GRE

NOV 2015

PROJECT ID: 1420-22-71

WITH: N/A

COUNTY: FOND DU LAC

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 Plan
Section No.	9	Computer Earth
Section No.	9	Cross Sections

TOTAL SHEETS = 702

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

FOND DU LAC BYPASS

CTH V INTERCHANGE

USH 151

FOND DU LAC COUNTY

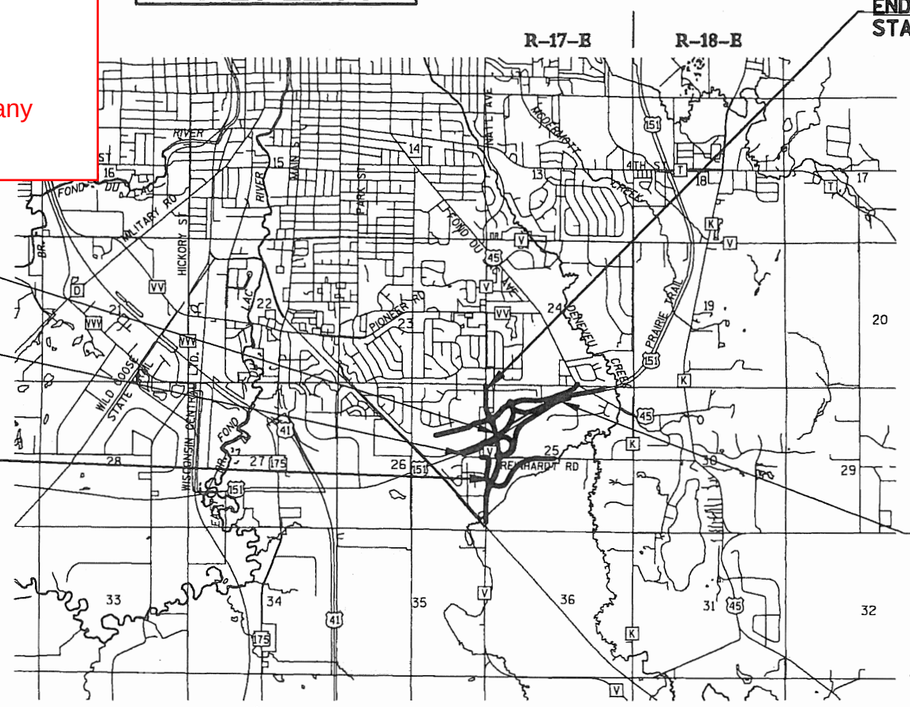
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1420-22-71	WISC 2015578	1

AS-BUILT PLAN

SUPERVISOR: Rob Wagner
PROJECT MANAGER: Bryan Learst
PROJECT LEADER: Zach Pilichowski
CONTRACTOR: Mashuda Contractors, Inc.
Work Started 4/16/2016
Work Completed 12/28/2016

Prime Contractor: Mashuda Contractors, INC
Subcontractors:
Bodart Electric Service
Fencing Plus INC
Interstate Sawing CO., INC
Iverson Construction, LLC
Mega Rentals, INC
North Farm Landscape, LLC
Northeast Asphalt, INC
Pheifer Bros Construction CO, INC
Treirweiler Construction and Supply Company
Wisconsin Land Surveying

STATE PROJECT NUMBER
1420-22-71



DESIGN DESIGNATION

		CTH V	USH 151
A.A.D.T. (2006)	=	3000	= 11500
A.A.D.T. (2038)	=	4700	= 17000
D.H.V. (2038)	=	517	= 1870
D.D.	=	60/40	= 60/40
T. (DHV)	=	7.1	= 7.1
DESIGN SPEED	=	40 MPH	= 70 MPH
ESALS	=	905,200	-

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE (PL + 58.1)
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

LAYOUT

SCALE: 0 1/2 MI. 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.645 MI. (CTH V)

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), FOND DU LAC COUNTY, NAD 1983 (97)

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)

ORIGINAL PLANS PREPARED BY
OMNI ASSOCIATES

WISCONSIN
RYAN E. BETKER
E-38778
NEENAH
WI
PROFESSIONAL ENGINEER
4-23-15

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT/GREMMER & ASSOCIATES, INC
Designer	OMNI ASSOCIATES, INC.
Project Manager	B. LEARST
Regional Examiner	-
Regional Supervisor	R. WAGNER
C.O. Examiner	-

APPROVED FOR THE DEPARTMENT
DATE: 04/23/15 (Signature)

1 E

142022_010101_ti

WISDOT/CADDS SHEET 15

GENERAL NOTES

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

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

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

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

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

CURB AND GUTTER RADII ARE SHOWN TO THE FLANGE LINE OF THE CURB AND GUTTER.

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES, FIELD ENTRANCES AND COMMERCIAL ENTRANCES SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD.

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

WETLAND AREAS ARE SHOWN ON THE PLANS. CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO WORK WITHIN THE SLOPE INTERCEPTS IN THE WETLAND AREAS.

DISTANCES SHOWN ON THIS PLAN ARE GROUND DISTANCES.

EROSION CONTROL FEATURES AS SHOWN ON THE PLAN SHEETS ARE AT SUGGESTED LOCATIONS. EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER IN THE FIELD

MISCELLANEOUS REMOVAL ITEMS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWCUT AS SHOWN ON THE PLANS

REMOVAL OF THE TEMPORARY PIPE UNDERDRAIN OUTFALLS FROM PROJECT 1420-23-71 WILL BE CONSIDERED INCIDENTAL TO COMMON EXCAVATION.

UTILITY REFERENCE LINES ON THE CROSS SECTIONS ARE FOR HORIZONTAL REFERENCE ONLY.

DESIGNER NOTES

DESIGN, PLANS, SPECIFICATIONS AND ESTIMATE FOR TRAFFIC CONTROL ITEMS PROVIDED BY QUEST CIVIL ENGINEERS.

DESIGN, PLANS, SPECIFICATIONS AND ESTIMATE FOR STREET LIGHTING ITEMS PROVIDED BY POWRTEK ENGINEERING.

DESIGN, PLANS, SPECIFICATIONS AND ESTIMATE FOR LANDSCAPING/PLANTING ITEMS PROVIDED BY KEN SAIKI DESIGN.

HYDROLOGY, HYDRAULICS AND CULVERT PIPE SIZING FOR THE PROJECT PROVIDED BY STORMWATER SOLUTIONS ENGINEERING.

EROSION CONTROL NOTES

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

TOTAL PROJECT AREA = 114 ACRES.
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 56 ACRES.

UTILITIES

ELECTRIC & GAS	ALLIANT ENERGY JASON HOGAN 4902 N BILTMORE LANE MADISON, WI 53718 TELEPHONE: 608-458-4871 JASONHOGAN@ALLIANTENERGY.COM
ELECTRIC	AMERICAN TRANSMISSION COMPANY, LLC MIKE OLSEN 801 O'KEEFE ROAD PO BOX 6113 DEPERE, WI 54115-6113 TELEPHONE: 920-338-6582 MOLSEN@ATCLLC.COM
COMMUNICATION	AT&T - WISCONSIN LISA SUPRENAND 70 E DIVISION ST FOND DU LAC, WI 54935 TELEPHONE: 920-929-8459 AD5647@ATT.COM
CABLE TV	CHARTER COMMUNICATIONS BRUCE HENRY 1623 BROADWAY AVENUE SHEBOYGAN, WI 53081 TELEPHONE: 920-907-7720 BRUCE.HENRY@CHARTERCOM.COM
WATER	CITY OF FOND DU LAC KATHY SCHARF 160 SOUTH MACY ST FOND DU LAC, WI 54936 TELEPHONE: 920-322-3682 KSCHARF@FDL.WI.GOV
SANITARY	TOWN OF EMPIRE SAN DIST #1 MARY TORIELLO N5295 CLUB DENEVUE DR FOND DU LAC, WI 54935 TELEPHONE: 920-923-1373
SANITARY	TOWN OF FOND DU LAC SAN DIST #4 JOHN RANSOM W5082 PARADISE LANE FOND DU LAC, WI 54935 TELEPHONE: 920-929-6562

SURVEY CONTACT

CORMAC McINNIS
NER SURVEY
944 VANDERPERREN WAY
GREEN BAY, WI 54304
TELEPHONE: 920-492-5638
EMAIL: CORMAC.MCINNIS@DOT.WI.GOV

DESIGN CONTACT

OMNNI ASSOCIATES
PHIL ROBERTS
ONE SYSTEMS DRIVE
APPLETON, WI 541914
TELEPHONE: 920-830-6178
EMAIL: PHIL.ROBERTS@OMNNI.COM

OTHER CONTACTS

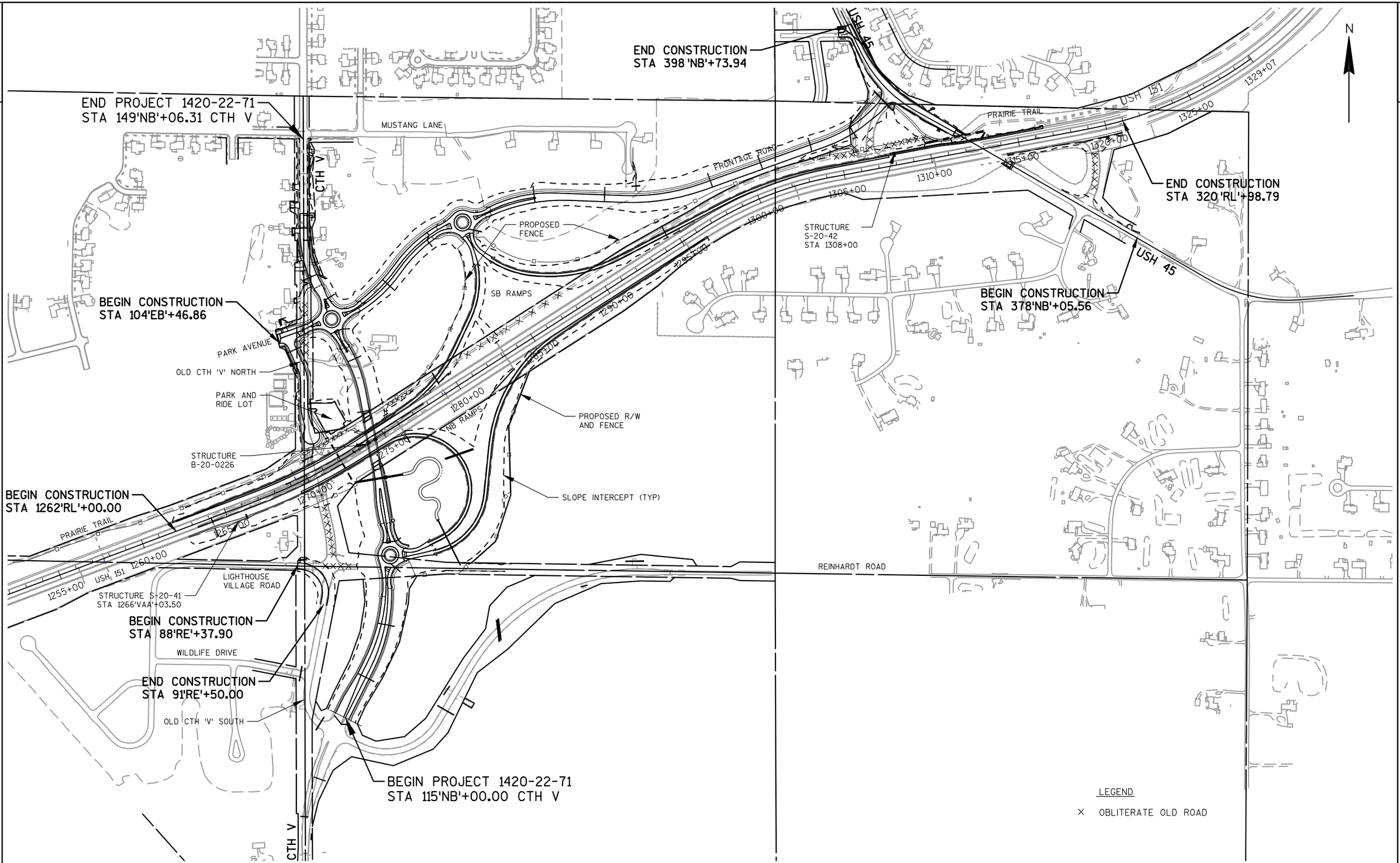
DNR LIAISON	JAY SCHIEFELBEIN DNR NORTHEAST REGIONAL HQ 2984 SHAWANO AVE GREEN BAY, WI 54313 TELEPHONE: 920-662-5130 EMAIL: JEREMIAH.SCHIEFELBEIN@WISCONSIN.GOV

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

ORDER OF "SECTION 2" SHEETS

SHEET TITLE
GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PAVING DETAILS
CONTOUR MAP
EROSION CONTROL
STORM SEWER PLAN
PLANTING
PERMANENT SIGNING
LIGHTING
PAVEMENT MARKING
TRAFFIC CONTROL AND STAGING
FENCING
ALIGNMENT

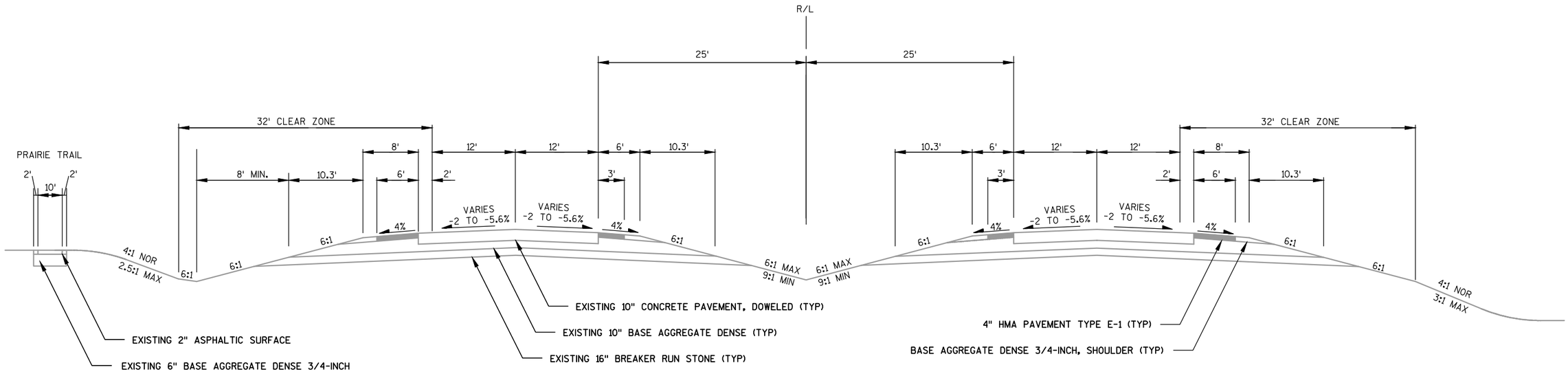
2



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PROJECT OVERVIEW	SHEET 3	E

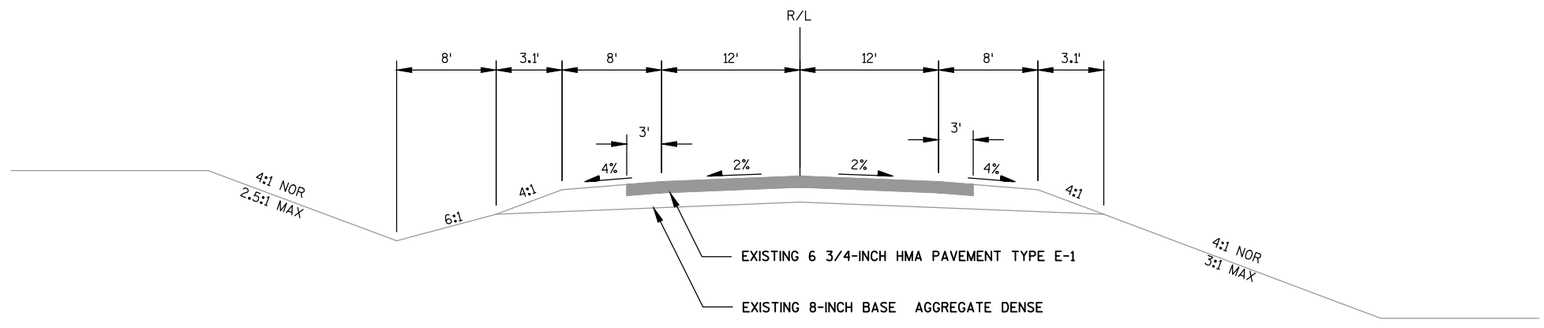
FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\14202271 CTH V\142022_020201_PO.DWG
142022_020201_po
PLOT DATE : 2/10/2015 3:10 PM
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION FOR USH 151

STA. 1262+00 - STA. 1320+98.79

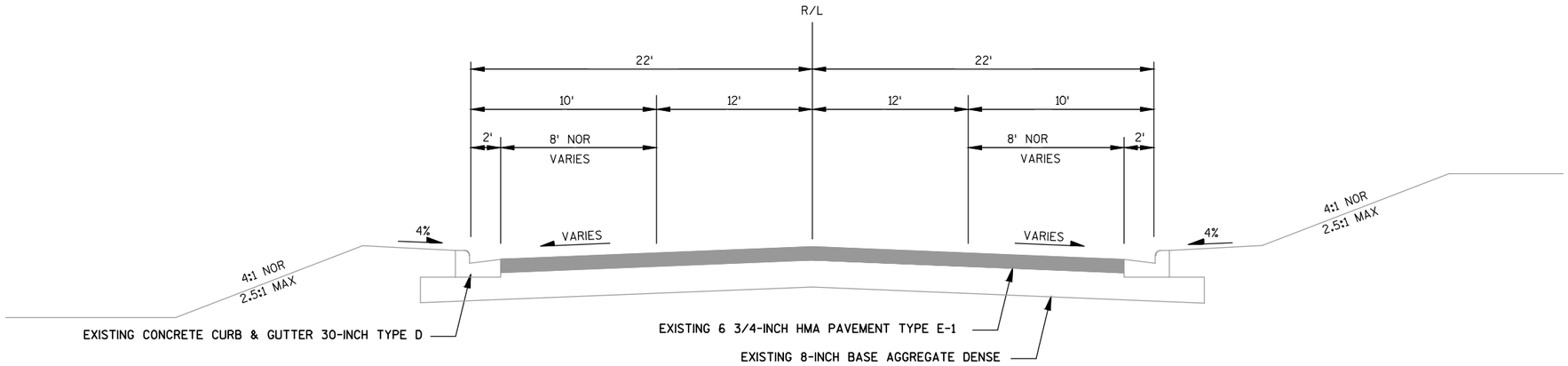


EXISTING TYPICAL SECTION FOR CTH V

BEGINNING OF CONSTRUCTION--USH 151

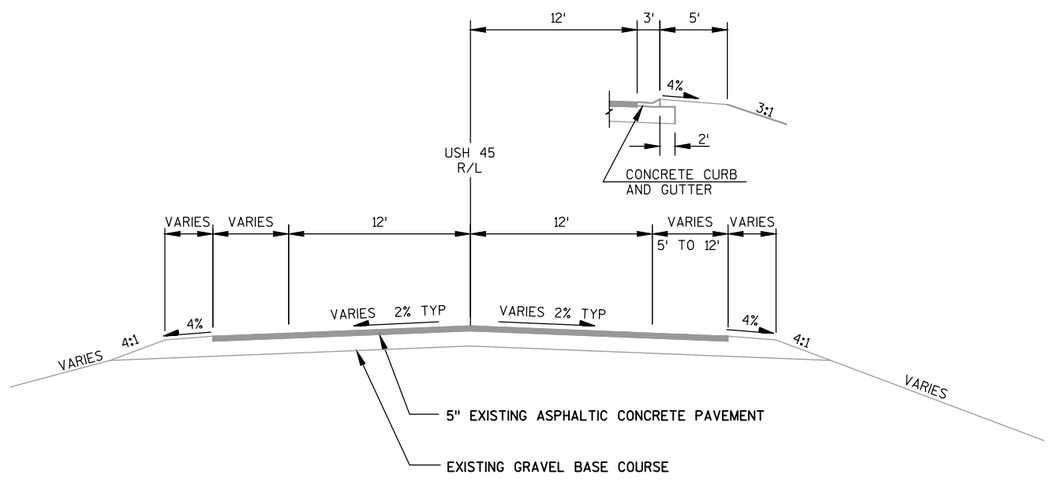
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 4	E

2



EXISTING TYPICAL SECTION FOR CTH V

USH 151--END OF CONSTRUCTION

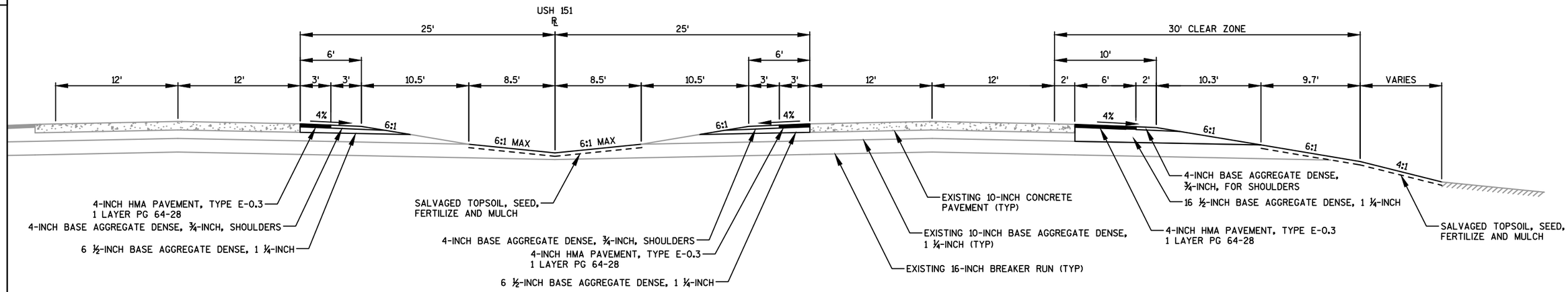


EXISTING TYPICAL SECTION USH 45

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 5	E

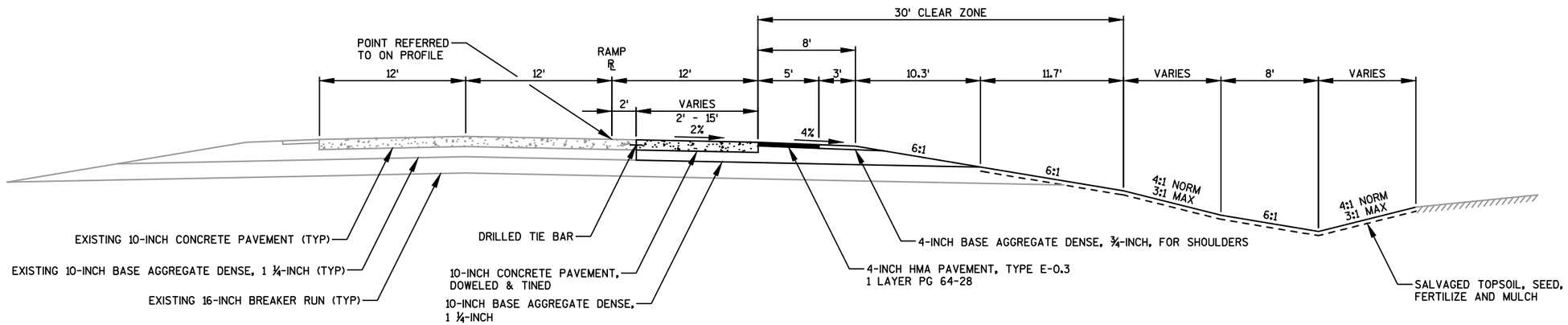
FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\14202271 CTH V\142022_020300_TS.DWG
142022_020302_ts
PLOT DATE : 2/10/2015 3:32 PM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH
WISDOT/CADDS SHEET 42

2



TYPICAL FINISHED SECTION FOR USH 151

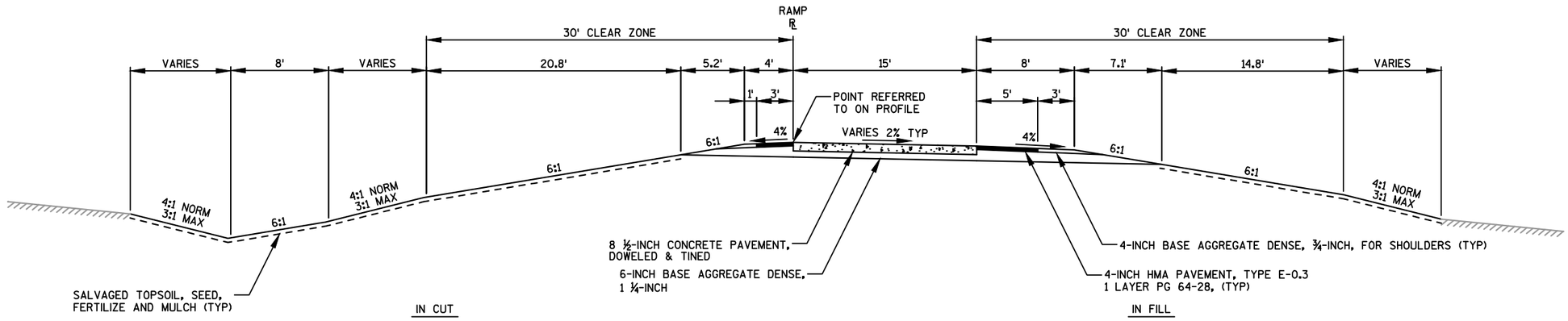
MEDIAN	STA 1263+25 RT - STA 1272+12 RT STA 1268+74 LT - STA 1277+79 LT
RIGHT SIDE	STA 1314+27 RT - STA 1320+99 RT



TYPICAL FINISHED SECTION FOR USH 151 RAMPS

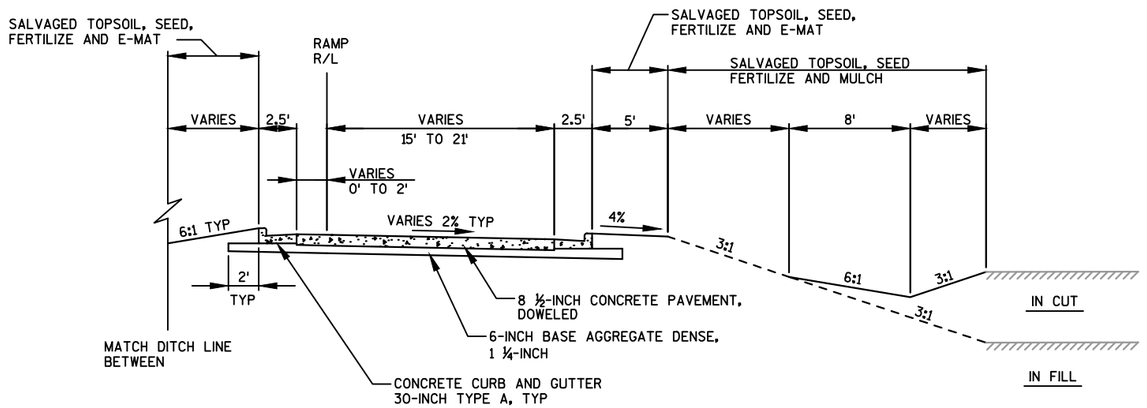
NB OFF-RAMP (VAA)	STA 269'VAA'+40.14 - STA 275'VAA'+40.70
NB ON-RAMP (VBB)	STA 285'VBB'+81.35 - STA 296'VBB'+15.62
SB OFF-RAMP (VCC)	STA 299'VCC'+65.61 - STA 307'VCC'+66.22 (MIRROR TYPICAL SECTION)
SB ON-RAMP (VDD)	STA 262'VDD'+20.00 - STA 277'VDD'+01.47 (MIRROR TYPICAL SECTION)

2



TYPICAL FINISHED SECTION FOR USH 151 RAMPS

NB OFF-RAMP (VAA) STA 275'VAA'+40.70 - STA 285'VAA'+84.23
NB ON-RAMP (VBB) STA 271'VBB'+30.04 - STA 285'VBB'+81.35
SB OFF-RAMP (VCC) STA 283'VCC'+63.49 - STA 299'VCC'+65.61 (MIRROR TYPICAL SECTION)
SB ON-RAMP (VDD) STA 277'VDD'+01.47 - STA 286'VDD'+24.47 (MIRROR TYPICAL SECTION)



TYPICAL FINISHED SECTION FOR USH 151 RAMPS

NB OFF-RAMP (VAA) STA 285'VAA'+84.23 - STA 287'VAA'+43.45
NB ON-RAMP (VBB) STA 269'VBB'+56.79 - STA 271'VBB'+30.04
SB OFF-RAMP (VCC) STA 281'VCC'+65.67 - STA 283'VCC'+63.49 (MIRROR TYPICAL SECTION)
SB ON-RAMP (VDD) STA 286'VDD'+24.47 - STA 287'VDD'+97.45 (MIRROR TYPICAL SECTION)

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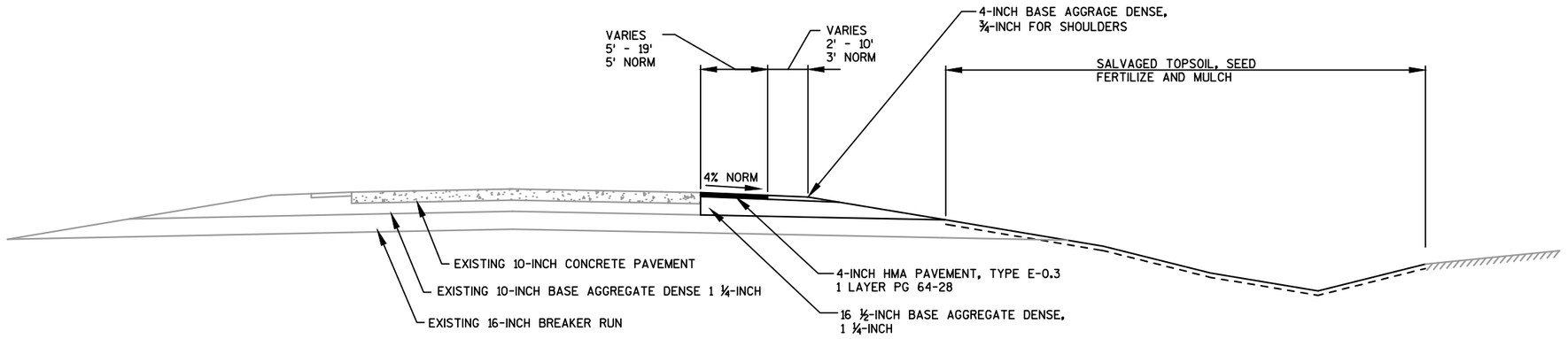
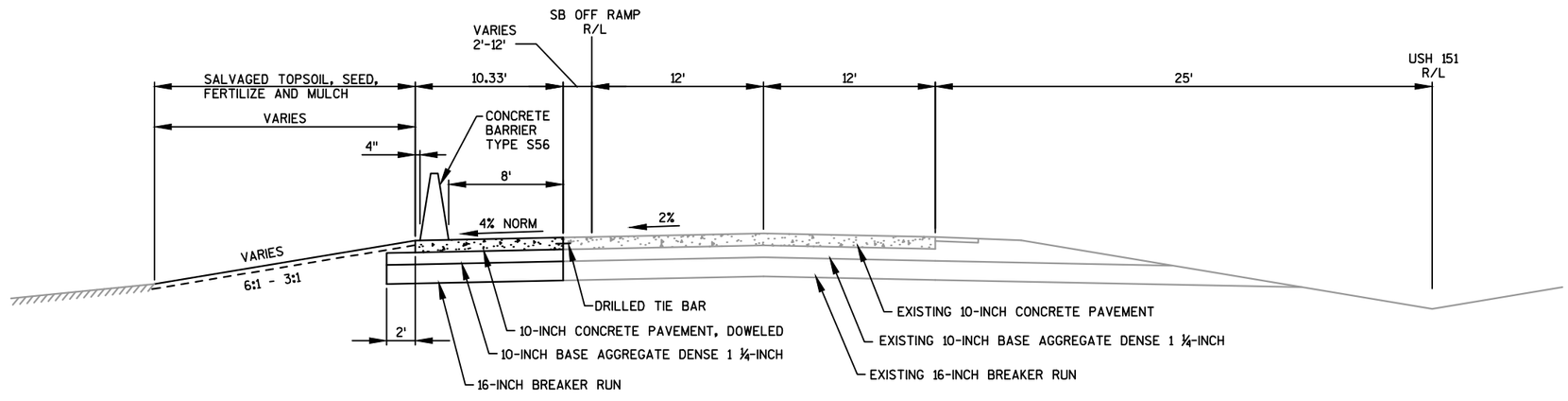


TYPICAL FINISHED SECTION FOR USH 151 RAMPS

NB OFF-RAMP (VAA) STA 262'VAA'+57.94 - STA 269'VAA'+40.14
SB OFF-RAMP (VCC) STA 307'VCC'+66.22 - STA 307'VCC'+75 (MIRROR TYPICAL SECTION)

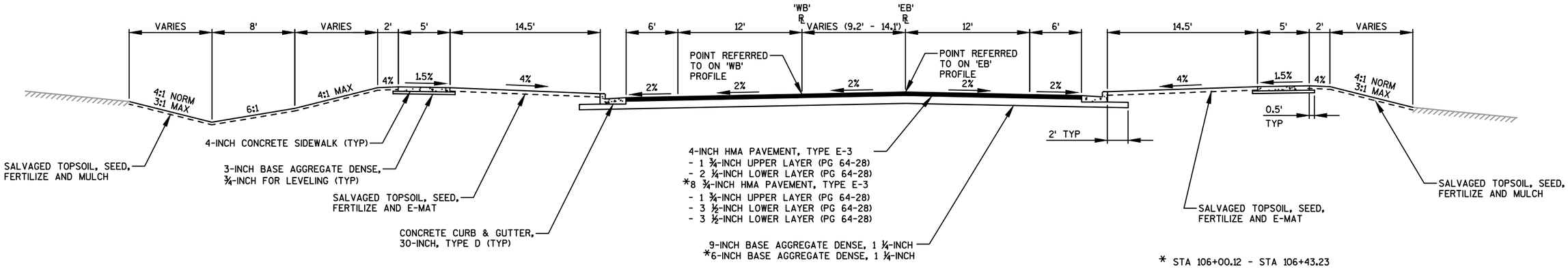


TYPICAL FINISHED SECTION FOR SB OFF-RAMP (VCC)

SB OFF-RAMP (VCC) STA 307'VCC'+75 - STA 316'VCC'+50.36

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 8	E

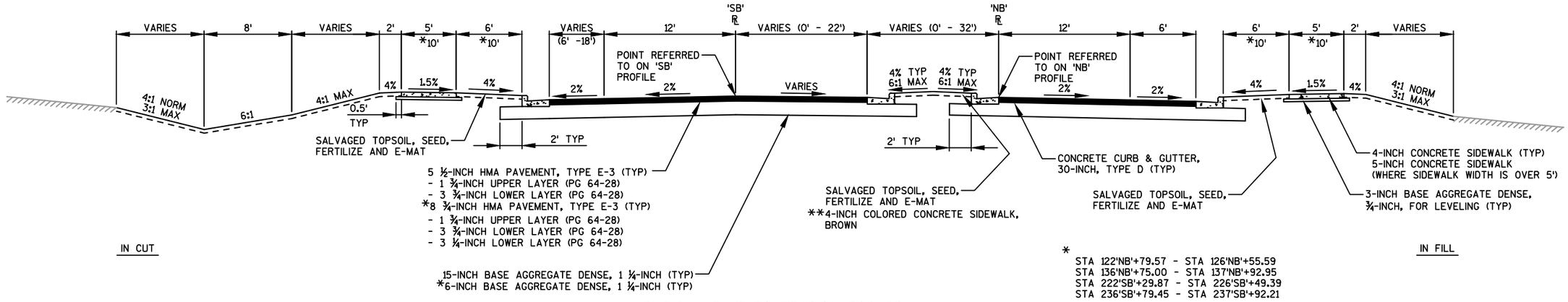
2



* STA 106+00.12 - STA 106+43.23

TYPICAL FINISHED SECTION PARK AVENUE

STA 104'EB'+46.86 - STA 106'EB'+43.23



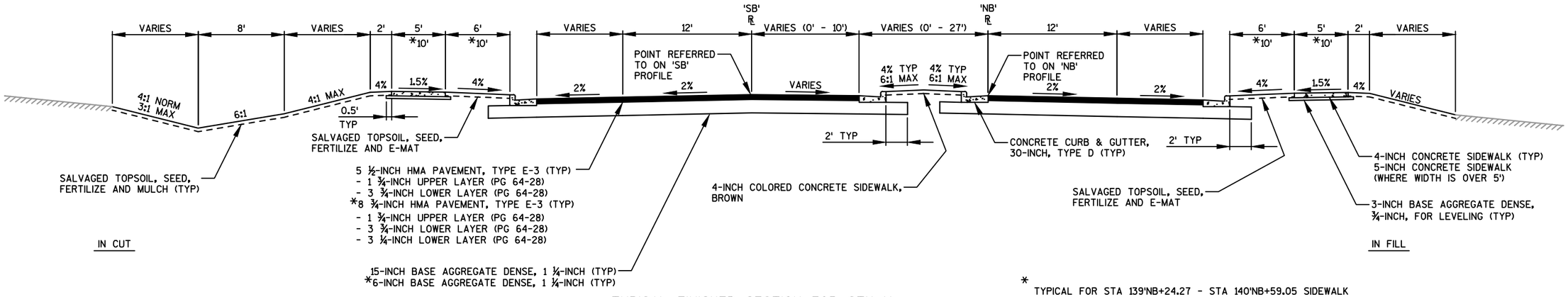
* STA 122'NB'+79.57 - STA 126'NB'+55.59
STA 136'NB'+75.00 - STA 137'NB'+92.95
STA 222'SB'+29.87 - STA 226'SB'+49.39
STA 236'SB'+79.45 - STA 237'SB'+92.21

** STA 123'NB'+05.08 - STA 123'NB'+97.30
STA 125'NB'+40 - STA 126'NB'+25
STA 136'NB'+56.87 - STA 137'NB'+92.95

TYPICAL FINISHED SECTION FOR CTH V

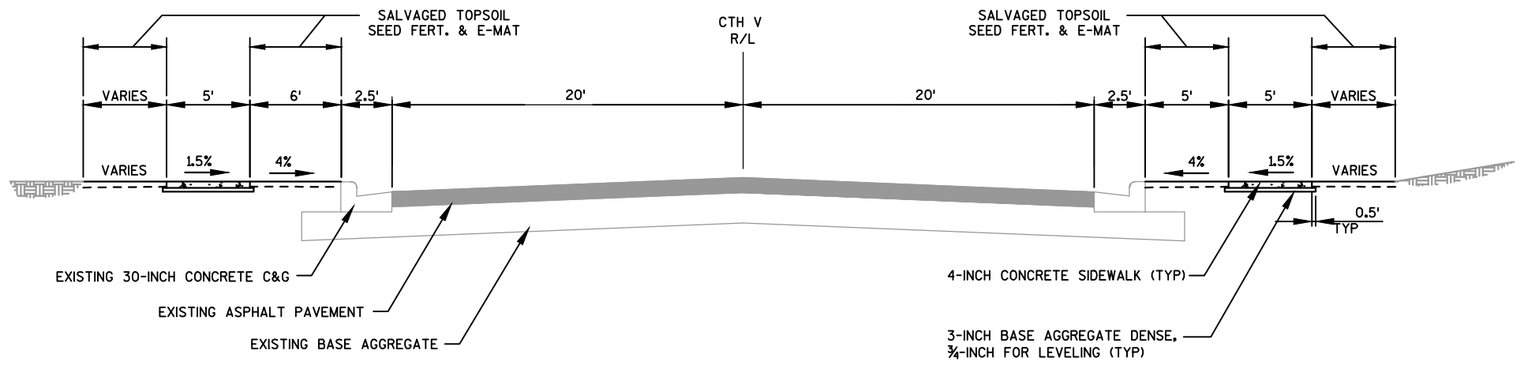
STA 115'NB'+00.00 - STA 129'NB'+60.71
STA 132'NB'+93.17 - STA 137'NB'+92.95

2



TYPICAL FINISHED SECTION FOR CTH V

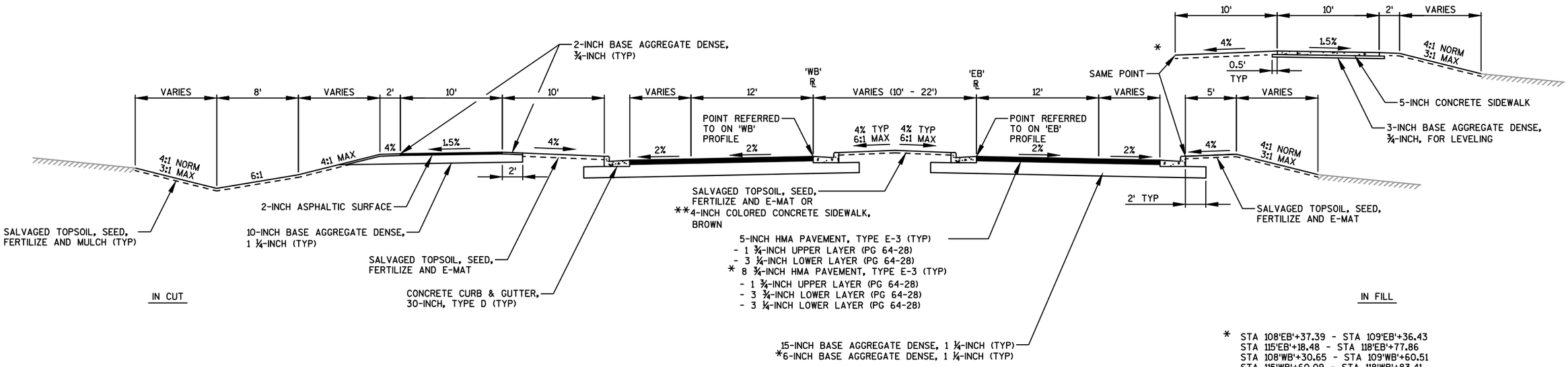
STA 139'NB'+24.37 - STA 144'NB'+02.46



TYPICAL FINISHED SECTION FOR CTH V

STA 144'NB'+02.46 - STA 149'NB'+07

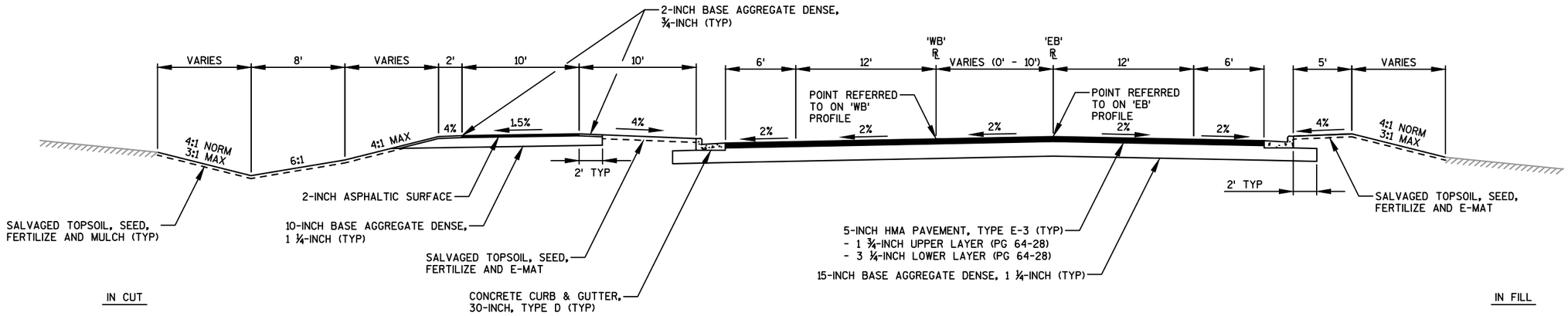
2



TYPICAL FINISHED SECTION FOR FRONTAGE ROAD

STA 108'EB'+37.39 - STA 121'EB'+49.41

* STA 108'EB'+37.39 - STA 109'EB'+36.43
STA 115'EB'+18.48 - STA 118'EB'+77.86
STA 108'WB'+30.65 - STA 109'WB'+60.51
STA 115'WB'+60.09 - STA 118'WB'+83.41
** STA 108'EB'+46 - STA 109'EB'+56.63
STA 116'EB'+27 - STA 116'EB'+38.17
STA 117'EB'+86.63 - STA 121'EB'+42.39

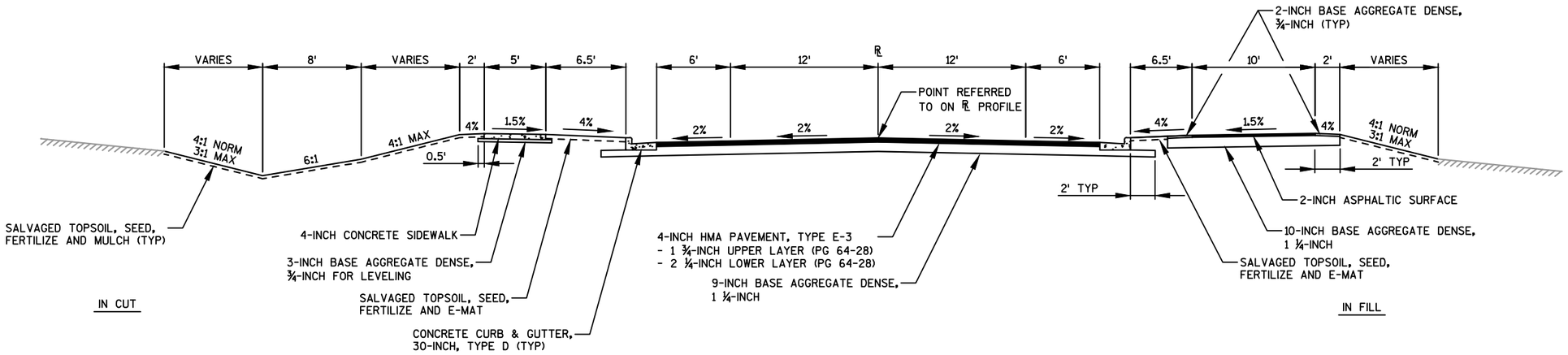


TYPICAL FINISHED SECTION FOR FRONTAGE ROAD

STA 121'EB'+49.41 - STA 142'EB'+78.01

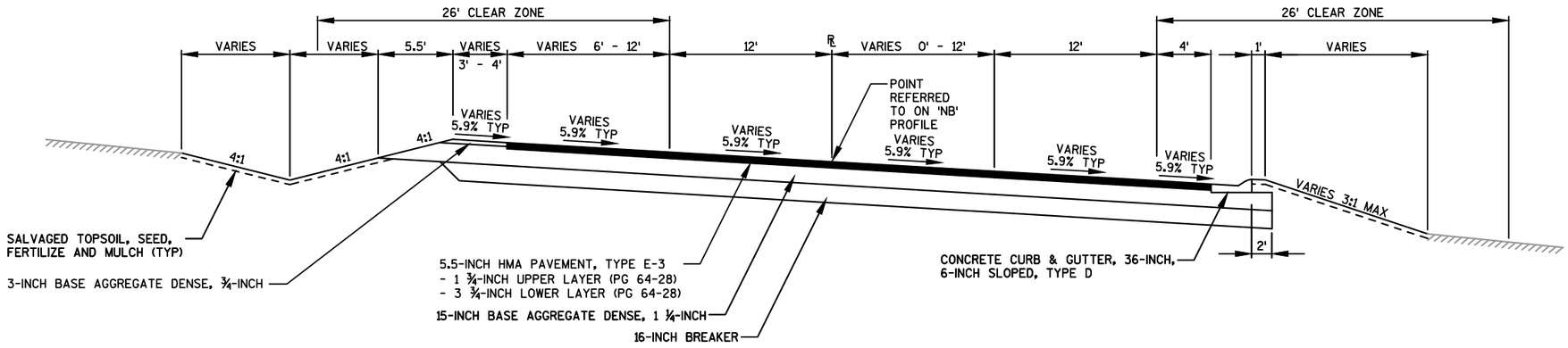
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 11	E

2



TYPICAL FINISHED SECTION OLD CTH V NORTH

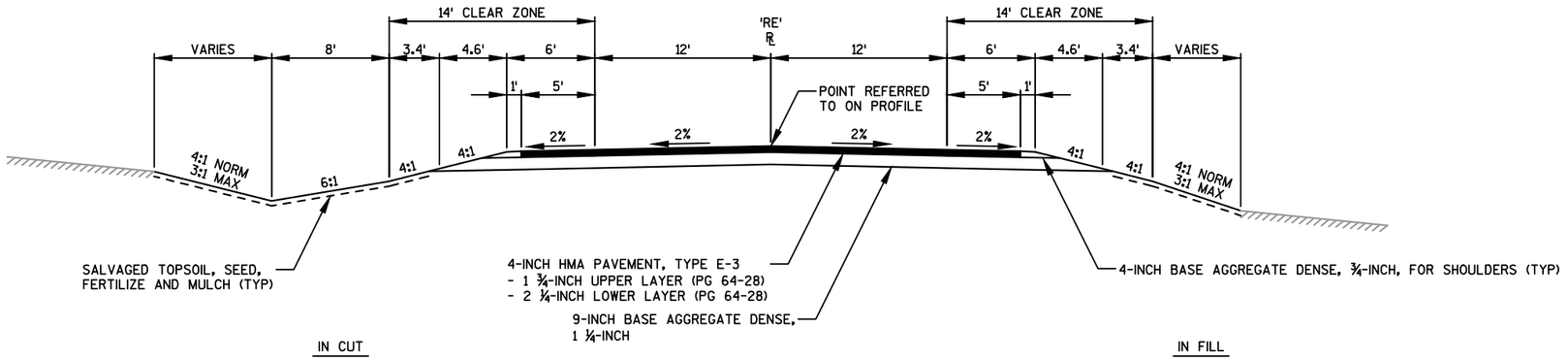
STA 10+00.00 - STA 15+78.32



TYPICAL FINISHED SECTION FOR USH 45

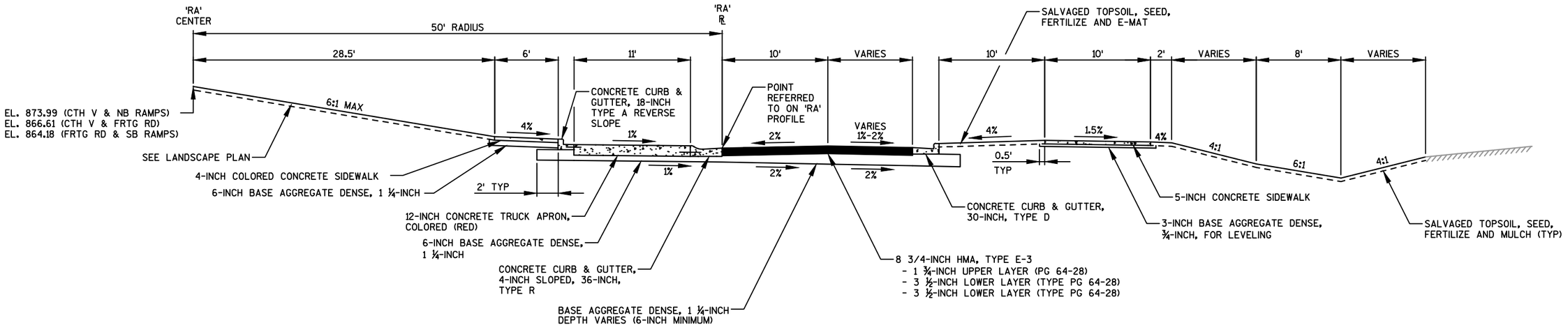
STA 389'NB'+94.23 - STA 398'NB'+73.94

2



FINISHED SECTION FOR OLD CTH V SOUTH

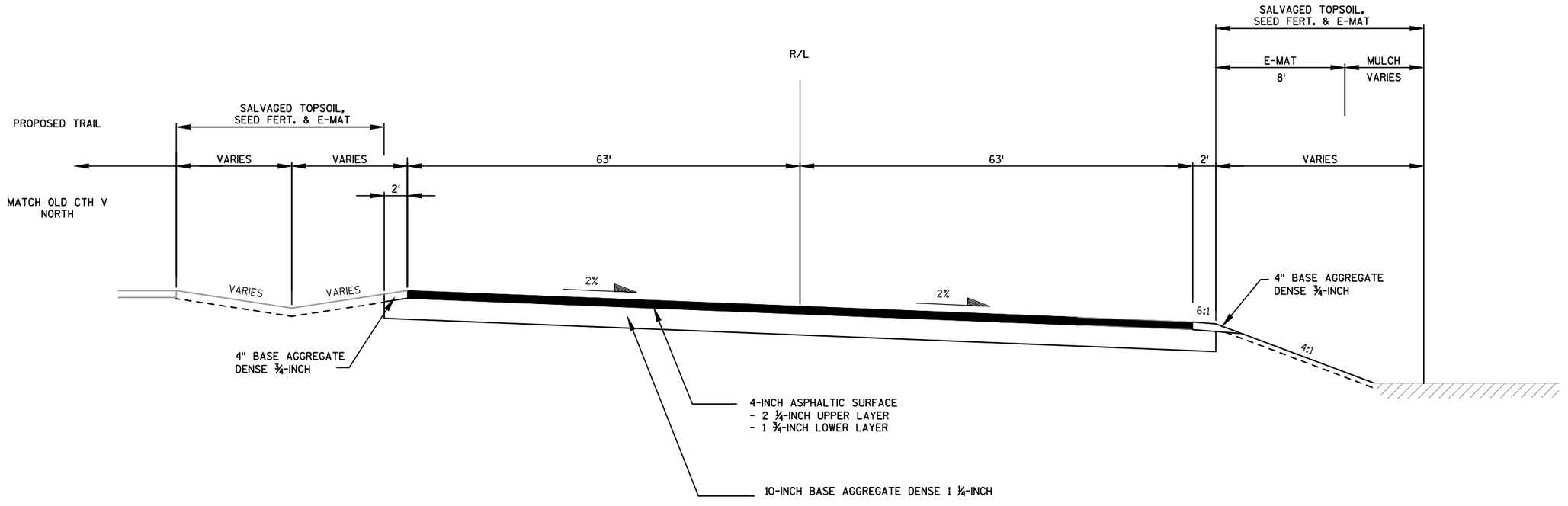
STA 88'RE'+21.49 - STA 98'RE'+14.40 (OLD CTH V SOUTH)



TYPICAL FINISHED SECTION FOR ROUNDABOUTS

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 13	E

2



TYPICAL FINISHED SECTION FOR PARK AND RIDE

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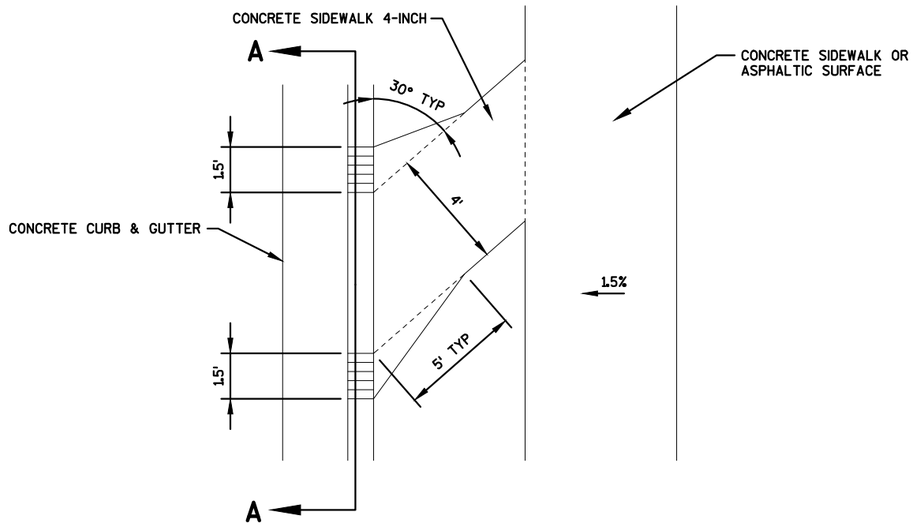
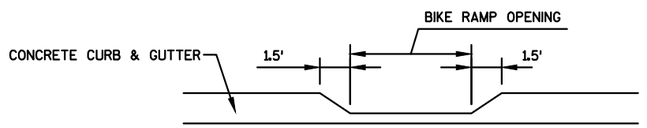
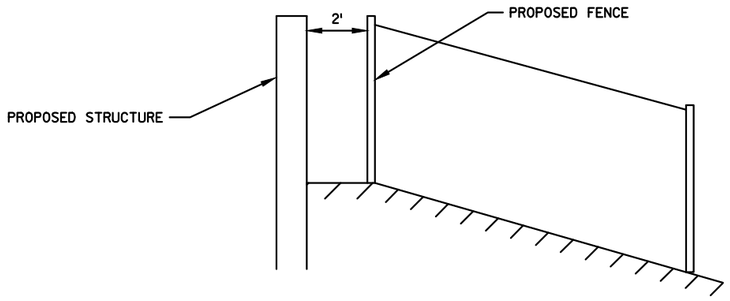




SECTION A-A

BIKE RAMP DETAIL

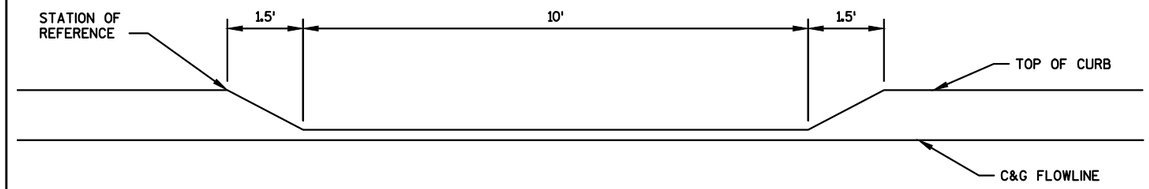
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 15	E



PLACE FIRST FENCE POST 2' AWAY FROM THE STRUCTURE.

FENCE AT STRUCTURE DETAIL

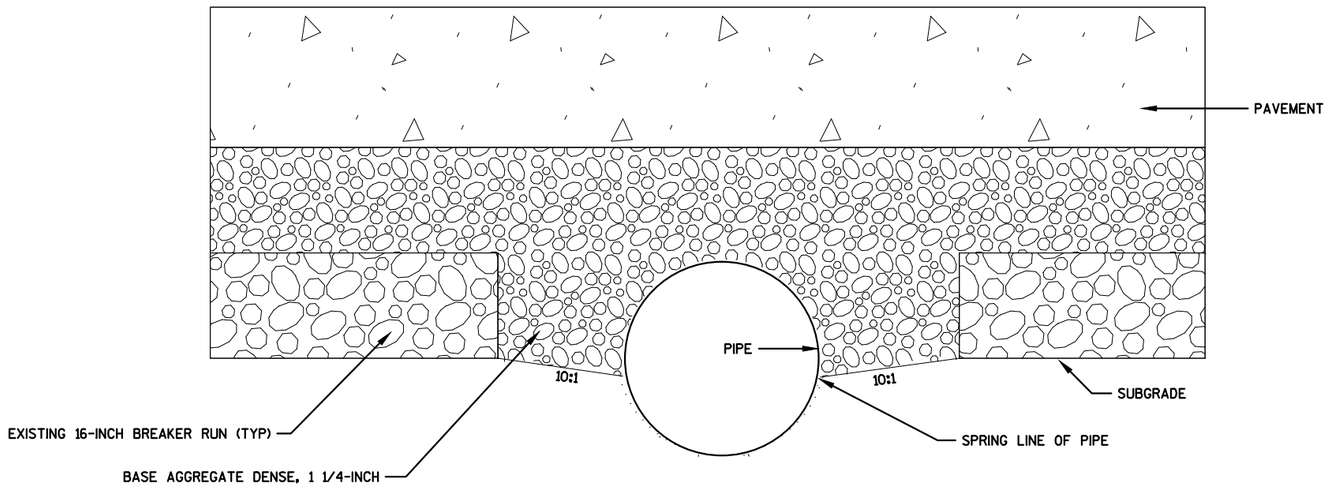
STA 129'NB'+74 LEFT CTH V
STA 129'NB'+95 RIGHT CTH V
STA 132'NB'+56 LEFT CTH V
STA 132'NB'+76 RIGHT CTH V



CURB CUT FOR MOWING DETAIL

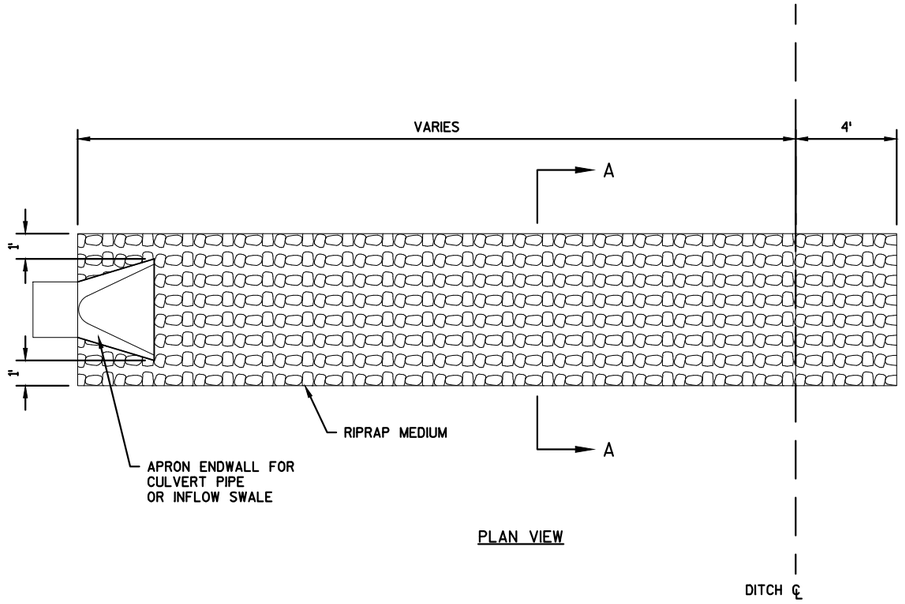
STA 109'NB'+22 CTH V
STA 109'EB'+65 FRONTAGE RD

2

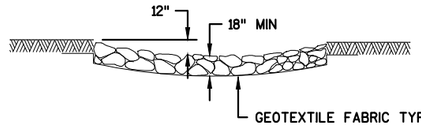


SHALLOW PIPE CROSSING DETAIL

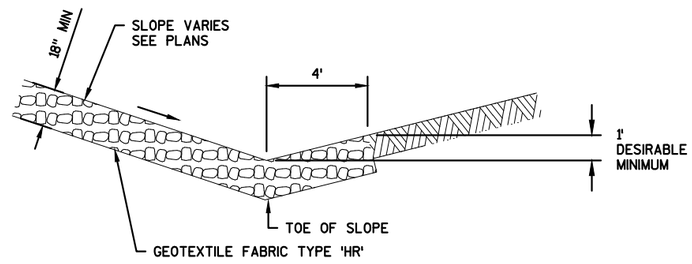
STA 272'VDD'+05 SB ON RAMP



PLAN VIEW

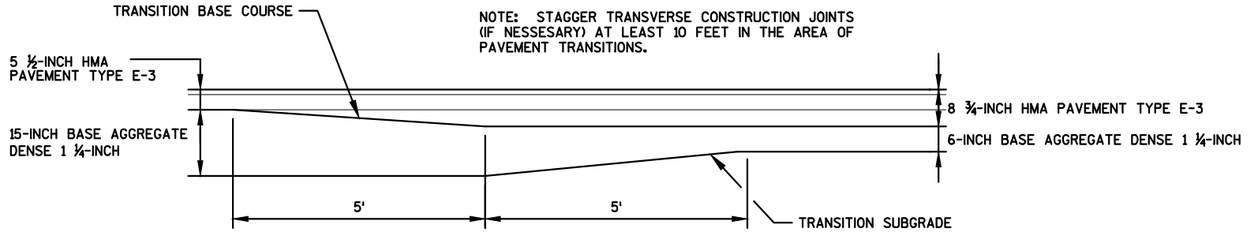


SECTION A-A



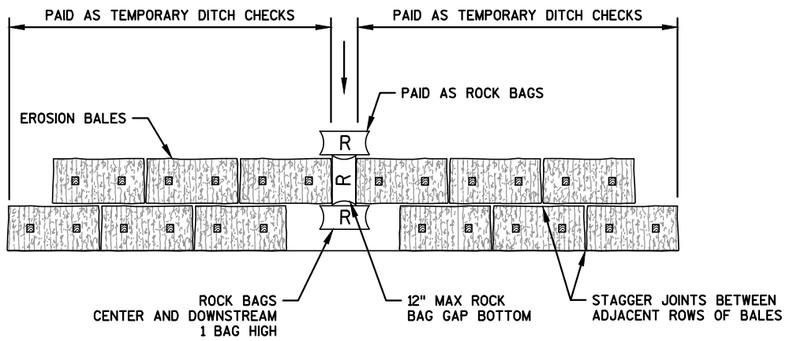
SIDE VIEW WHEN DISCHARGING TO DITCH

RIPRAP FLUME DETAIL

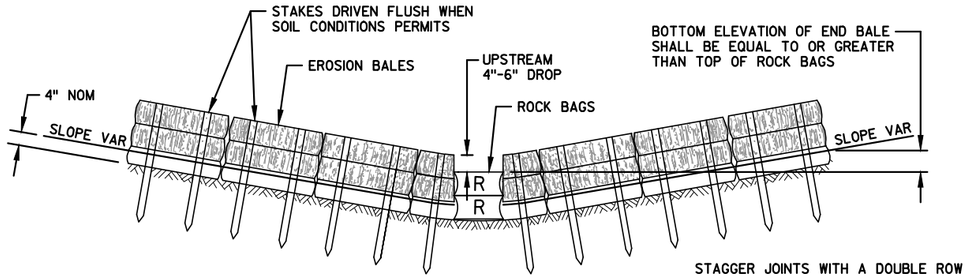


PAVEMENT TRANSITION DETAIL

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS	SHEET 17	E



PLAN VIEW

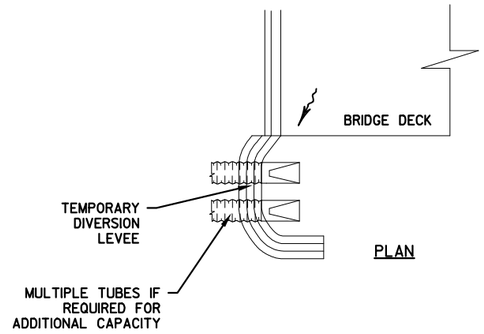


FRONT ELEVATION

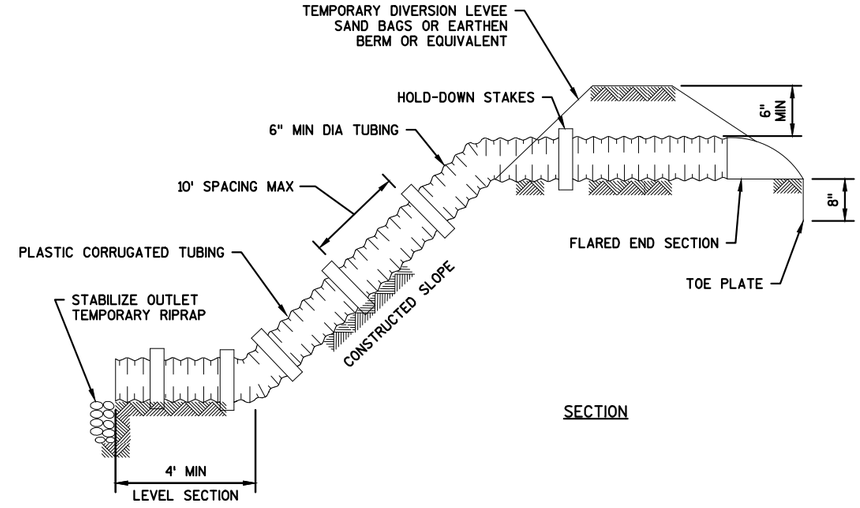
GENERAL NOTES

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

TEMPORARY DITCH CHECKS WITH ROCK BAG RELIEF



PLAN



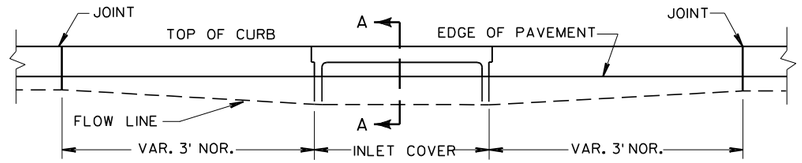
SECTION

NOTES:

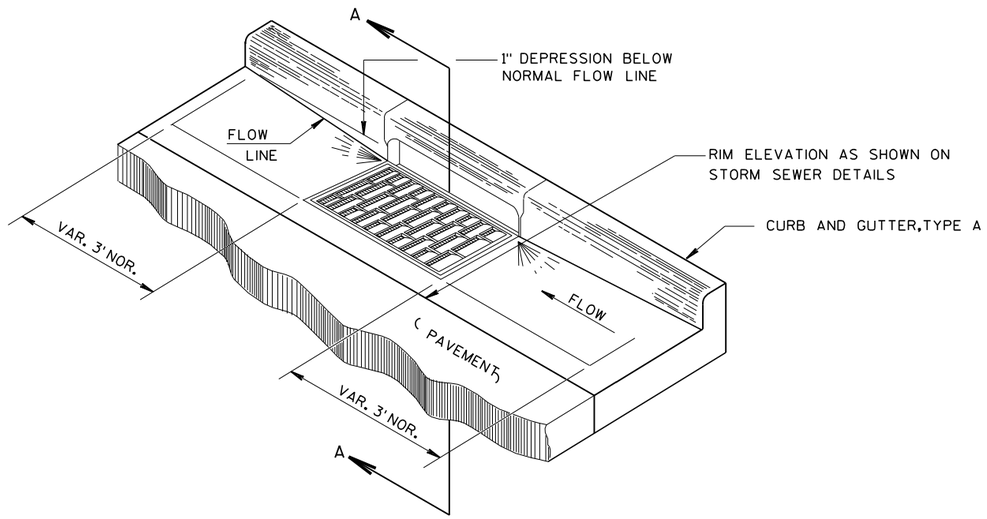
1. TEMPORARY LEVEE SHALL BE CONSTRUCTED FROM EARTHEN BERM, SAND BAGS, OR OTHER EQUIVALENT MATERIAL TO TEMPORARILY DIVERT WATER ALONG THE TOP OF SLOPE.
2. ADD MULTIPLE CONDUITS DOWN THE SLOPE AS REQUIRED FOR DISCHARGE CAPACITY.
3. CONDUIT MATERIAL SHALL BE HEAVY DUTY FLEXIBLE MATERIAL SUCH AS NON-PERFORATED CORRUGATED PLASTIC TUBING OR SPECIALLY DESIGNED FLEXIBLE TUBING.
4. THE FLARED END SECTION AT THE INLET SHALL BE WATER-TIGHT WITH HAND COMPACTED MATERIAL AROUND THE PIPE AND END SECTION.
5. THE SOIL MATERIAL AROUND THE PIPE SHALL BE HAND COMPACTED IN 6" LIFTS TO FILL ALL VOIDS IN THE TUBING CORRUGATIONS.
6. REMOVE TEMPORARY DRAINS AND TEMPORARY LEVEES AFTER SLOPE IS FULLY STABILIZED WITH VEGETATION AND EROSION CONTROL FEATURES.
7. TEMPORARY OUTLET STABILIZATION SUCH AS RIPRAP OR OTHER APPROVED METHOD IS INCIDENTAL TO THE TEMPORARY SLOPE DRAIN ITEM.

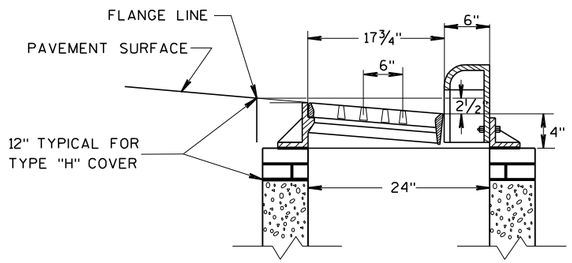
TEMPORARY SLOPE DRAIN DETAIL

2



ELEVATION

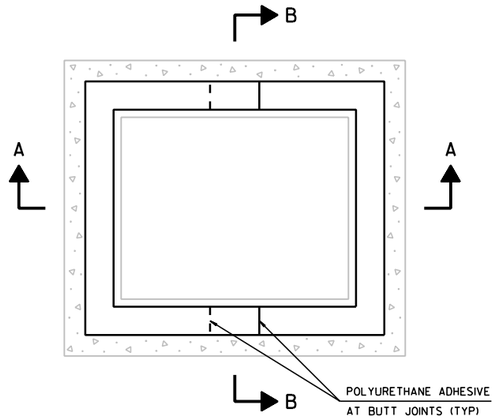




SECTION A-A

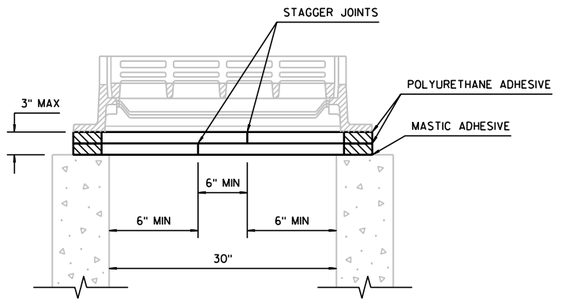
DETAIL OF CURB AND GUTTER AT INLETS

(INLETS 2 X 3-FT WITH TYPE H COVER SHOWN)

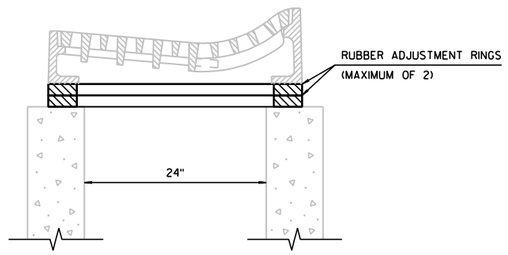


PLAN VIEW

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

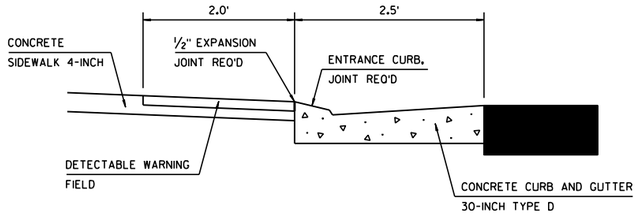


SECTION A-A

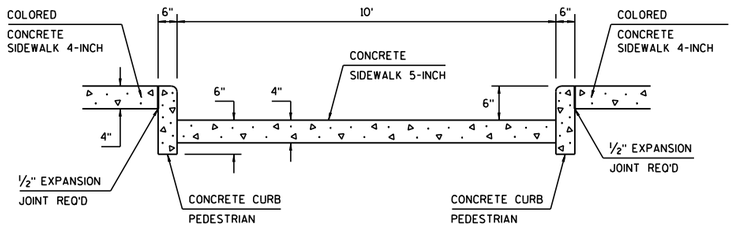


SECTION B-B

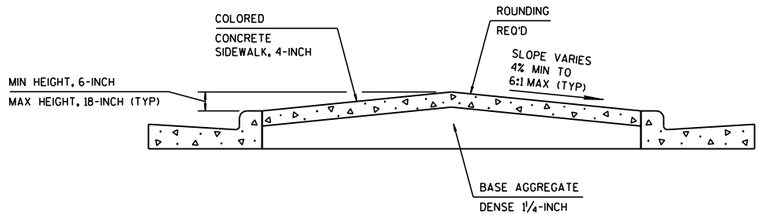
RUBBER RING CUTTING DETAIL FOR INLETS 2X2.5-FT SPECIAL



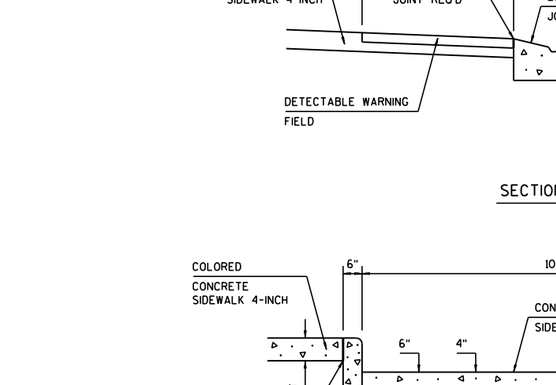
SECTION A-A



SECTION B-B

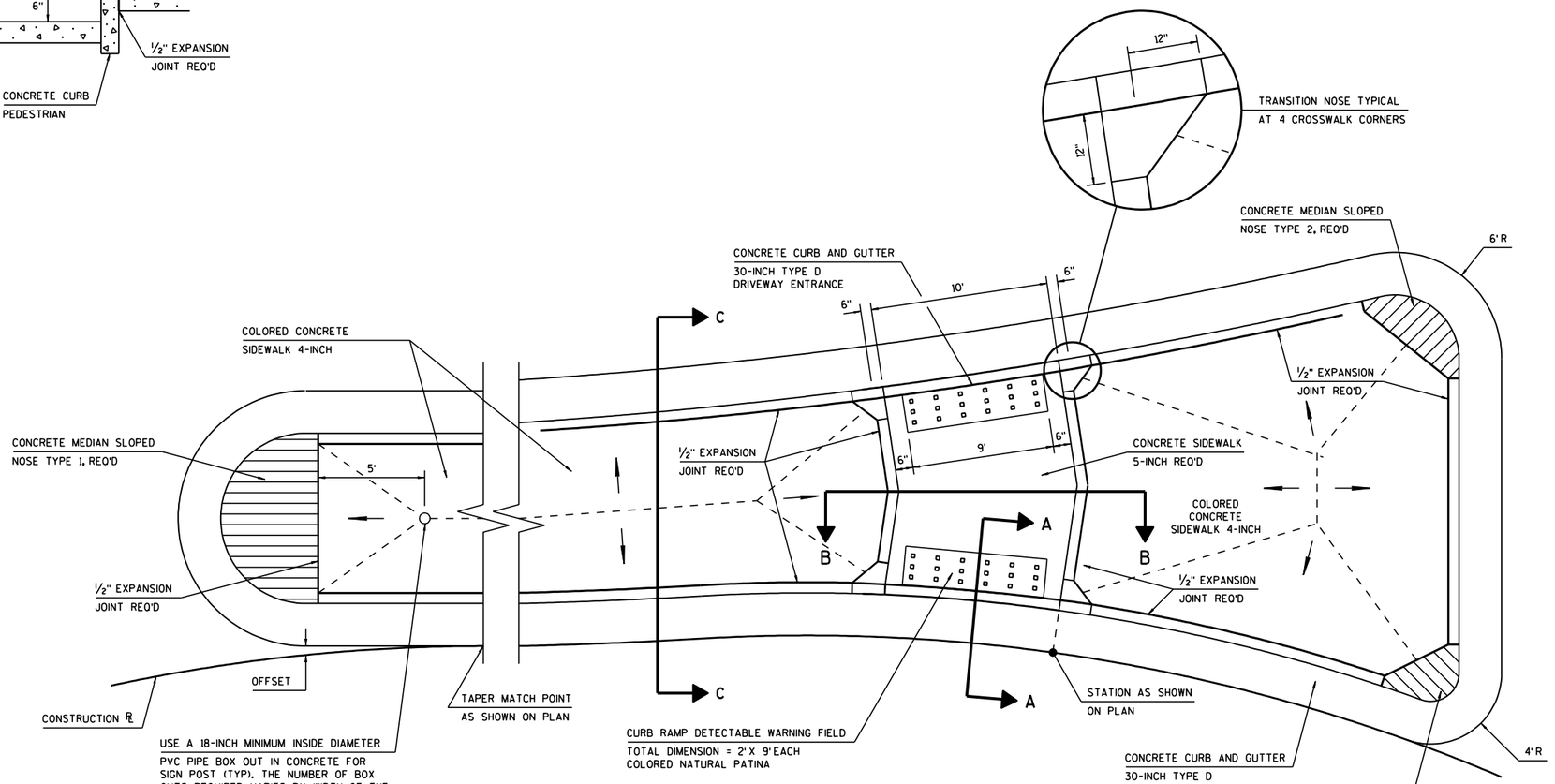


SECTION C-C



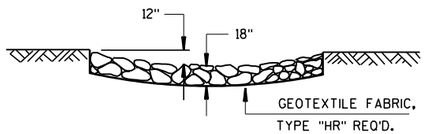
ISLAND SIGN LOCATION DETAIL (TYP)

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

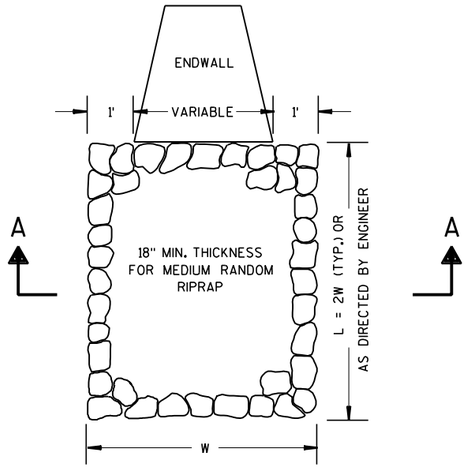


SPLITTER ISLAND DETAIL

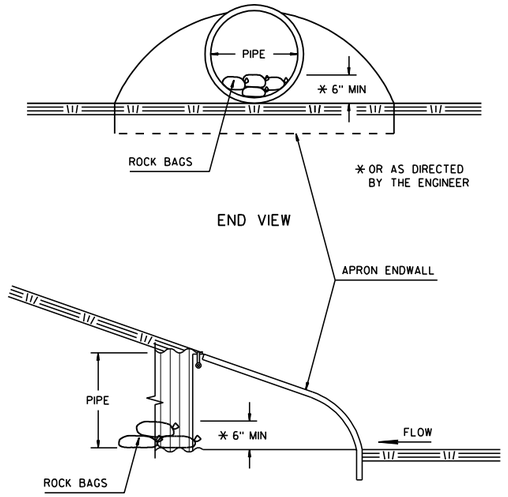
PROJECT NO:1420-22-71	HWY: USH 151	COUNTY:FOND DU LAC	CONSTRUCTION DETAILS	SHEET 20	E



SECTION A-A

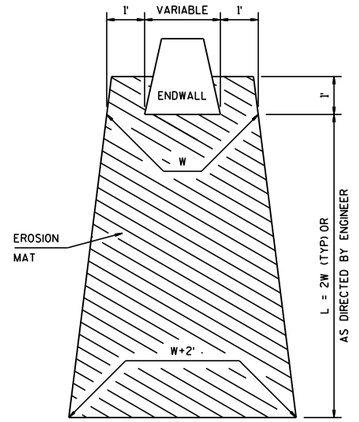


MEDIUM RANDOM RIPRAP TREATMENT AT CULVERTS

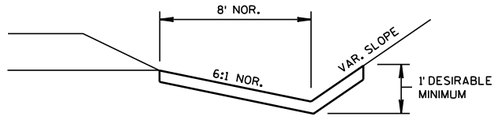


SIDE VIEW

CULVERT PIPE CHECKS

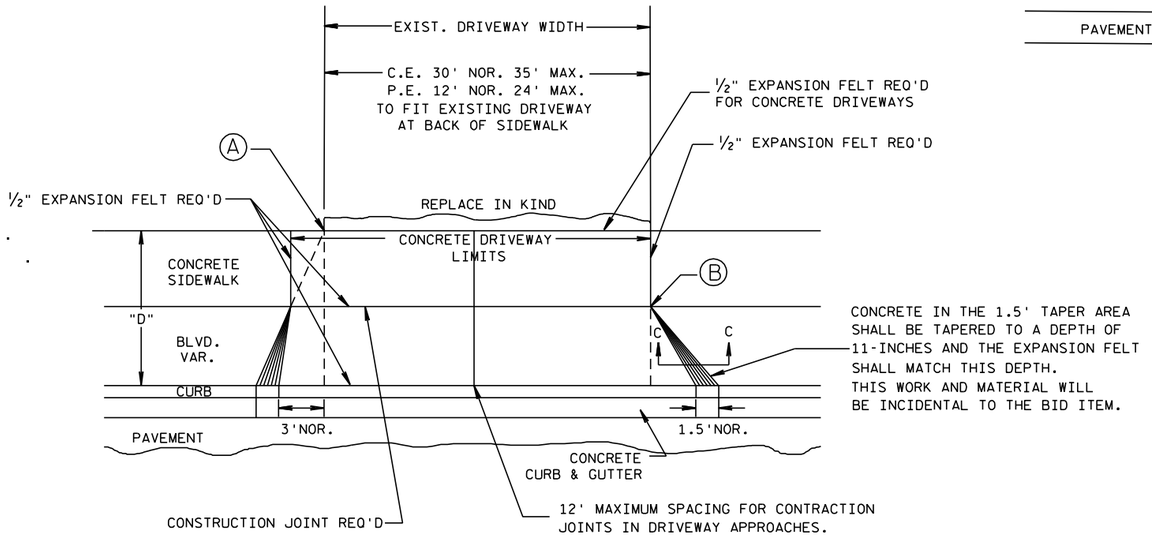


EROSION MAT TREATMENT AT CULVERTS



EROSION MAT DETAIL FOR DITCHES

2

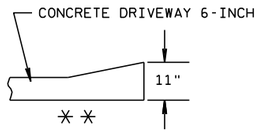


CONCRETE IN THE 1.5' TAPER AREA SHALL BE TAPERED TO A DEPTH OF 11-INCHES AND THE EXPANSION FELT SHALL MATCH THIS DEPTH. THIS WORK AND MATERIAL WILL BE INCIDENTAL TO THE BID ITEM.

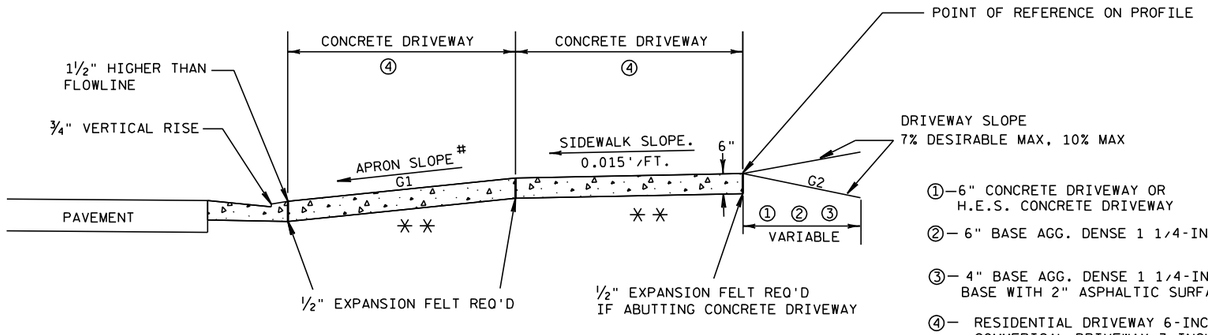
PLAN VIEW

Ⓐ WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

Ⓑ WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF SIDEWALK



SECTION C-C



TYPICAL SIDEWALK SECTION

①—6" CONCRETE DRIVEWAY OR H.E.S. CONCRETE DRIVEWAY

②— 6" BASE AGG. DENSE 1 1/4-INCH

③— 4" BASE AGG. DENSE 1 1/4-INCH BASE WITH 2" ASPHALTIC SURFACE

④— RESIDENTIAL DRIVEWAY 6-INCH COMMERICAL DRIVEWAY 7-INCH

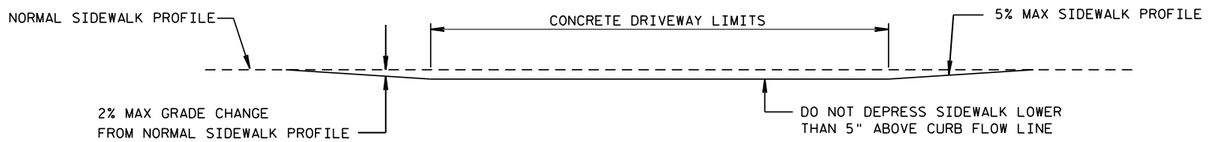
✳✳ = 6" BASE AGG. DENSE 1 1/4-INCH REQ'D UNDER CONCRETE DRWY

#

TERRACE WIDTH	APRON SLOPE (G1) MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	9.0
4 FT	5.0	7.0	9.0
5 FT	4.0	7.0	9.0
6 FT	4.0	7.0	9.0
7 FT	3.5	7.0	9.0
8 FT	3.0	7.0	9.0

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE



DEPRESSED SIDEWALK PROFILE DETAIL

DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER

2

ASPHALTIC SURFACE, 2-INCH

PC: 11+74.38'OV'

12'OV'

OLD CTH V SOUTH

+78.01'PR'
-70.98' LT

858.21

CONCRETE DRIVEWAY, 7-INCH

+05.67'PR'
-56.96' LT

858.88

858.28

857.42

+18.50'PR'
-63.00' LT

+51.50'PR'
-63.00' LT

+59.00'PR'
-51.92' LT

+13.50'PR'
-49.50' LT

+00.00'PR'
-44.50' LT

855.26 855.58 856.00 856.59 857.17 857.76 858.20

858.21

858.26

854.99

854.47 854.78

R5'

R7.5'

31'

63'

SEE PAVEMENT MARKING PLAN FOR LAYOUT DETAILS

853.58 854.16 854.75 855.33 855.91 856.50 857.08

60'PR'

61'PR'

62'PR'

EP: 62+10.67'PR'

64'

852.67 852.98

R5'

853.00

+00.00'PR'
45.50' RT

+13.50'PR'
50.50' RT

852.73 853.48 854.09 854.69 855.30 855.87

+18.50'PR'
64.00' RT

+49.73'PR'
45.11' RT

856.15 856.26

R10'

+58.50'PR'
49.92' RT

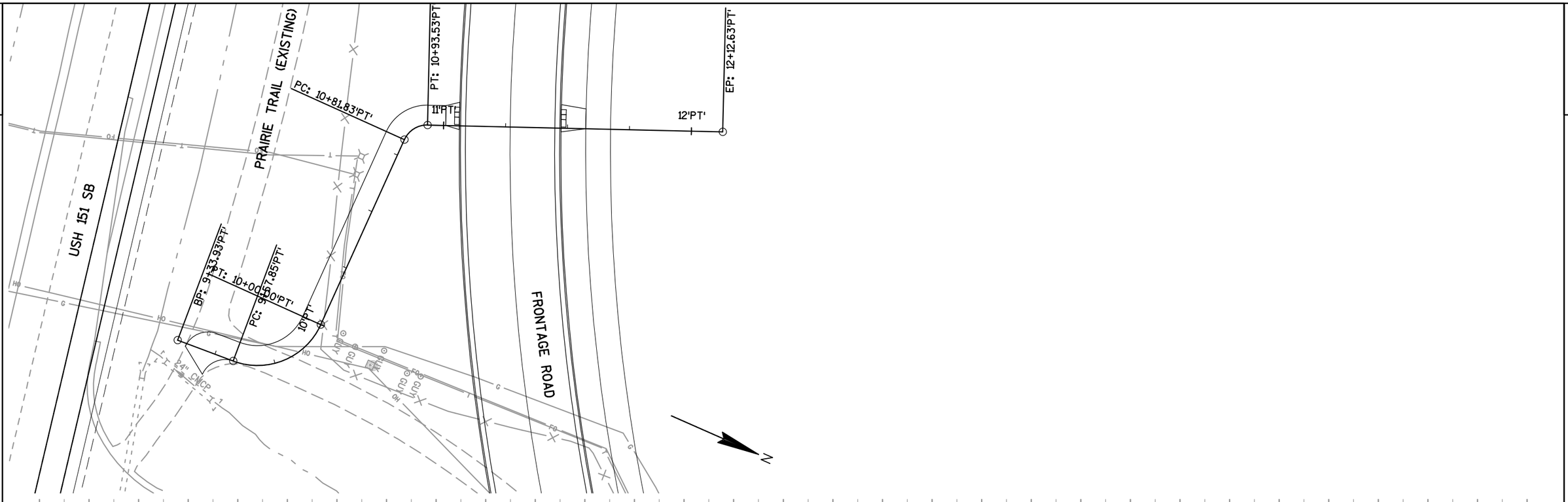
+48.50'PR'
64.00' RT

SLOPE INTERCEPT (TYP)

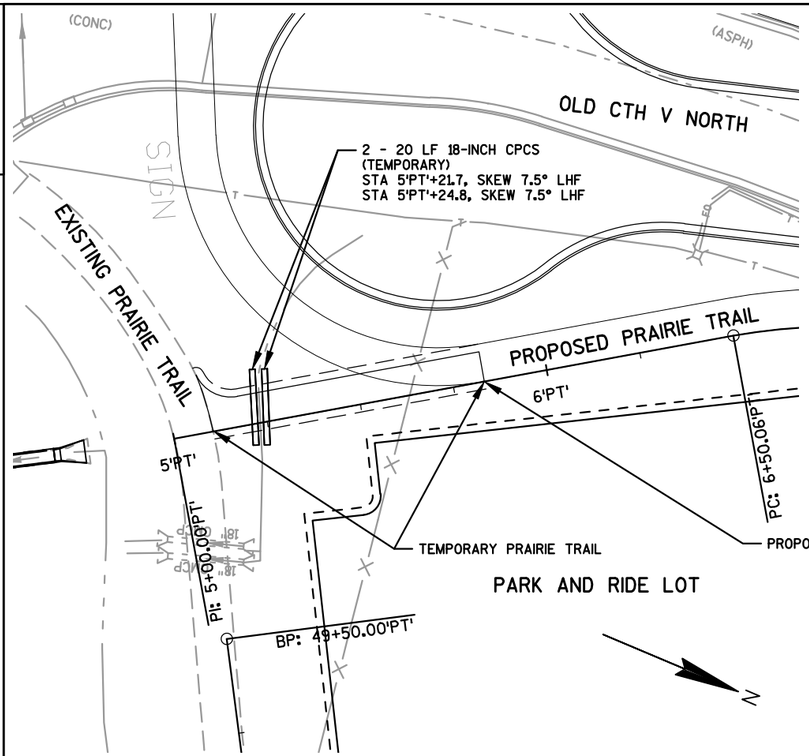
N

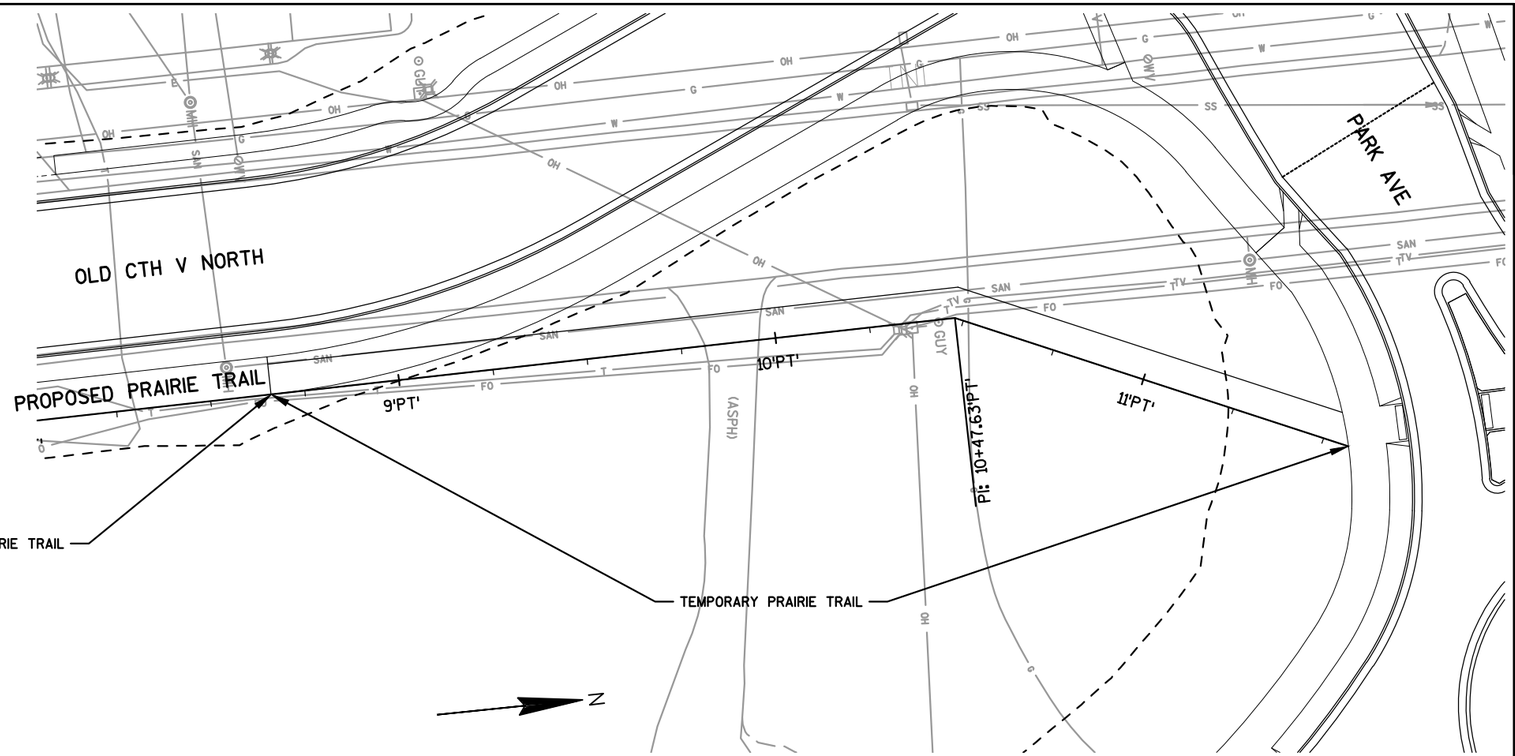
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - PARK-N-RIDE LOT	SHEET 23	E

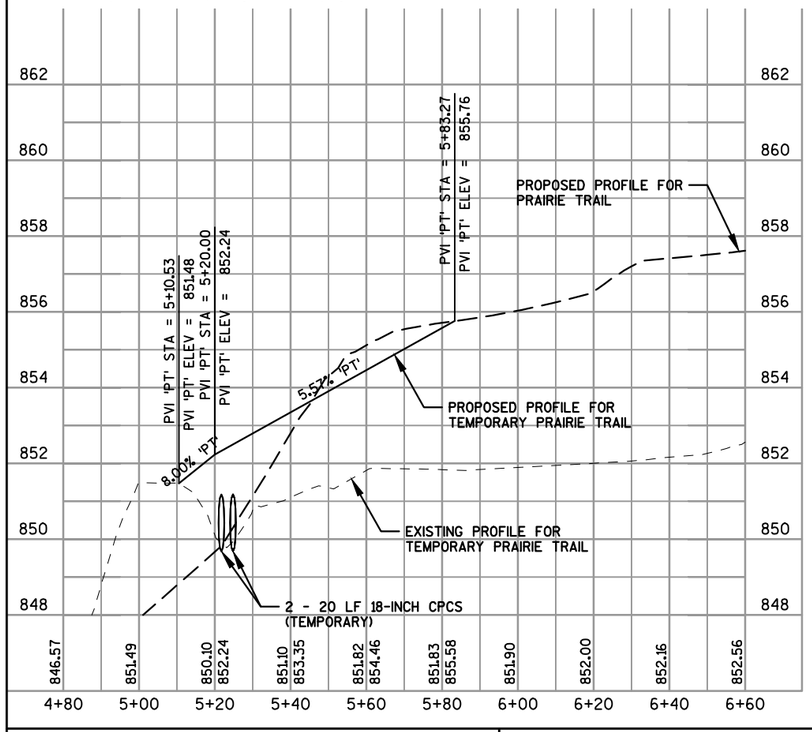
2

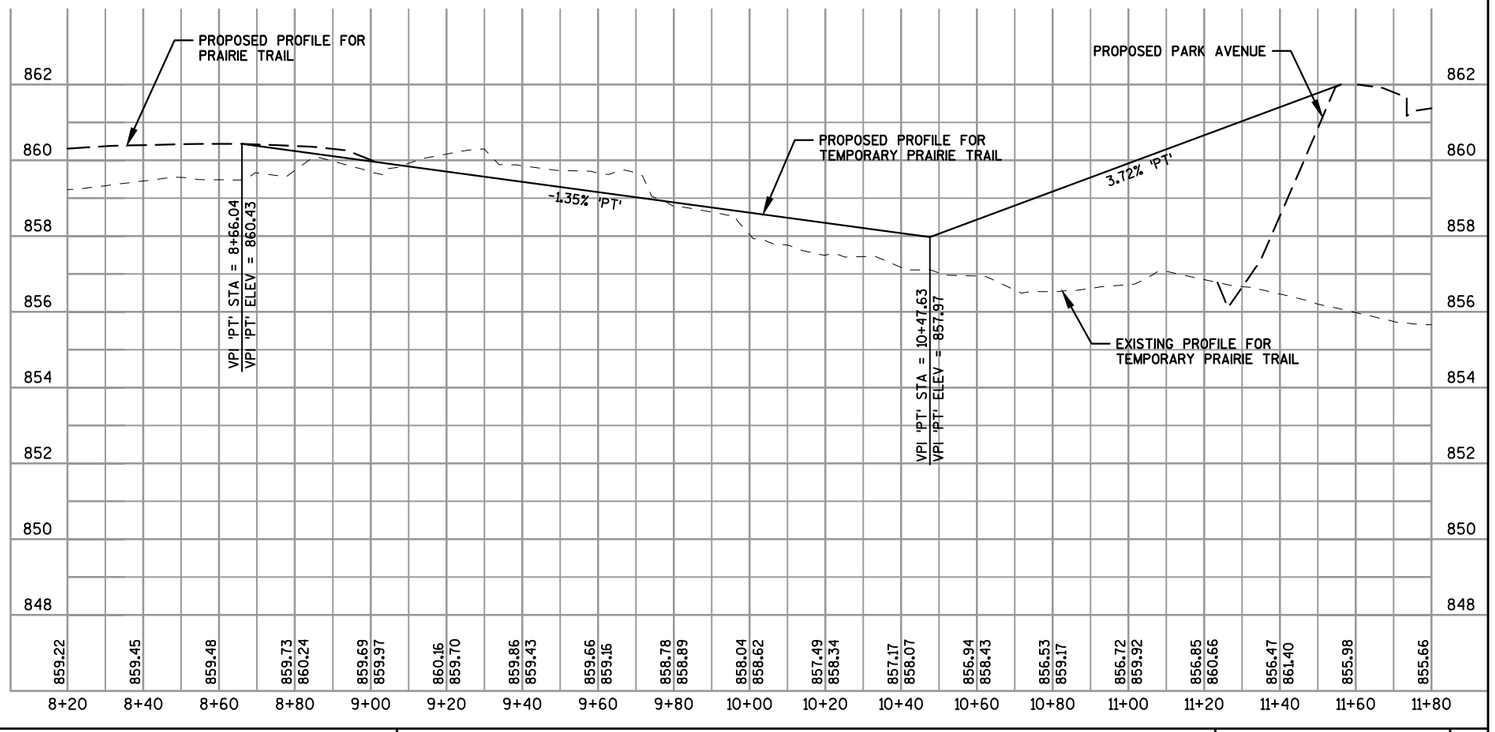


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - TEMPORARY PRAIRIE TRAIL	SHEET 24	E



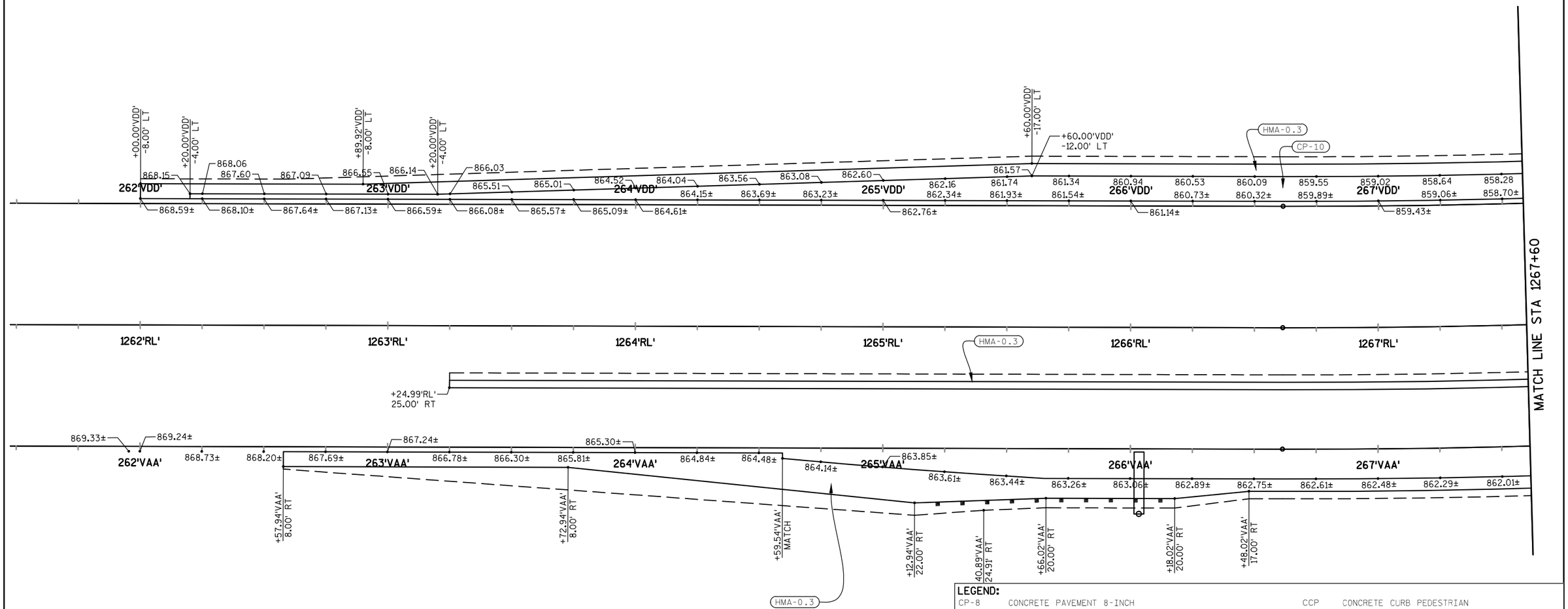


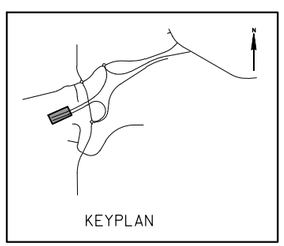




PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CONSTRUCTION DETAILS - TEMPORARY PRAIRIE TRAIL	SHEET 25	E

2





LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - USH 151	SHEET 26	E

2

LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

KEYPLAN

MATCH LINE STA 1267+60

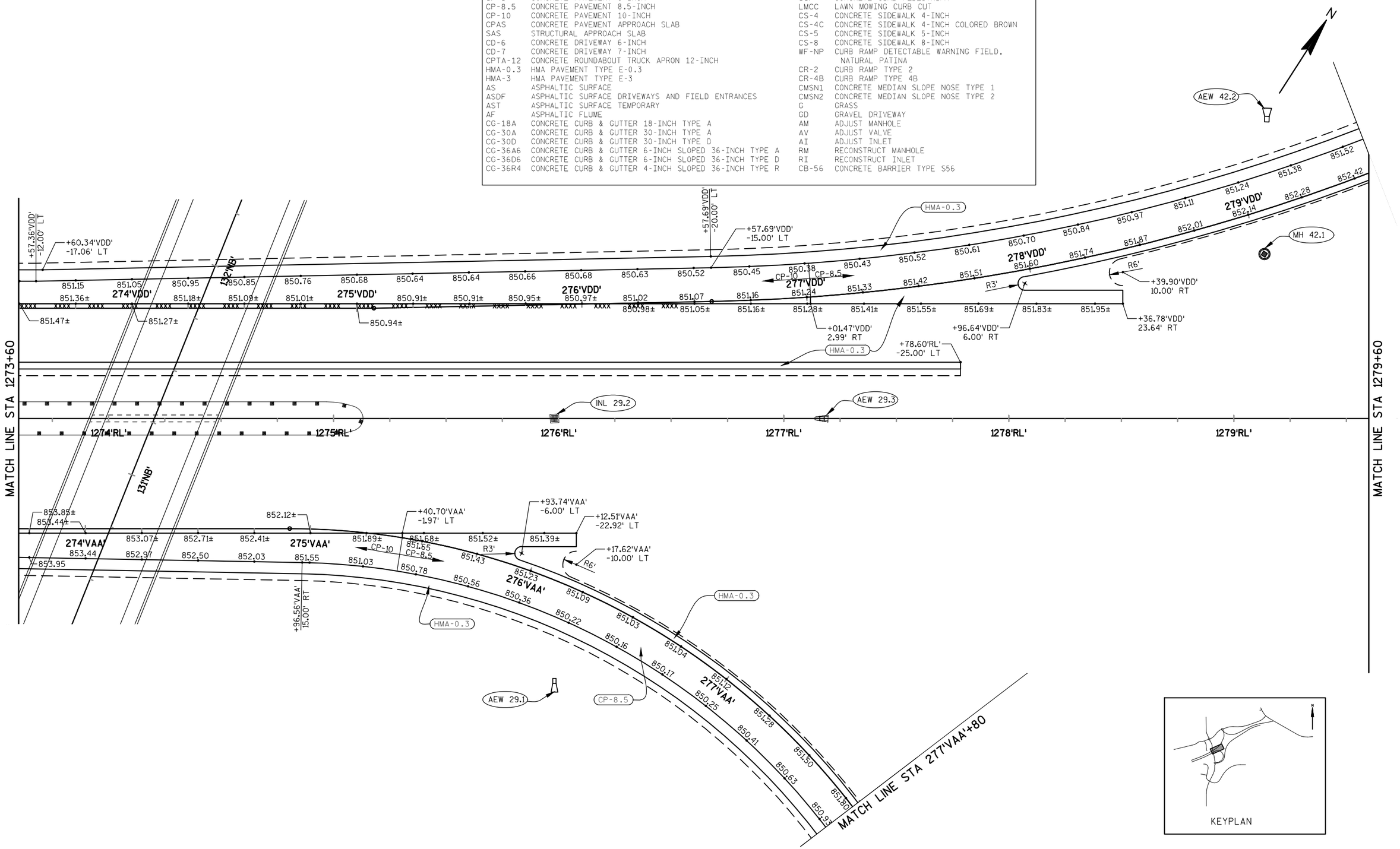
MATCH LINE STA 1273+60

+67.76'OV'
-68.00' LT
R50'
+00.00'OV'
-60.69' LT
+30.04'VDD'
-110.23' LT
R10'
R5'
+49.98'VDD'
-104.49' LT
+72.05'VDD'
-65.51' RT
+91.14'VDD'
-67.35' RT
+86.75'VDD'
-89.92' RT
+99.20'VDD'
-91.12' RT
+23.80'VDD'
-85.72' RT
AEW 26.3
MH 26.2
HMA-3
CS-4
INL 26.5
INL 26.4
CG-30D
AS
+00.00'OV'
0.00' RT
R46'
R58.5'
10'OV'
+83.98'OV'
45.84' RT
+67.76'OV'
68.00' RT
+20.14'OV'
45.47' RT
HMA-0.3
CP-10
268'VDD'
269'VDD'
270'VDD'
271'VDD'
272'VDD'
273'VDD'
268'RL'
269'RL'
270'RL'
271'RL'
272'RL'
273'RL'
+74.42'RL'
-25.00' LT
+11.46'RL'
25.00' RT
IMH 28.3
INL 28.2
MH 28.1
268'VAA'
269'VAA'
270'VAA'
271'VAA'
272'VAA'
273'VAA'
HMA-0.3
+40.14'VAA'
12.00' RT
+00.00'VAA'
12.00' RT

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - USH 151	SHEET 27	E

LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

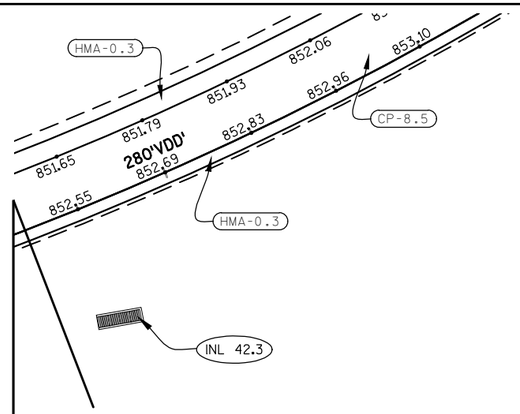


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - USH 151	SHEET 28	E

2

LEGEND:

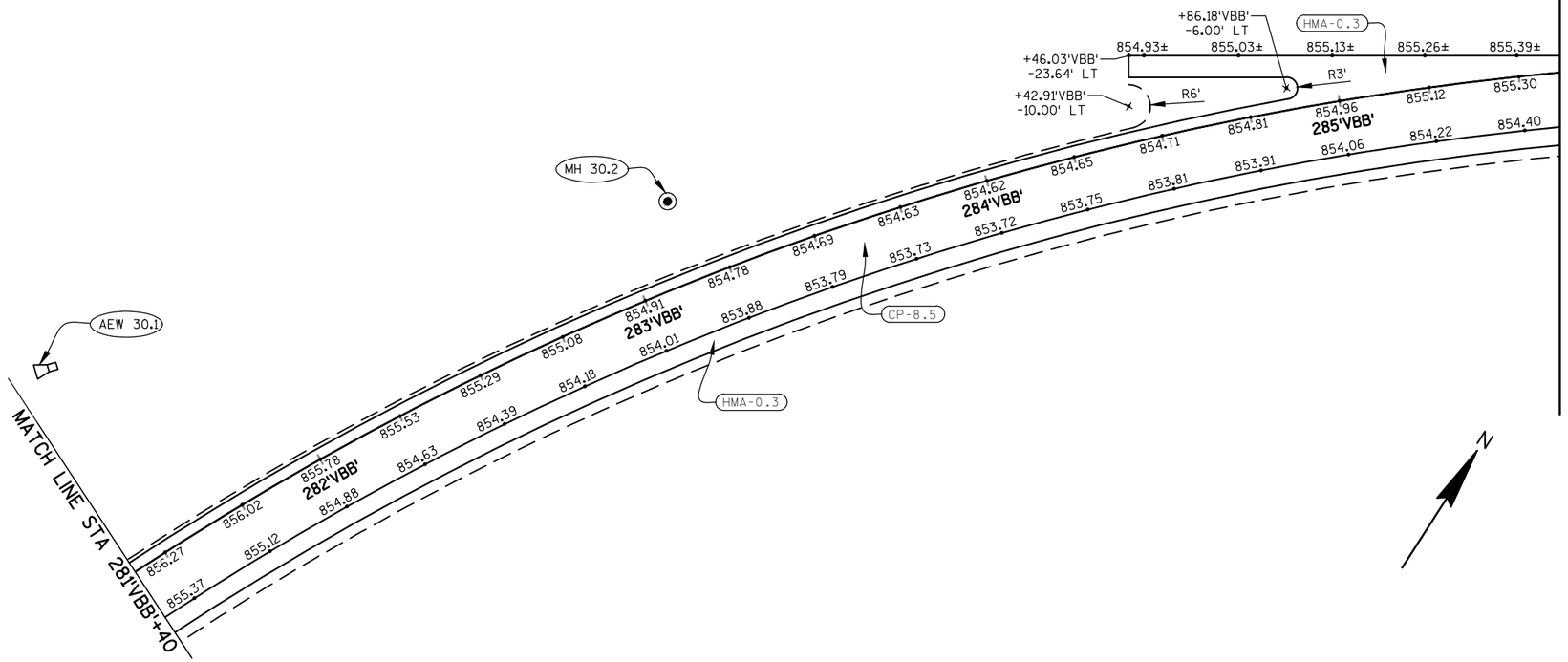
CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

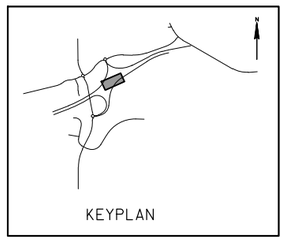


MATCH LINE STA 1279+60

1280'RL' 1281'RL' 1282'RL' 1283'RL' 1284'RL' 1285'RL'

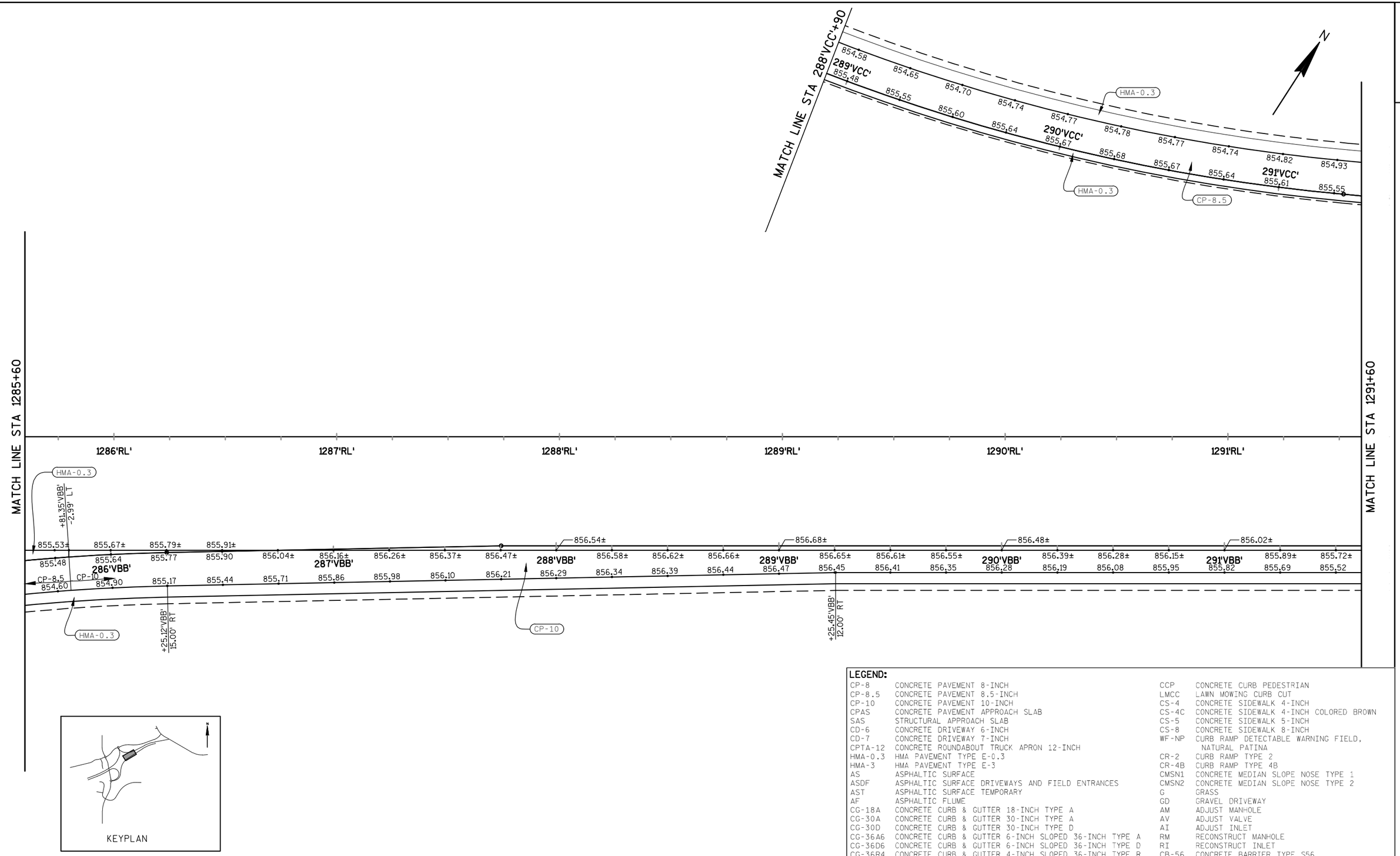
MATCH LINE STA 1285+60





PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - USH 151	SHEET 29	E

2



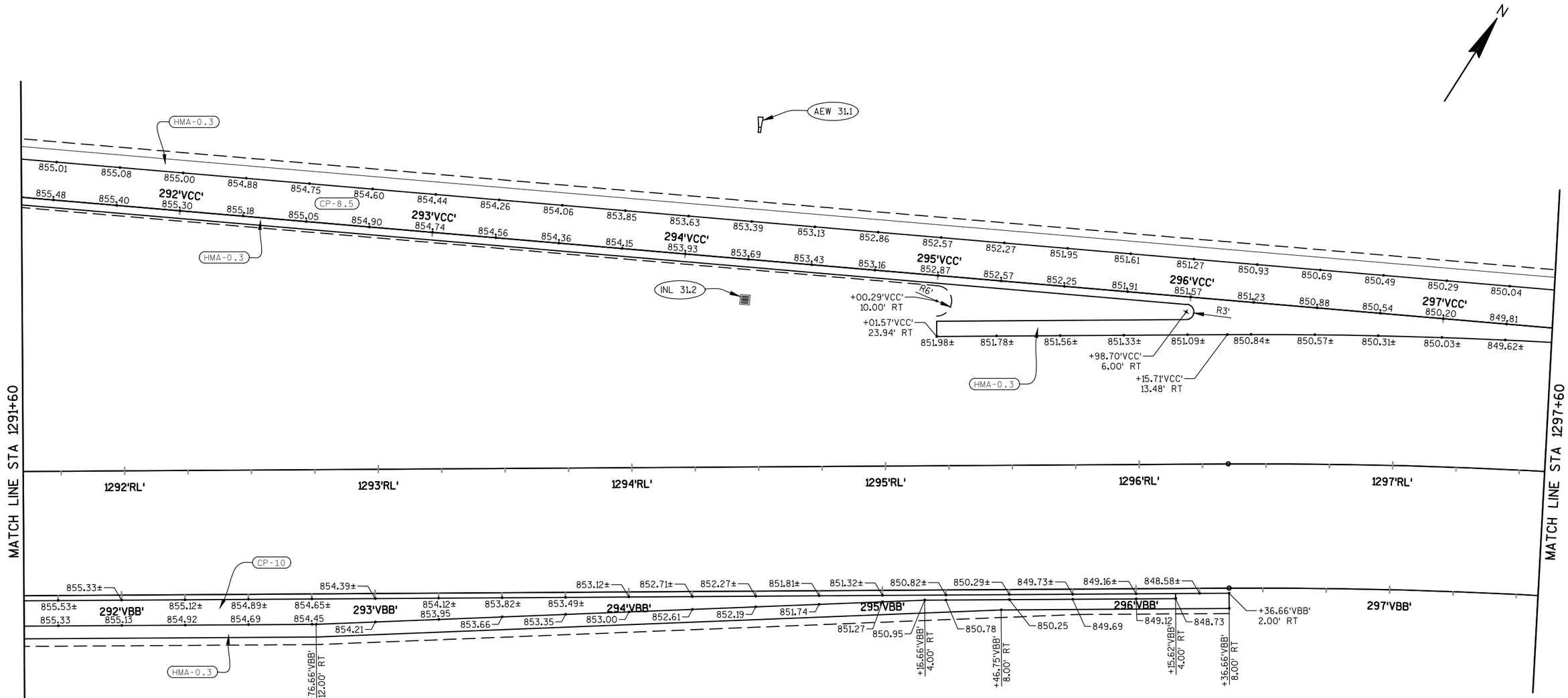
KEYPLAN

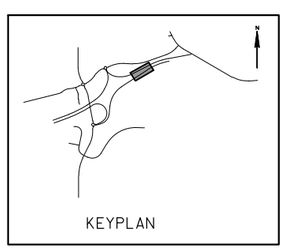
LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - USH 151	SHEET 30	E

2

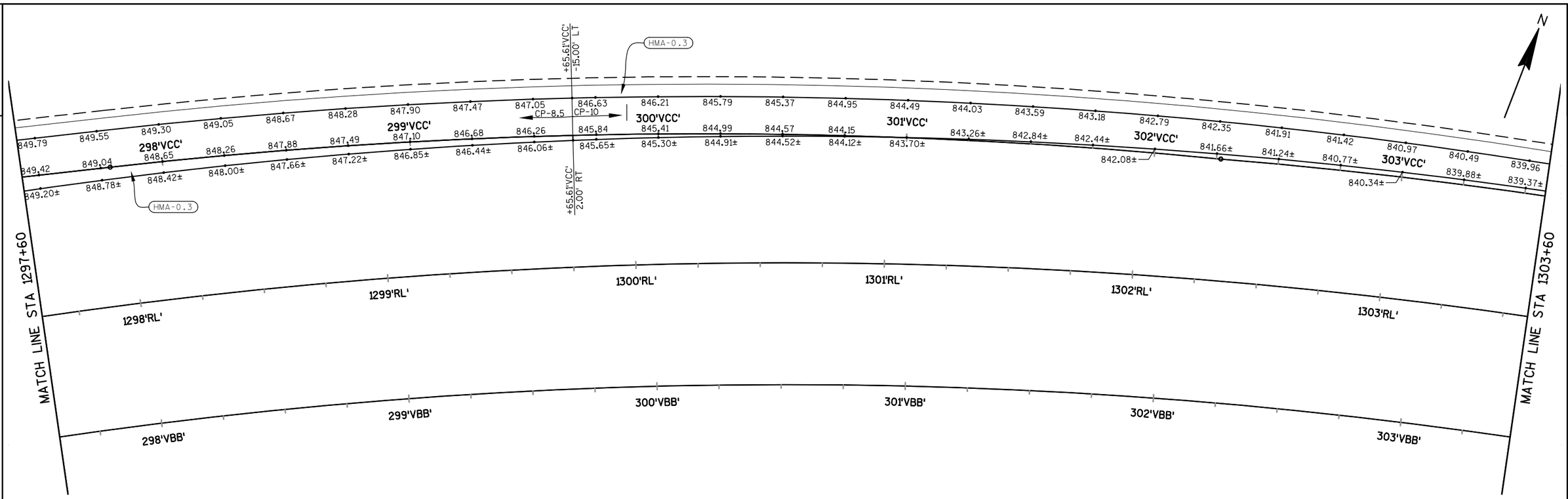




LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - USH 151	SHEET 31	E



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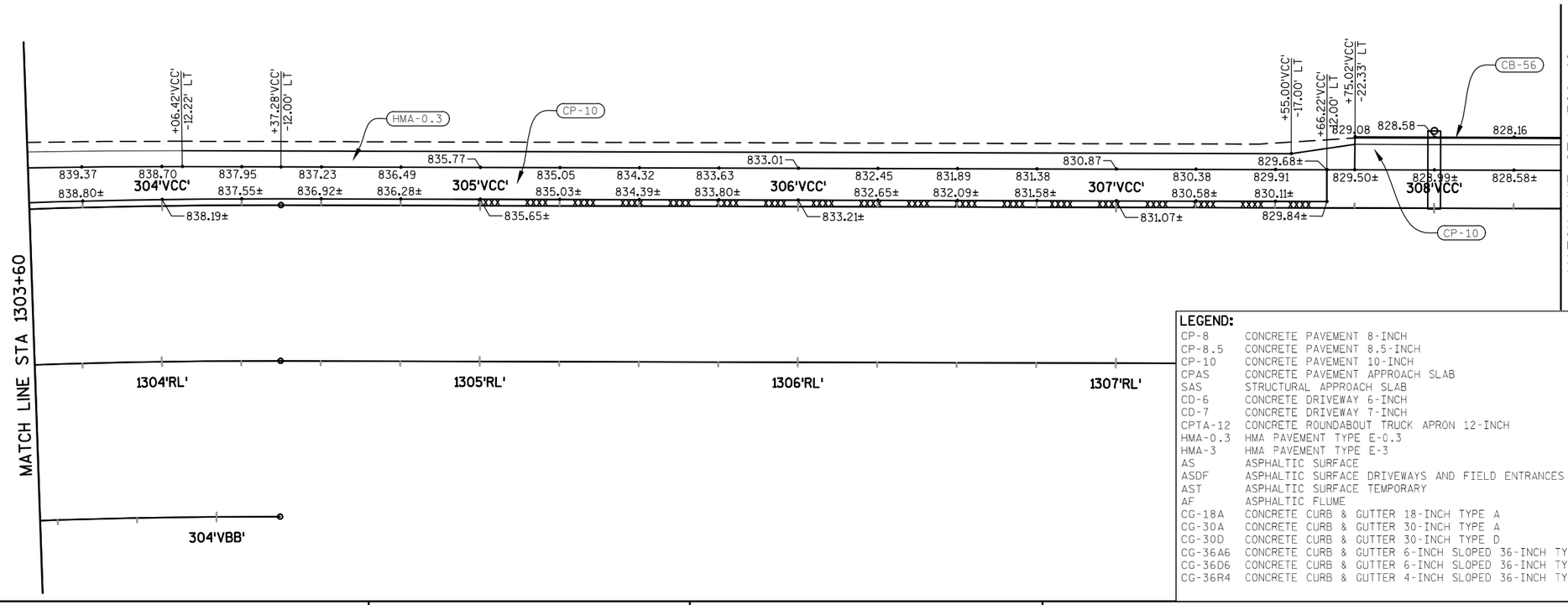
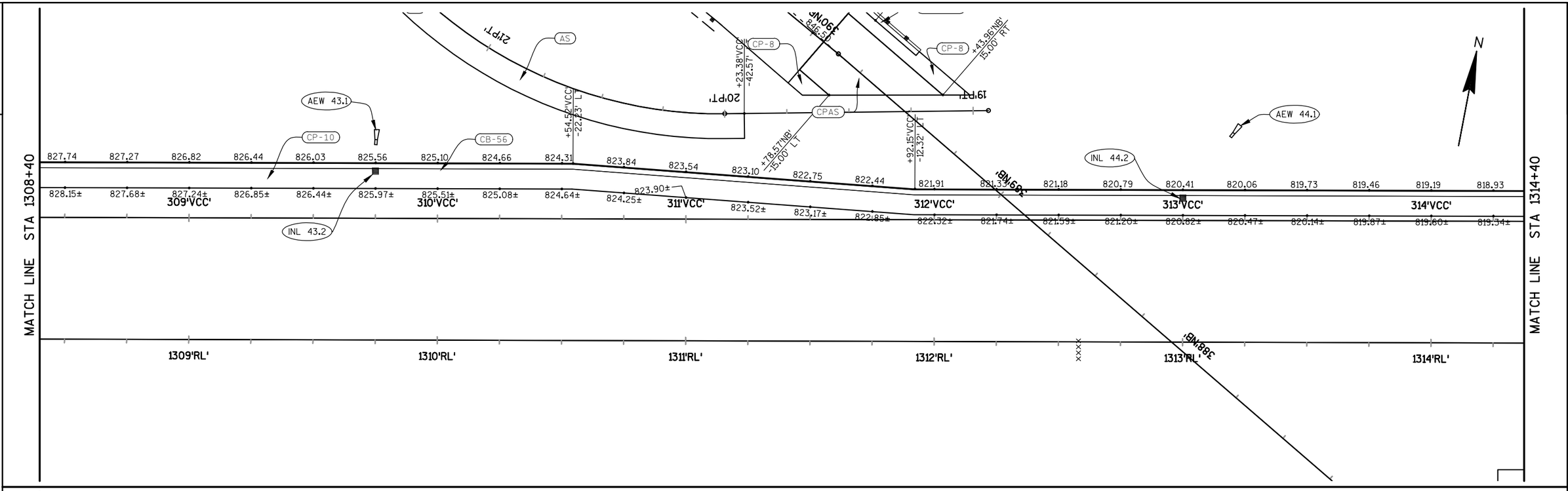
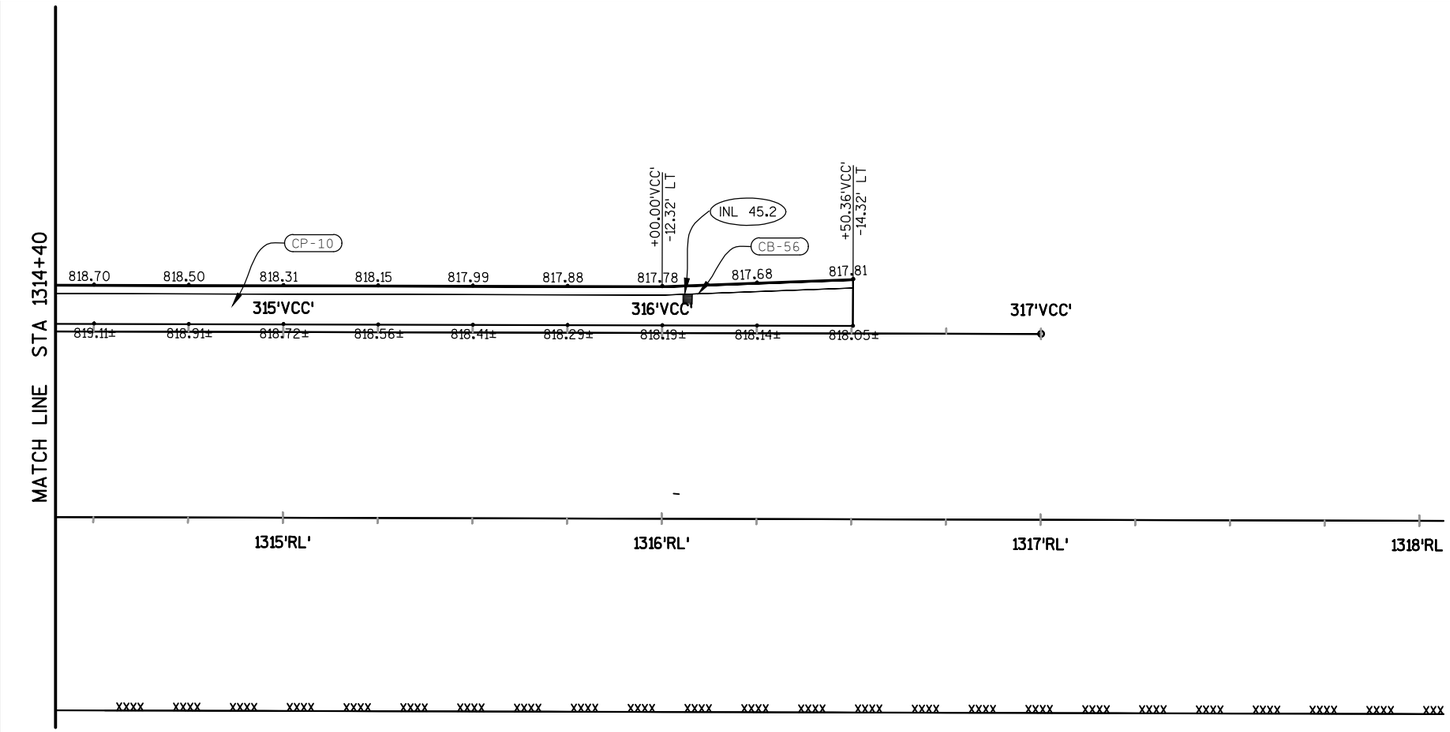


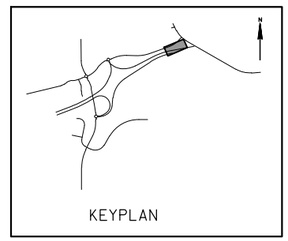
LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH	CR-2	CURB RAMP TYPE 2
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-4B	CURB RAMP TYPE 4B
HMA-3	HMA PAVEMENT TYPE E-3	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
AS	ASPHALTIC SURFACE	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	G	GRASS
AST	ASPHALTIC SURFACE TEMPORARY	GD	GRAVEL DRIVEWAY
AF	ASPHALTIC FLUME	AM	ADJUST MANHOLE
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AV	ADJUST VALVE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AI	ADJUST INLET
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	RM	RECONSTRUCT MANHOLE
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RI	RECONSTRUCT INLET
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	CB-56	CONCRETE BARRIER TYPE S56
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R		

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - USH 151	SHEET 32	E







LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - USH 151	SHEET 33	E

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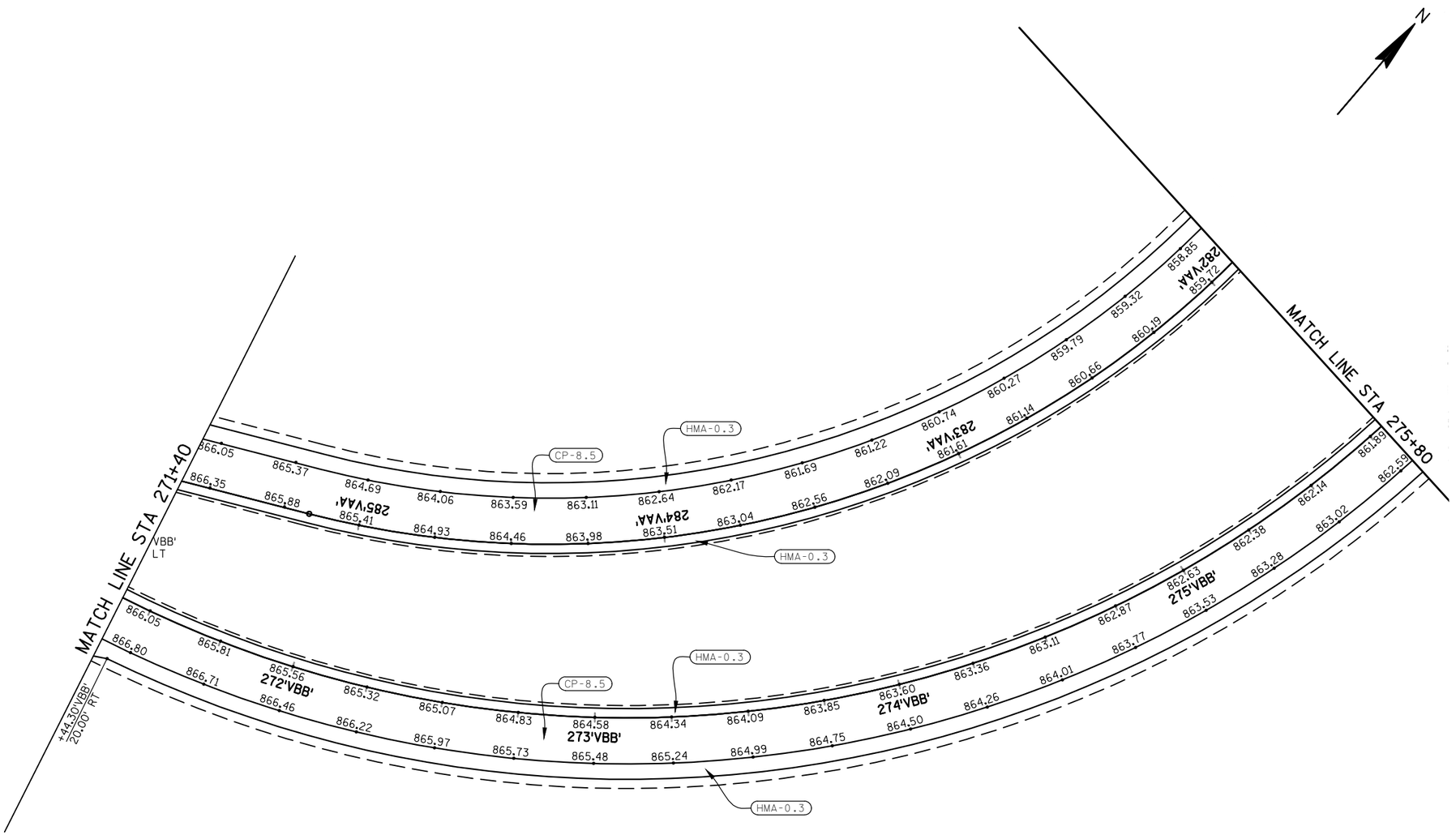
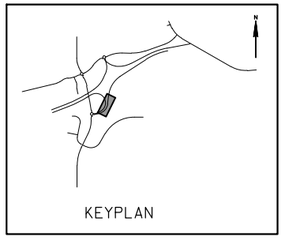




LEGEND:

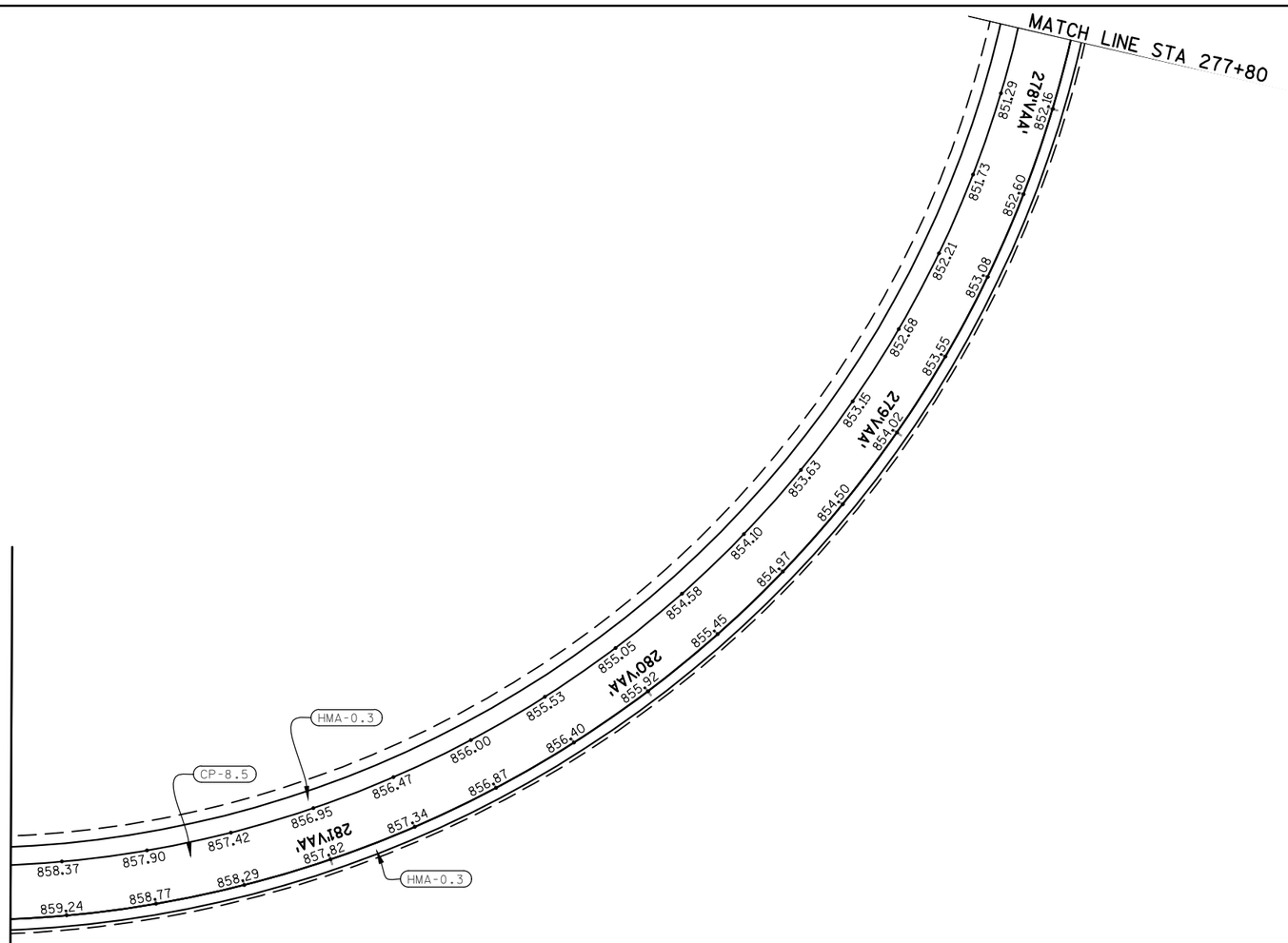
CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

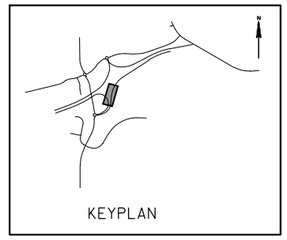
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - NORTHBOUND RAMPS	SHEET 34	E

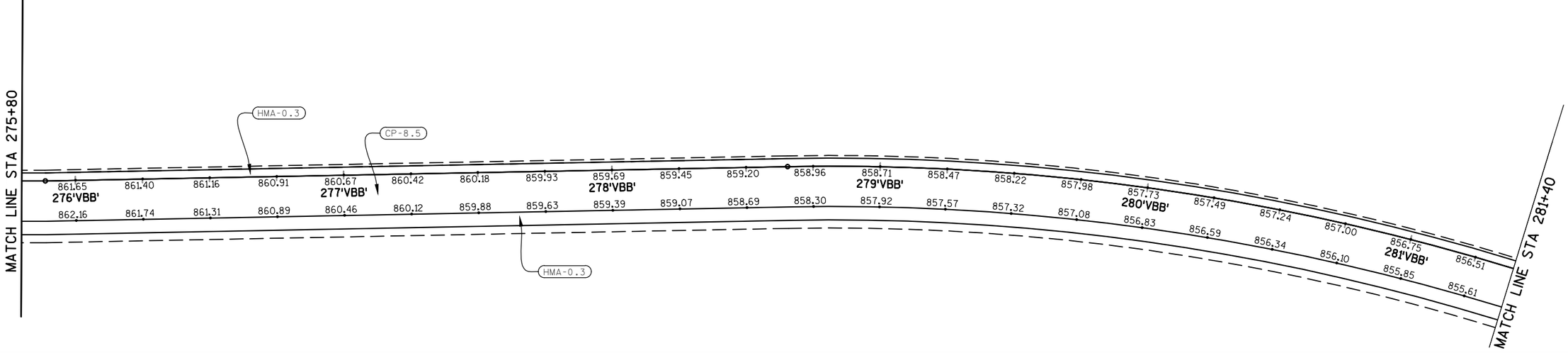
2

LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

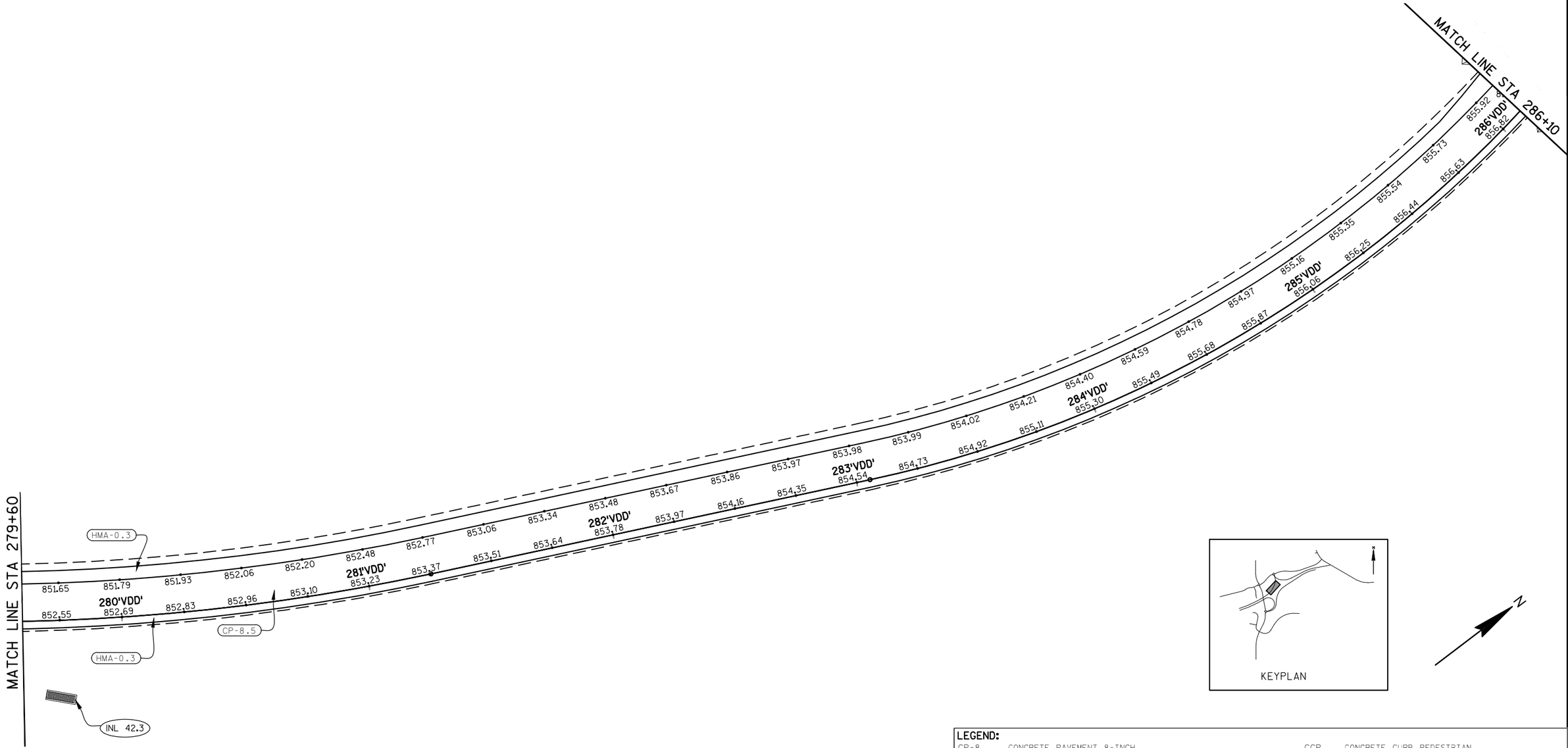






PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - NORTHBOUND RAMPS	SHEET 35	E

2



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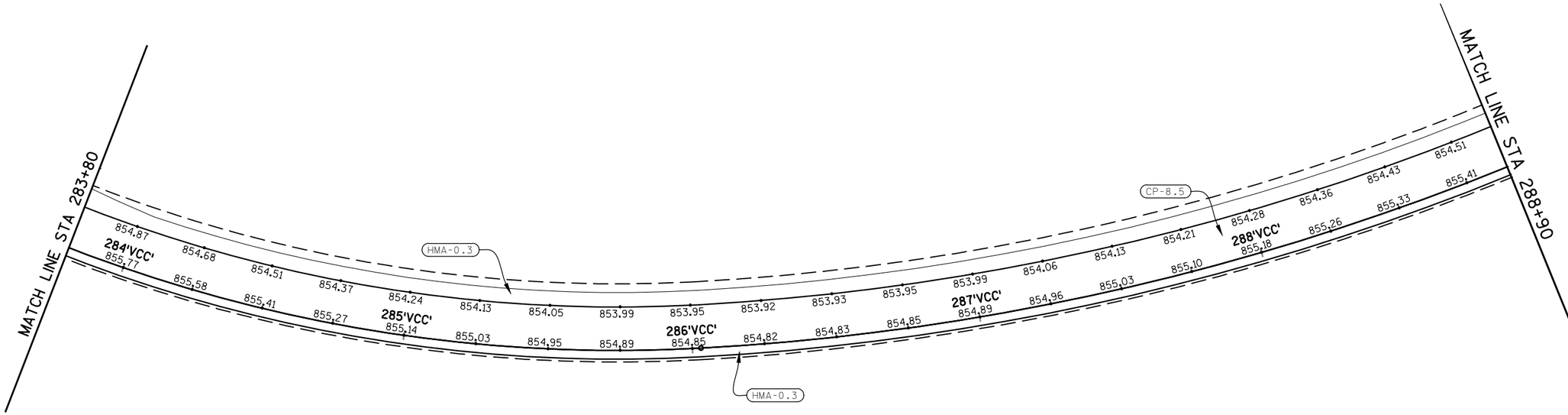
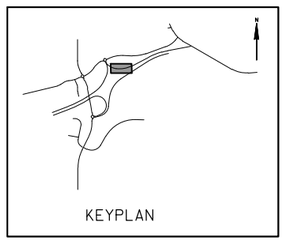
LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - SOUTHBOUND ON-RAMP (VDD)	SHEET 36	E

2





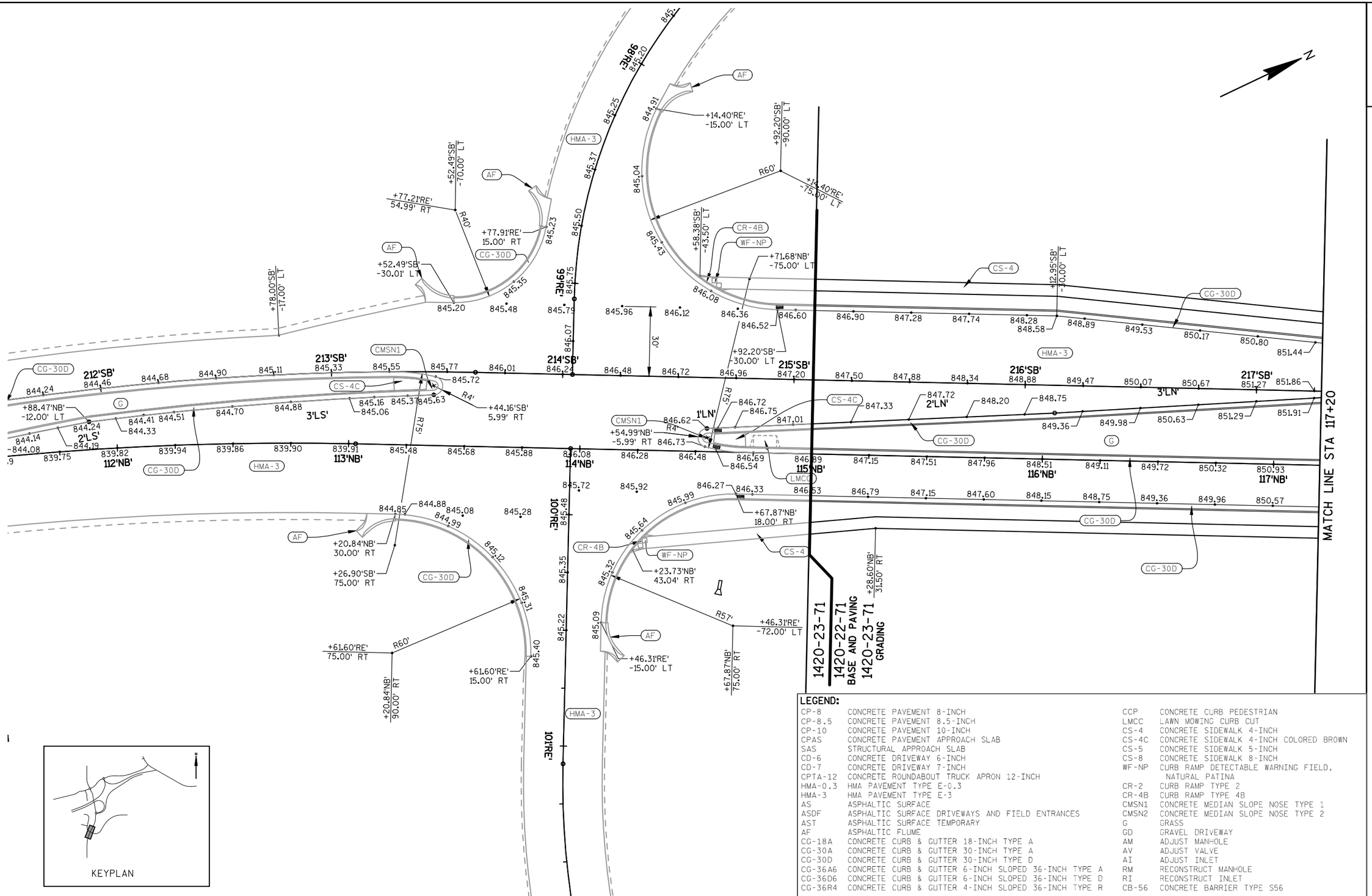
N

LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - SOUTHBOUND OFF-RAMP (VCC)	SHEET 37	E

2



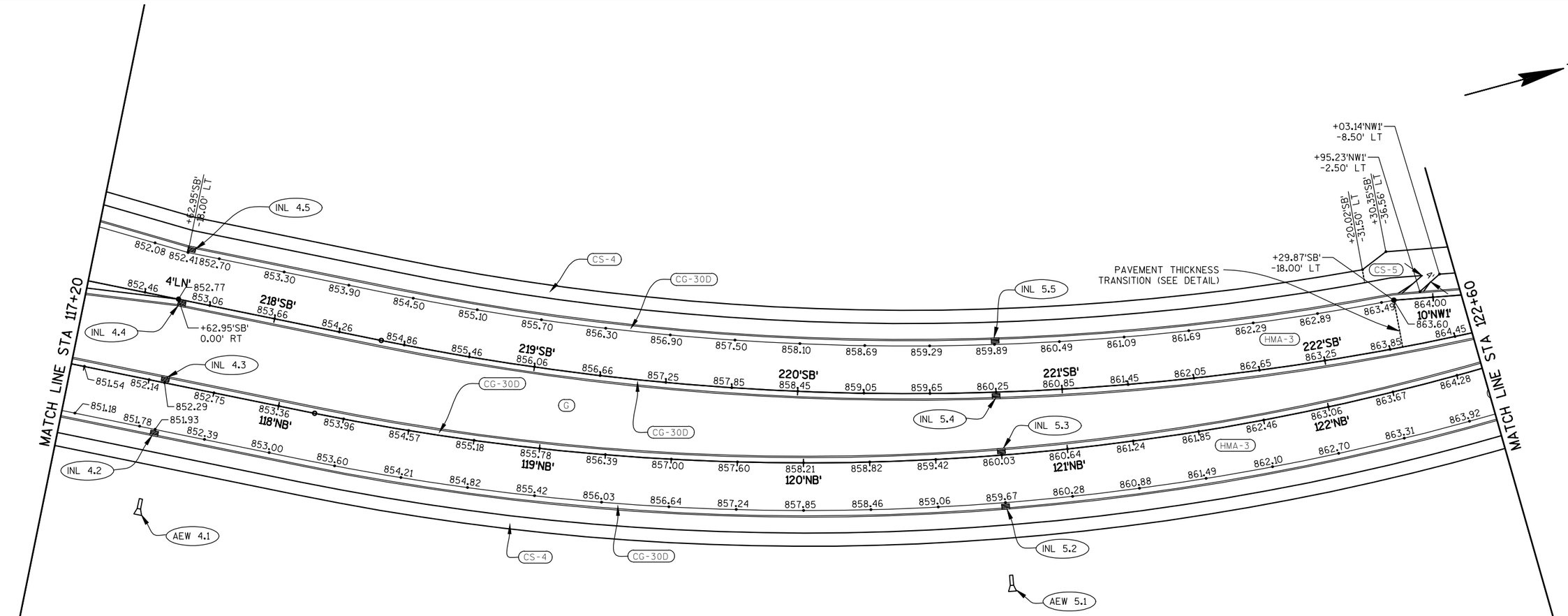
KEYPLAN

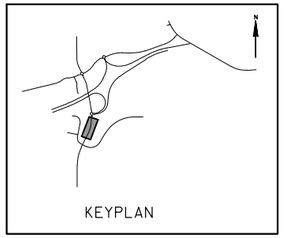
LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - CTH V	SHEET 38	E

2





LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH	CR-2	CURB RAMP TYPE 2
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-4B	CURB RAMP TYPE 4B
HMA-3	HMA PAVEMENT TYPE E-3	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
AS	ASPHALTIC SURFACE	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	G	GRASS
AST	ASPHALTIC SURFACE TEMPORARY	GD	GRAVEL DRIVEWAY
AF	ASPHALTIC FLUME	AM	ADJUST MANHOLE
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AV	ADJUST VALVE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AI	ADJUST INLET
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	RM	RECONSTRUCT MANHOLE
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RI	RECONSTRUCT INLET
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	CB-56	CONCRETE BARRIER TYPE S56
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R		

2

MATCH LINE STA 122+60

MATCH LINE STA 128+60

MATCH LINE STA 271+40

N

CROWN LINE

PAVEMENT THICKNESS TRANSITION (SEE DETAIL)

PAVEMENT THICKNESS TRANSITION (SEE DETAIL)

KEYPLAN

LEGEND:

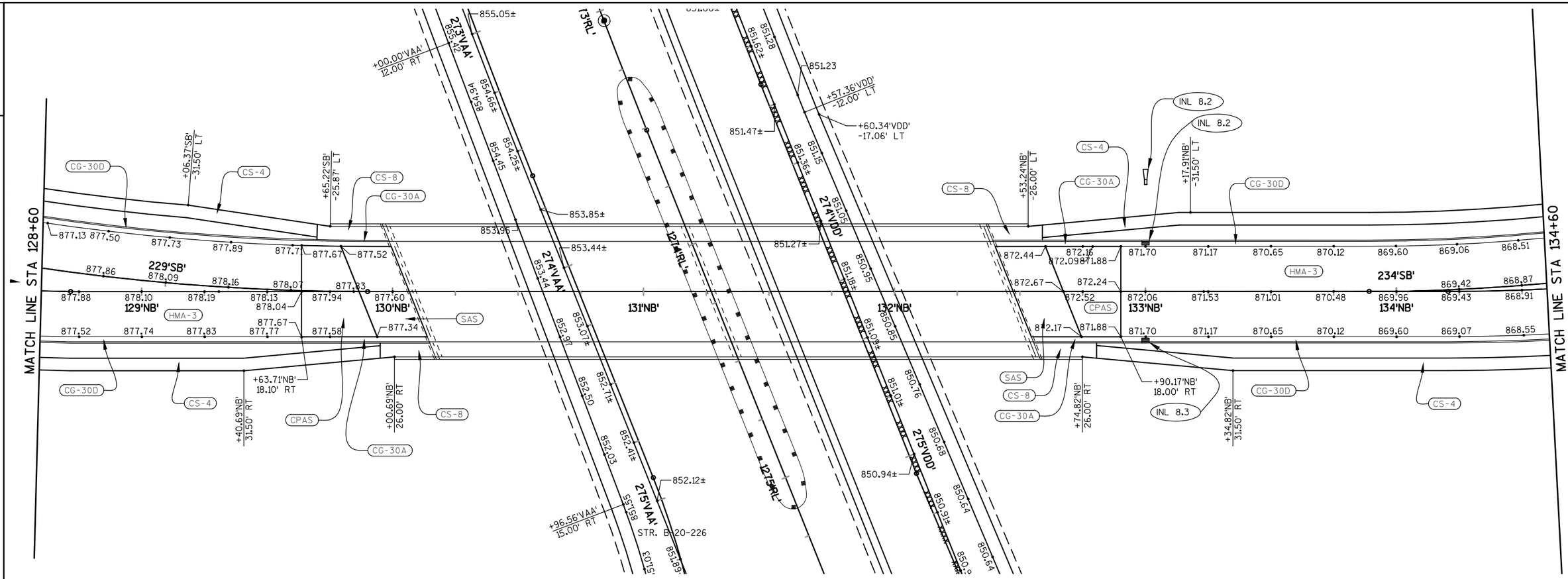
CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH	CR-2	CURB RAMP TYPE 2
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-4B	CURB RAMP TYPE 4B
HMA-3	HMA PAVEMENT TYPE E-3	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
AS	ASPHALTIC SURFACE	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	G	GRASS
AST	ASPHALTIC SURFACE TEMPORARY	GD	GRAVEL DRIVEWAY
AF	ASPHALTIC FLUME	AM	ADJUST MANHOLE
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AV	ADJUST VALVE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AI	ADJUST INLET
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	RM	RECONSTRUCT MANHOLE
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RI	RECONSTRUCT INLET
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	CB-56	CONCRETE BARRIER TYPE S56
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R		

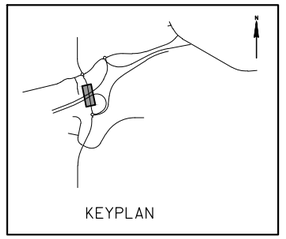
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - CTH V	SHEET 40 E

2

MATCH LINE STA 128+60

MATCH LINE STA 134+60



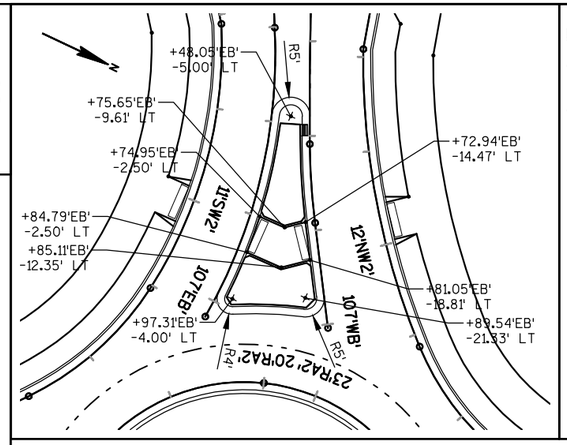


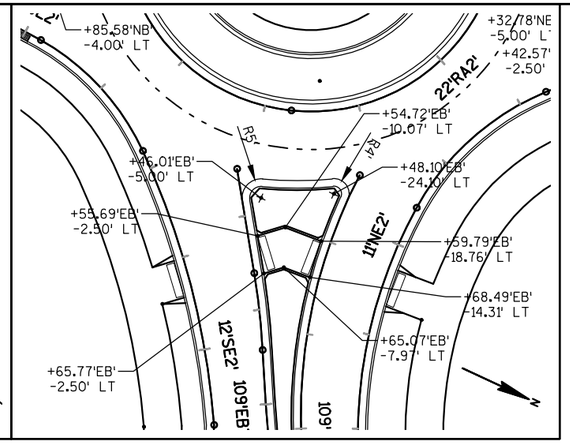
LEGEND:

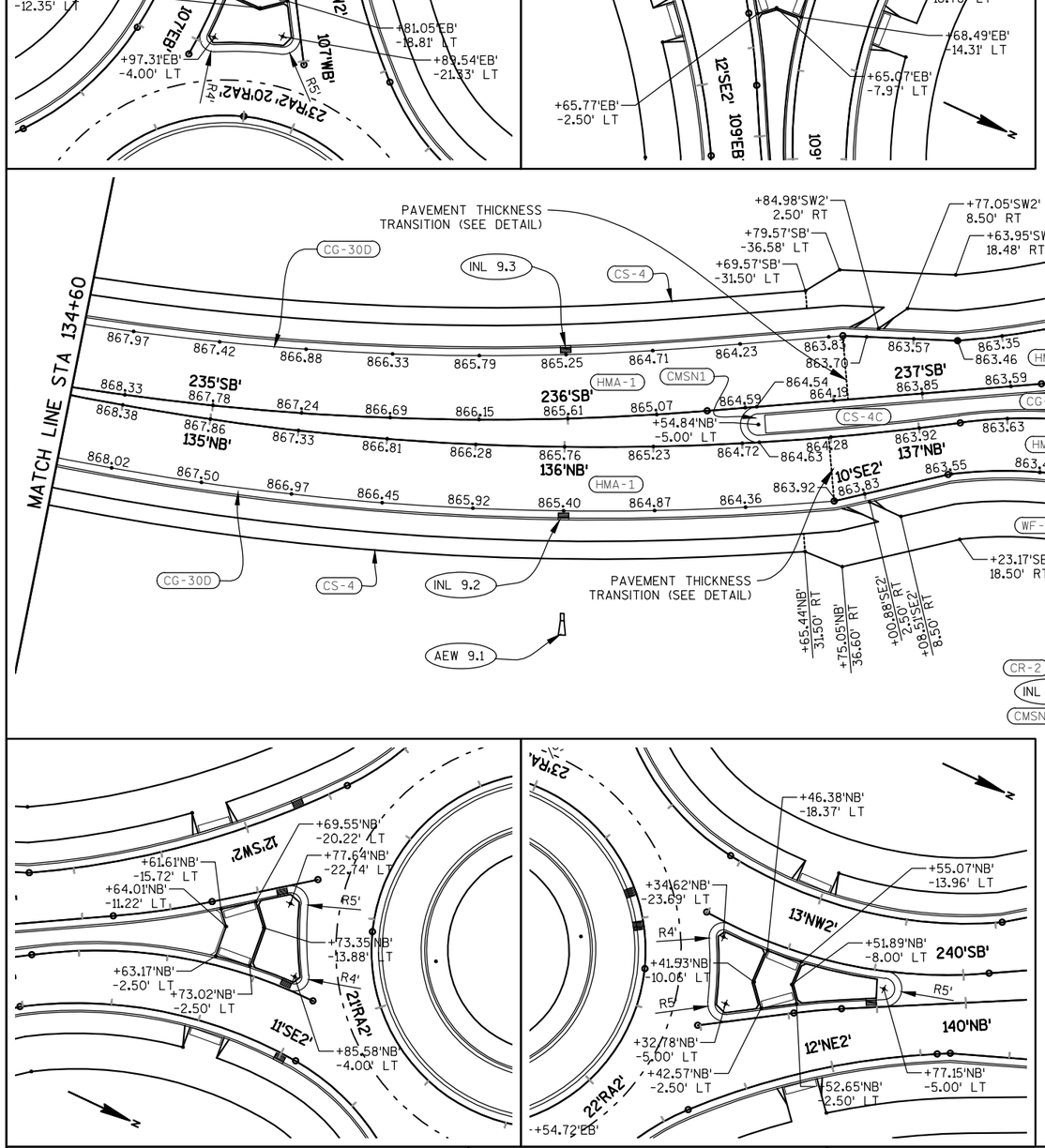
CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - CTH V	SHEET 41	E

2






MATCH LINE STA 134+60
MATCH LINE STA 140+60
MATCH LINE STA 106+40
MATCH LINE STA 109+70
PAVEMENT THICKNESS TRANSITION (SEE DETAIL)
PAVEMENT TRANSITION SEE DETAIL
PAVEMENT TRANSITION
CROWN LINE
CG-30D
CS-4
CS-5
CS-4C
CR-2
CG-18A
CG-36R4
CPTA-12
INL 9.3
INL 9.2
INL 10.5
INL 10.4
INL 10.3
INL 10.2
INL 14.2
INL 11.3
INL 11.2
INL 11.4
AEW 9.1
AEW 10.1
AEW 11.1
WF-NP
HMA-1
HMA-3
CMSN1
CMSN2
CCP
VPI+42
862.14
VPI+45
860.74
VPI+60
860.59
VPI+40
862.78
VPI+48
862.56
VPI+54
862.34
VPI+40
861.17
VPI+60
860.66
VPI+20
861.48
HP+20
860.90
HP+93
863.07
HP+05
861.58
HP+93
863.39
+84.98'SW2'
2.50' RT
+77.05'SW2'
8.50' RT
+63.95'SW2'
18.48' RT
+79.57'SB'
-36.58' LT
+69.57'SB'
-31.50' LT
+54.84'NB'
-5.00' LT
+23.50'SW2'
8.50' RT
+96.13'SW2'
8.50' RT
+88.73'NW2'
-8.50' LT
+102.62'NW2'
-8.50' LT
+80.56'NW2'
-8.50' LT
+89.16'NW2'
-2.50' LT
+57.07'SB'
-38.43' LT
+11.33'RA2'
-17.98' LT
+46.92'RA2'
-18.00' LT
+88.66'RA2'
17.98' LT
+64.97'RA2'
-8.00' LT
+65.44'NB'
31.50' RT
+75.05'NB'
36.60' RT
+00.88'SE2'
2.50' RT
+08.51'SE2'
8.50' RT
+72.60'SE2'
8.50' RT
+23.17'SE2'
18.50' RT
+85.74'SE2'
8.50' RT
+82.48'NE2'
12.50' RT
+95.54'NE2'
12.50' RT
+58.78'NE2'
10.42' RT
+70.71'NE2'
2.50' RT
+42.37'NB'
38.49' RT
+52.79'NB'
33.50' RT
+19.10'SE2'
18.50' RT
+29.50'SE2'
18.50' RT
+35.74'SE2'
8.50' RT
+43.37'SE2'
2.50' RT
+23.31'NE2'
12.50' RT
+16.24'NE2'
12.50' RT
+09.49'NE2'
22.50' RT
+02.64'NE2'
2.50' RT
235'SB'
236'SB'
237'SB'
135'NB'
136'NB'
137'NB'
240'SB'
140'NB'
10'SE2'
11'SE2'
12'SE2'
109'EB'
109'WB'
11'NE2'
12'NE2'
13'NW2'
14'N
R50'
R36'
R100'
R5'
R4'
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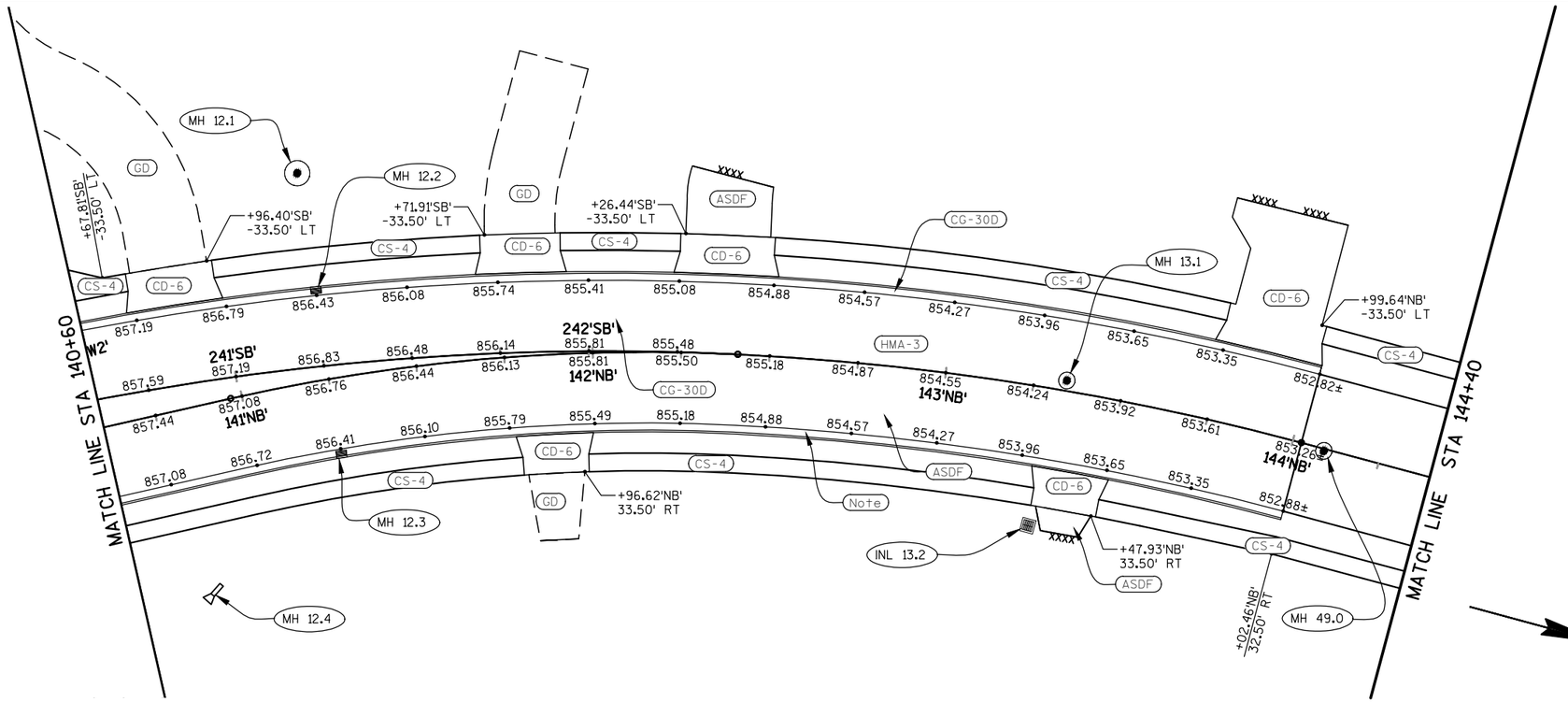


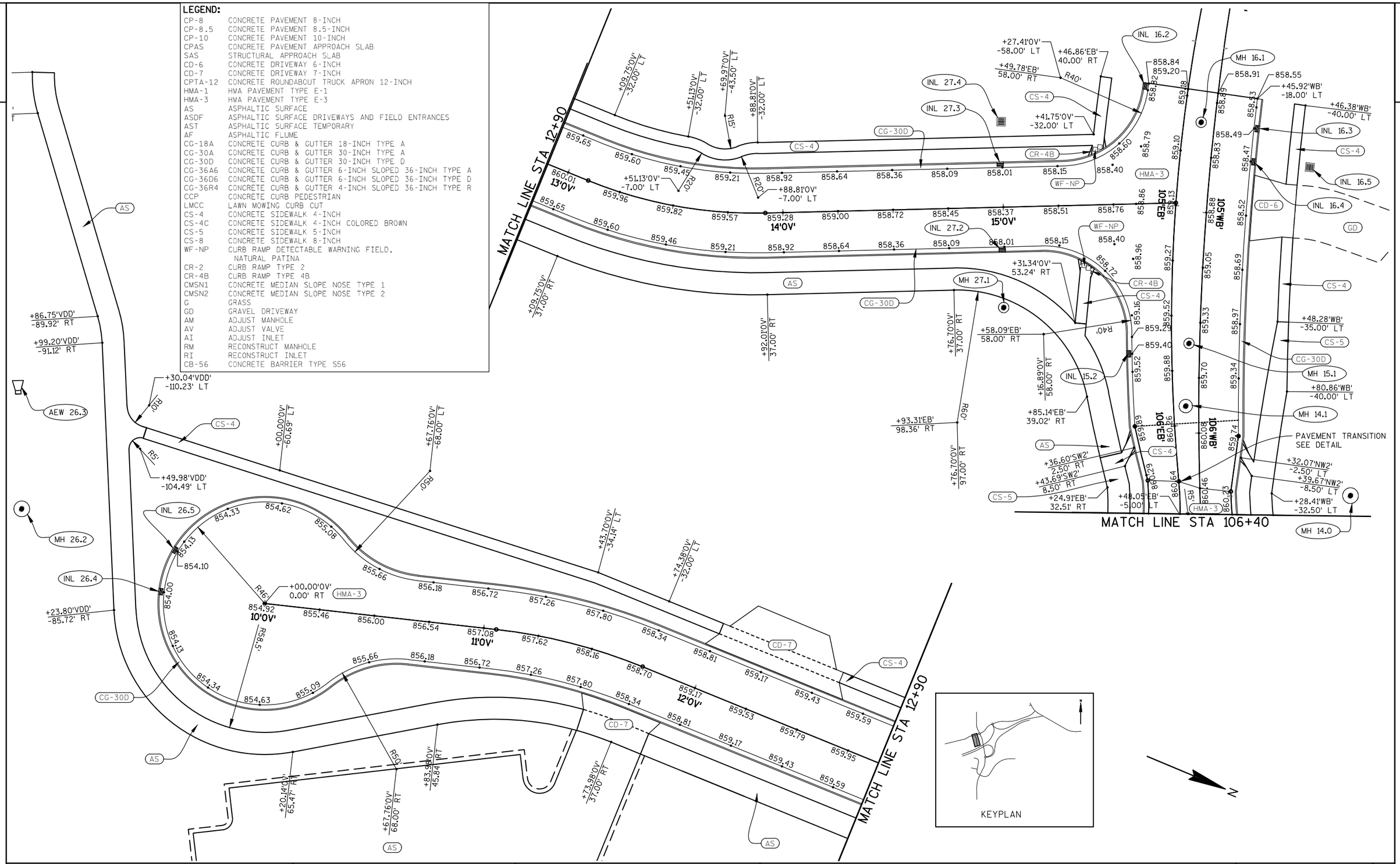
LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH
CP-8.5	CONCRETE PAVEMENT 8.5-INCH
CP-10	CONCRETE PAVEMENT 10-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
SAS	STRUCTURAL APPROACH SLAB
CD-6	CONCRETE DRIVEWAY 6-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH
HMA-1	HMA PAVEMENT TYPE E-1
HMA-3	HMA PAVEMENT TYPE E-3
AS	ASPHALTIC SURFACE
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
AST	ASPHALTIC SURFACE TEMPORARY
AF	ASPHALTIC FLUME
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R
CCP	CONCRETE CURB PEDESTRIAN
LMCC	LAWN MOWING CURB CUT
CS-4	CONCRETE SIDEWALK 4-INCH
CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
CS-5	CONCRETE SIDEWALK 5-INCH
CS-8	CONCRETE SIDEWALK 8-INCH
WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CR-2	CURB RAMP TYPE 2
CR-4B	CURB RAMP TYPE 4B
CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
G	GRASS
GD	GRAVEL DRIVEWAY
AM	ADJUST MANHOLE
AV	ADJUST VALVE
AI	ADJUST INLET
RM	RECONSTRUCT MANHOLE
RI	RECONSTRUCT INLET
CB-56	CONCRETE BARRIER TYPE S56

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - CTH V	SHEET 43	E

LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH
CP-8.5	CONCRETE PAVEMENT 8.5-INCH
CP-10	CONCRETE PAVEMENT 10-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB
SAS	STRUCTURAL APPROACH SLAB
CD-6	CONCRETE DRIVEWAY 6-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH
HMA-1	HVA PAVEMENT TYPE E-1
HMA-3	HVA PAVEMENT TYPE E-3
AS	ASPHALTIC SURFACE
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
AST	ASPHALTIC SURFACE TEMPORARY
AF	ASPHALTIC FLUME
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R
CCP	CONCRETE CURB PEDESTRIAN
LMCC	LAWN MOWING CURB CUT
CS-4	CONCRETE SIDEWALK 4-INCH
CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
CS-5	CONCRETE SIDEWALK 5-INCH
CS-8	CONCRETE SIDEWALK 8-INCH
WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CR-2	CURB RAMP TYPE 2
CR-4B	CURB RAMP TYPE 4B
CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
G	GRASS
GD	GRAVEL DRIVEWAY
AM	ADJUST MANHOLE
AV	ADJUST VALVE
AI	ADJUST INLET
RM	RECONSTRUCT MANHOLE
RI	RECONSTRUCT INLET
CB-56	CONCRETE BARRIER TYPE S56



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - OLD CTH V NORTH & PARK AVENUE	SHEET 44 E

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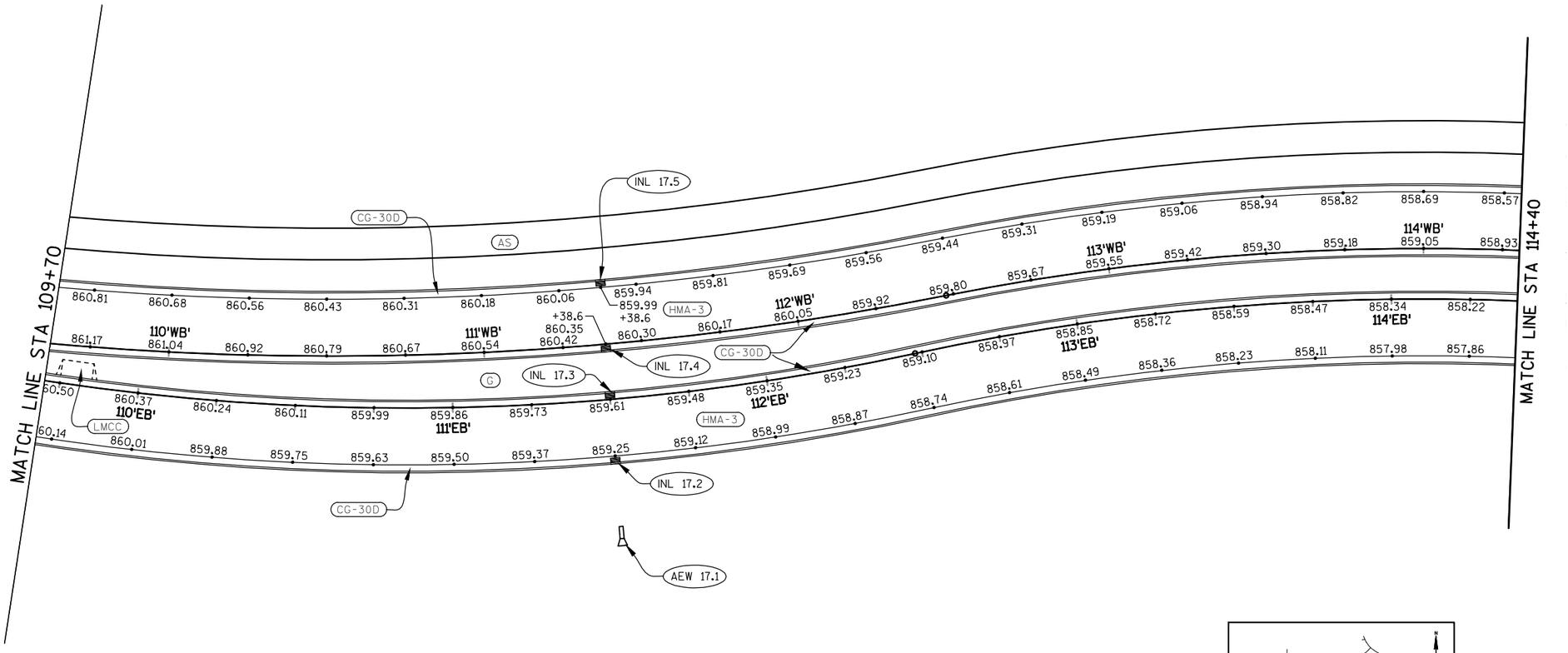
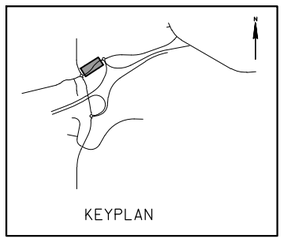




LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

2

MATCH LINE STA 114+40

MATCH LINE STA 120+40

MATCH LINE STA 286+10

MATCH LINE STA 283+80

CROWN LINE

PAVEMENT THICKNESS TRANSITION (SEE DETAIL)

PAVEMENT THICKNESS TRANSITION

PAVEMENT TRANSITION

VPI+90 859.39

VPI+60 859.18

VPI+90 858.85

VPI+12

HP+09 858.68

HP+51 859.64

HP+43 858.35

LP+88 858.19

+48.29'RA3' -18.00' LT

+62.19'RA3' -17.95' LT

+12.76'RA3' -17.94' LT

R100'

864.18

INL 19.2

INL 19.3

+60.87'WB' -30.50' LT

+70.03'NW3' -2.50' LT

+82.76'NW3' -12.50' LT

+99.11'NW3' -12.50' LT

+20.46'NW3' -2.50' LT

+99.13'NW3' -2.50' LT

+86.41'NW3' -12.50' LT

+24.18'NW3' -2.50' LT

+75.17'NW3' -12.50' LT

+82.55'WB' -30.50' LT

INL 18.6

INL 18.7

INL 18.5

INL 18.4

INL 18.3

INL 18.2

AEW 18.1

+91 858.70

+85 858.02

+85 857.66

+98.60'SW3' 8.50' RT

+77.89'SW3' 2.50' RT

+86.13'SW3' 8.50' RT

+93.06'SW3' 18.50' RT

+55.79'SW3' 2.50' RT

+28.55'SE3' 2.50' RT

+20.39'SE3' 8.50' RT

+13.54'SE3' 18.50' RT

+06.34'SE3' 8.50' RT

+22.36'SE3' 2.50' RT

+59.41'SE3' 18.50' RT

+60.95'SE3' 2.50' RT

+73.80'SW3' 18.50' RT

+72.91'SW3' 2.50' RT

+16.17'VDD' 2.50' LT

+07.19'VDD' -15.00' LT

+24.63'VDD' -15.00' LT

+24.63'VDD' -21.01' LT

+49.47'VDD' 0.00' RT

+24.47'VDD' 2.01' RT

+38.33'VCC' 0.00' RT

+63.33'VCC' -15.00' LT

+63.49'VCC' 2.01' RT

+81.06'VCC' -15.00' LT

11'NW3'

10'NW3'

12'NW3'

13'NW3'

11'SW3'

9'SW3'

10'SW3'

12'SW3'

13'SW3'

11'SE3'

12'SE3'

13'SE3'

282'VDD'

283'VCC'

287'VDD'

282'VCC'

32'RA3'

33'RA3'

30'RA3'

31'RA3'

115'WB'

116'WB'

118'WB'

119'WB'

120'WB'

115'EB'

116'EB'

118'EB'

119'EB'

120'EB'

CS-4

CS-5

CR-2

CG-36R4

CPTA-12

CG-18A

CS-4C

CMSN2

CCP

WF-NP

HMA-3

CG-30D

CG-30A

CP-8.5

HMA-0.3

AF

AS

G

+13.80'EB' -24.15' LT

+21.72'EB' -27.79' LT

+29.55'EB' -29.33' LT

+17.09'EB' -17.06' LT

+15.77'EB' -2.50' LT

+26.06'EB' -9.53' LT

+25.62'EB' -2.50' LT

+38.17'EB' -4.00' LT

+95.71'EB' -9.78' LT

+99.77'EB' -16.85' LT

+08.46'EB' -12.55' LT

+87.93'EB' -22.11' LT

+05.99'EB' -7.75' LT

+86.68'EB' -5.00' LT

+06.74'EB' -2.50' LT

+96.68'EB' -2.50' LT

+97.45'VDD' 5.00' LT

+94.51'VDD' 25.40' LT

+88.75'VDD' 10.24' LT

+88.05'VDD' 2.50' LT

+82.95'VDD' 19.75' LT

+78.01'VDD' 2.50' LT

+74.26'VDD' 15.02' LT

+78.50'VDD' 7.85' LT

+16.17'VDD' 2.50' LT

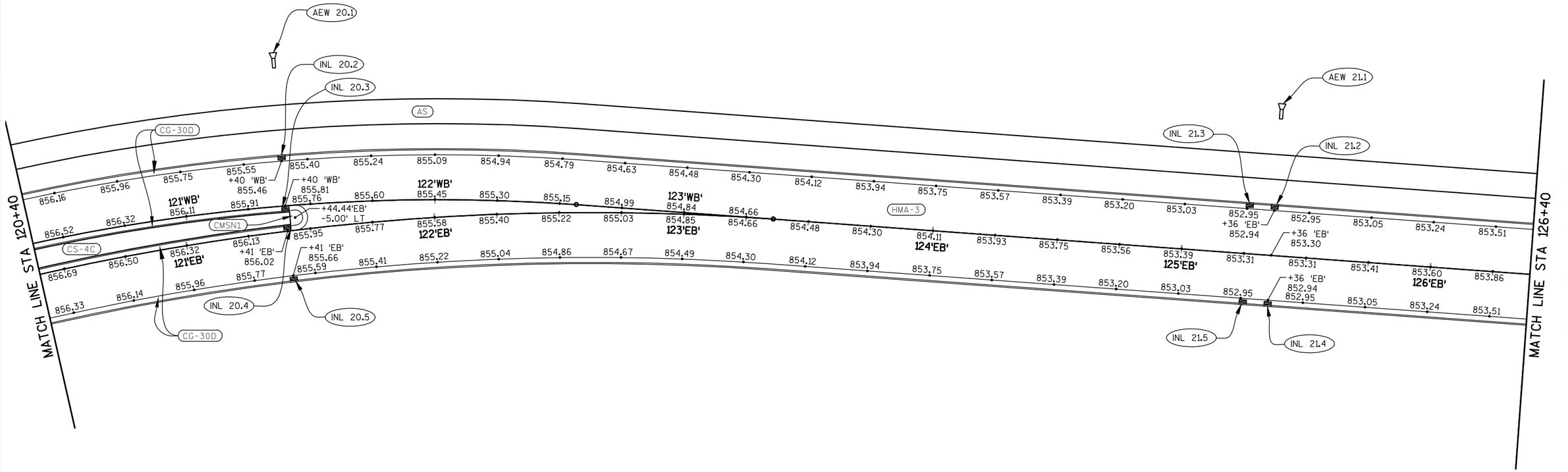
KEYPLAN

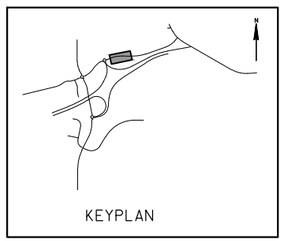
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - FRONTAGE ROAD	SHEET 46	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_021200_PD.DWG
142022_021242_pd

PLOT DATE : 1/13/2015 8:11 AM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH





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LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

2

N

MATCH LINE STA 126+40

MATCH LINE STA 132+40

+71.36'SW'
0.00' RT

16'SW'

MH 48

CS-4

5'

+02.33'EB'
-50.50' LT

+10.10'SW'
-15.00' LT

+28.43'EB'
-50.50' LT

+10.04'SW'
10.00' RT

15'SW'

AEW 22.1

INL 22.2

INL 22.3

AS

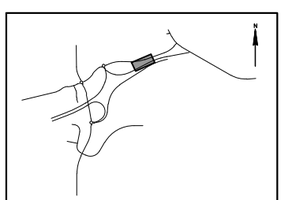
HMA-3

CG-30D

853.79 854.08 854.36 854.64 854.92 855.11 855.20 855.19 855.07 854.87 854.66 854.46 854.25 854.04 853.83 853.62 853.41 853.20 852.99 852.78 852.57 852.37 852.16 851.95

854.15 854.44 854.72 **127'EB'** 855.00 855.28 855.47 855.56 **128'EB'** 855.55 855.43 855.23 855.02 **129'EB'** 854.82 854.61 854.40 854.19 **130'EB'** 853.98 853.77 853.56 853.35 **131'EB'** 853.14 852.93 852.73 852.52 **132'EB'** 852.31

853.79 854.08 854.36 854.64 854.92 855.11 855.20 855.19 855.07 854.87 854.66 854.46 854.25 854.04 853.83 853.62 853.41 853.20 852.99 852.78 852.57 852.37 852.16 851.95

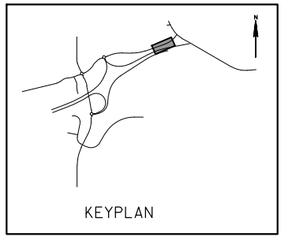


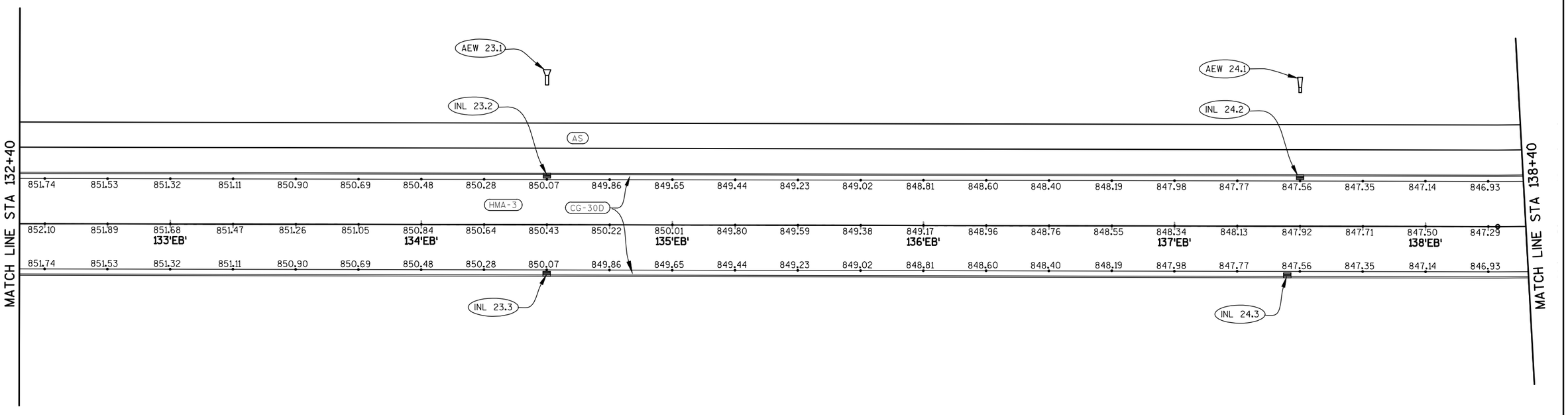
KEYPLAN

LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - FRONTAGE ROAD	SHEET 48	E





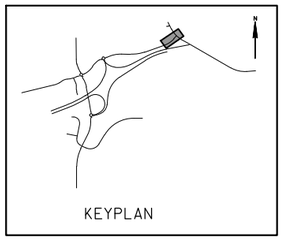
LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH	CR-2	CURB RAMP TYPE 2
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-4B	CURB RAMP TYPE 4B
HMA-3	HMA PAVEMENT TYPE E-3	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
AS	ASPHALTIC SURFACE	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	G	GRASS
AST	ASPHALTIC SURFACE TEMPORARY	GD	GRAVEL DRIVEWAY
AF	ASPHALTIC FLUME	AM	ADJUST MANHOLE
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AV	ADJUST VALVE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AI	ADJUST INLET
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	RM	RECONSTRUCT MANHOLE
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RI	RECONSTRUCT INLET
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	CB-56	CONCRETE BARRIER TYPE S56
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R		

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - FRONTAGE ROAD	SHEET 49	E

LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56



MATCH LINE STA 396+60

MATCH LINE STA 138+40

MATCH LINE STA 393+40

+78.49'NB' -24.00' LT

+08.67'EB' -117.88' LT

+17.85'NB' -105.03' LT

R38'

+44.53'EB' -69.78' LT

+78.49'NB' -24.00' LT

+78.49'NB' -64.00' LT

+47.53'EB' -56.26' LT

+67.24'EB' -39.31' LT

+13.49'EB' -18.00' LT

+54.64'EB' -40.50' LT

+04.39'EB' 18.00' RT

+41.98'EB' 21.01' RT

+79.43'EB' 24.00' RT

+43.51'EB' 24.00' RT

+67.04'NB' -45.37' LT

+44.05'EB' 64.00' RT

+55.09'NB' -64.00' LT

+55.09'NB' -24.00' LT

+78.95'NB' 32.00' RT

INL 25.4

INL 25.5

INL 25.3

INL 25.2

INL 40.4

INL 40.3

INL 40.2

INL 41.2

AEW 25.6

AEW 25.1

AEW 41.1

AS

AF

CR-4B

CS-5

WF-NP

CG-30D

HMA-3

CG-36D6

846.72 846.51 846.31 846.10 845.89 845.76 845.65 845.75 845.87 846.07 846.27 846.47 846.63 846.76 846.72 HP+84.4 846.80 846.47 846.60 846.32 MID-PT 846.26 846.12 PCC 845.82 MID-PT 845.92 845.75 846.14 846.30 846.07 845.88 MID-PT 845.72 845.81 845.85 845.69 845.70 847.08 846.87 846.67 139'EB' 846.46 846.25 846.12 846.08 140'EB' 846.11 846.24 846.43 846.63 141'EB' 846.83 846.99 HP+66.7 847.02 847.01 846.90 142'EB' 846.65 846.26 845.81 143'EB' 846.55 846.57 HP+66.7 846.61 846.52 846.42 845.88 846.55 846.44 846.27 846.07 845.88 845.75 845.65 845.76 845.89 846.10 846.31 846.51 846.72 846.74 846.44 846.14 845.84 845.54 845.24 844.99 844.80 844.68 844.62 844.63 844.71 844.82 845.87 845.81 845.82 845.72 845.69 845.70 846.74 846.44 846.14 845.84 845.54 845.24 844.99 844.80 844.68 844.62 844.63 844.71 844.82 845.87 845.81 845.82 845.72 845.69 845.70 845.30 844.94 844.57 844.20 843.89 843.84 843.48 843.16 842.91 842.79 842.73 842.74 842.83 842.69 842.82 842.94 842.73 842.74 842.82 842.94 843.16 842.91 842.79 842.73 842.74 842.82 842.94

24' 18' 24' 24'

MID-PT

LP 845.81

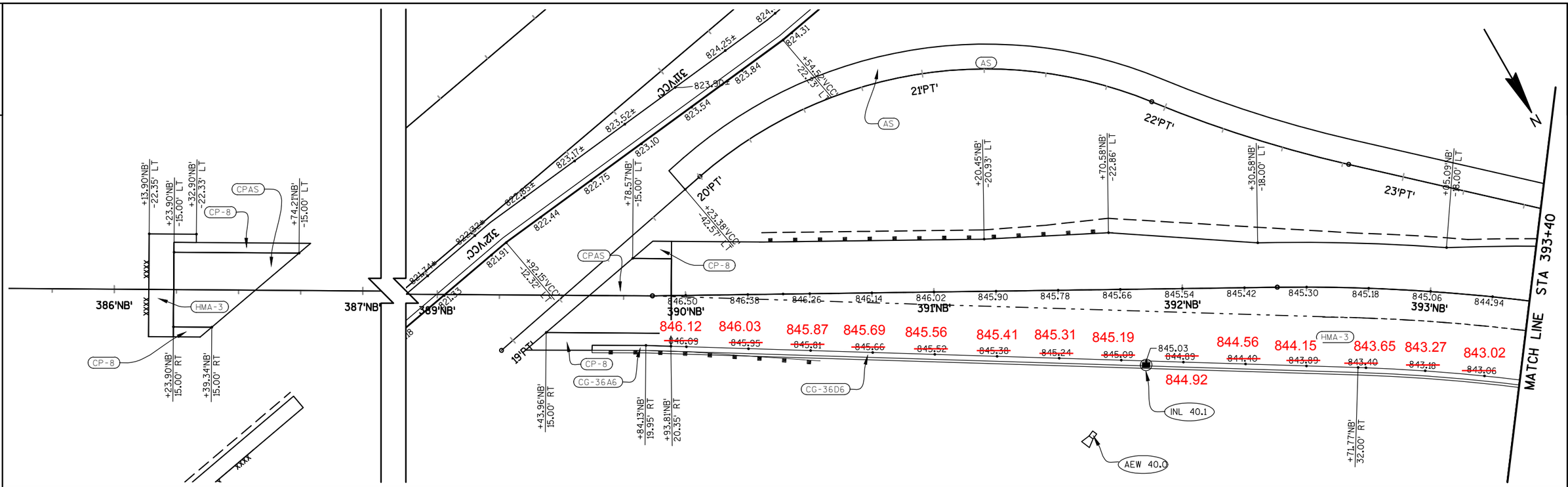
842.69

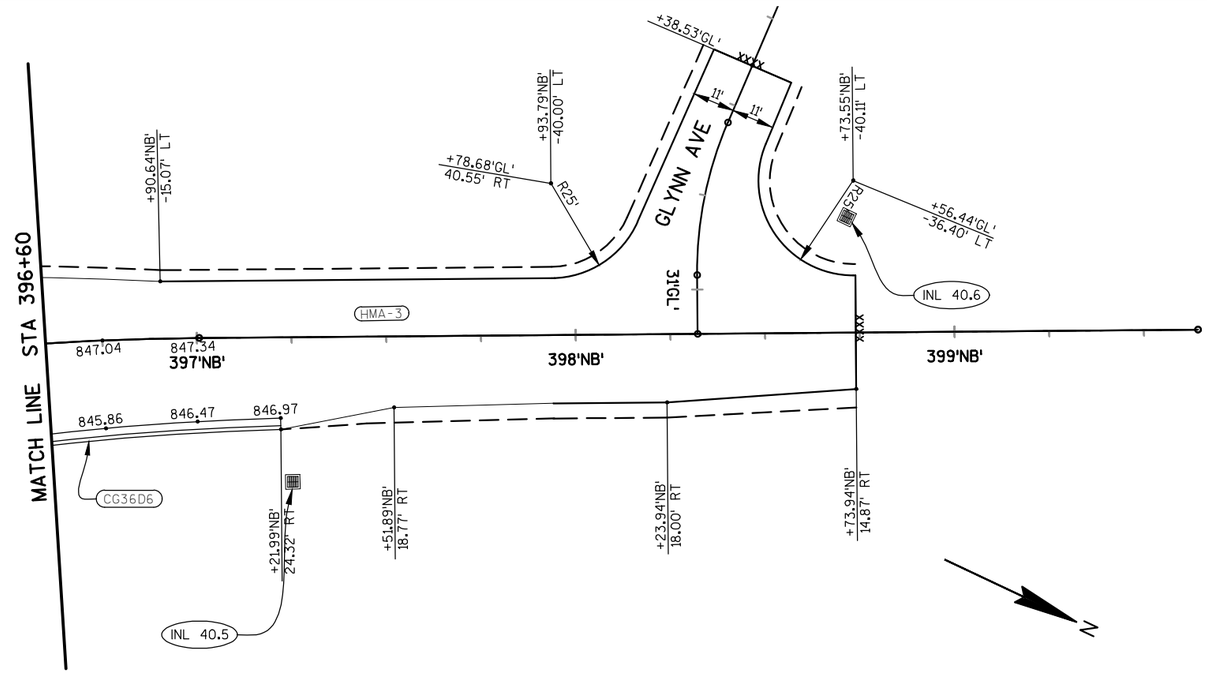
842.74

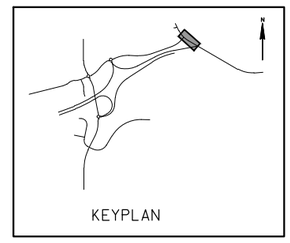
842.83

395'NB'

394'NB'





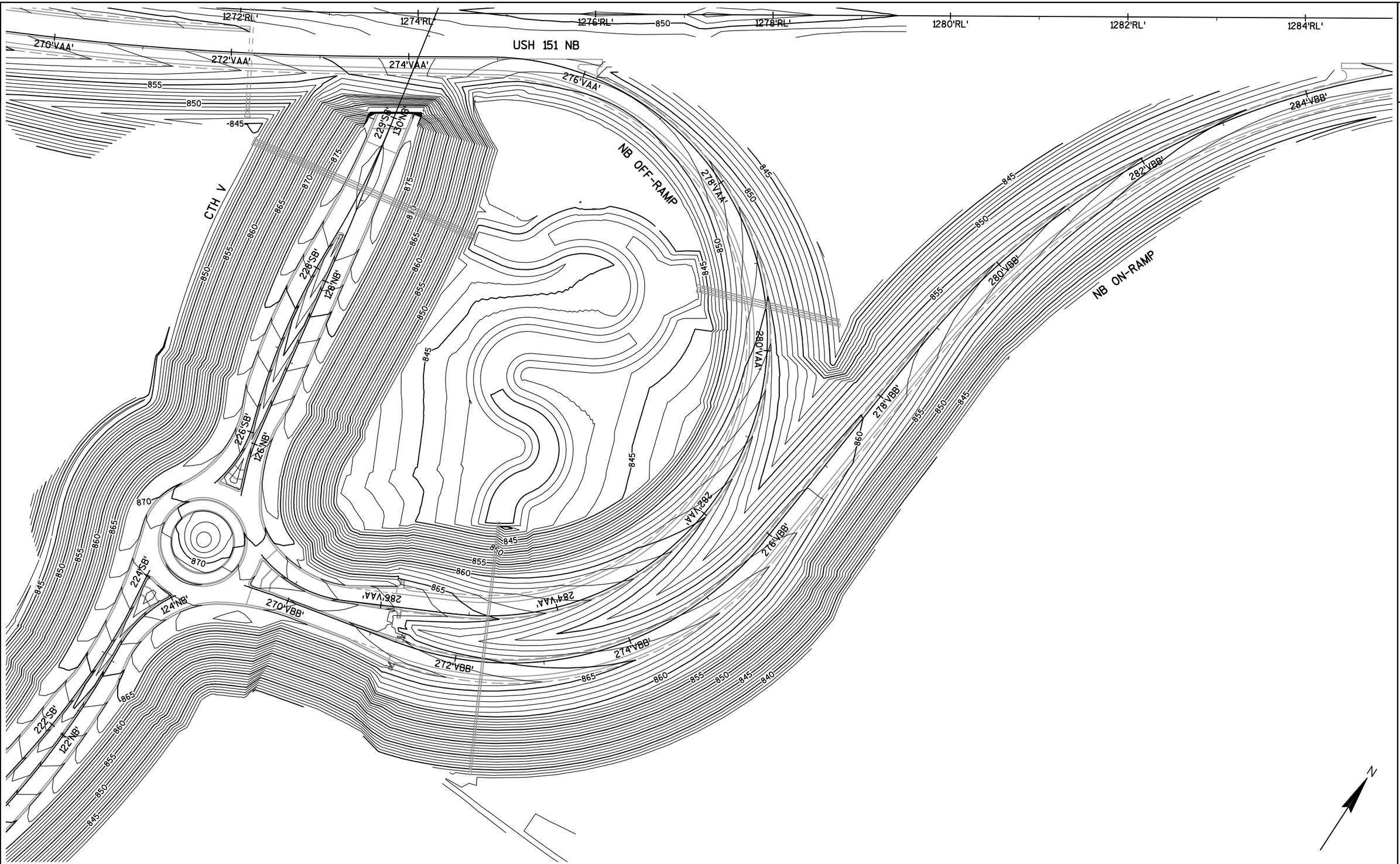


LEGEND:

CP-8	CONCRETE PAVEMENT 8-INCH	CCP	CONCRETE CURB PEDESTRIAN
CP-8.5	CONCRETE PAVEMENT 8.5-INCH	LMCC	LAWN MOWING CURB CUT
CP-10	CONCRETE PAVEMENT 10-INCH	CS-4	CONCRETE SIDEWALK 4-INCH
CPAS	CONCRETE PAVEMENT APPROACH SLAB	CS-4C	CONCRETE SIDEWALK 4-INCH COLORED BROWN
SAS	STRUCTURAL APPROACH SLAB	CS-5	CONCRETE SIDEWALK 5-INCH
CD-6	CONCRETE DRIVEWAY 6-INCH	CS-8	CONCRETE SIDEWALK 8-INCH
CD-7	CONCRETE DRIVEWAY 7-INCH	WF-NP	CURB RAMP DETECTABLE WARNING FIELD, NATURAL PATINA
CPTA-12	CONCRETE ROUNDABOUT TRUCK APRON 12-INCH		
HMA-0.3	HMA PAVEMENT TYPE E-0.3	CR-2	CURB RAMP TYPE 2
HMA-3	HMA PAVEMENT TYPE E-3	CR-4B	CURB RAMP TYPE 4B
AS	ASPHALTIC SURFACE	CMSN1	CONCRETE MEDIAN SLOPE NOSE TYPE 1
ASDF	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CMSN2	CONCRETE MEDIAN SLOPE NOSE TYPE 2
AST	ASPHALTIC SURFACE TEMPORARY	G	GRASS
AF	ASPHALTIC FLUME	GD	GRAVEL DRIVEWAY
CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A	AM	ADJUST MANHOLE
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A	AV	ADJUST VALVE
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D	AI	ADJUST INLET
CG-36A6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A	RM	RECONSTRUCT MANHOLE
CG-36D6	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D	RI	RECONSTRUCT INLET
CG-36R4	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	CB-56	CONCRETE BARRIER TYPE S56

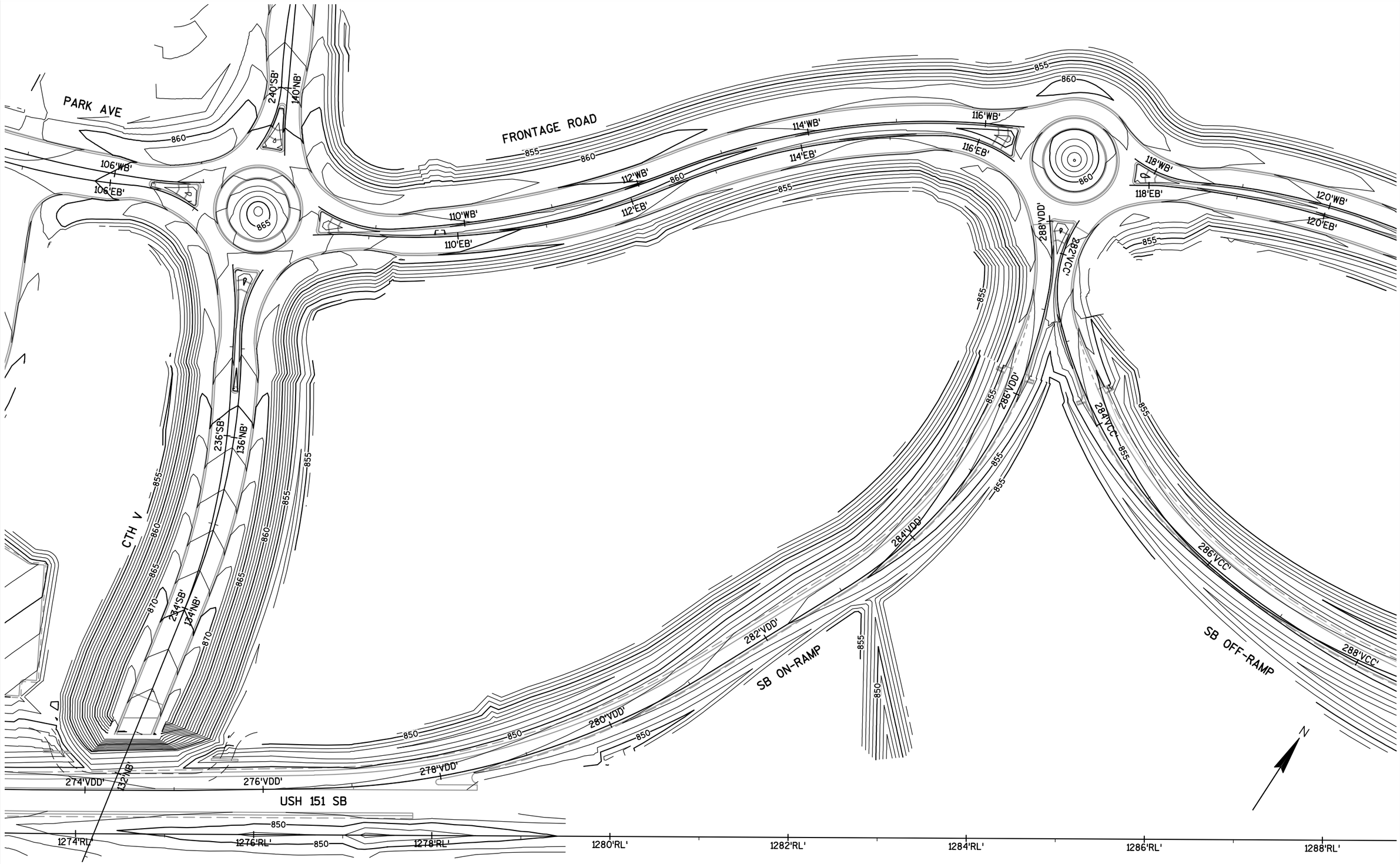
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVING DETAIL - USH 45	SHEET 51	E

2



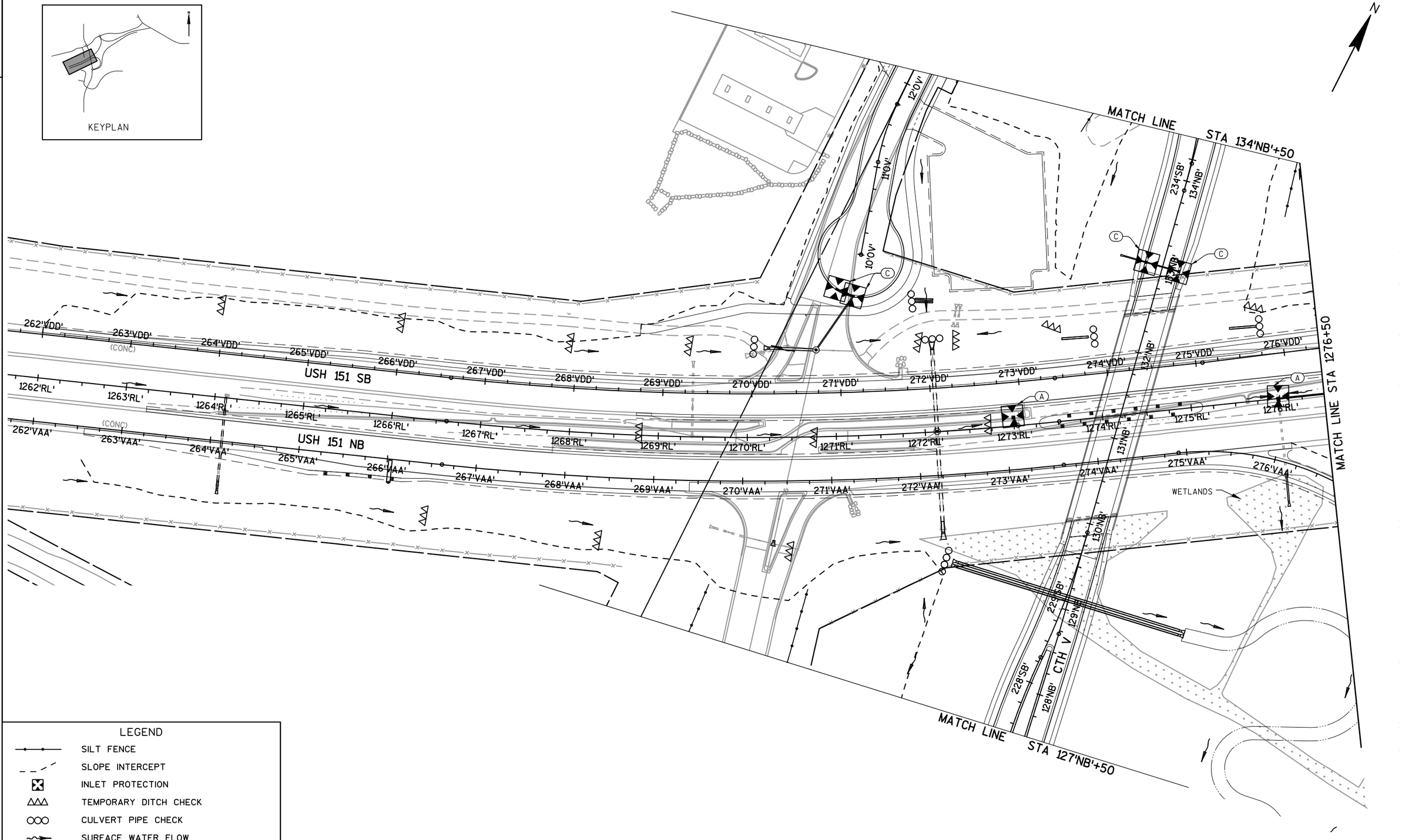
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CONTOUR MAP - CTH V INTERCHANGE	SHEET 52	E

2



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CONTOUR MAP - CTH V INTERCHANGE	SHEET 53	E

2



LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL TEMPORARY - USH 151	SHEET 54	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_022000_ECT.DWG
142022_022001_ec

PLOT DATE : 12/22/2014 11:57 AM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 42

2

2

KEYPLAN

MATCH LINE

STA 284'VDD'+50

MATCH LINE

STA 285'VCC'+50

SB ON-RAMP

SB OFF-RAMP

277'VDD' 278'VDD' 279'VDD' 280'VDD' 281'VDD' 282'VDD' 283'VDD' 284'VDD'

286'VCC' 287'VCC' 288'VCC' 289'VCC' 290'VCC' 291'VCC'

MATCH LINE STA 1276+50

MATCH LINE STA 1291+50

USH 151 SB

1277'RL' 1278'RL' 1279'RL' 1280'RL' 1281'RL' 1282'RL' 1283'RL' 1284'RL' 1285'RL' 1286'RL' 1287'RL' 1288'RL' 1289'RL' 1290'RL' 1291'RL'

USH 151 NB

277'VAA' 278'VAA' 279'VAA' 280'VAA'

284'VBB' 285'VBB' 286'VBB' 287'VBB' 288'VBB' 289'VBB' 290'VBB' 291'VBB'

283'VBB' 282'VBB' 281'VBB' 280'VBB' 279'VBB' 278'VBB'

WETLANDS

WETLANDS

NB OFF-RAMP

NB ON-RAMP

MATCH LINE

STA 280'VAA'+50

N

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL TEMPORARY - USH 151	SHEET 55	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_022000_ECT.DWG
142022_022002_ec

PLOT DATE : 1/9/2015 8:44 AM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 42

2

2

MATCH LINE STA 126'EB'+50

127'EB'

128'EB'

129'EB'

130'EB'

131'EB'

132'EB'

133'EB'

134'EB'

135'EB'

136'EB'

137'EB'

138'EB'

139'EB'

FRONTAGE ROAD

WETLANDS

SB OFF-RAMP

292'VCC'

293'VCC'

294'VCC'

295'VCC'

296'VCC'

297'VCC'

298'VCC'

299'VCC'

300'VCC'

301'VCC'

302'VCC'

303'VCC'

304'VCC'

305'VCC'

USH 151 SB

USH 151 NB

MATCH LINE STA 1291+50

1292'RL'

1293'RL'

1294'RL'

1295'RL'

1296'RL'

1297'RL'

1298'RL'

1299'RL'

1300'RL'

1301'RL'

1302'RL'

1303'RL'

1304'RL'

1305'RL'

MATCH LINE STA 1305+50

292'VBB'

293'VBB'

294'VBB'

295'VBB'

296'VBB'

297'VBB'

298'VBB'

299'VBB'

300'VBB'

301'VBB'

302'VBB'

303'VBB'

304'VBB'

NB ON-RAMP

A/C

KEYPLAN

N

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

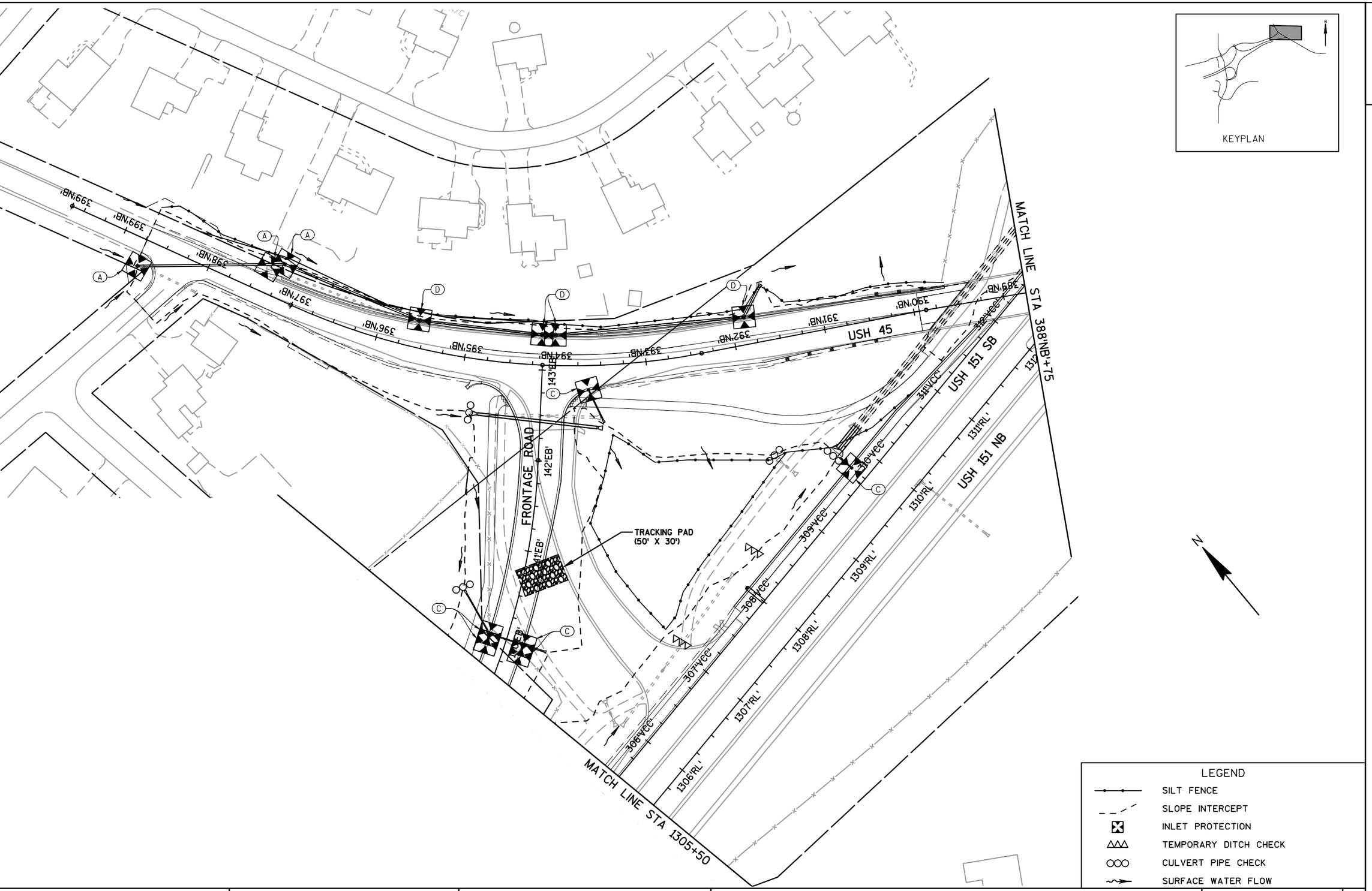
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL TEMPORARY - USH 151	SHEET 56	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_022000_ECT.DWG
142022_022003_ec

PLOT DATE : 12/22/2014 11:57 AM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

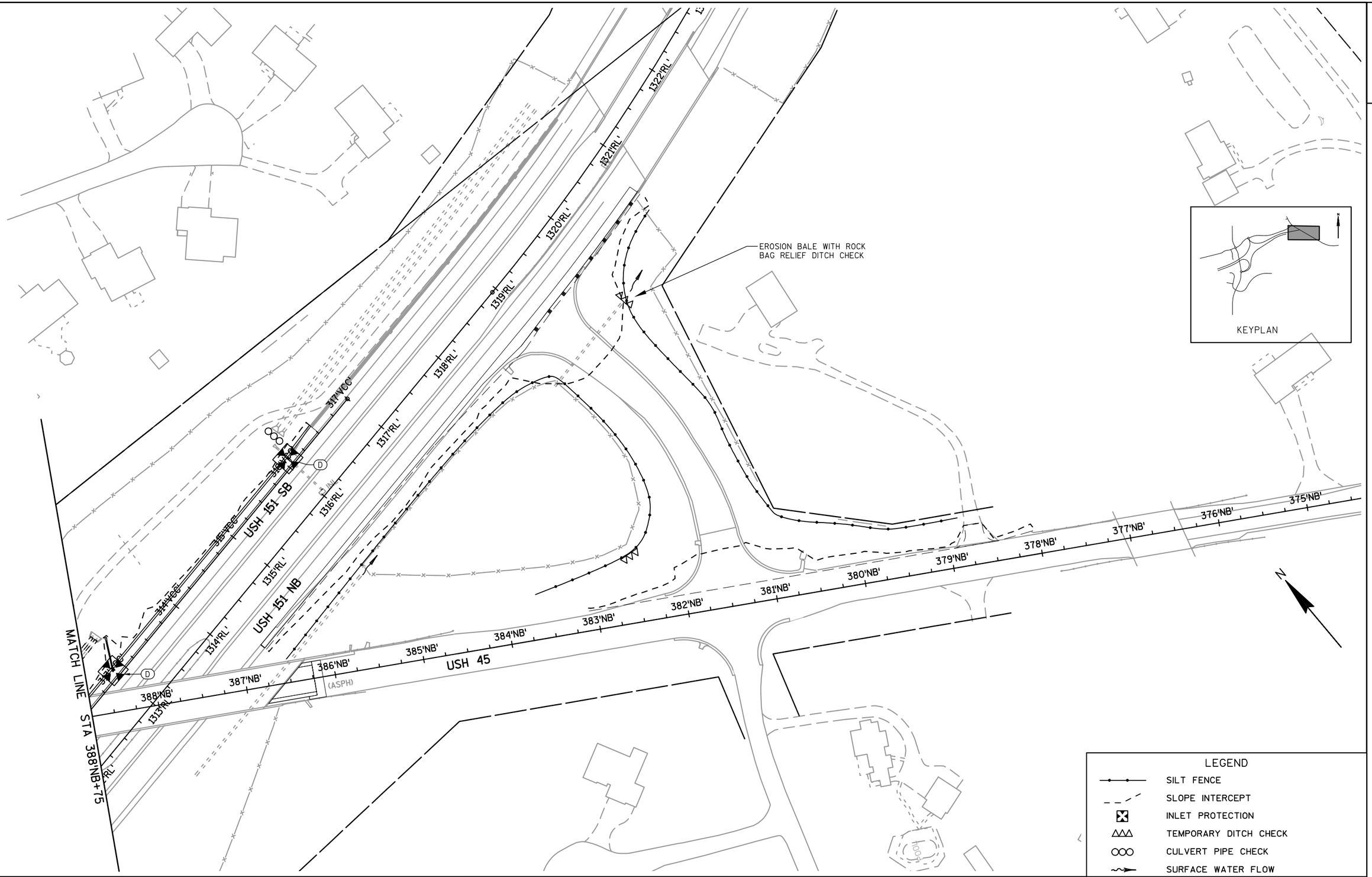
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL TEMPORARY - USH 151	SHEET 57	E

2



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL TEMPORARY - USH 151	SHEET 58	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_022000_ECT.DWG
142022_022005_ec

PLOT DATE : 1/9/2015 8:53 AM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

2

CTH V

WILDLIFE DRIVE

OLD CTH V SOUTH

REINHARDT ROAD

MATCH LINE STA 121+50

106'NB' 107'NB' 108'NB' 109'NB' 110'NB' 111'NB' 112'NB' 113'NB' 114'NB' 115'NB' 116'NB' 117'NB' 118'NB' 119'NB' 120'NB' 121'NB'

207'SB' 208'SB' 209'SB' 210'SB' 211'SB' 212'SB' 213'SB' 214'SB' 215'SB' 216'SB' 217'SB' 218'SB' 219'SB' 220'SB' 221'SB'

92'OV' 93'OV' 94'OV' 95'OV' 96'OV' 97'OV' 98'OV' 99'OV'

100'RE' 101'RE' 102'RE' 103'RE' 104'RE' 105'RE' 106'RE' 107'RE' 108'RE'

KEYPLAN

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

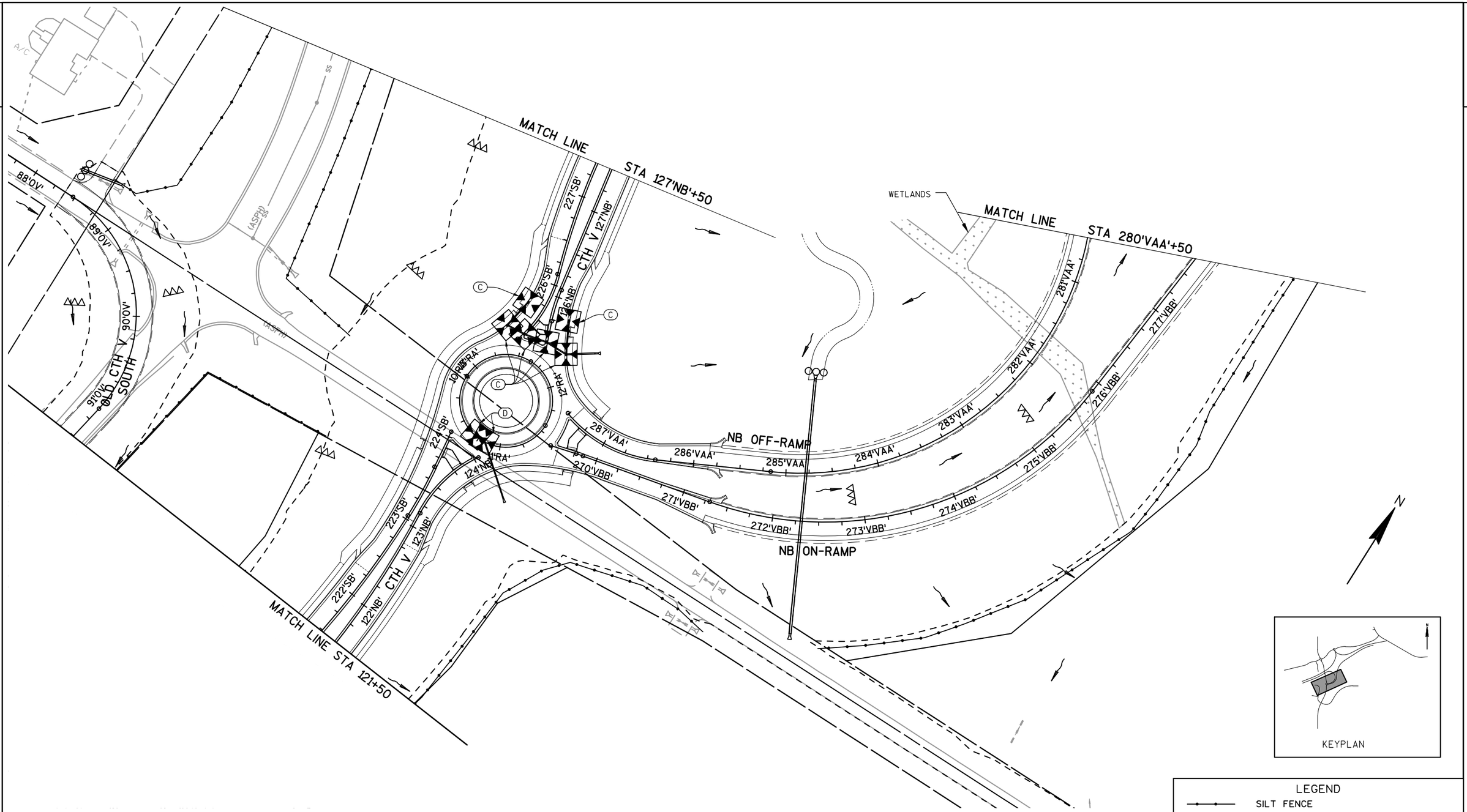
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL TEMPORARY - CTH V	SHEET 59	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\14202271 CTH V\142022_022000_ECT.DWG
142022_022011_ec

PLOT DATE : 2/16/2015 2:46 PM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL TEMPORARY - CTH V	SHEET 60	E

2

2

OLD CTH V NORTH

CTH V

PARK AVENUE

FRONTAGE ROAD

TRACKING PAD
(50' X 30')

MATCH LINE STA 134+50

MATCH LINE STA 113'EB+50

104'EB'
104'WB'
105'EB'
105'WB'
106'EB'
106'WB'
107'EB'
107'WB'
109'EB'
109'WB'
110'EB'
110'WB'
111'EB'
111'WB'
112'EB'
112'WB'
113'EB'
113'WB'
13'0V'
14'0V'
20'RA'
22'RA'
135'SB'
135'NB'
137'NB'
138'SB'
140'NB'
141'NB'
142'NB'
143'NB'
144'NB'
145'NB'
146'NB'
147'NB'
148'NB'
149'NB'
240'SB'
241'SB'
242'SB'

KEYPLAN

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL TEMPORARY - CTH V	SHEET 61	E

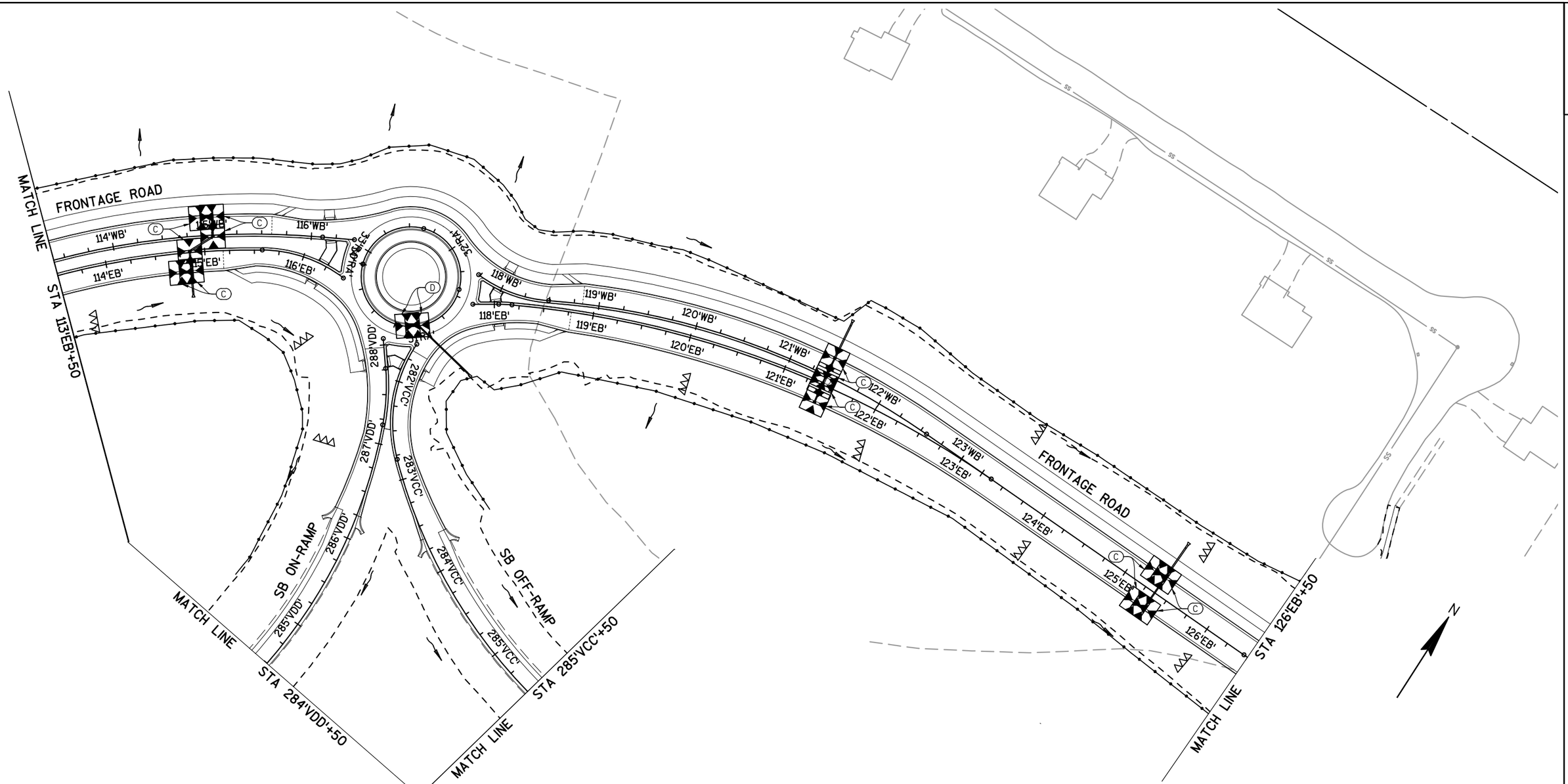
FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_022000_ECT.DWG
142022_022013_ec

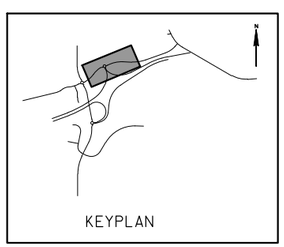
PLOT DATE : 1/9/2015 9:06 AM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 42

2



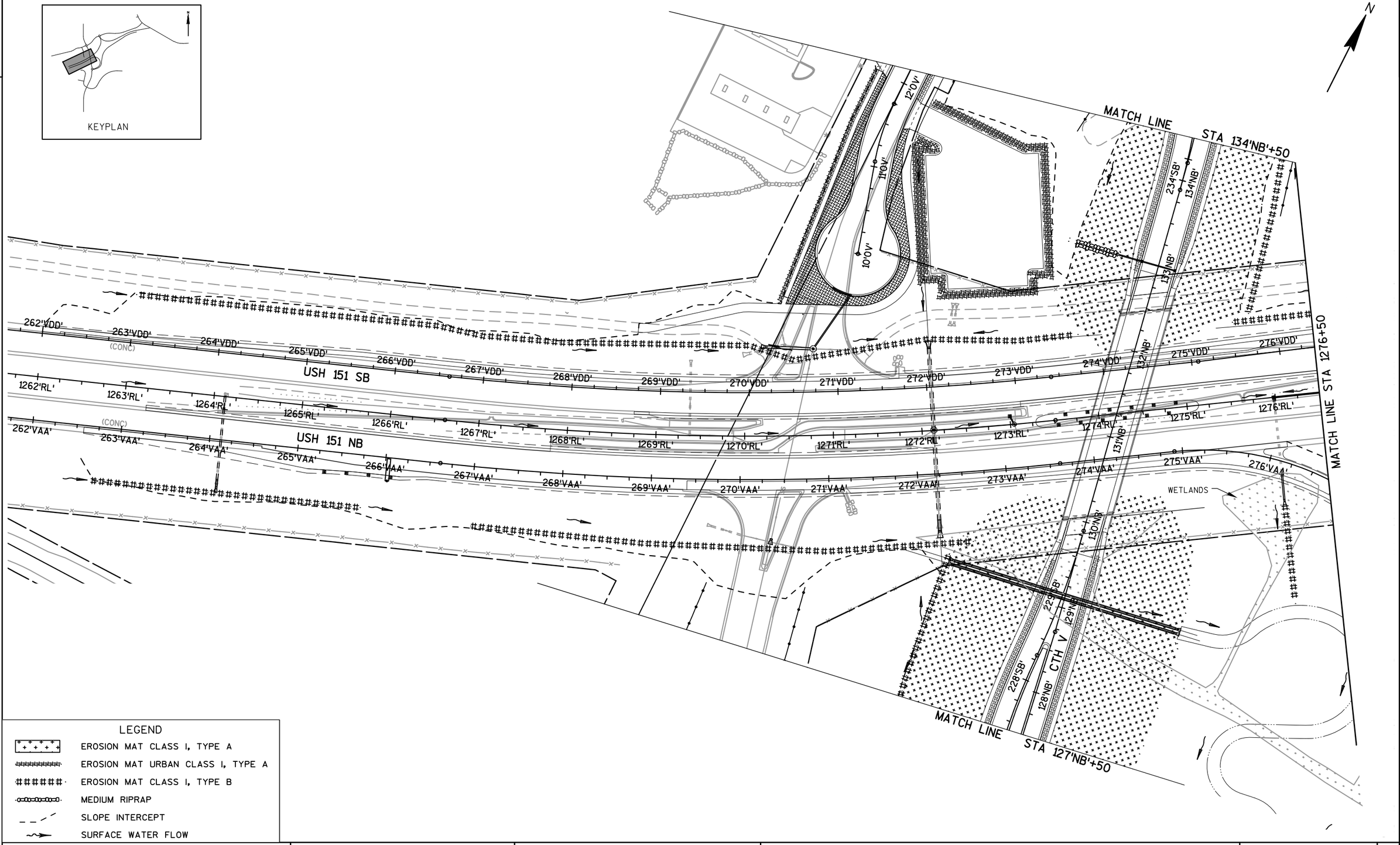


LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL TEMPORARY - FRONTAGE ROAD	SHEET 62	E

2



LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- MEDIUM RIPRAP
- SLOPE INTERCEPT
- SURFACE WATER FLOW

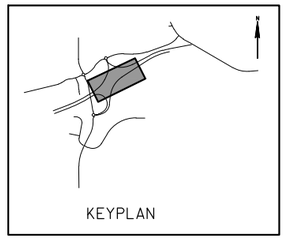
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL PERMANENT - USH 151	SHEET 63	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\14202271 CTH V\142022_022001_ECP.DWG
142022_022051_ecp

PLOT DATE : 7/23/2015 1:58 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

2



MATCH LINE

STA 284'VDD'+50

MATCH LINE

STA 285'VCC'+50

SB ON-RAMP

SB OFF-RAMP

277'VDD'
278'VDD'
279'VDD'
280'VDD'
281'VDD'
282'VDD'
283'VDD'
284'VDD'

286'VCC'
287'VCC'
288'VCC'
289'VCC'
290'VCC'
291'VCC'

MATCH LINE STA 1276+50

USH 151 SB

1277'RL' 1278'RL' 1279'RL' 1280'RL' 1281'RL' 1282'RL' 1283'RL' 1284'RL' 1285'RL' 1286'RL' 1287'RL' 1288'RL' 1289'RL' 1290'RL' 1291'RL'

USH 151 NB

MATCH LINE STA 1291+50

277'VAA'
278'VAA'
279'VAA'
280'VAA'

283'VBB'
284'VBB'
285'VBB'
286'VBB'
287'VBB'
288'VBB'
289'VBB'
290'VBB'
291'VBB'
282'VBB'
281'VBB'
280'VBB'
279'VBB'
278'VBB'

WETLANDS

WETLANDS

NB OFF-RAMP

NB ON-RAMP

MATCH LINE

STA 280'VAA'+50

LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- MEDIUM RIPRAP
- SLOPE INTERCEPT
- SURFACE WATER FLOW

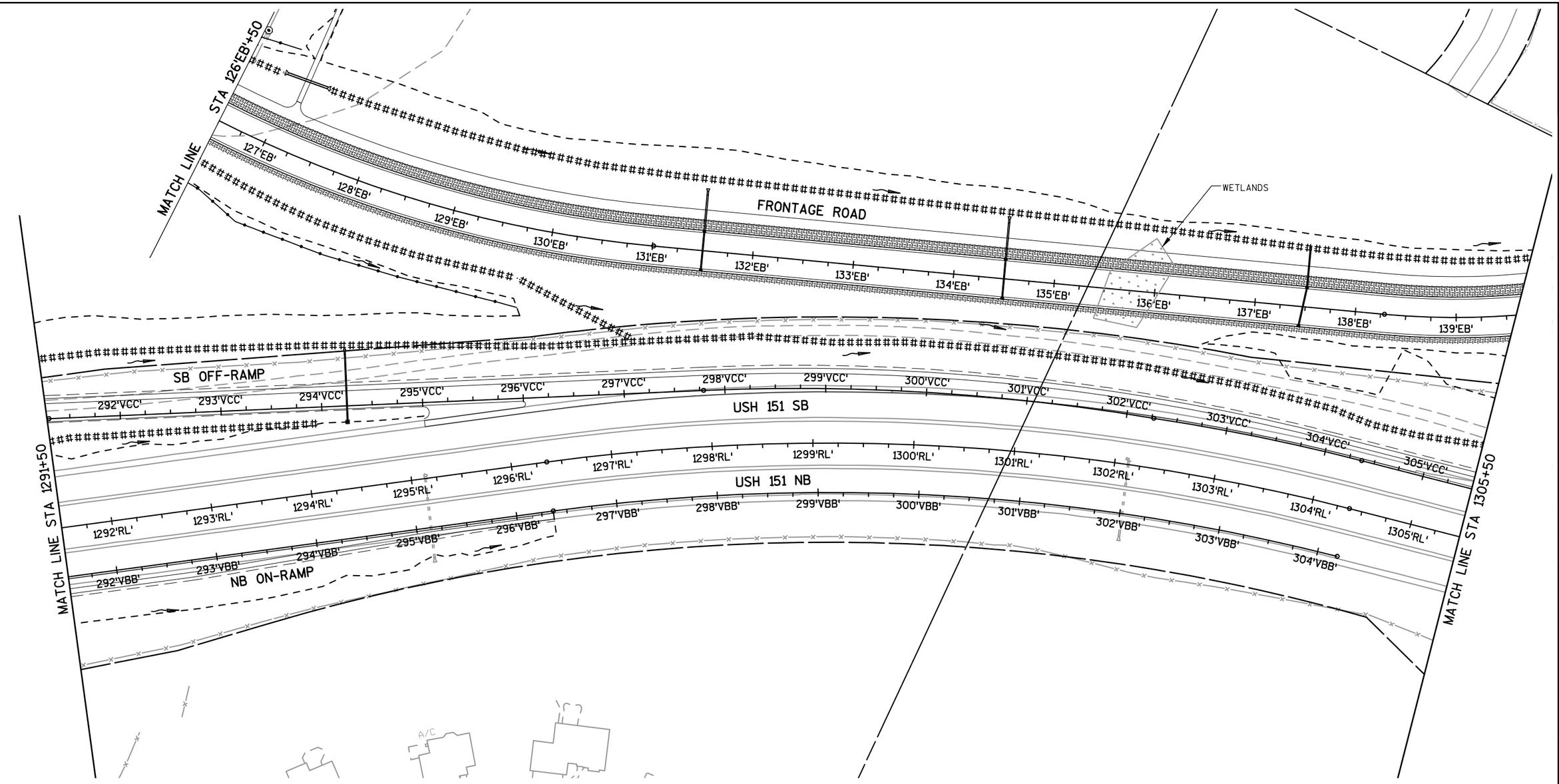
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL PERMANENT - USH 151	SHEET 64	E

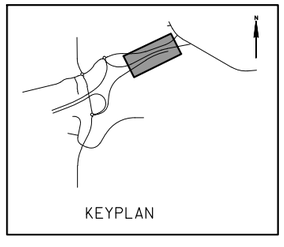
FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\14202271 CTH V\142022_022001_ECP.DWG
142022_022052_ecp

PLOT DATE : 7/23/2015 2:00 PM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 42

2



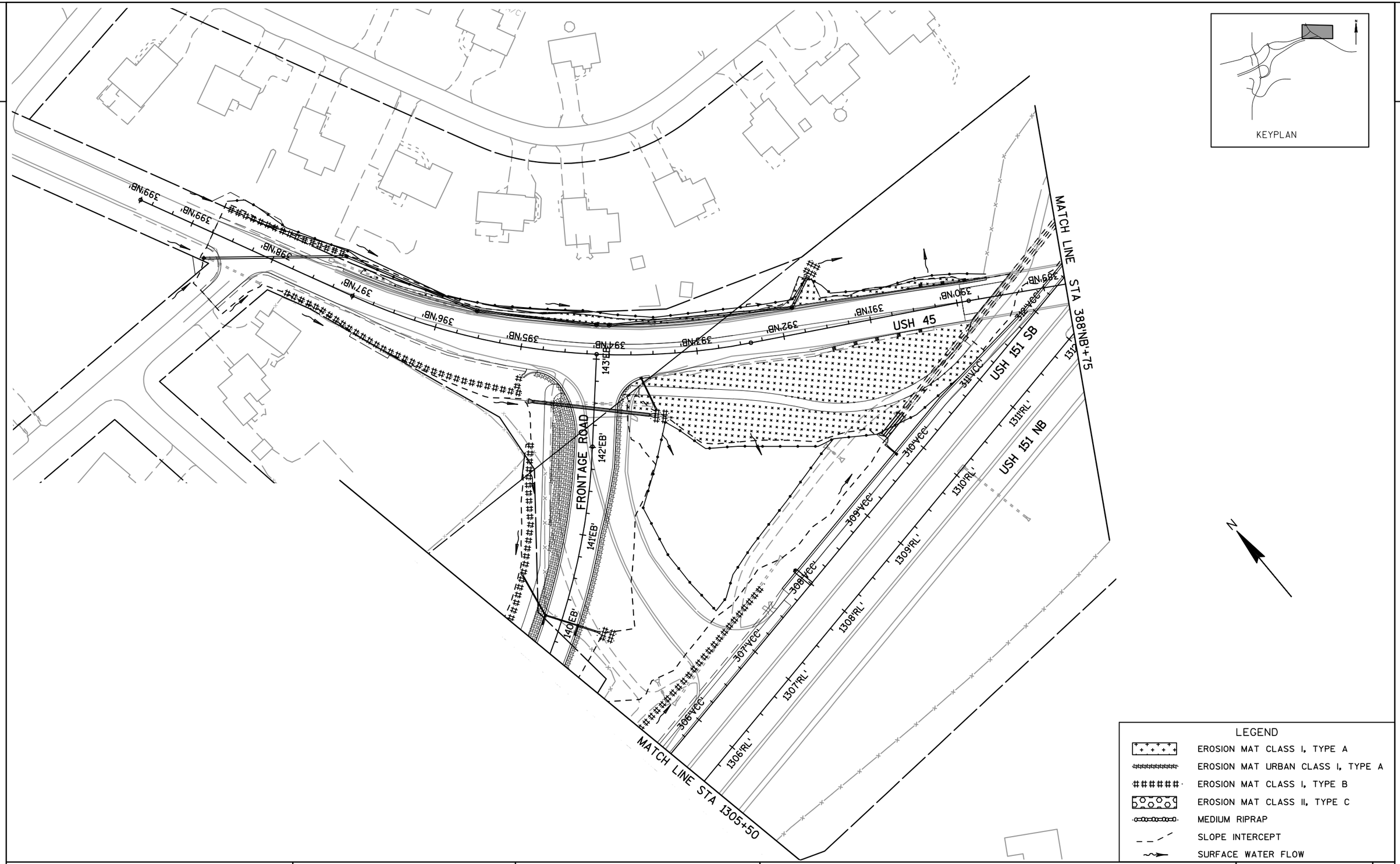


LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- MEDIUM RIPRAP
- SLOPE INTERCEPT
- SURFACE WATER FLOW

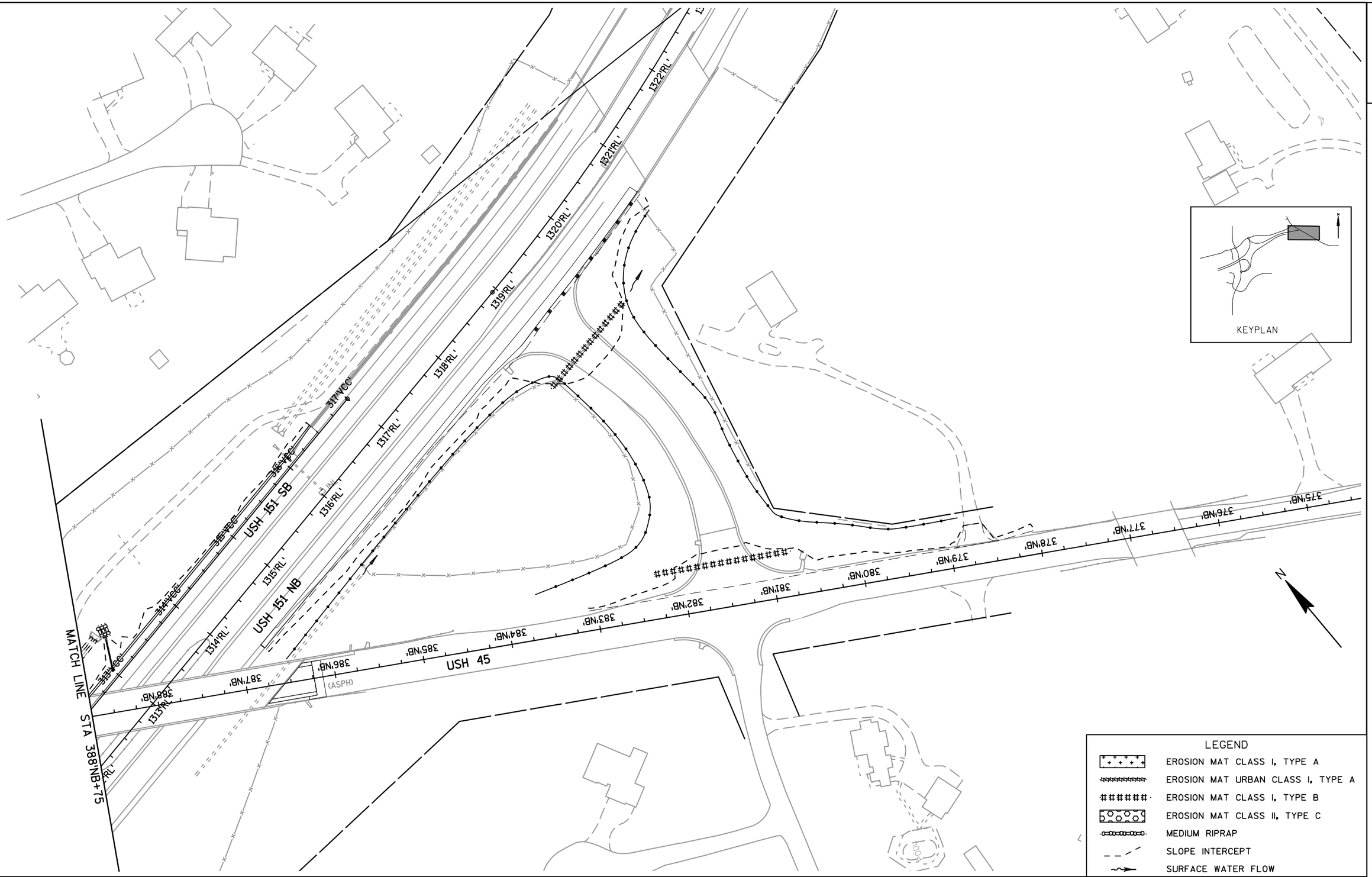
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL PERMANENT - USH 151	SHEET 65	E

2



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL PERMANENT - USH 151	SHEET 66	E

2



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL PERMANENT - USH 151	SHEET 67	E

2

CTH V

WILDLIFE DRIVE

OLD CTH V SOUTH

REINHARDT ROAD

MATCH LINE STA 121+50

KEYPLAN

LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- MEDIUM RIPRAP
- SLOPE INTERCEPT
- SURFACE WATER FLOW

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL PERMANENT - CTH V	SHEET 68	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\14202271 CTH V\142022_022001_ECP.DWG
142022_022061_ecp

PLOT DATE : 2/16/2015 3:53 PM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

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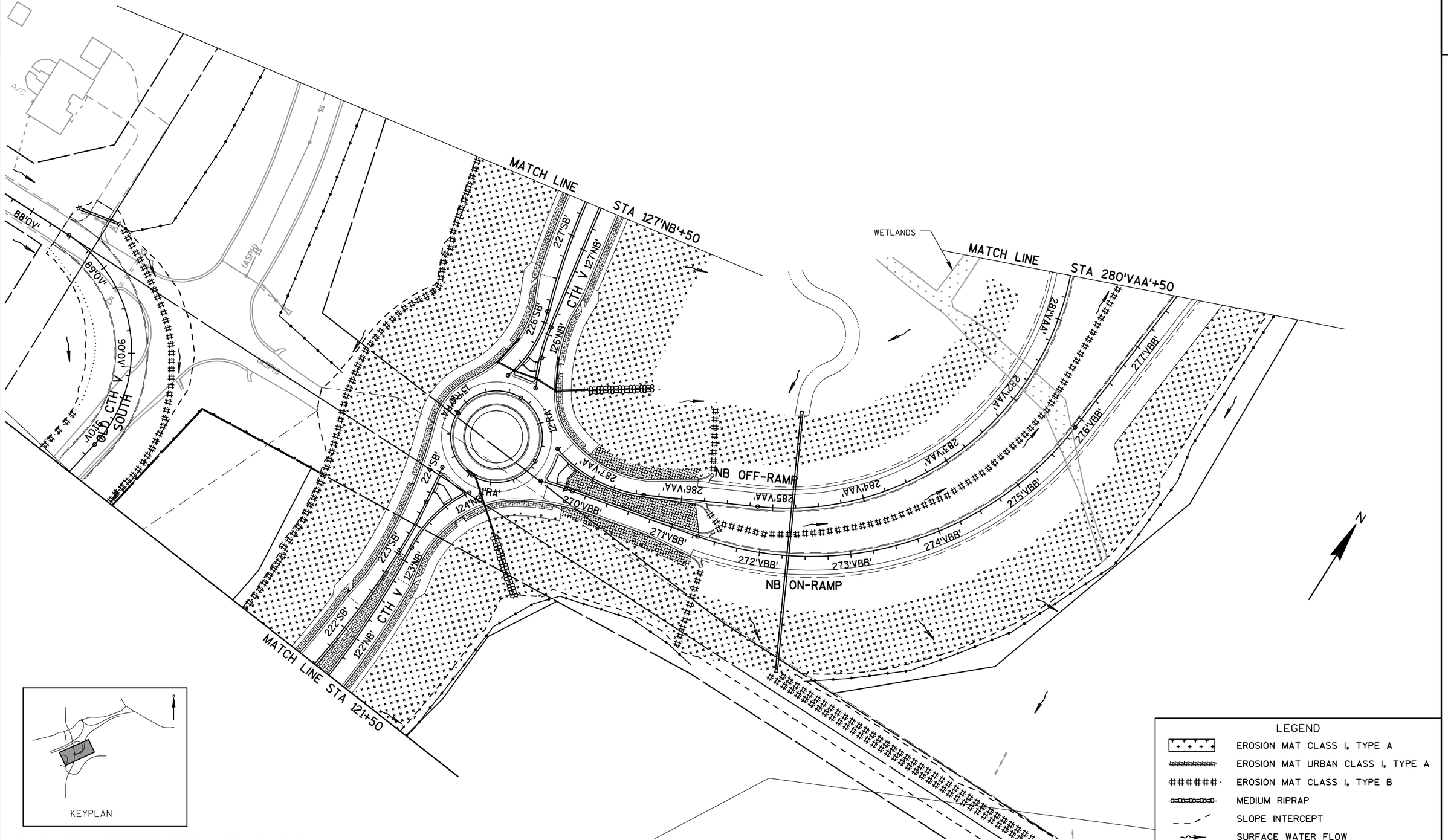
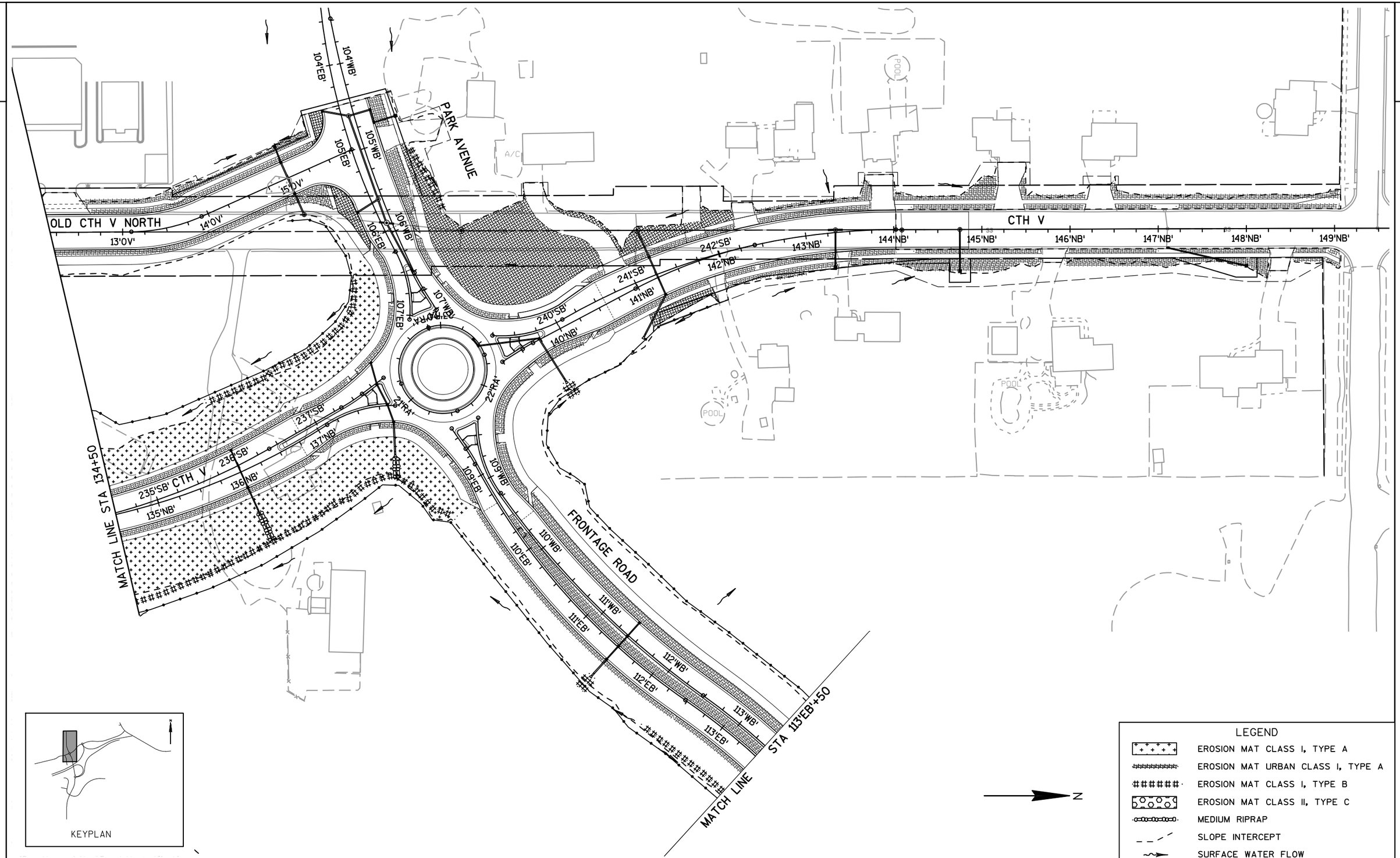


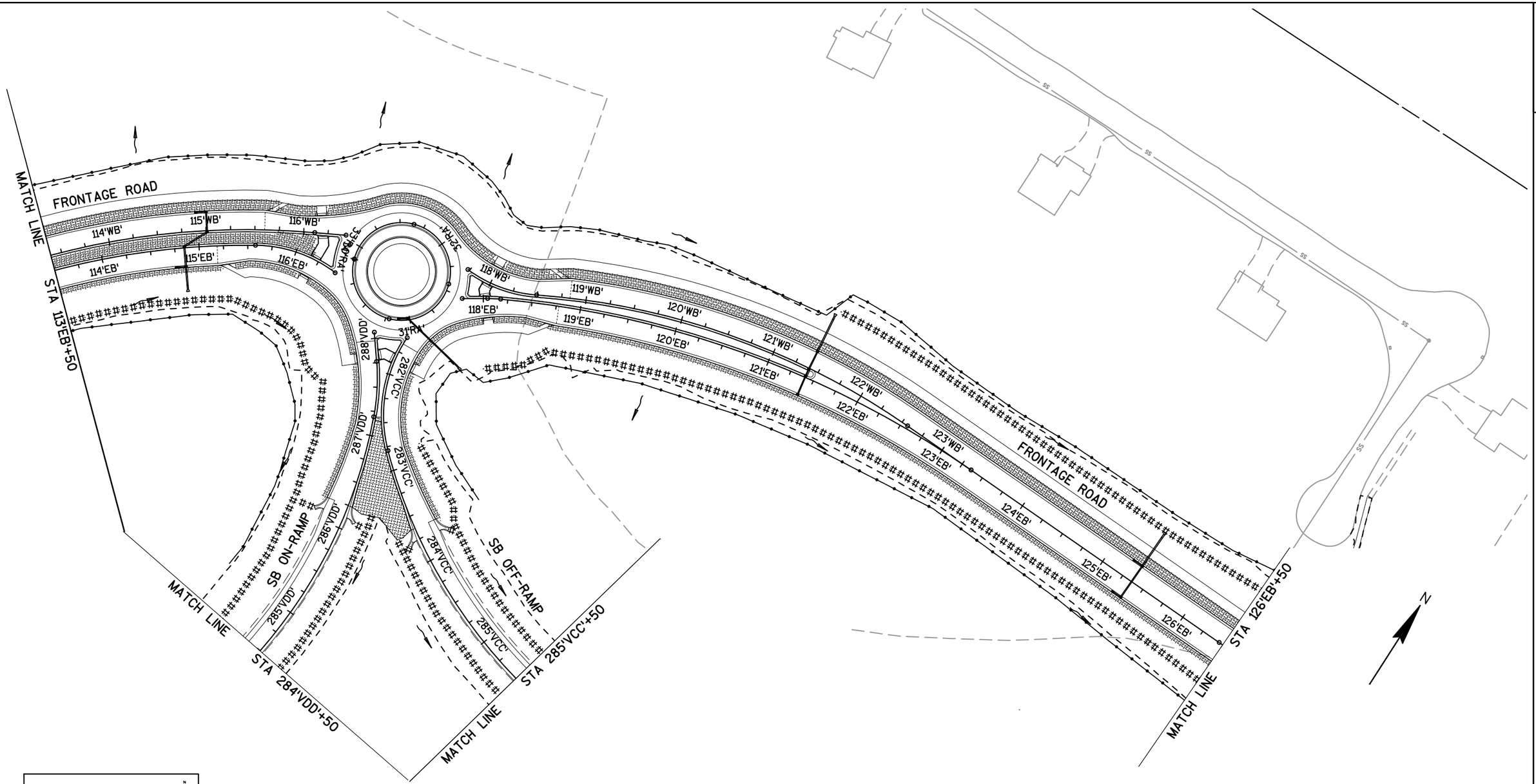
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL PERMANENT - CTH V	SHEET 69	E

2



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL PERMANENT - CTH V	SHEET 70	E

2



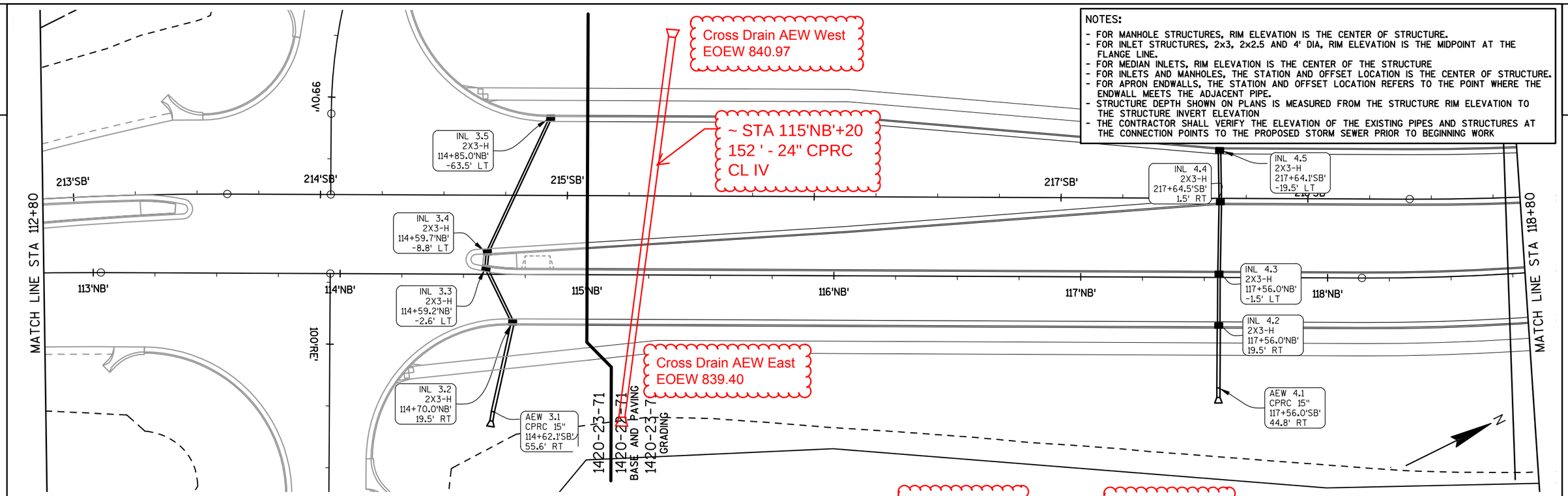
KEYPLAN

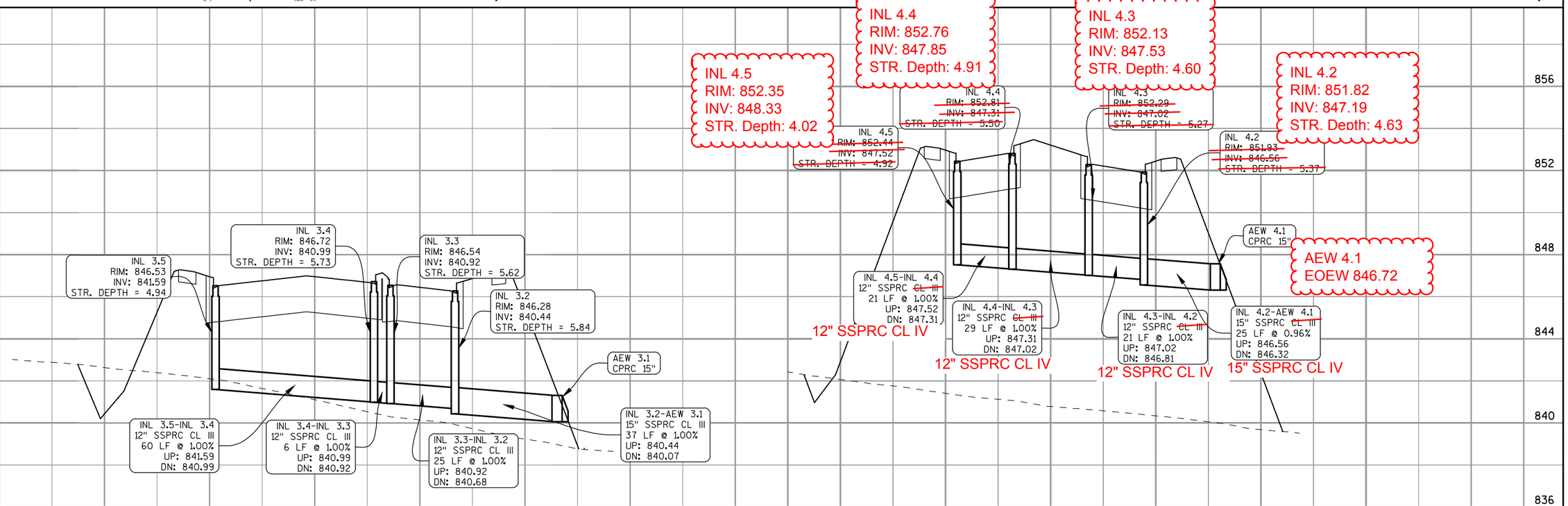
LEGEND

- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS I, TYPE B
- EROSION MAT CLASS II, TYPE C
- MEDIUM RIPRAP
- SLOPE INTERCEPT
- SURFACE WATER FLOW

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	EROSION CONTROL PERMANENT - FRONTAGE ROAD	SHEET 71	E

NOTES:
- FOR MANHOLE STRUCTURES, RIM ELEVATION IS THE CENTER OF STRUCTURE.
- FOR INLET STRUCTURES, 2x3, 2x2.5 AND 4' DIA, RIM ELEVATION IS THE MIDPOINT AT THE FLANGE LINE.
- FOR MEDIAN INLETS, RIM ELEVATION IS THE CENTER OF THE STRUCTURE
- FOR INLETS AND MANHOLES, THE STATION AND OFFSET LOCATION IS THE CENTER OF STRUCTURE.
- FOR APRON ENDWALLS, THE STATION AND OFFSET LOCATION REFERS TO THE POINT WHERE THE ENDWALL MEETS THE ADJACENT PIPE.
- STRUCTURE DEPTH SHOWN ON PLANS IS MEASURED FROM THE STRUCTURE RIM ELEVATION TO THE STRUCTURE INVERT ELEVATION
- THE CONTRACTOR SHALL VERIFY THE ELEVATION OF THE EXISTING PIPES AND STRUCTURES AT THE CONNECTION POINTS TO THE PROPOSED STORM SEWER PRIOR TO BEGINNING WORK





PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: CTH V	SHEET 72	E

NOTES:
- FOR MANHOLE STRUCTURES, RIM ELEVATION IS THE CENTER OF STRUCTURE.
- FOR INLET STRUCTURES, 2x3, 2x2.5 AND 4' DIA, RIM ELEVATION IS THE MIDPOINT AT THE FLANGE LINE.
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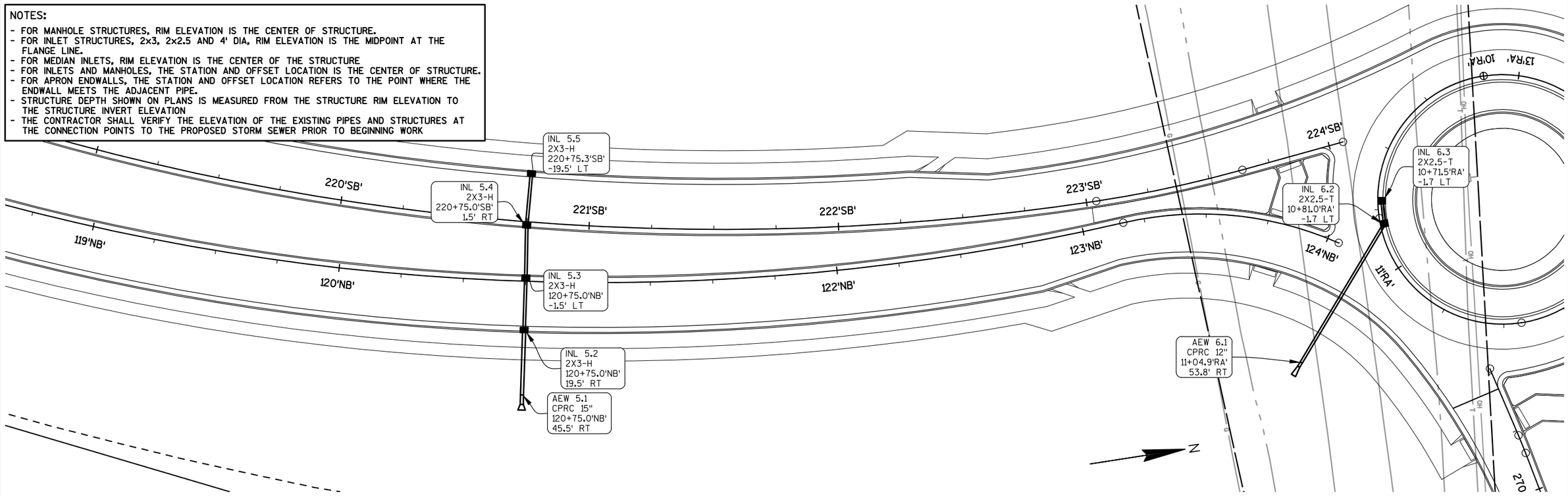
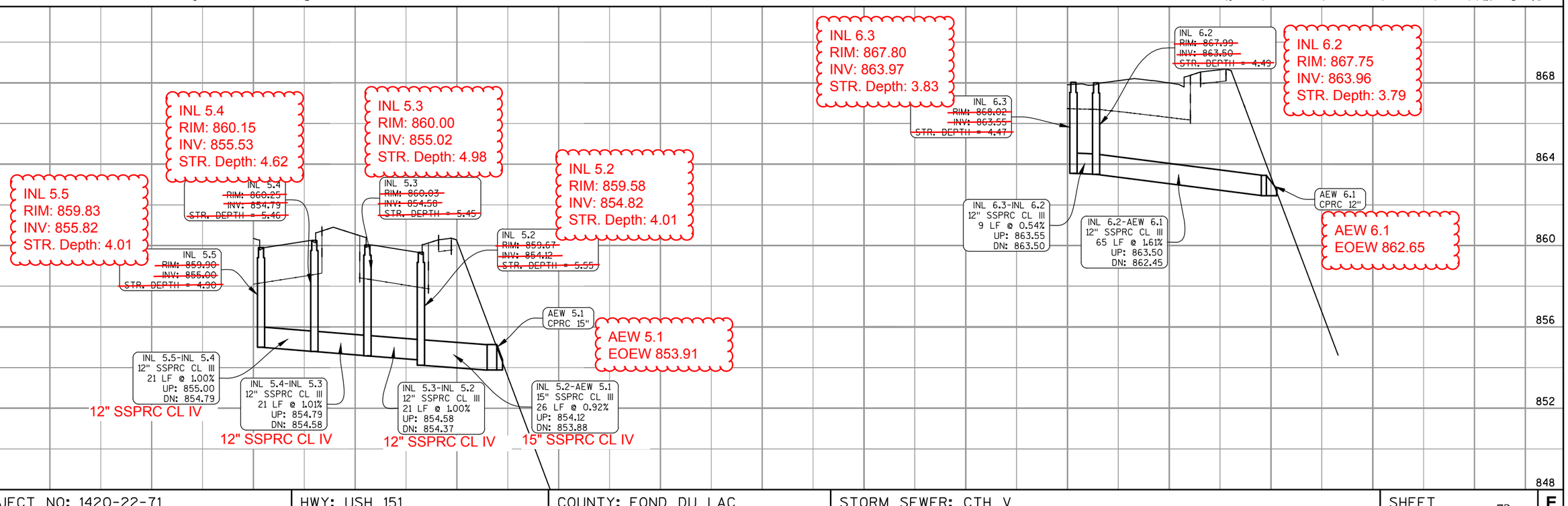
- STRUCTURE DEPTH SHOWN ON PLANS IS MEASURED FROM THE STRUCTURE RIM ELEVATION TO THE STRUCTURE INVERT ELEVATION
- THE CONTRACTOR SHALL VERIFY THE ELEVATION OF THE EXISTING PIPES AND STRUCTURES AT THE CONNECTION POINTS TO THE PROPOSED STORM SEWER PRIOR TO BEGINNING WORK





PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: CTH V	SHEET 73	E

NOTES:
- FOR MANHOLE STRUCTURES, RIM ELEVATION IS THE CENTER OF STRUCTURE.
- FOR INLET STRUCTURES, 2x3, 2x2.5 AND 4' DIA, RIM ELEVATION IS THE MIDPOINT AT THE FLANGE LINE.
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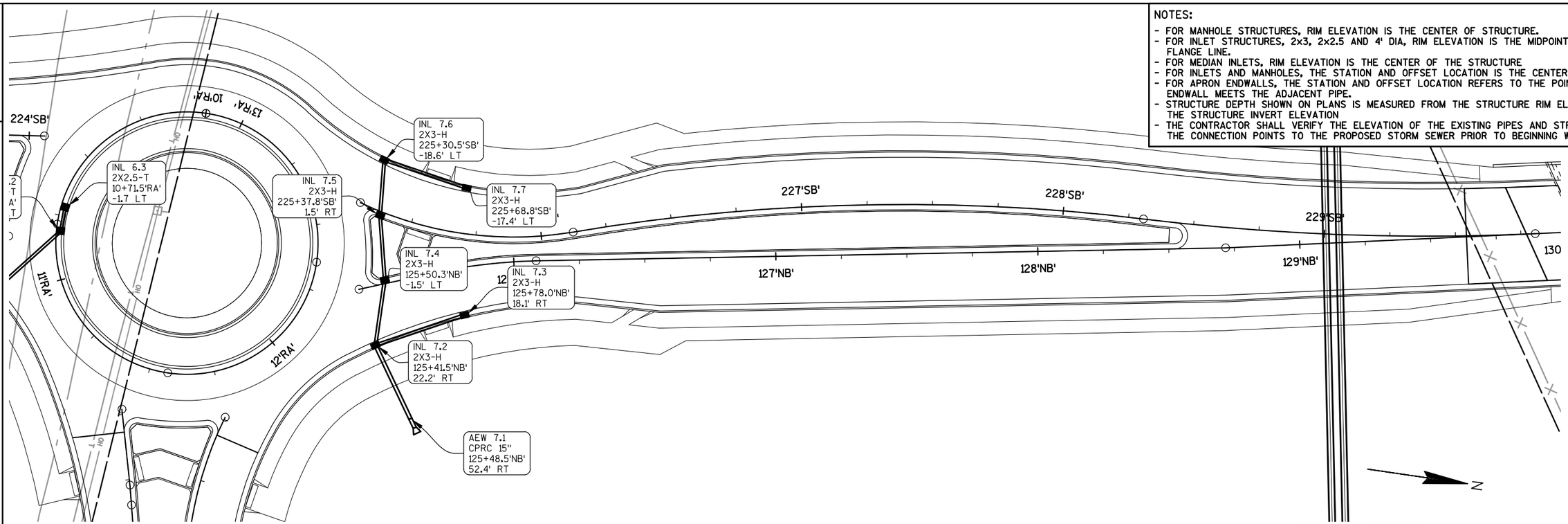
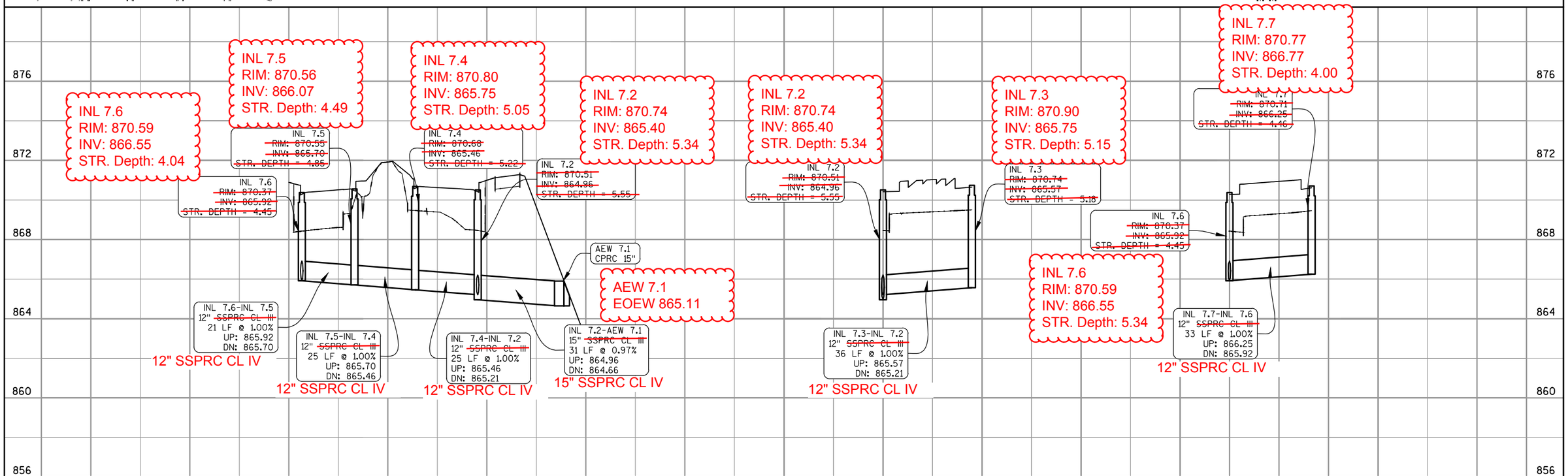
- THE CONTRACTOR SHALL VERIFY THE ELEVATION OF THE EXISTING PIPES AND STRUCTURES AT THE CONNECTION POINTS TO THE PROPOSED STORM SEWER PRIOR TO BEGINNING WORK





PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: CTH V	SHEET 74	E

NOTES:

- FOR MANHOLE STRUCTURES, RIM ELEVATION IS THE CENTER OF STRUCTURE.
- FOR INLET STRUCTURES, 2x3, 2x2.5 AND 4' DIA, RIM ELEVATION IS THE MIDPOINT AT THE FLANGE LINE.
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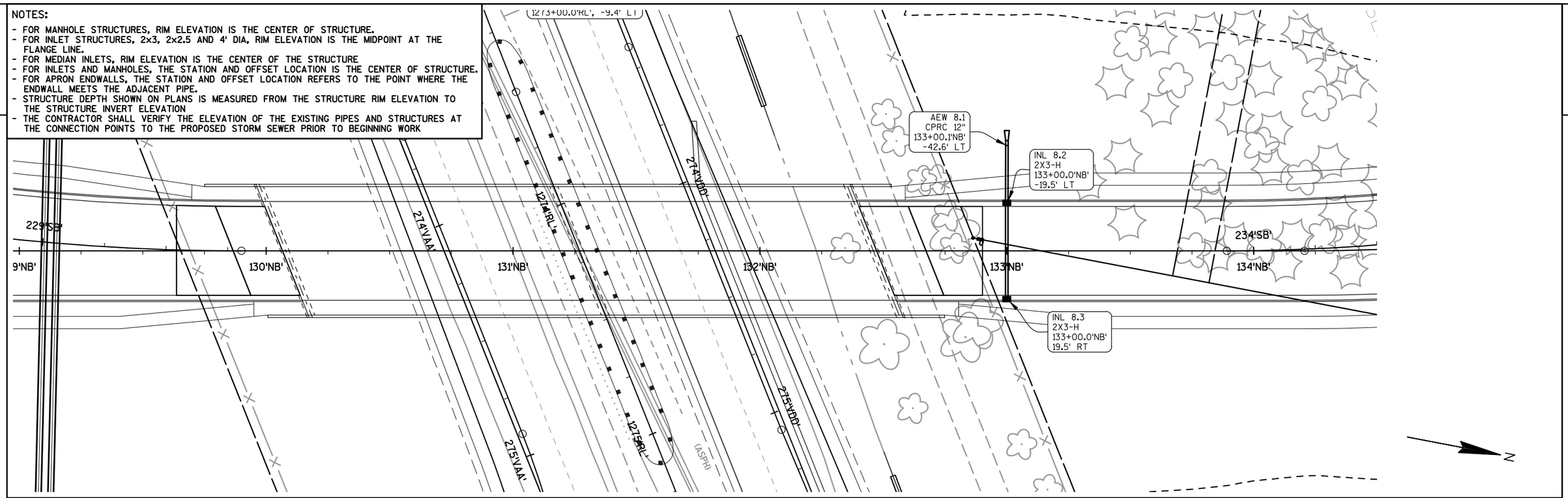
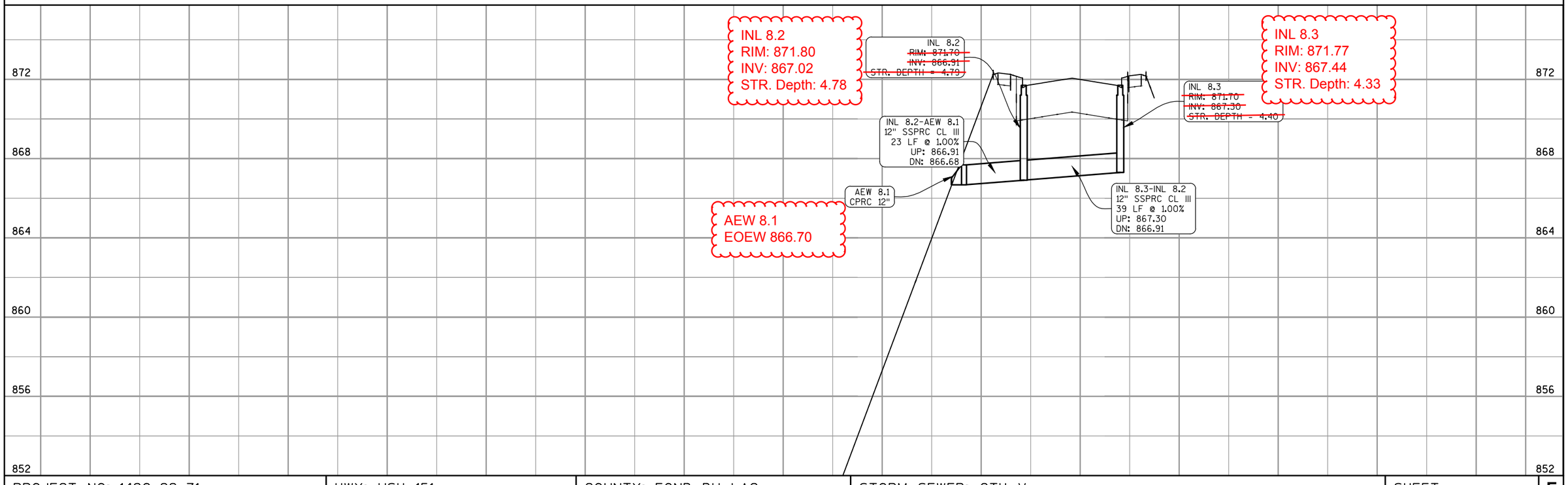
- THE CONTRACTOR SHALL VERIFY THE ELEVATION OF THE EXISTING PIPES AND STRUCTURES AT THE CONNECTION POINTS TO THE PROPOSED STORM SEWER PRIOR TO BEGINNING WORK





PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: CTH V	SHEET 75	E

NOTES:

- FOR MANHOLE STRUCTURES, RIM ELEVATION IS THE CENTER OF STRUCTURE.
- FOR INLET STRUCTURES, 2x3, 2x2.5 AND 4' DIA, RIM ELEVATION IS THE MIDPOINT AT THE FLANGE LINE.
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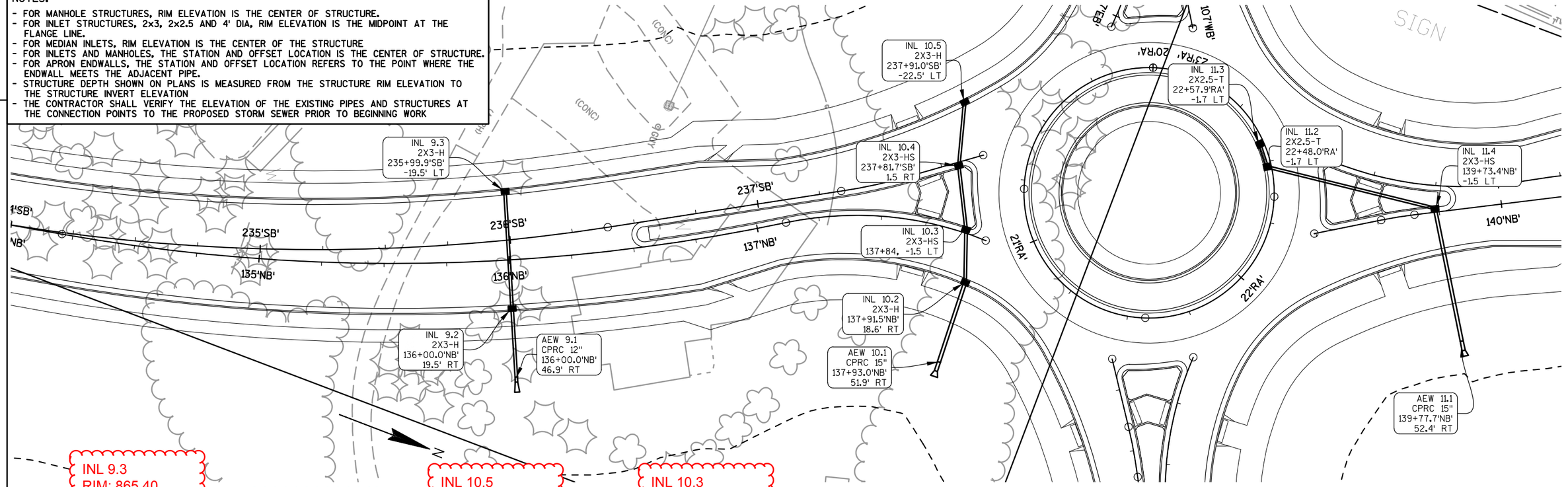
- THE CONTRACTOR SHALL VERIFY THE ELEVATION OF THE EXISTING PIPES AND STRUCTURES AT THE CONNECTION POINTS TO THE PROPOSED STORM SEWER PRIOR TO BEGINNING WORK



INL 9.3
RIM: 865.40
INV: 860.72
STR. Depth: 4.68

INL 9.2
RIM: 865.61
INV: 860.23
STR. Depth: 4.38

INL 10.5
RIM: 863.01
INV: 858.74
STR. Depth: 4.27

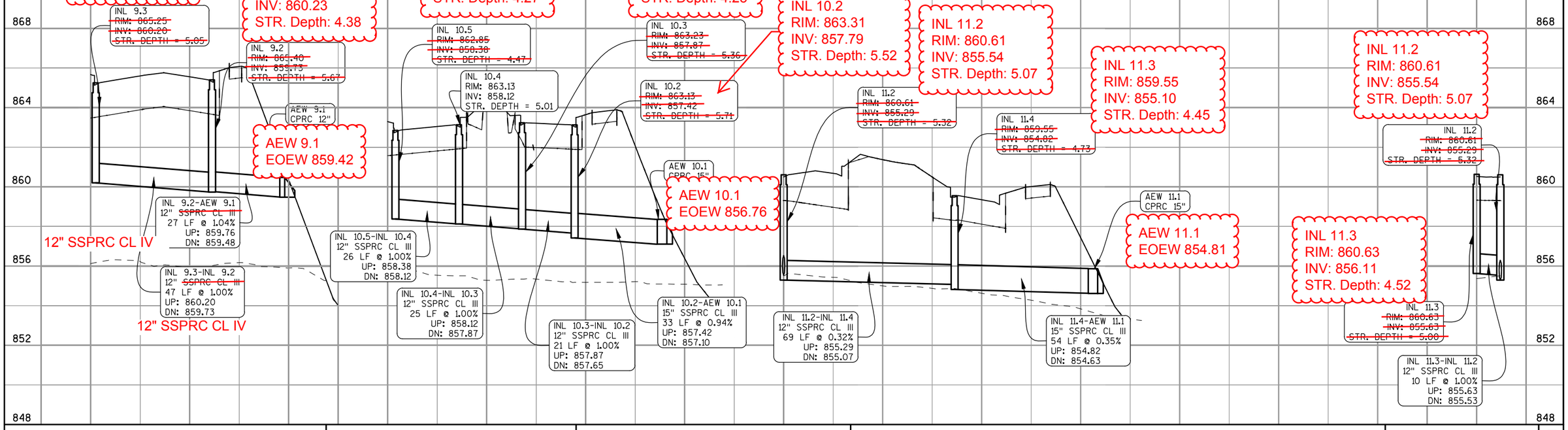
INL 10.3
RIM: 863.36
INV: 858.11
STR. Depth: 4.25

INL 10.2
RIM: 863.31
INV: 857.79
STR. Depth: 5.52

INL 11.2
RIM: 860.61
INV: 855.54
STR. Depth: 5.07

INL 11.3
RIM: 859.55
INV: 855.10
STR. Depth: 4.45

INL 11.2
RIM: 860.61
INV: 855.54
STR. Depth: 5.07



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: CTH V	SHEET 76 E

NOTES:
- FOR MANHOLE STRUCTURES, RIM ELEVATION IS THE CENTER OF STRUCTURE.
- FOR INLET STRUCTURES, 2x3, 2x2.5 AND 4' DIA, RIM ELEVATION IS THE MIDPOINT AT THE FLANGE LINE.
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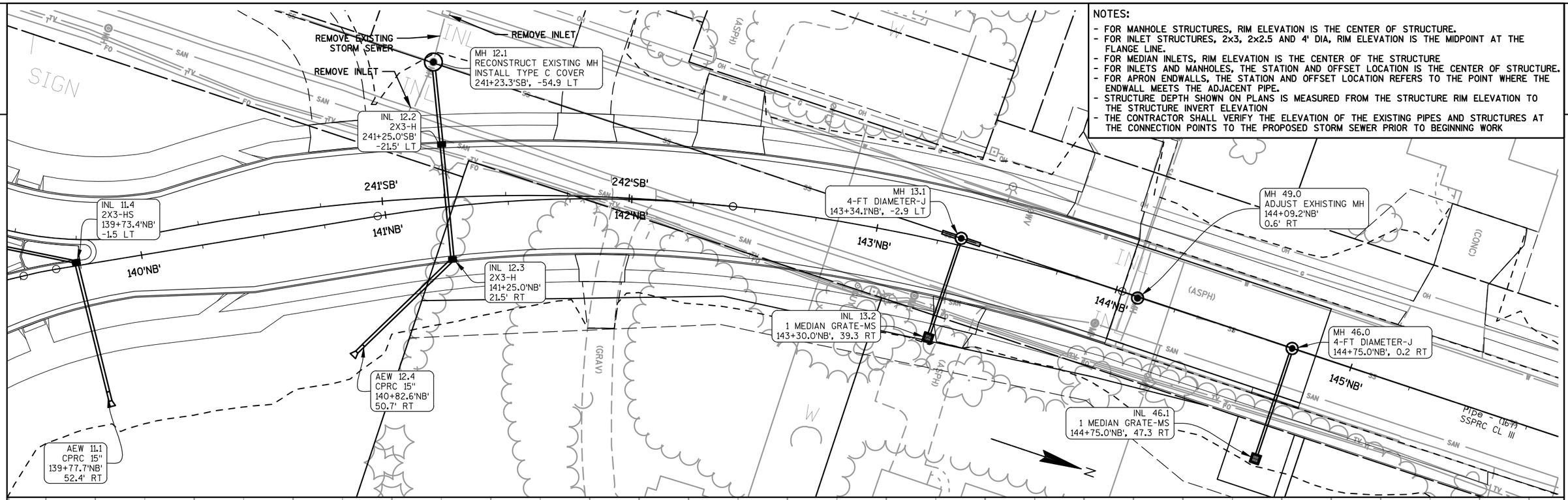

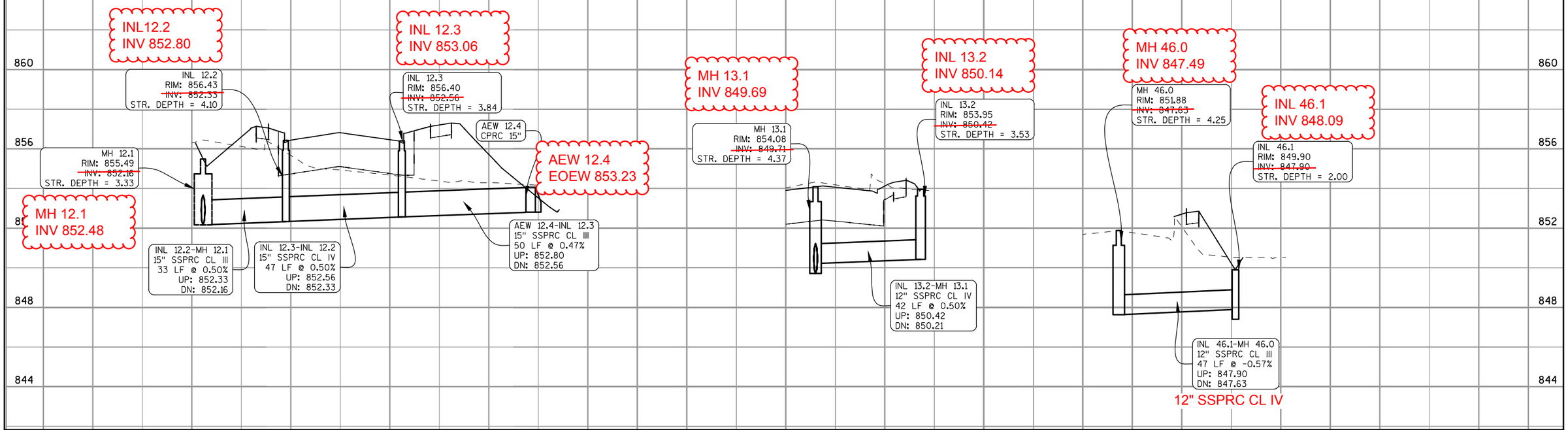

PROJECT NO: 1420-22-71 | HWY: USH 151 | COUNTY: FOND DU LAC | STORM SEWER: CTH V | SHEET 77 | E

2

NOTES:
- FOR MANHOLE STRUCTURES, RIM ELEVATION IS THE CENTER OF STRUCTURE.
- FOR INLET STRUCTURES, 2x3, 2x2.5 AND 4' DIA, RIM ELEVATION IS THE MIDPOINT AT THE FLANGE LINE.
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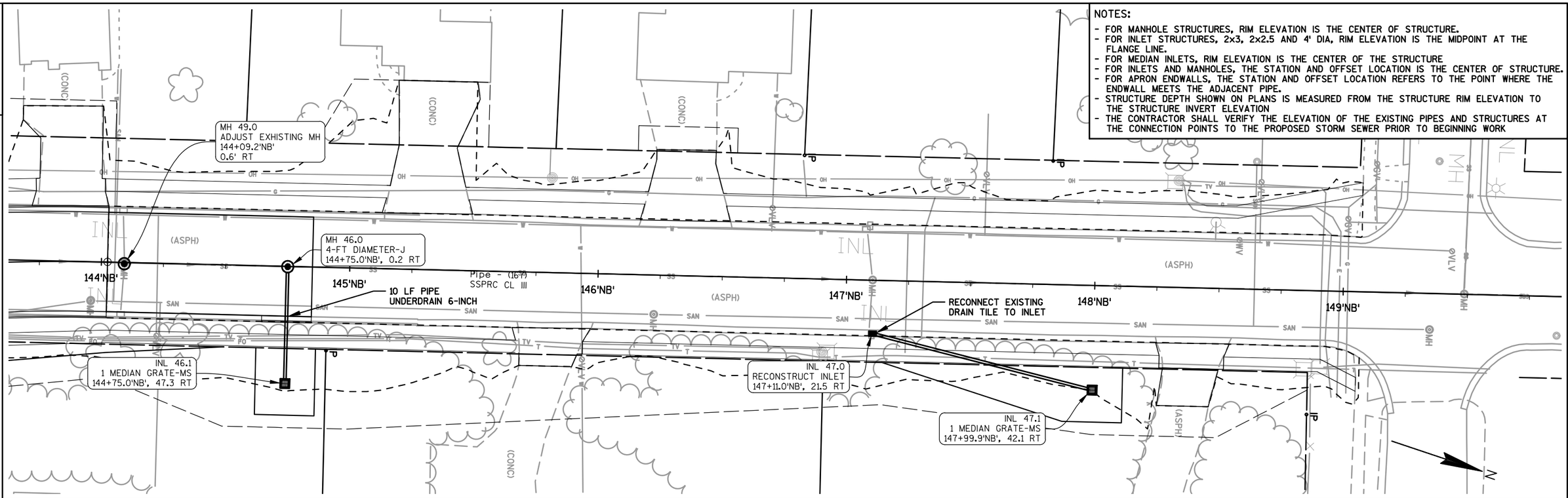

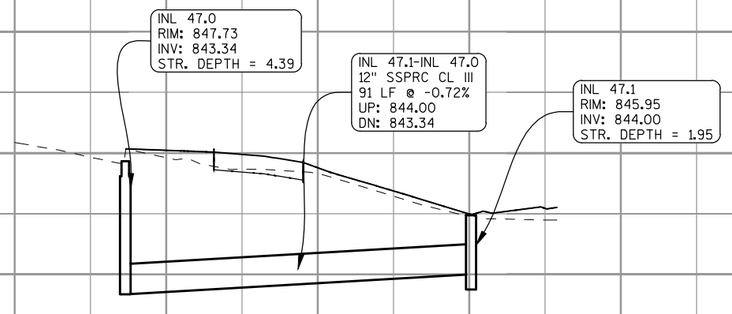

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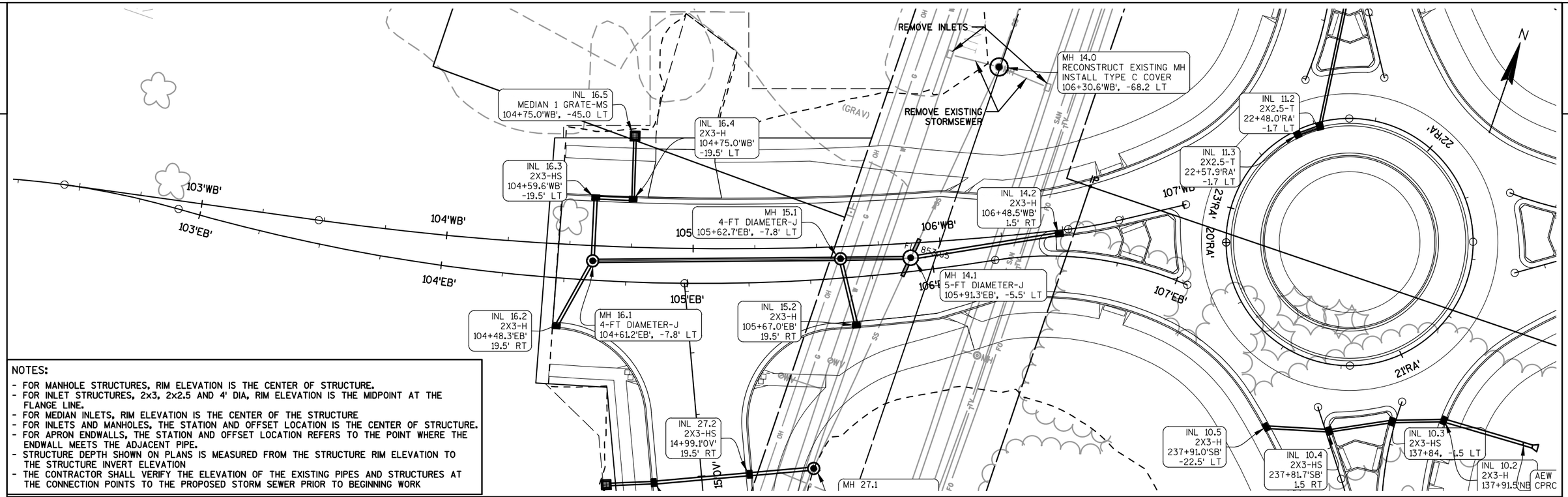
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: CTH V	SHEET 78	E

2



NOTES:

- FOR MANHOLE STRUCTURES, RIM ELEVATION IS THE CENTER OF STRUCTURE.
- FOR INLET STRUCTURES, 2x3, 2x2.5 AND 4' DIA, RIM ELEVATION IS THE MIDPOINT AT THE FLANGE LINE.
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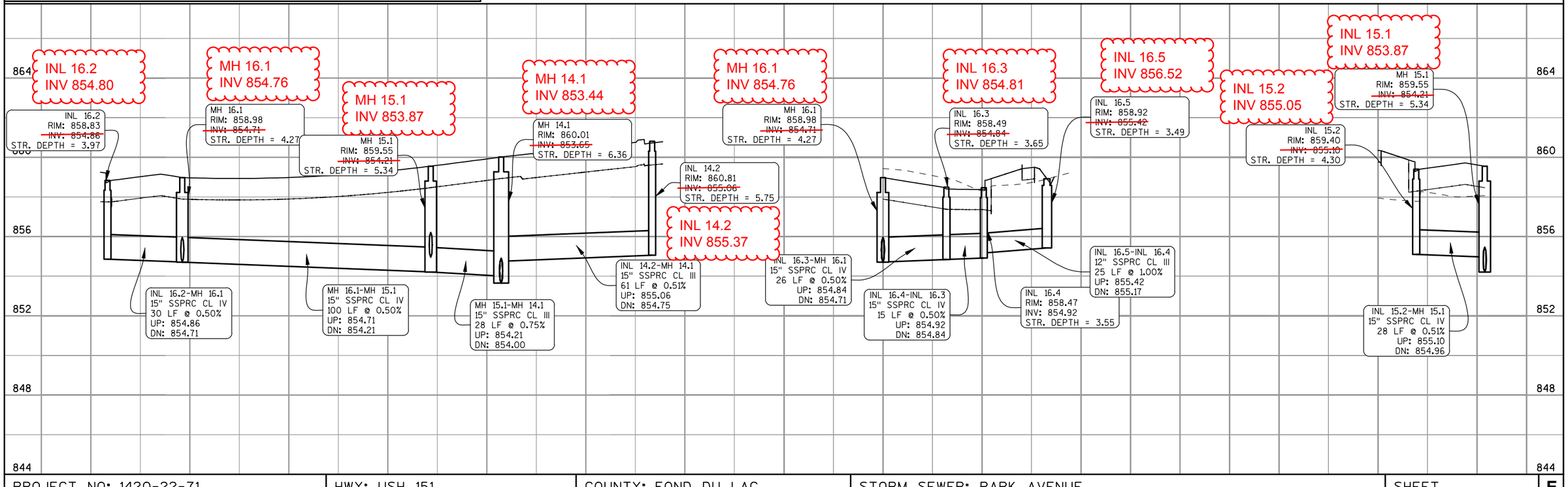

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: PARK AVENUE	SHEET 79	E

NOTES:
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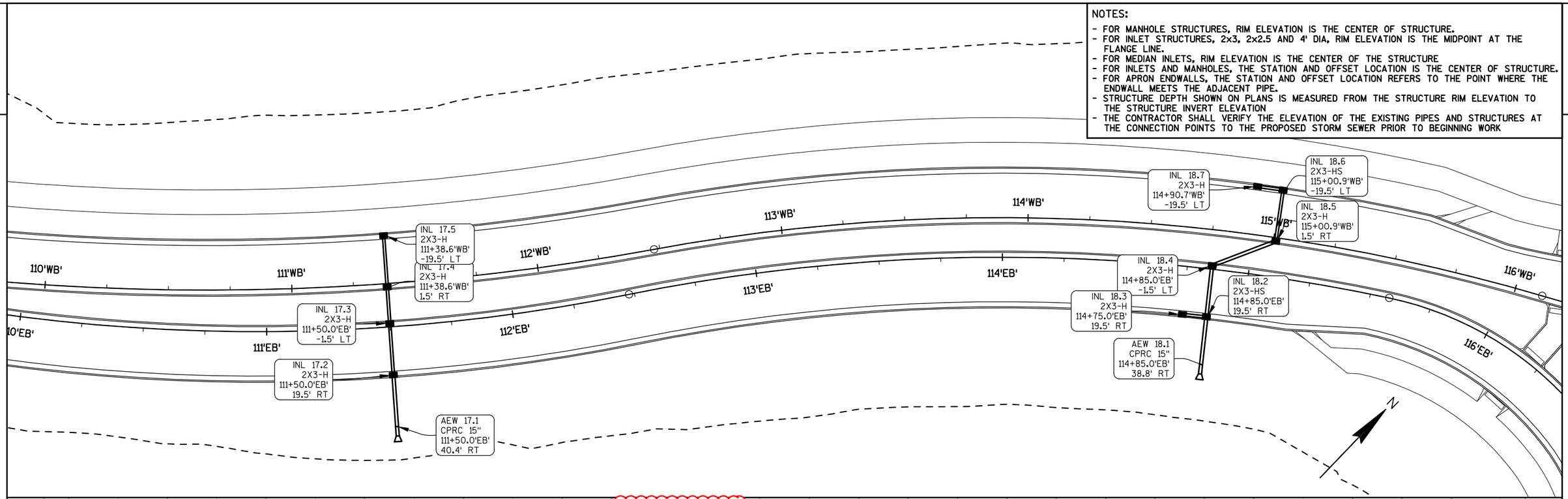
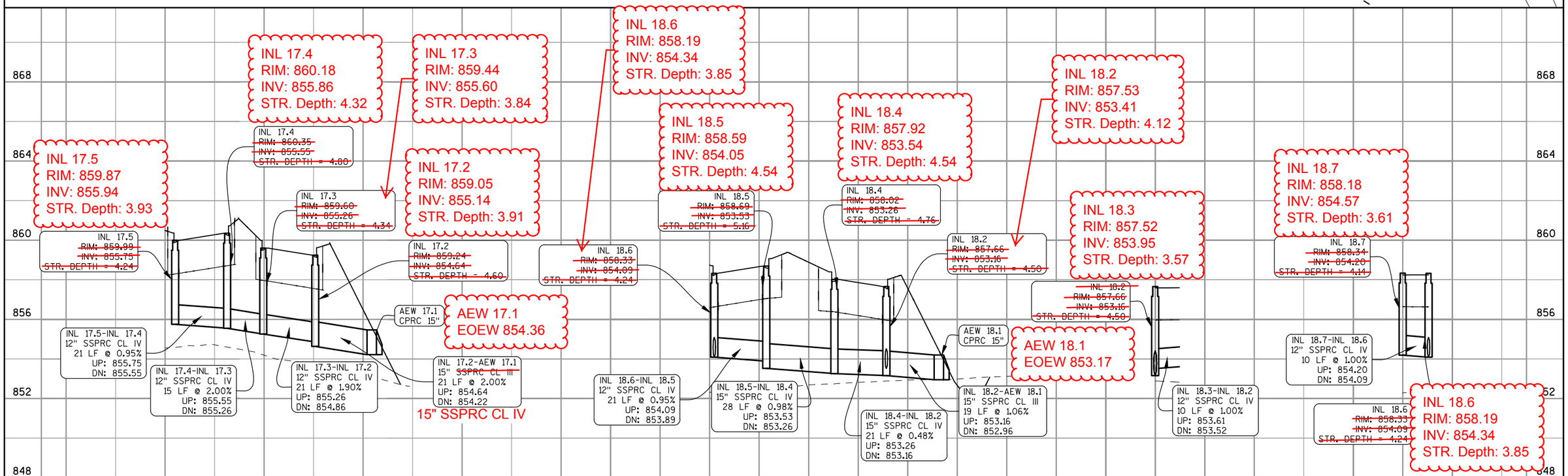
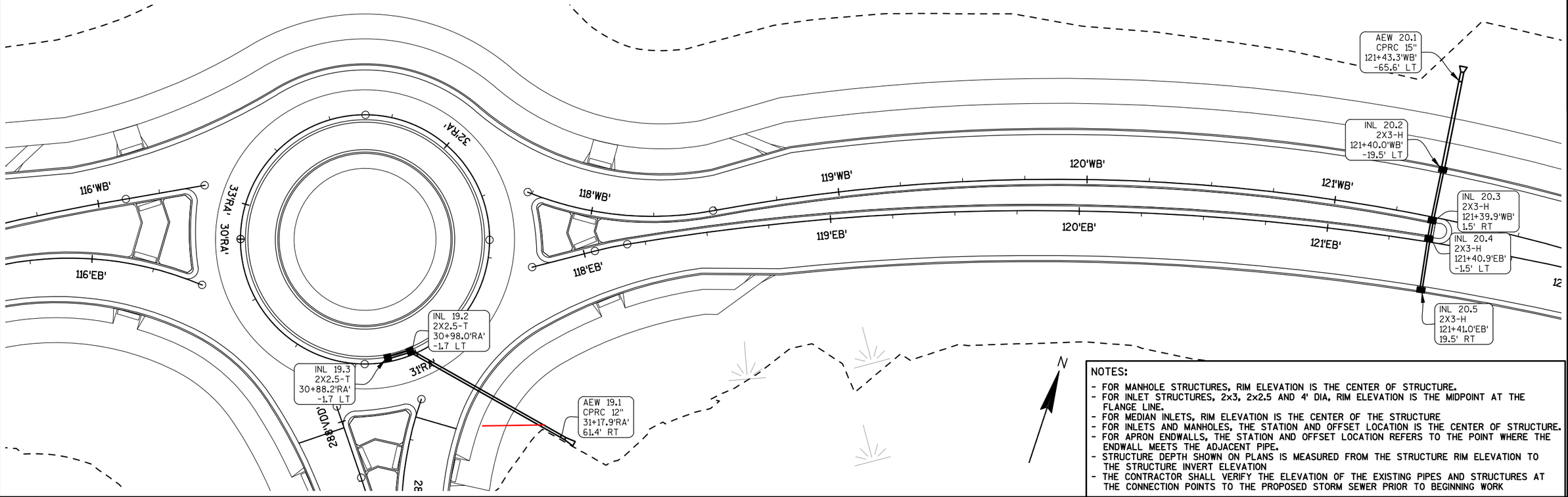




PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: FRONTAGE ROAD	SHEET 80	E

2



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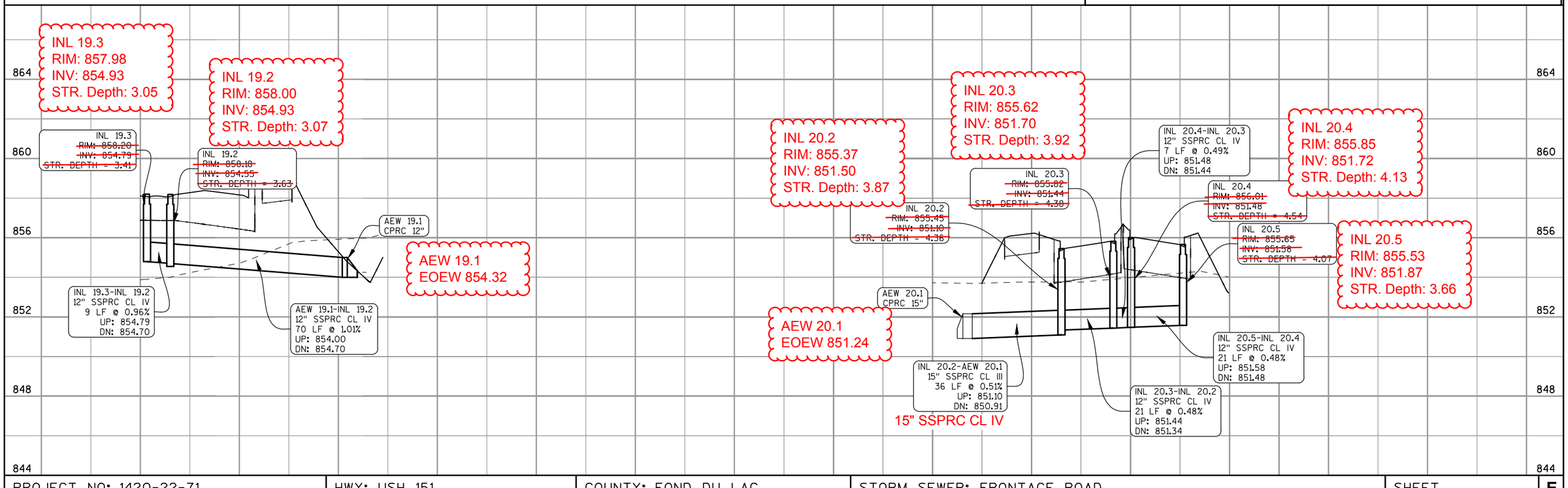

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: FRONTAGE ROAD	SHEET 81	E

2

MH 48
4-FT DIAMETER-C
126+53.9'EB', -102.2' LT

REMOVE STORM SEWER

REMOVE MANHOLE

Cross Drain AEW East
EOEW 848.54

Cross Drain AEW West
EOEW 849.17

AEW 21.1
CPRC 15"
125+36.0'EB'
-54.8' LT

INL 21.3
2X3-H
125+26.0'WB'
-19.5' LT

INL 21.2
2X3-HS
125+36.0'EB'
-19.5' LT

INL 21.4
2X3-HS
125+36.0'EB'
19.5' RT

INL 21.5
2X3-H
125+26.0'EB'
19.5' RT

123'WB'
123'EB'
124'EB'
125'EB'
126'EB'
127'EB'
128'EB'

N

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860
856
852
848
844
840

AEW 21.1
EOEW 849.12

AEW 21.1
CPRC 15"

INL 21.2-AEW 21.1
15" SSPRC CL III
35 LF @ 0.40%
UP: 848.98
DN: 848.84

15" SSPRC CL IV

INL 21.2
RIM: 852.86
INV: 849.20
STR. Depth: 3.66

INL 21.2
RIM: ~~852.94~~
INV: ~~848.98~~
STR. DEPTH = ~~3.96~~

INL 21.4-INL 21.2
12" SSPRC CL IV
39 LF @ 0.38%
UP: 849.13
DN: 848.98

INL 21.4
RIM: 852.88
INV: 849.54
STR. Depth: 3.34

INL 21.4
RIM: ~~852.94~~
INV: ~~849.13~~
STR. DEPTH = ~~3.81~~

INL 21.3
RIM: 852.85
INV: 849.22
STR. Depth: 3.53

INL 21.3
RIM: ~~852.94~~
INV: ~~849.08~~
STR. DEPTH = ~~3.86~~

INL 21.3-INL 21.2
12" SSPRC CL IV
10 LF @ 1.00%
UP: 849.08
DN: 848.98

INL 21.2
RIM: 852.86
INV: 849.20
STR. Depth: 3.66

INL 21.2
RIM: ~~852.94~~
INV: ~~848.98~~
STR. DEPTH = ~~3.96~~

INL 21.5
RIM: ~~852.94~~
INV: ~~849.23~~
STR. DEPTH = ~~3.72~~

INL 21.5
RIM: 852.89
INV: 849.54
STR. Depth: 3.35

INL 21.5-INL 21.4
12" SSPRC CL IV
10 LF @ 1.00%
UP: 849.23
DN: 849.13

INL 21.4
RIM: 852.88
INV: 849.54
STR. Depth: 3.34

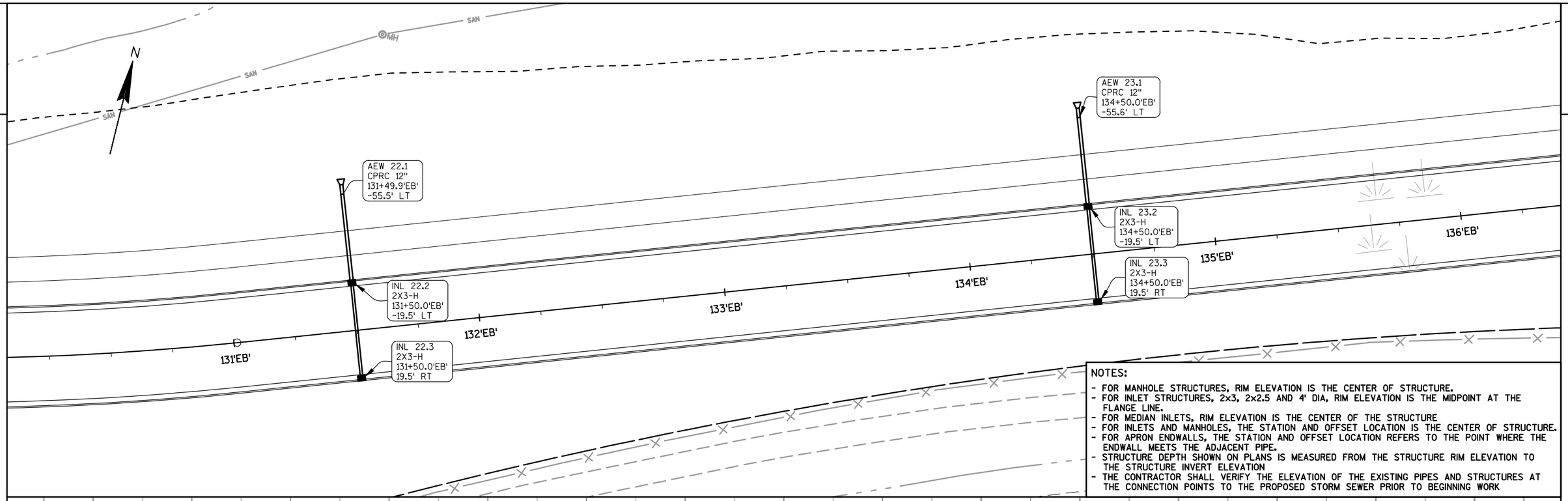
INL 21.4
RIM: ~~852.94~~
INV: ~~849.13~~
STR. DEPTH = ~~3.81~~

MH 48
RIM: 852.37
INV: 847.29
STR. DEPTH = 5.08

MH 48- Exist MH
10" SSPRC CL III
272 LF @ -1.18%
UP: 847.29
DN: 844.07

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: FRONTAGE ROAD	SHEET 82	E

2



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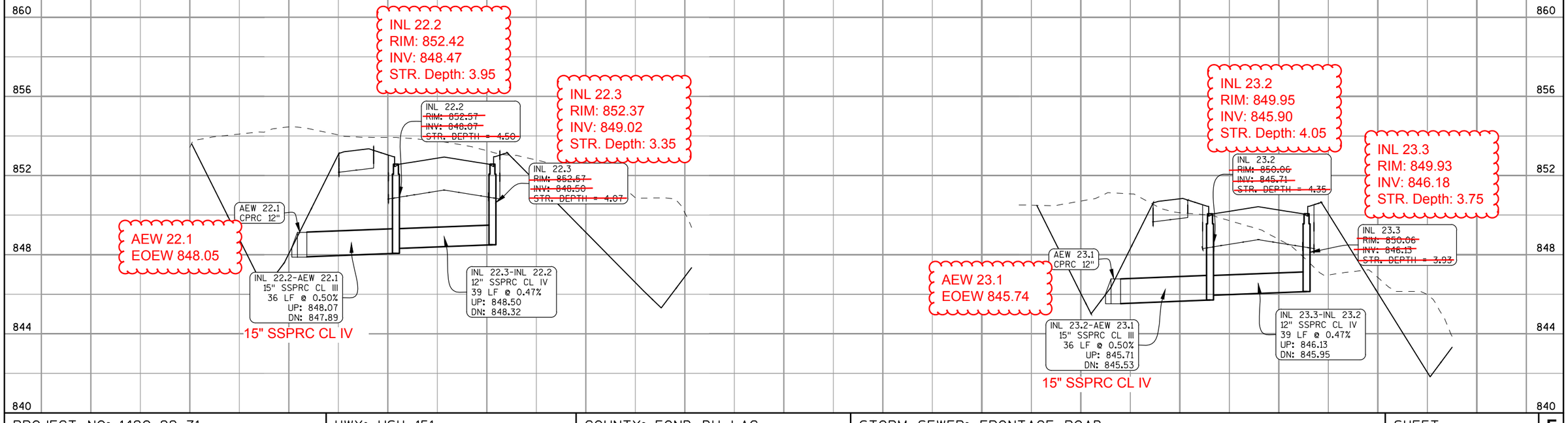
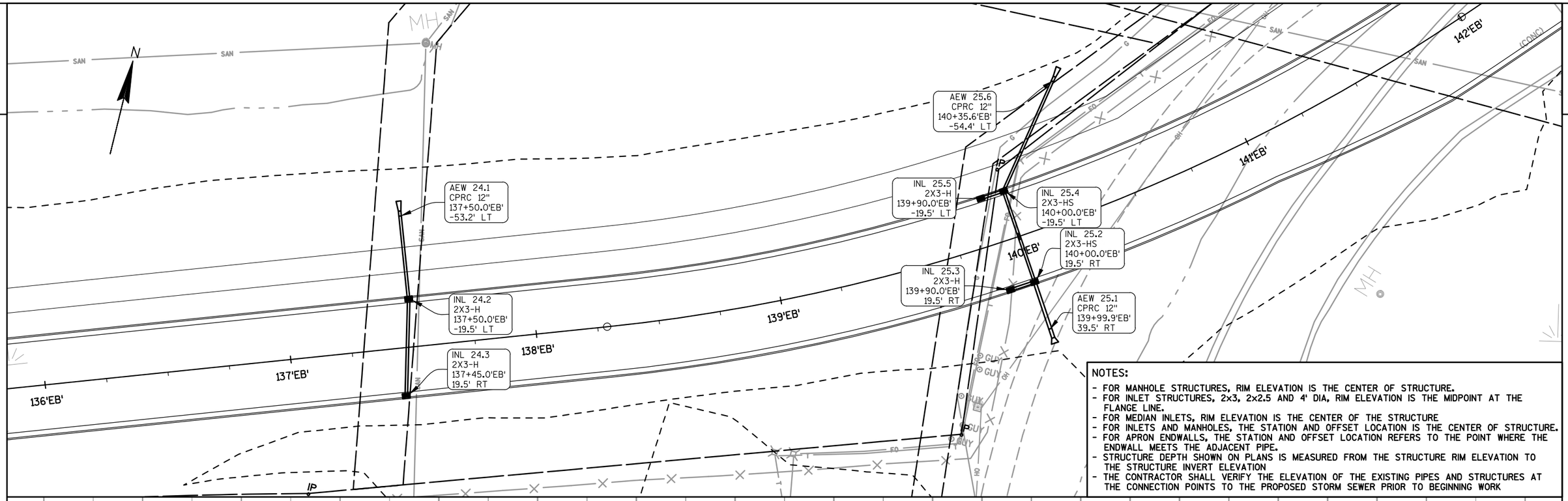
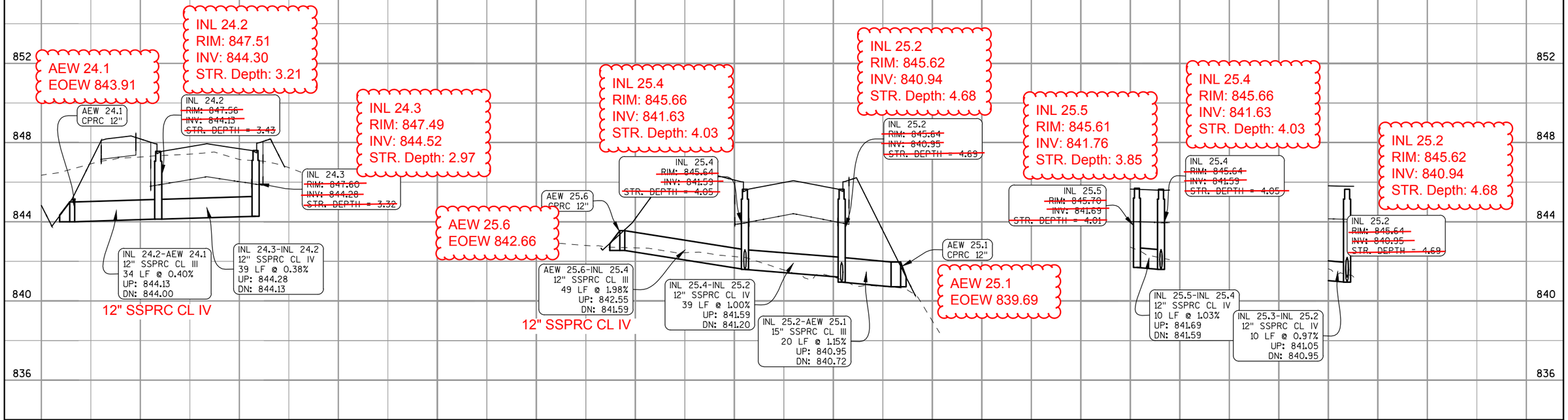


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: FRONTAGE ROAD	SHEET 83	E





PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: FRONTAGE ROAD	SHEET 84	E

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REMOVE INLET
1268+62, 14' LT
REMOVE EXISTING STORM SEWER
REMOVE MH
REMOVE 16 LF OF EXISTING STORM SEWER
ABANDON CULVERT PIPE
269'VAA'
269'RL'
270'VDD'
REMOVE EXISTING STORM SEWER
REMOVE EXISTING STORM SEWER, MH, INLETS WITHIN OBLITERATE AREA INCLUDES 2-MH 2-INLETS
REMOVE INLET
REMOVE MH
REMOVE EXISTING STORM SEWER
REMOVE INLET
270'VAA'
270'RL'
18" RCP
(CONC)
(ASPH)
AEW 26.1
CPRC 30"
270+34.7'VAA'
66.7' RT
AEW 26.3
CPRC 30"
270+20.1'VDD'
-51.5' LT
REMOVE INLET
REMOVE EXISTING STORM SEWER
REMOVE MH
INL 26.5
2X3-H
270+98.8'VDD'
-116.0' LT
MH 26.2
6-FT DIAMETER-J
270+73.0'VDD', -48.6' LT
REMOVE EXISTING STORM SEWER
REMOVE INLET
271'VDD'
INL 26.4
2X3-HS
271+17.6'VDD'
-107.7 LT
10'OV'
11'OV'
12'OV'
SIGN
MH
ENT
N

AEW 26.3
CPRC 30"
MH 26.2
RIM: 854.45
INV: 848.25
STR. DEPTH = 6.20
AEW 26.3-MH 26.2
30" SSPRC CL III
52 LF @ 1.40%
UP: 848.98
DN: 848.25
AEW 26.1
CPRC 30"
INVERT=847.58
MH 26.2
RIM: 854.45
INV: 848.25
STR. DEPTH = 6.20
INL 26.4
RIM: 854.00
INV: 849.48
STR. DEPTH = 4.51
INL 26.5
RIM: 854.09
INV: 849.92
STR. DEPTH = 4.17
INL 26.4-MH 26.2
15" SSPRC CL III
73 LF @ 1.00%
UP: 849.48
DN: 848.75
INL 26.5-INL 26.4
12" SSPRC CL III
20 LF @ 1.00%
UP: 849.92
DN: 849.72
864
860
856
852
848
844

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: OLD CTH V NORTH	SHEET 85	E

NOTES:

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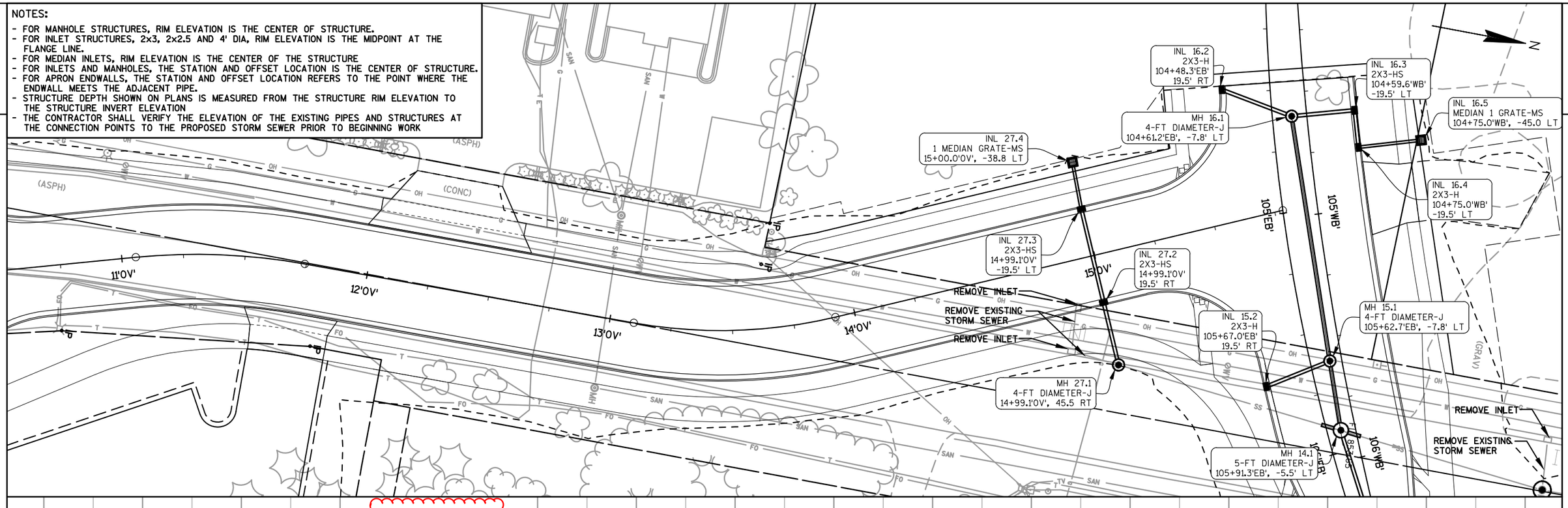
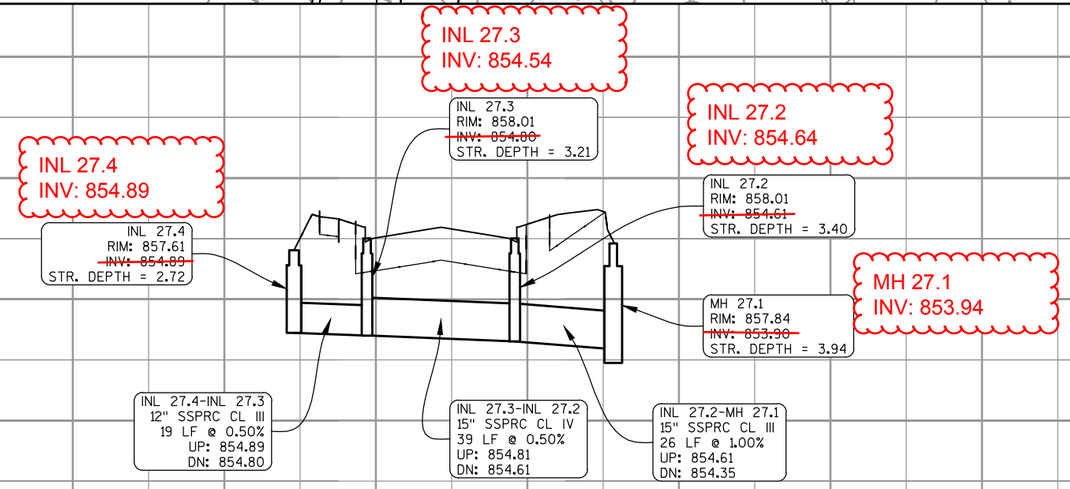
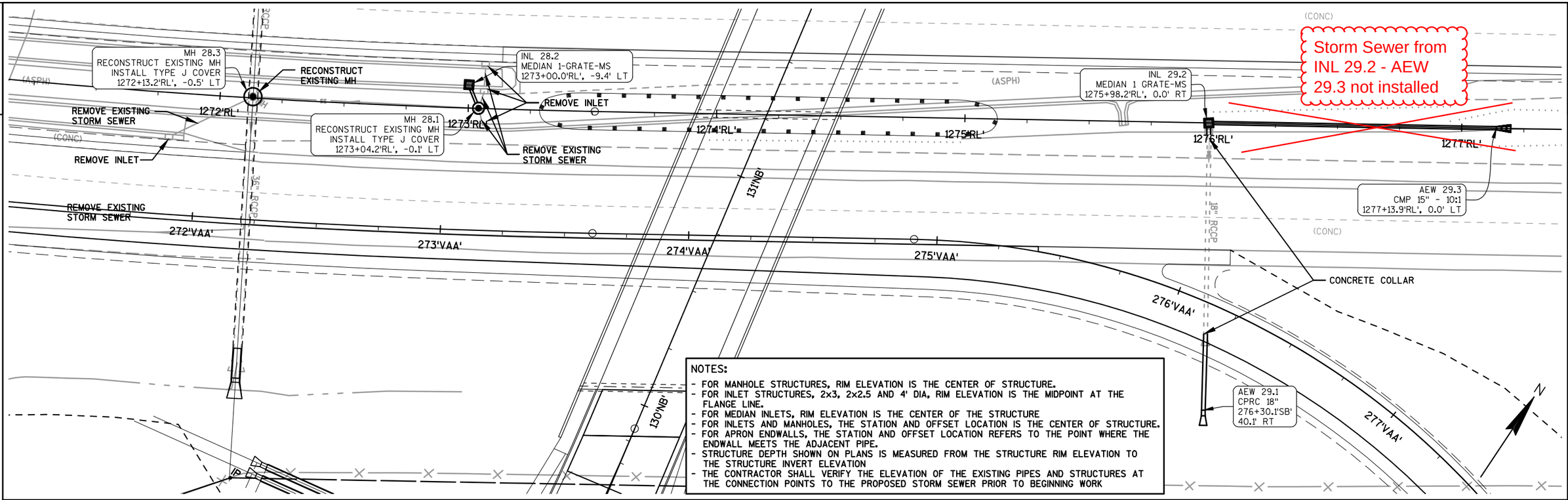




PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: OLD CTH V NORTH	SHEET 86	E



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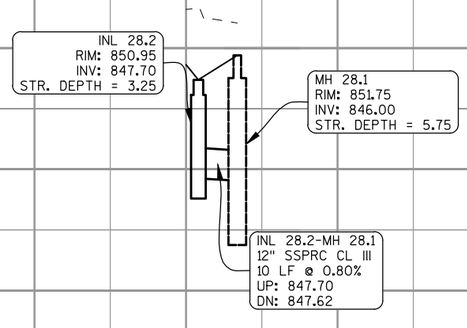
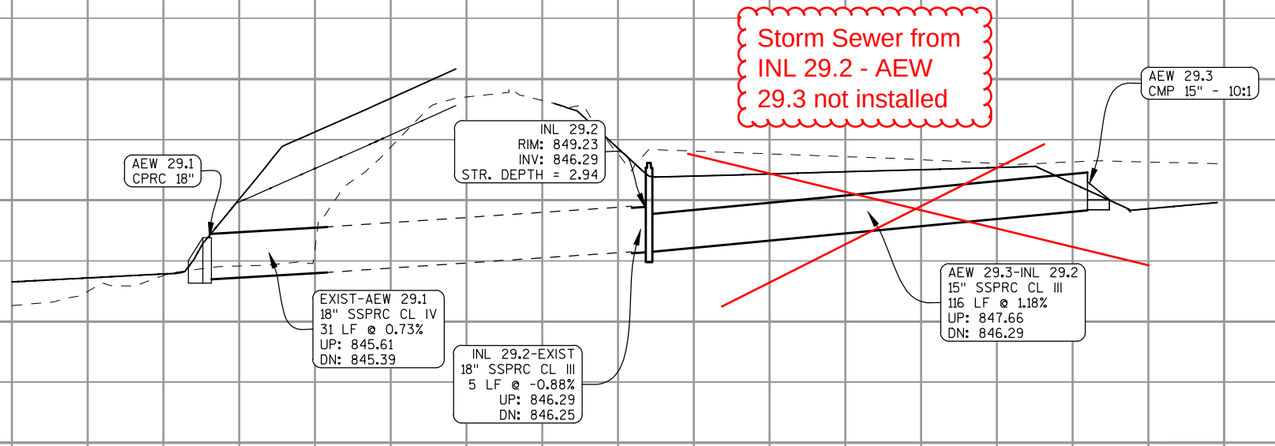
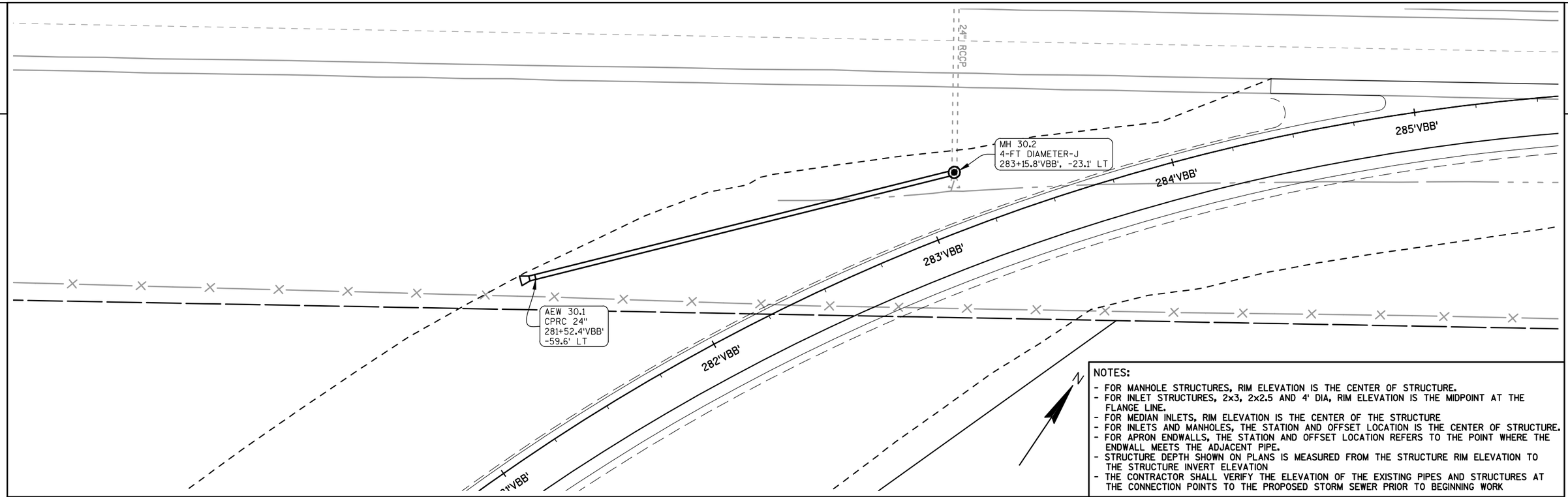




PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: NORTHBOUND OFF-RAMP (VAA)	SHEET 87	E

2



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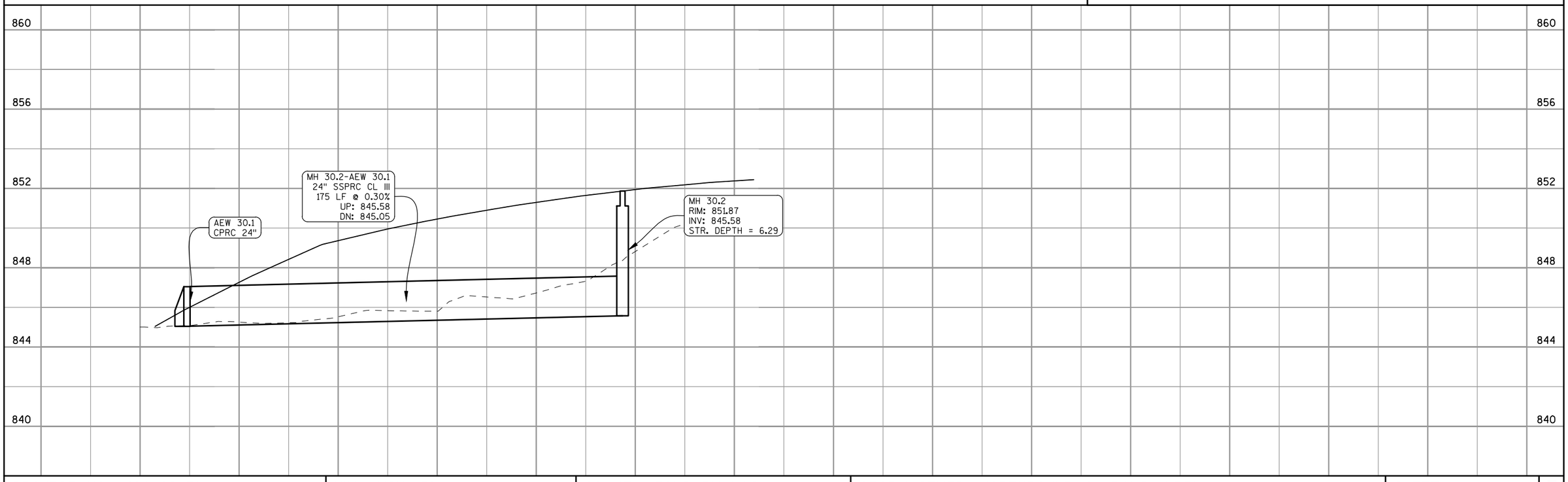
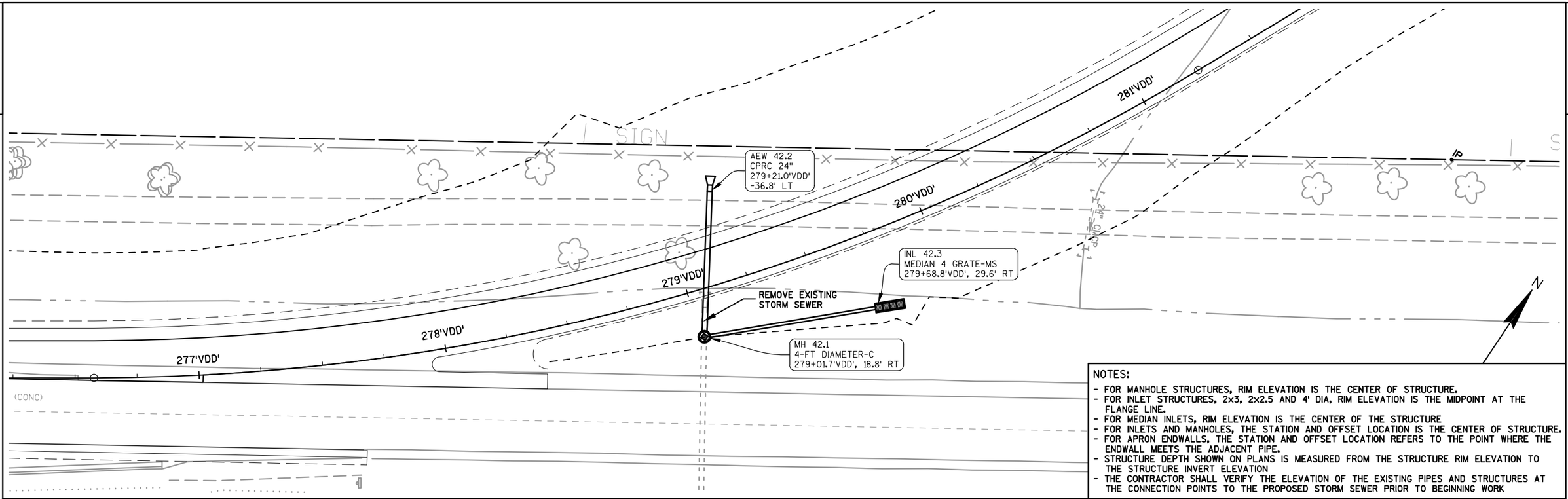


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: NORTHBOUND ON-RAMP (VBB)	SHEET 88	E

2



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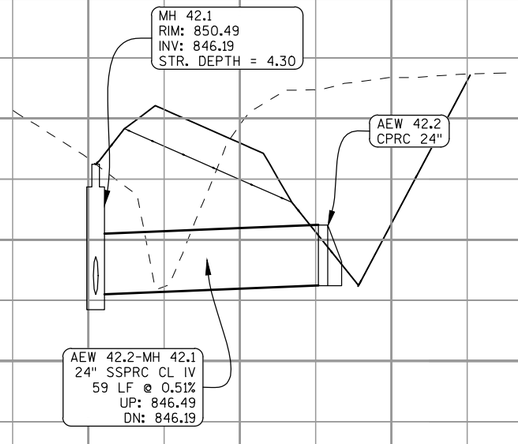
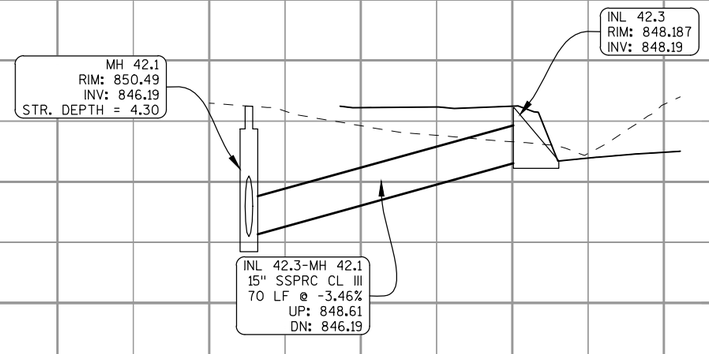
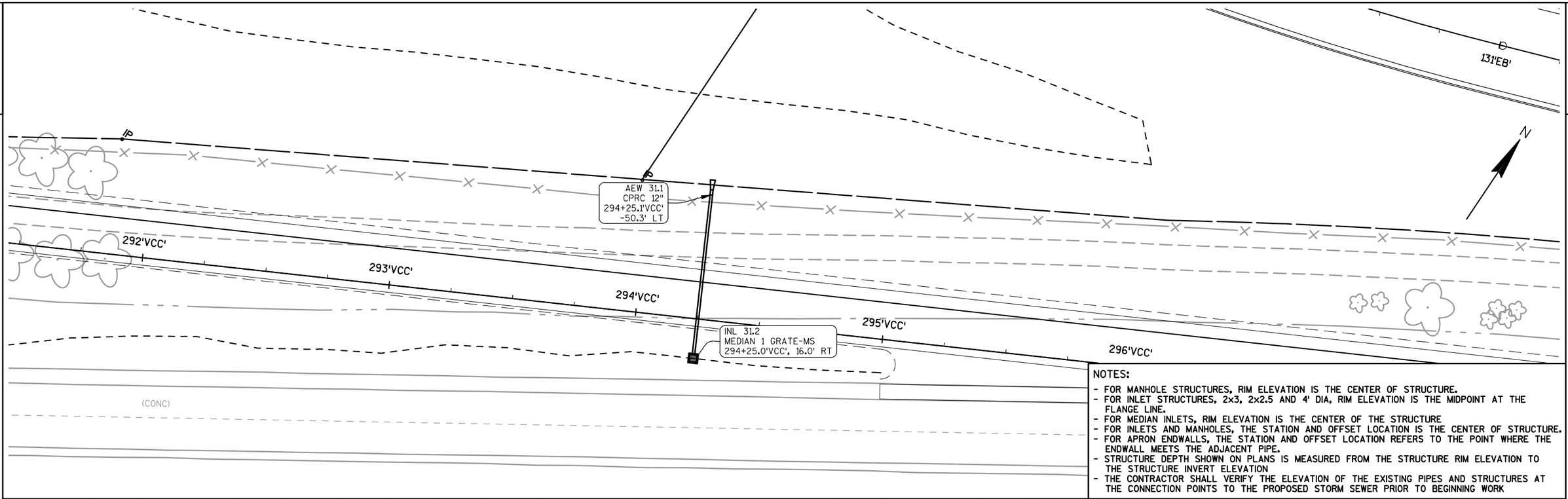




2



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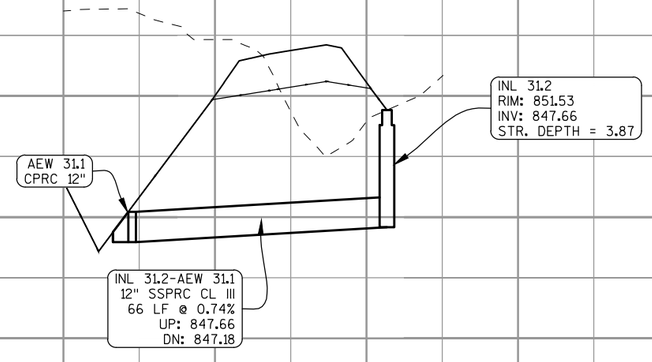
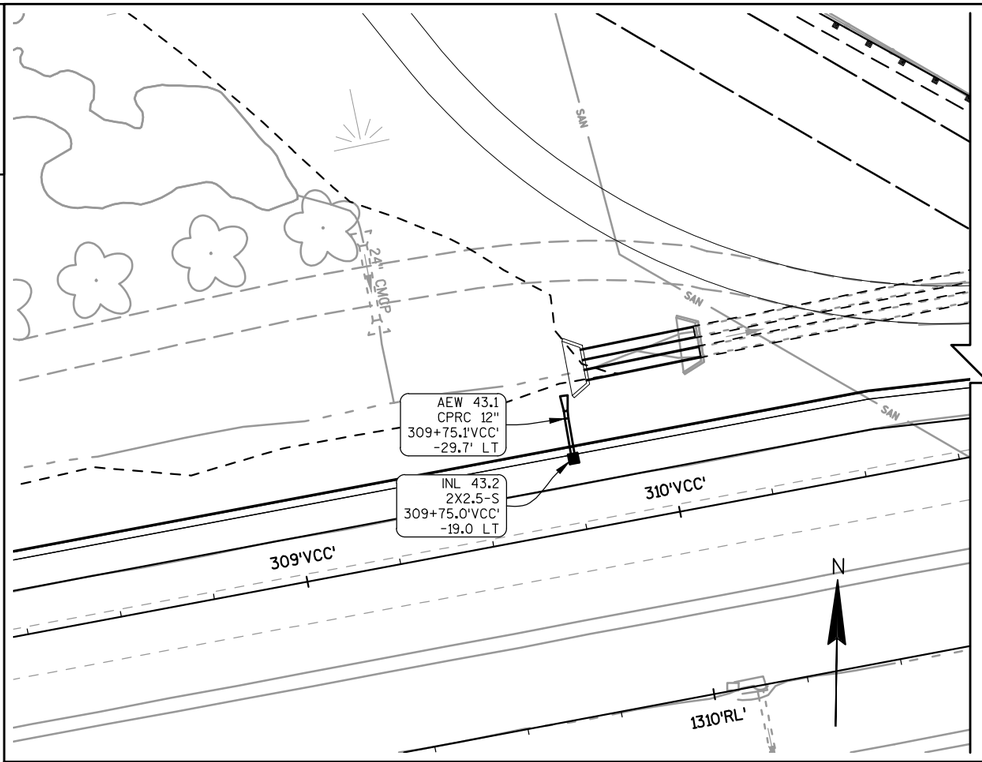
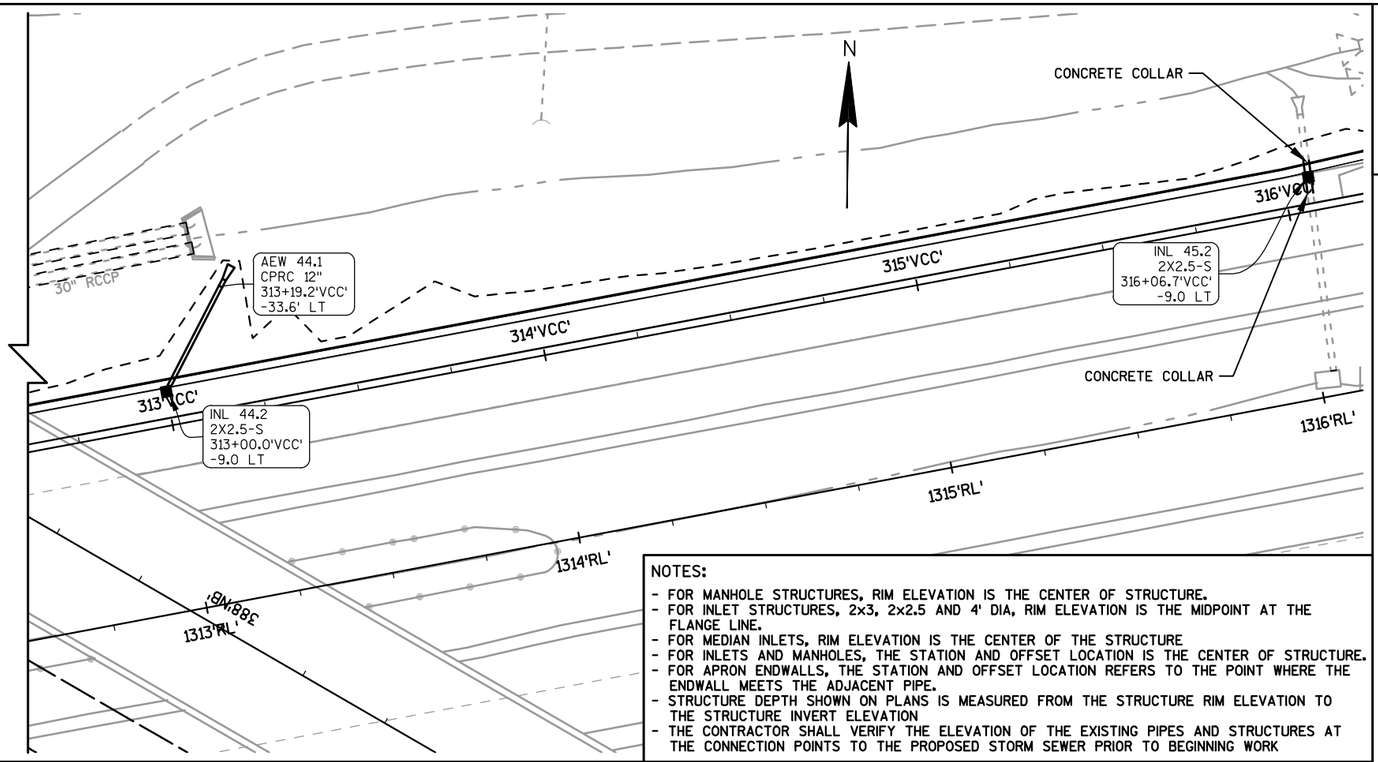


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: SOUTHBOUND OFF-RAMP (VCC)	SHEET 90	E





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- FOR INLET STRUCTURES, 2x3, 2x2.5 AND 4' DIA, RIM ELEVATION IS THE MIDPOINT AT THE FLANGE LINE.
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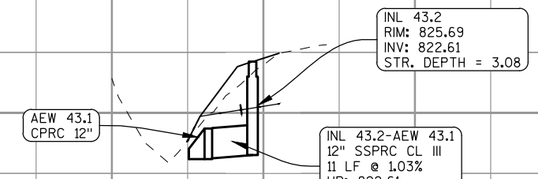
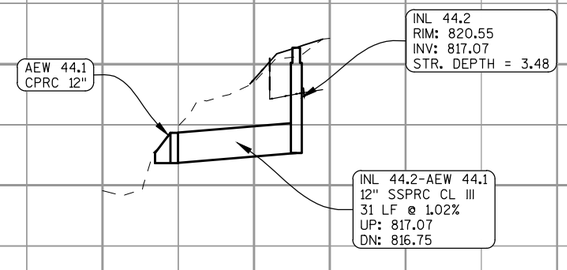
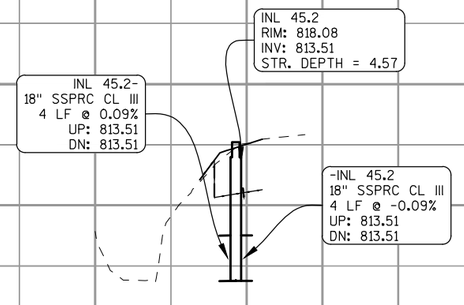
- FOR INLETS AND MANHOLES, THE STATION AND OFFSET LOCATION IS THE CENTER OF STRUCTURE.
- FOR APRON ENDWALLS, THE STATION AND OFFSET LOCATION REFERS TO THE POINT WHERE THE ENDWALL MEETS THE ADJACENT PIPE.
- STRUCTURE DEPTH SHOWN ON PLANS IS MEASURED FROM THE STRUCTURE RIM ELEVATION TO THE STRUCTURE INVERT ELEVATION
- THE CONTRACTOR SHALL VERIFY THE ELEVATION OF THE EXISTING PIPES AND STRUCTURES AT THE CONNECTION POINTS TO THE PROPOSED STORM SEWER PRIOR TO BEGINNING WORK







832 828 824 820 816 812

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: SOUTHBOUND OFF-RAMP (VCC)	SHEET 91	E

2

Cross Drain AEW South
EOEW 838.96

Cross Drain AEW North
EOEW 840.05

~ STA 142'NB'+50
144 ' - 36" CPRC
CL IV

AEW 41.1
CPRC 12"
393+51.0'NB'
-57.5' LT

INL 41.2
2X3-H
393+64.0'NB'
-26.7' LT

143'EB'

394'NB'

395'NB'

396'NB'

393'NB'

392'NB'

391'NB'

390'NB'

REMOVE MH

INL 40.2
4-FT DIA - HM-S
394+00.8'NB', 33.5 RT

INL 40.3
4-FT DIA - HM-S
394+15.8'NB', 33.5 RT

REMOVE EXISTING
STORM SEWER

INL 40.4
4-FT DIA - HM
395+58.0'NB', 30.0 RT

REMOVE EXISTING
STORM SEWER

REMOVE EXISTING
STORM SEWER

REMOVE MH

INL 40.1
4-FT DIA - HM
391+85.0'NB', 30.5 RT

REMOVE MH

AEW 40.0
CPRC 24"
391+64.0'NB', 57.3 RT

REMOVE EXISTING
STORM SEWER

NOTES:
- FOR MANHOLE STRUCTURES, RIM ELEVATION IS THE CENTER OF STRUCTURE.
- FOR INLET STRUCTURES, 2x3, 2x2.5 AND 4' DIA, RIM ELEVATION IS THE MIDPOINT AT THE FLANGE LINE.
- FOR MEDIAN INLETS, RIM ELEVATION IS THE CENTER OF THE STRUCTURE
- FOR INLETS AND MANHOLES, THE STATION AND OFFSET LOCATION IS THE CENTER OF STRUCTURE.
- FOR APRON ENDWALLS, THE STATION AND OFFSET LOCATION REFERS TO THE POINT WHERE THE ENDWALL MEETS THE ADJACENT PIPE.
- STRUCTURE DEPTH SHOWN ON PLANS IS MEASURED FROM THE STRUCTURE RIM ELEVATION TO THE STRUCTURE INVERT ELEVATION
- THE CONTRACTOR SHALL VERIFY THE ELEVATION OF THE EXISTING PIPES AND STRUCTURES AT THE CONNECTION POINTS TO THE PROPOSED STORM SEWER PRIOR TO BEGINNING WORK

852
848
844
840
836
832

INL 41.2
~~RIM: 845.81~~
~~INV: 840.39~~
~~STR. DEPTH = 5.42~~

INL 41.2
RIM: 845.92
INV: 841.02
STR. Depth: 4.90

AEW 41.1
EOEW 839.88

AEW 41.1
CPRC 12"

INL 41.2-AEW 41.1
12" SSPRC CL III
34 LF @ -2.00%
UP: 840.39
DN: 839.72

INL 40.1
~~RIM: 845.03~~
~~INV: 837.40~~
~~STR. DEPTH = 7.63~~

INL 40.1
RIM: 844.99
INV: 838.04
STR. Depth: 6.95

AEW 40.0
CPRC 24"

AEW 40.0
EOEW 837.50

INL 40.1-AEW 40.0
24" SSPRC CL III
34 LF @ 0.41%
UP: 837.40
DN: 837.26

INL 40.2
~~RIM: 842.74~~
~~INV: 838.23~~
~~STR. DEPTH = 4.51~~

INL 40.2
RIM: 842.67
INV: 838.47
STR. Depth: 4.20

INL 40.2-INL 40.1
24" SSPRC CL IV
208 LF @ 0.40%
UP: 838.23
DN: 837.40

INL 40.3
~~RIM: 842.73~~
~~INV: 838.29~~
~~STR. DEPTH = 4.44~~

INL 40.3
RIM: 842.68
INV: 838.63
STR. Depth: 4.05

INL 40.3-INL 40.2
24" SSPRC CL IV
14 LF @ 0.42%
UP: 838.29
DN: 838.23

INL 40.4
~~RIM: 843.96~~
~~INV: 839.08~~
~~STR. DEPTH = 4.88~~

INL 40.4
RIM: 843.86
INV: 839.56
STR. Depth: 4.30

INL 40.4-INL 40.3
24" SSPRC CL IV
136 LF @ 0.40%
UP: 839.08
DN: 838.54

PROJECT NO: 1420-22-17	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: USH 45	SHEET 92	E

NOTES:
- FOR MANHOLE STRUCTURES, RIM ELEVATION IS THE CENTER OF STRUCTURE.
- FOR INLET STRUCTURES, 2x3, 2x2.5 AND 4' DIA, RIM ELEVATION IS THE MIDPOINT AT THE FLANGE LINE.
- FOR MEDIAN INLETS, RIM ELEVATION IS THE CENTER OF THE STRUCTURE
- FOR INLETS AND MANHOLES, THE STATION AND OFFSET LOCATION IS THE CENTER OF STRUCTURE.
- FOR APRON ENDWALLS, THE STATION AND OFFSET LOCATION REFERS TO THE POINT WHERE THE ENDWALL MEETS THE ADJACENT PIPE.
- STRUCTURE DEPTH SHOWN ON PLANS IS MEASURED FROM THE STRUCTURE RIM ELEVATION TO THE STRUCTURE INVERT ELEVATION
- THE CONTRACTOR SHALL VERIFY THE ELEVATION OF THE EXISTING PIPES AND STRUCTURES AT THE CONNECTION POINTS TO THE PROPOSED STORM SEWER PRIOR TO BEGINNING WORK

INL 41.2
2X3-H
393+64.0'NB'
-26.7' LT

INL 40.2
4-FT DIA - HM-S
394+00.8'NB', 33.5 RT

INL 40.3
4-FT DIA - HM-S
394+15.8'NB', 33.5 RT

INL 40.4
4-FT DIA - HM
395+58.0'NB', 30.0 RT

INL 40.5
MEDIAN 1 GRATE-MS
397+25.0'NB', 38.1 RT

INL 40.6
MEDIAN 1 GRATE-MS
398+71.8'NB', -30.5 LT

REMOVE MH

REMOVE MH

REMOVE EXISTING STORM SEWER

REMOVE EXISTING STORM SEWER

REMOVE INLET

Sanitary Line routed around INL 40.6. Runs within 1' of the north side of the structure.

