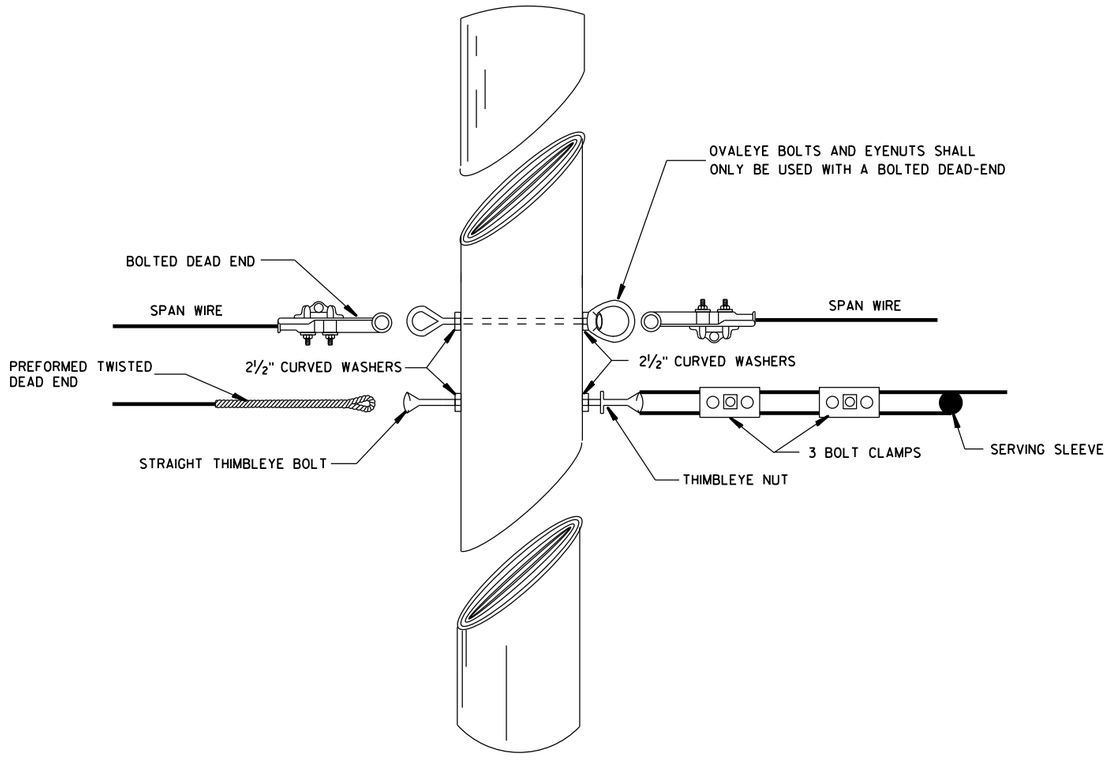
S.D.D. 9 G 1-4c



TYPICAL CABLE HANGERS



TYPICAL DEAD-ENDING

6

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S.D.D. 9 G 1-4d

S.D.D. 9 G 1-4d

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2015
DATE

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STATE ELECTRICAL

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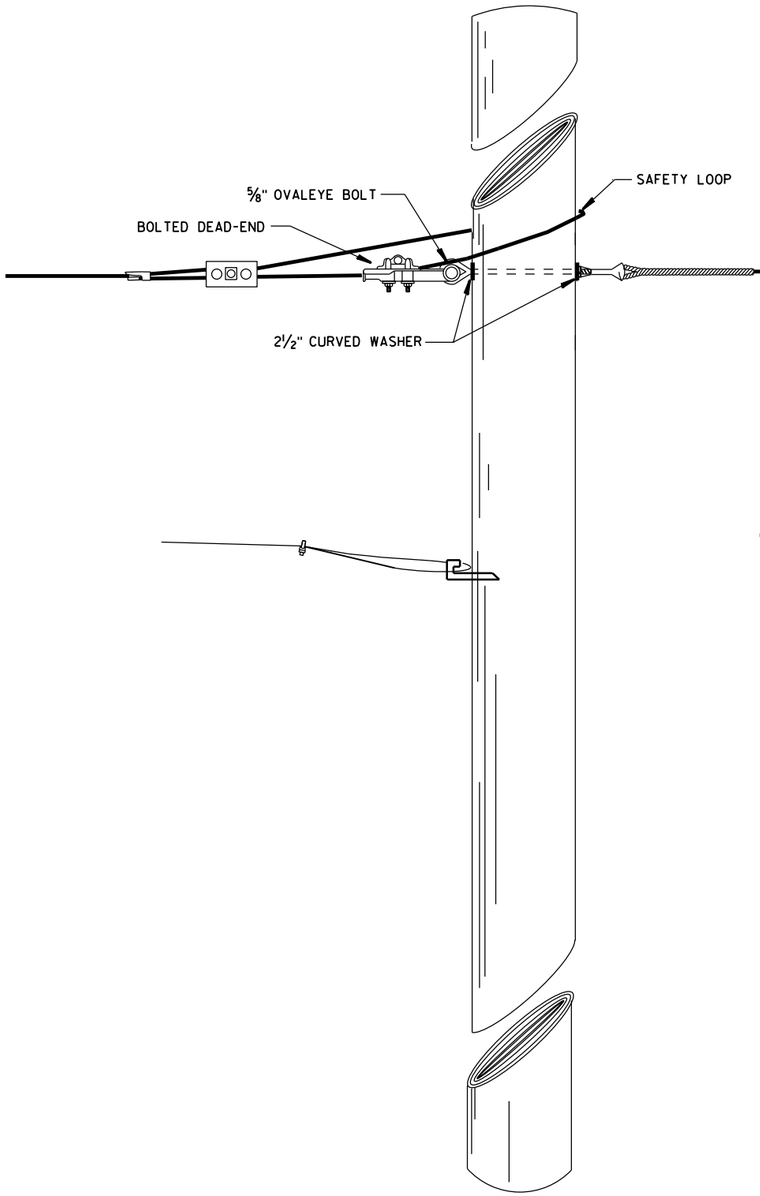
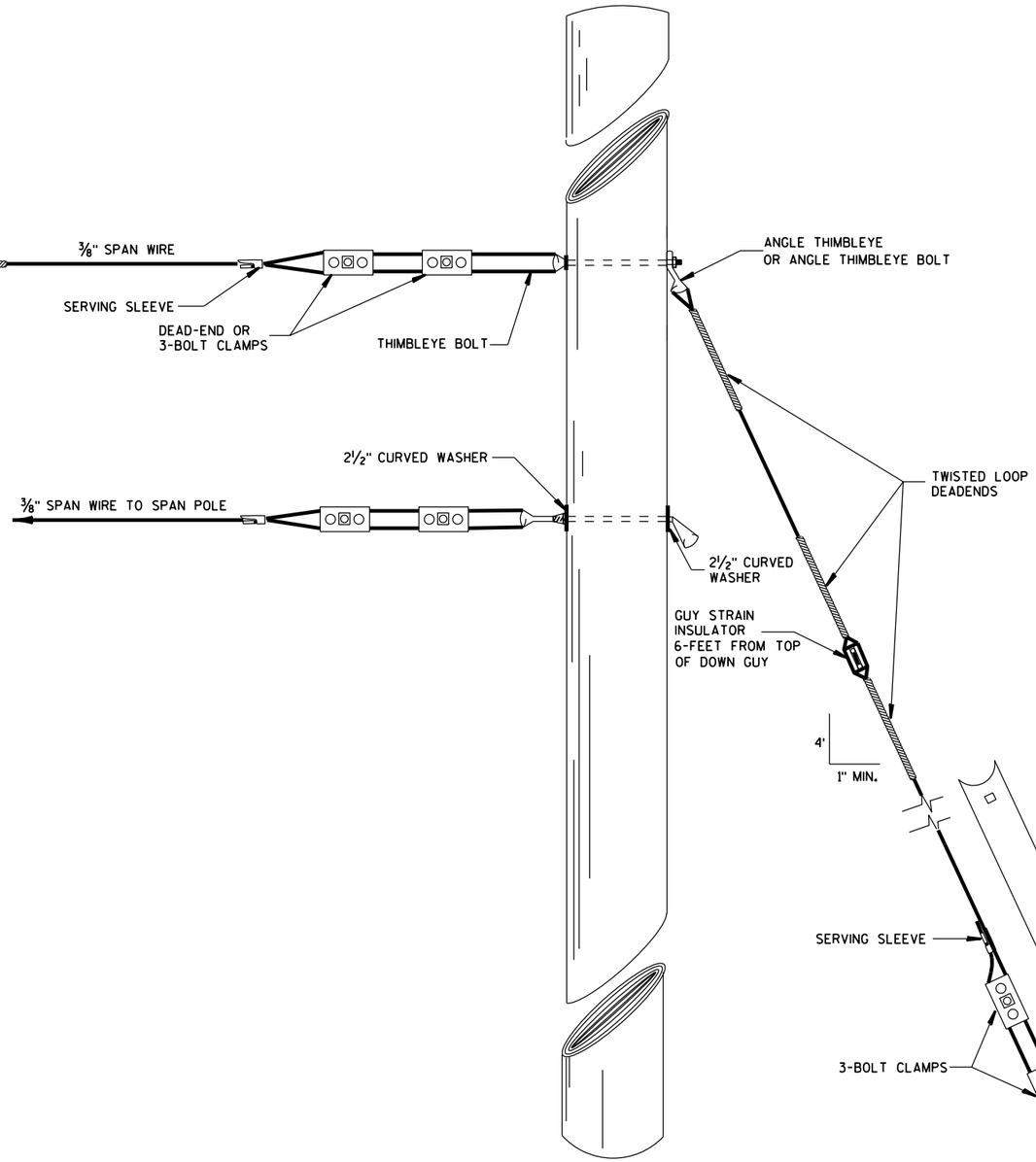
GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR ⅝" BOLTS.
2. SAFTY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



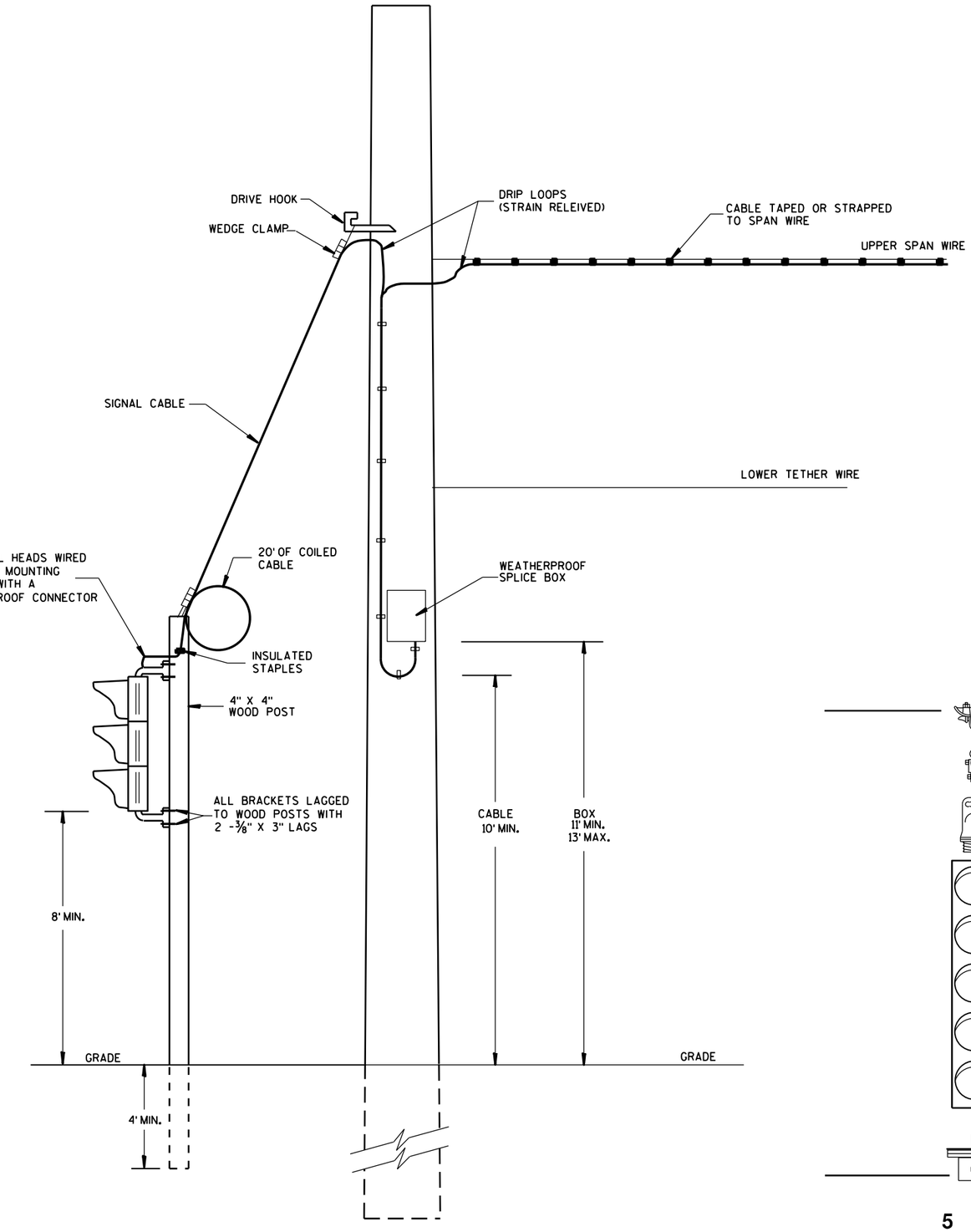
SPAN WIRE POLE



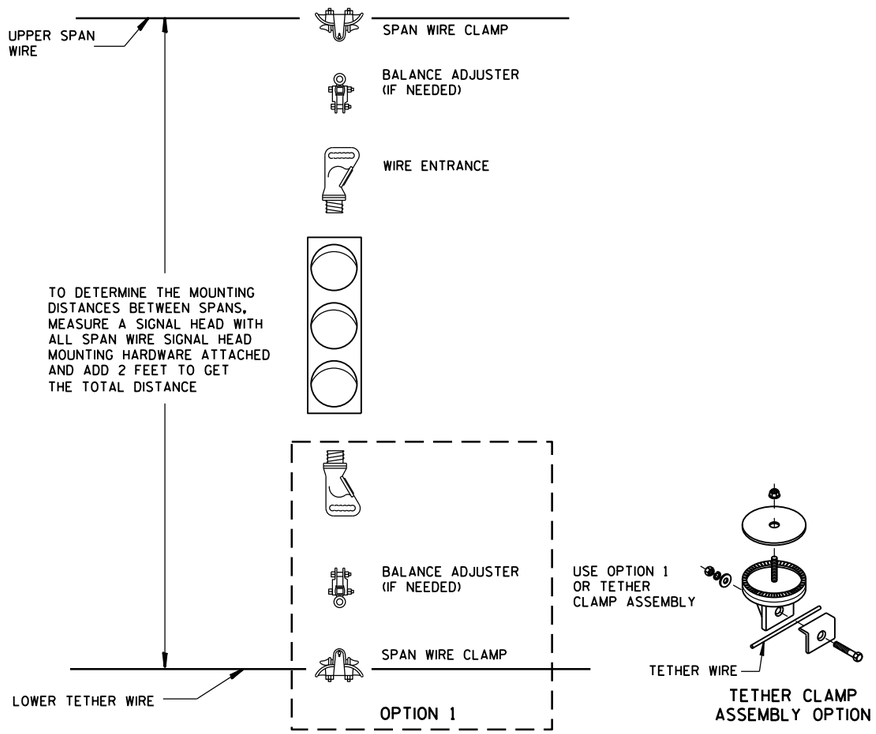
GUY POLE

TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE TEMPORARY TRAFFIC SIGNAL
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED June. 2015 — DATE /S/ Ahmet Demirbilek — STATE ELECTRICAL FHWA

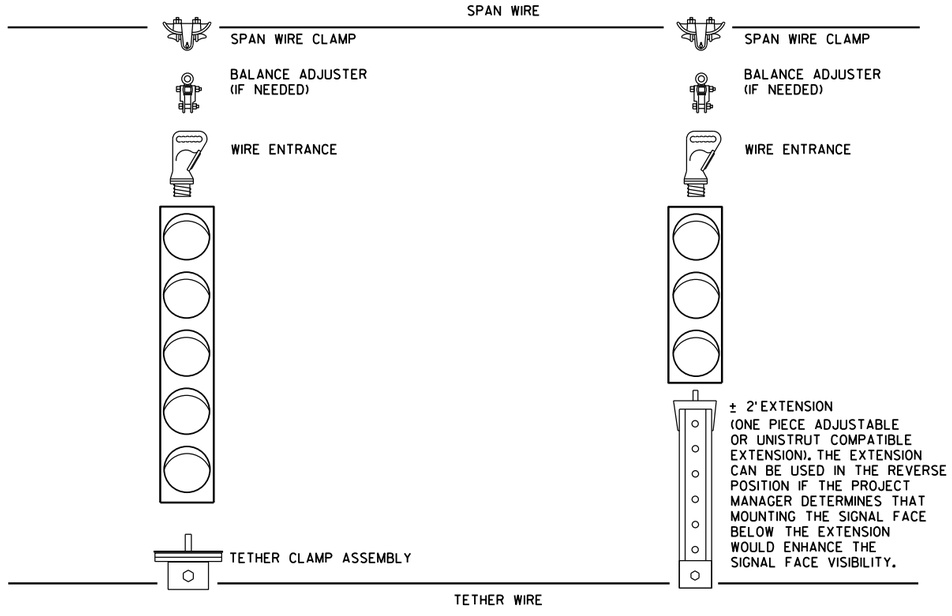


TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



TETHER CLAMP ASSEMBLY OPTION

TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June. 2015
DATE

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STATE ELECTRICAL

FHWA

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S.D.D. 9 G 1-4f

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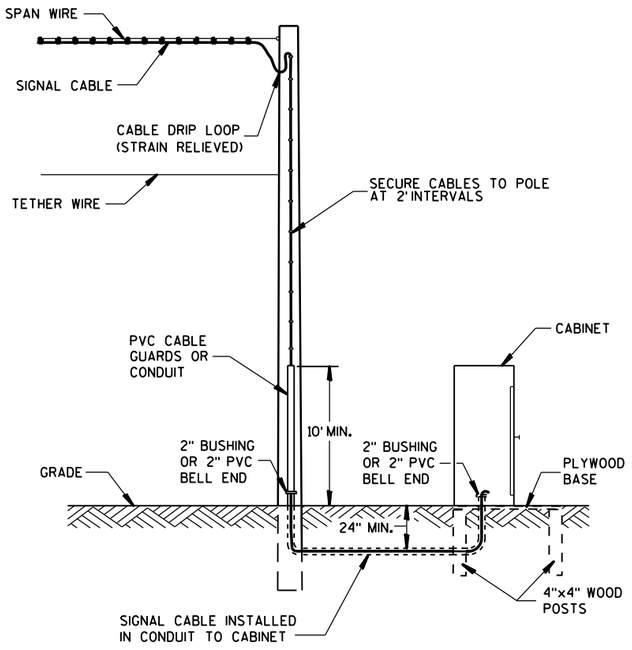
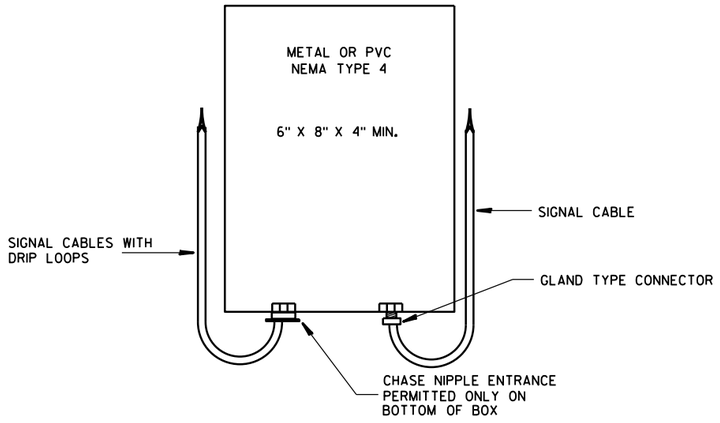
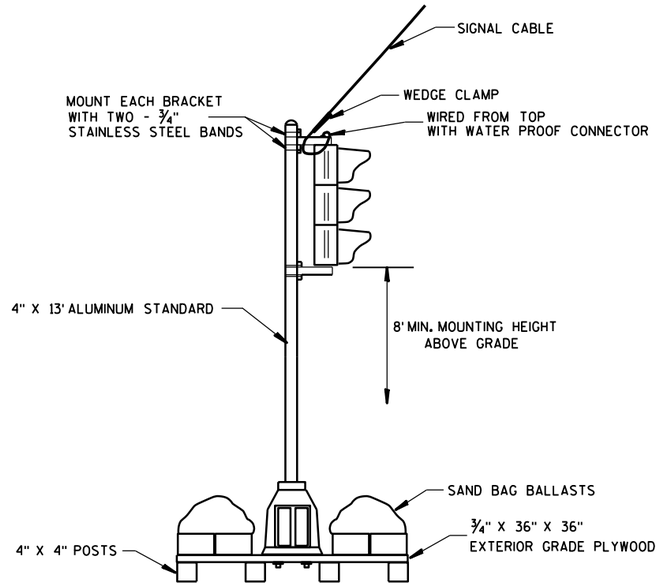
S.D.D. 9 G 1-4f

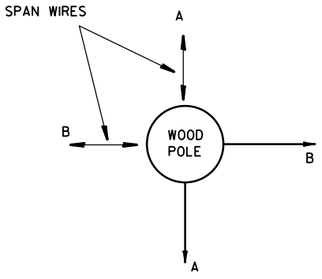




SPLICE BOX

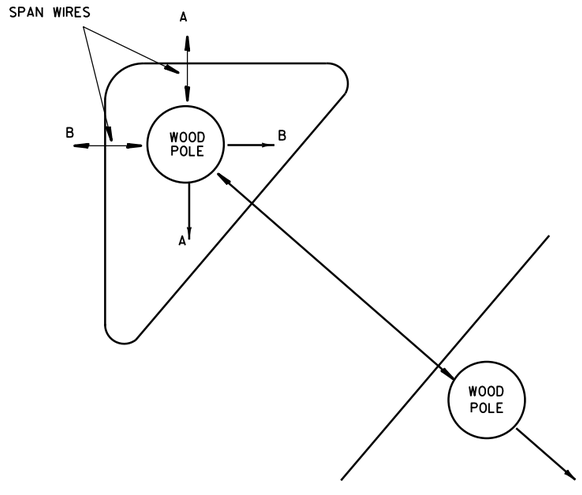


TYPICAL SKID TYPE TEMPORARY

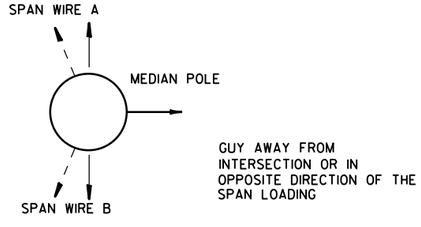


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF THE
SPAN LOADING

MEDIAN POLES

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 G 1-4g

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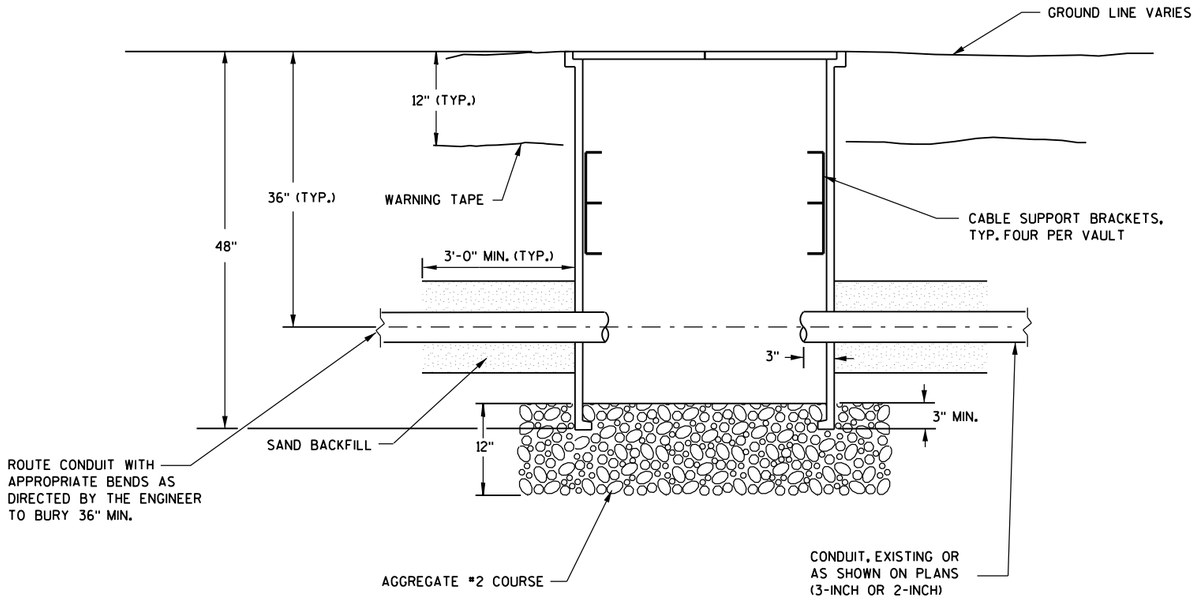
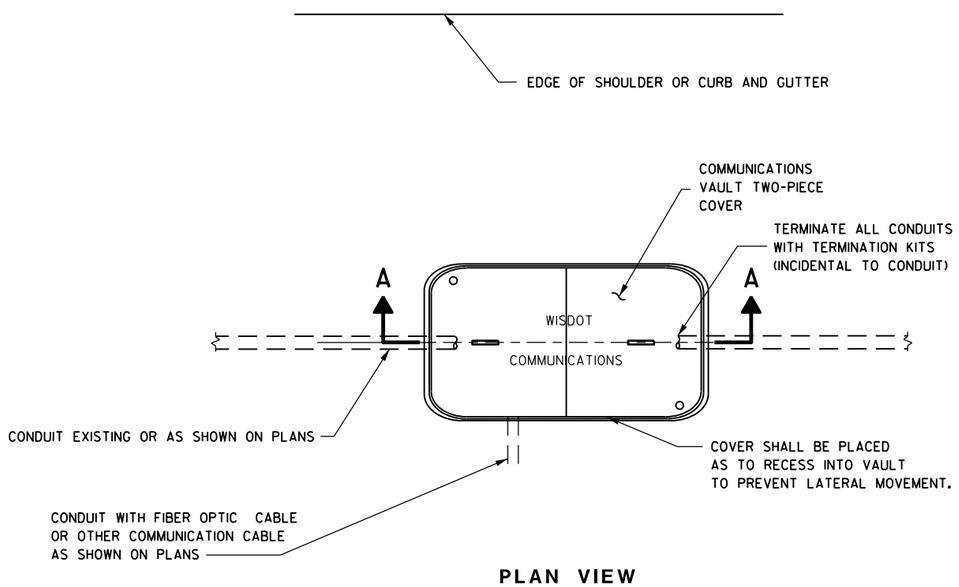
S.D.D. 9 G 1-4g



SECTION A-A



PLAN VIEW

COMMUNICATIONS VAULT

GENERAL NOTES

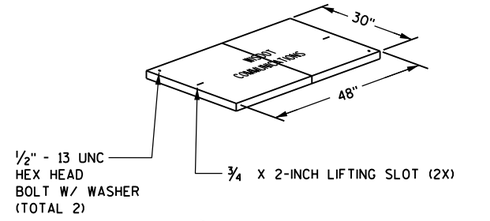
BOX SHALL HAVE AN OPEN BASE.

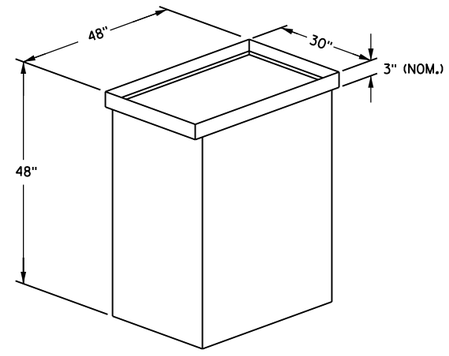
COVER SHALL BE DETECTABLE, AND HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.

ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.

VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.

FIELD PLACEMENT OF COMMUNICATIONS VAULTS SHALL BE AS DIRECTED BY THE ENGINEER.





ISOMETRIC VIEW

COMMUNICATION VAULT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept. 2014	/S/ Ahmet Demirbilek
DATE	STATE ELECTRICAL
FHWA	

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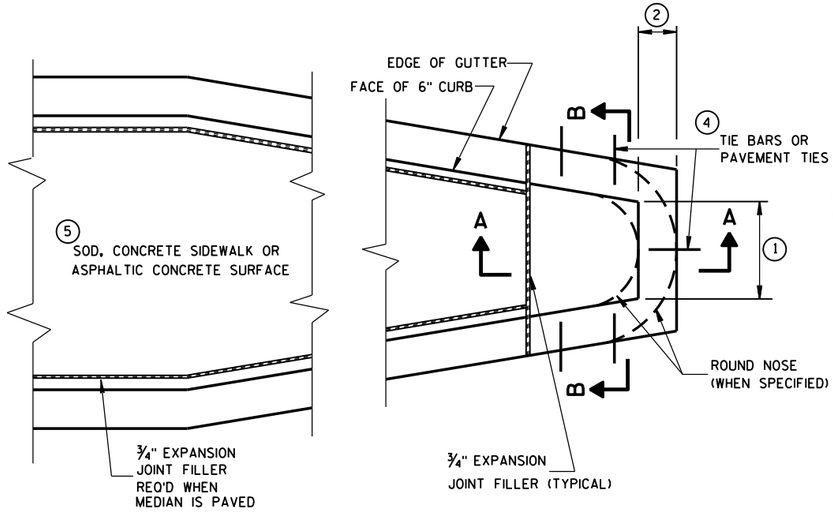
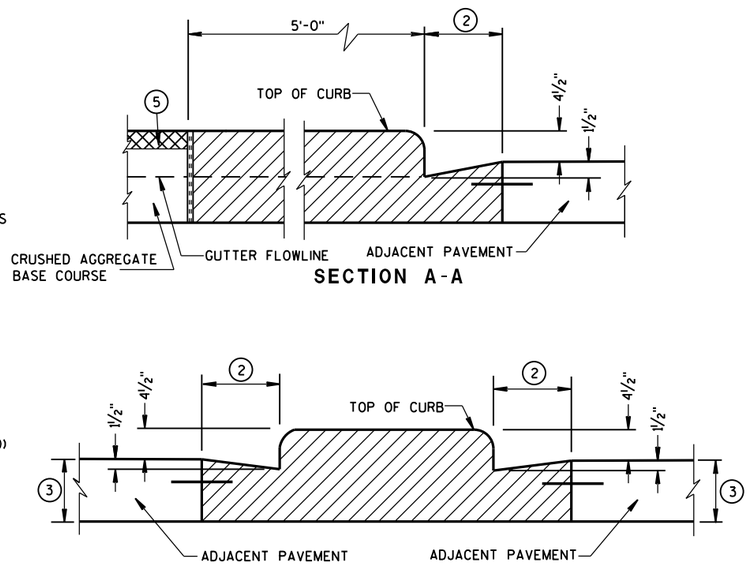
S.D.D. 9 H 9-1





CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

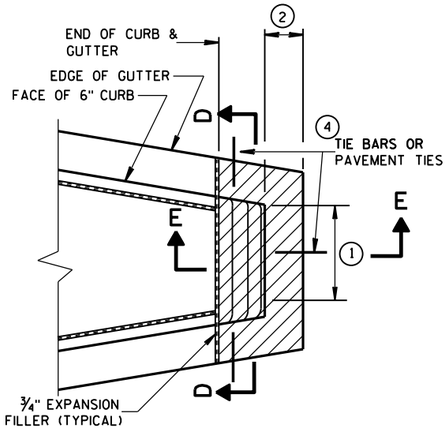
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

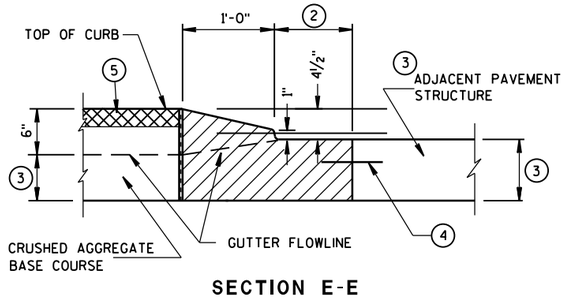
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

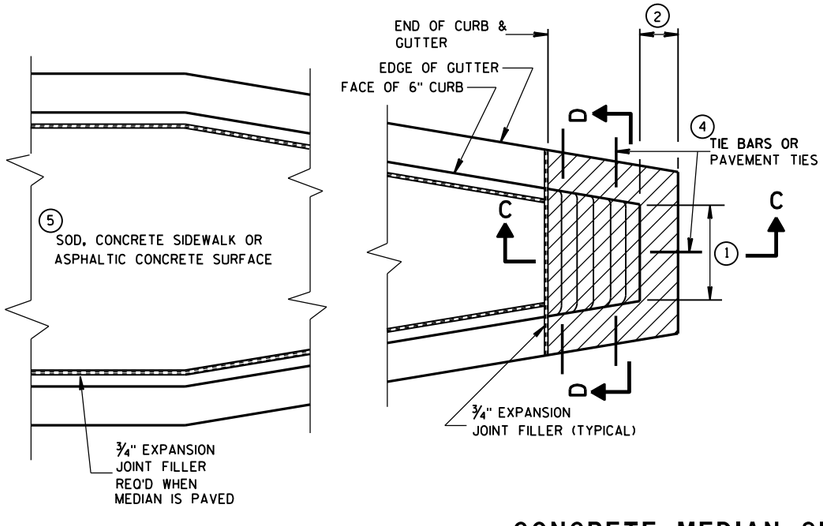
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

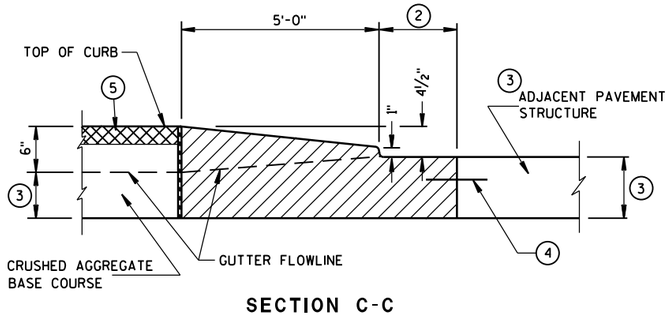




SECTION E-E

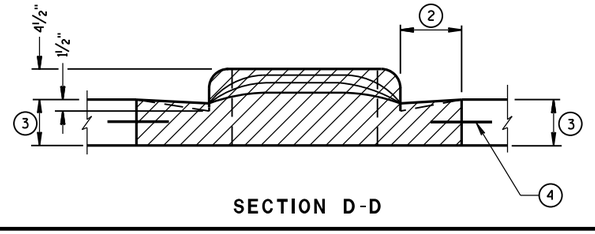
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER

FHWA

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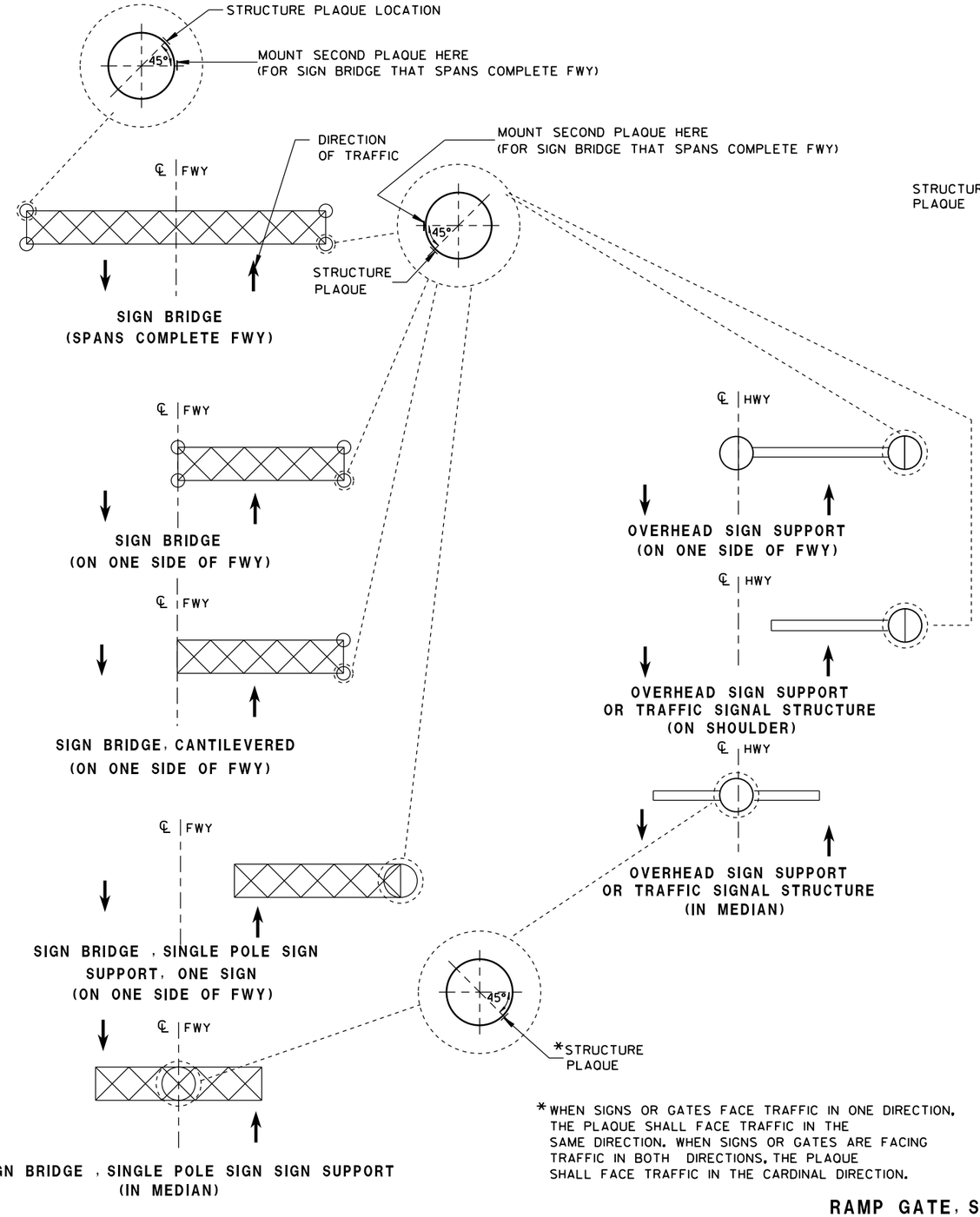
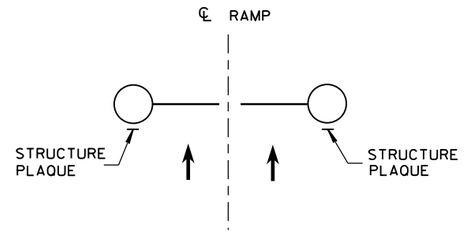
S.D.D. 11 B 2-2

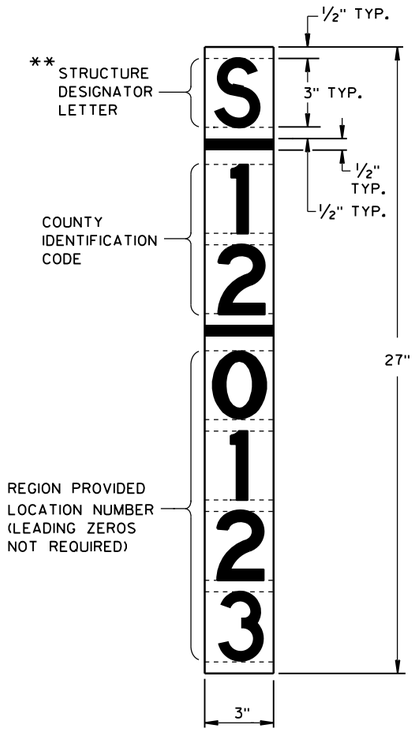


LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

* WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.



RAMP GATE
(ACROSS FWY ON-RAMP)



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

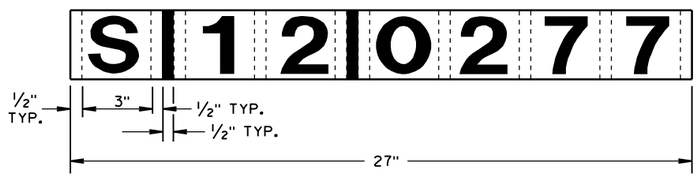
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

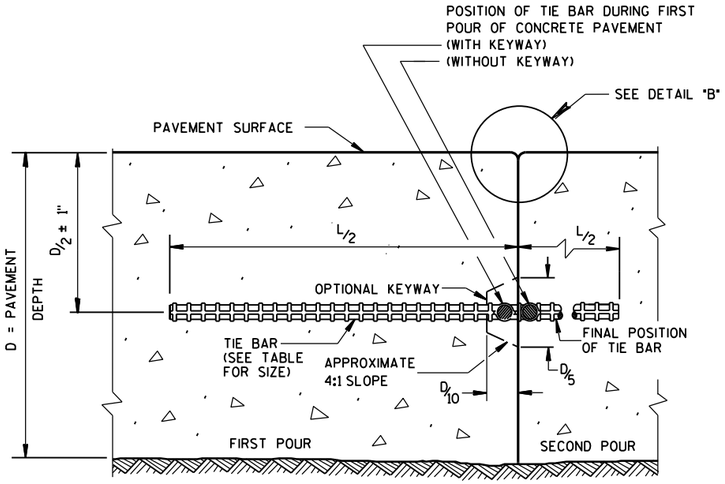
STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

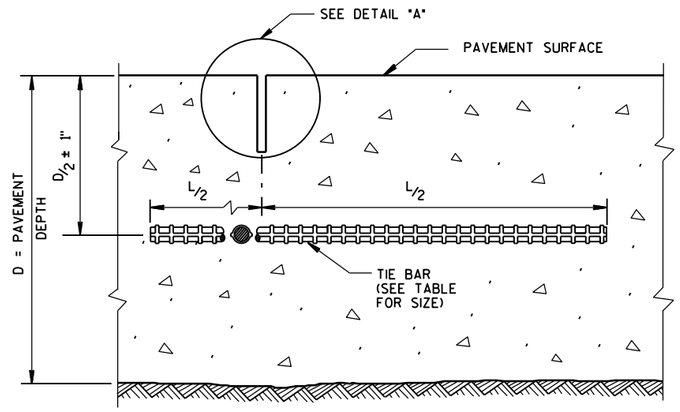
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 12 A 4-3



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

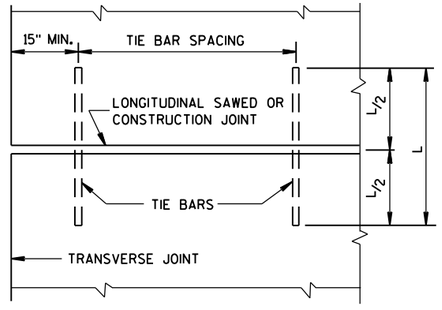
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

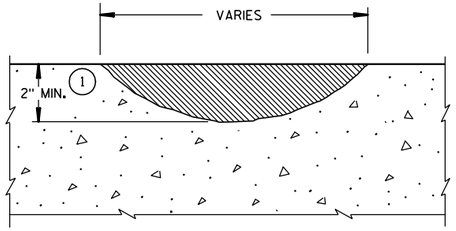
CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

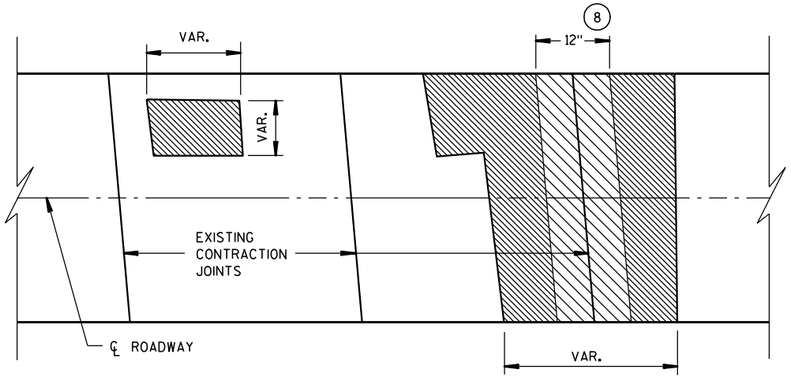
APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

6

S.D.D. 13 C 1-18

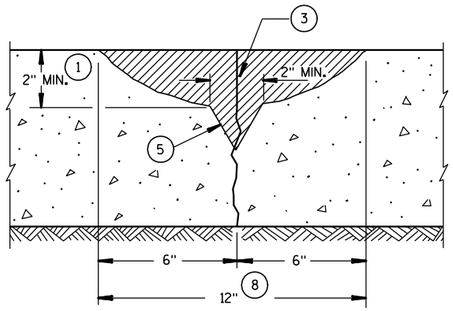


PROFILE VIEW

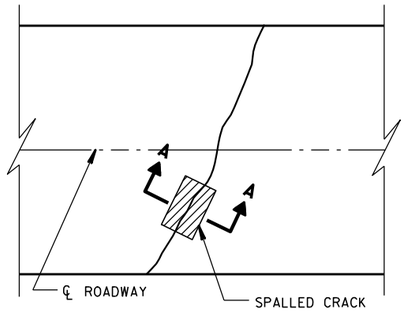


PLAN VIEW

SURFACE REPAIR



SECTION A-A

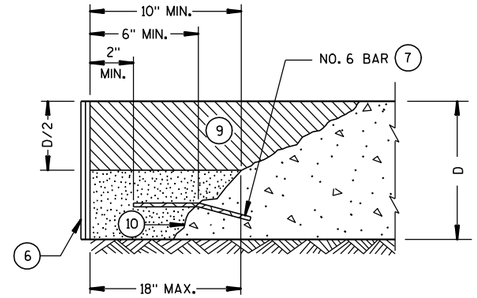


PLAN VIEW

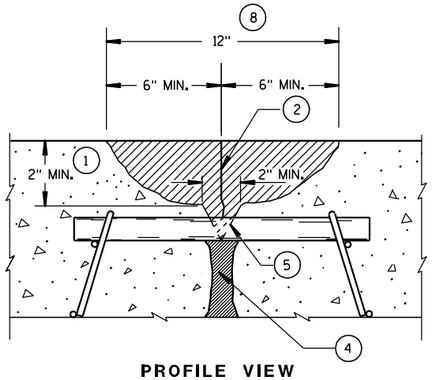
CRACK REPAIR

GENERAL NOTES

1. REMOVE ALL CONCRETE, TO LIMITS SHOWN, TO A MAXIMUM OF ½ THE PAVEMENT DEPTH OR TOP OF DOWELS.
2. IF REPAIR IS DEEPER THAN ANTICIPATED SAWCUT, COMPRESSION RELIEF MATERIAL MUST BE USED. THE THICKNESS OF COMPRESSION RELIEF MATERIAL MUST BE EQUAL TO OR GREATER THAN THE WIDTH OF THE JOINT OR CRACK (1/4"). THIS MATERIAL SHOULD EXTEND FULL DEPTH OF THE REPAIR.
3. COMPRESSION RELIEF MATERIAL MUST BE USED. THE THICKNESS OF COMPRESSION RELIEF MATERIAL MUST BE EQUAL TO OR GREATER THAN THE WIDTH OF THE JOINT OR CRACK (1/4"). THIS MATERIAL SHOULD EXTEND FULL DEPTH OF THE REPAIR.
4. CLEAN, DRY SAND WHEN NECESSARY.
5. REMOVE UNSOUND MATERIAL BY CHIPPING AT 1:1 SLOPE.
6. ¼" MINIMUM PREFORMED JOINT FILLER IF ADJACENT TO CONCRETE. EDGING REQUIRED. FULLY FORMED EDGE IF ADJACENT TO SHOULDER.
7. PAVEMENT TIES AS SHOWN. ALL EMBEDMENTS 6" MINIMUM AND INSTALLED WITH GROUT.
8. OVER 12" (NOMINAL WIDTH) WILL BE PAID AS SURFACE REPAIR.
9. PAID AS JOINT OR CRACK REPAIR.
10. FULL-DEPTH ADJUSTMENT SHALL BE CHIPPED TO BOTTOM OF PCC PAVEMENT AT 1:1 SLOPE.
11. BEYOND 18" WILL BE PAID AS SURFACE REPAIR.

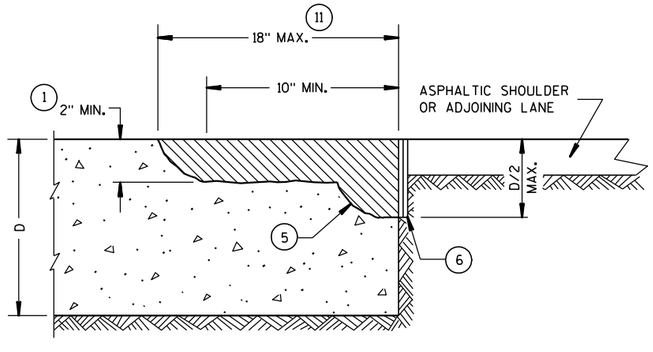


PROFILE VIEW

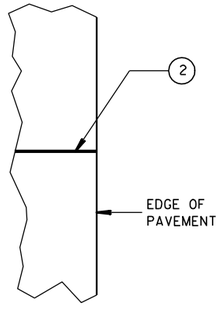


PROFILE VIEW

JOINT REPAIR

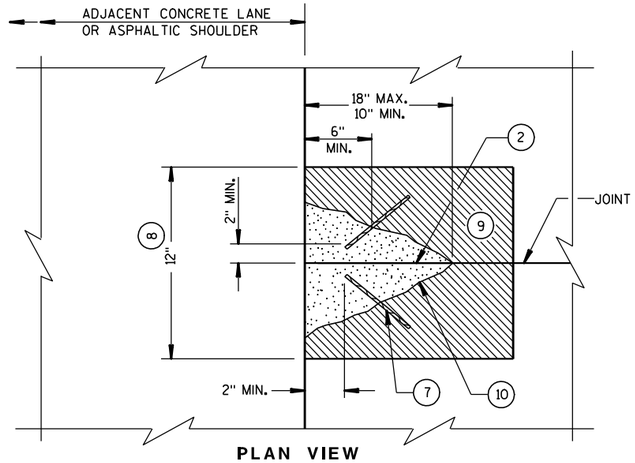


PROFILE VIEW



PLAN VIEW

EDGE REPAIR



PLAN VIEW

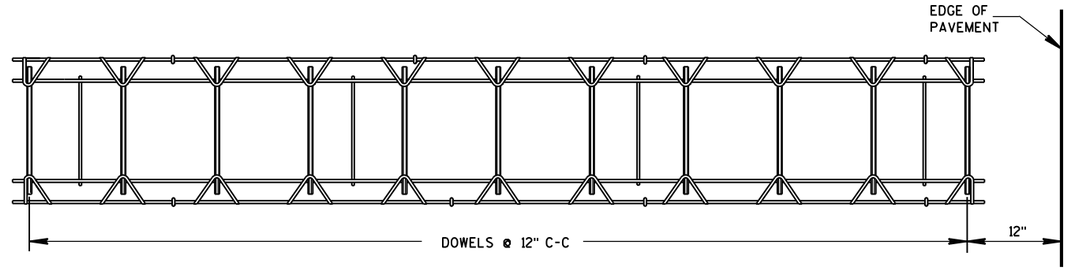
FULL DEPTH REPAIR ADJUSTMENT

CONCRETE PAVEMENT PARTIAL DEPTH REPAIR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/21/03 DATE
/S/ Bill Ducker PAVEMENT ENGR
FHWA

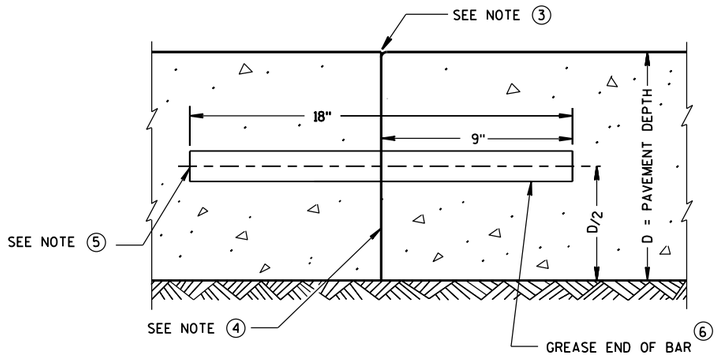
6
S.D.D. 13 C 8-2



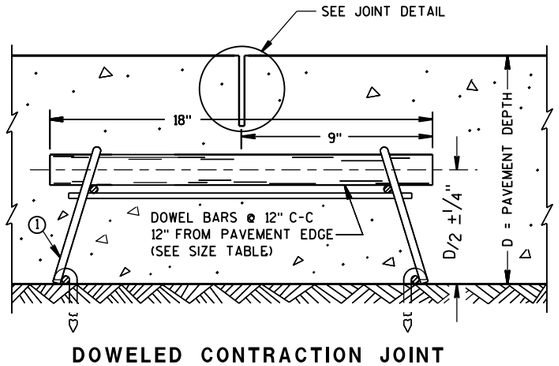
PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



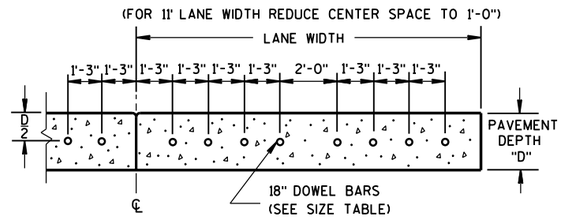
TRANSVERSE CONSTRUCTION JOINT



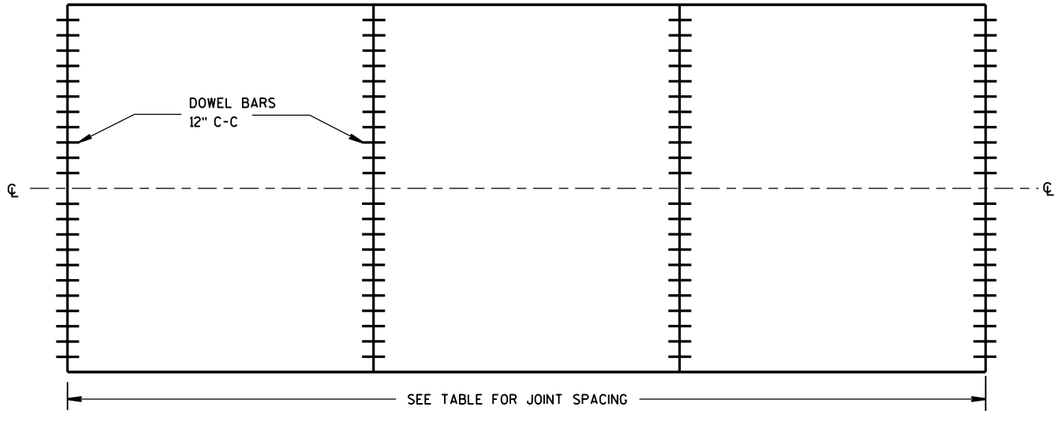
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① **OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.**

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

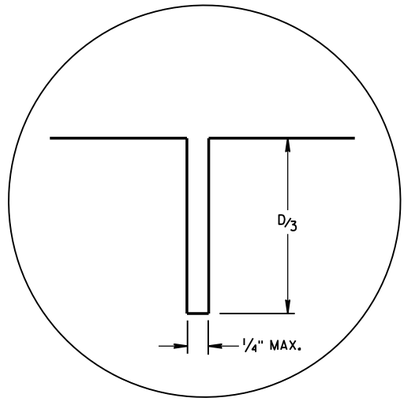
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

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

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER
FHWA

6

S.D.D. 13 C 13-8

6

S.D.D. 13 C 13-8

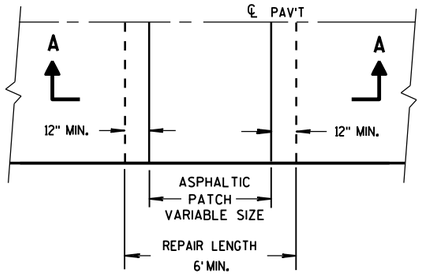
GENERAL NOTES

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

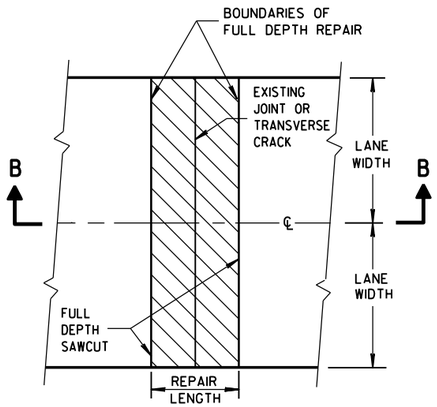
PROVIDE 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK.

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

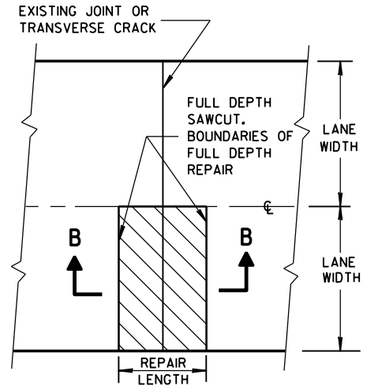
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

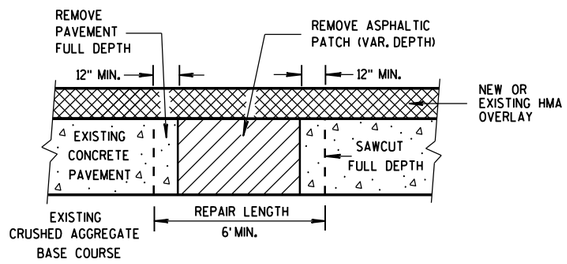


PLAN VIEW
(DOUBLE LANE REPAIR)



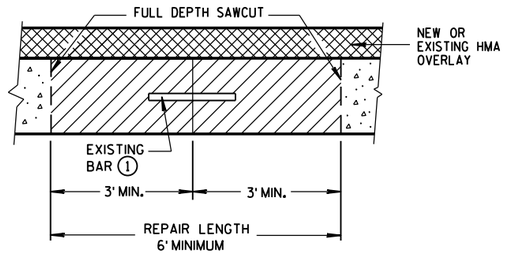
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

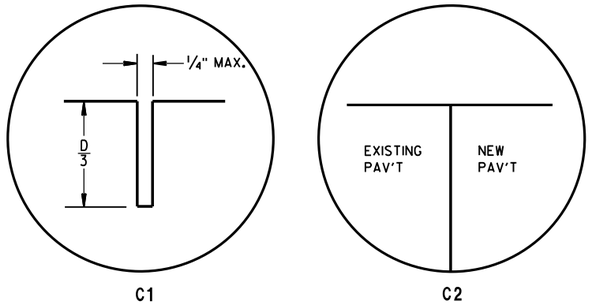
CONCRETE REMOVAL

BASE PATCHING CONCRETE

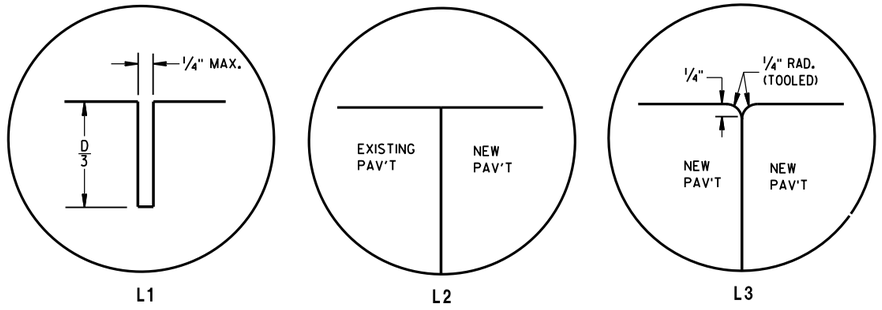
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

S.D.D. 13 C 14-6a

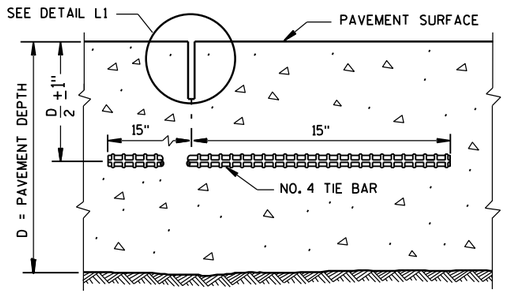
S.D.D. 13 C 14-6a



TRANSVERSE JOINTS

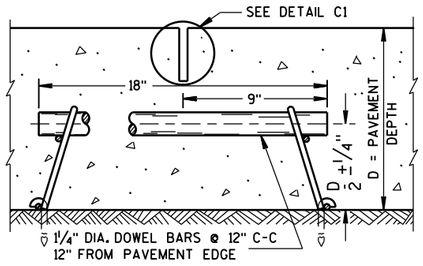


LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT



SECTION F-F

CONTRACTION JOINT

GENERAL NOTES

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

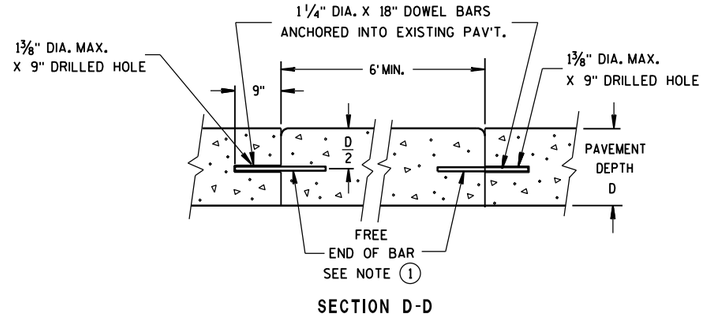
CONCRETE BASE PATCHES OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

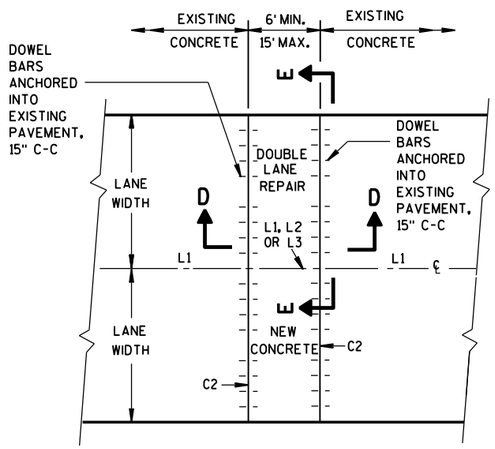
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

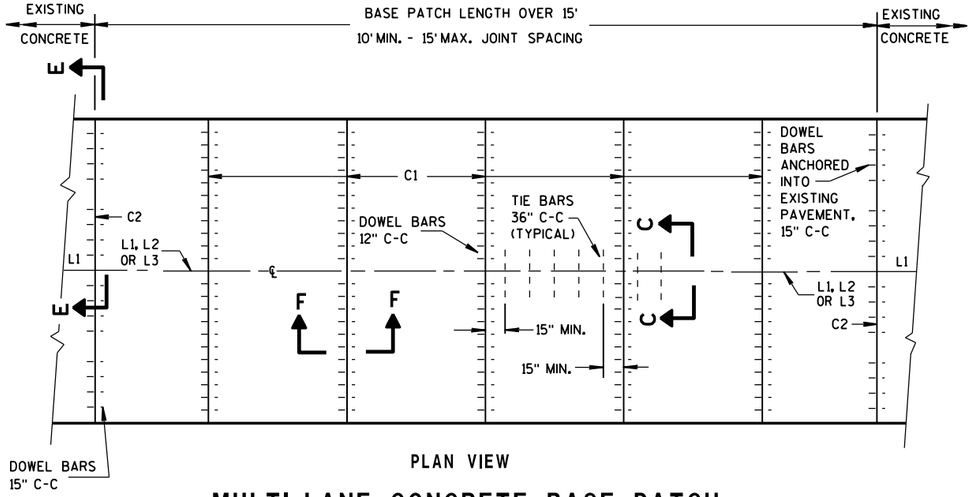


SECTION D-D



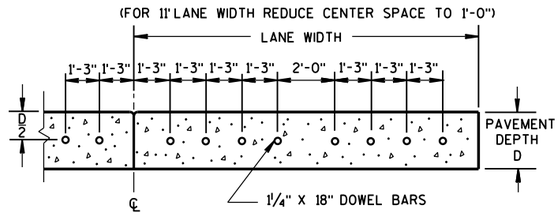
PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH



SECTION E-E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT

BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

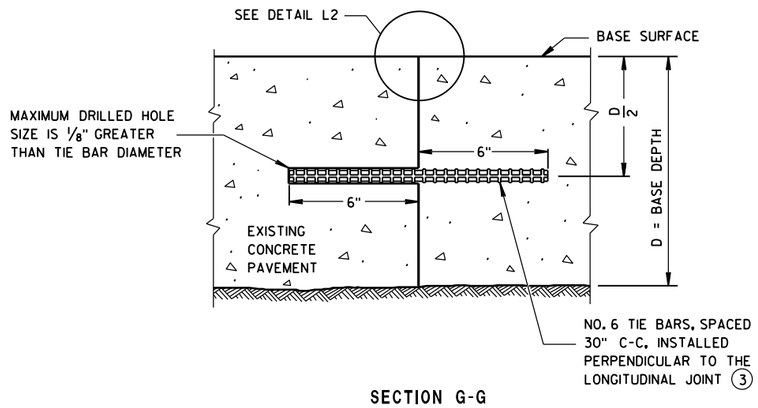
6
S.D.D. 13 C 14-6b

GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE BASE PATCHES UP TO 15 FEET IN LENGTH.

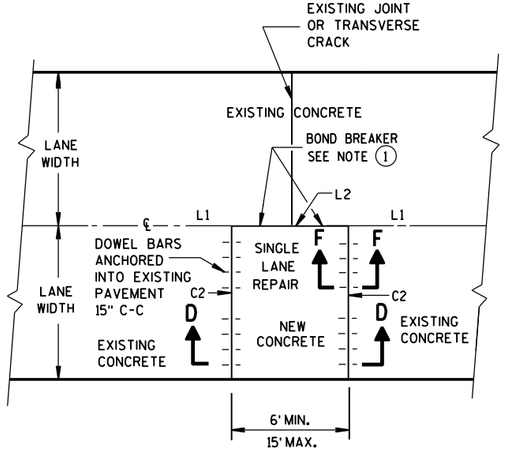
(2) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, DRILLED TIE BARS MAY BE INSTALLED ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



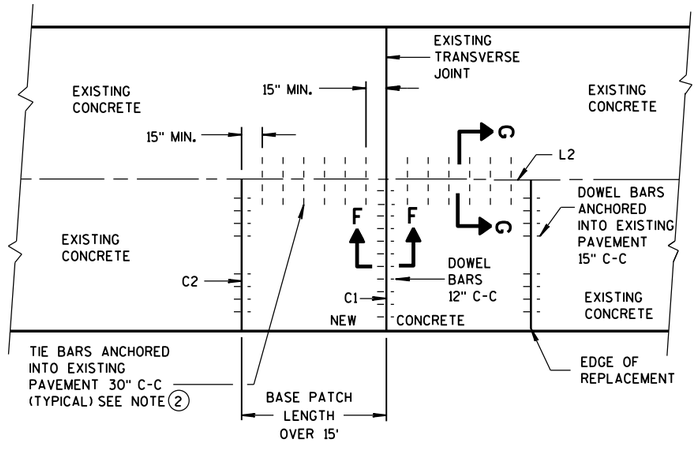
SECTION G-G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

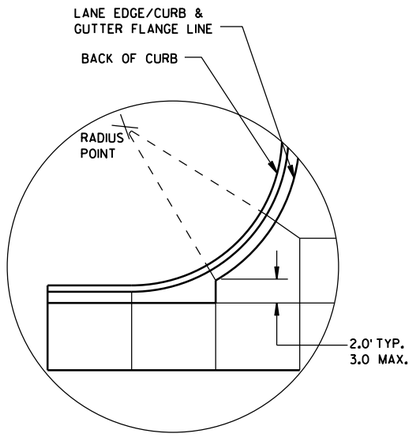
BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

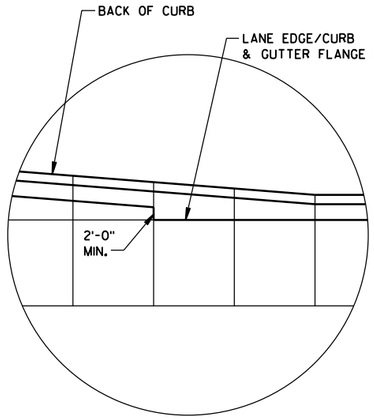
APPROVED
Sept., 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

6

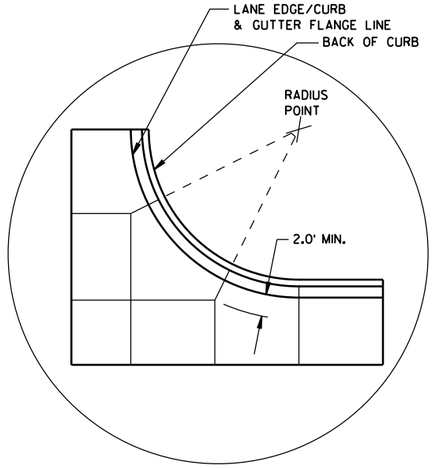
S.D.D. 13 C 14-6c



DETAIL "A"



DETAIL "B"



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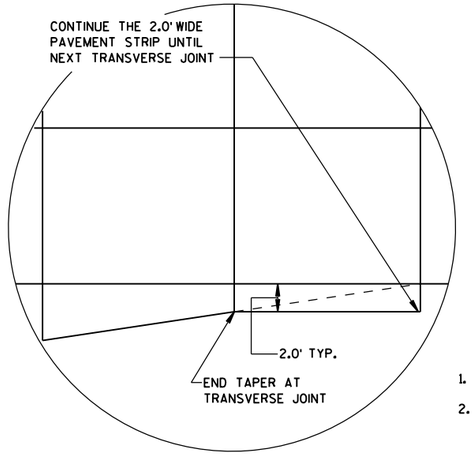


DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

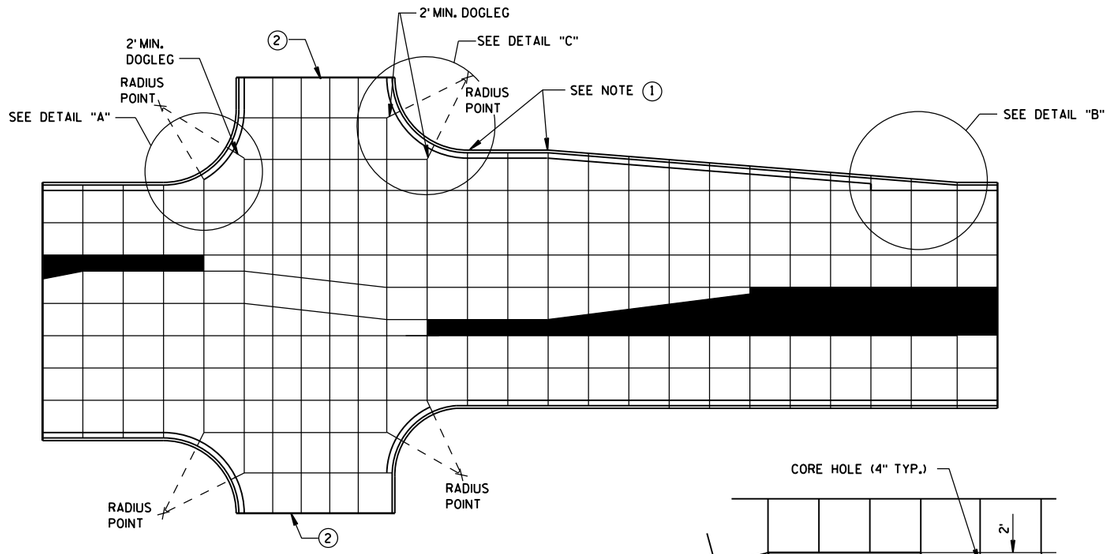
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

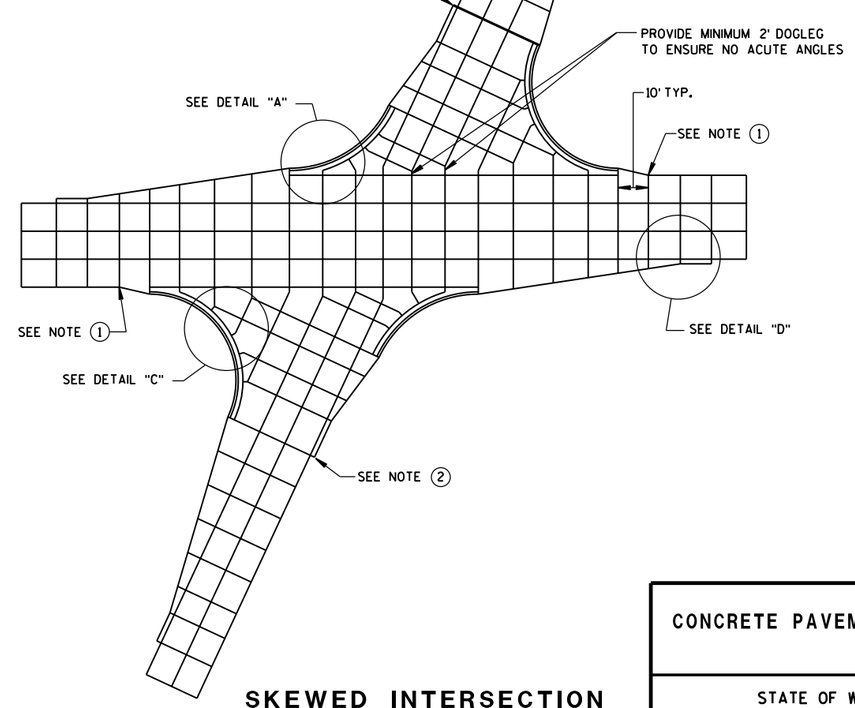
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



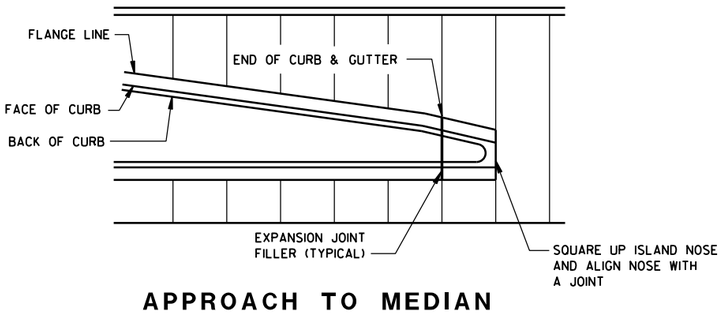
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

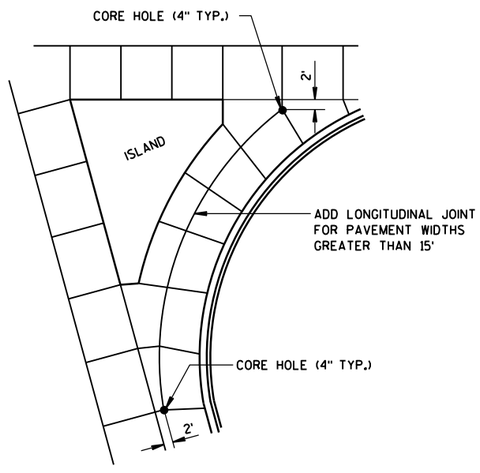
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 355

6

S.D.D. 13 C 18-3a

6

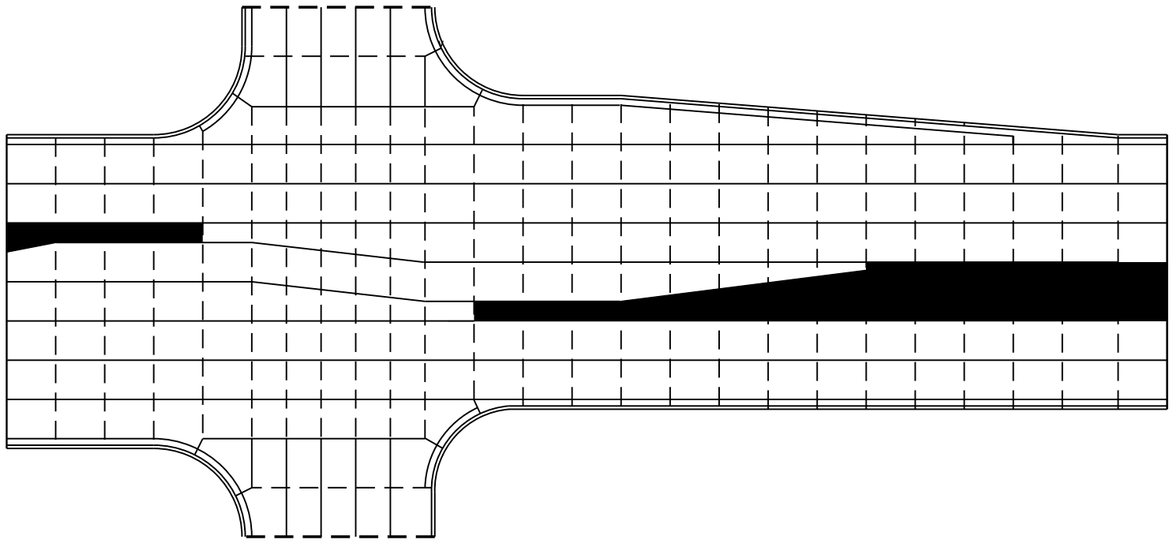
S.D.D. 13 C 18-3a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

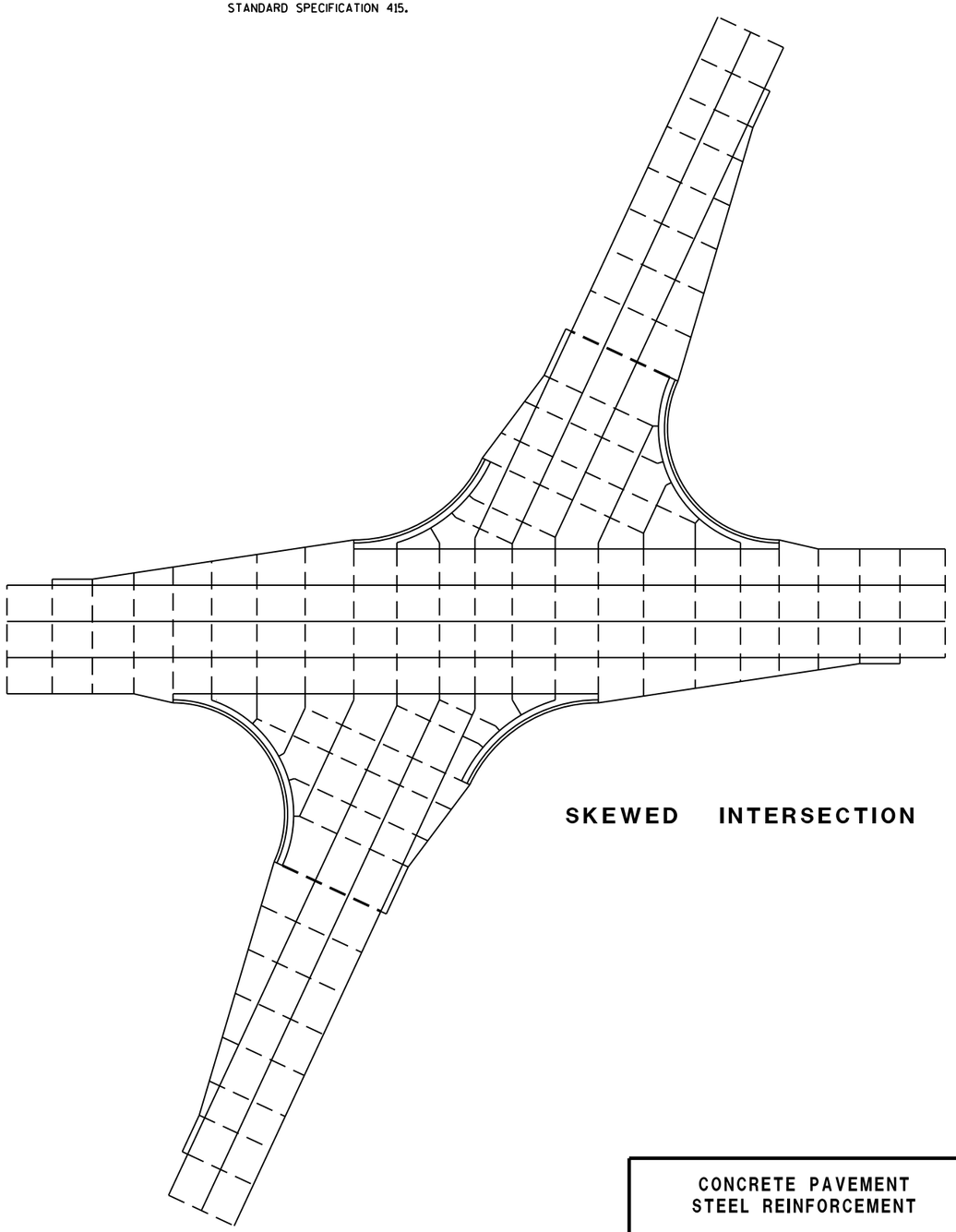
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

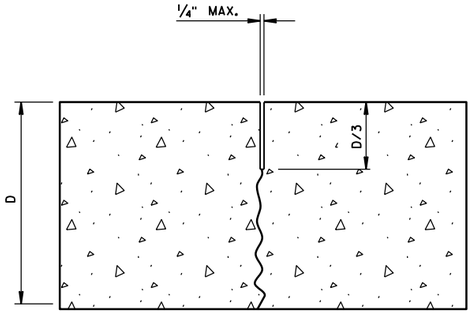
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

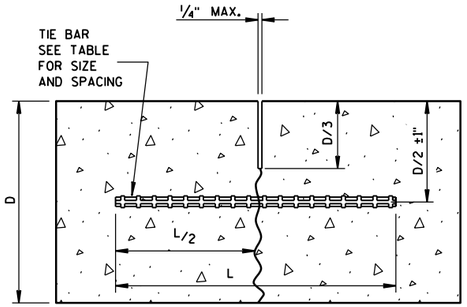
S.D.D. 13 C 18-3b

6

S.D.D. 13 C 18-3b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

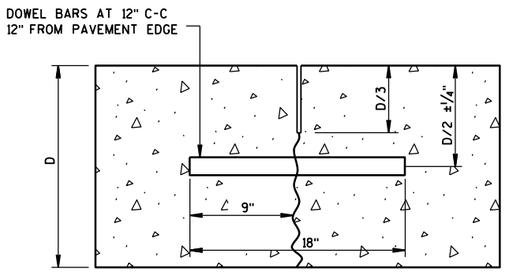
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* 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

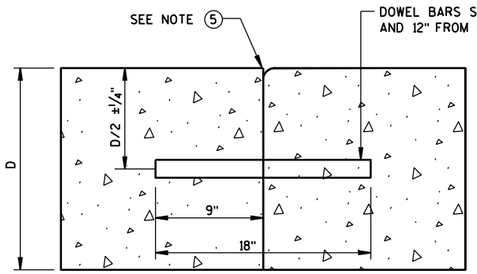
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 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.



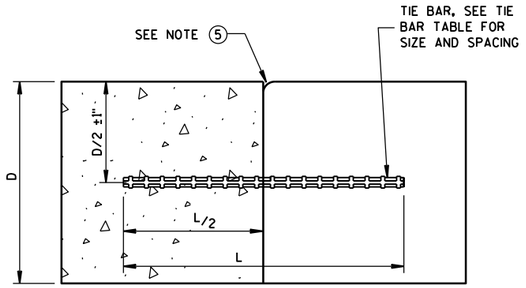
DOWELED-TRANSVERSE

CONTRACTION JOINTS

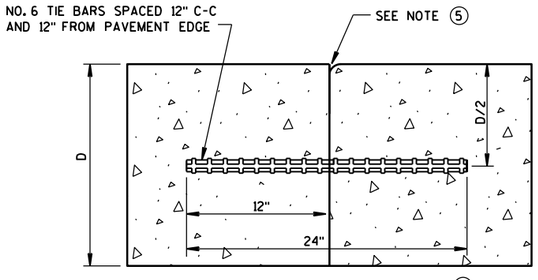
SEE NOTE (2)



DOWELED TRANSVERSE (3)

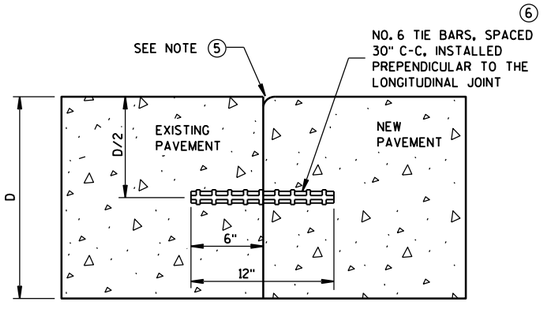


TIED LONGITUDINAL



TIED TRANSVERSE (3)

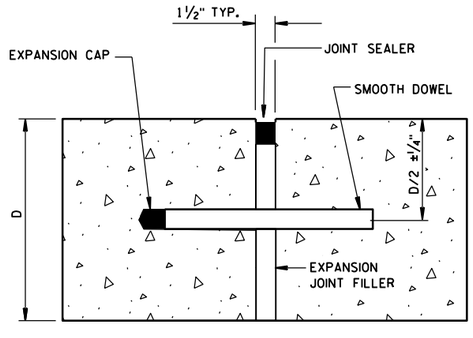
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

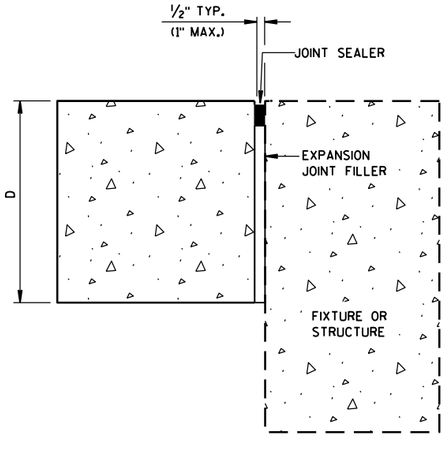
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

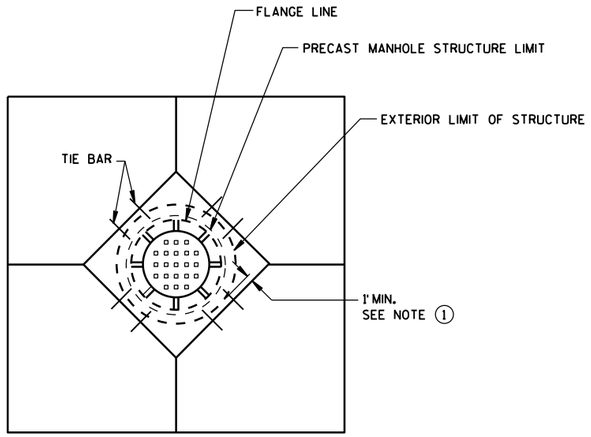
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

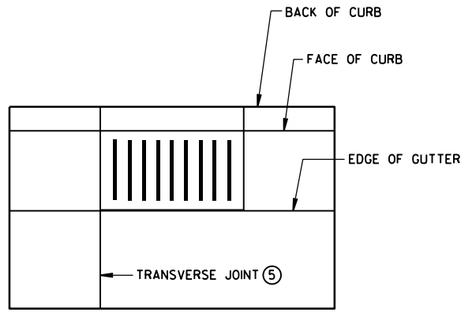
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

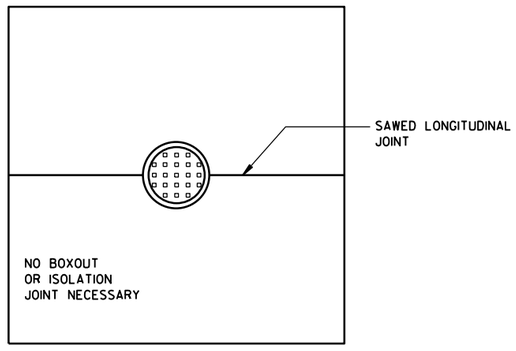
S.D.D. 13 C 18-3c



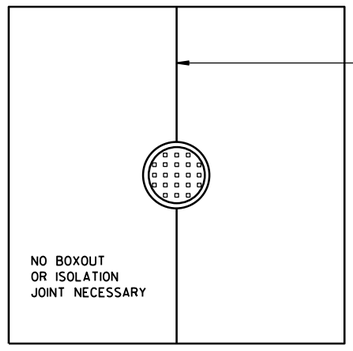
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



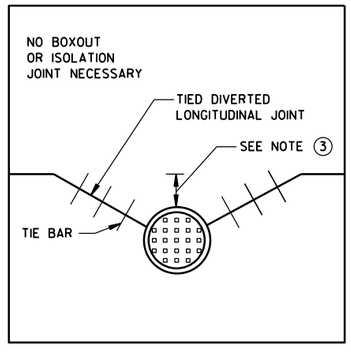
INLET WITH TRANSVERSE JOINT



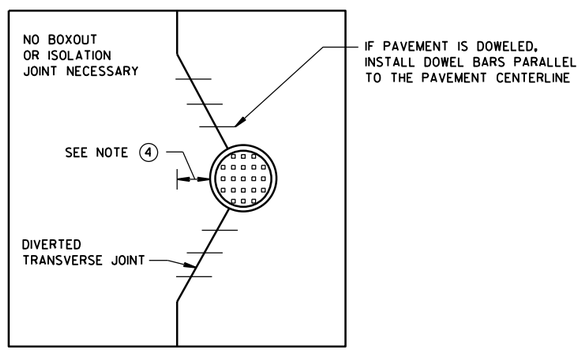
MANHOLE WITH LONGITUDINAL JOINT



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.

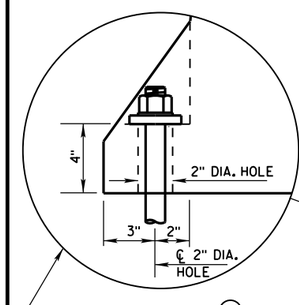
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

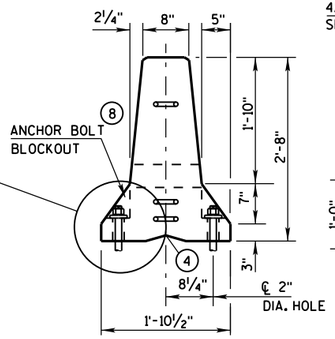
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

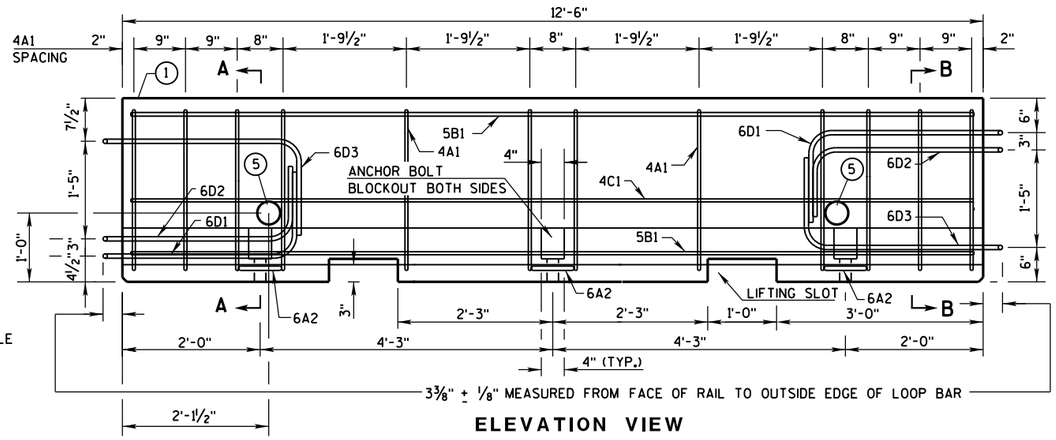
6

S.D.D. 13 C 18-3d

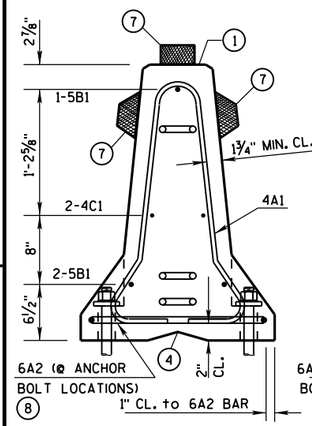




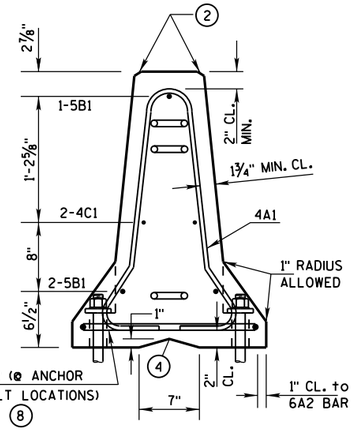
END VIEW



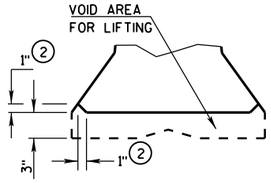
ELEVATION VIEW



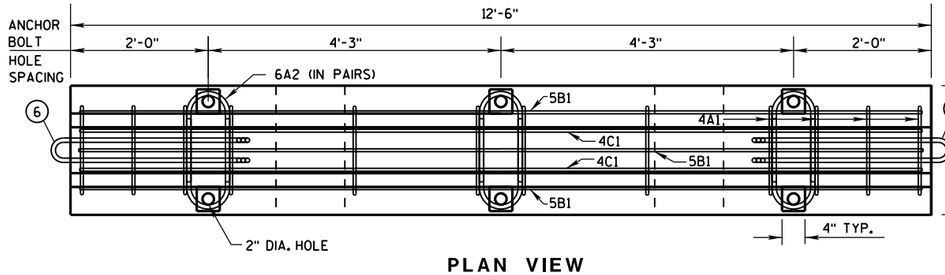
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

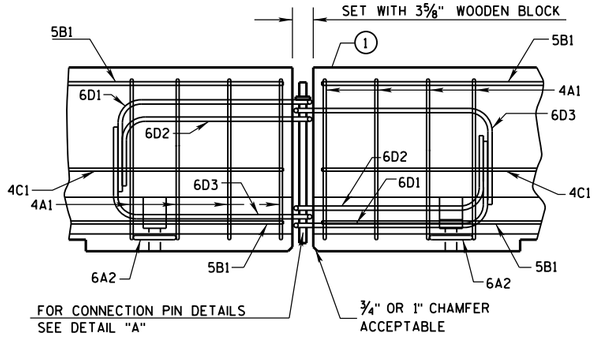


DETAIL "B"
LIFTING SLOT DETAIL

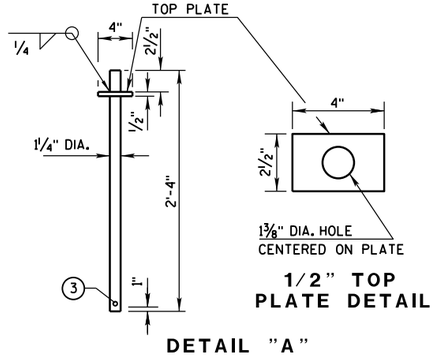


PLAN VIEW

DETAILS OF BARRIER SECTION

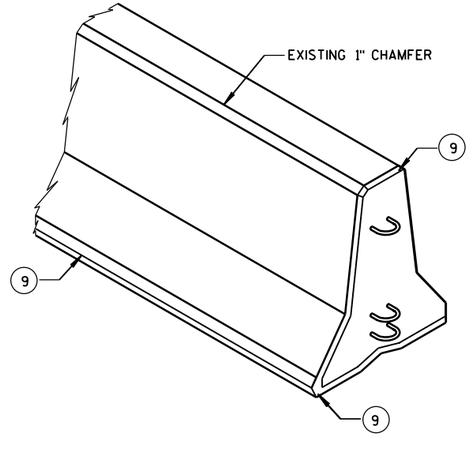


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-14(a) THRU 14B7-14(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

(8) SEE SHEET D FOR ANCHORING CRITERIA.

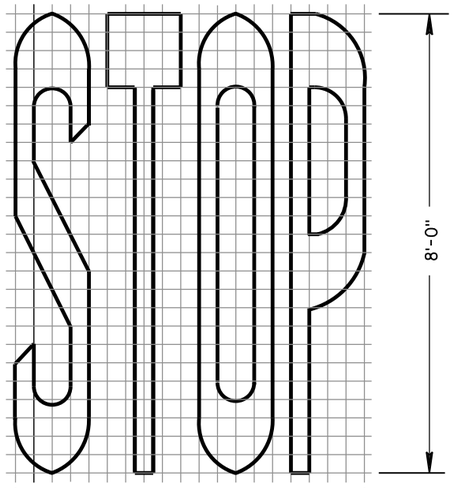
(9) 1" CHAMFER OPTIONAL.

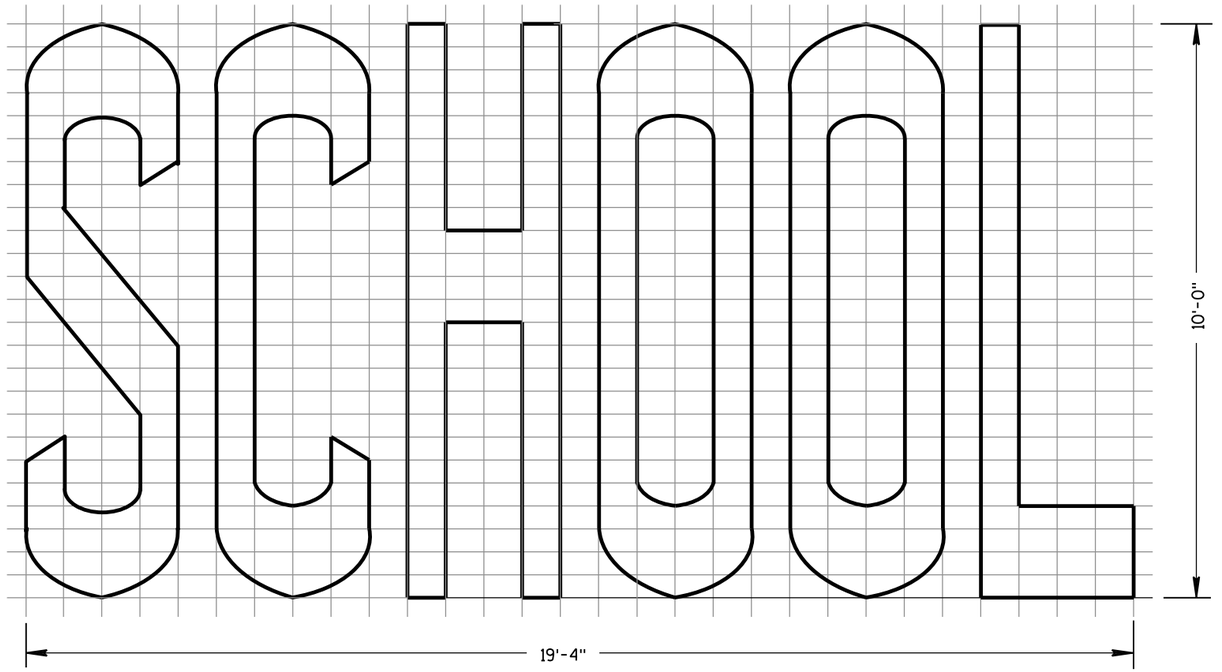
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

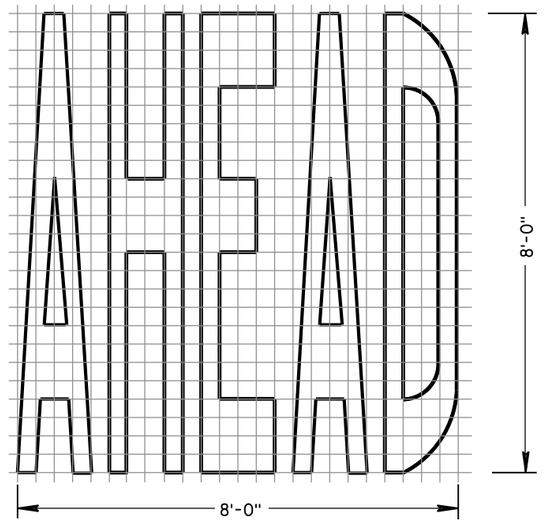
GENERAL NOTES

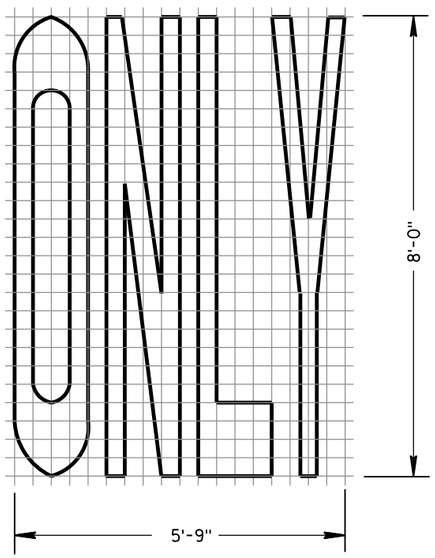
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

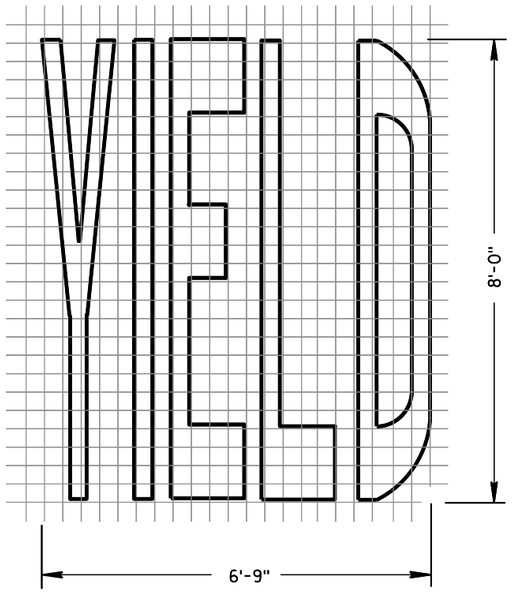


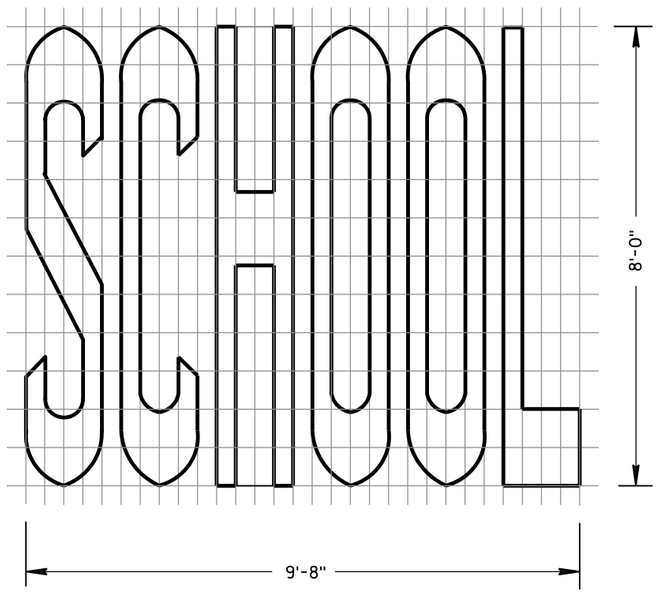


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-16 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MARK

FHWA

EER

6

S.D.D. 15 C 7-13b

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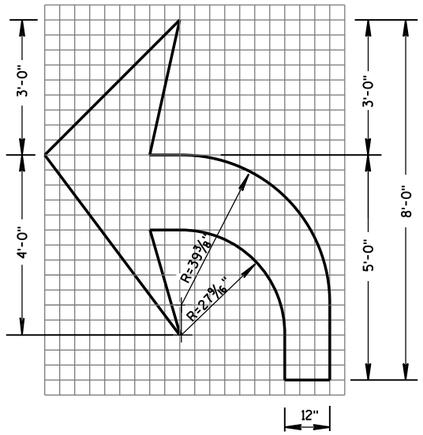
S.D.D. 15 C 7-13b

GENERAL NOTES

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



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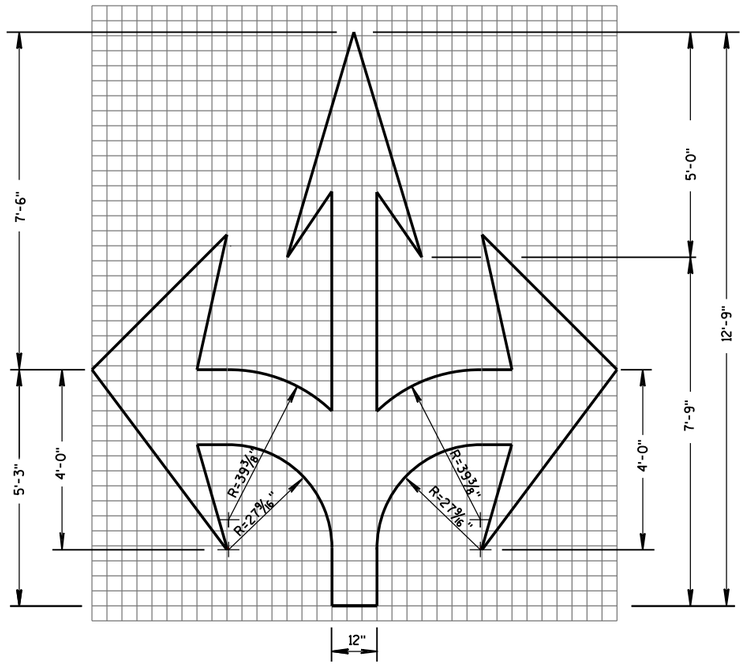
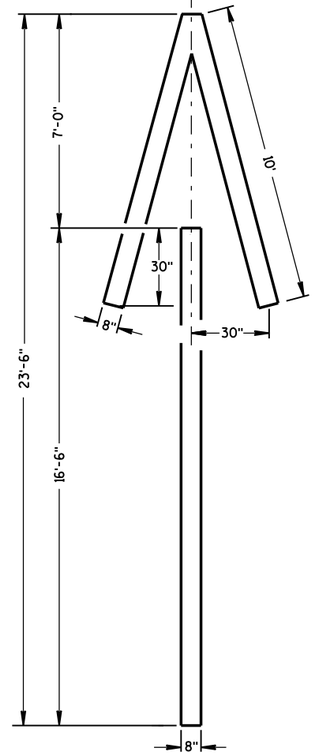


TYPE 6



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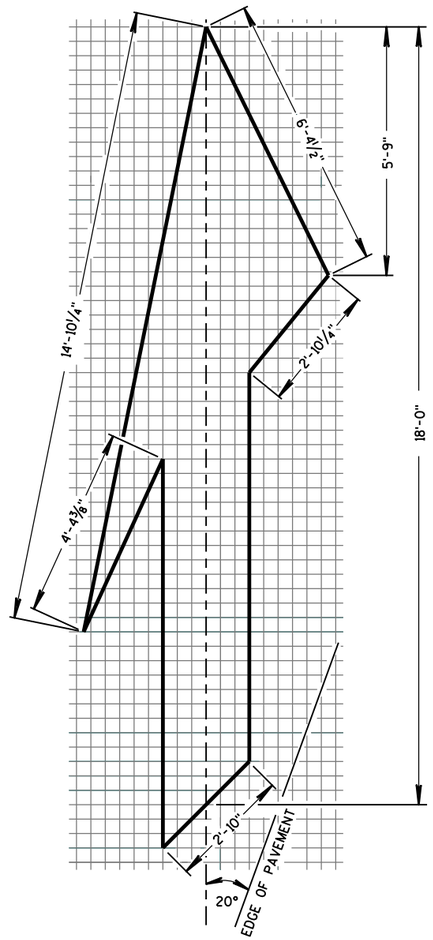
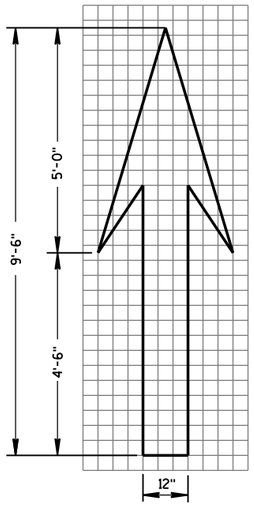
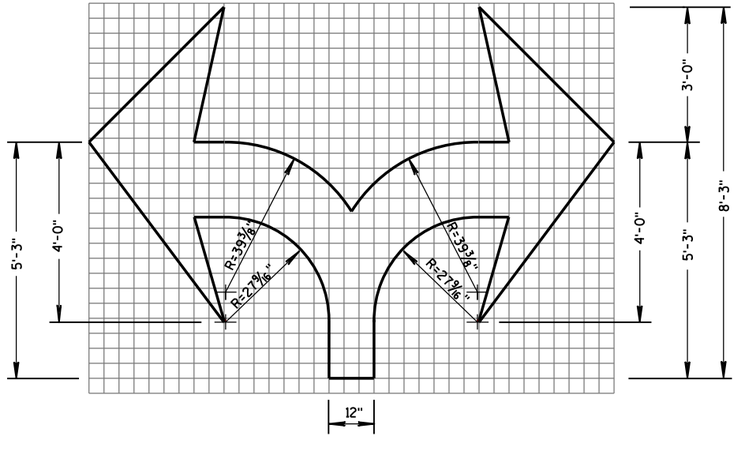


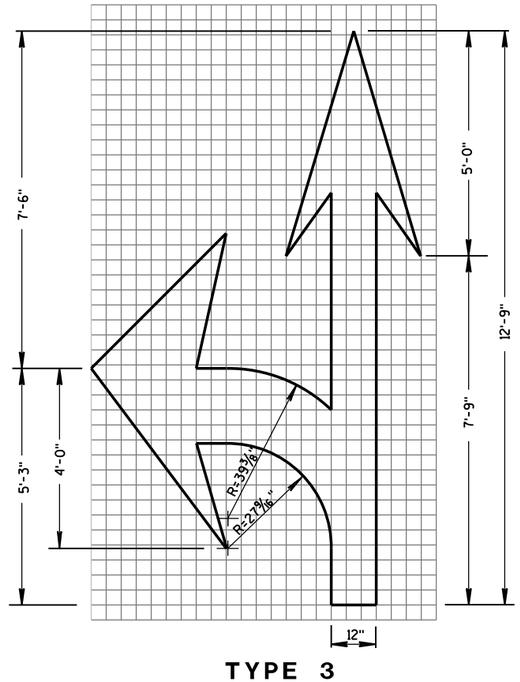
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-18-16 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR[illegible]NEER
FHWA

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S.D.D. 15 C 7-13c

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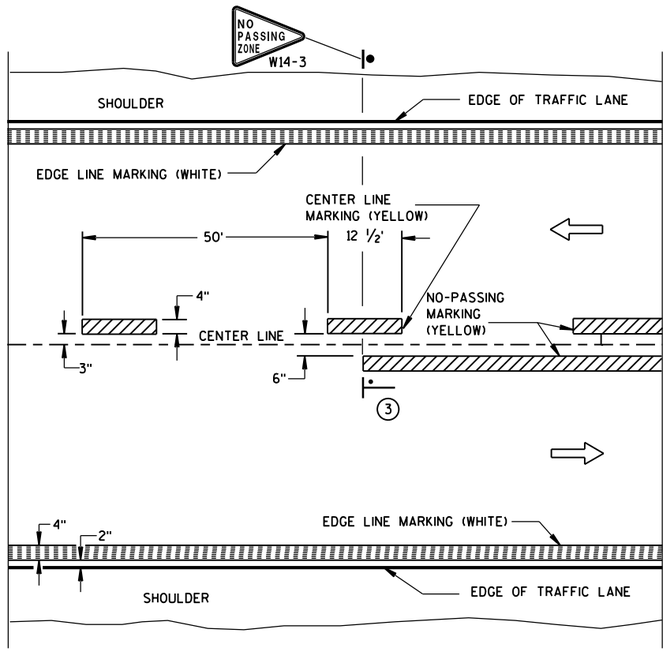
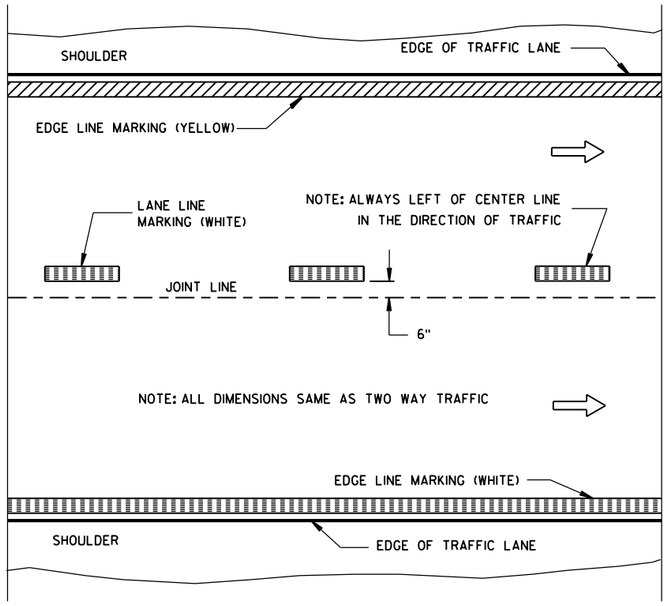
S.D.D. 15 C 7-13c

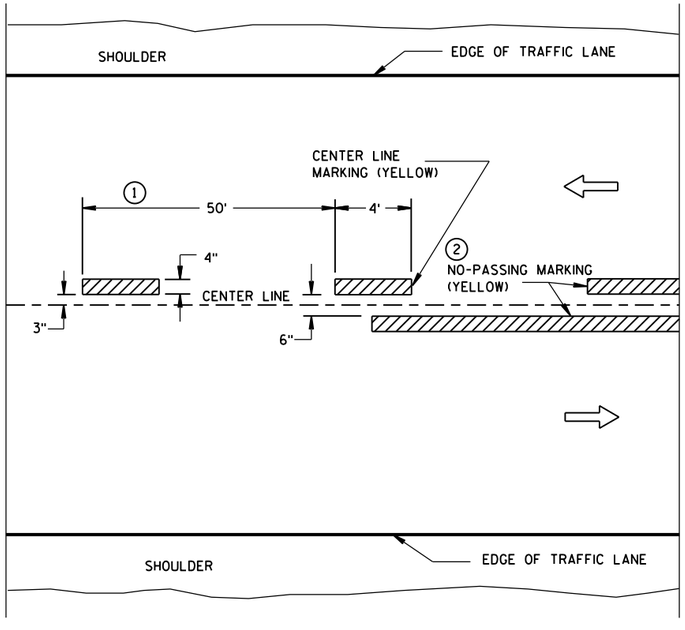


TWO WAY TRAFFIC

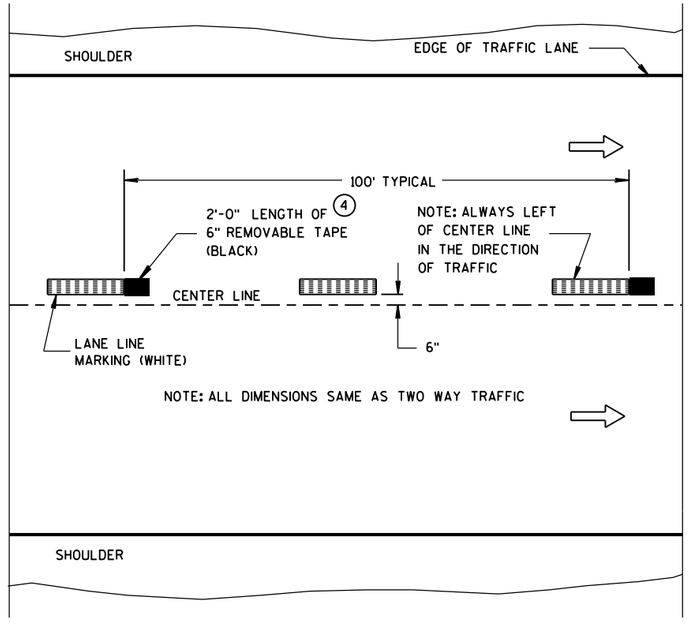


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

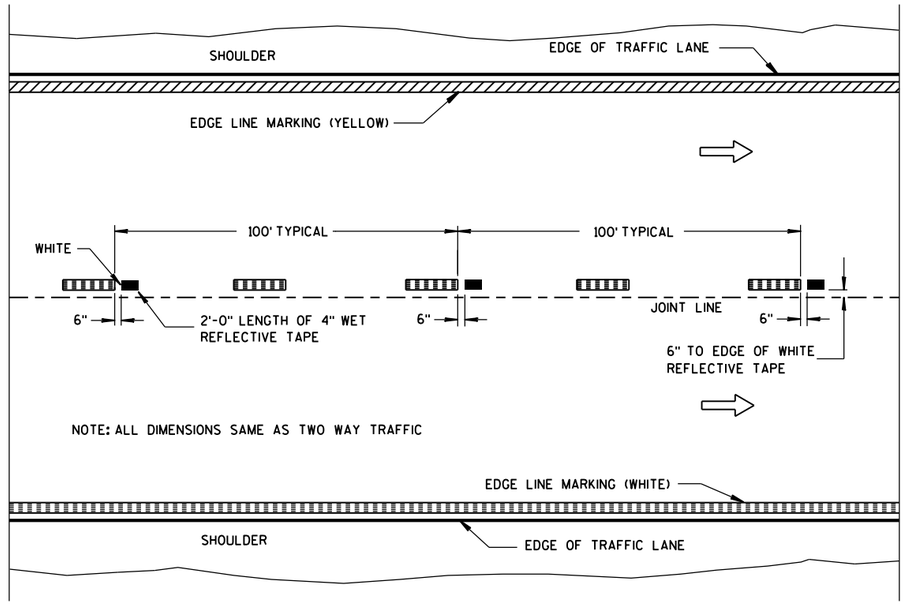
GENERAL NOTES

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

1. HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
2. NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
3. NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

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S.D.D. 15 C 8-16a

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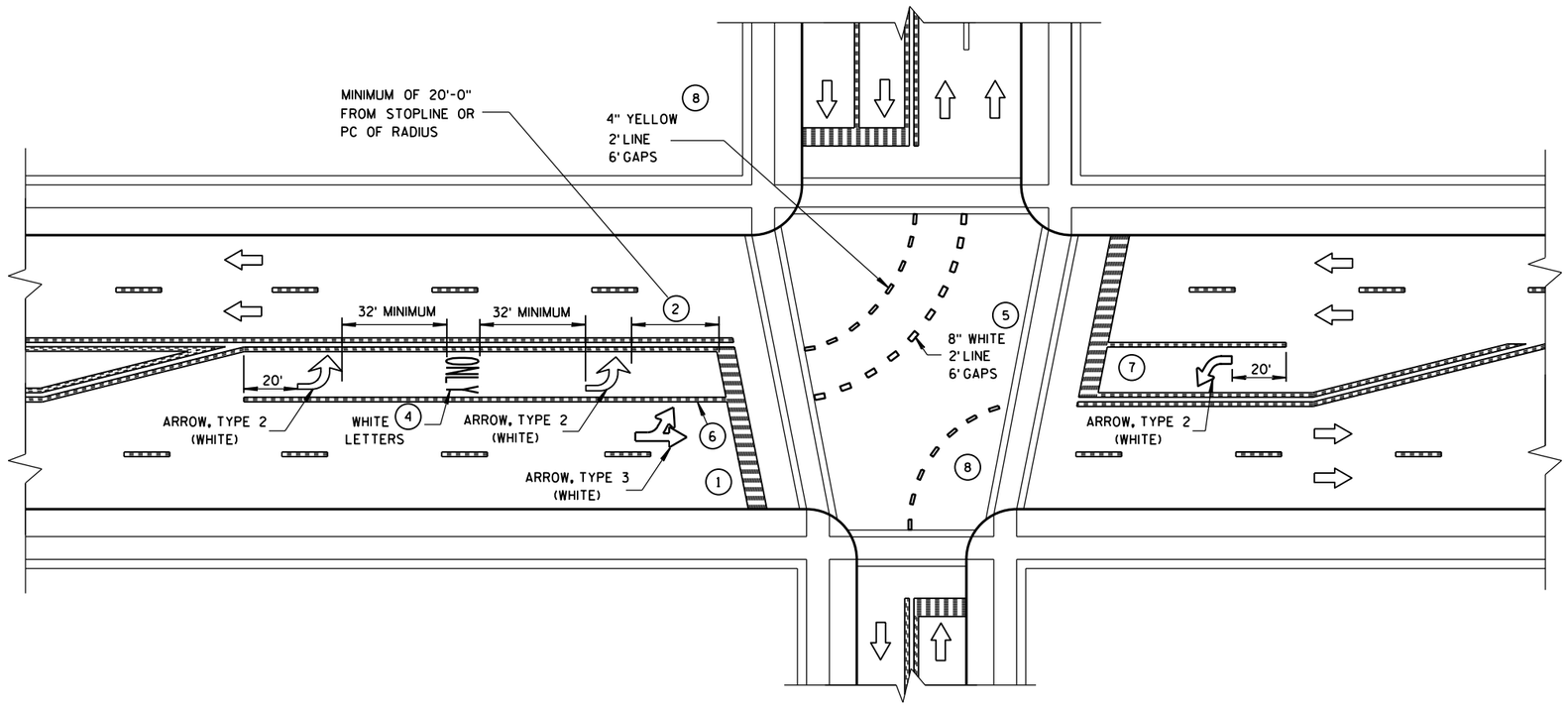
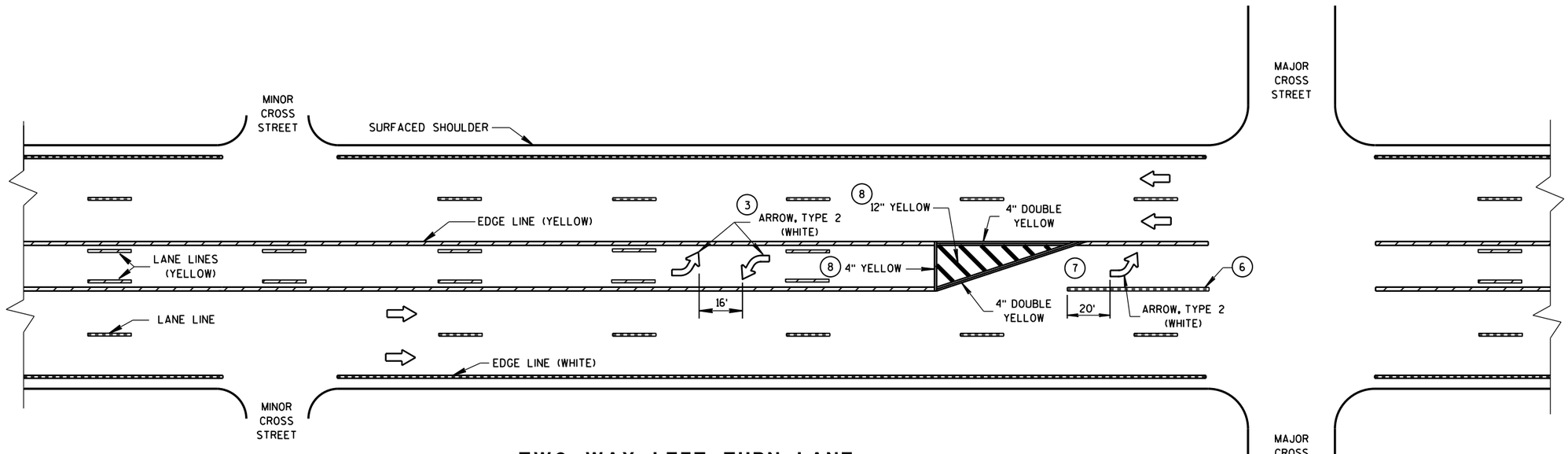
S.D.D. 15 C 8-16a



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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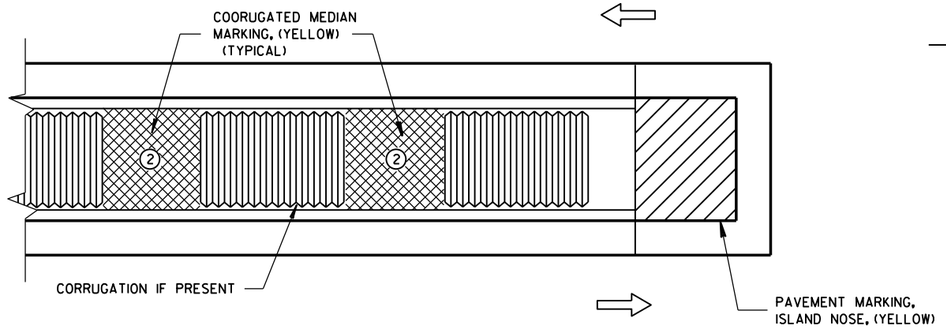
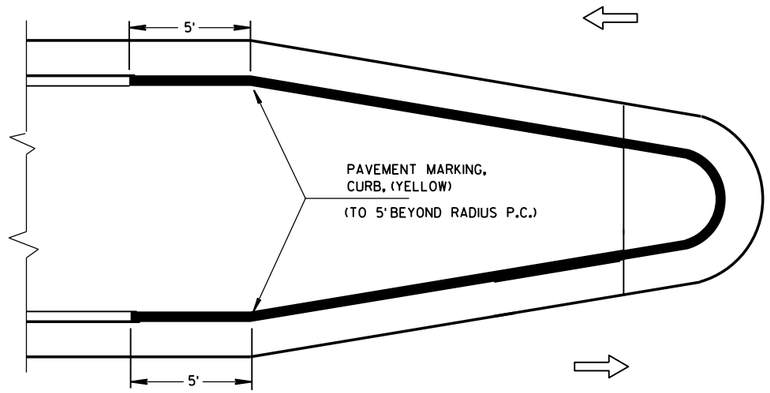
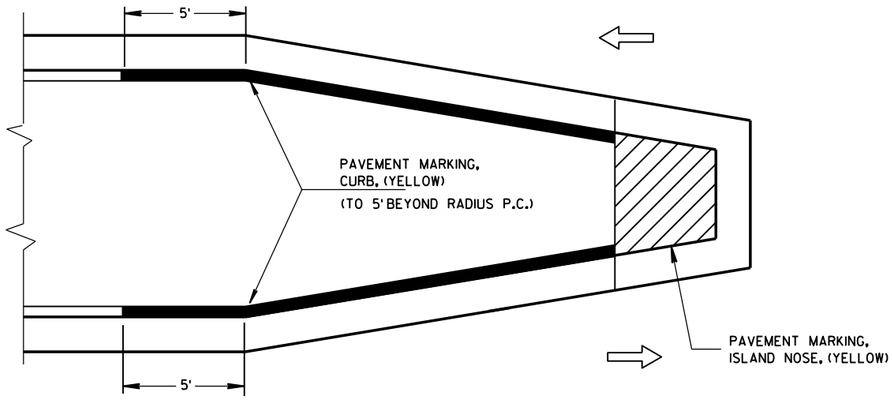
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

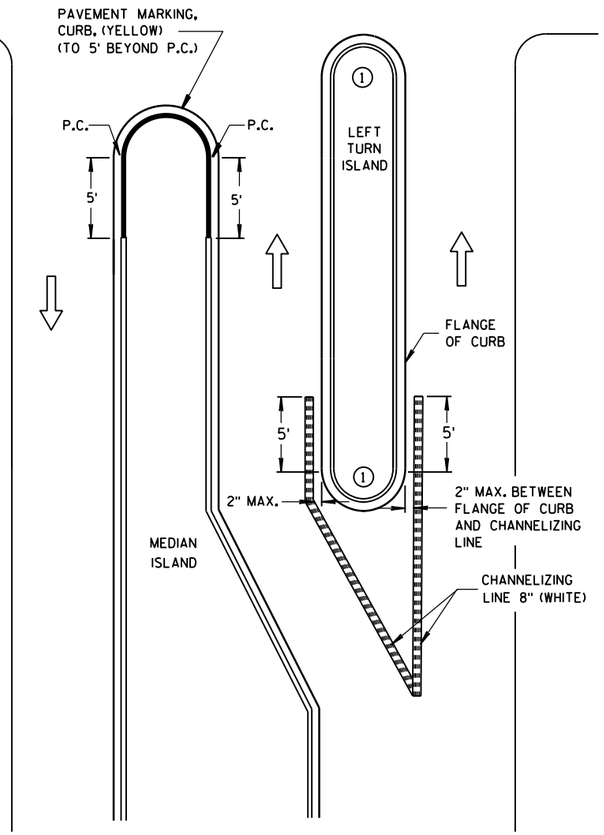


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

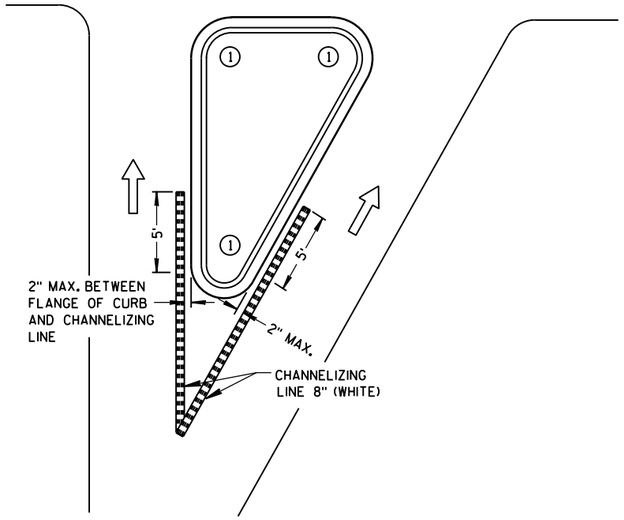


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

2. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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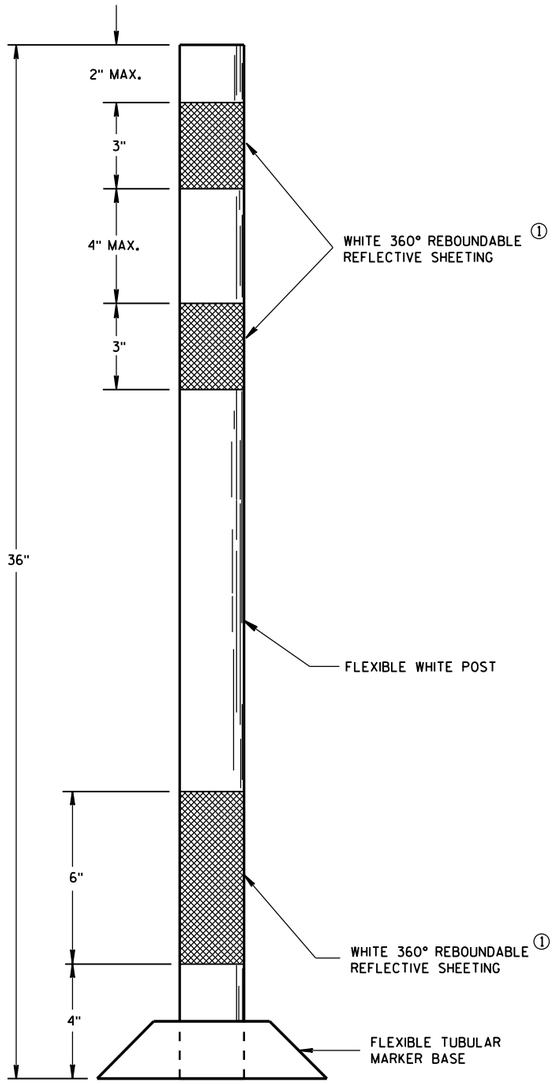
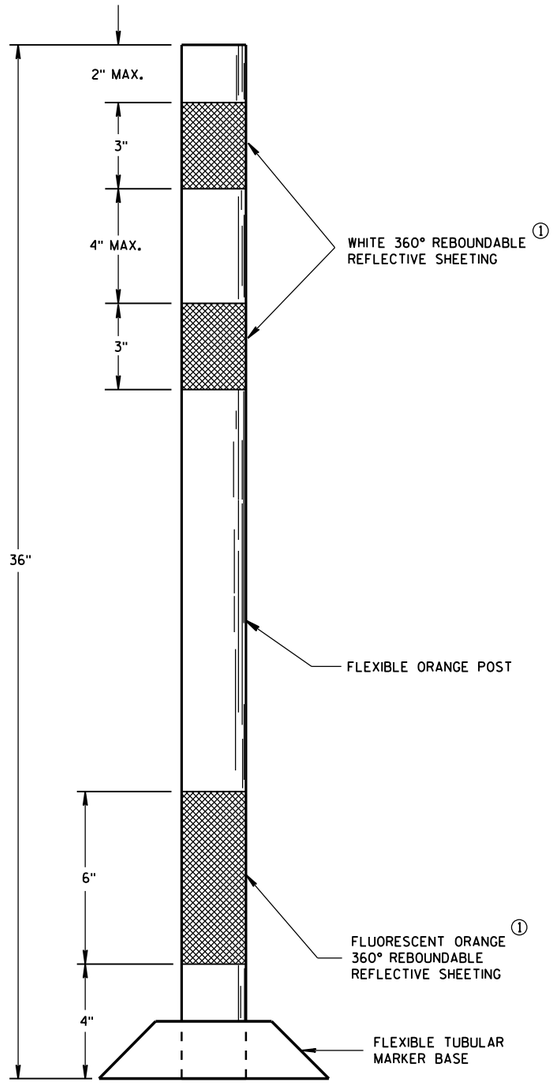
S.D.D. 15 C 8-16f



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.

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

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S.D.D. 15 C 11-6

S.D.D. 15 C 11-6

FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-16-2015
DATE
FHWA

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON
SAFETY ENGINE

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

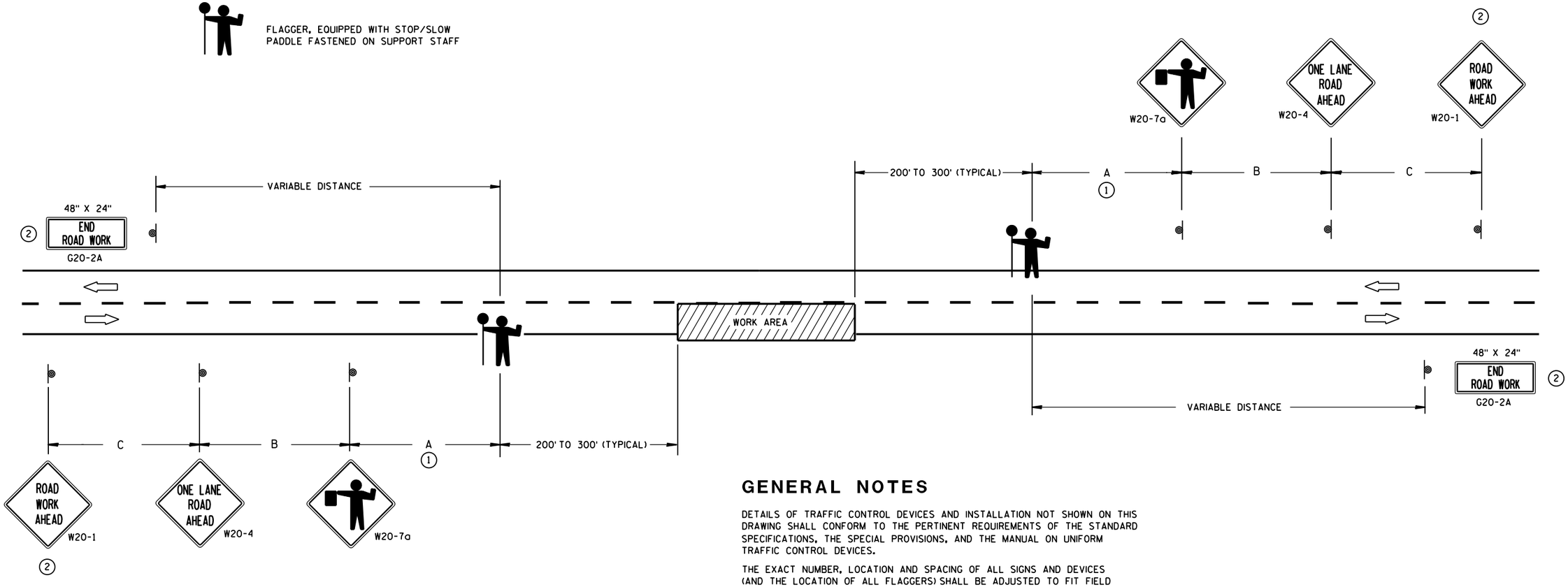
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 C 12-4

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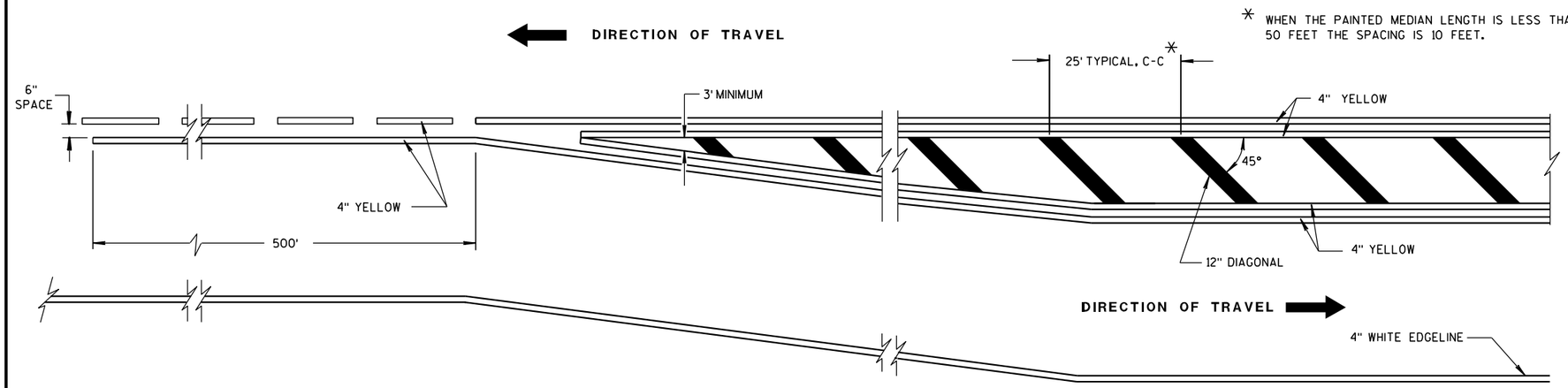
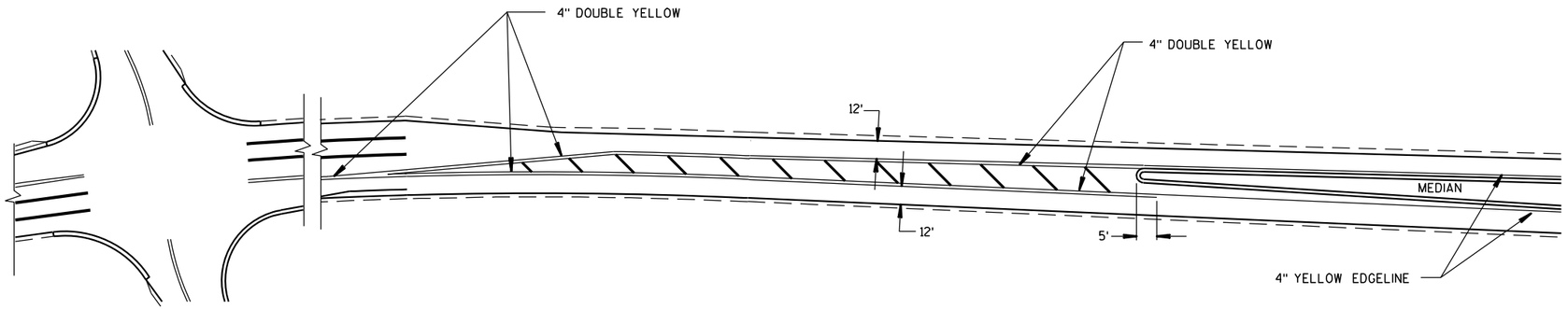
S.D.D. 15 C 12-4



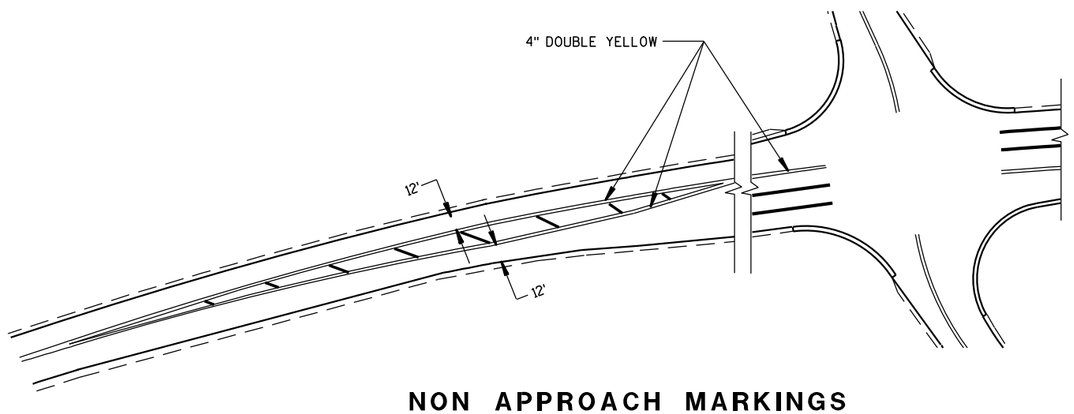
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER
FHWA	367 IGN

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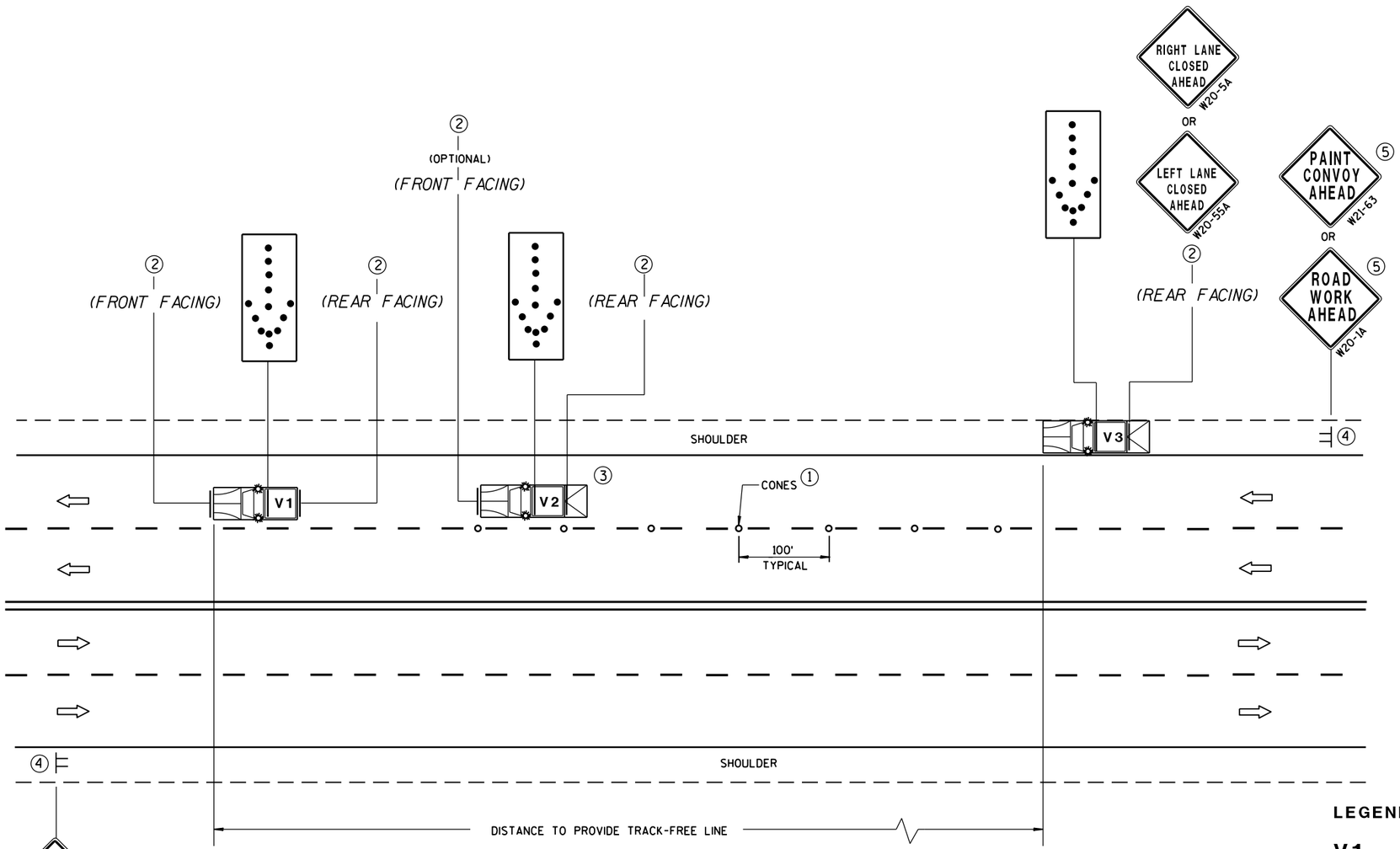
S.D.D. 15 C 18-3

S.D.D. 15 C 18-3



GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGELINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE OR LANELINE MARKING FOR MULTILANE UNDIVIDED ROADWAYS.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

PAINT CONVOY AHEAD W21-63
OR
ROAD WORK AHEAD W20-1A

MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE UNDIVIDED ROADWAY

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING OPERATION
MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZON SAFETY ENGINE
FHWA

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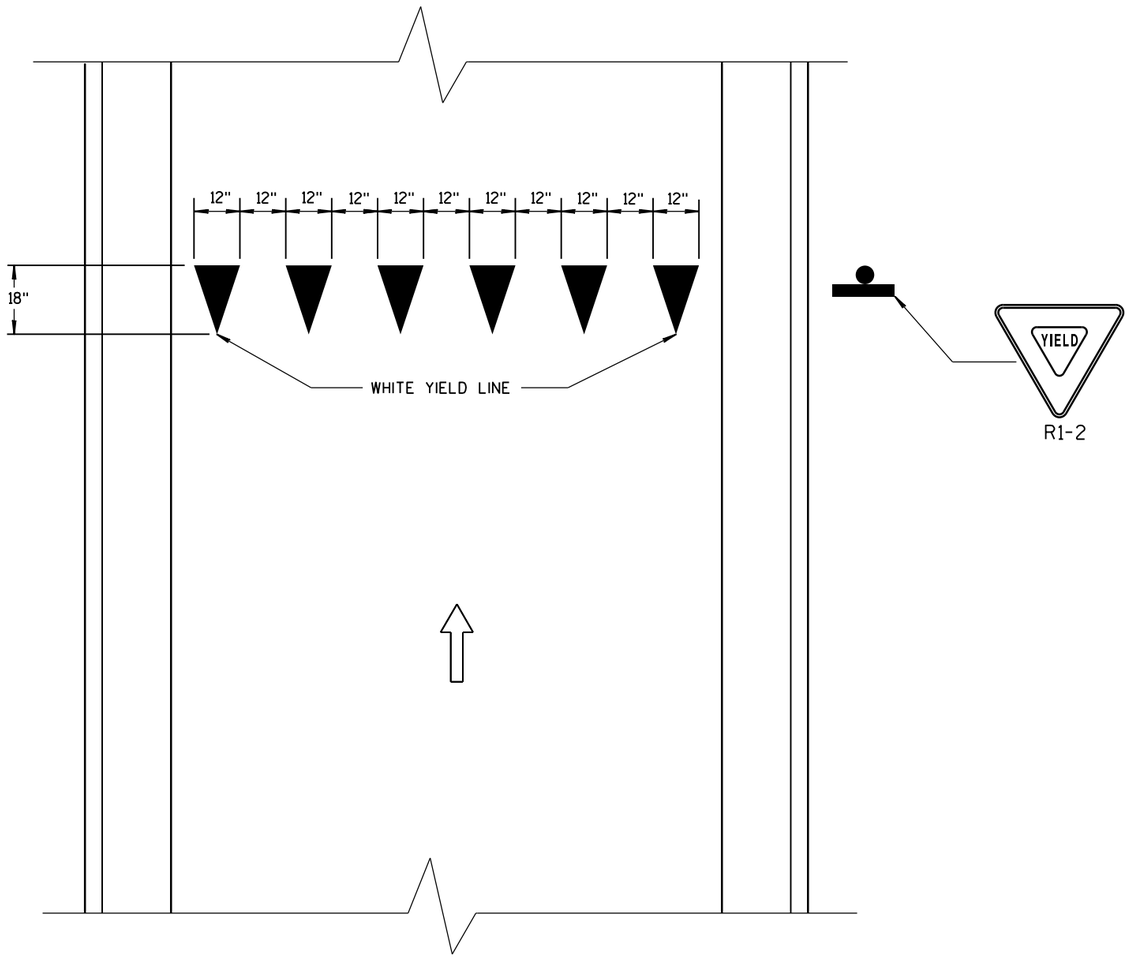
S.D.D. 15 C 19-3b



R1-2

DIRECTION OF TRAVEL

YIELD LINE

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S.D.D. 15 C 20-2

S.D.D. 15 C 20-2

YIELD MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARI 369 IEER

FHWA

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.

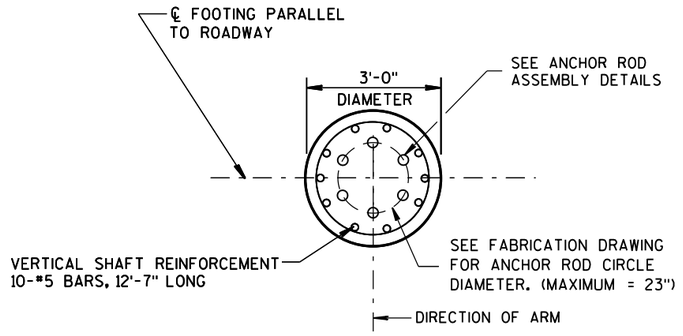
THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

FORM ALL EXPOSED CONCRETE CORNERS WITH ¾" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

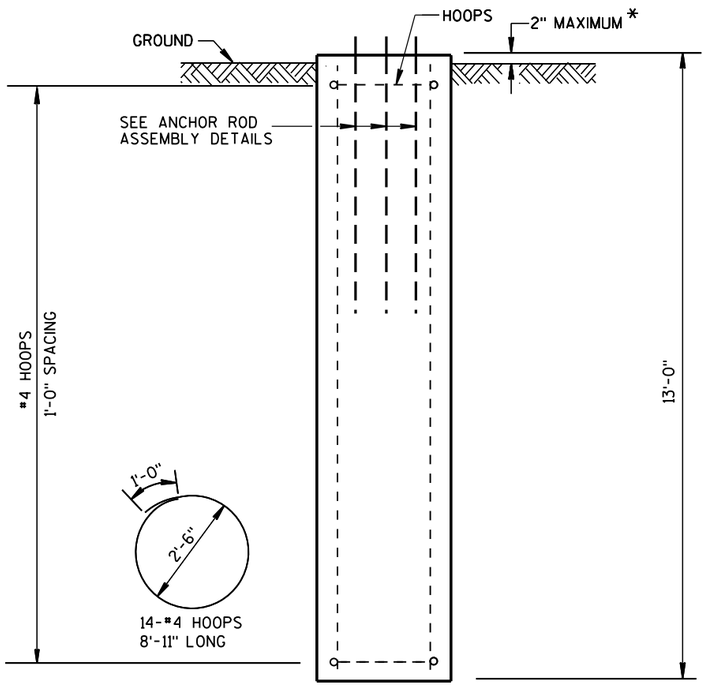
ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

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).

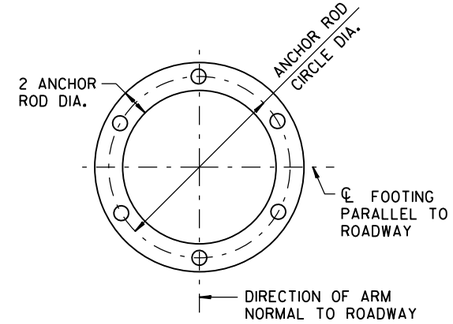


PLAN VIEW

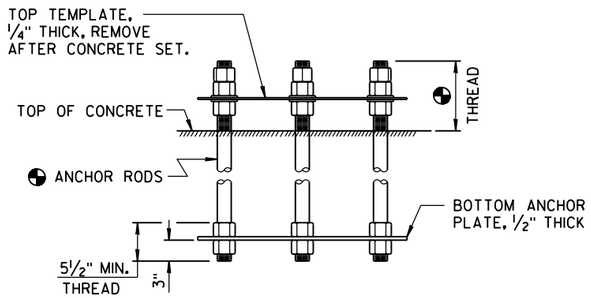


ELEVATION VIEW

* 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	/S/ Vu Thao
DATE	WIND LOADED STRU PROGRAM LEAD
FHWA	

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S.D.D. 15 C 24-4

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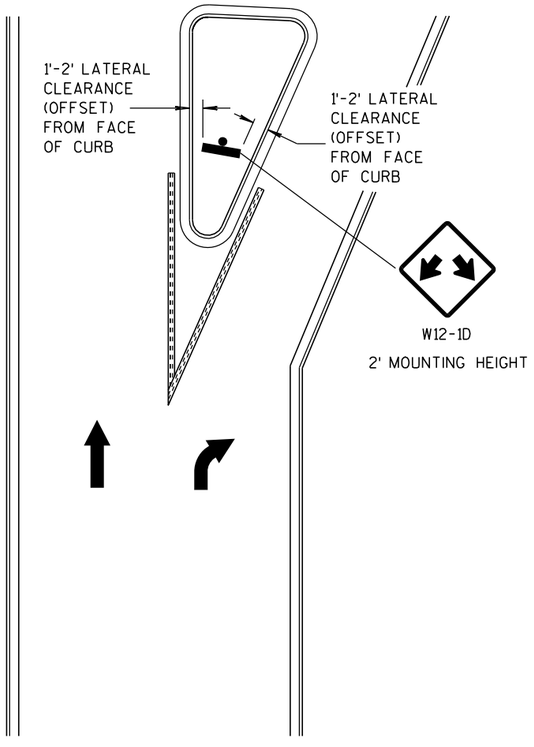
S.D.D. 15 C 24-4

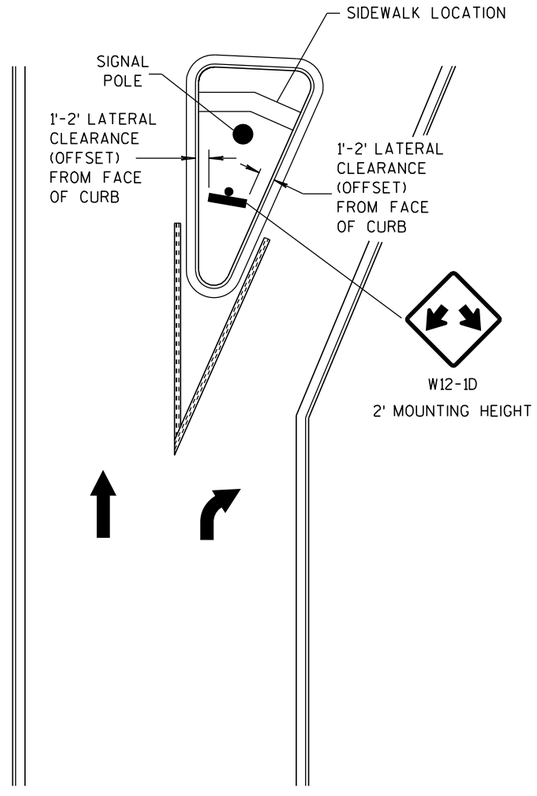
GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

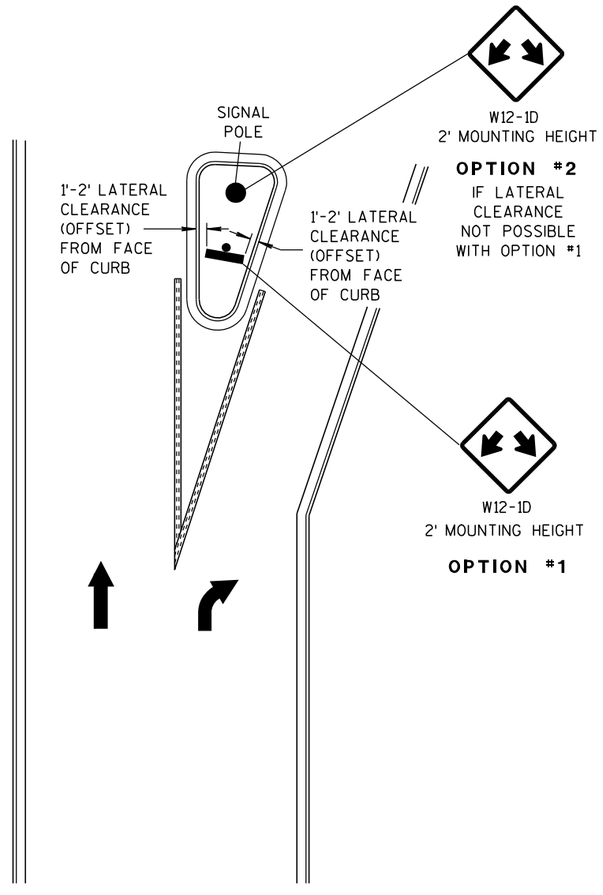
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.



LARGE RIGHT TURN ISLAND



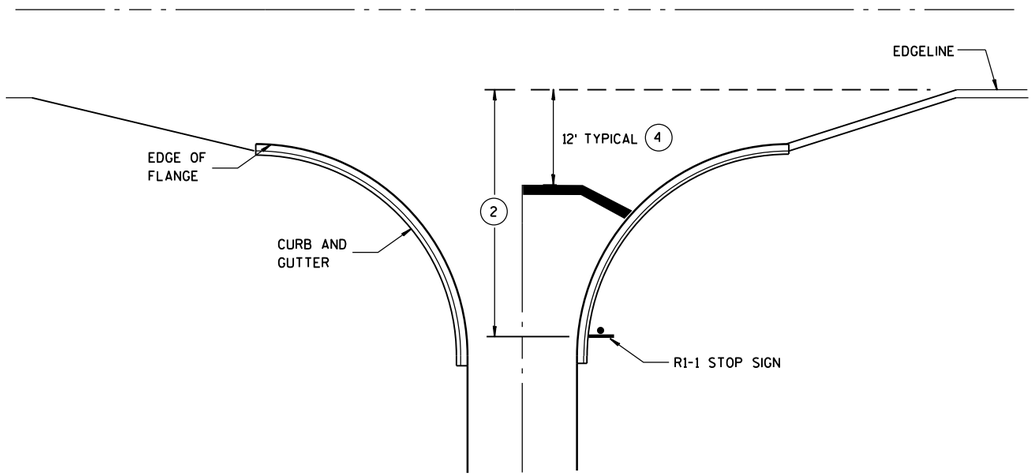
LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



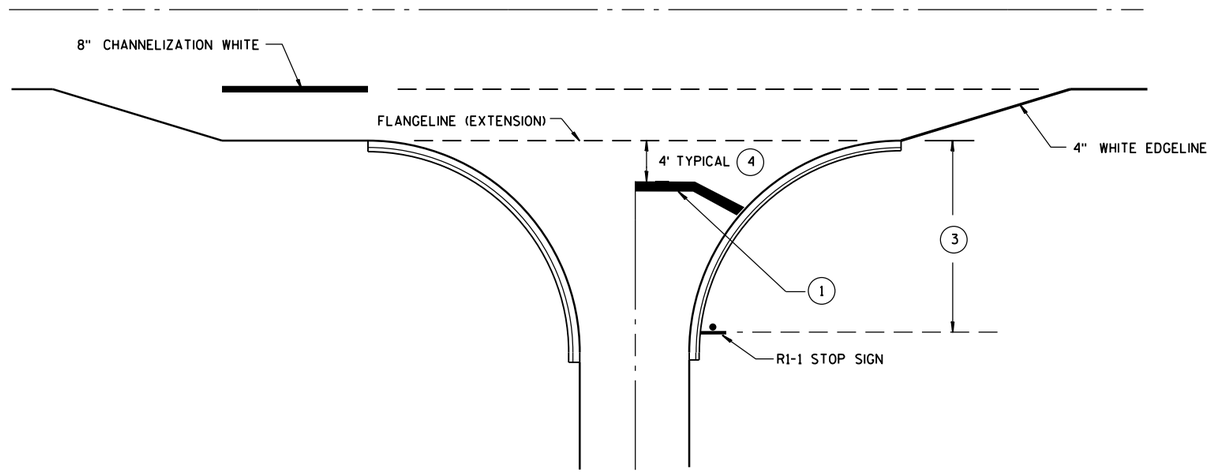
SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

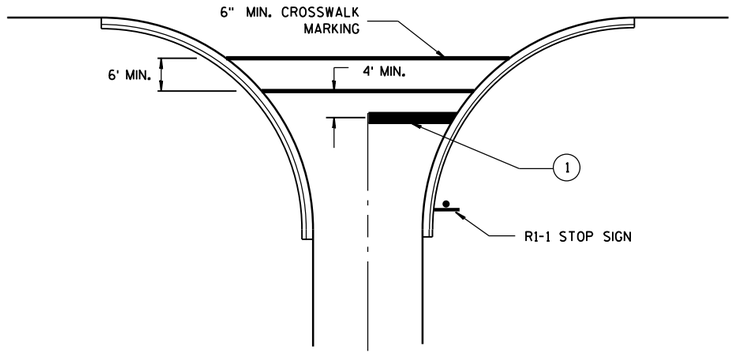
DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10-22-08 DATE	/S/ Thomas N. Nothdurft STATE TRAFFIC ENGINEER
FHWA	371 IGN



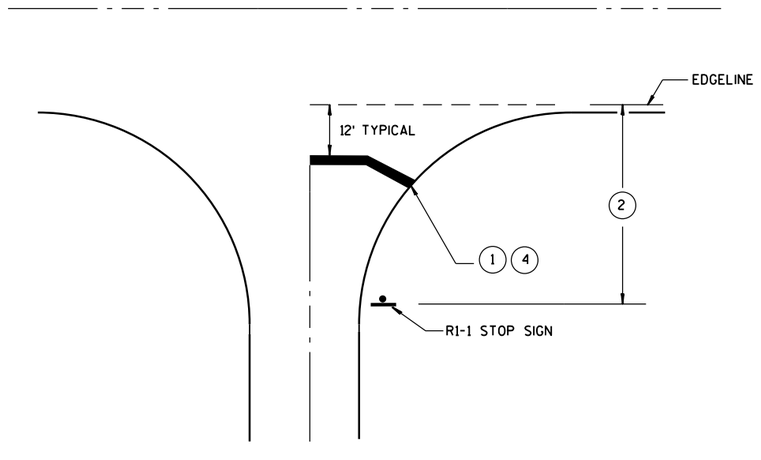
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.
3. IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
4. MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 372 NEER

FHWA

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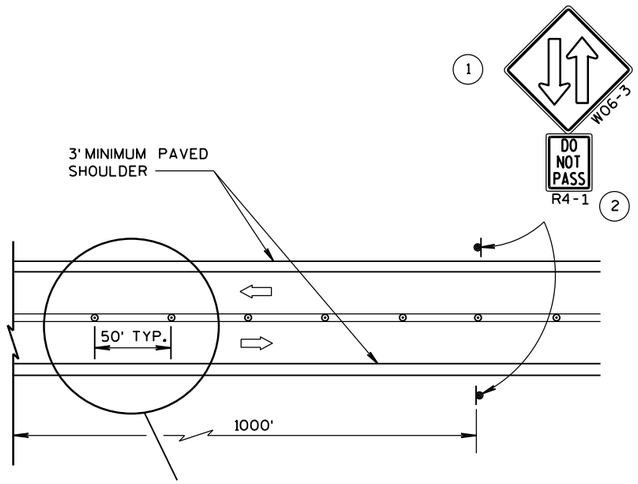
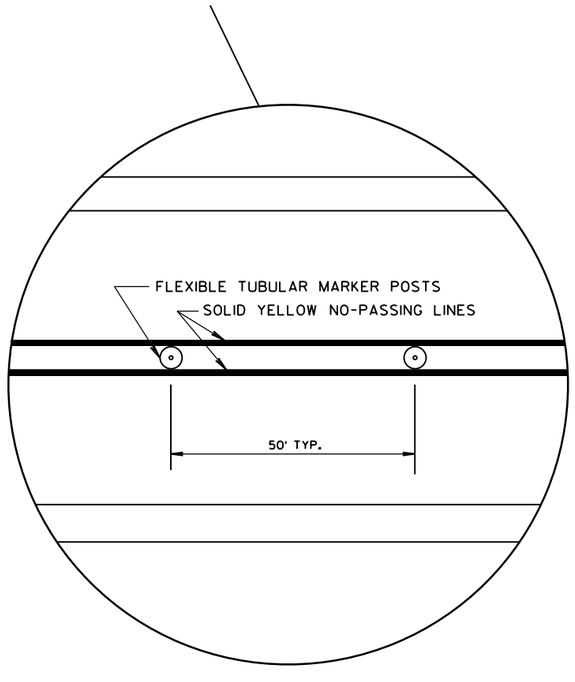
S.D.D. 15 C 33-2



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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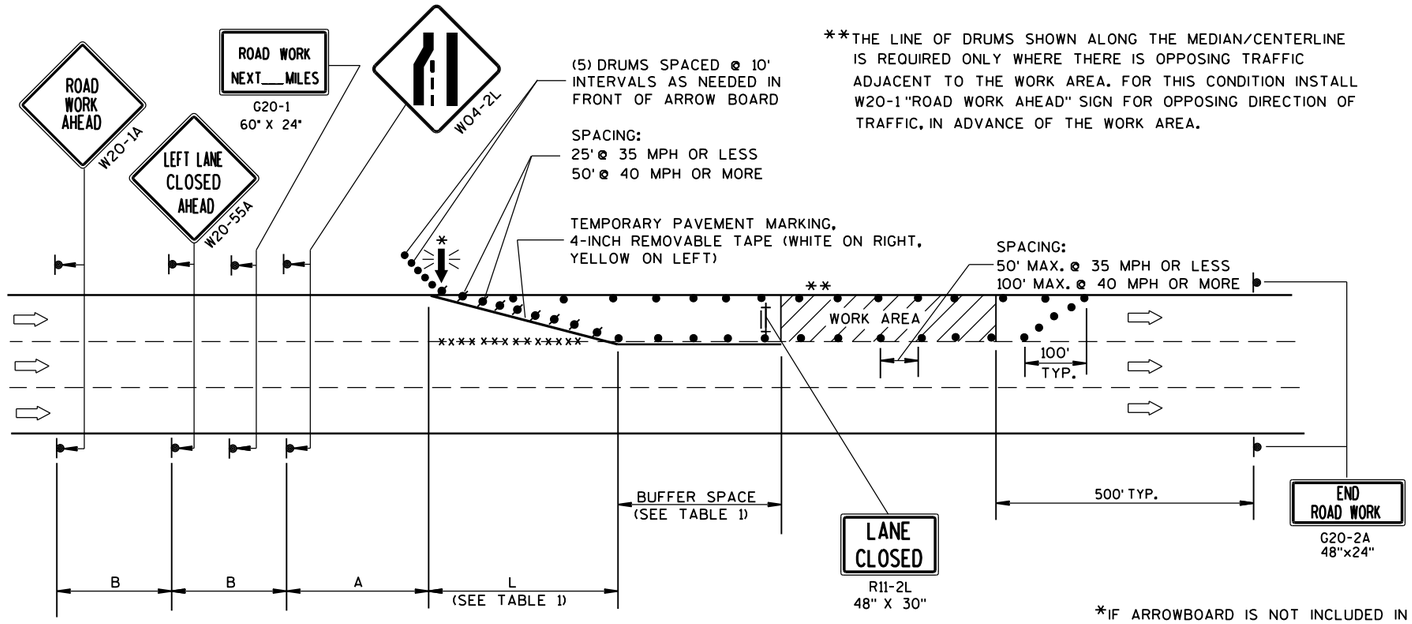

**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

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"

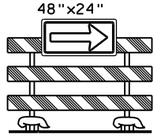

TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

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

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'
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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

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

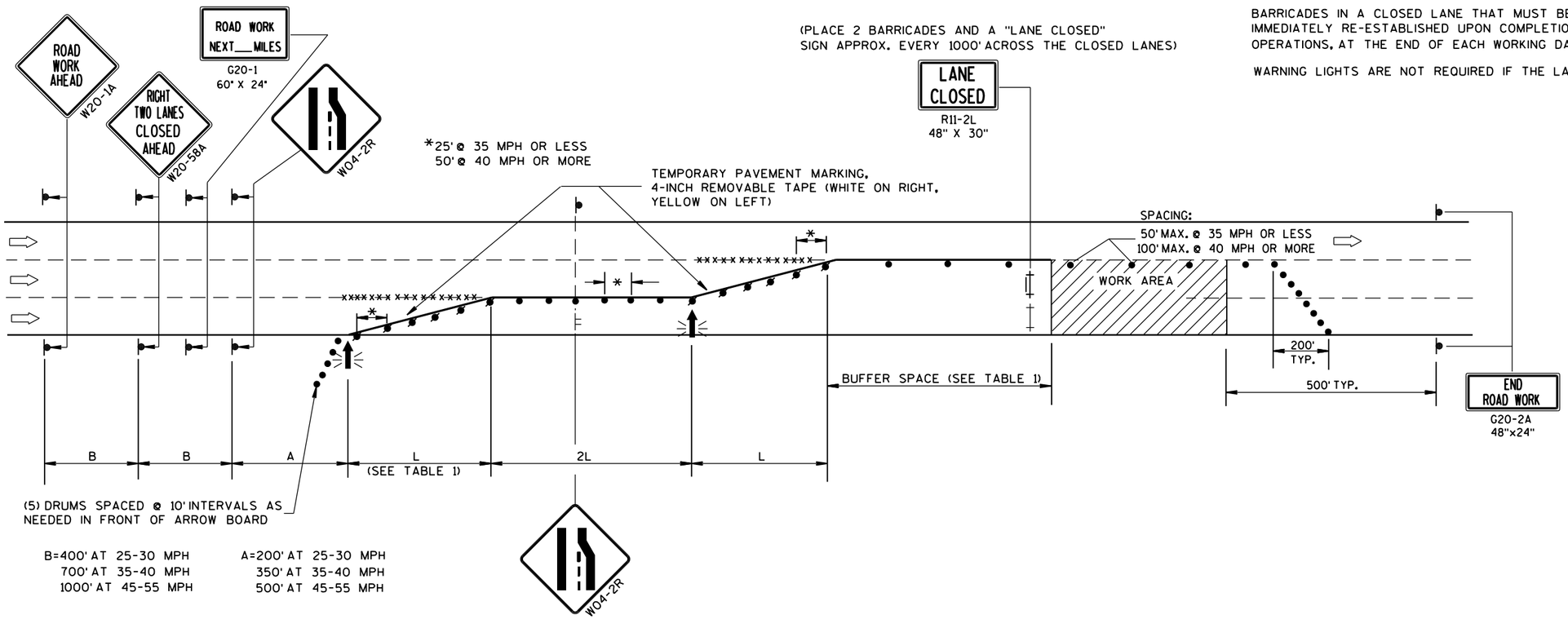
TRAFFIC CONTROL DRUM

FLASHING ARROW BOARD

DIRECTION OF TRAFFIC

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

WORK AREA



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

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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

THE SPACING BETWEEN 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 THE 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.

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.

WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO LOCATE THE ARROWBOARD AS SHOWN, PLACE THE ARROWBOARD IN THE LANE CLOSURE TAPER AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE TAPER.

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, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016
DATE
FHWA

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

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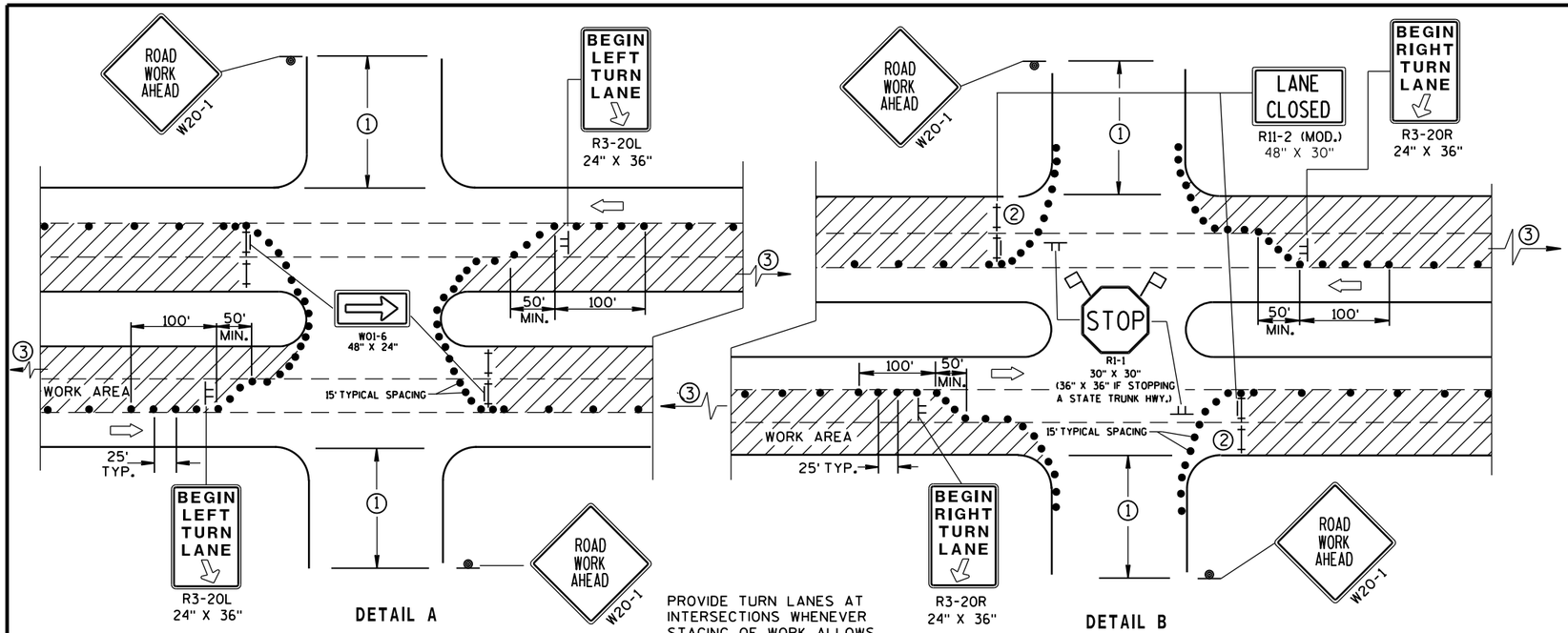
S.D.D. 15 D 22-3



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK

FOR RIGHT TWO LANES CLOSED AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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 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.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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.