INL 40.5 was placed ~0.4' over a fiber optic line. The last ~30' of pipe from INL 40.4, STR 40.5, and the first ~20' of pipe from INL 40.5 are all at a higher elevation than plan depth in order to avoid hitting the fiber optic line.

INL 40.2
RIM: 842.67
INV: 838.47
STR. Depth: 4.20

INL 40.3
RIM: 842.68
INV: 838.63
STR. Depth: 4.05

INL 40.4
RIM: 843.86
INV: 839.56
STR. Depth: 4.30

INL 40.5
RIM: 844.19
INV: 840.19
STR. Depth: 4.00

INL 40.6
RIM: 846.19
INV: 841.44
STR. Depth: 4.75

~~INL 40.2~~
~~RIM: 842.74~~
~~INV: 838.23~~
~~STR. DEPTH = 4.51~~

~~INL 40.3~~
~~RIM: 842.73~~
~~INV: 838.29~~
~~STR. DEPTH = 4.44~~

~~INL 40.4~~
~~RIM: 843.96~~
~~INV: 839.08~~
~~STR. DEPTH = 4.88~~

~~INL 40.5~~
~~RIM: 844.00~~
~~INV: 839.72~~
~~STR. DEPTH = 4.26~~

~~INL 40.6~~
~~RIM: 846.58~~
~~INV: 840.36~~
~~STR. DEPTH = 6.22~~

INL 40.3-INL 40.2
24" SSPRC CL IV
14 LF @ 0.42%
UP: 838.29
DN: 838.23

INL 40.4-INL 40.3
24" SSPRC CL IV
136 LF @ 0.40%
UP: 839.08
DN: 838.54

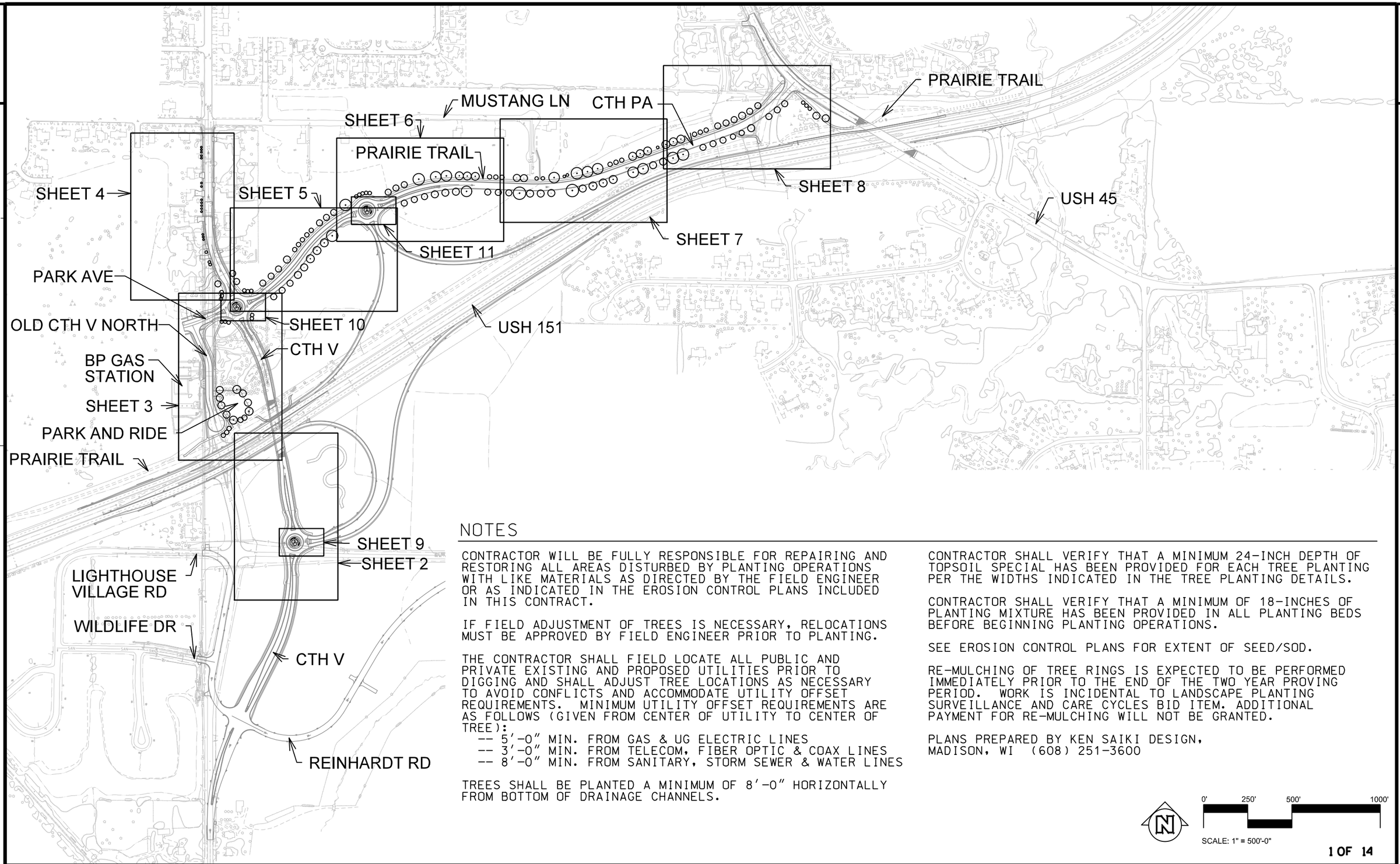
INL 40.5-INL 40.4
24" SSPRC CL IV
161 LF @ 0.40%
UP: 839.72
DN: 839.08

INL 40.6-INL 40.5
24" SSPRC CL IV
162 LF @ 0.40%
UP: 840.36
DN: 839.72

852 848 844 840 836 832

PROJECT NO: 1420-22-17	HWY: USH 151	COUNTY: FOND DU LAC	STORM SEWER: USH 45	SHEET 93	E

2



NOTES

CONTRACTOR WILL BE FULLY RESPONSIBLE FOR REPAIRING AND RESTORING ALL AREAS DISTURBED BY PLANTING OPERATIONS WITH LIKE MATERIALS AS DIRECTED BY THE FIELD ENGINEER OR AS INDICATED IN THE EROSION CONTROL PLANS INCLUDED IN THIS CONTRACT.

IF FIELD ADJUSTMENT OF TREES IS NECESSARY, RELOCATIONS MUST BE APPROVED BY FIELD ENGINEER PRIOR TO PLANTING.

THE CONTRACTOR SHALL FIELD LOCATE ALL PUBLIC AND PRIVATE EXISTING AND PROPOSED UTILITIES PRIOR TO DIGGING AND SHALL ADJUST TREE LOCATIONS AS NECESSARY TO AVOID CONFLICTS AND ACCOMMODATE UTILITY OFFSET REQUIREMENTS. MINIMUM UTILITY OFFSET REQUIREMENTS ARE AS FOLLOWS (GIVEN FROM CENTER OF UTILITY TO CENTER OF TREE):

-- 5'-0" MIN. FROM GAS & UG ELECTRIC LINES
-- 3'-0" MIN. FROM TELECOM, FIBER OPTIC & COAX LINES
-- 8'-0" MIN. FROM SANITARY, STORM SEWER & WATER LINES

TREES SHALL BE PLANTED A MINIMUM OF 8'-0" HORIZONTALLY FROM BOTTOM OF DRAINAGE CHANNELS.

CONTRACTOR SHALL VERIFY THAT A MINIMUM 24-INCH DEPTH OF TOPSOIL SPECIAL HAS BEEN PROVIDED FOR EACH TREE PLANTING PER THE WIDTHS INDICATED IN THE TREE PLANTING DETAILS.

CONTRACTOR SHALL VERIFY THAT A MINIMUM OF 18-INCHES OF PLANTING MIXTURE HAS BEEN PROVIDED IN ALL PLANTING BEDS BEFORE BEGINNING PLANTING OPERATIONS.

SEE EROSION CONTROL PLANS FOR EXTENT OF SEED/SOD.

RE-MULCHING OF TREE RINGS IS EXPECTED TO BE PERFORMED IMMEDIATELY PRIOR TO THE END OF THE TWO YEAR PROVING PERIOD. WORK IS INCIDENTAL TO LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES BID ITEM. ADDITIONAL PAYMENT FOR RE-MULCHING WILL NOT BE GRANTED.

PLANS PREPARED BY KEN SAIKI DESIGN,
MADISON, WI (608) 251-3600

0' 250' 500' 1000'

SCALE: 1" = 500'-0"

1 OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN LAYOUT - OVERVIEW	SHEET	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn PLOT DATE : 30-APRIL-2015 PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ
WISDOT/CADDS SHEET 42

2

LEGEND

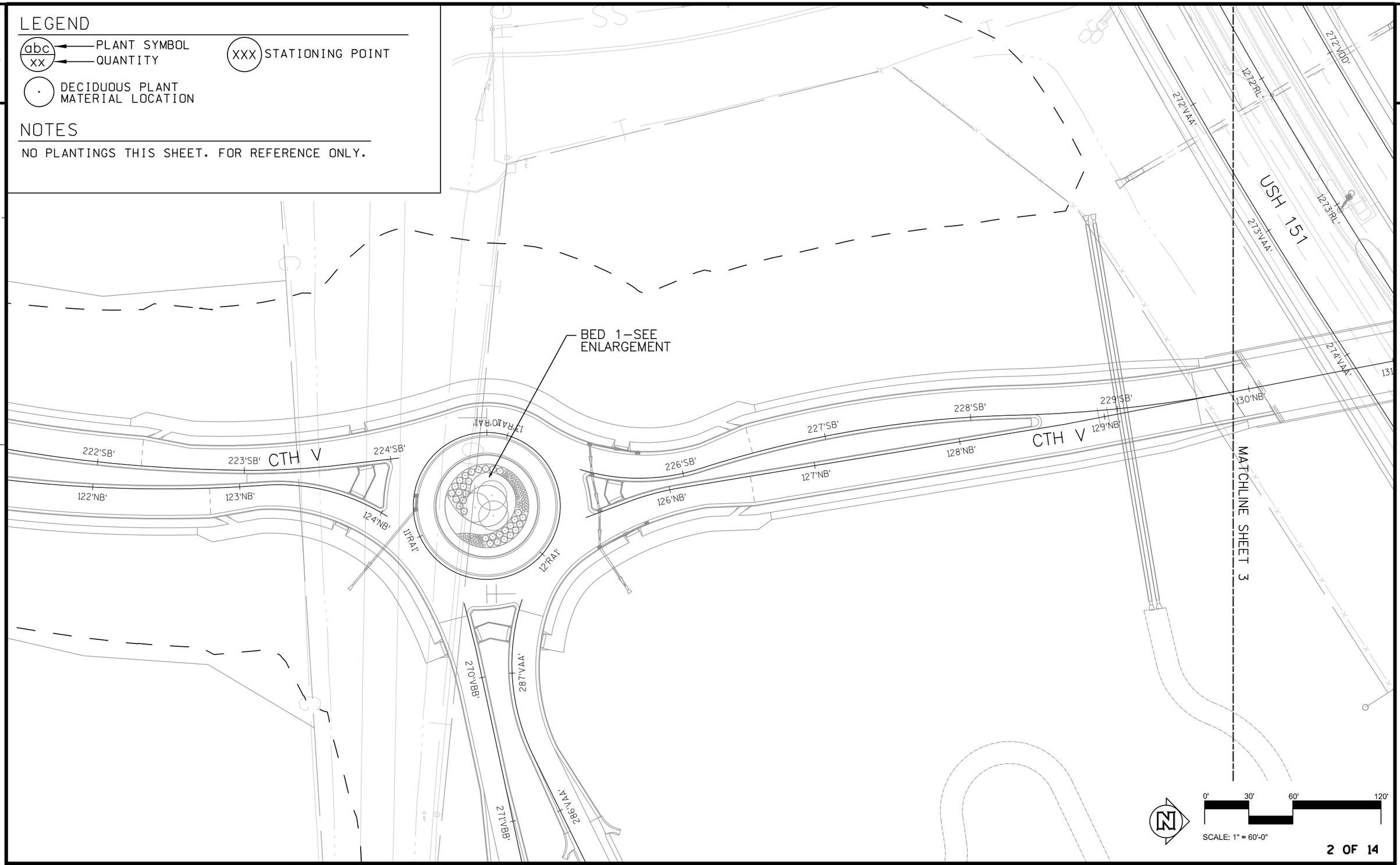
(abc / xx) ← PLANT SYMBOL / QUANTITY

(XXX) STATIONING POINT

(·) DECIDUOUS PLANT MATERIAL LOCATION

NOTES

NO PLANTINGS THIS SHEET. FOR REFERENCE ONLY.



2 OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN	SHEET 95	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn

PLOT DATE : 30-APRIL-2015

PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

WISDOT/CADDS SHEET 42

LEGEND

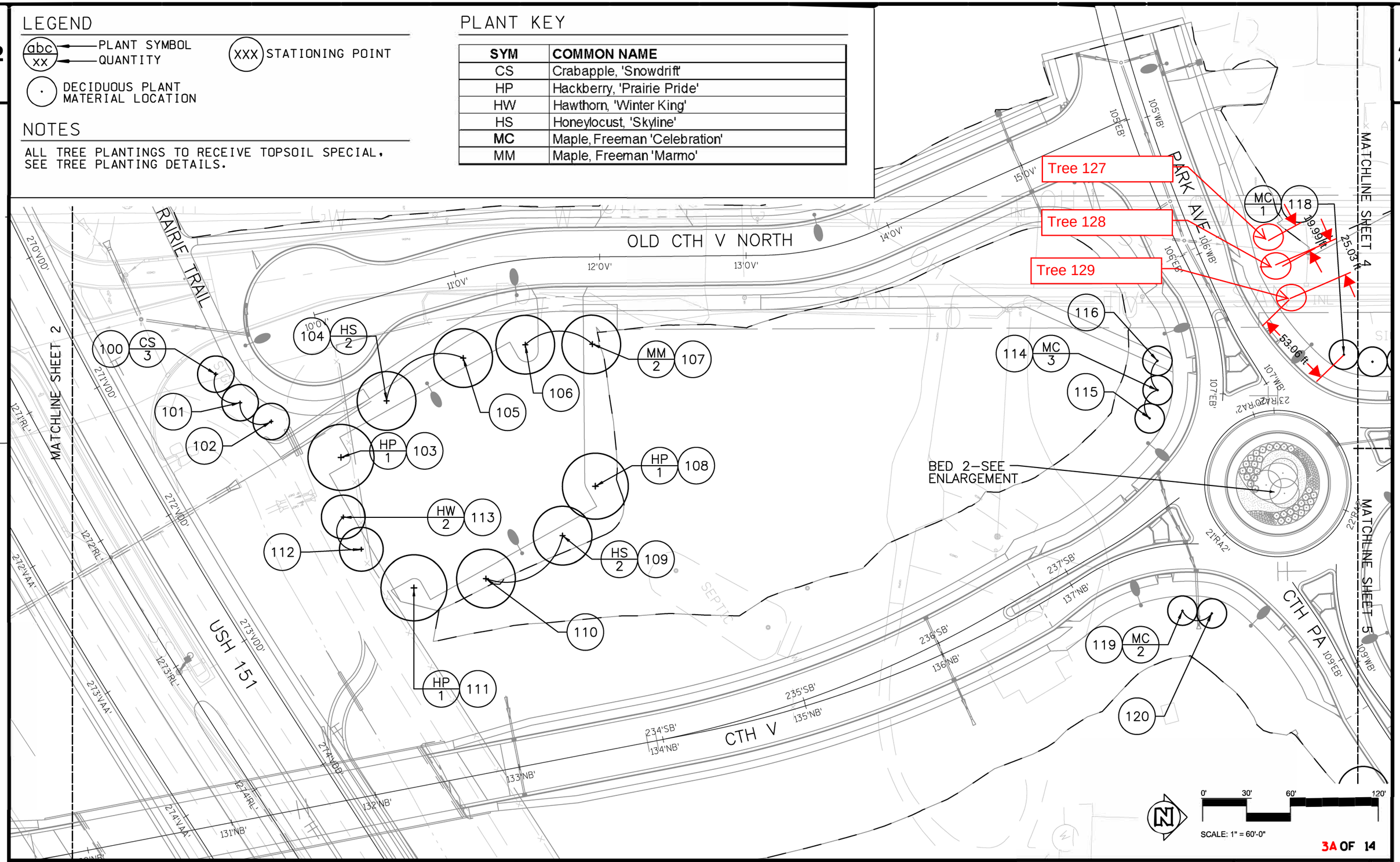
- abc / xx — PLANT SYMBOL / QUANTITY
- XXX — STATIONING POINT
- · — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL. SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
CS	Crabapple, 'Snowdrift'
HP	Hackberry, 'Prairie Pride'
HW	Hawthorn, 'Winter King'
HS	Honeylocust, 'Skyline'
MC	Maple, Freeman 'Celebration'
MM	Maple, Freeman 'Marmo'



3A OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN - PAID AS	SHEET 96	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 – Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn PLOT DATE : 30-APRIL-2015 PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

WISDOT/CADDS SHEET 42

LEGEND

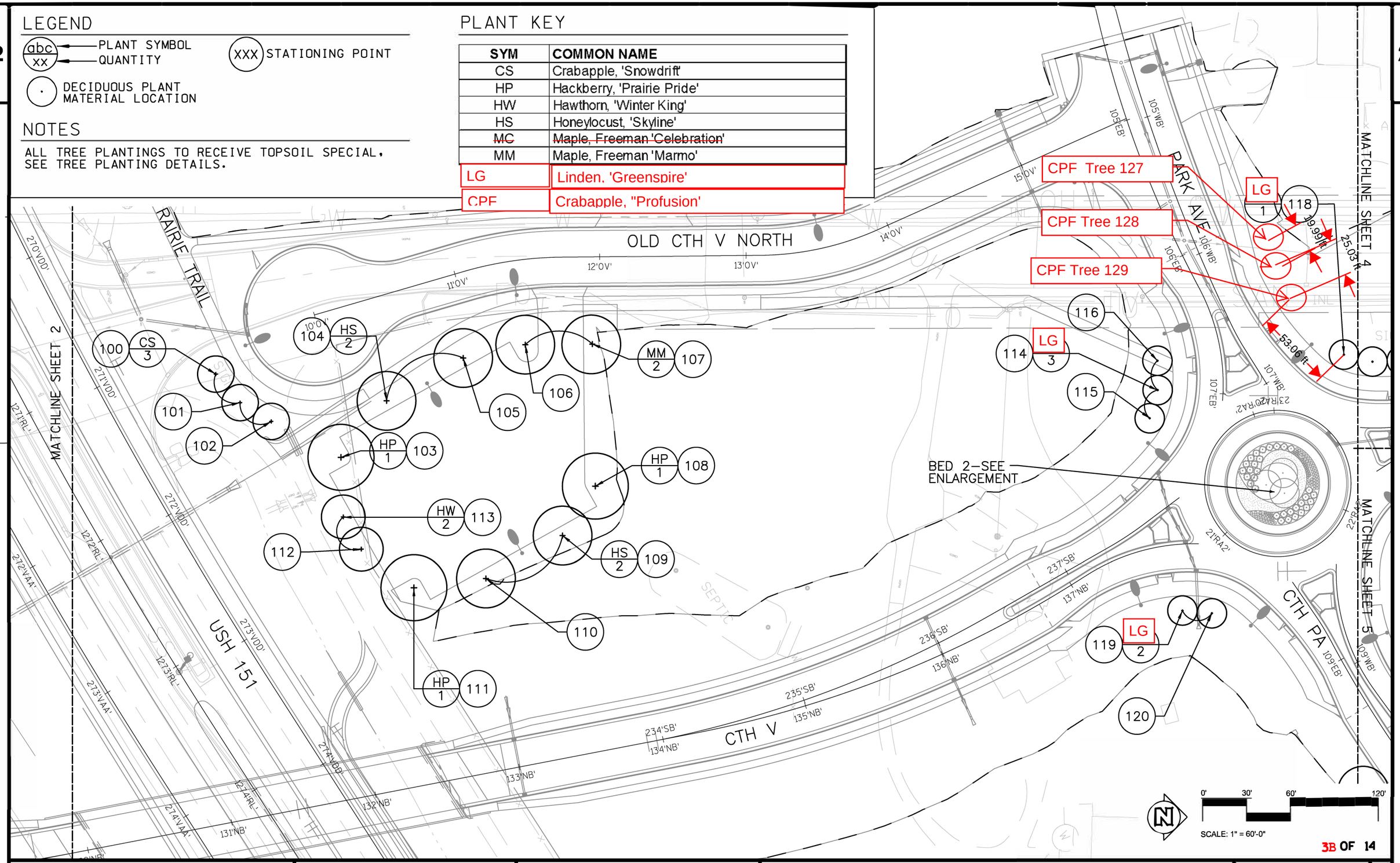
- abc / xx — PLANT SYMBOL / QUANTITY
- XXX — STATIONING POINT
- · — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL. SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
CS	Crabapple, 'Snowdrift'
HP	Hackberry, 'Prairie Pride'
HW	Hawthorn, 'Winter King'
HS	Honeylocust, 'Skyline'
~~MC~~	~~Maple, Freeman 'Celebration'~~
MM	Maple, Freeman 'Marmo'
LG	Linden, 'Greenspire'
CPF	Crabapple, "Profusion'



3B OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN - IN-GROUND	SHEET 96	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn
PLOT DATE : 30-APRIL-2015
PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ
WISDOT/CADDS SHEET 42

LEGEND

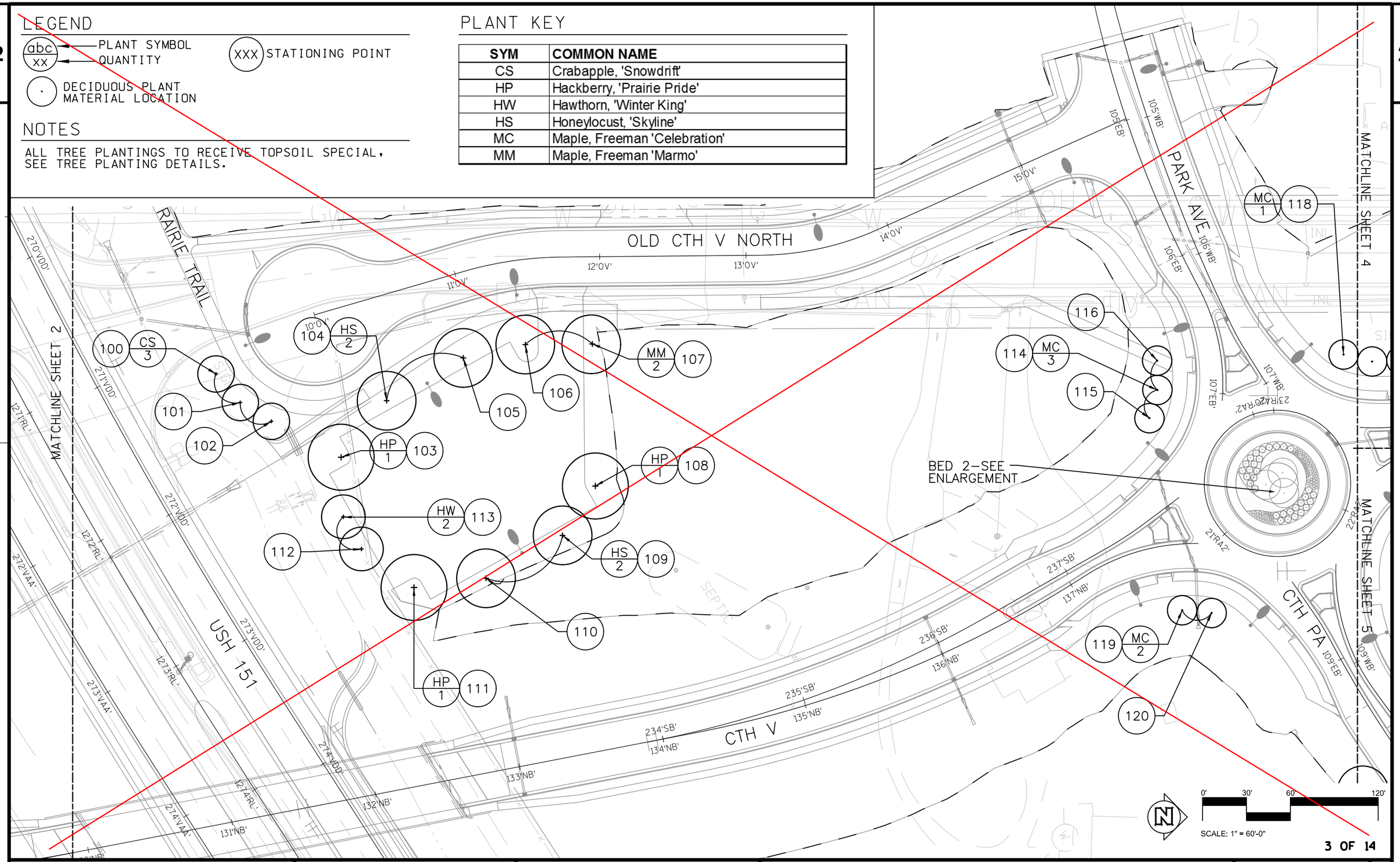
- abc / xx — PLANT SYMBOL / QUANTITY
- XXX — STATIONING POINT
- · — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL, SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
CS	Crabapple, 'Snowdrift'
HP	Hackberry, 'Prairie Pride'
HW	Hawthorn, 'Winter King'
HS	Honeylocust, 'Skyline'
MC	Maple, Freeman 'Celebration'
MM	Maple, Freeman 'Marmo'



3 OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN	SHEET	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 – Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn
PLOT DATE : 30-APRIL-2015
PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ
WISDOT/CADDS SHEET 42

LEGEND

abc / xx — PLANT SYMBOL / QUANTITY

(XXX) STATIONING POINT

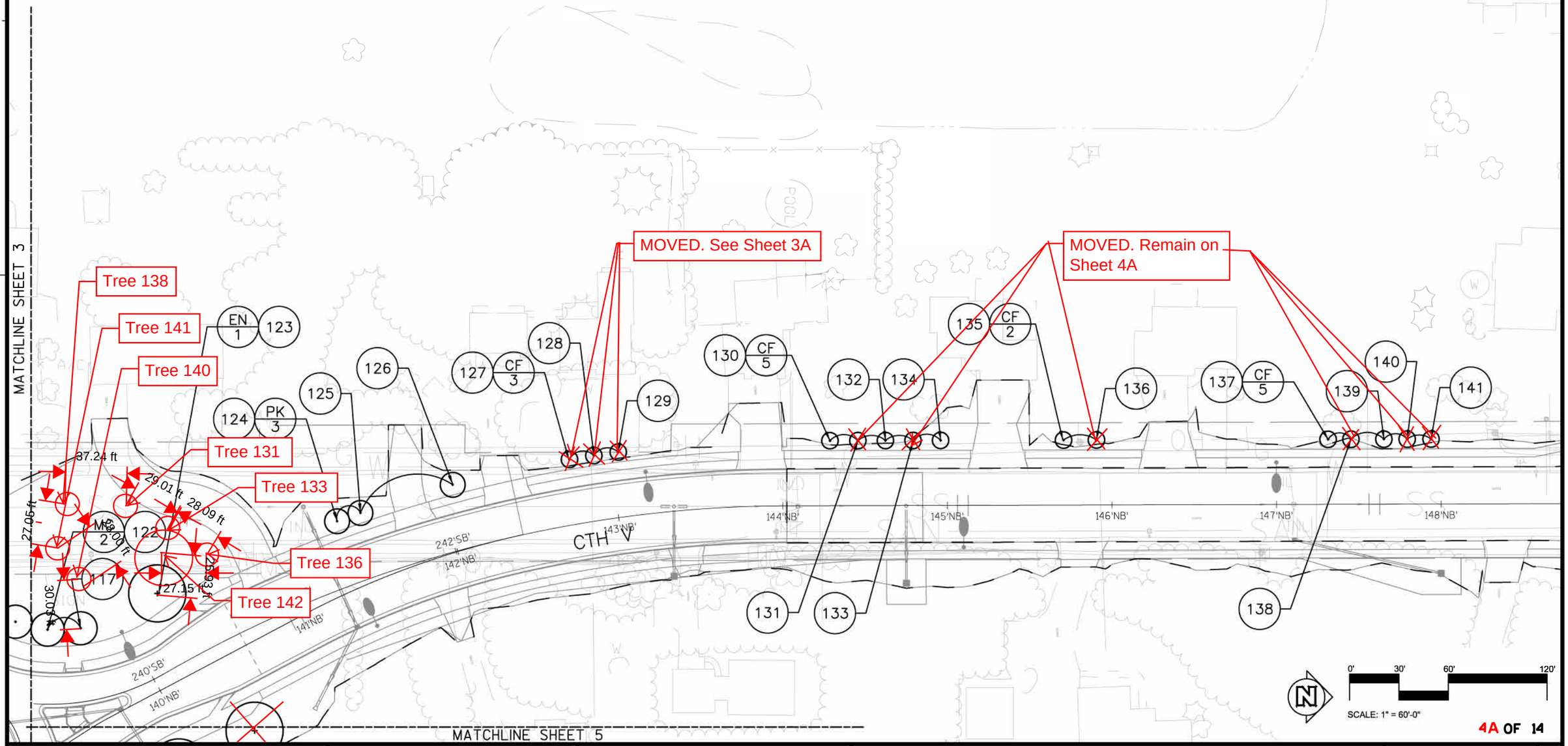
(·) DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL. SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
CF	Crabapple, 'Firebird'
EN	Elm, 'New Horizon'
MC	Maple, Freeman 'Celebration'
PK	Pear,'Korean Sun'



LEGEND

abc / xx — PLANT SYMBOL / QUANTITY

XXX — STATIONING POINT

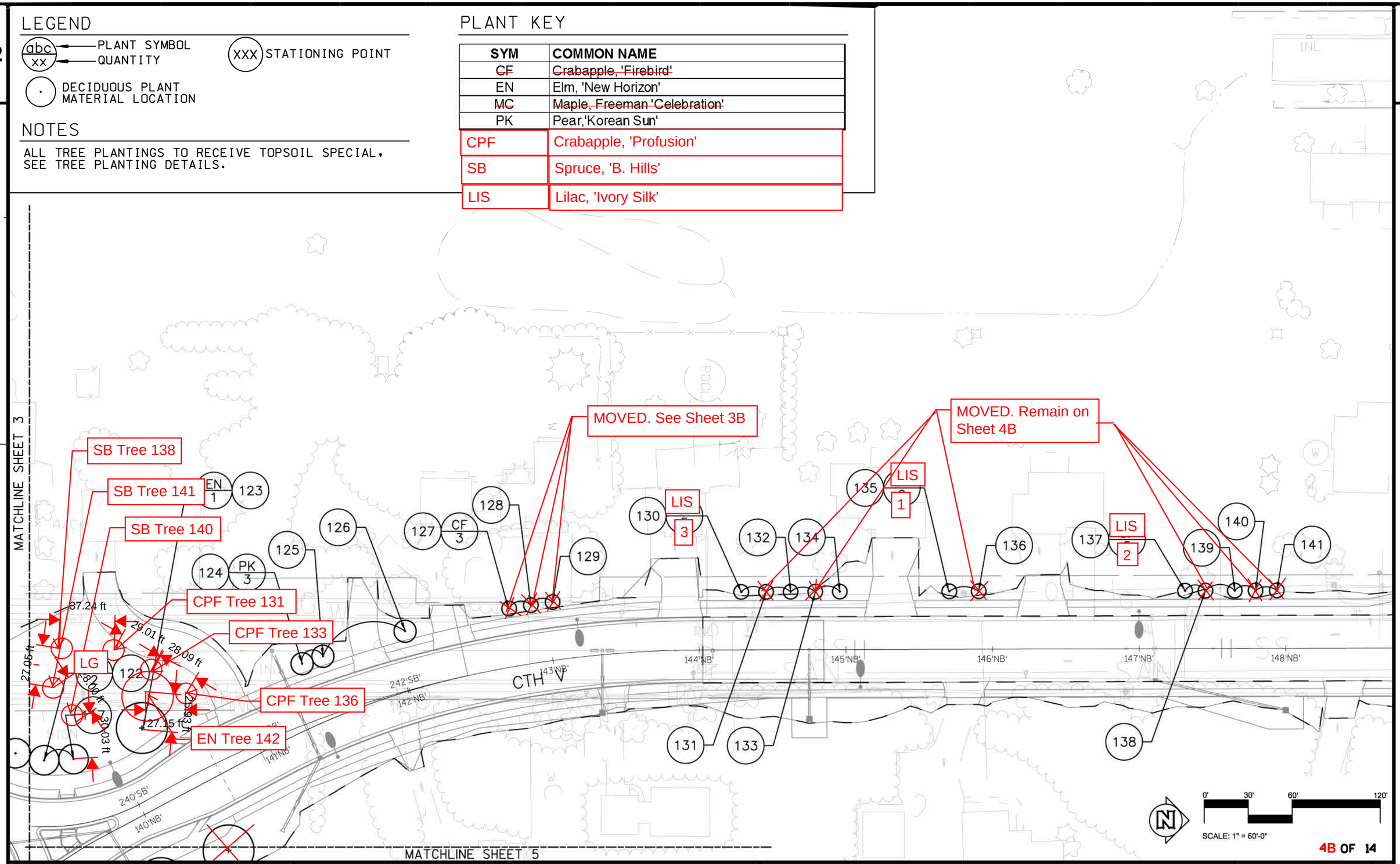
· — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL. SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
~~CF~~	~~Crabapple, 'Firebird'~~
EN	Elm, 'New Horizon'
~~MC~~	~~Maple, Freeman 'Celebration'~~
PK	Pear,'Korean Sun'
CPF	Crabapple, 'Profusion'
SB	Spruce, 'B. Hills'
LIS	Lilac, 'Ivory Silk'



4B OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN - IN-GROUND	SHEET	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn PLOT DATE : 30-APRIL-2015 PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

WISDOT/CADDS SHEET 42

LEGEND

abc / xx — PLANT SYMBOL / QUANTITY

(XXX) STATIONING POINT

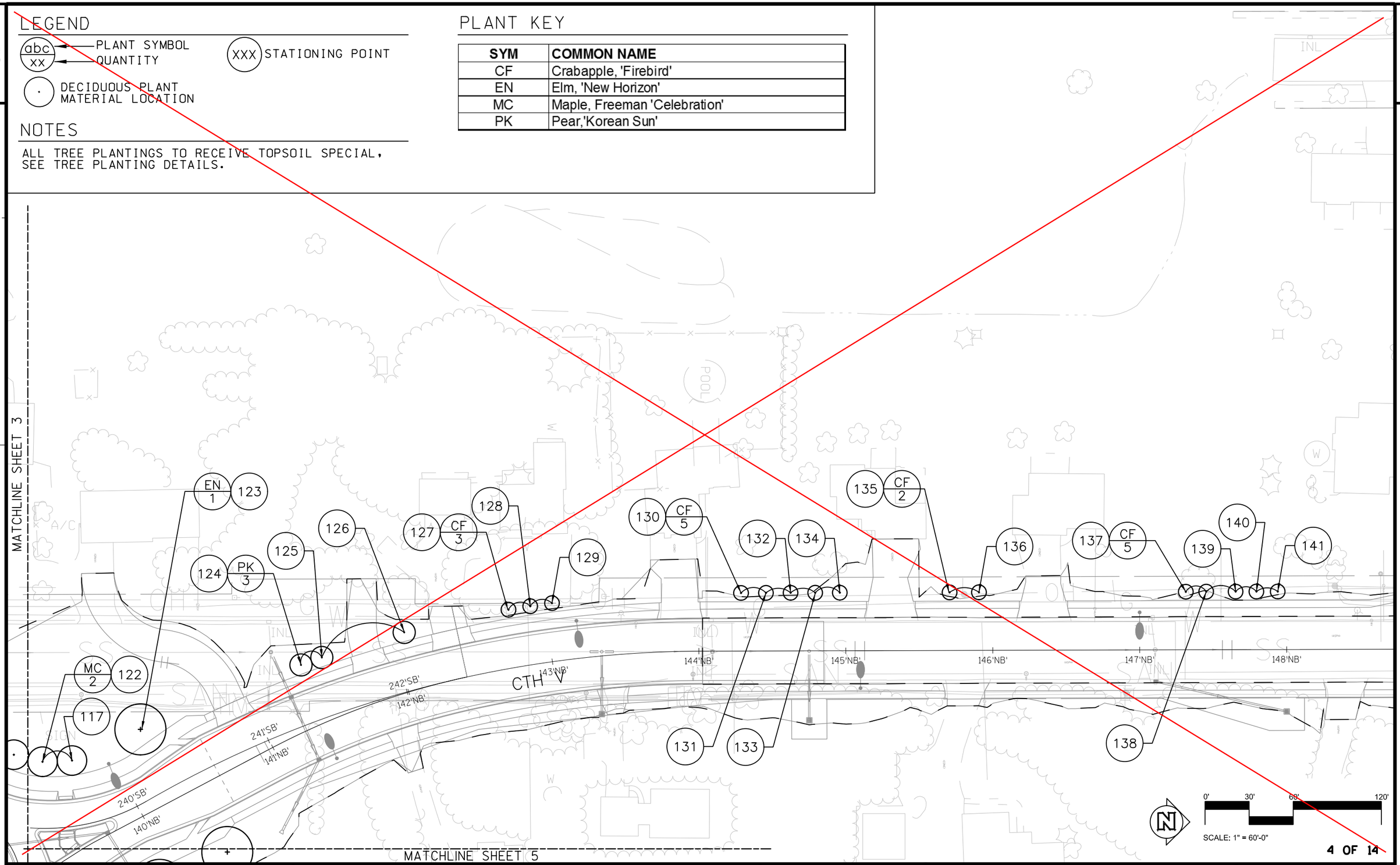
(·) DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL, SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
CF	Crabapple, 'Firebird'
EN	Elm, 'New Horizon'
MC	Maple, Freeman 'Celebration'
PK	Pear,'Korean Sun'



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN	SHEET E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn PLOT DATE : 30-APRIL-2015 PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

2

MATCHLINE SHEET 4

MATCHLINE SHEET 6

MATCHLINE SHEET 3

MOVED. See Sheet 4A

REMOVED

REMOVED

PRAIRIE TRAIL

CTH PA

116'WB'

116'EB'

115'WB'

115'EB'

114'WB'

114'EB'

113'WB'

113'EB'

112'WB'

112'EB'

111'WB'

111'EB'

110'WB'

110'EB'

109'WB'

109'EB'

33'RA30'

31'RA3'

28'VCC'

282'VCC'

28'VCC'

283'VCC'

22'RA2'

EN 2 142

143

MC 3 144

145

146

147 EN 3

148

149

150 MM 1

151 OE 5

152

153

154

155

156 EN 3

157

158

159 EN 3

160

161

162 MM 2

163

164 HP 3

165

166

167 OS 1

LEGEND

abc / xx — PLANT SYMBOL / QUANTITY

XXX STATIONING POINT

· DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL, SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
EN	Elm, 'New Horizon'
HP	Hackberry, 'Prairie Pride'
MC	Maple, Freeman 'Celebration'
MM	Maple, Freeman 'Marmo'
OE	Oak, English 'Skymaster'
OS	Oak, Swamp White

0' 30' 60' 120'

SCALE: 1" = 60'-0"

5A OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN - PAID AS	SHEET	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn

PLOT DATE : 30-APRIL-2015

PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

WISDOT/CADDS SHEET 42

MATCHLINE SHEET 4

MOVED. See Sheet 4B

REMOVED

REMOVED

OB 3

LG 3

EN 3

EN 2

MM 1

HP 3

MM 2

OS 1

EN 3

EN 3

PRAIRIE TRAIL

CTH PA

142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167

116'WB' 115'WB' 114'WB' 113'WB' 112'WB' 111'WB' 110'WB' 109'WB'

116'EB' 115'EB' 114'EB' 113'EB' 112'EB' 111'EB' 110'EB' 109'EB'

33'RA 30'RA 3' 31'RA 3' 22'RA 2'

288'VCC' 282'VCC' 287'VCC' 283'VCC'

MATCHLINE SHEET 3

MATCHLINE SHEET 6

2

LEGEND

- abc / xx — PLANT SYMBOL / QUANTITY
- XXX — STATIONING POINT
- · — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL, SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
EN	Elm, 'New Horizon'
HP	Hackberry, 'Prairie Pride'
~~MC~~	~~Maple, Freeman 'Celebration'~~
MM	Maple, Freeman 'Marmo'
~~OE~~	~~Oak, English 'Skymaster'~~
OS	Oak, Swamp White
OB	Oak, Bur
LG	Linden, 'Greenspire'

N

0' 30' 60' 120'

SCALE: 1" = 60'-0"

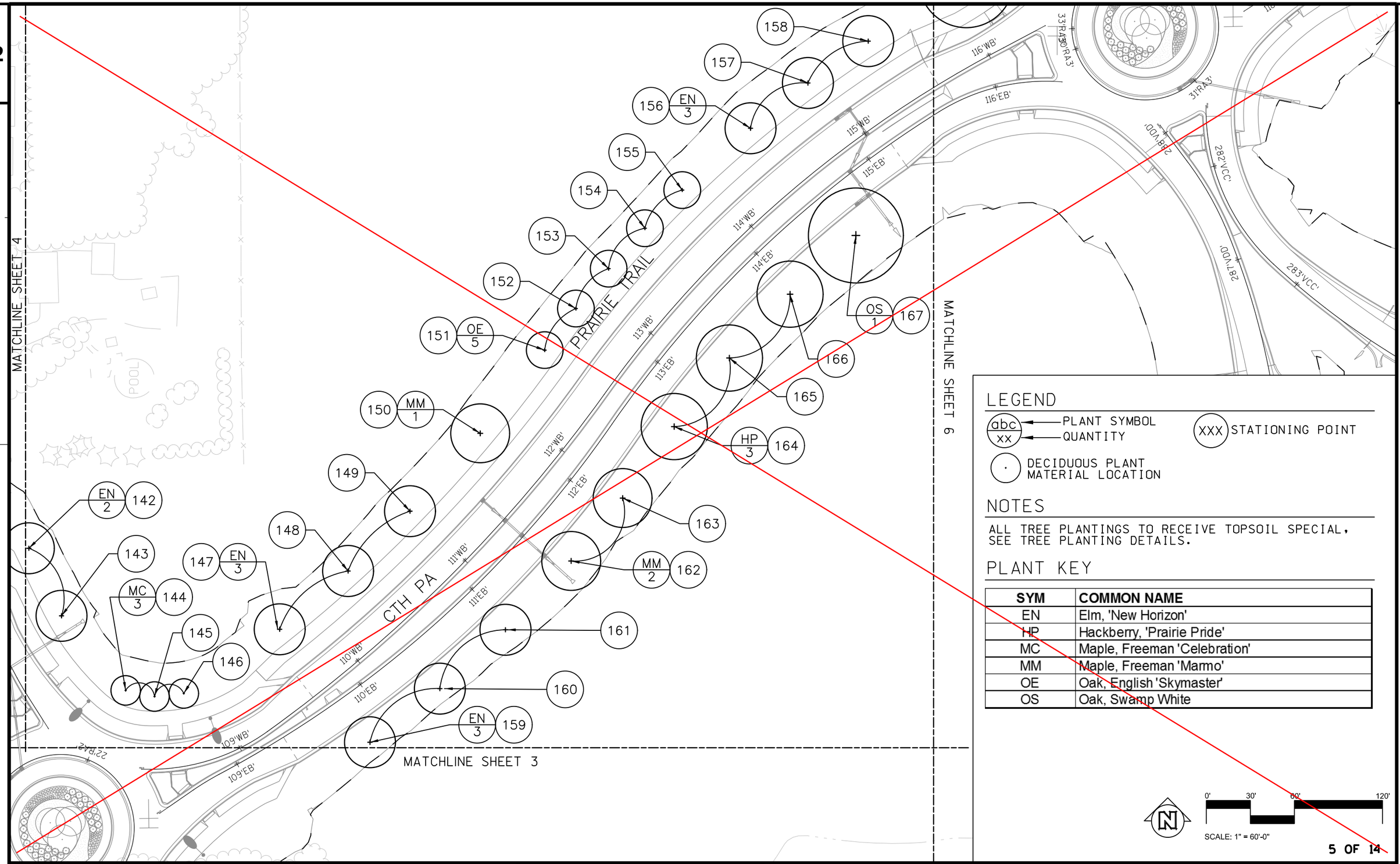
5B OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN - IN-GROUND	SHEET 98	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn

PLOT DATE : 30-APRIL-2015

PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ



LEGEND

- abc / xx — PLANT SYMBOL / QUANTITY
- XXX — STATIONING POINT
- · — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL, SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
EN	Elm, 'New Horizon'
HP	Hackberry, 'Prairie Pride'
MC	Maple, Freeman 'Celebration'
MM	Maple, Freeman 'Marmo'
OE	Oak, English 'Skymaster'
OS	Oak, Swamp White

N

0' 30' 60' 120'

SCALE: 1" = 60'-0"

5 OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN	SHEET	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn PLOT DATE : 30-APRIL-2015 PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

WISDOT/CADDS SHEET 42

LEGEND

abc / xx — PLANT SYMBOL / QUANTITY

XXX — STATIONING POINT

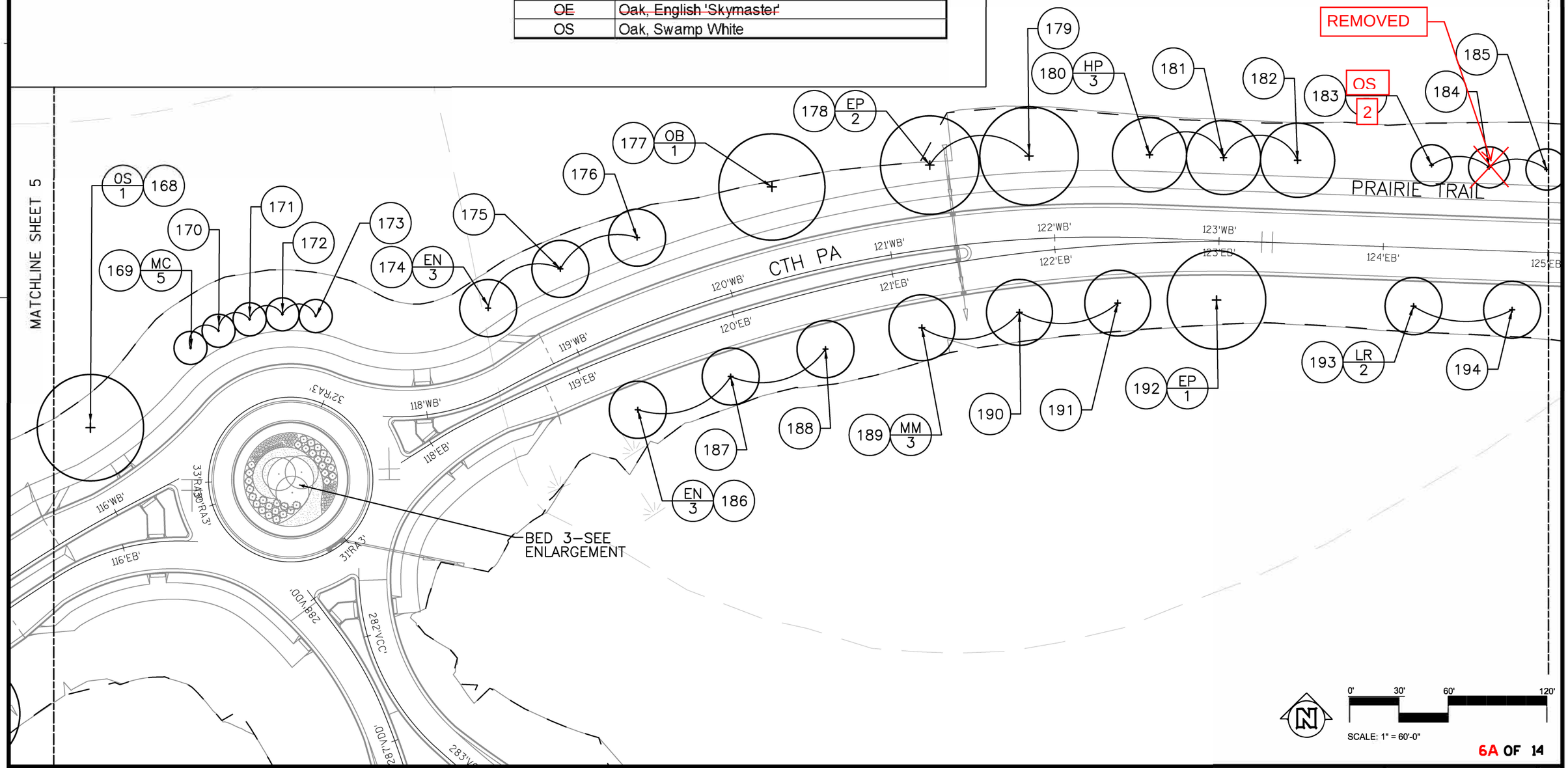
· — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL. SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
EN	Elm, 'New Horizon'
EP	Elm, 'Princeton'
HP	Hackberry, 'Prairie Pride'
LR	Linden, 'Redmond'
MC	Maple, Freeman 'Celebration'
MM	Maple, Freeman 'Marmo'
OB	Oak, Bur
~~OE~~	~~Oak, English 'Skymaster'~~
OS	Oak, Swamp White



6A OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN - PAID AS	SHEET	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn PLOT DATE : 30-APRIL-2015 PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

WISDOT/CADDS SHEET 42

LEGEND

abc / xx — PLANT SYMBOL / QUANTITY

XXX — STATIONING POINT

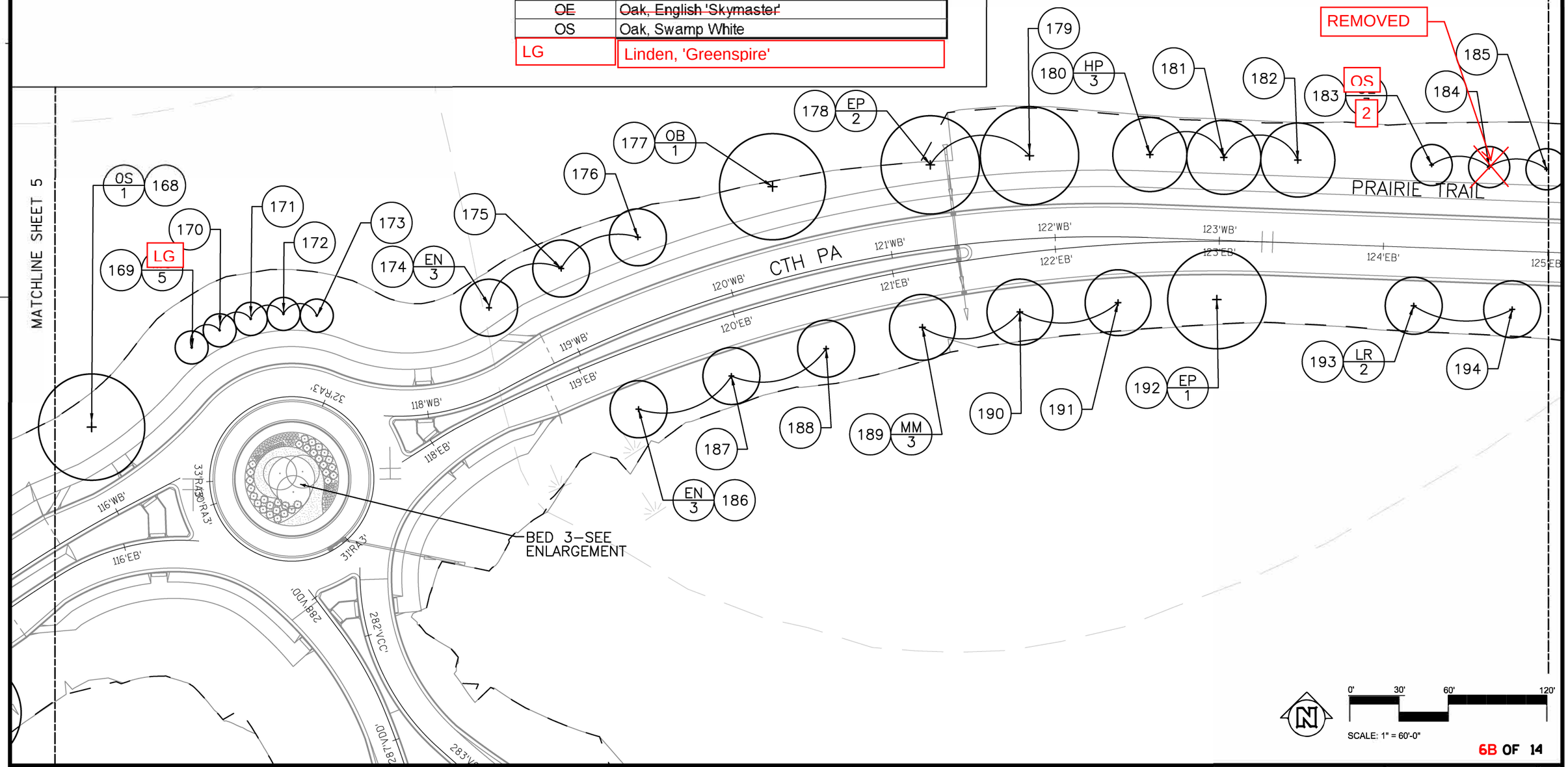
· — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL. SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
EN	Elm, 'New Horizon'
EP	Elm, 'Princeton'
HP	Hackberry, 'Prairie Pride'
LR	Linden, 'Redmond'
~~MC~~	~~Maple, Freeman 'Celebration'~~
MM	Maple, Freeman 'Marmo'
OB	Oak, Bur
~~OE~~	~~Oak, English 'Skymaster'~~
OS	Oak, Swamp White
LG	Linden, 'Greenspire'



6B OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN - IN-GROUND	SHEET	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn PLOT DATE : 30-APRIL-2015 PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

WISDOT/CADDS SHEET 42

LEGEND

abc / xx — PLANT SYMBOL / QUANTITY

XXX — STATIONING POINT

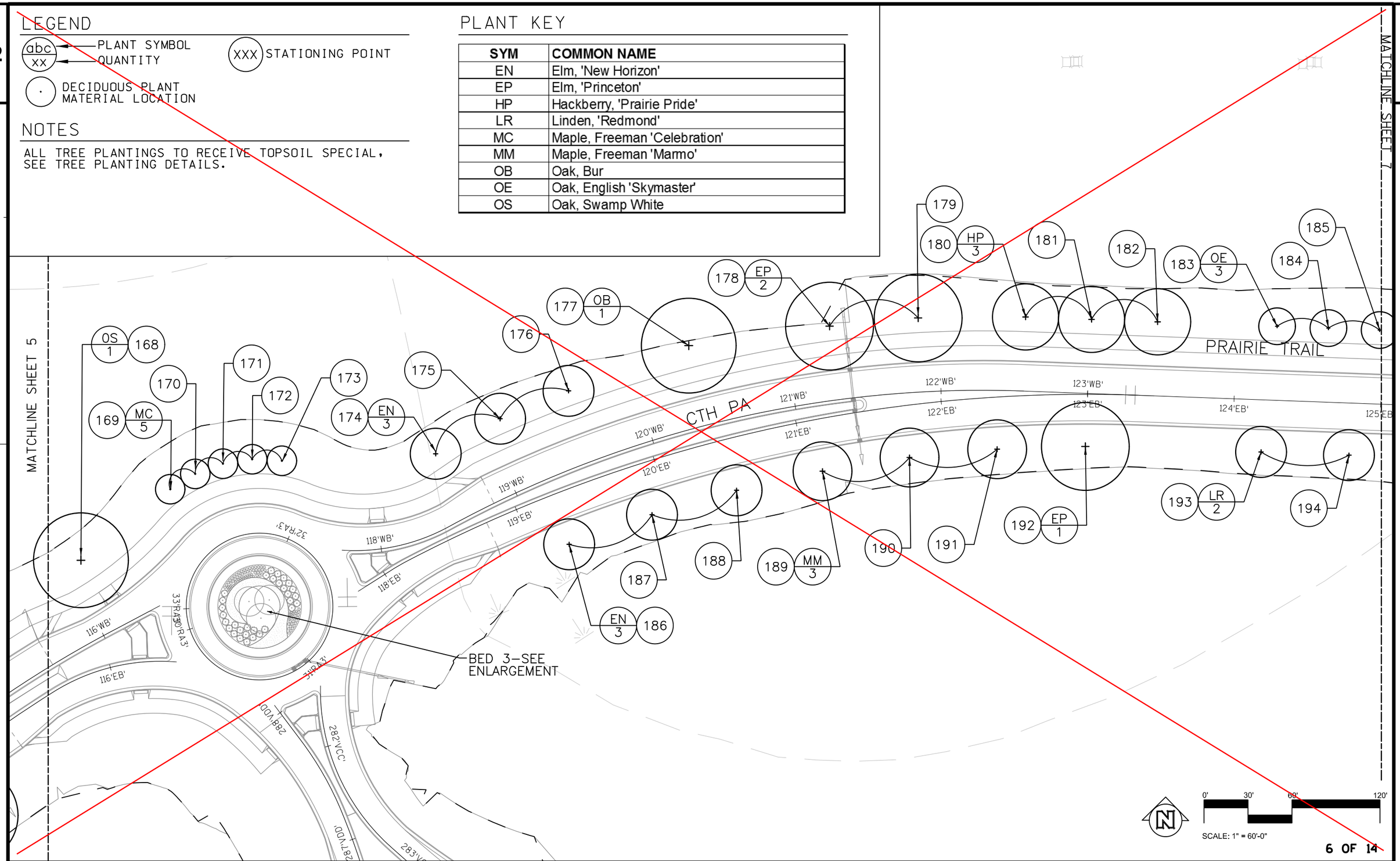
· — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL, SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
EN	Elm, 'New Horizon'
EP	Elm, 'Princeton'
HP	Hackberry, 'Prairie Pride'
LR	Linden, 'Redmond'
MC	Maple, Freeman 'Celebration'
MM	Maple, Freeman 'Marmo'
OB	Oak, Bur
OE	Oak, English 'Skymaster'
OS	Oak, Swamp White



6 OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN	SHEET	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn PLOT DATE : 30-APRIL-2015 PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

WISDOT/CADDS SHEET 42

LEGEND

abc / xx — PLANT SYMBOL / QUANTITY

XXX — STATIONING POINT

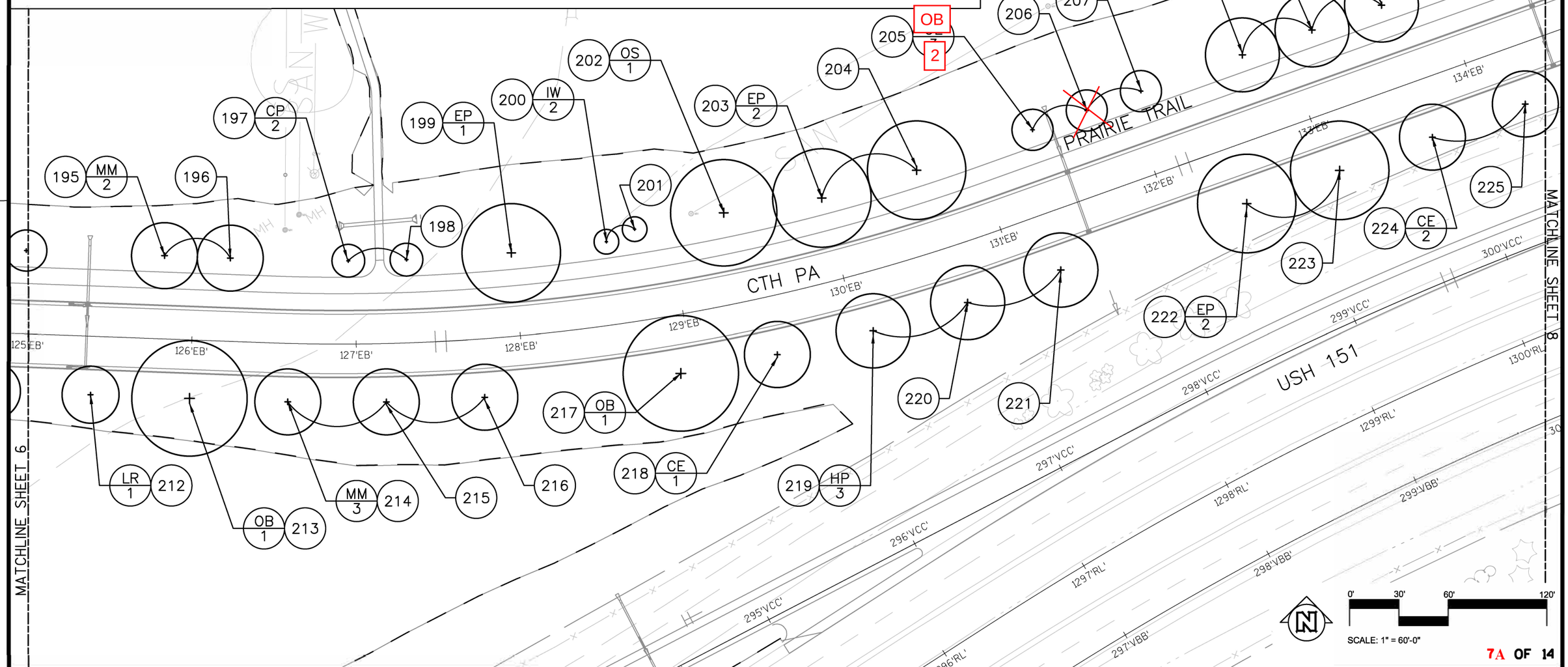
· — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL. SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
CE	Coffeetree, 'Espresso'
CP	Crabapple, 'Prairifire'
EP	Elm, 'Princeton'
HP	Hackberry, 'Prairie Pride'
IW	Ironwood
LR	Linden, 'Redmond'
MM	Maple, Freeman 'Marmo'
ML	Maple, Sugar 'Legacy'
OB	Oak, Bur
~~OE~~	~~Oak, English 'Skymaster'~~
OS	Oak, Swamp White



7A OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN - PAID AS	SHEET 100	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn

PLOT DATE : 30-APRIL-2015

PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

WISDOT/CADDS SHEET 42

LEGEND

abc / xx — PLANT SYMBOL / QUANTITY

XXX — STATIONING POINT

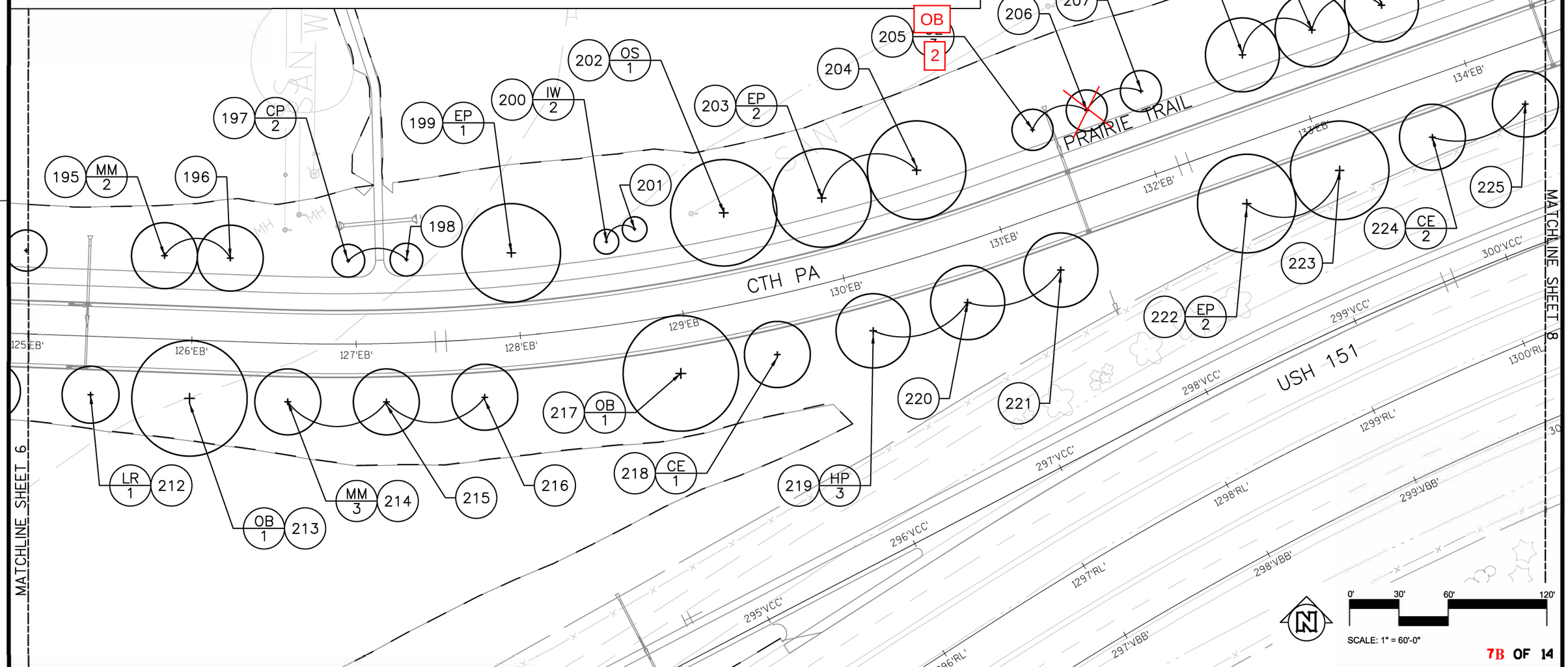
· — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL. SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
CE	Coffeetree, 'Espresso'
CP	Crabapple, 'Prairifire'
EP	Elm, 'Princeton'
HP	Hackberry, 'Prairie Pride'
IW	Ironwood
LR	Linden, 'Redmond'
MM	Maple, Freeman 'Marmo'
ML	Maple, Sugar 'Legacy'
OB	Oak, Bur
~~OE~~	~~Oak, English 'Skymaster'~~
OS	Oak, Swamp White



LEGEND

abc / xx — PLANT SYMBOL / QUANTITY

XXX — STATIONING POINT

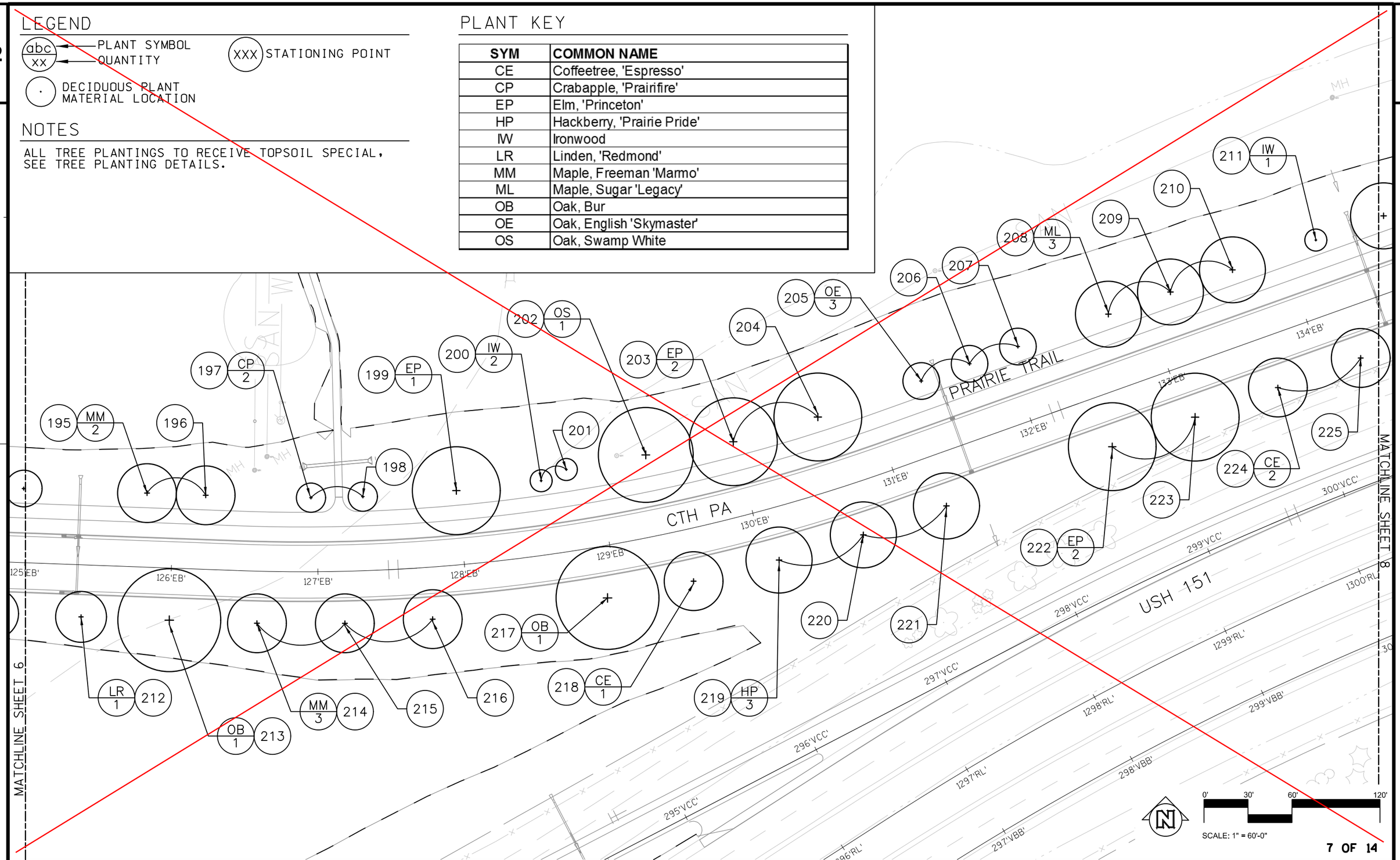
· — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL, SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
CE	Coffeetree, 'Espresso'
CP	Crabapple, 'Prairifire'
EP	Elm, 'Princeton'
HP	Hackberry, 'Prairie Pride'
IW	Ironwood
LR	Linden, 'Redmond'
MM	Maple, Freeman 'Marmo'
ML	Maple, Sugar 'Legacy'
OB	Oak, Bur
OE	Oak, English 'Skymaster'
OS	Oak, Swamp White



7 OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN	SHEET 100	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn

PLOT DATE : 30-APRIL-2015

PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

WISDOT/CADDS SHEET 42

LEGEND

(abc / xx) — PLANT SYMBOL / QUANTITY

(XXX) STATIONING POINT

(·) DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL. SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
CP	Crabapple, 'Prairifire'
EF	Elm, 'Frontier'
EN	Elm, 'New Horizon'
HP	Hackberry, 'Prairie Pride'
HW	Hawthorn, 'Winter King'
MM	Maple, Freeman 'Marmo'
~~OE~~	~~Oak, English 'Skymaster'~~
OS	Oak, Swamp White
OB	Oak, Bur

REMOVED

MATCHLINE SHEET 7

USH 45

PRAIRIE TRAIL EXTENSION

CTH PA

PRAIRIE TRAIL

USH 151

SCALE: 1" = 60'-0"

8A OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN - PAID AS	SHEET 101	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn

PLOT DATE : 30-APRIL-2015

PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

WISDOT/CADDS SHEET 42

LEGEND

abc / xx — PLANT SYMBOL / QUANTITY

XXX — STATIONING POINT

· — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL. SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
CP	Crabapple, 'Prairifire'
EF	Elm, 'Frontier'
EN	Elm, 'New Horizon'
HP	Hackberry, 'Prairie Pride'
HW	Hawthorn, 'Winter King'
MM	Maple, Freeman 'Marmo'
~~OE~~	~~Oak, English 'Skymaster'~~
OS	Oak, Swamp White
OB	Oak, Bur

REMOVED

MATCHLINE SHEET 7

USH 45

PRAIRIE TRAIL EXTENSION

CTH PA

PRAIRIE TRAIL

USH 151

SCALE: 1" = 60'-0"

8B OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN - IN-GROUND	SHEET 101	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn

PLOT DATE : 30-APRIL-2015

PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

WISDOT/CADDS SHEET 42

LEGEND

abc / xx — PLANT SYMBOL / QUANTITY

XXX — STATIONING POINT

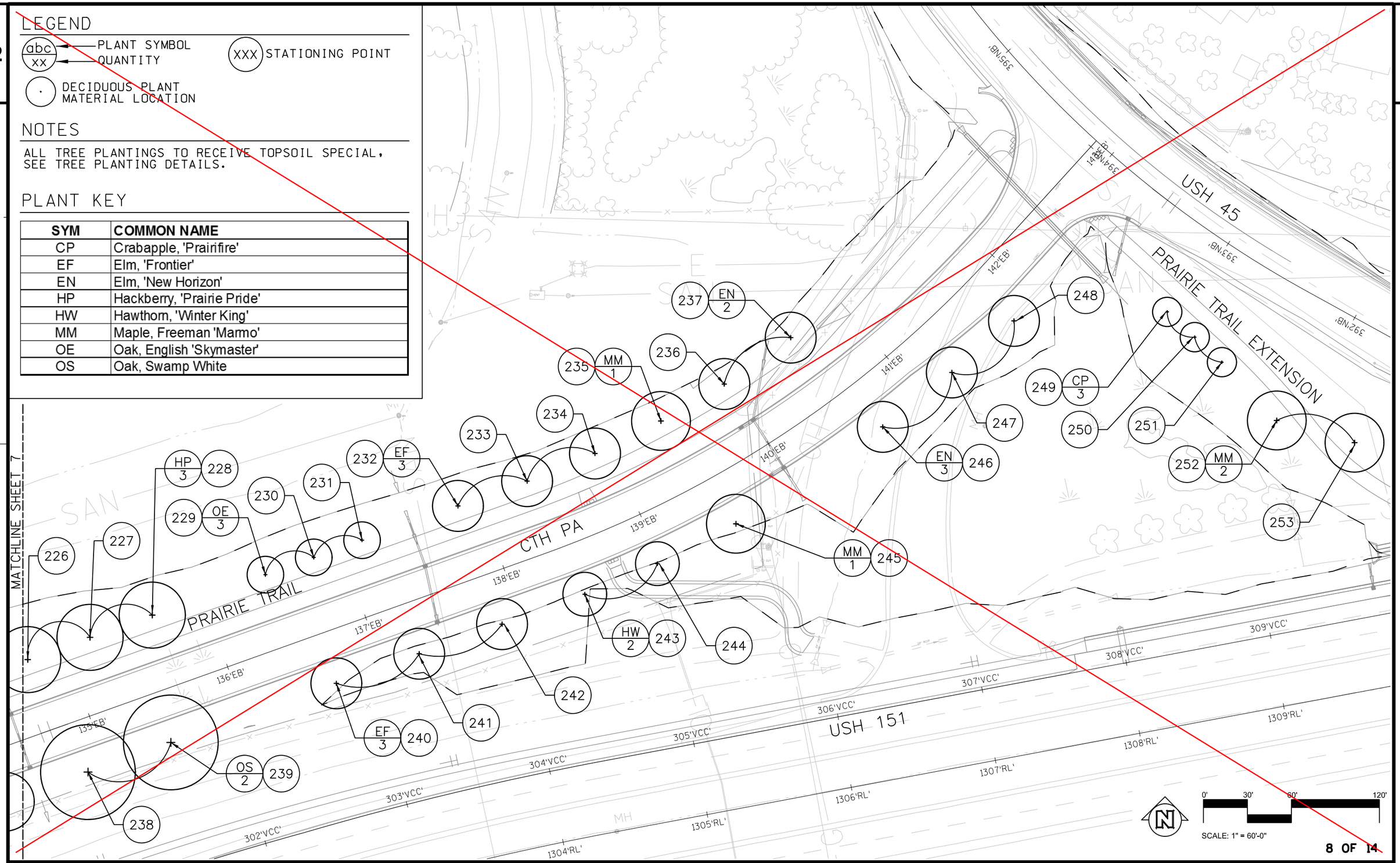
· — DECIDUOUS PLANT MATERIAL LOCATION

NOTES

ALL TREE PLANTINGS TO RECEIVE TOPSOIL SPECIAL, SEE TREE PLANTING DETAILS.

PLANT KEY

SYM	COMMON NAME
CP	Crabapple, 'Prairifire'
EF	Elm, 'Frontier'
EN	Elm, 'New Horizon'
HP	Hackberry, 'Prairie Pride'
HW	Hawthorn, 'Winter King'
MM	Maple, Freeman 'Marmo'
OE	Oak, English 'Skymaster'
OS	Oak, Swamp White



8 OF 14

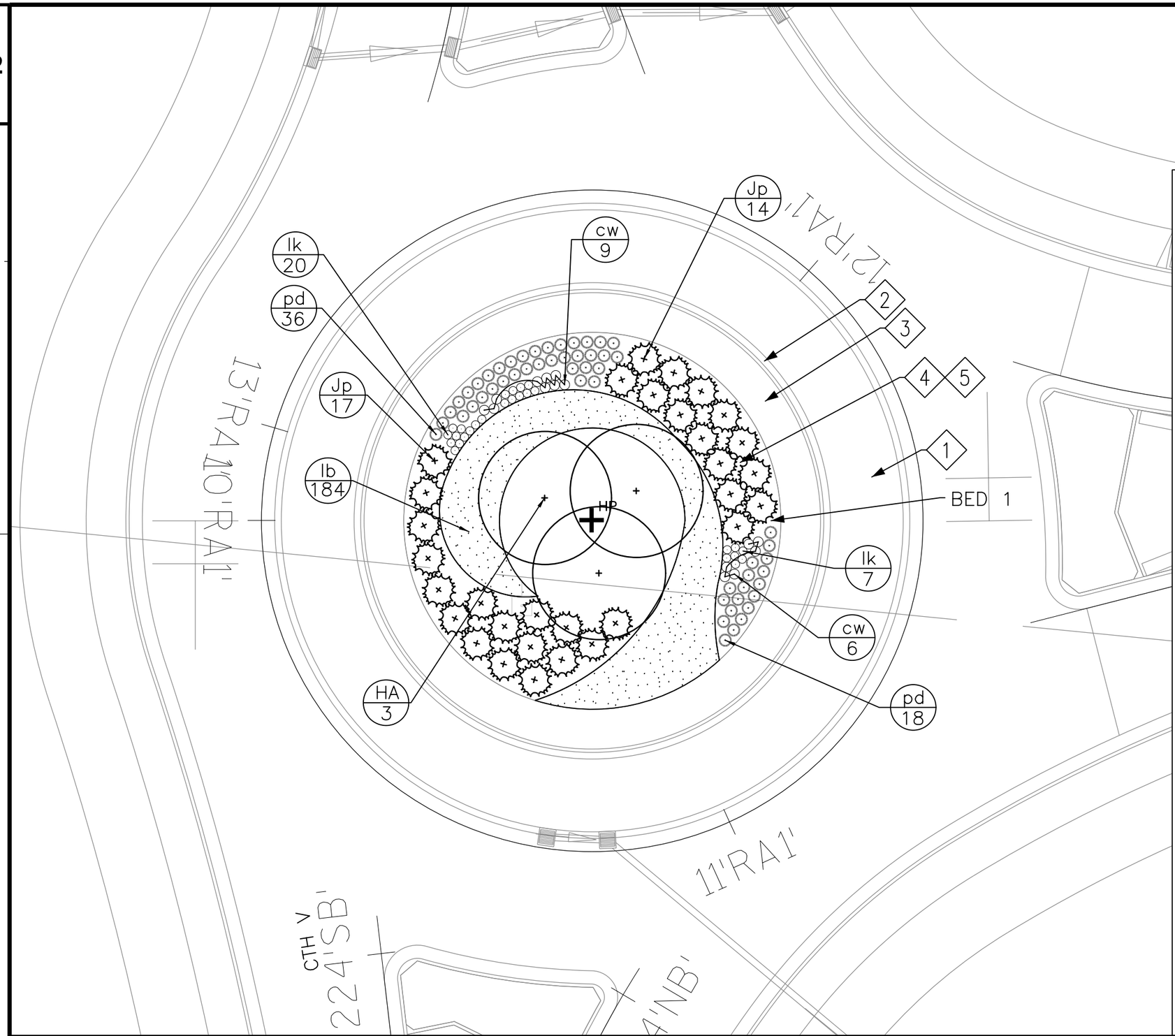
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LANDSCAPE PLAN	SHEET 101	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn

PLOT DATE : 30-APRIL-2015

PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ

WISDOT/CADDS SHEET 42



LEGEND

- abc / xx — PLANT SYMBOL / QUANTITY
- · — DECIDUOUS PLANT MATERIAL LOCATION
- + — EVERGREEN PLANT MATERIAL LOCATION
- XXX — STATIONING POINT
- 1 — TRUCK APRON
- 2 — ROUNDABOUT CONCRETE CURB, TYPE A
- 3 — ROUNDABOUT CONCRETE TRAVERSABLE ZONE
- 4 — SHREDDED HARDWOOD BARK MULCH
- 5 — PLANTING MIXTURE

PLANT KEY

SYM	COMMON NAME
HA	Hawthorn, Thornless Cockspur (Shrub Form Tree)
Jp	Juniper, Pfitzer 'Kallay's Compact'
cw	Coneflower, 'White Swan'
lb	Little Bluestem, 'Blue Heaven'
lk	Liatris, 'Kobold'
pd	Prairie Dropseed 'Tara'

LANDSCAPE LAYOUT

1) + HP DEPICTS HIGH POINT (HP) OF ROUNDABOUT
2) LOCATE +HP AT THE CENTER OF ROUNDABOUT
3) HP = 874.00

ALL ELEVATIONS GIVEN ARE FINAL ELEVATIONS FOR PLANTING MIXTURE IN PLACE AND COMPACTED TO ACHIEVE FINAL GRADES. CONTRACTOR MUST TAKE INTO ACCOUNT ANY SETTLING THAT MAY OCCUR IN ACHIEVING THE FINAL GRADES INDICATED IN THIS DRAWING.

SEE ROADWAY PLANS FOR ROADWAY SPOT ELEVATIONS AND PAVEMENT INFORMATION.

SEE DETAILS FOR ROUNDABOUT PLANTING MIXTURE DEPTHS.

N

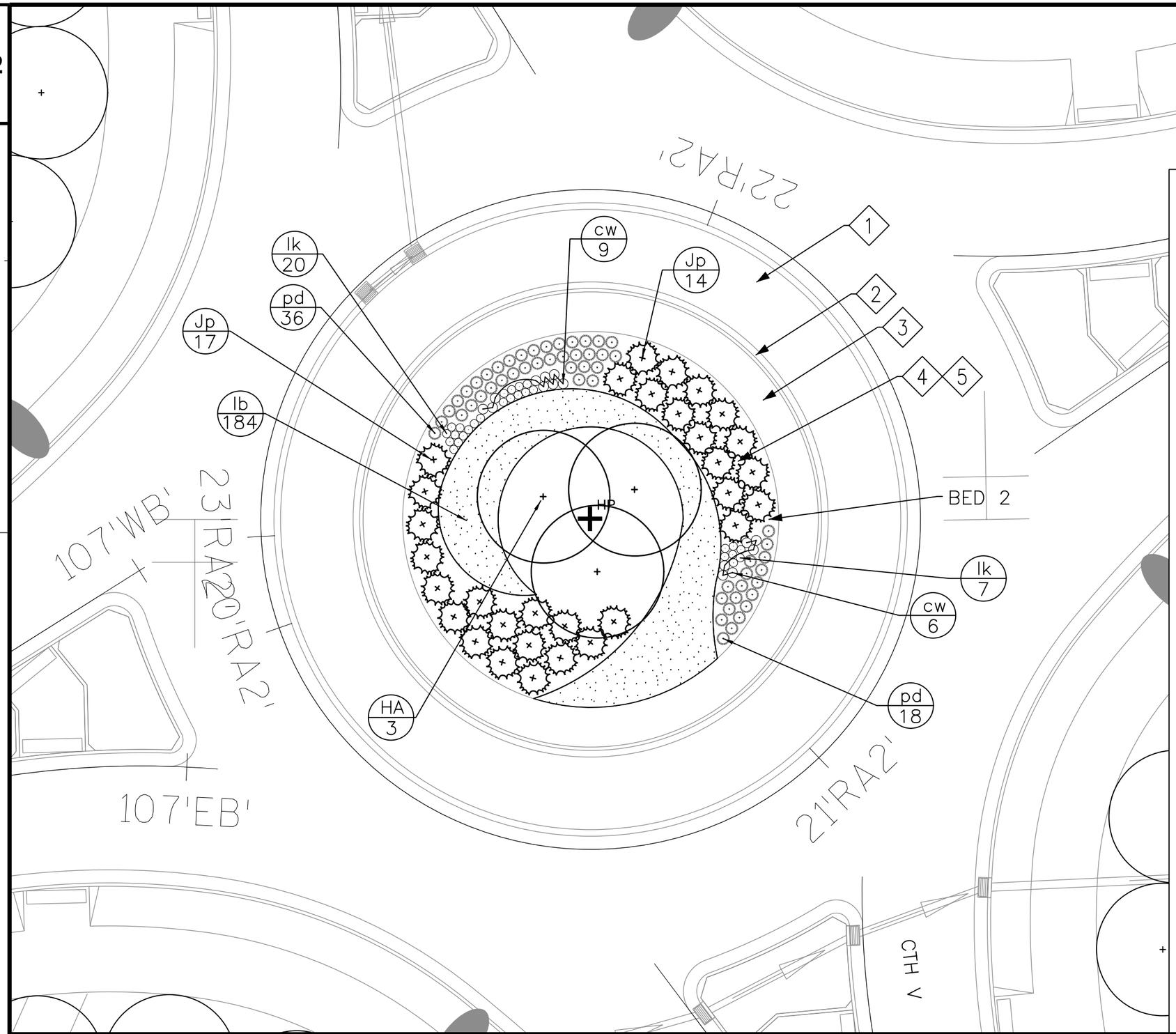
0' 8' 16' 32'

SCALE: 1/16" = 1'-0"

9 OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	BED 1 - CTH V & NB RAMPS	SHEET	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn
PLOT DATE : 30-APRIL-2015
PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ
WISDOT/CADDS SHEET 42



LEGEND

- abc / xx — PLANT SYMBOL / QUANTITY
- · — DECIDUOUS PLANT MATERIAL LOCATION
- + — EVERGREEN PLANT MATERIAL LOCATION
- XXX — STATIONING POINT
- 1 — TRUCK APRON
- 2 — ROUNDABOUT CONCRETE CURB, TYPE A
- 3 — ROUNDABOUT CONCRETE TRAVERSABLE ZONE
- 4 — SHREDDED HARDWOOD BARK MULCH
- 5 — PLANTING MIXTURE

PLANT KEY

SYM	COMMON NAME
HA	Hawthorn, Thornless Cockspur (Shrub Form Tree)
Jp	Juniper, Pfitzer 'Kallay's Compact'
cw	Coneflower, 'White Swan'
lb	Little Bluestem, 'Blue Heaven'
lk	Liatris, 'Kobold'
pd	Prairie Dropseed 'Tara'

LANDSCAPE LAYOUT

1) +HP DEPICTS HIGH POINT (HP) OF ROUNDABOUT
2) LOCATE +HP AT THE CENTER OF ROUNDABOUT
3) HP = 866.50

ALL ELEVATIONS GIVEN ARE FINAL ELEVATIONS FOR PLANTING MIXTURE IN PLACE AND COMPACTED TO ACHIEVE FINAL GRADES. CONTRACTOR MUST TAKE INTO ACCOUNT ANY SETTLING THAT MAY OCCUR IN ACHIEVING THE FINAL GRADES INDICATED IN THIS DRAWING.

SEE ROADWAY PLANS FOR ROADWAY SPOT ELEVATIONS AND PAVEMENT INFORMATION.

SEE DETAILS FOR ROUNDABOUT PLANTING MIXTURE DEPTHS.

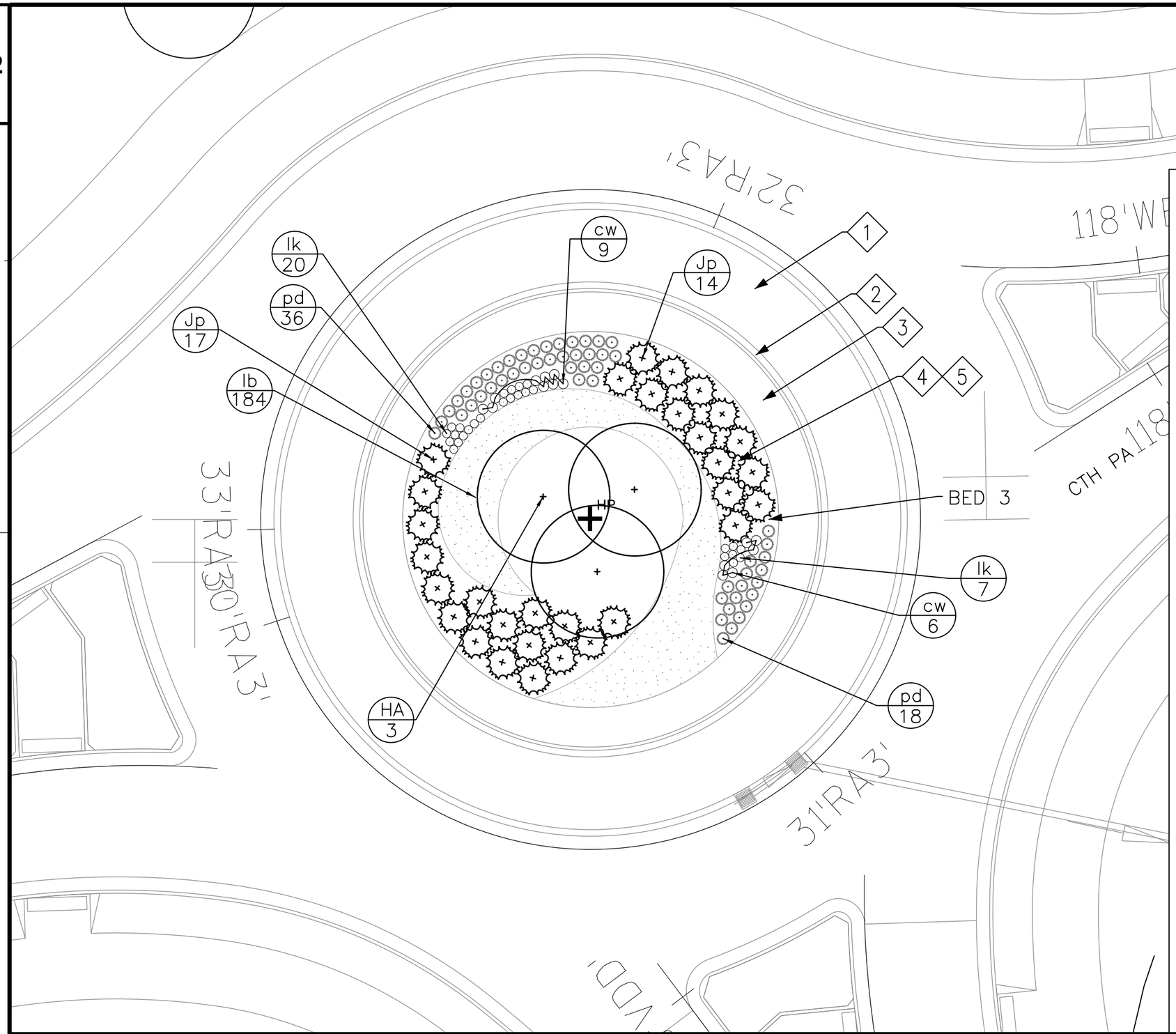
0' 8' 16' 32'

SCALE: 1/16" = 1'-0"

10 OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	BED 2 - CTH V & CTH PA	SHEET	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn
PLOT DATE : 30-APRIL-2015
PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ
WISDOT/CADDS SHEET 42



LEGEND

- abc / xx — PLANT SYMBOL / QUANTITY
- · — DECIDUOUS PLANT MATERIAL LOCATION
- + — EVERGREEN PLANT MATERIAL LOCATION
- XXX — STATIONING POINT
- 1 — TRUCK APRON
- 2 — ROUNDABOUT CONCRETE CURB, TYPE A
- 3 — ROUNDABOUT CONCRETE TRAVERSABLE ZONE
- 4 — SHREDDED HARDWOOD BARK MULCH
- 5 — PLANTING MIXTURE

PLANT KEY

SYM	COMMON NAME
HA	Hawthorn, Thornless Cockspur (Shrub Form Tree)
Jp	Juniper, Pfitzer 'Kallay's Compact'
cw	Coneflower, 'White Swan'
lk	Liatris, 'Kobold'
lb	Little Bluestem, 'Blue Heaven'
pd	Prairie Dropseed 'Tara'

LANDSCAPE LAYOUT

1) +HP DEPICTS HIGH POINT (HP) OF ROUNDABOUT
2) LOCATE +HP AT THE CENTER OF ROUNDABOUT
3) HP = 864.00

ALL ELEVATIONS GIVEN ARE FINAL ELEVATIONS FOR PLANTING MIXTURE IN PLACE AND COMPACTED TO ACHIEVE FINAL GRADES. CONTRACTOR MUST TAKE INTO ACCOUNT ANY SETTLING THAT MAY OCCUR IN ACHIEVING THE FINAL GRADES INDICATED IN THIS DRAWING.

SEE ROADWAY PLANS FOR ROADWAY SPOT ELEVATIONS AND PAVEMENT INFORMATION.

SEE DETAILS FOR ROUNDABOUT PLANTING MIXTURE DEPTHS.

0' 8' 16' 32'

SCALE: 1/16" = 1'-0"

11 OF 14

2

SHEET 3

POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
100	72+85.42	10.00 RT	CENTER OF TREE	PRAIRIE TRAIL
101	73+7.88	10.00 RT	CENTER OF TREE	PRAIRIE TRAIL
102	73+29.65	10.00 RT	CENTER OF TREE	PRAIRIE TRAIL
103	73+68.68	30.45 RT	CENTER OF TREE	PRAIRIE TRAIL
104	74+4.82	7.60 RT	CENTER OF TREE	PRAIRIE TRAIL
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
105	74+64.80	11.90 RT	CENTER OF TREE	PRAIRIE TRAIL
106	75+13.16	19.90 RT	CENTER OF TREE	PRAIRIE TRAIL
107	75+63.36	22.61 RT	CENTER OF TREE	PRAIRIE TRAIL
108	75+64.61	119.71 RT	CENTER OF TREE	PRAIRIE TRAIL
109	74+54.62	150.55 RT	CENTER OF TREE	PRAIRIE TRAIL
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
110	50+25.99	84.11 LT	CENTER OF TREE	PRAIRIE TRAIL
111	50+18.07	37.28 LT	CENTER OF TREE	PRAIRIE TRAIL
112	49+77.26	19.52 LT	CENTER OF TREE	PRAIRIE TRAIL
113	49+52.00	19.98 LT	CENTER OF TREE	PRAIRIE TRAIL
114	11+22.12	28.50 RT	CENTER OF TREE	SW2
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
115	11+52.78	28.50 RT	CENTER OF TREE	SW2
116	10+95.63	28.50 RT	CENTER OF TREE	SW2
117	13+5.22	28.50 LT	CENTER OF TREE	NW2
118	12+47.22	28.50 LT	CENTER OF TREE	NW2
119	10+89.53	28.50 RT	CENTER OF TREE	SE2
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
120	11+20.07	28.50 RT	CENTER OF TREE	SE2
121	--	--	--	--

SHEET 4

POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
122	12+79.18	28.50 LT	CENTER OF TREE	NW2
123	13+70.60	28.50 LT	CENTER OF TREE	NW2
124	241+38.43	39.50 LT	CENTER OF TREE	SB
125	241+52.76	39.50 LT	CENTER OF TREE	SB
126	242+8.48	39.50 LT	CENTER OF TREE	SB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
127	142+76.45	39.50 LT	CENTER OF TREE	NB
128	142+90.69	39.50 LT	CENTER OF TREE	NB
129	143+4.92	39.50 LT	CENTER OF TREE	NB
130	144+28.77	39.50 LT	CENTER OF TREE	NB
131	144+45.74	39.50 LT	CENTER OF TREE	NB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
132	144+62.78	39.50 LT	CENTER OF TREE	NB
133	144+79.24	39.50 LT	CENTER OF TREE	NB
134	144+95.99	39.50 LT	CENTER OF TREE	NB
135	145+70.71	39.50 LT	CENTER OF TREE	NB
136	145+90.71	39.50 LT	CENTER OF TREE	NB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
137	147+31.46	39.50 LT	CENTER OF TREE	NB
138	147+45.33	39.50 LT	CENTER OF TREE	NB
139	147+65.33	39.50 LT	CENTER OF TREE	NB
140	147+79.49	39.50 LT	CENTER OF TREE	NB
141	147+93.99	39.50 LT	CENTER OF TREE	NB

SHEET 5

POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
142	140+39.28	48.37 RT	CENTER OF TREE	NB
143	12+26.06	32.50 RT	CENTER OF TREE	NE2
144	11+39.15	32.50 RT	CENTER OF TREE	NE2
145	11+3.65	32.50 RT	CENTER OF TREE	NE2
146	11+76.48	32.50 RT	CENTER OF TREE	NE2
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
147	109+71.69	50.50 LT	CENTER OF TREE	WB
148	110+36.17	50.50 LT	CENTER OF TREE	WB
149	110+97.91	50.50 LT	CENTER OF TREE	WB
150	111+73.11	50.50 LT	CENTER OF TREE	WB
151	112+48.54	50.50 LT	CENTER OF TREE	WB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
152	112+81.75	50.50 LT	CENTER OF TREE	WB
153	113+14.77	50.50 LT	CENTER OF TREE	WB
154	113+49.49	50.50 LT	CENTER OF TREE	WB
155	113+83.65	50.50 LT	CENTER OF TREE	WB
156	114+42.53	50.50 LT	CENTER OF TREE	WB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
157	114+89.27	50.50 LT	CENTER OF TREE	WB
158	115+36.21	50.50 LT	CENTER OF TREE	WB
159	109+82.50	35.50 RT	CENTER OF TREE	EB
160	110+39.86	35.50 RT	CENTER OF TREE	EB
161	110+97.23	35.50 RT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
162	111+59.14	35.50 RT	CENTER OF TREE	EB
163	112+12.01	35.50 RT	CENTER OF TREE	EB
164	112+71.49	35.50 RT	CENTER OF TREE	EB
165	113+34.39	35.50 RT	CENTER OF TREE	EB
166	113+97.30	35.50 RT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
167	114+60.33	35.50 RT	CENTER OF TREE	EB

SHEET 6

POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
168	116+10.00	52.59 LT	CENTER OF TREE	WB
169	11+2.73	32.50 LT	CENTER OF TREE	NW3
170	11+16.29	32.50 LT	CENTER OF TREE	NW3
171	11+29.93	32.50 LT	CENTER OF TREE	NW3
172	11+43.60	32.50 LT	CENTER OF TREE	NW3
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
173	11+57.33	32.50 LT	CENTER OF TREE	NW3
174	12+92.36	32.50 LT	CENTER OF TREE	NW3
175	119+10.67	50.50 LT	CENTER OF TREE	WB
176	119+57.95	50.50 LT	CENTER OF TREE	WB
177	120+39.70	55.50 LT	CENTER OF TREE	WB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
178	121+30.23	50.50 LT	CENTER OF TREE	WB
179	121+87.14	50.50 LT	CENTER OF TREE	WB
180	122+55.86	50.50 LT	CENTER OF TREE	WB
181	123+0.84	50.50 LT	CENTER OF TREE	WB
182	123+45.93	50.50 LT	CENTER OF TREE	WB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
183	124+27.45	50.50 LT	CENTER OF TREE	EB
184	124+62.45	50.50 LT	CENTER OF TREE	EB
185	124+97.45	50.50 LT	CENTER OF TREE	EB
186	119+24.83	35.50 RT	CENTER OF TREE	EB
187	119+87.06	35.50 RT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
188	120+49.30	35.50 RT	CENTER OF TREE	EB
189	121+11.57	35.50 RT	CENTER OF TREE	EB
190	121+73.82	35.50 RT	CENTER OF TREE	EB
191	122+36.08	35.50 RT	CENTER OF TREE	EB
192	122+98.46	35.50 RT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
193	124+19.67	35.50 RT	CENTER OF TREE	EB
194	124+79.67	35.50 RT	CENTER OF TREE	EB

SHEET 7

POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
195	125+81.52	50.50 LT	CENTER OF TREE	EB
196	126+21.56	50.50 LT	CENTER OF TREE	EB
197	126+95.5	50.50 LT	CENTER OF TREE	EB
198	127+32.41	50.50 LT	CENTER OF TREE	EB
199	127+99.12	50.50 LT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
200	128+59.91	50.50 LT	CENTER OF TREE	EB
201	128+78.88	55.50 LT	CENTER OF TREE	EB
202	129+36.63	55.50 LT	CENTER OF TREE	EB
203	129+99.60	50.50 LT	CENTER OF TREE	EB
204	130+62.30	50.50 LT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
205	131+38.57	50.50 LT	CENTER OF TREE	EB
206	131+73.58	50.50 LT	CENTER OF TREE	EB
207	132+8.58	50.50 LT	CENTER OF TREE	EB
208	132+74.10	50.50 LT	CENTER OF TREE	EB
209	133+19.03	50.50 LT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
210	133+63.93	50.50 LT	CENTER OF TREE	EB
211	134+24.31	50.50 LT	CENTER OF TREE	EB
212	125+35.67	35.50 RT	CENTER OF TREE	EB
213	125+99.88	35.50 RT	CENTER OF TREE	EB
214	126+59.28	35.50 RT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
215	127+17.53	35.50 RT	CENTER OF TREE	EB
216	127+75.78	35.50 RT	CENTER OF TREE	EB
217	128+92.47	35.50 RT	CENTER OF TREE	EB
218	129+50.56	35.50 RT	CENTER OF TREE	EB
219	130+8.85	35.50 RT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
220	130+67.12	35.50 RT	CENTER OF TREE	EB
221	131+26.11	35.50 RT	CENTER OF TREE	EB
222	132+46.19	35.50 RT	CENTER OF TREE	EB
223	133+6.19	35.50 RT	CENTER OF TREE	EB
224	133+66.08	35.50 RT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
225	134+26.08	35.50 RT	CENTER OF TREE	EB

SHEET 8

POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
226	134+73.35	50.50 LT	CENTER OF TREE	EB
227	135+18.42	50.50 LT	CENTER OF TREE	EB
228	135+63.49	50.50 LT	CENTER OF TREE	EB
229	136+45.42	50.50 LT	CENTER OF TREE	EB
230	136+80.42	50.50 LT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
231	137+18.42	50.50 LT	CENTER OF TREE	EB
232	137+84.85	50.50 LT	CENTER OF TREE	EB
233	138+35.36	50.50 LT	CENTER OF TREE	EB
234	138+88.92	50.50 LT	CENTER OF TREE	EB
235	139+42.64	50.50 LT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
236	139+96.21	50.50 LT	CENTER OF TREE	EB
237	140+55.42	50.87 LT	CENTER OF TREE	EB
238	134+86.22	35.50 RT	CENTER OF TREE	EB
239	135+46.22	35.50 RT	CENTER OF TREE	EB
240	136+66.05	35.50 RT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
241	137+26.05	35.50 RT	CENTER OF TREE	EB
242	137+86.05	35.50 RT	CENTER OF TREE	EB
243	138+45.25	35.50 RT	CENTER OF TREE	EB
244	138+96.61	35.50 RT	CENTER OF TREE	EB
245	139+54.00	35.50 RT	CENTER OF TREE	EB
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
246	140+68.67	35.50 RT	CENTER OF TREE	EB
247	141+26.41	36.71 RT	CENTER OF TREE	EB
248	141+78.09	41.44 RT	CENTER OF TREE	EB
249	23+20.18	20.00 LT	CENTER OF TREE	PRAIRIE TRAIL
250	22+94.70	20.00 LT	CENTER OF TREE	PRAIRIE TRAIL
POINT	STATION	OFFSET	DESCRIPTION	ALIGNMENT
251	22+69.20	20.00 LT	CENTER OF TREE	PRAIRIE TRAIL
252	22+12.32	20.00 LT	CENTER OF TREE	PRAIRIE TRAIL
253	21+65.28	10.00 RT	CENTER OF TREE	PRAIRIE TRAIL

2

PLANT DATA TABLE

Symbol	Common Name	Scientific Name	Type	Average Mature Height	Plant Spacing	Size When Planted	Root Zone Mode	Minimum Size					Brace Or Guy	Fertilizer Units Required	Rodent Protection Required	Mulch Ring Required	Notes
								Ball/Pot		Root	Plant Hole						
								Diameter	Depth	Spread	Diameter	Depth					
	Canopy Trees																
CE	Coffeetree, 'Espresso'	*Gymnocladus dioicus 'Espresso'*	1T	40'-50' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
EF	Elm, 'Frontier'	*Ulmus 'Frontier'*	1T	40'-50' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
EN	Elm, 'New Horizon'	*Ulmus 'New Horizon'*	1T	50'-60' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
EP	Elm, 'Princeton'	*Ulmus americana 'Princeton'*	1T	60'-80' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
HP	Hackberry, 'Prairie Pride'	*Celtis occidentalis 'Prairie Pride'*	1T	45'-55' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
HS	Honeylocust, 'Skyline'	*Gleditsia triacanthos 'Skycole'*	1T	50'-60' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
LR	Linden, 'Redmond'	*Tilia americana 'Redmond'*	1T	40'-60' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
MC	Maple, Freeman 'Celebration'	*Acer x freemanii 'Celebration'*	1T	45'-60' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
MM	Maple, Freeman 'Marmo'	*Acer x freemanii 'Marmo'*	1T	60'-70' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
ML	Maple, Sugar 'Legacy'	*Acer saccharum 'Legacy'*	1T	50'-60' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
OB	Oak, Bur	*Quercus macrocarpa*	1T	60'-80 Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
OE	Oak English, 'Skymaster'	*Quercus robur 'Skymaster'*	1T	45'-50' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
OS	Oak, Swamp White	*Quercus bicolor*	1T	65'-75' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
	Ornamental Trees																
CF	Crabapple, 'Firebird'	*Malus 'Sargentii Select A'*	3T	8'-10' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
CP	Crabapple, 'Prairifire'	*Malus 'Prairifire'*	3T	15'-20' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
CS	Crabapple, 'Snowdrift'	*Malus 'Snowdrift'*	3T	20-25' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
HA	Hawthorn, Thornless Cockspur (Shrub Form Tree)	*Crataegus crus-galli var. inermis (Shrub Form Tree)*	3T	20'-25' Ht.	Per Plans	8' Ht.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	———	3 Canes Minimum.
HW	Hawthorn, 'Winter King'	*Crataegus viridis 'Winter King'*	3T	20'-30' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
IW	Ironwood	*Ostrya virginiana*	3T	20'-25' Ht	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
PK	Pear, 'Korean Sun'	*Pyrus fauriei 'Westwood'*	3T	10'-12' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
	Evergreens																
Jp	Juniper, Pfitzer 'Kallay's Compact'	*Juniperus chinensis 'Pfitzeriana Kallay'*	3E	2'-3' Ht.	5'-0" o.c.	24" Sp. / #3	CONT	12"	12"	———	36"	18"	———	2	———	———	———
	Perennials/ Ornamental Grasses																
cw	Coneflower, 'White Swan'	*Echinacea purpurea 'White Swan'*	1V	18"-24" Ht.	15" o.c.	1 gal.	CONT	8"	10"	———	16"	10"	———	1	———	———	———
lb	Little Bluestem, 'Blue Heaven'	*Schizachyrium scoparium 'Blue Heaven'*	1V	30"-48" Ht.	24" o.c.	1 gal.	CONT	8"	10"	———	16"	10"	———	1	———	———	———
lk	Liatris, 'Kobold'	*Liatris spicata 'Kobold'*	1V	18"-24" Ht.	18" o.c.	1 gal.	CONT	8"	10"	———	16"	10"	———	1	———	———	———
pd	Prairie Dropseed 'Tara'	*Sporobolus heterolepsis 'Tara'*	1V	18"-30" Ht.	24" o.c.	1 gal.	CONT	8"	10"	———	16"	10"	———	1	———	———	———

PLANT QUANTITIES TABLE

Symbol		Common Name	Scientific Name	Size When Planted	Root Zone Mode	Quantities										
						Sheet 2	Sheet 3	Sheet 4	Sheet 5	Sheet 6	Sheet 7	Sheet 8	Sheet 9	Sheet 10	Sheet 11	Totals
Canopy Trees 632.0101																
CE	632.0101.01	Coffeetree, 'Espresso'	*Gymnocladus dioicus 'Espresso'*	2.5" Cal.	B&B						3					3
EF	632.0101.02	Elm, 'Frontier'	*Ulmus 'Frontier'*	2.5" Cal.	B&B							6				6
EN	632.0101.03	Elm, 'New Horizon'	*Ulmus 'New Horizon'*	2.5" Cal.	B&B			~~1~~ 2	~~11~~ 10	6		5				23
EP	632.0101.04	Elm, 'Princeton'	*Ulmus americana 'Princeton'*	2.5" Cal.	B&B					3	5					8
HP	632.0101.05	Hackberry, 'Prairie Pride'	*Celtis occidentalis 'Prairie Pride'*	2.5" Cal.	B&B		3		3	3	3	3				15
HS	632.0101.06	Honeylocust, 'Skyline'	*Gleditsia triacanthos 'Skycole'*	2.5" Cal.	B&B		4									4
LR	632.0101.07	Linden, 'Redmond'	*Tilia americana 'Redmond'*	2.5" Cal.	B&B					2	1					3
MC	632.0101.08	Maple, Freeman 'Celebration'	*Acer x freemanii 'Celebration'*	2.5" Cal.	B&B		6	2	3	5						16
MM	632.0101.09	Maple, Freeman 'Marmo'	*Acer x freemanii 'Marmo'*	2.5" Cal.	B&B		2		3	3	5	4				17
ML	632.0101.10	Maple, Sugar 'Legacy'	*Acer saccharum 'Legacy'*	2.5" Cal.	B&B						3					3
OB	632.0101.11	Oak, Bur	*Quercus macrocarpa*	2.5" Cal.	B&B				3	1	~~2~~ 4	2				~~3~~ 10
OE	632.0101.12	Oak, English 'Skymaster'	*Quercus robur 'Skymaster'*	2.5" Cal.	B&B				~~5~~ 0	~~3~~ 0	~~3~~ 0	~~3~~ 0				~~14~~ 0
OS	632.0101.13	Oak, Swamp White	*Quercus bicolor*	2.5" Cal.	B&B				1	~~1~~ 3	1	2				~~5~~ 7
Ornamental Trees 632.0101																
CF	632.0101.14	Crabapple, 'Firebird'	*Malus 'Sargentii Select A'*	2" Cal.	B&B		3	~~15~~ 12								15
CP	632.0101.15	Crabapple, 'Prairifire'	*Malus 'Prairifire'*	2" Cal.	B&B						2	3				5
CS	632.0101.16	Crabapple, 'Snowdrift'	*Malus 'Snowdrift'*	2" Cal.	B&B		3									3
HA	632.0101.17	Hawthorn, Thornless Cockspur (Shrub Form Tree)	*Crataegus crus-galli var. inermis (Shrub Form Tree)*	8' Ht.	B&B								3	3	3	9
HW	632.0101.18	Hawthorn, 'Winter King'	*Crataegus viridis 'Winter King'*	2" Cal.	B&B		2					2				4
IW	632.0101.19	Ironwood	*Ostrya virginiana*	2" Cal.	B&B						3					3
PK	632.0101.20	Pear, 'Korean Sun'	*Pyrus fauriei 'Westwood'*	2" Cal.	B&B			3								3
Evergreens 632.0201																
Jp	632.0201.01	Juniper, Pfitzer 'Kallay's Compact'	*Juniperus chinensis 'Pfitzeriana Kallay'*	24" Sp. / #3	CONT								31	31	31	93
Perennials, Container, 1 Gal.																
cw	SPV.0060.60	Coneflower, 'White Swan'	*Echinacea purpurea 'White Swan'*	1 gal.	CONT								15	15	15	45
lb	SPV.0060.61	Little Bluestem, 'Blue Heaven'	*Schizachyrium scoparium 'Blue Heaven'*	1 gal.	CONT								184	184	184	552
lk	SPV.0060.62	Liatris, 'Kobold'	*Liatris spicata 'Kobold'*	1 gal.	CONT								27	27	27	81
pd	SPV.0060.63	Prairie Dropseed, 'Tara'	*Sporobolus heterolepsis 'Tara'*	1 gal.	CONT								54	54	54	162

PLANT DATA TABLE

Symbol	Common Name	Scientific Name	Type	Average Mature Height	Plant Spacing	Size When Planted	Root Zone Mode	Minimum Size					Brace Or Guy	Fertilizer Units Required	Rodent Protection Required	Mulch Ring Required	Notes
								Ball/Pot		Root	Plant Hole						
								Diameter	Depth	Spread	Diameter	Depth					
	Canopy Trees																
CE	Coffeetree, 'Espresso'	*Gymnocladus dioicus 'Espresso'*	1T	40'-50' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
EF	Elm, 'Frontier'	*Ulmus 'Frontier'*	1T	40'-50' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
EN	Elm, 'New Horizon'	*Ulmus 'New Horizon'*	1T	50'-60' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
EP	Elm, 'Princeton'	*Ulmus americana 'Princeton'*	1T	60'-80' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
HP	Hackberry, 'Prairie Pride'	*Celtis occidentalis 'Prairie Pride'*	1T	45'-55' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
HS	Honeylocust, 'Skyline'	*Gleditsia triacanthos 'Skycole'*	1T	50'-60' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
LR	Linden, 'Redmond'	*Tilia americana 'Redmond'*	1T	40'-60' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
MC	Maple, Freeman 'Celebration'	*Acer x freemanii 'Celebration'*	1T	45'-50' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
MM	Maple, Freeman 'Marmo'	*Acer x freemanii 'Marmo'*	1T	60'-70' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
ML	Maple, Sugar 'Legacy'	*Acer saccharum 'Legacy'*	1T	50'-60' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
OB	Oak, Bur	*Quercus macrocarpa*	1T	60'-80 Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
OE	Oak English, 'Skymaster'	*Quercus robur 'Skymaster'*	1T	45'-50' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
OS	Oak, Swamp White	*Quercus bicolor*	1T	65'-75' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
	Ornamental Trees																
CF	Crabapple, 'Firebird'	*Malus 'Sargentii Select A'*	3T	8'-10' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
CP	Crabapple, 'Prairifire'	*Malus 'Prairifire'*	3T	15'-20' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
CS	Crabapple, 'Snowdrift'	*Malus 'Snowdrift'*	3T	20-25' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
HA	Hawthorn, Thornless Cockspur (Shrub Form Tree)	*Crataegus crus-galli var. inermis (Shrub Form Tree)*	3T	20'-25' Ht.	Per Plans	8' Ht.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	———	3 Canes Minimum.
HW	Hawthorn, 'Winter King'	*Crataegus viridis 'Winter King'*	3T	20'-30' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
IW	Ironwood	*Ostrya virginiana*	3T	20'-25' Ht	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
PK	Pear, 'Korean Sun'	*Pyrus fauriei 'Westwood'*	3T	10'-12' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
	Evergreens																
Jp	Juniper, Pfitzer 'Kallay's Compact'	*Juniperus chinensis 'Pfitzeriana Kallay'*	3E	2'-3' Ht.	5'-0" o.c.	24" Sp. / #3	CONT	12"	12"	———	36"	18"	———	2	———	———	———
	Perennials/ Ornamental Grasses																
cw	Coneflower, 'White Swan'	*Echinacea purpurea 'White Swan'*	1V	18"-24" Ht.	15" o.c.	1 gal.	CONT	8"	10"	———	16"	10"	———	1	———	———	———
lb	Little Bluestem, 'Blue Heaven'	*Schizachyrium scoparium 'Blue Heaven'*	1V	30"-48" Ht.	24" o.c.	1 gal.	CONT	8"	10"	———	16"	10"	———	1	———	———	———
lk	Liatris, 'Kobold'	*Liatris spicata 'Kobold'*	1V	18"-24" Ht.	18" o.c.	1 gal.	CONT	8"	10"	———	16"	10"	———	1	———	———	———
pd	Prairie Dropseed 'Tara'	*Sporobolus heterolepsis 'Tara'*	1V	18"-30" Ht.	24" o.c.	1 gal.	CONT	8"	10"	———	16"	10"	———	1	———	———	———

PLANT QUANTITIES TABLE

Symbol		Common Name	Scientific Name	Size When Planted	Root Zone Mode	Quantities										
						Sheet 2	Sheet 3	Sheet 4	Sheet 5	Sheet 6	Sheet 7	Sheet 8	Sheet 9	Sheet 10	Sheet 11	Totals
Canopy Trees 632.0101																
CE	632.0101.01	Coffeetree, 'Espresso'	*Gymnocladus dioicus 'Espresso'*	2.5" Cal.	B&B						3					3
EF	632.0101.02	Elm, 'Frontier'	*Ulmus 'Frontier'*	2.5" Cal.	B&B							6				6
EN	632.0101.03	Elm, 'New Horizon'	*Ulmus 'New Horizon'*	2.5" Cal.	B&B			~~1~~ 2	~~11~~ 10	6		5				23
EP	632.0101.04	Elm, 'Princeton'	*Ulmus americana 'Princeton'*	2.5" Cal.	B&B					3	5					8
HP	632.0101.05	Hackberry, 'Prairie Pride'	*Celtis occidentalis 'Prairie Pride'*	2.5" Cal.	B&B		3		3	3	3	3				15
HS	632.0101.06	Honeylocust, 'Skyline'	*Gleditsia triacanthos 'Skycole'*	2.5" Cal.	B&B		4									4
LR	632.0101.07	Linden, 'Redmond'	*Tilia americana 'Redmond'*	2.5" Cal.	B&B					2	1					3
MC	632.0101.08	Maple, Freeman 'Celebration'	*Acer x freemanii 'Celebration'*	2.5" Cal.	B&B		~~4~~ 0	~~2~~ 0	~~3~~ 0	~~3~~ 0						~~16~~ 0
MM	632.0101.09	Maple, Freeman 'Marmo'	*Acer x freemanii 'Marmo'*	2.5" Cal.	B&B		2		3	3	5	4				17
ML	632.0101.10	Maple, Sugar 'Legacy'	*Acer saccharum 'Legacy'*	2.5" Cal.	B&B						3					3
OB	632.0101.11	Oak, Bur	*Quercus macrocarpa*	2.5" Cal.	B&B				3	1	~~2~~ 4	2				~~3~~ 10
OE	632.0101.12	Oak, English 'Skymaster'	*Quercus robur 'Skymaster'*	2.5" Cal.	B&B				~~3~~ 0	~~3~~ 0	~~3~~ 0	~~3~~ 0				~~14~~ 0
OS	632.0101.13	Oak, Swamp White	*Quercus bicolor*	2.5" Cal.	B&B				1	~~1~~ 3	1	2				~~5~~ 7
LG		Linden, 'Greenspire'					6	2	3	5						16
Ornamental Trees 632.0101																
CPF	632.0101.14	Crabapple, 'Profusion'	*Malus 'Sargentii Select A'*	2" Cal.	B&B		3	~~15~~ 3								15
CP	632.0101.15	Crabapple, 'Prairifire'	*Malus 'Prairifire'*	2" Cal.	B&B						2	3				5
CS	632.0101.16	Crabapple, 'Snowdrift'	*Malus 'Snowdrift'*	2" Cal.	B&B		3									3
HA	632.0101.17	Hawthorn, Thornless Cockspur (Shrub Form Tree)	*Crataegus crus-galli var. inermis (Shrub Form Tree)*	8' Ht.	B&B								3	3	3	9
HW	632.0101.18	Hawthorn, 'Winter King'	*Crataegus viridis 'Winter King'*	2" Cal.	B&B		2					2				4
IW	632.0101.19	Ironwood	*Ostrya virginiana*	2" Cal.	B&B						3					3
PK	632.0101.20	Pear, 'Korean Sun'	*Pyrus fauriei 'Westwood'*	2" Cal.	B&B			3								3
LIS		Lilac, 'Ivory Silk'						6								
Evergreens 632.0201																
Jp	632.0201.01	Juniper, Pfitzer 'Kallay's Compact'	*Juniperus chinensis 'Pfitzeriana Kallay'*	24" Sp. / #3	CONT								31	31	31	93
SB		Spruce, 'B. Hills'						3								
Perennials, Container, 1 Gal.																
cw	SPV.0060.60	Coneflower, 'White Swan'	*Echinacea purpurea 'White Swan'*	1 gal.	CONT								15	15	15	45
lb	SPV.0060.61	Little Bluestem, 'Blue Heaven'	*Schizachyrium scoparium 'Blue Heaven'*	1 gal.	CONT								184	184	184	552
lk	SPV.0060.62	Liatris, 'Kobold'	*Liatris spicata 'Kobold'*	1 gal.	CONT								27	27	27	81
pd	SPV.0060.63	Prairie Dropseed, 'Tara'	*Sporobolus heterolepsis 'Tara'*	1 gal.	CONT								54	54	54	162

PLANT DATA TABLE

Symbol	Common Name	Scientific Name	Type	Average Mature Height	Plant Spacing	Size When Planted	Root Zone Mode	Minimum Size					Brace Or Guy	Fertilizer Units Required	Rodent Protection Required	Mulch Ring Required	Notes
								Ball/Pot		Root Spread	Plant Hole						
								Diameter	Depth		Diameter	Depth					
	Canopy Trees																
CE	Coffeetree, 'Espresso'	*Gymnocladus dioicus 'Espresso'*	1T	40'-50' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
EF	Elm, 'Frontier'	*Ulmus 'Frontier'*	1T	40'-50' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
EN	Elm, 'New Horizon'	*Ulmus 'New Horizon'*	1T	50'-60' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
EP	Elm, 'Princeton'	*Ulmus americana 'Princeton'*	1T	60'-80' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
HP	Hackberry, 'Prairie Pride'	*Celtis occidentalis 'Prairie Pride'*	1T	45'-55' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
HS	Honeylocust, 'Skyline'	*Gleditsia triacanthos 'Skycole'*	1T	50'-60' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
LR	Linden, 'Redmond'	*Tilia americana 'Redmond'*	1T	40'-50' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
MC	Maple, Freeman 'Celebration'	*Acer x freemanii 'Celebration'*	1T	45'-50' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
MM	Maple, Freeman 'Marmo'	*Acer x freemanii 'Marmo'*	1T	60'-70' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
ML	Maple, Sugar 'Legacy'	*Acer saccharum 'Legacy'*	1T	50'-60' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
OB	Oak, Bur	*Quercus macrocarpa*	1T	60'-80 Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
OE	Oak English, 'Skymaster'	*Quercus robur 'Skymaster'*	1T	45'-50' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
OS	Oak, Swamp White	*Quercus bicolor*	1T	65'-75' Ht.	Per Plans	2.5" Cal.	B&B	28"	17"	———	52"	17"	Yes	6	Yes	Yes	———
	Ornamental Trees																
CF	Crabapple, 'Firebird'	*Malus 'Sargentii Select A'*	3T	8'-10' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
CP	Crabapple, 'Prairifire'	*Malus 'Prairifire'*	3T	15'-20' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
CS	Crabapple, 'Snowdrift'	*Malus 'Snowdrift'*	3T	20-25' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
HA	Hawthorn, Thornless Cockspur (Shrub Form Tree)	*Crataegus crus-galli var. inermis (Shrub Form Tree)*	3T	20'-25' Ht.	Per Plans	8' Ht.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	———	3 Canes Minimum.
HW	Hawthorn, 'Winter King'	*Crataegus viridis 'Winter King'*	3T	20'-30' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
IW	Ironwood	*Ostrya virginiana*	3T	20'-25' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
PK	Pear, 'Korean Sun'	*Pyrus fauriei 'Westwood'*	3T	10'-12' Ht.	Per Plans	2" Cal.	B&B	24"	14"	———	48"	14"	Yes	4	Yes	Yes	———
	Evergreens																
Jp	Juniper, Pfitzer 'Kallay's Compact'	*Juniperus chinensis 'Pfitzeriana Kallay'*	3E	2'-3' Ht.	5'-0" o.c.	24" Sp. / #3	CONT	12"	12"	———	36"	18"	———	2	———	———	———
	Perennials/ Ornamental Grasses																
cw	Coneflower, 'White Swan'	*Echinacea purpurea 'White Swan'*	1V	18"-24" Ht.	15" o.c.	1 gal.	CONT	8"	10"	———	16"	10"	———	1	———	———	———
lb	Little Bluestem, 'Blue Heaven'	*Schizachyrium scoparium 'Blue Heaven'*	1V	36"-48" Ht.	24" o.c.	1 gal.	CONT	8"	10"	———	16"	10"	———	1	———	———	———
lk	Liatris, 'Kobold'	*Liatris spicata 'Kobold'*	1V	18"-24" Ht.	18" o.c.	1 gal.	CONT	8"	10"	———	16"	10"	———	1	———	———	———
pd	Prairie Dropseed 'Tara'	*Sporobolus heterolepsis 'Tara'*	1V	18"-30" Ht.	24" o.c.	1 gal.	CONT	8"	10"	———	16"	10"	———	1	———	———	———

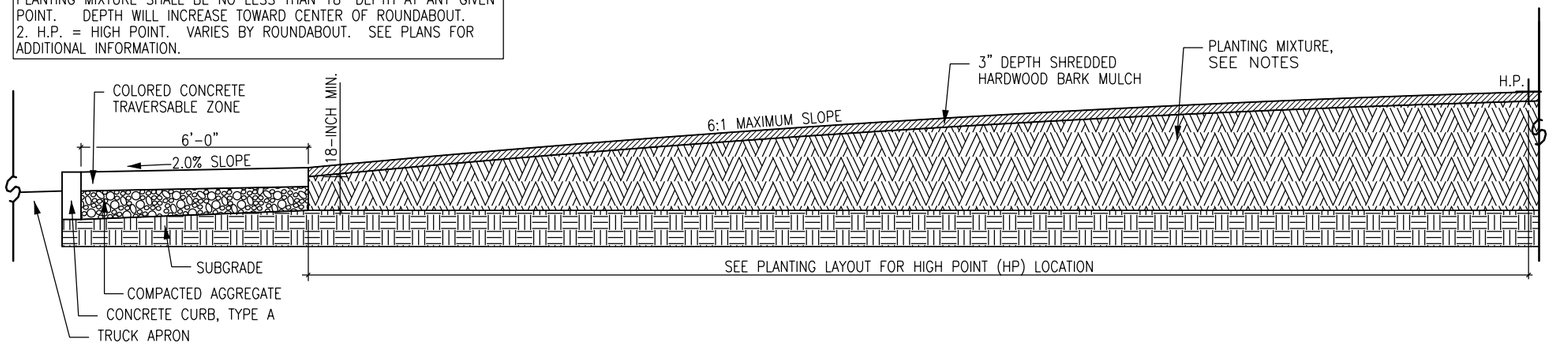
PLANT QUANTITIES TABLE

Symbol		Common Name	Scientific Name	Size When Planted	Root Zone Mode	Quantities										
						Sheet 2	Sheet 3	Sheet 4	Sheet 5	Sheet 6	Sheet 7	Sheet 8	Sheet 9	Sheet 10	Sheet 11	Totals
Canopy Trees 632.0101																
CE	632.0101.01	Coffeetree, 'Espresso'	*Gymnocladus dioicus 'Espresso'*	2.5" Cal.	B&B						3					3
EF	632.0101.02	Elm, 'Frontier'	*Ulmus 'Frontier'*	2.5" Cal.	B&B							6				6
EN	632.0101.03	Elm, 'New Horizon'	*Ulmus 'New Horizon'*	2.5" Cal.	B&B			1	11	6		5				23
EP	632.0101.04	Elm, 'Princeton'	*Ulmus americana 'Princeton'*	2.5" Cal.	B&B					3	5					8
HP	632.0101.05	Hackberry, 'Prairie Pride'	*Celtis occidentalis 'Prairie Pride'*	2.5" Cal.	B&B		3		3	3	3	3				15
HS	632.0101.06	Honeylocust, 'Skyline'	*Gleditsia triacanthos 'Skycole'*	2.5" Cal.	B&B		4									4
LR	632.0101.07	Linden, 'Redmond'	*Tilia americana 'Redmond'*	2.5" Cal.	B&B					2	1					3
MC	632.0101.08	Maple, Freeman 'Celebration'	*Acer x freemanii 'Celebration'*	2.5" Cal.	B&B		6	2	3	5						16
MM	632.0101.09	Maple, Freeman 'Marmo'	*Acer x freemanii 'Marmo'*	2.5" Cal.	B&B		2		3	3	5	4				17
ML	632.0101.10	Maple, Sugar 'Legacy'	*Acer saccharum 'Legacy'*	2.5" Cal.	B&B						3					3
OB	632.0101.11	Oak, Bur	*Quercus macrocarpa*	2.5" Cal.	B&B					1	2					3
OE	632.0101.12	Oak, English 'Skymaster'	*Quercus robur 'Skymaster'*	2.5" Cal.	B&B				5	3	3	3				14
OS	632.0101.13	Oak, Swamp White	*Quercus bicolor*	2.5" Cal.	B&B				1	1	1	2				5
Ornamental Trees 632.0101																
CF	632.0101.14	Crabapple, 'Firebird'	*Malus 'Sargentii Select A'*	2" Cal.	B&B			15								15
CP	632.0101.15	Crabapple, 'Prairifire'	*Malus 'Prairifire'*	2" Cal.	B&B						2	3				5
CS	632.0101.16	Crabapple, 'Snowdrift'	*Malus 'Snowdrift'*	2" Cal.	B&B		3									3
HA	632.0101.17	Hawthorn, Thornless Cockspur (Shrub Form Tree)	*Crataegus crus-galli var. inermis (Shrub Form Tree)*	8' Ht.	B&B								3	3	3	9
HW	632.0101.18	Hawthorn, 'Winter King'	*Crataegus viridis 'Winter King'*	2" Cal.	B&B		2					2				4
IW	632.0101.19	Ironwood	*Ostrya virginiana*	2" Cal.	B&B						3					3
PK	632.0101.20	Pear, 'Korean Sun'	*Pyrus fauriei 'Westwood'*	2" Cal.	B&B			3								3
Evergreens 632.0201																
Jp	632.0201.01	Juniper, Pfitzer 'Kallay's Compact'	*Juniperus chinensis 'Pfitzeriana Kallay'*	24" Sp. / #3	CONT								31	31	31	93
Perennials, Containers 1 Gal.																
cw	SPV.0060.60	Coneflower, 'White Swan'	*Echinacea purpurea 'White Swan'*	1 gal.	CONT								15	15	15	45
lb	SPV.0060.61	Little Bluestem, 'Blue Heaven'	*Schizachyrium scoparium 'Blue Heaven'*	1 gal.	CONT								184	184	184	552
lk	SPV.0060.62	Liatris, 'Kobold'	*Liatris spicata 'Kobold'*	1 gal.	CONT								27	27	27	81
pd	SPV.0060.63	Prairie Dropseed, 'Tara'	*Sporobolus heterolepsis 'Tara'*	1 gal.	CONT								54	54	54	162

PROJECT NO: 1420-22-71 | HWY: USH 151 | COUNTY: FOND DU LAC | PLANT DATA AND QUANTITIES | SHEET 106 E

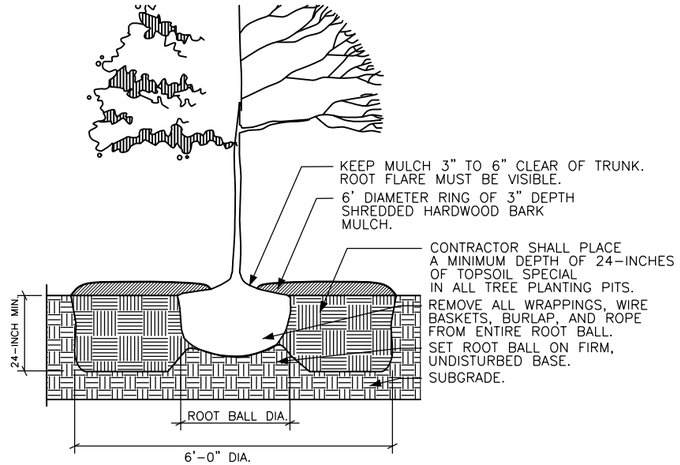
FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn
PLOT DATE : 30-APRIL-2015
PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ
WISDOT/CADDS SHEET 42

NOTES:
1. PLANTING MIXTURE SHALL BE INSTALLED IN 6–8" LAYERS, TAMPING EACH LAYER TO REMOVE AIR POCKETS AND PREVENT SETTLING. PLANTING MIXTURE SHALL BE NO LESS THAN 18" DEPTH AT ANY GIVEN POINT. DEPTH WILL INCREASE TOWARD CENTER OF ROUNDABOUT.
2. H.P. = HIGH POINT. VARIES BY ROUNDABOUT. SEE PLANS FOR ADDITIONAL INFORMATION.



1 ROUNDABOUT PLANTING BED SECTION

DETAIL
NOT TO SCALE



2 TREE PLANTING AND TOPSOIL SPECIAL

DETAIL
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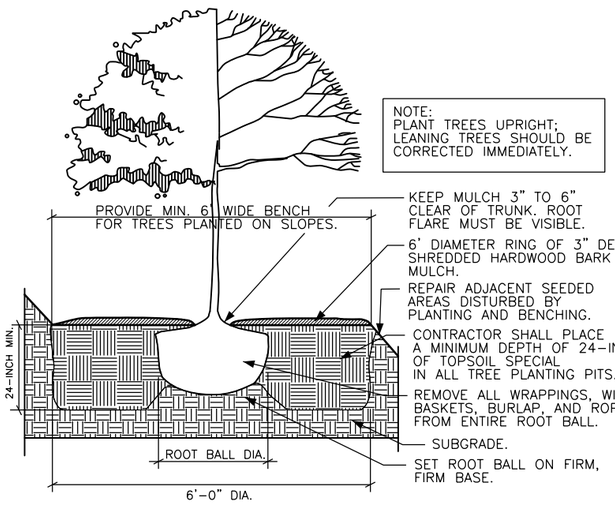
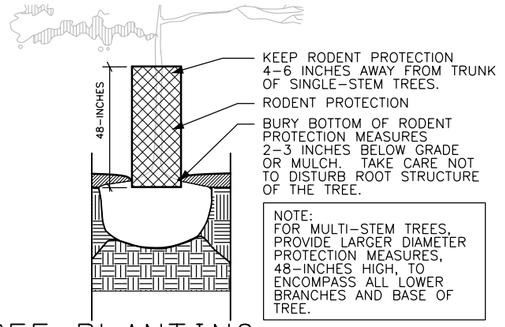


3 TREE PLANTING ON SLOPE

DETAIL
NOT TO SCALE



4 TREE PLANTING RODENT PROTECTION

DETAIL
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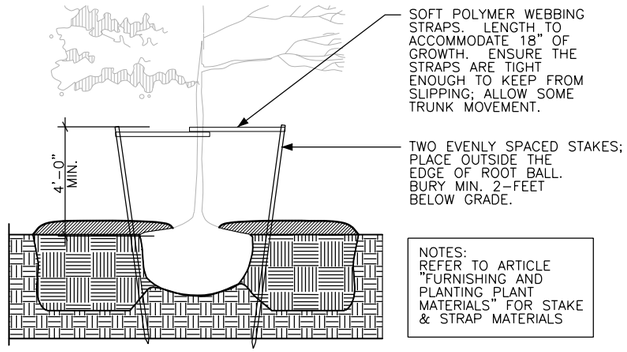
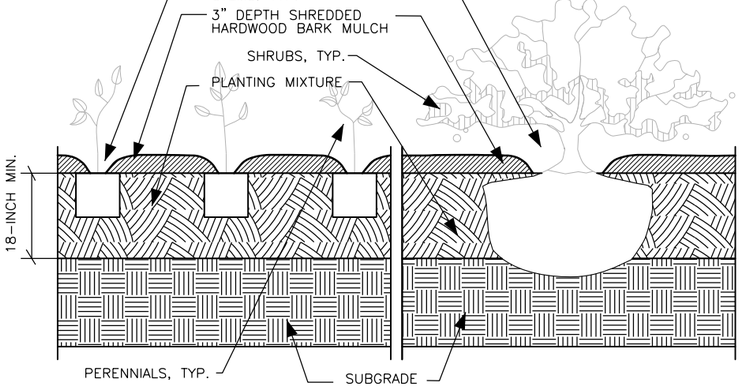
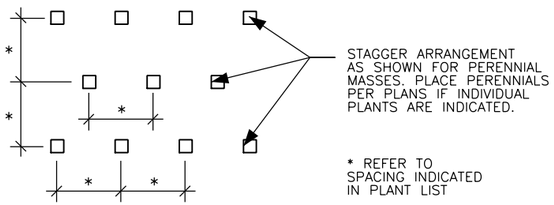


5 TREE STAKING & GUYING

DETAIL
NOT TO SCALE





6 SHRUB & PERENNIAL PLANTING

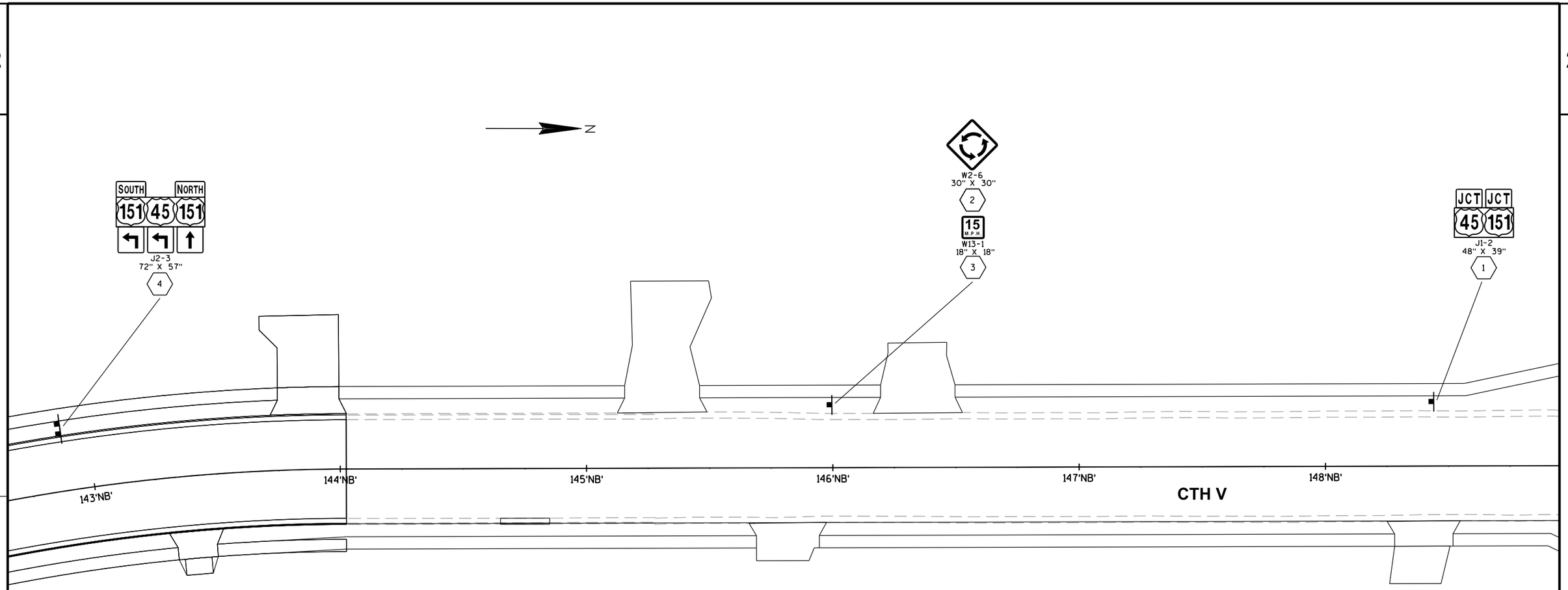
DETAIL
NOT TO SCALE

14 OF 14

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLANTING DETAILS	SHEET	E

FILE NAME : Q:\ 2012-008 CTH V Interchange\ CAD\ 1 - Working Drawings\ 2012-008_ksd base_CTH V_1420-22-71.dgn
PLOT DATE : 30-APRIL-2015
PLOT BY : KEN SAIKI DESIGN, INC - NIK SWARTZ
WISDOT/CADDS SHEET 42

2



SIGNING NOTES

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

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

NEW STOP SIGNS (R1-1) PLACED UNDER STAGE * SHALL HAVE A MINIMUM OF 6'6" OF CLEARANCE ABOVE THE ROADWAY. THIS WILL ALLOW FOR THE PLACEMENT OF FUTURE SIGNS BENEATH THE STOP SIGN.

INSTALL 18" X 18" ORANGE FLAGS ON TOP OF THE YIELD SIGNS FOR THE FIRST SIX MONTHS OF OPERATION OF THE ROUNDABOUT TO EMPHASIZE THE YIELD MOVEMENT.

LEGEND

- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 108	E

2

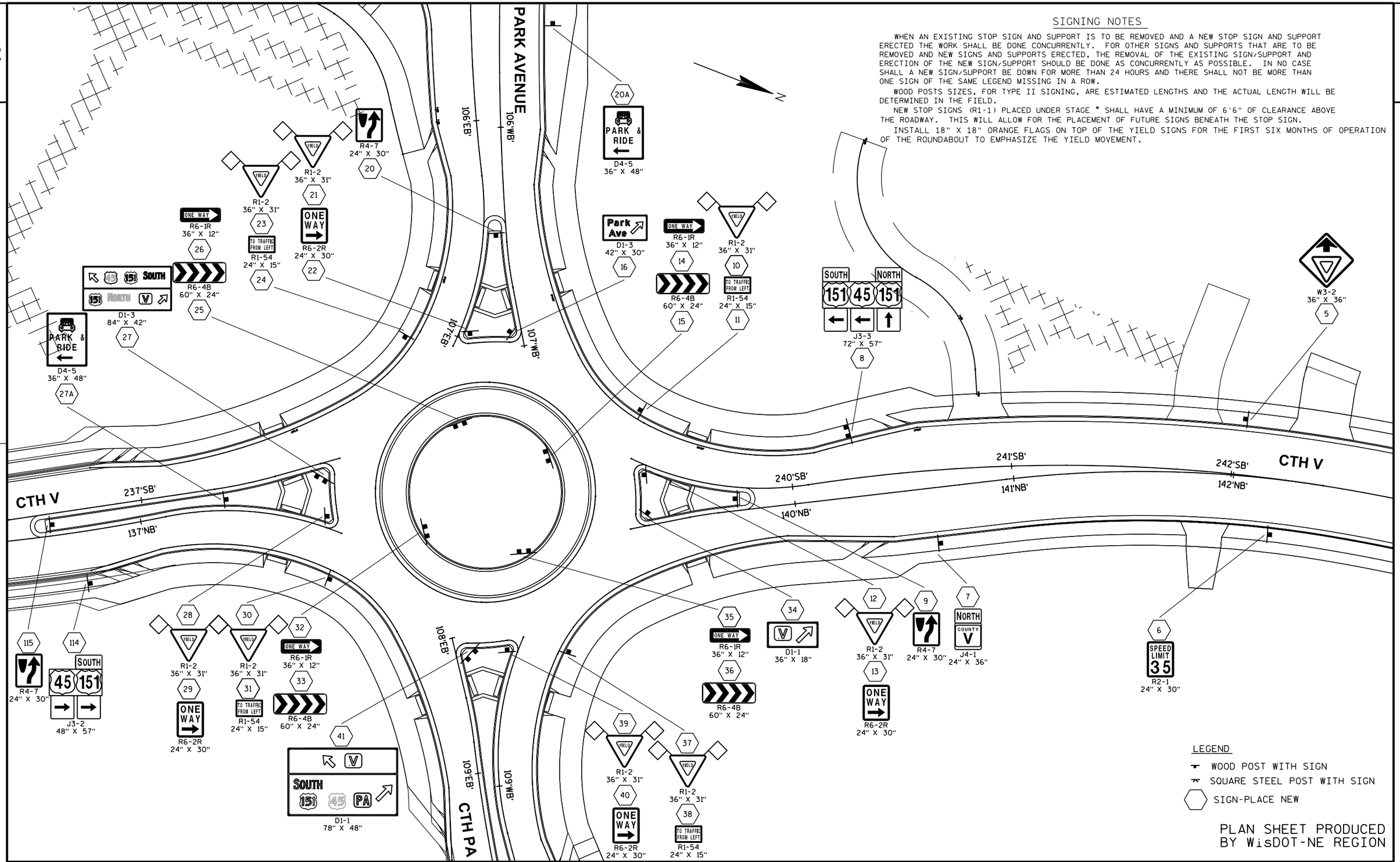
SIGNING NOTES

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

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

NEW STOP SIGNS (R1-1) PLACED UNDER STAGE * SHALL HAVE A MINIMUM OF 6'6" OF CLEARANCE ABOVE THE ROADWAY. THIS WILL ALLOW FOR THE PLACEMENT OF FUTURE SIGNS BENEATH THE STOP SIGN.

INSTALL 18" X 18" ORANGE FLAGS ON TOP OF THE YIELD SIGNS FOR THE FIRST SIX MONTHS OF OPERATION OF THE ROUNDABOUT TO EMPHASIZE THE YIELD MOVEMENT.



LEGEND

- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 109 E

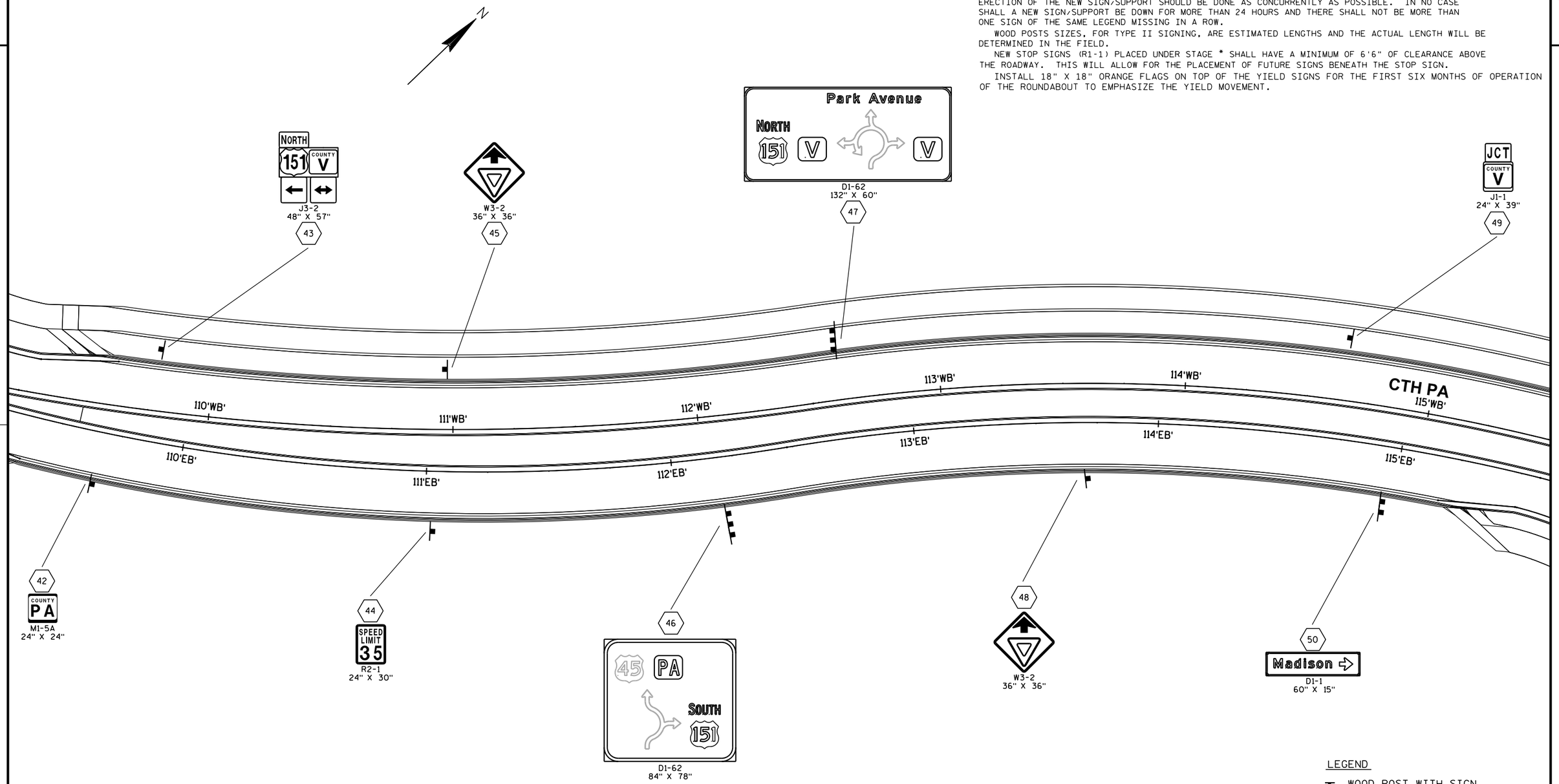
SIGNING NOTES

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

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

NEW STOP SIGNS (R1-1) PLACED UNDER STAGE * SHALL HAVE A MINIMUM OF 6'6" OF CLEARANCE ABOVE THE ROADWAY. THIS WILL ALLOW FOR THE PLACEMENT OF FUTURE SIGNS BENEATH THE STOP SIGN.

INSTALL 18" X 18" ORANGE FLAGS ON TOP OF THE YIELD SIGNS FOR THE FIRST SIX MONTHS OF OPERATION OF THE ROUNDABOUT TO EMPHASIZE THE YIELD MOVEMENT.

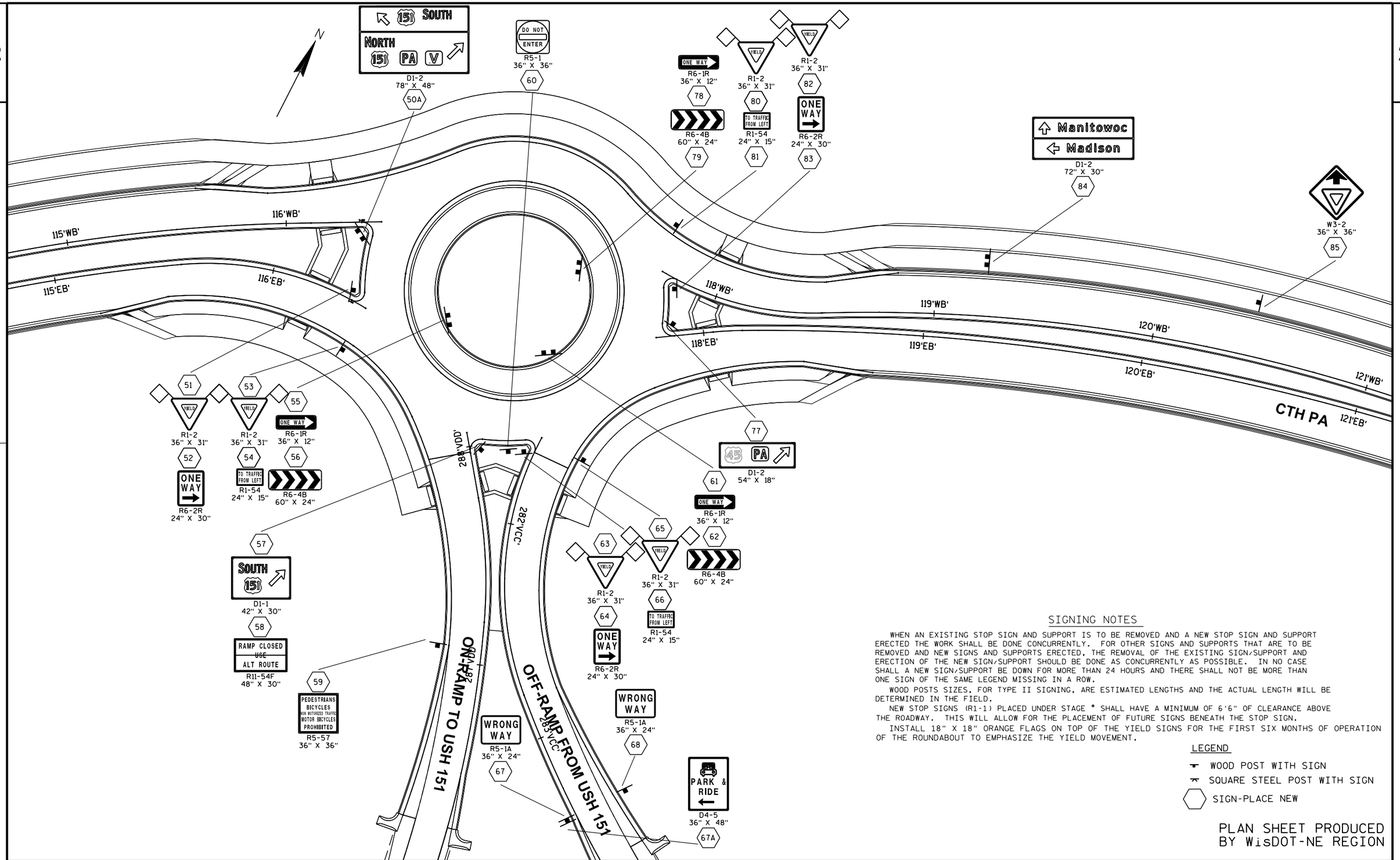


LEGEND

- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 110	E



SIGNING NOTES

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INSTALL 18" X 18" ORANGE FLAGS ON TOP OF THE YIELD SIGNS FOR THE FIRST SIX MONTHS OF OPERATION OF THE ROUNDABOUT TO EMPHASIZE THE YIELD MOVEMENT.

LEGEND

- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 111	E

SIGNING NOTES

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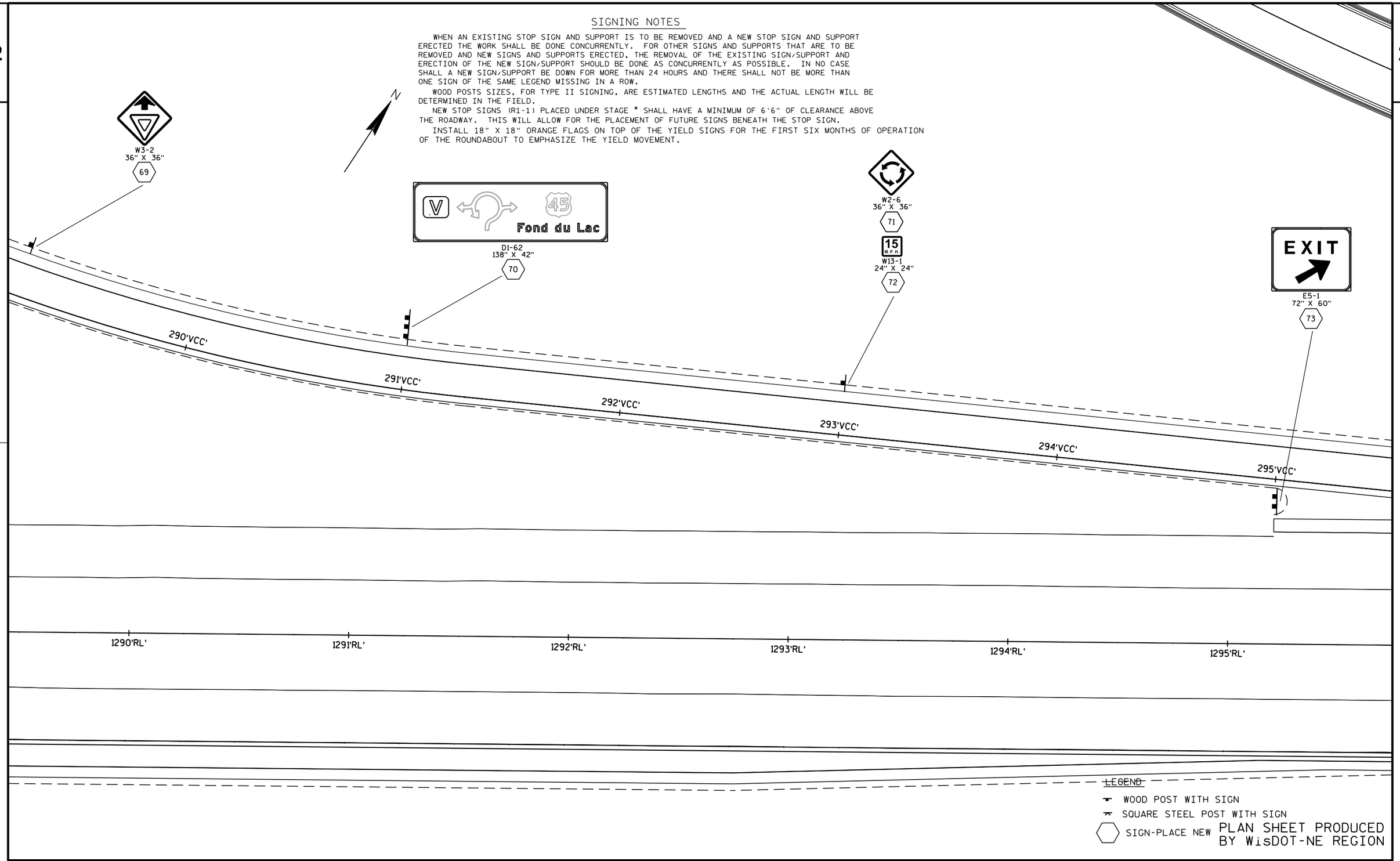

LEGEND

WOOD POST WITH SIGN

SQUARE STEEL POST WITH SIGN

SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 112	E

2

2

133'EB'

CTH PA

134'EB'

135'EB'

OFF-RAMP FROM USH 151

296'VCC'

297'VCC'

298'VCC'

299'VCC'

300'VCC'

301'VCC'

1296'RL'

1297'RL'

1298'RL'

1299'RL'

1300'RL'

1301'RL'

1302'RL'

USH 151 SB

USH 151 NB

74

NORTH

151

J4-1

36" X 54"

75

SPEED LIMIT

55

R2-1

36" X 48"

SIGNING NOTES

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LEGEND

- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 113	E

2

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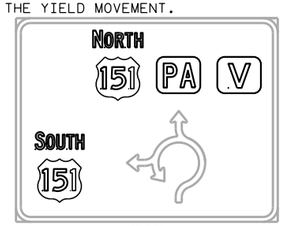


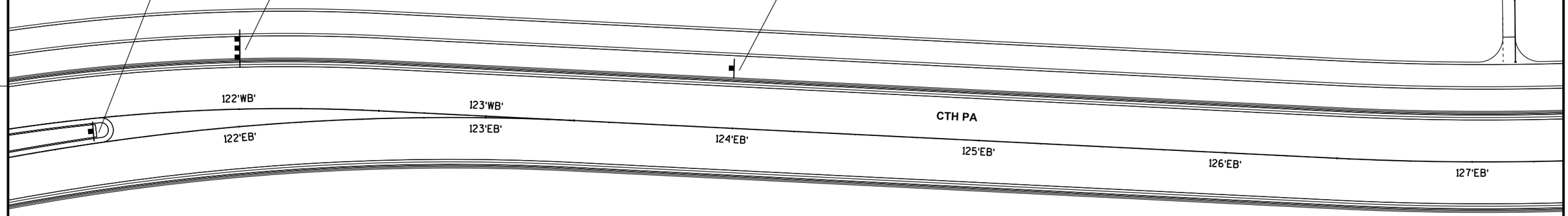
D1-62
108" X 84"
87

R4-7
24" X 30"
86

N

W2-6
30" X 30"
88

W13-1
18" X 18"
89



LEGEND

- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 114	E

SIGNING NOTES

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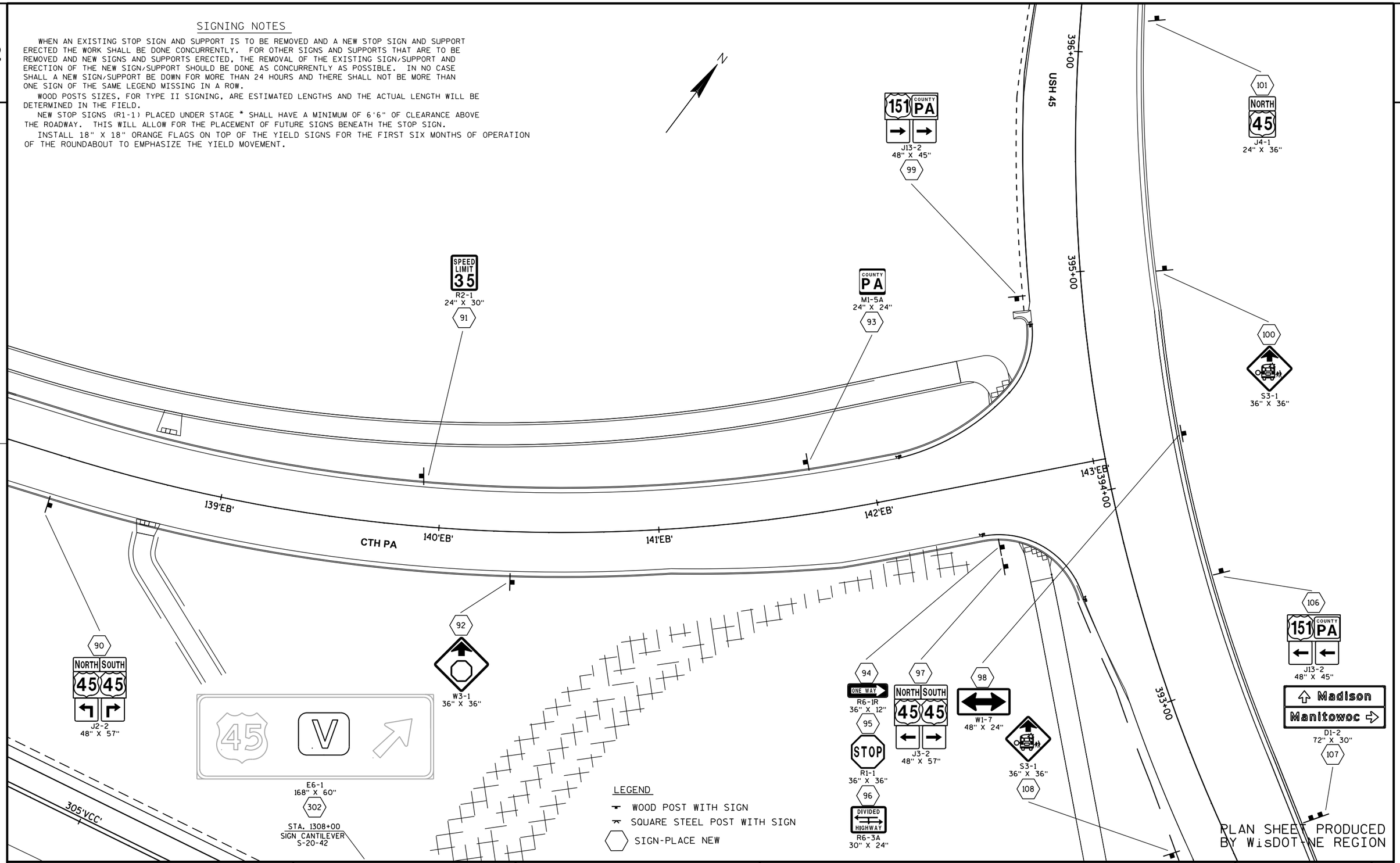

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PERMANENT SIGNING PLAN	SHEET E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1420-22-71 USH 151_CTH V Fond du Lac Co\023207_ps.dgn PLOT DATE : 05-NOV-2014 13:47 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 40:1

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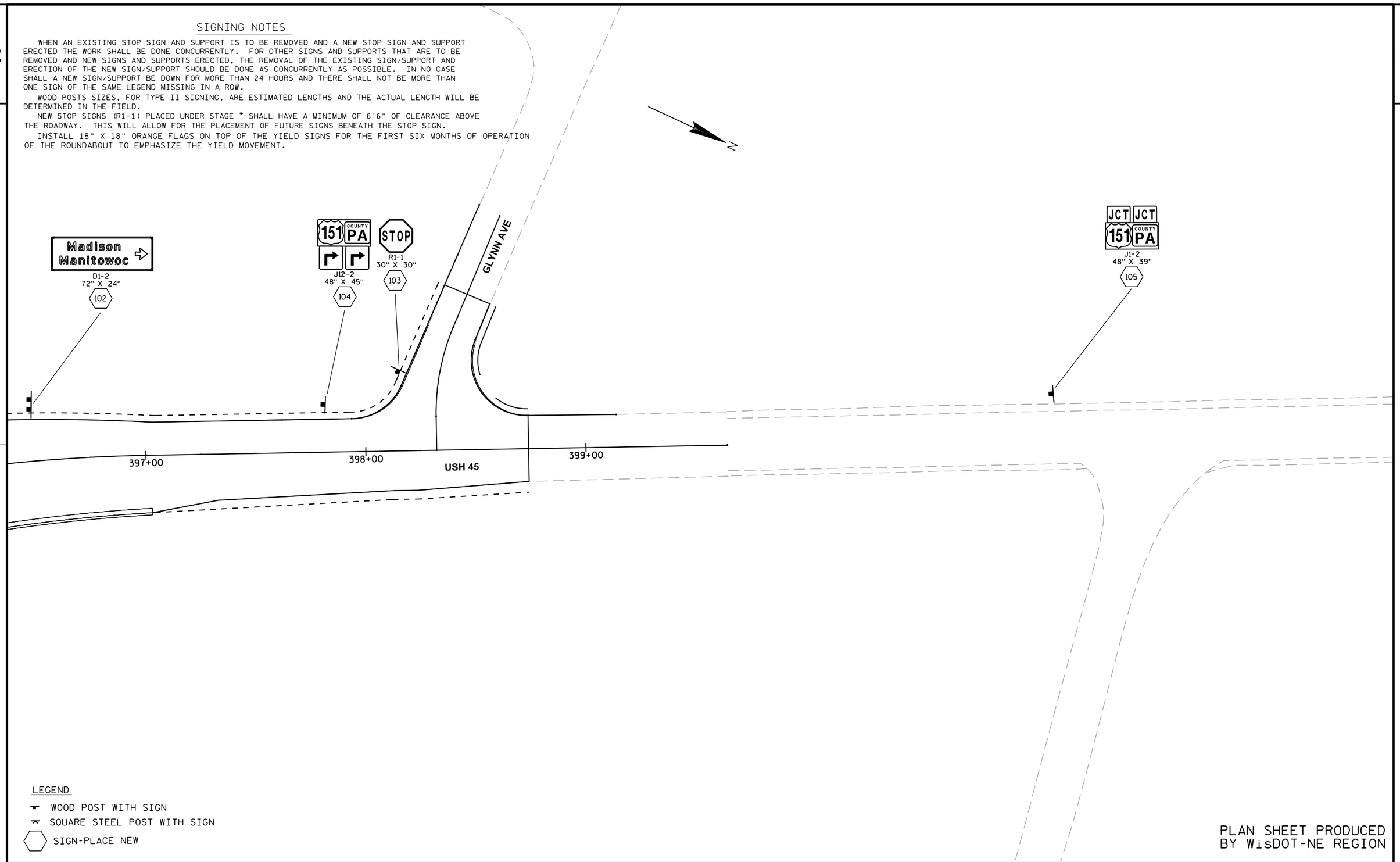

LEGEND

- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 116	E

2

45 V

EXIT 1 MILE

STA. 1348+05
GROUND MOUNT
303
E1-1A
156" X 90"

151 COUNTY PA
J12-2
48" X 45"
110

Hwy 151
M1-94
48" X 15"
109

Hwy 151
M1-94
48" X 15"
111

W1-2L
30" X 30"
112

JCT JCT
151 COUNTY PA
J1-2
48" X 39"
113

1315'RL'

1314'RL'

USH 45

390+00 389+00 388+00 387+00 385+00 384+00

312'VCC'

311'VCC'

1312'RL'

1311'RL'

USH 151

LEGEND

- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

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PLAN SHEET PRODUCED
BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 117	E

2

N

USH 151 SB

273'VDD'

274'VDD'

275'VDD'

276'VDD'

132'NB'

133'NB'

134'NB'

135'NB'

136'NB'

137'NB'

234'SB'

235'SB'

236'SB'

237'SB'

1275'RL'

1276'RL'

CTH V

Hwy 151
M1-94
48" X 15"
118
A

PARK & RIDE
D4-5
36" X 48"
27A

118
SOUTH
45 151
J2-2
48" X 57"

117
COUNTY
PA
J13-1
24" X 45"

116
Madison
D1-1
60" X 15"

115
R4-7
24" X 30"

114
SOUTH
45 151
J3-2
48" X 57"

LEGEND

- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

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PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 118	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1420-22-71 USH 151_CTH V Fond du Lac Co\023210_ps.dgn PLOT DATE : 22-SEP-2014 12:42 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 40:1

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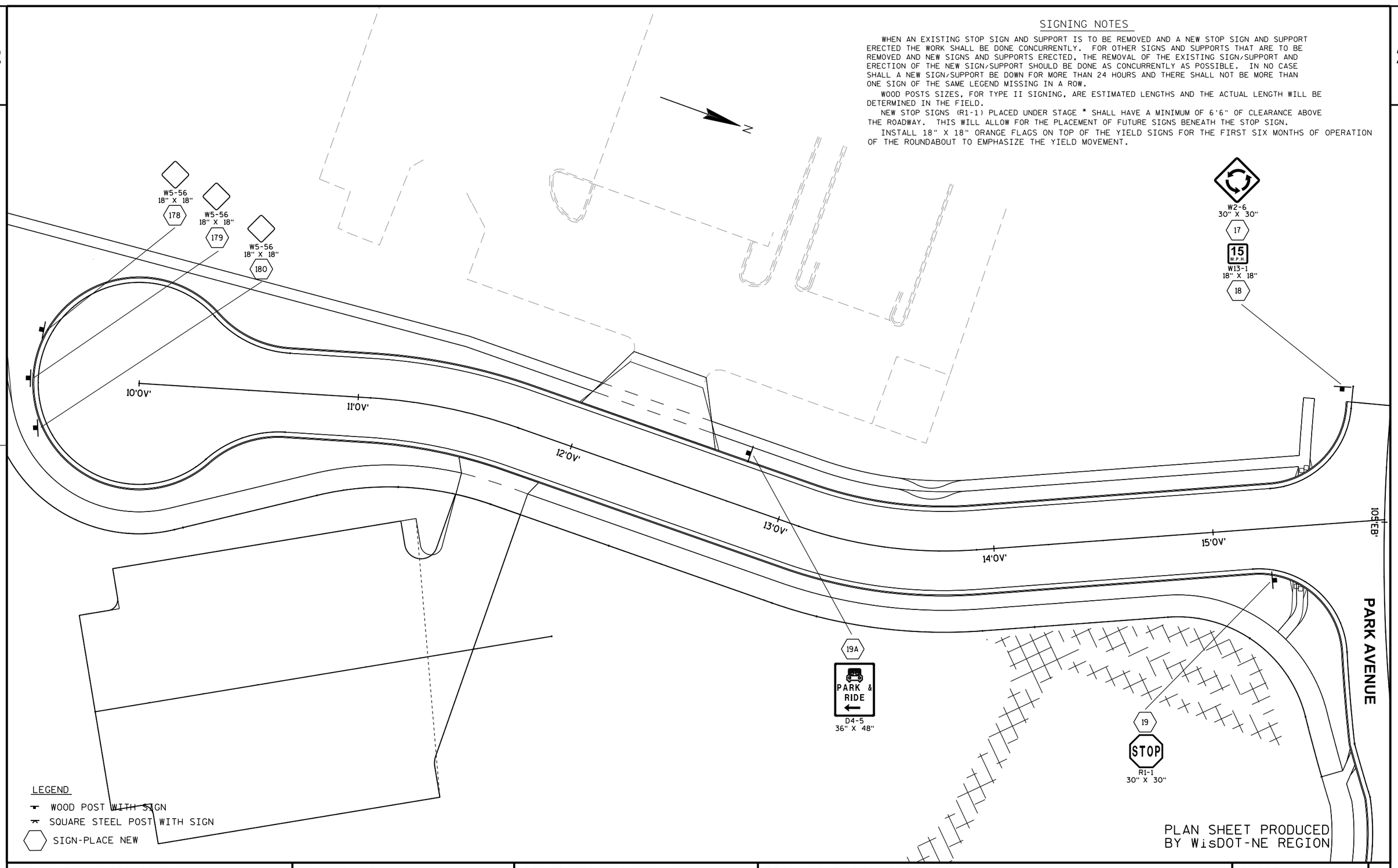

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	PERMANENT SIGNING PLAN	SHEET	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1420-22-71 USH 151_CTH V Fond du Lac Co\023211_ps.dgn PLOT DATE : 22-SEP-2014 12:42 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 40:1

2

USH 151 NB

OFF-RAMP TO CTH V

1275'RL'
1274'RL'
1273'RL'
131'NB'
275'VAA'
274'VAA'
273'VAA'
276'VAA'
277'VAA'
278'VAA'
279'VAA'
280'VAA'
229'SB'
130'NB'
229'SB'
129'NB'
228'SB'
128'NB'

144A
RAMP
00
M.P.H.
W13-3
48" X 60"
POSTED SPEED TO BE DETERMINED IN THE FIELD

NORTH 151 COUNTY V
J2-2
48" X 57"
120

CTH V

JCT JCT 45 COUNTY PA
J1-2
48" X 39"
119

119A
Hwy 151
M1-94
48" X 15"

Manitowoc
D1-1
72" X 15"
122

R4-7
24" X 30"
121

144
EXIT
E5-1
72" X 60"

142
W2-6
36" X 36"

143
15
M.P.H.
W13-1
24" X 24"

143A
W1-6
48" X 24"

145
W4-1
48" X 48"

141
V 45 V
Fond du Lac
D1-62
138" X 42"

W3-2
36" X 36"
140

SIGNING NOTES

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LEGEND

- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	PERMANENT SIGNING PLAN	SHEET	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1420-22-71 USH 151_CTH V Fond du Lac Co\023212_ps.dgn PLOT DATE : 22-SEP-2014 12:42 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 40:1

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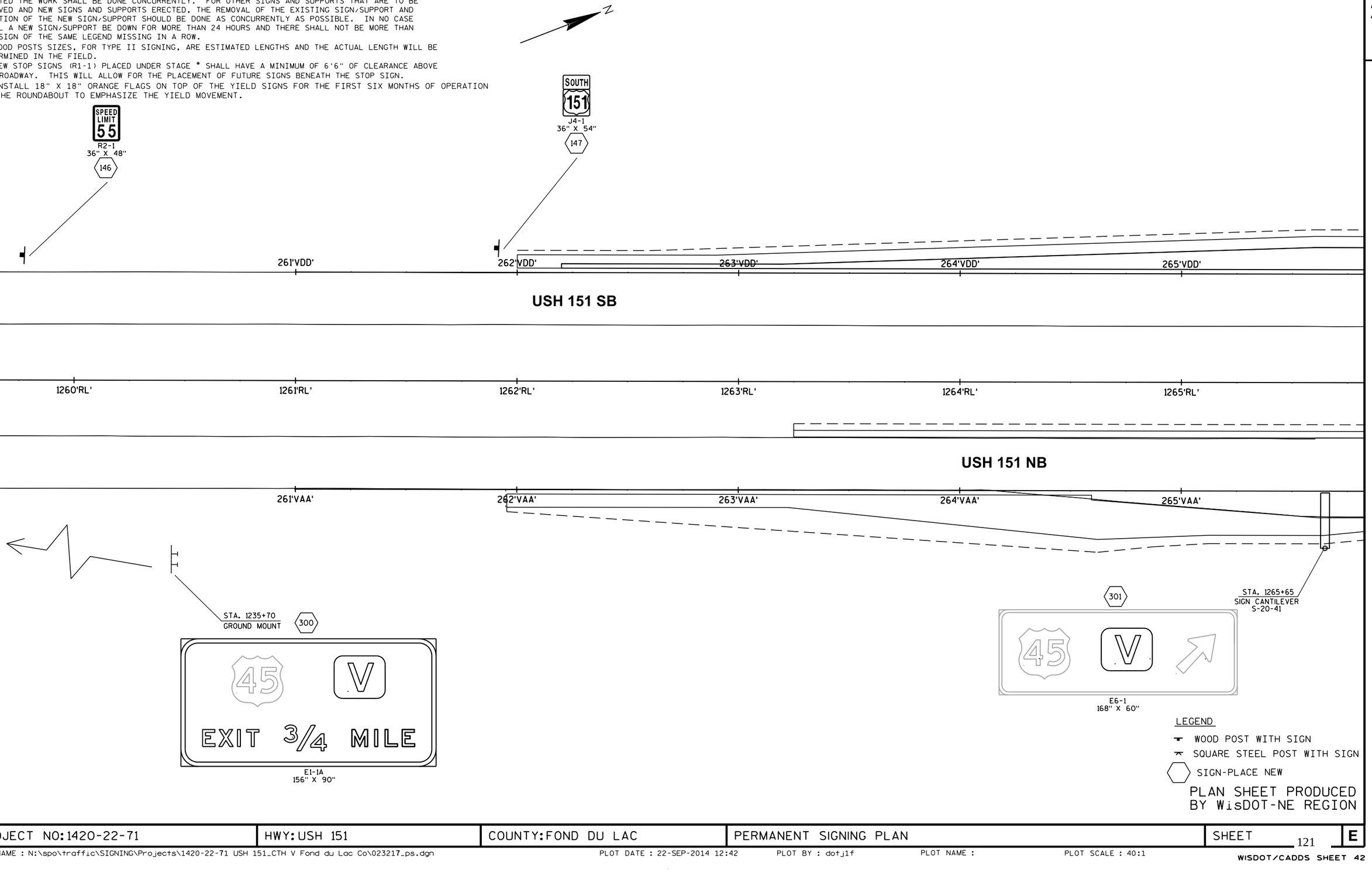

LEGEND

- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 121	E

SIGNING NOTES

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N

ONE WAY R6-1R 36" X 12" 128
YIELD R1-2 36" X 31" 124
TO TRAFFIC FROM LEFT R1-54 24" X 15" 125
R6-4B 60" X 24" 129
226'SB'
126'NB'
YIELD R1-2 36" X 31" 126
ONE WAY R6-2R 24" X 30" 127
ONE WAY R6-1R 36" X 12" 131
R6-4B 60" X 24" 132
SOUTH 151 V D1-1 66" X 30" 130
YIELD R1-2 36" X 31" 133
TO TRAFFIC FROM LEFT R1-54 24" X 15" 134
YIELD R1-2 36" X 31" 135
ONE WAY R6-2R 24" X 30" 136
WRONG WAY R5-1A 36" X 24" 138
PARK & RIDE D4-5 36" X 48" 138A
NORTH 151 V D1-2 66" X 42" 148
DO NOT ENTER R5-1 36" X 36" 137
287'VAA'
284'VAA'
286'VAA'
OFF-RAMP TO CTH V
285'VAA'
270'VBB'
ON-RAMP TO USH 151
271'VBB'
272'VBB'
273'VBB'
224'SB'
124'NB'
223'SB'
123'NB'
222'SB'
CTH V
SOUTH COUNTY V J4-1 24" X 36" 159
149 YIELD R1-2 36" X 31"
150 ONE WAY R6-2R 24" X 30"
151 YIELD R1-2 36" X 31"
152 TO TRAFFIC FROM LEFT R1-54 24" X 15"
153 ONE WAY R6-1R 36" X 12"
154 R6-4B 60" X 24"
SOUTH NORTH 151 151 J3-2 48" X 57" 158
155 NORTH 151 D1-1 42" X 30"
156 RAMP CLOSED ~~USE~~ ALT ROUTE R11-54F 48" X 30"
157 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED R5-57 36" X 36"
139 WRONG WAY R5-1A 36" X 24"

LEGEND
- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 122 E

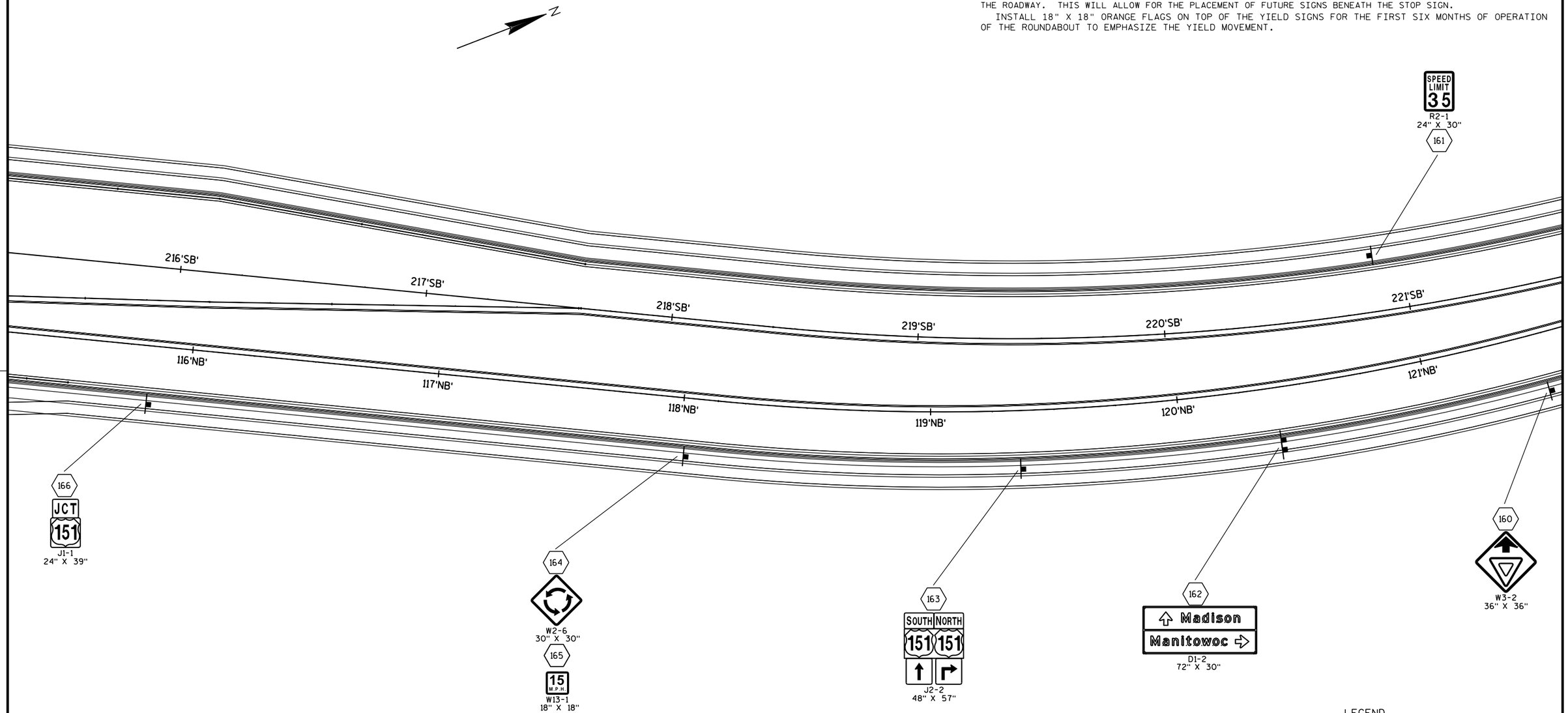
SIGNING NOTES

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

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

NEW STOP SIGNS (R1-1) PLACED UNDER STAGE * SHALL HAVE A MINIMUM OF 6'6" OF CLEARANCE ABOVE THE ROADWAY. THIS WILL ALLOW FOR THE PLACEMENT OF FUTURE SIGNS BENEATH THE STOP SIGN.

INSTALL 18" X 18" ORANGE FLAGS ON TOP OF THE YIELD SIGNS FOR THE FIRST SIX MONTHS OF OPERATION OF THE ROUNDABOUT TO EMPHASIZE THE YIELD MOVEMENT.



LEGEND

- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 123 E

SIGNING NOTES

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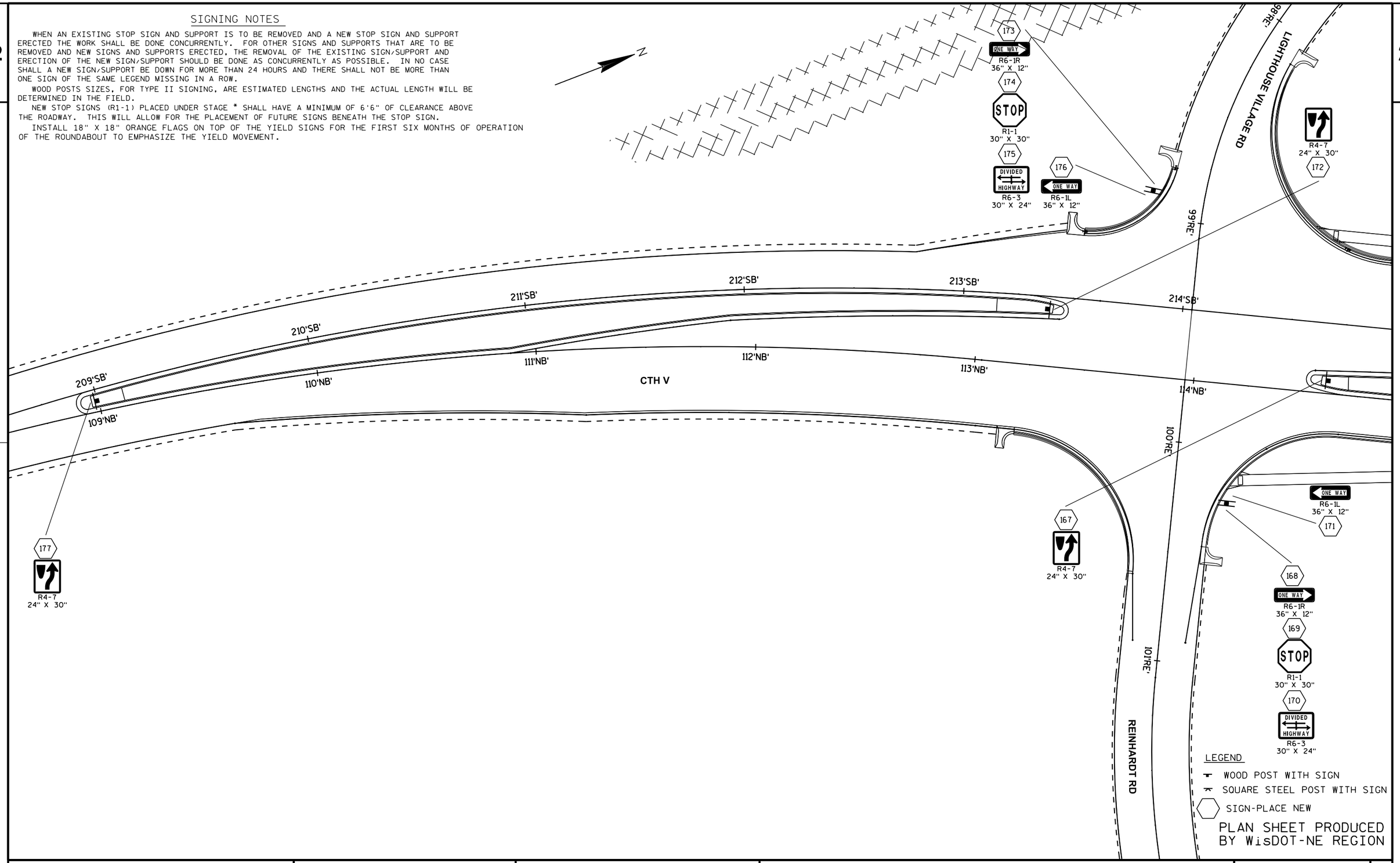

LEGEND

- WOOD POST WITH SIGN
- SQUARE STEEL POST WITH SIGN
- SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	PERMANENT SIGNING PLAN	SHEET 124	E

2

2

N

USH 151 SB

USH 151 NB

CANADIAN NATIONAL R/R

200
JCT
COUNTY
V
J1-1

201
JCT
COUNTY
V
J1-1

SIGNING NOTES

TYPE II SIGNS AND SUPPORTS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THEIR SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. SUPPORTS SHALL BE SORTED BY LENGTH AND TYPE. THE REGIONAL TRAFFIC UNIT, 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS AND SUPPORTS.

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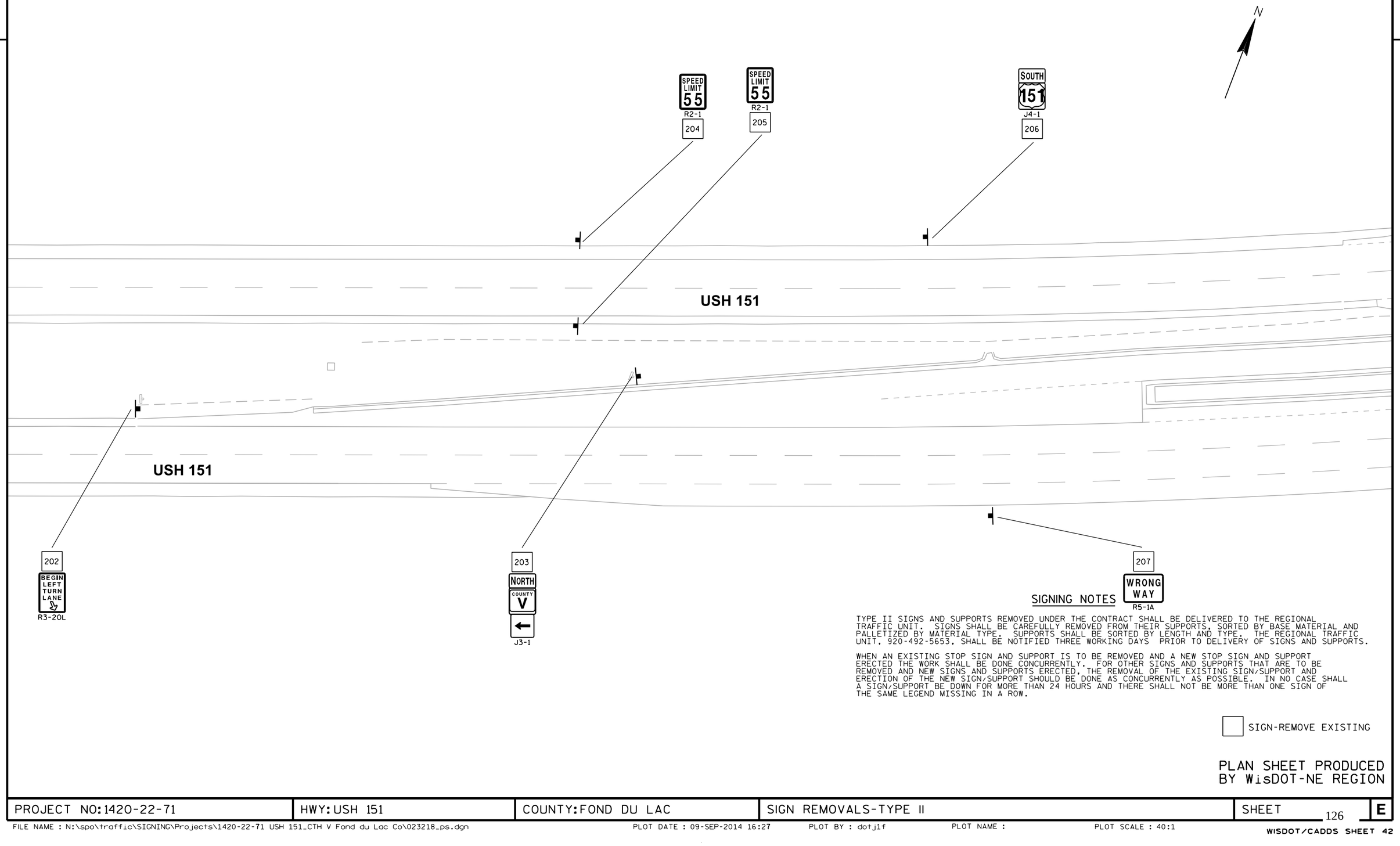
☐ SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 125	E

2



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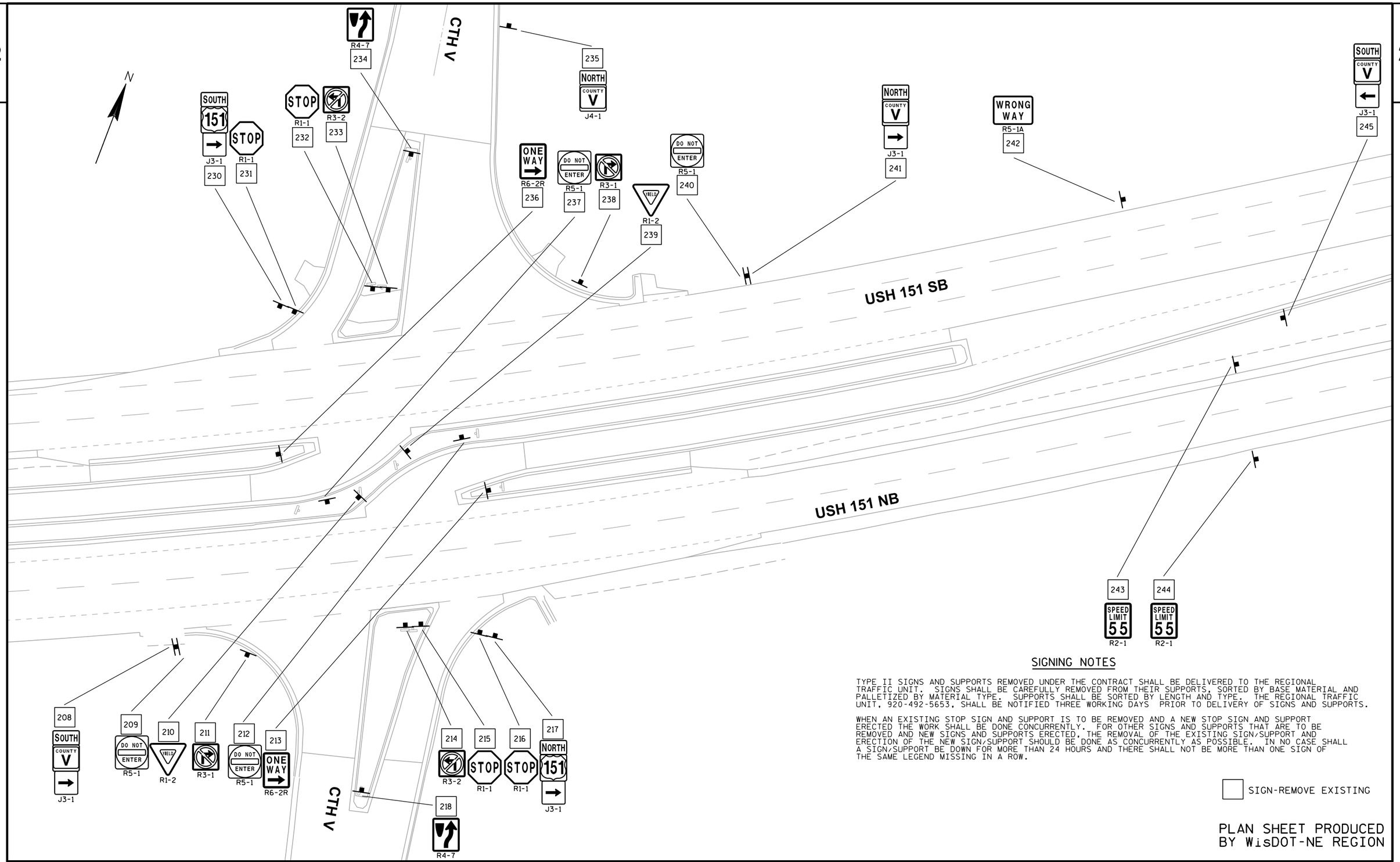
PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 126	E

2



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PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 127 E

2

SIGNING NOTES

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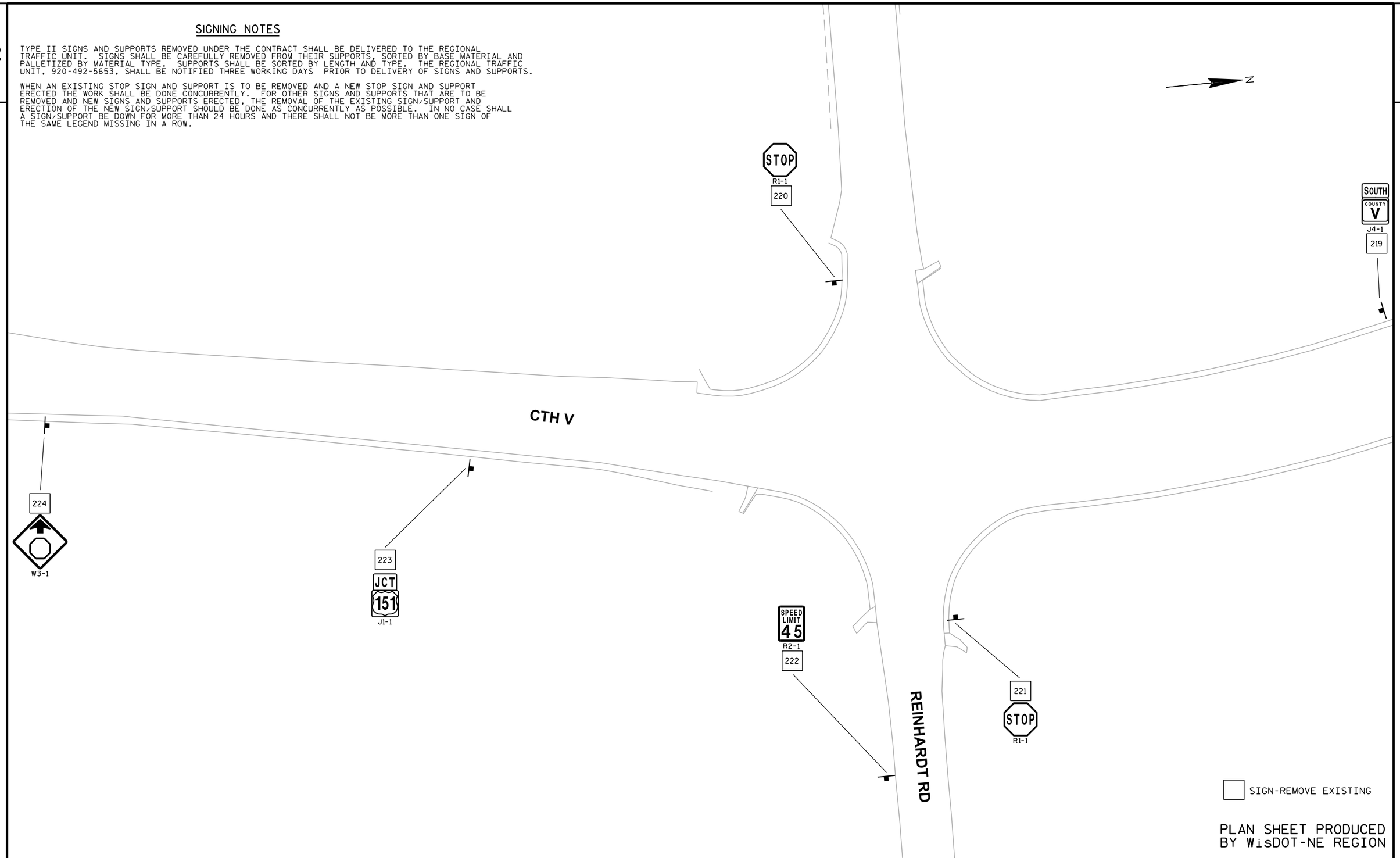

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 128	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1420-22-71 USH 151_CTH V Fond du Lac Co\023221_ps.dgn PLOT DATE : 09-SEP-2014 16:27 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

SIGNING NOTES

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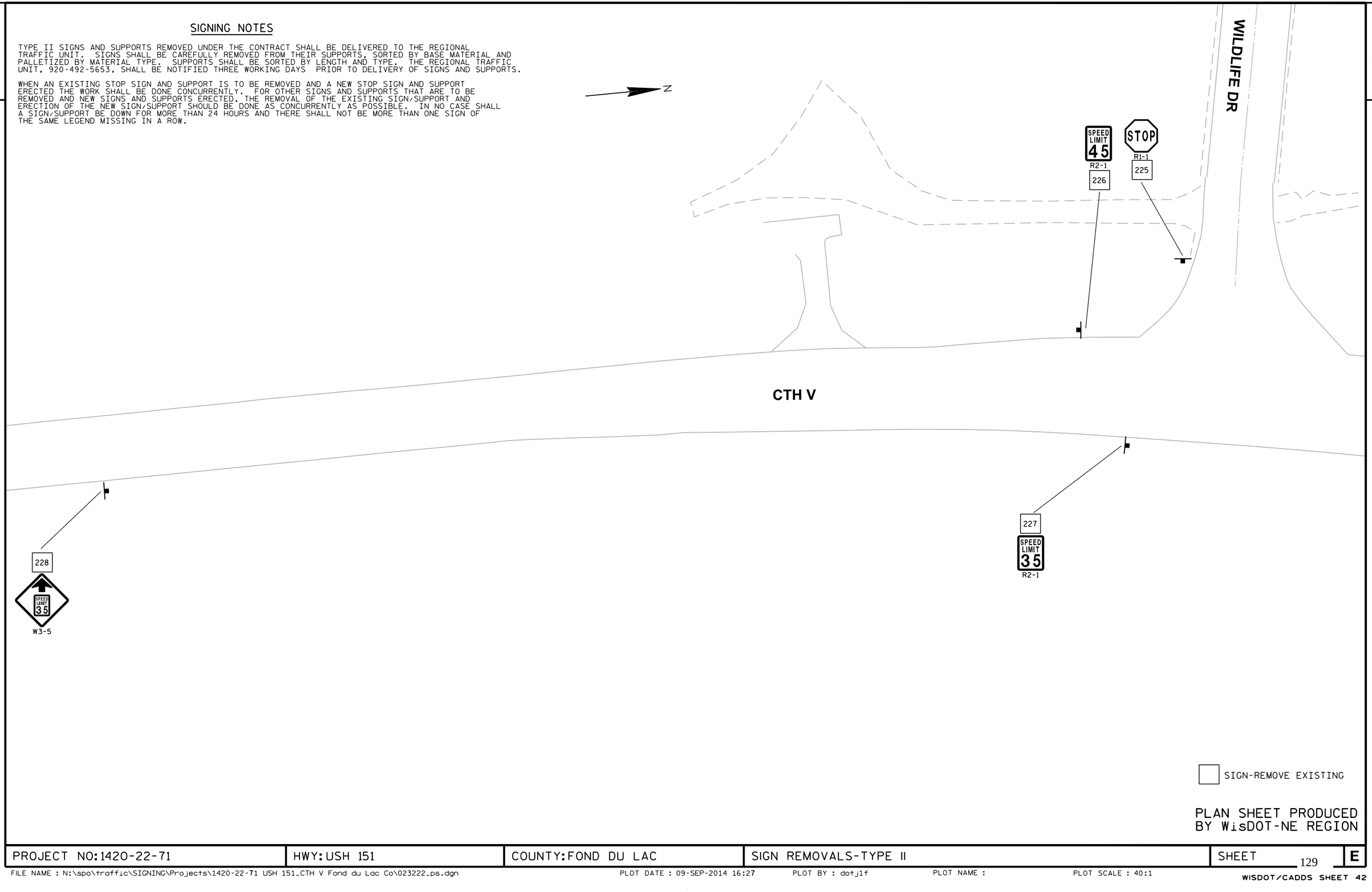

SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 129	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1420-22-71 USH 151_CTH V Fond du Lac Co\023222_ps.dgn PLOT DATE : 09-SEP-2014 16:27 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

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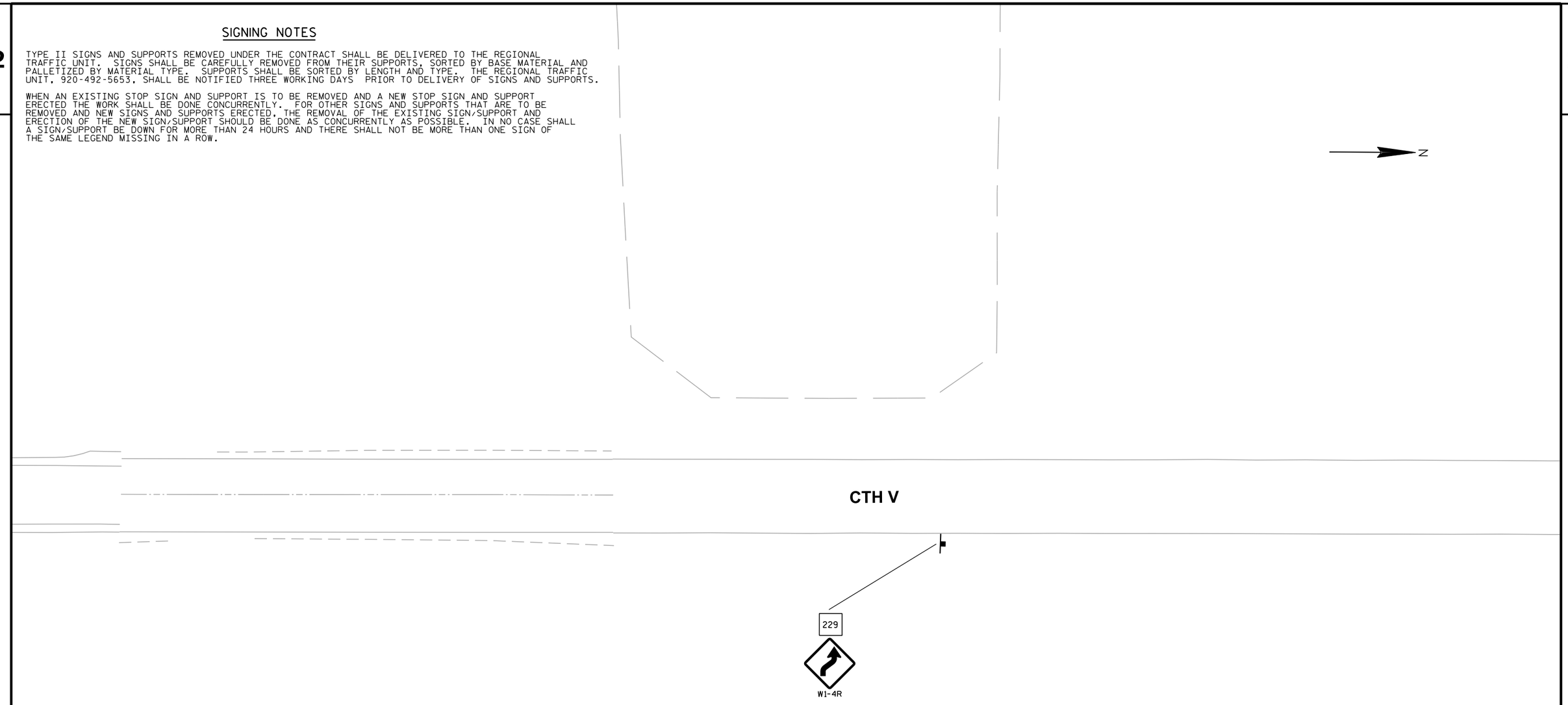

SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 130	E

2

SIGNING NOTES

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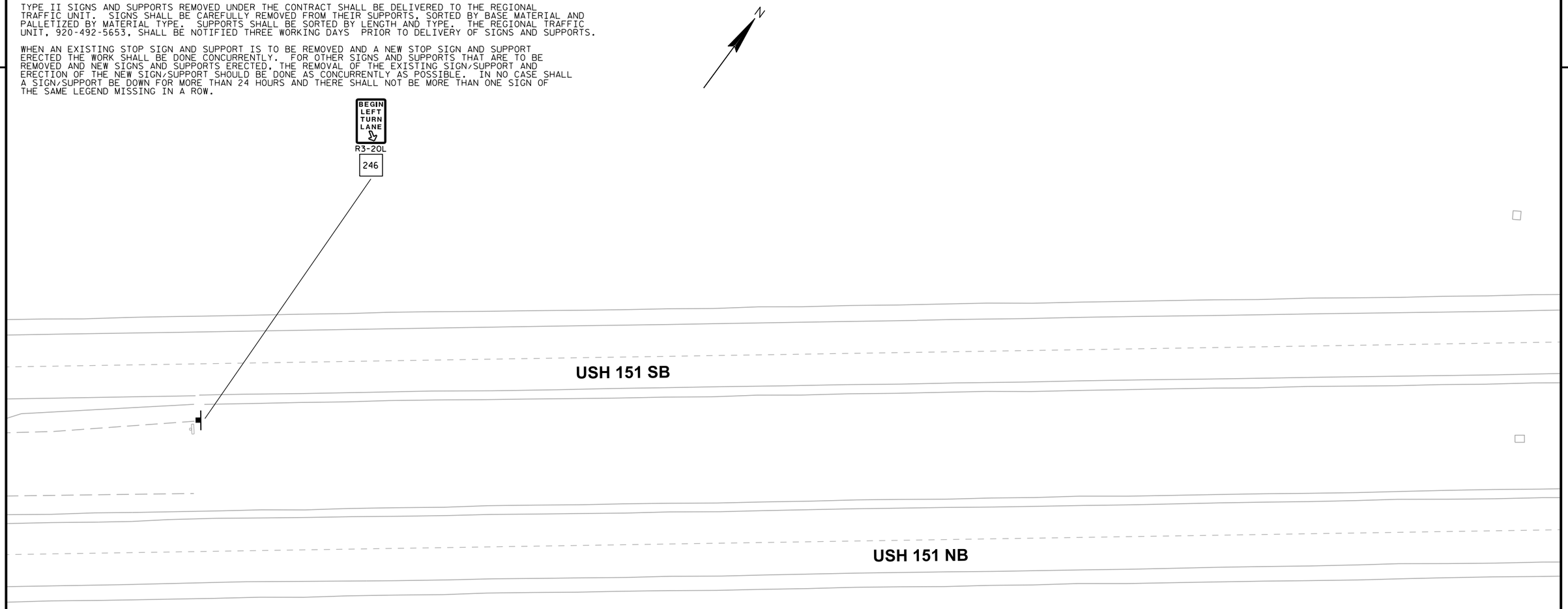

SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 131	E

2

2

N

JCT
151
J1-1
247

W1-4L
250

W3-1
251

CTH V

248
SPEED LIMIT 35
R2-1

249
Fond du Lac
POPULATION 43,021
I2-3

SIGNING NOTES

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PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 132	E

2

SIGNING NOTES

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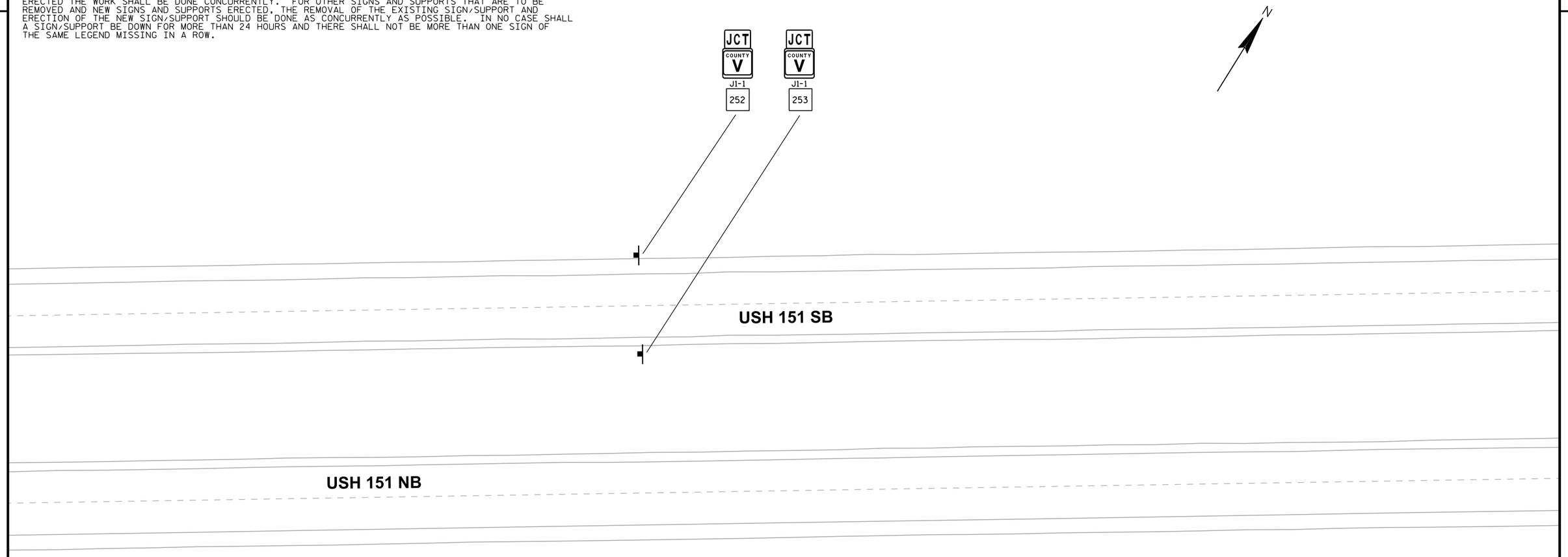

SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 133	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1420-22-71 USH 151_CTH V Fond du Lac Co\023225_ps.dgn PLOT DATE : 09-SEP-2014 16:27 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

SIGNING NOTES

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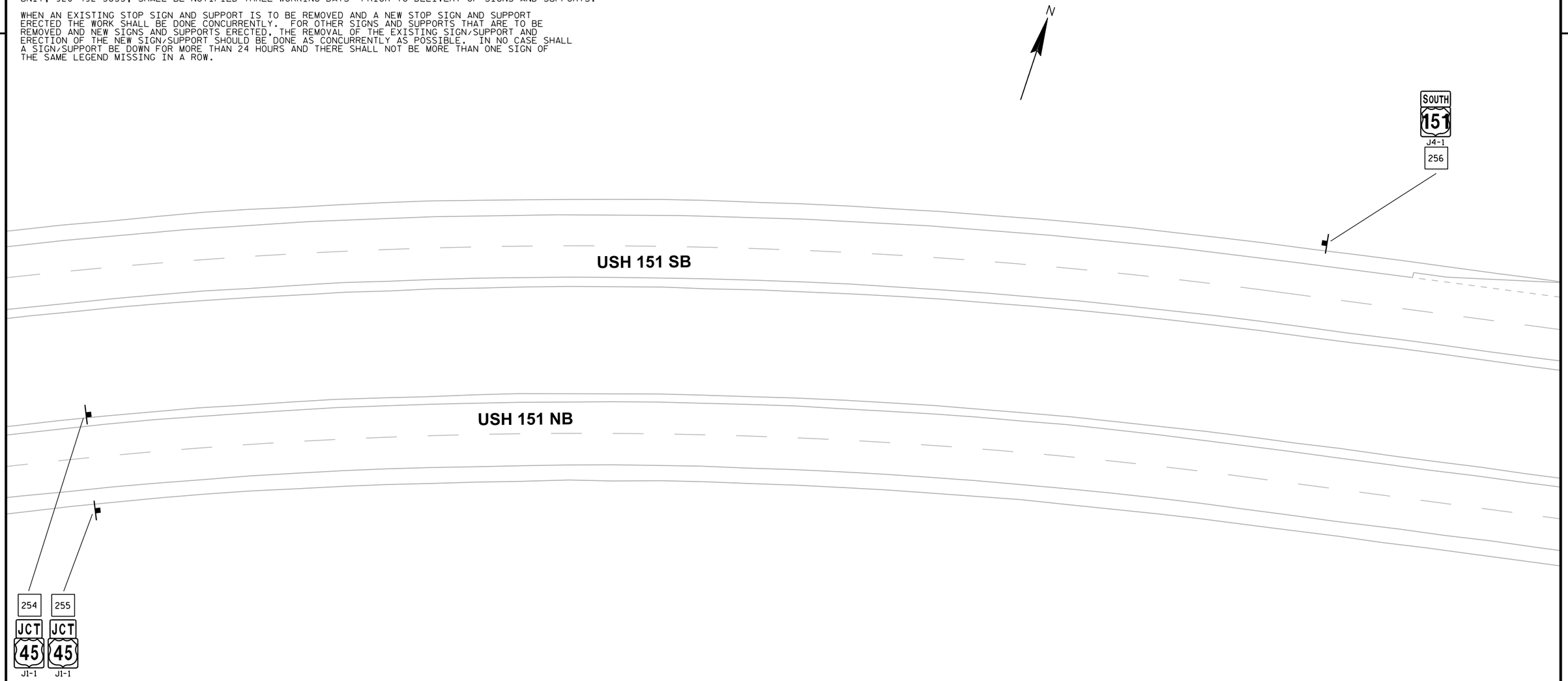
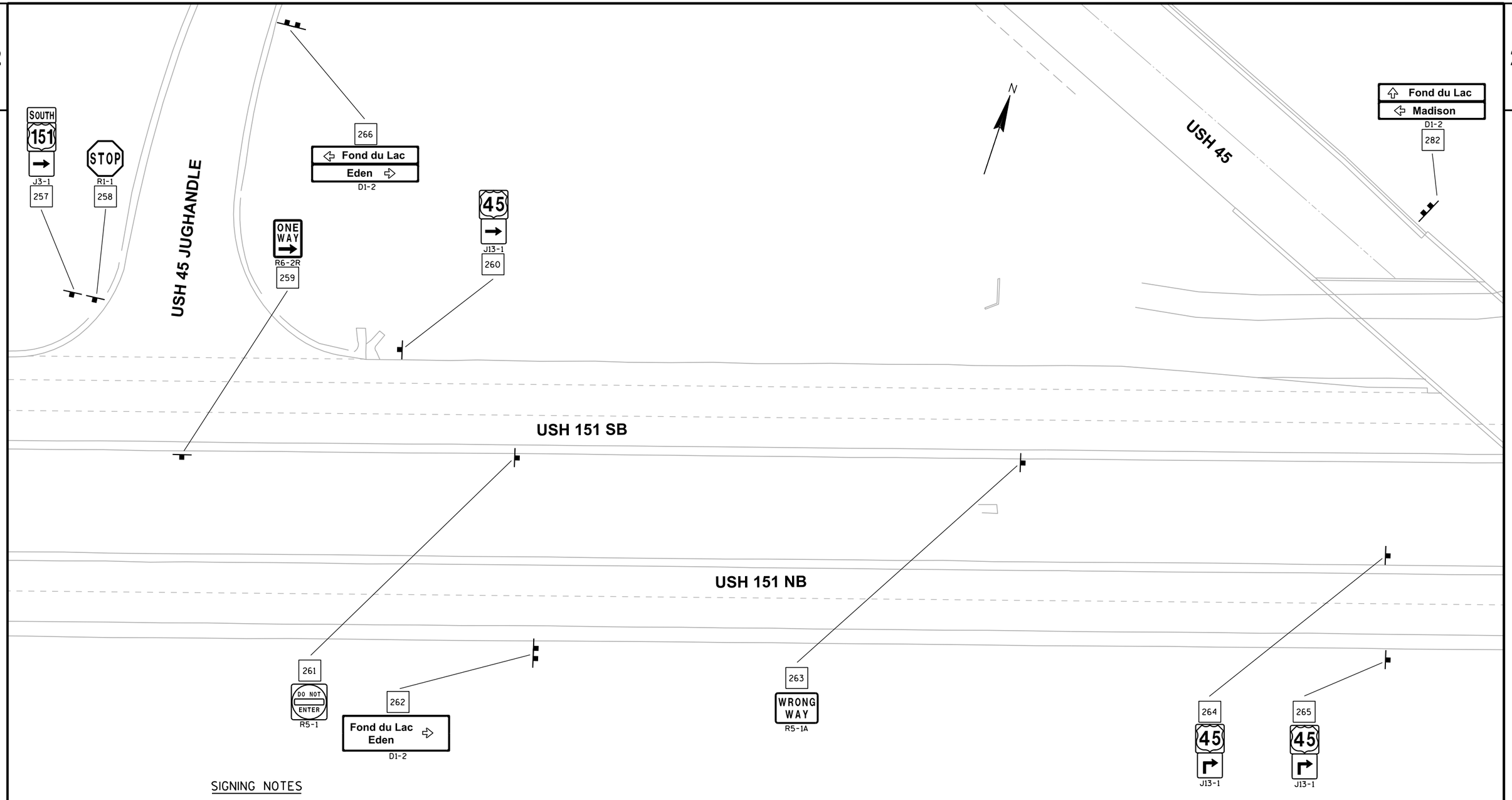


SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 134	E

2



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PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 135	E

2

N

USH 45

NORTH 45
J4-1
276

S3-1
274

SOUTH 151
J3-1
272

SPEED LIMIT 45
R2-1
280

275
Eden
Manitowoc
Madison
D1-3

273
NORTH 151 SOUTH 151
J3-2

W3-1
268

USH 45 JUGHANDLE

271
W1-7

269
STOP
R1-1

270
NORTH 45 SOUTH 45
J3-2

281
S3-1

SIGNING NOTES

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SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 136 E

2

2

N

TAKODAH DR

USH 45

279
JCT
151
J1-1

278
NORTH SOUTH
151 151
J2-2

GLYNN AVE

277
STOP
R1-1

SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

SIGNING NOTES

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PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 137	E

2

N

SOUTH NORTH
45 45
J3-2
288

STOP
R1-1
289

USH 45 JUGHANDLE

290
W3-1

SOUTH NORTH
151 151
J3-2
291

W1-2R
285

USH 45

283
NORTH
151
J2-1

284
Eden
Manitowoc
D1-2

286
W1-2L

287
NORTH
151
J3-1

VALLEY CREEK RD

SIGNING NOTES

TYPE II SIGNS AND SUPPORTS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THEIR SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. SUPPORTS SHALL BE SORTED BY LENGTH AND TYPE. THE REGIONAL TRAFFIC UNIT, 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS AND SUPPORTS.

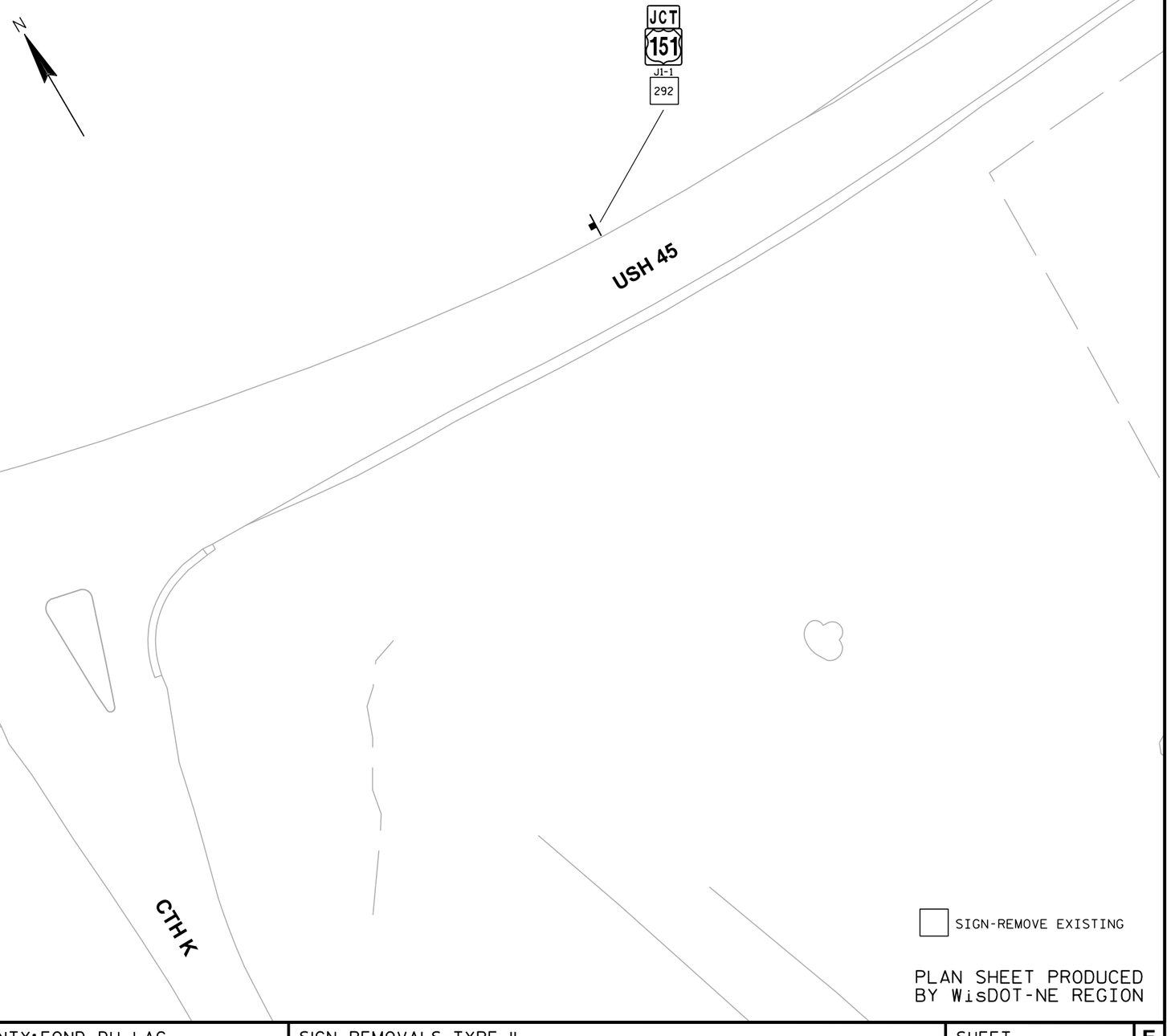
WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A 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.

☐ SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 138	E

2



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☐ SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 139	E

2

2

N

45
J12-1
295

45
J12-1
296

Fond du Lac
Eden
D1-2
297

USH 151 SB

USH 151 NB

USH 45 NB

298
WRONG WAY
R5-1A

299
DO NOT ENTER
R5-1

299A
ONE WAY
R6-2R

USH 45 JUGHANDLE

NORTH
151
J2-1
283

Eden
Fond du Lac
D1-2
294

299B
STOP
R1-1

299C
NORTH
151
J2-1

R3-2
293

SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

SIGNING NOTES

TYPE II SIGNS AND SUPPORTS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THEIR SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. SUPPORTS SHALL BE SORTED BY LENGTH AND TYPE. THE REGIONAL TRAFFIC UNIT, 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS AND SUPPORTS.

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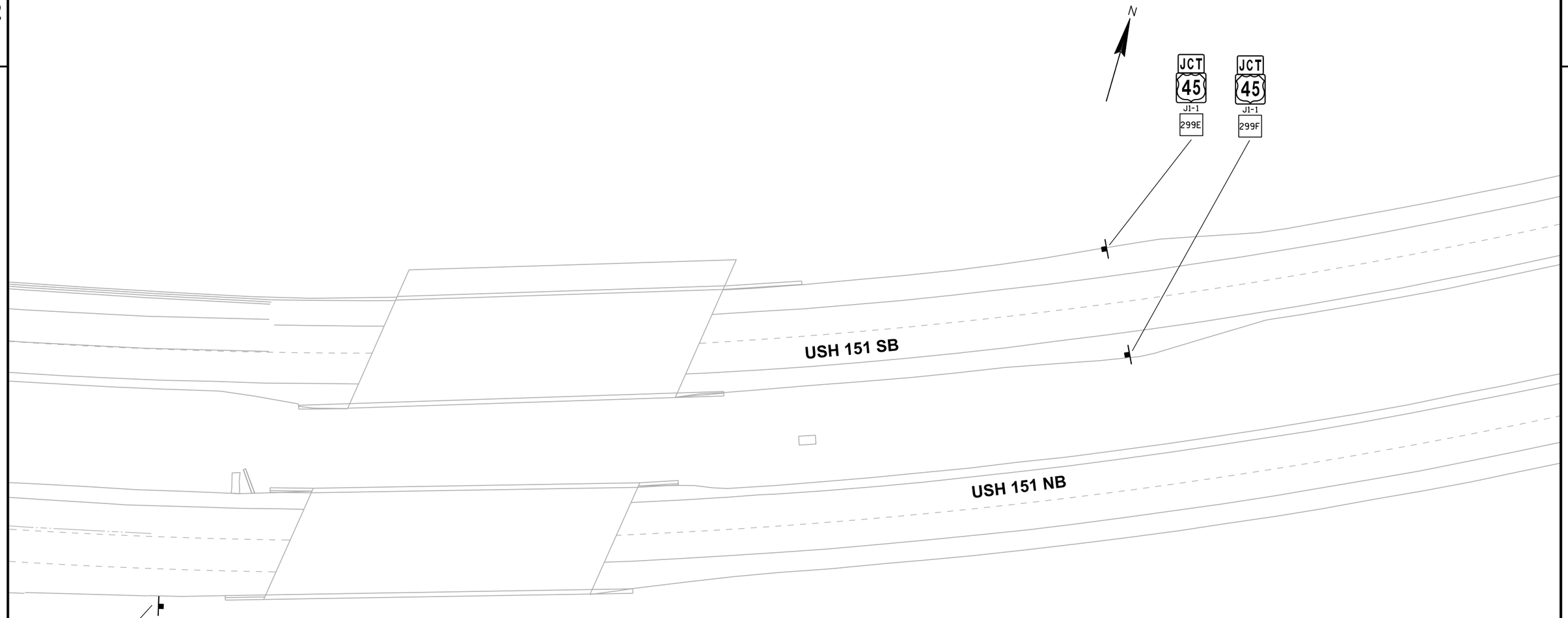
PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 140	E

2



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TYPE II SIGNS AND SUPPORTS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THEIR SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. SUPPORTS SHALL BE SORTED BY LENGTH AND TYPE. THE REGIONAL TRAFFIC UNIT, 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS AND SUPPORTS.

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☐ SIGN-REMOVE EXISTING

PLAN SHEET PRODUCED BY WisDOT-NE REGION

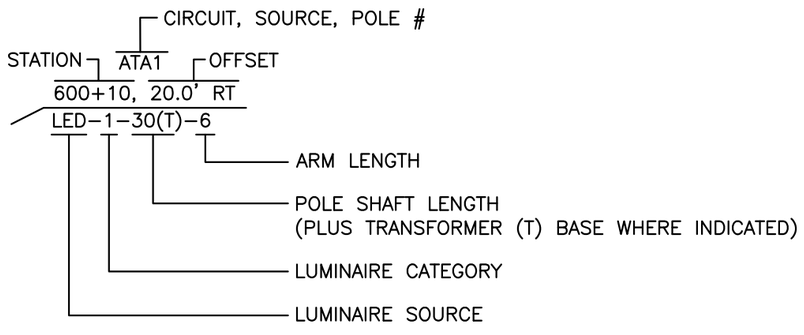
PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	SIGN REMOVALS-TYPE II	SHEET 141	E

2

LEGEND:

●—◗	MUNICIPAL LIGHTING UNIT
Ⓜ	STEEL PULL BOX (24 X 42 – INCH)
———	2–INCH SCH. 40 NONMETALLIC CONDUIT
— — — —	CONDUCTORS IN CONDUIT: 2–6 AWG AND 1–6 AWG GND IN 2–INCH SCH. 40 NONMETALLIC CONDUIT
—— - ——	CONDUCTORS IN CONDUIT: 3–6 AWG AND 1–6 AWG GND IN 2–INCH SCH. 40 NONMETALLIC CONDUIT

MUNICIPAL LIGHTING
UNIT IDENTIFICATION



GENERAL NOTES:

1. THE ENGINEER WILL APPROVE THE FINAL LOCATION OF ALL CONCRETE BASES AND PULL BOXES IN THE FIELD PRIOR TO CONSTRUCTION.
2. PITCH ALL CONDUITS TOWARDS PULL BOXES.
3. THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
4. THE LOCATION OF CONDUIT AS SHOWN ON THE PLANS IS APPROXIMATE. INSTALL ALL CONDUIT WITHIN 12–INCHES BEHIND CURB AND GUTTER.

KEYED NOTES:

(1) PROVIDE PULL ROPE IN EMPTY CONDUIT. INCIDENTAL TO CONDUIT.

(2) NO SPLICES ALLOWED IN PULL BOX, EXCEPT FOR BONDING PULL BOX TO GROUNDING CONDUCTOR.

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2

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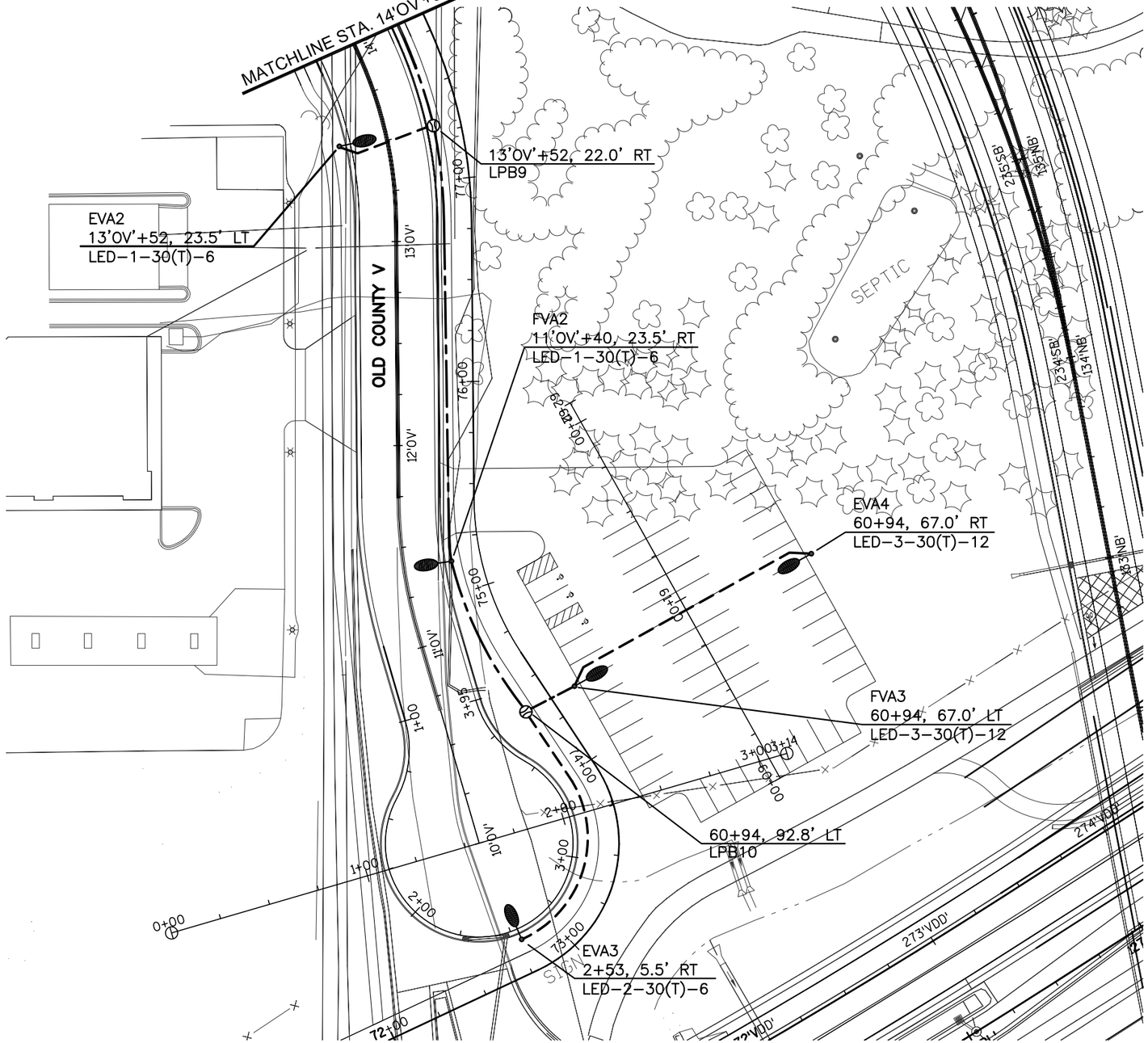


DESIGNED BY: POWRTEK ENGINEERING, INC. SHEET 2 OF 6

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LIGHTING PLAN	SHEET NO: 143 E

H:\PROJECTS\2241 - US151 - CTH T & CTH V\Powrtek\CTH V\E1_E4 - Lighting Plans.dwg, 9/17/2014 9:30:53 AM

2

N

MATCHLINE STA. 140'NB'+00

CVA1
13'NW2'+35, 19.6' LT
LED–3–30(T)–12

DVA1
12'NW2'+18, 23.6' LT
LED–3–30(T)–12

LIGHTING METER/LOAD CENTER 'VA'
106'WB'+46, 50.0' LT

2–INCH CONDUIT WITH 3–6 AWG & 1–6 AWG GND (CKTs. A & B)
2–INCH CONDUIT WITH 3–6 AWG & 1–6 AWG GND (CKTs. C & D)
2–INCH CONDUIT WITH 3–6 AWG & 1–6 AWG GND (CKTs. E & F)

106'WB'+46, 37.6' LT
LPB4

EVA1
104'WB'+69, 23.6' LT
LED–1–30(T)–6

15'OV'+54, 40.0' LT
LPB8

FVA1
15'OV'+28, 25.4' RT
LED–1–30(T)–6

CVA4
106'EB'+47, 23.6' RT
LED–3–30(T)–12

DVA4
11'SW2'+43, 19.7' RT
LED–3–30(T)–12

12'SW2'+44, 22.5' RT
LPB7

12'NE2'+25, 6.8' RT
LPB5

DVA2
11'NE2'+62, 11.3' RT
LED–3–30(T)–6

CVA2
10'NE2'+62, 11.3' RT
LED–3–30(T)–6

12'SE2'+23, 23.6' RT
LPB6

DVA3
106'SE2'+56, 20.0' RT
LED–3–30(T)–12

22'RA2'+95, 23.7' LT
LPB11

CVA3
106'SE2'+56, 20.0' RT
LED–3–30(T)–12

PARK AVE

FRONTAGE RD

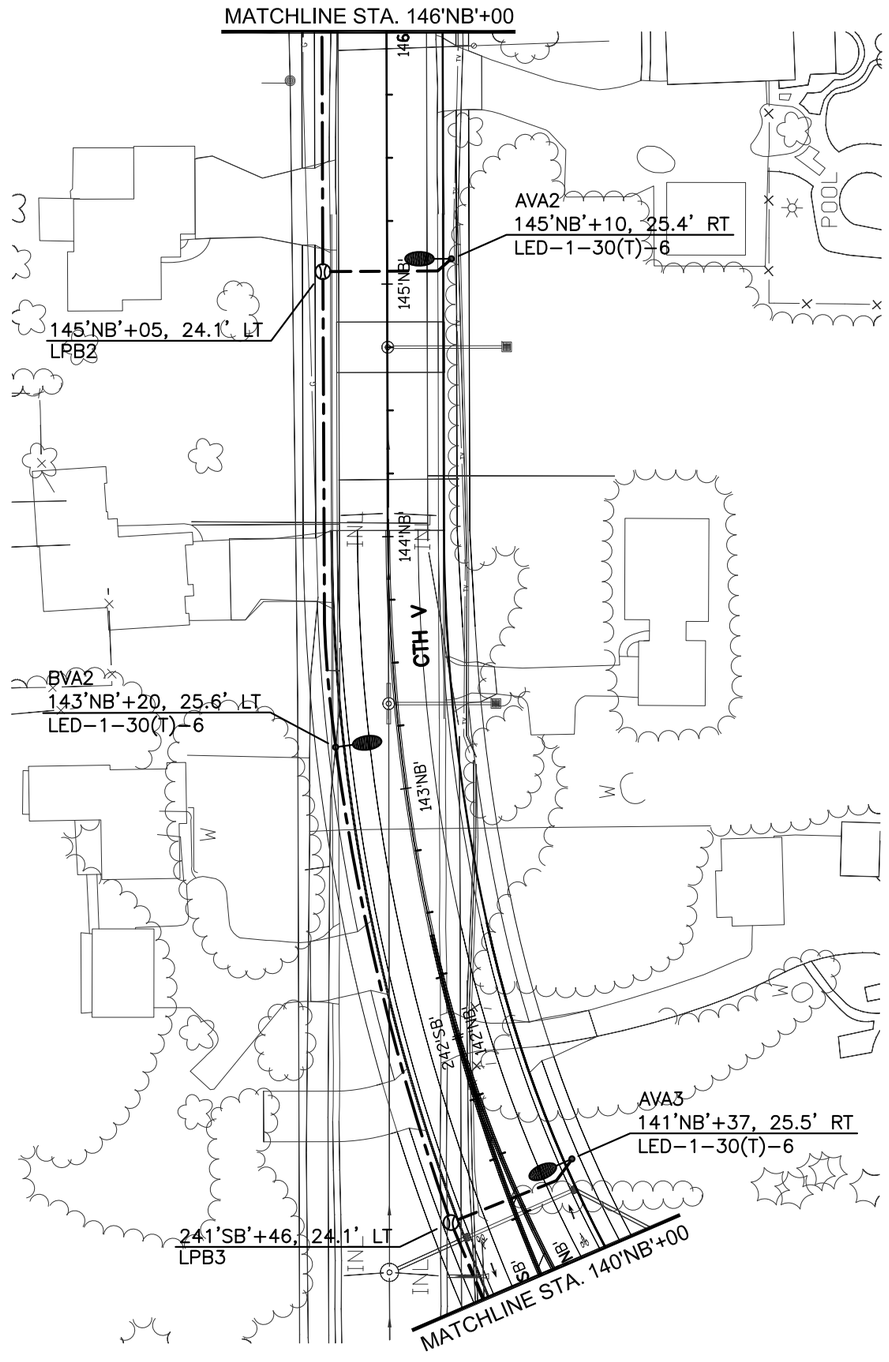
CTH V

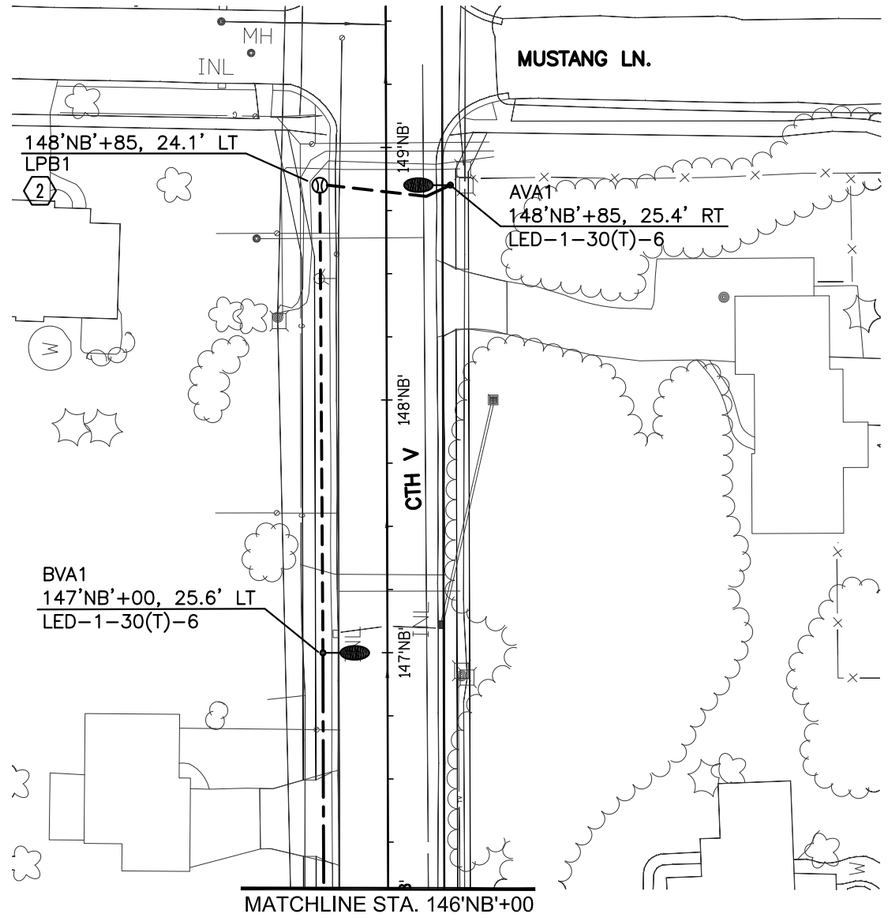
OLD COUNTY V

MATCHLINE STA. 14'OV'+00

DESIGNED BY: POWRTEK ENGINEERING, INC. SHEET 3 OF 6

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LIGHTING PLAN	SHEET NO: 144	E





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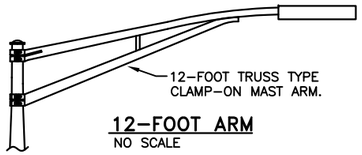
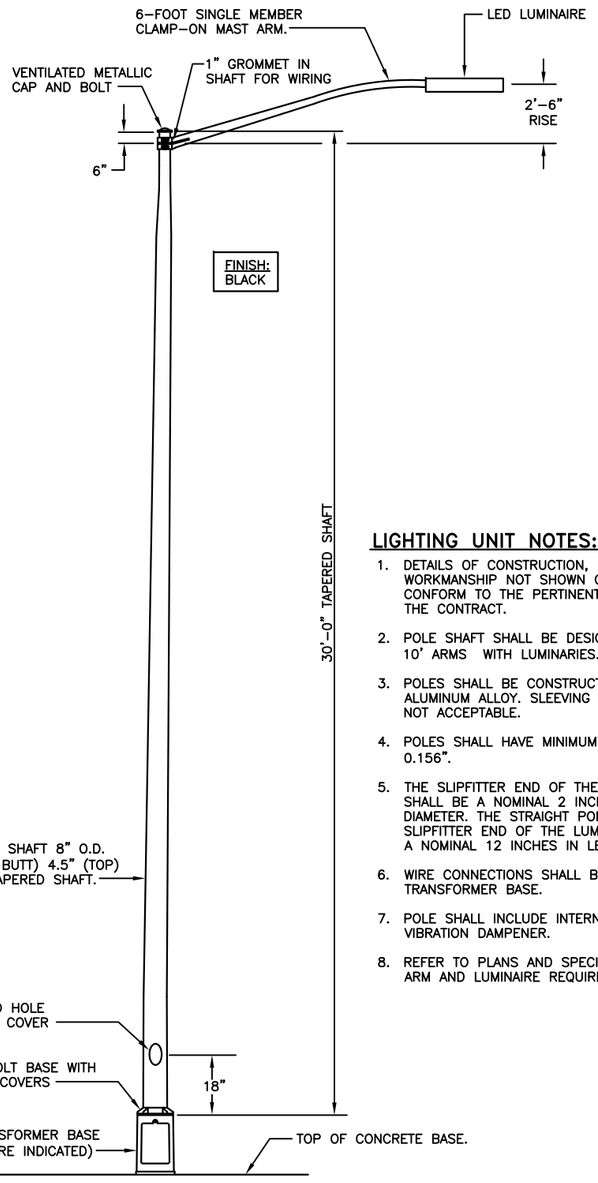
DESIGNED BY: POWRTEK ENGINEERING, INC. SHEET 4 OF 6

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LIGHTING PLAN	SHEET NO: 145 E



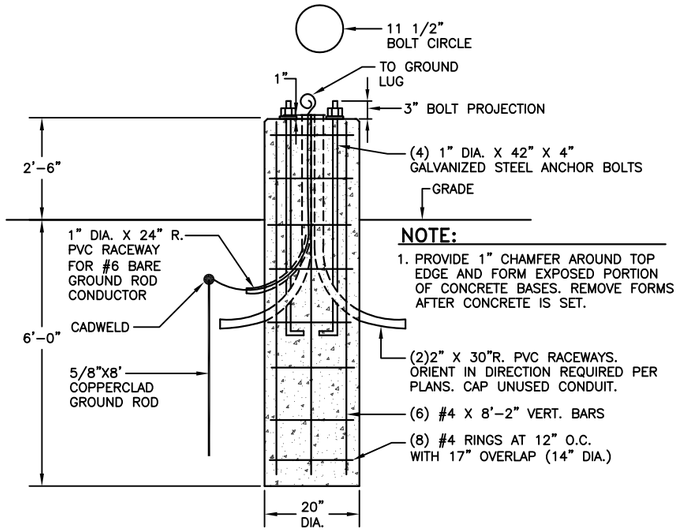
12–FOOT ARM
NO SCALE



LIGHTING UNIT NOTES:

1. DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
2. POLE SHAFT SHALL BE DESIGNED TO INCLUDE TWIN 10' ARMS WITH LUMINARIES.
3. POLES SHALL BE CONSTRUCTED OF 6063–T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.
4. POLES SHALL HAVE MINIMUM WALL THICKNESS OF 0.156".
5. THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.
6. WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.
7. POLE SHALL INCLUDE INTERNAL DUMBBELL STYLE VIBRATION DAMPENER.
8. REFER TO PLANS AND SPECIFICATIONS FOR MAST ARM AND LUMINAIRE REQUIREMENTS.

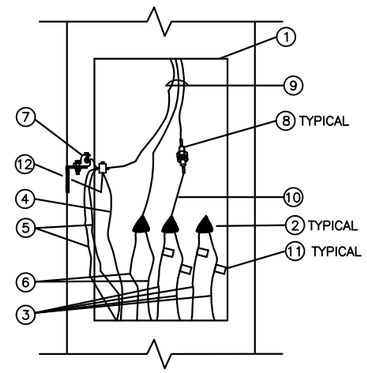
MUNICIPAL LIGHTING UNIT DETAIL
NO SCALE



NOTE:

1. PROVIDE 1" CHAMFER AROUND TOP EDGE AND FORM EXPOSED PORTION OF CONCRETE BASES. REMOVE FORMS AFTER CONCRETE IS SET.

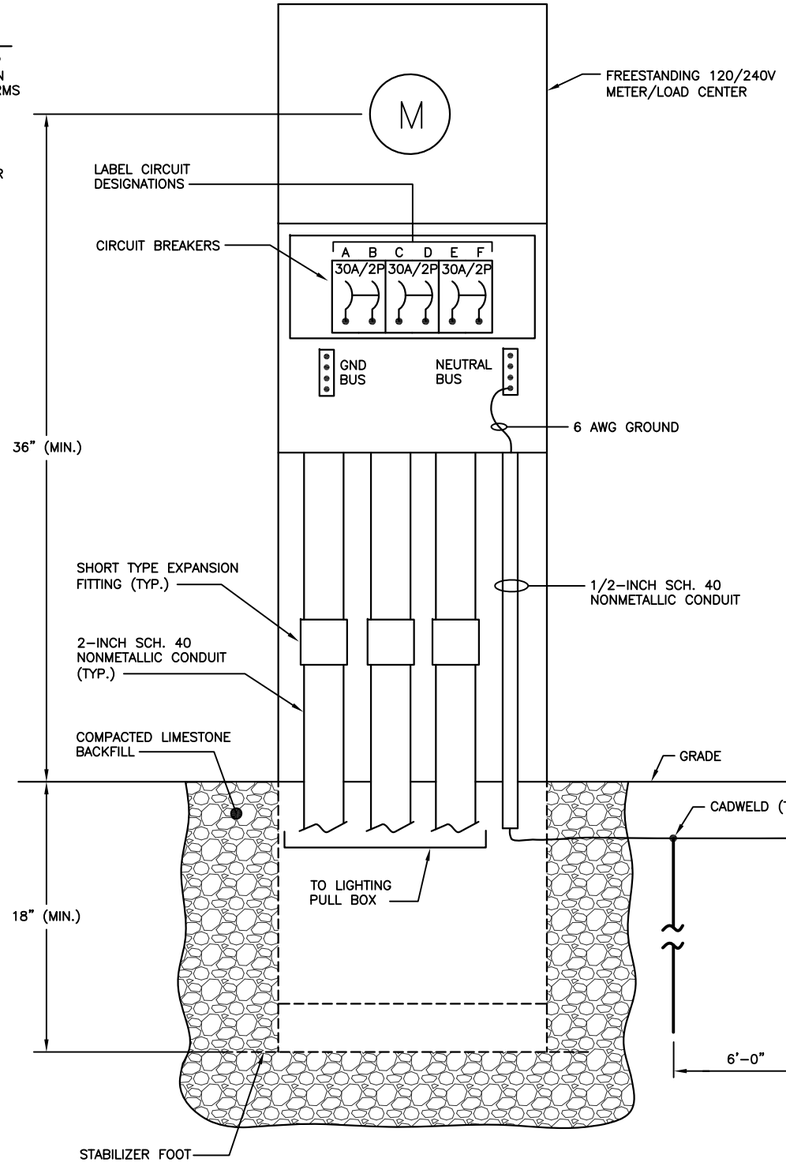
PARKING LOT CONCRETE BASE
NO SCALE



POLE WIRING NOTES:

1. TRANSFORMER BASE HAND HOLE AND COVER
2. INSULATED SPLICE
3. UNGROUNDED CONDUCTORS
4. #8 CONDUCTOR TO GROUND ROD
5. SYSTEM GROUNDING CONDUCTORS
6. GROUNDED CONDUCTOR (NEUTRAL)
7. HAND HOLE GROUNDING LUG
8. INLINE 1–POLE FUSE ASSEMBLY AND 5A KTK FUSES. WEATHERPROOF BOOTS.
9. 3#12 RHW/USE (XLP) TO LUMINAIRE
10. 12" PIGTAIL BETWEEN SPLICE AND FUSE ASSEMBLY
11. CIRCUIT TAG
12. REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTION (NOT INSULATED)

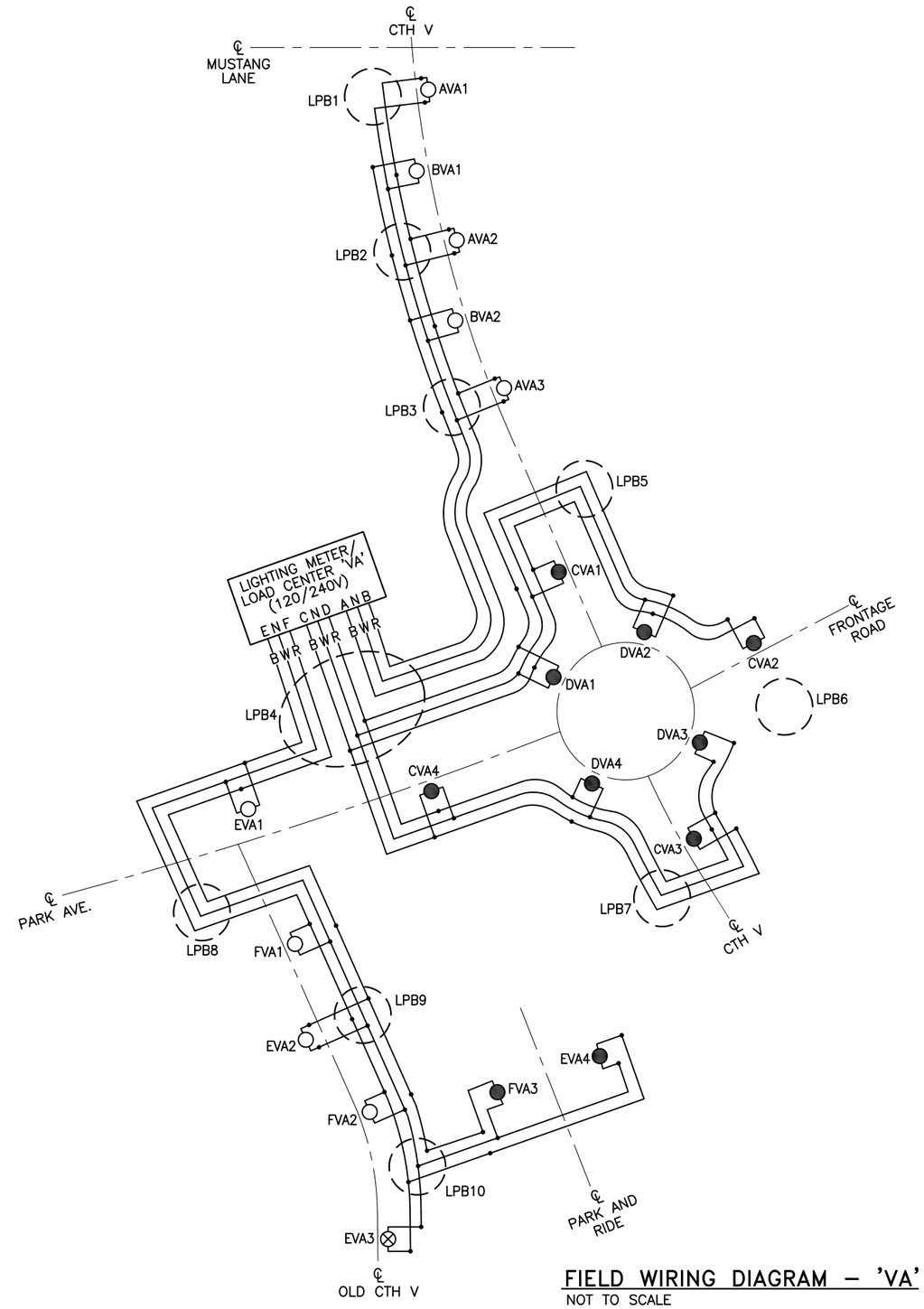
POLE WIRING DETAIL
NO SCALE



METER/LOAD CENTER DETAIL
NO SCALE

DESIGNED BY: POWRTEK ENGINEERING, INC. SHEET 5 OF 6

2



FIELD WIRING DIAGRAM – 'VA'

NOT TO SCALE

N

LEGEND:

- ○ TYPE 1 LED LUMINAIRE (135W MAX)
- ⊗ TYPE 2 LED LUMINAIRE (135W MAX)
- ● TYPE 3 LED LUMINAIRE (185W MAX)
- • SPLICE

COLOR CODE:

B – BLACK
R – RED
W – WHITE

NOTES:

1. SPLICES ONLY ALLOWED IN PULL BOXES, WHERE INDICATED.
2. GROUND CONDUCTOR (GREEN) REQUIRED, NOT SHOWN.

DESIGNED BY: POWRTEK ENGINEERING, INC. SHEET 6 OF 6

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	FIELD WIRING DIAGRAM	SHEET NO: 147	E

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N

III-LED A-12-5-C-1

LB5

PB6

CTH V

CTH V

PB5

III-LED A-12-5-B-2

LB4

III-LED A-12-5-B-1

PB4

LB3

NB OFF RAMP

III-LED A-12-5-C-2

LB6

PB7

NB ON RAMP

PB3

LB2

III-LED A-12-5-A-2

III-LED A-12-5-C-3

LB7

PB8

PB2

PB1

CB1

LB1

III-LED A-12-5-A-1

GUY

OH

30" RCCP

(ASPH)

24" CMCP (FE)

CONDUCTOR COLOR SCHEME

Circuit "A" = Black
Circuit "B" = Red
Circuit "C" = Blue
Circuit "D" = Brown
Circuit "E" = Orange
Circuit "F" = Yellow

LEGEND

- LIGHTING CONTROL CABINET WITH METER BREAKER PEDESTAL
- 2" CONDUIT, NON-METALLIC (unless otherwise noted)
- LIGHTING UNIT
- PULL BOX 24" X 42"
- UTILITY POLE
- ELECTRIC, UNDERGROUND — E —
- ELECTRIC, OVERHEAD — OH —

EXAMPLE (see individual label on each lighting unit)

III-LED A-12-5-A-4

- LIGHT UNIT NUMBER IN CIRCUIT
- CIRCUIT ID
- BASE TYPE
- MAST ARM LENGTH (in feet)
- LAMP WATTAGE
- DISTRIBUTION TYPE

240 VOLT SYSTEM

120/240 VOLT ELECTRIC SERVICE

NOTES:

WISCONSIN DOT NORTHEAST REGION ELECTRICAL UNIT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT THEM 3 DAYS IN ADVANCE AT (920) 492-5710.

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

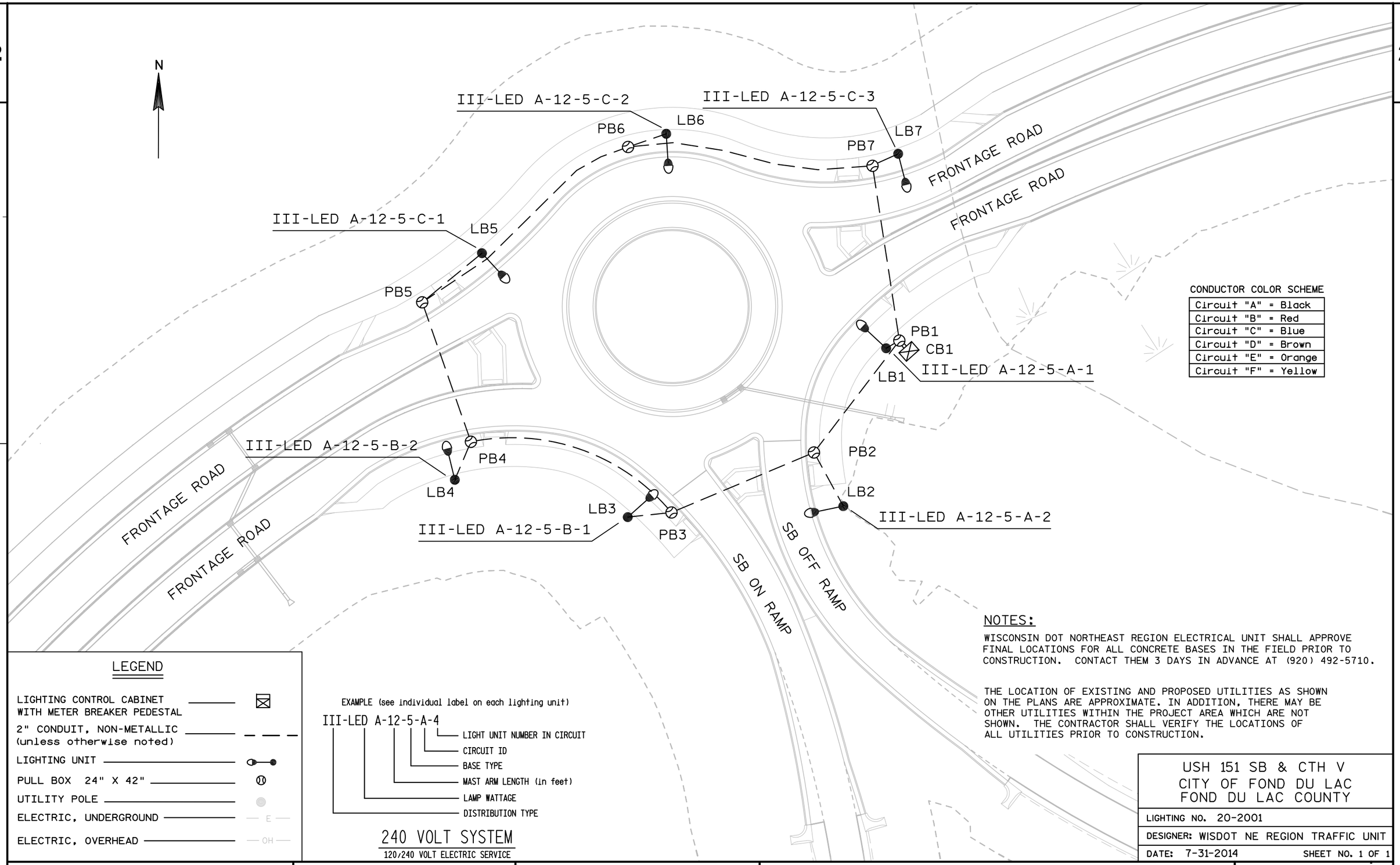
USH 151 NB & CTH V
CITY OF FOND DU LAC
FOND DU LAC COUNTY

LIGHTING NO. 20-2000

DESIGNER: WISDOT NE REGION TRAFFIC UNIT

DATE: 7-31-2014 SHEET NO. 1 OF 1

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CONSTRUCTION DETAIL - ROUNDABOUT LIGHTING	SHEET 148 E



CONDUCTOR COLOR SCHEME

Circuit "A" = Black
Circuit "B" = Red
Circuit "C" = Blue
Circuit "D" = Brown
Circuit "E" = Orange
Circuit "F" = Yellow

LEGEND

- LIGHTING CONTROL CABINET WITH METER BREAKER PEDESTAL
- 2" CONDUIT, NON-METALLIC (unless otherwise noted)
- LIGHTING UNIT
- PULL BOX 24" X 42"
- UTILITY POLE
- ELECTRIC, UNDERGROUND — E —
- ELECTRIC, OVERHEAD — OH —

EXAMPLE (see individual label on each lighting unit)

III-LED A-12-5-A-4

- 4 = LIGHT UNIT NUMBER IN CIRCUIT
- A = CIRCUIT ID
- 12 = BASE TYPE
- 5 = MAST ARM LENGTH (in feet)
- A = LAMP WATTAGE
- III-LED = DISTRIBUTION TYPE

240 VOLT SYSTEM

120/240 VOLT ELECTRIC SERVICE

NOTES:

WISCONSIN DOT NORTHEAST REGION ELECTRICAL UNIT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT THEM 3 DAYS IN ADVANCE AT (920) 492-5710.

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

USH 151 SB & CTH V
CITY OF FOND DU LAC
FOND DU LAC COUNTY

LIGHTING NO. 20-2001

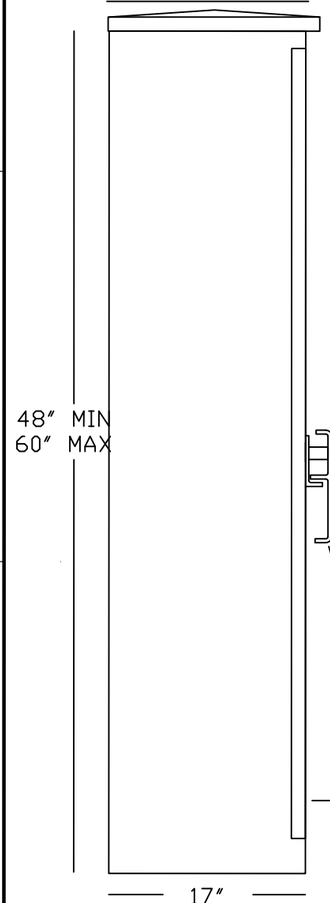
DESIGNER: WISDOT NE REGION TRAFFIC UNIT

DATE: 7-31-2014 SHEET NO. 1 OF 1

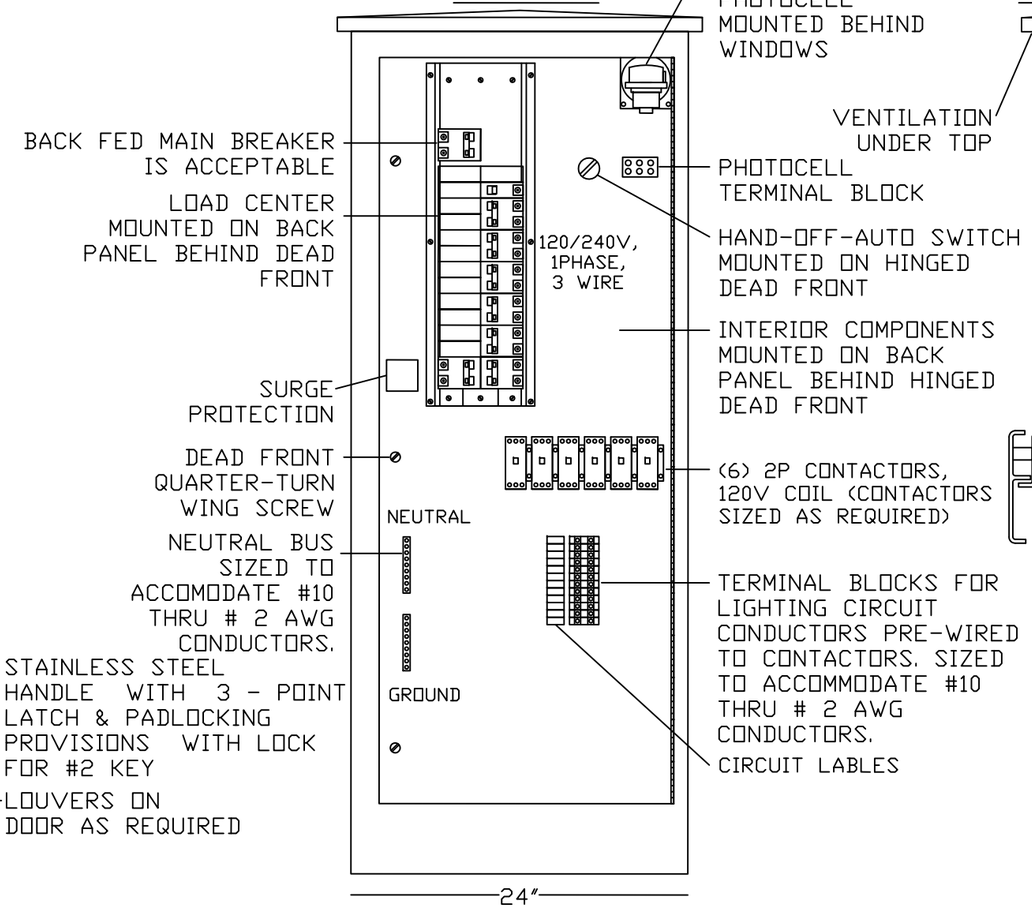
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CONSTRUCTION DETAIL - ROUNDABOUT LIGHTING	SHEET 149 E

Not to scale

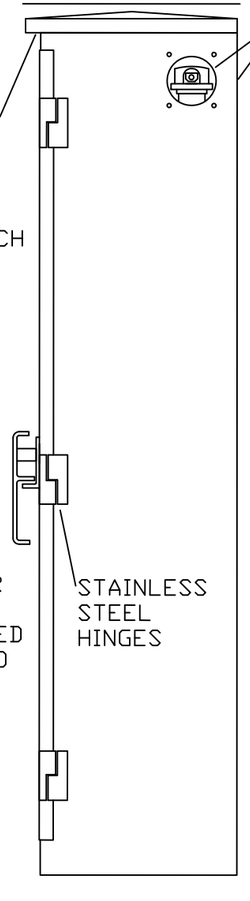
LEFT SIDE VIEW

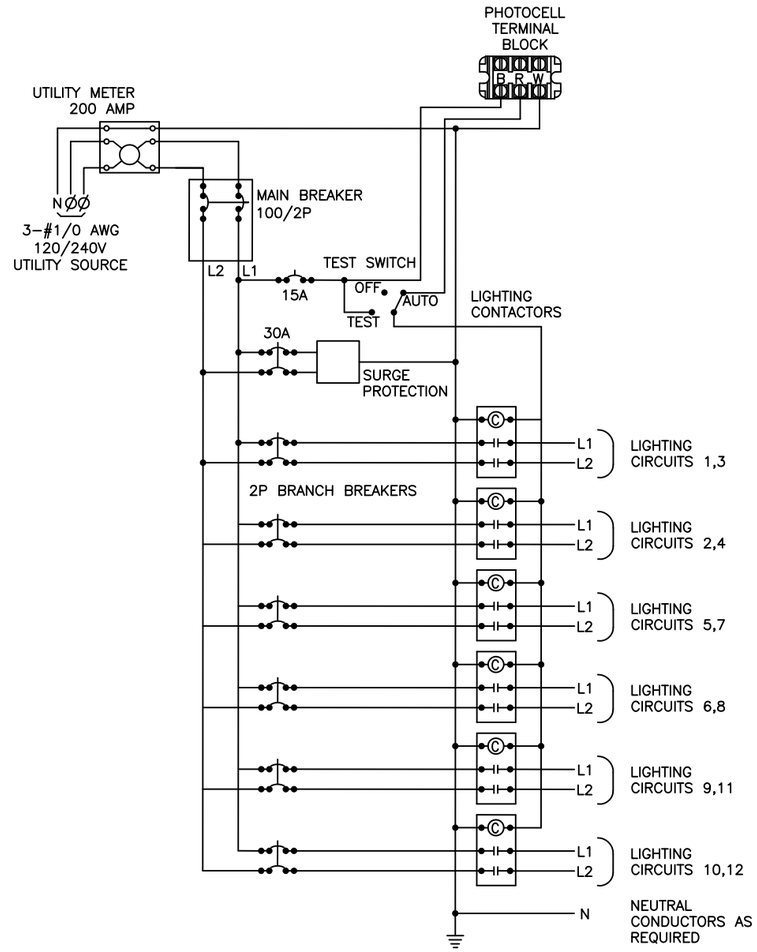


FRONT INTERIOR ELEVATION



RIGHT SIDE VIEW



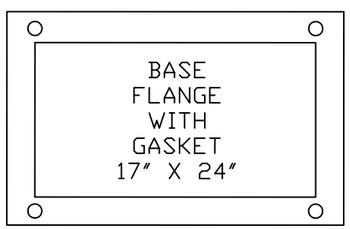


CONTROL CABINET SCHEMATIC

120/240 VOLT LIGHTING CONTROL CABINET WISDOT 120/240

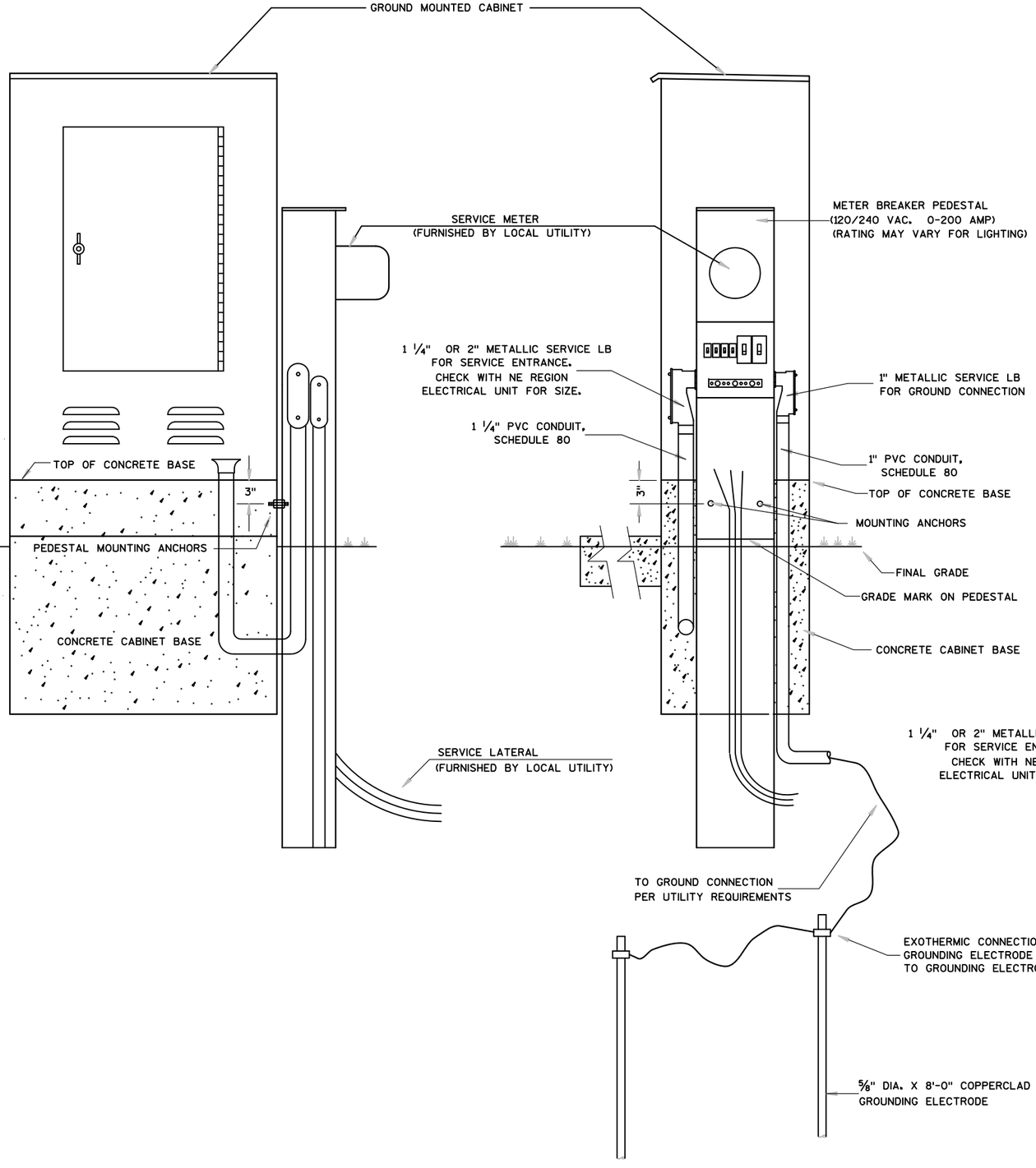
BOX CONSTRUCTION:

- NEMA3R
- UL LISTED
- -1/8" ALUMINUM 5052-H32 ANODIZED CLEAR
- BENT CONSTRUCTION - ONE PIECE SIDES AND BACK
- NEOPRENE GASKETED DOORS
- STAINLESS STEEL HARDWARE
- ETL LISTED IN ACCORDANCE W/ UL508A



LOAD CENTER:

- 30 CIRCUIT MIN.
- 100AMP MAIN CIRCUIT BREAKER
- COPPER BUS
- 22K AIC
- (1) 15A/1P CONTROL BREAKER
- (1) 30A/2P BREAKER FOR SURGE PROTECTION DEVICE
- (6) 2P BRANCH BREAKERS (BREAKERS SIZED AS REQUIRED)



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.

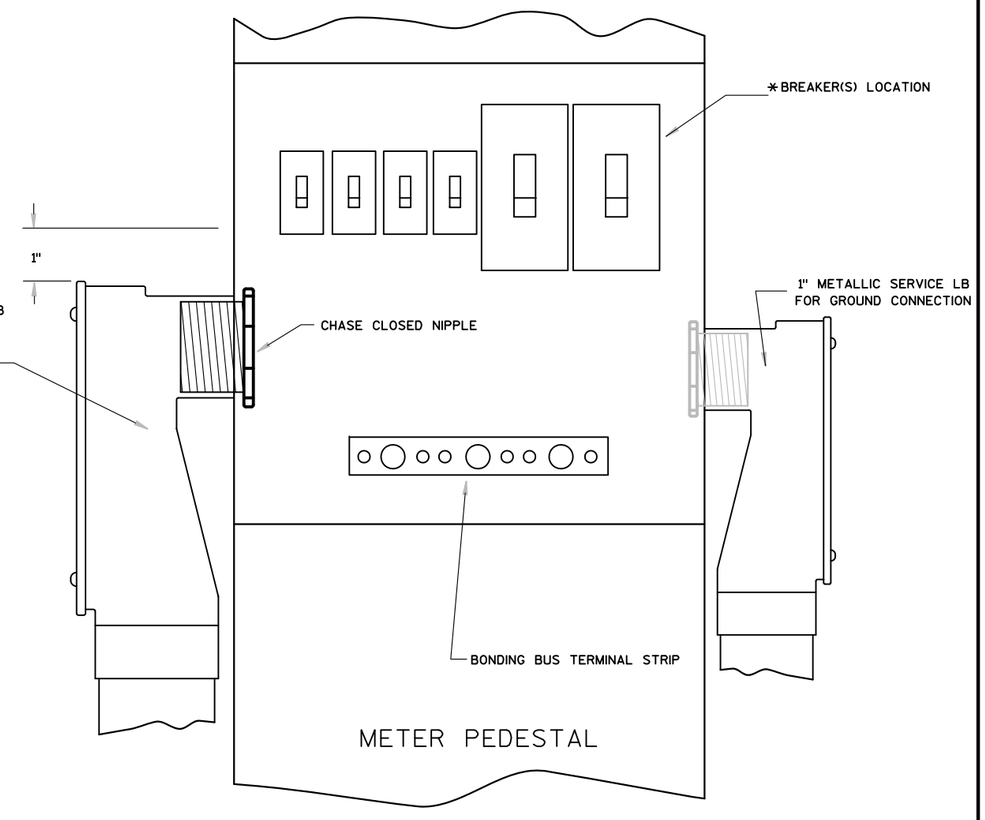
WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT OR SCHEDULE 80 PVC, NIPPLES AND/OR CONDULETS AS REQUIRED. CONDUIT LB SHALL BE OF METALLIC SERVICE ENTRANCE TYPE.

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 NEC.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.



PROJECT NO:1420-22-71	HWY: USH 151 & CTH V	COUNTY: FOND DU LAC	CONSTRUCTION DETAIL- NER METER PEDESTAL INSTALLATION	SHEET 151	E

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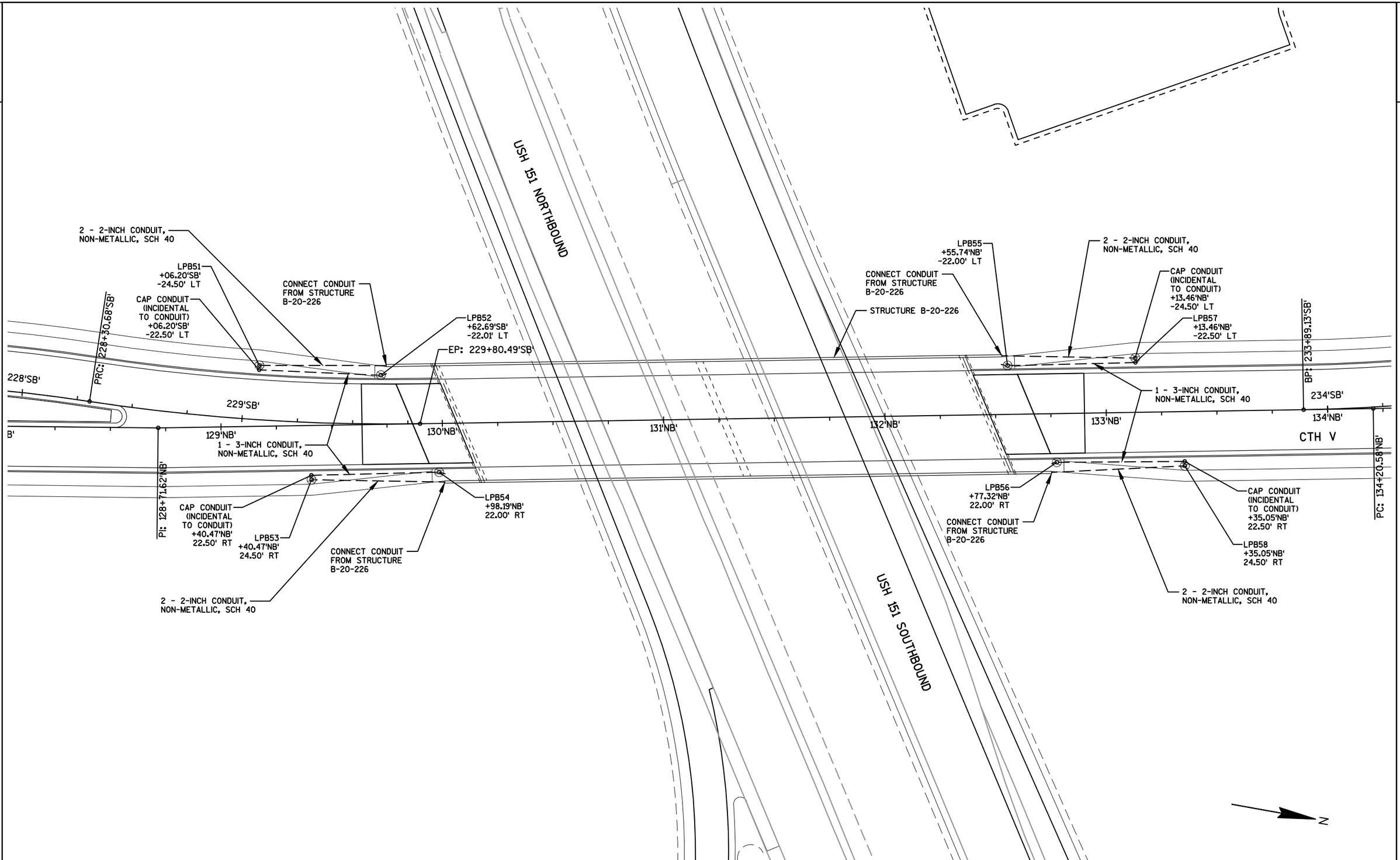

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	LIGHTING PLAN - STRUCTURE B-20-226	SHEET 152	E

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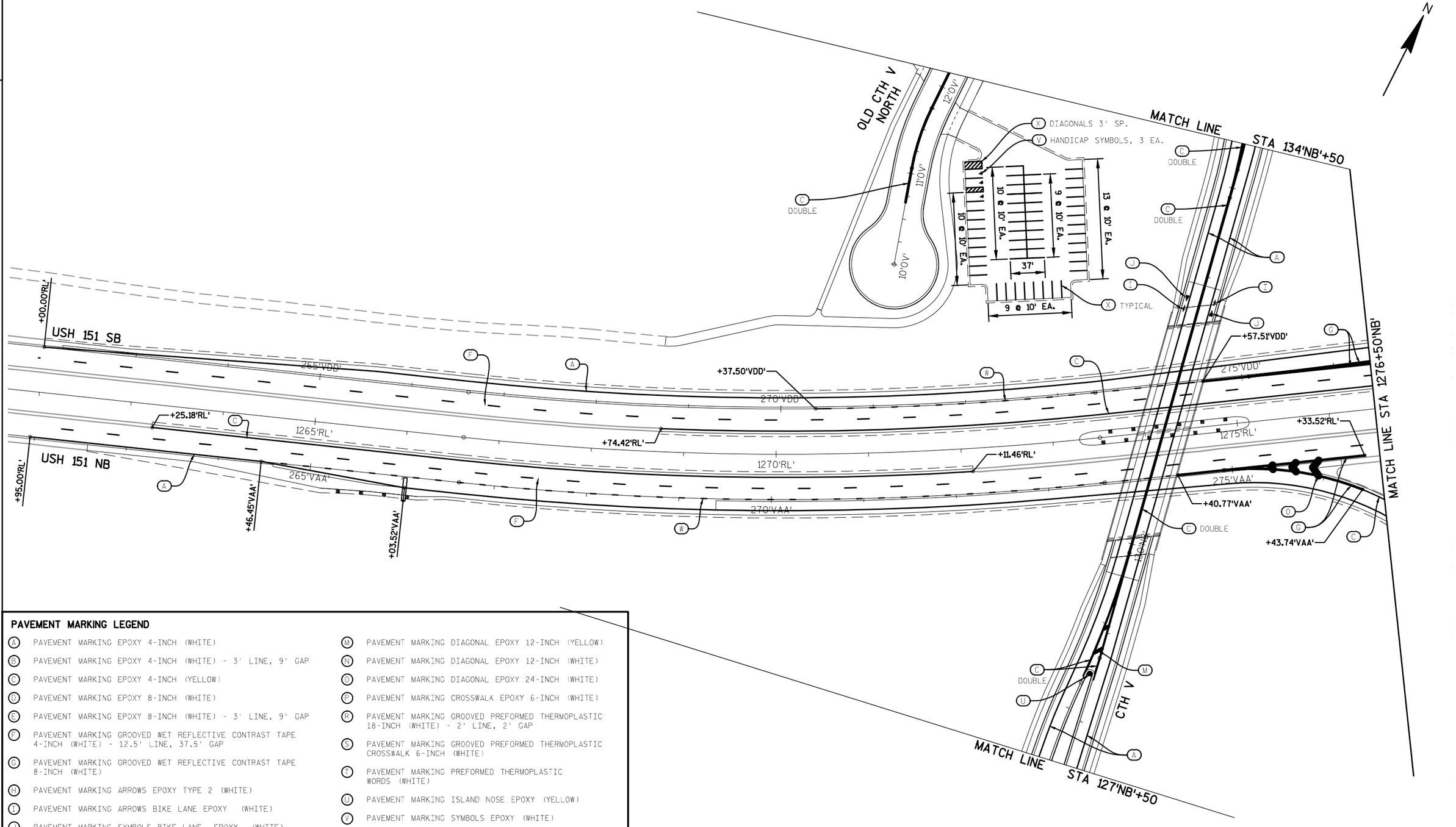

PAVEMENT MARKING LEGEND

- (A) PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- (B) PAVEMENT MARKING EPOXY 4-INCH (WHITE) - 3' LINE, 9' GAP
- (C) PAVEMENT MARKING EPOXY 4-INCH (YELLOW)
- (D) PAVEMENT MARKING EPOXY 8-INCH (WHITE)
- (E) PAVEMENT MARKING EPOXY 8-INCH (WHITE) - 3' LINE, 9' GAP
- (F) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) - 12.5' LINE, 37.5' GAP
- (G) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH (WHITE)
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- (I) PAVEMENT MARKING ARROWS BIKE LANE EPOXY (WHITE)
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- (O) PAVEMENT MARKING DIAGONAL EPOXY 24-INCH (WHITE)
- (P) PAVEMENT MARKING CROSSWALK EPOXY 6-INCH (WHITE)
- (R) PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 18-INCH (WHITE) - 2' LINE, 2' GAP
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- (U) PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
- (V) PAVEMENT MARKING SYMBOLS EPOXY (WHITE)
- (W) PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (WHITE) - 3' LINE, 9' GAP
- (X) PAVEMENT MARKING PARKING STALL EPOXY 4-INCH (WHITE)

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVEMENT MARKING - USH 151	SHEET 153	E

2

MATCH LINE

STA 284'VDD'+50

MATCH LINE

STA 285'VCC'+50

SB ON-RAMP

280'VDD'

+94.49'VDD'

+57.16'RL'

SB OFF-RAMP

290'VCC'

USH 151 SB

+78.60'RL'

1280'RL'

1285'RL'

1290'RL'

MATCH LINE STA 1276+50'NB'

MATCH LINE STA 1291+50'NB'

USH 151 NB

+34.47'RL'
49.00' RT

285'VBB'

290'VBB'

+36.32'VBB'

+25.31'VBB'

+01.31'VBB'

280'VBB'

NB ON-RAMP

NB OFF-RAMP

280'VAA'

MATCH LINE

STA 280'VAA'+50

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N

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVEMENT MARKING - USH 151	SHEET 154	E

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142022_024502_pm

PLOT DATE : 4/20/2015 2:23 PM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

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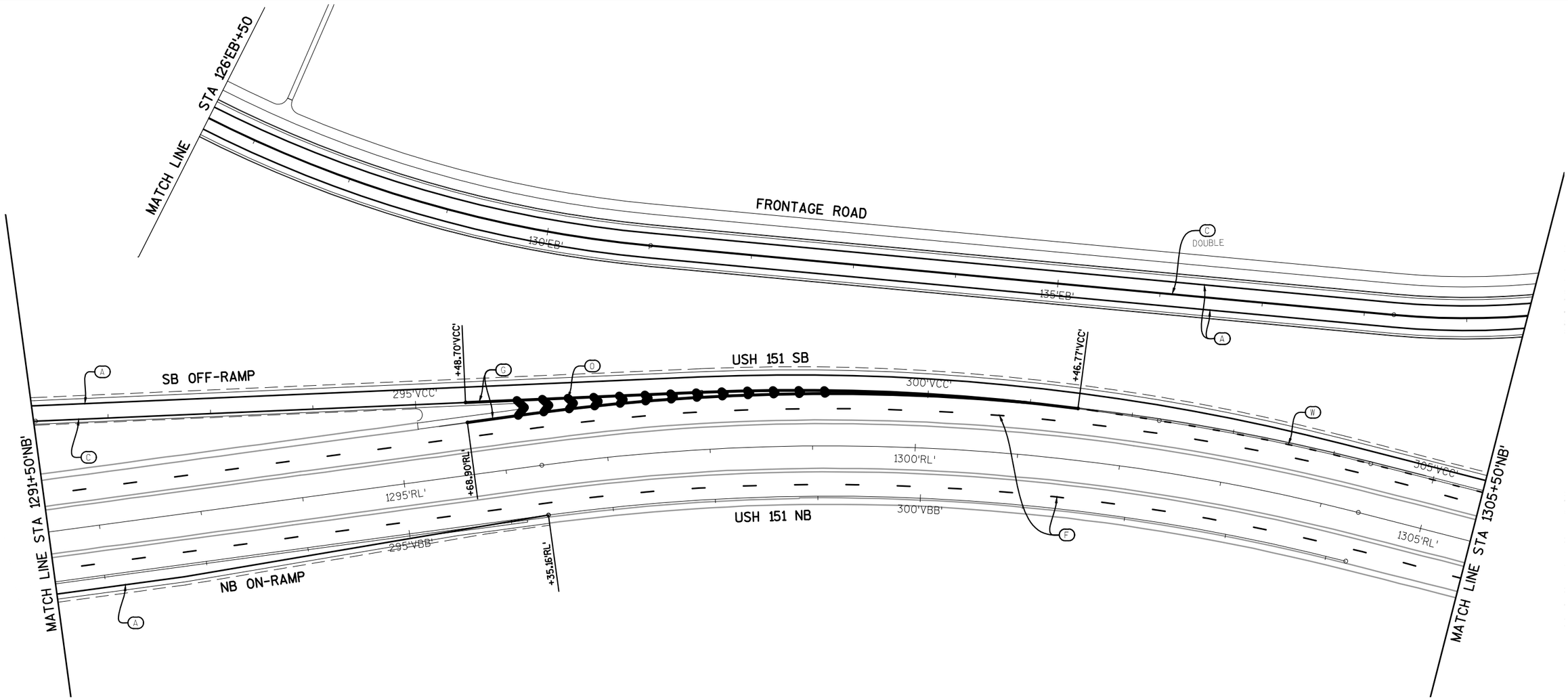

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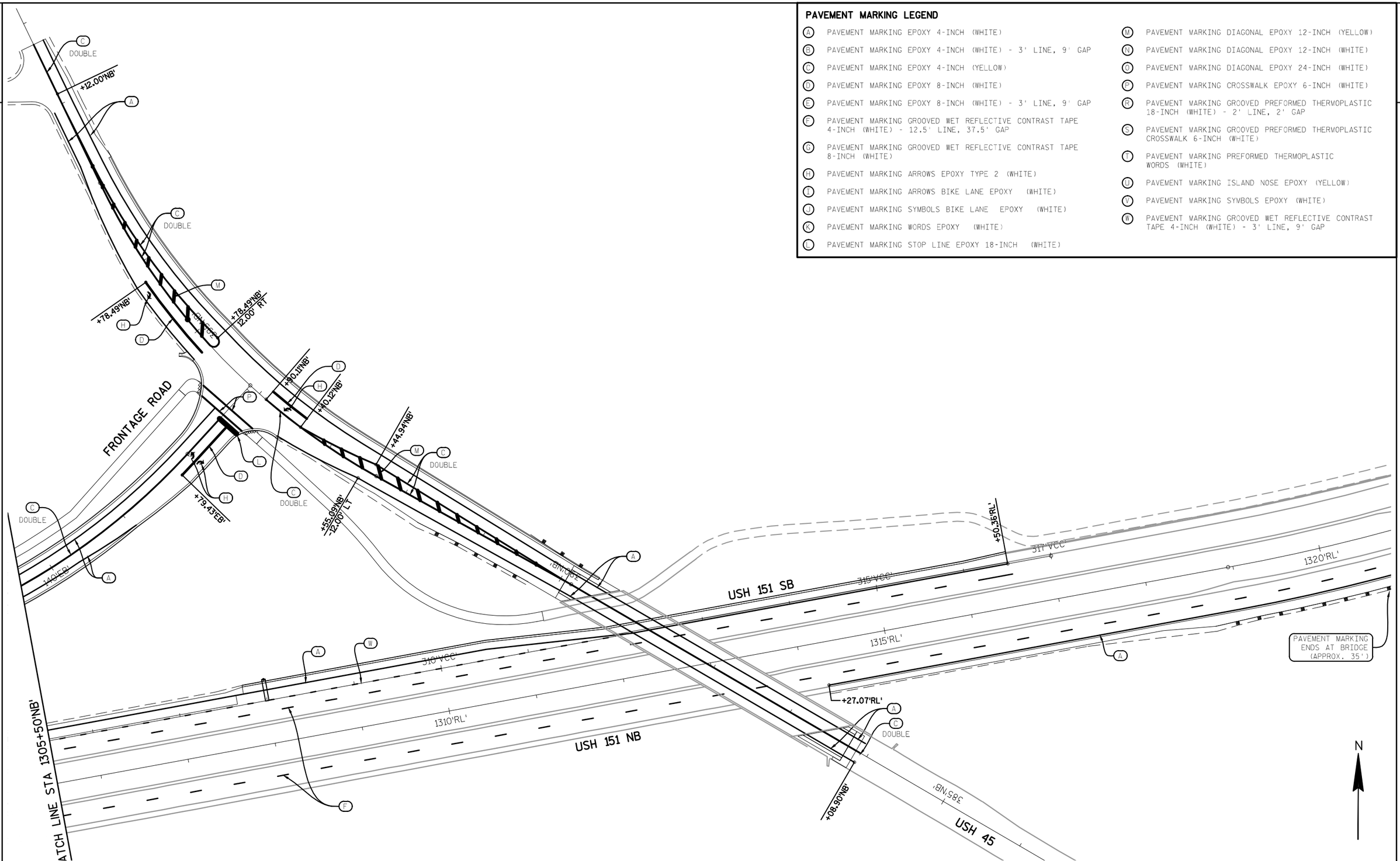
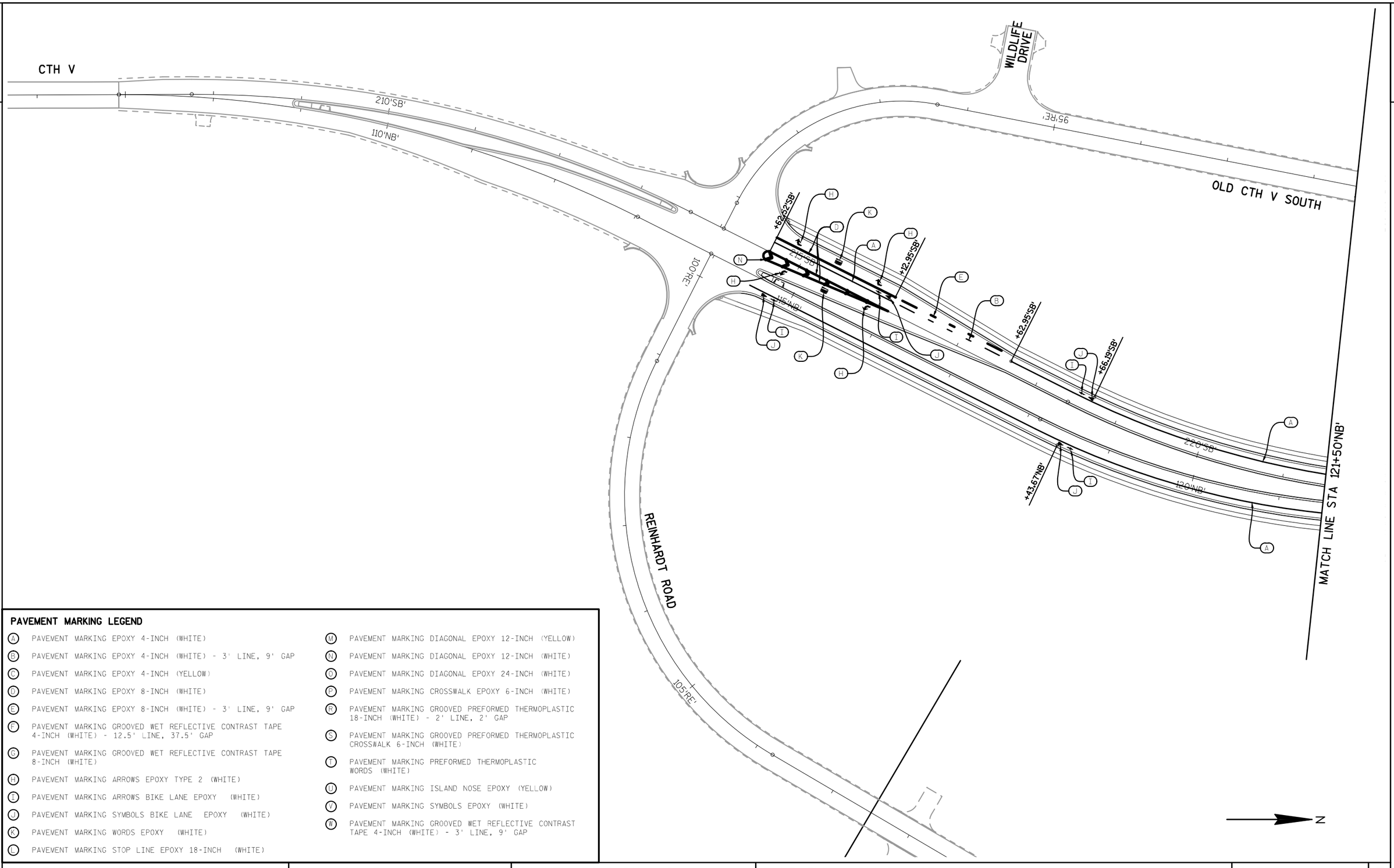


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVEMENT MARKING - USH 151	SHEET 156	E

2



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVEMENT MARKING - CTH V	SHEET 157	E

2

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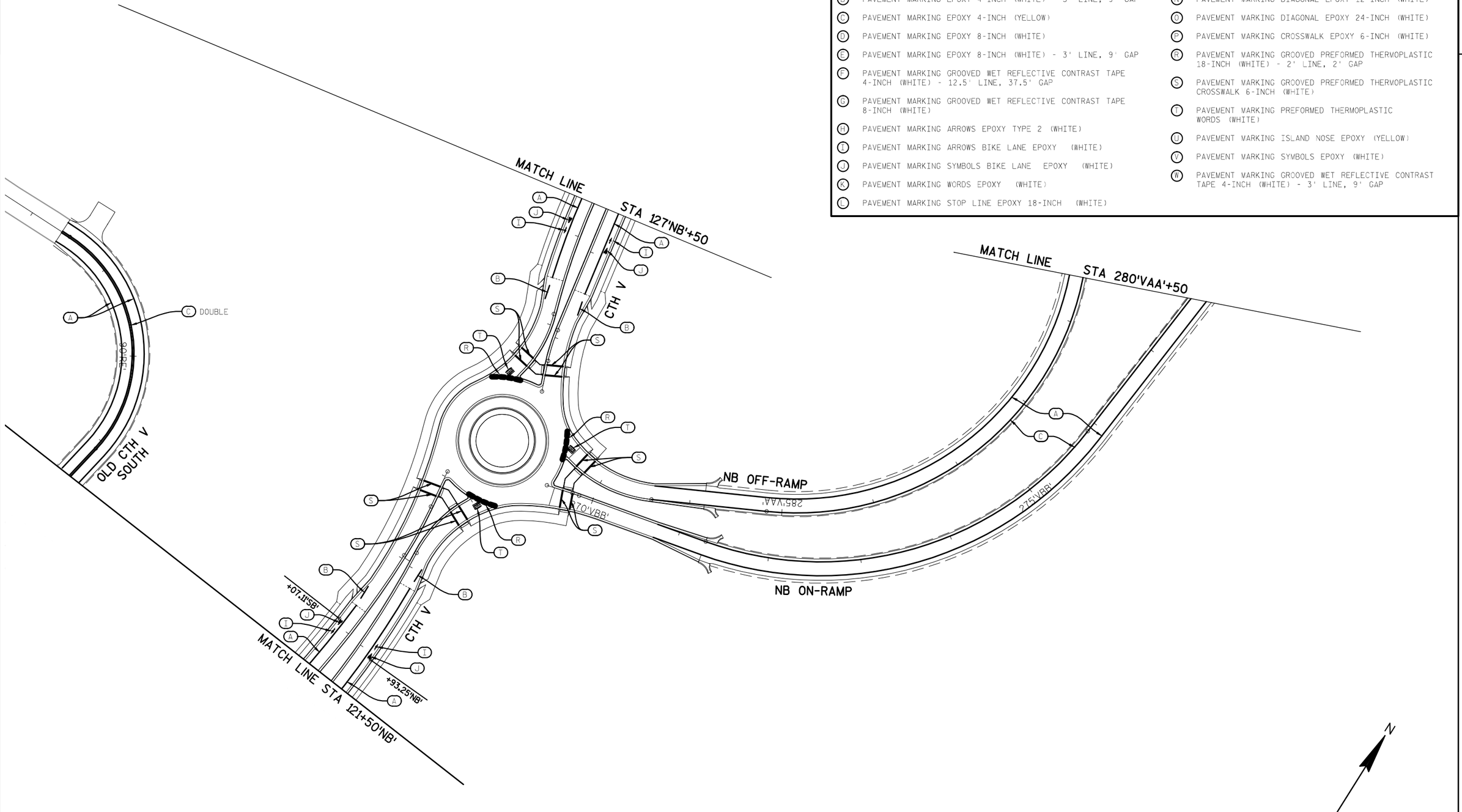
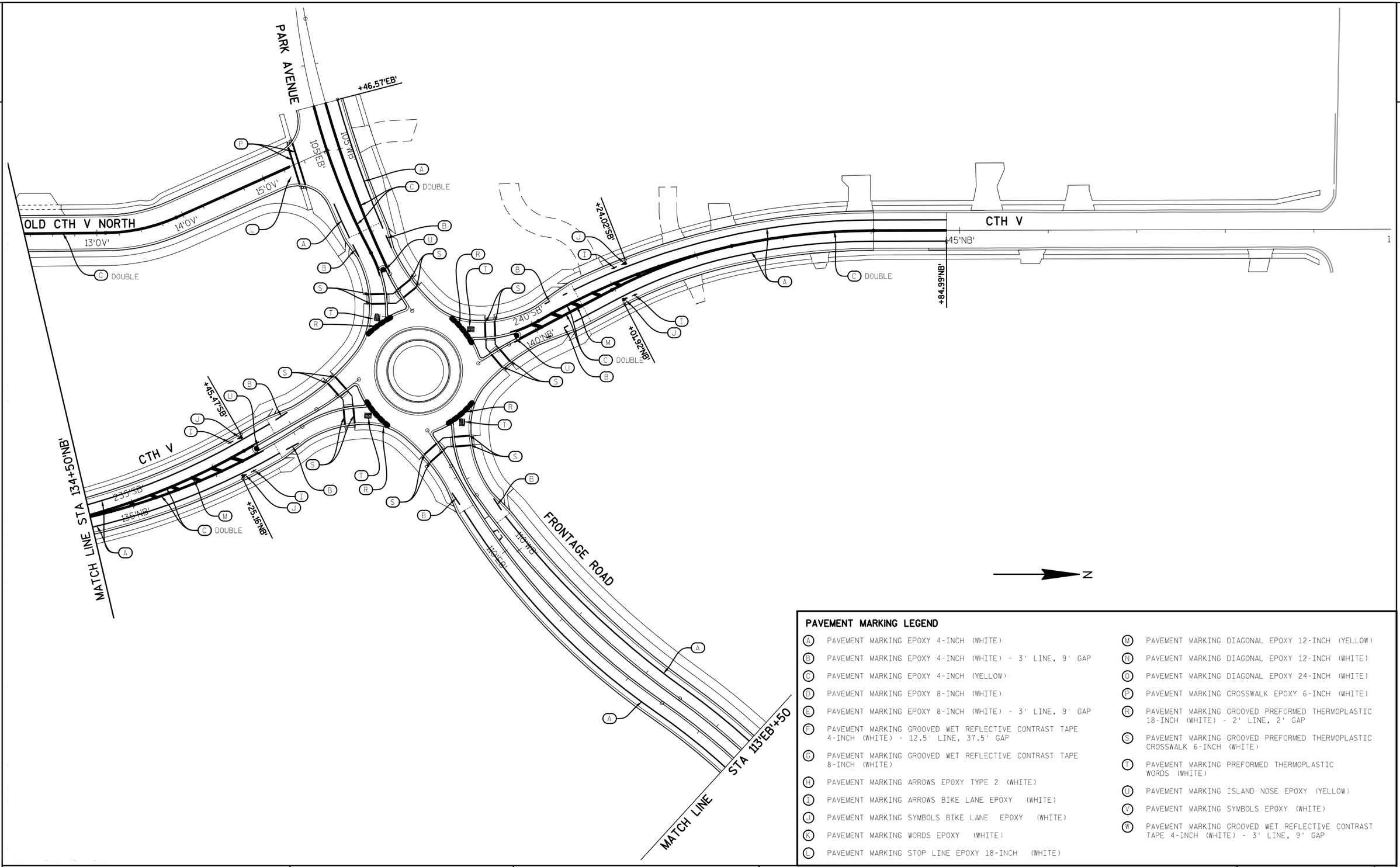


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVEMENT MARKING - CTH V	SHEET 158	E

2



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVEMENT MARKING - CTH V	SHEET 159	E

2

PAVEMENT MARKING LEGEND

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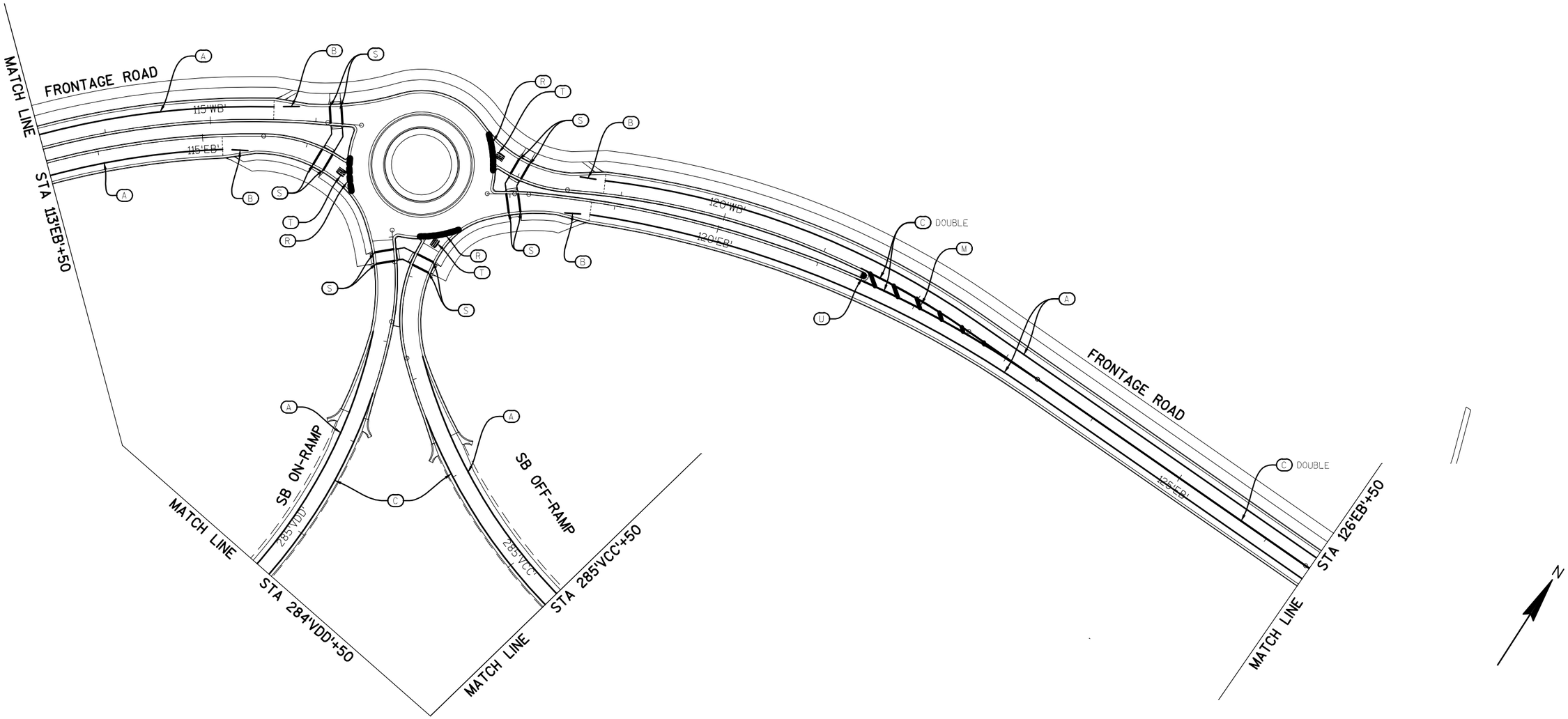


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PAVEMENT MARKING - FRONTAGE ROAD	SHEET 160	E

2

GENERAL NOTES FOR TRAFFIC CONTROL

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON METHODS OF SEQUENCE OF OPERATION.