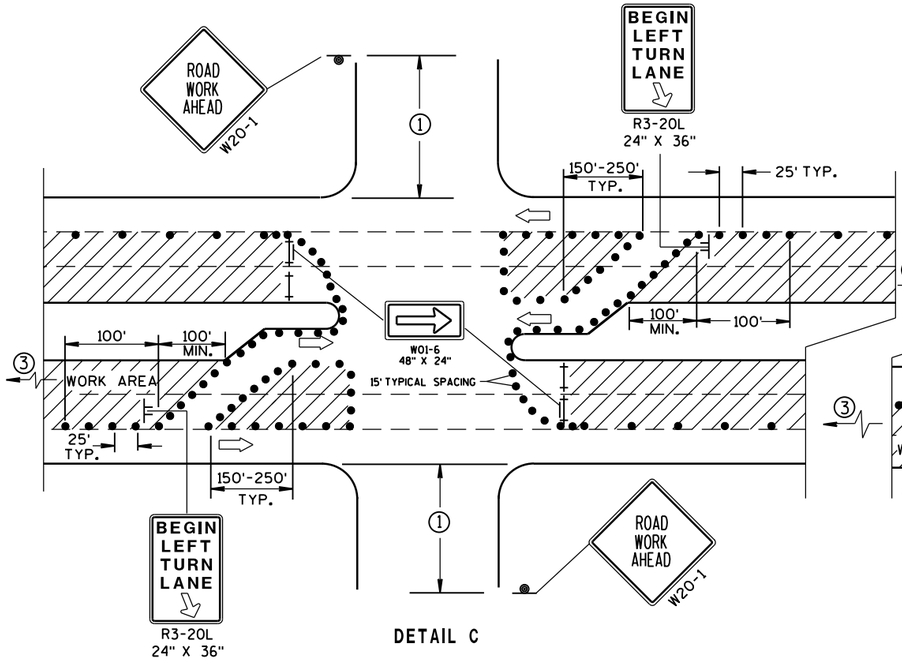
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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.

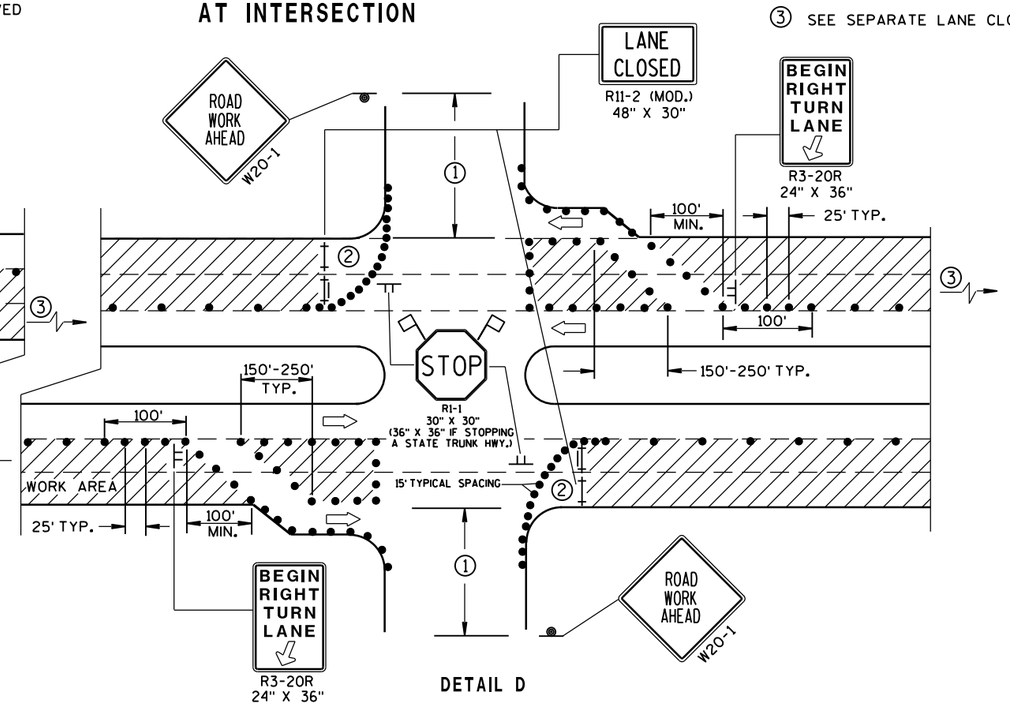
① 500 FEET TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350 FEET IF 35-40 MPH.
200 FEET IF 25-30 MPH.

② ALSO USE BARRICADES AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK (WITH LEFT TURN BAY OPEN)



FOR RIGHT TWO LANES CLOSED AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

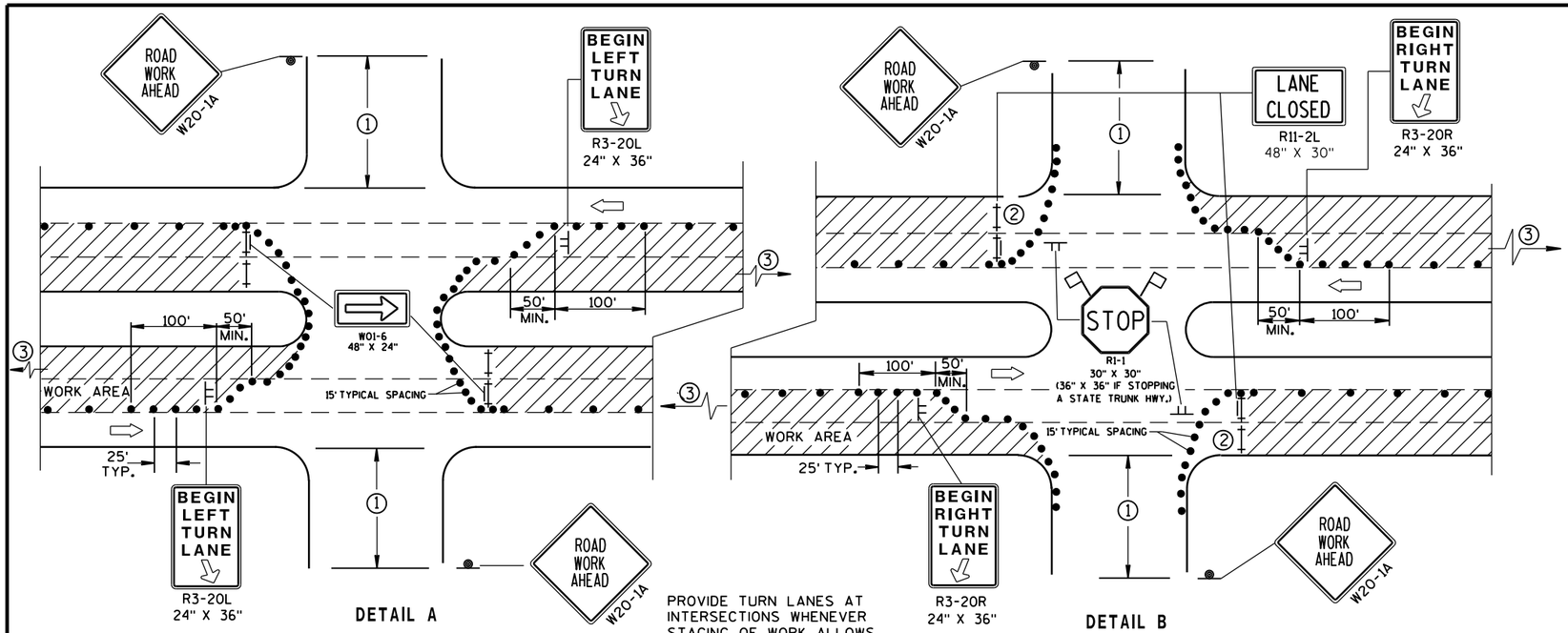
TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 D 23-3



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK

FOR RIGHT TWO LANES CLOSED AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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 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.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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.

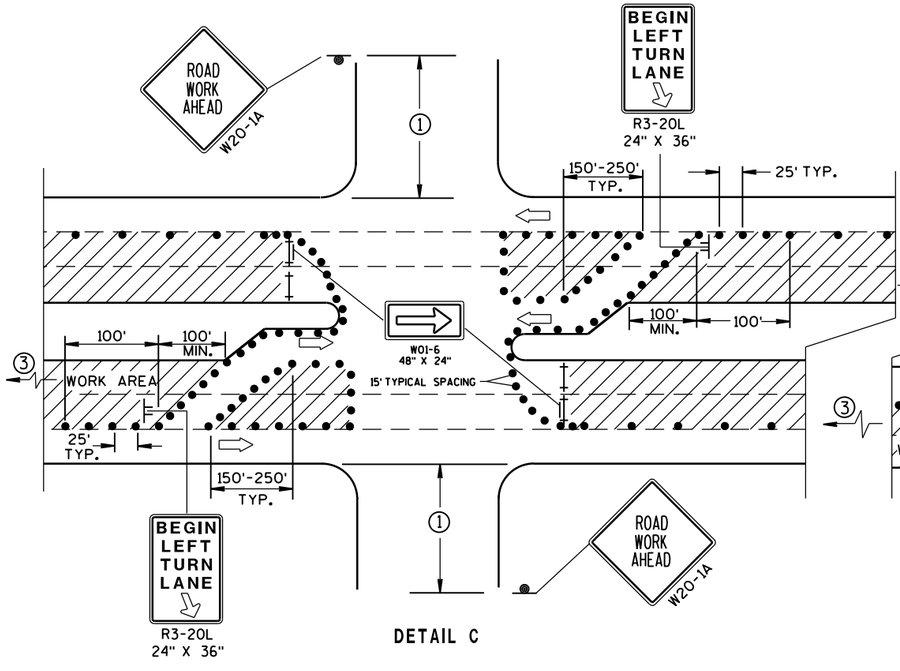
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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.

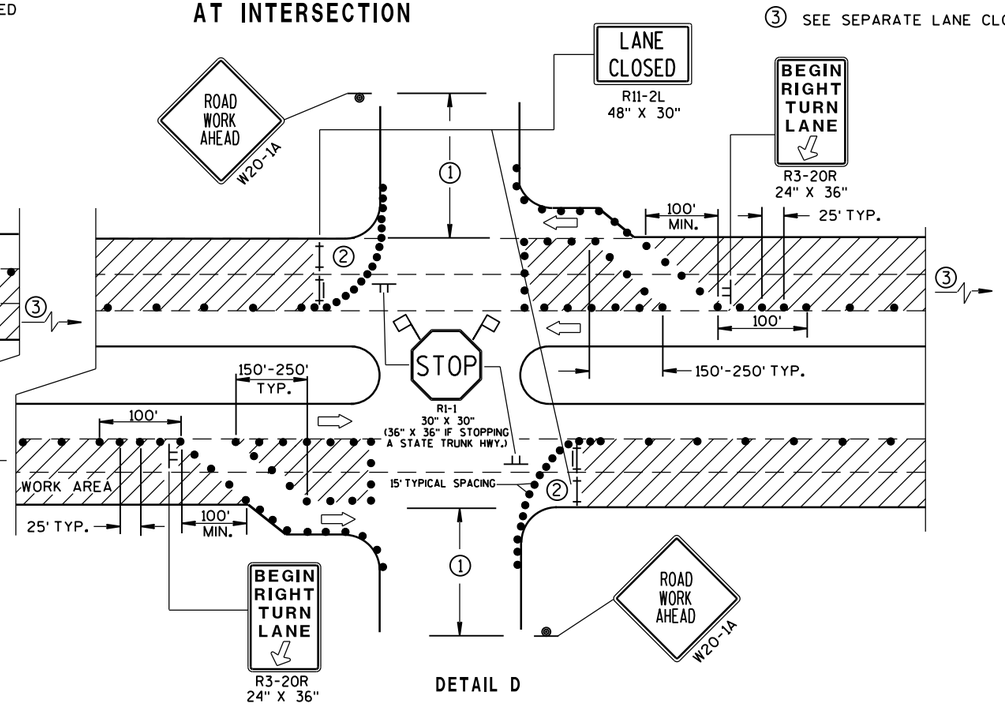
① 500 FEET TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350 FEET IF 35-40 MPH.
200 FEET IF 25-30 MPH.

② ALSO USE BARRICADES AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK (WITH LEFT TURN BAY OPEN)



FOR RIGHT TWO LANES CLOSED AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON SAFETY ENGIN — FIC
FHWA

6

S.D.D. 15 D 23-4

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S.D.D. 15 D 23-4

GENERAL NOTES

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

ALL SIGNS ARE 48" X 48" 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 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.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

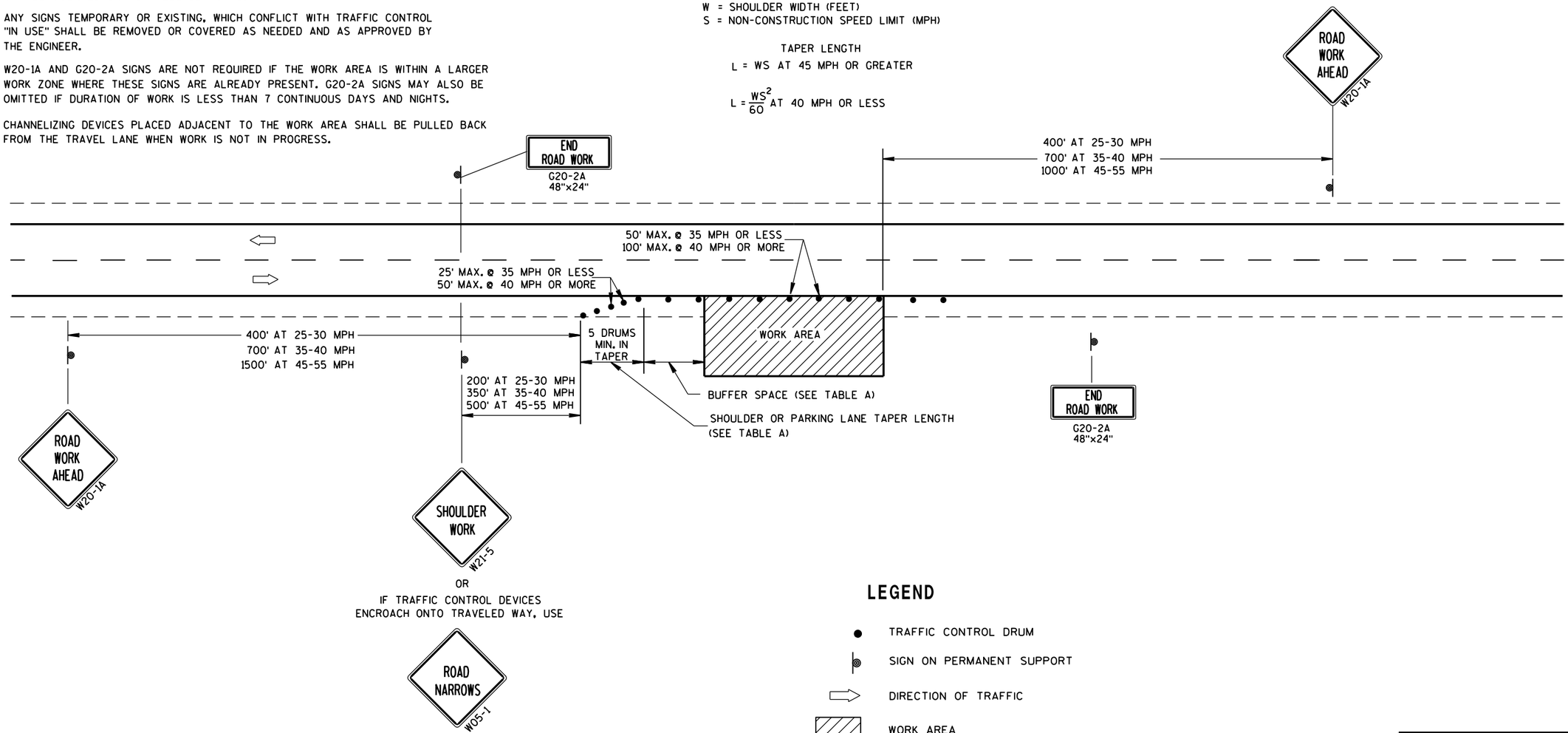
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

July 14, 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO SAFETY ENGI FIC

FHWA

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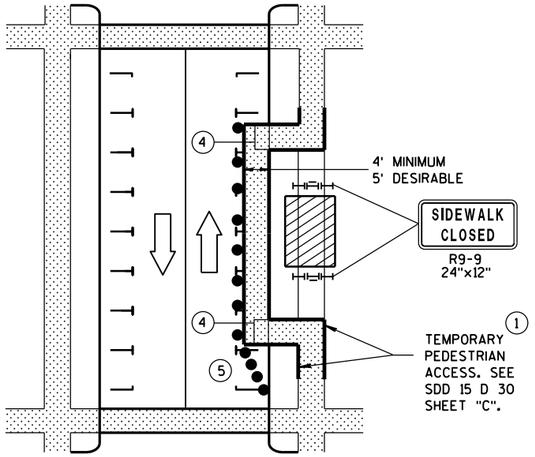
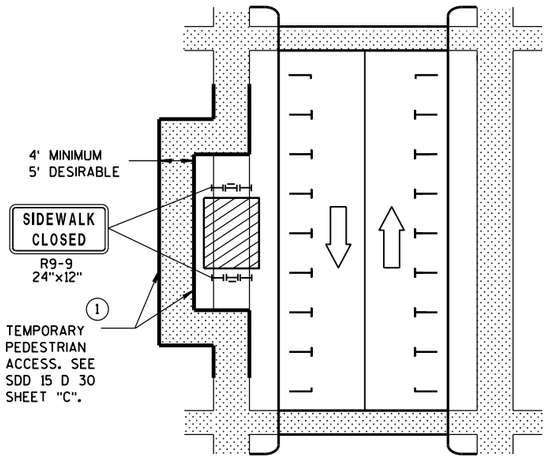
S.D.D. 15 D 28-3

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

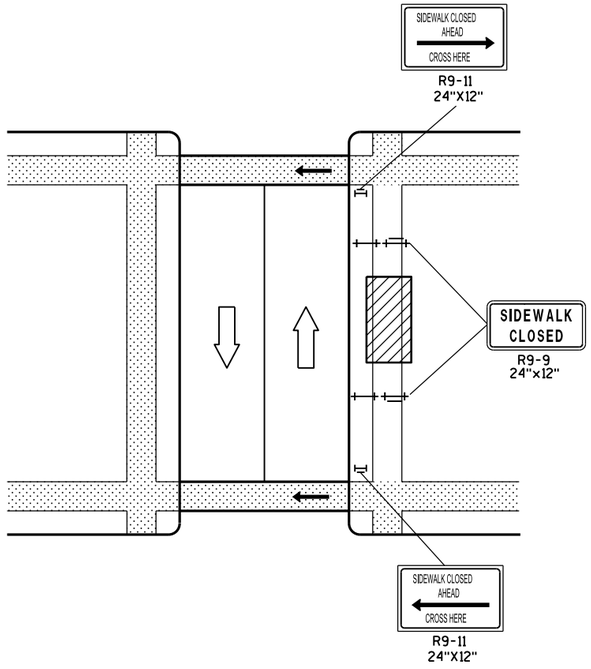


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

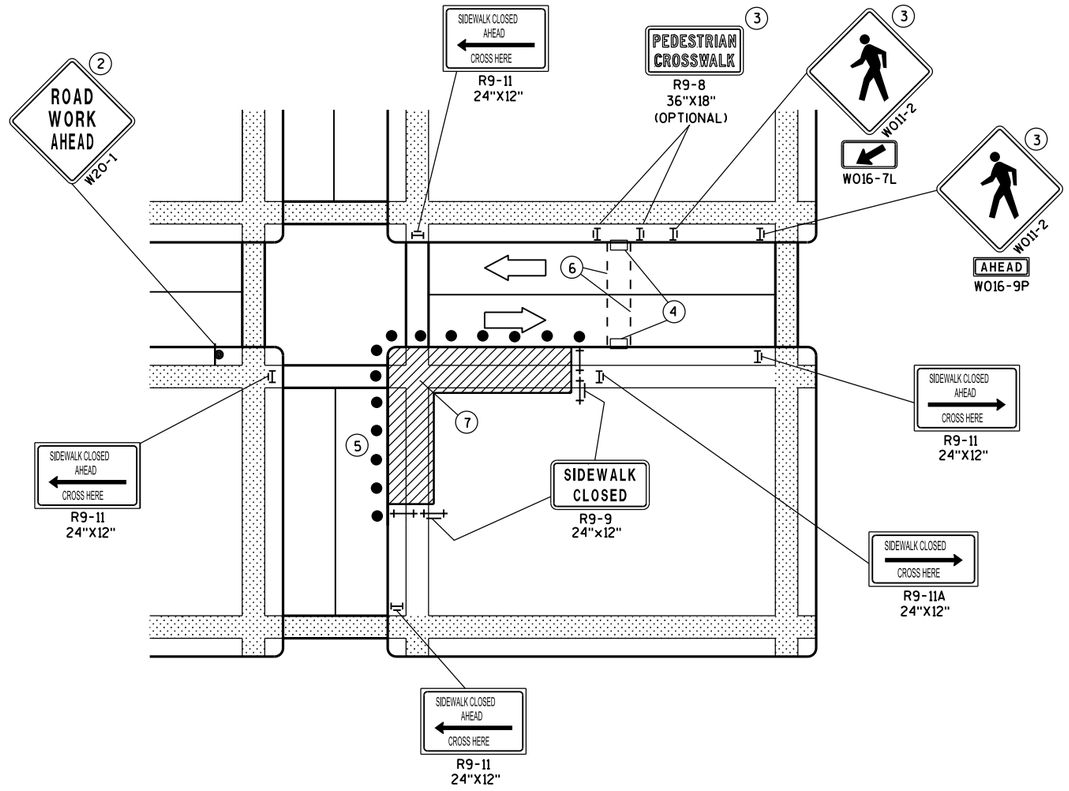
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

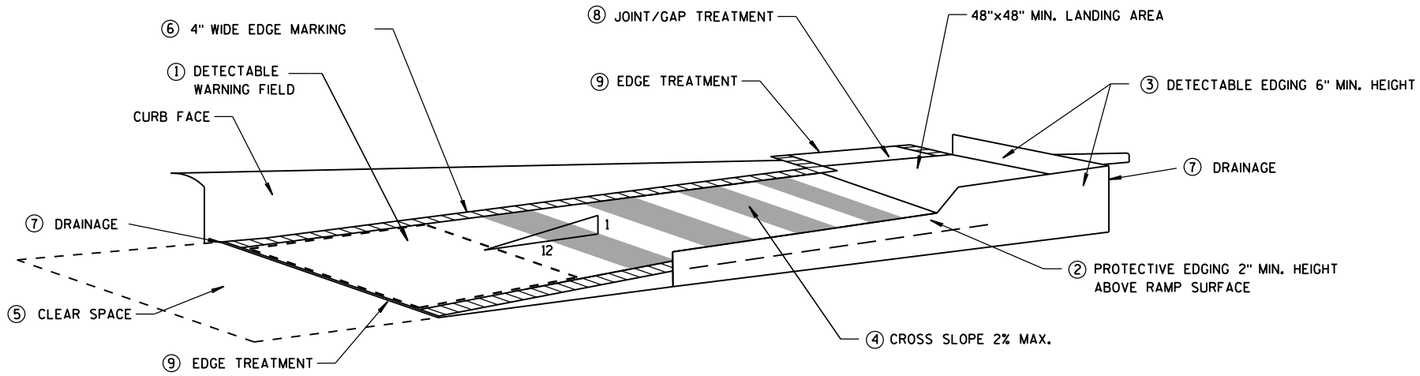
- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 30-3a



TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".

② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

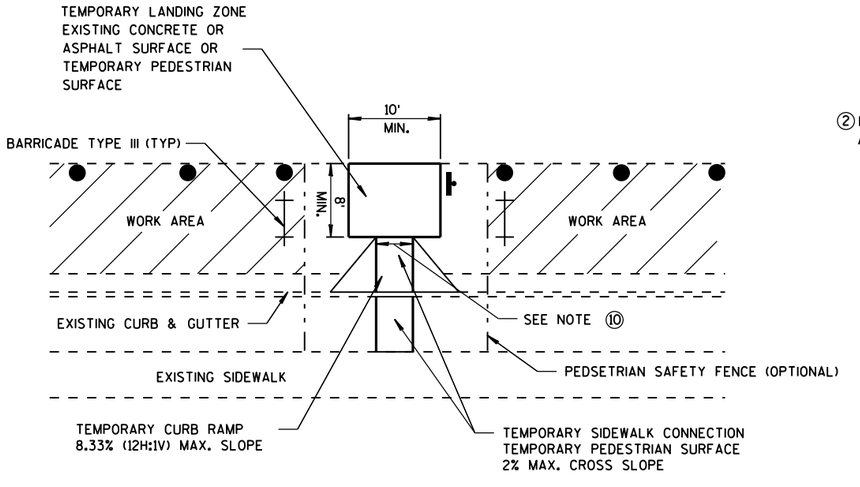
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

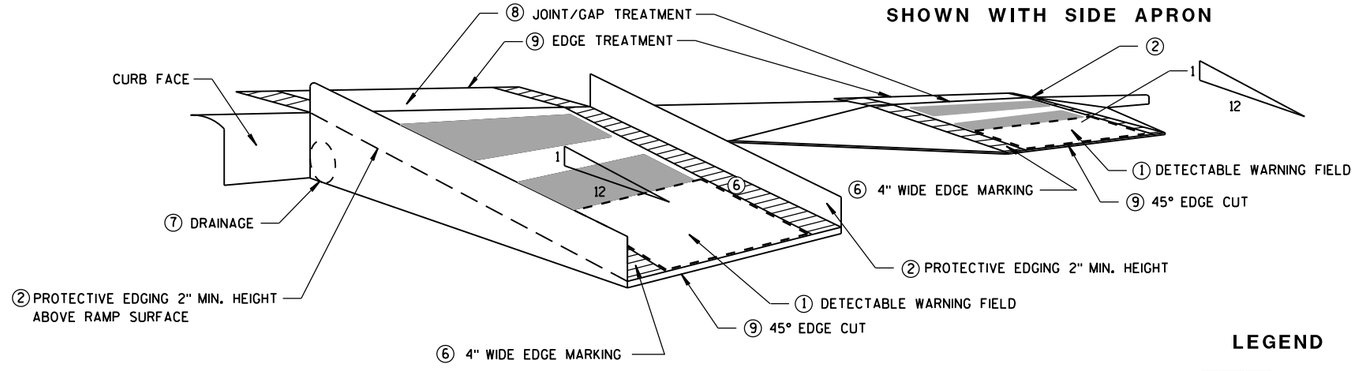
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

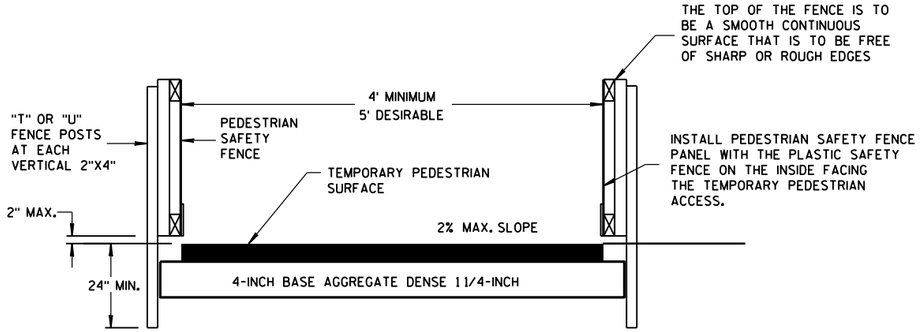
FHWA

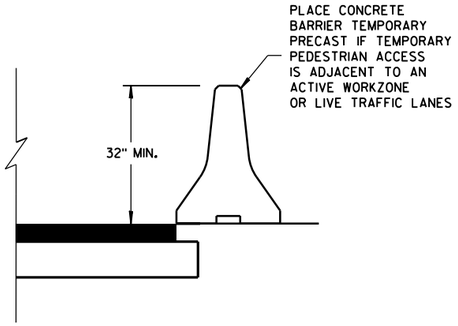
6

S.D.D. 15 D 30-3b

6

S.D.D. 15 D 30-3b

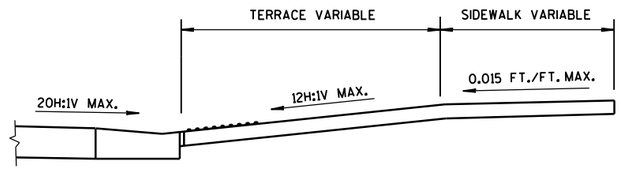




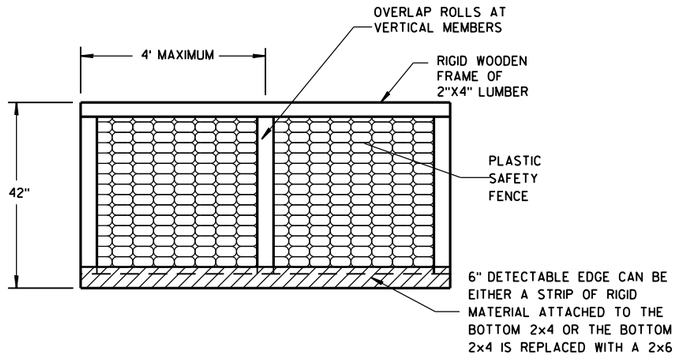
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

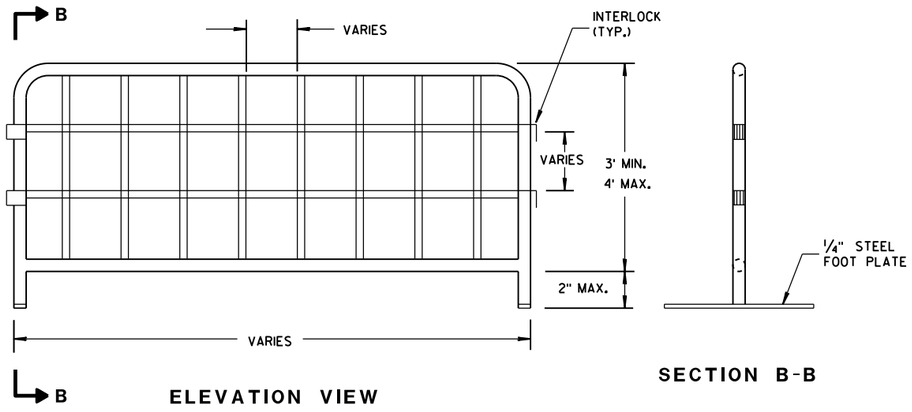
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



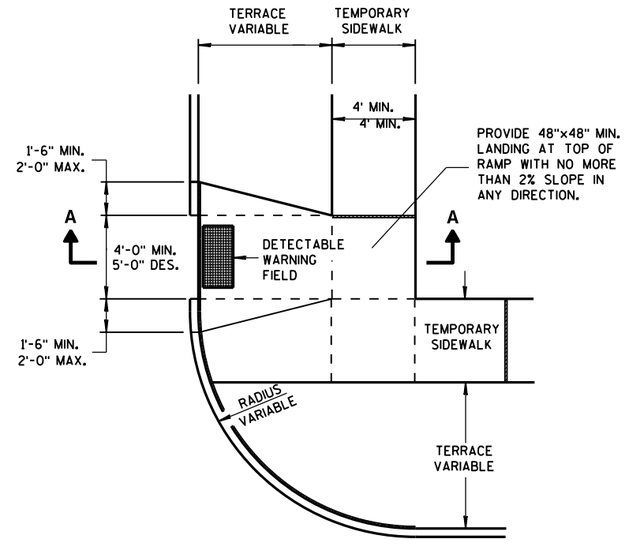
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

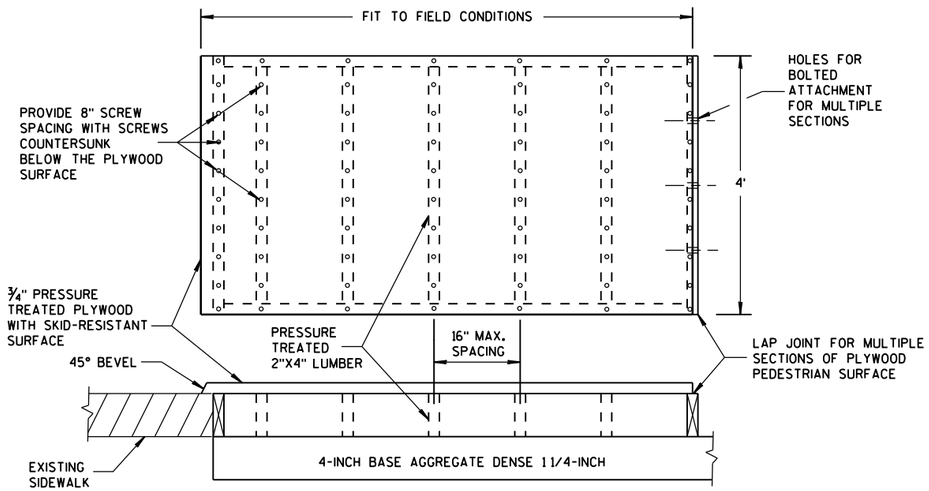
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



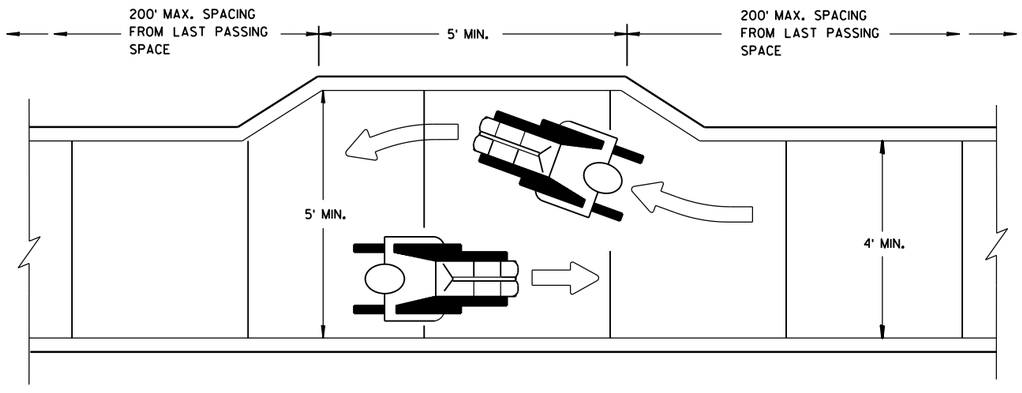
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016
DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON SAFETY ENGIN IC
FHWA

6

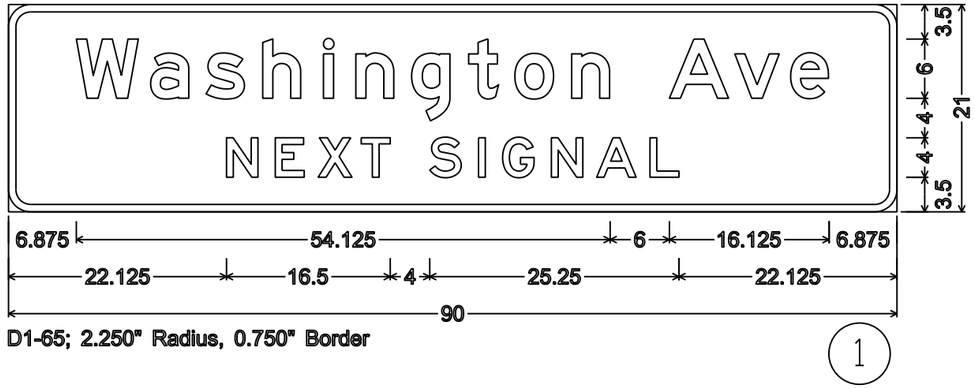
S.D.D. 15 D 30-3c

6

S.D.D. 15 D 30-3c

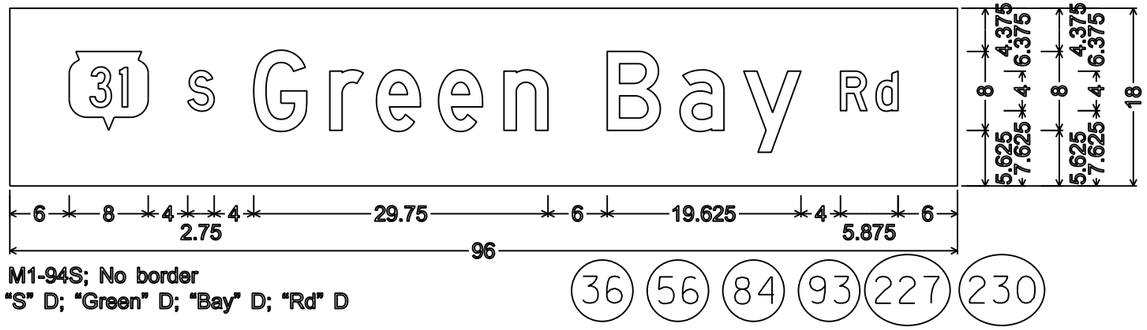
NOTES

1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted
4. M1-94S and M1-94H base material .125" aluminum



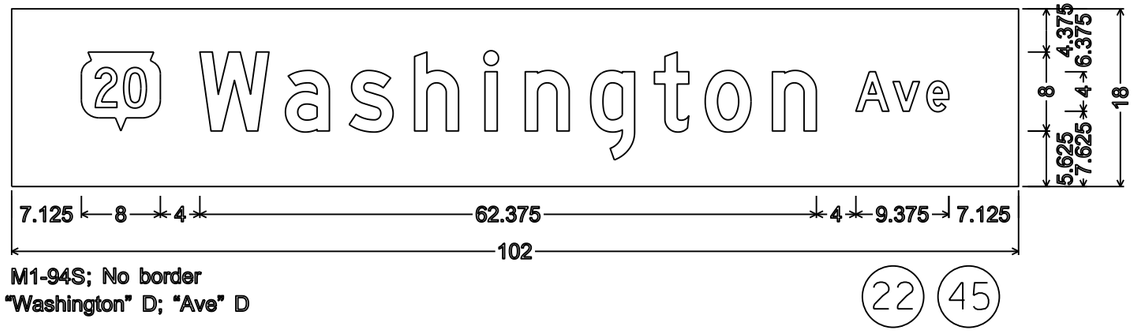
D1-65; 2.250" Radius, 0.750" Border

1



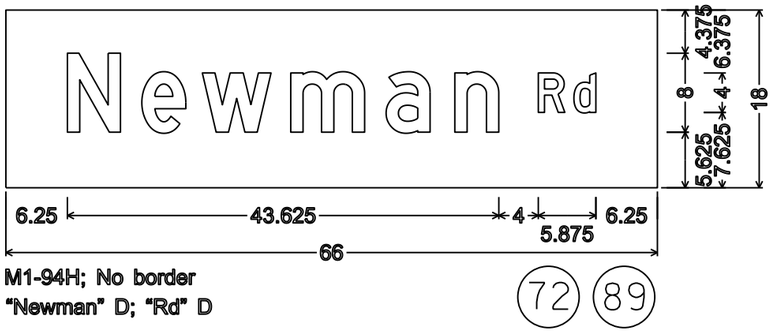
M1-94S; No border
"S" D; "Green" D; "Bay" D; "Rd" D

36 56 84 93 227 230



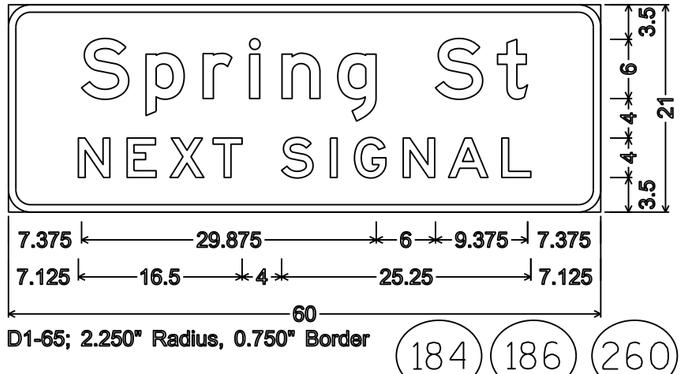
M1-94S; No border
"Washington" D; "Ave" D

22 45



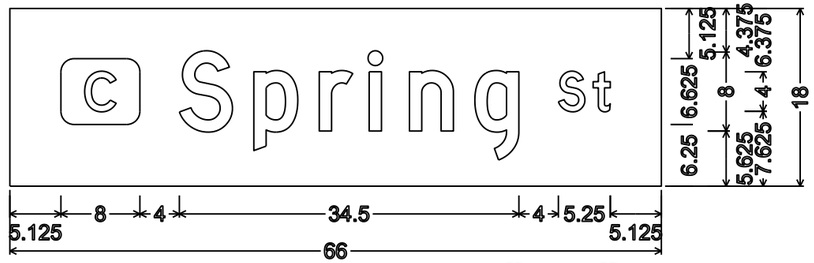
M1-94H; No border
"Newman" D; "Rd" D

72 89



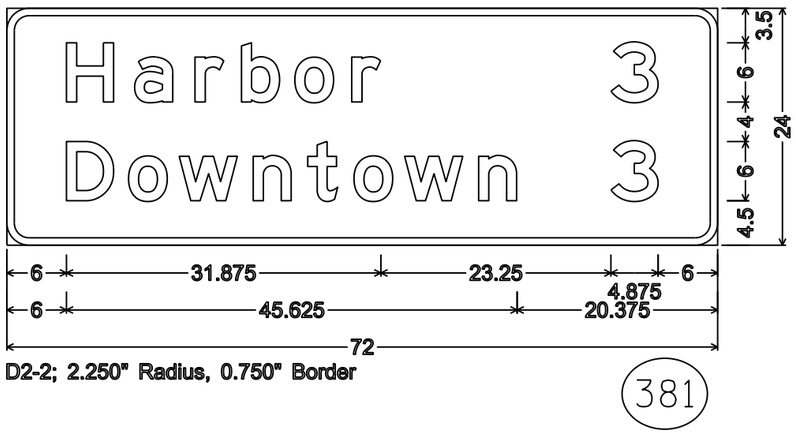
D1-65; 2.250" Radius, 0.750" Border

184 186 260 261



M1-94S; No border
"Spring" D; "St" D

210 251

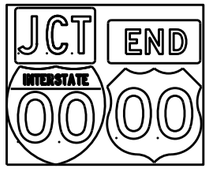


D2-2; 2.250" Radius, 0.750" Border

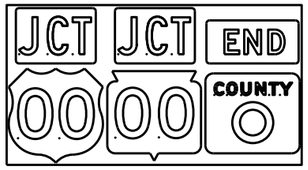
381

TYPICAL ASSEMBLIES

J1-1

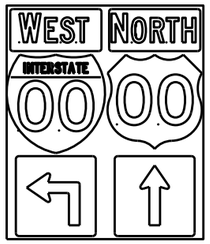


J1-2

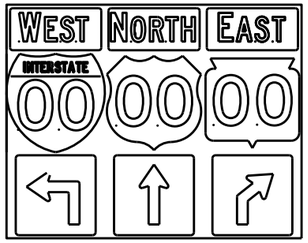


J1-3

J2-1



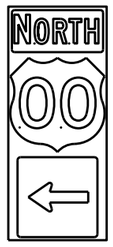
J2-2



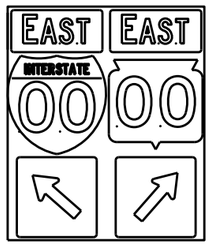
J2-3

JV

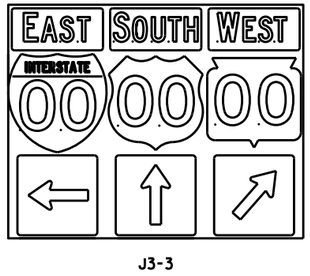
(Typical Vertical J-Assembly
See Note 10 and 11)



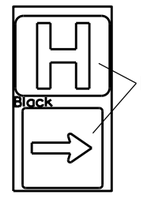
J3-1



J3-2



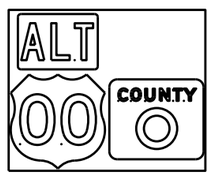
J3-3



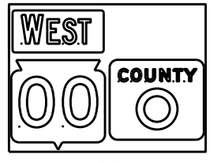
Blue Background

JH-1

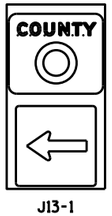
J4-1



J4-2



J4-2



J13-1

J12-1

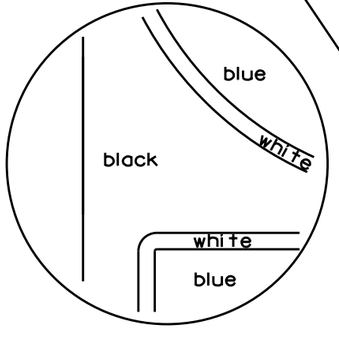
J32-1

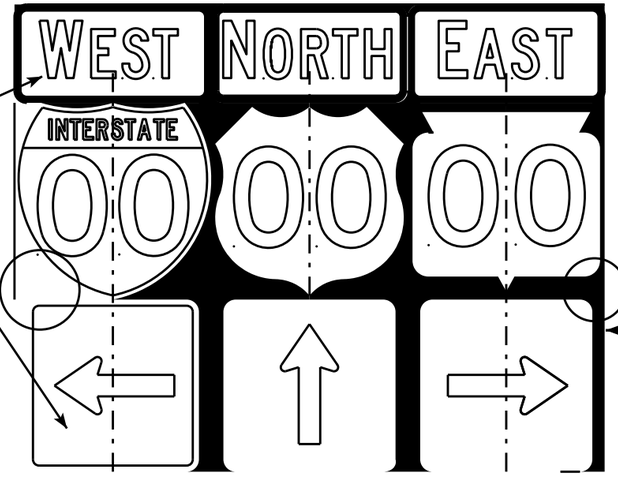
J33-1

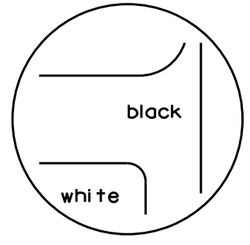
J23-1

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

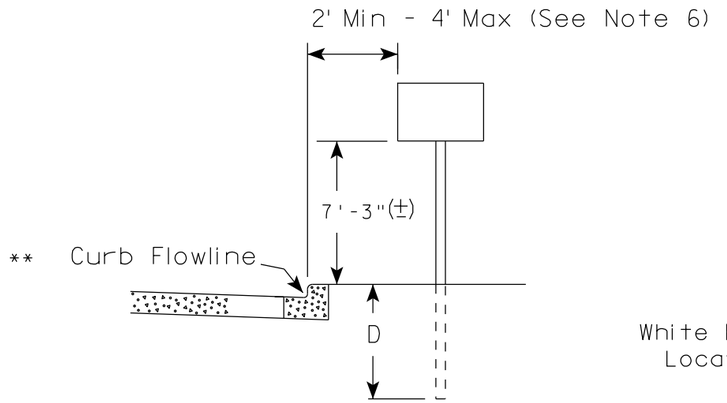
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

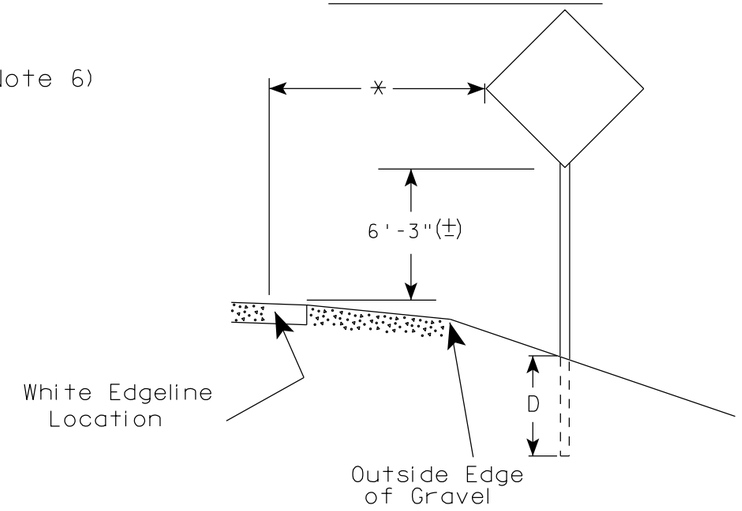
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

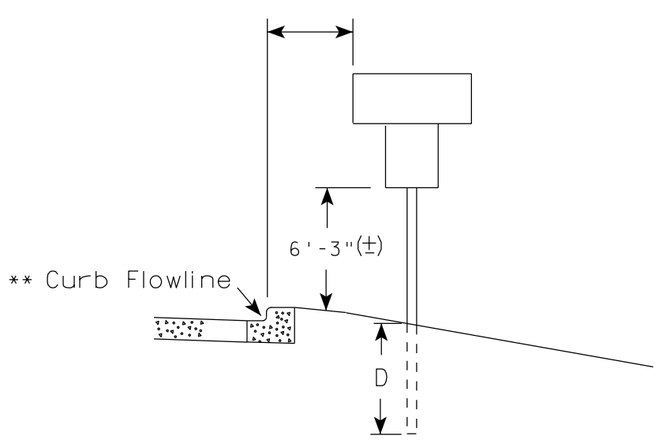
WISDOT/CADDS SHEET 42

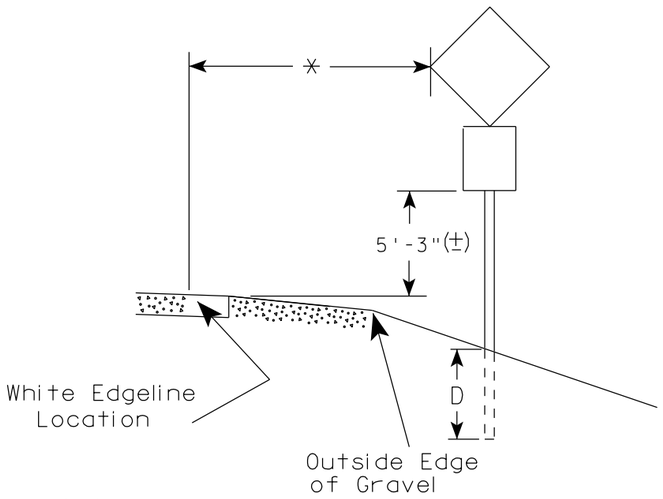
URBAN AREA



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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

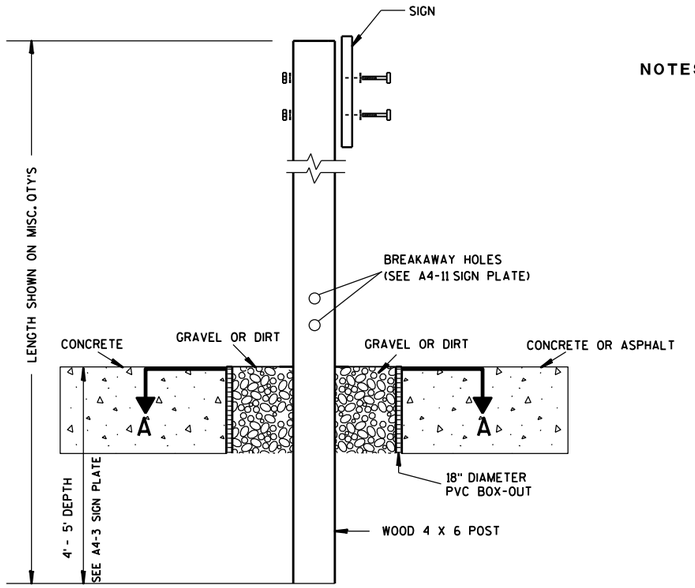
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

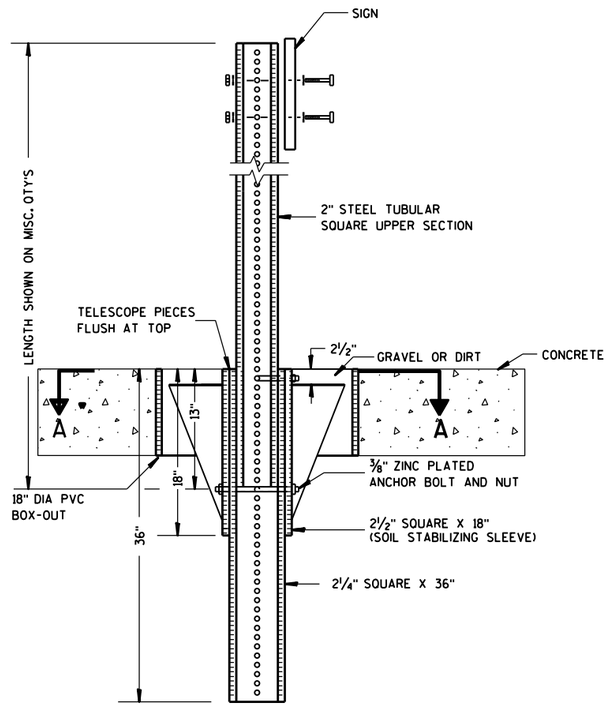
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

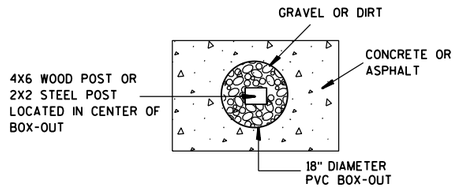
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

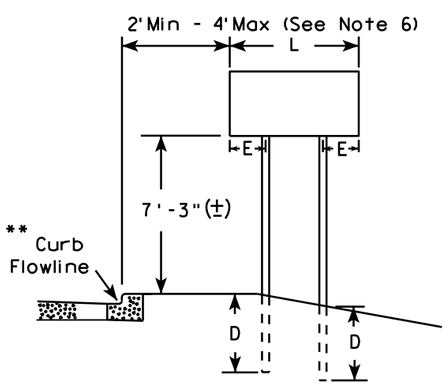
APPROVED Matthew R Rauch
for State Traffic Engineer

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

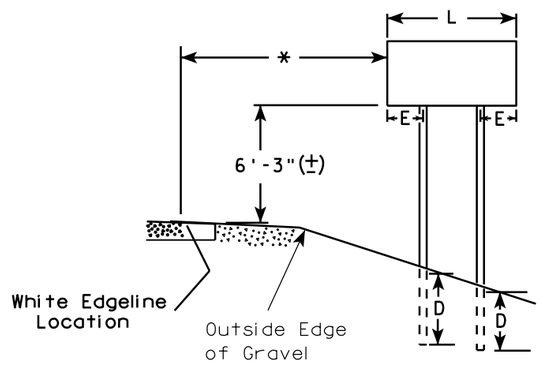
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

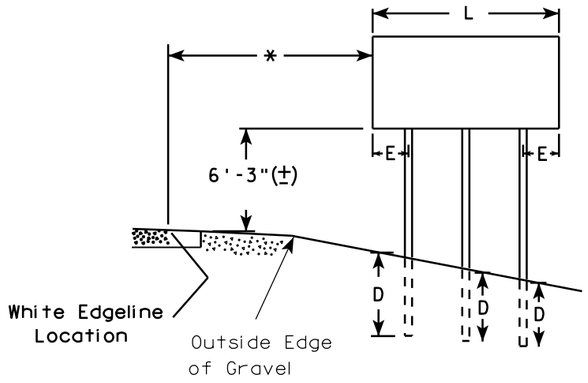
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

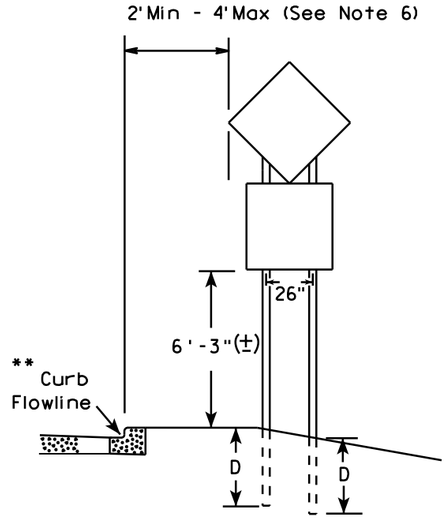
URBAN AREA



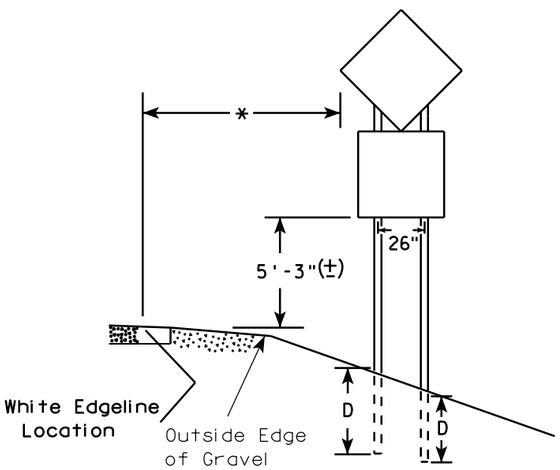
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

***

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

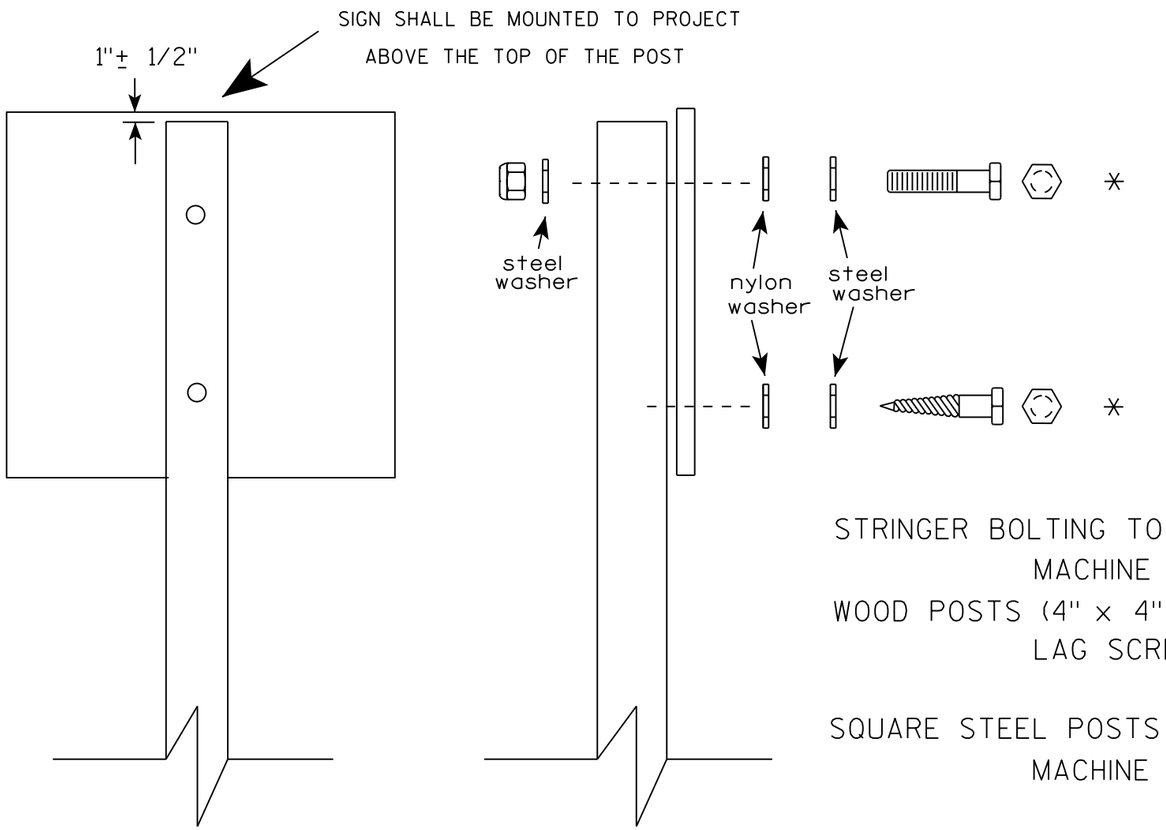
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 14

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 23-JUL-2015 15:23 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 107.021305:1.000000 WISDOT/CADDS SHEET 42



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)
SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

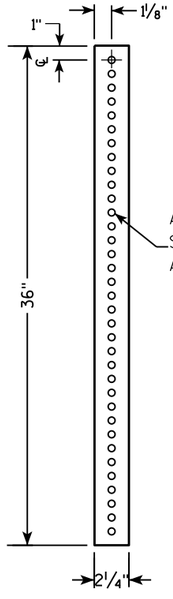
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

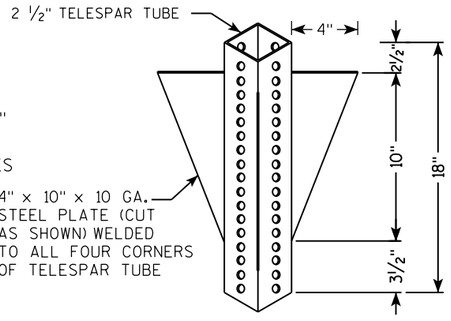
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

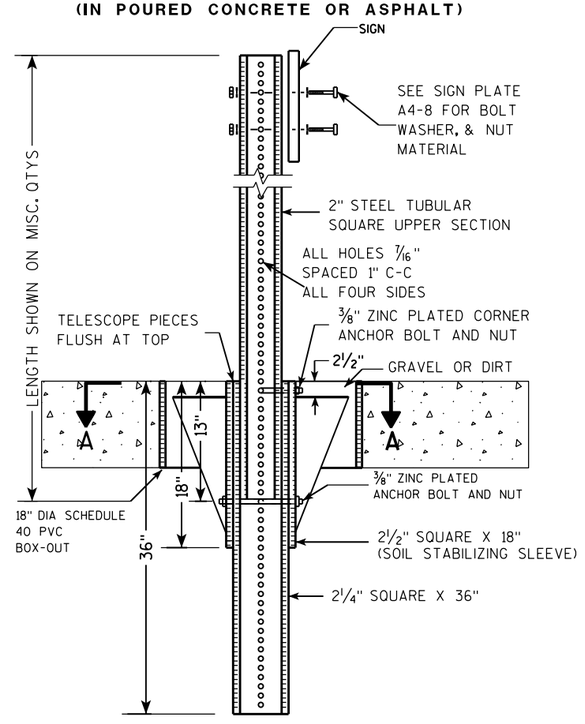
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



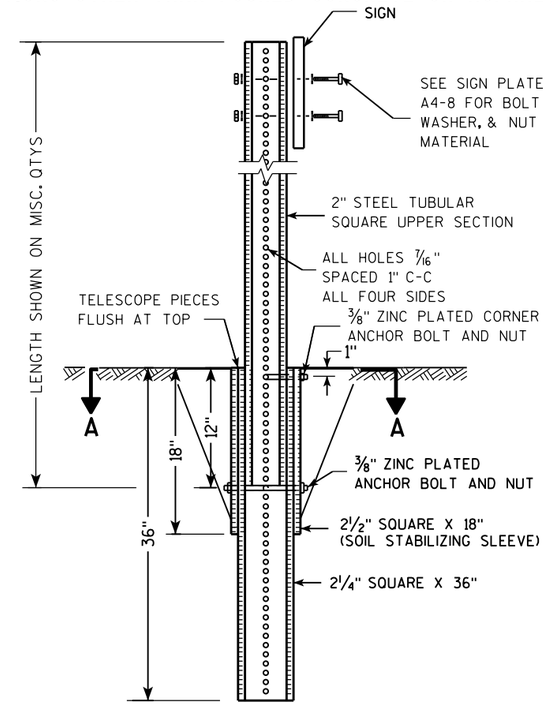
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

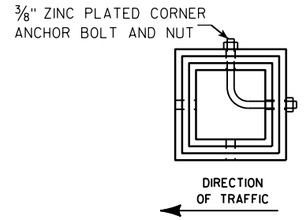


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

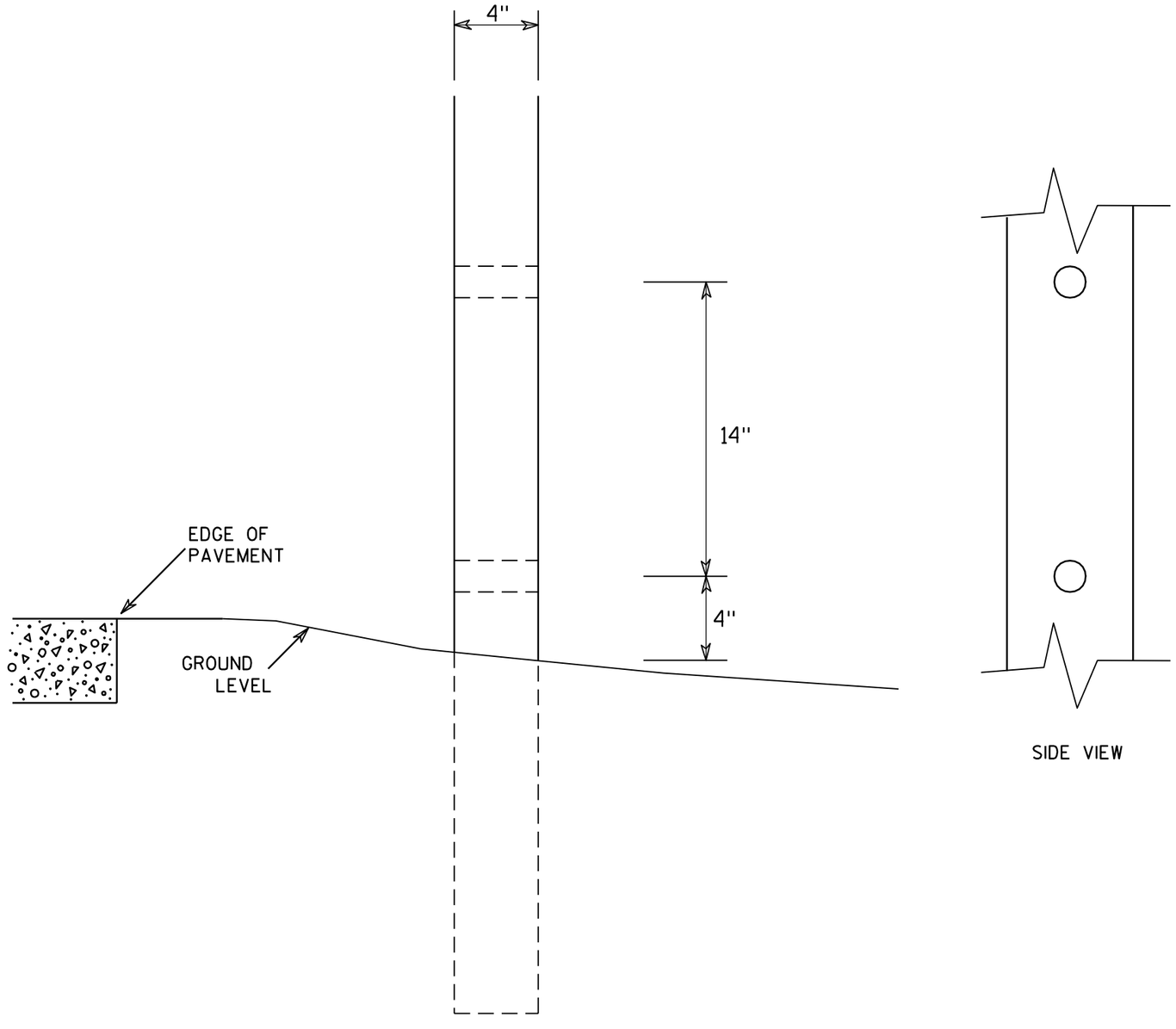
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 388 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

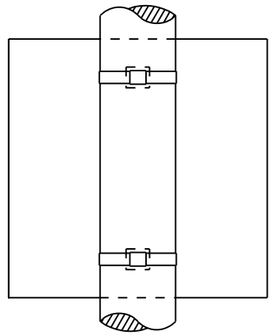
APPROVED Chester J Spang
for State Traffic Engineer

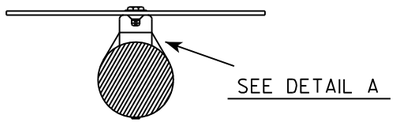
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 389	E

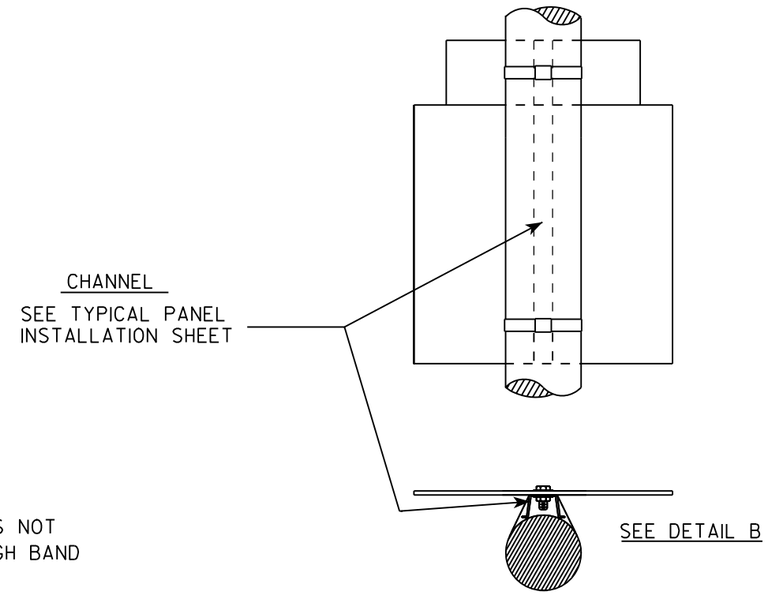
BANDING

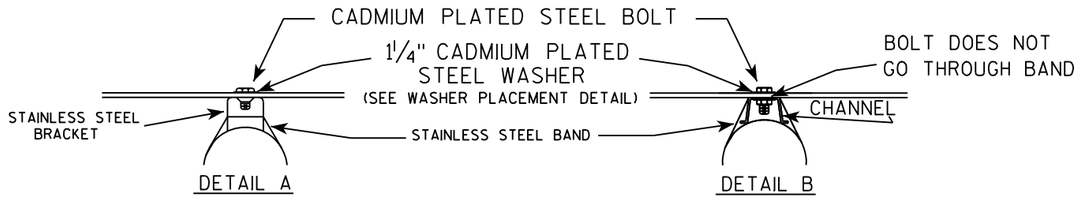
SINGLE SIGN



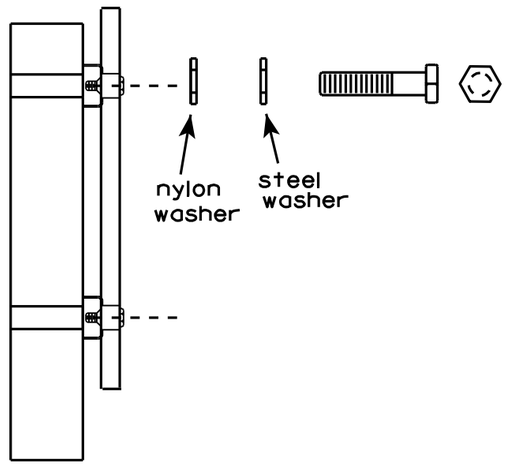


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

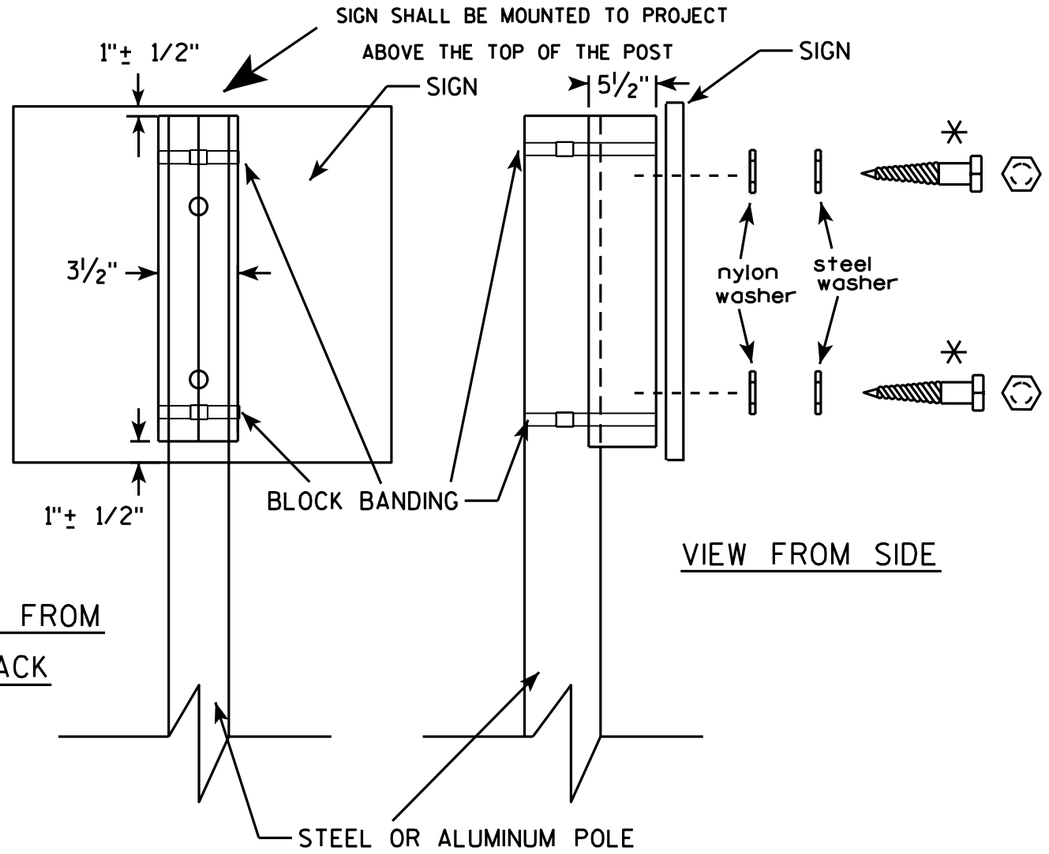
STANDARD SIGN
SIGN BANDING DETAILS

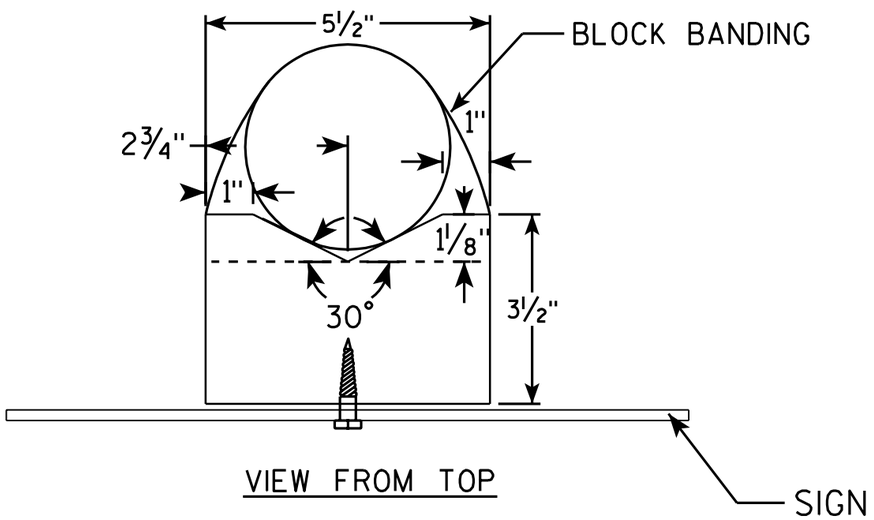
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 390	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

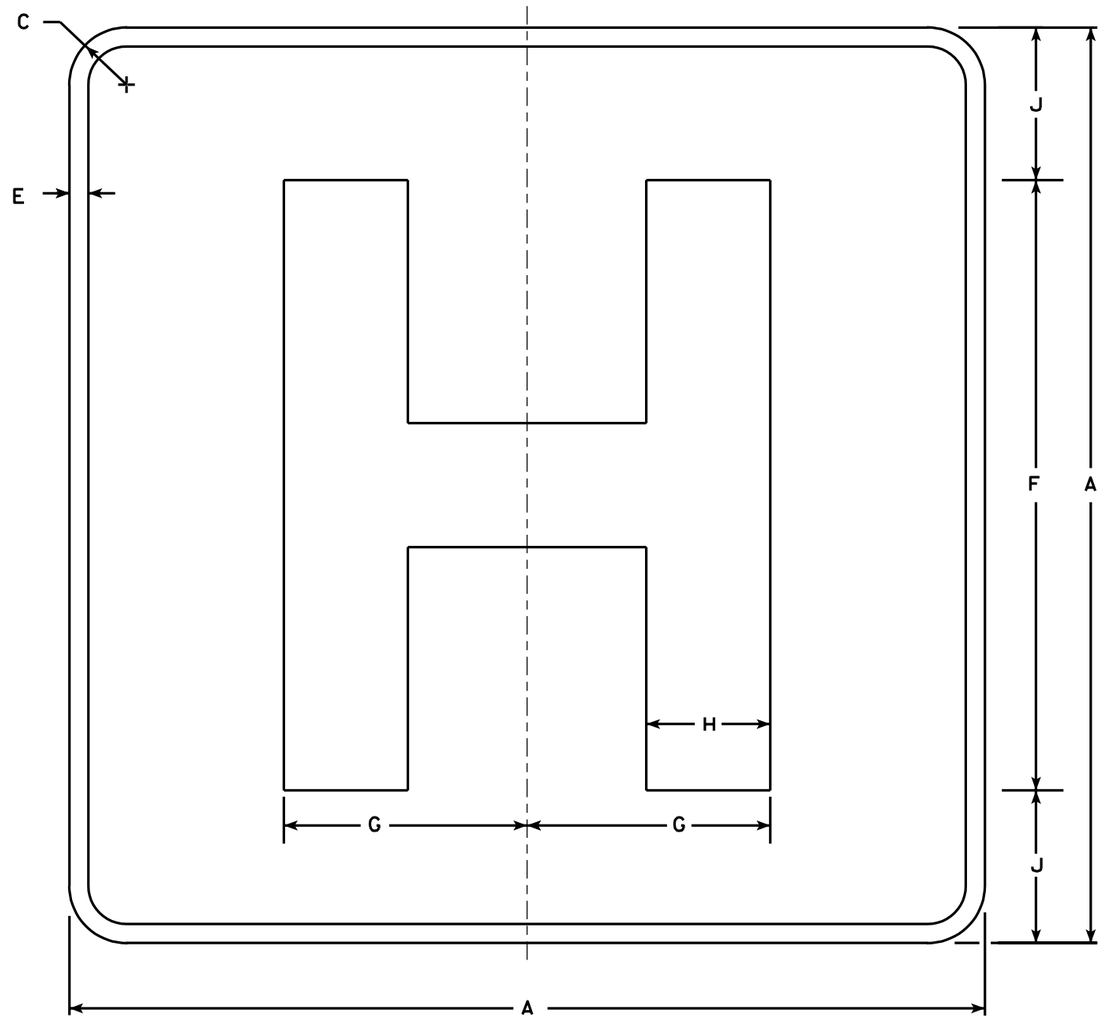
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 391 E

FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph

WISDOT/CADDS SHEET 42



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

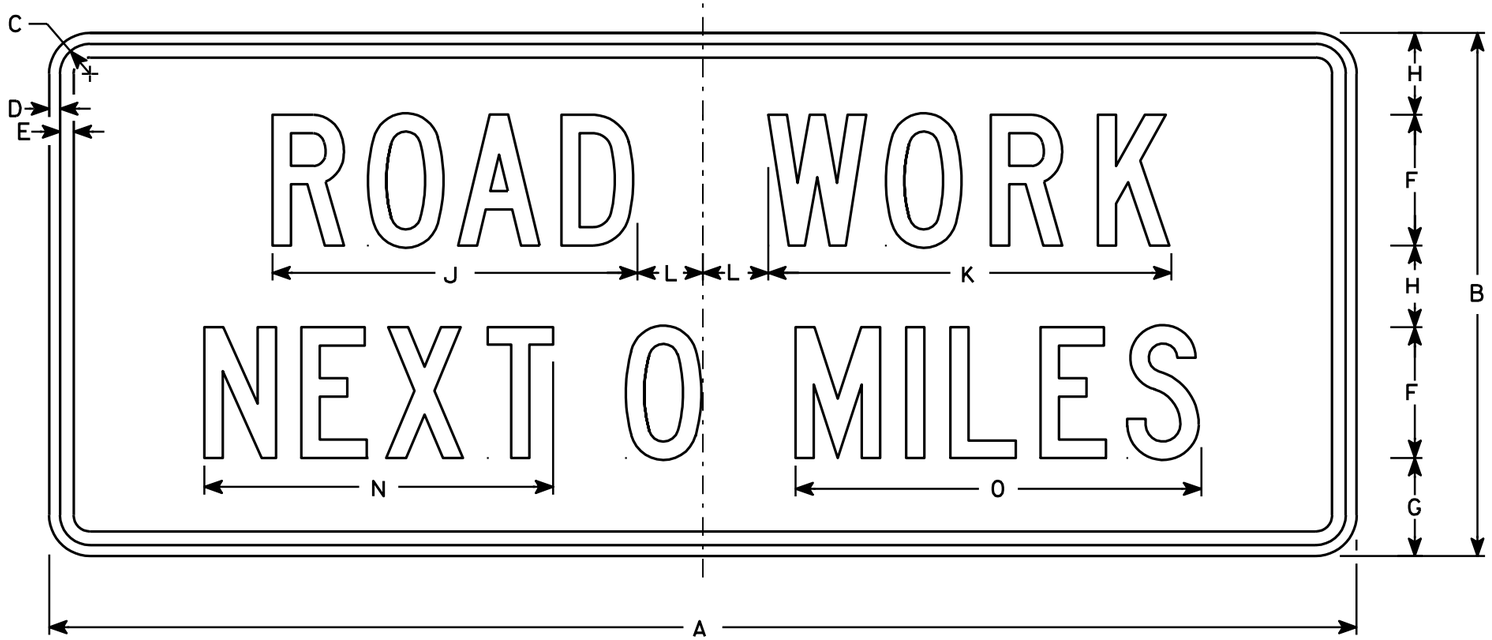
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spong
for State Traffic Engineer

DATE 1/15/02 PLATE NO. D9-2.4

PROJECT NO:

SHEET NO: 392 E



G20-1

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 - 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 and optically adjust spacing to achieve proper balance

Metric equivalent for this sign is:

SIZE	
1	
2	1500 mm X 600 mm
3	
4	1500 mm X 600 mm
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	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10	.90
3																												
4	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10	.90
5																												

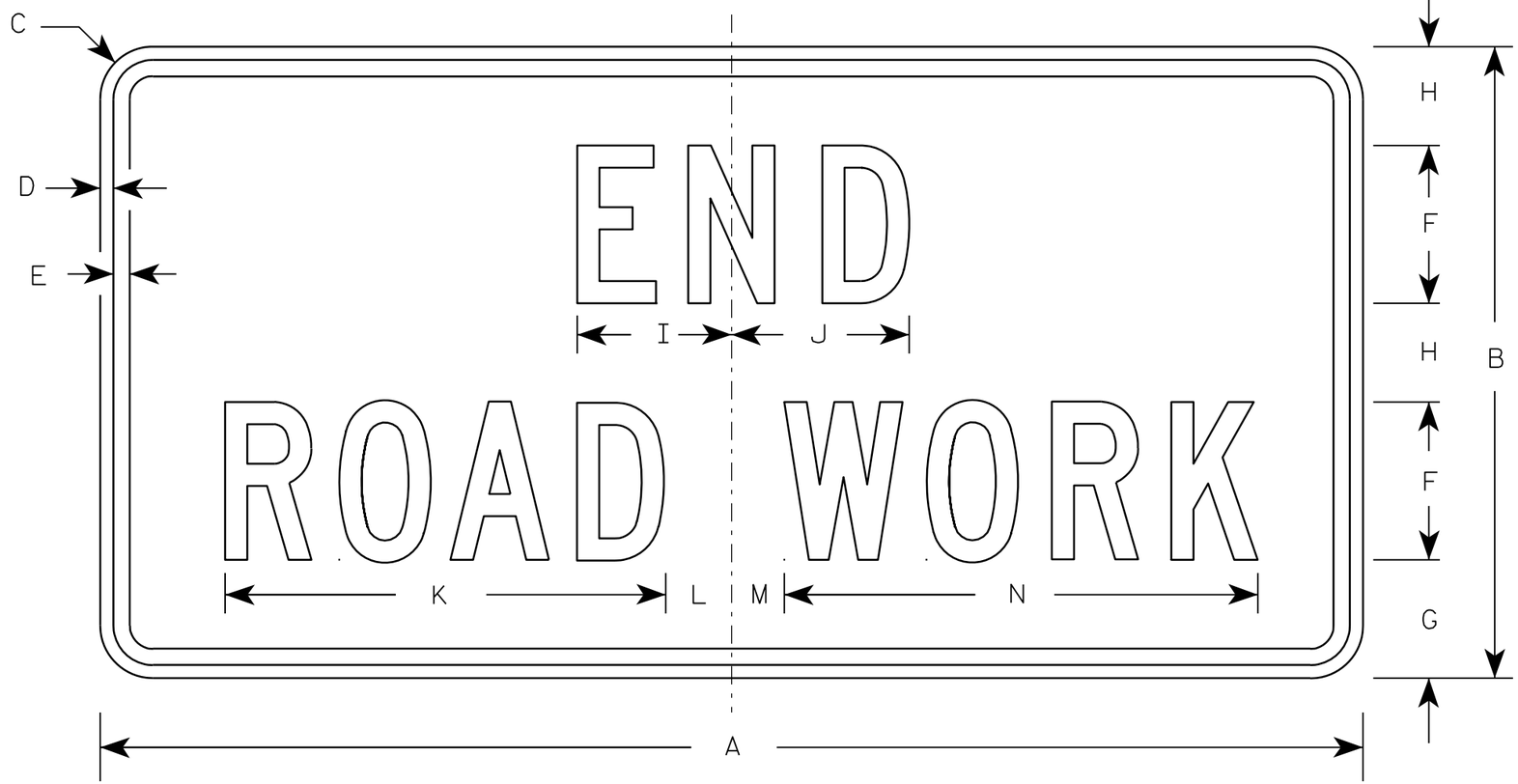
STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chester J Spray
for State Traffic Engineer

DATE 4/8/97 PLATE NO. G20-1.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 393	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

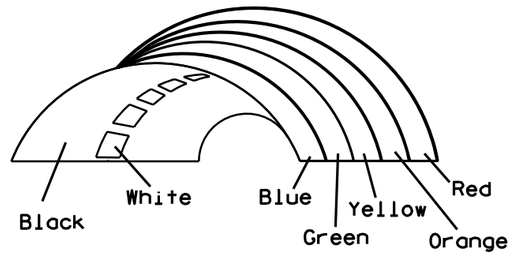
DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 394	E

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - (See Note 5)
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. Border - Blue
   Line 1 - Red
   Line 2 - Black
   Line 3-5 - Blue
6. Line 1 - Dutch 8011L
   Line 2 - Series E
   Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

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	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

STANDARD SIGN
I55-56

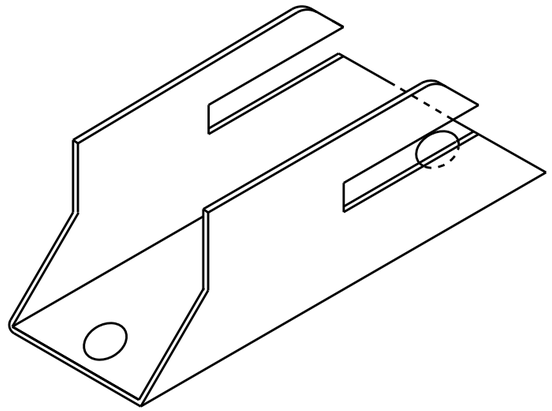
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

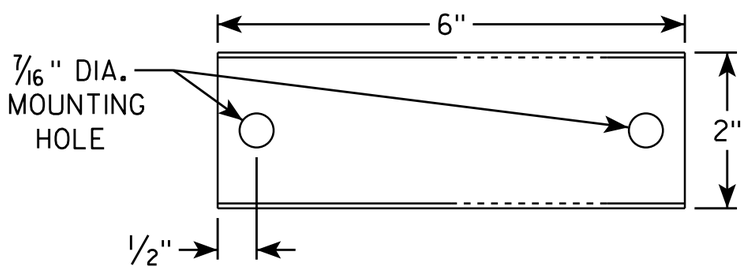
DATE 4/27/11 PLATE NO. 155-56.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 395