ADJUST SIGN SPACING TO AVOID CONFLICT WITH AND TO PROVIDE A MINIMUM SPACING OF 200 FEET (500 FEET DESIRABLE) TO EXISTING SIGNS.

UNLESS NOTED, ALL WARNING SIGNS ARE 48" X 48". ALL OTHER SIGNS ARE SIZE 5 IF LOCATED ON THE FREEWAY OR RAMPS AND SIZE 2S IF LOCATED ON OTHER ROADWAYS.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

REMOVE OR COVER ANY TEMPORARY OR EXISTING SIGNS THAT CONFLICT WITH "IN USE" TRAFFIC CONTROL.

ALL TRAFFIC CONTROL SIGNING WILL CONFORM TO PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION, & THE WISCONSIN SUPPLEMENT DATED MAY 25. 2011.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM OF 1500 FEET IN FRONT OF DRUMS.

IF LANE CLOSURES ARE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

INSTALL THE LANE CLOSURE SERIES AS A COMPLETE UNIT THAT INCLUDES ALL ADVANCED WARNING SIGNING, DRUMS, AND ARROW BOARDS.

WARNING LIGHTS SHALL NOT BE WORKING ON "COVERED" OR "DOWNED" SIGN OR BARRICADES.

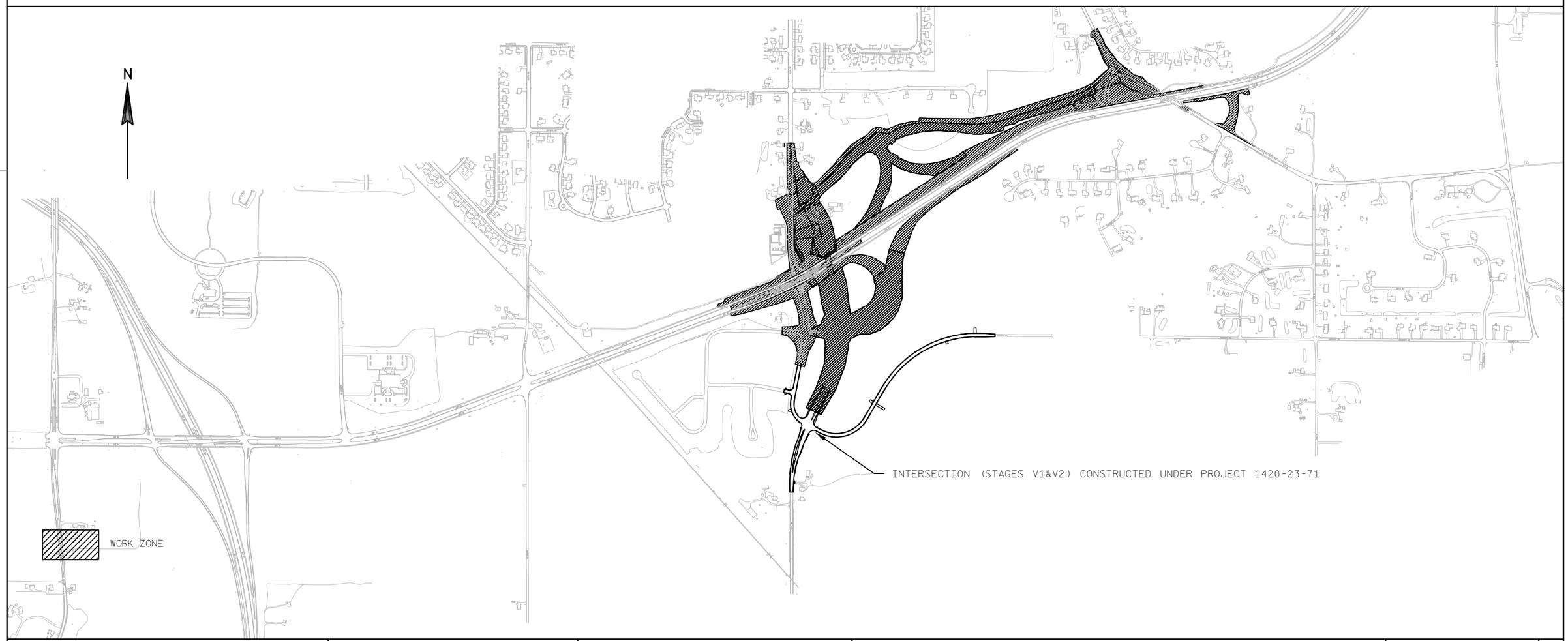
DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" LIGHTS.

REMOVE ALL EXISTING PAVEMENT MARKINGS CONFLICTING WITH THE TRAFFIC CONTROL OR NOT APPROPRIATE TO THE TRAVEL PATH.

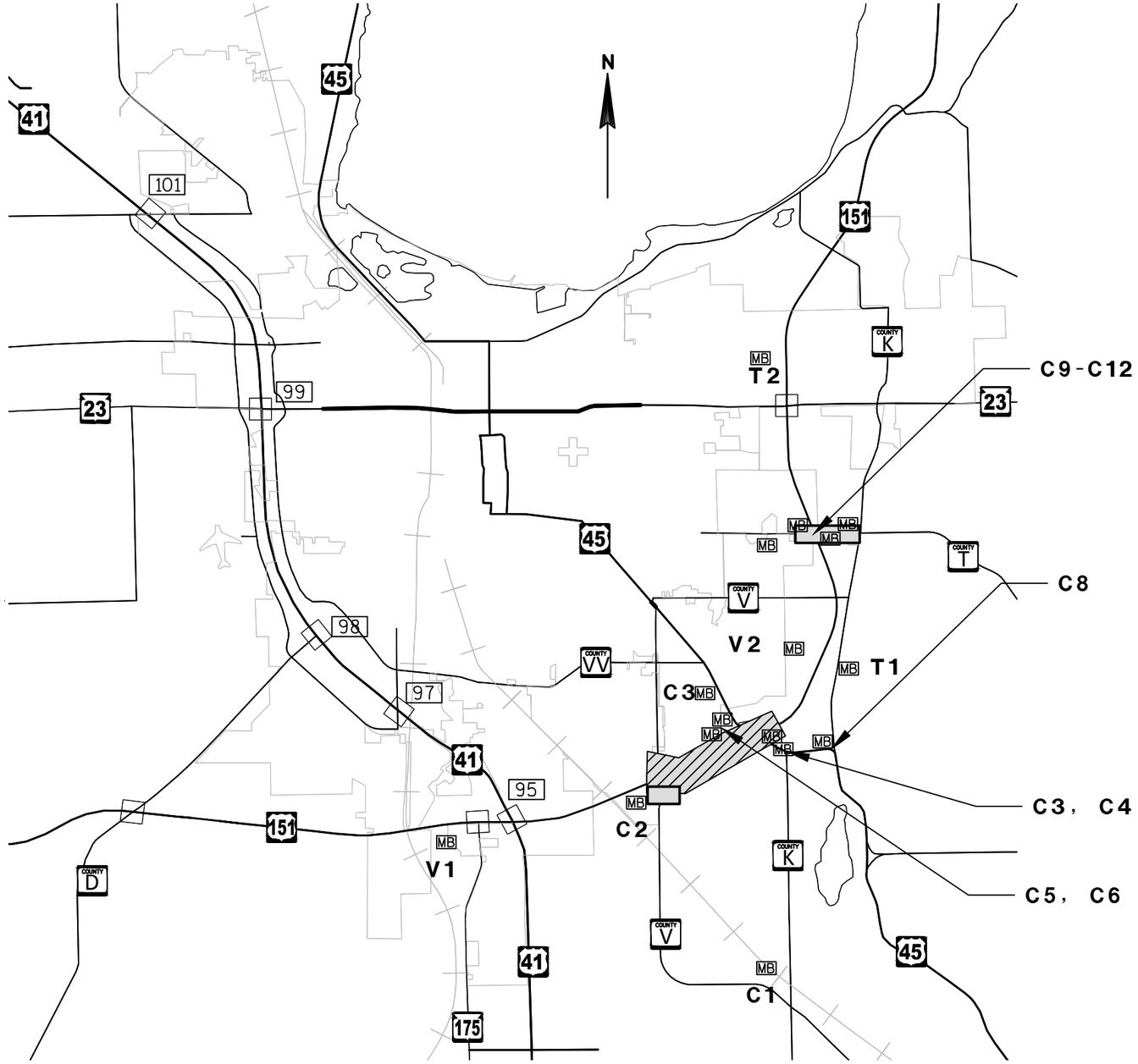
LAYOUT INFORMATION PROVIDED IS NOT INTENDED TO REPLACE WHAT IS PROVIDED IN APPLICABLE STANDARD DETAIL DRAWINGS.

ALL SIGN FLAGS SHOWN ARE 16" X 16" MIN (ORANGE) AND INCIDENTAL TO SIGN.

COORDINATE TRAFFIC CONTROL AND DEVICES NORTH OF STATON 260+00 WITH PROJECT 1420-23-71



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL NOTES	SHEET 161	E



PROJECT PCMS SIGN LOCATIONS

SITE NO	APPROXIMATE LOCATION	PURPOSE
PROJECT 1420-22-71		
V1	NB USH 151 UNDER STH 175 OVERPASS	CONSTRUCTION NOTIFICATION (2016)
V2	SB USH 151 ½ MILE SOUTH OF CTH V	CONSTRUCTION NOTIFICATION
C3	NB USH 45 OFF RAMP	ADVANCE RAMP CLOSURE NOTIFICATION
C4	NB USH 45 ON RAMP	ADVANCE RAMP CLOSURE NOTIFICATION
C5	SB USH 45 OFF RAMP	ADVANCE RAMP CLOSURE NOTIFICATION
C6	SB USH 45 ON RAMP	ADVANCE RAMP CLOSURE NOTIFICATION
C7	NB USH 45 AT CTH K	ADVANCE USH 45 CLOSURE NOTIFICATION
C8	SB USH 45 AT GLYNN AVE	ADVANCE USH 45 CLOSURE NOTIFICATION
PROJECT 1420-23-71		
V1	NB USH 151 UNDER STH 175 OVERPASS	CONSTRUCTION NOTIFICATION (2015)
T1	NB USH 151 ½ MILE SOUTH OF CTH V	CONSTRUCTION NOTIFICATION
T2	SB USH 151 ½ MILE NORTH OF STH 23 OFF RAMP	CONSTRUCTION NOTIFICATION
C1	SB CTH V AT USH 151	ADVANCE CTH V CLOSURE NOTIFICATION
C2	NB CTH V AT CTH K	ADVANCE CTH V CLOSURE NOTIFICATION
C9	EB CTH T AT USH 151	ADVANCE CTH T CLOSURE NOTIFICATION
C10	WB CTH T AT CTH K	ADVANCE CTH T CLOSURE NOTIFICATION
C11	WB CTH T AT USH 151	ADVANCE CTH T CLOSURE NOTIFICATION
C12	EB CTH T AT COUNTRY LANE	ADVANCE CTH T CLOSURE NOTIFICATION

GENERAL NOTES FOR PCMS

CONSIDER GEOMETRICS WHEN LOCATING PCMS SO THE DRIVE HAS A CLEAR VIEW OF THE BOARD FOR A MINIMUM OF 1000 FEET IN FRONT OF THE PCMS

PCMS SHOULD BE PLACED AS FAR AWAY FROM LIVE TRAFFIC LANES AS POSSIBLE WITHOUT HAMPERING VISIBILITY. IN ADVANCE OF HIGHWAY CONSTRUCTION PROJECTS, THE SIGNS SHOULD BE PLACED ON THE BACKSLOPE BEHIND THE DITCH. THE LOCATION FOR INTERMITTENT WORK SUCH AS FREEWAY LANE CLOSURE, OR WHERE SITE CONDITIONS DO NOT ALLOW OTHERWISE, THE SIGNS MAY BE PLACED ON THE SHOULDER. THE SITE SHOULD BE VISITED TO ASSURE VISIBILITY, SAFETY, AND MAINTENANCE CONSIDERATIONS. A TAPER OR REFLECTORIZED DRUMS OR BARRICADES SHOULD BE PLACED AHEAD OF PCMS PLACED ON THE SHOULDER IF IT IS NOT SHIELDED BY A BARRIER.

MB PROPOSED PCMS LOCATION

PROJECT 1420-22-71

PROJECT 1420-23-71

171 EXIT NUMBER

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - PCMS LOCATIONS	SHEET 162	E

2

PCMS MESSAGE OVERVIEW - PROJECT 1420-22-71

			STAGE V3									
			GENERAL		7 DAYS PRIOR TO NORTHBOUND LIFT		NIGHT OF NORTHBOUND LIFT		7 DAYS PRIOR TO SOUTHBOUND LIFT		NIGHT OF SOUTHBOUND LIFT	
2016	SITE NO.	ROADWAY CONDITION/ CONSTRUCTION	PHASE 1 (2 SEC)	PHASE 2 (2 SEC)	PHASE 1 (2 SEC)	PHASE 2 (2 SEC)	PHASE 1 (2 SEC)	PHASE 2 (2 SEC)	PHASE 1 (2 SEC)	PHASE 2 (2 SEC)	PHASE 1 (2 SEC)	PHASE 2 (2 SEC)
	SITE V1	GENERAL	NO MESSAGE BOARD USED		30 MIN CLOSURES AT CTH V	MON. XX 10 PM - 5 AM	30 MIN CLOSURES AT CTH V	BE PREPARED TO STOP	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED	
	SITE V2	LANE CLOSURE ADVANCE NOTICE	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		30 MIN CLOSURES AT CTH V	MON. XX 10 PM - 5 AM	30 MIN CLOSURES AT CTH V	BE PREPARED TO STOP
	SITES C3-C6	USH 45 RAMP CLOSURES ADV NOTICE	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED	
	SITES C7-C8	USH 45 CLOSURE ADVANCE NOTICE	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED	

			STAGE V4		7 DAYS PRIOR TO STAGE V5		STAGE V5		7 DAYS PRIOR TO STAGE V6		STAGE V6		STAGE V7	
2016	SITE NO.	ROADWAY CONDITION/ CONSTRUCTION	PHASE 1 (2 SEC)	PHASE 2 (2 SEC)	PHASE 1 (2 SEC)	PHASE 2 (2 SEC)	PHASE 1 (2 SEC)	PHASE 2 (2 SEC)	PHASE 1 (2 SEC)	PHASE 2 (2 SEC)	PHASE 1 (2 SEC)	PHASE 2 (2 SEC)	PHASE 1 (2 SEC)	PHASE 2 (2 SEC)
	SITE V1	GENERAL	(NO MESSAGE)		(NO MESSAGE)		(NO MESSAGE)		(NO MESSAGE)		(NO MESSAGE)		(NO MESSAGE)	
	SITE V2	LANE CLOSURE ADVANCE NOTICE	(NO MESSAGE)		(NO MESSAGE)		USH 45 RAMP CLOSED	USE NEW COUNTY V RAMP	(NO MESSAGE)		(NO MESSAGE)		(NO MESSAGE)	
	SITES C3-C6	USH 45 RAMP CLOSURES ADV NOTICE	NO MESSAGE BOARD USED		RAMP CLOSES	DAY MON. XX	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED	
	SITES C7-C8	USH 45 CLOSURE ADVANCE NOTICE	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		US 45 CLOSURE	TO BEGIN MON. XX	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED	

IF A REVISION TO THESE MESSAGES OR ADDITIONAL
PCMS LOCATIONS/MESSAGES ARE PROPOSED
CONTACT THE NORTHEAST REGION TRAFFIC SECTION FOR APPROVAL

2

STAGE V3

PURPOSE:
BEGIN GRADING OF FRONTAGE ROAD AND SB USH 151 INTERCHANGE RAMPS
BEGIN CONSTRUCTION OF B-20-0226
CONTINUE GRADING OF NEW CTH V AND NB USH 151 INTERCHANGE RAMPS
COMPLETE PAVING OF NEW PRAIRIE TRAIL ADJACENT TO FRONTAGE ROAD AND TEMPORARY CONNECTIONS

TRAFFIC HANDLING:
NORTHBOUND USH 151 TRAFFIC OPEN TO TWO LANES OF TRAFFIC.
SOUTHBOUND USH 151 TRAFFIC OPEN TO TWO LANES OF TRAFFIC.
CTH V TRAFFIC OPEN TO ONE LANE IN EACH DIRECTION
CTH V ON NEW CTH V SOUTH OF REINHARDT ROAD INTERSECTION.
CTH V ON EXISTING CTH V NORTH OF REINHARDT ROAD INTERSECTION.
USH 45 TRAFFIC OPEN TO ONE LANE IN EACH DIRECTION.
CTH V ACCESS TO USH 151 AT THE AT GRADE INTERSECTIONS.
USH 45 RAMPS TO USH 151 OPEN TO TRAFFIC.

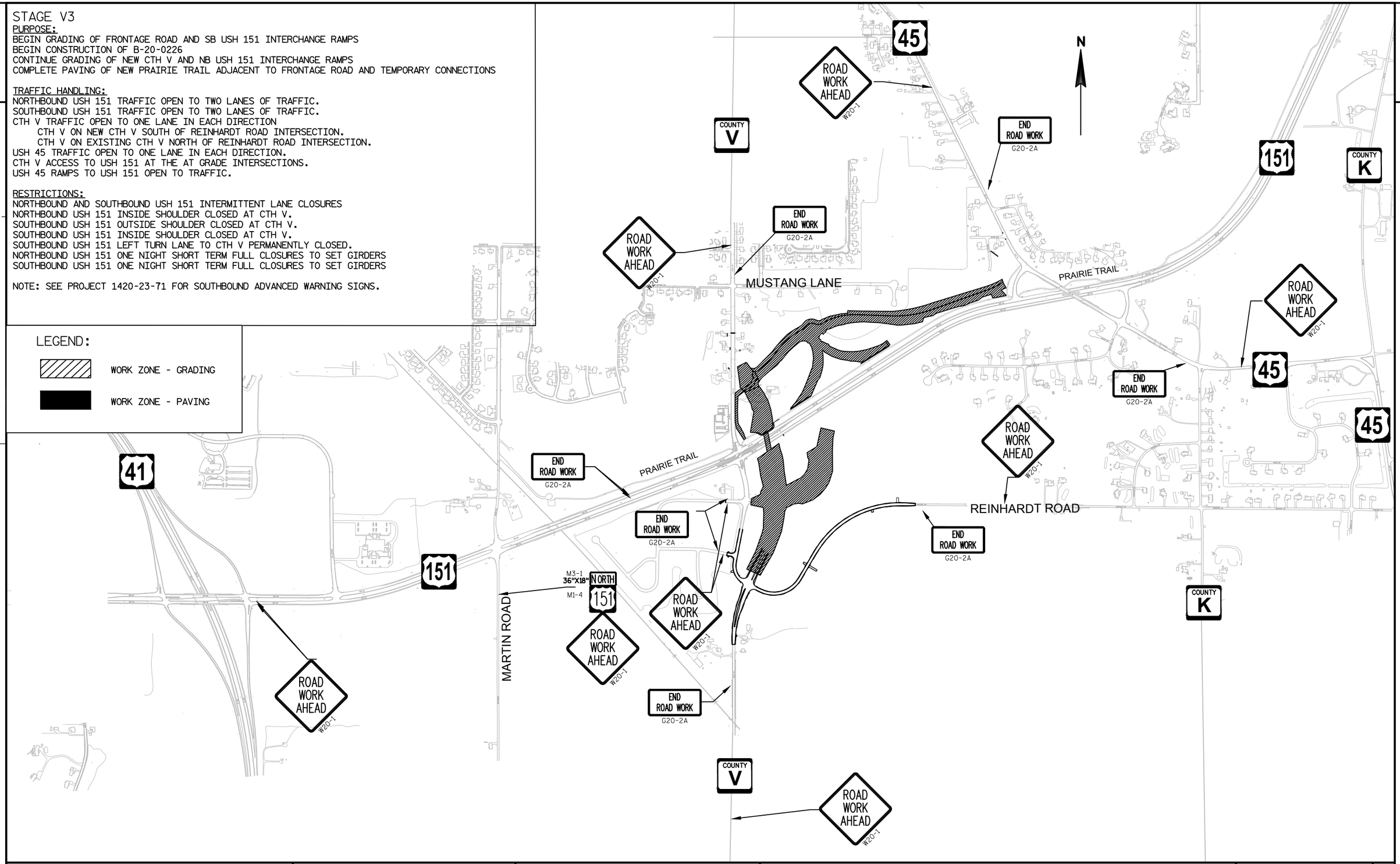
RESTRICTIONS:
NORTHBOUND AND SOUTHBOUND USH 151 INTERMITTENT LANE CLOSURES
NORTHBOUND USH 151 INSIDE SHOULDER CLOSED AT CTH V.
SOUTHBOUND USH 151 OUTSIDE SHOULDER CLOSED AT CTH V.
SOUTHBOUND USH 151 INSIDE SHOULDER CLOSED AT CTH V.
SOUTHBOUND USH 151 LEFT TURN LANE TO CTH V PERMANENTLY CLOSED.
NORTHBOUND USH 151 ONE NIGHT SHORT TERM FULL CLOSURES TO SET GIRDERS
SOUTHBOUND USH 151 ONE NIGHT SHORT TERM FULL CLOSURES TO SET GIRDERS

NOTE: SEE PROJECT 1420-23-71 FOR SOUTHBOUND ADVANCED WARNING SIGNS.

LEGEND:

WORK ZONE - GRADING

WORK ZONE - PAVING



2

2

SB USH 41

NB USH 41

SB USH 151

NB USH 151

1200'RL'

1205'RL'

1210'RL'

1215'RL'

MATCHLINE STA 1218+00

N

MATCHLINE STA 1218+00

CAMELOT DRIVE

1220'RL'

1225'RL'

1230'RL'

1235'RL'

1240'RL'

1245'RL'

MARTIN ROAD

MATCHLINE STA 1248+00

ROAD WORK 1/2 MILE

W20-1

LOCATION

23

K

T

V

45

V

41

151

LEGEND

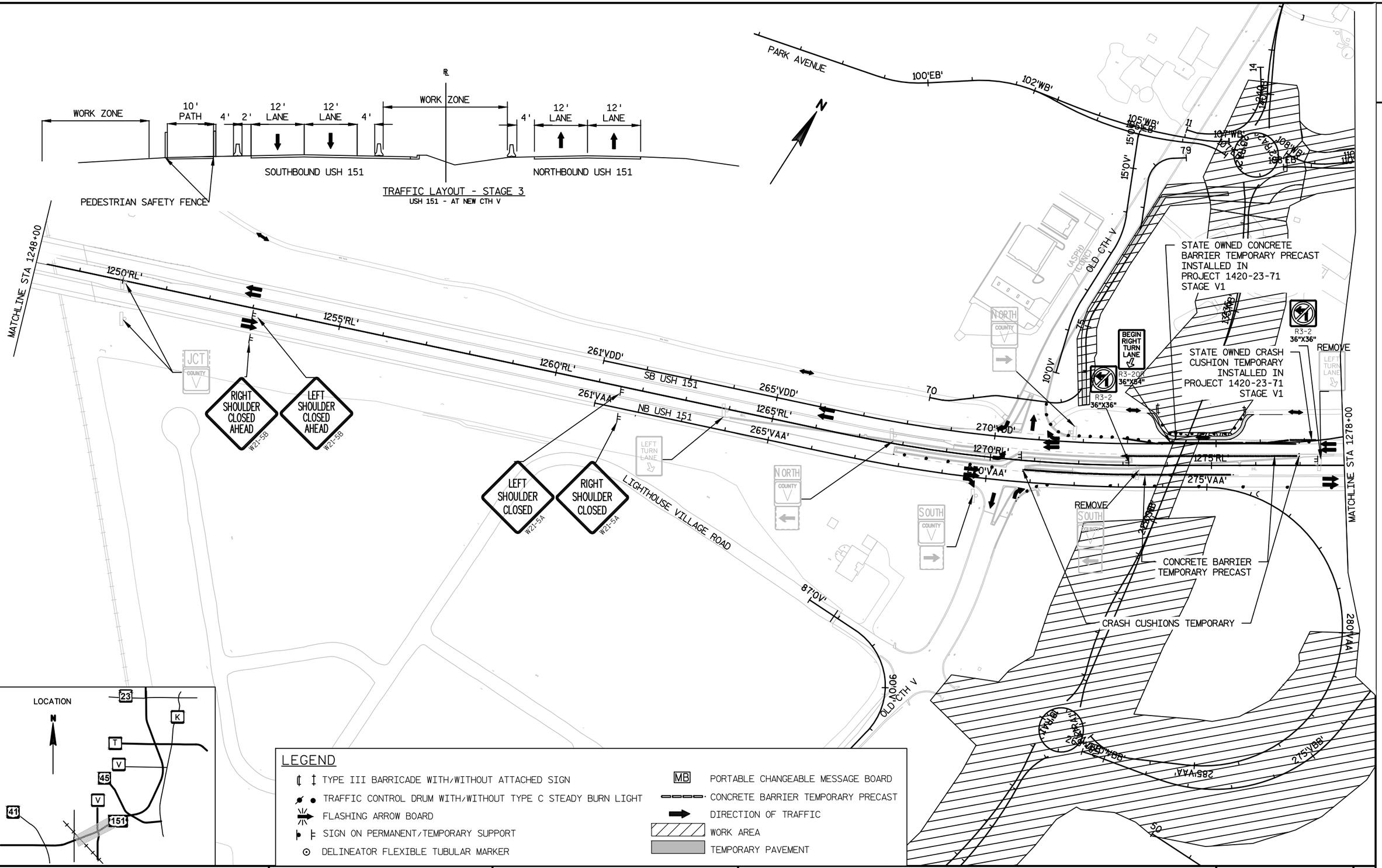
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

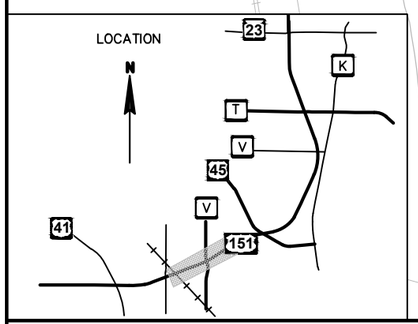
PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V3 - USH 151	SHEET	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025311-TC-V3-151.DWG PLOT DATE : 3/30/2015 10:22 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

TRAFFIC LAYOUT - STAGE 3
USH 151 - AT NEW CTH V





LEGEND

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- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V3 - USH 151	SHEET	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025311-TC-V3-151.DWG PLOT DATE : 3/30/2015 10:22 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 41

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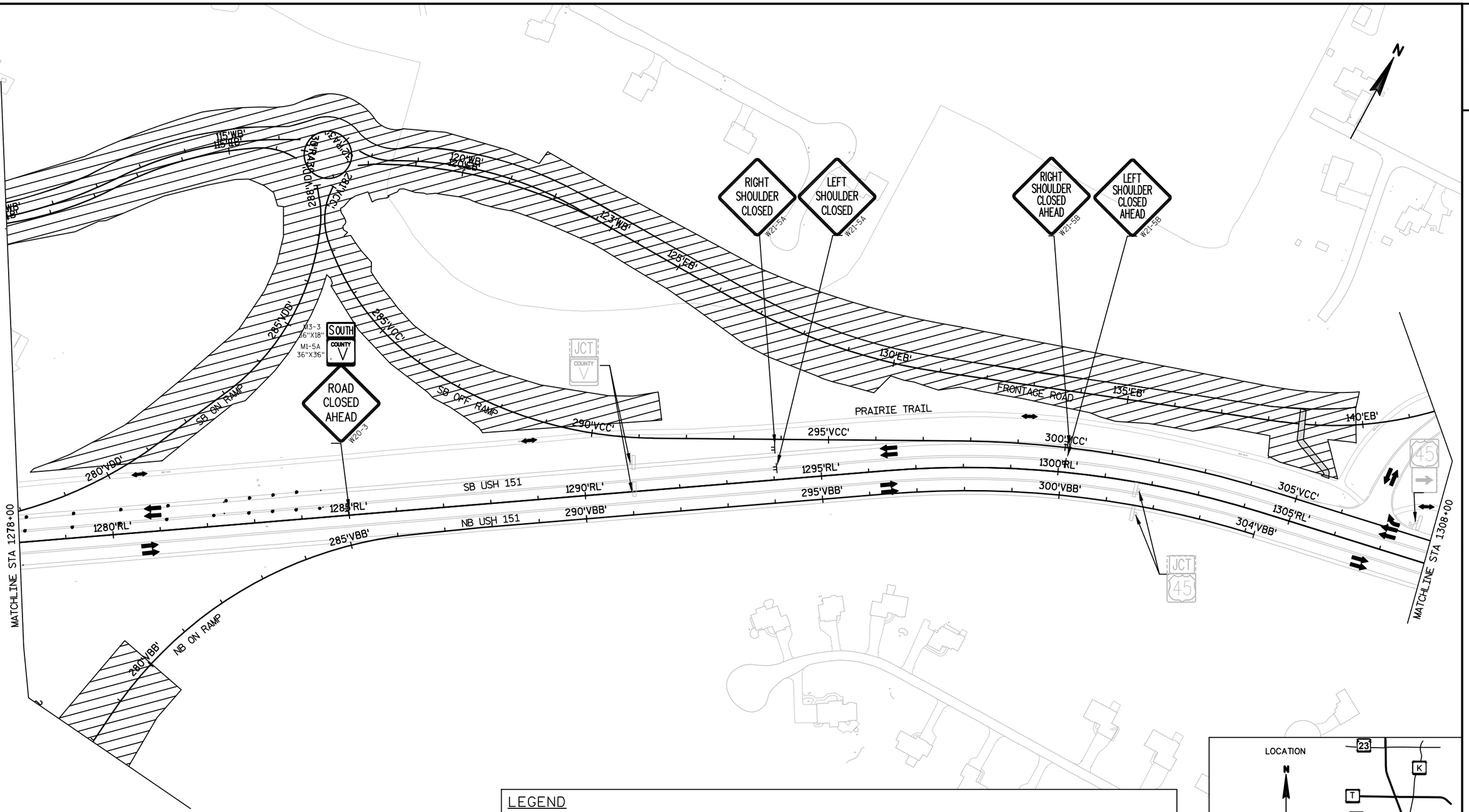

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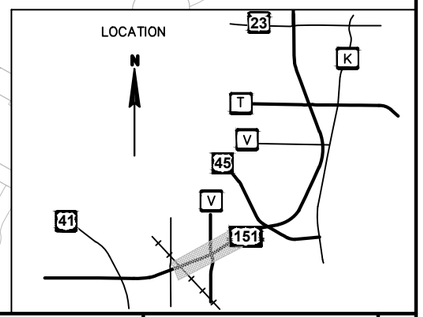

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V3 - USH 151	SHEET	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025311-TC-V3-151.DWG PLOT DATE : 3/30/2015 10:23 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

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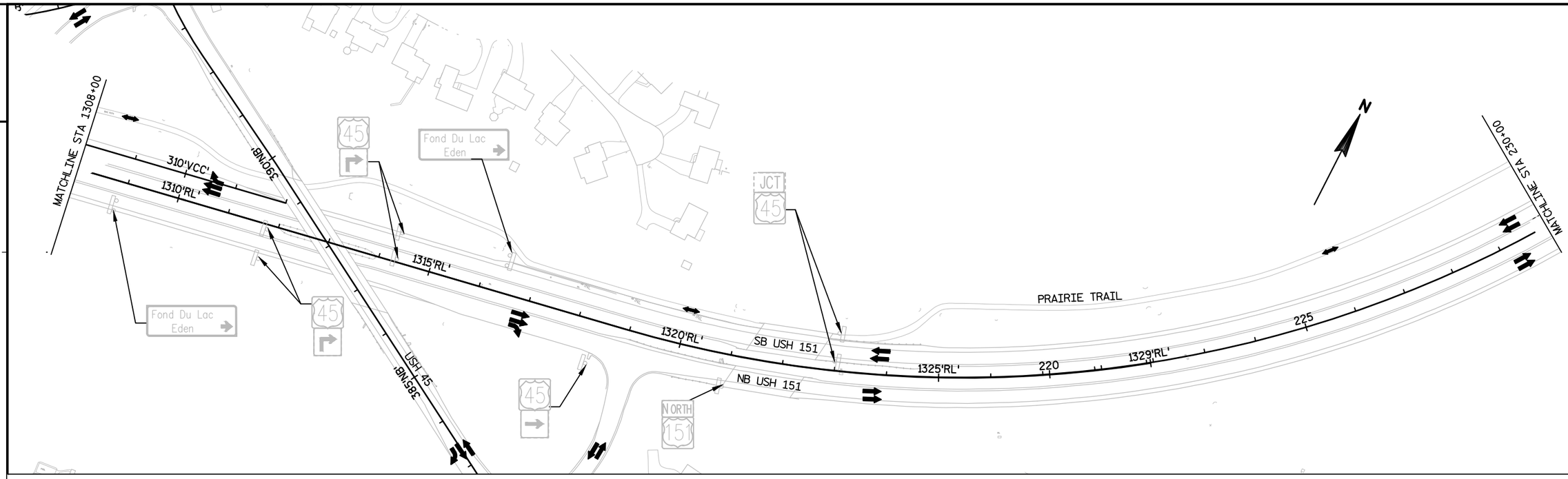

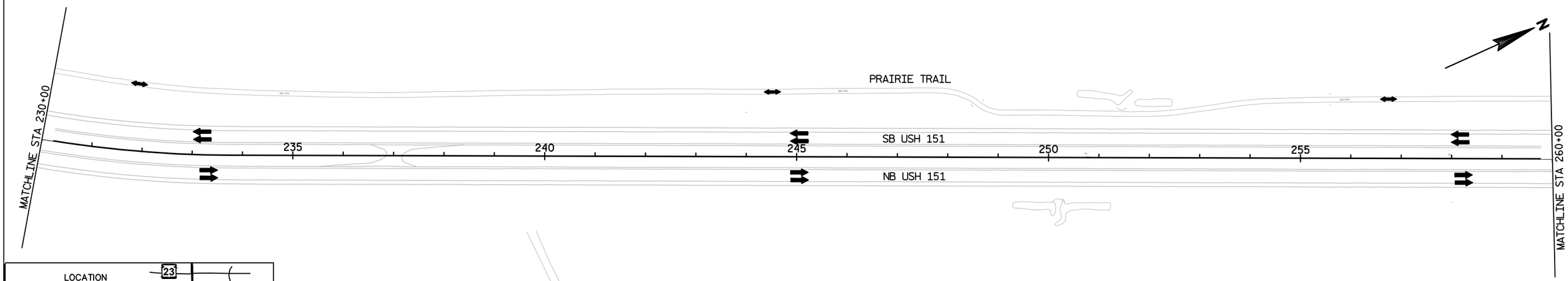

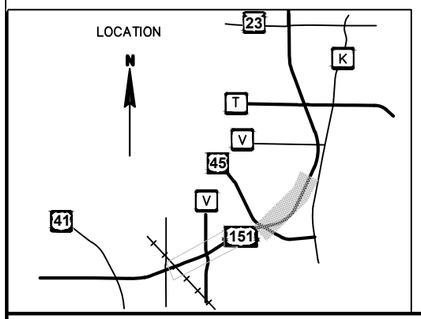

LEGEND

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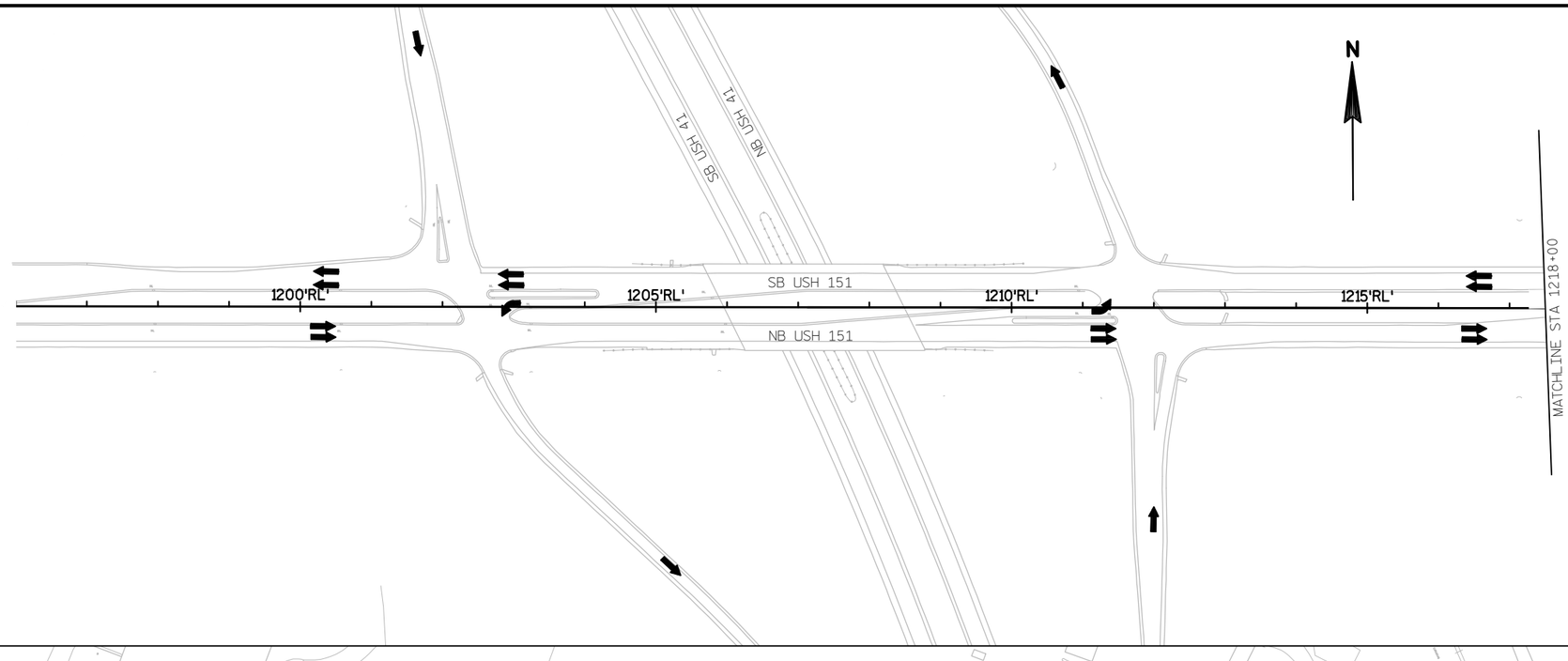
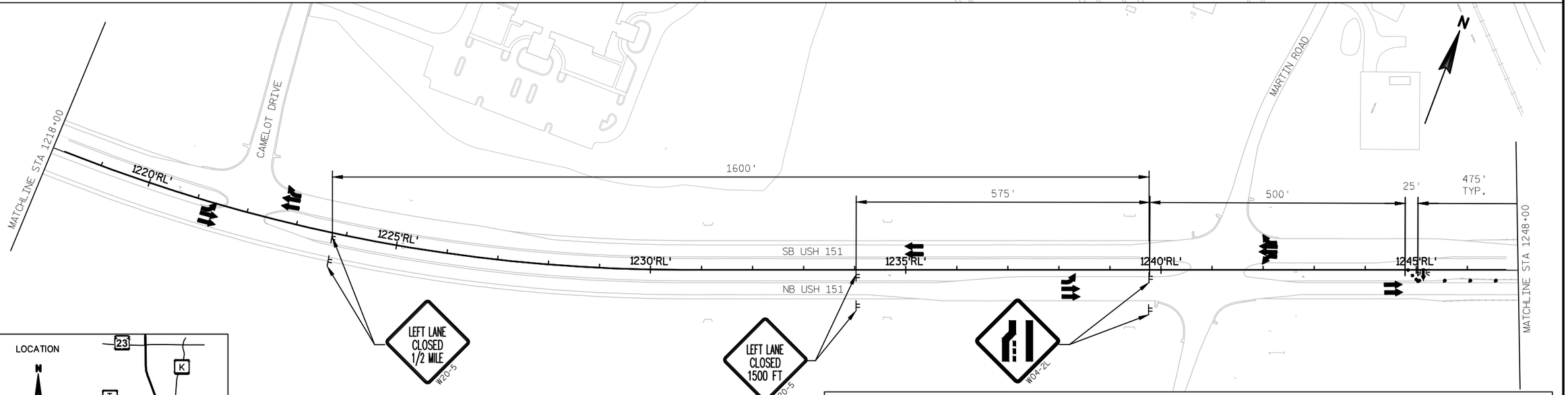
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

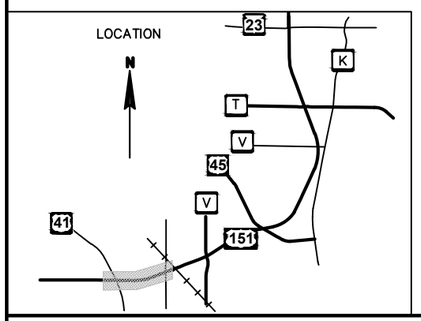
PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V3 - USH 151	SHEET 168	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025311-TC-V3-151.DWG PLOT DATE : 3/30/2015 10:23 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 41

2







NOTES:
DETAIL FOR USE FOR SHORT TERM LANE CLOSURES REQUIRED TO SET UP PERMANENT TRAFFIC CONTROL OR OTHER CONSTRUCTION OPERATIONS. USE INDIVIDUAL STAGE DETAILS FOR PERMANENT TRAFFIC CONTROL DURING THE STAGE.

COORDINATE LANE CLOSURES WITH PROJECT 1420-23-71, INCLUDING CONNECTING ADJACENT CLOSURES.

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V3 (LT LANE CLOSURE DETAIL)	SHEET 169	E

2

475' TYP.

660' MIN.

500' MIN.

MATCHLINE STA 1248+00

1250'RL'

1255'RL'

1260'RL'

1265'RL'

1270'RL'

1275'RL'

SB USH 151

NB USH 151

PRAIRIE TRAIL

OLD CTH V

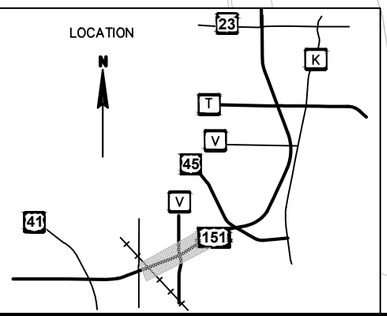
LIGHTHOUSE VILLAGE ROAD

MATCHLINE STA 1278+00

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

BEGIN LEFT TURN LANE
R3-20L
36"X54"

LOCATION



LEGEND

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- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
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- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V3 (LT LANE CLOSURE DETAIL)	SHEET 170	E

2

N

BEGIN LEFT TURN LANE
R3-20L
36"X54"

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

SB USH 151

NB USH 151

1280'RL'

1285'RL'

1290'RL'

1295'RL'

1300'RL'

1305'RL'

MATCHLINE STA 1278+00

MATCHLINE STA 1308+00

LOCATION

N

23

K

T

V

45

V

41

151

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
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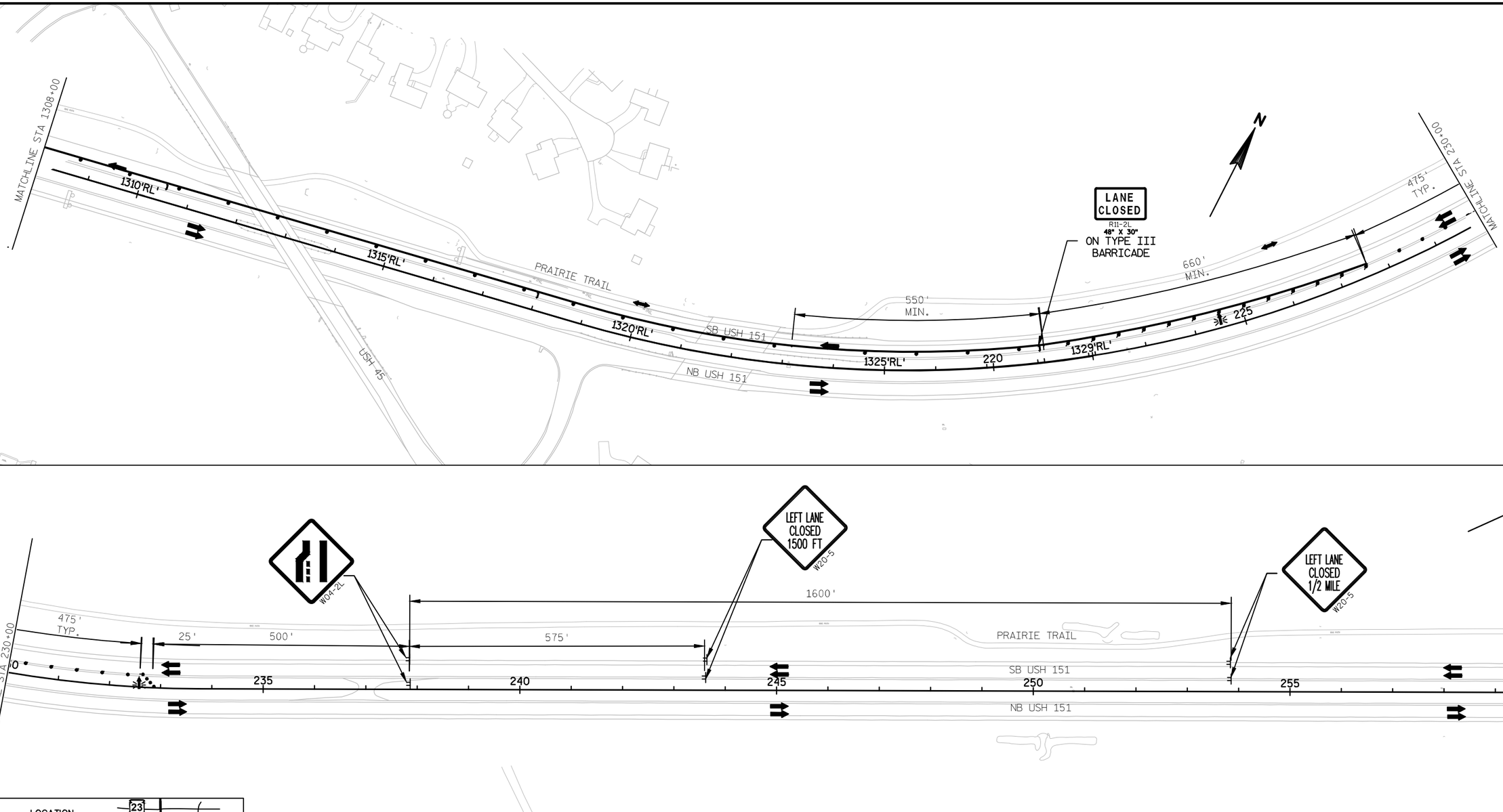
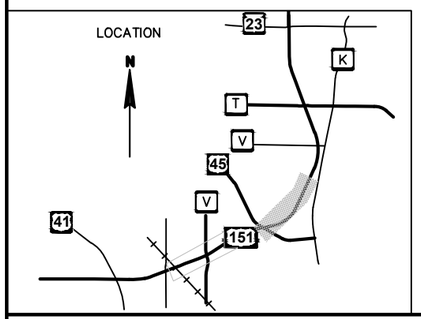
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V3 (LT LANE CLOSURE DETAIL)	SHEET 171	E





LEGEND

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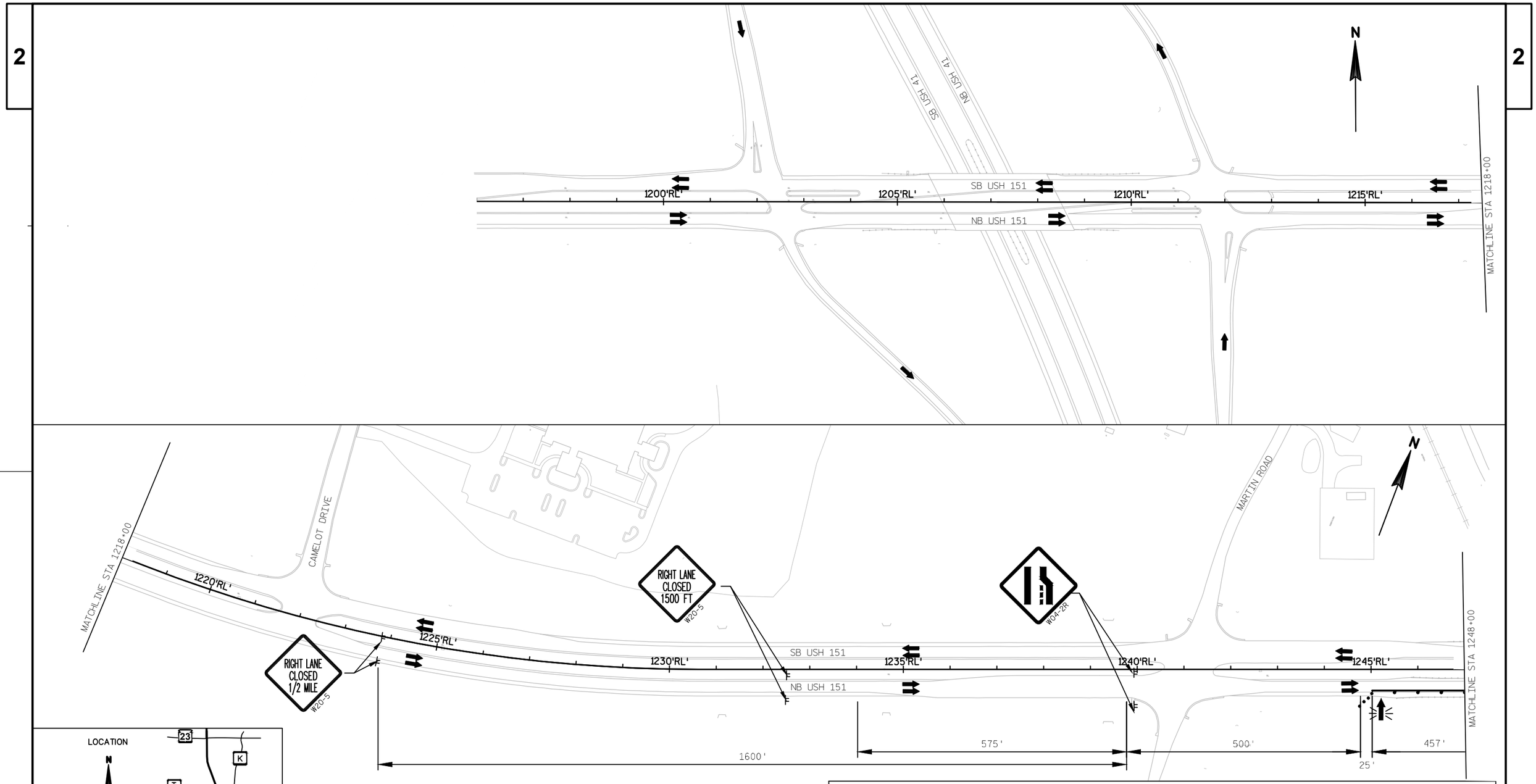
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V3 (LT LANE CLOSURE DETAIL)	SHEET 172	E



NOTES:
DETAIL FOR USE FOR SHORT TERM LANE CLOSURES REQUIRED TO SET UP PERMANENT TRAFFIC CONTROL OR OTHER CONSTRUCTION OPERATIONS. USE INDIVIDUAL STAGE DETAILS FOR PERMANENT TRAFFIC CONTROL DURING THE STAGE.

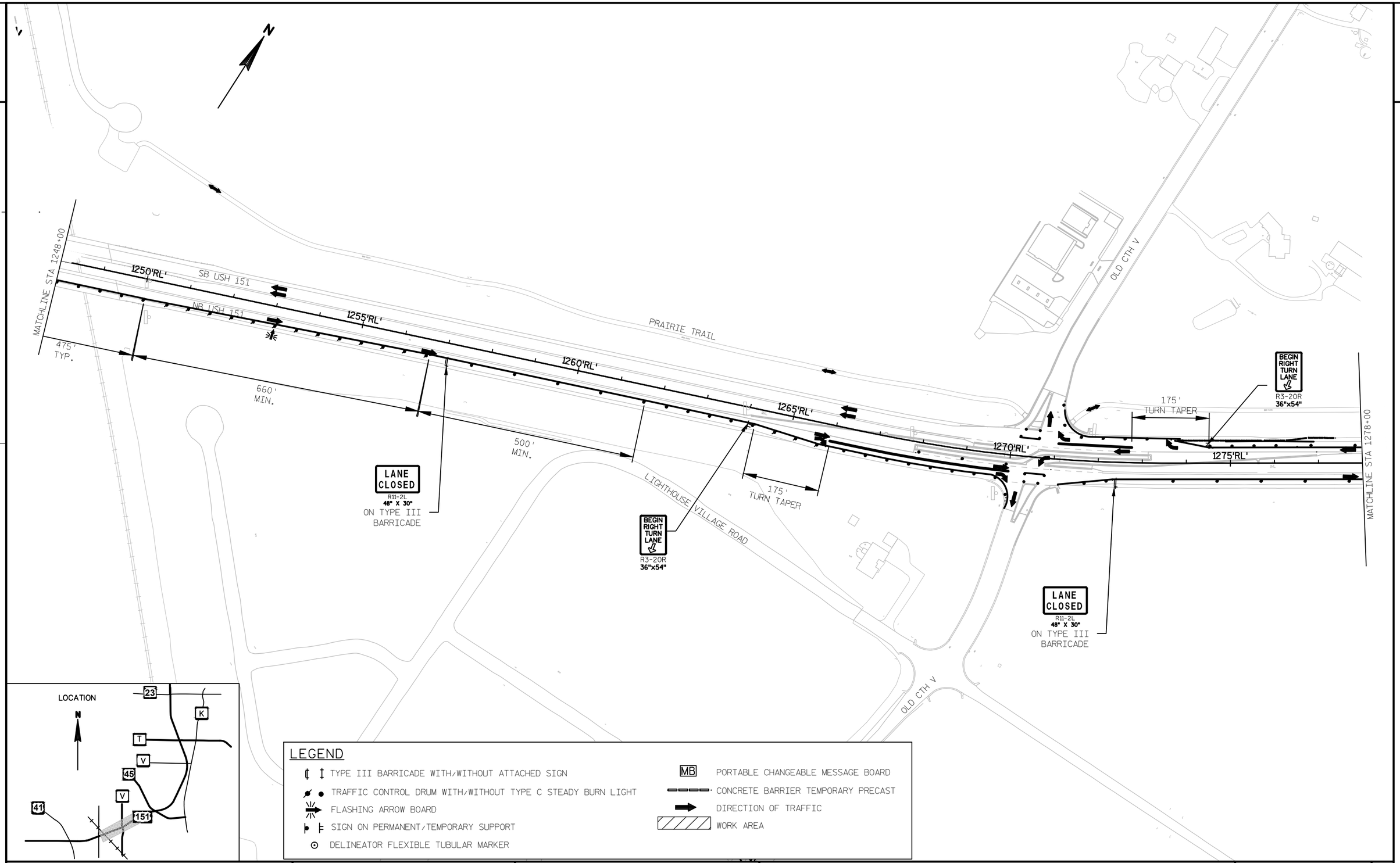
COORDINATE LANE CLOSURES WITH PROJECT 1420-23-71, INCLUDING CONNECTING ADJACENT CLOSURES.

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V3 (RT LANE CLOSURE DETAIL)	SHEET 173	E

2



LOCATION

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
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- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V3 (RT LANE CLOSURE DETAIL)	SHEET 174	E

2

2

N

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

175' TURN TAPER

SB USH 151
NB USH 151

1280'RL'
1285'RL'
1290'RL'
1295'RL'
1300'RL'
1305'RL'

MATCHLINE STA 1278+00

MATCHLINE STA 1308+00

LOCATION

N

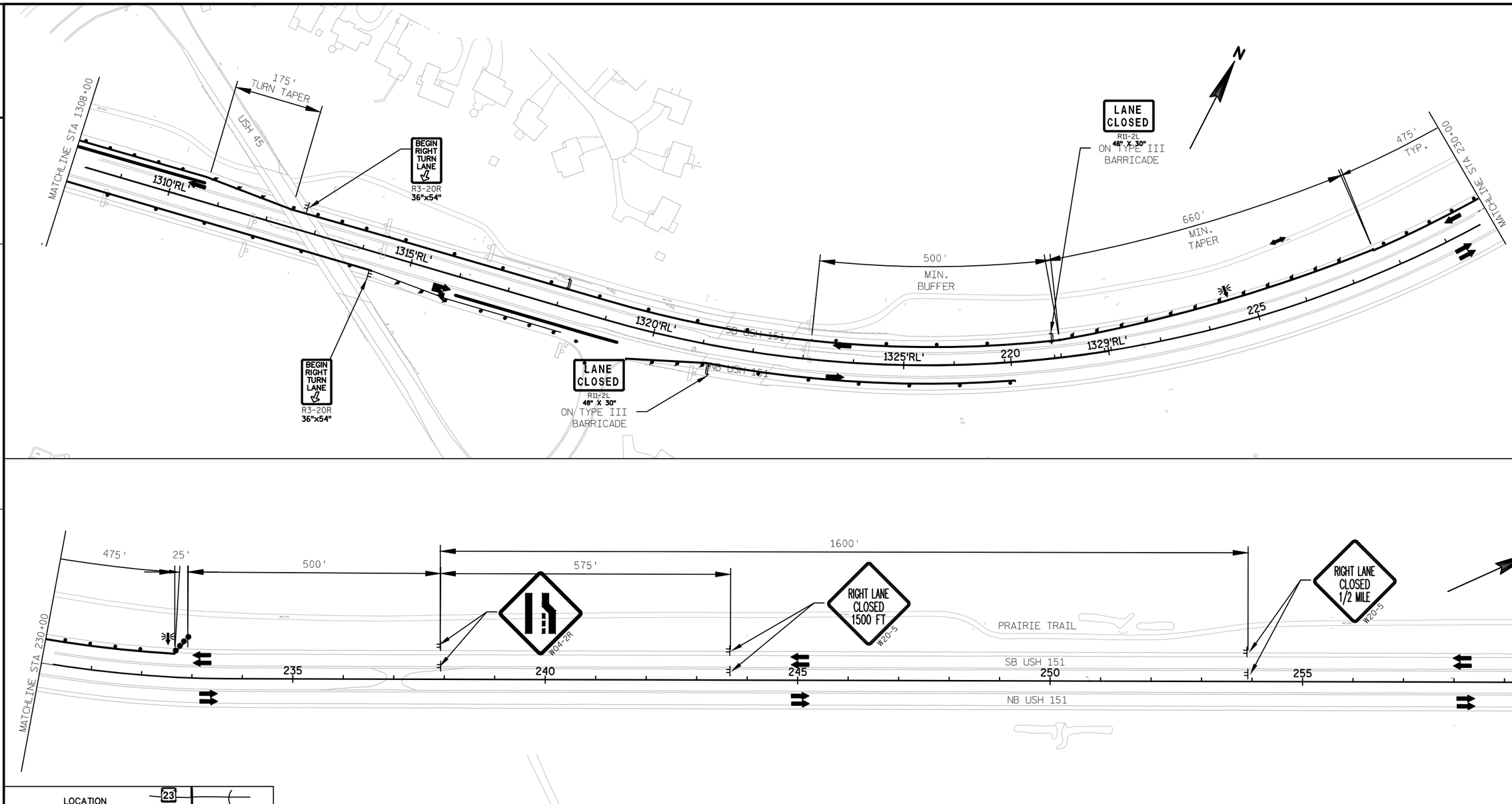
23
K
T
V
45
V
41
151

LEGEND

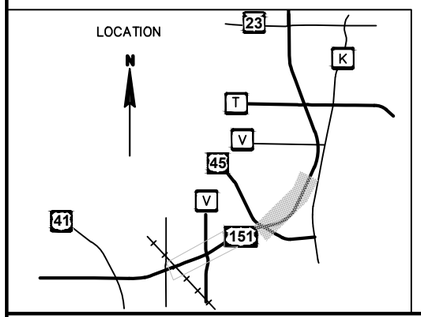
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V3 (RT LANE CLOSURE DETAIL)	SHEET 175	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025301-RT LANE CLOSURE-TC.DWG PLOT DATE : 3/30/2015 9:21 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41



LOCATION



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V3 (RT LANE CLOSURE DETAIL)	SHEET 176	E

2

N

102'NB'
104'NB'
106'NB'
206'SB'
208'SB'
108'NB'
210'SB'
110'NB'
212'SB'
112'NB'
CTH V

W03-1

COUNTY V
M1-5A
24"X24"
M05-1L
21"X21"

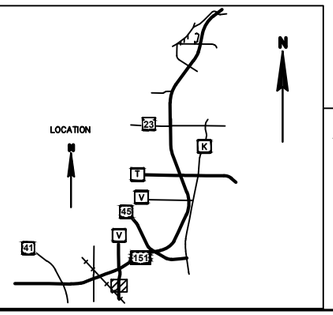
COUNTY V

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

COUNTY V
M1-5A
24"X24"
M6-1
21"X21"

STOP

OLD CTH V
98'RE
214'SB'
214'RE
CTH V
114'NB'
114'RE
REDGRAVE
STOP
REINHARDT ROAD
102'RE
104'RE
MATCHLINE STA 216+00
STOP
COUNTY V
R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V3	SHEET 177	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025312-TC-V3-LOC.DWG PLOT DATE : 3/30/2015 10:45 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

2

N

M1-5A
24"X24"

M05-1R
21"X21"

W03-1

R11-2
48" X 30"
ROAD
CLOSED

TYPE III BARRICADE

REMOVE

SOUTH
COUNTY

NORTH
COUNTY

SOUTH
COUNTY

MATCH LINE STA 216+00

CTH V

OLD CTH V

SB USH 151

NB USH 151

96'RE'
94'RE'
92'RE'
90'RE'
88'RE'
87'RE'
4'WI'
4'WI'
6'NB'
218'SB'
118'NB'
226'SB'
120'NB'
222'SB'
122'NB'
224'SB'
124'NB'
12'RA'
269'VBB'
270'VBB'
287'VAA'
12'RA'
226'SB'
126'NB'
228'SB'
128'NB'
268'VAA'
8'VDD'
268'RL'
270'VAA'
270'VDD'
270'RL'
272'VAA'
272'VDD'
272'RL'
274'VAA'
274'RL'
278'VAA'

LOCATION

N

23
K
T
V
45
V
41
151

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V3	SHEET	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025312-TC-V3-LOC.DWG PLOT DATE : 3/30/2015 10:46 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

2

N

NORTH COUNTY V

SOUTH COUNTY V

REMOVE

SIDEWALK CLOSED

R9-9

INSTALL ON TYPE II BARRICADE WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING

MAINTAINING PEDESTRIAN SAFETY FENCE

(ASPH)

(CONC)

OLD CTH V

CTH V

PARK AVENUE

MATCHLINE STA 241+00

US HSH 151

268'VAA'

268'RL'

268'VDD'

270'VDD'

270'VAA'

270'RL'

272'VAA'

272'RL'

272'VDD'

274'VDD'

274'RL'

274'VAA'

276'VDD'

276'RL'

276'VAA'

104'WB'

104'EB'

106'WB'

106'EB'

107'WB'

107'EB'

108'WB'

108'EB'

110'WB'

110'EB'

112'WB'

112'EB'

114'WB'

114'EB'

233'NB'

235

236'NB'

240

242'NB'

LOCATION

N

23

K

T

V

45

V

41

151

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V3	SHEET 179	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025312-TC-V3-LOC.DWG PLOT DATE : 3/30/2015 10:46 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

N

T-BIRD DRIVE

SAMMY JO CIRCLE

MUSTANG LANE

MATCHLINE STA 241+00

142'NB' 242

144'NB'

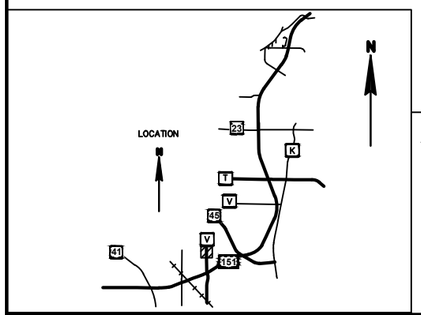
146'NB'

148'NB'

150'NB'

151'NB'

CTH V



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V3	SHEET 180	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025312-TC-V3-LOC.DWG PLOT DATE : 3/30/2015 10:46 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

2

2

PRAIRIE TRAIL

SB USH 151

NB USH 151

1320'RL'

1318'RL'

1316'RL'

1314'RL'

388'NB'

386'NB'

384'NB'

382'NB'

380'NB'

378'NB'

376'NB'

374'NB'

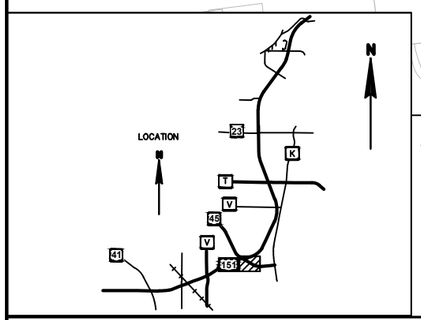
372'NB'

USH 45

VALLEY COURT

VALLEY CREEK ROAD

N



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V3	SHEET 181	E

2

2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

N

GLYNN AVE

DOUGLAS COURT

TAKODAH DRIVE

399'NB'

398'NB'

396'NB'

394'NB'

392'NB'

390'NB'

388'NB'

143'EB'

142'EB'

140'EB'

138'EB'

SIDEWALK CLOSED
R9-9
INSTALL ON TYPE II BARRICADE WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING

FRONTAGE ROAD

PRAIRIE TRAIL

USH 45

SB USH 151

NB USH 151

312'VCC'

310'VCC'

308'VCC'

306'VCC'

1314'RL'

1312'RL'

1310'RL'

1308'RL'

LOCATION

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V3	SHEET 182 E

2

STAGE V4

PURPOSE:
COMPLETE GRADING AND PAVING OF NEW CTH V UP TO NORTH PROJECT TIE-IN
COMPLETE CONSTRUCTION OF B-20-0226
COMPLETE PAVING OF FRONTAGE ROAD BETWEEN CTH V AND ROUNDABOUT AT INTERCHANGE RAMPS
COMPLETE GRADING AND PAVING OF ENTIRE CTH V ON RAMP TO NB USH 151
COMPLETE GRADING AND PAVING OF CTH V OFF RAMP FROM NB USH 151 BETWEEN STA 271+50 AND CTH V
COMPLETE GRADING AND PAVING OF CTH V OFF RAMP FROM SB USH 151 BETWEEN FRONTAGE RD AND STA 304+00
COMPLETE GRADING AND PAVING OF CTH V ON RAMP TO SB USH 151 BETWEEN STA 273+75 AND FRONTAGE RD

TRAFFIC HANDLING:
NORTHBOUND USH 151 TRAFFIC OPEN TO ONE LANE OF TRAFFIC.
SOUTHBOUND USH 151 TRAFFIC OPEN TO ONE LANE OF TRAFFIC.
CTH V TRAFFIC OPEN TO ONE LANE IN EACH DIRECTION
- CTH V ON NEW CTH V SOUTH OF REINHARDT ROAD INTERSECTION.
- CTH V ON EXISTING CTH V NORTH OF REINHARDT ROAD INTERSECTION.
- CONSTRUCT NORTH CTH V TIE IN UNDER FLAGGING OPERATIONS

USH 45 TRAFFIC OPEN TO ONE LANE IN EACH DIRECTION.
CTH V ACCESS TO USH 151 AT THE AT GRADE INTERSECTIONS.
USH 45 RAMPS TO USH 151 OPEN TO TRAFFIC.

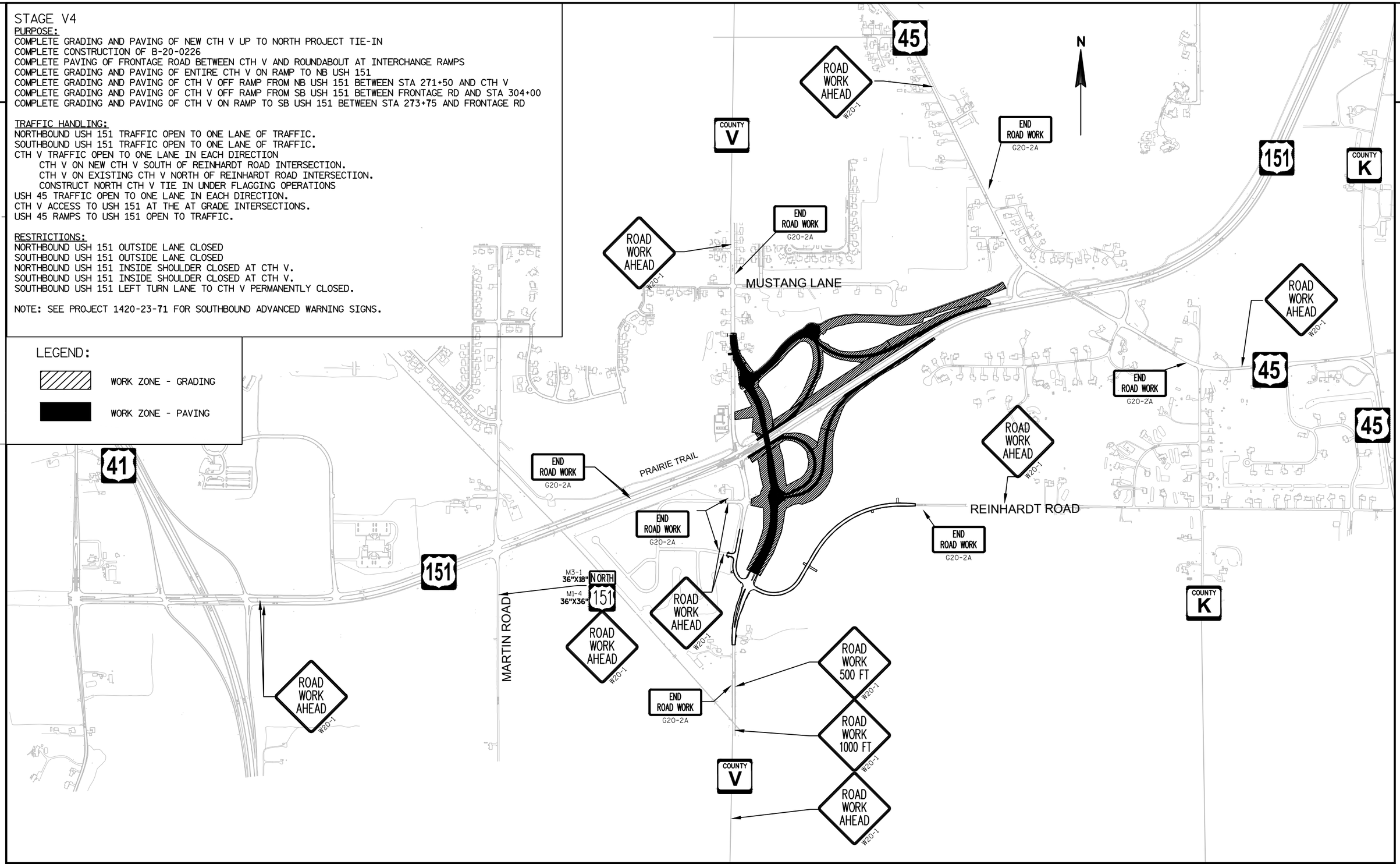
RESTRICTIONS:
NORTHBOUND USH 151 OUTSIDE LANE CLOSED
SOUTHBOUND USH 151 OUTSIDE LANE CLOSED
NORTHBOUND USH 151 INSIDE SHOULDER CLOSED AT CTH V.
SOUTHBOUND USH 151 INSIDE SHOULDER CLOSED AT CTH V.
SOUTHBOUND USH 151 LEFT TURN LANE TO CTH V PERMANENTLY CLOSED.

NOTE: SEE PROJECT 1420-23-71 FOR SOUTHBOUND ADVANCED WARNING SIGNS.

LEGEND:

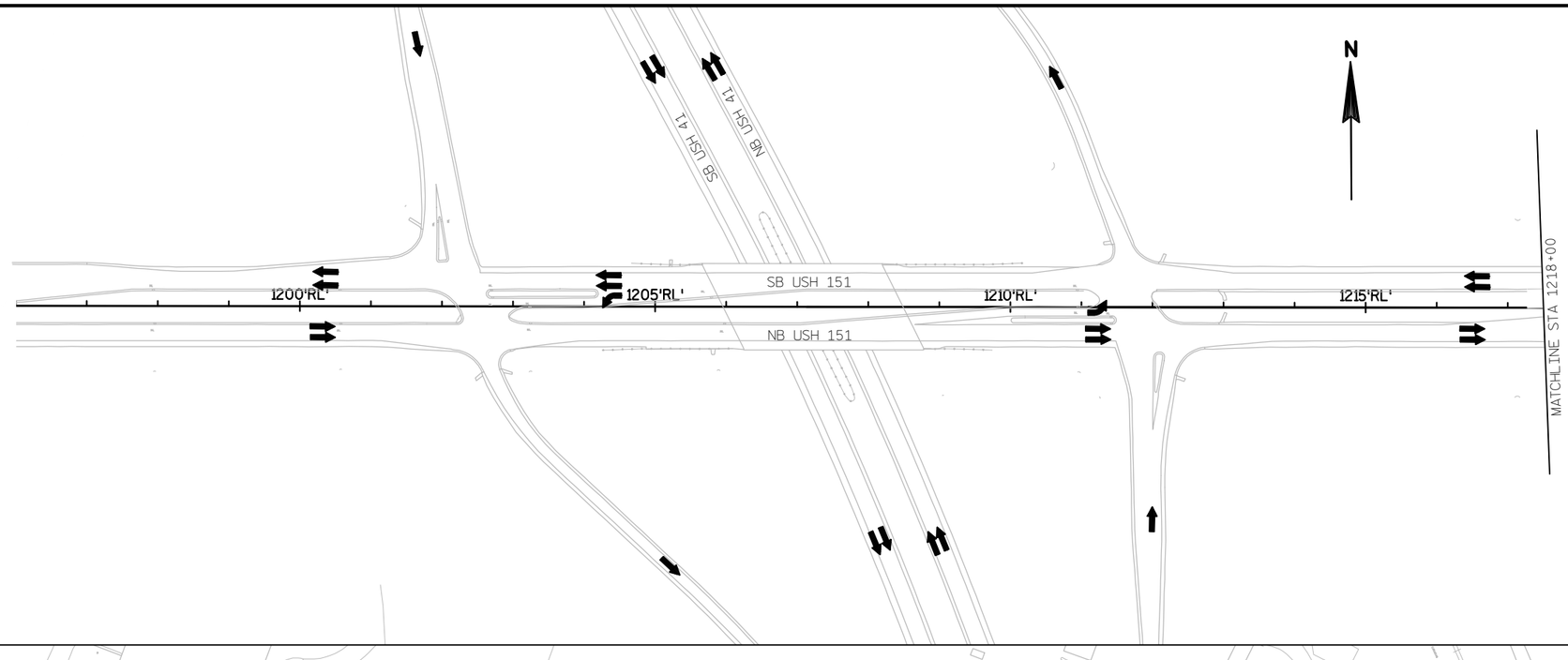
WORK ZONE - GRADING

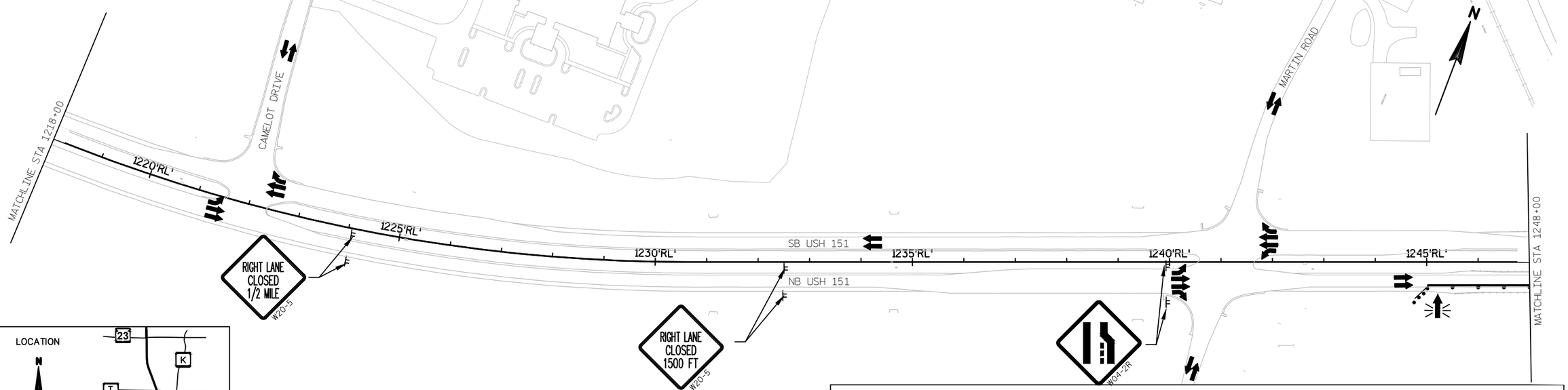
WORK ZONE - PAVING

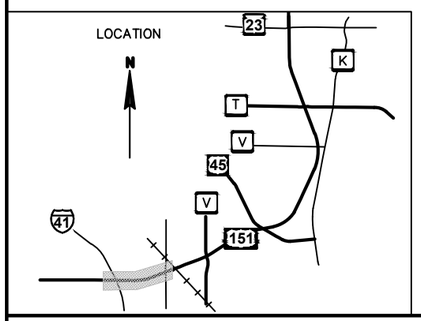


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL STAGE V4	SHEET 183 E

2





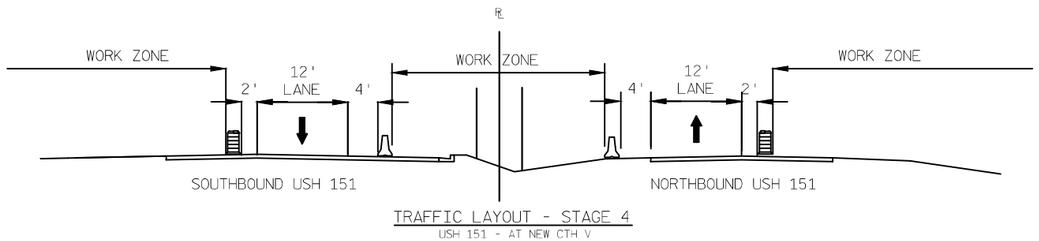


LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V4 - USH 151	SHEET 184	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\025411-TC-V4-151.DWG PLOT DATE : 1/15/2015 10:23 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41



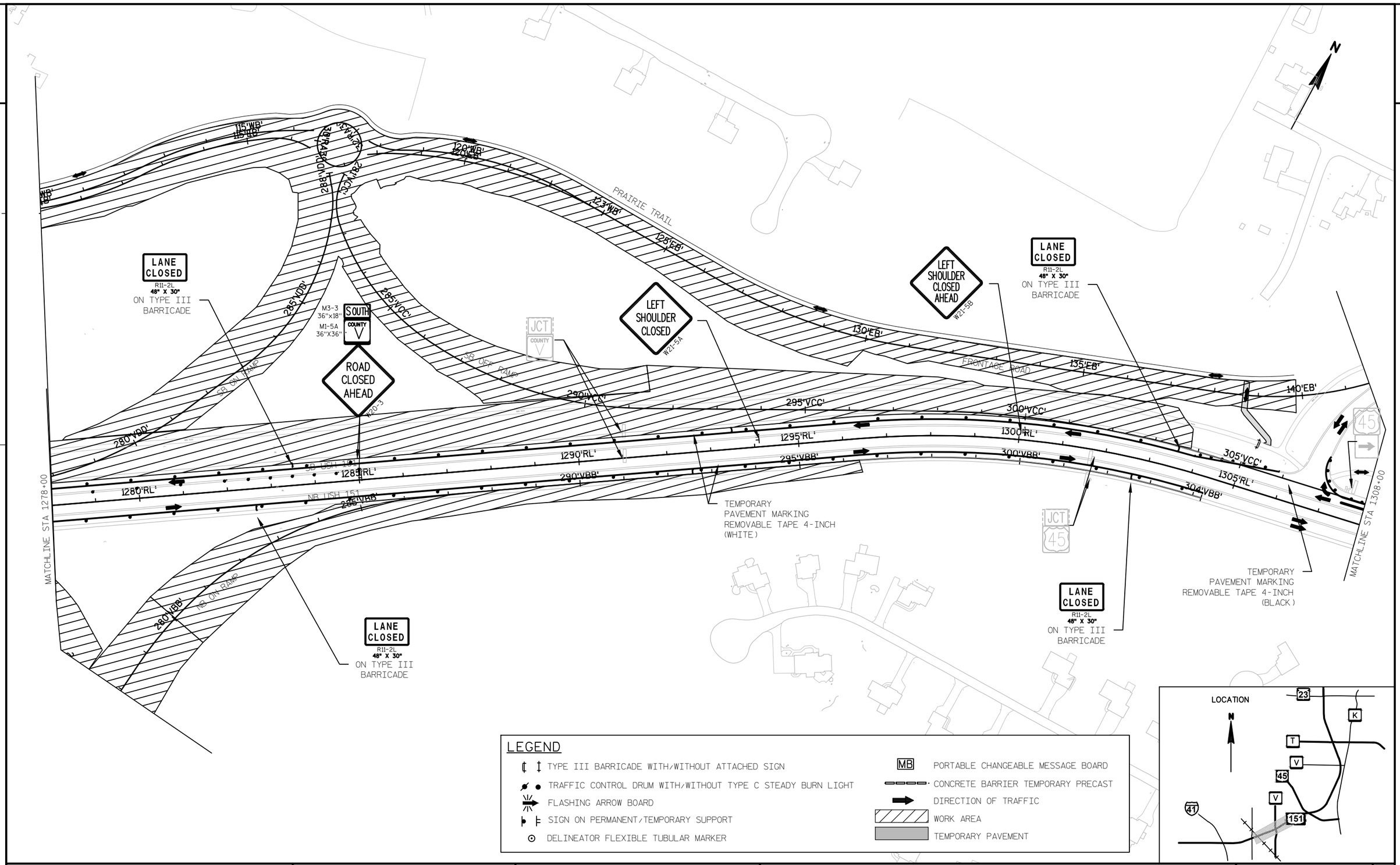
TRAFFIC LAYOUT - STAGE 4
USH 151 - AT NEW CTH V

LEGEND

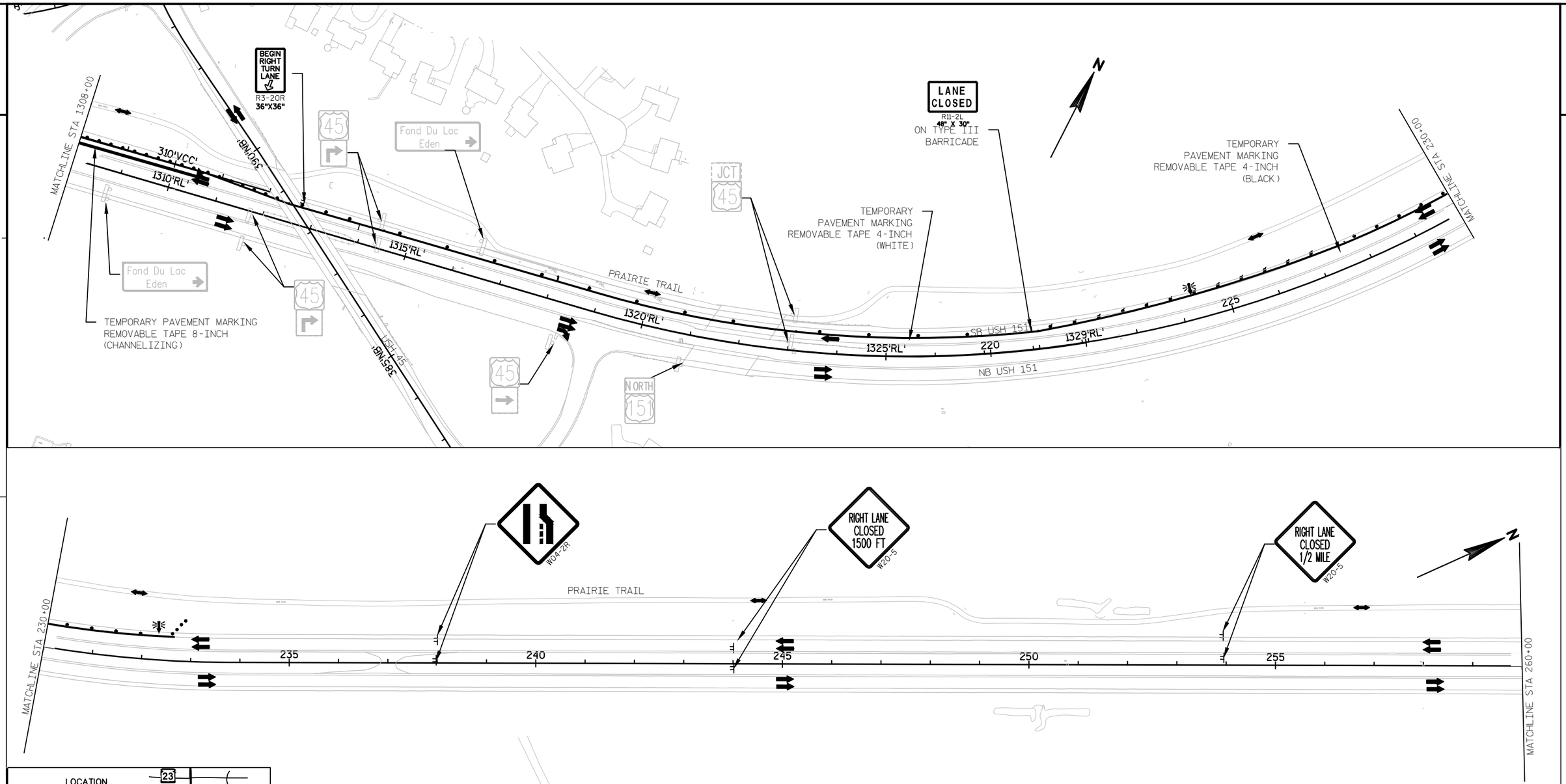
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

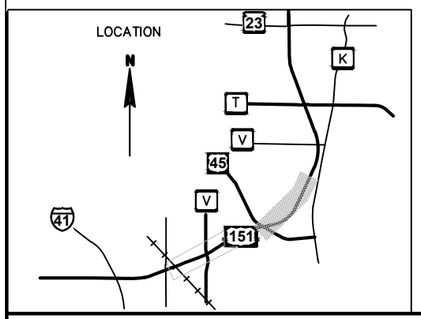
PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V4 - USH 151	SHEET 185	E

2



PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V4 - USH 151	SHEET 186	E





LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V4 - USH 151	SHEET 187	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\025411-TC-V4-151.DWG PLOT DATE : 1/15/2015 10:23 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

N

102'NB'
104'NB'
106'NB'
206'SB'
208'SB'
108'NB'
210'SB'
110'NB'
212'SB'
112'NB'
CTH V

W03-1

COUNTY
M1-5A
24"X24"
M05-1L
21"X21"

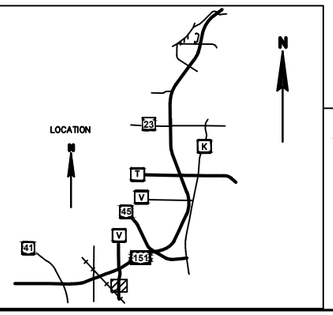
LANE CLOSED
R11-2-L
48"X30"
ON TYPE III
BARRICADE

COUNTY
M1-5A
24"X24"
M6-1
21"X21"

STOP

OLD CTH V
98'RE
214'SB'
214'NB'
CTH V
114'NB'
REDGORE RD
STOP
REINHARDT ROAD
102'RE
104'RE
216'SB'
MATCHLINE STA 216+00
COUNTY
STOP

R11-2
PERM SIGN
48"X30"
ROAD CLOSED
TYPE III BARRICADE



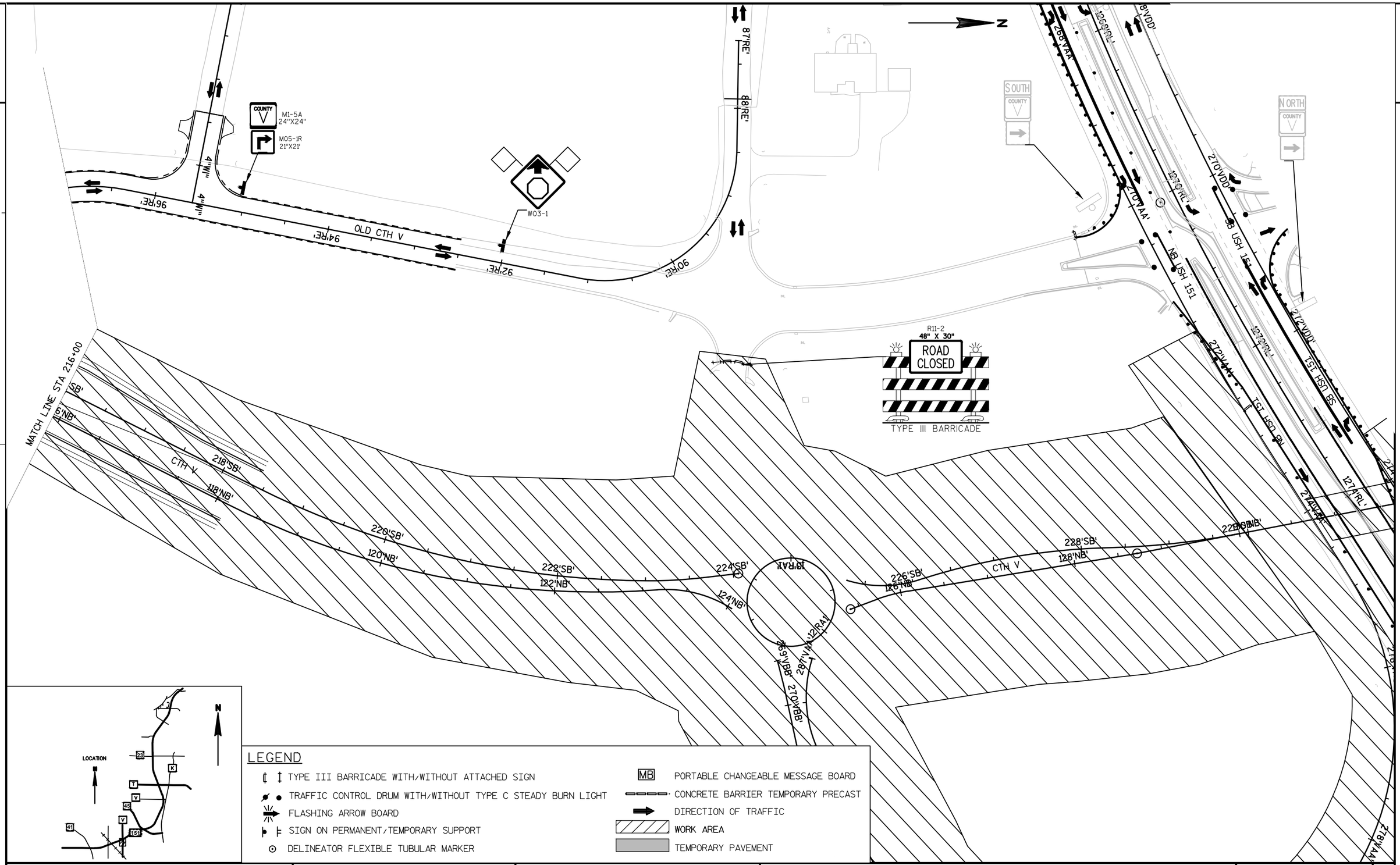
LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V4	SHEET 188	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025412-TC-V4-LOC.DWG PLOT DATE : 3/30/2015 10:50 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2



PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V4	SHEET 189	E

2

N

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

SIDEWALK CLOSED
R9-9
INSTALL ON TYPE II BARRICADE WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING

SIDEWALK CLOSED
R9-9
INSTALL ON TYPE II BARRICADE WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING

OLD CTH V
CTH V
PARK AVENUE
MATCHLINE STA 241+00

LOCATION

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V4	SHEET 190	E

2

N

T-BIRD DRIVE

CONSTRUCT UNDER NB LANE
UTILIZING FLAGGING OPERATIONS

SAMMY JO CIRCLE

MUSTANG LANE

144'NB'

146'NB'

148'NB'

150'NB'

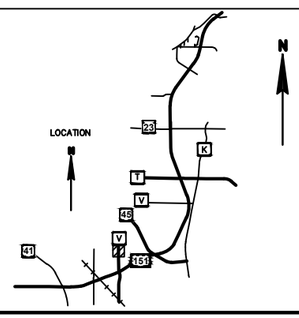
151'NB'

142'NB'

CTH V

MATCHLINE STA 241+00

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V4	SHEET 191	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025412-TC-V4-LOC.DWG PLOT DATE : 3/30/2015 10:51 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

2

N

SB USH 151

NB USH 151

1320'RL'

1318'RL'

1316'RL'

1314'RL'

388'NB'

386'NB'

384'NB'

382'NB'

USH 45

380'NB'

378'NB'

376'NB'

374'NB'

372'NB'

373+45.01

VALLEY COURT

VALLEY CREEK ROAD

LOCATION

N

23

K

T

V

45

V

41

151

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V4	SHEET	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025412-TC-V4-LOC.DWG PLOT DATE : 3/30/2015 10:51 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

N

EP: 399+64.27

399'NB'

GLYNN AVE

398'NB'

TAKODAH DRIVE

DOUGLAS COURT

PT: 397+00.56

396'NB'

394'NB'

143'EB'

USH 45

142'EB'

392'NB'

PC: 392+38.22

390'NB'

SIDEWALK CLOSED

R9-9

INSTALL ON TYPE II BARRICADE WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING

TEMPORARY CURB RAMPS

140'EB'

138'EB'

FRONTAGE ROAD

PRAIRIE TRAIL

PRAIRIE TRAIL

312'VCC'

310'VCC'

PI: 389+86.61

SB USH 151

1314'RL'

1312'RL'

388'NB'

308'VCC'

1310'RL'

NB USH 151

306'VCC'

1308'RL'

LOCATION

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V4	SHEET 193 E

2

STAGE V5

PURPOSE:
COMPLETE CTH V NORTH PROJECT TIE IN
COMPLETE RECONSTRUCTION OF OLD CTH V AND INSTALL CUL DE SACS
COMPLETE NEW PARK ROAD INTERSECTION WITH OLD CTH V
COMPLETE CONSTRUCTION OF NB OFF RAMP PARALLEL LANE AND SIGN BRIDGE

TRAFFIC HANDLING:
NORTHBOUND USH 151 TRAFFIC OPEN TO ONE LANE OF TRAFFIC.
SOUTHBOUND USH 151 TRAFFIC OPEN TO ONE LANE OF TRAFFIC.
CTH V TRAFFIC OPEN TO ONE LANE IN EACH DIRECTION
CTH V ON NEW CTH V.
CONSTRUCT NORTH CTH V TIE IN UNDER FLAGGING OPERATIONS.
USH 45 TRAFFIC OPEN TO ONE LANE IN EACH DIRECTION.
CTH V ACCESS TO USH 151 USING INTERCHANGE RAMPS WITH TEMPORARY GORES
USH 45 RAMPS TO USH 151 PERMANENTLY CLOSED TO TRAFFIC.

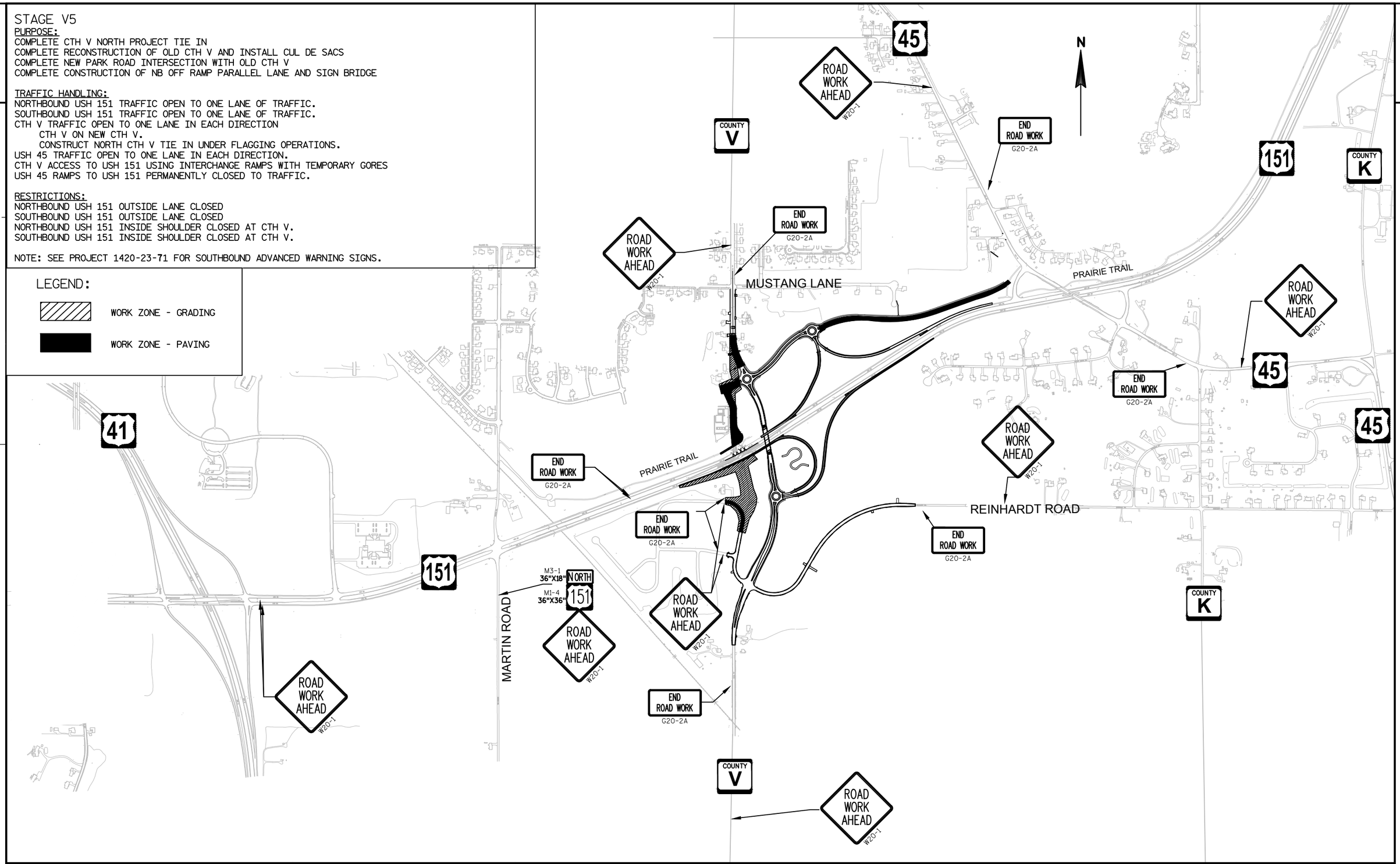
RESTRICTIONS:
NORTHBOUND USH 151 OUTSIDE LANE CLOSED
SOUTHBOUND USH 151 OUTSIDE LANE CLOSED
NORTHBOUND USH 151 INSIDE SHOULDER CLOSED AT CTH V.
SOUTHBOUND USH 151 INSIDE SHOULDER CLOSED AT CTH V.

NOTE: SEE PROJECT 1420-23-71 FOR SOUTHBOUND ADVANCED WARNING SIGNS.

LEGEND:

WORK ZONE - GRADING

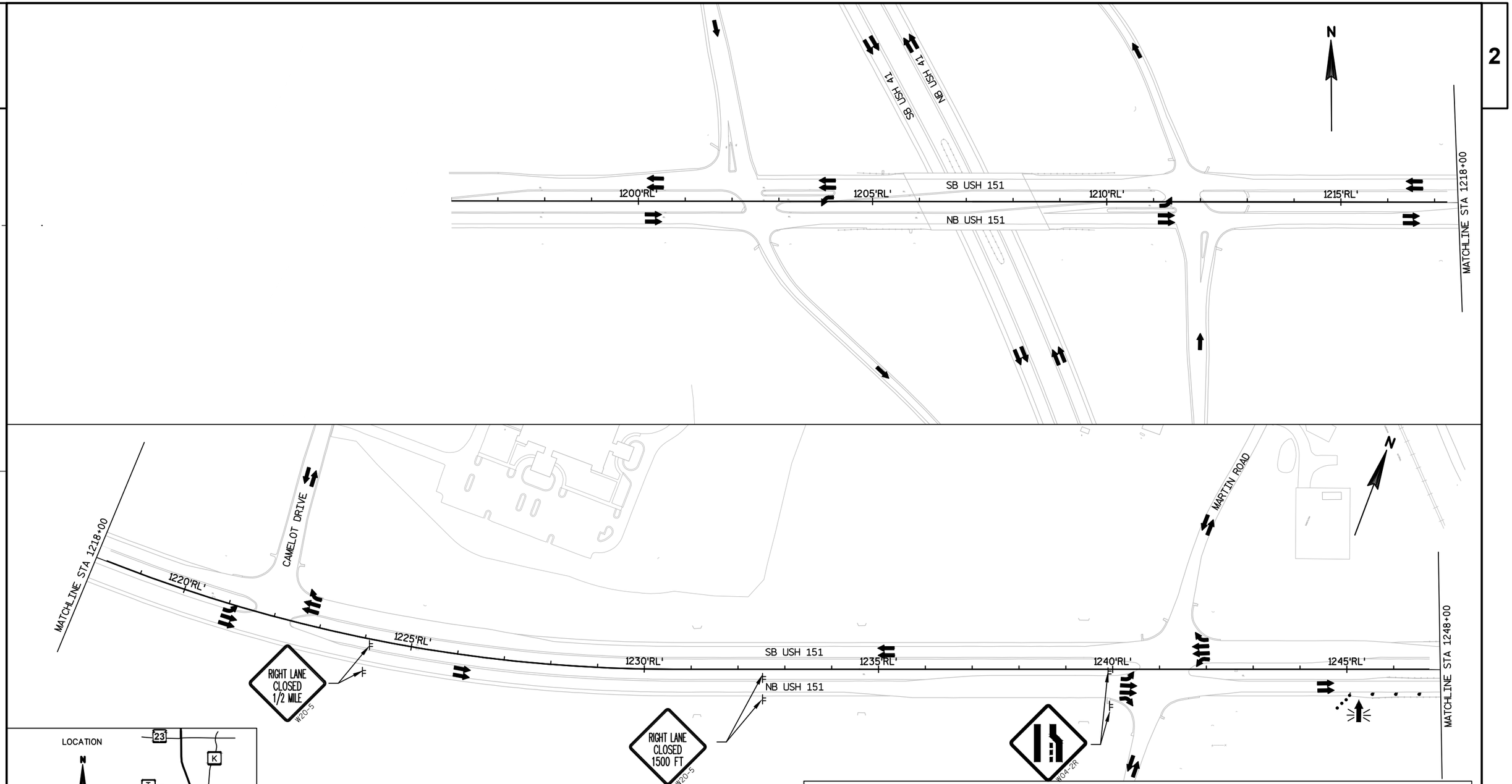
WORK ZONE - PAVING



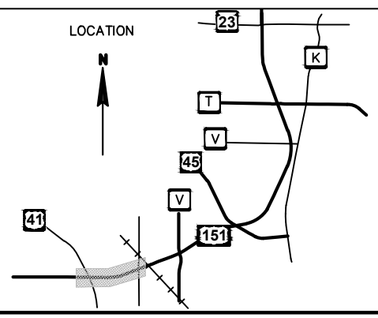
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL STAGE V5	SHEET 194	E

2

2



LOCATION

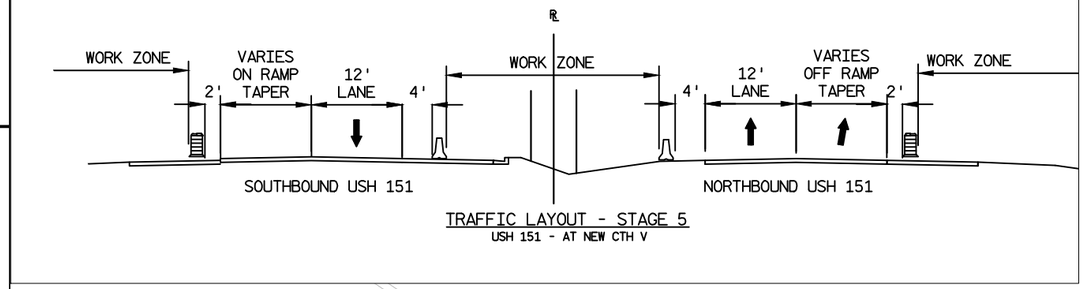


LEGEND

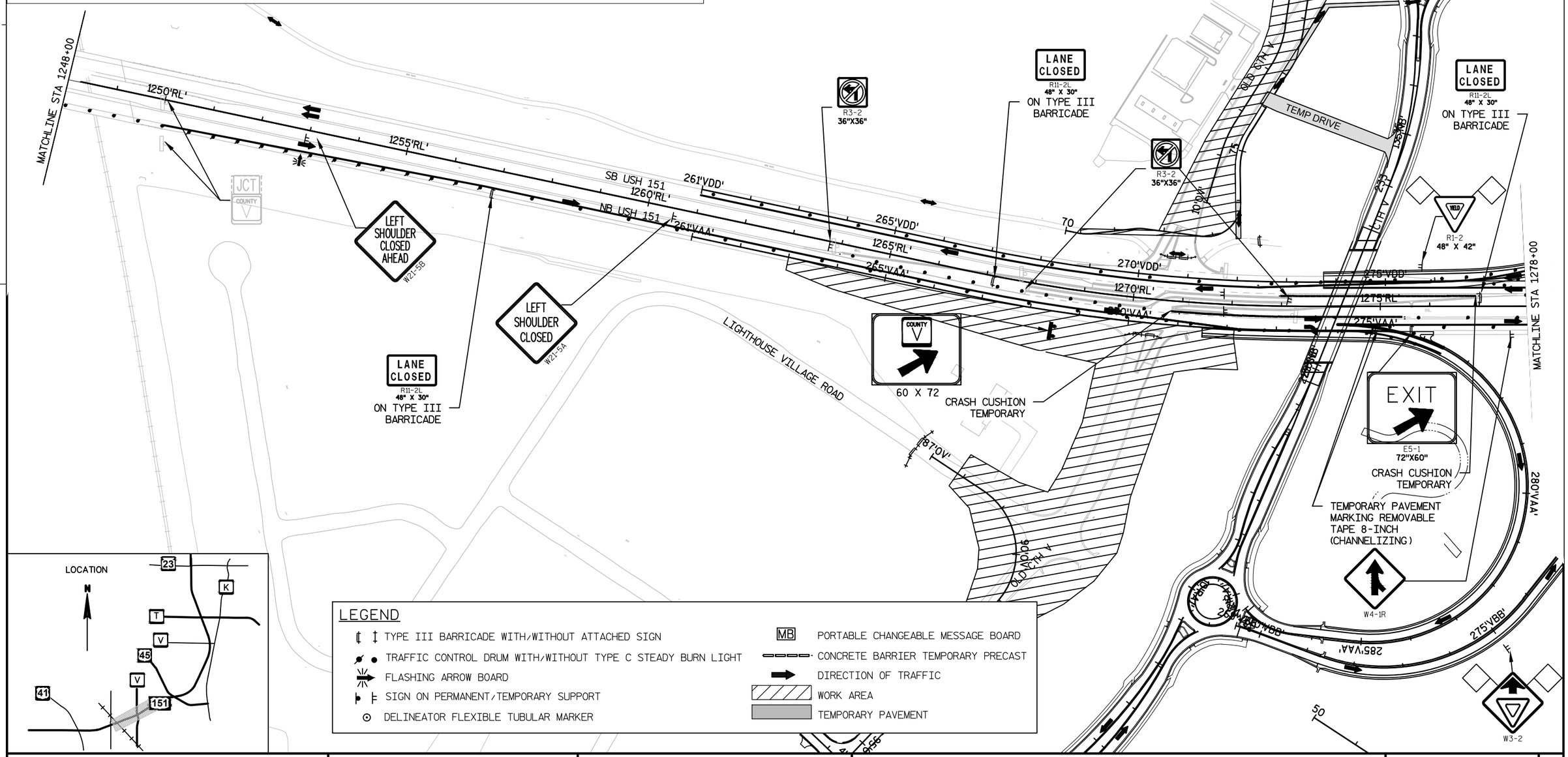
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V5 - USH 151	SHEET 195	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025511-TC-V5-151.DWG PLOT DATE : 4/10/2015 7:19 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41



TRAFFIC LAYOUT - STAGE 5
USH 151 - AT NEW CTH V



LOCATION

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V5 - USH 151	SHEET 196	E

2

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

N

W3-2

W4-1R

EXIT
E5-1
72"X60"

COUNTY
V
60 X 72

R3-1
24"X24"

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

LEFT SHOULDER CLOSED
W21-5A

LEFT SHOULDER CLOSED AHEAD
W21-5B

R1-2
48" X 42"

JCT 45

MATCHLINE STA 1278+00

MATCHLINE STA 1308+00

115'WB'
115'EB'
280'VBB'
285'VBB'
SB ON RAMP
285'VCC'
SB OFF RAMP
290'VCC'
120'WB'
120'EB'
123'WB'
125'EB'
130'EB'
FRONTAGE ROAD
CLOSED
CLOSED
135'EB'
140'EB'
295'VCC'
300'VCC'
1295'RL'
1300'RL'
295'VBB'
300'VBB'
305'VCC'
1305'RL'
304'VBB'
1290'RL'
SB USH 151
1285'RL'
1280'RL'
290'VBB'
NB USH 151
285'VBB'
280'VBB'
NB ON RAMP

LOCATION
N
23
K
T
V
45
V
41
151

LEGEND

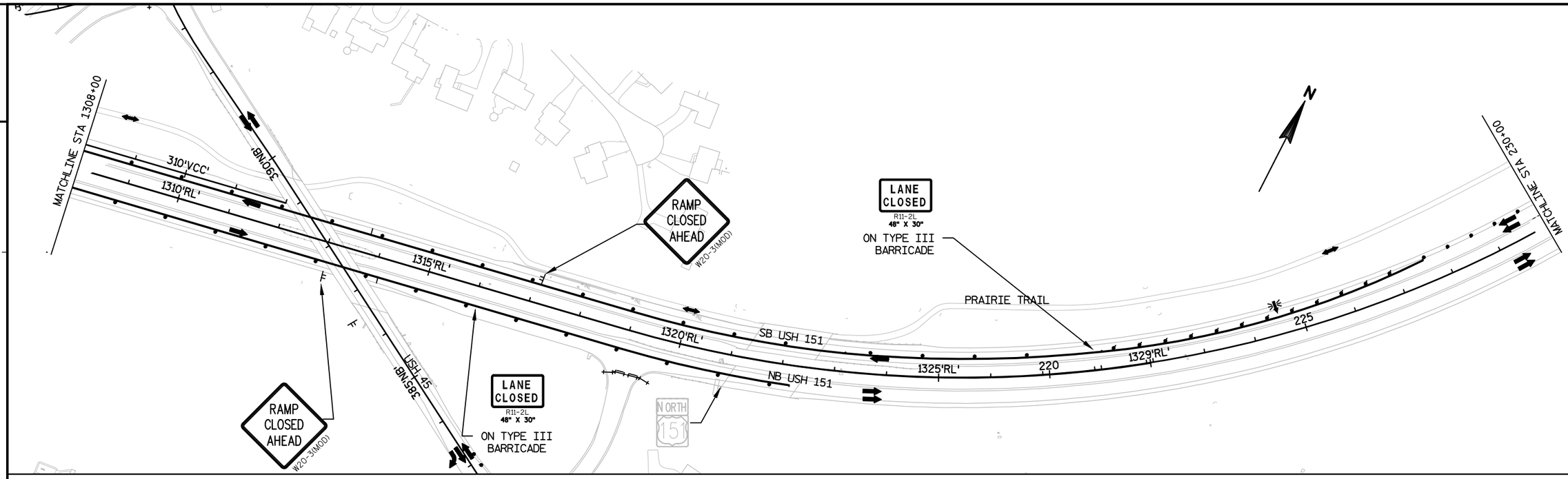
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

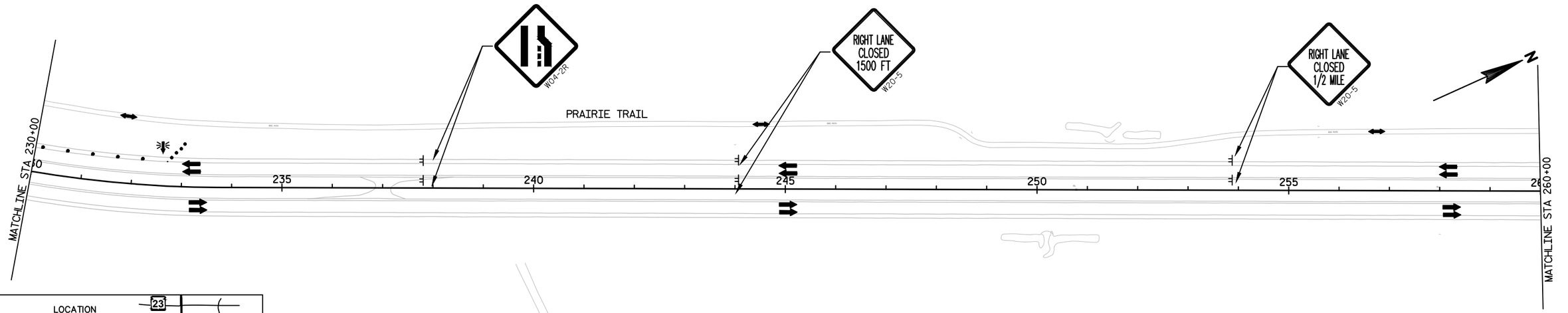
PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V5 - USH 151	SHEET 197	E

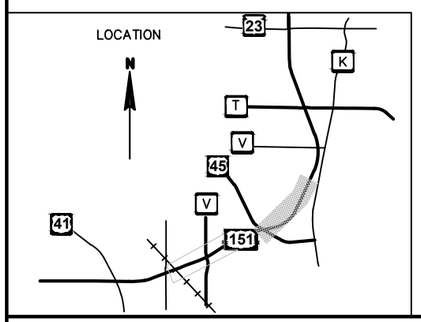
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025511-TC-V5-151.DWG PLOT DATE : 4/10/2015 7:20 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

2







LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V5 - USH 151	SHEET 198	E

2

INSTALL PERMANENT PAVEMENT MARKINGS ON CTH V

N

102'NB'
104'NB'
106'NB'
206'SB'
208'SB'
108'NB'
210'SB'
110'NB'
212'SB'
112'NB'
CTH V

ROAD CLOSED TO THRU TRAFFIC
R11-4
TYPE III BARRICADE

STOP
CTH V
98'RE
STOP
REMOVE

COUNTY
REMOVE

214'SB'
114'NB'
CTH V
98'RE
100'RE
216
STOP
REMOVE
REINHARDT ROAD
102'RE'
MATCHLINE STA 216+00

COUNTY
TO REMAIN
REMOVE
STOP
M6-4
21"X21"
PERM SIGN

LOCATION
N
23
K
T
V
45
V
41
151
22

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V5	SHEET 199	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025512-TC-V5-LOC.DWG PLOT DATE : 3/30/2015 9:55 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

2

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

N

OLD CTH V

MATCH LINE STA 216+00

CTH V

NB USH 151

SB USH 151

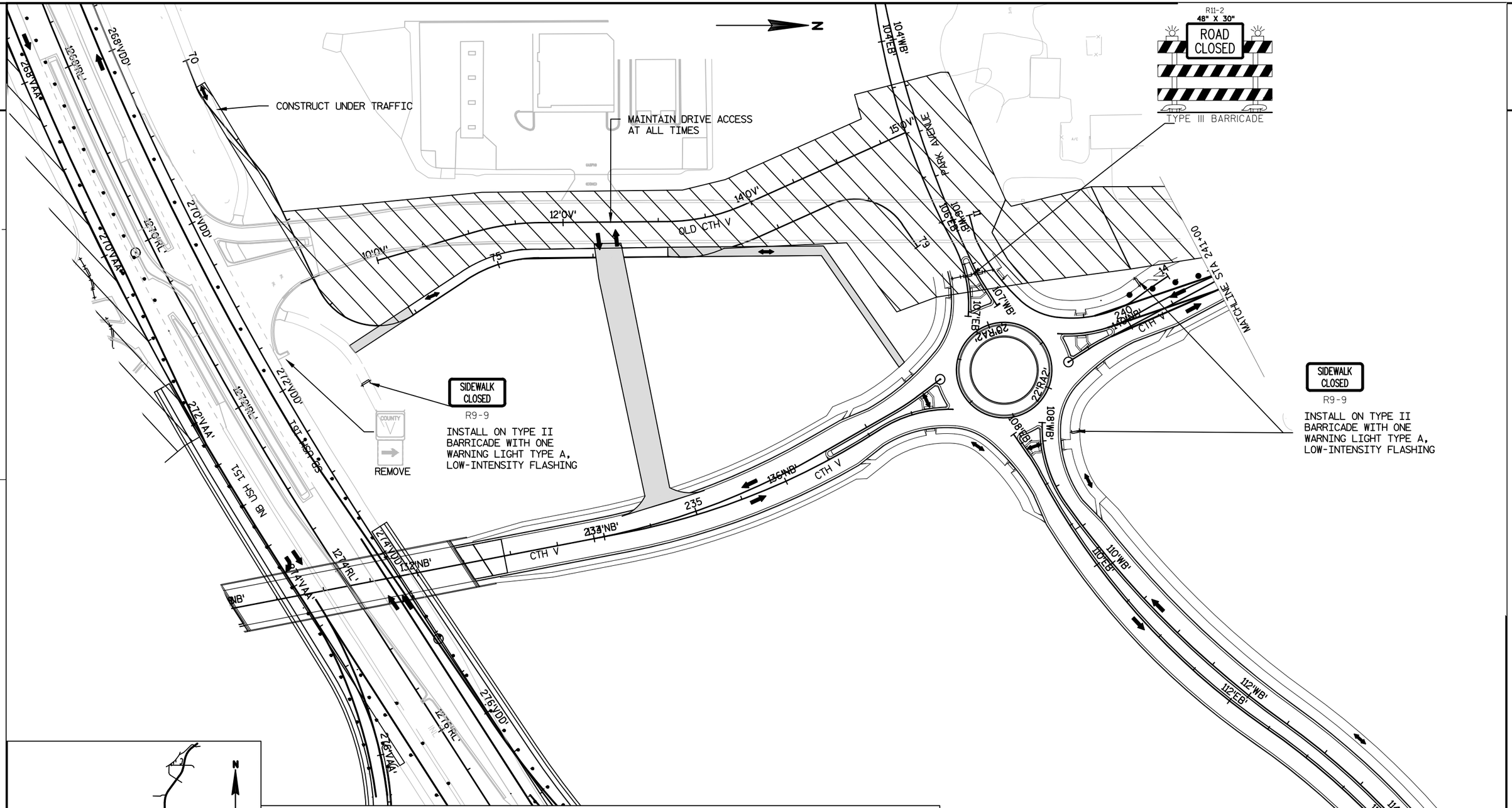
LOCATION

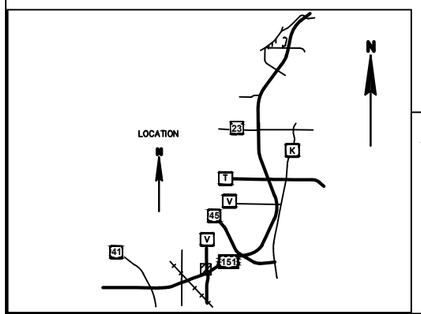
LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V5	SHEET 200	E

2





LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V5	SHEET 201	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025512-TC-V5-LOC.DWG PLOT DATE : 3/30/2015 9:56 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 41

2

N

T-BIRD DRIVE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

CONSTRUCT SB LANE
UTILIZING FLAGGING OPERATIONS

SAMMY JO CIRCLE

MUSTANG LANE

MATCHLINE STA 241+00

142'NB' 243

144'NB'

146'NB'

148'NB'

150'NB'

151'NB'

CTH V

LOCATION

N

23
K
T
V
45
V
22
151
41

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V5	SHEET 202	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025512-TC-V5-LOC.DWG PLOT DATE : 3/30/2015 9:56 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

2

N

1320'RL'
1318'RL'
1316'RL'
1314'RL'
SB USH 151
NB USH 151
388'NB'
386'NB'
384'NB'
382'NB'
380'NB'
378'NB'
376'NB'
374'NB'
372'NB'
373+45.01

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

ROAD CLOSED AHEAD
W20-3

ROAD CLOSED AHEAD
W20-3

USH 45
NORTH
151

VALLEY COURT
VALLEY CREEK ROAD

LOCATION

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V5	SHEET 203	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025512-TC-V5-LOC.DWG PLOT DATE : 3/30/2015 9:57 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

N

EP: 399+64.27

399'NB'

ROAD CLOSED AHEAD
W20-3

GLYNN AVE

TAKODAH DRIVE

DOUGLAS COURT

PT: 397+00.56

396'NB'

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

394'NB'

143'EB'

USH 45

142'EB'

SIDEWALK CLOSED
R9-9

INSTALL ON TYPE II BARRICADE WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING

PC: 392+38.22

393'NB'

390'NB'

PRAIRIE TRAIL

140'EB'

PRAIRIE TRAIL

138'EB' FRONTAGE ROAD

TEMPORARY CURB RAMPS

PI: 389+86.61

312'VCC'

310'VCC'

SB USH 151

1314'RL'

1312'RL'

388'NB'

308'VCC'

1310'RL'

306'VCC'

1308'RL'

NB USH 151

LOCATION

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V5	SHEET 204	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025512-TC-V5-LOC.DWG PLOT DATE : 3/30/2015 9:57 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

2

STAGE V6

PURPOSE:
COMPLETE FRONTAGE ROAD CONNECTION WITH USH 45
COMPLETE REHABILITATION OF USH 45 STRUCTURE APPROACHES
COMPLETE SB USH 151 ON AND OFF RAMP PARALLEL LANES AND SIGN BRIDGE
STAGE V6A-COMPLETE CONSTRUCTION OF PRAIRIE TRAIL

TRAFFIC HANDLING:
NORTHBOUND USH 151 TRAFFIC OPEN TO ONE LANE OF TRAFFIC.
SOUTHBOUND USH 151 TRAFFIC OPEN TO ONE LANE OF TRAFFIC.
CTH V TRAFFIC OPEN TO ONE LANE IN EACH DIRECTION ON NEW CTH V
USH 45 CLOSED TO THRU TRAFFIC AND DETOURED
CTH V ACCESS TO USH 151 USING INTERCHANGE RAMPS WITH TEMPORARY GORES FOR SB RAMPS
USH 45 RAMPS TO USH 151 PERMANENTLY CLOSED TO TRAFFIC (REMOVED IN THIS STAGE).

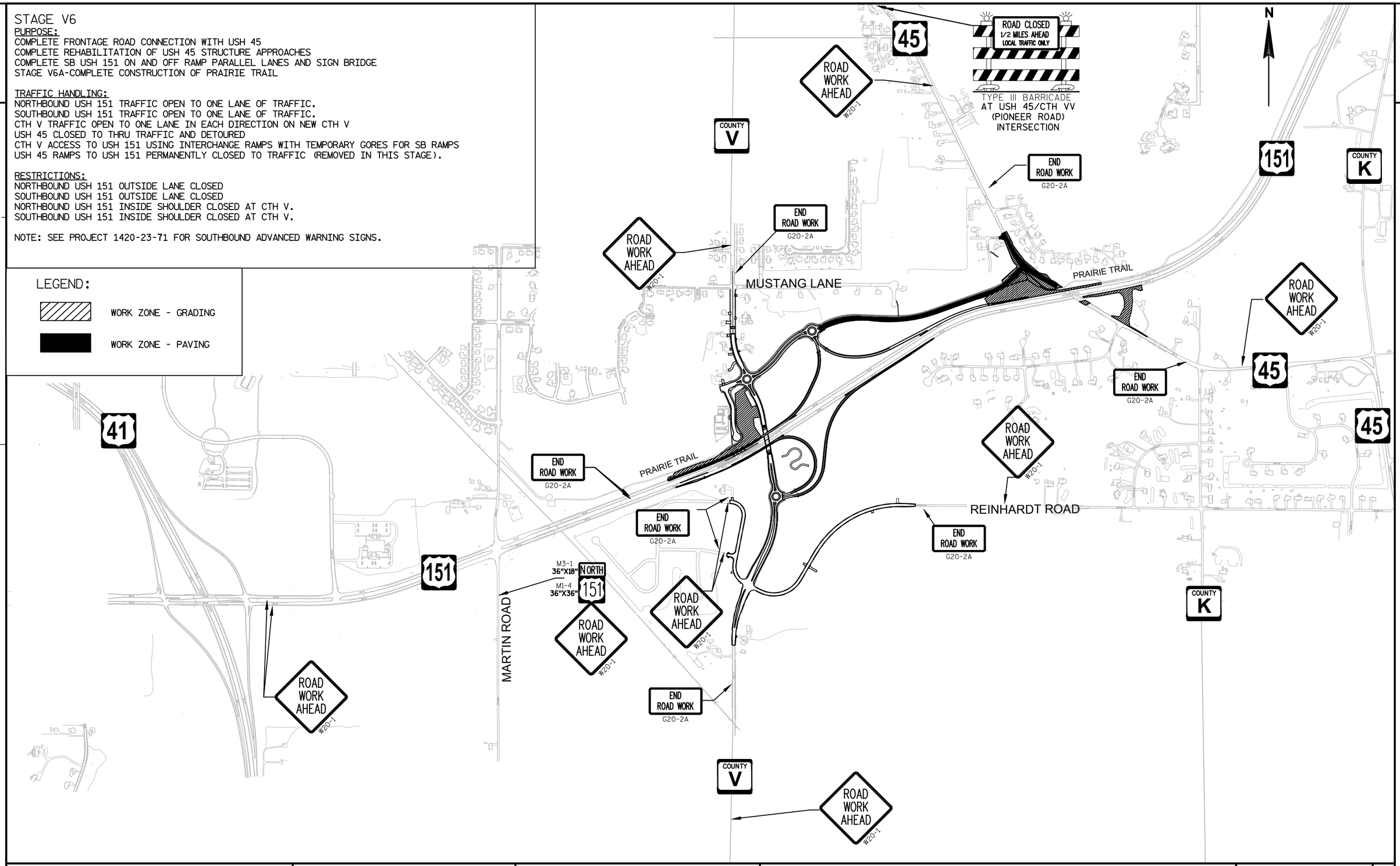
RESTRICTIONS:
NORTHBOUND USH 151 OUTSIDE LANE CLOSED
SOUTHBOUND USH 151 OUTSIDE LANE CLOSED
NORTHBOUND USH 151 INSIDE SHOULDER CLOSED AT CTH V.
SOUTHBOUND USH 151 INSIDE SHOULDER CLOSED AT CTH V.

NOTE: SEE PROJECT 1420-23-71 FOR SOUTHBOUND ADVANCED WARNING SIGNS.

LEGEND:

WORK ZONE - GRADING

WORK ZONE - PAVING



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL STAGE V6	SHEET 205	E

2

2

NB USH 41

SB USH 41

N

1200'RL'

1205'RL'

SB USH 151

1210'RL'

1215'RL'

NB USH 151

MATCHLINE STA 1218+00

MATCHLINE STA 1218+00

CAMELOT DRIVE

1220'RL'

1225'RL'

1230'RL'

SB USH 151

1235'RL'

1240'RL'

1245'RL'

NB USH 151

MARTIN ROAD

MATCHLINE STA 1248+00

RIGHT LANE CLOSED 1/2 MILE

W20-5

RIGHT LANE CLOSED 1500 FT

W20-5

W04-2R

LOCATION

N

23

K

T

V

45

V

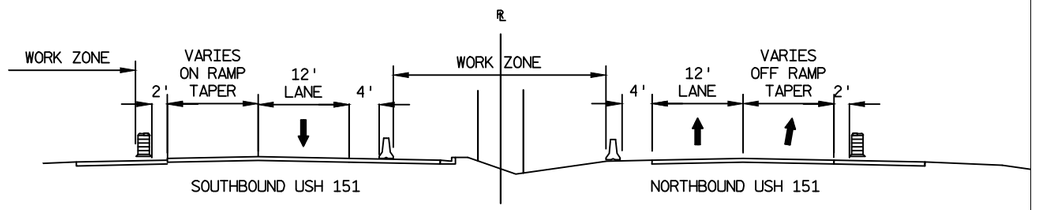
41

151

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V6A - USH 151	SHEET 206	E



TRAFFIC LAYOUT - STAGE 6
USH 151 - AT NEW CTH V

95'EB'
PARK AVENUE
100'EB'
102'WB'
105'WB'
105'EB'
107'WB'
108'WB'
108'EB'
156'V'
REMOVE
REMOVE TEMP. DRIVE
CTH V
10'0'V'
LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE
LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE
W20.1
R1-2
48" X 42"
R3-1
36"X36"
MATCHLINE STA 1248+00
1250'RL'
1255'RL'
SB USH 151
1260'RL'
261'VDD'
261'VAA'
NB USH 151
PRAIRIE TRAIL
265'VDD'
1265'RL'
265'VAA'
270'VDD'
1270'RL'
270'VAA'
275'VDD'
1275'RL'
275'VAA'
MATCHLINE STA 1278+00
JCT COUNTY V
LEFT SHOULDER CLOSED AHEAD
W21-5B
LEFT SHOULDER CLOSED
W21-5A
LIGHTHOUSE VILLAGE ROAD
COUNTY V
60 X 72
870'V'
900'V'
280'VAA'
285'VAA'
275'VBB'
EXIT
E5-1
72"X60"
TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 8-INCH (CHANNELIZING)
CONCRETE BARRIER TEMPORARY PRECAST AND CRASH CUSHIONS INSTALLED IN STAGE 3
W4-1R
W3-2
50

LOCATION
N
23
K
T
V
45
V
41
151

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V6A - USH 151	SHEET	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025611-TC-V6A-151.DWG PLOT DATE : 4/10/2015 7:09 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

ROAD CLOSED
R11-2
48" X 30"
TYPE III BARRICADE

PRAIRIE TRAIL
115'WB'
115'EB'
120'WB'
120'EB'
123'WB'
125'EB'
130'EB'
FRONTAGE ROAD
CLOSED
135'EB'
140'EB'

W3-2

285'VBB'
SB ON RAMP

W4-1R

285'VCC'
SB OFF RAMP
290'VCC'

EXIT
E5-1
72"X60"

295'VCC'
300'VCC'
1300'RL'
305'VCC'
1305'RL'
304'VBB'

COUNTY
V
60 X 72

R3-1
36"X36"

1295'RL'
300'VBB'
1290'RL'
295'VBB'
SB USH 151
1285'RL'
NB USH 151
285'VBB'
1280'RL'

MATCHLINE STA 1278+00

280'VBB'
NB ON RAMP

YIELD
R1-2
48" X 42"

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

LEFT SHOULDER CLOSED
W21-5A

LEFT SHOULDER CLOSED AHEAD
W21-5B

MATCHLINE STA 1308+00

LOCATION
N
23
K
T
V
45
V
41
151

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V6A - USH 151	SHEET 208	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025611-TC-V6A-151.DWG PLOT DATE : 4/10/2015 7:09 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

SIDEWALK CLOSED
R9-9
INSTALL ON TYPE II BARRICADE WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING

CONSTRUCT UNDER TRAFFIC

MATCHLINE STA 1308+00

310'VCC'

1310'RL'

1315'RL'

1320'RL'

1325'RL'

220

1329'RL'

225

MATCHLINE STA 230+00

RAMP CLOSED AHEAD
W20-3(MOD)

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

PRAIRIE TRAIL

SB USH 151

NB USH 151

USH 45
385'NB

RAMP CLOSED AHEAD
W20-3(MOD)

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

N

W04-2R

RIGHT LANE CLOSED 1500 FT
W20-5

RIGHT LANE CLOSED 1/2 MILE
W20-5

MATCHLINE STA 230+00

230

235

240

245

250

255

MATCHLINE STA 260+00

LOCATION

N

23

K

T

V

45

V

41

151

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V6A - USH 151	SHEET 209	E

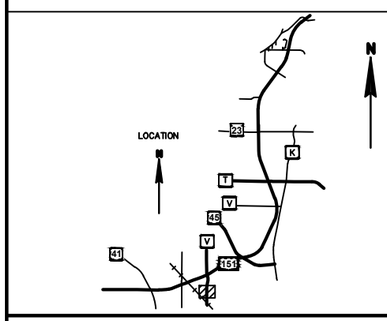
FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025611-TC-V6A-151.DWG PLOT DATE : 4/10/2015 7:10 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

2

N

102'NB'
104'NB'
106'NB'
206'SB'
208'SB'
108'NB'
210'SB'
110'NB'
212'SB'
112'NB'
CTH V
STOP
OLD CTH V
98'RE
214'SB'
114'NB'
CTH V
98'RE
100'RE
216
REINHARDT ROAD
102'RE
104'RE
STOP
MATCHLINE STA 216+00



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V6A	SHEET 210	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025612-TC-V6A-LOC.DWG PLOT DATE : 3/30/2015 9:36 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

N

OLD CTH V

87'RE'
88'RE'
90'RE'
92'RE'
94'RE'
96'RE'
4'WB'
4'WB'

MATCH LINE STA 216+00

SB'
6'NB'
CTH V
218'SB'
118'NB'
220'SB'
120'NB'
222'SB'
122'NB'
224'SB'
124'NB'
10'RA1'
226'SB'
126'NB'
CTH V
228'SB'
128'NB'
228'SB'
12'RA1'
28'VBB'
28'VAA'
270'VBB'
12'RA1'

258'VAA'
12'RA1'
84'VBB'
270'VDD'
12'RA1'
270'VAA'
SB USH 151
NB USH 151
272'VDD'
12'RA1'
272'VAA'
12'RA1'
274'VDD'
12'RA1'
274'VAA'
12'RA1'
274'VBB'
218'VAA'

LOCATION

LEGEND

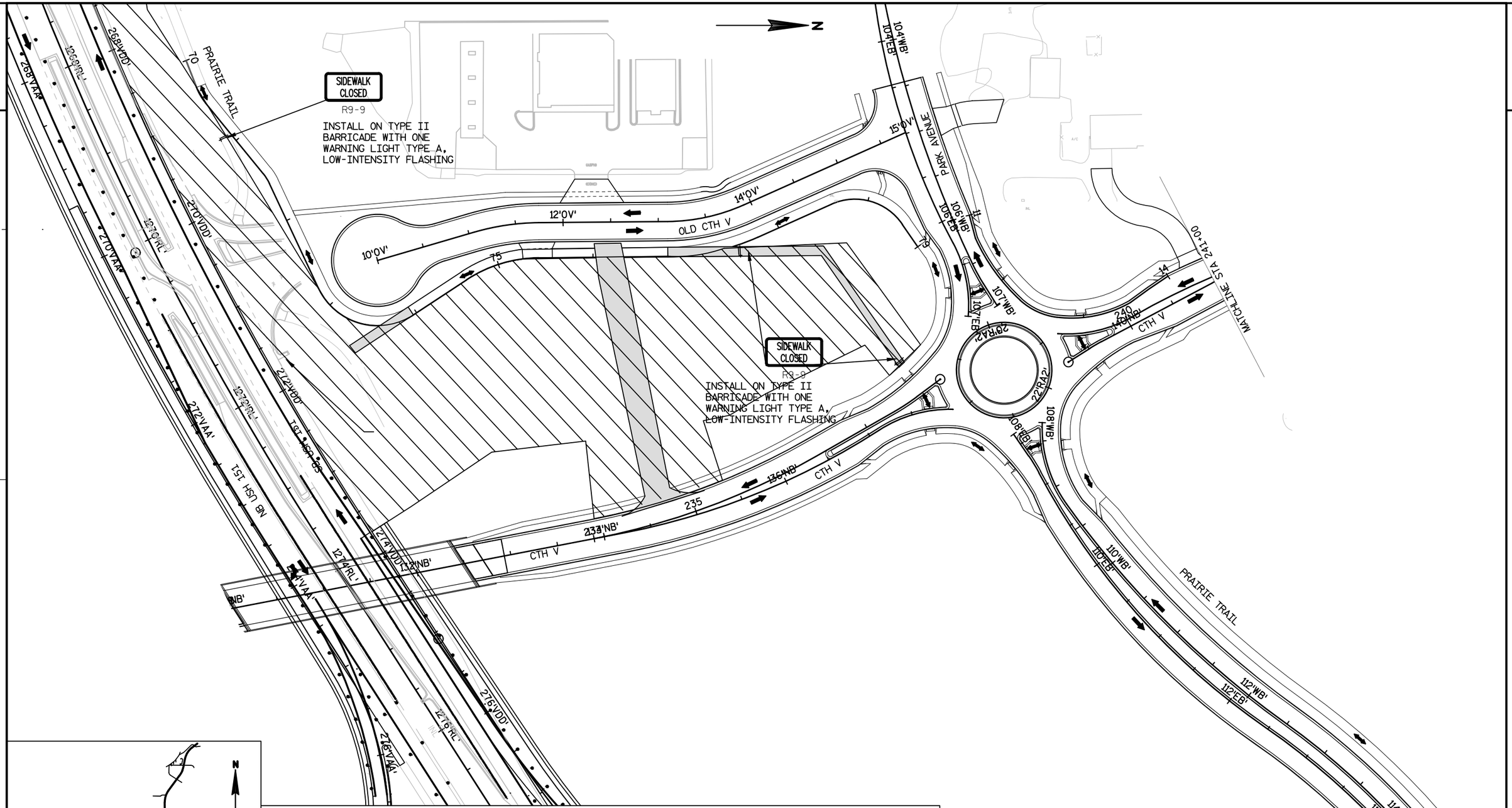
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V6A	SHEET 211	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025612-TC-V6A-LOC.DWG PLOT DATE : 3/30/2015 9:37 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

2



PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V6A	SHEET 212	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025612-TC-V6A-LOC.DWG PLOT DATE : 3/30/2015 9:37 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

N

T-BIRD DRIVE

SAMMY JO CIRCLE

MUSTANG LANE

MATCHLINE STA 241+00

142'NB' 242

144'NB'

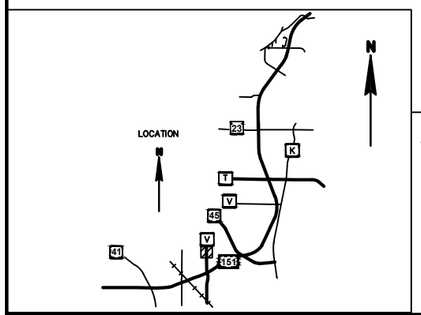
146'NB'

148'NB'

150'NB'

151'NB'

CTH V



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V6A	SHEET 213	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025612-TC-V6A-LOC.DWG PLOT DATE : 3/30/2015 9:37 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

2

2

N

SB USH 151

NB USH 151

1320'RL'

1318'RL'

1316'RL'

1314'RL'

388'NB'

386'NB'

384'NB'

382'NB'

380'NB'

378'NB'

376'NB'

374'NB'

372'NB'

373+45.01

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

NORTH 151

USH 45

VALLEY COURT

VALLEY CREEK ROAD

LOCATION

N

23

K

T

V

45

V

41

151

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V6A	SHEET	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025612-TC-V6A-LOC.DWG PLOT DATE : 3/30/2015 9:38 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

N

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

EP: 399+64.27

GLYNN AVE

DOUGLAS COURT

PT: 397+00.56

TAKODAH DRIVE

SIDEWALK CLOSED
R9-9

INSTALL ON TYPE II BARRICADE WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING

PRAIRIE TRAIL

138'EB' FRONTAGE ROAD

140'EB'

142'EB'

PC: 392+38.22

PI: 389+86.61

SB USH 151

NB USH 151

310'VCC'

308'VCC'

306'VCC'

312'VCC'

1314'RL'

1312'RL'

1310'RL'

1308'RL'

TEMPORARY CURB RAMPS

LOCATION

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V6A	SHEET 215 E

2

2

NB USH 41

SB USH 41

N

MATCHLINE STA 1218+00

1200'RL'

1205'RL'

SB USH 151

1210'RL'

1215'RL'

NB USH 151

MATCHLINE STA 1218+00

CAMELOT DRIVE

1220'RL'

1225'RL'

1230'RL'

SB USH 151

1235'RL'

1240'RL'

1245'RL'

NB USH 151

MARTIN ROAD

N

MATCHLINE STA 1248+00

RIGHT LANE CLOSED 1/2 MILE

W20-5

RIGHT LANE CLOSED 1500 FT

W20-5

W04-2R

LOCATION

N

23

K

T

V

45

V

41

151

LEGEND

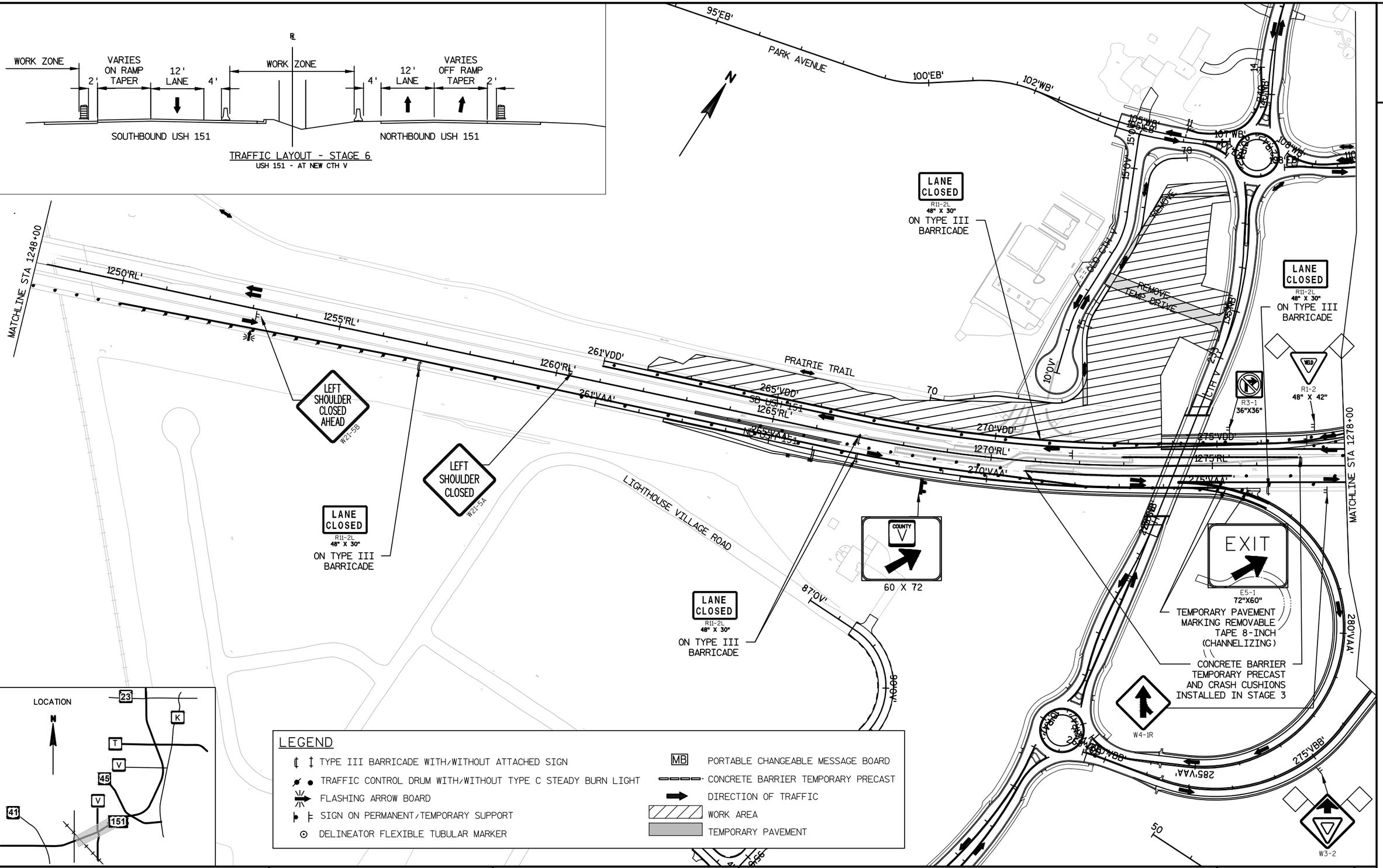
- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V6B - USH 151	SHEET 216	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025621-TC-V6B-151.DWG PLOT DATE : 4/10/2015 7:13 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

TRAFFIC LAYOUT - STAGE 6
USH 151 - AT NEW CTH V


MATCHLINE STA 1248+00
1250'RL'
1255'RL'
1260'RL'
261'VDD'
261'VAA'
1265'RL'
265'VDD'
SB USH 151
NB USH 151
265'VAA'
PRAIRIE TRAIL
70
270'VDD'
1270'RL'
270'VAA'
1275'RL'
275'VAA'
95'EB'
100'EB'
102'WB'
105'WB'
105'EB'
107'WB'
108'WB'
108'EB'
156'WB'
156'EB'
15'
14'
11'
10'
10'
10

2

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

R11-2
48" X 30"
RAMP CLOSED
TYPE III BARRICADE

W3-2

W4-1R

EXIT
E5-1
72"X60"

COUNTY V
60 X 72

R3-1
36"X36"

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

LEFT SHOULDER CLOSED
W21-5A

LEFT SHOULDER CLOSED AHEAD
W21-5B

W3-2
R1-2
48" X 42"

115'WB'
115'EB'
120'WB'
120'EB'
123'WB'
125'EB'
130'EB'
135'EB'
140'EB'
PRAIRIE TRAIL
FRONTAGE ROAD **CLOSED**
285'VBB'
SB ON RAMP
285'VCC'
SB OFF RAMP
290'VCC'
295'VCC'
300'VCC'
1280'RL'
SB USH 151
1285'RL'
1290'RL'
1295'RL'
1300'RL'
NB USH 151
285'VBB'
290'VBB'
295'VBB'
300'VBB'
305'VCC'
1305'RL'
304'VBB'
280'VBB'
NB ON RAMP
MATCHLINE STA 1278+00
MATCHLINE STA 1308+00

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

LOCATION
N
23
K
T
V
45
V
41
151

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V6B - USH 151	SHEET 218	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025621-TC-V6B-151.DWG PLOT DATE : 4/10/2015 7:14 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

2

CONSTRUCT UNDER TRAFFIC

SIDEWALK CLOSED
R9-9
INSTALL ON TYPE II BARRICADE WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING

RAMP CLOSED AHEAD
W20-3(MOD)

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

MATCHLINE STA 1308+00

310'VCC'

1310'RL'

1315'RL'

1320'RL'

1325'RL'

1329'RL'

220

225

PRAIRIE TRAIL

SB USH 151

NB USH 151

USH 45

385'NB

N ORTH

151

MATCHLINE STA 230+00

N

RAMP CLOSED AHEAD
W20-3(MOD)

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

W04-2R

RIGHT LANE CLOSED 1500 FT
W20-5

RIGHT LANE CLOSED 1/2 MILE
W20-5

PRAIRIE TRAIL

MATCHLINE STA 230+00

230

235

240

245

250

255

MATCHLINE STA 260+00

N

LOCATION

N

23

K

T

V

45

V

41

151

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

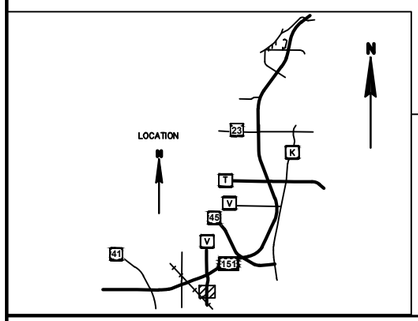
PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V6B - USH 151	SHEET 219	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025621-TC-V6B-151.DWG PLOT DATE : 4/10/2015 7:14 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

N

102'NB'
104'NB'
106'NB'
206'SB'
208'SB'
108'NB'
210'SB'
110'NB'
212'SB'
112'NB'
CTH V
214'SB'
114'NB'
CTH V
98'RE
OLD CTH V
STOP
REDOR RE
216
REINHARDT ROAD
102'RE
104'RE
STOP
MATCHLINE STA 216+00



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V6B	SHEET 220	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025622-TC-V6B-LOC.DWG PLOT DATE : 3/30/2015 9:33 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

N

87'RE'
88'RE'
96'RE'
94'RE'
92'RE'
90'RE'
OLD CTH V
4'WH'
4'WH'

MATCH LINE STA 216+00
SB'
6'NB'
CTH V
218'SB'
118'NB'
220'SB'
120'NB'
222'SB'
122'NB'
224'SB'
24'NB'
10'RA1'
28'VBB'
28'VAA'
12'RA1'
270'VBB'
226'SB'
126'NB'
CTH V
228'SB'
128'NB'
228'SB'
128'NB'
258'VAA'
84'VDD'
123'RL'
270'VDD'
127'RL'
270'VAA'
SB USH 151
NB USH 151
272'VDD'
123'RL'
272'VAA'
274'VAA'
124'RL'
218'VAA'

LOCATION
N
23
K
T
V
45
V
41
151

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V6B	SHEET 221	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025622-TC-V6B-LOC.DWG PLOT DATE : 3/30/2015 9:33 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

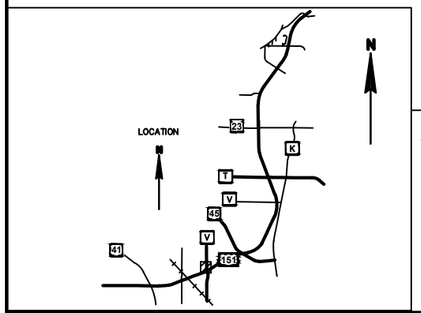
2

N

SIDEWALK CLOSED
R9-9
INSTALL ON TYPE II BARRICADE WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING

SIDEWALK CLOSED
R9-9
INSTALL ON TYPE II BARRICADE WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING

OLD CTH V
PARK AVENUE
CTH V
MATCHLINE STA 241+00
USH 151 NB



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V6B	SHEET 222	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025622-TC-V6B-LOC.DWG PLOT DATE : 3/30/2015 9:33 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : ********** WISDOT/CADDS SHEET 41

2

N

T-BIRD DRIVE

SAMMY JO CIRCLE

MUSTANG LANE

MATCHLINE STA 241+00

142'NB' 242

144'NB'

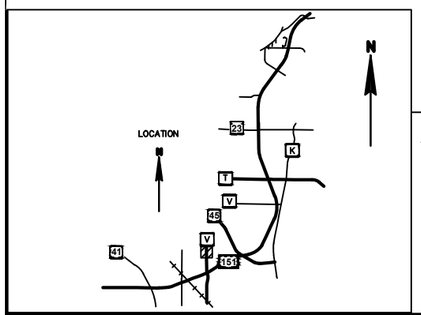
146'NB'

148'NB'

150'NB'

151'NB'

CTH V



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V6B	SHEET 223	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025622-TC-V6B-LOC.DWG PLOT DATE : 3/30/2015 9:34 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

2

2

N

SB USH 151

NB USH 151

1320'RL'

1318'RL'

1316'RL'

1314'RL'

388'NB'

386'NB'

384'NB'

382'NB'

380'NB'

378'NB'

376'NB'

374'NB'

372'NB'

373+45.01

USH 45

NORTH 151

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

VALLEY COURT

VALLEY CREEK ROAD

LOCATION

N

23

K

T

V

45

V

41

151

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V6B	SHEET	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025622-TC-V6B-LOC.DWG PLOT DATE : 3/30/2015 9:34 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

2

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

N

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

EP: 399+64.27

399'NB'

GLYNN AVE

DOUGLAS COURT

TAKODAH DRIVE

PT: 397+00.56

396'NB'

394'NB'

147'EB'

CTH 45

SIDEWALK CLOSED
R9-9
INSTALL ON TYPE II BARRICADE WITH ONE WARNING LIGHT TYPE A, LOW-INTENSITY FLASHING

142'EB'

140'EB'

PRAIRIE TRAIL

138'EB' FRONTAGE ROAD

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

PCS: 392+38.22

393'NB'

REMOVE
45

PRAIRIE TRAIL

312'VCC'

310'VCC'

PI: 390+86.61

SB USH 151

1314'RL'

1312'RL'

388'NB'

308'VCC'

1310'RL'

306'VCC'

1308'RL'

NB USH 151

45
REMOVE

LOCATION
N
23
K
T
V
45
V
41
151

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V6B	SHEET 225	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\22\025622-TC-V6B-LOC.DWG PLOT DATE : 3/30/2015 9:34 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

2

STAGE V7

PURPOSE:
COMPLETE REMOVAL OF TURN LANES, RESTORATION OF MEDIAN, AND INSIDE SHOULDERS OF USH 151

TRAFFIC HANDLING:
NORTHBOUND USH 151 TRAFFIC OPEN TO ONE LANE OF TRAFFIC.
SOUTHBOUND USH 151 TRAFFIC OPEN TO ONE LANE OF TRAFFIC.
CTH V TRAFFIC OPEN TO ONE LANE IN EACH DIRECTION ON NEW CTH V.
USH 45 OPEN TO ONE LANE IN EACH DIRECTION.
CTH V ACCESS TO USH 151 USING INTERCHANGE RAMPS .
USH 45 ACCESS TO USH 151 VIA FRONTAGE ROAD TO INTERCHANGE RAMPS .

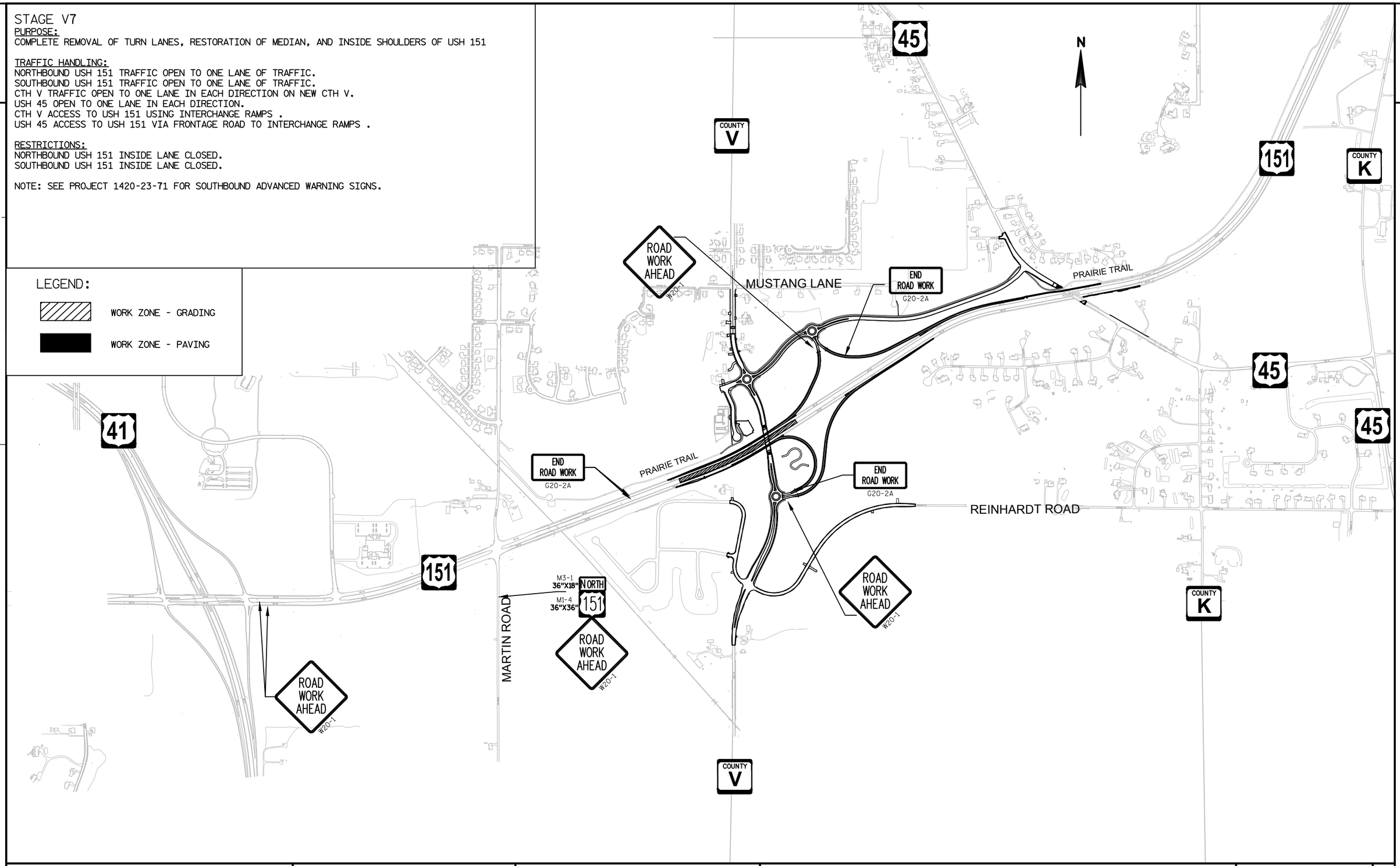
RESTRICTIONS:
NORTHBOUND USH 151 INSIDE LANE CLOSED.
SOUTHBOUND USH 151 INSIDE LANE CLOSED.

NOTE: SEE PROJECT 1420-23-71 FOR SOUTHBOUND ADVANCED WARNING SIGNS.

LEGEND:

WORK ZONE - GRADING

WORK ZONE - PAVING



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL STAGE V7	SHEET 226	E

2

2

N

SB USH 41

NB USH 41

SB USH 151

NB USH 151

1200'RL'

1205'RL'

1210'RL'

1215'RL'

MATCHLINE STA 1218+00

MATCHLINE STA 1218+00

CAMELOT DRIVE

1220'RL'

1225'RL'

1230'RL'

1235'RL'

1240'RL'

1245'RL'

MARTIN ROAD

MATCHLINE STA 1248+00

LEFT LANE CLOSED 1/2 MILE

W20-5

LEFT LANE CLOSED 1500 FT

W20-5

W04-2L

LOCATION

N

23

K

T

V

45

V

41

151

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

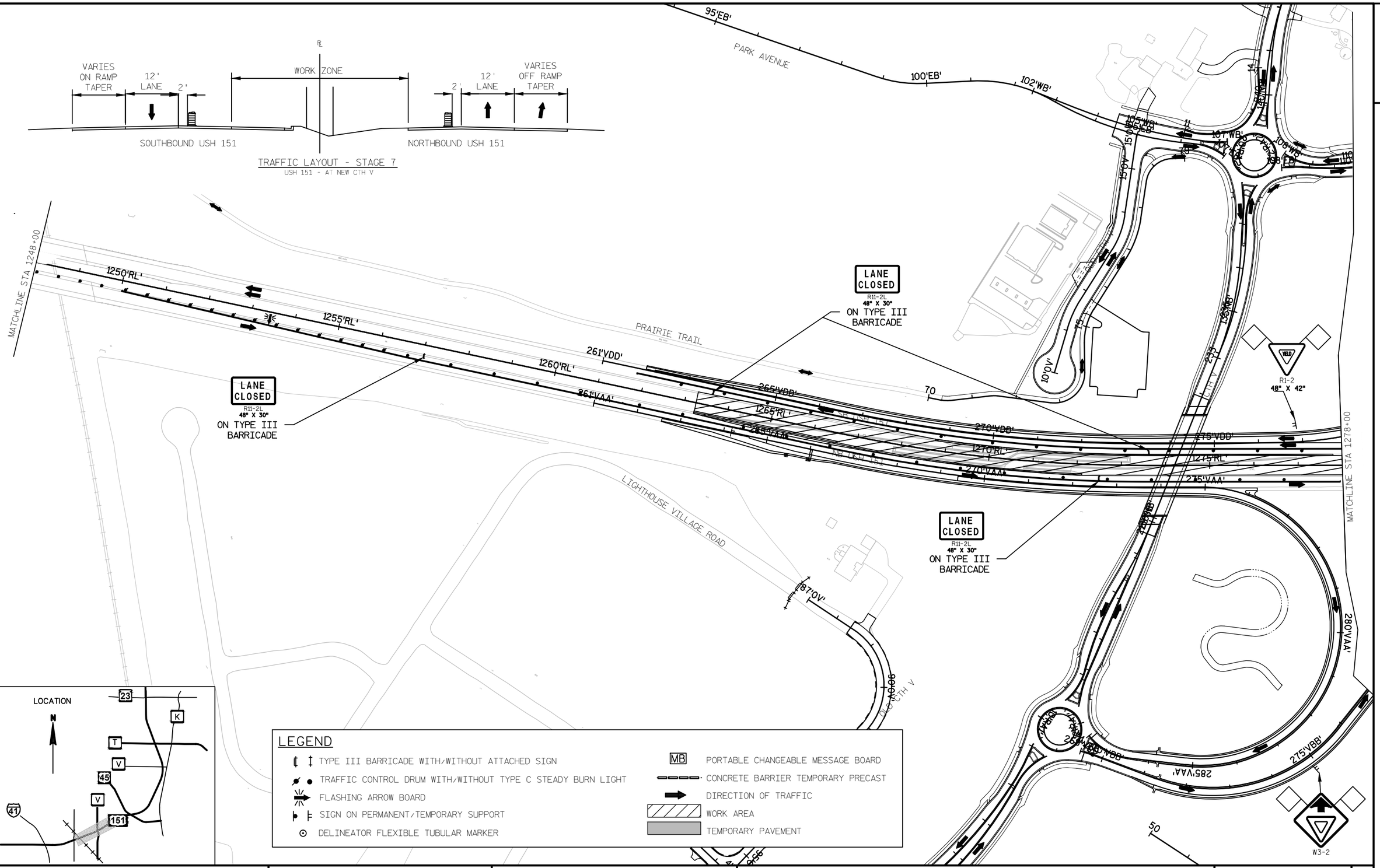
PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V7 - USH 151	SHEET 227	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\025711-TC-V7-151.DWG PLOT DATE : 1/15/2015 11:37 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41

TRAFFIC LAYOUT - STAGE 7

USH 151 - AT NEW CTH V



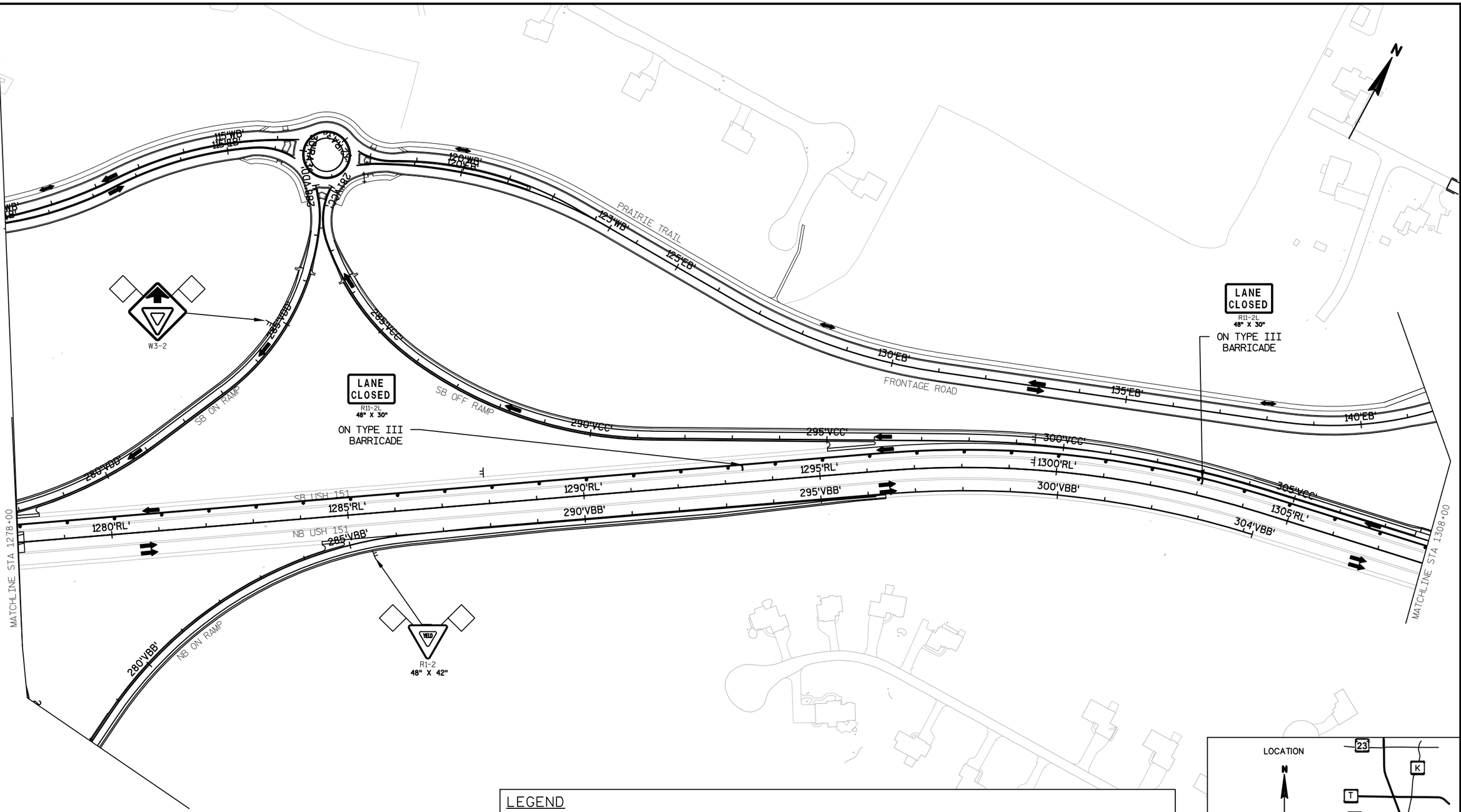
LOCATION

LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

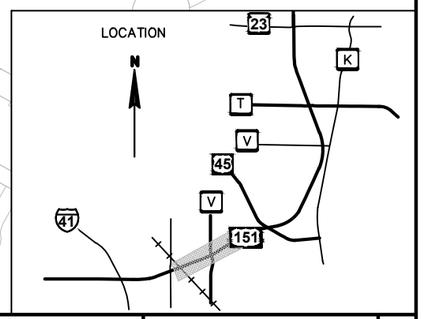
PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V7 - USH 151	SHEET 228	E

2



LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT



PROJECT NO:1420-22-71	HWY:USH 151	COUNTY:FOND DU LAC	TRAFFIC CONTROL - STAGE V7 - USH 151	SHEET 229	E

2

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

MATCHLINE STA 1308+00

30'VCC

1310'RL'

1315'RL'

PRAIRIE TRAIL

1320'RL'

SB USH 151

NB USH 151

USH 45

385'NB

1325'RL'

220

LANE CLOSED
R11-2L
48" X 30"
ON TYPE III BARRICADE

1329'RL'

225

MATCHLINE STA 230+00

N

W04-2L

LEFT LANE CLOSED 1500 FT
W20-5

LEFT LANE CLOSED 1/2 MILE
W20-5

PRAIRIE TRAIL

MATCHLINE STA 230+00

230

235

240

245

250

255

MATCHLINE STA 260+00

N

LOCATION

N

23

K

T

V

45

V

41

151

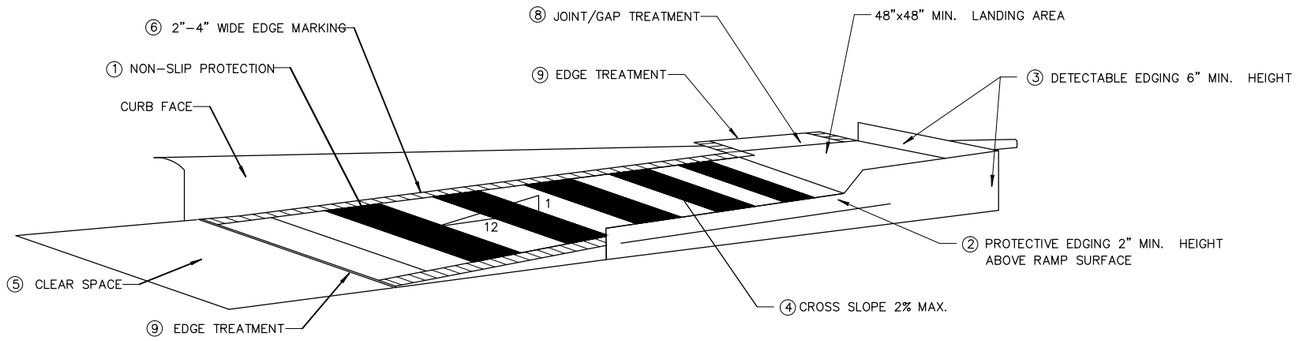
LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT/TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE TUBULAR MARKER
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA
- TEMPORARY PAVEMENT

PROJECT NO:1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TRAFFIC CONTROL - STAGE V7 - USH 151	SHEET 230	E

FILE NAME : S:\DESIGN\DESIGN PROJECTS\NE REGION PROJECTS\1420-22-00 USH 151 - CTH V (OMNNI)\C3D\SHEETSPLAN\025711-TC-V7-151.DWG PLOT DATE : 1/15/2015 11:38 AM PLOT BY : QUEST CIVIL ENG. PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 41



TEMPORARY CURB RAMP
PARALLEL TO CURB

GENERAL NOTES

GAP SIDEWALK WORK TO MAINTAIN PEDESTRIAN ACCESS WHERE APPLICABLE.

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.

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.

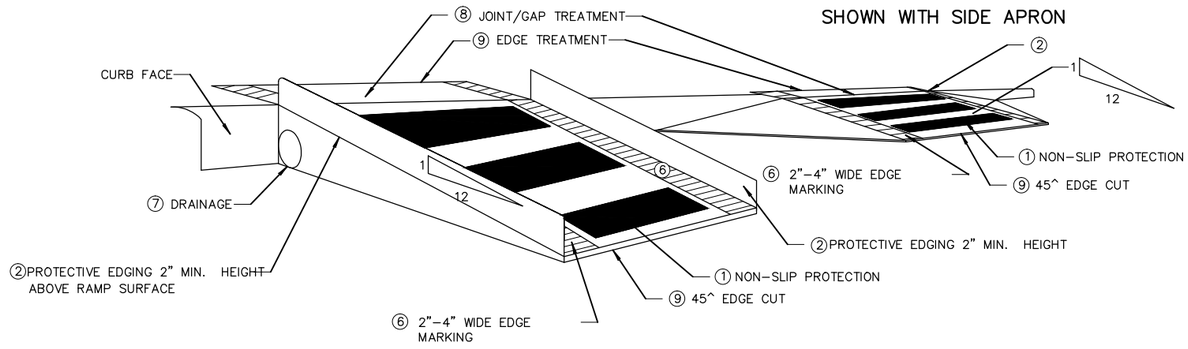
⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

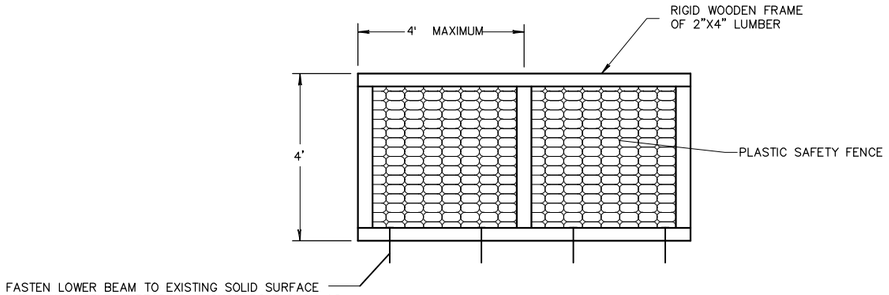
⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH FENCE TEMPORARY, 10' WIDE MIN. WITHOUT FENCE TEMPORARY.

⑪ MOVE EXISTING BUS STOP SIGN TO STEEL POST 2' X 2'.

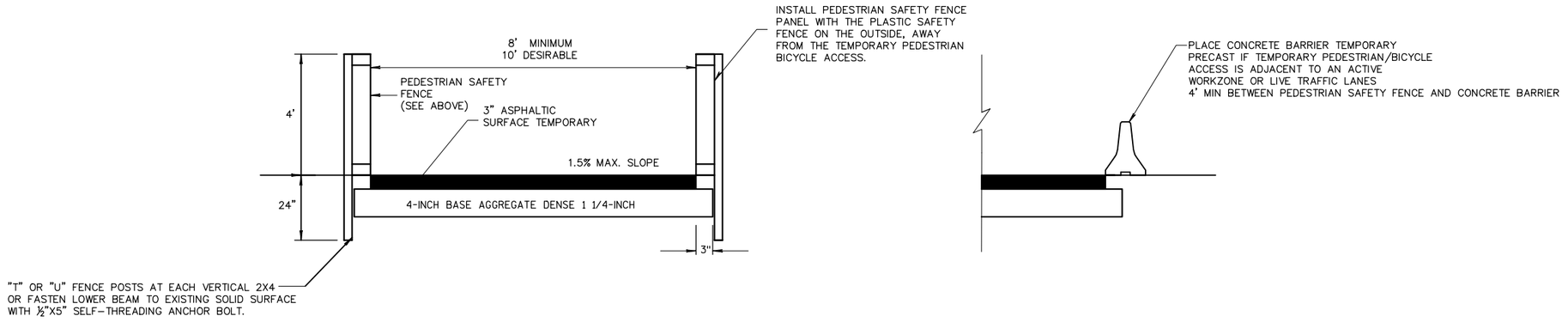


TEMPORARY CURB RAMP
PERPENDICULAR TO CURB



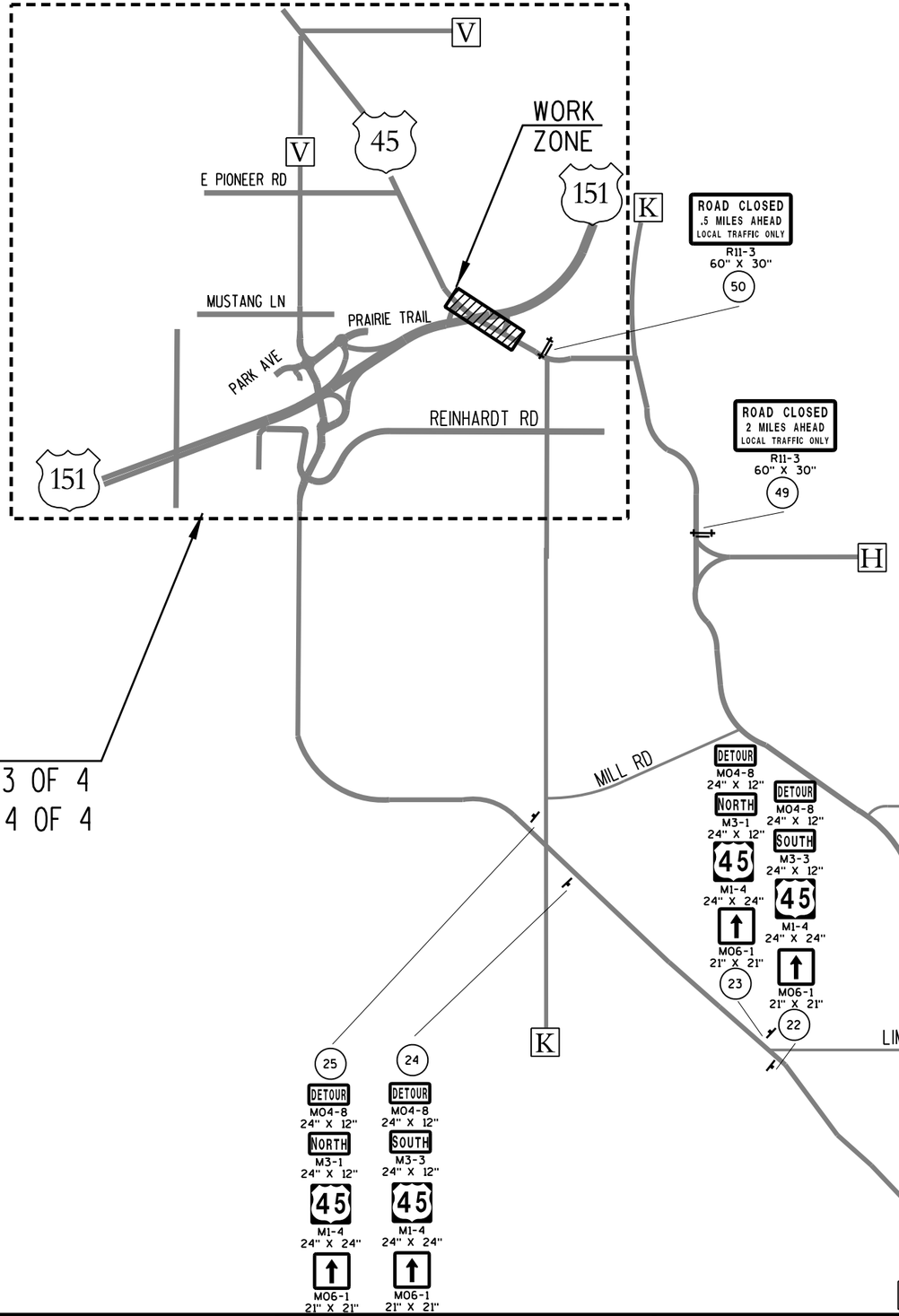
PEDESTRIAN SAFETY FENCE*

***PEDESTRIAN FENCE PREVIOUSLY PLACED BY OTHERS.**
DETAIL SHOWN FOR ITEMS NECESSARY TO MAINTAIN/REMOVE PEDESTRIAN FENCE UNDER THE ITEM "MAINTAINING PEDESTRIAN SAFETY FENCE"



PRAIRIE TRAIL ADJACENT TO ABUTMENT CONSTRUCTION

2



LEGEND

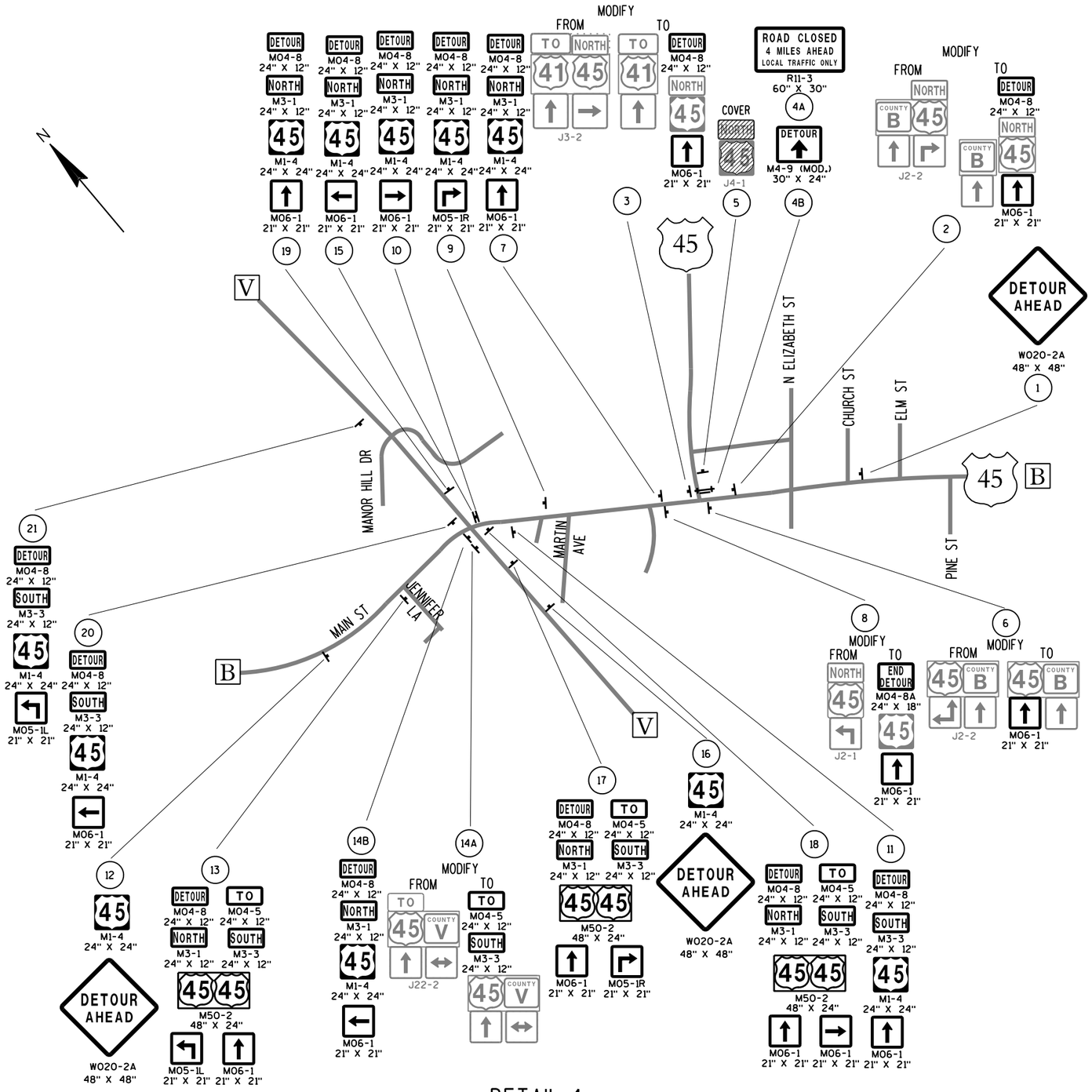
- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- ▲ PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN

SHEET 1 OF 4

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	DETOUR SIGNING DETAIL	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



LEGEND

- (X) SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITY SHEET
- ▲ PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN

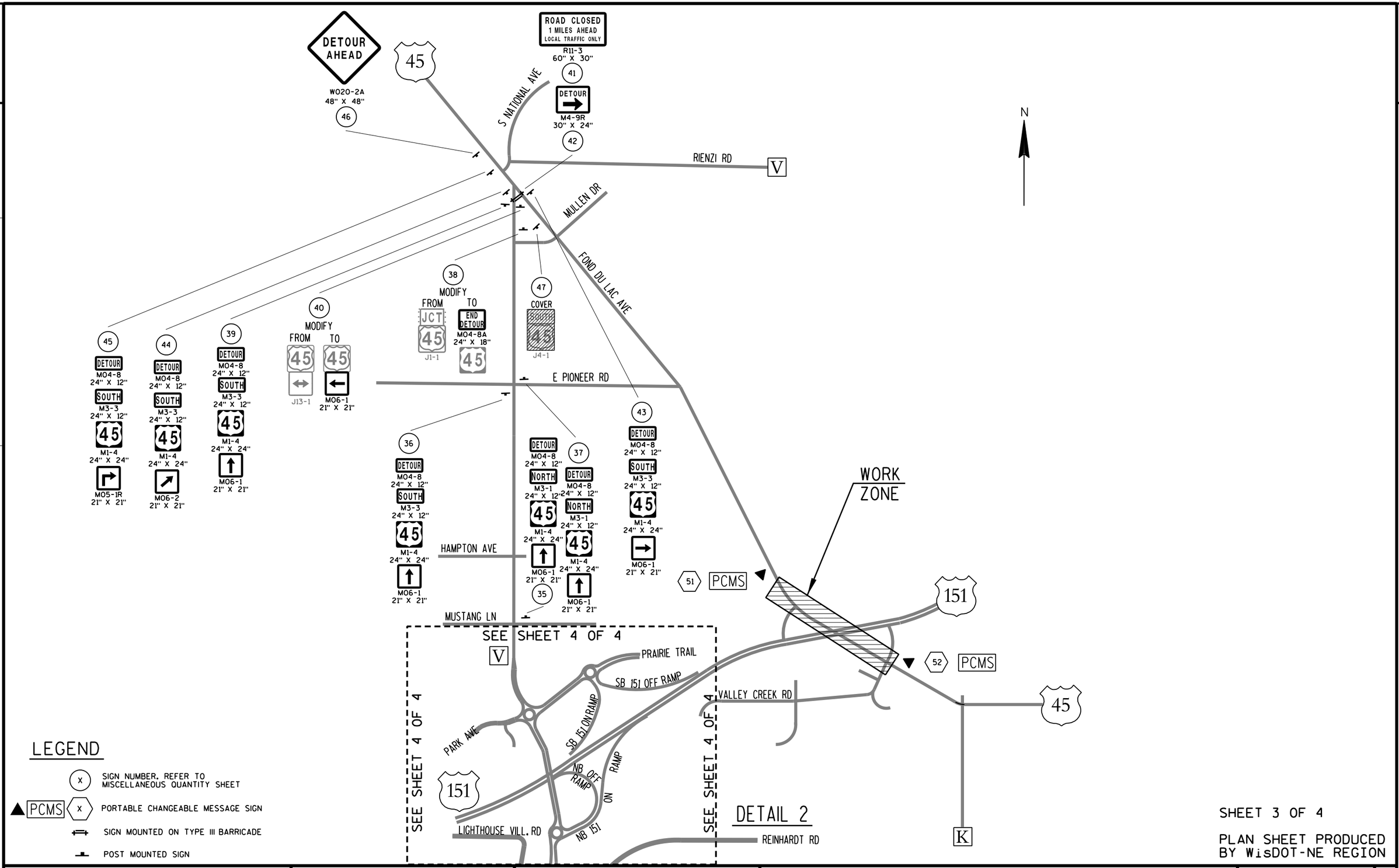
DETAIL 1

SHEET 2 OF 4

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	DETOUR SIGNING DETAIL	SHEET 234	E

2



LEGEND

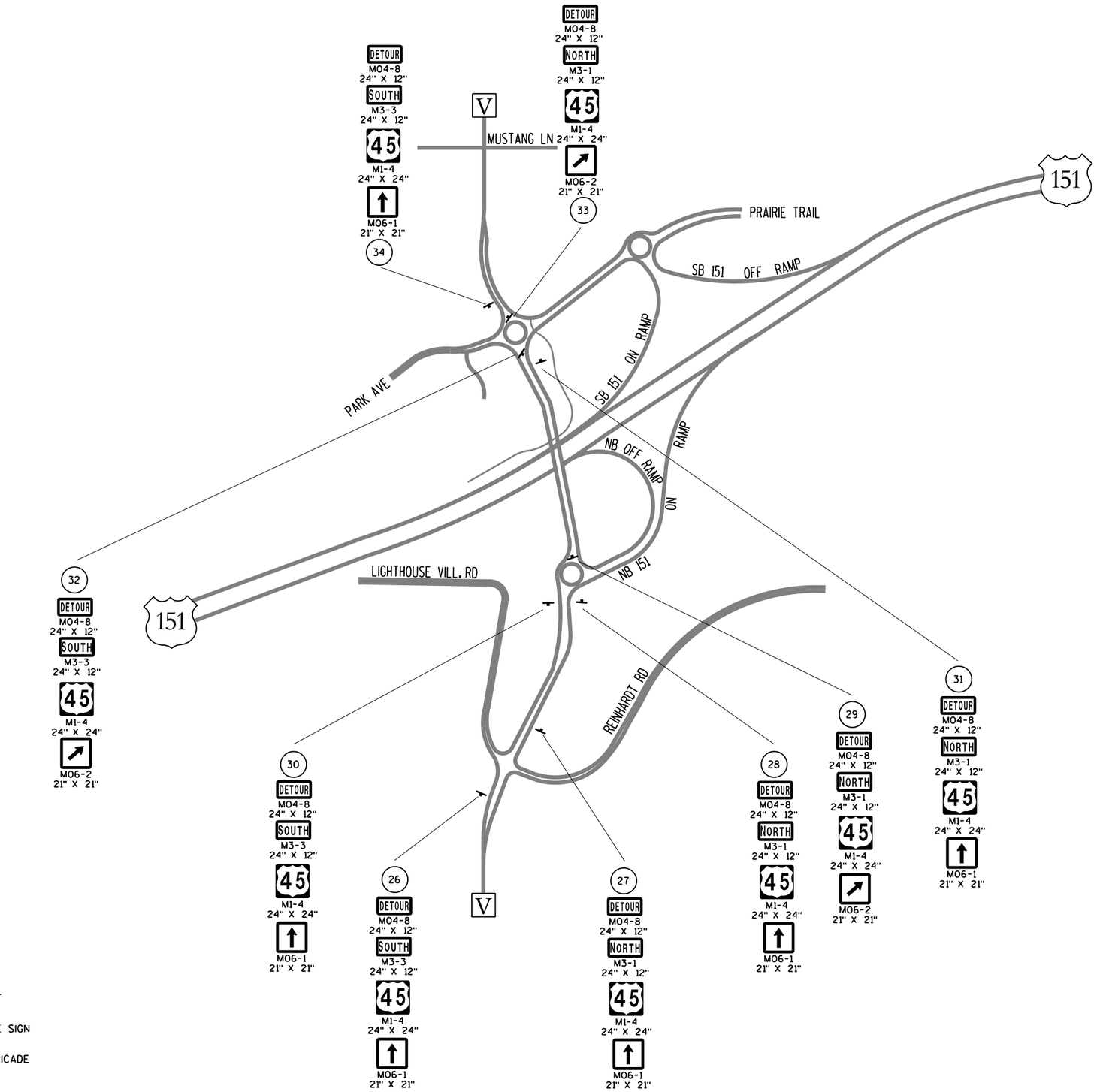
- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- ▲ PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN

SHEET 3 OF 4

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	DETOUR SIGNING DETAIL	SHEET 235	E

2



LEGEND

- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN

SHEET 4 OF 4

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	DETOUR SIGNING DETAIL	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

N

PLACE WOVEN-WIRE FENCE 5 FEET FROM EXISTING TRAIL (TYP)

REMOVE FENCE

TIE TO EXISTING FENCE

PRAIRIE TRAIL

USH 151 SB

USH 151 NB

1253'RL' 1254'RL' 1255'RL' 1256'RL' 1257'RL' 1258'RL' 1259'RL' 1260'RL' 1261'RL' 1262'RL' 1263'RL' 1264'RL' 1265'RL' 1266'RL' 1267'RL'

30" RCCP

INL

(ASPH)

MATCH LINE STA 1267+50

LIGHTHOUSE VILLAGE DRIVE

IP

OH

W

A/C

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	FENCING: USH 151	SHEET 237	E

2

2

MATCH LINE STA 1267+50

MATCH LINE STA 1282+50

OLD CTH V NORTH

CTH V

SB ON-RAMP

NB OFF-RAMP

NB ON-RAMP

USH 151 SB

USH 151 NB

PLACE WOVEN-WIRE FENCE 5 FEET FROM EXISTING TRAIL (TYP)

REMOVE FENCE

+81.00'RL'
-109.18' LT

+38.54'RL'
129.63' LT

REMOVE FENCE

END FENCE 2 FEET FROM BRIDGE WING WALL FACE (SEE CONSTRUCTION DETAIL)

PLACE WOVEN-WIRE FENCE 65' FROM EDGE OF CONCRETE

65.00'

REMOVE FENCE

1268'RL' 1269'RL' 1270'RL' 1271'RL' 1272'RL' 1273'RL' 1274'RL' 1275'RL' 1276'RL' 1277'RL' 1278'RL' 1279'RL' 1280'RL' 1281'RL' 1282'RL'

TIE TO EXISTING FENCE

EXISTING FENCE (TO REMAIN)

WOVEN-WIRE FENCE

+21.13'RL'
168.64' RT

+37.59'RL'
133.03' RT

END FENCE 2 FEET FROM BRIDGE WING WALL FACE (SEE CONSTRUCTION DETAIL)

PLACE CHAIN-LINK FENCE 2 FEET FROM SIDEWALK

278'VBB' 279'VBB' 280'VBB' 281'VBB' 282'VBB'

+99.69'VBB'
86.96' RT

R/W

PLACE WOVEN-WIRE FENCE 3 FEET FROM R/W

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	FENCING: USH 151	SHEET 238	E

2

+14.27'RL'
-652.90' LT

PLACE WOVEN-WIRE FENCE 65' FROM EDGE OF CONCRETE

65.00'

SB ON-RAMP

+74.46'RL'
-628.46' LT

65.00'

PLACE WOVEN-WIRE FENCE 65' FROM EDGE OF CONCRETE

SB OFF-RAMP

+08.52'RL'
-217.38' LT

PLACE WOVEN-WIRE FENCE 80' FROM EDGE OF CONCRETE

80.00'

FRONTAGE ROAD

N

SAN

MH

MH

SS

SAN

REMOVE FENCE

REMOVE FENCE

SIGN

SIGN

SIGN

24" CMCP

24" RCCP

24" RCCP

USH 151 SB

USH 151 NB

MATCH LINE STA 1282+50

MATCH LINE STA 1297+50

1283'RL' 1284'RL' 1285'RL' 1286'RL' 1287'RL' 1288'RL' 1289'RL' 1290'RL' 1291'RL' 1292'RL' 1293'RL' 1294'RL' 1295'RL' 1296'RL' 1297'RL'

284'VBB' 285'VBB' 286'VBB' 287'VBB' 288'VBB' 289'VBB' 290'VBB' 291'VBB' 292'VBB' 293'VBB' 294'VBB' 295'VBB' 296'VBB' 297'VBB'

NB 30'RAMP

REMOVE FENCE

TIE TO EXISTING FENCE

PLACE WOVEN-WIRE FENCE 3 FEET FROM R/W

R/W

EXISTING FENCE (TO REMAIN)

A/C

2

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	FENCING: USH 151	SHEET 239	E

2

2

FRONTAGE ROAD

USH 151 SB

USH 151 NB

USH 45

MATCH LINE STA 1297+50

MATCH LINE STA 1311+50

+96.03'RL'
-150.79' LT

+12.92'RL'
-125.00' LT

+37.28'RL'
-125.00' LT

+90.53'RL'
-125.00' LT

+73.37'RL'
-83.65' LT

REMOVE FENCE

PLACE WOVEN-WIRE FENCE 64' FROM EDGE OF CONCRETE

64.00'

PLACE WOVEN-WIRE FENCE 5 FEET FROM EDGE OF TRAIL

EXISTING FENCE (TO REMAIN)

END FENCE AT BACK OF BARRIER WALL

1298'RL' 1299'RL' 1300'RL' 1301'RL' 1302'RL' 1303'RL' 1304'RL' 1305'RL' 1306'RL' 1307'RL' 1308'RL' 1309'RL' 1310'RL' 1311'RL'

298'VBB' 299'VBB' 300'VBB' 301'VBB' 302'VBB' 303'VBB' 304'VBB'

24" RCCP

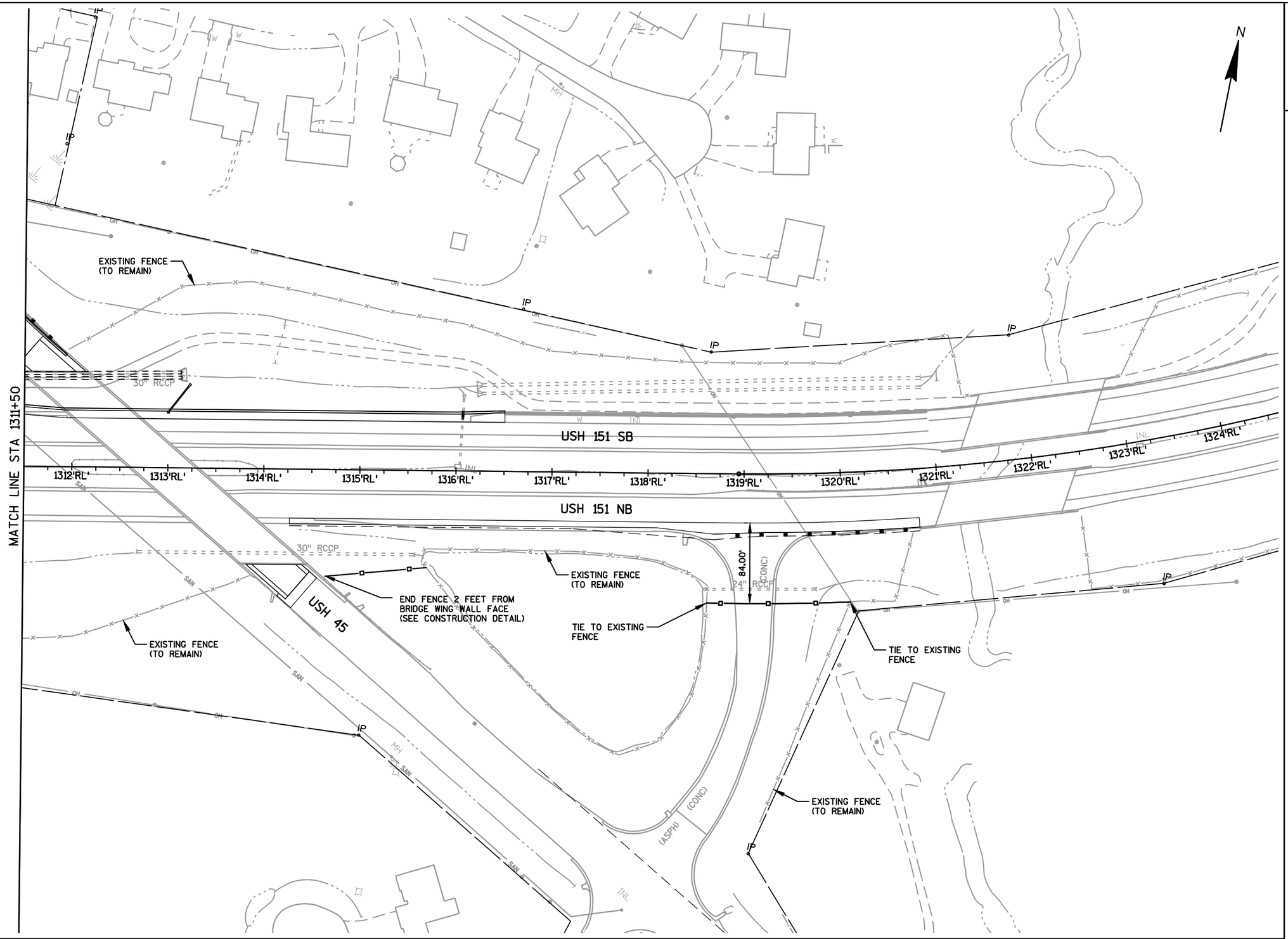
30" RCCP

OH SAN MH IP E G RCCP ANT. A/C

N

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	FENCING: USH 151	SHEET 240	E

2



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	FENCING: USH 151	SHEET 241	E

2

USH 151 SB

USH 151 NB

1270'RL' 1271'RL' 1272'RL' 1273'RL' 1274'RL' 1275'RL' 1276'RL' 1277'RL' 1278'RL' 1279'RL' 1280'RL' 1281'RL' 1282'RL' 1283'RL'

END FENCE AT BRIDGE WING WALL FACE

+21.13'RL'
168.64' RT
+37.59'RL'
133.03' RT

CTH V

PLACE CHAIN-LINK FENCE 2 FEET FROM SIDEWALK

NB OFF-RAMP

NB ON-RAMP

283'VBB' 282'VBB' 281'VBB' 280'VBB' 279'VBB' 278'VBB' 277'VBB' 276'VBB' 275'VBB' 274'VBB' 273'VBB' 272'VBB' 271'VBB' 270'VBB'

+99.69'VBB'
86.98' RT

PLACE WOVEN-WIRE FENCE 3 FEET FROM RIGHT-OF WAY

+16.19'VBB'
144.85' RT

+72.42'VBB'
103.47' RT

+36.53'VBB'
134.18' RT

PLACE WOVEN-WIRE FENCE 3 FEET FROM RIGHT-OF WAY

+99.92'VBB'
156.89' RT

+97.88'VBB'
-59.25' LT

+94.97'VBB'
-52.48' LT

+86.63'VBB'
29.46' RT

+00.80'VBB'
114.43' RT

PLACE WOVEN-WIRE FENCE 3 FEET FROM EXISTING RIGHT-OF-WAY

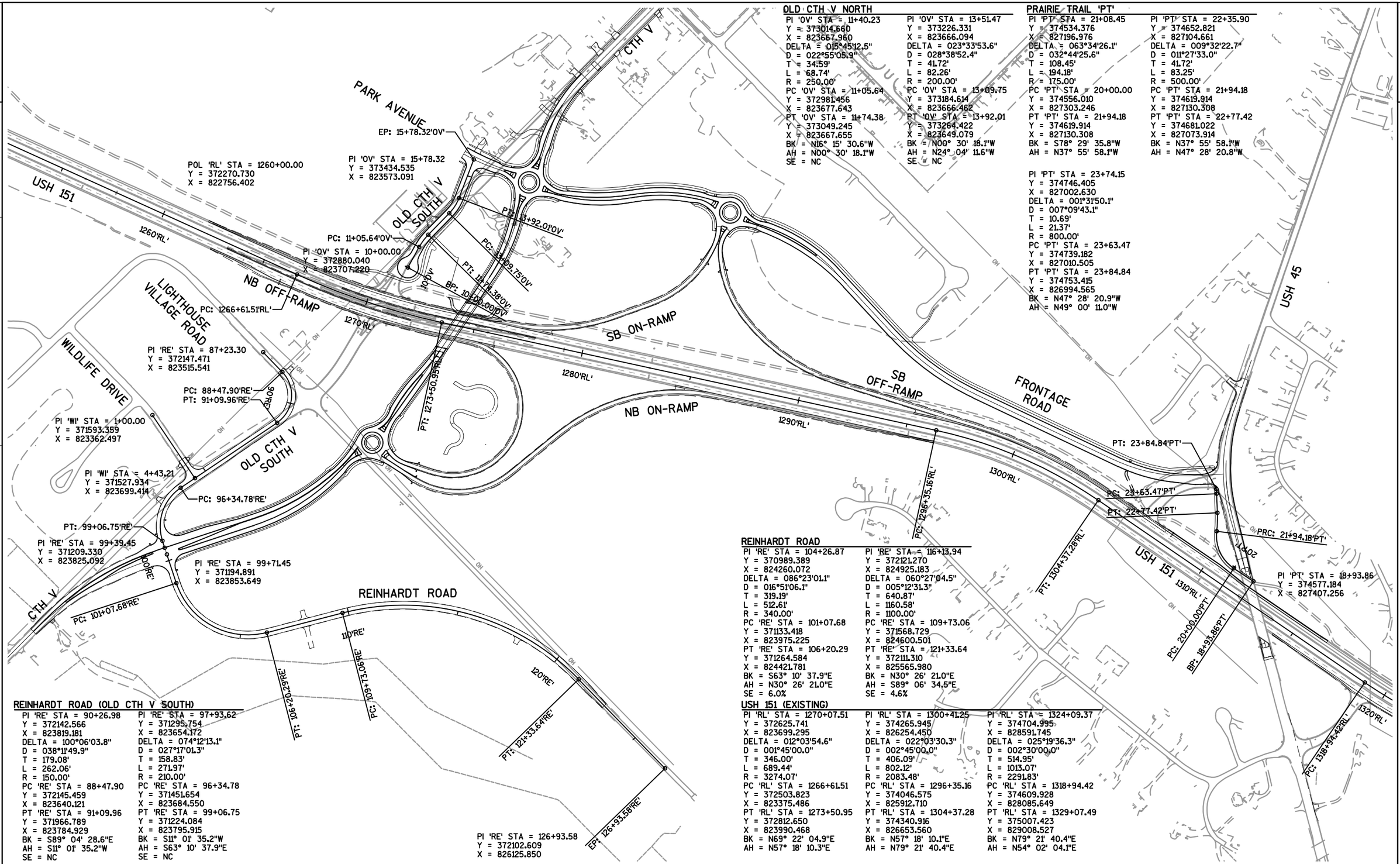
+06.40'VBB'
167.40' RT

CTH V

N

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	FENCING: USH 151	SHEET 242	E

2



OLD CTH V NORTH

PI '0V' STA = 11+40.23	PI '0V' STA = 13+51.47
Y = 373014.660	Y = 373226.331
X = 823667.960	X = 823666.094
DELTA = 015°45'12.5"	DELTA = 023°33'53.6"
D = 022°55'05.9"	D = 028°38'52.4"
T = 34.59'	T = 41.72'
L = 68.74'	L = 82.26'
R = 250.00'	R = 200.00'
PC '0V' STA = 11+05.64	PC '0V' STA = 13+09.75
Y = 372981.456	Y = 373184.614
X = 823677.643	X = 823666.462
PT '0V' STA = 11+74.38	PT '0V' STA = 13+92.01
Y = 373049.245	Y = 373264.422
X = 823667.655	X = 823649.079
BK = N16° 15' 30.6"W	BK = N00° 30' 18.1"W
AH = N00° 30' 18.1"W	AH = N24° 04' 11.6"W
SE = NC	SE = NC

PRAIRIE TRAIL 'PT'

PI 'PT' STA = 21+08.45	PI 'PT' STA = 22+35.90
Y = 374534.376	Y = 374652.821
X = 827196.976	X = 827104.661
DELTA = 063°34'26.1"	DELTA = 009°32'22.7"
D = 032°44'25.6"	D = 011°27'33.0"
T = 108.45'	T = 41.72'
L = 194.18'	L = 83.25'
R = 175.00'	R = 500.00'
PC 'PT' STA = 20+00.00	PC 'PT' STA = 21+94.18
Y = 374556.010	Y = 374619.914
X = 827303.246	X = 827130.308
PT 'PT' STA = 21+94.18	PT 'PT' STA = 22+77.42
Y = 374619.914	Y = 374681.022
X = 827130.308	X = 827073.914
BK = S78° 29' 35.8"W	BK = N37° 55' 58.1"W
AH = N37° 55' 58.1"W	AH = N47° 28' 20.8"W

PI 'PT' STA = 23+74.15
Y = 374746.405
X = 827002.630
DELTA = 001°31'50.1"
D = 007°09'43.1"
T = 10.69'
L = 21.37'
R = 800.00'
PC 'PT' STA = 23+63.47
Y = 374739.182
X = 827010.505
PT 'PT' STA = 23+84.84
Y = 374753.415
X = 826994.565
BK = N47° 28' 20.9"W
AH = N49° 00' 11.0"W

REINHARDT ROAD

PI 'RE' STA = 104+26.87	PI 'RE' STA = 116+13.94
Y = 370989.389	Y = 372121.270
X = 824260.072	X = 824925.183
DELTA = 086°23'01.1"	DELTA = 060°27'04.5"
D = 016°51'06.1"	D = 005°12'31.3"
T = 319.19'	T = 640.87'
L = 512.61'	L = 1160.58'
R = 340.00'	R = 1100.00'
PC 'RE' STA = 101+07.68	PC 'RE' STA = 109+73.06
Y = 371133.418	Y = 371568.729
X = 823975.225	X = 824600.501
PT 'RE' STA = 106+20.29	PT 'RE' STA = 121+33.64
Y = 371264.584	Y = 372111.310
X = 824421.781	X = 825565.980
BK = S63° 10' 37.9"E	BK = N30° 26' 21.0"E
AH = N30° 26' 21.0"E	AH = S89° 06' 34.5"E
SE = 6.0%	SE = 4.6%

REINHARDT ROAD (OLD CTH V SOUTH)

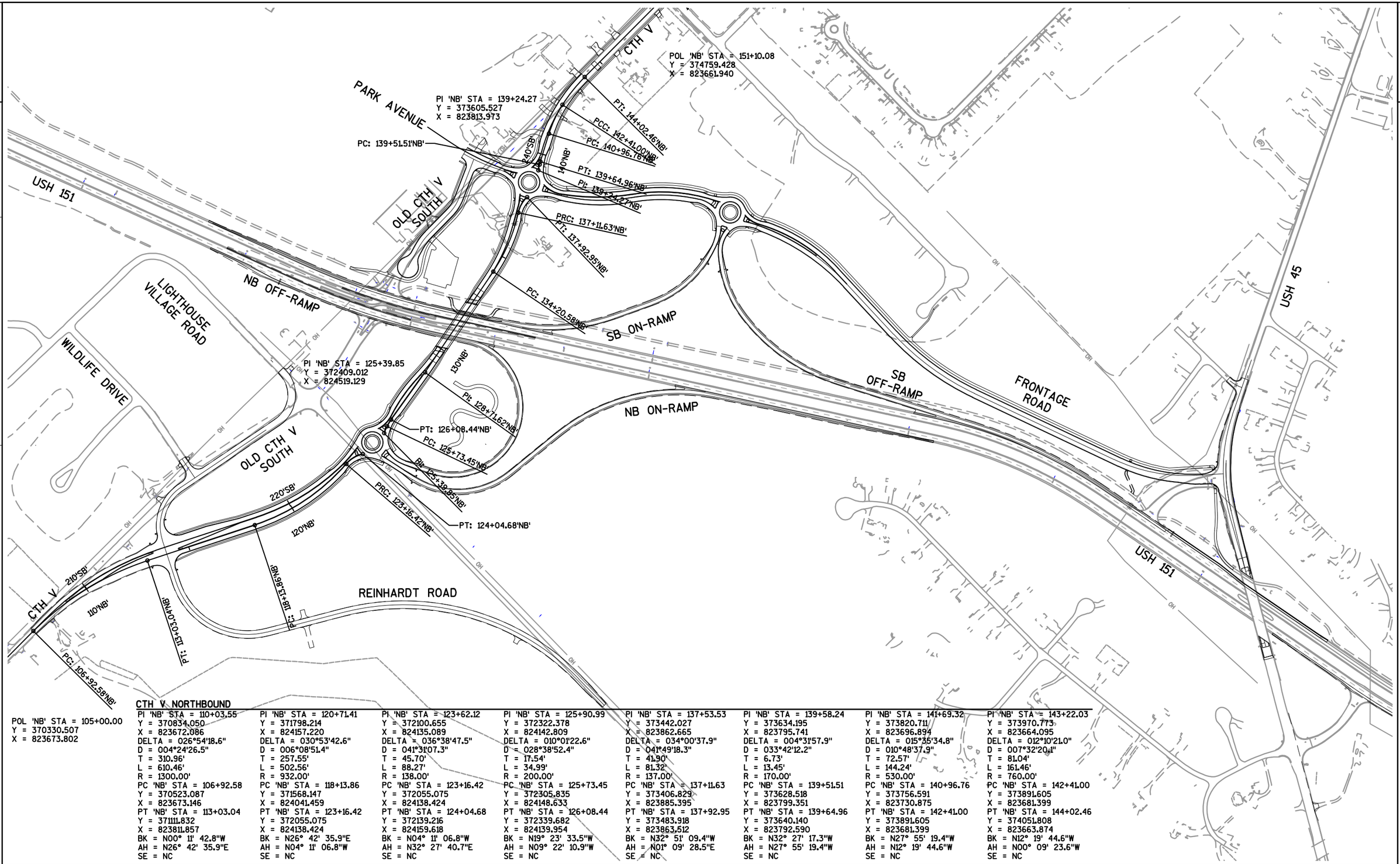
PI 'RE' STA = 90+26.98	PI 'RE' STA = 97+93.62
Y = 372142.566	Y = 371295.754
X = 823819.181	X = 823654.172
DELTA = 100°06'03.8"	DELTA = 074°12'13.1"
D = 038°11'49.9"	D = 027°17'01.3"
T = 179.08'	T = 158.83'
L = 262.06'	L = 271.97'
R = 150.00'	R = 210.00'
PC 'RE' STA = 88+47.90	PC 'RE' STA = 96+34.78
Y = 372145.459	Y = 371451.654
X = 823640.121	X = 823684.550
PT 'RE' STA = 91+09.96	PT 'RE' STA = 99+06.75
Y = 371966.789	Y = 371224.084
X = 823784.929	X = 823795.915
BK = S89° 04' 28.6"E	BK = S11° 01' 35.2"W
AH = S11° 01' 35.2"W	AH = S63° 10' 37.9"E
SE = NC	SE = NC

USH 151 (EXISTING)

PI 'RL' STA = 1270+07.51	PI 'RL' STA = 1300+41.25	PI 'RL' STA = 1324+09.37
Y = 372625.741	Y = 374265.945	Y = 374704.995
X = 823699.295	X = 826254.450	X = 828591.745
DELTA = 012°03'54.6"	DELTA = 022°03'30.3"	DELTA = 025°19'36.3"
D = 001°45'00.0"	D = 002°45'00.0"	D = 002°30'00.0"
T = 346.00'	T = 406.09'	T = 514.95'
L = 689.44'	L = 802.12'	L = 1013.07'
R = 3274.07'	R = 2083.48'	R = 2291.83'
PC 'RL' STA = 1266+61.51	PC 'RL' STA = 1296+35.16	PC 'RL' STA = 1318+94.42
Y = 372503.823	Y = 374046.575	Y = 374609.928
X = 823375.486	X = 825912.710	X = 828085.649
PT 'RL' STA = 1273+50.95	PT 'RL' STA = 1304+37.28	PT 'RL' STA = 1329+07.49
Y = 372812.650	Y = 374340.916	Y = 375007.423
X = 823990.468	X = 826653.560	X = 829008.527
BK = N69° 22' 04.9"E	BK = N57° 18' 10.1"E	BK = N79° 21' 40.4"E
AH = N57° 18' 10.3"E	AH = N79° 21' 40.4"E	AH = N54° 02' 04.1"E

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	ALIGNMENT DETAILS - USH 151, REINHARDT LANE, WILDLIFE LANE	SHEET 243 E

2

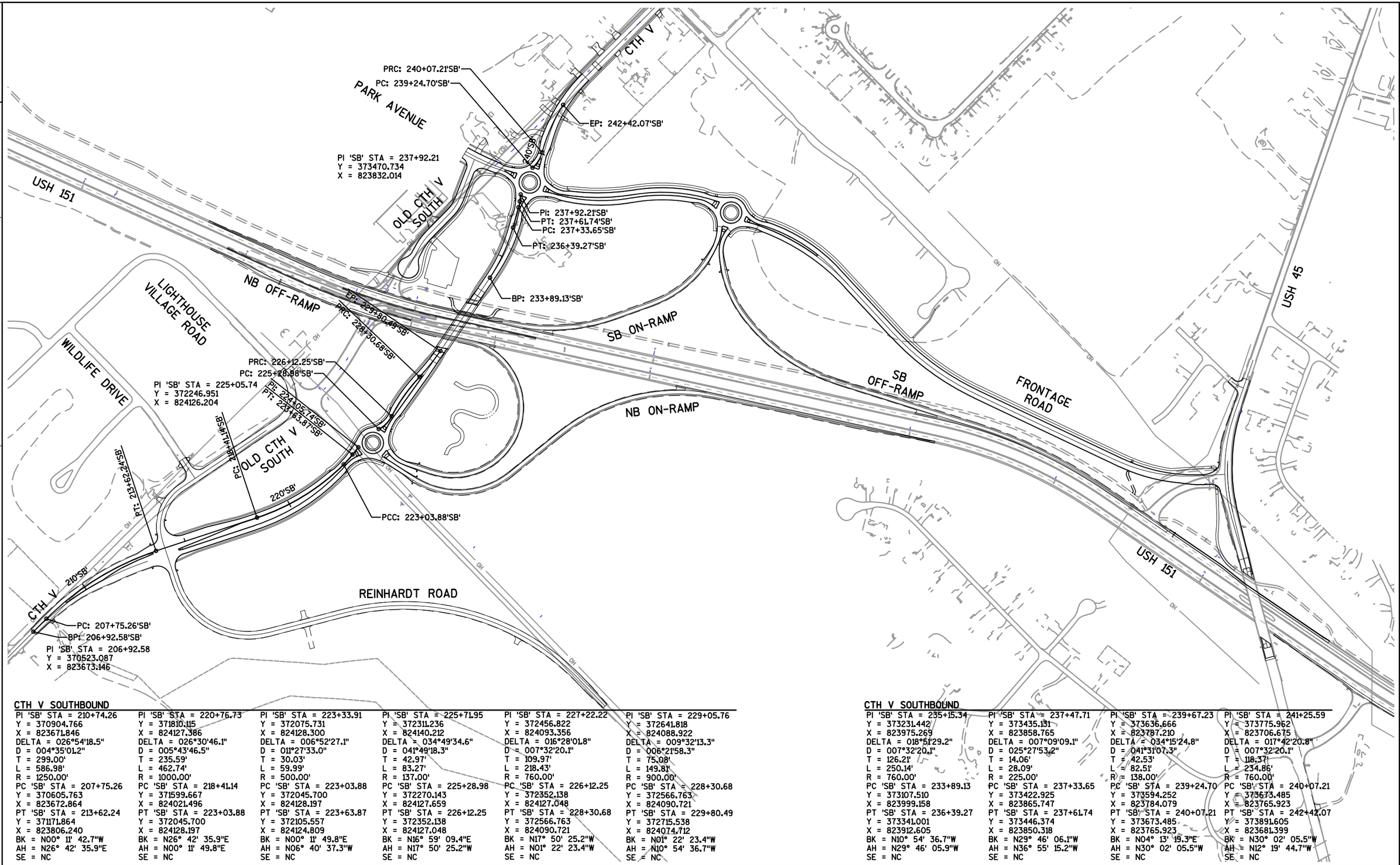


POL 'NB' STA = 105+00.00
Y = 370330.507
X = 823673.802

CTH V NORTHBOUND

PI 'NB' STA = 110+03.55	PI 'NB' STA = 120+71.41	PI 'NB' STA = 123+62.12	PI 'NB' STA = 125+90.99	PI 'NB' STA = 137+53.53	PI 'NB' STA = 139+58.24	PI 'NB' STA = 141+69.32	PI 'NB' STA = 143+22.03
Y = 370834.050	Y = 371798.214	Y = 372100.655	Y = 372322.378	Y = 373442.027	Y = 373634.195	Y = 373820.711	Y = 373970.773
X = 823672.086	X = 824157.220	X = 824135.089	X = 824142.809	X = 823862.665	X = 823795.741	X = 823696.894	X = 823664.095
DELTA = 026°54'18.6"	DELTA = 030°53'42.6"	DELTA = 036°38'47.5"	DELTA = 010°01'22.6"	DELTA = 034°00'37.9"	DELTA = 004°31'57.9"	DELTA = 015°35'34.8"	DELTA = 012°10'21.0"
D = 004°24'26.5"	D = 006°08'51.4"	D = 041°31'07.3"	D = 028°38'52.4"	D = 041°49'18.3"	D = 033°42'12.2"	D = 010°48'37.9"	D = 007°32'20.1"
T = 310.96'	T = 257.55'	T = 45.70'	T = 17.54'	T = 41.90'	T = 6.73'	T = 72.57'	T = 81.04'
L = 610.46'	L = 502.56'	L = 88.27'	L = 34.99'	L = 81.32'	L = 13.45'	L = 144.24'	L = 161.46'
R = 1300.00'	R = 932.00'	R = 138.00'	R = 200.00'	R = 137.00'	R = 170.00'	R = 530.00'	R = 760.00'
PC 'NB' STA = 106+92.58	PC 'NB' STA = 118+13.86	PC 'NB' STA = 123+16.42	PC 'NB' STA = 125+73.45	PC 'NB' STA = 137+11.63	PC 'NB' STA = 139+51.51	PC 'NB' STA = 140+96.76	PC 'NB' STA = 142+41.00
Y = 370523.087	Y = 371568.147	Y = 372055.075	Y = 372305.835	Y = 373406.829	Y = 373628.518	Y = 373756.591	Y = 373891.605
X = 823673.146	X = 824041.459	X = 824138.424	X = 824148.633	X = 823885.395	X = 823799.351	X = 823730.875	X = 823681.399
PT 'NB' STA = 113+03.04	PT 'NB' STA = 123+16.42	PT 'NB' STA = 124+04.68	PT 'NB' STA = 126+08.44	PT 'NB' STA = 137+92.95	PT 'NB' STA = 139+64.96	PT 'NB' STA = 142+41.00	PT 'NB' STA = 144+02.46
Y = 371111.832	Y = 372055.075	Y = 372139.216	Y = 372339.682	Y = 373483.918	Y = 373640.140	Y = 373891.605	Y = 374051.808
X = 823811.857	X = 824138.424	X = 824159.618	X = 824139.954	X = 823863.512	X = 823792.590	X = 823681.399	X = 823663.874
BK = N00° 11' 42.8"W	BK = N26° 42' 35.9"E	BK = N04° 11' 06.8"W	BK = N19° 23' 33.5"W	BK = N32° 51' 09.4"W	BK = N32° 27' 17.3"W	BK = N27° 55' 19.4"W	BK = N12° 19' 44.6"W
AH = N26° 42' 35.9"E	AH = N04° 11' 06.8"W	AH = N32° 27' 40.7"E	AH = N09° 22' 10.9"W	AH = N01° 09' 28.5"E	AH = N27° 55' 19.4"W	AH = N12° 19' 44.6"W	AH = N00° 09' 23.6"W
SE = NC	SE = NC	SE = NC	SE = NC	SE = NC	SE = NC	SE = NC	SE = NC

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	ALIGNMENT DETAILS - CTH V NORTHBOUND	SHEET 244 E



CTH V SOUTHBOUND

PI 'SB' STA = 210+74.26	PI 'SB' STA = 220+76.73	PI 'SB' STA = 223+33.91	PI 'SB' STA = 225+71.95	PI 'SB' STA = 227+22.22	PI 'SB' STA = 229+05.76
Y = 370904.766	Y = 371810.115	Y = 372075.731	Y = 372311.236	Y = 372456.822	Y = 372641.818
X = 823671.846	X = 824127.386	X = 824128.300	X = 824140.212	X = 824093.356	X = 824088.922
DELTA = 026°54'18.5"	DELTA = 026°30'46.1"	DELTA = 006°52'27.1"	DELTA = 034°49'34.6"	DELTA = 016°28'01.8"	DELTA = 009°32'13.3"
D = 004°35'01.2"	D = 005°43'46.5"	D = 011°27'33.0"	D = 041°49'18.3"	D = 007°32'20.1"	D = 006°21'58.3"
T = 299.00'	T = 235.59'	T = 30.03'	T = 42.97'	T = 109.97'	T = 75.08'
L = 586.98'	L = 462.74'	L = 59.99'	L = 83.27'	L = 218.43'	L = 149.81'
R = 1250.00'	R = 1000.00'	R = 500.00'	R = 137.00'	R = 760.00'	R = 900.00'
PC 'SB' STA = 207+75.26	PC 'SB' STA = 218+41.14	PC 'SB' STA = 223+03.88	PC 'SB' STA = 225+28.98	PC 'SB' STA = 226+12.25	PC 'SB' STA = 228+30.68
Y = 370605.763	Y = 371599.667	Y = 372045.700	Y = 372270.143	Y = 372352.138	Y = 372566.763
X = 823672.864	X = 824021.496	X = 824128.197	X = 824127.659	X = 824127.048	X = 824090.721
PT 'SB' STA = 213+62.24	PT 'SB' STA = 223+03.88	PT 'SB' STA = 223+63.87	PT 'SB' STA = 226+12.25	PT 'SB' STA = 228+30.68	PT 'SB' STA = 229+80.49
Y = 371171.864	Y = 372045.700	Y = 372105.557	Y = 372352.138	Y = 372566.763	Y = 372715.538
X = 823806.240	X = 824128.197	X = 824124.809	X = 824127.048	X = 824090.721	X = 824074.712
BK = N00° 11' 42.7"W	BK = N26° 42' 35.9"E	BK = N00° 11' 49.8"E	BK = N16° 59' 09.4"E	BK = N17° 50' 25.2"W	BK = N01° 22' 23.4"W
AH = N26° 42' 35.9"E	AH = N00° 11' 49.8"E	AH = N06° 40' 37.3"W	AH = N17° 50' 25.2"W	AH = N01° 22' 23.4"W	AH = N10° 54' 36.7"W
SE = NC	SE = NC	SE = NC	SE = NC	SE = NC	SE = NC

CTH V SOUTHBOUND

PI 'SB' STA = 235+15.34	PI 'SB' STA = 237+47.71	PI 'SB' STA = 239+67.23	PI 'SB' STA = 241+25.59
Y = 373231.442	Y = 373435.131	Y = 373636.666	Y = 373775.962
X = 823975.269	X = 823858.765	X = 823787.210	X = 823706.675
DELTA = 018°51'29.2"	DELTA = 007°09'09.1"	DELTA = 034°15'24.8"	DELTA = 017°42'20.8"
D = 007°32'20.1"	D = 025°27'53.2"	D = 041°31'07.3"	D = 007°32'20.1"
T = 126.21'	T = 14.06'	T = 42.53'	T = 118.37'
L = 250.14'	L = 28.09'	L = 82.51'	L = 234.86'
R = 760.00'	R = 225.00'	R = 138.00'	R = 760.00'
PC 'SB' STA = 233+89.13	PC 'SB' STA = 237+33.65	PC 'SB' STA = 239+24.70	PC 'SB' STA = 240+07.21
Y = 373107.510	Y = 373422.925	Y = 373594.252	Y = 373673.485
X = 823999.158	X = 823865.747	X = 823784.079	X = 823765.923
PT 'SB' STA = 236+39.27	PT 'SB' STA = 237+61.74	PT 'SB' STA = 240+07.21	PT 'SB' STA = 242+42.07
Y = 373341.001	Y = 373446.374	Y = 373673.485	Y = 373891.605
X = 823912.605	X = 823850.318	X = 823765.923	X = 823681.399
BK = N10° 54' 36.7"W	BK = N29° 46' 06.1"W	BK = N04° 13' 19.3"E	BK = N30° 02' 05.5"W
AH = N29° 46' 05.9"W	AH = N36° 55' 15.2"W	AH = N30° 02' 05.5"W	AH = N12° 19' 44.7"W
SE = NC	SE = NC	SE = NC	SE = NC

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	ALIGNMENT DETAILS - CTH V SOUTHBOUND	SHEET 245 E

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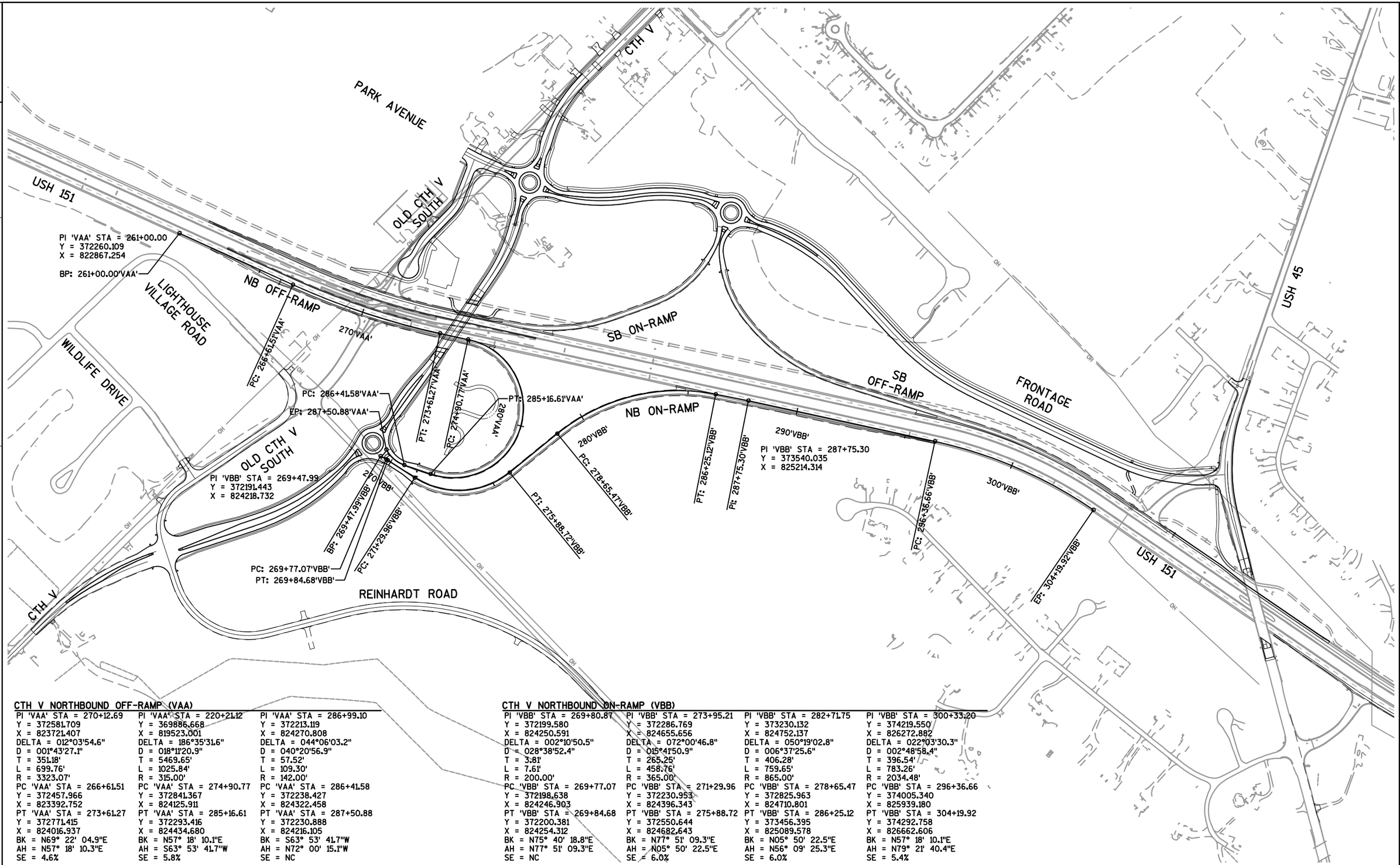


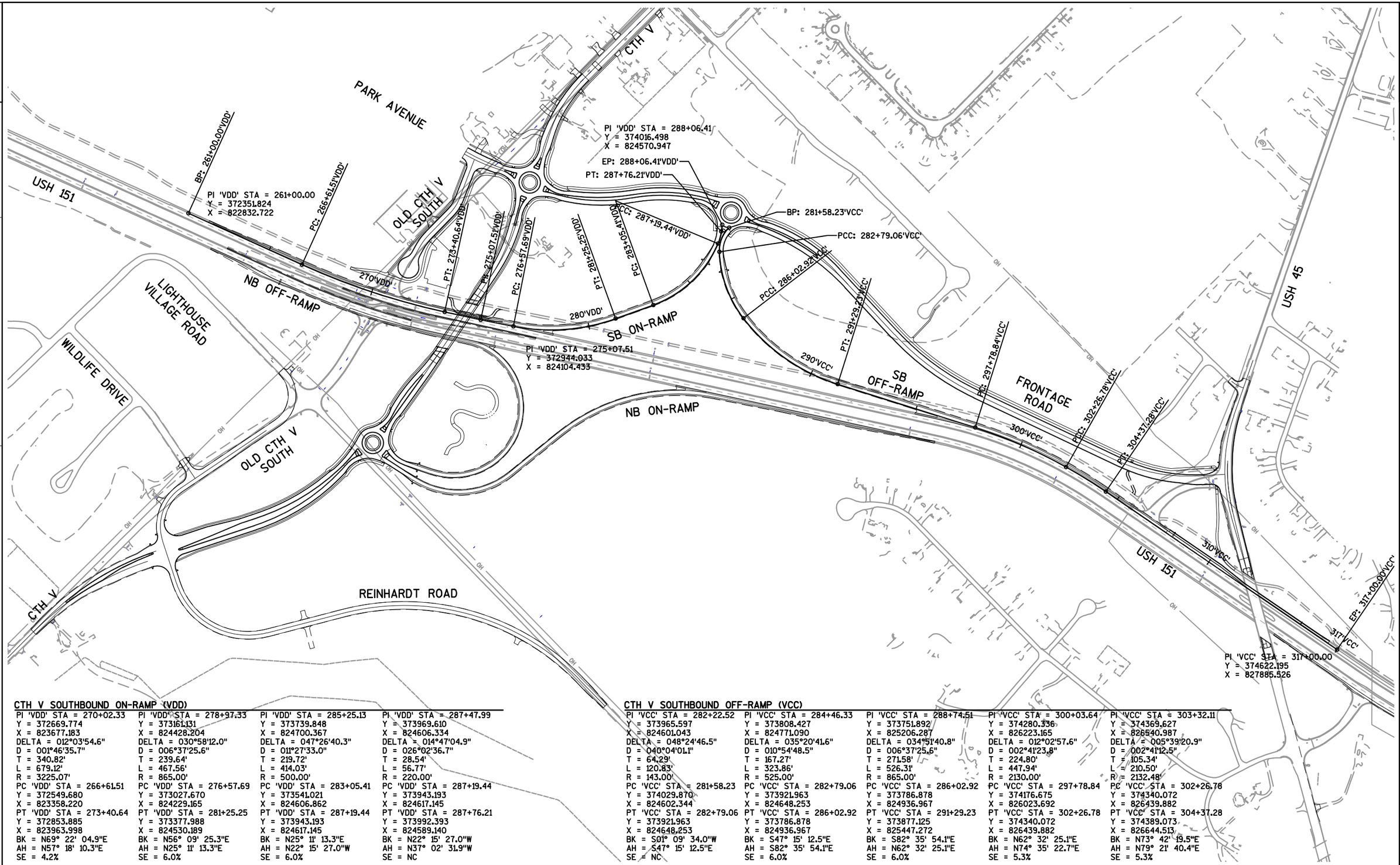
CTH V NORTHBOUND OFF-RAMP (VAA)

PI 'VAA' STA = 270+12.69	PI 'VAA' STA = 220+21.12	PI 'VAA' STA = 286+99.10
Y = 372581.709	Y = 369886.668	Y = 372213.119
X = 823721.407	X = 819523.001	X = 824270.808
DELTA = 012°03'54.6"	DELTA = 186°35'31.6"	DELTA = 044°06'03.2"
D = 001°43'27.1"	D = 018°11'20.9"	D = 040°20'56.9"
T = 351.18'	T = 5469.65'	T = 57.52'
L = 699.76'	L = 1025.84'	L = 109.30'
R = 3323.07'	R = 315.00'	R = 142.00'
PC 'VAA' STA = 266+61.51	PC 'VAA' STA = 274+90.77	PC 'VAA' STA = 286+41.58
Y = 372457.966	Y = 372841.367	Y = 372238.427
X = 823392.752	X = 824125.911	X = 824322.458
PT 'VAA' STA = 273+61.27	PT 'VAA' STA = 285+16.61	PT 'VAA' STA = 287+50.88
Y = 372771.415	Y = 372293.416	Y = 372230.888
X = 824016.937	X = 824434.680	X = 824216.105
BK = N69° 22' 04.9"E	BK = N57° 18' 10.1"E	BK = S63° 53' 41.7"W
AH = N57° 18' 10.3"E	AH = S63° 53' 41.7"W	AH = N72° 00' 15.1"W
SE = 4.6%	SE = 5.8%	SE = NC

CTH V NORTHBOUND ON-RAMP (VBB)

PI 'VBB' STA = 269+80.87	PI 'VBB' STA = 273+95.21	PI 'VBB' STA = 282+71.75	PI 'VBB' STA = 300+33.20	
Y = 372199.580	Y = 372286.769	Y = 373230.132	Y = 374219.550	
X = 824250.591	X = 824655.656	X = 824752.137	X = 826272.882	
DELTA = 002°10'50.5"	DELTA = 072°00'46.8"	DELTA = 050°19'02.8"	DELTA = 022°03'30.3"	
D = 028°38'52.4"	D = 015°41'50.9"	D = 006°37'25.6"	D = 002°48'58.4"	
T = 3.81'	T = 265.25'	T = 406.28'	T = 396.54'	
L = 7.61'	L = 458.76'	L = 759.65'	L = 783.26'	
R = 200.00'	R = 365.00'	R = 865.00'	R = 2034.48'	
PC 'VBB' STA = 269+77.07	PC 'VBB' STA = 271+29.96	PC 'VBB' STA = 278+65.47	PC 'VBB' STA = 296+36.66	
Y = 372198.638	Y = 372230.953	Y = 372825.963	Y = 374005.340	
X = 824246.903	X = 824396.343	X = 824710.801	X = 825939.180	
PT 'VBB' STA = 269+84.68	PT 'VBB' STA = 275+88.72	PT 'VBB' STA = 286+25.12	PT 'VBB' STA = 304+19.92	
Y = 372200.381	Y = 372550.644	Y = 373456.395	Y = 374292.758	
X = 824254.312	X = 824682.643	X = 825089.578	X = 826662.606	
BK = N75° 40' 18.8"E	BK = N77° 51' 09.3"E	BK = N05° 50' 22.5"E	BK = N57° 18' 10.1"E	
AH = N77° 51' 09.3"E	AH = N05° 50' 22.5"E	AH = N56° 09' 25.3"E	AH = N79° 21' 40.4"E	
SE = NC	SE = 6.0%	SE = 6.0%	SE = 5.4%	

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	ALIGNMENT DETAILS - NORTHBOUND RAMPS	SHEET 246 E



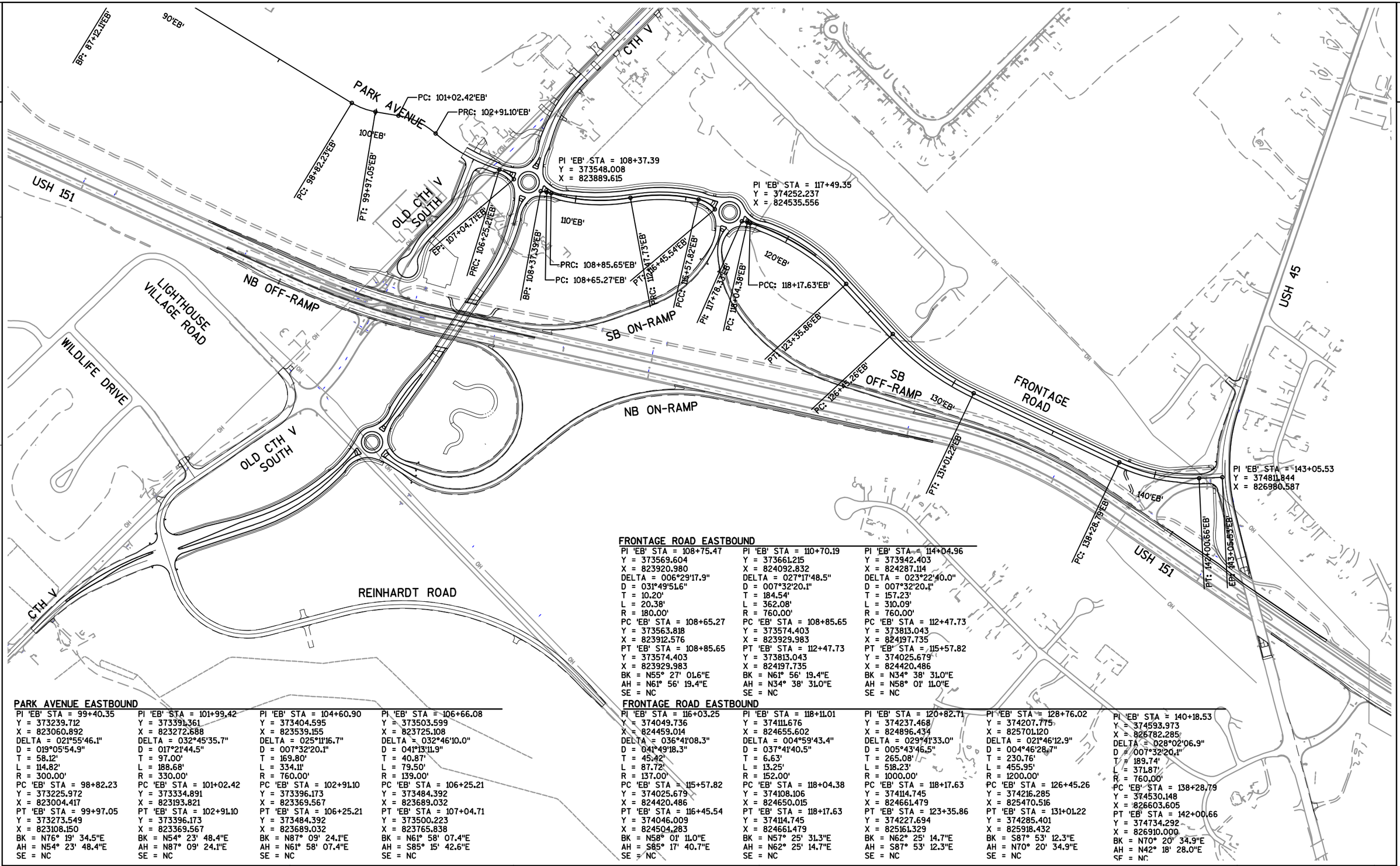
CTH V SOUTHBOUND ON-RAMP (VDD)

PI 'VDD' STA = 270+02.33	PI 'VDD' STA = 278+97.33	PI 'VDD' STA = 285+25.13	PI 'VDD' STA = 287+47.99
Y = 372669.774	Y = 373161.131	Y = 373739.848	Y = 373969.610
X = 823677.183	X = 824428.204	X = 824700.367	X = 824606.334
DELTA = 012°03'54.6"	DELTA = 030°58'12.0"	DELTA = 047°26'40.3"	DELTA = 014°47'04.9"
D = 001°46'35.7"	D = 006°37'25.6"	D = 011°27'33.0"	D = 026°02'36.7"
T = 340.82'	T = 239.64'	T = 219.72'	T = 28.54'
L = 679.12'	L = 467.56'	L = 414.03'	L = 56.77'
R = 3225.07'	R = 865.00'	R = 500.00'	R = 220.00'
PC 'VDD' STA = 266+61.51	PC 'VDD' STA = 276+57.69	PC 'VDD' STA = 283+05.41	PC 'VDD' STA = 287+19.44
Y = 372549.680	Y = 373027.670	Y = 373541.021	Y = 373943.193
X = 823358.220	X = 824229.165	X = 824606.862	X = 824617.145
PT 'VDD' STA = 273+40.64	PT 'VDD' STA = 281+25.25	PT 'VDD' STA = 287+19.44	PT 'VDD' STA = 287+76.21
Y = 372853.885	Y = 373377.988	Y = 373943.193	Y = 373992.393
X = 823963.998	X = 824530.189	X = 824617.145	X = 824589.140
BK = N69° 22' 04.9"E	BK = N56° 09' 25.3"E	BK = N25° 11' 13.3"E	BK = N22° 15' 27.0"W
AH = N57° 18' 10.3"E	AH = N25° 11' 13.3"E	AH = N22° 15' 27.0"W	AH = N37° 02' 31.9"W
SE = 4.2%	SE = 6.0%	SE = 6.0%	SE = NC

CTH V SOUTHBOUND OFF-RAMP (VCC)

PI 'VCC' STA = 282+22.52	PI 'VCC' STA = 284+46.33	PI 'VCC' STA = 288+74.51	PI 'VCC' STA = 300+03.64	PI 'VCC' STA = 303+32.11
Y = 373965.597	Y = 373808.427	Y = 373751.892	Y = 374280.336	Y = 374369.627
X = 824601.043	X = 824771.090	X = 825206.287	X = 826223.165	X = 826540.987
DELTA = 048°24'46.5"	DELTA = 035°20'41.6"	DELTA = 034°51'40.8"	DELTA = 012°02'57.6"	DELTA = 005°39'20.9"
D = 040°04'01.1"	D = 010°54'48.5"	D = 006°37'25.6"	D = 002°41'23.8"	D = 002°41'12.5"
T = 64.29'	T = 167.27'	T = 271.58'	T = 224.80'	T = 105.34'
L = 120.83'	L = 323.86'	L = 526.31'	L = 447.94'	L = 210.50'
R = 143.00'	R = 525.00'	R = 865.00'	R = 2130.00'	R = 2132.48'
PC 'VCC' STA = 281+58.23	PC 'VCC' STA = 282+79.06	PC 'VCC' STA = 286+02.92	PC 'VCC' STA = 297+78.84	PC 'VCC' STA = 302+26.78
Y = 374029.870	Y = 373921.963	Y = 373786.878	Y = 374176.675	Y = 374340.072
X = 824602.344	X = 824648.253	X = 824936.967	X = 826023.692	X = 826439.882
PT 'VCC' STA = 282+79.06	PT 'VCC' STA = 286+02.92	PT 'VCC' STA = 291+29.23	PT 'VCC' STA = 302+26.78	PT 'VCC' STA = 304+37.28
Y = 373921.963	Y = 373786.878	Y = 373877.125	Y = 374340.072	Y = 374389.073
X = 824648.253	X = 824936.967	X = 825447.272	X = 826439.882	X = 826644.513
BK = S01° 09' 34.0"W	BK = S47° 15' 12.5"E	BK = S82° 35' 54.1"E	BK = N62° 32' 25.1"E	BK = N73° 42' 19.5"E
AH = S47° 15' 12.5"E	AH = S82° 35' 54.1"E	AH = N62° 32' 25.1"E	AH = N74° 35' 22.7"E	AH = N79° 21' 40.4"E
SE = NC	SE = 6.0%	SE = 6.0%	SE = 5.3%	SE = 5.3%

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	ALIGNMENT DETAILS - SOUTHBOUND RAMPS	SHEET 247 E



FRONTAGE ROAD EASTBOUND

PI 'EB' STA = 108+75.47	PI 'EB' STA = 110+70.19	PI 'EB' STA = 114+04.96
Y = 373569.604	Y = 373661.215	Y = 373942.403
X = 823920.980	X = 824092.832	X = 824287.114
DELTA = 006°29'17.9"	DELTA = 027°17'48.5"	DELTA = 023°22'40.0"
D = 031°49'51.6"	D = 007°32'20.1"	D = 007°32'20.1"
T = 10.20'	T = 184.54'	T = 157.23'
L = 20.38'	L = 362.08'	L = 310.09'
R = 180.00'	R = 760.00'	R = 760.00'
PC 'EB' STA = 108+65.27	PC 'EB' STA = 108+85.65	PC 'EB' STA = 112+47.73
Y = 373563.818	Y = 373574.403	Y = 373813.043
X = 823912.576	X = 823929.983	X = 824197.735
PT 'EB' STA = 108+85.65	PT 'EB' STA = 112+47.73	PT 'EB' STA = 115+57.82
Y = 373574.403	Y = 373813.043	Y = 374025.679
X = 823929.983	X = 824197.735	X = 824420.486
BK = N55° 27' 01.6"E	BK = N61° 56' 19.4"E	BK = N34° 38' 31.0"E
AH = N61° 56' 19.4"E	AH = N34° 38' 31.0"E	AH = N58° 01' 11.0"E
SE = NC	SE = NC	SE = NC

PARK AVENUE EASTBOUND

PI 'EB' STA = 99+40.35	PI 'EB' STA = 101+99.42	PI 'EB' STA = 104+60.90	PI 'EB' STA = 106+66.08
Y = 373239.712	Y = 373391.361	Y = 373404.595	Y = 373503.599
X = 823060.892	X = 823272.688	X = 823539.155	X = 823725.108
DELTA = 021°55'46.1"	DELTA = 032°45'35.7"	DELTA = 025°11'16.7"	DELTA = 032°46'10.0"
D = 019°05'54.9"	D = 017°21'44.5"	D = 007°32'20.1"	D = 041°13'11.9"
T = 58.12'	T = 97.00'	T = 169.80'	T = 40.87'
L = 114.82'	L = 188.68'	L = 334.11'	L = 79.50'
R = 300.00'	R = 330.00'	R = 760.00'	R = 139.00'
PC 'EB' STA = 98+82.23	PC 'EB' STA = 101+02.42	PC 'EB' STA = 102+91.10	PC 'EB' STA = 106+25.21
Y = 373225.972	Y = 373334.891	Y = 373396.173	Y = 373484.392
X = 823004.417	X = 823193.821	X = 823369.567	X = 823689.032
PT 'EB' STA = 99+97.05	PT 'EB' STA = 102+91.10	PT 'EB' STA = 106+25.21	PT 'EB' STA = 107+04.71
Y = 373273.549	Y = 373396.173	Y = 373484.392	Y = 373500.223
X = 823108.150	X = 823369.567	X = 823689.032	X = 823765.838
BK = N76° 19' 34.5"E	BK = N54° 23' 48.4"E	BK = N87° 09' 24.1"E	BK = N61° 58' 07.4"E
AH = N54° 23' 48.4"E	AH = N87° 09' 24.1"E	AH = N61° 58' 07.4"E	AH = S85° 15' 42.6"E
SE = NC	SE = NC	SE = NC	SE = NC

FRONTAGE ROAD EASTBOUND

PI 'EB' STA = 116+03.25	PI 'EB' STA = 118+11.01	PI 'EB' STA = 120+82.71	PI 'EB' STA = 128+76.02	PI 'EB' STA = 140+18.53
Y = 374049.736	Y = 374111.676	Y = 374237.468	Y = 374207.775	Y = 374593.973
X = 824459.014	X = 824655.602	X = 824896.434	X = 825701.120	X = 826782.285
DELTA = 036°41'08.3"	DELTA = 004°59'43.4"	DELTA = 029°41'33.0"	DELTA = 021°46'12.9"	DELTA = 028°02'06.9"
D = 041°49'18.3"	D = 037°41'40.5"	D = 005°43'46.5"	D = 004°46'28.7"	D = 007°32'20.1"
T = 45.42'	T = 6.63'	T = 265.08'	T = 230.76'	T = 189.74'
L = 87.72'	L = 13.25'	L = 518.23'	L = 455.95'	L = 371.87'
R = 137.00'	R = 152.00'	R = 1000.00'	R = 1200.00'	R = 760.00'
PC 'EB' STA = 115+57.82	PC 'EB' STA = 118+04.38	PC 'EB' STA = 118+17.63	PC 'EB' STA = 126+45.26	PC 'EB' STA = 138+28.79
Y = 374025.679	Y = 374108.106	Y = 374114.745	Y = 374216.285	Y = 374530.148
X = 824420.486	X = 824650.015	X = 824661.479	X = 825470.516	X = 826603.605
PT 'EB' STA = 116+45.54	PT 'EB' STA = 118+17.63	PT 'EB' STA = 123+35.86	PT 'EB' STA = 131+01.22	PT 'EB' STA = 142+00.66
Y = 374046.009	Y = 374114.745	Y = 374227.694	Y = 374285.401	Y = 374734.292
X = 824504.283	X = 824661.479	X = 825161.329	X = 825918.432	X = 826910.000
BK = N58° 01' 11.0"E	BK = N57° 25' 31.3"E	BK = N62° 25' 14.7"E	BK = S87° 53' 12.3"E	BK = N70° 20' 34.9"E
AH = S85° 17' 40.7"E	AH = N62° 25' 14.7"E	AH = S87° 53' 12.3"E	AH = N70° 20' 34.9"E	AH = N42° 18' 28.0"E
SE = NC	SE = NC	SE = NC	SE = NC	SE = NC

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	ALIGNMENT DETAILS - FRONTAGE ROAD EASTBOUND	SHEET 248 E

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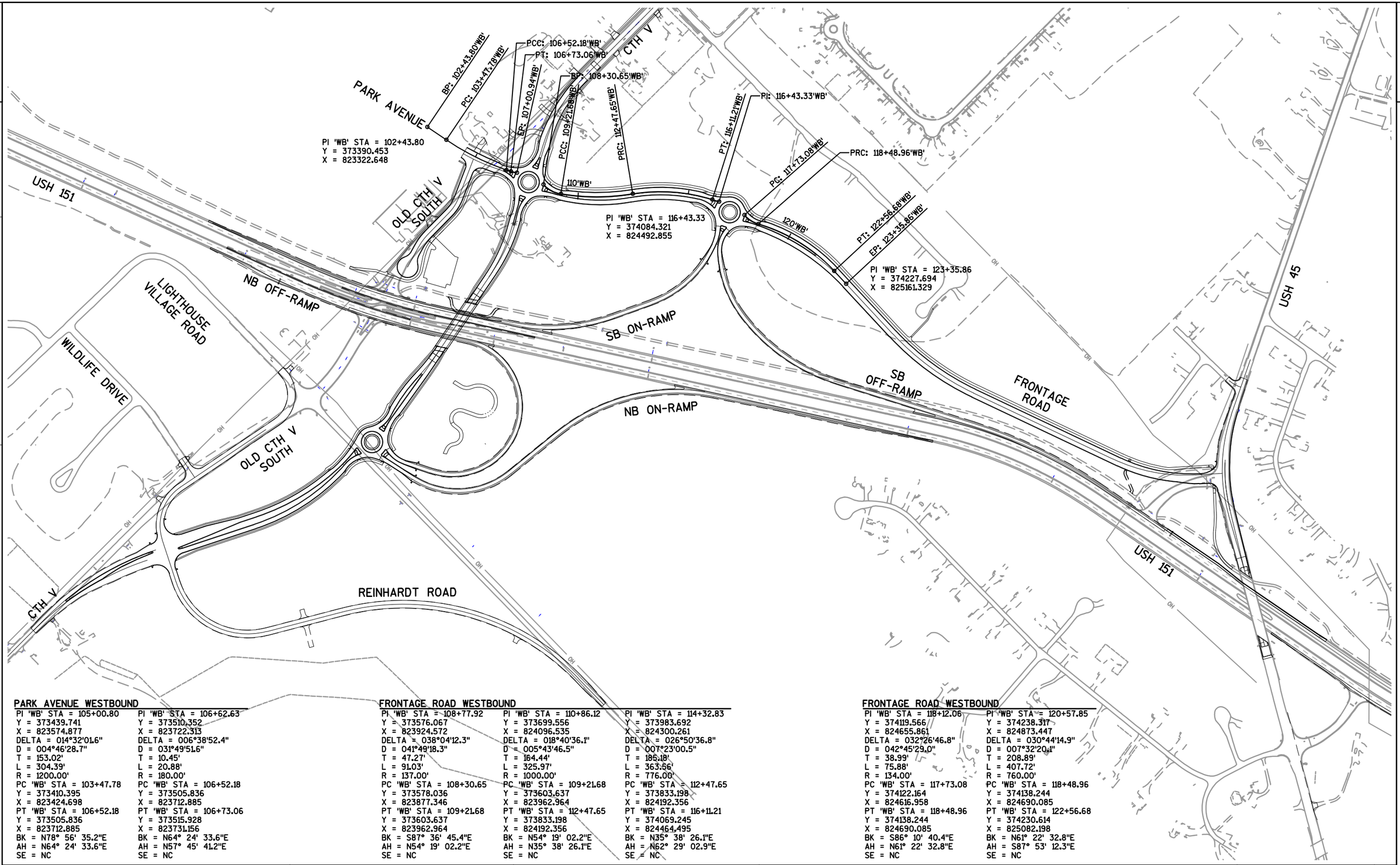


PARK AVENUE WESTBOUND

PI 'WB' STA = 105+00.80	PI 'WB' STA = 106+62.63
Y = 373439.741	Y = 373510.352
X = 823574.877	X = 823722.313
DELTA = 014°32'01.6"	DELTA = 006°38'52.4"
D = 004°46'28.7"	D = 031°49'51.6"
T = 153.02'	T = 10.45'
L = 304.39'	L = 20.88'
R = 1200.00'	R = 180.00'
PC 'WB' STA = 103+47.78	PC 'WB' STA = 106+52.18
Y = 373410.395	Y = 373505.836
X = 823424.698	X = 823712.885
PT 'WB' STA = 106+52.18	PT 'WB' STA = 106+73.06
Y = 373505.836	Y = 373515.928
X = 823712.885	X = 823731.156
BK = N78° 56' 35.2"E	BK = N64° 24' 33.6"E
AH = N64° 24' 33.6"E	AH = N57° 45' 41.2"E
SE = NC	SE = NC

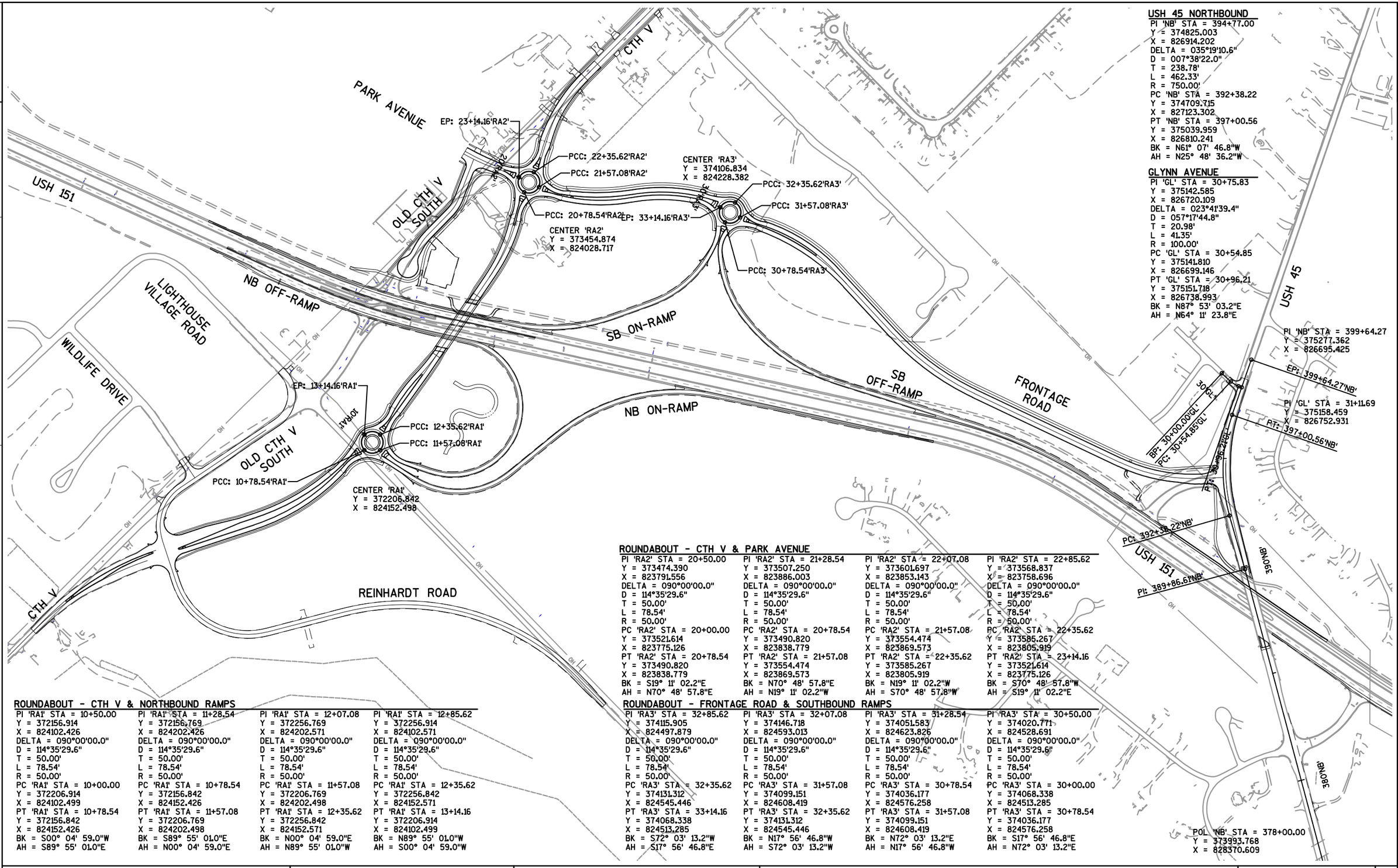
FRONTAGE ROAD WESTBOUND

PI 'WB' STA = 108+77.92	PI 'WB' STA = 110+86.12	PI 'WB' STA = 114+32.83
Y = 373576.067	Y = 373699.556	Y = 373983.692
X = 823924.572	X = 824096.535	X = 824300.261
DELTA = 038°04'12.3"	DELTA = 018°40'36.1"	DELTA = 026°50'36.8"
D = 041°49'18.3"	D = 005°43'46.5"	D = 007°23'00.5"
T = 47.27'	T = 164.44'	T = 185.18'
L = 91.03'	L = 325.97'	L = 363.66'
R = 137.00'	R = 1000.00'	R = 776.00'
PC 'WB' STA = 108+30.65	PC 'WB' STA = 109+21.68	PC 'WB' STA = 112+47.65
Y = 373578.036	Y = 373603.637	Y = 373833.198
X = 823877.346	X = 823962.964	X = 824192.356
PT 'WB' STA = 109+21.68	PT 'WB' STA = 112+47.65	PT 'WB' STA = 116+11.21
Y = 373603.637	Y = 373833.198	Y = 374069.245
X = 823962.964	X = 824192.356	X = 824464.495
BK = S87° 36' 45.4"E	BK = N54° 19' 02.2"E	BK = N35° 38' 26.1"E
AH = N54° 19' 02.2"E	AH = N35° 38' 26.1"E	AH = N62° 29' 02.9"E
SE = NC	SE = NC	SE = NC

FRONTAGE ROAD WESTBOUND

PI 'WB' STA = 118+12.06	PI 'WB' STA = 120+57.85
Y = 374119.566	Y = 374238.317
X = 824655.861	X = 824873.447
DELTA = 032°26'46.8"	DELTA = 030°44'14.9"
D = 042°45'29.0"	D = 007°32'20.1"
T = 38.99'	T = 208.89'
L = 75.88'	L = 407.72'
R = 134.00'	R = 760.00'
PC 'WB' STA = 117+73.08	PC 'WB' STA = 118+48.96
Y = 374122.164	Y = 374138.244
X = 824616.958	X = 824690.085
PT 'WB' STA = 118+48.96	PT 'WB' STA = 122+56.68
Y = 374138.244	Y = 374230.614
X = 824690.085	X = 825082.198
BK = S86° 10' 40.4"E	BK = N61° 22' 32.8"E
AH = N61° 22' 32.8"E	AH = S87° 53' 12.3"E
SE = NC	SE = NC

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	ALIGNMENT DETAILS - FRONTAGE ROAD WESTBOUND	SHEET 249	E



USH 45 NORTHBOUND

PI 'NB' STA = 394+77.00
Y = 374825.003
X = 826914.202
DELTA = 035°19'10.6"
D = 007°38'22.0"
T = 238.78'
L = 462.33'
R = 750.00'
PC 'NB' STA = 392+38.22
Y = 374709.715
X = 827123.302
PT 'NB' STA = 397+00.56
Y = 375039.959
X = 826810.241
BK = N61° 07' 46.8"W
AH = N25° 48' 36.2"W

GLYNN AVENUE

PI 'GL' STA = 30+75.83
Y = 375142.585
X = 826720.109
DELTA = 023°41'39.4"
D = 057°17'44.8"
T = 20.98'
L = 41.35'
R = 100.00'
PC 'GL' STA = 30+54.85
Y = 375141.810
X = 826699.146
PT 'GL' STA = 30+96.21
Y = 375151.718
X = 826738.993
BK = N87° 53' 03.2"E
AH = N64° 11' 23.8"E

PI 'NB' STA = 399+64.27
Y = 375277.362
X = 826695.425

PI 'GL' STA = 31+11.69
Y = 375158.459
X = 826752.931

POL 'NB' STA = 378+00.00
Y = 373993.768
X = 828370.609

ROUNDABOUT - CTH V & PARK AVENUE

PI 'RA2' STA = 20+50.00	PI 'RA2' STA = 21+28.54	PI 'RA2' STA = 22+07.08	PI 'RA2' STA = 22+85.62
Y = 373474.390	Y = 373507.250	Y = 373601.697	Y = 373568.837
X = 823791.556	X = 823886.003	X = 823853.143	X = 823758.696
DELTA = 090°00'00.0"	DELTA = 090°00'00.0"	DELTA = 090°00'00.0"	DELTA = 090°00'00.0"
D = 114°35'29.6"	D = 114°35'29.6"	D = 114°35'29.6"	D = 114°35'29.6"
T = 50.00'	T = 50.00'	T = 50.00'	T = 50.00'
L = 78.54'	L = 78.54'	L = 78.54'	L = 78.54'
R = 50.00'	R = 50.00'	R = 50.00'	R = 50.00'
PC 'RA2' STA = 20+00.00	PC 'RA2' STA = 20+78.54	PC 'RA2' STA = 21+57.08	PC 'RA2' STA = 22+35.62
Y = 373521.614	Y = 373490.820	Y = 373554.474	Y = 373585.267
X = 823775.126	X = 823838.779	X = 823869.573	X = 823805.919
PT 'RA2' STA = 20+78.54	PT 'RA2' STA = 21+57.08	PT 'RA2' STA = 22+35.62	PT 'RA2' STA = 23+14.16
Y = 373490.820	Y = 373554.474	Y = 373585.267	Y = 373521.614
X = 823838.779	X = 823869.573	X = 823805.919	X = 823775.126
BK = S19° 11' 02.2"E	BK = N70° 48' 57.8"E	BK = N19° 11' 02.2"W	BK = S70° 48' 57.8"W
AH = N70° 48' 57.8"E	AH = N19° 11' 02.2"W	AH = S70° 48' 57.8"W	AH = S19° 11' 02.2"E

ROUNDABOUT - CTH V & NORTHBOUND RAMPS

PI 'RA1' STA = 10+50.00	PI 'RA1' STA = 11+28.54	PI 'RA1' STA = 12+07.08	PI 'RA1' STA = 12+85.62
Y = 372156.914	Y = 372156.769	Y = 372256.769	Y = 372256.914
X = 824102.426	X = 824202.426	X = 824202.571	X = 824102.571
DELTA = 090°00'00.0"	DELTA = 090°00'00.0"	DELTA = 090°00'00.0"	DELTA = 090°00'00.0"
D = 114°35'29.6"	D = 114°35'29.6"	D = 114°35'29.6"	D = 114°35'29.6"
T = 50.00'	T = 50.00'	T = 50.00'	T = 50.00'
L = 78.54'	L = 78.54'	L = 78.54'	L = 78.54'
R = 50.00'	R = 50.00'	R = 50.00'	R = 50.00'
PC 'RA1' STA = 10+00.00	PC 'RA1' STA = 10+78.54	PC 'RA1' STA = 11+57.08	PC 'RA1' STA = 12+35.62
Y = 372206.914	Y = 372156.842	Y = 372206.769	Y = 372256.842
X = 824102.499	X = 824152.426	X = 824202.498	X = 824152.571
PT 'RA1' STA = 10+78.54	PT 'RA1' STA = 11+57.08	PT 'RA1' STA = 12+35.62	PT 'RA1' STA = 13+14.16
Y = 372156.842	Y = 372206.769	Y = 372256.842	Y = 372206.914
X = 824152.426	X = 824202.498	X = 824152.571	X = 824102.499
BK = S00° 04' 59.0"W	BK = S89° 55' 01.0"E	BK = N00° 04' 59.0"E	BK = N89° 55' 01.0"W
AH = S89° 55' 01.0"E	AH = N00° 04' 59.0"E	AH = N89° 55' 01.0"W	AH = S00° 04' 59.0"W

ROUNDABOUT - FRONTAGE ROAD & SOUTHBOUND RAMPS

PI 'RA3' STA = 32+85.62	PI 'RA3' STA = 32+07.08	PI 'RA3' STA = 31+28.54	PI 'RA3' STA = 30+50.00
Y = 374115.905	Y = 374146.718	Y = 374051.583	Y = 374020.771
X = 824497.879	X = 824593.013	X = 824623.826	X = 824528.691
DELTA = 090°00'00.0"	DELTA = 090°00'00.0"	DELTA = 090°00'00.0"	DELTA = 090°00'00.0"
D = 114°35'29.6"	D = 114°35'29.6"	D = 114°35'29.6"	D = 114°35'29.6"
T = 50.00'	T = 50.00'	T = 50.00'	T = 50.00'
L = 78.54'	L = 78.54'	L = 78.54'	L = 78.54'
R = 50.00'	R = 50.00'	R = 50.00'	R = 50.00'
PC 'RA3' STA = 32+35.62	PC 'RA3' STA = 31+57.08	PC 'RA3' STA = 30+78.54	PC 'RA3' STA = 30+00.00
Y = 374131.312	Y = 374099.151	Y = 374036.177	Y = 374068.338
X = 824545.446	X = 824608.419	X = 824576.258	X = 824513.285
PT 'RA3' STA = 33+14.16	PT 'RA3' STA = 32+35.62	PT 'RA3' STA = 31+57.08	PT 'RA3' STA = 30+78.54
Y = 374068.338	Y = 374131.312	Y = 374099.151	Y = 374036.177
X = 824513.285	X = 824545.446	X = 824608.419	X = 824576.258
BK = S72° 03' 13.2"W	BK = N17° 56' 46.8"W	BK = N72° 03' 13.2"E	BK = S17° 56' 46.8"E
AH = S17° 56' 46.8"E	AH = S72° 03' 13.2"W	AH = N17° 56' 46.8"W	AH = N72° 03' 13.2"E

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	ALIGNMENT DETAILS - ROUNDABOUTS	SHEET 250	E

DATE 12AUG15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1420-22-71 QUANTITY
0010	201.0105	Clearing	STA	19.000	19.000
0020	201.0120	Clearing	ID	17.000	17.000
0030	201.0205	Grubbing	STA	19.000	19.000
0040	201.0220	Grubbing	ID	17.000	17.000
0050	203.0100	Removing Small Pipe Culverts	EACH	12.000	12.000
0060	204.0100	Removing Pavement	SY	8,259.000	8,259.000
0070	204.0110	Removing Asphaltic Surface	SY	3,518.000	3,518.000
0080	204.0150	Removing Curb & Gutter	LF	6,226.000	6,226.000
0090	204.0165	Removing Guardrail	LF	345.000	345.000
0100	204.0170	Removing Fence	LF	6,320.000	6,320.000
0110	204.0185	Removing Masonry	CY	4.000	4.000
0120	204.0190	Removing Surface Drains	EACH	14.000	14.000
0130	204.0210	Removing Manholes	EACH	12.000	12.000
0140	204.0220	Removing Inlets	EACH	24.000	24.000
0150	204.0245	Removing Storm Sewer (size) 01. 10-Inch	LF	34.000	34.000
0160	204.0245	Removing Storm Sewer (size) 02. 12-Inch	LF	316.000	316.000
0170	204.0245	Removing Storm Sewer (size) 03. 15-Inch	LF	119.000	119.000
0180	204.0245	Removing Storm Sewer (size) 04. 18-Inch	LF	374.000	374.000
0190	204.0245	Removing Storm Sewer (size) 05. 24-Inch	LF	213.000	213.000
0200	204.0245	Removing Storm Sewer (size) 06. 30-Inch	LF	759.000	759.000
0210	204.0245	Removing Storm Sewer (size) 07. 36-Inch	LF	16.000	16.000
0220	204.0270	Abandoning Culvert Pipes	EACH	1.000	1.000
0230	204.9060.S	Removing (item description) 01. Removing Crash Cushions	EACH	1.000	1.000
0240	204.9090.S	Removing (item description) 01. State Owned Barrier	LF	350.000	350.000
0250	205.0100	Excavation Common	CY	74,270.000	74,270.000
0260	206.1000	Excavation for Structures Bridges (structure) 01. B-20-226	LS	1.000	1.000
0270	208.0100	Borrow	CY	23,045.000	23,045.000
0280	210.0100	Backfill Structure	CY	385.000	385.000
0290	213.0100	Finishing Roadway (project) 01. 1420-22-71	EACH	1.000	1.000
0300	214.0100	Obliterating Old Road	STA	27.000	27.000
0310	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,800.000	3,800.000
0320	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	68,840.000	68,840.000
0330	310.0115	Base Aggregate Open Graded	CY	1.000	1.000
0340	311.0110	Breaker Run	TON	10,700.000	10,700.000
0350	405.0100	Coloring Concrete Red	CY	319.000	319.000
0360	415.0080	Concrete Pavement 8-Inch	SY	74.000	74.000
0370	415.0085	Concrete Pavement 8 1/2-Inch	SY	9,598.000	9,598.000
0380	415.0100	Concrete Pavement 10-Inch	SY	5,472.000	5,472.000
0390	415.0410	Concrete Pavement Approach Slab	SY	403.000	403.000
0400	416.0160	Concrete Driveway 6-Inch	SY	664.000	664.000
0410	416.0170	Concrete Driveway 7-Inch	SY	202.000	202.000
0420	416.0512	Concrete Roundabout Truck Apron 12-Inch	SY	956.000	956.000
0430	416.0610	Drilled Tie Bars	EACH	1,945.000	1,945.000
0440	416.0620	Drilled Dowel Bars	EACH	24.000	24.000
0450	440.4410.S	Incentive IRI Ride	DOL	5,600.000	5,600.000
0460	455.0120	Asphaltic Material PG64-28	TON	768.000	768.000
0470	455.0605	Tack Coat	GAL	3,336.000	3,336.000
0480	460.1100	HMA Pavement Type E-0.3	TON	2,004.000	2,004.000
0490	460.1103	HMA Pavement Type E-3	TON	11,960.000	11,960.000
0500	460.2000	Incentive Density HMA Pavement	DOL	9,050.000	9,050.000

3

DATE 12AUG15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1420-22-71 QUANTITY
0510	460.4000	HMA Cold Weather Paving	TON	5,975.000	5,975.000
0520	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	12,188.000	12,188.000
0530	465.0105	Asphaltic Surface	TON	1,191.000	1,191.000
0540	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	30.000	30.000
0550	465.0315	Asphaltic Flumes	SY	77.000	77.000
0560	502.0100	Concrete Masonry Bridges	CY	1,026.000	1,026.000
0570	502.3200	Protective Surface Treatment	SY	1,880.000	1,880.000
0580	503.0155	Prestressed Girder Type I 54W-Inch	LF	1,672.000	1,672.000
0590	504.0900	Concrete Masonry Endwalls	CY	4.000	4.000
0600	505.0405	Bar Steel Reinforcement HS Bridges	LB	11,740.000	11,740.000
0610	505.0605	Bar Steel Reinforcement HS Coated Bridges	LB	168,360.000	168,360.000
0620	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	1,870.000	1,870.000
0630	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	28.000	28.000
0640	506.4000	Steel Diaphragms (structure) 01. B-20-226	EACH	24.000	24.000
0650	516.0500	Rubberized Membrane Waterproofing	SY	31.000	31.000
0660	517.1015.S	Concrete Staining Multi-Color (structure) 01. B-20-226	SF	2,814.000	2,814.000
0670	517.1050.S	Architectural Surface Treatment (structure) 01. B-20-226	SF	2,814.000	2,814.000
0680	520.4018	Culvert Pipe Temporary 18-Inch	LF	40.000	40.000
0690	520.8000	Concrete Collars for Pipe	EACH	9.000	9.000
0700	521.0124	Culvert Pipe Corrugated Steel 24-Inch	LF	88.000	88.000
0710	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	4.000	4.000
0720	521.1615	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 15-Inch 10 to 1	EACH	1.000	1.000
0730	522.0118	Culvert Pipe Reinforced Concrete Class III 18-Inch	LF	8.000	8.000
0740	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	196.000	196.000
0750	522.0136	Culvert Pipe Reinforced Concrete Class III 36-Inch	LF	12.000	12.000
0760	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	13.000	13.000
0770	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	10.000	10.000
0780	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	2.000	2.000
0790	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000
0800	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	6.000	6.000
0810	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	1.000	1.000
0820	550.0600	Pile Redriving	EACH	8.000	8.000
0830	550.2126	Piling CIP Concrete 12 3/4 X 0.375-Inch	LF	4,505.000	4,505.000
0840	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	660.000	660.000
0850	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	1,111.000	1,111.000
0860	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	19,062.000	19,062.000
0870	601.0452	Concrete Curb & Gutter Integral 30-Inch Type D	LF	432.000	432.000

3

DATE 12AUG15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1420-22-71 QUANTITY
0880	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	32.000	32.000
0890	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	709.000	709.000
0900	601.0580	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R	LF	906.000	906.000
0910	601.0600	Concrete Curb Pedestrian	LF	357.000	357.000
0920	602.0405	Concrete Sidewalk 4-Inch	SF	40,343.000	40,343.000
0930	602.0410	Concrete Sidewalk 5-Inch	SF	25,460.000	25,460.000
0940	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	800.000	800.000
0950	603.1156	Concrete Barrier Type S56	LF	825.000	825.000
0960	603.3213	Concrete Barrier Transition Type F32SF to S36	EACH	1.000	1.000
0970	603.3535	Concrete Barrier Transition Type S36 to S42	EACH	1.000	1.000
0980	603.3559	Concrete Barrier Transition Type S42 to S56	EACH	1.000	1.000
0990	603.8000	Concrete Barrier Temporary Precast Delivered	LF	900.000	900.000
1000	603.8125	Concrete Barrier Temporary Precast Installed	LF	900.000	900.000
1010	604.0500	Slope Paving Crushed Aggregate	SY	555.000	555.000
1020	606.0200	Riprap Medium	CY	110.000	110.000
1030	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	1,072.000	1,072.000
1040	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	845.000	845.000
1050	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	29.000	29.000
1060	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	34.000	34.000
1070	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	60.000	60.000
1080	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	503.000	503.000
1090	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	334.000	334.000
1100	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	31.000	31.000
1110	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	740.000	740.000
1120	611.0420	Reconstructing Manholes	EACH	4.000	4.000
1130	611.0430	Reconstructing Inlets	EACH	1.000	1.000
1140	611.0530	Manhole Covers Type J	EACH	9.000	9.000
1150	611.0612	Inlet Covers Type C	EACH	4.000	4.000
1160	611.0624	Inlet Covers Type H	EACH	50.000	50.000
1170	611.0627	Inlet Covers Type HM	EACH	2.000	2.000
1180	611.0636	Inlet Covers Type HM-S	EACH	2.000	2.000
1190	611.0639	Inlet Covers Type H-S	EACH	13.000	13.000
1200	611.0642	Inlet Covers Type MS	EACH	14.000	14.000
1210	611.0651	Inlet Covers Type S	EACH	3.000	3.000
1220	611.0652	Inlet Covers Type T	EACH	6.000	6.000
1230	611.2004	Manholes 4-FT Diameter	EACH	7.000	7.000
1240	611.2005	Manholes 5-FT Diameter	EACH	1.000	1.000
1250	611.2006	Manholes 6-FT Diameter	EACH	1.000	1.000

3

DATE 12AUG15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1420-22-71 QUANTITY
1260	611.3004	Inlets 4-FT Diameter	EACH	4.000	4.000
1270	611.3230	Inlets 2x3-FT	EACH	63.000	63.000
1280	611.3901	Inlets Median 1 Grate	EACH	10.000	10.000
1290	611.3904	Inlets Median 4 Grate	EACH	1.000	1.000
1300	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
1310	612.0106	Pipe Underdrain 6-Inch	LF	20.000	20.000
1320	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	195.000	195.000
1330	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	4.000	4.000
1340	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	2.000	2.000
1350	614.0230	Steel Thrie Beam	LF	155.000	155.000
1360	614.0905	Crash Cushions Temporary	EACH	2.000	2.000
1370	614.2300	MGS Guardrail 3	LF	225.000	225.000
1380	614.2500	MGS Thrie Beam Transition	LF	118.000	118.000
1390	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
1400	614.2620	MGS Guardrail Terminal Type 2	EACH	1.000	1.000
1410	616.0100	Fence Woven Wire (height) 01. 4-FT	LF	8,565.000	8,565.000
1420	616.0204	Fence Chain Link 4-FT	LF	530.000	530.000
1430	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1420-22-71	EACH	1.000	1.000
1440	619.1000	Mobilization	EACH	1.000	1.000
1450	620.0300	Concrete Median Sloped Nose	SF	668.000	668.000
1460	624.0100	Water	MGAL	435.000	435.000
1470	625.0500	Salvaged Topsoil	SY	202,500.000	202,500.000
1480	627.0200	Mulching	SY	113,700.000	113,700.000
1490	628.1104	Erosion Bales	EACH	100.000	100.000
1500	628.1504	Silt Fence	LF	15,760.000	15,760.000
1510	628.1520	Silt Fence Maintenance	LF	15,760.000	15,760.000
1520	628.1905	Mobilizations Erosion Control	EACH	14.000	14.000
1530	628.1910	Mobilizations Emergency Erosion Control	EACH	8.000	8.000
1540	628.2002	Erosion Mat Class I Type A	SY	31,150.000	31,150.000
1550	628.2004	Erosion Mat Class I Type B	SY	29,950.000	29,950.000
1560	628.2006	Erosion Mat Urban Class I Type A	SY	27,800.000	27,800.000
1570	628.7005	Inlet Protection Type A	EACH	100.000	100.000
1580	628.7010	Inlet Protection Type B	EACH	20.000	20.000
1590	628.7015	Inlet Protection Type C	EACH	80.000	80.000
1600	628.7020	Inlet Protection Type D	EACH	20.000	20.000
1610	628.7504	Temporary Ditch Checks	LF	1,000.000	1,000.000
1620	628.7555	Culvert Pipe Checks	EACH	130.000	130.000
1630	628.7560	Tracking Pads	EACH	2.000	2.000
1640	628.7570	Rock Bags	EACH	100.000	100.000
1650	629.0210	Fertilizer Type B	CWT	128.000	128.000
1660	630.0120	Seeding Mixture No. 20	LB	395.000	395.000
1670	630.0130	Seeding Mixture No. 30	LB	3,535.000	3,535.000
1680	630.0140	Seeding Mixture No. 40	LB	120.000	120.000
1690	630.0160	Seeding Mixture No. 60	LB	100.000	100.000
1700	630.0200	Seeding Temporary	LB	2,725.000	2,725.000
1710	630.0300	Seeding Borrow Pit	LB	100.000	100.000
1720	632.0101	Trees (species) (size) (root) 01. Coffeetree, 'Espresso', B&B, 2.5" Cal.	EACH	3.000	3.000
1730	632.0101	Trees (species) (size) (root) 02. Elm, 'Frontier', B&B, 2.5" Cal.	EACH	6.000	6.000
1740	632.0101	Trees (species) (size) (root) 03. Elm, 'New Horizon', B&B, 2.5" Cal.	EACH	23.000	23.000

3

DATE 12AUG15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1420-22-71 QUANTITY
1750	632.0101	Trees (species) (size) (root) 04. Elm, 'Princeton', B&B, 2.5" Cal.	EACH	8.000	8.000
1760	632.0101	Trees (species) (size) (root) 05. Hackberry, 'Prairie Pride', B&B, 2.5" Cal.	EACH	15.000	15.000
1770	632.0101	Trees (species) (size) (root) 06. Honeylocust, 'Skyline', B&B, 2.5" Cal.	EACH	4.000	4.000
1780	632.0101	Trees (species) (size) (root) 07. Linden, 'Redmond', B&B, 2.5" Cal.	EACH	3.000	3.000
1790	632.0101	Trees (species) (size) (root) 08. Maple, Freeman 'Celebration', B&B, 2.5" Cal.	EACH	16.000	16.000
1800	632.0101	Trees (species) (size) (root) 09. Maple, Freeman 'Marmo', B&B, 2.5" Cal.	EACH	17.000	17.000
1810	632.0101	Trees (species) (size) (root) 10. Maple, Sugar 'Legacy', B&B, 2.5" Cal	EACH	3.000	3.000
1820	632.0101	Trees (species) (size) (root) 11. Oak, Bur, B&B, 2.5" Cal.	EACH	3.000	3.000
1830	632.0101	Trees (species) (size) (root) 12. Oak, English 'Skymaster', B&B, 2.5" Cal.	EACH	14.000	14.000
1840	632.0101	Trees (species) (size) (root) 13. Oak, Swamp White, B&B, 2.5" Cal.	EACH	5.000	5.000
1850	632.0101	Trees (species) (size) (root) 14. Crabapple, 'Firebird', B&B, 2" Cal.	EACH	15.000	15.000
1860	632.0101	Trees (species) (size) (root) 15. Crabapple, 'Prairifire', B&B, 2" Cal	EACH	5.000	5.000
1870	632.0101	Trees (species) (size) (root) 16. Crabapplet, 'Snowdrift', B&B, 2" Cal	EACH	3.000	3.000
1880	632.0101	Trees (species) (size) (root) 17. Hawthorn, Thornless Cockspur (Shrub Form Tree), B&B, 8' HT	EACH	9.000	9.000
1890	632.0101	Trees (species) (size) (root) 18. Hawthorn, 'Winter King', B&B, 2" Cal	EACH	4.000	4.000
1900	632.0101	Trees (species) (size) (root) 19. Ironwood, B&B, 2" Cal.	EACH	3.000	3.000
1910	632.0101	Trees (species) (size) (root) 20. Pear, 'Korean Sun', B&B, 2" Cal.	EACH	3.000	3.000
1920	632.0201	Shrubs (species) (size) (root) 01. Juniper, Pfitzer 'Kallay's Compact', CONT, 24" Sp./#3	EACH	93.000	93.000
1930	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	26.000	26.000
1940	633.0100	Delineator Posts Steel	EACH	131.000	131.000
1950	633.0500	Delineator Reflectors	EACH	139.000	139.000
1960	633.1000	Delineator Brackets	EACH	8.000	8.000
1970	633.5200	Markers Culvert End	EACH	37.000	37.000
1980	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	34.000	34.000
1990	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	55.000	55.000
2000	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	67.000	67.000
2010	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	20.000	20.000
2020	635.0200	Sign Supports Structural Steel HS	LB	1,348.000	1,348.000
2030	636.0100	Sign Supports Concrete Masonry	CY	18.400	18.400
2040	636.0500	Sign Supports Steel Reinforcement	LB	136.000	136.000
2050	636.1000	Sign Supports Steel Reinforcement HS	LB	1,960.000	1,960.000
2060	637.1220	Signs Type I Reflective SH	SF	370.000	370.000
2070	637.2210	Signs Type II Reflective H	SF	1,488.970	1,488.970
2080	637.2215	Signs Type II Reflective H Folding	SF	20.000	20.000
2090	637.2220	Signs Type II Reflective SH	SF	6.750	6.750

3

DATE 12AUG15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1420-22-71 QUANTITY
2100	637.2230	Signs Type II Reflective F	SF	252.750	252.750
2110	638.2602	Removing Signs Type II	EACH	103.000	103.000
2120	638.3000	Removing Small Sign Supports	EACH	109.000	109.000
2130	641.1200	Sign Bridge Cantilevered (structure) 01. S-20-41	LS	1.000	1.000
2140	641.1200	Sign Bridge Cantilevered (structure) 02. S-20-42	LS	1.000	1.000
2150	642.5201	Field Office Type C	EACH	1.000	1.000
2160	643.0200	Traffic Control Surveillance and Maintenance (project) 01. 1420-22-71	DAY	260.000	260.000
2170	643.0300	Traffic Control Drums	DAY	41,111.000	41,111.000
2180	643.0410	Traffic Control Barricades Type II	DAY	1,020.000	1,020.000
2190	643.0420	Traffic Control Barricades Type III	DAY	5,932.000	5,932.000
2200	643.0705	Traffic Control Warning Lights Type A	DAY	7,111.000	7,111.000
2210	643.0715	Traffic Control Warning Lights Type C	DAY	9,467.000	9,467.000
2220	643.0800	Traffic Control Arrow Boards	DAY	512.000	512.000
2230	643.0900	Traffic Control Signs	DAY	16,011.000	16,011.000
2240	643.0920	Traffic Control Covering Signs Type II	EACH	2.000	2.000
2250	643.1000	Traffic Control Signs Fixed Message	SF	60.000	60.000
2260	643.1050	Traffic Control Signs PCMS	DAY	70.000	70.000
2270	643.2000	Traffic Control Detour (project) 01. 1420-22-71	EACH	1.000	1.000
2280	643.3000	Traffic Control Detour Signs	DAY	4,770.000	4,770.000
2290	645.0111	Geotextile Fabric Type DF Schedule A	SY	11.000	11.000
2300	645.0120	Geotextile Fabric Type HR	SY	370.000	370.000
2310	646.0106	Pavement Marking Epoxy 4-Inch	LF	44,775.000	44,775.000
2320	646.0126	Pavement Marking Epoxy 8-Inch	LF	730.000	730.000
2330	646.0600	Removing Pavement Markings	LF	2,981.000	2,981.000
2340	646.0841.S	Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch	LF	3,530.000	3,530.000
2350	646.0843.S	Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch	LF	2,957.000	2,957.000
2360	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	8.000	8.000
2370	647.0206	Pavement Marking Arrows Bike Lane Epoxy	EACH	13.000	13.000
2380	647.0256	Pavement Marking Symbols Epoxy	EACH	3.000	3.000
2390	647.0306	Pavement Marking Symbols Bike Lane Epoxy	EACH	13.000	13.000
2400	647.0356	Pavement Marking Words Epoxy	EACH	2.000	2.000
2410	647.0358	Pavement Marking Words Preformed Thermoplastic	EACH	10.000	10.000
2420	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	26.000	26.000
2430	647.0606	Pavement Marking Island Nose Epoxy	EACH	4.000	4.000
2440	647.0656	Pavement Marking Parking Stall Epoxy	LF	1,192.000	1,192.000
2450	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	409.000	409.000
2460	647.0746	Pavement Marking Diagonal Epoxy 24-Inch	LF	163.000	163.000
2470	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	225.000	225.000
2480	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	33,900.000	33,900.000
2490	649.0600	Temporary Pavement Marking Removable Tape 6-Inch	LF	738.000	738.000
2500	649.0801	Temporary Pavement Marking Removable Tape 8-Inch	LF	4,650.000	4,650.000
2510	650.4000	Construction Staking Storm Sewer	EACH	125.000	125.000
2520	650.4500	Construction Staking Subgrade	LF	28,566.000	28,566.000
2530	650.5000	Construction Staking Base	LF	17,744.000	17,744.000

3

DATE 12AUG15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1420-22-71 QUANTITY
2540	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	21,695.000	21,695.000
2550	650.6000	Construction Staking Pipe Culverts	EACH	8.000	8.000
2560	650.6500	Construction Staking Structure Layout (structure) 01. S-20-41	LS	1.000	1.000
2570	650.6500	Construction Staking Structure Layout (structure) 02. S-20-42	LS	1.000	1.000
2580	650.6500	Construction Staking Structure Layout (structure) 03. B-20-226	LS	1.000	1.000
2590	650.7000	Construction Staking Concrete Pavement	LF	10,650.000	10,650.000
2600	650.7500	Construction Staking Concrete Barrier	LF	875.000	875.000
2610	650.8500	Construction Staking Electrical Installations (project) 01. 1420-22-71	LS	1.000	1.000
2620	650.9910	Construction Staking Supplemental Control (project) 01. 1420-22-71	LS	1.000	1.000
2630	650.9920	Construction Staking Slope Stakes	LF	28,566.000	28,566.000
2640	652.0125	Conduit Rigid Metallic 2-Inch	LF	144.000	144.000
2650	652.0135	Conduit Rigid Metallic 3-Inch	LF	112.000	112.000
2660	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	6,637.000	6,637.000
2670	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	739.000	739.000
2680	653.0140	Pull Boxes Steel 24x42-Inch	EACH	34.000	34.000
2690	653.0222	Junction Boxes 18x12x6-Inch	EACH	5.000	5.000
2700	654.0105	Concrete Bases Type 5	EACH	32.000	32.000
2710	654.0224	Concrete Control Cabinet Bases Type L24	EACH	2.000	2.000
2720	655.0610	Electrical Wire Lighting 12 AWG	LF	4,644.000	4,644.000
2730	655.0615	Electrical Wire Lighting 10 AWG	LF	8,515.000	8,515.000
2740	655.0625	Electrical Wire Lighting 6 AWG	LF	12,373.000	12,373.000
2750	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. USH 151 SB & CTH V	LS	1.000	1.000
2760	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. USH 151 NB and CTH V	LS	1.000	1.000
2770	657.6005.S	Anchor Assemblies Light Poles on Structures	EACH	1.000	1.000
2780	659.2124	Lighting Control Cabinets 120/240 24-Inch	EACH	2.000	2.000
2790	690.0150	Sawing Asphalt	LF	900.000	900.000
2800	690.0250	Sawing Concrete	LF	3,000.000	3,000.000
2810	715.0415	Incentive Strength Concrete Pavement	DOL	1,390.000	1,390.000
2820	715.0502	Incentive Strength Concrete Structures	DOL	6,160.000	6,160.000
2830	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,400.000	2,400.000
2840	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,100.000	2,100.000
2850	SPV.0035	Special 02. Planting Mixture	CY	841.000	841.000
2860	SPV.0035	Special 03. Topsoil Special	CY	321.000	321.000
2870	SPV.0035	Special 04. Coloring Concrete Brown	CY	167.000	167.000
2880	SPV.0060	Special 05. Inlets 2x2.5-FT Special	EACH	9.000	9.000
2890	SPV.0060	Special 12. Temporary Slope Drains	EACH	2.000	2.000
2900	SPV.0060	Special 20. Adjusting Water Service Curb Stop	EACH	4.000	4.000
2910	SPV.0060	Special 21. Adjusting Water Valve Box	EACH	7.000	7.000
2920	SPV.0060	Special 23. Adjusting Sanitary Manhole Cover	EACH	4.000	4.000

3

DATE 12AUG15 E S T I M A T E O F Q U A N T I T I E S

LINE 1420-22-71

NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
2930	SPV.0060	Special 24. Reconstruct Sanitary Sewer Manhole	EACH	2.000	2.000
2940	SPV.0060	Special 31. Temporary Curb Ramp	EACH	2.000	2.000
2950	SPV.0060	Special 40. Lighting Meter/Load Center	EACH	1.000	1.000
2960	SPV.0060	Special 41. Municipal Light Poles	EACH	20.000	20.000
2970	SPV.0060	Special 42. Municipal Mast Arms 6-FT	EACH	12.000	12.000
2980	SPV.0060	Special 43. Municipal Mast Arms 12-FT	EACH	8.000	8.000
2990	SPV.0060	Special 44. Municipal Transformer Bases	EACH	20.000	20.000
3000	SPV.0060	Special 45. Municipal LED Luminaires Type 1	EACH	9.000	9.000
3010	SPV.0060	Special 46. Municipal LED Luminaires Type 2	EACH	1.000	1.000
3020	SPV.0060	Special 47. Municipal LED Luminaires Type 3	EACH	10.000	10.000
3030	SPV.0060	Special 48. Parking Lot Concrete Bases	EACH	2.000	2.000
3040	SPV.0060	Special 51. Poles Type 5-Aluminum Black	EACH	14.000	14.000
3050	SPV.0060	Special 52. Transformer Bases Breakaway, 11 1/2-Inch Clamp 12-FT Black	EACH	14.000	14.000
3060	SPV.0060	Special 53. Luminaire Arms Truss Type 4 4 1/2-Inch Clamp 12-FT Black	EACH	14.000	14.000
3070	SPV.0060	Special 55. Luminaires Utility LED Category C Black	EACH	14.000	14.000
3080	SPV.0060	Special 60. Coneflower, 'White Swan' CG, 1 Gal.	EACH	45.000	45.000
3090	SPV.0060	Special 61. Little Bluestem, 'Blue Heaven' CG, 1 Gal.	EACH	552.000	552.000
3100	SPV.0060	Special 62. Liatris, 'Kobold' CG, 1 Gal.	EACH	81.000	81.000
3110	SPV.0060	Special 63. Prairie Dropseed 'Tara' CG, 1 Gal.	EACH	162.000	162.000
3120	SPV.0075	Special 01. Street Sweeping	HRS	96.000	96.000
3130	SPV.0090	Special 05. Pavement Marking Grooved Preformed Thermoplastic 18-Inch	LF	311.000	311.000
3140	SPV.0090	Special 06. Pavement Marking Grooved Preformed Thermoplastic Crosswalk 6-Inch	LF	675.000	675.000
3150	SPV.0090	Special 07. Railing Tubular Screening Galvanized B-20-226	LF	561.000	561.000
3160	SPV.0090	Special 14. Maintaining Pedestrian Safety Fence	LF	600.000	600.000
3170	SPV.0120	Special 01. Water for Seeded Areas	MGAL	3,418.000	3,418.000
3180	SPV.0165	Special 03. Concrete Sidewalk 8-Inch	SF	517.000	517.000
3190	SPV.0180	Special 01. Shredded Hardwood Bark Mulch	SY	1,342.000	1,342.000

3

CLEARING AND GRUBBING

STATION	TO	STATION	LOCATION	201.0105 CLEARING STA	201.0120 CLEARING ID	201.0205 GRUBBING STA	201.0220 GRUBBING ID
PROJECT 1420-22-71 CATEGORY 0010							
267+00	-	268+00	NB OFF RAMP	1	---	1	---
290+00	-	292+00	SB OFF RAMP	2	---	2	---
296+00	-	299+00	SB OFF RAMP	2	8	2	8
278+00	-	280+00	SB ON RAMP	---	9	---	9
141+00	-	149+00	CTH V	8	---	8	---
12+00	-	14+00	OLD CTH V NORTH	2	---	2	---
106+00	-	107+00	PARK AVE	1	---	1	---
108+00	-	109+00	FRONTAGE RD	1	---	1	---
141+00	-	142+00	FRONTAGE RD	1	---	1	---
61+00	-	62+00	PARK & RIDE	1	---	1	---
			PROJECT TOTALS	19	17	19	17

REMOVING SMALL PIPE CULVERTS & SURFACE DRAINS

STATION	DIR.	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0190 REMOVING SURFACE DRAINS EACH
PROJECT 1420-22-71 CATEGORY 0010				
1267+14	LT	USH 151	---	1
1271+10	RT	USH 151	---	1
1271+75	LT	USH 151	---	1
1275+63	LT	USH 151	---	1
1307+47	LT	USH 151	---	1
1318+40	RT	USH 151	---	1
282+11	LT	USH 151 SB ON RAMP	1	---
306+44	LT	USH 151 SB OFF RAMP	---	1
306+73	LT	USH 151 SB OFF RAMP	1	---
88+64	LT	OLD CTH V SOUTH	1	---
89+20	LT	OLD CTH V SOUTH	1	---
89+25	LT	OLD CTH V SOUTH	---	1
90+20	LT	OLD CTH V SOUTH	---	1
142+32	RT	FRONTAGE RD	---	1
142+47	RT	FRONTAGE RD	1	---
380+66	RT	USH 45	---	1
381+75	RT	USH 45	---	1
398+34	LT	USH 45	1	---
		OLD REINHARDT RD	---	2
		OLD TRAIL	6	---
		PROJECT TOTALS	12	14

REMOVING PAVEMENT

STATION	TO	STATION	LOCATION	204.0100 REMOVING PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY
PROJECT 1420-22-71 CATEGORY 0010					
1267+82	-	1273+20	USH 151 MEDIAN	1,168	---
1314+53	-	1320+79	USH 151 NB OUTSIDE	1,230	---
269+36	-	272+21	USH 151 NB OFF-RAMP	787	---
305+91	-	307+66	USH 151 SB OFF-RAMP	663	---
316+42	-	316+50	USH 151 SB OFF-RAMP	35	---
269+74	-	276+51	USH 151 SB ON-RAMP	1,565	---
143+70	-	146+53	CTH V	427	368
11+97	-	15+78	OLD CTH V NORTH	125	---
140+75	-	142+29	FRONTAGE RD	691	---
1277+75	-	1280+75	OLD PRAIRIE TRAIL	---	337
1288+00	-	1306+25	OLD PRAIRIE TRAIL	---	2,134
50+50	-	53+13	TEMP TRAIL WEST	---	205
9+48	-	11+06	TEMP TRAIL EAST	---	150
5+11	-	5+83	TEMP TRAIL NORTH	---	66
8+66	-	11+57	TEMP TRAIL NORTH	---	258
OBLITERATING OLD ROAD			USH 45 WEST CONNECTOR	571	---
OBLITERATING OLD ROAD			USH 45 EAST CONNECTOR	997	---
			PROJECT TOTALS	8,259	3,518

REMOVING CURB & GUTTER

STATION	TO	STATION	DIRECTION	LOCATION	204.0150 REMOVING CURB & GUTTER LF
PROJECT 1420-22-71 CATEGORY 0010					
1264+06	-	1276+96	LT & RT	USH 151 MEDIAN	1,566
269+91	-	270+58	RT	USH 151 NB OFF-RAMP	153
138+50	-	144+03	LT & RT	CTH V	1,007
144+65	-	144+85	RT	CTH V	20
105+51	-	106+52	LT & RT	PARK AVE	269
10+00	-	15+17	LT & RT	OLD CTH V NORTH	1,056
142+29	-	142+84	LT & RT	FRONTAGE RD	149
89+49	-	90+32	LT	OLD CTH V SOUTH	121
389+62	-	397+30	RT	USH 45	751
OBLITERATING OLD ROAD			---	OLD CTH V SOUTH	813
OBLITERATING OLD ROAD			---	OLD CTH V NORTH	154
OBLITERATING OLD ROAD			---	USH 45 EAST CONNECTOR	167
				PROJECT TOTAL	6,226

REMOVING GUARDRAIL

STATION	TO	STATION	DIRECTION	LOCATION	204.0165 REMOVING GUARDRAIL LF
PROJECT 1420-22-71 CATEGORY 0010					
1319+94	-	1320+94	RT	USH 151 NB	100
389+62	-	390+62	RT	USH 45	100
390+30	-	391+75	LT	USH 45	145
				PROJECT TOTAL	345

REMOVING FENCE

STATION	TO	STATION	DIRECTION	LOCATION	204.0170 REMOVING FENCE LF
PROJECT 1420-22-71 CATEGORY 0010					
1253+80	-	1270+14	LT	USH 151	1,620
1270+78	-	1283+80	RT	USH 151	1,330
1276+09	-	1307+27	LT	USH 151	3,370
				PROJECT TOTAL	6,320

REMOVING MASONRY

STATION	DIST.	DIR.	LOCATION	204.0185 REMOVING MASONRY CY
PROJECT 1420-22-71 CATEGORY 0010				
20+93	26	LT	PRAIRIE TRAIL EAST	4
			PROJECT TOTAL	4

REMOVING STORM SEWER STRUCTURES

STATION	DIST.	DIR.	LOCATION	204.0210 REMOVING MANHOLES EACH	204.0220 REMOVING INLETS EACH
PROJECT 1420-22-71 CATEGORY 0010					
1268+63	14'	LT	USH 151	---	1
1269+38	1'	LT	USH 151	1	---
1269+86	0	LT	USH 151	1	---
1269+86	7'	LT	USH 151	---	1
1270+06	18'	RT	USH 151	---	1
1270+06	7'	RT	USH 151	---	1
1271+81	17'	RT	USH 151	---	1
1273+06	7'	RT	USH 151	---	1
1273+06	7'	LT	USH 151	---	1
1273+06	18'	LT	USH 151	---	1
1275+98	4'	RT	USH 151	---	1
126+55	69	LT	FRONTAGE RD	1	---
391+84	27'	RT	USH 45	1	---
394+11	30'	RT	USH 45	1	---
394+21	30'	RT	USH 45	1	---
395+63	26'	RT	USH 45	1	---
397+39	27'	RT	USH 45	---	1
			OLD CTH V SOUTH	3	4
			OLD CTH V NORTH	2	10
			PROJECT TOTALS	12	24

REMOVING STORM SEWER

STATION TO STATION	LOCATION	204.0245.01 10-INCH LF	204.0245.02 12-INCH LF	204.0245.03 15-INCH LF	204.0245.04 18-INCH LF	204.0245.05 24-INCH LF	204.0245.06 30-INCH LF	204.0245.07 36-INCH LF	204.0270 ABANDONING CULVERT PIPES EACH
PROJECT 1420-22-71 CATEGORY 0010									
1264+13 - 1316+07	USH 151	---	152	22	70	76	---	16	1
126+55 -	FRONTAGE RD	34	---	---	---	---	---	---	---
-	OLD CTH V SOUTH	---	59	---	75	---	409	---	---
-	OLD CTH V NORTH	---	105	97	55	---	81	---	---
391+62 - 397+42	USH 45	---	---	---	174	137	269	---	---
	PROJECT TOTALS	34	316	119	374	213	759	16	1

REMOVING STATE OWNED BARRIER

STAGE		204.9090.S.01 LF
PROJECT 1420-22-71 CATEGORY 0010		
STA 1273+75-STA 1277+25	SB USH 151	350
PROJECT TOTALS		350

OBLITERATING OLD ROAD

STATION	TO	STATION	DIR	REFERENCE	214.0100 STA	REMARKS
PROJECT 1420-22-71 CATEGORY 0010						
123+36	-	128+15	LT	CTH V NB	5	OLD CTH V
13+54	-	15+26	LT	OLD V NORTH	2	OLD CTH V/DWY
139+56	-	139+91	LT	CTH V NB	1	OLD CTH V
140+85	-	141+73	LT	CTH V NB	1	OLD CTH V
1275+75	-	1277+96	LT	USH 151	3	OLD PRAIRIE TRAIL
1280+72	-	1288+23	LT	USH 151	8	OLD PRAIRIE TRAIL
1307+26	-	1309+72	LT	USH 151	3	OLD PRAIRIE TRAIL
139+44	-	141+42	RT	FRONTAGE RD EB	2	TRAIL/USH 45 WEST CONNECTOR
1318+18	-	1319+28	RT	USH 151	2	USH 45 EAST CONNECTOR
				PROJECT TOTAL	27	

3

3

EARTHWORK SUMMARY

Location	From/To Station	Additional Location	Common Excavation (1) (item # 205.0100) Cut (2)	EBS Excavation (3)	Salvaged/Unusable Pavement Material (4)	Drainage Blanket (16) (ITEM SPV.0035.01)	Available Material (5)	Unexpanded Fill	Expanded Fill (13) Factor 1.10	Mass Ordinate +/- (14)	Waste	Borrow (ITEM #208.0100)	Comment:
Stage 3													
S3_a_Frontage_EB.xml	108+50/116+25		172	0	0	0	172	15,226	16,749	-16,577			
S3_a_Frontage_WB.xml	108+50/109+00		0	0	0	0	0	697	767	-767			
S3_b_Frontage_EB.xml	118+00/140+00		13,317	1,500	0	0	13,317	7,286	8,014	5,303			
S3_b_Frontage_WB.xml	115+75/116+25		0	0	0	0	0	634	697	-697			
S3_c_Frontage_WB.xml	118+00/118+50		0	0	0	0	0	494	543	-543			
S3_Frontage_SB_RA.xml	30+40/33+14		68	0	0	0	68	6,623	7,286	-7,217			
S3_Frontage_V_RA.xml	20+38/23+14		60	0	0	0	60	6,363	7,000	-6,940			
S3_SB_OffRamp.xml	281+75+293+00		14,479	0	0	0	14,479	113	124	14,355			
S3_SB_OnRamp.xml	278+00/287+75		8,651	0	0	0	8,651	417	459	8,192			
S3_Temp_SW.xml	15+33/16+71		171	0	0	0	171	1	1	170			
S3_CTH_V_NB.xml	136+75/137+75		46	0	0	0	46	1,559	1,715	-1,669			
S3_CTH_V_SB.xml	236+75/237+75		6	0	0	0	6	1,173	1,290	-1,284			
CTH V - North of USH 151	---	Winter Settlement	0	0	0	0	0	348	383	-383			
CTH V & NB Ramps-South of USH 151	---	Winter Settlement	0	0	0	0	0	2,558	2,814	-2,814			
Stage 3 Subtotal			36,970	1,500	0	0	36,970	43,491	47,840	-10,870	0	10,870	
Stage 4													
S4_CTH_V_NB.xml	139+50/149+07		1,252	0	0	0	1,252	1,622	1,784	-532			
S4_CTH_V_SB.xml	239+50/240+00		42	0	0	0	42	283	311	-269			
S4_NB_OffRamp.xml	272+00/277+00		289	0	0	0	289	8,941	9,835	-9,546			
S4_NB_OnRamp.xml	283+00/296+37		743	0	0	0	743	1,931	2,124	-1,381			
S4_SB_OffRamp.xml	293+00/303+00		7,046	0	0	0	7,046	852	937	6,109			
S4_SB_OnRamp.xml	273+00/278+00		936	0	0	0	936	6,811	7,492	-6,556			
Stage 4 Subtotal			10,308	0	0	0	10,308	20,439	22,483	-12,175	0	12,175	
Stage 5													
S5_NB_OffRamp.xml	262+58/272+00		4,417	0	237	0	4,180	898	987	3,193			
S5_Old_V_North.xml	10+00/15+00		1,363	0	0	0	1,363	4,514	4,965	-3,602			
S5_Old_V_South.xml	88+38/94+00		1,944	0	0	0	1,944	350	385	1,559			
S5_Park_EB.xml	104+50/106+75		495	0	0	0	495	982	1,081	-585			
S5_Park_WB.xml	106+25/106+75		20	0	0	0	20	309	340	-320			
Stage 5 Subtotal			8,239	0	237	0	8,002	7,052	7,758	244	244	0	
Stage 6													
S6_Frontage_EB.xml	140+00/142+44		127	188	188	0	127	3,813	4,195	-4,068			
S6_SB_OffRamp.xml	303+00/316+50		2,425	0	167	0	2,258	270	297	1,961			
S6_SB_OnRamp.xml	262+20/273+00		2,774	0	402	0	2,372	932	1,026	1,346			
S6_USH_151at45.xml	1314+27/1320+93		1,921	0	379	0	1,541	1	1	1,540			
S6_USH_45_North.xml	390+00/398+72		6,487	0	0	0	6,487	3,852	4,237	2,250			
S6_USH_45_South.xml	378+06/383+09		428	0	0	0	428	0	0	427			
Stage 6 Subtotal			14,162	188	1,137	0	13,213	8,869	9,756	3,457	3,457	0	
Stage 7													
S7_USH_151Median.xml	1263+25/1279+50		2,904	0	799	0	2,104	84	92	2,012			
Stage 7 Subtotal			2,904	0	799	0	2,104	84	92	2,012	2,012	0	
Grand Total			72,583	1,688	2,173	0	70,597	79,936	87,929	-17,332	5,713	23,045	
Total Common Exc			74,270										

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 Breaker Run.
4) Salvaged/Unusable Pavement Material included in propsed cut volumes. If existing pavement is below/outside proposed roadway excavation, volumes shown as EBS Excavation.
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
13) Expanded Fill. Factor = 1.10
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 Stage. Plus quantity indicates an excess of material within the Stage. Minus indicates a shortage of material within the Stage.

BASE AGGREGATE DENSE

STATION	TO	STATION	LOCATION	DIRECTION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	311.0110 BREAKER RUN TON	624.0100 WATER MGAL
PROJECT 1420-22-71 CATEGORY 0010								
262+58	-	275+41	USH 151 NB OFF-RAMP	RT	157	2,502	---	16
285+81	-	296+37	USH 151 NB ON-RAMP	RT	109	2,164	---	14
299+66	-	307+75	USH 151 SB OFF-RAMP	LT	84	1,797	---	11
262+00	-	277+02	USH 151 SB ON-RAMP	LT	156	3,099	---	20
275+41	-	287+43	USH 151 NB OFF-RAMP	LT & RT	164	2,282	---	15
269+57	-	285+81	USH 151 NB ON-RAMP	LT & RT	238	3,228	---	21
281+66	-	299+66	USH 151 SB OFF-RAMP	LT & RT	275	3,628	---	23
277+02	-	287+97	USH 151 SB ON-RAMP	LT & RT	154	2,133	---	14
1268+74	-	1277+79	USH 151 INSIDE SHLDR	LT	94	334	---	3
1263+25	-	1272+11	USH 151 INSIDE SHLDR	RT	92	328	---	3
1307+75	-	1316+50	USH 151 OUTSIDE SHLDR	LT	---	700	1,125	4
1314+27	-	1320+79	USH 151 OUTSIDE SHLDR	RT	74	1,200	---	8
88+38	-	91+50	OLD CTH V SOUTH	LT & RT	27	763	---	5
115+00	-	122+80	CTH V	LT & RT	---	4,358	---	26
122+80	-	126+56	CTH V	LT & RT	---	1,396	---	8
126+56	-	129+94	CTH V	LT & RT	---	1,622	---	10
132+60	-	136+75	CTH V	LT & RT	---	1,900	---	11
136+75	-	140+57	CTH V	LT & RT	---	1,865	---	11
140+57	-	144+02	CTH V	LT & RT	---	1,684	---	10
10+00	-	15+50	OLD CTH V NORTH	LT & RT	---	1,730	---	10
60+00	-	62+06	PARK AND RIDE LOT	LT & RT	43	1,458	---	9
104+47	-	106+00	PARK AVE	LT & RT	---	528	---	3
109+36	-	115+18	FRONTAGE ROAD	LT & RT	---	3,040	---	18
115+18	-	118+78	FRONTAGE ROAD	LT & RT	---	1,229	---	7
118+78	-	142+82	FRONTAGE ROAD	LT & RT	---	10,842	---	65
378+06	-	383+09	USH 45	RT	86	368	209	3
386+14	-	386+79	USH 45	LT & RT	3	126	54	1
389+36	-	398+74	USH 45	LT & RT	160	5,253	5,190	32
70+30	-	79+73	PRAIRIE TRAIL WEST	LT	50	835	---	5
109+46	-	142+48	PRAIRIE TRAIL	LT	327	3,363	---	22
19+92	-	23+85	PRAIRIE TRAIL @ USH 45	LT	21	363	---	2
9+48	-	11+01	TEMPORARY TRAIL EAST	LT	---	133	---	1
5+11	-	11+57	TEMPORARY TRAIL NORTH	LT	---	289	---	2
---	-	---	COLORED SIDEWALK	---	---	537	---	3
---	-	---	SIDEWALK LEVELING COURSE	---	1194	---	---	7
---	-	---	CONC/ASPH DRIVEWAYS	---	---	364	---	2
---	-	---	GRAVEL DRIVEWAYS	---	210	---	---	1
---	-	---	UNDISTRIBUTED	---	82	1,059	4,122	8
			PROJECT TOTALS		3,800	68,500	10,700	435

CONCRETE PAVEMENT

STATION		TO STATION	LOCATION	405.0100 COLORING CONCRETE RED CY	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0085 CONCRETE PAVEMENT 8 1/2-INCH SY	415.0100 CONCRETE PAVEMENT 10-INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	416.0512 CONCRETE ROUNDABOUT TRUCK APRON 12-INCH SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
PROJECT 1420-22-71			CATEGORY 0010								
275+41	-	287+43	USH 151 NB OFF-RAMP	---	---	1989	---	---	---	---	---
269+57	-	285+81	USH 151 NB ON-RAMP	---	---	2746	---	---	---	---	---
281+66	-	299+66	USH 151 SB OFF-RAMP	---	---	3015	---	---	---	---	---
277+02	-	287+97	USH 151 SB ON-RAMP	---	---	1849	---	---	---	---	---
269+40	-	275+41	USH 151 NB OFF-RAMP	---	---	---	719	---	---	240	8
285+81	-	296+16	USH 151 NB ON-RAMP	---	---	---	1088	---	---	414	---
299+66	-	307+66	USH 151 SB OFF-RAMP	---	---	---	1070	---	---	320	8
262+20	-	277+02	USH 151 SB ON-RAMP	---	---	---	1583	---	---	593	---
1307+75	-	1316+50	USH 151 OUTSIDE SHLDR	---	---	---	1011	---	---	350	8
129+64	-	129+94	CTH V	---	---	---	---	92	---	---	---
132+60	-	132+90	CTH V	---	---	---	---	91	---	---	---
386+24	-	386+79	USH 45	---	29	---	---	---	---	28	---
386+24	-	386+74	USH 45	---	---	---	---	110	---	---	---
389+44	-	389+94	USH 45	---	---	---	---	110	---	---	---
389+36	-	389+94	USH 45	---	44	---	---	---	---	---	---
10+00	-	13+14	CTH V RA SOUTH	106	---	---	---	---	319	---	---
20+00	-	23+14	CTH V RA NORTH	106	---	---	---	---	319	---	---
30+00	-	33+14	FRONTAGE RD RA	106	---	---	---	---	319	---	---
			PROJECT TOTALS	319	74	9,598	5,472	403	956	1,945	24

CONCRETE DRIVEWAYS

STATION	LOCATION	DIR.	416.0160 6-INCH SY	416.0170 7-INCH SY
PROJECT 1420-22-71 CATEGORY 0010				
140+87	CTH V	LT	31	---
141+81	CTH V	LT	29	---
141+88	CTH V	RT	24	---
142+37	CTH V	LT	34	---
143+40	CTH V	RT	24	---
143+88	CTH V	LT	124	---
145+31	CTH V	LT	175	---
145+82	CTH V	RT	45	---
146+35	CTH V	LT	93	---
148+40	CTH V	RT	31	---
11+74	OLD CTH V NORTH	RT	---	60
12+30	OLD CTH V NORTH	LT	---	142
104+99	PARK AVE	LT	57	---
	PROJECT TOTAL		664	202

CONCRETE MASONRY ENDWALLS

STATION	LOCATION	DIR	504.0900 CY	REMARKS
PROJECT 1420-22-71 CATEGORY 0010				
21+15	PRAIRIE TRAIL EAST	LT	4	UPSTREAM ENDWALL
	PROJECT TOTAL		4	

3

ASPHALTIC ITEMS

STATION TO STATION	DIR	LOCATION	455.0120 ASPHALTIC MATERIAL PG 64-28 TON	455.0605 TACK COAT GAL	460.1100 HMA PAVEMENT TYPE E-0.3 TON	460.1103 HMA PAVEMENT TYPE E-3 TON	460.4000 HMA COLD WEATHER PAVING TON	460.4110.S REHEATING HMA PAVT. LOGITUDINAL JOINTS LF	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS & FIELD ENT. TON	465.0315 ASPHALTIC FLUMES SY
PROJECT 1420-22-71 CATEGORY 0010											
262+58 - 285+84	RT	USH 151 NB OFF-RAMP	18	100	329	---	---	---	---	---	9
271+30 - 296+37	RT	USH 151 NB ON-RAMP	18	97	320	---	---	---	---	---	9
283+63 - 307+75	LT	USH 151 SB OFF-RAMP	17	94	308	---	---	---	---	---	9
262+00 - 286+25	LT	USH 151 SB ON-RAMP	17	93	306	---	---	---	---	---	9
275+41 - 285+84	LT	USH 151 NB OFF-RAMP	5	27	90	---	---	---	---	---	9
271+30 - 285+81	LT	USH 151 NB ON-RAMP	7	39	130	---	---	---	---	---	9
283+63 - 299+66	RT	USH 151 SB OFF-RAMP	9	50	165	---	---	---	---	---	9
277+02 - 286+24	RT	USH 151 SB ON-RAMP	5	27	90	---	---	---	---	---	9
1263+25 - 1272+11	RT	USH 151 NB INSIDE SHLDR	4	21	68	---	---	---	---	---	---
1268+74 - 1277+79	LT	USH 151 SB INSIDE SHLDR	4	21	69	---	---	---	---	---	---
1314+27 - 1320+79	RT	USH 151 NB OUTSIDE SHLDR	7	39	128	---	---	---	---	---	---
88+38 - 91+50	LT & RT	OLD CTH V SOUTH	15	82	---	270	150	624	---	15	---
115+00 - 122+80	LT & RT	CTH V	61	247	---	1,115	---	510	---	---	---
122+80 - 126+56	LT & RT	CTH V ROUNDABOUT SOUTH	52	130	---	937	---	---	---	---	---
126+56 - 129+64	LT & RT	CTH V	22	89	---	403	---	227	---	---	---
132+90 - 136+75	LT & RT	CTH V	29	118	---	532	---	770	---	---	---
136+75 - 140+57	LT & RT	CTH V ROUNDABOUT NORTH	75	191	---	1,369	---	---	---	---	---
140+57 - 144+85	LT & RT	CTH V	34	137	---	619	619	856	---	16	---
10+00 - 15+50	LT & RT	OLD CTH V NORTH	35	196	---	644	644	1,100	---	---	---
60+00 - 62+06	LT & RT	PARK AND RIDE LOT	---	165	---	---	---	---	543	---	---
104+47 - 106+00	LT & RT	PARK AVE	12	64	---	210	210	306	---	---	---
70+30 - 79+73	LT	PRAIRIE TRAIL WEST	---	---	---	---	---	---	117	---	---
109+36 - 115+18	LT & RT	FRONTAGE ROAD	37	166	---	680	---	---	---	---	---
115+18 - 118+78	LT & RT	FRONTAGE RD ROUNDABOUT	46	115	---	827	---	---	---	---	---
118+78 - 142+82	LT & RT	FRONTAGE ROAD	156	692	---	2,840	2,840	4,275	---	---	---
109+47 - 142+48	LT	PRAIRIE TRAIL	---	---	---	---	---	---	425	---	---
386+14 - 386+33	LT & RT	USH 45	1	3	---	16	16	---	---	---	---
389+94 - 398+74	LT & RT	USH 45	82	331	---	1,496	1,496	3,519	---	---	9
19+92 - 23+85	LT	PRAIRIE TRAIL @ USH 45	---	---	---	---	---	---	51	---	---
9+48 - 11+01	LT	TEMPORARY TRAIL EAST	---	---	---	---	---	---	17	---	---
5+11 - 5+83	LT	TEMPORARY TRAIL NORTH	---	---	---	---	---	---	8	---	---
8+66 - 11+57	LT	TEMPORARY TRAIL NORTH	---	---	---	---	---	---	30	---	---
		PROJECT TOTALS	768	3,336	2,004	11,960	5,975	12,188	1,191	30	77

CULVERT PIPES

STA	LOCATION		520.4018 CULVERT PIPE TEMPORARY 18-INCH LF	521.0124 CULVERT PIPE CORRUGATED STEEL 24-INCH LF	521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH EACH	633.5200* MARKERS CULVERT END EACH	650.6000* CONSTRUC-TION STAKING PIPE CULVERTS EACH	INLET	OUTLET	STEEL THICKNESS INCH	**FOR INFO ONLY
PROJECT 1420-22-71 CATEGORY 0010											
127+15	FRONTAGE RD	LT	---	42	2	2	1	848.40	848.20	0.064	
88+61	OLD CTH V SOUTH	LT	---	46	2	---	---	850.88	849.11	0.064	
5+22	TEMP TRAIL NORTH	C/L	20	---	---	---	1	850.40	849.40	0.064	SKEW 7.5 DEG LHF
5+25	TEMP TRAIL NORTH	C/L	20	---	---	---	1	850.40	849.37	0.064	SKEW 8.3 DEG LHF
	PROJECT TOTALS		40	88	4	2	3				

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REINFORCED CONCRETE CULVERT PIPES

STA	LOCATION		522.0118 CULVERT PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	522.0130 CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	522.0136 CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	522.1018* APRON ENDWALLS FOR CULVERT PIPE REIN. CONCRETE 18-INCH EACH	522.1030* APRON ENDWALLS FOR CULVERT PIPE REIN. CONCRETE 30-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REIN. CONCRETE 36-INCH EACH	633.5200* MARKERS CULVERT END EACH	650.6000* CONSTRUC-TION STAKING PIPE CULVERTS EACH	INLET	OUTLET	**FOR INFO ONLY
PROJECT 1420-22-71 CATEGORY 0010													
264+13	USH 151 NB OFF-RAMP	RT	8	---	---	1	---	---	1	1	856.69	856.56	EXTENSION
272+21	USH 151 NB OFF-RAMP	RT	---	---	12	---	---	1	1	1	845.39	845.31	EXTENSION
142+44	FRONTAGE RD	LT/RT	---	132	---	---	2	---	2	1	839.30	838.66	SKEW 4.0 DEG LHF
20+83	PRAIRIE TRAIL EAST	LT	---	32	---	---	1	---	1	1	821.56	821.00	EXTENSION
20+95	PRAIRIE TRAIL EAST	LT	---	32	---	---	1	---	1	1	821.56	820.97	EXTENSION
	PROJECT TOTALS		8	196	12	1	4	1	6	5			

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE CURB AND GUTTER

STATION TO STATION			DIR	LOCATION	601.0405 18-INCH TYPE A LF	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	601.0452 INTEGRAL 30-INCH TYPE D LF	601.0555 6-INCH SLOPED 36-INCH TYPE A LF	601.0557 6-INCH SLOPED 36-INCH TYPE D LF	601.0580 4-INCH SLOPED 36-INCH TYPE R LF	601.0600 CONCRETE CURB PED. LF
PROJECT 1420-22-71			CATEGORY 0010									
285+84	-	287+43	LT & RT	USH 151 NB OFF-RAMP	---	195	---	113	---	---	---	---
269+57	-	271+30	LT & RT	USH 151 NB ON-RAMP	---	236	---	110	---	---	---	---
281+66	-	283+63	LT & RT	USH 151 SB OFF-RAMP	---	276	---	105	---	---	---	---
286+24	-	287+97	LT & RT	USH 151 SB ON-RAMP	---	234	---	105	---	---	---	---
115+00	-	122+80	LT & RT	CTH V	---	---	3,006	---	---	---	---	---
122+80	-	126+56	LT & RT	CTH V ROUNDABOUT	220	---	1,361	---	---	---	302	125
126+56	-	130+15	LT & RT	CTH V	---	86	1,001	---	---	---	---	---
132+39	-	136+75	LT & RT	CTH V	---	86	816	---	---	---	---	---
136+75	-	140+55	LT & RT	CTH V ROUNDABOUT	220	---	1,786	---	---	---	302	124
140+55	-	144+85	LT & RT	CTH V	---	---	712	---	---	---	---	---
10+00	-	15+50	LT & RT	OLD CTH V NORTH	---	---	1,275	---	---	---	---	---
104+47	-	106+00	LT & RT	PARK AVE	---	---	243	---	---	---	---	---
109+36	-	115+18	LT & RT	FRONTAGE ROAD	---	---	2,367	---	---	---	---	---
115+18	-	118+78	LT & RT	FRONTAGE RD ROUNDABOUT	220	---	1,130	---	---	---	302	108
118+78	-	142+81	LT & RT	FRONTAGE ROAD	---	---	5,367	---	---	---	---	---
389+63	-	397+03	RT	USH 45	---	---	---	---	32	709	---	---
				PROJECT TOTALS	660	1,111	19,062	432	32	709	906	357

CONCRETE SIDEWALK AND RAMPS

STATION TO STATION			DIR	LOCATION	SPV.0035.04 COLORING CONCRETE BROWN CY	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0410 CONCRETE SIDEWALK 5-INCH SF	SPV.0165.03 CONCRETE SIDEWALK 8-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF
PROJECT 1420-22-71									
CATEGORY 0010									
215+08	-	222+20	LT	CTH V SB	---	3,506	---	---	---
115+00	-	122+70	RT	CTH V NB	---	3,924	---	---	---
122+24	-	126+65	LT & RT	CTH V RA SOUTH	---	176	9,265	---	216
226+58	-	229+89	LT	CTH V SB	---	1,521	---	152	---
126+65	-	130+17	RT	CTH V NB	---	1,655	---	116	---
132+37	-	236+70	LT	CTH V SB	---	2,007	---	116	---
132+56	-	136+65	RT	CTH V NB	---	1,973	---	133	---
136+65	-	140+69	LT & RT	CTH V RA NORTH	---	394	11,478	---	288
140+69	-	149+07	LT	CTH V	---	3,434	---	---	---
140+53	-	149+06	RT	CTH V	---	3,749	---	---	---
104+46	-	105+48	LT	PARK AVE	---	374	---	---	---
104+47	-	105+59	RT	PARK AVE	---	319	---	---	16
10+00	-	15+41	LT	OLD CTH V NORTH	---	2,735	---	---	---
115+21	-	118+85	LT & RT	FRONTAGE RD RA	---	228	4,097	---	216
127+13	-	142+68	LT & RT	FRONTAGE RD	---	807	473	---	36
10+90	-	11+47	LT & RT	TEMP TRAIL EAST	---	---	147	---	28
				CATEGORY 0010 SUBTOTALS	0	26,802	25,460	517	800
CATEGORY 0020									
123+05	-	128+50	LT & RT	CTH V	68	5,512	---	---	---
136+57	-	139+75	LT & RT	CTH V	44	3,602	---	---	---
116+26	-	121+42	LT & RT	FRONTAGE RD	55	4,427	---	---	---
				CATEGORY 0020 SUBTOTALS	167	13,541	0	0	0
				PROJECT TOTALS	167	40,343	25,460	517	800

CONCRETE BARRIER TEMPORARY PRECAST

STAGE		603.8000 DELIVERED LF	603.8125 INSTALLED LF
PROJECT 1420-22-71 CATEGORY 0010			
STAGE V3	USH 151	900	900
PROJECT TOTALS		900	900

CONCRETE BARRIER

STATION	TO	STATION	LOCATION	603.1156 CONCRETE BARRIER TYPE S56 LF	603.3559 CONCRETE BARRIER TRANSITION TYPE S42 TO S56 EACH	603.3535 CONCRETE BARRIER TRANSITION TYPE S36 TO S42 EACH	603.3213 CONCRETE BARRIER TRANSITION TYPE F32SF TO S36 EACH
PROJECT 1420-22-71	CATEGORY 0010						
307+75	-	316+00	USH 151 SB OFF RAMP	825	---	---	---
316+00	-	316+25	USH 151 SB OFF RAMP	---	1	---	---
316+25	-	316+35	USH 151 SB OFF RAMP	---	---	1	---
316+35	-	316+50	USH 151 SB OFF RAMP	---	---	---	1
			PROJECT TOTALS	825	1	1	1

STORM SEWER PIPE

STRUCTURE FROM	STRUCTURE TO	608.0312 REIN. CONC. CLASS III 12-INCH LF	608.0315 REIN. CONC. CLASS III 15-INCH LF	608.0318 REIN. CONC. CLASS III 18-INCH LF	608.0324 REIN. CONC. CLASS III 24-INCH LF	608.0330 REIN. CONC. CLASS III 30-INCH LF	608.0412 REIN. CONC. CLASS IV 12-INCH LF	608.0415 REIN. CONC. CLASS IV 15-INCH LF	608.0418 REIN. CONC. CLASS IV 18-INCH LF	608.0424 REIN. CONC. CLASS IV 24-INCH LF	520.8000 CONCRETE COLLARS FOR PIPE EACH
PROJECT 1420-22-71 CATEGORY 0010											
4.2	4.1	---	25	---	---	---	---	---	---	---	---
4.3	4.2	21	---	---	---	---	---	---	---	---	---
4.4	4.3	29	---	---	---	---	---	---	---	---	---
4.5	4.4	21	---	---	---	---	---	---	---	---	---
5.2	5.1	---	26	---	---	---	---	---	---	---	---
5.3	5.2	21	---	---	---	---	---	---	---	---	---
5.4	5.3	21	---	---	---	---	---	---	---	---	---
5.5	5.4	21	---	---	---	---	---	---	---	---	---
6.2	6.1	65	---	---	---	---	---	---	---	---	---
6.3	6.2	9	---	---	---	---	---	---	---	---	---
7.2	7.1	---	31	---	---	---	---	---	---	---	---
7.3	7.2	36	---	---	---	---	---	---	---	---	---
7.4	7.2	25	---	---	---	---	---	---	---	---	---
7.5	7.4	25	---	---	---	---	---	---	---	---	---
7.6	7.5	21	---	---	---	---	---	---	---	---	---
7.7	7.6	33	---	---	---	---	---	---	---	---	---
8.2	8.1	23	---	---	---	---	---	---	---	---	---
8.3	8.2	39	---	---	---	---	---	---	---	---	---
9.2	9.1	27	---	---	---	---	---	---	---	---	---
9.3	9.2	47	---	---	---	---	---	---	---	---	---
10.2	10.1	---	33	---	---	---	---	---	---	---	---
10.3	10.2	21	---	---	---	---	---	---	---	---	---
10.4	10.3	25	---	---	---	---	---	---	---	---	---
10.5	10.4	26	---	---	---	---	---	---	---	---	---
11.4	11.1	---	54	---	---	---	---	---	---	---	---
11.2	11.4	69	---	---	---	---	---	---	---	---	---
11.3	11.2	10	---	---	---	---	---	---	---	---	---
12.2	12.1	---	33	---	---	---	---	---	---	---	---
12.3	12.2	---	---	---	---	---	---	47	---	---	---
12.4	12.3	---	50	---	---	---	---	---	---	---	---
13.1	EXISTING	---	---	16	---	---	---	---	---	---	2
13.2	13.1	---	---	---	---	---	42	---	---	---	---
14.1	EXISTING	---	16	---	---	---	---	---	---	---	2
14.2	14.1	---	61	---	---	---	---	---	---	---	---
15.1	14.1	---	28	---	---	---	---	---	---	---	---
15.2	15.1	---	---	---	---	---	---	28	---	---	---
	SUBTOTALS	635	357	16	0	0	42	75	0	0	4

STORM SEWER PIPE CONT'D

STRUCTURE FROM	STRUCTURE TO	608.0312 REIN. CONC. CLASS III 12-INCH LF	608.0315 REIN. CONC. CLASS III 15-INCH LF	608.0318 REIN. CONC. CLASS III 18-INCH LF	608.0324 REIN. CONC. CLASS III 24-INCH LF	608.0330 REIN. CONC. CLASS III 30-INCH LF	608.0412 REIN. CONC. CLASS IV 12-INCH LF	608.0415 REIN. CONC. CLASS IV 15-INCH LF	608.0418 REIN. CONC. CLASS IV 18-INCH LF	608.0424 REIN. CONC. CLASS IV 24-INCH LF	520.8000 CONCRETE COLLARS FOR PIPE EACH
PROJECT 1420-22-71 CATEGORY 0010											
16.1	15.1	---	---	---	---	---	---	100	---	---	---
16.2	16.1	---	---	---	---	---	---	30	---	---	---
16.3	16.1	---	---	---	---	---	---	26	---	---	---
16.4	16.3	---	---	---	---	---	---	15	---	---	---
16.5	16.4	25	---	---	---	---	---	---	---	---	---
17.2	17.1	---	21	---	---	---	---	---	---	---	---
17.3	17.2	---	---	---	---	---	21	---	---	---	---
17.4	17.3	---	---	---	---	---	15	---	---	---	---
17.5	17.4	---	---	---	---	---	21	---	---	---	---
18.2	18.1	---	19	---	---	---	---	---	---	---	---
18.3	18.2	---	---	---	---	---	10	---	---	---	---
18.4	18.2	---	---	---	---	---	---	21	---	---	---
18.5	18.4	---	---	---	---	---	---	28	---	---	---
18.6	18.5	---	---	---	---	---	21	---	---	---	---
18.7	18.6	---	---	---	---	---	10	---	---	---	---
19.2	19.1	---	---	---	---	---	70	---	---	---	---
19.3	19.2	---	---	---	---	---	9	---	---	---	---
20.2	20.1	---	36	---	---	---	---	---	---	---	---
20.3	20.2	---	---	---	---	---	21	---	---	---	---
20.4	20.3	---	---	---	---	---	7	---	---	---	---
20.5	20.4	---	---	---	---	---	21	---	---	---	---
21.2	21.1	---	35	---	---	---	---	---	---	---	---
21.3	21.2	---	---	---	---	---	10	---	---	---	---
21.4	21.2	---	---	---	---	---	39	---	---	---	---
21.5	21.4	---	---	---	---	---	10	---	---	---	---
22.2	22.1	---	36	---	---	---	---	---	---	---	---
22.3	22.2	---	---	---	---	---	39	---	---	---	---
23.2	23.1	---	36	---	---	---	---	---	---	---	---
23.3	23.2	---	---	---	---	---	39	---	---	---	---
24.2	24.1	34	---	---	---	---	---	---	---	---	---
24.3	24.2	---	---	---	---	---	39	---	---	---	---
25.2	25.1	---	20	---	---	---	---	---	---	---	---
25.3	25.2	---	---	---	---	---	10	---	---	---	---
25.4	25.2	---	---	---	---	---	39	---	---	---	---
25.5	25.4	---	---	---	---	---	10	---	---	---	---
25.6	25.4	49	---	---	---	---	---	---	---	---	---
26.2	EXISTING	---	---	---	---	8	---	---	---	---	1
26.3	26.2	---	---	---	---	52	---	---	---	---	---
26.4	26.2	---	73	---	---	---	---	---	---	---	---
26.5	26.4	20	---	---	---	---	---	---	---	---	---
27.2	27.1	---	26	---	---	---	---	---	---	---	---
27.3	27.2	---	---	---	---	---	---	39	---	---	---
27.4	27.3	19	---	---	---	---	---	---	---	---	---
28.2	28.1	10	---	---	---	---	---	---	---	---	---
	SUBTOTALS	157	302	0	0	60	461	259	0	0	1

3

STORM SEWER PIPE CONT'D

STRUCTURE FROM	STRUCTURE TO	608.0312 REIN. CONC. CLASS III 12-INCH LF	608.0315 REIN. CONC. CLASS III 15-INCH LF	608.0318 REIN. CONC. CLASS III 18-INCH LF	608.0324 REIN. CONC. CLASS III 24-INCH LF	608.0330 REIN. CONC. CLASS III 30-INCH LF	608.0412 REIN. CONC. CLASS IV 12-INCH LF	608.0415 REIN. CONC. CLASS IV 15-INCH LF	608.0418 REIN. CONC. CLASS IV 18-INCH LF	608.0424 REIN. CONC. CLASS IV 24-INCH LF	520.8000 CONCRETE COLLARS FOR PIPE EACH
PROJECT 1420-22-71 CATEGORY 0010											
EXISTING	29.1	---	---	---	---	---	---	---	31	---	1
29.2	EXISTING	---	---	5	---	---	---	---	---	---	1
29.3	29.2	---	~~116~~ 0	---	---	---	---	---	---	---	---
31.2	31.1	66	---	---	---	---	---	---	---	---	---
40.1	40.0	---	---	---	34	---	---	---	---	---	---
40.2	40.1	---	---	---	---	---	---	---	---	208	---
40.3	40.2	---	---	---	---	---	---	---	---	14	---
40.4	40.3	---	---	---	---	---	---	---	---	136	---
40.5	40.4	---	---	---	---	---	---	---	---	161	---
40.6	40.5	---	---	---	---	---	---	---	---	162	---
41.2	41.1	34	---	---	---	---	---	---	---	---	---
42.2	42.1	---	---	---	---	---	---	---	---	59	---
42.3	42.1	---	70	---	---	---	---	---	---	---	---
43.2	43.1	11	---	---	---	---	---	---	---	---	---
44.2	44.1	31	---	---	---	---	---	---	---	---	---
45.2	EXISTING	---	---	8	---	---	---	---	---	---	2
46.1	46.0	47	---	---	---	---	---	---	---	---	---
47.1	47.0	91	---	---	---	---	---	---	---	---	---
	SUBTOTALS	280	~~186~~ 70	13	34	0	0	0	31	740	4
	PROJECT TOTALS	1072	~~845~~ 729	29	34	60	503	334	31	740	9

3

STORM SEWER STRUCTURES

STRUCTURE NUMBER	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1030* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	521.1615 AEW FOR CP SLOPED SIDE DRAIN STEEL 15-INCH 10:1 EACH	611.2004 MANHOLES 4-FT EACH	611.2005 MANHOLES 5-FT EACH	611.2006 MANHOLES 6-FT EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0612 INLET COVERS TYPE C EACH	611.0420 RECONSTRUCT-ING MANHOLES EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	633.5200* MARKERS CULVERT END EACH	650.4000* CONST. STAKING STORM SEWER EACH
PROJECT 1420-22-71 CATEGORY 0010															
4.1	---	1	---	---	---	---	---	---	---	---	---	---	---	1	1
5.1	---	1	---	---	---	---	---	---	---	---	---	---	---	1	1
6.1	1	---	---	---	---	---	---	---	---	---	---	---	---	1	1
7.1	---	1	---	---	---	---	---	---	---	---	---	---	---	1	1
8.1	1	---	---	---	---	---	---	---	---	---	---	---	---	1	1
9.1	1	---	---	---	---	---	---	---	---	---	---	---	---	1	1
10.1	---	1	---	---	---	---	---	---	---	---	---	---	---	1	1
11.1	---	1	---	---	---	---	---	---	---	---	---	---	---	1	1
12.1	---	---	---	---	---	---	---	---	---	---	1	1	---	---	---
12.4	---	1	---	---	---	---	---	---	---	---	---	---	---	1	1
13.1	---	---	---	---	---	---	1	---	---	1	---	---	---	---	1
14.0	---	---	---	---	---	---	---	---	---	---	1	1	---	---	---
14.1	---	---	---	---	---	---	---	1	---	1	---	---	---	---	1
15.1	---	---	---	---	---	---	1	---	---	1	---	---	---	---	1
16.1	---	---	---	---	---	---	1	---	---	1	---	---	---	---	1
17.1	---	1	---	---	---	---	---	---	---	---	---	---	---	1	1
18.1	---	1	---	---	---	---	---	---	---	---	---	---	---	1	1
19.1	1	---	---	---	---	---	---	---	---	---	---	---	---	1	1
20.1	---	1	---	---	---	---	---	---	---	---	---	---	---	1	1
21.1	---	1	---	---	---	---	---	---	---	---	---	---	---	1	1
22.1	1	---	---	---	---	---	---	---	---	---	---	---	---	1	1
23.1	1	---	---	---	---	---	---	---	---	---	---	---	---	1	1
SUBTOTALS	6	10	0	0	0	0	3	1	0	4	2	2	0	16	20

3

STORM SEWER STRUCTURES CONT'D

STRUCTURE NUMBER	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1030* APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	521.1615 AEW FOR CP SLOPED SIDE DRAIN STEEL 15-INCH 10:1 EACH	611.2004 MANHOLES 4-FT EACH	611.2005 MANHOLES 5-FT EACH	611.2006 MANHOLES 6-FT EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0612 INLET COVERS TYPE C EACH	611.0420 RECONSTRUCT-ING MANHOLES EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	633.5200* MARKERS CULVERT END EACH	650.4000* CONST. STAKING STORM SEWER EACH
PROJECT 1420-22-71 CATEGORY 0010															
24.1	1	---	---	---	---	---	---	---	---	---	---	---	---	1	1
25.1	1	---	---	---	---	---	---	---	---	---	---	---	---	1	1
25.6	1	---	---	---	---	---	---	---	---	---	---	---	---	1	1
26.1	---	---	---	---	1	---	---	---	---	---	---	---	---	1	1
26.2	---	---	---	---	---	---	---	---	1	1	---	---	---	---	1
26.3	---	---	---	---	1	---	---	---	---	---	---	---	---	1	1
27.1	---	---	---	---	---	---	1	---	---	1	---	---	---	---	1
28.1	---	---	---	---	---	---	---	---	---	1	---	1	---	---	---
28.3	---	---	---	---	---	---	---	---	---	1	---	1	---	---	---
29.1	---	---	1	---	---	---	---	---	---	---	---	---	---	1	1
29.3	---	---	---	---	---	~~1~~ 0	---	---	---	---	---	---	---	1	1
31.1	1	---	---	---	---	---	---	---	---	---	---	---	---	1	1
40.0	---	---	---	1	---	---	---	---	---	---	---	---	---	1	1
41.1	1	---	---	---	---	---	---	---	---	---	---	---	---	1	1
42.1	---	---	---	---	---	---	1	---	---	---	1	---	---	---	1
42.2	---	---	---	1	---	---	---	---	---	---	---	---	---	1	1
43.1	1	---	---	---	---	---	---	---	---	---	---	---	---	1	1
44.1	1	---	---	---	---	---	---	---	---	---	---	---	---	1	1
46.0	---	---	---	---	---	---	1	---	---	1	---	---	---	---	1
48.0	---	---	---	---	---	---	1	---	---	---	1	---	---	---	1
49.0	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---
SUBTOTALS	7	0	1	2	2	~~1~~ 0	4	0	1	5	2	2	1	13	18
PROJECT TOTALS	13	10	1	2	2	~~1~~ 0	7	1	1	9	4	4	1	29	38

GENERAL NOTES: LOCATION FOR MANHOLES REFERS TO THE CENTER OF STRUCTURE
LOCATION FOR APRON ENDWALLS REFERS TO THE BEGINNING OF ENDWALL
ELEVATIONS (ON PLAN SHEETS) REFER TO THE CENTER OF STRUCTURE FOR MANHOLES
STRUCTURE DEPTH (ON PLAN SHEETS) EQUALS THE RIM ELEVATION MINUS THE INVERT ELEVATION
INVERTS OF EXISTING PIPE AND STRUCTURES SHOULD BE VERIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO ORDERING THE STRUCTURE

SPECIAL NOTES: 1. FLAT TOP REQUIRED ON MH
* ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** FOR INFORMATION ONLY

3

STORM SEWER INLETS

STRUCTURE NUMBER	611.3004 INLETS 4-FT DIAMETER EACH	SPV.0060.05 INLETS 2x2.5-FT SPECIAL EACH	611.3230 INLETS 2x3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0636 INLET COVERS TYPE HM-S EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0642 INLET COVERS TYPE MS EACH	611.0651 INLET COVERS TYPE S EACH	611.0652 INLET COVERS TYPE T EACH	611.0430 RECONSTRUCT-ING INLETS EACH	650.4000* CONST. STAKING STORM SEWER EACH
PROJECT 1420-22-71 CATEGORY 0010														
4.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
4.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
4.4	---	---	1	---	---	1	---	---	---	---	---	---	---	1
4.5	---	---	1	---	---	1	---	---	---	---	---	---	---	1
5.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
5.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
5.4	---	---	1	---	---	1	---	---	---	---	---	---	---	1
5.5	---	---	1	---	---	1	---	---	---	---	---	---	---	1
6.2	---	1	---	---	---	---	---	---	---	---	---	1	---	1
6.3	---	1	---	---	---	---	---	---	---	---	---	1	---	1
7.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
7.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
7.4	---	---	1	---	---	1	---	---	---	---	---	---	---	1
7.5	---	---	1	---	---	1	---	---	---	---	---	---	---	1
7.6	---	---	1	---	---	1	---	---	---	---	---	---	---	1
7.7	---	---	1	---	---	1	---	---	---	---	---	---	---	1
8.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
8.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
9.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
9.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
10.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
10.3	---	---	1	---	---	---	---	---	1	---	---	---	---	1
10.4	---	---	1	---	---	---	---	---	1	---	---	---	---	1
10.5	---	---	1	---	---	1	---	---	---	---	---	---	---	1
11.2	---	1	---	---	---	---	---	---	---	---	---	1	---	1
11.3	---	1	---	---	---	---	---	---	---	---	---	1	---	1
11.4	---	---	1	---	---	---	---	---	1	---	---	---	---	1
SUBTOTALS	0	4	23	0	0	20	0	0	3	0	0	4	0	27

STORM SEWER INLETS CONT'D

STRUCTURE NUMBER	611.3004 INLETS 4-FT DIAMETER EACH	SPV.0060.05 INLETS 2x2.5-FT SPECIAL EACH	611.3230 INLETS 2x3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0636 INLET COVERS TYPE HM-S EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0642 INLET COVERS TYPE MS EACH	611.0651 INLET COVERS TYPE S EACH	611.0652 INLET COVERS TYPE T EACH	611.0430 RECONSTRUCT-ING INLETS EACH	650.4000* CONST. STAKING STORM SEWER EACH
PROJECT 1420-22-71 CATEGORY 0010														
12.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
12.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
13.2	---	---	---	1	---	---	---	---	---	1	---	---	---	1
14.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
15.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
16.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
16.3	---	---	1	---	---	---	---	---	1	---	---	---	---	1
16.4	---	---	1	---	---	1	---	---	---	---	---	---	---	1
16.5	---	---	---	1	---	---	---	---	---	1	---	---	---	1
17.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
17.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
17.4	---	---	1	---	---	1	---	---	---	---	---	---	---	1
17.5	---	---	1	---	---	1	---	---	---	---	---	---	---	1
18.2	---	---	1	---	---	---	---	---	1	---	---	---	---	1
18.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
18.4	---	---	1	---	---	1	---	---	---	---	---	---	---	1
18.5	---	---	1	---	---	1	---	---	---	---	---	---	---	1
18.6	---	---	1	---	---	---	---	---	1	---	---	---	---	1
18.7	---	---	1	---	---	1	---	---	---	---	---	---	---	1
19.2	---	1	---	---	---	---	---	---	---	---	---	1	---	1
19.3	---	1	---	---	---	---	---	---	---	---	---	1	---	1
20.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
20.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
20.4	---	---	1	---	---	1	---	---	---	---	---	---	---	1
20.5	---	---	1	---	---	1	---	---	---	---	---	---	---	1
21.2	---	---	1	---	---	---	---	---	1	---	---	---	---	1
21.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
21.4	---	---	1	---	---	---	---	---	1	---	---	---	---	1
21.5	---	---	1	---	---	1	---	---	---	---	---	---	---	1
22.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
22.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
23.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
23.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
SUBTOTALS	0	2	29	2	0	24	0	0	5	2	0	2	0	33

STORM SEWER INLETS CONT'D

STRUCTURE NUMBER	611.3004 INLETS 4-FT DIAMETER EACH	SPV.0060.05 INLETS 2x2.5-FT SPECIAL EACH	611.3230 INLETS 2x3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3904 INLETS MEDIAN 4 GRATE EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0636 INLET COVERS TYPE HM-S EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0642 INLET COVERS TYPE MS EACH	611.0651 INLET COVERS TYPE S EACH	611.0652 INLET COVERS TYPE T EACH	611.0430 RECONSTRUCT-ING INLETS EACH	650.4000* CONST. STAKING STORM SEWER EACH
PROJECT 1420-22-71 CATEGORY 0010														
24.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
24.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
25.2	---	---	1	---	---	---	---	---	1	---	---	---	---	1
25.3	---	---	1	---	---	1	---	---	---	---	---	---	---	1
25.4	---	---	1	---	---	---	---	---	1	---	---	---	---	1
25.5	---	---	1	---	---	1	---	---	---	---	---	---	---	1
26.4	---	---	1	---	---	---	---	---	1	---	---	---	---	1
26.5	---	---	1	---	---	1	---	---	---	---	---	---	---	1
27.2	---	---	1	---	---	---	---	---	1	---	---	---	---	1
27.3	---	---	1	---	---	---	---	---	1	---	---	---	---	1
27.4	---	---	---	1	---	---	---	---	---	1	---	---	---	1
28.2	---	---	---	1	---	---	---	---	---	1	---	---	---	1
29.2	---	---	---	1	---	---	---	---	---	1	---	---	---	1
31.2	---	---	---	1	---	---	---	---	---	1	---	---	---	1
40.1	1	---	---	---	---	---	1	---	---	---	---	---	---	1
40.2	1	---	---	---	---	---	---	1	---	---	---	---	---	1
40.3	1	---	---	---	---	---	---	1	---	---	---	---	---	1
40.4	1	---	---	---	---	---	1	---	---	---	---	---	---	1
40.5	---	---	---	1	---	---	---	---	---	1	---	---	---	1
40.6	---	---	---	1	---	---	---	---	---	1	---	---	---	1
41.2	---	---	1	---	---	1	---	---	---	---	---	---	---	1
42.3	---	---	---	---	1	---	---	---	---	4	---	---	---	1
43.2	---	1	---	---	---	---	---	---	---	---	1	---	---	1
44.2	---	1	---	---	---	---	---	---	---	---	1	---	---	1
45.2	---	1	---	---	---	---	---	---	---	---	1	---	---	1
46.1	---	---	---	1	---	---	---	---	---	1	---	---	---	1
47.0	---	---	---	---	---	---	---	---	---	---	---	---	1	---
47.1	---	---	---	1	---	---	---	---	---	1	---	---	---	1
SUBTOTALS	4	3	11	8	1	6	2	2	5	12	3	0	1	27
PROJECT TOTALS	4	9	63	10	1	50	2	2	13	14	3	6	1	87

GENERAL NOTES: LOCATION FOR INLETS REFERS TO THE CENTER OF STRUCTURE
ELEVATIONS (ON PLAN SHEETS) REFER TO THE FLANGELINE FOR INLETS
STRUCTURE DEPTH (ON PLAN SHEETS) EQUALS THE FLANGE ELEVATION MINUS THE INVERT ELEVATION
INVERTS OF EXISTING PIPE AND STRUCTURES SHOULD BE VERIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO ORDERING THE STRUCTURE

SPECIAL NOTES: * ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** FOR INFORMATION ONLY

PIPE UNDERDRAIN

STATION TO STATION			DIR	LOCATION	612.0106 PIPE UNDERDRAIN 6-INCH LF	310.0115 BASE AGGREGATE OPEN GRADED CY	645.0111 GEOTEXTILE FABRIC TYPE DF SCHEDULE A SY
PROJECT 1420-22-71 CATEGORY 0010							
144+65	-	144+85	RT	CTH V NB	20	1	11
				PROJECT TOTALS	20	1	11

FENCE

STATION TO STATION			DIR	LOCATION	616.0100 FENCE WOVEN WIRE 4-FT LF	616.0204 FENCE CHAIN LINK 4-FT LF
PROJECT 1420-22-71 CATEGORY 0010						
1252+75	-	1274+40	LT	USH 151	2,145	---
274+90	-	287+75	LT	USH 151 SB ON-RAMP	1,195	---
281+92	-	310+73	LT	USH 151 SB OFF-RAMP	2,820	---
268+65	-	273+50	RT	USH 151 NB OFF-RAMP	520	---
125+20	-	129+96	RT	CTH V NB	---	530
269+82	-	283+61	RT	USH 151 NB ON-RAMP	1,625	---
1318+62	-	1320+06	RT	USH 151	260	---
				PROJECT TOTALS	8,565	530

GUARDRAIL

STATION	TO	STATION	ROADWAY	SIDE	HAZARD	HAZARD TYPE	614.0220 STEEL THRIE BEAM BULLNOSE TERMINAL EA	614.0230 STEEL THRIE BEAM LF	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EA	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EA
PROJECT 1420-22-71 CATEGORY 0010												
265+13	-	266+18	USH 151 NB OFF RAMP	RT	S-20-41	SIGN	---	---	50	---	1	1
1273+29	-	1275+13	USH 151	LT & RT	B-20-226	PIER	2	155	---	---	---	---
1318+68	-	1320+81	USH 151	RT	B-20-148	BRIDGE	---	---	125	39	1	---
390+30	-	391+71	USH 45	LT		BRIDGE	---	---	50	39	1	---
389+62	-	390+54	USH 45	RT		BRIDGE	---	---	---	39	1	---
						PROJECT TOTALS	2	155	225	118	4	1

CRASH CUSHION TEMPORARY

STAGE	LOCATION	614.0905 EACH	204.9060.S.01 REMOVING CRASH CUSHIONS	BACK WIDTH FT	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS
PROJECT 1420-22-71 CATEGORY 0010									
EXISTING	1277+25 SB	---	1	2	OM-3R	TL-3	UNIDIRECTIONAL	L	TEMP BARRIER ON SHOULDER
STAGE V3	1270+75 NB	1	---	2	OM-3L	TL-3	UNIDIRECTIONAL	R	TEMP BARRIER IN MEDIAN
STAGE V3	1277+00 SB	1	---	2	OM-3L	TL-3	UNIDIRECTIONAL	R	TEMP BARRIER IN MEDIAN
PROJECT TOTALS		2	1						

CONCRETE MEDIAN SLOPED NOSE

STATION	LOCATION	DIR	620.0300 SF	REMARKS
PROJECT 1420-22-71 CATEGORY 0010				
10+59	CTH V & NB RAMPS RA	RT	20	TYPE 2
10+79	CTH V & NB RAMPS RA	RT	17	TYPE 2
11+50	CTH V & NB RAMPS RA	RT	20	TYPE 2
11+70	CTH V & NB RAMPS RA	RT	17	TYPE 2
12+34	CTH V & NB RAMPS RA	RT	20	TYPE 2
12+50	CTH V & NB RAMPS RA	RT	17	TYPE 2
128+50	CTH V NB	LT	60	TYPE 1
136+57	CTH V NB	LT	59	TYPE 1
20+08	CTH V & FRONTAGE RA	RT	17	TYPE 2
20+74	CTH V & FRONTAGE RA	RT	20	TYPE 2
20+90	CTH V & FRONTAGE RA	RT	17	TYPE 2
21+52	CTH V & FRONTAGE RA	RT	20	TYPE 2
21+67	CTH V & FRONTAGE RA	RT	17	TYPE 2
22+29	CTH V & FRONTAGE RA	RT	20	TYPE 2
22+44	CTH V & FRONTAGE RA	RT	17	TYPE 2
23+07	CTH V & FRONTAGE RA	RT	20	TYPE 2
139+75	CTH V NB	LT	60	TYPE 1
106+50	PARK AVE EB	LT	60	TYPE 1
30+09	FRONTAGE & SB RAMPS RA	RT	17	TYPE 2
30+75	FRONTAGE & SB RAMPS RA	RT	20	TYPE 2
30+91	FRONTAGE & SB RAMPS RA	RT	17	TYPE 2
31+53	FRONTAGE & SB RAMPS RA	RT	20	TYPE 2
31+67	FRONTAGE & SB RAMPS RA	RT	17	TYPE 2
33+03	FRONTAGE & SB RAMPS RA	RT	20	TYPE 2
121+42	FRONTAGE RD EB	LT	59	TYPE 1
		PROJECT TOTAL	668	

LANDSCAPING

STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.2002 E-MAT CLASS I TYPE A SY	628.2004 E-MAT CLASS I TYPE B SY	628.2006 E-MAT URBAN CLASS I TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIX NO. 20 LB	630.0130 SEEDING MIX NO. 30 LB	630.0140 SEEDING MIX NO. 40 LB	630.0160 SEEDING MIX NO. 60 LB	630.0200 SEEDING TEMPORARY LB	630.0300 SEEDING BORROW PIT LB	SPV.0120.01 WATER FOR SEEDED AREAS MGAL
PROJECT 1420-22-71 CATEGORY 0010																
1263+25	-	1277+79	USH 151 MEDIAN	2,900	2,900	---	---	---	1.8	---	50	---	---	40	---	49
1314+22	-	1320+87	USH 151 NB OUTSIDE	1,500	1,250	---	250	---	0.9	---	25	---	---	20	---	25
262+37	-	285+80	USH 151 NB OFF-RAMP	9,500	6,500	1,050	1,950	---	6.0	---	170	---	---	130	---	160
271+30	-	296+37	USH 151 NB ON-RAMP	11,300	6,900	3,300	1,100	---	7.1	---	205	---	---	150	---	190
281+92	-	316+50	USH 151 SB OFF-RAMP	19,400	12,750	---	6,400	300	12.2	---	350	---	---	260	---	327
287+75	-	262+00	USH 151 SB ON-RAMP	14,550	8,850	---	5,450	250	9.2	---	260	---	---	195	---	245
114+00	-	130+52	CTH V	18,100	1,000	12,700	100	4,350	11.4	---	325	---	---	245	---	305
132+18	-	138+50	CTH V	5,650	550	4,350	---	750	3.5	---	100	---	---	75	---	95
138+50	-	144+03	CTH V	6,150	1,000	---	---	5,150	3.9	---	---	95	---	85	---	104
104+47	-	107+05	PARK AVE	550	---	---	150	400	0.3	---	10	---	---	5	---	9
10+00	-	15+41	OLD CTH V NORTH	2,650	750	---	---	1,900	1.7	---	50	---	---	35	---	45
60+00	-	62+10	PARK N RIDE	1,550	450	---	---	1,150	1.0	---	30	---	---	20	---	26
108+37	-	143+02	FRONTAGE RD	35,150	20,750	---	6,400	8,000	22.1	---	635	---	---	475	---	592
88+21	-	91+50	OLD CTH V SOUTH	6,900	5,850	---	1,050	---	4.3	---	125	---	---	95	---	116
389+86	-	397+03	USH 45	5,250	850	3,500	850	---	3.3	---	95	---	---	70	---	88
	-		OBLITERATION AREAS	20,900	20,650	---	250	---	13.2	375	375	---	---	280	---	352
UNDISTRIBUTED				40,500	22,700	6,250	6,000	5,550	25.5	20	730	25	100	545	100	689
			PROJECT TOTALS	202,500	113,700	31,150	29,950	27,800	128	395	3,535	120	100	2,725	100	3,418

EROSION CONTROL

STATION	TO	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE FABRIC TYPE HR SY	628.1104 EROSION BALES EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINT. LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.7005 INLET PROTECTION TYPE A EA	628.7010 INLET PROTECTION TYPE B EA	628.7015 INLET PROTECTION TYPE C EA	628.7020 INLET PROTECTION TYPE D EA	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7560 TRACKING PADS EACH	628.7570 ROCK BAGS EACH
PROJECT 1420-22-71 CATEGORY 0010																		
1263+25	-	1277+79	USH 151 MEDIAN	---	---	---	---	---	1	---	2	2	---	---	36	3	---	---
1314+27	-	1320+79	USH 151 NB OUTSIDE	---	---	---	440	440	---	---	---	---	---	---	24	---	---	4
261+95	-	285+80	USH 151 NB OFF-RAMP	---	---	---	---	---	1	---	---	---	---	---	48	12	---	---
271+30	-	296+37	USH 151 NB ON-RAMP	---	---	---	1,250	1,250	1	---	---	---	---	---	60	---	---	---
281+92	-	316+50	USH 151 SB OFF-RAMP	5	18	---	520	520	1	---	4	1	---	3	96	24	---	---
262+00	-	287+75	USH 151 SB ON-RAMP	---	---	---	250	250	1	---	2	2	---	---	132	30	---	---
114+00	-	130+52	CTH V	67	225	---	1,180	1,180	1	---	20	---	18	2	84	16	---	---
132+18	-	138+50	CTH V	32	110	---	870	870	1	---	8	---	8	---	60	---	---	---
138+50	-	149+07	CTH V	---	---	---	300	300	1	---	9	3	7	2	---	---	---	---
104+47	-	107+05	PARK AVE	---	---	---	100	100	1	---	6	2	4	---	---	---	---	---
10+00	-	15+41	OLD CTH V NORTH	---	---	---	---	---	1	---	5	1	4	---	---	6	1	---
108+37	-	143+02	FRONTAGE RD	---	---	---	3,760	3,760	1	---	30	---	28	2	180	10	1	---
88+37	-	91+50	OLD CTH V SOUTH	---	---	---	---	---	1	---	---	---	---	---	48	4	---	---
389+86	-	398+74	USH 45	---	---	---	1,130	1,130	1	---	8	3	1	4	---	---	---	---
	-		OBLITERATION AREAS	---	---	---	2,295	2,295	1	---	---	---	---	---	12	---	---	---
UNDISTRIBUTED				6	17	100	3,665	3,665	---	8	6	6	10	7	220	25	---	96
			PROJECT TOTALS	110	370	100	15,760	15,760	14	8	100	20	80	20	1,000	130	2	100

3

PLANTING MATERIALS

STATION TO STATION			DIR	LOCATION	632.9101 LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES EACH	SPV.0035.02 PLANTING MIXTURE CY	SPV.0035.03 TOPSOIL SPECIAL CY	SPV.0180.01 SHREDDED HARDWOOD BARK MULCH SY
PROJECT 1420-22-71			CATEGORY 0020					
	-			ALL	26	-	321	490
	-			CTH V & NB RAMPS - BED 1		275		284
	-			CTH V & CTH PA - BED 2		274		284
	-			CTH PA & SB RAMPS - BED 3		292		284
	-							
				PROJECT TOTALS	26	841	321	1,342

DELINEATORS

STATION	TO	STATION	LOCATION	633.0100 DELINEATOR POSTS STEEL EACH	633.0500 DELINEATOR REFLECTORS EACH	633.1000 DELINEATOR BRACKETS EACH	REMARKS
PROJECT 1420-22-71		CATEGORY 0010					
1262+00	-	1276+00	USH 151 NB	14	14	--	
1276+00	-	1285+00	USH 151 NB	5	5	--	
1285+00	-	1296+00	USH 151 NB	11	11	--	
1296+00	-	1318+00	USH 151 NB	6	6	--	
1262+00	-	1278+00	USH 151 SB	16	16	--	
1278+00	-	1295+00	USH 151 SB	9	9	--	
1295+00	-	1308+00	USH 151 SB	13	13	--	
276+00	-	286+00	USH 151 NB OFF RAMP VAA	20	20	--	
271+00	-	275+00	USH 151 NB ON RAMP VBB	8	8	--	
275+00	-	285+00	USH 151 NB ON RAMP VBB	10	10	--	
278+00	-	286+00	USH 151 SB ON RAMP VDD	8	8	--	
284+00	-	296+00	USH 151 SB OFF RAMP VCC	12	12	--	
307+75	-	316+00	USH 151 SB OFF RAMP VCC	--	8	8	CONCRETE BARRIER WALL
			PROJECT TOTALS	131	139	8	

3

SUMMARY OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 FOLDING SIGNS TYPE II REFLECTIVE H S.F.	637.2220 SIGNS TYPE II REFLECTIVE SH S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	REMARKS
1	CTH V, S. OF MUSTANG LN	J1-2	48" X 39"	13.00	---	---	---	---	1	---	---	JCT USH 45, JCT USH 151
2	"	W2-6	30" X 30"	---	---	---	6.25	---	---	1	---	
3	"	W13-1	18" X 18"	---	---	---	2.25	---	---	---	---	15 MPH, MOUNT BELOW SIGN #2
4	"	J2-3	72" X 57"	28.50	---	---	---	---	---	---	2	SOUTH USH 151, USH 45, NORTH USH 151, SEE PLAN SHEET
5	CTH V, N. OF CTH PA/PARK AVE	W3-2	36" X 36"	---	---	---	9.00	---	1	---	---	
6	"	R2-1	24" X 30"	5.00	---	---	---	---	1	---	---	35 MPH
7	"	J4-1	24" X 36"	6.00	---	---	---	---	1	---	---	NORTH CTH V
8	"	J3-3	72" X 57"	28.50	---	---	---	---	---	---	---	
9	"	R4-7	24" X 30"	5.00	---	---	---	---	1	---	---	
10	CTH V/CTH PA RAB	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
11	"	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	MOUNT BELOW SIGN #10
12	"	R1-2	36" X 31"	3.80	---	---	---	---	---	1	---	
13	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #12
14	"	R6-1R	36" X 12"	3.00	---	---	---	---	2	---	---	
15	"	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #14
16	"	D1-1	42" X 30"	8.75	---	---	---	---	1	---	---	PARK AVE, SEE SIGN DETAIL SHEET
17	PARK AVENUE	W2-6	30" X 30"	---	---	---	6.25	---	---	1	---	
18	"	W13-1	18" X 18"	---	---	---	2.25	---	---	---	---	15 MPH, MOUNT BELOW SIGN #17
19	PARK AVE CUL DE SAC	R1-1	30" X 30"	5.18	---	---	---	---	1	---	---	
19A	"	D4-5	36" X 48"	12.00	---	---	---	---	---	1	---	
20	CTH V/CTH PA RAB	R4-7	24" X 30"	5.00	---	---	---	---	1	---	---	
20A	PARK AVENUE	D4-5	36" X 48"	12.00	---	---	---	---	---	1	---	
21	CTH V/CTH PA RAB	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
22	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #21
23	"	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	
24	"	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	MOUNT BELOW SIGN #23
25	"	R6-1R	36" X 12"	3.00	---	---	---	---	2	---	---	
26	"	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #25
27	"	D1-3	84" X 42"	24.50	---	---	---	---	---	2	---	SEE SIGN DETAIL SHEET
27A	CTH V, S. OF CTH PA/PARK AVE	D4-5	36" X 48"	12.00	---	---	---	---	1	---	---	
28	CTH V/CTH PA RAB	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
29	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #28
30	"	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
31	"	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	MOUNT BELOW SIGN #30
32	"	R6-1R	36" X 12"	3.00	---	---	---	---	2	---	---	
33	"	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #32
34	"	D1-1	36" X 18"	4.50	---	---	---	1	---	---	---	CTH V, SEE SIGN DETAIL SHEET
35	"	R6-1R	36" X 12"	3.00	---	---	---	---	2	---	---	
36	"	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #35
37	"	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
38	"	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	MOUNT BELOW SIGN #37
	PAGE SUBTOTALS			274.01	0.00	0.00	26.00	1	18	12	2	

PLAN SHEET PRODUCED
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3

3

SUMMARY OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 FOLDING SIGNS TYPE II REFLECTIVE H S.F.	637.2220 SIGNS TYPE II REFLECTIVE SH S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	REMARKS
39	CTH V/CTH PA RAB	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
40	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #39
41	"	D1-1	78" X 48"	26.00	---	---	---	---	---	2	---	SEE SIGN DETAIL SHEET
42	CTH PA, E. OF CTH V RAB	M1-54	24" X 24"	4.00	---	---	---	---	1	---	---	COUNTY PA
43	"	J3-2	48" X 57"	19.00	---	---	---	---	---	1	---	NORTH USH 151, CTH V, SEE PLAN SHEET
44	"	R2-1	24" X 30"	5.00	---	---	---	---	1	---	---	35 MPH
45	"	W3-2	36" X 36"	---	---	---	9.00	---	---	1	---	
46	CTH PA, W. OF USH 151 SB RAB RAMP TERMINI	D1-62	84" X 78"	45.50	---	---	---	---	---	---	3	SEE SIGN DETAIL SHEET
47	"	D1-62	132" X 60"	55.00	---	---	---	---	---	---	3	SEE SIGN DETAIL SHEET
48	"	W3-2	36" X 36"	---	---	---	9.00	---	---	1	---	
49	"	J1-1	24" X 39"	6.50	---	---	---	---	---	1	---	JCT CTH V
50	"	D1-1	60" X 15"	6.25	---	---	---	1	---	---	---	MADISON, SEE SIGN DETAIL SHEET
50A	"	D1-2	78" X 48"	26.00	---	---	---	---	---	2	---	SEE SIGN DETAIL SHEET
51	USH 151 SB RAB RAMP TERMINI	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
52	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #51
53	"	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	
54	"	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	MOUNT BELOW SIGN #53
55	"	R6-1R	36" X 12"	3.00	---	---	---	2	---	---	---	
56	"	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #55
57	"	D1-1	42" X 30"	8.75	---	---	---	---	---	1	---	SOUTH USH 151, SEE SIGN DETAIL SHEET
58	"	R11-54F	48" X 30"	---	10.00	---	---	---	---	---	---	MOUNT BELOW SIGN #57
59	USH 151 SB ON-RAMP	R5-57	36" X 36"	9.00	---	---	---	---	1	---	---	
60	USH 151 SB RAB RAMP TERMINI	R5-1	36" X 36"	9.00	---	---	---	---	1	---	---	
61	"	R6-1R	36" X 12"	3.00	---	---	---	2	---	---	---	
62	"	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #61
63	"	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
64	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #63
65	"	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	
66	"	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	MOUNT BELOW SIGN #65
67	USH 151 SB OFF-RAMP	R5-1A	36" X 24"	6.00	---	---	---	---	---	---	---	MOUNT ON BACK OF SIGN #67A
67A	"	D4-5	36" X 48"	12.00	---	---	---	---	1	---	---	
68	"	R5-1A	36" X 24"	6.00	---	---	---	1	---	---	---	
69	"	W3-2	36" X 36"	---	---	---	9.00	---	1	---	---	
70	"	D1-62	138" X 42"	40.25	---	---	---	---	---	---	3	SEE SIGN DETAIL SHEET
71	"	W2-6	36" X 36"	---	---	---	9.00	---	---	1	---	
72	"	W13-1	24" X 24"	---	---	---	4.00	---	---	---	---	15 MPH, MOUNT BELOW SIGN #71
73	"	E5-1	72" X 60"	30.00	---	---	---	---	---	2	---	
74	USH 151 NB, N. OF ON-RAMP	J4-1	36" X 54"	13.50	---	---	---	---	---	1	---	NORTH USH 151
75	"	R2-1	36" X 48"	12.00	---	---	---	---	---	1	---	55 MPH
76	USH 151 SB, BETWEEN OFF-RAMP AND ON-RAMP	W4-1	48" X 48"	---	---	---	16.00	---	---	2	---	
	PAGE SUBTOTALS			405.15	10.00	0.00	56.00	6	8	19	9	

PLAN SHEET PRODUCED
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3

3

SUMMARY OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 FOLDING SIGNS TYPE II REFLECTIVE H S.F.	637.2220 SIGNS TYPE II REFLECTIVE SH S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	REMARKS
77	USH 151 SB RAB RAMP TERMINI	D1-2	54" X 18"	6.75	---	---	---	1	---	---	---	SEE SIGN DETAIL SHEET
78	"	R6-1R	36" X 12"	3.00	---	---	---	2	---	---	---	
79	"	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #78
80	"	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
81	"	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	MOUNT BELOW SIGN #80
82	"	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
83	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #82
84	CTH PA, E. OF USH 151 SB RAB RAMP TERMINI	D1-2	72" X 30"	15.00	---	---	---	---	2	---	---	MANITOWOC, MADISON, SEE SIGN DETAIL SHEET
85	"	W3-2	36" X 36"	---	---	---	9.00	---	---	1	---	
86	"	R4-7	24" X 30"	5.00	---	---	---	---	1	---	---	
87	"	D1-62	108" X 84"	63.00	---	---	---	---	---	---	3	SEE SIGN DETAIL SHEET
88	"	W2-6	30" X 30"	---	---	---	6.25	---	---	1	---	
89	"	W13-1	18" X 18"	---	---	---	2.25	---	---	---	---	15 MPH, MOUNT BELOW SIGN #88
90	"	J2-2	48" X 57"	19.00	---	---	---	---	---	1	---	NORTH USH 45, SOUTH USH 45, SEE PLAN SHEET
91	"	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	
92	"	W3-1	36" X 36"	---	---	---	9.00	---	---	1	---	
93	CTH PA, E. OF USH 45	M1-5A	24" X 24"	4.00	---	---	---	1	---	---	---	COUNTY PA
94	CTH PA, AT USH 45	R6-1R	36" X 12"	3.00	---	---	---	---	---	---	---	MOUNT ABOVE SIGN #95
95	"	R1-1	36" X 36"	7.46	---	---	---	---	---	---	1	
96	"	R6-3A	30" X 24"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #95
97	"	J3-2	48" X 57"	19.00	---	---	---	---	---	1	---	NORTH USH 45, SOUTH USH 45, SEE PLAN SHEET
98	"	W1-7	48" X 24"	---	---	---	8.00	1	---	---	---	
99	USH 45, N. OF CTH PA	J13-2	48" X 45"	15.00	---	---	---	---	---	1	---	USH 151, CTH PA, SEE PLAN SHEET
100	"	S3-1	36" X 36"	---	---	---	9.00	---	1	---	---	
101	"	J4-1	24" X 36"	6.00	---	---	---	---	1	---	---	NORTH USH 45
102	"	D1-2	72" X 24"	12.00	---	---	---	---	2	---	---	MADISON, MANITOWOC, SEE SIGN DETAIL SHEET
103	GLYNN AVE	R1-1	30" X 30"	5.18	---	---	---	---	1	---	---	
104	USH 45, N. OF CTH PA	J12-2	48" X 45"	15.00	---	---	---	---	---	1	---	USH 151, CTH PA, SEE PLAN SHEET
105	"	J1-2	48" X 39"	13.00	---	---	---	---	1	---	---	JCT USH 151, JCT CTH PA
106	USH 45, S. OF CTH PA	J13-2	48" X 45"	15.00	---	---	---	---	---	1	---	USH 151, CTH PA, SEE PLAN SHEET
107	"	D1-2	72" X 24"	12.00	---	---	---	---	2	---	---	MADISON, MANITOWOC, SEE SIGN DETAIL SHEET
108	"	S3-1	36" X 36"	---	---	---	9.00	---	1	---	---	
109	"	M1-94	48" X 15"	5.00	---	---	---	1	---	---	---	HWY 151, SEE SIGN DETAIL SHEET
110	"	J12-2	48" X 45"	15.00	---	---	---	---	---	1	---	USH 151, CTH PA, SEE PLAN SHEET
111	"	M1-94	48" X 15"	5.00	---	---	---	1	---	---	---	HWY 151, SEE SIGN DETAIL SHEET
112	"	W1-2L	30" X 30"	---	---	---	6.25	1	---	---	---	
113	"	J1-2	48" X 39"	13.00	---	---	---	---	1	---	---	JCT USH 151, JCT CTH PA
	PAGE SUBTOTALS			311.65	0.00	0.00	58.75	9	13	11	4	

PLAN SHEET PRODUCED
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3

3

SUMMARY OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 FOLDING SIGNS TYPE II REFLECTIVE H S.F.	637.2220 SIGNS TYPE II REFLECTIVE SH S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	REMARKS
114	CTH V, S. OF CTH PA RAB	J3-2	48" X 57"	19.00	---	---	---	---	---	1	---	USH 45, SOUTH USH 151, SEE PLAN SHEET
115	"	R4-7	24" X 30"	5.00	---	---	---	---	1	---	---	
116	"	D1-1	60" X 15"	6.25	---	---	---	1	---	---	---	MADISON, SEE SIGN DETAIL SHEET
117	"	J13-1	24" X 45"	7.50	---	---	---	---	---	1	---	CTH PA, SEE PLAN SHEET
118	"	J2-2	48" X 57"	19.00	---	---	---	---	---	1	---	USH 45, SOUTH USH 151, SEE PLAN SHEET
118A	"	M1-94	48" X 15"	5.00	---	---	---	1	---	---	---	HWY 151, SEE SIGN DETAIL SHEET
119	CTH V, N. OF USH 151 NB RAMP TERMINI RAB	J1-2	48" X 39"	13.00	---	---	---	---	---	1	---	JCT USH 45, JCT CTH PA
119A	"	M1-94	48" X 15"	5.00	---	---	---	1	---	---	---	HWY 151, SEE SIGN DETAIL SHEET
120	"	J2-2	48" X 57"	19.00	---	---	---	---	---	1	---	NORTH USH 151, CTH V, SEE PLAN SHEET
121	"	R4-7	24" X 30"	5.00	---	---	---	---	1	---	---	
122	"	D1-1	72" X 15"	7.50	---	---	---	1	---	---	---	MANITOWOC, SEE SIGN DETAIL SHEET
123	"	J3-2	48" X 57"	19.00	---	---	---	---	---	1	---	NORTH USH 151, CTH V, SEE PLAN SHEET
124	CTH V/USH 151 NB RAMP TERMINI RAB	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
125	"	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	MOUNT BELOW SIGN #124
126	"	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
127	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #126
128	"	R6-1R	36" X 12"	3.00	---	---	---	2	---	---	---	
129	"	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #128
130	"	D1-1	66" X 30"	13.75	---	---	---	---	2	---	---	SEE SIGN DETAIL SHEET
131	"	R6-1R	36" X 12"	3.00	---	---	---	2	---	---	---	
132	"	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #131
133	"	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
134	"	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	MOUNT BELOW SIGN #133
135	"	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
136	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #135
137	"	R5-1	36" X 36"	9.00	---	---	---	---	1	---	---	
138	USH 151 NB OFF-RAMP TO CTH V	R5-1A	36" X 24"	6.00	---	---	---	---	---	1	---	
138A	"	D4-5	36" X 48"	12.00	---	---	---	---	---	---	---	MOUNT ON BACK OF SIGN #138
139	"	R5-1A	36" X 24"	6.00	---	---	---	1	---	---	---	
140	"	W3-2	36" X 36"	---	---	---	9.00	---	1	---	---	
141	"	D1-62	138" X 42"	40.25	---	---	---	---	---	3	---	SEE SIGN DETAIL SHEET
142	"	W2-6	36" X 36"	---	---	---	9.00	---	---	---	1	
143	"	W13-1	24" X 24"	---	---	---	4.00	---	---	---	---	15 MPH, MOUNT BELOW SIGN #142
143A	"	W1-6	48" X 24"	---	---	---	8.00	---	1	---	---	
144	USH 151 NB, OFF-RAMP TO CTH V	E5-1	72" X 60"	30.00	---	---	---	---	---	---	2	
144A	"	W13-3	48" X 60"	---	---	---	20.00	---	---	---	2	POSTED SPEED TO BE DETERMINED IN THE FIELD AFTER RAMP IS BUILT
145	USH 151 NB, BETWEEN OFF-RAMP & ON-RAMP	W4-1	48" X 48"	---	---	---	16.00	---	---	2	---	
146	USH 151 SB, S. OF CTH V	R2-1	36" X 48"	12.00	---	---	---	---	---	1	---	55 MPH
147	"	J4-1	36" X 54"	13.50	---	---	---	---	---	1	---	SOUTH USH 151
148	CTH V/USH 151 NB RAMP TERMINI RAB	D1-2	66" X 42"	19.25	---	---	---	---	---	2	---	SEE SIGN DETAIL SHEET
149	"	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
150	"	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #149
	PAGE SUBTOTALS			357.40	0.00	0.00	66.00	9	7	21	5	

PLAN SHEET PRODUCED

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3

3

SUMMARY OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2215 FOLDING SIGNS TYPE II REFLECTIVE H S.F.	637.2220 SIGNS TYPE II REFLECTIVE SH S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	REMARKS
151	CTH V/USH 151 NB RAMP TERMINI RAB	R1-2	36" X 31"	3.88	---	---	---	---	---	1	---	
152	"	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	MOUNT BELOW SIGN #151
153	"	R6-1R	36" X 12"	3.00	---	---	---	2	---	---	---	
154	"	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #153
155	"	D1-1	42" X 30"	8.75	---	---	---	---	1	---	---	SEE SIGN DETAIL SHEET
156	"	R11-54F	48" X 30"	---	10.00	---	---	---	---	---	---	MOUNT BELOW SIGN #155
157	USH 151 NB ON-RAMP	R5-57	36" X 36"	9.00	---	---	---	---	1	---	---	
158	CTH V, S. OF USH 151 RAMP TERMINI RAB	J3-2	48" X 57"	19.00	---	---	---	---	---	1	---	SOUTH USH 151, NORTH USH 151, SEE PLAN SHEET
159	"	J4-1	24" X 36"	6.00	---	---	---	---	1	---	---	SOUTH CTH V
160	"	W3-2	36" X 36"	---	---	---	9.00	---	1	---	---	
161	"	R2-1	24" X 30"	5.00	---	---	---	---	1	---	---	35 MPH
162	"	D1-2	72" X 30"	15.00	---	---	---	---	2	---	---	MANITOWOC, MADISON, SEE SIGN DETAIL SHEET
163	"	J2-2	48" X 57"	19.00	---	---	---	---	---	1	---	SOUTH USH 151, NORTH USH 151, SEE PLAN SHEET
164	"	W2-6	30" X 30"	---	---	---	6.25	---	---	1	---	
165	"	W13-1	18" X 18"	---	---	---	2.25	---	---	---	---	MOUNT BELOW SIGN #164
166	"	J1-1	24" X 39"	6.50	---	---	---	---	1	---	---	JCT USH 151
167	CTH V, N. OF REINHARDT RD	R4-7	24" X 30"	5.00	---	---	---	---	1	---	---	
168	REINHARDT RD	R6-1R	36" X 12"	3.00	---	---	---	---	---	---	---	MOUNT ABOVE SIGN #169
169	VACANT	---	---	---	---	---	---	---	---	---	---	
170	REINHARDT RD	R6-3	30" X 24"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #169
171	"	R6-1L	36" X 12"	3.00	---	---	---	---	---	---	---	MOUNT ON BACK OF SIGN #168
172	"	M6-4	21" X 21"	3.06	---	---	---	---	---	---	---	SIGN TO BE PLACED AND MOUNTED OVER EXISTING LT-AHEAD ASSEMBLY
173	LIGHTHOUSE VILLAGE RD	R6-1R	36" X 12"	3.00	---	---	---	---	---	---	---	MOUNT ABOVE SIGN #174
174	"	M6-4	21" X 21"	3.06	---	---	---	---	---	---	---	SIGN TO BE PLACED AND MOUNTED OVER EXISTING AHEAD-RT ASSEMBLY
175	"	R6-3	30" X 24"	5.00	---	---	---	---	---	---	---	MOUNT BELOW SIGN #174
176	"	R6-1L	36" X 12"	3.00	---	---	---	---	---	---	---	MOUNT ON BACK OF SIGN #173
177	VACANT	---	---	---	---	---	---	---	---	---	---	
178	PARK AVE CUL DU SAC	W5-56	18" X 18"	---	---	2.25	---	1	---	---	---	
179	"	W5-56	18" X 18"	---	---	2.25	---	1	---	---	---	
180	"	W5-56	18" X 18"	---	---	2.25	---	1	---	---	---	
181	LIGHTHOUSE VILLAGE RD	W1-2L	30" X 30"	---	---	---	6.25	1	---	---	---	
182	"	W1-6	48" X 24"	---	---	---	8.00	1	---	---	---	
183	"	W1-6	48" X 24"	---	---	---	8.00	1	---	---	---	
184	"	W1-2R	30" X 30"	---	---	---	6.25	1	---	---	---	
	PAGE SUBTOTALS			140.76	10.00	6.75	46.00	9	9	4	0	
	PROJECT TOTALS			**1488.97**	**20.00**	**6.75**	**252.75**	**34**	**55**	**67**	**20**	

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3

REMOVING TYPE II SIGNS AND REMOVING SMALL SIGN SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
200	USH 151, S. OF CTH V	J1-1	1	1	
201	"	J1-1	1	1	
202	"	R3-20L	1	1	
203	"	J3-1	1	1	
204	"	R2-1	1	1	
205	"	R2-1	1	1	
206	"	J4-1	1	1	
207	"	R5-1A	1	1	
208	"	J3-1	1	1	
209	"	R5-1	---	---	PART OF REMOVAL FOR SIGN #208
210	USH 151, AT CTH V	R1-2	1	1	
211	"	R3-1	1	1	
212	"	R5-1	1	1	
213	"	R6-2R	1	1	
214	CTH V, AT USH 151	R3-2	1	1	
215	"	R1-1	1	1	
216	"	R1-1	1	1	
217	"	J3-1	1	1	
218	"	R4-7	1	1	
219	CTH V, S. OF USH 151	J4-1	1	1	
220	LIGHTHOUSE VILLAGE RD	R1-1	1	1	
221	CTH V	R1-1	1	---	POST TO REMAIN FOR REMAINING R4-7 SIGN
221A	"	R1-3P	---	---	PART OF REMOVAL FOR SIGN #221
222	"	R2-1	1	1	
222A	"	R1-3P	---	---	PART OF REMOVAL FOR SIGN #222
223	"	J1-1	1	1	
224	"	W3-1	1	1	
225	"	J13-1	1	1	
226	CTH V/LIGHTHOUSE VILLAGE RD	R1-3P	1	---	POST TO REMAIN
227	REINHARDT RD	R1-3P	1	---	POST TO REMAIN
228	VACANT	---	---	---	
229	CTH V	W1-4R	1	1	
230	CTH V, AT USH 151	J3-1	1	1	
231	"	R1-1	1	1	
232	"	R1-1	1	1	
233	"	R3-2	1	1	
234	CTH V	R4-7	1	1	
235	"	J4-1	1	1	
236	USH 151, AT CTH V	R6-2R	1	1	
237	"	R5-1	1	1	
238	"	R3-1	1	1	
	PAGE SUBTOTALS		37	34	

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3

REMOVING TYPE II SIGNS AND
REMOVING SMALL SIGN SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
239	USH 151, AT CTH V	R1-2	1	1	
240	USH 151, N. OF CTH V	R5-1	1	1	
241	"	J3-1	---	---	PART OF REMOVAL FOR SIGN #240
242	"	R5-1A	1	1	
243	"	R2-1	1	1	
244	"	R2-1	1	1	
245	"	J3-1	1	1	
246	"	R3-20L	1	1	
247	CTH V	J1-1	1	1	
248	"	R2-1	1	1	
249	"	I2-3	1	2	
250	"	W1-4L	1	1	
251	"	W3-1	1	1	
252	USH 151, N. OF CTH V	J1-1	1	1	
253	"	J1-1	1	1	
254	"	J1-1	1	1	
255	USH 151, S. OF USH 45	J1-1	1	1	
256	"	J4-1	1	1	
257	USH 45 SB JUGHANDLE, AT USH 151	J3-1	1	1	
258	"	R1-1	1	1	
259	"	R6-2R	1	1	
260	USH 151, S. OF USH 45 OVERPASS	J13-1	1	1	
261	"	R5-1	1	1	
262	"	D1-2	1	2	
263	"	R5-1A	1	1	
264	"	J13-1	1	1	
265	"	J13-1	1	1	
266	USH 45 SB JUGHANDLE	D1-2	1	2	
267	"	R3-2	1	1	
268	"	W3-1	1	1	
269	"	R1-1	1	1	
270	"	J3-2	1	1	
271	USH 45, AT SB JUGHANDLE	W1-7	1	1	
	PAGE SUBTOTALS		32	35	

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3

REMOVING TYPE II SIGNS AND REMOVING SMALL SIGN SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
272	USH 45, AT SB JUGHANDLE	J3-1	1	1	
273	USH 45, N. OF SB JUGHANDLE	J3-2	1	1	
274	"	S3-1	1	1	
275	"	D1-3	1	2	
276	"	J4-1	1	1	
277	GLYNN AVE	R1-1	1	1	
278	USH 45, N. OF SB JUGHANDLE	J2-2	1	2	
279	"	J1-1	1	1	
280	USH 45, S. OF SB JUGHANDLE	R2-1	1	1	
281	"	S3-1	1	1	
282	"	D1-2	1	2	
283	USH 45, N. OF NB JUGHANDLE	J2-1	1	1	
284	"	D1-2	1	2	
285	"	W1-2R	1	1	
286	"	W1-2L	1	1	
287	"	J3-1	1	1	
288	USH 45 NB JUGHANDLE	J3-2	1	1	
289	"	R1-1	1	1	
290	"	W3-1	1	1	
291	USH 45, S. OF NB JUGHANDLE	J3-2	1	1	
292	USH 45, S. OF CTH K	J1-1	1	1	
293	USH 45 NB JUGHANDLE	R3-2	1	1	
294	"	D1-2	1	2	
295	USH 151, N. OF USH 45 OVERPASS	J12-1	1	1	
296	"	J12-1	1	1	
297	"	D1-2	1	2	
298	"	R5-1A	1	1	
299	"	R5-1	1	1	
299A	"	R6-2R	1	1	
299B	USH 45 NB JUGHANDLE	R1-1	1	1	
299C	"	J2-1	1	1	
299D	USH 151, N. OF USH 45 NB JUGHANDLE	J4-1	1	1	
299E	"	J1-1	1	1	
299F	"	J1-1	1	1	
	PAGE SUBTOTALS		34	40	
	PROJECT TOTALS		**103**	**109**	

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3

ERECTION OF PERMANENT SIGNING, TYPE I AND SIGN SUPPORTS

SIGN NO.	LOCATION	SIGN CODE	637.1220 SIGNS TYPE I REFLECTIVE SH W X H	S.F.	635.0200 SIGN SUPPORTS STRUCT. STEEL HIGH-STRENGTH LB	636.0100 SIGN SUPPORTS CONCRETE MASONRY CY	636.0500 SIGN SUPPORTS STEEL REINFORCEMENT LB	TYPE/SIZE OF STEEL	INFO ONLY - POST LENGTH TO BE VERIFIED BY CONTRACTOR: SIGN BRIDGE CANTILEVERED LS	POST NO. 1 LENGTH FT	POST NO. 2 LENGTH FT	OFFSET DISTANCE FT	DISTANCE BETWEEN POSTS (S) FT	REMARKS
300	USH 151 NB, JUST NORTH OF MARTIN RD	E1-1A	156" X 90"	97.50	652	1.2	68	2-TYPE A	---	20.2	21.5	30.0	9.0	STA.1235+70, USH 45, CTH V, EXIT 3/4 MILE, SEE SIGN DETAIL SHEET
301	USH 151 NB, AT PARALLEL EXIT FOR CTH V	E6-1	168" X 60"	70.00	---	---	---	---	1	---	---	---	---	S-20-41, STA. 1266+03.5, USH 45, CTH V, SEE SIGN DETAIL SHEET
302	USH 151 SB, AT PARALLEL EXIT FOR CTH PA	E6-1	168" X 90"	105.00	---	---	---	---	1	---	---	---	---	S-20-42, STA. 1308+00, USH 45, CTH V, SEE SIGN DETAIL SHEET
303	USH 151 SB, SOUTH OF RIENZI RD	E1-1A	156" X 90"	97.50	696	1.2	68	2-TYPE A	---	21.5	23.8	30.0	9.0	STA. 1348+05, USH 45, CTH V, EXIT 1 MILE, SEE SIGN DETAIL SHEET
	PROJECT TOTALS			**370.00**	**1348**	**2.4**	**136**							

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TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 30 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420* BARRICADES TYPE III DAYS	643.0705* WARNING LIGHTS TYPE A DAYS	643.1050* SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	643.0920 COVERING SIGNS NUMBER OF CYCLES	643.0920 COVERING SIGNS EACH	REMARKS
1	50' E OF CHURCH ST INTERSECTION ON USH 45	WO 20-2-A	48"x48"	1	30	30						
2	MODIFY J 2-2 (B-AH; N-45-AH RT)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	EXISTING									
	"	M 1-4	EXISTING									45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
3	MODIFY J 3-2 (TO -41-AH; N-45-RT)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	EXISTING									
	"	M 1-4	EXISTING									45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
4A	NE QUAD OF USH 45/CTH B & USH 45 INTERSECTION	R 11-3	60"x30"	1	30	30	30	60				4 MILES
4B	BELOW SIGN 4A (ON BARRICADE)	M 4-9 (MOD)	30"x24"	1	30	30						AHEAD ARROW
5	J4-1 (NORTH 45)									1	1	NORTH 45
6	MODIFY J 2-2 (45-LT & AH; B-AH)	M 1-4	EXISTING									45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
7	200' W OF STH 45 INTERSECTION ON WEST CTH B	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
8	MODIFY J2-1 (N-45-AH LT)	MO 4-8-A	24"x18"	1	30	30						
		M 1-4	EXISTING									45
		MO 6-1	21"x21"	1	30	30						AHEAD
9	150' E OF W3-1 (STOP AHEAD) SIGN ON CTY B (WB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 5-1-R	21"x21"	1	30	30						
10	RT OF J4-2 (TO-41-AH; V-LT& RT) ON CTY B (WB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						RIGHT
11	200' E OF CTH V INTERSECTION ON CTH B (EB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
12	300' W OF J1-1 (JCT V) ON CTY B (EB)	M 1-4	24"x24"	1	30	30						45
	"	WO 20-2-A	48"x48"	1	30	30						
13	LT OF J1-1 (JCT V) ON CTY B (EB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	MO 4-5	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 50-2	48"x24"	1	30	30						45 / 45
	"	MO 5-1-L	21"x21"	1	30	30						
	"	MO 6-1	21"x21"	1	30	30						AHEAD
14A	MODIFY J4-2 (TO-45-AH; V-LT & RT) ON CTY B (EB)	MO 4-5	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	EXISTING									45
	"	MO 6-1	EXISTING									AHEAD

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TRAFFIC CONTROL DETOUR SIGN SUMMARY-CONT'D

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 30 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420* BARRICADES TYPE III DAYS	643.0705* WARNING LIGHTS TYPE A DAYS	643.1050* SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	643.0920 COVERING SIGNS NUMBER OF CYCLES	643.0920 COVERING SIGNS EACH	REMARKS
14B	LT OF SIGN # 14A	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"									45
	"	MO 6-1	21"x21"									LEFT
15	BACK SIDE OF J4-2 (TO-41-AH; V-LT & RT) ON CTY B (WB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						LEFT
16	200' S OF R 2-1 (SPEED LIMIT 35 MPH) ON CTY (NB)	M 1-4	24"x24"	1	30	30						45
	"	WO 20-2-A	48"x48"	1	30	30						
17	100' N OF D1-1 (EDEN-POPULATION) ON CTY V (NB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	MO 4-5	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 50-2	48"x24"	1	30	30						45 / 45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
	"	MO 5-1-R	21"x21"	1	30	30						
18	RT OF J4-2 (TO-41-LT; B-LT& RT) ON CTY V (NB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	MO 4-5	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 50-2	48"x24"	1	30	30						45 / 45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
	"	MO 6-1	21"x21"	1	30	30						RIGHT
19	250' N OF CTH B INTERSECTION ON CTH V (NB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
20	RT OF J4-2 (B-LT & RT; TO-41-RT) ON CTY V (SB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						LEFT
21	RT OF J1-1 (JCT B) ON CTY V (SB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 5-1-L	21"x21"	1	30	30						
22	200' S OF LIME RD INTERSECTION OF CTH V (SB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
23	200' N OF LIME RD INTERSECTION OF CTH V (NB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
24	200' E OF CTY K INTERSECTION ON CTY V (SB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD

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TRAFFIC CONTROL DETOUR SIGN SUMMARY-CONT'D

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 30 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420* BARRICADES TYPE III DAYS	643.0705* WARNING LIGHTS TYPE A DAYS	643.1050* SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	643.0920 COVERING SIGNS NUMBER OF CYCLES	643.0920 COVERING SIGNS EACH	REMARKS
25	200' W OF CTY K INTERSECTION ON CTY V (NB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
26	200' S OF REINHART RD INTERSECTION ON CTY V (SB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
27	200' N OF REINHART R INTERSECTION ON CTY V (NB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
28	RT OF J3-2 (S-151-AH; N-151-RT) ON CTY V (NB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
29	ABOVE D1-1 (S-151 & CTY V TILT RT) ON NORTH LEG SPLITTER ISLAND @ RAB FOR NB HWY 151 INTERCHANGE RAMPS	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-2	21"x21"	1	30	30						RIGHT
30	RT OF J4-1 (SOUTH-V) ON CTY V (SB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
31	RT OF J3-2 (45-RT; S-151-RT) ON CTY V (NB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
32	ABOVE D1-3 (TILT RT-45, 151-SOUTH; 151 NORTH, V TILT RT) ON SOUTH LEG SPLITTER ISLAND @ RAB FOR SB HWY 151 & FRONTAGE RD INTERCHANGE RAMPS	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-2	21"x21"	1	30	30						RIGHT
33	ABOVE D1-1 (CTY V-TILT RT) ON NORTH LEG SPLITTER ISLAND @ RAB FOR FRONTAGE RD & SB HWY 151 INTERCHANGE RAMPS	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-2	21"x21"	1	30	30						RIGHT
34	RT OF J3-3 (S-151-L; 45-L; N-151-AH) ON CTY V (SB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD

TRAFFIC CONTROL DETOUR SIGN SUMMARY-CONT'D

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 30 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420* BARRICADES TYPE III DAYS	643.0705* WARNING LIGHTS TYPE A DAYS	643.1050* SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	643.0920 COVERING SIGNS NUMBER OF CYCLES	643.0920 COVERING SIGNS EACH	REMARKS
35	100' N OF MUSTANG LN INTERSECTION ON CTY V (NB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
36	150' S OF CTY VV (PIONEER RD) INTERSECTION ON CTY V (SB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
37	150' N OF CTY VV (PIONEER RD) INTERSECTION ON CTY V (NB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-1	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
38	MODIFY J1-1 (JCT 45) ON CTY V (NB)	MO 4-8-A	24"x18"	1	30	30						
	"	M 1-4	EXISTING									45
39	100' S OF HWTY 45 INTERSECTION ON CTY V (SB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						AHEAD
40	MODIFY J13-1 (45 LT & RT) ON CTY V (NB)	M 1-4	EXISTING									45
	"	MO 6-1	21"x21"	1	30	30						LEFT
41	SW QUAD OF USH 45 & CTY V INTERSECTION	R 11-3	60"x30"	1	30	30	30	60				1 MILES
42	BELOW SIGN 41	M 4-9-R	30"x24"	1	30	30						
43	BACKSIDE OF J13-1 (V-LT & AH) ON HWY 45 (SB-FAR LT)	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-1	21"x21"	1	30	30						RIGHT
44	RT OF J13-1 (V-TILT RT) ON HWY 45 (SB-NEAR RT)	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 6-2	21"x21"	1	30	30						RIGHT
45	250' N OF J13-1 (V-LT & AH) ON HWY 45 (SB)	MO 4-8	24"x12"	1	30	30						
	"	M 3-3	24"x12"	1	30	30						
	"	M 1-4	24"x24"	1	30	30						45
	"	MO 5-1-R	21"x21"	1	30	30						
46	500' N OF SIGN # 45 ON HWY 45 (SB)	WO 20-2-A	48"x48"	1	30	30						
47	J4-1 (SOUTH 45) SOUTH OF HWY 45/CTY V INTERSECTION									1	1	SOUTH 45
48	NE QUAD OF USH 45 & CTY UU INTERSECTION ON HWY 45 (NB)	R 11-3	60"x30"	1	30	30	30	60				3 MILES
49	NE QUAD OF USH 45 & CTY H INTERSECTION ON HWY 45 (NB)	R 11-3	60"x30"	1	30	30	30	60				2 MILES
50	NW QUAD OF USH 45 & CTY K (WEST LEG) INTERSECTION ON HWY 45 (NB)	R 11-3	60"x30"	1	30	30	30	60				1/2 MILES
51	FIELD DETERMINED - HWY 45 (SB)	PCMS		1					7			PRIOR TO CONSTRUCTION
52	FIELD DETERMINED - HWY 45 (SB)	PCMS		1					7			PRIOR TO CONSTRUCTION
	TOTAL			*161*		*4,770*	*150*	*300*	*14*		*2*	

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL

STAGE	DESCRIPTION	DAYS	643.0300 DRUMS NUMBER	643.0300 DRUMS DAYS	643.0410 BARRICADES TYPE II NUMBER	643.0410 BARRICADES TYPE II DAYS	643.0420* BARRICADES TYPE III NUMBER	643.0420* BARRICADES TYPE III DAYS	643.0705* WARNING LIGHTS TYPE A NUMBER	643.0705* WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C NUMBER	643.0715 WARNING LIGHTS TYPE C DAYS	643.0800 ARROW BOARDS NUMBER	643.0800 ARROW BOARDS DAYS	643.0900 SIGNS NUMBER	643.0900 SIGNS DAYS
PROJECT 1420-22-71 CATEGORY 0010																
STAGE V3	USH 151	137	36	4932	---	---	---	---	---	---	---	---	---	---	37	5069
STAGE V3	LOCAL	137	20	2740	4	548	12	1644	18	2466	---	---	---	---	16	2192
STAGE V4	USH 151	45	206	9270	---	---	7	315	---	---	49	2205	4	180	56	2520
STAGE V4	LOCAL	45	65	2925	3	135	23	1035	30	1350	---	---	---	---	21	945
STAGE V5	USH 151	19	273	5187	---	---	12	228	5	95	114	2166	4	76	60	1140
STAGE V5	LOCAL	19	65	1235	3	57	50	950	64	1216	---	---	---	---	23	437
STAGE V6A	USH 151	23	273	6279	1	23	12	276	8	184	114	2622	4	92	59	1357
STAGE V6A	LOCAL	23	20	460	7	161	24	552	36	828	---	---	---	---	14	322
STAGE V6B	USH 151	16	273	4368	1	16	13	208	8	128	114	1824	4	64	67	1072
STAGE V6B	LOCAL	16	20	320	5	80	24	384	34	544	---	---	---	---	12	192
STAGE V7	USH 151	15	137	2055	---	---	8	120	---	---	26	390	4	60	37	555
STAGE V7	LOCAL	15	---	---	---	---	---	---	---	---	---	---	---	---	---	---
LANE CLOSURE	NB USH 151 INSIDE	10	45	450	---	---	2	20	---	---	12	120	2	20	9	90
LANE CLOSURE	NB USH 151 OUTSIDE	---	54	---	---	---	4	---	---	---	24	---	2	---	14	---
LANE CLOSURE	SB USH 151 INSIDE	10	89	890	---	---	5	50	---	---	14	140	2	20	12	120
LANE CLOSURE	SB USH 151 OUTSIDE	---	105	---	---	---	4	---	---	---	24	---	2	---	12	---
PROJECT TOTALS				41111		1020		5782		6811		9467		512		16011

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC CONTROL

PROJECT	643.0200.01 SURVEILLANCE AND MAINTAINANCE PROJECT DAY
PROJECT 1420-22-71 CATEGORY 0010	
1420-22-71	260
PROJECT TOTALS	260

TRAFFIC CONTROL SIGNS FIXED MESSAGE

NO.	INSTALL IN	STATION/LOCATION	MESSAGE	TO REMAIN FOR STAGE	SIZE IN	X	SIZE IN	643.1000 SF	NOTES
PROJECT 1420-22-71 CATEGORY 0010									
T1	STAGE V5	STA 1268+00 NB USH 151 RT	V (EXIT ARROW)	5,6A, 6B	60	X	72	30	
T2	STAGE V5	STA 1304+00 SB USH 151 RT	V (EXIT ARROW)	5,6A, 6B	60	X	72	30	
PROJECT TOTALS								60	

3

TRAFFIC CONTROL PAVEMENT MARKING

		646.0600		649.0400		649.0600	649.0801	
		REMOVING PAVEMENT MARKING		TEMPORARY PAVEMENT MARKING REMOVABLE TAPE				
		4-INCH	8-INCH	4-INCH	4-INCH	6-INCH	8-INCH	8-INCH
			(2X 4-INCH)	WHITE	YELLOW	BLACK	BLACK	WHITE
STAGE		LF	LF	LF	LF	LF	LF	LF
PROJECT 1420-22-71 CATEGORY 0010								
STAGE V1AB	USH 151	---	---	---	---	---	---	---
STAGE V1AB	LOCAL	---	---	---	---	---	---	---
STAGE V1C	USH 151	---	---	---	---	---	---	---
STAGE V1C	LOCAL	---	---	---	---	---	---	---
STAGE V2	USH 151	---	---	---	---	---	---	---
STAGE V2	LOCAL	---	---	---	---	---	---	---
STAGE V3	USH 151	---	---	---	---	---	---	---
STAGE V3	LOCAL	---	---	---	---	---	---	---
STAGE V4	USH 151	---	---	12200	---	450	---	900
STAGE V4	LOCAL	281	---	1125	1125	---	---	---
STAGE V5	USH 151	2200	---	7000	---	288	---	3750
STAGE V5	LOCAL	500	---	2250	---	---	---	---
STAGE V6A	USH 151	---	---	---	---	---	---	---
STAGE V6A	LOCAL	---	---	---	---	---	---	---
STAGE V6B	USH 151	---	---	---	---	---	---	---
STAGE V6B	LOCAL	---	---	---	---	---	---	---
STAGE V7	USH 151	---	---	---	10200	---	---	---
STAGE V7	LOCAL	---	---	---	---	---	---	---
SUBTOTAL		2981	---	22575	11325	738	---	4650
PROJECT TOTALS		2981		33900		738	4650	

TRAFFIC CONTROL SIGNS PCMS

SIGN	2016 DAYS	643.105* TRAFFIC CONTROL SIGNS PCMS NUMBER	DAYS
PROJECT 1420-22-71 CATEGORY 0010			
PCMS V1	7	1	7
PCMS V2	7	1	7
USH 45 RAMP CLOSURE ADV WARN (C3-C6)	7	4	28
USH 45 CLOSURE ADV WARN (C7-C8)	7	2	14
PROJECT TOTALS			56

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TEMPORARY CURB RAMPS

STAGE	LOCATION	TEMPORARY CURB RAMP SPV.0060.31 LF	NOTES
PROJECT 1420-22-71 CATEGORY 0010			
STAGE V4	PRAIRIE TRAIL	2	TEMP CROSSING OF FRONTAGE ROAD STA 138+50; TO REMAIN FOR STAGE 5, 6A
PROJECT TOTALS		2	

PEDESTRIAN SAFETY FENCE

STAGE	LOCATION	MAINTAINING PEDESTRIAN SAFETY FENCE SPV.0090.14 LF	NOTES
PROJECT 1420-22-71 CATEGORY 0010			
EXISTING	PRAIRIE TRAIL	300	ALONG NORTH SIDE OF TRAIL STA 1273+50-1275+50
EXISTING	PRAIRIE TRAIL	300	ALONG SOUTH SIDE OF TRAIL STA 1273+50-1275+50
PROJECT TOTALS		600	

PAVEMENT MARKING

STATION	TO	STATION	LOCATION	646.0106 PAVEMENT MARKING EPOXY 4-INCH (WHITE) LF	646.0106 PAVEMENT MARKING EPOXY 4-INCH (YELLOW) LF	646.0126 PAVEMENT MARKING EPOXY 8-INCH LF	646.0841.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH LF	646.0843.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH LF	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2 EACH	647.0206 PAVEMENT MARKING ARROWS BIKE LANE EPOXY EACH	647.0256 PAVEMENT MARKING SYMBOLS EPOXY EACH	647.0306 PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY EACH	647.0356 PAVEMENT MARKING WORDS EPOXY EACH	647.0566 PAVEMENT MARKING STOP LINE 18-INCH EPOXY LF	647.0606 PAVEMENT MARKING ISLAND NOSE EPOXY EACH
PROJECT 1420-22-71		CATEGORY 0010													
1261+95	-	1321+00	USH 151	5319	1792	---	3530	1528	---	---	---	---	---	---	---
274+91	-	286+39	USH 151 NB OFF-RAMP	1094	998	---	---	153	---	---	---	---	---	---	---
270+75	-	288+25	USH 151 NB ON-RAMP	1756	1361	---	---	339	---	---	---	---	---	---	---
282+81	-	301+46	USH 151 SB OFF-RAMP	1850	1211	---	---	598	---	---	---	---	---	---	---
275+08	-	287+07	USH 151 SB ON-RAMP	1179	803	---	---	339	---	---	---	---	---	---	---
114+50	-	123+03	CTH V	1496	---	504	---	---	4	5	---	5	2	---	---
123+03	-	126+32	CTH V ROUNDABOUT	---	---	---	---	---	---	---	---	---	---	---	---
126+32	-	137+06	CTH V	2065	2308	---	---	---	---	6	---	6	---	---	2
137+06	-	139+72	CTH V ROUNDABOUT	---	---	---	---	---	---	---	---	---	---	---	---
139+72	-	144+02	CTH V	722	1302	---	---	---	---	2	---	2	---	---	1
10+00	-	15+50	OLD CTH V NORTH	---	930	---	---	---	---	---	---	---	---	---	---
	-		PARK N RIDE	---	---	---	---	---	---	---	3	---	---	---	---
104+47	-	106+53	PARK AVE	208	808	---	---	---	---	---	---	---	---	---	1
87+89	-	91+50	OLD CTH V SOUTH	625	625	---	---	---	---	---	---	---	---	---	---
109+13	-	115+85	FRONTAGE ROAD	1208	---	---	---	---	---	---	---	---	---	---	---
115+85	-	118+54	FRONTAGE RD ROUNDABOUT	---	---	---	---	---	---	---	---	---	---	---	---
118+54	-	142+67	FRONTAGE ROAD	4614	4548	75	---	---	2	---	---	---	---	26	---
386+09	-	398+74	USH 45	2323	3630	151	---	---	2	---	---	---	---	---	---
			SUBTOTALS	24459	20316	730	3530	2957	8	13	3	13	2	26	4
			PROJECT TOTALS	44775		730	3530	2957	8	13	3	13	2	26	4

3

PAVEMENT MARKING CONT'D

STATION	TO	STATION	LOCATION	647.0656 PAVEMENT MARKING PARKING STALL EPOXY (WHITE) 4-INCH LF	647.0726 PAVEMENT MARKING DIAGONAL EPOXY (YELLOW) 12-INCH LF	647.0726 PAVEMENT MARKING DIAGONAL EPOXY (WHITE) 12-INCH LF	647.0746 PAVEMENT MARKING DIAGONAL EPOXY 24-INCH LF	647.0766 PAVEMENT MARKING CROSSWALK EPOXY 6-INCH LF	SPV.0090.05 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 18-INCH LF	SPV.0090.06 PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 6-INCH LF	647.0358 PAVEMENT MARKING WORDS PREFORMED THERMOPLASTIC EACH
PROJECT 1420-22-71 CATEGORY 0010											
1261+95	-	1321+00	USH 151	---	---	---	---	---	---	---	---
274+91	-	286+39	USH 151 NB OFF-RAMP	---	---	---	39	---	---	---	---
270+75	-	288+25	USH 151 NB ON-RAMP	---	---	---	---	---	---	---	---
282+81	-	301+46	USH 151 SB OFF-RAMP	---	---	---	124	---	---	---	---
275+08	-	287+07	USH 151 SB ON-RAMP	---	---	---	---	---	---	---	---
114+50	-	123+03	CTH V	---	---	51	---	---	---	---	---
123+03	-	126+32	CTH V ROUNDABOUT	---	---	---	---	---	87	206	3
126+32	-	137+06	CTH V	---	73	---	---	---	---	---	---
137+06	-	139+72	CTH V ROUNDABOUT	---	---	---	---	---	128	270	4
139+72	-	144+02	CTH V	---	55	---	---	---	---	---	---
10+00	-	15+50	OLD CTH V NORTH	---	---	---	---	91	---	---	---
	-		PARK N RIDE	1192	---	---	---	---	---	---	---
104+47	-	106+53	PARK AVE	---	---	---	---	---	---	---	---
87+89	-	91+50	OLD CTH V SOUTH	---	---	---	---	---	---	---	---
109+13	-	115+85	FRONTAGE ROAD	---	---	---	---	---	---	---	---
115+85	-	118+54	FRONTAGE RD ROUNDABOUT	---	---	---	---	---	96	199	3
118+54	-	142+67	FRONTAGE ROAD	---	48	---	---	134	---	---	---
386+09	-	398+74	USH 45	---	182	---	---	---	---	---	---
			SUBTOTALS	1192	358	51	163	225	311	675	10
			PROJECT TOTALS	1192	409		163	225	311	675	10

CONSTRUCTION STAKING

STATION	TO	STATION	REFERENCE LINE	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB, GUTTER & CURB AND GUTTER LF	650.6500 STRUCTURE LAYOUT LS	650.7000 CONCRETE PAVEMENT LF	650.7500 CONCRETE BARRIER LF	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF
PROJECT 1420-22-71 CATEGORY 0010											
1263+25	-	1277+79	USH 151	1,454	1,454	---	---	---	---	---	1,454
1314+27	-	1320+79	USH 151	652	652	---	---	---	---	---	652
262+58	-	287+43	USH 151 NB OFF RAMP	2,486	682	---	1	1,803	---	---	2,486
269+57	-	296+37	USH 151 NB ON RAMP	2,680	21	---	---	2,659	---	---	2,680
262+00	-	287+97	USH 151 SB ON RAMP	2,597	20	---	---	2,577	---	---	2,597
281+66	-	316+50	USH 151 SB OFF RAMP	3,485	9	---	1	3,476	875	---	3,485
115+00	-	124+05	CTH V NB	905	905	1,875	---	---	---	---	905
215+08	-	224+06	CTH V SB	898	898	1,815	---	---	---	---	898
10+00	-	13+14	RAB CTH V & NB RAMPS	314	314	719	---	---	---	---	314
125+40	-	129+87	CTH V NB	447	424	783	---	23	---	---	447
225+29	-	229+77	CTH V SB	448	425	823	---	23	---	---	448
132+67	-	137+93	CTH V NB	526	503	779	---	23	---	---	526
233+89	-	237+92	CTH V SB	403	403	775	---	---	---	---	403
20+00	-	23+14	RAB CTH V & FRONTAGE	314	314	722	---	---	---	---	314
139+24	-	149+07	CTH V NB	983	983	697	---	---	---	---	983
239+25	-	242+42	CTH V SB	317	317	678	---	---	---	---	317
104+47	-	107+05	PARK AVE EB	258	258	143	---	---	---	---	258
104+46	-	107+01	PARK AVE WB	255	255	194	---	---	---	---	255
108+37	-	116+46	FRONTAGE EB	809	809	1,557	---	---	---	---	809
108+31	-	116+43	FRONTAGE WB	812	812	1,570	---	---	---	---	812
30+00	-	33+14	RAB FRONTAGE & SB RAMPS	314	314	694	---	---	---	---	314
117+78	-	142+82	FRONTAGE EB	2,503	2,503	2,942	---	---	---	---	2,503
117+73	-	123+36	FRONTAGE WB	563	563	2,945	---	---	---	---	563
10+00	-	15+67	OLD CTH V NORTH	567	567	1,275	---	---	---	---	567
60+00	-	62+11	PARK N RIDE	211	211	---	---	---	---	---	211
88+38	-	91+50	OLD CTH V SOUTH	312	312	---	---	---	---	---	312
386+14	-	386+57	USH 45	43	10	---	---	33	---	---	43
389+61	-	398+74	USH 45	913	880	709	---	33	---	---	913
30+39	-	30+97	GLYNN AVE	58	58	---	---	---	---	---	58
70+30	-	79+73	PRAIRIE TRAIL WEST	943	943	---	---	---	---	---	943
19+92	-	23+96	PRAIRIE TRAIL @ USH 45	404	404	---	---	---	---	---	404
15+00	-	16+71	SIDEWALK CONNECTION	171	---	---	---	---	---	---	171
9+48	-	11+06	TEMP TRAIL EAST	158	158	---	---	---	---	---	158
5+11	-	5+83	TEMP TRAIL NORTH	73	73	---	---	---	---	---	73
8+66	-	11+57	TEMP TRAIL NORTH	291	291	---	---	---	---	---	291
---	-	---	PROJECT	---	---	---	---	---	---	1	---
			PROJECT TOTALS	28,566	17,744	21,695	2	10,650	875	1	28,566

CONDUIT

FROM	-	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
PROJECT 1420-22-71 CATEGORY 0030				
BRIDGE	-	LPB51	116	---
LPB52	-	CAP	---	55
BRIDGE	-	LPB53	122	---
LPB54	-	CAP	---	58
BRIDGE	-	LPB57	122	---
LPB55	-	CAP	---	58
BRIDGE	-	LPB58	122	---
LPB56	-	CAP	---	58
PROJECT TOTALS			482	229

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PULL BOXES

NO.	653.0140* PULL BOXES STEEL 24x42-INCH EACH
PROJECT 1420-22-71 CATEGORY 0030	
LPB51	1
LPB52	1
LPB53	1
LPB54	1
LPB55	1
LPB56	1
LPB57	1
LPB58	1
PROJECT TOTAL	8

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SAWING

STATION	TO	STATION	DIR	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
PROJECT 1420-22-71 CATEGORY 0010						
1267+82	-	1272+12	RT	USH 151	---	432
1268+92	-	1273+13	LT	USH 151	---	419
1314+53	-	1320+79	RT	USH 151	---	640
269+40	-	272+21	RT	NB OFF RAMP	---	281
268+74	-	276+51	RT	SB ON RAMP	---	777
304+92	-	307+66	LT	SB OFF RAMP	---	284
316+50	-	---	LT	SB OFF RAMP	---	12
142+27	-	148+47	LT & RT	CTH V NB	96	87
88+38	-	91+50	LT & RT	OLD CTH V SOUTH	85	---
378+06	-	383+09	RT	USH 45 NB	504	---
386+14	-	---	LT & RT	USH 45 NB	42	---
398+74	-	---	LT & RT	USH 45 NB	30	---
30+39	-	---	LT & RT	GLYNN AVE	22	---
70+30	-	---	LT	PRAIRIE TRAIL	10	---
19+92	-	---	LT	PRAIRIE TRAIL	10	---
9+48	-	---	LT	TEMPORARY TRAIL	14	---
5+11	-	---	LT	TEMPORARY TRAIL	16	---
---	-	---	---	UNDISTRIBUTED	71	68
				PROJECT TOTALS	900	3,000

WATER & SANITARY SEWER

STATION	O/S	DIR.	LOCATION	SPV.0060.20 ADJUSTING WATER SERVICE CURB STOP EACH	SPV.0060.21 ADJUSTING WATER VALVE BOX EACH	SPV.0060.23 ADJUSTING SANITARY MANHOLE COVER EACH	SPV.0060.24 RECONSTRUCT SANITARY SEWER MANHOLE EACH
PROJECT 1420-22-71 CATEGORY 0050							
269+13	43	RT	NB OFF RAMP	---	1	---	---
240+02	85	LT	CTH V SB	---	---	---	1
143+21	24	RT	CTH V NB	---	---	1	---
143+49	28	LT	CTH V NB	---	---	---	---
143+58	20	LT	CTH V NB	---	1	---	---
143+96	16	RT	CTH V NB	---	---	1	---
144+23	29	RT	CTH V NB	1	---	---	---
145+94	35	RT	CTH V NB	1	---	---	---
146+70	28	LT	CTH V NB	1	---	---	---
147+24	29	RT	CTH V NB	1	---	---	---
10+98	43	LT	OLD CTH V NORTH	---	---	---	---
11+05	38	LT	OLD CTH V NORTH	---	1	---	---
12+99	29	RT	OLD CTH V NORTH	---	---	1	---
13+08	25	LT	OLD CTH V NORTH	---	1	---	---
105+36	38	RT	PARK AVE EB	---	1	---	---
105+56	33	RT	PARK AVE EB	---	1	---	---
106+13	37	RT	PARK AVE EB	---	---	---	1
95+45	90	RT	OLD CTH V SOUTH	---	1	---	---
95+55	83	RT	OLD CTH V SOUTH	---	---	1	---
			PROJECT TOTALS	4	7	4	2

STREET SWEEPING

LOCATION	SPV.0075.01 HRS
PROJECT 1420-22-71 CATEGORY 0010	
USH 151	24
CTH V	24
USH 45	24
SIDEROADS	24
PROJECT TOTAL	96

TEMPORARY SLOPE DRAINS

STATION	LOCATION	DIR	SPV.0060.12 EACH	REMARKS
PROJECT 1420-22-71 CATEGORY 0010				
132+61	CTH V NB	LT	1	SEE DETAILS
132+82	CTH V NB	RT	1	SEE DETAILS
	PROJECT TOTAL		2	

Conduit Rigid Nonmetallic Schedule 40

LOCATION		652.0225	652.0235	652.0615
USH 151 NB & V		2-Inch	3-Inch	3-Inch
				Special
FROM	TO	LF	LF	LF
CB1	PB1		10	
CB1	PB1		10	
PB1	PB2	30		
PB2	PB3	110		
PB2	LB1	20		
PB3	LB2	20		
PB3	PB4	80		
PB4	LB3	35		
PB4	PB5	100		
PB5	LB4	40		
PB5	PB6	60		
PB6	LB5	20		
PB6	PB7	110		
PB7	LB6	35		
PB7	PB8	100		
PB8	LB7	35		
PB8	PB2	60		
	TOTAL	855	20	0

Concrete Bases

		654.0224
	654.0105	Control
	Type 5	Cabinet
LOCATION	EACH	EACH
USH 151 NB & V	7	1

Electric Service

	656.0200	659.2124
	Meter Breaker Pedestal	Lighting Control Cabinet
LOCATION	LS	EACH
USH 151 NB & V	1	1

Electrical Wire Lighting

			10AWG	12AWG	
LOCATION					655.0610
USH 151 NB & V			655.0615	655.0610	Equipment
			Ungrounded	Ungrounded	Grounding
(240 VOLT SYSTEM)			Conductor	Conductor	Conductor
			(see Circuit Color)	(Black)/(Red)	(Green)
Circuit	FROM	TO	LF	LF	LF
A	CB1	LB1	200		
(Black)	LB1	Luminaires		100	50
	LB1	LB2	380		
	LB2	Luminaires		100	50
B	CB1	LB3	650		
(Red)	LB3	Luminaires		100	50
	LB3	LB4	430		
	LB4	Luminaires		100	50
C	LB6	LB5	410		
(Blue)	LB5	Luminaire		100	50
	LB7	LB6	420		
	LB6	Luminaires		100	50
	CB1	LB7	370		
	LB7	Luminaires		100	50
D					
(Brown)					
E					
(Orange)					
		SUB-TOTALS	2,860	700	350
		TOTAL	2,860	1,050	

Electrical Wire Lighting 10AWG

LOCATION		655.0615
USH 151 NB & V		Equipment
		Grounding
(240 VOLT SYSTEM)		Conductor
		(Green)
FROM	TO	LF
CB1	LB1	100
CB1	PB1	30
LB1	LB2	190
LB1	PB2	40
LB2	PB3	40
LB2	LB3	175
LB3	PB4	55
LB3	LB4	215
LB4	PB5	60
LB4	LB5	160
LB5	PB6	40
LB5	LB6	205
LB6	PB7	55
LB6	LB7	210
LB7	PB8	55
LB7	CB1	185
	TOTAL	1,815

Pull Boxes Steel

	653.0140
	24x42-Inch
LOCATION	EACH
USH 151 NB & V	8

Lighting Summary

	SPV.0060.52	SPV.0060.51	SPV.0060.53	SPV.0060.55
	Transformer Bases	Poles	Luminaire Arms	Luminaires
	Breakaway	Type 5	Truss Type	Utility
	11 1/2-Inch	(Aluminum)	4 1/2-Inch Clamp	LED-A
	Bolt Circle		12-FT	
LOCATION	EACH	EACH	EACH	EACH
USH 151 NB & V	7	7	7	7

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

Conduit Rigid Nonmetallic Schedule 40

LOCATION		652.0225	652.0235	652.0615
USH 151 SB & V		2-Inch	3-Inch	3-Inch
				Special
FROM	TO	LF	LF	LF
CB1	PB1		10	
CB1	PB1		10	
PB1	PB2	60		
PB1	LB1	10		
PB2	LB2	30		
PB2	PB3	70		
PB3	LB3	20		
PB3	PB4	100		
PB4	LB4	20		
PB4	PB5	70		
PB5	LB5	40		
PB5	PB6	120		
PB6	LB6	20		
PB6	PB7	110		
PB7	LB7	20		
PB7	PB1	80		
	TOTAL	770	20	0

Concrete Bases

		654.0224
	654.0105	Control
	Type 5	Cabinet
LOCATION	EACH	EACH
USH 151 SB & V	7	1

Electric Service

	656.0200	659.2124
	Meter Breaker Pedestal	Lighting Control Cabinet
LOCATION	LS	EACH
USH 151 SB & V	1	1

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

Electrical Wire Lighting

			10AWG	12AWG	
LOCATION					655.0610
USH 151 SB & V			655.0615	655.0610	Equipment
			Ungrounded	Ungrounded	Grounding
(240 VOLT SYSTEM)			Conductor	Conductor	Conductor
			(see Circuit Color)	(Black)/(Red)	(Green)
Circuit	FROM	TO	LF	LF	LF
A	CB1	LB1	100		
(Black)	LB1	Luminaires		100	50
	LB1	LB2	280		
	LB2	Luminaires		100	50
B	CB1	LB3	420		
(Red)	LB3	Luminaires		100	50
	LB3	LB4	360		
	LB4	Luminaires		100	50
C	LB6	LB5	440		
(Blue)	LB5	Luminaire		100	50
	LB7	LB6	380		
	LB6	Luminaires		100	50
	CB1	LB7	300		
	LB7	Luminaires		100	50
		SUB-TOTALS	2,280	700	350
		TOTAL	2,280	1,050	

Electrical Wire Lighting 10AWG

LOCATION		655.0615
USH 151 SB & V		Equipment
		Grounding
(240 VOLT SYSTEM)		Conductor
		(Green)
FROM	TO	LF
CB1	LB1	50
CB1	PB1	30
LB1	LB2	140
LB2	PB2	50
LB2	LB3	160
LB3	PB3	40
LB3	LB4	180
LB4	PB4	40
LB4	LB5	170
LB5	PB5	60
LB5	LB6	220
LB6	PB6	40
LB6	LB7	190
LB7	PB7	40
LB7	CB1	150
	TOTAL	1,560

Pull Boxes Steel

	653.0140
	24x42-Inch
LOCATION	EACH
USH 151 SB & V	7

Lighting Summary

	SPV.0060.52	SPV.0060.51	SPV.0060.53	SPV.0060.55
	Transformer Bases	Poles	Luminaire Arms	Luminaires
	Breakaway	Type 5	Truss Type	Utility
	11 1/2-Inch	(Aluminum)	4 1/2-Inch Clamp	LED-A
	Bolt Circle		12-FT	
LOCATION	EACH	EACH	EACH	EACH
USH 151 SB & V	7	7	7	7

LIGHTING BRANCH CIRCUIT WIRE AND CONDUIT QUANTITIES

CATEGORY	FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF
0010	LPB4	METER/LOAD CENTER 'VA'	17	84
	LPB4	LPB11	104	
	LPB4	DVA1	46	212
	DVA1	CVA1	100	432
	CVA1	LPB5	65	288
	LPB5	DVA2	61	272
	DVA2	CVA2	95	309
	CVA2	LPB6	74	
	LPB6	DVA3	56	
	DVA3	CVA3	84	276
	CVA3	LPB7	83	360
	LPB7	DVA4	64	284
	DVA4	CVA4	72	320
	CVA4	LPB4	80	348
	LPB10	FVA3	27	144
	FVA3	EVA4	134	438
		SUB-TOTALS	1162	3767
0030	AVA1	LPB1	50	171
	LPB1	BVA1	185	576
	BVA1	LPB2	195	808
	LPB2	AVA2	50	171
	LPB2	BVA2	185	768
	BVA2	LPB3	198	820
	LPB3	AVA3	54	183
	LPB3	LPB4	260	1064
	LPB4	METER/LOAD CENTER 'VA'	34	168
	LPB4	LPB11	105	
	LPB4	EVA1	175	728
	EVA1	LPB8	68	300
	LPB8	FVA1	70	308
	FVA1	LPB9	181	752
	LPB9	EVA2	45	156
	LPB9	FVA2	214	884
	FVA2	LPB10	85	368
	LPB10	EVA3	120	381
		SUB-TOTALS	2274	8606
		TOTALS	3436	12373

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LIGHTING PULL BOX QUANTITIES

CATEGORY	NO.	653.0140* PULL BOXES STEEL 24X42-INCH EACH
0010	LPB4	1
	LPB5	1
	LPB6	1
	LPB7	1
	LPB11	1
	SUB-TOTAL	5
0030	LPB1	1
	LPB2	1
	LPB2	1
	LPB8	1
	LPB9	1
	LPB10	1
	SUB-TOTAL	6
	TOTAL	11

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LIGHTING CONTROL QUANTITIES

CATEGORY	LOCATION	650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS LS	SPV.0060.40 LIGHTING METER/ LOAD CENTER EACH
0010	PROJECT	1	
	METER/LOAD CENTER 'VA'		1
	TOTALS	1	1

LIGHTING UNIT QUANTITIES

CATEGORY	NO.	654.0105* CONCRETE BASES TYPE 5 EACH	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF	SPV.0060.41 MUNICIPAL LIGHT POLES EACH	SPV.0060.42 MUNICIPAL MAST ARMS 6-FT EACH	SPV.0060.43 MUNICIPAL MAST ARMS 12-FT EACH	SPV.0060.44 MUNICIPAL TRANSFORMER BASES EACH	SPV.0060.45 MUNICIPAL LED LUMINAIRES TYPE 1 EACH	SPV.0060.46 MUNICIPAL LED LUMINAIRES TYPE 2 EACH	SPV.0060.47 MUNICIPAL LED LUMINAIRES TYPE 3 EACH	SPV.0060.48 PARKING LOT CONCRETE BASES EACH
0010	DVA1	1	138	1		1	1			1	
	CVA2	1	120	1	1		1			1	
	DVA2	1	120	1	1		1			1	
	CVA3	1	138	1		1	1			1	
	DVA3	1	138	1		1	1			1	
	CVA4	1	138	1		1	1			1	
	DVA4	1	138	1		1	1			1	
	FVA3		138	1		1	1			1	1
	EVA4		138	1		1	1			1	1
	SUB-TOTALS	7	1206	9	2	7	9	0	0	9	2
0030	AVA1	1	120	1	1		1	1			
	BVA1	1	120	1	1		1	1			
	AVA2	1	120	1	1		1	1			
	BVA2	1	120	1	1		1	1			
	AVA3	1	120	1	1		1	1			
	CVA1	1	138	1		1	1			1	
	EVA1	1	120	1	1		1	1			
	FVA1	1	120	1	1		1	1			
	EVA2	1	120	1	1		1	1			
	FVA2	1	120	1	1		1	1			
	EVA3	1	120	1	1		1		1		
	SUB-TOTALS	11	1338	11	10	1	11	9	1	1	0
	TOTALS	18	2544	20	12	8	20	9	1	10	2

* ADDTIIONAL QUANTITIES SHOWN ELESEWHERE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

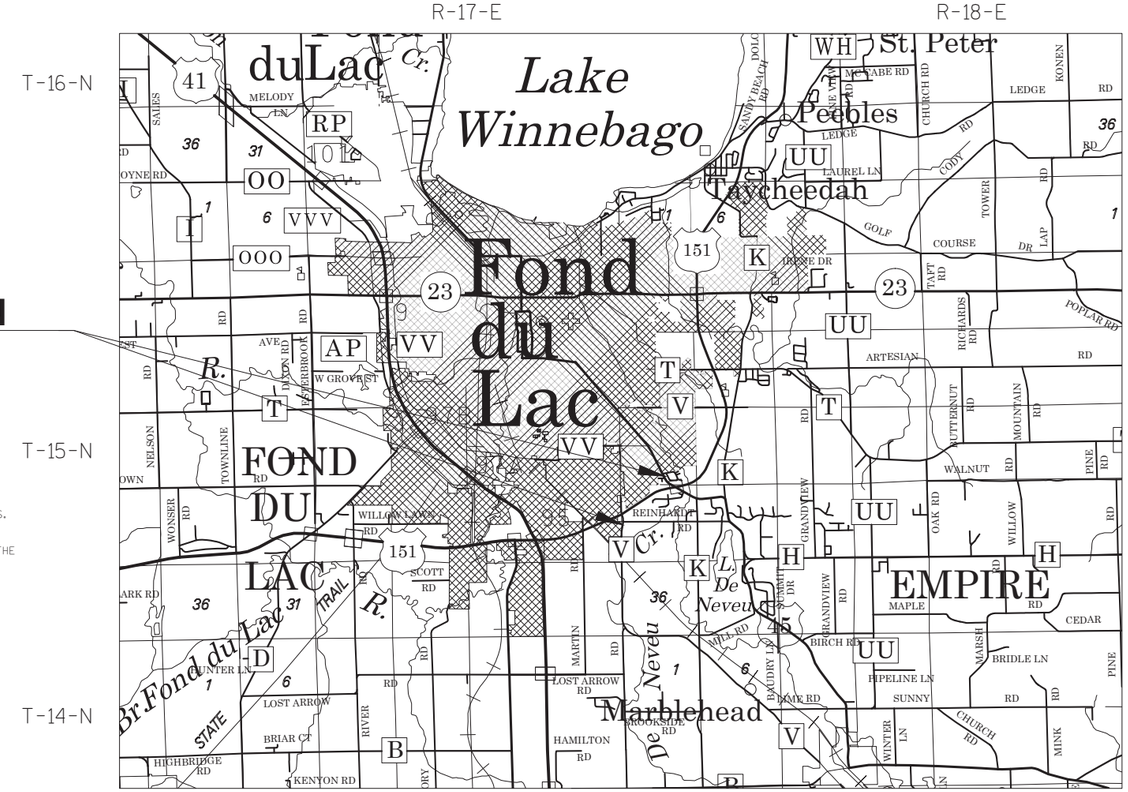
1420-22-21

CTH V - USH 45 INTERCHANGE

USH 151

FOND DU LAC COUNTY

PROJECT LOCATION



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, FOND DU LAC COUNTY, NAD 83 (1997) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY 1"X24" IRON PIPE) 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.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 151 ESTABLISHED FROM PREVIOUS PROJECT 1420-05-20 REVISED APRIL 4TH, 2005 AND EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS.
EXISTING ACCESS CONTROL ALONG USH 151 ESTABLISHED FROM PREVIOUS PROJECTS 1420-05-20 REVISED APRIL 4TH, 2005.

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.

TRANS 233 RESTRICTIONS APPLY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

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

THE NOTES, CONVENTIONAL SYMBOLS AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT NUMBER 1420-22-21.

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

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
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.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN (1" UNLESS NOTED)		PROPOSED R/W LINE
		EXISTING H.E. LINE
R/W MONUMENT	(SET)	PROPERTY LINE
R/W STANDARD	(SET)	LOT & TIE LINES
SIGN	SIGN	SLOPE INTERCEPTS
SECTION CORNER MONUMENT		CORPORATE LIMITS
SECTION CORNER SYMBOL		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)
FEE (HATCH VARIES)		ACCESS RESTRICTED (BY ACQUISITION)
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)
PERMANENT LIMITED EASEMENT		SECTION LINE
R/W BOUNDARY POINT	RWB20	QUARTER LINE
PARCEL NUMBER	10	SIXTEENTH LINE
UTILITY PARCEL NUMBER	02	EXISTING CENTERLINE
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE
BUILDING		PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

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

	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1420-22-21 - 4.01
SHEET 2 OF 2
AMENDMENT NO:___

TRANSPORTATION PROJECT PLAT NO: 1420-22-21-4.02 AMENDMENT NO: 1

AMENDS PARCEL NO: 2 OF TRANSPORTATION PROJECT PLAT 1420-22-21-4.02 RECORDED AS DOCUMENT NO: 1035940

THAT PART OF THE SW 1/4 - NW 1/4 AND THE SE 1/4 - NW 1/4 OF SECTION 25, TOWNSHIP 15 NORTH, RANGE 17 EAST, TOWN OF FOND DU LAC, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER USH 151 FOND DU LAC 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 SUBSECTIONS 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS:
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.

CITY OF FOND DU LAC

TOWN OF FOND DU LAC

DOC# 1035297
Recorded
March 17, 2014 9:37 AM
SHAWN KELLY
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1420-22-21 - 4.02
AMENDMENT NO:1

SEE PLAT NO.-4.03

SEE PLAT NO.-4.01

NW-NW SEC 25 | NE-NW SEC 25 | SE-NW SEC 25 | SW-NW SEC 25 | NE-SE SEC 26 | NW-SE SEC 26 | SW-SE SEC 26 | NW-SW SEC 25 | NE-SW SEC 25

SIXTEENTH LINE | REINHARDT RD. | USH 151 | CTH "OF"

NOTE:
EXISTING ACCESS CONTROL ALONG USH 151 ESTABLISHED FROM PREVIOUS PROJECTS 1420-05-20 REVISED APRIL 4TH, 2005.

PI STA = 282+71.75"NB"
Y = 373230.132
X = 824752.137
DELTA = 50°19'03"
D = 6°37'26"
T = 406.28'
L = 759.65'
R = 865.00'
PC STA = 278+65.47"NB"
PT STA = 286+25.12"NB"

PI STA = 269+80.87"NB"
Y = 372199.580
X = 824250.591
DELTA = 2°10'50"
D = 28°38'52"
T = 3.81'
L = 7.61'
R = 200.00'
PC STA = 269+77.07"NB"
PT STA = 269+84.68"NB"

PI STA = 273+95.21"NB"
Y = 372286.769
X = 824655.656
DELTA = 72°00'47"
D = 15°41'51"
T = 265.25'
L = 458.76'
R = 365.00'
PC STA = 271+29.96"NB"
PT STA = 275+88.72"NB"

14.460 ACRES
BANDICOOT LIMITED PARTNERSHIP
TAX ID. T09-15-17-25-07-001-00
LOT 1, CSM 327, V. 3, P. 126,
DOC. 262440

0.544 ACRES
BANDICOOT LIMITED PARTNERSHIP
TAX ID. T09-15-17-25-08-001-00
DOC. 880968

PI STA = 116+13.94"R"
Y = 372121.270
X = 824925.183
DELTA = 60°27'04"
D = 5°12'31"
T = 640.87'
L = 1160.58'
R = 1100.00'
PC STA = 109+73.06"R"
PT STA = 121+33.64"R"

SHERIDAN, ROSEMARY;
SHERIDAN FAMILY INVESTMENTS LLC.
TAX ID. T09-15-17-25-10-001-00
DOC. 966442

SHERIDAN, ROSEMARY;
SHERIDAN FAMILY INVESTMENTS LLC.
TAX ID. T09-15-17-25-09-001-00
DOC. 966442

FOND DU LAC

SEC1004
ALUM. MON. FOUND
X = 823661.653
Y = 374796.215

SEC1021
ALUM. MON. FOUND
X = 826325.542
Y = 374768.766

SEC1003
ALUM. MON. FOUND
X = 823669.966
Y = 372144.790

CTRS1010
SURVEY SPIKE
X = 826324.661
Y = 372105.550

Curve Table			
Curve #	Length	Radius	Delta
C1	360.896	865.000	23.9050

SCALE, FEET: 0 100 200

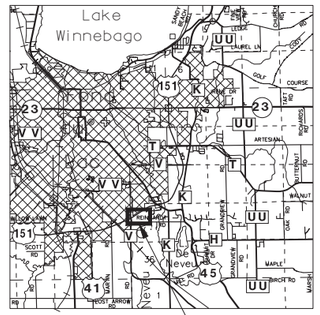
UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
81	ALLIANT ENERGY	RELEASE OF RIGHTS
85	CHARTER COMMUNICATIONS - TELEPHONE	RELEASE OF RIGHTS
88	AT&T WISCONSIN	RELEASE OF RIGHTS

EASEMENTS OF RECORD			
PARCEL #	UTILITY #	OWNERSHIP	RECORDING INFO
2	88	WISCONSIN BELL INC. DBA AT&T WISCONSIN	DOC. #842139
		WISCONSIN BELL INC. DBA AT&T WISCONSIN	VOL. 1102, PAGE 66 DOC. #520085
		WISCONSIN BELL INC. DBA AT&T WISCONSIN	VOL. 1078, PAGE 675 DOC. #509486
		WISCONSIN TELEPHONE COMPANY DBA AT&T WISCONSIN	VOL. 829, PAGE 448 DOC. #369722
	81	WISCONSIN POWER AND LIGHT COMPANY DBA ALLIANT ENERGY	VOL. 272, PAGE 331 DOC. #24473

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW ACRES	R/W EXISTING ACRES	R/W TOTAL ACRES	PLE, TLE SF
2	BANDICOOT LIMITED PARTNERSHIP	FEE	15.004	----	15.004	----

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

LOCATION SKETCH
(NOT TO SCALE)



SHEET LOCATION

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, TRANSPORTATION PROJECT PLATS, DOCUMENT NO. 1035297 FOR ADDITIONAL INFORMATION.

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

I, JAMES D. BLONDHEIM, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WIS. DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1420-22-21 - 4.02 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE _____ DATE 09/26/14
JAMES D. BLONDHEIM, R.L.S. S-2800
COLEMAN ENGINEERING COMPANY
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHEAST REGION.
SIGNATURE _____ DATE 03/10/14
CURT VAN EREM

WISCONSIN JAMES D. BLONDHEIM 2800-008 KINGSFORD MICHIGAN LAND SURVEYOR

FILE NAME : F:\DATA\CAD PROJECTS\CAD11379-USH 151 TPP\1420-22-00\SHEETSPLAN\040102_RP_AMEND.DWG
APPRAISAL PLAT DATE : ----------
PLOT DATE : 9/26/2014 9:04 AM
PLOT BY : JEFF GILROY
PLOT NAME :
PLOT SCALE : 1" = 200'

TRANSPORTATION PROJECT PLAT NO: 1420-22-21 - 4.03

THAT PART OF LOT 1, CSM 326, V. 3, PG. 125, LOCATED IN THE NW-NW OF SECTION 25; ALSO ALL OF LOT 1, CSM 6701, V. 46, PG. 97, LOCATED IN THE NW-NW AND THE SW-NW OF SECTION 25, T15N, R17E, TOWN OF FOND DU LAC; ALSO PART OF THE NW-NW OF SECTION 25, T15N, R17E, CITY OF FOND DU LAC, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER USH 151 FOND DU LAC 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 SUBSECTIONS 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SEC1004
ALUM. MON. FOUND
X = 823661.653
Y = 374796.215

SEC1021
ALUM. MON. FOUND
X = 826325.542
Y = 374768.766

DOC# 1035940
Recorded
April 04, 2014 11:51 AM
SHAWN KELLY
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1420-22-21 - 4.03
AMENDMENT NO:___

SEE PLAT NO.-4.04

SCALE, FEET 0 100 200

CITY OF FOND DU LAC
TOWN OF FOND DU LAC
NE-NW SEC 25
NW-NW SEC 25
SW-NW SEC 25
SE-NW SEC 25
NE-NE SEC 26
SE-NE SEC 26

KENNETH R. & ROSEANN R. BRAUN TAX ID. FDL-15-17-25-22-251-00

GARY L. MERWIN TAX ID. FDL-15-17-25-22-252-00

WISCONSIN DEPARTMENT OF TRANSPORTATION TAX ID. FDL-15-17-25-22-499-00

THERESA M. CONGER TAX ID. FDL-15-17-25-22-253-00 DOC. 982191

BETTY J. WOXLAND TAX ID. T09-15-17-25-06-006-00 LOT 1 CSM# 326 V. 3 P. 125

COSTELLO REV TR TAX ID. T09-15-17-25-07-002-00 LOT 1 CSM# 6701 V. 46 P. 97

SEE PLAT NO.-4.05

SEE PLAT NO.-4.02

SIXTEENTH LINE

CTH V

USH 151

PI STA = 143+22.03"V"
X = 823664.095
Y = 373970.773
DELTA = 12°10'21"
D = 7°32'20"
T = 81.04'
L = 161.46'
R = 760.00'
PCC STA = 142+41.00"V"
PT STA = 144+02.46"V"

PI STA = 141+69.32"V"
X = 823696.894
Y = 373820.711
DELTA = 15°35'35"
D = 10°48'38"
T = 72.57'
L = 144.24'
R = 530.00'
PC STA = 140+96.76"V"
PCC STA = 142+41.00"V"

PI STA = 139+58.24"V"
X = 823795.741
Y = 373634.195
DELTA = 4°31'58"
D = 33°42'12"
T = 6.73'
L = 13.45'
R = 170.00'
PC STA = 139+51.51"V"
PT STA = 139+64.96"V"

PI STA = 137+53.53"V"
X = 823862.665
Y = 373442.027
DELTA = 34°00'38"
D = 41°49'18"
T = 41.90'
L = 81.32'
R = 137.00'
PRC STA = 137+11.63"V"
PT STA = 137+92.95"V"

PI STA = 135+67.91"V"
X = 823965.320
Y = 373283.060
DELTA = 21°56'33"
D = 7°32'20"
T = 147.33'
L = 291.06'
R = 760.00'
PC STA = 134+20.58"V"
PRC STA = 137+11.63"V"

TLE TRAVERSE TABLE		
LINE #	BEARING	DISTANCE
L1	S47°11'21"E	14.64'
L2	S6°48'30"E	151.15'
L3	S21°03'24"E	125.74'
L4	S89°50'04"W	15.89'

EASEMENTS OF RECORD

PARCEL #	UTILITY #	OWNERSHIP	RECORDING INFO
3	81	WISCONSIN POWER AND LIGHT COMPANY - DBA ALLIANT ENERGY	VOL. 272 PAGE 331 DOC. #24473
	N/A	PUBLIC UTILITY EASEMENT	CSM#5097, VOL. 31, PG. 40, DOC. #597999
	N/A	PUBLIC UTILITY EASEMENT	CSM#6701, VOL.46, PG. 97, DOC. #825321
4	81	WISCONSIN POWER AND LIGHT COMPANY - DBA ALLIANT ENERGY	VOL. 272, PAGE 331 DOC. #24473
6	81	WISCONSIN POWER AND LIGHT COMPANY - DBA ALLIANT ENERGY	VOL. 272, PAGE 331 DOC. #24473

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
81	ALLIANT ENERGY	RELEASE OF RIGHTS
83	CITY OF FOND DU LAC DEPARTMENT OF PUBLIC WORKS - WATER	RELEASE OF RIGHTS
84	FOND DU LAC SANITARY DISTRICT #4 - SEWER	RELEASE OF RIGHTS
85	CHARTER COMMUNICATIONS - TELEPHONE	RELEASE OF RIGHTS

NOTE:
EXISTING ACCESS CONTROL ALONG USH 151 ESTABLISHED FROM PREVIOUS PROJECTS 1420-05-20 REVISED APRIL 4TH, 2005.

RIGHT-OF-WAY COURSE TABLE		
PT - PT	BEARING	DISTANCE
CLS311 - RWB312	N89°49'13"E	33.00'
RWB312 - ALI313	N00°10'47"W	49.03'
ALI313 - PRW314	N00°10'47"W	266.12'
PRW314 - PRW315	S04°15'15"E	47.66'
PRW315 - PRW316	S06°14'34"E	153.42'
PRW316 - PRW317	S19°25'18"E	121.87'
PRW317 - ALI318	S89°50'04"W	40.39'
ALI318 - RWB312	S89°50'04"W	19.36'

RIGHT-OF-WAY COURSE TABLE		
PT - PT	BEARING	DISTANCE
SEC1003 - CLS299	N00°10'47"W	750.00'
CLS299 - RWB300	N89°49'13"E	60.00'
RWB300 - RWB301	N13°39'24"W	64.36'
RWB301 - RWB302	N07°01'19"W	100.72'
RWB302 - RWB303	N00°10'47"W	29.40'
RWB303 - RWB304	N89°49'13"E	17.00'
RWB310 - RWB300	S80°44'32"W	154.07'

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW ACRES	R/W EXISTING ACRES	R/W TOTAL ACRES	PLE, TLE SF
3	COSTELLO REVOCABLE TRUST	FEE	4.07	-----	4.07	-----
4	BETTY J. WOXLAND	FEE & TLE	0.13	-----	0.13	2299.67
6	THERESA M. CONGER	FEE & TLE	0.02	-----	0.02	1006.67

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

LOCATION SKETCH
(NOT TO SCALE)

SHEET LOCATION

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN TRANSPORTATION PROJECT PLATS, AS DOCUMENT NO. 1035297 FOR ADDITIONAL INFORMATION.

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

I, JAMES D. BLONDHEIM, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WIS. DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1420-22-21 - 4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE _____ DATE 3/31/14
JAMES D. BLONDHEIM, R.L.S. S-2800
COLEMAN ENGINEERING COMPANY

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHEAST REGION.

SIGNATURE Curt Van Eren DATE 03/26/14
CURT VAN EREN

FILE NAME : F:\DATA\CAD PROJECTS\CAD11379-USH 151 TPP\1420-22-00\SHEETSPLAN\040103_RP.DWG
APPRAISAL PLAT DATE : _____
PLOT DATE : 3/31/2014 8:41 AM PLOT BY : JEFF GILROY PLOT NAME : PLOT SCALE : 1" = 200'

1420-22-21 4.03

TRANSPORTATION PROJECT PLAT NO: 1420-22-21 - 4.04 AMENDMENT NO: 1

AMENDS PARCELS NO: 7, 9, 11 AND 12 ALSO ADDS PARCEL NO: 14; REMOVES UTILITY #87 AND ADDS UTILITY #84 OF TRANSPORTATION PROJECT PLAT 1420-22-21-4.04 RECORDED AS DOCUMENT NO: 1036045

THAT PART OF LOTS 2, 3, 4 AND 5 OF THE PLAT OF BOWHOUSEN'S SUBDIVISION V. 10 P. 41; PART OF LOTS 28, 29, 30, 31 AND 32 OF THE PLAT OF TAKODAH HEIGHTS SUBDIVISION V. 10 P. 31; LOCATED IN THE SW 1/4 - SE 1/4 OF SECTION 24, TOWNSHIP 15 NORTH, RANGE 17 EAST, TOWN OF FOND DU LAC, FOND DU LAC COUNTY, WISCONSIN.

RELOCATION ORDER USH 151 FOND DU LAC 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 SUBSECTIONS 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT

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

NOTE:
EXISTING ACCESS CONTROL ALONG USH 151 ESTABLISHED FROM PREVIOUS PROJECTS 1420-05-20 REVISED APRIL 4TH, 2005.

TLE TRAVERSE TABLE		
PT - PT	BEARING	DISTANCE
TLE1 - TLE2	S75°32'55"E	23.21'
TLE2 - TLE3	S21°24'41"E	65.19'
TLE3 - TLE4	S16°25'53"W	13.51'
TLE9 - TLE10	N31°42'21"E	21.34'

GN

0 100 200
SCALE, FEET

DOCN 1036044
Recorded
April 08, 2014 8:47 AM
SHAWN KELLY
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1420-22-21 - 4.04
AMENDMENT NO: 1

PI STA = 394+77.00"S"
X = 826914.202
Y = 374825.003
DELTA = 35°19'11"
D = 7°38'22"
T = 238.78'
L = 462.33'
R = 750.00'
PC STA = 392+38.22"S"
PT STA = 397+00.56"S"

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
80	ALLIANT ENERGY - GAS	RELEASE OF RIGHTS
81	ALLIANT ENERGY	RELEASE OF RIGHTS
84	TOWN OF FOND DU LAC SANITARY DISTRICT #4 - SEWER	RELEASE OF RIGHTS
85	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS
88	AT&T WISCONSIN	RELEASE OF RIGHTS
89	AMERICAN TRANSMISSION COMPANY LLC.	RELEASE OF RIGHTS

SE-SW
SEC 24

EASEMENTS OF RECORD			
PARCEL #	UTILITY #	OWNERSHIP	RECORDING INFO
7	81	WISCONSIN POWER AND LIGHT COMPANY - DBA ALLIANT ENERGY	VOL. 495, PAGE 311, DOC. #194591
	N/A	TOWN OF FOND DU LAC	VOL. 1268, P. 542, DOC. #595082
	89	AMERICAN TRANSMISSION COMPANY LLC.	DOC. #705430
	81	WISCONSIN POWER AND LIGHT COMPANY - DBA ALLIANT ENERGY	
	88	WISCONSIN BELL INC - DBA AT&T WISCONSIN	DOC. #769111
	85	WISCONSIN AND CHARTER CABLE PARTNERS, LLC. - DBA CHARTER COMMUNICATIONS	
8	81	WISCONSIN POWER AND LIGHT COMPANY - DBA ALLIANT ENERGY	VOL. 388, PAGE 532, DOC. #134363
	88	WISCONSIN TELEPHONE COMPANY - DBA AT&T WISCONSIN	
9	81	WISCONSIN POWER AND LIGHT COMPANY - DBA ALLIANT ENERGY	VOL. 388, PAGE 532, DOC. #134363
	88	WISCONSIN TELEPHONE COMPANY - DBA AT&T WISCONSIN	
11	81	WISCONSIN POWER AND LIGHT COMPANY - DBA ALLIANT ENERGY	VOL. 388, PAGE 532, DOC. #134363
	88	WISCONSIN TELEPHONE COMPANY - DBA AT&T WISCONSIN	
12	81	WISCONSIN POWER AND LIGHT COMPANY - DBA ALLIANT ENERGY	VOL. 388, PAGE 532, DOC. #134363
	88	WISCONSIN TELEPHONE COMPANY - DBA AT&T WISCONSIN	
13	81	WISCONSIN POWER AND LIGHT COMPANY - DBA ALLIANT ENERGY	VOL. 388, PAGE 532, DOC. #134363
	88	WISCONSIN TELEPHONE COMPANY - DBA AT&T WISCONSIN	
	N/A	LOT 32 & 33 OF THE PLAT OF TAKODAH HEIGHTS SUBDIVISION	VOL. 983, PAGE 48, DOC. #458650

TLE TRAVERSE TABLE		
PT - PT	BEARING	DISTANCE
TLE5 - TLE6	S69°34'05"W	5.00'
TLE6 - TLE7	N20°25'55"W	50.00'
TLE7 - TLE8	N69°34'05"E	5.00'

SEC1004
ALUM. MON. FOUND
X = 823661.653
Y = 374796.215

SEC1021
ALUM. MON. FOUND
X = 826325.542
Y = 374768.766

SEE PLAT NO.-4.03

S89°24'10"E
1331.62' (MON. TO MON.)

CTRS1010
SURVEY SPIKE
X = 826324.661
Y = 372105.550

RIGHT-OF-WAY COURSE TABLE		
PT - PT	BEARING	DISTANCE
PRW403 - PRW404	N46°20'04"E	28.42'
PRW404 - RWB405	N06°04'04"E	51.06'
RWB405 - RWB406	N20°25'55"W	247.47'
RWB406 - RWB407	N26°02'55"W	86.90'
RWB407 - ALI408	N64°11'24"E	33.44'
ALI408 - PRW409	N64°11'24"E	32.56'
PRW409 - PRW411	S33°27'55"E	100.90'
PRW411 - PRW412	S25°01'32"E	119.63'
PRW413 - PRW414	S46°57'33"E	100.00'
PRW414 - RWB415	S52°18'52"E	90.01'
RWB415 - PRW416	S71°11'33"E	164.25'
RWB416 - ALI417	N88°39'23"W	173.86'
ALI417 - RWB418	N88°39'23"W	213.16'
RWB418 - PRW403	N88°39'23"W	18.31'

SW-SE
SEC 24

NE-NW
SEC 25

NW-NE
SEC 25

NE-NE
SEC 25

USH 45

USH 151

SIXTEENTH LINE

L&T INVESTMENTS, A WISCONSIN GENERAL PARTNERSHIP
TAX ID. T09-15-17-99-B0-020-00
DOC. 989665

JEREMY L. MUELLENBACH & KIMBERLY D. SEARL
TAX ID. T09-15-17-99-TH-320-00
DOC. 1002818

PLAT OF
TAKODAH HEIGHTS SUBDIVISION

HAROLD C. MANSKE
TAX ID. T09-15-17-99-TH-310-00
DOC. 0721225, DOC. 1016881

EXISTING PERMANENT LIMITED EASEMENT
WISCONSIN DEPARTMENT OF TRANSPORTATION
DOC. 0729816

ROBERT J. EVANS
TAX ID. T09-15-17-99-TH-300-00
DOC. 522627 V. 1107 P. 879
DOC. 1026211

RICHARD N. & CAROL A. MIELKE
TAX ID. T09-15-17-99-TH-290-00
DOC. 634343 V. 1360 P. 101

JAMES A. & JALAINE M. KARL
TAX ID. T09-15-17-99-TH-280-00
DOC. 783942

JAMES A. BEHNKE
TAX ID.T09-15-17-99-TH-270-00
DOC. 0721774

SCOTT H. LEWANDOWSKI
TAX ID. T09-15-17-99-TH-260-00
DOC. 563781 V. 1201 P. 70

JEFFREY & JESSICA BURMEISTER
TAX ID. T09-15-17-99-B0-030-00
DOC. 1025832

JEFFREY & JESSICA BURMEISTER
TAX ID. T09-15-17-99-B0-040-00
DOC. 1025832

JEFFREY & JESSICA BURMEISTER
TAX ID. T09-15-17-99-B0-050-00
DOC. 1025832

PLAT OF
BOWHOUSEN'S SUBDIVISION

WISCONSIN DEPARTMENT OF TRANSPORTATION
TAX ID. T09-15-17-25-02-002-00
CSM 5426 DOC. NO. 628124

WISCONSIN DEPARTMENT OF TRANSPORTATION
TAX ID. T09-15-17-25-05-001-00
CSM 5426 DOC. NO. 628124

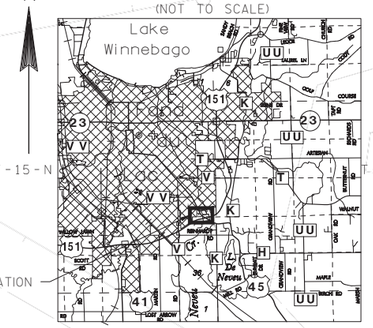
TLE FOR GRADING

STA 394+30.68 "S"=
STA 143+02.03

CURVE TABLE						
CURVE	CHORD BEARING	CHORD DISTANCE	RADIUS	ARC LENGTH	PI Y	PI X
C1	S37°36'19"E	62.87'	818.51'	62.88	374947.950	826909.842
C2	N40°26'19"W	378.83'	750.00'	382.97	374863.729	826895.473

SEC103
CHISLED "<-"
X = 828996.585
X = 374706.115

LOCATION SKETCH
(NOT TO SCALE)



REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN TRANSPORTATION PROJECT PLATS, AS DOCUMENT NO. 1035297 FOR ADDITIONAL INFORMATION.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW ACRES	R/W EXISTING SF	R/W TOTAL SF	PLE, TLE SF
7	JEFFREY AND JESSICA BURMEISTER	FEE, ACCESS RIGHTS & TLE	0.004	----	185.18	250.00
8	JAMES A. AND JALAINE M. KARL	FEE	0.003	----	117.69	----
9	RICHARD N. AND CAROL A. MIELKE	FEE	0.006	----	245.26	----
11	ROBERT J. EVANS	FEE	0.025	88.60	1094.40	----
12	HAROLD C. MANSKE	FEE & TLE	0.009	----	390.85	637.37
13	JEREMY L. MUELLENBACH AND KIMBERLY D. SEARL	TLE	----	----	----	508.36
14	L&T INVESTMENTS, A WISCONSIN GENERAL PARTNERSHIP	TLE	----	----	----	180.50

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

I, JAMES D. BLONDHEIM, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WIS. DEPT. OF TRANSPORTAITION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1420-22-21 - 4.04 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE _____ DATE 6/2/14
JAMES D. BLONDHEIM, R.L.S. S-2800
COLEMAN ENGINEERING COMPANY

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHEAST REGION.

SIGNATURE _____ DATE 04/01/14
CURT VAN ERE

TRANSPORTATION PROJECT PLAT NO: 1420-22-21 -4.05

THA[illegible] LOT 1 OF CSM 3986, V. 22, P. 65; ALSO THAT PART OF THE SE 1/4 - NE 1/4 AND THE NE 1/4 - NE[illegible] 26, CITY OF FOND DU LAC; ALSO THAT PART OF THE NE 1/4 -NE 1/4 OF SECTION 26, TOWN OF FONI[illegible] IN TOWN 15 NORTH, RANGE 17 EAST, FOND DU LAC COUNTY, WISCONSIN.

RELO[illegible]H 151 FOND DU LAC COUNTY

DOCH 1036845 April 16,2014 8:56 AM SHARON KELLY REGISTER OF DEEDS FOND DU LAC COUNTY Fee Amount: $25.00

TO PROF[illegible] OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STA[illegible] DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS [illegible] IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

GN

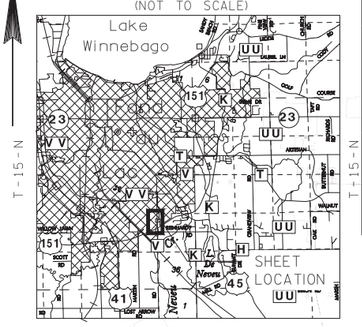
SCALE, FEET 0 100 200

SIGNATURE Curt Van Erem DATE 04/01/14 CURT VAN EREM 305

RESERVED FOR REGISTER OF DEEDS PROJECT NUMBER 1420-22-21 - 4.05 AMENDMENT NO:___

LOCATION SKETCH

(NOT TO SCALE)



EASEMENTS OF RECORD			
PARCEL #	UTILITY #	OWNERSHIP	RECORDING INFO
16	89	AMERICAN TRANSMISSION COMPANY LLC., WISCONSIN POWER AND LIGHT COMPANY	DOC. #863775
	90	US SPRINT COMMUNICATIONS COMPANY LIMITED PARTNERSHIP	VOL. 1036, PAGE 830, DOC. #489235
17	82	WISCONSIN POWER AND LIGHT COMPANY DBA ALLIANT ENERGY	VOL. 574, PAGE 214, DOC. #226847
18	81	WISCONSIN POWER AND LIGHT COMPANY DBA ALLIANT ENERGY	VOL. 574, PAGE 224, DOC. #226852

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
81	ALLIANT ENERGY	RELEASE OF RIGHTS
82	CITY OF FOND DU LAC DEPARTMENT OF PUBLIC WORKS - SANITARY SEWER	RELEASE OF RIGHTS
83	CITY OF FOND DU LAC DEPARTMENT OF PUBLIC WORKS - WATER	RELEASE OF RIGHTS
89	AMERICAN TRANSMISSION COMPANY LLC., WISCONSIN POWER AND LIGHT COMPANY	RELEASE OF RIGHTS
90	US SPRINT COMMUNICATIONS COMPANY LIMITED PARTNERSHIP	RELEASE OF RIGHTS

TLE TRAVERSE TABLE		
Line #	BEARING	DISTANCE
L21	S89°49'13"W	15.00'
L22	N0°10'47"W	30.00'
L23	N89°49'13"E	15.00'

TLE TRAVERSE TABLE		
Line #	BEARING	DISTANCE
L25	S89°49'13"W	15.00'
L26	N0°10'47"W	44.58'
L27	N89°49'13"E	15.00'

CURVE TABLE						
CURVE	CHORD BEARING	CHORD DISTANCE	RADIUS	ARC LENGTH	PI X	PI Y
C1	N71° 30' 58"E	113.27'	760.00'	113.37	823573.489	373432.434

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW ACRES	R/W EXISTING ACRES	R/W TOTAL SF	PLE, TLE SF
16	WHITE PINE RESOURCES	FEE & TLE	0.372	----	16205.67	1268.74
17	WILLIAM E. & JUDITH D. LEE	FEE & TLE	0.036	----	1577.37	3632.67
18	JAMES S. MALY	TLE	----	----	----	626.07
19	AARON C. KLASSY AND CARMEN L. JEGLUM	TLE	----	----	----	668.68

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

NOTE: EXISTING ACCESS CONTROL ALONG USH 151 ESTABLISHED FROM PREVIOUS PROJECTS 1420-05-20 REVISED APRIL 4TH, 2005.

SEC1004 ALUM MON. FOUND X = 823661.653 Y = 374796.215

SEC1003 ALUM. MON. FOUND 823669.966 372144.790 X Y

WHITE PINE RESOURCES TAX ID. FDL-15-17-26-11-249-00 DOC. 491193 V. 1040 P. 507

NE-NE SEC 26

AARON C. KLASSY & CARMEN L. JEGLUM TAX ID. FDL-15-17-26-11-005-00 LOT 1 CSM 3986 VOL. 22 PAGE 65

JAMES S. MALY TAX ID. FDL-15-17-26-11-024-00 DOC. 920354, DOC. 911034

JAMES S. MALY TAX ID. T09-15-17-26-01-003-00 DOC. 920354, DOC. 911034 LOT 1 CSM 1039 VOL. 6 PAGE 199

WILLIAM E. & JUDITH D. LEE TAX ID. T09-15-17-26-01-002-00 DOC. 296650 V. 719 P. 304 DOC. 312496 V. 742 P. 71

ANTHONY & CATHLEEN RODEN TAX ID. FDL-15-17-26-11-023-00

KENNETH R. & ROSEANN R. BRAUN TAX ID. FDL-15-17-25-22-251-00

GARY L. MERWIN TAX ID. FDL-15-17-25-22-252-00

MICHAEL T. KOEHN & ALYSON G. MUELLER TAX ID. FDL-15-17-26-11-004-00

THERESA M. CONGER TAX ID. FDL-15-17-25-22-253-00 DOC. 982191

BETTY J. WOXLAND TAX ID. T09-15-17-25-06-006-00 LOT 1, CSM 326 V. 3 P.125

WISCONSIN DEPARTMENT OF TRANSPORTATION TAX ID. FDL-15-17-25-22-499-00

COSTELLO REV TR TAX ID. T09-15-17-25-07-002-00 LOT 1, CSM 5097 VOL. 31 PAGE 40 LOT 1, CSM 6710 VOL. 46 PAGE 97

M. SIX INTERNATIONAL PROPERTIES LLC TAX ID. FDL-15-17-26-14-998-00 CSM 7175 VOL. 51 PAGE 80 DOC. 888371

PI STA = 143+22.03"V" X = 823664.095 Y = 373970.773 DELTA = 12°10'21" D = 7°32'20" T = 81.04' L = 161.46' R = 760.00' PCC STA = 142+41.00"V" PT STA = 144+02.46"V"

PI STA = 141+69.32"V" X = 823696.894 Y = 373820.711 DELTA = 15°35'35" D = 10°48'38" T = 72.57' L = 144.24' R = 530.00' PC STA = 140+96.76"V" PCC STA = 142+41.00"V"

PI STA = 139+58.24"V" X = 823795.741 Y = 373634.195 DELTA = 4°31'58" D = 33°42'12" T = 6.73' L = 13.45' R = 170.00' PC STA = 139+51.51"V" PT STA = 139+64.96"V"

PI STA = 137+53.53"V" X = 823862.665 Y = 373442.027 DELTA = 34°00'38" D = 41°49'18" T = 41.90' L = 81.32' R = 137.00' PRC STA = 137+11.63"V" PT STA = 137+92.95"V"

PI STA = 135+67.91"V" X = 823965.320 Y = 373283.060 DELTA = 21°56'33" D = 7°32'20" T = 147.33' L = 291.06' R = 760.00' PC STA = 134+20.58"V" PRC STA = 137+11.63"V"

PI STA = 11+40.23"O" X = 823667.960 Y = 373014.660 DELTA = 15°45'12" D = 22°55'06" T = 34.59' L = 68.74' R = 250.00' PC STA = 11+05.64"O" PT STA = 11+74.38"O"

PI STA = 104+60.90"P" X = 823539.155 Y = 373404.595 DELTA = 25°11'17" D = 7°32'20" T = 169.80' L = 334.11' R = 760.00' PRC STA = 102+91.10"P" PRC STA = 106+25.21"P"

PI STA = 106+66.08"P" X = 823725.108 Y = 373503.599 DELTA = 32°46'10" D = 41°13'12" T = 40.87' L = 79.50' R = 139.00' PRC STA = 106+25.21"P" PT STA = 107+04.71"P"

PI STA = 13+51.47"O" X = 823666.094 Y = 373226.331 DELTA = 23°33'54" D = 28°38'52" T = 41.72' L = 82.26' R = 200.00' PC STA = 13+09.75"O" PT STA = 13+92.01"O"

SEE PLAT NO.-4.03

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN TRANSPORTATION PROJECT PLATS, DOCUMENT NO. 1035297 FOR ADDITIONAL INFORMATION.

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

I, JAMES D. BLONDHEIM, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WIS. DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1420-22-21 - 4.05 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE _____ DATE 03/26/14
JAMES D. BLONDHEIM, R.L.S. S-2800
COLEMAN ENGINEERING COMPANY

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHEAST REGION.

DATE _____

WISCONSIN JAMES D. BLONDHEIM 2800-008 KINGSFORD MICHIGAN LAND SURVEYOR

FILE NAME : F:\DATA\CAD PROJECTS\CAD11379-USH 151 TPP\1420-22-00\SHEETSPLAN\040105_RP.DWG PLOT DATE : APPRAISAL PLAT DATE : PLOT DATE : 3/26/2014 8:00 AM PLOT BY : Jeff Gilroy PLOT NAME : PLOT SCALE : 1" = 200'

TRANSPORTATION PROJECT PLAT NO: 1420-22-21 - 4.06

THAT PART OF THE LOT 3 OF CSM 4024, V. 22, P. 103 AND LOT 2 CSM 3986, V. 22, P. 65; ALSO THAT PART OF THE NE 1/4 - NE 1/4 OF SECTION 26, ALSO THAT PART OF LOT 1 CSM 127, V. 1 P. 127; ALSO THAT PART OF THE NW 1/4 - NW 1/4 OF SECTION 25, TOWN 15 NORTH, RANGE 17 EAST, CITY OF FOND DU LAC, FOND DU LAC COUNTY, WISCONSIN

RELOCATION ORDER USH 151 FOND DU LAC 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), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

GN

0 50 100
SCALE, FEET

DOC# 1035941
Recorded
April 04, 2014 11:55 AM
SHAWN KELLY
REGISTER OF DEEDS
FOND DU LAC COUNTY
Fee Amount: $25.00

306

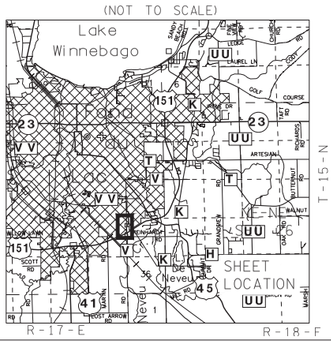
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1420-22-21 - 4.06
AMENDMENT NO:___

SEC1004
ALUM. MON. FOUND
X = 823661.653
Y = 374796.215

EP: 151+10.08
X = 823661.940
Y = 374759.430

N00°26'50"W
36.79'

LOCATION SKETCH
(NOT TO SCALE)



SCHEDULE OF LANDS & INTERESTS REQUIRED							
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W NEW ACRES	R/W EXISTING ACRES	R/W TOTAL SF	TLE SF	PLE SF
6	THERESA M. CONGER	FEE, PLE & TLE	0.019	----	----	262.50	645.98
22	GARY L. MERWIN	TLE	----	----	----	5120.83	---
23	KENNETH R. & ROSEANN R. BRAUN	PLE & TLE	----	----	----	2935.06	1333.66
24	MICHAEL T. KOEHN & ALYSON G. MUELLER	TLE	----	----	----	1629.02	---
26	ANTHONY S. & CATHLEEN S. RODEN	TLE	----	----	----	400.79	---

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

EASEMENTS OF RECORD			
PARCEL #	UTILITY #	OWNERSHIP	RECORDING INFO
6	(81)	WISCONSIN POWER AND LIGHT COMPANY - DBA ALLIANT ENERGY	VOL. 272, PAGE 331 DOC. #24473

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
81	ALLIANT ENERGY	RELEASE OF RIGHTS

WHITE PINE RESOURCES
TAX ID. FDL-15-17-26-11-249-00
DOC. 491193 V. 1040 P. 507

TLE TRAVERSE TABLE		
Line #	BEARING	DISTANCE
L12	S89°50'36"W	10.03'
L13	N00°09'24"W	40.00'
L14	N89°50'36"E	10.01'

ANTHONY S. & CATHLEEN S. RODEN
TAX ID. FDL-15-17-26-11-023-00
PART OF LOT 3 CSM 4024, V. 22, P. 103

MICHAEL T. KOEHN & ALYSON G. MUELLER
TAX ID. FDL-15-17-26-11-004-00
LOT 2 CSM 3986, V. 22, P. 65

TLE TRAVERSE TABLE		
Line #	BEARING	DISTANCE
L9	N60°15'04"W	30.09'
L10	N00°09'24"W	55.00'
L11	N89°50'36"E	26.05'

AARON C. KLASSY & CARMEN L. JEGLUM
TAX ID. FDL-15-17-26-11-005-00
LOT 1 CSM 3986 VOL. 22 PAGE 65

TLE FROM 1420-22-21-4.05 RECORDED AS DOC.#1035941

PI STA = 143+22.03
Y = 373970.773
X = 823664.095
DELTA = 12°10'21"
D = 7°32'20"
T = 81.04'
L = 161.46'
R = 760.00'
PCC STA = 142+41.00
PT STA = 144+02.46

PI STA = 141+69.32
Y = 373820.711
X = 823696.894
DELTA = 15°35'35"
D = 10°48'38"
T = 72.57'
L = 144.24'
R = 530.00'
PC STA = 140+96.76
PCC STA = 142+41.00

PI STA = 139+78.20
Y = 373634.193
X = 823795.747
DELTA = 4°31'24"
D = 33°42'12"
T = 6.73'
L = 13.45'
R = 170.00'
PC STA = 139+51.51
PT STA = 139+64.96

SIGNATURE: Curt Van Erem DATE 03/26/14
CURT VAN EREM

SEC1003
ALUM. MON. FOUND
X = 823669.96
Y = 372144.79

APPROXIMATE SIXTEENTH LINE SE-NE SEC 26

SEE PLAT NO.-4.05

JAMES S. MALY
TAX ID. T09-15-17-26-01-003-00
DOC. 920354, DOC. 911034
LOT 1 CSM 1039 VOL. 6 PAGE 199

WILLIAM E. & JUDITH D. LEE
TAX ID. T09-15-17-26-01-002-00
DOC. 296650 V. 719 P. 304
DOC. 312496 V. 742 P. 71

JAMES S. MALY
TAX ID. FLD-15-17-26-11-024-00
DOC. 920354, DOC. 911034

TLE FROM 1420-22-21-4.05 RECORDED AS DOC.#1035941

PROPOSED R/W FROM 1420-22-21-4.03 RECORDED AS DOC.#1036044

PROPOSED R/W FROM 1420-22-21-4.05 RECORDED AS DOC.#1035941

NE-NE SEC 26

NW-NW SEC 25

SW-NW SEC 25

FOND DU LAC

CITY OF FOND DU LAC

TOWN OF FOND DU LAC

MUSTANG LANE

CTH "V"

SIGN

MH

PROP

PL

IP

POOL

SAN

OH

W

G

A/C

PLE TRAVERSE TABLE		
Line #	BEARING	DISTANCE
L18	N16°37'25"E	76.25'
L19	N00°09'24"W	24.00'
L20	S89°50'36"W	22.05'

TLE TRAVERSE TABLE		
Line #	BEARING	DISTANCE
L1	N21°06'21"E	51.02'
L2	N00°09'24"W	50.00'
L3	N04°08'51"W	215.52'
L4	N06°33'21"E	85.55'
L5	N00°09'23"W	50.03'
L6	N28°54'56"W	41.57'

PLE TRAVERSE TABLE		
Line #	BEARING	DISTANCE
L15	N89°50'36"E	26.91'
L16	N00°09'24"W	24.00'
L17	S89°50'36"W	26.92'

RIGHT-OF-WAY COURSE TABLE		
PT - PT	BEARING	DISTANCE
PRW314-PRW315	S4°15'15"E	47.66'
PRW315-PRW600	S6°14'34"E	92.02'
PRW600-RWB601	S89°44'16"W	13.11'
RWB601-PRW314	N0°10'47"W	139.07'

SEE PLAT NO.-4.03

WISCONSIN DEPARTMENT OF TRANSPORTATION
TAX ID. FDL-15-17-25-22-499-00

NOTE:
EXISTING ACCESS CONTROL ALONG USH 151 ESTABLISHED FROM PREVIOUS PROJECTS 1420-05-20 REVISED APRIL 4TH, 2005.

THERESA M. CONGER
TAX ID. FDL-15-17-25-22-253-00
DOC. 982191

GARY L. MERWIN
TAX ID. FDL-15-17-25-22-252-00
LOT 1 CSM 127 V. 1, P. 127

KENNETH R. & ROSEANN R. BRAUN
TAX ID. FDL-15-17-25-22-251-00
DOC.#696955

BETTY J. WOXLAND
TAX ID. T09-15-17-25-06-006-00
LOT 1, CSM 326 V. 3 P.125

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, IN TRANSPORTATION PROJECT PLATS, DOCUMENT NO. 1035297 FOR ADDITIONAL INFORMATION.

COLEMAN ENGINEERING COMPANY
635 CIRCLE DRIVE
IRON MOUNTAIN, MICHIGAN 49801

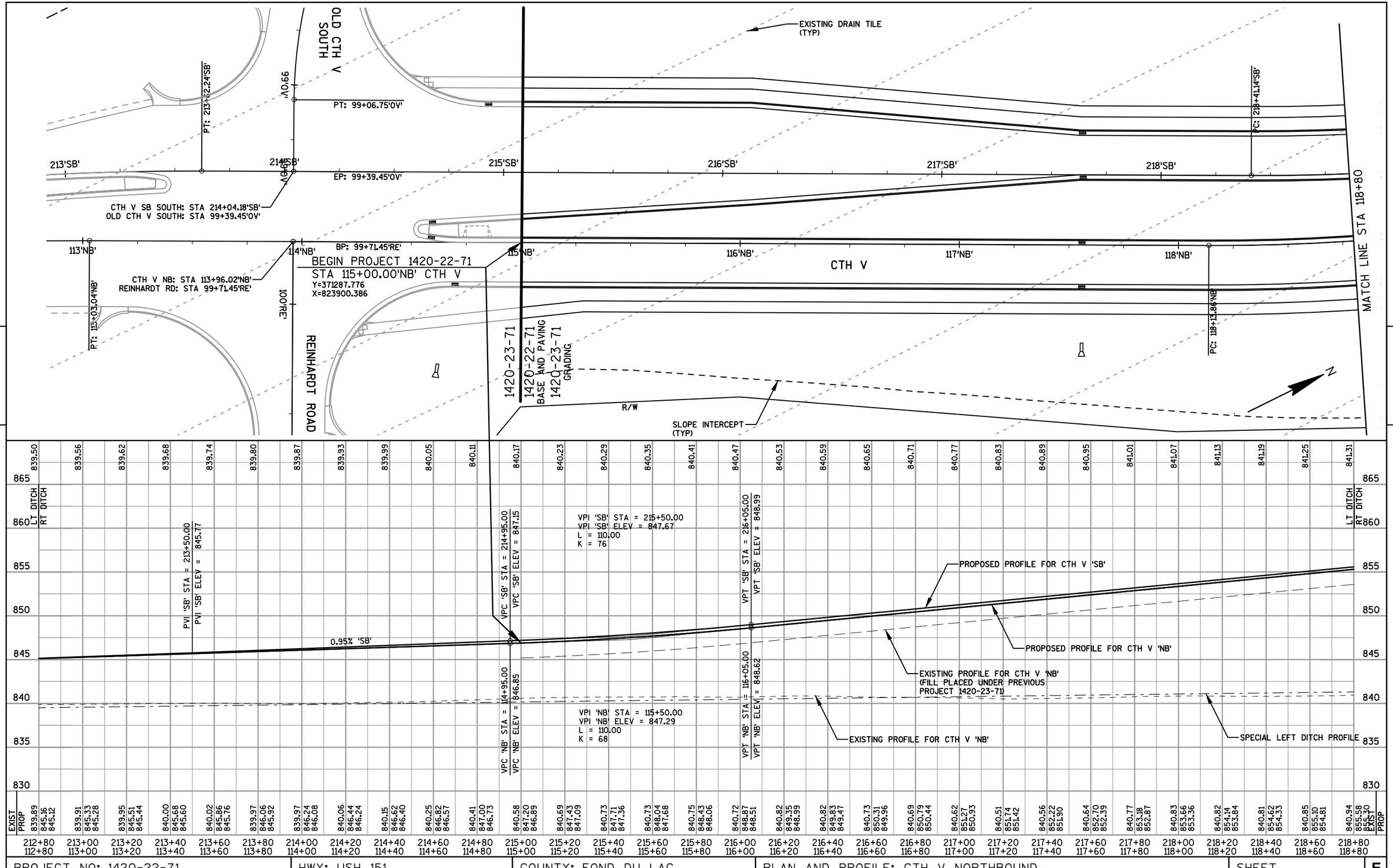
I, JAMES D. BLONDHEIM, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WIS. DEPT. OF TRANSPORTATION, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1420-22-21 - 4.06 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE _____ DATE 09/30/14
JAMES D. BLONDHEIM, R.L.S. S-2800
COLEMAN ENGINEERING COMPANY

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTHEAST REGION.

SIGNATURE Curt Van Erem DATE 03/26/14
CURT VAN EREM

PLOT NAME : PLOT SCALE : 1" : 100'
PLOT BY : Jeff Gilroy
PLOT DATE : 9/30/2014 10:57 AM
FILE NAME : F:\DATA\CAD PROJECTS\CAD11379-USH 151 TPP\1420-22-00\SHEETSPLAN\040106_RP.DWG
APPRAISAL PLAT DATE : _____
1420-22-21 4.06
298



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: CTH V NORTHBOUND	SHEET 307 E

MATCH LINE STA 118+80

219'SB' 220'SB' 221'SB' 222'SB' 223'SB' 224'SB'

119'NB' 120'NB' 121'NB' 122'NB' 123'NB' 124'NB'

CTH V

CAUTION

ALLIANT ENERGY (GAS)

PRC: 223+03.88'SB'

PT: 223+83.81'SB'

PC: 224+05.74'SB'

CHARTER COMMUNICATIONS

13'RA' 10'RA'

11'RA'

PRC: 123+16.42'NB'

PT: 124+04.68'NB'

ALLIANT ENERGY (OVERHEAD ELECTRIC)

BP: 269+47.94'VBB'

USH 151 RAMPS

PC: 269+17.07'VBB'

PC: 269+84.68'VBB'

270'

SLOPE INTERCEPT (TYP)

R/W

EXISTING DRAIN TILE (TYP.)

N

880

880

875

870 LT DITCH RT DITCH

865

860

855

850

845

840

PROPOSED PROFILE FOR CTH V 'SB'

PROPOSED PROFILE FOR CTH V 'NB'

EXISTING PROFILE FOR CTH V 'NB' (FILL PLACED UNDER PREVIOUS PROJECT 1420-23-71)

2.40% 'SB'

2.43% 'NB'

PVI 'SB' STA = 224+05.74
PVI 'SB' ELEV = 868.18

VPI 'NB' STA = 124+04.67
VPI 'NB' ELEV = 868.03

SPECIAL LEFT DITCH PROFILE

EXISTING PROFILE FOR CTH V 'NB'

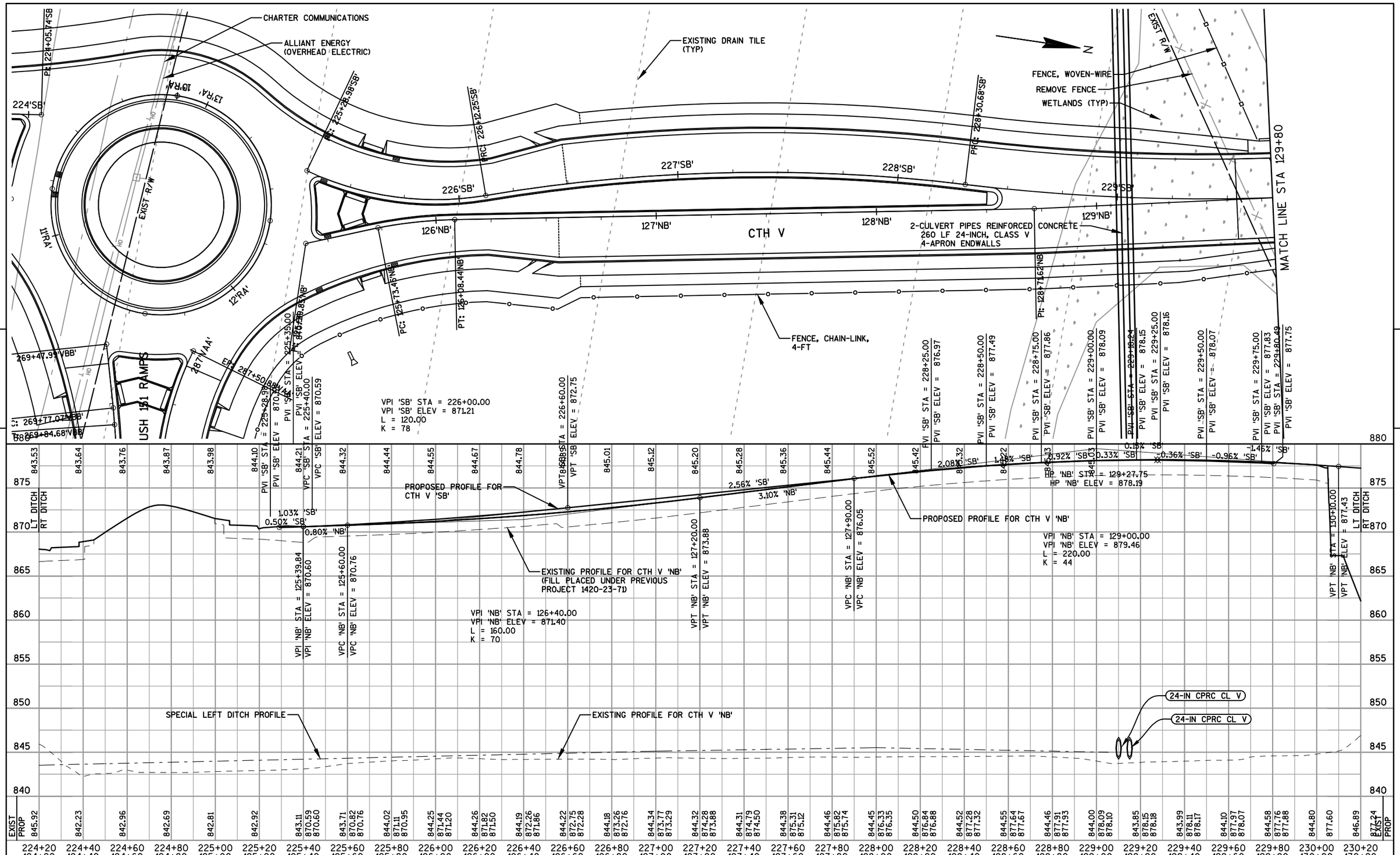
	218+80	219+00	219+20	219+40	219+60	219+80	220+00	220+20	220+40	220+60	220+80	221+00	221+20	221+40	221+60	221+80	222+00	222+20	222+40	222+60	222+80	223+00	223+20	223+40	223+60	223+80	224+00	224+20	224+40	224+60	224+80
	118+80	119+00	119+20	119+40	119+60	119+80	120+00	120+20	120+40	120+60	120+80	121+00	121+20	121+40	121+60	121+80	122+00	122+20	122+40	122+60	122+80	123+00	123+20	123+40	123+60	123+80	124+00	124+20	124+40	124+60	124+80
EXIST	840.94	840.99	840.98	840.96	840.92	840.81	840.86	840.86	840.91	840.75	840.65	840.58	840.61	840.52	840.49	840.47	840.42	840.43	840.54	840.69	840.89	841.01	841.11	841.68	842.12	846.10	847.07	845.92	842.23	842.96	842.69
PROP	855.58	856.06	856.54	857.02	857.50	857.98	858.46	858.93	859.41	859.89	860.37	860.85	861.33	861.81	862.29	862.77	863.25	863.73	864.21	864.69	865.17	865.65	866.13	866.60	867.08	867.56	868.04				EXIST
	855.30	855.78	856.27	856.75	857.24	857.72	858.21	858.70	859.18	859.67	860.15	860.64	861.12	861.61	862.09	862.58	863.06	863.55	864.03	864.52	865.00	865.49	865.98	866.46	866.95	867.43	867.92				PROP

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: CTH V NORTHBOUND	SHEET 308 E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\14202271 CTH V\142022_050100_PP.DWG
142022_050103_pp

PLOT DATE : 2/13/2015 8:30 AM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 44

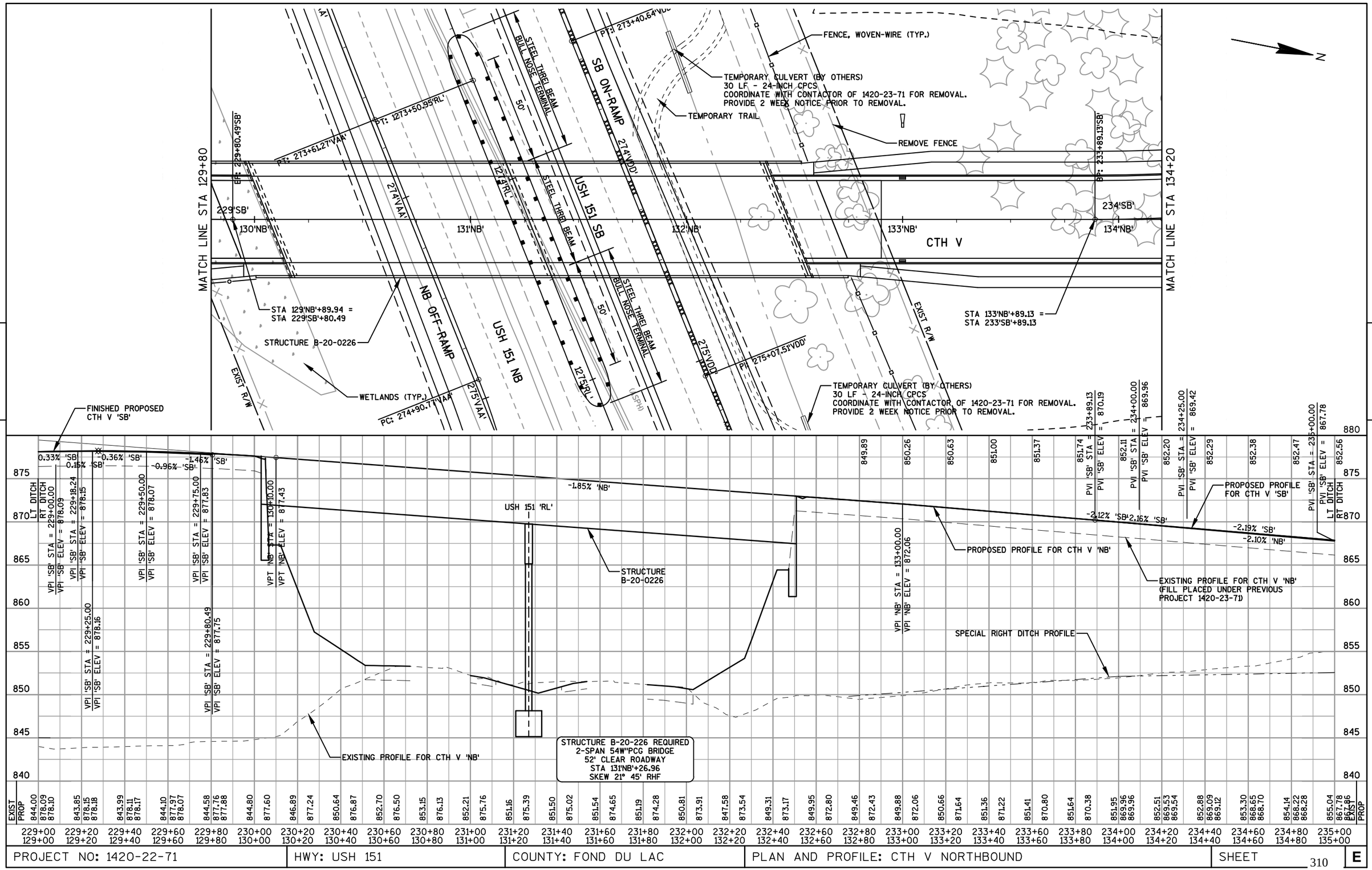


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: CTH V NORTHBOUND	SHEET 309 E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\14202271 CTH V\142022_050100_PP.DWG
142022_050105_pp

PLOT DATE : 2/13/2015 10:00 AM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 44

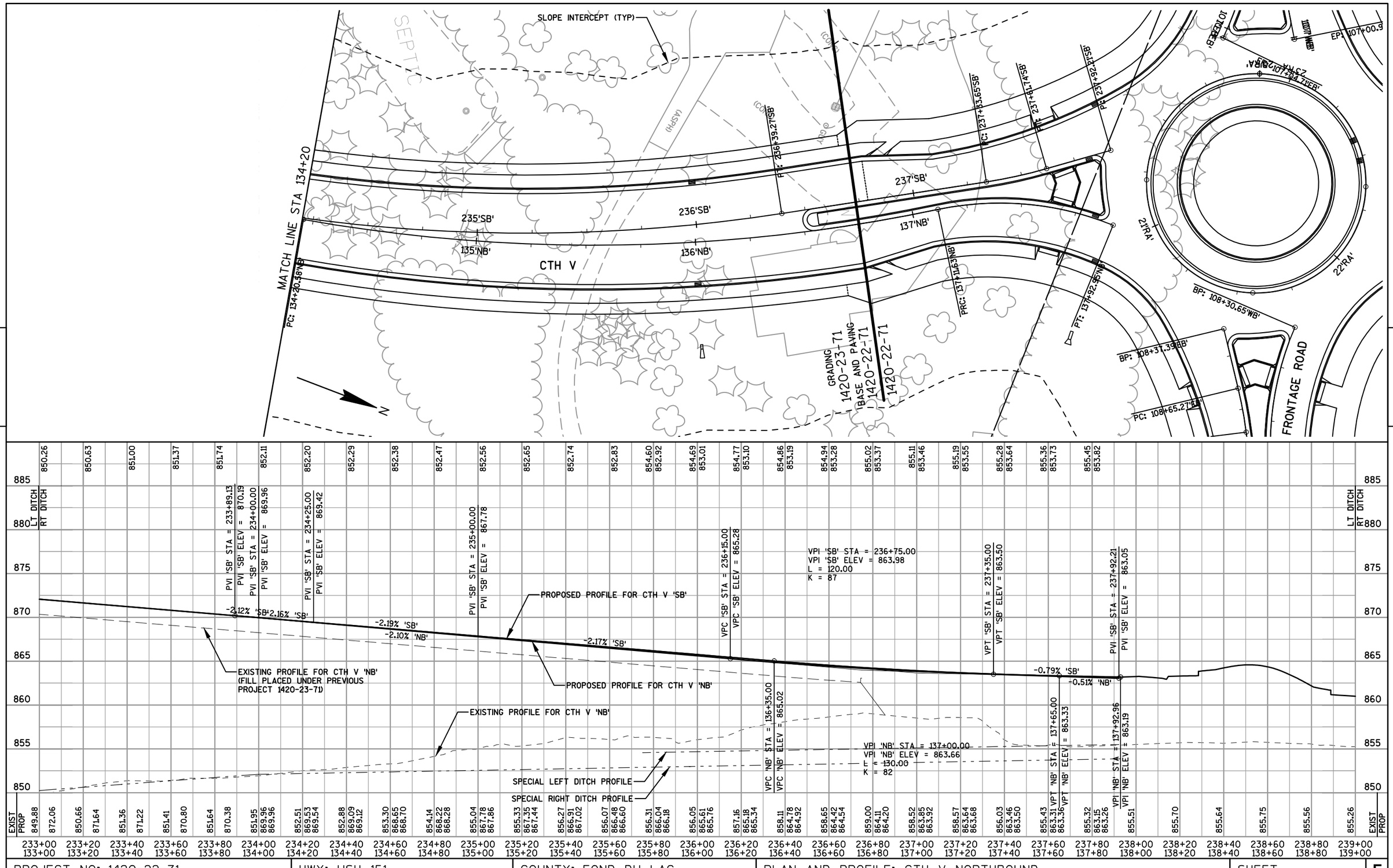


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: CTH V NORTHBOUND	SHEET 310 E

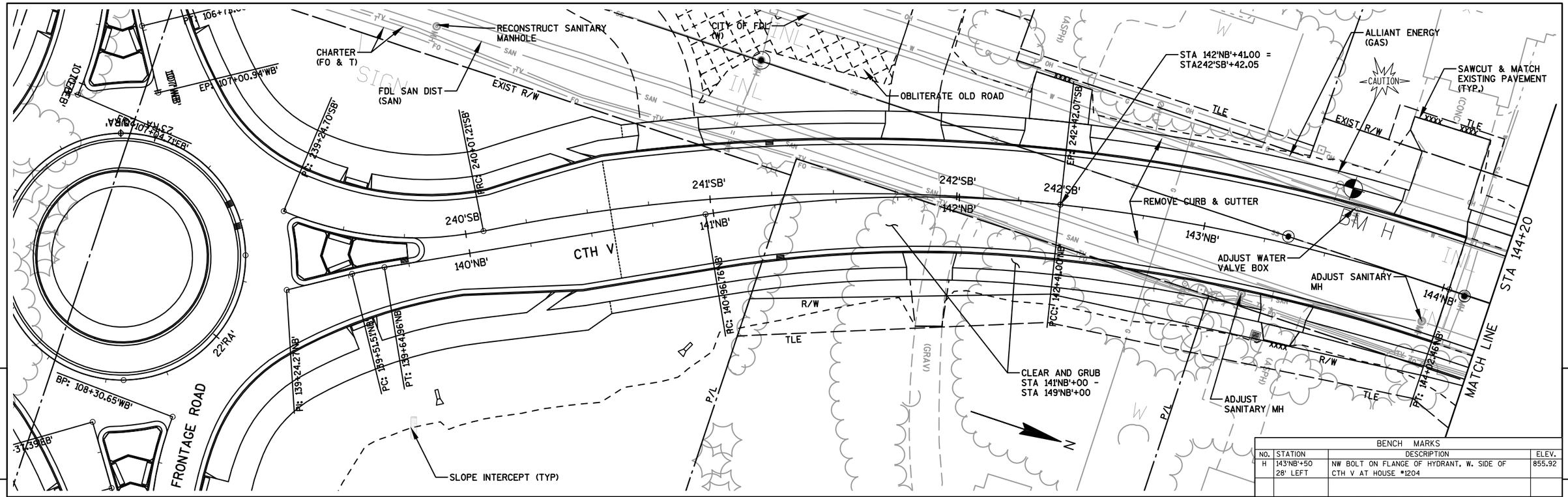
FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\14202271 CTH V\142022_050100_PP.DWG
142022_050106_pp

PLOT DATE : 7/23/2015 2:58 PM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

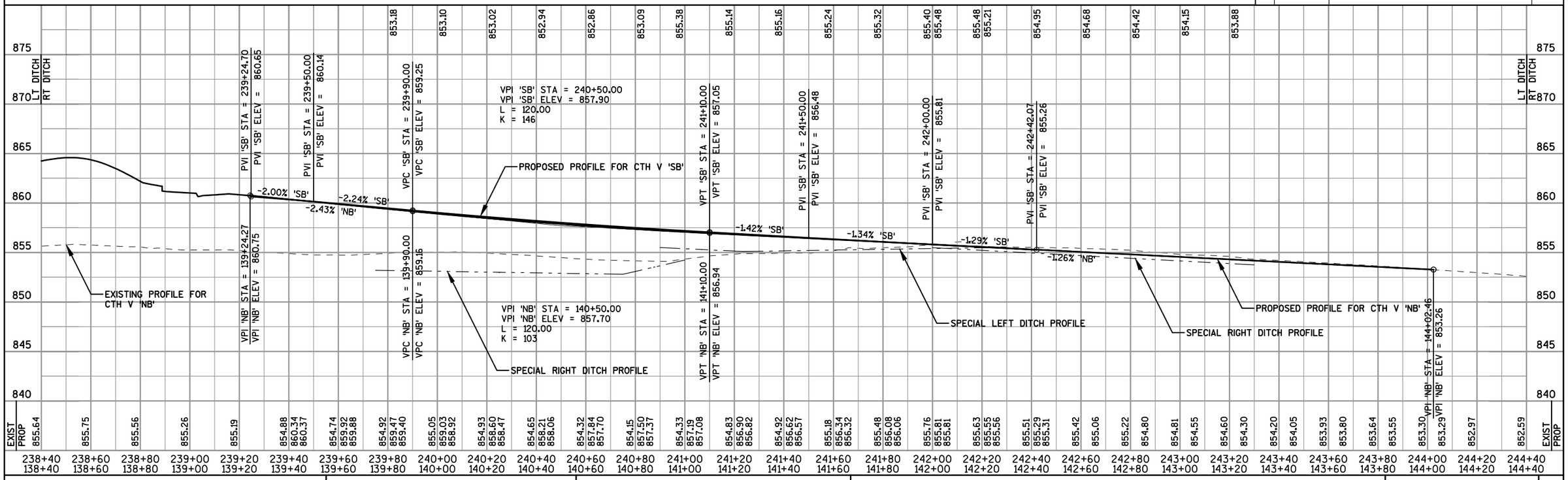
WISDOT/CADDS SHEET 44



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: CTH V NORTHBOUND	SHEET 311 E



BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
H	143'NB'+50	NW BOLT ON FLANGE OF HYDRANT, W. SIDE OF	855.92
	28' LEFT	CTH V AT HOUSE #1204	



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: CTH V NORTHBOUND	SHEET 312 E

STA 144+20

MATHC LINE

TLE

EXIST R/W

(CONC)

P/L

(ASPH)

CITY OF FDL (W)

CTH V

ALLIANT ENERGY (GAS)

CAUTION

ADJUST WATER SERVICE CURB STOP

145'NB'

146'NB'

147'NB'

148'NB'

149'NB'

150'NB'

FDL SAN DIST (SAN)

SAN

R/W

CHARTER (FO & T)

FO

T

TV

CLEAR AND GRUB STA 141'NB'+00 - STA 149'NB'+00

SLOPE INTERCEPT (TYP)

SAWCUT & MATCH EXISTING PAVEMENT (TYP)

END PROJECT 1420-22-71
STA 149+06.31'NB' CTH V

MUSTANG LANE

INL

MH

OH

G

W

SS

N

5

5

865
860
855
850
845
840
835
830

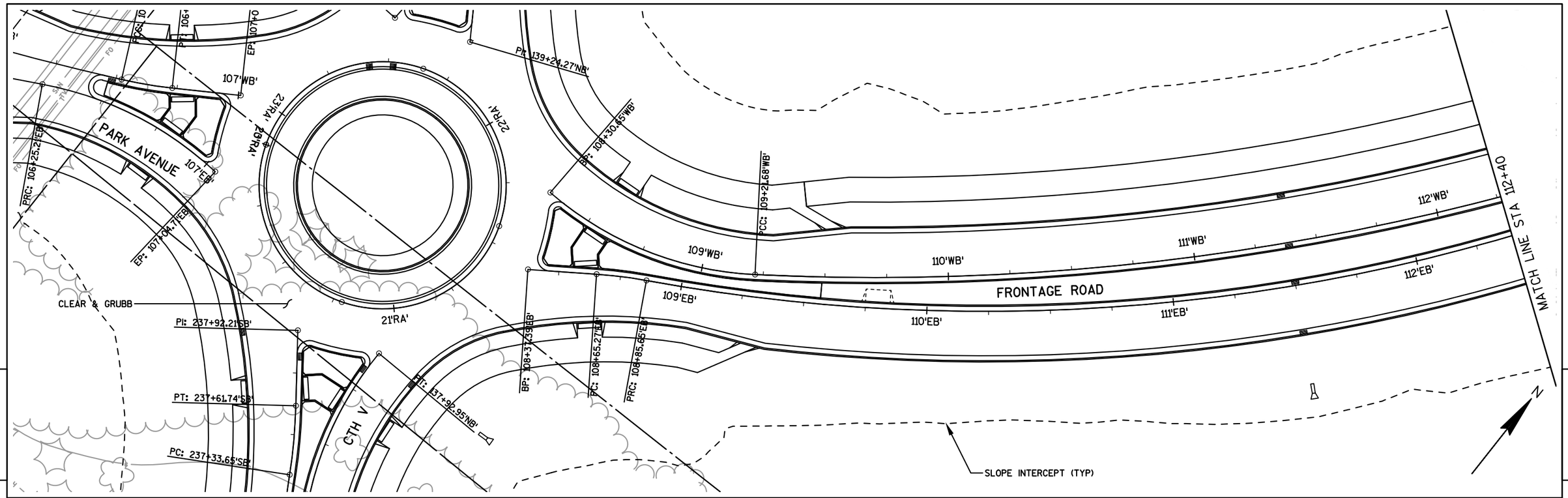
LT DITCH
RT DITCH

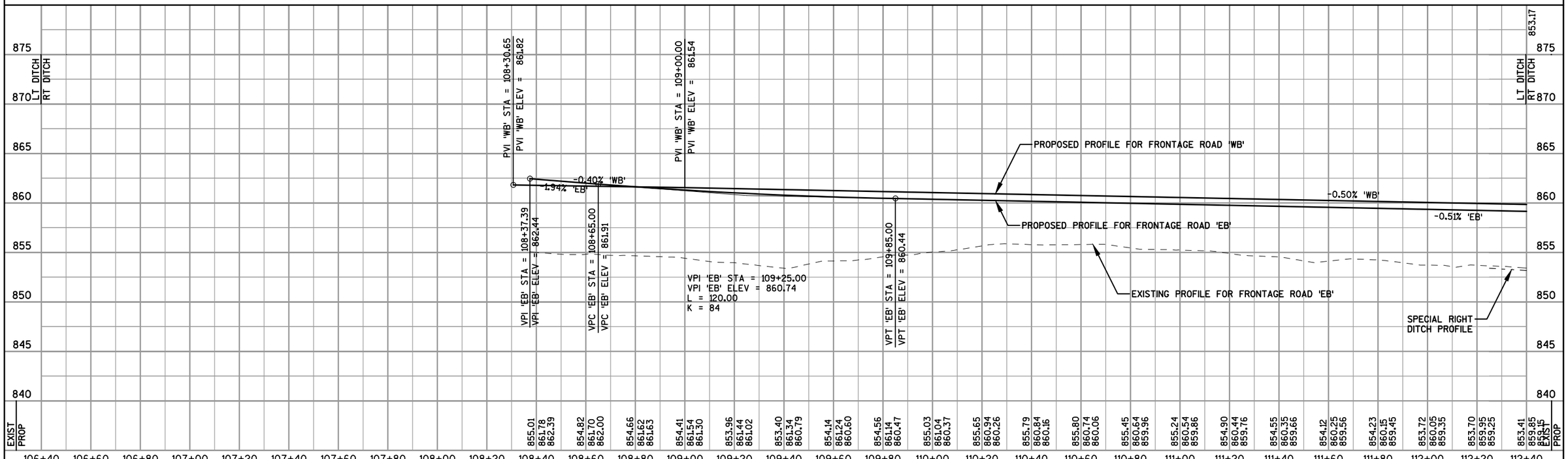
EXISTING PROFILE FOR CTH V 'NB'

EXIST	852.97	852.59	852.18	851.78	851.50	851.21	850.97	850.59	850.05	849.68	849.37	849.06	848.76	848.41	848.04	847.69	847.33	847.03	846.76	846.38	846.12	845.89	845.57	845.28	844.99	844.48	844.18	843.92	843.67	843.24	842.80	EXIST
PROP																																PROP

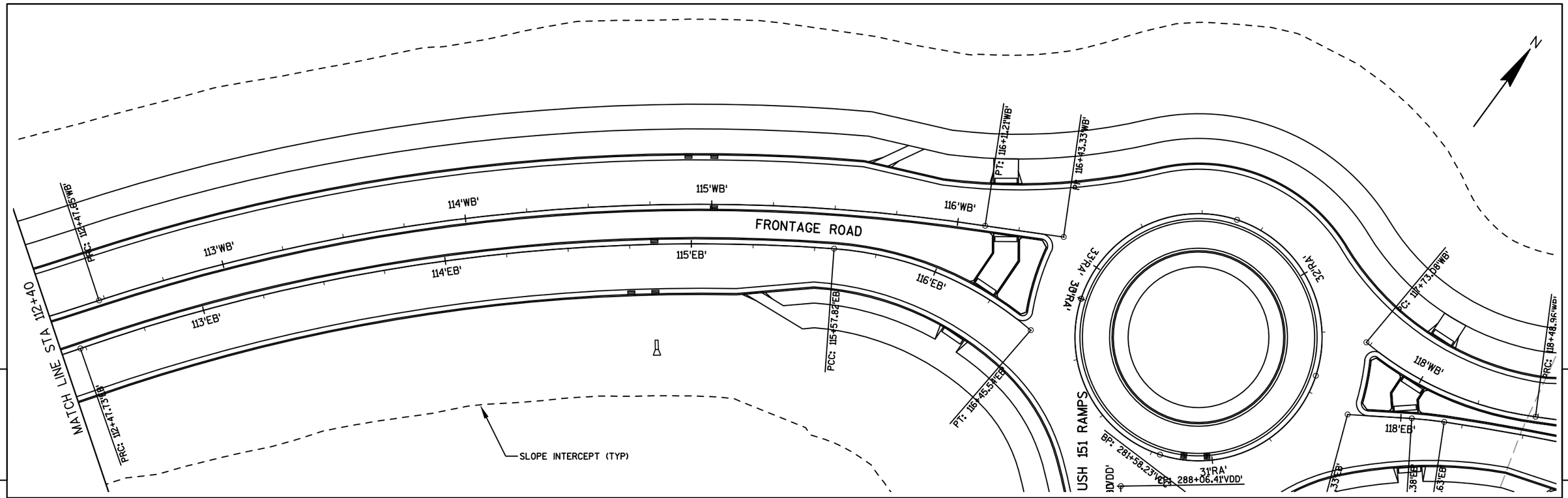
144+20 144+40 144+60 144+80 145+00 145+20 145+40 145+60 145+80 146+00 146+20 146+40 146+60 146+80 147+00 147+20 147+40 147+60 147+80 148+00 148+20 148+40 148+60 148+80 149+00 149+20 149+40 149+60 149+80 150+00 150+20

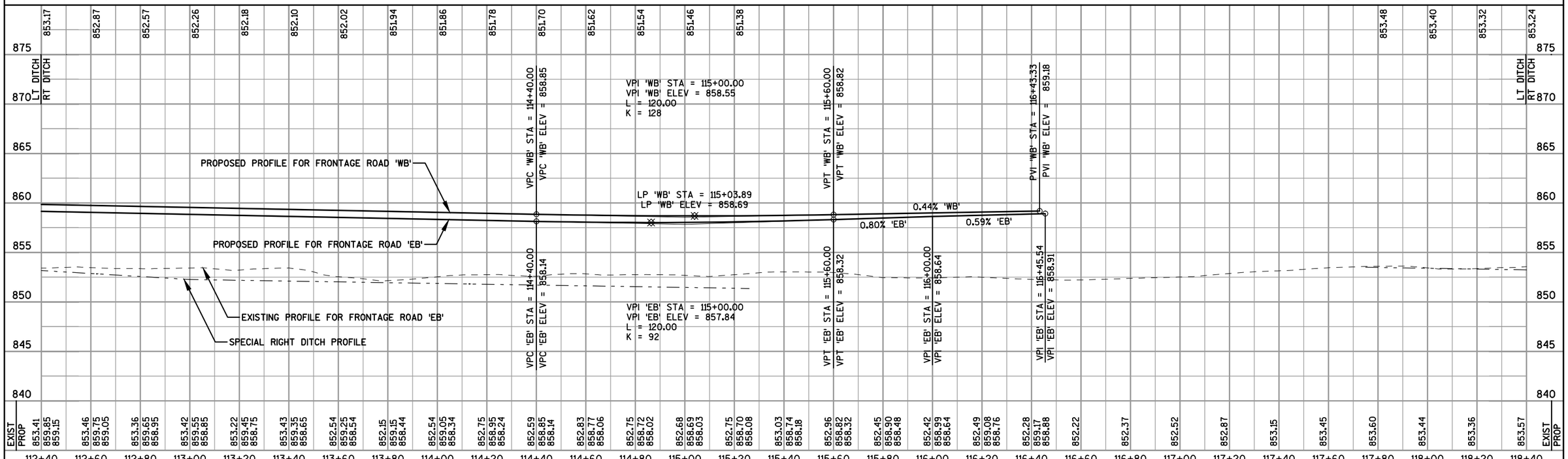
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: CTH V NORTHBOUND	SHEET 313	E



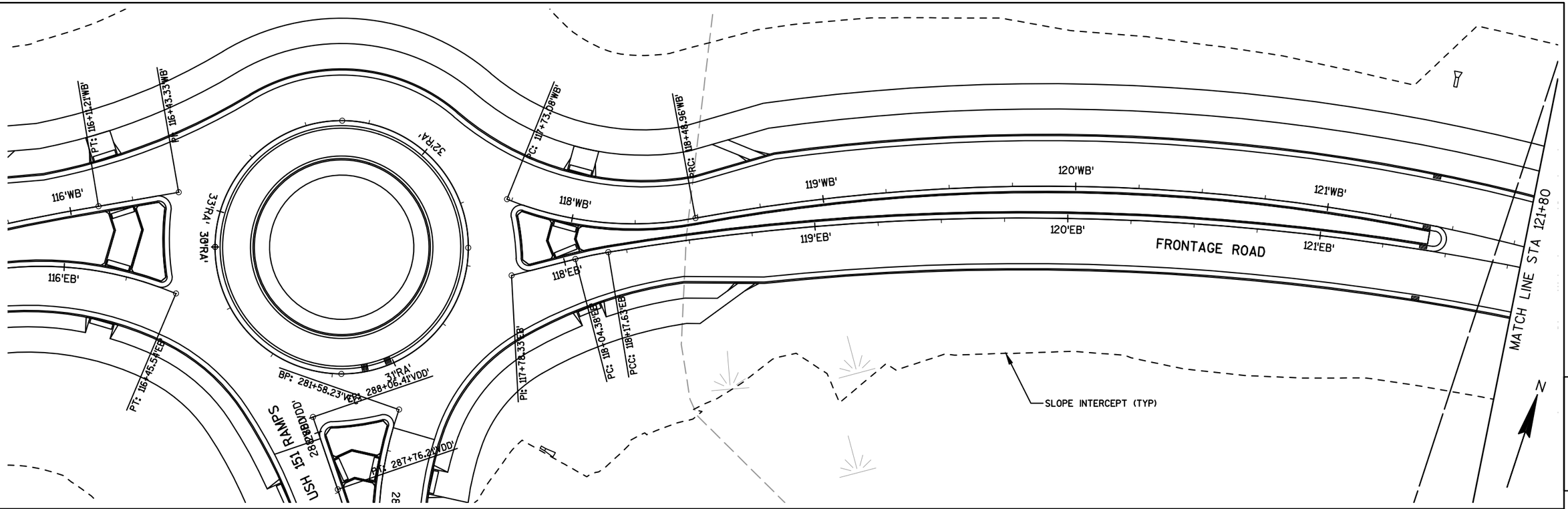


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: FRONTAGE ROAD	SHEET 314	E

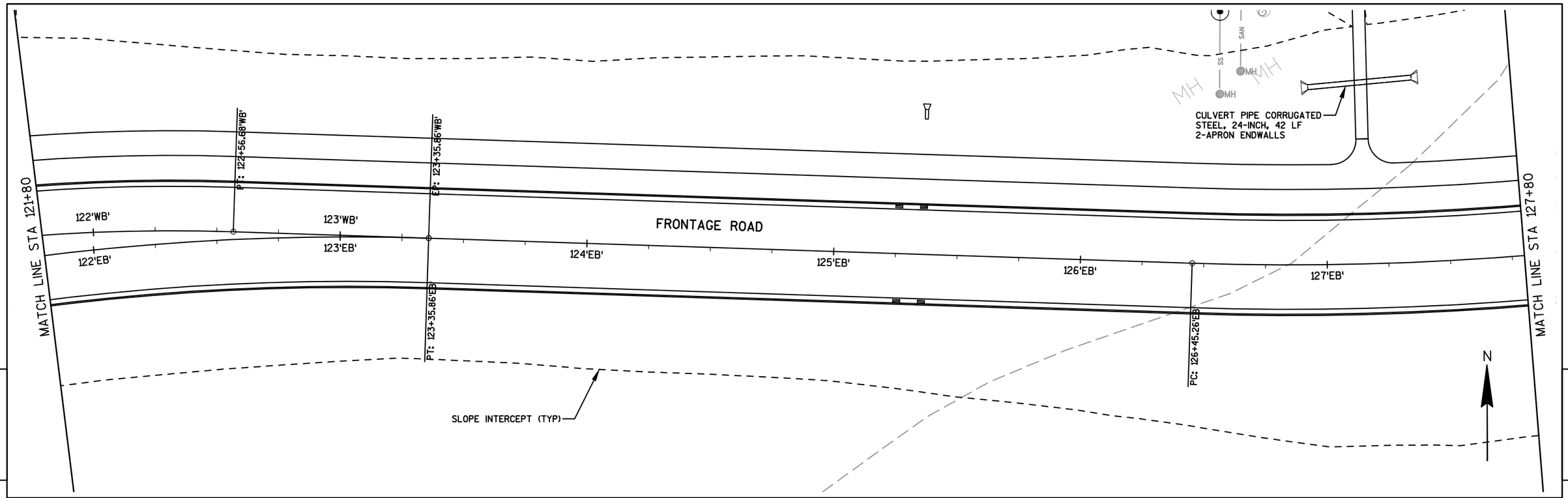


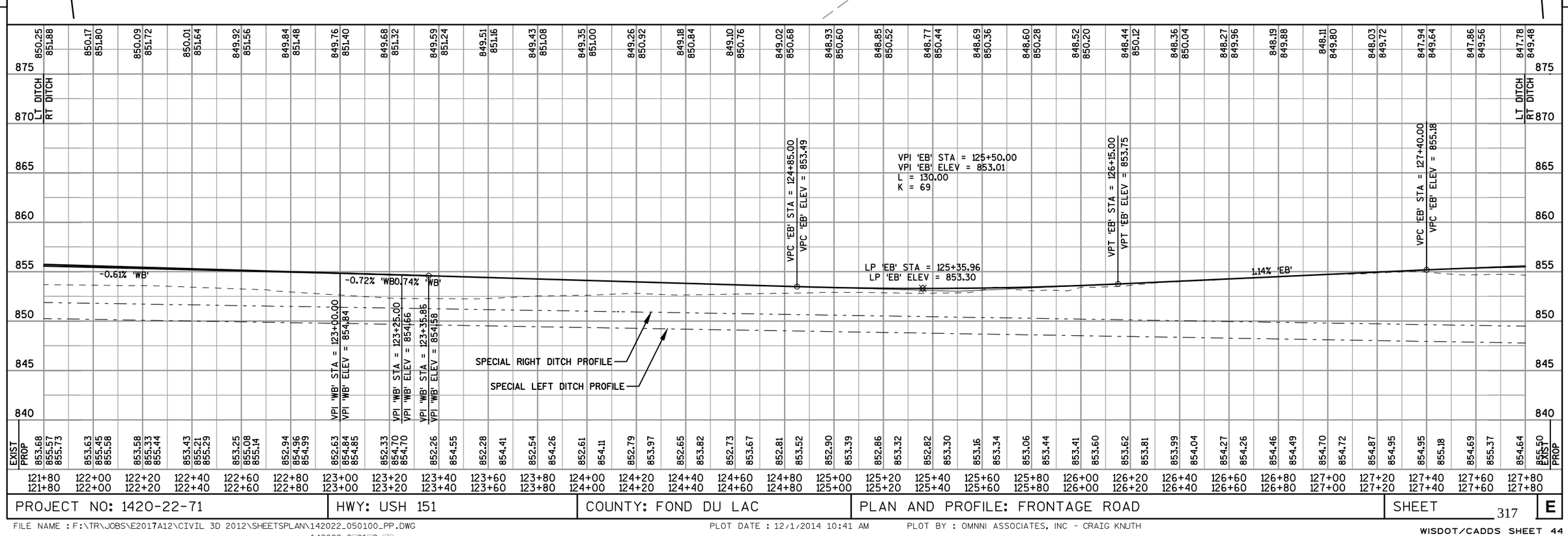


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: FRONTAGE ROAD	SHEET 315	E

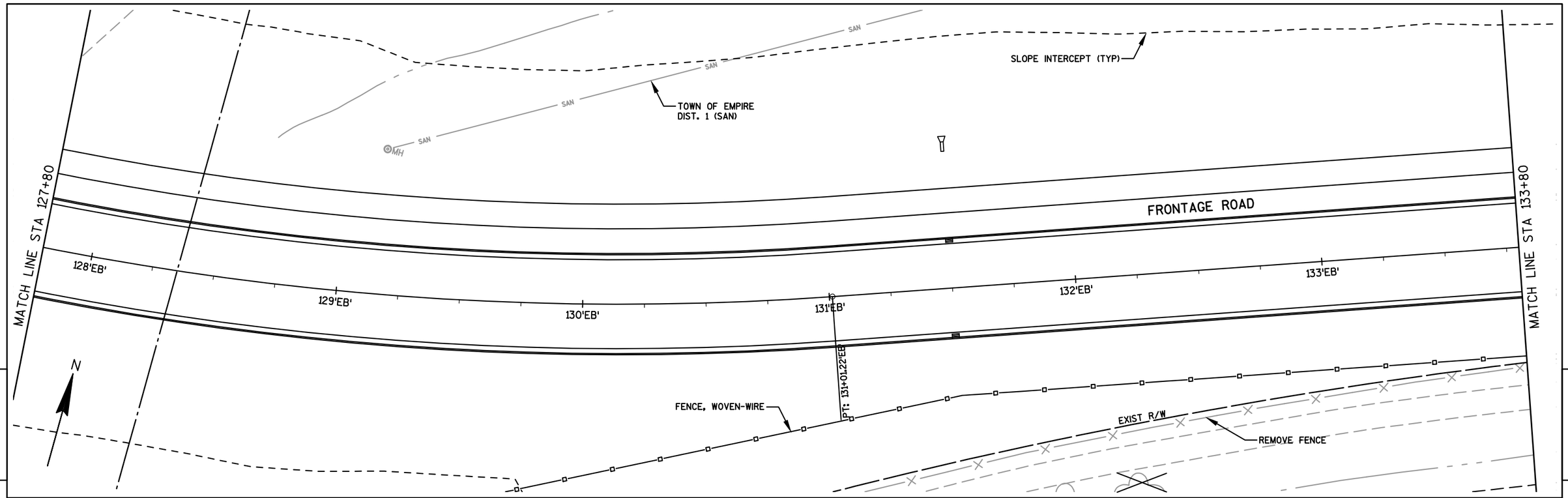


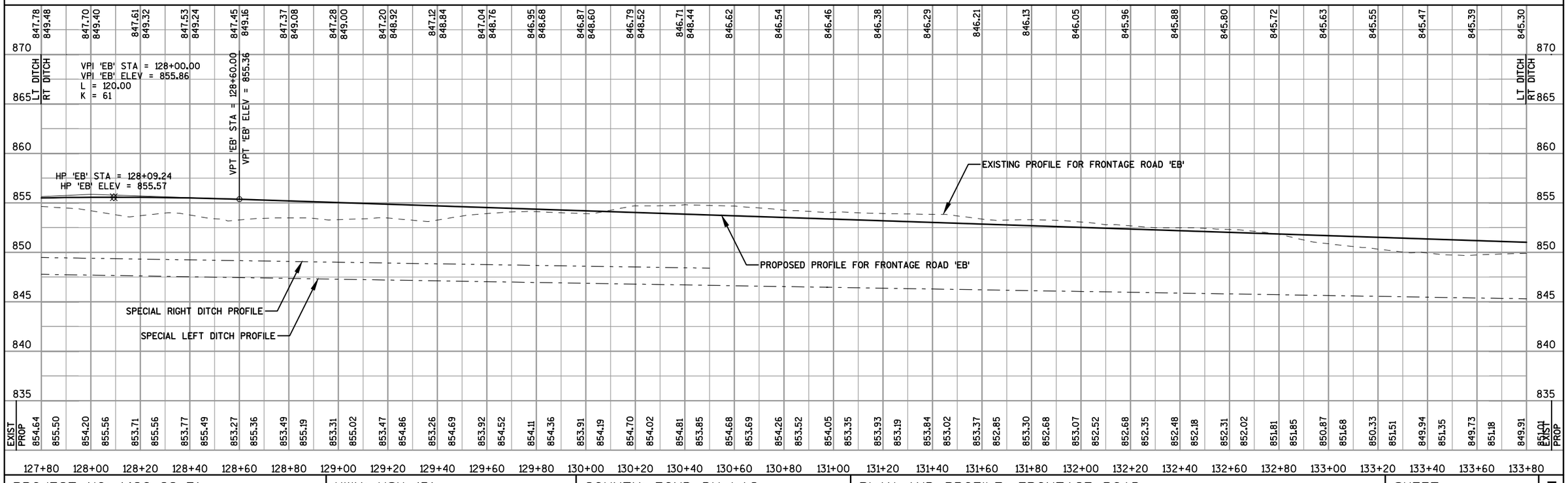
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: FRONTAGE ROAD	SHEET 316 E





PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: FRONTAGE ROAD	SHEET 317	E





PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: FRONTAGE ROAD	SHEET 318	E

MATCH LINE STA 133+80

MATCH LINE STA 139+80

TOWN OF EMPIRE
DIST. 1 (SAN)

SLOPE INTERCEPT (TYP)

N

WETLANDS

FRONTAGE ROAD

134'EB' 135'EB' 136'EB' 137'EB' 138'EB' 139'EB'

FENCE, WOVEN-WIRE

PRAIRIE TRAIL

USH 151

REMOVE FENCE

PC: 138+28.79'EB

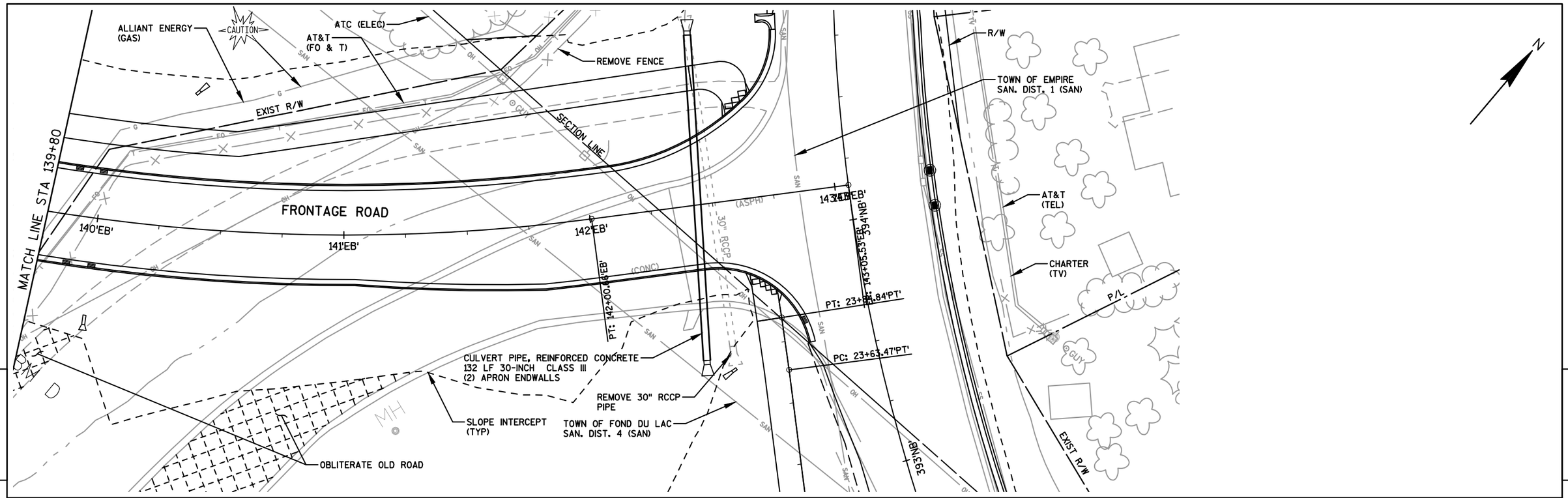
EXIST R/W

AT&T (FO & T)

SAN

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
D	139'EB'+62 67' RIGHT	RR SPIKE IN PP #15-17-25.2.1 16/43, W. SIDE OF BIKE PATH, NW CORNER OF USH 45 AND USH 151 SOUTHBOUND	841.66

	845.30	845.22	845.14	845.06	844.97	844.89	844.81	844.73	844.64	844.56	844.48	844.40	844.31	844.23	844.15	844.07	843.98	843.90	843.82	843.74	843.65	843.57	843.49	843.41	843.32	843.24	843.16	843.08	842.99	842.91	842.83
865																															
860	LT DITCH RT DITCH																														LT DITCH RT DITCH
855																															
850	-0.84% 'EB'																														
845																															
840																															
835																															
830																															
EXIST	849.91	851.01	849.92	850.84	849.75	850.68	849.47	850.51	849.14	850.34	848.80	850.18	847.17	850.01	847.05	849.84	845.85	849.67	846.07	849.51	845.81	849.34	845.68	849.17	845.78	849.01	846.15	848.84	846.65	848.67	847.29	848.50	847.46	848.34	847.55	848.17	847.47	848.00	847.52	847.84	847.14	847.67	846.64	847.50	846.24	847.33	846.08	847.17	846.04	847.00	846.02	846.83	845.65	846.67	845.02	846.50	844.48	846.33	843.91	846.19	842.79	846.11	EXIST
PROP																		

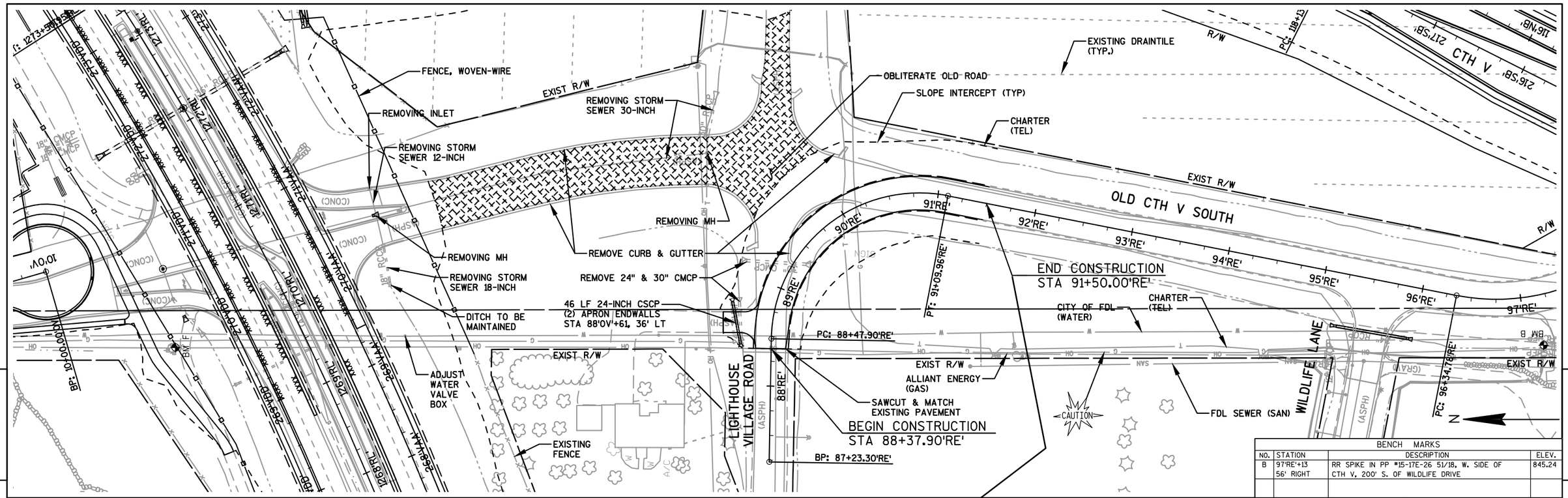


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: FRONTAGE ROAD	SHEET 320	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_050100_PP.DWG
142022_0□01□□_□□

PLOT DATE : 12/1/2014 10:43 AM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 44

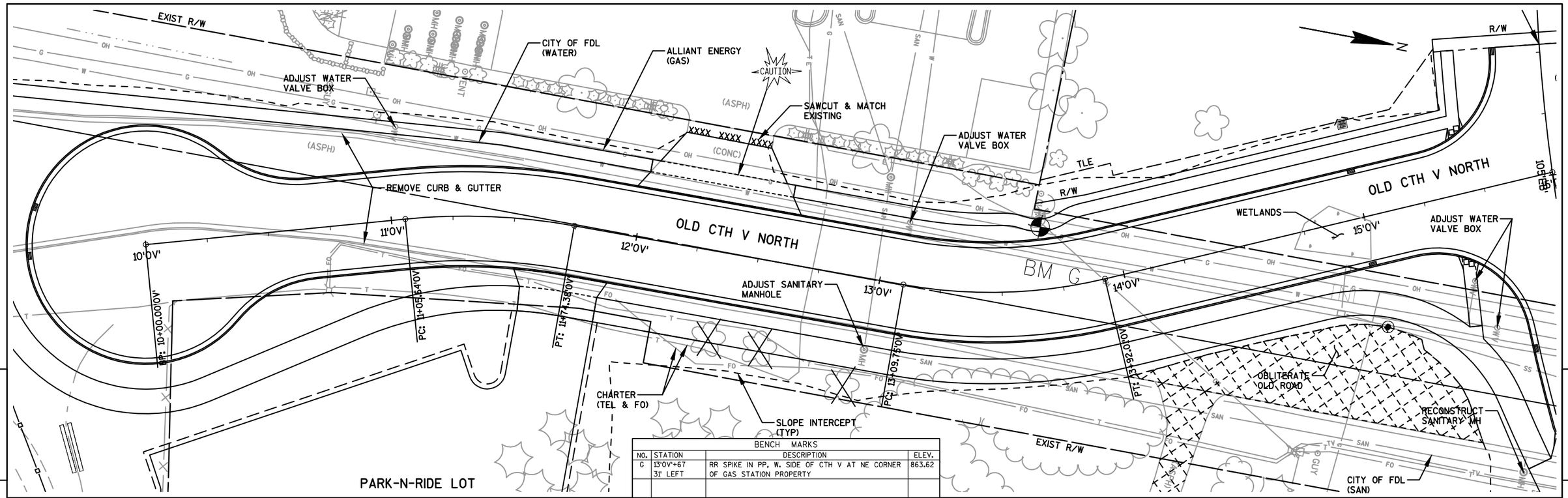


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: OLD CTH V SOUTH	SHEET 321	E

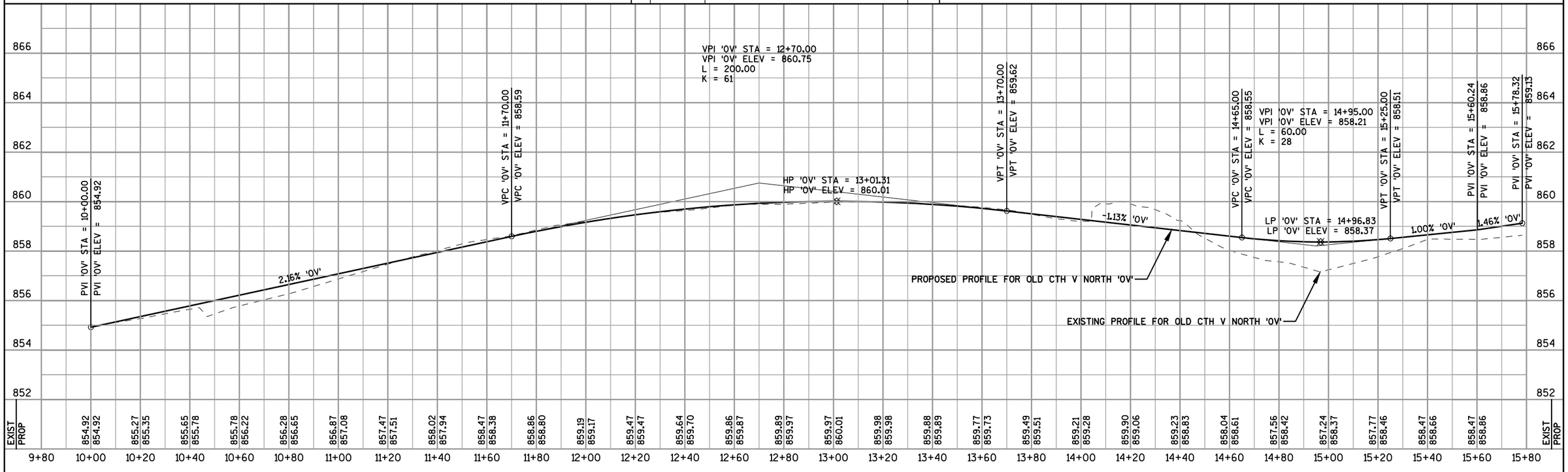
FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\14202271 CTH V\142022_050100_PP.DWG
142022_050171_pp

PLOT DATE : 4/13/2015 8:42 AM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

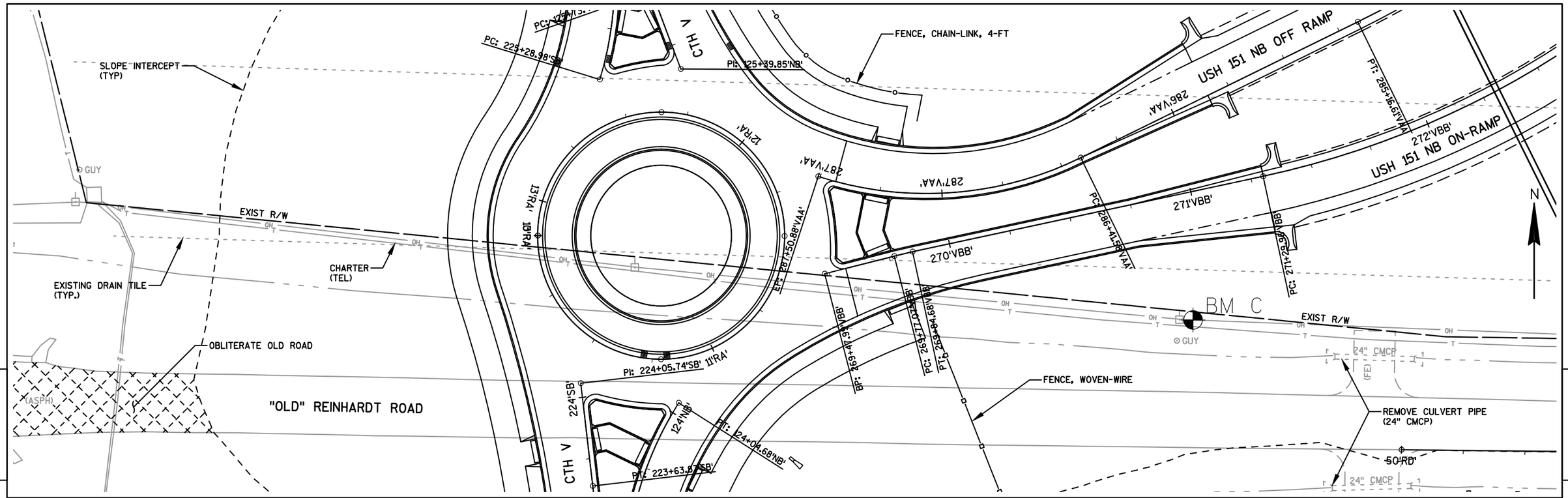
WISDOT/CADDS SHEET 44

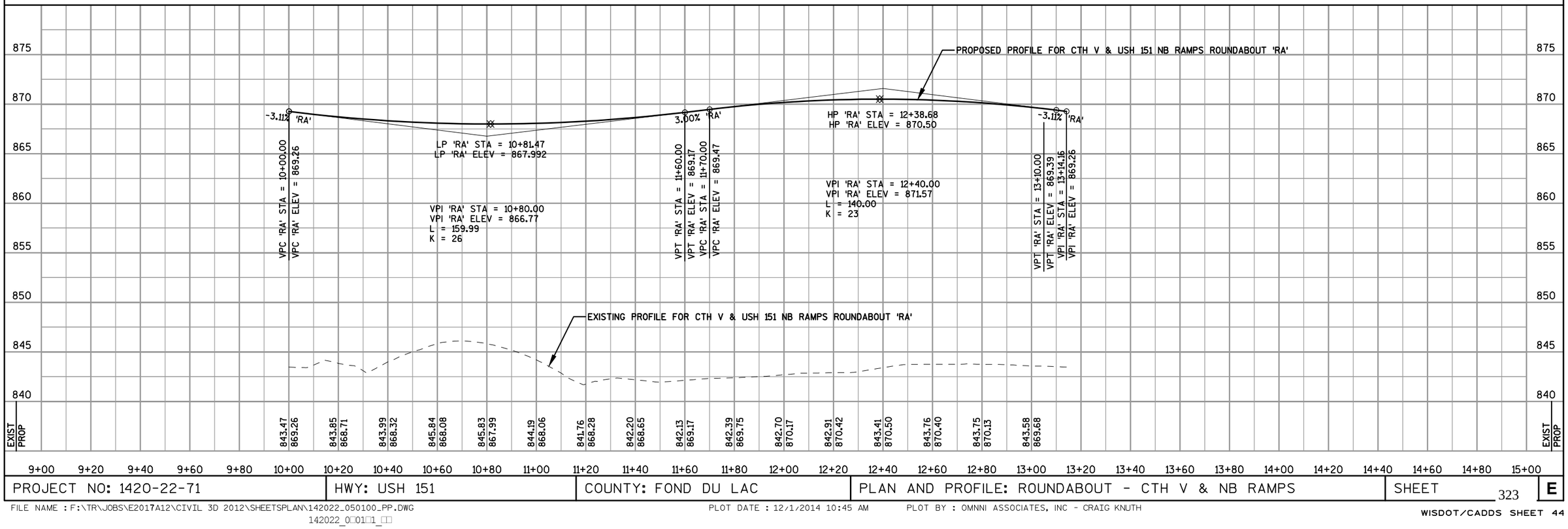


BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
G	13'OV'+67 31' LEFT	RR SPIKE IN PP, W. SIDE OF CTH V AT NE CORNER OF GAS STATION PROPERTY	863.62

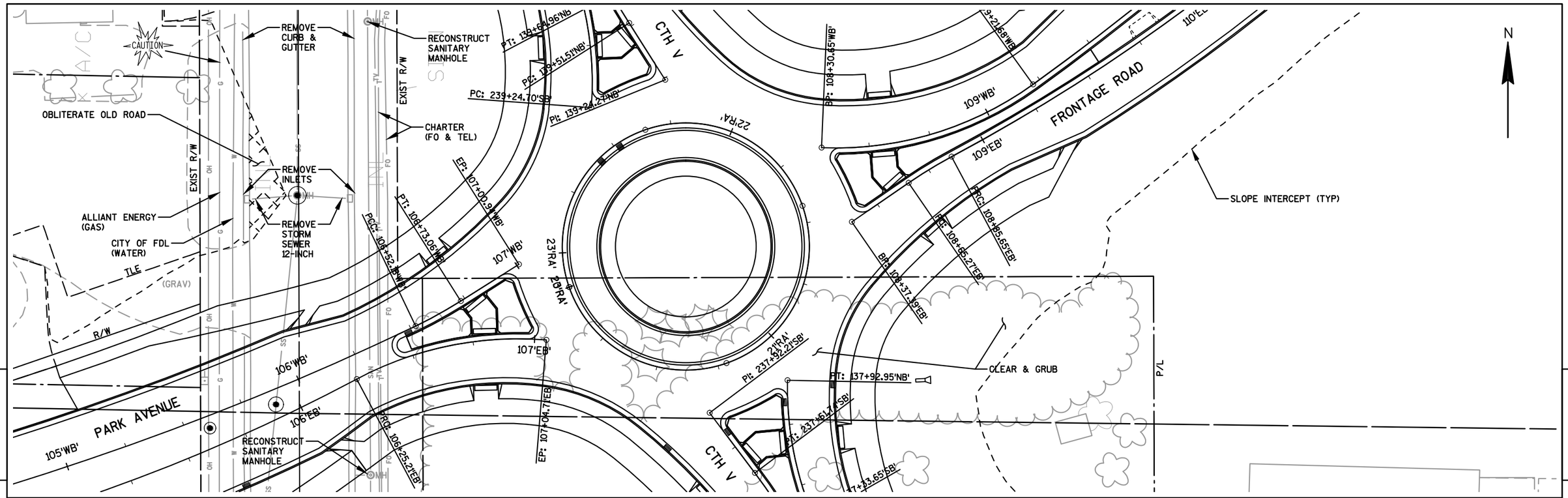


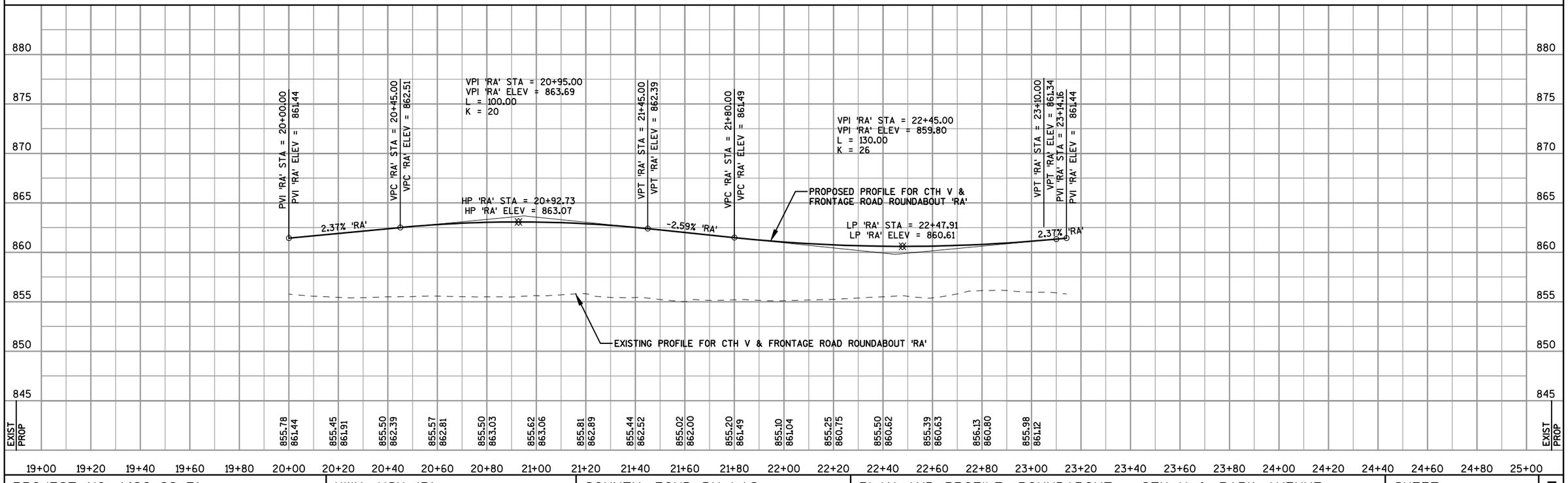
PROJECT NO: 1420-22-17	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: OLD CTH V NORTH	SHEET 322	E



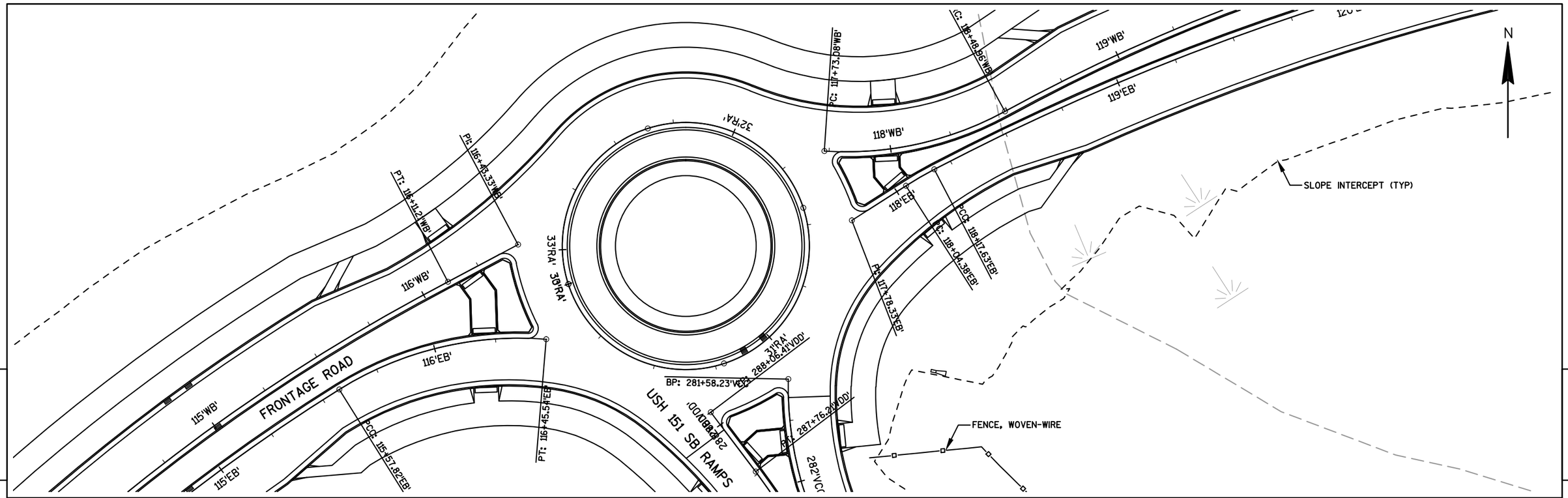


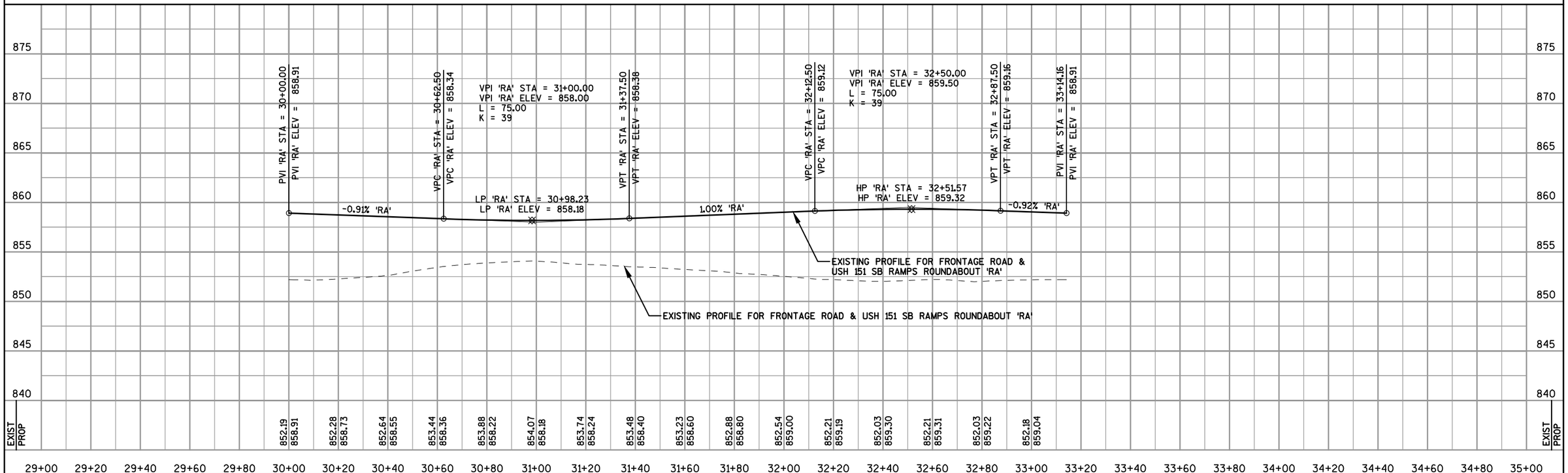
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: ROUNDABOUT - CTH V & NB RAMPS	SHEET 323	E



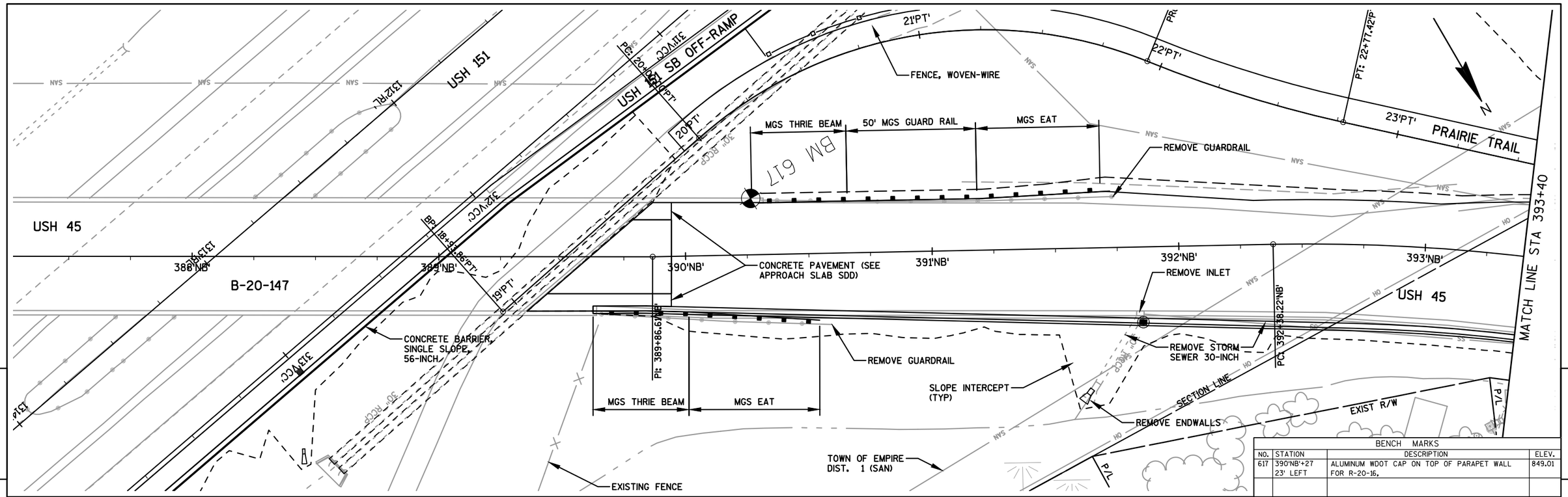


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: ROUNDABOUT - CTH V & PARK AVENUE	SHEET 324	E



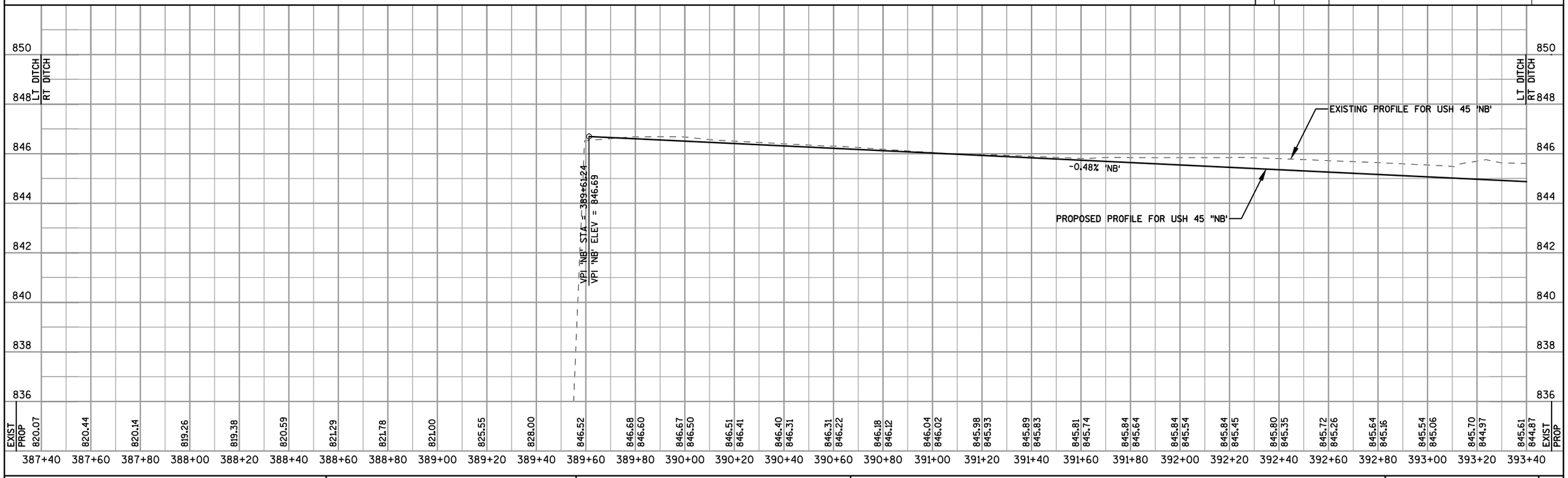


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: ROUNDABOUT - FRONTAGE ROAD & SB RAMPS	SHEET 325	E

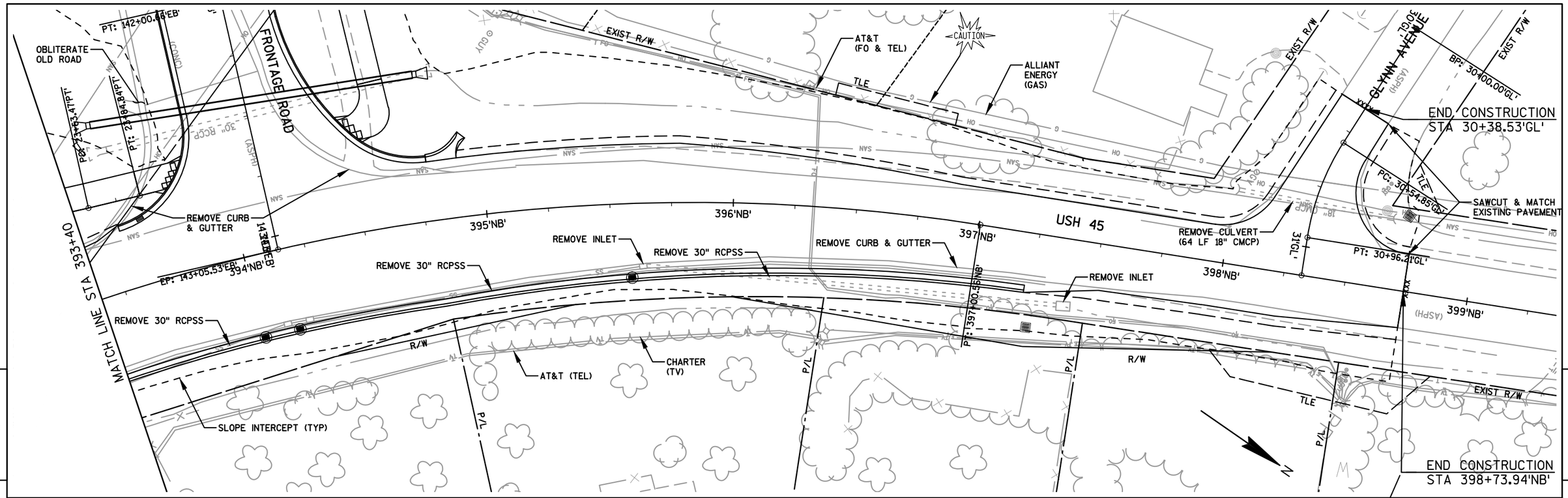


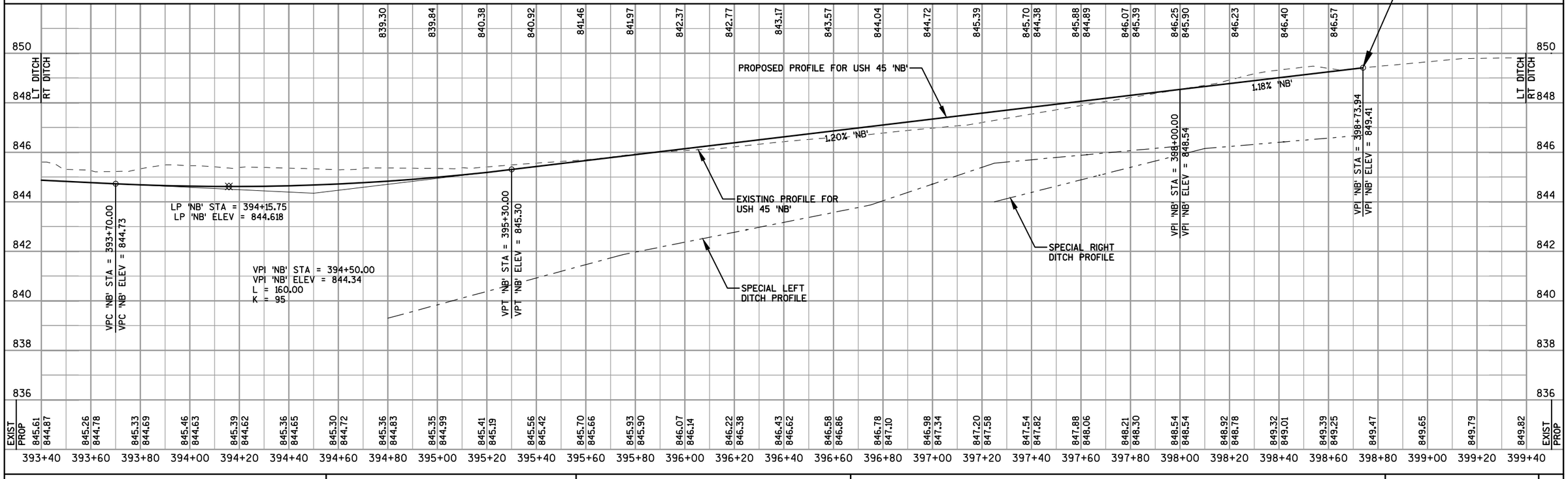
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
617	390'NB'+27 23' LEFT	ALUMINUM WDOT CAP ON TOP OF PARAPET WALL FOR R-20-16,	849.01



PROJECT NO: 1420-22-17	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: USH 45	SHEET 326	E

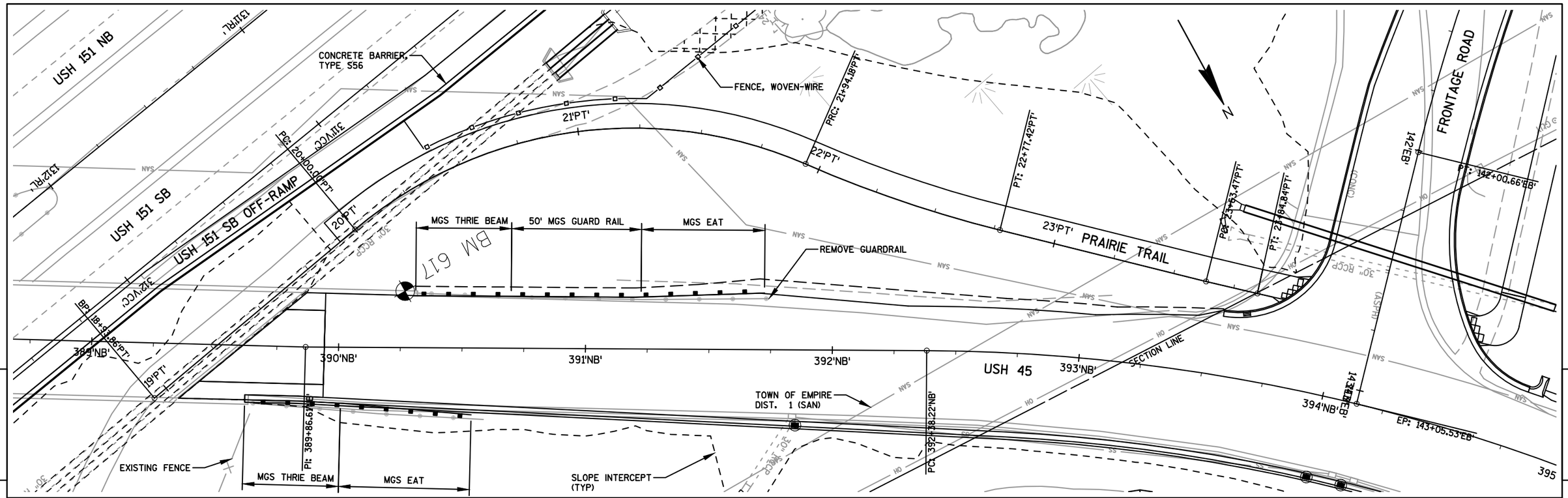




PROJECT NO: 1420-22-17	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: USH 45	SHEET 327	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_050100_PP.DWG
142022_050186_pp

PLOT DATE : 12/23/2014 1:53 PM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN AND PROFILE: PRAIRIE TRAIL	SHEET 328	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_050100_PP.DWG
142022_0□01□□_□□

PLOT DATE : 12/1/2014 10:48 AM PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 44

BEGIN PROJECT 1420-22-71
STA 1262+00.00'RL'
Y=372341.203
X=822943.574

BEGIN CONSTRUCTION
262'VDD'+00

EXIST R/W

PRAIRIE TRAIL

FENCE, WOVEN-WIRE

PC: 266+61.51'VDD'

REMOVE CURB & GUTTER

REMOVE FENCE

PC: 13+09.75'OV'

PT: 11+74.38'OV'

PC: 11+05.64'OV'

BP: 10+00.00'OV'

CONSTRUCT PARK-N-RIDE LOT (SEE DETAIL)

REMOVE 8LF EXISTING 36-INCH RCCP PLACE 1 - 36-INCH APRON ENDWALL 1 - CONCRETE COLLAR

CLEAR & GRUB

BP: 233+89.13'SB'

PC: 134+20.58'NB'

OBLITERATE OLD ROAD

FENCE, WOVEN-WIRE

PC: 275+37.68'VDD'

PI: 275+01.51'VDD

PT: 273+40.61'VDD'

REMOVE 2 - 18-INCH CMCP

MATCH LINE STA 1276+80

USH 151

SAWCUT (TYP.)

STEEL THRIE BEAM AND BULLNOSE TERMINALS

NB OFF-RAMP

BEGIN CONSTRUCTION
262'VAA'+57.94

CONCRETE COLLAR

MGS STEEL PLATE GUARDRAIL

SLOPE INTERCEPT (TYP)

CULVERT PIPE REINFORCED CONCRETE 8 LF, 18-INCH CLASS III 1-APRON

EXIST R/W

S-20-41

PC: 266+61.51'VAA'

EP: 229+80.49'SB'

CONCRETE COLLAR

PC: 274+90.77'VAA'

STRUCTURE B-20-226

REMOVE CURB & GUTTER

PRC: 228+30.68'SB'

PI: 128+71.62'NB'

FENCE, WOVEN-WIRE

OBLITERATE OLD ROAD

CULVERT PIPE REINFORCED CONCRETE 12 LF, 36-INCH CLASS III, 1-APRON ENDWALL

EXISTING DRAIN TILE (TYP.)

2-CULVERT PIPE, REINFORCED CONCRETE 260 LF, 24-INCH CLASS IV 4-APRON ENDWALLS

FENCE, CHAIN-LINK, 4-FT

LIGHTHOUSE VILLAGE ROAD

EXIST R/W

EXIST R/W

PRC: 226+12.25'SB'

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
F	1270'RL'+00	CHISELED CROSS ON SE BOLT OF TRANSMISSION POLE POLE BASE, NW CORNER OF USH 151 AND CTH V	855.66

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN: CTH V - USH 151	SHEET 329	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\14202271 CTH V\142022_050100_PP.DWG
142022_050201_pn

PLOT DATE : 4/13/2015 9:06 AM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 44

5

FRONTAGE ROAD

SB ON-RAMP

SB OFF-RAMP

NB ON-RAMP

NB OFF-RAMP

USH 151

MATCH LINE STA 1276+80

MATCH LINE STA 1291+80

SLOPE INTERCEPT (TYP)

GRADE DITCH WITH 4:1 SIDE SLOPES

REMOVE FENCE

OBLITERATE OLD ROAD (TYP)

REMOVE CULVERT (24" CMCP)

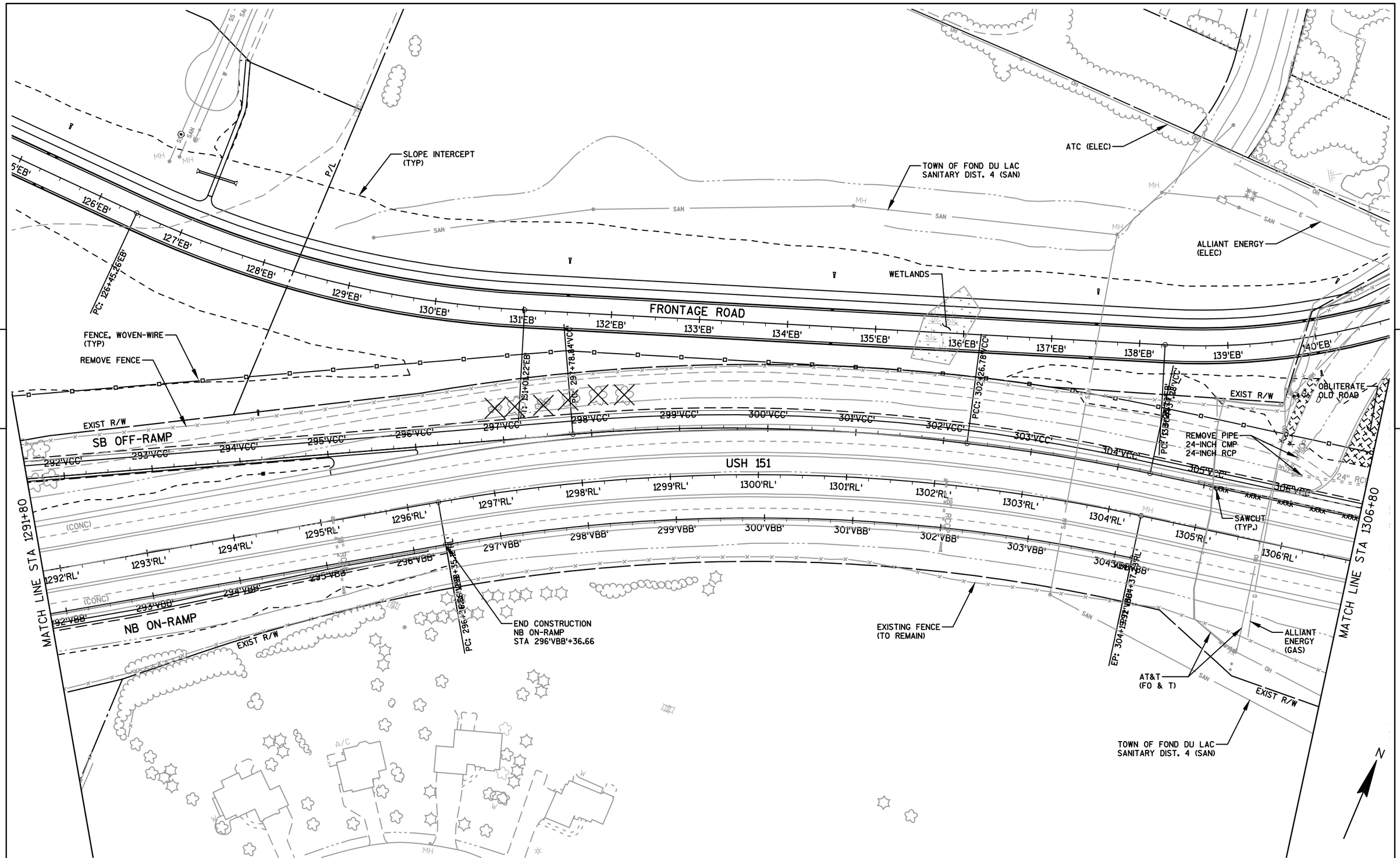
FENCE, WOVEN-WIRE (TYP)

EXISTING FENCE (TO REMAIN)

FENCE, WOVEN-WIRE

EXIST R/W

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN: CTH V - USH 151	SHEET 330	E



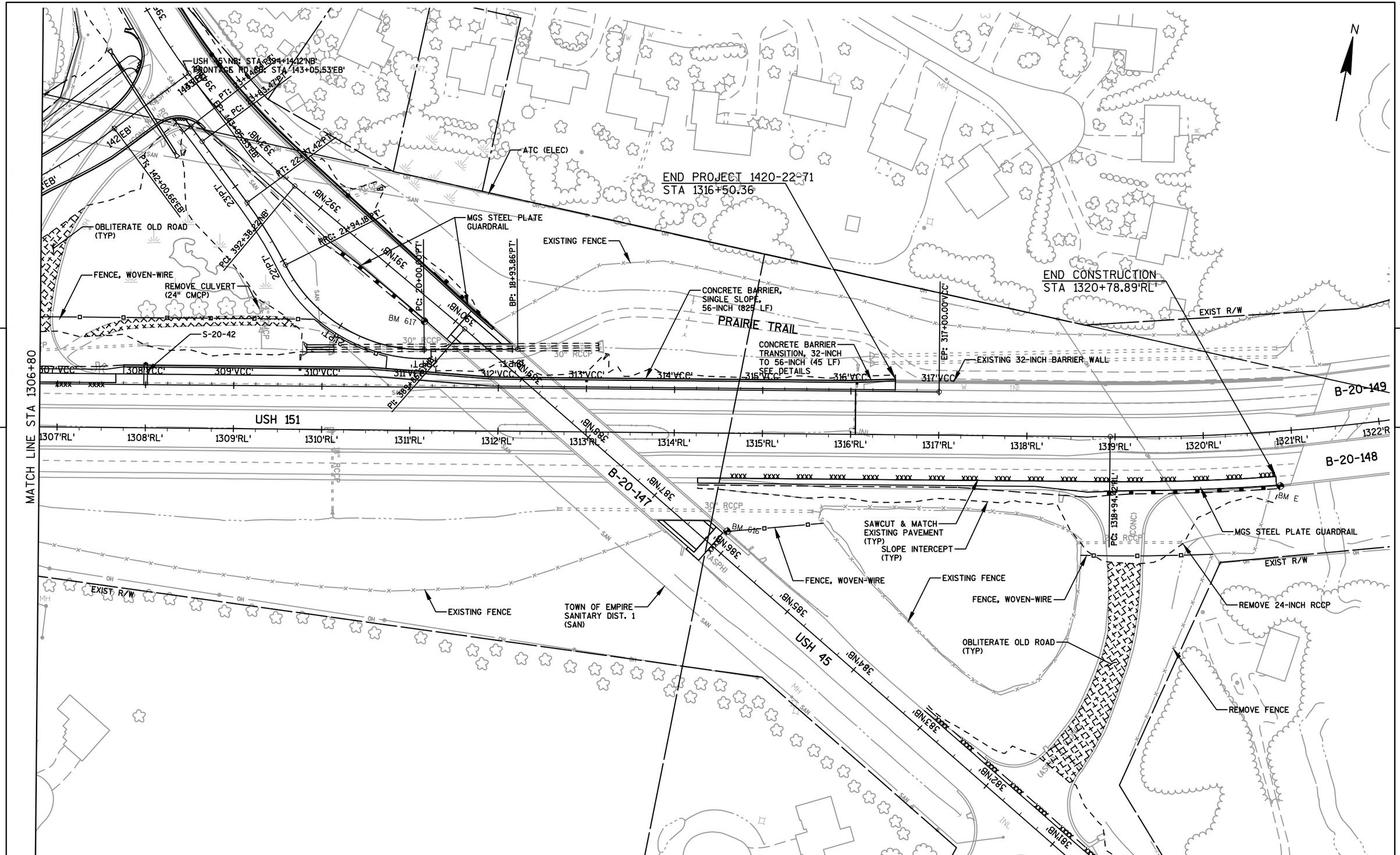
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN: CTH V - USH 151	SHEET 331	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\14202271 CTH V\142022_050100_PP.DWG
142022_050203_pn

PLOT DATE : 2/13/2015 1:40 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 44



5

5

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN: CTH V - USH 151	SHEET 332	E

5

REMOVE EXISTING FENCE

EXISTING FENCE (TO REMAIN)

EXISTING DRAIN TILE (TYP)

SLOPE INTERCEPT (TYP)

FENCE, WOVEN-WIRE (TYP)

FENCE, CHAIN-LINK, 4-FT

DRAINAGE SWALE (15-FT WIDE, FLAT- BOTTOM)

CAP DRAIN TILE (TYP)

NB OFF-RAMP

NB ON-RAMP

EP: 229+80.49'SB'

PC: 274+90.77'VAA'

PRC: 228+30.68'SB'

PI: 128+71.62'NB'

PT: 126+08.44'NB'

PC: 125+73.45'NB'

PI: 125+39.85'NB'

PT: 275+88.72'VBB'

PC: 278+65.47'VBB'

PT: 286+25.12'VBB'

PC: 286+41.58'VAA'

PT: 285+16.54'VAA'

PC: 274+29.96'VBB'

EXIST R/W

R/W

5.0'RD.

BENCH MARKS

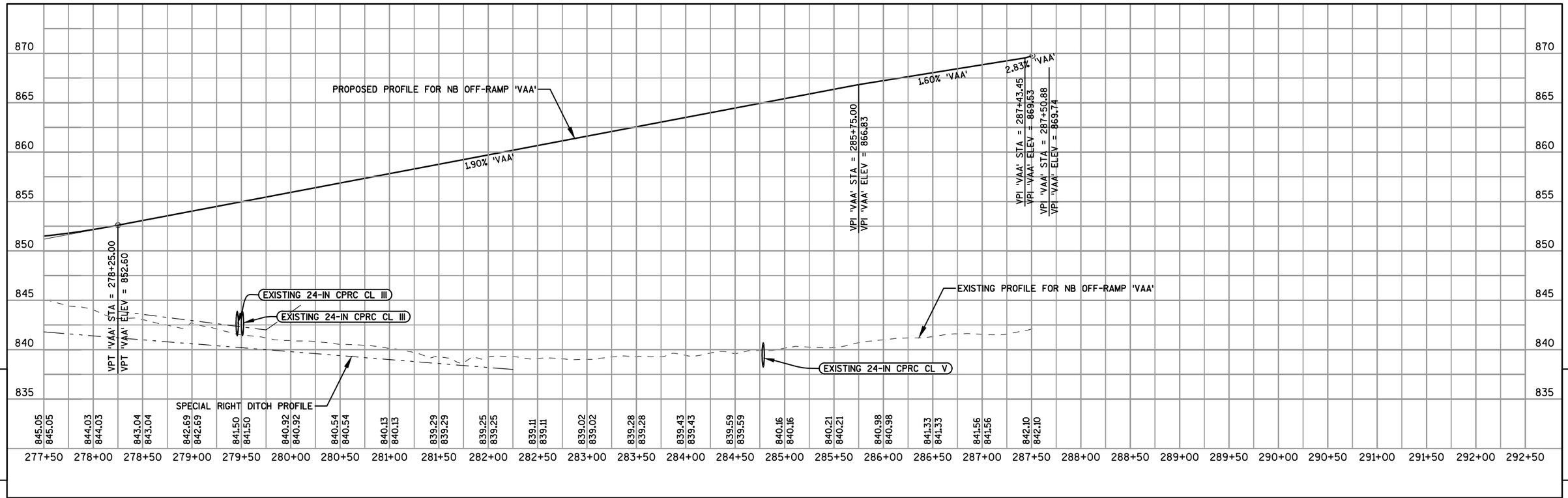
NO.	STATION	DESCRIPTION	ELEV.
C	270'VBB'+90 51' RIGHT	RR SPIKE IN PP #15-17-25 6/27, N. SIDE OF REINHARDT ROAD, 500' E. OF CTH V	841.93

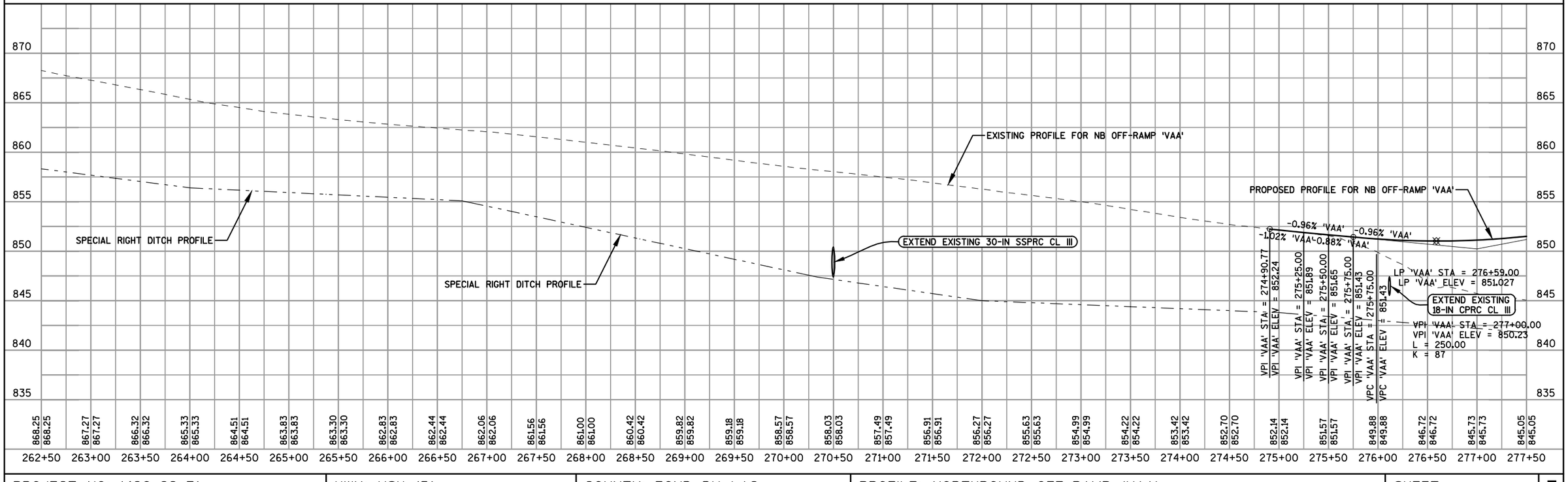
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PLAN: CTH V - USH 151	SHEET 333	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\14202271 CTH V\142022_050100_PP.DWG
142022_050205_pn

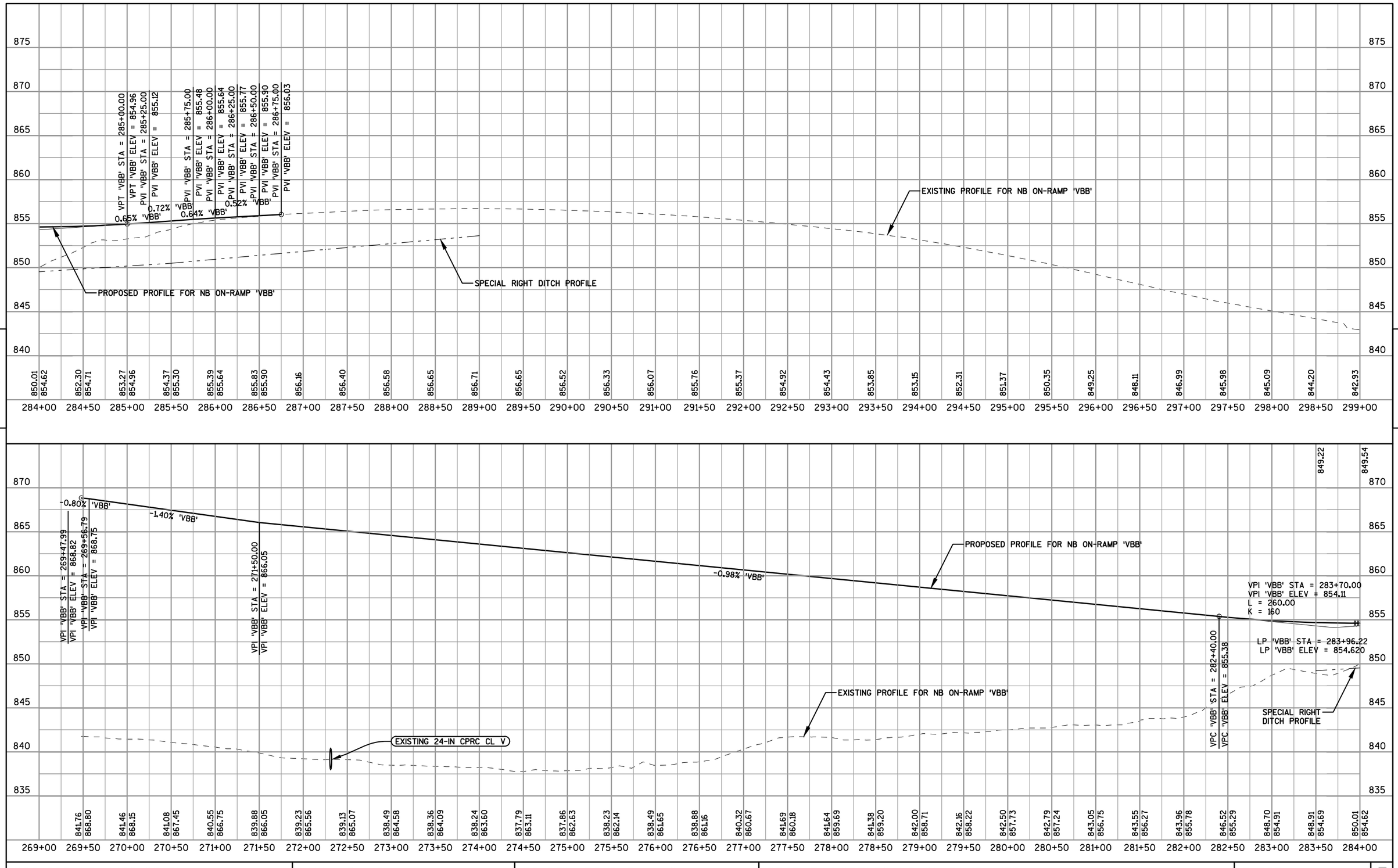
PLOT DATE : 4/13/2015 8:55 AM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

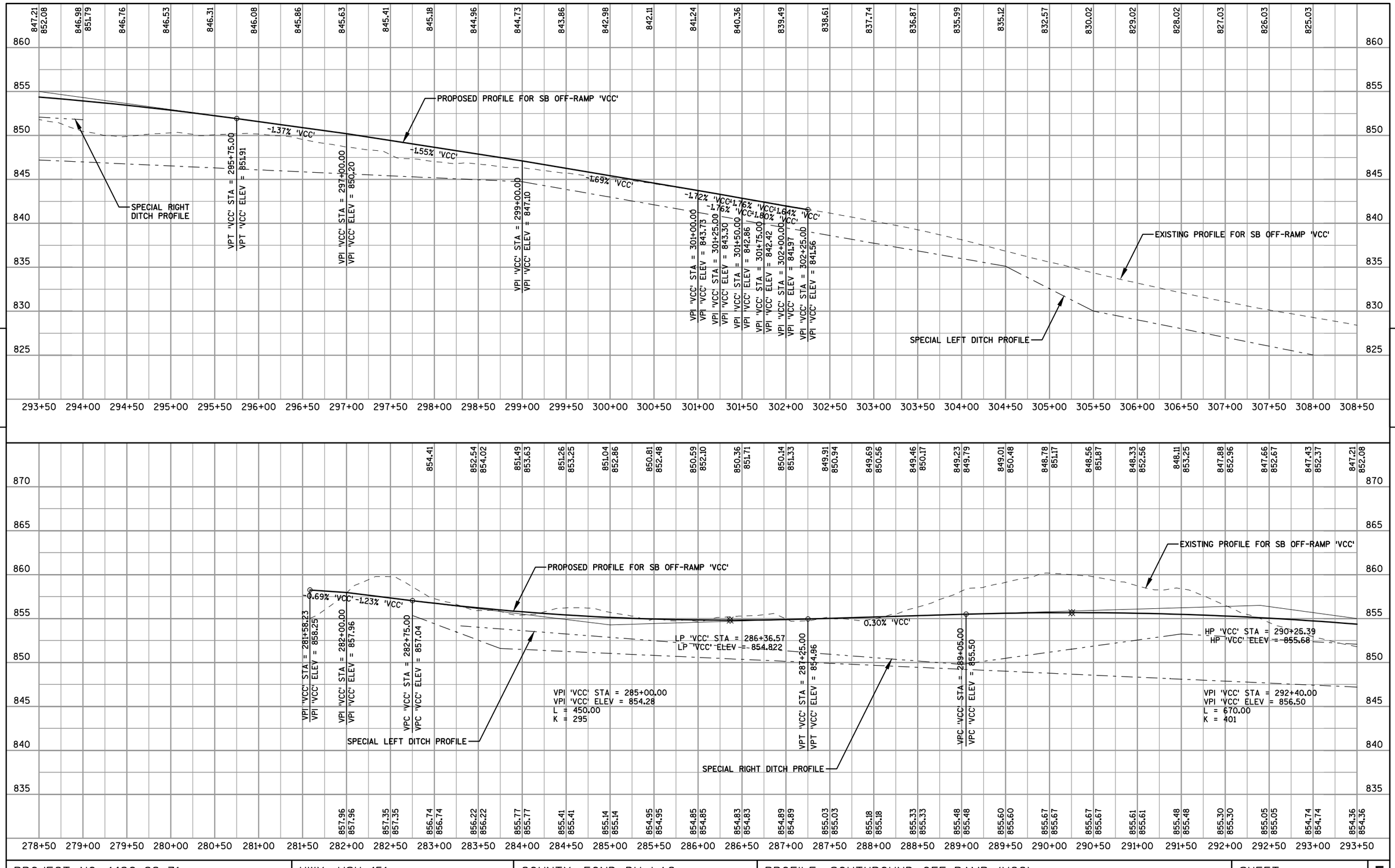




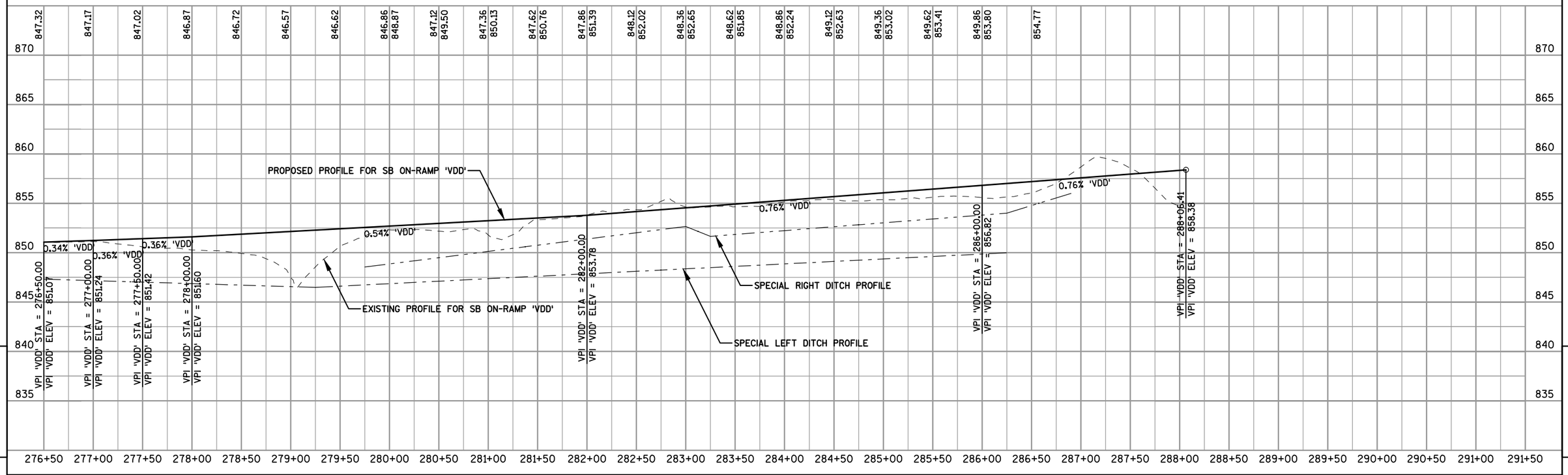
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PROFILE: NORTHBOUND OFF-RAMP (VAA)	SHEET 334	E



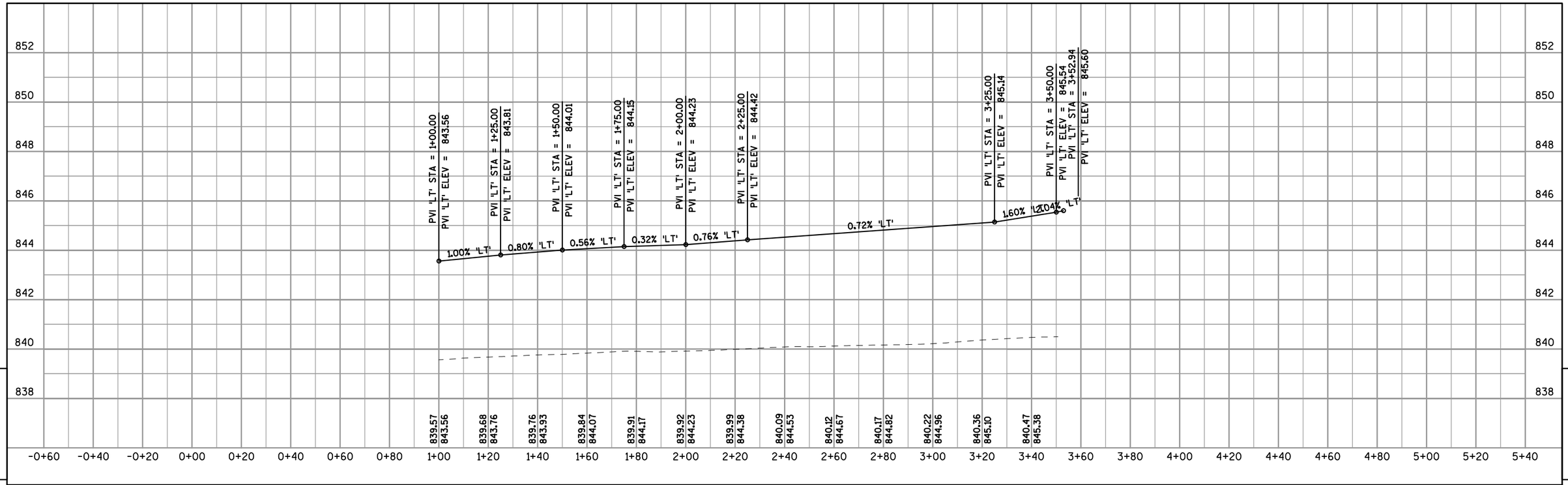
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PROFILE: NORTHBOUND ON-RAMP (VBB)	SHEET 335	E

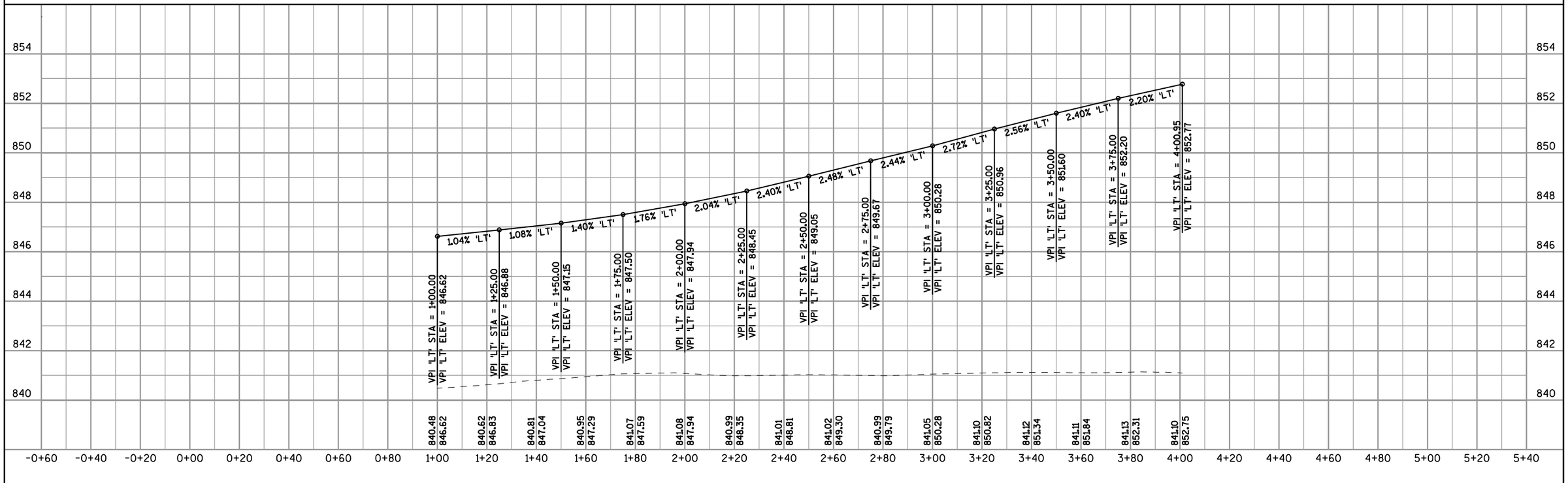


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PROFILE: SOUTHBOUND OFF-RAMP (VCC)	SHEET 336	E

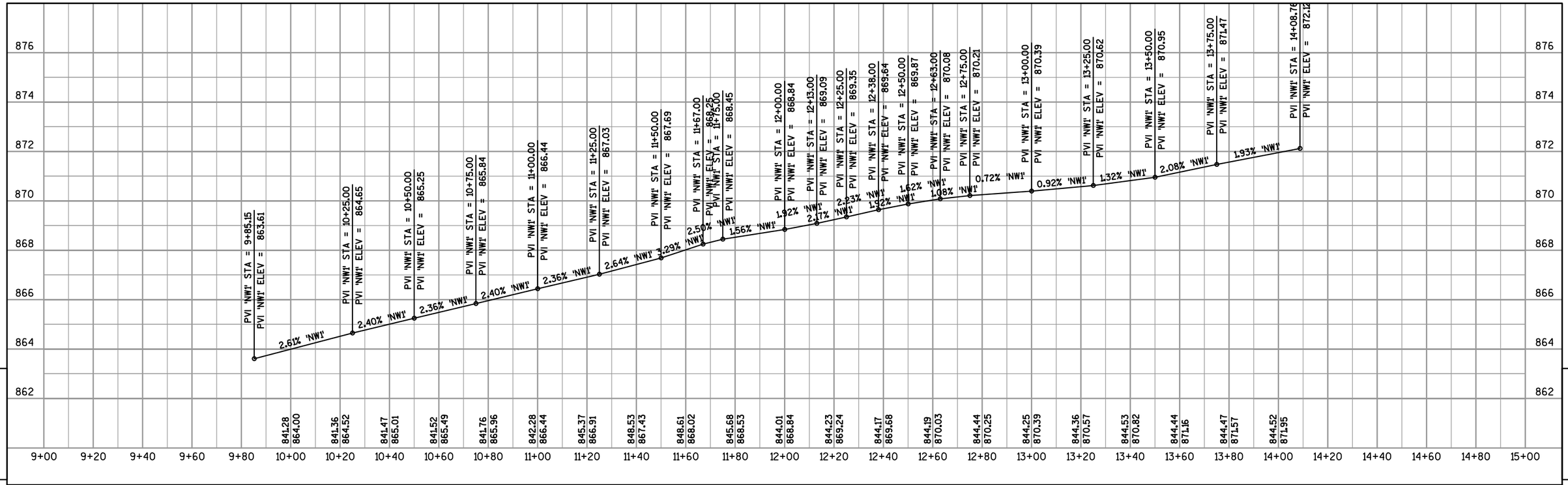


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PROFILE: SOUTHBOUND ON-RAMP (VDD)	SHEET 337	E

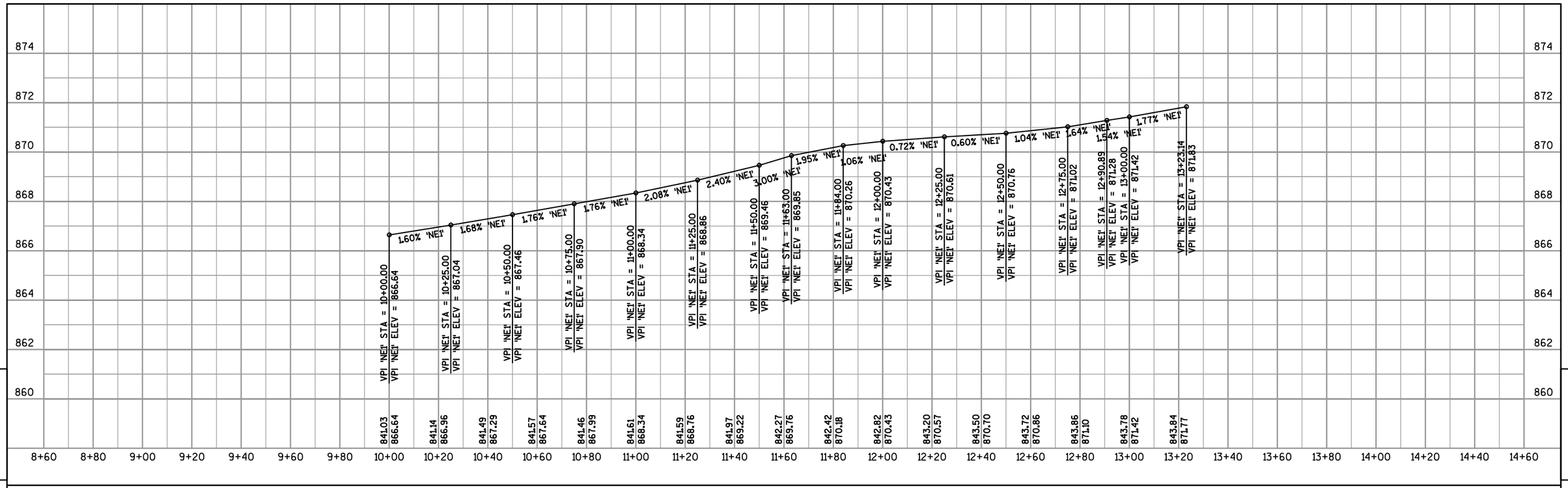




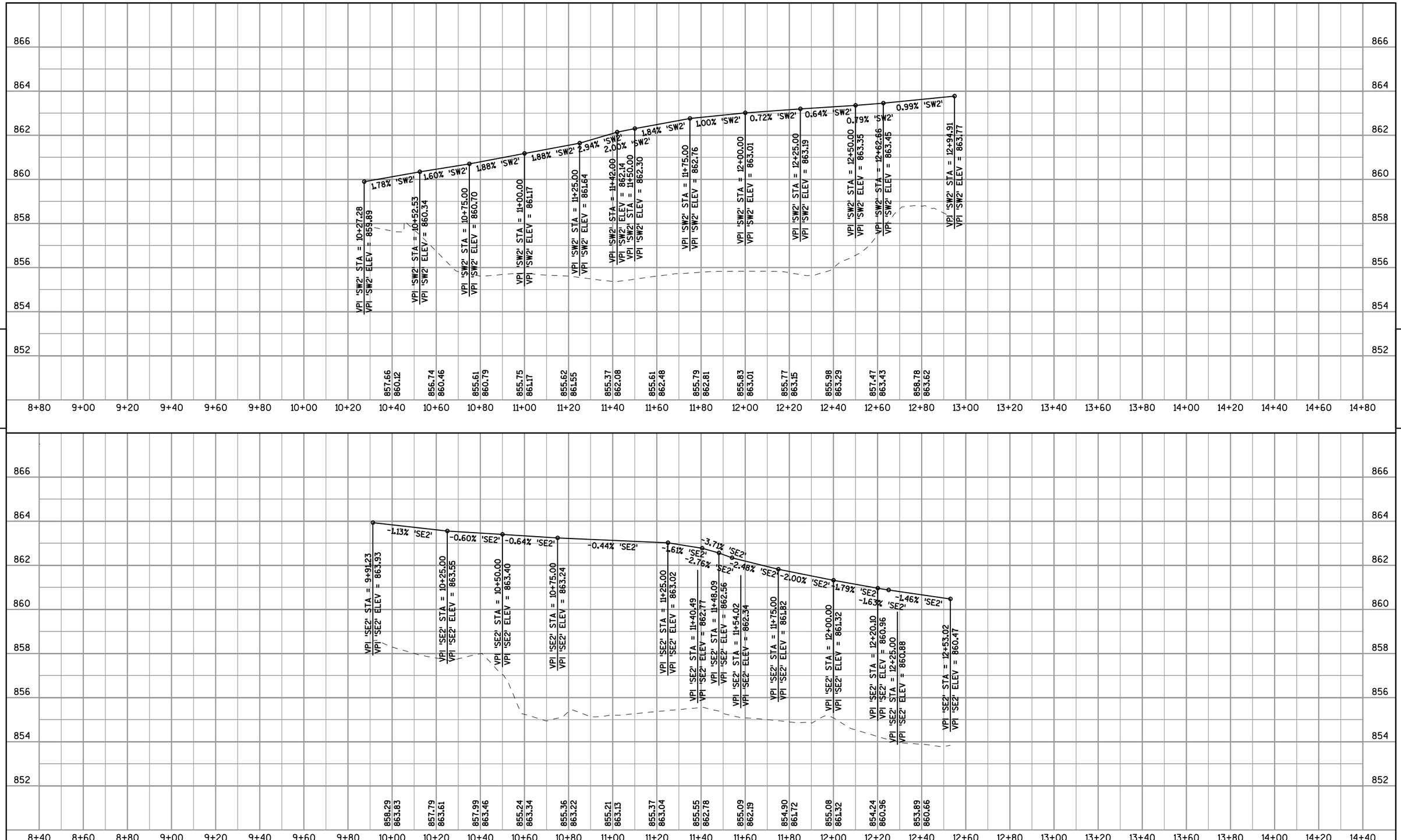
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PROFILE: CURB & GUTTER - CTH V & REINHARDT RD LEFT TURN	SHEET 338	E



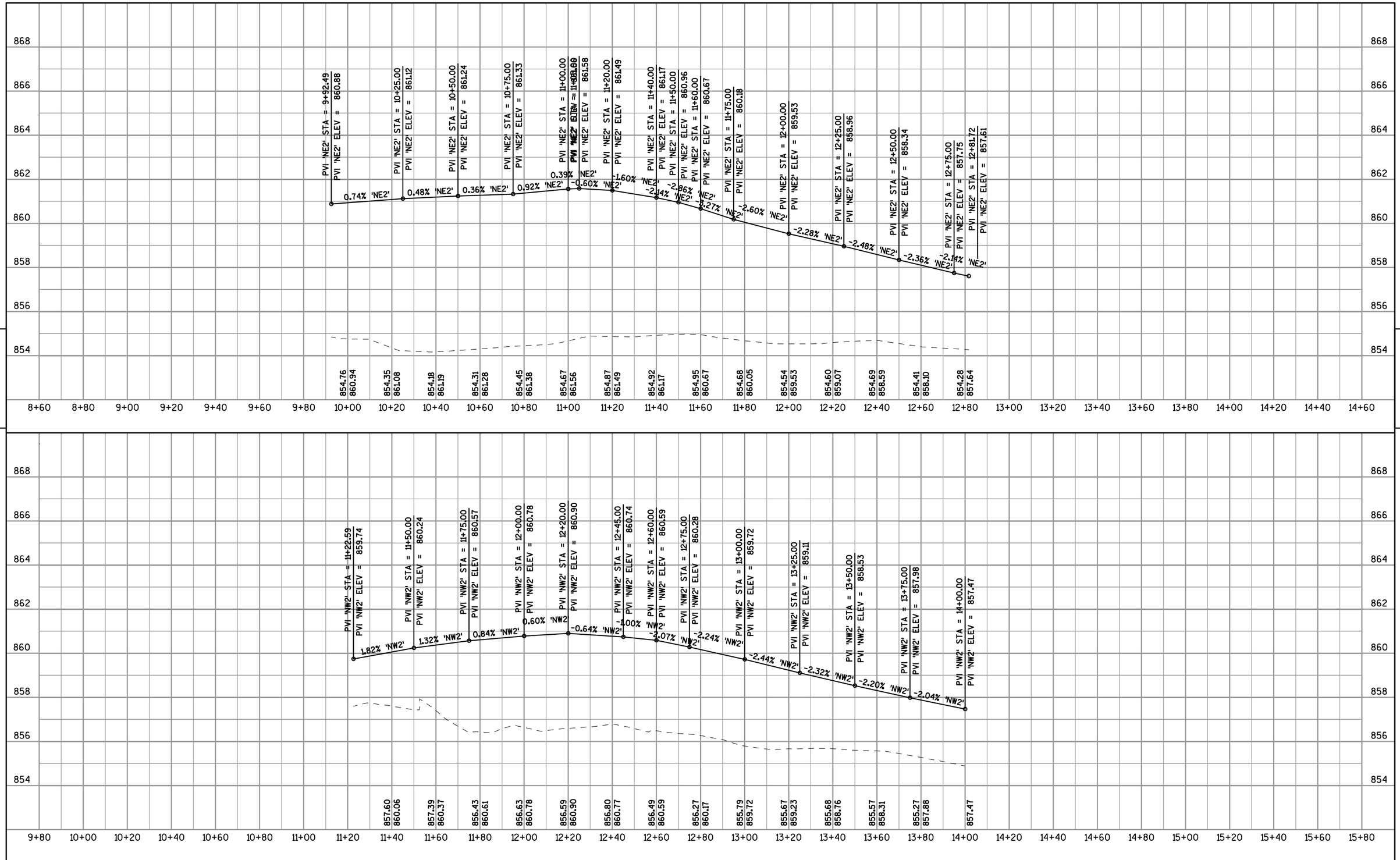
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PROFILE: CURB & GUTTER - CTH V & NB RAMPS	SHEET 339	E



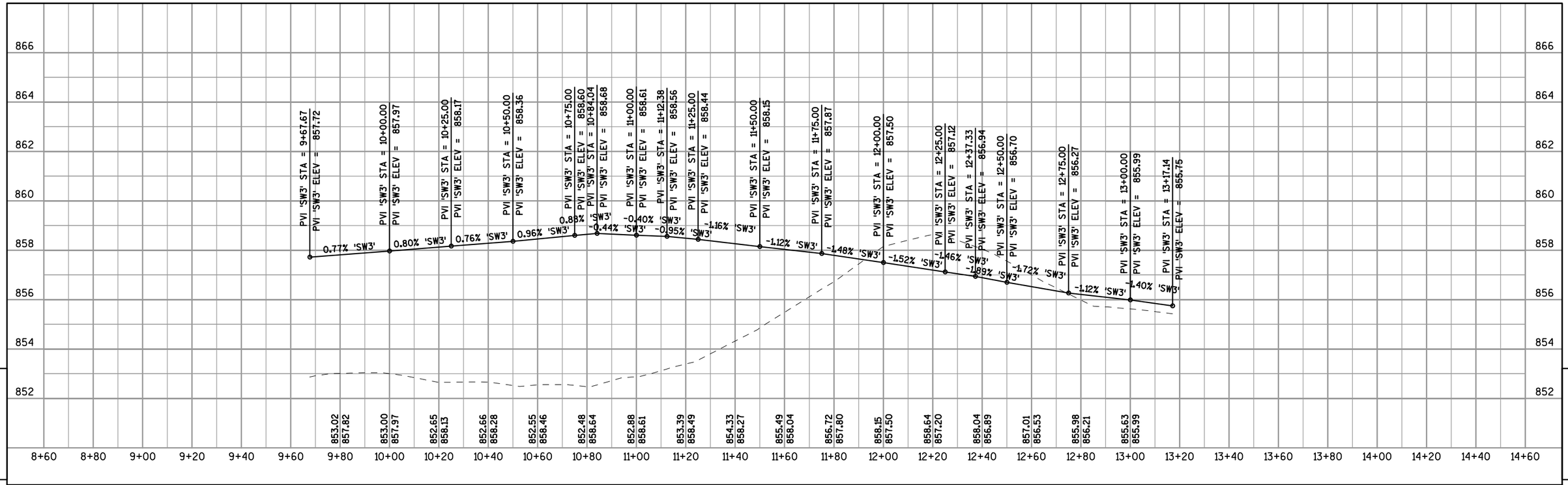
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PROFILE: CURB & GUTTER - CTH V & NB RAMPS	SHEET 340	E

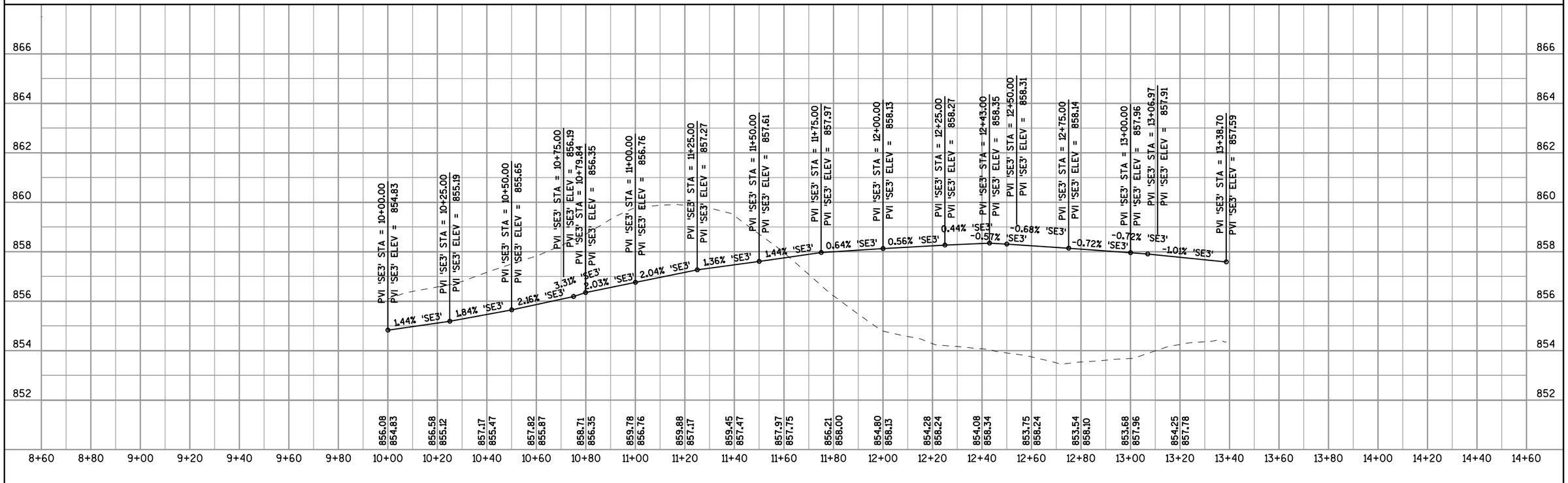


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PROFILE: CURB & GUTTER - CTH V & FRONTAGE ROAD	SHEET 341	E

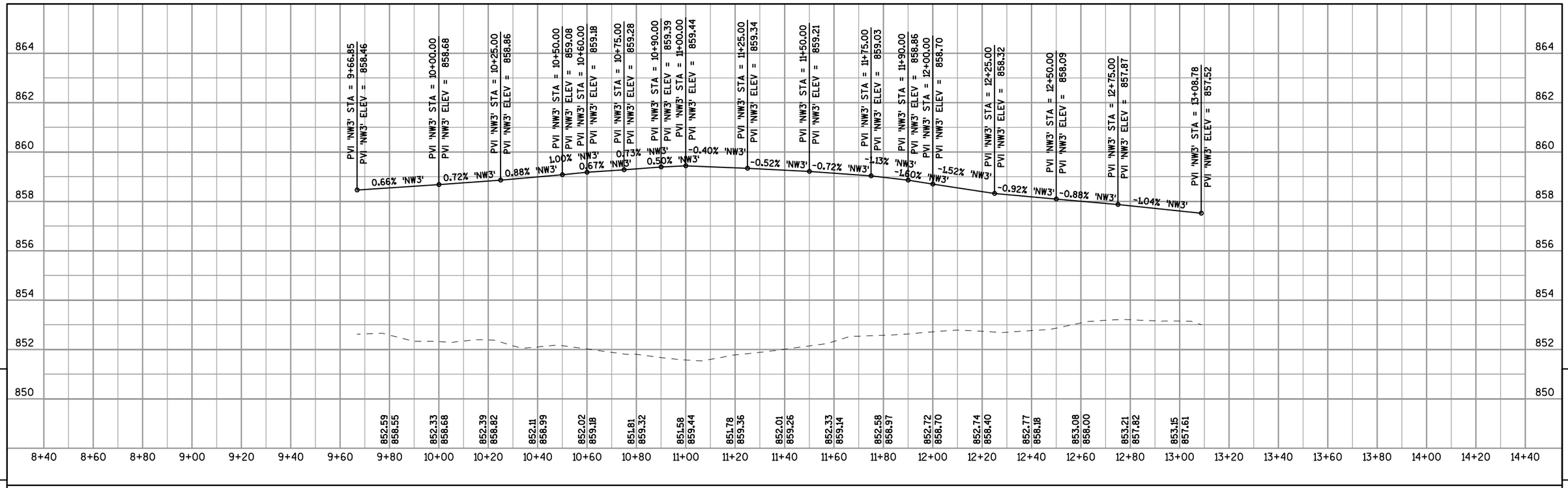


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PROFILE: CURB & GUTTER - CTH V & FRONTAGE ROAD	SHEET 342	E





PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PROFILE: CURB & GUTTER - CTH V & SB RAMPS	SHEET 343	E



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PROFILE: CURB & GUTTER - CTH V & SB RAMPS	SHEET 344	E

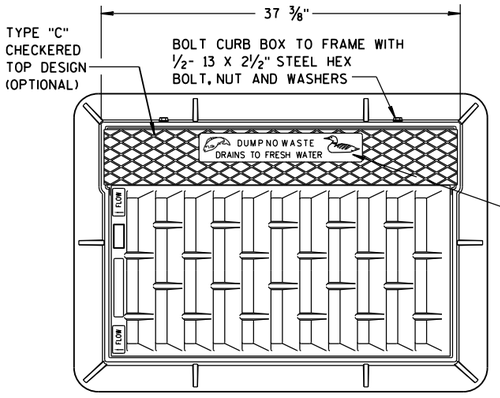
Standard Detail Drawing ListStandard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
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
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08C09-01	INLETS MEDIAN 3 AND 4 GRATE
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS
08F10-01	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
09B02-08	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C14-02	CONCRETE CONTROL CABINET BASE, TYPE L
09E01-14D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
11B02-02	CONCRETE MEDIAN NOSE
12A03-10	NAME PLATE (STRUCTURES)
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13B02-07A	CONCRETE BRIDGE APPROACH
13B02-07B	STRUCTURAL APPROACH SLAB AND CONCRETE BRIDGE APPROACH
13C01-17	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C04-16	URBAN NON-DOWELED CONCRETE PAVEMENT
13C11-11A	RURAL DOWELED CONCRETE PAVEMENT
13C11-11B	RURAL DOWELED CONCRETE PAVEMENT
13C17-01A	CONCRETE JOINT DETAIL FOR EXIT RAMP TERMINI
13C17-01B	CONCRETE JOINT DETAIL FOR ENTRANCE RAMP TERMINI
13C18-02A	CONCRETE PAVEMENT JOINTING
13C18-02B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-02C	CONCRETE PAVEMENT JOINT TIES
13C18-02D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-02E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
14A01-03	TREE PRESERVATION DETAILS
14B07-14A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-14H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-01A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B20-11A	STEEL THRIE BEAM STRUCTURE APPROACH
14B26-03A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B32-03A	CONCRETE BARRIER SINGLE SLOPE (CBSS)

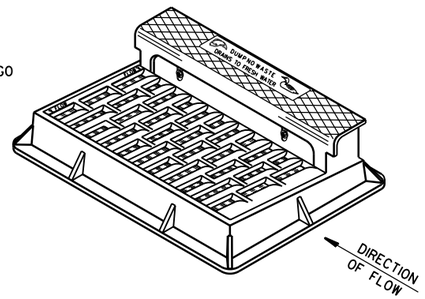
6

14B32-03B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-03C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-03D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B34-01B	56" CONCRETE BARRIER SINGLE SLOPE CLASS B
14B39-01A	32-INCH SSCB TO 36-INCH SSCB HEIGHT TRANSITION
14B39-01C	36-INCH SSCB TO 42-INCH SSCB HEIGHT TRANSITION
14B39-01E	42-INCH SSCB TO 56-INCH SSCB HEIGHT TRANSITION
14B42-03A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-02A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A02-08	DELINEATOR POST, DELINEATOR, AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A06-02	DELINEATOR LAYOUT
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12A	PAVEMENT MARKING SYMBOLS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C07-12D	ROUNDABOUT ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-02C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C29-03E	PAVEMENT MARKING FOR BIKE LANES
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-05A	TRAFFIC CONTROL, LANE CLOSURE
15D15-01	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D21-03	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27-02	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

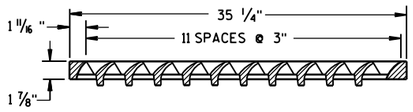
6

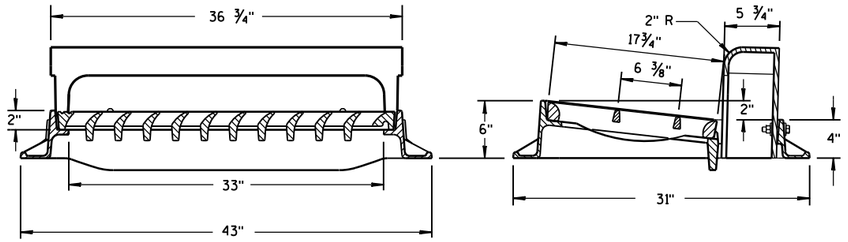


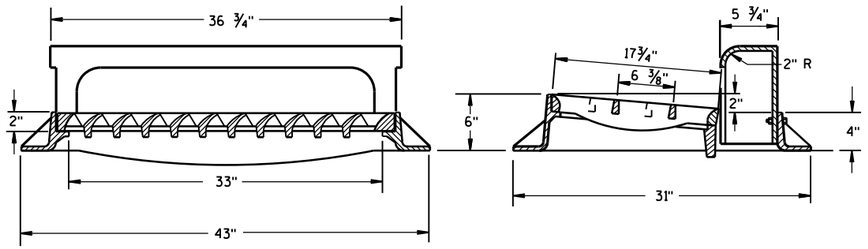
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

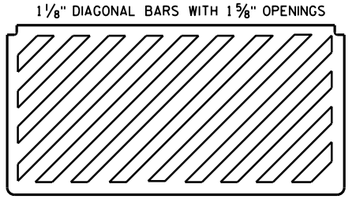






TYPE "H"

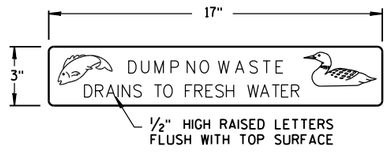
NOTE: EITHER CASTING IS ACCEPTABLE



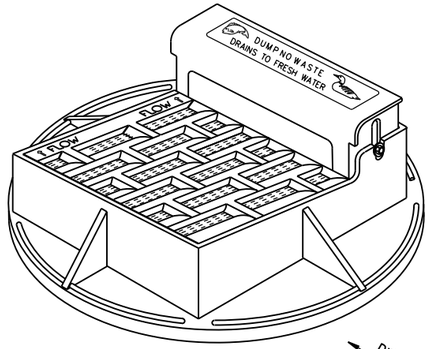
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

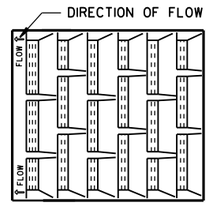
NOTE:
GRATE IS REVERSIBLE.

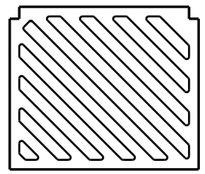
GENERAL NOTES

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.

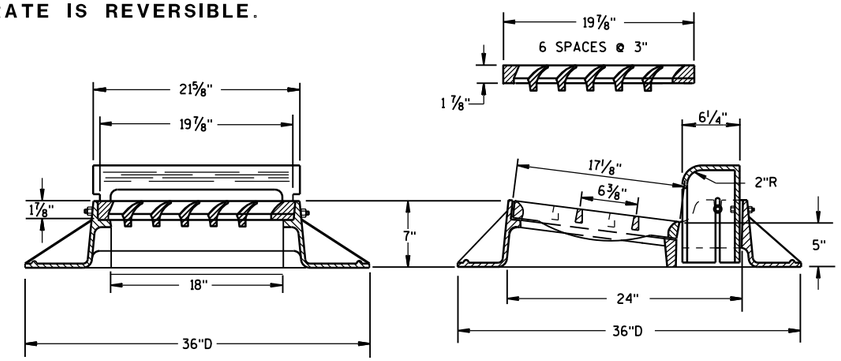




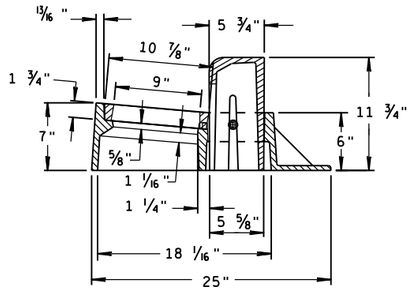
SPECIAL GRATE FOR TYPE "A" COVER

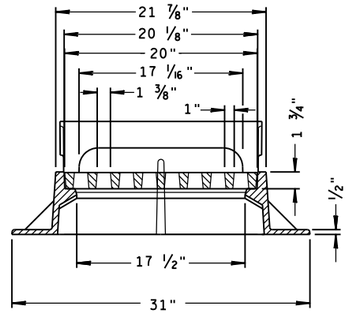
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

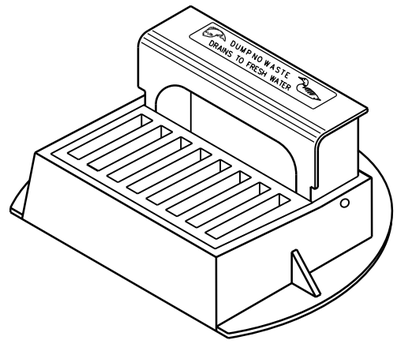


TYPE "A"





TYPE "Z"



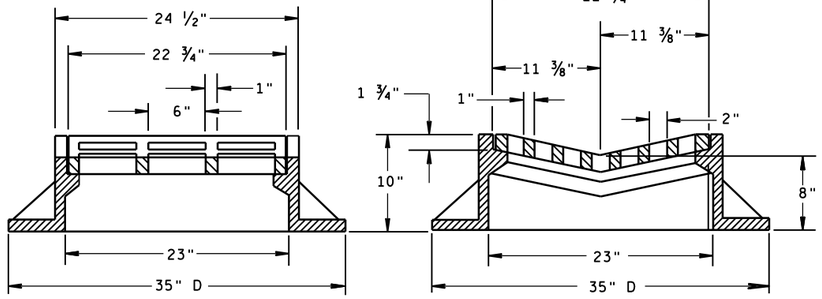
INLET COVERS
TYPE A, H, A-S, H-S & Z

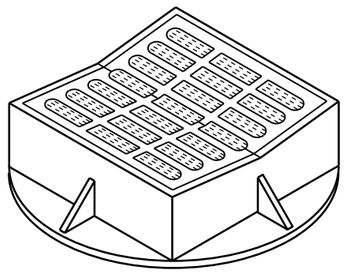
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

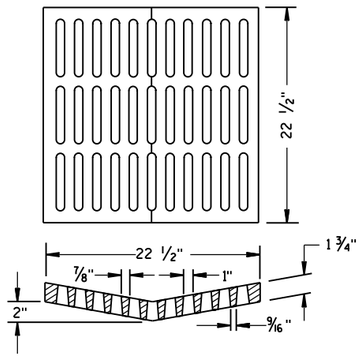
6

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



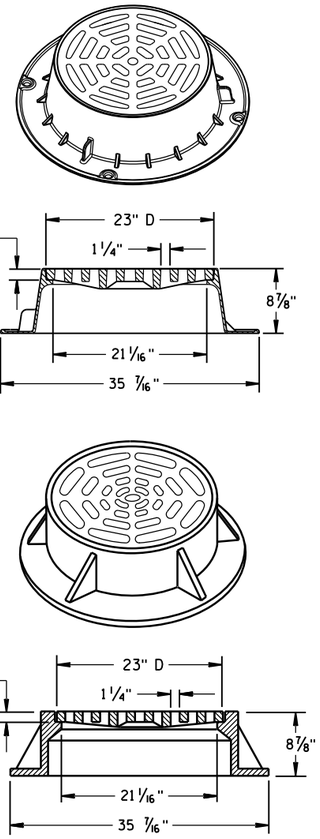


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

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



TYPE "C"

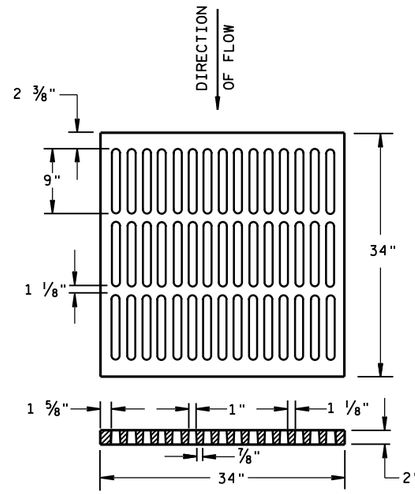
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

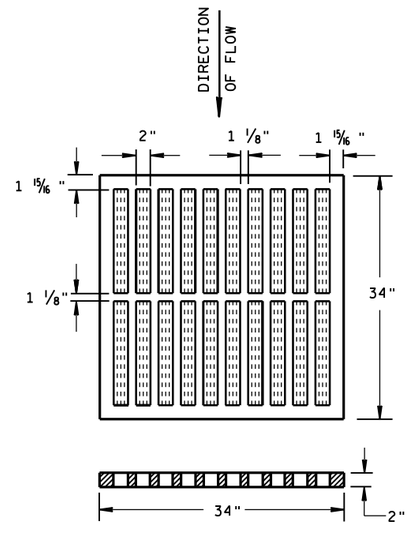
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



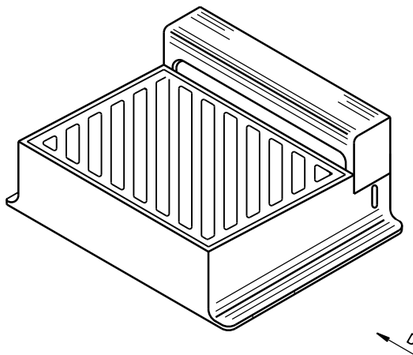
ALTERNATIVE TYPE "MS"

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

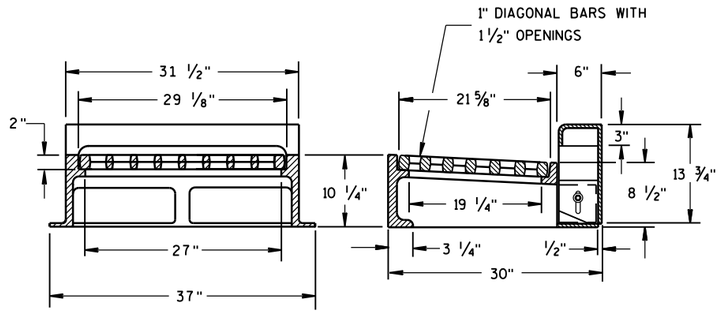


TYPE "MS"

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



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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

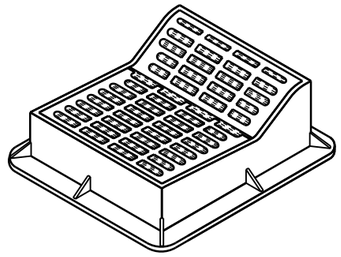
INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

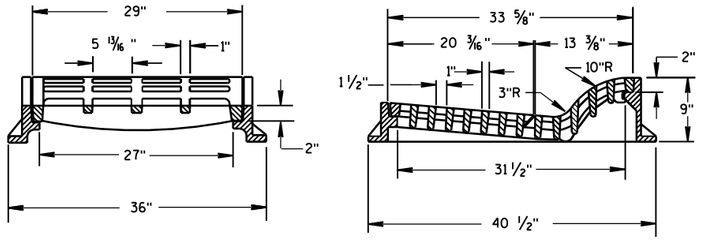
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

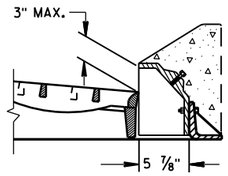
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

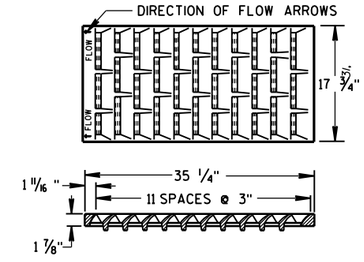
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

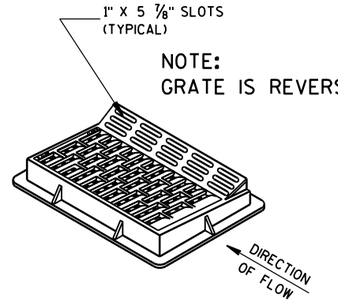
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

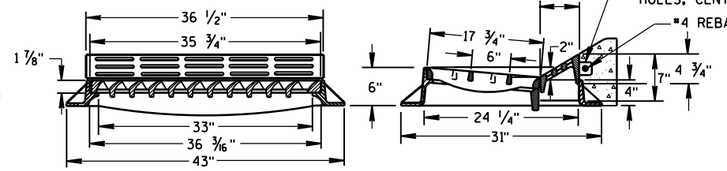
GENERAL NOTES

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

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



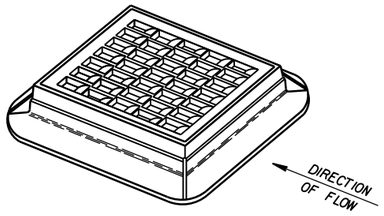


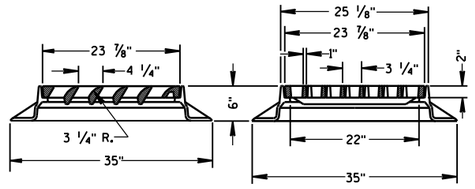


TYPE "HM"

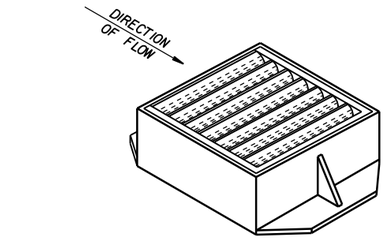
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

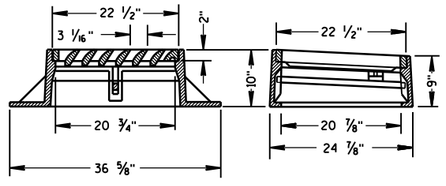
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



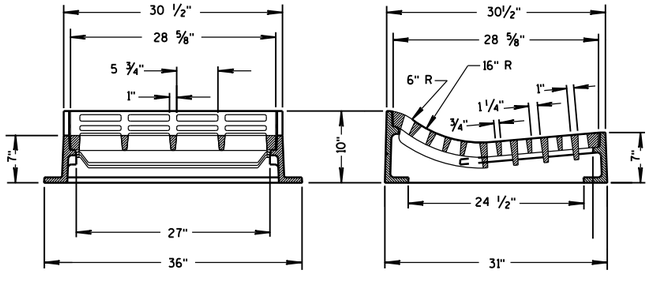


TYPE "S"



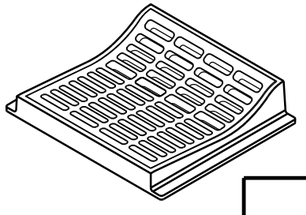


TYPE "V"



TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

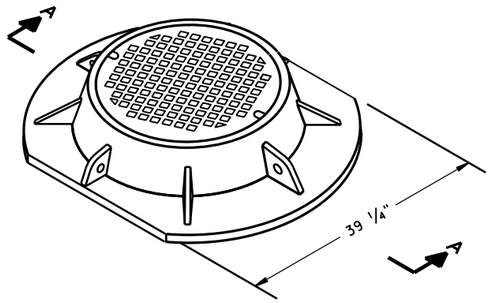
APPROVED
11/27/2013
DATE

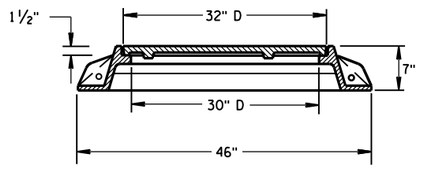
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

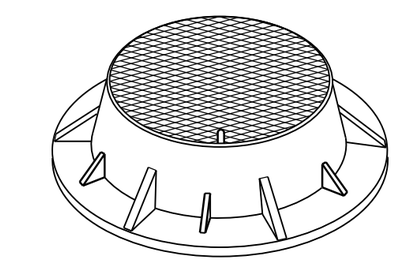
6

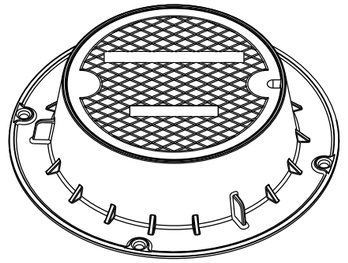
S.D.D. 8 A 5-19c

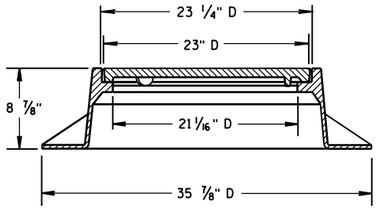


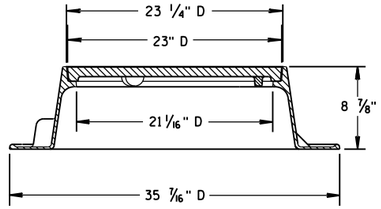


SECTION A-A
TYPE "K"









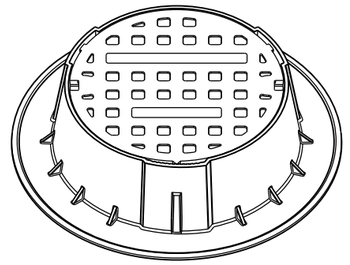
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

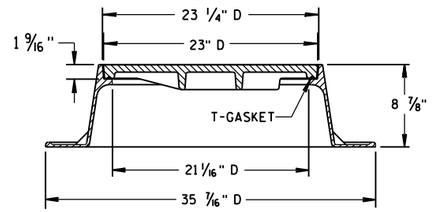
GENERAL NOTES

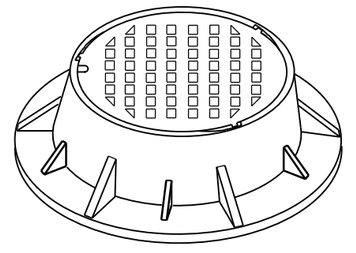
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

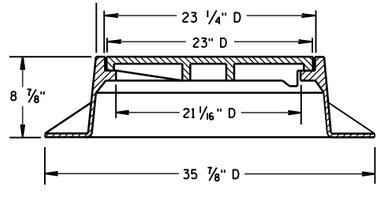
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

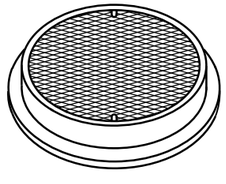


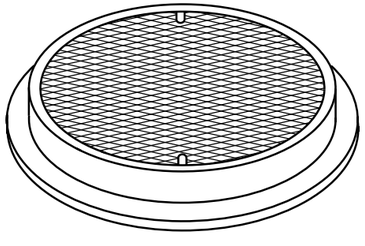


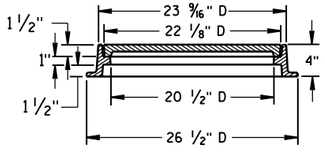




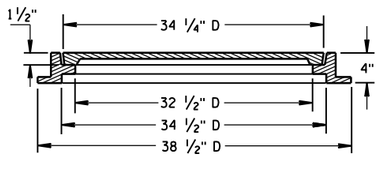
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



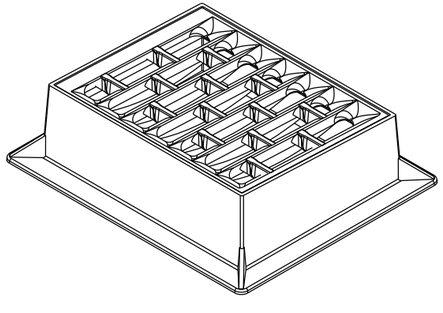


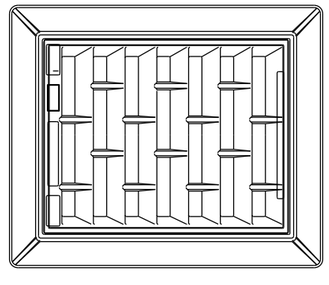


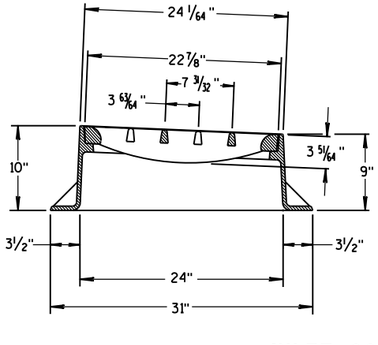
TYPE "L"

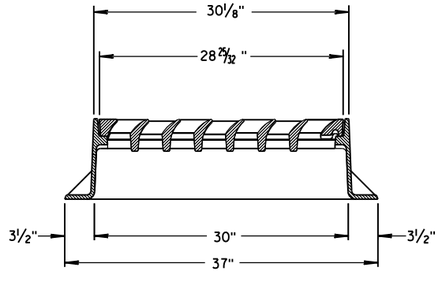


TYPE "M"









INLET COVER TYPE "BW"

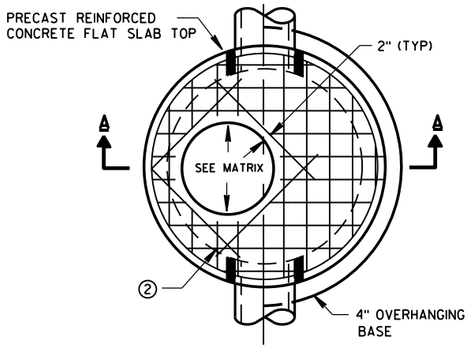
INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

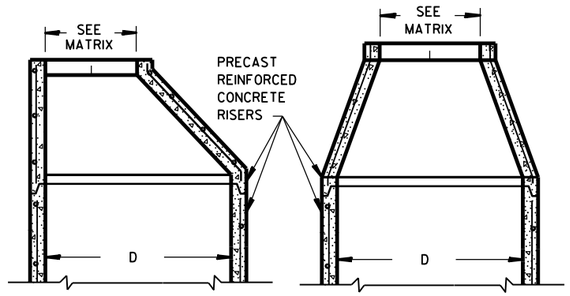
APPROVED
11/27/2013
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6
S.D.D. 8 A 5-19d

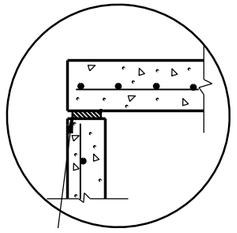


PLAN VIEW CIRCULAR OPENING

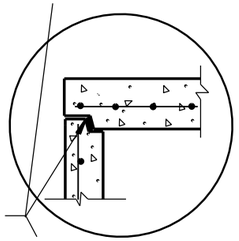


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

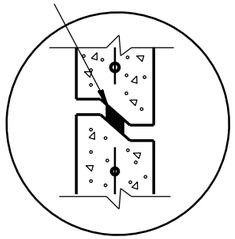


TOP WITH PLAIN END JOINT



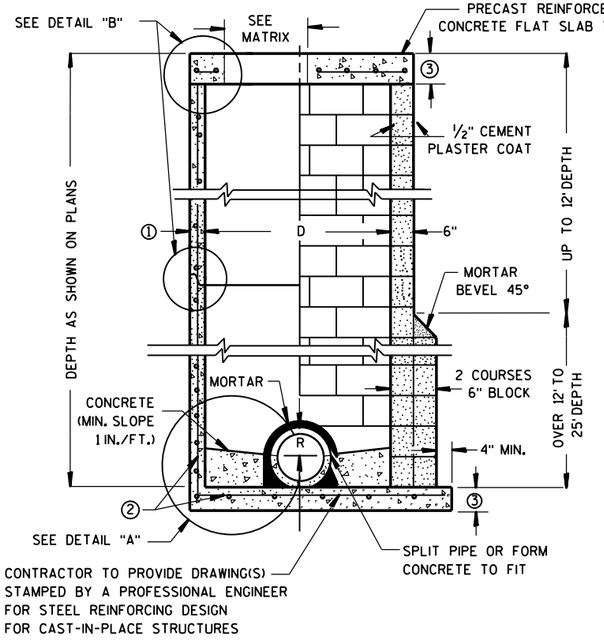
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



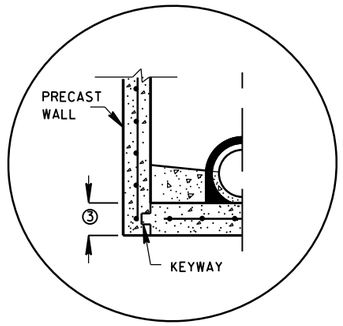
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

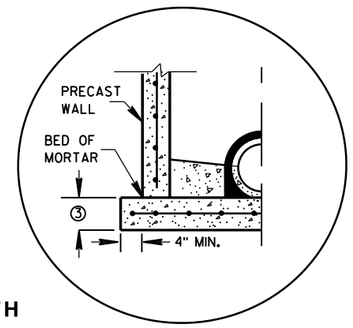


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

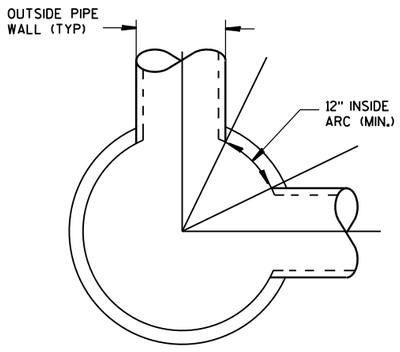


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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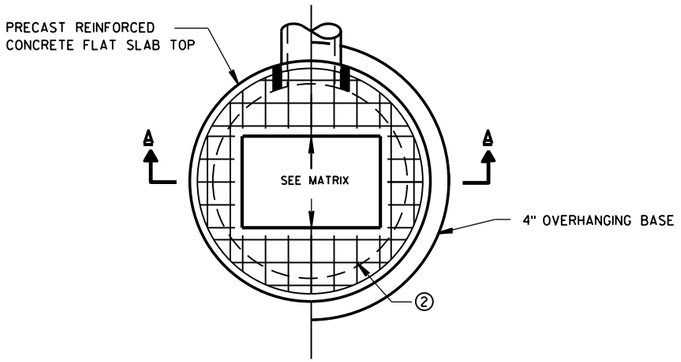
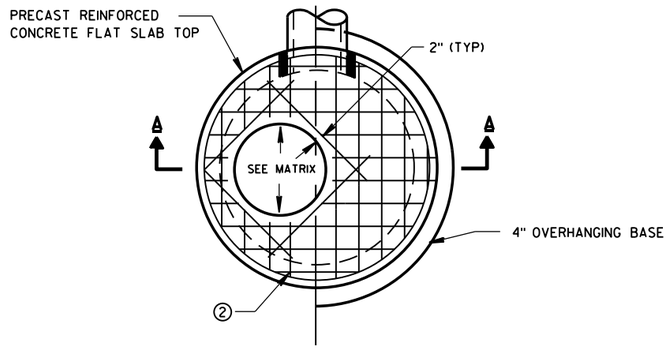
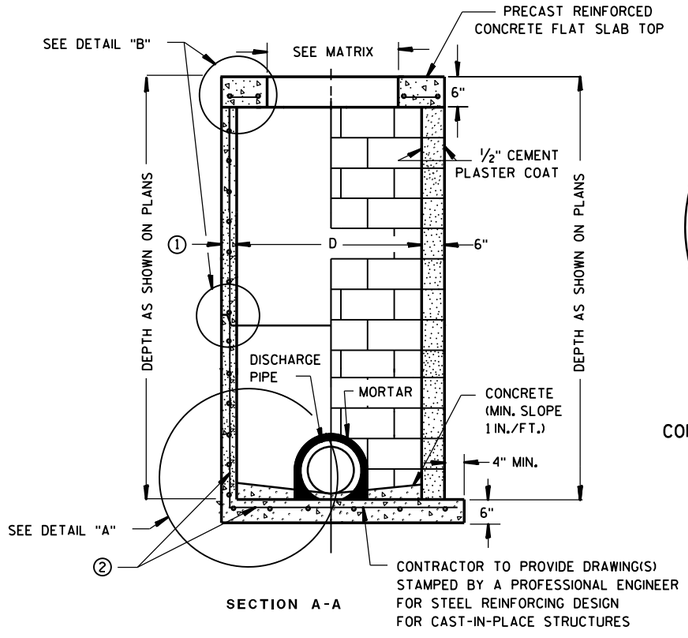
S.D.D. 8 B 9-1



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

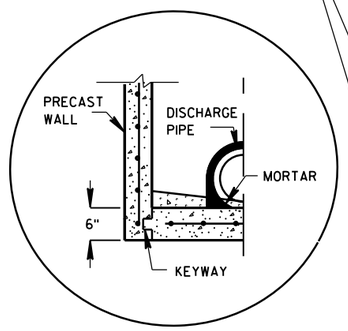


SECTION A-A

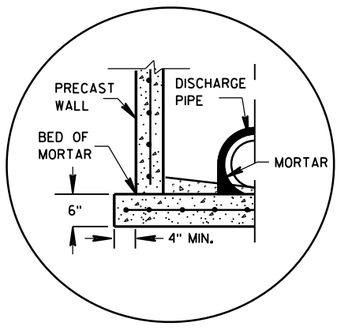
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

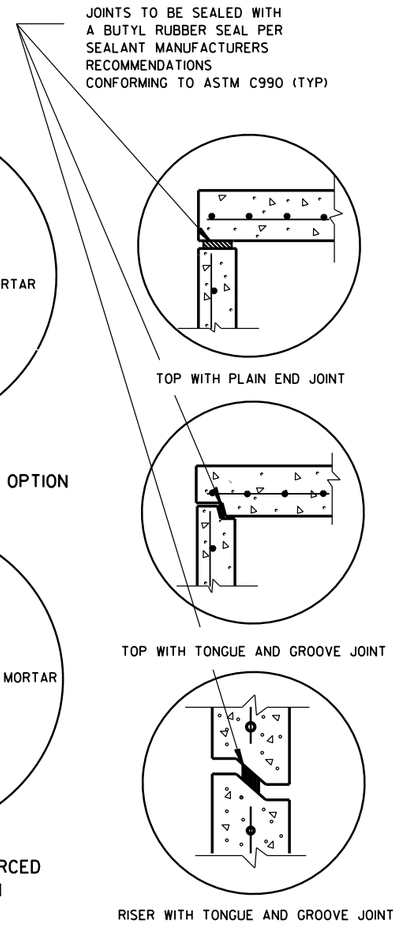


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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.

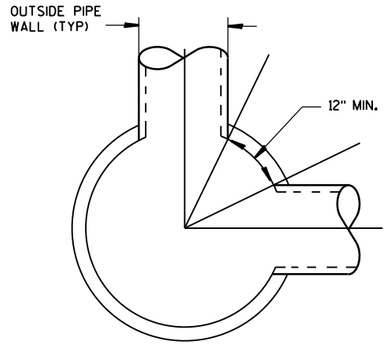
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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

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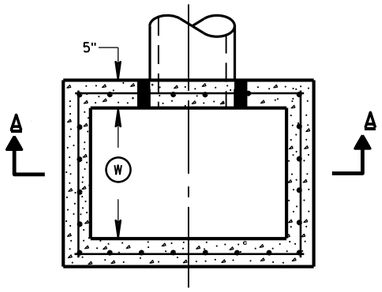
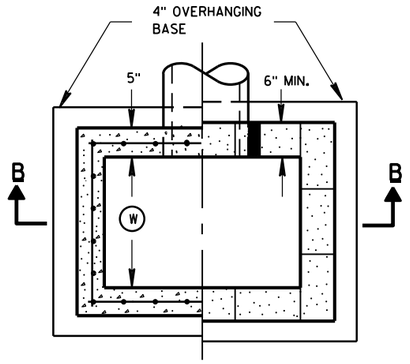
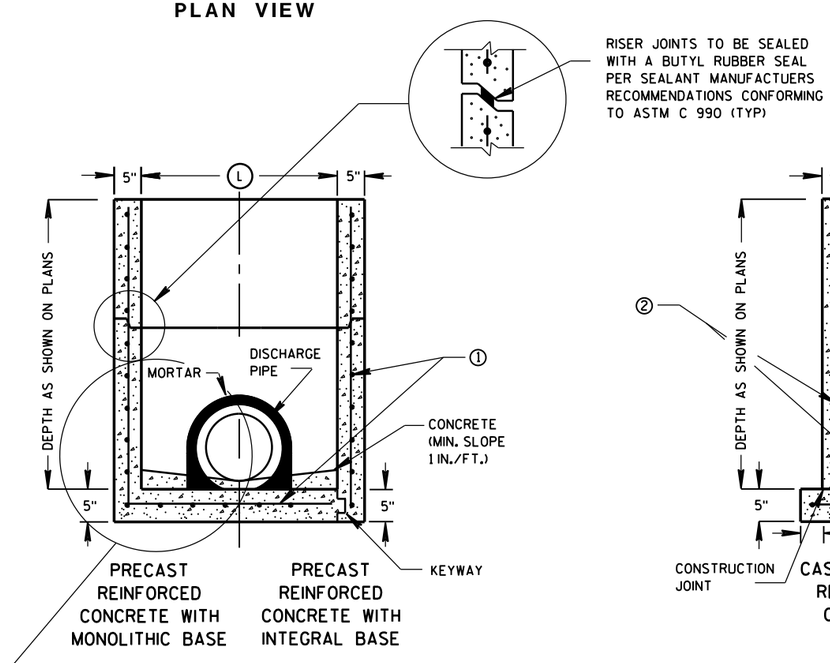


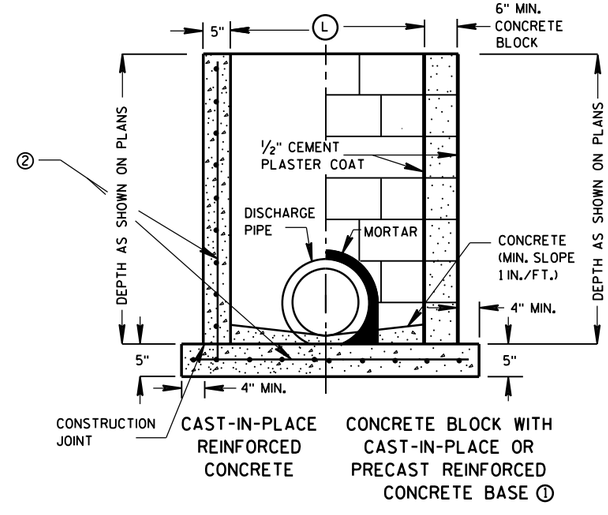
PLAN VIEW



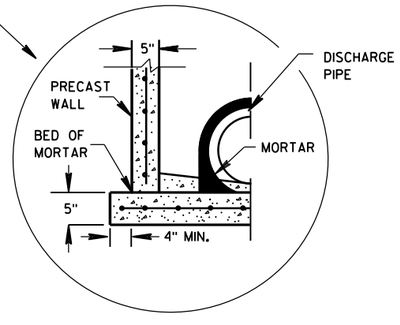
PLAN VIEW



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.

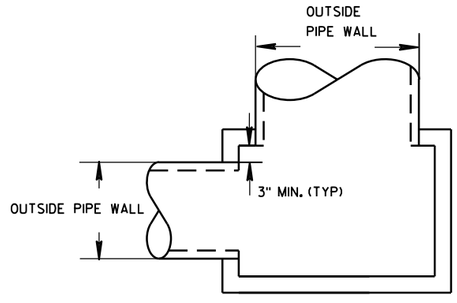
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

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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/S/ Jerry H. Zogg
ROADWAY STANDARDS DE
ENGINEER

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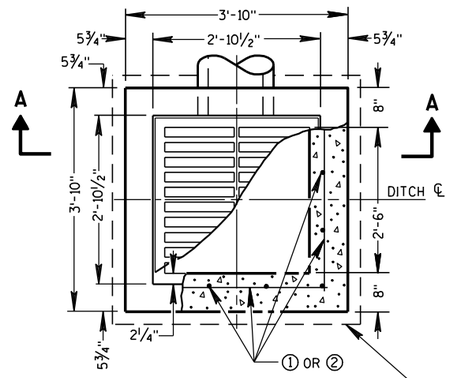
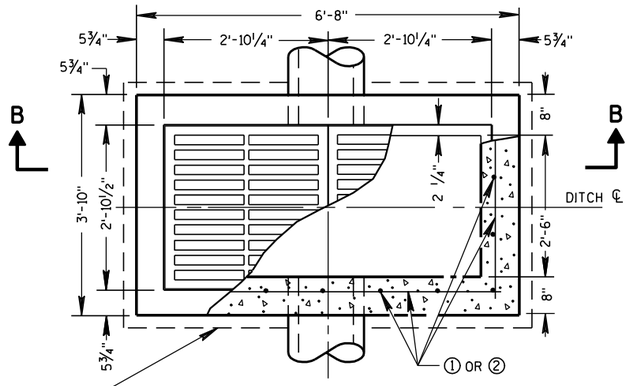
S.D.D. 8 C 7-1

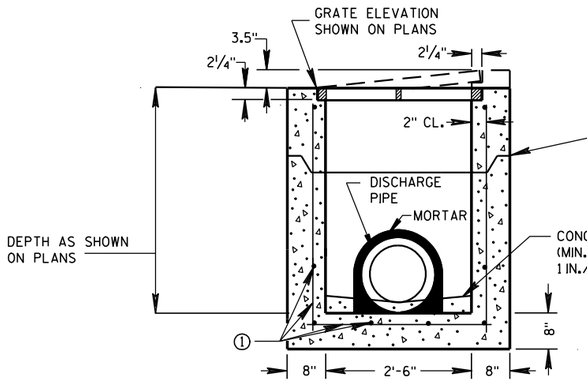


PLAN VIEW

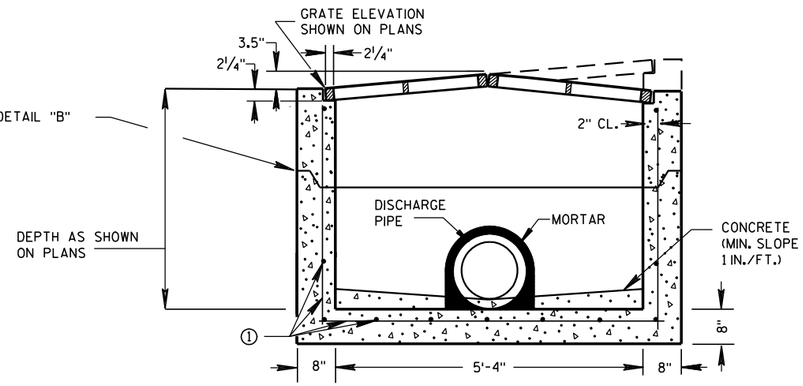


PLAN VIEW

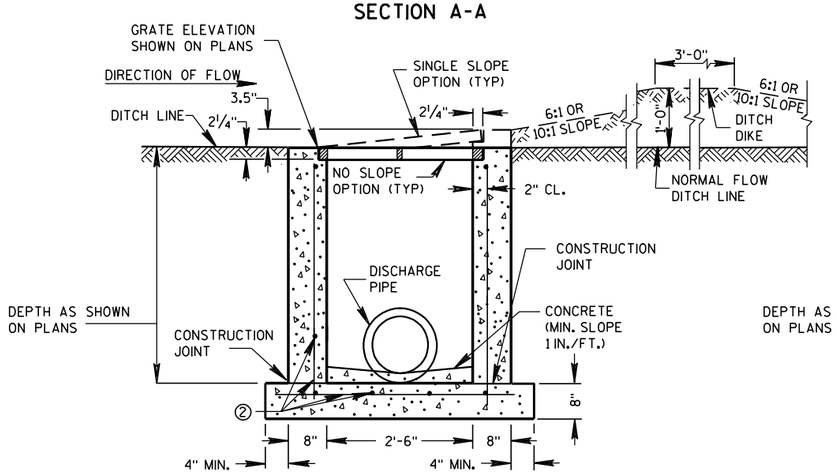
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



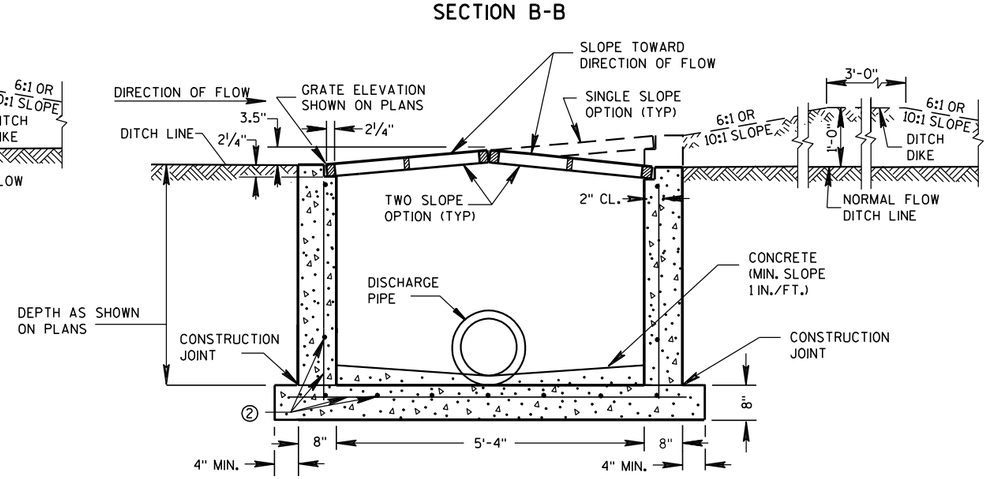
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

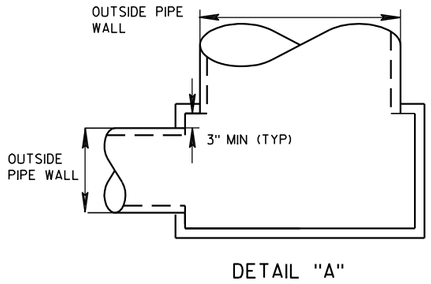
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

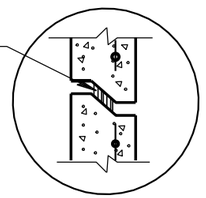
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

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



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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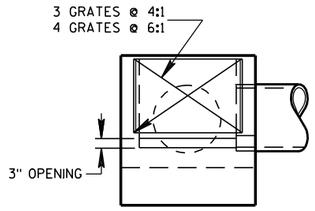
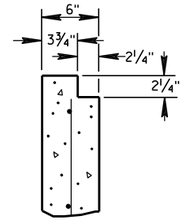
S.D.D. 8 C 8-1



SECTION B-B



SECTION C-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.

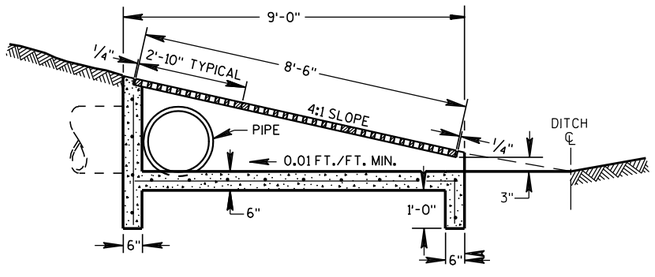
UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

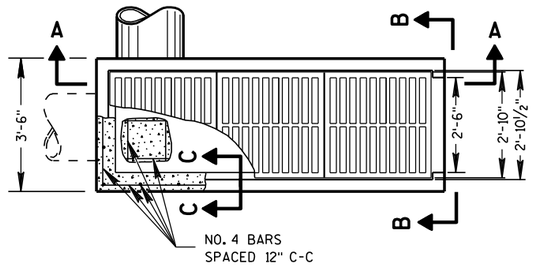
ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 3G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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 ASTM C 913.

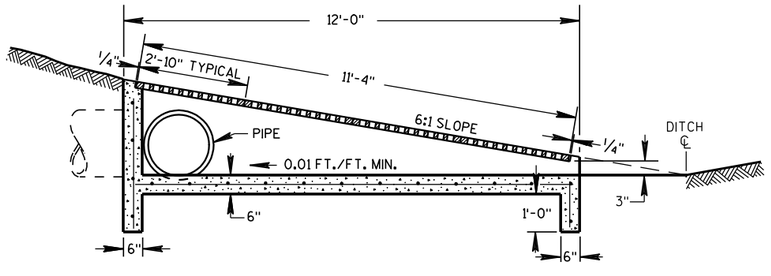


SECTION A-A

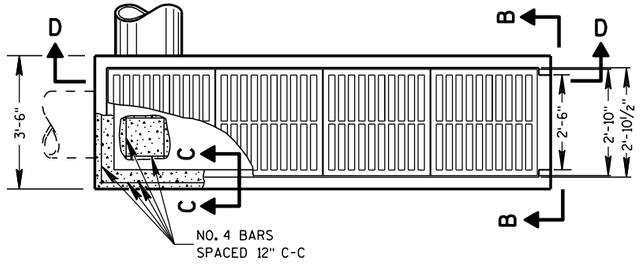


PLAN VIEW

INLETS MEDIAN 3 GRATE



SECTION D-D



PLAN VIEW

INLETS MEDIAN 4 GRATE

INLETS MEDIAN 3 AND 4 GRATE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 6/5/2012 DATE FHWA	/S/ Jerry H. Zogg ROADWAY STANDARDS DEV ENGINEER

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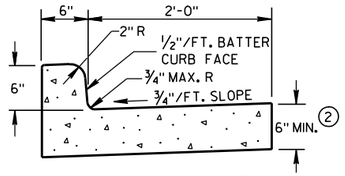
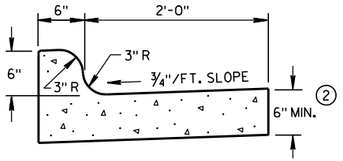
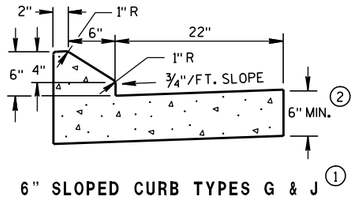
S.D.D. 8 C 9-1



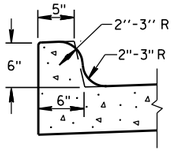
TYPES A & D (1)



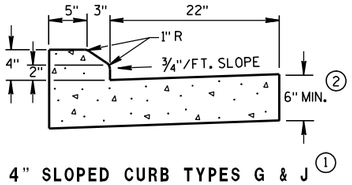
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

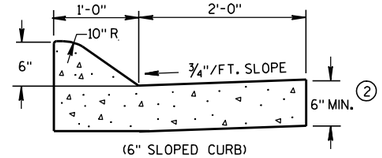


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

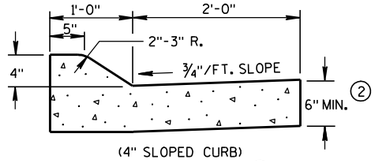


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

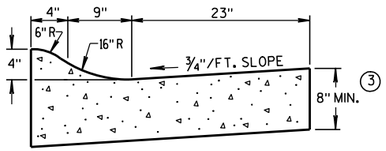


(6" SLOPED CURB)



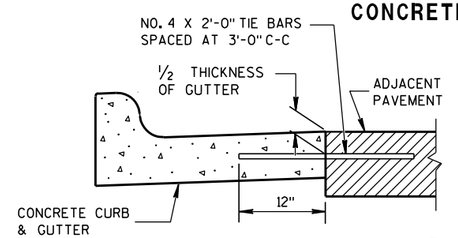
(4" SLOPED CURB)

TYPES A & D (1)

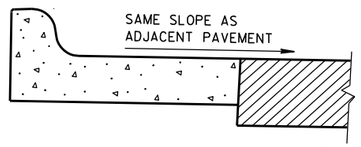


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION (1)



REVERSE SLOPE GUTTER (5)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

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.

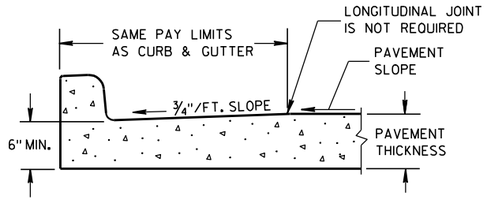
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(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.