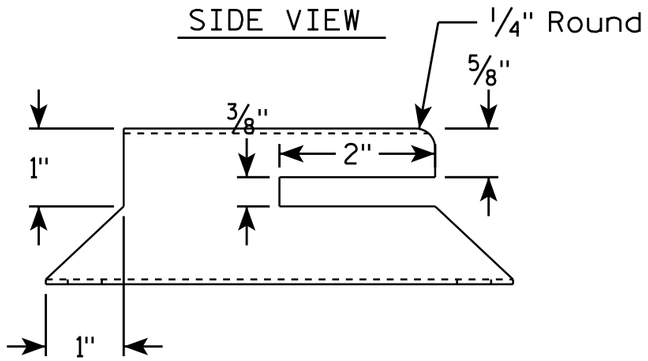
ISOMETRIC VIEW



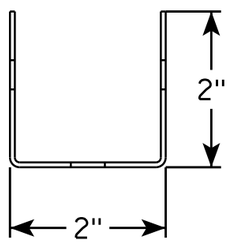
TOP VIEW



SIDE VIEW



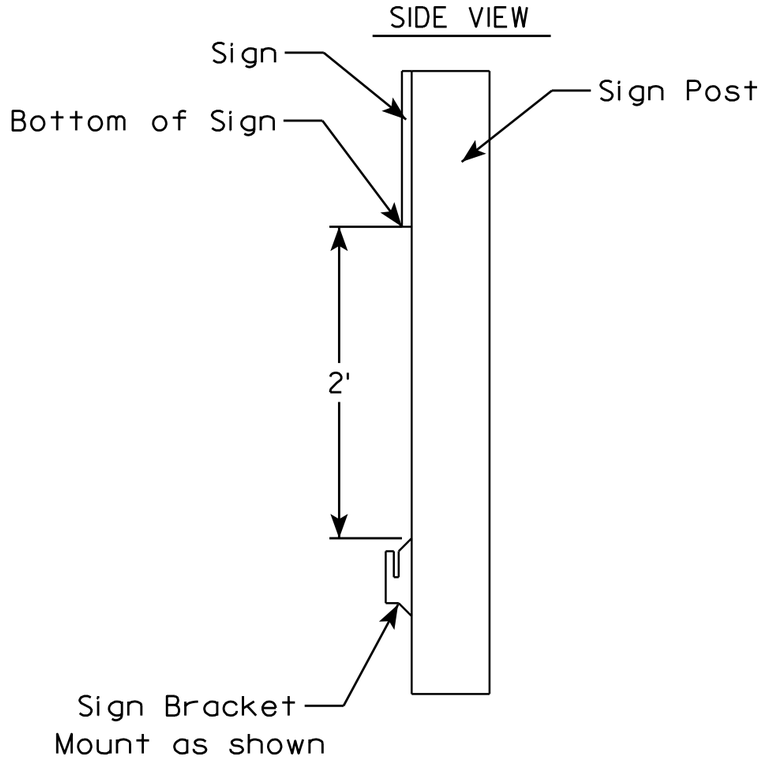
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

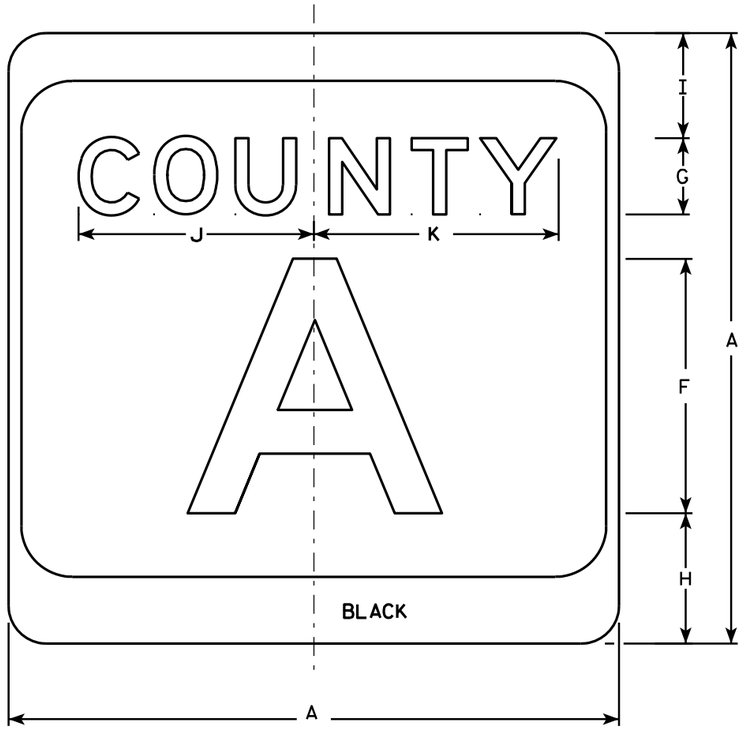
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

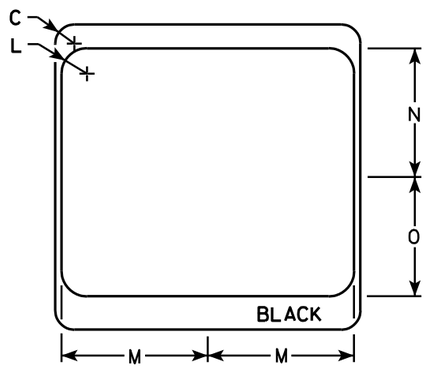
DATE 4/26/16 PLATE I55-56B.2

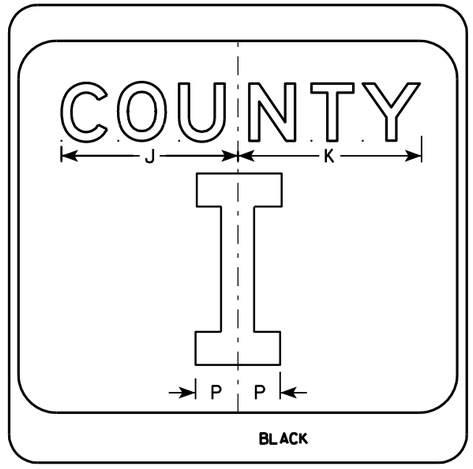
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

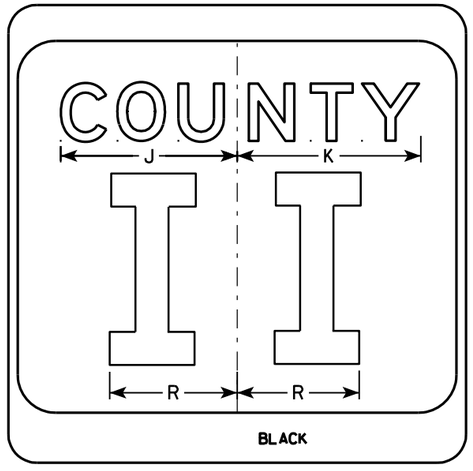
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\I5556B.DGN PLOT DATE : 26-APR-2016 17:29 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 1.945842:1.000000
WISDOT/CADDS SHEET 42



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

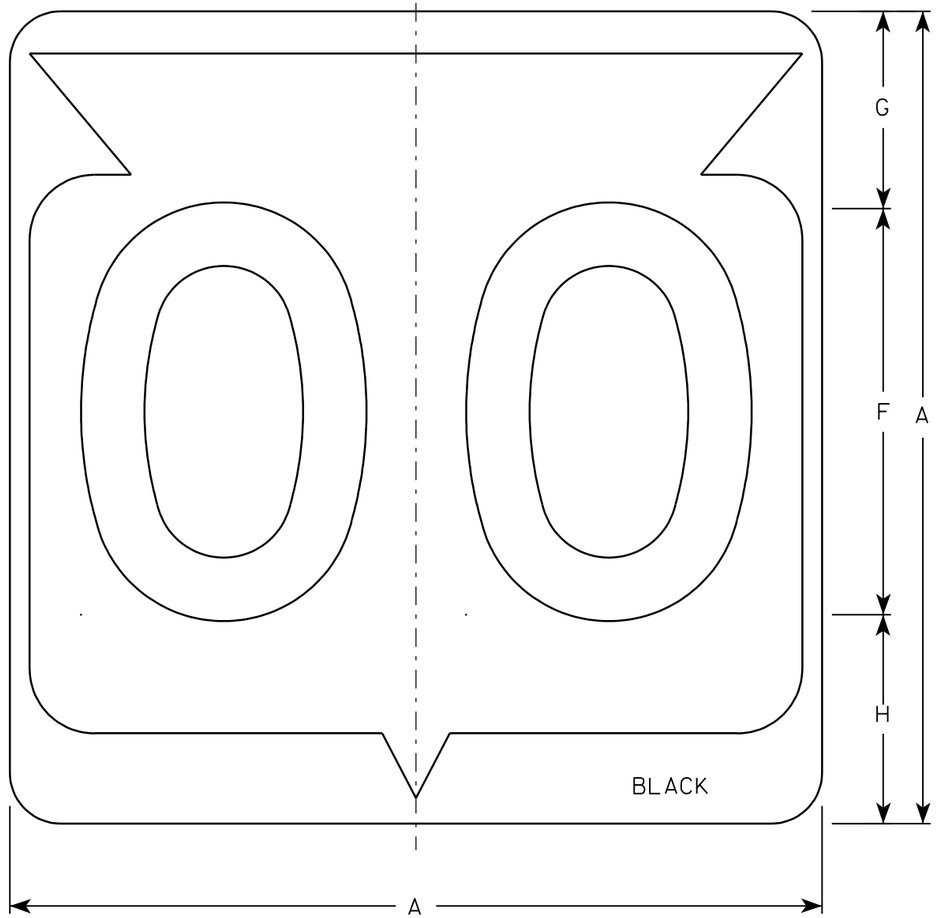
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

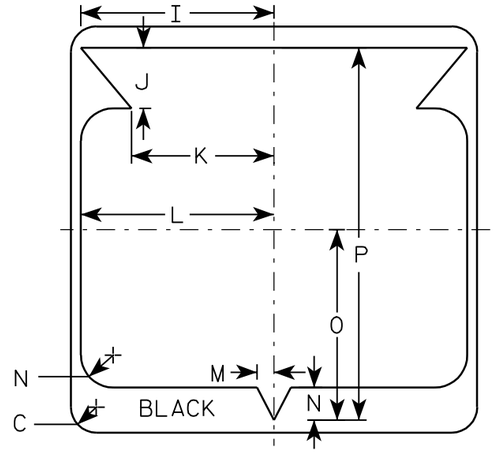
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 397	E



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
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	.36
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	.81
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	.81
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	.81

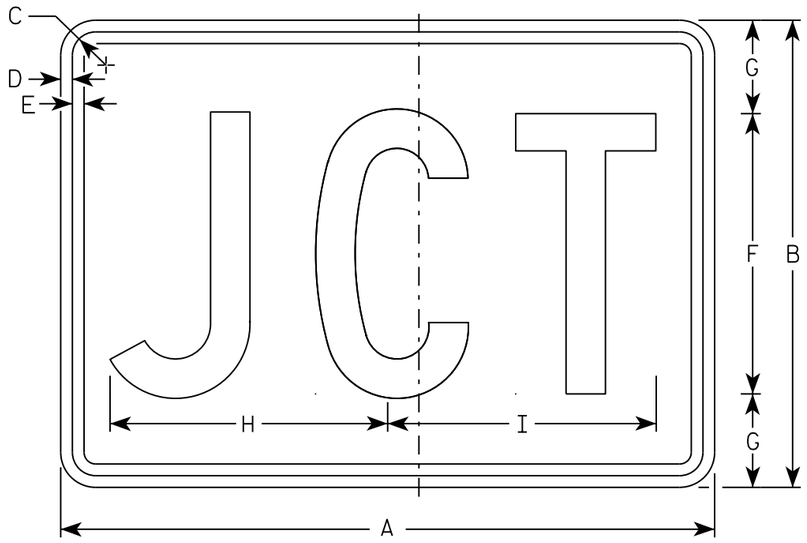
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

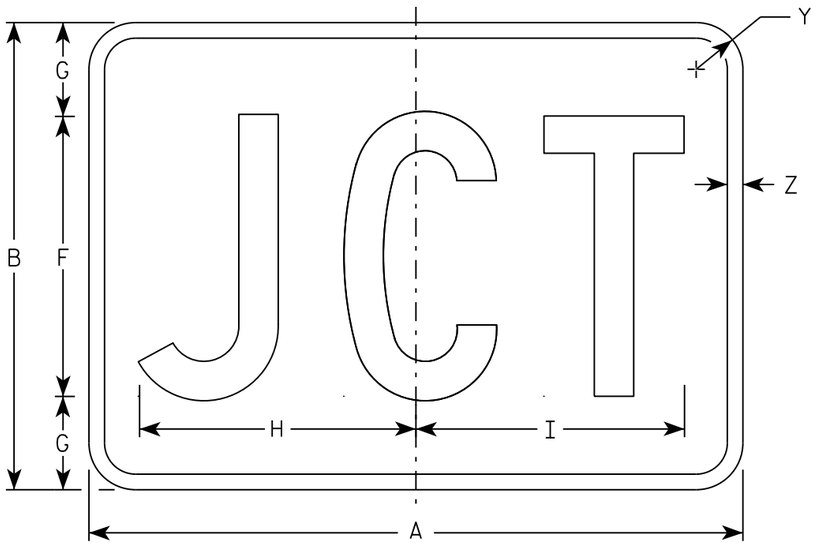
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 398	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

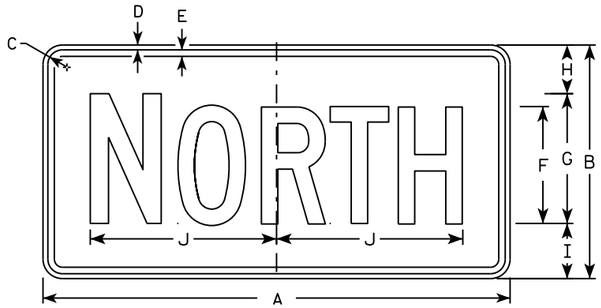
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

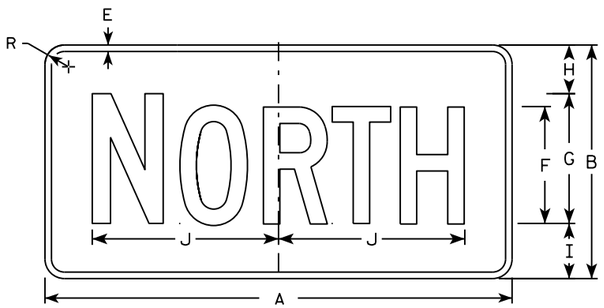
DATE 10/15/15 PLATE 399 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



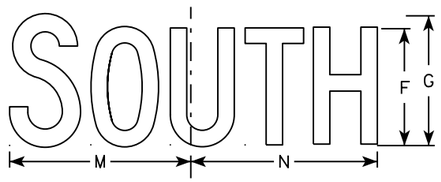
M3-1
MM3-1
MP3-1



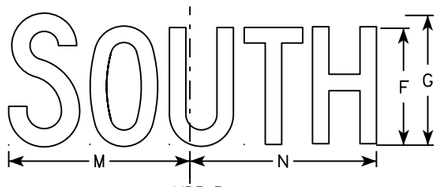
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

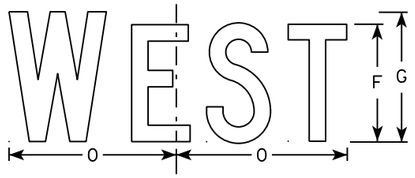
MB3-2
MK3-2
MN3-2



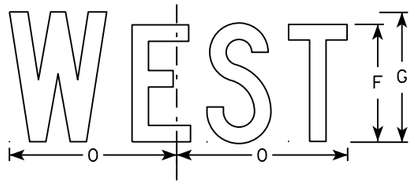
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

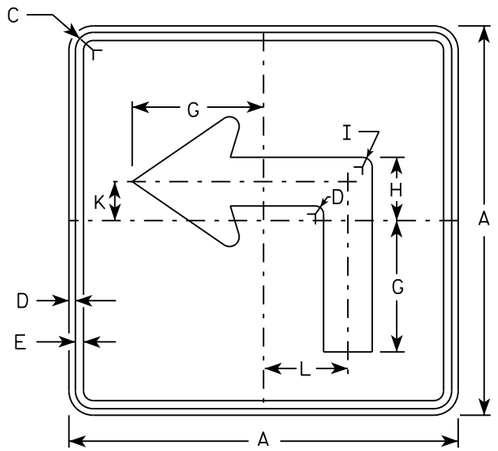
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

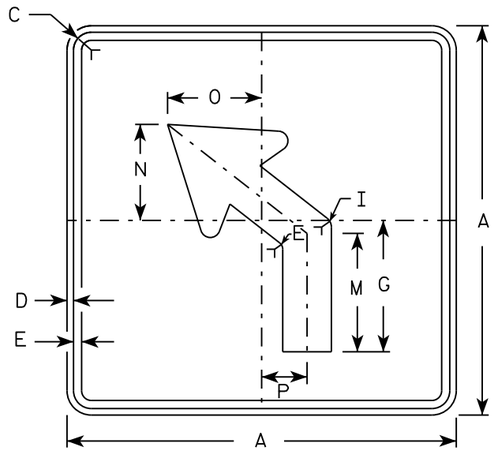
DATE 10/15/15 PLATE NO M3-1.14

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

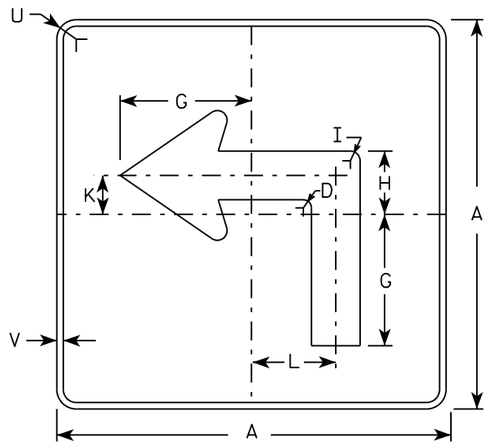
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



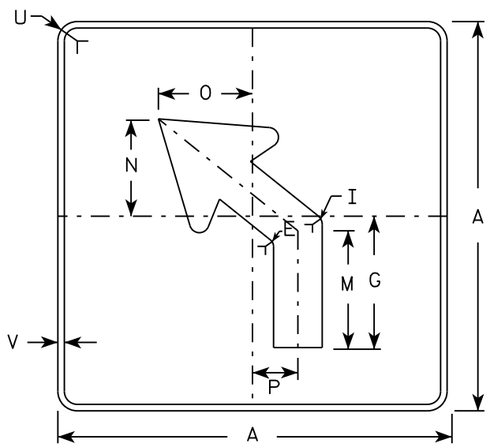
M5-1L
MM5-1L
MO5-1L
MP5-1L



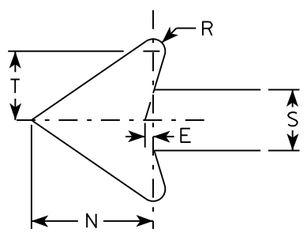
M5-2L
MM5-2L
MO5-2L
MP5-2L



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

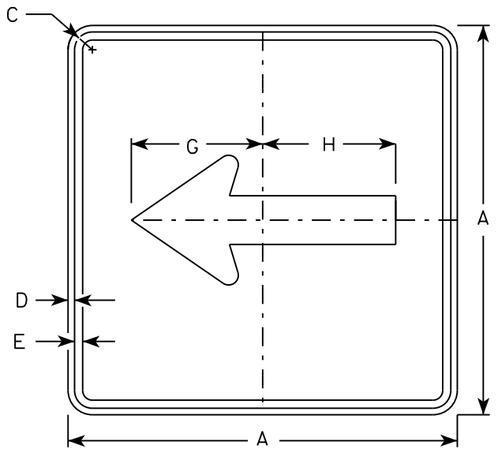
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

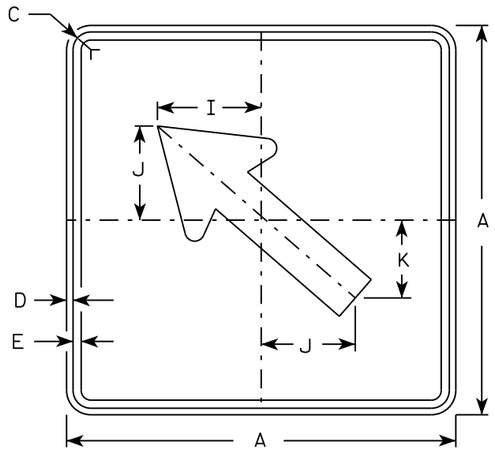
DATE 10/15/15 PLATE NO. M5-1.13

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



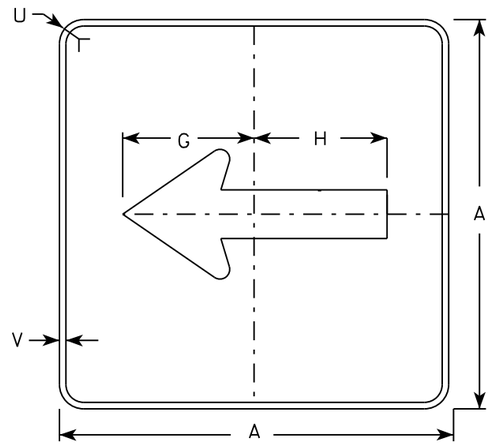
M6-1
MM6-1
MO6-1
MP6-1



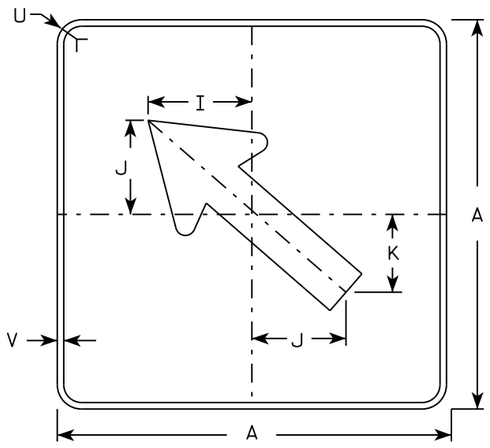
M6-2
MM6-2
MO6-2
MP6-2

NOTES

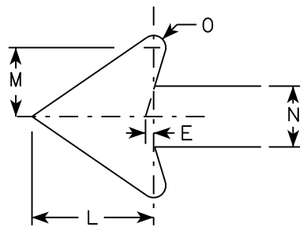
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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

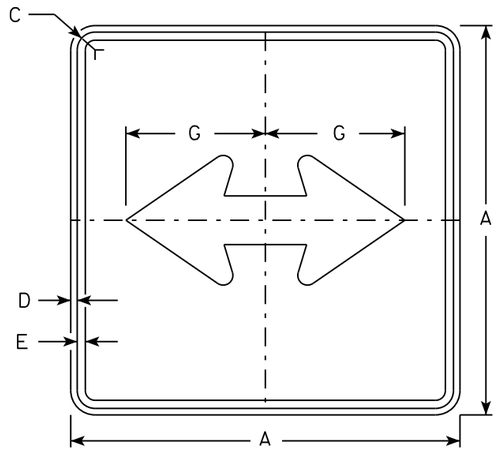
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

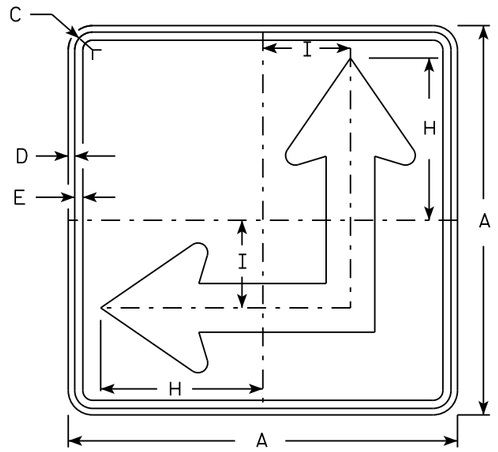
DATE 10/15/15 PLATE 402 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



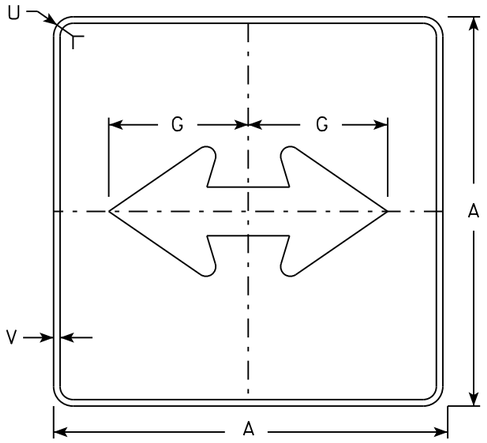
M6-4
MM6-4
MO6-4
MP6-4



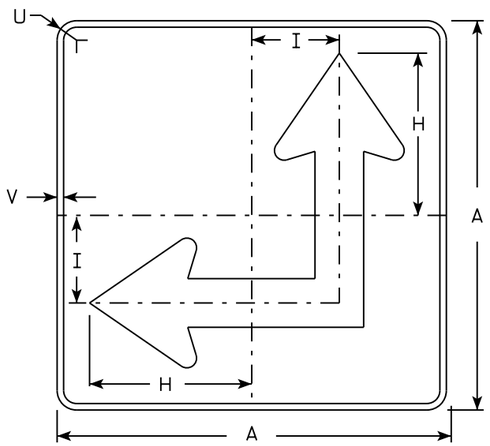
M6-6
MM6-6
MO6-6
MP6-6

NOTES

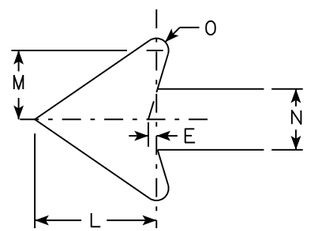
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

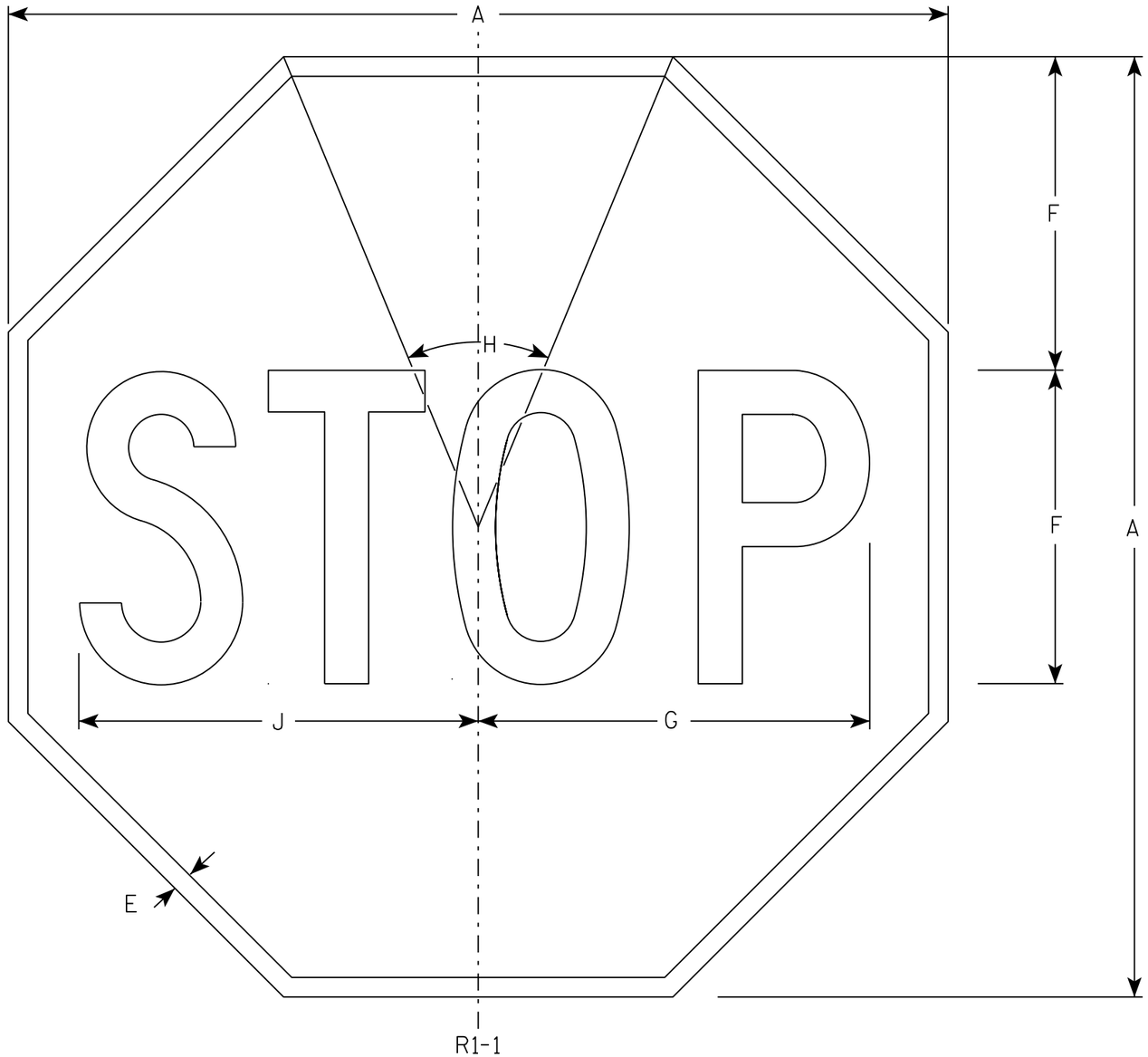
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/15/15 PLATE 403 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



R1-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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

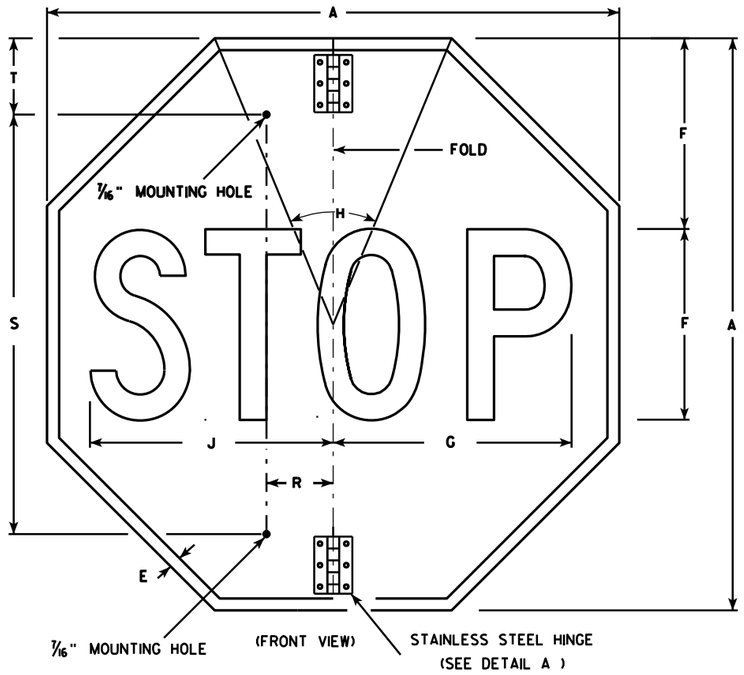
WISCONSIN DEPT OF TRANSPORTATION

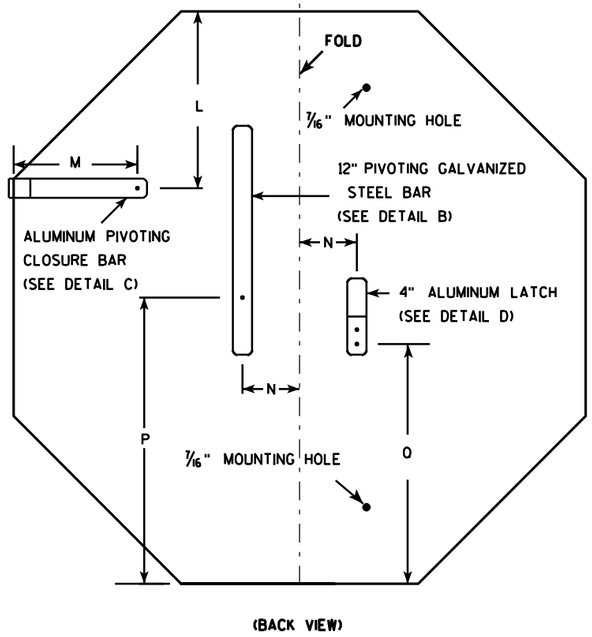
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE 404 R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

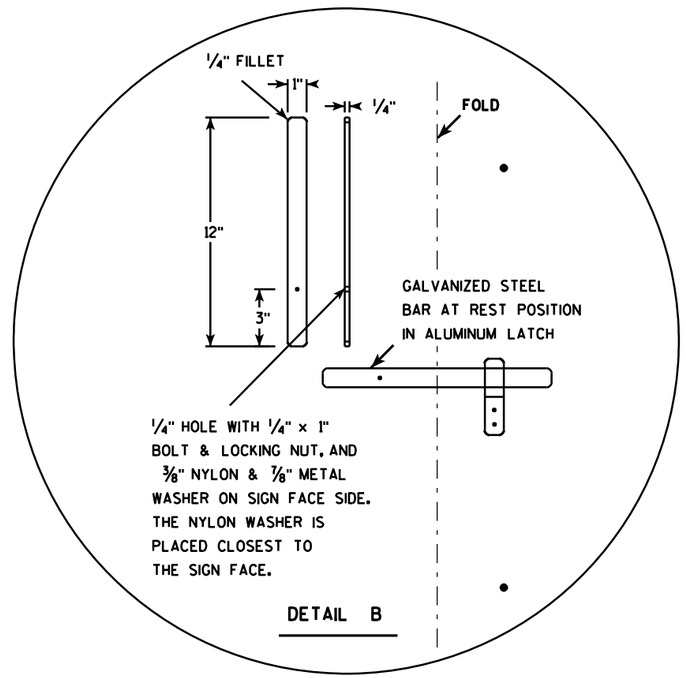
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000

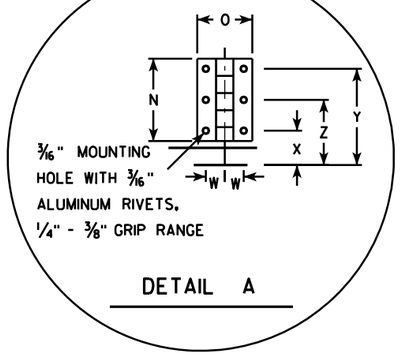


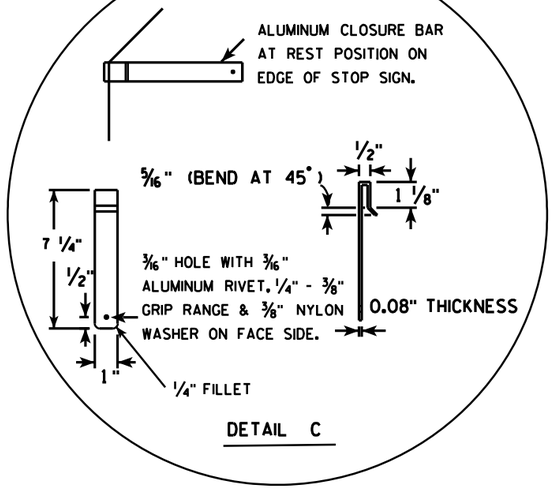


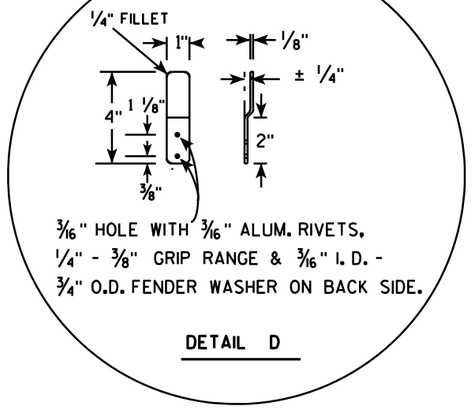
NOTES

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																											

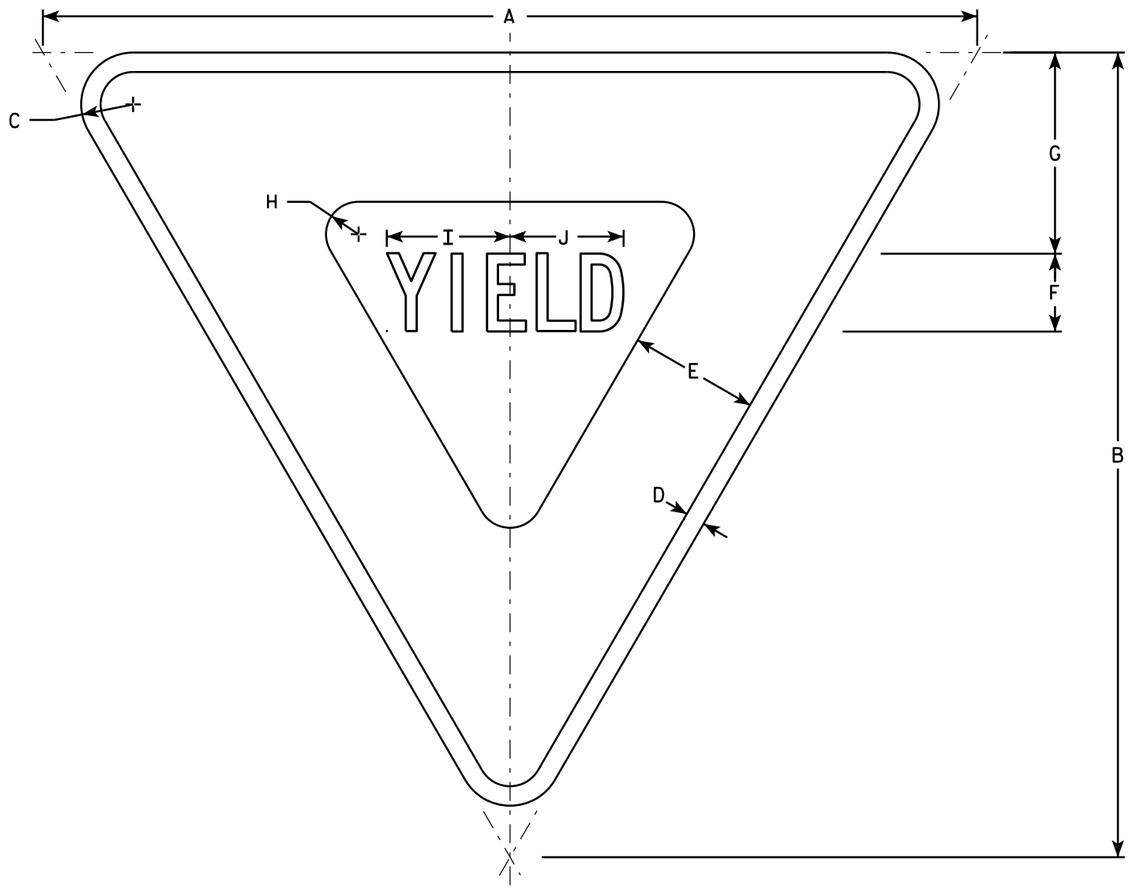
STANDARD SIGN
R1-1F

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: 405	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

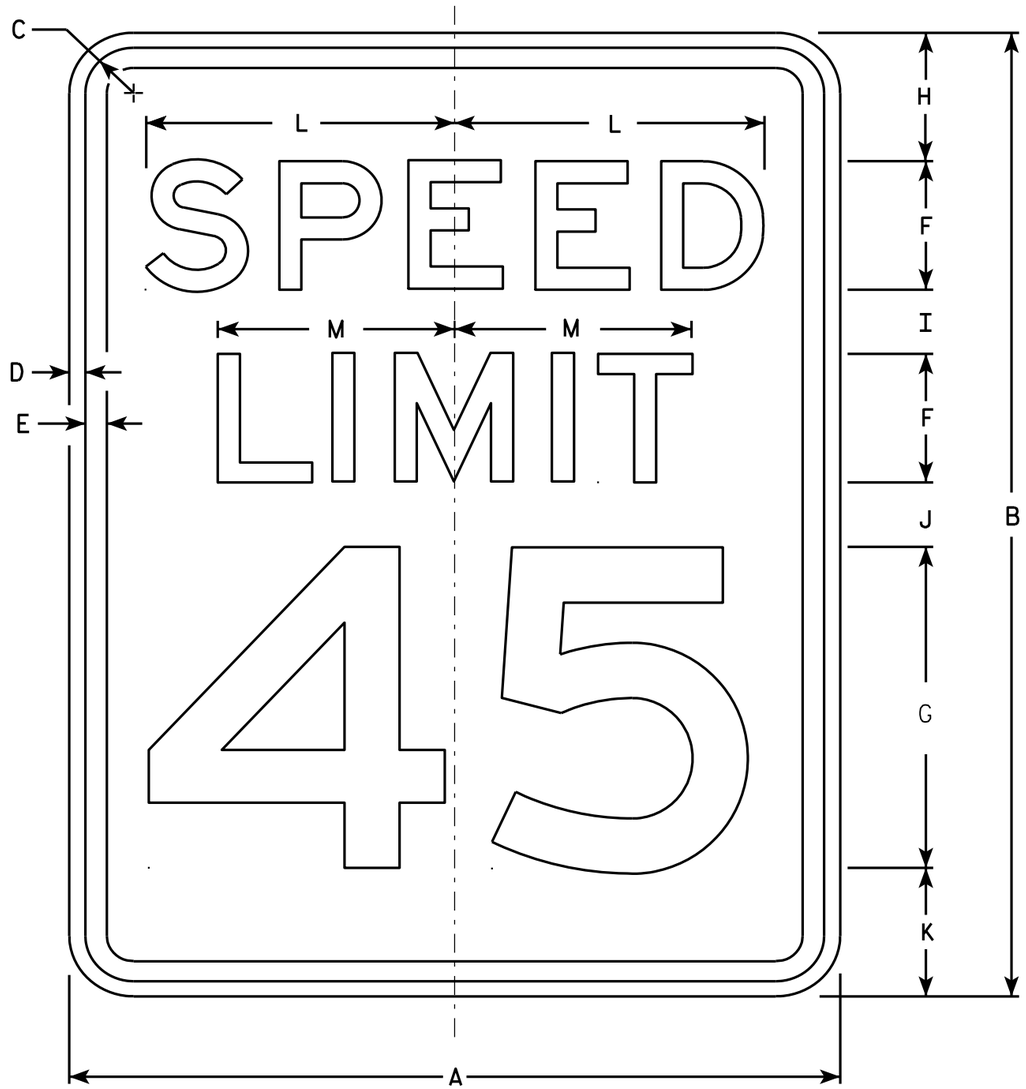
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE P1-2.12

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



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

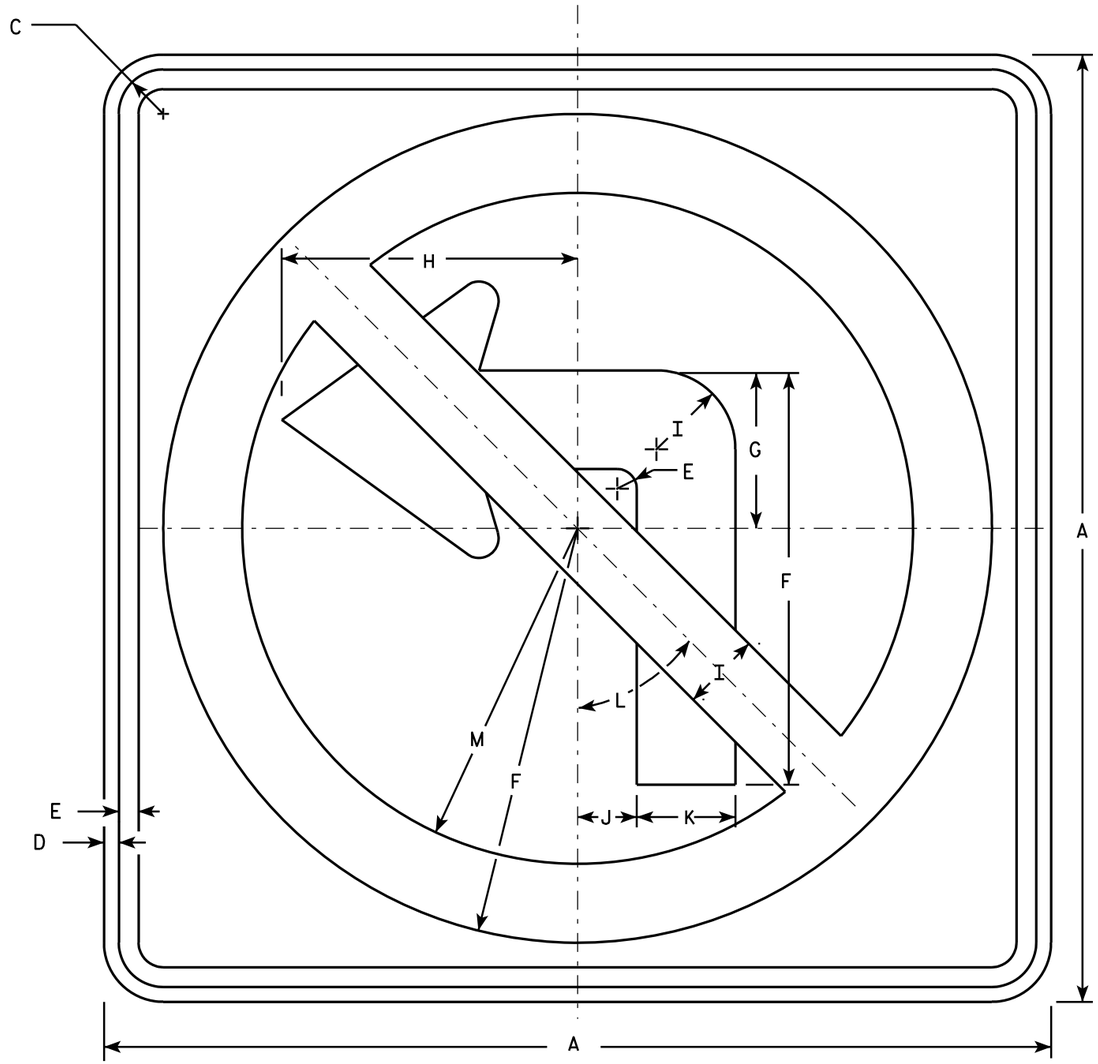
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

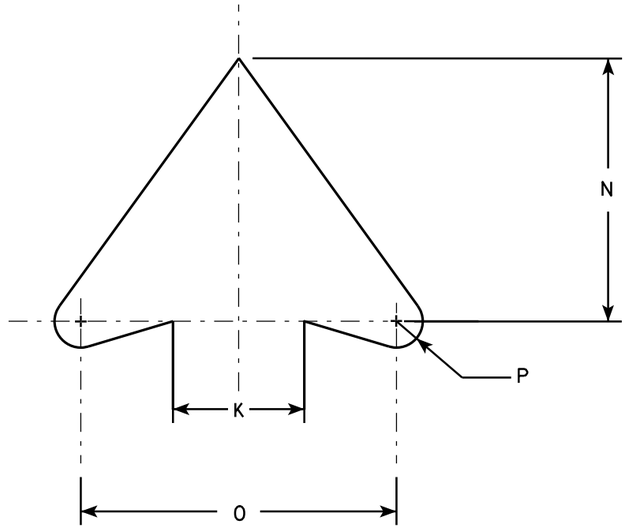
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 407	E



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

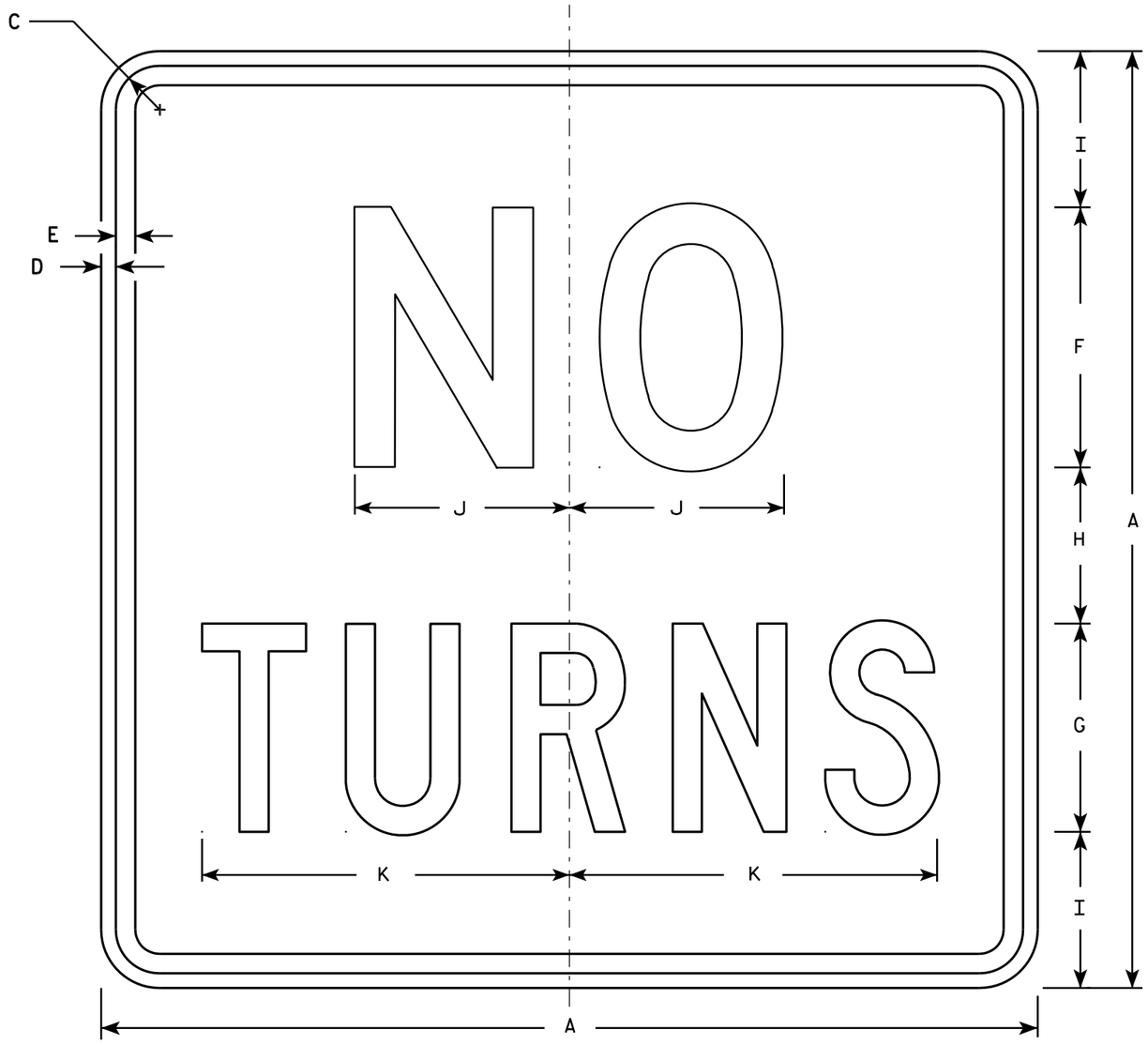
STANDARD SIGN
R3-2

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: 408	E



R3-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D and Line 2 is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2	6	5	4	4 1/2	5 1/8	8 3/4																4.0
2M	36		1 5/8	5/8	3/4	10	8	6	6	8 1/4	14 1/8																9.0
3	36		1 5/8	5/8	3/4	10	8	6	6	8 1/4	14 1/8																9.0
4	36		1 5/8	5/8	3/4	10	8	6	6	8 1/4	14 1/8																9.0
5	48		2 1/4	3/4	1	12	10	8	9	10 1/4	17 5/8																16.0

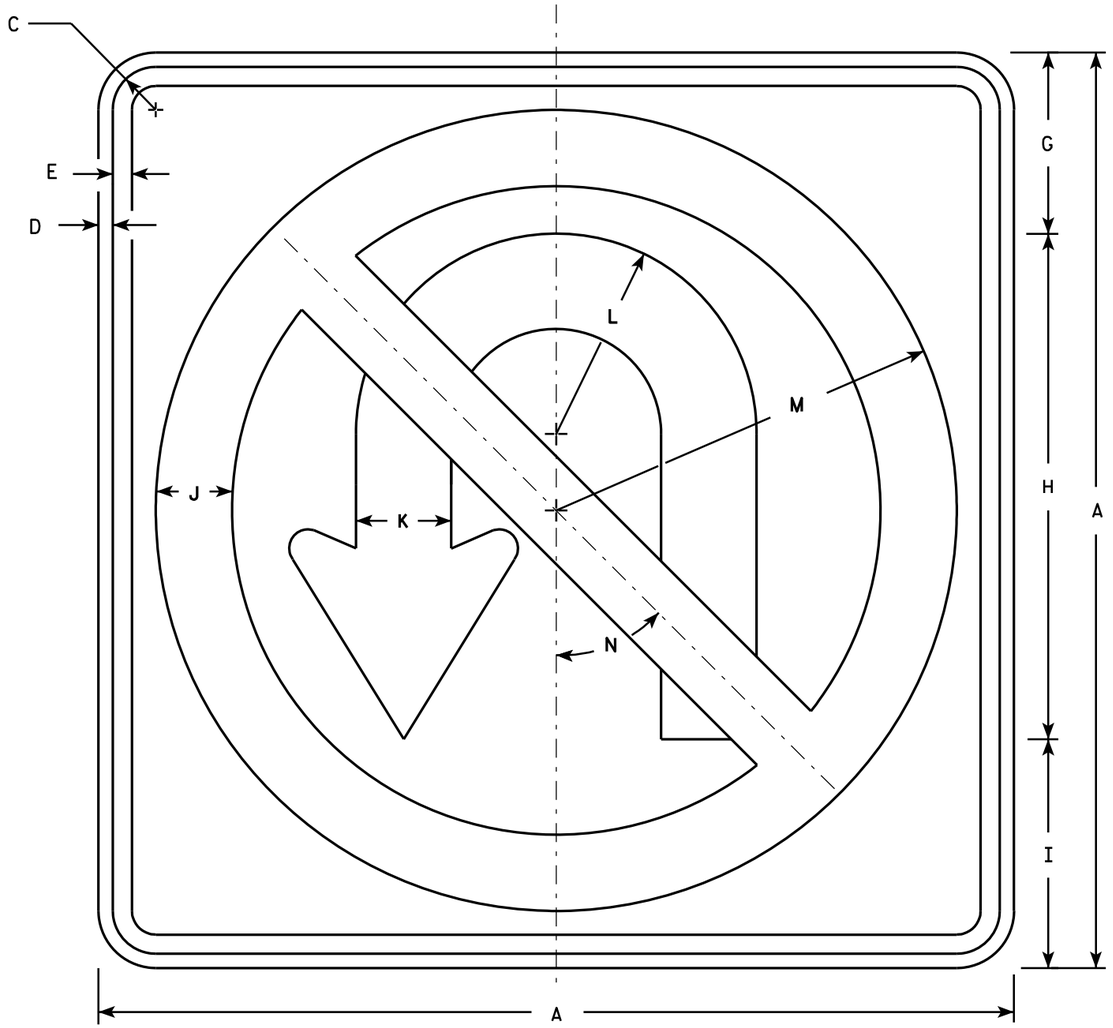
STANDARD SIGN
R3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-3.10

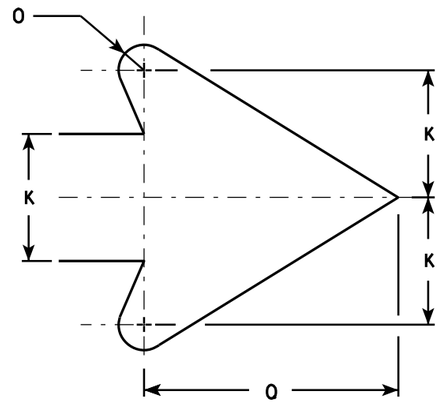
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 409 | E



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

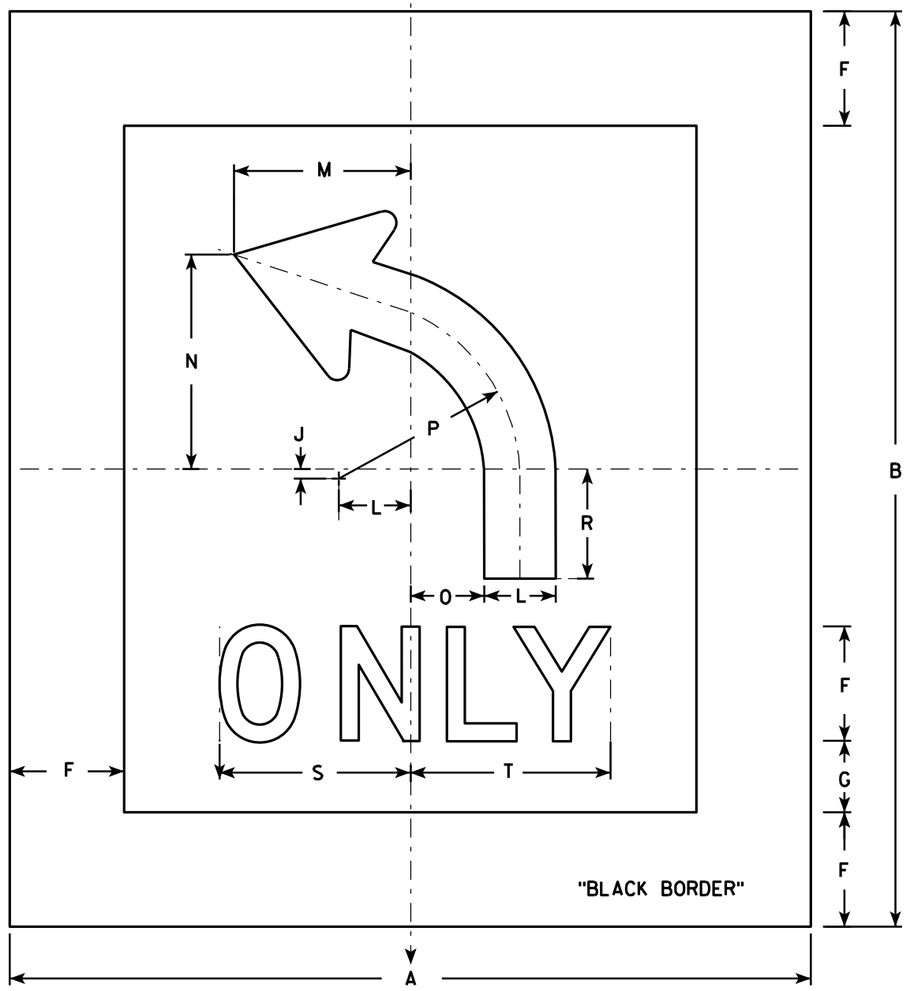
STANDARD SIGN
R3-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

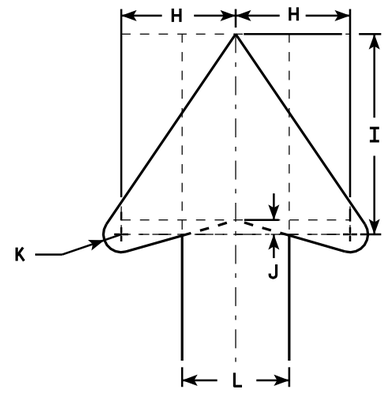
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 410	E



R3-5L

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. When base material is metal, the corners shall be rounded.
5. R3-5R is the same as R3-5L except curved portion of arrow points right.
6. 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	3 3/4	4	7	1/2	5/8	3 3/4	9 1/4	11 1/4	3 7/8	9 1/2		5 3/4	10	10 1/2							1.26
2M	42	48				6	3 3/4	4	7	1/2	5/8	3 3/4	9 1/4	11 1/4	3 7/8	9 1/2		5 3/4	10	10 1/2							1.26
3																											
4																											
5																											

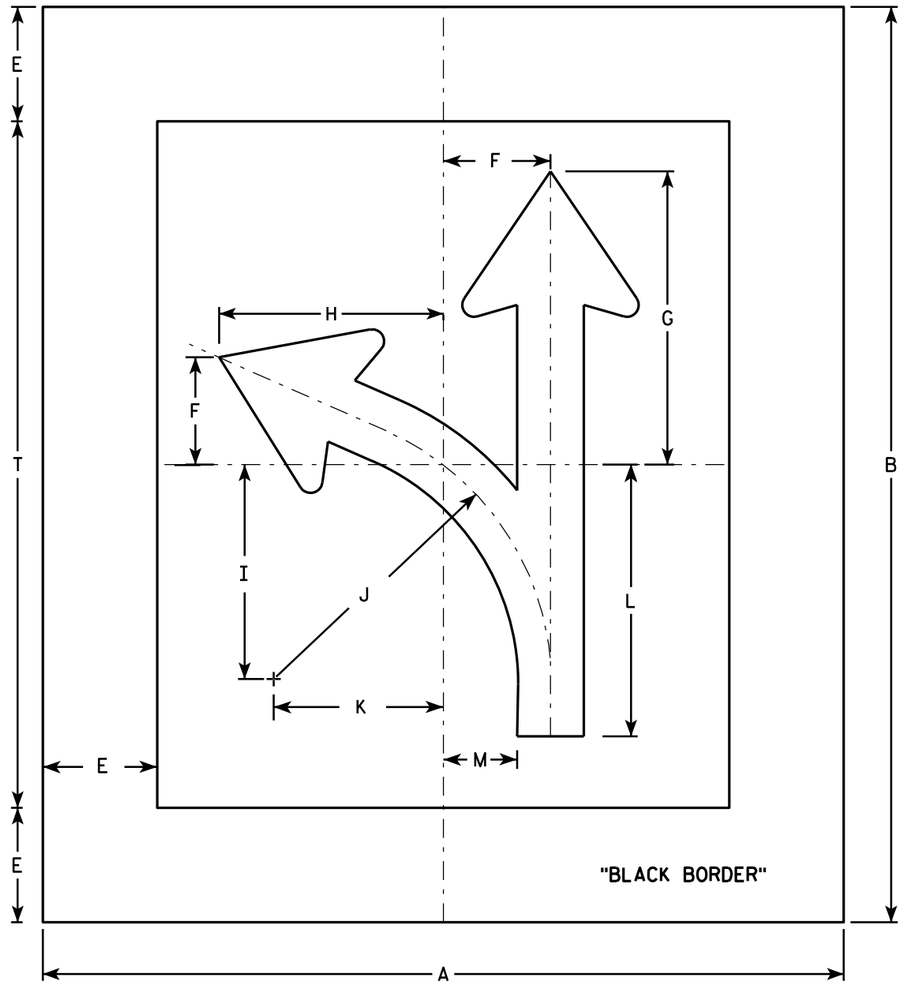
STANDARD SIGN
R3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/24/11 PLATE NO. R3-5.6

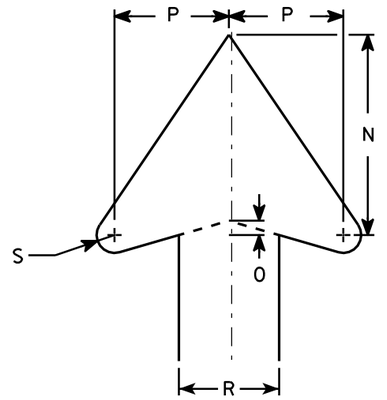
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 411 | E



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																											

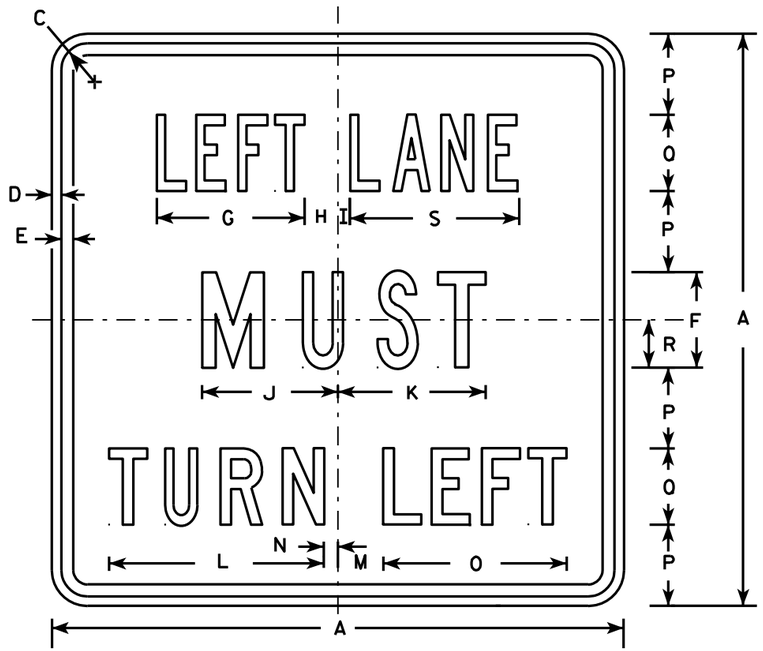
STANDARD SIGN
R3-6

WISCONSIN DEPT OF TRANSPORTATION

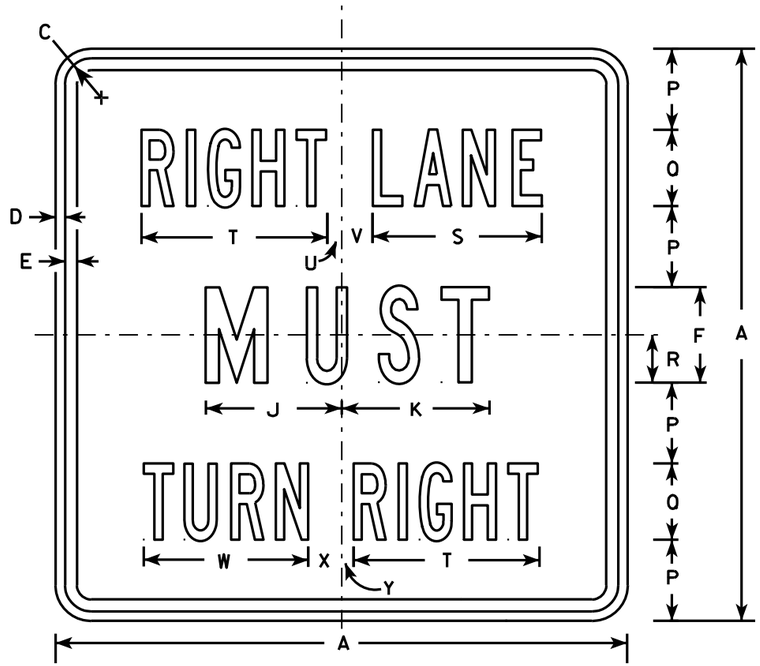
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/17/2011 PLATE NO. R3-6.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 412 | E



R3-7L



R3-7R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

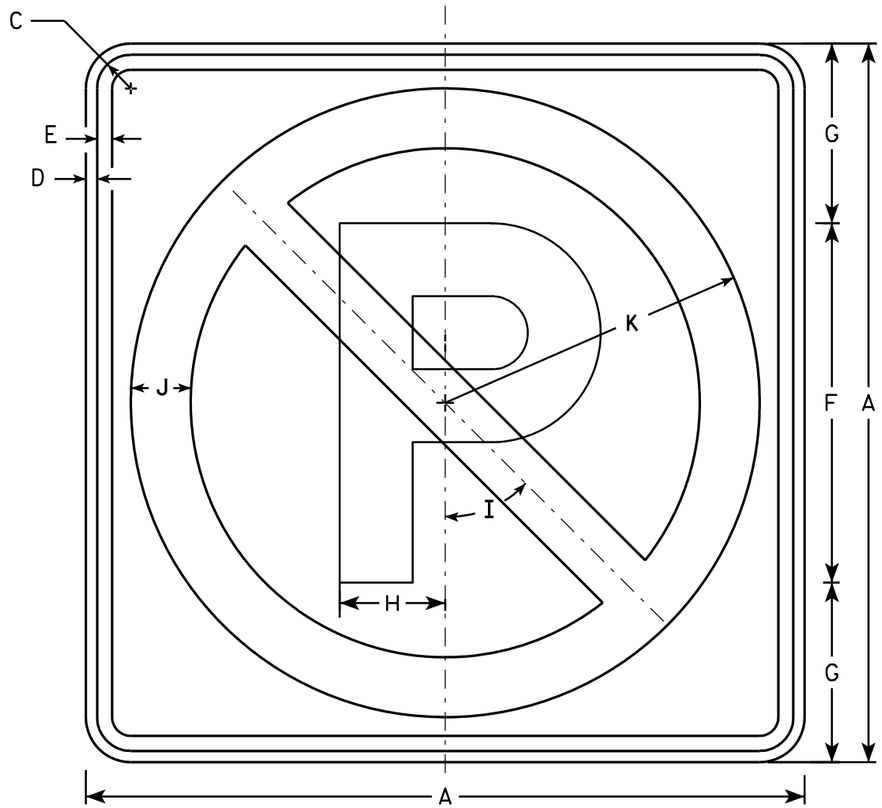
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 413	E



R3-8A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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 & Letter P are non reflective black, the circle with diagonal bar is reflective red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2	12	6	3 1/2	45°	2	10 1/2																4.0
2M	24		1 1/8	3/8	1/2	12	6	3 1/2	45°	2	10 1/2																4.0
3																											
4																											
5																											

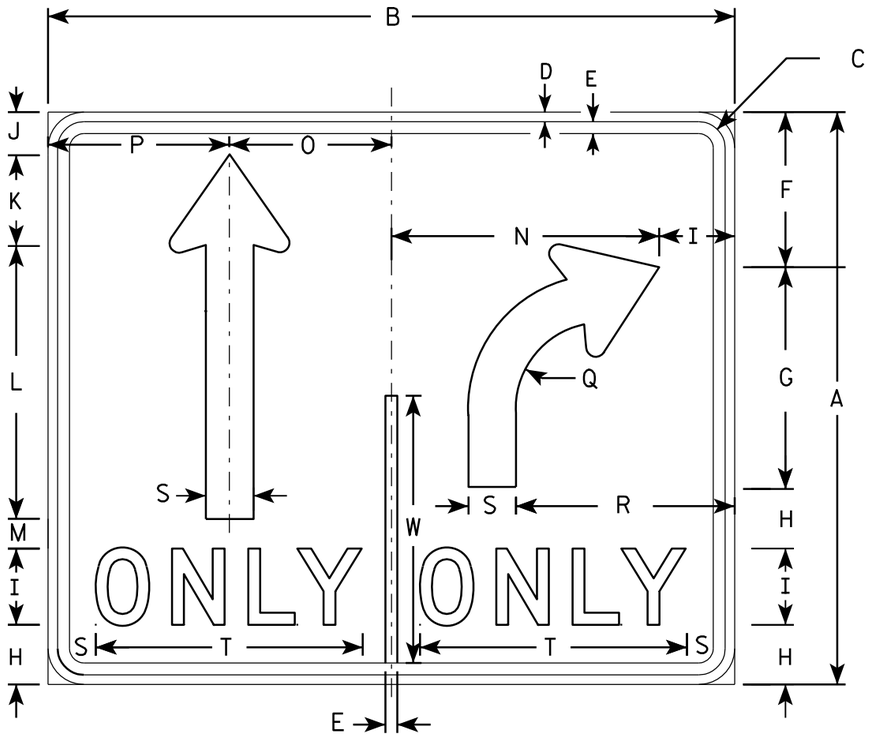
STANDARD SIGN
R3-8A

WISCONSIN DEPT OF TRANSPORTATION

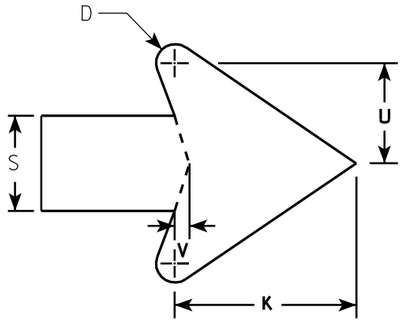
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/01/12 PLATE NO. R3-8A.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 414 | E



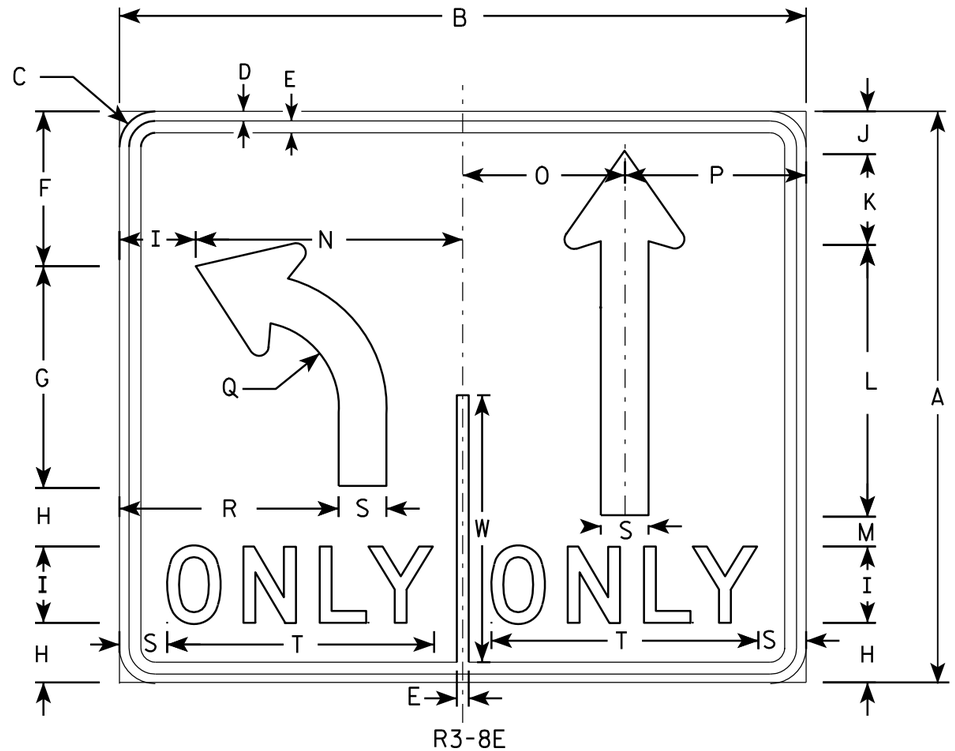
R3-8D



ARROW DETAIL

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.



R3-8E

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	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	14	8 1/2	9 1/2	4 1/2	11 1/2	2 1/2	14	2 5/8	3/8	14				7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	14	8 1/2	9 1/2	4 1/2	11 1/2	2 1/2	14	2 5/8	3/8	14				7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7 1/8	21 1/2	4 3/4	21	12 3/4	14 1/4	7 1/4	17 1/8	3 3/4	20 5/8	4	5/8	22 3/8				18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7 1/8	21 1/2	4 3/4	21	12 3/4	14 1/4	7 1/4	17 1/8	3 3/4	20 5/8	4	5/8	22 3/8				18.0

STANDARD SIGN
R3-8D & R3-8E

WISCONSIN DEPT OF TRANSPORTATION

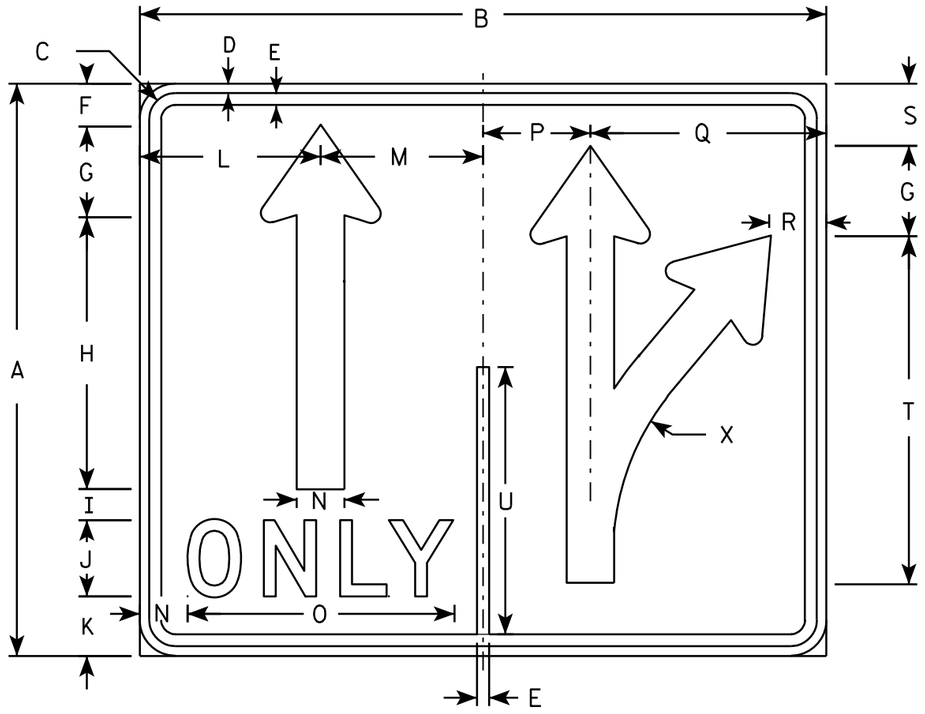
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8D.2

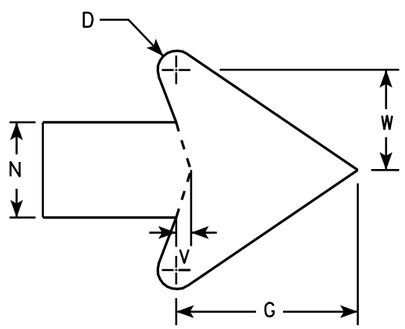
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 415 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R38D.DGN PLOT DATE : 18-MAR-2011 12:47 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 7.945391:1.000000

WISDOT/CADDS SHEET 42



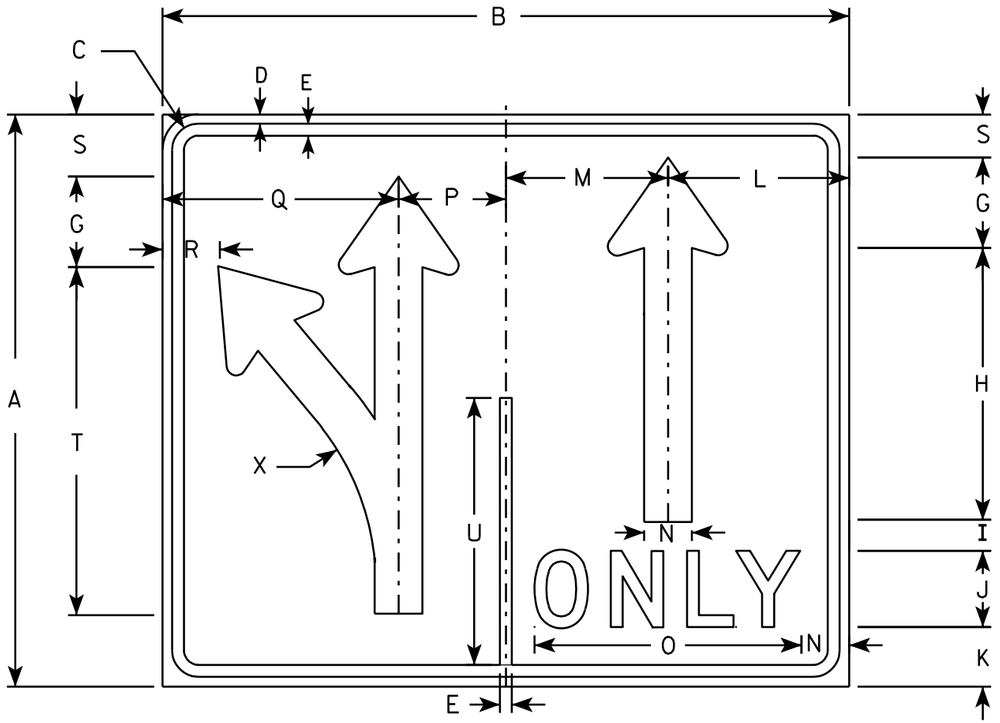
R3-8G



ARROW DETAIL

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.



R3-8H

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	36	1 3/8	1/2	5/8	2 1/4	4 3/4	14 1/4	1 5/8	4	3 1/8	9 1/2	8 1/2	2 1/2	14	5 5/8	12 3/8	3	3 1/4	18 1/4	14	3/8	2 5/8	13 1/4			7.5
2M	30	36	1 3/8	1/2	5/8	2 1/4	4 3/4	14 1/4	1 5/8	4	3 1/8	9 1/2	8 1/2	2 1/2	14	5 5/8	12 3/8	3	3 1/4	18 1/4	14	3/8	2 5/8	13 1/4			7.5
3																											
4	48	54	2 1/4	3/4	1	3 1/2	7 1/8	29 1/8	2 7/8	6	5 1/8	14 1/4	12 3/4	3 3/4	20 5/8	8 3/8	18 5/8	4 3/8	5 1/4	29 1/8	22 3/8	5/8	4	21 7/8			18.0
5	48	54	2 1/4	3/4	1	3 1/2	7 1/8	29 1/8	2 7/8	6	5 1/8	14 1/4	12 3/4	3 3/4	20 5/8	8 3/8	18 5/8	4 3/8	5 1/4	29 1/8	22 3/8	5/8	4	21 7/8			18.0

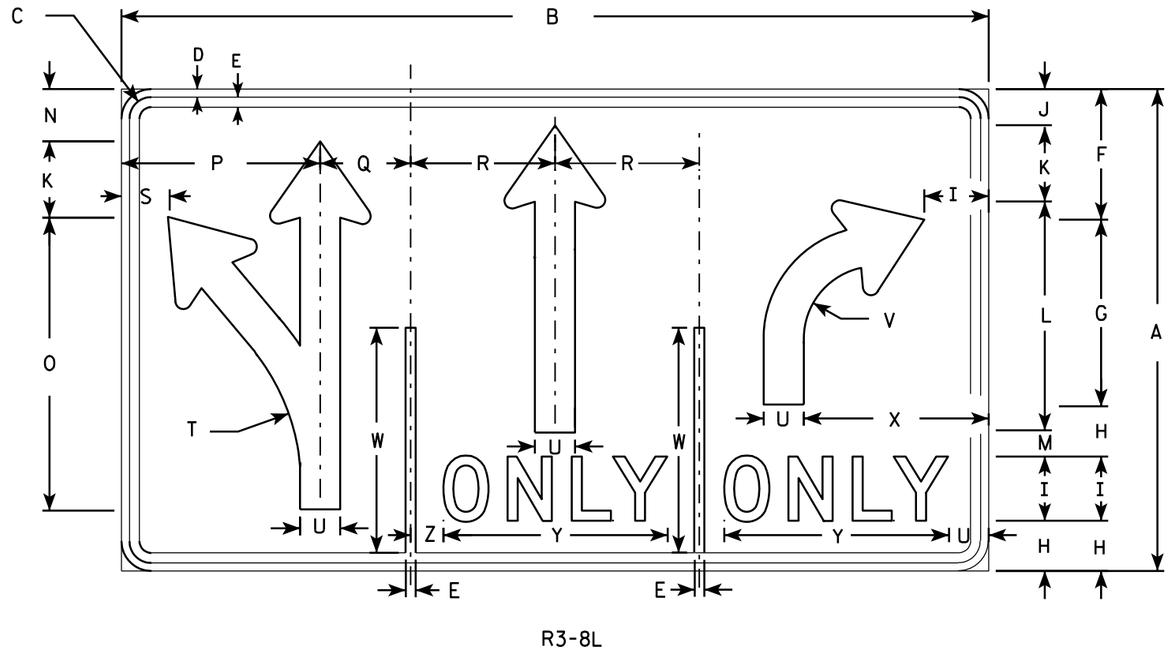
STANDARD SIGN
R3-8G & R3-8H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8G.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 416	E

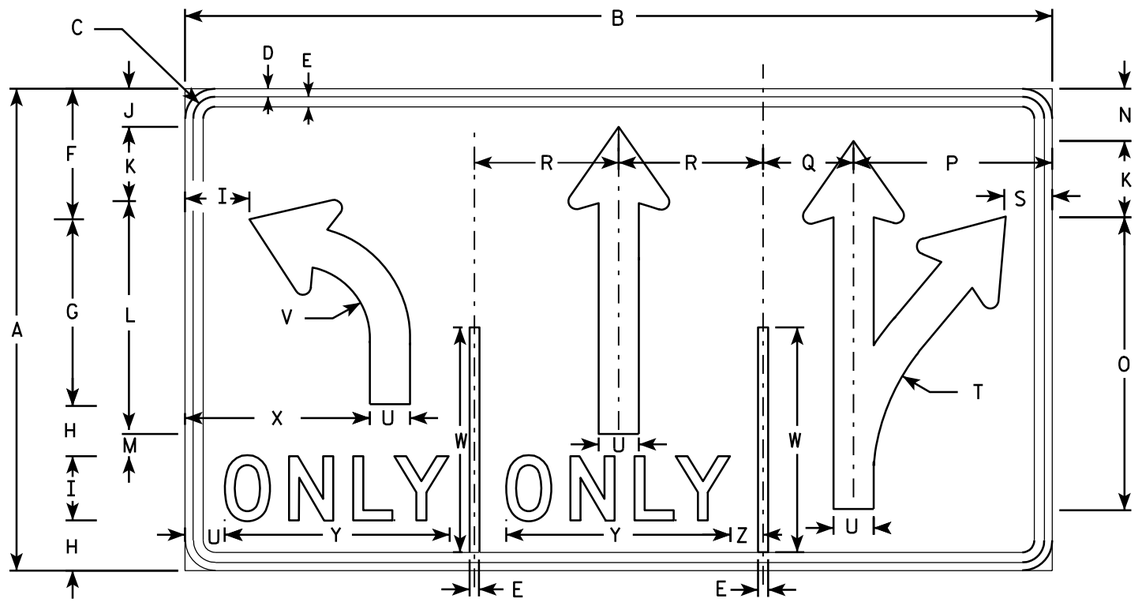


R3-8L

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.