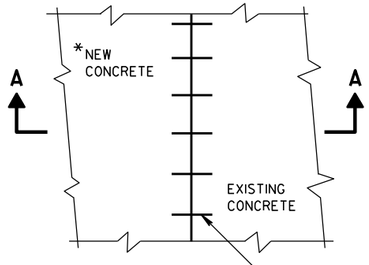
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(4) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(5) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

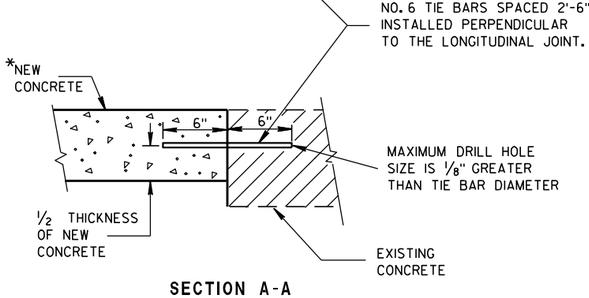


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



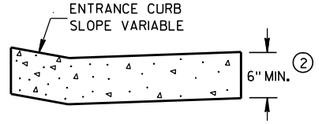
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

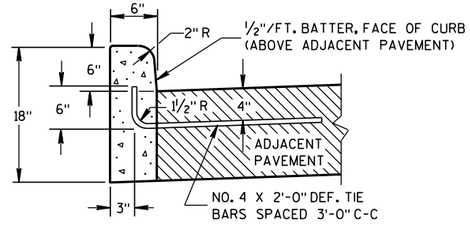


SECTION A-A

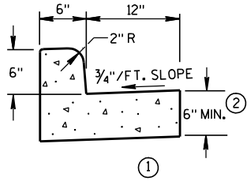
TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

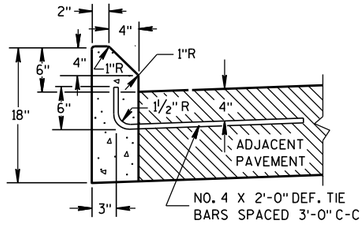


(1) TYPES A & D

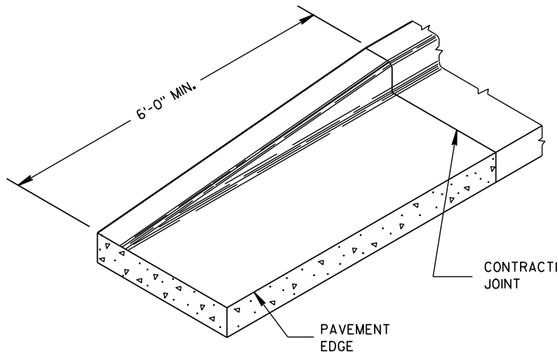


(1) TYPES A & D

CONCRETE CURB & GUTTER 18"



(1) TYPES G & J



END SECTION CURB & GUTTER

CONCRETE CURB

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
9/4/08 DATE	/S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER
FHWA	356 ENT

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S.D.D. 8 D 1-17

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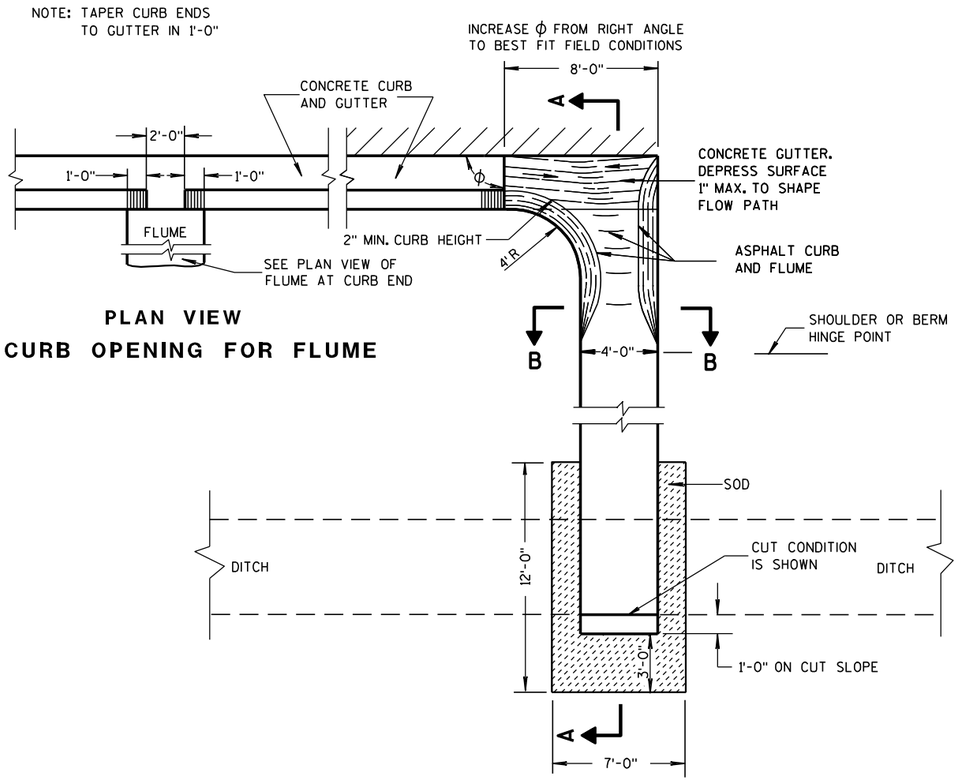
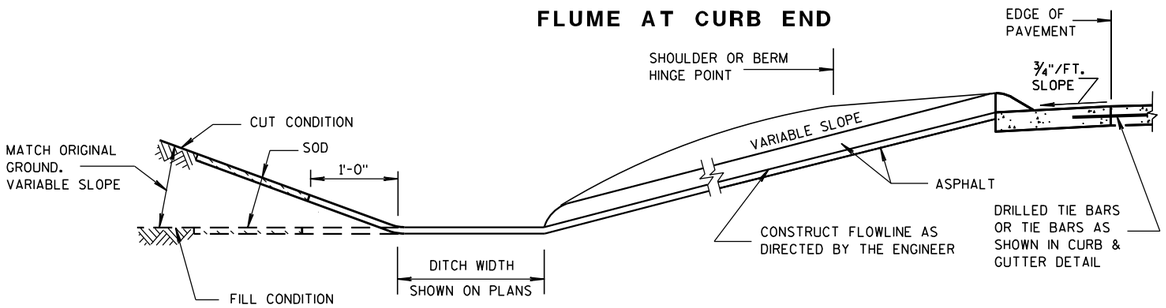
S.D.D. 8 D 1-17

ASPHALTIC FLUME

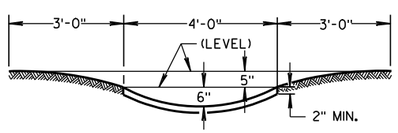


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

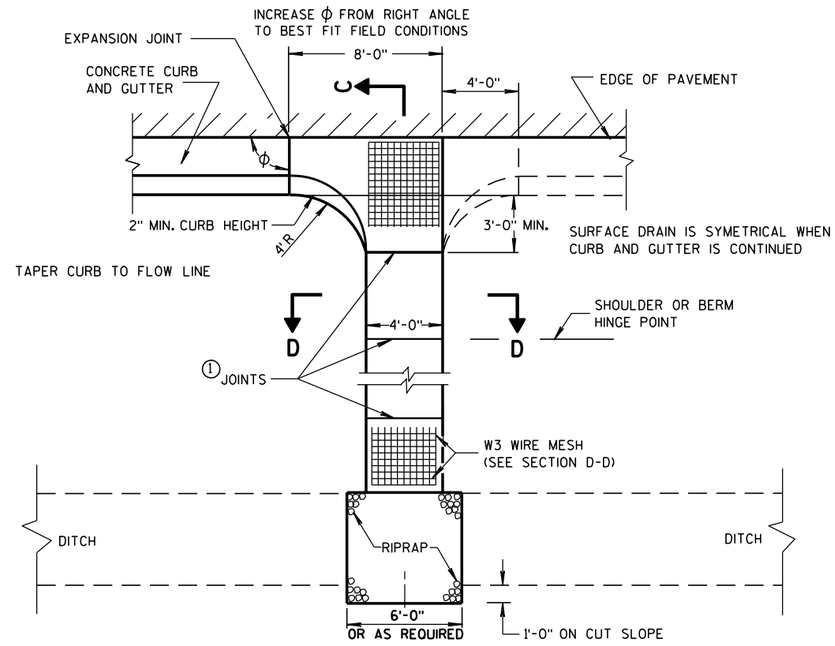
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

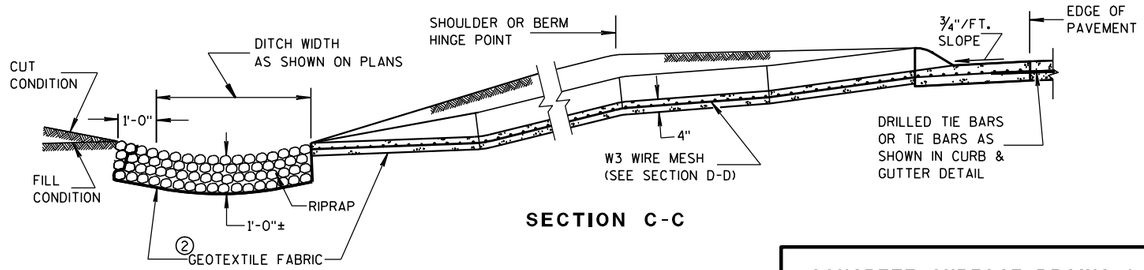
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

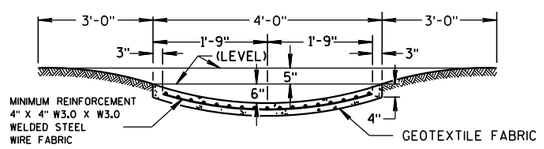
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
357
MENT
FHWA

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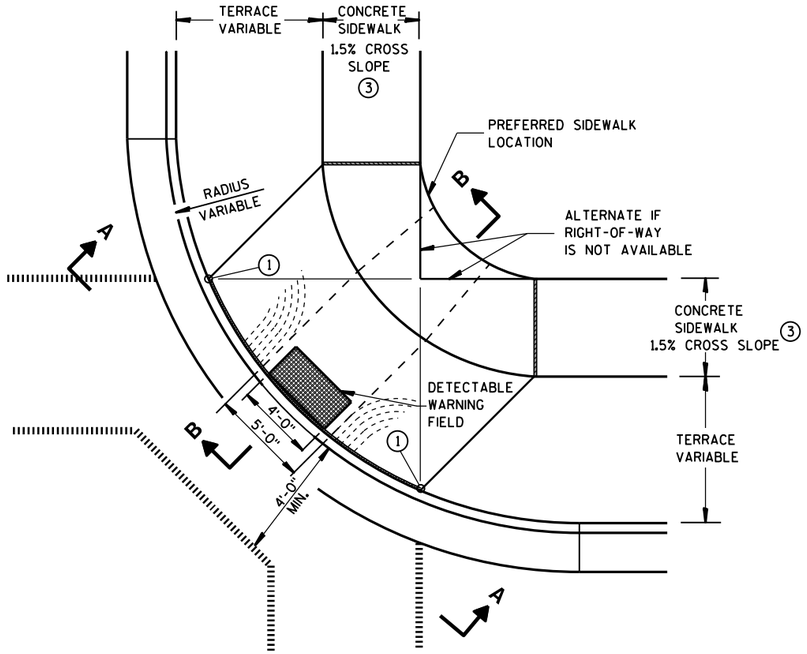
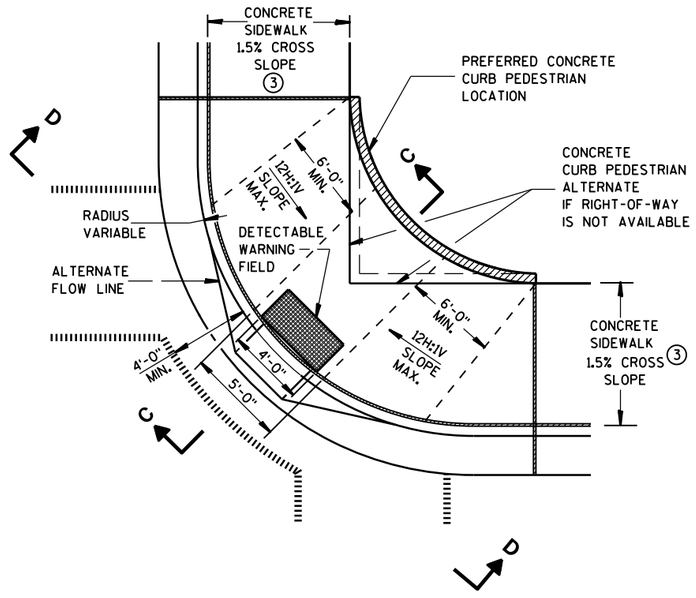
S.D.D. 8 D 4-5



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.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. 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.

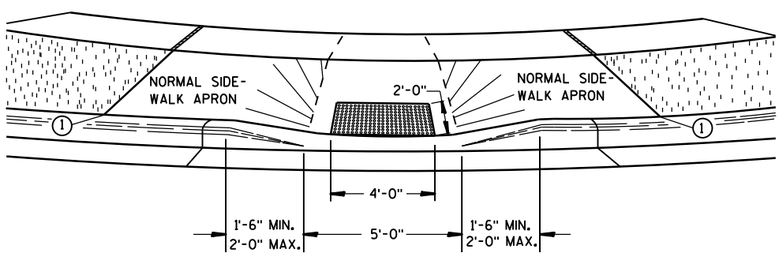
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

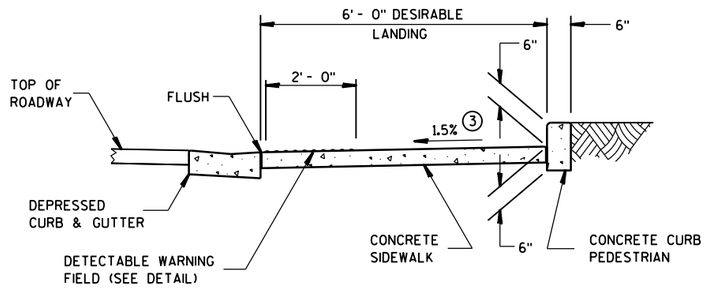
③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

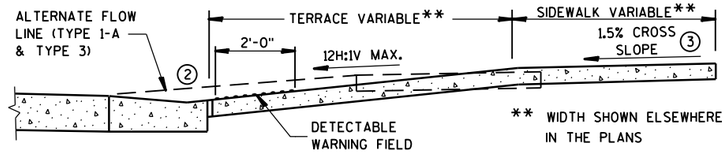
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



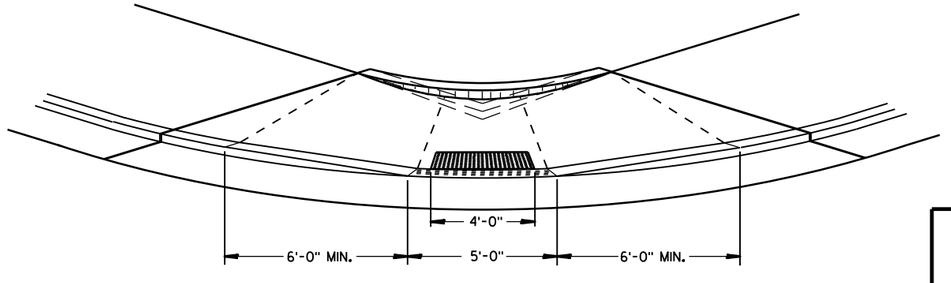
VIEW A-A



SECTION C-C



SECTION B-B



VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 358

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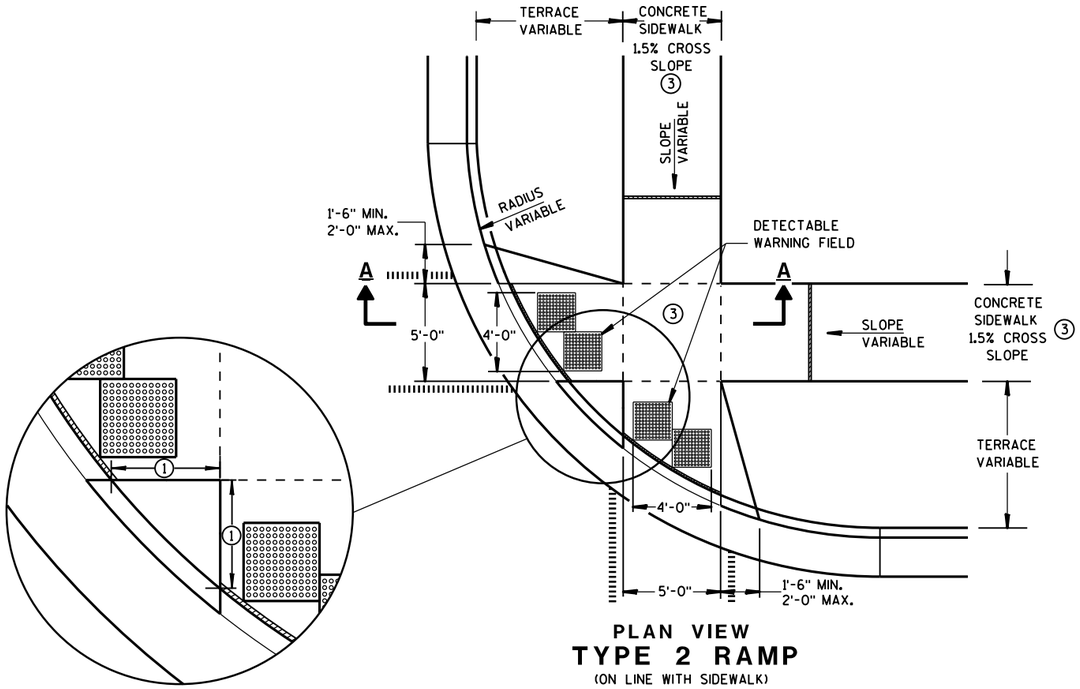
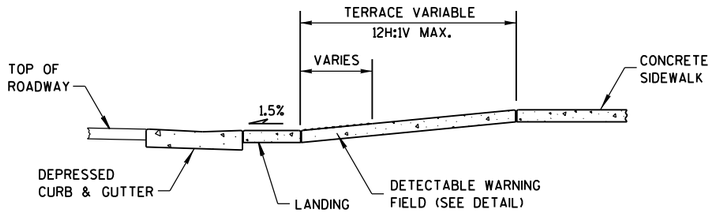
S.D.D. 8 D 5-15a



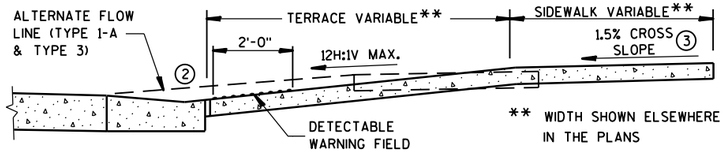
PLAN VIEW

TYPE 2 RAMP

(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

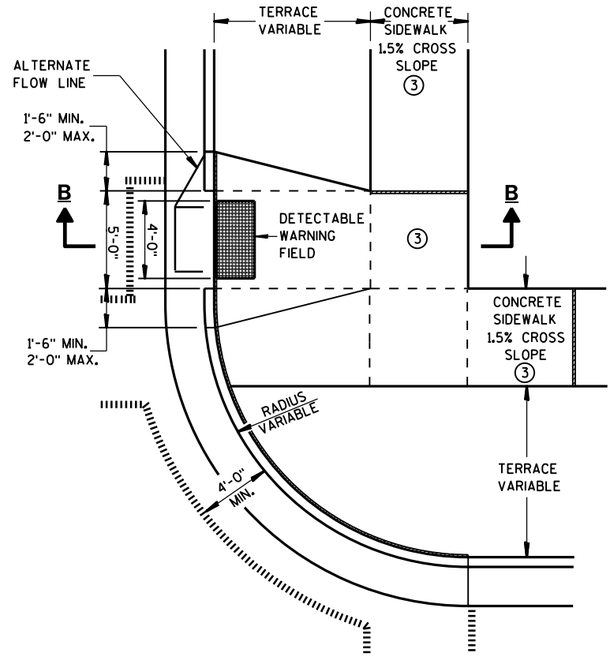
① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

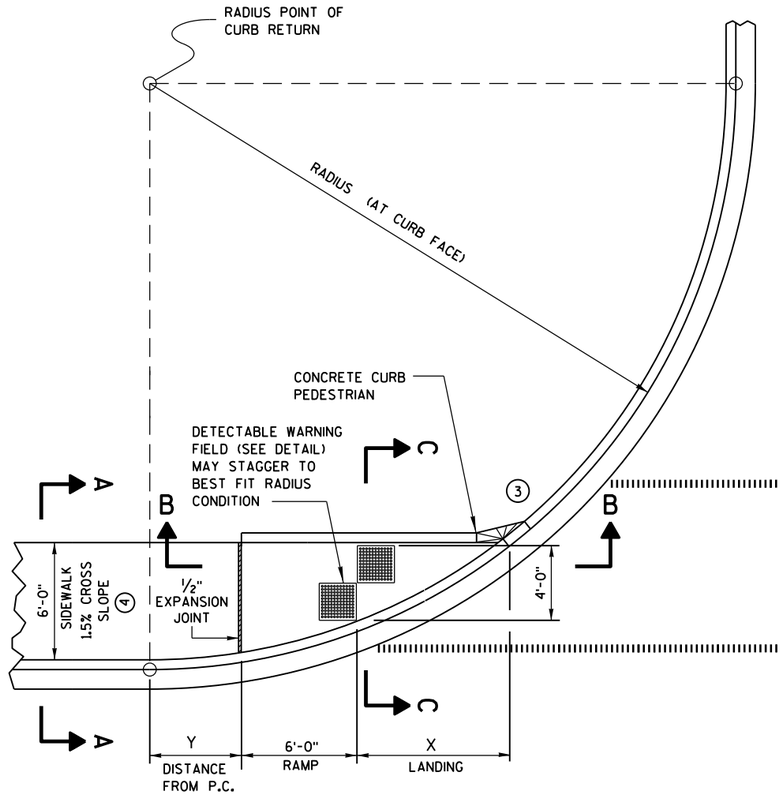
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

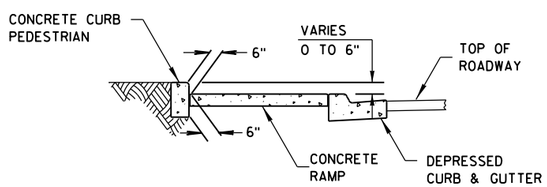
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

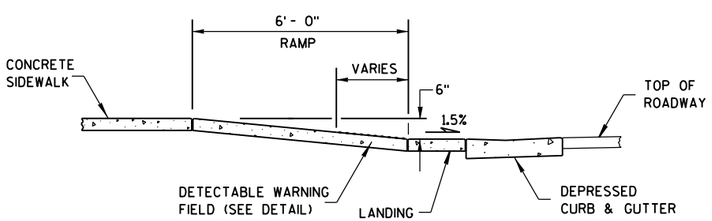
S.D.D. 8 D 5-15b



CURB RAMP TYPE 4A
PLAN VIEW



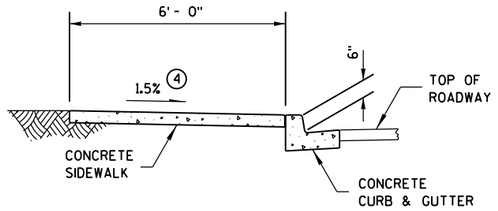
SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

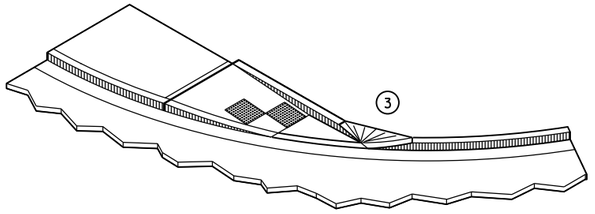
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

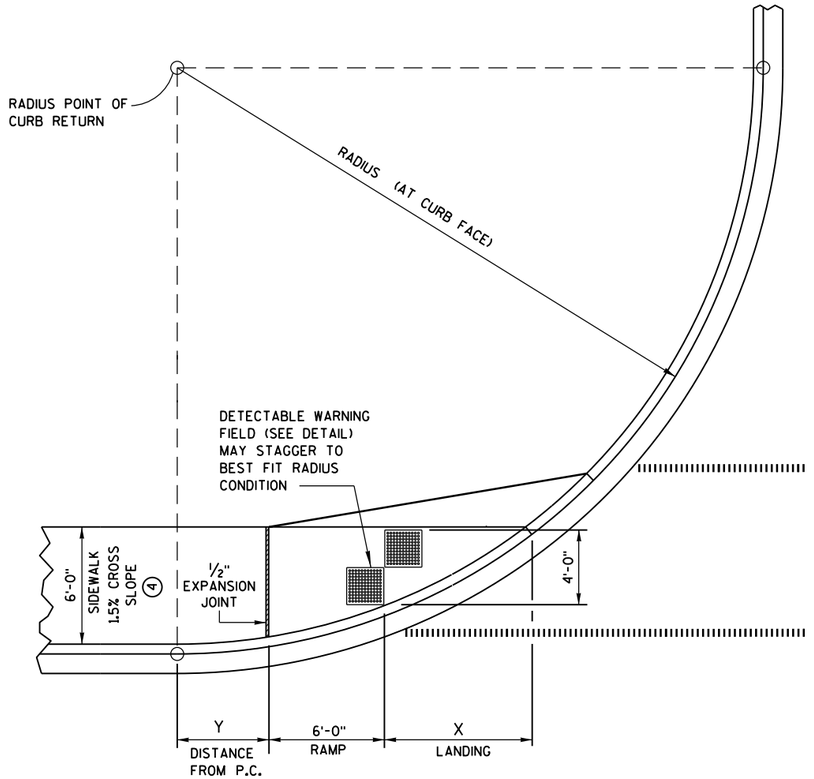
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

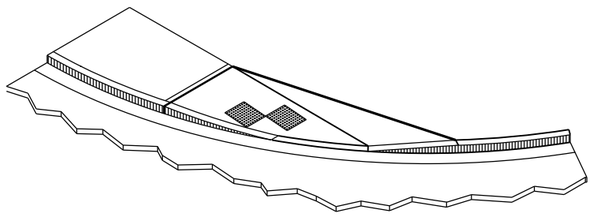
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

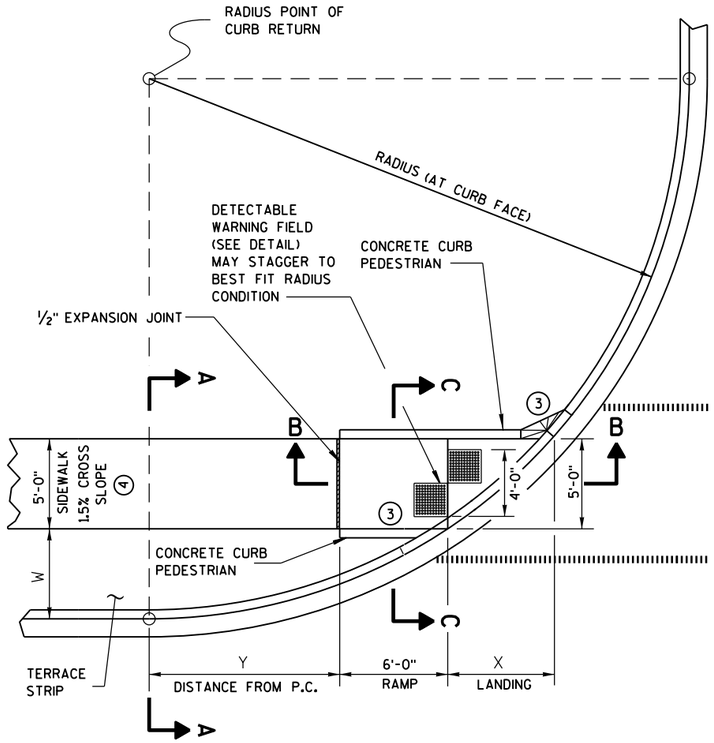
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

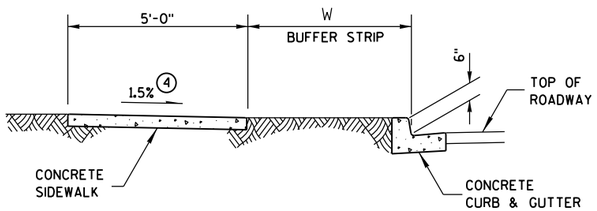
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

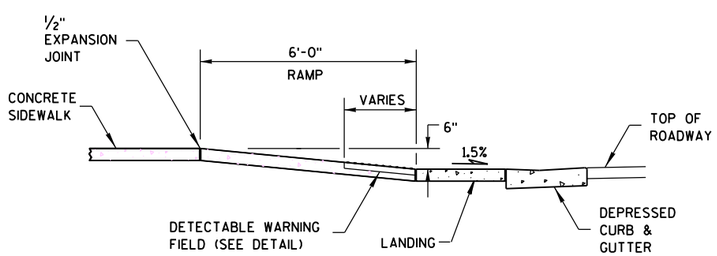
S.D.D. 8 D 5-15c



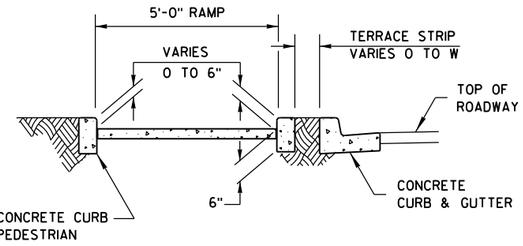
CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



SECTION B-B FOR TYPE 4B



SECTION C-C FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

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'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

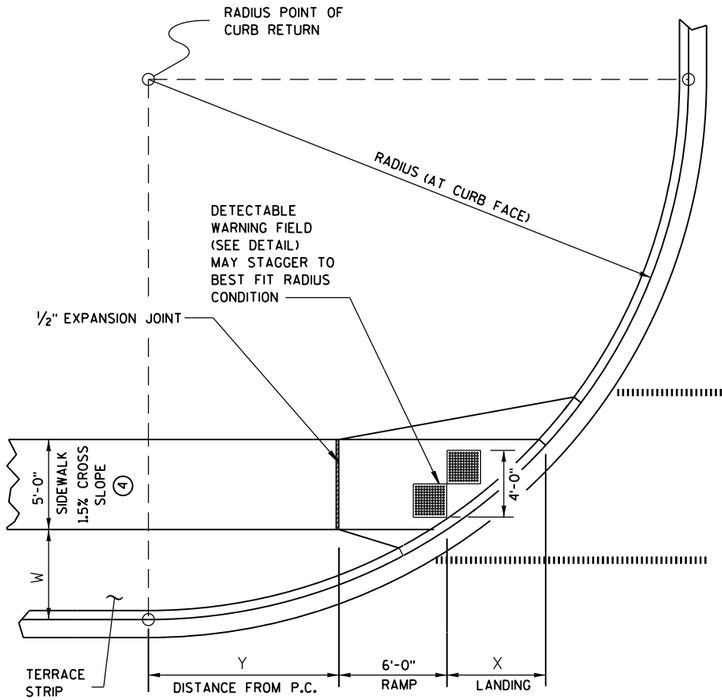
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

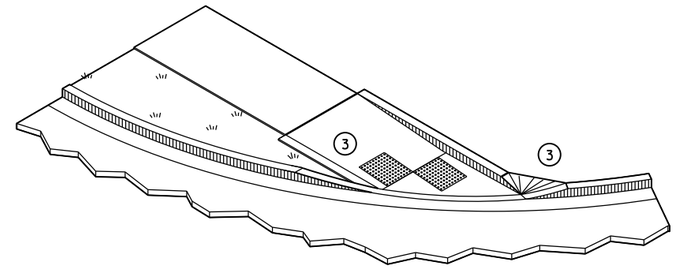
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

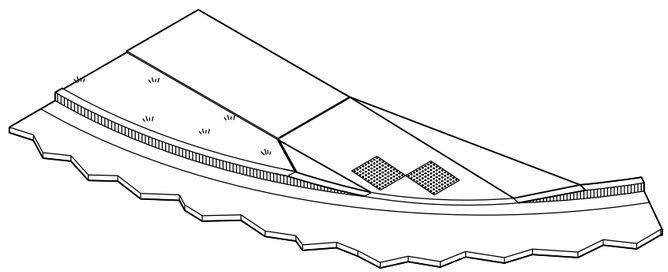
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



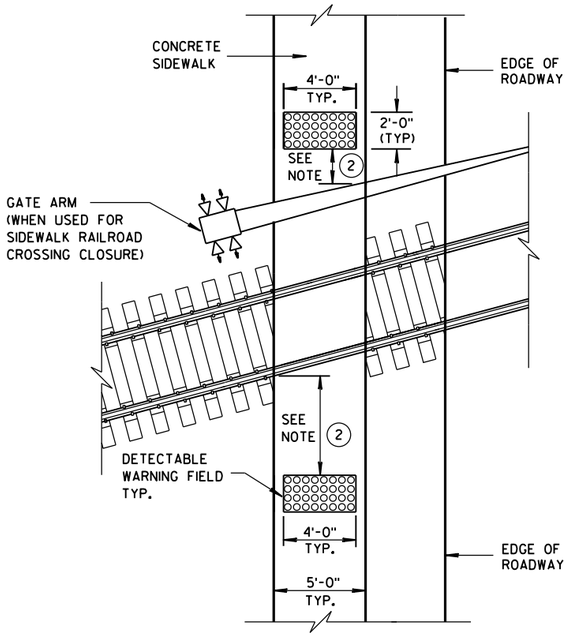
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

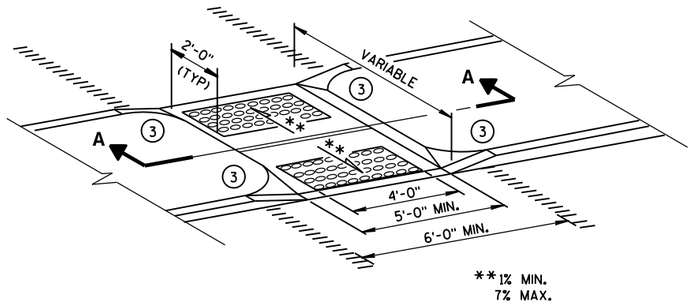
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-15d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

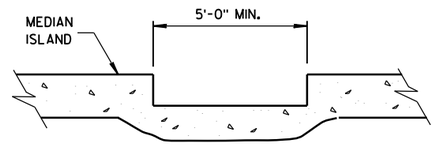
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

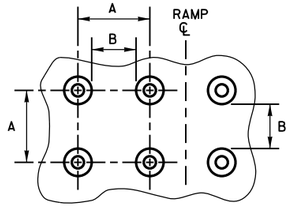
(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

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

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



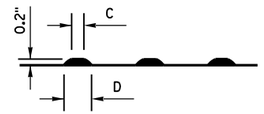
SECTION A-A



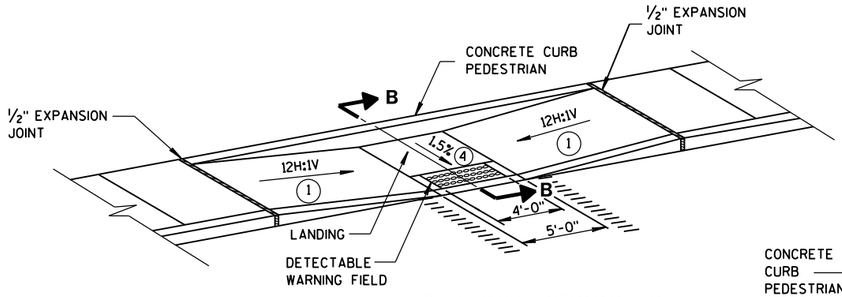
PLAN VIEW

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

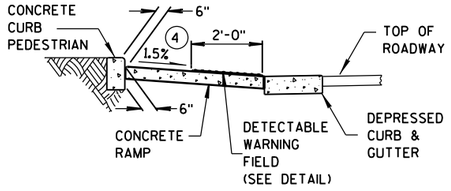
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

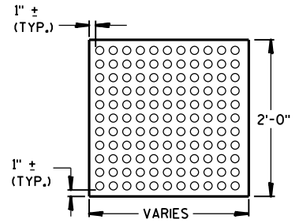


MID-BLOCK CROSSING
TYPE 7A



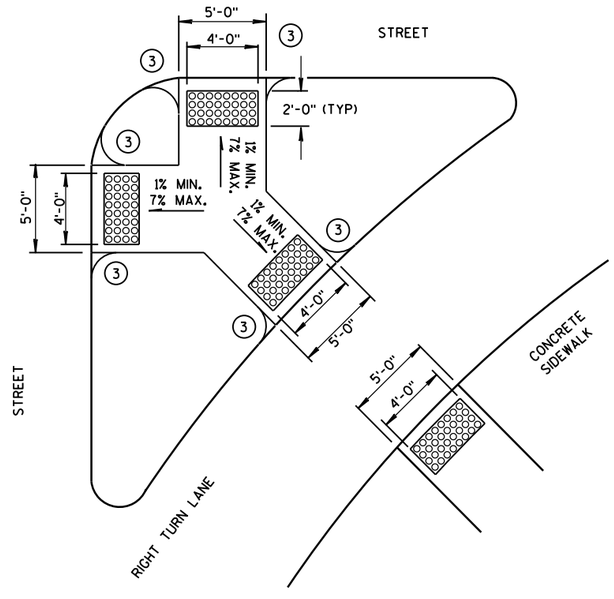
SECTION B-B

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

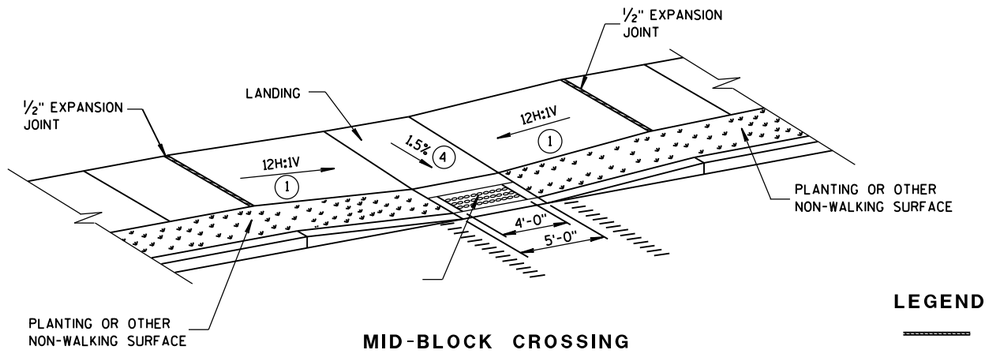


PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

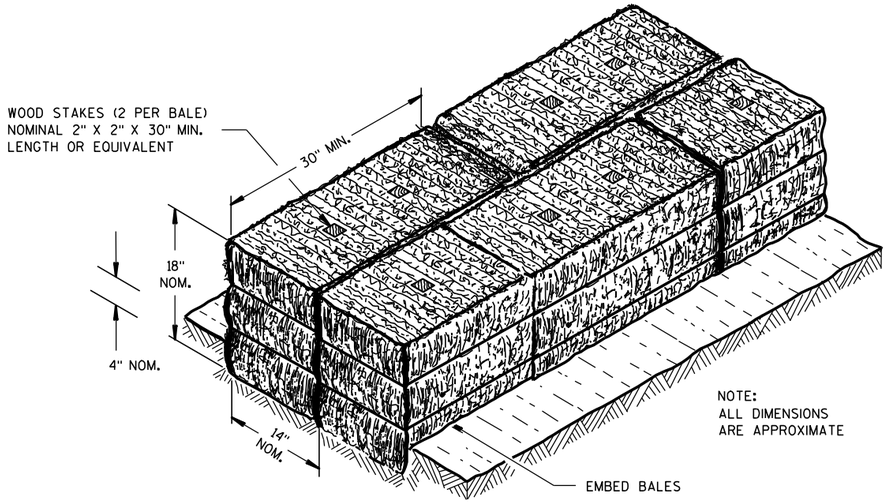
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

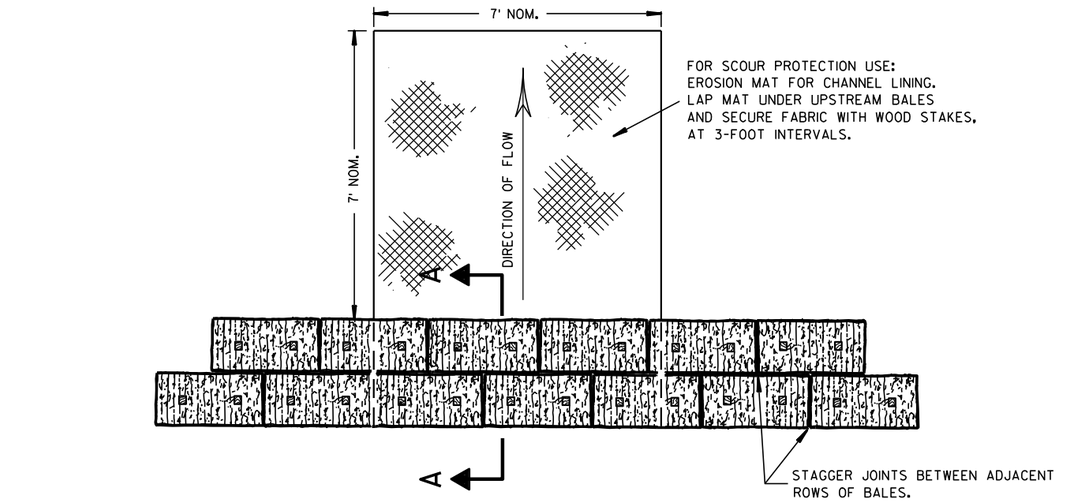
APPROVED
2-6-2013 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

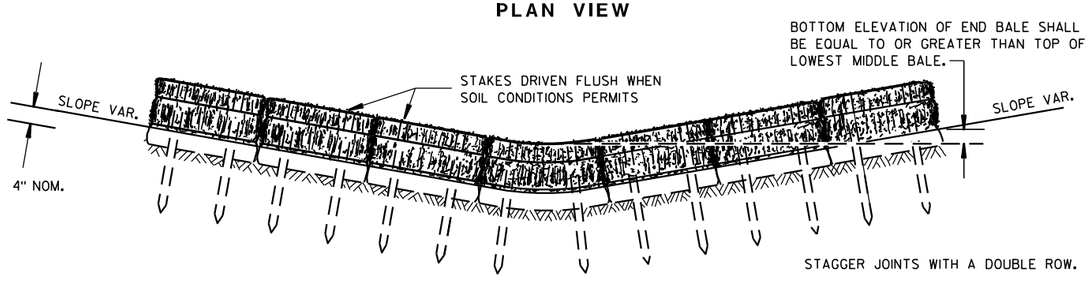
S.D.D. 8 D 5-15e



SECTION A-A



PLAN VIEW



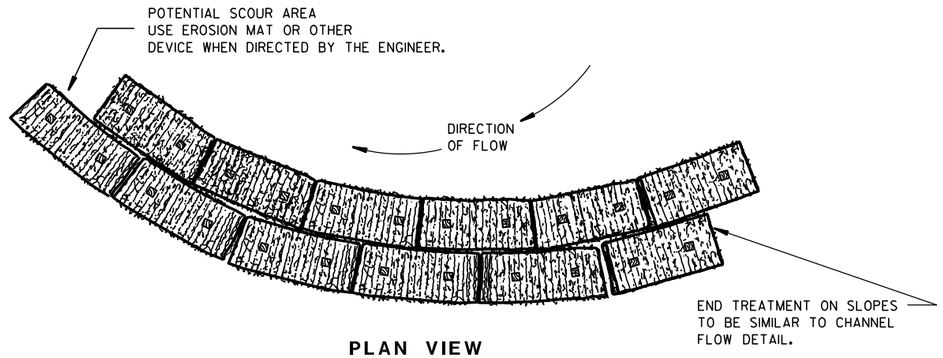
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

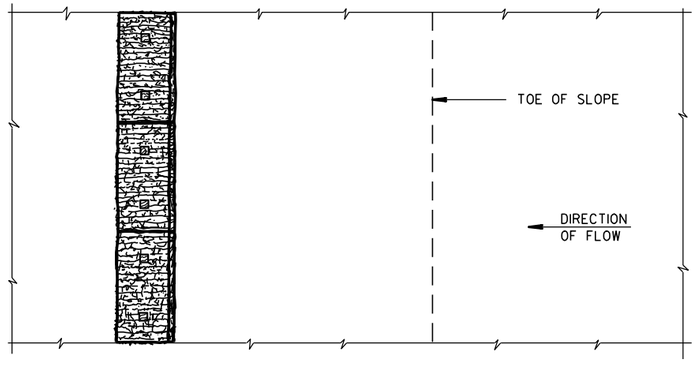
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

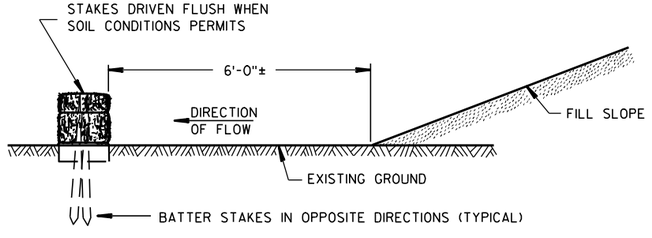


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

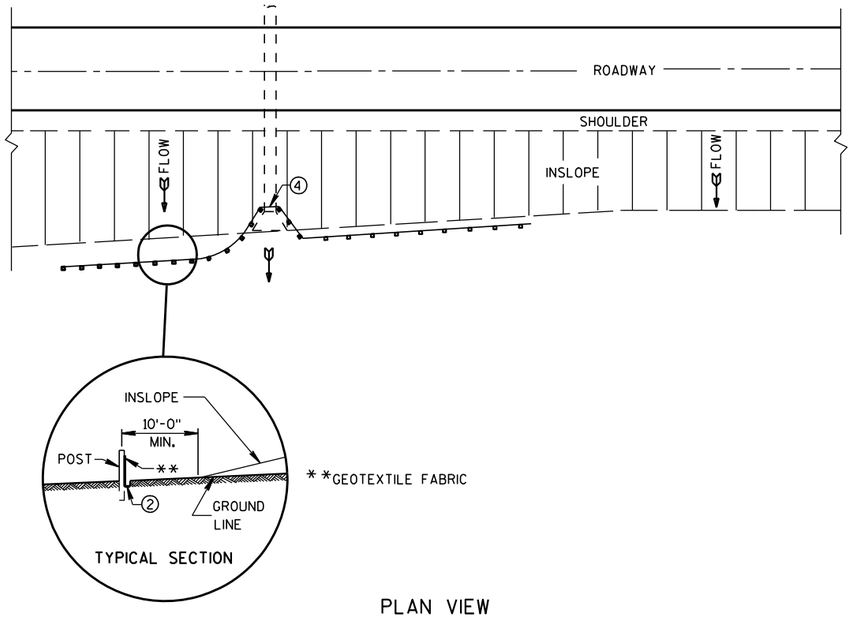
6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

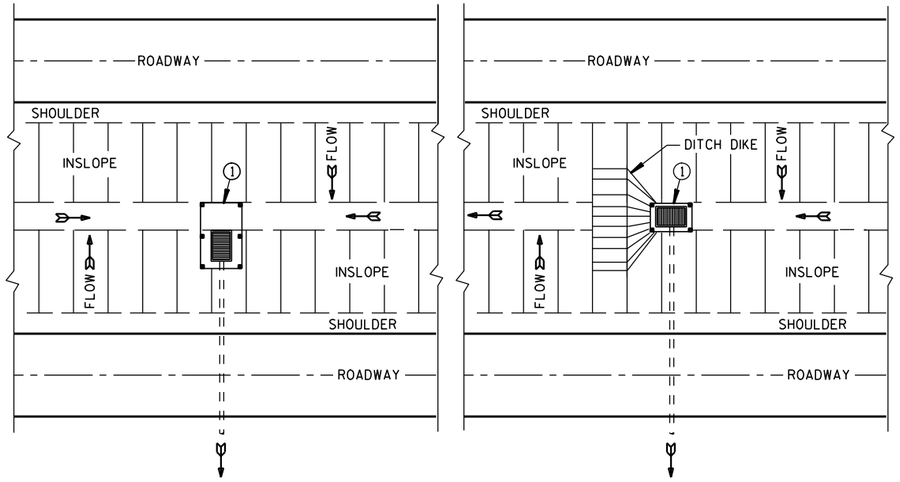
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



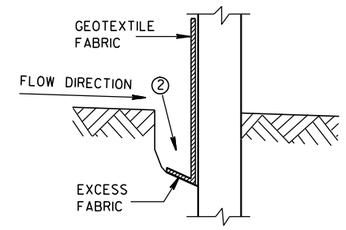
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

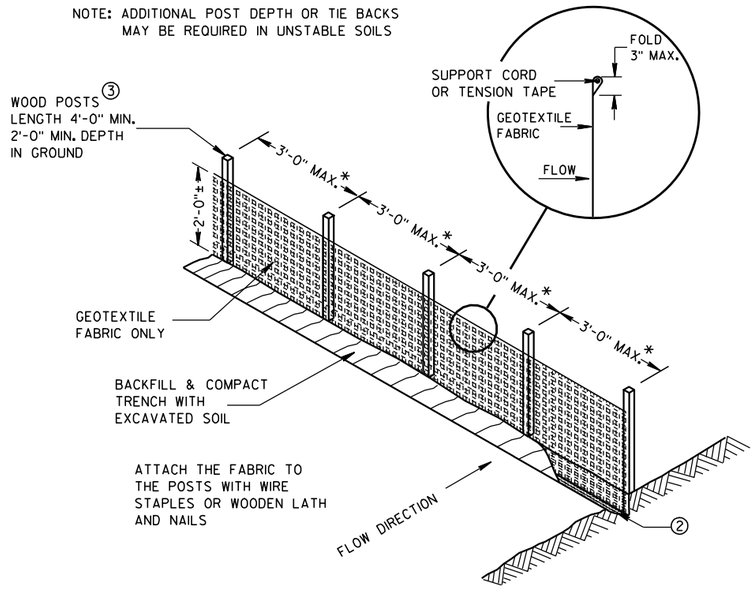
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

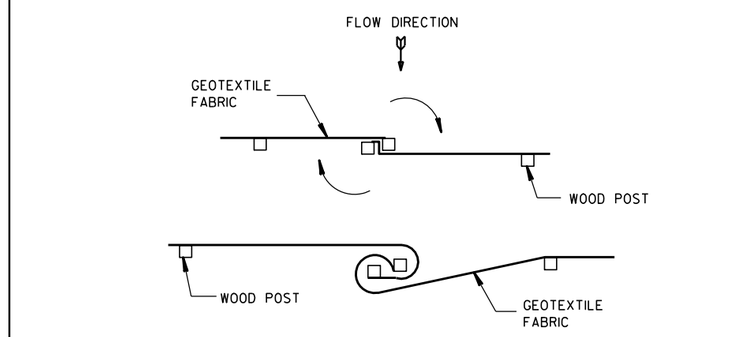


TRENCH DETAIL

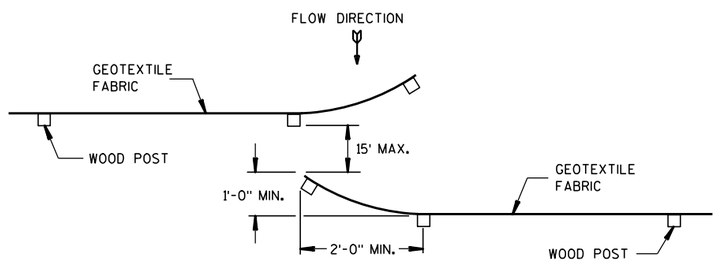


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

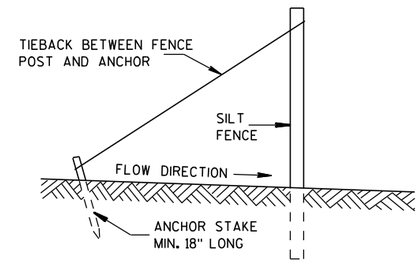


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

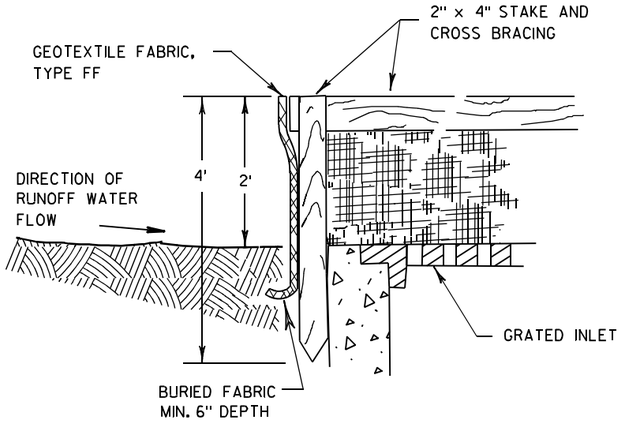
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

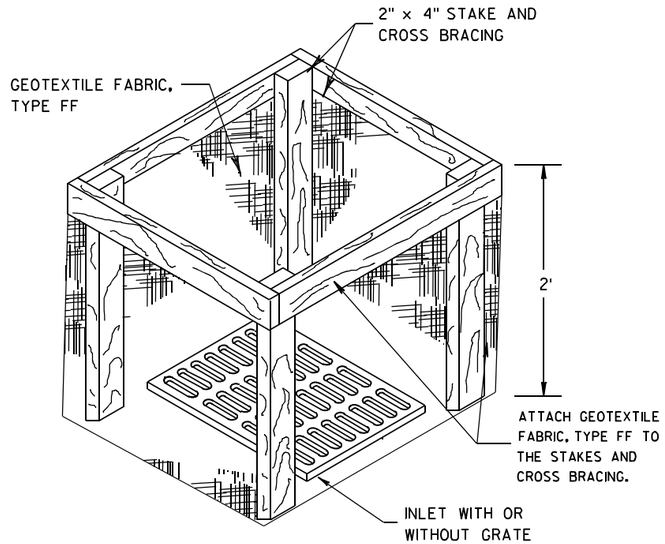
6

S.D.D. 8 E 9-6

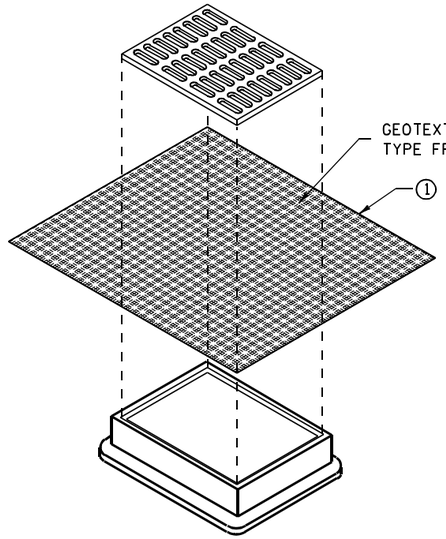
6

S.D.D. 8 E 9-6



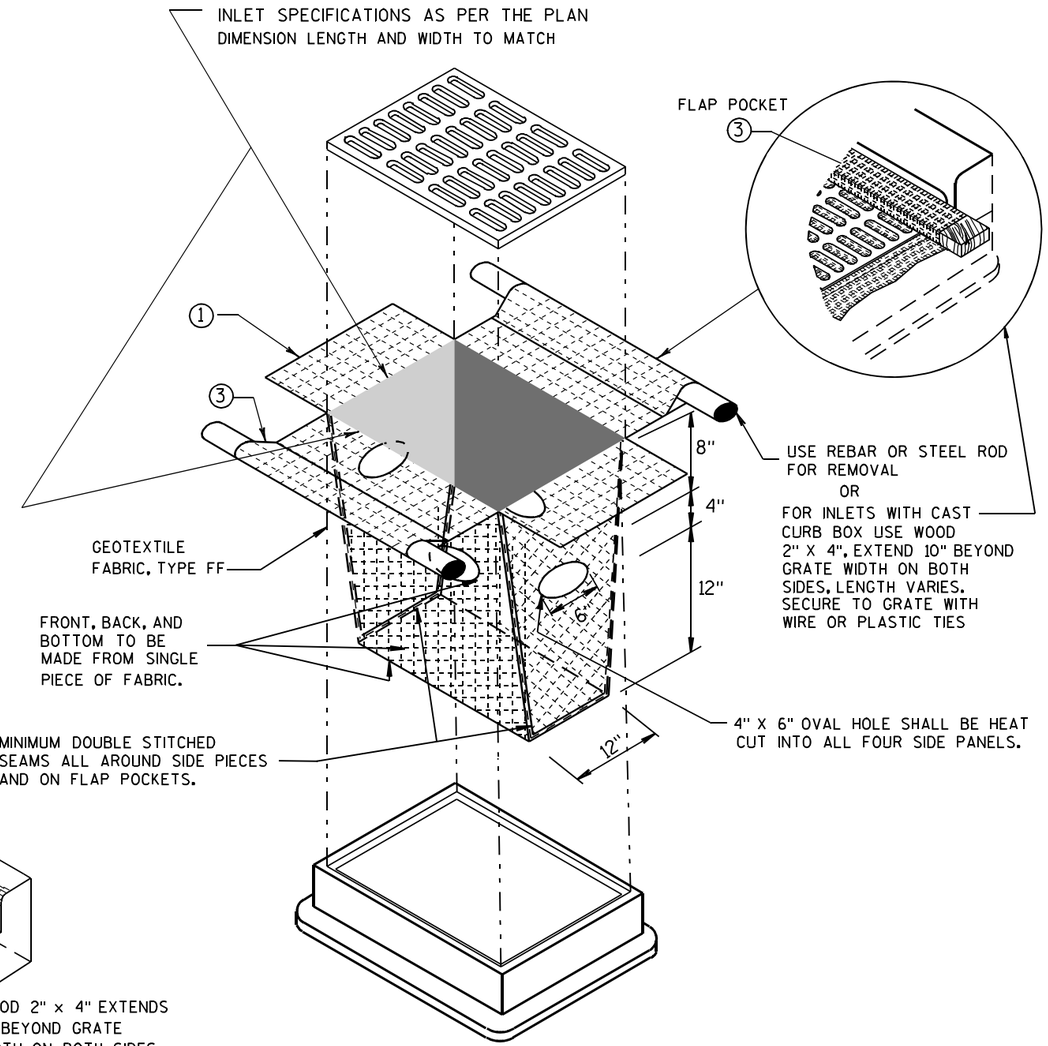


INLET PROTECTION, TYPE A



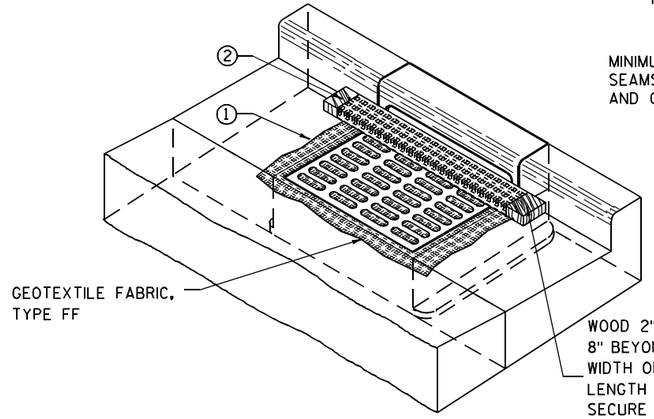
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE 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

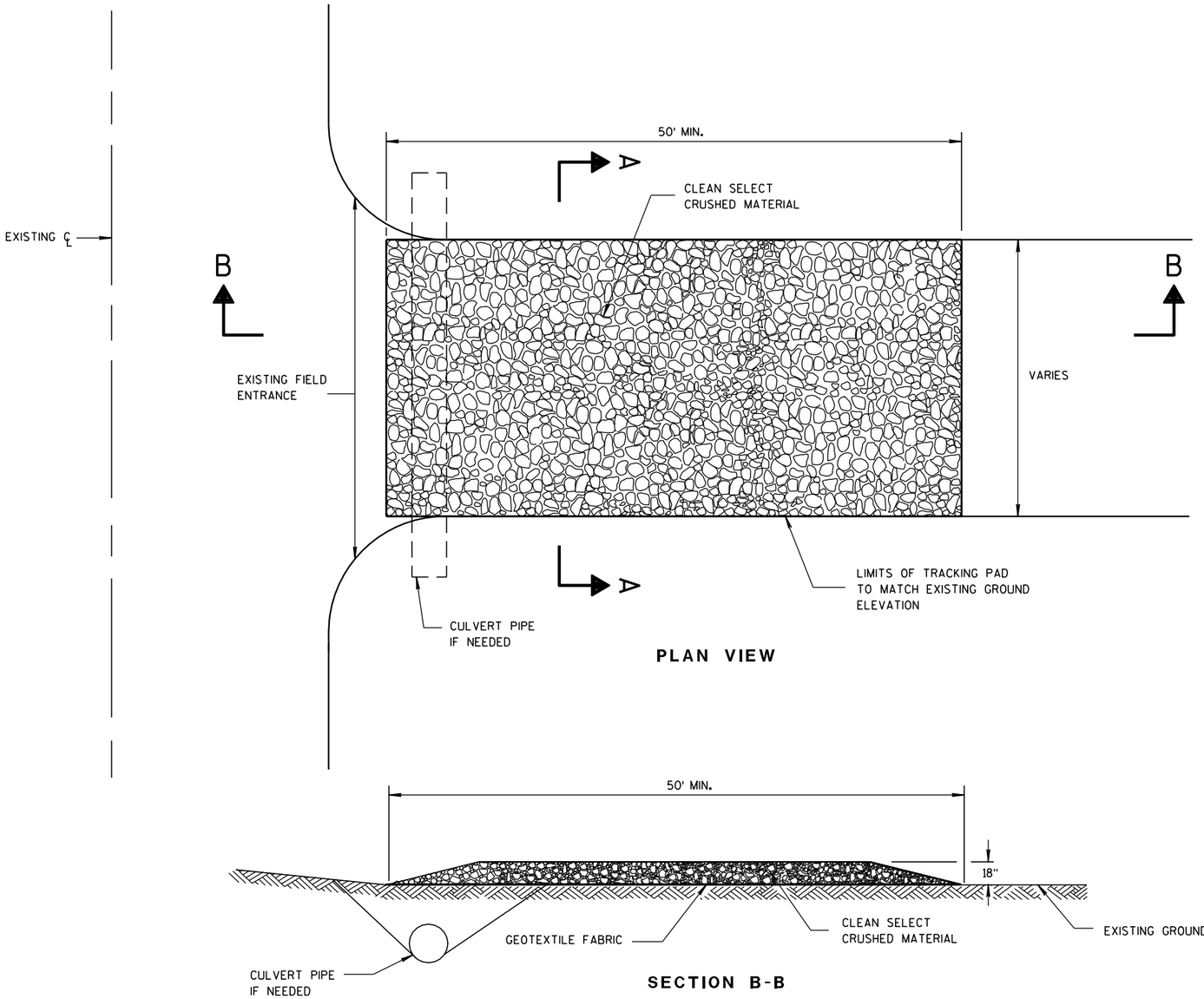
FHWA

6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



PLAN VIEW

SECTION B-B

GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

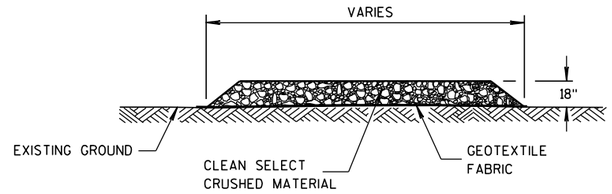
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

TRACKING PAD	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/24/2011 DATE FHWA	/S/ Jerry H. Zoda ROADWAY STANDARDS ENGINEER

6

S.D.D. 8 E 14-1

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

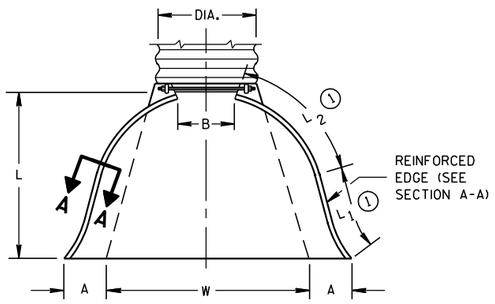
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

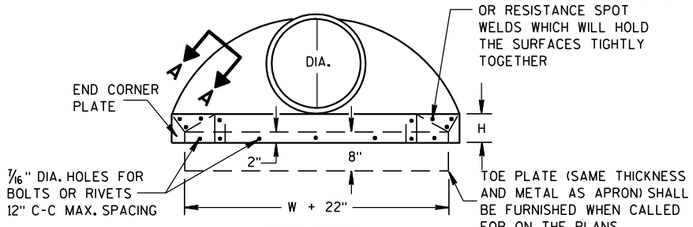
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

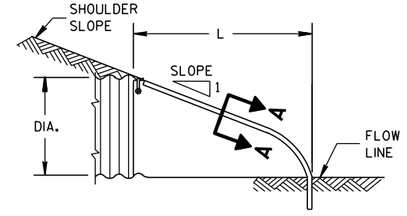
*MINIMUM
**MAXIMUM



PLAN VIEW

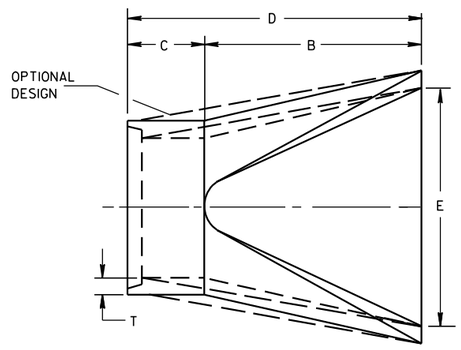


END VIEW

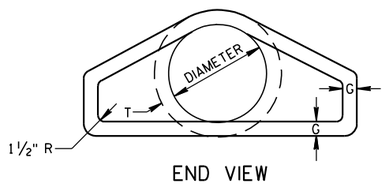


SIDE ELEVATION

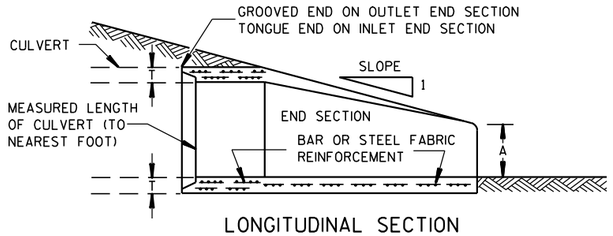
METAL ENDWALLS



PLAN

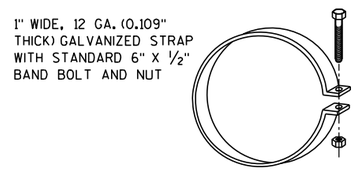


END VIEW



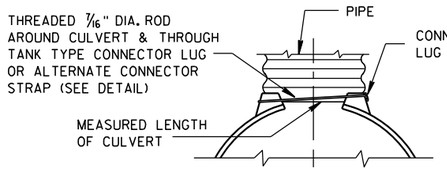
LONGITUDINAL SECTION

CONCRETE ENDWALLS

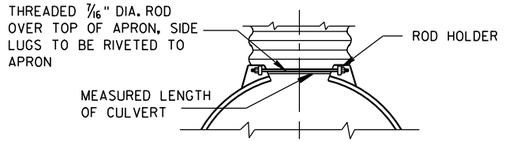


ALTERNATE FOR TYPE 1 CONNECTION

END SECTION CONNECTOR STRAP

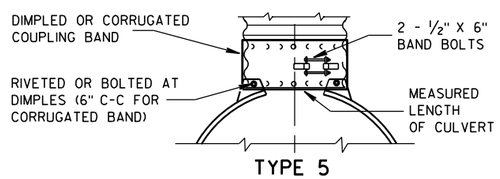


TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE

TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

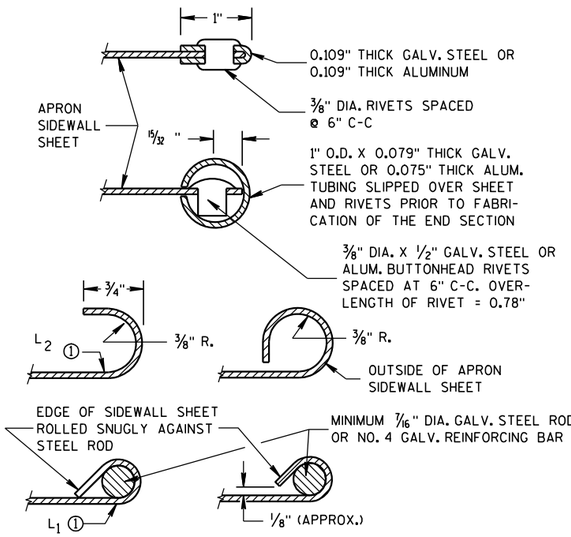
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

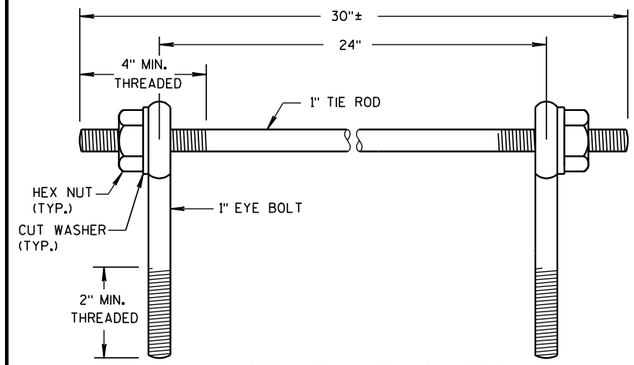
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

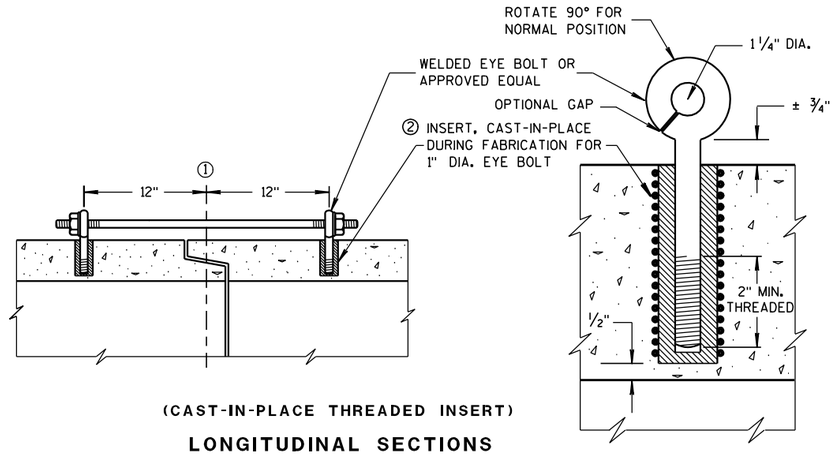
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

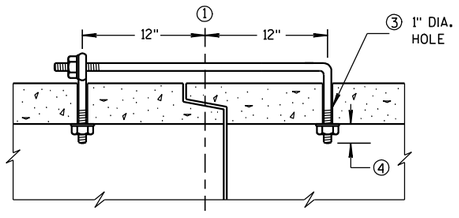
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

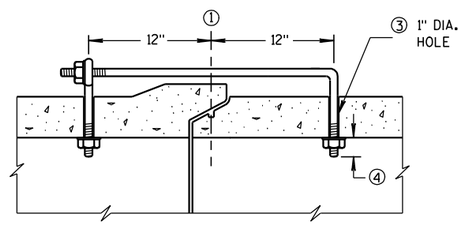
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

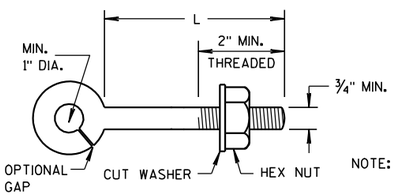


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

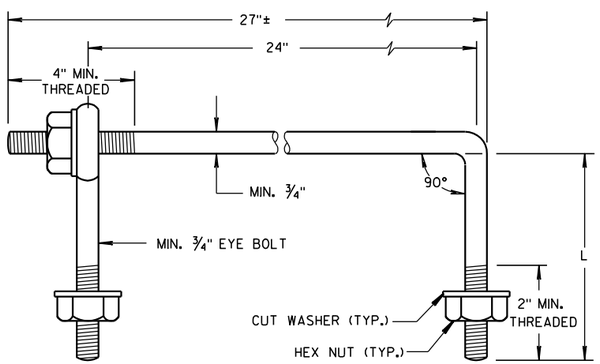
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

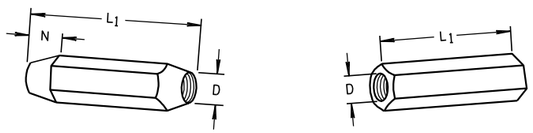
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

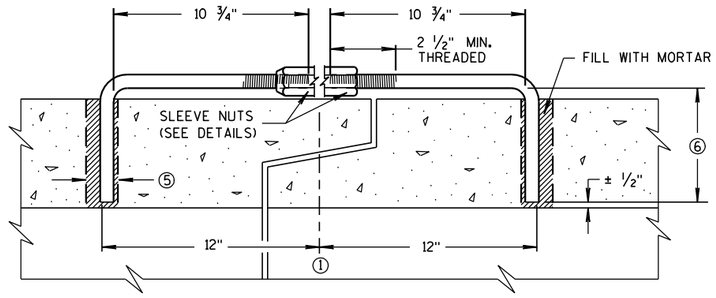
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

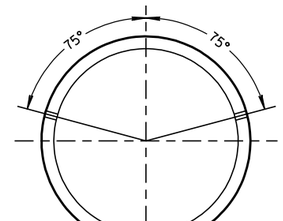
SLEEVE NUTS



LONGITUDINAL SECTION

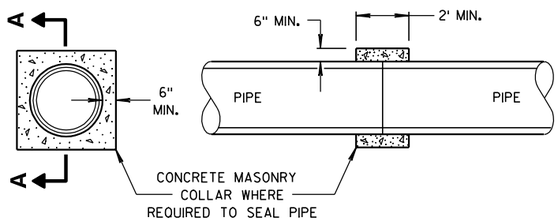
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

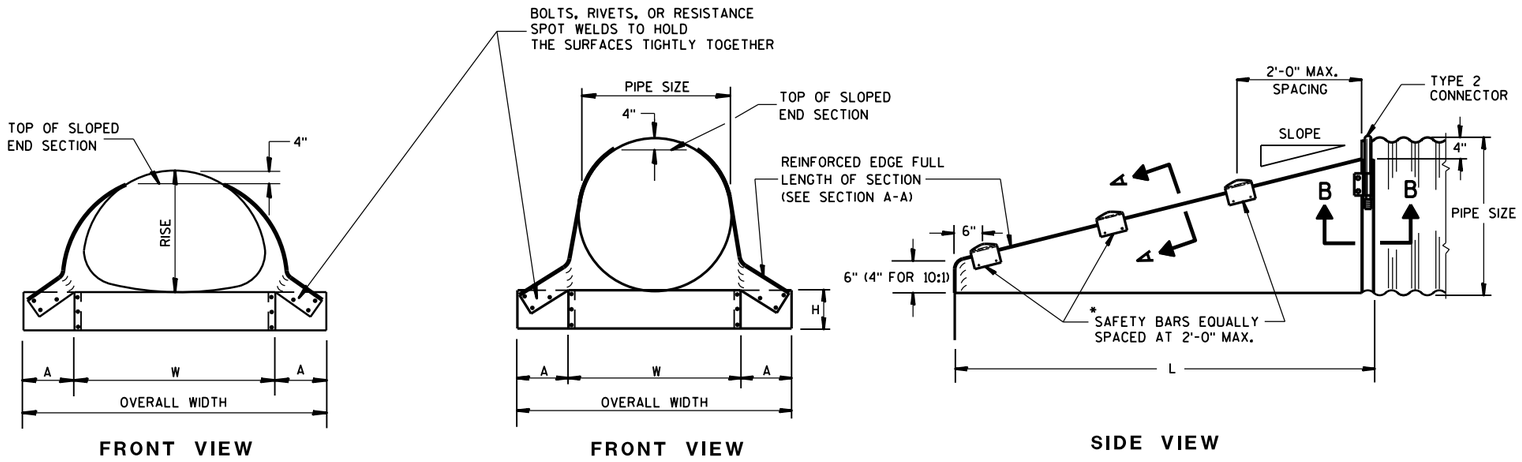
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
368
FHWA

6

S.D.D. 8 F 4-7

6

S.D.D. 8 F 4-7



FRONT VIEW

FRONT VIEW

SIDE VIEW

GENERAL NOTES

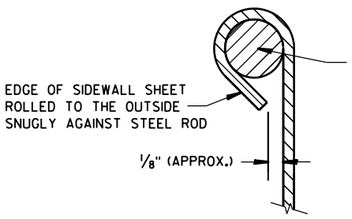
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS

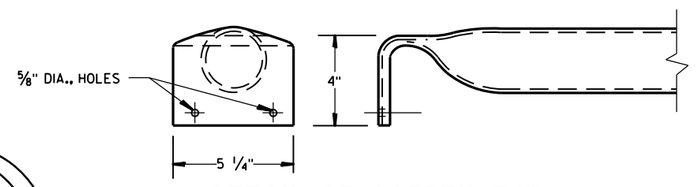
PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	6:1	300	——	——



SECTION A-A

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.

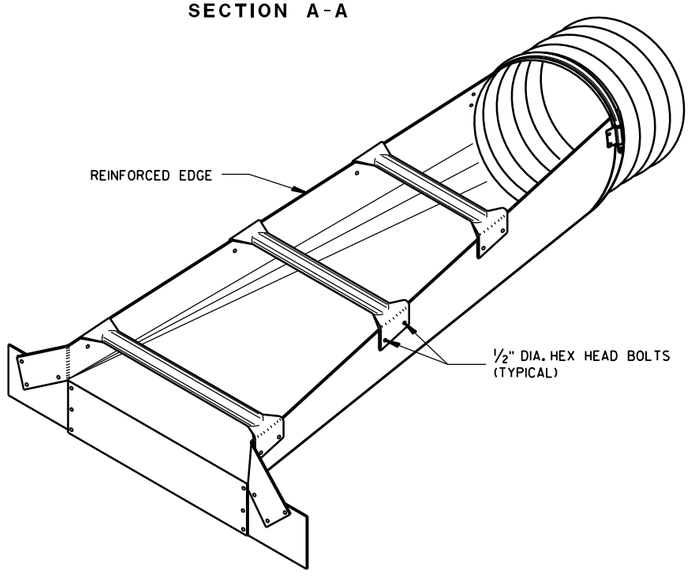


DETAIL OF SAFETY BAR

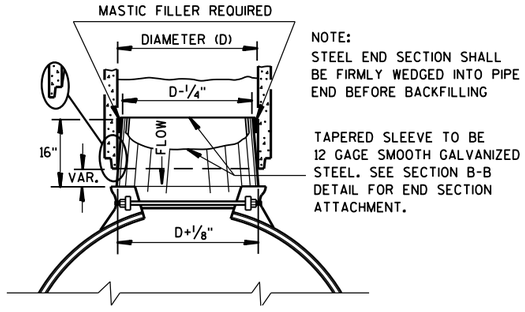
STEEL APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

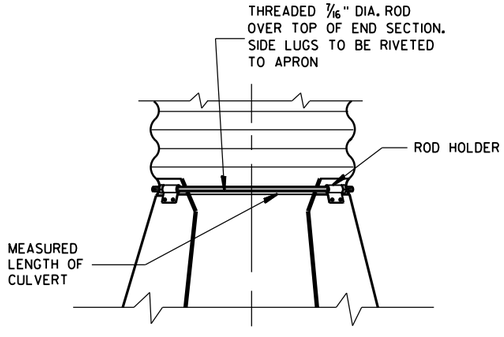
① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



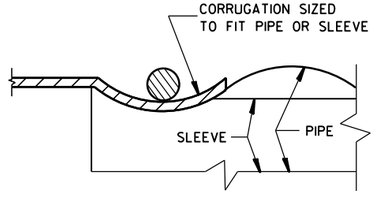
ISOMETRIC VIEW



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



TYPE 2 CONNECTION DETAIL



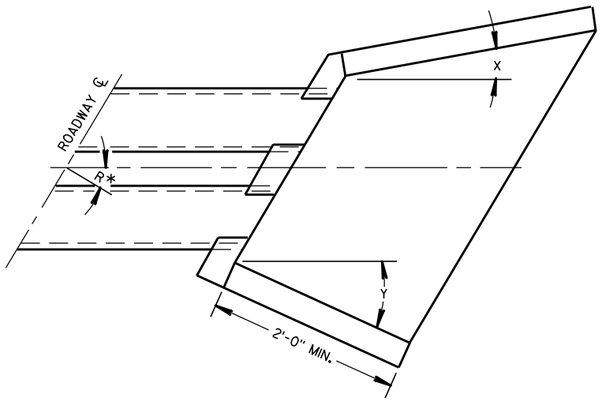
SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/14/2012 DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 7-5



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

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.

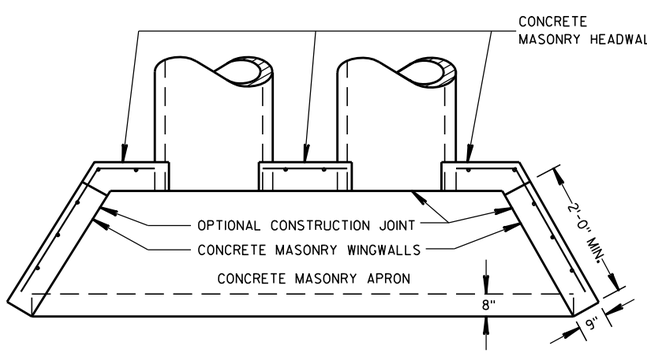
FILL SLOPES FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

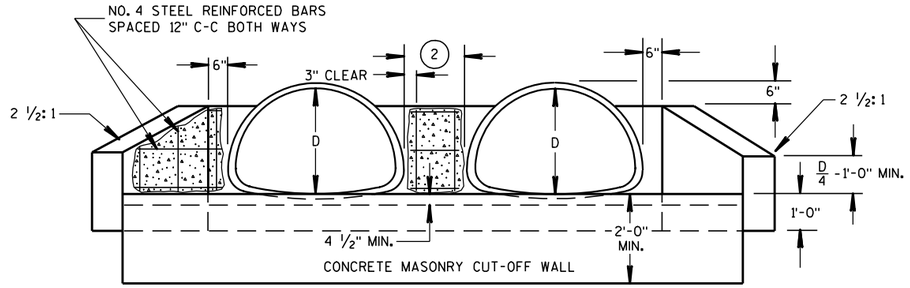
(2) THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	½ DIA. OR SPAN
OVER 72"	3'-0"



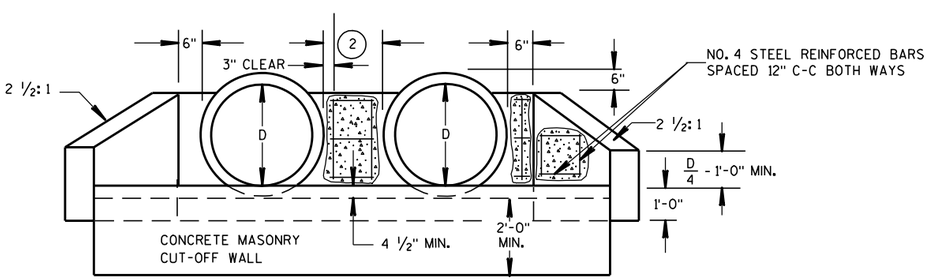
PLAN VIEW

CULVERT PIPE AND PIPE ARCH



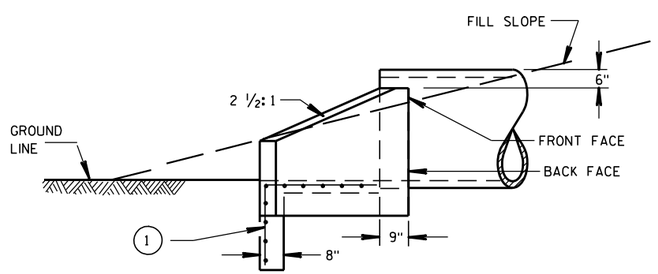
END ELEVATION

PIPE ARCH



END ELEVATION

CULVERT PIPE



SIDE ELEVATION

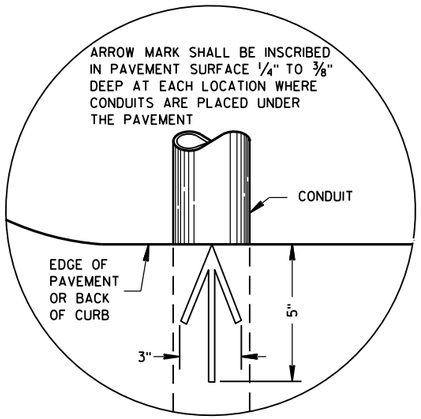
CULVERT PIPE AND PIPE ARCH

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

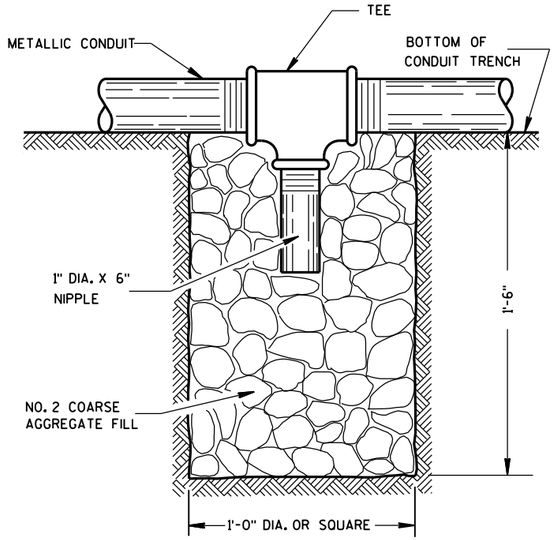
APPROVED
9/14/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 10-1



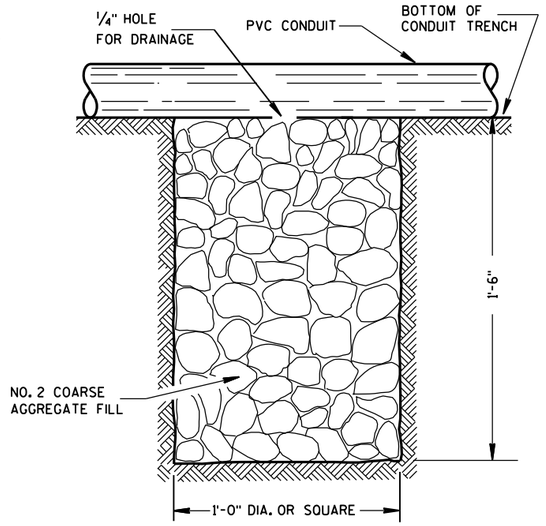
PLAN VIEW

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.

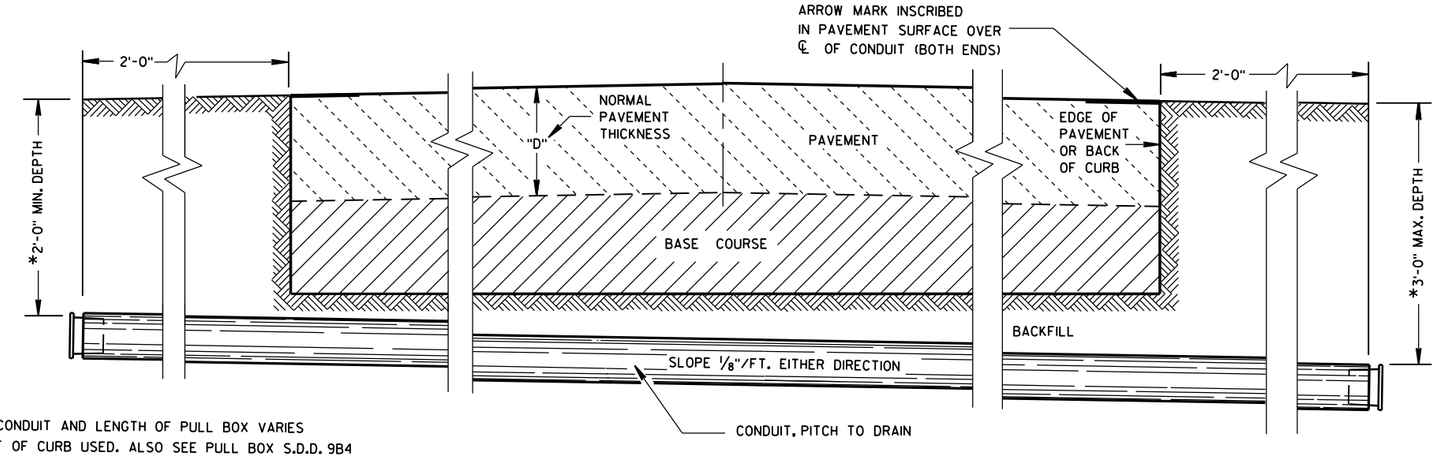
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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.).

POLY ROPE OR A PULL 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
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

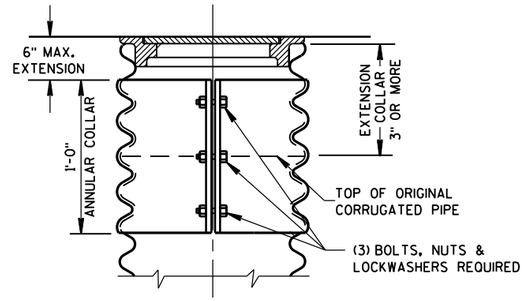
S.D.D. 9 B 2-8

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

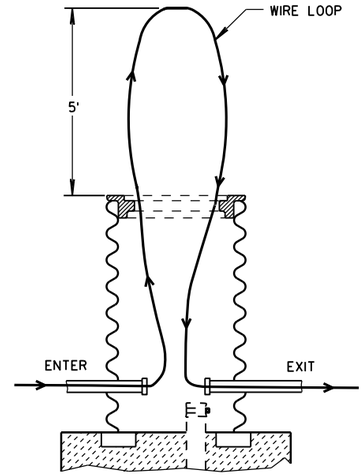
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

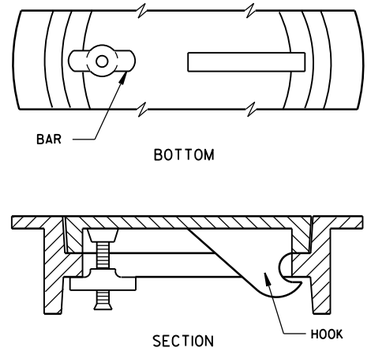
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

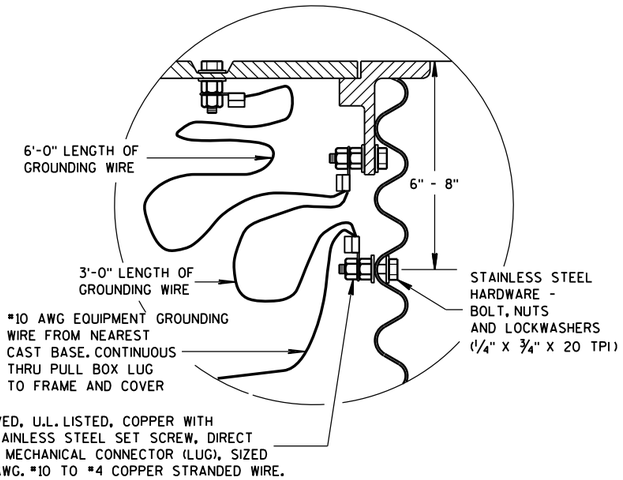


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

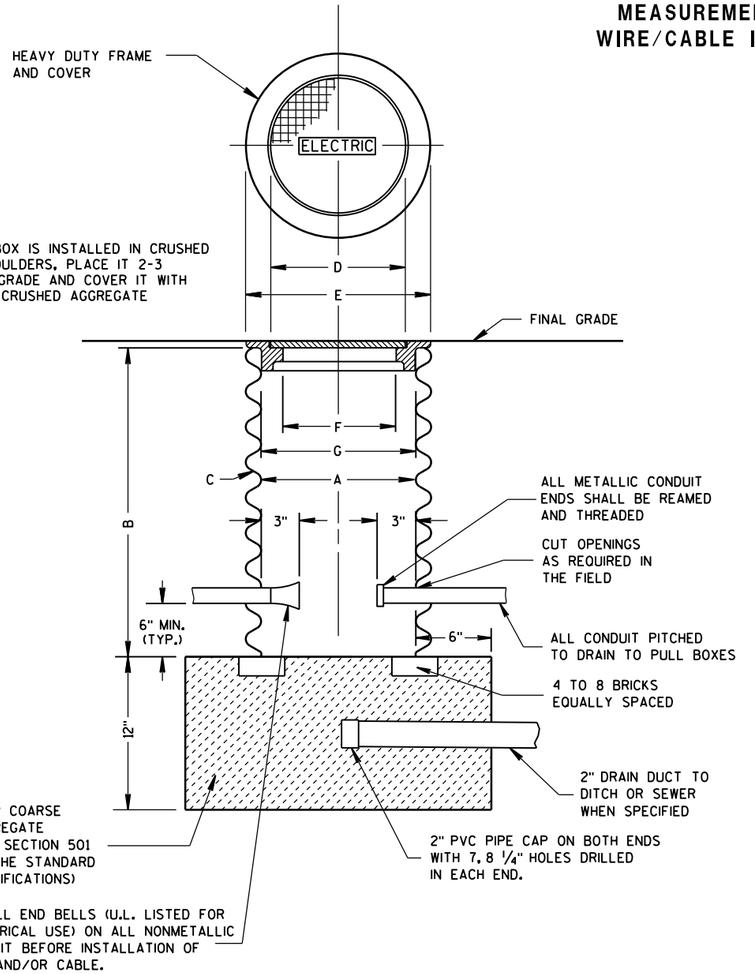


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

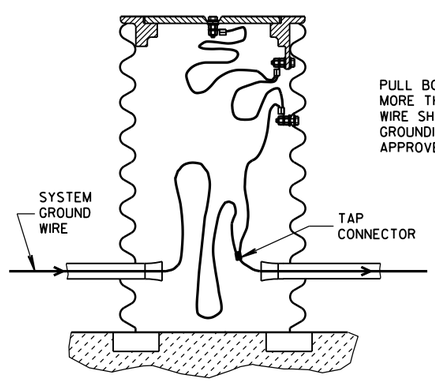
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

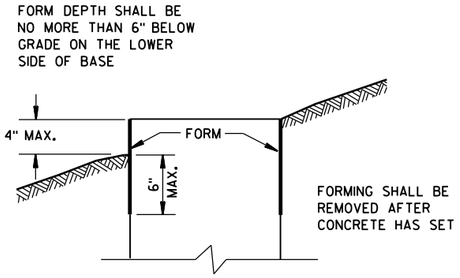
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

6

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.

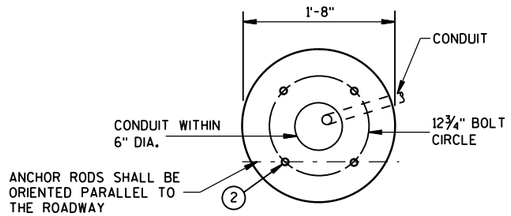
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

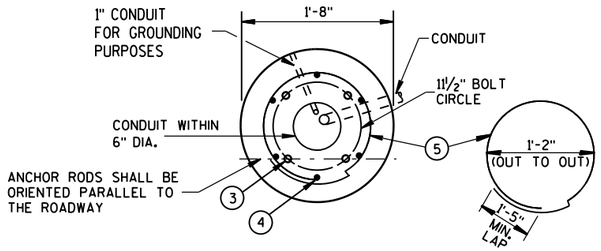
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

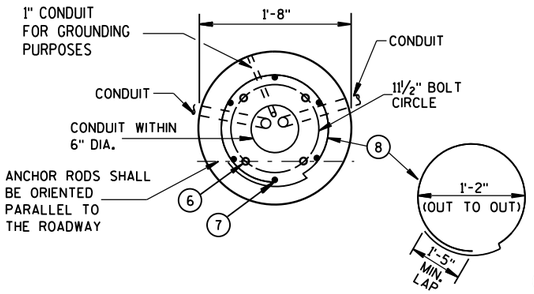
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

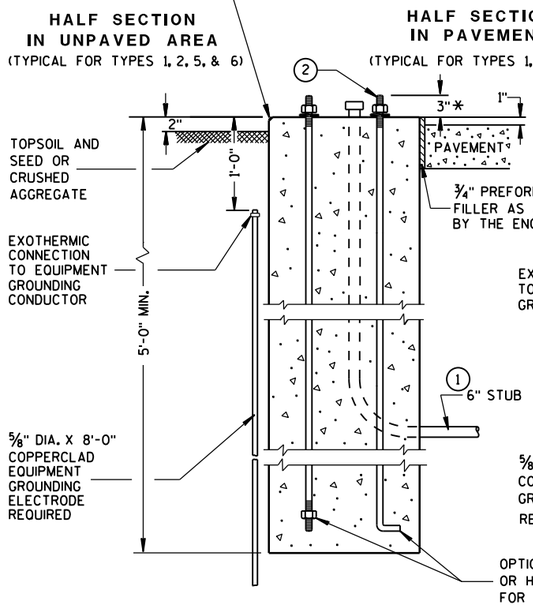
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

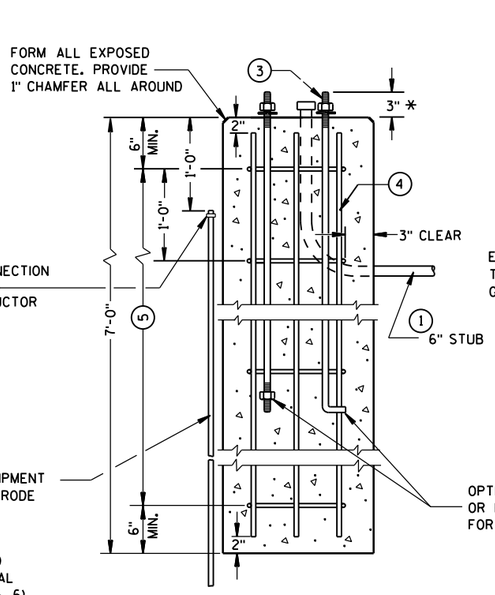
(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



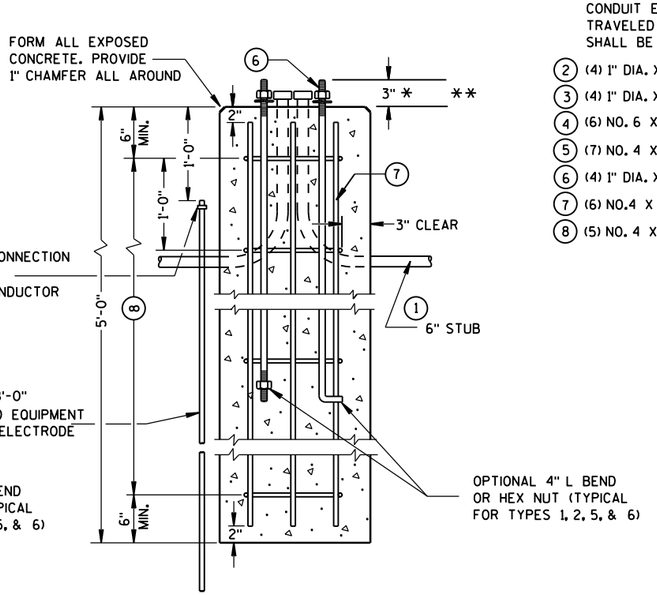








TYPE 2



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.

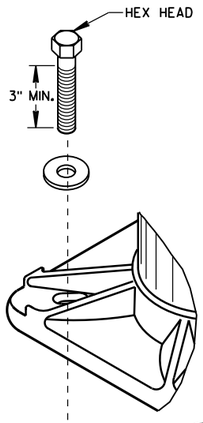
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

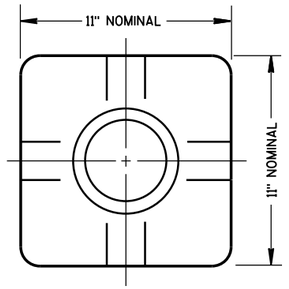
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

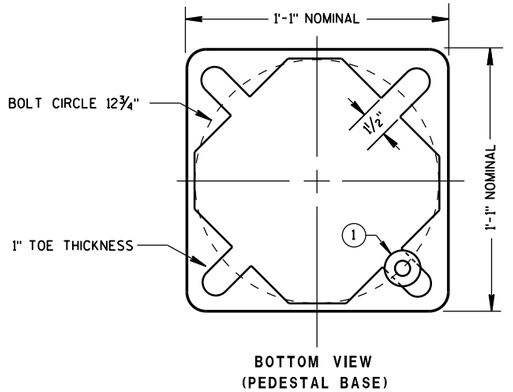
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

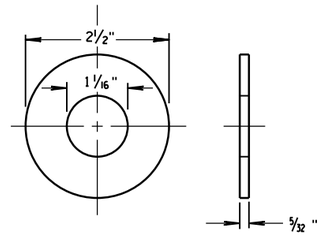




TOP VIEW
(PEDESTAL BASE)

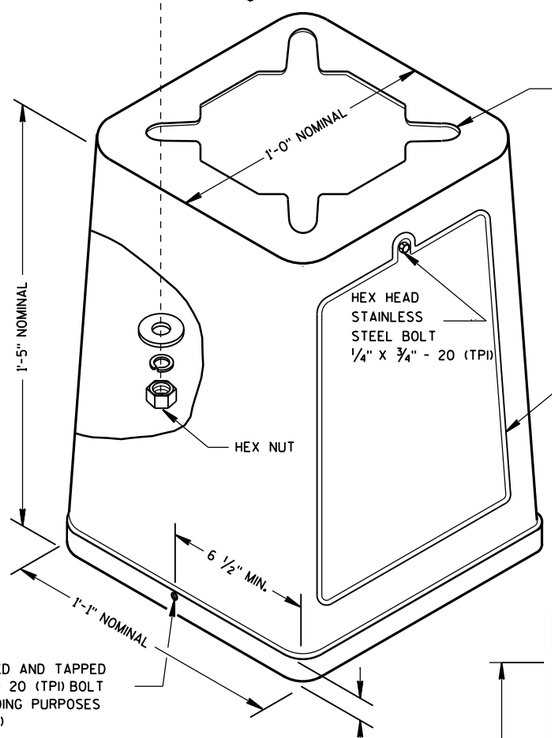


BOTTOM VIEW
(PEDESTAL BASE)

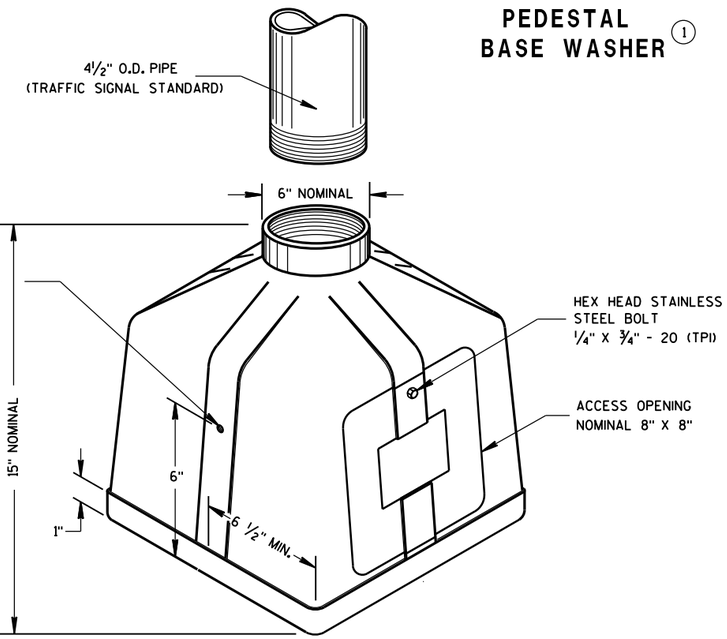


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

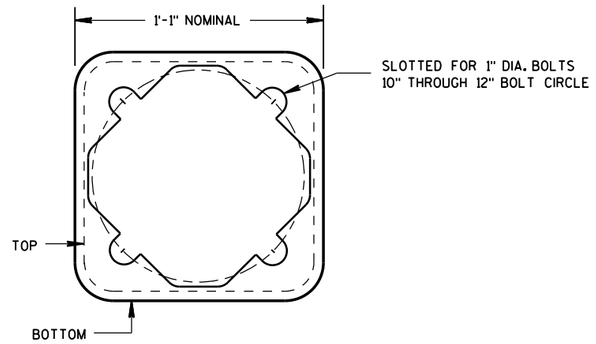


ISOMETRIC VIEW

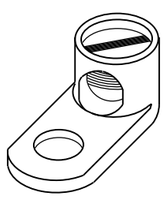


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

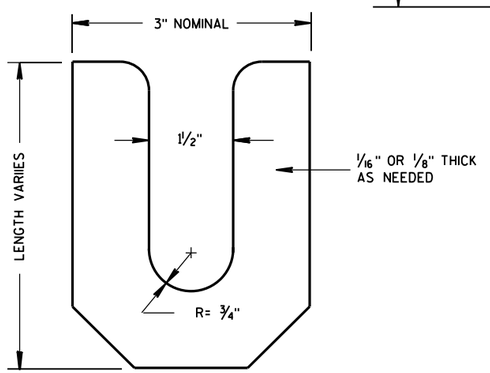


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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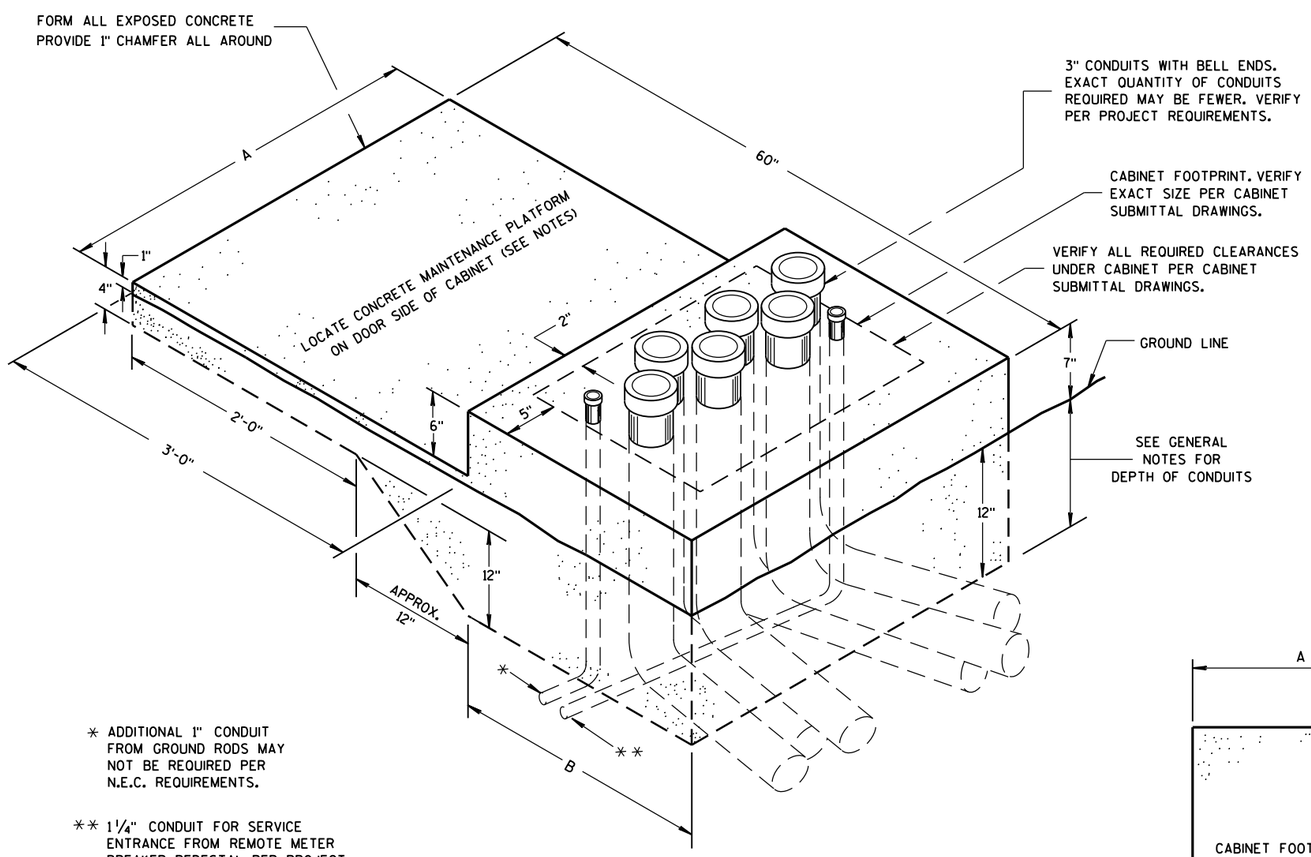
S.D.D. 9 C 3-4



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

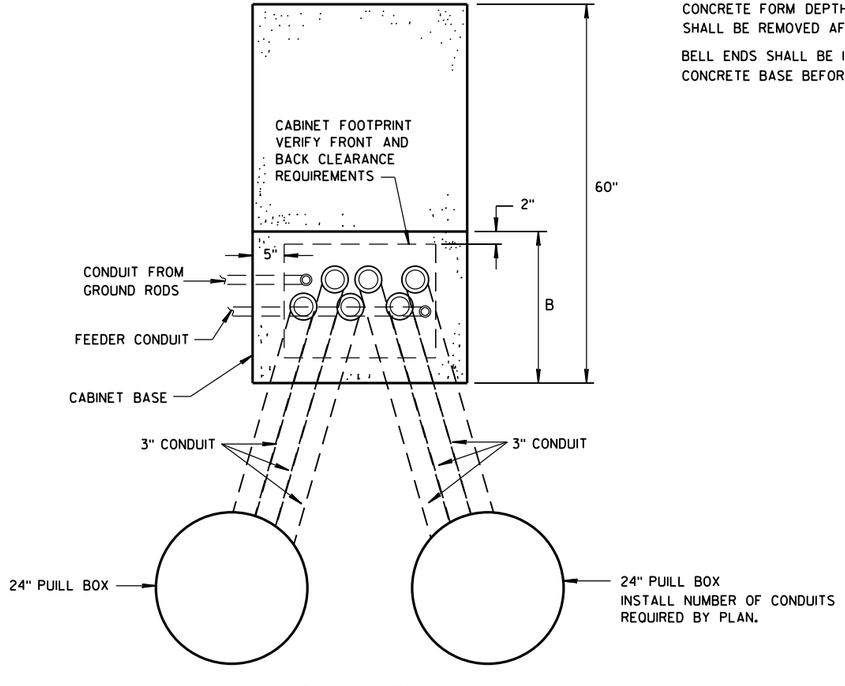
** 1¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

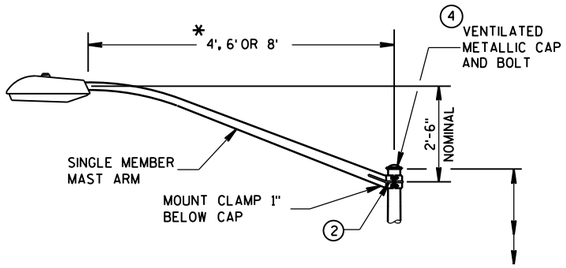
BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

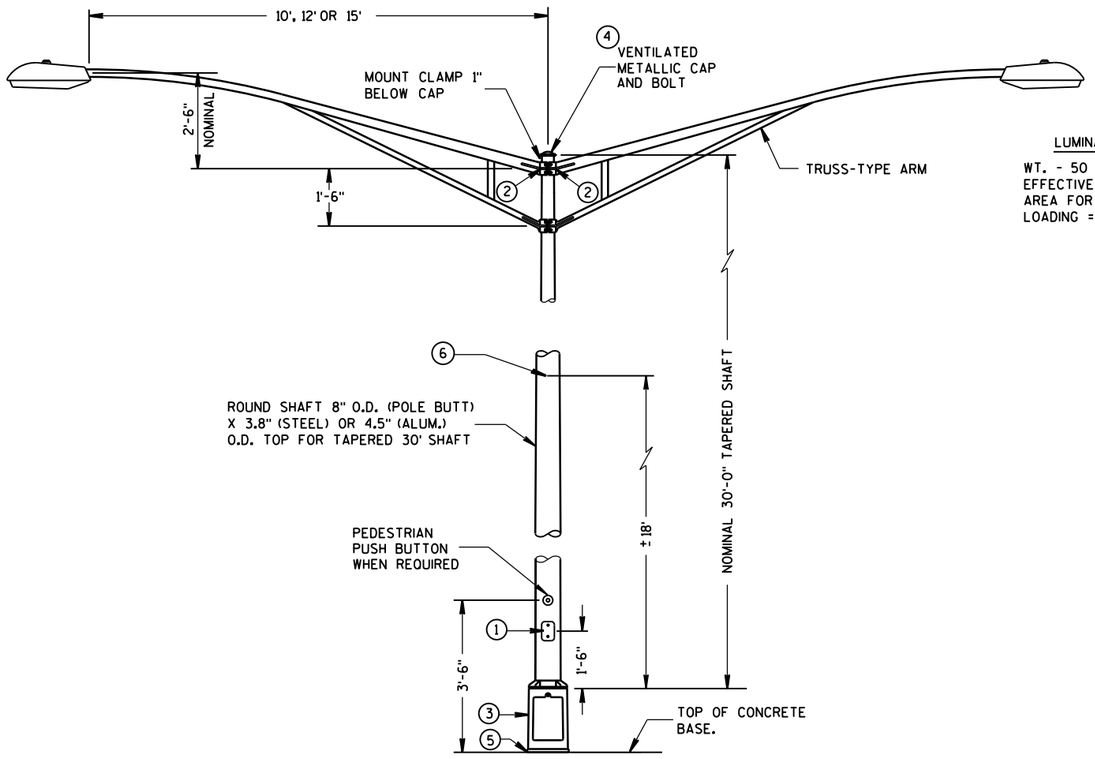
CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

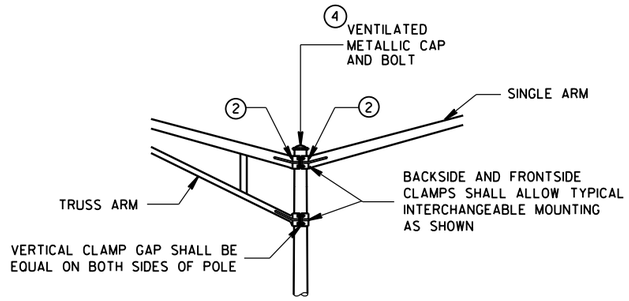
APPROVED
Nov. 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINE
FHWA

*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

6

S.D.D. 9 E 1-14d

POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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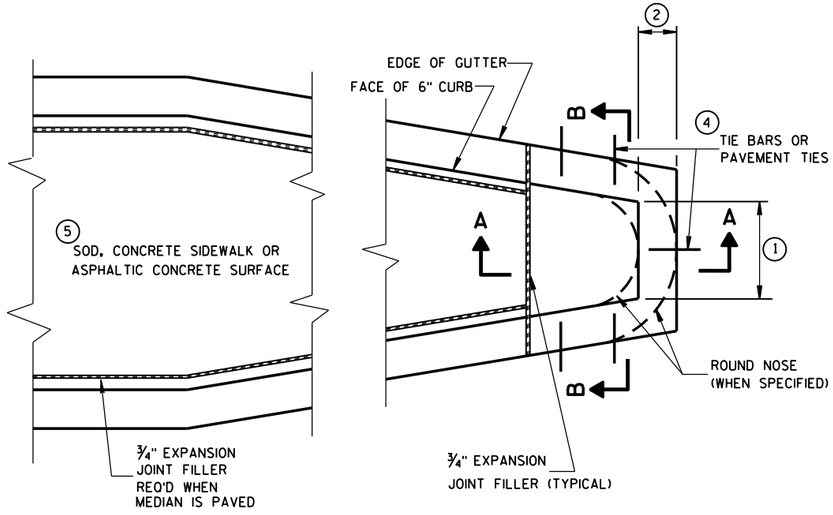
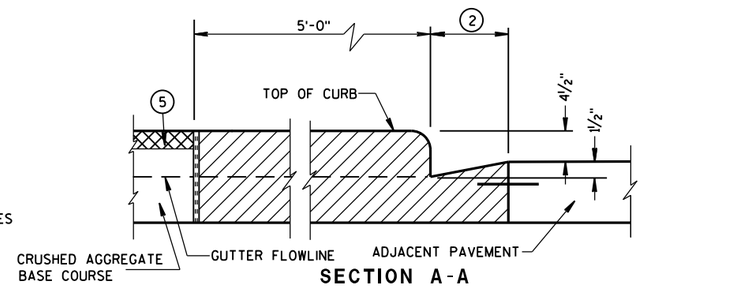
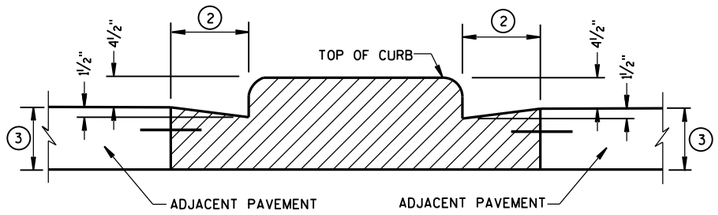






CONCRETE MEDIAN BLUNT NOSE DETAIL

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.

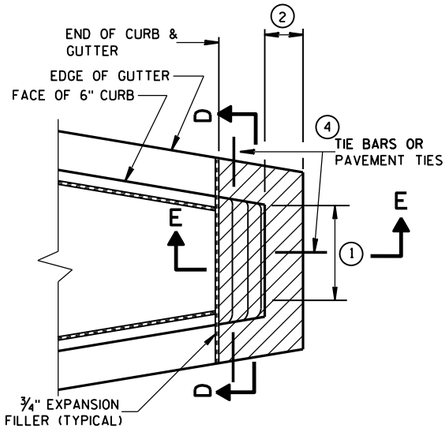
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

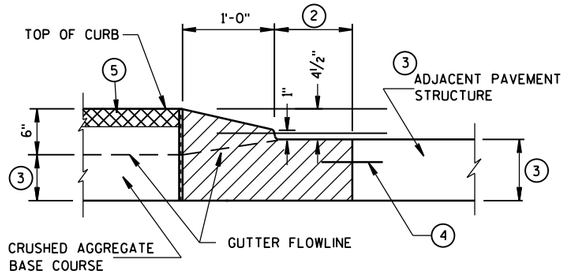
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(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.

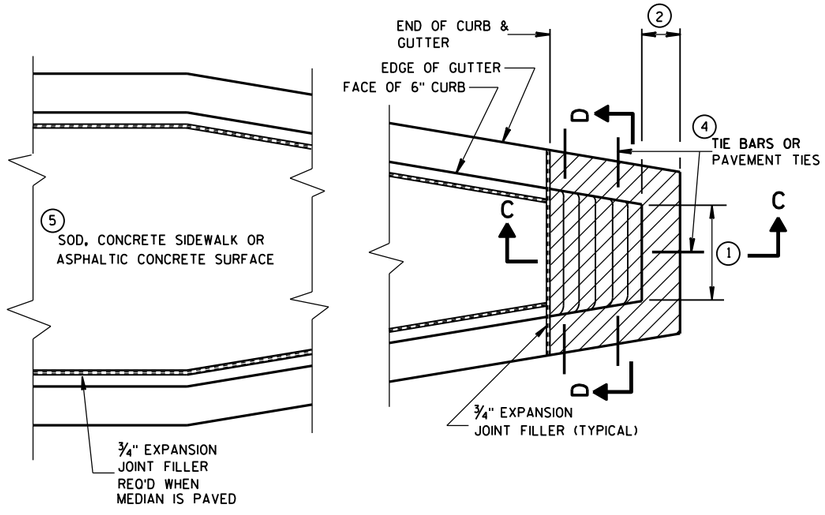
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

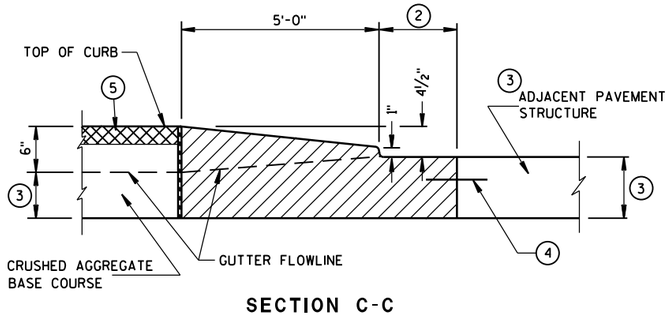




SECTION E-E

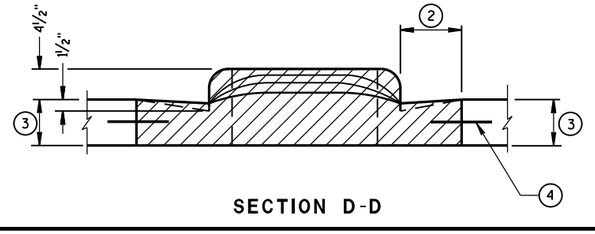
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1

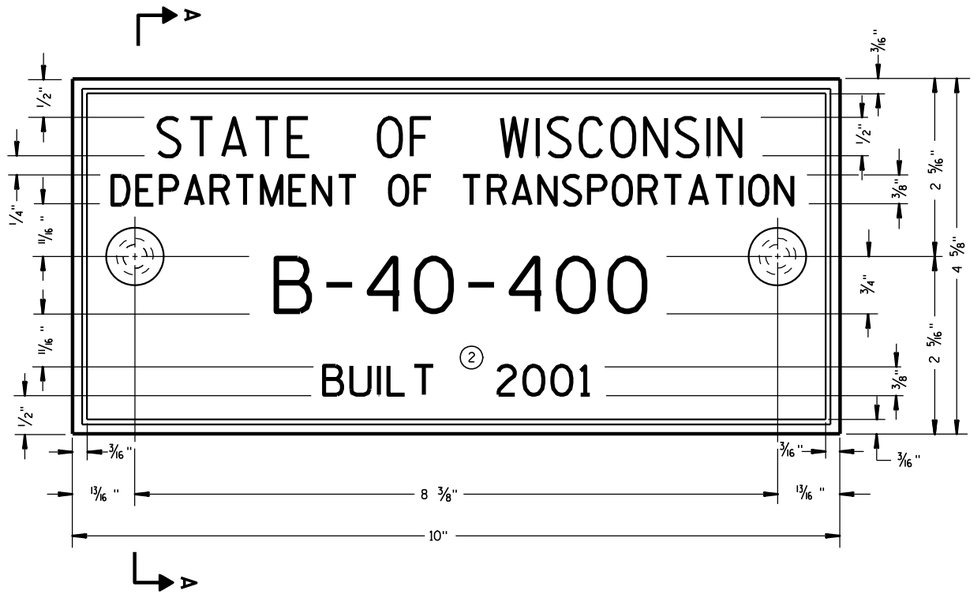


SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

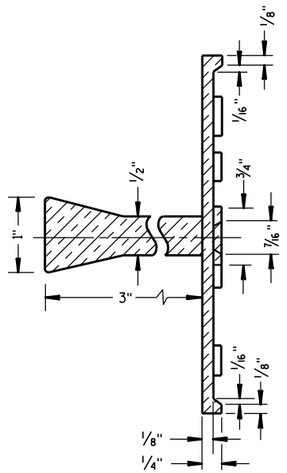
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

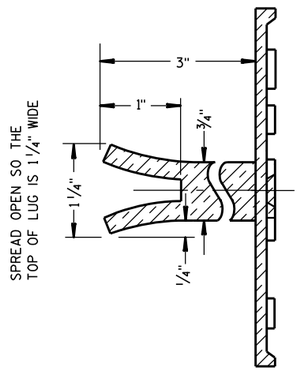
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

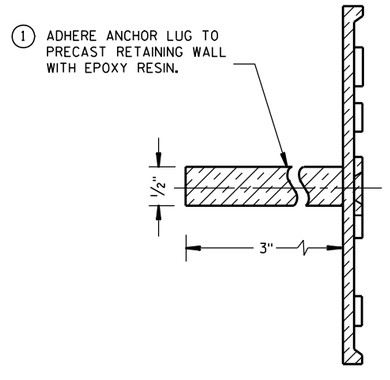
COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE

/S/ Scot Beck-- CHIEF STRUCTURAL DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 12 A 3-10

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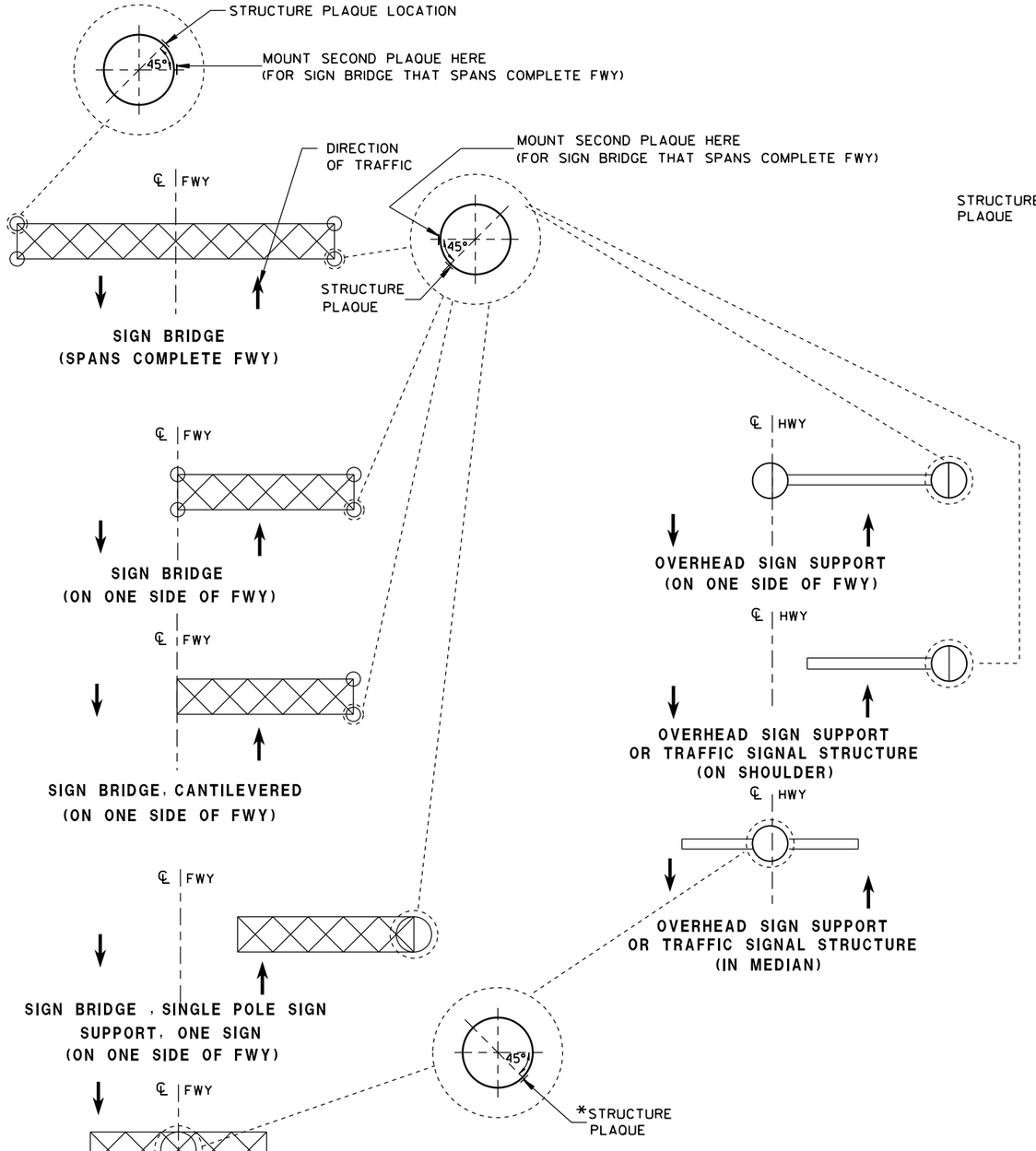
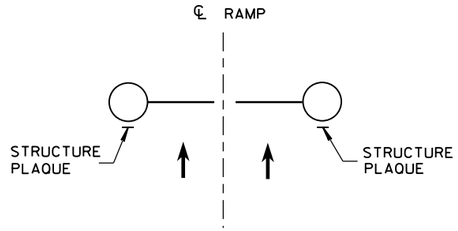
S.D.D. 12 A 3-10

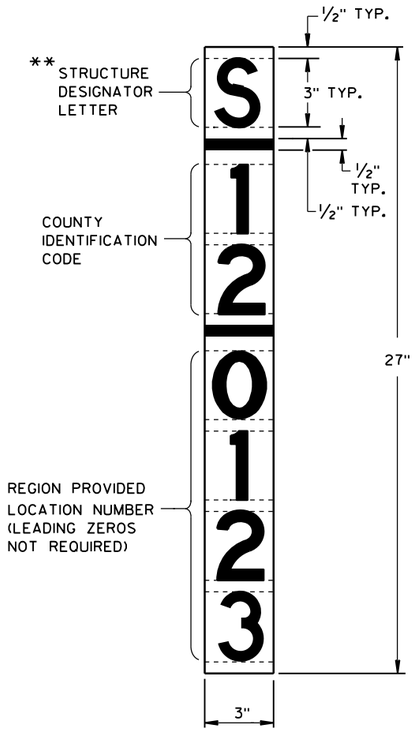


*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



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.

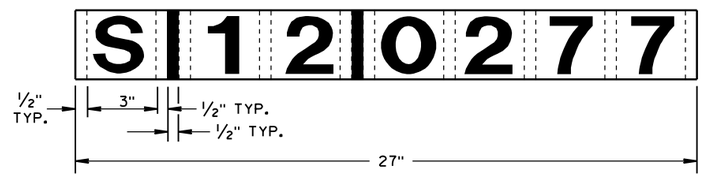
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

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

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S.D.D. 12 A 4-3

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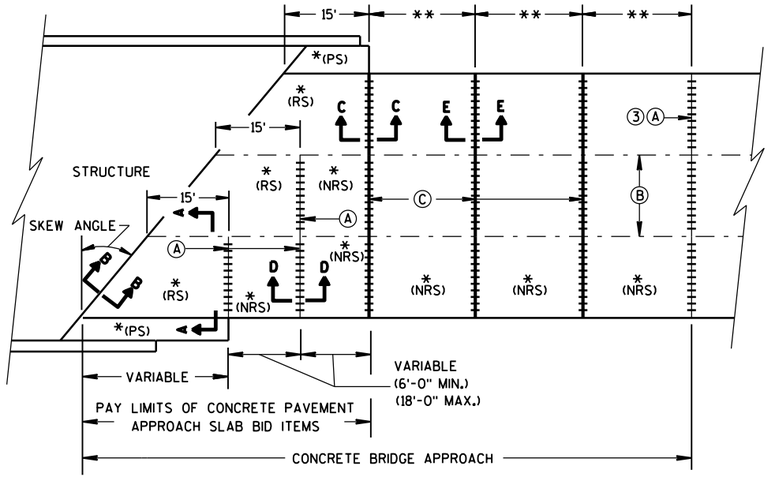
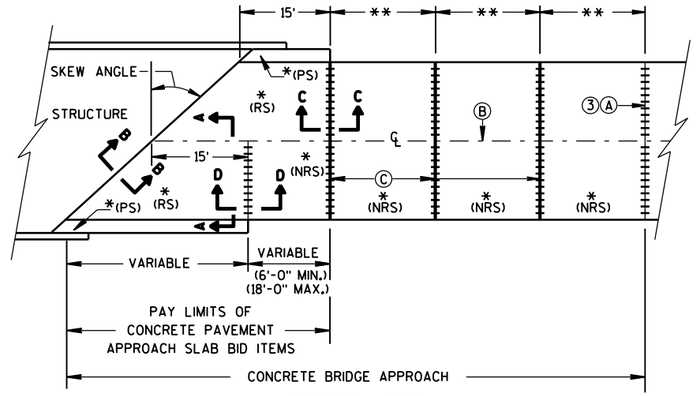
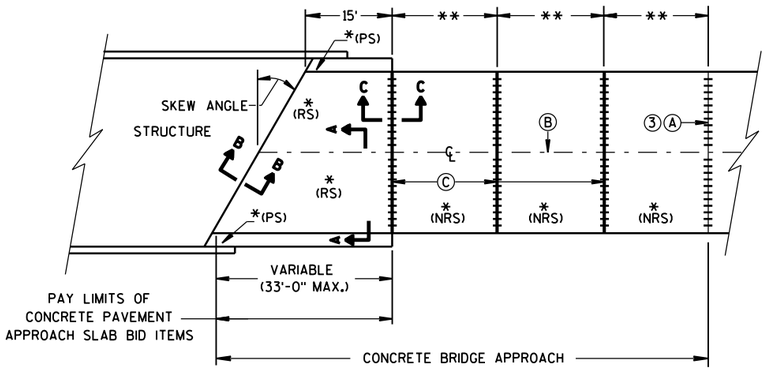
S.D.D. 12 A 4-3



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >30°
(PAVEMENT WIDTH ≤30')



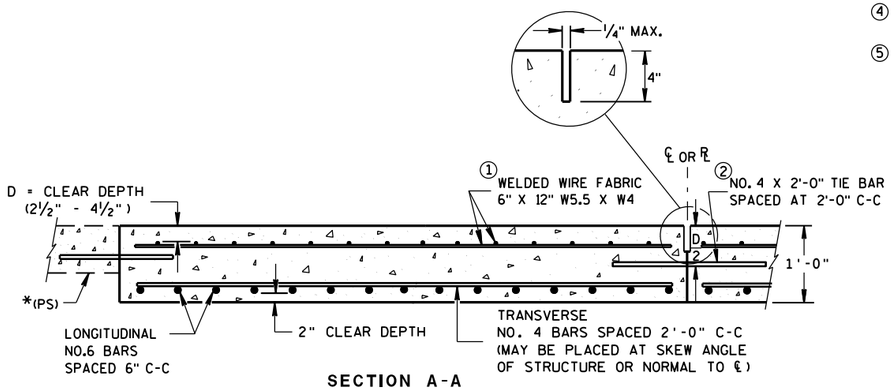
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

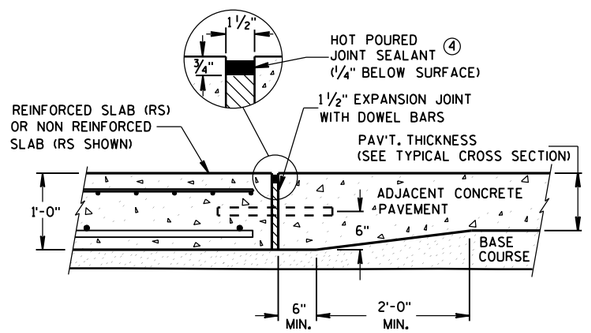
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN (SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING (SEE SDD 13C4, SDD 13C11, & SDD 13C13)
***STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11, & SDD 13C13)

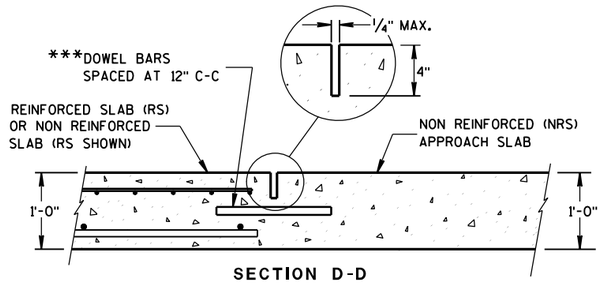
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
(B) STANDARD LONGITUDINAL JOINT AND TIE BARS.
(C) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



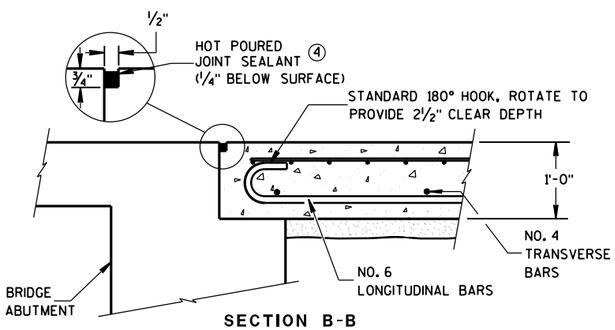
SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

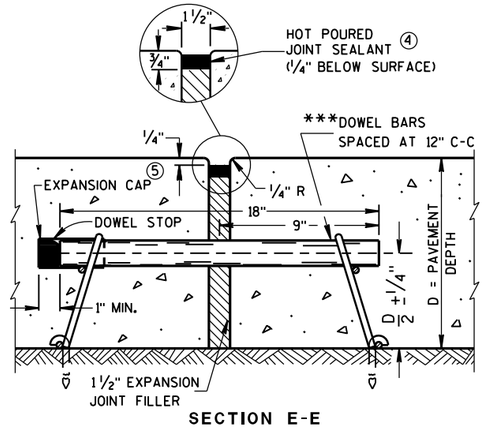
THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

1. THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.
2. THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.
3. DO NOT DOWEL A CONTRACTION JOINT THAT ABUTS AN HMA PAVEMENT.
4. USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.
5. PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION E-E
EXPANSION JOINT

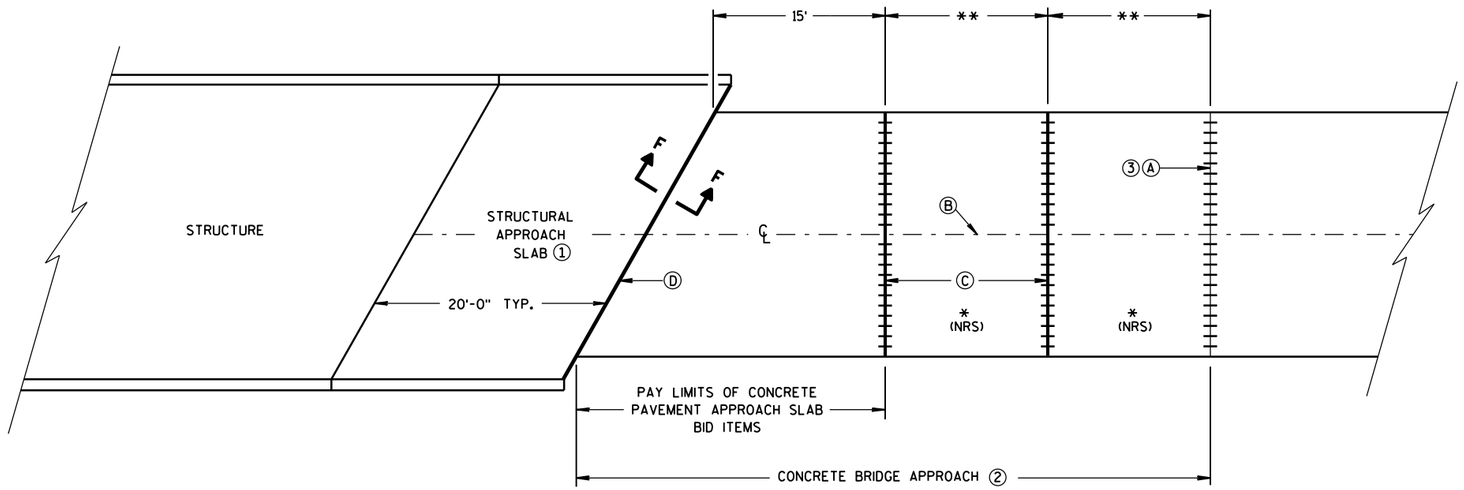
CONCRETE BRIDGE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2014 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DE
FHWA

6

S.D.D. 13 B 2-7a



BRIDGE APPROACHES

GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE BRIDGE APPROACH.

① CONFORM TO APPLICABLE BRIDGE MANUAL STANDARD DRAWINGS FOR *STRUCTURAL APPROACH SLABS* (SEE CHAPTER 12 - ABUTMENTS).

② CONFORM TO SHEET (a) OF THIS SET FOR *CONCRETE BRIDGE APPROACH* DETAILS, WITH ONE EXCEPTION — WHEN CONSTRUCTING A *CONCRETE BRIDGE APPROACH* NEXT TO A *STRUCTURAL APPROACH SLAB*, AS SHOWN IN THE DETAIL DRAWING, THE *CONCRETE BRIDGE APPROACH* WILL ONLY HAVE TWO EXPANSION JOINTS; THE THIRD EXPANSION JOINT IS AT THE END OF THE *STRUCTURAL APPROACH SLAB*.

③ DO NOT DOWEL A CONTRACTION JOINT THAT ABUTS AN HMA PAVEMENT.

*(NRS) = NON-REINFORCED CONCRETE SLAB

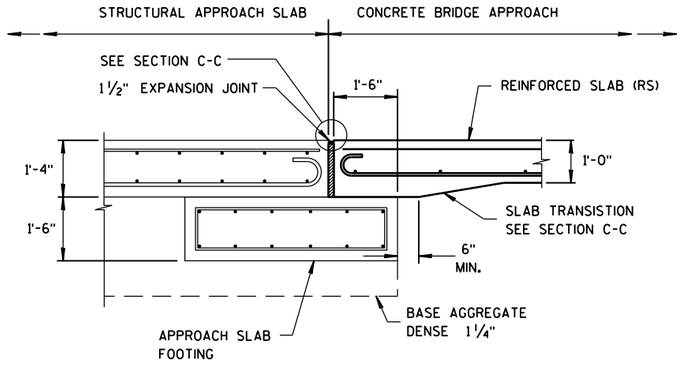
**STANDARD TRANSVERSE JOINT SPACING (SEE SDD 13C4, SDD 13C11, & SDD 13C13)

Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄

Ⓑ STANDARD LONGITUDINAL JOINT AND TIE BARS.

Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄

Ⓓ 1½" EXPANSION JOINT (NO DOWELS)



SECTION F-F

FOOTING DETAIL

STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE BRIDGE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2014 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DE
FHWA
EER

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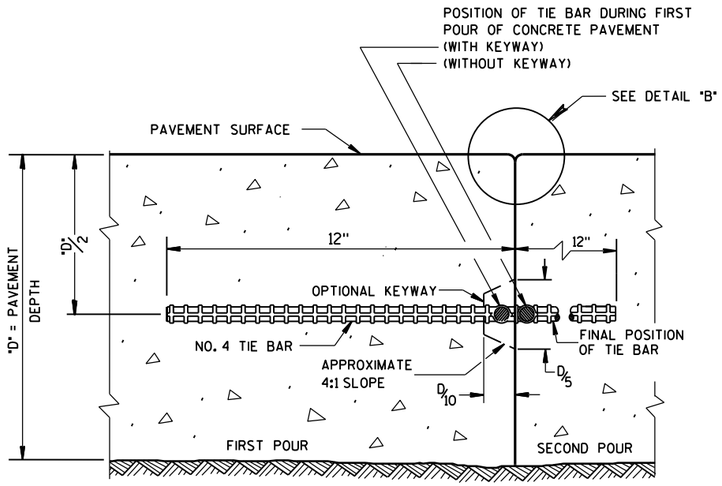
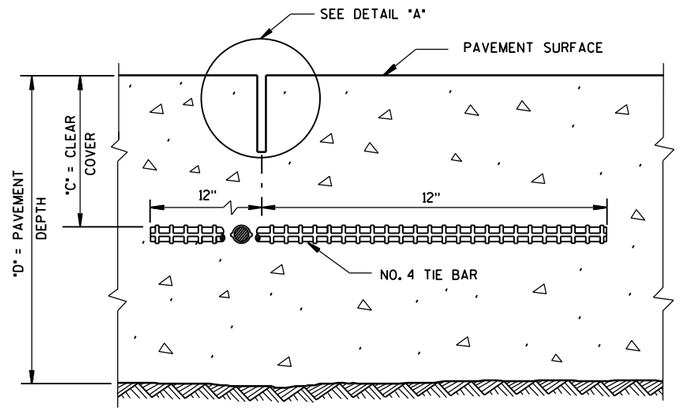
S.D.D. 13 B 2-7b



CONSTRUCTION JOINT



SAWED JOINT

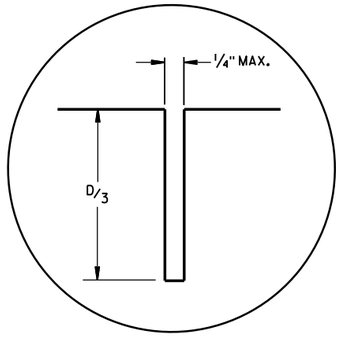
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

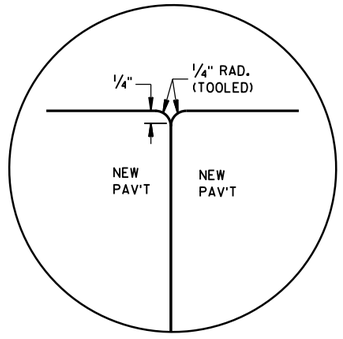
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



DETAIL "A"



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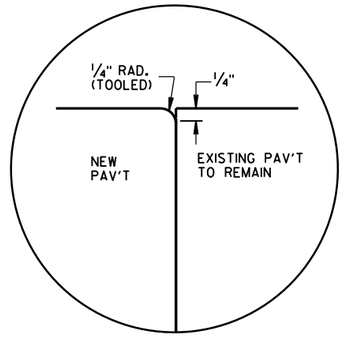
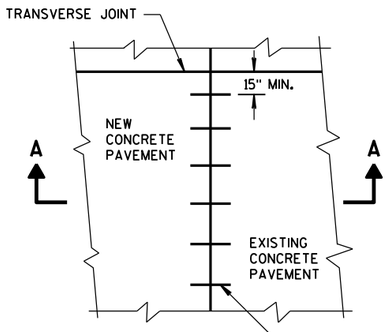
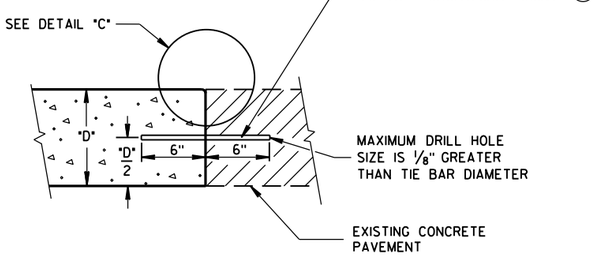


DETAIL "C"



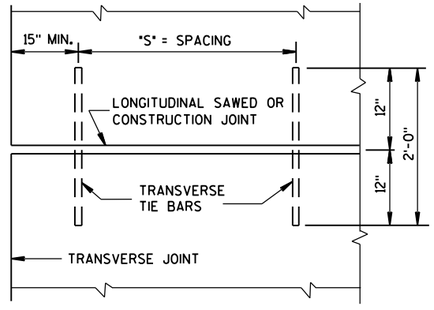
PLAN VIEW



SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

TIE BAR TABLE

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH	
		24' OR 26'	≥30'
6, 6 1/2"	3"±1/2"	48"	42"
7, 7 1/2"	3 1/4"±1"	45"	36"
8, 8 1/2"	3 3/4"±1"	39"	30"
9, 9 1/2"	4 1/4"±1"	33"	27"
10, 10 1/2"	4 3/4"±1"	30"	24"
11, 11 1/2"	5 1/4"±1"	27"	21"
12"	5 3/4"±1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

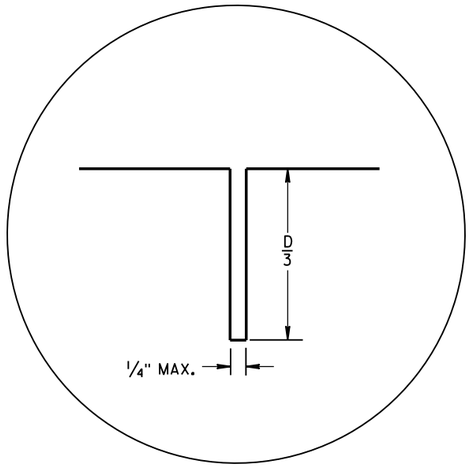
9/2014 — DATE

/S/ Deb Bischoff — PAVEMENT POLICY & DE ... NEER

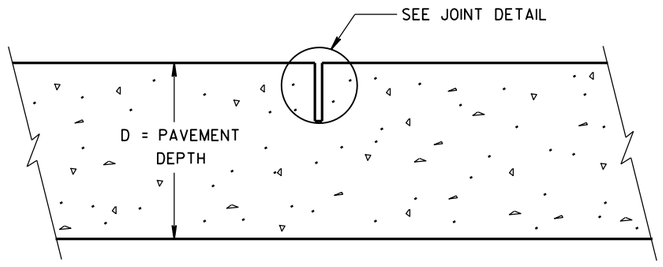
FHWA

6

S.D.D. 13 C 1-17



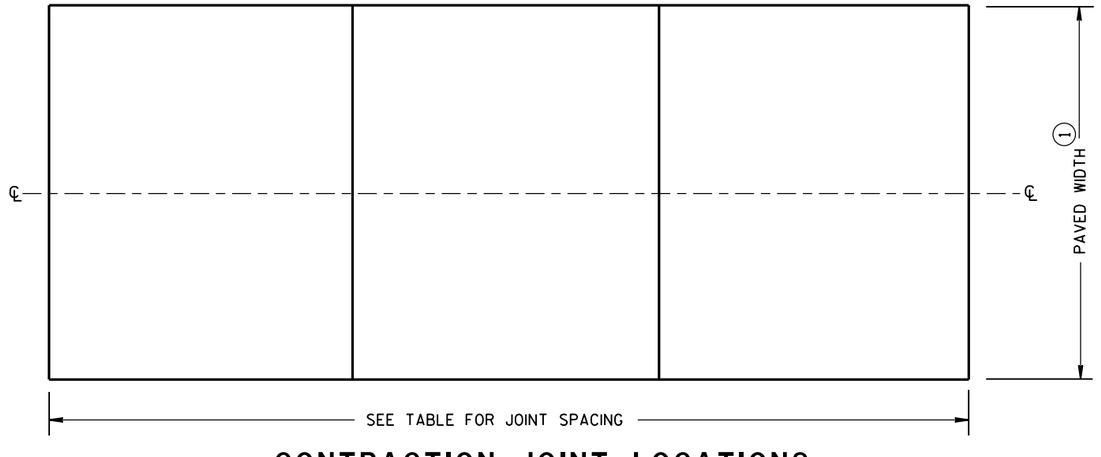
JOINT DETAIL



CONTRACTION JOINT

PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 1/2"	12'
7", 7 1/2"	14'
8" & ABOVE	15'



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE.

LOCATE AND ORIENT CONTRACTION JOINTS THROUGH INTERSECTIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

CONSTRUCTION JOINTS

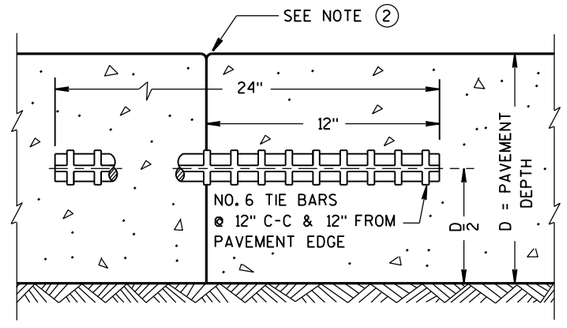
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

FORM OR SAW CONSTRUCTION JOINTS.

THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

(1) REFER TO TYPICAL CROSS SECTIONS FOR PAVED WIDTH AND LOCATION OF LONGITUDINAL JOINTS.

(2) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.



TIED TRANSVERSE CONSTRUCTION JOINT

6

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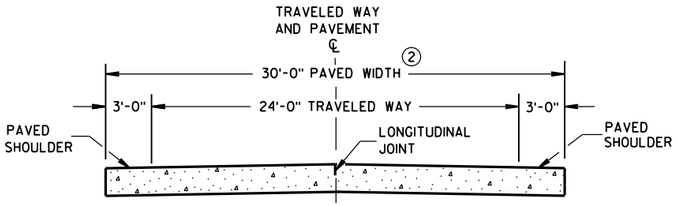
S.D.D. 13 C 4-16

S.D.D. 13 C 4-16

URBAN
NON-DOWELED CONCRETE PAVEMENT

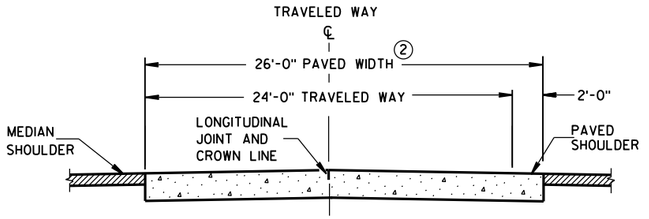
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-3-2013 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DE
IEER
FHWA

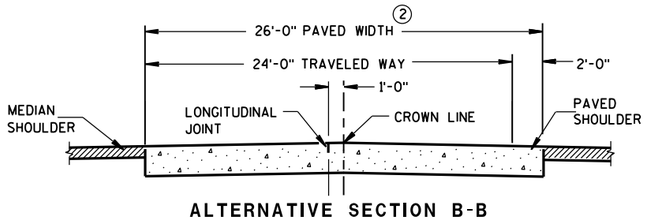


SECTION A-A ①

TWO-LANE TWO-WAY HIGHWAY



SECTION B-B



ALTERNATIVE SECTION B-B ①

DIVIDED HIGHWAY

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 FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

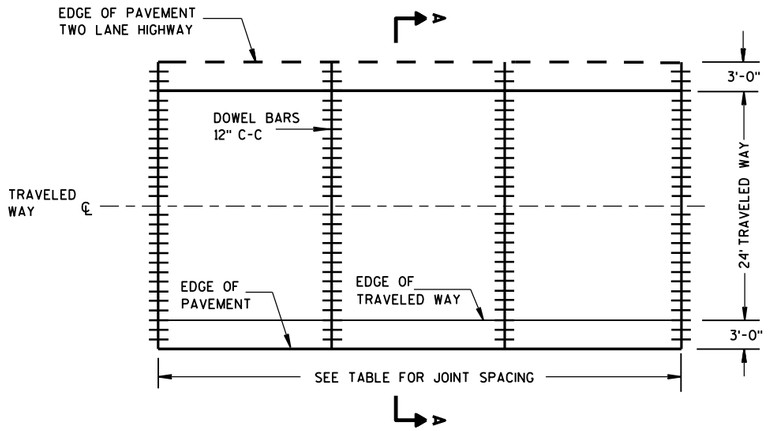
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

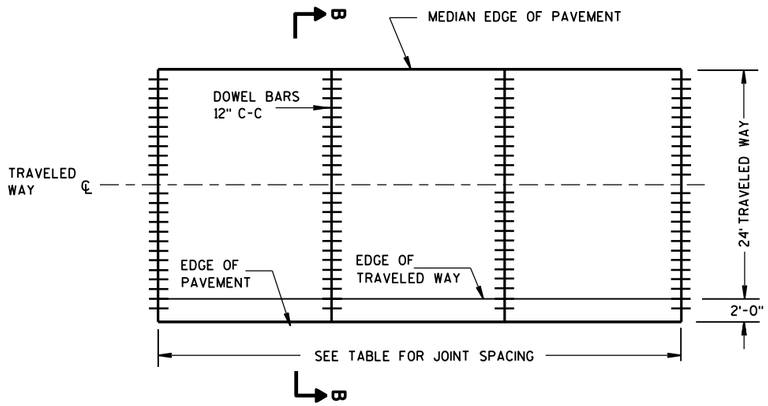
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

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'



CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY



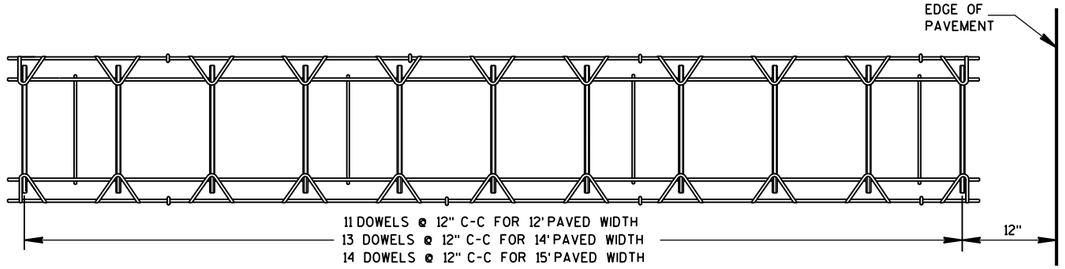
CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED
CONCRETE PAVEMENT

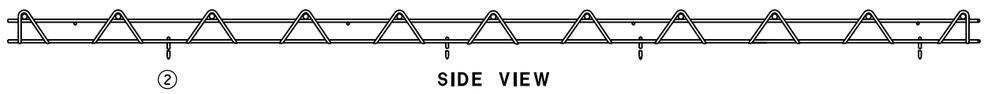
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 C 11-11a



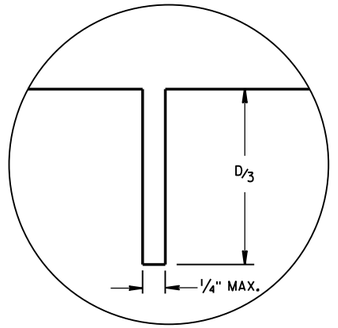
PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

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.

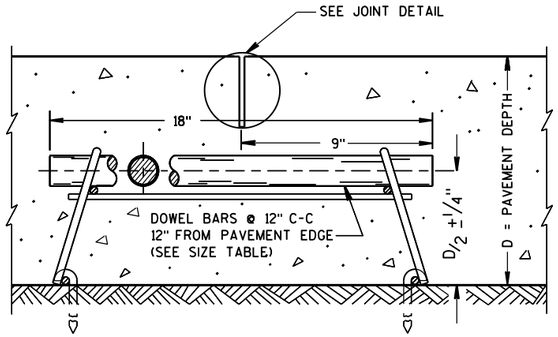
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

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

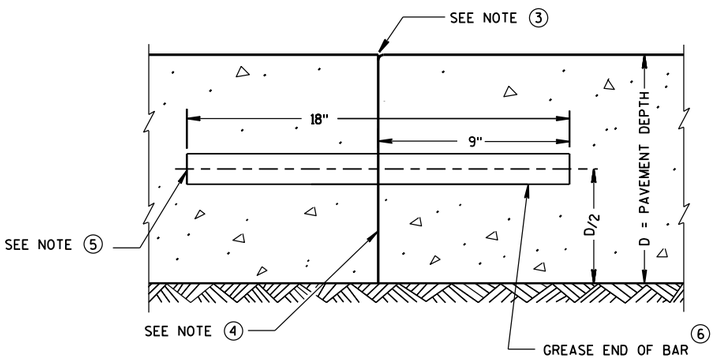
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

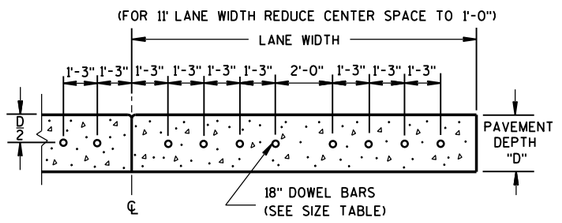
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

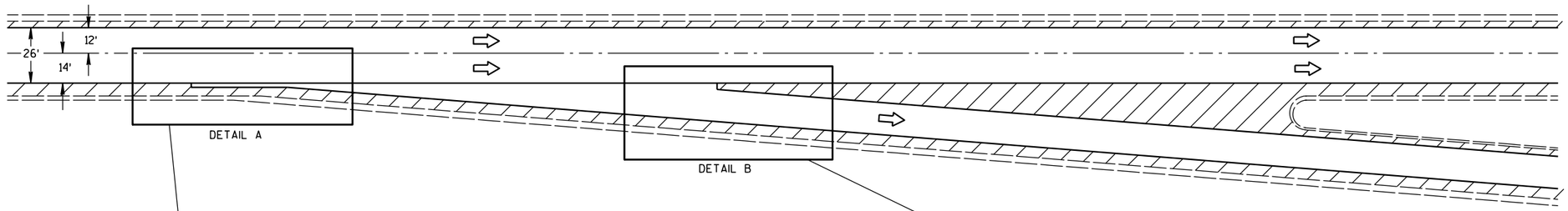
APPROVED
5/3/2013 DATE
/S/ Deb Bischoff PAVEMENT POLICY & DE ENGINEER
FHWA

6

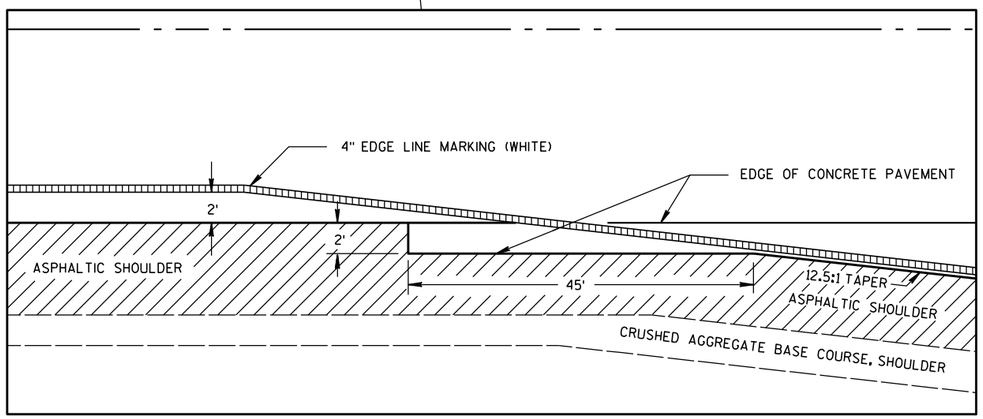
S.D.D. 13 C 11-11b

6

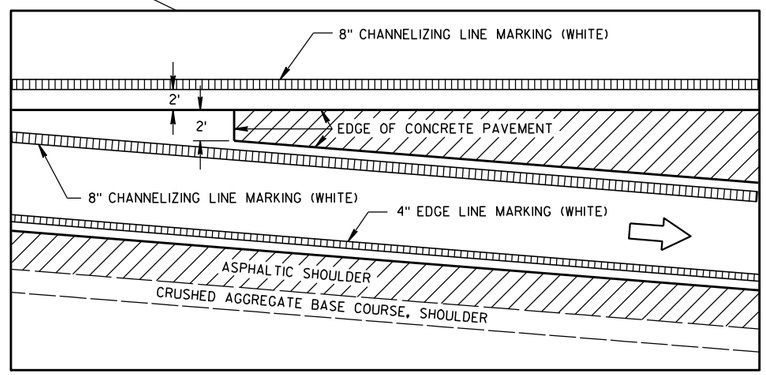
S.D.D. 13 C 11-11b



EXIT RAMP DETAIL



DETAIL A



DETAIL B

CONCRETE JOINT PAVING DETAILS

GENERAL NOTES

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

SEE SDD 13 A 4-4c OR SDD 13 A 5-1b FOR RAMP AND GORE RUMBLE STRIP LOCATION.

CONCRETE JOINT DETAIL FOR EXIT RAMP TERMINI

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 17-1a

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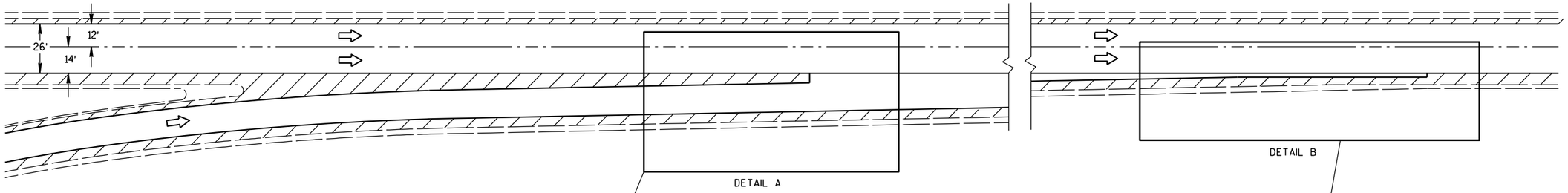
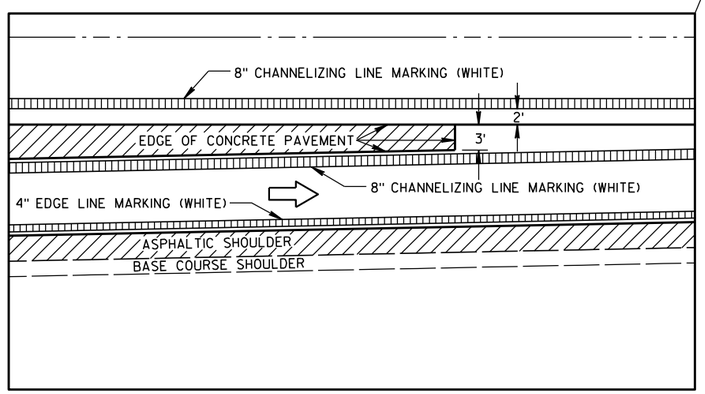
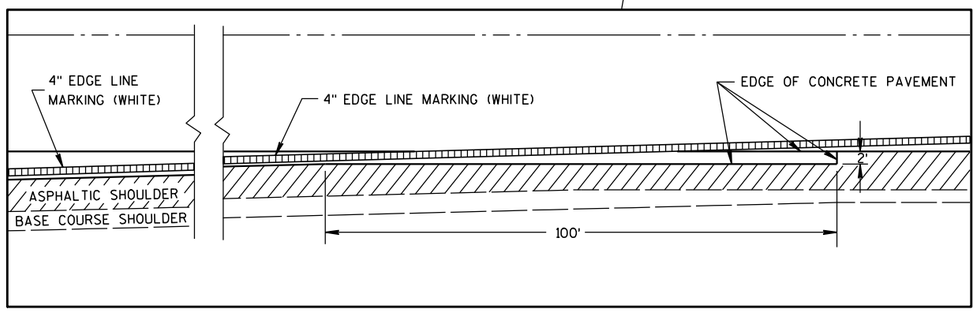
S.D.D. 13 C 17-1a



ENTRANCE RAMP DETAIL



DETAIL A



DETAIL B

CONCRETE JOINT PAVING DETAILS

GENERAL NOTES

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

SEE SDD 13 A 4-4c OR SDD 13 A 5-1b FOR RAMP AND GORE RUMBLE STRIP LOCATION.

CONCRETE JOINT DETAIL FOR ENTRANCE RAMP TERMINI

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

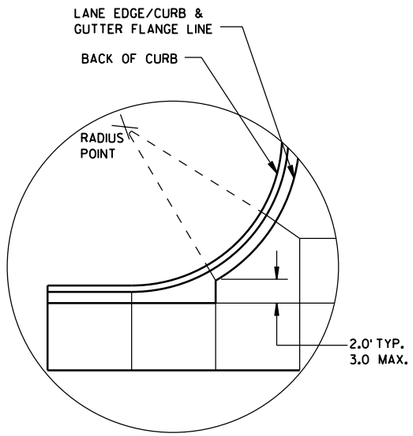
5/27/98
DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

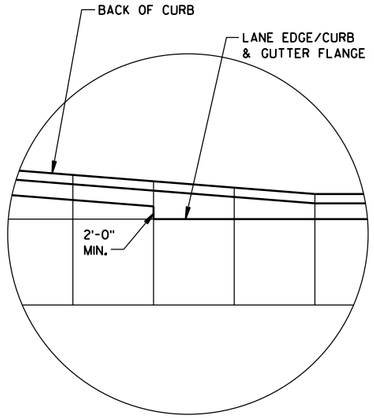
FHWA

6

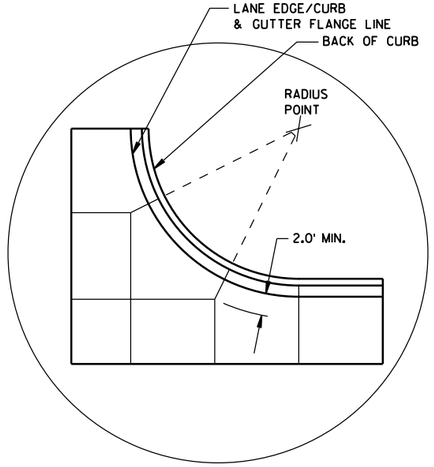
S.D.D. 13 C 17-1b



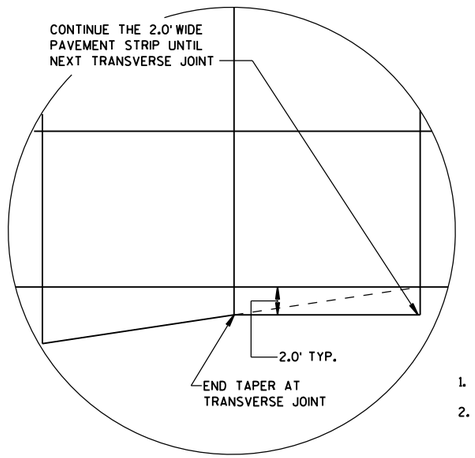
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

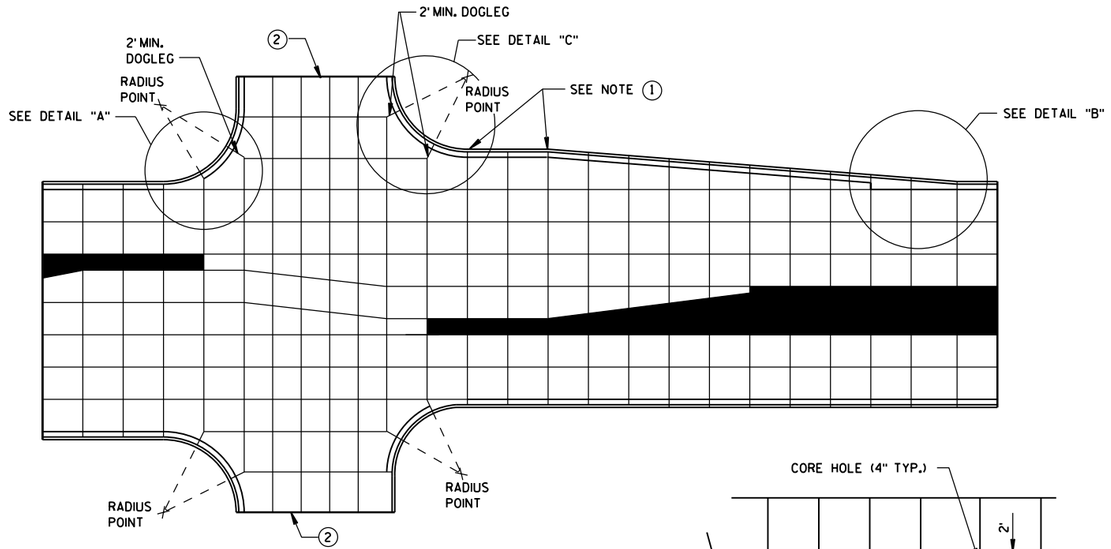
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

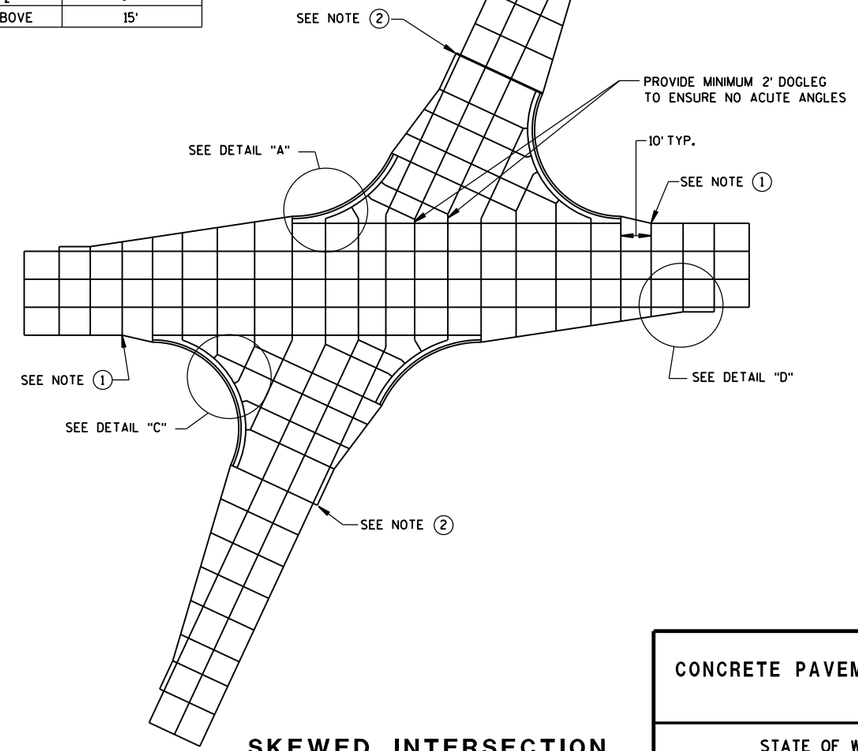
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



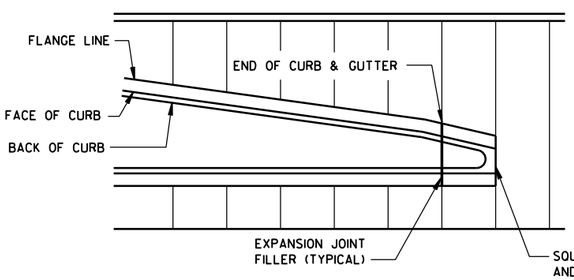
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

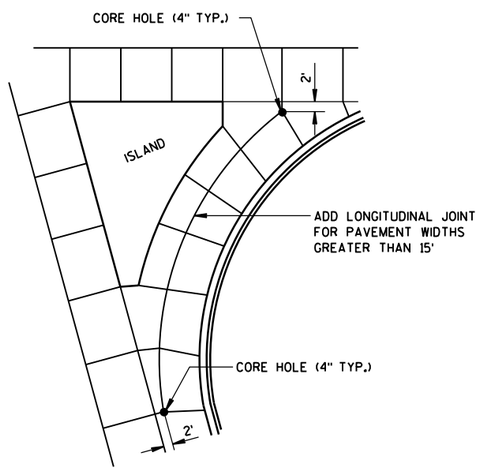
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

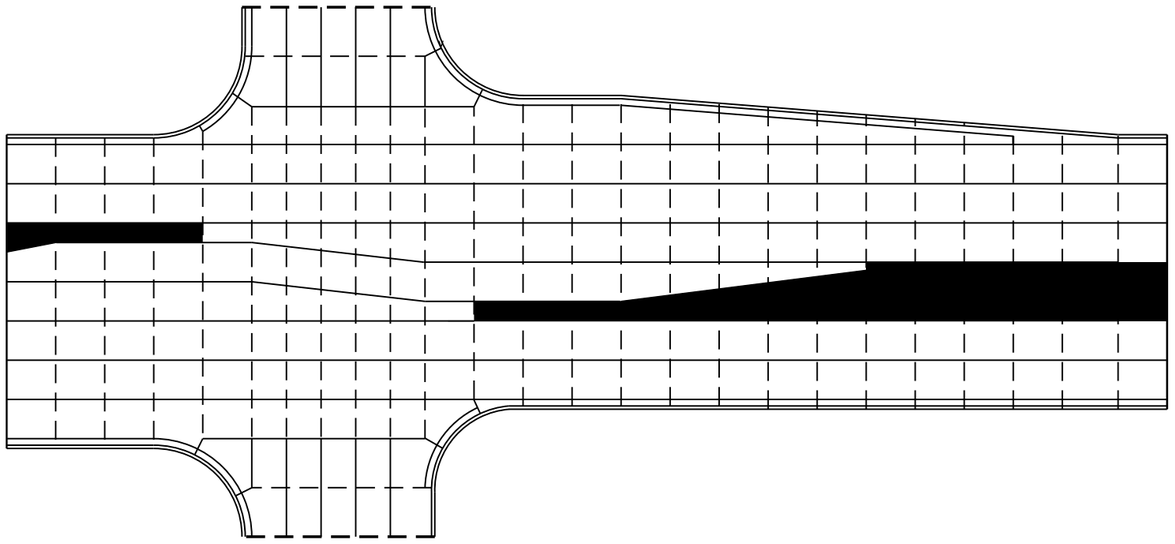
6
S.D.D. 13 C 18-2a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

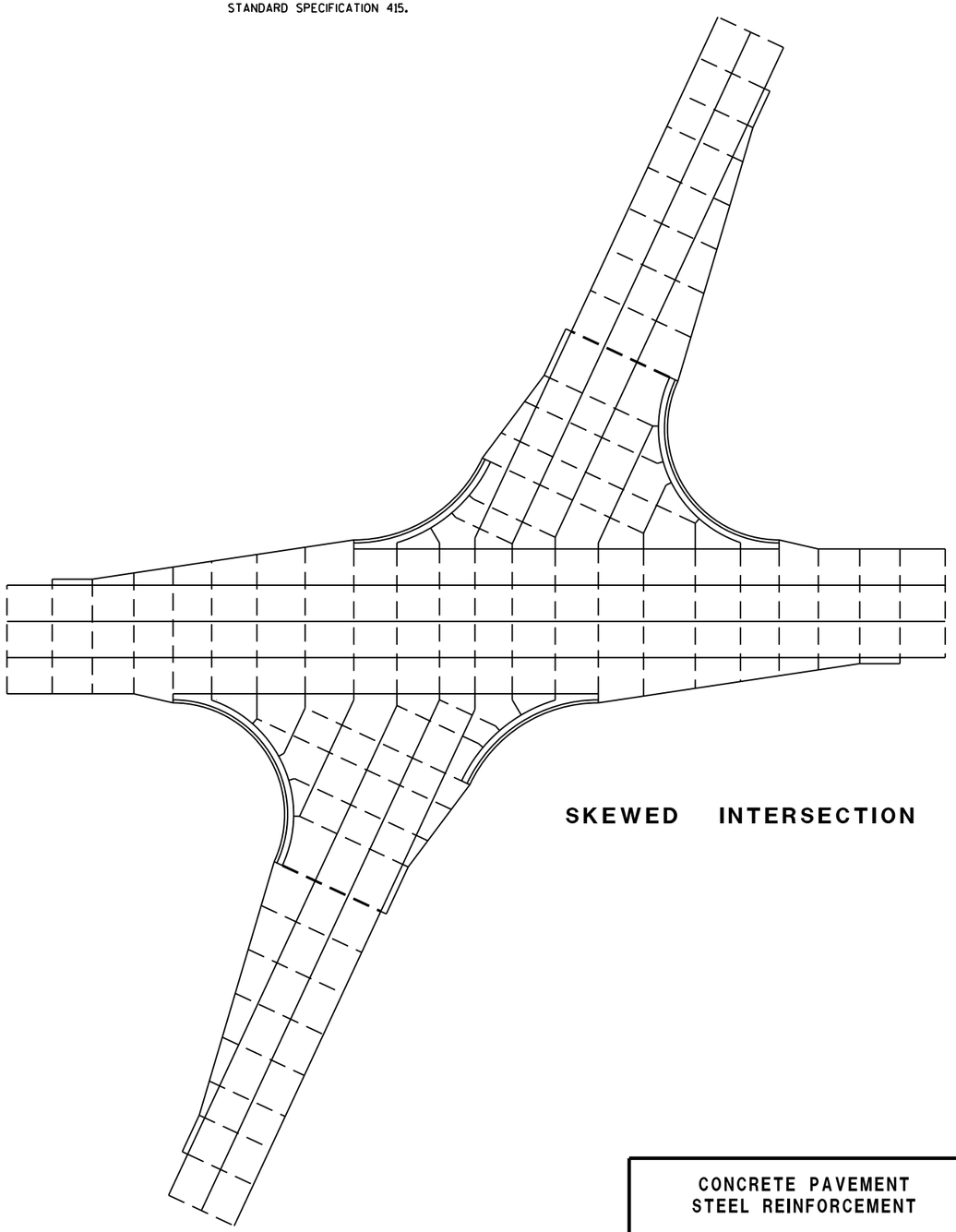
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

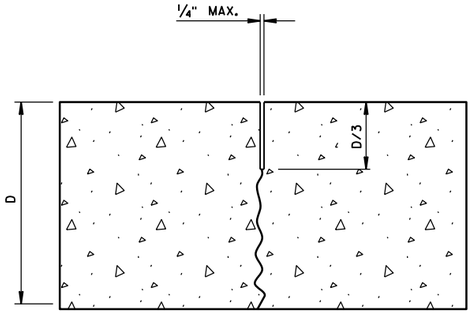
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

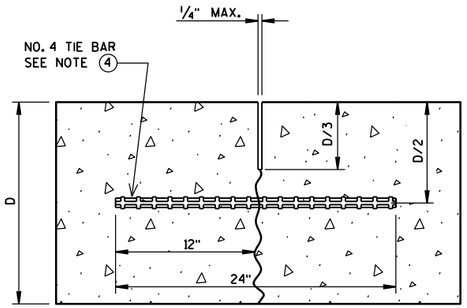
S.D.D. 13 C 18-2b

6

S.D.D. 13 C 18-2b



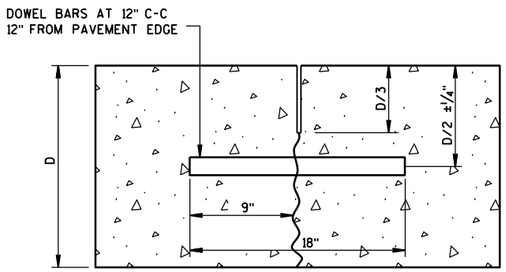
UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

GENERAL NOTES

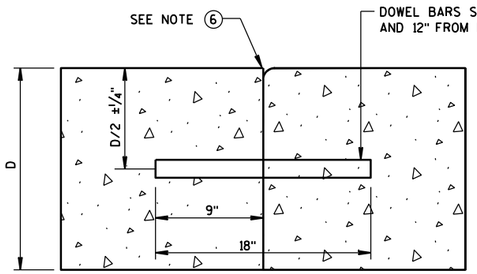
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.



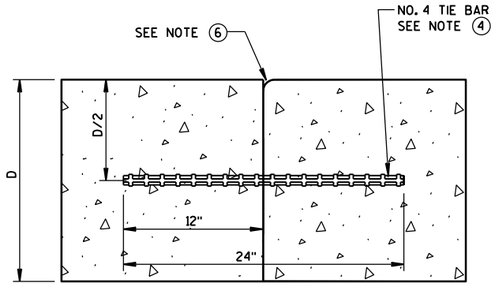
DOWELED-TRANSVERSE

CONTRACTION JOINTS

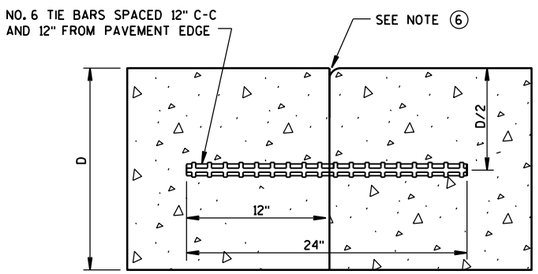
SEE NOTE (2)



DOWELED TRANSVERSE

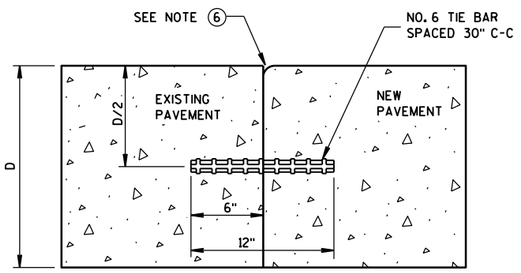


TIED LONGITUDINAL



TIED TRANSVERSE

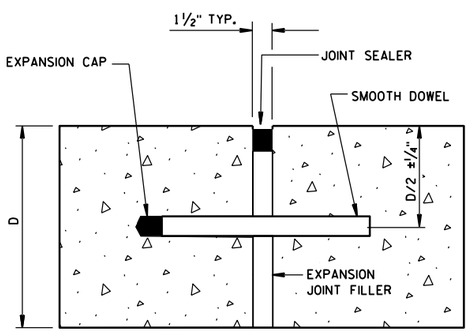
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

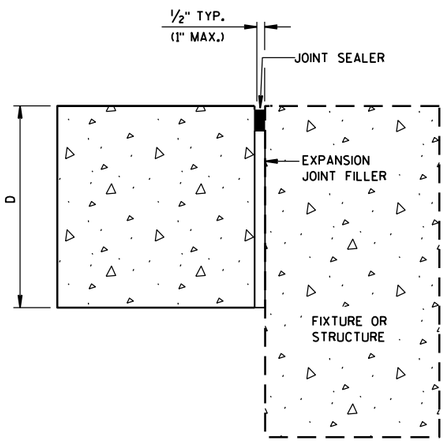
CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

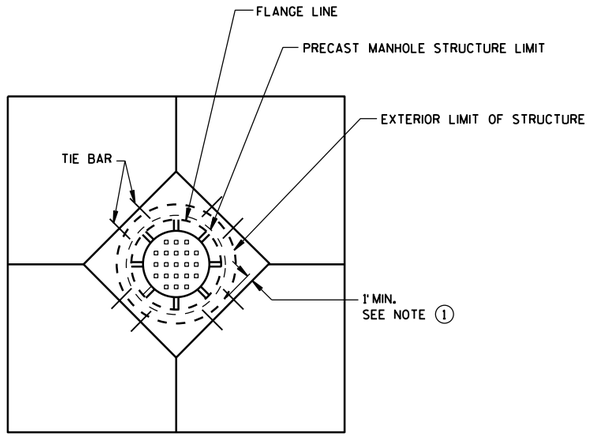
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

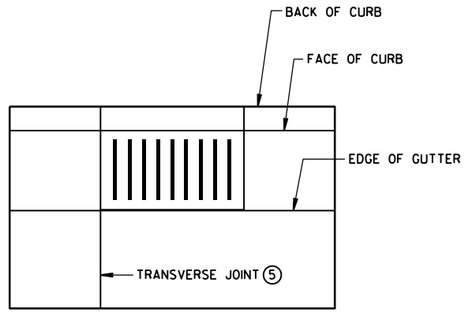
S.D.D. 13 C 18-2c

6

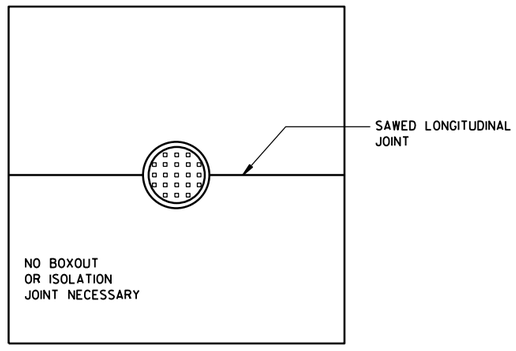
S.D.D. 13 C 18-2c



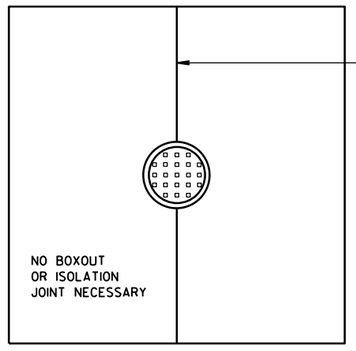
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



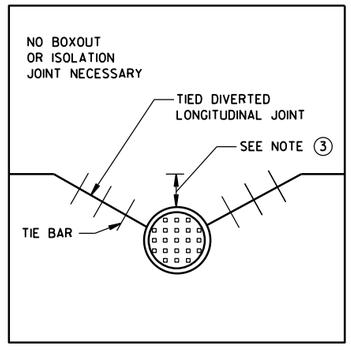
INLET WITH TRANSVERSE JOINT



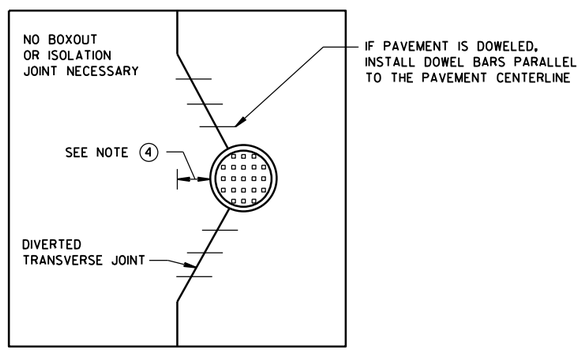
MANHOLE WITH LONGITUDINAL JOINT



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

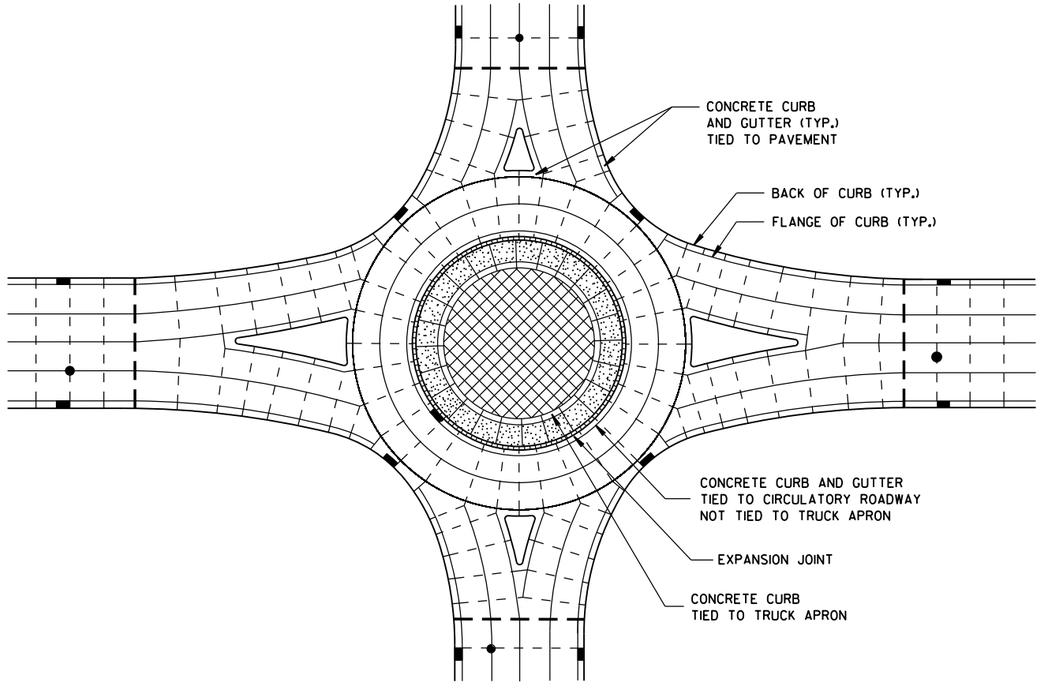
APPROVED
5-3-2013 DATE
/S/ Deb Bischoff PAVEMENT POLICY & DE
NEER
FHWA

6

S.D.D. 13 C 18-2d

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES



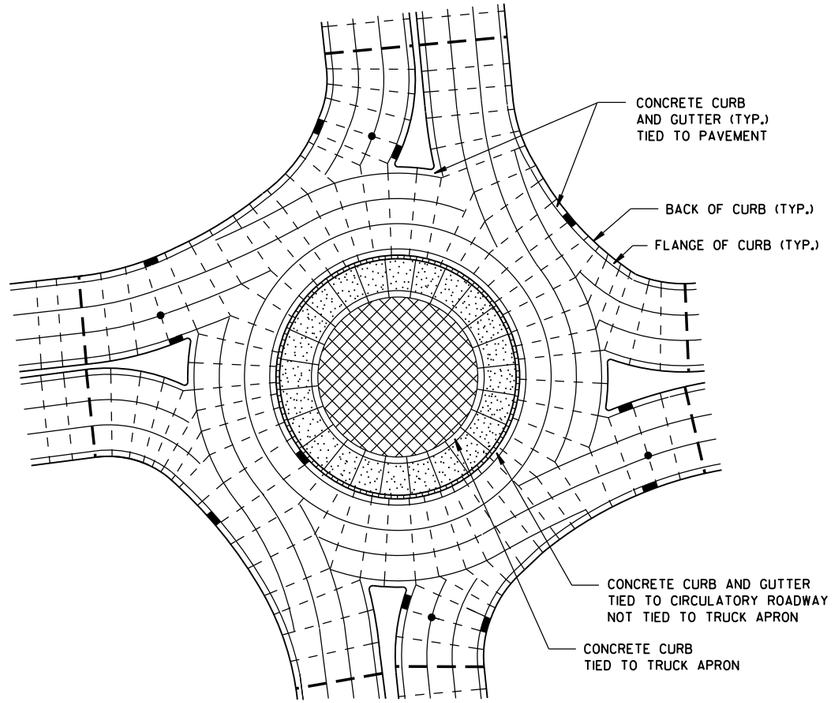
ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS

GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 SHEET "a".

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

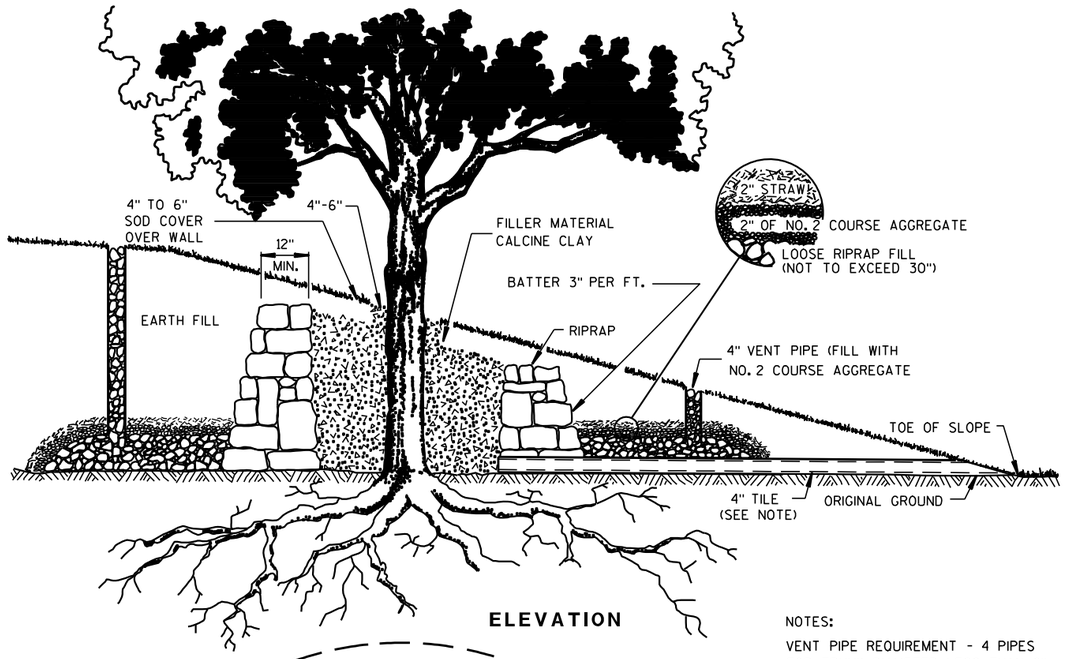


PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

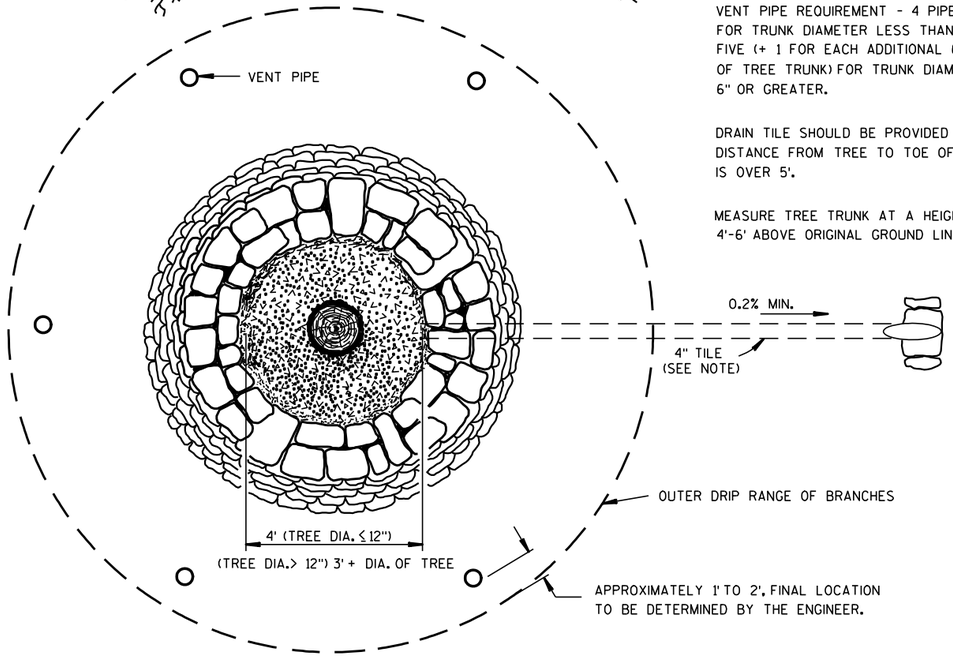
CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 5-3-2013 DATE — /S/ Deb Bischoff PAVEMENT POLICY & DE ENGINEER FHWA

6

S.D.D. 13 C 18-2e



ELEVATION



PLAN

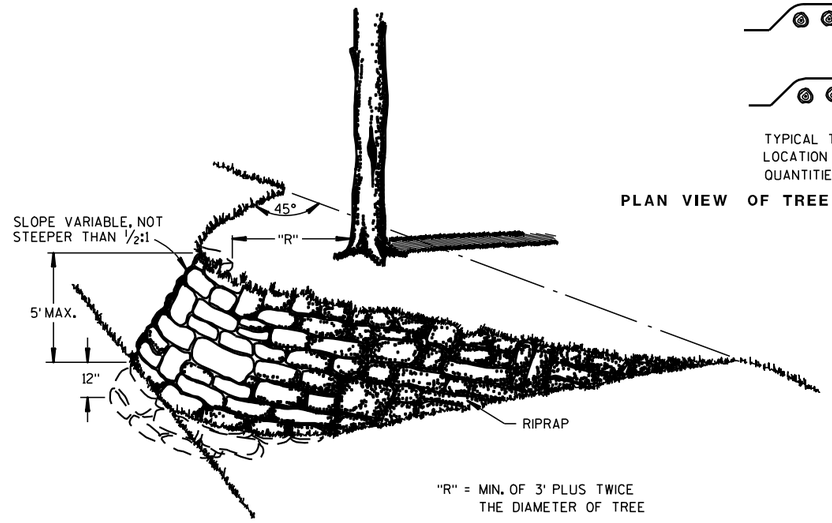
FULL TREE WELL WITH RIPRAP WALL

NOTES:

VENT PIPE REQUIREMENT - 4 PIPES FOR TRUNK DIAMETER LESS THAN 6". FIVE (+ 1 FOR EACH ADDITIONAL 6" OF TREE TRUNK) FOR TRUNK DIAMETER 6" OR GREATER.

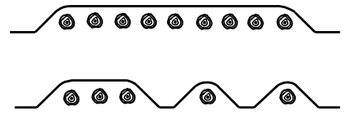
DRAIN TILE SHOULD BE PROVIDED IF DISTANCE FROM TREE TO TOE OF SLOPE IS OVER 5'.

MEASURE TREE TRUNK AT A HEIGHT 4'-6' ABOVE ORIGINAL GROUND LINE.



"R" = MIN. OF 3' PLUS TWICE THE DIAMETER OF TREE

DETAILS OF TREE ISLAND AND ROOT PROTECTION



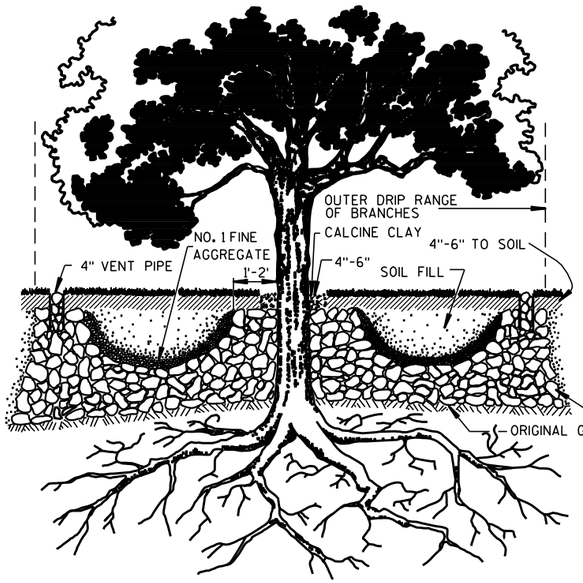
TYPICAL TREATMENTS OF ROOT PROTECTION. LOCATION SHOWN ON MISCELLANEOUS QUANTITIES SHEET.

PLAN VIEW OF TREE ISLANDS FOR ONE OR MORE TREES

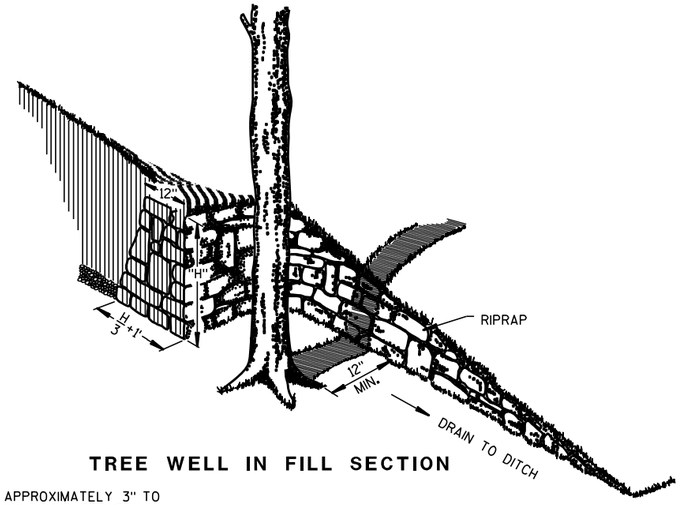
GENERAL NOTES

WALLS TO BE BUILT TO APPROXIMATE SHAPE AND DIMENSIONS SHOWN. STONE TO CONFORM TO SPECIFICATIONS FOR RIPRAP.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.



TREE WELL WITHOUT WALL



TREE WELL IN FILL SECTION

DETAILS FOR TREE WELLS

TREE PRESERVATION DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/25/76 DATE
/S/ D. L. Strand STATE DESIGN ENGINEER
FHWA

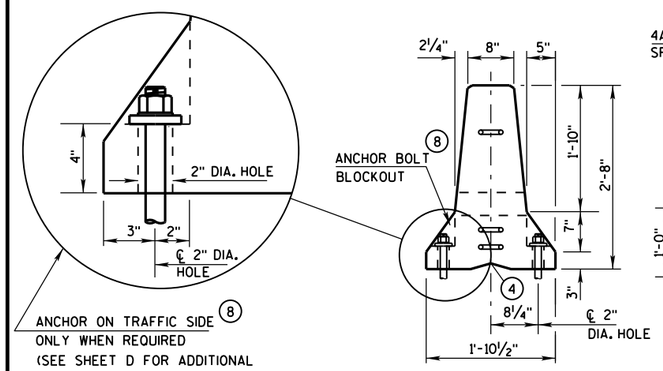
393 WYS

6

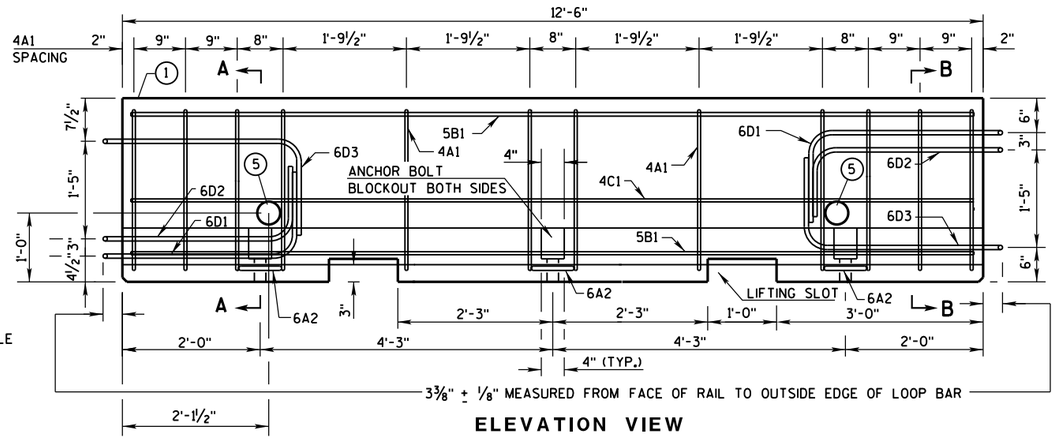
S.D.D. 14 A 1-3

6

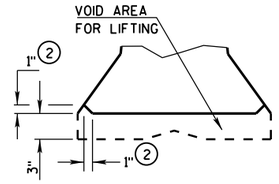
S.D.D. 14 A 1-3



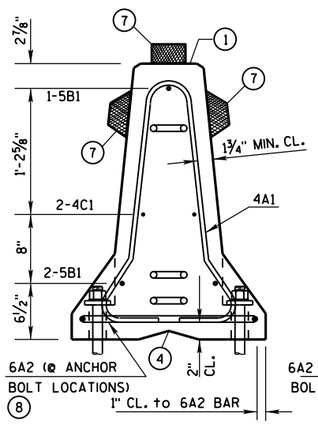
END VIEW



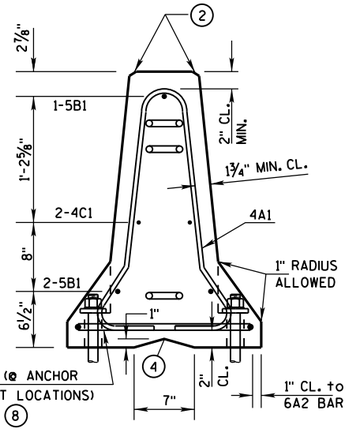
ELEVATION VIEW



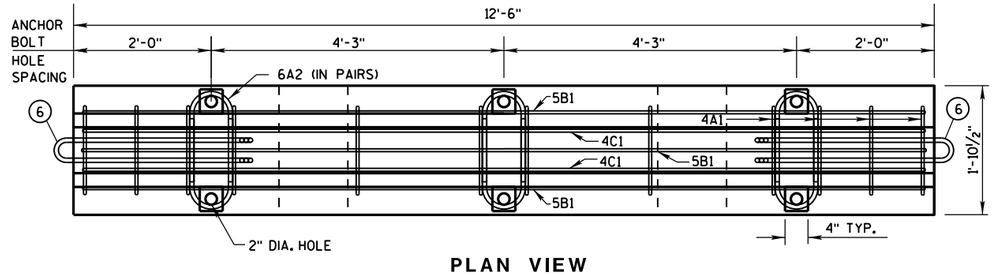
DETAIL "B"
LIFTING SLOT DETAIL



SECTION A-A
(STIRRUP PLACEMENT)

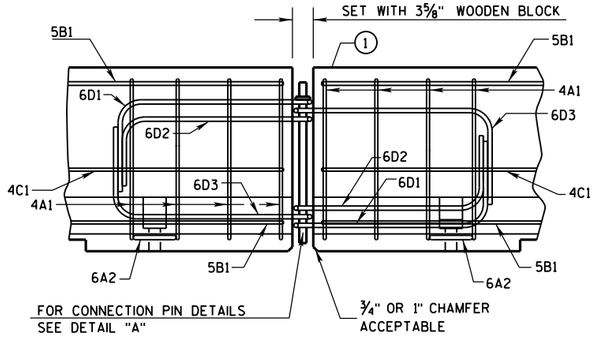


SECTION B-B
(STIRRUP PLACEMENT)

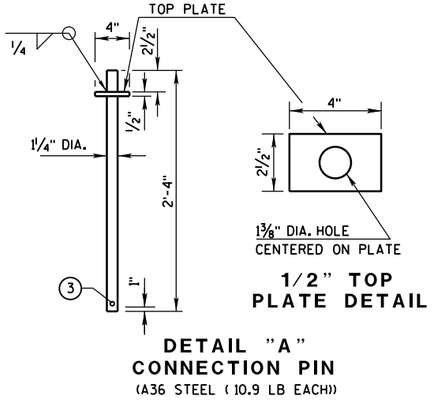


PLAN VIEW

DETAILS OF BARRIER SECTION

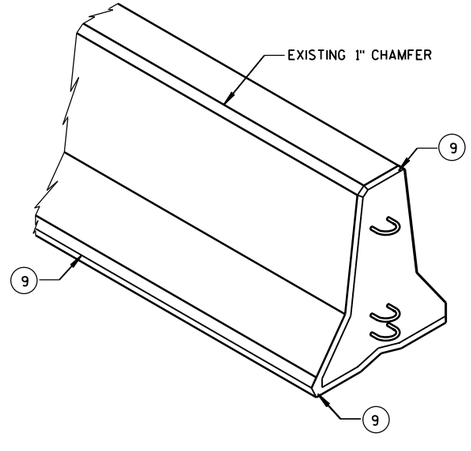


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



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.

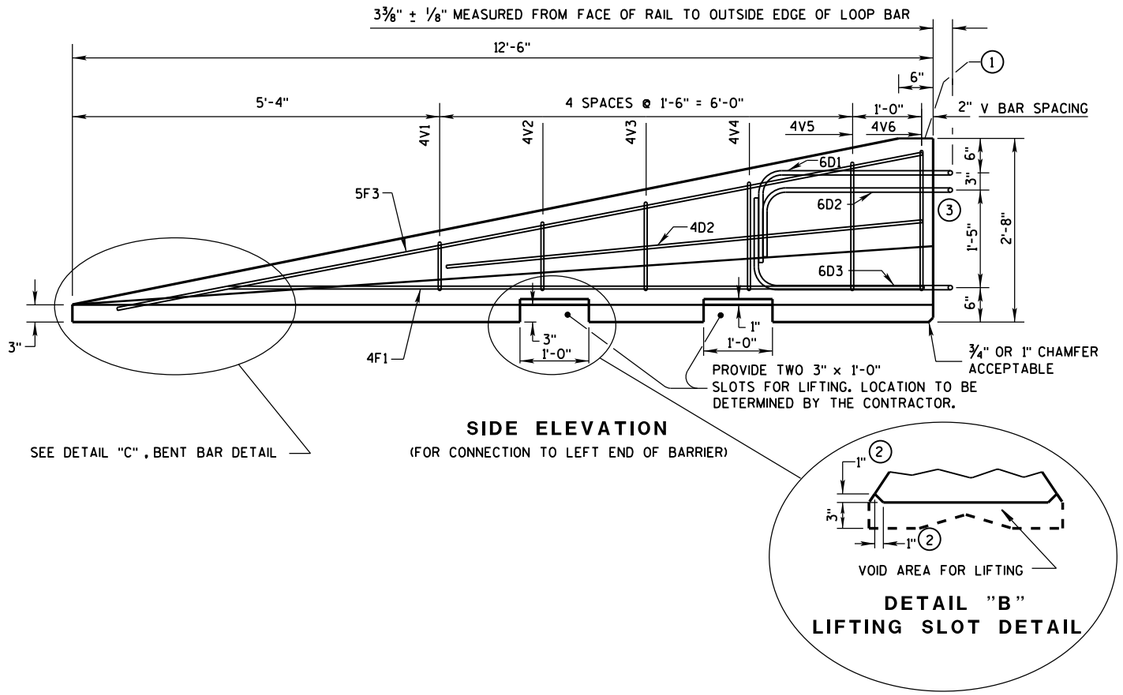
(9) 1" CHAMFER OPTIONAL.

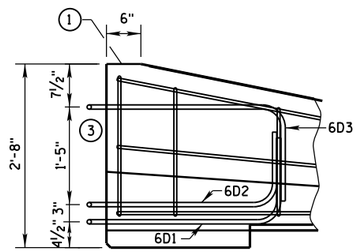
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

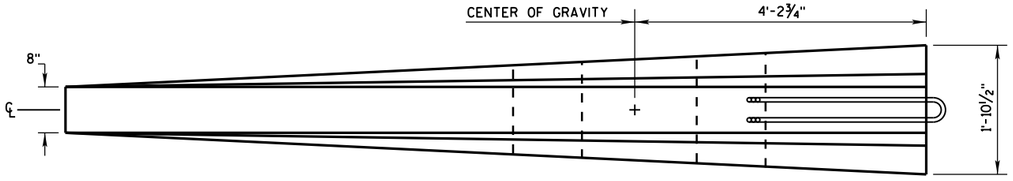
S.D.D. 14 B 7-14a

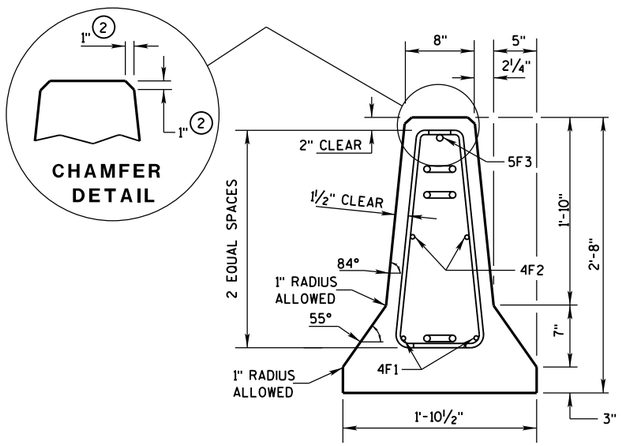


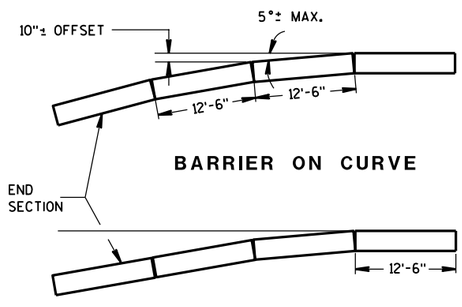


GENERAL NOTES

1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.







POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

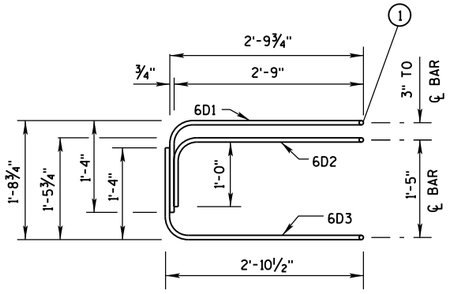
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 7-14b

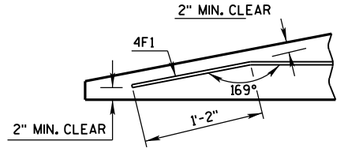
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

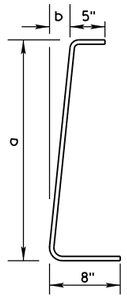
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

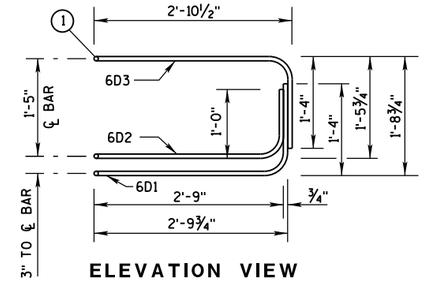
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

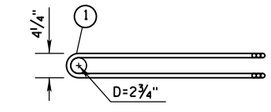
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

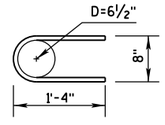
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



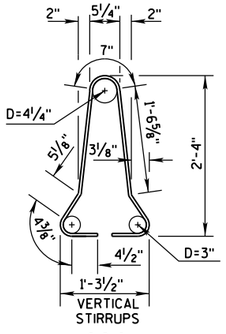
ELEVATION VIEW



PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



4A1

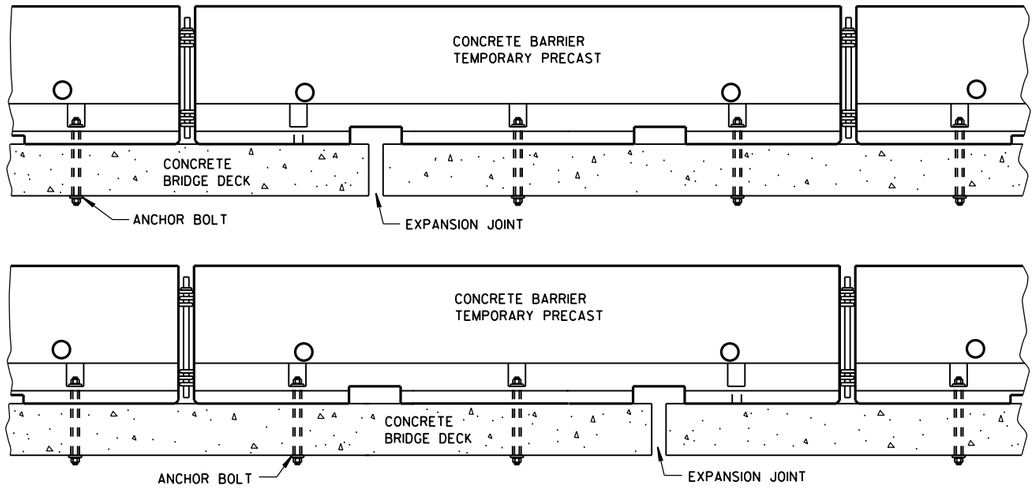
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

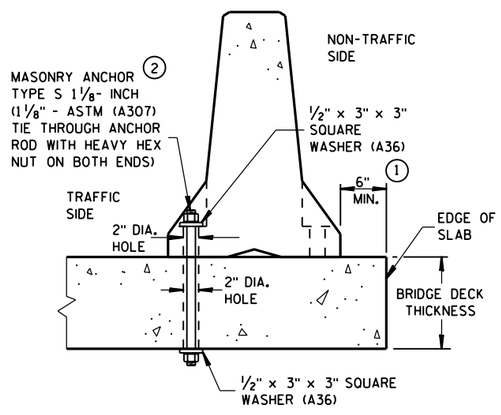
6

S.D.D. 14 B 7-14c



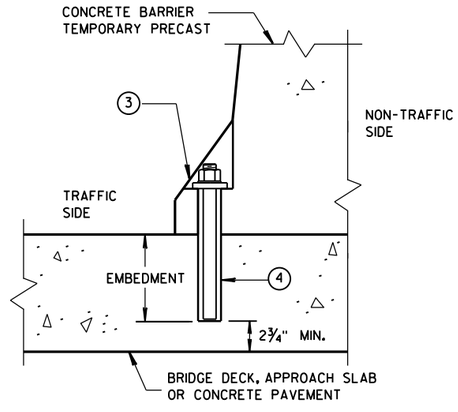
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



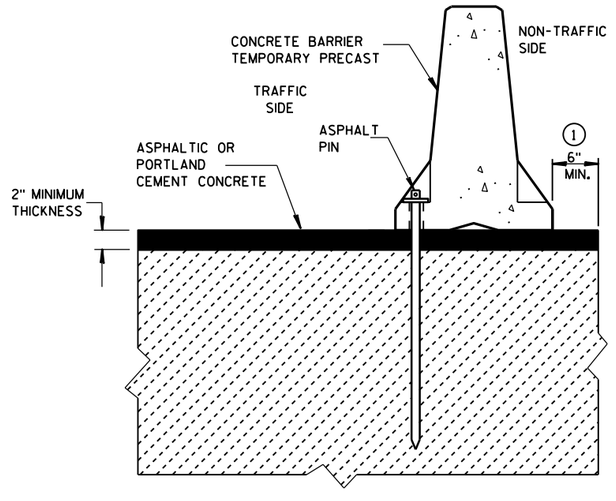
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



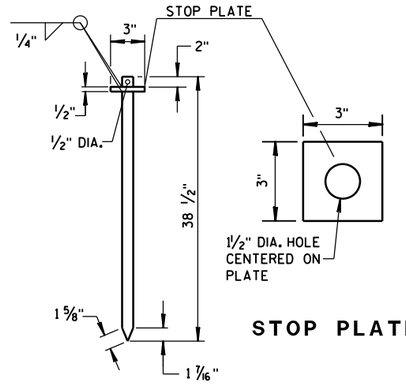
REMOVABLE ADHESIVE BONDED ANCHOR ② INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

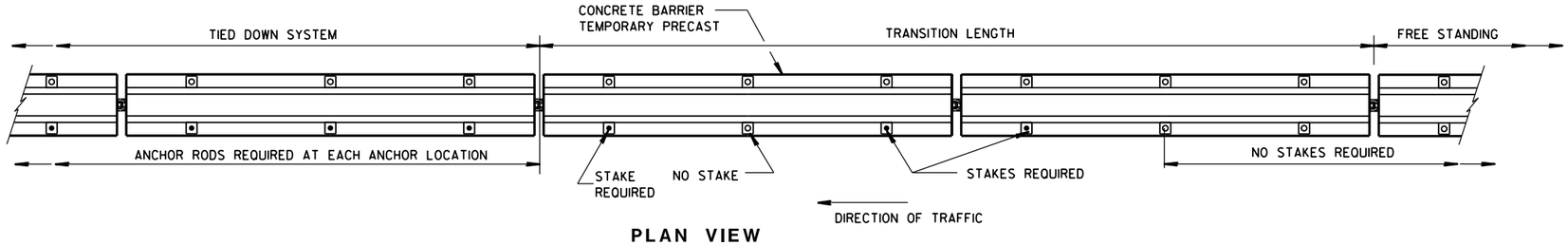
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

GENERAL NOTES

① CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALL ANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.

③ 1⅛" DIAMENTER A307 THREADED ROD, ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.

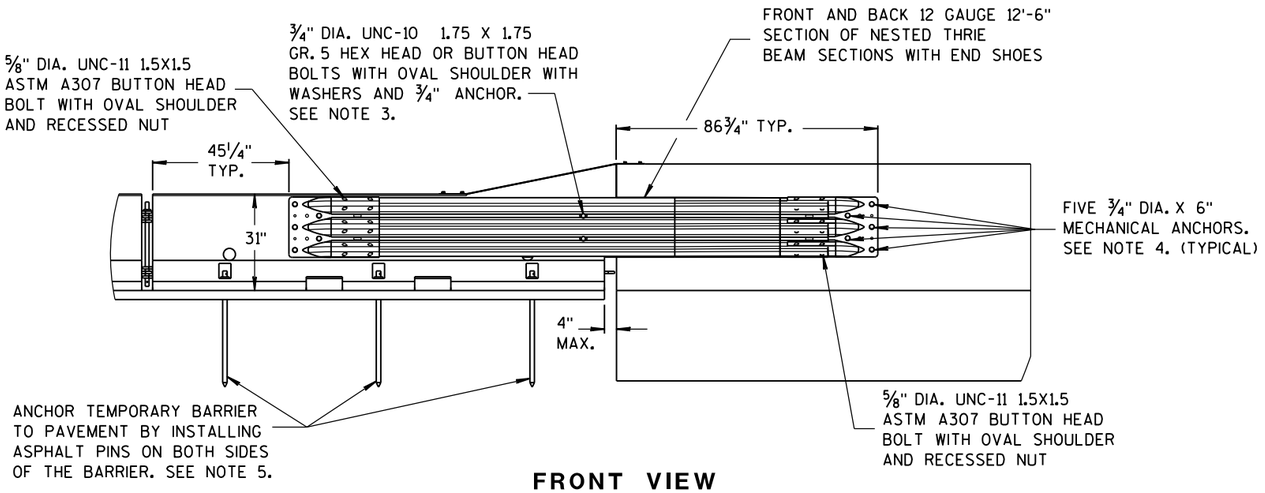
④ ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

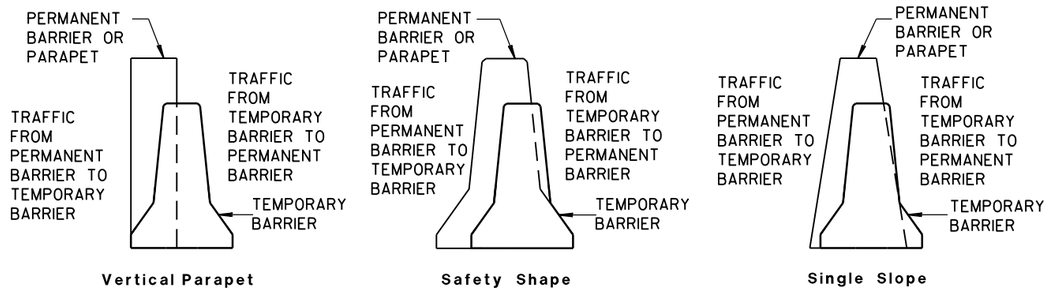
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-14d



FRONT VIEW



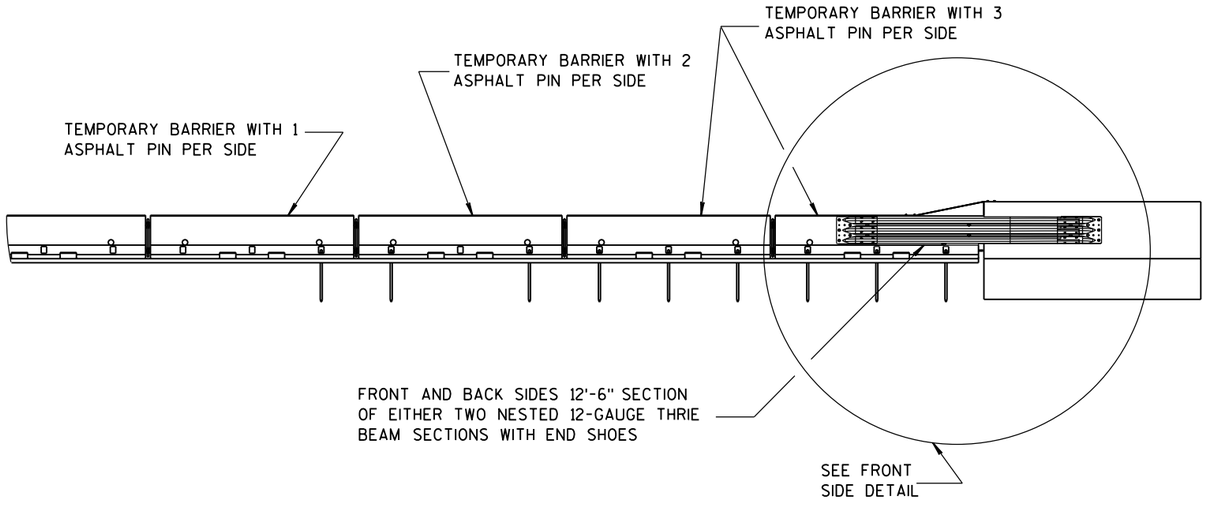
TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

NOTES

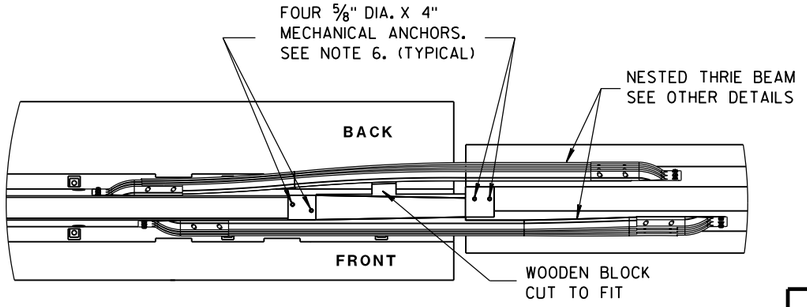
NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

BACK VIEW



FRONT VIEW



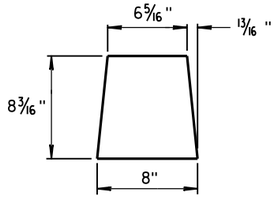
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

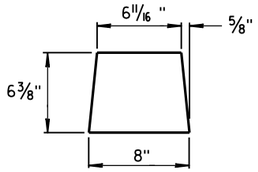
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

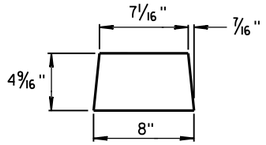
6
S.D.D. 14 B 7-14e



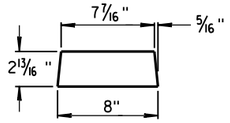
GUSSET 1



GUSSET 2

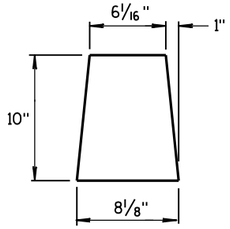


GUSSET 3

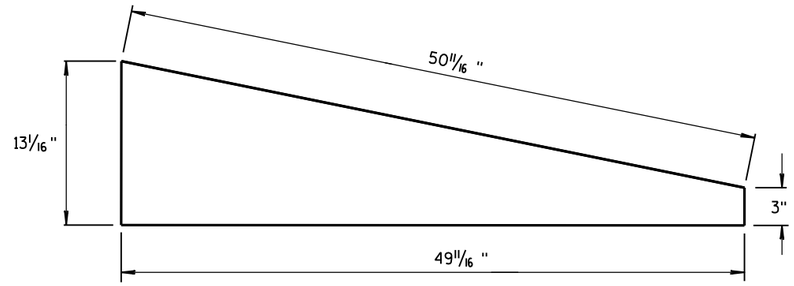


GUSSET 4

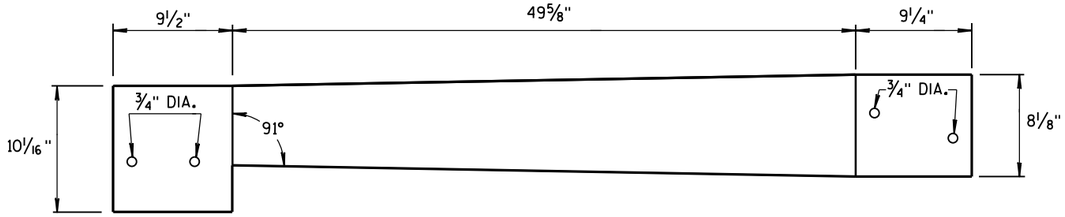
GUSSETS

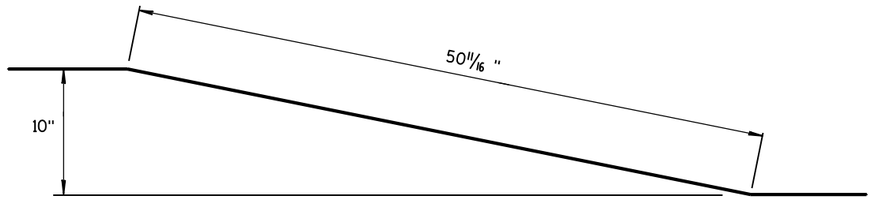


END PLATE



SIDE PLATE

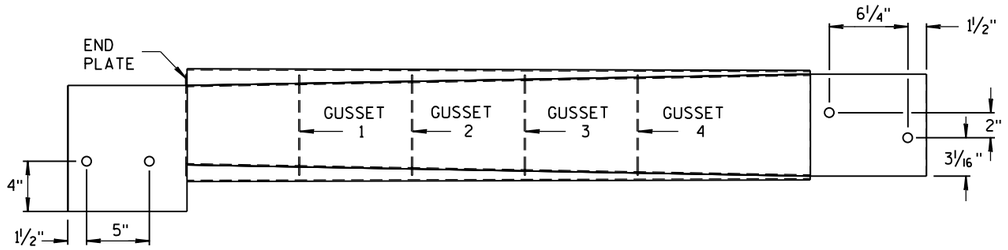


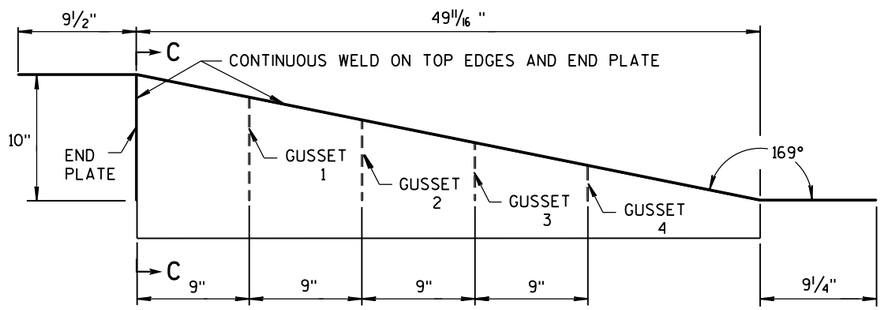


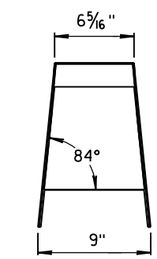
TOP PLATE

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.







SECTION C-C

NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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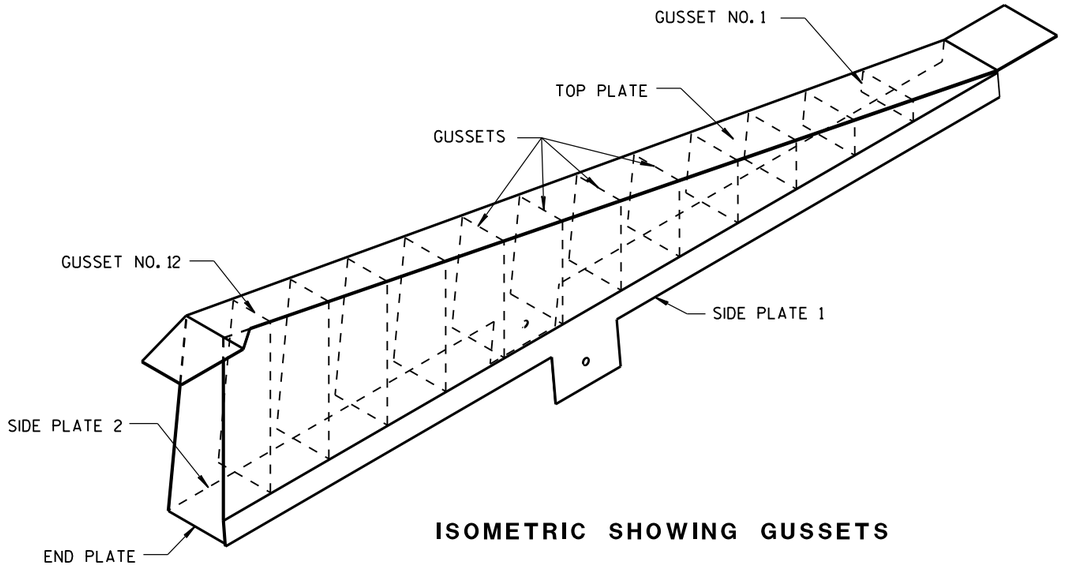
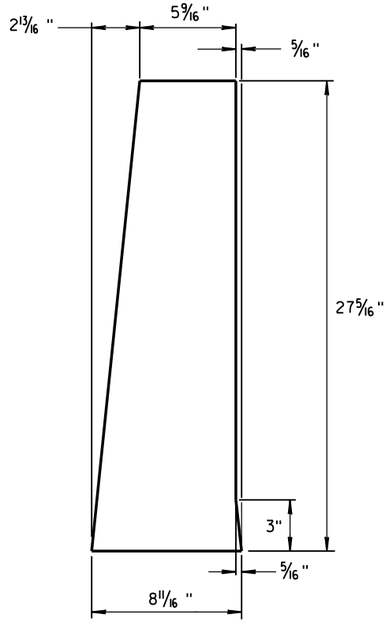
S.D.D. 14 B 7-14f

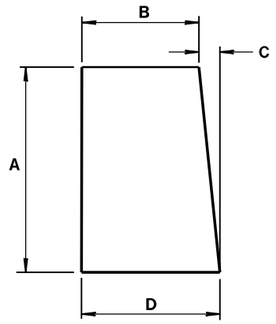


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



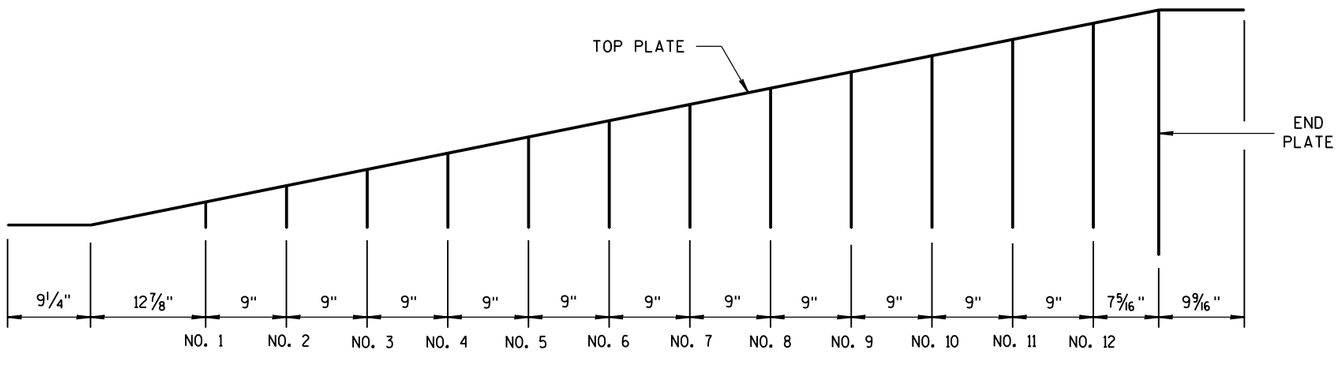
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

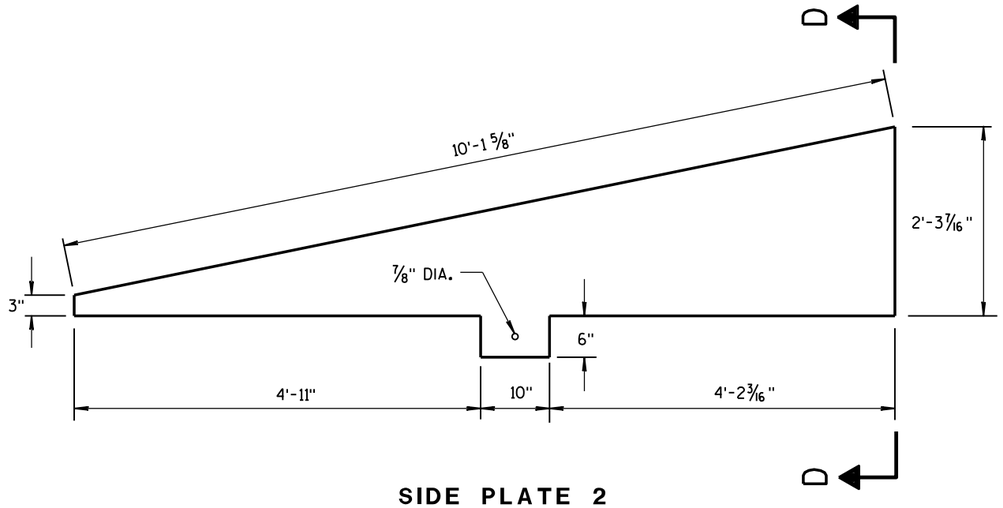
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 400

6

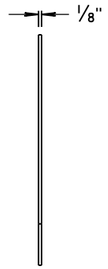
S.D.D. 14 B 7-14g

6

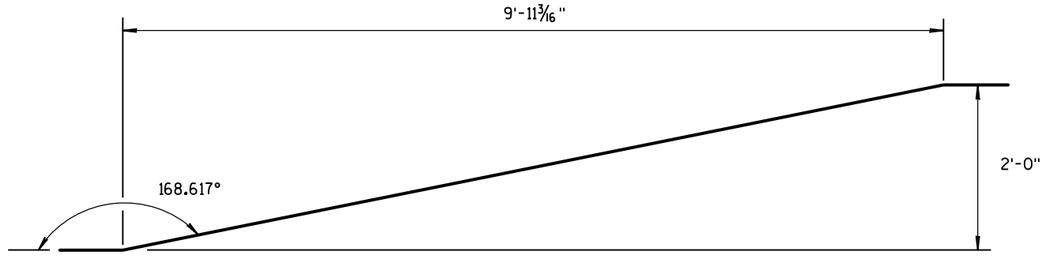
S.D.D. 14 B 7-14g



SIDE PLATE 2

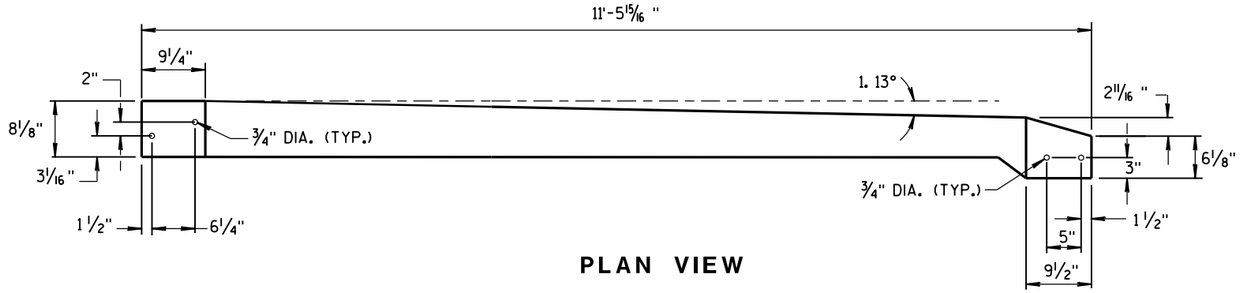


END VIEW



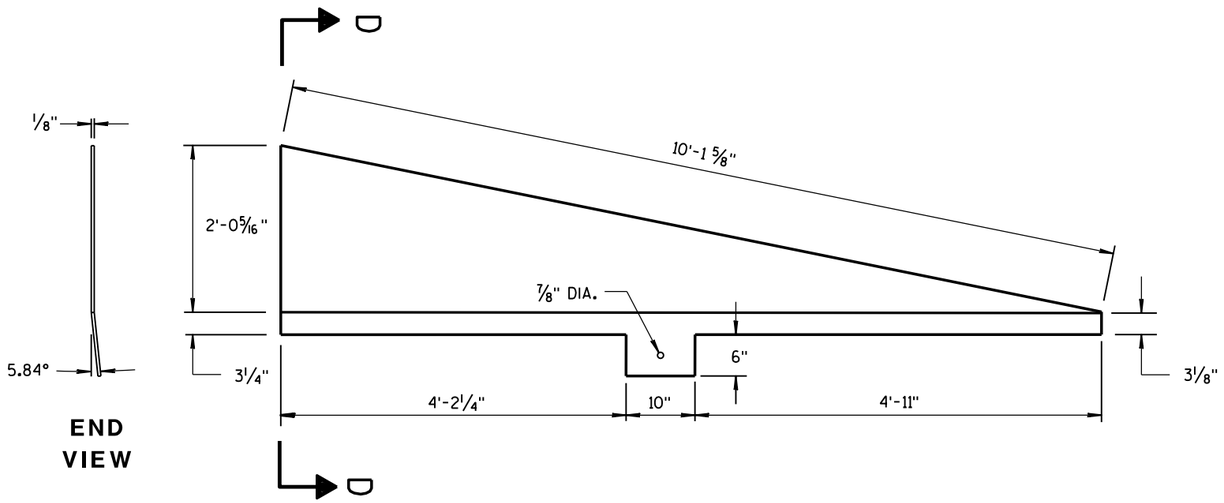
SIDE VIEW

TOP PLATE



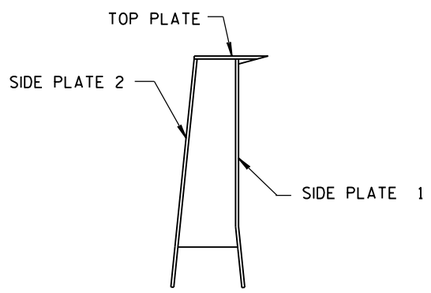
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

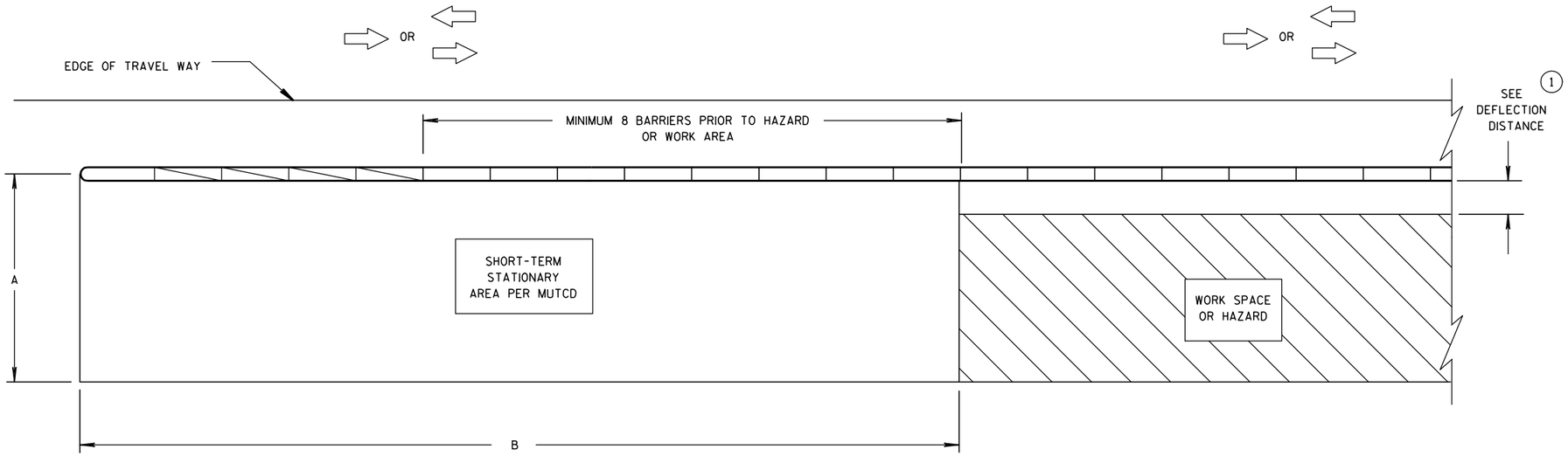
APPROVED
June 2014 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARD DEVELOPMENT ENGINEER
FHWA

6

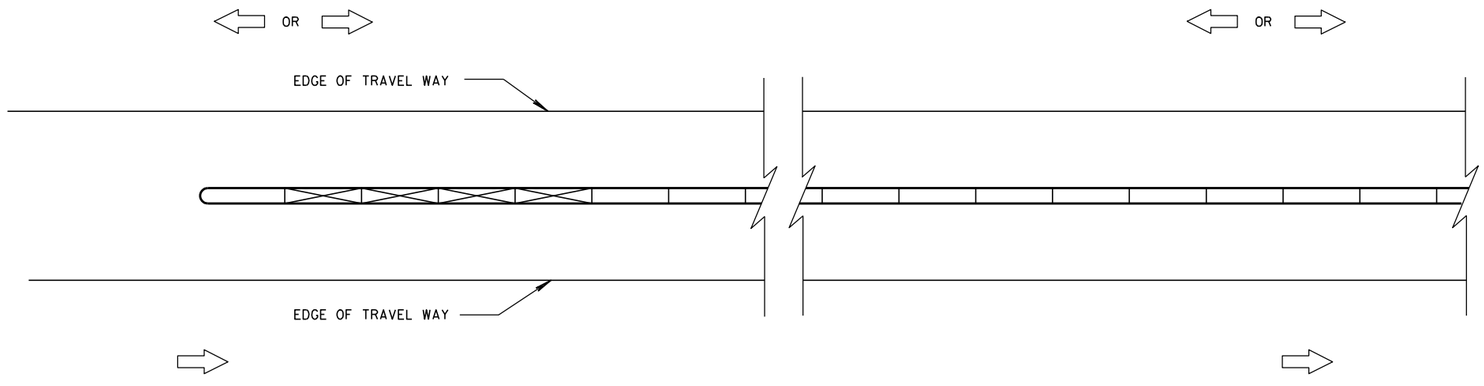
S.D.D. 14 B 7-14h

6

S.D.D. 14 B 7-14h



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

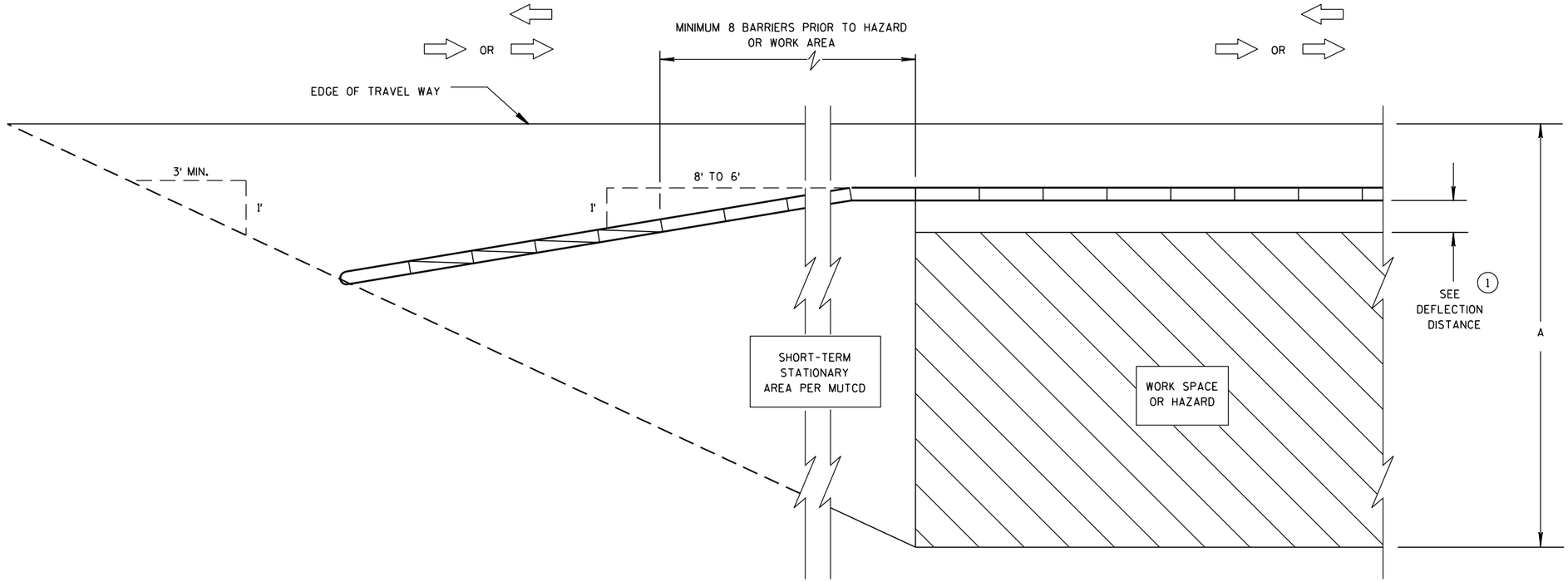
(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

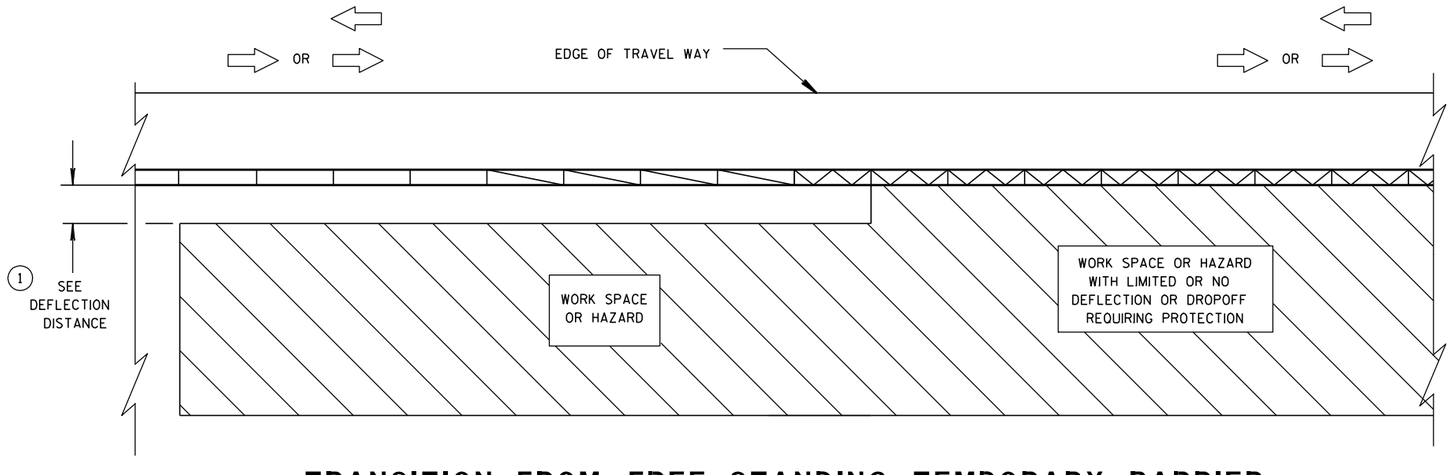
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 8-1a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

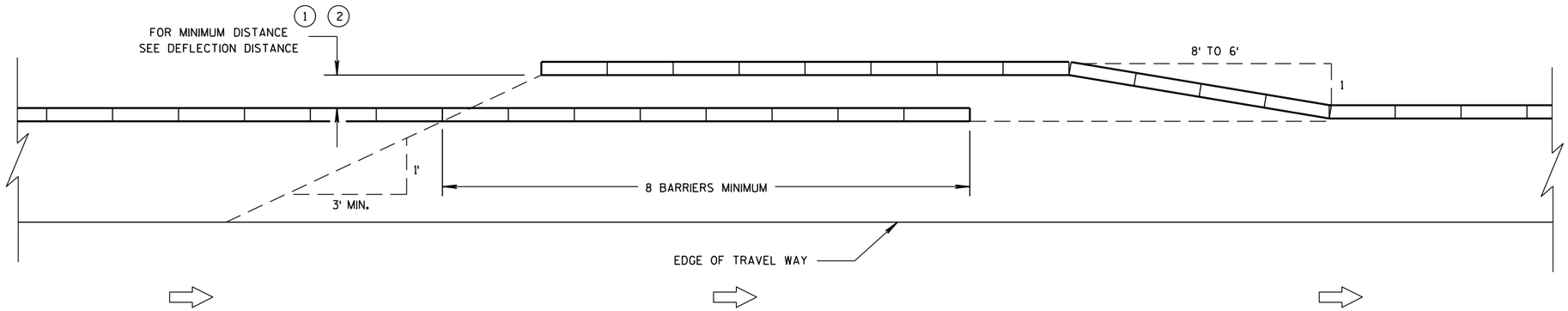
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

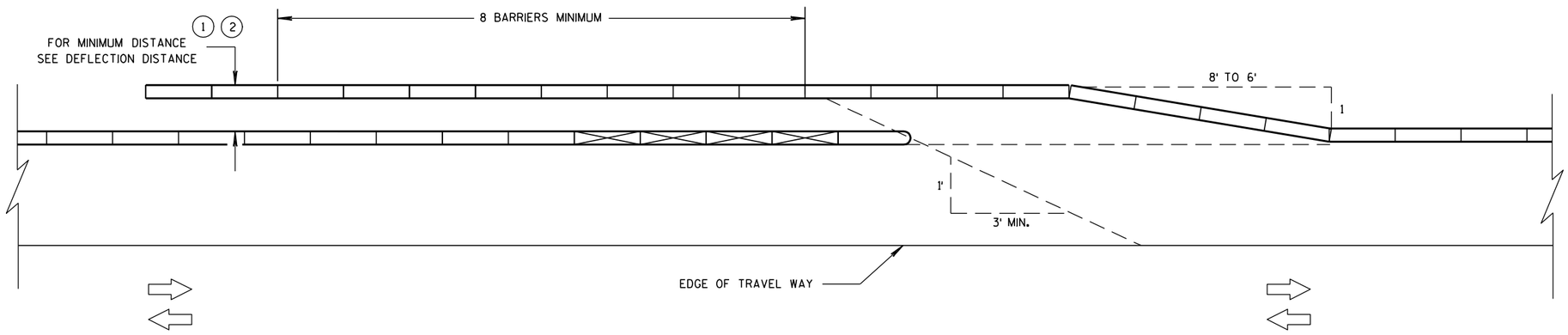
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6

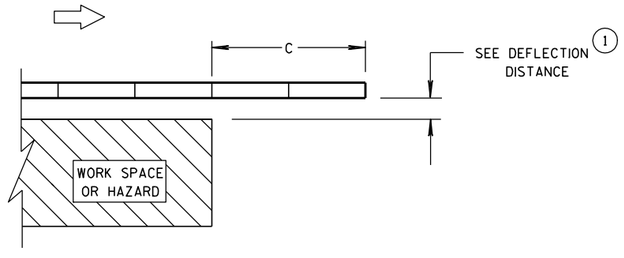
S.D.D. 14 B 8-1b



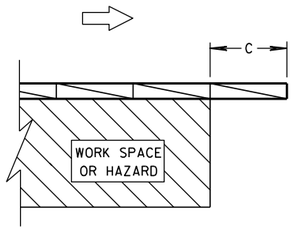
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

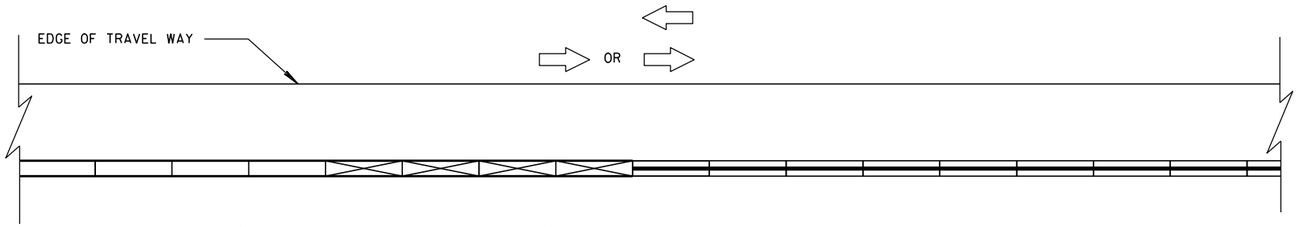
LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

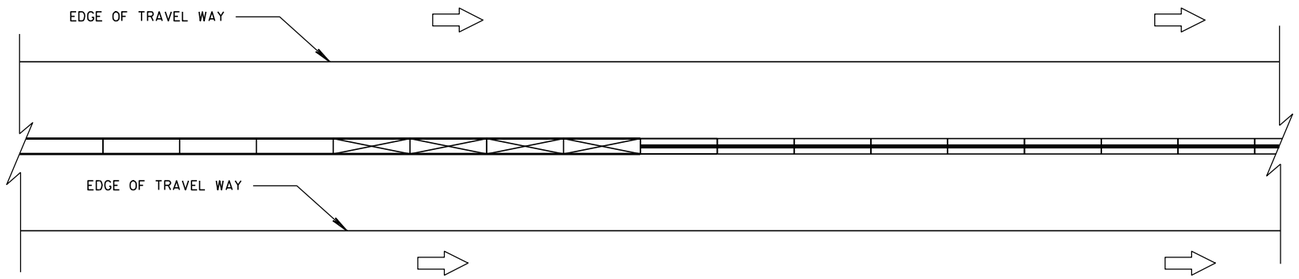
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 8-1c



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR
SAND BARREL ARRAY

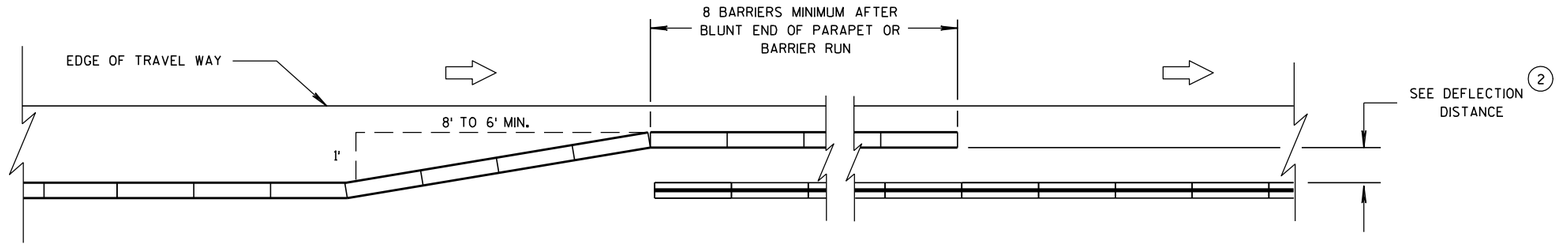
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

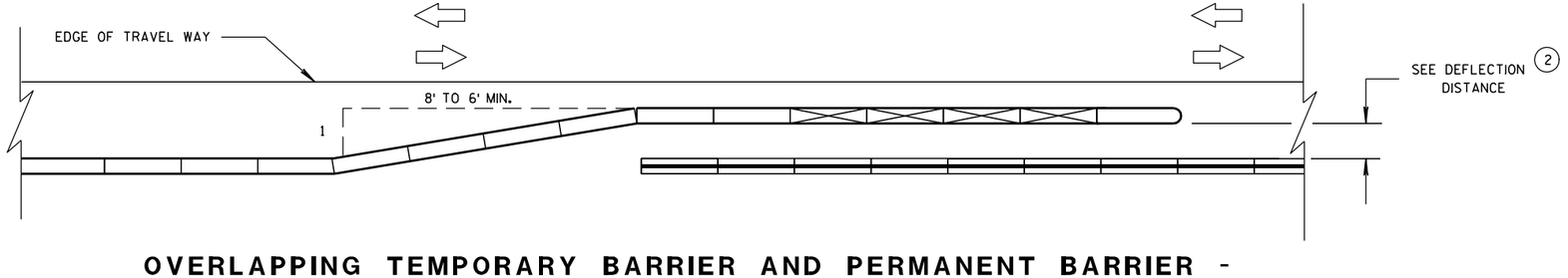
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER
OR CONCRETE PARAPET

FREE STANDING TEMPORARY
BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6
S.D.D. 14 B 8-1d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

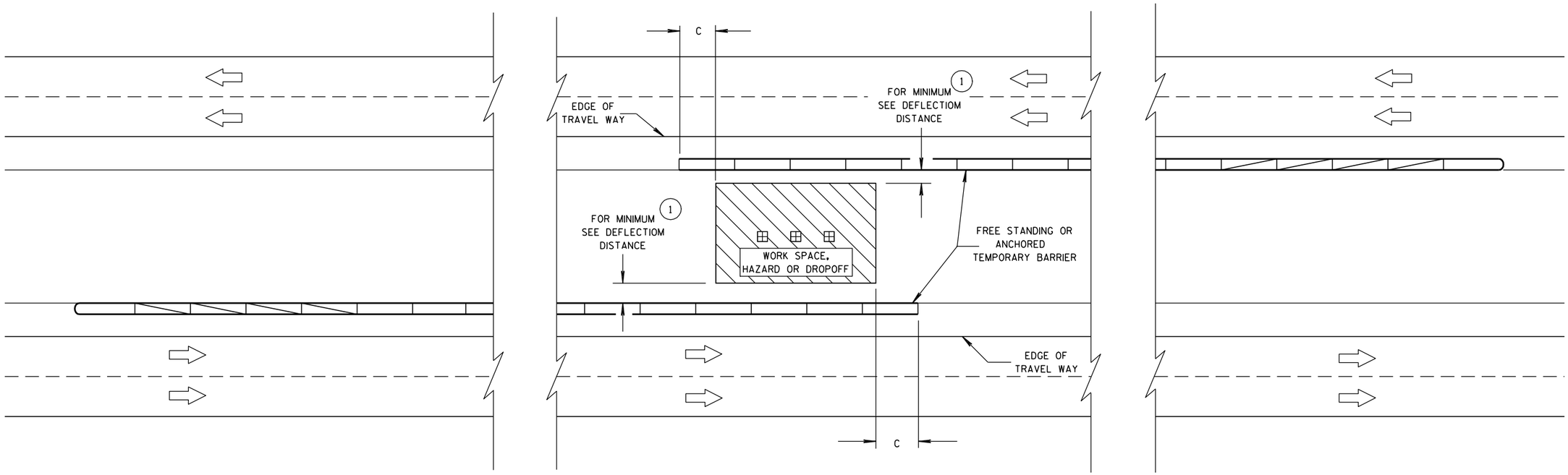
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER

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FHWA

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S.D.D. 14 B 8-1e

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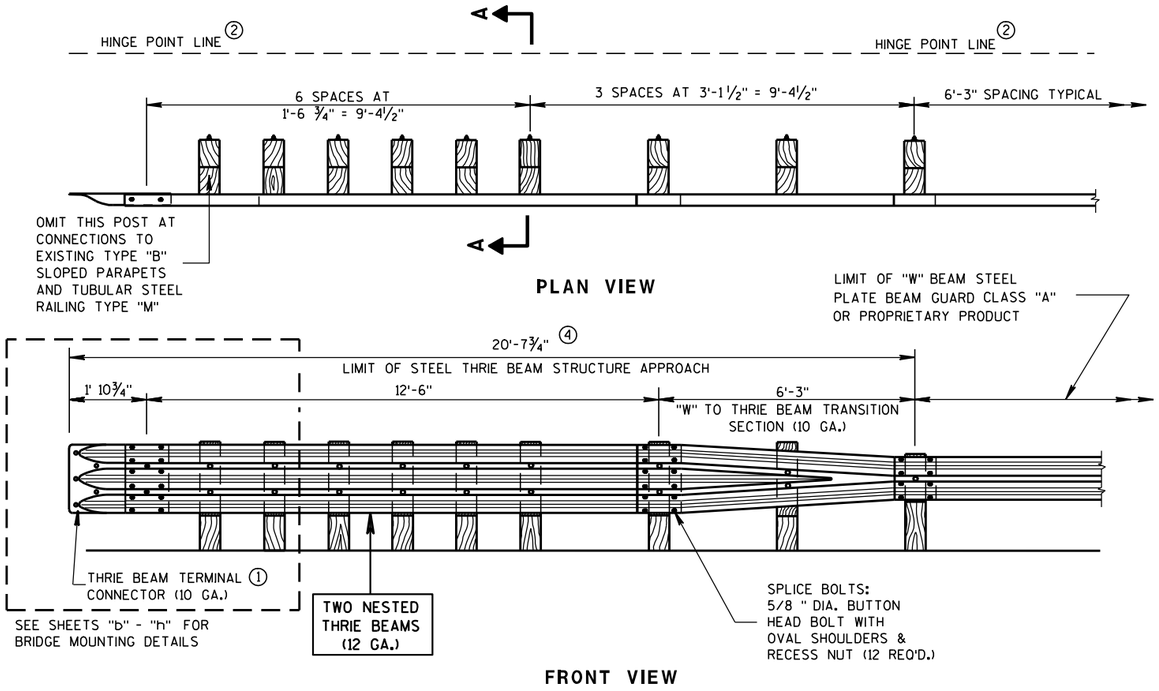
S.D.D. 14 B 8-1e



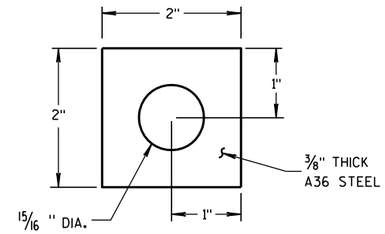


PLATE WASHER DETAIL

GENERAL NOTES

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3".

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

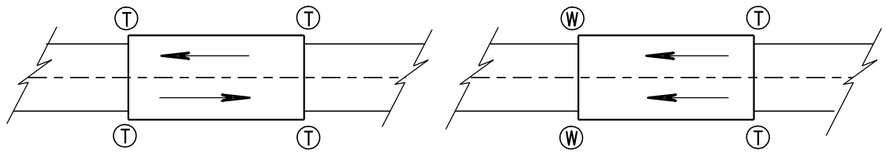
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2" , AND 12" DIAMETER AROUND POST. SEE 14B15 FOR MORE DETAILS.

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② MINIMUM EMBEDMENT SHALL BE 4'-0". WHERE EXISTING CONDITIONS DO NOT PERMIT THE APPROPRIATE EARTHWORK SHOWN ON THE PLAN TYPICAL SECTIONS OR DETAILS, THE ENGINEER MAY ALLOW THE REDUCTION OR ELIMINATION OF THE 2 FOOT DISTANCE TO THE HINGE POINT. OTHERWISE BUILD AS THE PLAN SHOWS OR AS THE ENGINEER DIRECTS. IF THE 2 FOOT DISTANCE TO THE HINGE POINT IS REDUCED OR ELIMINATED, INCREASE THE POST EMBEDMENT DEPTH TO 4'-6" OR MORE.

③ POST BOLTS ARE 5/8" DIAMETER ASTM A307 BUTTON HEAD BOLT. A POST BOLT REQUIRES A 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX AND A 5/8" DIAMETER F844 FLAT WASHER. LENGTH OF POST BOLT MAY VARY.

④ ALL WOOD POSTS MUST BE 6" X 8" AND AT LEAST 7'-0" LONG.



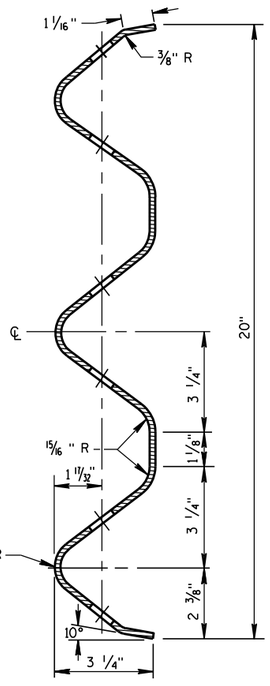
TWO WAY TRAFFIC

ONE WAY TRAFFIC

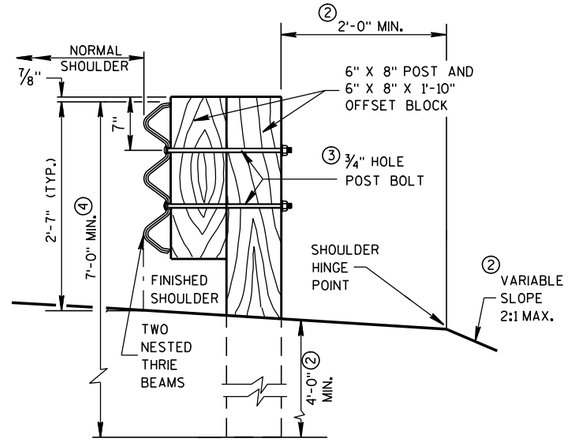
(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

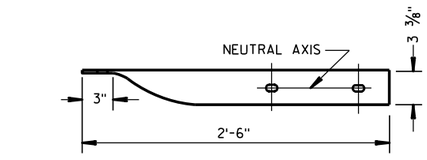
TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

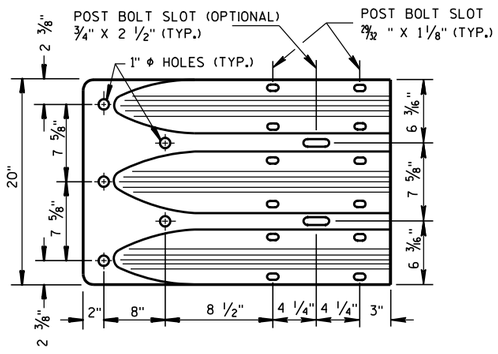


SECTION THRU THRIE BEAM RAIL ELEMENT

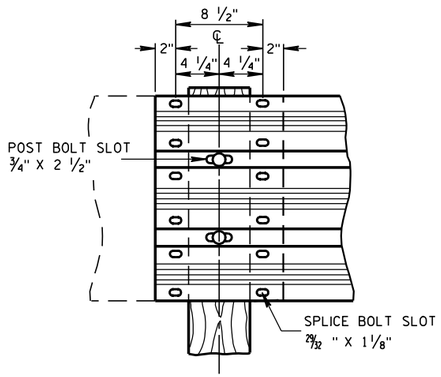


SECTION A-A





THRIE BEAM TERMINAL CONNECTOR



THRIE BEAM SPLICE

STEEL THRIE BEAM STRUCTURE APPROACH

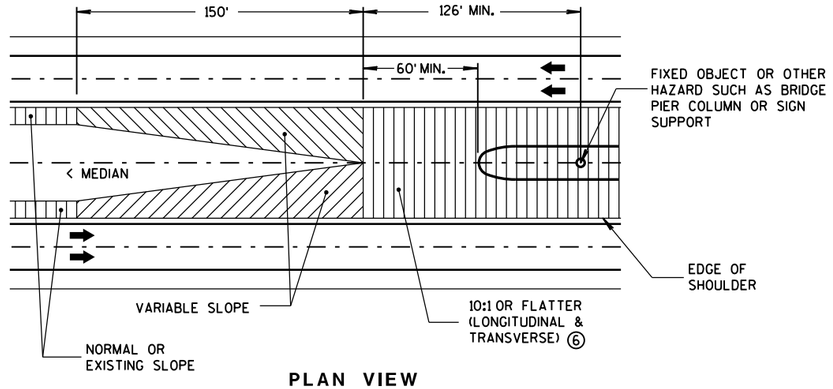
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

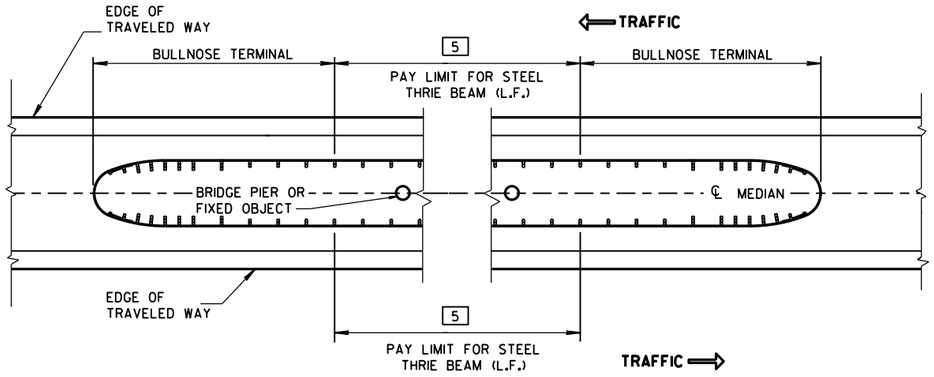
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

FHWA

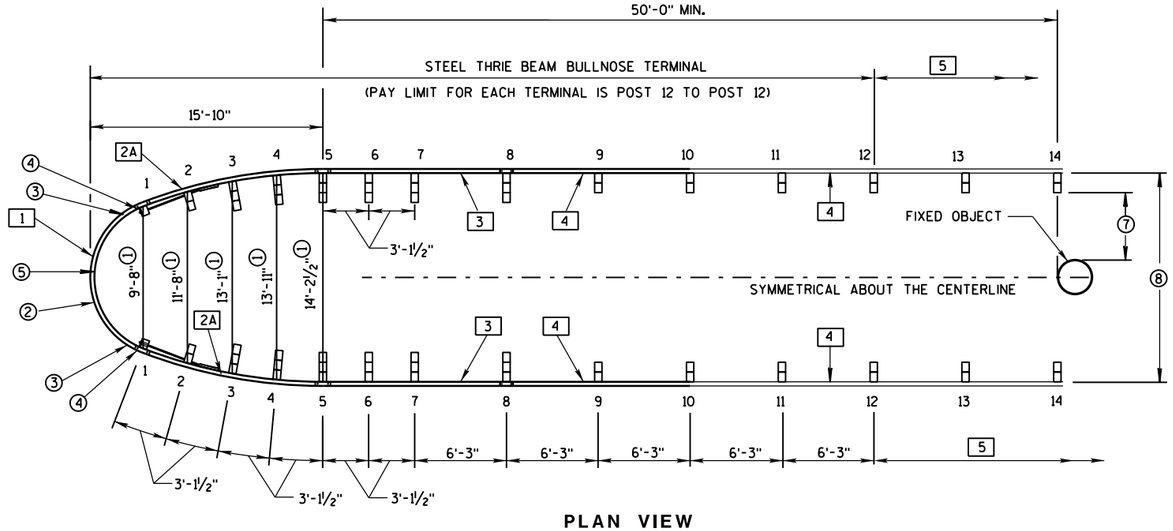


PLAN VIEW

GRADING AT BULLNOSE
(ALL INSTALLATIONS)

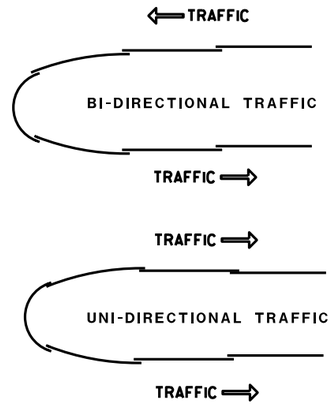


MEDIAN HAZARD PROTECTION PAY LIMITS



PLAN VIEW

TYPICAL BULLNOSE LAYOUT



LAPPING DETAIL
(ALL INSTALLATIONS)

GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

PUNCHING, DRILLING, CUTTING OR WELDING IS NOT PERMITTED ON ANY GALVANIZED THRIE BEAM ACCESSORY OR TERMINAL ACCESSORY.

OTHER ANCHOR CABLE ASSEMBLIES HAVING 40,000 LBS. MIN. BREAKING STRENGTH MAY BE USED.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

THE USE OF STEEL POSTS ON THE BULLNOSE IS NOT ALLOWED.

BOLTS AND ALL NECESSARY HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

ALL THRIE BEAM SHALL BE 12-GAUGE.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½" AND 12" DIAMETER AROUND POST. SEE SDD 14B15 OR SDD 14B42 FOR MORE INFORMATION.

[1] SLOTTED THRIE BEAM RAIL NO. 1. (POST 1 TO POST 1)

[2A] SLOTTED THRIE BEAM RAIL NO. 2A. (POST 1 TO POST 5)

[3] SLOTTED THRIE BEAM RAIL NO. 3. (POST 5 TO POST 8)

[4] UNBENT STANDARD THRIE-BEAM RAIL NO.4. (POST 8 TO POST 10 & POST 10 TO POST 12)

[5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.

② U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.

③ NOSE CABLE W/SWAGGED END BUTTONS.

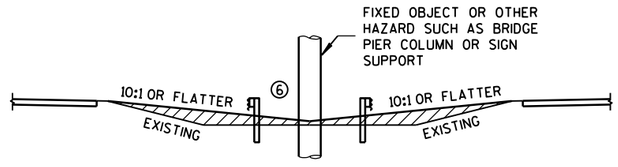
④ NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).

⑤ THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.

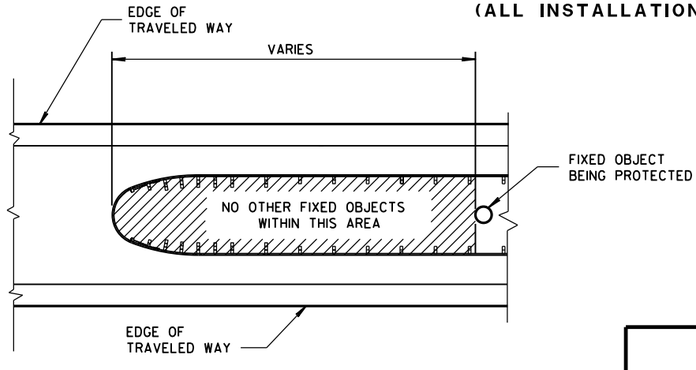
⑥ PROVIDE SUITABLE DRAINAGE WHEN MEDIAN GRADING IMPEDES NORMAL FLOW.

⑦ 2'-6" MINIMUM LATERAL DISTANCE BETWEEN BACK OF POST AND FACE OF FIXED OBJECT.

⑧ MAXIMUM WIDTH OF SYSTEM IS 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.



MEDIAN GRADING SECTION
(ALL INSTALLATIONS)

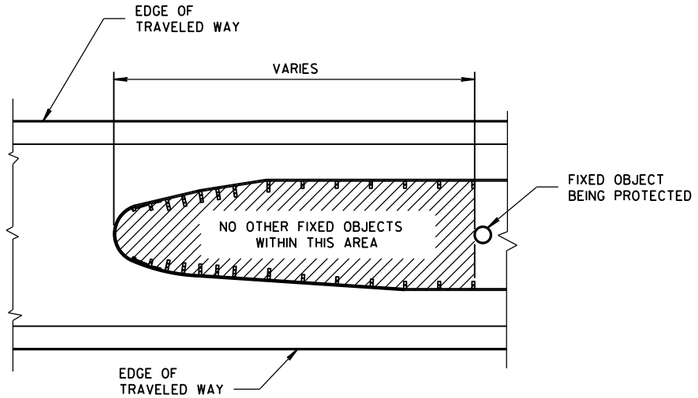


HAZARD FREE AREA INSIDE BULLNOSE

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 14 B 26-3a



HAZARD FREE
AREA INSIDE BULLNOSE

GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

[1] SLOTTED THRIE BEAM RAIL NO. 1. (POST 1 TO POST 1)

[2A] SLOTTED THRIE BEAM RAIL NO. 2A, (POST 1 TO POST 5)

[2B] SLOTTED THRIE BEAM RAIL NO. 2B, (POST 1 TO POST 5)

[3] SLOTTED THRIE BEAM RAIL NO. 3. (POST 5 TO POST 8)

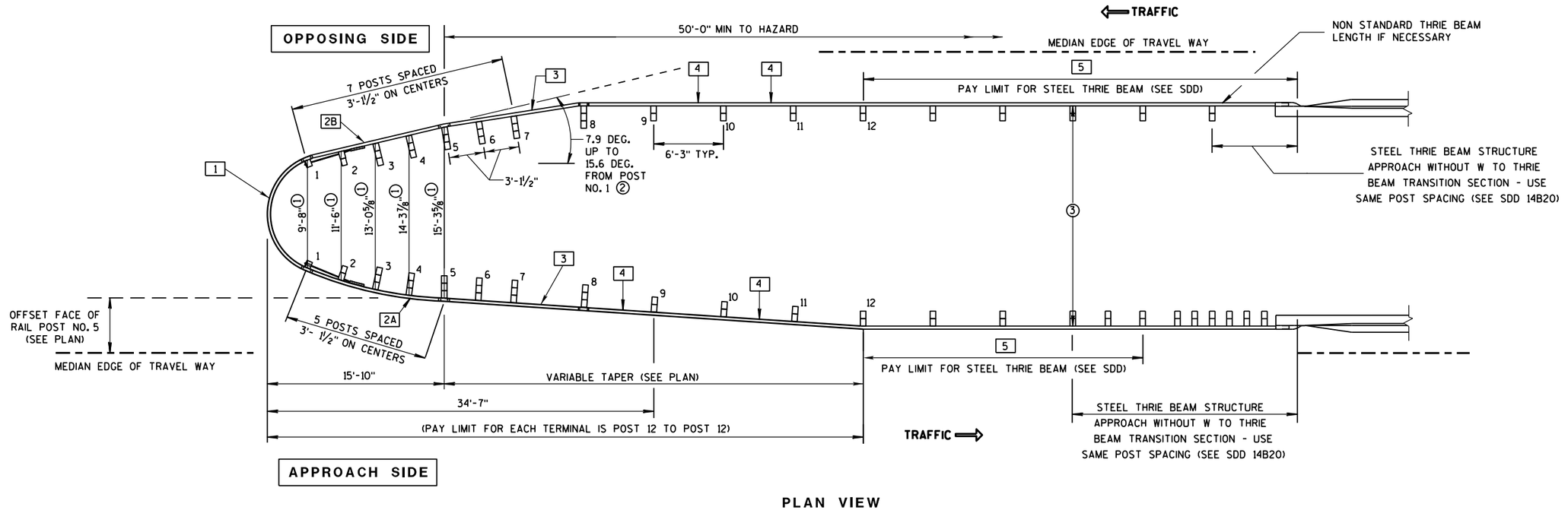
[4] UNBENT STANDARD THRIE-BEAM RAIL NO. 4, (POST 8 TO POST 10 & POST 10 TO POST 12)

[5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST.

② TAPER BEGINNING AT POST NO. 1 MUST CONTINUE TO POST NO. 5. PAST POST NO. 5 TAPER MAY END OR BE EXTENDED UP TO 15.6 DEGREES TO FIT VARIABLE MEDIAN WIDTHS. (SEE PLAN)

③ FOR MEDIANS WIDER THAN 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.



PLAN VIEW

WIDENED BULLNOSE DESIGN

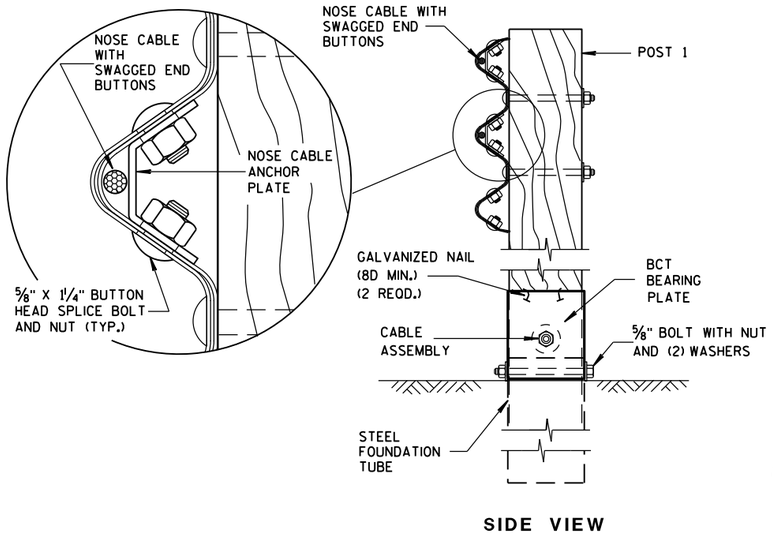
(INSTALLATION AT TWIN BRIDGES WITH BI-DIRECTIONAL TRAFFIC SHOWN)

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

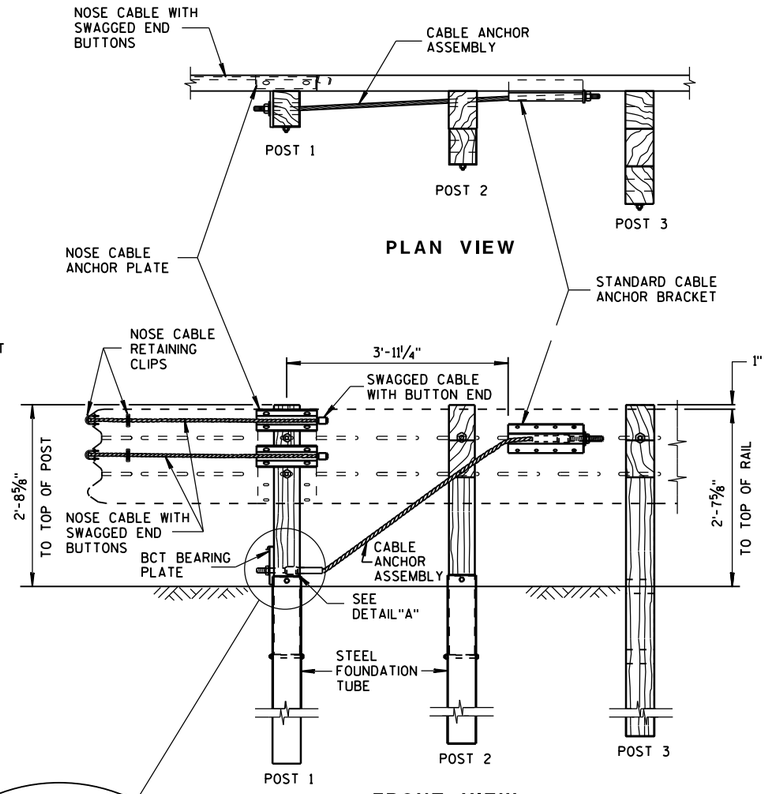
6

S.D.D. 14 B 26-3b



SIDE VIEW

NOSE CABLE ASSEMBLY AT POST NO. 1



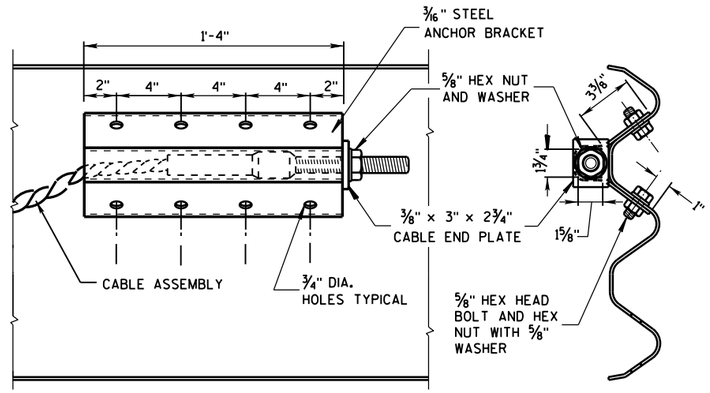
PLAN VIEW

FRONT VIEW

NOSE CABLE ANCHOR AND STANDARD BRACKET ASSEMBLY

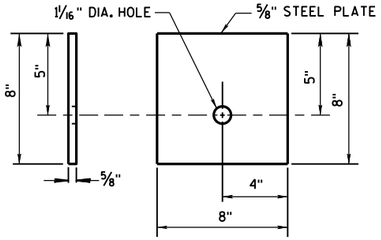
GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

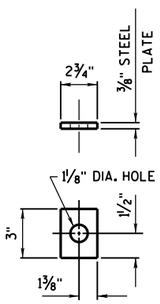


FRONT VIEW END VIEW

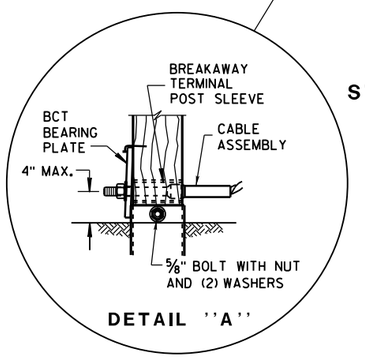
DETAILS OF CABLE ANCHOR BRACKET



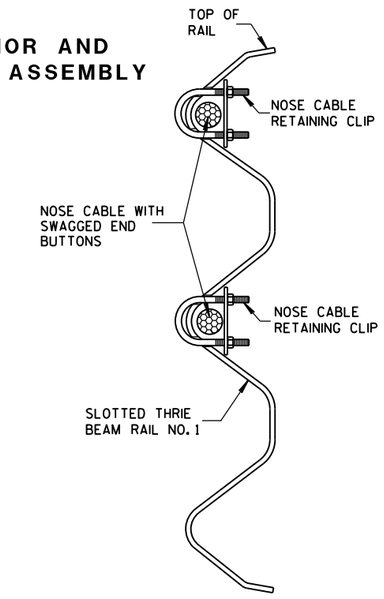
BCT BEARING PLATE



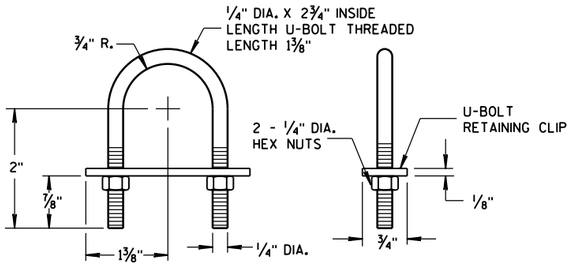
CABLE END PLATE



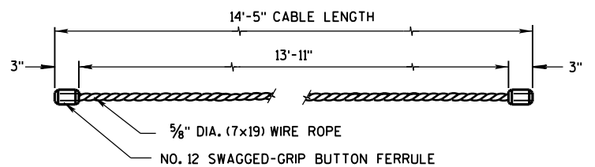
DETAIL ''A''



PLACEMENT OF NOSE CABLE RETAINING CLIP

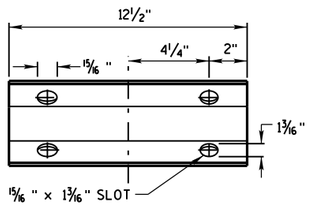


NOSE CABLE RETAINING CLIP

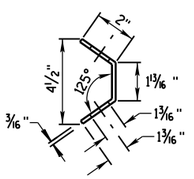


NOSE CABLE WITH SWAGGED END BUTTONS

TO PULL OFF SWAGGED GRIP BUTTON FERRULE FROM WIRE ROPE REQUIRES A FORCE EQUAL TO 98% OF THE WIRE ROPE'S BREAKING STRENGHT.



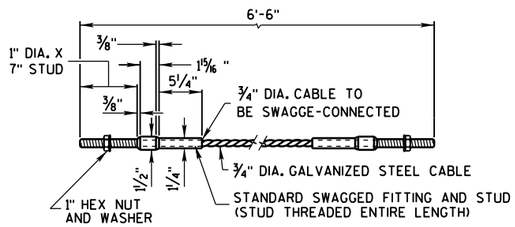
ELEVATION VIEW



END VIEW

NOSE CABLE ANCHOR PLATE

NOTE: 12 1/2" x 5 13/16" x 3/16" STEEL PLATE (A306)



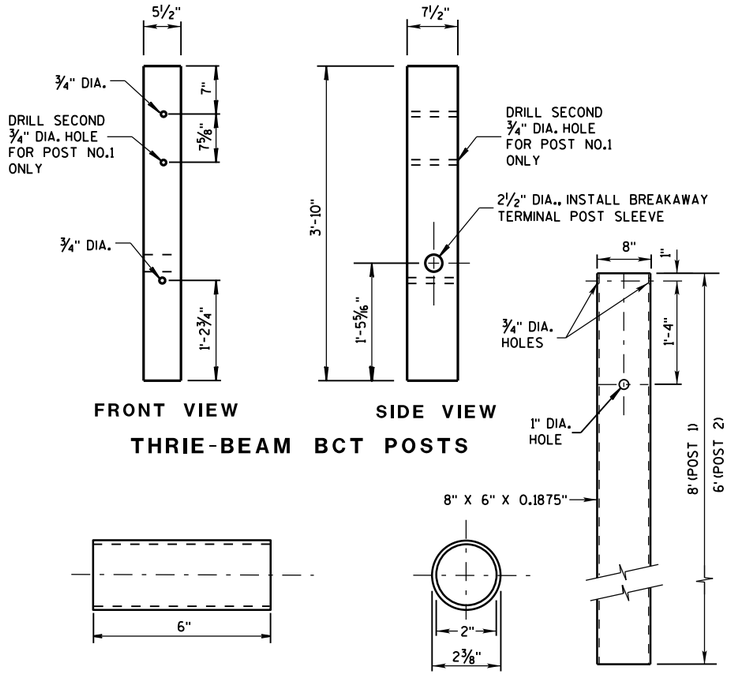
DETAILS OF CABLE ANCHOR ASSEMBLY

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 26-3c

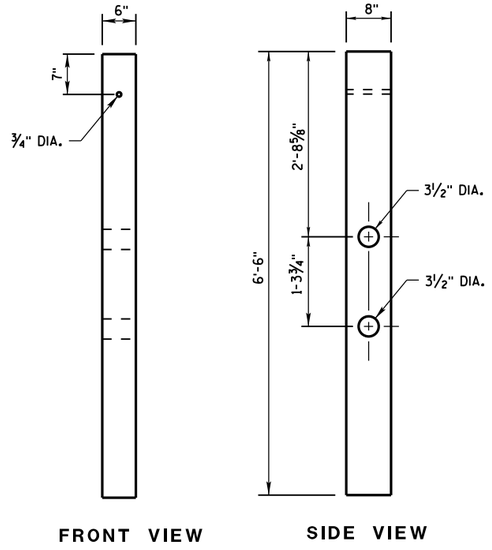


FRONT VIEW SIDE VIEW

THRIE-BEAM BCT POSTS

BREAKAWAY TERMINAL POST SLEEVE

STEEL FOUNDATION TUBE

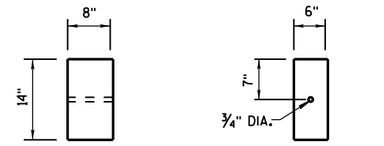


FRONT VIEW SIDE VIEW

THRIE-BEAM CRT WOOD POSTS

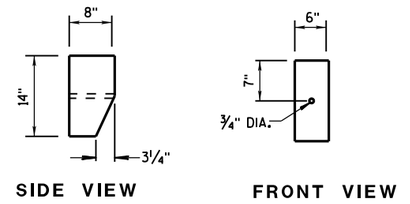
GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



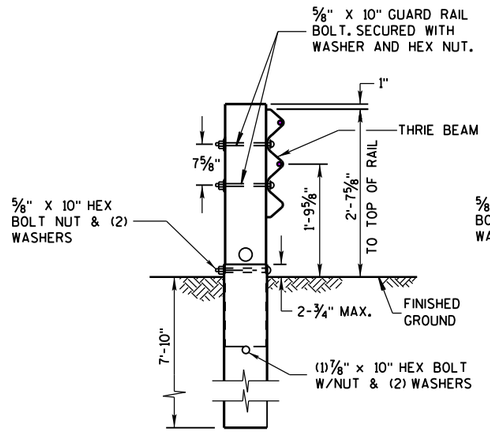
SIDE VIEW FRONT VIEW

STANDARD WOOD BLOCK



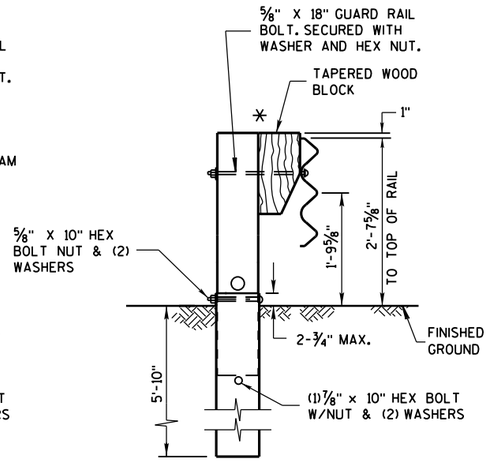
SIDE VIEW FRONT VIEW

TAPERED WOOD BLOCK



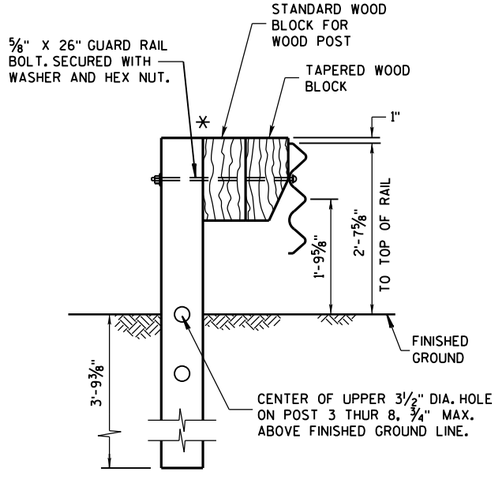
THRIE-BEAM BCT POST
(WITH 8'-0" FOUNDATION TUBE)

POST NO. 1



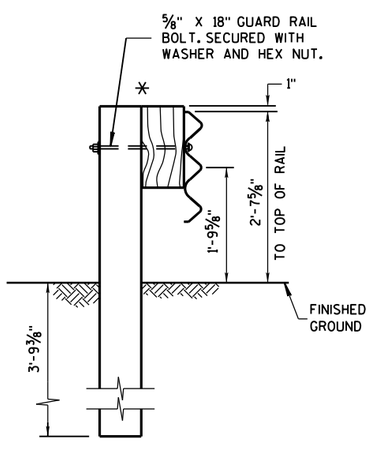
THRIE-BEAM BCT POST
(WITH 6'-0" FOUNDATION TUBE AND 1'-2" TAPERED BLOCK)

POST NO. 2



THRIE-BEAM CRT POST
(6'-6" LONG POST WITH 1'-2" BLOCK AND 1'-2" TAPERED BLOCK)

POST NO. 3,4,5,6,7, & 8



THRIE-BEAM POST
(6'-6" LONG POST WITH 1'-2" BLOCK)

POST NO. 9,10,11,& 12

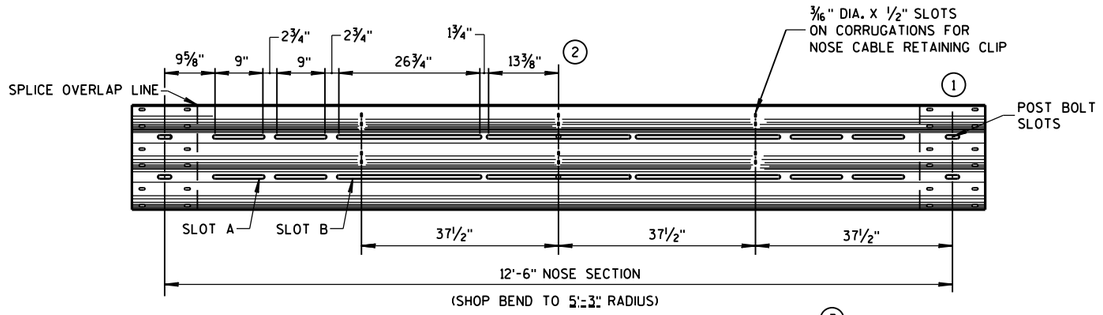
(ALSO USE FOR STEEL THRIE BEAM BEYOND POST 12)

* IF NEEDED DUE TO AN UNDERGROUND OBSTACLE ADD 1 ADDITIONAL STANDARD BLOCKOUT TO POST.

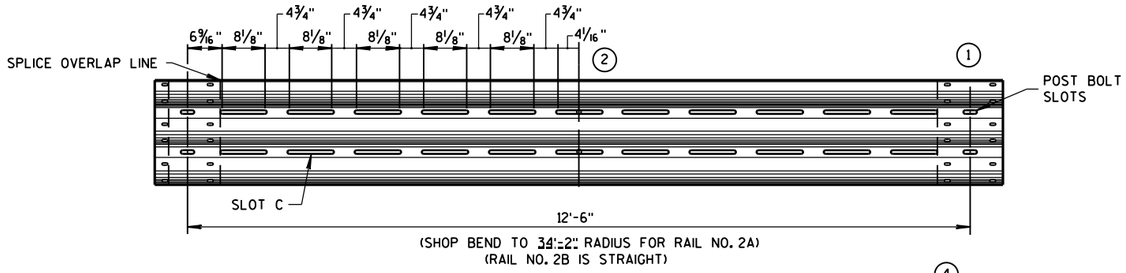
STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

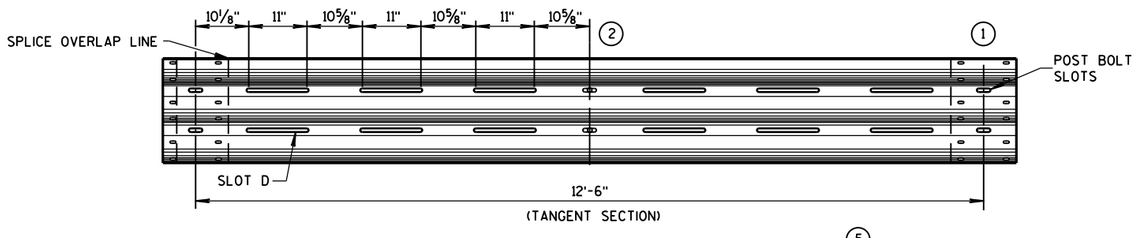
6
S.D.D. 14 B 26-3d



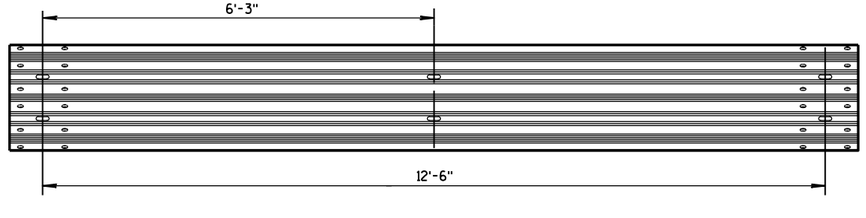
SLOTTED THRIE BEAM RAIL NO. 1 (3)



SLOTTED THRIE BEAM RAILS NO. 2A AND NO. 2B (4)



SLOTTED THRIE BEAM RAIL NO. 3 (5)



UNBENT STANDARD THRIE BEAM RAIL NO. 4 AND NO. 5

GENERAL NOTES

SEE STANADRD DETAIL DRAWINGS 14 B 26a-e.

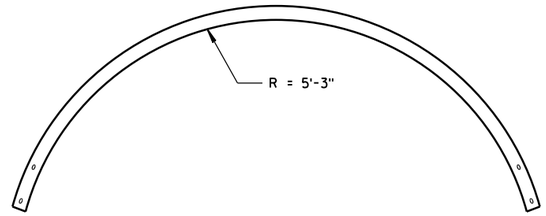
(1) SLOTTED THRIE BEAM RAIL DIMENSIONS SHOWN ARE BEFORE BENDING TO THE RADIUS SHOWN.

(2) SLOT SIZE AND SPACING SYMMETRIC.

(3) SLOTTED THRIE BEAM RAIL NO. 1, 12'-6", SHOP BEND TO R=5'-3".

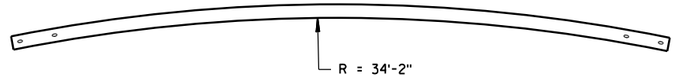
(4) SLOTTED THRIE BEAM RAIL NO. 2A, 12'-6", SHOP BEND TO R=34'-2".
SLOTTED THRIE BEAM RAIL NO. 2B, 12'-6", RAIL IS STRAIGHT.

(5) SLOTTED THRIE BEAM RAIL NO. 3, 12'-6", TANGENT.



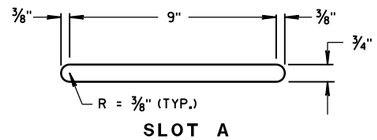
PLAN VIEW

SLOTTED THRIE BEAM RAIL NO. 1

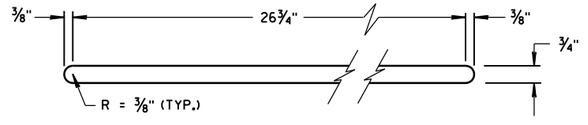


PLAN VIEW

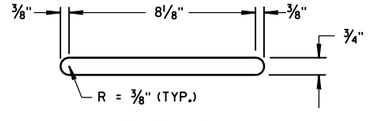
SLOTTED THRIE BEAM RAIL NO. 2A



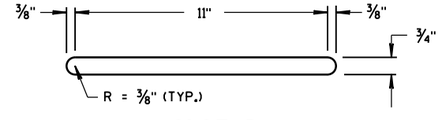
SLOT A



SLOT B



SLOT C



SLOT D

SLOT DETAILS

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 14 B 26-3e

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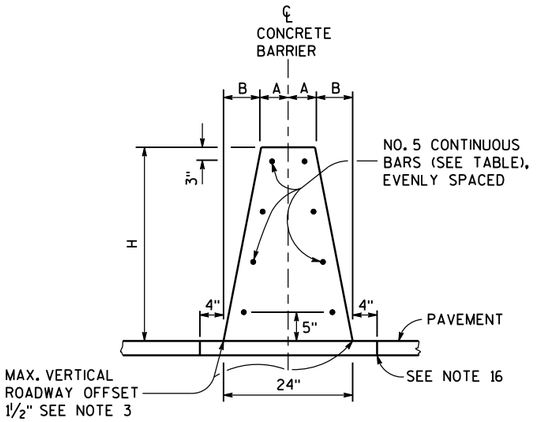
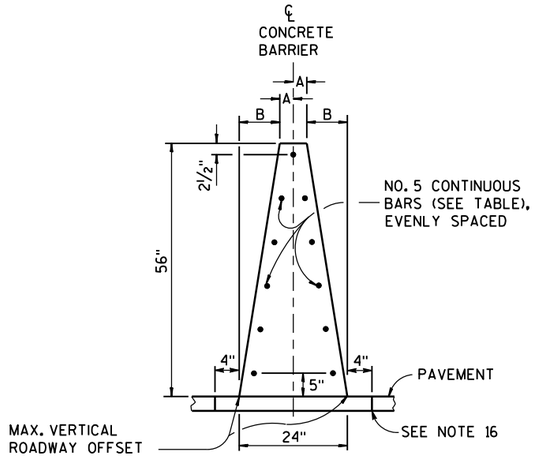
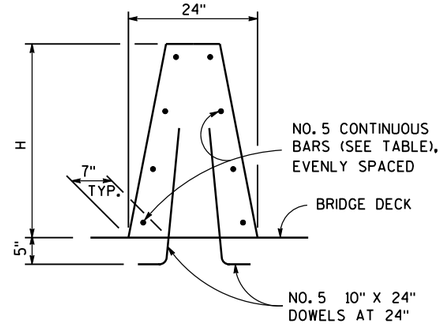
S.D.D. 14 B 26-3e



32-INCH, 36-INCH OR 42-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S32, TYPE S36, AND TYPE S42)



56-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S56)



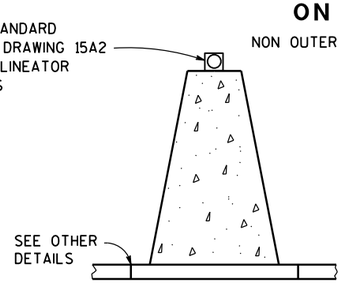
SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

NON OUTER PARAPET APPLICATION

GENERAL NOTES

1. WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.
2. EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK, AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OR ½" MINIMUM.
3. WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1½", USE TYPE A
4. PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.
5. EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED FOR ROADWAY OFFSETS LESS THAN 1'-0".
6. FOR TYPE S32, TYPE S36, TYPE S42, AND S56 MONOLITHIC FOOTING OR DOWELED FOOTING WITH 2-#8 x 8" @ 2'-0".
7. STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL 2 FEET. BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.
8. 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.
9. WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PLACE OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. EXPOSED STEEL INTO NEXT POURS REINFORCEMENT. LAPS TO BE FIRMLY TIED.
10. USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
11. 2" CLEAR COVER TYPICAL.
12. COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED. LAPS TO BE FIRMLY TIED.
13. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 NO ADDITIONAL VERTICAL STEEL NEEDED. IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A REQUIRES VERTICAL STEEL. SEE OTHER DETAIL.
14. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 DEPTH OF FOOTING 10". IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A MATCH TOTAL HEIGHT OF SINGLE SLOPE BARRIER RETAINING WALL.
15. FOR ALL BARRIER TYPES SHOWN, ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN ON DRAWING OR DETAILS SHOWN ON S.D.D. 14B33. ANCHORS INCIDENTAL TO CBSS.
16. CONCRETE PAD UNDER CBSS MAY BE PLACED INTEGRAL WITH BARRIER, PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED FULL DEPTH. CONCRETE PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6¼	5¾	8
42	5¼	6¾	10
56	3	9	11



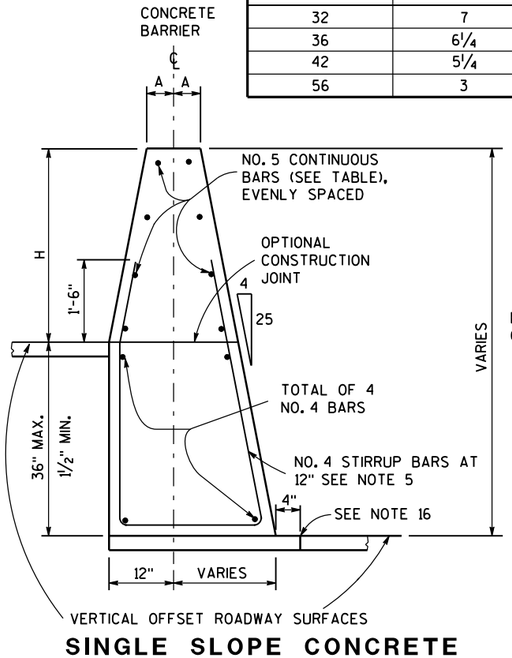
DELINEATION

DELINEATOR SPACING ON HORIZONTAL CURVES

RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

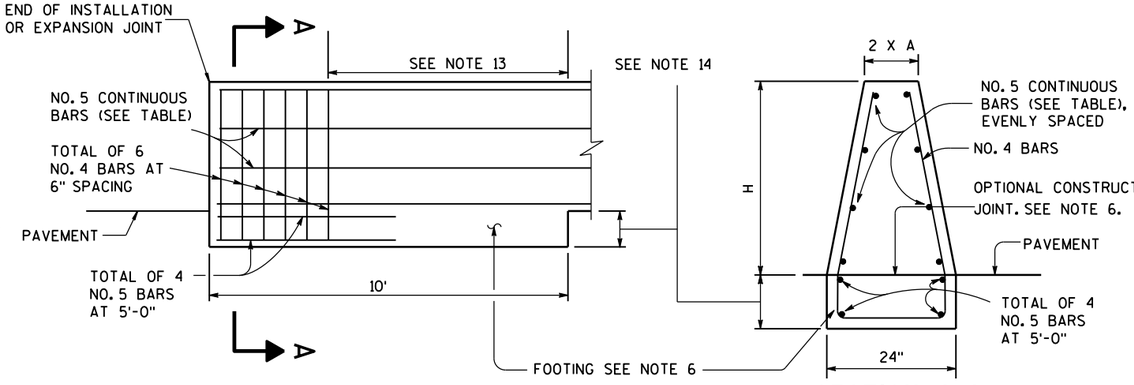
DELINEATOR SPACING ON RADIUS GREATER THAN 1000 FEET OR TANGENT SECTIONS

	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2	



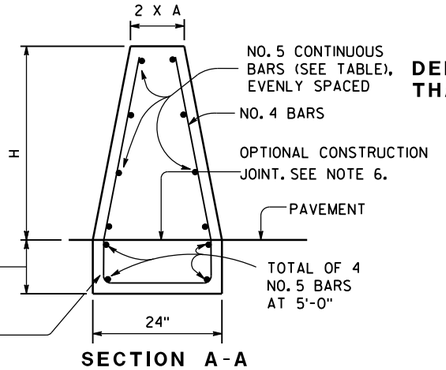
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)

(BETWEEN ADJACENT ROADWAYS)



END ANCHOR SINGLE SLOPE CONCRETE BARRIER

AT CONSTRUCTION JOINT



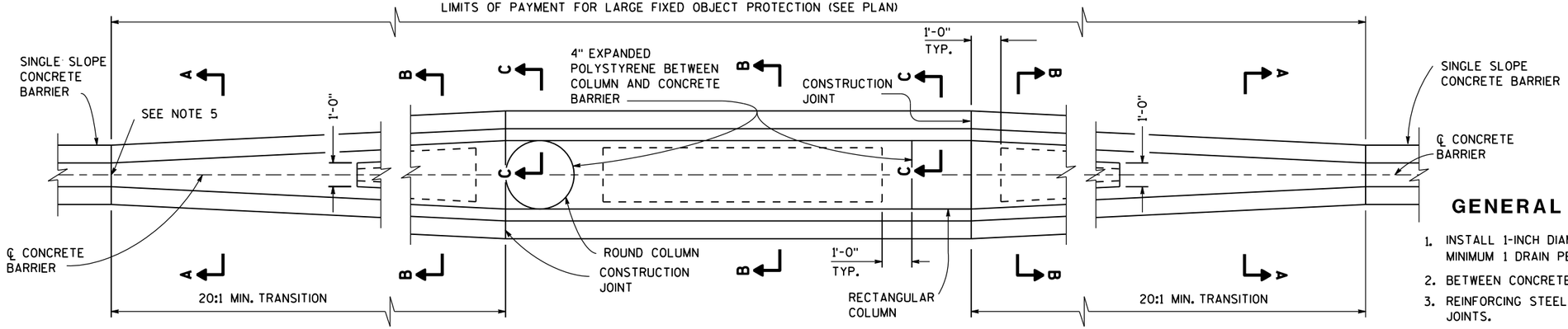
SECTION A-A

CONCRETE BARRIER SINGLE SLOPE (CBSS)

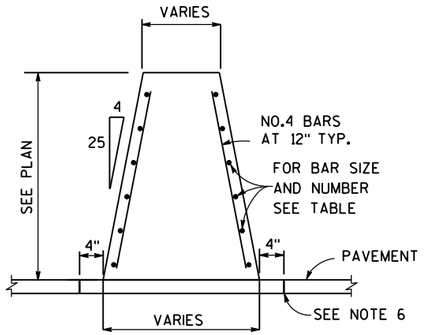
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

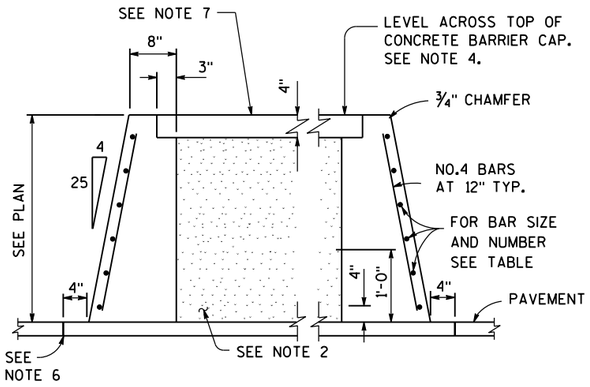
S.D.D. 14 B 32-3a



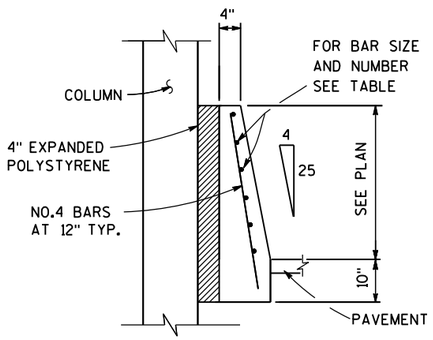
LARGE FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56



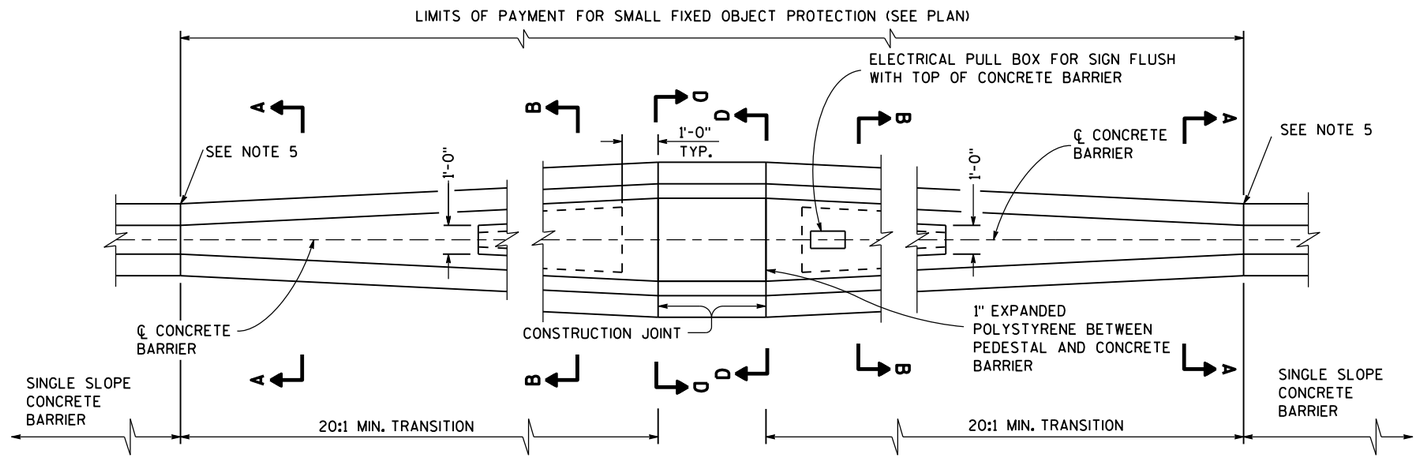
SECTION A-A



SECTION B-B



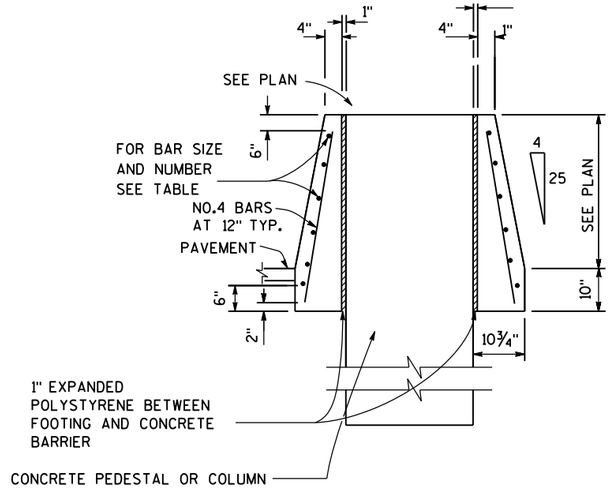
SECTION C-C



SMALL FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56

GENERAL NOTES

1. INSTALL 1-INCH DIAMETER DRAIN PIPE EVERY 20 FEET OF CROSS SECTION B-B. MINIMUM 1 DRAIN PER CAVITY.
2. BETWEEN CONCRETE BARRIER WALLS FILL WITH GRANULAR BACKFILL GRADE 2
3. REINFORCING STEEL SHALL EXTEND CONTINUOUS THROUGH CONSTRUCTION JOINTS.
4. ADJUST HEIGHT OF CONCRETE BARRIER WALL ON LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS TO PROVIDE LEVEL GRADE ACROSS TOP OF CONCRETE CAP.
5. IF FIXED OBJECT PROTECTION IS INSTALLED FIRST, USE COLD JOINTS. IF CBSS PLACED FIRST, USE EXPANSION JOINT.
6. CONCRETE PAD UNDER CBSS MAY BE PLACED INTEGRAL WITH BARRIER, PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED FULL DEPTH. SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. CONCRETE PAD MINIMUM DEPTH IS 6 INCHES, OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.
7. USE NO. 3 BAR SPACED 12 INCHES CENTER TO CENTER (PLACED IN EACH DIRECTION) OR EQUIVALENT WIRE MESH.



SECTION D-D

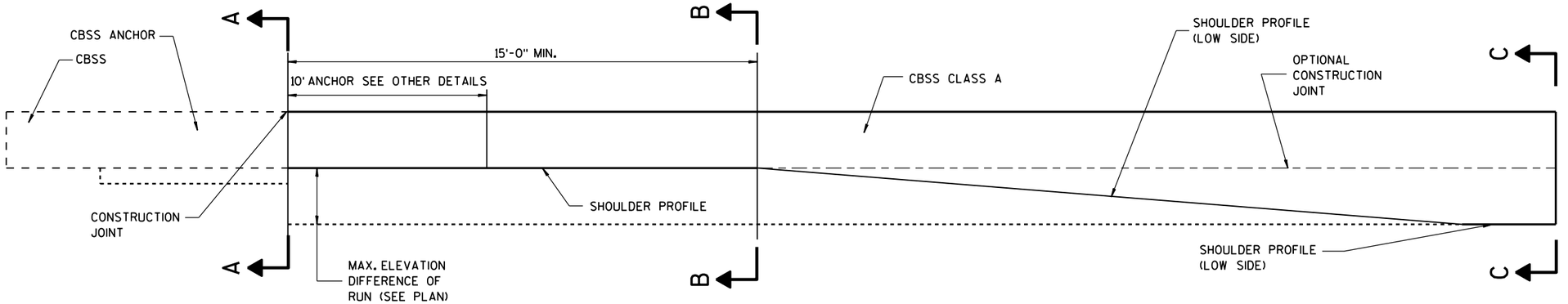
BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	9

CONCRETE BARRIER SINGLE SLOPE (CBSS)

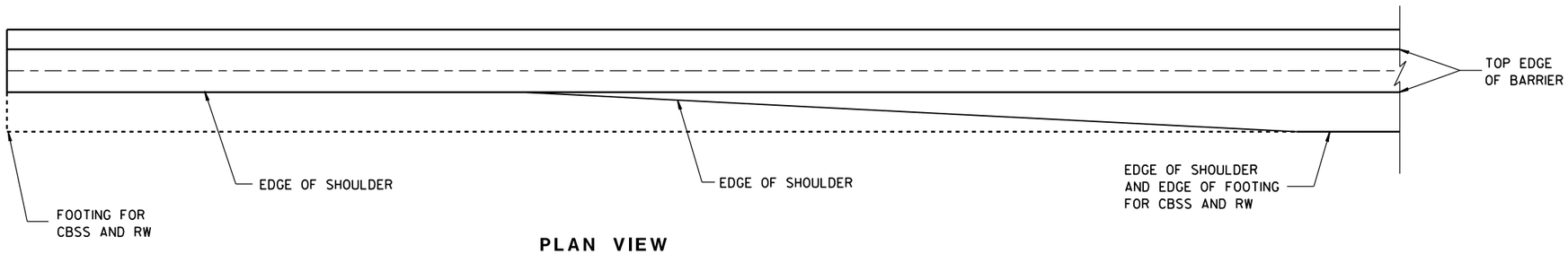
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

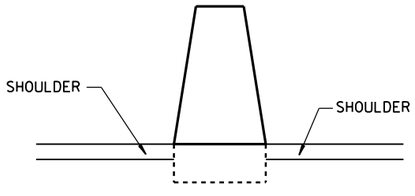
S.D.D. 14 B 32-3b



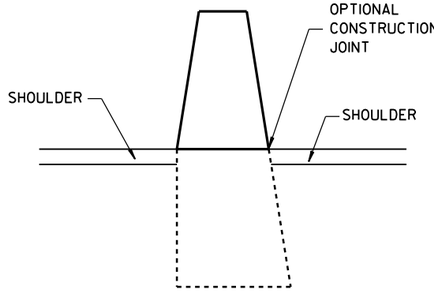
ELEVATION VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



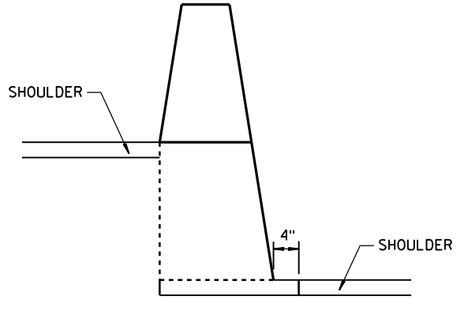
PLAN VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



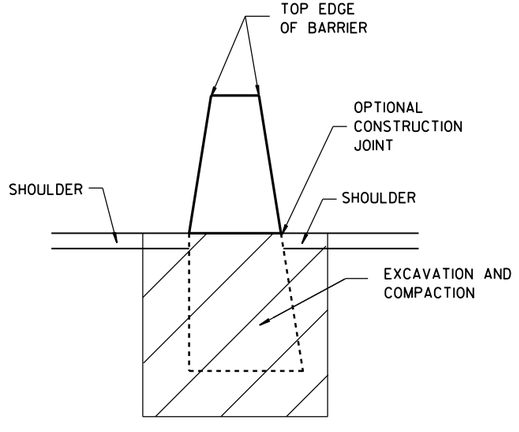
SECTION A-A



SECTION B-B



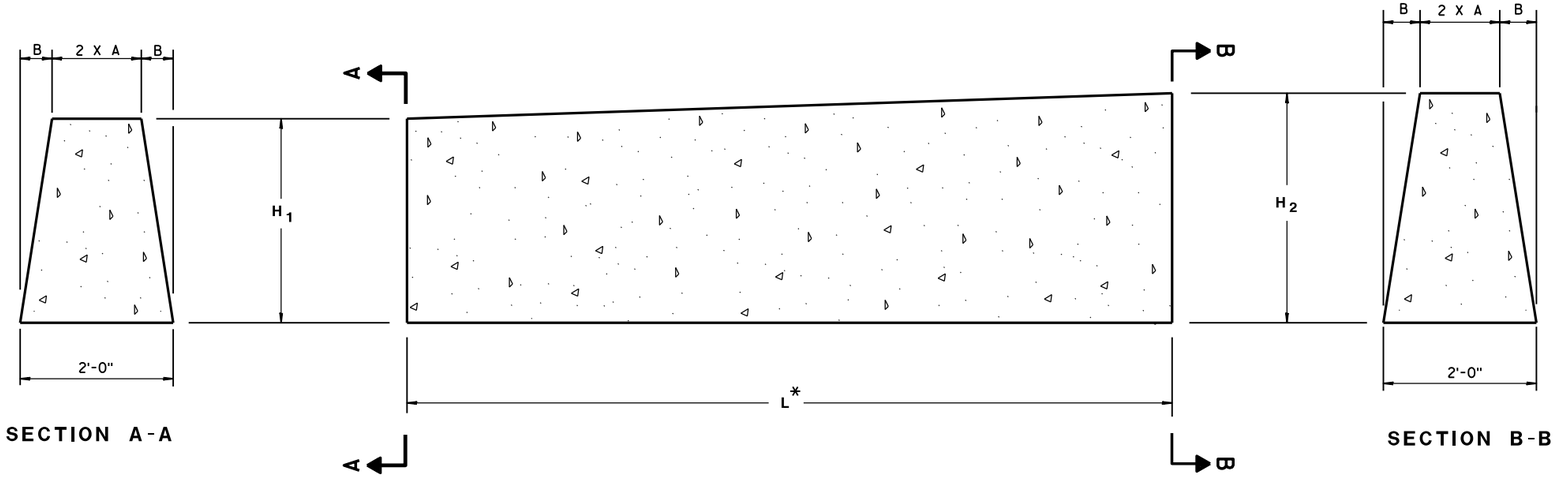
SECTION C-C



CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 32-3c



SECTION A-A

SECTION B-B

DOUBLE COLD JOINT HEIGHT TRANSITION

BARRIER DIMENSIONS

BARRIER HEIGHT INCHES	A INCHES	B INCHES
32	7	5
36	6 1/4	5 3/4
42	5 1/4	6 3/4
56	3	9

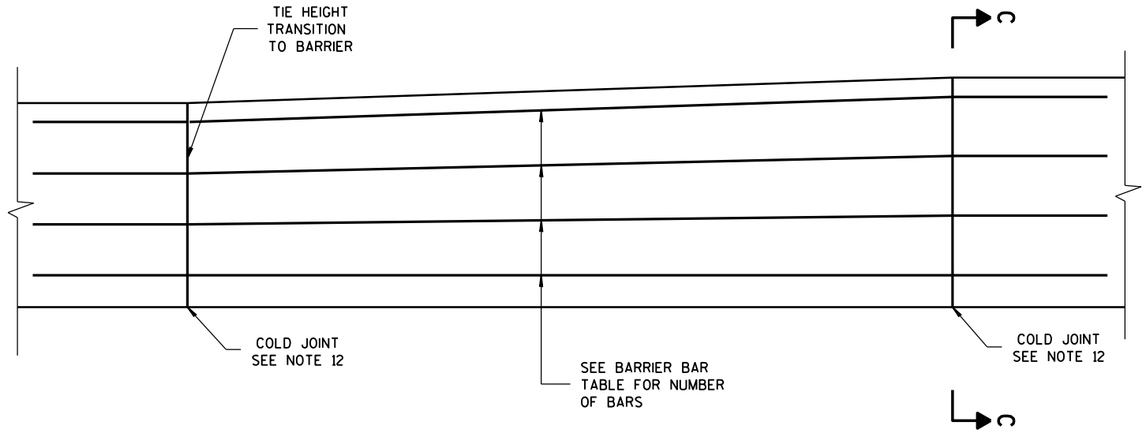
MULTIPLE HEIGHT TRANSITIONS MAY BE USED IN SEQUENCE TO GET TO APPROPRIATE HEIGHT.

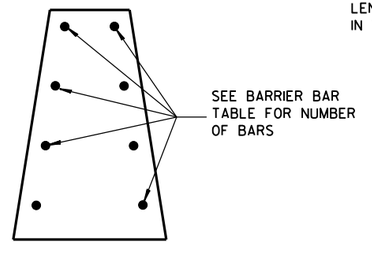
USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

BARRIER BARS

H_1	H_2	L*	NUMBER OF NO. 5 BARS
32"	36"	10'-0"	8
36"	42"	10'-6"	10
42"	56"	24'-6"	11

* LENGTH OF DOUBLE COLD JOINT INCLUDED IN THE TOTAL LENGTH OF CBSS.





SECTION C-C

STEEL REINFORCEMENT DETAIL

CONCRETE BARRIER SINGLE SLOPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

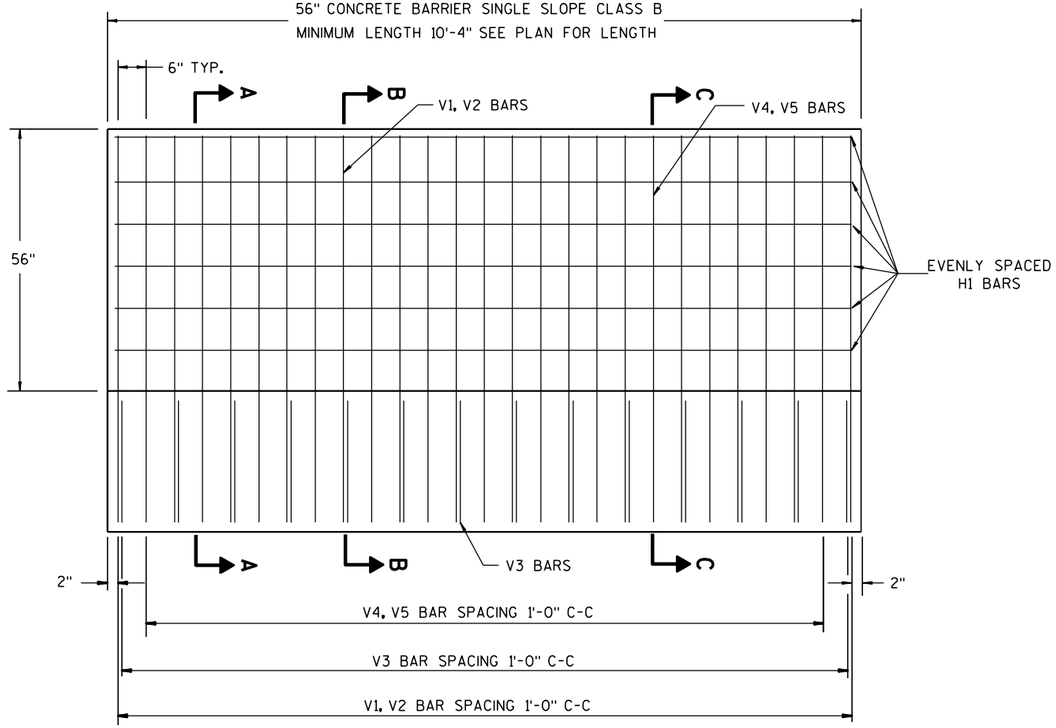
APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

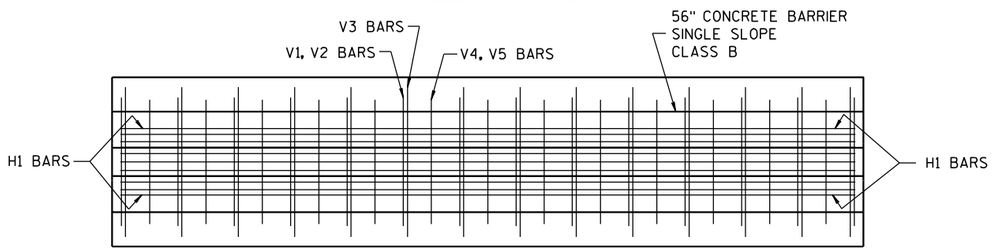
S.D.D. 14 B 32-3d

6

S.D.D. 14 B 32-3d



ELEVATION VIEW



PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

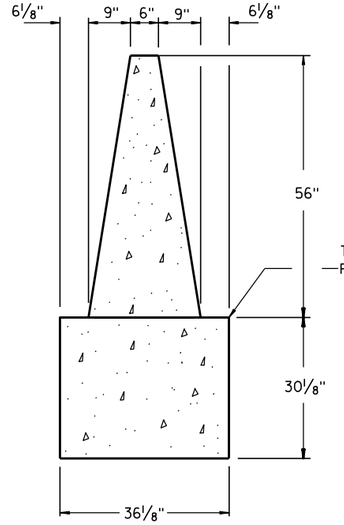
WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.

PAVEMENT AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL

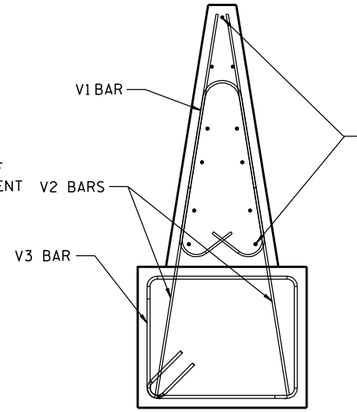
PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.

WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PLACE OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. EXPOSED STEEL INTO NEXT POURS REINFORCMENT. LAPS TO BE FIRMLY TIED.

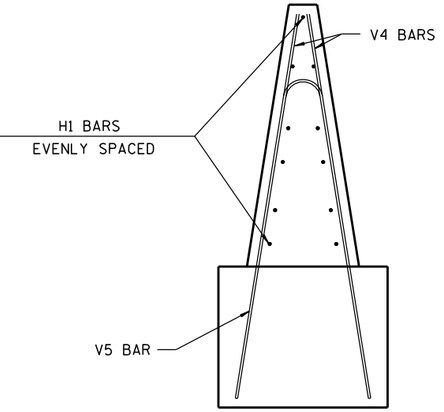
IF REQUIRED USE THRIE BEAM ANCHOR. NO OTHER ANCHOR REQUIRED.



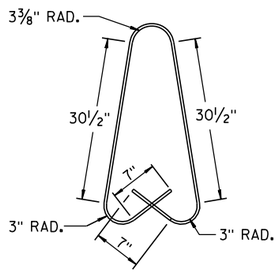
SECTION A-A



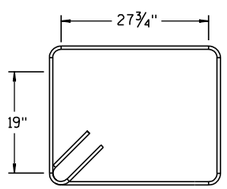
SECTION B-B



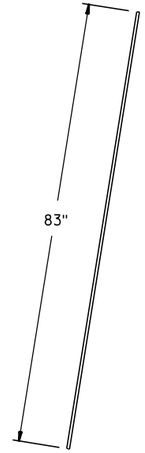
SECTION C-C



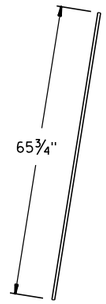
V1 BAR BENDING DETAIL
V1 BARS ARE NO. 4 BARS



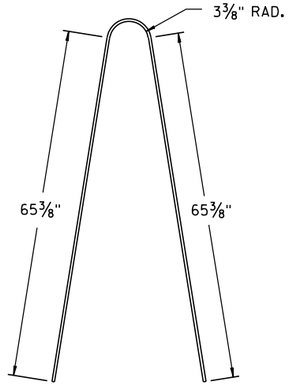
V3 BAR BENDING DETAIL
V3 BARS ARE NO. 6 BARS



V2 BAR BENDING DETAIL
V2 BARS ARE NO. 5 BARS



V4 BAR BENDING DETAIL
V4 BARS ARE NO. 5 BARS

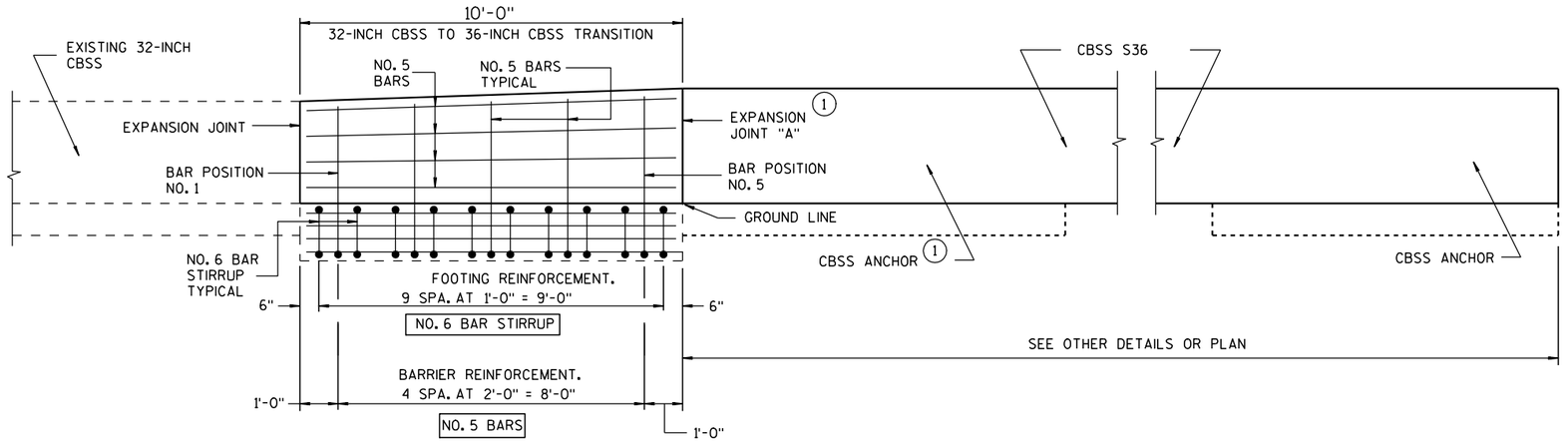


V5 BAR BENDING DETAIL
V4 BARS ARE NO. 6 BARS

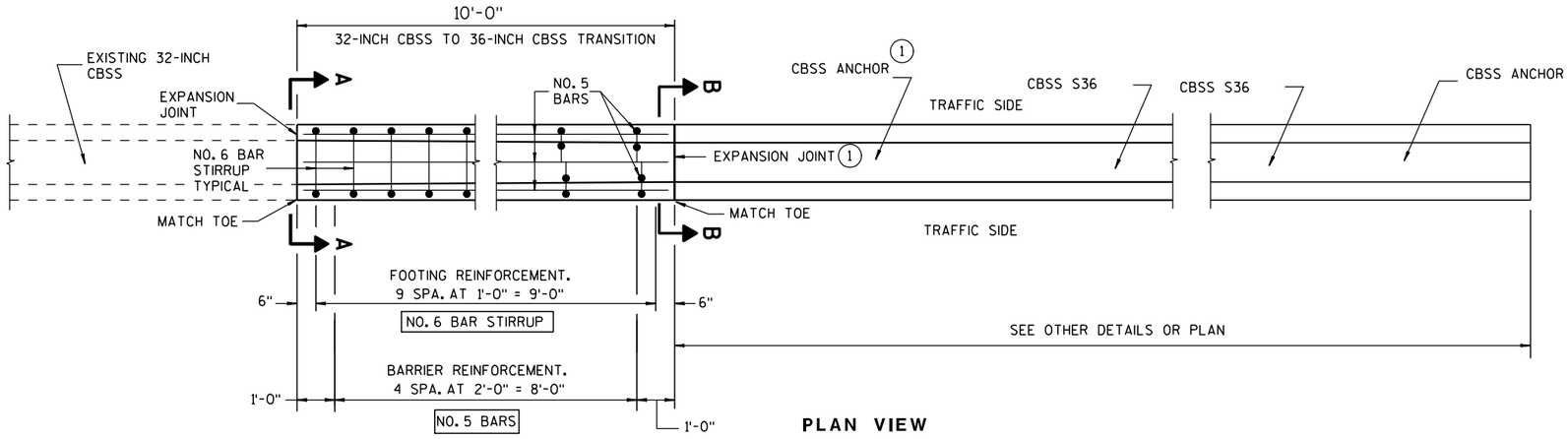
56" CONCRETE BARRIER SINGLE SLOPE CLASS B

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 34-1b



ELEVATION VIEW



PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

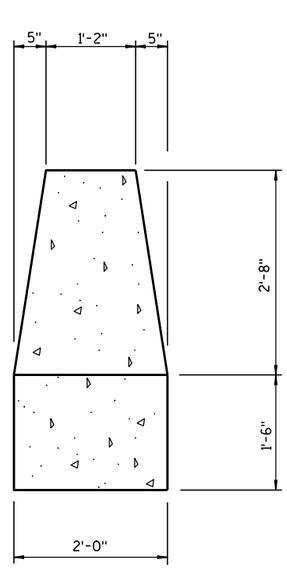
4000 PSICONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE $\frac{3}{4}$" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

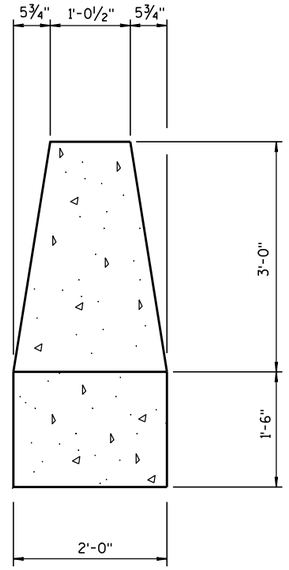
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

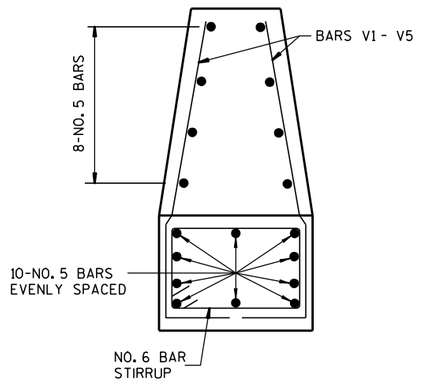
(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD-JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHOR NOT REQUIRED.



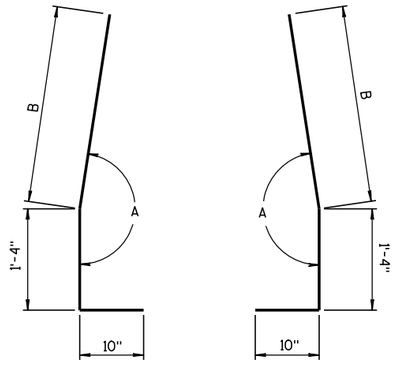
SECTION A-A



SECTION B-B



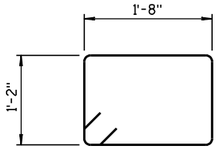
BAR DETAIL
BAR POSITION NO. 1 - NO. 5



BAR BENDING DETAIL
FOR BARS V1 - V5

BAR CHART
SECTIONS V1 - V5

BAR	A	B
V1	171°-10'	2'-6½"
V2	171°-05'	2'-8"
V3	170°-55'	2'-9"
V4	170°-40'	2'-9½"
V5	171°	2'-10"



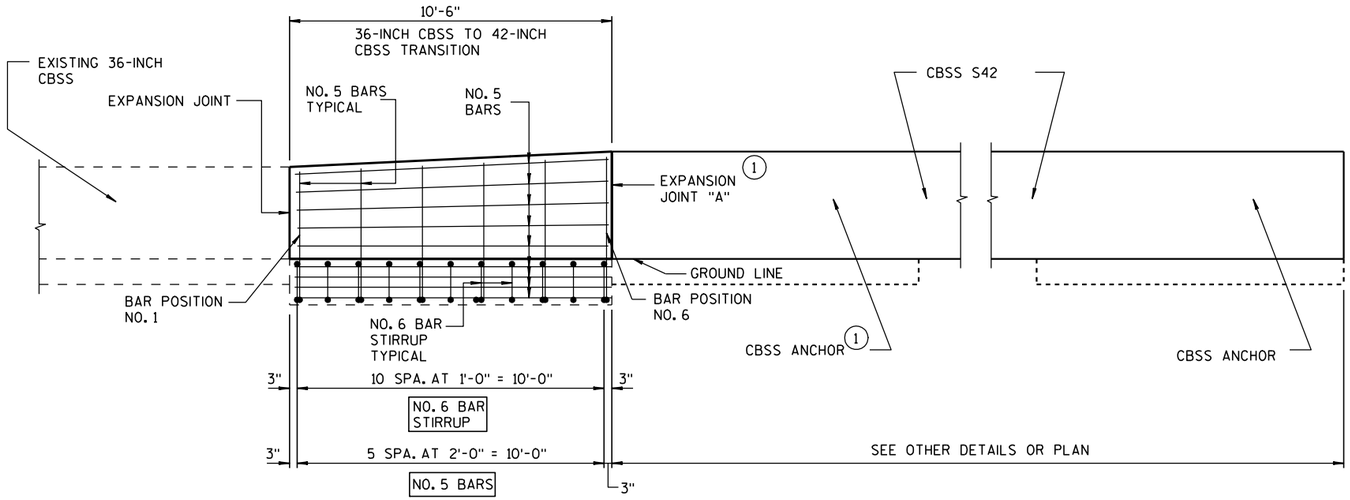
STIRRUP BAR
BENDING DETAIL

32-INCH SINGLE SLOPE CONCRETE BARRIER TO 36-INCH SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION

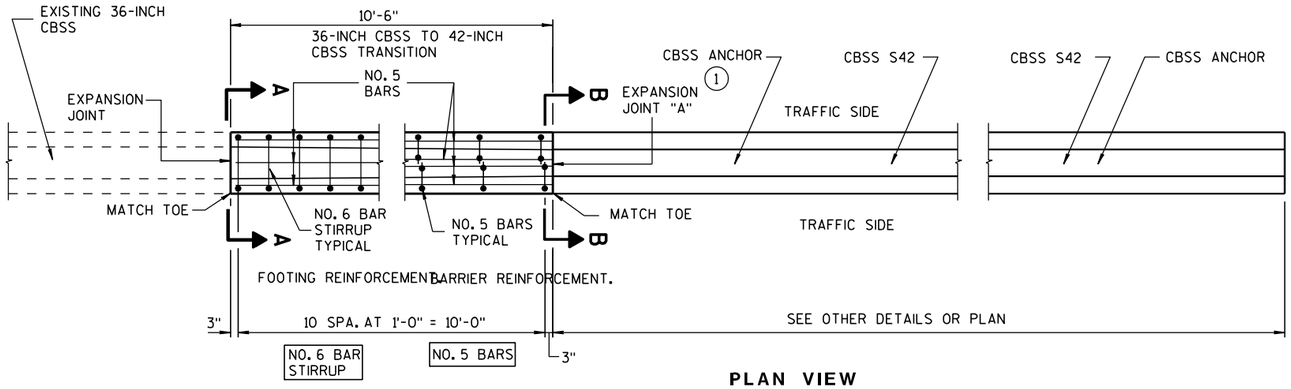
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-3-2010
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS [illegible]
ENGINEER
FHWA

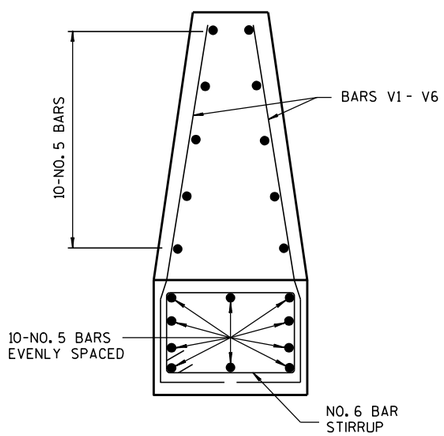
6
S.D.D. 14 B 39-1a



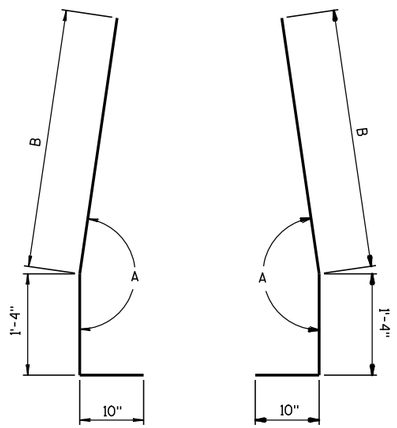
ELEVATION VIEW



PLAN VIEW



BAR DETAIL
BAR POSITION NO. 1 - NO. 6



BAR BENDING DETAIL
FOR BARS V1 - V6

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

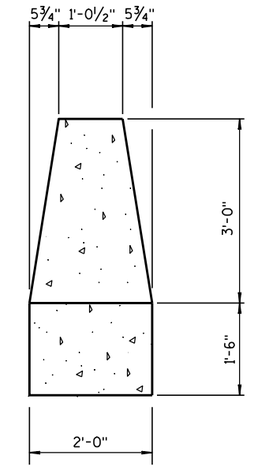
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

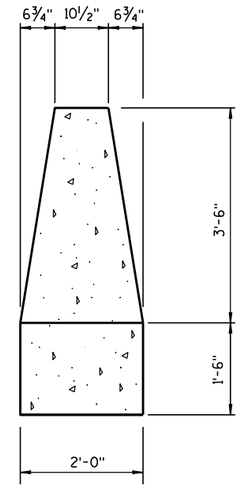
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD-JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHOR NOT REQUIRED.



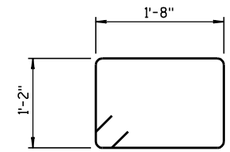
SECTION A-A



SECTION B-B

BAR CHART
SECTIONS V1 - V6

BAR	A	B
V1	170°-55'	2'-10½"
V2	171°-05'	3'-0"
V3	171°-20'	3'-1"
V4	171°-20'	3'-2"
V5	171°-35'	3'-3"
V6	171°-40'	3'-4½"



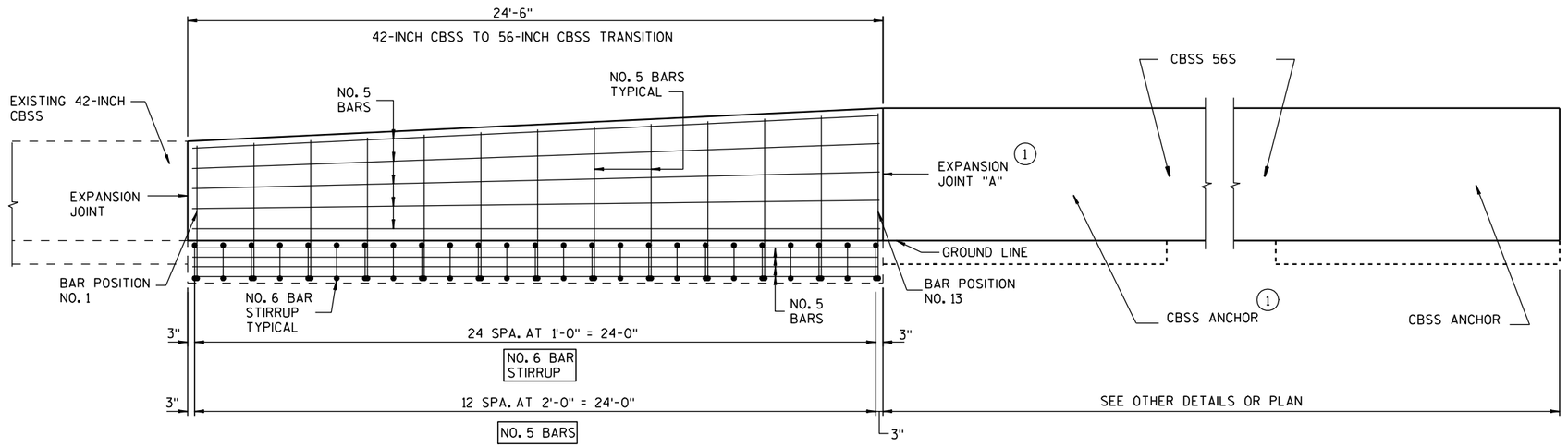
STIRRUP BAR
BENDING DETAIL

36-INCH SINGLE SLOPE CONCRETE BARRIER TO 42-INCH SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION

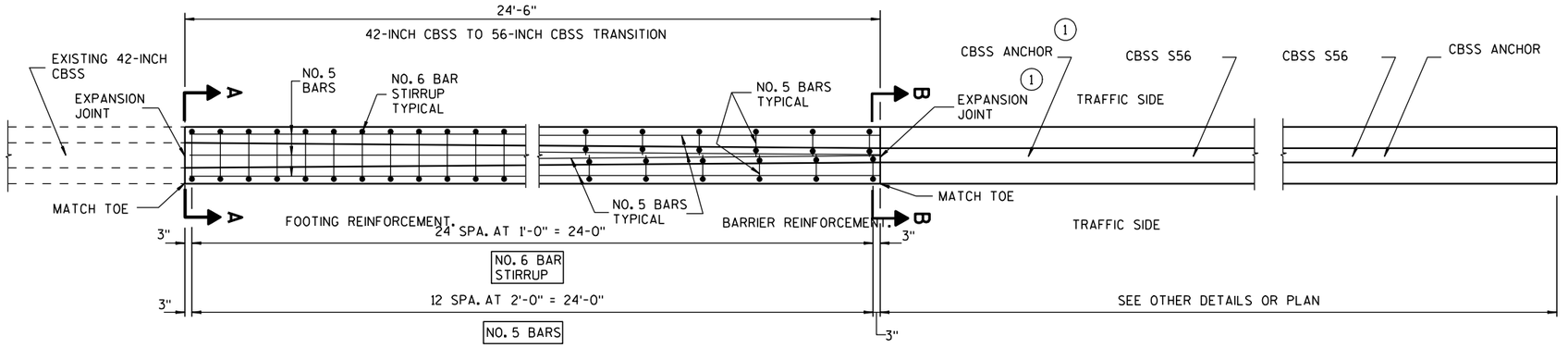
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-3-2010
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 14 B 39-1c



ELEVATION VIEW



PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

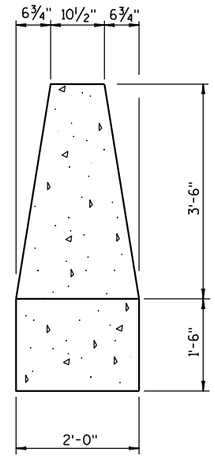
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE 3/4" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

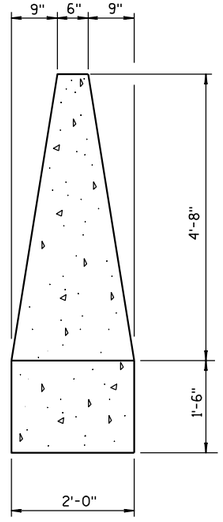
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

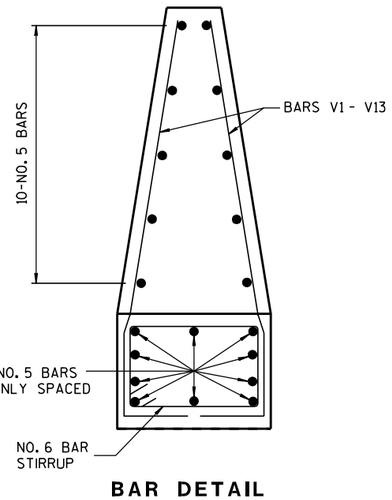
(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD-JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHOR NOT REQUIRED.



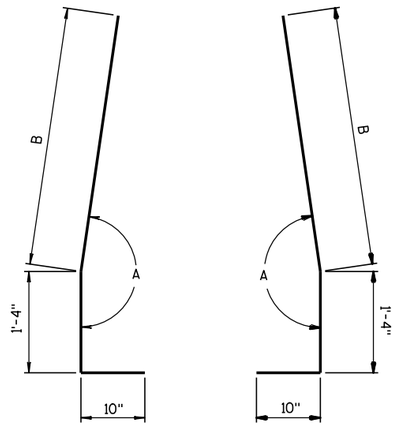
SECTION A-A



SECTION B-B



BAR DETAIL
BAR POSITION NO. 1 - NO. 13

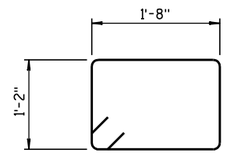


BAR BENDING DETAIL
FOR BARS V1 - V13

BAR CHART SECTIONS V1 - V13

BAR	A	B
V1	170°-50'	3'-4 1/2"
V2	170°-50'	3'-6"
V3	170°-55'	3'-7"
V4	171°	3'-8"
V5	170°-55'	3'-9 1/2"
V6	170°-50'	3'-10 1/2"
V7	170°-50'	3'-11 1/2"

BAR	A	B
V8	170°-55'	4'-0 1/2"
V9	170°-50'	4'-2"
V10	170°-50'	4'-3"
V11	170°-50'	4'-4 1/2"
V12	170°-55'	4'-5 1/2"
V13	170°-50'	4'-6 1/2"



STIRRUP BAR
BENDING DETAIL

42-INCH SINGLE SLOPE CONCRETE BARRIER TO 56-INCH SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6-3-2010 DATE — /S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER

420

FHWA

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S.D.D. 14 B 39-1e

6

S.D.D. 14 B 39-1e

GENERAL NOTES

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

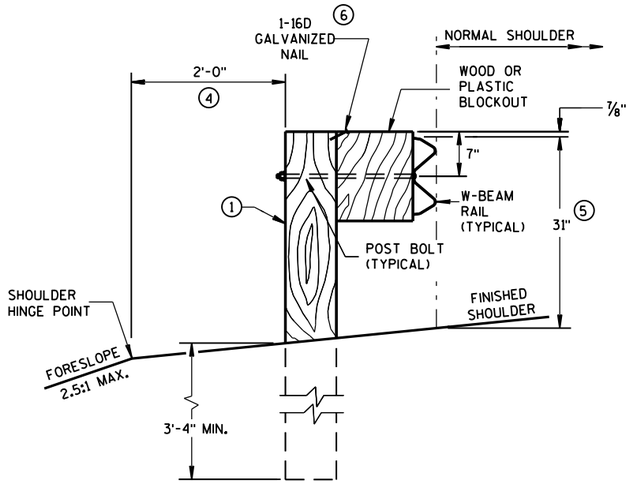
(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

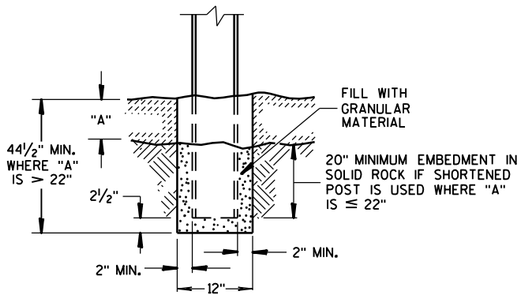
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



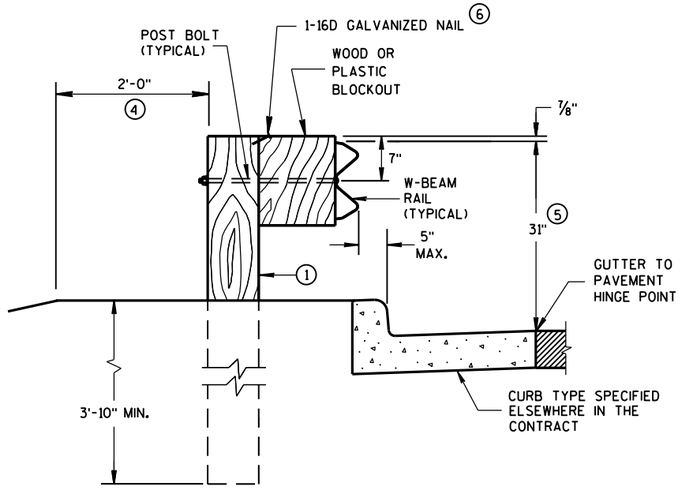
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



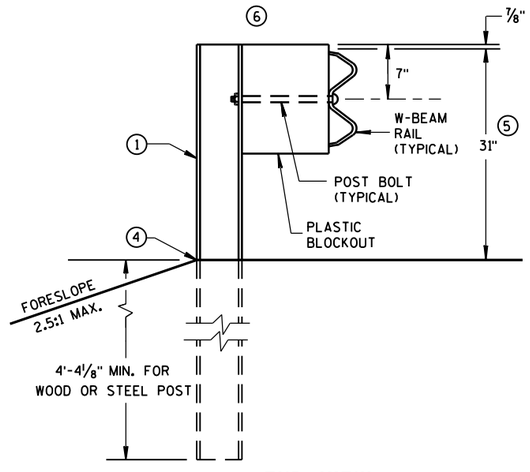
END VIEW

SETTING STEEL OR WOOD POST IN ROCK (3)



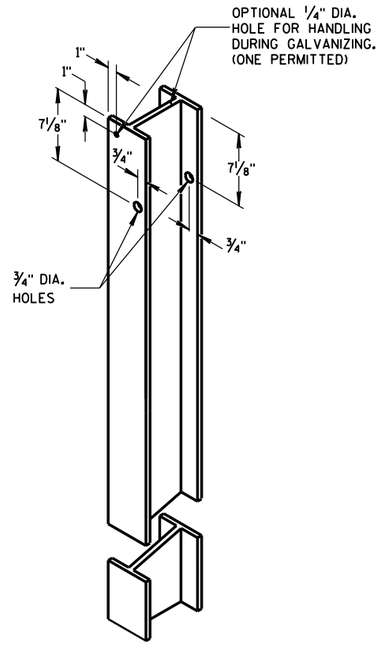
END VIEW

LOCATED ALONG A CURBED ROADWAY

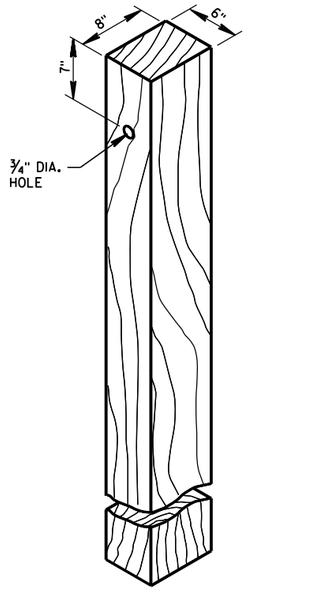


END VIEW

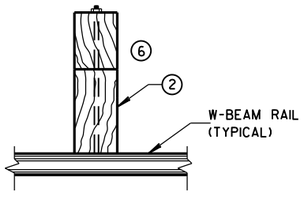
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



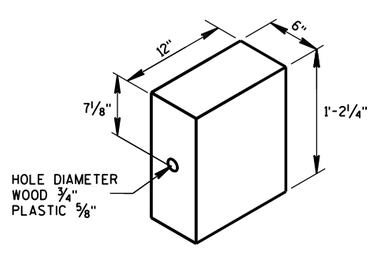
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) (1)



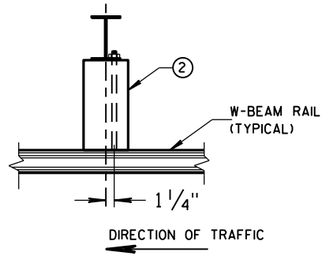
WOOD POST
(6" X 8") NOMINAL (1)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT (2)

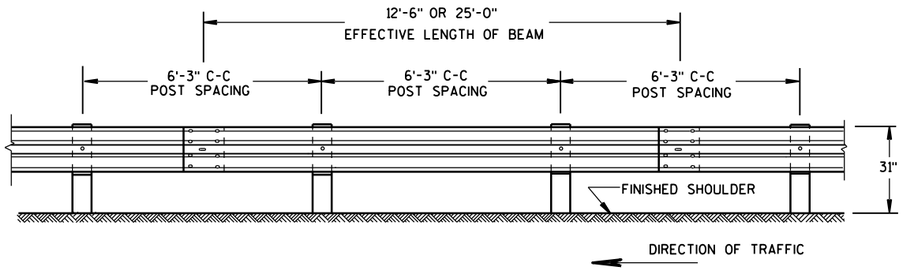


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

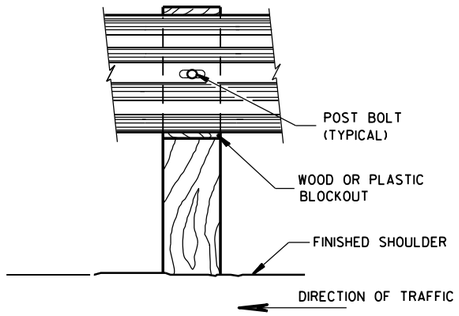
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 42-3a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



FRONT VIEW AT WOOD POST

GENERAL NOTES

(7) PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

(8) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

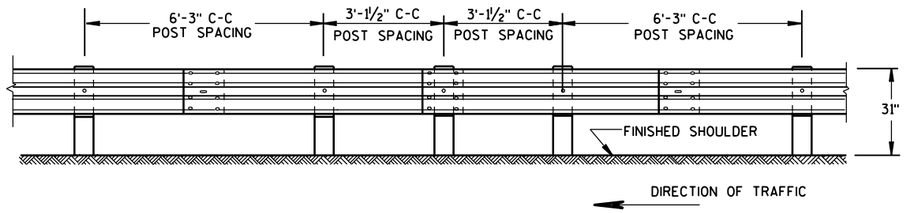
(9) REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

(10) PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

(11) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

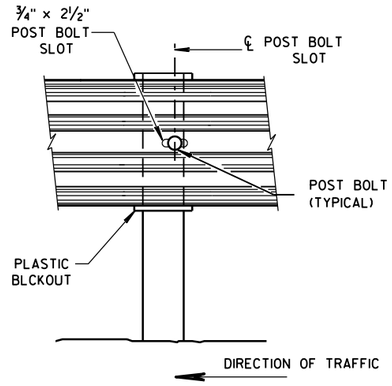
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

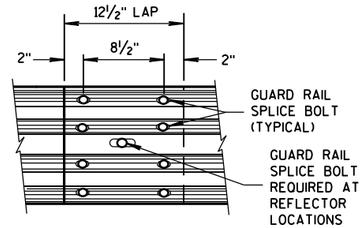


FRONT VIEW

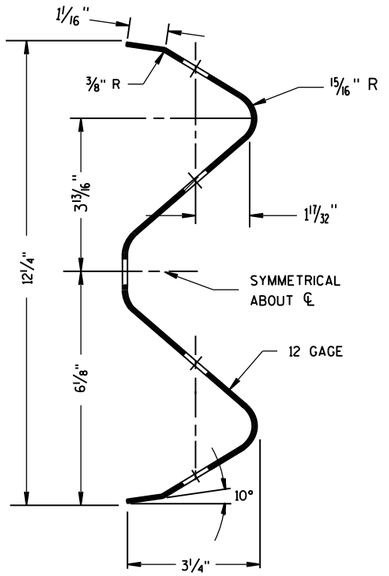
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



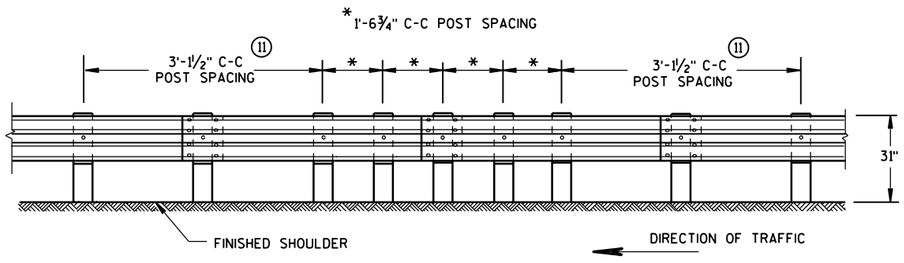
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

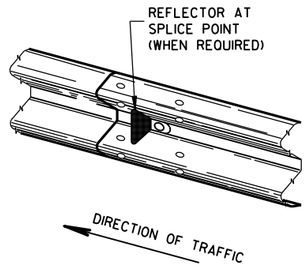


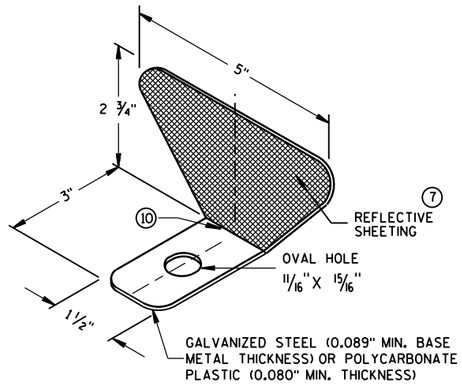
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





REFLECTOR SPACING (8)

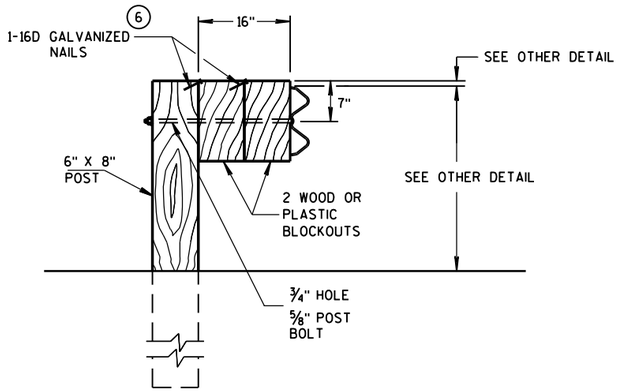
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (9)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 (10)	

ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (7)

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

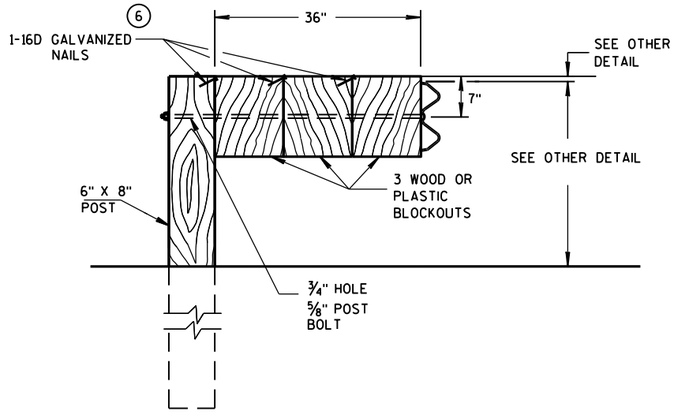
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 42-3b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

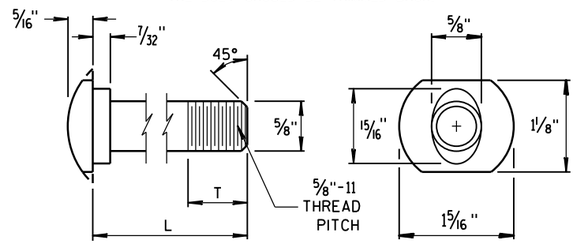


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

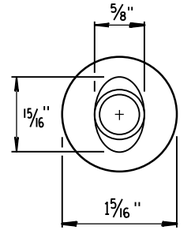
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

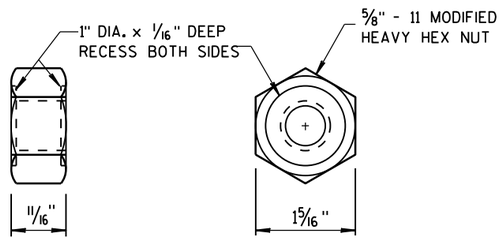


POST BOLT TABLE

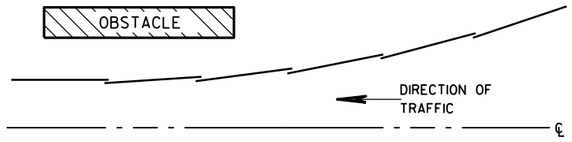
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

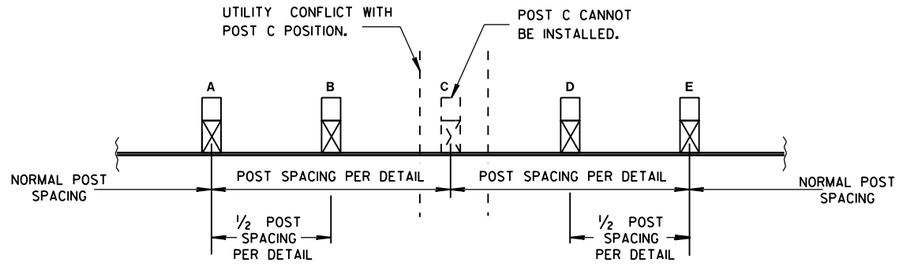


POST BOLT AND RECESS NUT

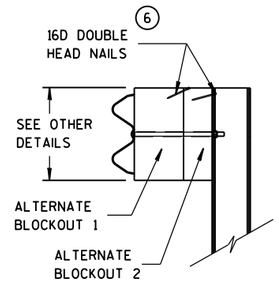


PLAN VIEW

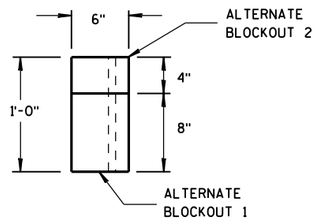
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
423
FHWA

6

S.D.D. 14 B 42-3c

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S.D.D. 14 B 42-3c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

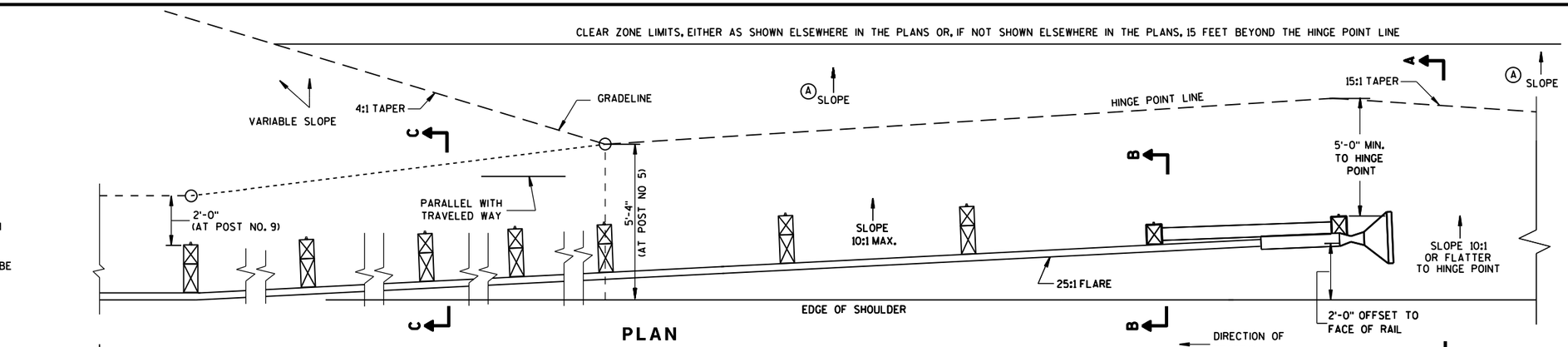
SEE SDD 14B42 FOR MORE INFORMATION.

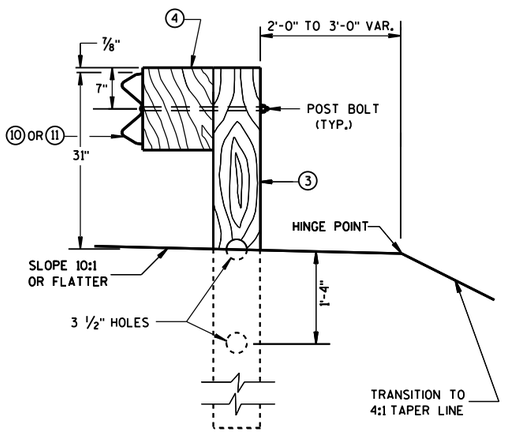
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

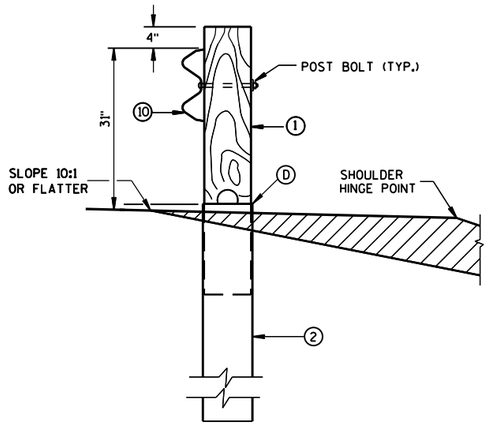
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.

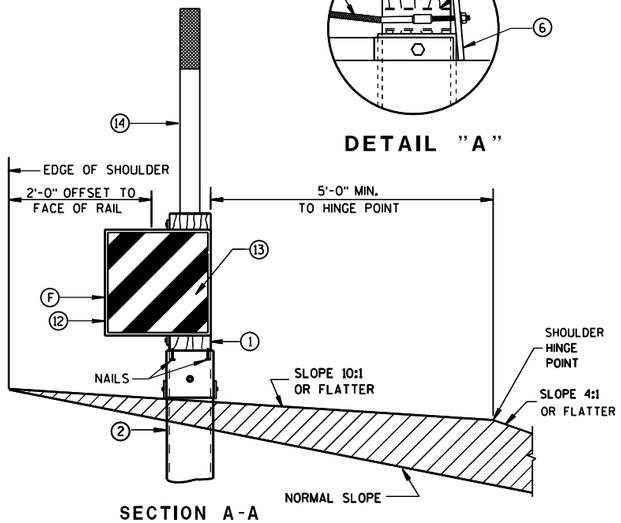




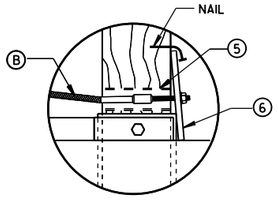
SECTION C-C
TYPICAL AT POST NOS. 3-9



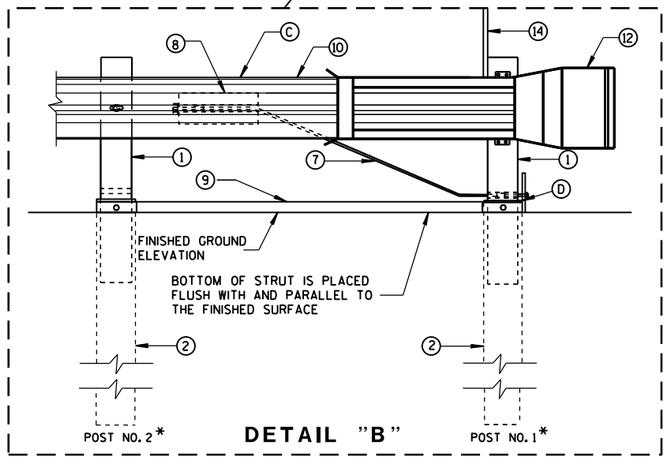
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

S.D.D. 14 B 44-2a

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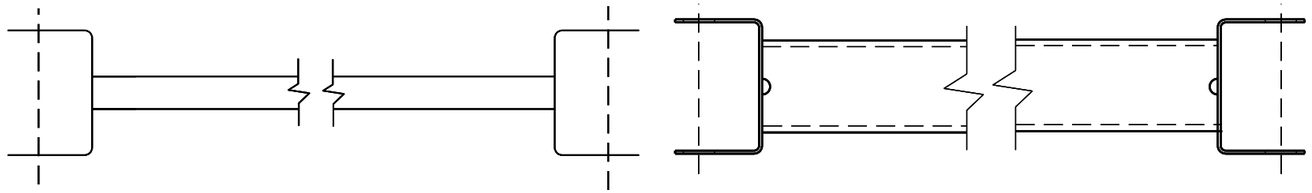
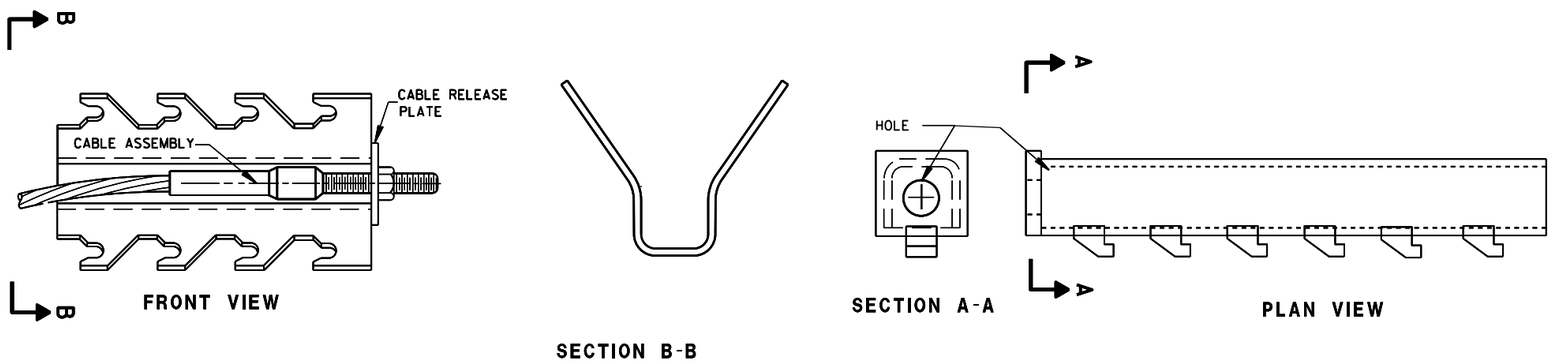


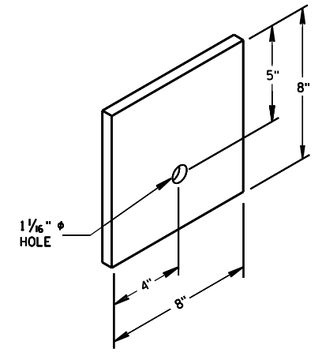
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



GENERIC ANCHOR CABLE BOX (8) (H)



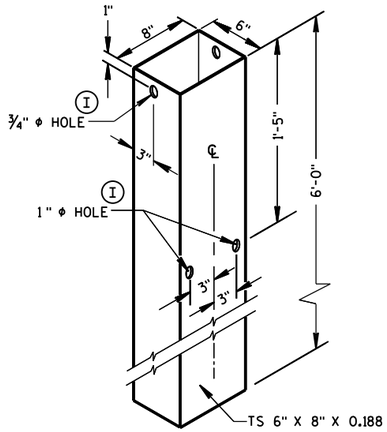
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

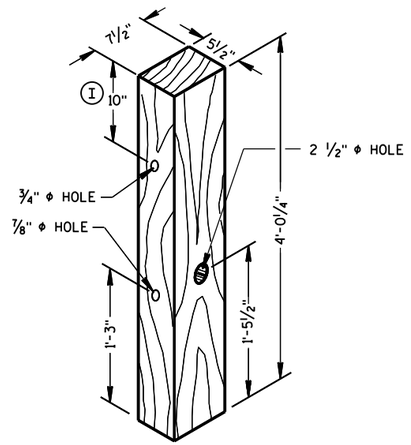
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 44-2b

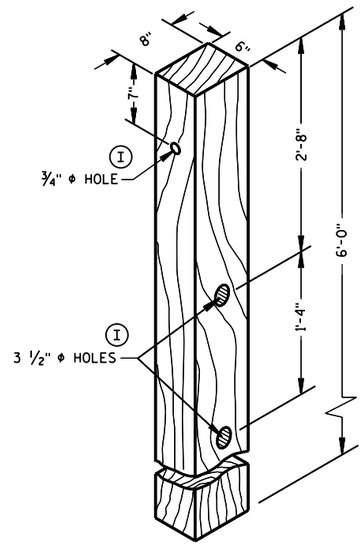


FOUNDATION TUBE (2)



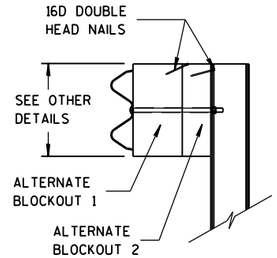
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

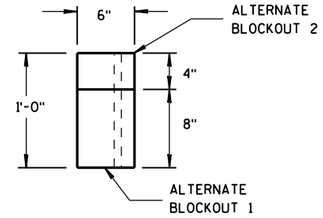


POSTS NUMBER 3-9

WOOD CRT POST (3)

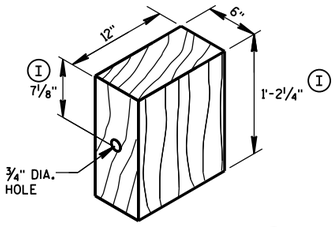


SIDE VIEW



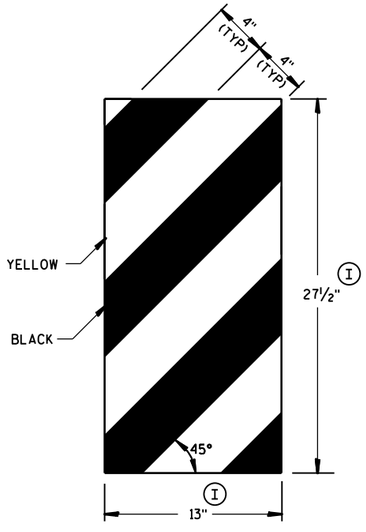
TOP VIEW

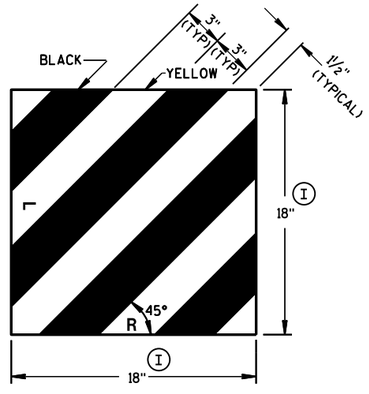
ALTERNATE WOOD BLOCKOUT DETAIL



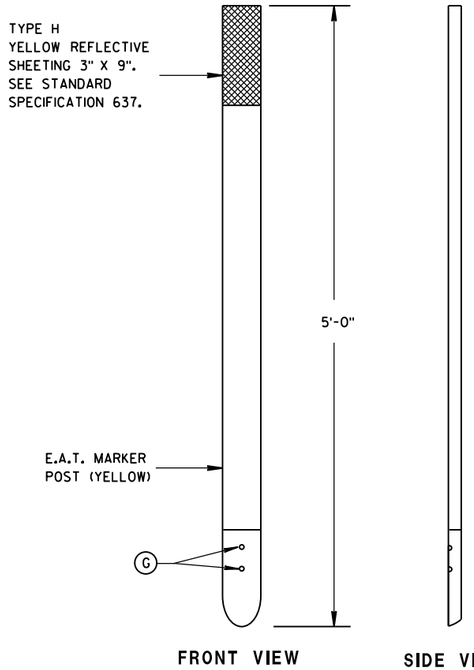
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





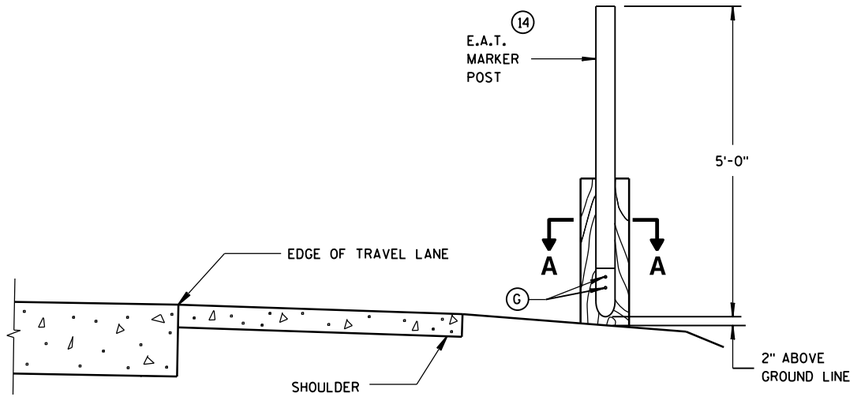
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

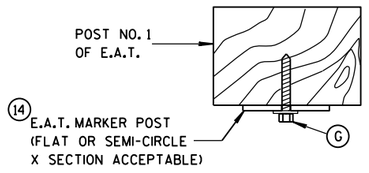
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

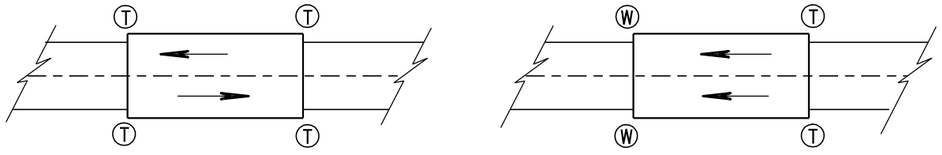
FHWA

6

S.D.D. 14 B 44-2c

6

S.D.D. 14 B 44-2c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

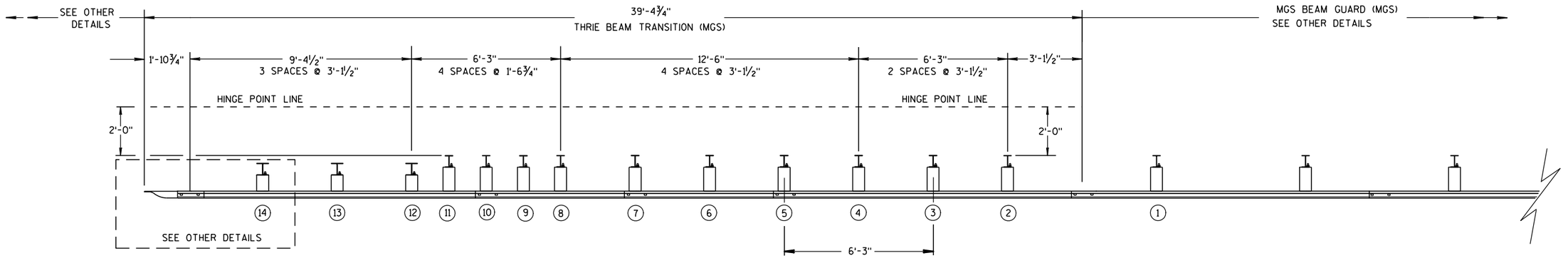
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

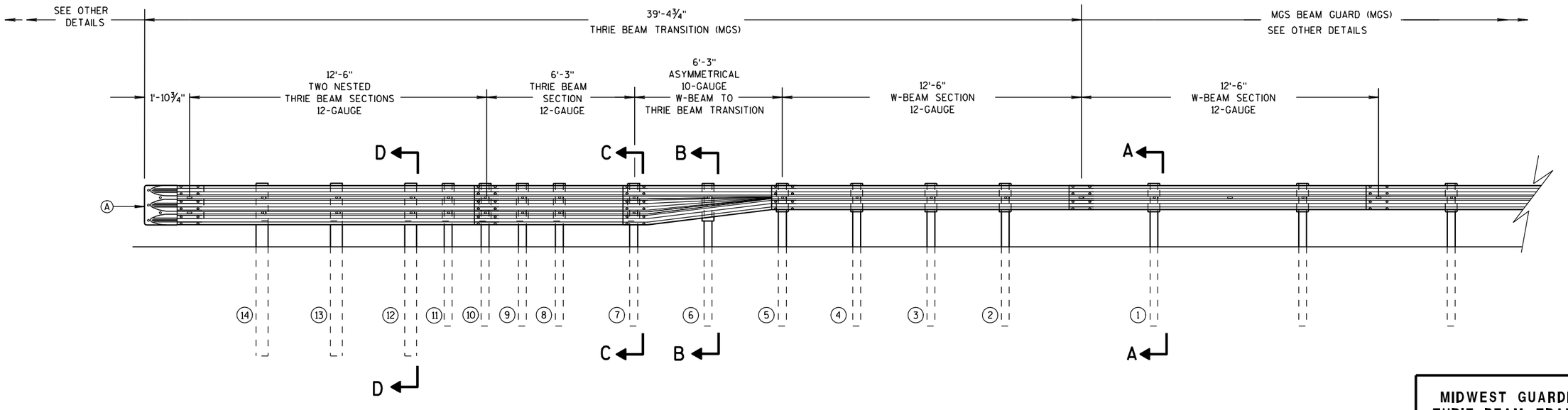
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

Ⓐ BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

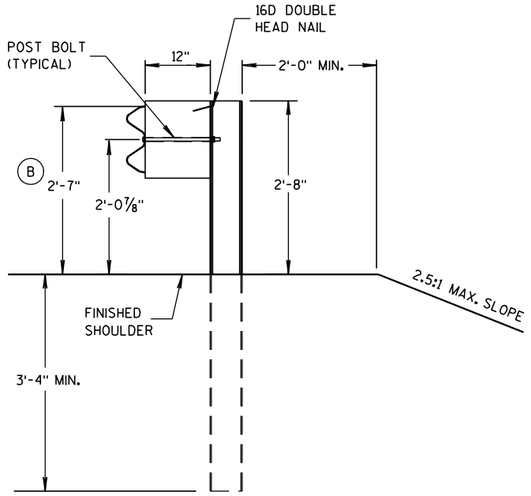
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-3a

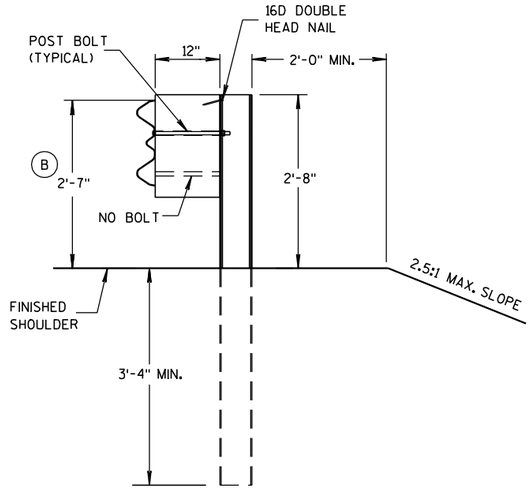
GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



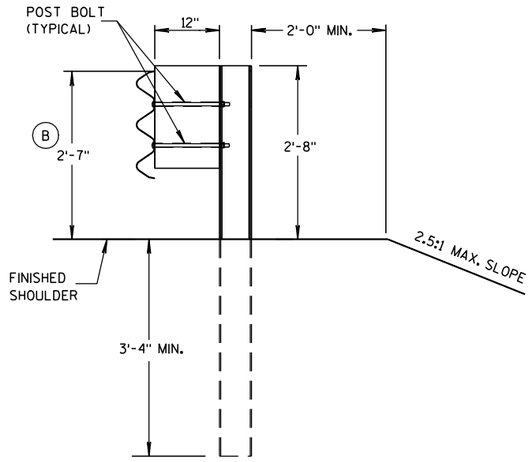
SECTION A-A

POSTS 1-5



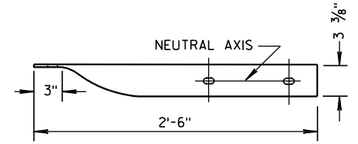
SECTION B-B

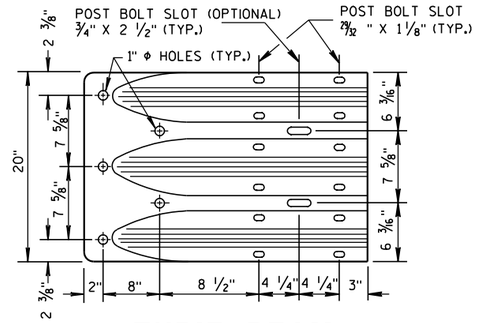
POST 6



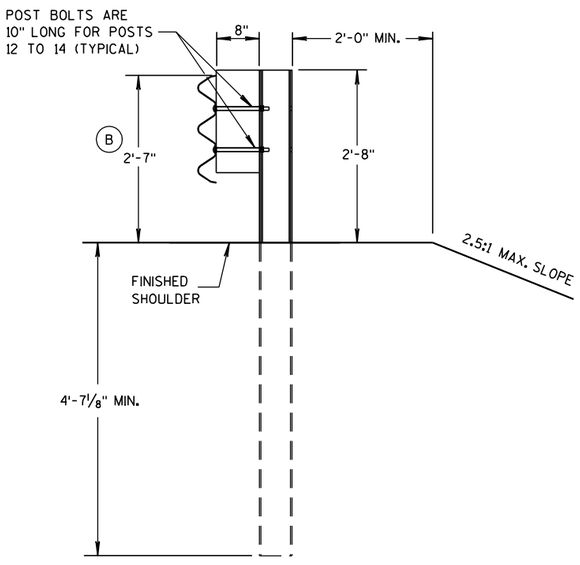
SECTION C-C

POSTS 7-11





THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-14

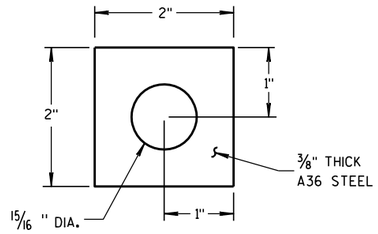
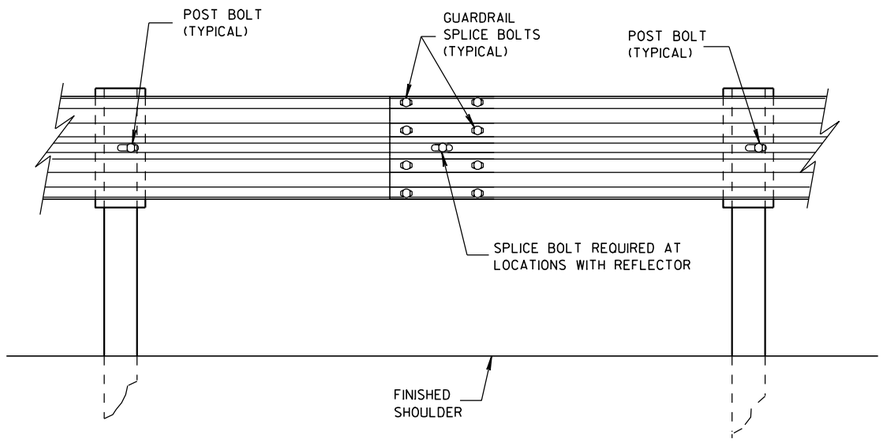
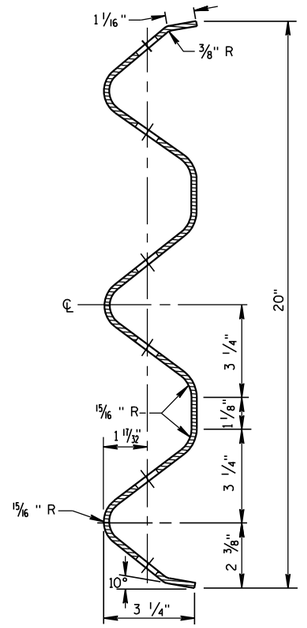


PLATE WASHER DETAIL



SPLICE DETAIL



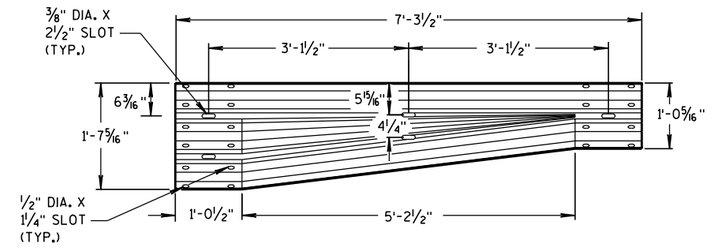
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

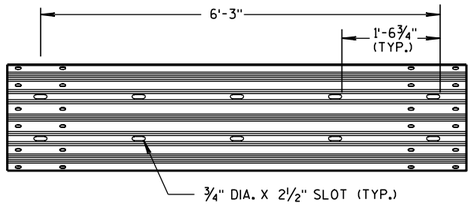
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

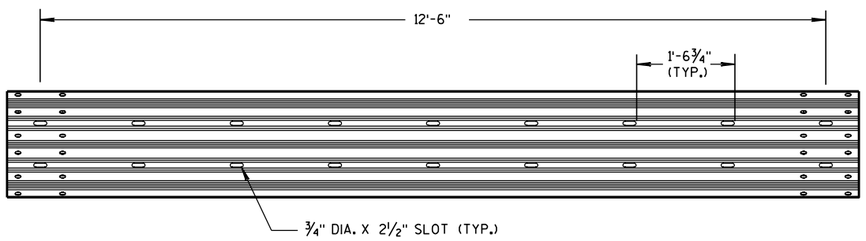
S.D.D. 14 B 45-3b



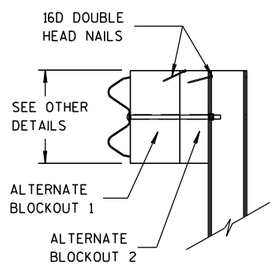
W-BEAM TO THRIE BEAM TRANSITION SECTION



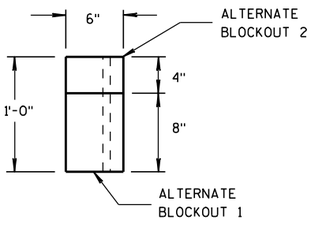
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

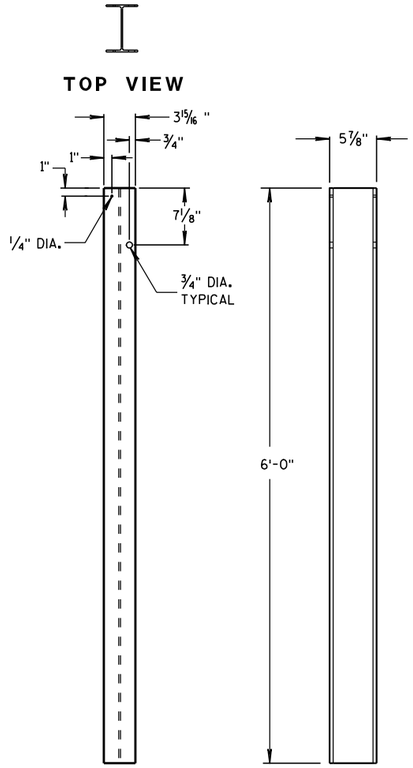


SIDE VIEW

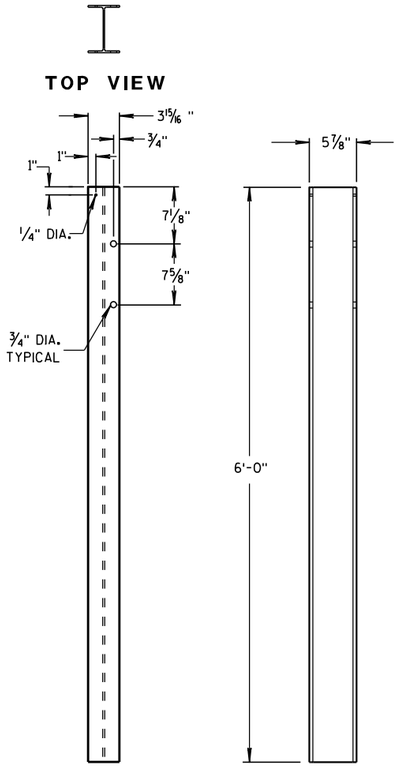


TOP VIEW

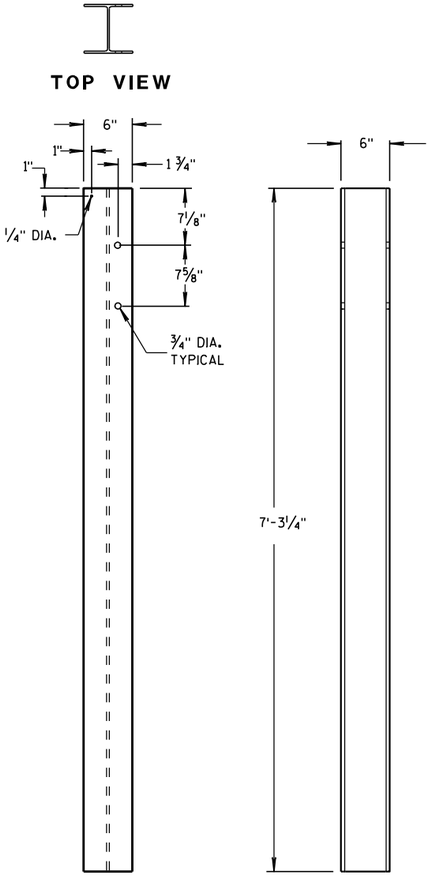
ALTERNATE WOOD BLOCKOUT DETAIL



STEEL POSTS 1-5

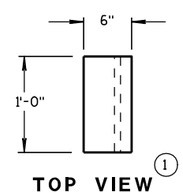


STEEL POSTS 6-11

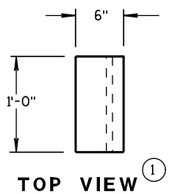


STEEL POSTS 12-14

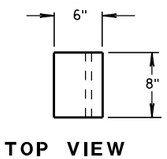
① WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



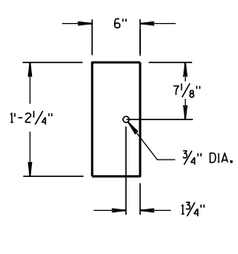
TOP VIEW ①



TOP VIEW ①

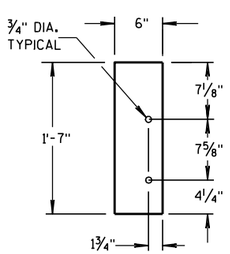


TOP VIEW



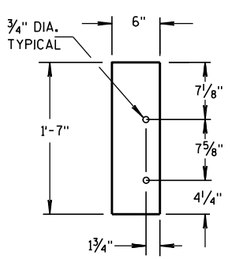
FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-11



FRONT VIEW

BLOCKOUT POSTS 12-14

STEEL POST SIZES

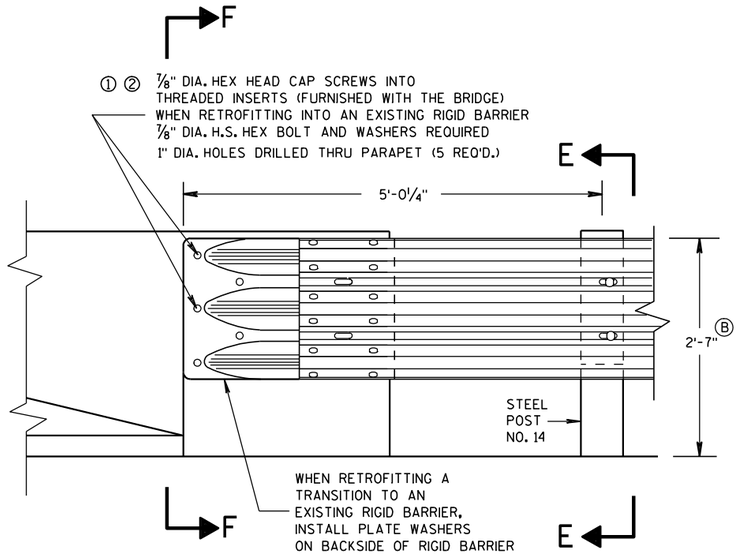
POST NUMBER	SECTION TYPE	LENGTH
①	W6x9	72"
②	W6x9	72"
③	W6x9	72"
④	W6x9	72"
⑤	W6x9	72"
⑥	W6x9	72"
⑦	W6x9	72"
⑧	W6x9	72"
⑨	W6x9	72"
⑩	W6x9	72"
⑪	W6x9	72"
⑫	W6x15	87 1/8"
⑬	W6x15	87 1/8"
⑭	W6x15	87 1/8"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

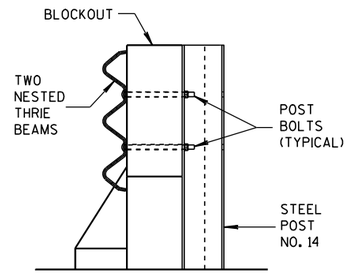
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 45-3c



FRONT VIEW



SECTION E-E

GENERAL NOTES

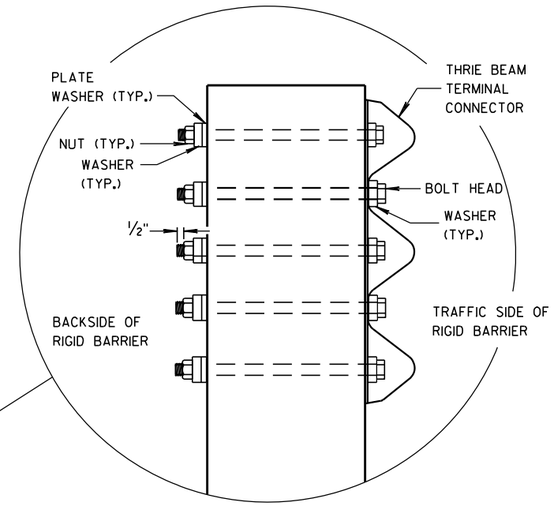
THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

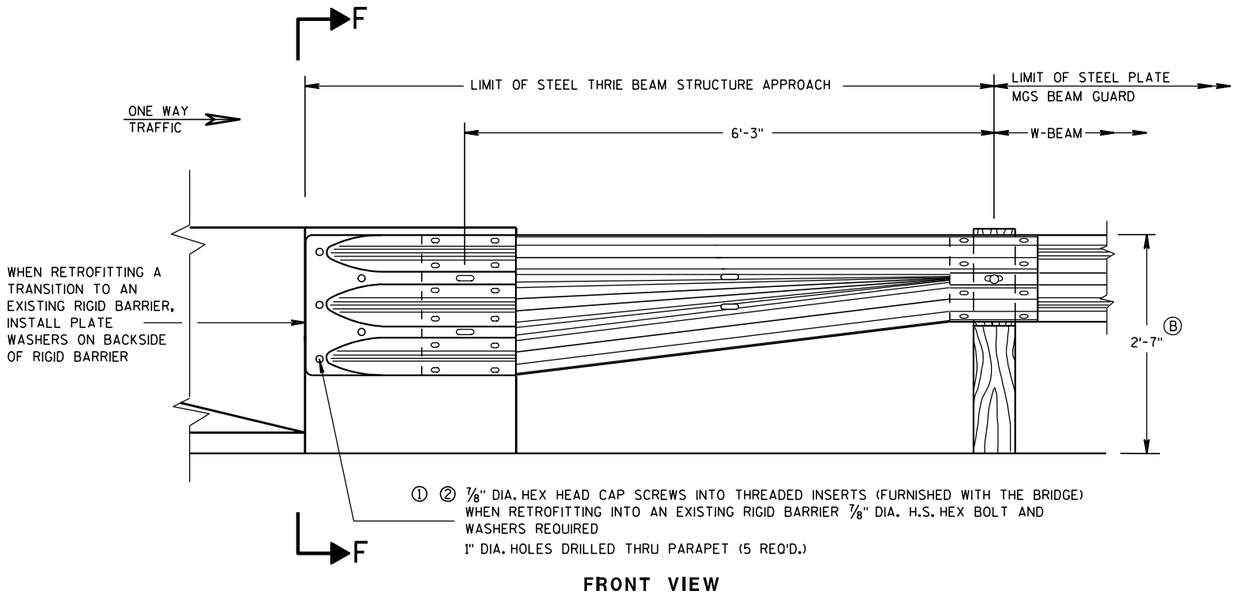
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

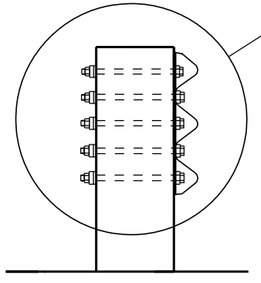
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



FRONT VIEW



SECTION F-F

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

/S/ Jerry H. [illegible] — ROADWAY STANDARDS (430) ENGINEER

FHWA

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S.D.D. 14 B 45-3d

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S.D.D. 14 B 45-3d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

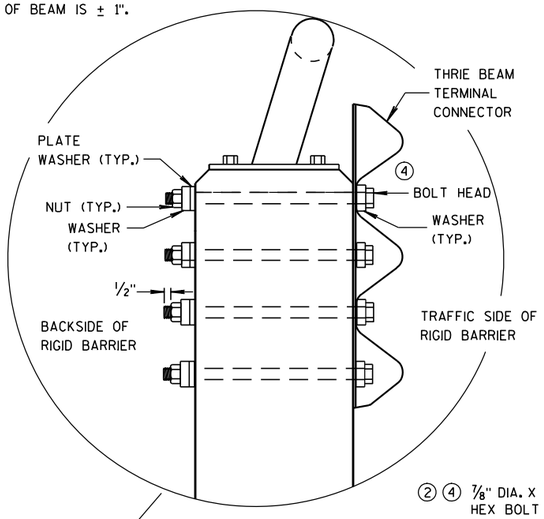
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

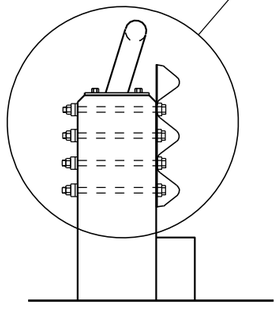
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2". BLOCK IS INCIDENTAL TO THE CONTRACT.

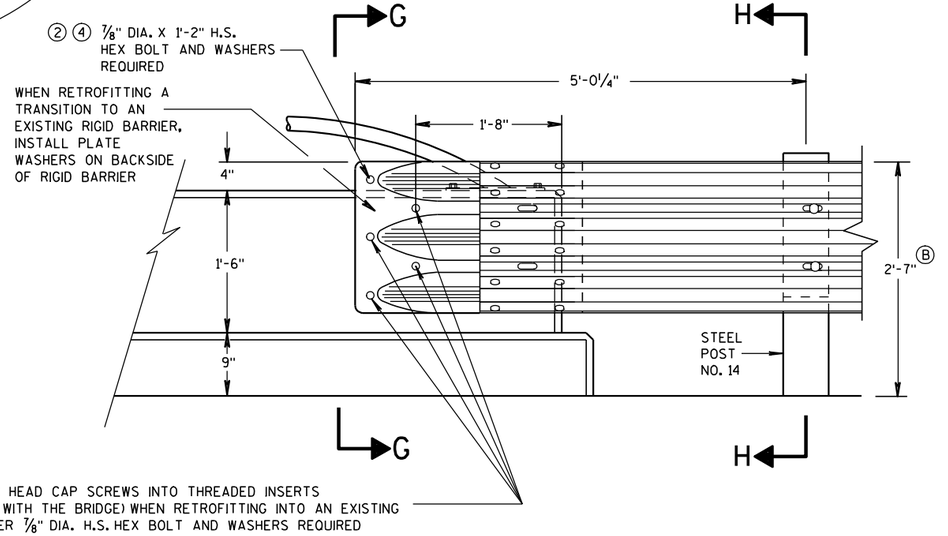
④ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

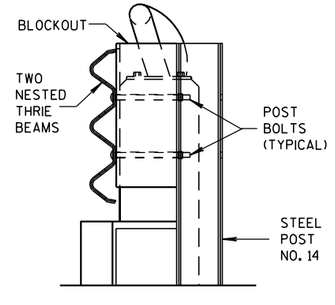




SECTION G-G

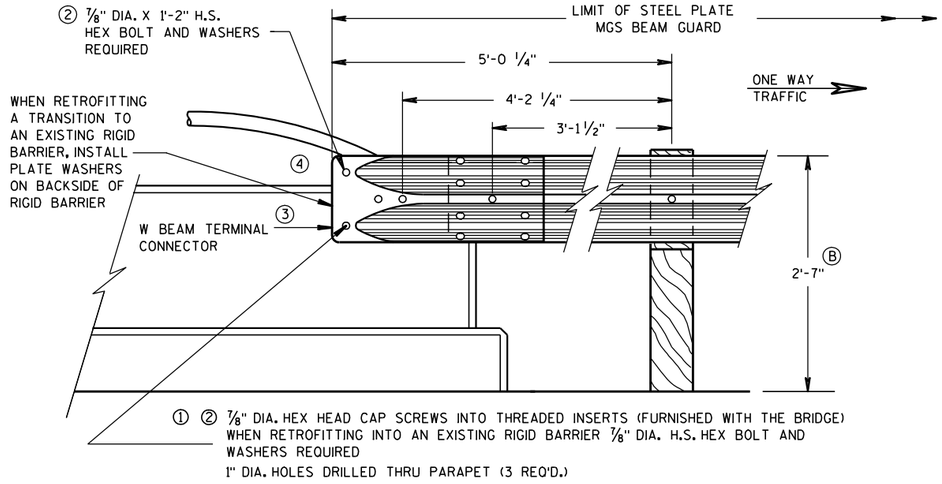


FRONT VIEW



SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
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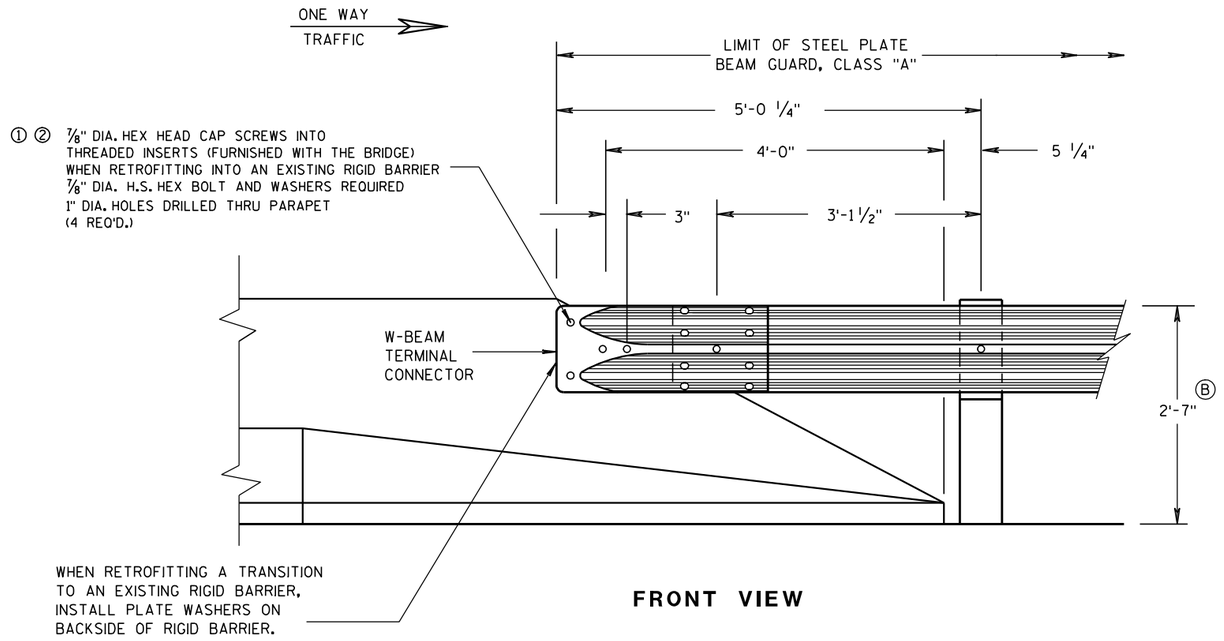
8-31-2012 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	1431



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

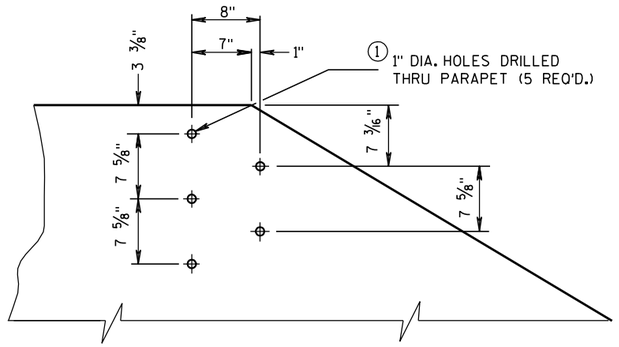
(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

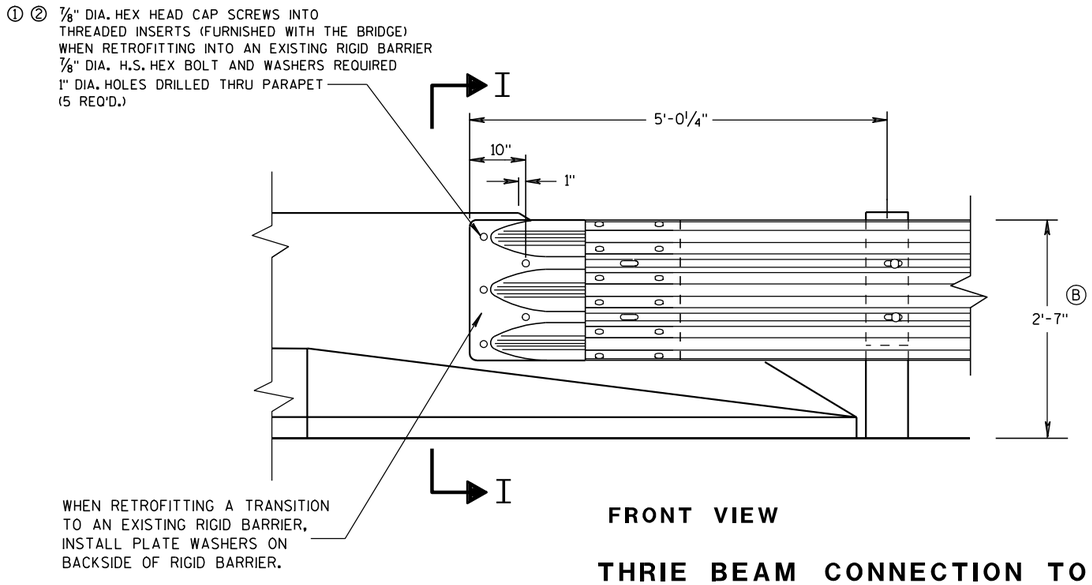
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

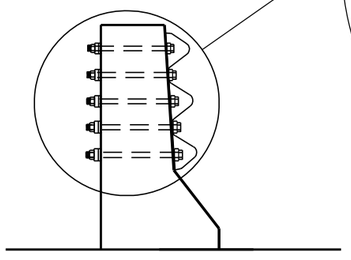
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



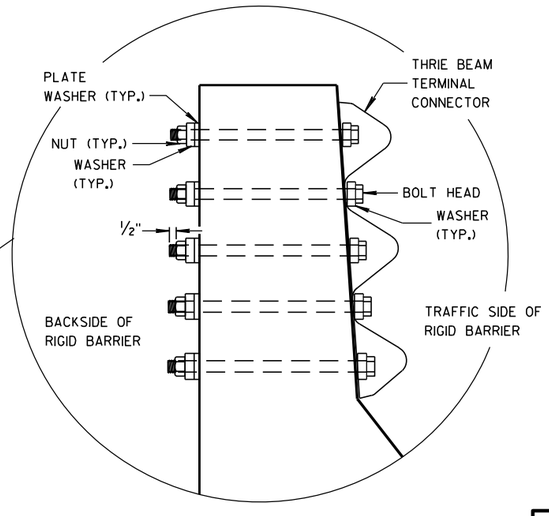
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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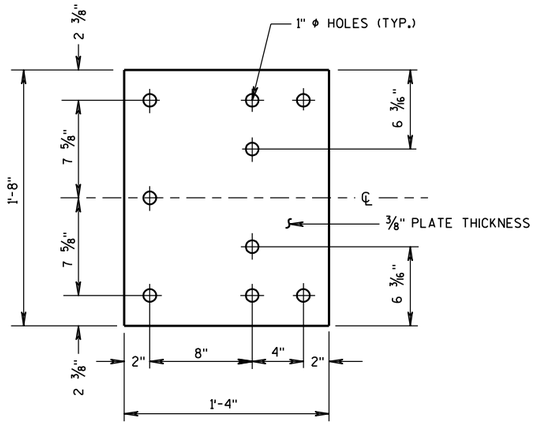
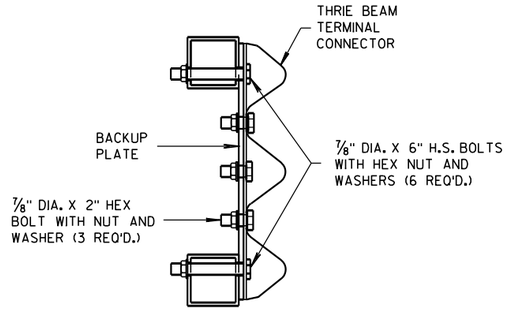


BACK-UP PLATE DETAIL

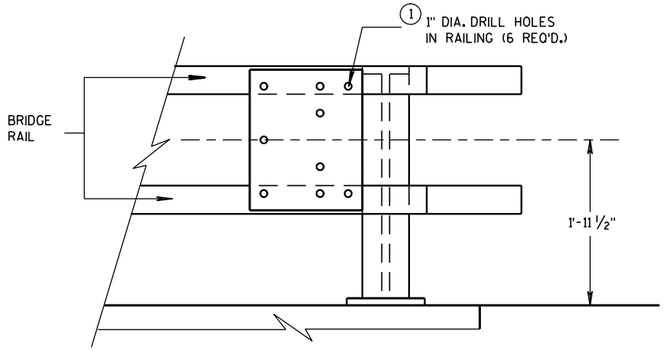


SECTION J-J

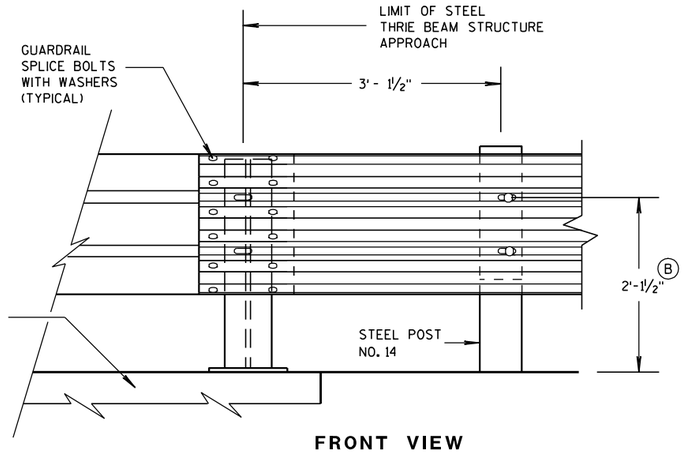
GENERAL NOTES

(1) DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(B) TOLERANCE FOR TOP OF BEAM IS ± 1".

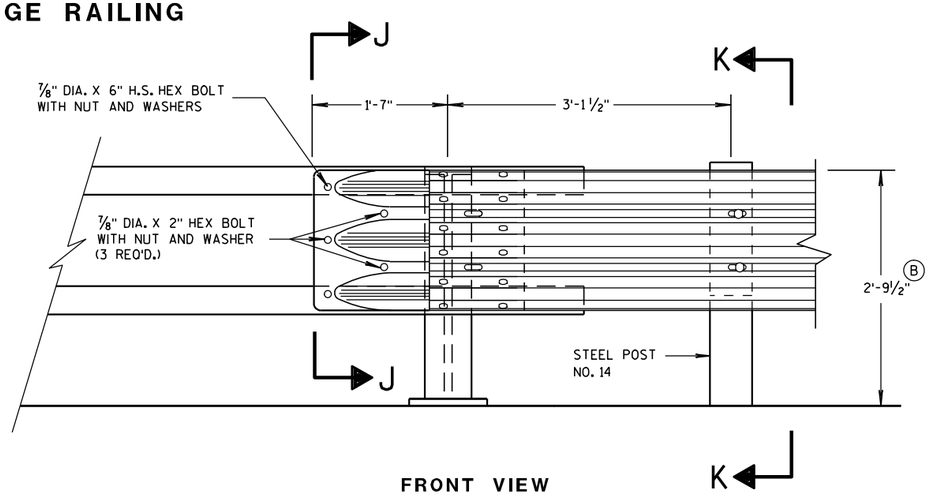


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

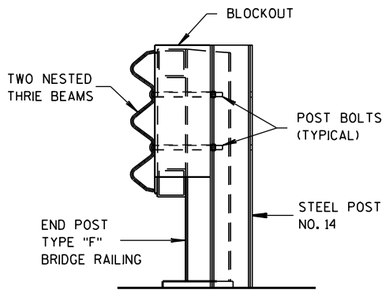


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
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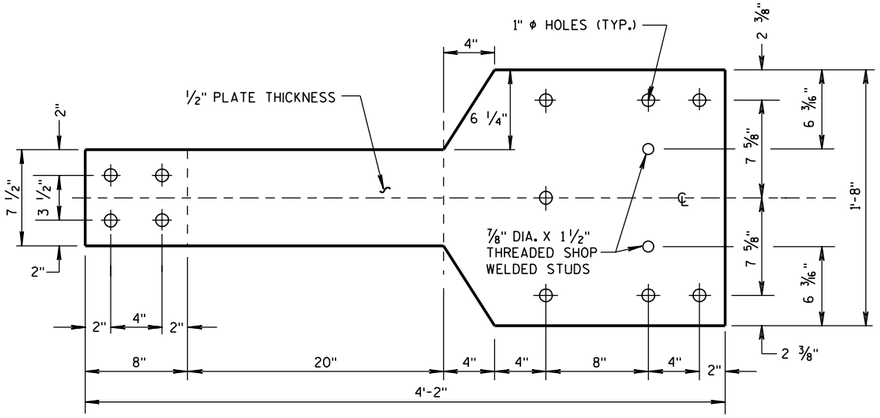
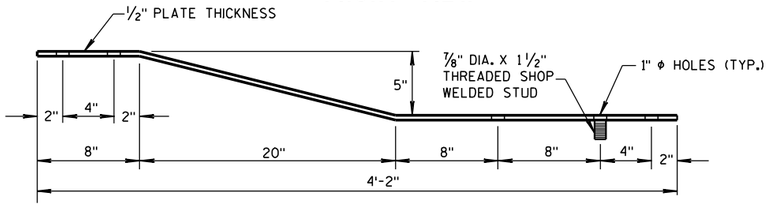
GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

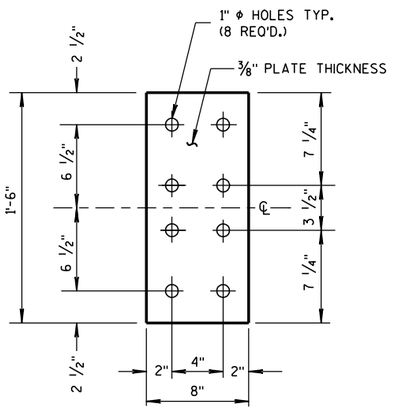


FRONT VIEW



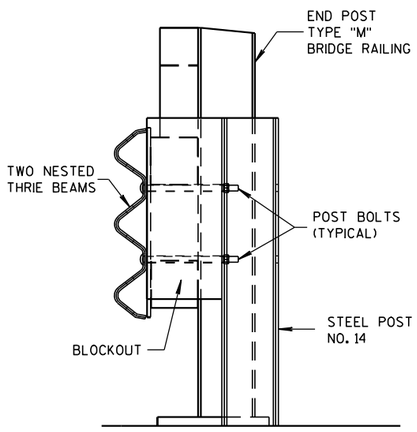
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

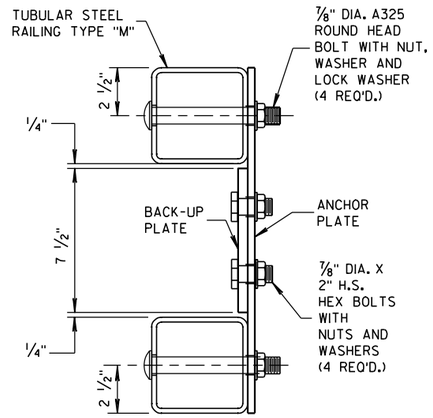


FRONT VIEW

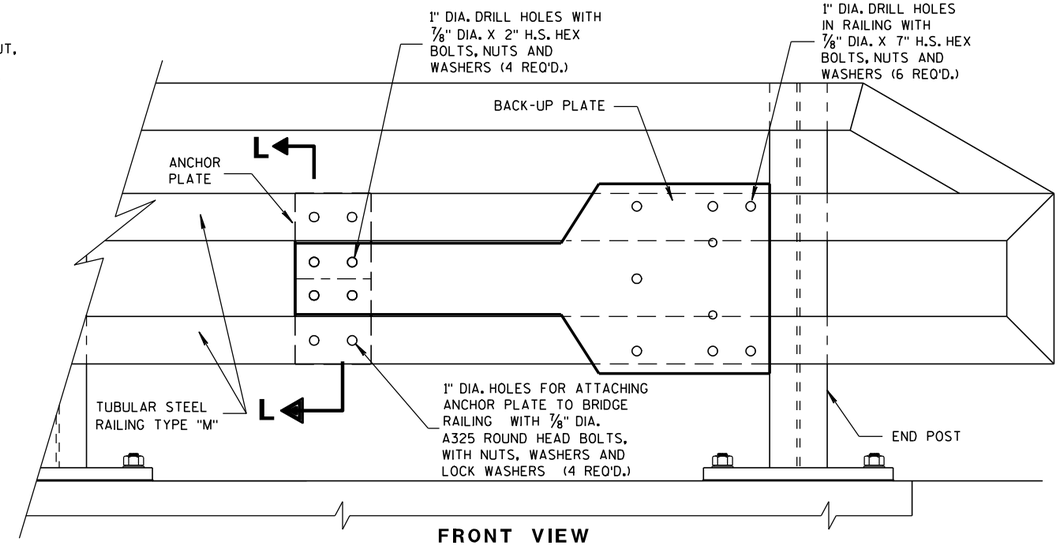
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

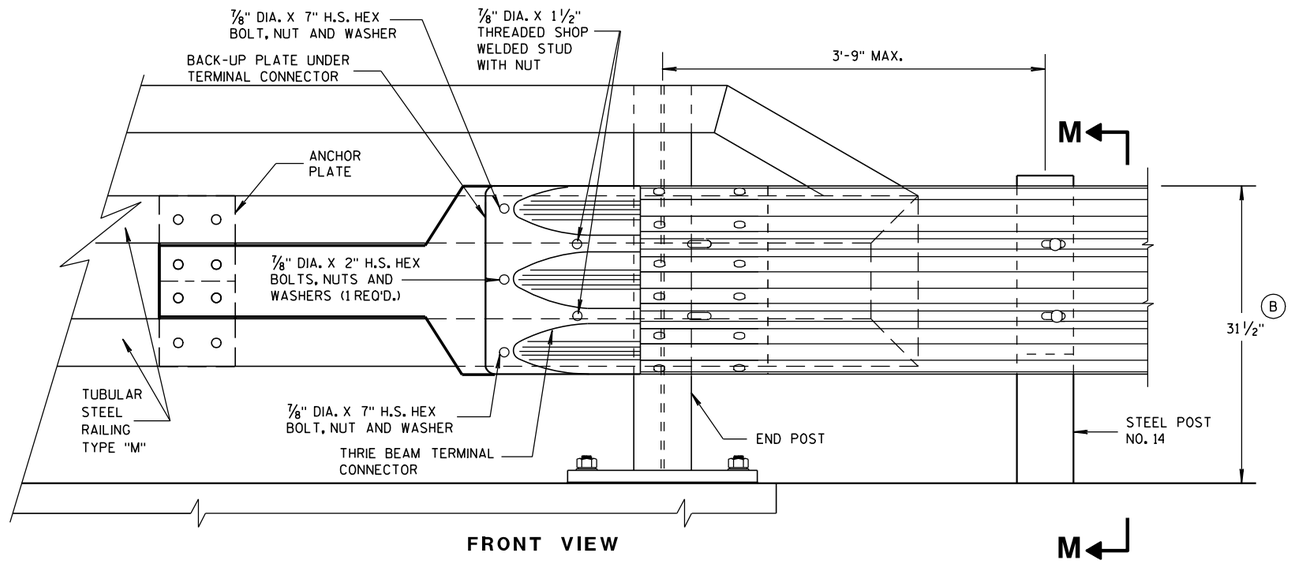


SECTION L-L

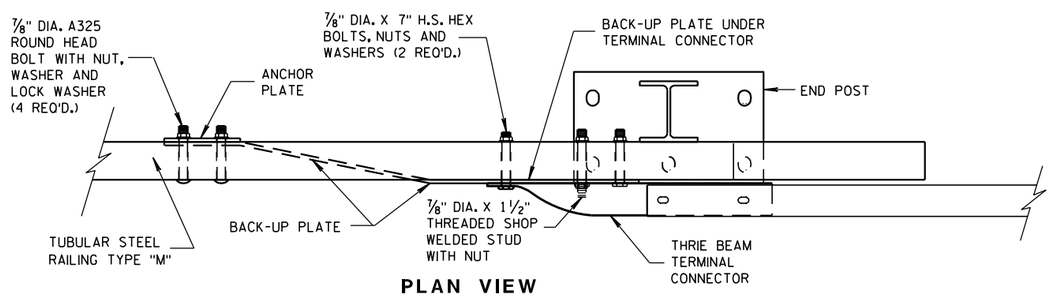


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8-31-2012 DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

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S.D. 14 B 45-3h

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S.D. 14 B 45-3h

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

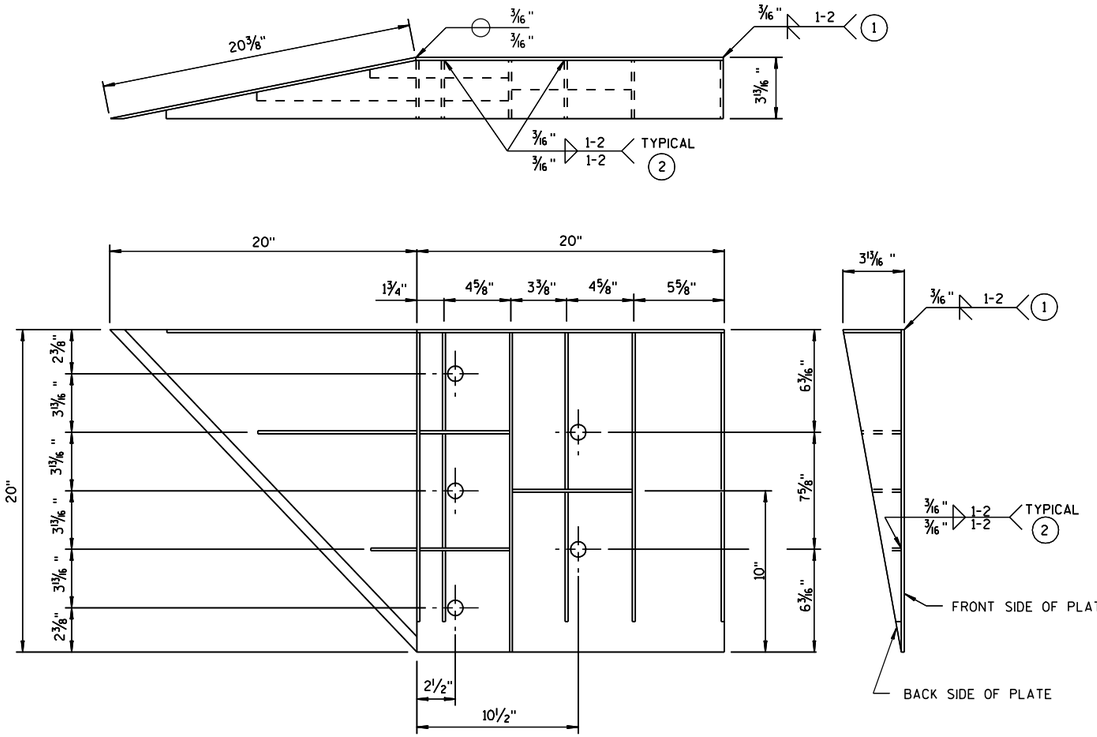
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(1) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(2) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

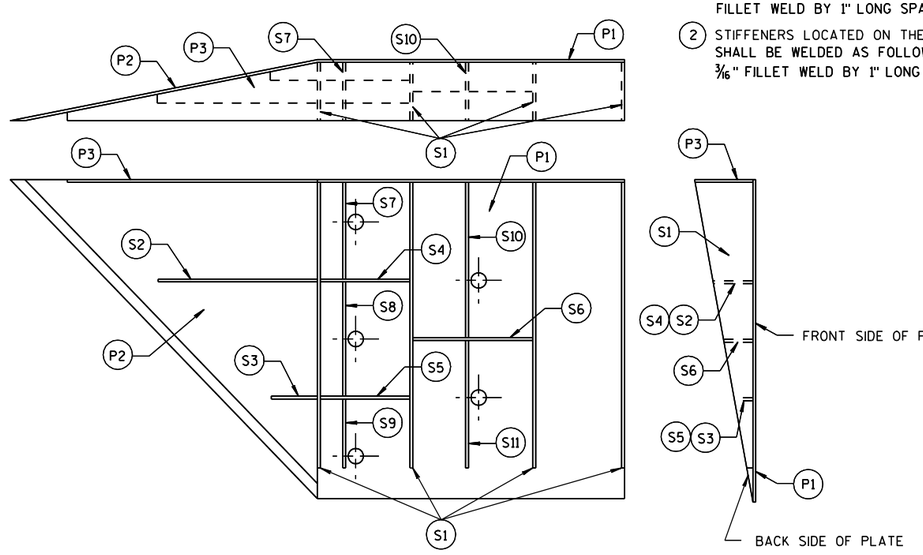


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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DATE
/S/ Jerry H ----
ROADWAY STANDARDS 435 ENGINEER
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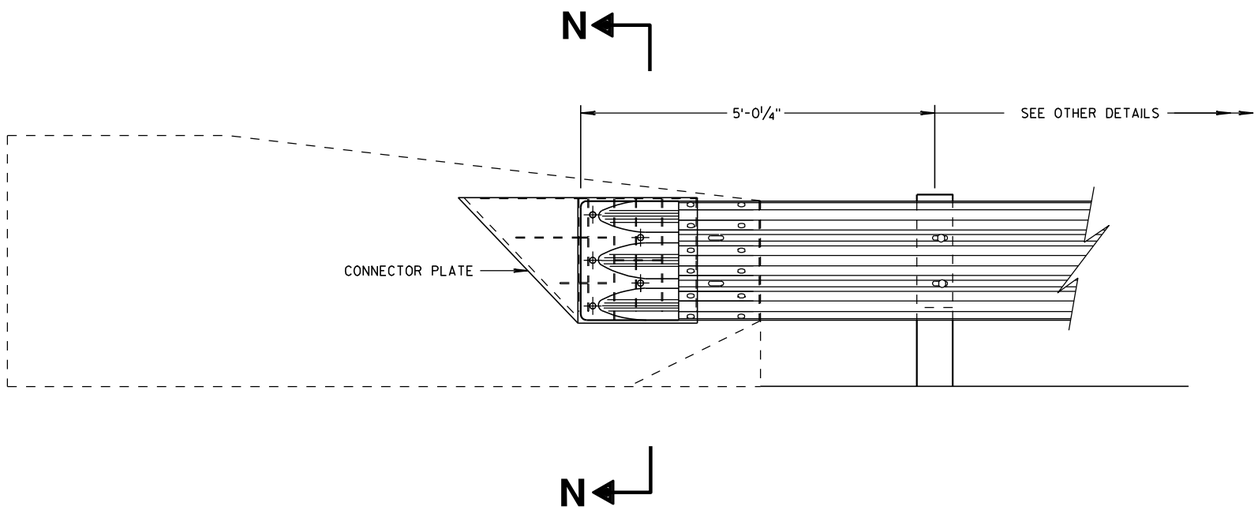
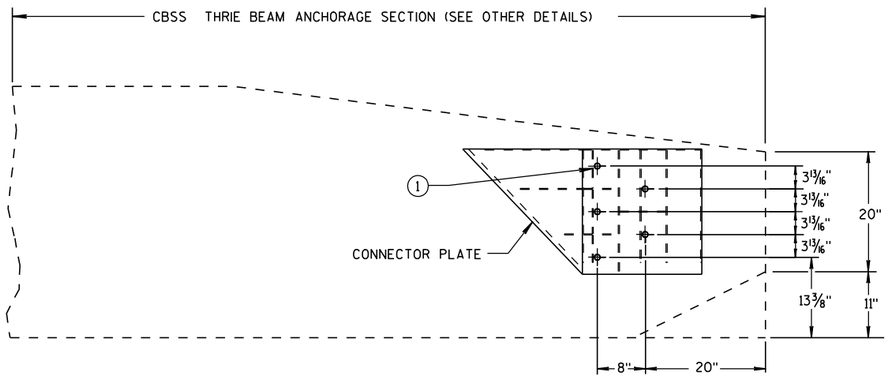


THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER

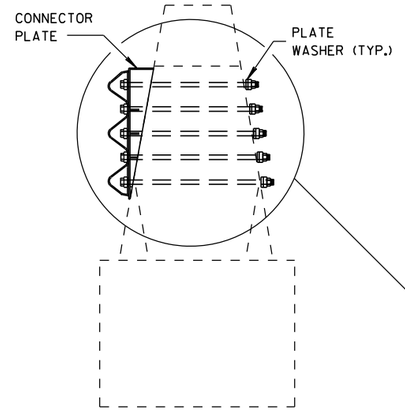


SINGLE SLOPE CONNECTION PLATE PLACEMENT

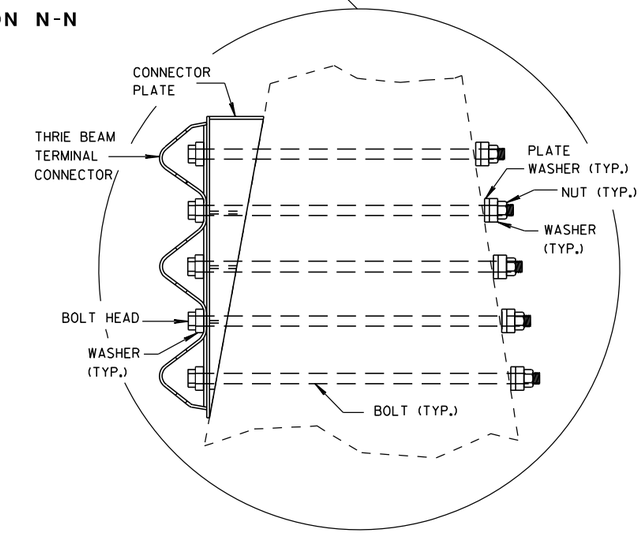
GENERAL NOTES

CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(1) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

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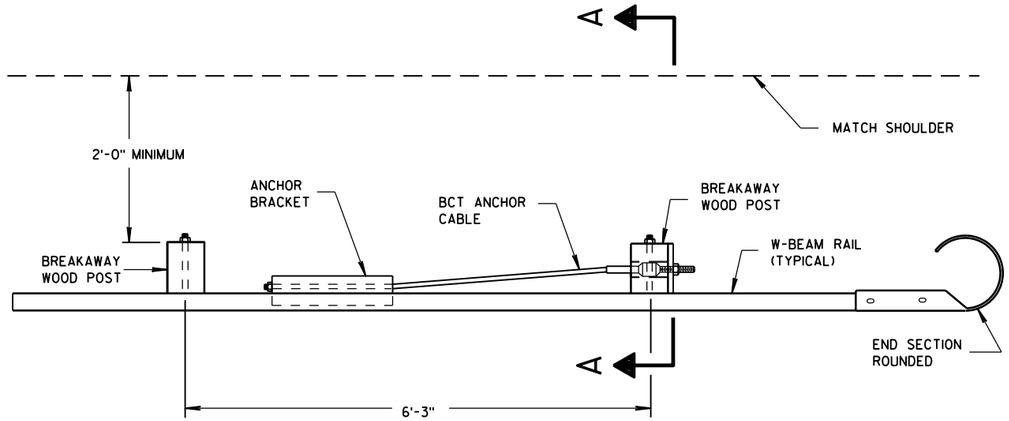
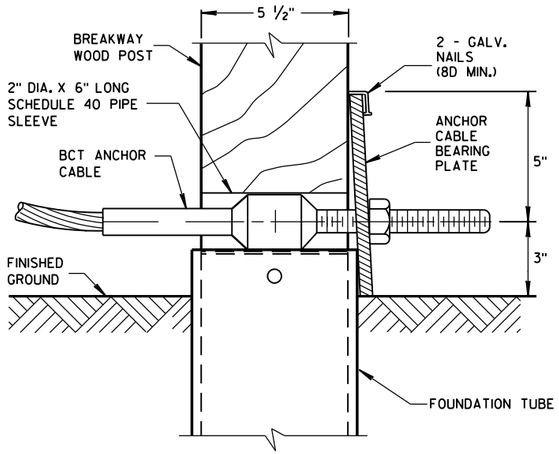


PLAN VIEW



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

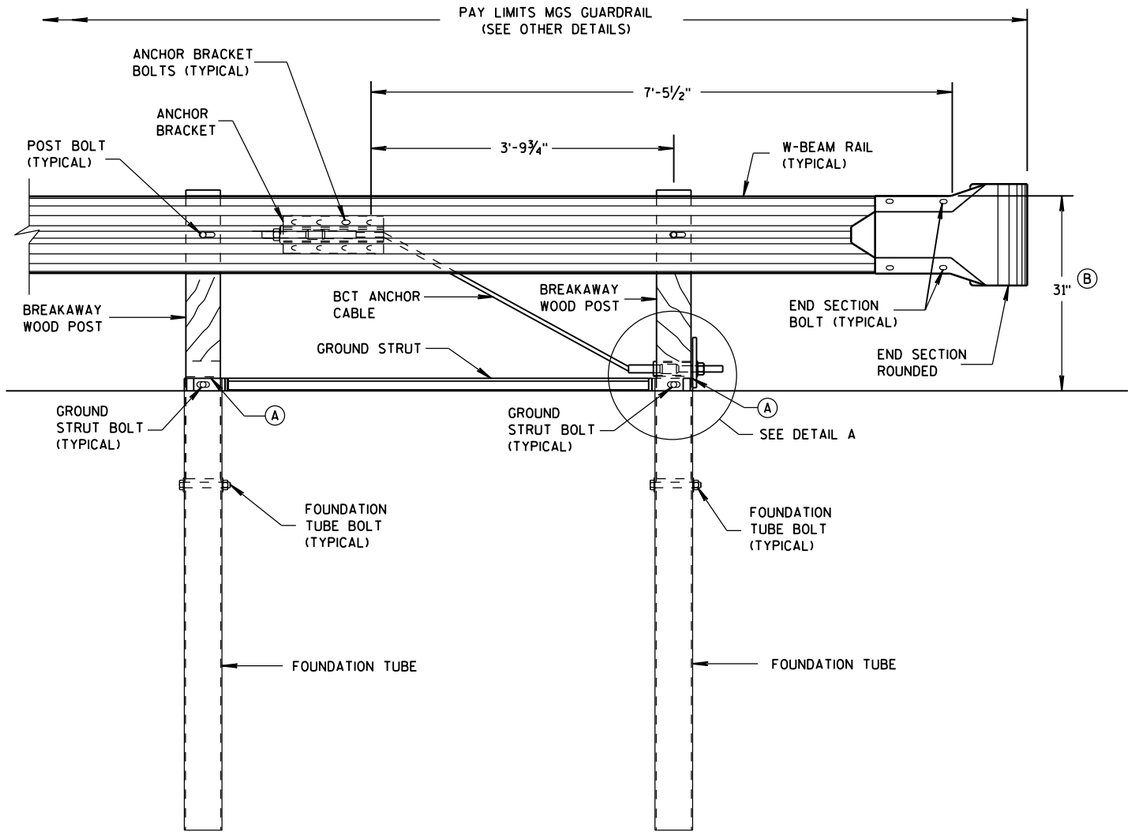
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A ⅝" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅝" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

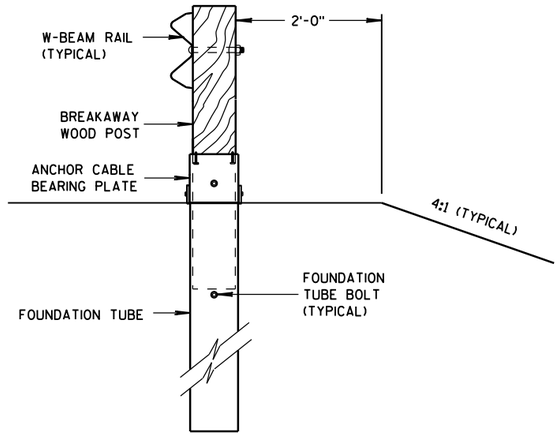
(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".

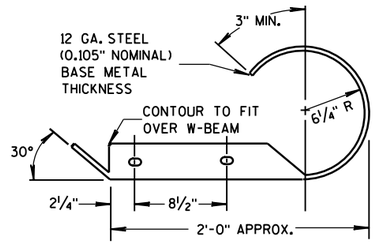


FRONT VIEW

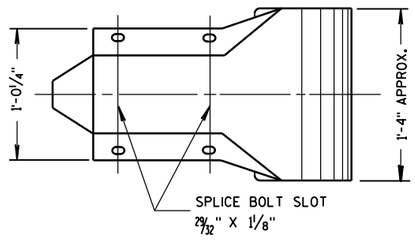
END RAIL DETAIL



SECTION A-A



PLAN VIEW



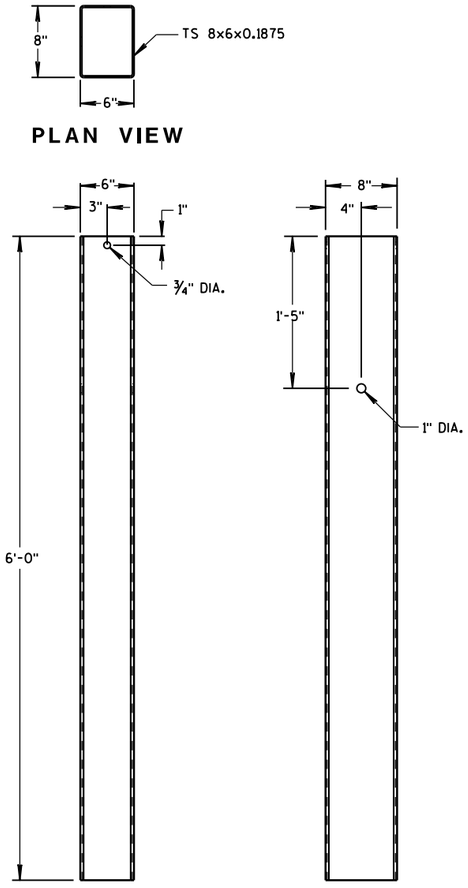
FRONT VIEW

W BEAM END SECTION ROUNDED

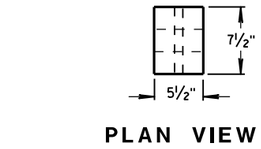
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

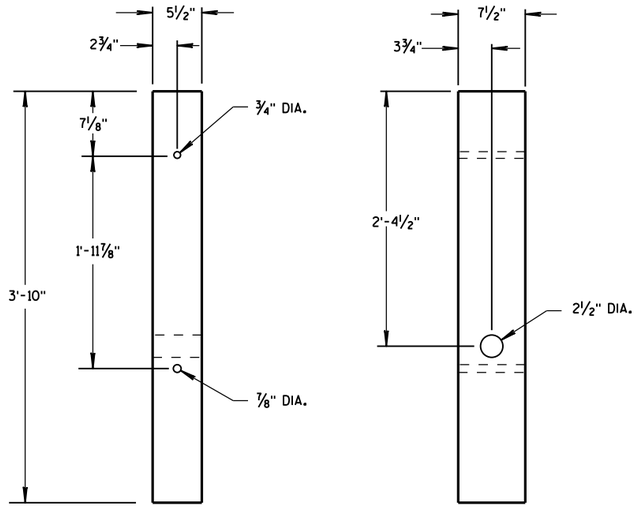
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 14 B 47-2a



FOUNDATION TUBE



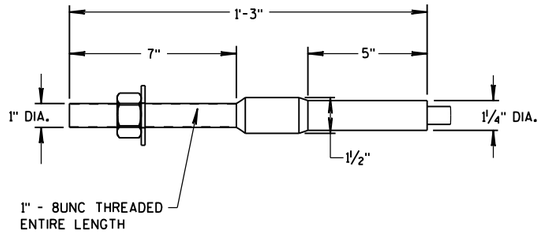


BREAKAWAY WOOD POST

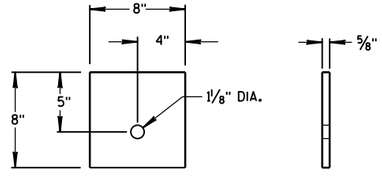
GENERAL NOTES

BCT ANCHOR CABLE IS A ¾" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. TREADED STUD SHALL CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.

BCT ANCHOR CABLE



DETAIL B



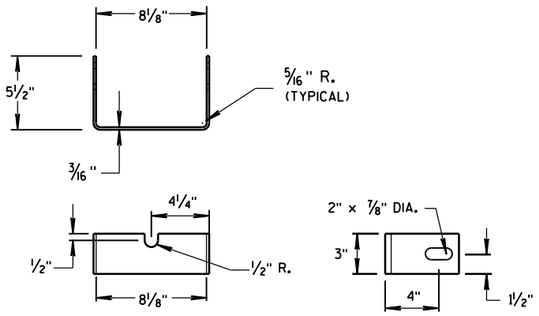
ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

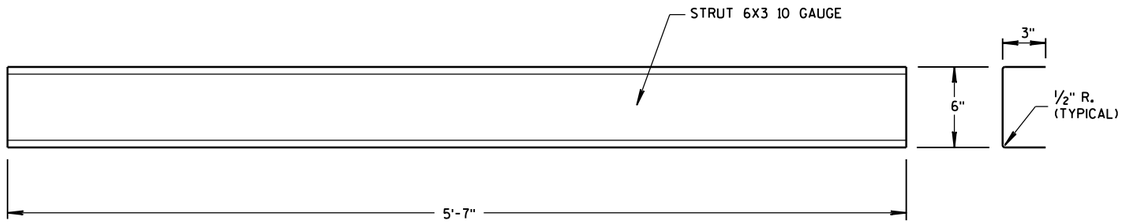
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

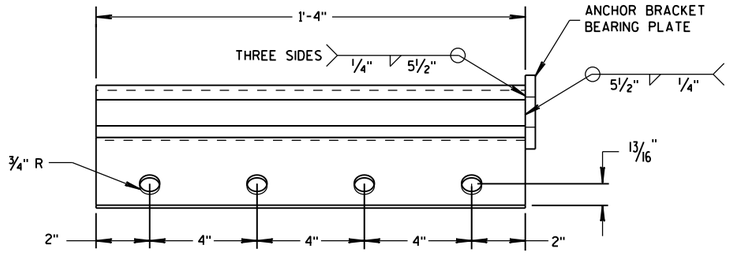
S.D.D. 14 B 47-2b

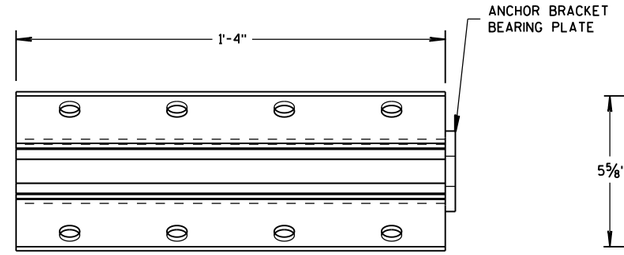


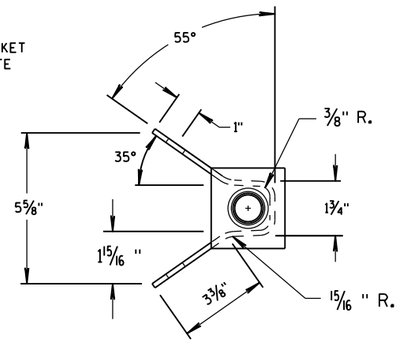
YOKE DETAIL



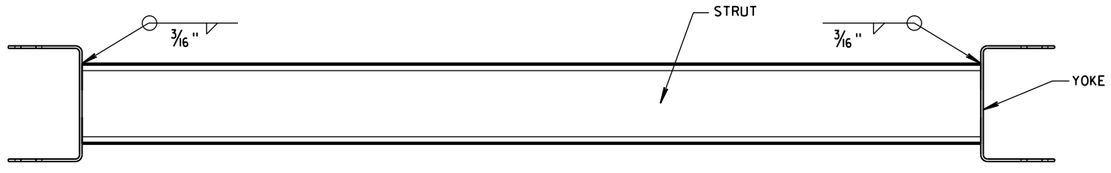
STRUT DETAIL



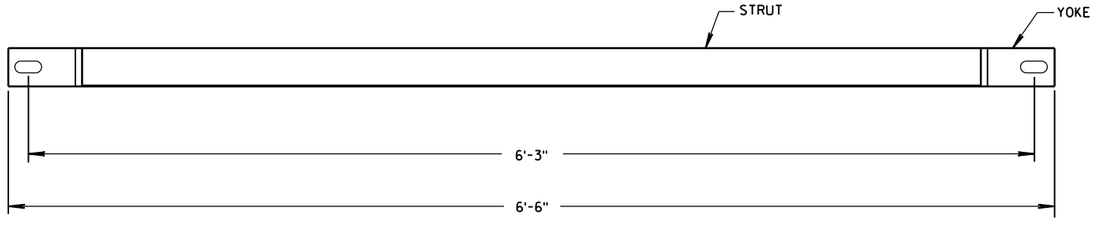




ANCHOR BRACKET

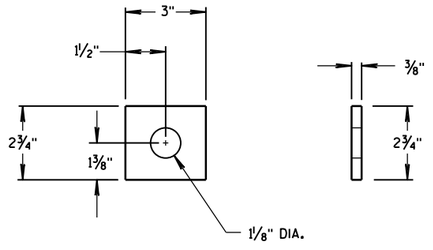


PLAN VIEW



FRONT VIEW

GROUND STRUT DETAIL



ANCHOR BRACKET BEARING PLATE

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
FHWA

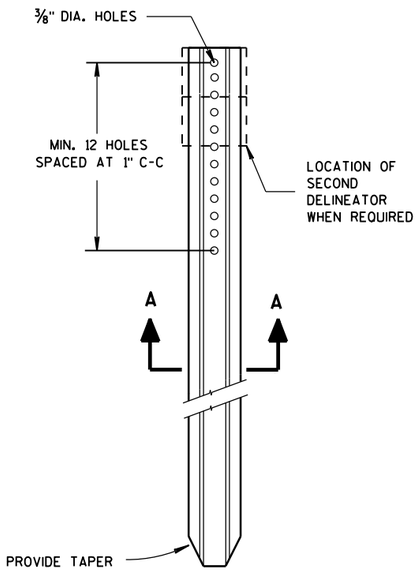
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

6

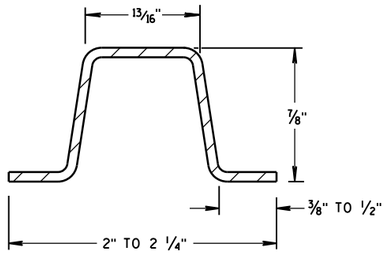
S.D.D. 14 B 47-2c

6

S.D.D. 14 B 47-2c

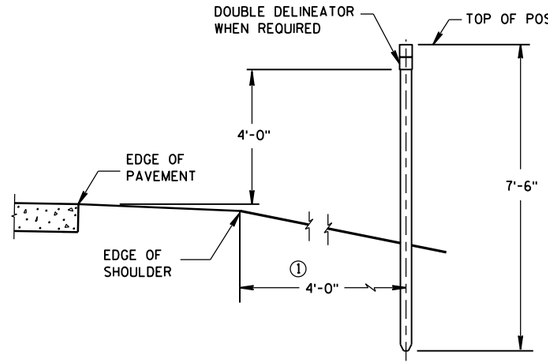


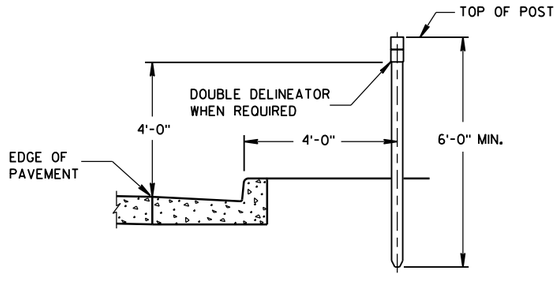
DELINEATOR POST



SECTION A-A

WEIGHT 1.12 LBS PER FT. ± 0.1 LB.



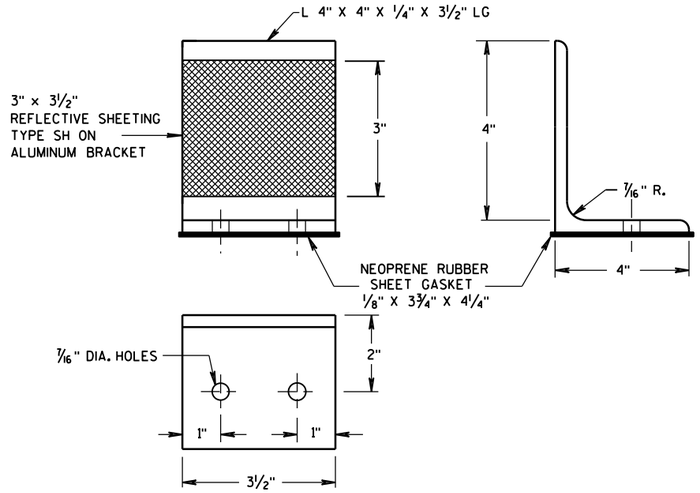


TYPICAL INSTALLATIONS OF DELINEATOR POSTS

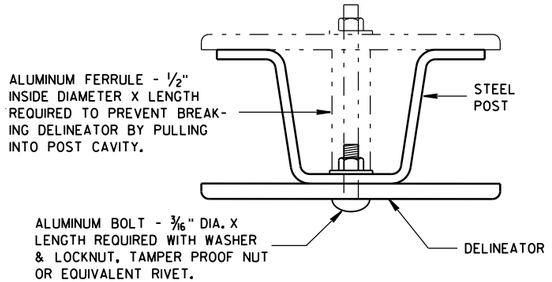
GENERAL NOTES

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

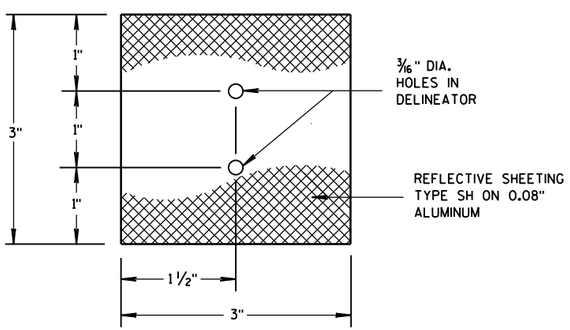
① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.



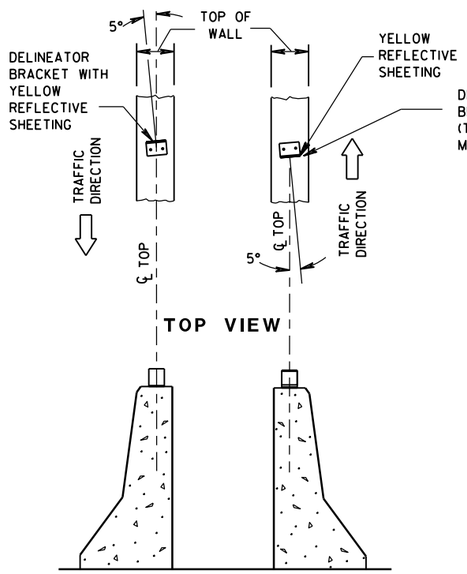
DELINEATOR BRACKET



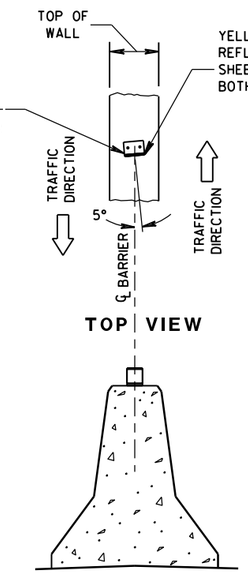
MOUNTING DETAIL FOR DELINEATOR



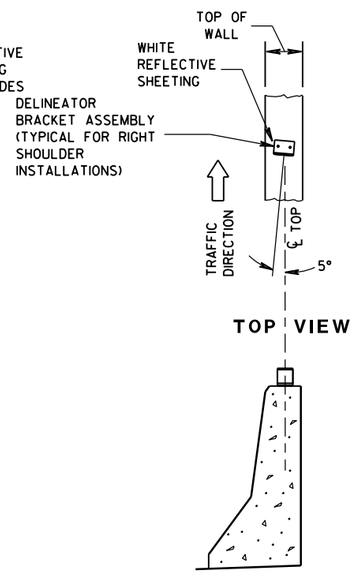
3"x 3" DELINEATOR



DOUBLE BARRIERS IN MEDIAN

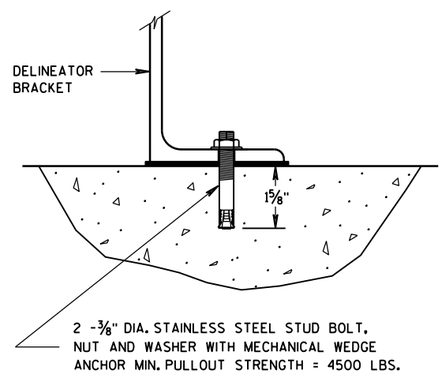


MEDIAN BARRIER



BARRIER LOCATED TO RT. OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR DELINEATOR BRACKETS MOUNTED ON CONCRETE BARRIERS



DELINEATOR BRACKET MOUNTING DETAIL

DELINEATOR POST, DELINEATOR, AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC E
FHWA

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S.D.D. 15 A 2-8

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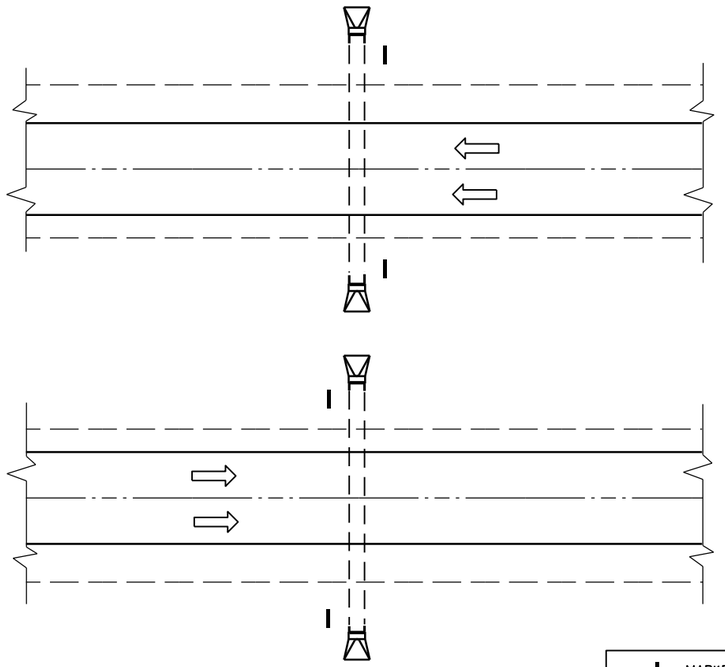
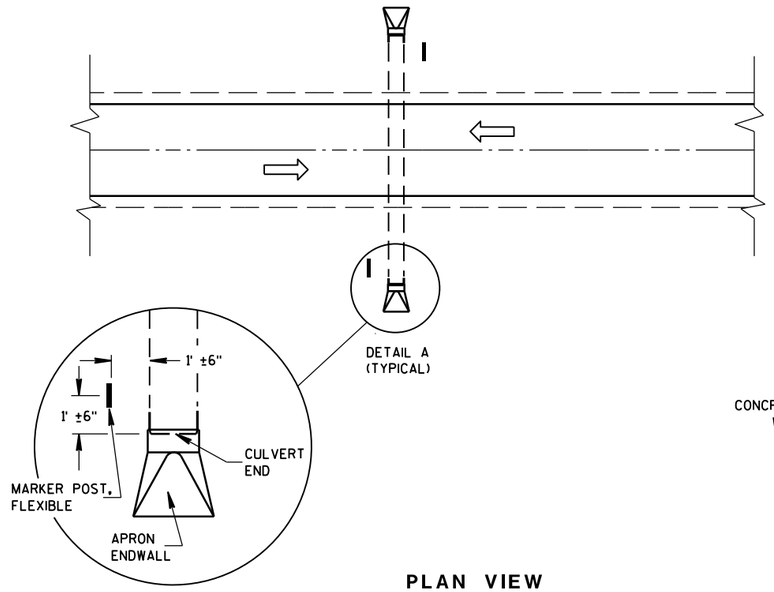
S.D.D. 15 A 2-8



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

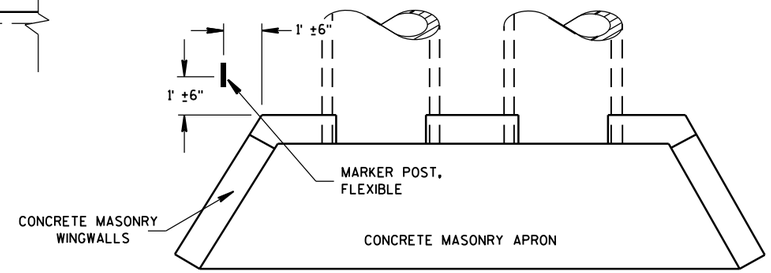
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

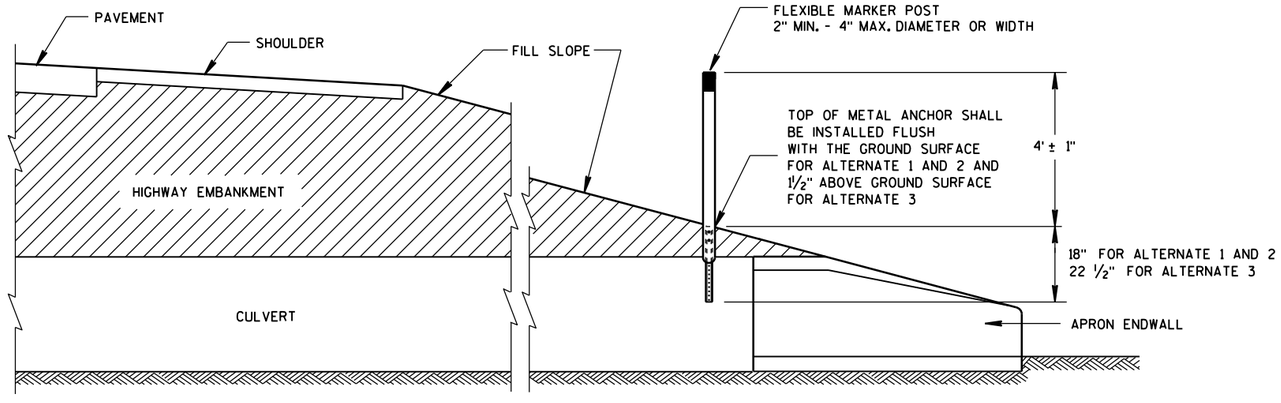
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 A 3-2a

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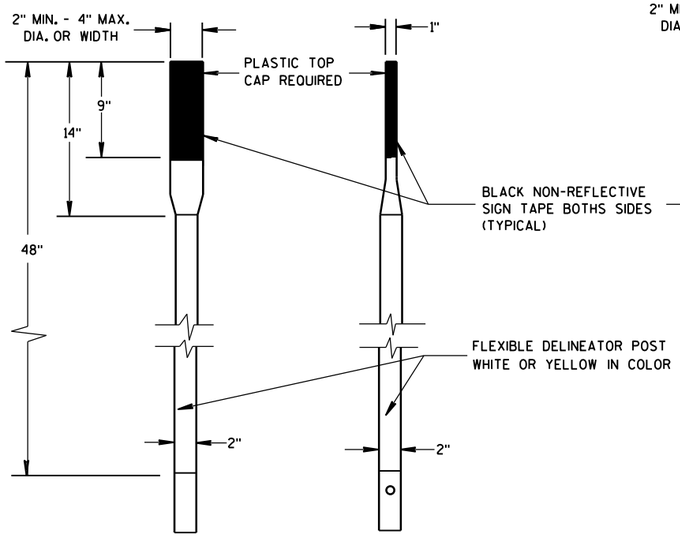
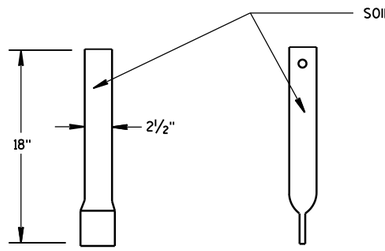
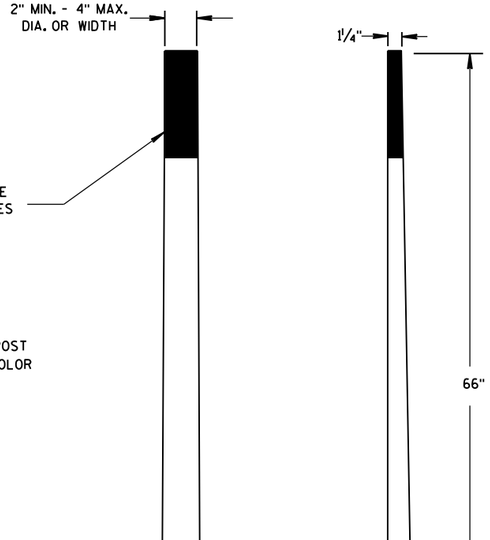
S.D.D. 15 A 3-2a





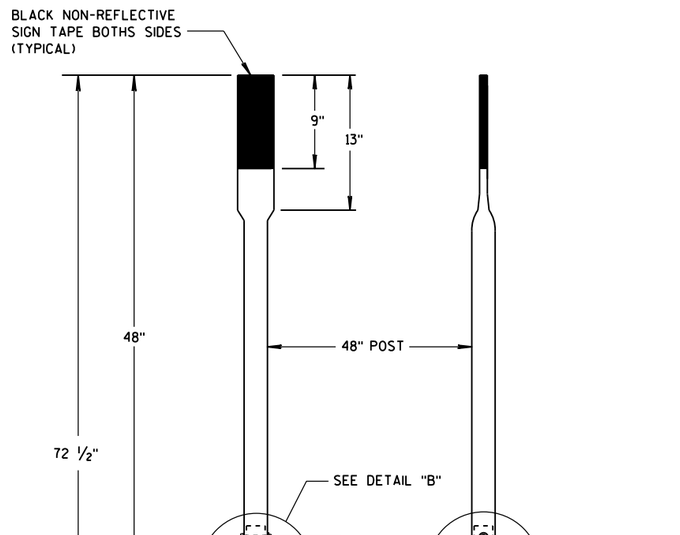
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

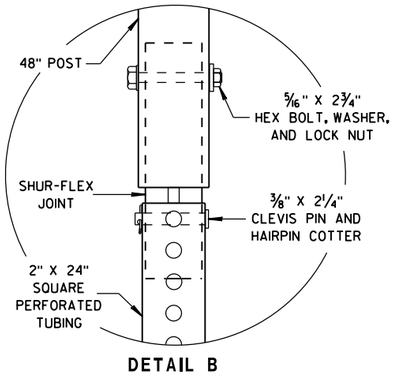
ALTERNATE 2



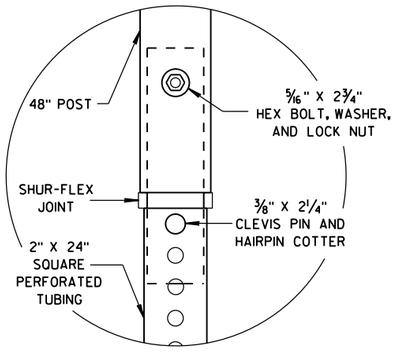
FRONT VIEW SIDE VIEW

ALTERNATE 3

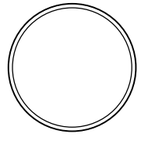
FLEXIBLE MARKER POSTS



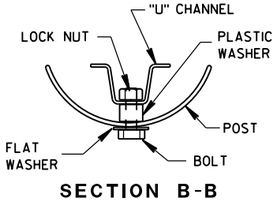
DETAIL B



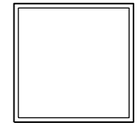
DETAIL C



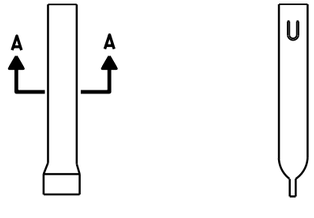
SECTION A-A



SECTION B-B

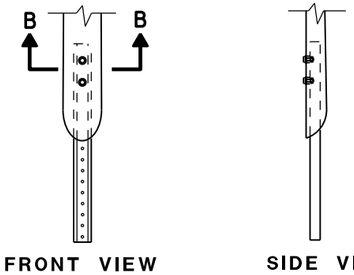


SECTION C-C



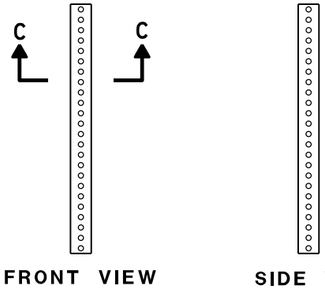
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

6

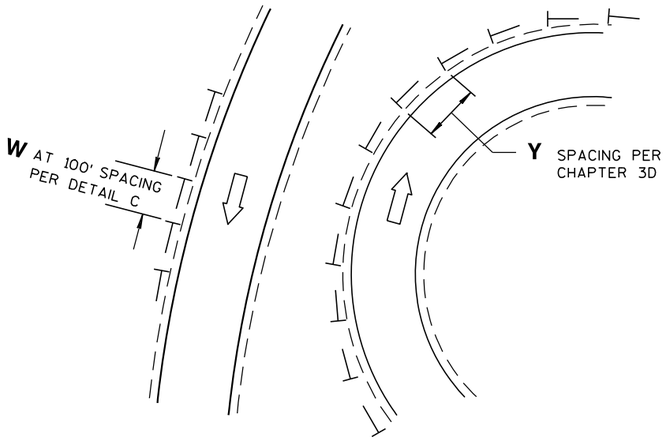
S.D.D. 15 A 3-2b

6

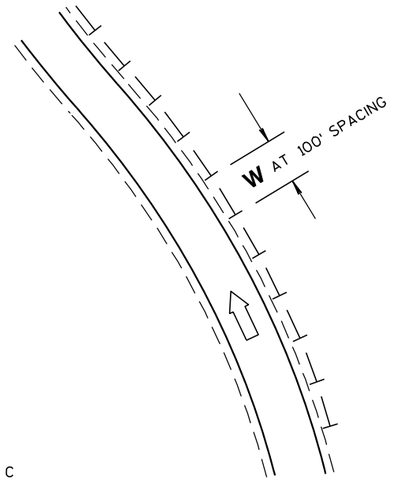
S.D.D. 15 A 3-2b

GENERAL NOTES

* USE DOUBLE DELINEATOR ALONG ACCELERATION-DECELERATION LANES AND TAPERS. USE SINGLE DELINEATOR WHEN RAMP PAVEMENT IS FULL WIDTH.



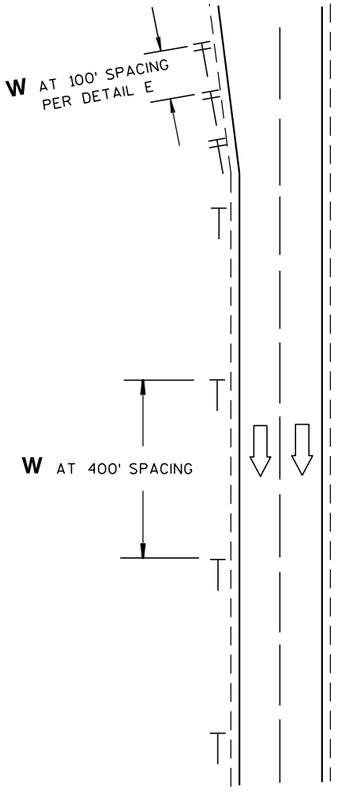
DETAIL A
DELINEATOR LAYOUT AT CURVED RAMP



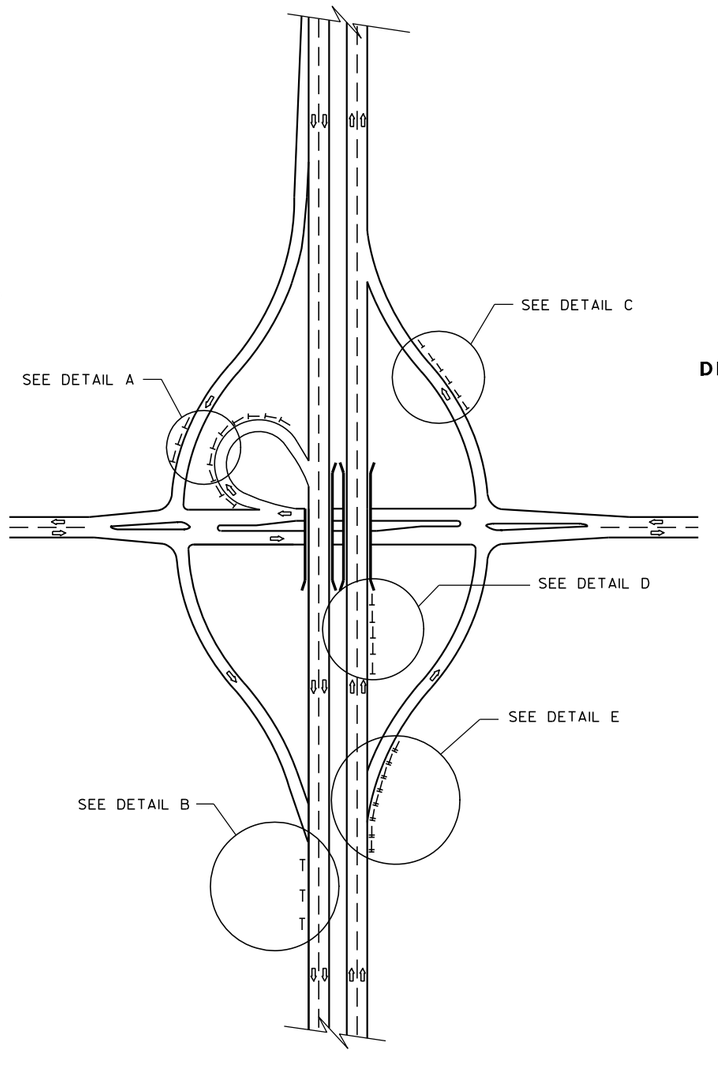
DETAIL C
DELINEATOR LAYOUT ALONG RAMP

LEGEND

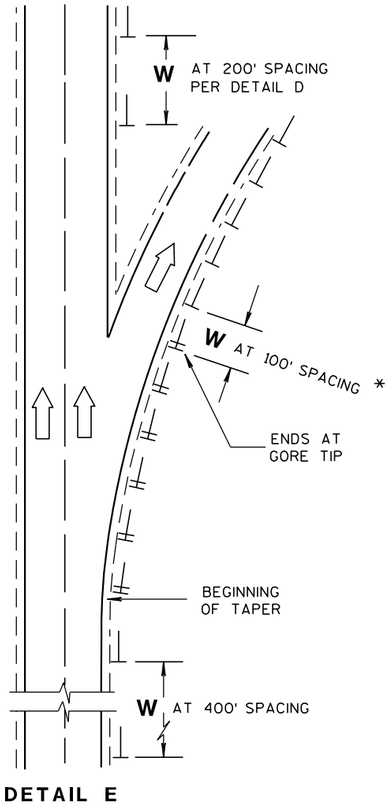
- DIRECTION OF TRAFFIC FLOW
- SINGLE DELINEATOR
- DOUBLE DELINEATOR
- W — WHITE
- Y — YELLOW



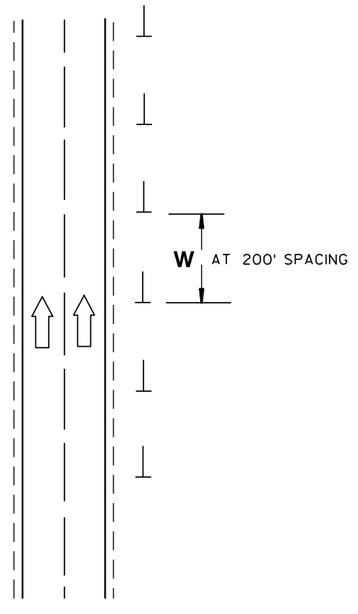
DETAIL B
DELINEATOR LAYOUT ALONG MAINLINE



DELINEATOR LAYOUT



DETAIL E
DELINEATOR LAYOUT FOR ACCELERATION - DECELERATION LANES AND TAPERS AT RAMPS



DETAIL D
DELINEATOR LAYOUT BETWEEN INTERCHANGE RAMPS

DELINEATOR LAYOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/5/09 DATE
/S/ Thomas N. Nothdurft
STATE TRAFFIC ENGINEER
FHWA

6

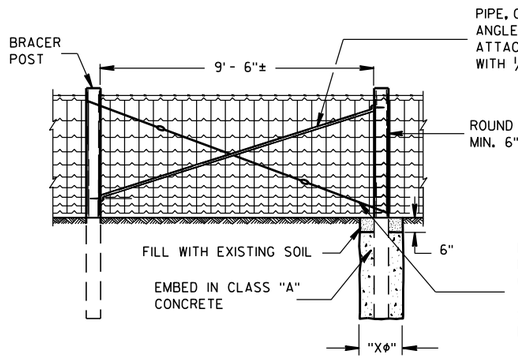
S.D.D. 15 A 6-2

6

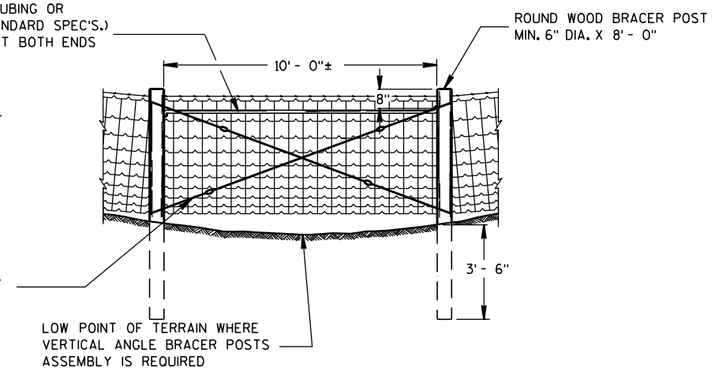
S.D.D. 15 A 6-2

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY



VERTICAL ANGLE BRACER POSTS ASSEMBLY

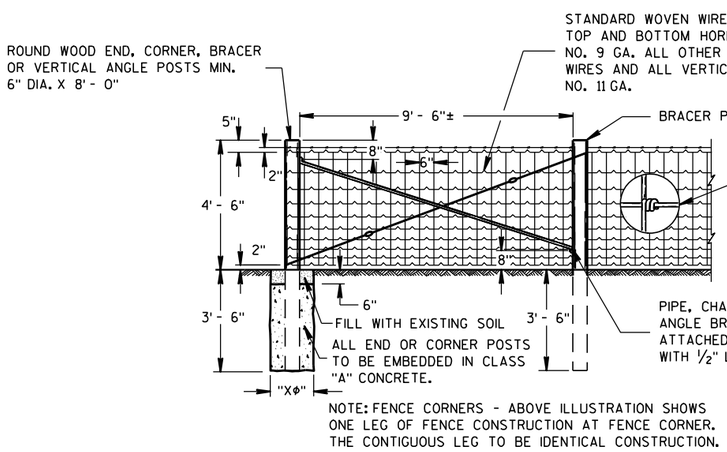
GENERAL NOTES

"XΦ" = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

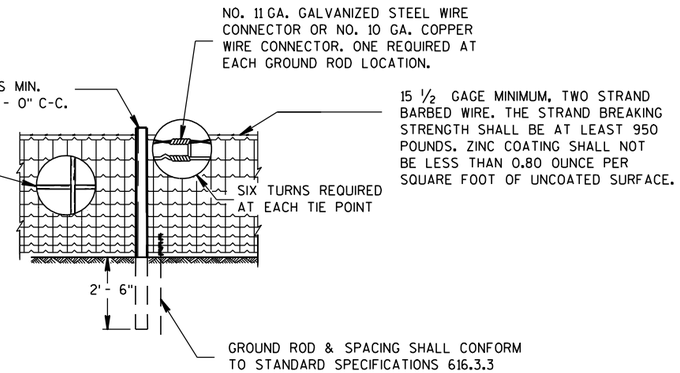
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.



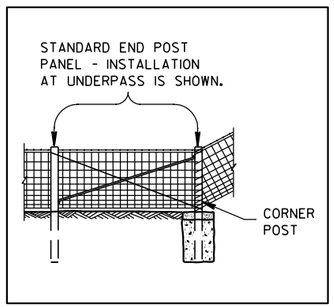
NOTE: FENCE CORNERS - ABOVE ILLUSTRATION SHOWS ONE LEG OF FENCE CONSTRUCTION AT FENCE CORNER. THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.

END OR CORNER POSTS ASSEMBLY

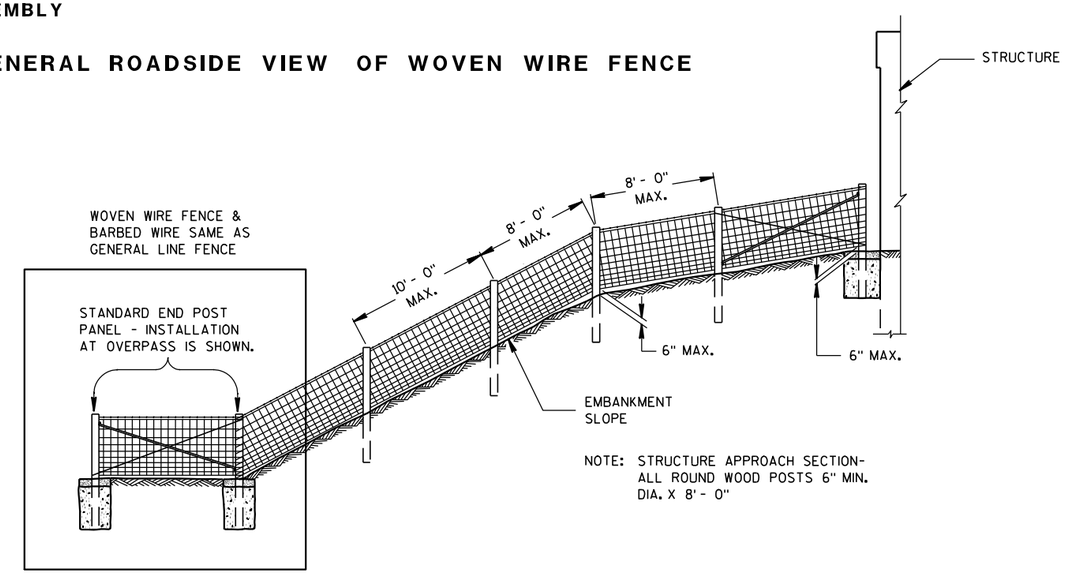


LINE FENCE CONSTRUCTION

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



ALTERNATE FENCE DESIGN AT STRUCTURE



NOTE: STRUCTURE APPROACH SECTION- ALL ROUND WOOD POSTS 6" MIN. DIA. X 8' - 0"

FENCE DESIGN AT STRUCTURE APPROACH

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

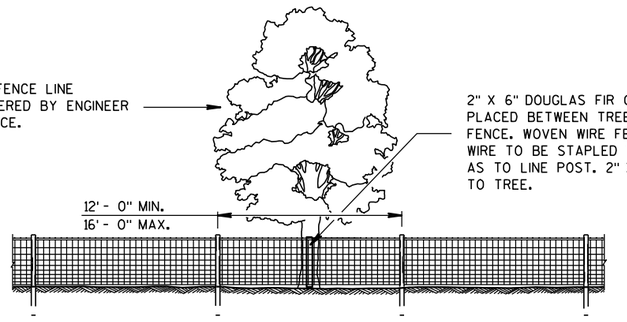
S.D.D. 15 B 1-8a

6

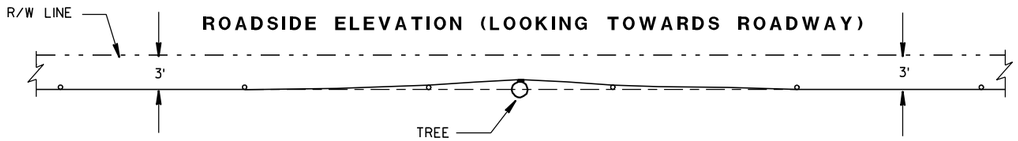
S.D.D. 15 B 1-8a

NOTE: TREE IN NORMAL FENCE LINE SPECIFICALLY ORDERED BY ENGINEER TO REMAIN IN PLACE.

2" X 6" DOUGLAS FIR OR SO. YELLOW PINE PLACED BETWEEN TREE AND WOVEN WIRE FENCE. WOVEN WIRE FENCE AND BARBED WIRE TO BE STAPLED TO 2" X 6" LIKE AS TO LINE POST. 2" X 6" NOT FASTENED TO TREE.

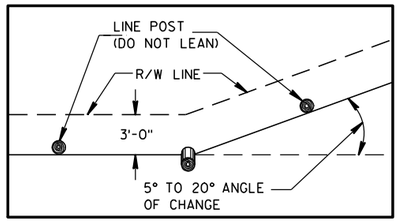


ROADSIDE ELEVATION (LOOKING TOWARDS ROADWAY)

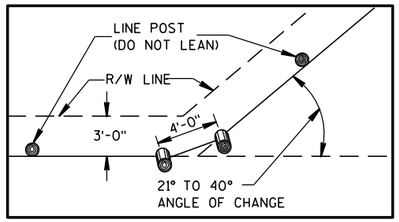


PLAN VIEW

FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE



PLAN VIEW
SINGLE POST CORNER

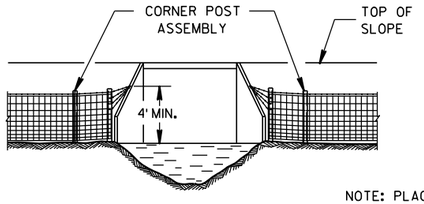


PLAN VIEW
DOUBLE POST CORNER

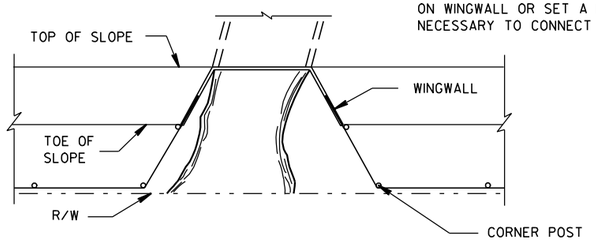
RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

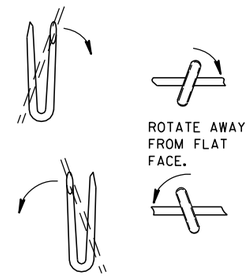
WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



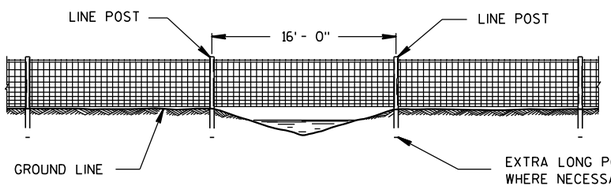
NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



FENCE INSTALLATION TO WINGWALLS

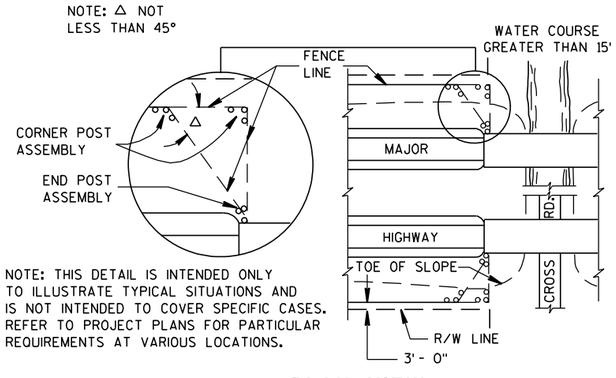


LINE POST



FENCE CONSTRUCTION OVER STREAM COURSES OF 15 FT. OR LESS IN WIDTH

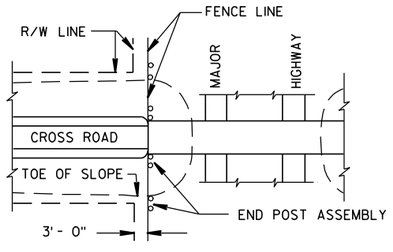
NOTE: △ NOT LESS THAN 45°



NOTE: THIS DETAIL IS INTENDED ONLY TO ILLUSTRATE TYPICAL SITUATIONS AND IS NOT INTENDED TO COVER SPECIFIC CASES. REFER TO PROJECT PLANS FOR PARTICULAR REQUIREMENTS AT VARIOUS LOCATIONS.

PLAN VIEW

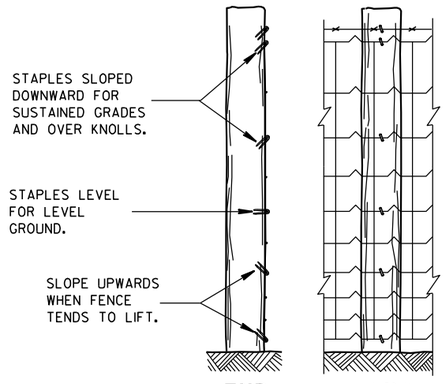
MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 15 FT. IN WIDTH



PLAN VIEW

MAJOR HIGHWAY UNDERPASS

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.



END ELEVATION

FARM SIDE ELEVATION

FENCE MOUNTING DETAIL

FENCE LOCATION AT STRUCTURES

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

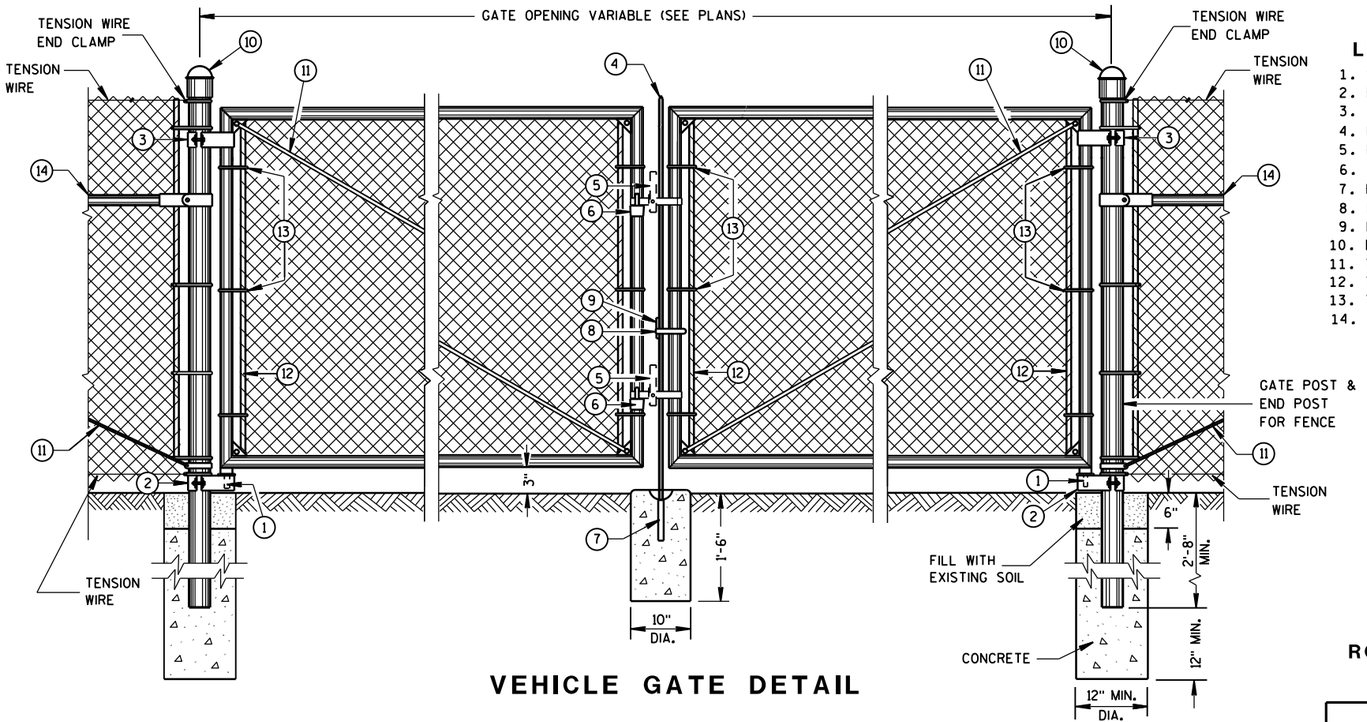
4/4/2008
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS [illegible]
ENGINEER

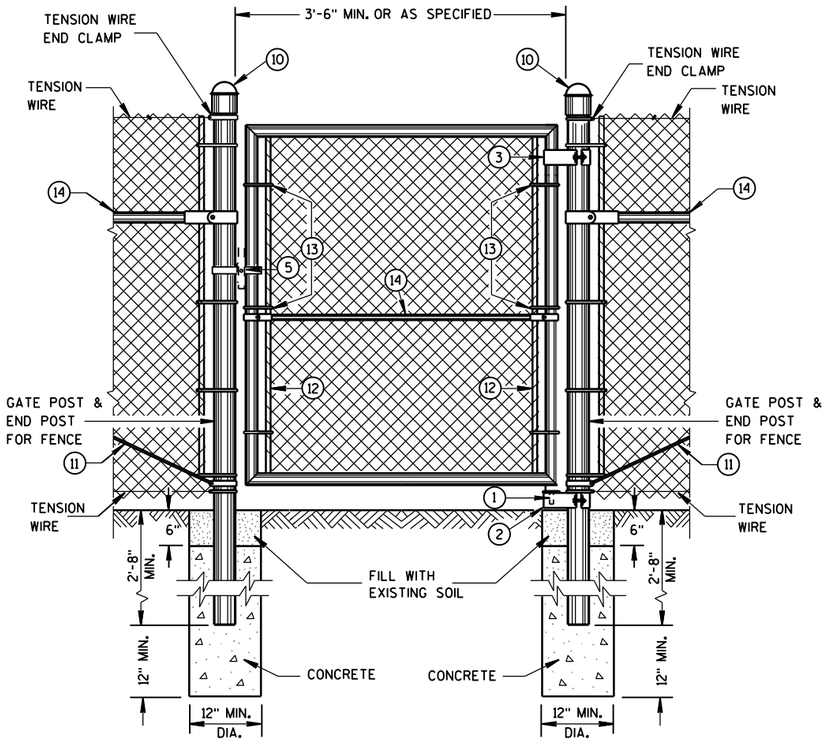
FHWA

6

S.D.D. 15 B 1-8b



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

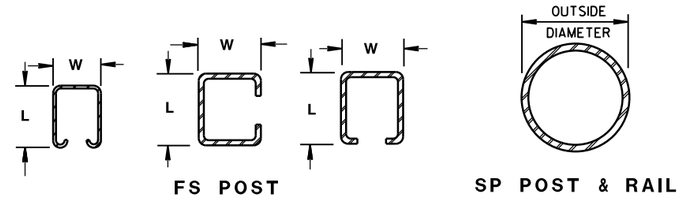
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



FS POST

SP POST & RAIL

CROSS SECTIONS OF POSTS AND RAILS

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

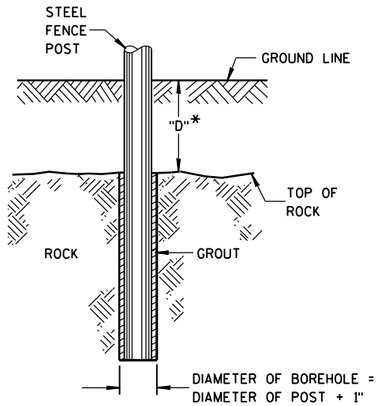
POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

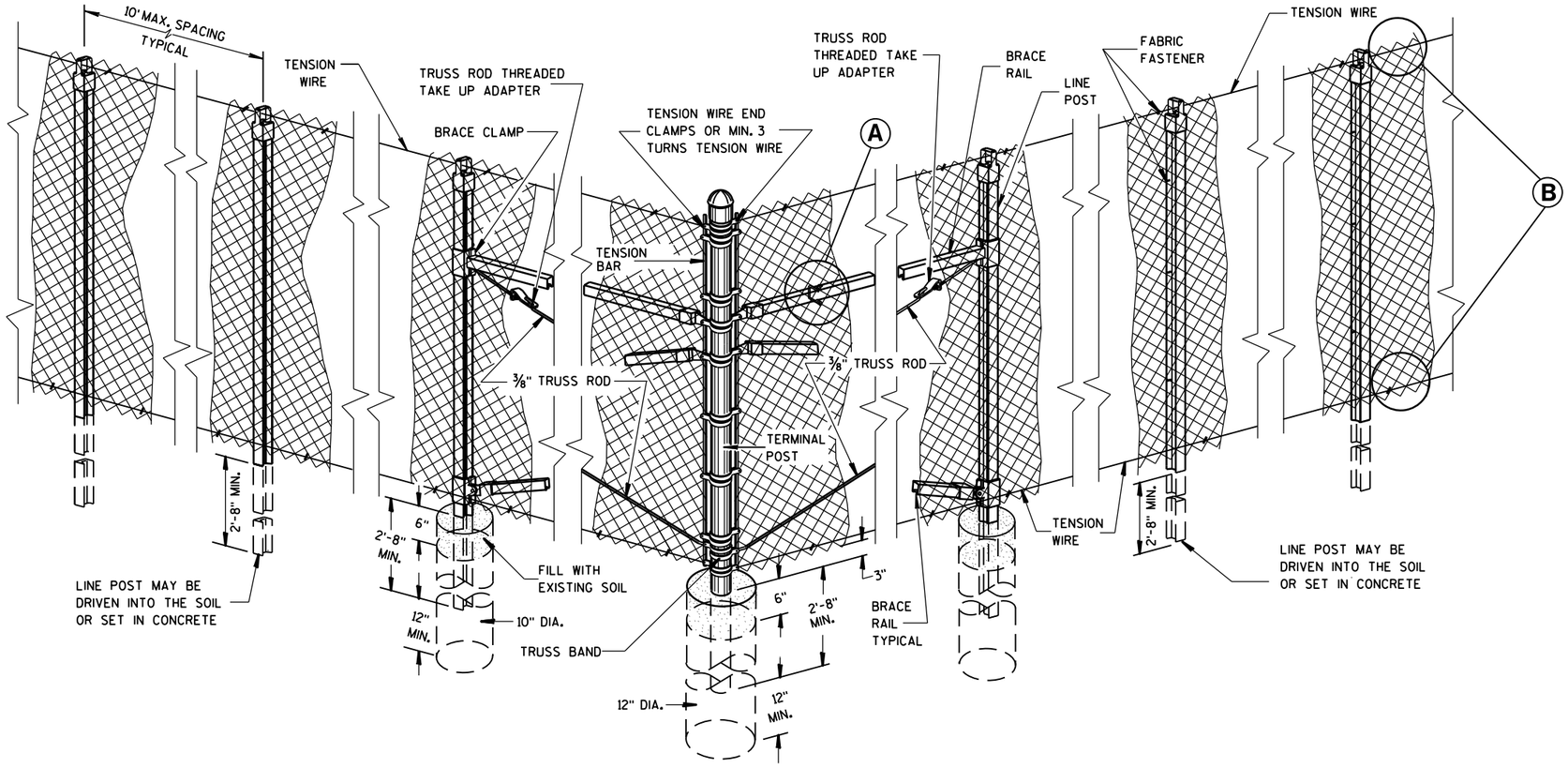
6

S.D.D. 15 B 3-15a
S.D.D. 15 B 3-15a

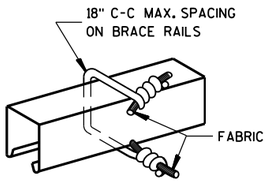


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



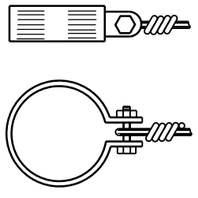
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



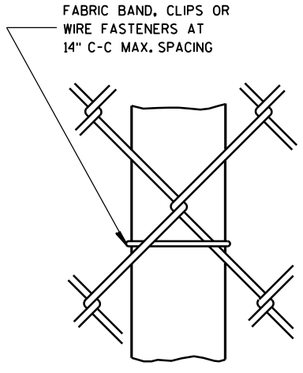
BRACE RAIL

FABRIC FASTENER

Ⓐ



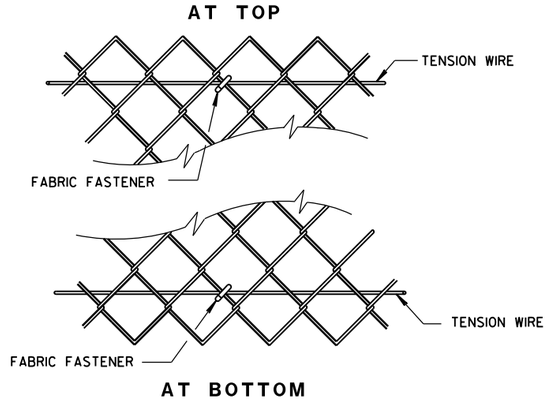
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

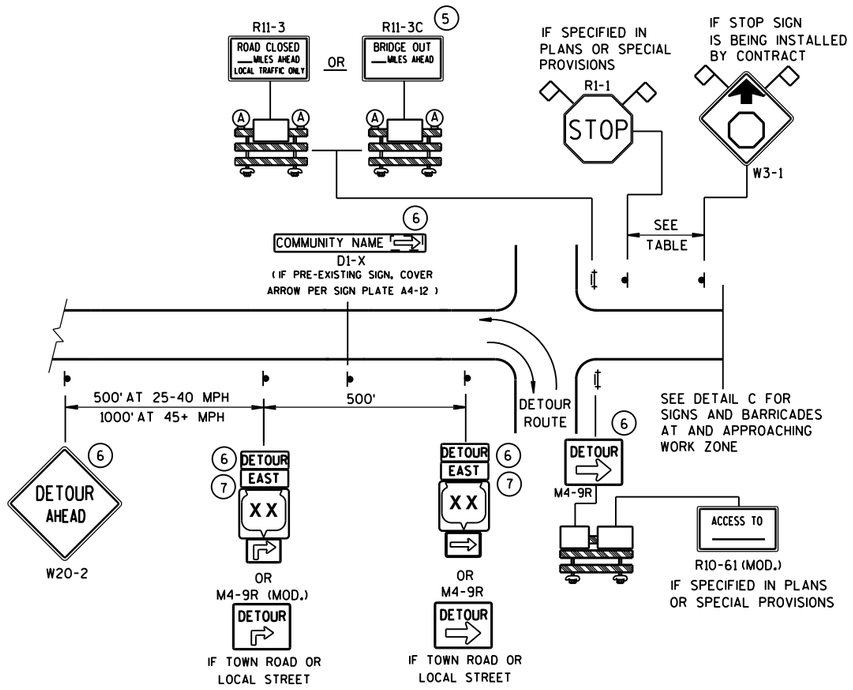
FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

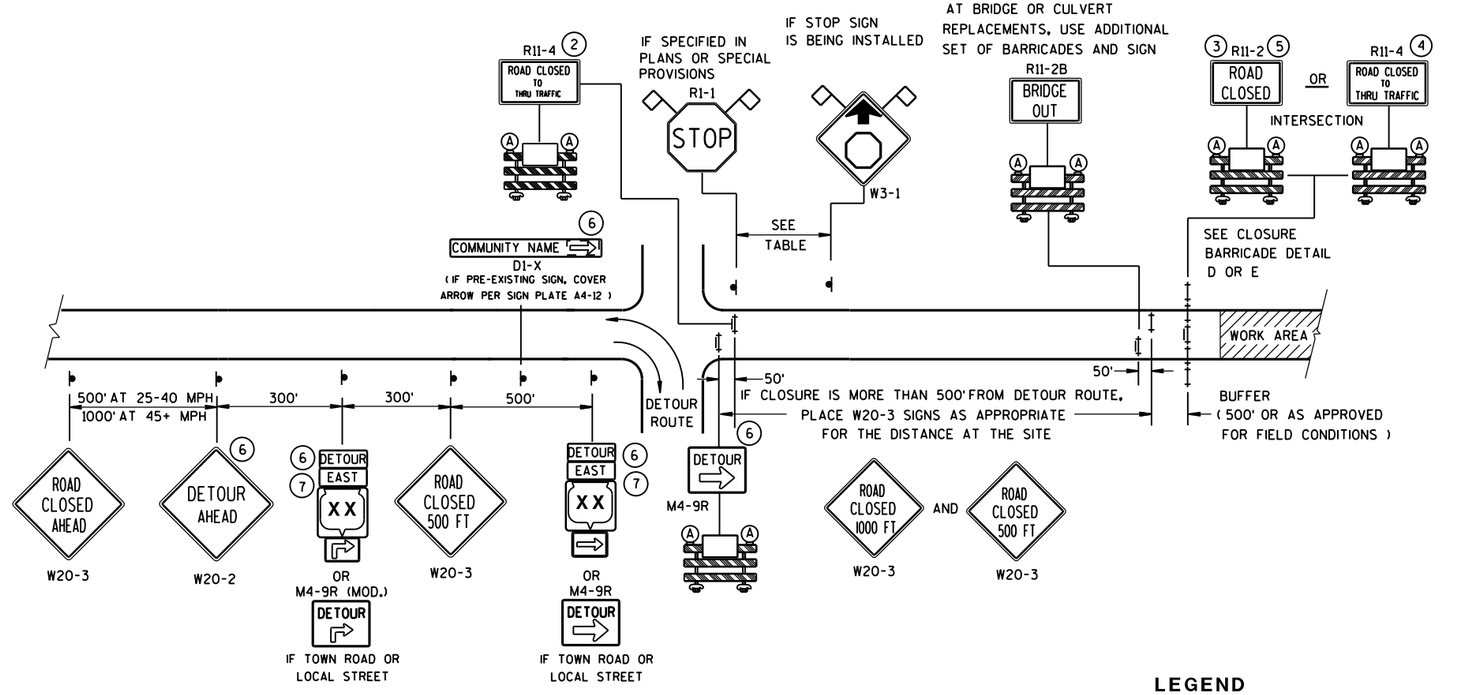
6

S.D.D. 15 B 3-15b



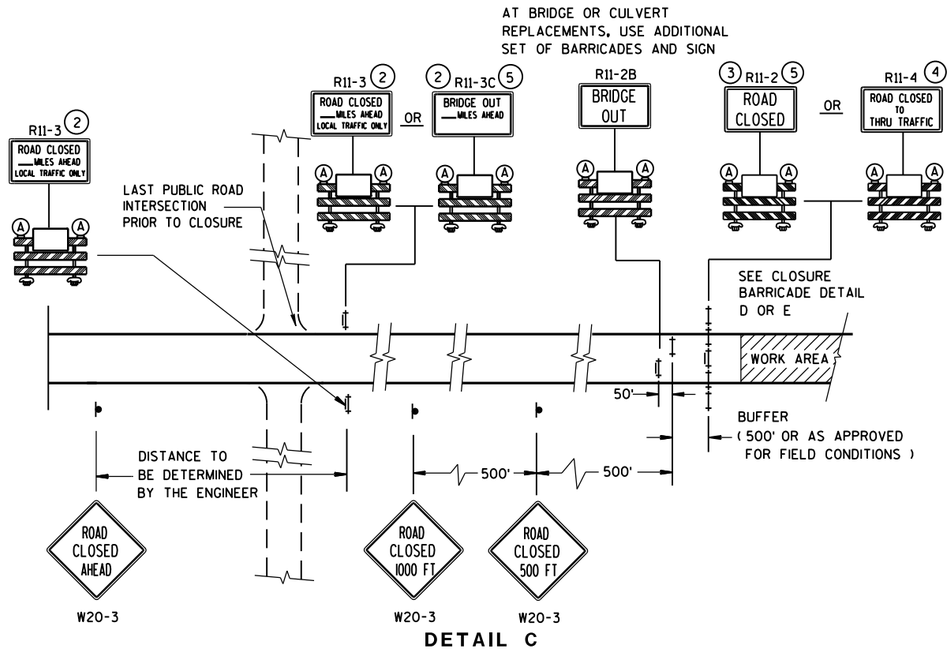
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**"
FOR GENERAL NOTES
AND FOOTNOTES (1) THROUGH (7)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

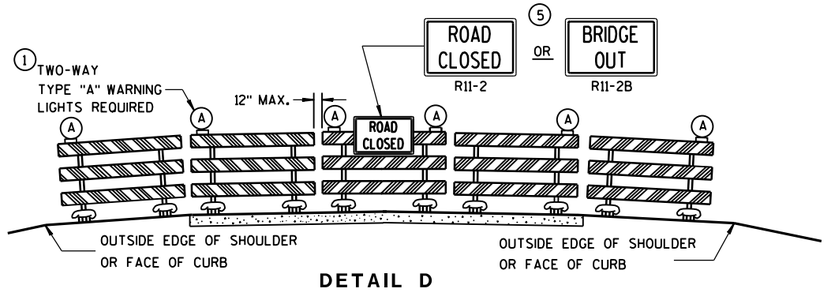
8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

6

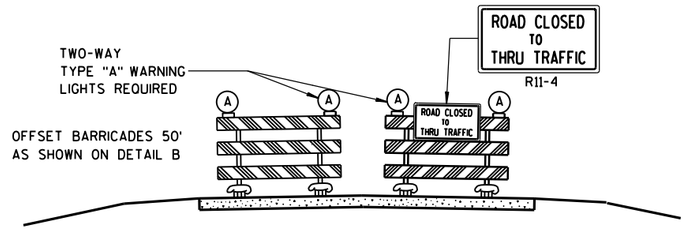
S.D.D. 15 C 2-5a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 2-5b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

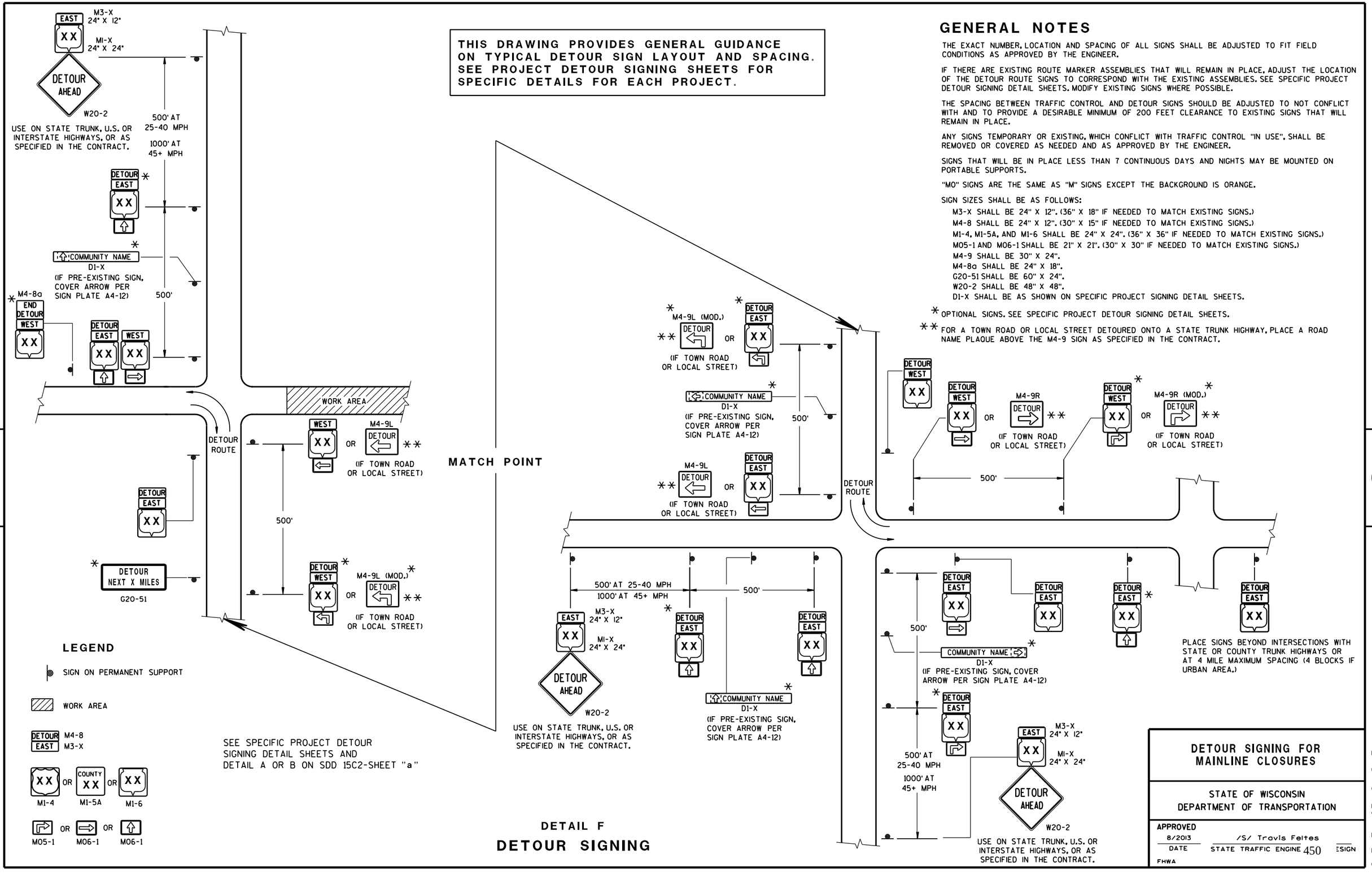
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



DETAIL F

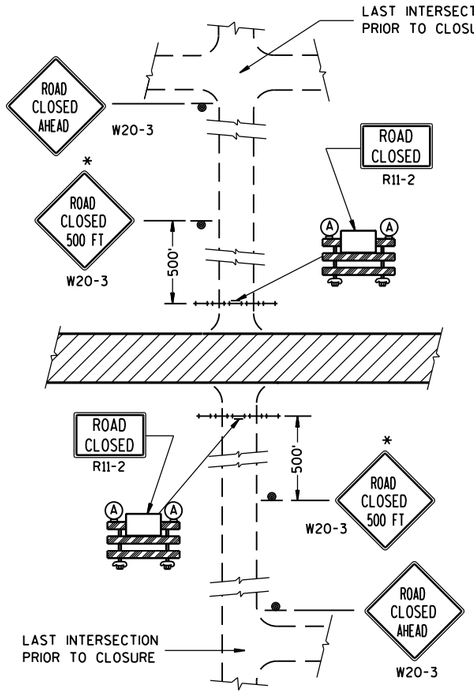
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

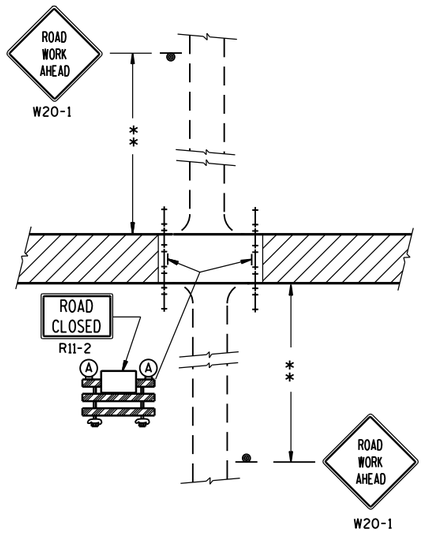
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6 S.D.D. 15 C 2-5c



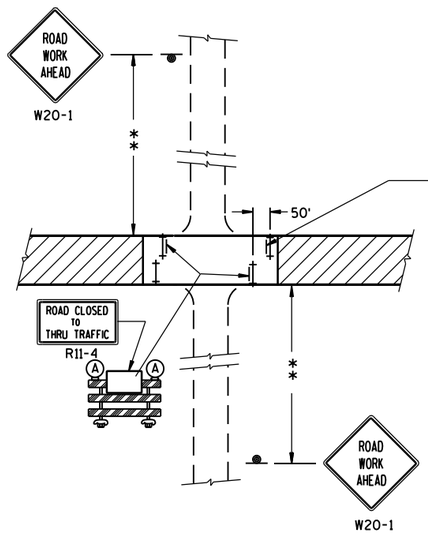
DETAIL 1

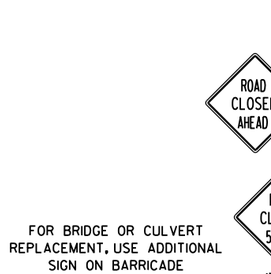
(NO ACCESS TO PROJECT)

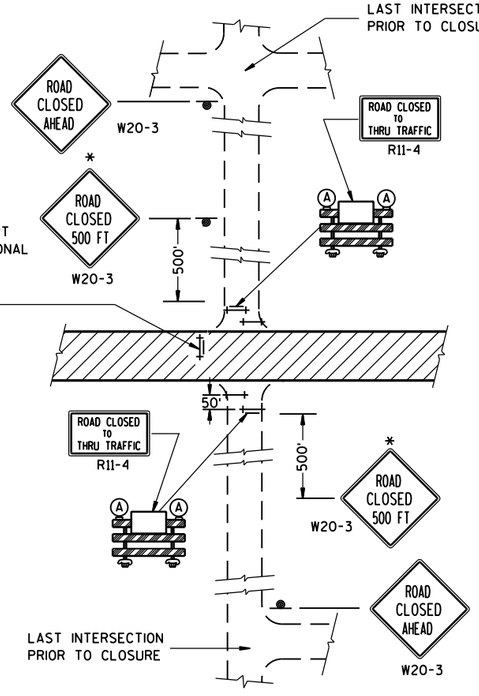


DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).







DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).

DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

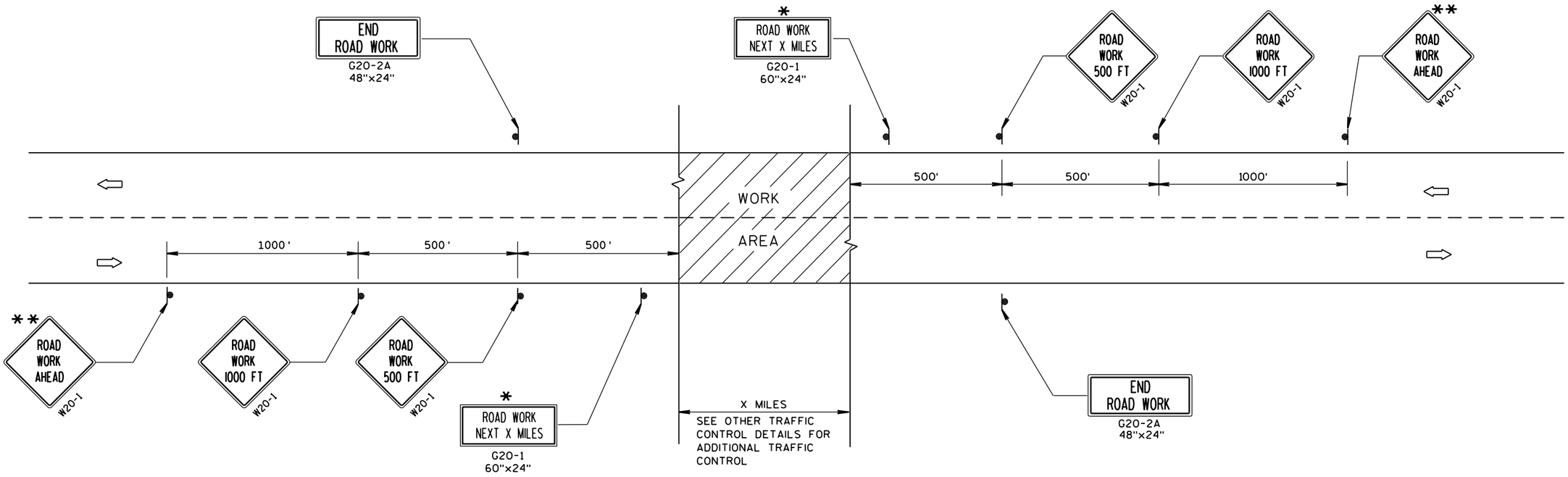
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 3-2

6

S.D.D. 15 C 3-2



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

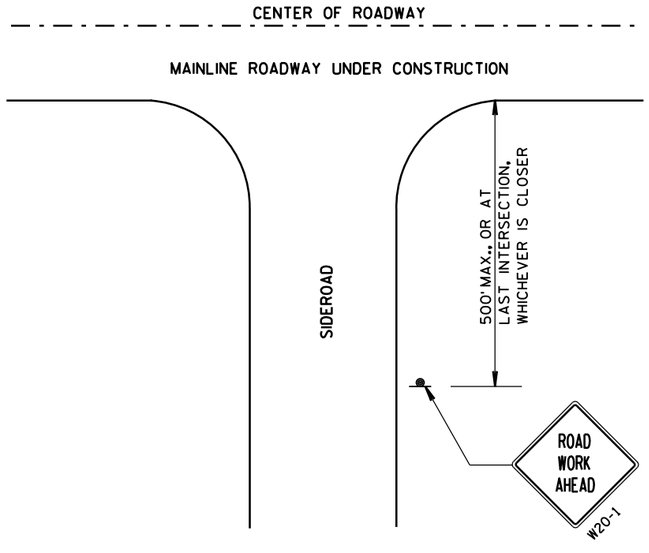
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

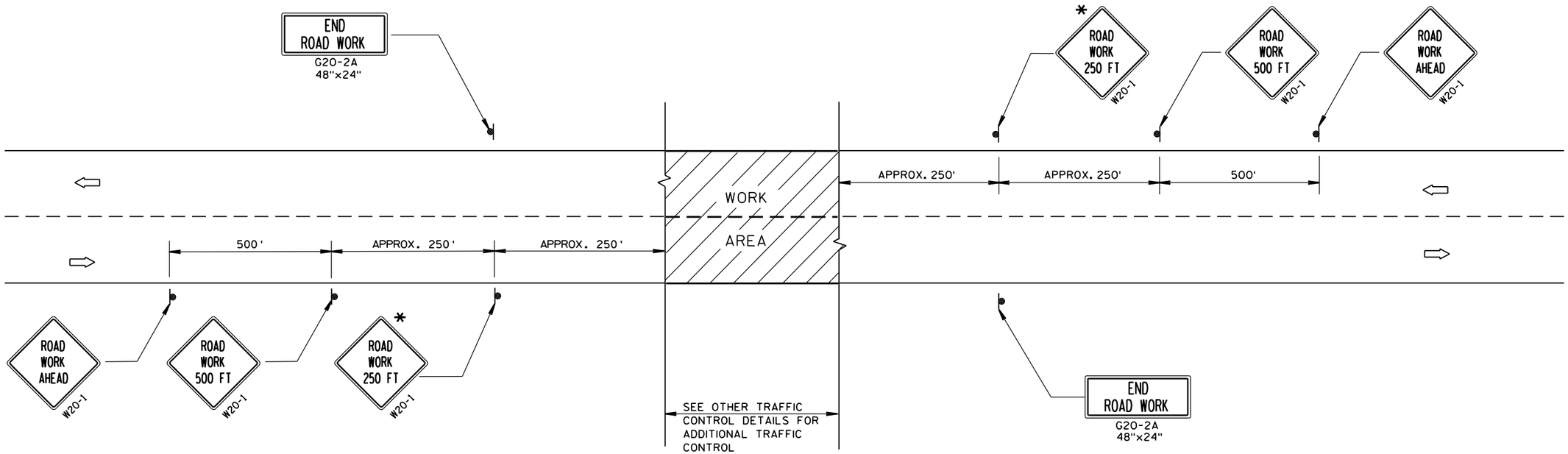
FHWA

6

S.D.D. 15 C 4-2

6

S.D.D. 15 C 4-2



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

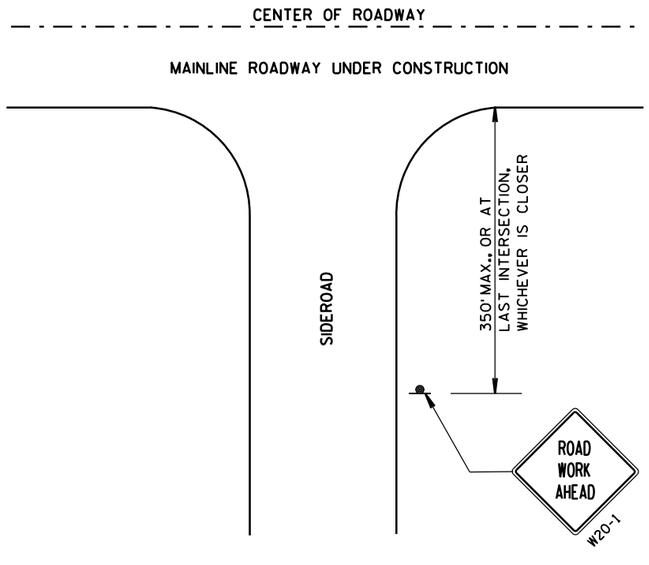
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

453 — SIGN

FHWA

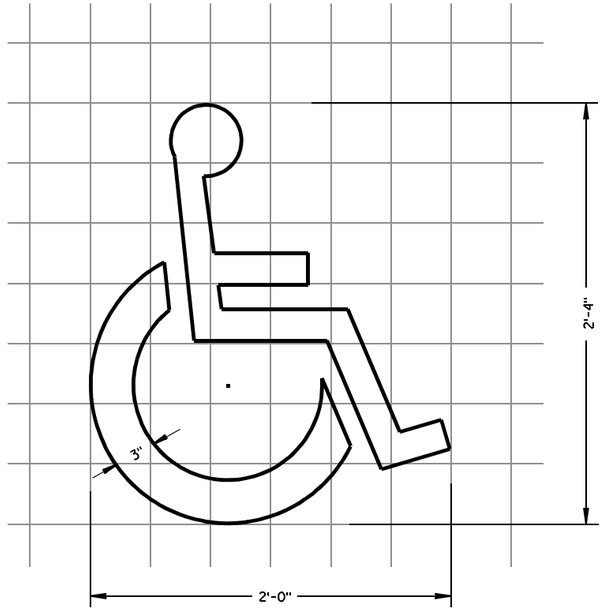
6
S.D.D. 15 C 5-2

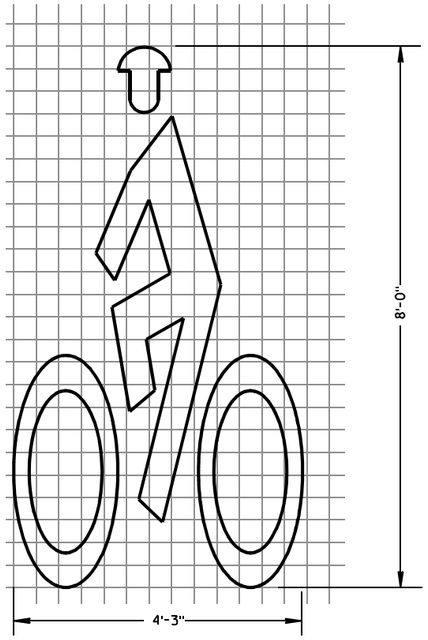
GENERAL NOTES

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.

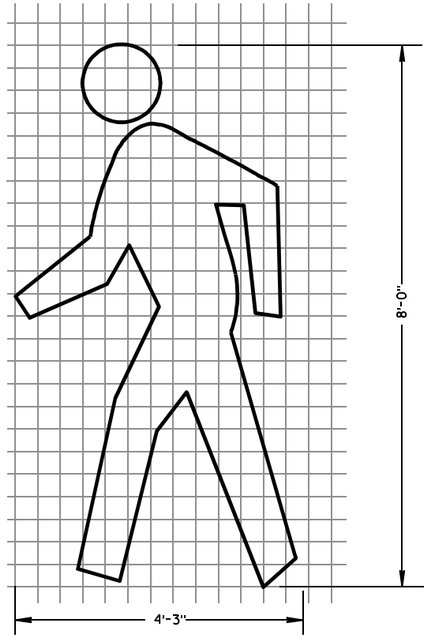
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

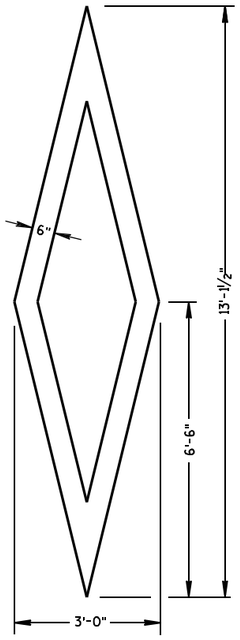




BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL LANE SYMBOL

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N Nathan — STATE TRAFFIC ENGINEER

454

IGN

FHWA

6

S.D.D. 15 C 7-12a

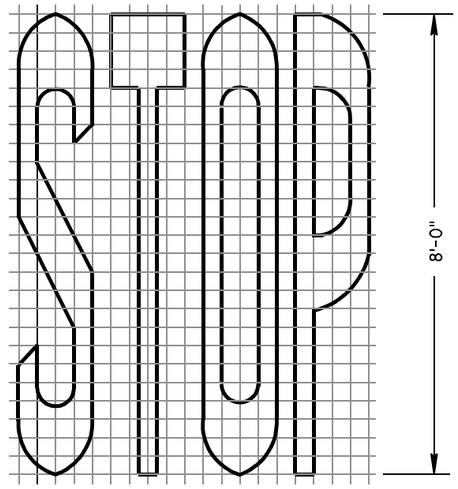
6

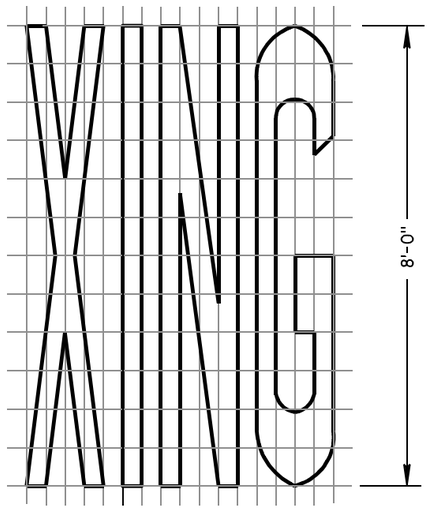
S.D.D. 15 C 7-12a

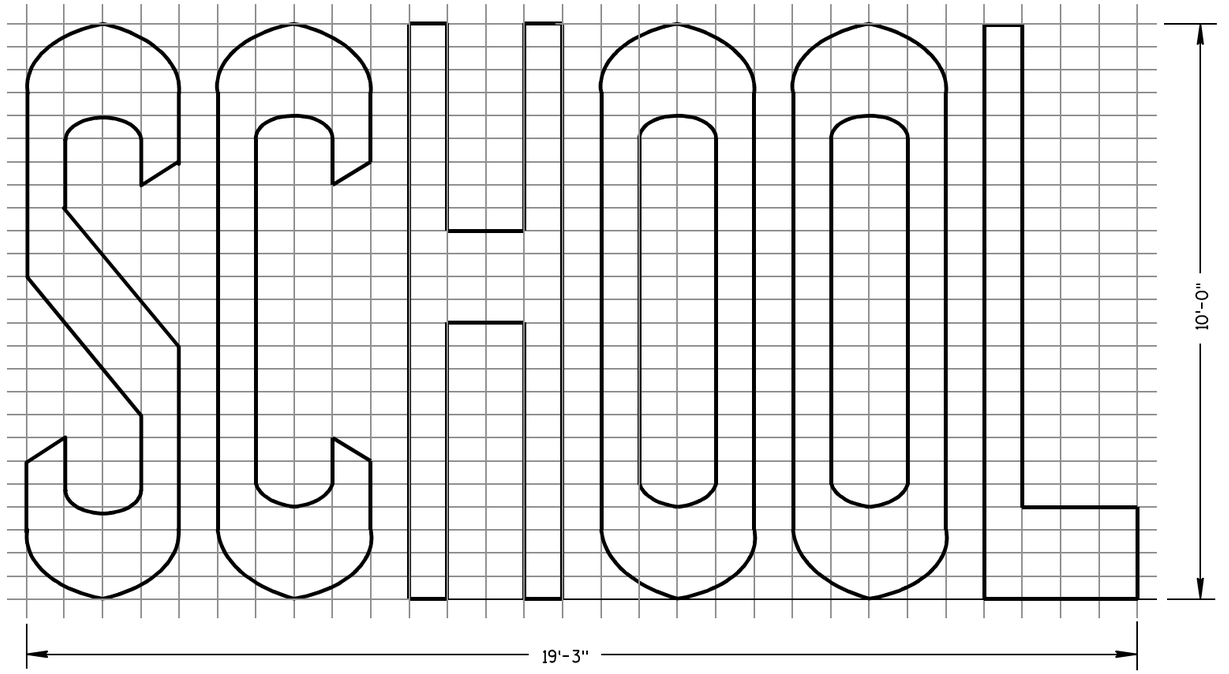
GENERAL NOTES

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.

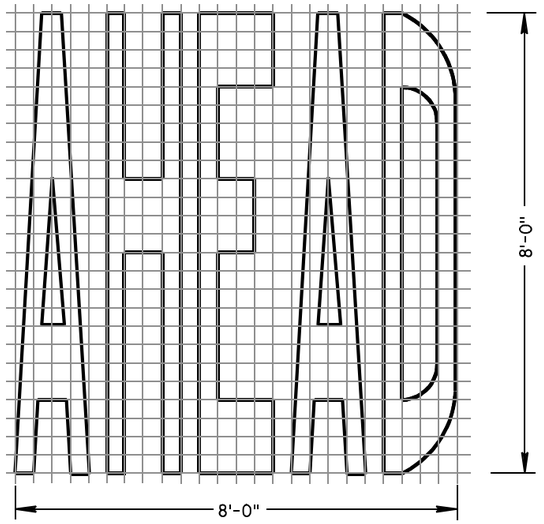
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

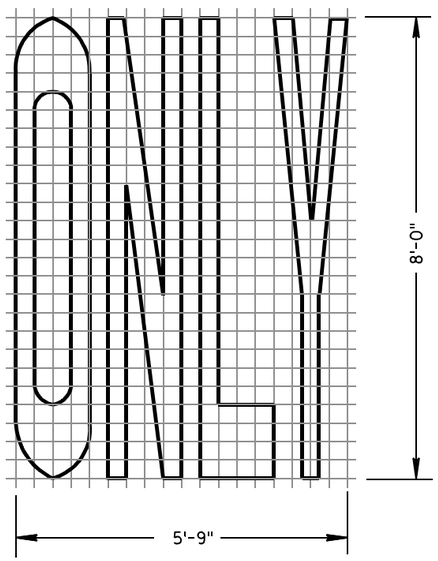


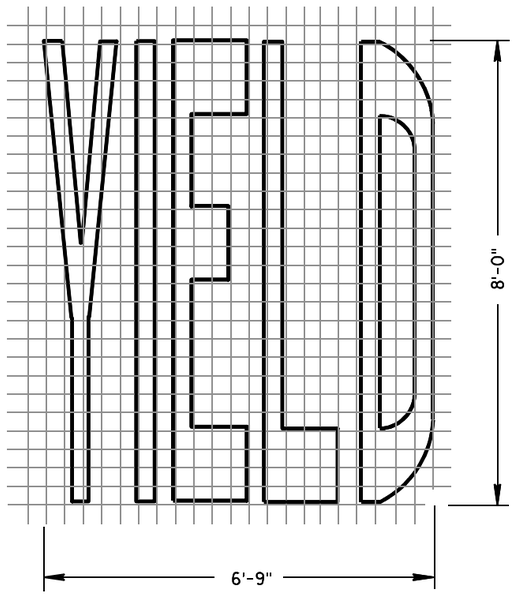


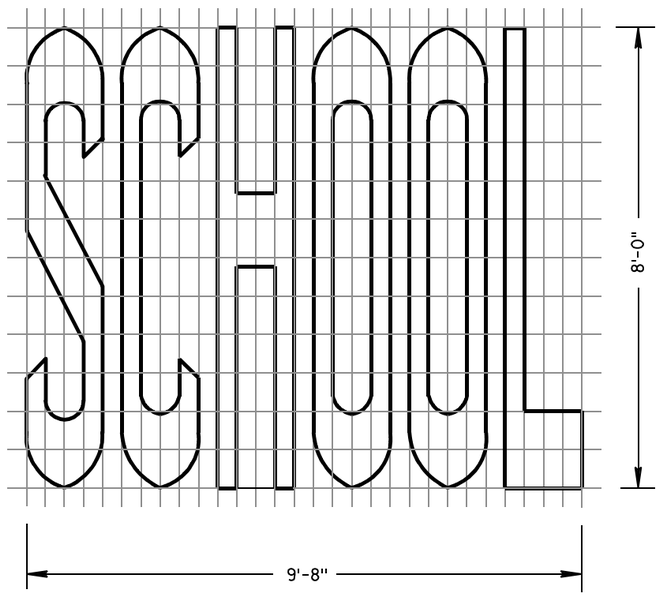


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 — DATE

/S/ Thomas N. Nottbohm — STATE TRAFFIC ENGINEER

455 — IGN

FHWA

6

S.D.D. 15 C 7-12b

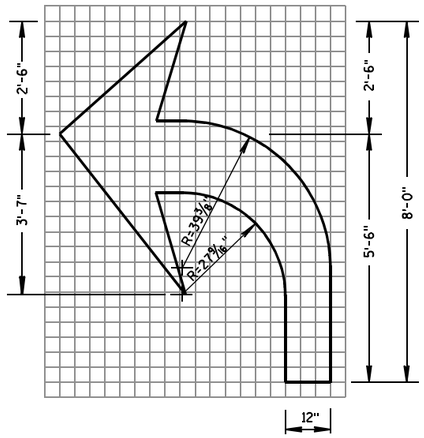
6

S.D.D. 15 C 7-12b

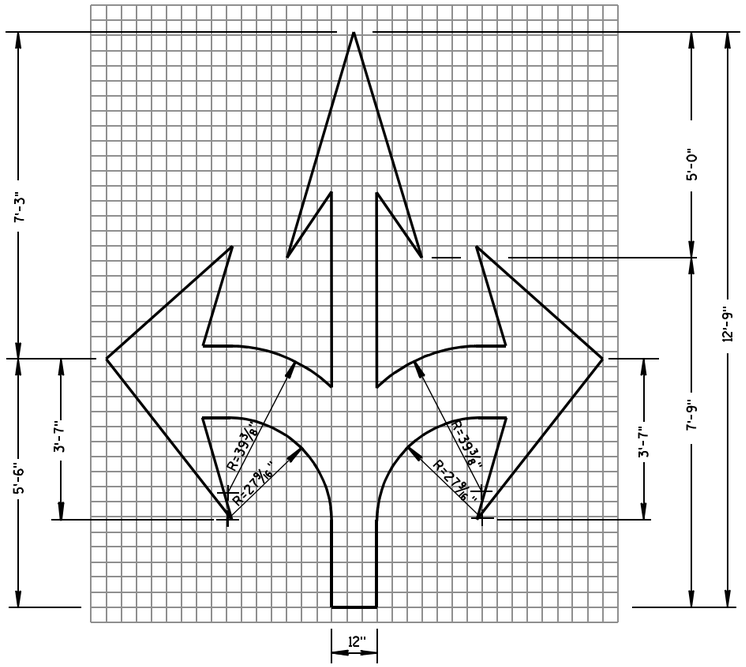
GENERAL NOTES

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.

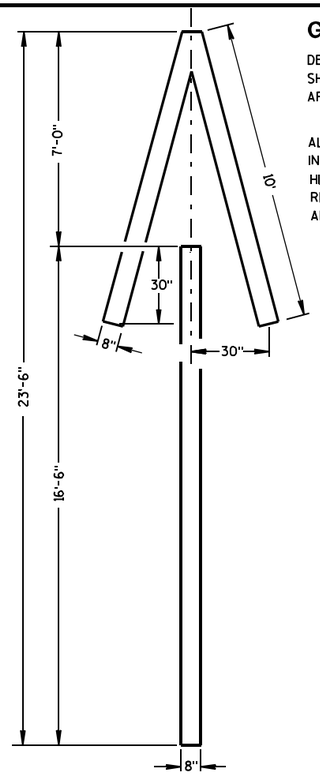
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



TYPE 2



TYPE 6



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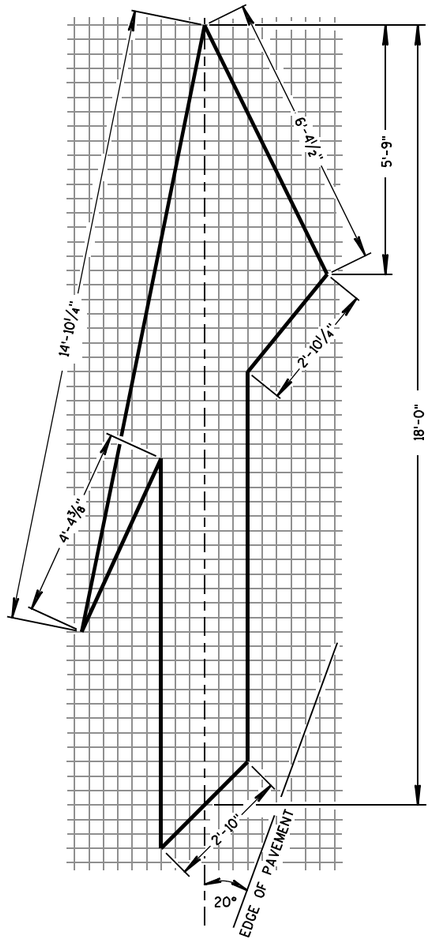
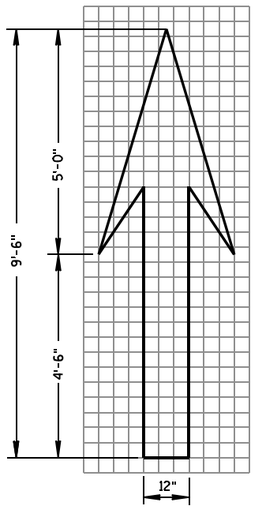
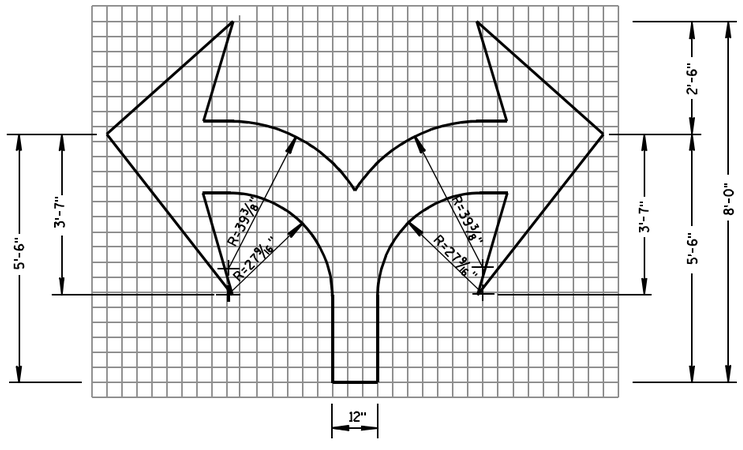


TYPE 5 LANE DROP ARROW



TYPE 1



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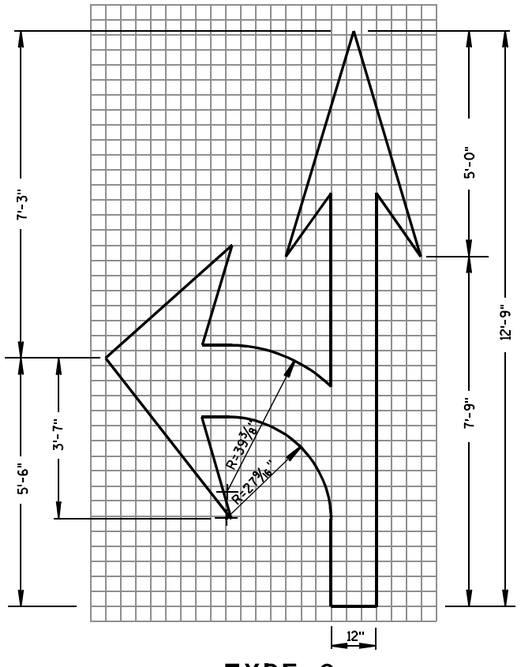


TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

FHWA

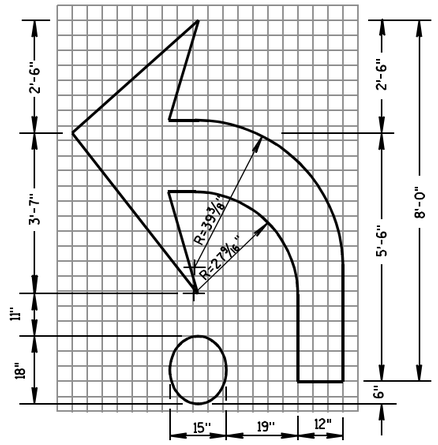
6

S.D.D. 15 C 7-12c

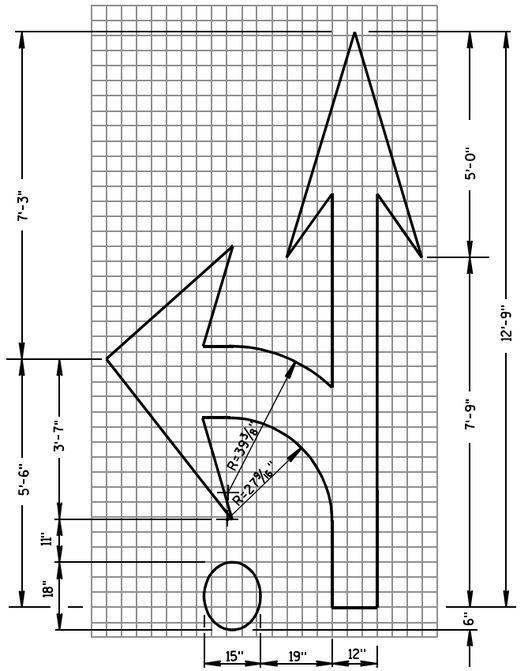
GENERAL NOTES

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.

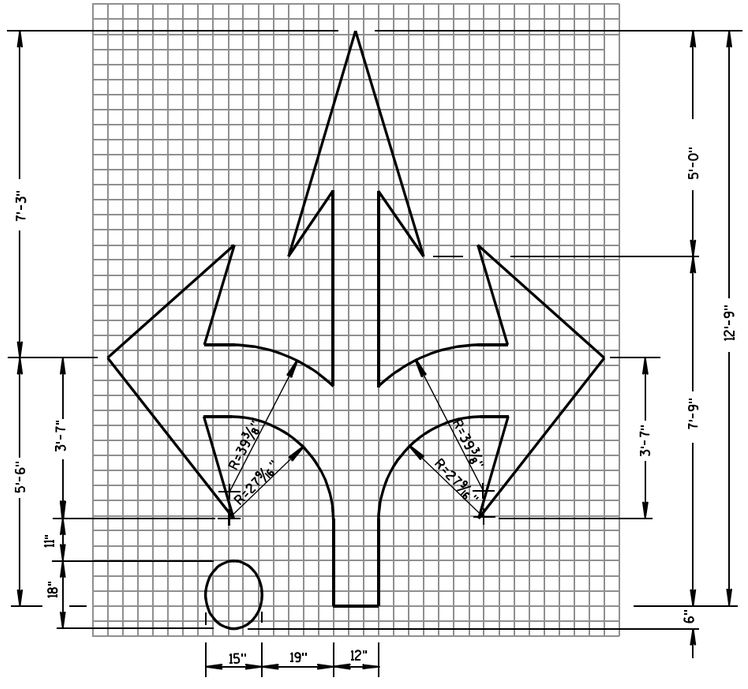
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



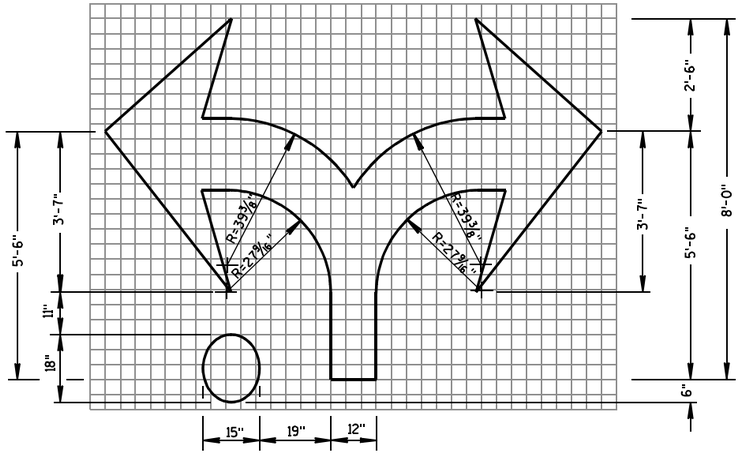
TYPE 2R



TYPE 3R



TYPE 6R



TYPE 7R

ROUNDABOUT ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurm — STATE TRAFFIC ENGINEER — SIGN

FHWA

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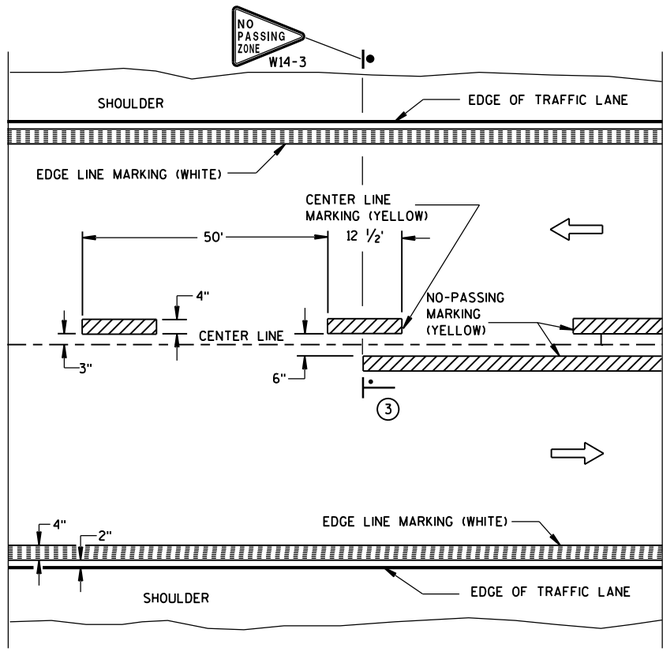
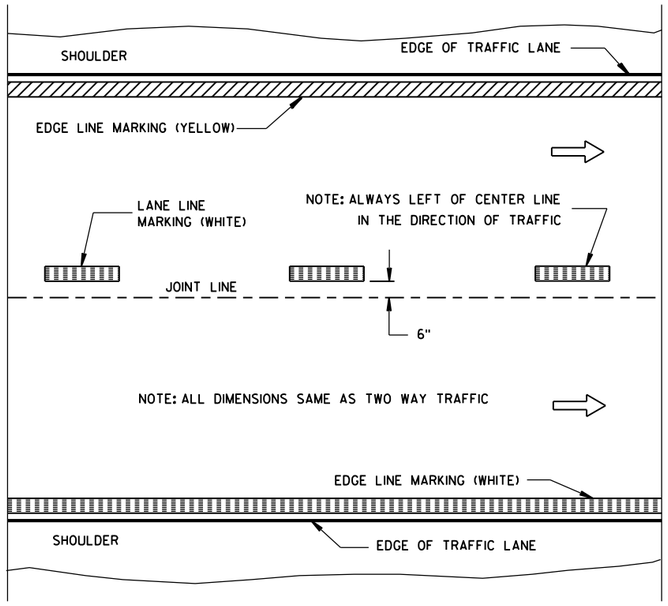
S.D.D. 15 C 7-12d

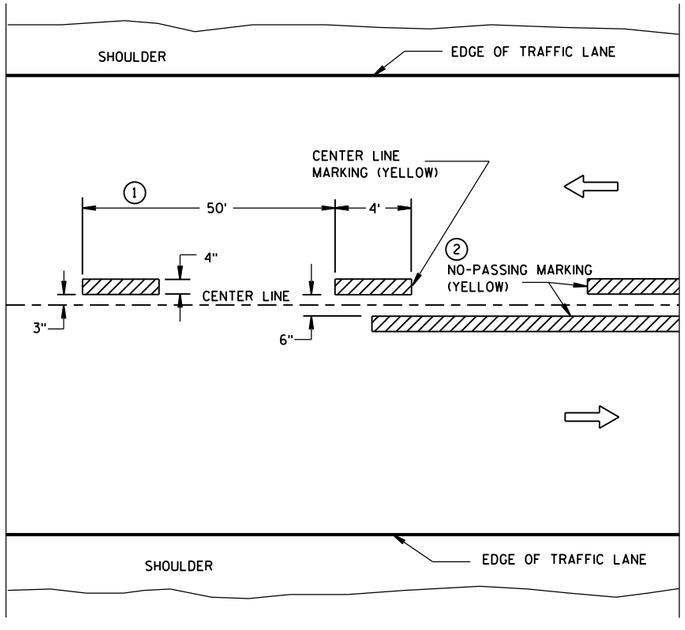


TWO WAY TRAFFIC

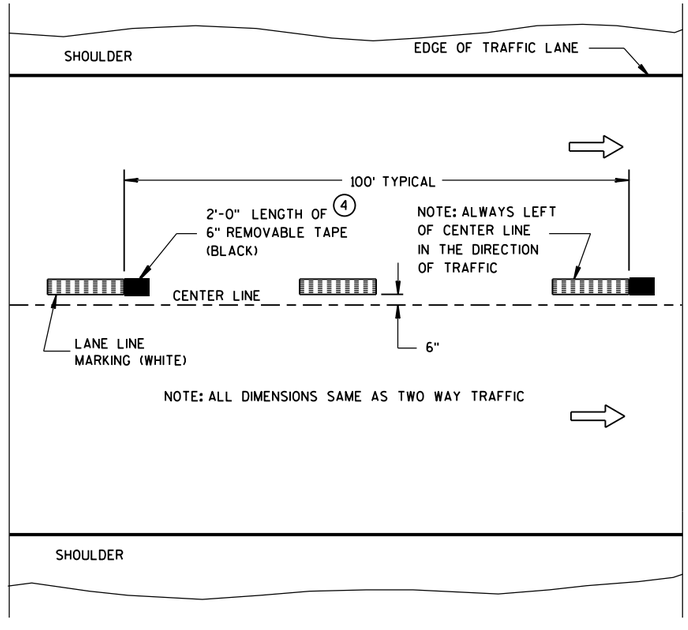


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

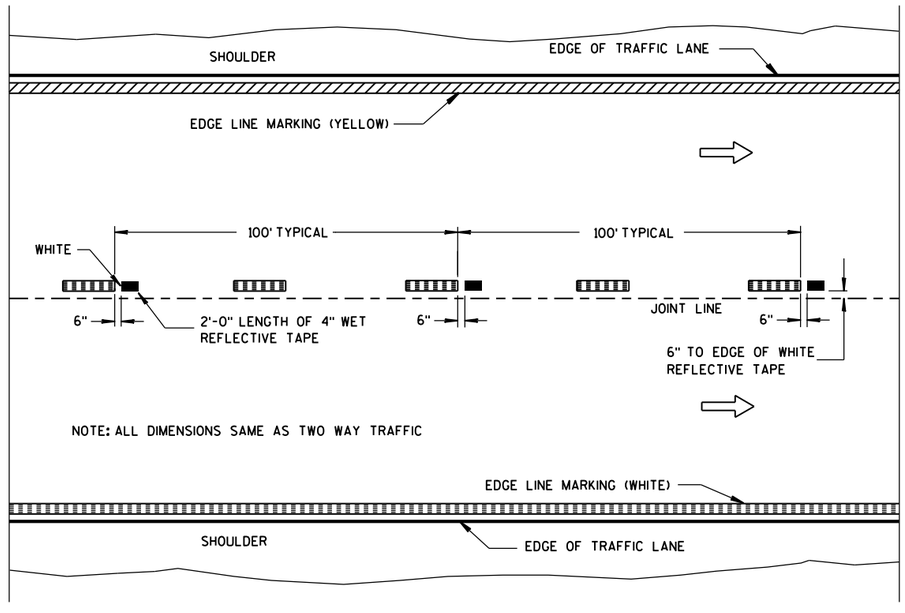
GENERAL NOTES

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

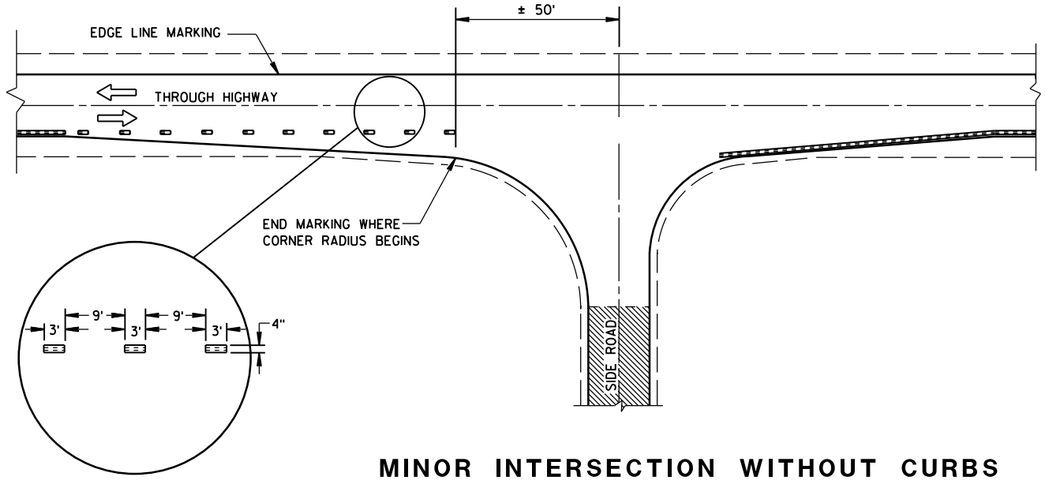
FHWA

6

S.D.D. 15 C 8-16a

6

S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

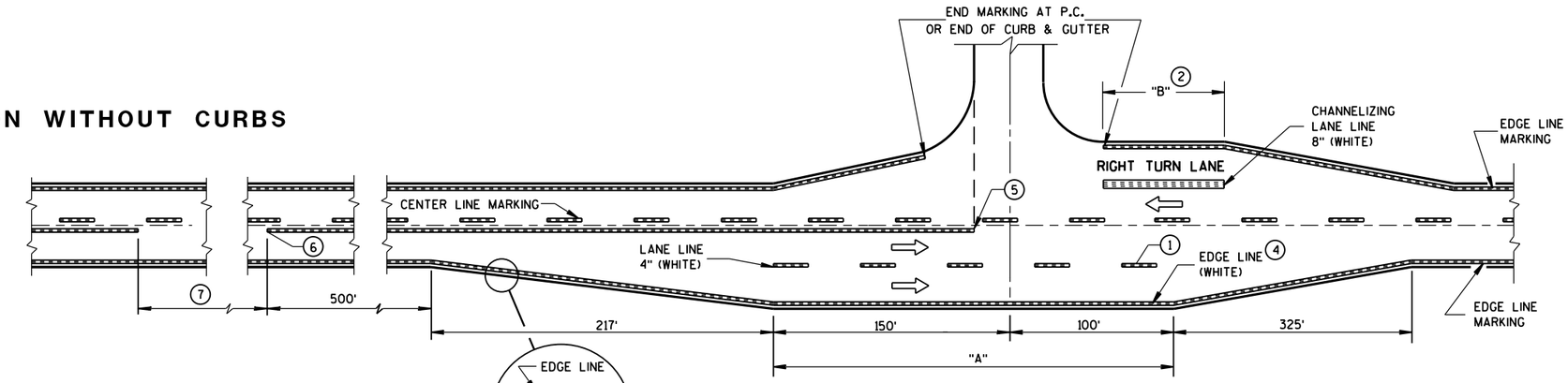
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

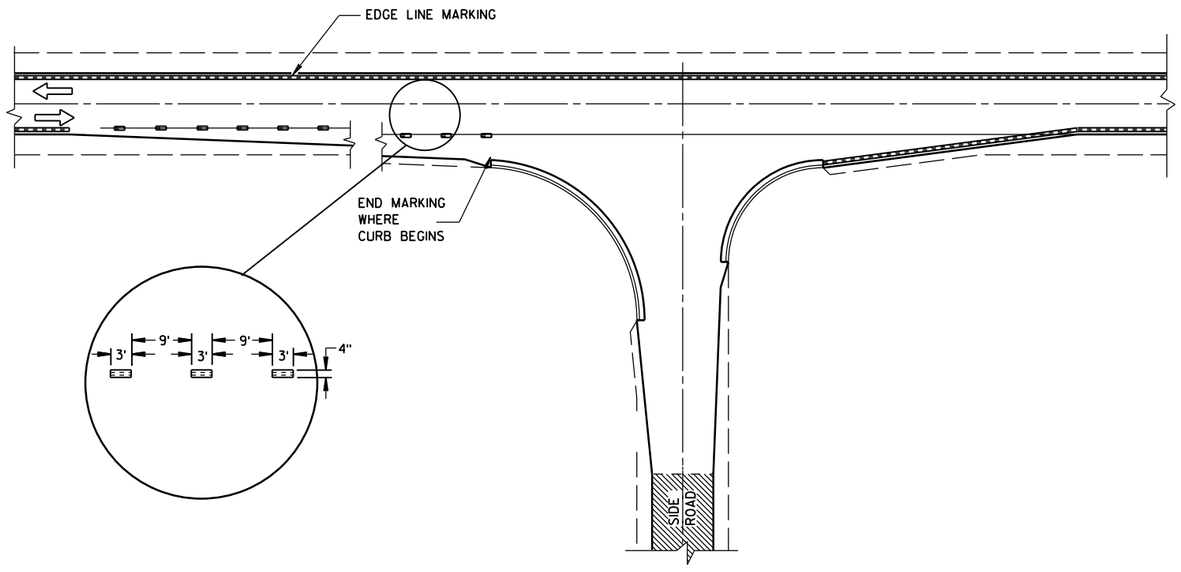
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



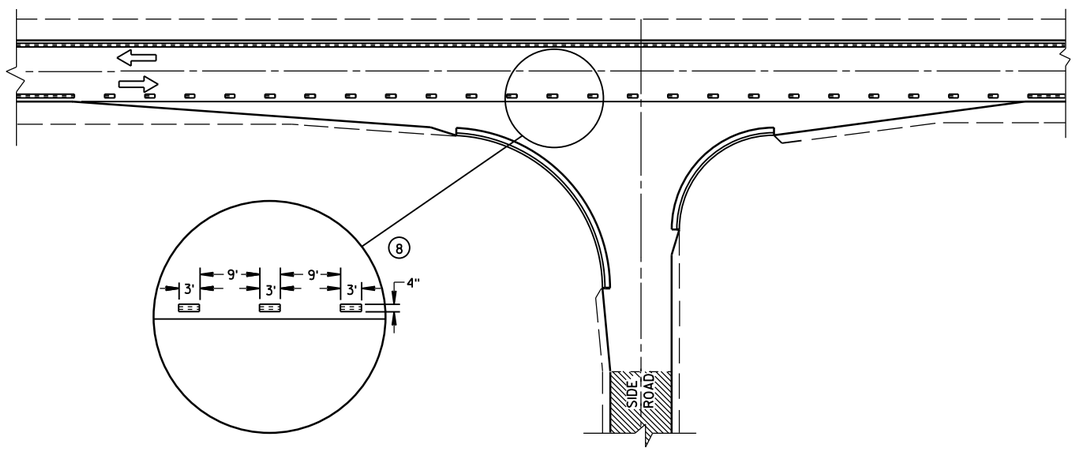
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

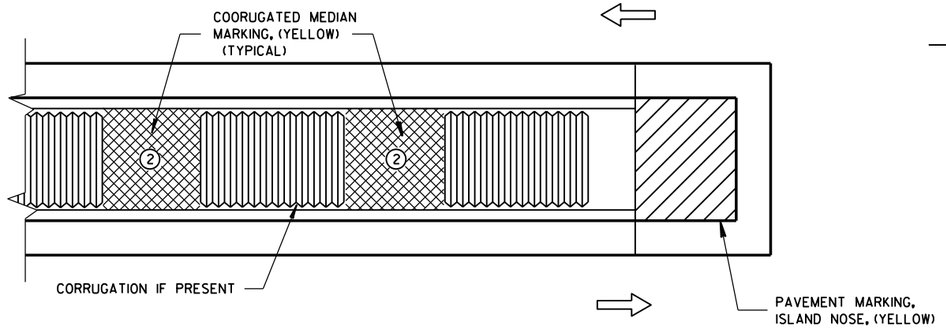
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

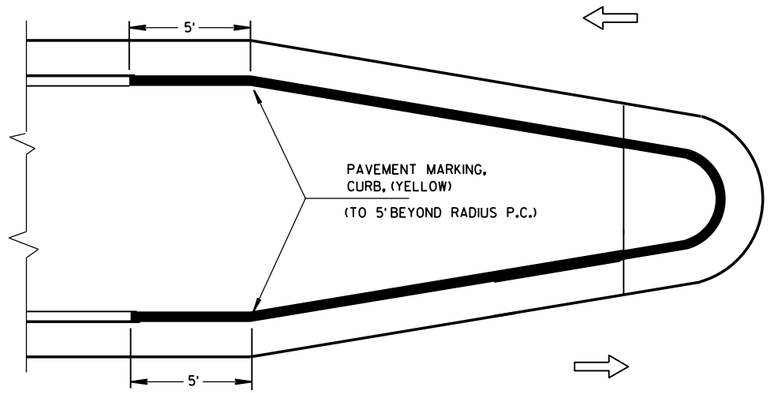
S.D.D. 15 C 8-16b

6

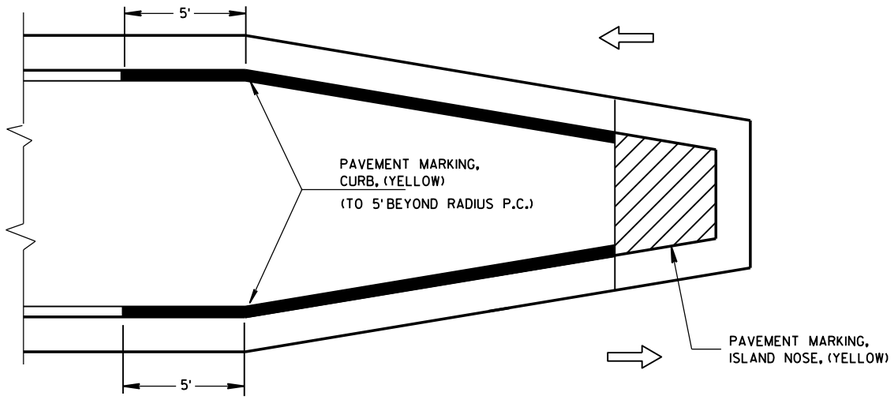
S.D.D. 15 C 8-16b



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

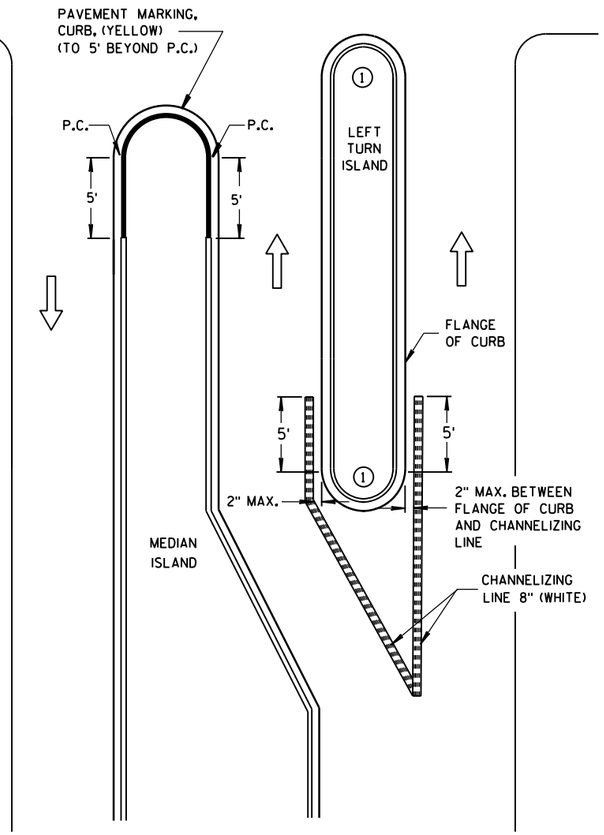


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

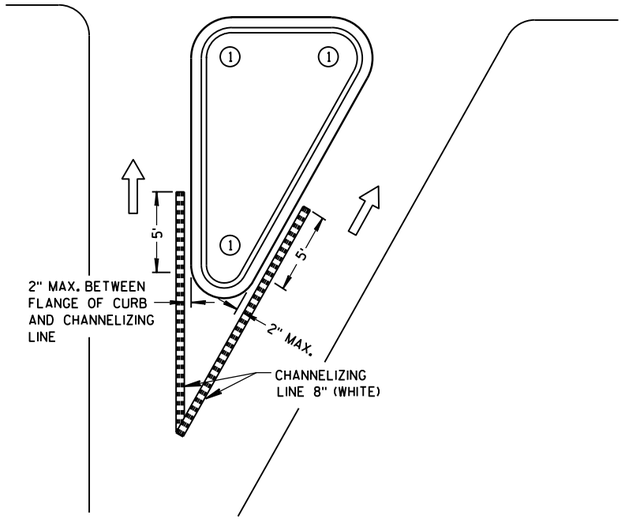


LEFT TURN & MEDIAN ISLAND

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

6

S.D.D. 15 C 8-16f

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

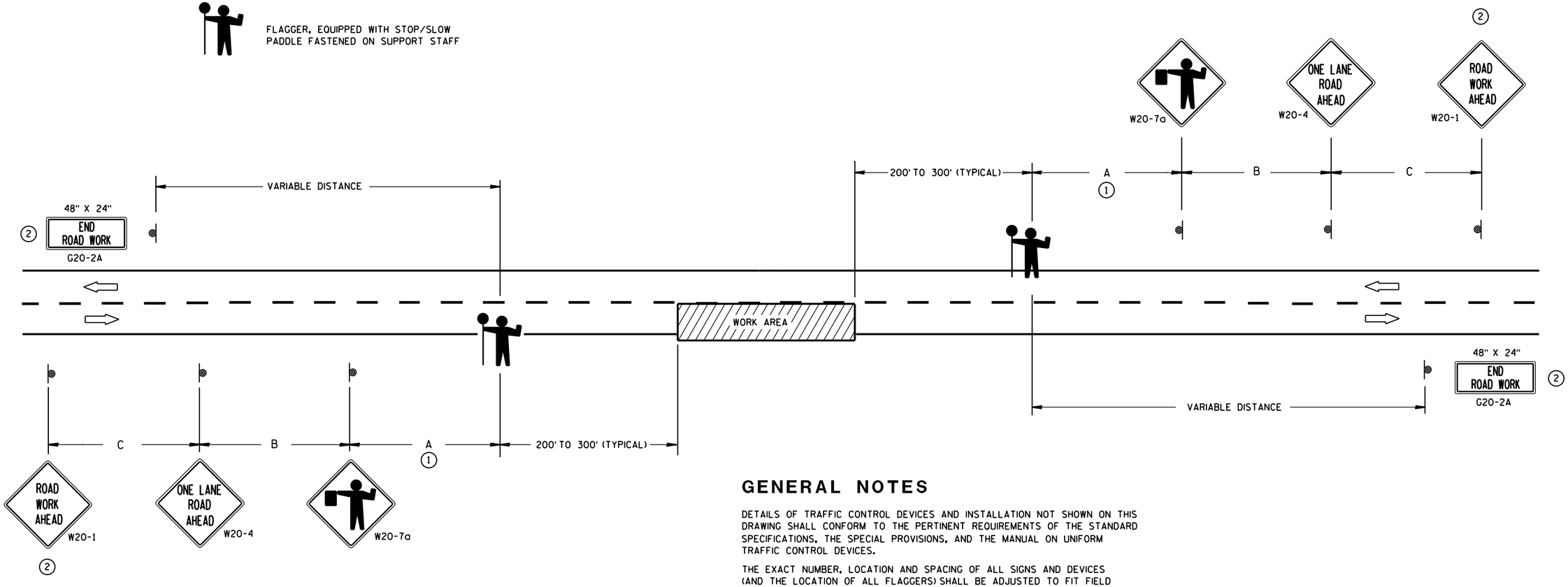
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

BE PREPARED TO STOP
W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

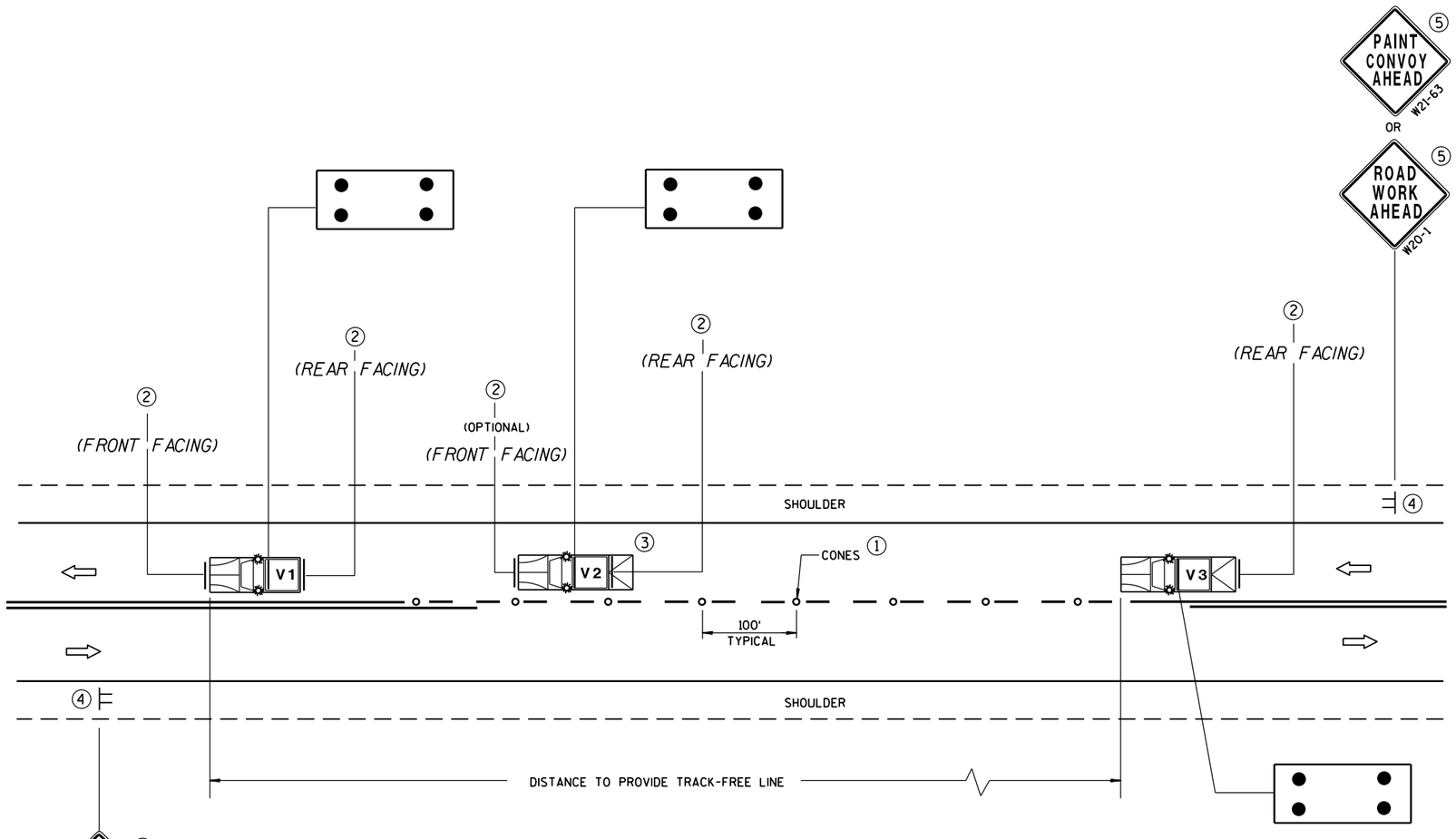
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 12-4

6

S.D.D. 15 C 12-4



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

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.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. 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.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(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.

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 (CAUTION)

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
5/3/2013 DATE	/S/ Travis Feltes STATE TRAFFIC E
FHWA	

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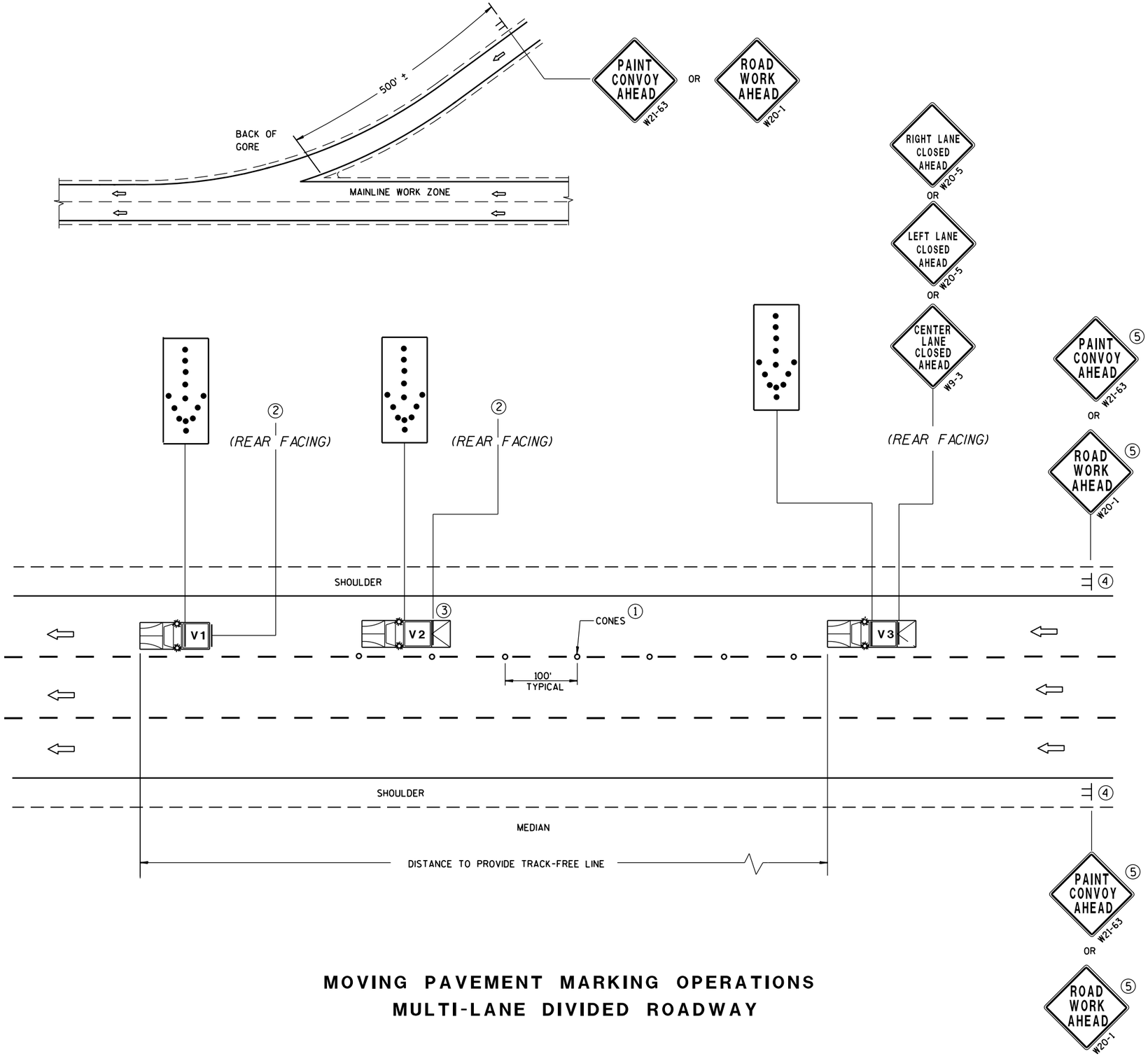
S.D.D. 15 C 19-2a



MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE DIVIDED ROADWAY

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. USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

THIS DRAWING SHALL BE USED FOR EDGELINE OR LANELINE MARKING FOR MULTILANE DIVIDED 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 AFTER EVERY ON RAMP OR EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

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 DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/3/2013 DATE

/S/ Travis Feltes STATE TRAFFIC EN

FHWA

6

S.D.D. 15 C 19-2c

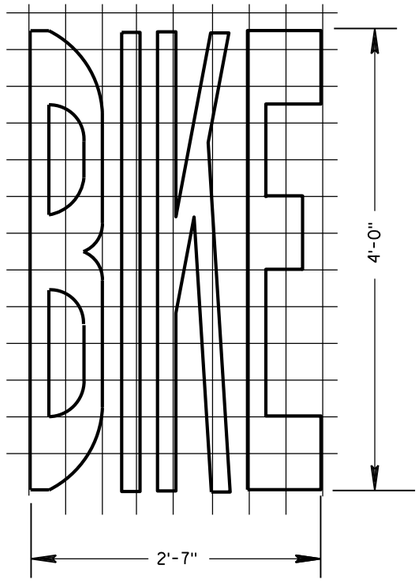
6

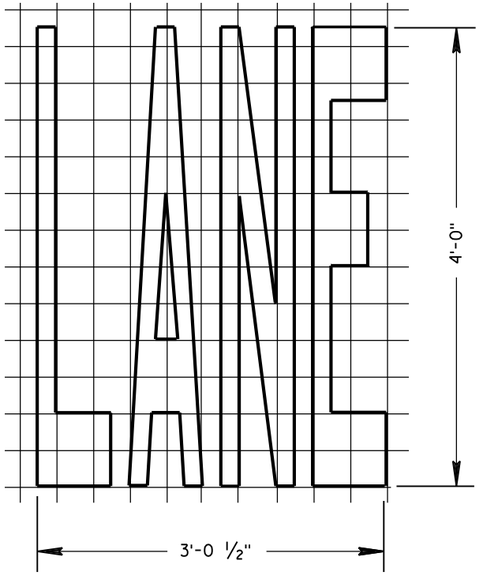
S.D.D. 15 C 19-2c

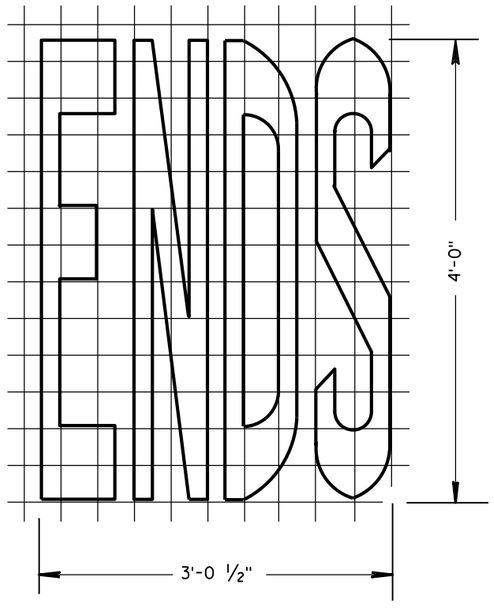
GENERAL NOTES

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.

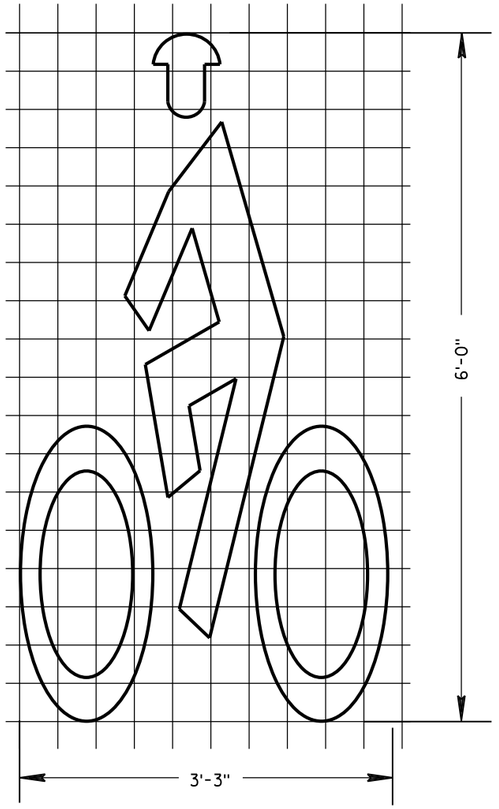
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



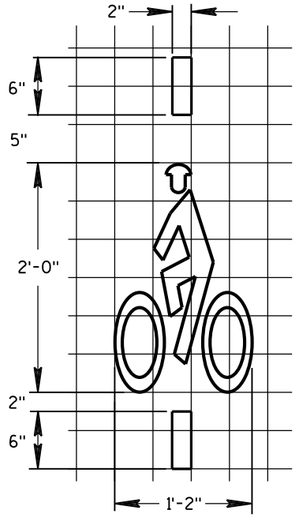




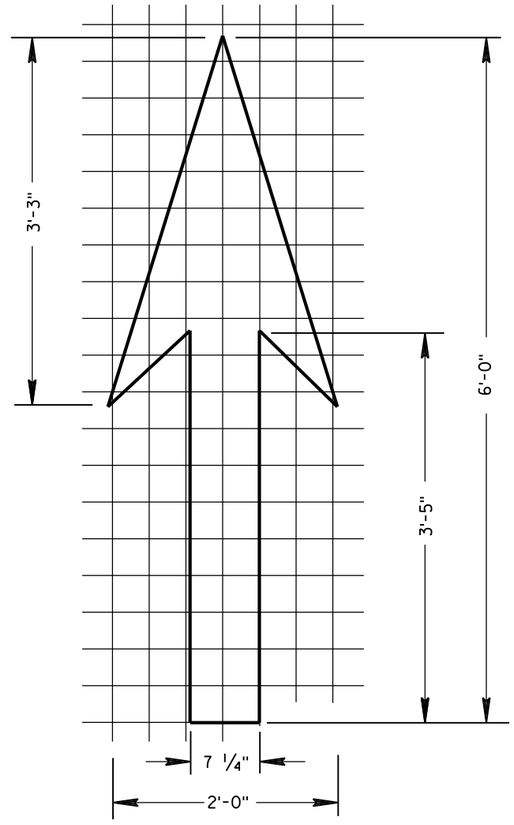
BIKE LANE WORDS



BIKE LANE SYMBOL



BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE ARROW

PAVEMENT MARKING FOR BIKE LANES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-30-2013 DATE	/S/ Travis Feltes STATE TRAFFIC EN
FHWA	

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S.D.D. 15 C 29-3e

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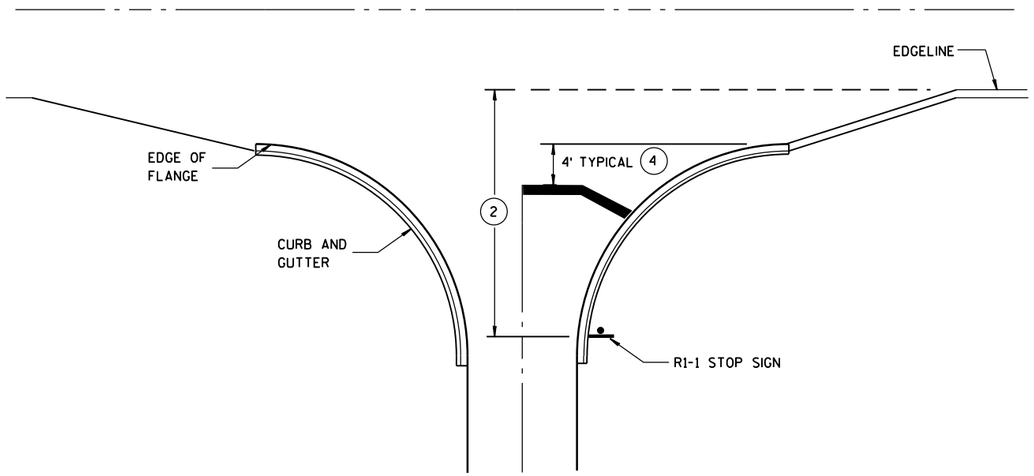
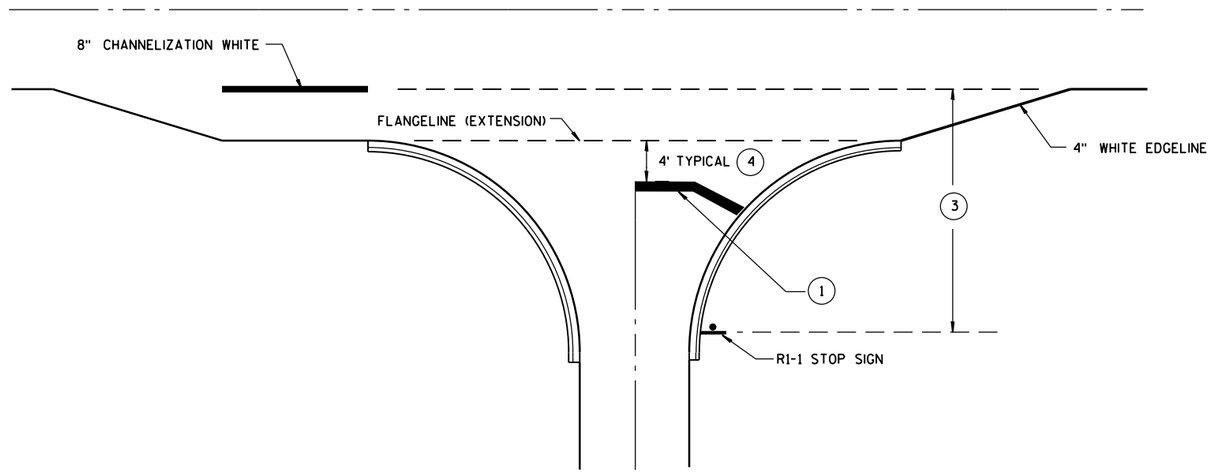
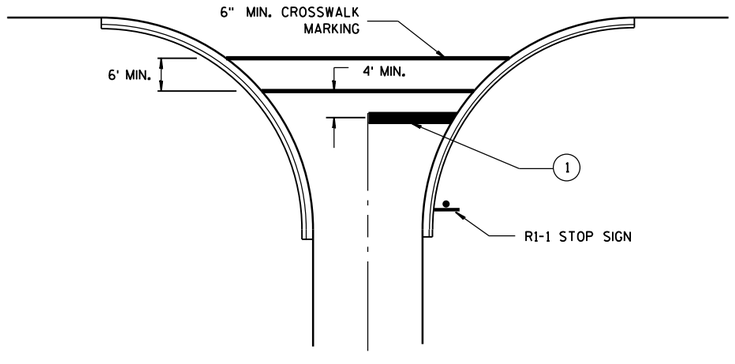
S.D.D. 15 C 29-3e



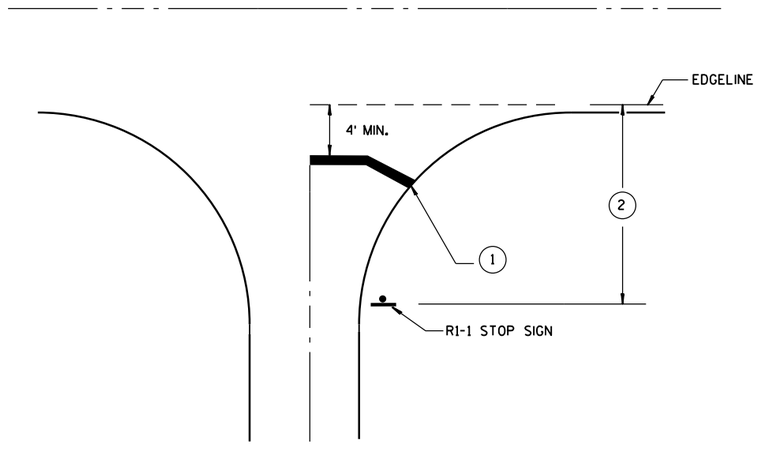
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 33-1

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

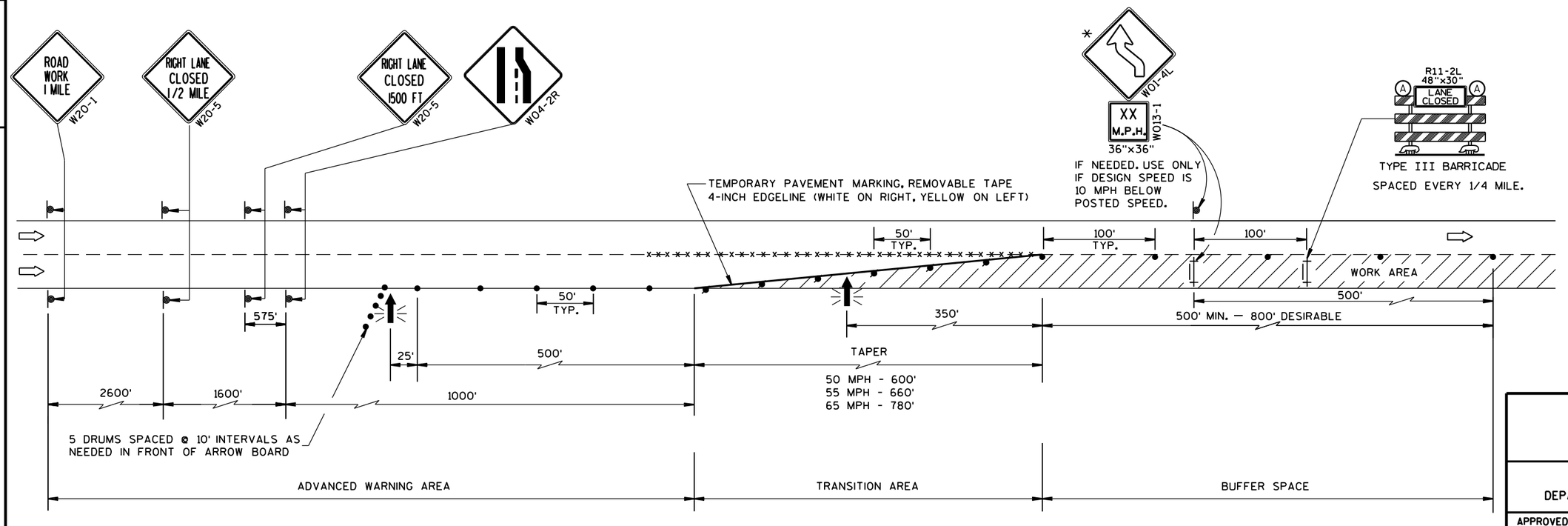
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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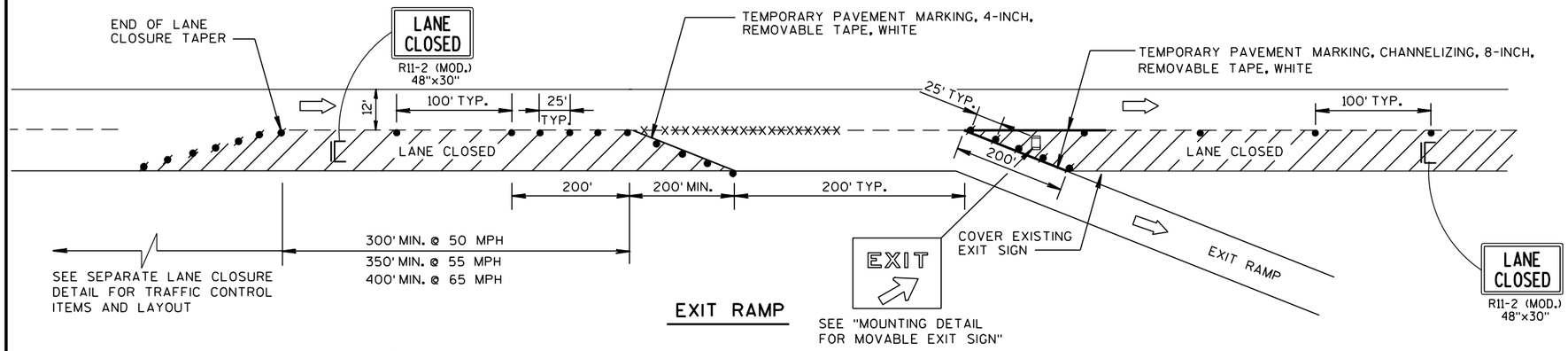
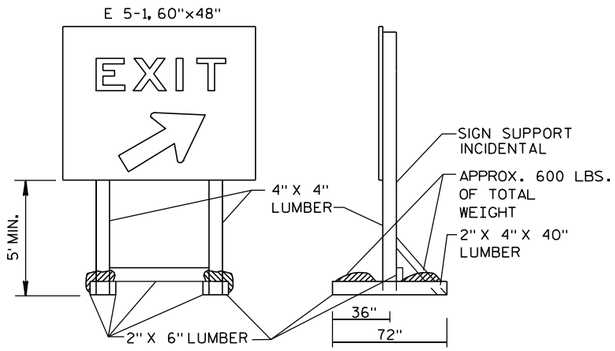
S.D.D. 15 D 12-5a

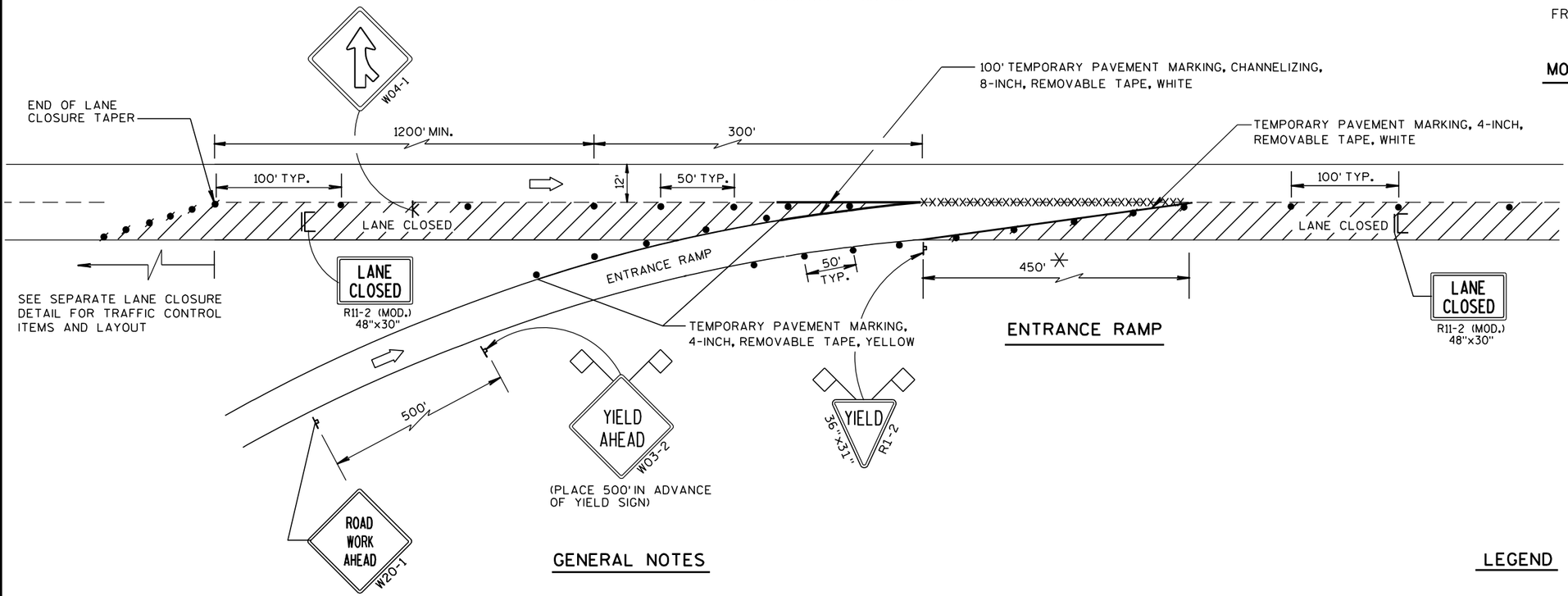


EXIT RAMP



NOTE: ALL LUMBER DIMENSIONS ARE NOMINAL

MOUNTING DETAIL FOR MOVABLE EXIT SIGN



ENTRANCE RAMP

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2 (MOD.) "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

✳ LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

LEGEND

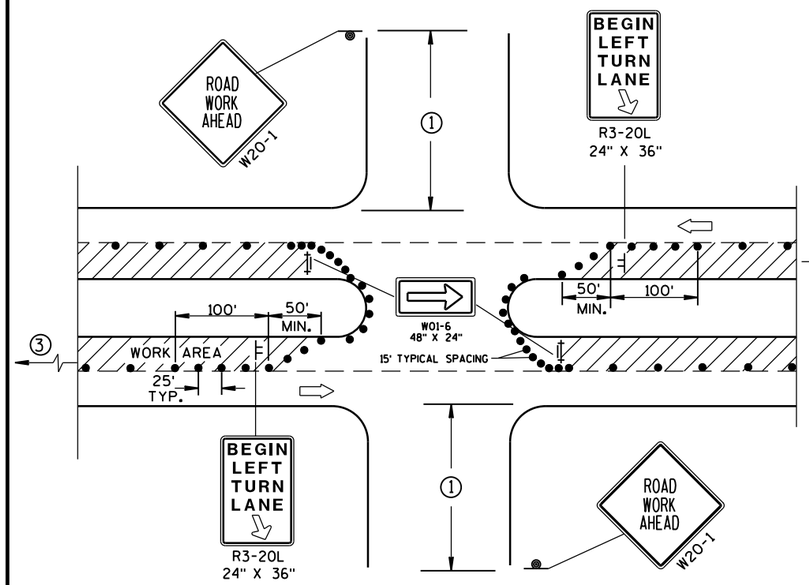
- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT
- TRAFFIC CONTROL, DRUM
- TRAFFIC CONTROL, DRUM WITH WARNING LIGHT, TYPE C (STEADY-BURN)
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE (8' EQUIVALENT) WITH SIGN
- FLAGS, 16"x16" MIN., ORANGE
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/24/2000
DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARKINGS ENGINEER
FHWA

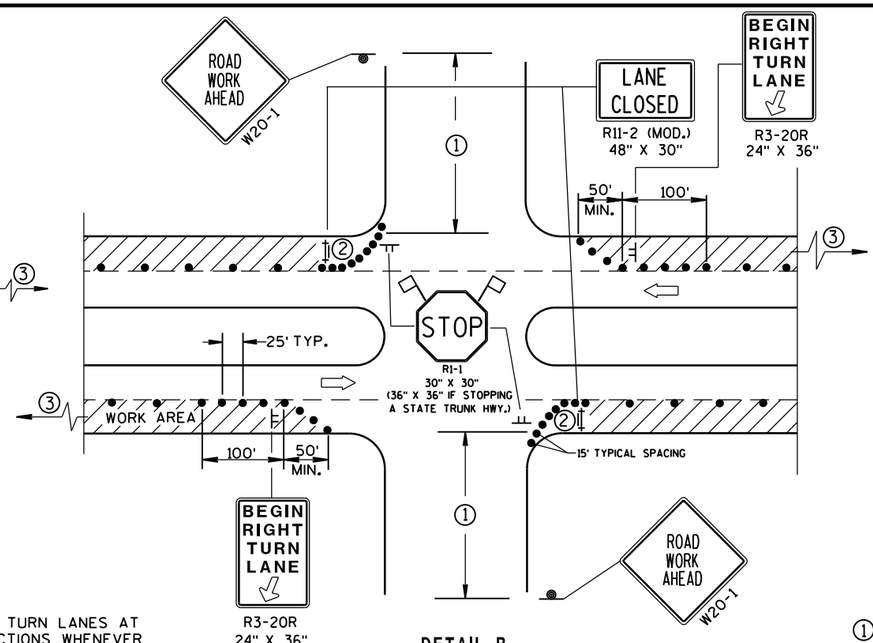
6
S.D.D. 15 D 15-1



DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

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.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, 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.

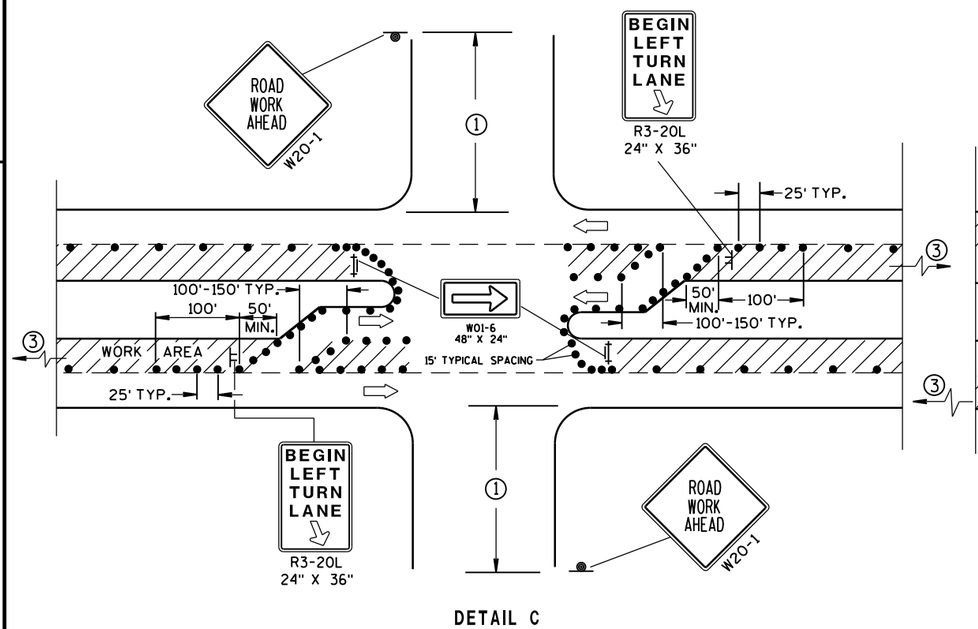
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

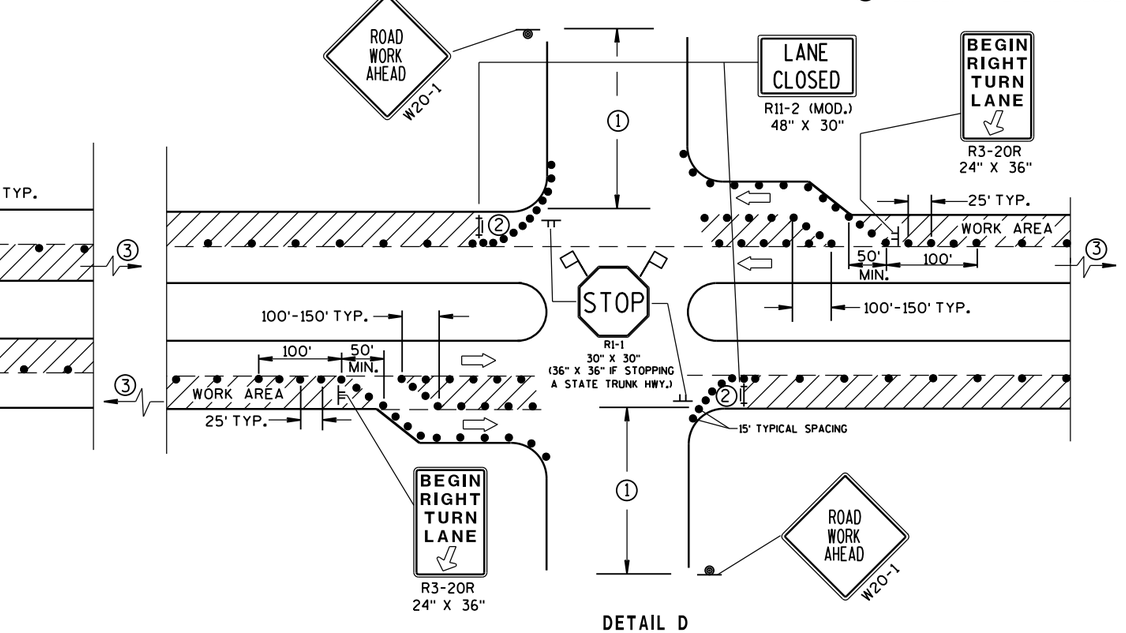
② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE 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 WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE 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 21-3

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

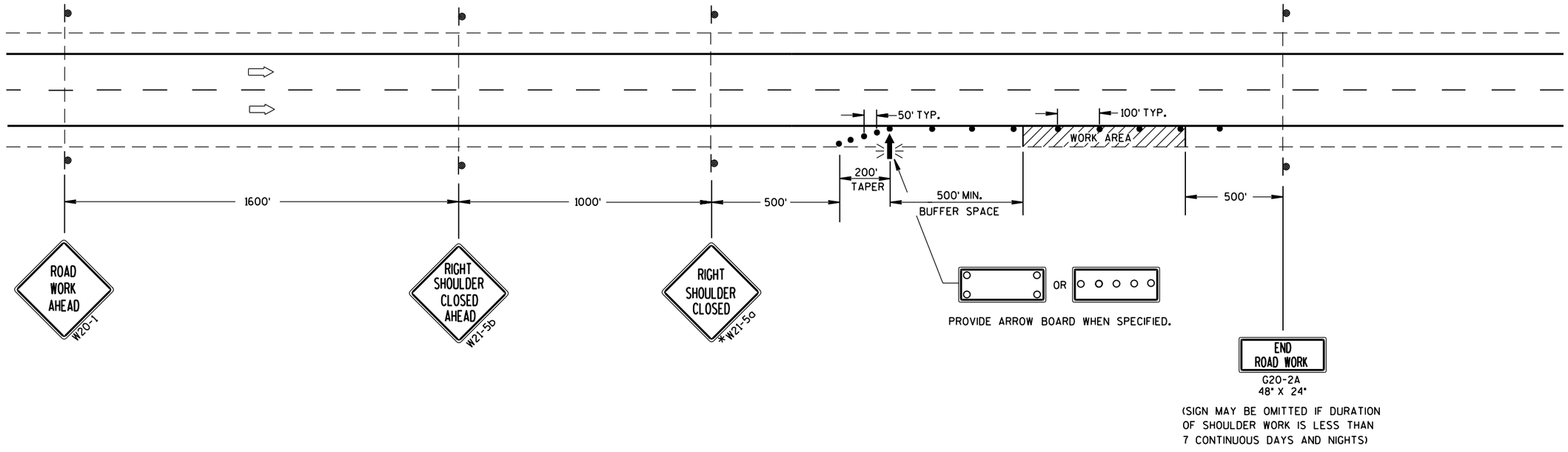
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

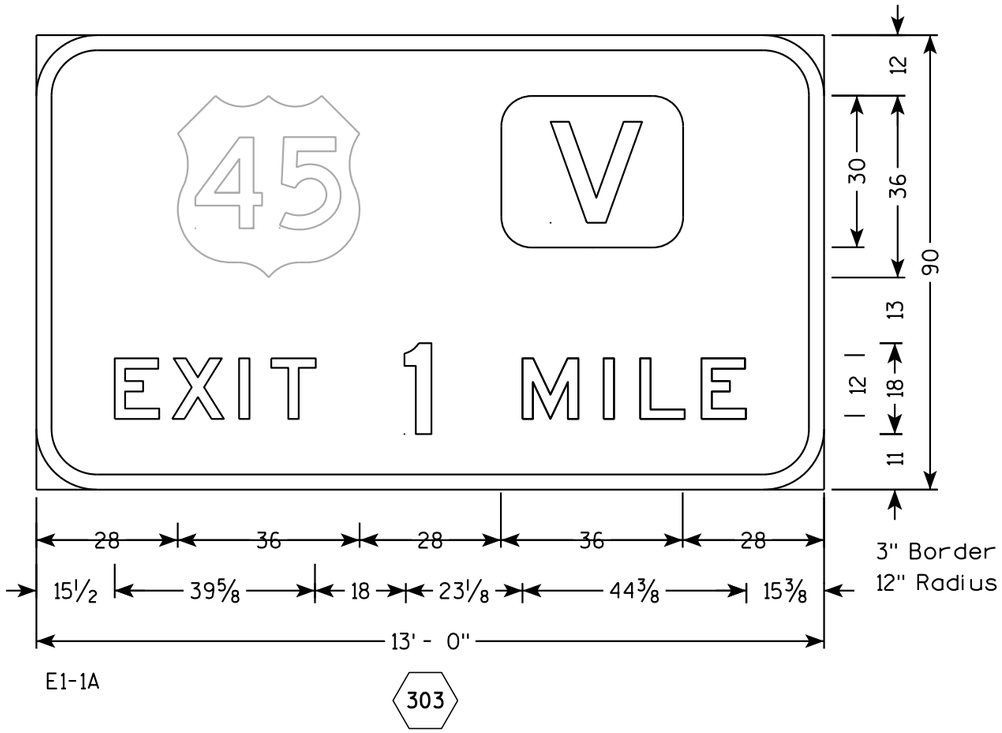
8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

FHWA

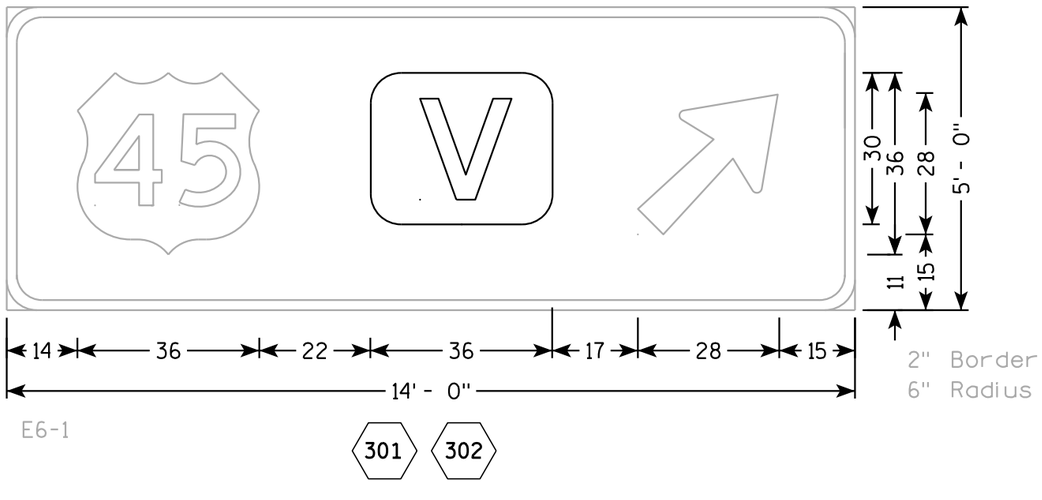
6

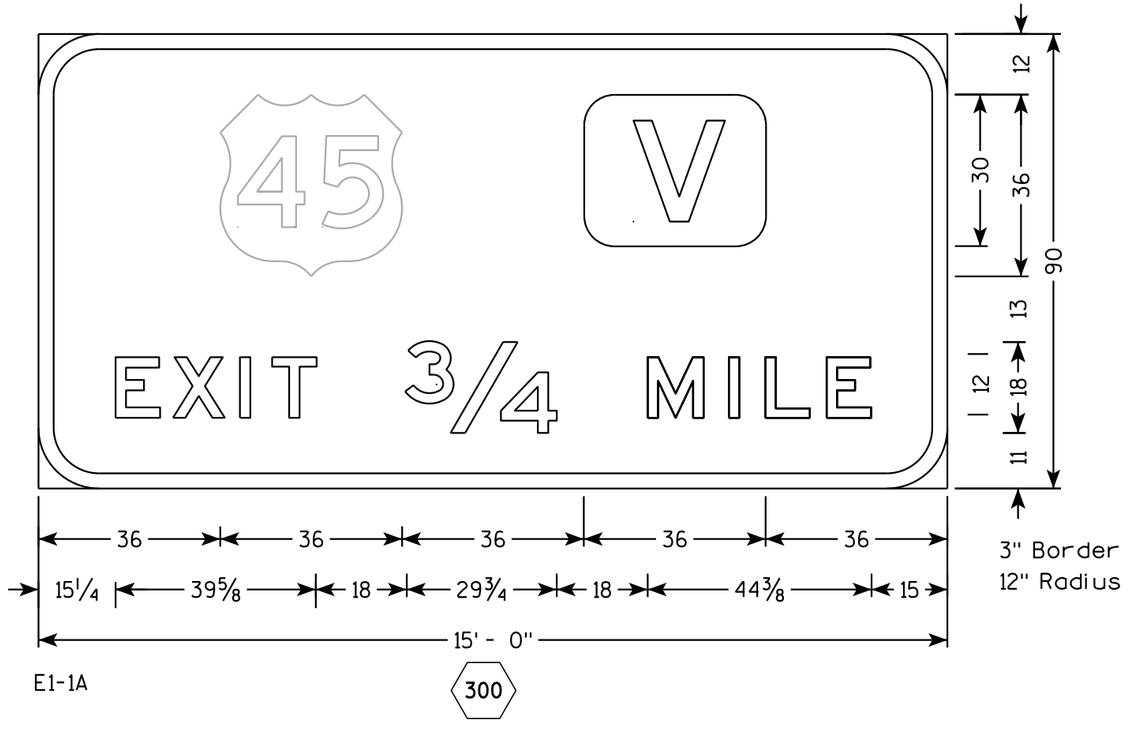
S.D.D. 15 D 27-2



NOTES

1. All Signs are Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all cap Words are Series E





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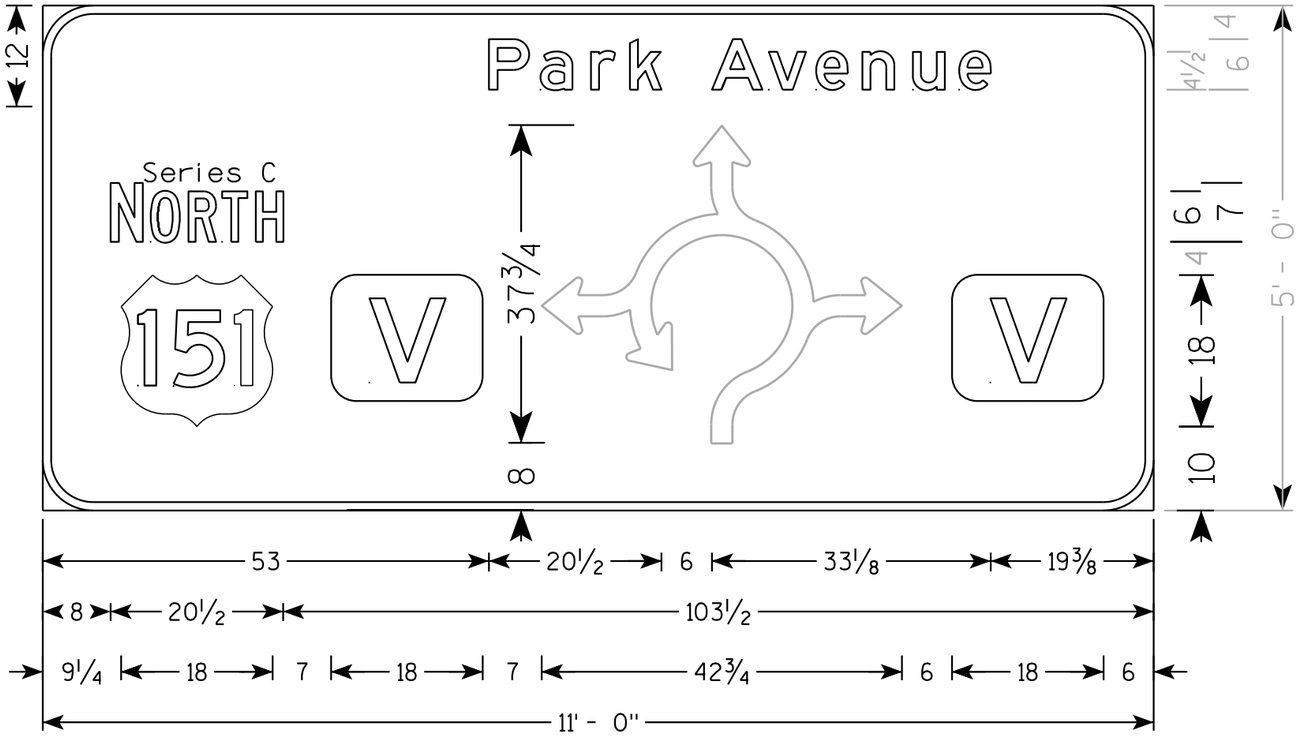
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET NO: 470	E

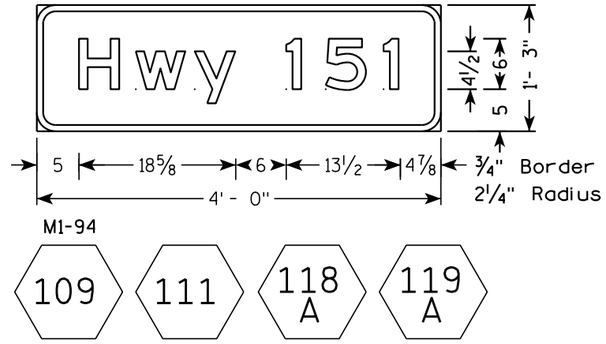
NOTES

1. All Sign Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E except as Shown



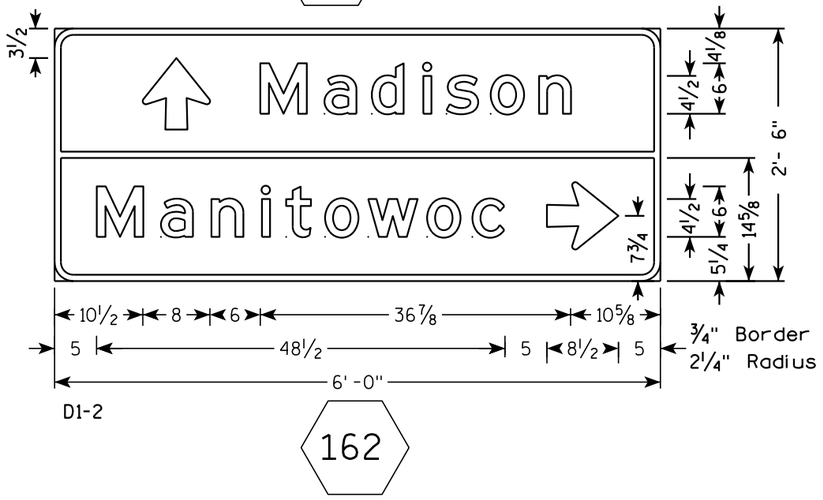
D1-62

47



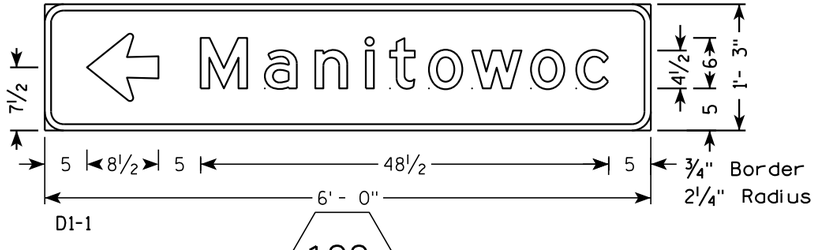
M1-94

109 111 118 A 119 A



D1-2

162



D1-1

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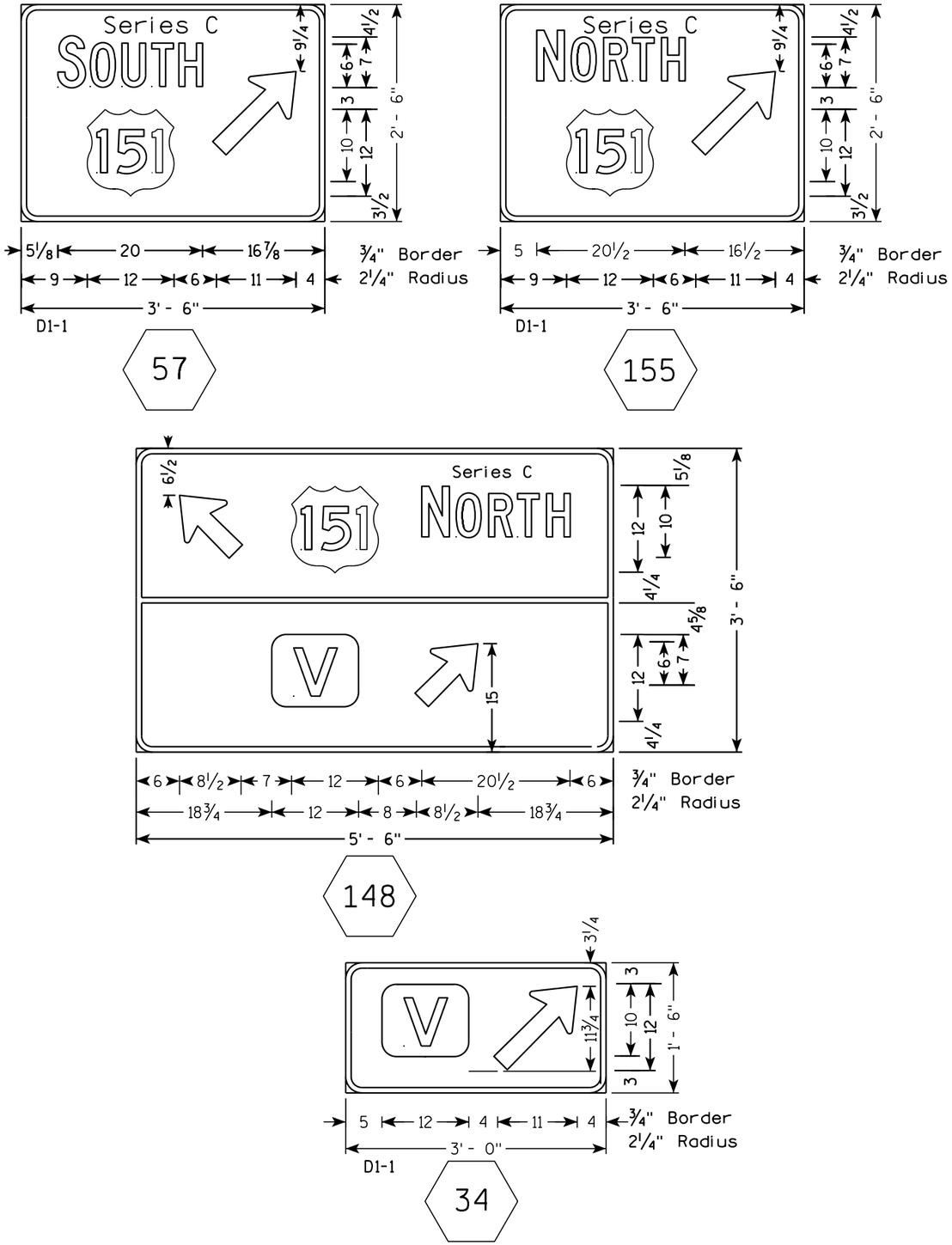
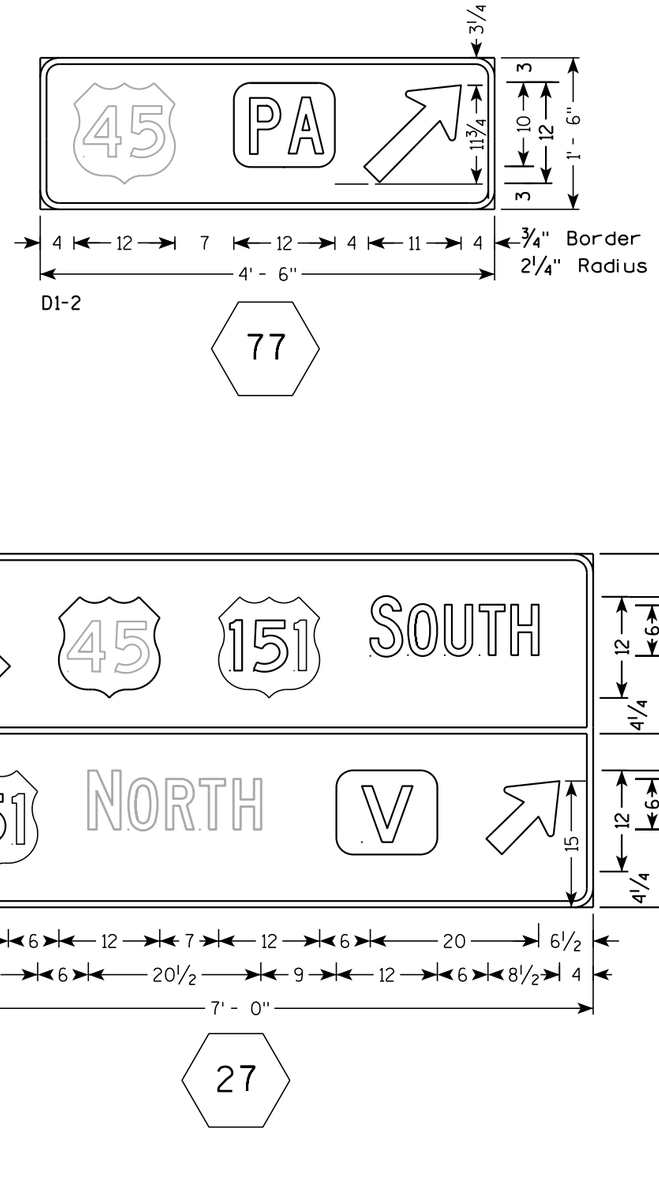
7

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET NO: 471	E



NOTES

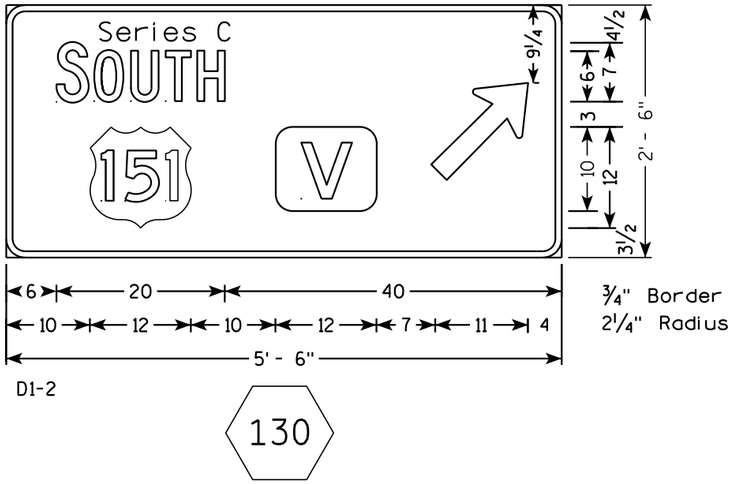
1. All Sign Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E except as Shown

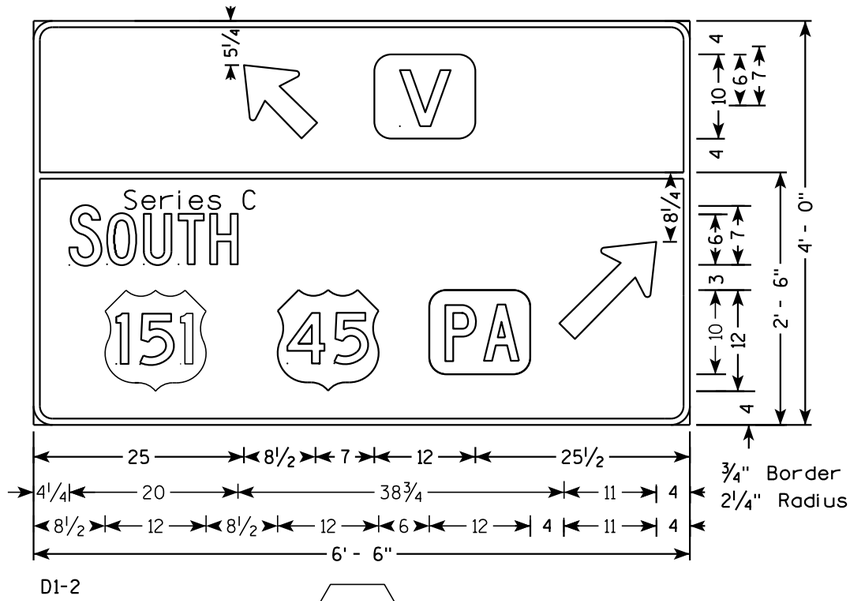


PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET NO: 472	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1420-22-71 USH 151_CTH V Fond du Lac Co\070103_sd.dgn PLOT DATE : 22-SEP-2014 12:53 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 18:1

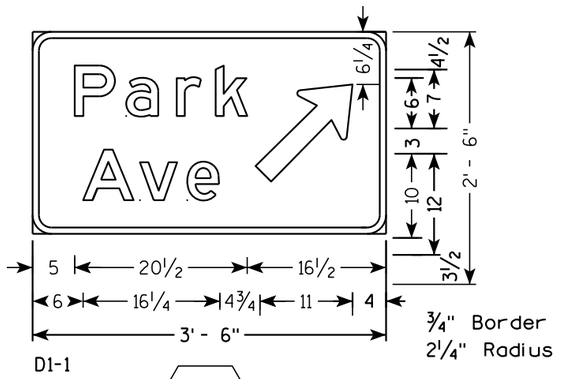
WISDOT/CADDS SHEET 42

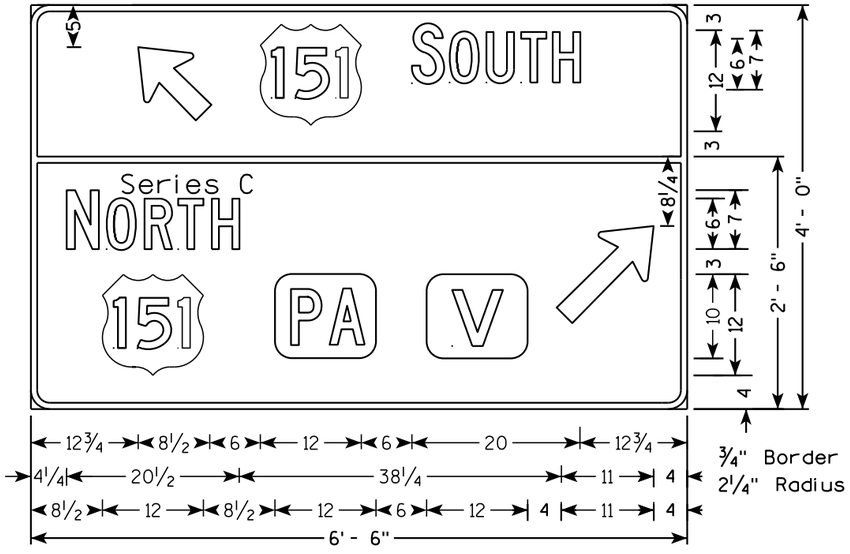


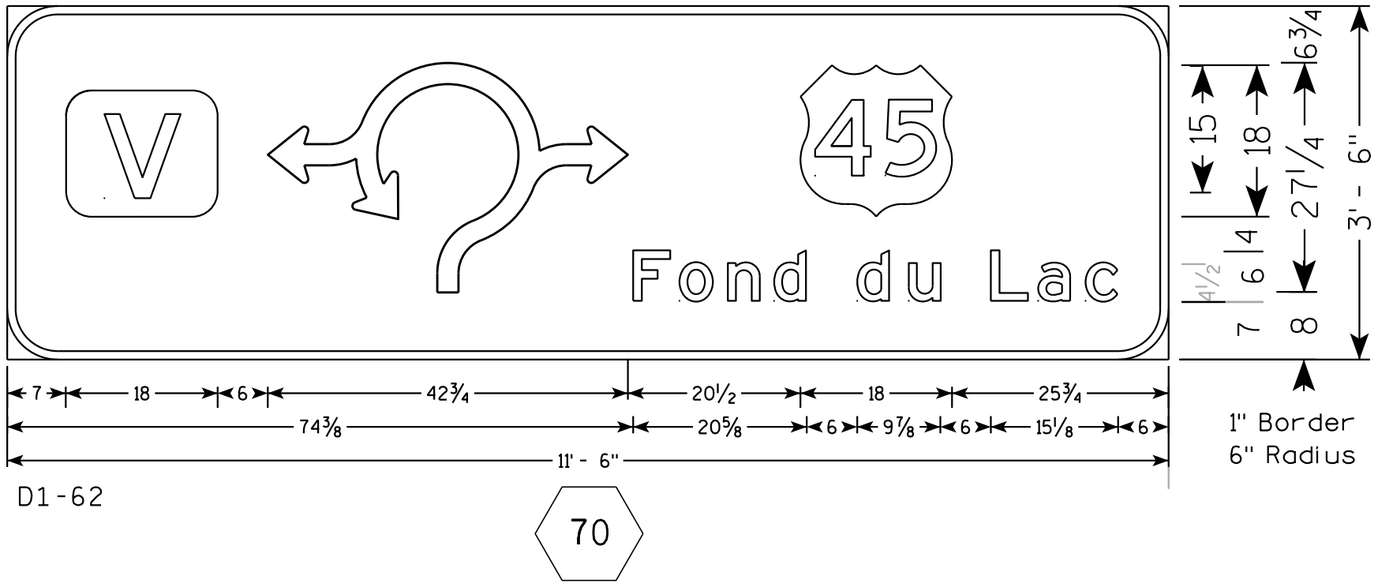


NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E except as Shown







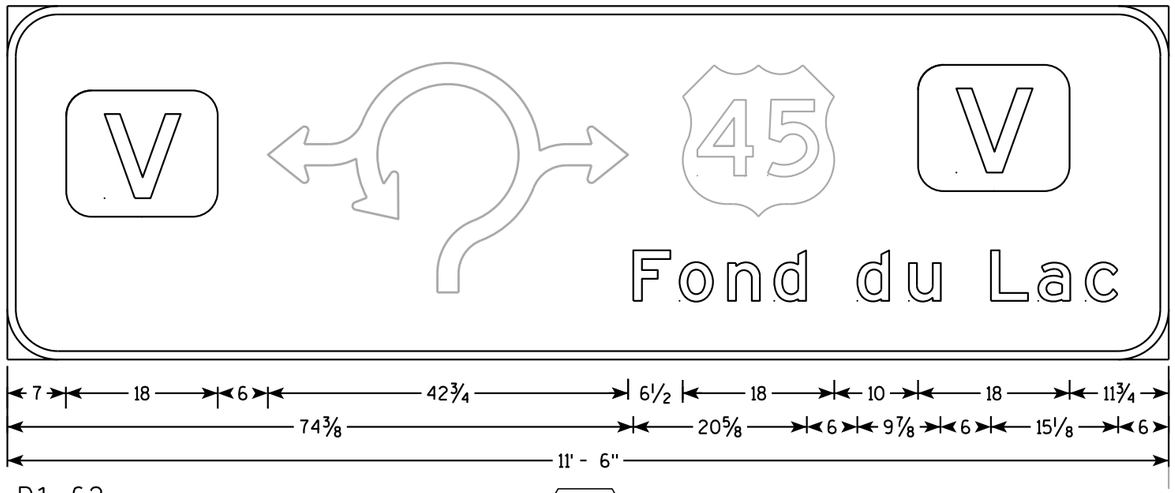
7

7

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET NO: 473	E

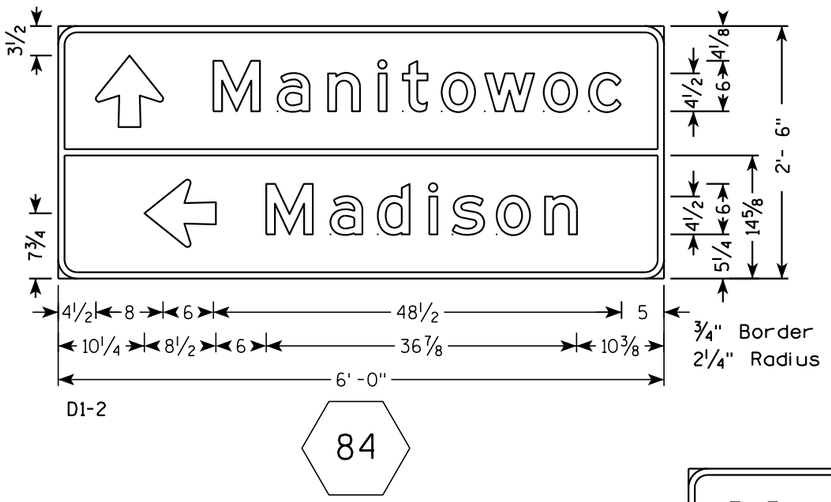
NOTES

1. All Sign Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E except as Shown



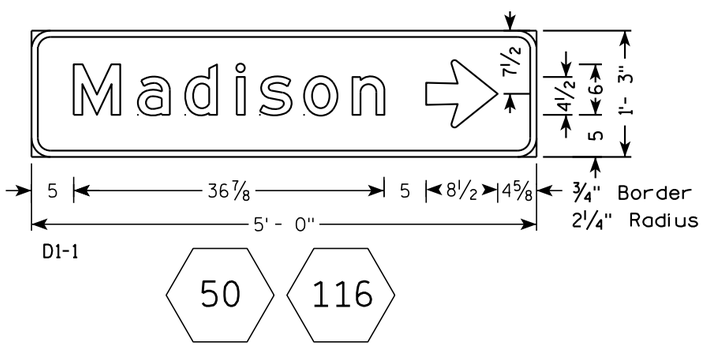
D1-62

141



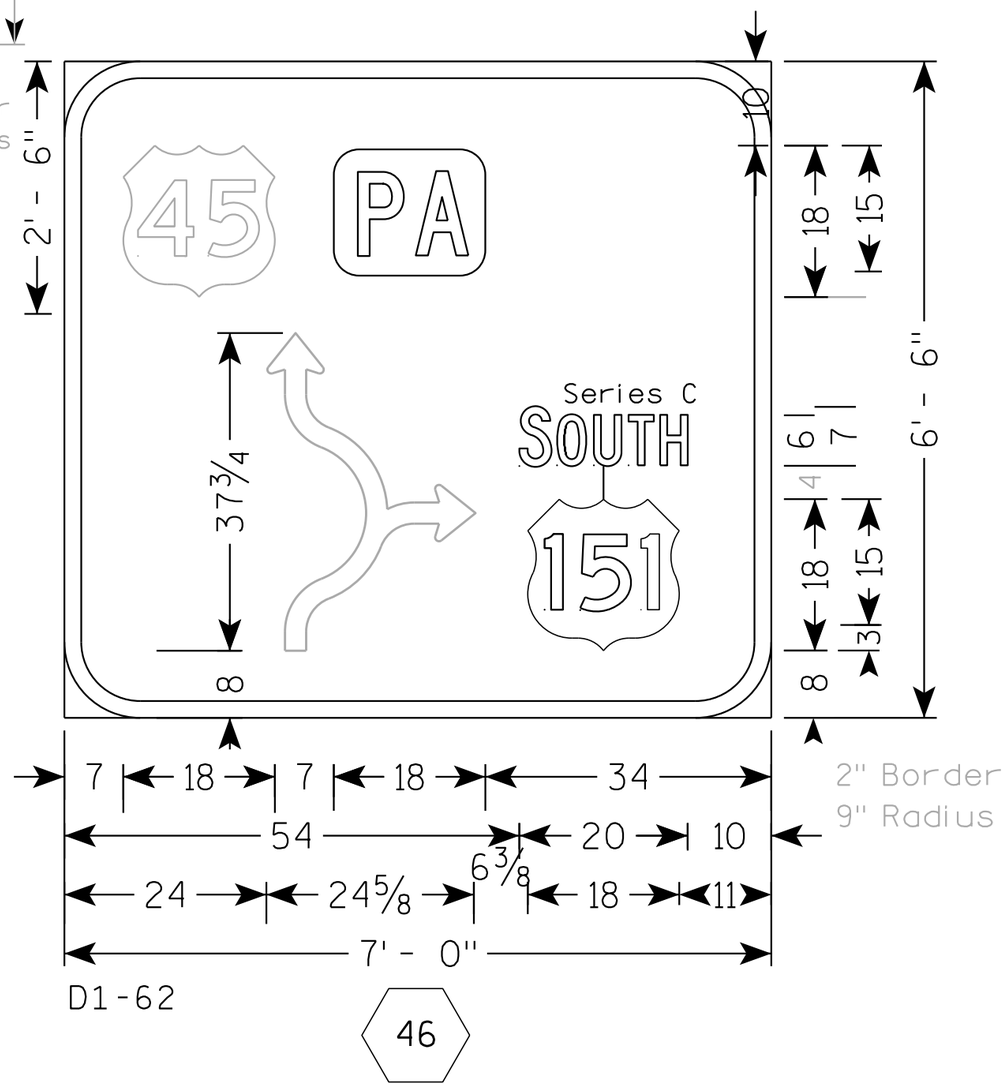
D1-2

84



D1-1

50 116



D1-62

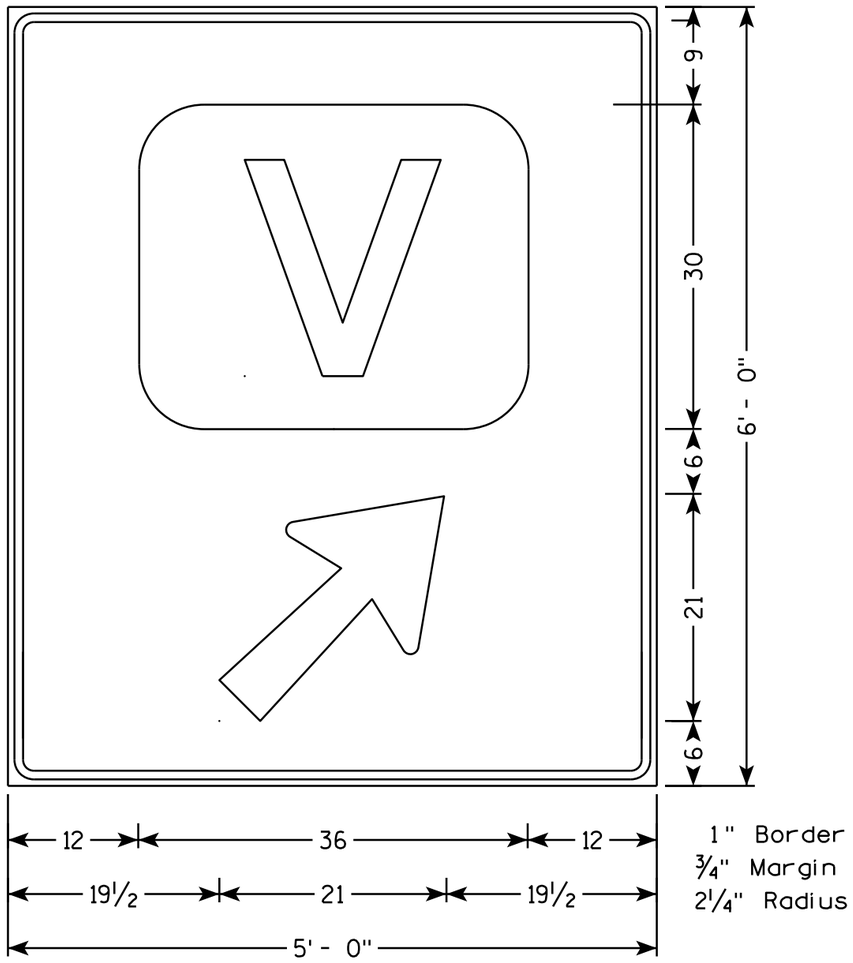
46

7

7

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET NO: 474	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1420-22-71 USH 151_CTH V Fond du Lac Co\070105_sd.dgn
PLOT DATE : 22-SEP-2014 12:53 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 18:1
WISDOT/CADDS SHEET 42



NOTES

1. Sign Is Type II - Type F Reflective
2. Color:
   Background - ORANGE
   Message - BLACK

7

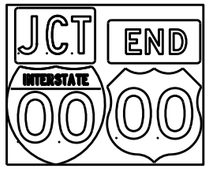
7

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	TEMPORARY SIGNING	SHEET NO:	E

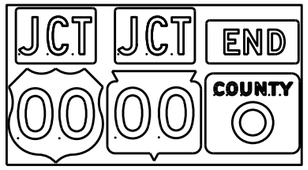
FILE NAME : C:\CAEFiles\Projects\tr_d3\3202A914.DGN PLOT DATE : 09-APR-2015 14:27 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 14.010062:1.000000
WISDOT/CADDS SHEET 42

TYPICAL ASSEMBLIES

J1-1

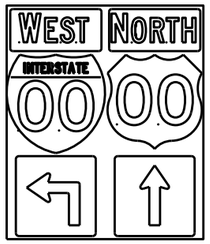


J1-2

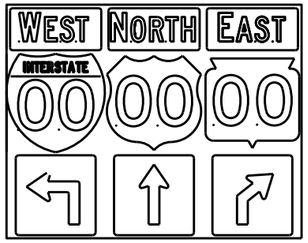


J1-3

J2-1



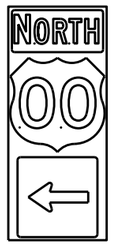
J2-2



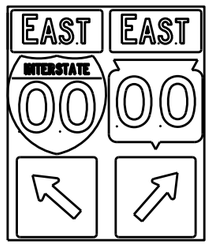
J2-3

JV

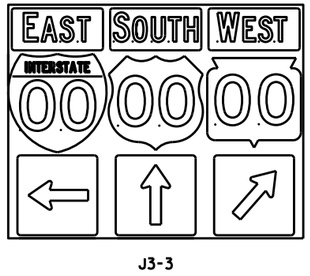
(Typical Vertical J-Assembly
See Note 10 and 11)



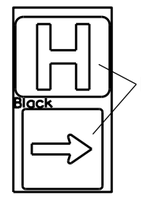
J3-1



J3-2



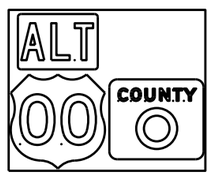
J3-3



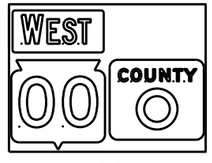
Blue Background

JH-1

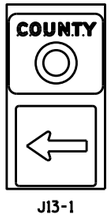
J4-1



J4-2



J4-2



J13-1

J12-1

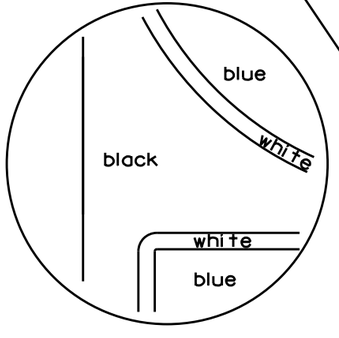
J32-1

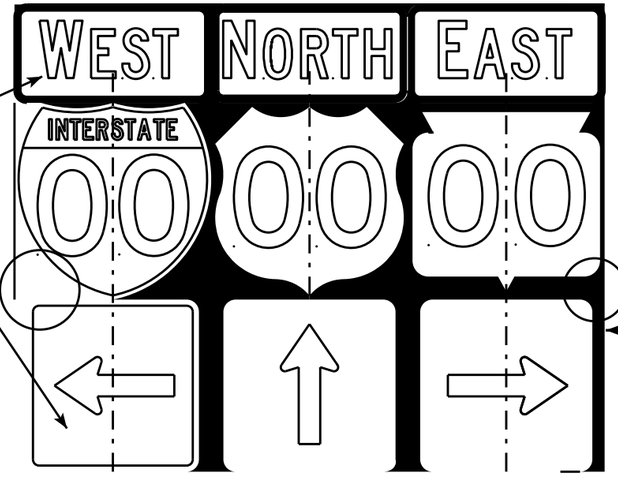
J33-1

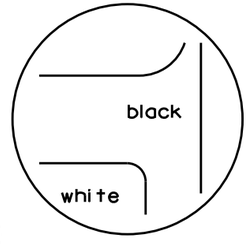
J23-1

J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

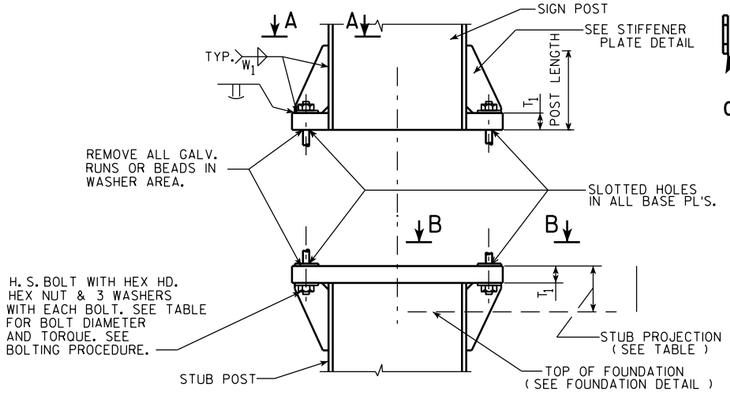
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

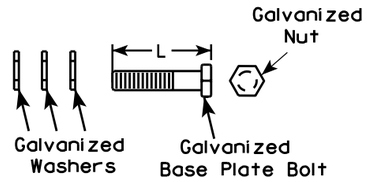
PROJECT NO: SHEET NO: E

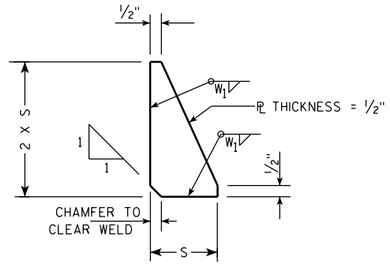
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

WISDOT/CADDS SHEET 42



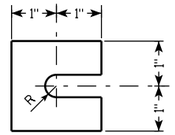
SIGN POST AND STUB POST ELEVATION





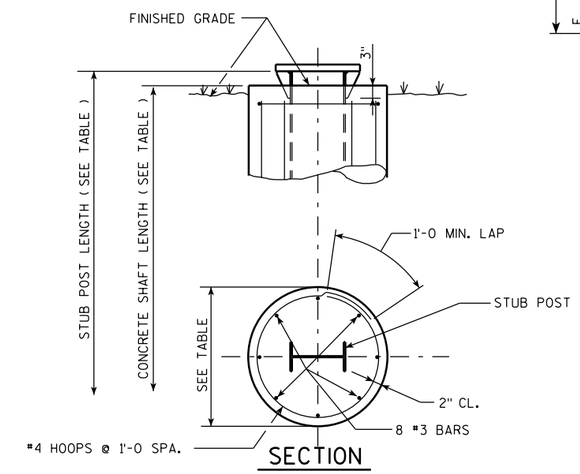
STIFFENER PLATE DETAIL

(SEE TABLE FOR DIMENSIONS)

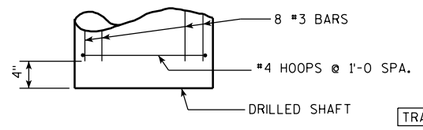


FURNISH 2 @ .012" ± THICK AND 2 @ .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M.- B36.

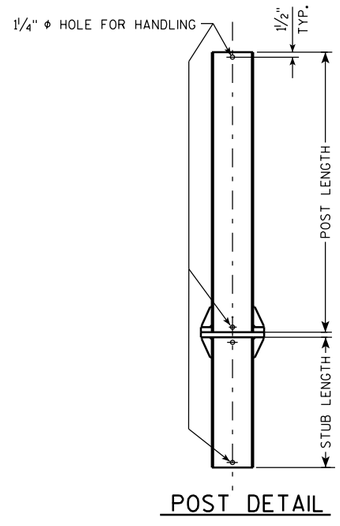
SHIM DETAIL



SECTION



FOUNDATION DETAIL



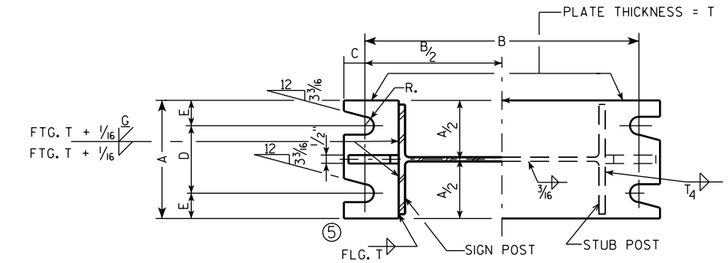
POST DETAIL

QUANTITIES FOR 1 FOOTING		
	CONC. MASONRY C.Y.	REINF. STEEL LBS.
A	0.6	34
B	0.8	49
C	0.9	50
D	0.9	56
E	1.0	62

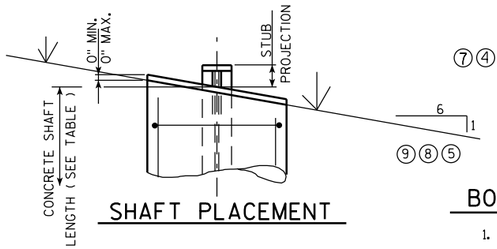
⑦

REINF.	TYPE	#3	#4
	A	8 @ 4'-5	5 @ 6'-3
	B	8 @ 6'-5	7 @ 6'-3
	C	8 @ 6'-11	7 @ 6'-3
	D	8 @ 7'-5	8 @ 6'-3
	E	8 @ 7'-11	9 @ 6'-3

⑦



SECTION A-A SECTION B-B



SHAFT PLACEMENT

DESIGN DATA

WIND PRESSURE = 75 M.P.H.
WIND COMPONENTS - NORMAL = 1.0 TRANSVERSE = 0.0
ICE LOAD = 3 P.S.F.

GROUP LOADS	PERCENT OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD & WIND	140
3. DEAD, ICE & ½ WIND[4]	140 [4]25 P.S.F. MIN.

ALLOWABLE SOIL PRESSURE = 1½T / SQ. FT.
WIND LOAD WAS APPLIED TO THE AREA OF THE SIGN AND TO THE SUPPORTING MEMBERS.
ICE LOAD WAS APPLIED TO ONE FACE OF THE SIGN AND AROUND THE SURFACE OF THE SUPPORTING MEMBERS.

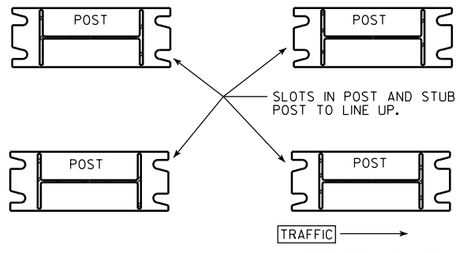
GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DESIGN CONFORMS WITH A.A.S.H.T.O. SPECIFICATIONS 1985.
ALL POSTS, POST STUBS & ATTACHMENTS SHALL BE A.S.T.M. A709 GRADE 50.
⑨ THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.
H.S. BOLTS, WASHERS & NUTS SHALL BE A325 GALVANIZED WHEN POSTS, POST STUBS AND ATTACHMENTS ARE A709 GRADE 50 AND GALVANIZED.

BOLTING PROCEDURE - BASE CONNECTION

1. ASSEMBLE SIGN POST TO STUB POST WITH BOLTS AND ONE OF THE FLAT WASHERS ON EACH BOLT BETW. PLATES.
2. SHIM AS REQ'D. TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. (SEE TABLE)
5. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NOTE:
TIGHTEN THE HIGH STRENGTH BOLTS TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.



POST SLOT ORIENTATION ⑦

L	X	TYPE	DIMENSION / POST SIZE	BASE CONNECTION DATA TABLE: BOLT SIZE & TORQUE	A	B	C	D	E	T_1	T_4	W_1	R	S	FOUNDATION DATA: STUB LENGTH	STUB PROJECTION	SHAFT DIAMETER	SHAFT LENGTH	② K
3 ¾	④	A	W10"X12.0 #/FT.	¾" Φ @ 75#-FT.	5¼"	1'-0⅜	⅞"	3½"	⅞"	1"	3/16"	5/16"	13/32"	2⅛"	3'-6	3"	2'-0 Φ	5'-0	76.0# ④
4 ¾	④	B	W12"X16.0 #/FT.	⅞" Φ @ 85#-FT.	5½"	1'-4¼	1"	3½"	1"	1¼"	¼"	5/16"	15/32"	3"	5'-6	3"	2'-0 Φ	7'-0	146.5# ④
5		C	W12"X19.0 #/FT.	⅞" Φ @ 85#-FT.	5½"	1'-4¼	1"	3½"	1"	1½"	5/16"	5/16"	15/32"	3"	6'-0	3"	2'-0 Φ	7'-6	182.1#
5		D	W12"X22.0 #/FT.	⅞" Φ @ 85#-FT.	5½"	1'-4¼	1"	3½"	1"	1½"	⅜"	5/16"	15/32"	3"	6'-6	3"	2'-0 Φ	8'-0	210.5#
5	③	E	W12"X26.0 #/FT.	1" Φ @ 90#-FT.	7"	1'-4¼	1¼"	4"	1½"	1½"	⅜"	5/16"	11/32"	3"	7'-0	3"	2'-0 Φ	8'-6	293.0# ③

① ⑥ ①

STRUCTURAL CARBON STEEL PAY WTS. (1 POST) = K+ (POST LENGTH X POST WT.)
" K " INCLUDES STUB, BASE PLATES, STIFFS., BOLTS, AND WASHERS.