SEE R3-8 FOR ARROW DETAIL



R3-8M

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	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	3 1/4	18 1/4	12 3/8	5 5/8	9	3	13 1/4	2 1/2	4 1/2	14	11 1/2	14	2	11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	3 1/4	18 1/4	12 3/8	5 5/8	9	3	13 1/4	2 1/2	4 1/2	14	11 1/2	14	2	11.25
3																											
4	48	84	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7	29 1/8	2 7/8	5 1/4	29 1/8	18 5/8	8 3/4	14	4 3/8	21 7/8	3 3/4	7 1/4	22 3/8	17 1/4	20 5/8	3 1/4	28.0
5	48	84	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	3 1/2	7	29 1/8	2 7/8	5 1/4	29 1/8	18 5/8	8 3/4	14	4 3/8	21 7/8	3 3/4	7 1/4	22 3/8	17 1/4	20 5/8	3 1/4	28.0

STANDARD SIGN
R3-8L & R3-8M

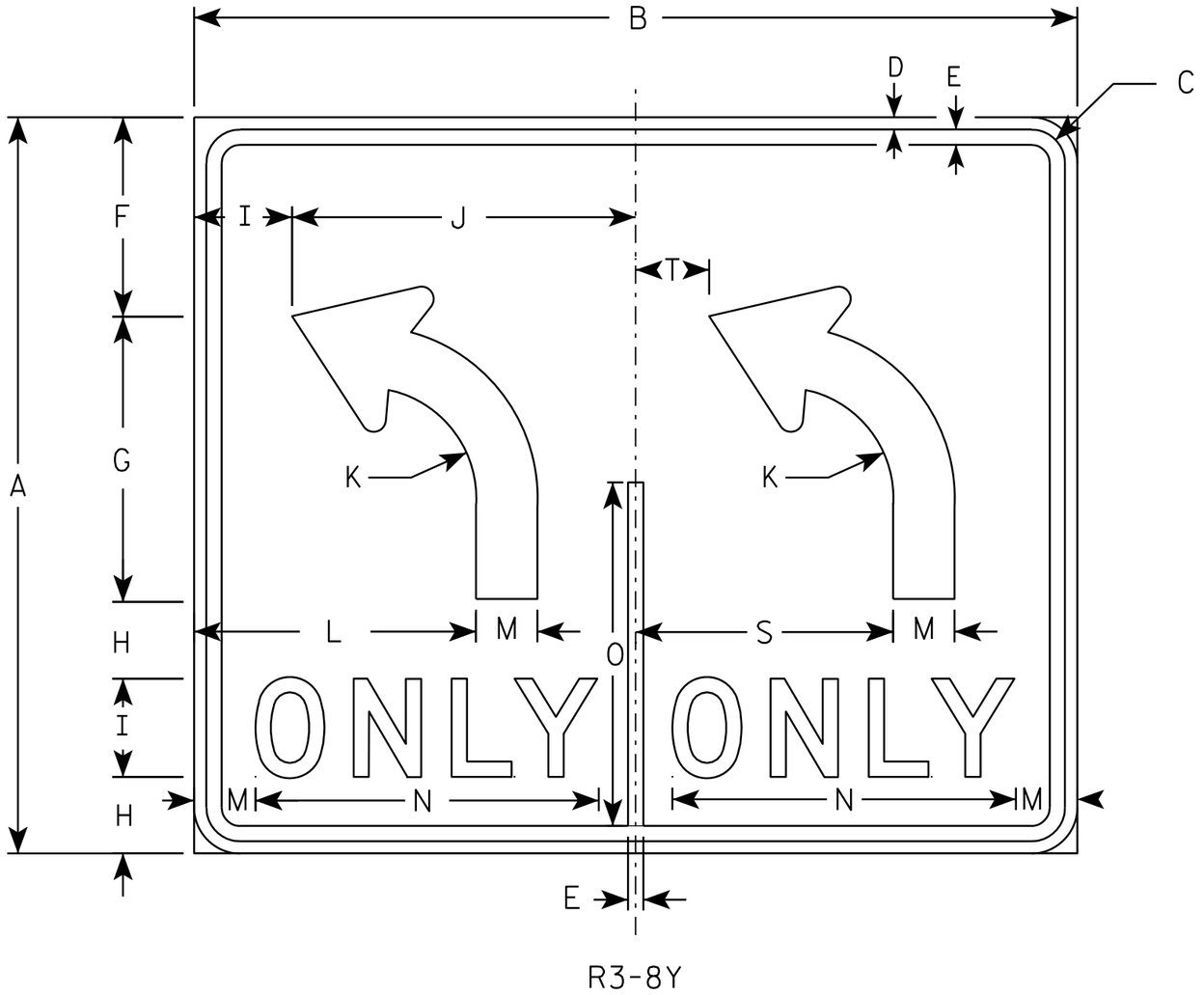
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/2011 PLATE NO. R3-8L.2

PROJECT NO:

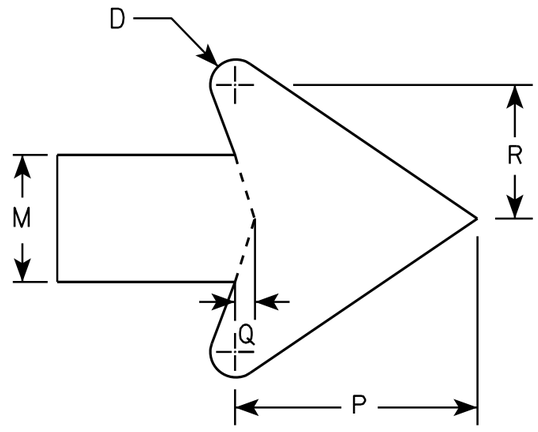
SHEET NO: 417 E



R3-8Y

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	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	14	4 1/2	11 1/2	2 1/2	14	14	4 3/4	3/8	2 5/8	10 1/2	3							7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	14	4 1/2	11 1/2	2 1/2	14	14	4 3/4	3/8	2 5/8	10 1/2	3							7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	21	7 1/4	17 1/4	3 3/4	20 5/8	22 3/8	7 1/8	5/8	4	15 3/4	4 1/2							18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	21	7 1/4	17 1/4	3 3/4	20 5/8	22 3/8	7 1/8	5/8	4	15 3/4	4 1/2							18.0

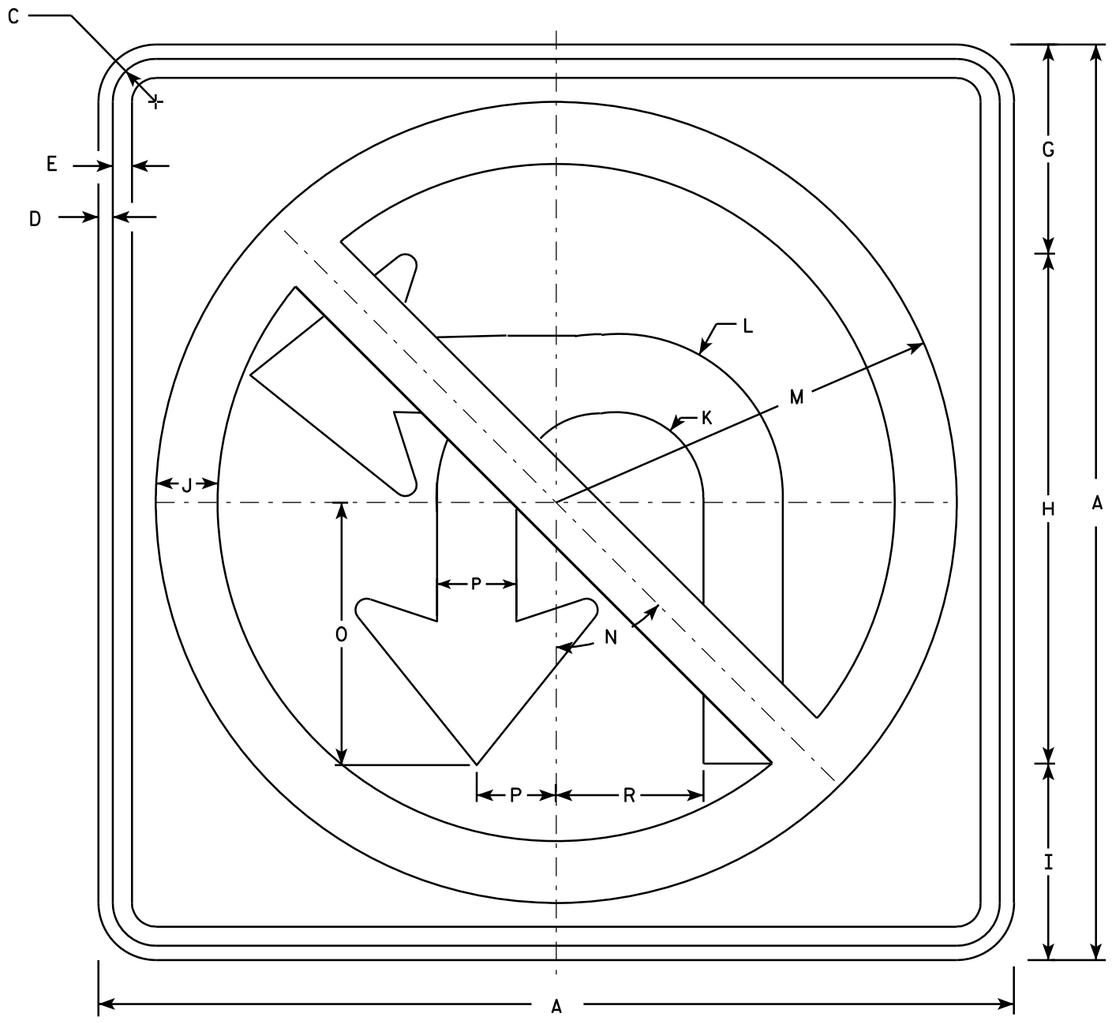
STANDARD SIGN
R3-8Y

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8Y.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 418	E



R3-18

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.

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		5 1/2	13 3/8	5 1/8	1 5/8	2 1/4	4 1/4	10 1/2	45°	6 7/8	2 1/8		3 7/8									4.0
2M	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45°	10 3/8	3 1/8		5 3/4									9.0
3	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
4	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
5	48		2 1/4	3/4	1		11	26 3/4	10 1/4	3 1/4	4 5/8	8 5/8	21	45°	13 3/4	4 1/8		7 3/4									16.0

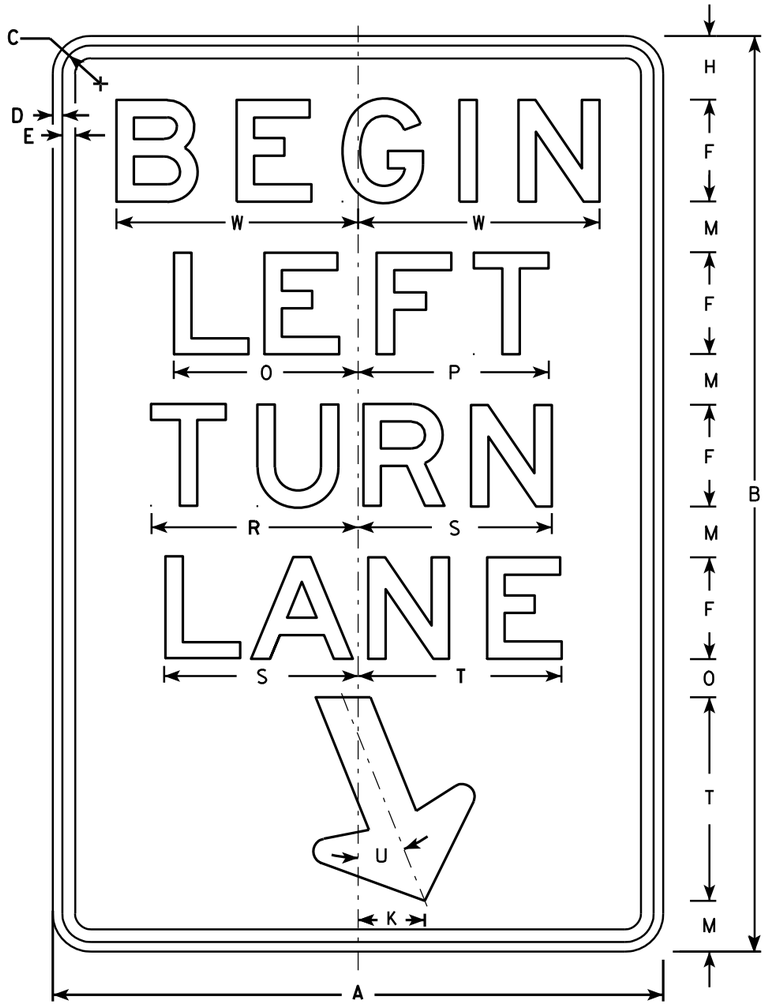
STANDARD SIGN
R3-18

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/10 PLATE NO. R3-18.2

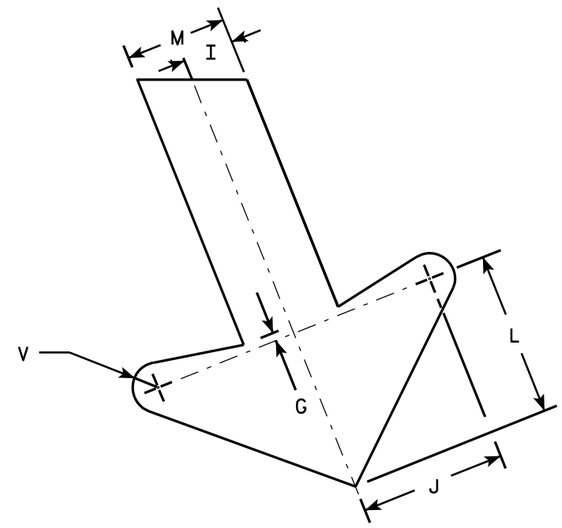
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 419	E



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																											

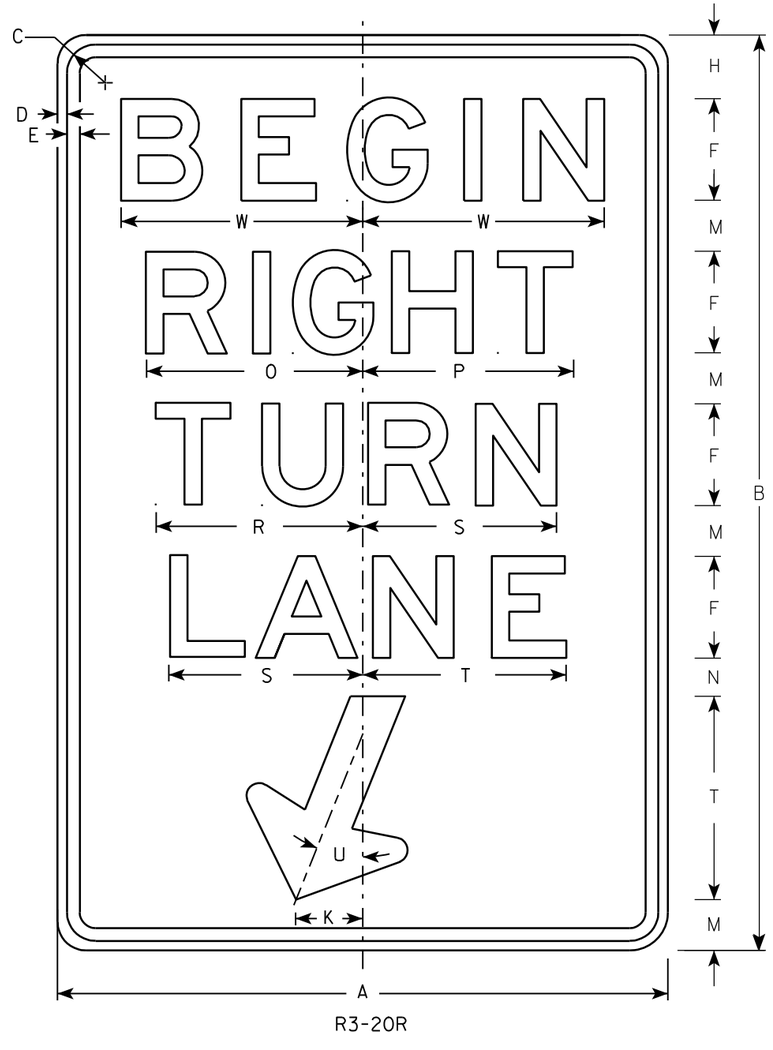
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

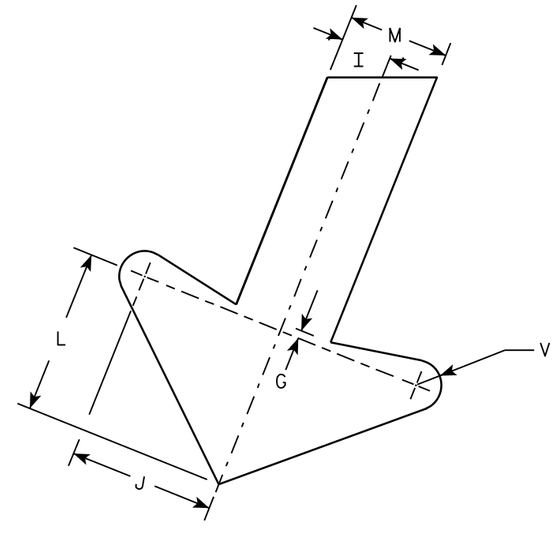
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 420 | E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

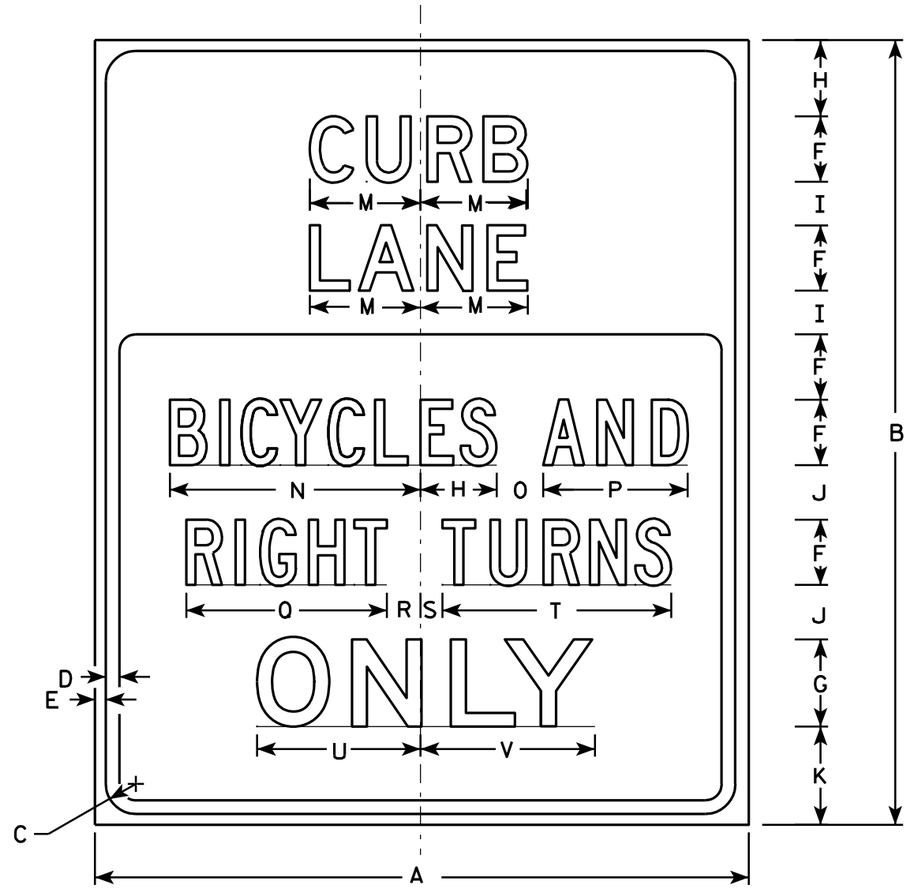
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 421 | E



R3-52

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   Message - See note 5
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 symbol and legend are White Type H reflective with a Black background,
   Bottom legend is Black with White Type H reflective background.
6. Lines 1 and 2 are series D.
   Lines 3 and 4 are Series C
   Bottom line is series E.

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	36	1 3/8	1/2	5/8	3	4	3 1/2	2	2 1/2	4 1/2		5	11 1/2	2 1/8	6 5/8	9 1/4	1 1/2	1	10 1/2	7 1/2	8					7.5
2M	30	36	1 3/8	1/2	5/8	3	4	3 1/2	2	2 1/2	4 1/2		5	11 1/2	2 1/8	6 5/8	9 1/4	1 1/2	1	10 1/2	7 1/2	8					7.5
3																											
4																											
5																											

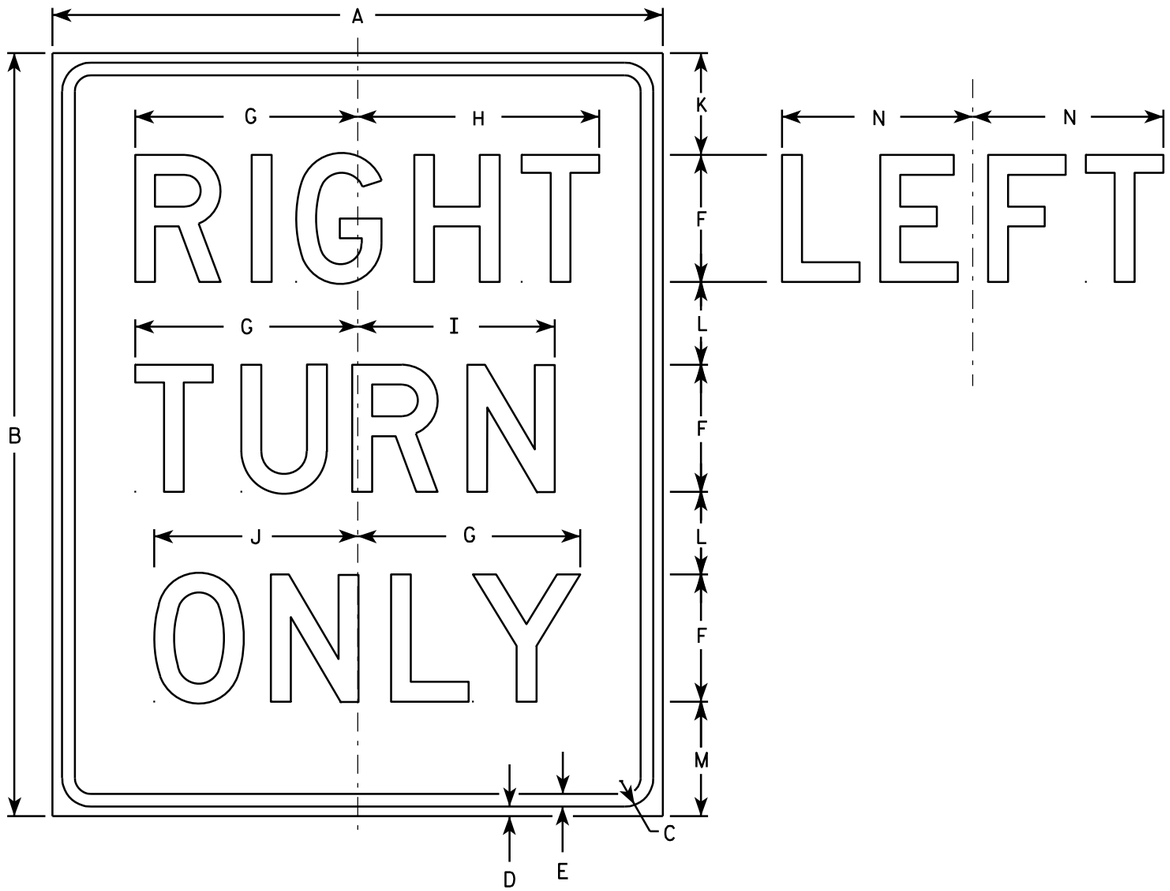
STANDARD SIGN
R3-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/04/2011 PLATE NO. R3-52.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 422	E



R3-53R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R3-53L same as R3-53R except LEFT is substituted for RIGHT.

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

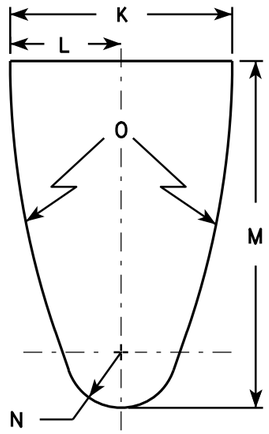
STANDARD SIGN
R3-53

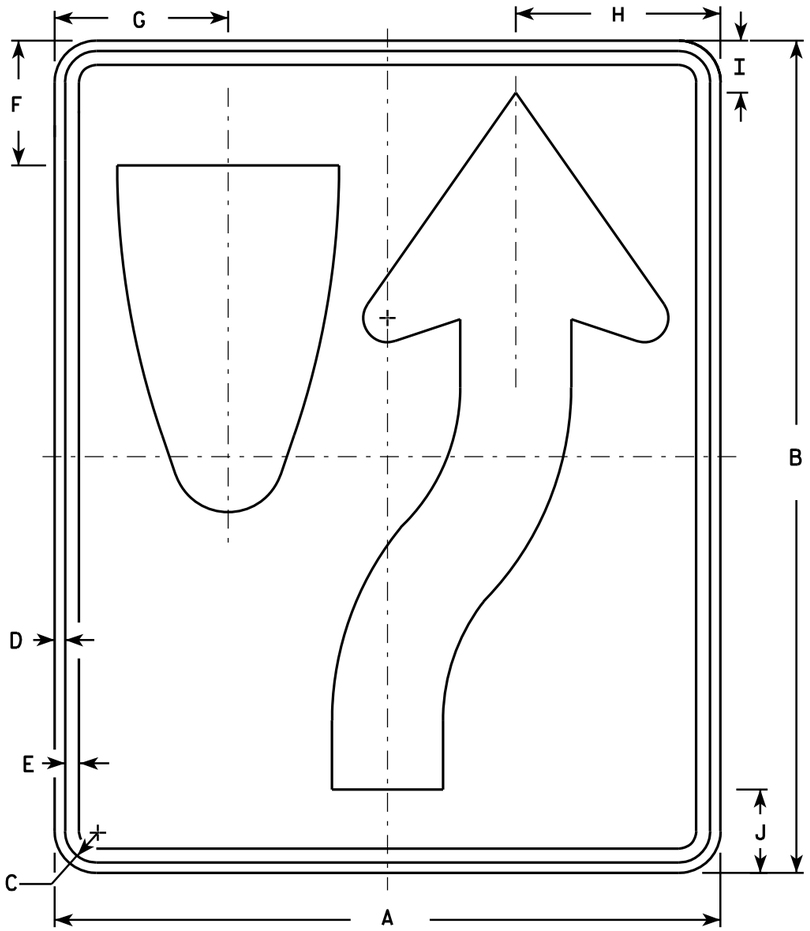
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-53.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 423	E

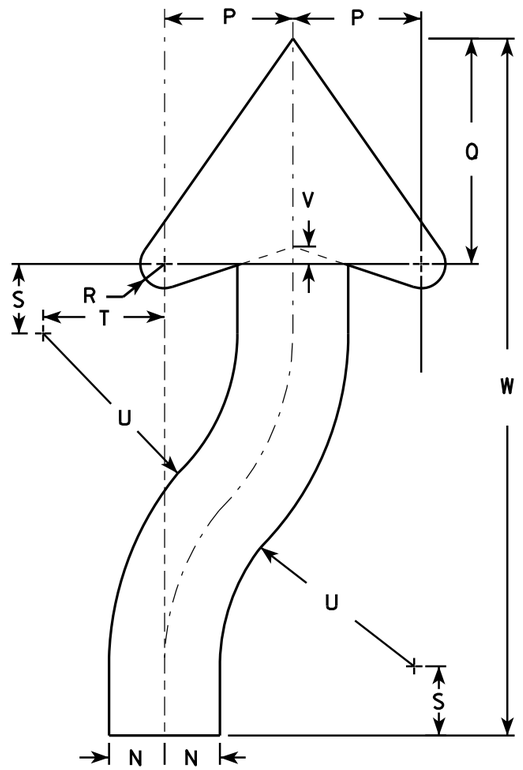




R4-7

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

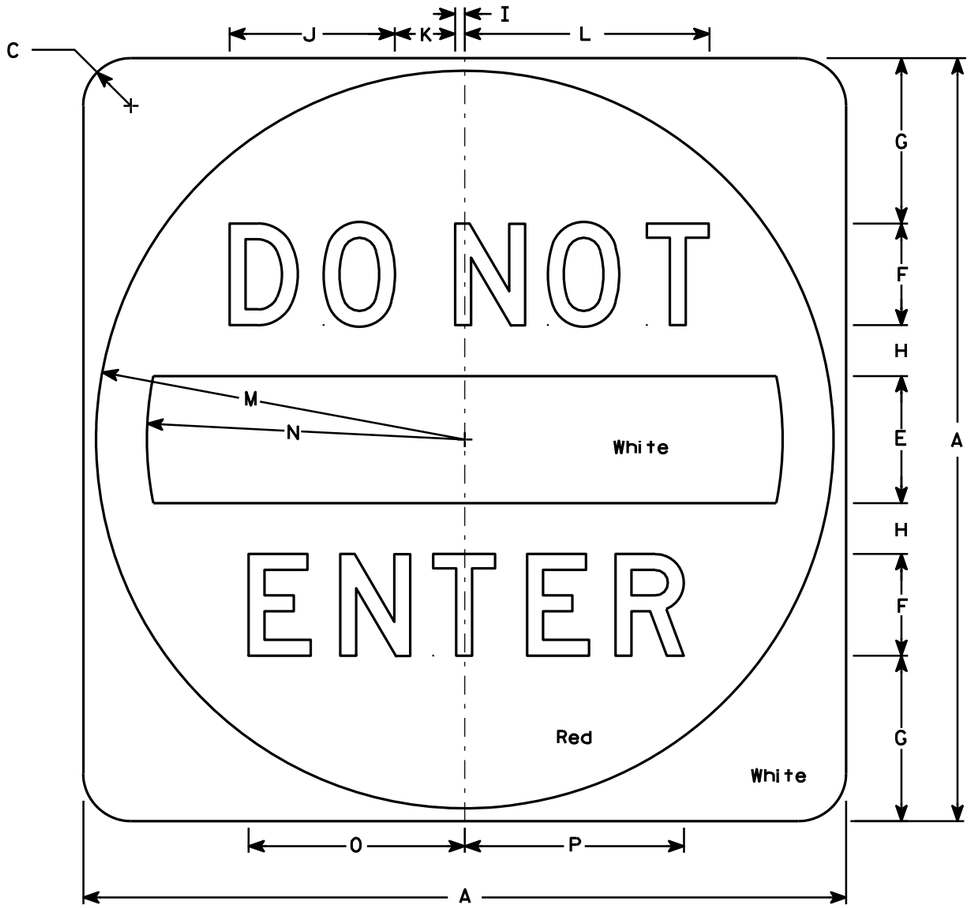
STANDARD SIGN
R4-7 & R4-8

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: 424	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

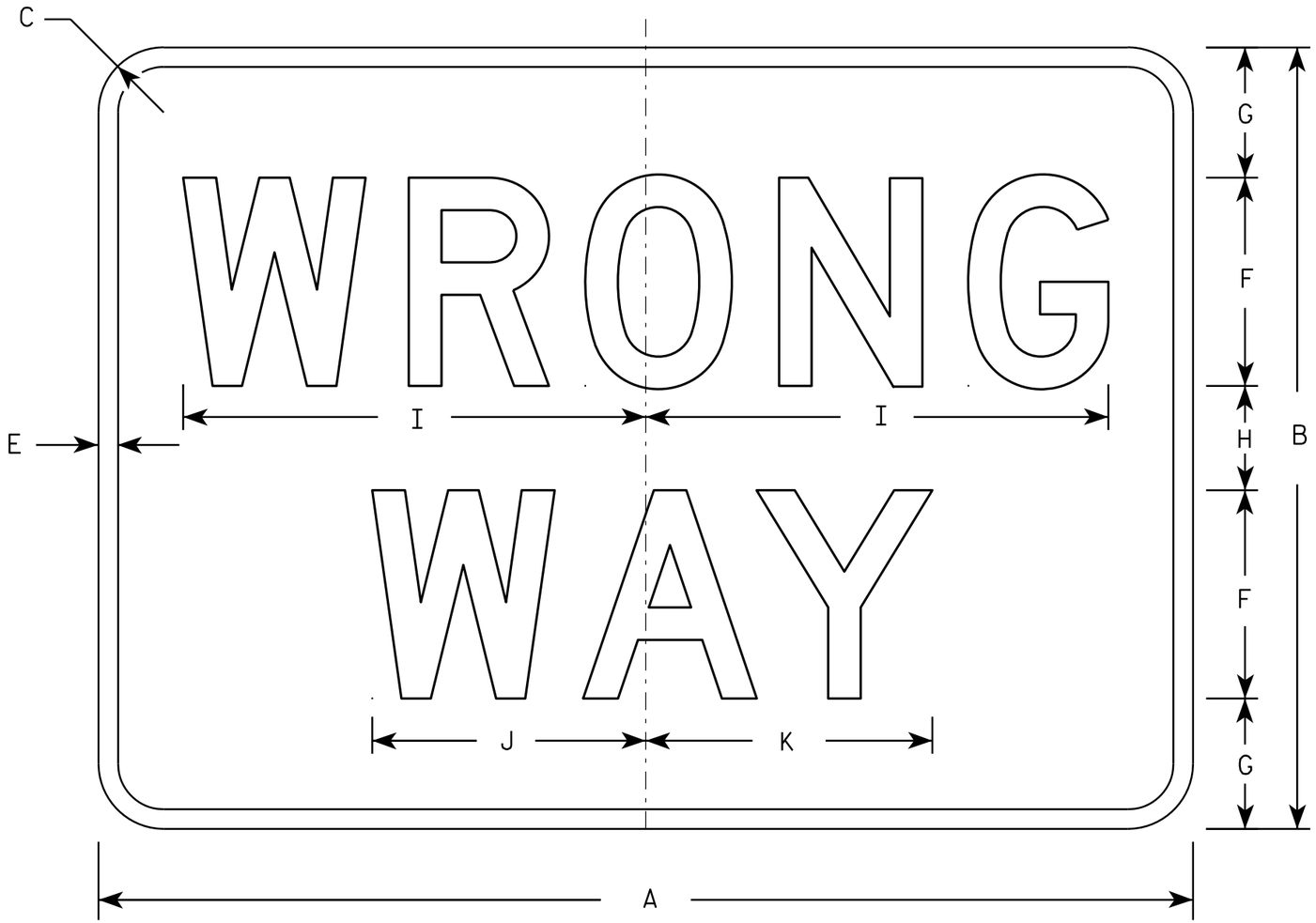
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 425 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

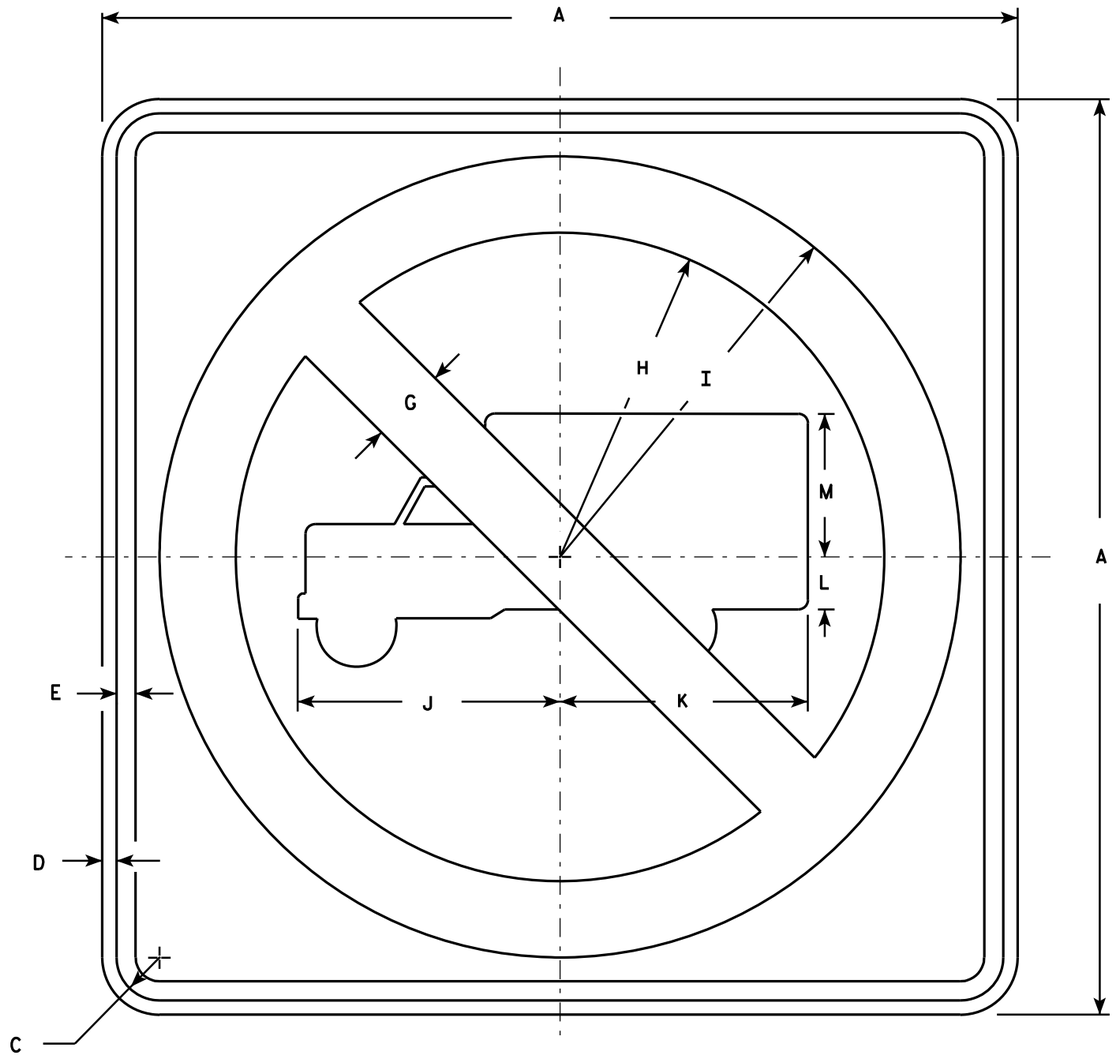
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 426 | 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

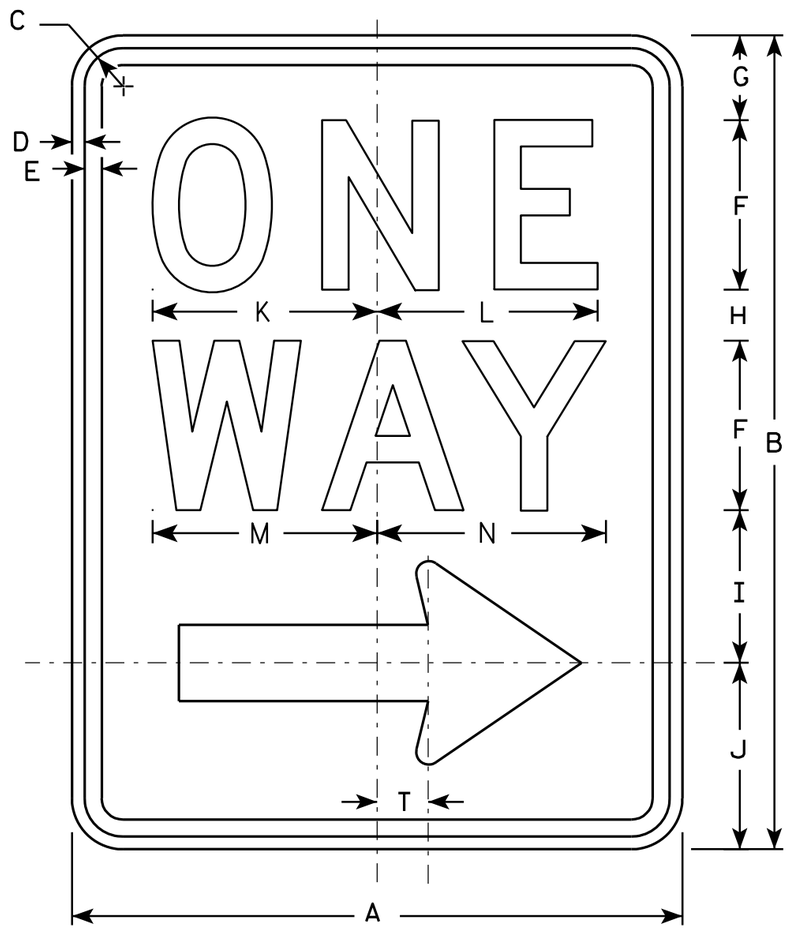
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 427	E

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

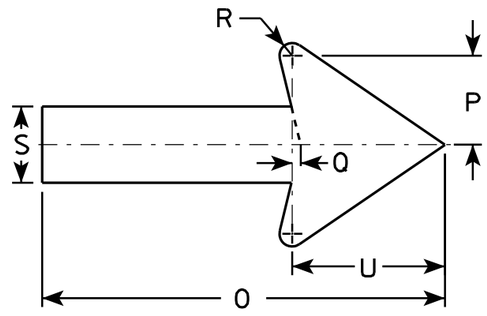
7



R6-2R

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																										

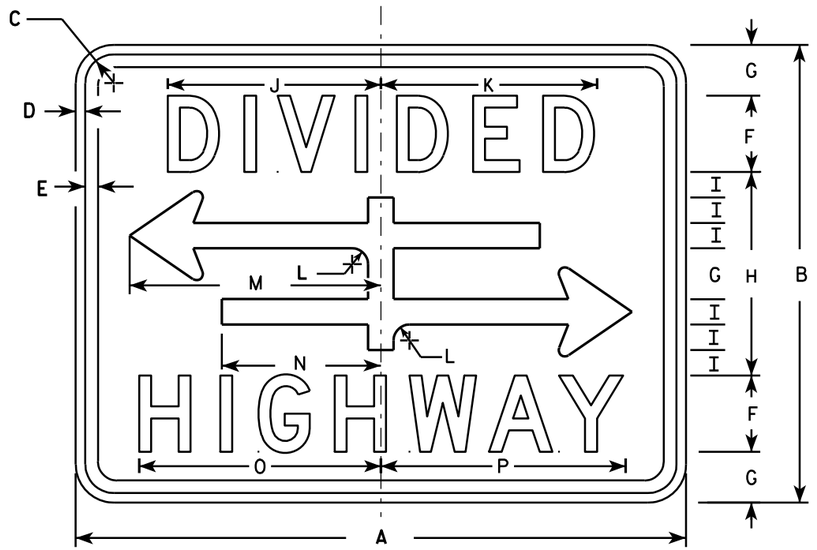
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

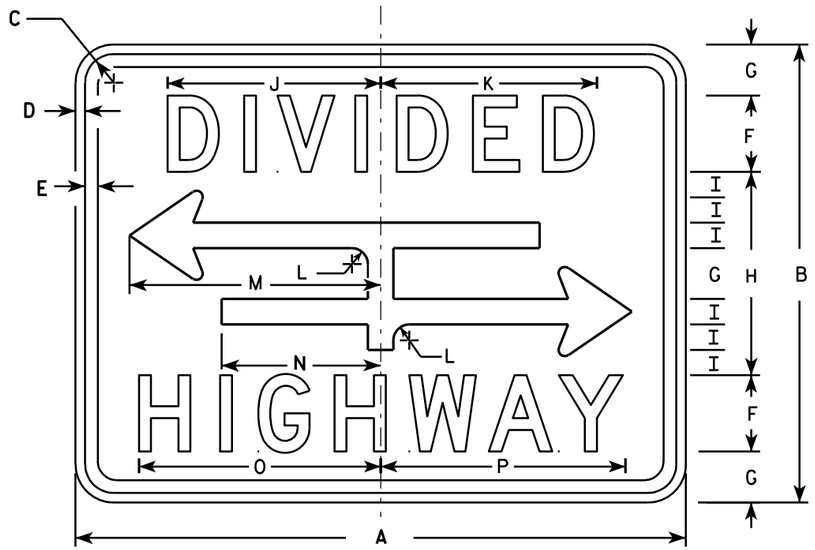
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 428	E



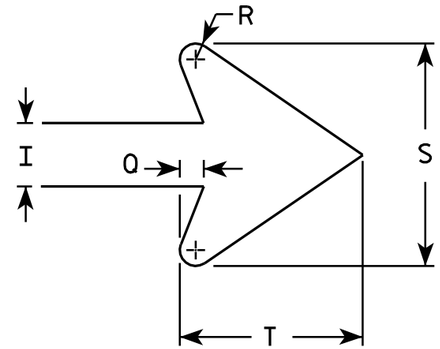
R6-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-3A



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	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

STANDARD SIGN
R6-3 & R6-3A

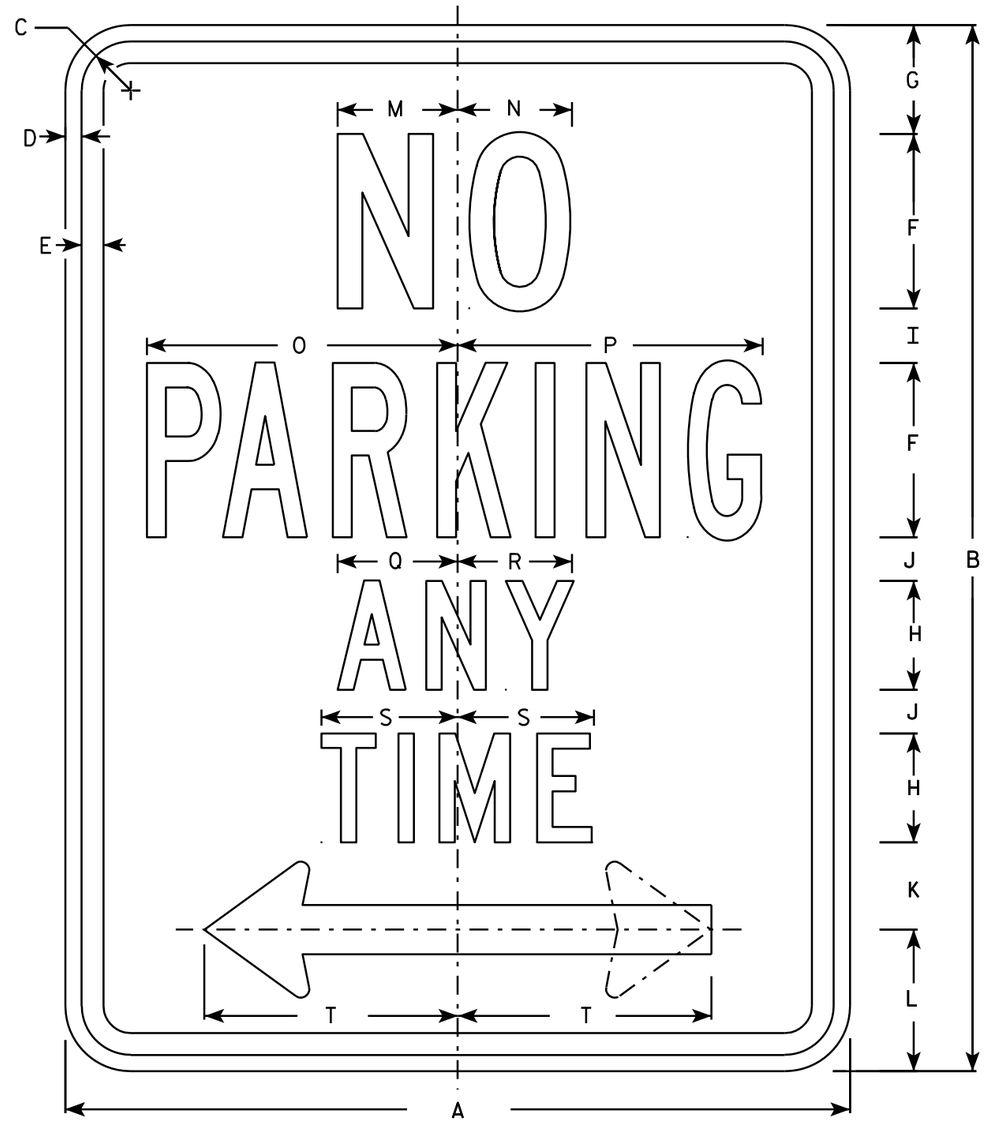
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

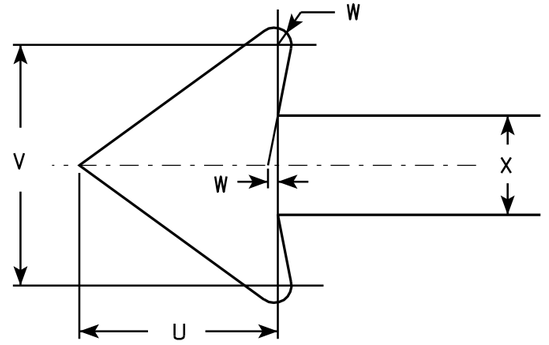
SHEET NO: 429 E



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

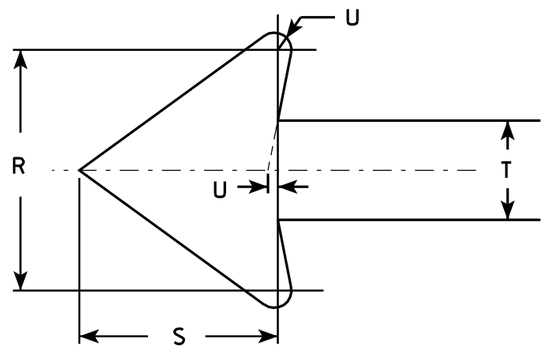
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 430 | E

R7-2

*- See Note 5

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 7
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 as required & adjust spacing to achieve proper balance.
6. R7-2D (double arrow)
   R7-2L (left arrow)
   R7-2R (right arrow)
7. Lines 1, 3 and 4 are series C, line 2 is 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	12	18	1 1/8	3/8	3/8	3	1 7/8	1 1/2	7/8	7/8	2	2 1/2	2	2	4 7/8	4 7/8	3 7/8	1 3/4	1 1/2	3/4	1/8						1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	5 7/8	2 5/8	2 1/4	1 1/8	1/4						3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 3/4	3 1/2	3	1 1/2	1/4						5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 3/4	3 1/2	3	1 1/2	1/4						5.0
4																											
5																											

STANDARD SIGN
R7-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

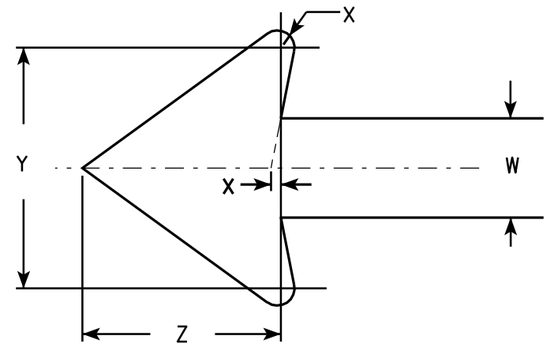
DATE 3/31/2011 PLATE NO. R7-2.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 431	E

R7-53

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-53D (double arrow)
   R7-53L (left arrow)
   R7-53R (right arrow)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 5/8	1 3/4	1/4	4 1/2	2 3/8	3 7/8	3/4	1/8	1 3/4	1 1/2	1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	3 3/8	1 1/2	5/8	5 3/8	3	5 7/8	1 1/8	1/4	2 5/8	2 1/4	3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	4	2	5/8	6 5/8	3 5/8	7 3/4	1 1/2	1/4	3 1/2	3	5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	4	2	5/8	6 5/8	3 5/8	7 3/4	1 1/2	1/4	3 1/2	3	5.0
4																											
5																											

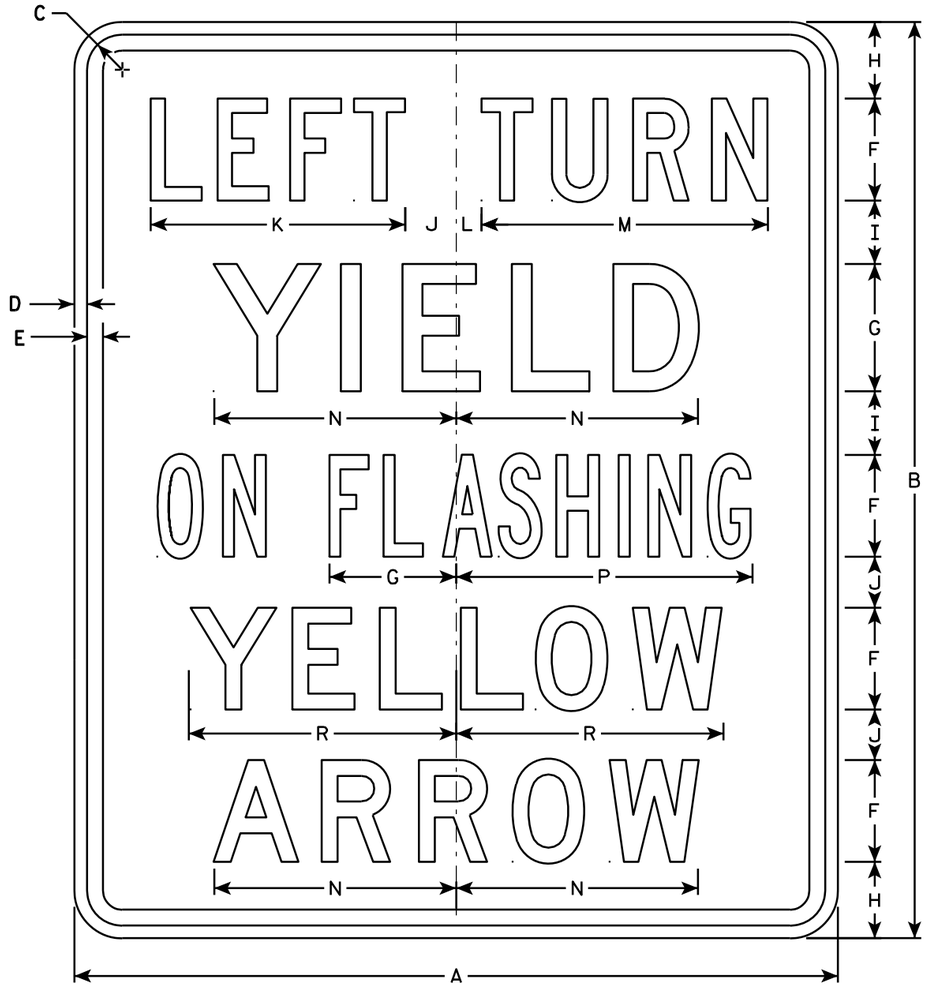
STANDARD SIGN
R7-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-53.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 432	E

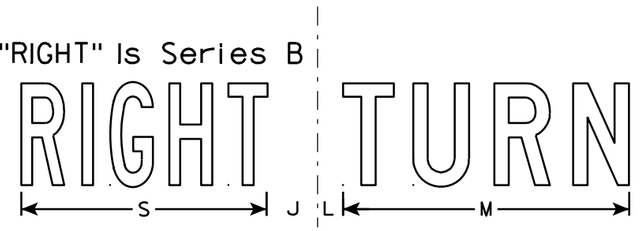


R10-50L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C.
   Lines 2, 4 and 5 are Series D.
   Line 3 is Series B.

"RIGHT" Is Series B



R10-50R

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	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
2M	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
3																											
4																											
5																											

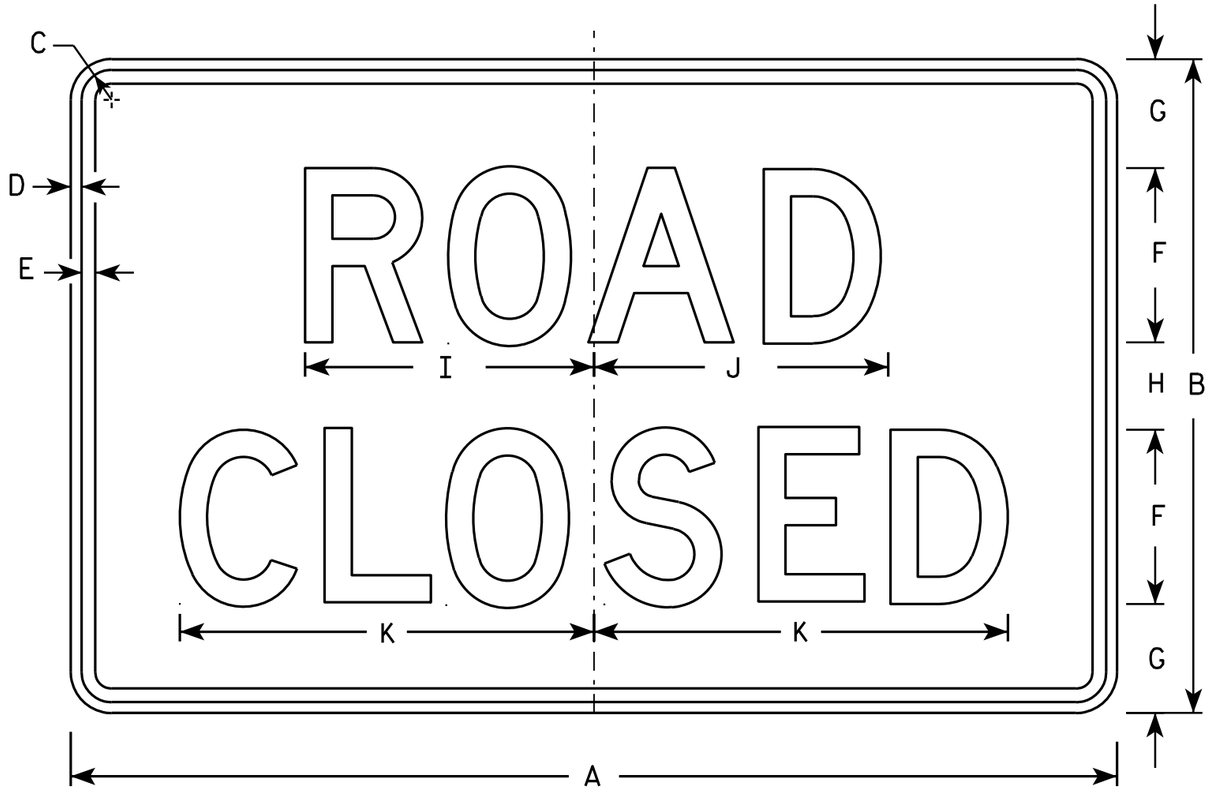
STANDARD SIGN
R10-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/11/13 PLATE NO. R10-50.2

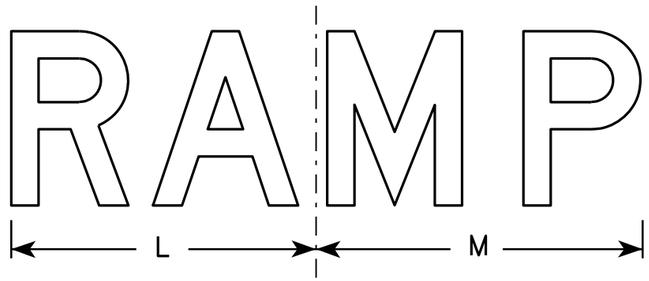
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 433	E



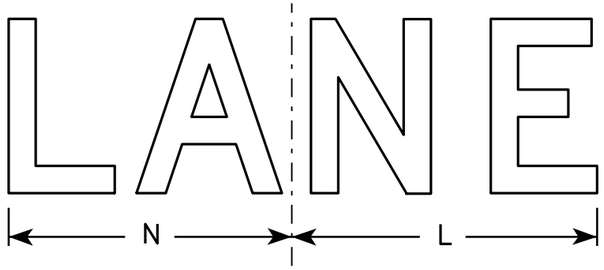
R11-2

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

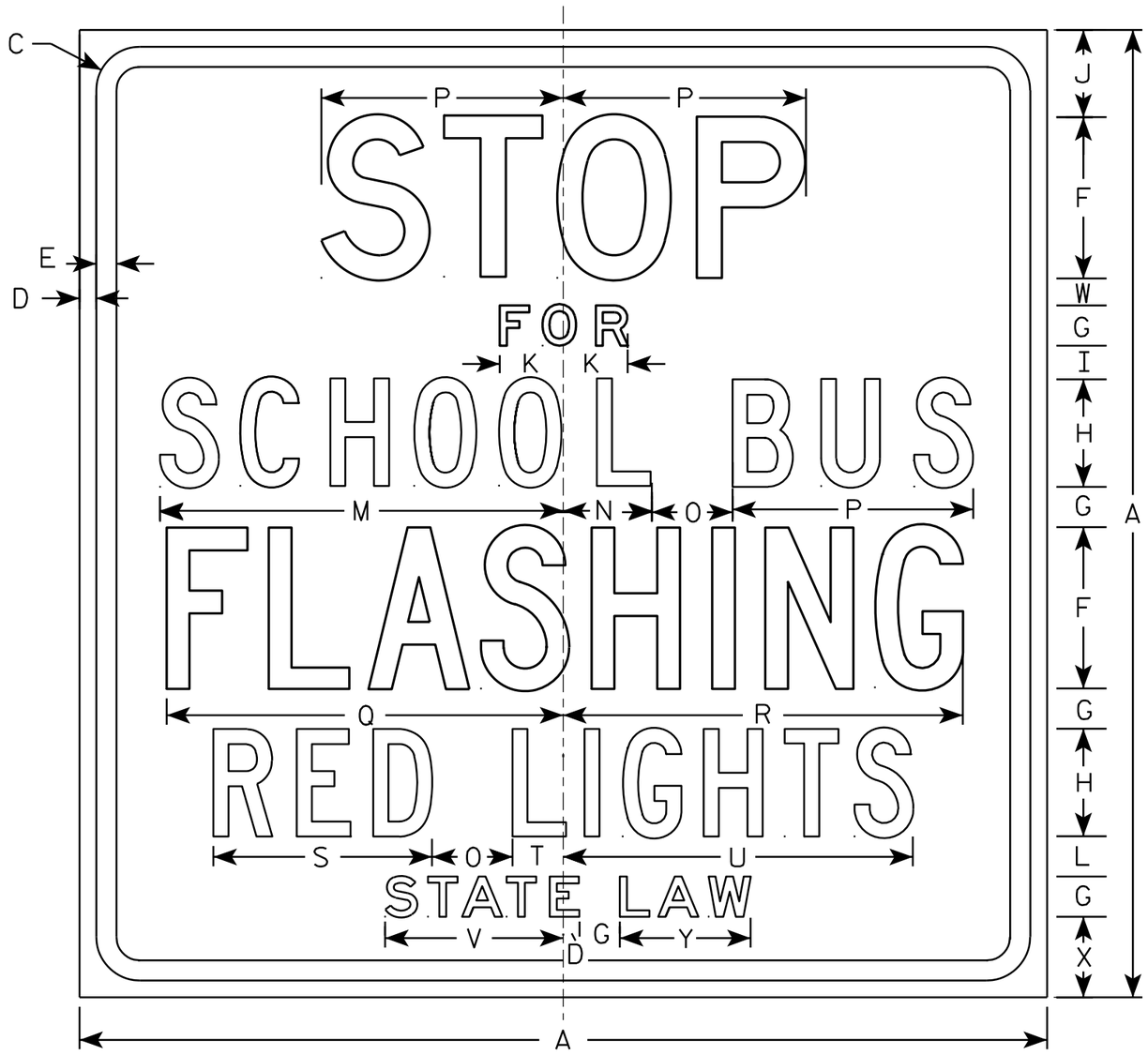
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 434	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.DGN PLOT DATE : 01-APR-2011 14:25 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.952219:1.000000

WISDOT/CADDS SHEET 42



R59-51

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D
   Lines 2 & 6 are Series E
   Line 3, 4 & 5 are Series C

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	36		1 5/8	5/8	3/4	6	1 1/2	4	1 1/4	3 1/4	2 3/8	1 1/2	15	3 1/4	3	9	14 3/4	14 7/8	8 1/8	1 7/8	13	6 5/8	1	3	4 7/8		9.0
2M	36		1 5/8	5/8	3/4	6	1 1/2	4	1 1/4	3 1/4	2 3/8	1 1/2	15	3 1/4	3	9	14 3/4	14 7/8	8 1/8	1 7/8	13	6 5/8	1	3	4 7/8		9.0
3	48		2 1/4	3/4	1	8	2	6	1 1/4	4 3/4	3 1/4	1 1/2	20 1/4	5	3 5/8	12	19 1/2	20	11 5/8	3 3/4	19	9 1/2	1	3 1/2	6 3/4		16.0
4	48		2 1/4	3/4	1	8	2	6	1 1/4	4 3/4	3 1/4	1 1/2	20 1/4	5	3 5/8	12	19 1/2	20	11 5/8	3 3/4	19	9 1/2	1	3 1/2	6 3/4		16.0
5																											

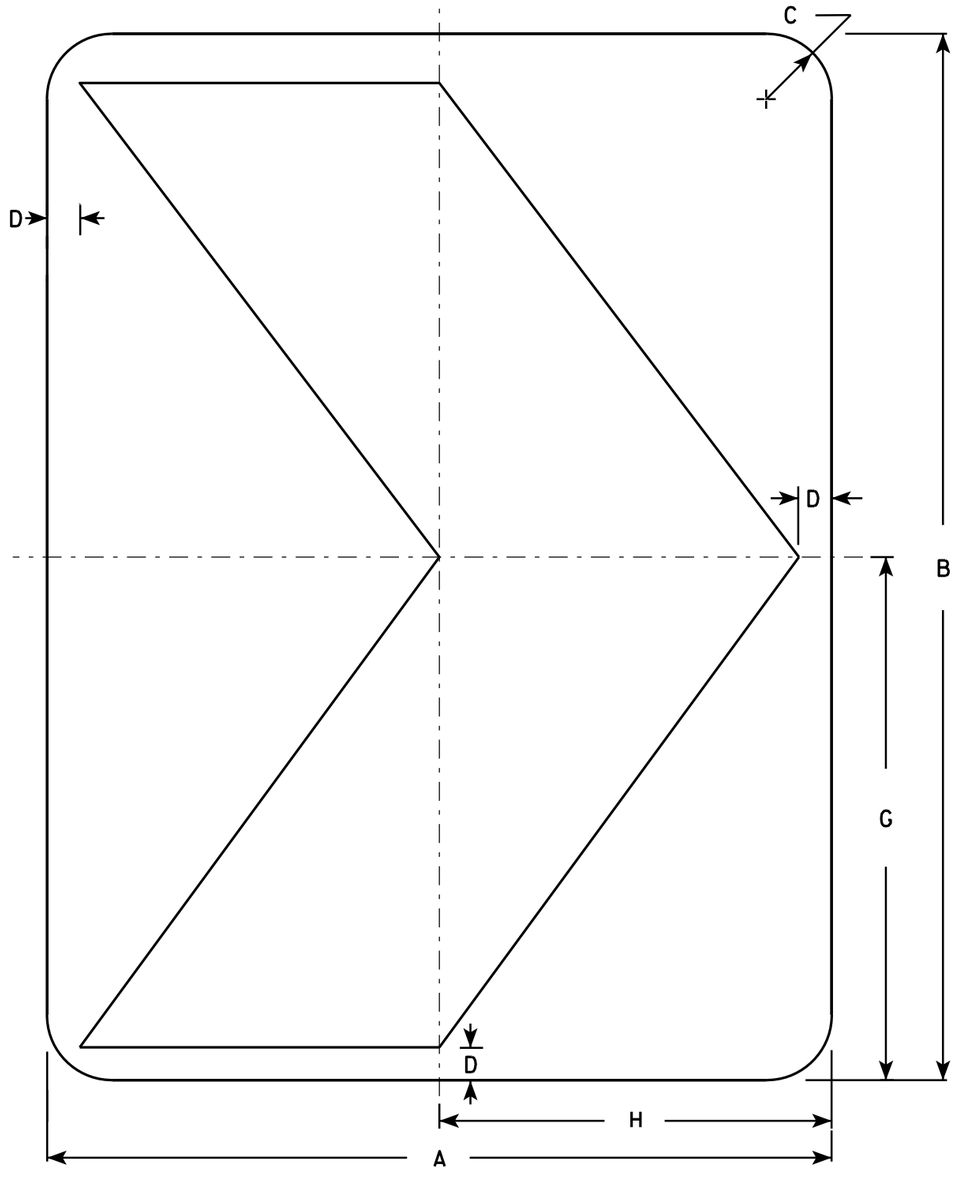
STANDARD SIGN
R59-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/30/11 PLATE NO. R59-51.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 435 | E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

W1-8

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 ½	½			9	6																			1.5
2S	18	24	1 ½	¾			12	9																			3.0
2M	18	24	1 ½	¾			12	9																			3.0
3	24	30	1 ½	1			15	12																			5.0
4	30	36	1 ⅞	1 ¼			18	15																			7.5
5	36	48	2 ¼	1 ½			24	18																			12.0

STANDARD SIGN
W1-8

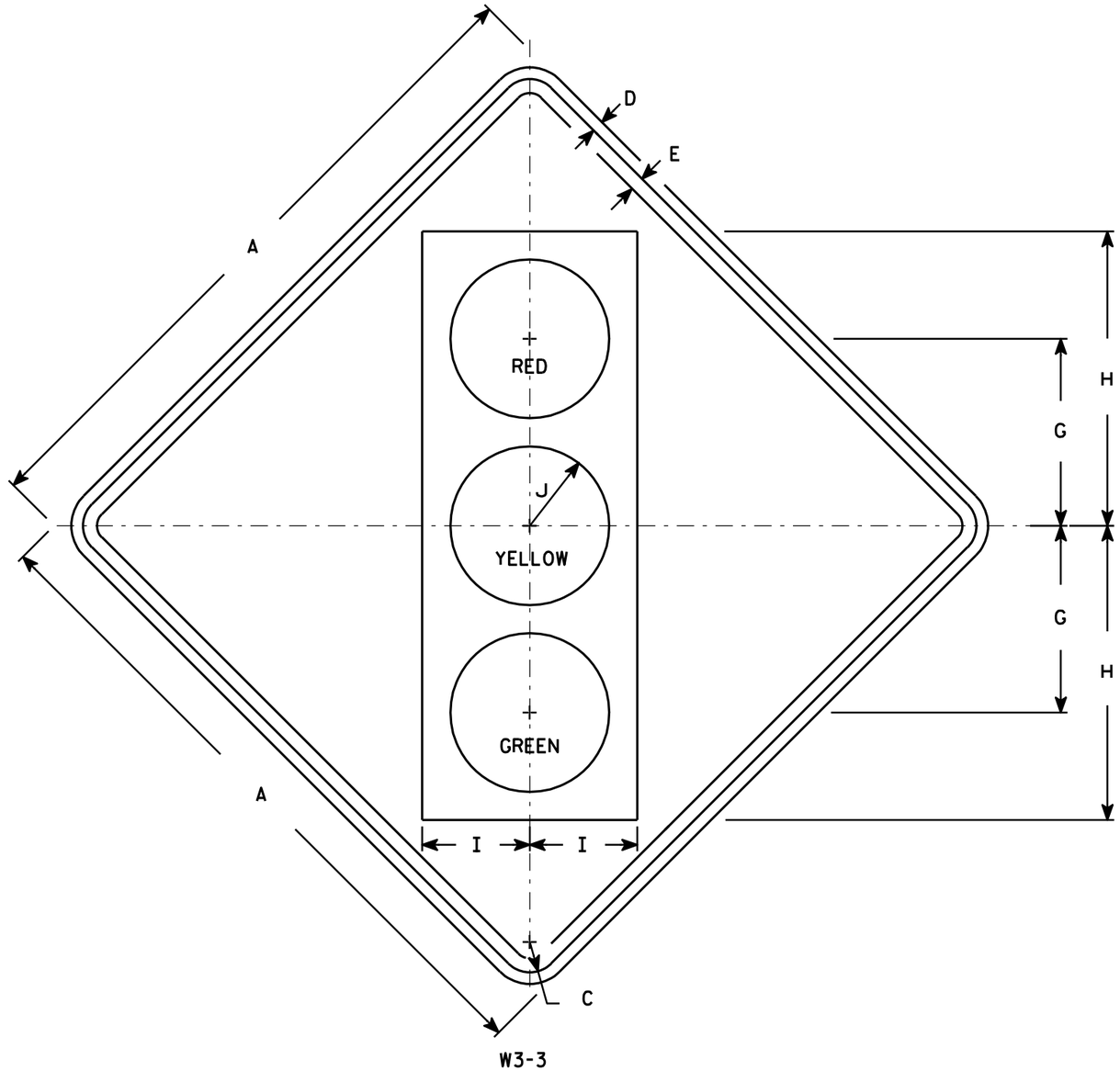
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-8.6

PROJECT NO:

SHEET NO: 436 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

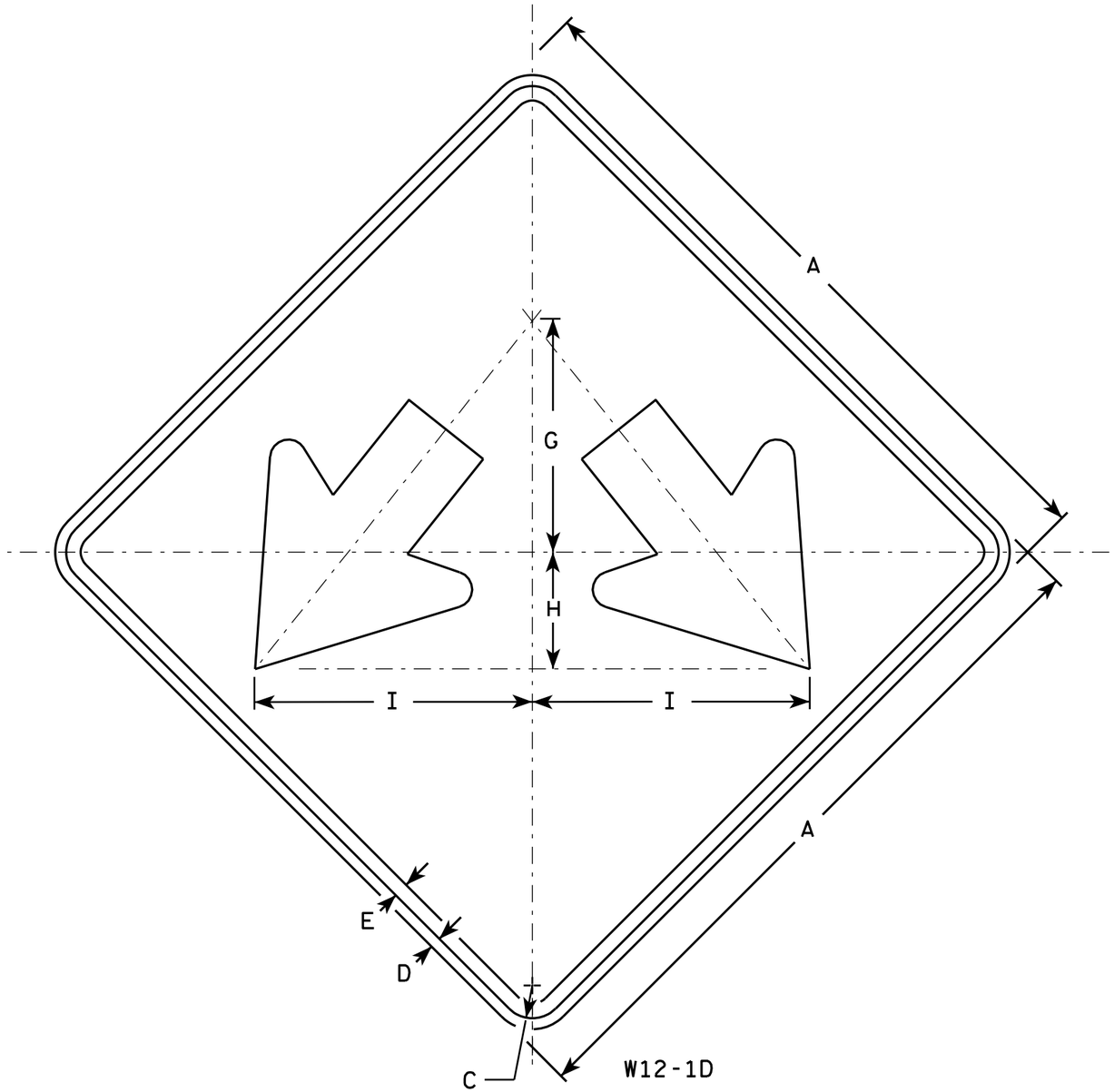
STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

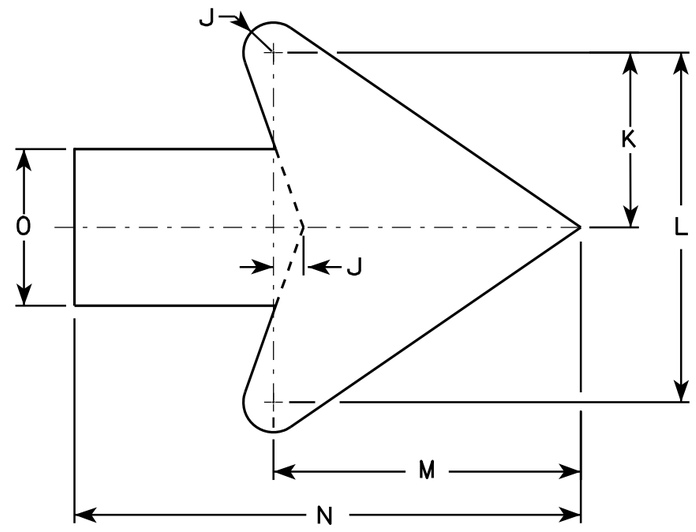
DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 437 | 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

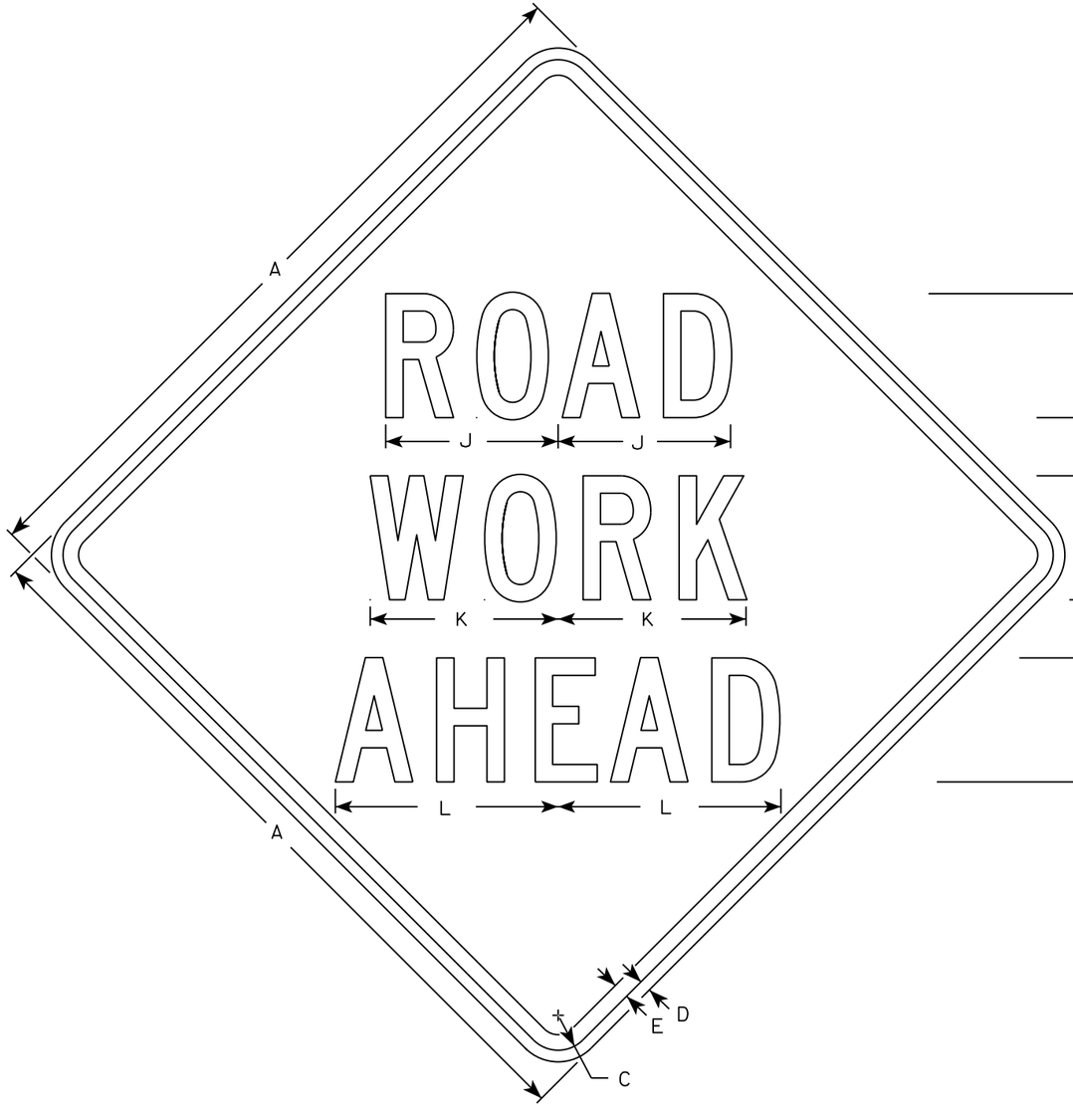
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

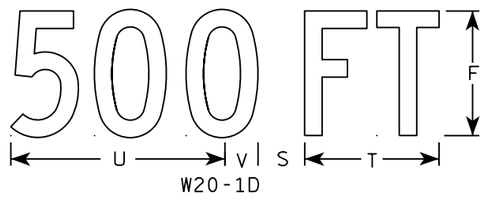
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

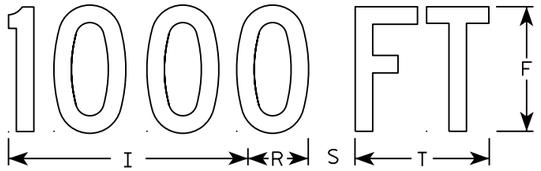
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 438	E



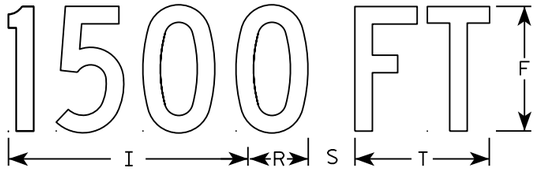
W20-1A



W20-1D

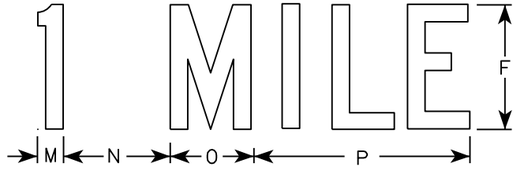


W20-1C

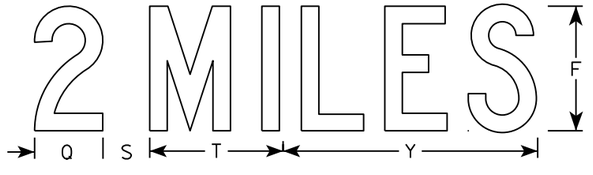


W20-1B

W20-1G



W20-1F



W20-1E

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

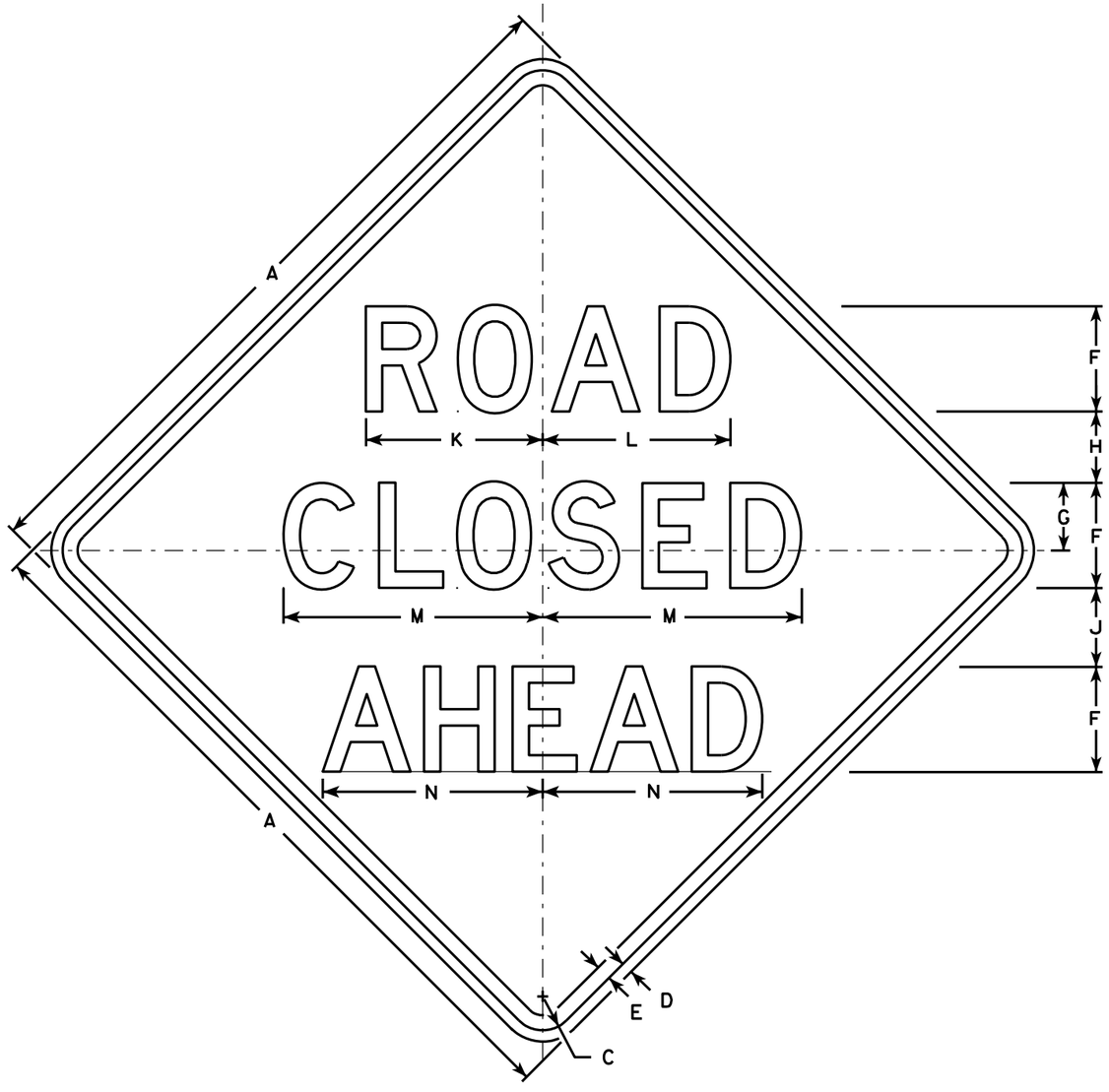
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

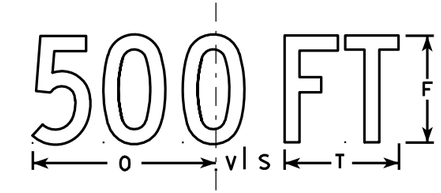
PROJECT NO:

SHEET NO: E

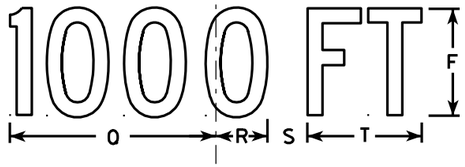
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



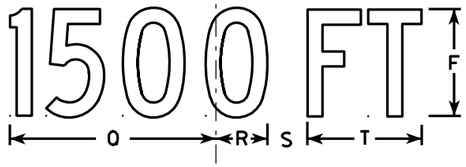
W20-3A



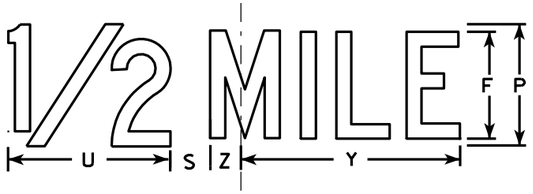
W20-3D



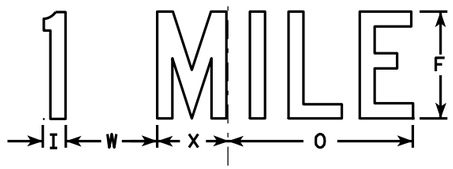
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

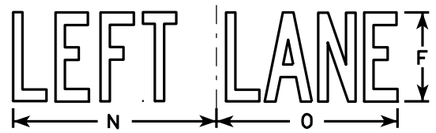
APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 440 | E

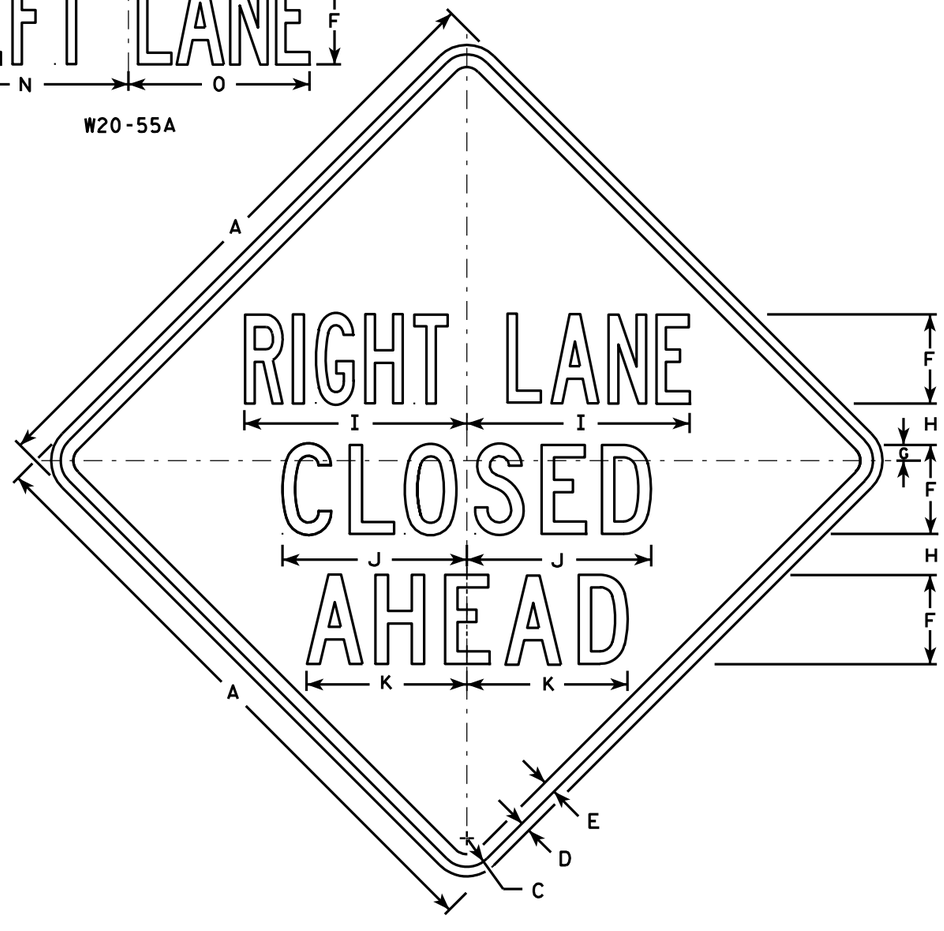
7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42