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/30/14 PLATE NO. A3-1.15

⑩	1-21-14	LUBRICATION OF BASE BOLTS
⑨	4-26-11	REMOVE NON-GALVANIZED
⑧	10-30-96	NOT GALVANIZED/GALVANIZED
⑦	10-30-92	QUANT., A588 EXCEPT., ADD SLOT VIEW
⑥	8-24-87	BASE CONN. WELD
⑤	10-13-81	BASE CONN. WELD & FUSE PL WASHERS
④	10-19-79	POST A & B, A572 GR. 50, & K
②	11-28-78	"K" ③ 4-23-79 TYPE "E"
①	5-4-78	T_1 , T_2 & W_1
NO.	DATE	REVISION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

TYPE A, B, C, D, & E

CONST. SPEC. 2011	DRAWN BY JPH	PLANS CK'D.

FTG. & SIGN SUPPORT DETAILS GROUND MOUNT BREAK-AWAY SIGNS

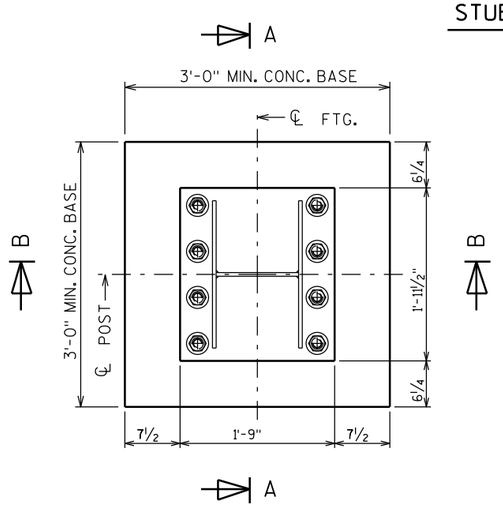
SHEET 477

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

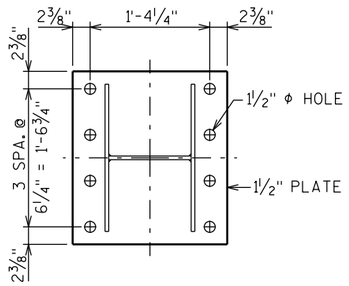
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A31.DGN PLOT DATE : 30-JUN-2014 10:43 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.351066:1.000000

WISDOT/CADDS SHEET 42

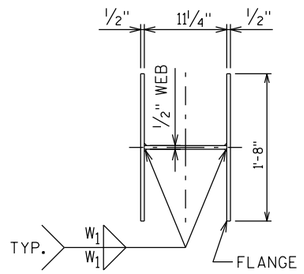
STUB AND MASONRY ANCHOR DETAILS



STUB SECTION



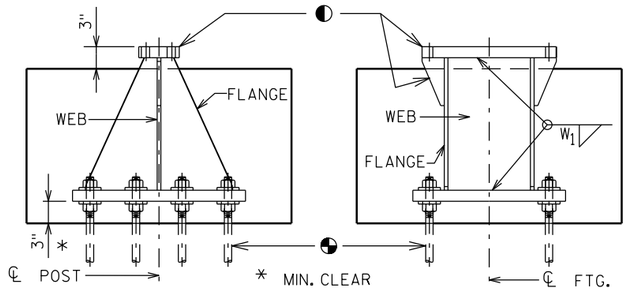
BASE PLATE



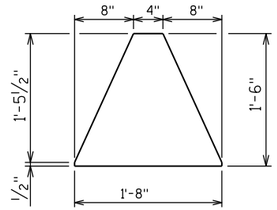
STUB

◐ SEE PLATE NO. A3-1 FOR DETAILS

◒ MASONRY ANCHORS TYPE S 1¼-INCHES (ADHESIVE). ALLOWABLE PULL OUT CAPACITY 14,995 KIPS. EMBED 1'-3" IN ROCK.



SECTION A SECTION B



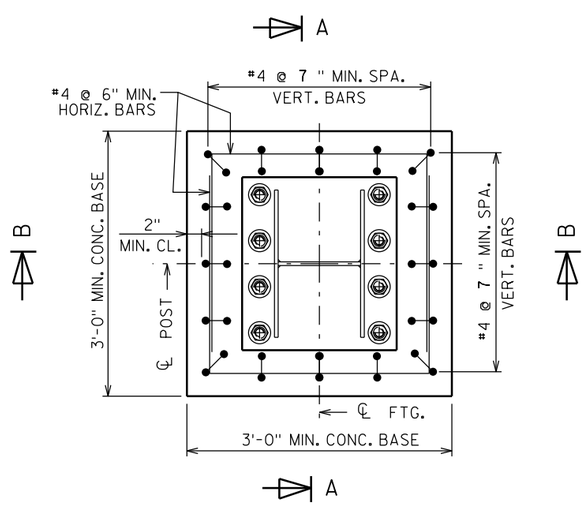
FLANGE

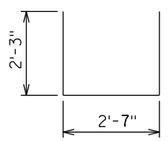
GENERAL NOTES

1. Quantities per Base:
   - REINFORCING BAR STEEL = 62 LBS
   - CONCRETE = 0.6 C.Y.
   - STEEL WEIGHT = 335 LBS
2. All materials, except anchor rod, nuts and washers, are to be A.S.T.M. A709 grade 50. All materials to be galvanized after fabrication.
3. If the contractor encounters rock before reaching the footing depth, per the A3-1 Sign Detail, determine the pull-out capacity of a test adhesive anchor installed in the rock. If the test result equals or exceeds the pull-out capacity of 14,995 KIPS, the contractor may install the breakaway stub for rock, according to this detail.

CONCRETE BASE AND REINFORCING STEEL DETAILS

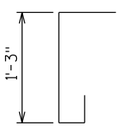
CONCRETE BASE SECTION





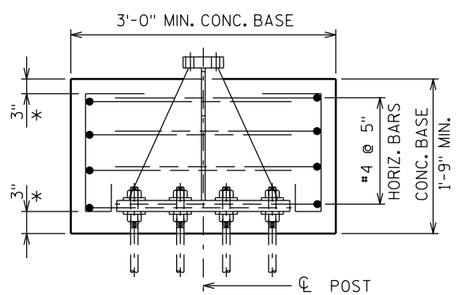
HORIZONTAL BAR

8 BARS @ 6'-11" LENGTH



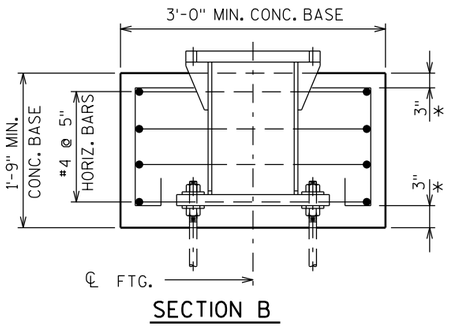
VERTICAL BARS

16 BARS @ 2'-4" LENGTH
MAY BE PLACED IN SKEW
FOR CLEARANCE NEED



SECTION A

* MIN. CLEAR



SECTION B

ALTERNATE BREAK-AWAY BASE ON ROCK
A3-1M

WISCONSIN DEPT OF TRANSPORTATION

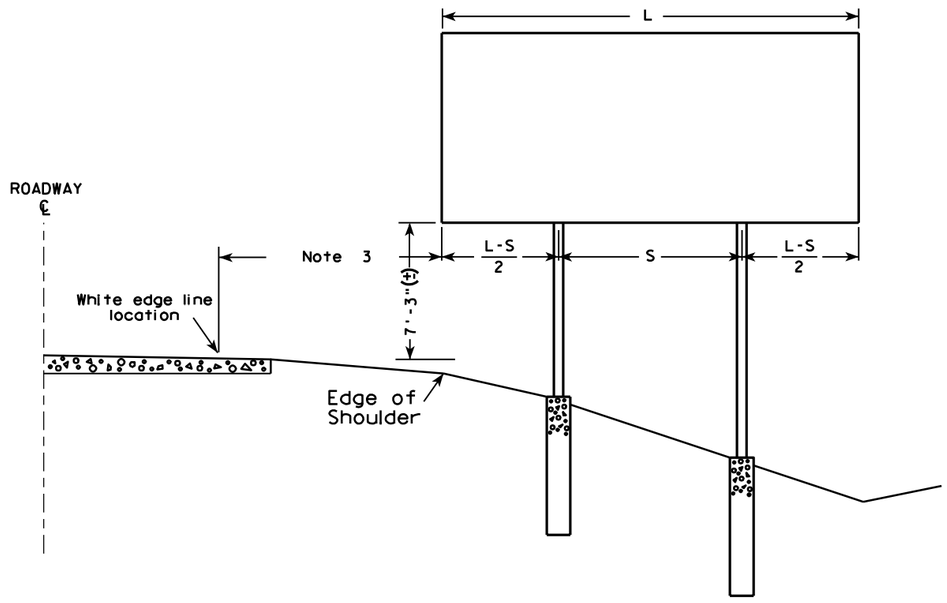
APPROVED Matthew R Rauch for State Traffic Engineer

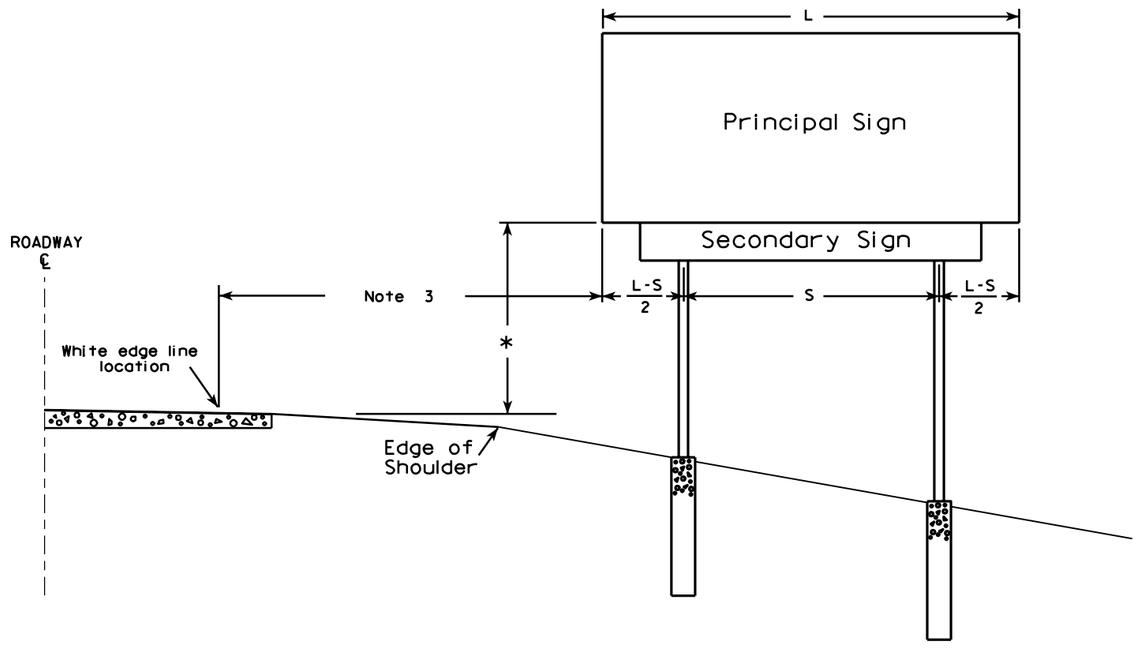
DATE 2/06/2014 PLATE A3-1M.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A31M.DGN PLOT DATE : 10-MAR-2014 15:16 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 1.556674:1.000000

WISDOT/CADDS SHEET 42





GENERAL NOTES

1. For a 2 post installation, S equals 3L/5, but shall not be less than 9 ft.
2. For a 3 post installation, S equals 5L/7, but shall not be less than 18 ft., and the space between any two posts shall not be less than 9 ft.
3. Unless noted in the plan, the sign offset distance shall be a minimum of 17'-6", desirable 30'-0".
4. The (±) tolerance shown on this sheet is 3 in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Post lengths shown in the miscellaneous quantities are estimated lengths. The contractor shall verify post lengths at the time of final grading.
7. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.

* Clearance is 8'-3"(±) when the secondary sign is 3 ft. or less in height. For secondary signs larger than 3 ft., the clearance to the bottom of the secondary sign shall be 5'-3"(±).

7

7

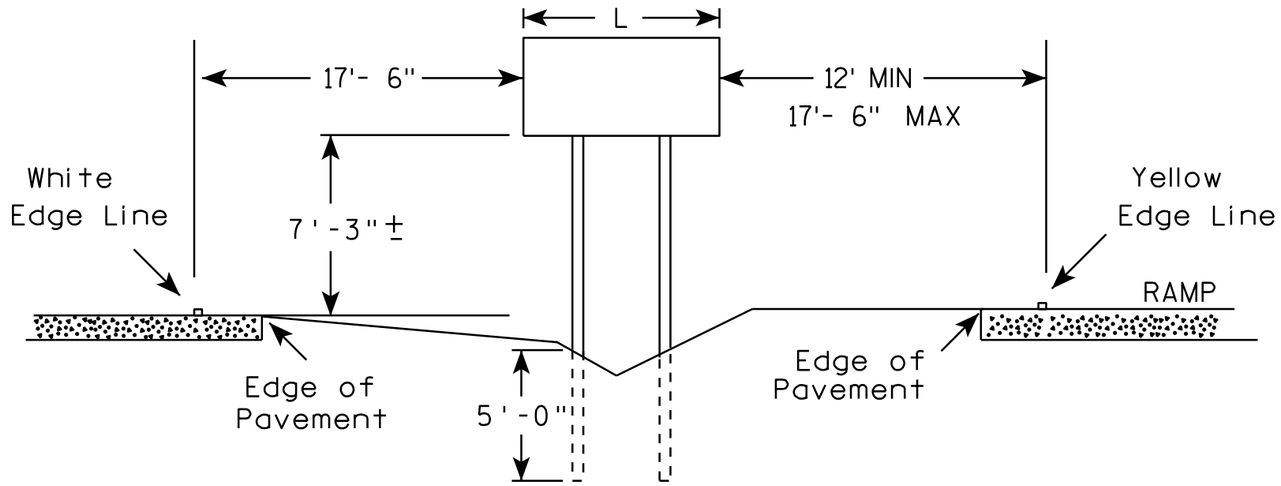
TYPICAL INSTALLATION OF TYPE I SIGNS

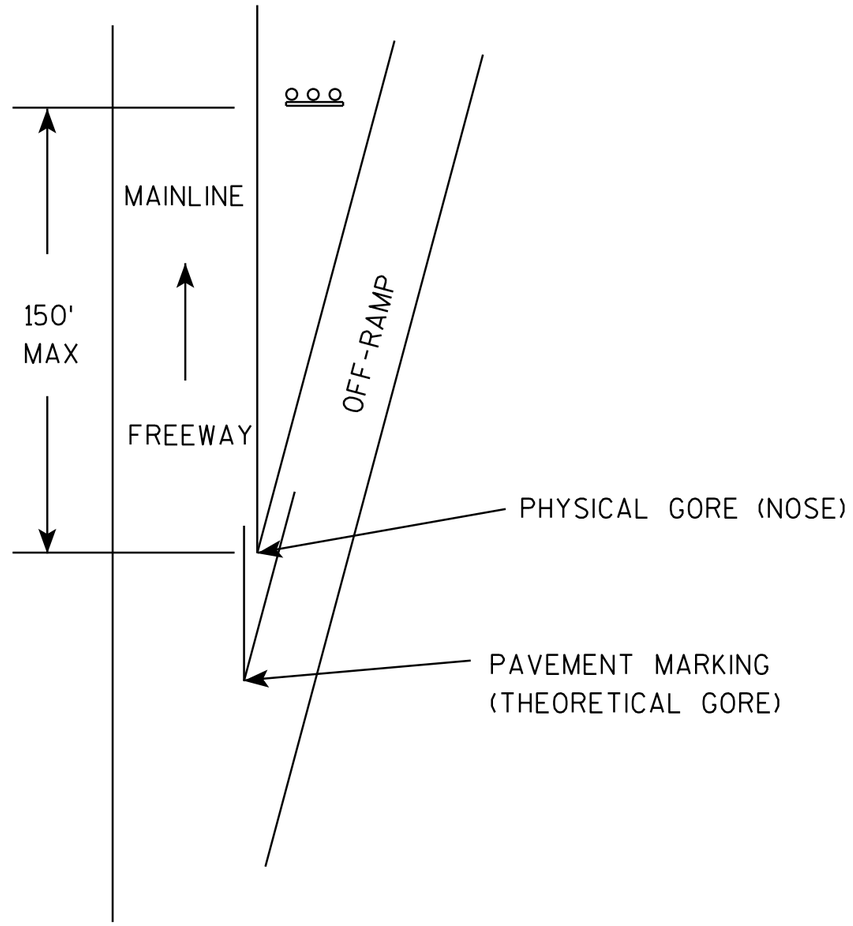
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/02/08 PLATE NO. A4-1.9

PROJECT NO:				SHEET NO: 479	E





GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 10 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

7

7

TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

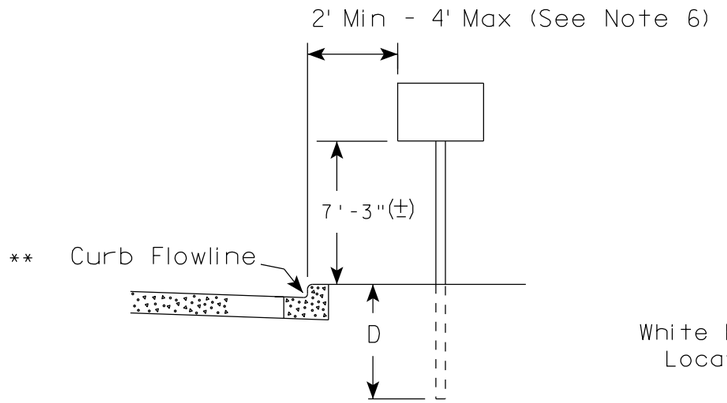
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

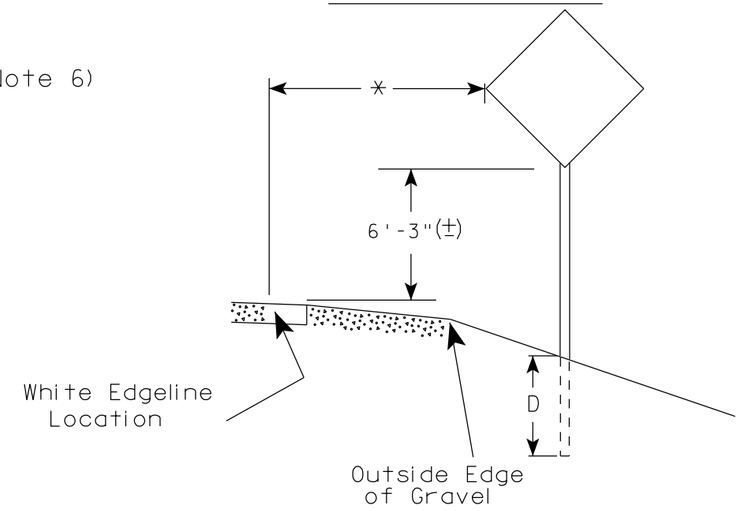
DATE 2/06/14 PLA 480 A4-2.3

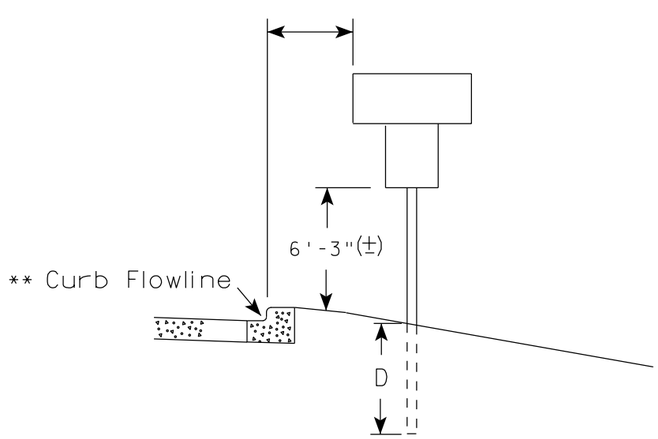
PROJECT NO: | SHEET NO: E

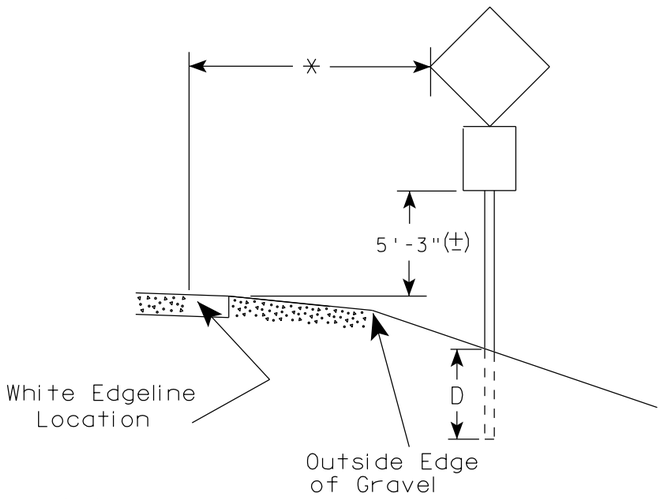
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. 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" (±).

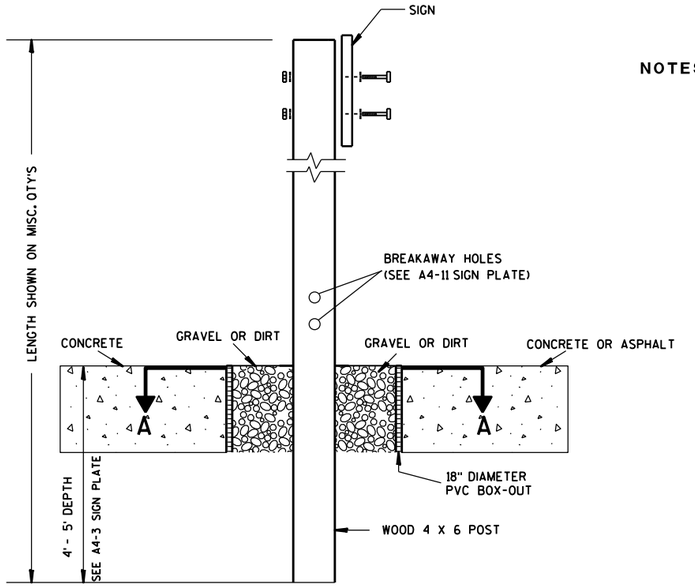
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

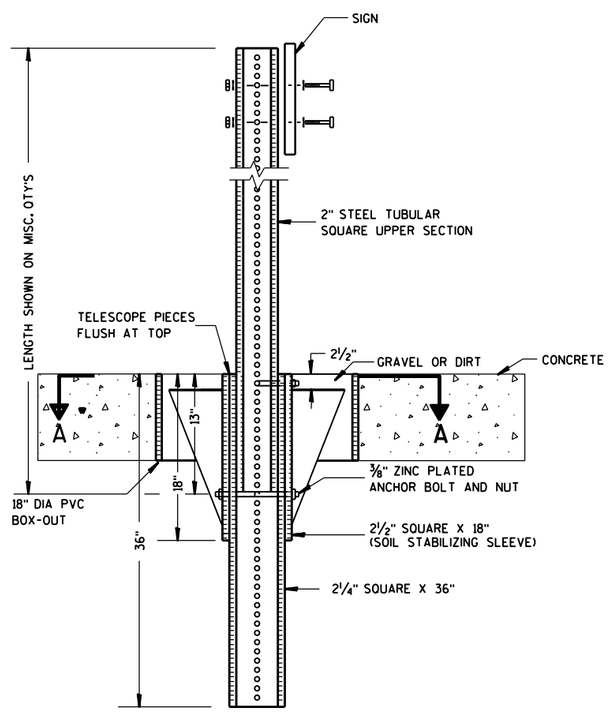
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

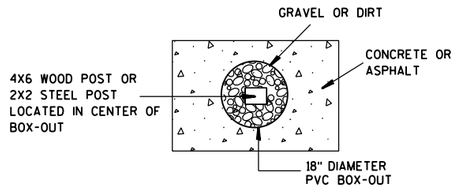
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

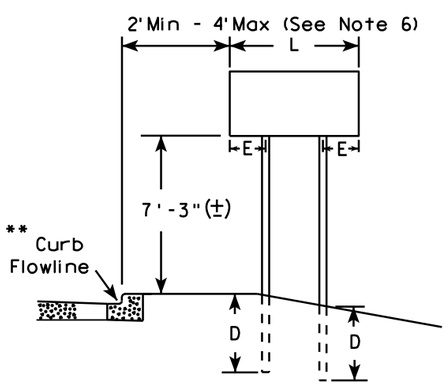
APPROVED Matthew R Rauch
for State Traffic Engineer

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

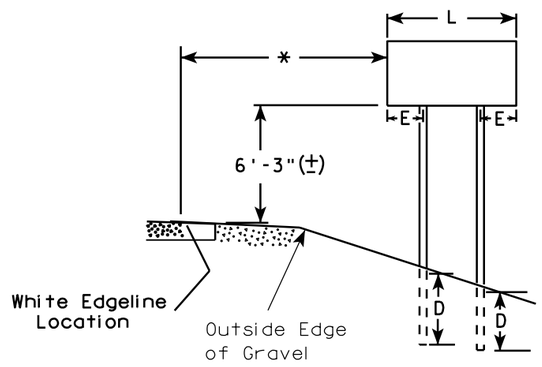
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

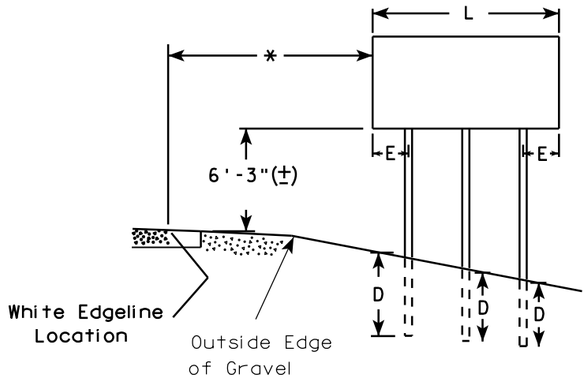
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

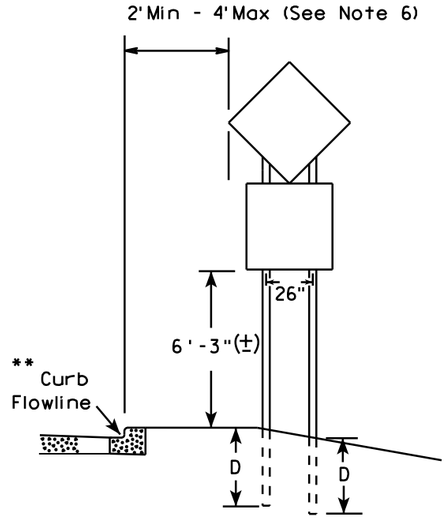
URBAN AREA



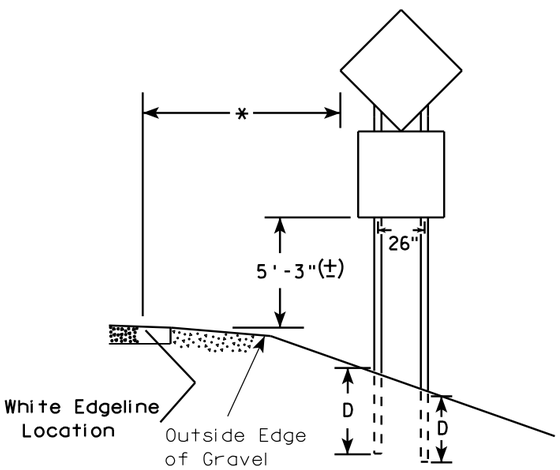
RURAL AREA (See Note 3)







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

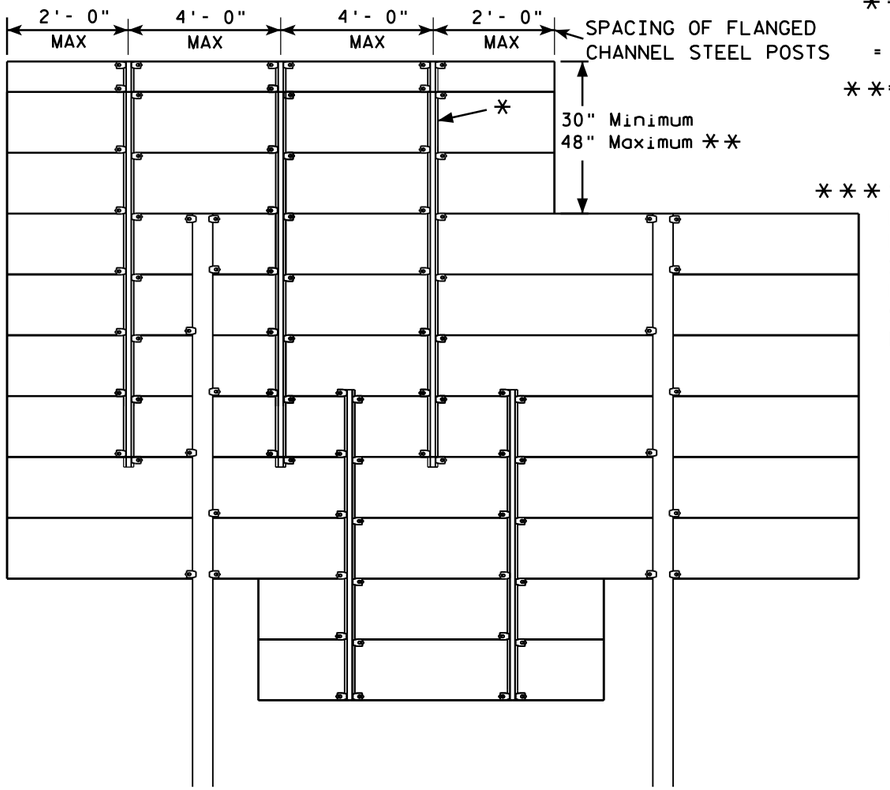
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 483 14

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

GROUND MOUNTED SIGN

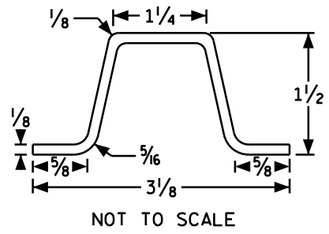


* =2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

** =FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

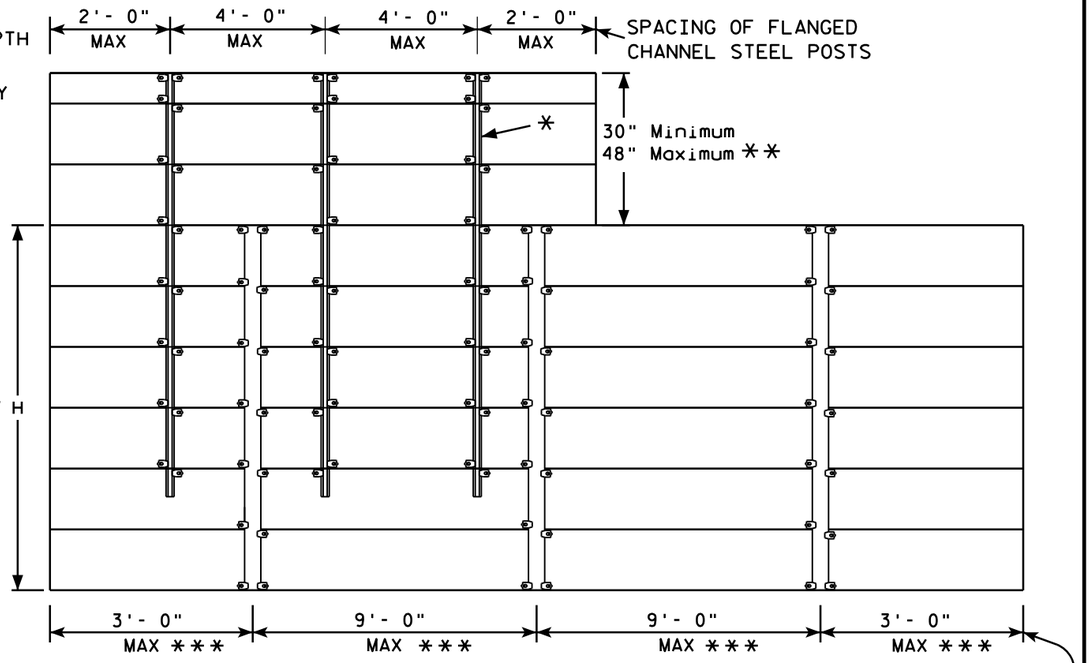
*** THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 16 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 16 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAIL



NOT TO SCALE

SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

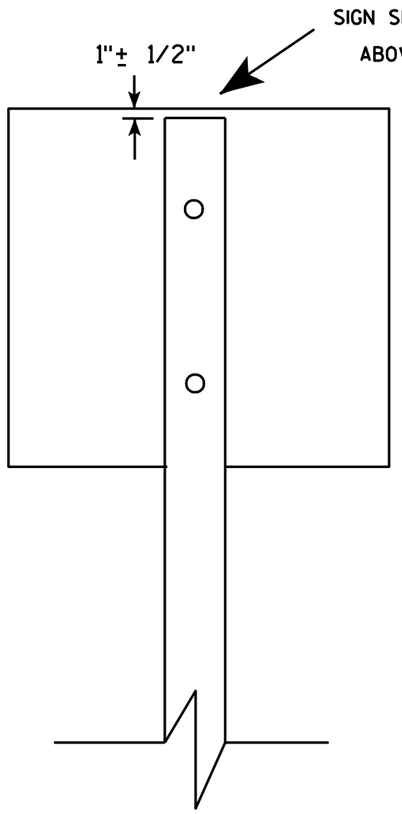
ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

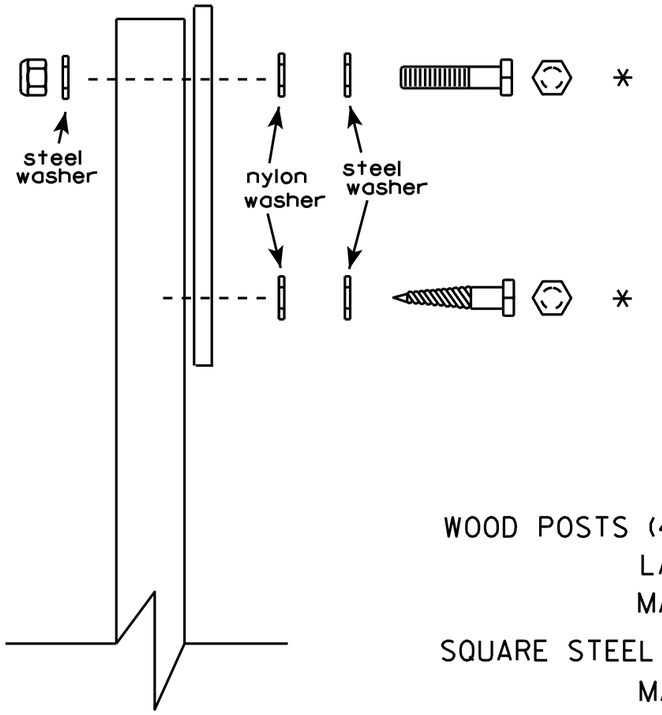
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/05/13 PLAT 484 A4-6.12

PROJECT NO:				SHEET NO:	E





Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

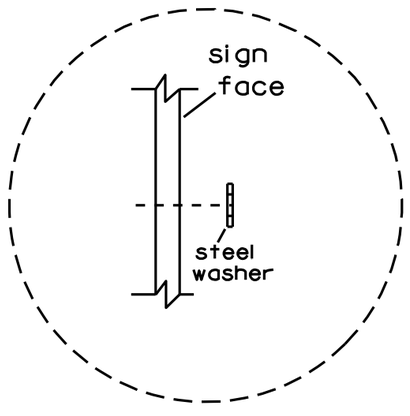
a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* 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 3/23/10 PLATE NO. A4-8.7

7

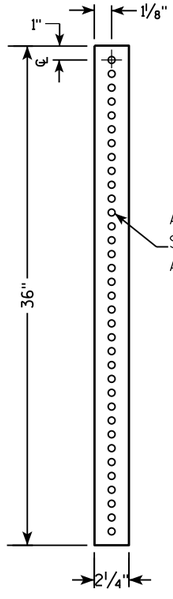
7

PROJECT NO:

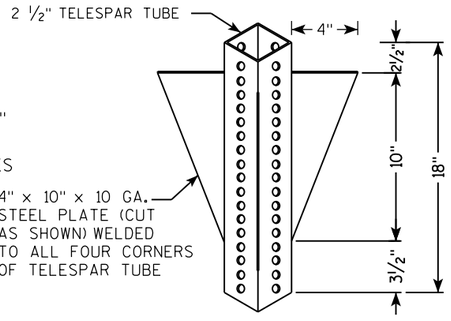
SHEET NO: 485 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

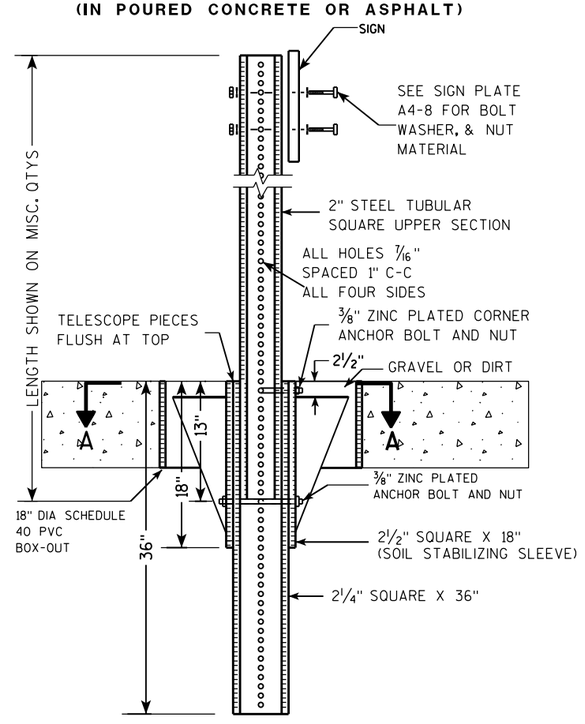
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



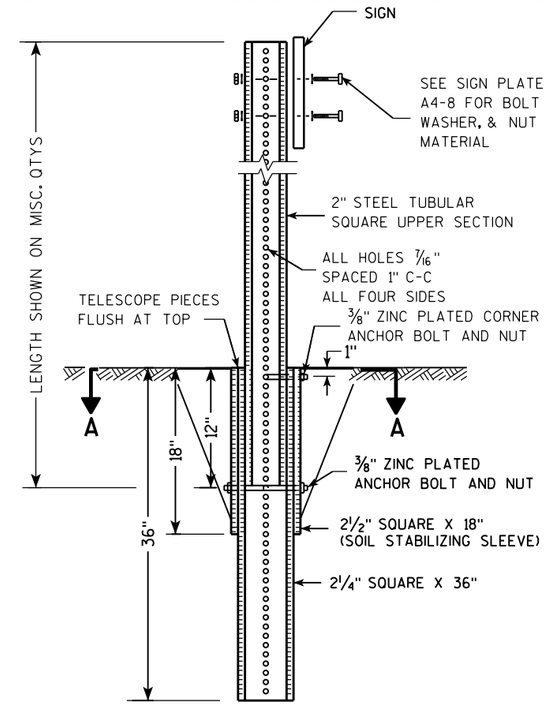
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

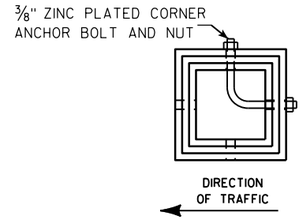


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

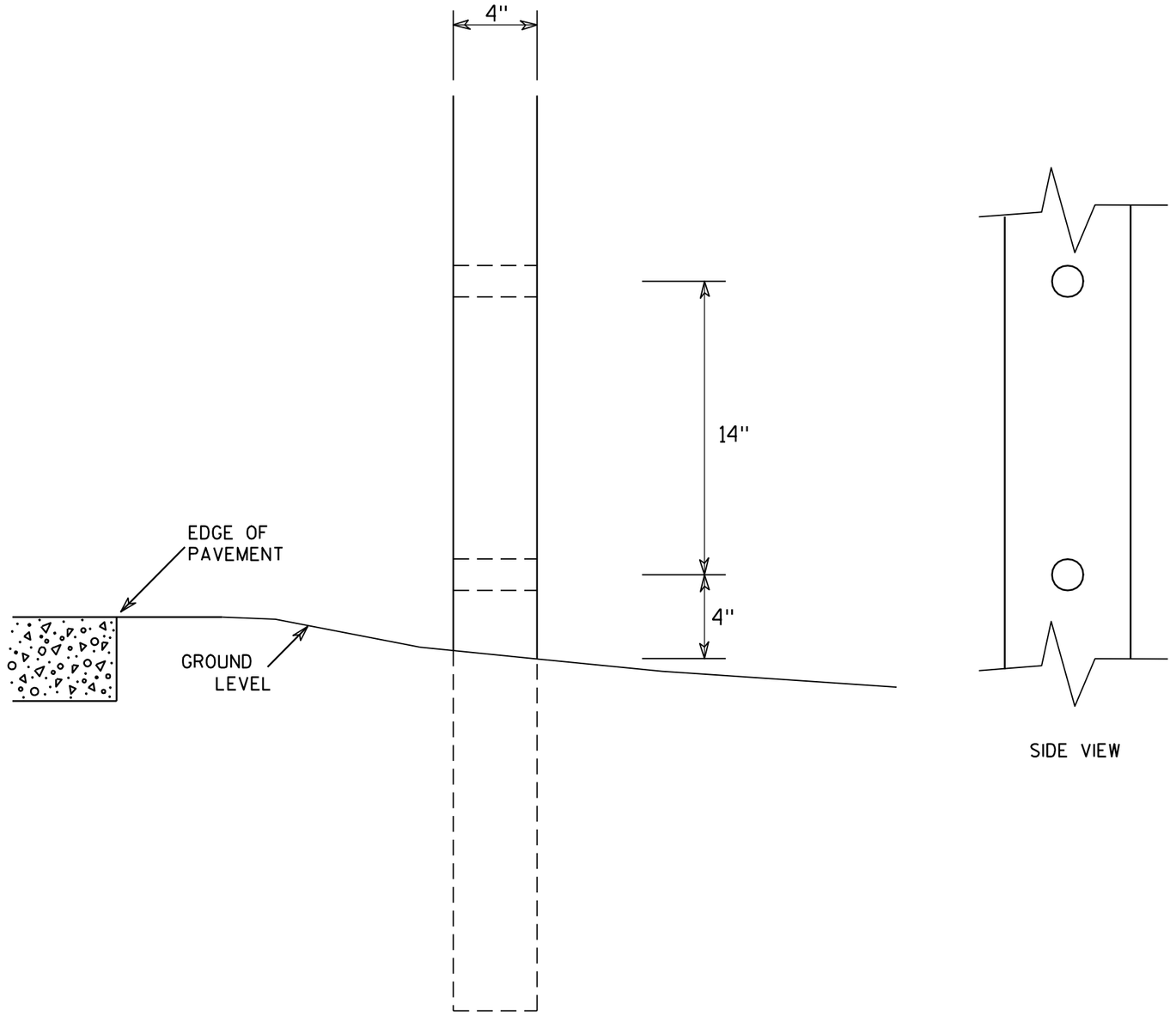
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 486 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

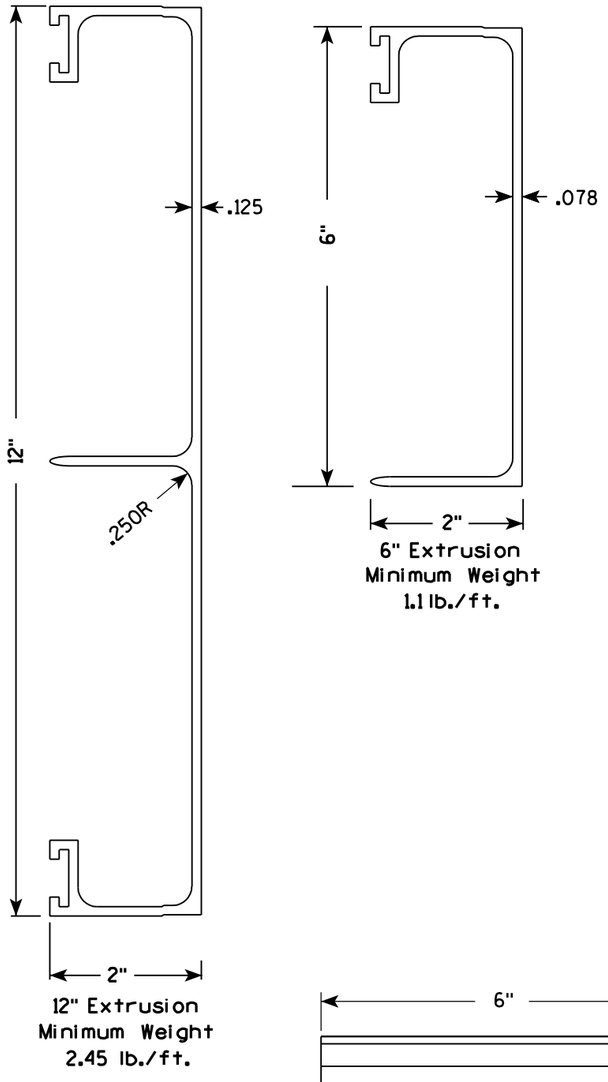
WISCONSIN DEPT OF TRANSPORTATION

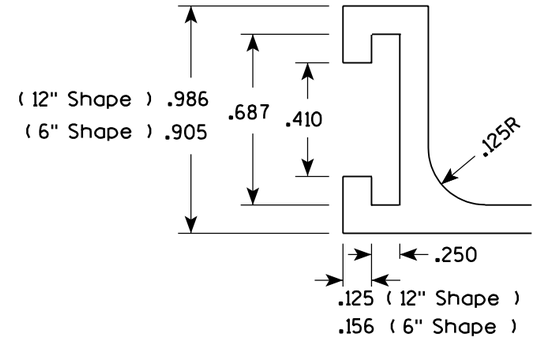
APPROVED Chester J Spang
for State Traffic Engineer

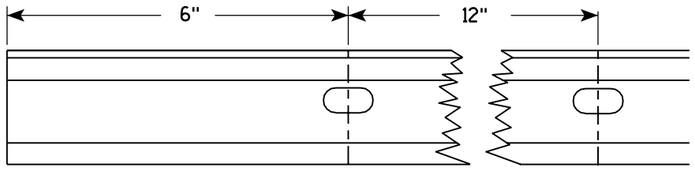
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 487	E

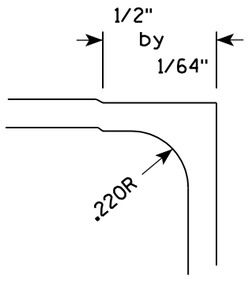
Extruded Shape







Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

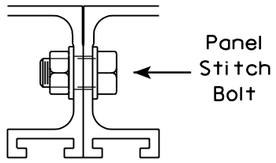


Hardware

STITCH BOLT, WASHER & NUT

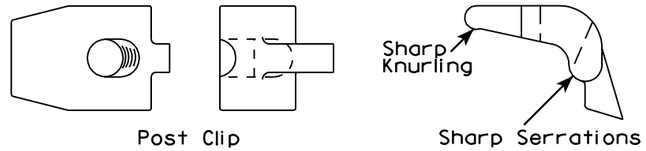
The hardware includes:

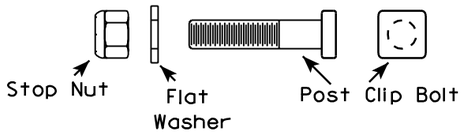
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 11/18/99 PLATE NO. A5-2.9

PROJECT NO:

SHEET NO: 488 E

FILE NAME : C:\Users\Projects\tr_stdplate\A52.DGN PLOT DATE : 28-SEP-2005 07:20 PLOT BY : DOTDZK

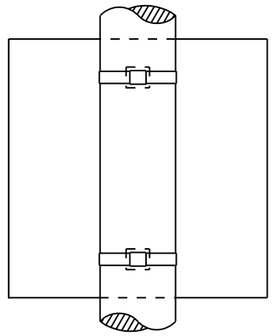
WISDOT/CADDS SHEET 42

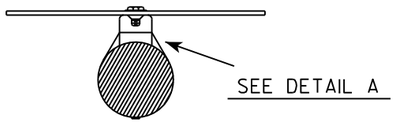
7

7

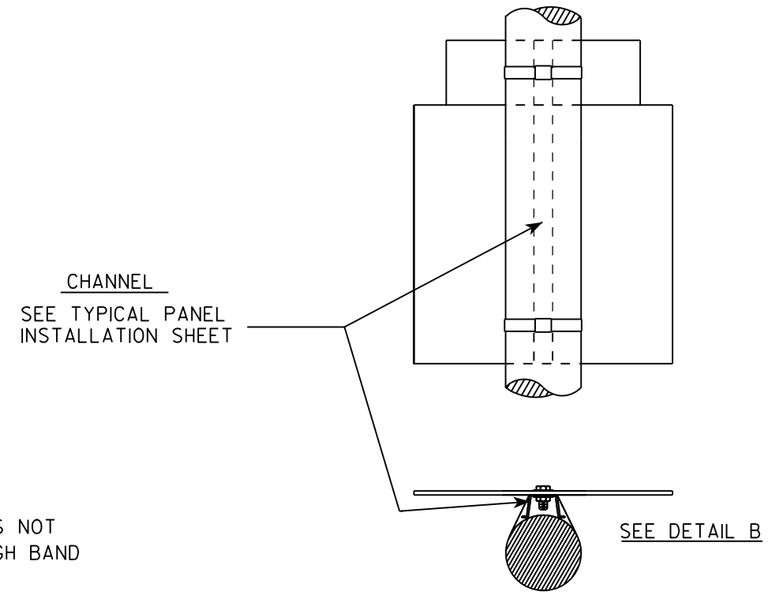
BANDING

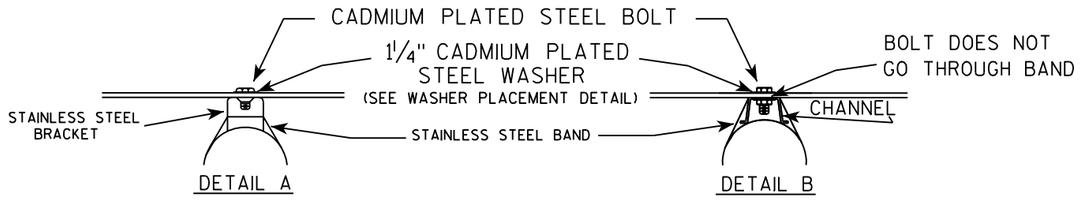
SINGLE SIGN



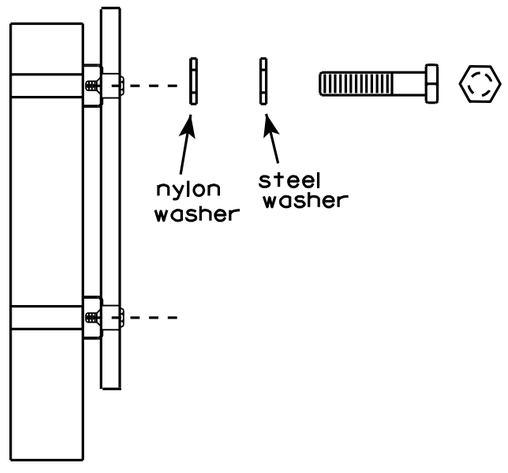


"J" ASSEMBLY





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.

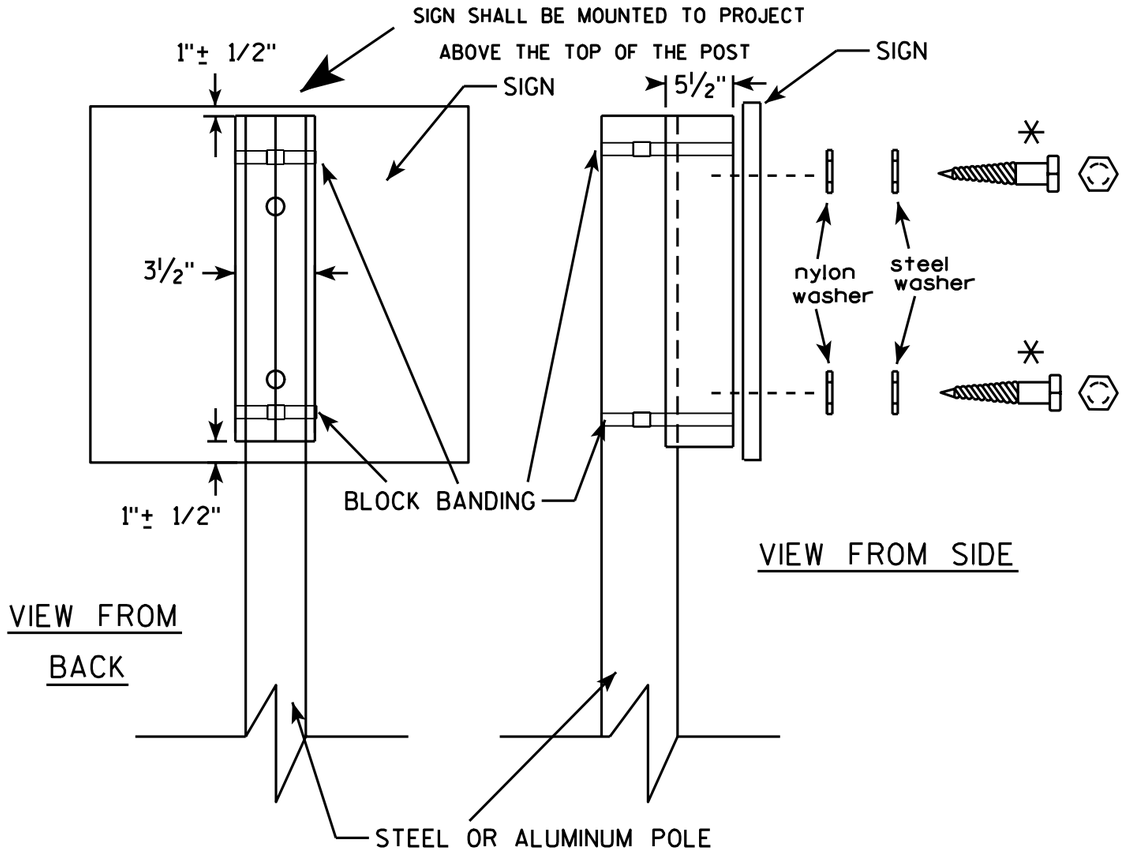
STANDARD SIGN
SIGN BANDING DETAILS

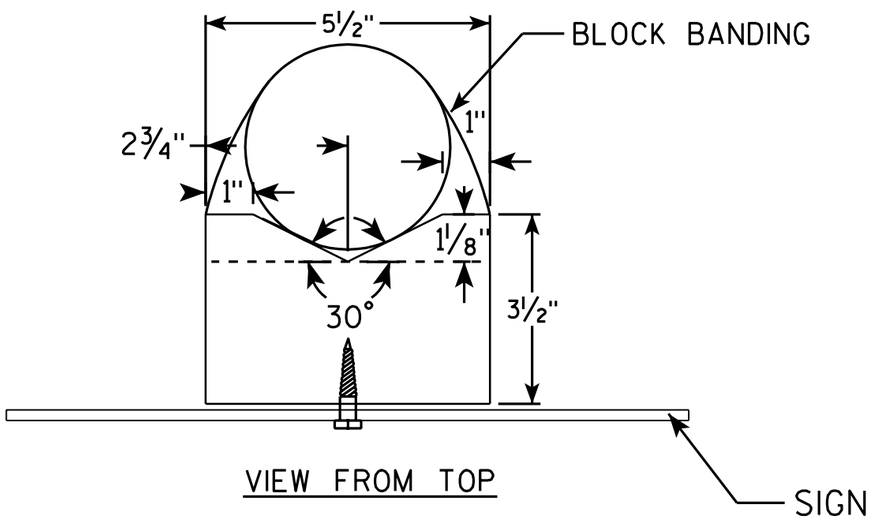
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 489	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

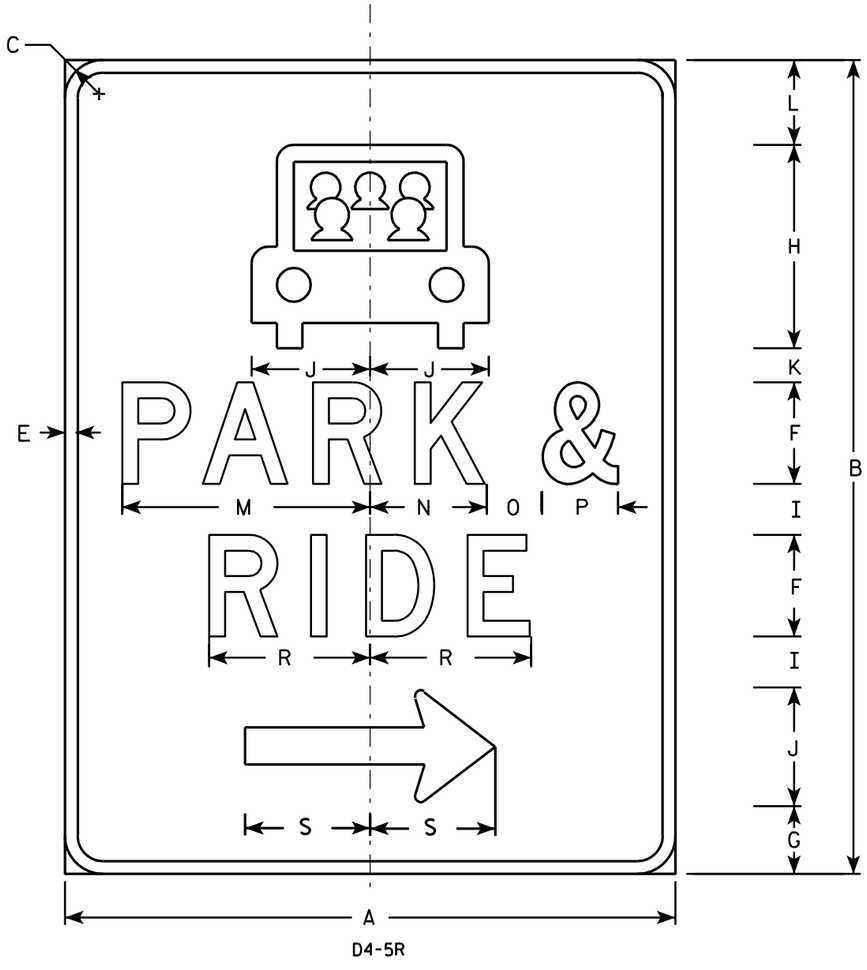
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 490 E

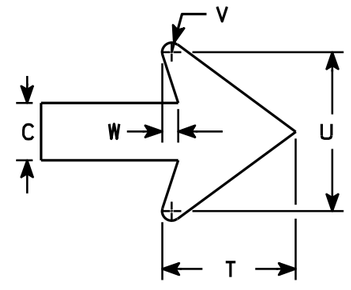
FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph
WISDOT/CADDS SHEET 42



D4-5R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White - Type H Reflective
3. Message Series - 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. The D4-5L is the same as a D4-5R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	36	1 3/8		5/8	5	1 3/8	9	2	5	1 5/8	5	11 3/4	5 1/2	2 3/4	3 3/4		8	6 1/8	4	4 3/8	3/8	1/2				7.50
3	36	48	2 1/4		3/4	6	4	12	3	7	2	5	14 5/8	6 7/8	3 1/4	4 1/2		9 1/2	7 1/2	5 1/4	6 1/4	3/8	5/8				12.0
4																											
5																											

STANDARD SIGN
D4-5 L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/15/10 PLATE NO. D4-5.2

PROJECT NO:

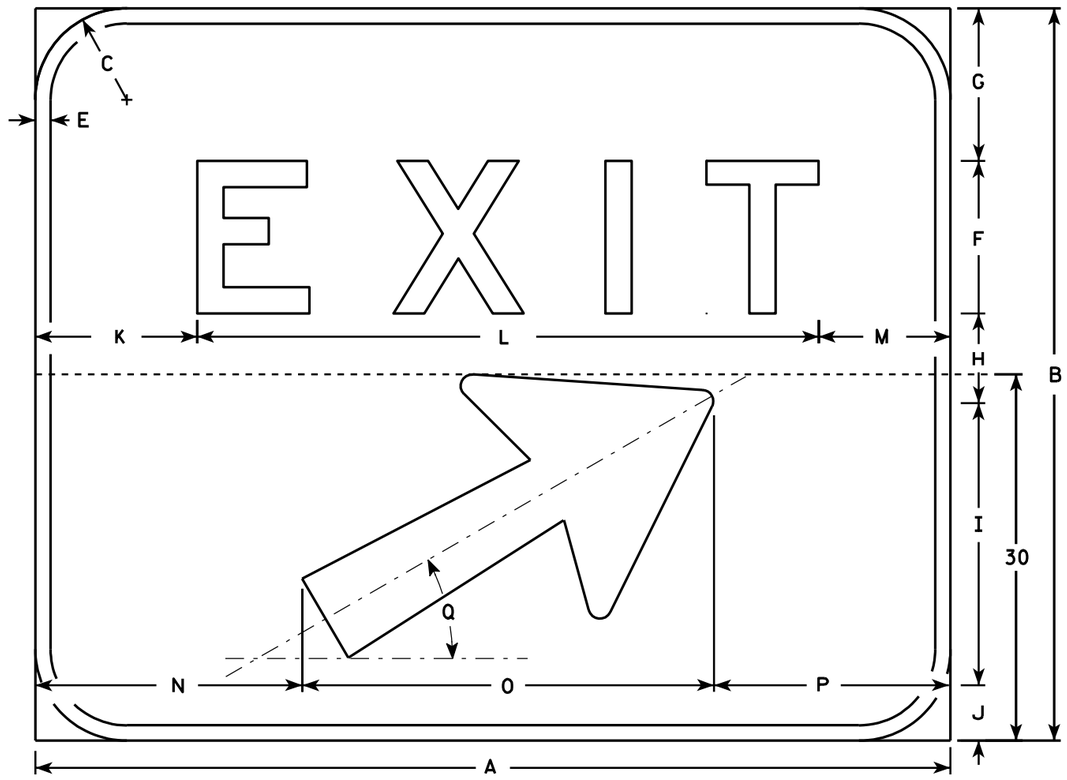
SHEET NO: 491 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\D45.DGN PLOT DATE : 15-NOV-2010 14:08 PLOT BY : dotsja

WISDOT/CADDS SHEET 42

7

7



E5-1

NOTES

1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White (Type H reflective)
3. Message Series - E
4. Corners may be square or rounded but borders shall be rounded as shown.
5. Base material for this sign shall be plywood and shall be split into two seperate pieces for the 72 x 60 size as shown on the detail by the dashed line (----------).
6. Arrow is Type "A" from sign plate A1-1.
7. As per the Standard Spec's, this sign shall not have a vertical joint.

Metric equivalent for this sign is:

SIZE	
1	
2	
3	
4	1500 mm X 1200 mm
5	1800 mm X 1500 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																												
3																												
4	60	48	6		1	10	10	5 7/8	18 1/2	3 5/8	10 5/8	40 3/4	8 5/8	17 1/2	27	15 1/2	30°										20.0	1.80
5	72	60	6		1	12	12	10	18 1/2	7 1/2	13 1/4	48 1/2	10 1/4	23 1/2	27	21 1/2	30°										30.0	2.70

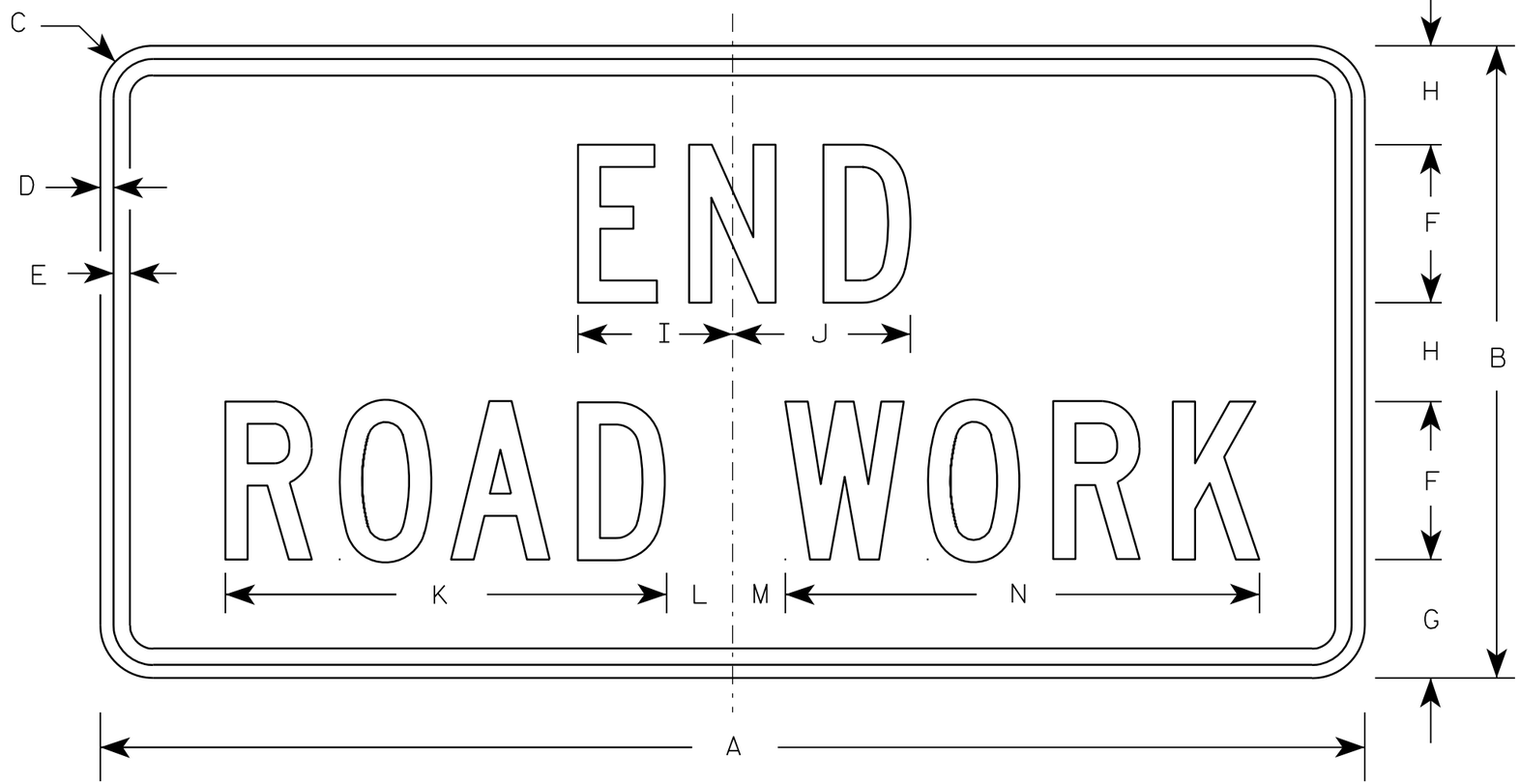
STANDARD SIGN
E5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 6/22/00 PLATE NO. E5-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 492	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

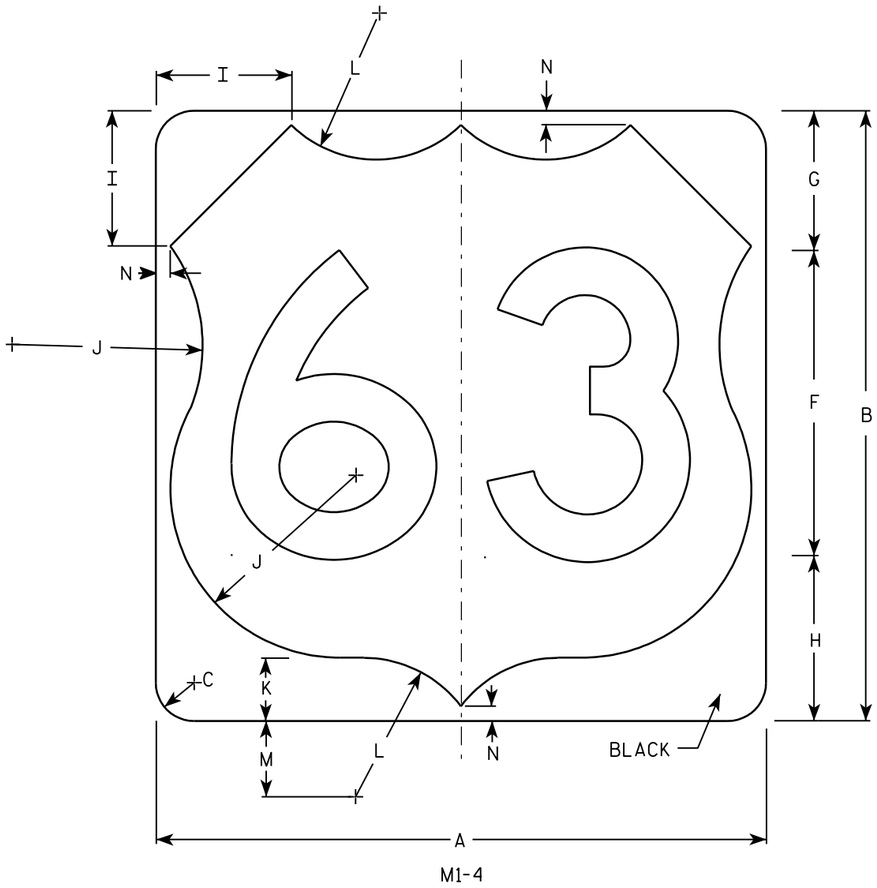
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

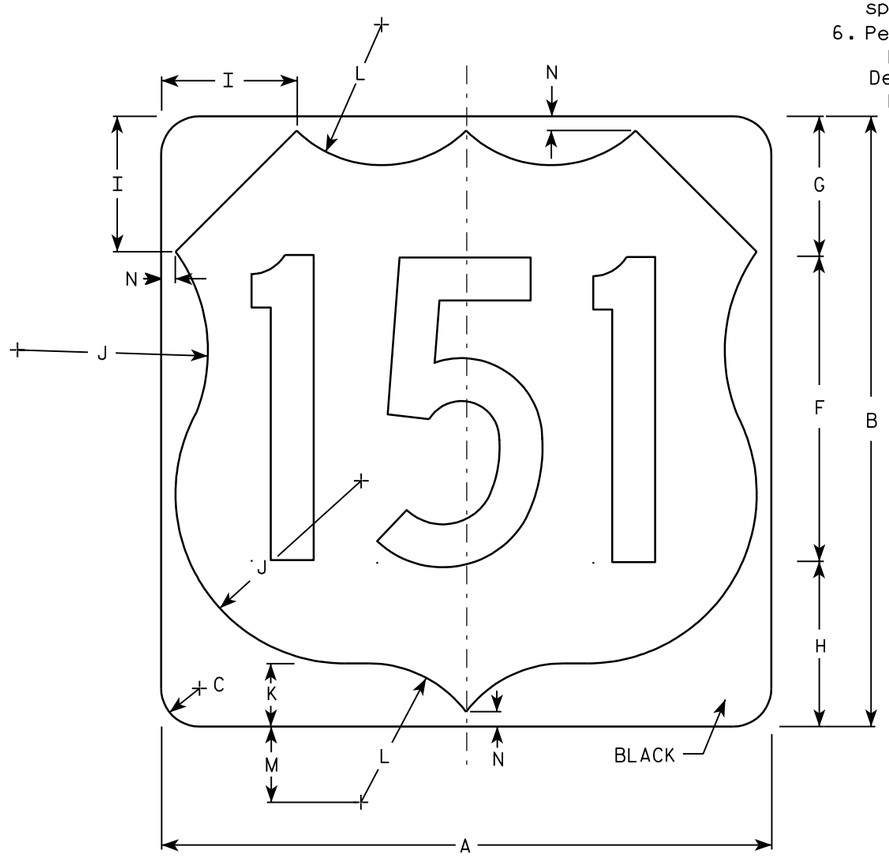
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 493	E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

7

7

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Areq sq. ft.	Area m2
1																												
2	24	24	1 ½			12	5 ½	6 ½	5	7 ½	2 ½	5 ½	3	½													4.0	.36
3	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0	.81
4	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0	.81
5	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0	.81

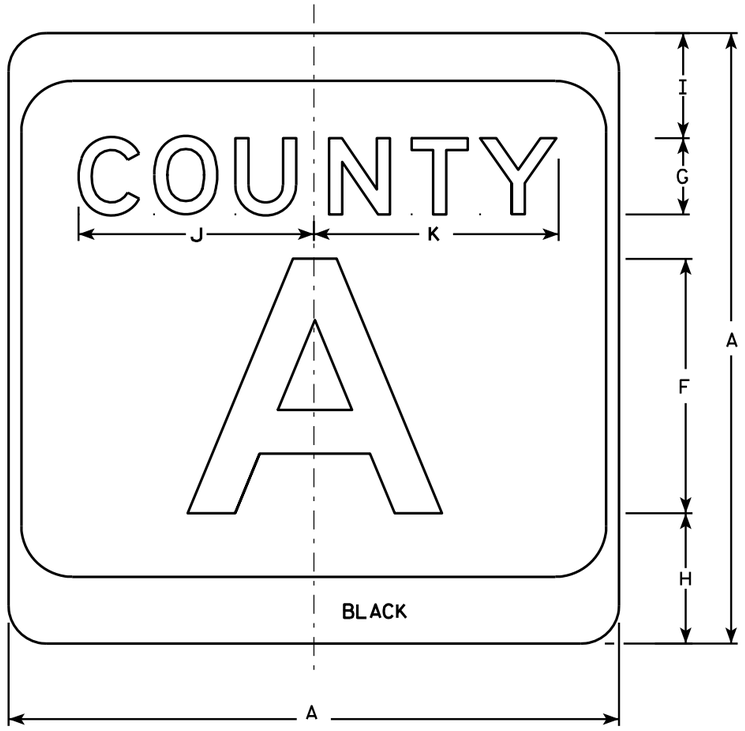
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

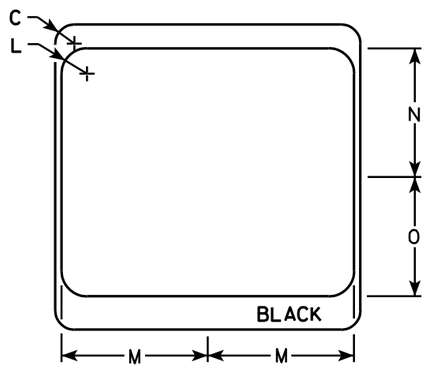
APPROVED Matthew R Rauch
for State Traffic Engineer

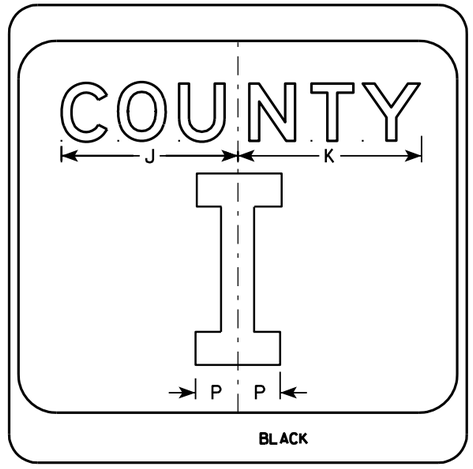
DATE 08/25/05 PLATE NO. M1-4.9

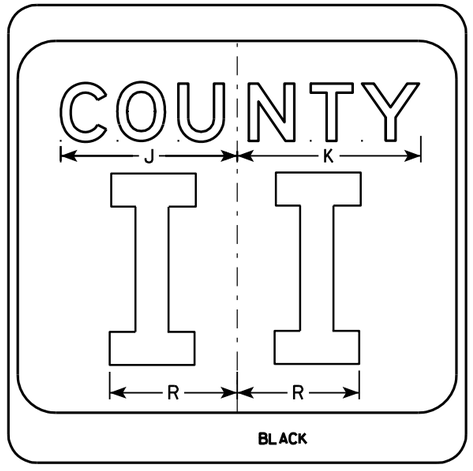
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 494	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

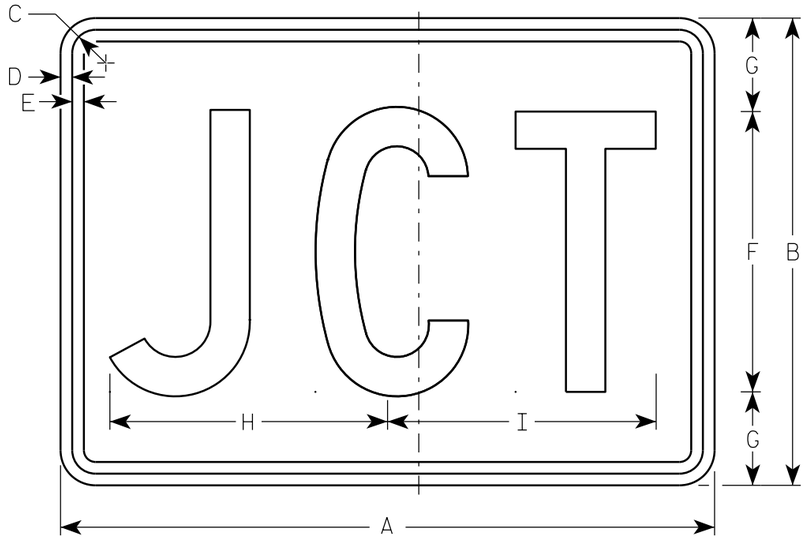
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

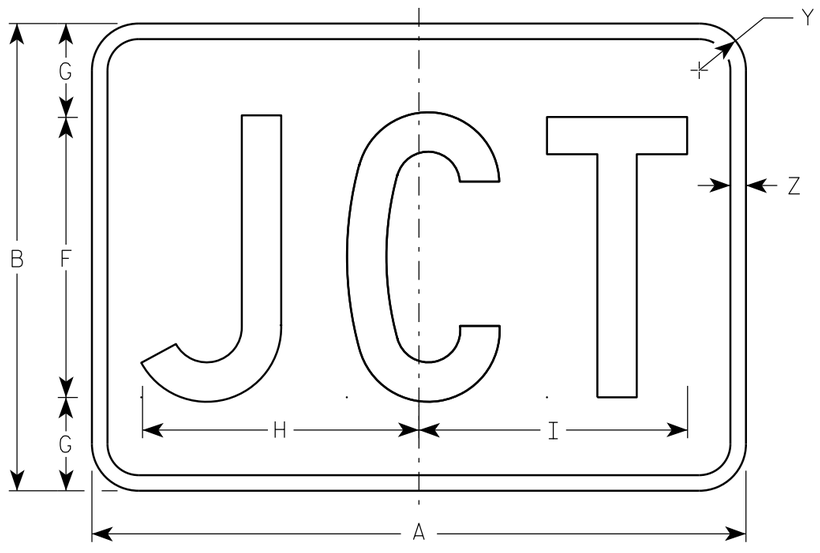
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 495 | E



M2-1
MK2-1
MM2-1
MN2-1
MR2-1



MB2-1

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
   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

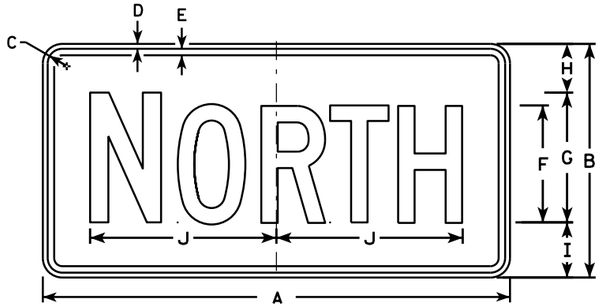
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

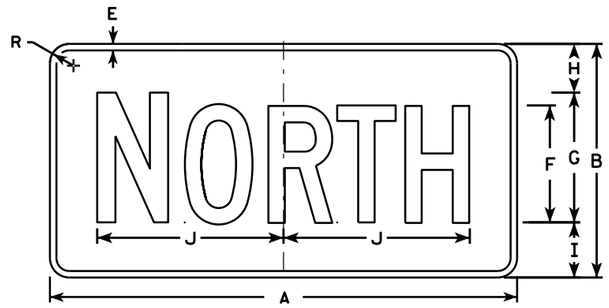
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/30/14 PLATE 496 12-1.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

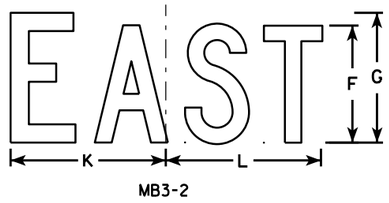


M3-1
MK3-1
MM3-1
MN3-1

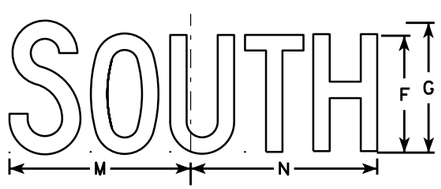


MB3-1

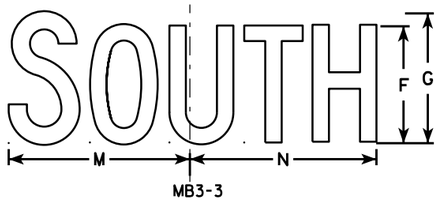
M3-2
MK3-2
MM3-2
MN3-2



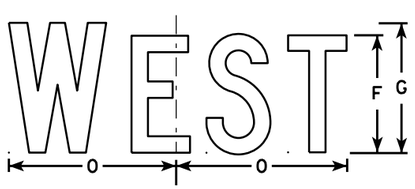
MB3-2



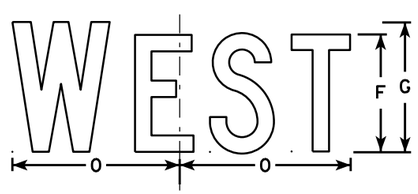
M3-3
MK3-3
MM3-3
MN3-3



MB3-3



M3-4
MK3-4
MM3-4
MN3-4



MB3-4

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
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

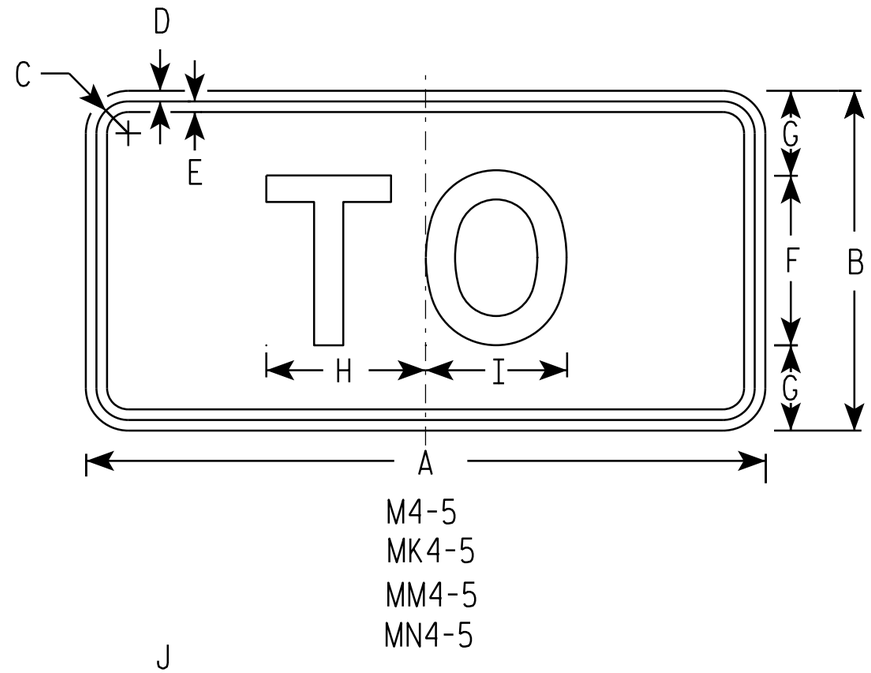
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

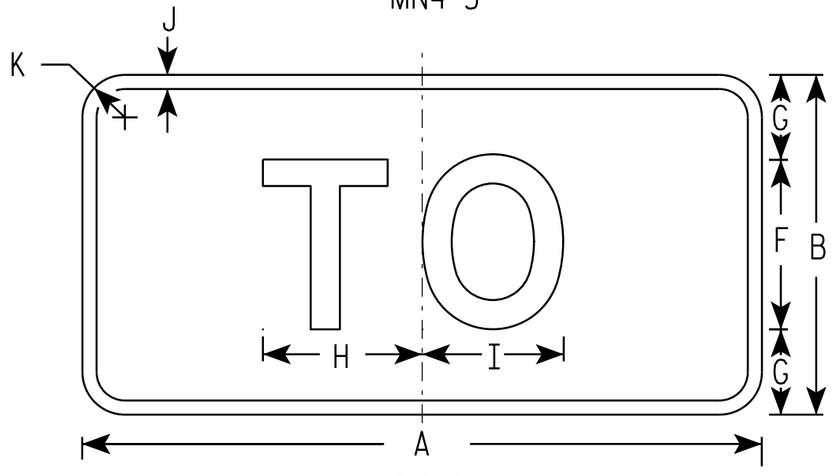
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/30/14 PLATE NO M3-1.13

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



M4-5
MK4-5
MM4-5
MN4-5



MB4-5

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

STANDARD SIGN
M4-5

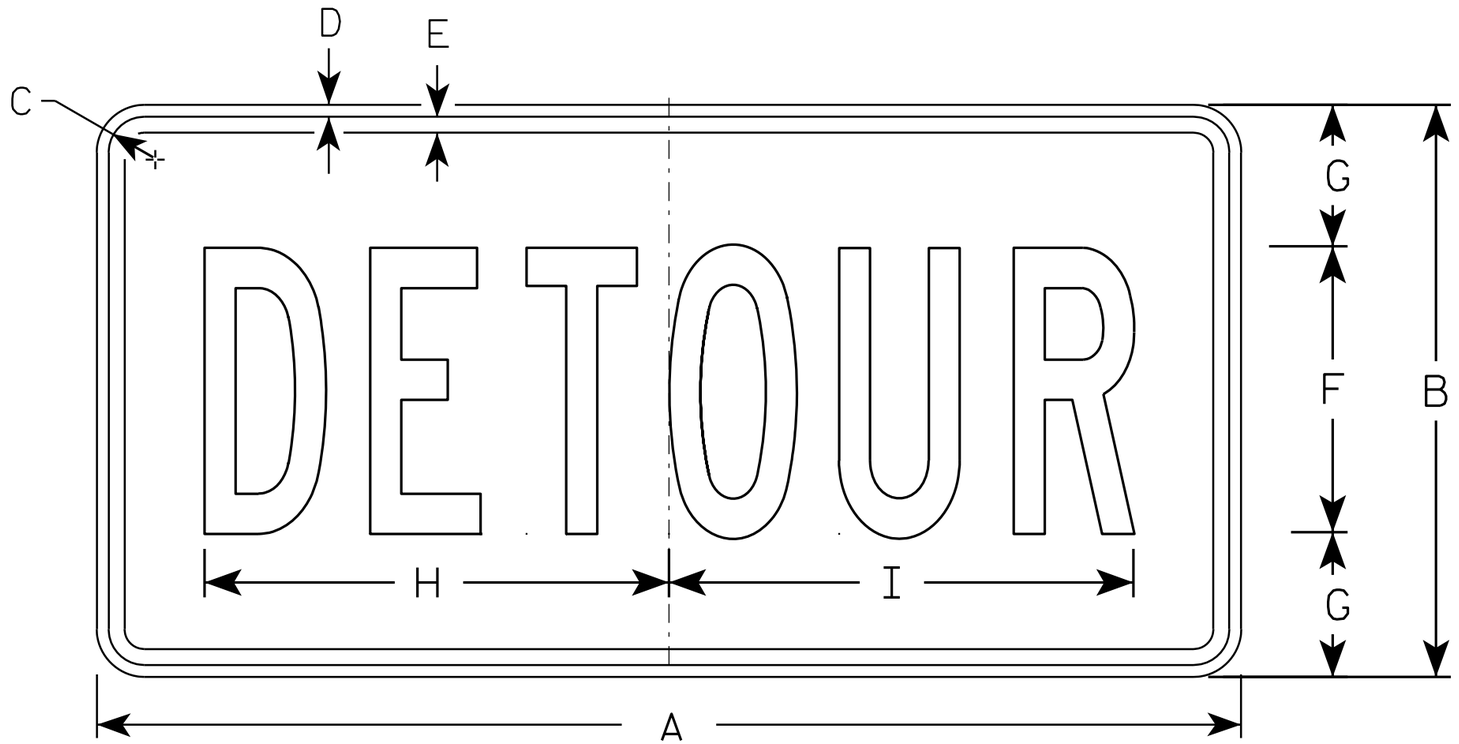
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/14 PLATE M4-5.7

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M45.DGN PLOT DATE : 30-JUN-2014 12:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.351066:1.000000
WISDOT/CADDS SHEET 42



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

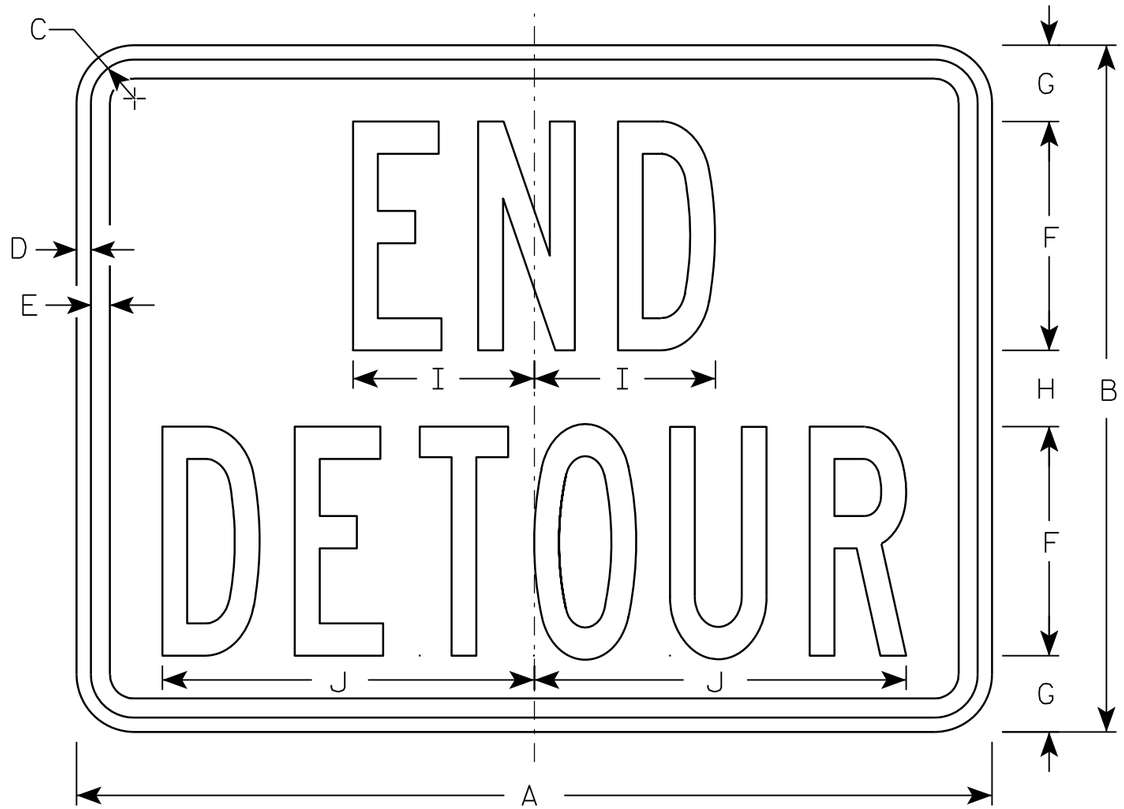
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 499	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M48.DGN PLOT DATE : 10-NOV-2010 13:18 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.767233:1.000000

WISDOT/CADDS SHEET 42

7

7



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

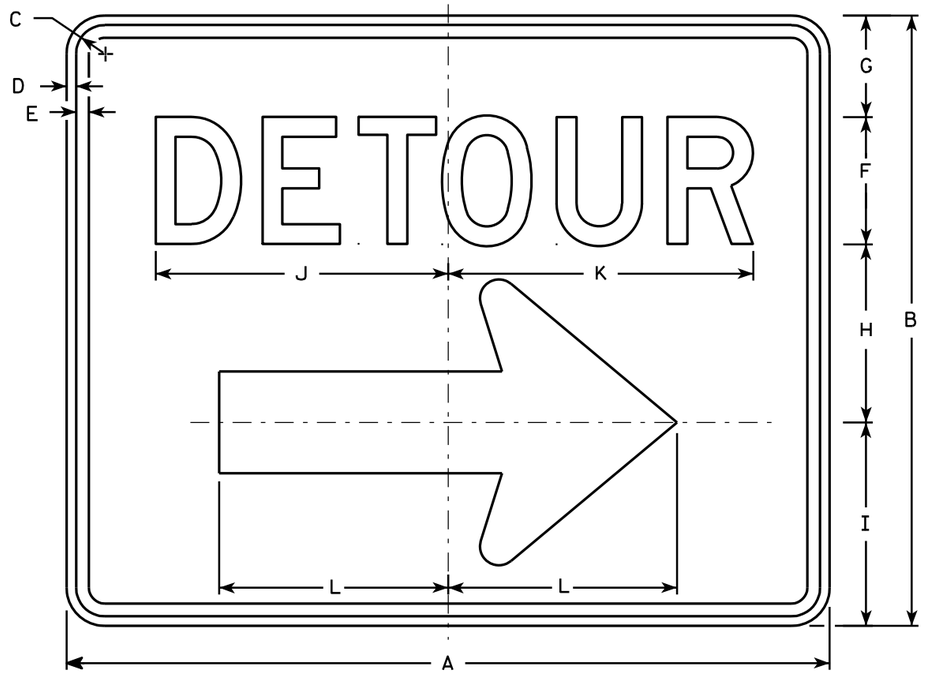
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

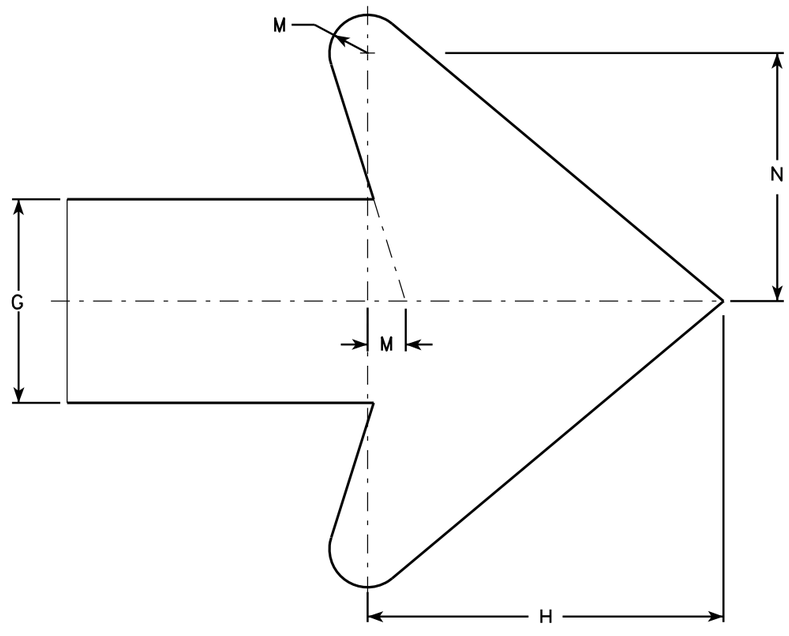
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 500	E



M4-9R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

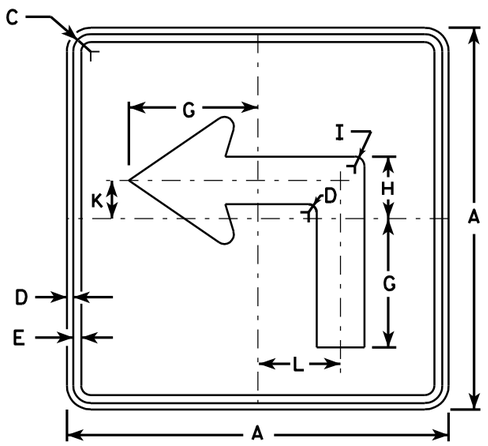
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

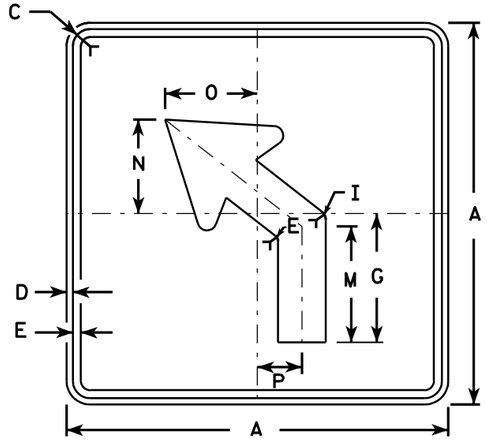
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

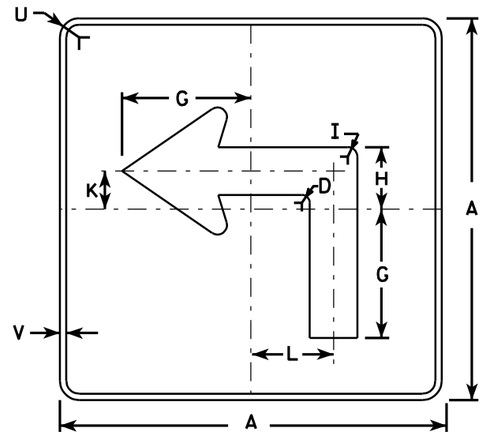
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 501 | E



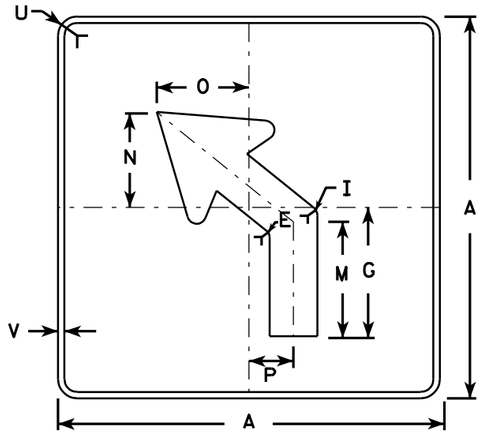
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



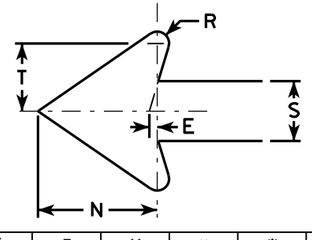
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   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 - Type H Reflective
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 1/8	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 1/8	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 1/8	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

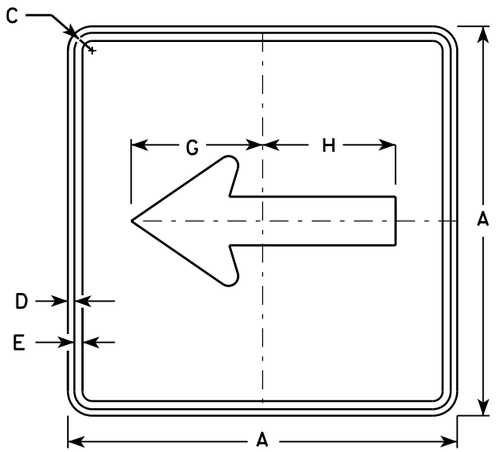
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

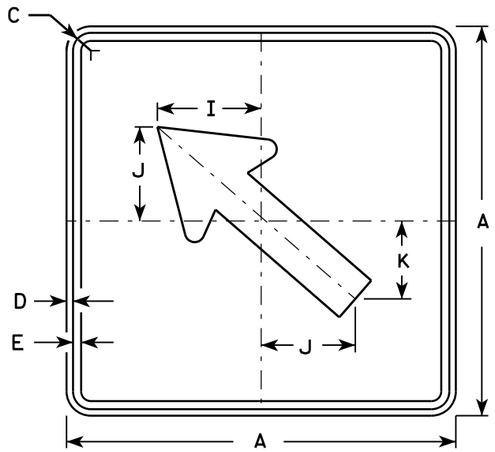
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 502 | E



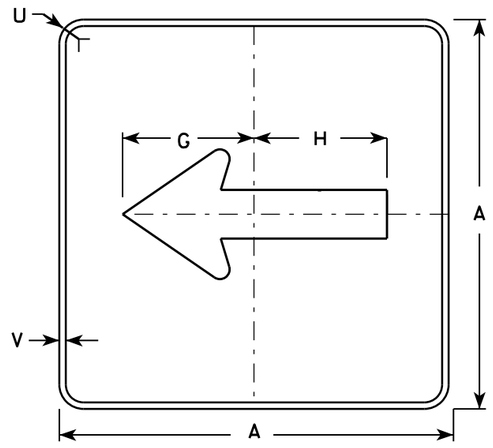
M6-1
MK6-1
MM6-1
MN6-1
MO6-1
MP6-1
MR6-1



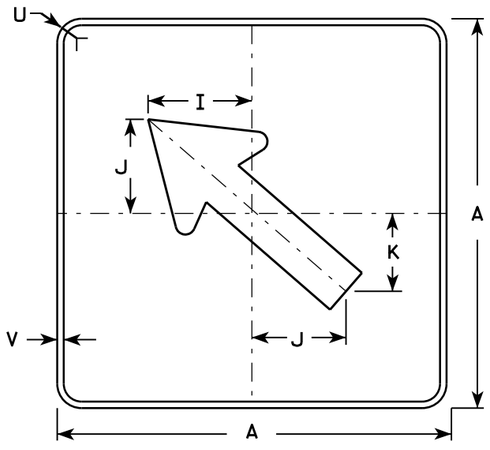
M6-2
MK6-2
MM6-2
MN6-2
MO6-2
MP6-2
MR6-2

NOTES

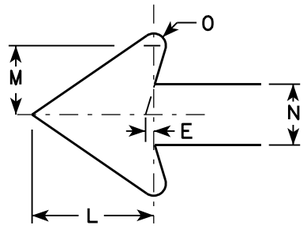
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MG6-1 and MG6-2 Background - Green
   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



MB6-2



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

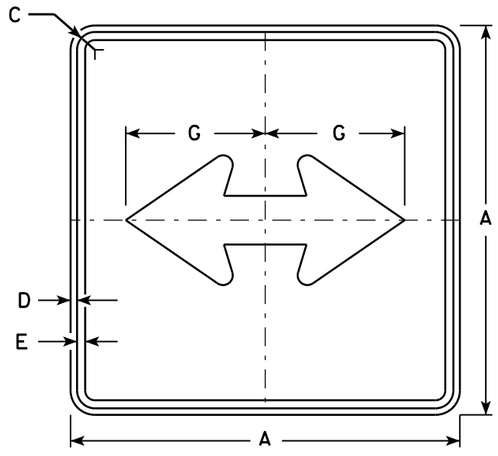
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

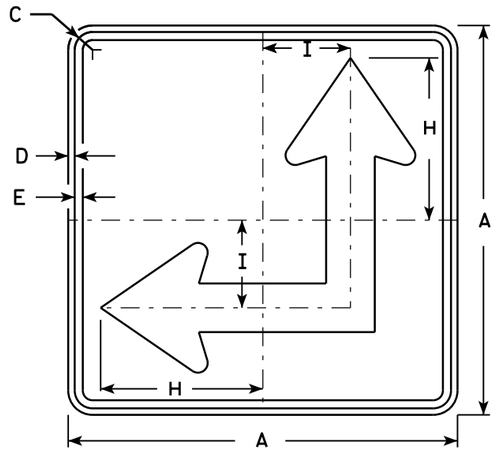
DATE 7/03/14 PLATE 503 M6-1.14

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

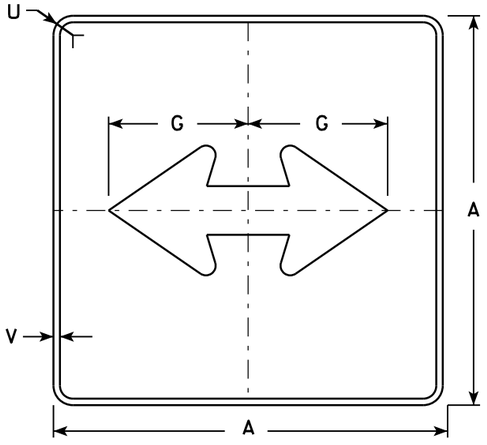
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 03-JUL-2014 14:28 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 11.675051:1.000000
WISDOT/CADDS SHEET 42



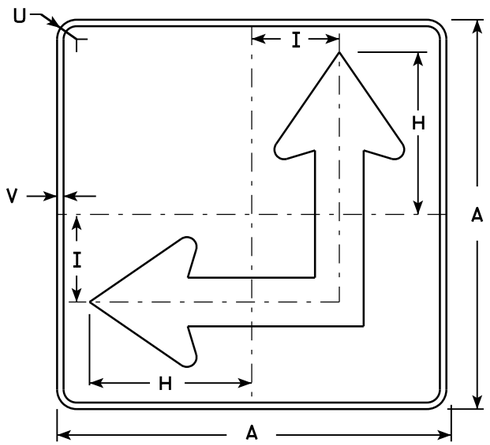
M6-4
MK6-4
MM6-4
MN6-4
MO6-4
MP6-4
MR6-4



M6-6
MK6-6
MM6-6
MN6-6
MO6-6
MP6-6
MR6-6



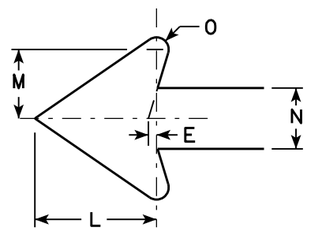
MB6-4



MB6-6

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.



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

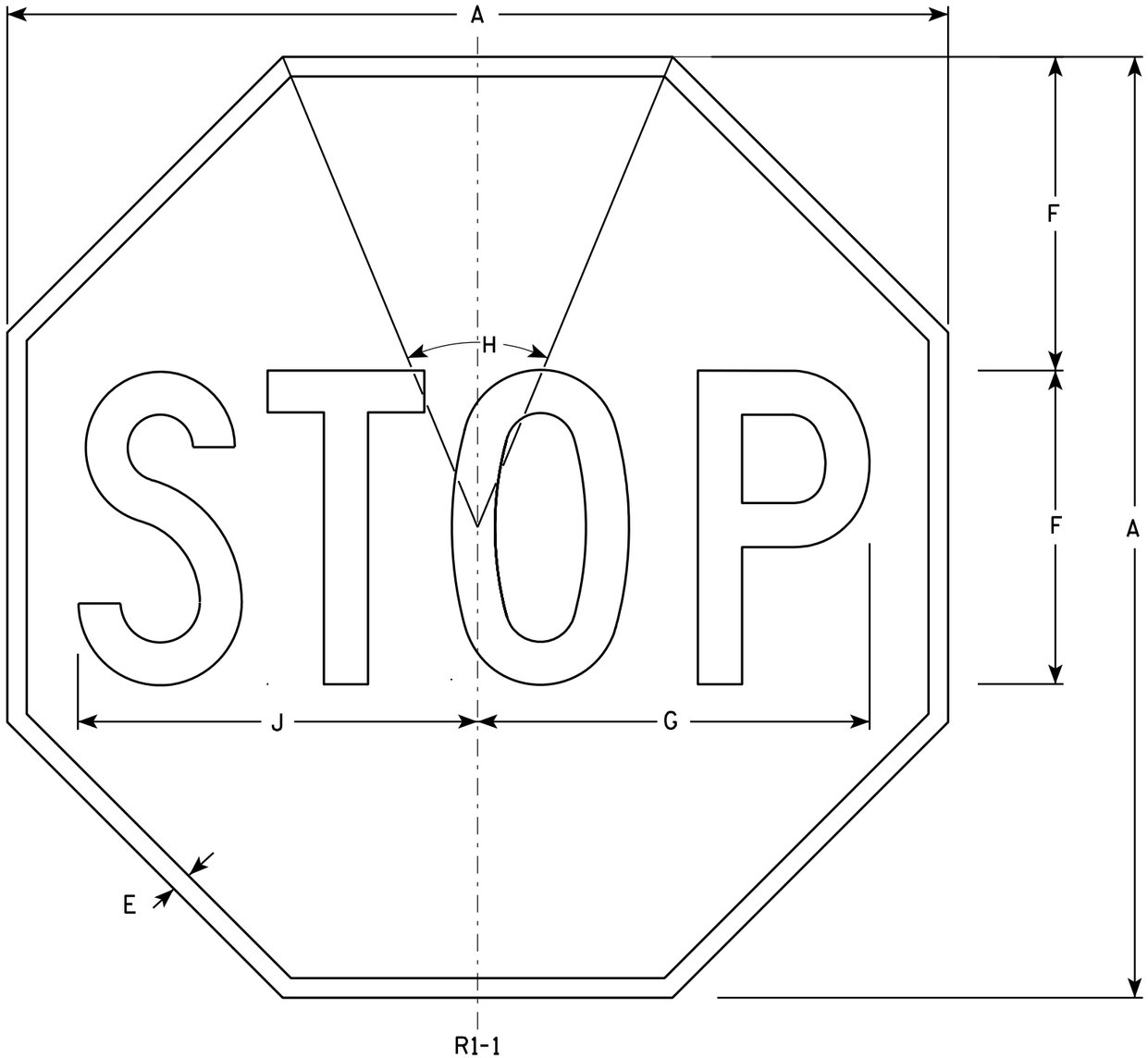
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 7/03/14 PLATE M6-4.9

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 03-JUL-2014 14:56 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
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

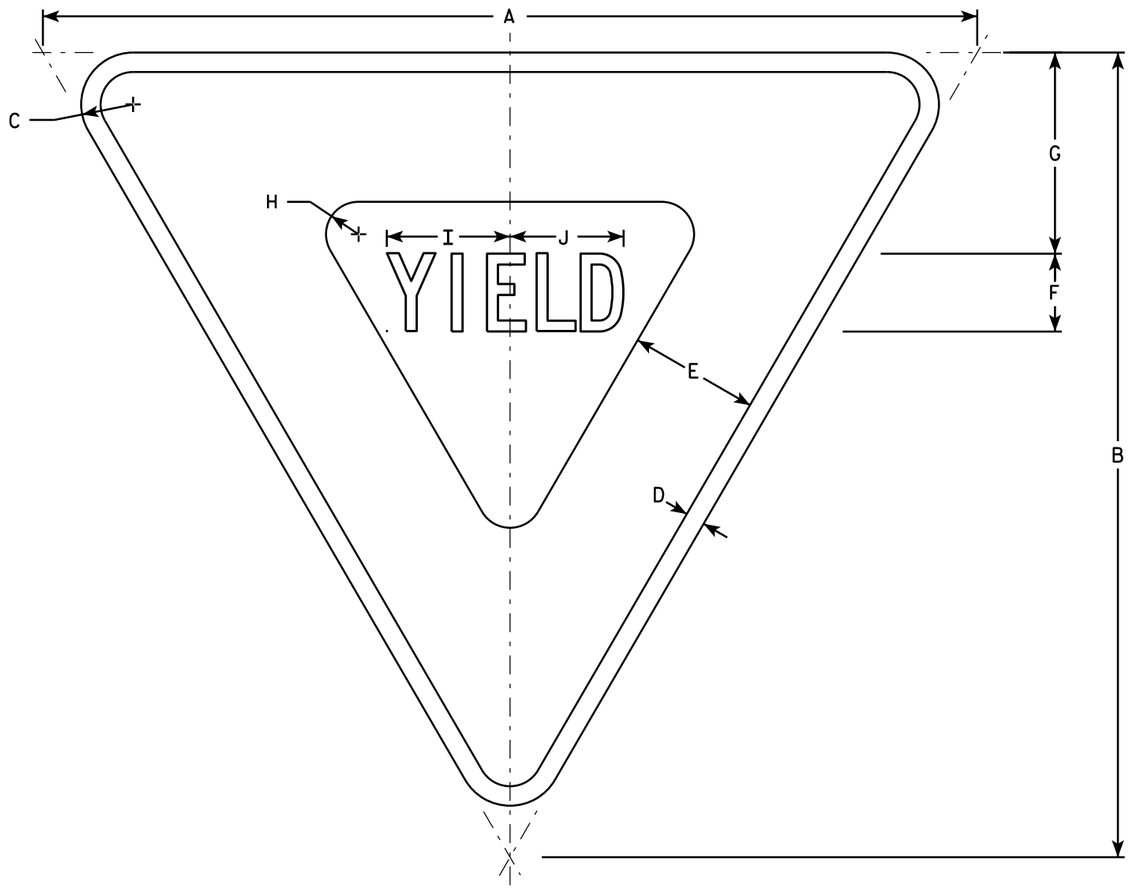
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 505	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

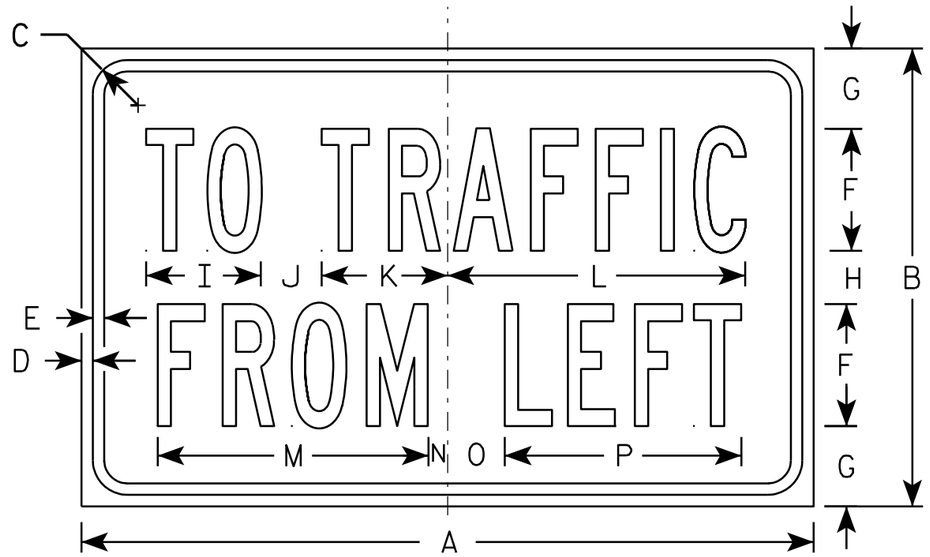
WISCONSIN DEPT OF TRANSPORTATION

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



R1-54

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
2M	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
3																											
4																											
5																											

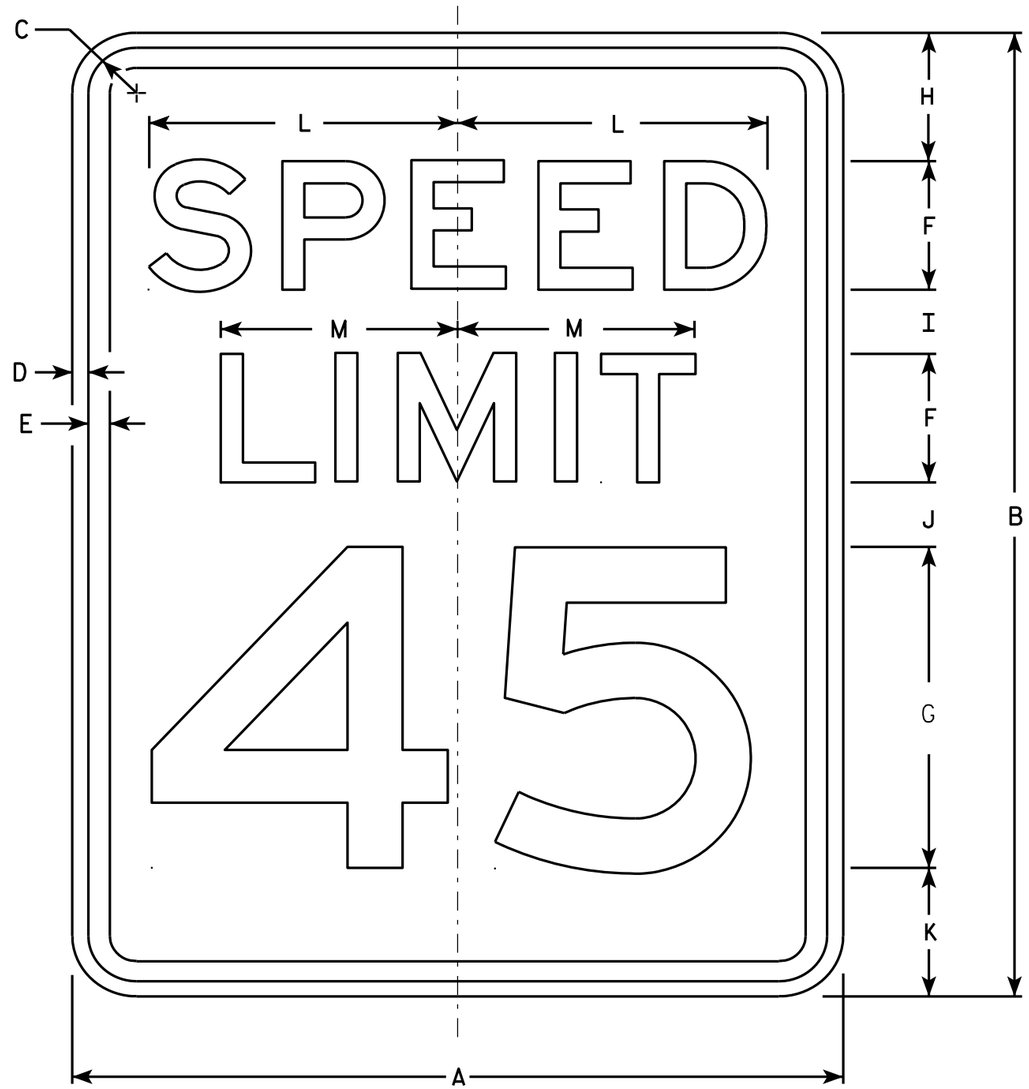
STANDARD SIGN
R1-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-54.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 507 | E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

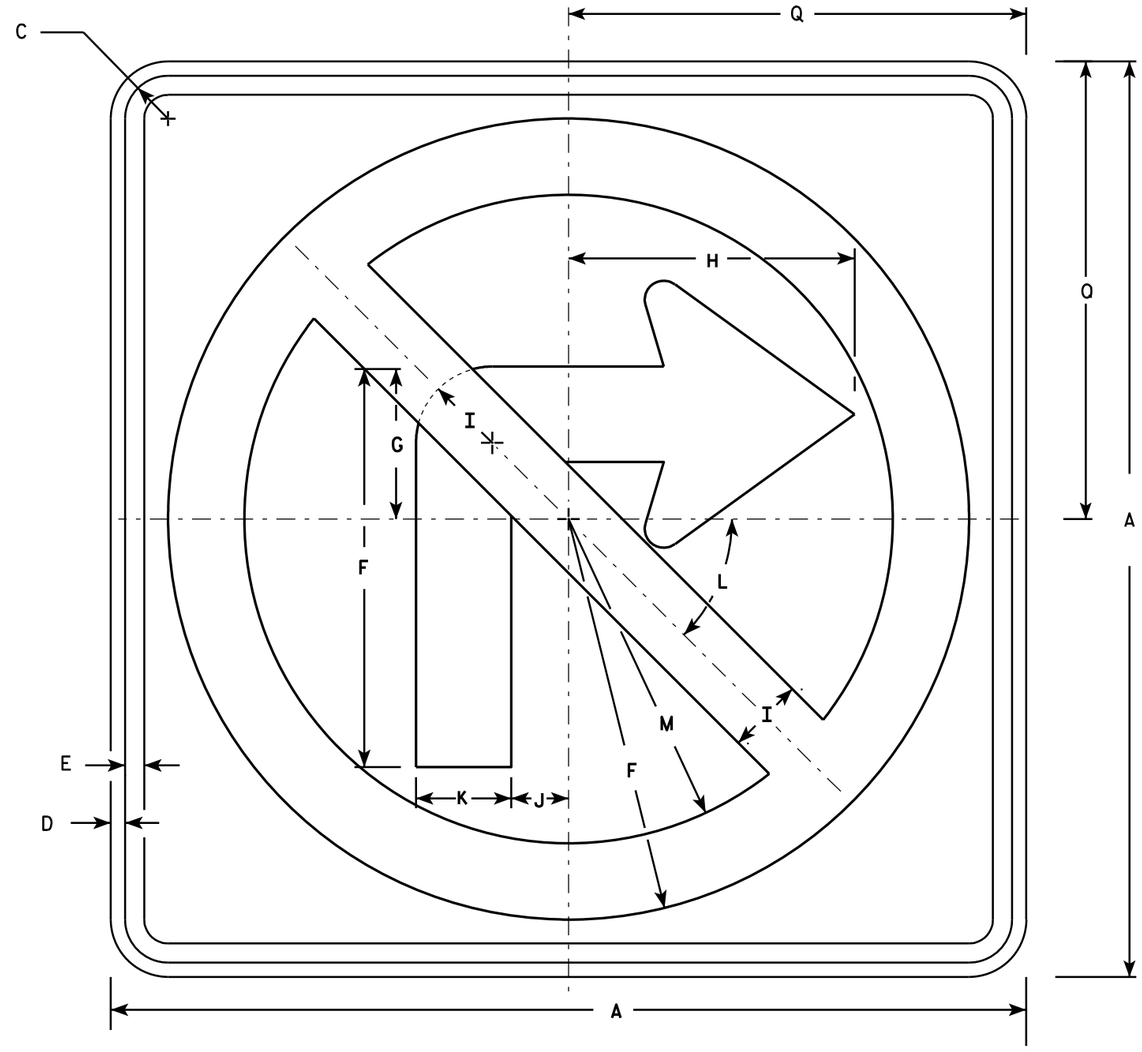
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 508 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000

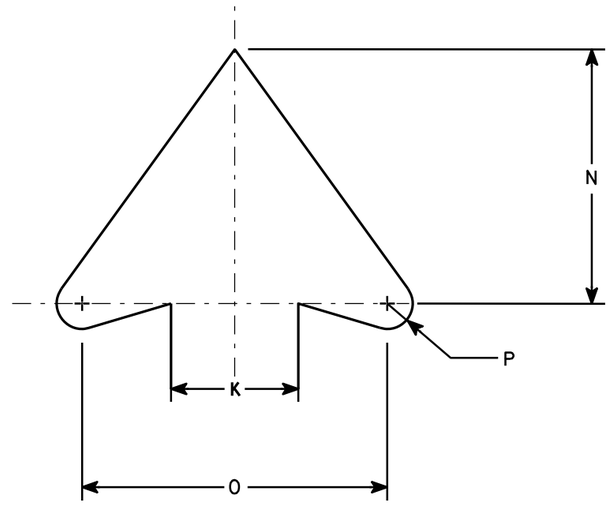
WISDOT/CADDS SHEET 42



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

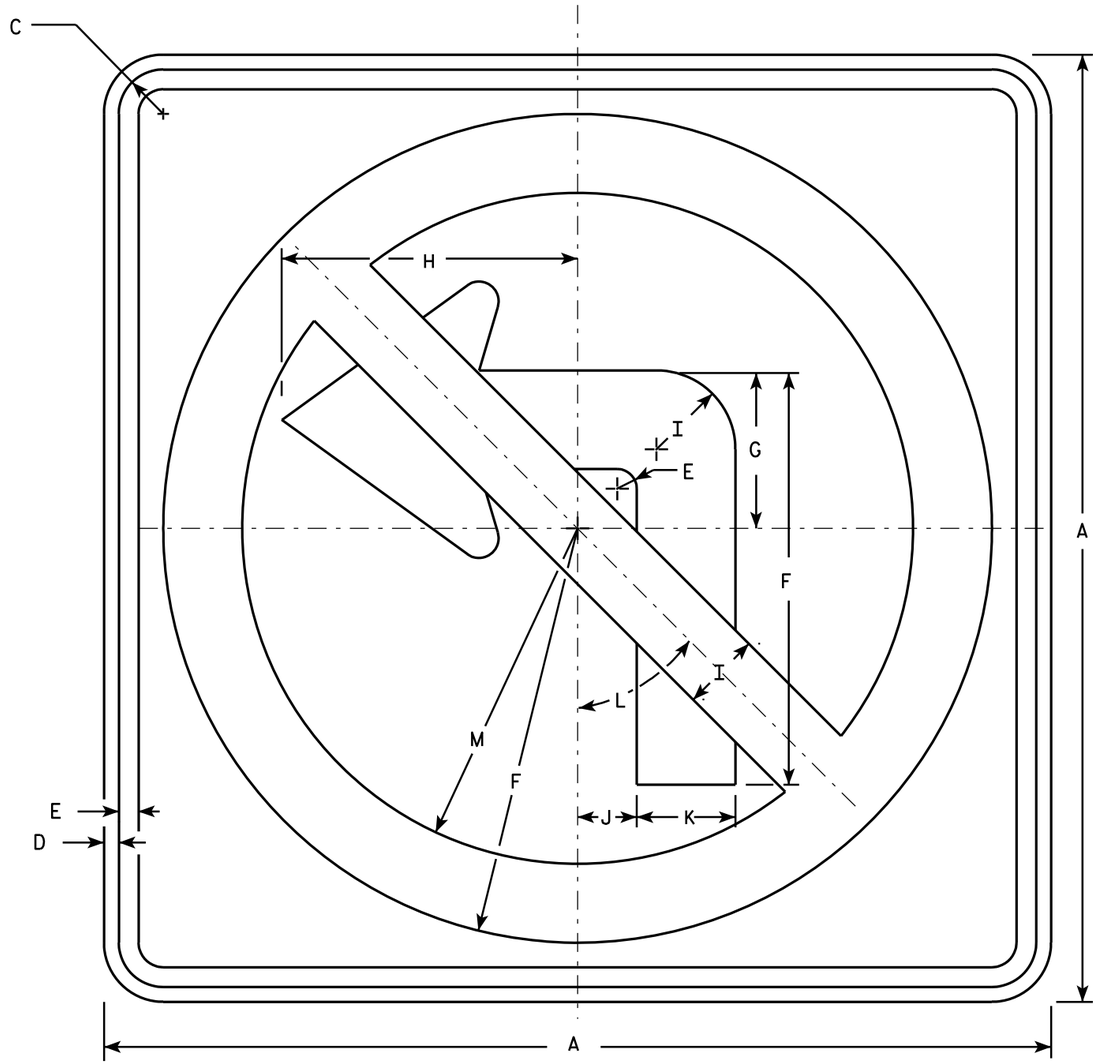
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

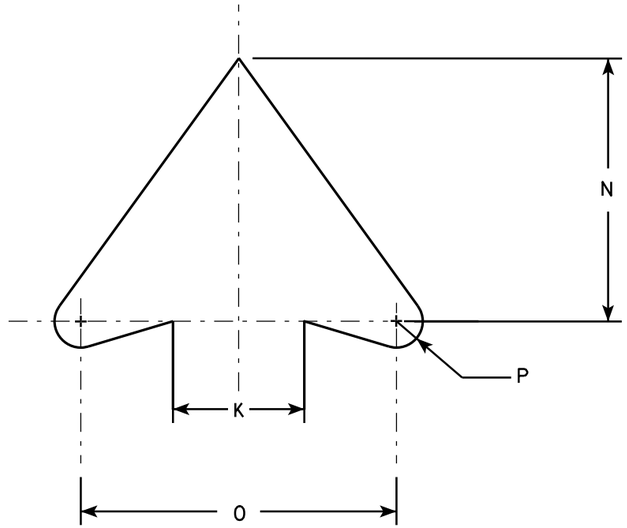
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 509	E



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

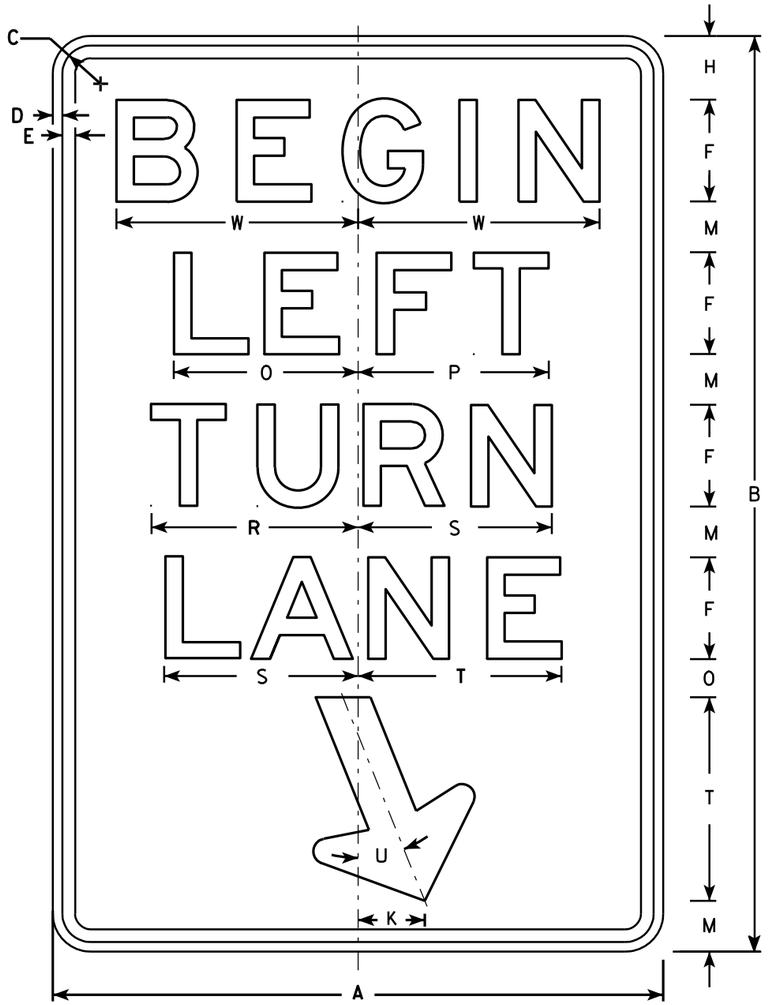
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

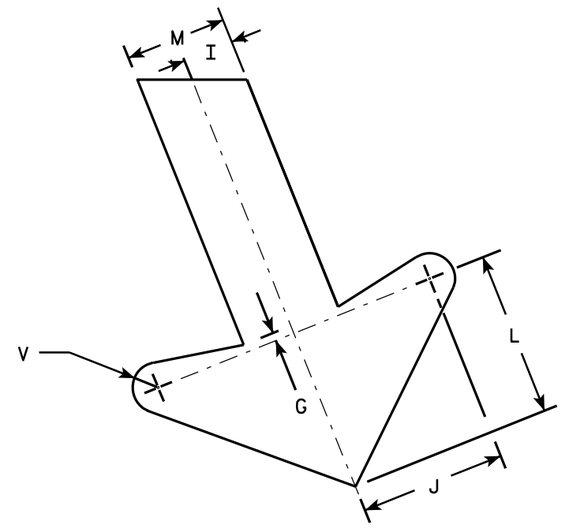
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 510	E



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																											

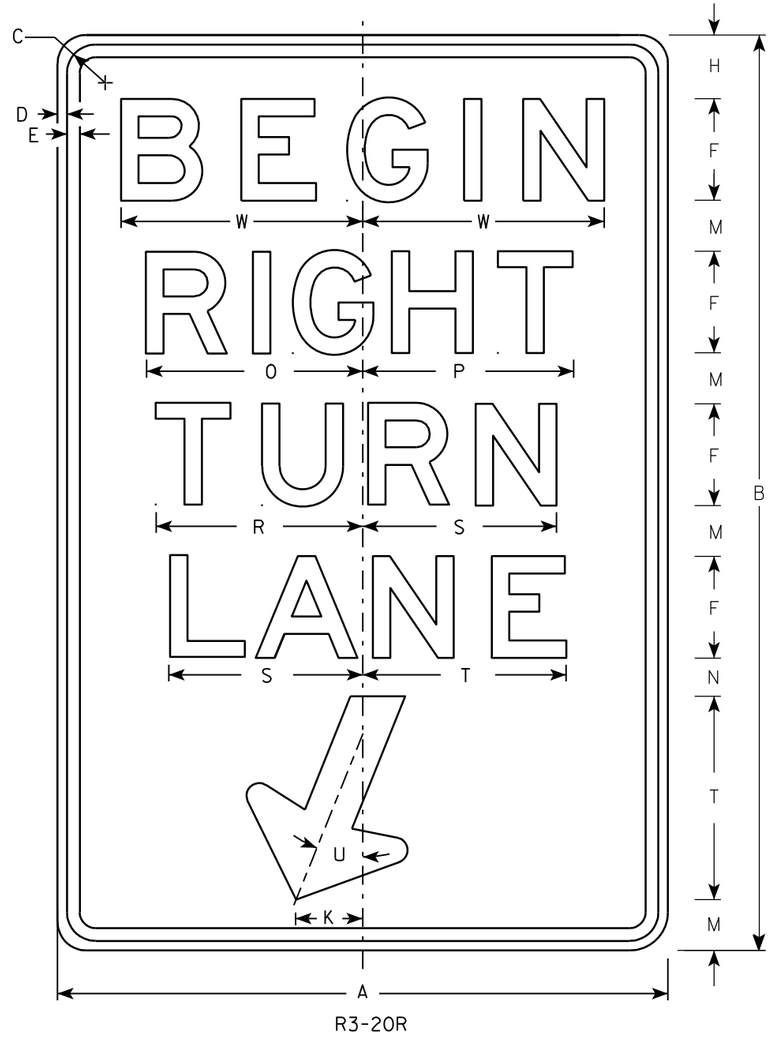
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

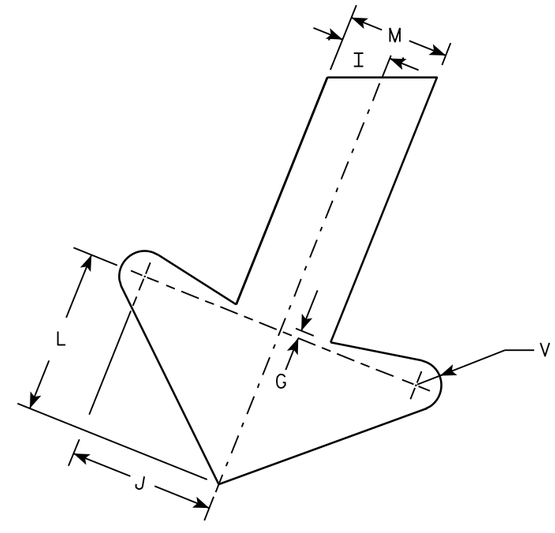
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 511 | E



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																											

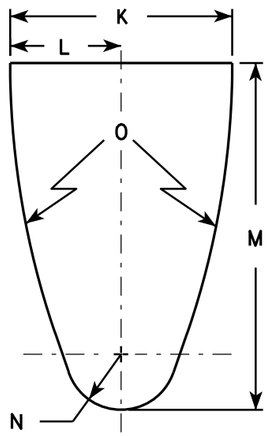
STANDARD SIGN
R3-20R

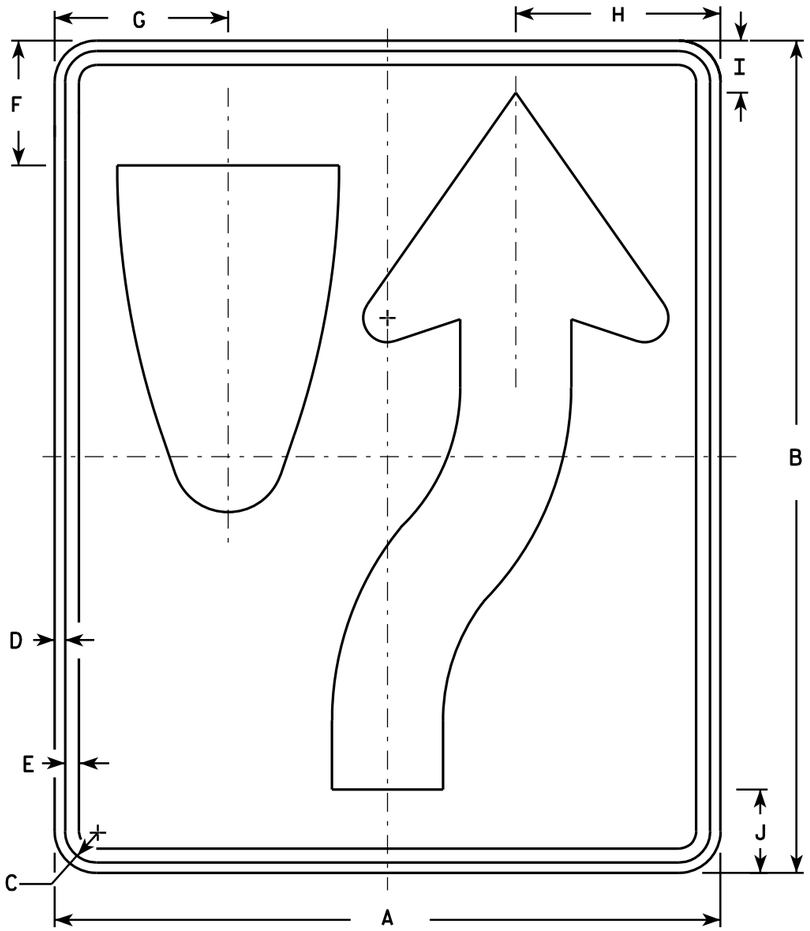
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 512 | E

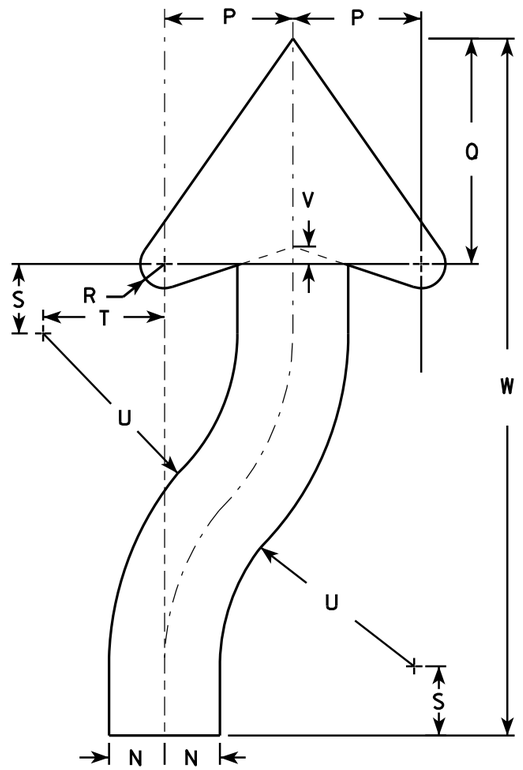




R4-7

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

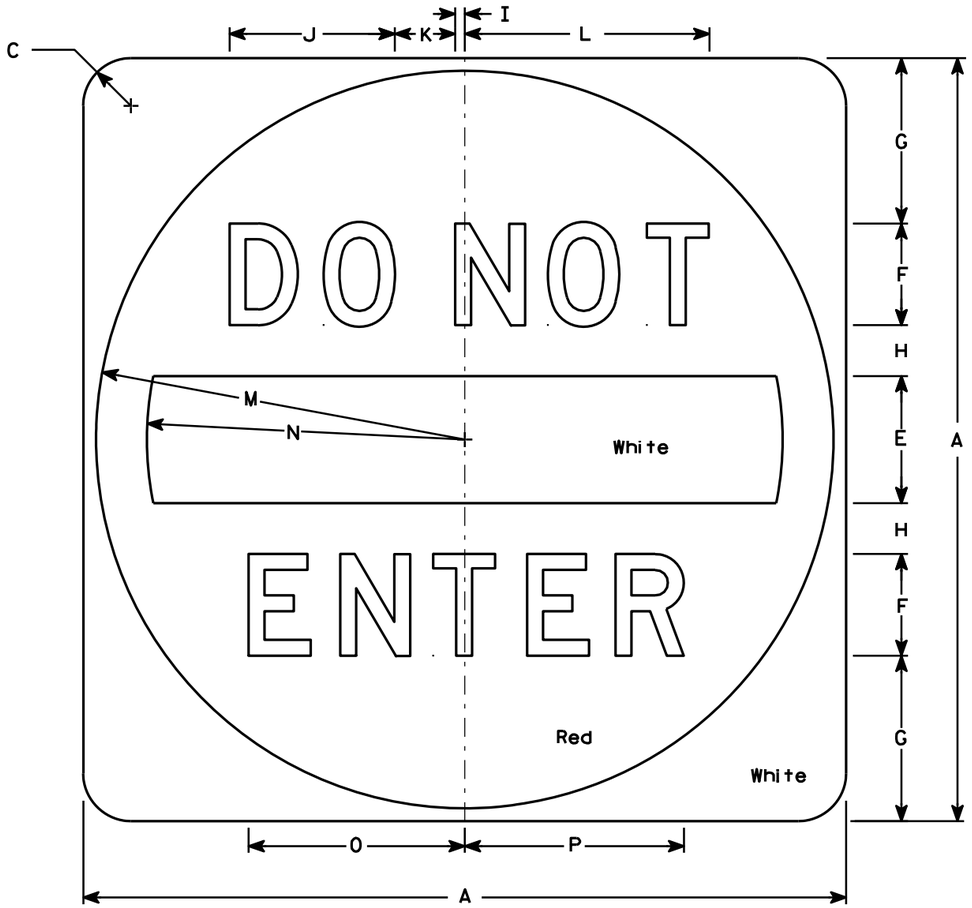
STANDARD SIGN
R4-7 & R4-8

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: 513	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

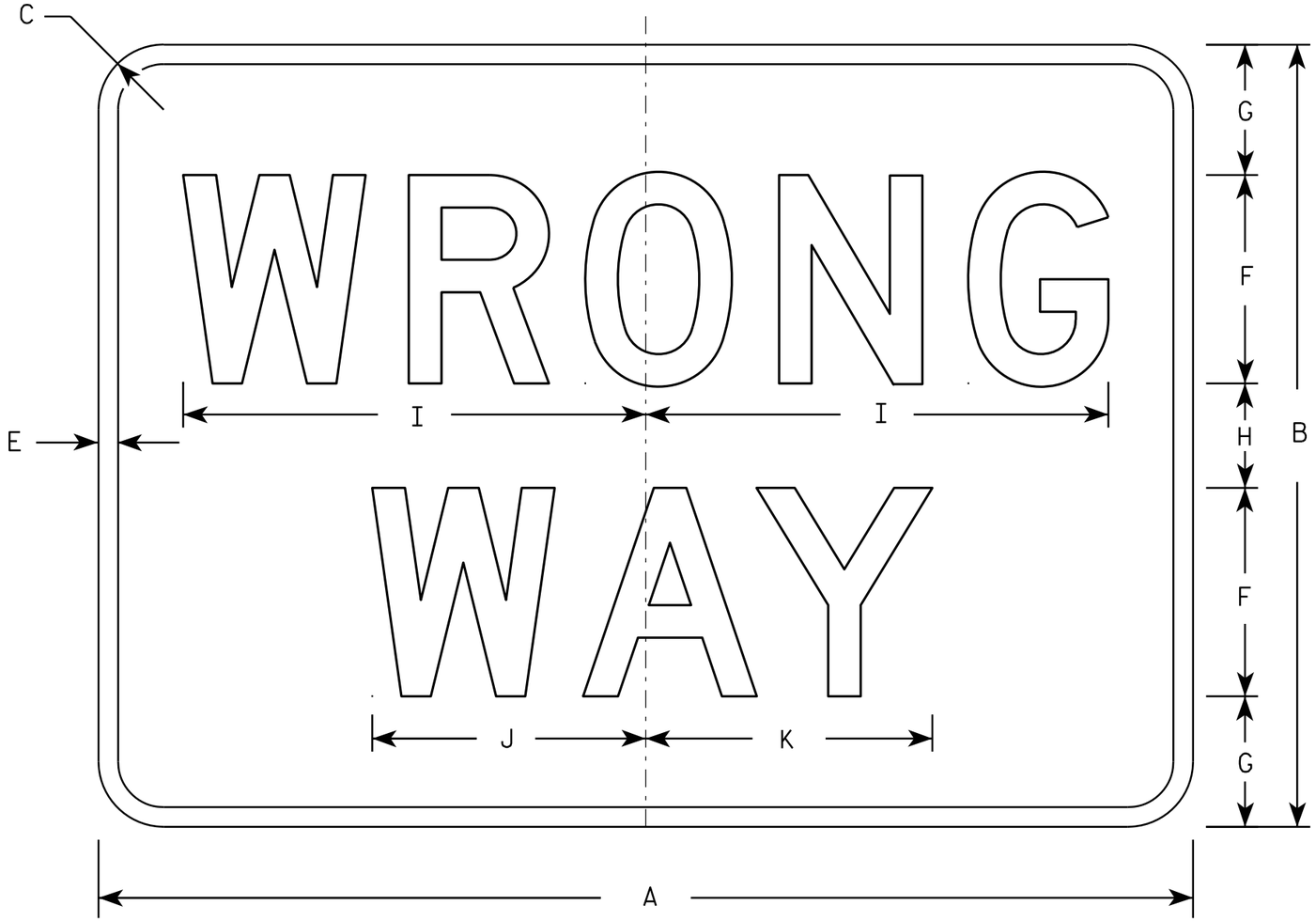
STANDARD SIGN
R5-1

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: 514 | 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: 515 | E

R5-57

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Lines 1, 2, and 5 are Series C.
   Lines 3 and 4 are Series B.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3																											
4	36		1 5/8	5/8	3/4	4	3	2	3 1/2	14 1/4	14 7/8	11	11 1/2	4 3/4	1 3/4	9		1 3/8	10	11	2 1/2	1 3/4	15 1/2	13	13 5/8		9.0
5	36		1 5/8	5/8	3/4	4	3	2	3 1/2	14 1/4	14 7/8	11	11 1/2	4 3/4	1 3/4	9		1 3/8	10	11	2 1/2	1 3/4	15 1/2	13	13 5/8		9.0

STANDARD SIGN
R5-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-57.10

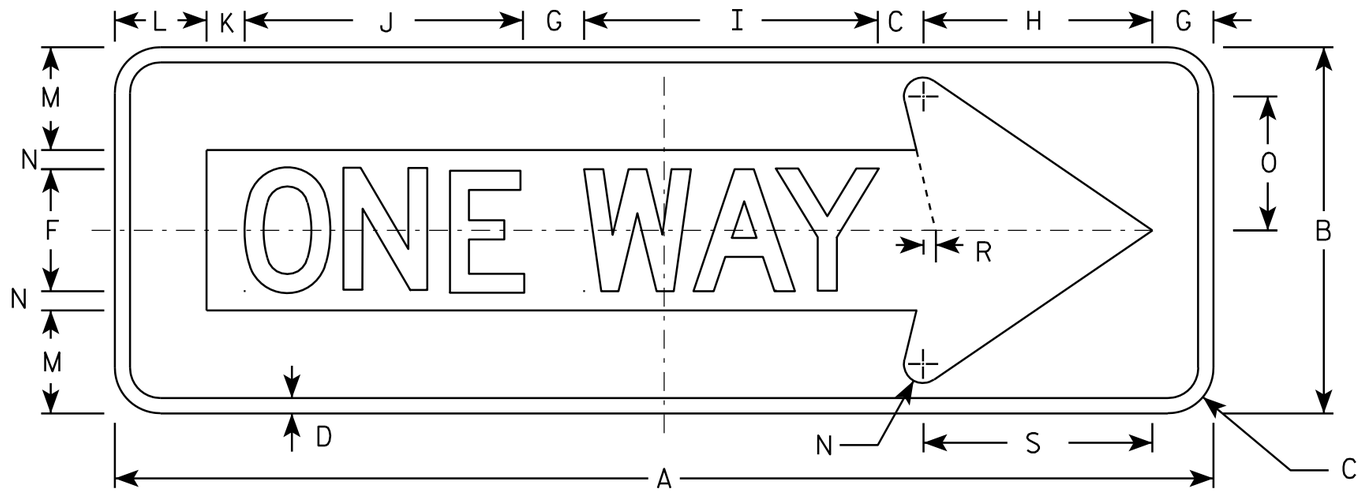
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 516 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R557.DGN PLOT DATE : 29-MAR-2011 14:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

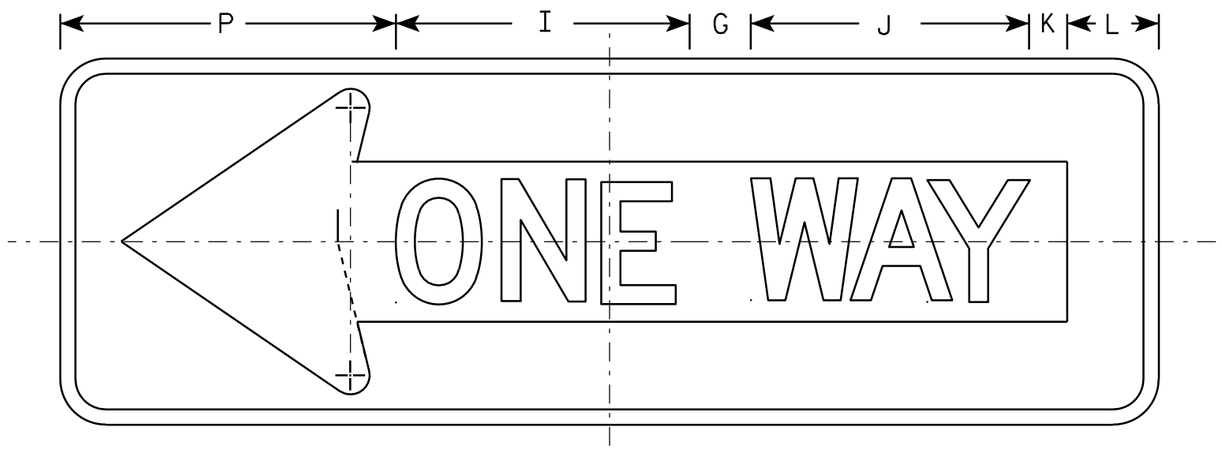
7



R6-1R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-1L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 ½	½		4	2	7 ½	9 ⅝	9 ⅛	1 ¼	3	3 ⅜	⅝	4 ⅜	11		⅜	7 ½								3.0
2M	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
3	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
4	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
5																											

STANDARD SIGN
R6-1 L & R

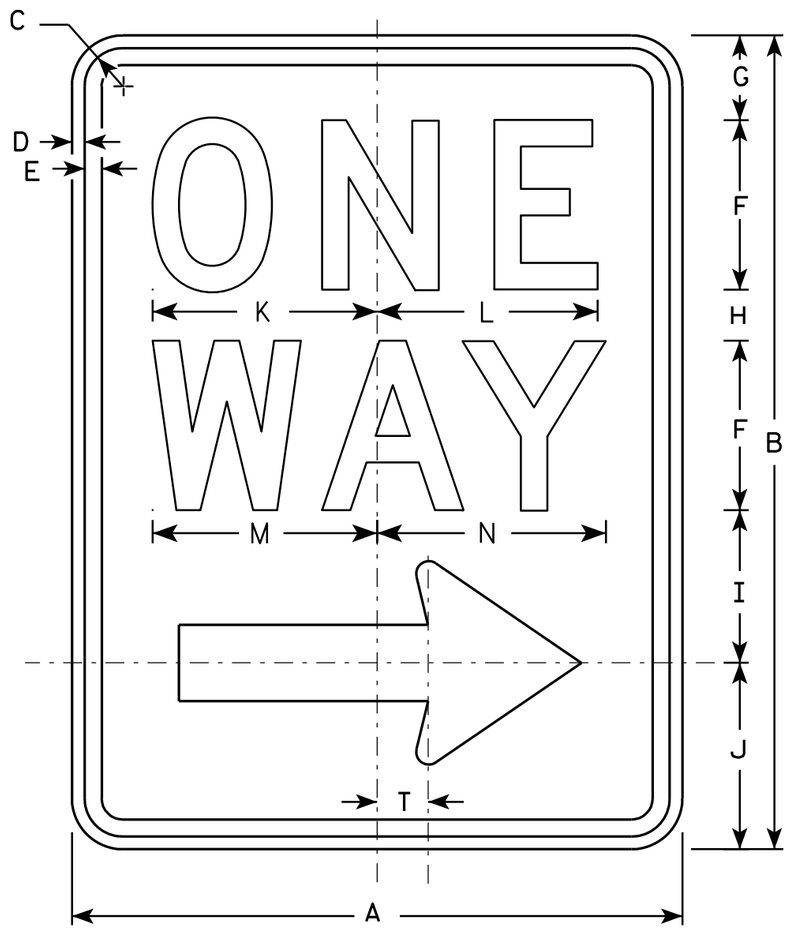
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R6-1.2

PROJECT NO:

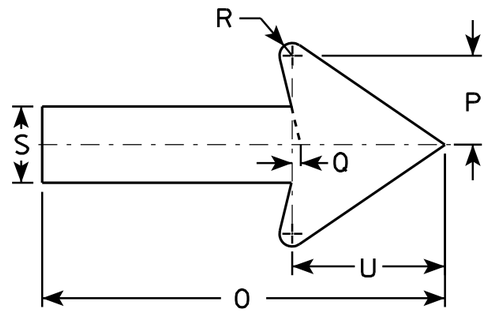
SHEET NO: 517 E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

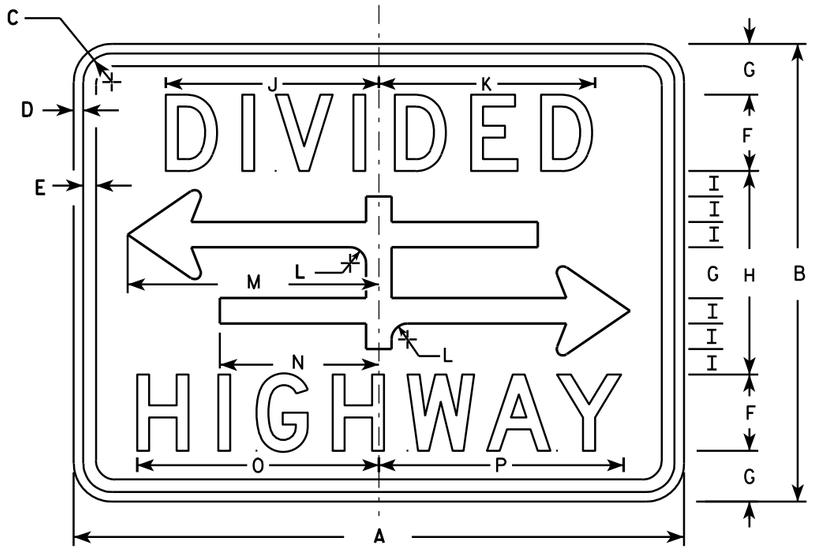
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

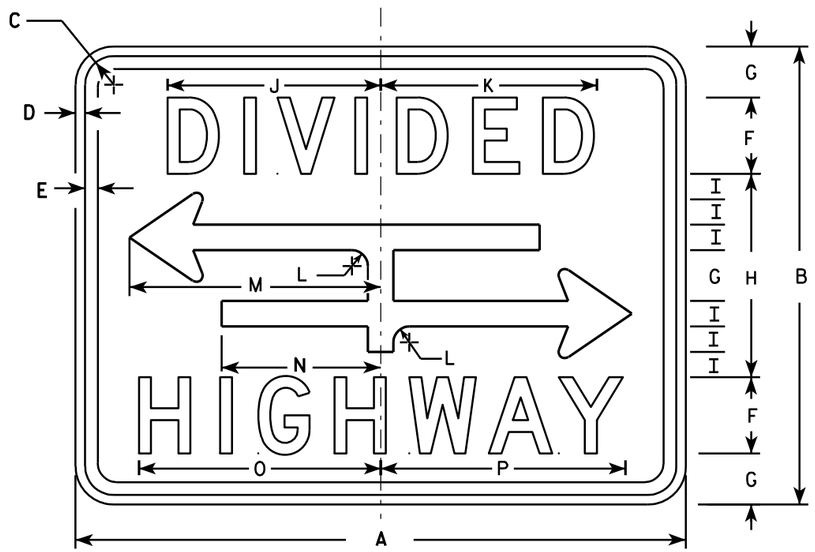
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 518	E



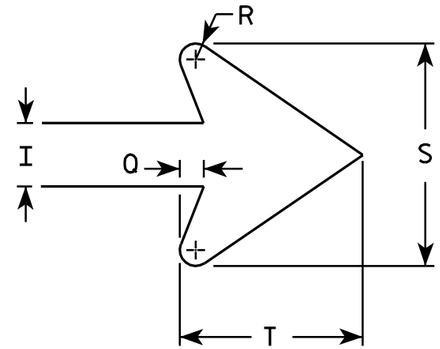
R6-3

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

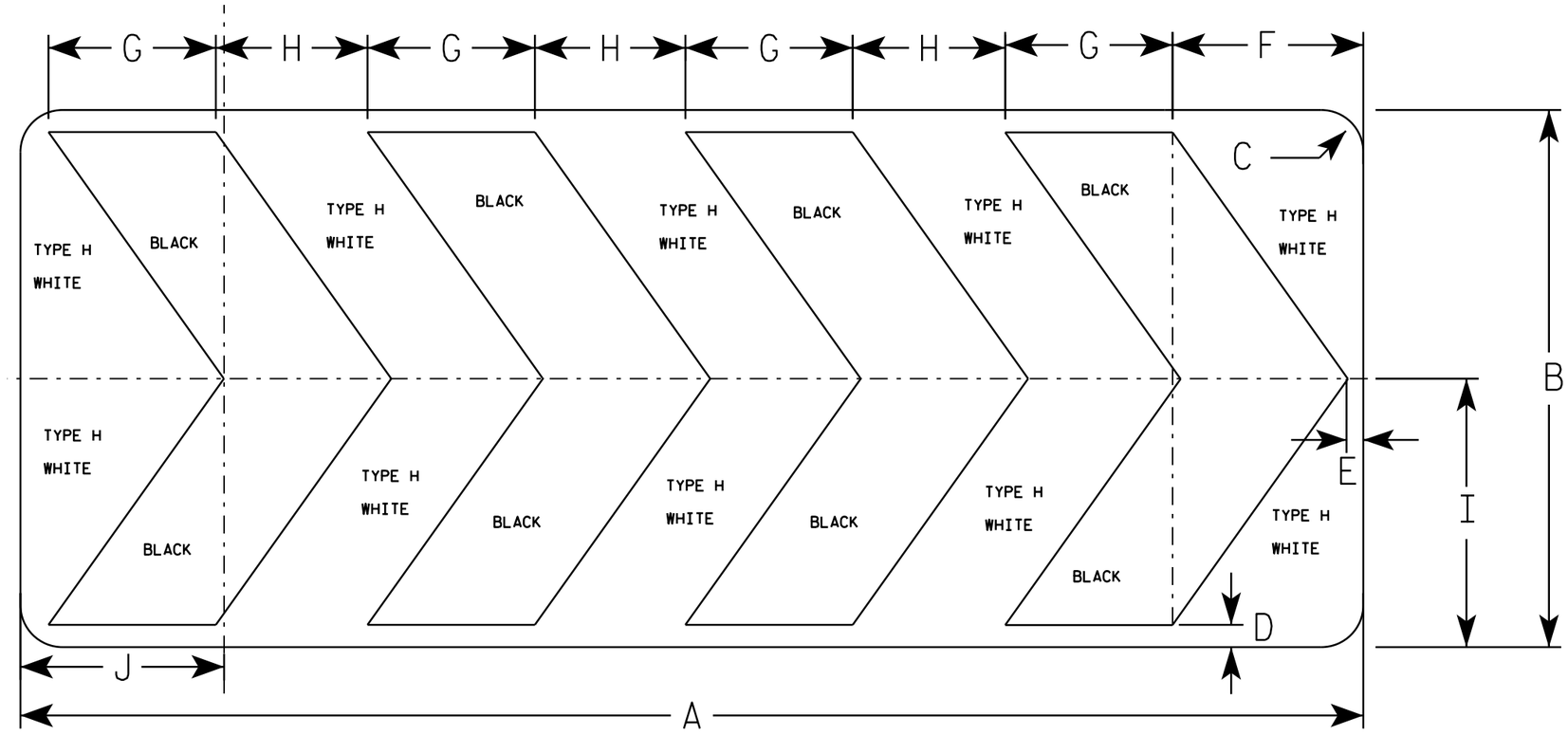
DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

SHEET NO: 519 E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-4B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
R6-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/14 PLATE NO. R6-4.3

PROJECT NO: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R64B.DGN PLOT DATE : 21-AUG-2014 15:01 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3/4	1/2	1/2	4	3 1/2	3	10 3/4	8 1/8																	3.75
2M	30	18	1 3/4	1/2	1/2	4	3 1/2	3	10 3/4	8 1/8																	3.75
3																											
4																											
5																											

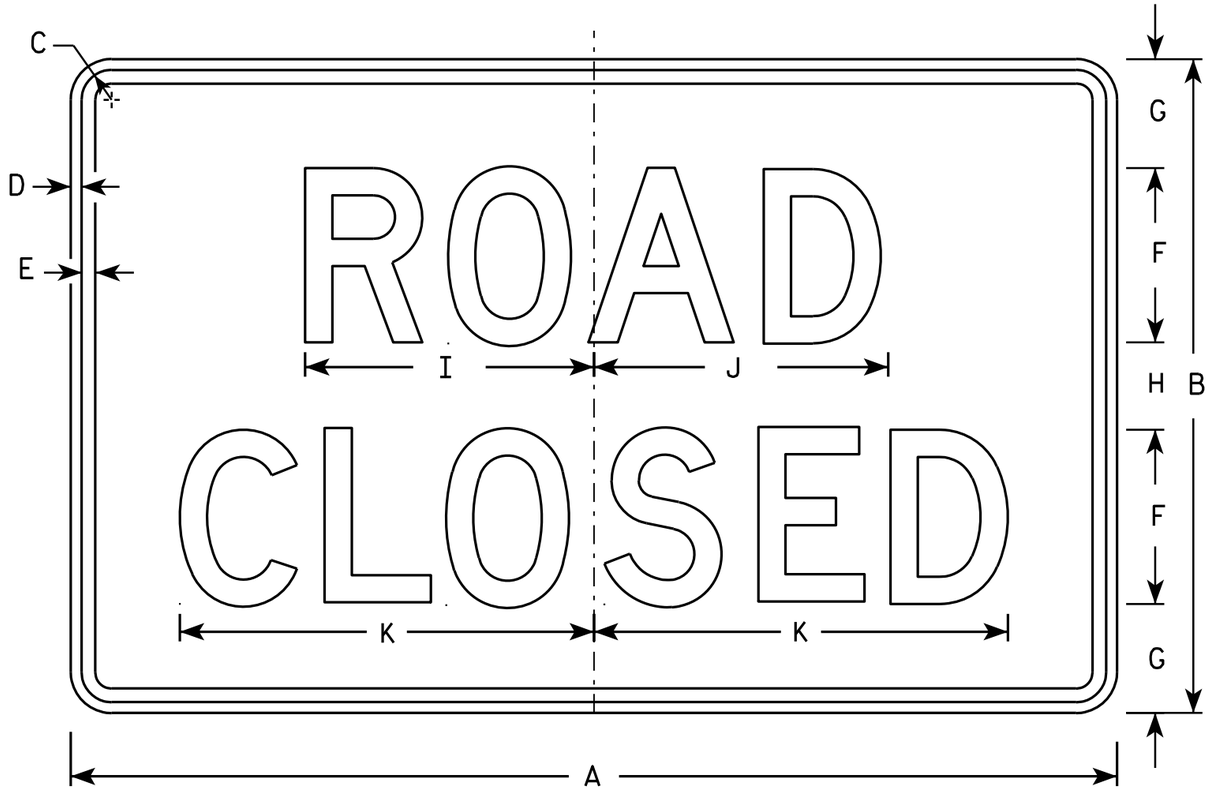
STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/2011 PLATE NO. R9-9.5

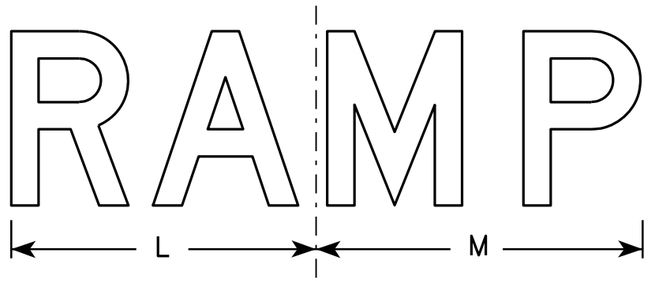
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 521	E



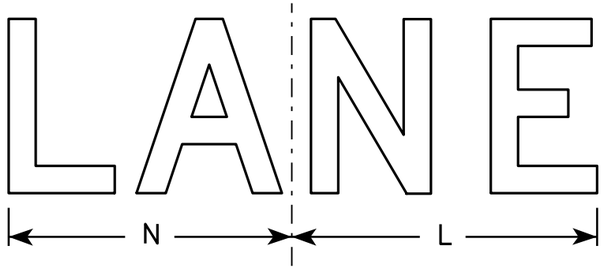
R11-2

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

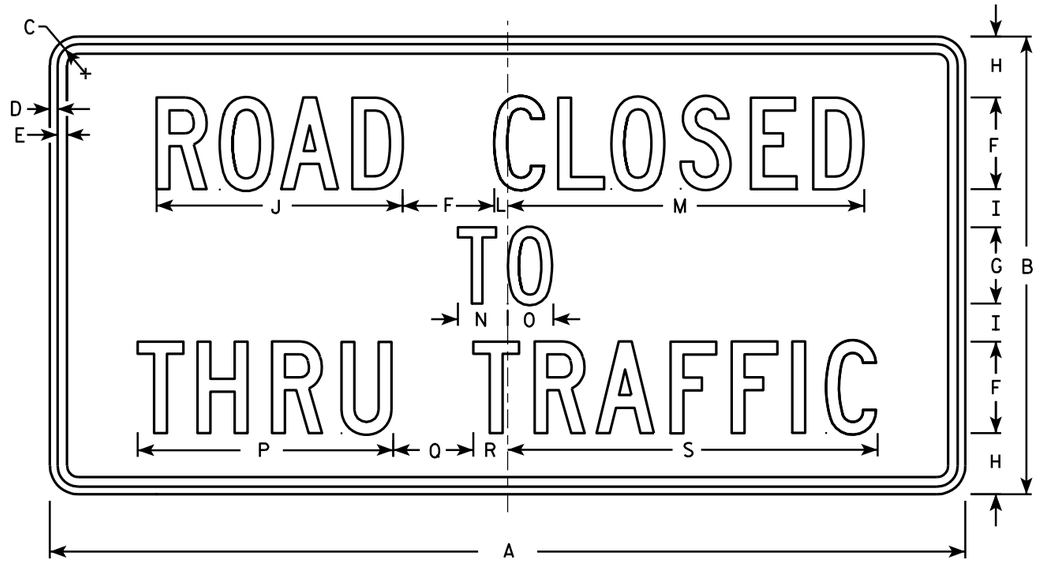
STANDARD SIGN
R11-2

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: 522	E



R11-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

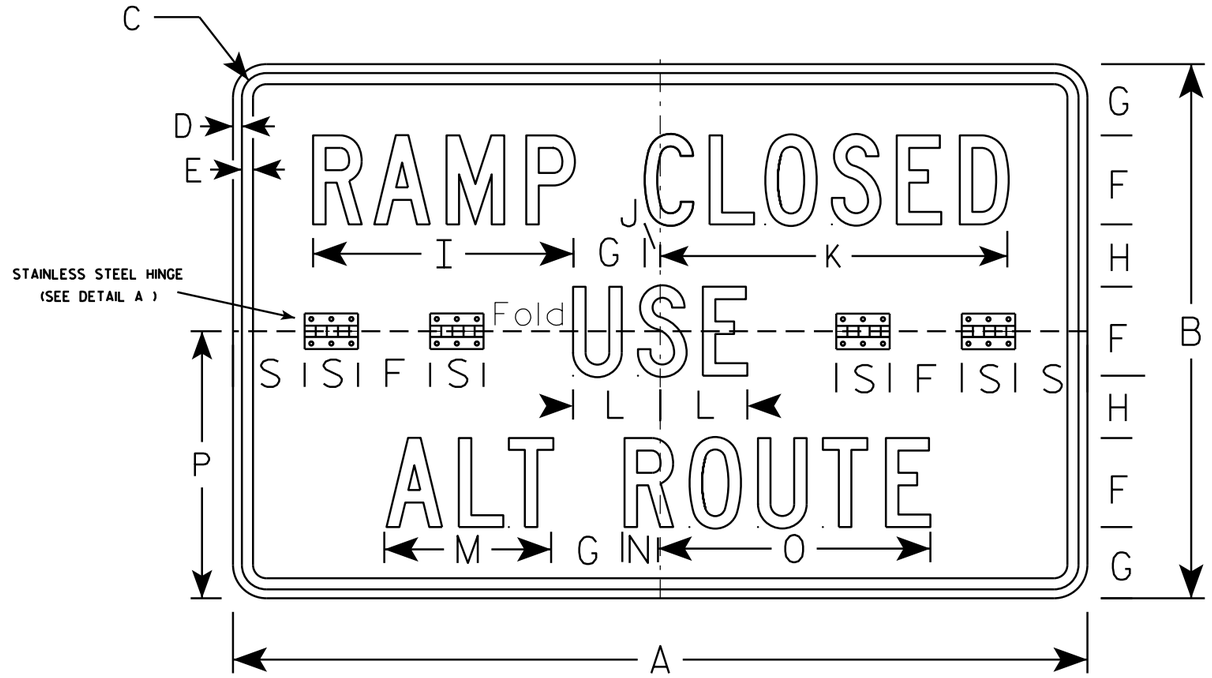
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

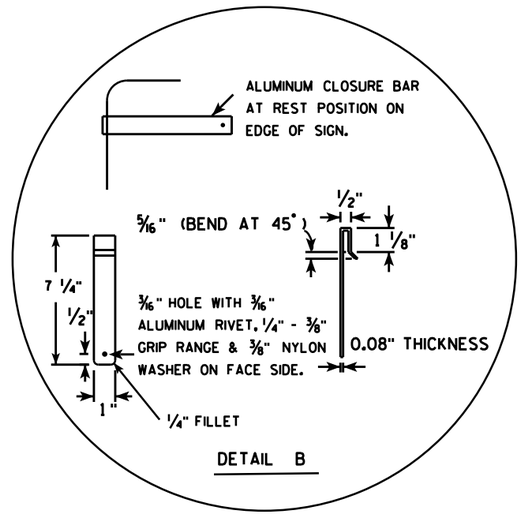
DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 523 | E



R11-54F

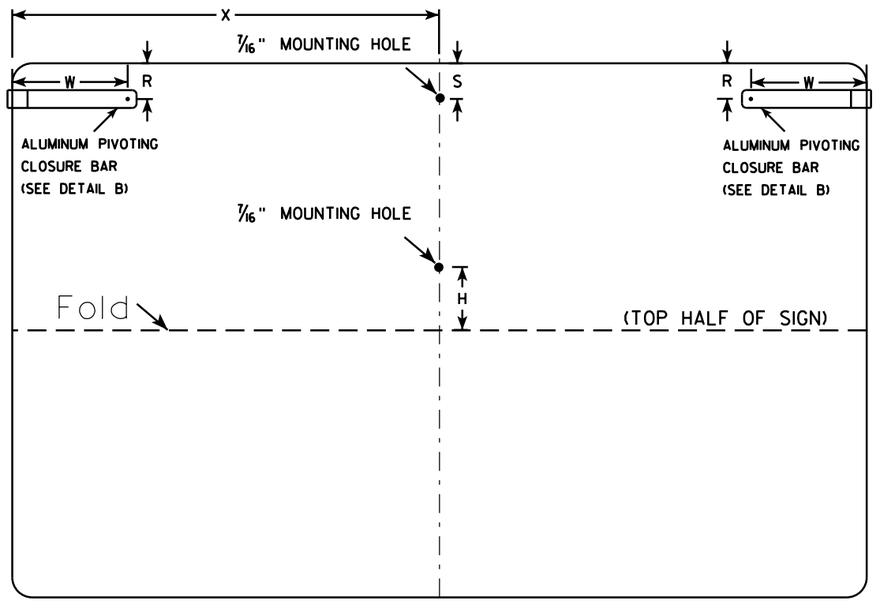
DETAIL A



DETAIL B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - C
4. Sign Base Material shall be aluminum, corners and borders shall be rounded.
5. All hardware used on the folding sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.
6. Refer to plate A5-3A for sign blank layout.



(BACK VIEW)

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
2M	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
3																											
4																											
5																											

STANDARD SIGN
R11-54F

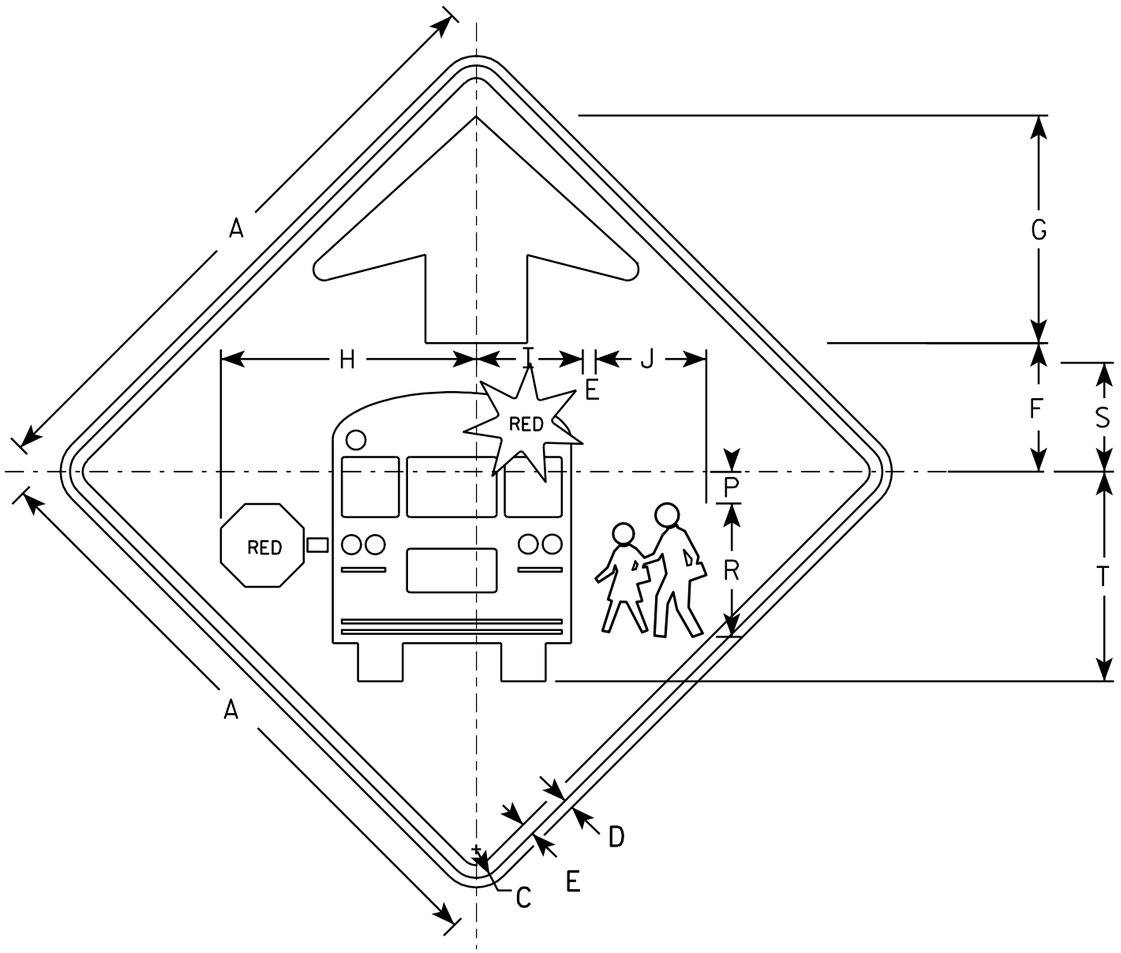
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/28/14 PLATE NO. R11-54F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

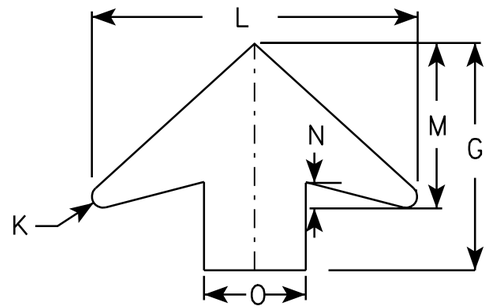
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R1154F.DGN PLOT DATE : 28-MAY-2014 14:15 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 8.511110:1.000000
WISDOT/CADDS SHEET 42



S3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW-GREEN
   Message - BLACK except as noted
   Circles except PEDS- RED BACKGROUND
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	12 1/2	5 1/4	5 1/2	1/2	16	8	1 1/4	5	1 1/2		6 5/8	5 3/8	10 3/8							6.25
2	36		1 5/8	5/8	3/4	7 1/2	13 1/2	15 1/8	6 1/4	6 1/2	5/8	19 1/4	9 3/4	1 5/8	6	1 7/8		7 7/8	6 3/8	12 3/8							9.0
3	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
4	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
5																											

STANDARD SIGN
S3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

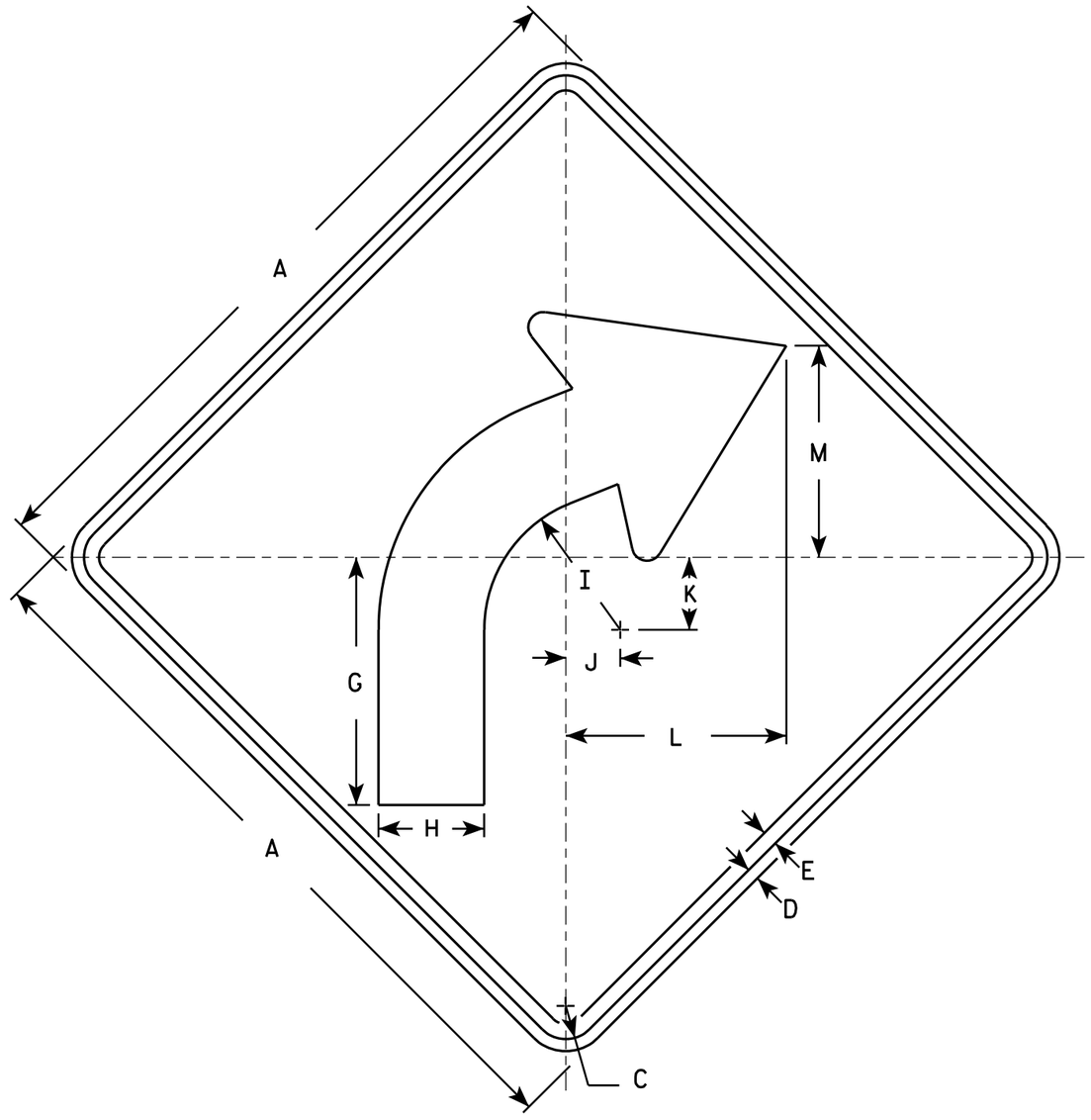
DATE 6/8/10 PLATE NO. S3-1.6

PROJECT NO:

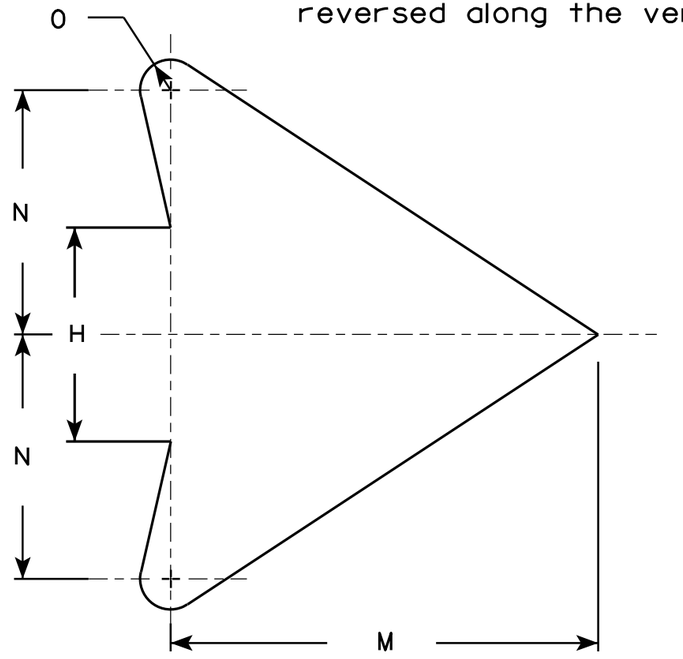
SHEET NO: 525 E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

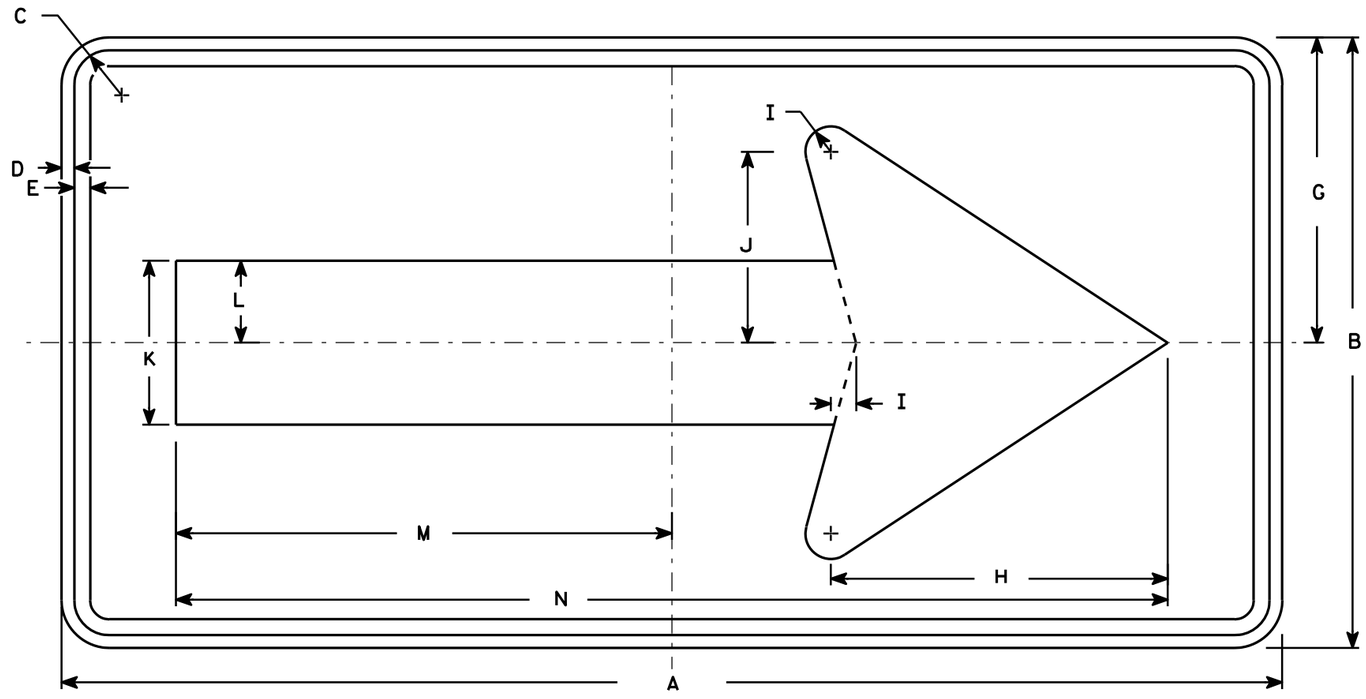
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 526	E



W1-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

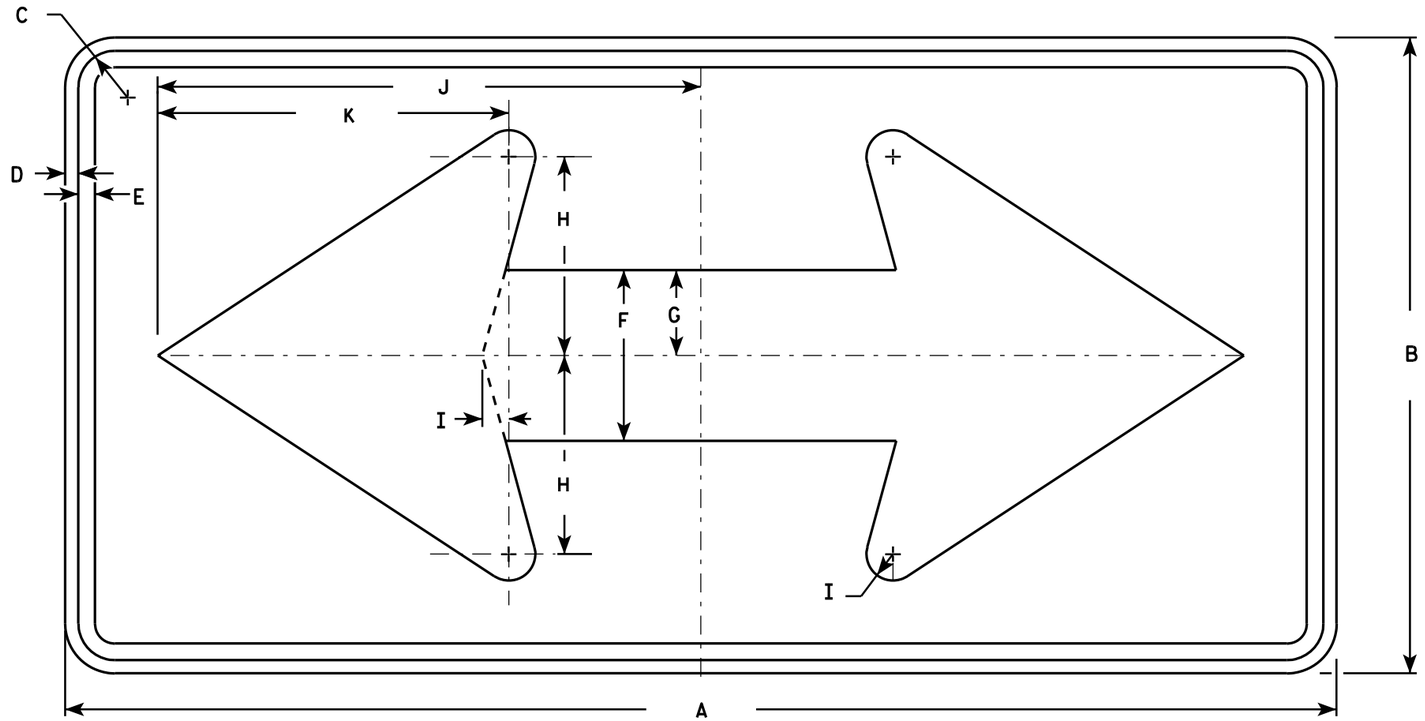
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 527



W1-7

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

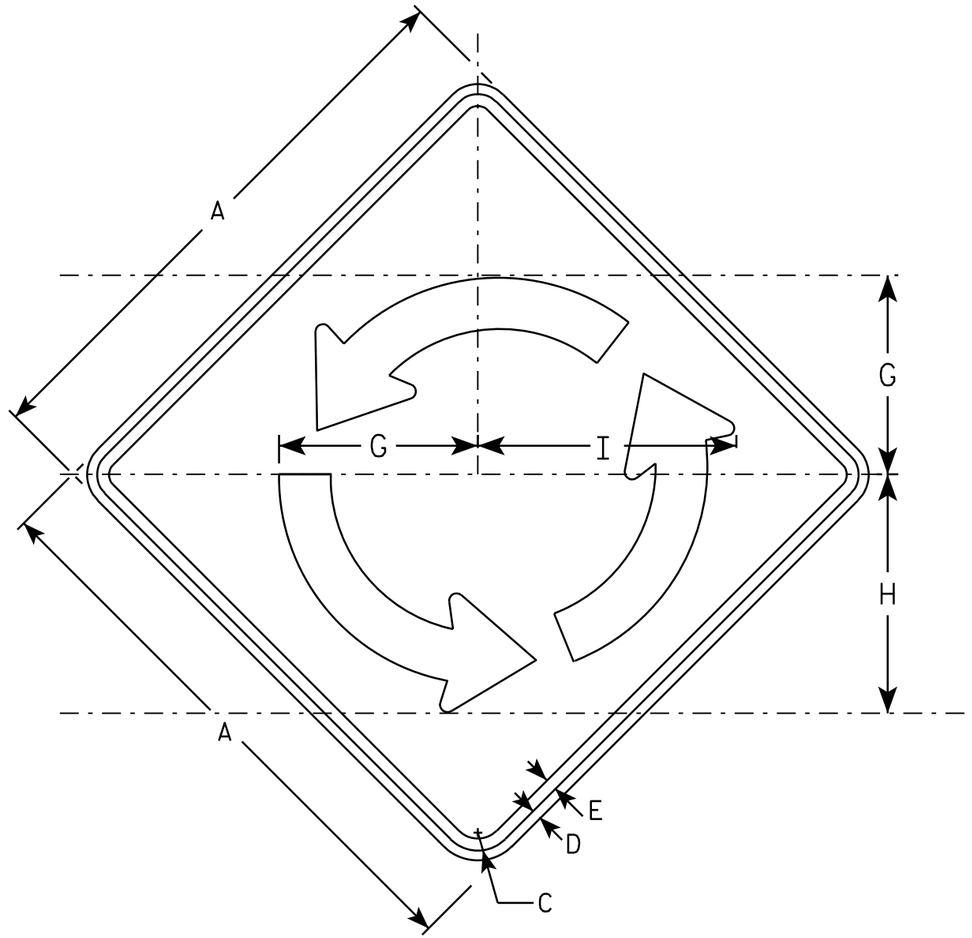
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

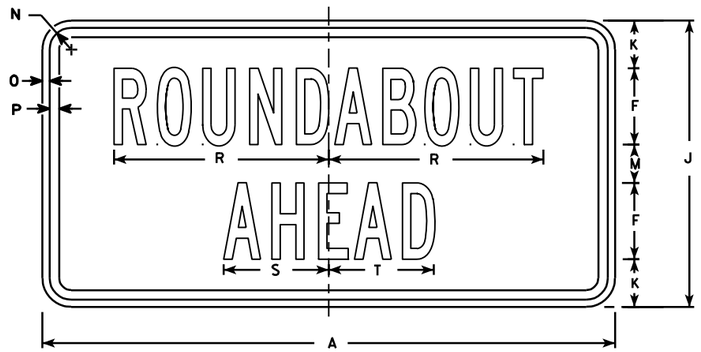
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 528 | E



W2-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Message - BLACK
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W2-6P

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	W2-6 Area sq. ft.	W2-6P Area sq. ft.
1																										
2S	30		1 3/8	1/2	5/8	4	10 3/8	12 1/2	13 1/2	15	2 1/2		2	1 1/8	3/8	1/2		11 1/4	5 1/2	5 1/2					6.25	3.12
2M	30		1 3/8	1/2	5/8	4	10 3/8	12 1/2	13 1/2	15	2 1/2		2	1 1/8	3/8	1/2		11 1/4	5 1/2	5 1/2					6.25	3.12
3	36		1 5/8	5/8	3/4	5	12 1/2	15	16 1/4	18	2 5/8		2 3/4	1 1/8	3/8	1/2		14	7	6 3/4					9.00	4.50
4	48		2 1/4	3/4	1	6	16 5/8	20	16 1/4	24	4 3/8		3 5/8	1 3/8	1/2	5/8		17	8 1/4	8 1/4					16.0	8.0
5																										

STANDARD SIGN
W2-6

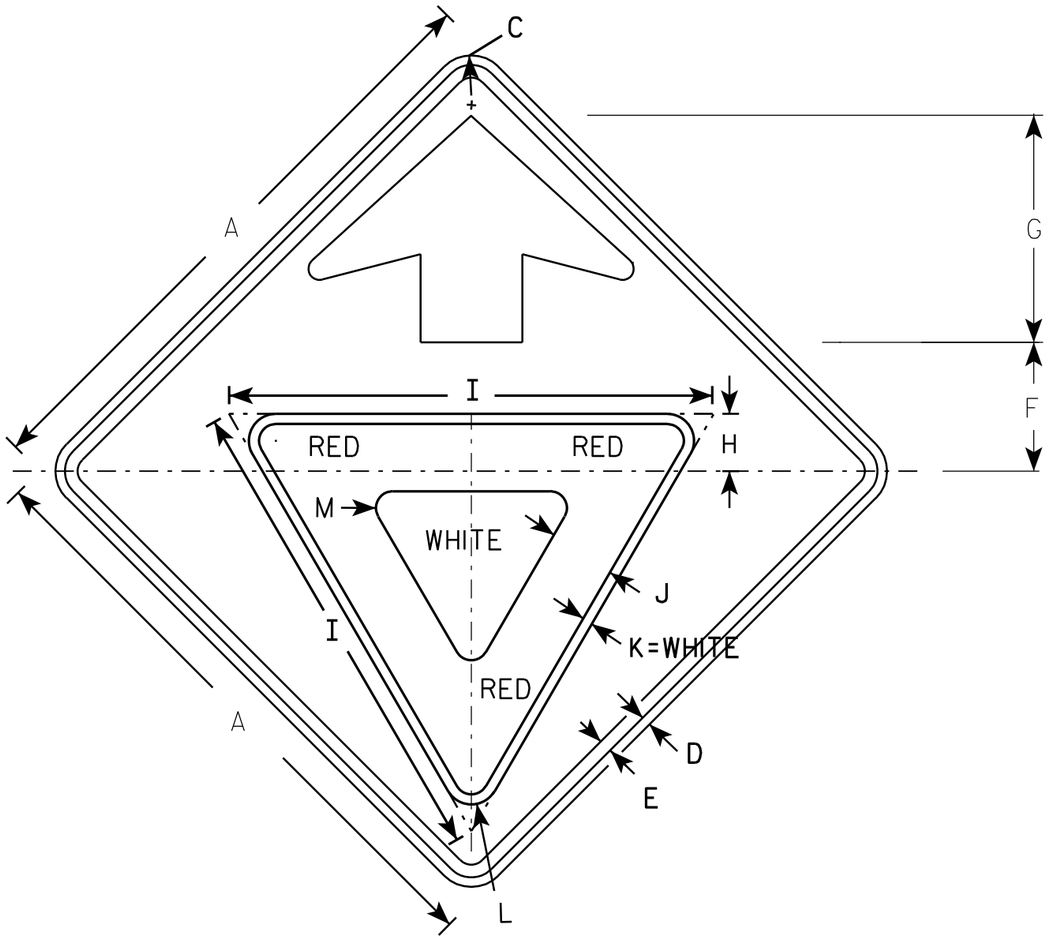
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/29/12 PLATE NO. W2-6.5

PROJECT NO:

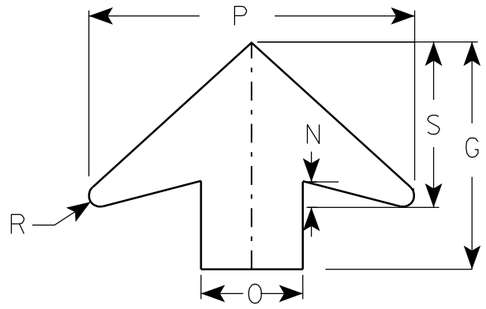
SHEET NO: 529 E



W3-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Yield Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	3	25	3 3/8	1/2	1 3/8	7/8	1 1/4	5	16		1/2	8								6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

STANDARD SIGN
W3-2

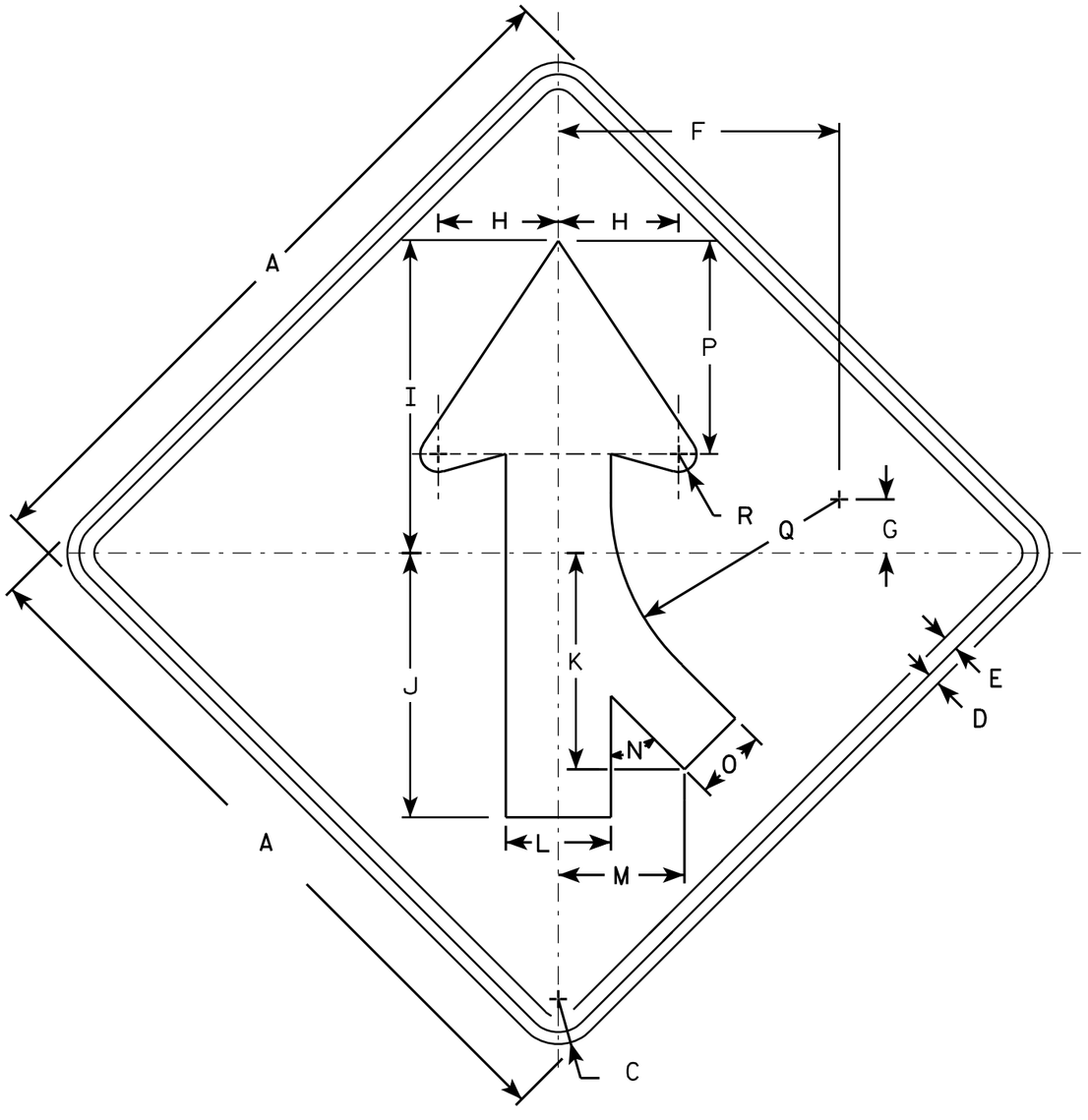
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-2..9

PROJECT NO:

SHEET NO: 530 E



W4-1 R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-1L is the same as W4-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	11 5/8	2 1/2	5	13	11	9	4 3/8	5 1/4	45°	3	8 7/8	9 1/2	3/4									6.25
2S	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2M	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
3	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

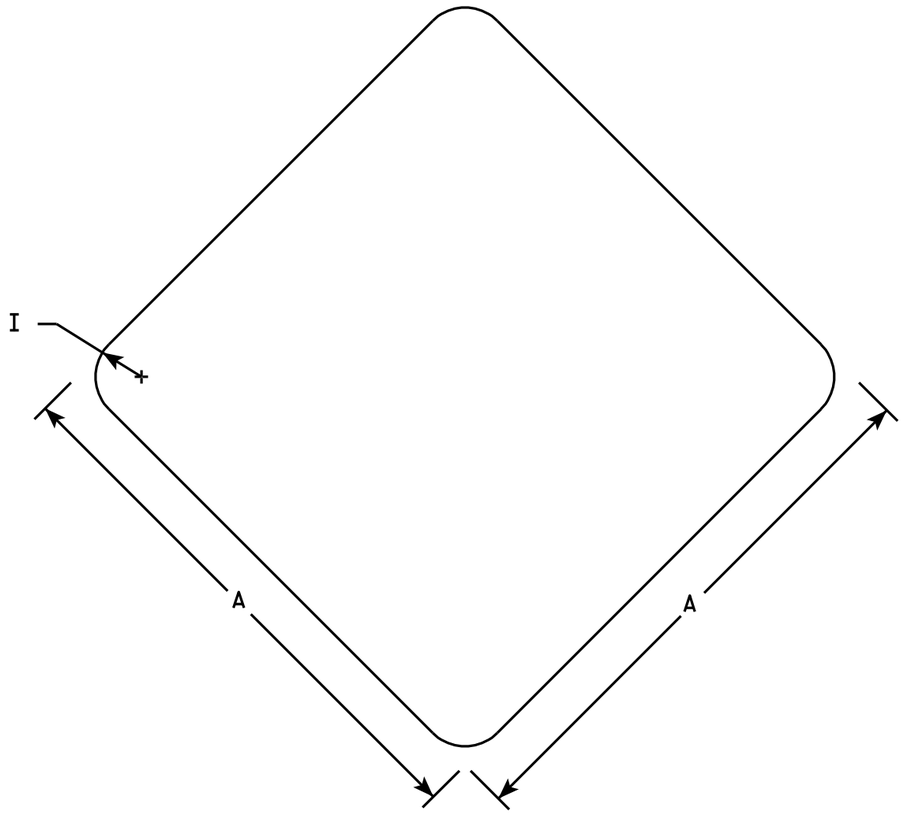
STANDARD SIGN
W4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 531	E



W5-56

NOTES

1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

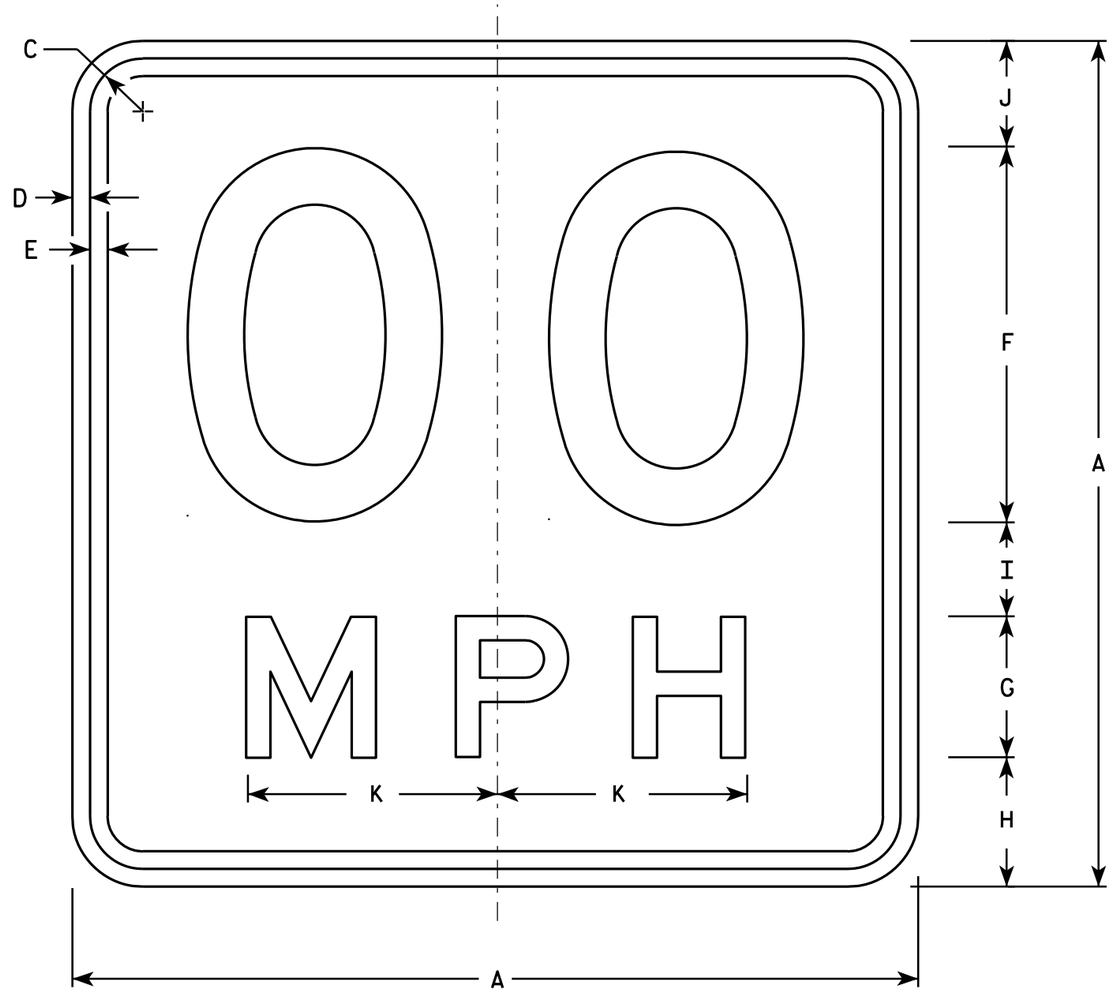
STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. W5-56.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 532	E



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

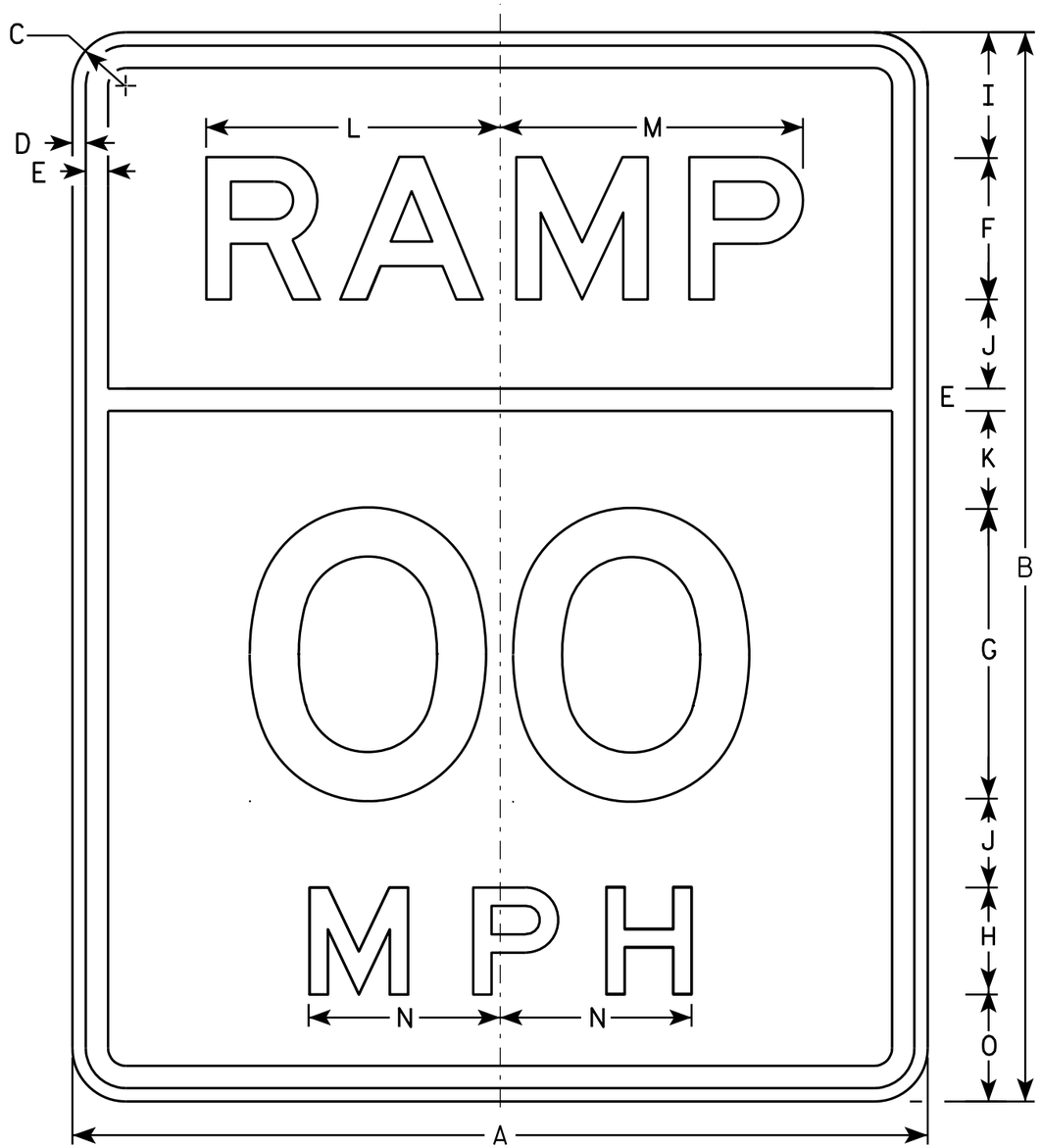
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 533 | E



W13-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. 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 space about centerline 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	24	30	1 1/8	3/8	5/8	4	8	3	3 1/2	2 1/2	2 7/8	8 1/4	8 1/2	5 3/8	3												5.0
2S	24	30	1 1/8	3/8	5/8	4	8	3	3 1/2	2 1/2	2 7/8	8 1/4	8 1/2	5 3/8	3												5.0
2M	24	30	1 1/8	3/8	5/8	4	8	3	3 1/2	2 1/2	2 7/8	8 1/4	8 1/2	5 3/8	3												5.0
3																											
4	36	48	1 5/8	5/8	7/8	6	12	4	6	4 1/8	5 1/8	13 1/2	13 5/8	7 1/8	6												12.0
5	48	60	2 1/4	3/4	1 1/4	8	16	6	7	5	5 3/4	16 1/2	17	10 5/8	6												20.0

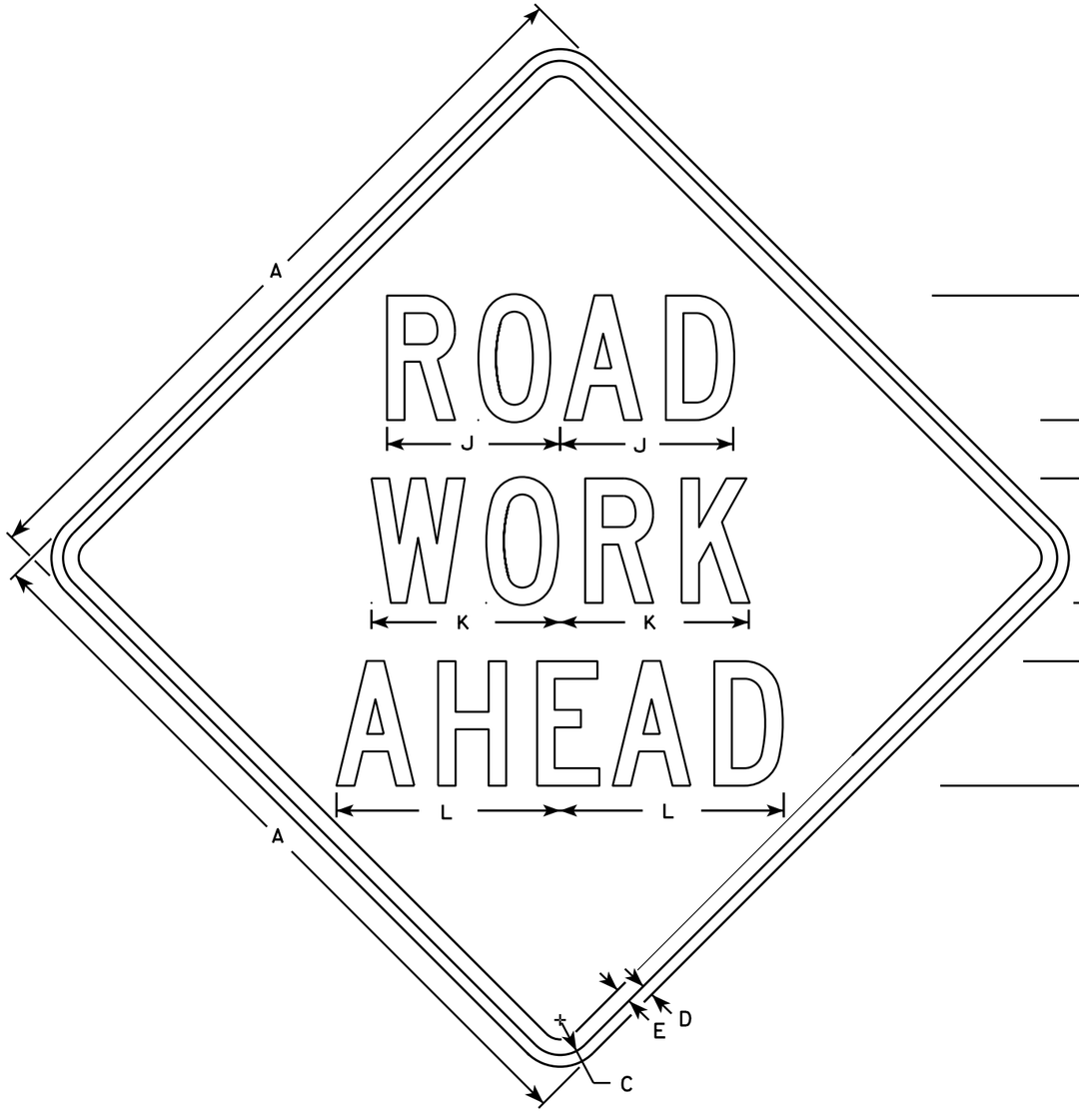
STANDARD SIGN
W13-3

WISCONSIN DEPT OF TRANSPORTATION

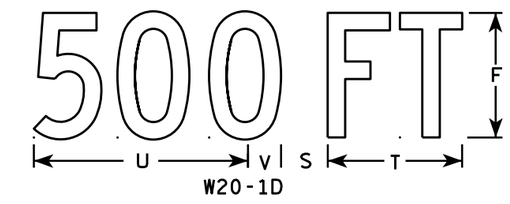
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/13/13 PLATE NO. W13-3.9

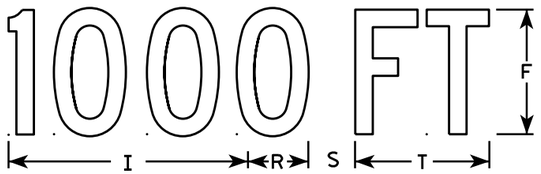
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 534 | E



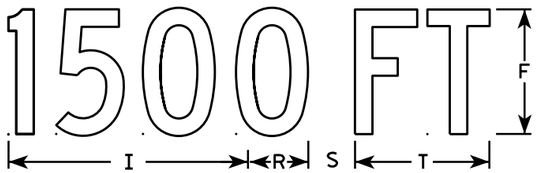
W20-1A



W20-1D



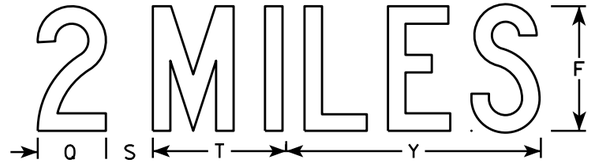
W20-1C



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

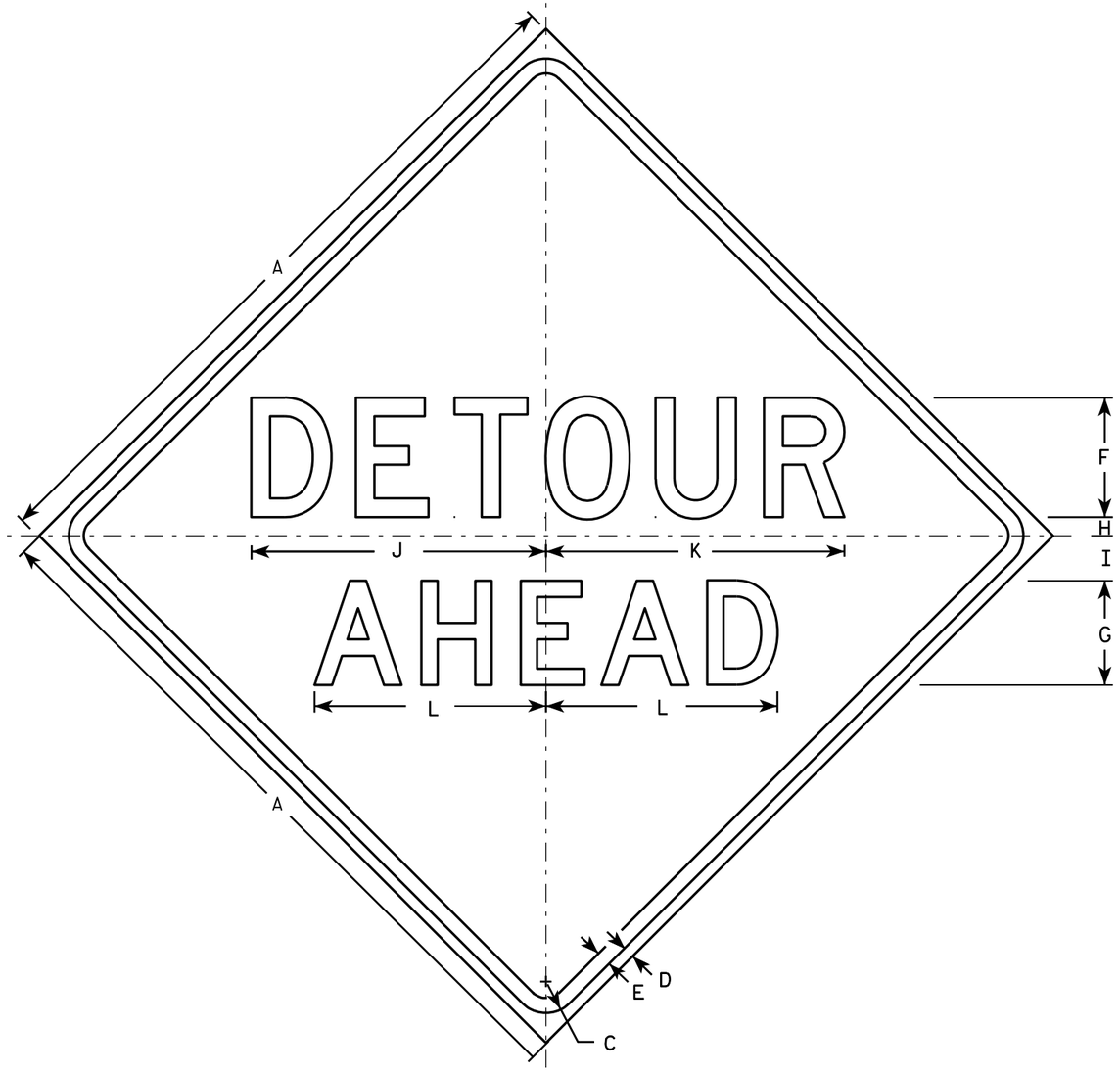
APPROVED

State Traffic Engineer

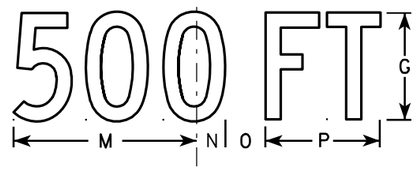
DATE 5/07/15 PLATE NO. W20-1.10

PROJECT NO:

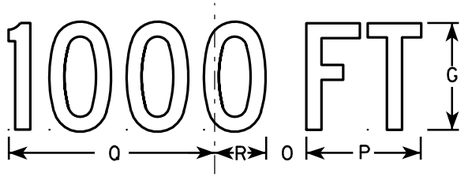
SHEET NO: E



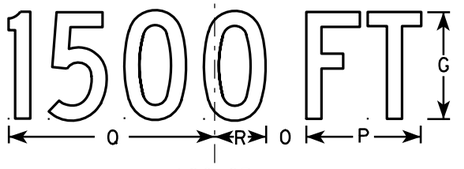
W20-2A



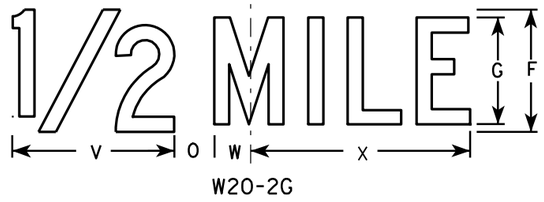
W20-2D



W20-2C



W20-2B



W20-2G

W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

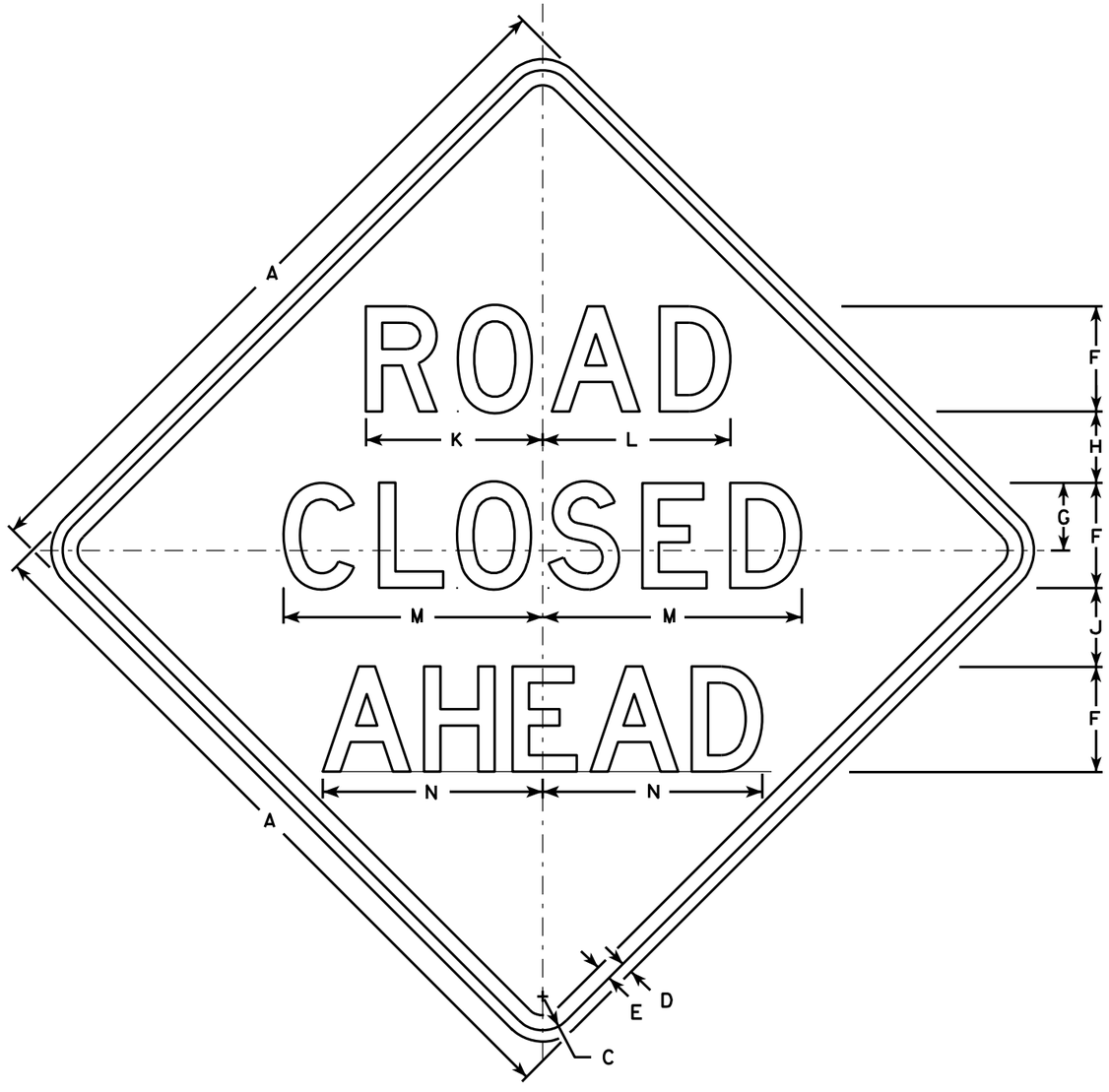
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

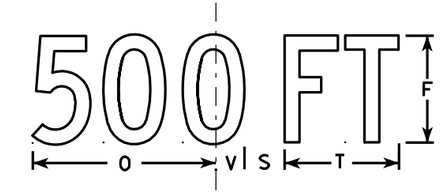
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

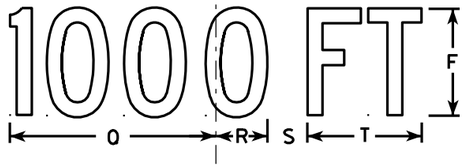
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 536	E



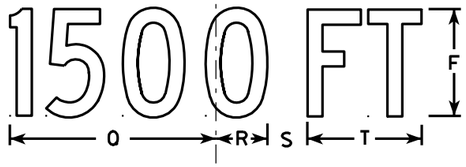
W20-3A



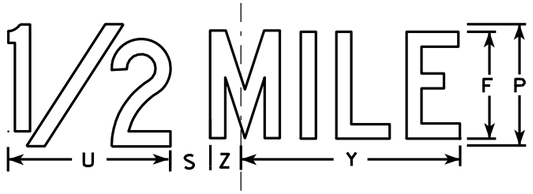
W20-3D



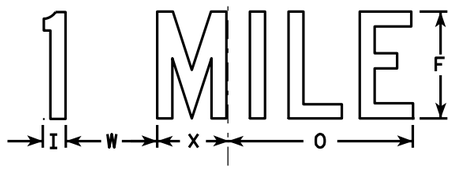
W20-3C



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

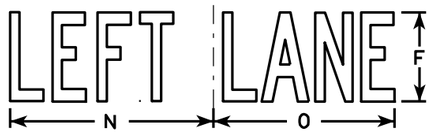
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

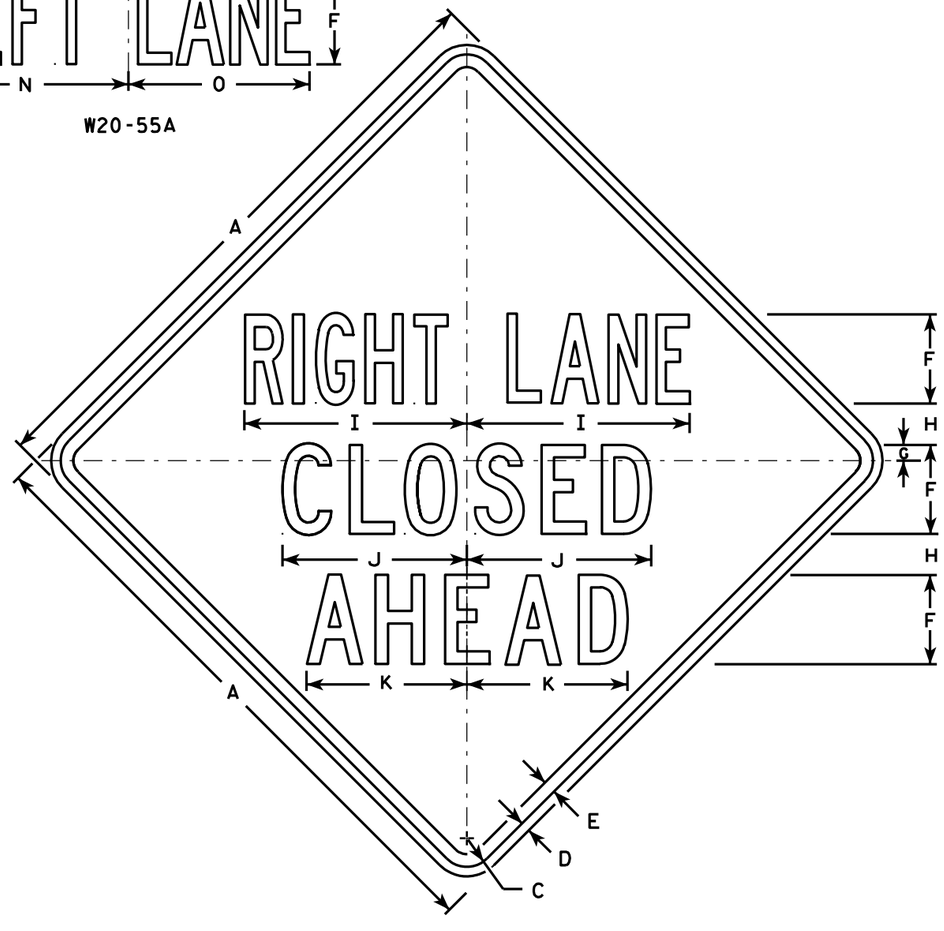
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 537 | E

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

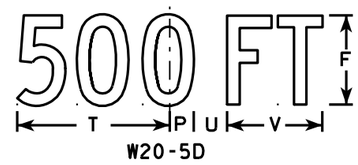
W20-56A



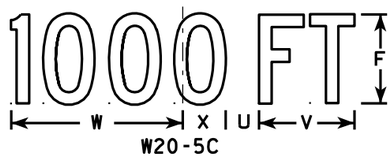
W20-55A



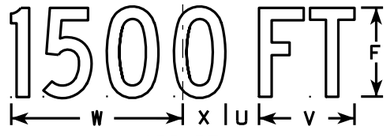
W20-5A



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

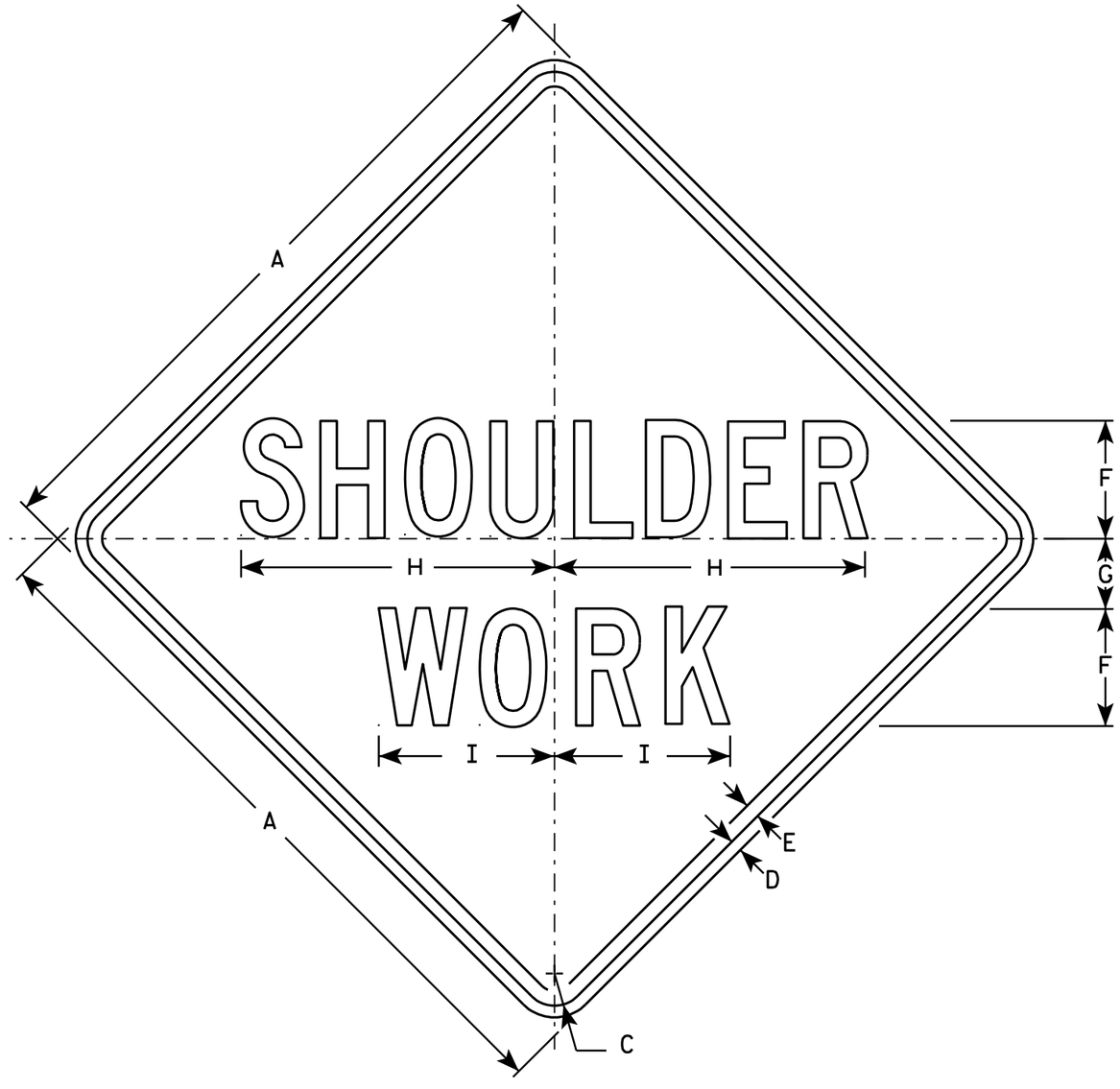
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 538	E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W21-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2 1/2	10 3/4	6																		4.0
2S	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3 1/2	16	9																		9.0
4	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0

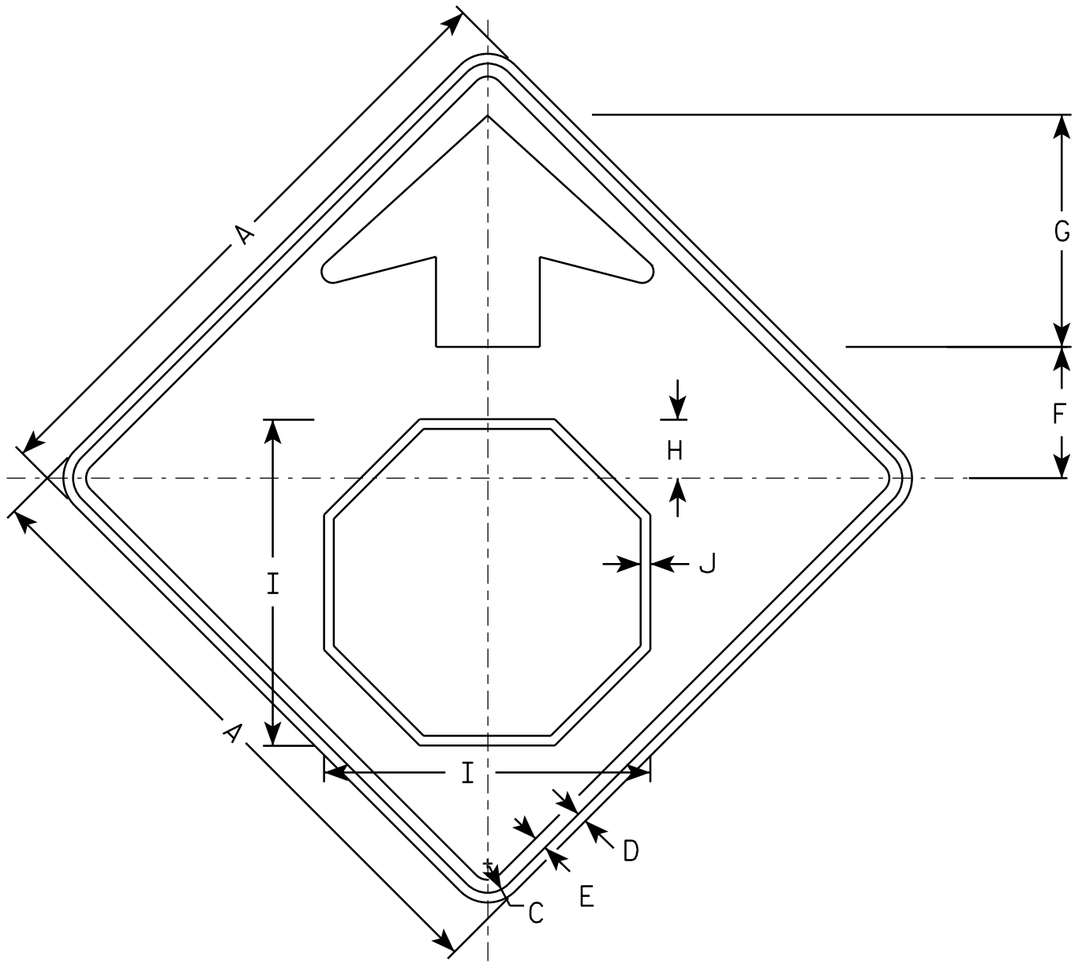
STANDARD SIGN
W21-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-5.5

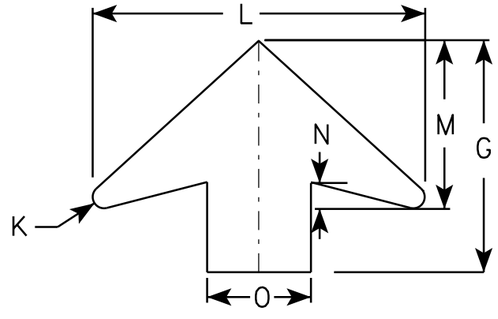
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 539	E



W03-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2S	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
2M	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
3	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W03-1

WISCONSIN DEPT OF TRANSPORTATION

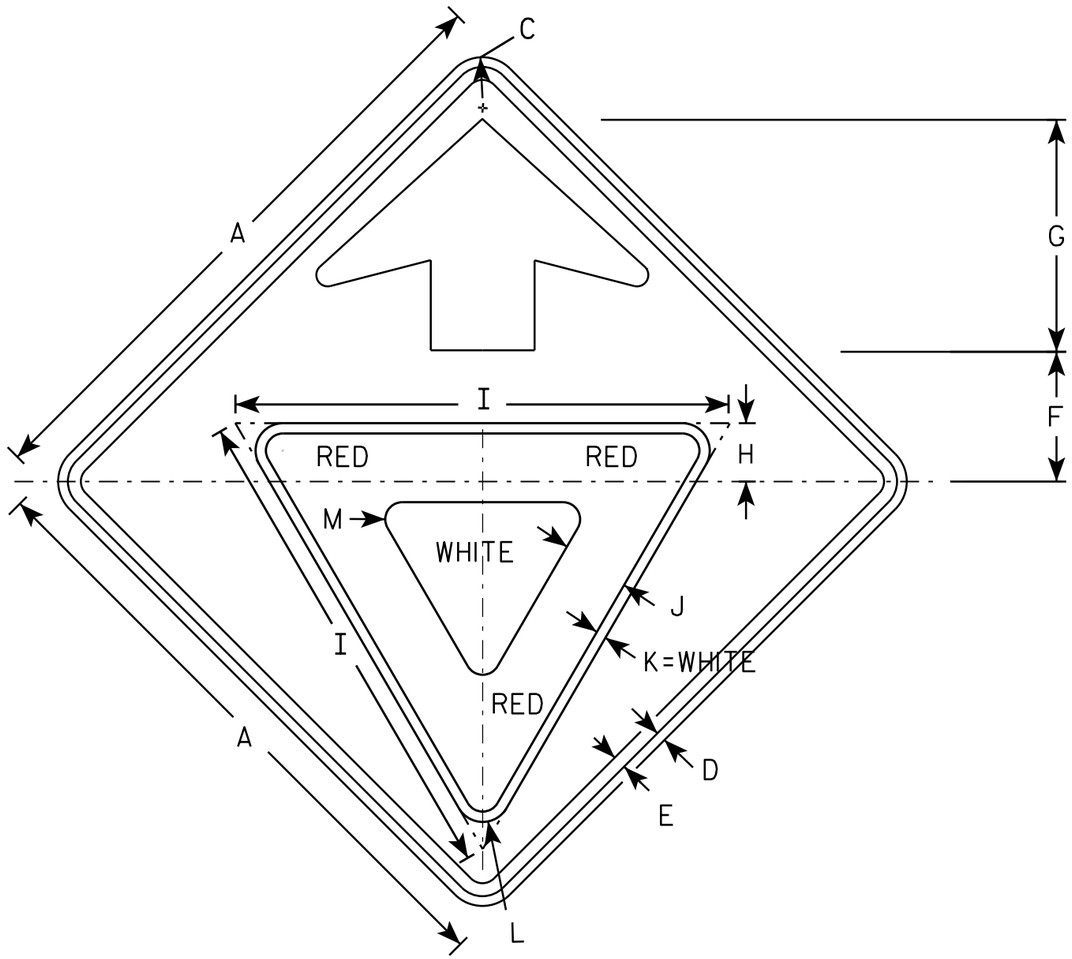
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 03-1.1

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W031.DGN PLOT DATE : 20-NOV-2013 10:54 PLOT BY : mscsja

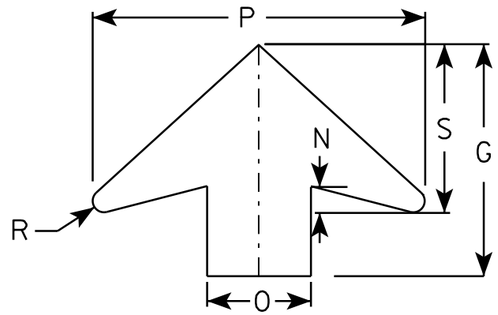
WISDOT/CADDS SHEET 42



W03-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Arrow & Border - BLACK
   Yield Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2S	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
2M	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
3	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

STANDARD SIGN
W03-2

WISCONSIN DEPT OF TRANSPORTATION

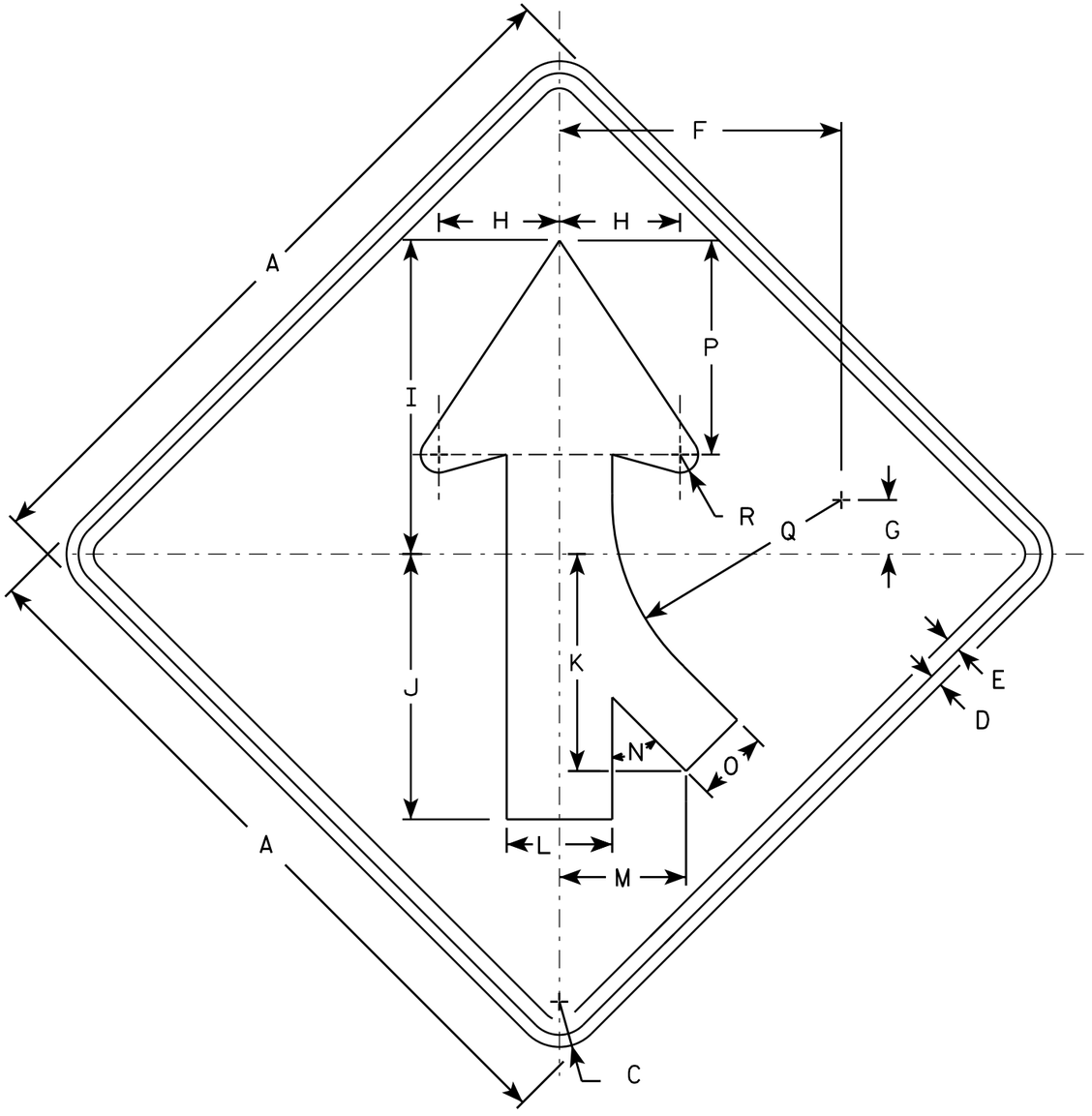
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-2.1

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W032.DGN PLOT DATE : 20-NOV-2013 11:18 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



W04-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-1L is the same as W4-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2S	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
2M	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
3	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

STANDARD SIGN
W04-1

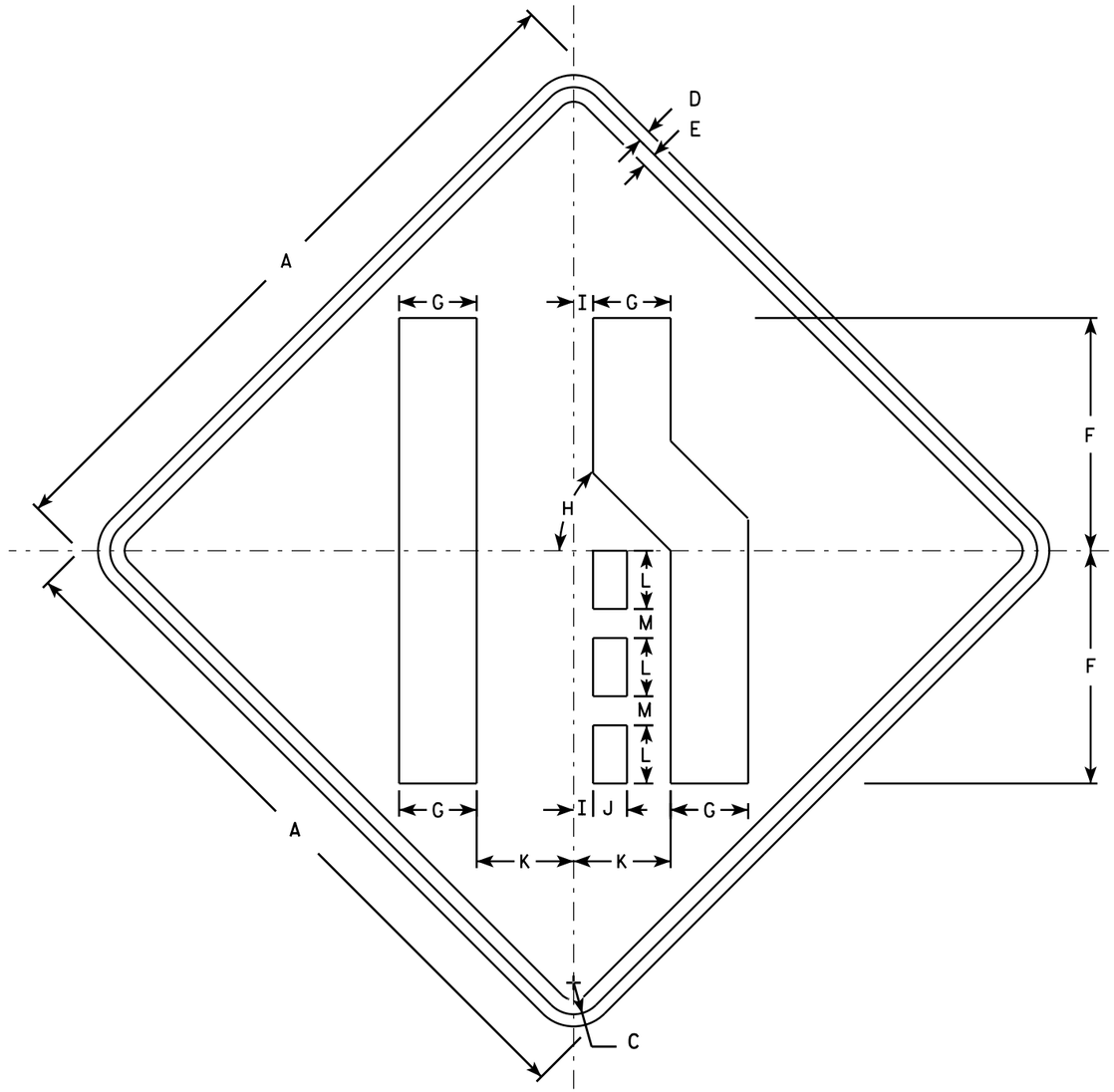
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO W04-1.1

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W041.DGN PLOT DATE : 20-NOV-2013 11:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000
WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

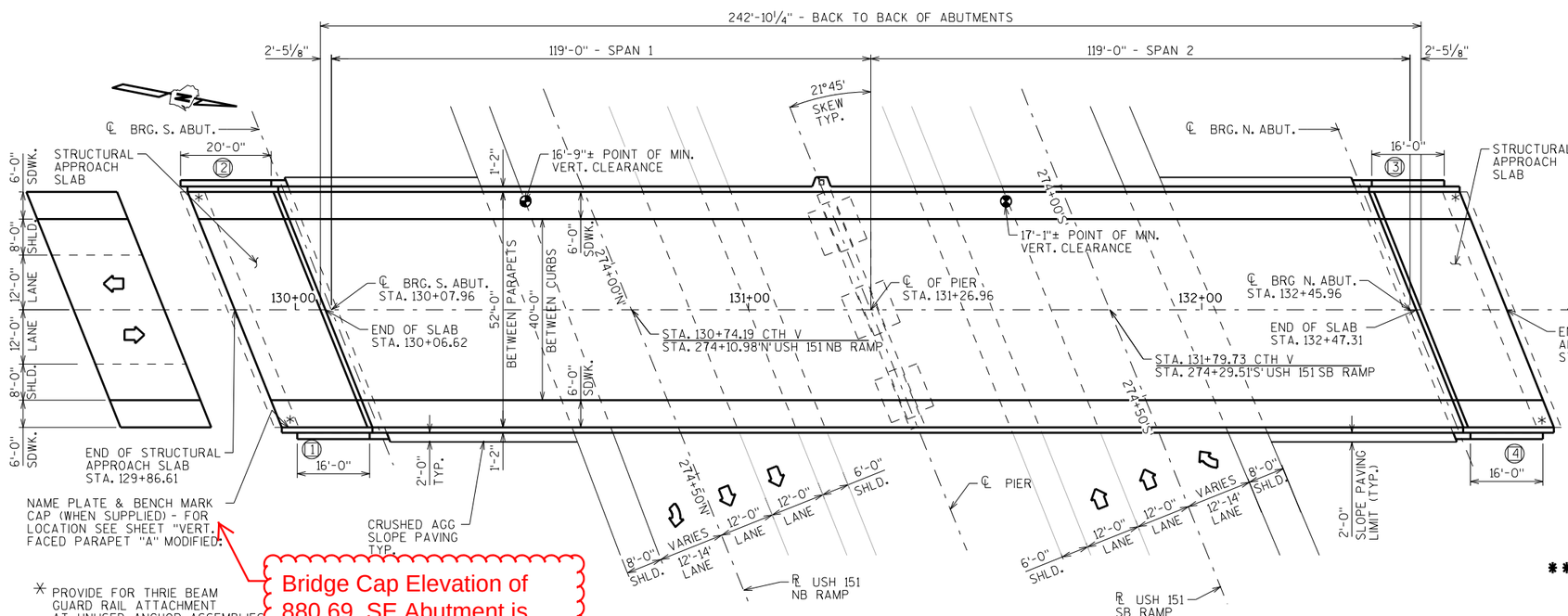
DATE 11/20/13 PLATE 543 W04-2.1

PROJECT NO:

SHEET NO: E

STATE PROJECT NUMBER

1420-22-71



NAME PLATE & BENCH MARK CAP (WHEN SUPPLIED) - FOR LOCATION SEE SHEET "VERT. FACED PARAPET "A" MODIFIED"

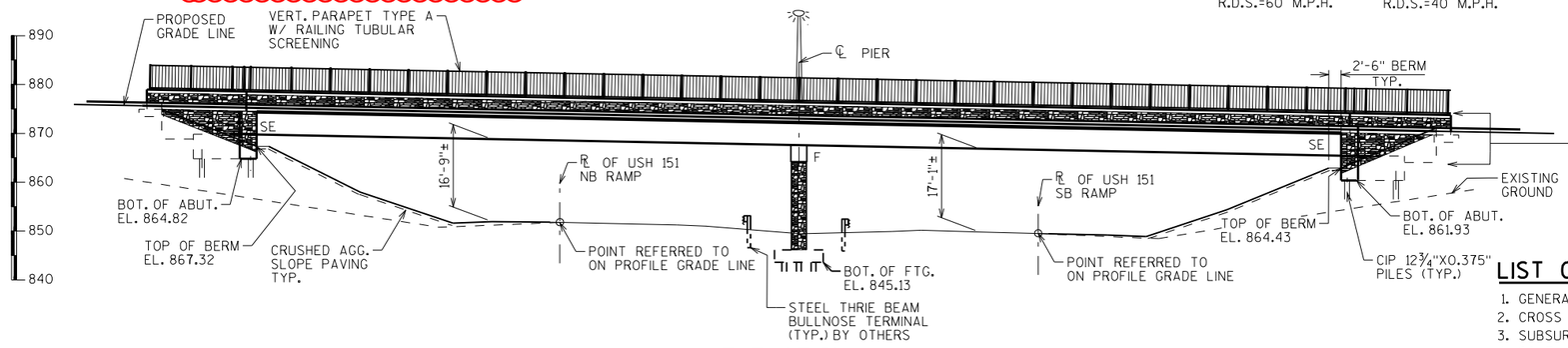
Bridge Cap Elevation of 880.69. SE Abutment is experiencing a settlement issue.

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT AT UNUSED ANCHOR ASSEMBLIES. CAULK HOLES SHUT WITH "100% SILICONE CAULK".

(n) INDICATES WING NUMBER

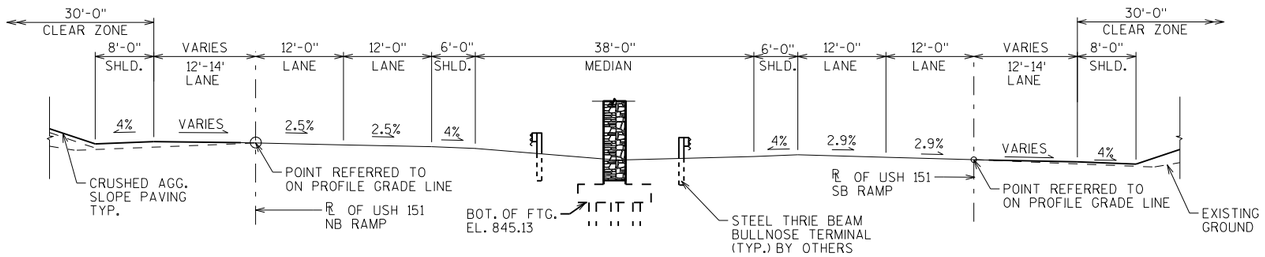
PLAN

2 SPAN - 54W" PRESTRESSED CONCRETE GIRDER BRIDGE



ELEVATION

(NORMAL TO USH 151, LOOKING WEST)



PROPOSED TYPICAL SECTION THRU USH 151

LOOKING WEST

TRAFFIC VOLUME

USH 151 NB & SB	CTH V
A.D.T.=13,400 (2038)	A.D.T.=3,700 (2038)
R.D.S.=60 M.P.H.	R.D.S.=40 M.P.H.

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF=1.09
OPERATING RATING FACTOR: RF=1.42
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 235 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY DECK f'c = 4,000 P.S.I.

ALL OTHER — f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.

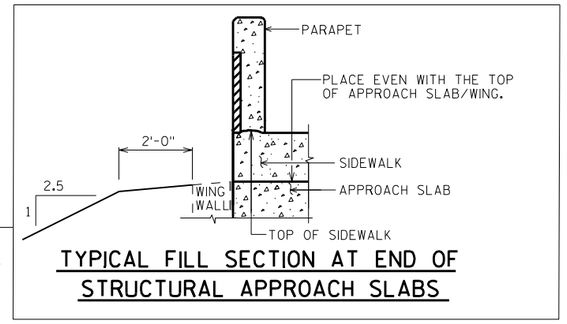
54W" PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 8000 P.S.I.
STRANDS- 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

SOUTH AND NORTH ABUTMENTS TO BE SUPPORTED ON CIP CONCRETE 12¾ X 0.375-INCH PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 210 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 95' AND 90' LONG RESPECTIVELY.

PIER TO BE SUPPORTED ON CIP CONCRETE 12¾ X 0.375-INCH PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 210 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 75' LONG.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.



TYPICAL FILL SECTION AT END OF STRUCTURAL APPROACH SLABS

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. PIER
9. PIER DETAILS
10. 54W" PRESTRESSED GIRDER DETAILS 1
11. 54W" PRESTRESSED GIRDER DETAILS 2
12. STEEL DIAPHRAGM
13. SUPERSTRUCTURE
14. SUPERSTRUCTURE DETAILS 1
15. SUPERSTRUCTURE DETAILS 2
16. LIGHTING STD. & CONDUIT DETAILS
17. VERT. FACED PARAPET "A" MODIFIED
18. SOUTH STRUCTURAL APPROACH SLAB
19. NORTH STRUCTURAL APPROACH SLAB
20. RAILING TUBULAR SCREENING
21. RAILING TUBULAR SCREENING DETAILS
22. AESTHETIC DETAILS
23. SLOPE PAVING
24. ALTERNATE CONSTRUCTION JOINT

STRUCTURE DESIGN CONTACTS:

STEVEN DOOCY (608) 261-6063
AARON BONK (608) 261-0261

NO.	DATE	REVISION	BY

Plans Prepared By WISDOT
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher — CHIEF STRUCTURES DESIGN ENGINEER — 1/21/15 DATE

STRUCTURE B-20-226

CTH V OVER USH 151

COUNTY FOND DU LAC — ~~TOWN~~/CITY/~~VILLAGE~~ FOND DU LAC

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	SAD	DESIGN CK'D.	EMK	DRAWN BY	SAD	PLANS CK'D.	EMK

GENERAL PLAN

SHEET 1 OF 24

544

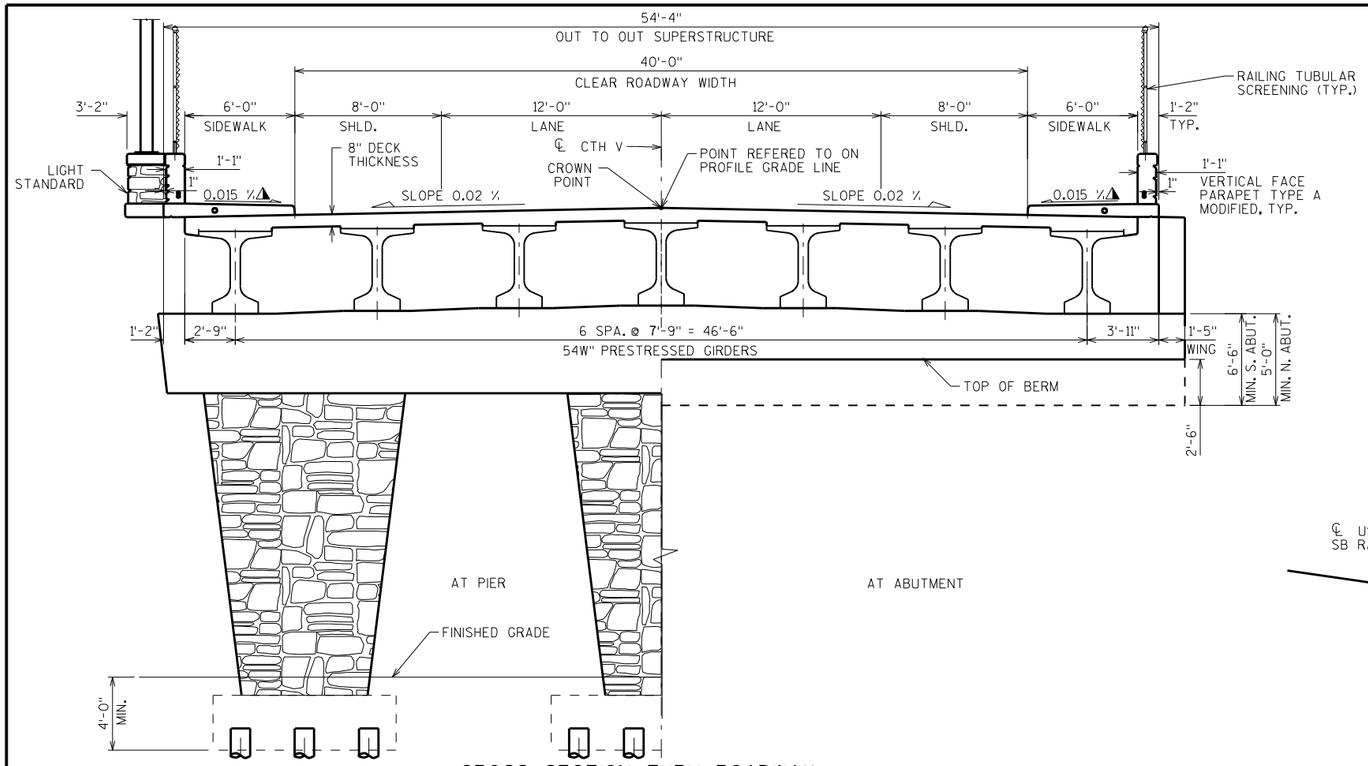
I.D. 1420-22-00

DATE: OCT 2014

SCALE: 15

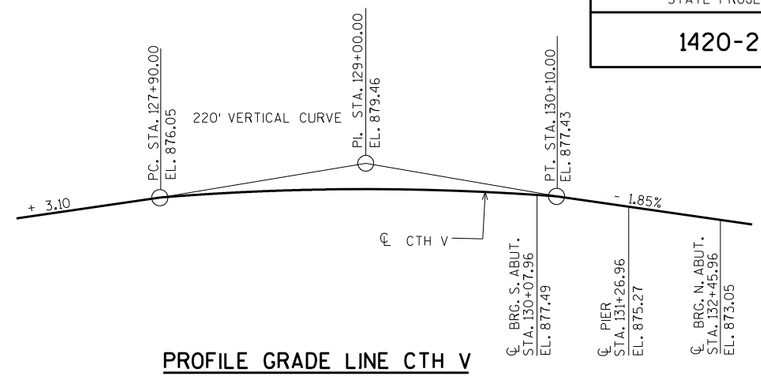
8

8

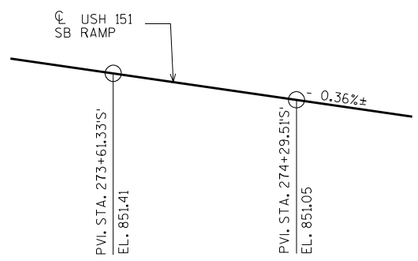


CROSS SECTION THRU ROADWAY

(LOOKING NORTH)

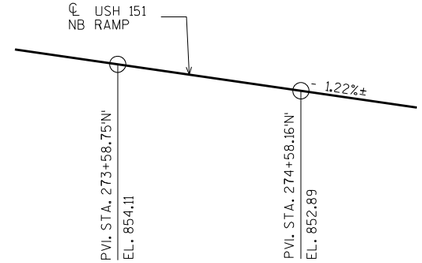


PROFILE GRADE LINE CTH V



PROFILE GRADE LINE USH 151

SB RAMP



PROFILE GRADE LINE USH 151

NB RAMP

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	SOUTH APPROACH SLAB	SOUTH ABUT.	PIER	NORTH ABUT.	NORTH APPROACH SLAB	TOTALS
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-20-226	LS	———	———	———	———	———	———	1
210.0100	BACKFILL STRUCTURE	CY	———	———	210	———	175	———	385
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	———	170	———	———	———	170	340
502.0100	CONCRETE MASONRY BRIDGES	CY	600	80	86	115	65	80	1026
502.3200	PROTECTIVE SURFACE TREATMENT	SY	1610	135	———	———	———	135	1880
503.0155	PRESTRESSED GIRDER TYPE I 54W-INCH	LF	1672	———	———	———	———	———	1672
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	———	———	5335	2335	4070	———	11,740
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	117,190	13,480	2665	19,560	1985	13,480	168,360
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	1870	———	———	———	———	———	1870
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	———	———	7	14	7	———	28
506.4000	STEEL DIAPHRAGMS B-20-226	EACH	24	———	———	———	———	———	24
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	———	16	———	15	———	31
517.1015.S	CONCRETE STAINING MULTI-COLOR B-20-226	SF	969	80	257	1224	204	80	2814
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-20-226	SF	969	80	257	1224	204	80	2814
550.2126	PILING CIP CONCRETE 12 3/4 X 0.375	LF	———	———	1235	2100	1170	———	4505
550.0600	PILE REDRIVING	EACH	———	———	2	4	2	———	8
604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	———	———	280	———	275	———	555
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	———	100	———	95	———	195
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	———	2	———	———	———	2	4
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	———	———	72	———	72	———	144
652.0135	CONDUIT RIGID METALLIC 3-INCH	LF	12	50	———	———	———	50	112
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	944	75	———	———	———	75	1094
652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	470	———	———	———	———	———	470
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	5	———	———	———	———	———	5
657.6005.S	ANCHOR ASSEMBLIES LIGHT POLES ON STRUCTURES	EACH	1	———	———	———	———	———	1
SPV.0090.07	RAILING TUBULAR SCREENING GALVINIZED B-20-226	LF	481	40	———	———	———	40	561
	NON-BID ITEMS								
	FILLER	SIZE	———	———	———	———	———	———	½", ¾", & 1½"
	PLASTIC OR ZINC PLATE	SIZE	———	———	———	———	———	———	⅛"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE OR "BASE AGGREGATE DENSE 1¼-INCH" SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIER.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK, TOP OF APPROACH SLAB SURFACES, SIDEWALK, AS WELL AS THE INSIDE AND TOP OF PARAPETS SURFACES ON BOTH DECK AND APPROACH SLABS.

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE SHOWN OR NOTED.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1 AND ON THE 'SLOPE PAVING' SHEET AND ON THE ABUTMENT DETAILS SHEETS.

ARCHITECTURAL SURFACE TREATMENT TO BE APPLIED TO BACKS OF PARAPETS, WINGWALLS, AND PIER SHAFTS. FINISHED STAIN IS TO RESEMBLE WEATHERED LIMESTONE. SEE AESTHETICS SHEET AND SPECIAL PROVISIONS FOR ARCHITECTURAL SURFACE TREATMENT.

ALL RAILINGS, POSTS AND ASSOCIATED HARDWARE SHALL BE FINISHED AS SHOWN ON "RAILING TUBULAR SCREENING" SHEET. IF TOUCH UP PAINTING IS REQUIRED AFTER INSTALLATION IS COMPLETE, ALL TOUCH UP PAINTING IS TO BE DONE TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST.

▲ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

CROSS SECTION & QUANTITIES

SHEET 2

545

STATE PROJECT NUMBER

1420-22-71

8

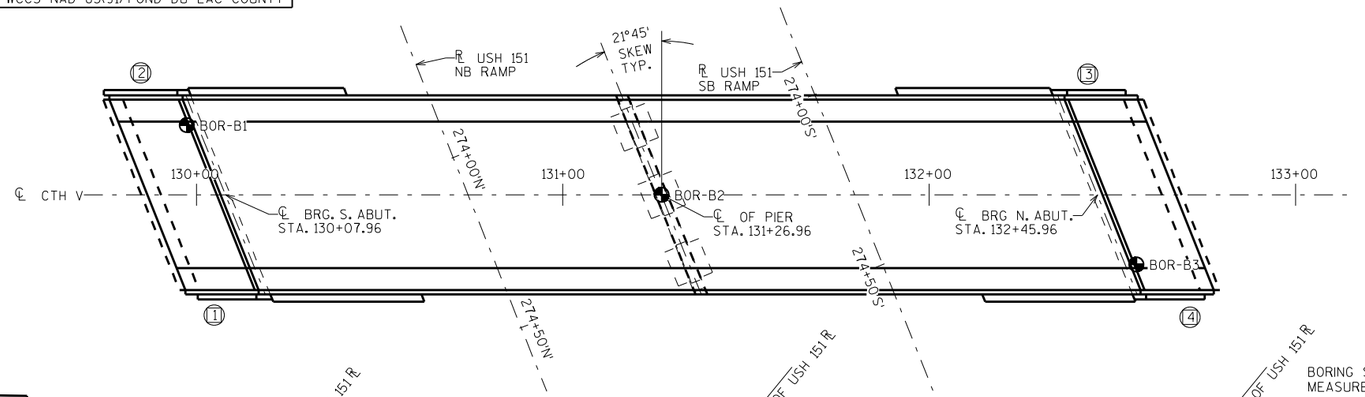
8

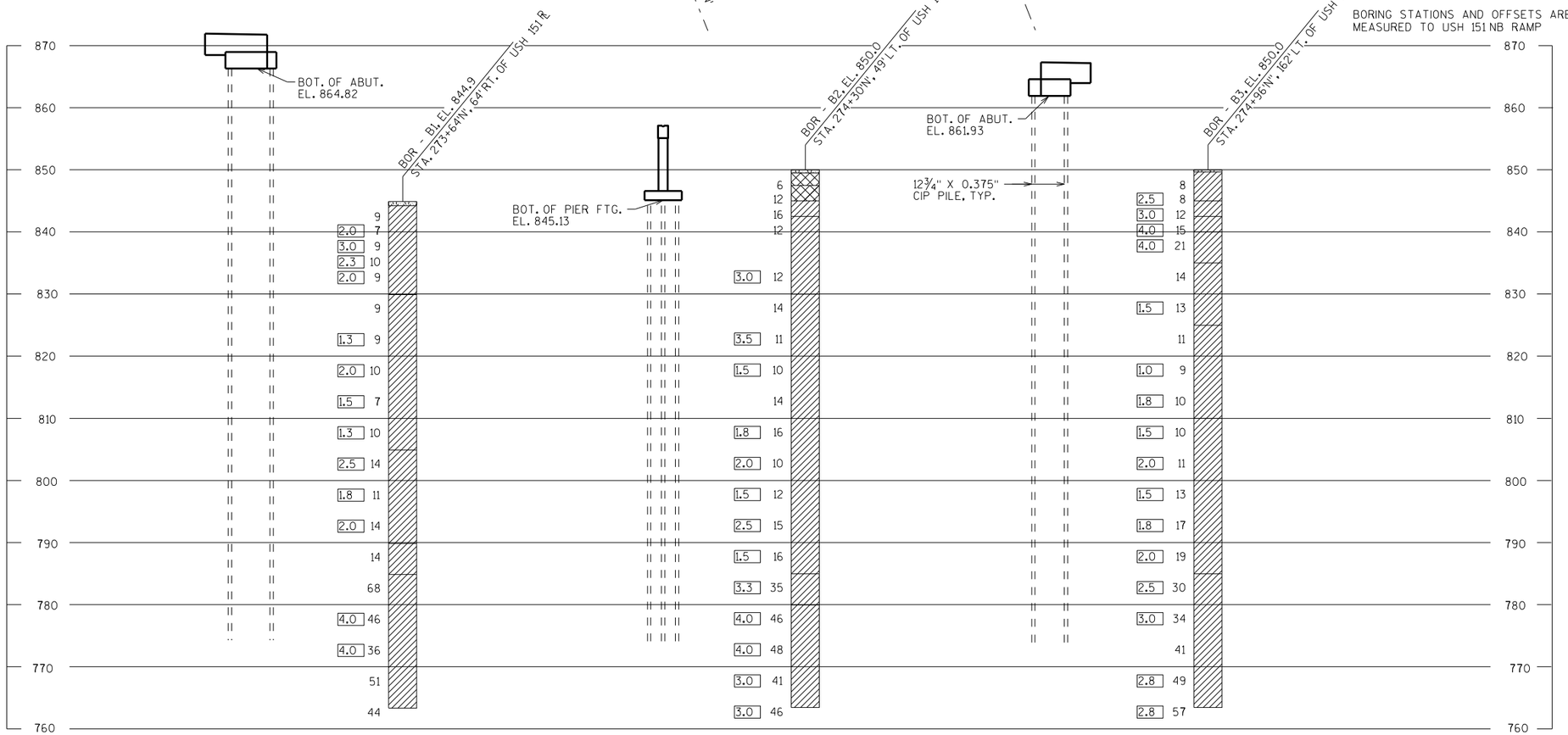
SCALE = 4

FOND DU LAC BYPASS
CTH V OVER USH 151

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	7/24/2013	372719.2326	824054.6499
2	7/30/2013	372850.0807	824048.7782
3	7/30/2013	372980.9289	824042.9064

BORINGS COMPLETED BY: GEOTECHNICAL DRILLING CONTRACTORS, INC.
REPORT COMPLETED BY: OMNNI
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) FOND DU LAC COUNTY





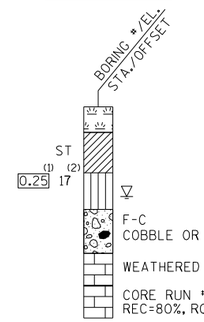
STATE PROJECT NUMBER

1420-22-71

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY PR/SAD | PLANS CK'D. EMK

SUBSURFACE EXPLORATION

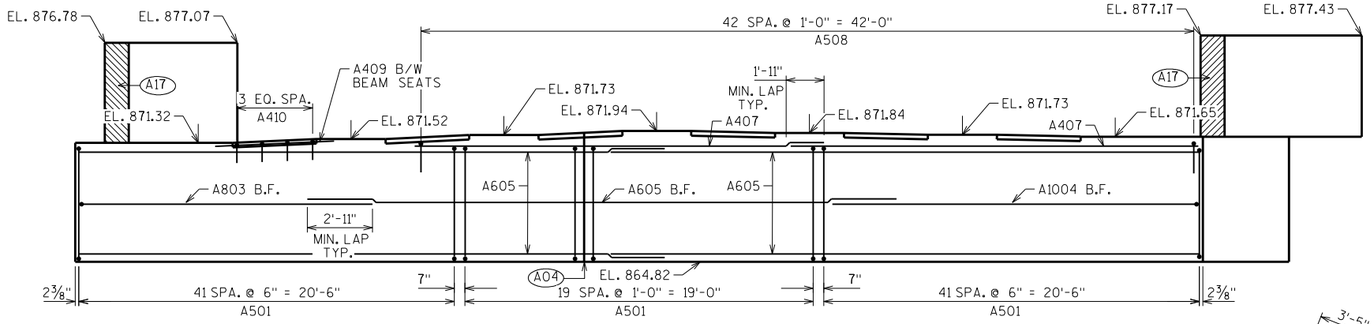
SHEET 3

546

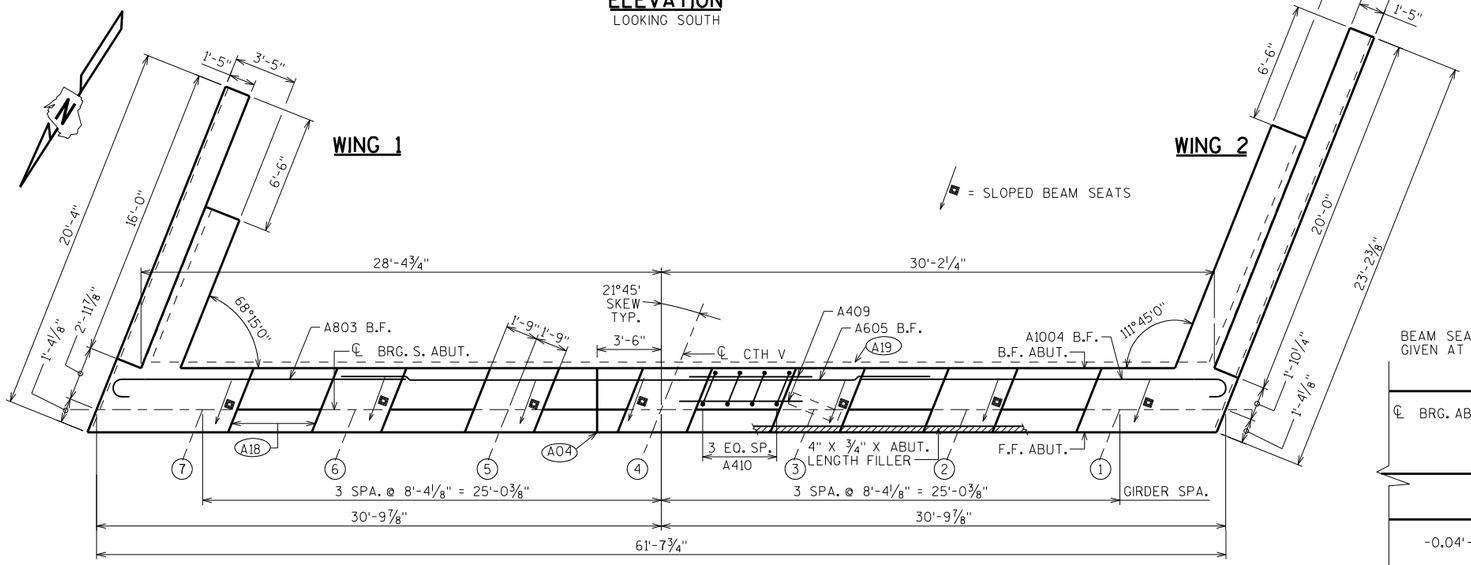
SCALE = 20

STATE PROJECT NUMBER

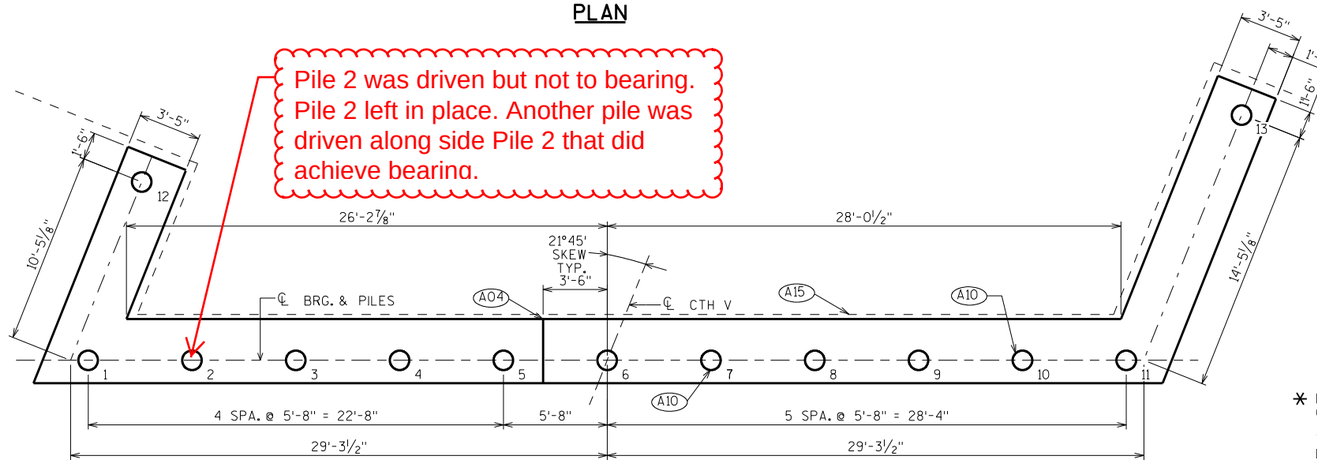
1420-22-71



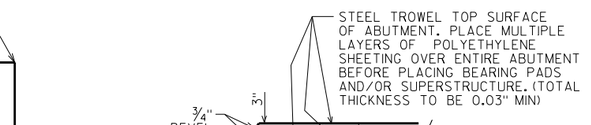
ELEVATION
LOOKING SOUTH

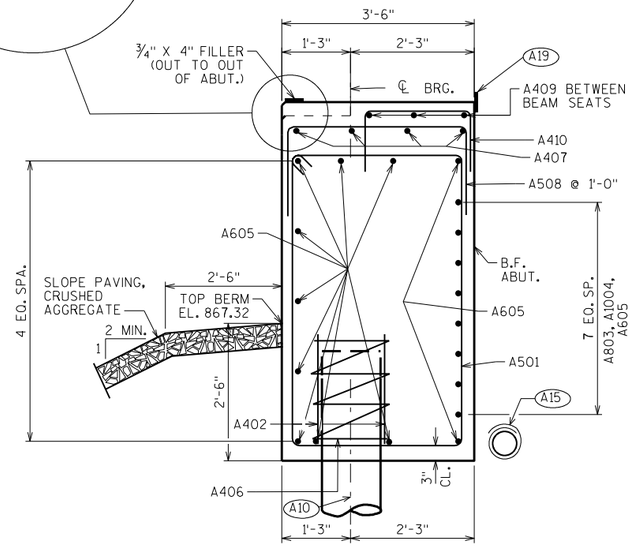


PLAN

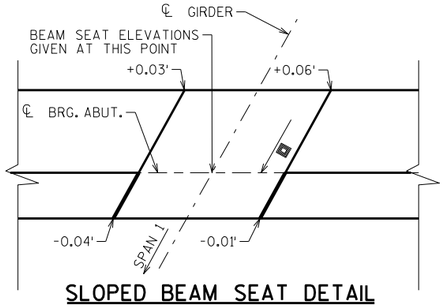


PILE PLAN

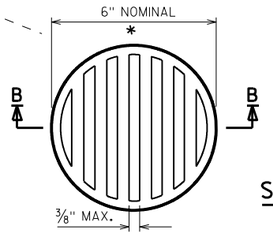




SECTION THRU BODY



SLOPED BEAM SEAT DETAIL



RODENT SHIELD DETAIL

SECTION B-B

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A10) SUPPORT ABUTMENT ON 12 3/4" x 0.375" CAST-IN-PLACE CONCRETE PILING, ESTIMATED 95'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 210 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

SOUTH ABUTMENT

SHEET 4

547

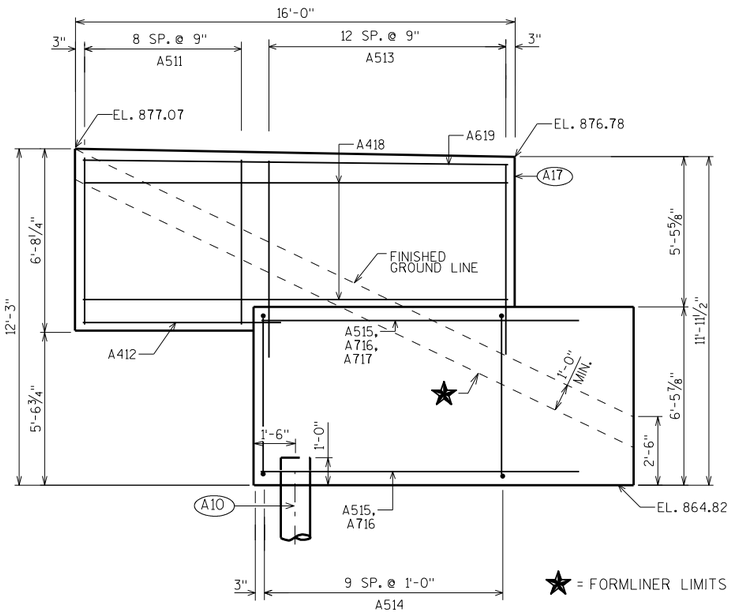
SCALE = 4

8

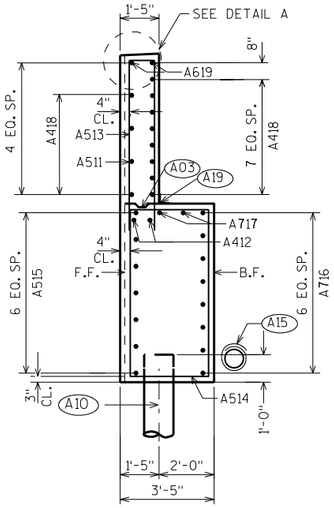
8

STATE PROJECT NUMBER

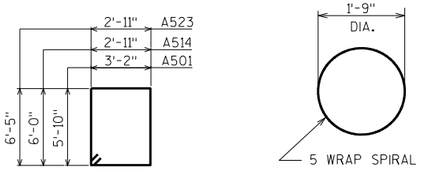
1420-22-71



WING 1 ELEVATION

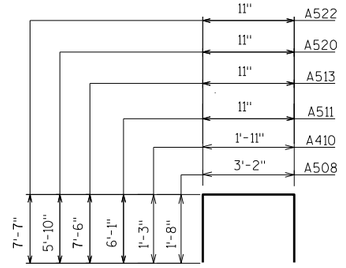


WING 1 SECTION

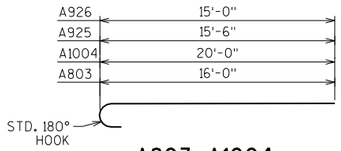


A501, A514, A523

A406



A508, A410, A511, A513, A520, A522

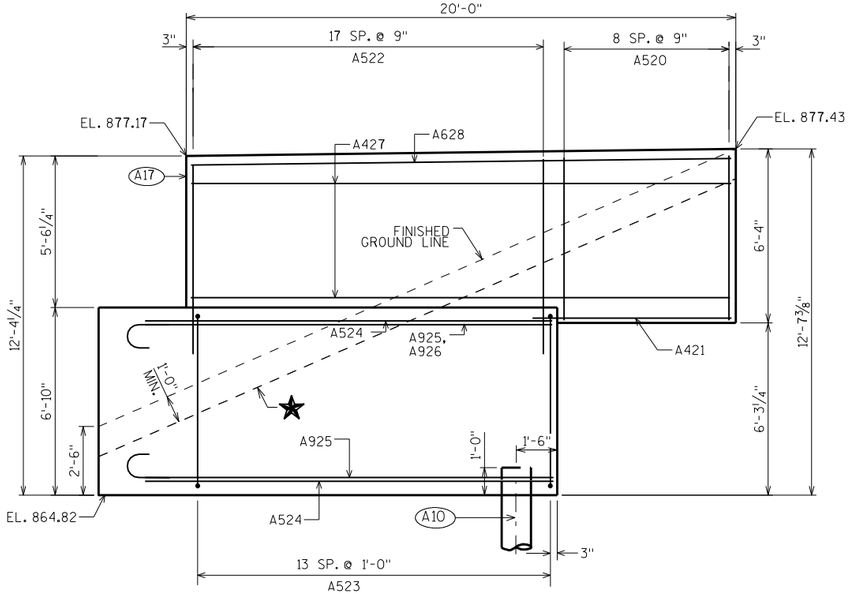


A803, A1004, A925, A926

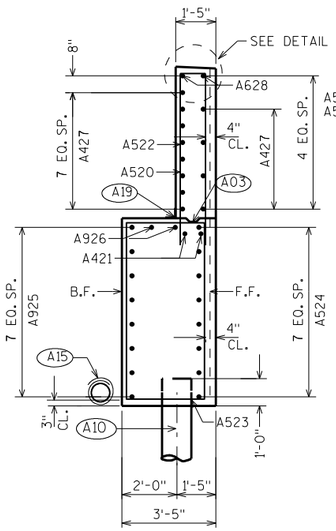
BILL OF BARS

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

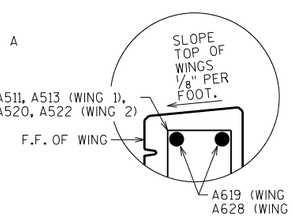
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	LOCATION
A501		104	18'-8"	X	BODY-STIRRUPS
A402		22	2'-3"		PILES- 2 PER PILE
A803		8	16'-11"	X	BODY-HORIZONTAL
A1004		8	21'-5"	X	BODY-HORIZONTAL
A605		30	32'-2"		BODY-HORIZONTAL
A406		11	28'-0"	X	PILES-1 PER PILE
A407		8	22'-0"		BODY-HORZ. OVER GIRS. 1-5
A508		43	6'-3"	X	BODY-TOP OVER GIRS. 1-5
A409		12	6'-10"		BODY-HORZ. BETWEEN BEAM SEATS
A410		24	4'-2"	X	BODY-BETWEEN BEAM SEATS
A511	X	9	12'-10"	X	WING 1-VERTICAL
A412	X	2	7'-9"		WING 1-HORIZONTAL
A513	X	13	15'-8"	X	WING 1-VERTICAL
A514	X	10	18'-6"	X	WING 1-STIRRUP
A515	X	7	12'-9"		WING 1-HORIZONTAL
A716	X	7	11'-4"		WING 1-HORIZONTAL
A717	X	2	12'-2"		WING 1-HORIZONTAL
A418	X	12	15'-8"		WING 1-HORIZONTAL
A619	X	2	15'-8"		WING 1-HORIZONTAL
A520	X	9	12'-4"	X	WING 2-VERTICAL
A421	X	2	7'-9"		WING 2-HORIZONTAL
A522	X	18	15'-10"	X	WING 2-VERTICAL
A523	X	14	19'-4"	X	WING 2-STIRRUP
A524	X	8	15'-9"		WING 2-HORIZONTAL
A925	X	8	17'-3"	X	WING 2-HORIZONTAL
A926	X	2	16'-9"	X	WING 2-HORIZONTAL
A427	X	12	19'-8"		WING 2-HORIZONTAL
A628	X	2	19'-8"		WING 2-HORIZONTAL



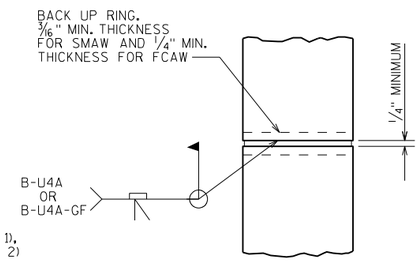
WING 2 ELEVATION



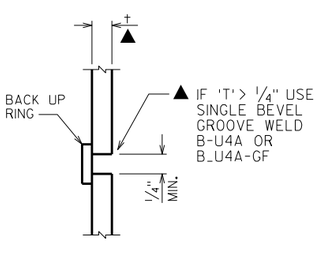
WING 2 SECTION



DETAIL A



CAST-IN-PLACE 'PIPE PILE'



C.I.P. PILE WELD DETAIL

PILE DETAILS

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A10) SUPPORT ABUTMENT ON 12¾" X 0.375" CAST-IN-PLACE CONCRETE PILING, ESTIMATED 95 FT. LONG WITH A REQUIRED DRIVING RESISTANCE OF 210 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

SOUTH ABUTMENT DETAILS

SHEET 5

548

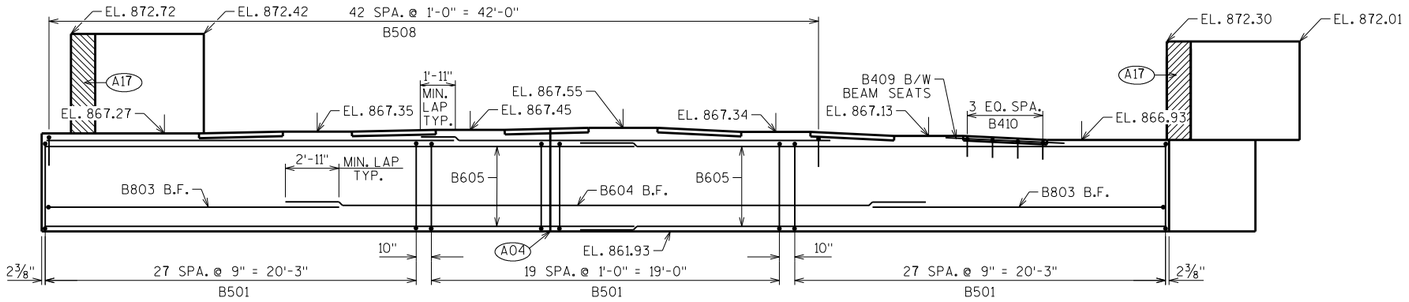
SCALE = 2.66

8

8

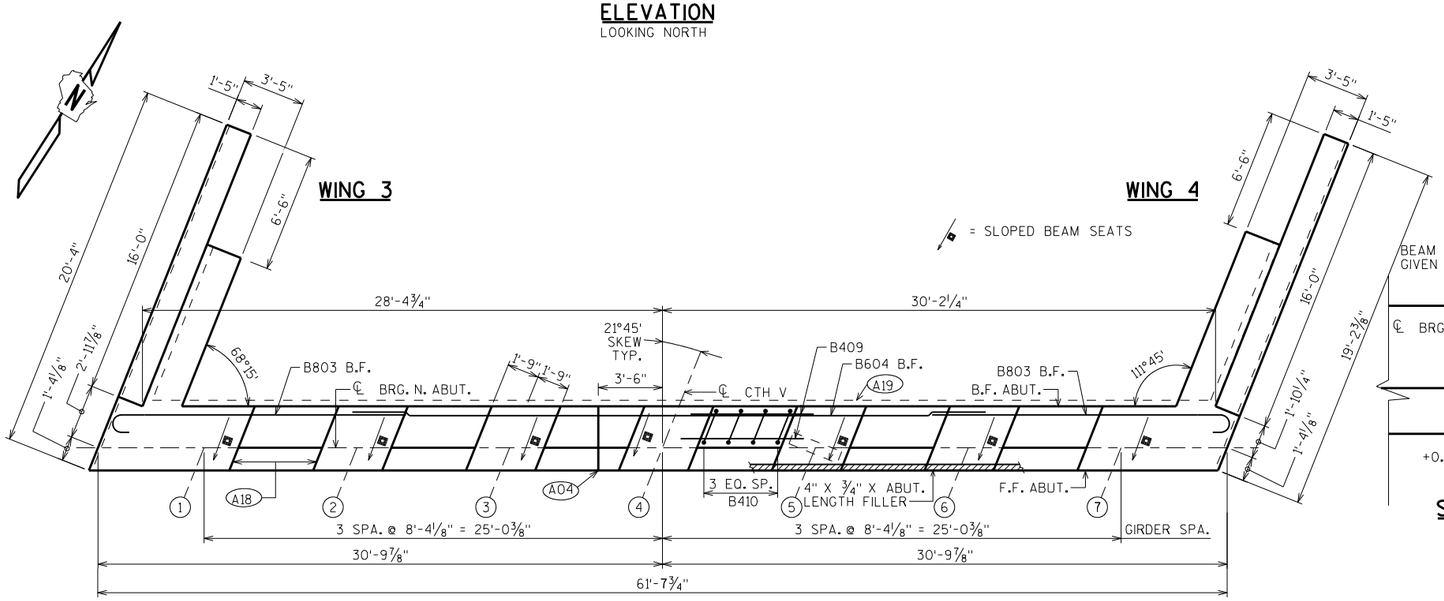
STATE PROJECT NUMBER

1420-22-71

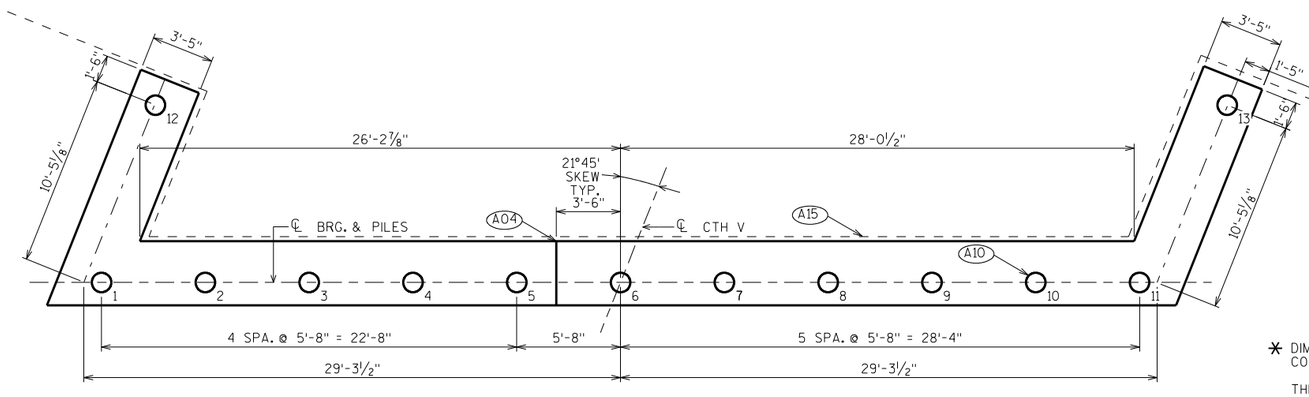


ELEVATION

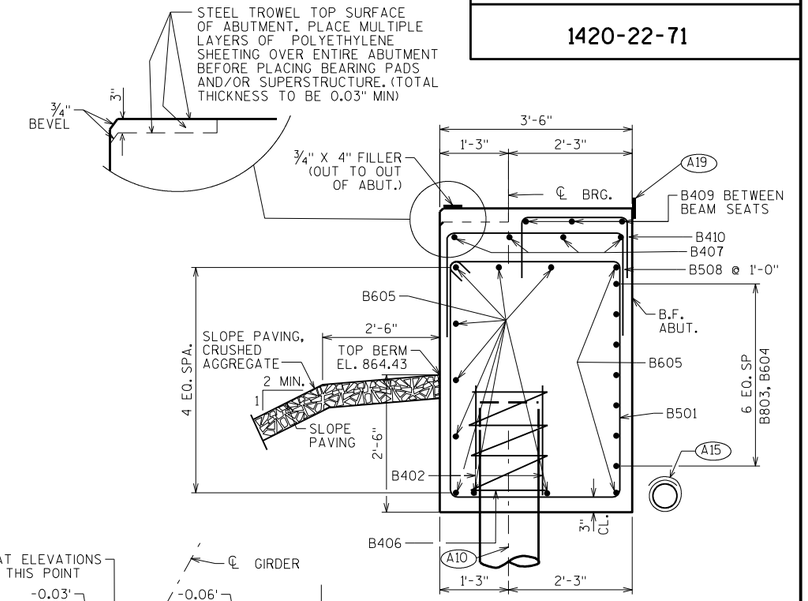
LOOKING NORTH



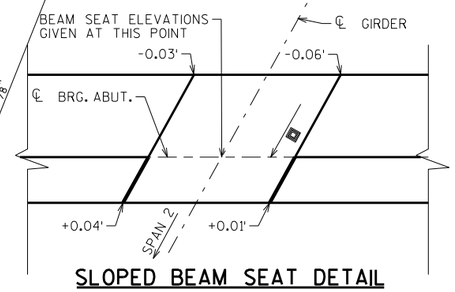
PLAN



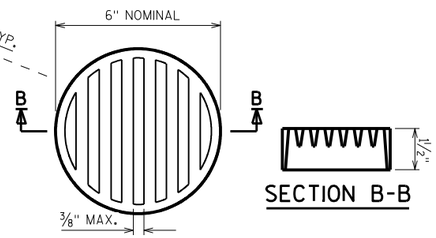
PILE PLAN



SECTION THRU BODY



SLOPED BEAM SEAT DETAIL



RODENT SHIELD DETAIL

(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A10) SUPPORT ABUTMENT ON 12 3/4" x 0.375" CAST-IN-PLACE CONCRETE PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 210 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

NORTH ABUTMENT

SHEET 6

549

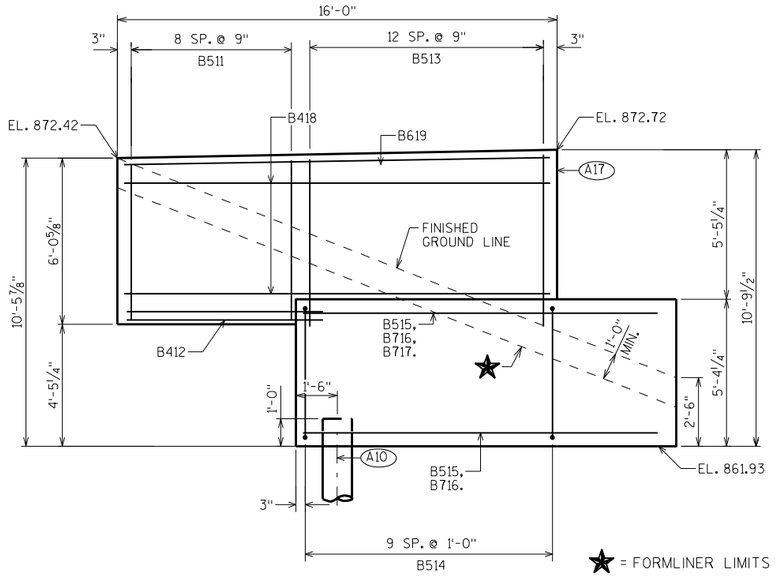
SCALE = 4

8

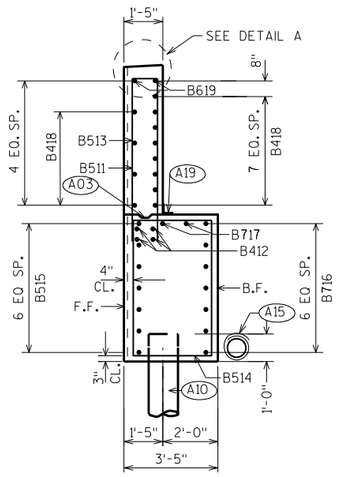
8

STATE PROJECT NUMBER

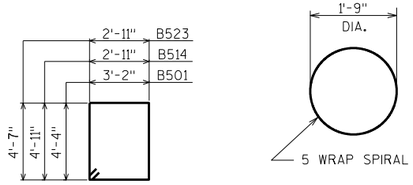
1420-22-71



WING 3 ELEVATION

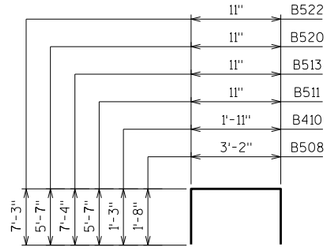


WING 3 SECTION

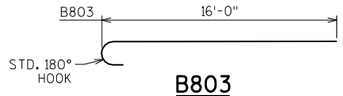


B501, B514, B523

B406



B508, B410, B511, B513, B520, B522

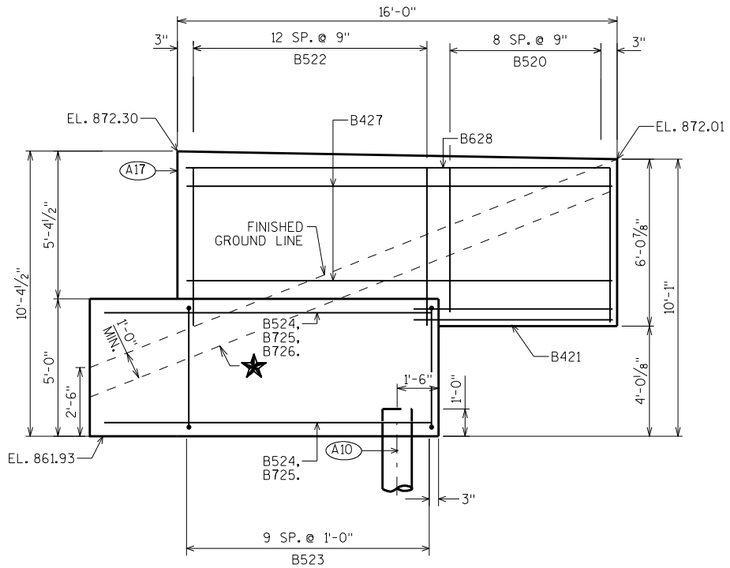


B803

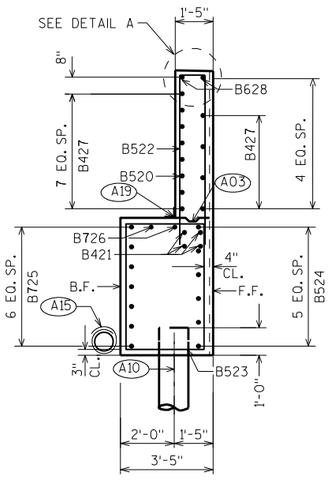
BILL OF BARS

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

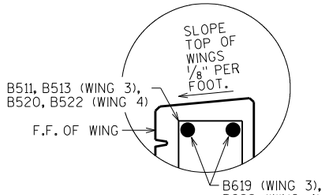
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	LOCATION
B501		76	15'-8"	X	BODY-STIRRUPS
B402		22	2'-3"		PILES- 2 PER PILE
B803		14	16'-11"	X	BODY-HORIZONTAL
B604		7	35'-2"		BODY-HORIZONTAL
B605		22	32'-2"		BODY-HORIZONTAL
B406		11	28'-0"	X	PILES-1 PER PILE
B407		8	22'-0"		BODY-HORZ. OVER GIRS. 1-5
B508		43	6'-3"	X	BODY-TOP OVER GIRS. 1-5
B409		12	6'-10"		BODY-BETWEEN BEAM SEATS
B410		24	4'-2"	X	BODY-HORZ. BETWEEN BEAM SEATS
B511	X	9	11'-10"	X	WING 3-VERTICAL
B412	X	4	7'-9"		WING 3-HORIZONTAL
B513	X	13	15'-4"	X	WING 3-VERTICAL
B514	X	10	16'-4"	X	WING 3-STIRRUP
B515	X	7	12'-9"		WING 3-HORIZONTAL
B716	X	7	11'-6"		WING 3-HORIZONTAL
B717	X	2	12'-2"		WING 3-HORIZONTAL
B418	X	12	15'-8"		WING 3-HORIZONTAL
B619	X	2	15'-8"		WING 3-HORIZONTAL
B520	X	9	11'-10"	X	WING 4-VERTICAL
B421	X	2	7'-9"		WING 4-HORIZONTAL
B522	X	13	15'-2"	X	WING 4-VERTICAL
B523	X	10	15'-8"	X	WING 4-STIRRUP
B524	X	6	11'-11"		WING 4-HORIZONTAL
B725	X	7	12'-10"		WING 4-HORIZONTAL
B726	X	2	12'-1"		WING 4-HORIZONTAL
B427	X	14	15'-8"		WING 4-HORIZONTAL
B628	X	2	15'-8"		WING 4-HORIZONTAL



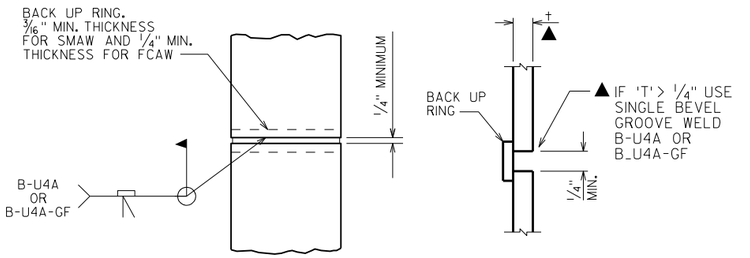
WING 4 ELEVATION



WING 4 SECTION



DETAIL A



CAST-IN-PLACE 'PIPE PILE' C.I.P. PILE WELD DETAIL

PILE DETAILS

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A10) SUPPORT ABUTMENT ON 12¾" X 0.375" CAST-IN-PLACE CONCRETE PILING. ESTIMATED 90 FT. LONG WITH A REQUIRED DRIVING RESISTANCE OF 210 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

NORTH ABUTMENT DETAILS

SHEET 7

550

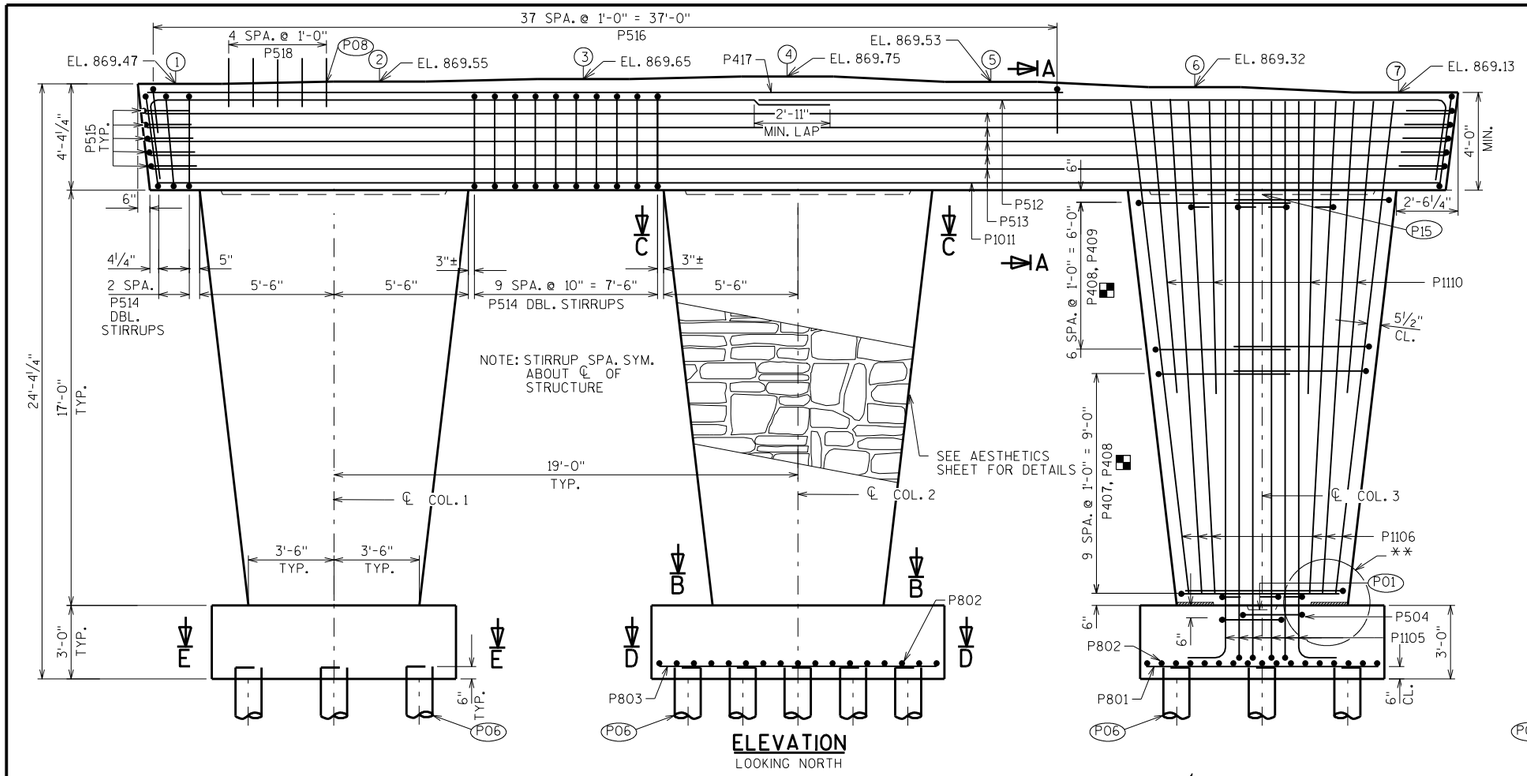
SCALE = 2.66

8

8

STATE PROJECT NUMBER

1420-22-71



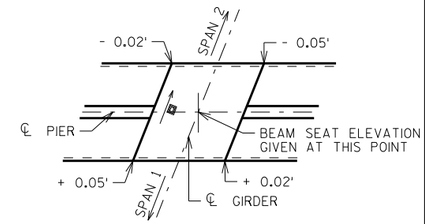
ELEVATION

LOOKING NORTH

COLUMN SIDE VIEW

LOOKING WEST

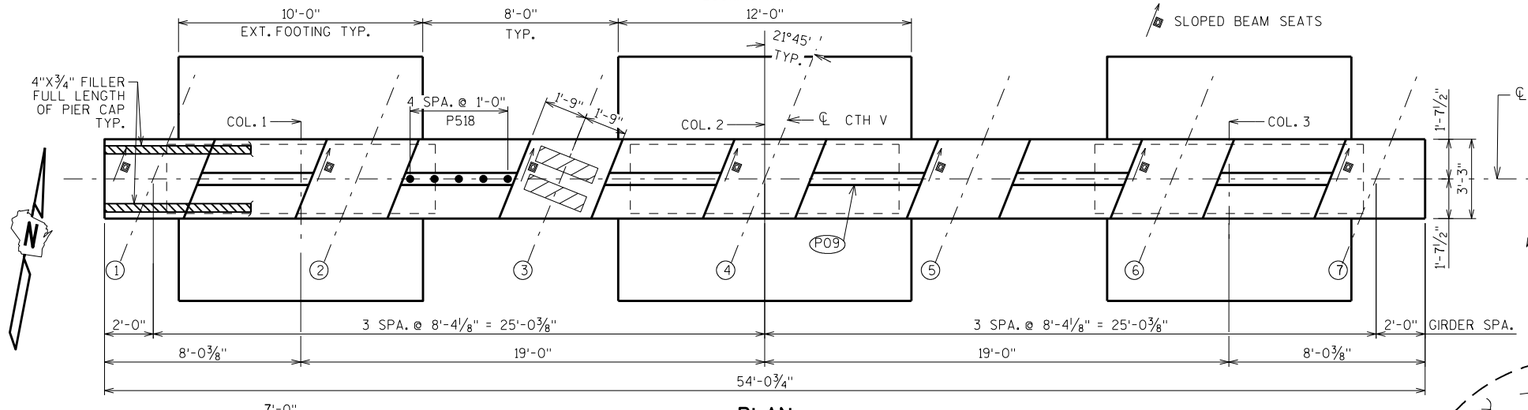
SECTION A-A: CAP



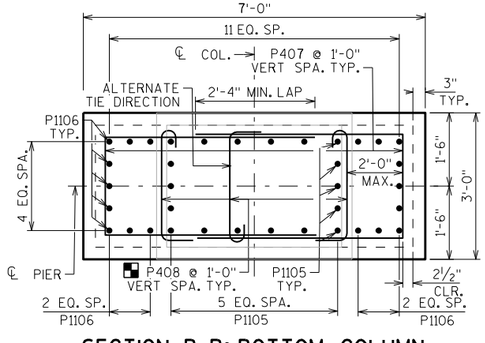
BEAM SEAT

** SEE "PIER DETAILS" SHEET FOR COMPRESSIBLE FILLER DETAILS

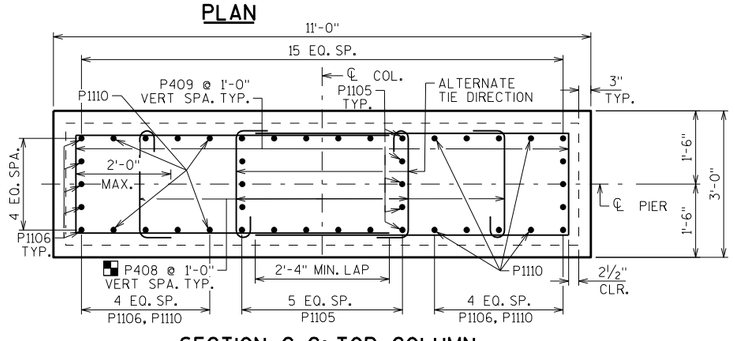
NOTE: FOR SECTION VIEWS D AND E SEE "PIER DETAILS" SHEET.



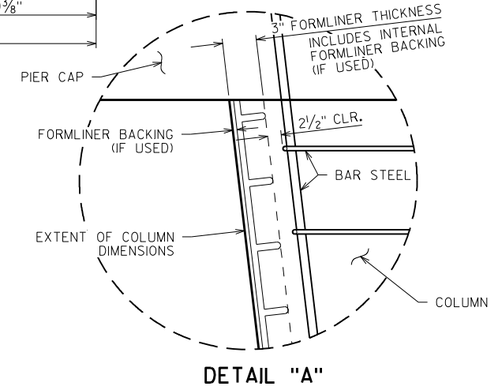
PLAN



SECTION B-B: BOTTOM COLUMN



SECTION C-C: TOP COLUMN



DETAIL "A"

BUNDLING DETAIL

■ P408 TIES 1'-0" VERTICAL SPACING 2'-0" MAX HORIZONTAL SPACING. SEE SECTION B-B AND SECTION C-C FOR DETAILS.

(P01) 3'-0" X 1'-0" X 4" CONST. JOINT SHALL BE FORMED BY A BEVELED KEYWAY

(P06) SUPPORT PIER ON 12 3/4" X 0.375 INCH CAST-IN-PLACE CONCRETE PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 210 TONS PER PILE.

(P08) P518 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 X 6 BETWEEN BEAM SEATS.

(P15) 7'-0" X 1'-1" X 4" DEEP CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

PIER | SHEET 8 | 551

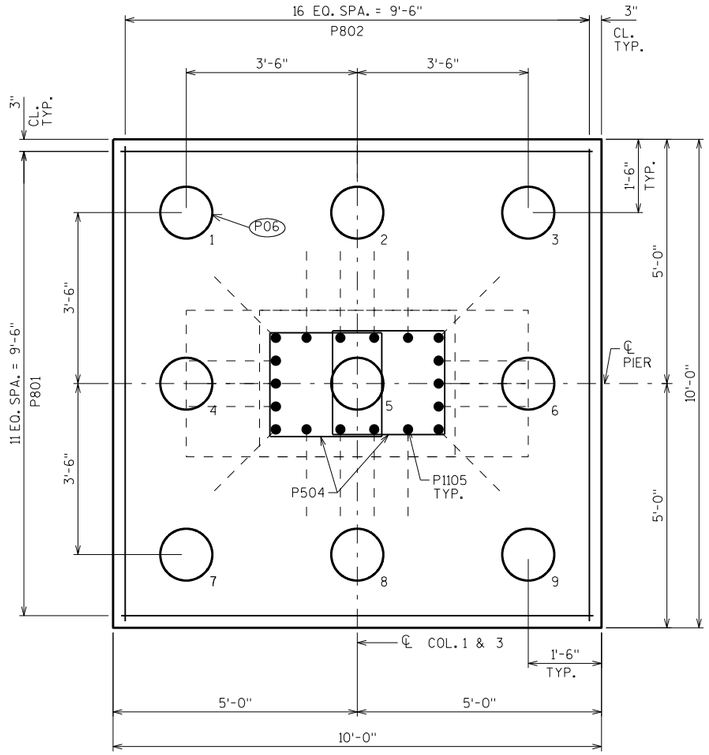
SCALE = 3

8

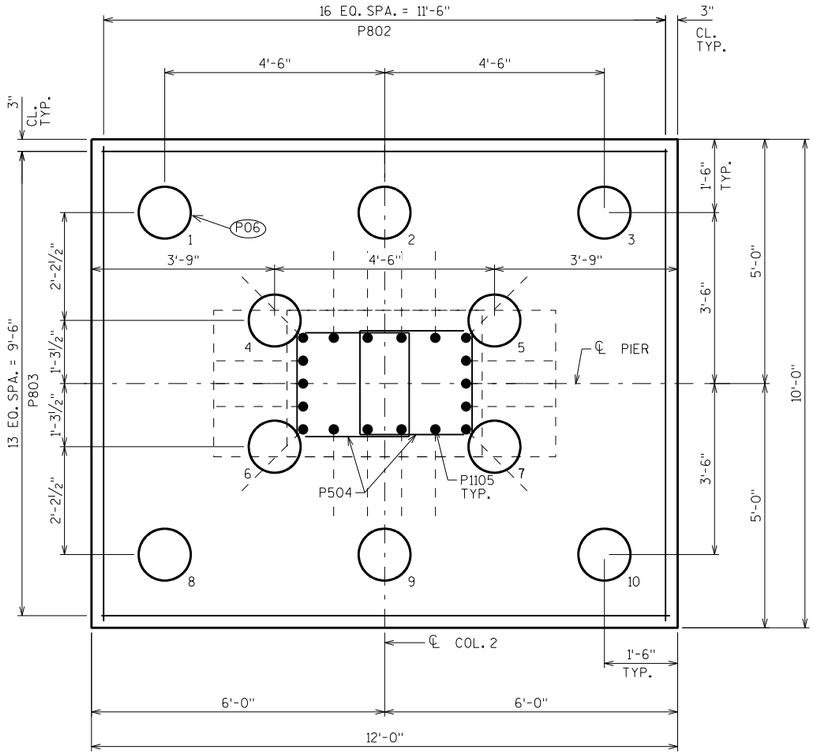
8

STATE PROJECT NUMBER

1420-22-71



SECTION E-E: EXTERIOR FOOTING



SECTION D-D: INTERIOR FOOTING

BILL OF BARS

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

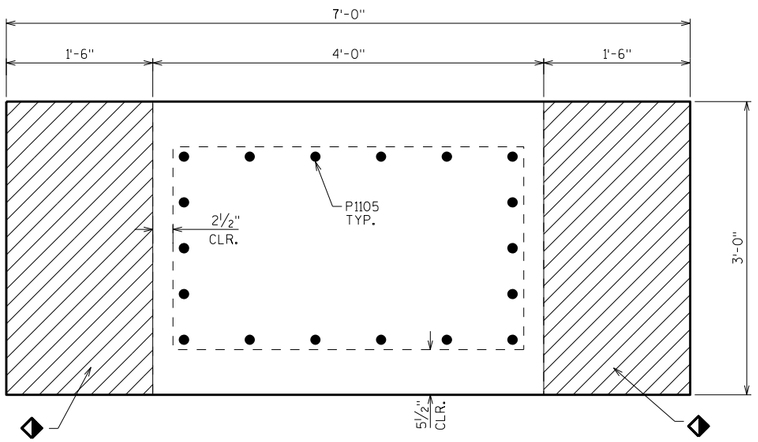
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
P801		24	9'-6"			FOOTINGS - EXTERIOR
P802		51	9'-6"			FOOTINGS - INTERIOR & EXTERIOR
P803		14	11'-6"			FOOTING - INTERIOR
P504	X	6	9'-2"	X		COLUMN BASE STIRRUP
P1105	X	54	24'-6"	X		FOOTING DOWEL - COLUMN VERT.
P1106	X	54	20'-2"			COLUMN - VERT.
P407	X	60	12'-9"	X		COLUMN STIRRUP
P408	X	174	3'-4"	X		COLUMN - HORIZ. TIE
P409	X	42	14'-5"	X		COLUMN STIRRUP
P1110	X	24	12'-0"			COLUMN - VERT.
P1011	X	8	52'-6"			CAP - HORIZ. BOTTOM
P512	X	12	31'-0"	X		CAP - HORIZ. TOP
P513	X	10	53'-1"		◭	CAP - HORIZ. SIDE
P514	X	52	11'-10"	X		CAP STIRRUP
P515	X	10	5'-11"	X		CAP - HORIZ. END U-BAR
P516	X	37	6'-1"	X		CAP - VERT. U-BAR GIR. 1-5
P417	X	4	37'-6"			CAP - HORIZ. GIR. 1-5
P518	X	30	2'-0"			CAP - DOWEL BARS

◭ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

◭ BAR SERIES TABLE

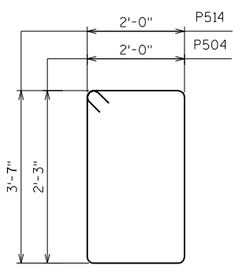
MARK	NO. REQD.	LENGTH
P513	2 SERIES OF 5	52'-10" TO 53'-4"

BUNDLE AND TAG EACH SERIES SEPARATELY.

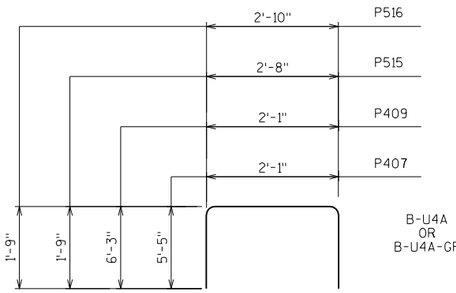


COMPRESSIBLE FILLER DETAIL
TOP OF FOOTING/BASE OF COLUMN

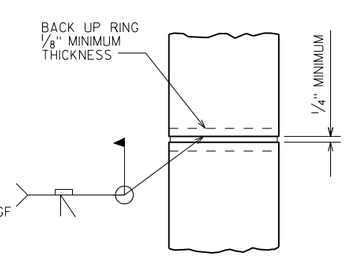
◆ 1½" X 1'-6" X 3'-0" COMPRESSIBLE FILLER BETWEEN TOP OF FOOTING AND BASE OF COLUMN.



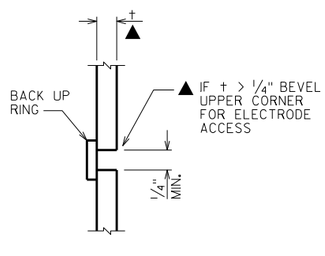
P504, P514



P407, P409, P515, P516

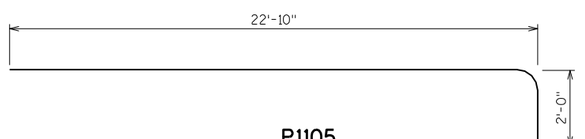


CAST-IN-PLACE 'PIPE PILE'

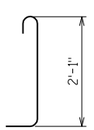


C.I.P. PILE WELD DETAIL

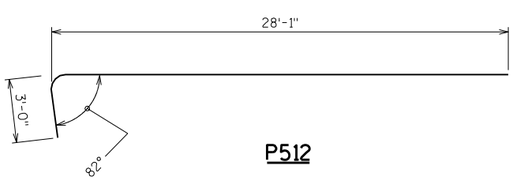
PILE DETAILS



P1105



P408



P512

(P06) SUPPORT PIER ON 12 3/4" X 0.375 INCH CAST-IN-PLACE CONCRETE PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 210 TONS PER PILE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

PIER DETAILS

SHEET 9

552

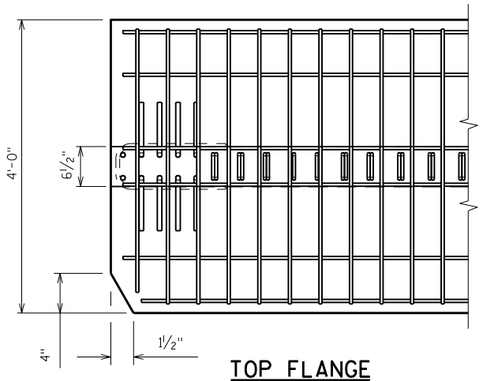
SCALE = 2

8

8

STATE PROJECT NUMBER

1420-22-71



TOP FLANGE

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 15" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 15" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

STRANDS SHALL BE FLUSH WITH THE END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, ENDS OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO APPLICATION OF THE SEALER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

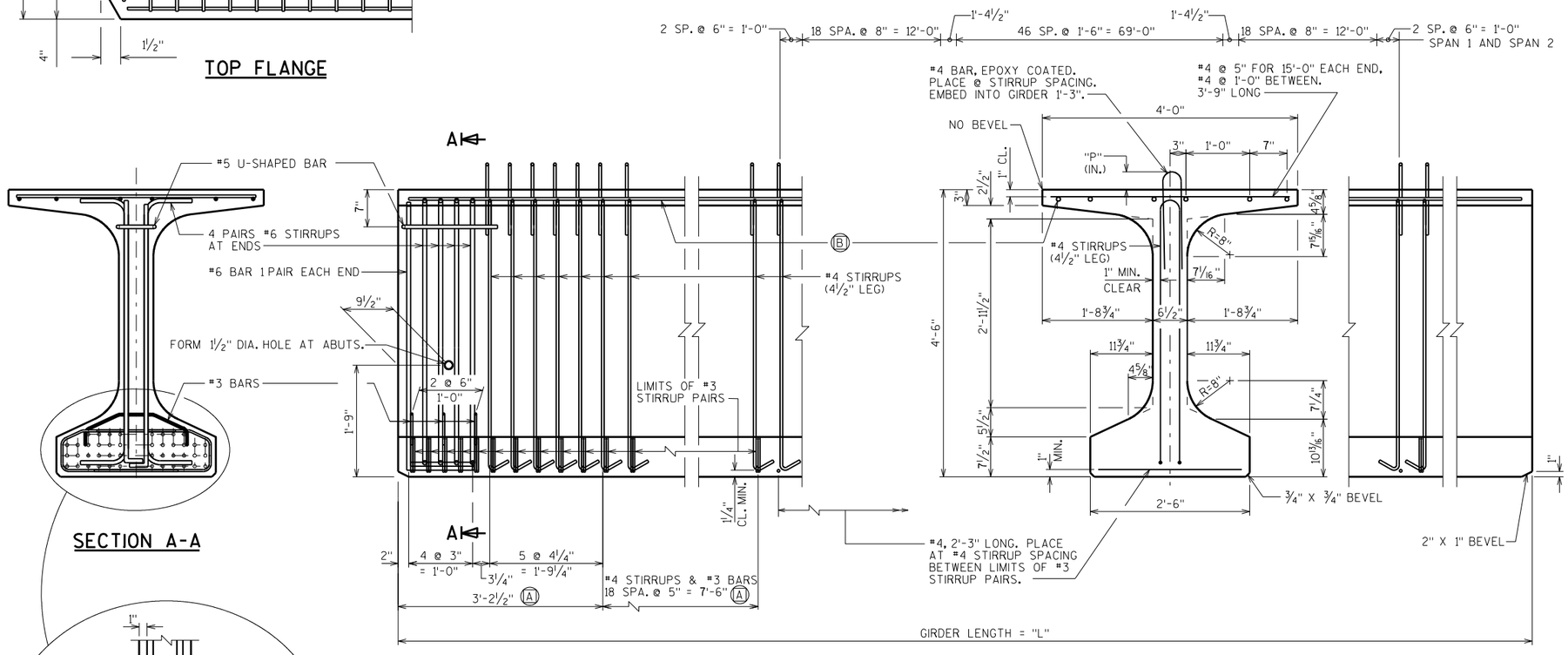
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT. IF THE FABRICATOR WANTS TO BUILD A BAR STEEL CAGE BY WELDING LONGITUDINAL REINFORCEMENT TO THE #4 STIRRUPS, ONE OPTION IS AVAILABLE:

USE ASTM A706, GRADE 60 REINFORCEMENT AND THE STIRRUP SPACING AS SHOWN ON THE PLANS.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT SECTION.

PRESTRESSING STRANDS SHALL BE 0.6" DIA.-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 psi.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

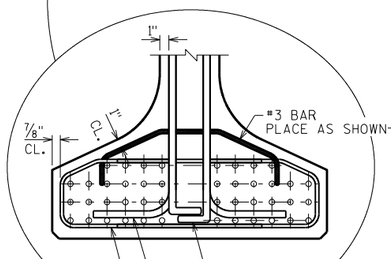


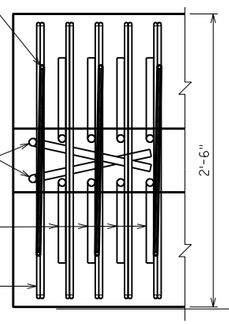
SIDE VIEW & TYP. SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

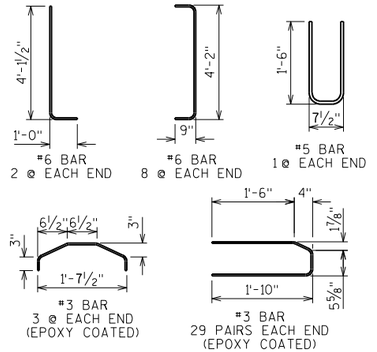
Ⓑ (SPAN 1) 6 #4, FULL LENGTH 1'-11" MIN. LAP
(SPAN 2) 6 #4, FULL LENGTH 1'-11" MIN. LAP

SECTION A-A





BOTTOM FLANGE



✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CONC. STRGTH. f'c (p.s.i.)	"P" 1ST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳	("A"	"B" MIN.	"B" MAX.	"C")	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳
1	ALL	119.38	0.7	1.3	1.8	2.1	2.2	2.1	1.8	1.3	0.7	8000	8"	7"	8"	0.6	36	6800	49.0	16.0	19.0	5.0		
2	ALL	119.38	0.7	1.3	1.8	2.1	2.2	2.1	1.8	1.3	0.7	8000	8"	7"	8"	0.6	36	6800	49.0	16.0	19.0	5.0		

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

54W" PRESTRESSED GIRDER DETAILS 1

SHEET 10

553

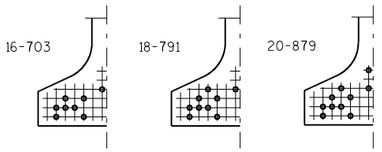
SCALE = 1.0

8

8

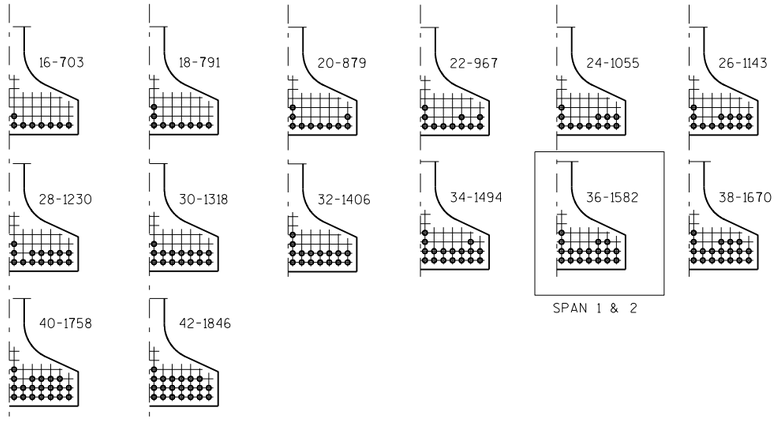
STATE PROJECT NUMBER

1420-22-71



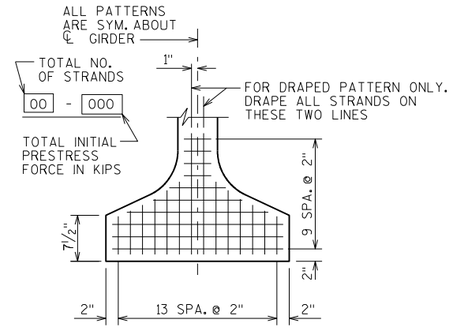
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS

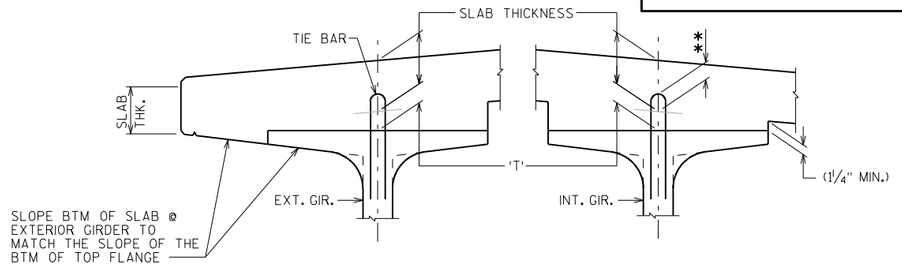


ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS



TYP. STRAND PATTERN



SLAB HAUNCH DETAIL

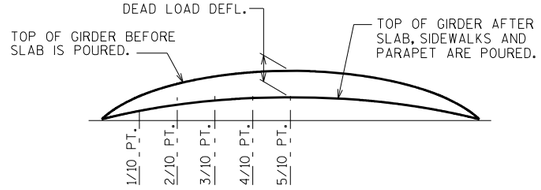
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

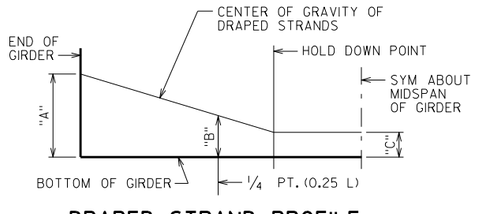
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3.16" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DEAD LOAD DEFLECTION DIAGRAM



DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	3.54
2	3.54

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

54W" PRESTRESSED GIRDER DETAILS 2

SHEET 11

554

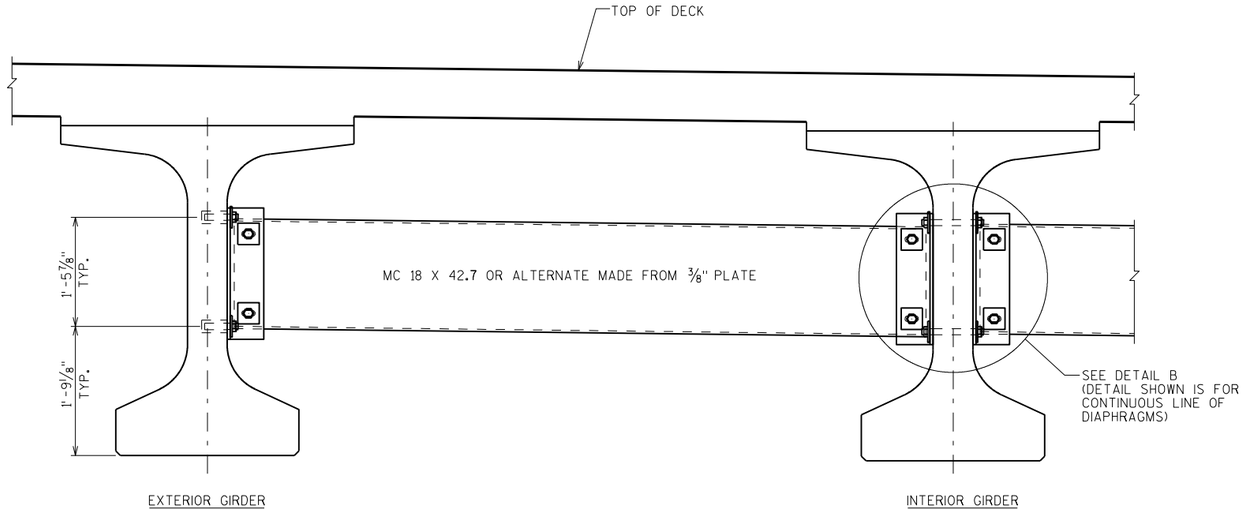
8

8

SCALE = 1

STATE PROJECT NUMBER

1420-22-71



PART TRANSVERSE SECTION AT DIAPHRAGM

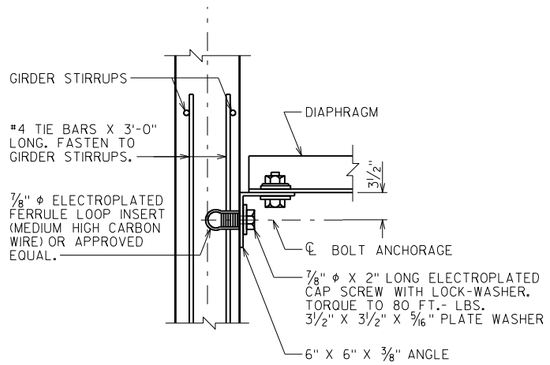
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-20-226", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

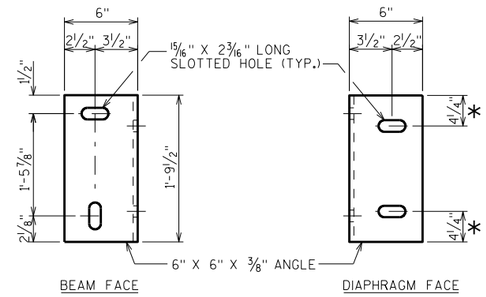
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.