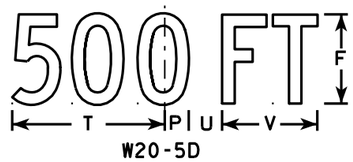
W20-56A



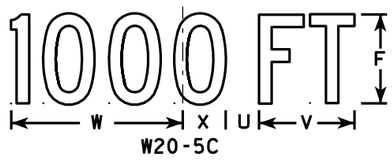
W20-55A



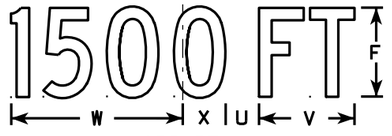
W20-5A



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

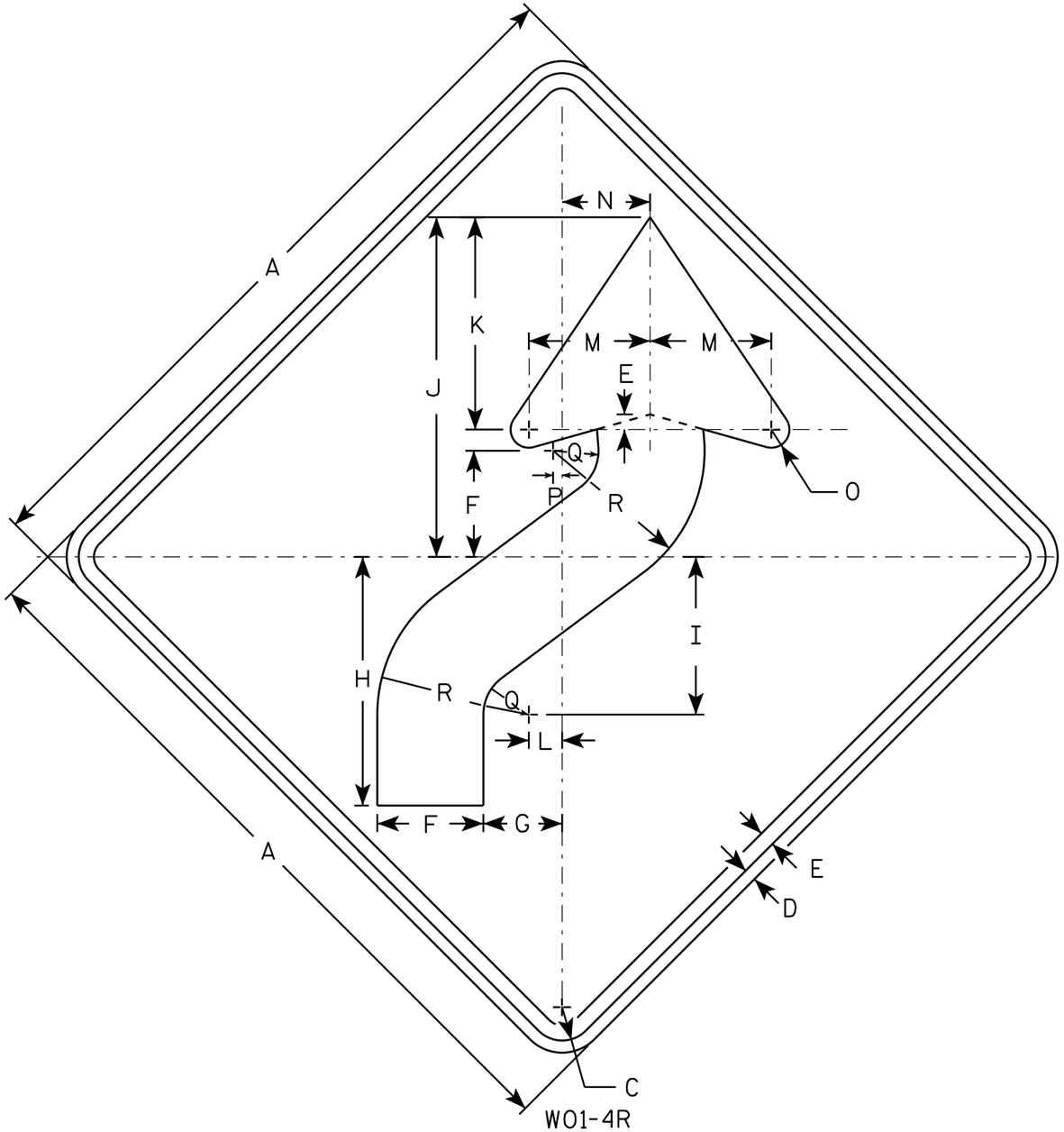
STANDARD SIGN
W20-5A, B, C, D, F & G

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: 441	E



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

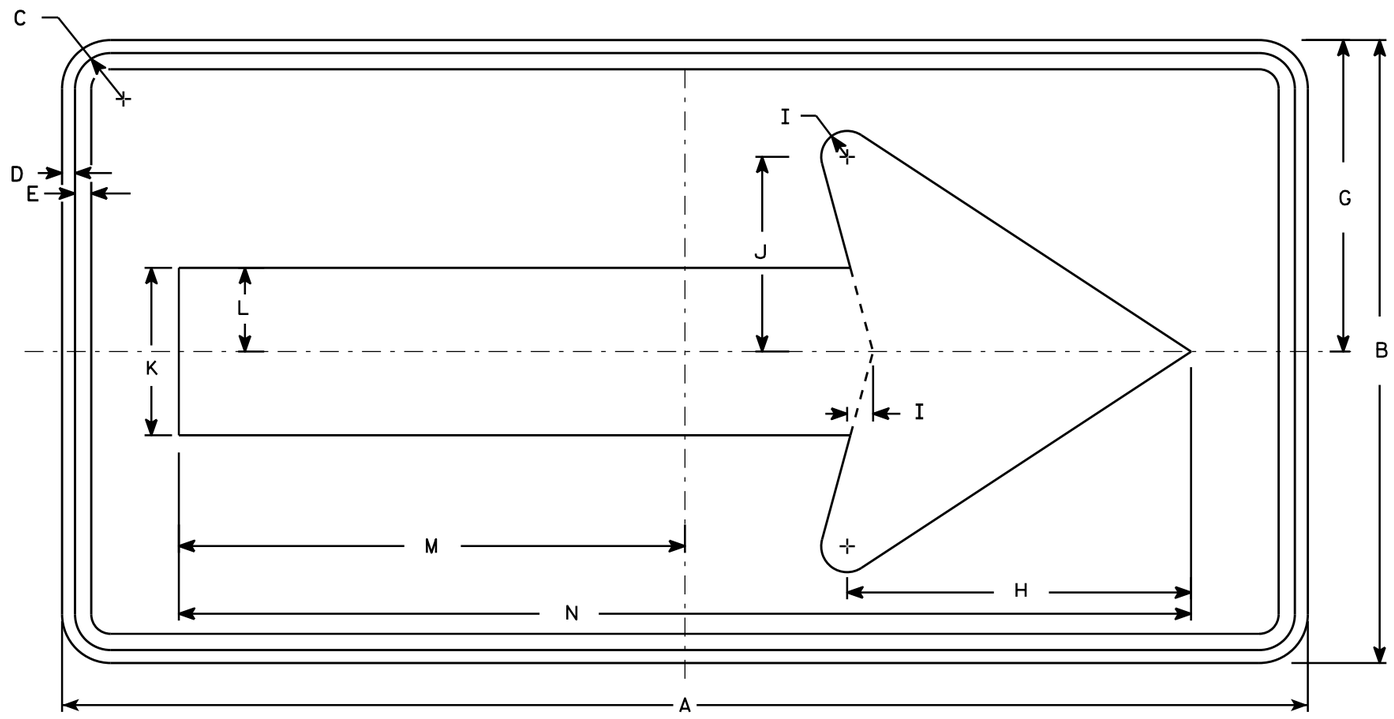
WISCONSIN DEPT OF TRANSPORTATION

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

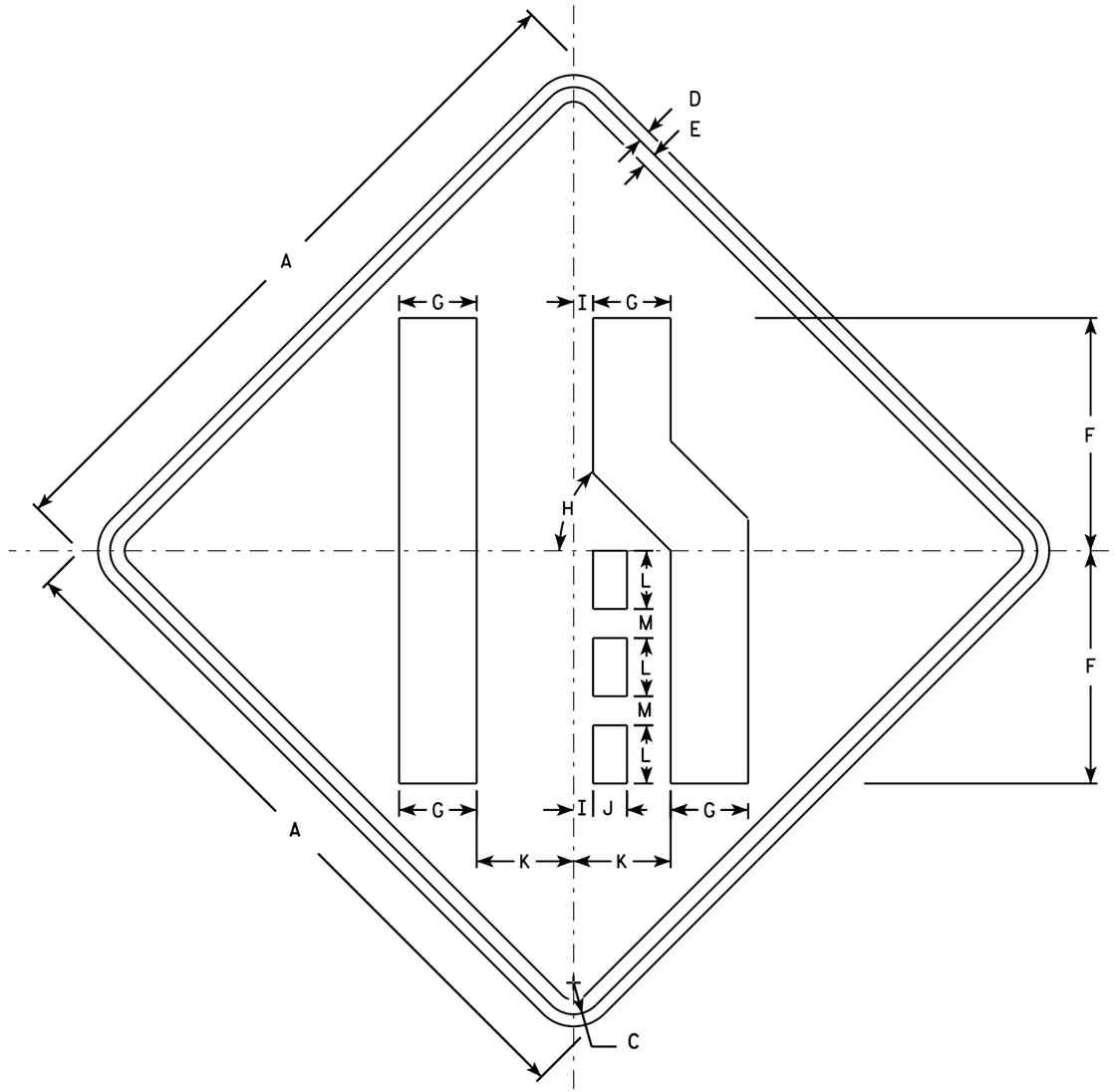
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE 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



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

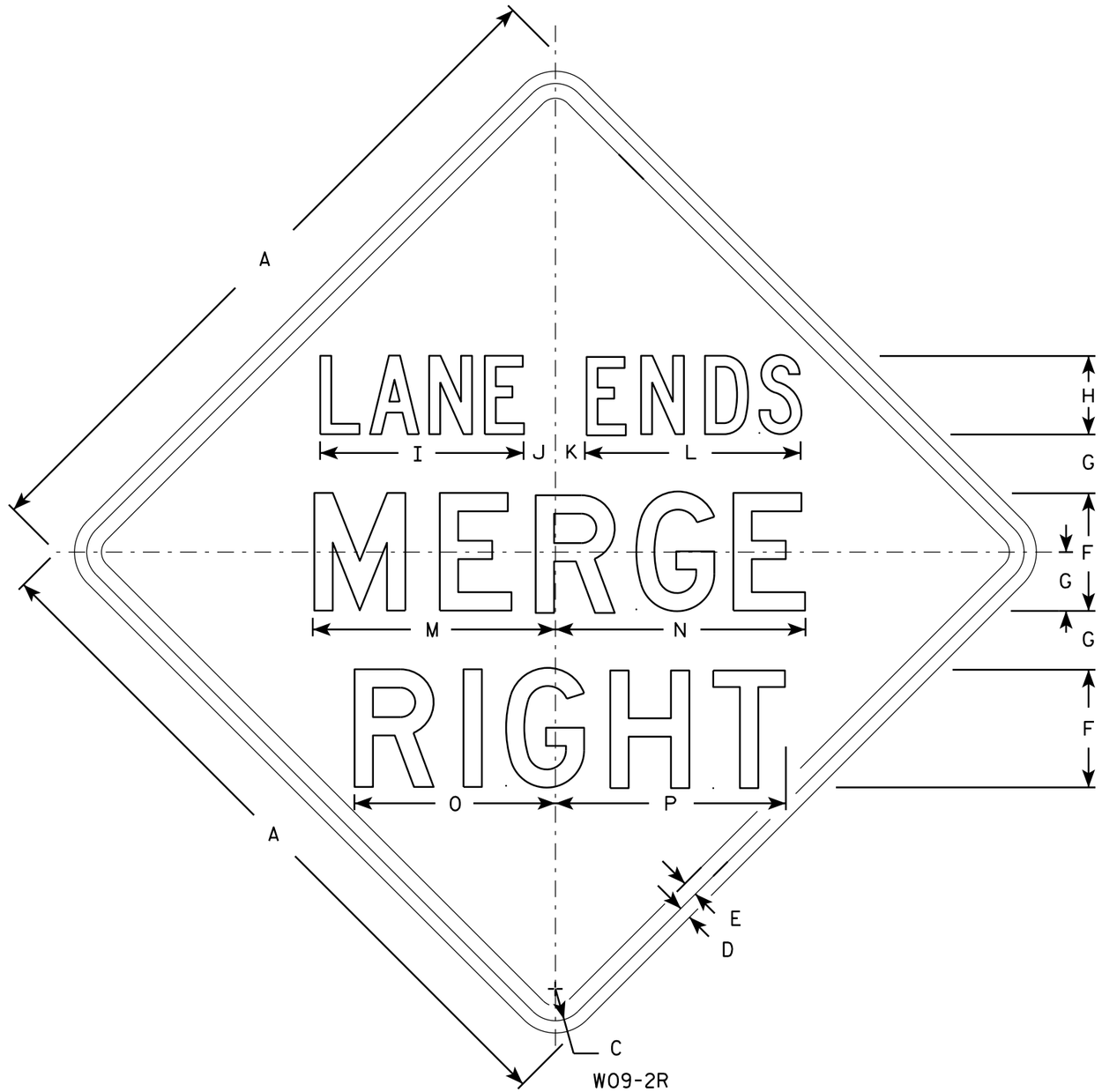
STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 444 W04-2.1

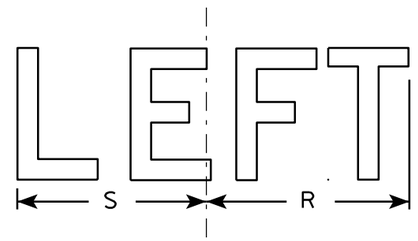
PROJECT NO: | SHEET NO: E



W09-2R

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. 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 C, lines 2 & 3 are Series D.
6. W09-2L is the same as W09-2R except the word LEFT replaces RIGHT.



W09-2L

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	36		1 5/8	5/8	3/4	6	3	4	10 3/8	1 5/8	1 1/2	11	12 3/8	12 3/4	10 1/4	11 3/4		9 1/8	8 1/2								9.0
2S	48		2 1/4	3/4	1	8	4	6	14 1/2	2	3 1/4	13 3/4	16 3/8	17 1/8	13 3/4	15 3/4		12 1/4	11 1/4								16.0
2M	48		2 1/4	3/4	1	8	4	6	14 1/2	2	3 1/4	13 3/4	16 3/8	17 1/8	13 3/4	15 3/4		12 1/4	11 1/4								16.0
3	48		2 1/4	3/4	1	8	4	6	14 1/2	2	3 1/4	13 3/4	16 3/8	17 1/8	13 3/4	15 3/4		12 1/4	11 1/4								16.0
4	48		2 1/4	3/4	1	8	4	6	14 1/2	2	3 1/4	13 3/4	16 3/8	17 1/8	13 3/4	15 3/4		12 1/4	11 1/4								16.0
5	48		2 1/4	3/4	1	8	4	6	14 1/2	2	3 1/4	13 3/4	16 3/8	17 1/8	13 3/4	15 3/4		12 1/4	11 1/4								16.0

STANDARD SIGN
W09-2

WISCONSIN DEPT OF TRANSPORTATION

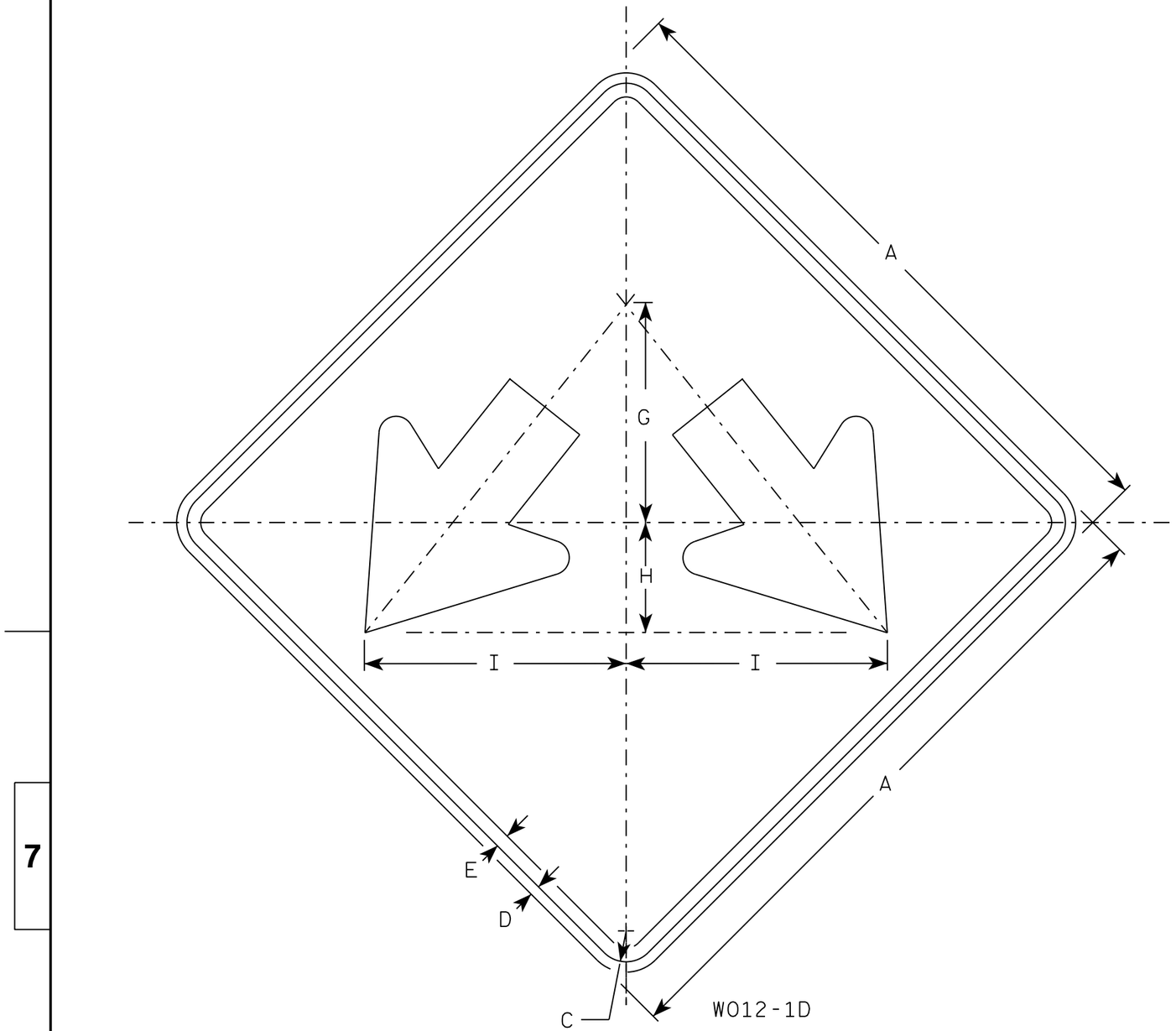
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/02/13 PLATE NO W09-2.1

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W092.DGN PLOT DATE : 02-DEC-2013 15:18 PLOT BY : mscsja

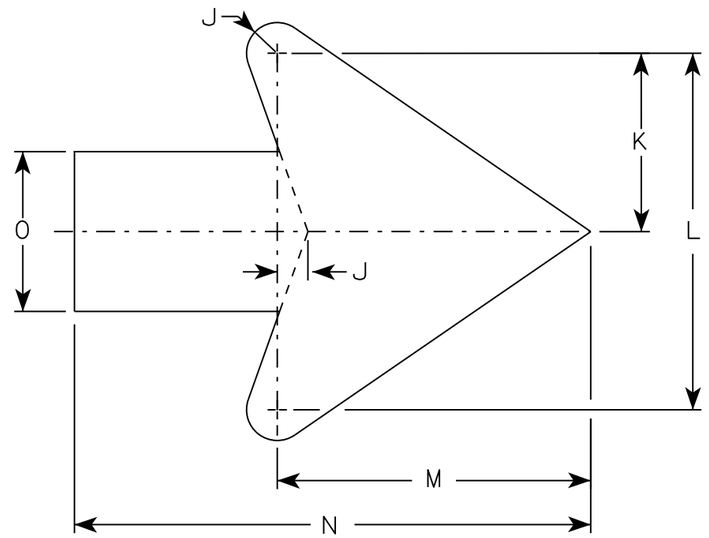
WISDOT/CADDS SHEET 42



W012-1D

NOTES

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



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0

STANDARD SIGN
W012-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/28/16 PLATE NO W012-1D.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W0121D.DGN PLOT DATE : 11-AUG-2016 11:28 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.621375:1.000000

STH 31 STATION		Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate Note 8
				Cut	Salvaged Unusable Pavement Material	Fill	EBS	Cut Note 1	Salvaged Unusable Pavement Material Note 2	Fill Note 3	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded EBS Backfill 1.30 Note 5	Reduced EBS In Fill 0.80 Note 7	
108+29	AH	10829	0	5	0	0	0	0	0	0	0	0	0	0	0	0
108+34	BK	10834	5	9	0	0	0	1	0	0	0	1	0	0	0	1
108+34	AH	10834	0	9	0	0	0	0	0	0	0	0	0	0	0	1
108+50		10850	16	9	0	0	0	5	0	0	0	5	0	0	0	7
109+00		10900	50	14	0	2	0	21	0	2	0	27	2	0	0	26
109+50		10950	50	15	0	1	0	27	0	3	0	53	5	0	0	49
109+95	BK	10995	45	71	0	0	0	72	0	1	0	125	7	0	0	120
109+95	AH	10995	0	71	0	0	0	0	0	0	0	0	0	0	0	120
110+00		11000	5	71	0	0	0	13	0	0	0	13	0	0	0	133
110+13	BK	11013	13	73	0	0	0	35	0	0	0	48	0	0	0	168
110+13	AH	11013	0	73	0	0	0	0	0	0	0	0	0	0	0	168
110+50		11050	37	51	0	0	0	85	0	0	0	98	0	0	0	253
111+00		11100	50	54	0	0	0	97	0	0	0	195	0	0	0	350
111+49	BK	11149	49	54	0	0	0	98	0	0	0	293	0	0	0	448
111+49	AH	11149	0	54	0	0	0	0	0	0	0	0	0	0	0	448
111+50		11150	1	54	0	0	0	2	0	0	0	197	0	0	0	450
112+00		11200	50	37	0	0	0	84	0	0	0	281	0	0	0	533
112+50		11250	50	25	0	0	0	58	0	0	0	339	0	0	0	591
113+00		11300	50	25	0	0	0	47	0	0	0	385	0	0	0	637
113+50		11350	50	34	0	0	0	54	0	0	0	440	1	0	0	691
114+00		11400	50	26	0	0	0	55	0	0	0	495	1	0	0	746
114+50		11450	50	39	0	0	0	60	0	0	0	555	1	0	0	806
114+67	BK	11467	17	39	0	0	0	24	0	0	0	580	1	0	0	831
114+67	AH	11467	0	39	0	0	0	0	0	0	0	0	0	0	0	831
115+00		11500	33	35	0	0	0	45	0	0	0	601	1	0	0	877
115+50		11550	50	26	0	0	0	57	0	0	0	658	1	0	0	934
115+85	BK	11585	35	26	0	0	0	34	0	0	0	691	1	0	0	968
115+85	AH	11585	0	26	0	0	0	0	0	0	0	0	0	0	0	968
116+00		11600	15	49	0	0	0	21	0	0	0	21	0	0	0	989
116+50		11650	50	49	0	6	0	90	0	6	0	111	7	0	0	1072
117+00		11700	50	48	0	3	0	89	0	8	0	200	18	0	0	1151
117+50		11750	50	46	0	1	0	87	0	4	0	287	23	0	0	1232
118+00		11800	50	60	0	0	0	99	0	1	0	386	24	0	0	1329
118+50		11850	50	48	0	0	0	100	0	0	0	486	24	0	0	1429
119+00		11900	50	21	0	9	0	64	0	8	0	549	35	0	0	1482
119+12	BK	11912	12	21	0	4	0	9	0	3	0	559	38	0	0	1488

STH 31 STATION		Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
				Cut	Salvaged Unusable Pavement Material	Fill	EBS	Cut	Salvaged Unusable Pavement Material	Fill	EBS	Cut 1.00	Expanded Fill 1.25	Expanded EBS Backfill 1.30	Reduced EBS In Fill 0.80	Mass Ordinate
								Note 1	Note 2	Note 3		Note 1		Note 5	Note 7	Note 8
119+12	AH	11912	0	21	0	5	0	0	0	0	0	0	0	0	0	1488
119+50		11950	38	13	0	5	0	24	0	6	0	573	43	0	0	1507
119+58	BK	11958	8	0	0	5	0	2	0	1	0	575	44	0	0	1507
122+13	AH	12213	0	7	0	0	0	0	0	0	0	0	0	0	0	0
122+50		12250	37	17	0	0	0	16	0	0	0	16	0	0	0	16
123+00		12300	50	32	0	0	0	45	0	0	0	62	0	0	0	61
123+50		12350	50	37	0	0	0	64	0	0	0	126	0	0	0	126
124+00		12400	50	33	0	0	0	65	0	0	0	190	0	0	0	190
124+50		12450	50	40	0	0	0	68	0	0	0	258	0	0	0	258
124+67	BK	12467	17	33	0	0	0	23	0	0	0	281	0	0	0	281
126+33	AH	12633	0	7	0	0	0	0	0	0	0	0	0	0	0	0
126+50		12650	17	17	0	0	0	8	0	0	0	8	0	0	0	8
127+00		12700	50	32	0	0	0	45	0	0	0	53	0	0	0	53
127+50		12750	50	37	0	0	0	64	0	0	0	117	0	0	0	117
128+00		12800	50	33	0	0	0	65	0	0	0	182	0	0	0	182
128+50		12850	50	40	0	0	0	68	0	0	0	249	1	0	0	249
129+00		12900	50	33	0	3	0	68	0	3	0	317	4	0	0	313
129+50		12950	50	7	0	0	0	37	0	2	0	354	7	0	0	347
130+00		13000	50	17	0	0	0	22	0	0	0	376	7	0	0	369
130+50		13050	50	32	0	0	0	45	0	0	0	422	7	0	0	414
131+00		13100	50	37	0	0	0	64	0	0	0	486	7	0	0	478
131+50		13150	50	33	0	0	0	65	0	0	0	550	7	0	0	543
132+00		13200	50	40	0	0	0	68	0	0	0	618	7	0	0	611
132+27	BK	13227	27	33	0	0	0	37	0	0	0	655	7	0	0	647
134+08	AH	13408	0	14	0	1	0	0	0	0	0	0	0	0	0	0
134+50		13450	42	33	0	0	0	37	0	1	0	37	1	0	0	36
135+00		13500	50	32	0	0	0	61	0	0	0	97	1	0	0	96
135+50		13550	50	15	0	2	0	44	0	2	0	141	4	0	0	138
136+00		13600	50	19	0	0	0	31	0	2	0	172	6	0	0	166
136+50		13650	50	23	0	0	0	39	0	0	0	211	6	0	0	205
137+00		13700	50	29	0	0	0	48	0	0	0	259	6	0	0	253
137+50		13750	50	26	0	0	0	51	0	0	0	310	6	0	0	304
137+96	BK	13796	46	15	0	0	0	35	0	0	0	345	6	0	0	339
142+92	AH	14292	0	17	0	0	0	0	0	0	0	0	0	0	0	0
143+00		14300	8	17	0	0	0	5	0	0	0	5	0	0	0	5
143+50		14350	50	19	0	0	0	33	0	0	0	38	0	0	0	38
144+00		14400	50	21	0	0	0	37	0	0	0	75	0	0	0	75
144+41	BK	14441	41	19	0	0	0	30	0	0	0	105	0	0	0	105

STH 31 STATION		Real Station	Distance	AREA (SF) Cut	Salvaged Unusable Pavement Material	Fill	EBS	Incremental Vol (CY) (Unadjusted) Cut	Salvaged Unusable Pavement Material	Fill	EBS	Cumulative Vol (CY) Cut	Expanded Fill	Expanded EBS Backfill	Reduced EBS In Fill	Mass Ordinate
								Note 1	Note 2	Note 3		1.00 Note 1	1.25	1.30 Note 5	0.80 Note 7	Note 8
146+26	AH	14626	0	34	0	0	0	0	0	0	0	0	0	0	0	0
146+50		14650	24	37	0	0	0	32	0	0	0	32	0	0	0	32
147+00		14700	50	45	0	0	0	76	0	0	0	108	0	0	0	108
147+50		14750	50	51	0	0	0	89	0	0	0	197	0	0	0	197
148+00		14800	50	42	0	0	0	85	0	0	0	282	0	0	0	282
148+50		14850	50	22	0	0	0	59	0	0	0	341	0	0	0	341
148+73	BK	14873	23	14	0	0	0	15	0	0	0	357	0	0	0	357
											0					
151+38	AH	15138	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151+50		15150	12	16	0	0	0	3	0	0	0	3	0	0	0	3
152+00		15200	50	12	0	8	0	25	0	8	0	29	10	0	0	19
152+50		15250	50	15	0	0	0	25	0	8	0	54	19	0	0	34
152+63	BK	15263	13	21	0	0	0	9	0	0	0	62	19	0	0	43
154+71	AH	15471	0	13	0	0	0	0	0	0	0	0	0	0	0	0
155+00		15500	29	18	0	0	0	17	0	0	0	17	0	0	0	17
155+50		15550	50	29	0	0	0	44	0	0	0	61	0	0	0	61
156+00		15600	50	30	0	0	0	55	0	0	0	116	0	0	0	116
156+50		15650	50	39	0	0	0	63	0	0	0	179	0	0	0	179
157+00		15700	50	34	0	0	0	68	0	0	0	247	1	0	0	246
157+12	BK	15712	12	21	0	0	0	12	0	0	0	259	1	0	0	258
158+21	AH	15821	0	20	0	0	0	0	0	0	0	0	0	0	0	0
158+50		15850	29	19	0	2	0	21	0	1	0	21	2	0	0	19
159+00		15900	50	15	0	6	0	31	0	7	0	51	11	0	0	41
159+50		15950	50	12	0	8	0	25	0	12	0	76	26	0	0	50
160+00		16000	50	11	0	6	0	21	0	13	0	98	42	0	0	55
160+50		16050	50	7	0	0	0	16	0	6	0	114	50	0	0	64
160+56	BK	16056	6	7	0	0	0	2	0	0	0	116	50	0	0	66
162+58	AH	16258	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163+00		16300	42	24	0	0	0	18	0	0	0	18	0	0	0	18
163+50		16350	50	35	0	0	0	54	0	0	0	73	0	0	0	73
164+00		16400	50	25	0	0	0	56	0	0	0	128	0	0	0	128
164+38	BK	16438	38	26	0	0	0	36	0	0	0	164	0	0	0	164
166+53	AH	16653	0	19	0	0	0	0	0	0	0	0	0	0	0	0
167+00		16700	47	32	0	0	0	44	0	0	0	44	0	0	0	44
167+50		16750	50	42	0	0	0	69	0	0	0	113	0	0	0	113
168+00		16800	50	39	0	0	0	76	0	0	0	189	0	0	0	189
168+50		16850	50	37	0	0	0	70	0	0	0	259	0	0	0	259
169+00		16900	50	42	0	0	0	73	0	0	0	332	0	0	0	332
169+50		16950	50	46	0	0	0	81	0	0	0	413	0	0	0	413
170+00		17000	50	12	0	7	0	53	0	6	0	466	8	0	0	458
170+48	BK	17048	48	29	0	5	0	36	0	10	0	502	21	0	0	481

STH 31 STATION		Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate Note 8
				Cut	Salvaged Unusable Pavement Material	Fill	EBS	Cut Note 1	Salvaged Unusable Pavement Material Note 2	Fill Note 3	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded EBS Backfill 1.30 Note 5	Reduced EBS In Fill 0.80 Note 7	
170+48	AH	17048	0	29	0	5	0	0	0	0	0	0	0	0	0	481
170+50		17050	2	29	0	5	0	2	0	0	0	468	9	0	0	483
171+00		17100	50	50	0	0	0	73	0	5	0	575	27	0	0	540
171+50		17150	50	101	0	0	0	140	0	0	0	715	27	0	0	637
172+00		17200	50	127	0	0	0	211	0	0	0	926	27	0	0	761
172+50		17250	50	113	0	0	0	222	0	0	0	1148	27	0	0	917
173+00		17300	50	130	0	1	0	226	0	1	0	1374	28	0	0	1108
173+50		17350	50	116	0	0	0	229	0	1	0	1603	30	0	0	1324
173+71	BK	17371	21	116	0	0	0	90	0	0	0	1693	30	0	0	1418
173+71	AH	17371	0	116	0	0	0	0	0	0	0	0	0	0	0	1418
174+00		17400	29	82	0	0	0	106	0	0	0	1709	30	0	0	1534
174+50		17450	50	113	0	5	0	180	0	5	0	1889	36	0	0	1707
175+00		17500	50	76	0	0	0	175	0	5	0	2064	43	0	0	1876
175+08	BK	17508	8	76	0	0	0	23	0	0	0	2087	43	0	0	1898
175+08	AH	17508	0	76	0	0	0	0	0	0	0	0	0	0	0	1898
175+38	BK	17538	30	76	0	0	0	84	0	0	0	2148	43	0	0	1983
176+15	AH	17615	0	111	0	0	0	0	0	0	0	0	0	0	0	0
176+50		17650	35	150	0	0	0	170	0	0	0	170	0	0	0	2152
177+00		17700	50	105	0	0	0	237	0	0	0	406	0	0	0	2389
177+41	BK	17741	41	80	0	0	0	141	0	0	0	547	0	0	0	2530
177+41	AH	17741	0	80	0	0	0	0	0	0	0	0	0	0	0	2530
177+50		17750	9	80	0	0	0	27	0	0	0	27	0	0	0	2556
178+00		17800	50	77	0	0	0	146	0	0	0	173	0	0	0	2702
178+50		17850	50	57	0	0	0	125	0	0	0	297	0	0	0	2827
179+00		17900	50	51	0	0	0	100	0	0	0	397	0	0	0	2927
179+50		17950	50	60	0	0	0	102	0	0	0	499	0	0	0	3029
180+00		18000	50	56	0	0	0	107	0	0	0	607	0	0	0	3136
180+50		18050	50	34	0	0	0	83	0	0	0	690	0	0	0	3220
180+89	BK	18089	39	8	0	0	0	30	0	0	0	720	0	0	0	3250
180+89	AH	18089	0	8	0	0	0	0	0	0	0	0	0	0	0	3250
181+00		18100	11	0	0	0	0	2	0	0	0	2	0	0	0	3251
181+21	BK	18121	21	17	0	0	0	6	0	0	0	8	0	0	0	3258
185+13	AH	18513	0	17	0	7	0	0	0	0	0	0	0	0	0	0
185+50		18550	37	12	0	5	0	19	0	9	0	19	11	0	0	9
186+00		18600	50	12	0	0	0	22	0	5	0	41	17	0	0	24
186+50		18650	50	12	0	0	0	22	0	0	0	63	17	0	0	47
186+78	BK	18678	28	14	0	0	0	14	0	0	0	77	17	0	0	60

STH 31 STATION		Real Station	Distance	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				Mass Ordinate Note 8
				Cut	Salvaged Unusable Pavement Material	Fill	EBS	Cut Note 1	Salvaged Unusable Pavement Material Note 2	Fill Note 3	EBS	Cut 1.00 Note 1	Expanded Fill 1.25	Expanded EBS Backfill 1.30 Note 5	Reduced EBS In Fill 0.80 Note 7	
187+58	AH	18758	0	10	0	0	0	0	0	0	0	0	0	0	0	60
188+00		18800	42	22	0	0	0	25	0	0	0	25	0	0	0	85
188+50		18850	50	37	0	0	0	55	0	0	0	80	0	0	0	140
189+00		18900	50	37	0	0	0	68	0	0	0	148	0	0	0	208
189+50		18950	50	35	0	0	0	67	0	0	0	215	0	0	0	275
190+00		19000	50	32	0	0	0	62	0	0	0	277	0	0	0	338
190+50		19050	50	39	0	0	0	65	0	0	0	343	0	0	0	403
190+86	BK	19086	36	1	0	0	0	26	0	0	0	369	0	0	0	429
191+37	AH	19137	0	36	0	0	0	0	0	0	0	0	0	0	0	0
191+50		19150	13	29	0	1	0	16	0	0	0	16	0	0	0	15
192+00		19200	50	25	0	1	0	50	0	2	0	66	3	0	0	62
192+50		19250	50	25	0	0	0	46	0	1	0	112	5	0	0	107
193+00		19300	50	28	0	1	0	49	0	1	0	160	6	0	0	154
193+50		19350	50	23	0	2	0	47	0	3	0	207	10	0	0	197
194+00		19400	50	14	0	2	0	34	0	4	0	241	15	0	0	225
194+39	BK	19439	39	0	0	0	0	10	0	2	0	251	17	0	0	233
197+62	AH	19762	0	8	0	0	0	0	0	0	0	0	0	0	0	0
198+00		19800	38	9	0	0	0	12	0	0	0	12	0	0	0	12
198+50		19850	50	36	0	0	0	42	0	0	0	55	0	0	0	55
199+00		19900	50	36	0	0	0	67	0	0	0	122	0	0	0	122
199+45	BK	19945	45	9	0	5	0	38	0	4	0	159	5	0	0	155
				COLUMN TOTALS				8297	0	178	0					

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PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	EARTHWORK	SHEET 451	E

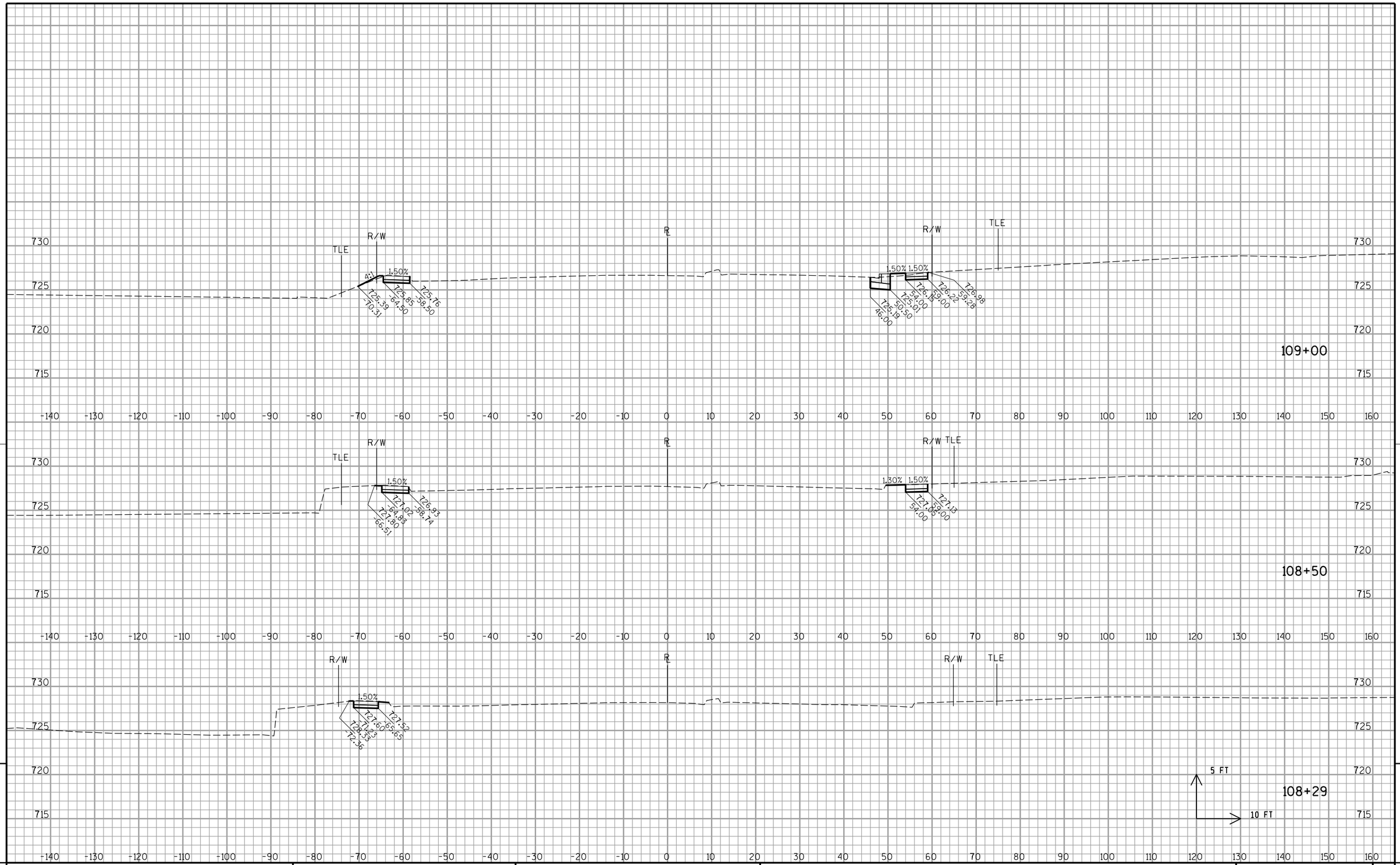
FILE NAME :

PLOT DATE : 8/31/2016 PLOT BY : PLOT NAME : EW5 PLOT SCALE :

WISDOT/CADDS SHEET 49

STH 20 STATION		Real Station	Distance	AREA (SF) Cut	Salvaged Unusable Pavement Material	Fill	EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged Unusable Pavement Material Note 2	Fill Note 3	EBS	Cumulative Vol (CY) Cut 1.00 Note 1	EXPANDED Expanded 1.25	Expanded EBS Backfill 1.30 Note 5	Reduced EBS In Fill 0.80 Note 7	Mass Ordinate Note 8
388+68	AH	38868	0	24	0	0	0	0	0	0	0					
388+94	BK	38894	26	46	0	0	0	34	0	0	0	34	0	0	0	34
388+94	AH	38894	0	46	0	0	0	0	0	0	0	0	0	0	0	34
389+00		38900	6	46	0	0	0	10	0	0	0	10	0	0	0	44
389+50		38950	56	63	0	0	0	113	0	0	0	147	0	0	0	158
390+00		39000	50	60	0	0	0	114	0	0	0	261	0	0	0	271
390+50		39050	50	50	0	0	0	101	0	0	0	362	0	0	0	373
391+00		39100	50	56	0	0	0	98	0	0	0	461	0	0	0	471
391+18	BK	39118	18	56	0	0	0	37	0	0	0	498	0	0	0	509
391+18	AH	39118	0	56	0	0	0	0	0	0	0	0	0	0	0	509
391+50		39150	32	41	0	0	0	57	0	0	0	57	0	0	0	566
392+00		39200	50	39	0	0	0	74	0	0	0	131	0	0	0	640
392+50		39250	50	35	0	0	0	69	0	0	0	200	0	0	0	709
393+00		39300	50	34	0	0	0	64	0	0	0	264	0	0	0	773
393+50		39350	50	34	0	0	0	63	0	0	0	327	0	0	0	835
394+00		39400	50	37	0	0	0	66	0	0	0	392	0	0	0	901
394+34	BK	39434	34	38	0	0	0	47	0	0	0	440	0	0	0	948
395+13	AH	39513	0	34	0	0	0	0	0	0	0	0	0	0	0	0
395+50		39550	37	38	0	0	0	49	0	0	0	49	0	0	0	49
396+00		39600	50	38	0	0	0	70	0	0	0	119	0	0	0	119
396+50		39650	50	39	0	0	0	72	0	0	0	191	0	0	0	191
397+00		39700	50	42	0	0	0	75	0	0	0	267	0	0	0	267
397+50		39750	50	42	0	0	0	78	0	0	0	345	0	0	0	345
398+00		39800	50	35	0	0	0	71	0	0	0	416	0	0	0	416
398+50		39850	50	35	0	0	0	64	0	0	0	480	0	0	0	480
399+00		39900	50	37	0	0	0	66	0	0	0	547	0	0	0	547
399+50		39950	50	33	0	1	0	65	0	1	0	612	1	0	0	611
400+00		40000	50	12	0	2	0	42	0	3	0	654	5	0	0	650
400+50		40050	50	12	0	2	0	22	0	3	0	677	9	0	0	668
400+59	BK	40059	9	13	0	1	0	4	0	0	0	681	9	0	0	672
				COLUMN TOTALS				1629	0	7	0					

CTH C STATION		Real Station	Distance	AREA (SF) Cut	Salvaged Unusable Pavement Material	Fill	EBS	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged Unusable Pavement Material Note 2	Fill Note 3	EBS	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.25	Expanded EBS Backfill 1.30 Note 5	Reduced EBS In Fill 0.80 Note 7	Mass Ordinate Note 8
39650	AH	39650	0	7	0	0	0									
39700		39700	50	23	0	0	0	28	0	0	0	28	0	0	0	28
39750		39750	50	25	0	0	0	45	0	0	0	73	0	0	0	73
39794	BK	39794	44	37	0	0	0	51	0	0	0	124	0	0	0	124
39794	AH	39794	0	37	0	0	0	0	0	0	0	0	0	0	0	124
39800		39800	6	37	0	0	0	8	0	0	0	8	0	0	0	132
39850		39850	50	51	0	0	0	81	0	0	0	90	0	0	0	213
39900		39900	50	109	0	0	0	148	0	0	0	238	0	0	0	362
39903	BK	39903	3	109	0	0	0	12	0	0	0	250	0	0	0	374
39903	AH	39903	0	109	0	0	0									374
39950		39950	47	77	0	0	0	163	0	0	0	401	0	0	0	536
39953	BK	39953	3	67	0	0	0	8	0	0	0	409	0	0	0	544
40073	AH	40073	0	218	0	0	0	0	0	0	0	0	0	0	0	0
40100		40100	27	300	0	0	0	259	0	0	0	259	0	0	0	259
40150		40150	50	303	0	0	0	558	0	0	0	817	0	0	0	817
40200		40200	50	278	0	0	0	537	0	0	0	1355	0	0	0	1355
40250		40250	50	237	0	0	0	477	0	0	0	1831	0	0	0	1831
40300		40300	50	243	0	0	0	445	0	0	0	2276	0	0	0	2276
40350		40350	50	226	0	0	0	435	0	0	0	2711	0	0	0	2711
40400		40400	50	224	0	1	0	417	0	1	0	3128	1	0	0	3127
40450		40450	50	204	0	1	0	396	0	1	0	3525	3	0	0	3522
40500		40500	50	200	0	0	0	374	0	1	0	3898	4	0	0	3894
40550		40550	50	328	0	0	0	489	0	0	0	4387	4	0	0	4383
40600		40600	50	280	0	0	0	563	0	0	0	4950	4	0	0	4946
40650		40650	50	193	0	0	0	439	0	0	0	5389	4	0	0	5384
40700		40700	50	174	0	0	0	340	0	0	0	5729	5	0	0	5724
40750		40750	50	162	0	0	0	311	0	0	0	6040	5	0	0	6034
40776	BK	40776	26	160	0	0	0	155	0	0	0	6194	5	0	0	6189
						COLUMN TOTALS		6739		4						



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 454	E

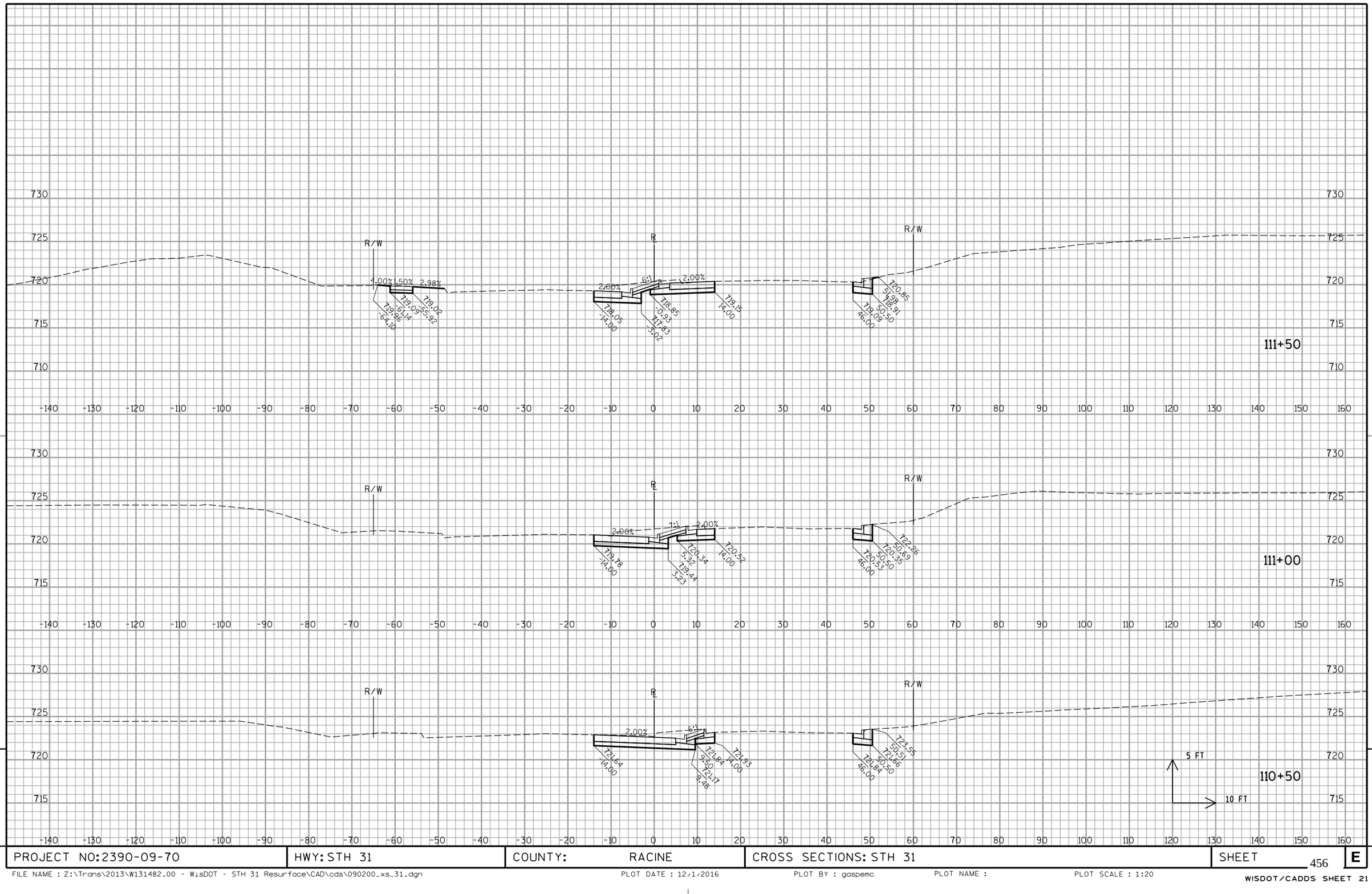
9

9

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 455	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



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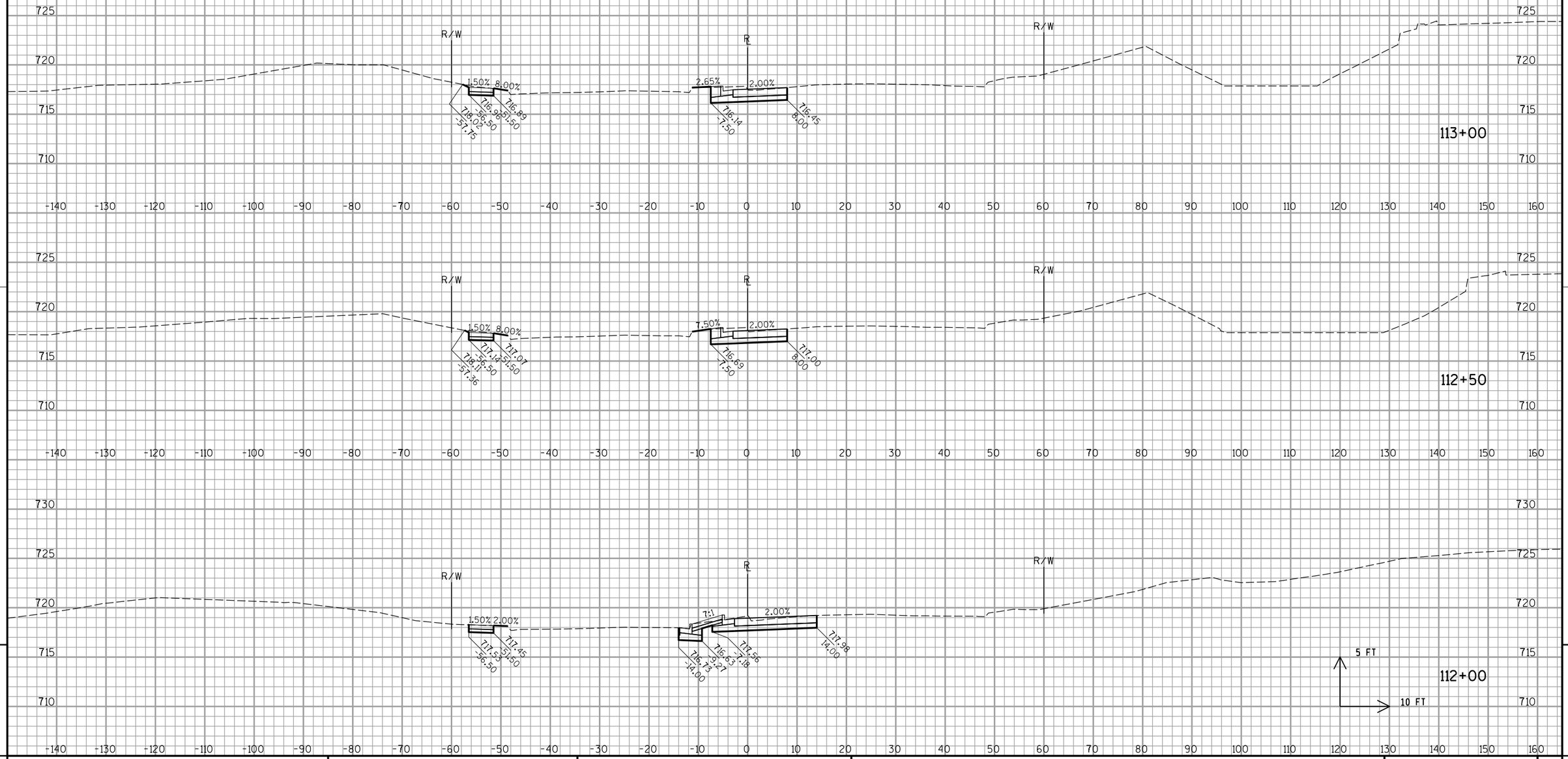
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 456	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



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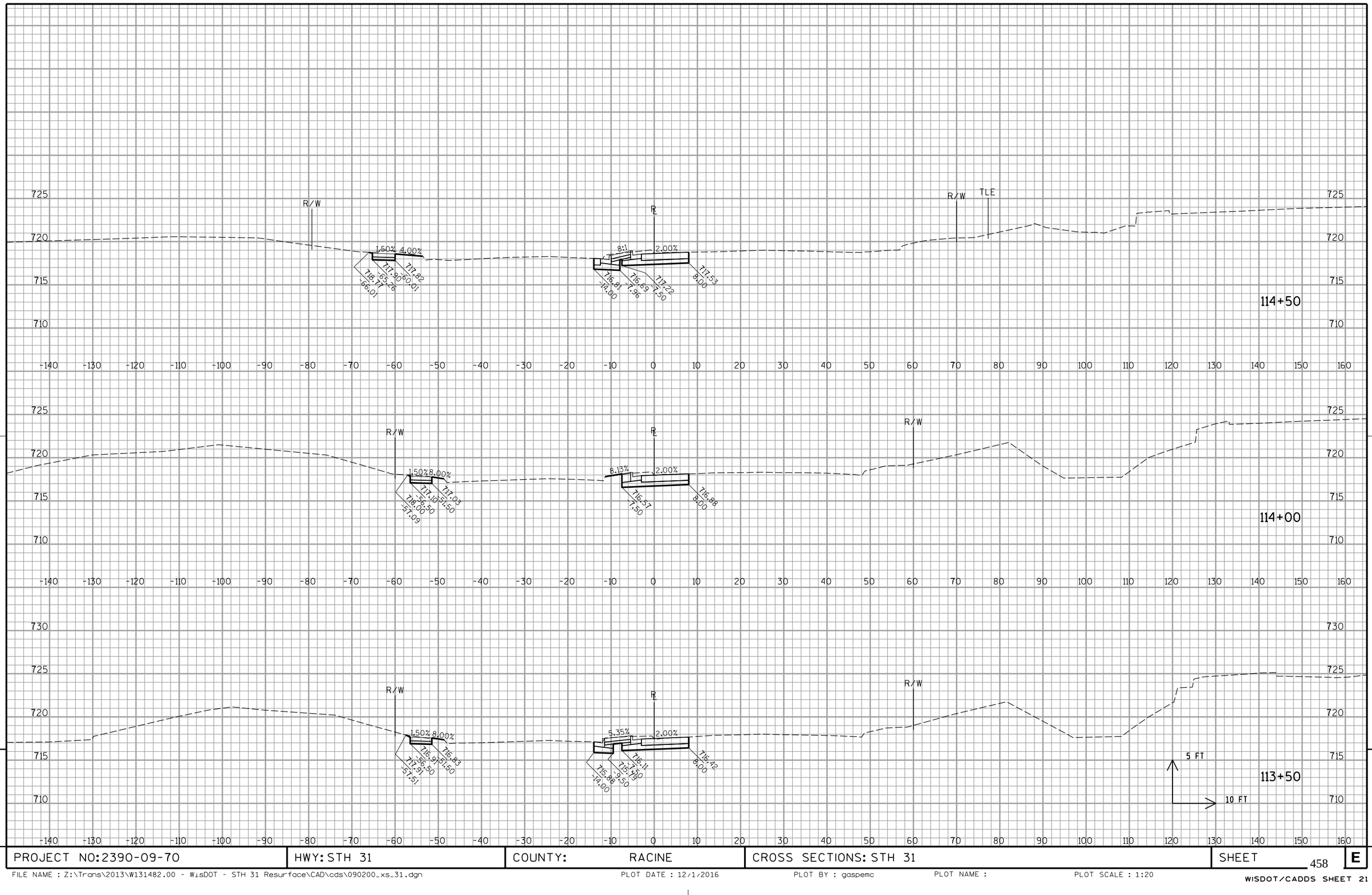
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 457	E



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 458	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

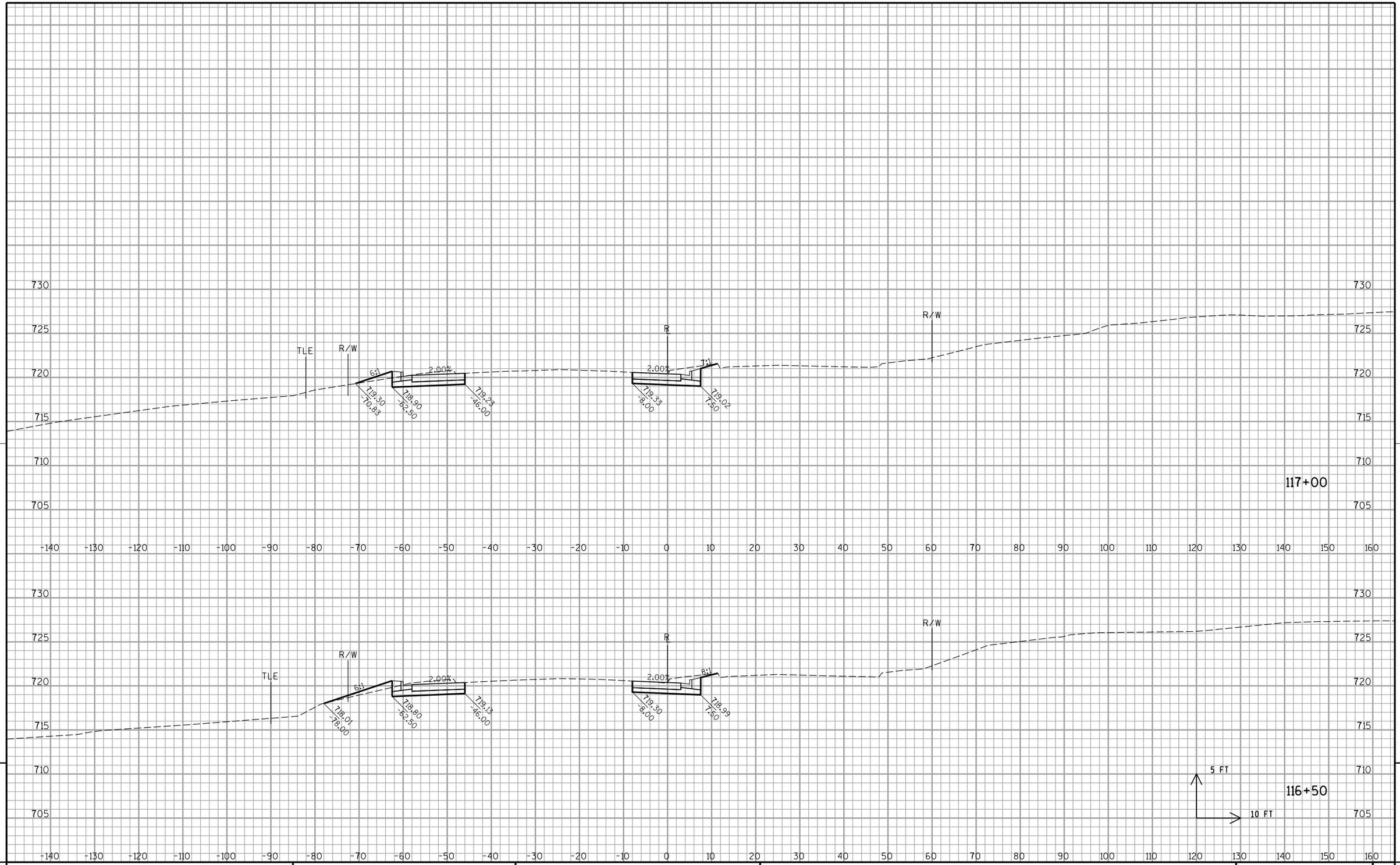
9

9

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 459	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 460	E

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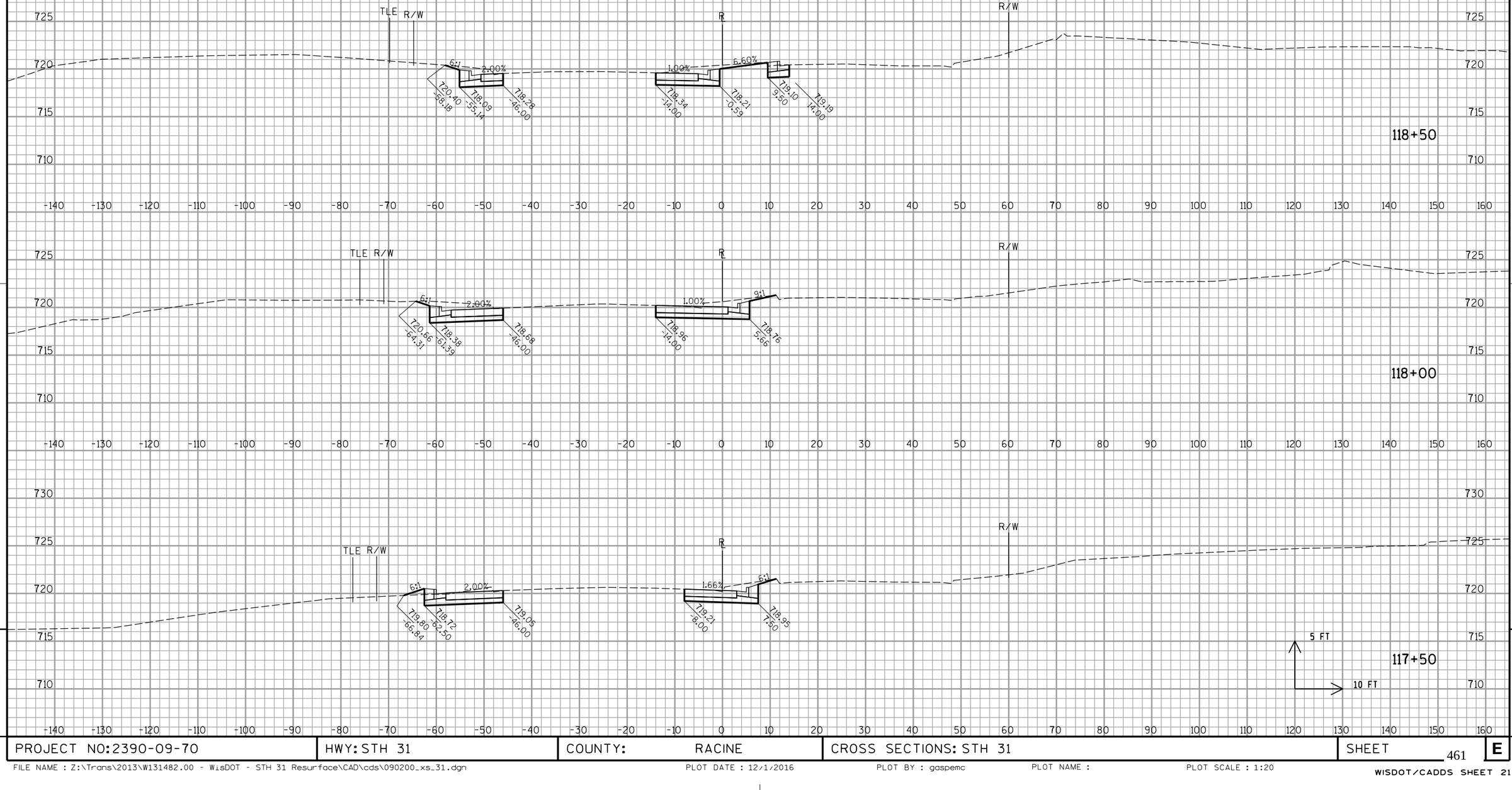
WISDOT/CADDS SHEET 21



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 461	E

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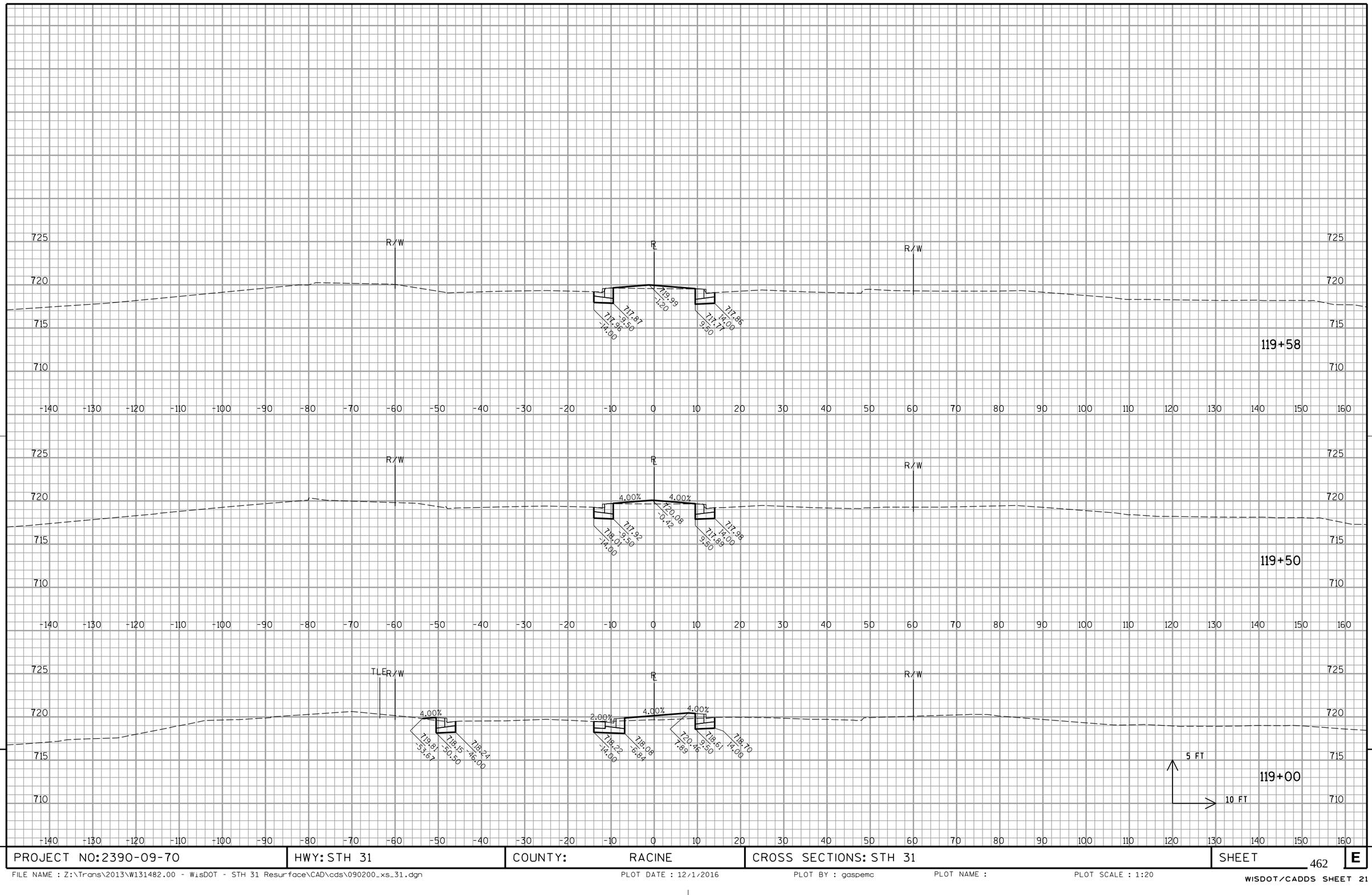

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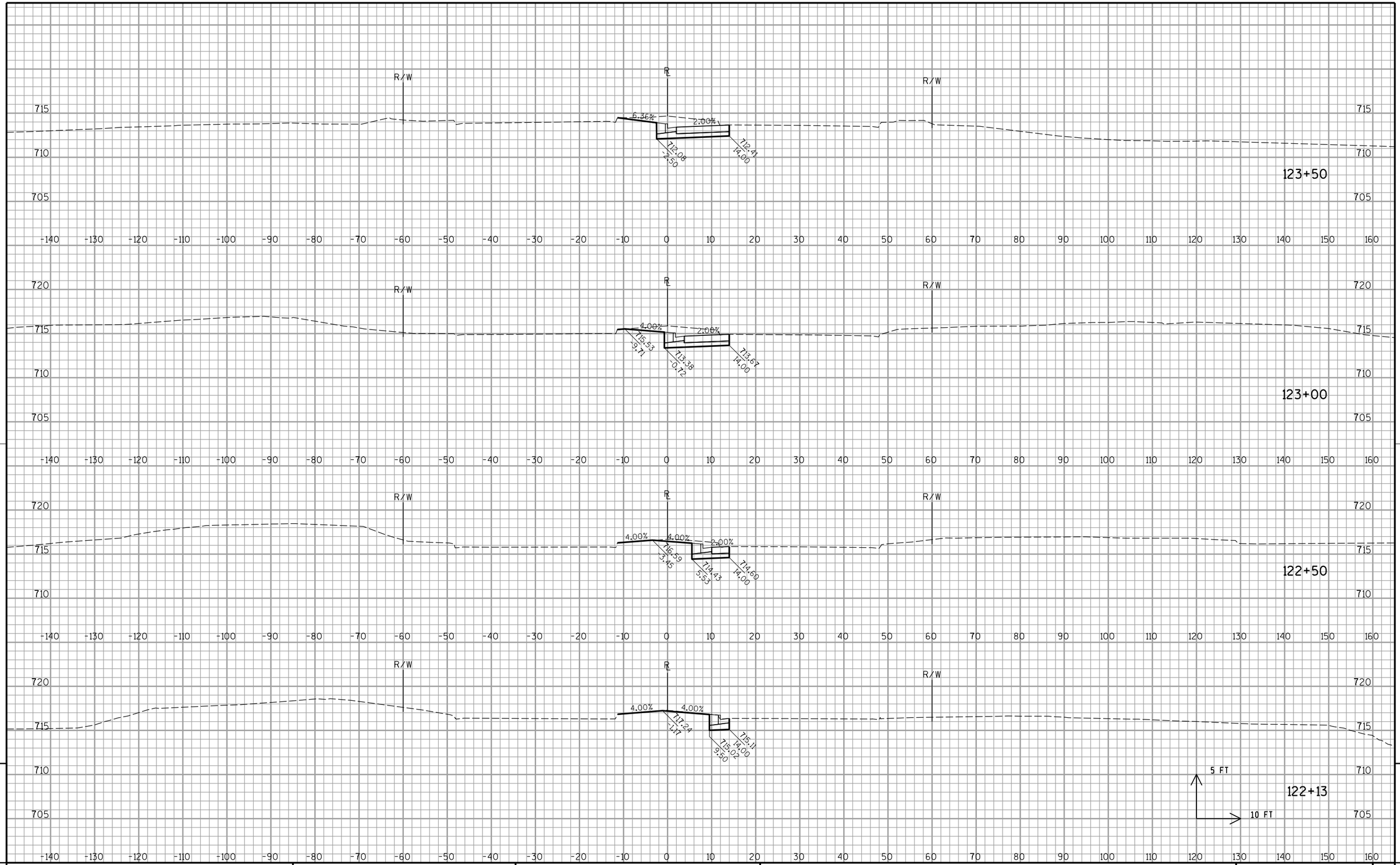
PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 462	E



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 463	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

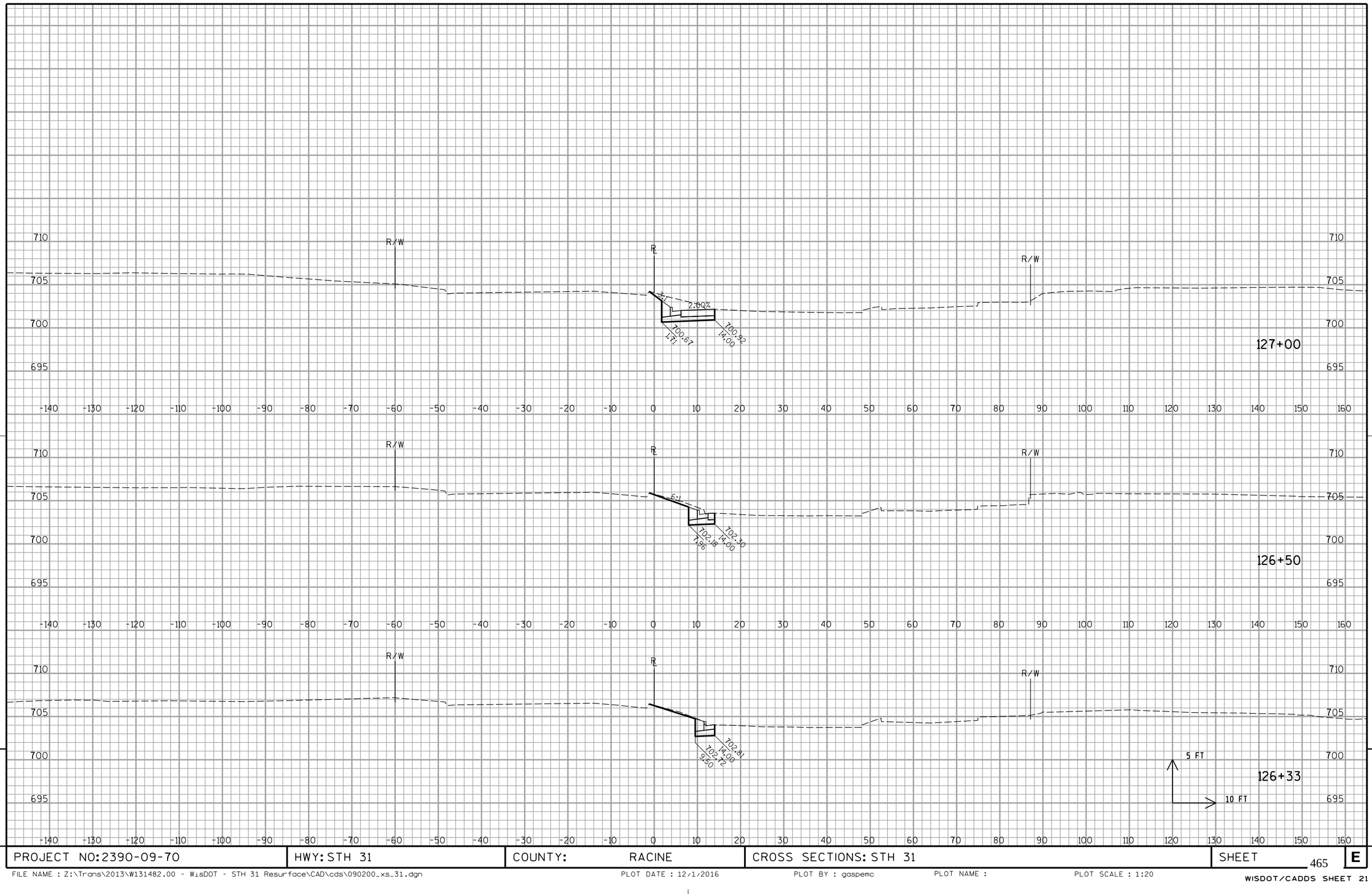
9

9

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 464	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



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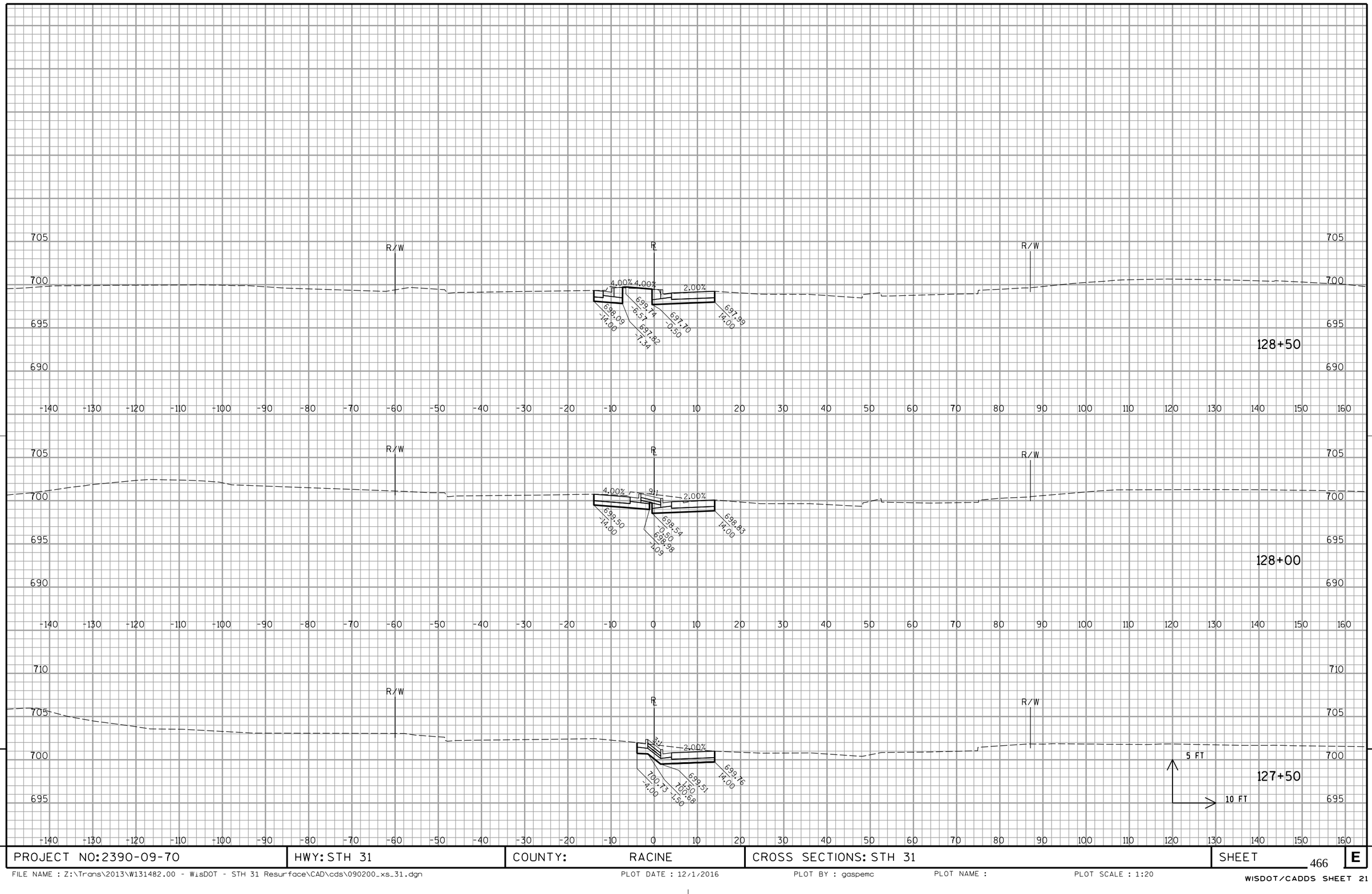
PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 465	E



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 466	E

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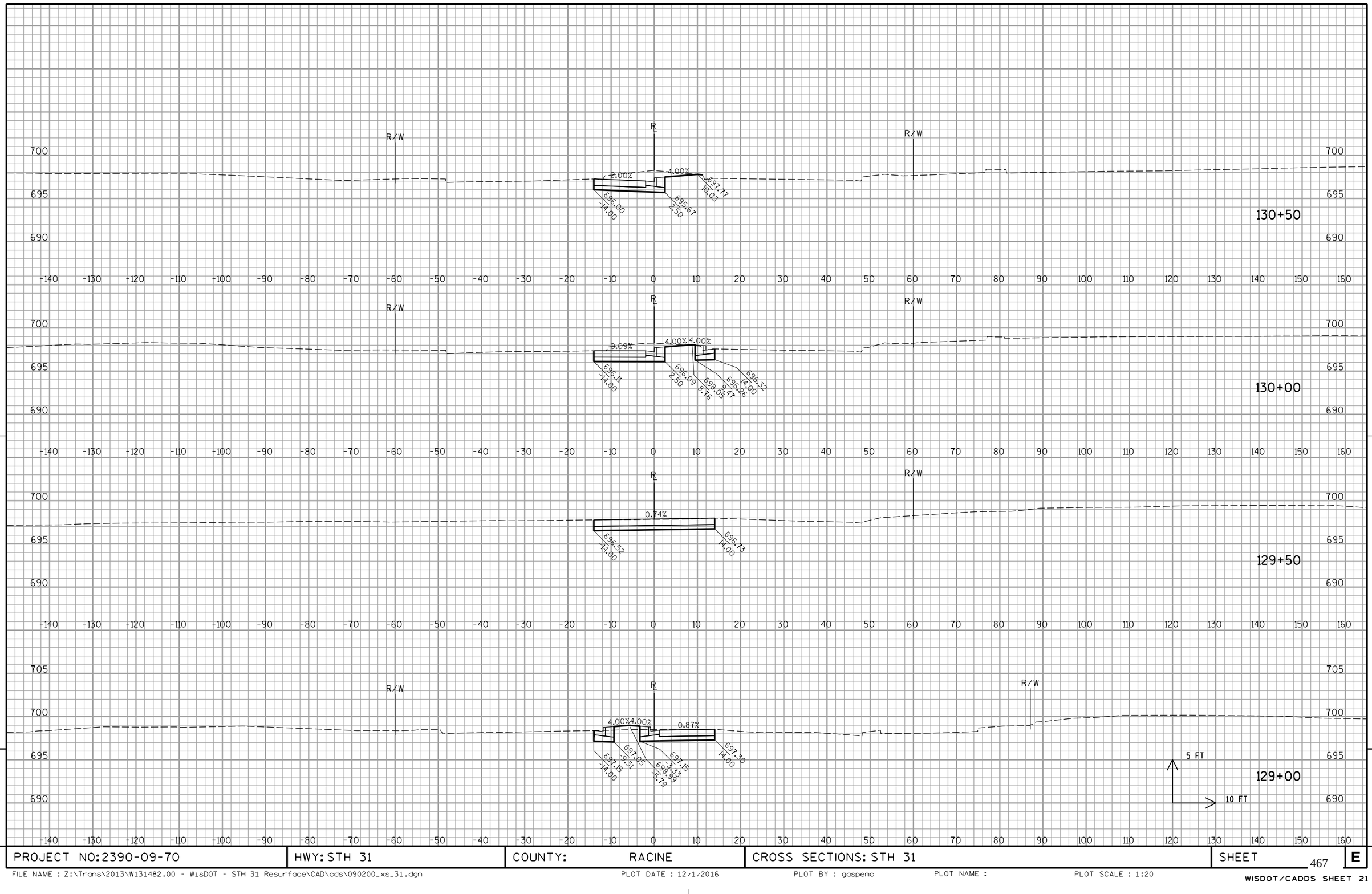
WISDOT/CADDS SHEET 21



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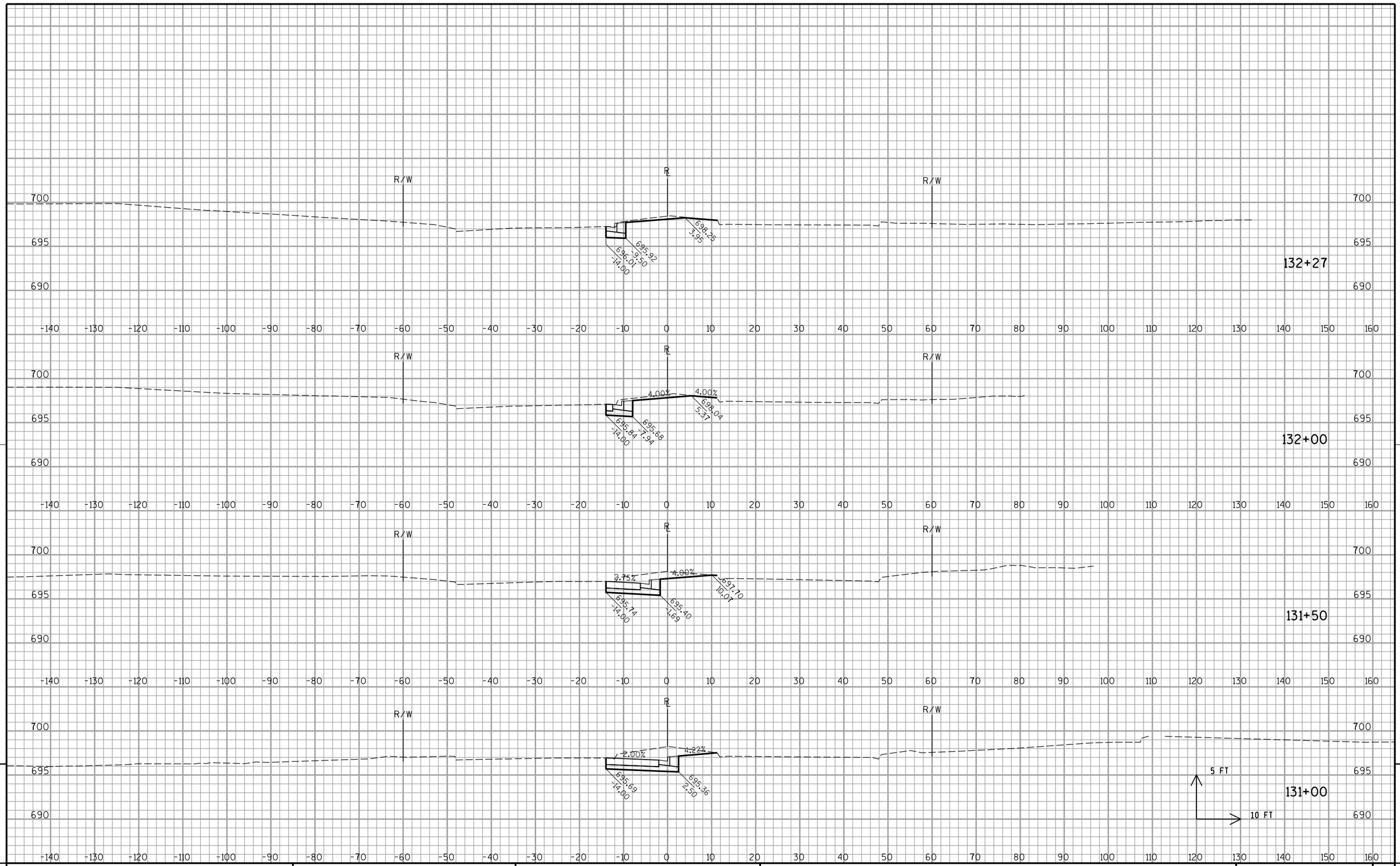
PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 467	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn
PLOT DATE : 12/1/2016
PLOT BY : gaspemc
PLOT NAME :
PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21



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PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 468	E

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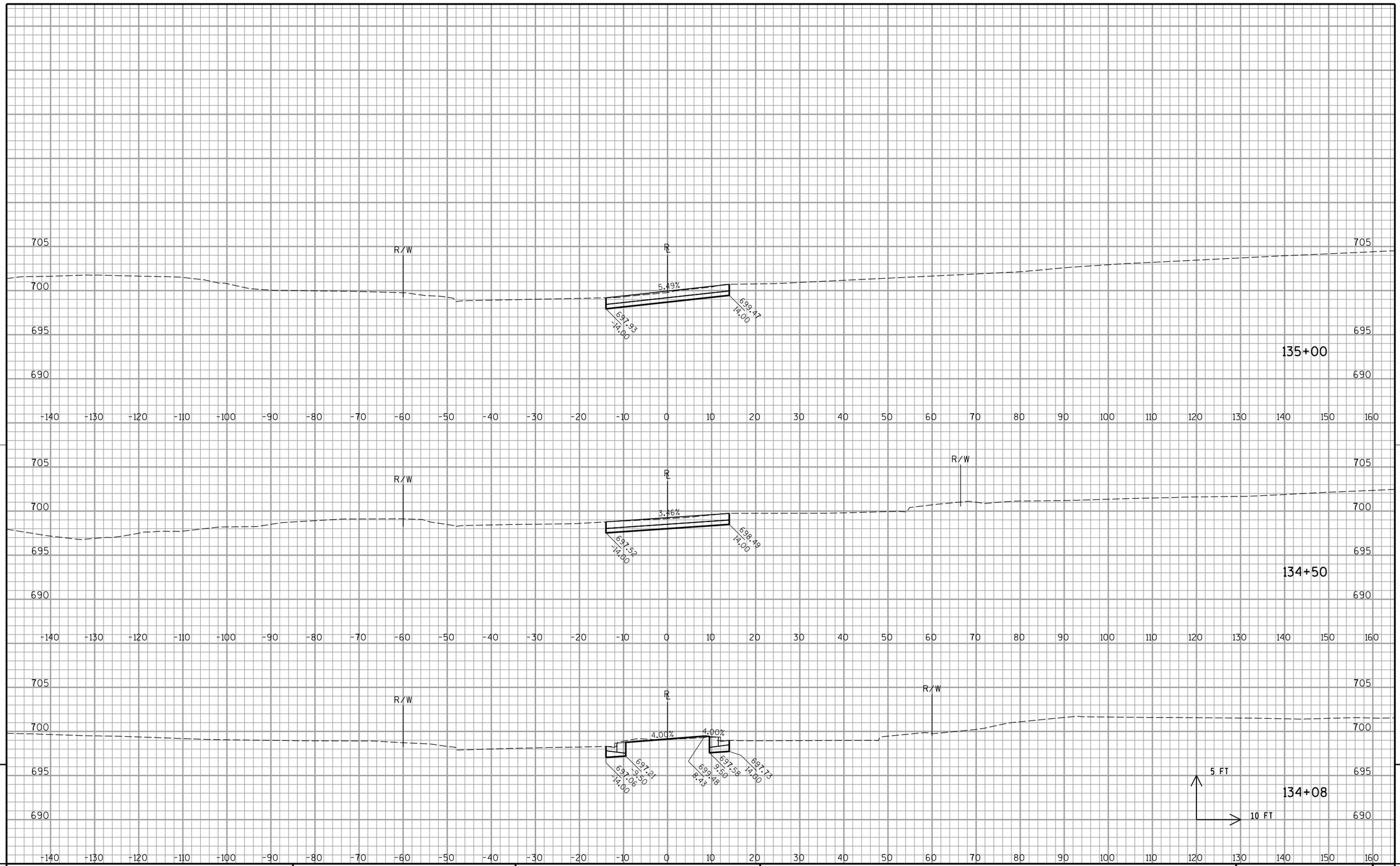
WISDOT/CADDS SHEET 21



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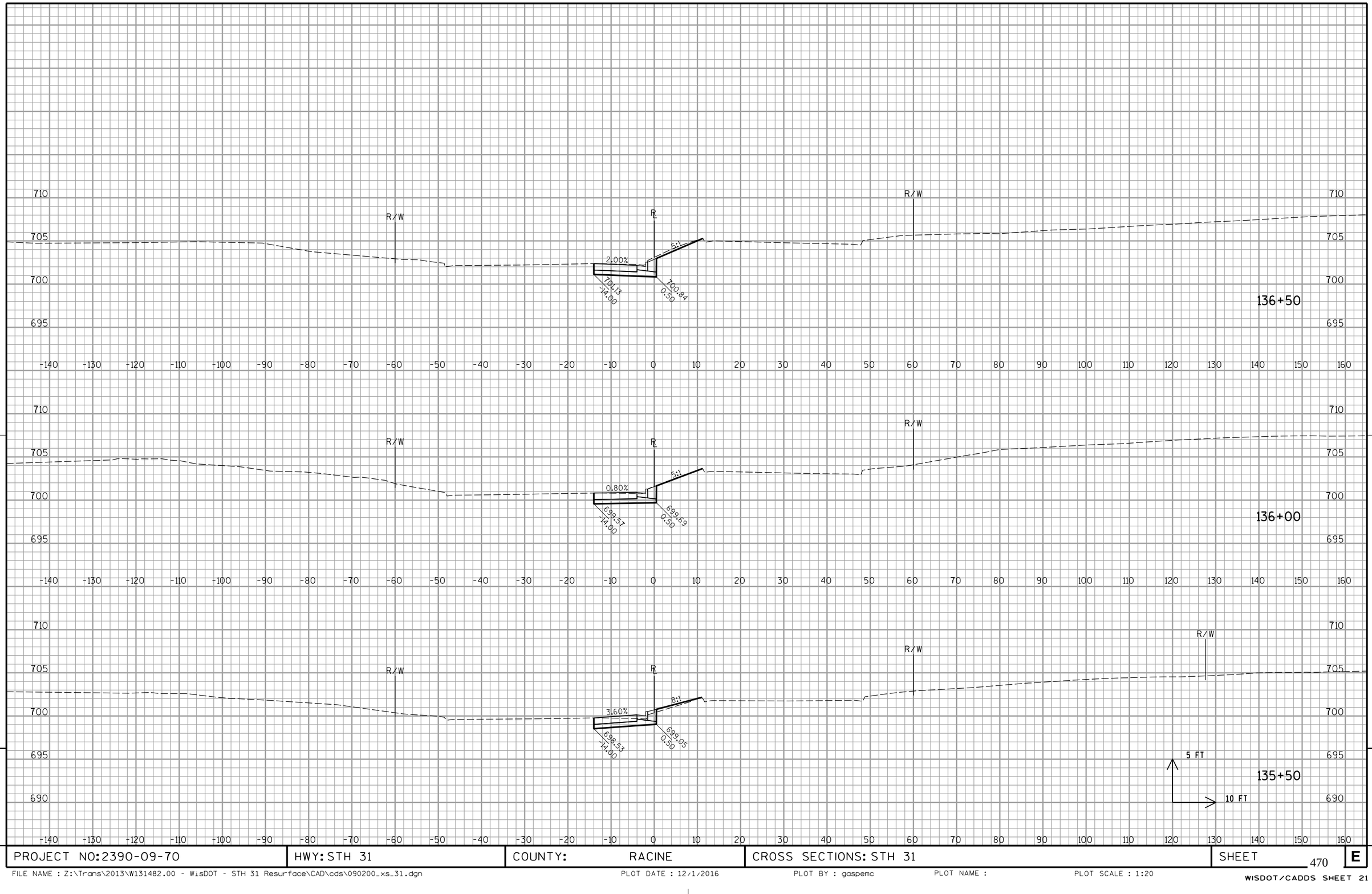
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 469	E



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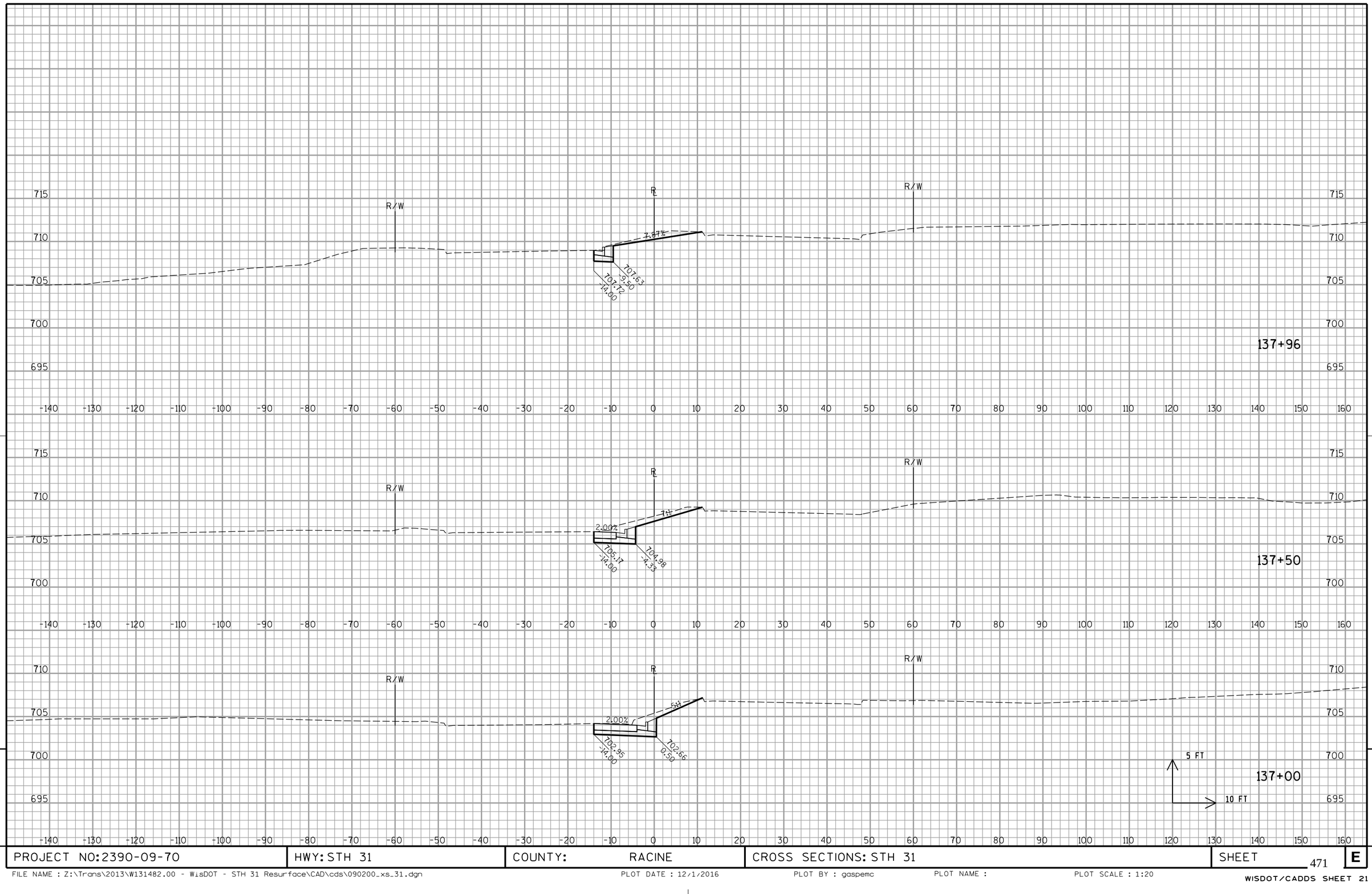
PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 470	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 471	E

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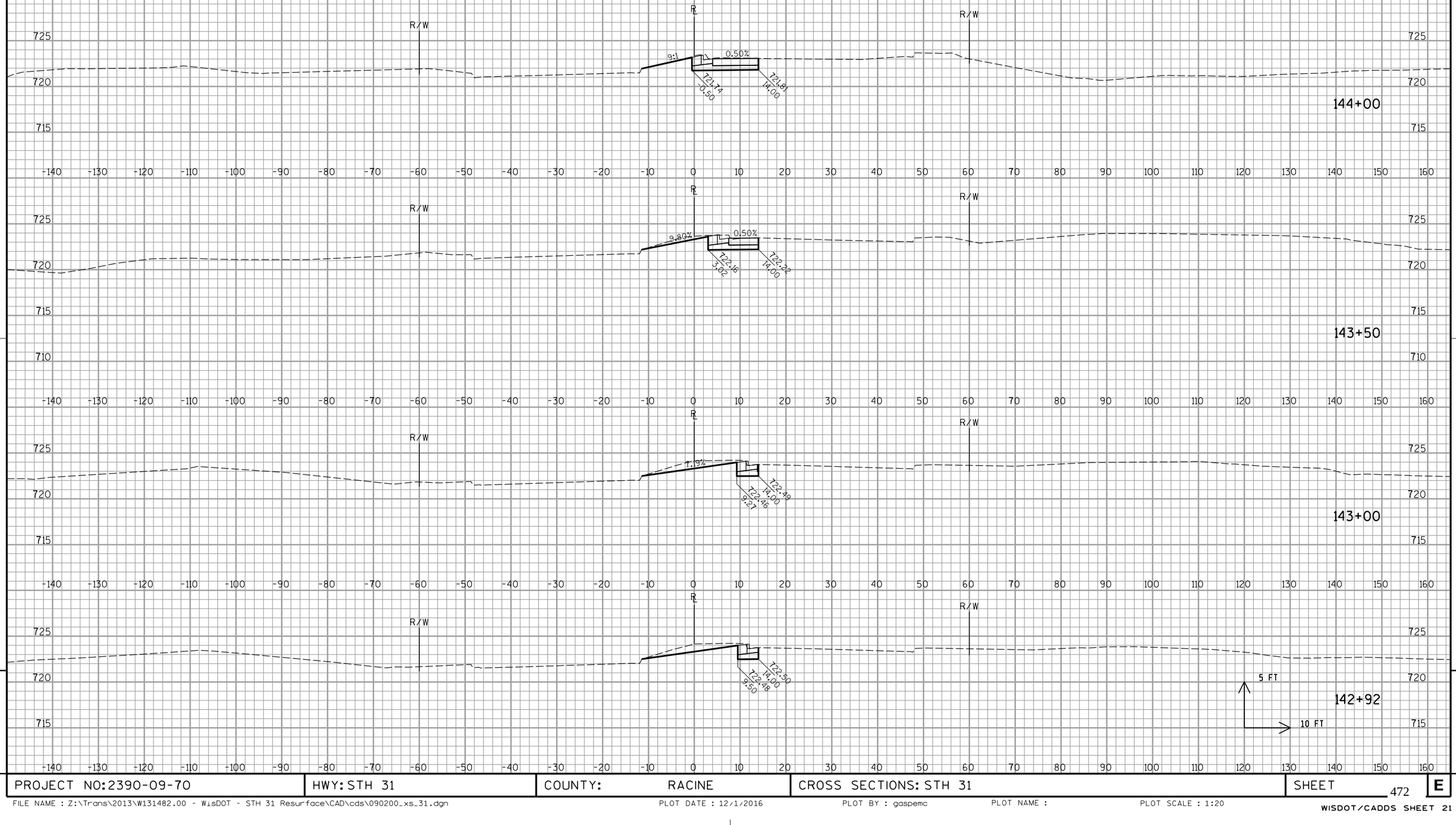
WISDOT/CADDS SHEET 21



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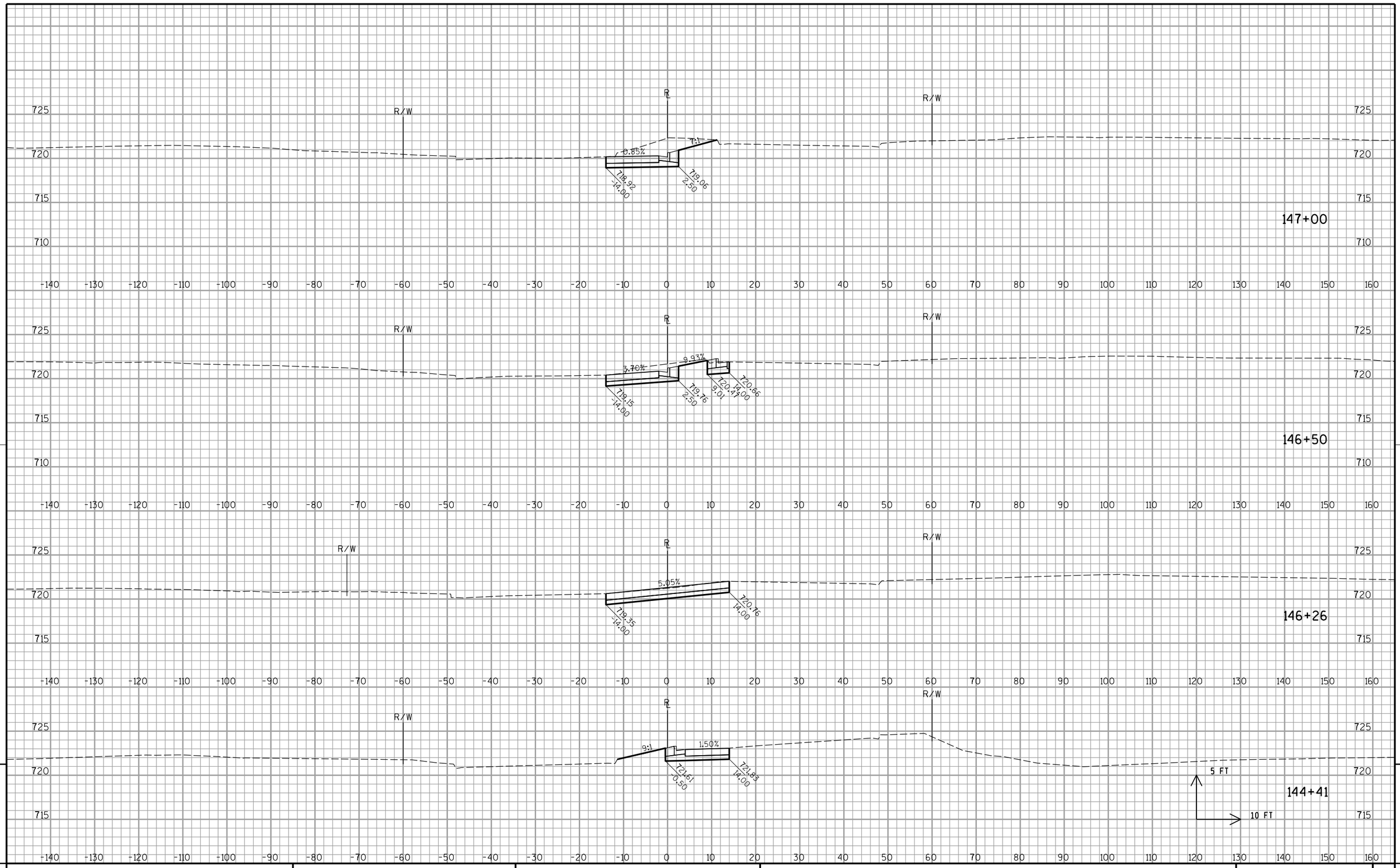
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 472	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

9



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 473	E

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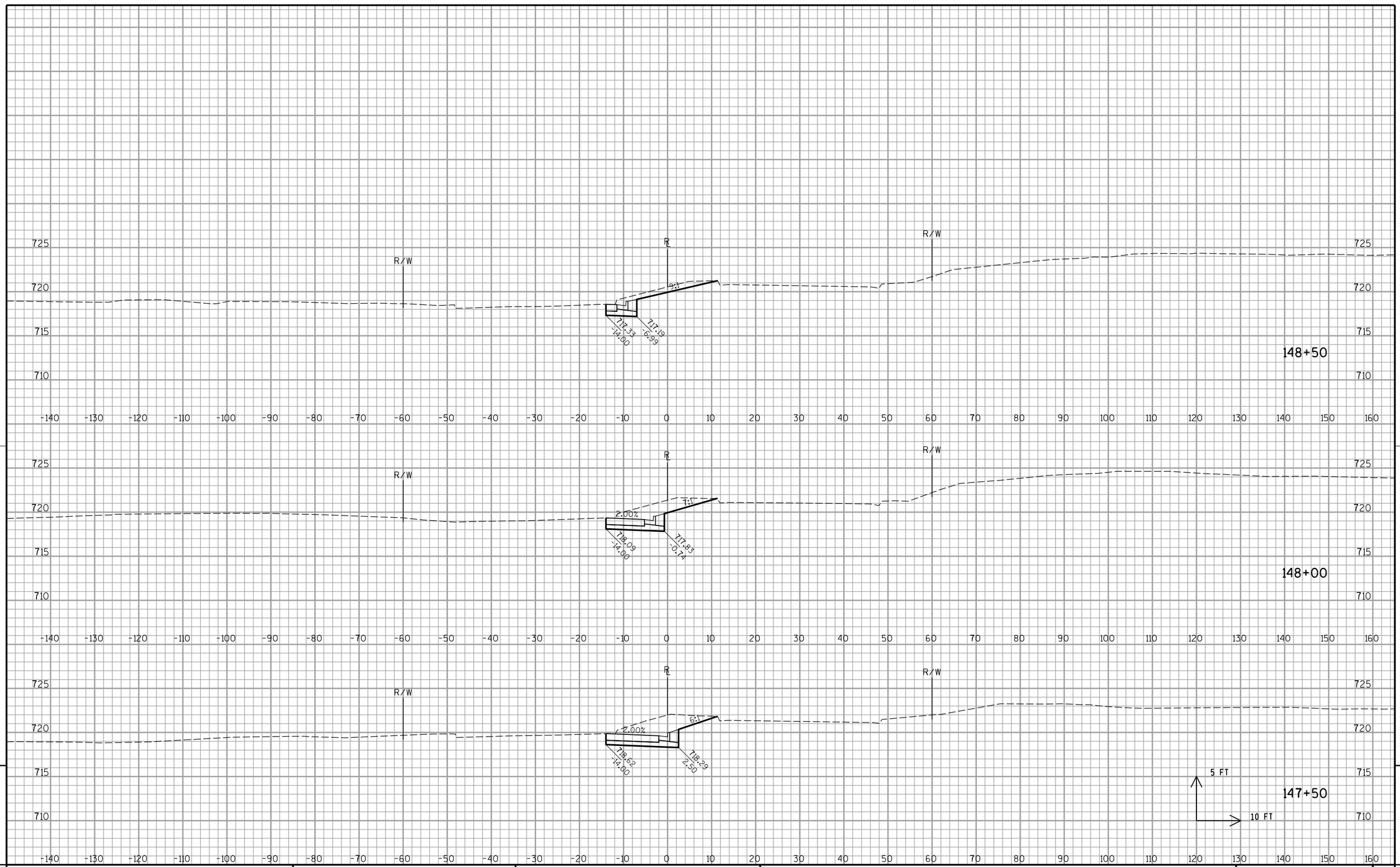
WISDOT/CADDS SHEET 21



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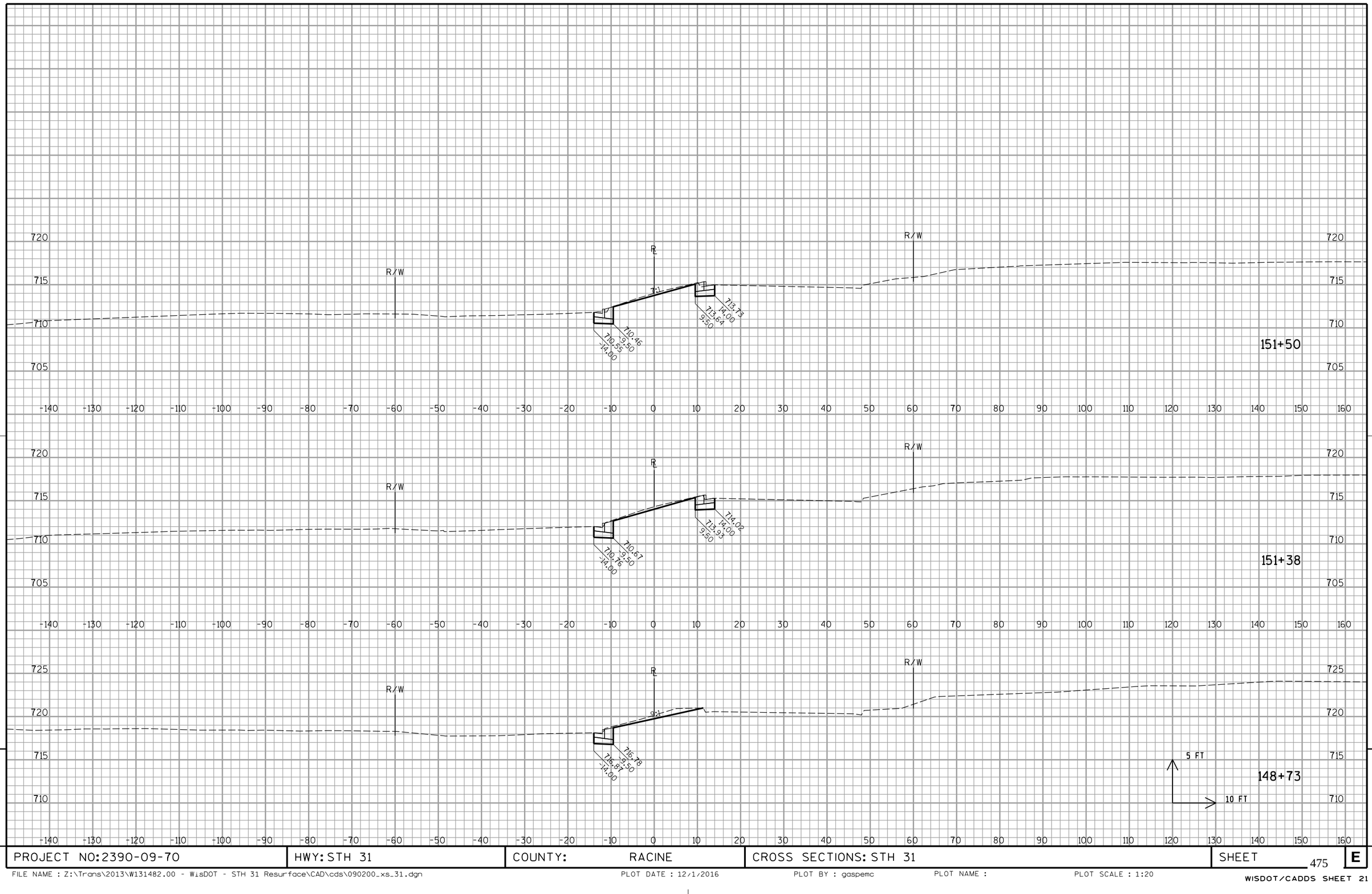
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 474	E



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 475	E

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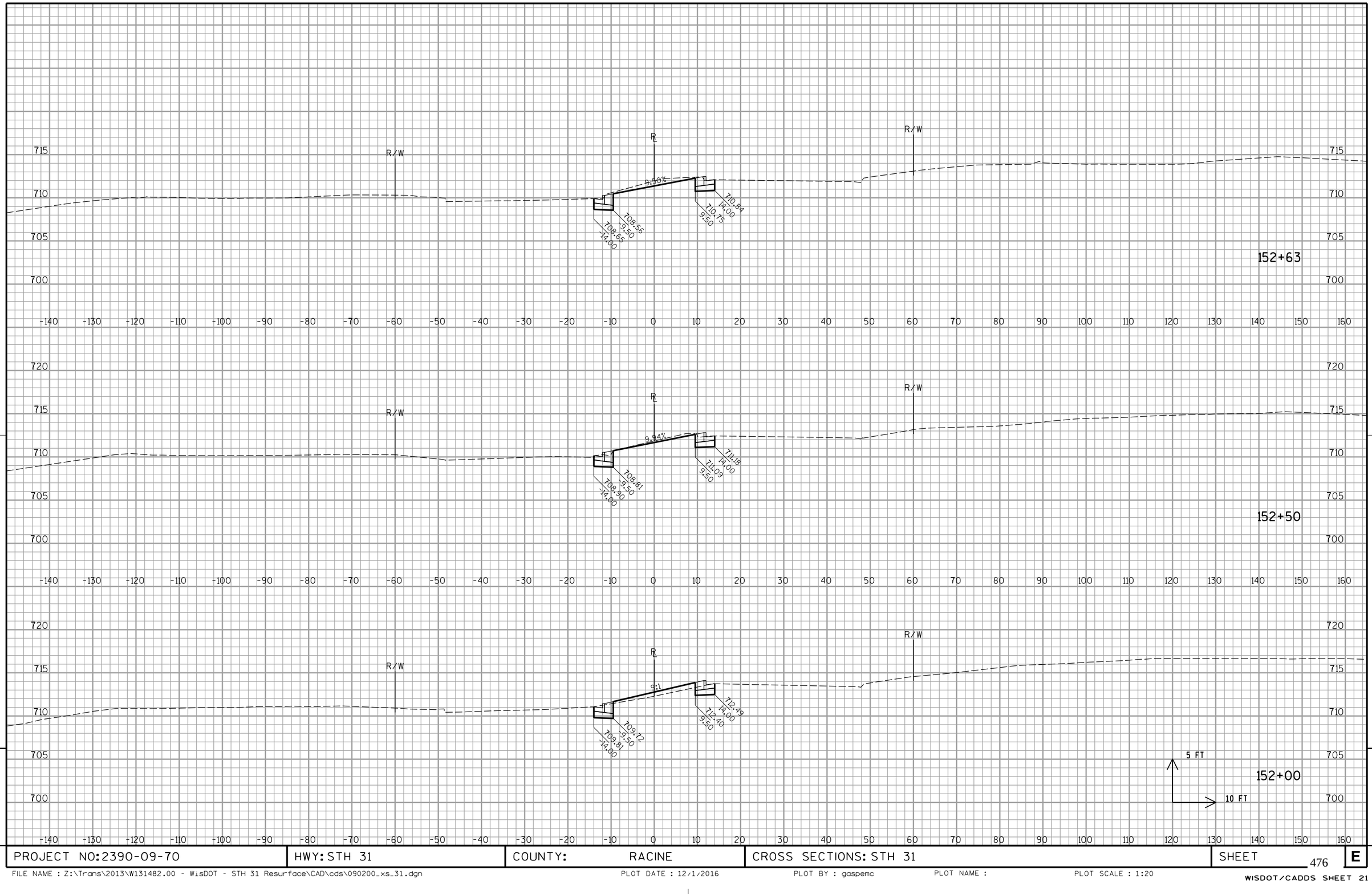
WISDOT/CADDS SHEET 21



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 476	E

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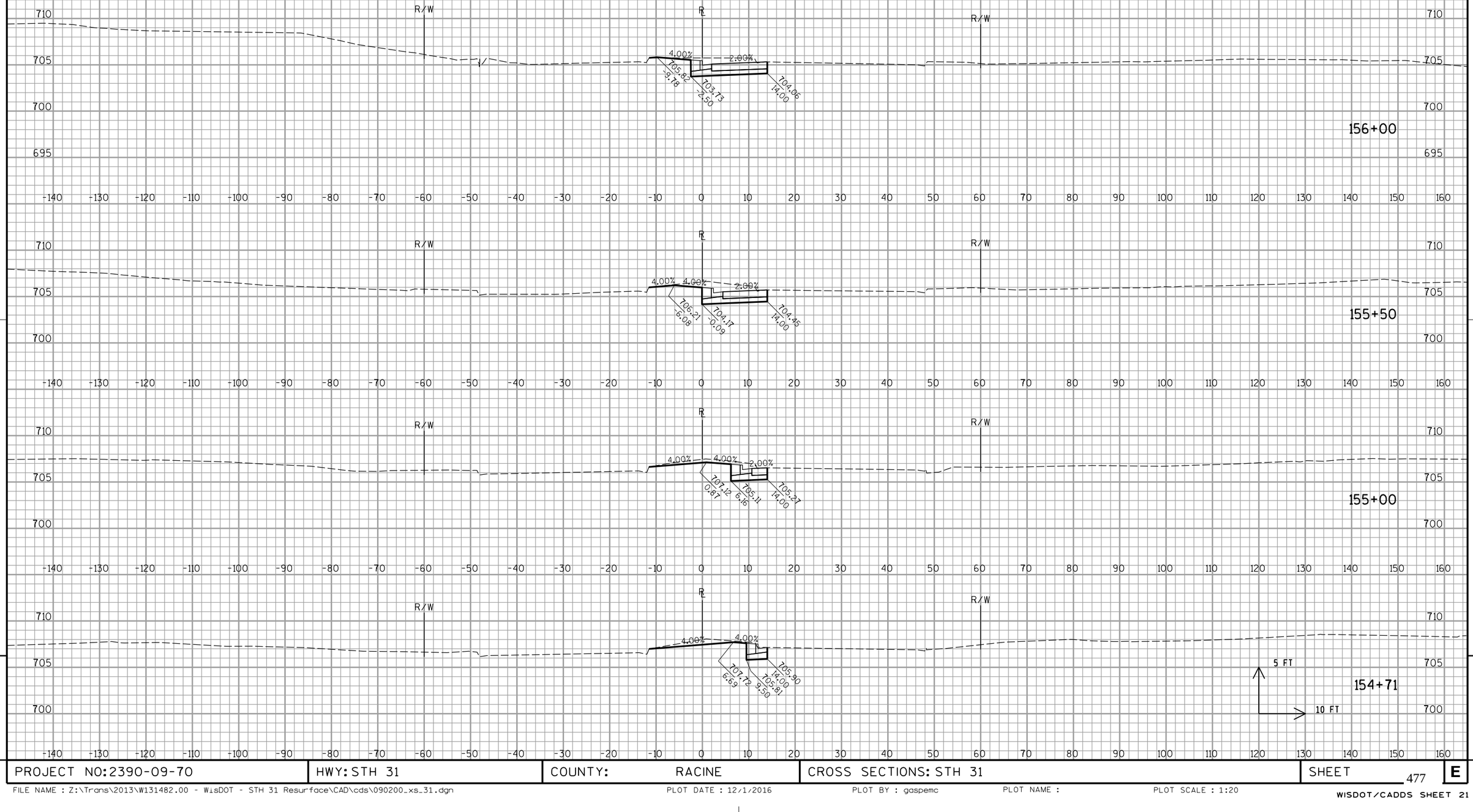
WISDOT/CADDS SHEET 21



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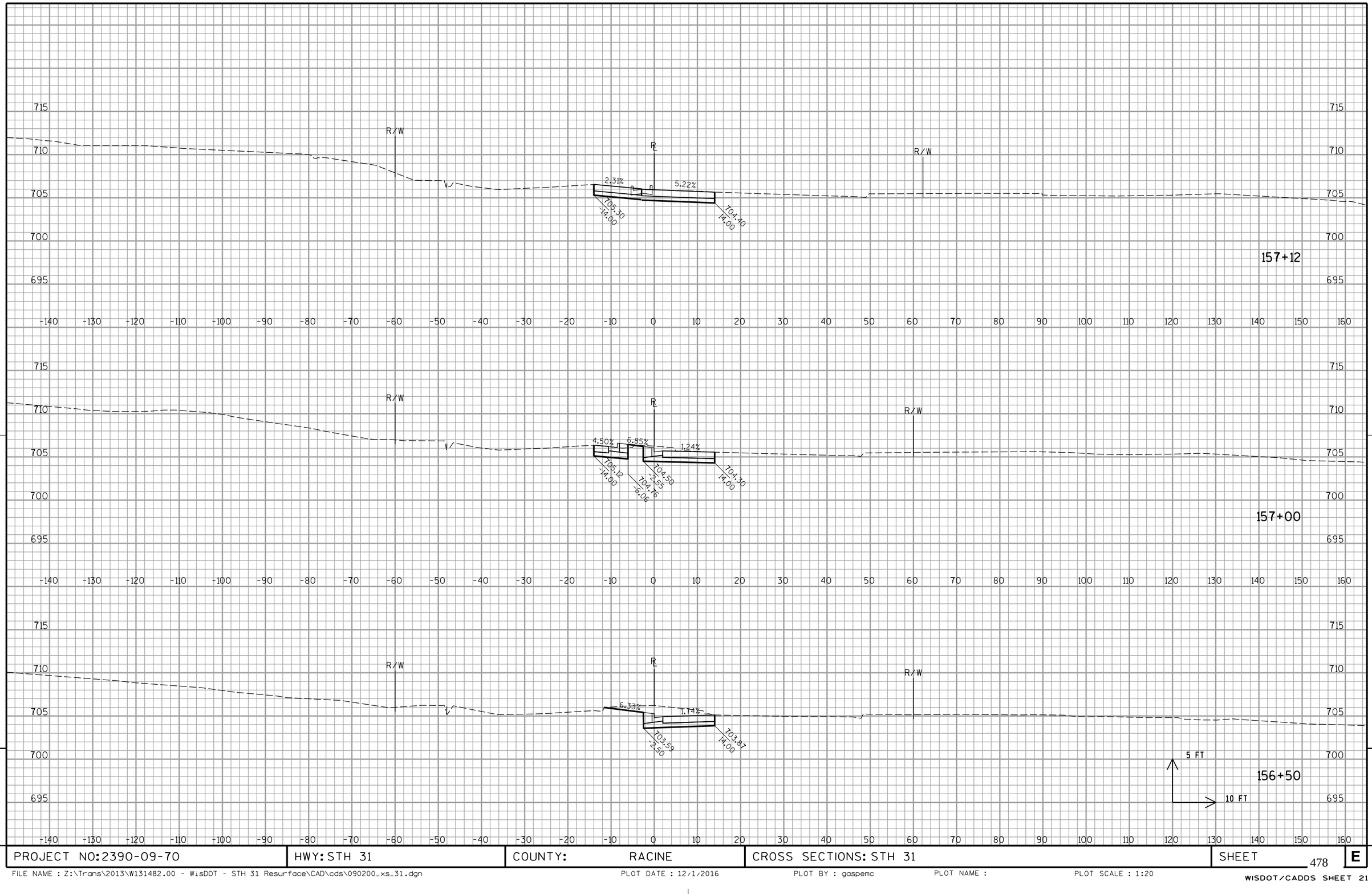

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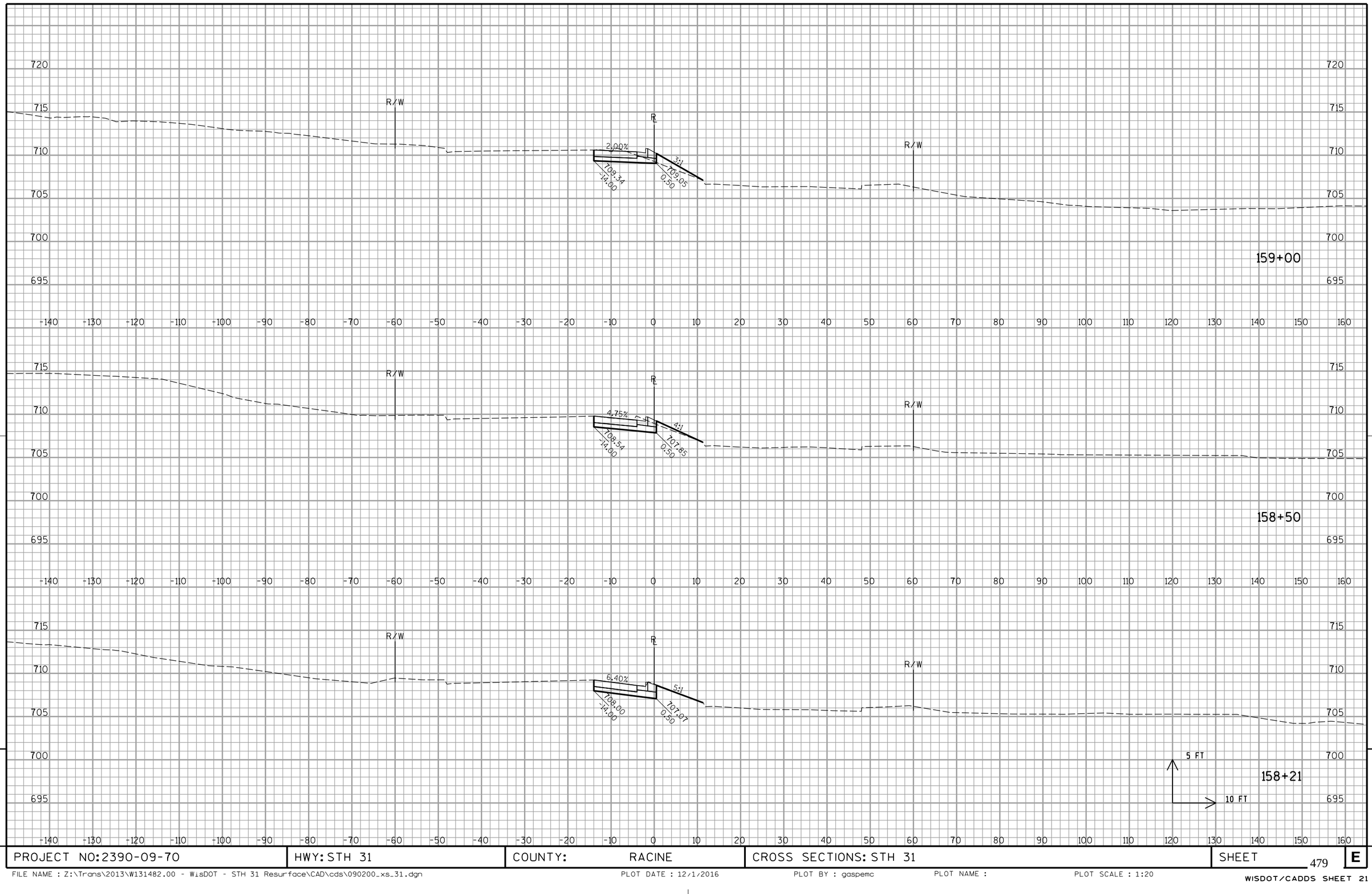
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 478	E



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 479	E

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FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

720
715
710
705
700
695
690

-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

R/W

R

2.00%

4:1

710.04

-14.00

709.84

-3.90

R/W

160+00

720
715
710
705
700
695
690

-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

R/W

R

2.00%

3:1

709.89

-14.00

709.60

0.50

R/W

5 FT

10 FT

159+50

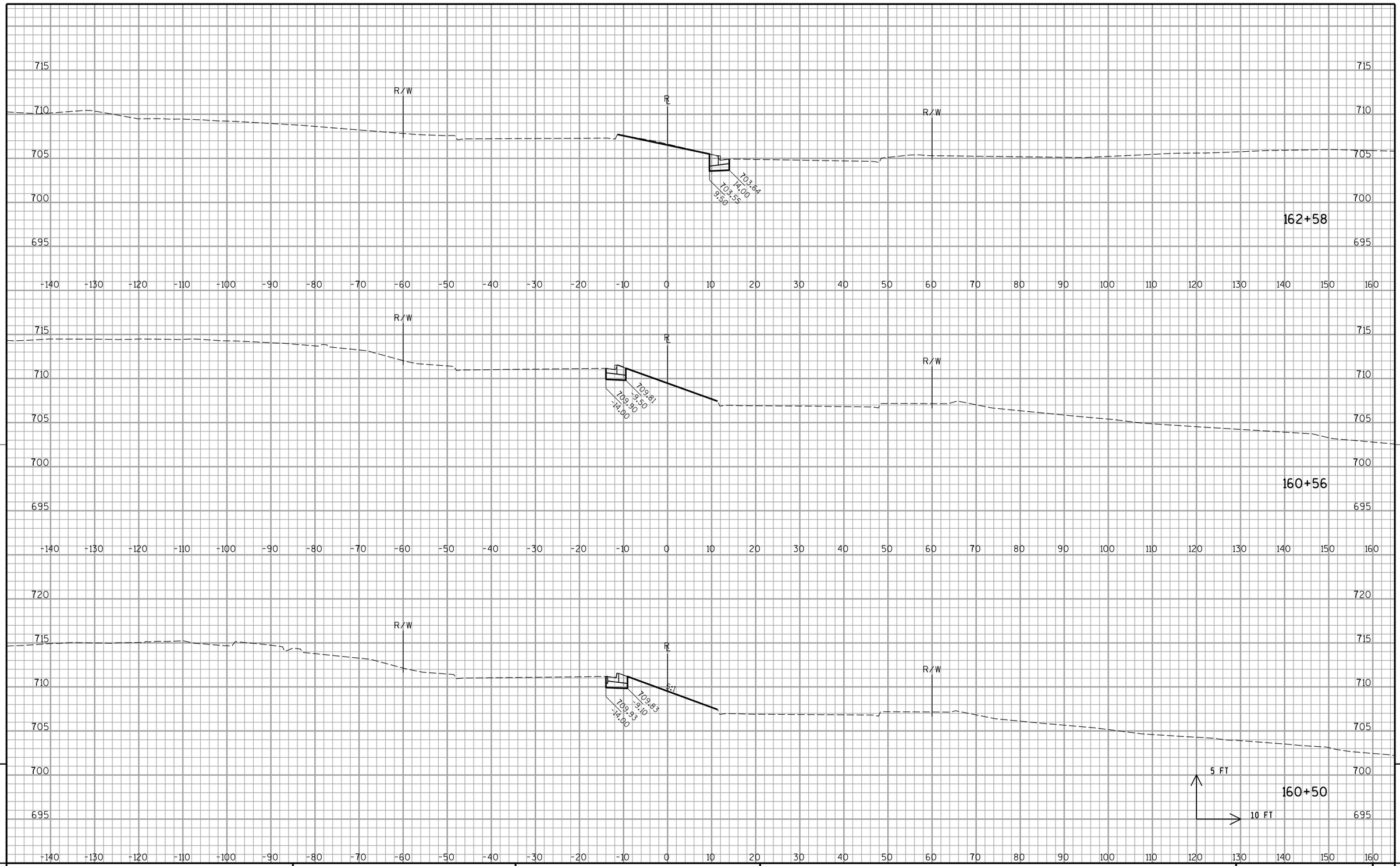
9

9

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 480	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



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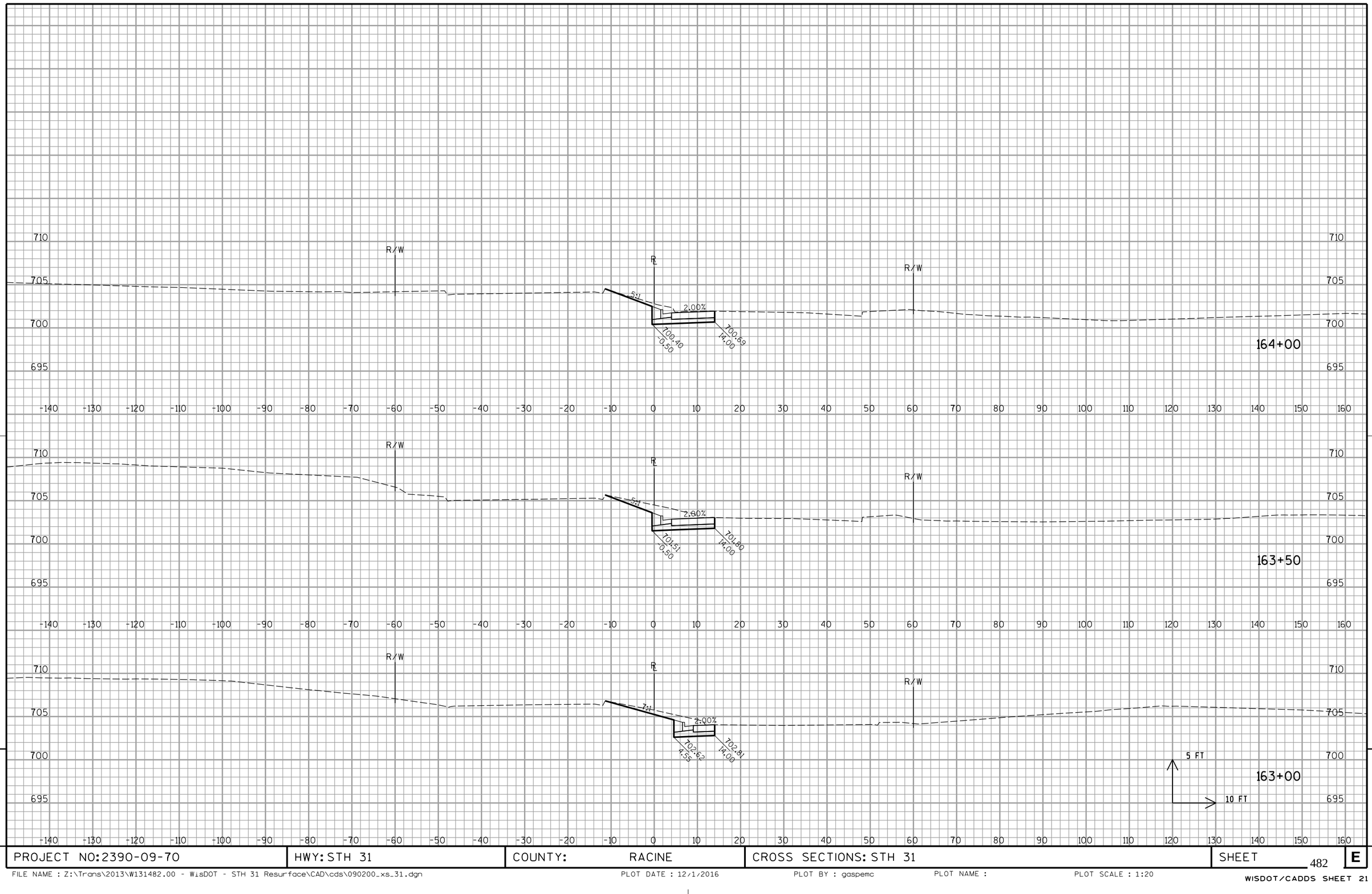
PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 481	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



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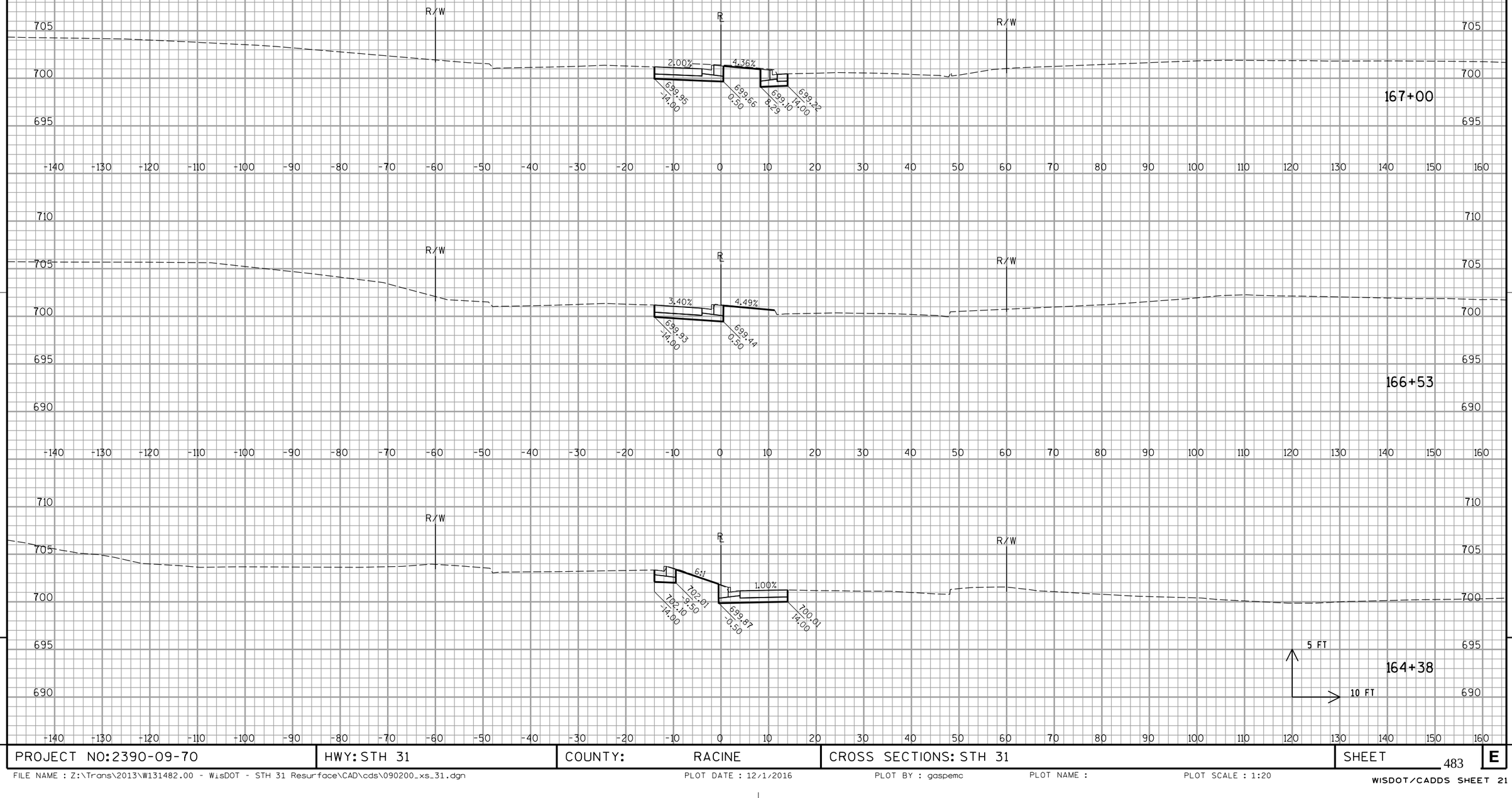
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 482	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



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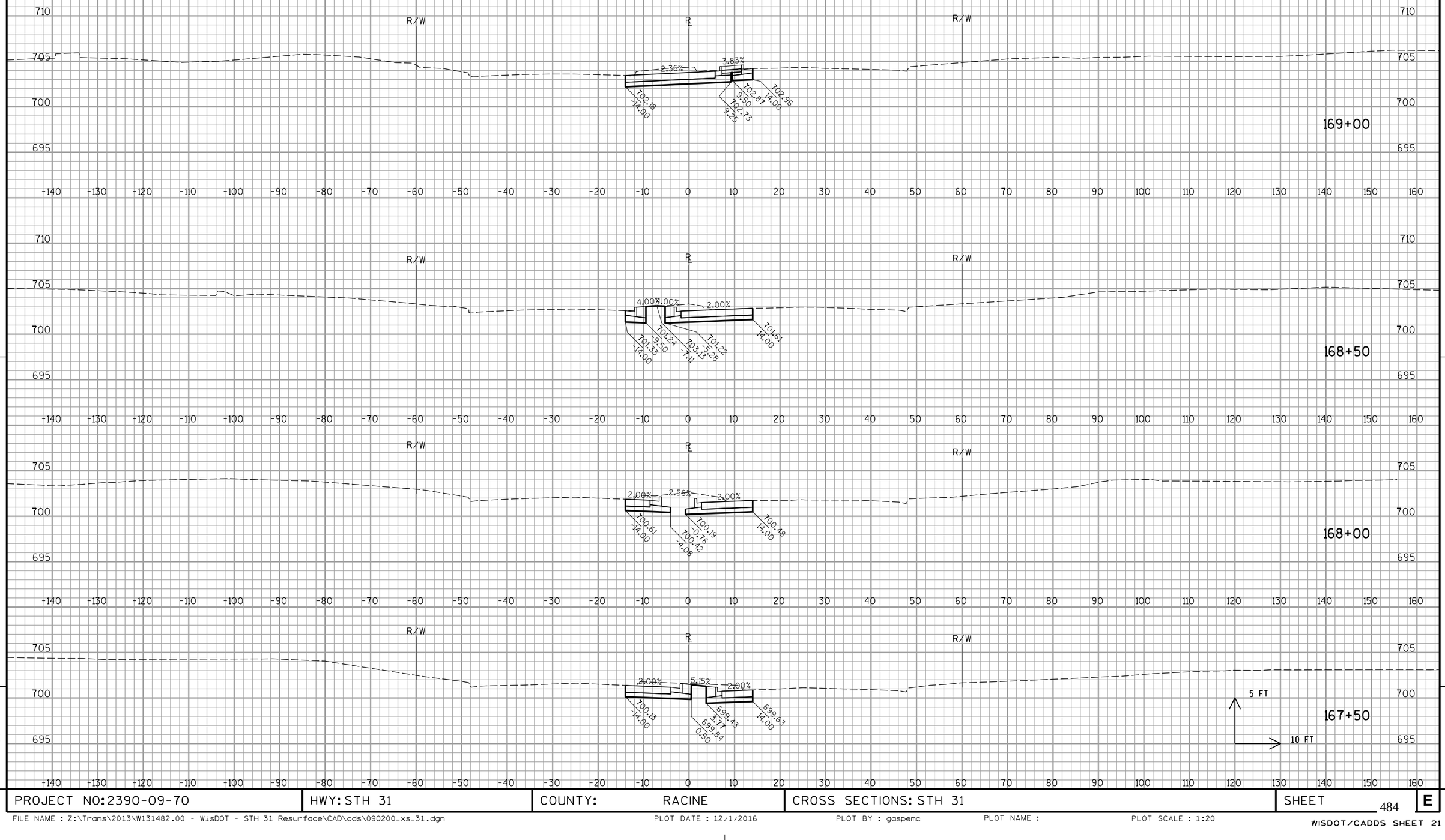
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 483	E



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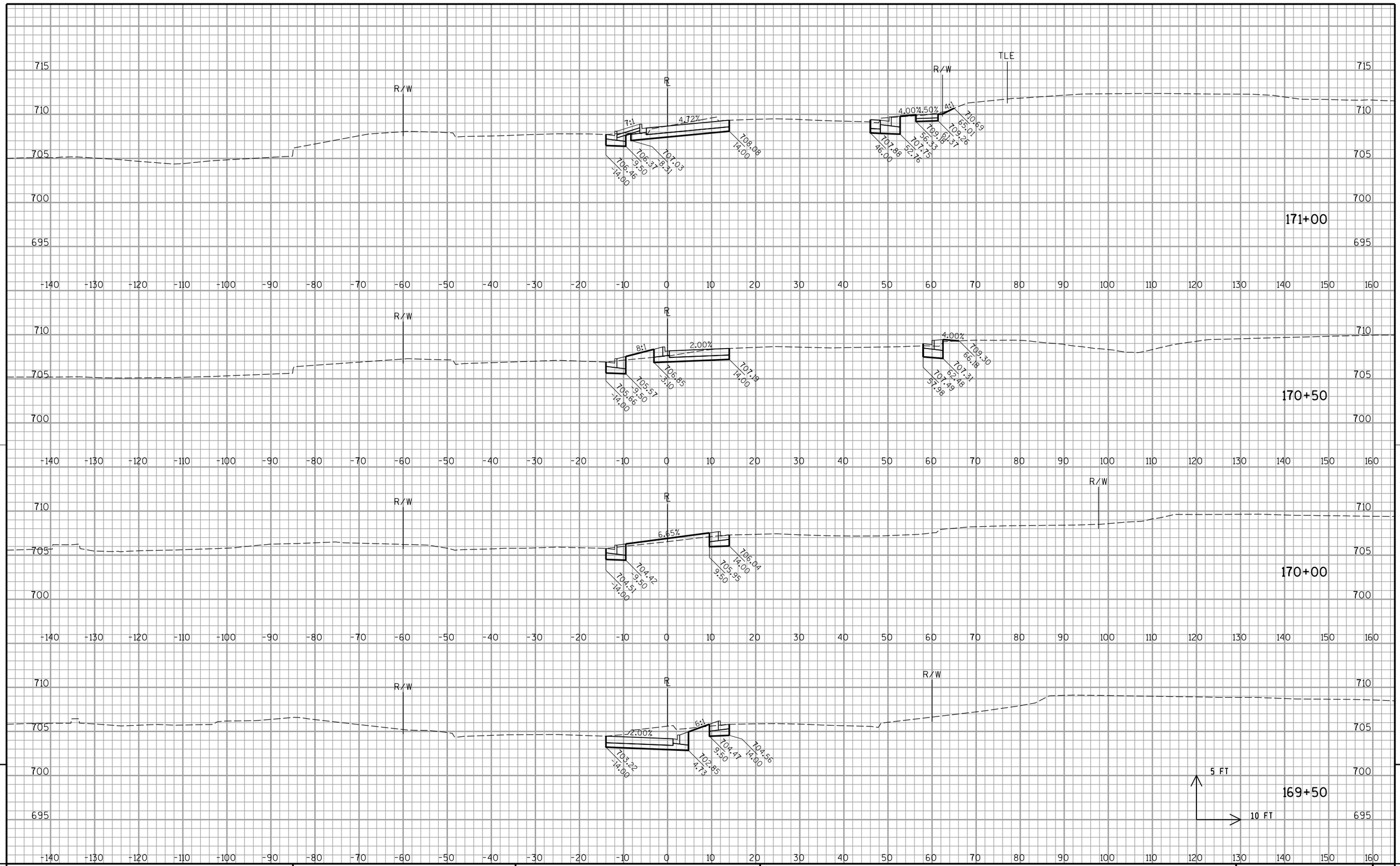
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 484	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



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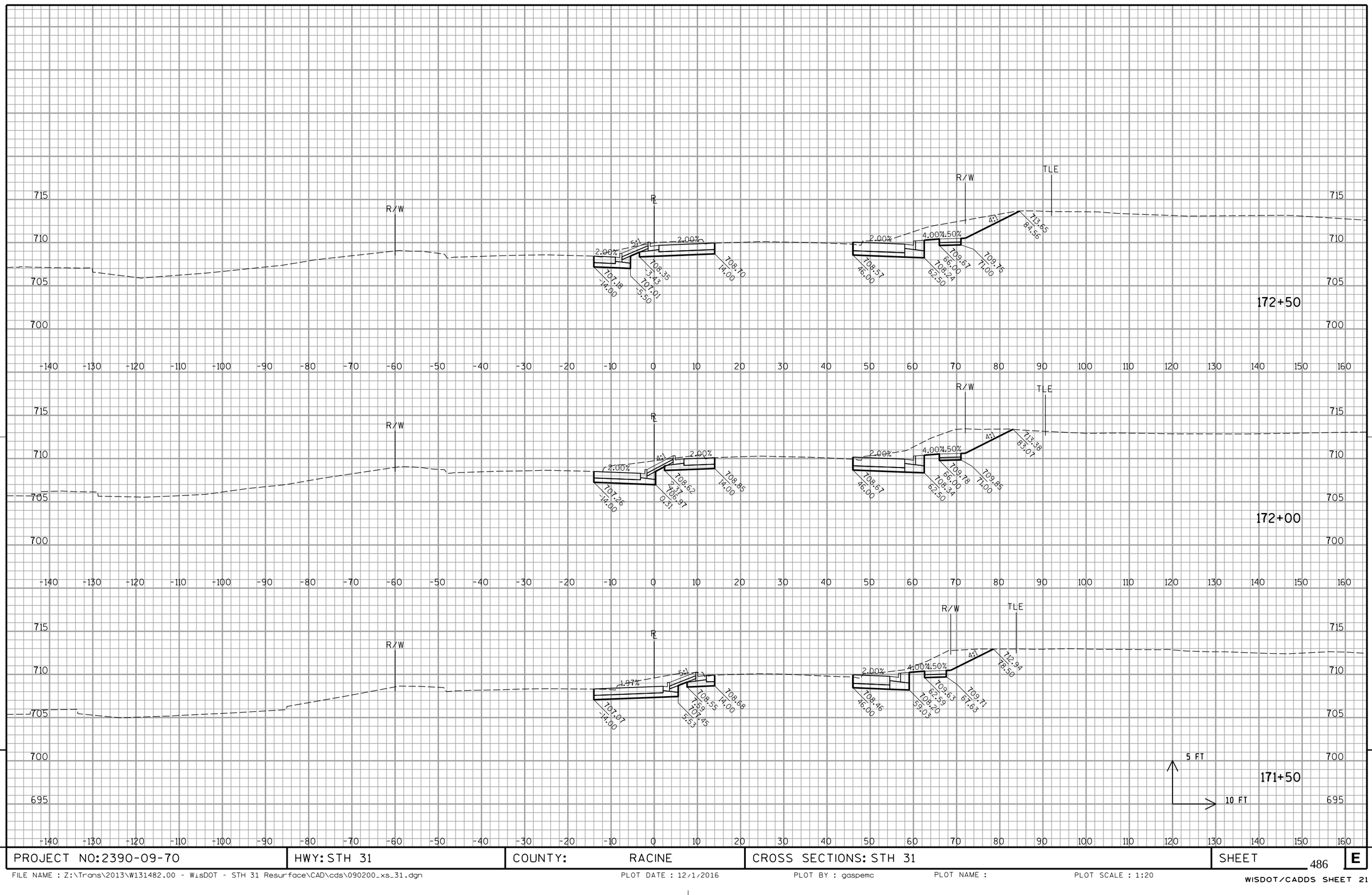
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 485	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



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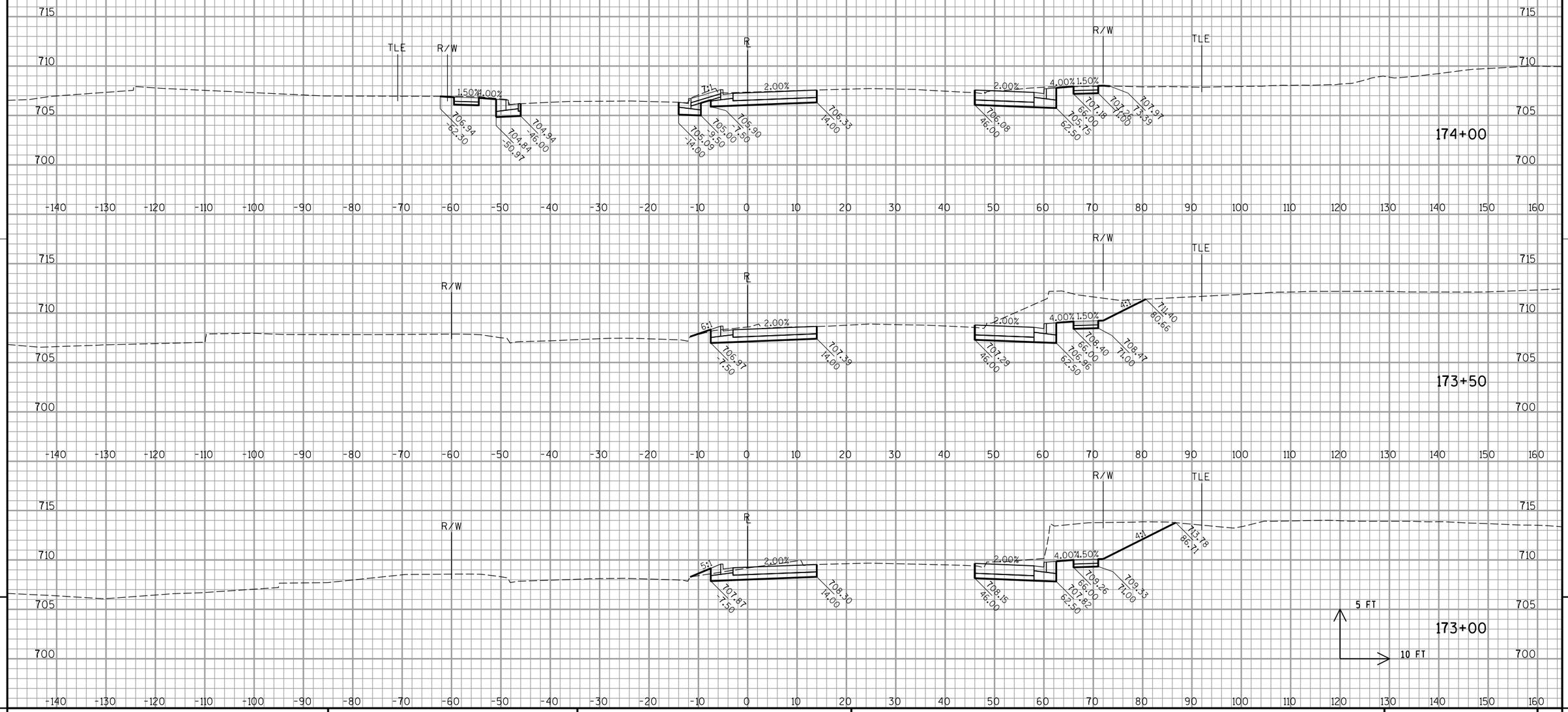
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 486	E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090200_xs_31.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 487	E

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WISDOT/CADDS SHEET 21

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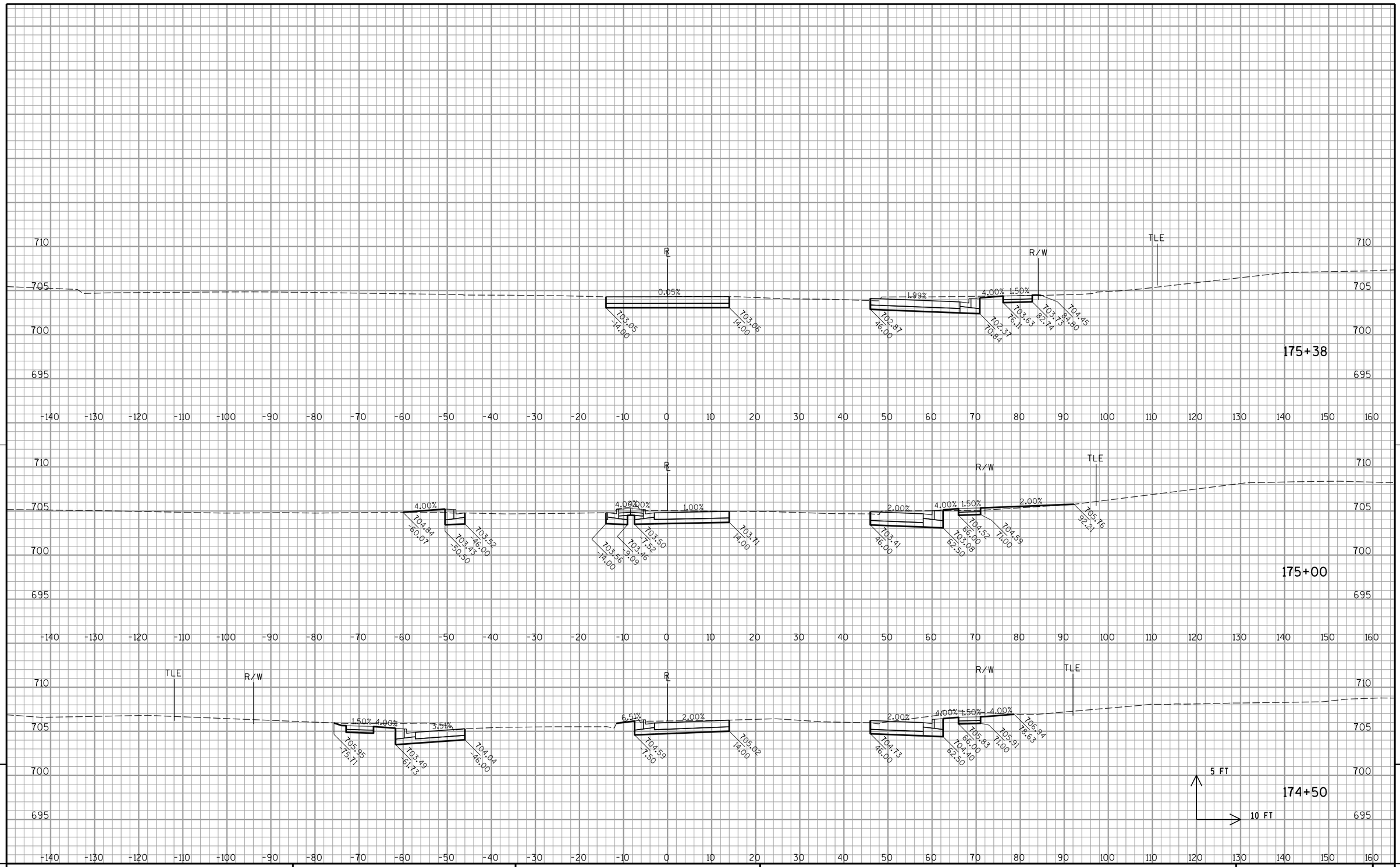

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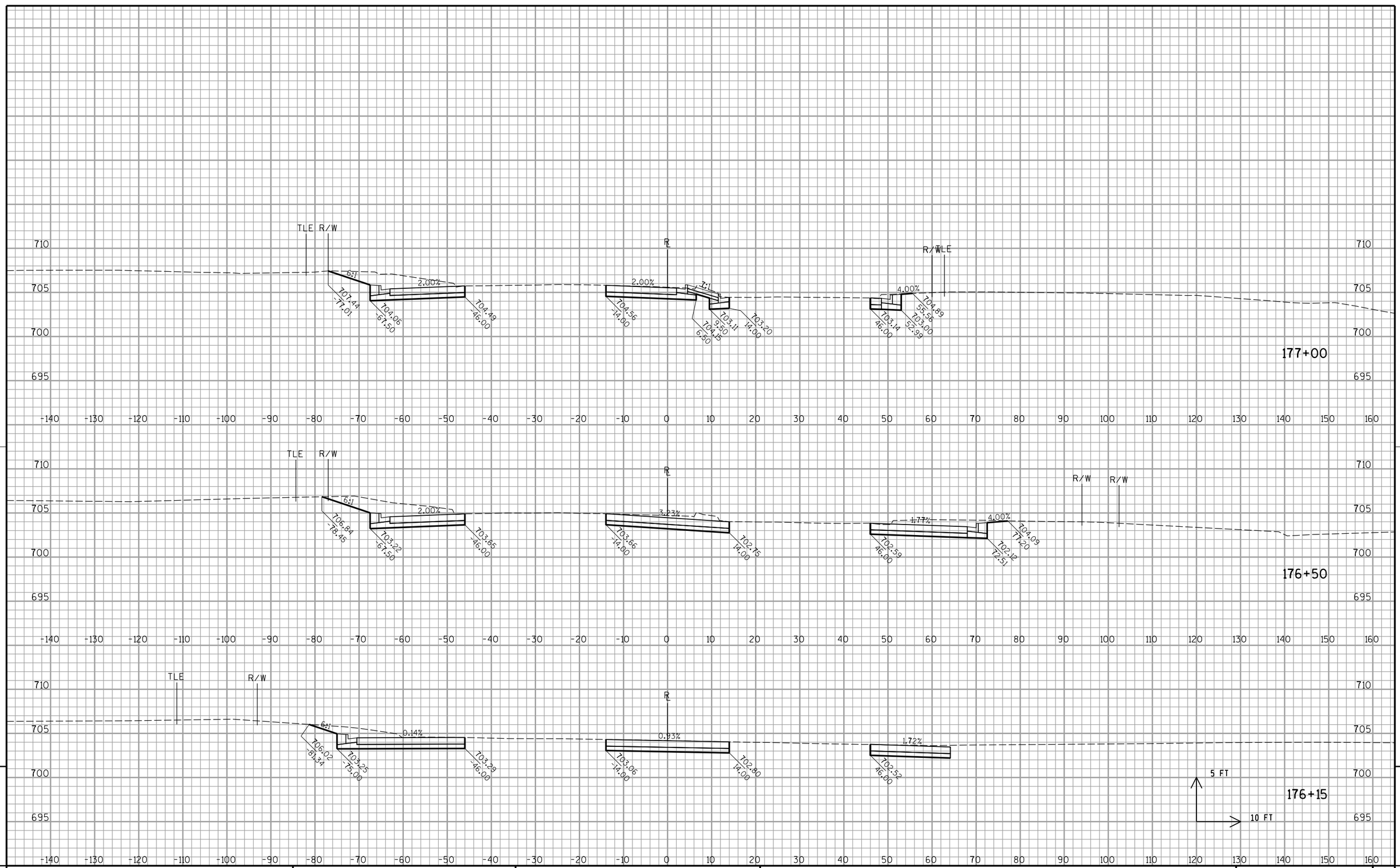
PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 488	E



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 489	E

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WISDOT/CADDS SHEET 21

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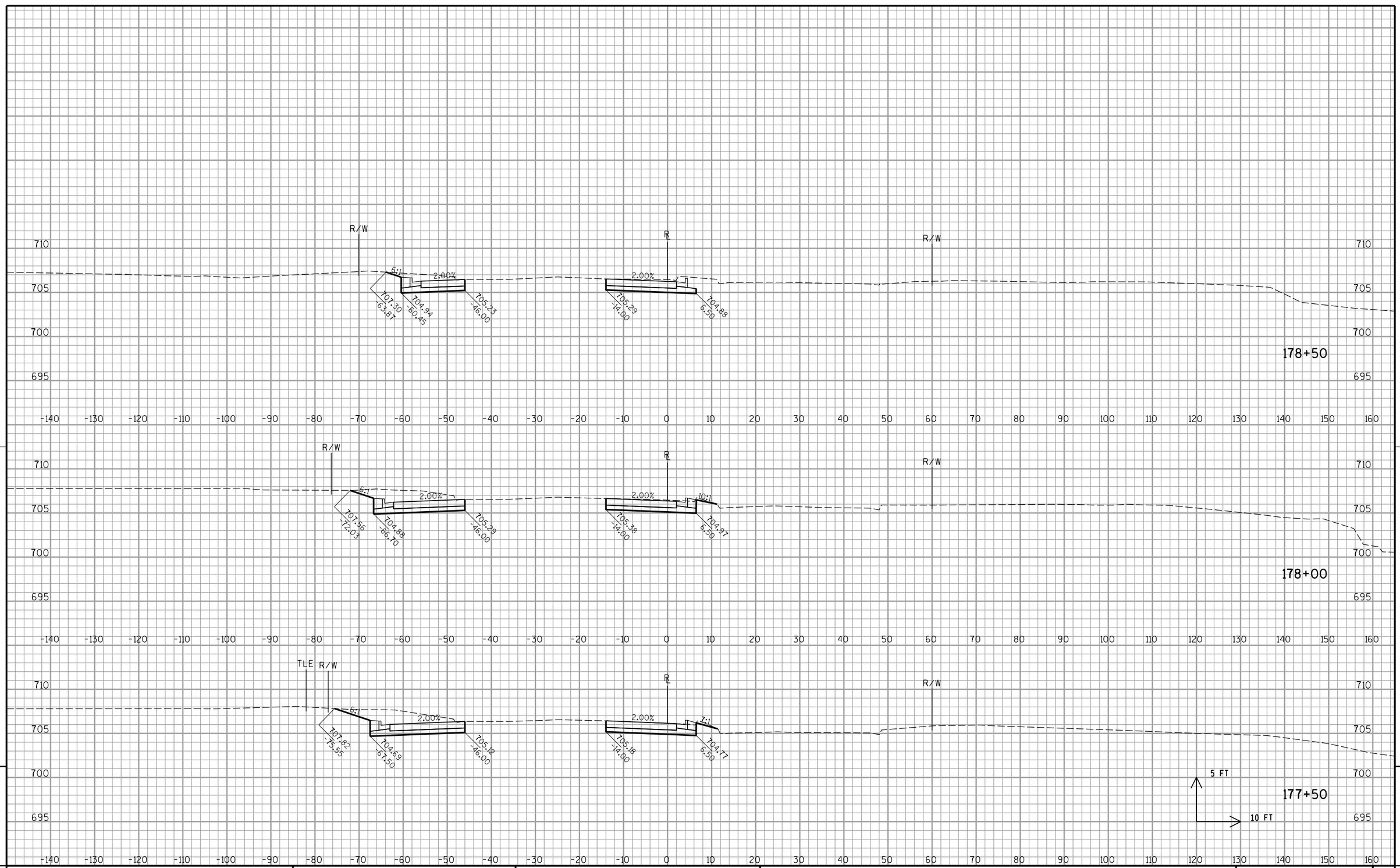

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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 490	E

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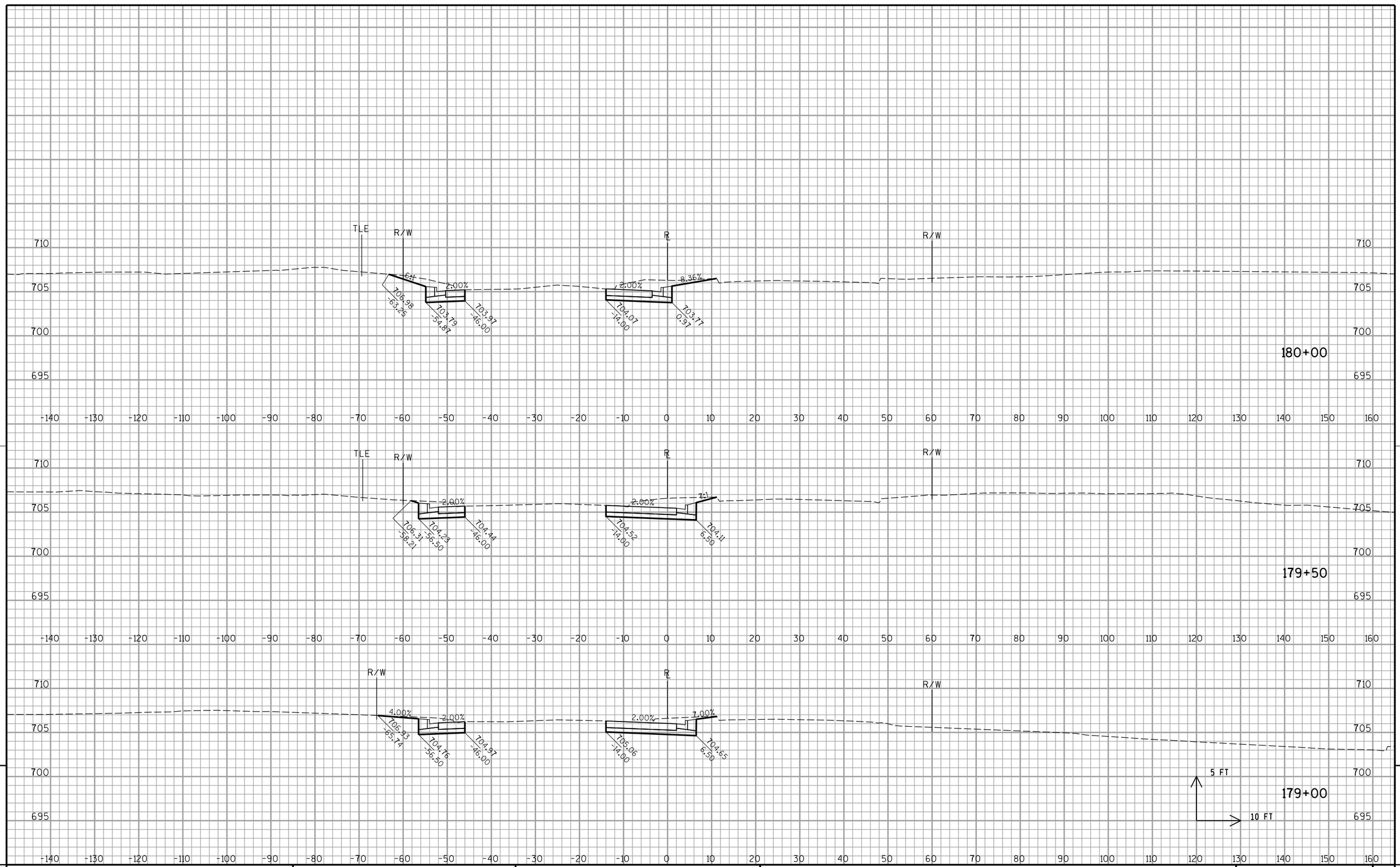
WISDOT/CADDS SHEET 21



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 491	E

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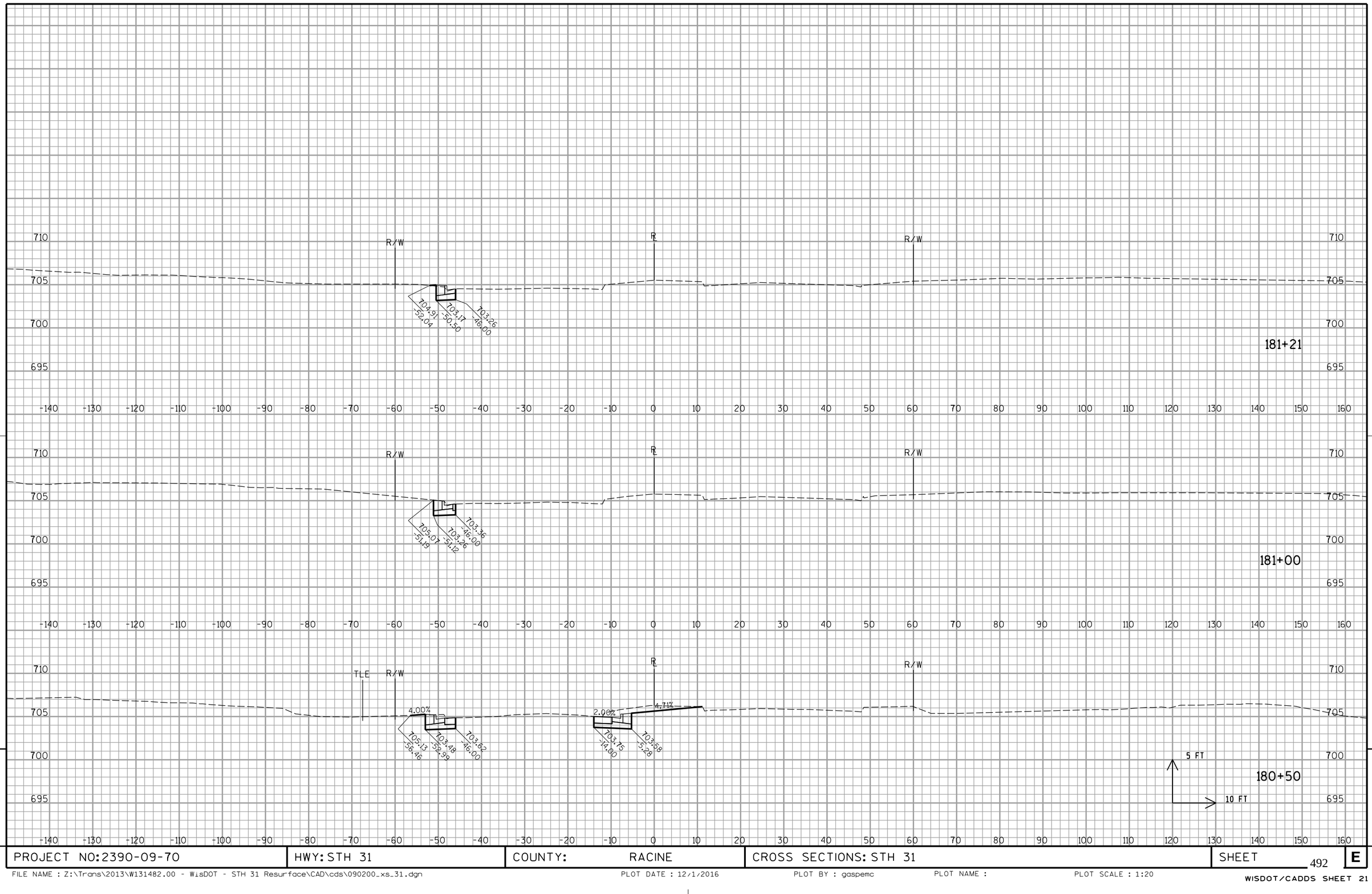
WISDOT/CADDS SHEET 21



PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 492	E

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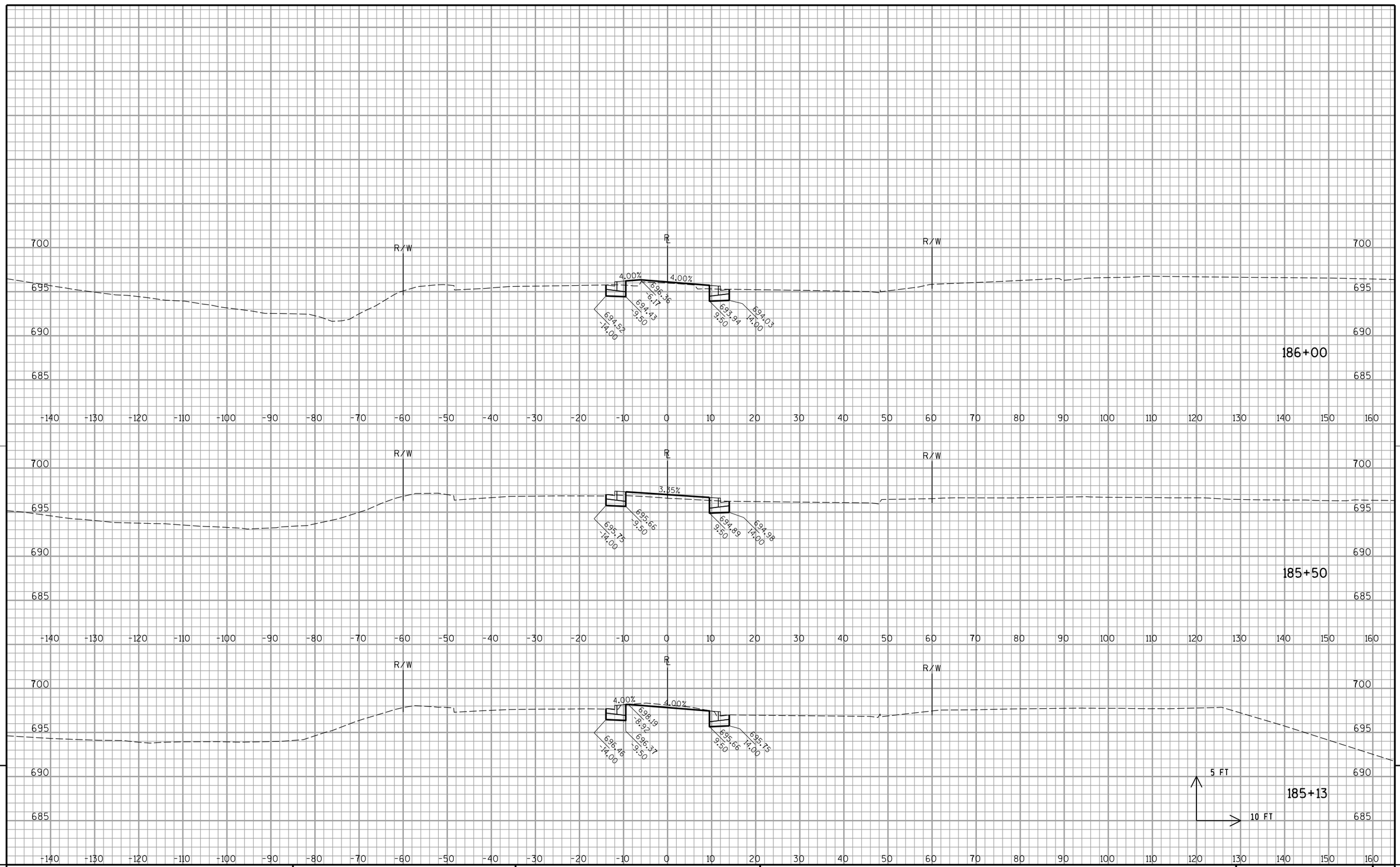
WISDOT/CADDS SHEET 21



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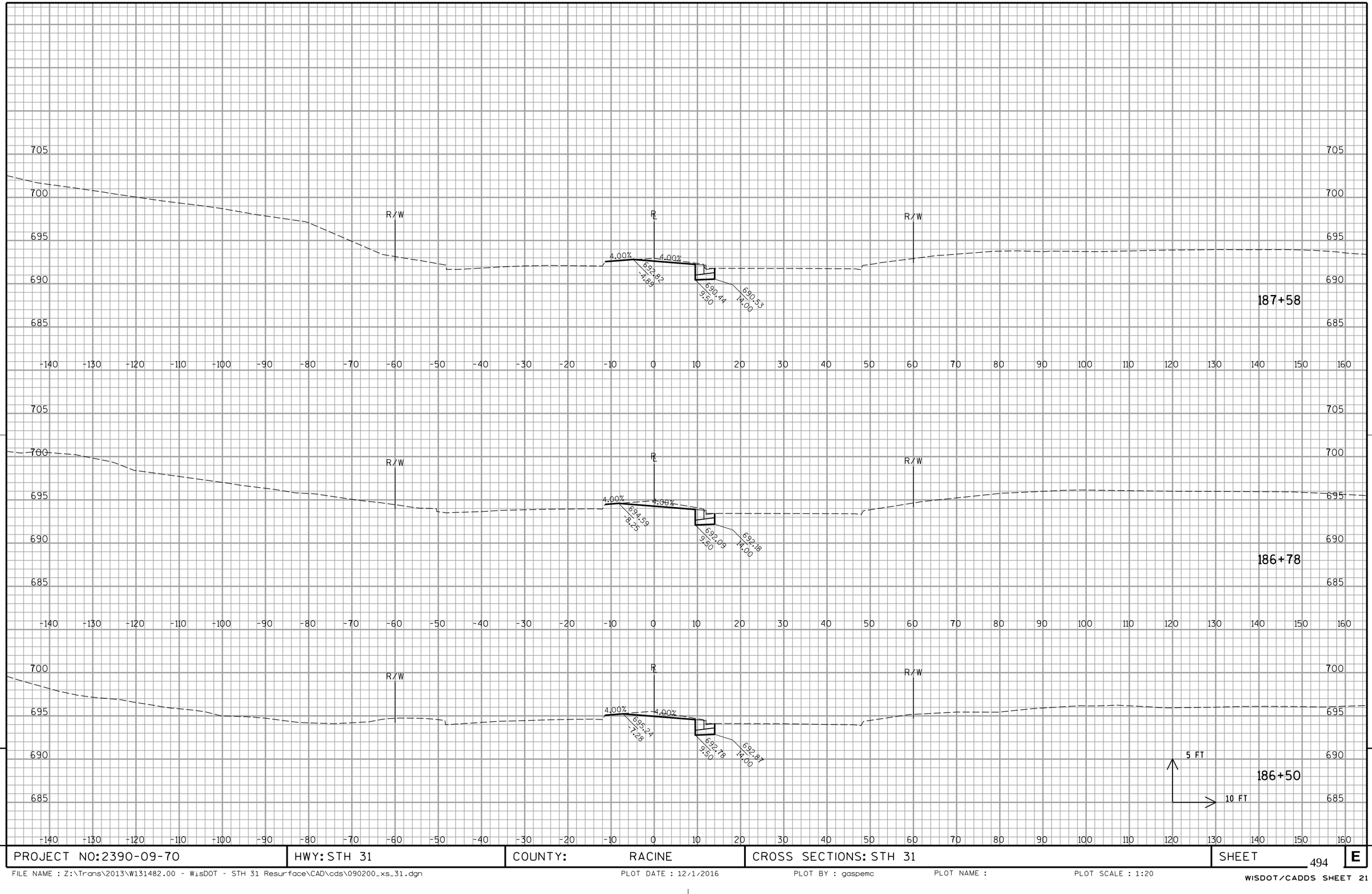
WISDOT/CADDS SHEET 21



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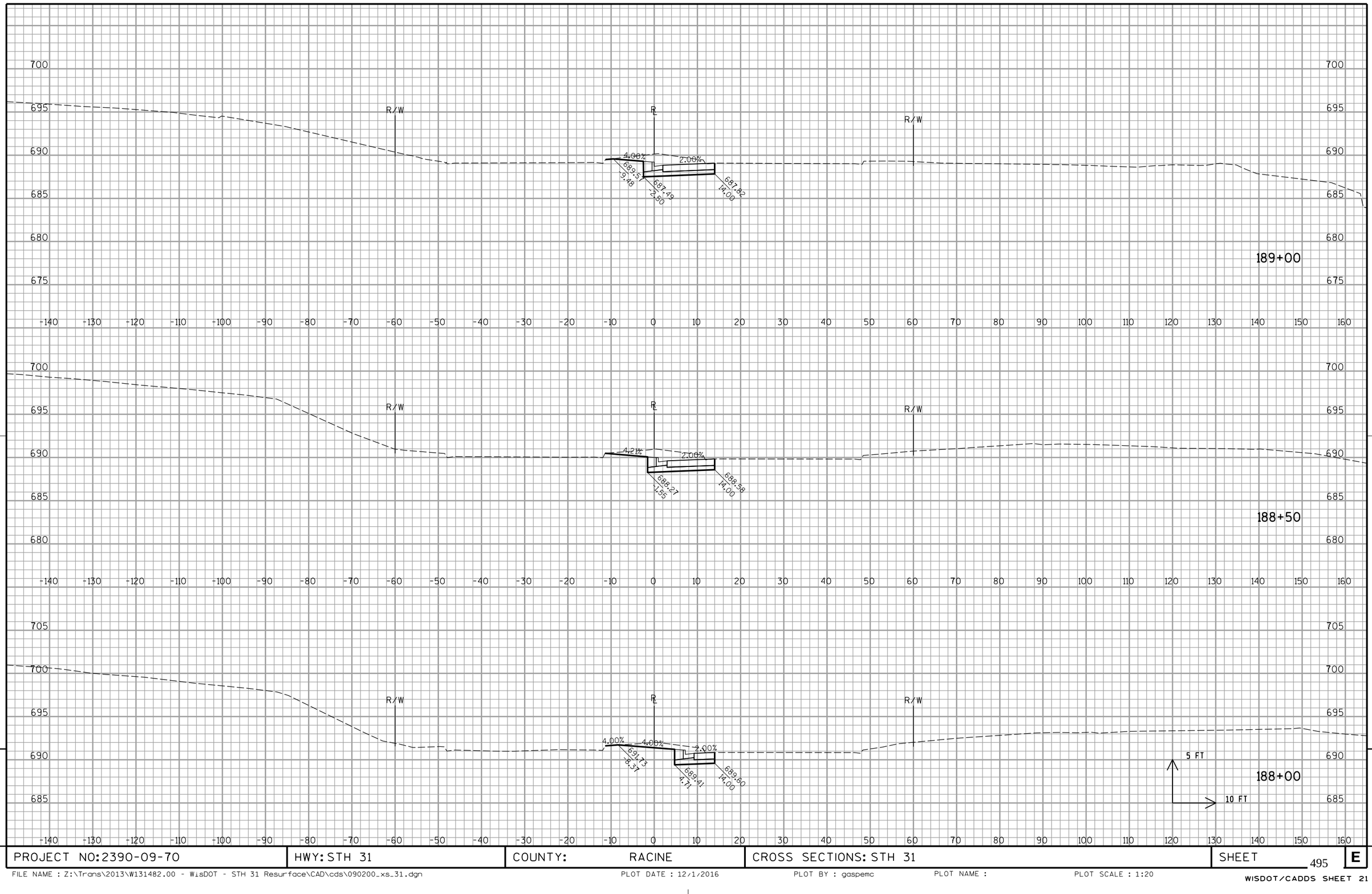
WISDOT/CADDS SHEET 21



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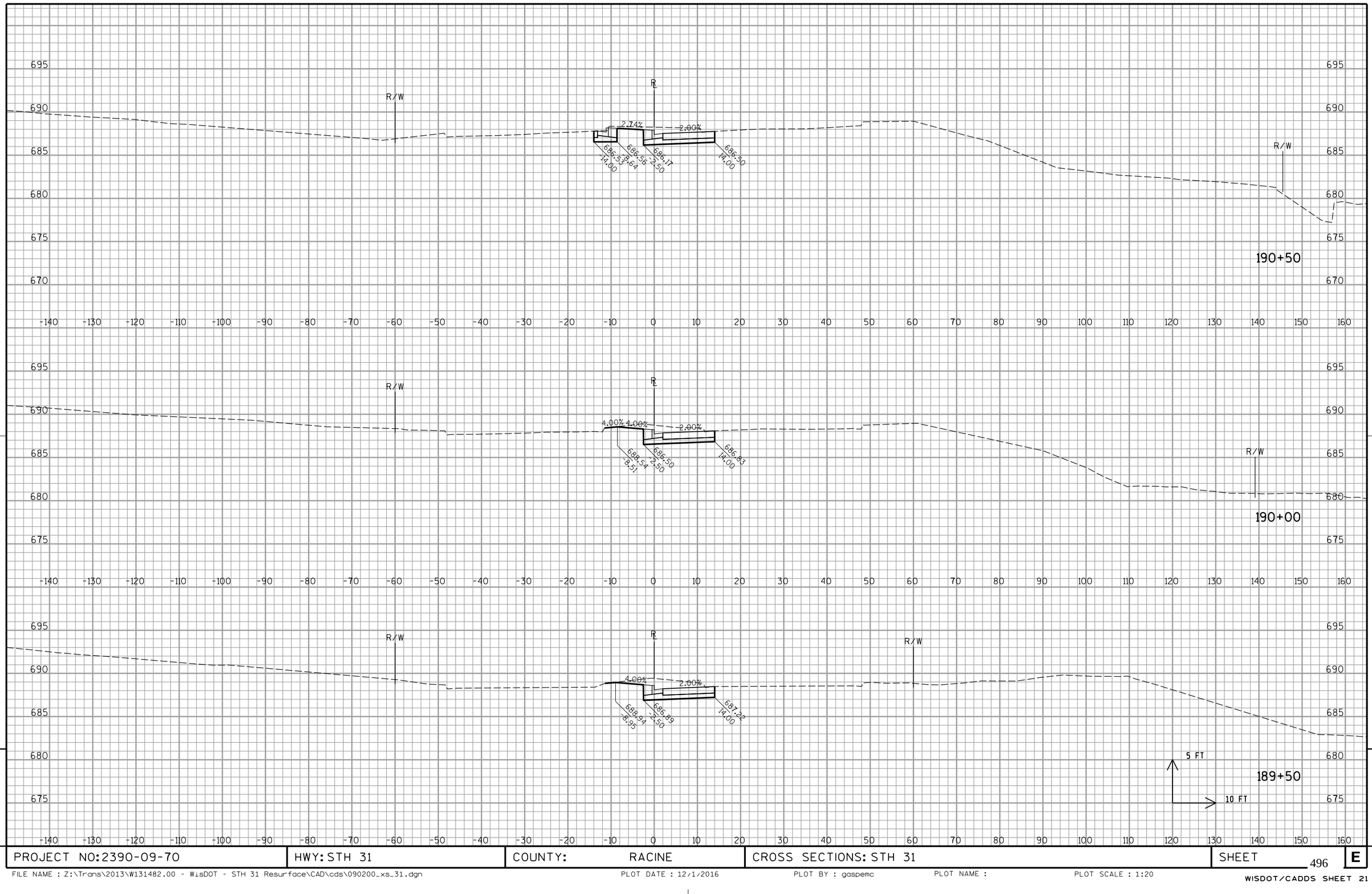

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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 496	E

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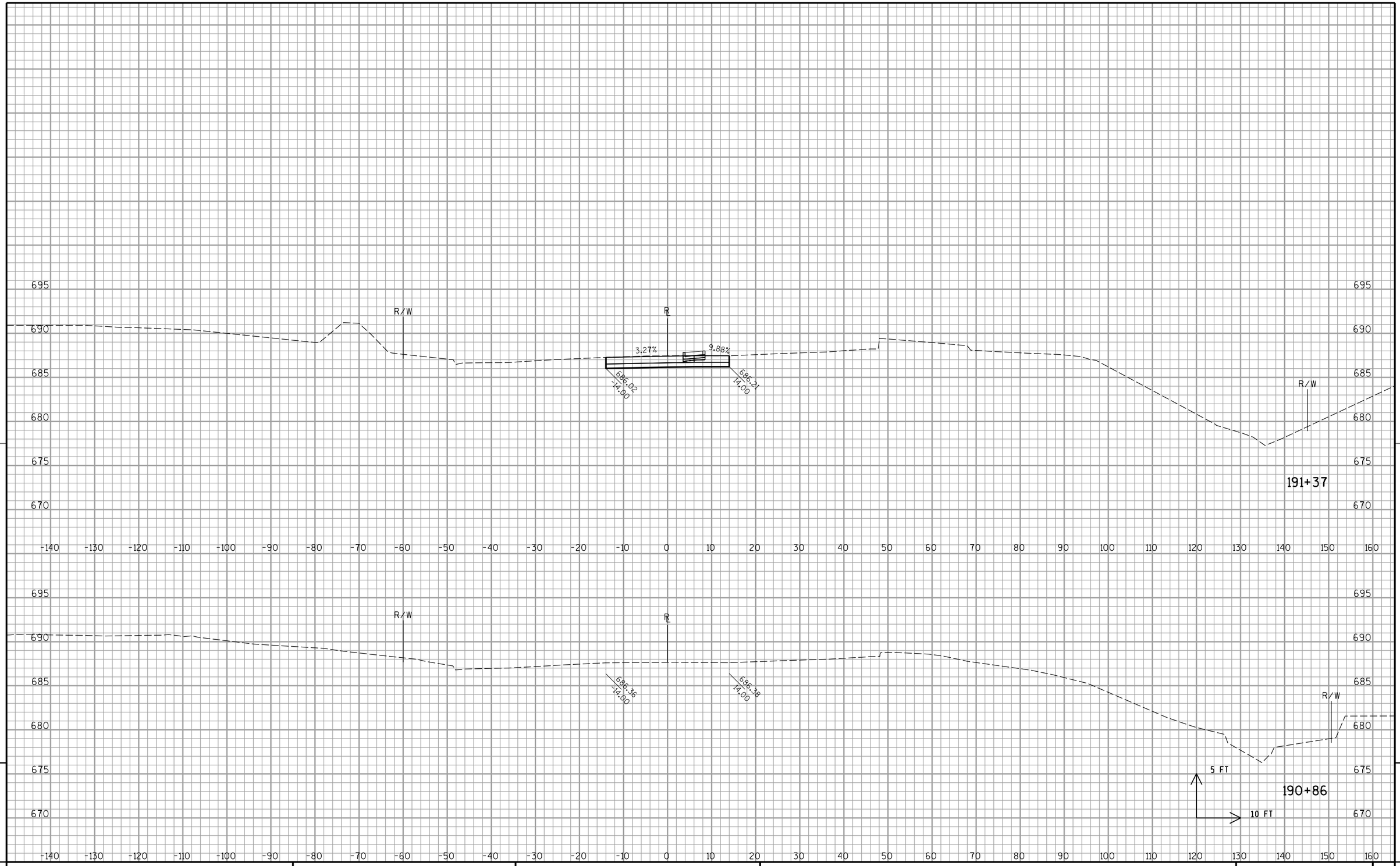
WISDOT/CADDS SHEET 21



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 497	E

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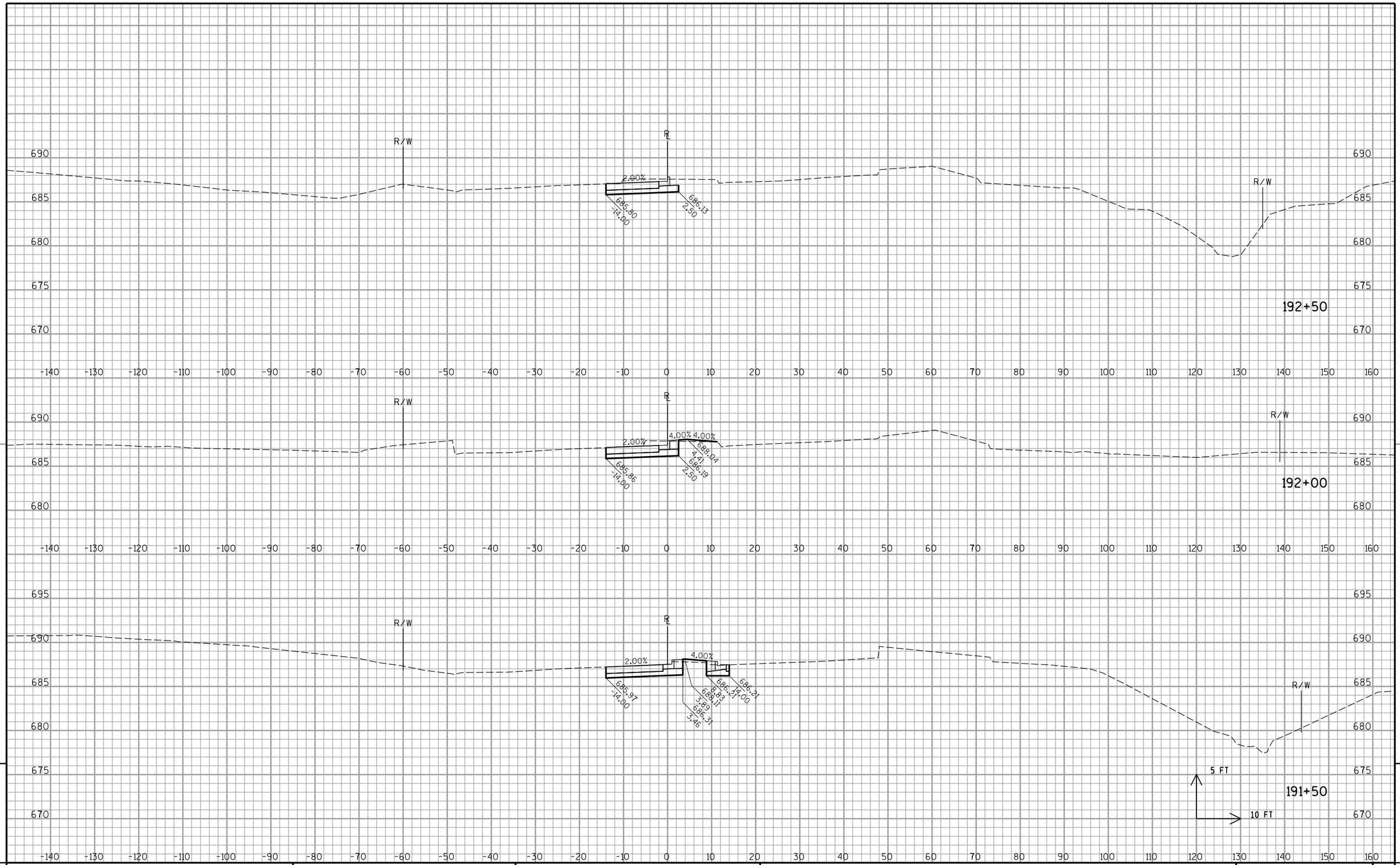
WISDOT/CADDS SHEET 21



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 498	E

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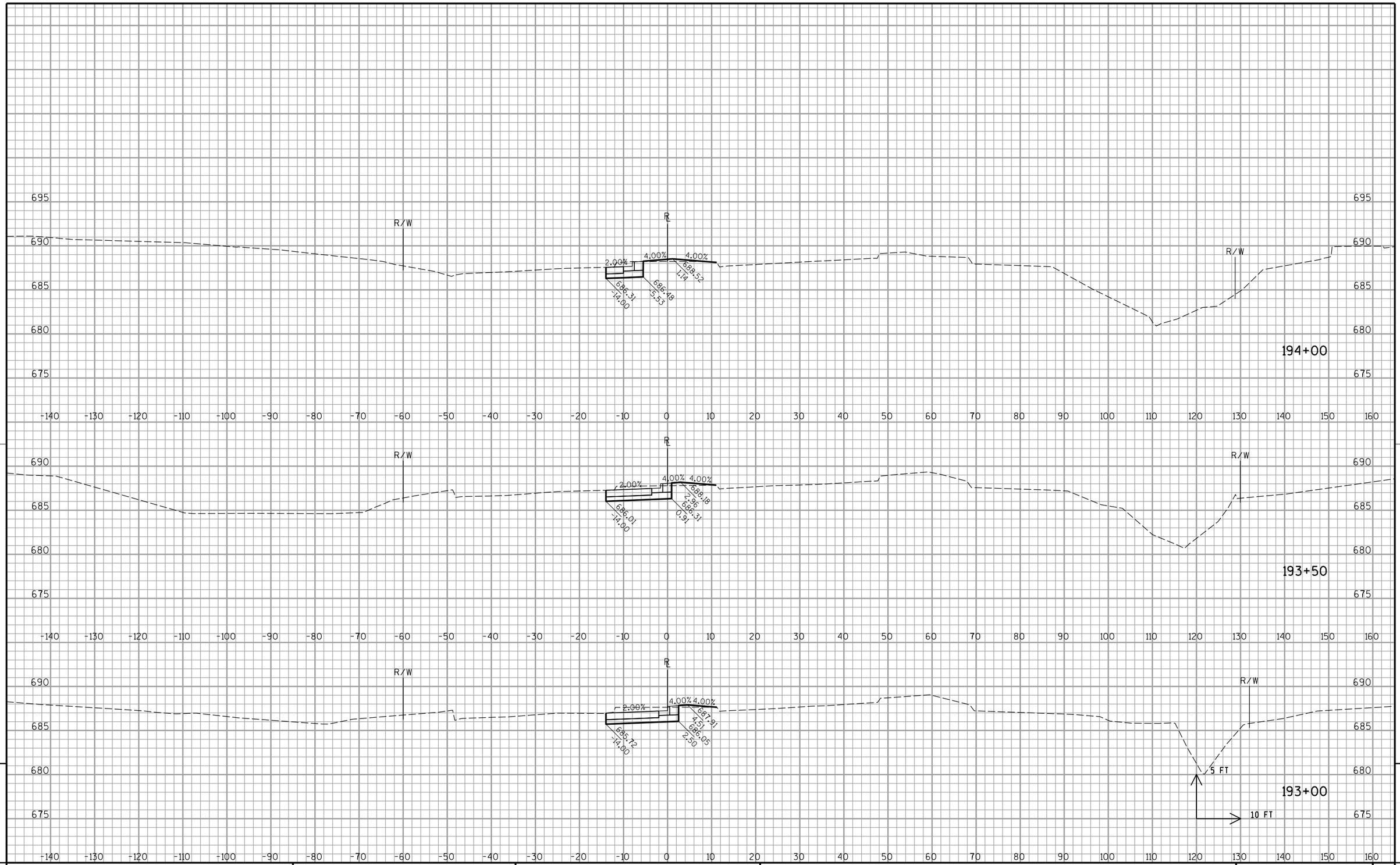

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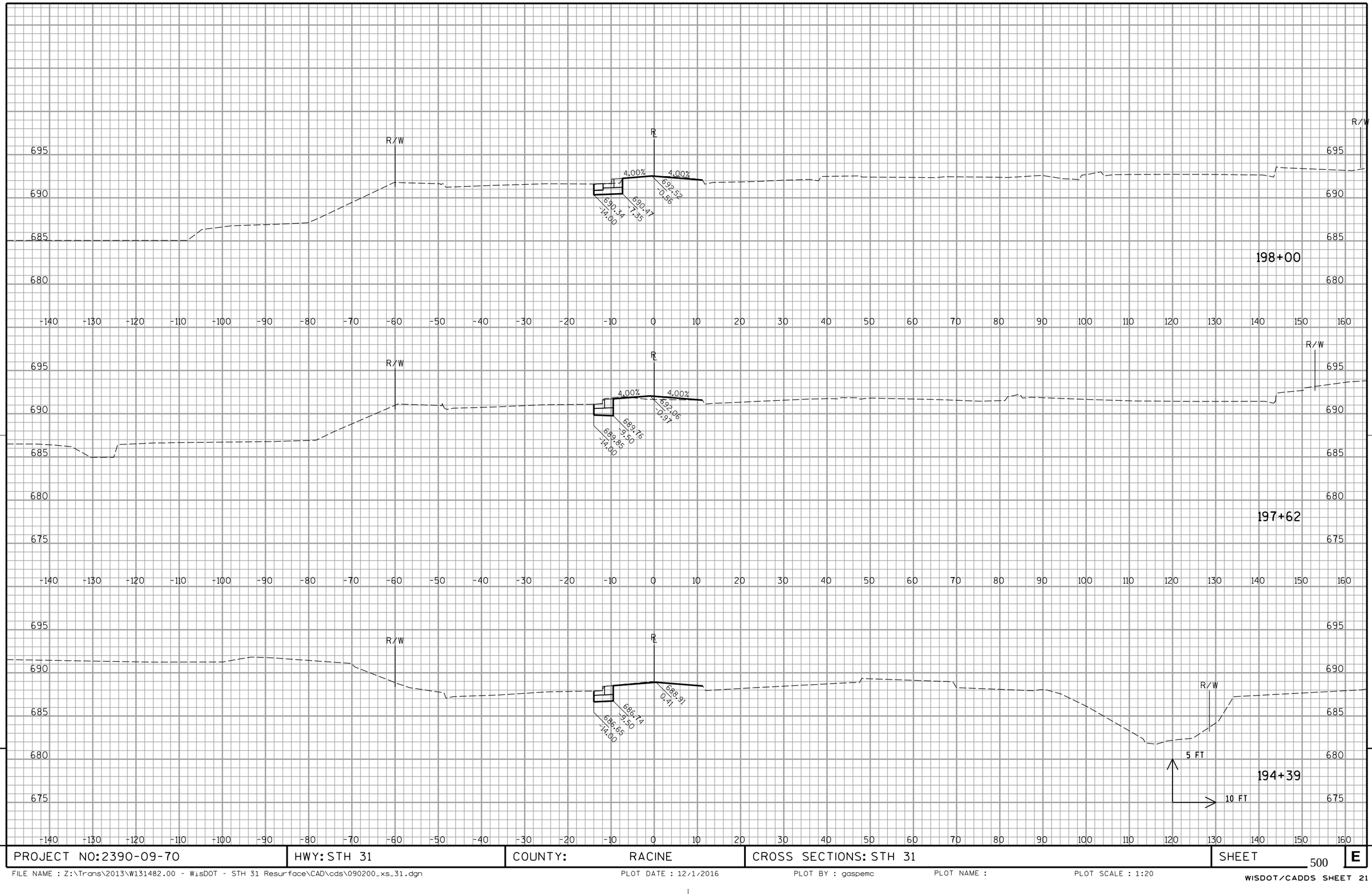
WISDOT/CADDS SHEET 21



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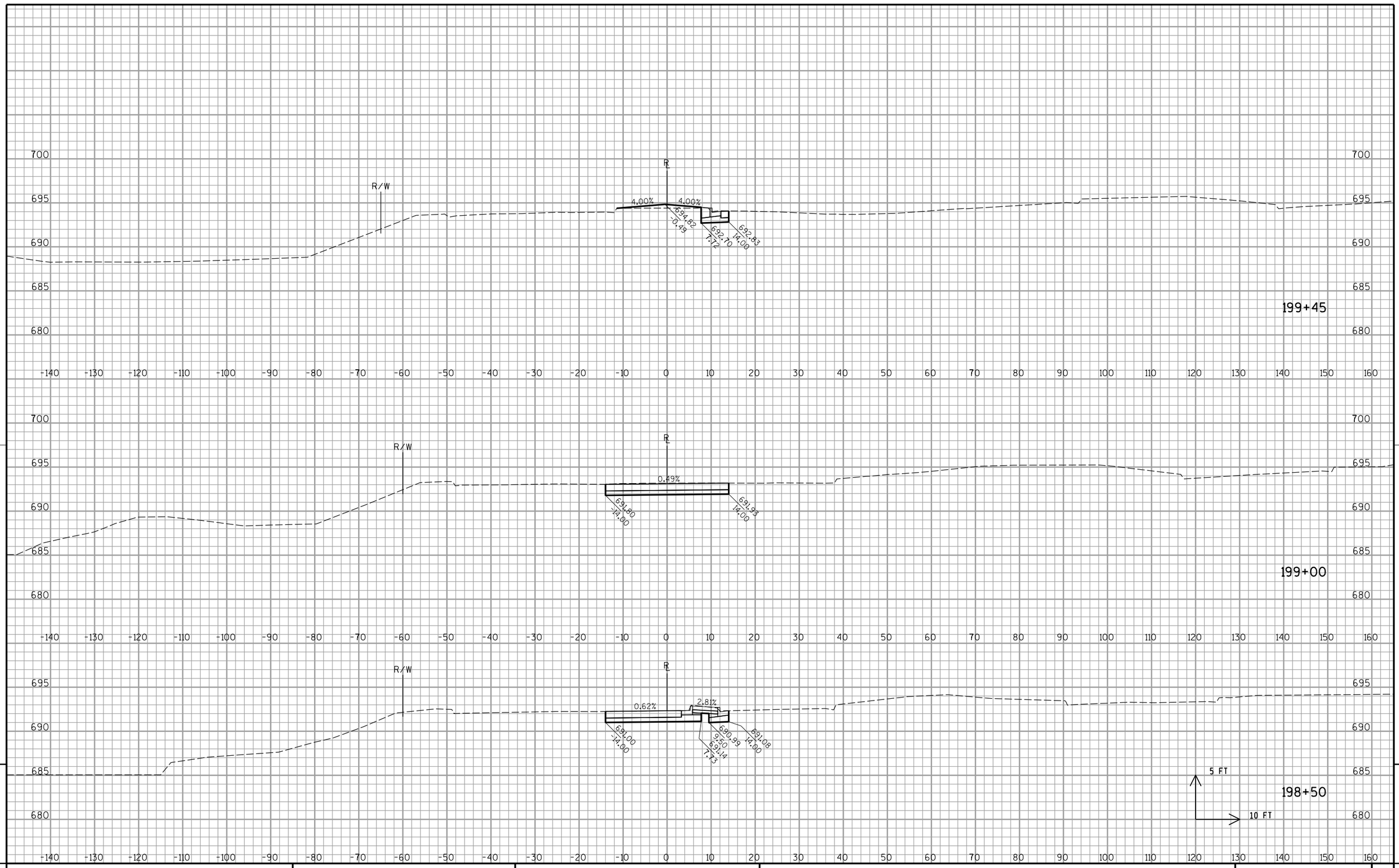

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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 31	SHEET 501	E

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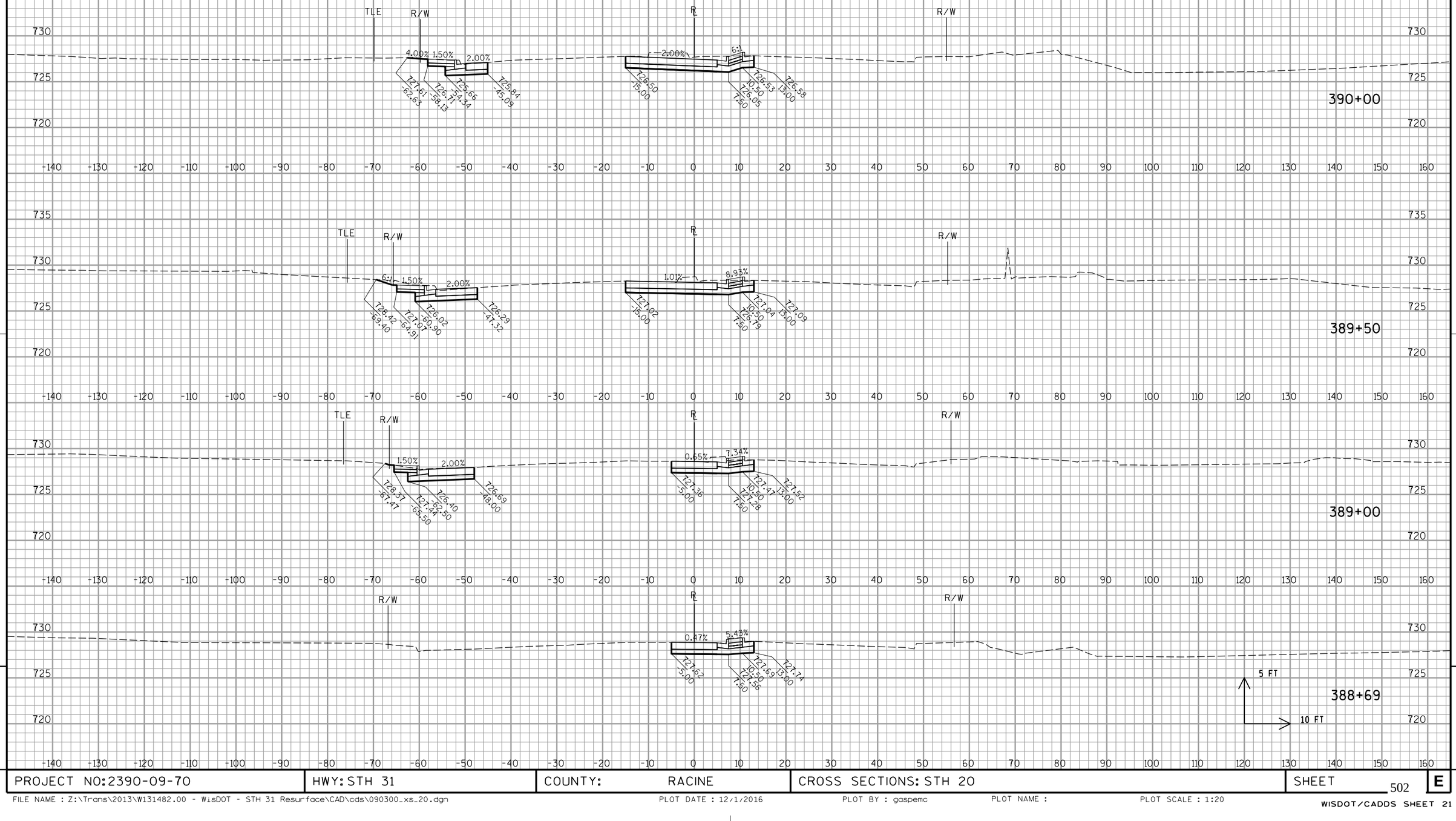
WISDOT/CADDS SHEET 21



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 502	E

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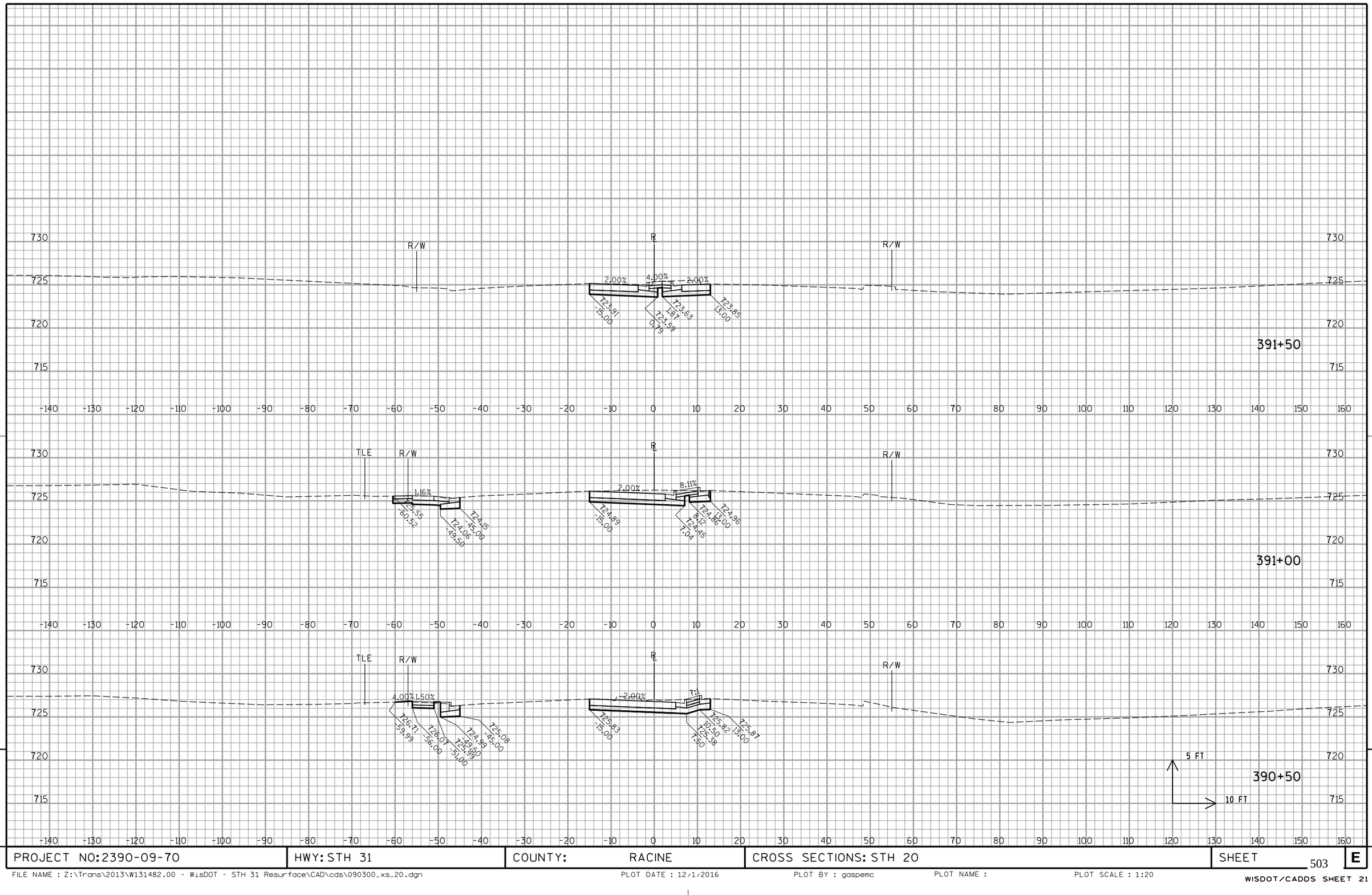
WISDOT/CADDS SHEET 21



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WISDOT/CADDS SHEET 21

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9

PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 504	E

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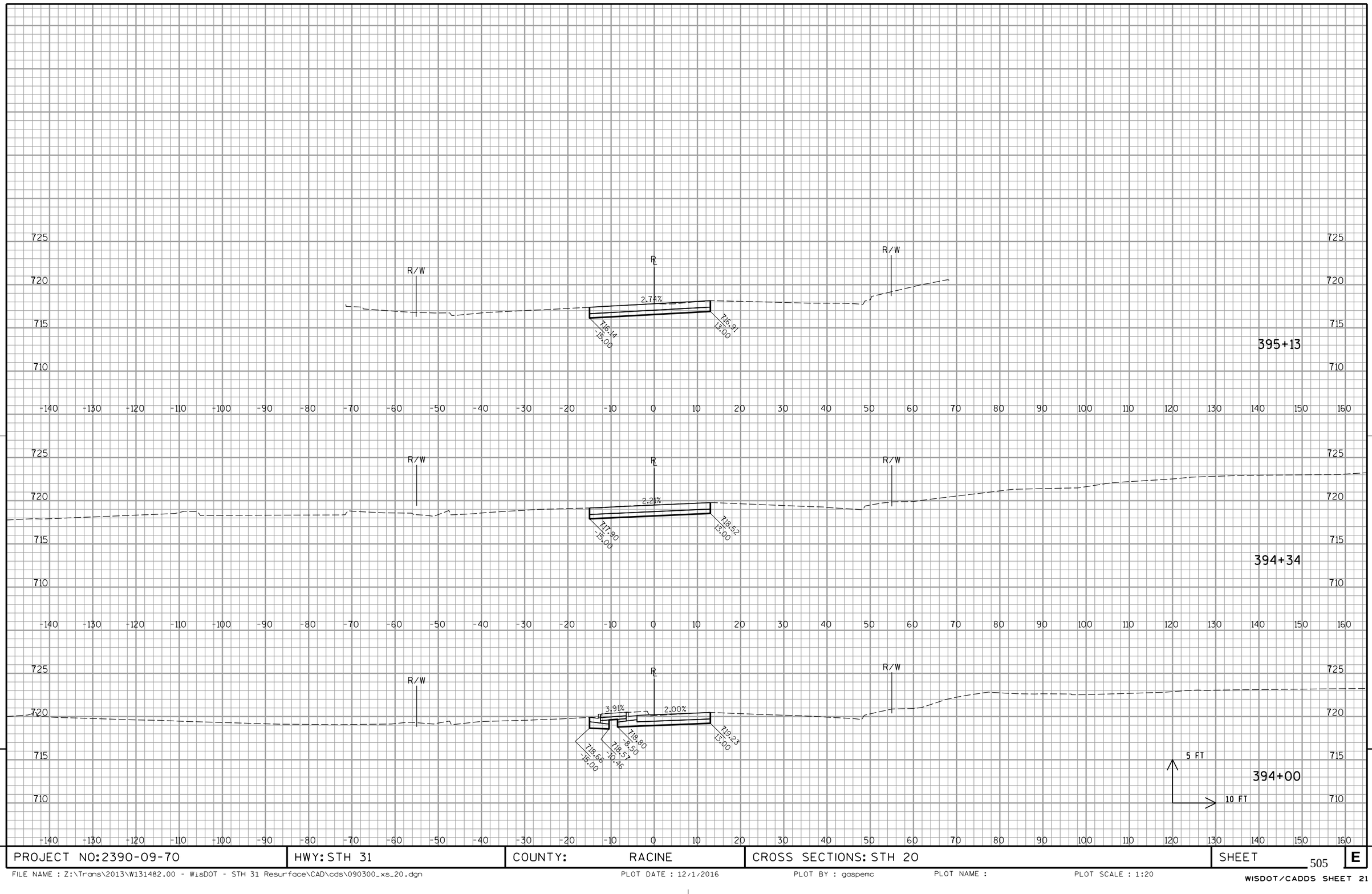
WISDOT/CADDS SHEET 21



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 505	E

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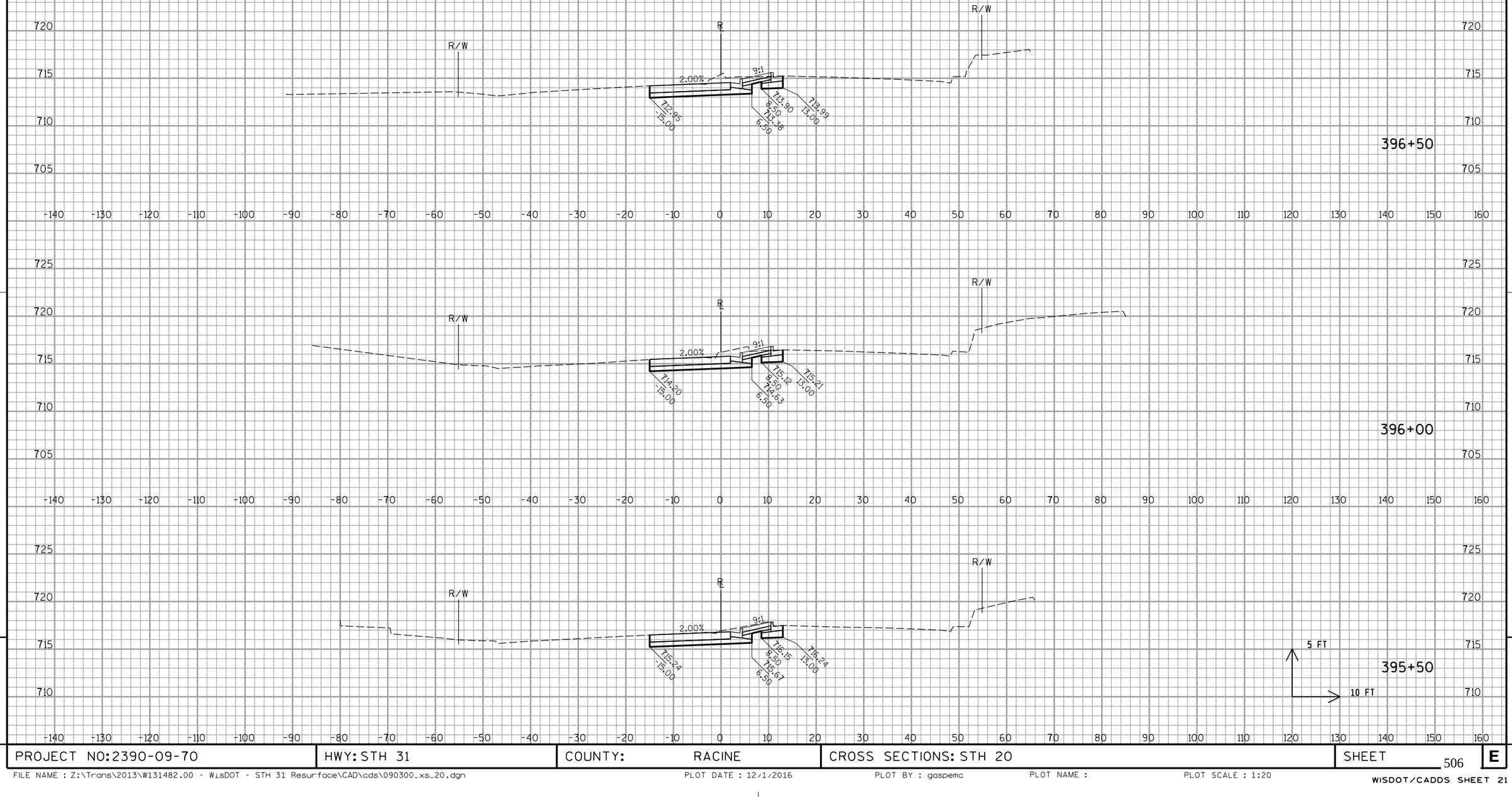
WISDOT/CADDS SHEET 21



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 506	E

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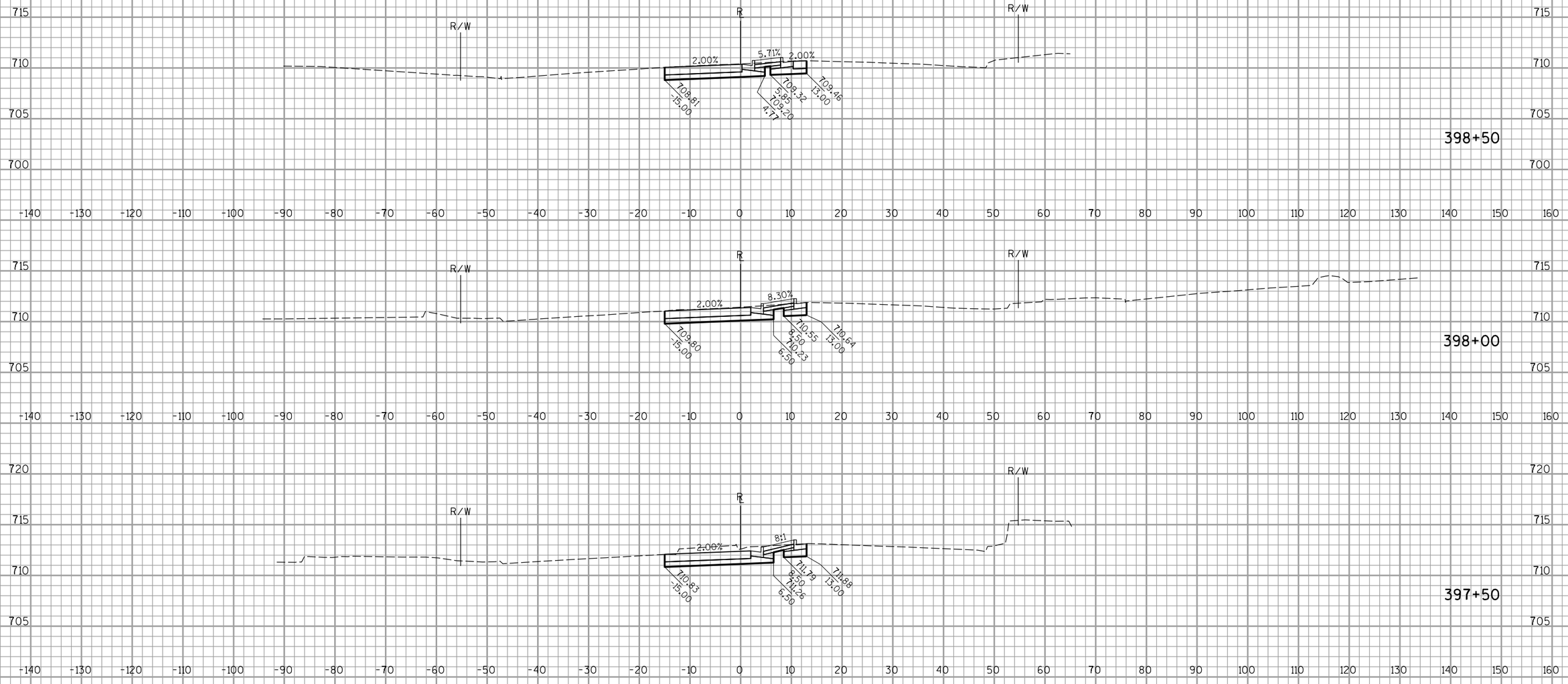
WISDOT/CADDS SHEET 21



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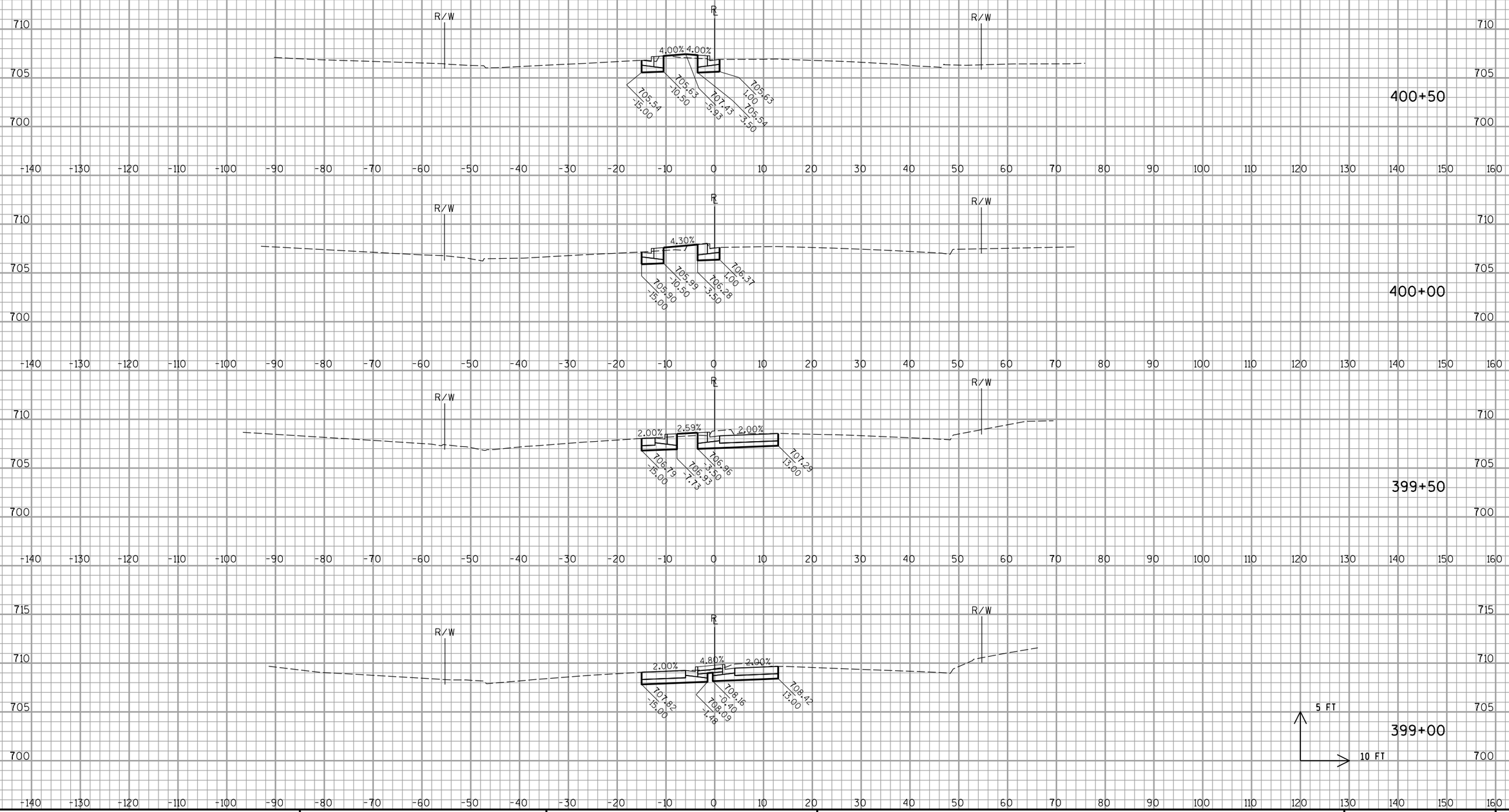
WISDOT/CADDS SHEET 21



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WISDOT/CADDS SHEET 21

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PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 509	E

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WISDOT/CADDS SHEET 21

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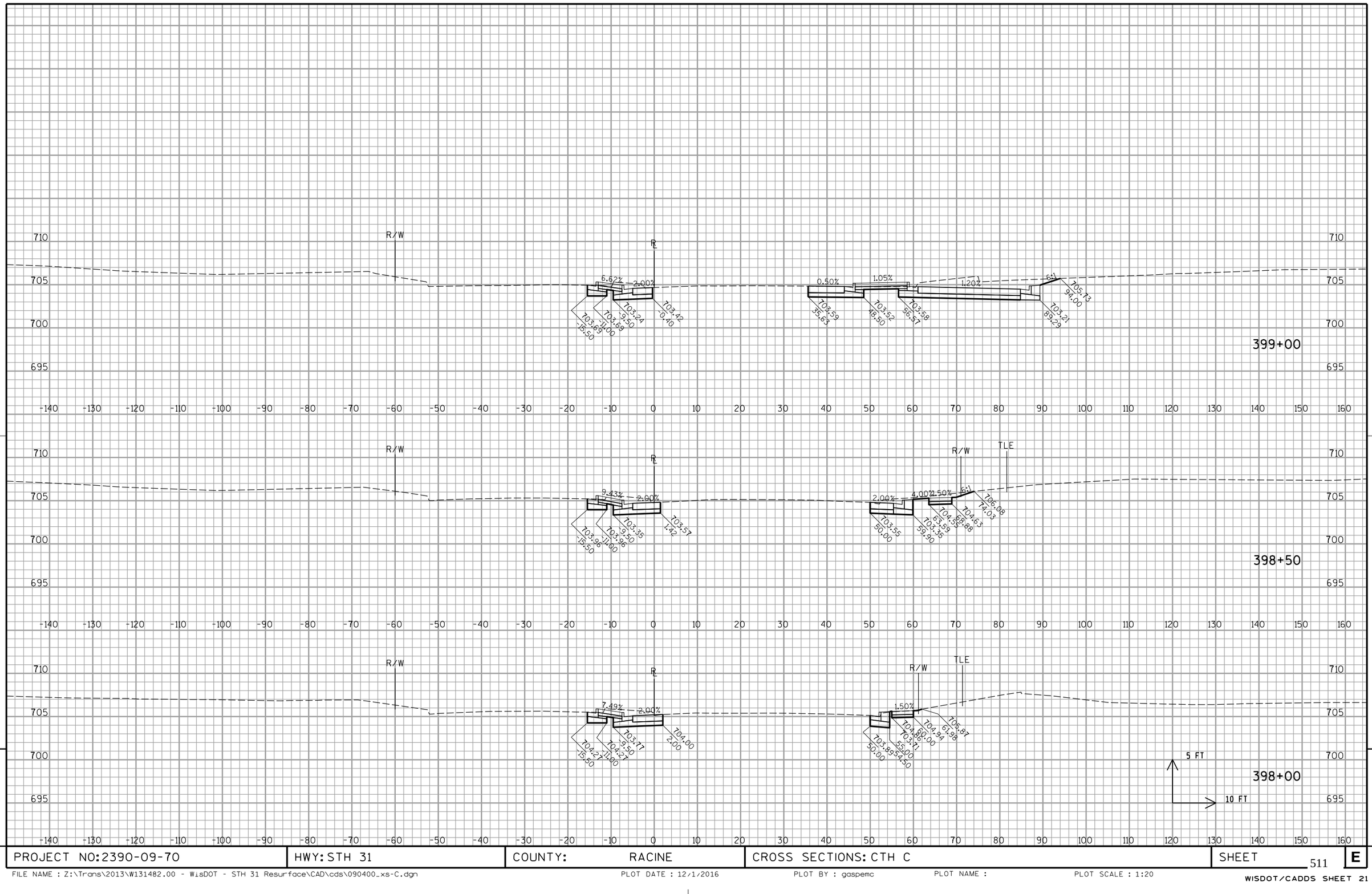
PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: CTH C	SHEET 510	E

9

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090400_xs-C.dgn PLOT DATE : 12/1/2016 PLOT BY : gaspemc PLOT NAME : PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: CTH C	SHEET 511	E

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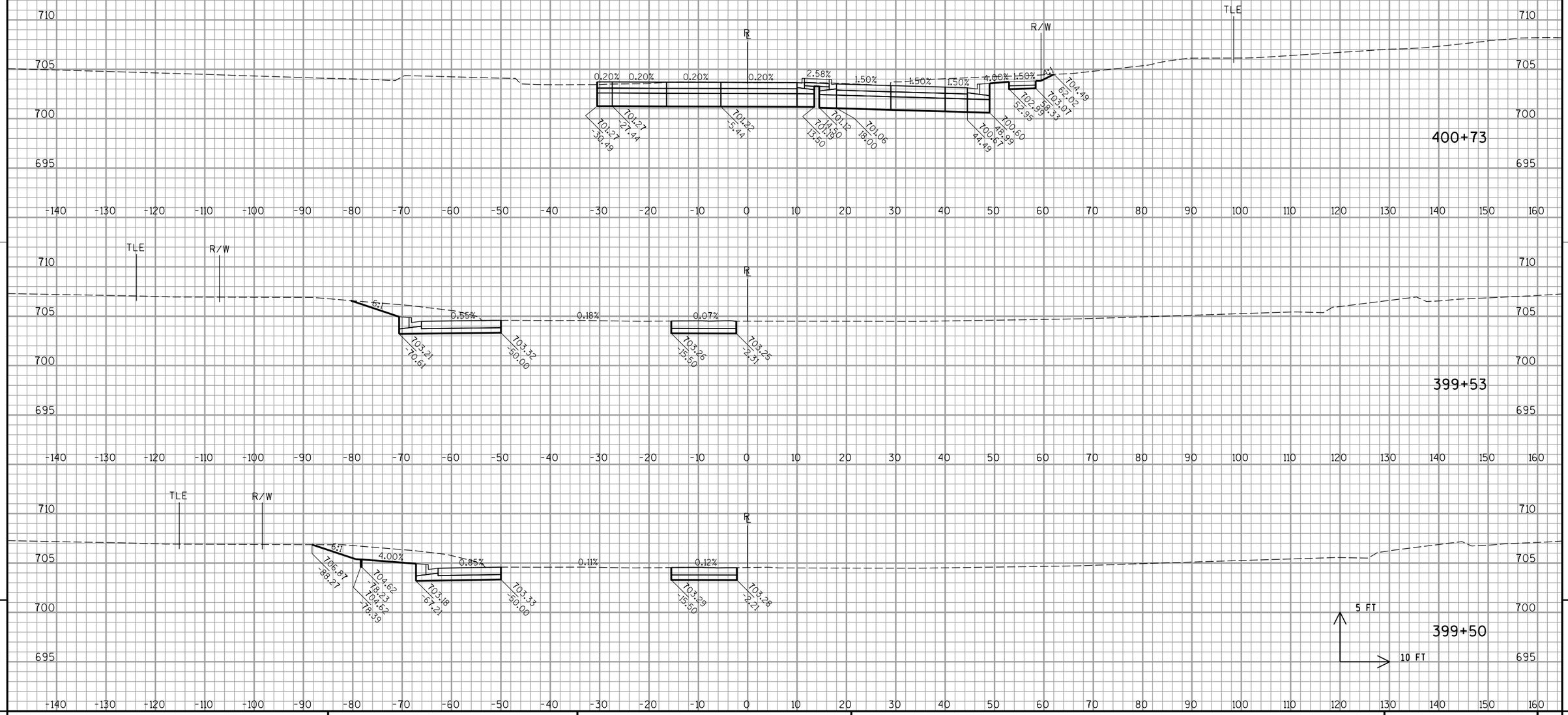

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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: CTH C	SHEET 512	E

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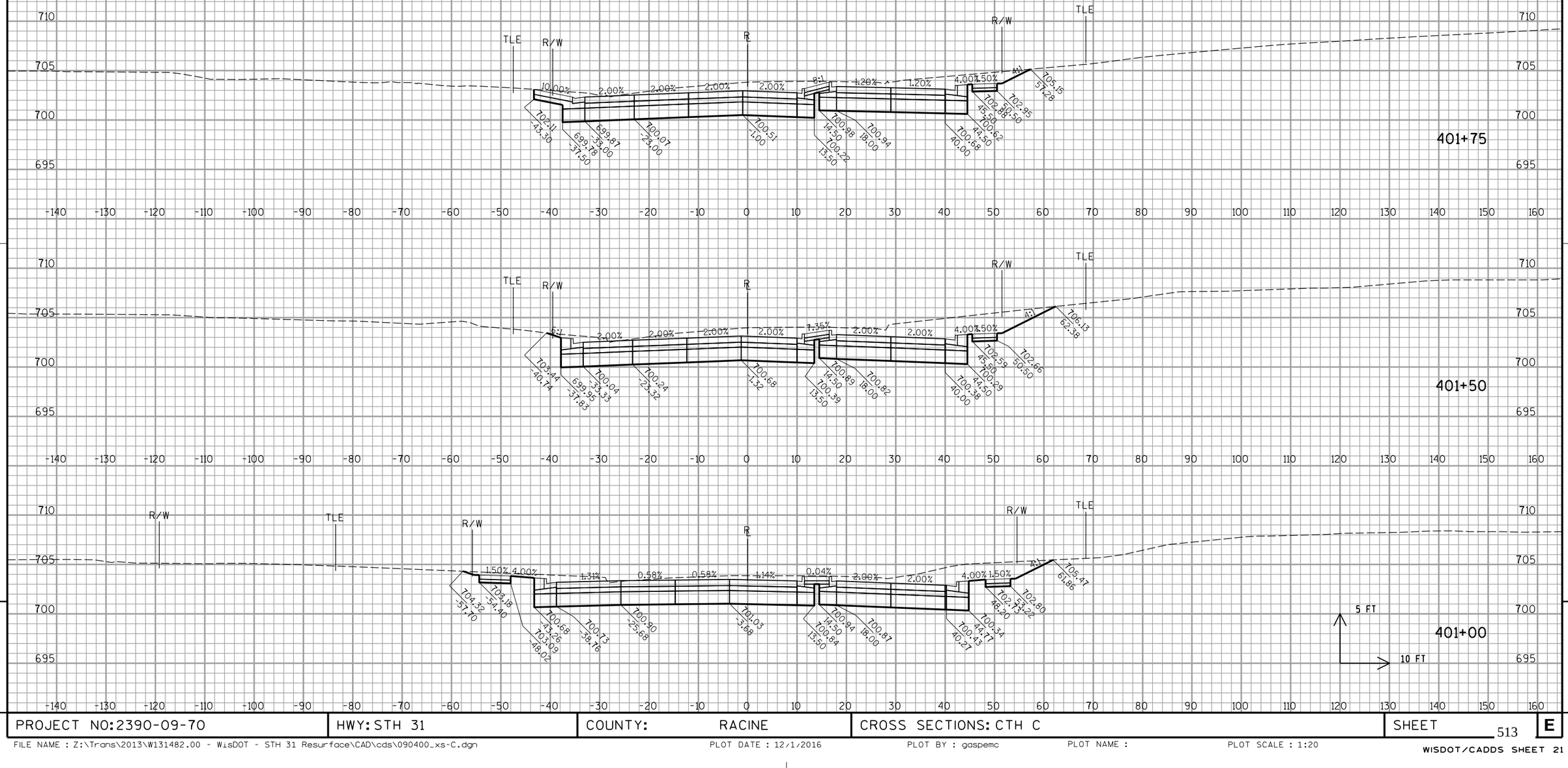
WISDOT/CADDS SHEET 21



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PROJECT NO: 2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: CTH C	SHEET 513	E

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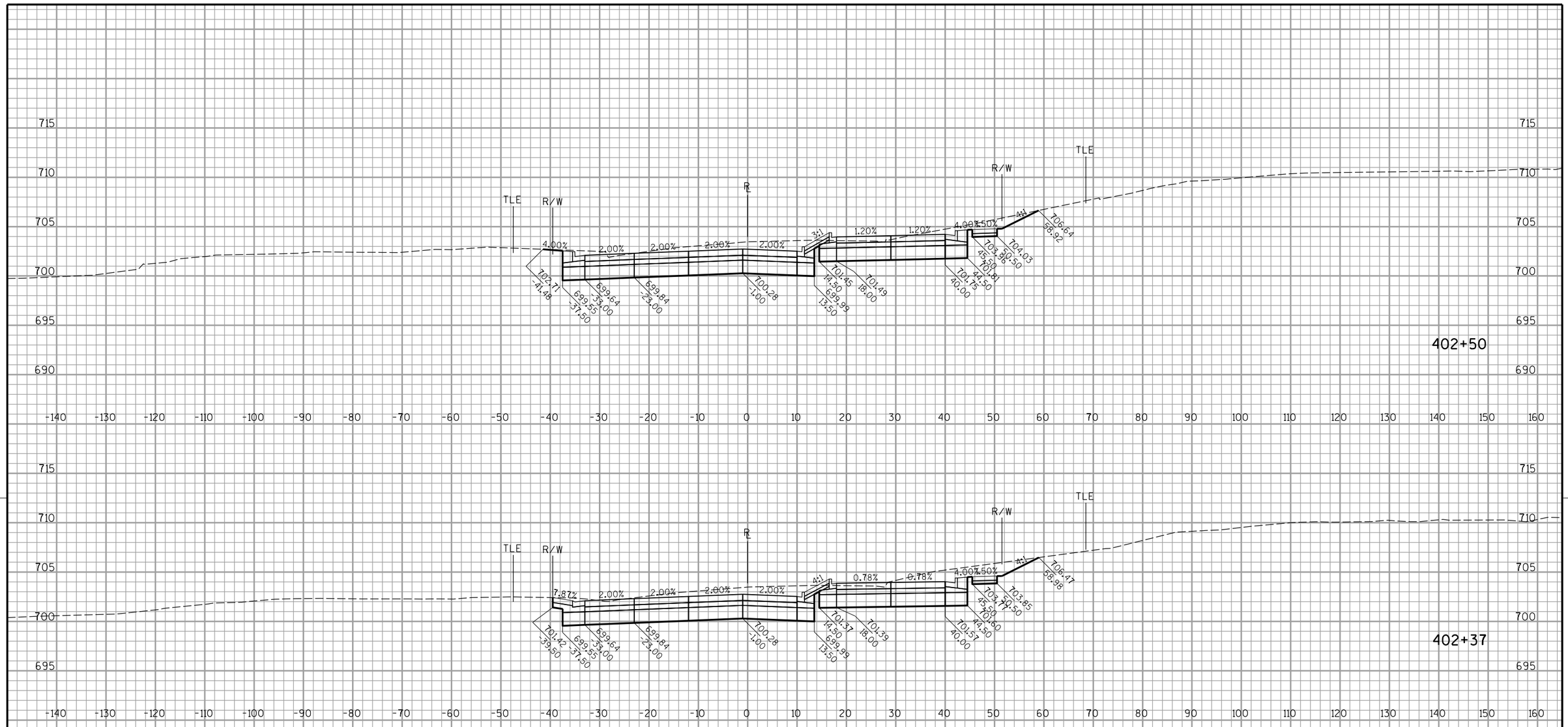
PLOT NAME :
PLOT SCALE : 1:20
WISDOT/CADDS SHEET 21



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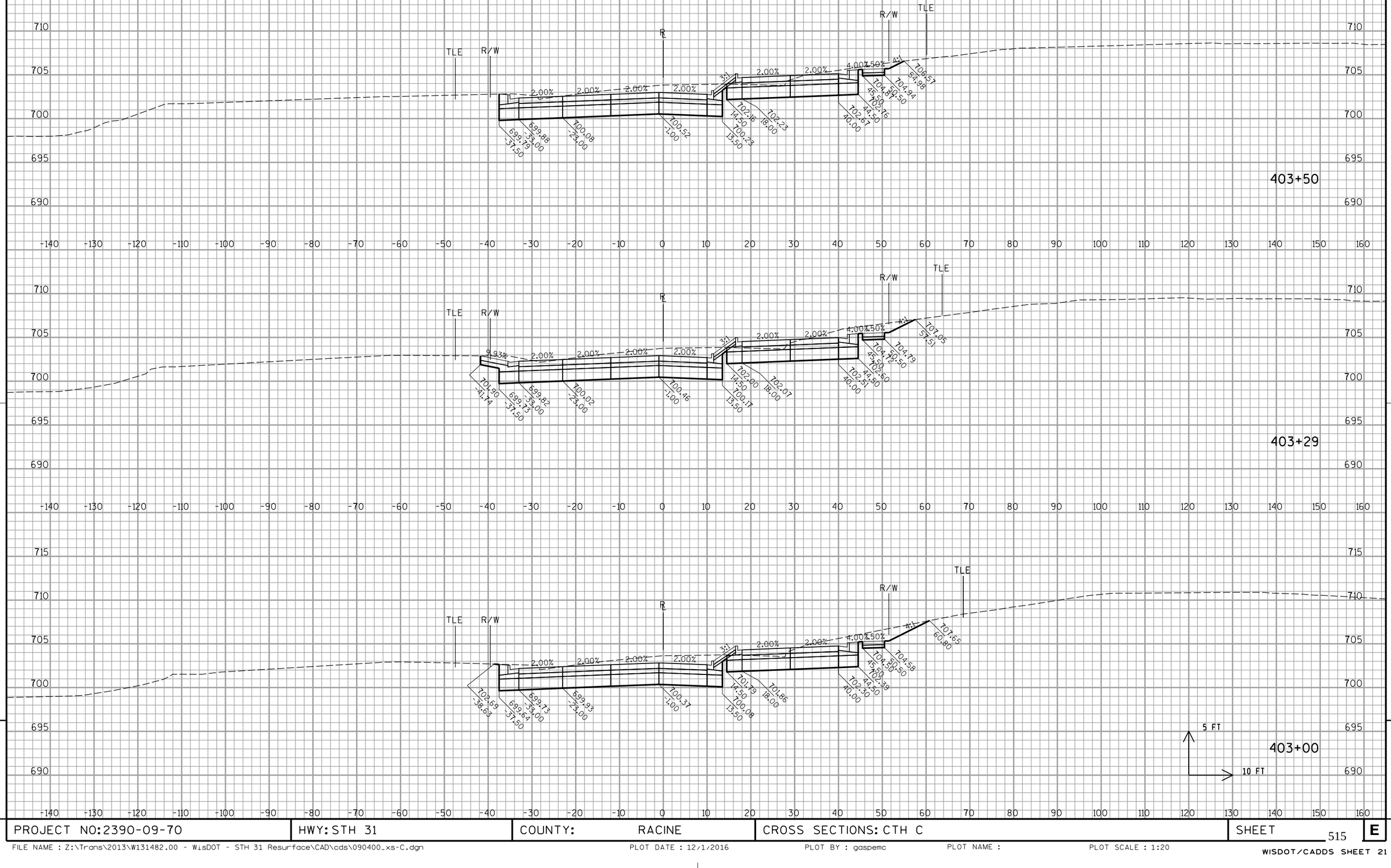

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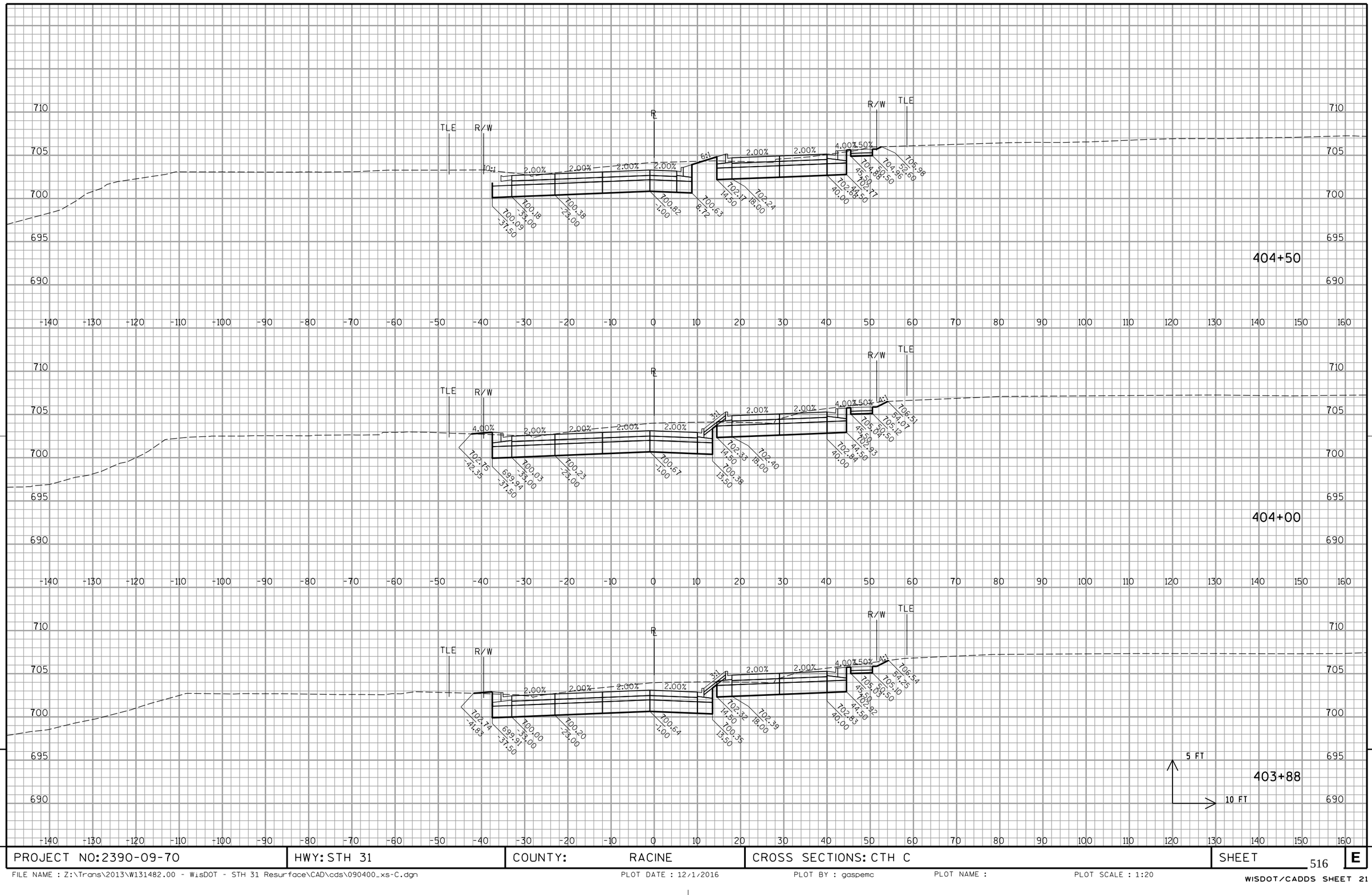

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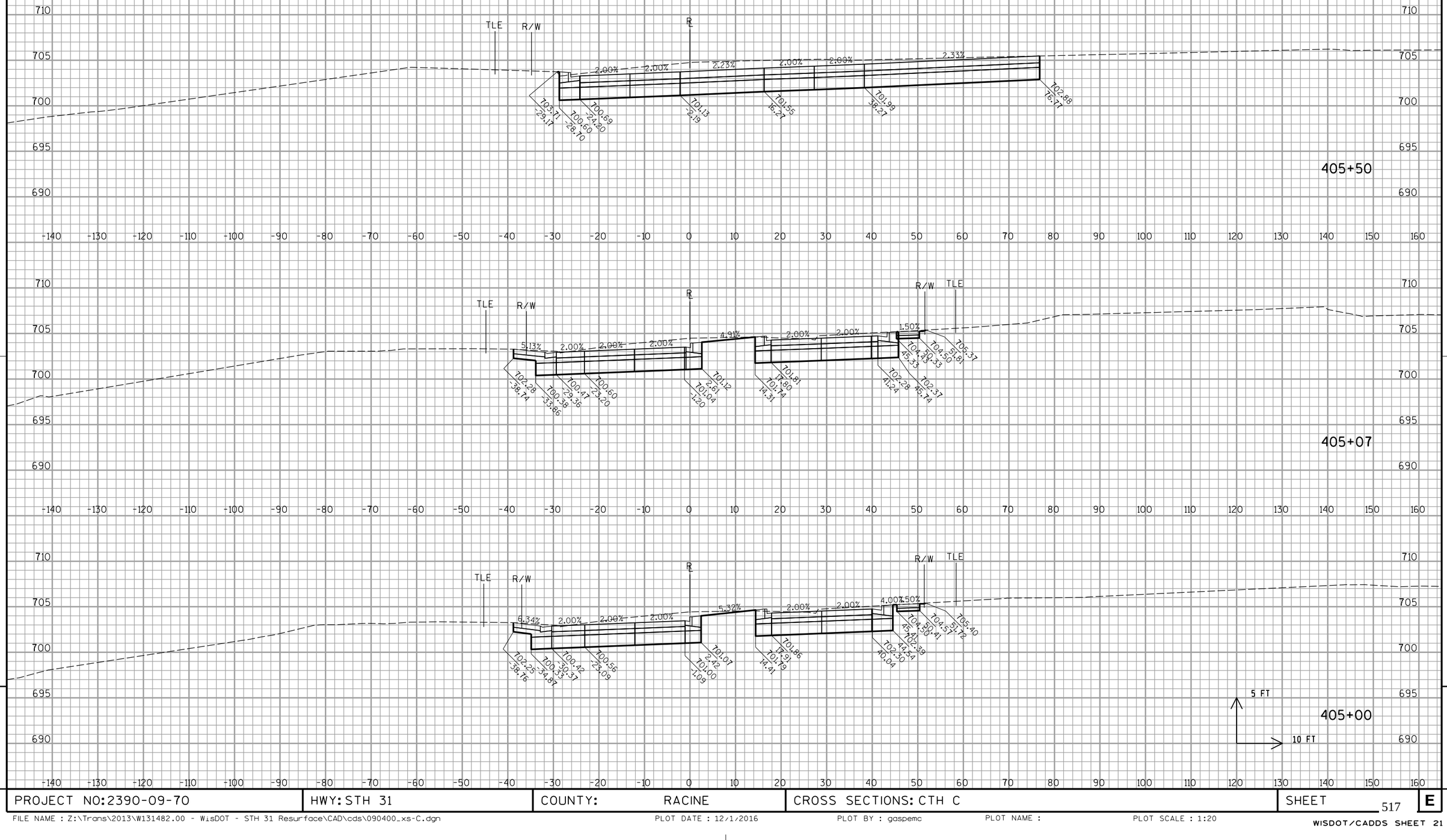
WISDOT/CADDS SHEET 21



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PLOT NAME :
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WISDOT/CADDS SHEET 21

PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: CTH C	SHEET 518 E

FILE NAME : Z:\Trans\2013\W131482.00 - WisDOT - STH 31 Resurface\CAD\cds\090400_xs-C.dgn | PLOT DATE : 12/1/2016 | PLOT BY : gaspemc | PLOT NAME : | PLOT SCALE : 1:20

WISDOT/CADDS SHEET 21

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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: CTH C	SHEET 519	E

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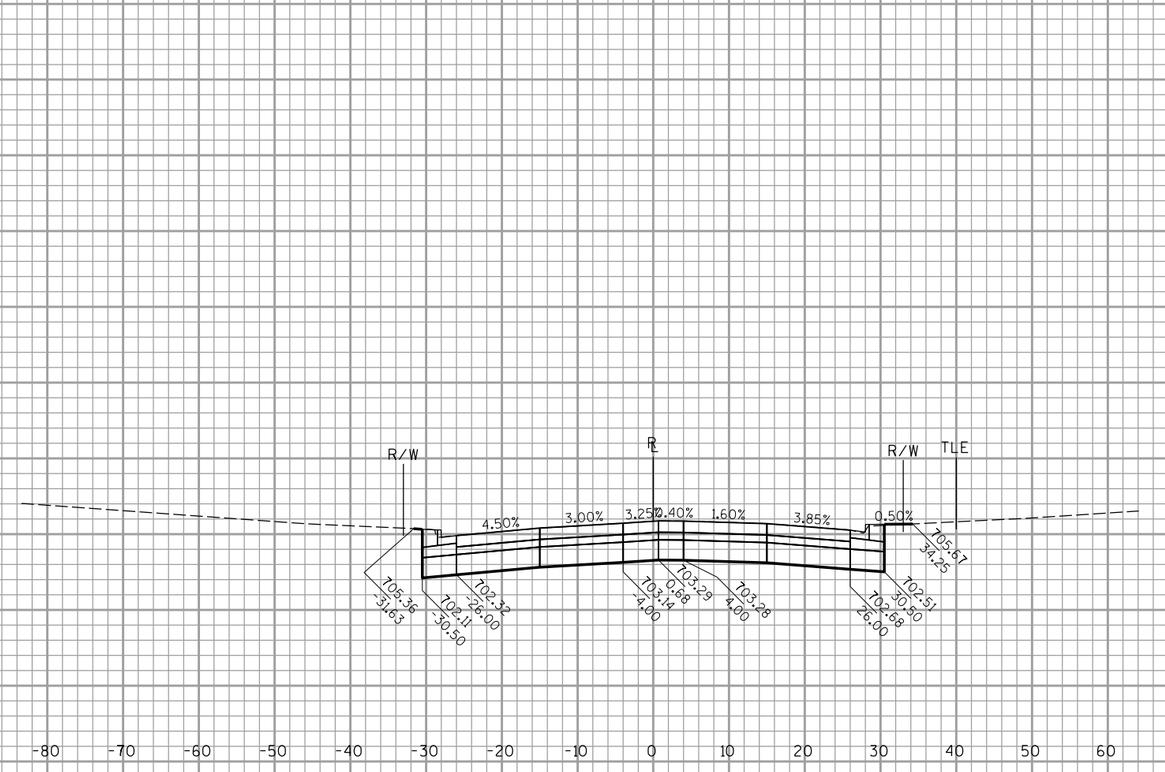
WISDOT/CADDS SHEET 21



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PROJECT NO:2390-09-70	HWY: STH 31	COUNTY: RACINE	CROSS SECTIONS: CTH C	SHEET 520	E

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WISDOT/CADDS SHEET 21

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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