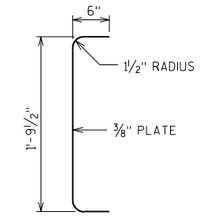
SECTION A-A

(FOR EXTERIOR ATTACHMENT)

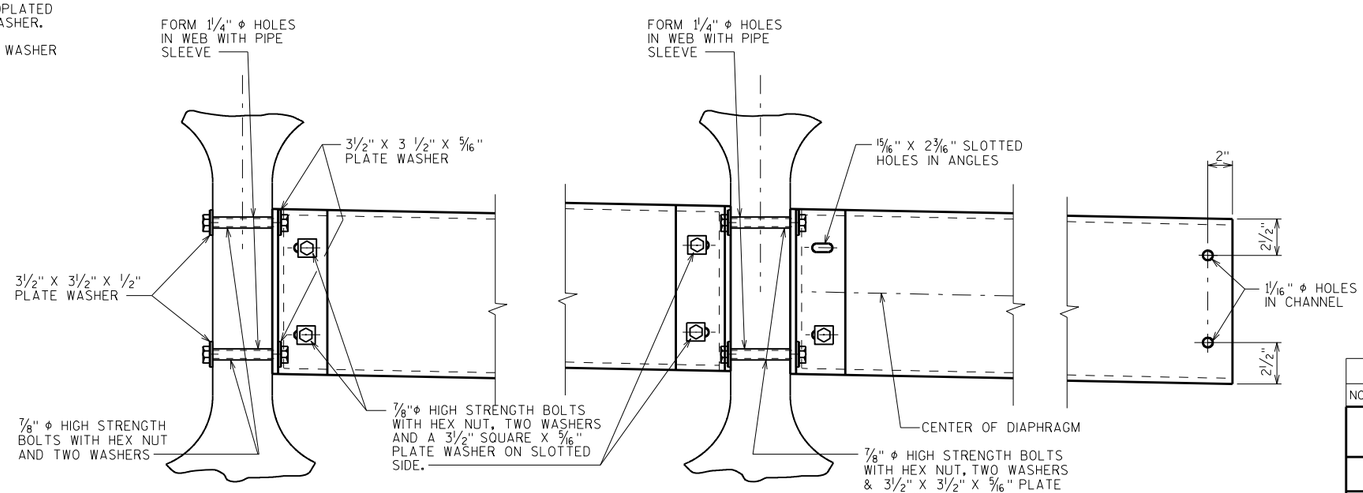


DIAPHRAGM SUPPORT

* 2½" FOR ALTERNATE PLATE DIAPHRAGM



SECTION THRU ALTERNATE DIAPHRAGM



(FOR STAGGERED DIAPHRAGM)

(FOR CONTINUOUS LINE OF DIAPHRAGMS)

DETAIL B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

STEEL DIAPHRAGM

SHEET 12

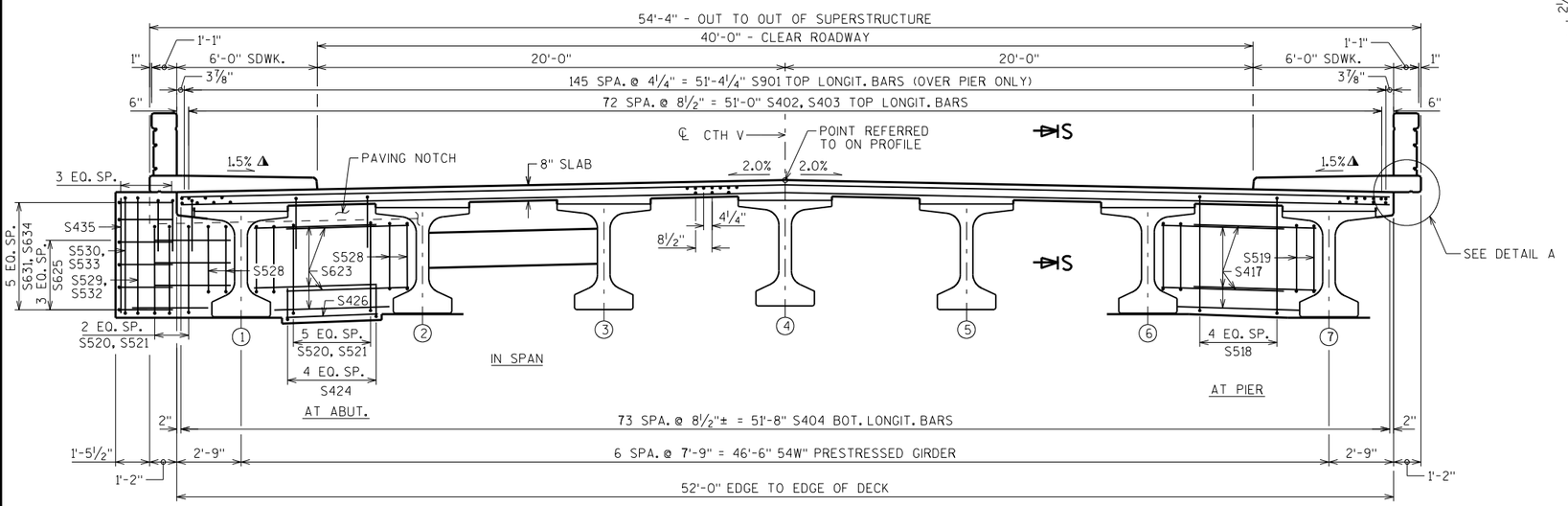
555

SCALE = 1

8

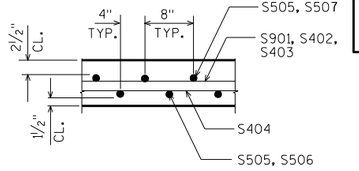
8

STATE PROJECT NUMBER
1420-22-71

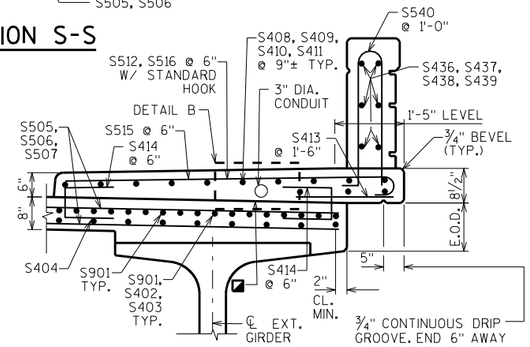


CROSS SECTION THRU ROADWAY

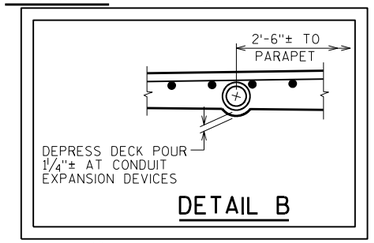
(LOOKING NORTH)



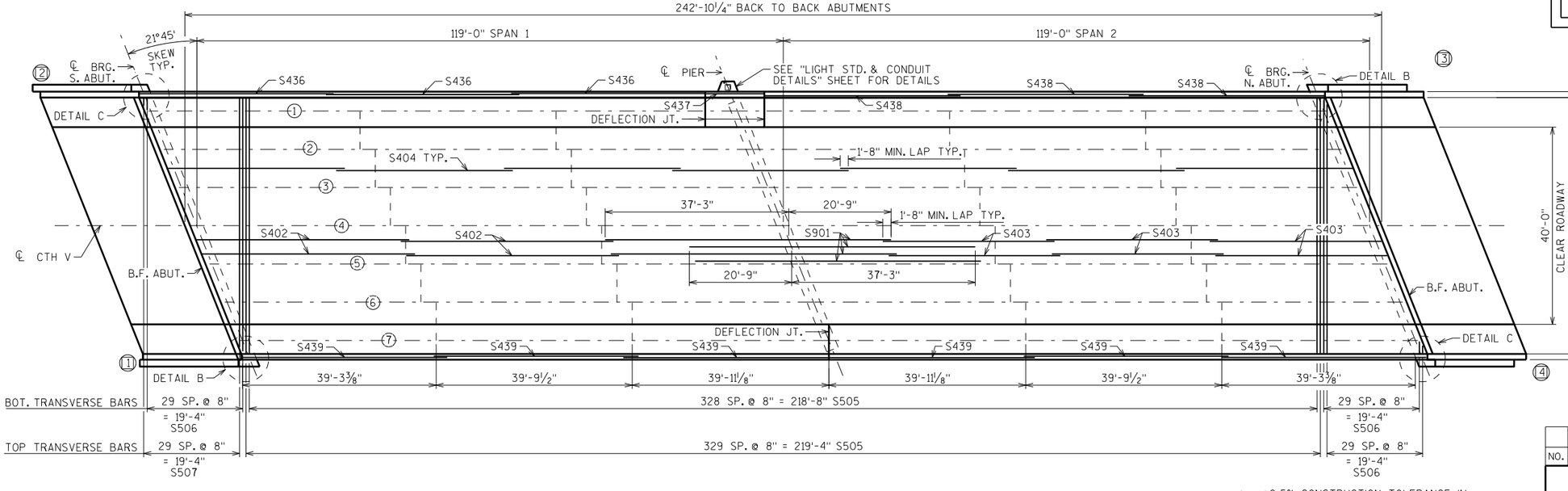
SECTION S-S



DETAIL A



DETAIL B



PLAN

▲ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

NOTE: FOR DETAILS B AND C, SIDEWALK BARS AND RAIL POST SPACING, SEE "SUPERSTRUCTURE DETAILS 1" SHEET.

◪ CONSTRUCTION JOINT- STRIKE OFF AND LEAVE ROUGH AS SHOWN. MATCH BRIDGE CROSS SLOPE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

SUPERSTRUCTURE

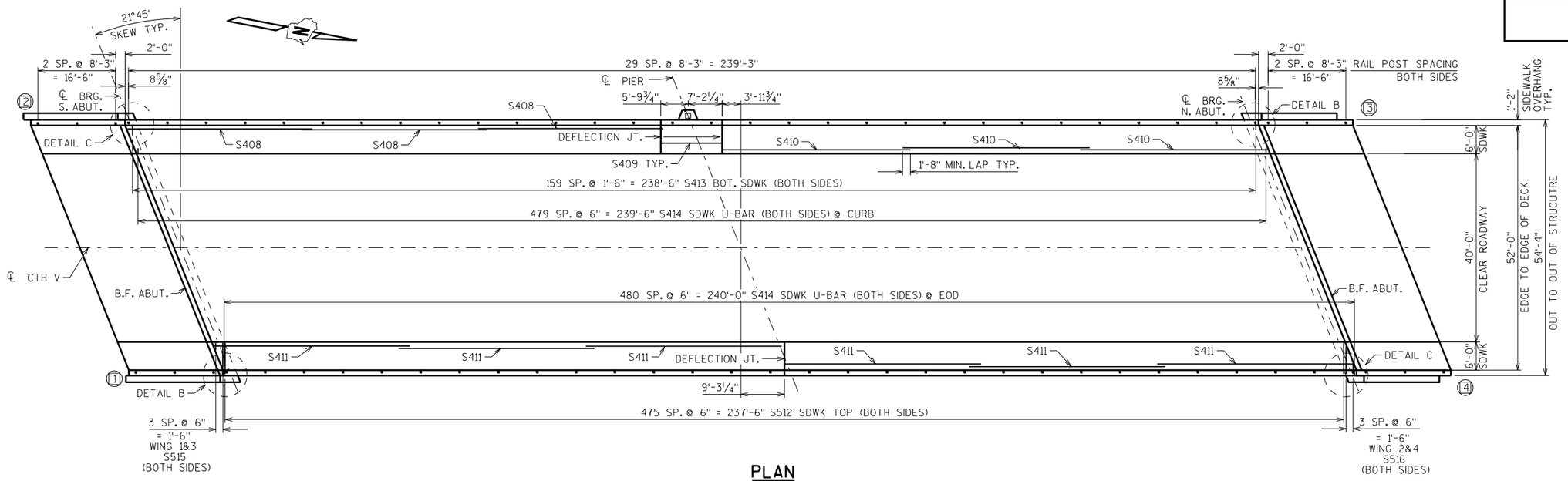
SHEET 13

556

SCALE = 12

STATE PROJECT NUMBER

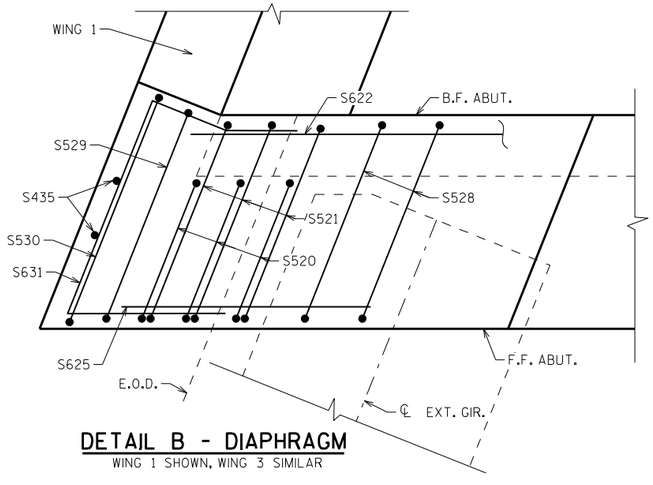
1420-22-71



PLAN

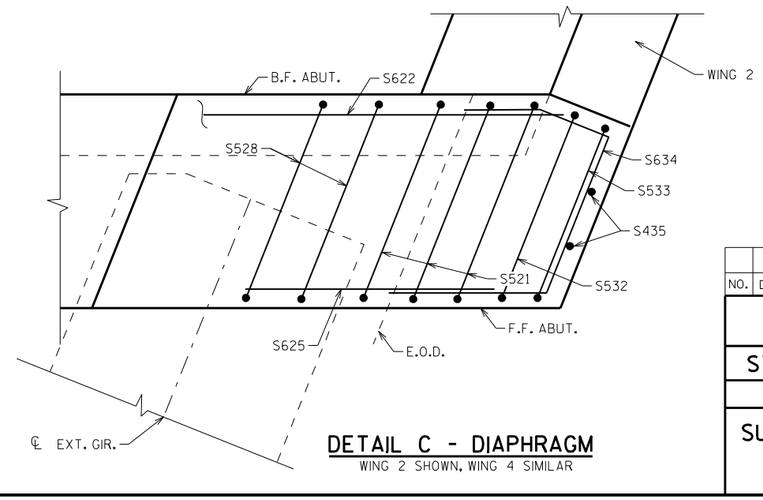
TOP OF DECK ELEVATIONS

	S. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	N. ABUT.
EOD	877.11	876.91	876.69	876.47	876.25	876.03	875.81	875.59	875.37	875.15	874.93	874.71	874.49	874.27	874.05	873.83	873.61	873.39	873.17	872.94	872.72
GIR. 1	877.15	876.94	876.73	876.51	876.29	876.07	875.85	875.62	875.40	875.18	874.96	874.74	874.52	874.30	874.08	873.86	873.64	873.42	873.20	872.98	872.76
GIR. 2	877.26	877.05	876.83	876.61	876.39	876.17	875.95	875.73	875.51	875.29	875.07	874.84	874.62	874.40	874.18	873.96	873.74	873.52	873.30	873.08	872.86
GIR. 3	877.36	877.15	876.93	876.71	876.49	876.27	876.05	875.83	875.61	875.39	875.17	874.95	874.73	874.51	874.29	874.07	873.85	873.62	873.40	873.18	872.96
℄/GIR. 4	877.47	877.25	877.03	876.81	876.59	876.37	876.15	875.93	875.71	875.49	875.27	875.05	874.83	874.61	874.39	874.17	873.95	873.73	873.51	873.29	873.07
GIR. 5	877.25	877.03	876.81	876.59	876.37	876.15	875.93	875.71	875.49	875.27	875.05	874.83	874.61	874.39	874.17	873.95	873.73	873.51	873.29	873.07	872.85
GIR. 6	877.03	876.81	876.59	876.37	876.15	875.93	875.71	875.49	875.27	875.05	874.83	874.61	874.39	874.17	873.95	873.73	873.51	873.29	873.07	872.85	872.63
GIR. 7	876.81	876.59	876.37	876.15	875.93	875.71	875.49	875.27	875.05	874.83	874.61	874.39	874.17	873.95	873.73	873.51	873.29	873.07	872.85	872.63	872.41
EOD	876.73	876.51	876.29	876.07	875.85	875.63	875.41	875.19	874.97	874.75	874.53	874.31	874.09	873.87	873.65	873.43	873.21	872.99	872.77	872.55	872.33



DETAIL B - DIAPHRAGM

WING 1 SHOWN, WING 3 SIMILAR



DETAIL C - DIAPHRAGM

WING 2 SHOWN, WING 4 SIMILAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

SUPERSTRUCTURE DETAILS 1

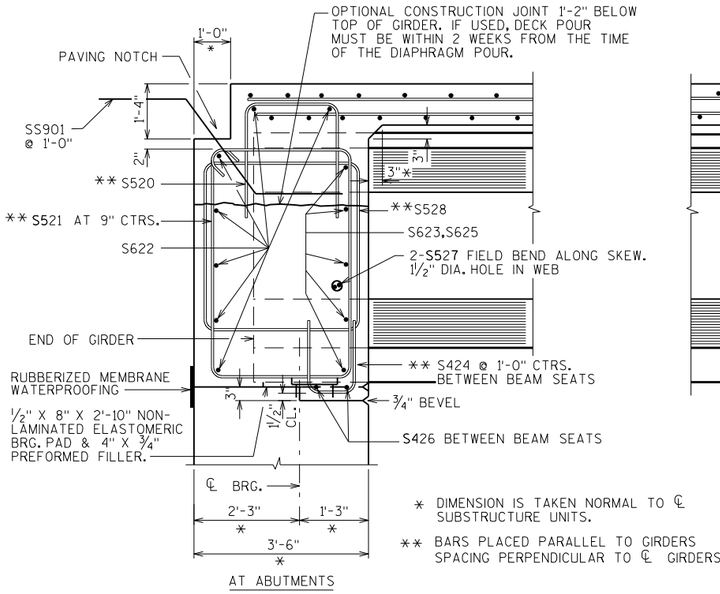
SHEET 14

557

SCALE = 12

STATE PROJECT NUMBER

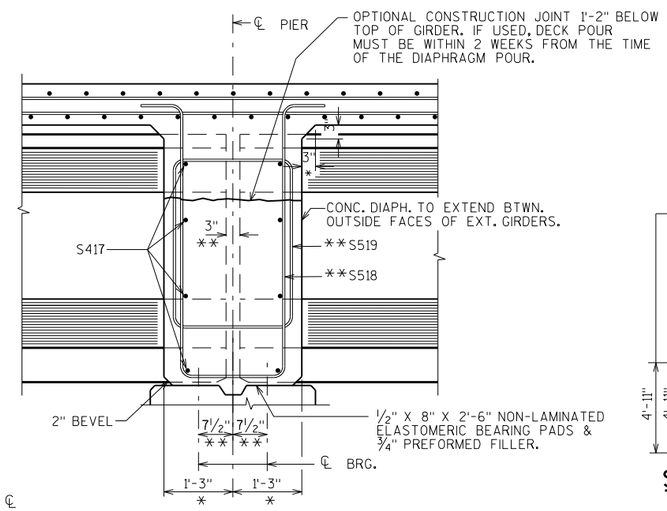
1420-22-71



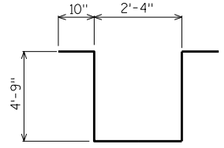
* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

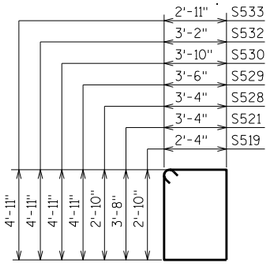
PART LONGIT. SECTION



AT PIER DIAPHRAGM



S518

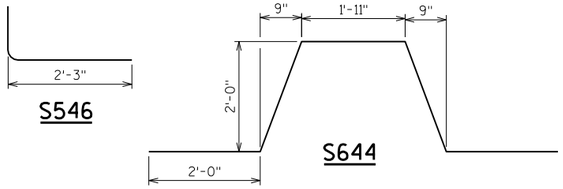


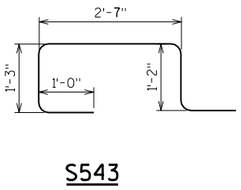
S519, S521, S528, S529, S530, S532, S533

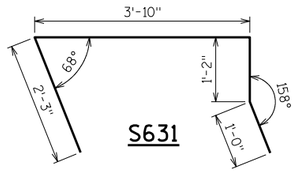
BILL OF BARS

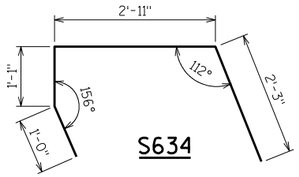
▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

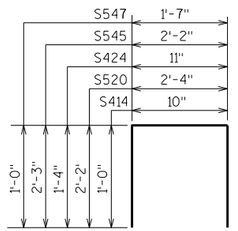
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S901	X	146	58'-0"			LONGITUDINAL CONTINUITY
S402	X	146	43'-2"			LONGITUDINAL TOP
S403	X	219	34'-10"			LONGITUDINAL TOP
S404	X	518	35'-10"			LONGITUDINAL BOT.
S505	X	659	51'-8"			TRANSVERSE TOP AND BOTTOM
▲ S506	X	60	27'-1"		▲	TRANSVERSE BOTTOM
▲ S507	X	60	26'-3"		▲	TRANSVERSE TOP
S408	X	39	38'-11"			LONGITUDINAL SIDEWALK
S409	X	13	12'-8"			LONGITUDINAL SIDEWALK
S410	X	39	39'-9"			LONGITUDINAL SIDEWALK
S411	X	78	41'-7"			LONGITUDINAL SIDEWALK
S512	X	952	7'-3"	X		TRANSVERSE SIDEWALK TOP
S413	X	320	2'-0"			TRANSVERSE SIDEWALK BOTTOM
S414	X	1922	2'-8"	X		SIDEWALK U-BAR
▲ S515	X	8	3'-5"		▲	TRANSVERSE SIDEWALK TOP
▲ S516	X	8	4'-8"	X	▲	TRANSVERSE SIDEWALK TOP
S417	X	84	5'-3"			PIER DIAPHRAGM HORIZ.
S518	X	30	13'-0"	X		PIER DIAPHRAGM STIRRUP
S519	X	24	11'-0"	X		PIER DIAPHRAGM STIRRUP
S520	X	84	6'-5"	X		ABUT. DIAPHRAGM DECK U-BAR
S521	X	84	14'-8"	X		ABUT. DIAPHRAGM STIRRUP
S622	X	28	31'-9"			ABUT. DIAPHRAGM HORIZ. B.F.
S623	X	108	5'-3"			ABUT. DIAPHRAGM HORIZ F.F.
S424	X	60	3'-5"	X		ABUT. DIAPHRAGM U-BAR B/W SEATS
S625	X	20	3'-10"			ABUT. DIAPHRAGM HORIZ. END
S426	X	24	4'-2"			ABUT. DIAPHRAGM HORIZ. B/W SEATS
S527	X	28	6'-0"			ABUT. DIAPHRAGM HORIZ. THRU GIRDERS
S528	X	56	13'-0"	X		ABUT. DIAPHRAGM STIRRUP
S529	X	2	17'-8"	X		ABUT. DIAPHRAGM STIRRUP WING 1 & 3
S530	X	2	18'-2"	X		ABUT. DIAPHRAGM STIRRUP WING 1 & 3
S631	X	12	8'-0"	X		ABUT. DIAPHRAGM HORIZ. WING 1 & 3
S532	X	2	16'-10"	X		ABUT. DIAPHRAGM STIRRUP WING 2 & 4
S533	X	2	16'-4"	X		ABUT. DIAPHRAGM STIRRUP WING 2 & 4
S634	X	12	6'-11"	X		ABUT. DIAPHRAGM HORIZ. WING 2 & 4
S435	X	8	5'-0"			ABUT. DIAPHRAGM VERT. END
S436	X	18	38'-11"			PARAPET HORIZ.
S437	X	6	12'-8"			PARAPET HORIZ.
S438	X	18	39'-9"			PARAPET HORIZ.
S439	X	36	41'-7"			PARAPET HORIZ.
S540	X	482	6'-8"	X		PARAPET VERT.
S641	X	12	4'-9"			LIGHT STD. TRANSVERSE BOT.
S542	X	12	7'-3"	X		LIGHT STD. TRANSVERSE TOP
S543	X	4	7'-8"	X		LIGHT STD. VERT.
S644	X	6	10'-4"	X		LIGHT STD. HORIZ.
S545	X	4	6'-5"	X		LIGHT STD. VERT.
S546	X	2	3'-2"	X		LIGHT STD. VERT.
S547	X	2	3'-4"	X		LIGHT STD. VERT.
S548	X	12	3'-11"	X		PARAPET VERT. - AT ABUT. JUNCTION BOX
S549	X	12	2'-4"			PARAPET VERT. - AT ABUT. JUNCTION BOX
STAINLESS STEEL → SS901		110	5'-0"	X		CONC. ABUT. DIA. TO APPROACH SLAB



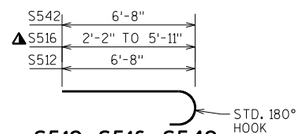




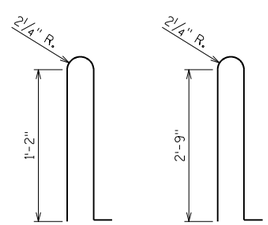




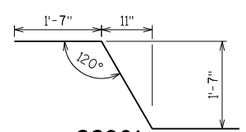
S414, S520, S424, S545, S547



S512, S516, S542



S548 S540

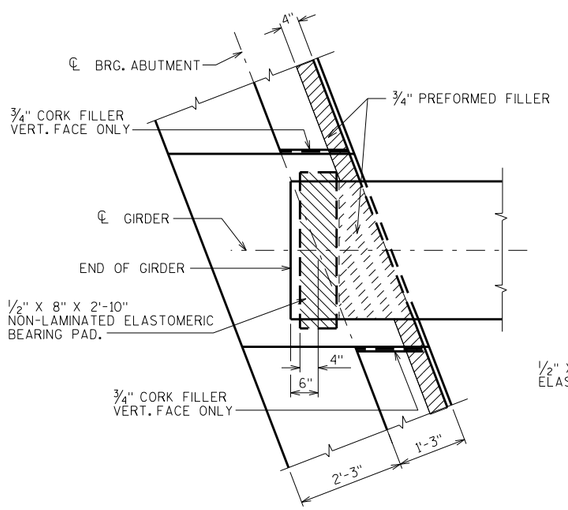


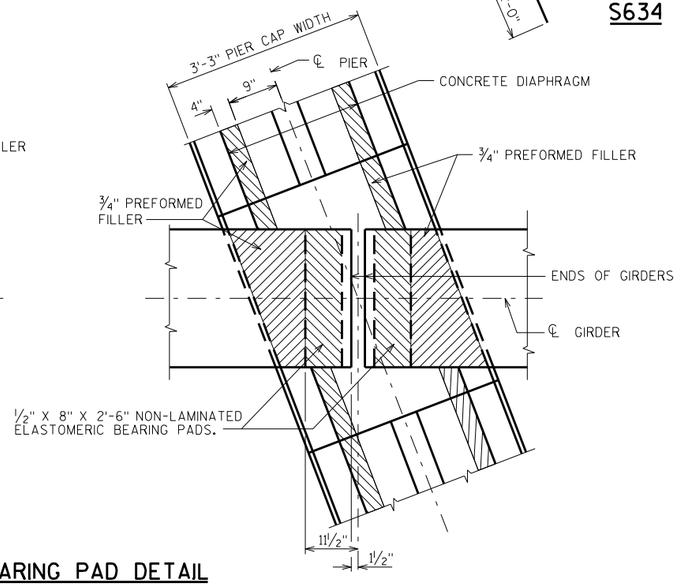
SS901

▲ BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY

MARK	NO. REQD.	LENGTH
S506	2 SERIES OF 30	2'-10" TO 51'-3"
S507	2 SERIES OF 30	2'-0" TO 50'-5"
S515	2 SERIES OF 4	1'-6" TO 5'-3"
S516	2 SERIES OF 4	2'-9" TO 6'-6"





BEARING PAD DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

SUPERSTRUCTURE DETAILS 2

SHEET 15

558

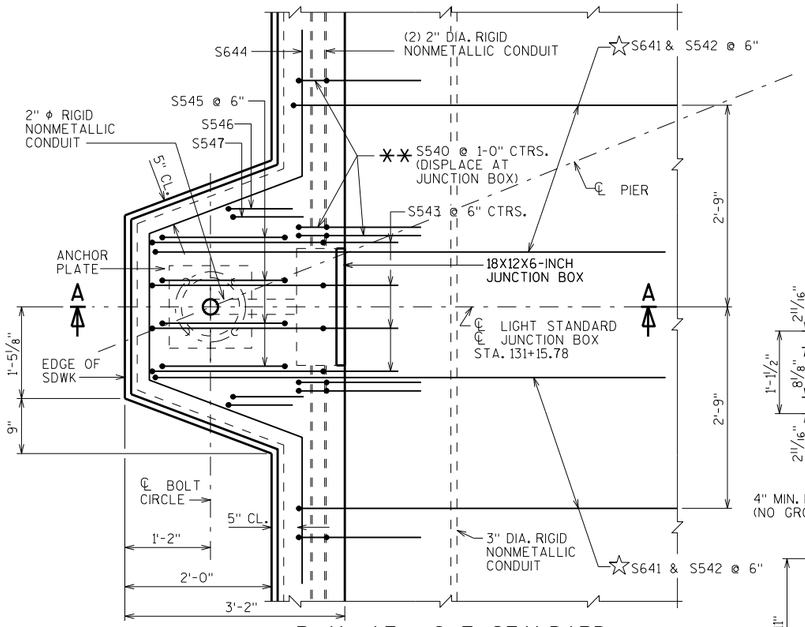
SCALE = 1.33

8

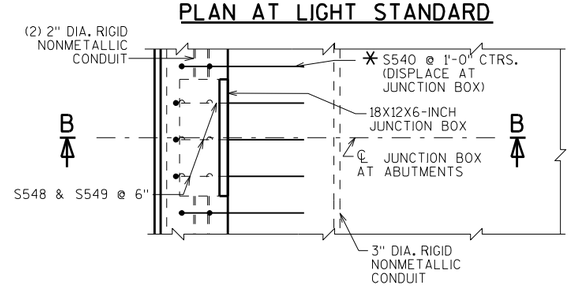
8

STATE PROJECT NUMBER

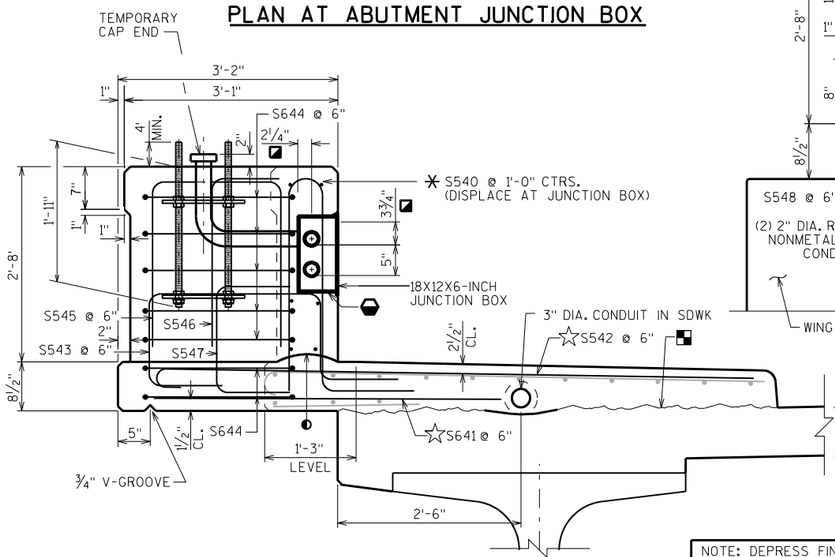
1420-22-71



PLAN AT LIGHT STANDARD

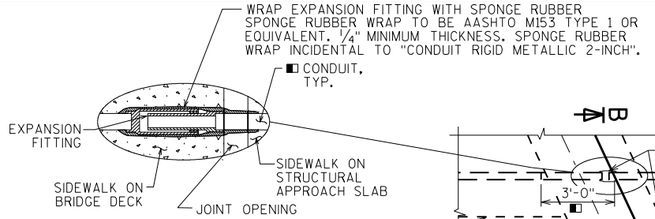


PLAN AT ABUTMENT JUNCTION BOX



SECTION A-A

NOTE: DEPRESS FINISH SURFACE OF DECK POUR AT DEFLECION JOINTS AND PAVING NOTCH TO ALLOW EXPANSION FITTING TO FIT IN SIDEWALK.



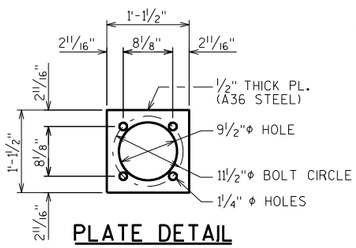
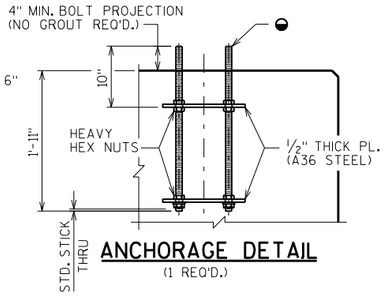


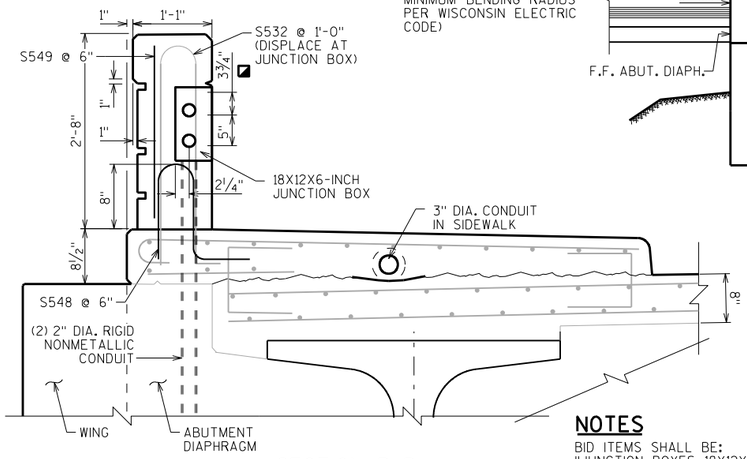
PLATE DETAIL

(2 REQ'D.)



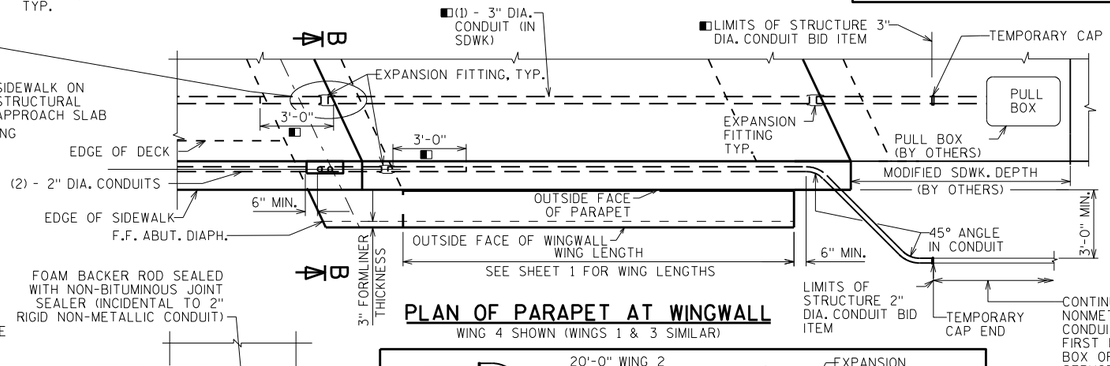
ANCHORAGE DETAIL

(1 REQ'D.)



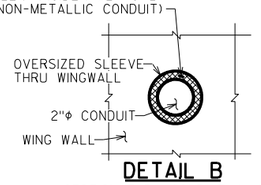
SECTION B-B

TYPICAL AT ALL ABUTMENT CORNERS



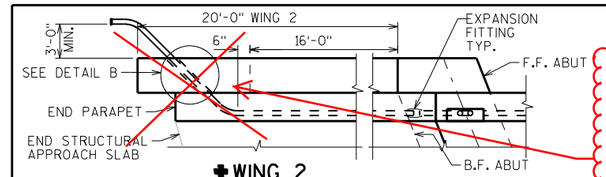
PLAN OF PARAPET AT WINGWALL

WING 4 SHOWN (WINGS 1 & 3 SIMILAR)



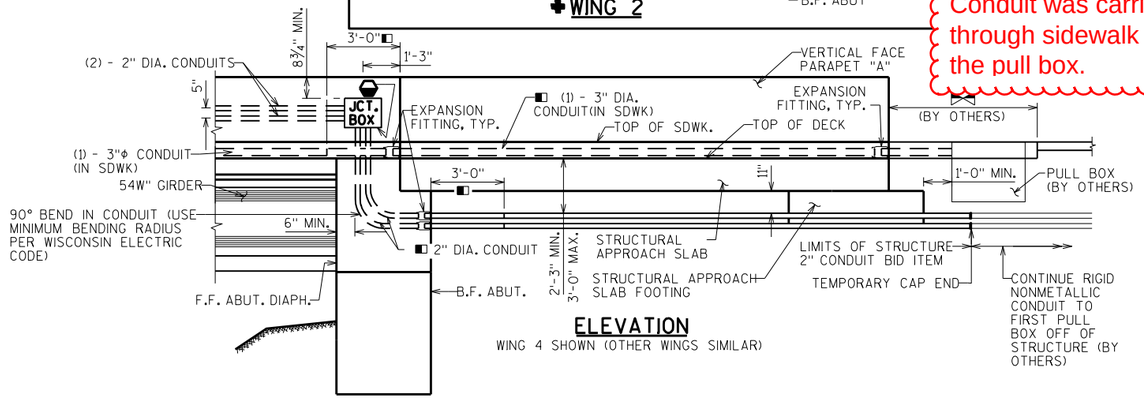
DETAIL B

SECTION THRU CONDUIT IN WING



✤ WING 2

Conduit did not angle through wing as detail shows. Conduit was carried through sidewalk to the pull box.



ELEVATION

WING 4 SHOWN (OTHER WINGS SIMILAR)

- ⋈ MODIFIED SIDEWALK DEPTH OFF STRUCTURE FOR EMBEDDED 3" DIA. CONDUIT (BY OTHERS)
- ✚ FOR WING 2 ONLY - SLEEVE CONDUIT THROUGH WING 2. SEE DETAIL B
- ◒ 1"ϕ THREADED ANCHOR BOLTS ASTM A449 OR AASHTO M 314-90 GR 55. HOT DIP ASTM A153, CLASS C, UPPER 8" OF BOLT INCLUDING NUTS & WASHERS. PROVIDE ENLARGED THREAD ON NUTS FOR PROPER FIT AFTER GALVANIZING. PROVIDE DOUBLE FLAT WASHERS & NUTS.
- ◧ USE RIGID METALLIC CONDUIT 3'-0" INTO PARAPET ON DECK AND WING SIDES OF THE JOINT OPENING.
- ☆ BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN THE SIDEWALK
- ■ CONSTRUCTION JOINT - STRIKE OFF AS SHOWN
- ⬬ CUT OUT ± 1" OF GASKET AT BOTTOME OF JUNCTION BOX TO ALLOW FOR DRAINAGE.
- ◪ LOCATION OF CONDUIT MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.
- * TEMPORARY END CAP
- ✶✶ SEE "VERT. FACE PARAPET 'A' MODIFIED" SHEET FOR ADDITIONAL STEEL DETAILS.

SEE "SUPERSTRUCTURE" SHEET FOR ADDITIONAL SIDEWALK AND DECK STEEL DETAILS.

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18X12X6-INCH", EACH.
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH".
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH"
"CONDUIT RIGID METALLIC 3-INCH".
"ANCHOR ASSEMBLIES LIGHT POLES", EACH

APPROVED MANUFACTURERS - JUNCTION BOXES:
SEE APPROVED MATERIAL LIST.

APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER (4" TOTAL CONDUIT MOVEMENT).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH" AND "CONDUIT RIGID METALLIC 3-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

LIGHTING STD & CONDUIT DETAILS

SHEET 16

559

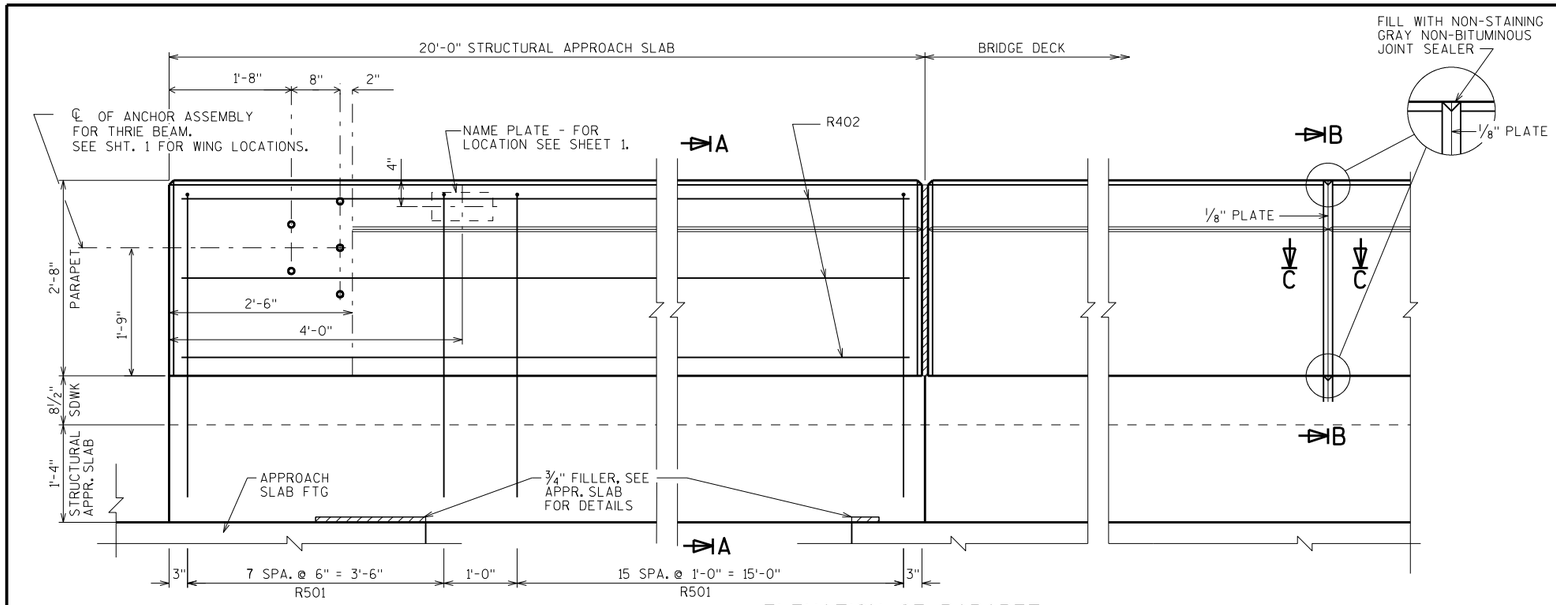
SCALE = 3

8

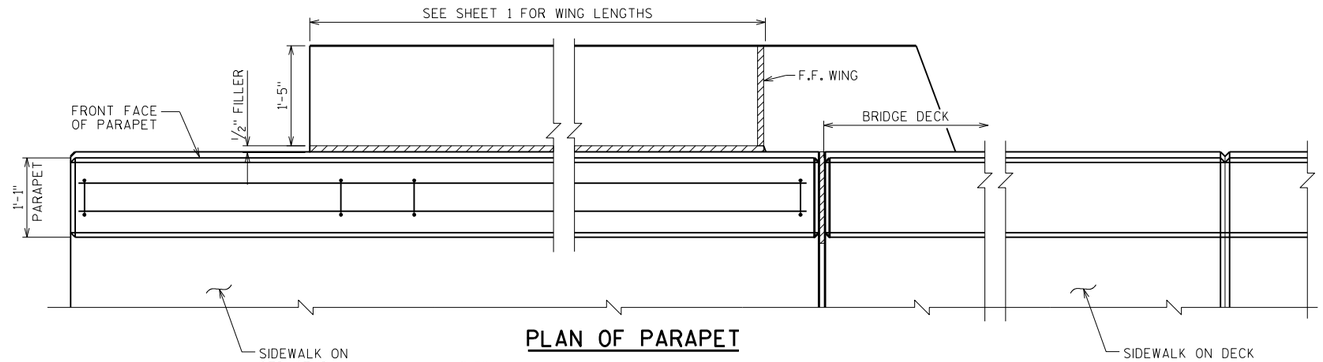
8

STATE PROJECT NUMBER

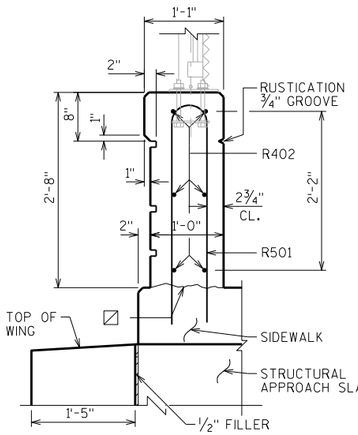
1420-22-71



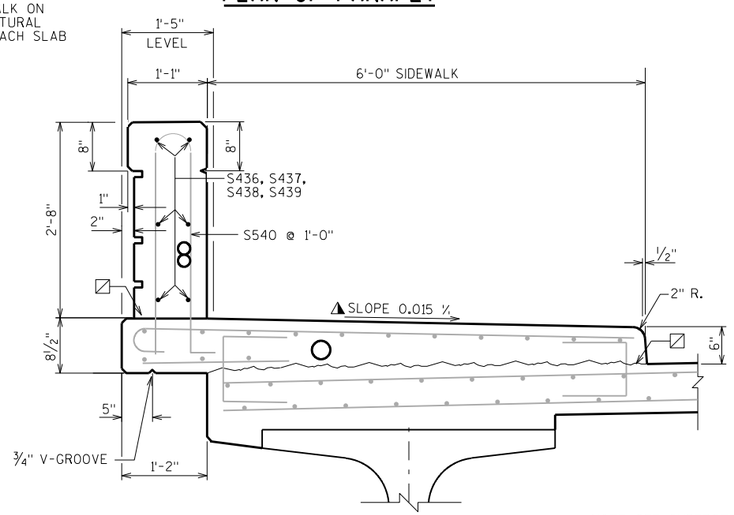
ELEVATION OF PARAPET



PLAN OF PARAPET

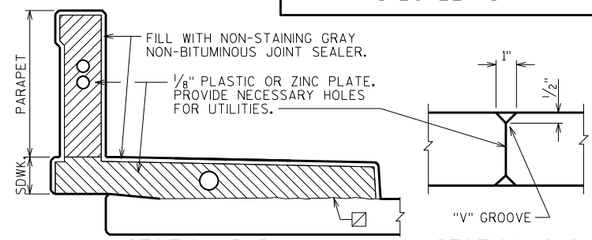


SECTION A-A



ON DECK

NOTE: SEE SUPERSTRUCTURE SHEET FOR SIDEWALK STEEL DETAILS



SECTION B-B

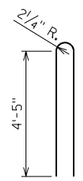
(SHOWING DEFLECTION JOINT IN PARAPET AND SIDEWALK.)

SECTION C-C

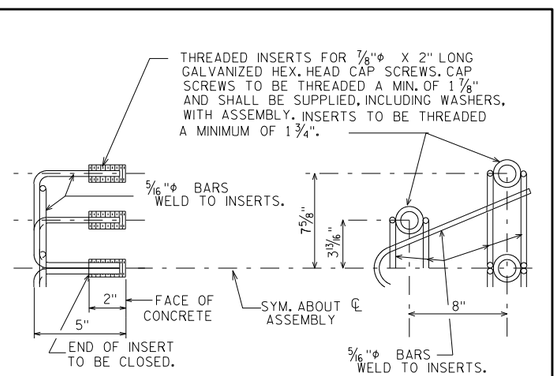
WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF 1/8" ZINC OR PLASTIC PLATE CUT AS SHOWN IN SECTION B-B BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.

BILL OF BARS

BAR MARK	COAT	SOUTH APPROACH SLAB	NORTH APPROACH SLAB	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	48	48	9'-5"	X		PARAPET VERT.
R402	X	12	12	19'-8"			PARAPET HORIZ.



R501



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX. HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

SEE "RAILING TUBULAR SCREENING" SHEET FOR RAILING DETAILS.

▲ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

☐ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE X-SLOPE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

VERTICAL FACE PARAPET "A" MODIFIED

SHEET 17

560

PPTA 7-13

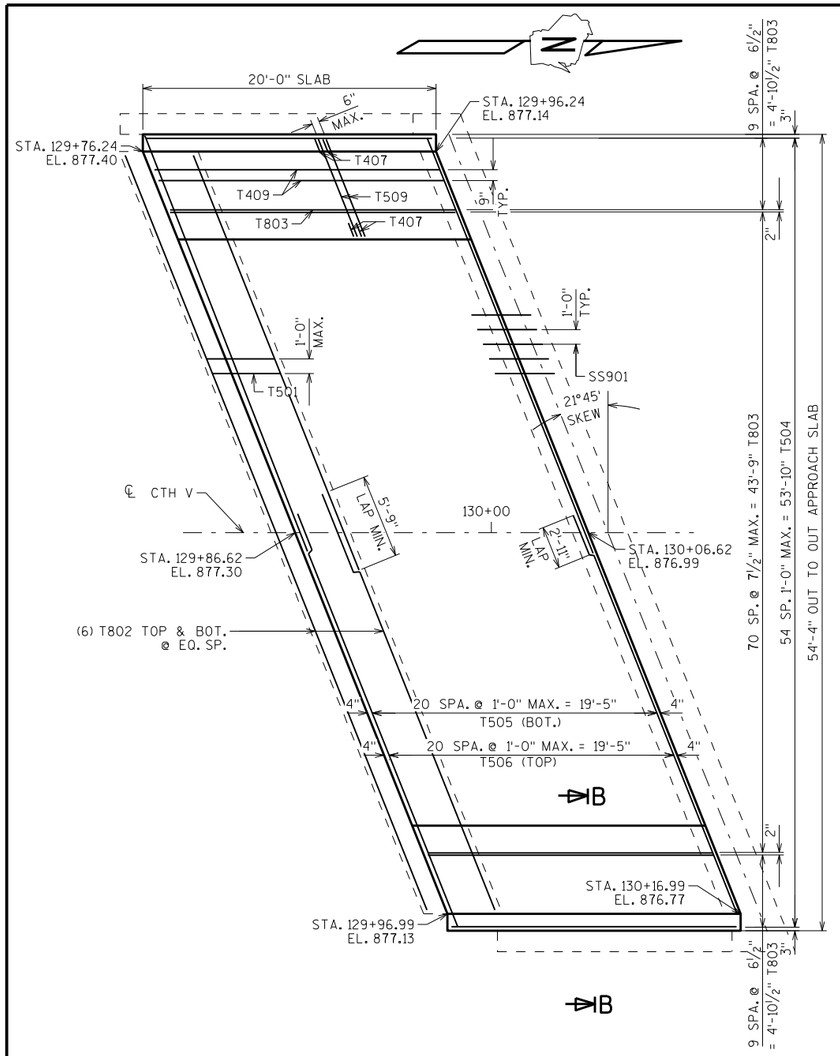
SCALE = 1

8

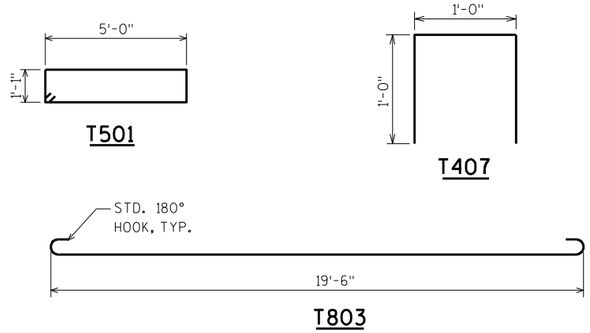
8

STATE PROJECT NUMBER

1420-22-71



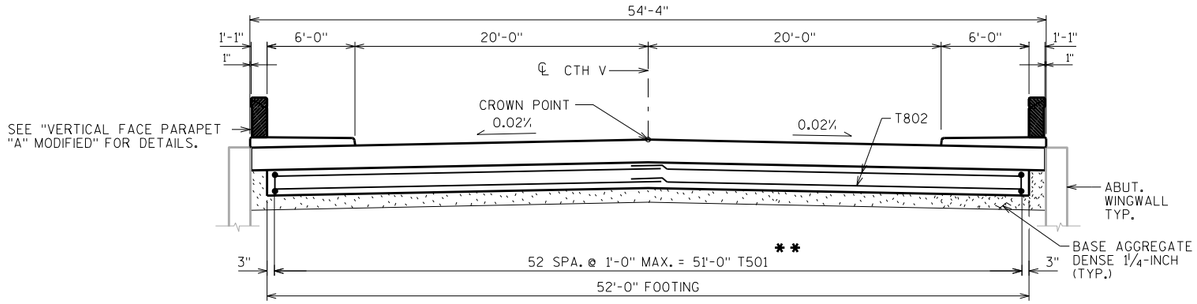
SOUTH STRUCTURAL APPROACH SLAB PLAN



BILL OF BARS

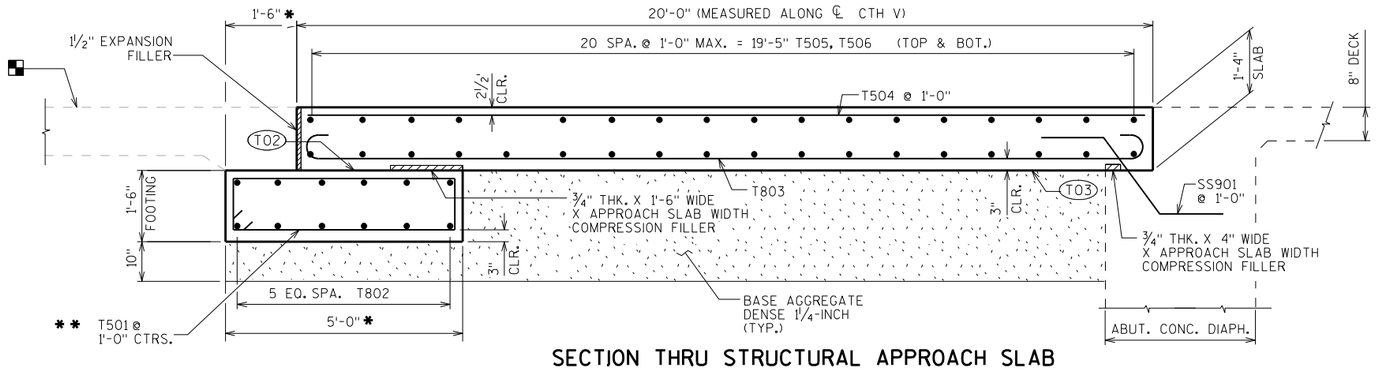
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	53	12'-10"	X		APPROACH SLAB FTG. - STIRRUP
T802	X	24	30'-9"			APPROACH SLAB FTG. - TRANS.
T803	X	91	21'-4"	X		APPROACH SLAB - LONG. - BOT.
T504	X	55	19'-6"			APPROACH SLAB - LONG. - TOP
T505	X	42	30'-7"			APPROACH SLAB - TRANS - BOT.
T506	X	42	30'-7"			APPROACH SLAB - TRANS - TOP.
T407	X	164	2'-10"	X		SIDEWALK - U-BAR
T408	X	20	19'-8"			SIDEWALK - LONG.
T509	X	82	7'-2"			SIDEWALK - TRANS.

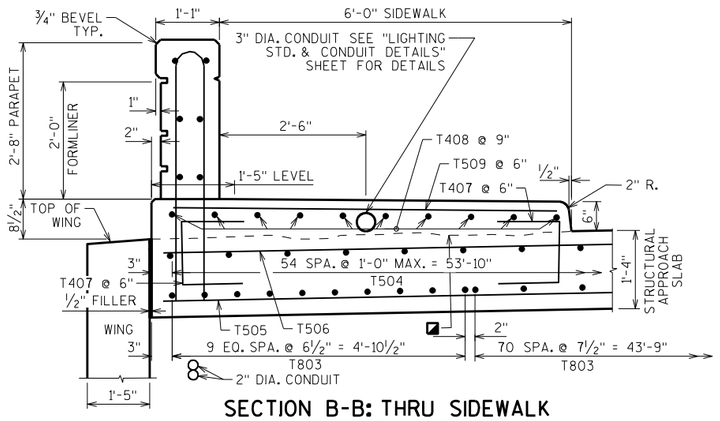


CROSS SECTION THRU ROADWAY - LOOKING WEST

(SHOWING FOOTING STEEL ONLY)



SECTION THRU STRUCTURAL APPROACH SLAB



SECTION B-B: THRU SIDEWALK

- ◪ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.
- * MEASURED NORMAL TO SUBSTRUCTURE
- ** BARS PLACED PARALLEL TO ℄ SPACING PERPENDICULAR TO ℄
- ◩ CONCRETE PAVEMENT APPROACH SLAB. SEE ROADWAY PLANS FOR DETAILS.

APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCTURAL APPROACH SLAB.

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

SOUTH STRUCTURAL APPROACH SLAB

SHEET 18

561

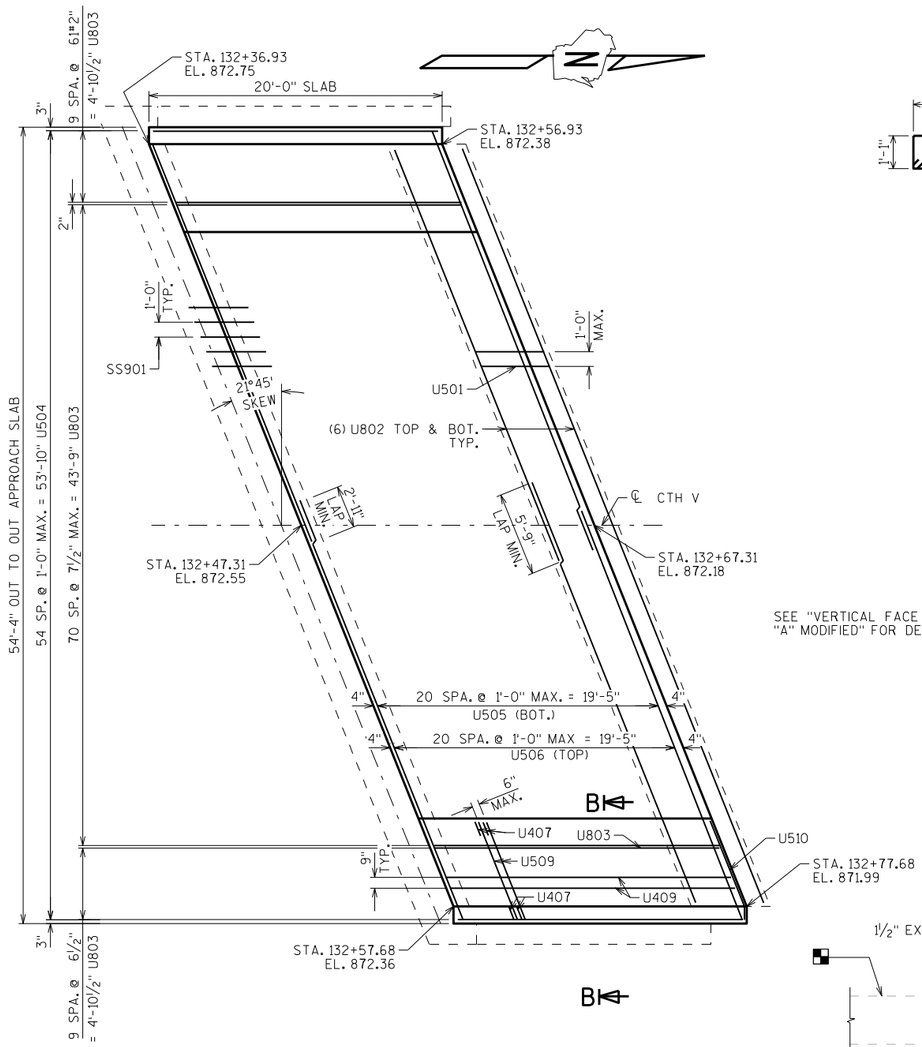
SCALE = 5

8

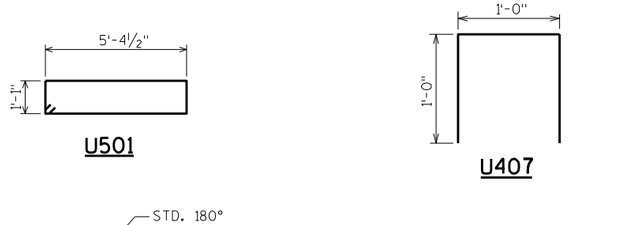
8

STATE PROJECT NUMBER

1420-22-71



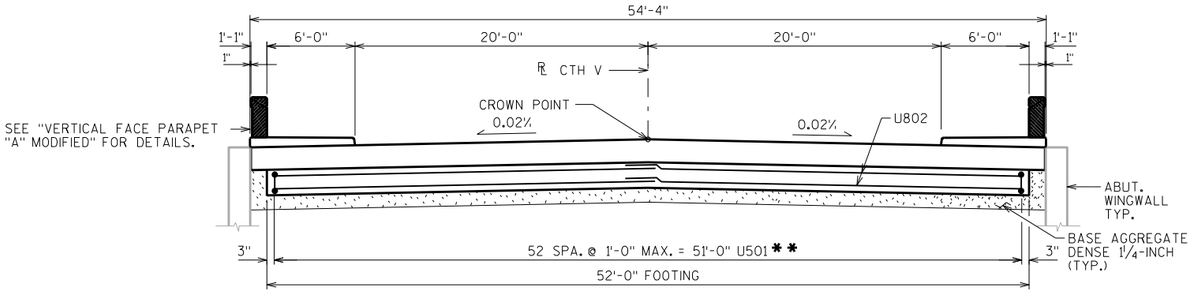
NORTH STRUCTURAL APPROACH SLAB PLAN



BILL OF BARS

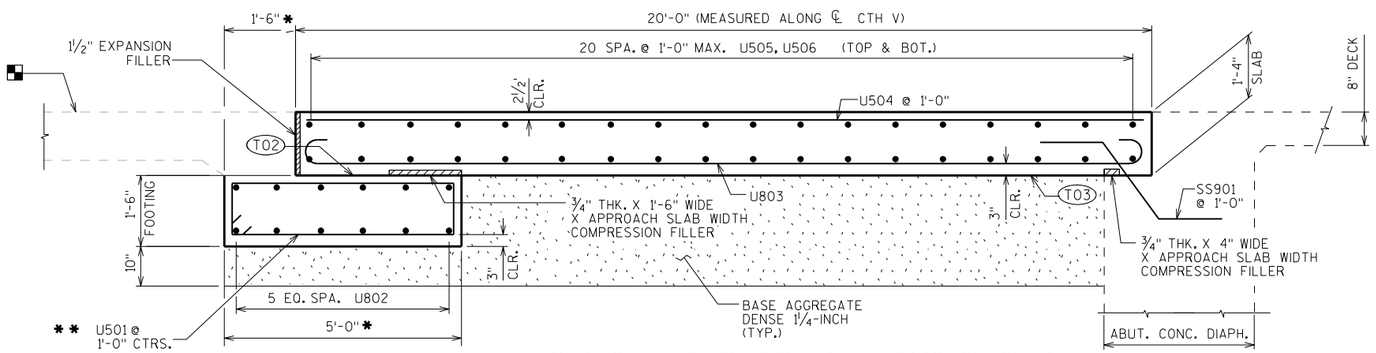
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
U501	X	53	12'-10"	X		APPROACH SLAB FTG. - STIRRUP
U802	X	24	30'-9"			APPROACH SLAB FTG. - TRANS.
U803	X	91	21'-4"	X		APPROACH SLAB - LONG. - BOT.
U504	X	55	19'-6"			APPROACH SLAB - LONG. - TOP
U505	X	42	30'-7"			APPROACH SLAB - TRANS - BOT.
U506	X	42	30'-7"			APPROACH SLAB - TRANS - TOP.
U407	X	164	2'-10"	X		SIDEWALK - U-BAR
U408	X	20	19'-8"			SIDEWALK - LONG.
U509	X	82	7'-2"			SIDEWALK - TRANS.

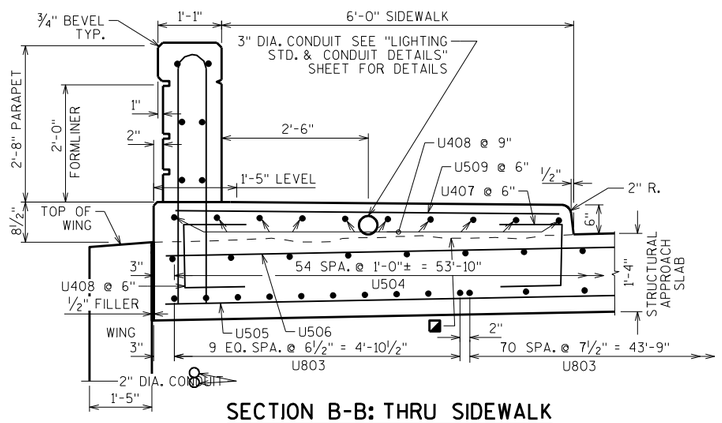


CROSS SECTION THRU ROADWAY - LOOKING WEST

(SHOWING FOOTING STEEL ONLY)



SECTION THRU STRUCTURAL APPROACH SLAB



SECTION B-B: THRU SIDEWALK

- ◪ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.
- * MEASURED NORMAL TO SUBSTRUCTURE
- ** BARS PLACED PARALLEL TO ℄ SPACING PERPENDICULAR TO ℄
- ◩ CONCRETE PAVEMENT APPROACH SLAB. SEE ROADWAY PLANS FOR DETAILS.

APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCTURAL APPROACH SLAB.

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

NORTH STRUCTURAL APPROACH SLAB

SHEET 19

562

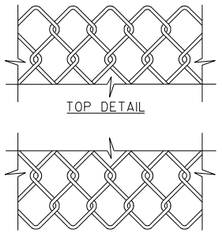
SCALE = 5

8

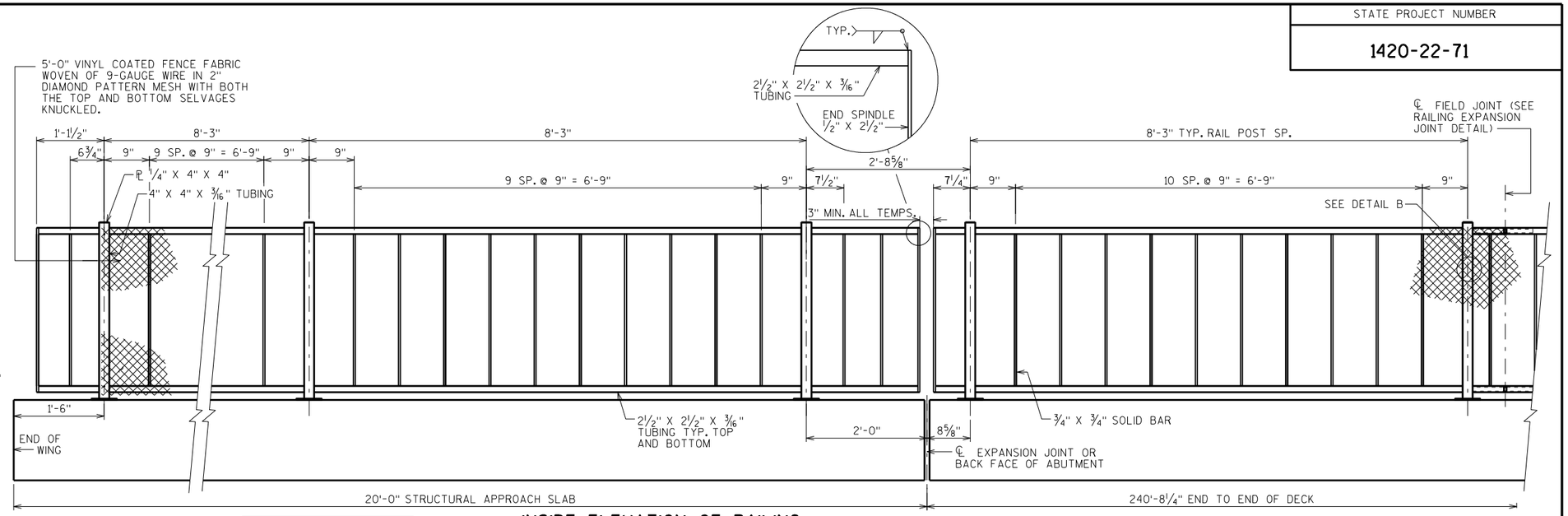
8

STATE PROJECT NUMBER

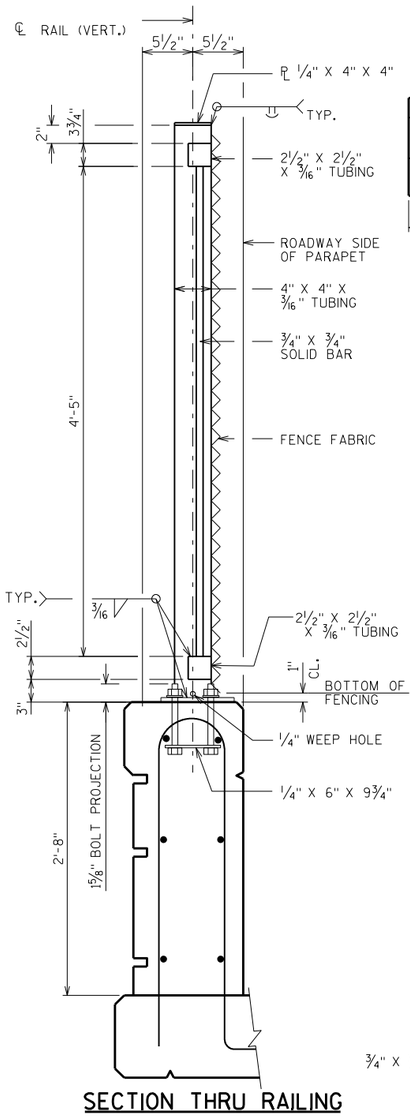
1420-22-71



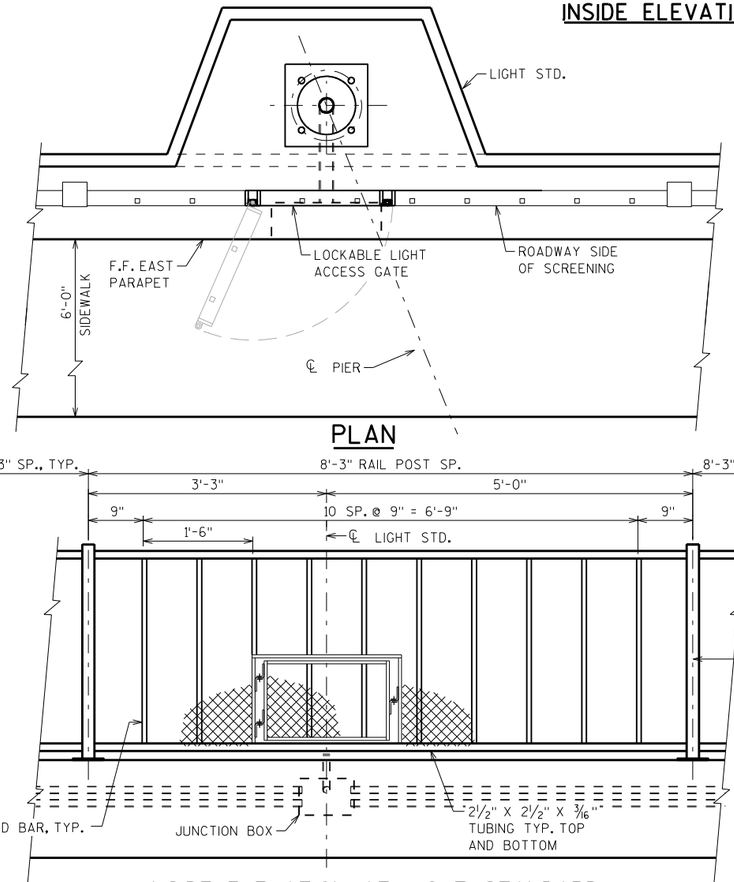
FENCE FABRIC



INSIDE ELEVATION OF RAILING

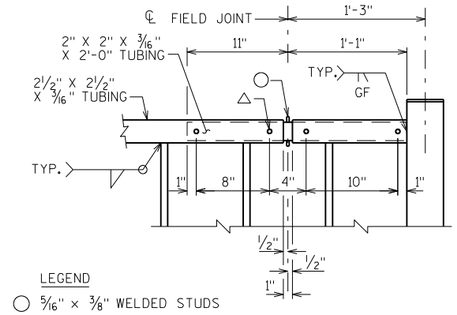


SECTION THRU RAILING



PLAN

INSIDE ELEVATION AT LIGHT STANDARD



LEGEND

○ 5/16" × 3/8" WELDED STUDS

△ WELD BEAD ON EACH SIDE OF TUBE. GRIND BEADS SO THAT SLEEVE FITS FREELY INSIDE THE 2½" × 2½" TUBE.

RAILING EXPANSION JOINT DETAIL

THE BID ITEM SHALL BE "RAILING TUBULAR SCREENING GALVANIZED B-20-226" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

THE STEEL WIRE MESH SHALL BE ATTACHED TO THE LIGHT ACCESS GATE BY MEANS OF TACK WELDING AT ALL LOCATIONS WHERE THE STEEL WIRE MESH MEETS THE LIGHT ACCESS GATE ½" X 2½" SOLID BAR GATE FRAME AND ¾" X ¾" SOLID BARS. THE STEEL WIRE MESH SHALL BE WELDED TO THE ROADWAY SIDE OF THE ¾" X ¾" SOLID BARS.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A #6 BLAST CLEANING BY SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

THE END OF THE FABRIC SHALL BE ATTACHED TO THE POST BY MEANS OF A TENSION BAR THREADED THROUGH THE END LOOPS OF THE FABRIC AND SECURED TO THE POST WITH CLAMPS & BOLT. THE FABRIC SHALL BE STRETCHED TO REMOVE ALL SLACK.

SEE "RAILING TUBULAR SCREENING DETAILS" SHEET FOR SECTIONS, FABRIC, AND GATE DETAILS.

NOTES

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

RAILS AND POSTS TO BE ASTM A500, GRADE B. BASE PLATES AND SHIMS TO BE ASTM A709, GRADE 36. ALL GALVANIZED AFTER FABRICATION.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPA. ARE TAKEN HORIZ. ALONG CENTER LINE OF RAILING AT BASE OF POST.

SHIMS SHALL BE USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

FABRIC SHALL CONFORM TO ASTM F668, CALSS 2B. STEEL RAILS, POSTS, AND POST SLEEVES SHALL CONFORM TO ASTM F1083. STANDARD WEIGHT PIPE (SCHEDULE 40). FITTINGS SHALL CONFORM TO ASTM 626. SEE THE "BRIDGE SPECIAL PROVISIONS" FOR ADDITIONAL DETAILS.

THE COLOR OF POLYMER-COATING FOR THIS STRUCTURE SHALL BE BLACK IN ACCORDANCE WITH ASTM F934.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

RAILING TUBULAR SCREENING

SHEET 20

563

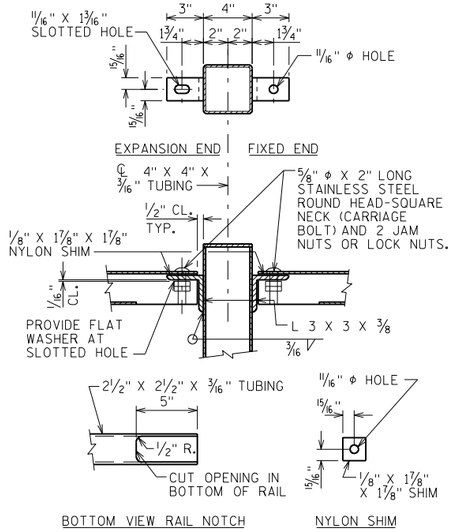
SCALE = 1

8

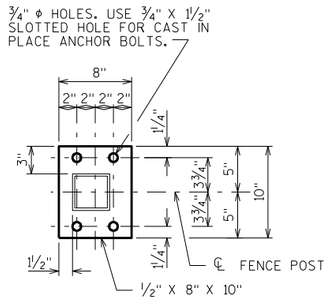
8

STATE PROJECT NUMBER

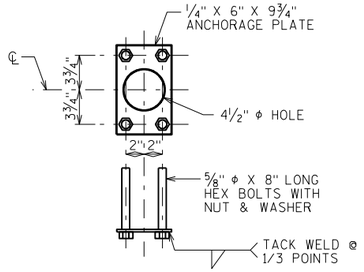
1420-22-71



TOP RAIL CONNECTION FOR FENCE W/ BENT TOP



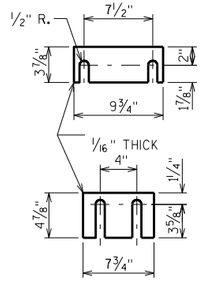
BASE PLATE



ANCHORAGE DETAIL

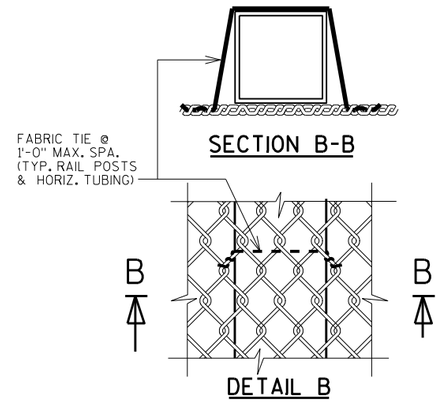
5/8" CAST-IN-PLACE ANCHOR BOLTS. MASONRY ANCHORS MAY BE SUBSTITUTED FOR C.I.P. ANCHOR BOLTS. ANCHORAGE PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.

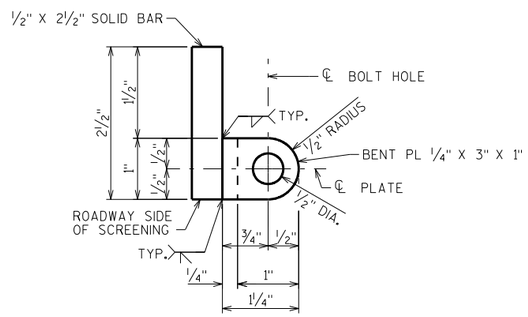
MASONRY ANCHOR TYPE S 5/8-INCH. EMBED 7" IN CONCRETE.



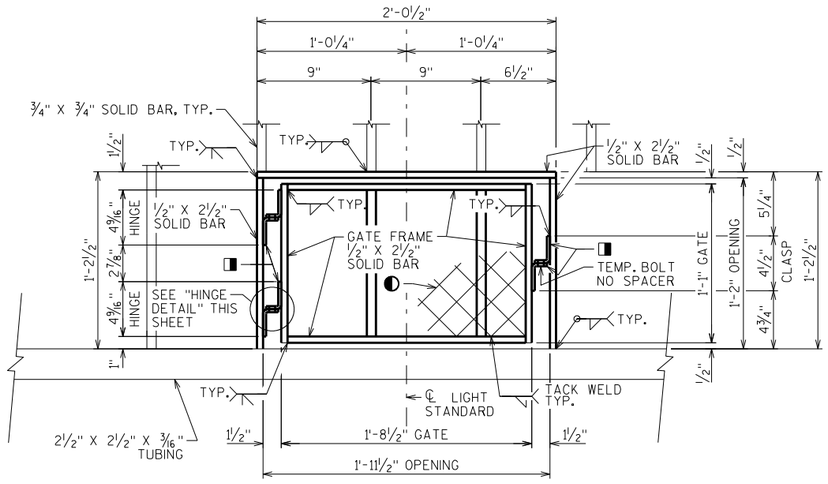
SHIM PLATE DETAILS

TWO SHIMS OF EACH SIZE REQUIRED PER POST

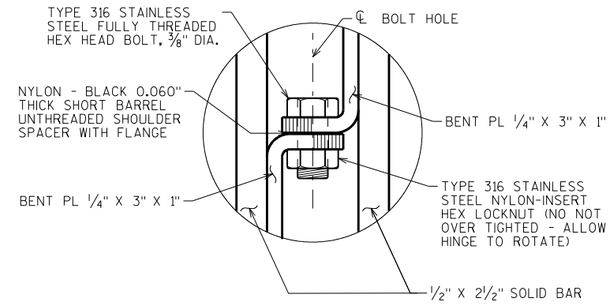




STEEL PLATE DETAIL



LIGHT ACCESS GATE DETAIL



HINGE DETAIL

PROVIDE (1) ADDITIONAL STAINLESS STEEL FULLY THREADED HEX HEAD BOLT, 3/8" DIA. AND (1) STAINLESS STEEL NYLON-INSERT HEX LOCKNUT - FINGER TIGHTEN TO TEMPORARILY LOCK GATE.

◐ MCNICHOLS STEEL WIRE MESH WITH OPENING SIZE 2" X 2" SQUARE, 1/4" DIA. WIRE. ITEM NO. 3293920148 (OR EQUIVALENT)

◨ BENT STEEL PL 1/4" X 3" X 1". SEE "STEEL PLATE DETAIL" THIS SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

RAILING TUBULAR SCREENING DETAILS

SHEET 21

564

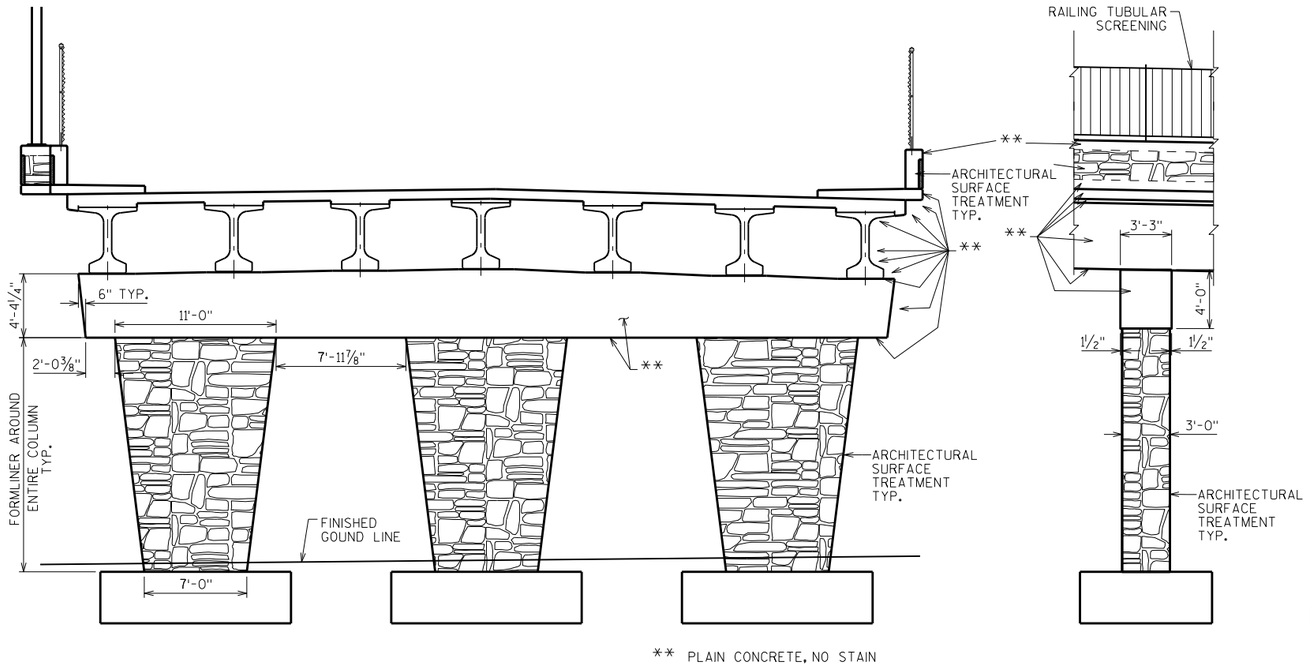
8

8

SCALE = 1

STATE PROJECT NUMBER

1420-22-71



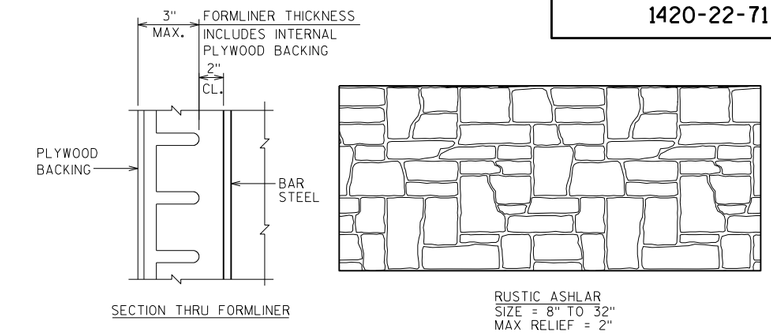
** PLAIN CONCRETE, NO STAIN

PIER ELEVATION

LOOKING NORTH

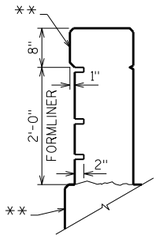
PIER COLUMN SIDE VIEW

LOOKING WEST



SECTION THRU FORMLINER

RUSTIC ASHLAR
SIZE = 8" TO 32"
MAX RELIEF = 2"



FORMLINER ON PARAPET

TYP.

FORMLINER DETAILS

ABUTMENT NOTES

FORMLINER COURSING ON WINGS SHALL BE LEVEL.

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

PIER NOTES

FORMLINER COURSING ON PIERS SHALL BE LEVEL.

THE FORMLINER COURSING ON ALL FACES OF EACH COLUMN SHALL BE VERTICALLY ALIGNED.

SPACE ADJACENT PORTIONS OF FORMLINER ON SLOPED FACE SO THAT COURSING IS ALIGNED VERTICALLY WITH COURSING ON VERTICAL FACE.

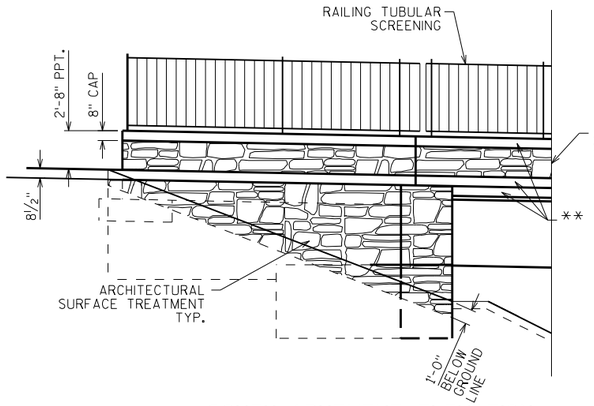
THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

WRAP AROUND/MATCH FORMLINER PATTERN AT CORNERS.

PARAPET NOTES

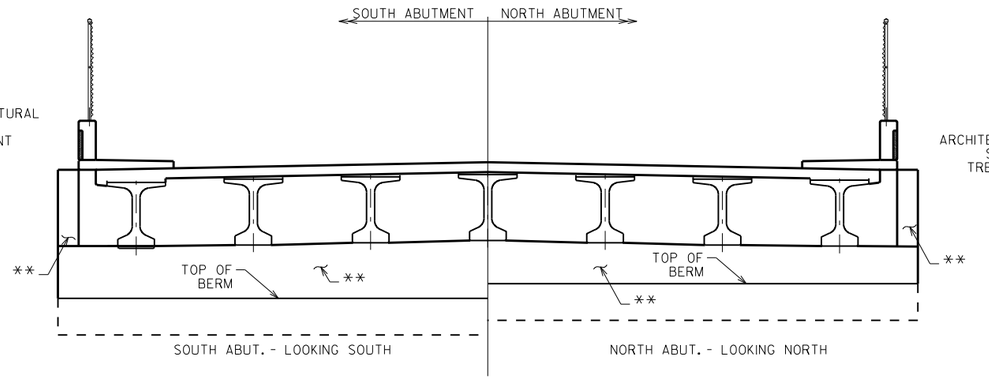
FORMLINER COURSING ON PARAPETS SHALL BE PARALLEL TO TOP OF PARAPET.

NOTE: MULTI-COLOR STAIN TO LOOK SIMILAR TO WEATHERED LIMESTONE. SIMILAR TO EXISTING BRIDGE B-20-3832.

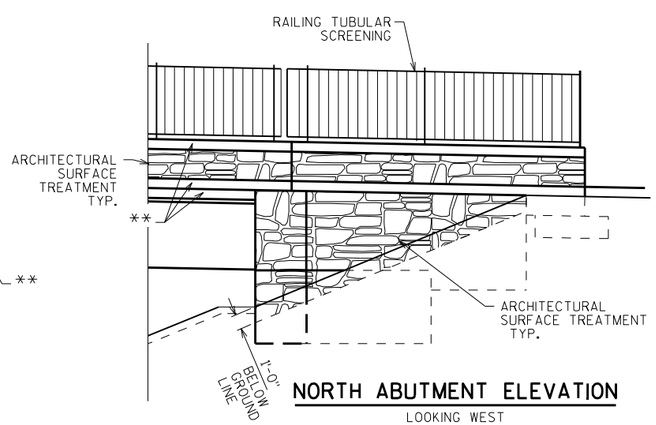


SOUTH ABUTMENT ELEVATION

LOOKING WEST



ABUTMENT ELEVATION



NORTH ABUTMENT ELEVATION

LOOKING WEST

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

AESTHETIC DETAILS

SHEET 22

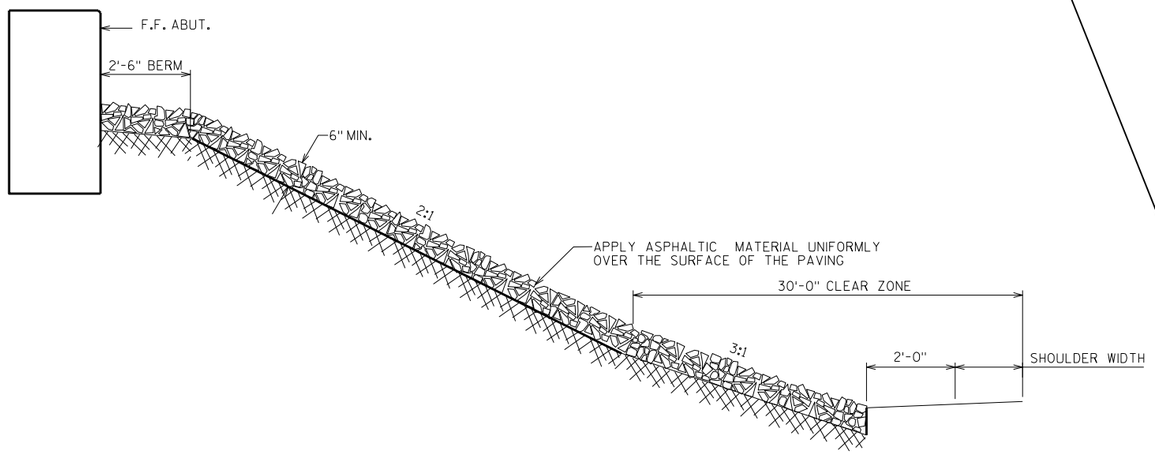
565

8

8

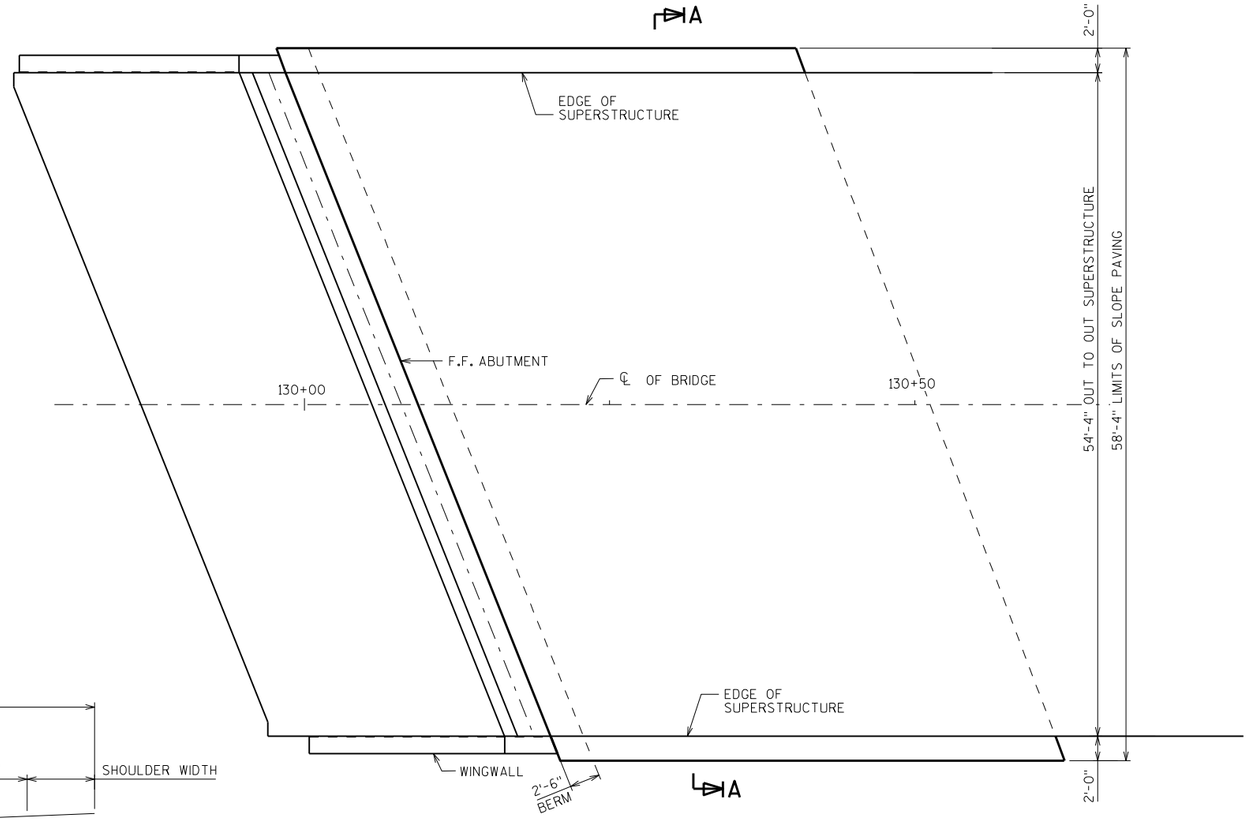
SCALE = 5

STATE PROJECT NUMBER
1420-22-71

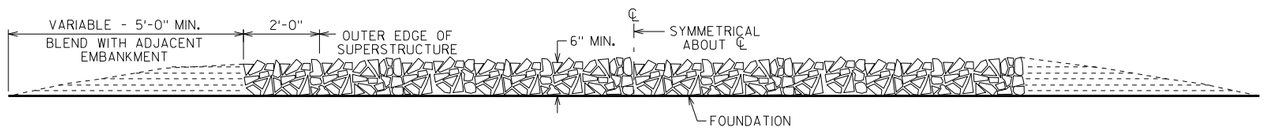


STANDARD CROSS SECTION

ROUND STONE WILL NOT BE ACCEPTED



PLAN



SECTION A-A

GENERAL NOTES

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

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

SLOPE PAVING (CRUSHED AGGREGATE)

SHEET 23

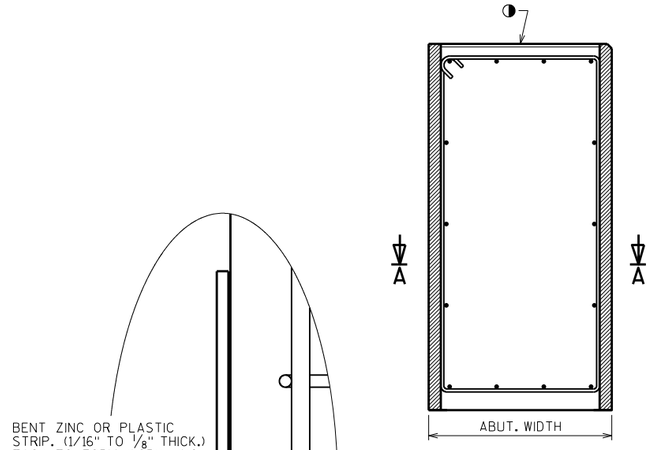
566

8

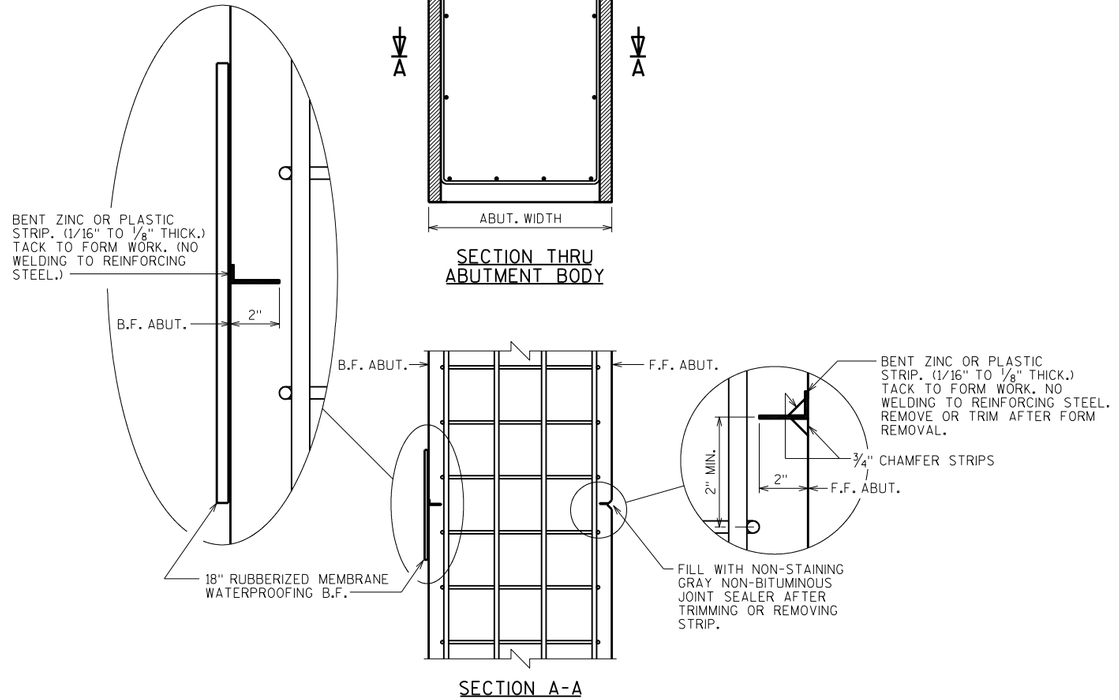
8

SCALE = 6

STATE PROJECT NUMBER
1420-22-71



SECTION THRU ABUTMENT BODY



SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-20-226

DRAWN BY SAD | PLANS CK'D. EMK

ALTERNATE CONSTRUCTION JOINT

SHEET 24

567

8

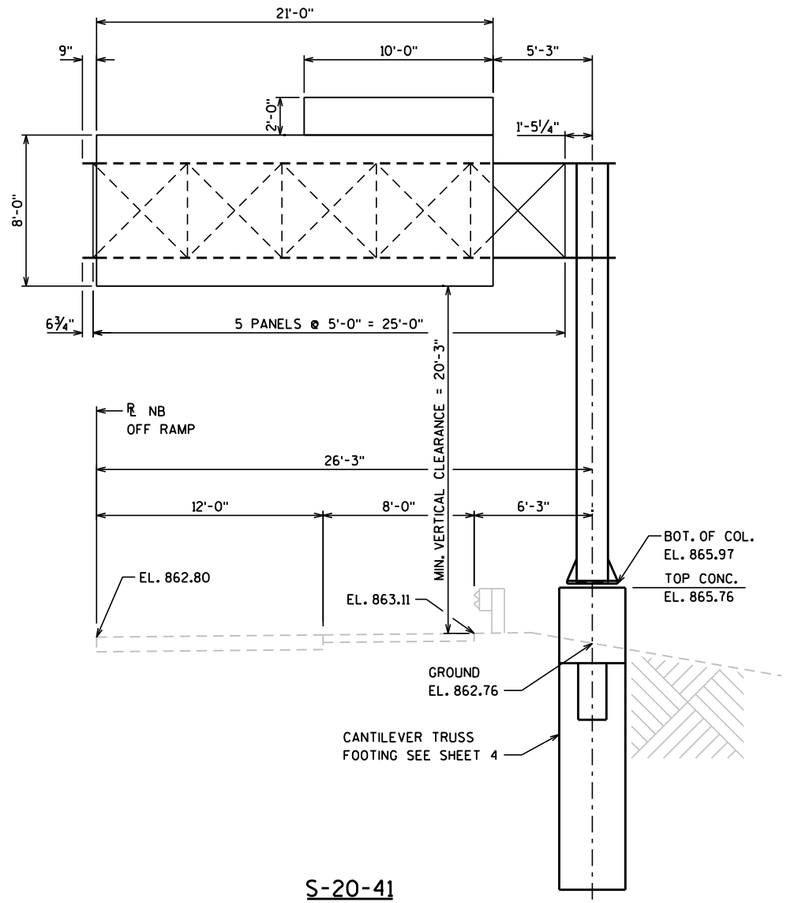
8

123

SCALE = 1

ALTJOINT
10-08

STATE PROJECT NUMBER
1420-22-71

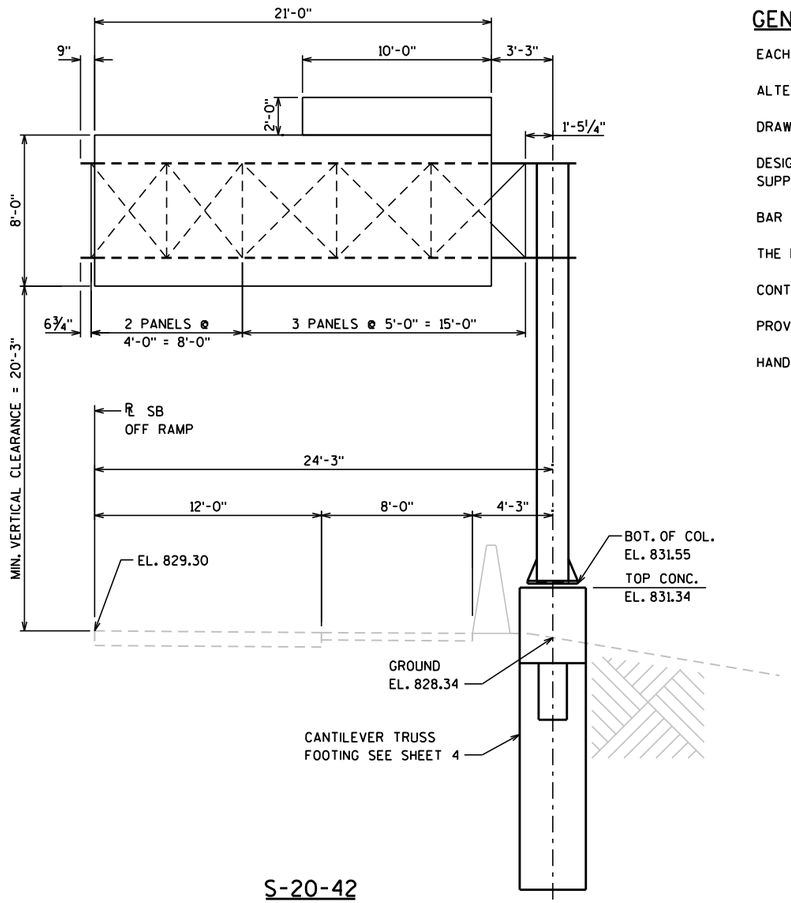


S-20-41

STA 266+03.50 VAA

(NB OFF-RAMP)
LOOKING EAST

26'-3" RT OF
R/L USH 151 NB OFF RAMP



S-20-42

STA 308+00 VCC

(SB OFF-RAMP)
LOOKING WEST

~~24'-3" LT OF~~
~~R/L USH 151 SB OFF RAMP~~

25'-3" LT OF
R/L USH 151 SB
OFF RAMP

GENERAL NOTES

EACH LOCATION OF THE SIGN BRIDGE SHALL BE DIRECTED BY THE ENGINEER.

ALTERNATE DESIGNS ARE NOT ALLOWED.

DRAWINGS SHALL NOT BE SCALED.

DESIGNED ACCORDING TO A.A.S.H.T.O STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR UNLESS DETAILED OTHERWISE.

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

CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.

PROVIDE SIGN BRIDGE IDENTIFICATION PLAQUE, INCIDENTAL TO SIGN BRIDGE.

HANDHOLES ARE NOT REQUIRED.

LIST OF DRAWINGS

1. SIGN BRIDGE LAYOUTS
2. GALVANIZED STEEL CANTILEVER SIGN TRUSS
3. GALVANIZED STEEL CANTILEVER SIGN TRUSS DETAILS
4. CANTILEVER TRUSS FOOTING

ESTIMATED QUANTITIES

641.1200	SIGN BRIDGE CANTILEVER	S-20-41	1 L.S.
641.1200	SIGN BRIDGE CANTILEVER	S-20-42	1 L.S.
636.0100	SIGN SUPPORTS CONCRETE MASONRY		16 C.Y.
636.1000	SIGN SUPPORTS STEEL REINFORCEMENT		1960 LB.

DESIGN DATA

SIGN STRUCTURE	PROPOSED SIGN SIZE FT X FT	MAX. DESIGN SIGN AREA SF	MAX. SIGN DEPTH FT
S-20-41	8'-0" X 21'-0"	264	12'
S-20-42	8'-0" X 21'-0"	264	12'

NO LIGHTS, NO CATWALK

WISCONSIN
KRISTOFER R. OLSON
E-35236
APPLETON, WI
PROFESSIONAL ENGINEER

11/13/14

CONSULTANT CONTACT

KRISTOFER OLSON
OMNNI ASSOCIATES, INC.
(920) 735-6900

BRIDGE OFFICE CONTACT

WILLIAM DREHER
(608) 266-8489

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
OMNNI ASSOCIATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 07/30/15
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE S-20-41 & S-20-42

USH 151

COUNTY	TOWN
FOND DU LAC	FOND DU LAC

DESIGN SPEC. AASHTO LRFD DESIGN SPEC. 4th EDITION — LOAD 90 MPH WIND

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BRE	KRO	BRE	KRO

SIGN BRIDGE LAYOUTS

SHEET 1 OF 4

568

8

8

STATE PROJECT NUMBER
1420-22-71

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DESIGNED ACCORDING TO A.A.S.H.T.O. "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC "SIGNALS"

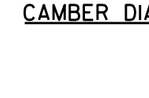
WIND VELOCITY = 90 M.P.H. (3-SECOND GUST SPEED)

PREFABRICATE CAMBER INTO THE HORIZONTAL SUPPORT PROVIDING AN AMOUNT "Y" AT END OF TRUSS SHOWN IN "CAMBER DIAGRAM". DO NOT RAKE VERTICAL UPRIGHT BY ADJUSTMENT OF LEVELING NUTS.

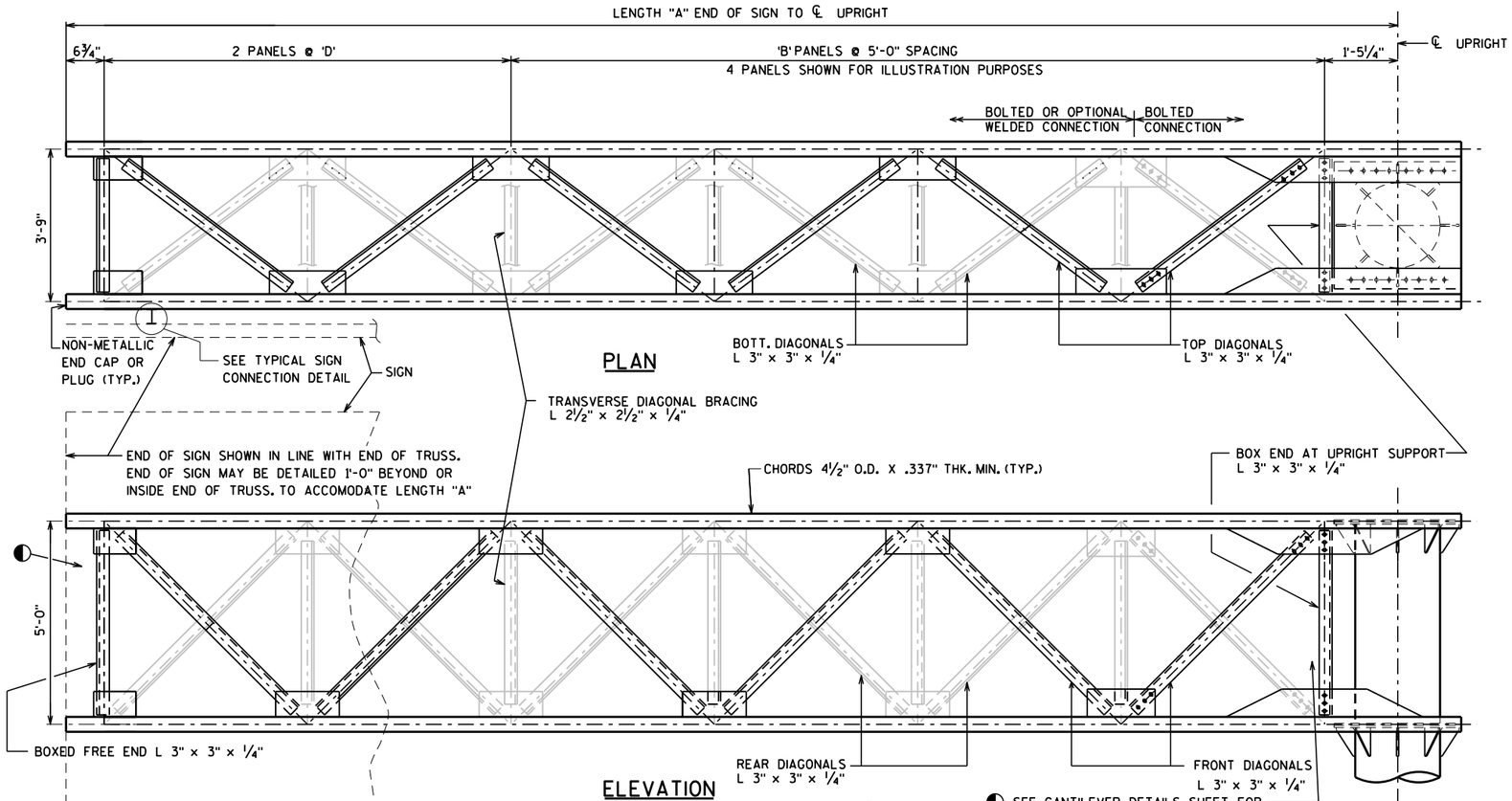
ALLOWABLE DESIGN STRESSES

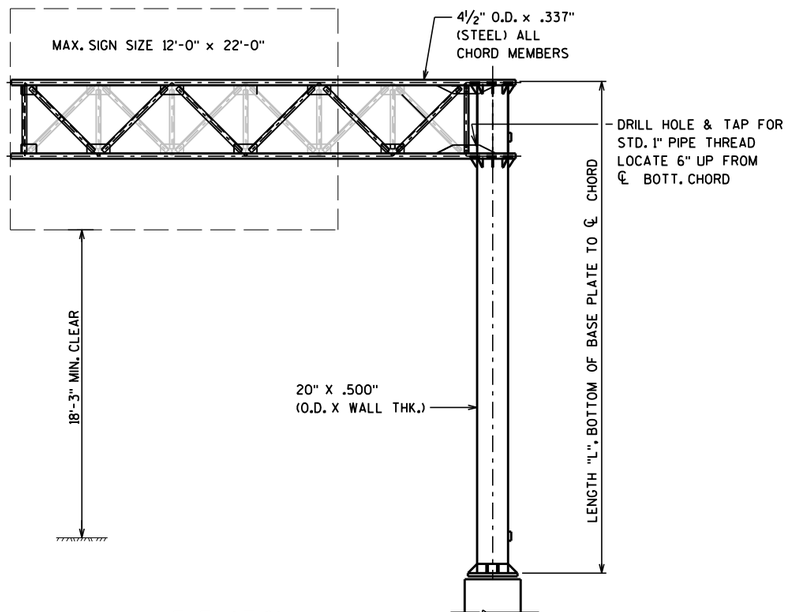
CHORDS & COLUMN (INCLD. HANDHOLE)	API-5L-X42	fy=42,000 P.S.I.
STRUCTURAL ANGLES	A.S.T.M. A709 GRADE 36	fy=36,000 P.S.I.
PLATES & BARS	A.S.T.M. A709 GRADE 36	fy=36,000 P.S.I.
ANCHOR BOLTS	A.A.S.H.T.O. M314	fy=55,000 P.S.I.
HIGH STRENGTH BOLTS	A325	fy=92,000 P.S.I.
STRUCTURAL MEMBERS GALVANIZED A123		
HARDWARE GALVANIZED		A153 CLASS C

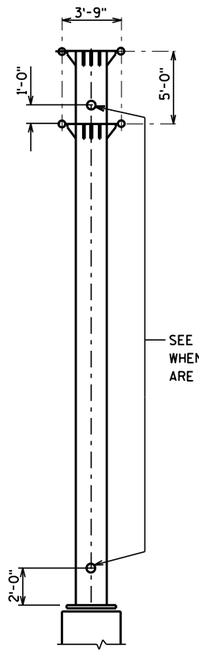
STRUCTURE	"A"	"L"	"B"	"D"	"Y"
S-20-41	26'-3"	23'-10¾"	5	---	1½"
S-20-42	24'-3"	24'-6"	3	4'-0"	1¼"

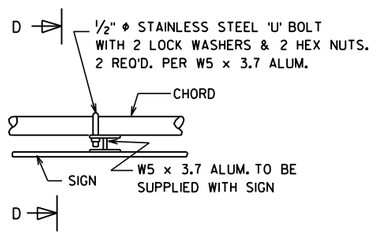


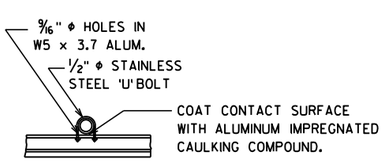
CAMBER DIAGRAM





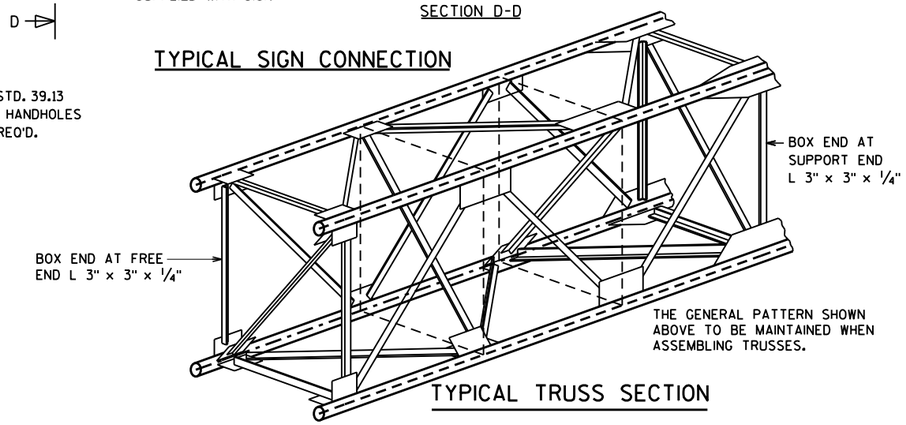






SECTION D-D

TYPICAL SIGN CONNECTION



TYPICAL TRUSS SECTION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-20-41 & S-20-42

DRAWN BY BRE | PLANS CK'D. CAB

GALVANIZED STEEL CANTILEVER SIGN TRUSS

SHEET 2 OF 4

569

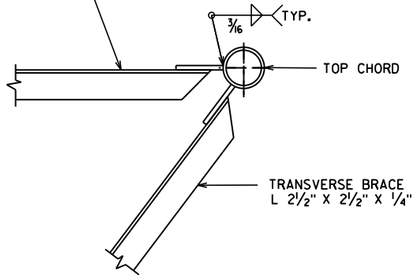
8

8

STATE PROJECT NUMBER
1420-22-71

HORIZONTAL WEB
L 3" X 3" X 1/4"

* ANGLE	WELD LENGTH (MIN.)
L 2 1/2" X 2 1/2" X 1/4"	7"
L 3" X 3" X 1/4"	8"

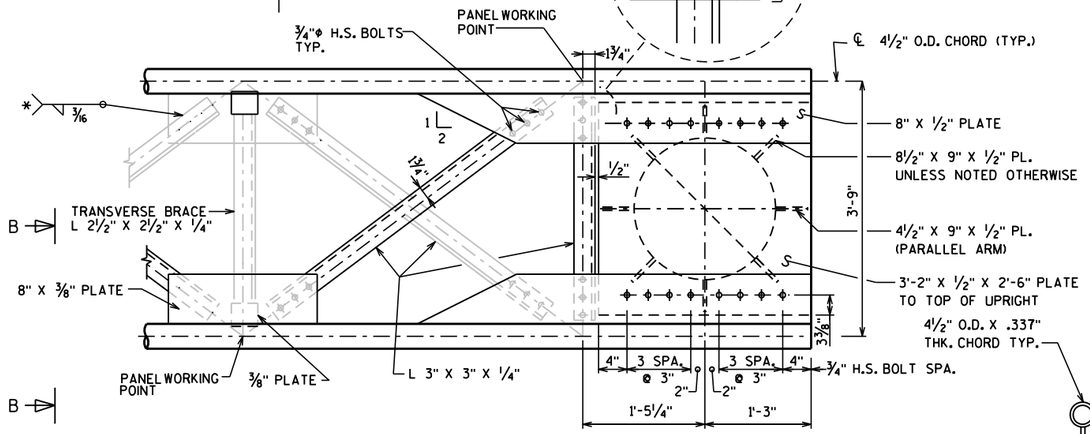


SECTION B-B

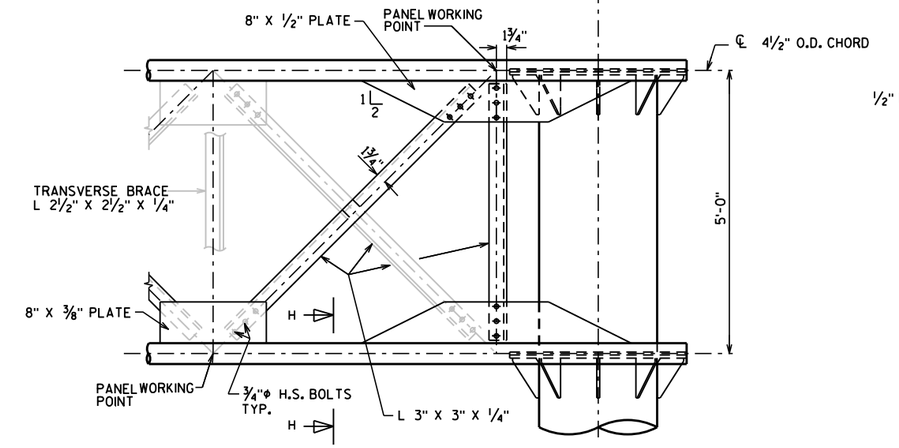
SECTION H-H

DETAIL 'A'

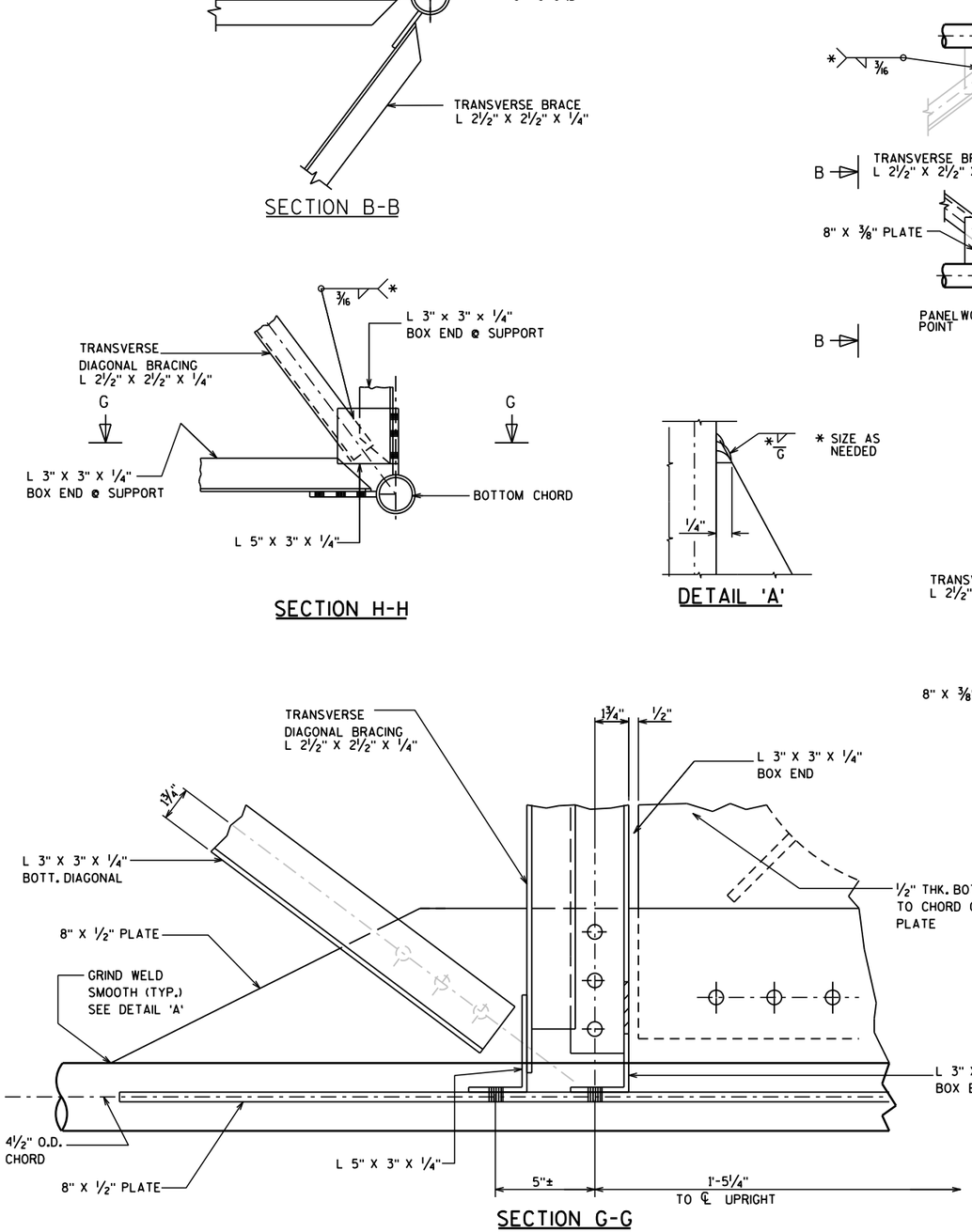
BOLTED OR OPTIONAL WELDED CONNECTION | BOLTED CONNECTION



PLAN TRUSS TO UPRIGHT

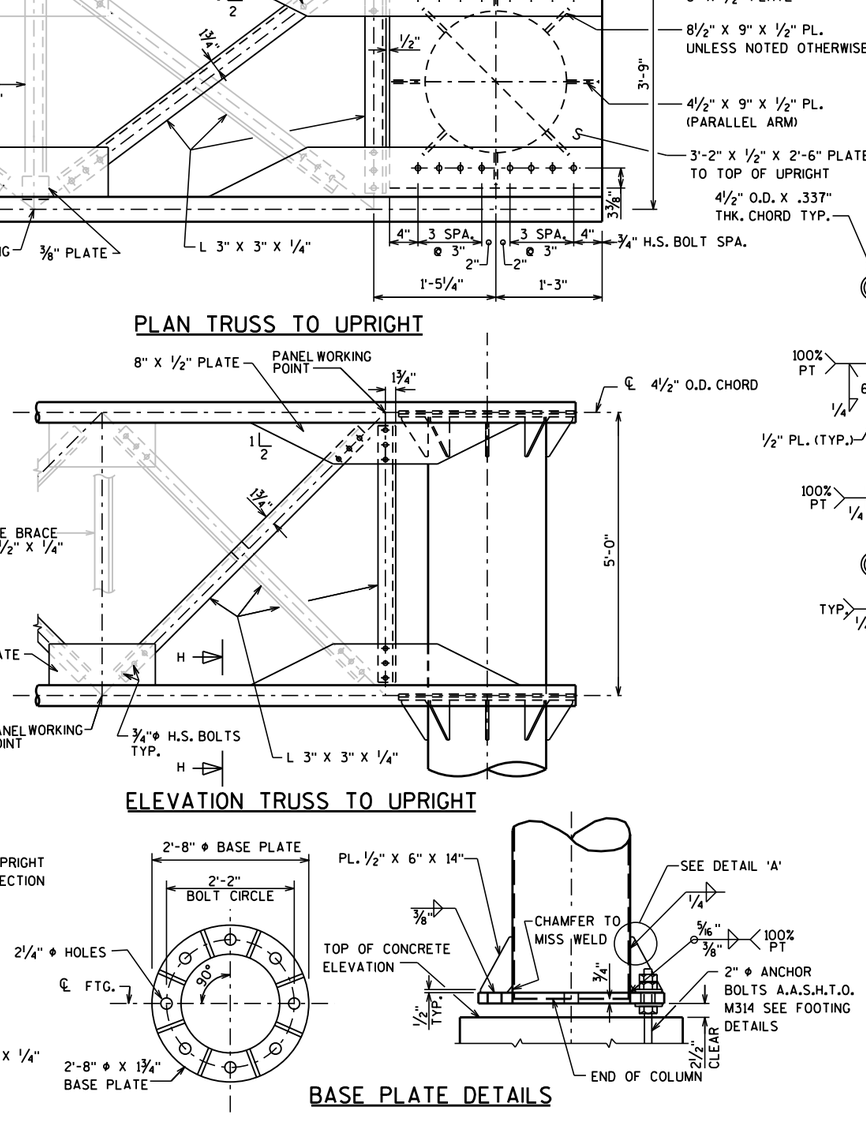


ELEVATION TRUSS TO UPRIGHT



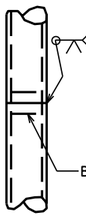
SECTION G-G

(LOOKING DOWN @ BOTT. HORIZ. PLANE @ FRONT CHORD)

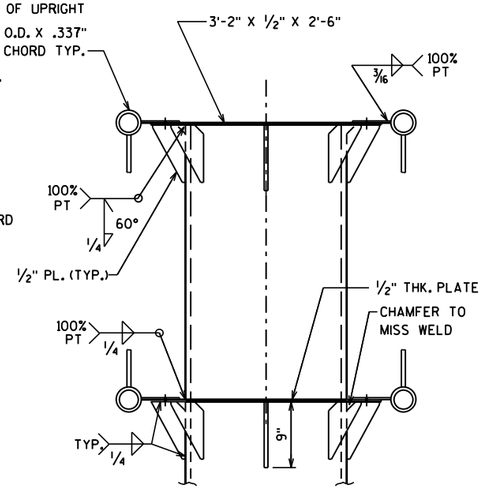


BASE PLATE DETAILS

SEPARATE OPTIONAL SPLICE FROM GUSSET PLATES BY 6" MIN.



OPTIONAL COLUMN OR CHORD SPLICE DETAIL



END VIEW
TRUSS TO UPRIGHT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-20-41 & S-20-42

DRAWN BY BRE | PLANS CK'D. CAB

GALVANIZED STEEL CANTILEVER SIGN TRUSS DETAILS

SHEET 3 OF 4

570

8

8

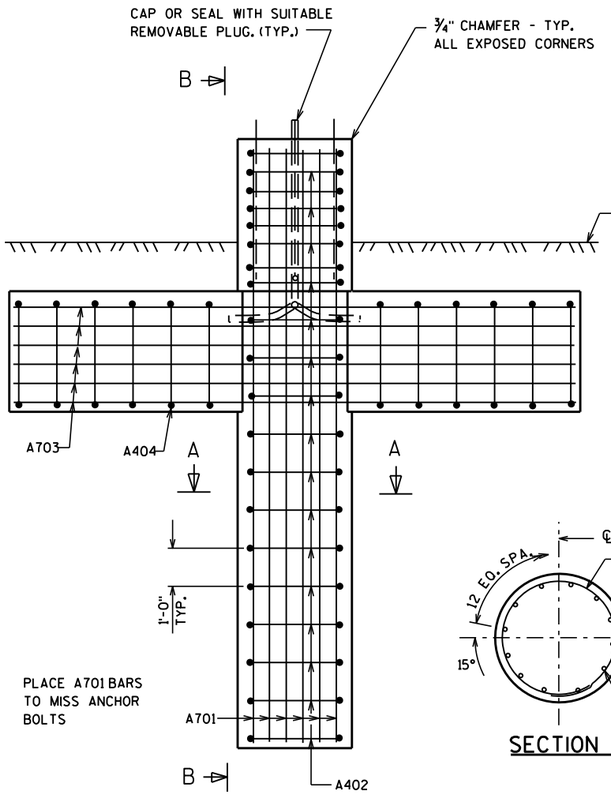
STATE PROJECT NUMBER
1420-22-71

NOTE:
THE FIRST OR FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.

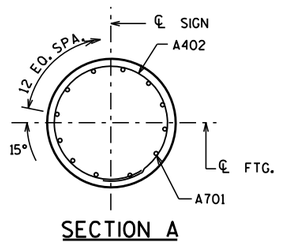
BILL OF BARS

980 LB.

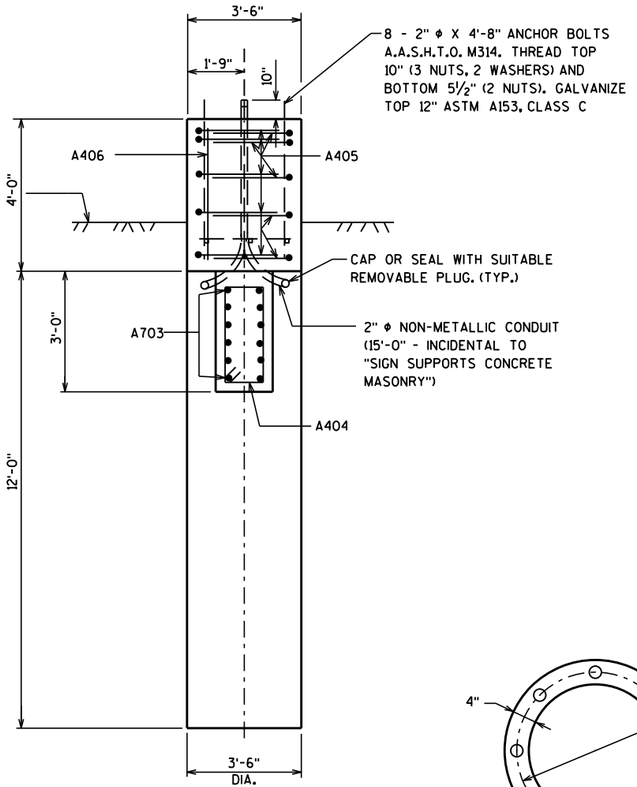
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	CUT. DIAG.	BUN-DLE	LOCATION
A701		12	15'-6"				FOOTING - COLUMN/TOP
A402		16	10'-6"	X			FOOTING - COLUMN/TOP
A703		12	15'-0"				FOOTING - WINGS
A404		12	7'-6"	X			FOOTING - WINGS
A405		10	7'-11"	X			FOOTING - TOP
A406		4	3'-6"				FOOTING - TOP - COLUMNS



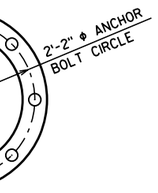
ELEVATION
(8 C.Y.)



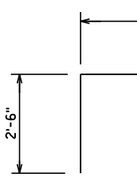
SECTION A



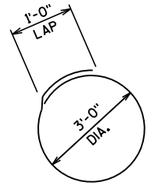
SECTION B



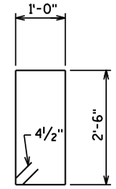
TOP VIEW OF TOP & BOTTOM TEMPLATES



A405



A402



A404
(STIRRUP)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR UNLESS DETAILED OTHERWISE.

ALLOWABLE DESIGN STRESSES

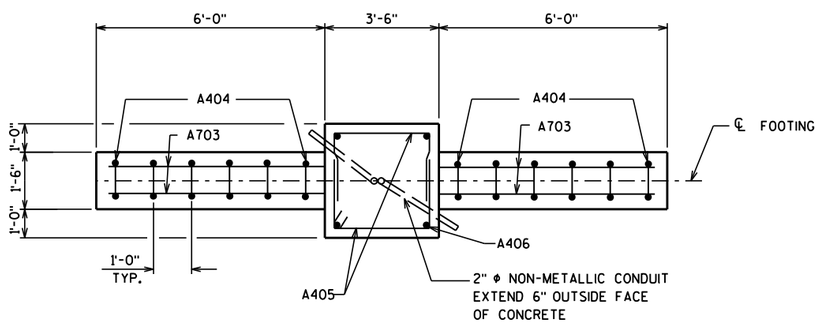
CONCRETE MASONRY ——— f'c=3,500 P.S.I.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 ——— fy=60,000 P.S.I.
ANCHOR BOLTS A.A.S.H.T.O. M314 ——— fy=55,000 P.S.I.

FOUNDATION DATA

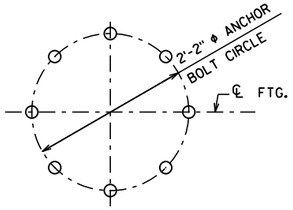
ALLOWABLE SOIL BEARING PRESSURE = 2T/SQ. FT.

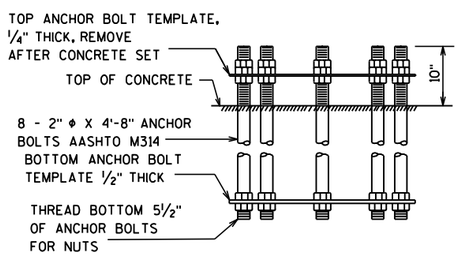
TOTAL ESTIMATED QUANTITIES (1 FTG.)

SIGN SUPPORTS CONCRETE MASONRY ——— 8 C.Y.
SIGN SUPPORTS STEEL REINFORCEMENT HS ——— 980 LB.



PLAN





ANCHOR BOLT DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-20-41 & S-20-42

DRAWN BY KRO | PLANS CK'D. CAB

CANTILEVER TRUSS FOOTING

SHEET 4 OF 4

571

8

8

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
108+50	10850.00	0.00	6.21	0.00	575.21	0	0	0	0	0	0.00
108+75	10875.00	25.00	5.00	0.00	422.47	5	0	462	5	508	-502.89
109+00	10900.00	25.00	4.57	0.00	370.38	4	0	367	10	912	-902.22
109+50	10950.00	50.00	0.00	0.00	604.43	4	0	903	14	1,905	-1,890.86
110+00	11000.00	50.00	0.00	0.00	478.92	0	0	1,003	14	3,008	-2,994.28
110+50	11050.00	50.00	0.00	0.00	438.67	0	0	850	14	3,943	-3,928.86
111+00	11100.00	50.00	0.00	0.00	505.76	0	0	874	14	4,905	-4,890.78
111+50	11150.00	50.00	0.00	0.00	561.96	0	0	989	14	5,992	-5,978.27
112+00	11200.00	50.00	0.00	0.00	614.63	0	0	1,089	14	7,191	-7,176.66
112+50	11250.00	50.00	1.81	0.00	591.37	2	0	1,117	16	8,419	-8,403.32
113+00	11300.00	50.00	6.38	0.00	561.39	8	0	1,067	23	9,593	-9,569.84
113+50	11350.00	50.00	5.27	0.00	562.83	11	0	1,041	34	10,738	-10,704.08
114+00	11400.00	50.00	6.58	0.00	575.24	11	0	1,054	45	11,897	-11,852.26
114+50	11450.00	50.00	9.39	0.00	580.67	15	0	1,070	60	13,074	-13,014.79
115+00	11500.00	50.00	11.02	0.00	573.17	19	0	1,068	79	14,250	-14,171.11
115+50	11550.00	50.00	15.83	0.00	588.53	25	0	1,076	103	15,433	-15,329.47
115+75	11575.00	25.00	23.86	0.00	338.32	18	0	429	122	15,905	-15,783.11
116+00	11600.00	25.00	26.24	0.00	400.26	23	0	342	145	16,281	-16,136.04
116+25	11625.00	25.00	31.70	0.00	517.79	27	0	425	172	16,749	-16,576.74
S3				FRONTAGE RD EB SUBTOTALS:		172	0	15,226			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
108+50	10850.00	0.00	0.00	0.00	390.30	0	0	0	0	0	0.00
108+75	10875.00	25.00	0.00	0.00	375.45	0	0	355	0	390	-389.96
109+00	10900.00	25.00	0.00	0.00	364.06	0	0	342	0	767	-766.56
S3				FRONTAGE RD WB SUBTOTALS:		0	0	697			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
118+00	11800.00	0.00	13.21	0.00	319.56	0	0	0	0	0	0.00
118+25	11825.00	25.00	3.61	0.00	251.78	8	0	265	8	291	-283.17
118+50	11850.00	25.00	3.77	0.00	196.91	3	0	208	11	519	-508.25
119+00	11900.00	50.00	4.55	0.00	372.57	8	0	527	19	1,099	-1,080.57
119+50	11950.00	50.00	11.34	0.00	260.61	15	0	586	34	1,744	-1,710.76
120+00	12000.00	50.00	11.74	0.00	155.25	21	0	385	55	2,168	-2,112.95
120+50	12050.00	50.00	38.21	0.00	123.27	46	0	258	101	2,452	-2,350.39
121+00	12100.00	50.00	38.38	0.00	89.05	71	0	197	172	2,668	-2,495.72
121+50	12150.00	50.00	77.05	0.00	63.93	107	0	142	279	2,824	-2,544.66
122+00	12200.00	50.00	94.99	0.00	36.35	159	0	93	438	2,926	-2,487.50
122+50	12250.00	50.00	49.14	0.00	73.02	133	0	101	572	3,037	-2,465.44
123+00	12300.00	50.00	33.73	0.00	103.48	77	0	163	649	3,217	-2,568.49
123+50	12350.00	50.00	34.20	0.00	92.22	63	0	181	711	3,416	-2,704.92
124+00	12400.00	50.00	68.49	0.00	49.97	95	0	132	806	3,561	-2,754.66
124+50	12450.00	50.00	115.44	0.00	26.86	170	0	71	977	3,639	-2,662.60
125+00	12500.00	50.00	174.15	0.00	5.89	268	0	30	1,245	3,673	-2,427.82
125+50	12550.00	50.00	192.52	0.00	6.48	340	0	11	1,584	3,685	-2,100.90
126+00	12600.00	50.00	249.40	0.00	2.99	409	0	9	1,994	3,695	-1,701.36
126+50	12650.00	50.00	265.75	0.00	17.53	477	0	19	2,471	3,716	-1,245.27
127+00	12700.00	50.00	304.49	0.00	3.85	528	0	20	2,999	3,738	-739.05
127+50	12750.00	50.00	378.46	0.00	6.64	632	0	10	3,631	3,748	-117.37
128+00	12800.00	50.00	302.54	0.00	32.71	631	0	36	4,262	3,788	473.11
128+50	12850.00	50.00	236.11	0.00	76.58	499	0	101	4,760	3,900	860.55
129+00	12900.00	50.00	252.59	0.00	52.64	452	0	120	5,213	4,031	1,181.44
129+50	12950.00	50.00	282.91	0.00	39.36	496	0	85	5,709	4,125	1,583.57
130+00	13000.00	50.00	460.64	0.00	2.50	688	0	39	6,397	4,168	2,229.41
130+50	13050.00	50.00	434.64	0.00	0.00	829	0	2	7,226	4,170	3,055.82
131+00	13100.00	50.00	451.49	0.00	0.26	820	0	0	8,047	4,171	3,876.05
131+50	13150.00	50.00	442.92	0.00	0.17	828	0	0	8,875	4,171	4,703.76
132+00	13200.00	50.00	405.66	0.00	3.33	786	0	3	9,660	4,175	5,485.92
132+50	13250.00	50.00	337.30	0.00	10.64	688	0	13	10,348	4,189	6,159.62
133+00	13300.00	50.00	266.33	0.00	14.52	559	0	23	10,907	4,214	6,692.92
133+50	13350.00	50.00	234.19	0.00	29.79	463	0	41	11,371	4,260	7,111.23
134+00	13400.00	50.00	192.82	0.00	34.51	395	0	60	11,766	4,325	7,441.13
134+50	13450.00	50.00	189.20	0.00	49.79	354	0	78	12,120	4,411	7,708.99
135+00	13500.00	50.00	102.04	0.00	95.07	270	0	134	12,389	4,558	7,831.12
135+50	13550.00	50.00	24.70	0.00	203.75	117	0	277	12,507	4,863	7,644.13
136+00	13600.00	50.00	13.52	0.00	197.46	35	0	371	12,542	5,271	7,270.88
136+50	13650.00	50.00	32.64	0.00	102.75	43	0	278	12,585	5,577	7,007.86
137+00	13700.00	50.00	91.13	0.00	17.99	115	0	112	12,700	5,700	6,999.49
137+50	13750.00	50.00	93.91	0.00	14.27	171	0	30	12,871	5,733	7,137.97
138+00	13800.00	50.00	78.62	0.00	20.10	160	0	32	13,031	5,768	7,262.71
138+50	13850.00	50.00	51.55	0.00	32.05	121	0	48	13,151	5,821	7,330.12
139+00	13900.00	50.00	51.36	0.00	37.19	95	0	64	13,246	5,892	7,354.89
139+50	13950.00	50.00	11.80	0.00	78.58	58	0	107	13,305	6,010	7,295.46
140+00	14000.00	50.00	1.48	0.00	269.69	12	0	322	13,317	6,364	6,953.04
S3			FRONTAGE RD EB SUBTOTALS:			13,317	0	5,786			

STATION	Real Station	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.10	Mass Ordinate Note 8
115+75	11575.00	0.00	0.00	0.00	323.12	0	0	0	0	0	0.00
116+00	11600.00	25.00	0.00	0.00	335.72	0	0	305	0	336	-335.52
116+25	11625.00	25.00	0.00	0.00	374.89	0	0	329	0	697	-697.40
S3				FRONTAGE RD WB SUBTOTALS:		0	0	634			

STATION	Real Station	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.10	Mass Ordinate Note 8
118+00	11800.00	0.00	0.00	0.00	292.24	0	0	0	0	0	0.00
118+25	11825.00	25.00	0.00	0.00	265.51	0	0	258	0	284	-284.04
118+50	11850.00	25.00	0.00	0.00	242.74	0	0	235	0	543	-542.87
S3				FRONTAGE RD WB SUBTOTALS:		0	0	494			

STATION	Real Station	Distance	AREA (SF) Cut	Salvaged/Unusable Pavement Material	Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Expanded Fill 1.10	Mass Ordinate Note 8
30+40	3040.00	0.00	42.80	0.00	626.38	0	0	0	0	0	0.00
30+83	3083.00	43.00	0.00	0.00	466.66	34	0	870	34	957	-923.34
31+20	3120.00	37.00	23.99	0.00	493.05	16	0	658	51	1,681	-1,630.24
31+60	3160.00	40.00	0.00	0.00	536.45	18	0	763	68	2,520	-2,451.33
32+00	3200.00	40.00	0.00	0.00	770.38	0	0	968	68	3,584	-3,516.15
32+25	3225.00	25.00	0.00	0.00	832.27	0	0	742	68	4,401	-4,332.31
32+50	3250.00	25.00	0.00	0.00	860.61	0	0	784	68	5,263	-5,194.43
32+75	3275.00	25.00	0.00	0.00	843.85	0	0	789	68	6,131	-6,062.44
33+14.15	3314.15	39.15	0.00	0.00	604.06	0	0	1,050	68	7,286	-7,217.22
S3				FRONTAGE RD/SB RAMPS R-A-B SUBTOTALS:		68	0	6,623			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
20+38	2038.00	0.00	7.05	0.00	717.83	0	0	0	0	0	0.00
20+82	2082.00	44.00	0.00	0.00	614.57	6	0	1,086	6	1,194	-1,188.48
21+19	2119.00	37.00	5.77	0.00	809.47	4	0	976	10	2,268	-2,257.83
21+59	2159.00	40.00	0.00	0.00	530.51	4	0	993	14	3,359	-3,345.40
21+96	2196.00	37.00	0.00	0.00	717.23	0	0	855	14	4,300	-4,285.83
22+36	2236.00	40.00	0.00	0.00	527.04	0	0	922	14	5,314	-5,299.68
22+74	2274.00	38.00	31.91	0.00	505.67	22	0	727	36	6,113	-6,076.61
23+14.15	2314.15	40.15	0.00	0.00	578.35	24	0	806	60	7,000	-6,939.56
S3			FRONTAGE RD/CTH V R-A-B SUBTOTALS:			60	0	6,363			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
281+75	28175.00	0.00	0.15	0.00	29.51	0	0	0	0	0	0.00
282+00	28200.00	25.00	39.73	0.00	0.00	18	0	14	18	15	3.43
282+25	28225.00	25.00	93.84	0.00	0.00	62	0	0	80	15	65.27
282+50	28250.00	25.00	103.67	0.00	0.00	91	0	0	172	15	156.71
283+00	28300.00	50.00	141.69	0.00	0.04	227	0	0	399	15	383.87
284+00	28400.00	100.00	138.77	0.00	0.00	519	0	0	918	15	903.17
285+00	28500.00	100.00	211.55	0.00	0.00	649	0	0	1,567	15	1,551.90
286+00	28600.00	100.00	193.58	0.00	0.00	750	0	0	2,317	15	2,302.13
287+00	28700.00	100.00	239.23	0.00	0.00	802	0	0	3,119	15	3,103.63
288+00	28800.00	100.00	340.78	0.00	0.00	1,074	0	0	4,193	15	4,177.72
289+00	28900.00	100.00	736.73	0.00	0.00	1,995	0	0	6,188	15	6,173.11
290+00	29000.00	100.00	644.41	0.00	0.00	2,558	0	0	8,746	15	8,730.78
291+00	29100.00	100.00	600.76	0.00	1.23	2,306	0	2	11,052	18	11,034.16
292+00	29200.00	100.00	450.59	0.00	12.22	1,947	0	25	12,999	45	12,953.71
293+00	29300.00	100.00	348.76	0.00	26.46	1,480	0	72	14,479	124	14,355.20
S3			151 SB OFF-RAMP SUBTOTALS:			14,479	0	113			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged / Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged / Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
278+00	27800.00	0.00	93.55	0.00	4.93	0	0	0	0	0	0.00
279+00	27900.00	100.00	205.30	0.00	62.72	553	0	125	553	138	415.63
279+25	27925.00	25.00	230.81	0.00	69.20	202	0	61	755	205	550.36
280+00	28000.00	75.00	219.39	0.00	0.55	625	0	97	1,381	312	1,069.09
281+00	28100.00	100.00	188.06	0.00	14.96	755	0	29	2,135	343	1,792.02
282+00	28200.00	100.00	242.39	0.00	0.00	797	0	28	2,932	374	2,558.67
283+00	28300.00	100.00	505.47	0.00	0.00	1,385	0	0	4,317	374	3,943.62
284+00	28400.00	100.00	276.23	0.00	0.00	1,448	0	0	5,765	374	5,391.22
285+00	28500.00	100.00	241.32	0.00	0.66	958	0	1	6,723	375	6,348.30
286+00	28600.00	100.00	183.39	0.00	5.39	787	0	11	7,510	387	7,122.49
286+50	28650.00	50.00	123.99	0.00	10.86	285	0	15	7,794	404	7,390.54
287+00	28700.00	50.00	223.05	0.00	0.00	321	0	10	8,116	415	7,700.81
287+50	28750.00	50.00	204.02	0.00	2.38	395	0	2	8,511	417	8,093.82
287+75	28775.00	25.00	98.24	0.00	79.23	140	0	38	8,651	459	8,192.19
S3			151 SB ON-RAMP SUBTOTALS:			8,651	0	417			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged / Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged / Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
15+33	1533.00	0.00	302.16	0.00	0.00	0	0	0	0	0	0.00
15+50	1550.00	17.00	80.03	0.00	0.19	120	0	0	120	0	120.25
15+75	1575.00	25.00	5.43	0.00	0.00	40	0	0	160	0	159.72
16+00	1600.00	25.00	2.92	0.00	0.03	4	0	0	164	0	163.57
16+25	1625.00	25.00	2.56	0.00	0.14	3	0	0	166	0	166.02
16+50	1650.00	25.00	2.34	0.00	0.41	2	0	0	169	1	168.01
16+71	1671.00	21.00	4.05	0.00	0.00	2	0	0	171	1	170.32
S3			TEMP. SIDEWALK CONNECTION SUBTOTALS:			171	0	1			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
136+75	13675.00	0.00	37.66	0.00	297.02	0	0	0	0	0	0.00
137+00	13700.00	25.00	10.74	0.00	328.38	22	0	290	22	318	-296.08
137+50	13750.00	50.00	7.16	0.00	493.06	17	0	761	39	1,155	-1,116.16
137+75	13775.00	25.00	8.36	0.00	606.54	7	0	509	46	1,715	-1,668.96
S3				CTH V NB SUBTOTALS:		46	0	1,559			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
236+75	23675.00	0.00	3.51	0.00	300.50	0	0	0	0	0	0.00
237+00	23700.00	25.00	0.60	0.00	262.43	2	0	261	2	287	-284.77
237+50	23750.00	50.00	1.40	0.00	363.18	2	0	579	4	924	-920.11
237+75	23775.00	25.00	2.50	0.00	355.58	2	0	333	6	1,290	-1,284.34
S3				CTH V SB SUBTOTALS:		6	0	1,173			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged / Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged / Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
139+50	13950.00	0.00	0.00	0.00	385.19	0	0	0	0	0	0.00
140+00	14000.00	50.00	0.04	0.00	220.53	0	0	561	0	617	-616.90
140+50	14050.00	50.00	31.28	0.00	238.89	29	0	425	29	1,085	-1,055.83
140+88	14088.00	38.00	3.13	0.00	139.55	24	0	266	53	1,378	-1,324.56
141+00	14100.00	12.00	0.34	0.00	127.12	1	0	59	54	1,443	-1,388.97
141+50	14150.00	50.00	40.13	0.00	33.08	37	0	148	91	1,606	-1,514.68
141+88	14188.00	38.00	93.34	0.00	9.90	94	0	30	185	1,639	-1,454.03
142+00	14200.00	12.00	91.37	0.00	10.70	41	0	5	226	1,644	-1,418.02
142+38	14238.00	38.00	122.85	0.00	2.76	151	0	9	377	1,655	-1,277.69
142+50	14250.00	12.00	111.04	0.00	4.98	52	0	2	429	1,657	-1,227.61
143+00	14300.00	50.00	111.19	0.00	1.67	206	0	6	635	1,664	-1,028.61
143+38	14338.00	38.00	104.09	0.00	0.96	151	0	2	786	1,666	-879.15
143+50	14350.00	12.00	99.29	0.00	2.49	45	0	1	832	1,666	-834.80
143+88	14388.00	38.00	105.86	0.00	0.86	144	0	2	976	1,669	-693.03
144+00	14400.00	12.00	86.33	0.00	2.25	43	0	1	1,019	1,670	-651.08
144+50	14450.00	50.00	3.60	0.00	17.15	83	0	18	1,102	1,690	-587.57
145+00	14500.00	50.00	26.16	0.00	11.20	28	0	26	1,130	1,718	-588.90
145+32	14532.00	32.00	21.12	0.00	4.69	28	0	9	1,158	1,729	-571.24
145+50	14550.00	18.00	3.96	0.00	5.62	8	0	3	1,166	1,733	-566.66
145+78	14578.00	28.00	6.13	0.00	0.15	5	0	3	1,171	1,736	-564.71
146+00	14600.00	22.00	4.75	0.00	1.65	4	0	1	1,176	1,737	-561.08
146+34	14634.00	34.00	14.58	0.00	0.00	12	0	1	1,188	1,738	-550.06
146+50	14650.00	16.00	24.51	0.00	0.00	12	0	0	1,199	1,738	-538.48
147+00	14700.00	50.00	4.07	0.00	5.57	26	0	5	1,226	1,743	-517.69
147+50	14750.00	50.00	7.20	0.00	1.92	10	0	7	1,236	1,751	-514.89
148+00	14800.00	50.00	1.28	0.00	6.45	8	0	8	1,244	1,760	-515.56
148+36	14836.00	36.00	1.77	0.00	6.87	2	0	9	1,246	1,769	-523.30
148+50	14850.00	14.00	2.42	0.00	3.08	1	0	3	1,247	1,772	-525.05
149+00	14900.00	50.00	2.38	0.00	6.89	4	0	9	1,252	1,782	-530.77
149+06.9	14906.90	6.90	4.11	0.00	4.73	1	0	1	1,252	1,784	-531.57
S4				CTH V NB SUBTOTALS:		1,252	0	1,622			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged / Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged / Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
239+50	23950.00	0.00	28.76	0.00	166.21	0	0	0	0	0	0.00
240+00	24000.00	50.00	16.75	0.00	139.39	42	0	283	42	311	-269.12
S4				CTH V SB SUBTOTALS:		42	0	283			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged / Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged / Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
272+00	27200.00	0.00	21.87	0.00	91.39	0	0	0	0	0	0.00
272+21	27221.00	21.00	21.04	0.00	106.59	17	0	77	17	85	-68.07
273+00	27300.00	79.00	11.76	0.00	539.06	48	0	945	65	1,124	-1,059.12
274+00	27400.00	100.00	19.79	0.00	1687.60	58	0	4,123	123	5,660	-5,536.49
275+00	27500.00	100.00	31.43	0.00	5.29	95	0	3,135	218	9,108	-8,890.10
276+00	27600.00	100.00	4.84	0.00	60.74	67	0	122	285	9,242	-8,957.43
276+39	27639.00	39.00	0.00	0.00	122.66	3	0	132	289	9,388	-9,099.63
277+00	27700.00	61.00	0.00	0.00	236.76	0	0	406	289	9,835	-9,546.24
S4				151 NB OFF-RAMP SUBTOTALS:		289	0	8,941			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
283+00	28300.00	0.00	0.00	0.00	379.18	0	0	0	0	0	0.00
284+00	28400.00	100.00	14.25	0.00	114.35	26	0	914	26	1,005	-978.96
285+00	28500.00	100.00	19.50	0.00	48.15	62	0	301	89	1,336	-1,247.49
286+00	28600.00	100.00	19.25	0.00	11.85	72	0	111	161	1,459	-1,297.96
287+00	28700.00	100.00	14.14	0.00	28.02	62	0	74	222	1,540	-1,317.33
288+00	28800.00	100.00	14.50	0.00	18.02	53	0	85	275	1,634	-1,358.08
289+00	28900.00	100.00	15.56	0.00	8.94	56	0	50	331	1,688	-1,357.32
290+00	29000.00	100.00	14.59	0.00	13.45	56	0	41	387	1,734	-1,347.06
291+00	29100.00	100.00	14.36	0.00	29.50	54	0	80	441	1,822	-1,380.94
292+00	29200.00	100.00	15.82	0.00	28.56	56	0	108	496	1,940	-1,443.31
293+00	29300.00	100.00	16.54	0.00	22.63	60	0	95	556	2,044	-1,487.65
294+00	29400.00	100.00	14.64	0.00	4.00	58	0	49	614	2,098	-1,484.16
295+00	29500.00	100.00	13.81	0.00	3.18	53	0	13	667	2,113	-1,446.10
295+14	29514.00	14.00	14.63	0.00	1.51	7	0	1	674	2,114	-1,440.06
296+00	29600.00	86.00	15.02	0.00	2.83	47	0	7	721	2,122	-1,400.44
296+36.6	29636.60	36.60	17.50	0.00	0.01	22	0	2	743	2,124	-1,380.51
S4				151 NB ON-RAMP SUBTOTALS:		743	0	1,931			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
293+00	29300.00	0.00	348.76	0.00	26.46	0	0	0	0	0	0.00
294+00	29400.00	100.00	322.56	0.00	35.89	1,243	0	115	1,243	127	1,116.17
295+00	29500.00	100.00	291.38	0.00	32.26	1,137	0	126	2,380	266	2,114.26
296+00	29600.00	100.00	218.75	0.00	14.61	945	0	87	3,325	361	2,963.46
297+00	29700.00	100.00	298.23	0.00	18.79	957	0	62	4,282	429	3,852.79
298+00	29800.00	100.00	188.98	0.00	30.44	902	0	91	5,184	530	4,654.75
299+00	29900.00	100.00	98.32	0.00	30.96	532	0	114	5,716	655	5,061.69
300+00	30000.00	100.00	88.44	0.00	18.05	346	0	91	6,062	755	5,307.70
301+00	30100.00	100.00	90.92	0.00	9.66	332	0	51	6,394	811	5,583.40
302+00	30200.00	100.00	86.76	0.00	18.03	329	0	51	6,723	867	5,856.03
303+00	30300.00	100.00	87.26	0.00	16.06	322	0	63	7,046	937	6,108.84
S4				151 SB OFF-RAMP SUBTOTALS:		7,046	0	852			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged / Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged / Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
273+00	27300.00	0.00	62.41	0.00	28.05	0	0	0	0	0	0.00
273+50	27350.00	50.00	78.62	0.00	0.19	131	0	26	131	29	101.83
274+00	27400.00	50.00	32.07	0.00	604.64	102	0	560	233	645	-411.71
274+50	27450.00	50.00	31.80	0.00	1534.97	59	0	1,981	292	2,824	-2,531.80
275+00	27500.00	50.00	32.51	0.00	1003.16	60	0	2,350	352	5,409	-5,057.39
276+00	27600.00	100.00	31.67	0.00	7.23	119	0	1,871	471	7,467	-6,996.76
277+00	27700.00	100.00	62.98	0.00	0.00	175	0	13	646	7,482	-6,836.22
278+00	27800.00	100.00	93.55	0.00	4.93	290	0	9	936	7,492	-6,556.40
S4				151 SB ON-RAMP SUBTOTALS:		936	0	6,811			

9

9

PROJECT NO: 1420-22-71 | HWY: USH 151 | COUNTY: FOND DU LAC | EARTHWORK QUANTITIES | SHEET NO: 581 E

FILE NAME: | ORIGINATOR: OMNNI ASSOCIATES | ORIG. DATE: | REV. DATE: | PRINT DATE: March 31, 2015

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
262+57.94	26257.94	0.00	25.79	0.00	0.00	0	0	0	0	0	0.00
263+00	26300.00	42.06	37.07	0.00	17.41	49	0	14	49	15	34.04
264+00	26400.00	100.00	41.78	0.00	9.84	146	0	50	195	70	124.55
264+13	26413.00	13.00	45.54	0.00	15.80	21	0	6	216	77	138.78
265+00	26500.00	87.00	26.68	0.00	22.02	116	0	61	332	144	188.12
265+50	26550.00	50.00	16.41	0.00	16.63	40	0	36	372	184	188.66
266+00	26600.00	50.00	17.50	0.00	18.07	31	0	32	404	219	184.72
267+00	26700.00	100.00	12.88	0.00	34.53	56	0	97	460	326	133.83
268+00	26800.00	100.00	36.14	0.00	29.34	91	0	118	551	456	94.49
269+00	26900.00	100.00	57.48	0.00	70.03	173	0	184	724	659	65.42
270+00	27000.00	100.00	628.68	50.55	0.00	1,271	94	130	1,995	801	1,099.82
270+36	27036.00	36.00	734.76	30.49	0.00	909	54	0	2,904	801	1,954.76
271+00	27100.00	64.00	198.13	15.25	0.00	1,106	54	0	4,009	801	3,006.21
272+00	27200.00	100.00	21.87	3.56	91.39	407	35	169	4,417	987	3,192.62
S5				151 NB OFF-RAMP SUBTOTALS:		4,417	237	898			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
10+00	1000.00	0.00	107.96	0.00	431.04	0	0	0	0	0	0.00
10+50	1050.00	50.00	58.40	0.00	660.19	154	0	1,010	154	1,111	-957.40
11+00	1100.00	50.00	61.41	0.00	693.80	111	0	1,254	265	2,491	-2,225.53
11+50	1150.00	50.00	69.57	0.00	606.09	121	0	1,204	386	3,814	-3,428.22
11+69	1169.00	19.00	68.86	0.00	540.03	49	0	403	435	4,258	-3,823.11
12+00	1200.00	31.00	56.69	0.00	300.88	72	0	483	507	4,789	-4,282.06
12+17	1217.00	17.00	67.43	0.00	8.19	39	0	97	546	4,896	-4,350.01
12+50	1250.00	33.00	51.73	0.00	9.19	73	0	11	619	4,908	-4,288.87
12+79	1279.00	29.00	57.78	0.00	6.39	59	0	8	678	4,917	-4,239.25
13+00	1300.00	21.00	63.12	0.00	7.61	47	0	5	725	4,923	-4,198.23
13+50	1350.00	50.00	91.72	0.00	0.96	143	0	8	868	4,932	-4,063.58
14+00	1400.00	50.00	141.59	0.00	0.27	216	0	1	1,084	4,933	-3,848.81
14+50	1450.00	50.00	71.79	0.00	6.09	198	0	6	1,282	4,939	-3,657.71
15+00	1500.00	50.00	16.17	0.00	19.03	81	0	23	1,363	4,965	-3,601.86
S5				OLD CTH V NORTH SUBTOTALS:		1,363	0	4,514			

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STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
88+38.31	8838.31	0.00	39.64	0.00	1.99	0	0	0	0	0	0.00
88+50	8850.00	11.69	71.64	0.00	3.11	24	0	1	24	1	22.88
89+00	8900.00	50.00	67.87	0.00	21.98	129	0	23	153	27	126.50
90+00	9000.00	100.00	232.80	0.00	44.91	557	0	124	710	163	547.04
91+00	9100.00	100.00	68.92	0.00	22.26	559	0	124	1,269	300	968.95
92+00	9200.00	100.00	73.98	0.00	9.71	265	0	59	1,533	365	1,168.45
93+00	9300.00	100.00	73.77	0.00	0.00	274	0	18	1,807	385	1,422.29
94+00	9400.00	100.00	0.00	0.00	0.00	137	0	0	1,944	385	1,558.91
S5			OLD CTH V SOUTH SUBTOTALS:			1,944	0	350			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
104+50	10450.00	0.00	102.92	0.00	7.92	0	0	0	0	0	0.00
105+00	10500.00	50.00	210.89	0.00	0.00	291	0	7	291	8	282.50
105+50	10550.00	50.00	3.25	0.00	106.88	198	0	99	489	117	371.93
106+00	10600.00	50.00	0.25	0.00	187.53	3	0	273	492	417	75.31
106+25	10625.00	25.00	0.00	0.00	150.68	0	0	157	492	589	-96.81
106+50	10650.00	25.00	1.11	0.00	244.91	1	0	183	493	790	-297.76
106+75	10675.00	25.00	4.11	0.00	324.66	2	0	264	495	1,081	-585.41
S5			PARK EB SUBTOTALS:			495	0	982			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
106+25	10625.00	0.00	4.67	0.00	114.70	0	0	0	0	0	0.00
106+50	10650.00	25.00	13.70	0.00	173.95	9	0	134	9	147	-138.50
106+75	10675.00	25.00	11.52	0.00	204.92	12	0	175	20	340	-319.77
S5			PARK WB SUBTOTALS:			20	0	309			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
140+00	14000.00	0.00	1.48	0.00	269.69	0	0	0	0	0	0.00
140+50	14050.00	50.00	0.09	0.00	576.75	1	0	784	1	862	-860.66
141+00	14100.00	50.00	0.55	33.23	576.93	1	31	1,068	2	2,037	-2,065.87
141+50	14150.00	50.00	2.57	32.38	416.51	3	61	920	5	3,049	-3,135.57
142+00	14200.00	50.00	0.47	38.07	219.38	3	65	589	8	3,697	-3,845.65
142+44	14244.00	44.00	145.74	0.00	105.81	119	31	265	127	3,988	-4,049.00
S6				FRONTAGE EB SUBTOTALS:		127	188	3,626			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
303+00	30300.00	0.00	87.26	0.00	16.06	0	0	0	0	0	0.00
304+00	30400.00	100.00	66.07	0.00	10.28	284	0	49	284	54	230.28
305+00	30500.00	100.00	109.79	0.42	3.32	326	1	25	610	81	527.46
306+00	30600.00	100.00	142.99	10.13	0.00	468	20	6	1,078	88	969.27
307+00	30700.00	100.00	128.40	36.73	0.00	503	87	0	1,580	88	1,385.06
307+66	30766.00	66.00	59.35	8.33	0.00	229	55	0	1,810	88	1,559.46
308+00	30800.00	34.00	11.60	0.00	0.92	45	5	1	1,854	89	1,598.25
309+00	30900.00	100.00	14.82	0.00	0.64	49	0	3	1,903	92	1,644.01
310+00	31000.00	100.00	18.77	0.00	48.21	62	0	90	1,966	191	1,606.72
311+00	31100.00	100.00	13.49	0.00	0.96	60	0	91	2,025	292	1,566.31
312+00	31200.00	100.00	30.51	0.00	0.00	81	0	2	2,107	294	1,645.85
313+00	31300.00	100.00	16.68	0.00	0.39	87	0	1	2,194	294	1,732.45
314+00	31400.00	100.00	16.67	0.00	0.20	62	0	1	2,256	296	1,793.00
315+00	31500.00	100.00	17.80	0.00	0.00	64	0	0	2,320	296	1,856.42
316+00	31600.00	100.00	18.07	0.00	0.33	66	0	1	2,386	297	1,922.18
316+50	31650.00	50.00	24.41	0.00	0.00	39	0	0	2,425	297	1,961.18
S6				151 SB OFF-RAMP SUBTOTALS:		2,425	167	270			

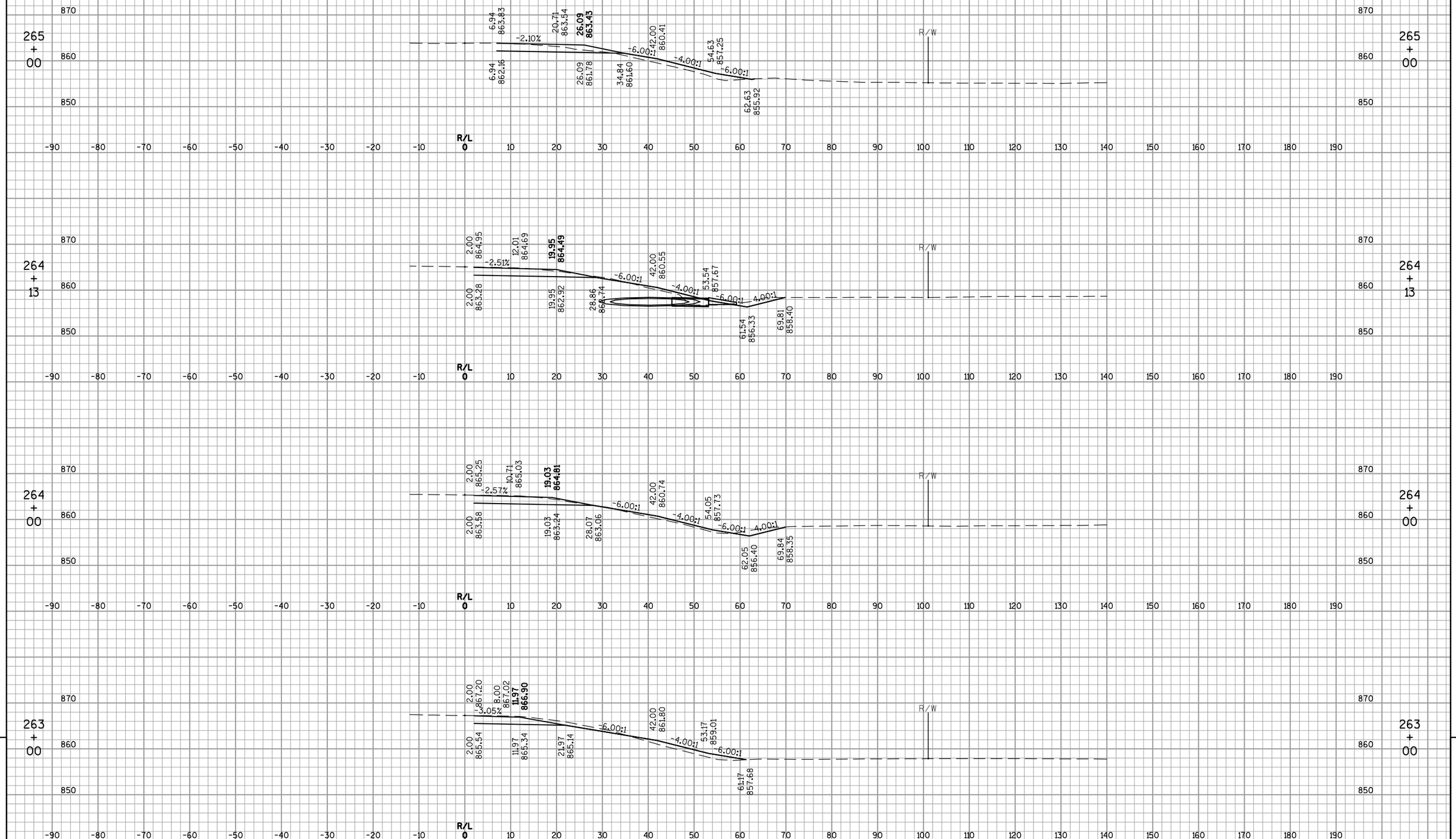
STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged / Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged / Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
262+20.01	26220.01	0.00	22.98	0.00	0.00	0	0	0	0	0	0.00
263+00	26300.00	79.99	20.29	0.00	16.45	64	0	24	64	27	37.29
264+00	26400.00	100.00	24.00	0.00	28.13	82	0	83	146	118	28.50
265+00	26500.00	100.00	30.15	0.00	30.16	100	0	108	246	236	10.04
266+00	26600.00	100.00	21.88	0.00	37.62	96	0	126	343	374	-31.69
267+00	26700.00	100.00	22.77	0.00	16.32	83	0	100	425	484	-58.87
268+00	26800.00	100.00	24.17	0.00	16.49	87	0	61	512	551	-38.77
269+00	26900.00	100.00	70.03	1.78	14.28	174	3	57	687	614	69.69
269+33	26933.00	33.00	113.06	4.34	10.12	112	4	15	799	630	161.43
270+00	27000.00	67.00	162.58	16.64	0.77	342	26	14	1,141	645	462.53
270+50	27050.00	50.00	167.30	46.29	1.41	305	58	2	1,446	647	707.48
271+00	27100.00	50.00	192.70	79.34	17.58	333	116	18	1,779	667	905.15
272+00	27200.00	100.00	143.72	8.76	92.84	623	163	204	2,402	892	1,140.05
272+05	27205.00	5.00	144.04	8.72	61.12	27	2	14	2,429	907	1,149.40
273+00	27300.00	95.00	51.89	8.18	0.00	345	30	108	2,774	1,026	1,346.07
S6				151 SB ON-RAMP SUBTOTALS:		2,774	402	932			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged / Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged / Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
1314+27.07	131427.07	0.00	16.68	0.00	0.00	0	0	0	0	0	0.00
1315+00	131500.00	72.93	17.35	3.08	0.20	46	4	0	46	0	41.52
1316+00	131600.00	100.00	26.37	8.35	0.00	81	21	0	127	1	100.94
1317+00	131700.00	100.00	26.54	8.22	0.00	98	31	0	225	1	168.25
1318+00	131800.00	100.00	29.96	8.09	0.12	105	30	0	330	1	242.45
1319+00	131900.00	100.00	306.91	82.58	0.00	624	168	0	953	1	698.17
1319+50	131950.00	50.00	299.62	17.03	0.00	562	92	0	1,515	1	1,167.54
1320+00	132000.00	50.00	40.40	6.71	0.00	315	22	0	1,830	1	1,460.39
1320+50	132050.00	50.00	30.99	2.86	0.00	66	9	0	1,896	1	1,517.63
1320+93	132093.00	43.00	0.00	0.07	0.00	25	2	0	1,921	1	1,539.97
S6				USH 151 SUBTOTALS:		1,921	379	1			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
390+00	39000.00	0.00	167.59	0.00	35.78	0	0	0	0	0	0.00
390+50	39050.00	50.00	174.71	0.00	130.81	317	0	154	317	170	147.26
391+00	39100.00	50.00	179.79	0.00	256.53	328	0	359	645	564	80.98
391+50	39150.00	50.00	184.72	0.00	417.53	338	0	624	983	1,251	-268.05
392+00	39200.00	50.00	188.74	0.00	448.14	346	0	802	1,328	2,132	-803.95
392+50	39250.00	50.00	200.13	0.00	340.43	360	0	730	1,689	2,936	-1,247.06
393+00	39300.00	50.00	214.50	0.00	263.02	384	0	559	2,072	3,550	-1,477.77
393+50	39350.00	50.00	250.04	0.00	49.12	430	0	289	2,503	3,868	-1,365.56
394+00	39400.00	50.00	327.15	0.00	0.00	534	0	45	3,037	3,918	-881.15
394+14	39414.00	14.00	349.12	0.00	0.00	175	0	0	3,212	3,918	-705.82
394+50	39450.00	36.00	299.87	0.00	3.95	433	0	3	3,645	3,921	-276.06
395+00	39500.00	50.00	223.28	0.00	28.43	484	0	30	4,129	3,954	175.37
395+50	39550.00	50.00	193.50	0.00	40.78	386	0	64	4,515	4,025	490.78
396+00	39600.00	50.00	165.06	0.00	39.72	332	0	75	4,847	4,107	740.80
396+50	39650.00	50.00	144.44	0.00	31.26	287	0	66	5,134	4,179	955.09
397+00	39700.00	50.00	126.25	0.00	6.91	251	0	35	5,385	4,218	1,166.86
397+50	39750.00	50.00	121.62	0.00	5.43	230	0	11	5,614	4,230	1,383.80
398+00	39800.00	50.00	139.99	0.00	0.33	242	0	5	5,856	4,236	1,620.17
398+36	39836.00	36.00	316.39	0.00	0.06	304	0	0	6,161	4,236	1,924.15
398+50	39850.00	14.00	285.52	0.00	0.03	156	0	0	6,317	4,236	2,080.17
398+72	39872.00	22.00	132.29	0.00	1.55	170	0	1	6,487	4,237	2,249.68
S6				USH 45 SUBTOTALS:		6,487	0	3,852			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
378+06	37806.00	0.00	0.66	0.00	0.52	0	0	0	0	0	0.00
378+50	37850.00	44.00	1.98	0.00	0.00	2	0	0	2	0	1.68
379+00	37900.00	50.00	2.50	0.00	0.00	4	0	0	6	0	5.83
379+50	37950.00	50.00	2.71	0.00	0.00	5	0	0	11	0	10.65
380+00	38000.00	50.00	4.22	0.00	0.00	6	0	0	18	0	17.06
380+50	38050.00	50.00	4.76	0.00	0.00	8	0	0	26	0	25.38
381+00	38100.00	50.00	64.58	0.00	0.00	64	0	0	90	0	89.58
381+50	38150.00	50.00	91.48	0.00	0.00	145	0	0	235	0	234.09
382+00	38200.00	50.00	53.39	0.00	0.00	134	0	0	369	0	368.23
382+50	38250.00	50.00	4.42	0.00	0.00	54	0	0	422	0	421.77
383+00	38300.00	50.00	1.21	0.00	0.00	5	0	0	427	0	426.98
383+09	38309.00	9.00	1.72	0.00	0.00	0	0	0	428	0	427.46
S6				USH 45 SUBTOTALS:		428	0	0			

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged / Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged / Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.10	Mass Ordinate Note 8
1263+25	126325.00	0.00	23.99	0.18	1.69	0	0	0	0	0	0.00
1263+50	126350.00	25.00	14.72	3.98	7.35	18	2	4	18	5	11.39
1264+00	126400.00	50.00	11.52	5.78	13.16	24	9	19	42	25	5.76
1265+00	126500.00	100.00	56.10	10.26	0.00	125	30	24	167	52	74.46
1266+00	126600.00	100.00	63.74	16.37	0.00	222	49	0	389	52	247.07
1267+00	126700.00	100.00	62.88	21.39	0.00	234	70	0	624	52	411.63
1268+00	126800.00	100.00	52.37	14.94	0.00	213	67	0	837	52	557.77
1269+00	126900.00	100.00	69.94	19.06	0.00	226	63	0	1,064	52	721.29
1270+00	127000.00	100.00	89.23	20.90	0.00	295	74	0	1,359	52	942.04
1271+00	127100.00	100.00	88.31	22.33	0.00	329	80	0	1,687	52	1,190.76
1272+00	127200.00	100.00	63.29	18.54	0.00	281	76	0	1,968	52	1,395.80
1273+00	127300.00	100.00	51.15	15.04	0.00	212	62	0	2,180	52	1,545.54
1274+00	127400.00	100.00	38.49	20.79	0.02	166	66	0	2,346	52	1,645.15
1275+00	127500.00	100.00	34.98	15.33	2.22	136	67	4	2,482	57	1,709.76
1276+00	127600.00	100.00	35.69	9.90	1.61	131	47	7	2,613	65	1,786.12
1277+00	127700.00	100.00	20.29	5.13	2.85	104	28	8	2,717	74	1,852.89
1278+00	127800.00	100.00	25.34	0.00	0.71	85	10	7	2,801	81	1,920.64
1279+00	127900.00	100.00	14.26	0.00	3.12	73	0	7	2,874	89	1,986.18
1279+50	127950.00	50.00	17.20	0.00	0.00	29	0	3	2,904	92	2,012.13
S7			USH 151 SUBTOTALS:			2,904	799	84			



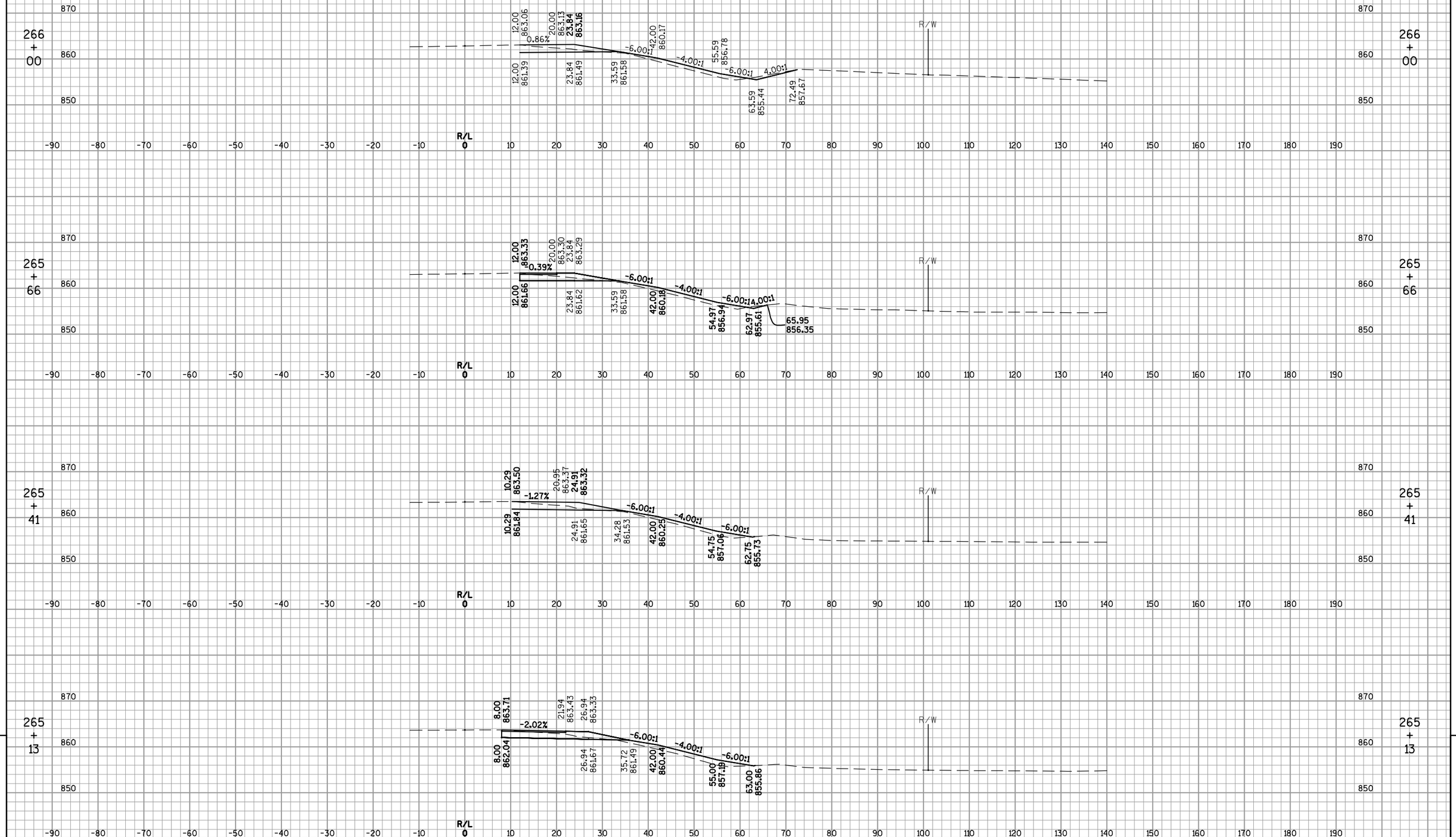
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB OFF-RAMP	SHEET 588	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RAMPS.DWG
142022_0□0200_□□

PLOT DATE : 1/9/2015 1:43 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB OFF-RAMP	SHEET 589	E

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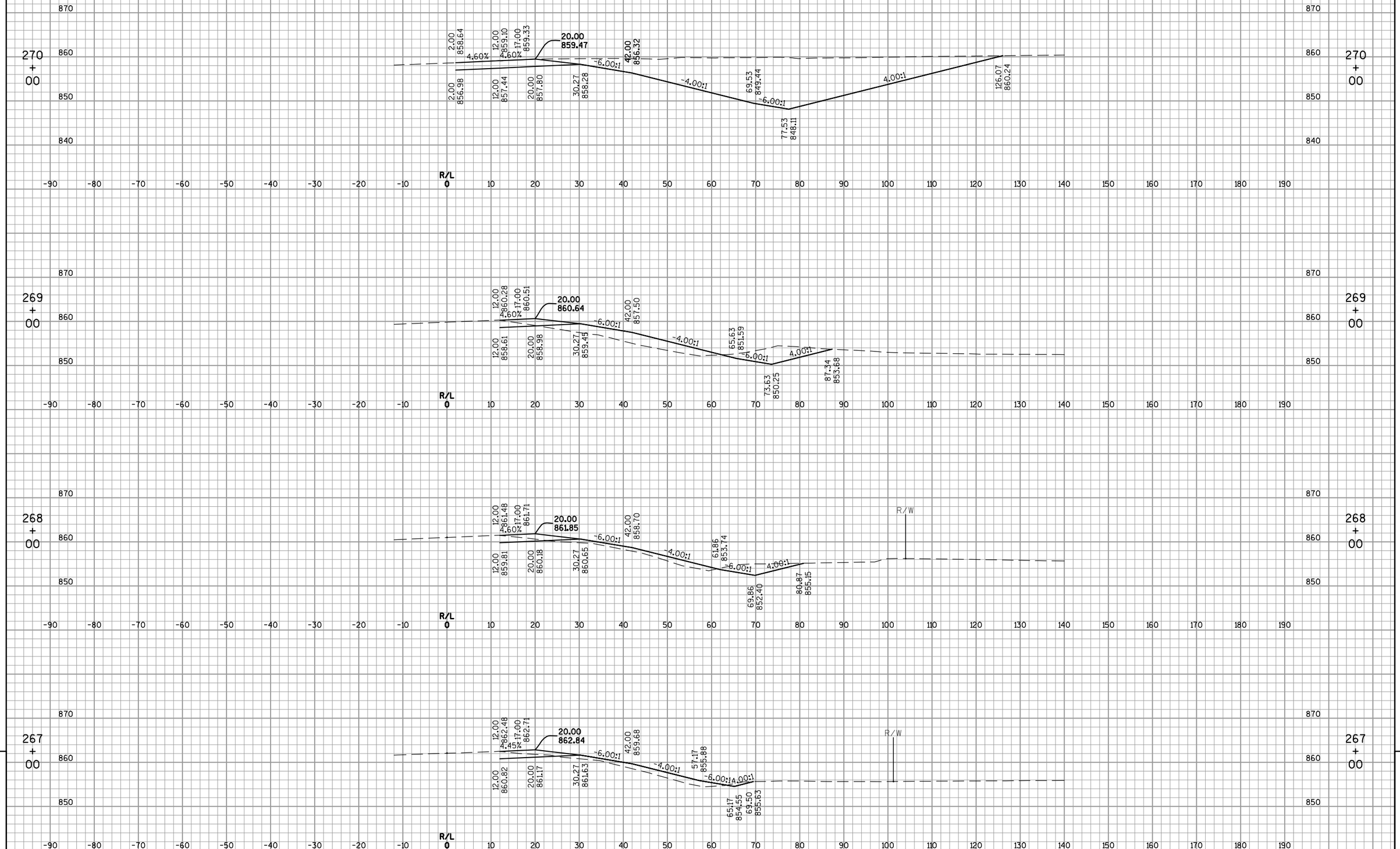
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



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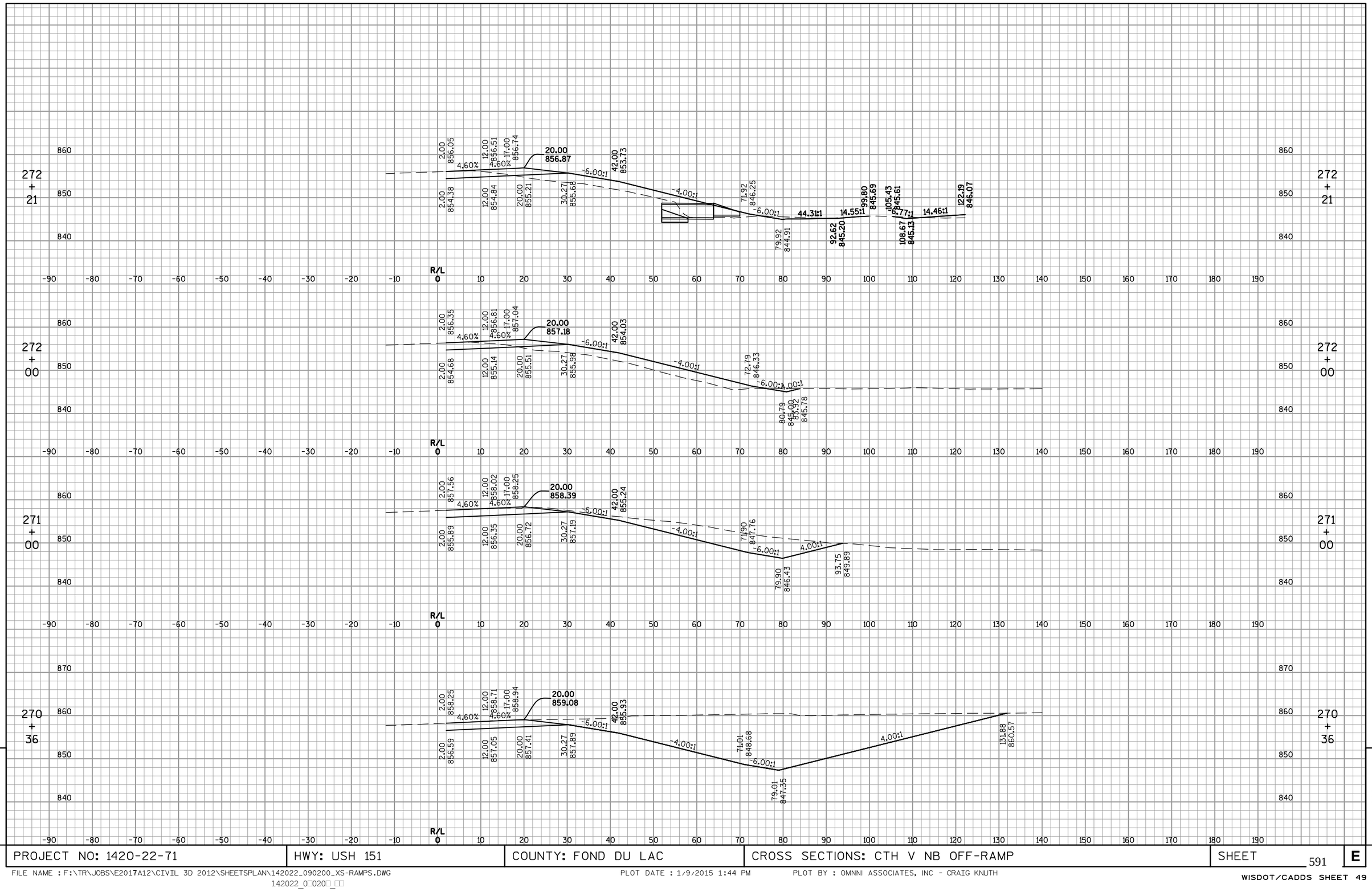
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB OFF-RAMP	SHEET 590	E



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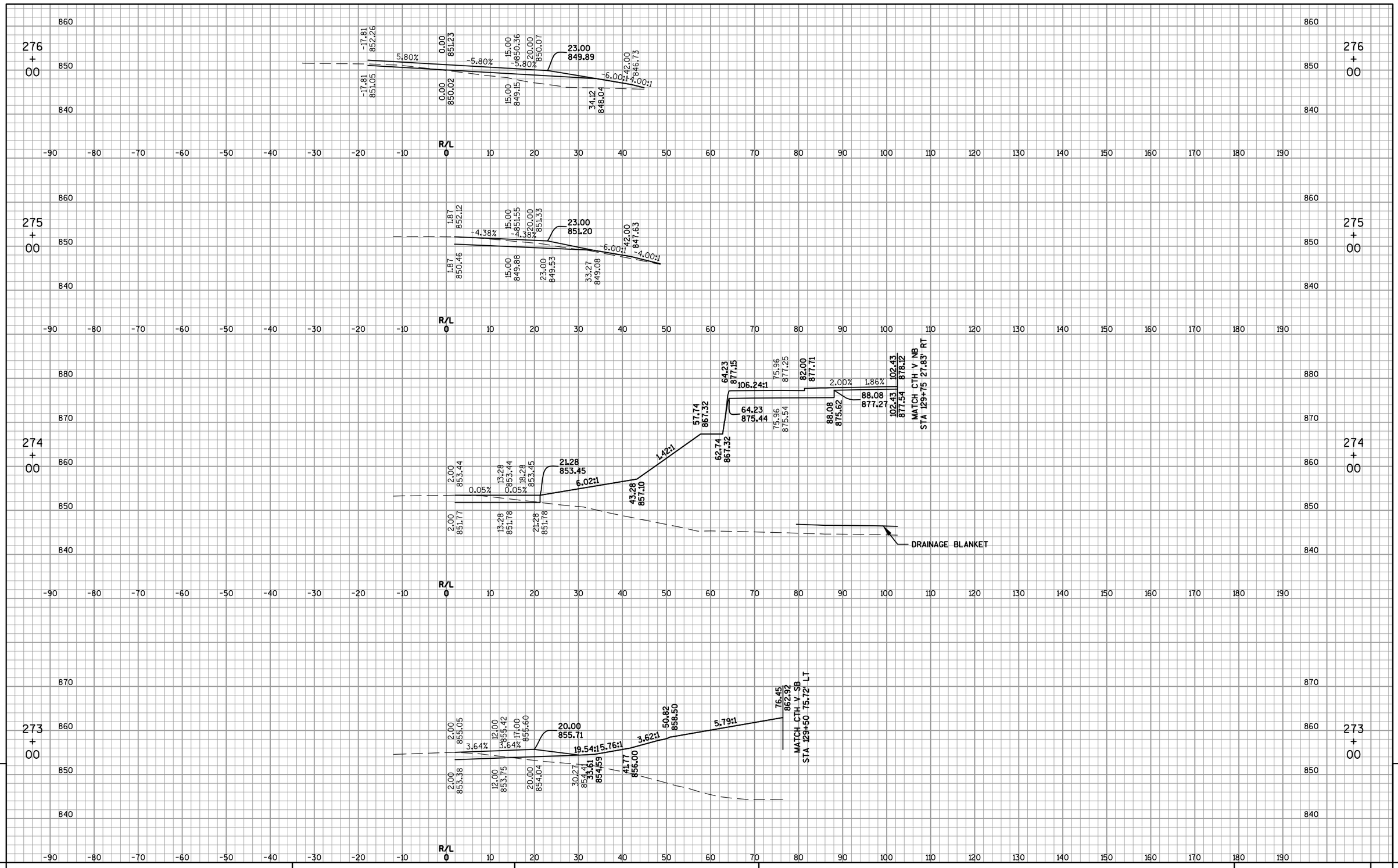
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB OFF-RAMP	SHEET 591	E



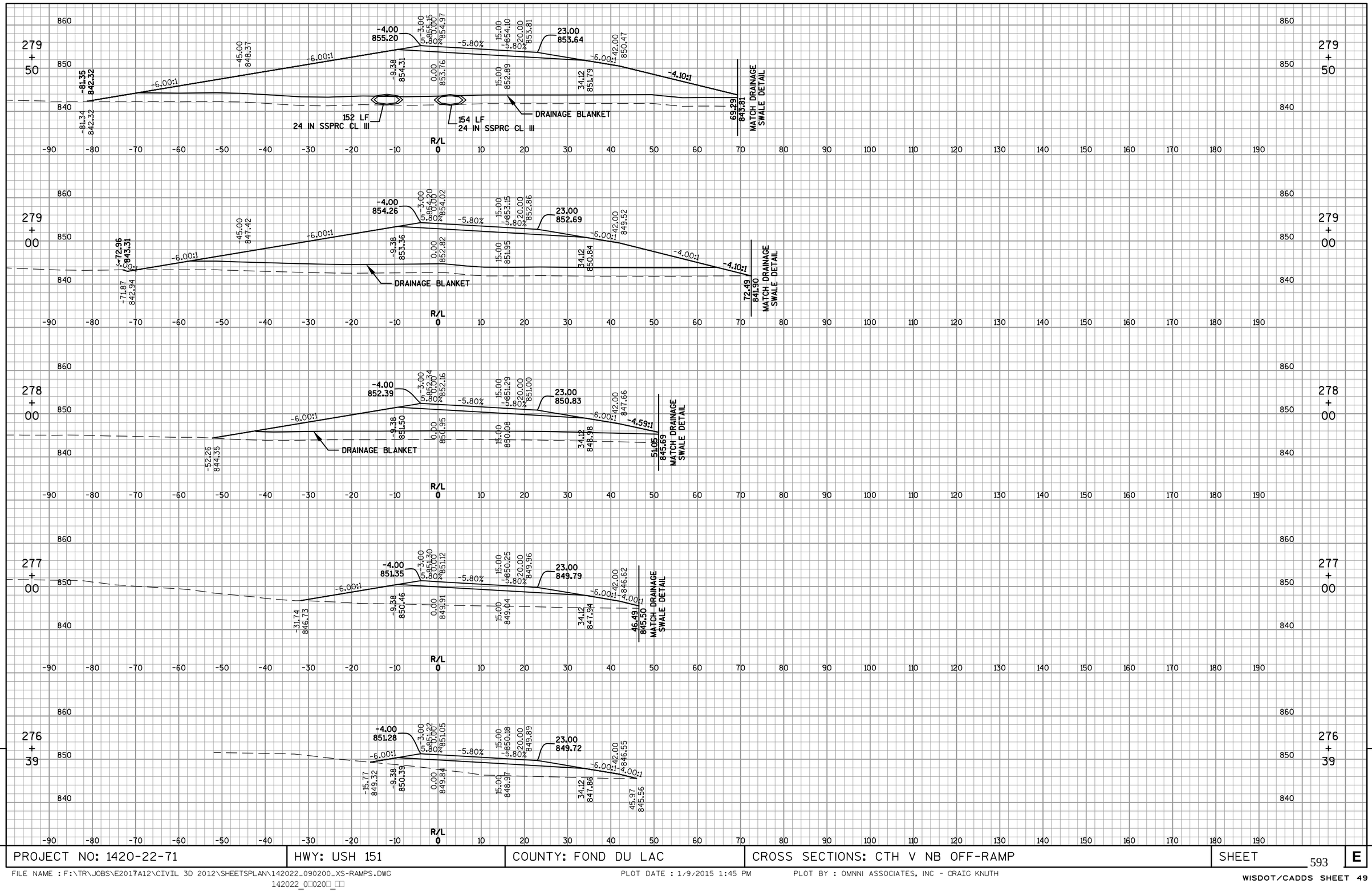
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB OFF-RAMP	SHEET 592	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RAMPS.DWG
142022_0□0204_□□

PLOT DATE : 1/9/2015 1:44 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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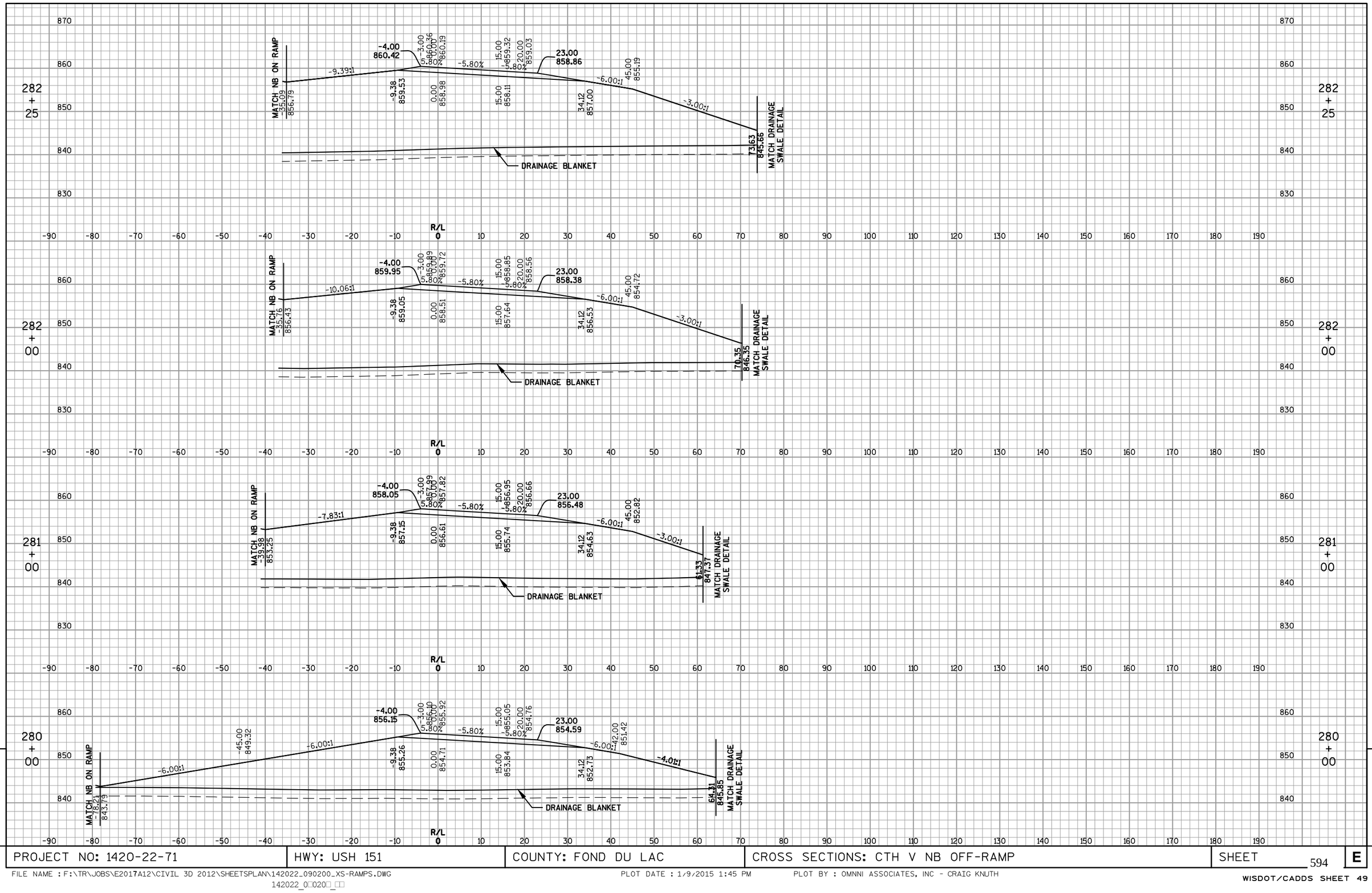

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB OFF-RAMP	SHEET 594	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RAMPS.DWG
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PLOT DATE : 1/9/2015 1:45 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB OFF-RAMP	SHEET 595	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RAMPS.DWG
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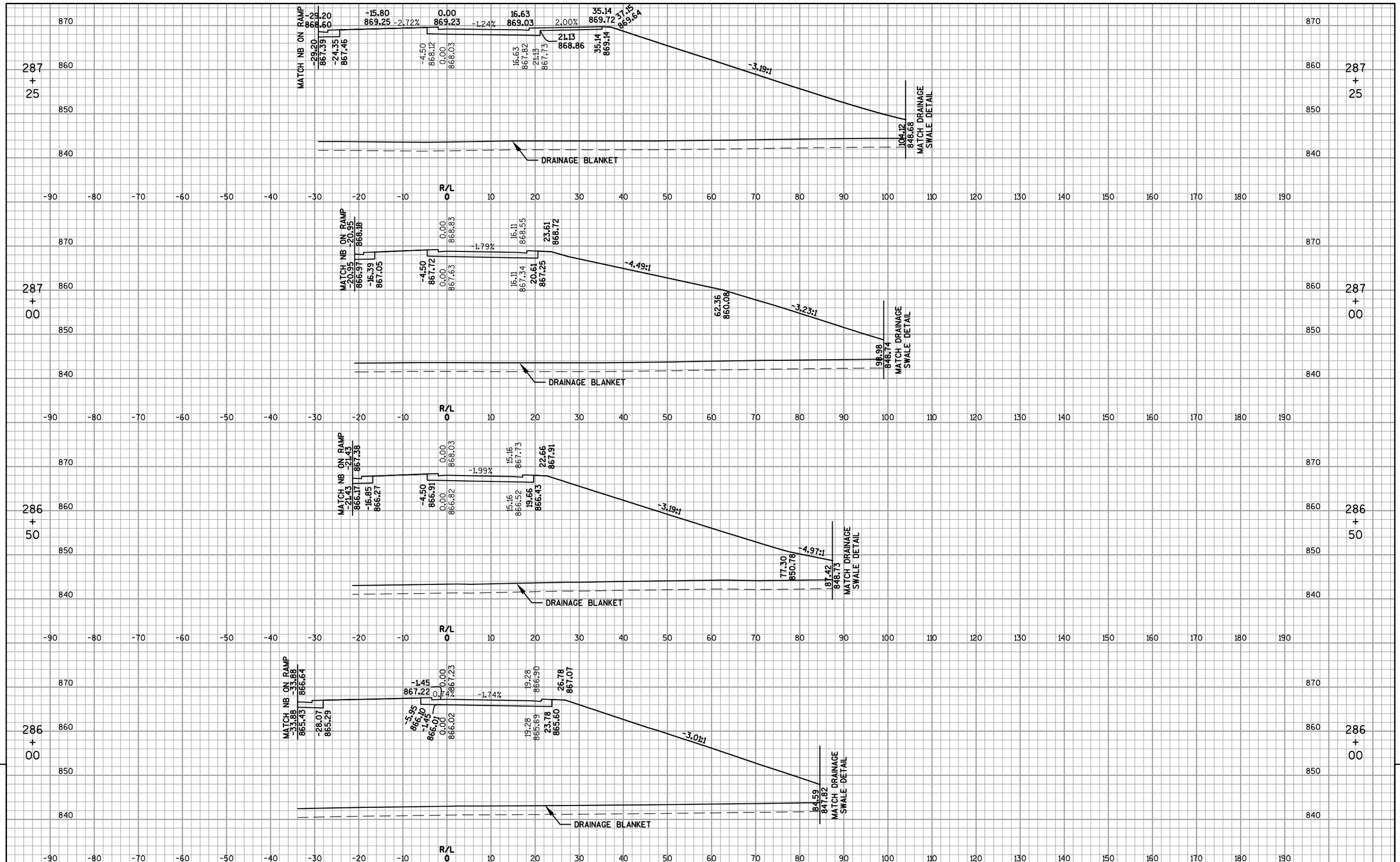
PLOT DATE : 1/9/2015 1:45 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



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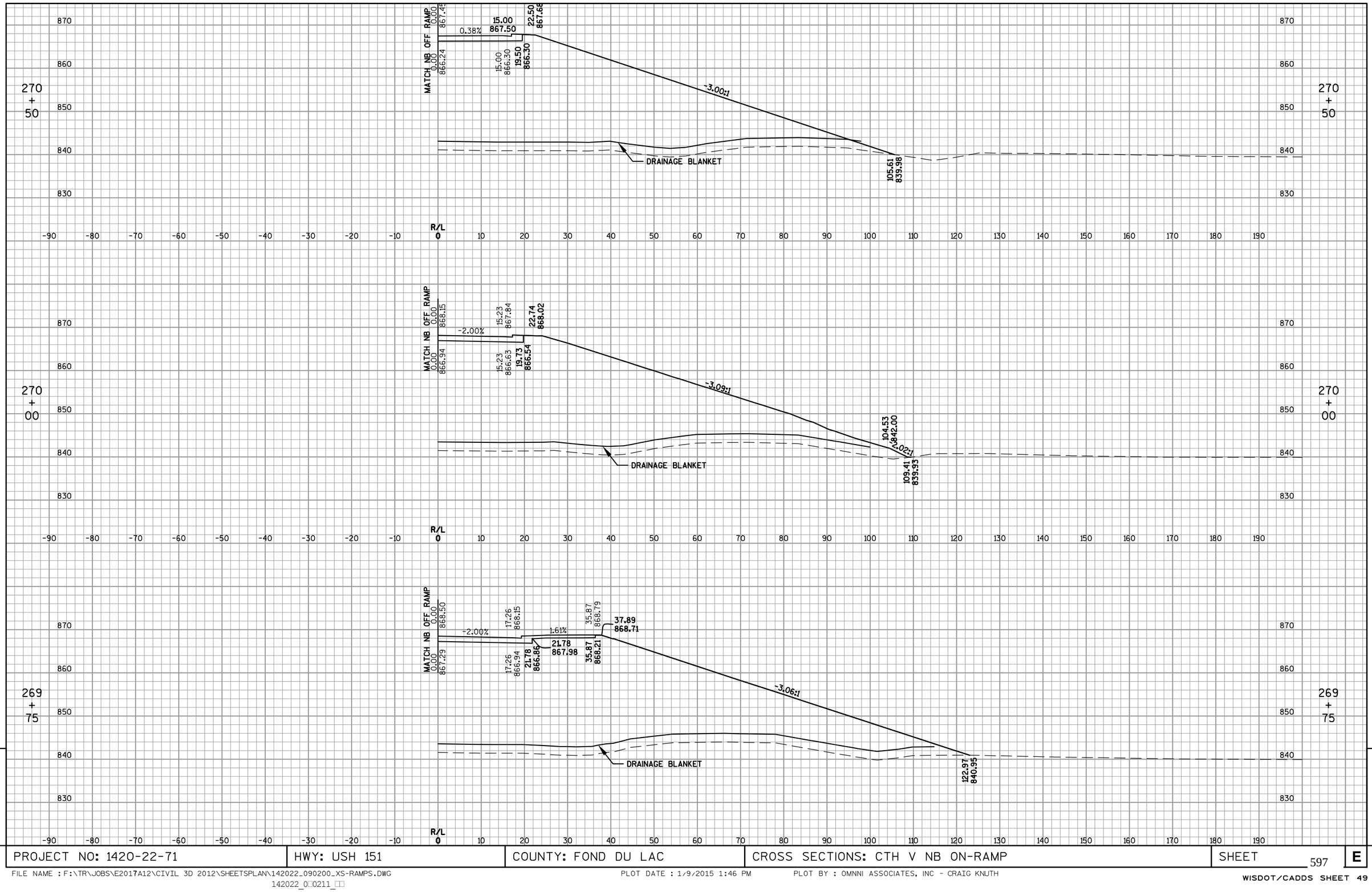

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB ON-RAMP	SHEET 597	E

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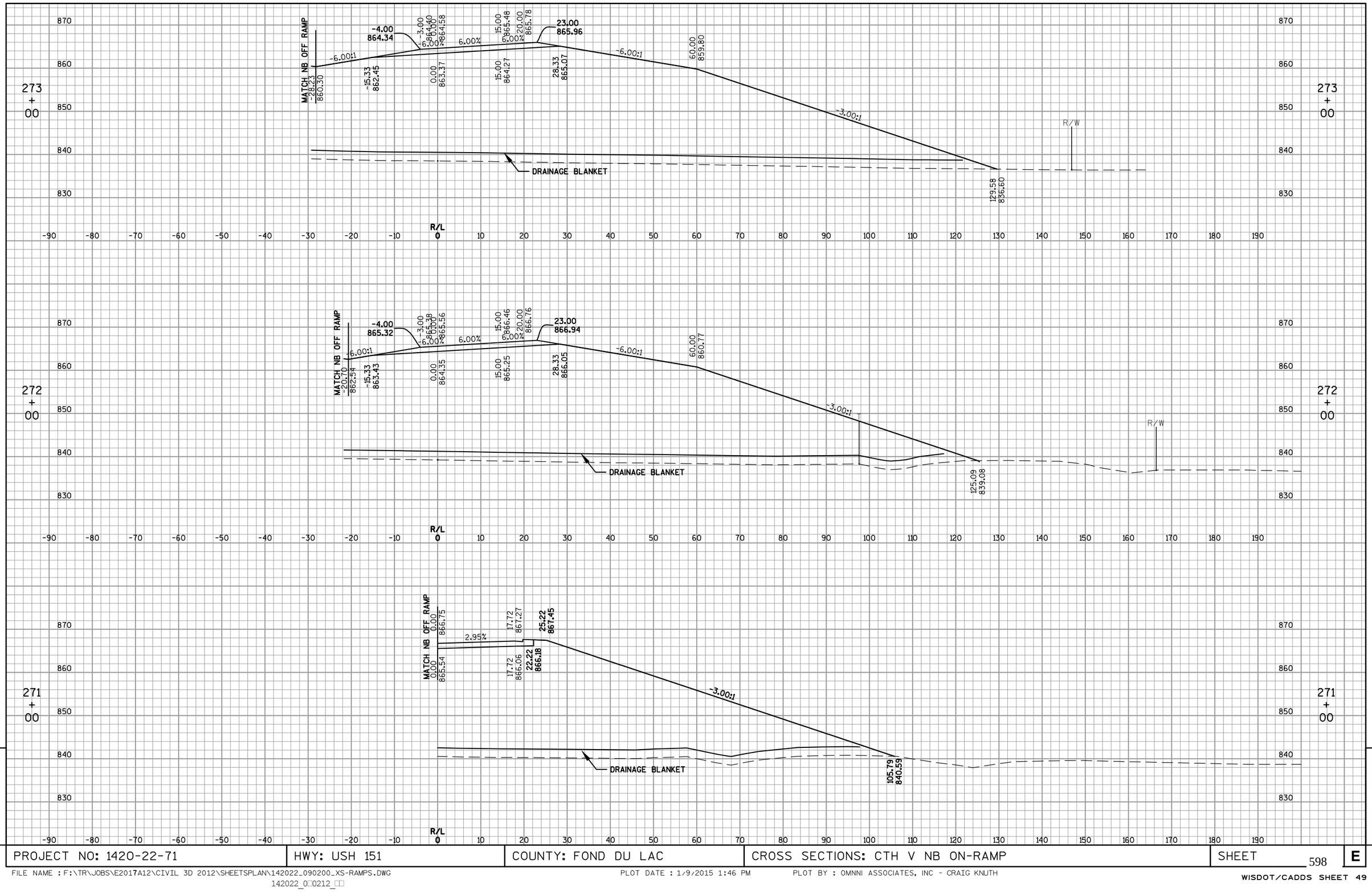
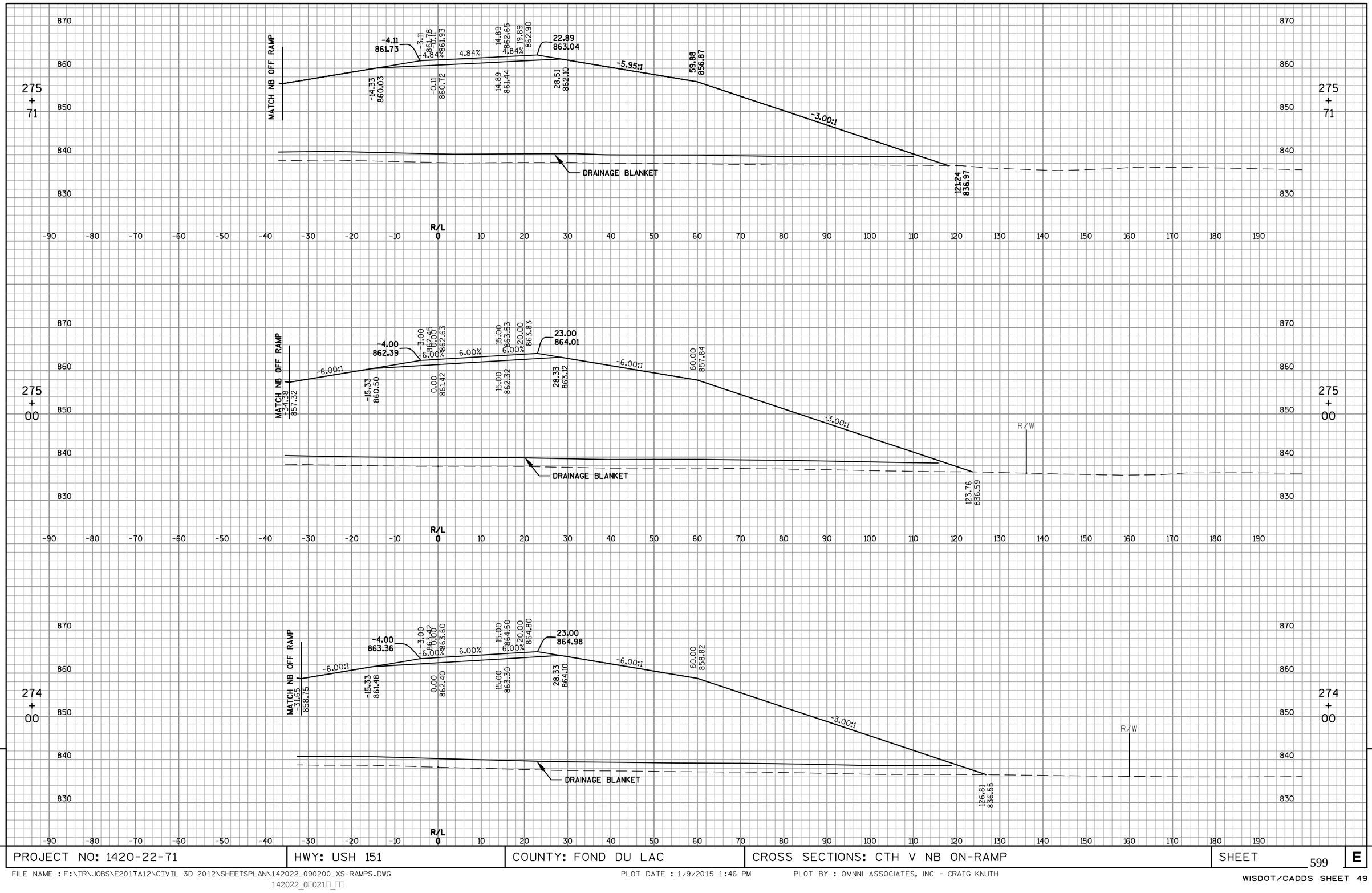
PLOT DATE : 1/9/2015 1:46 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB ON-RAMP	SHEET 598	E



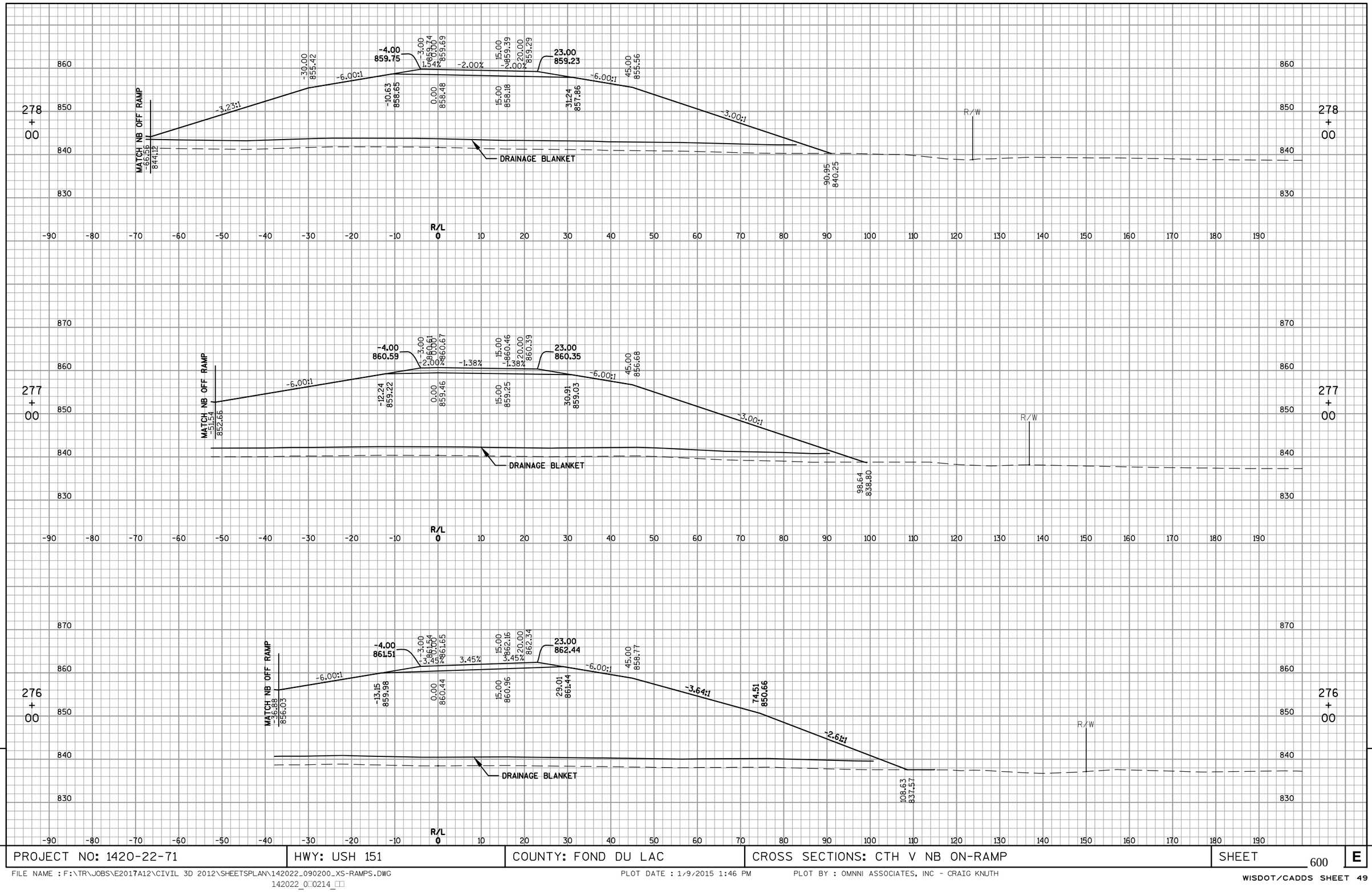
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB ON-RAMP	SHEET 599	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RAMPS.DWG
142022_0□021□_□□

PLOT DATE : 1/9/2015 1:46 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB ON-RAMP	SHEET 600	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RAMPS.DWG
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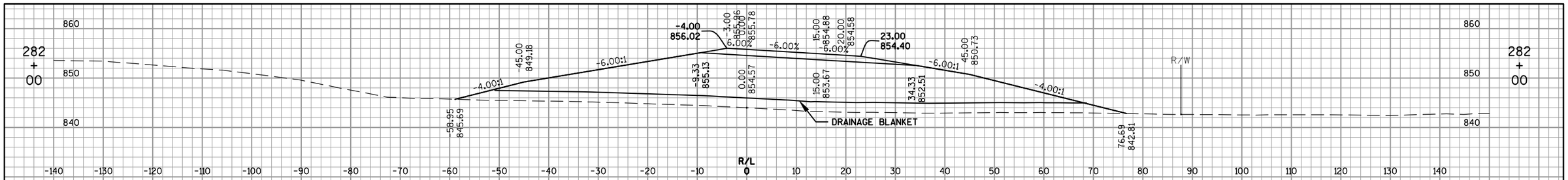
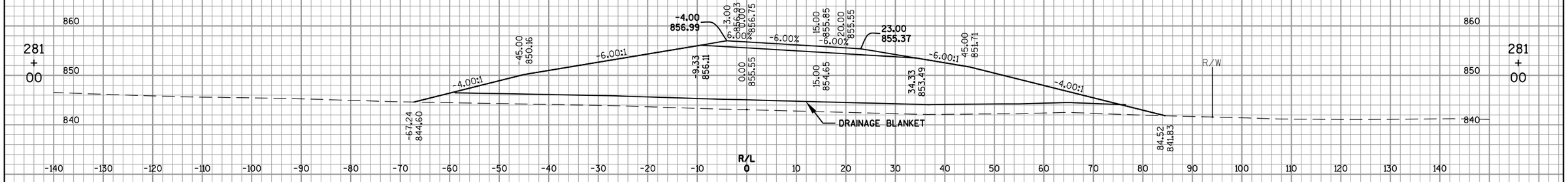
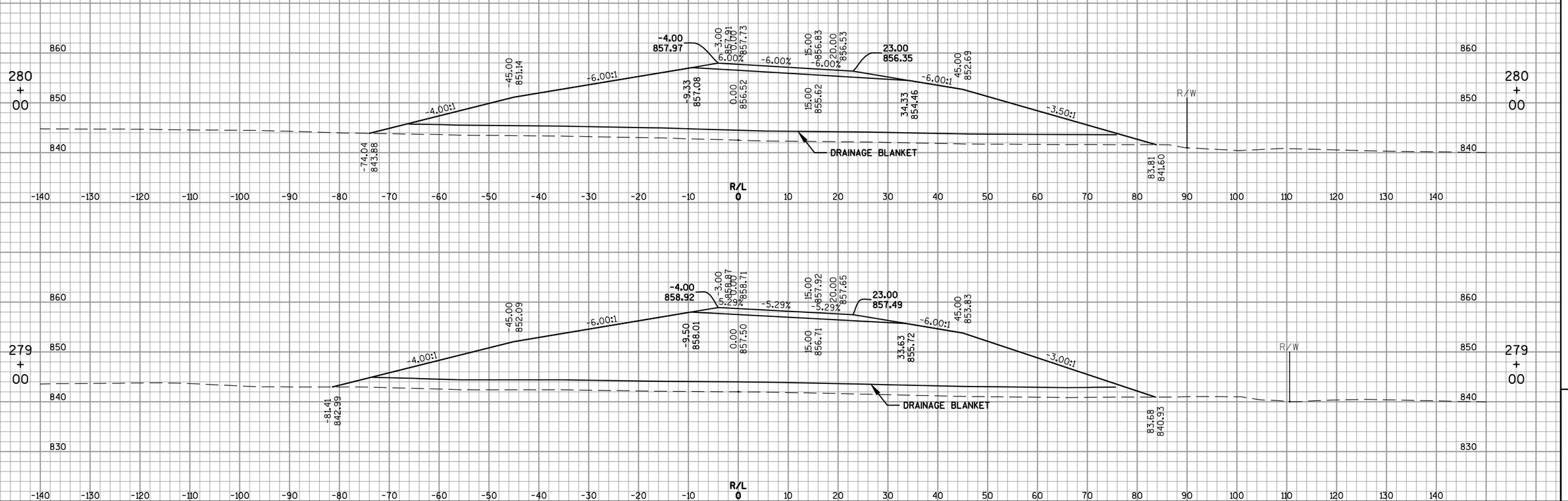
PLOT DATE : 1/9/2015 1:46 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH







PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB ON-RAMP	SHEET 601	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RAMPS.DWG
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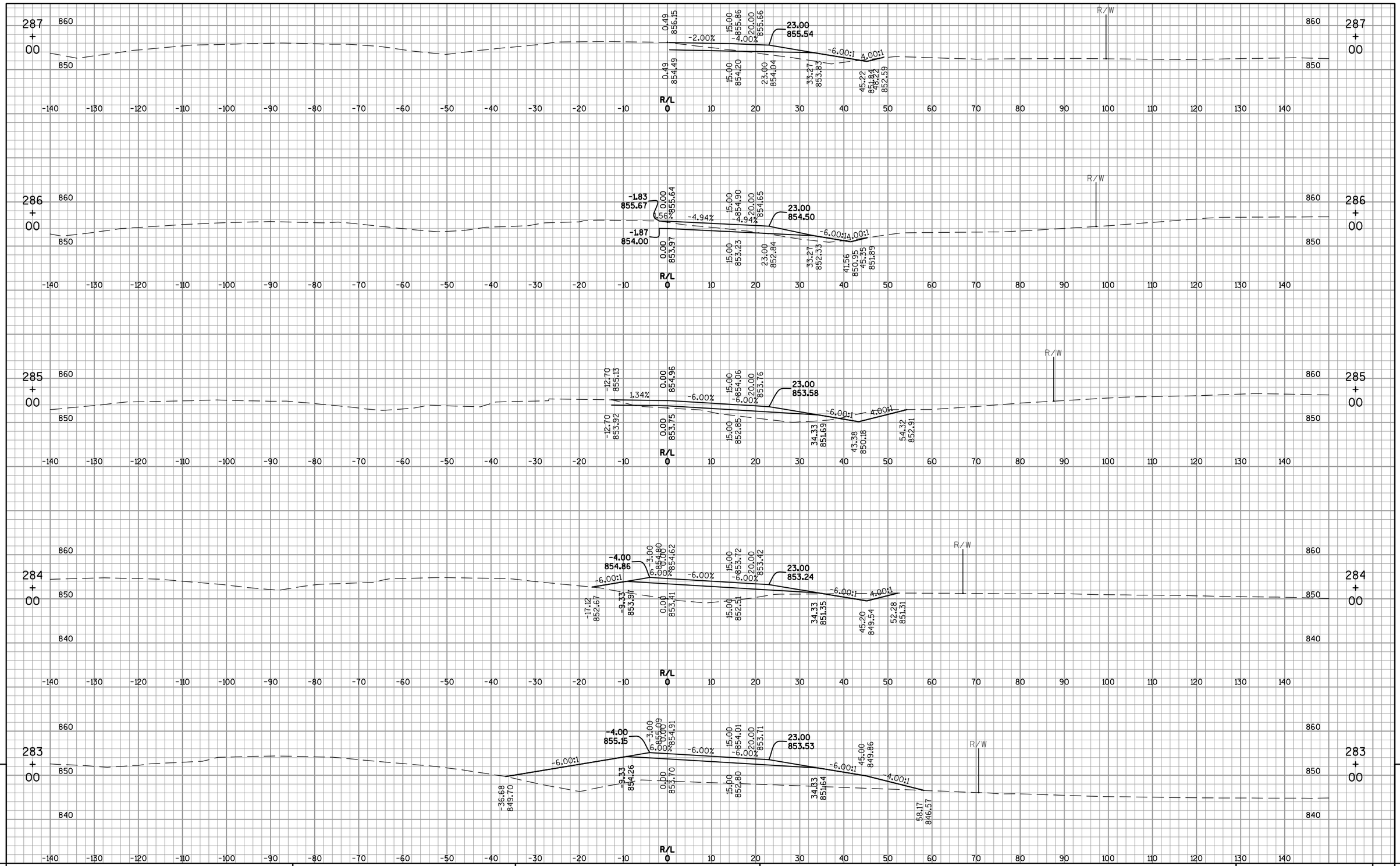
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB ON-RAMP	SHEET 602	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RAMPS.DWG
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PLOT DATE : 1/9/2015 1:47 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49

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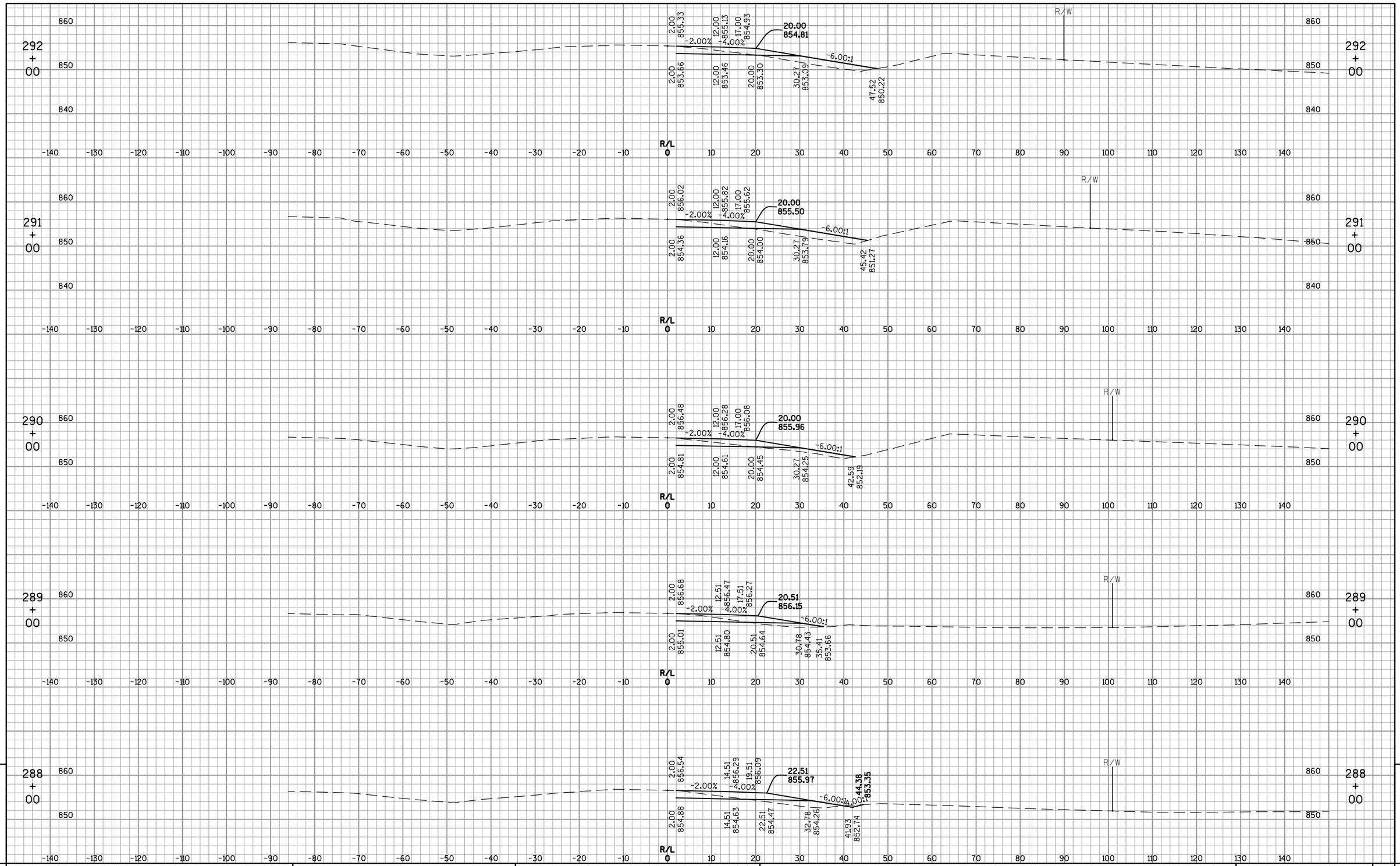

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB ON-RAMP	SHEET 603	E

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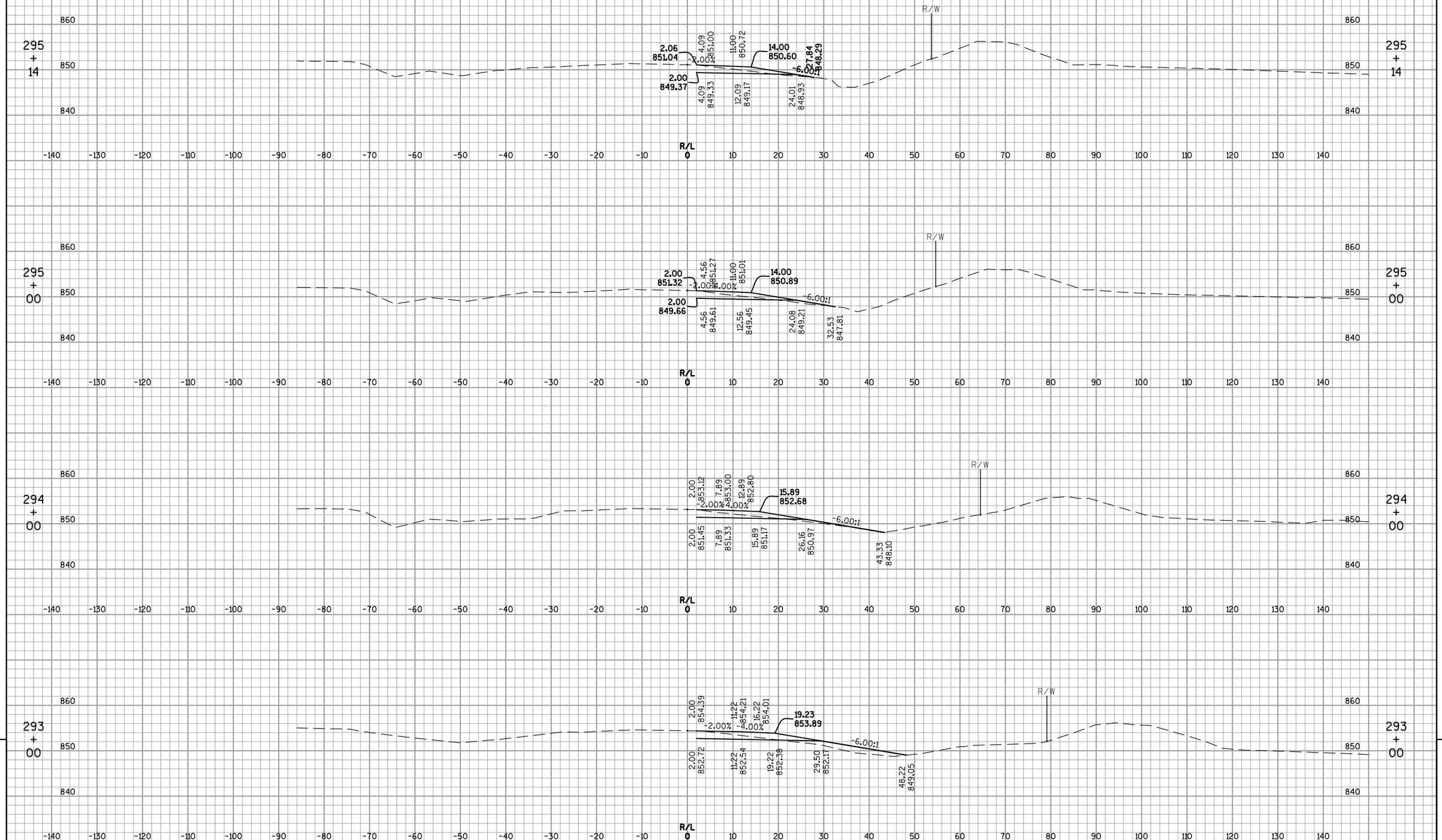
PLOT DATE : 1/9/2015 1:47 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB ON-RAMP	SHEET 604	E

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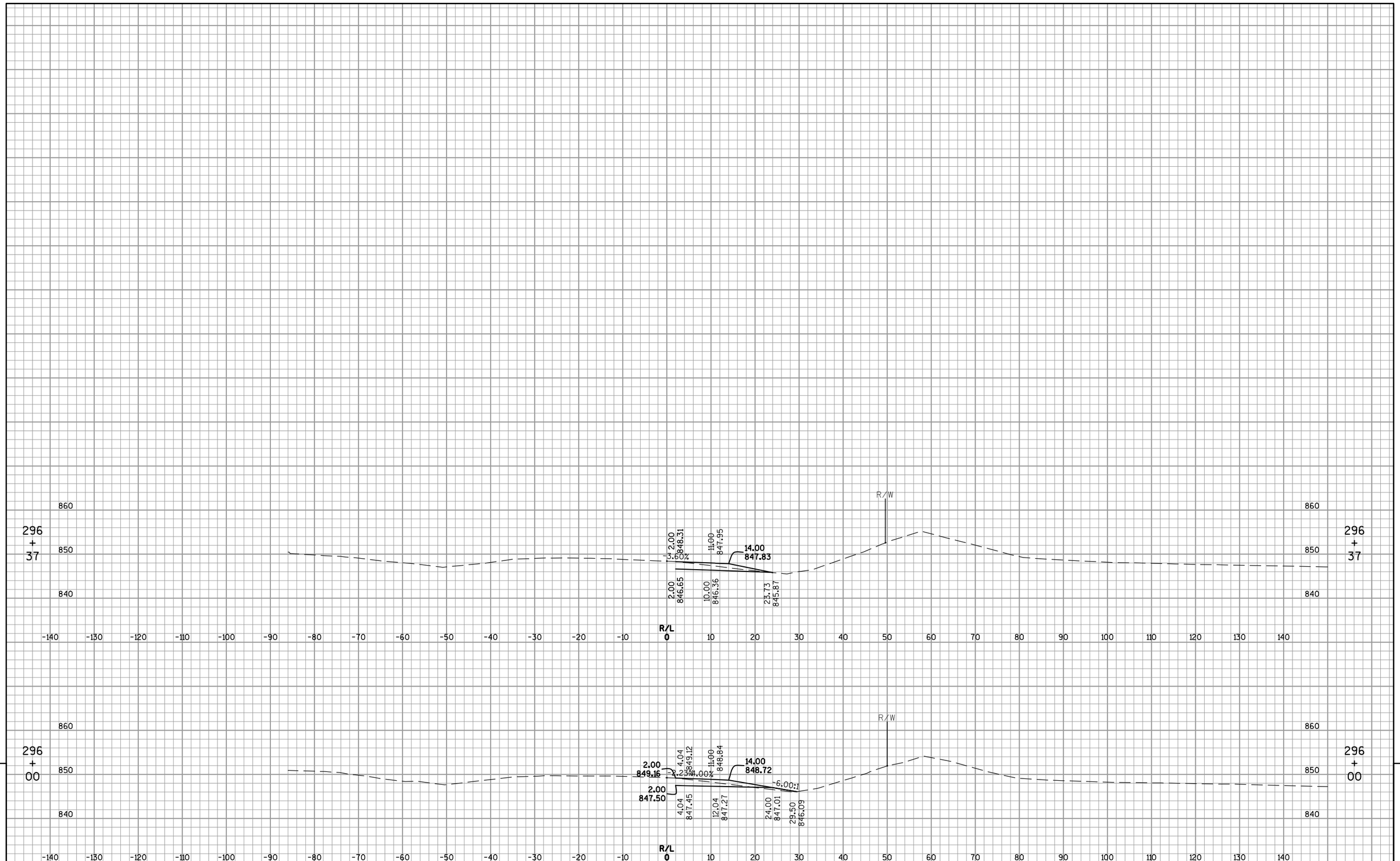
142022_0□021□_□□

PLOT DATE : 1/9/2015 1:47 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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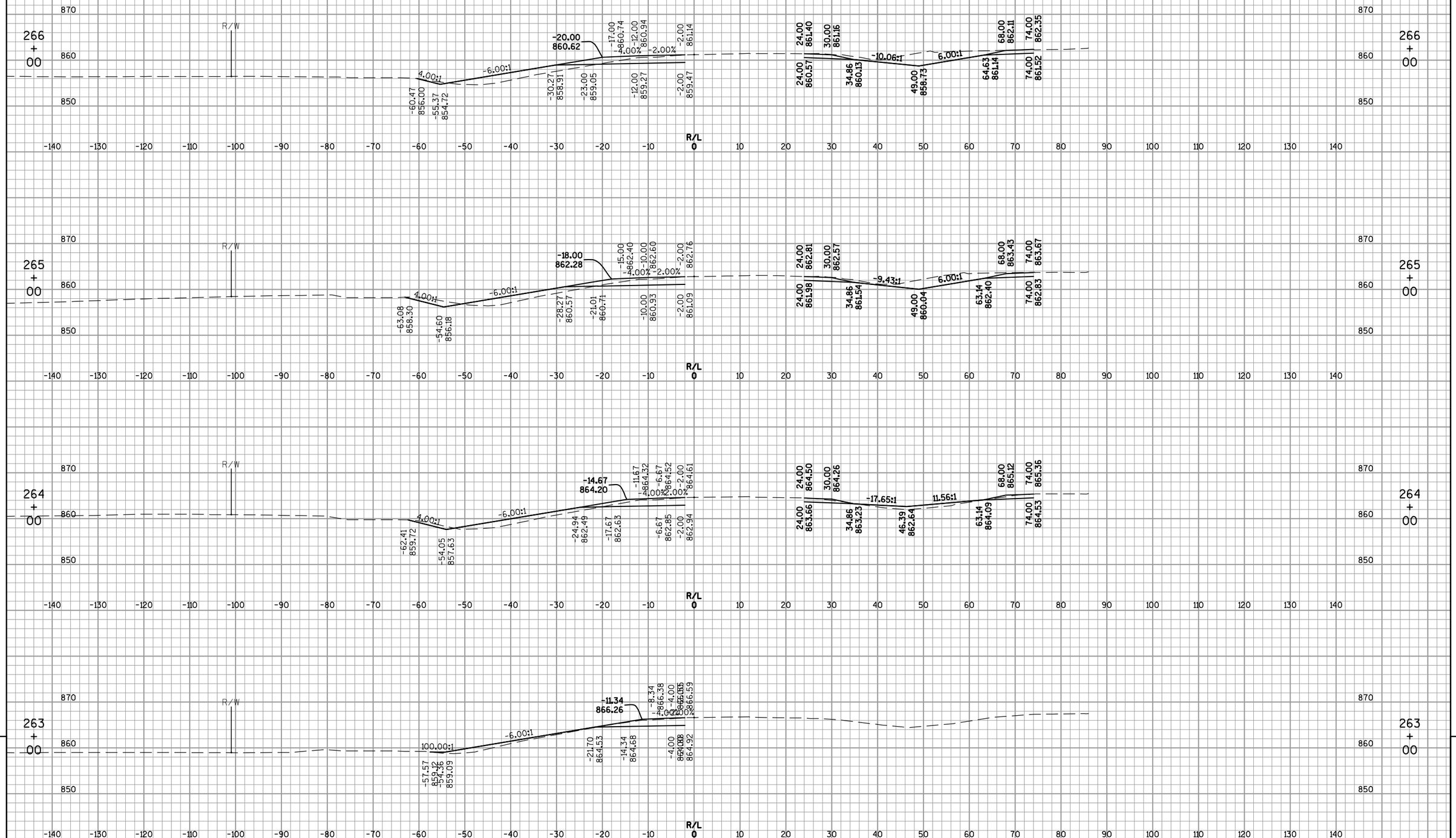
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NB ON-RAMP	SHEET 605	E



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB ON-RAMP	SHEET 606 E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RAMPS.DWG
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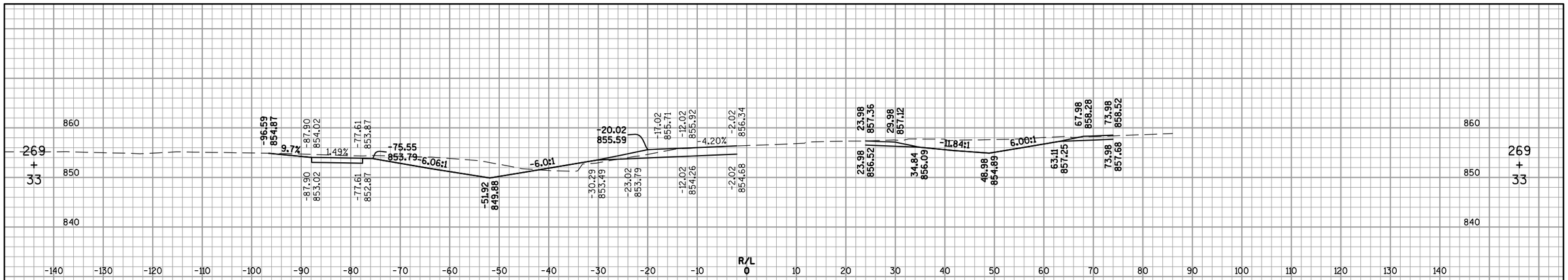
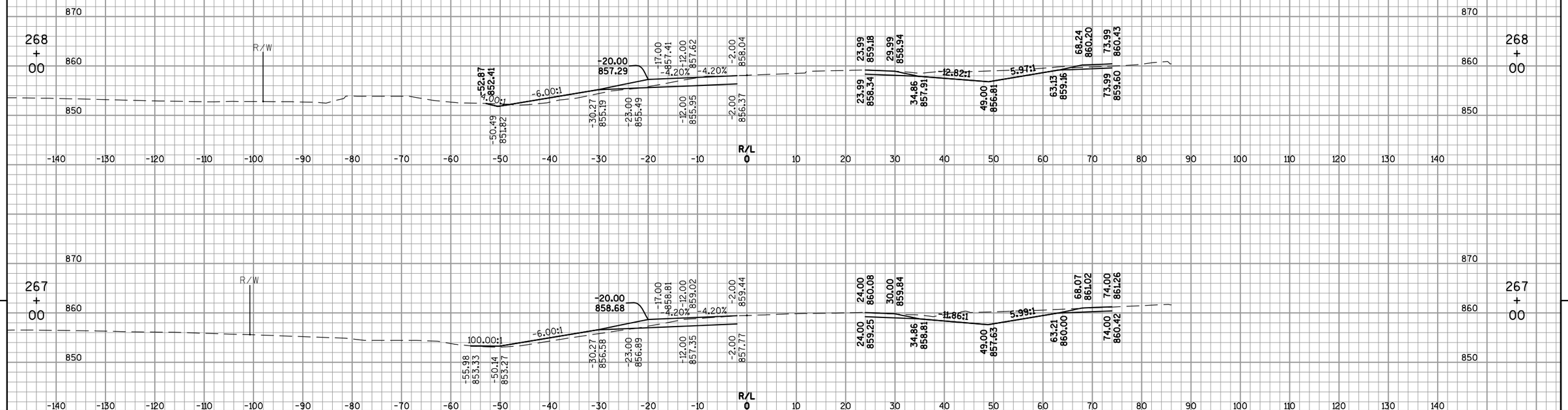
PLOT DATE : 1/9/2015 1:48 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49





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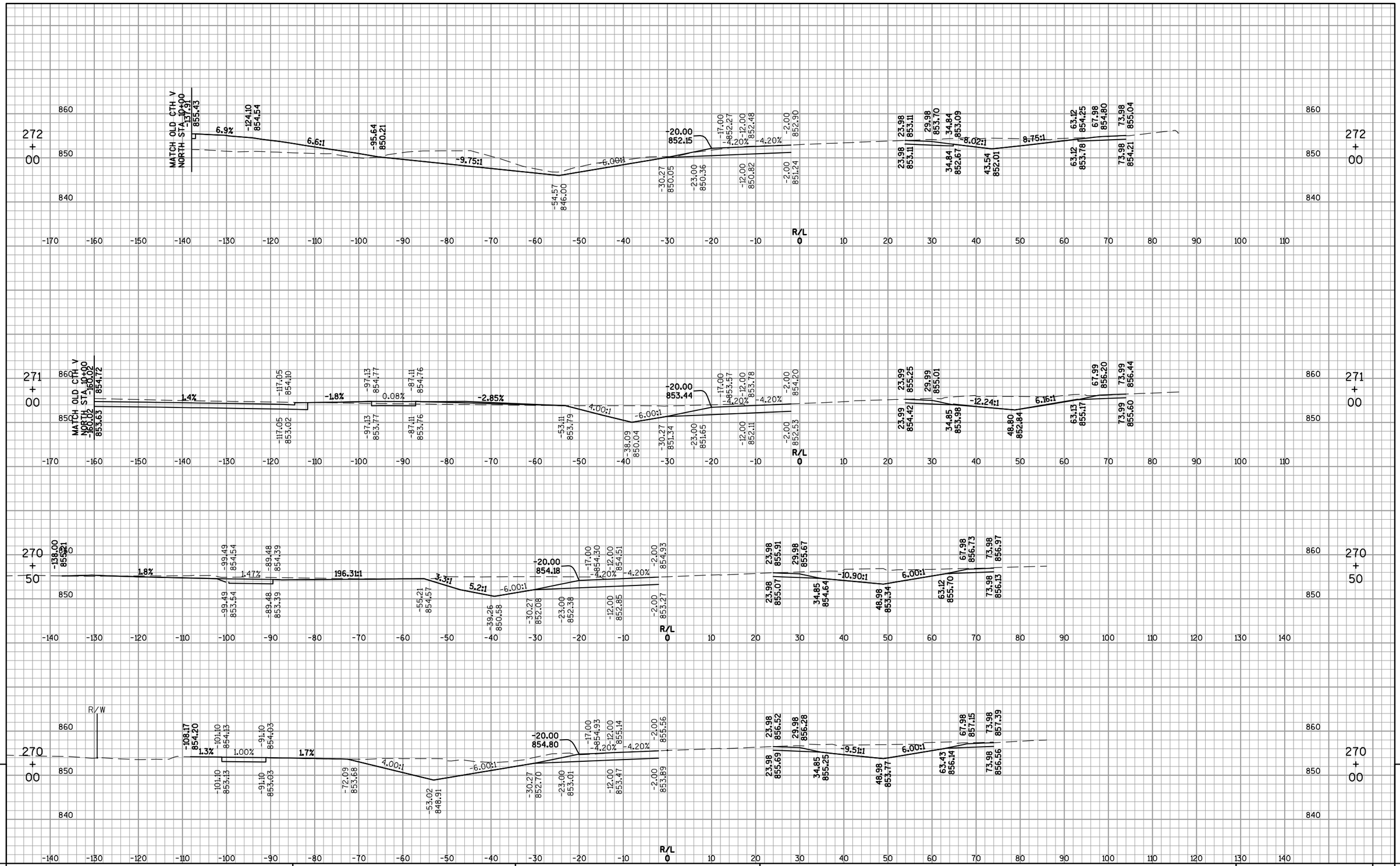
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB ON-RAMP	SHEET 607	E



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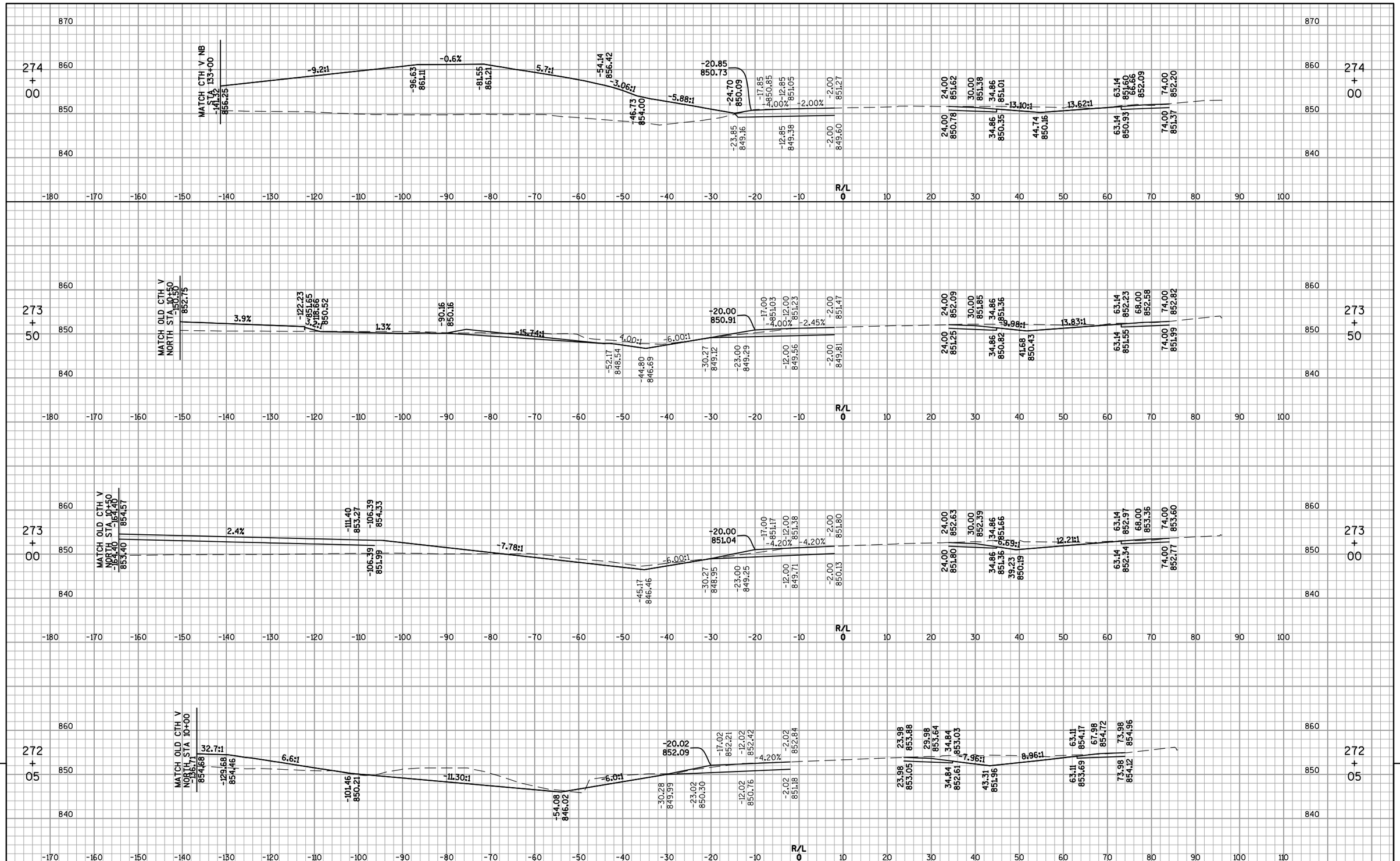
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB ON-RAMP	SHEET 608	E



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB ON-RAMP	SHEET 609	E

9	PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB ON-RAMP	SHEET 610 E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RAMPS.DWG
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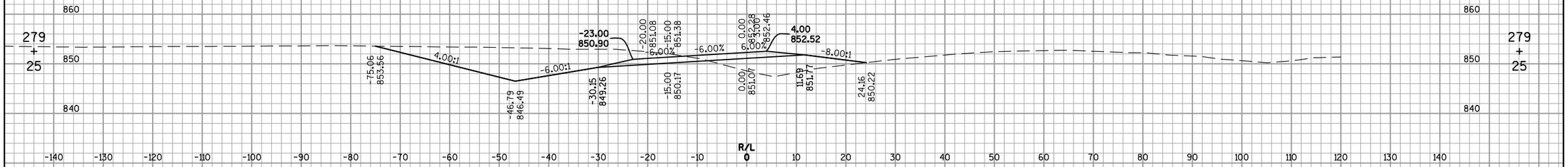
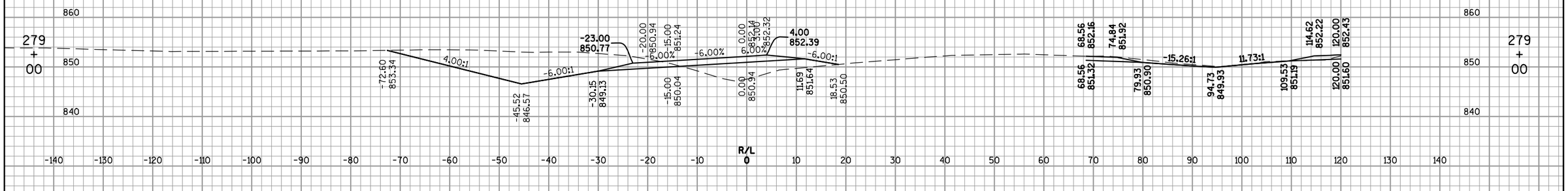
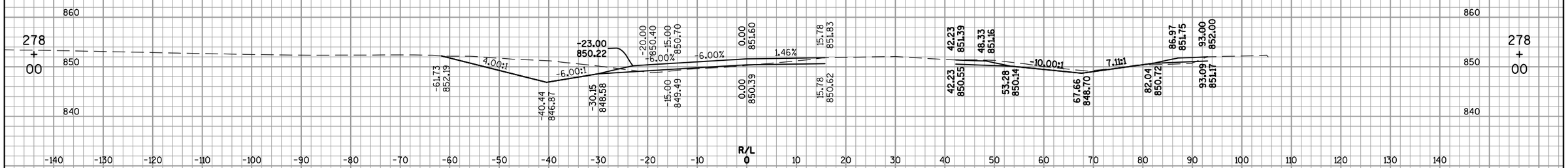
PLOT DATE : 1/9/2015 1:49 PM

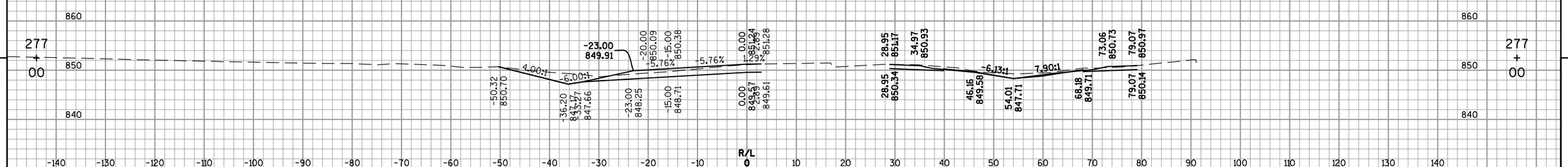
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49









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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB ON-RAMP	SHEET 611	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RAMPS.DWG
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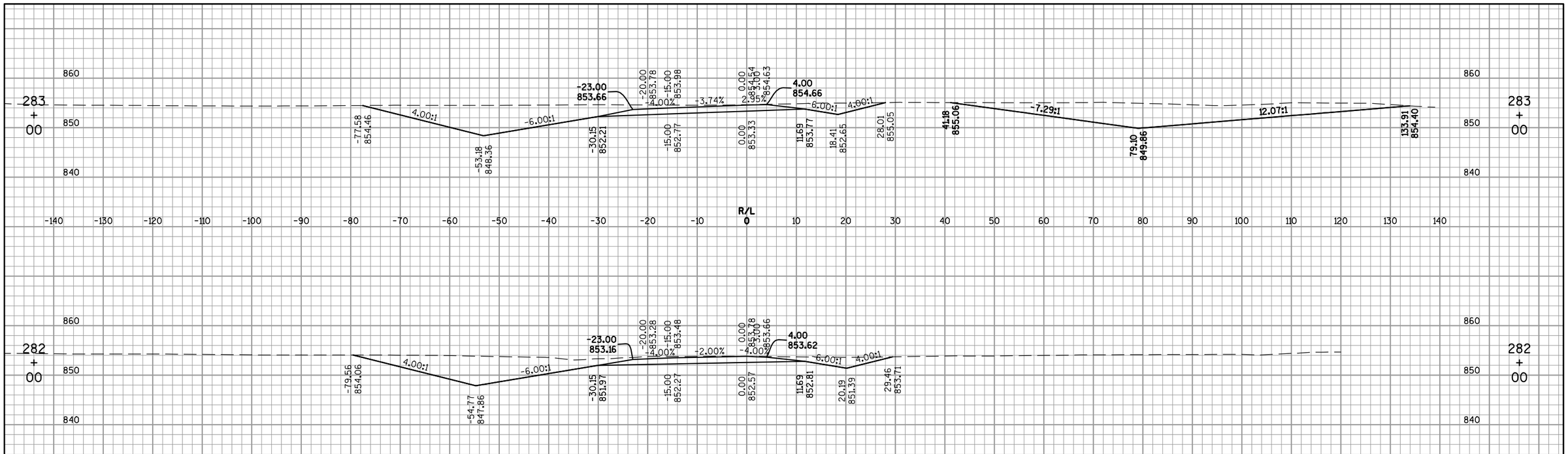
PLOT DATE : 1/9/2015 1:49 PM
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH
WISDOT/CADDS SHEET 49



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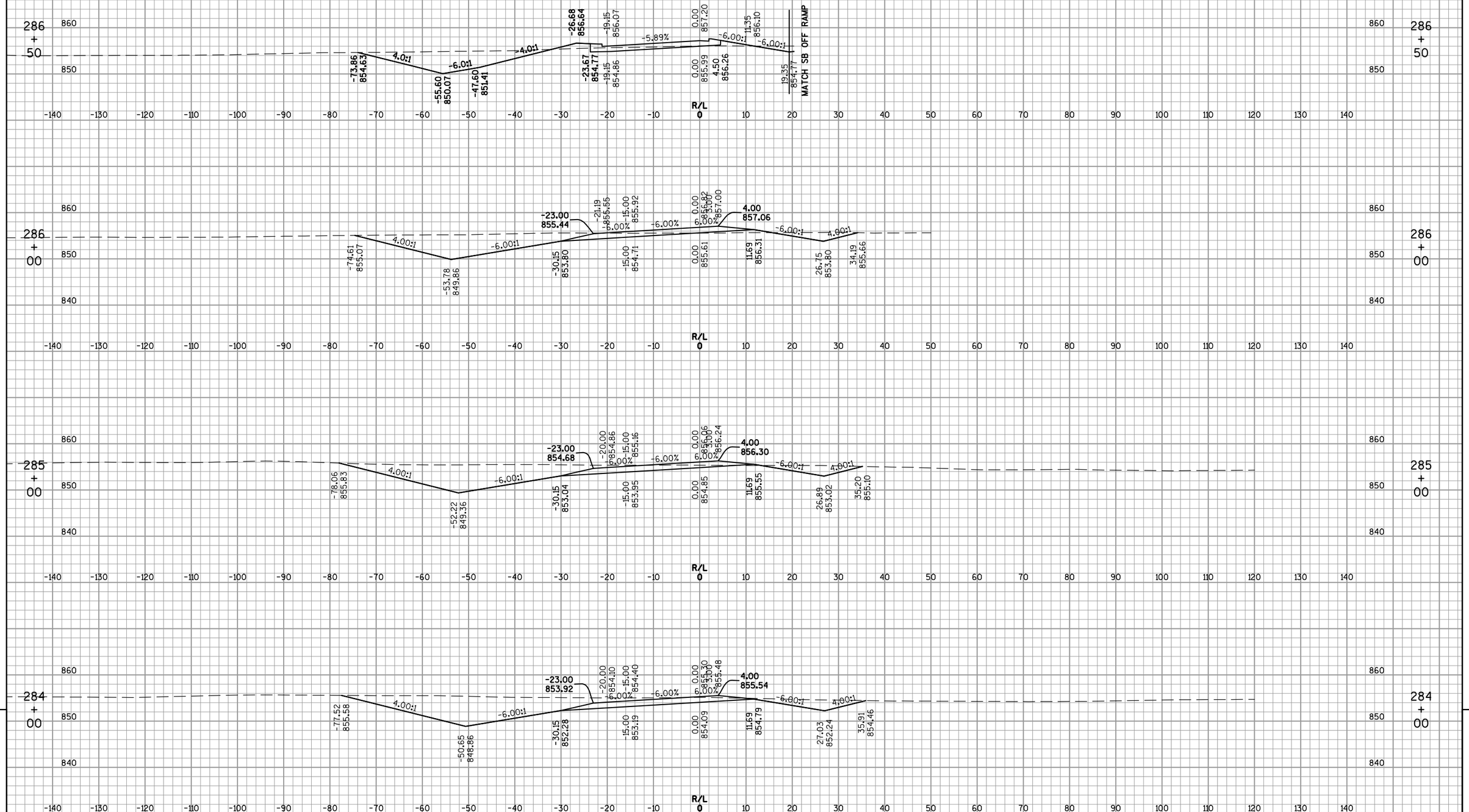
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB ON-RAMP	SHEET 612	E



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB ON-RAMP	SHEET 613	E

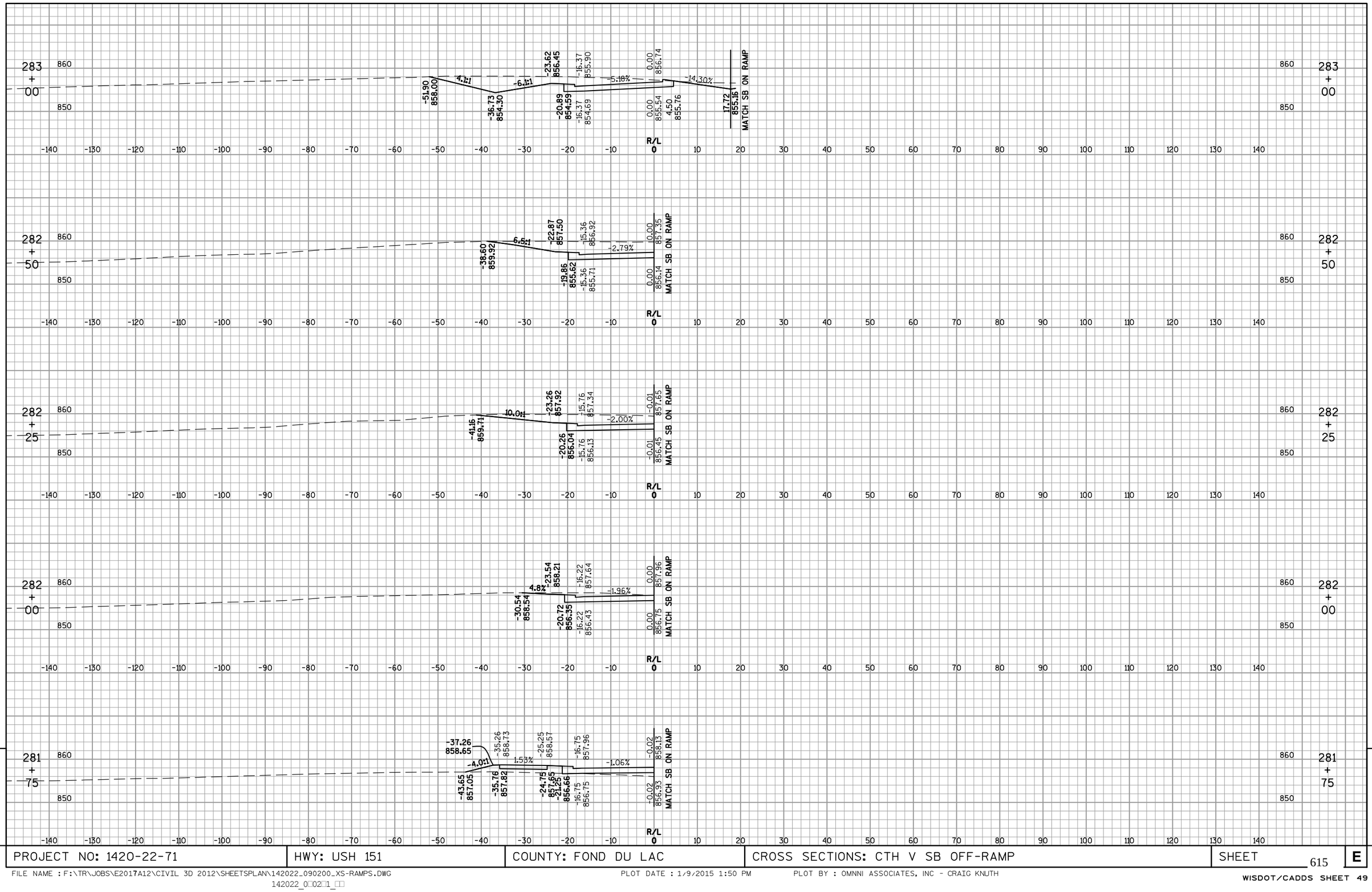
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB ON-RAMP	SHEET 614	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RAMPS.DWG
142022_0□022□_□□

PLOT DATE : 1/9/2015 1:49 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB OFF-RAMP	SHEET 615	E

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PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

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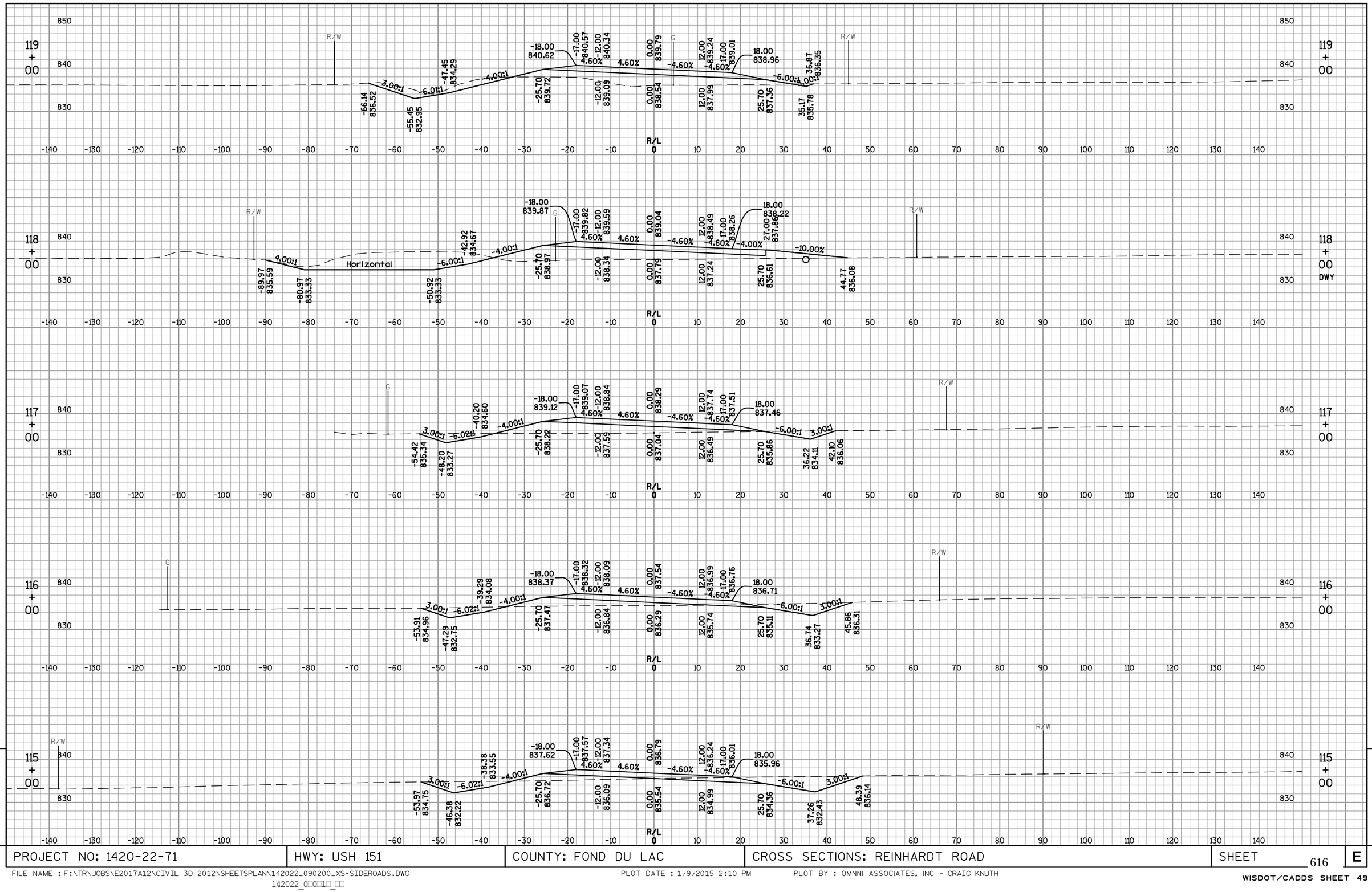

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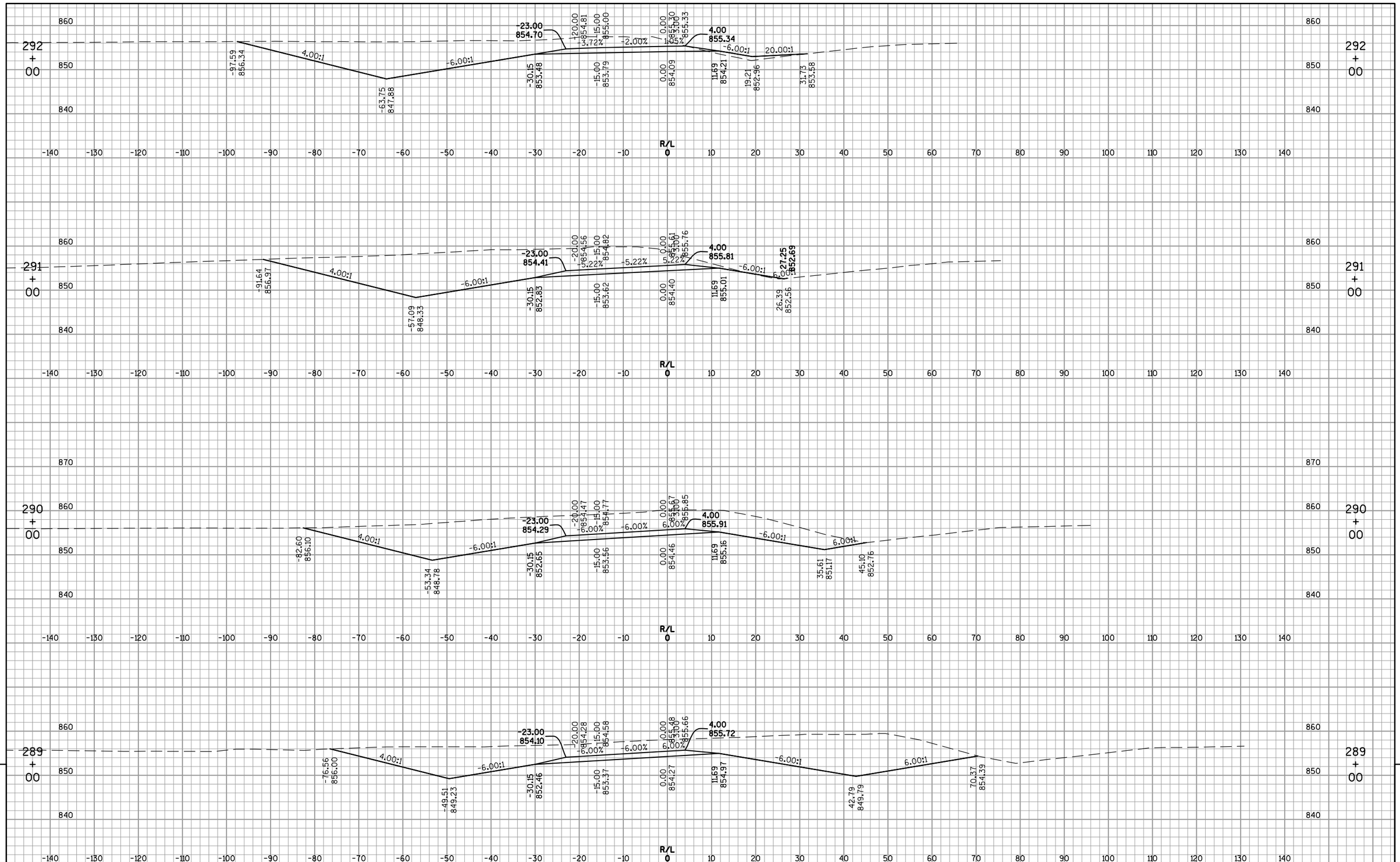

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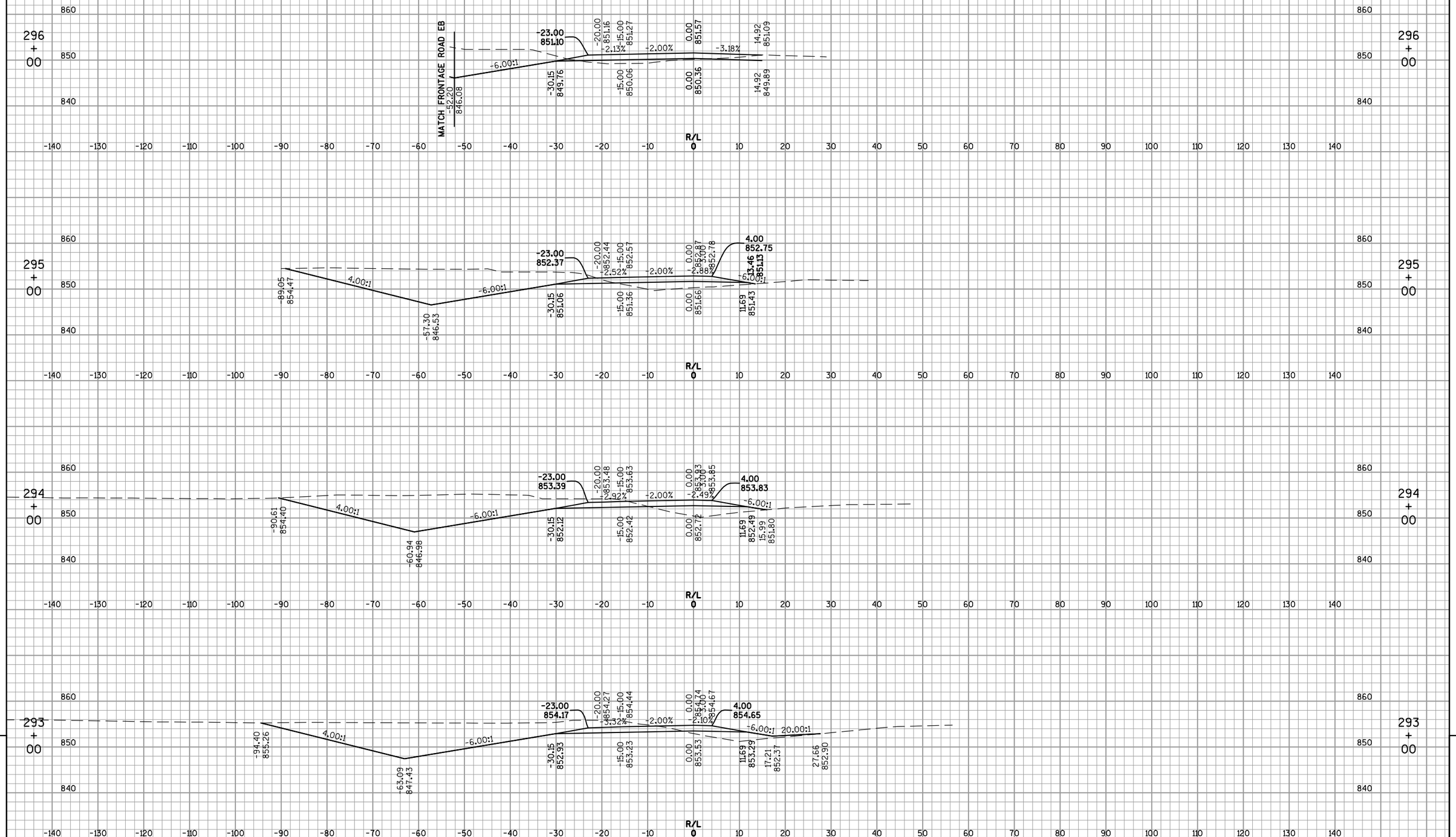

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB OFF-RAMP	SHEET 618	E

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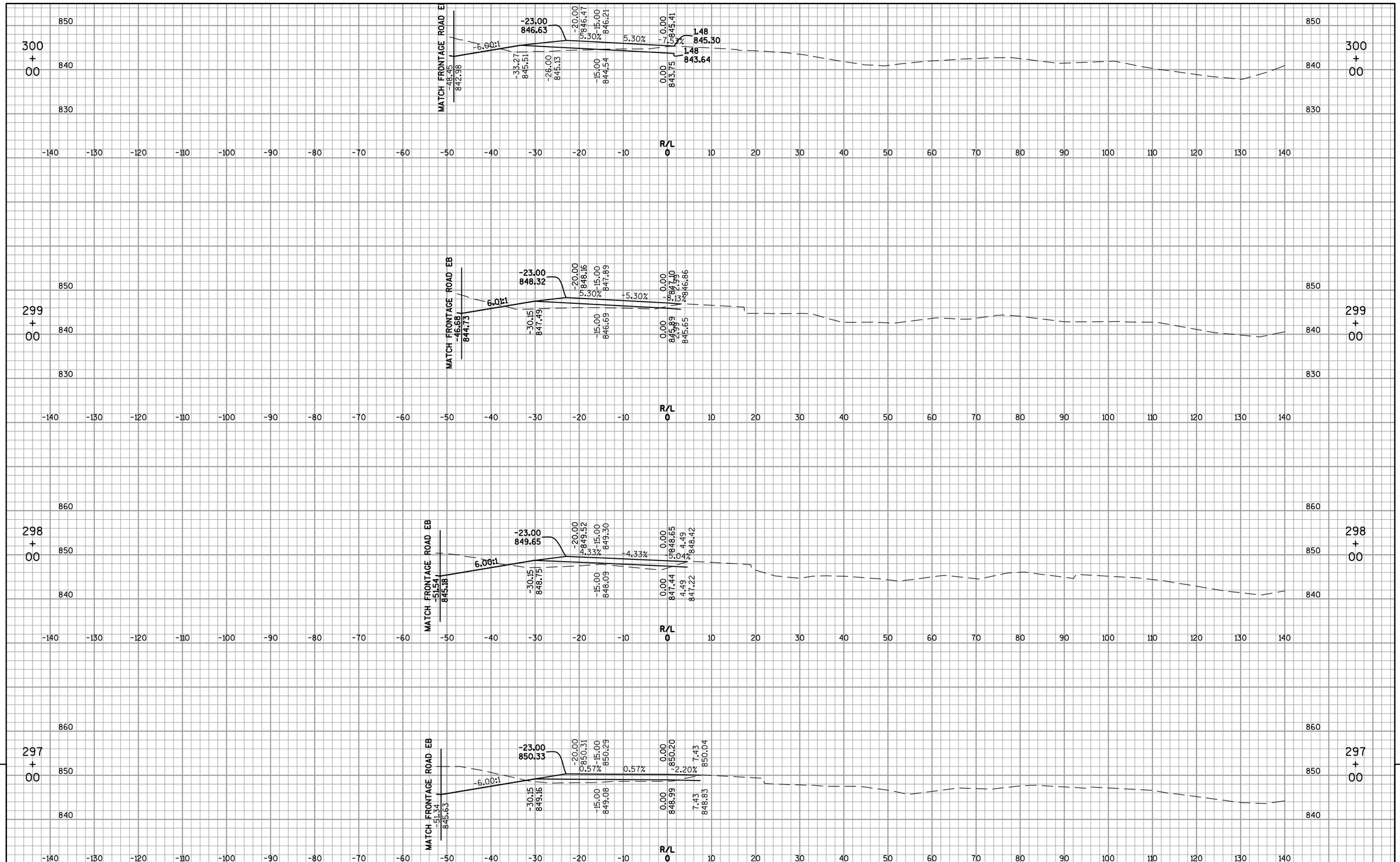
WISDOT/CADDS SHEET 49



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB OFF-RAMP	SHEET 619	E

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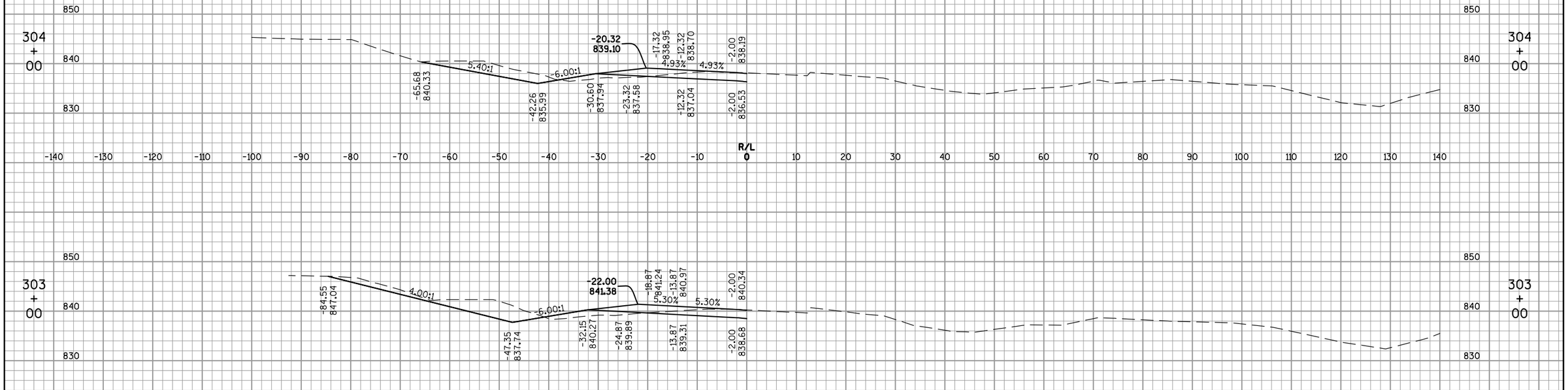
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH
WISDOT/CADDS SHEET 49



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB OFF-RAMP	SHEET 620	E

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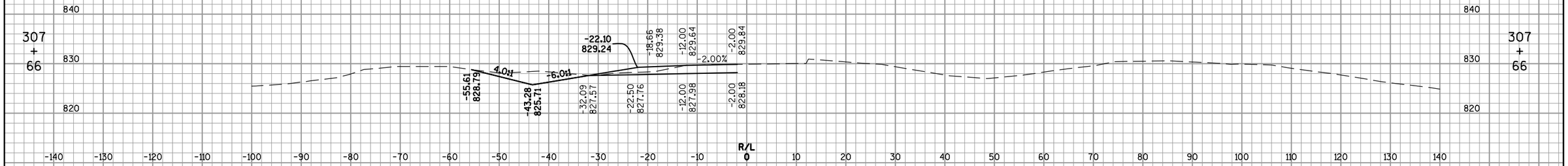
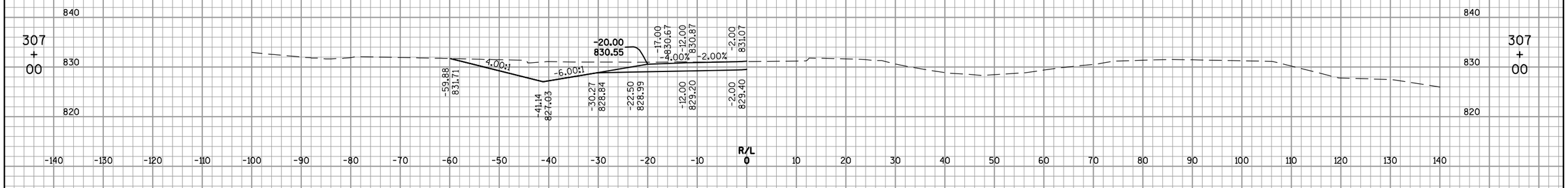
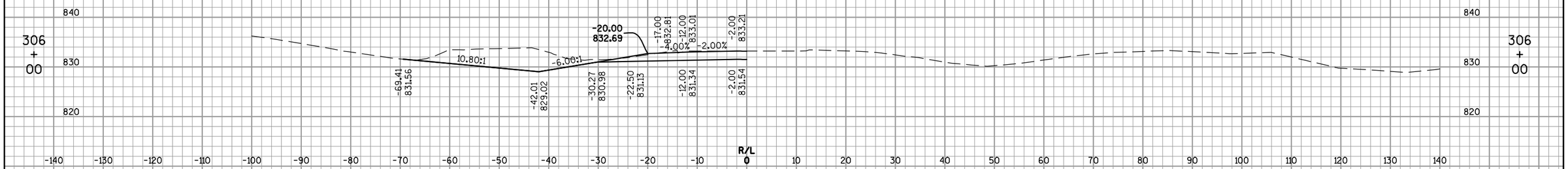
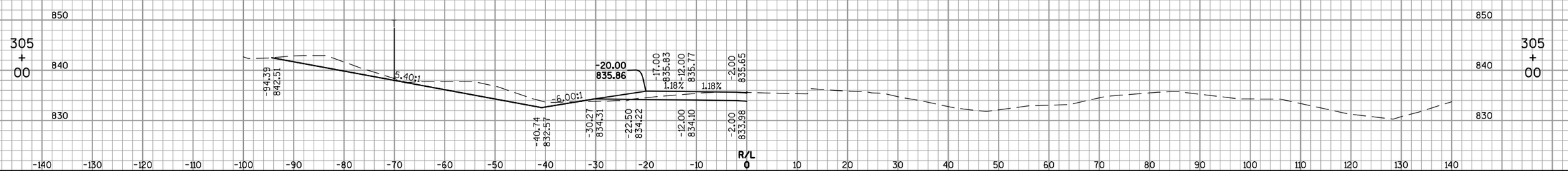
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH
WISDOT/CADDS SHEET 49









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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SB OFF-RAMP	SHEET 621	E

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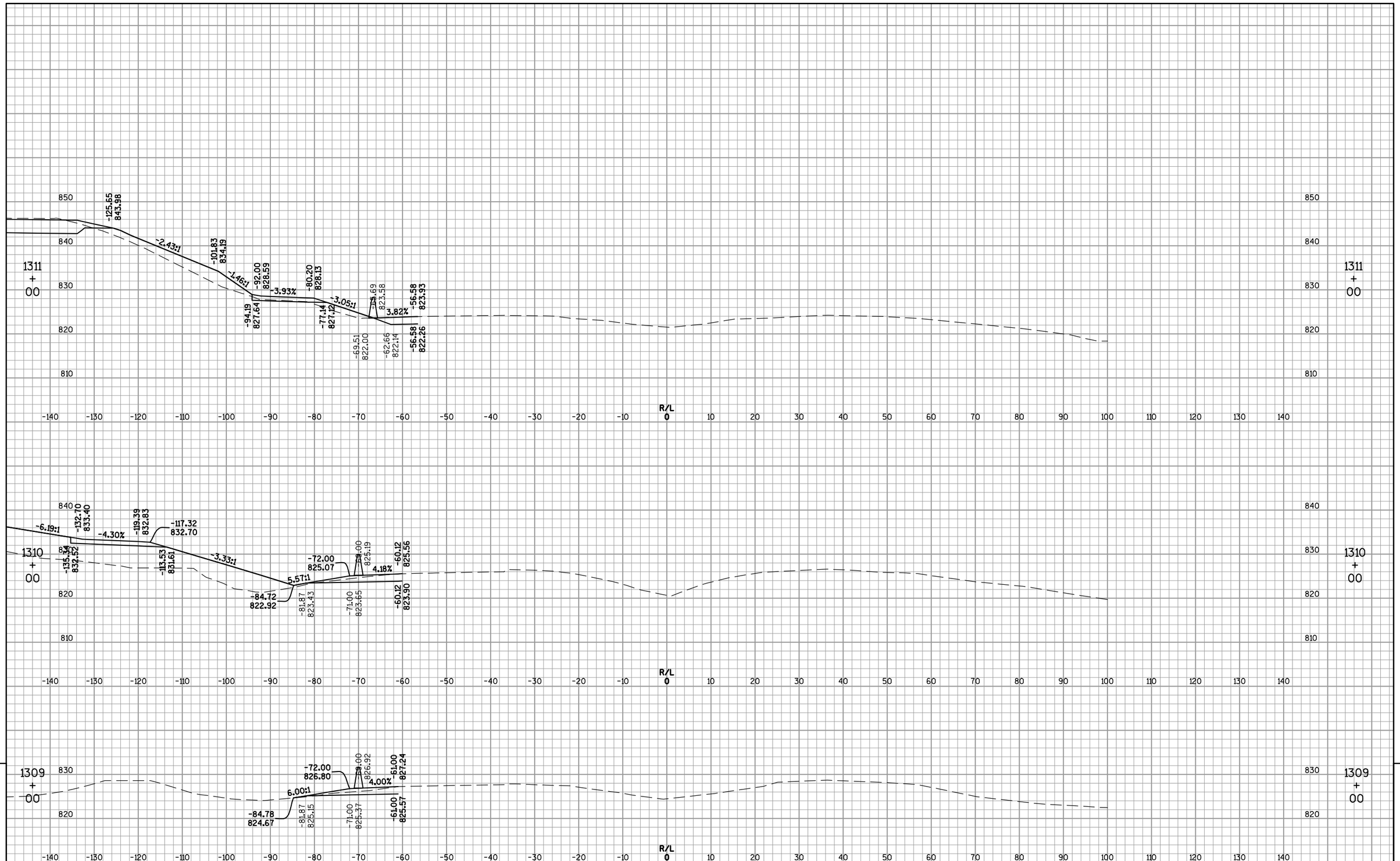
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: USH 151 (BARRIER WALL)	SHEET 622	E

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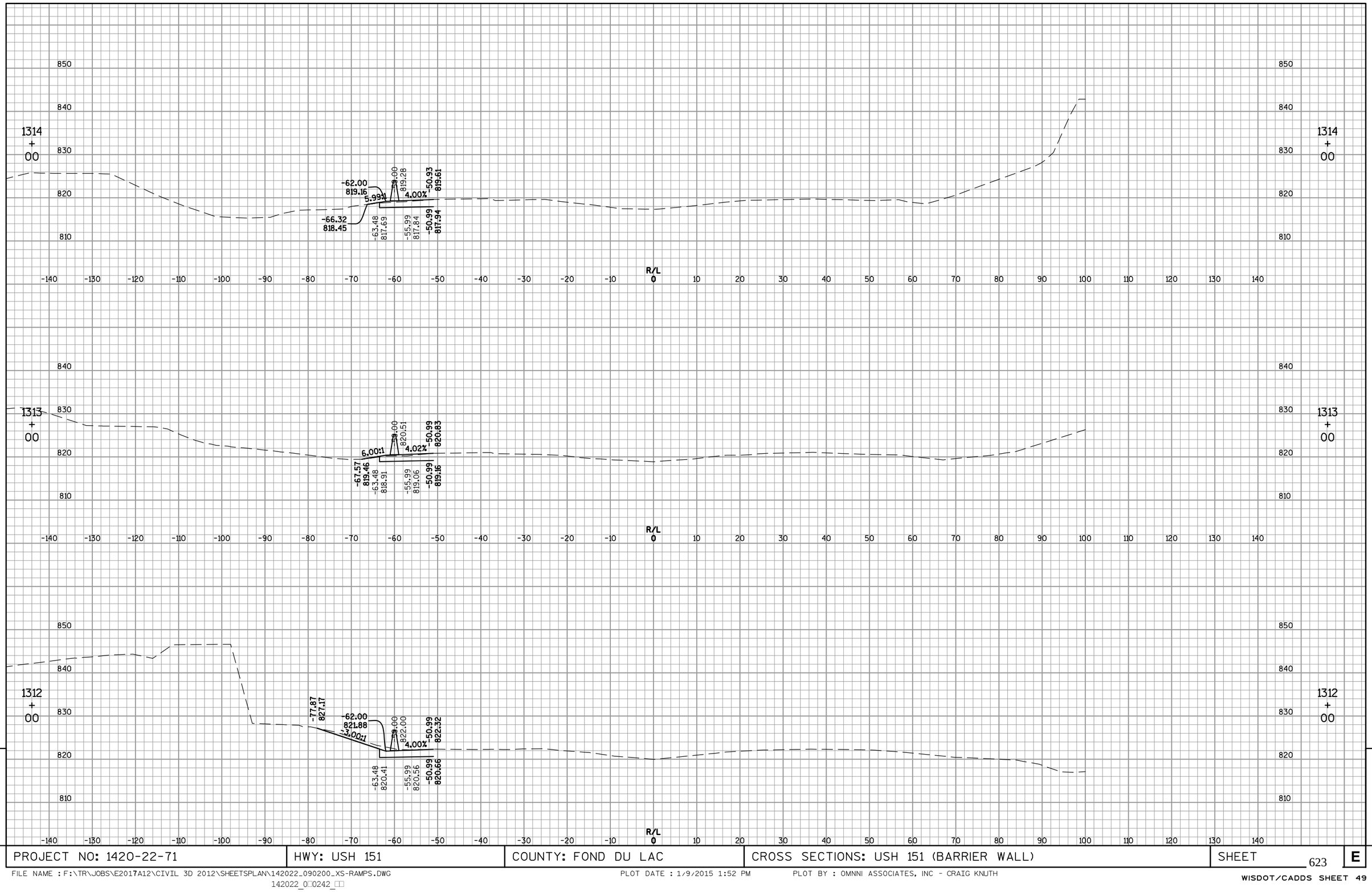

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: USH 151 (BARRIER WALL)	SHEET 623	E

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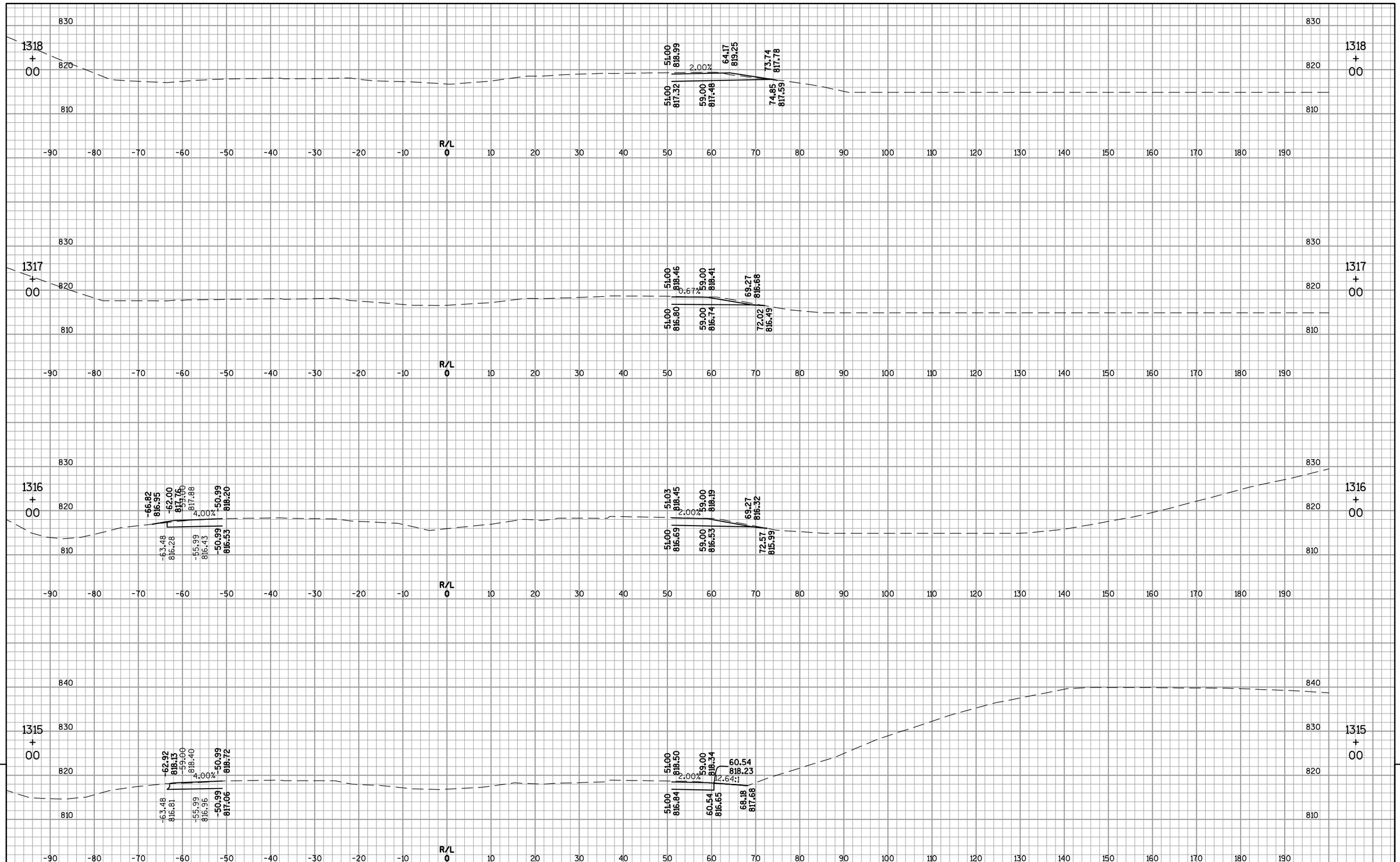
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: USH 151 (NB EXISTING INTERSECTION)	SHEET 624	E

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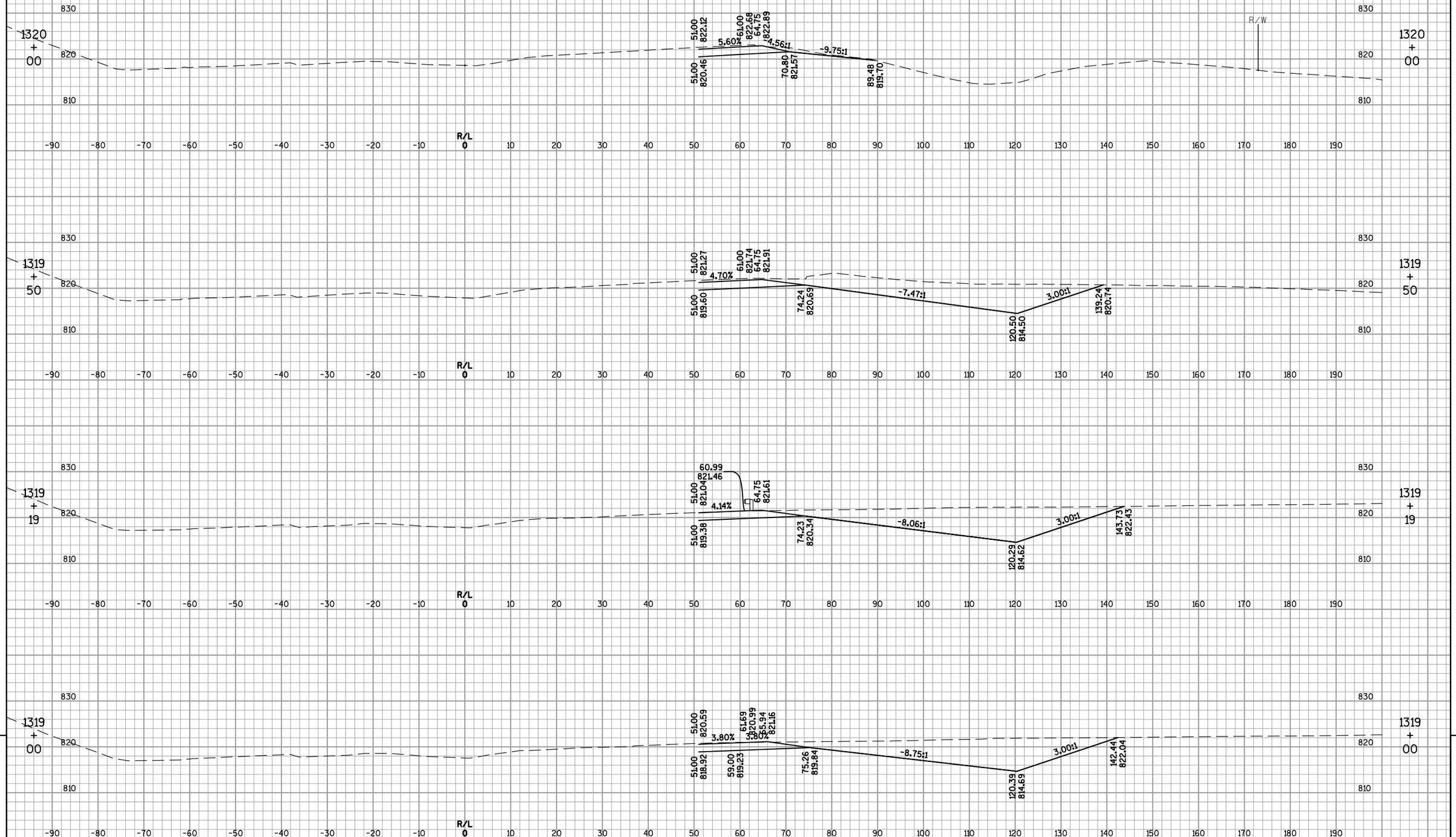

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: USH 151 (NB EXISTING INTERSECTION)	SHEET 625	E

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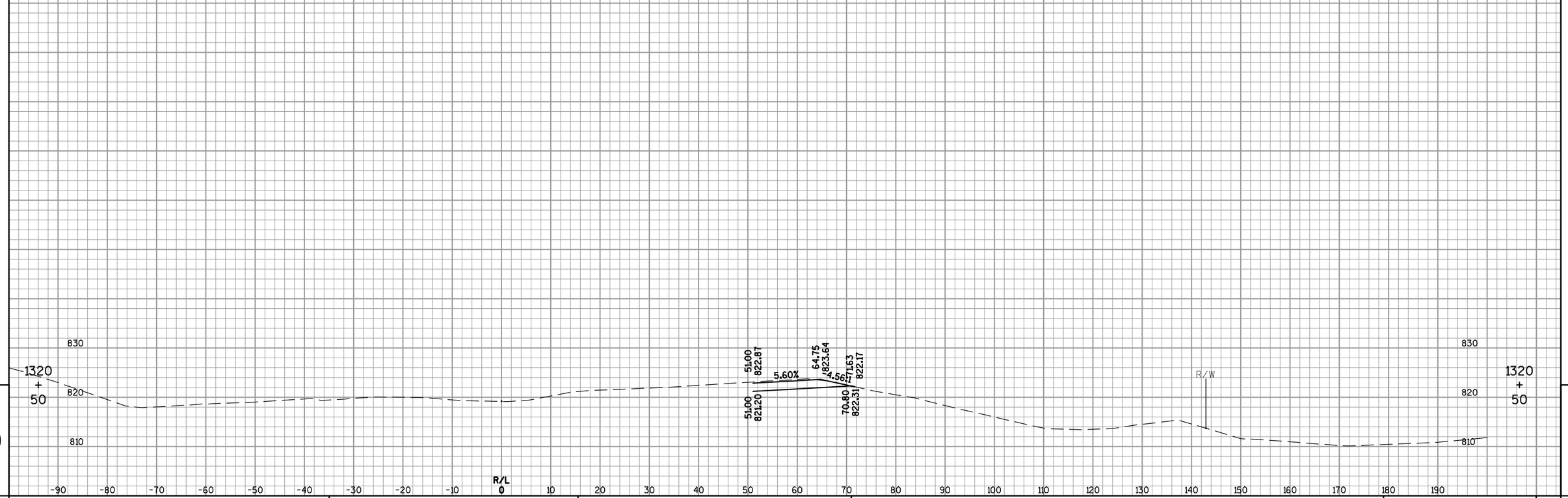

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: USH 151 (NB EXISTING INTERSECTION)	SHEET 626	E

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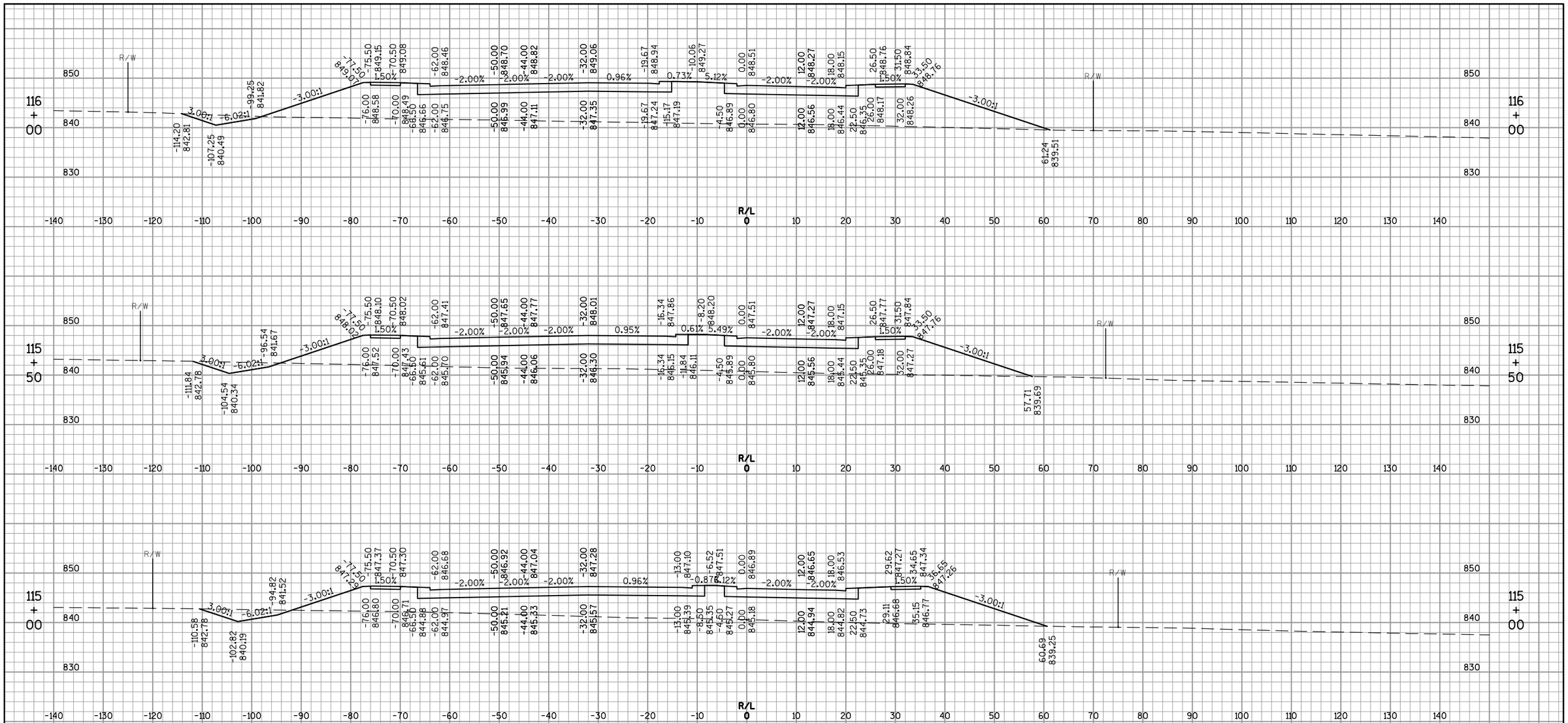
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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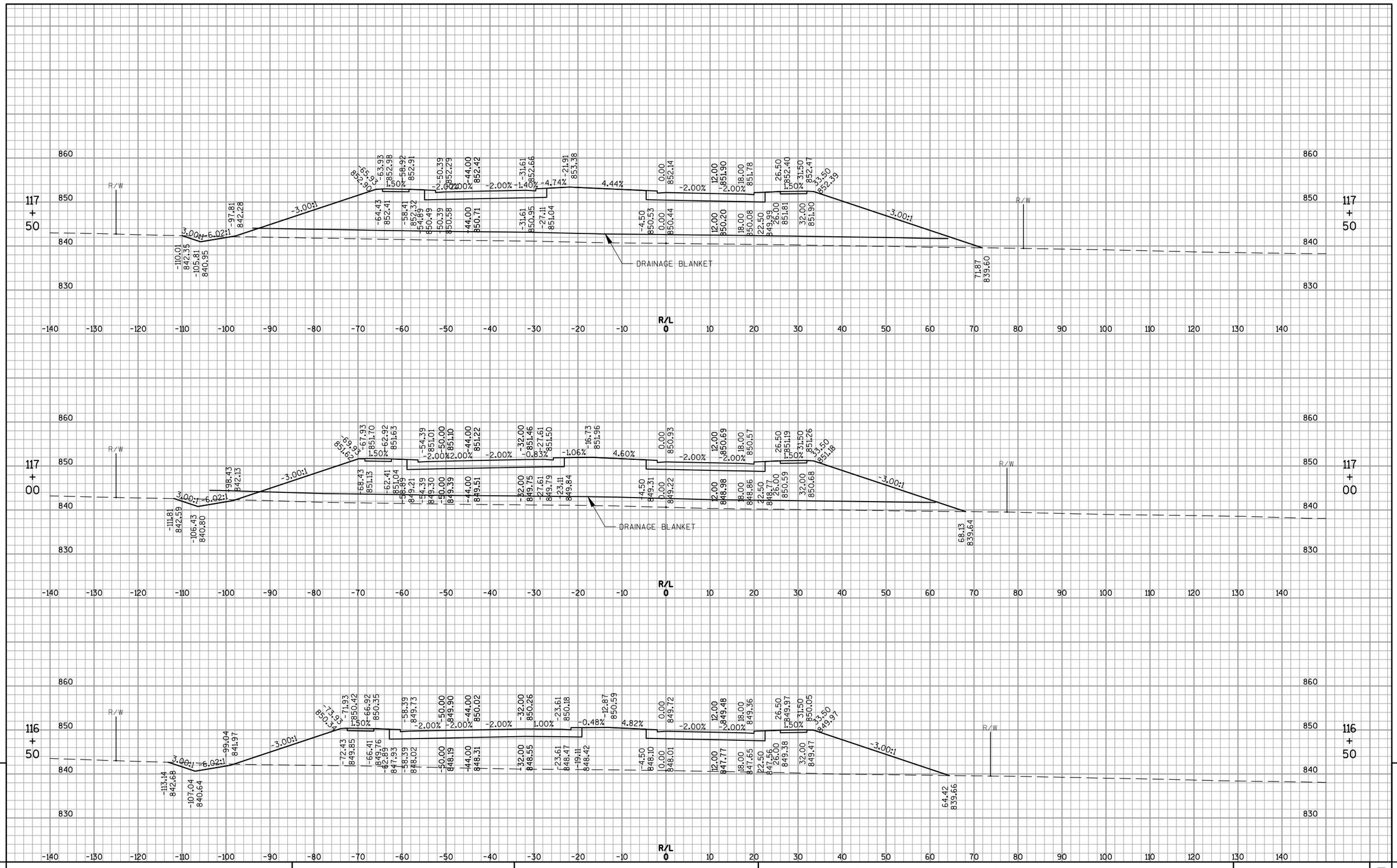
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 627	E



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 628	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-CTH V.DWG
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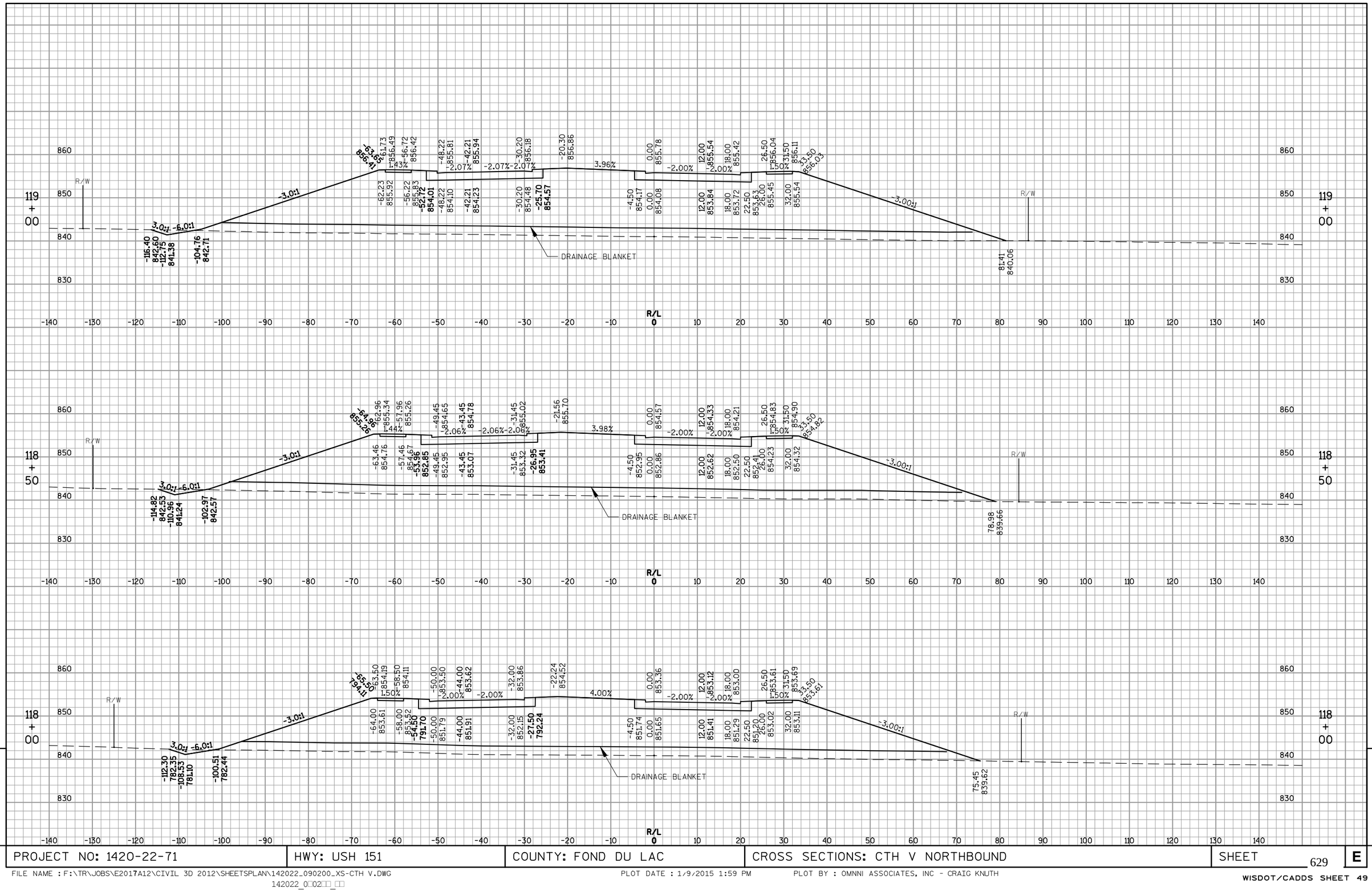
PLOT DATE : 1/9/2015 1:58 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 629 E

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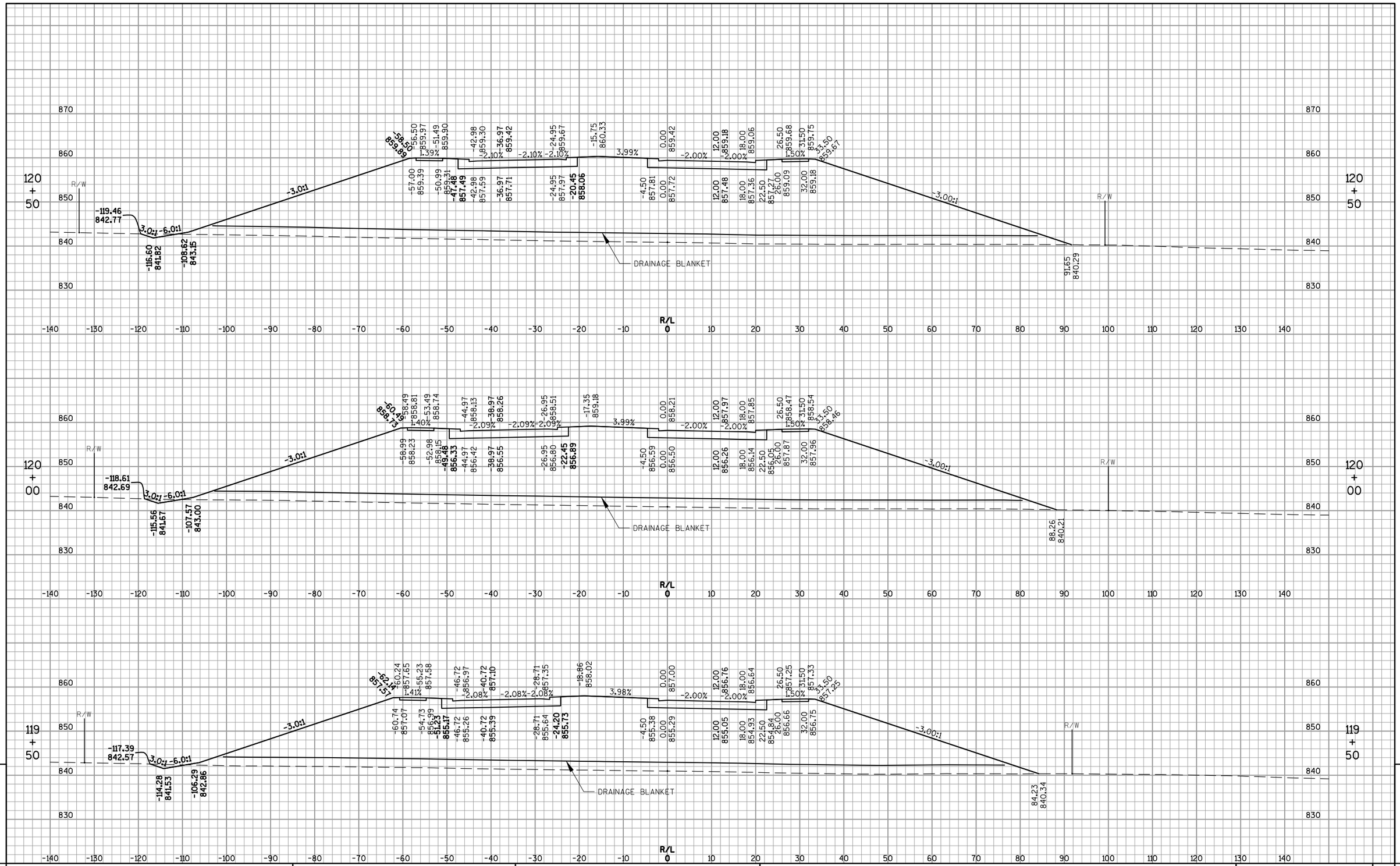
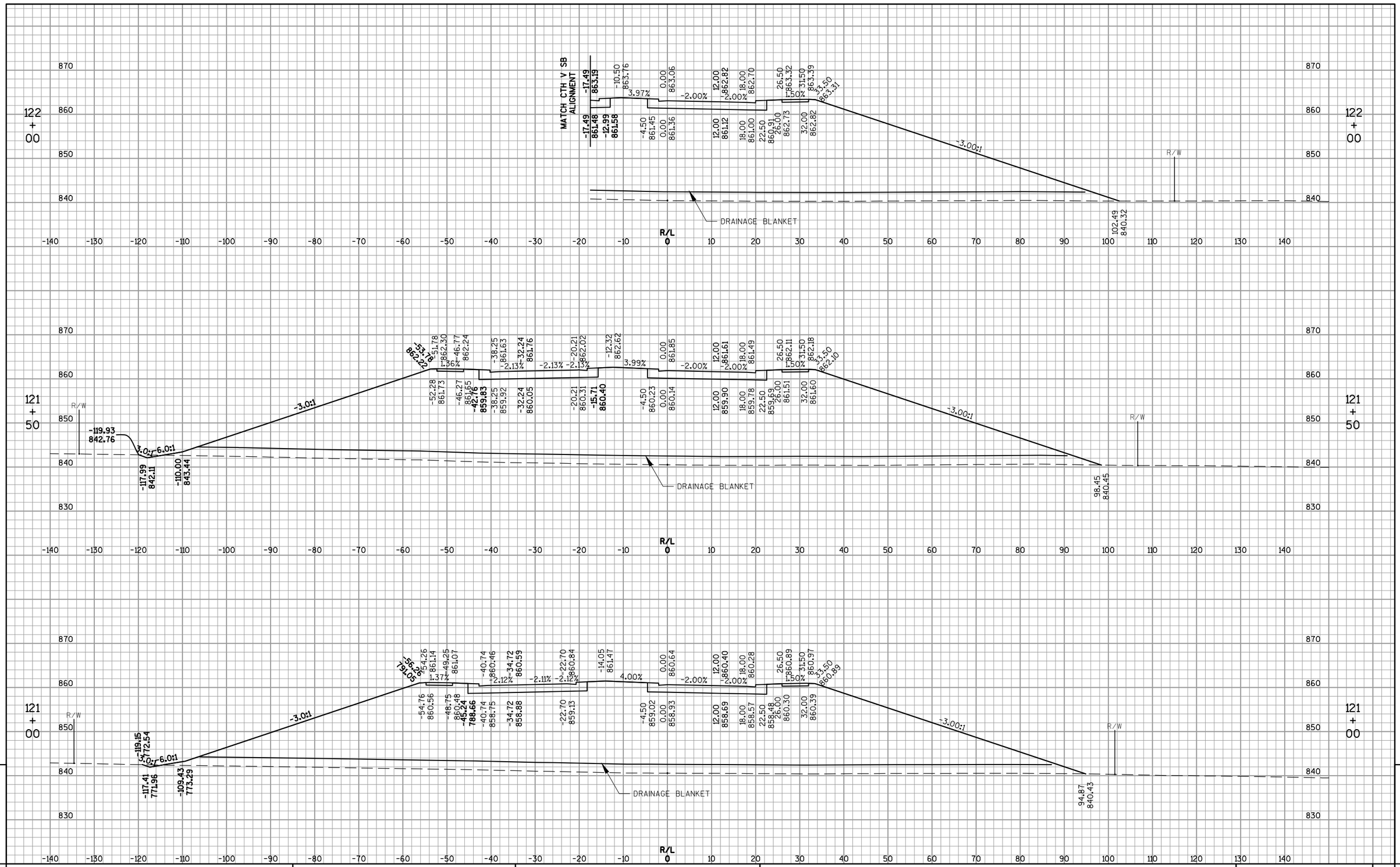
PLOT DATE : 1/9/2015 1:59 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 630 E



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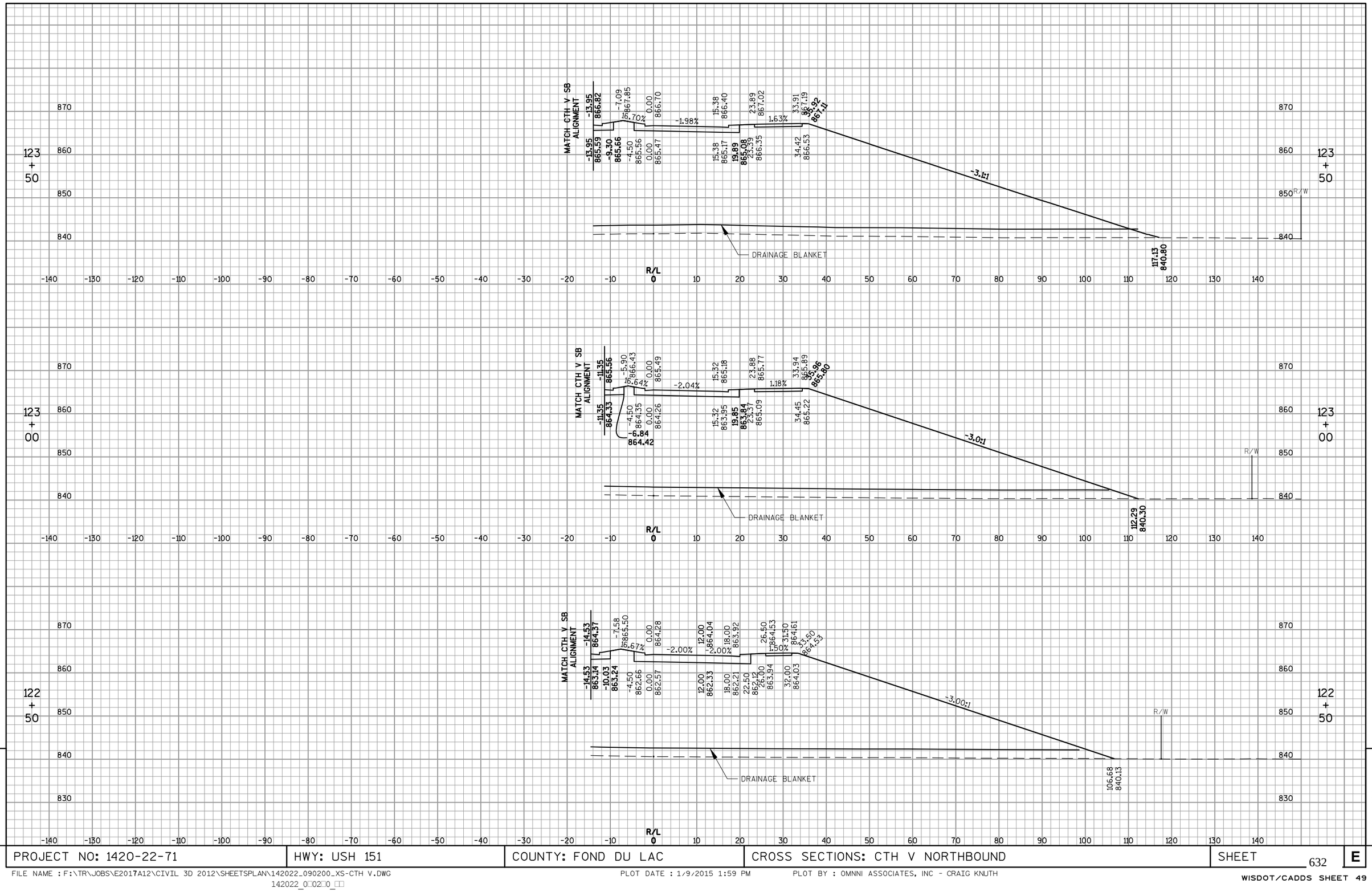

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PLOT DATE : 1/9/2015 1:59 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49

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9

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 633	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-CTH V.DWG
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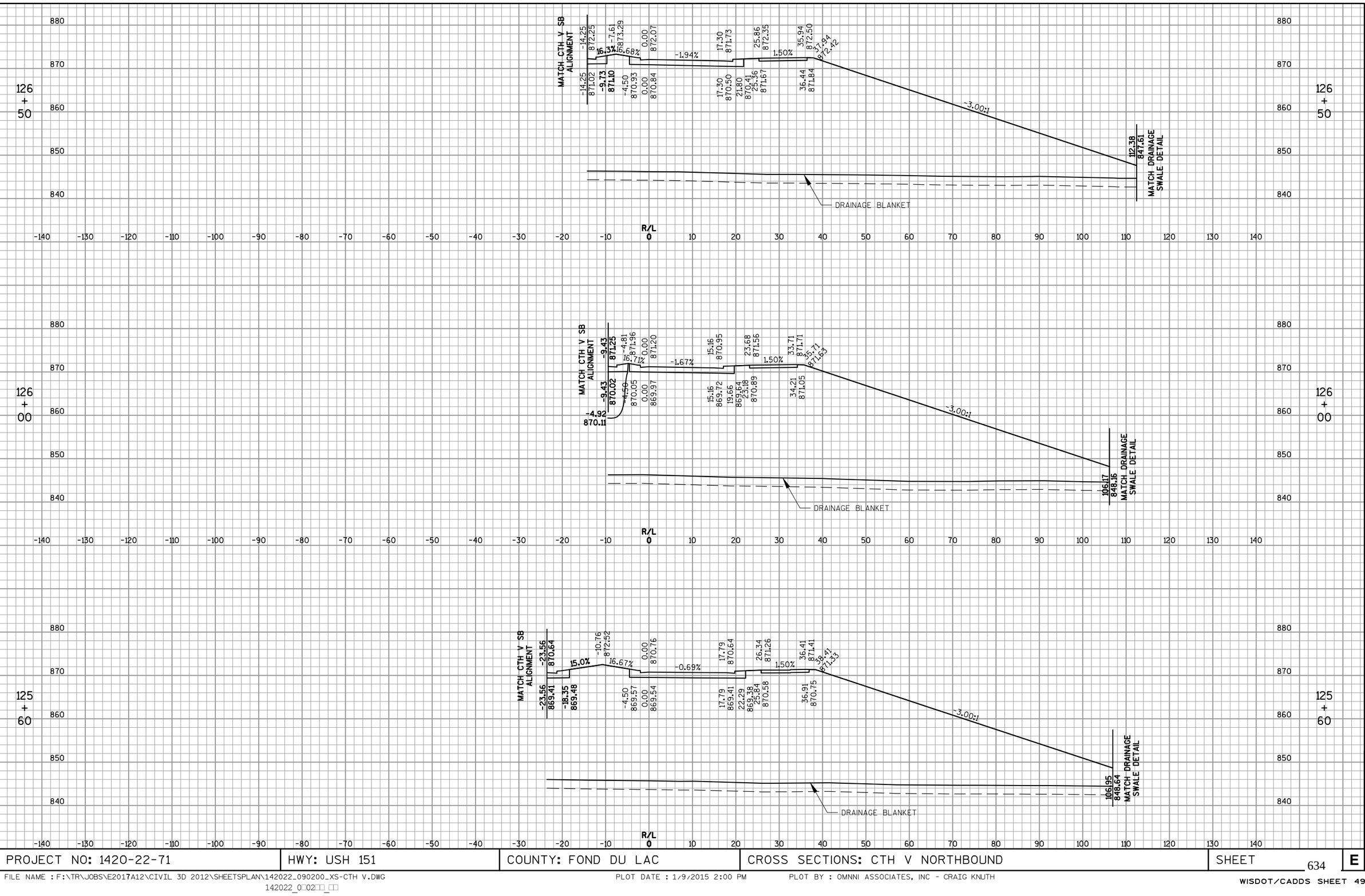
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 634	E

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PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

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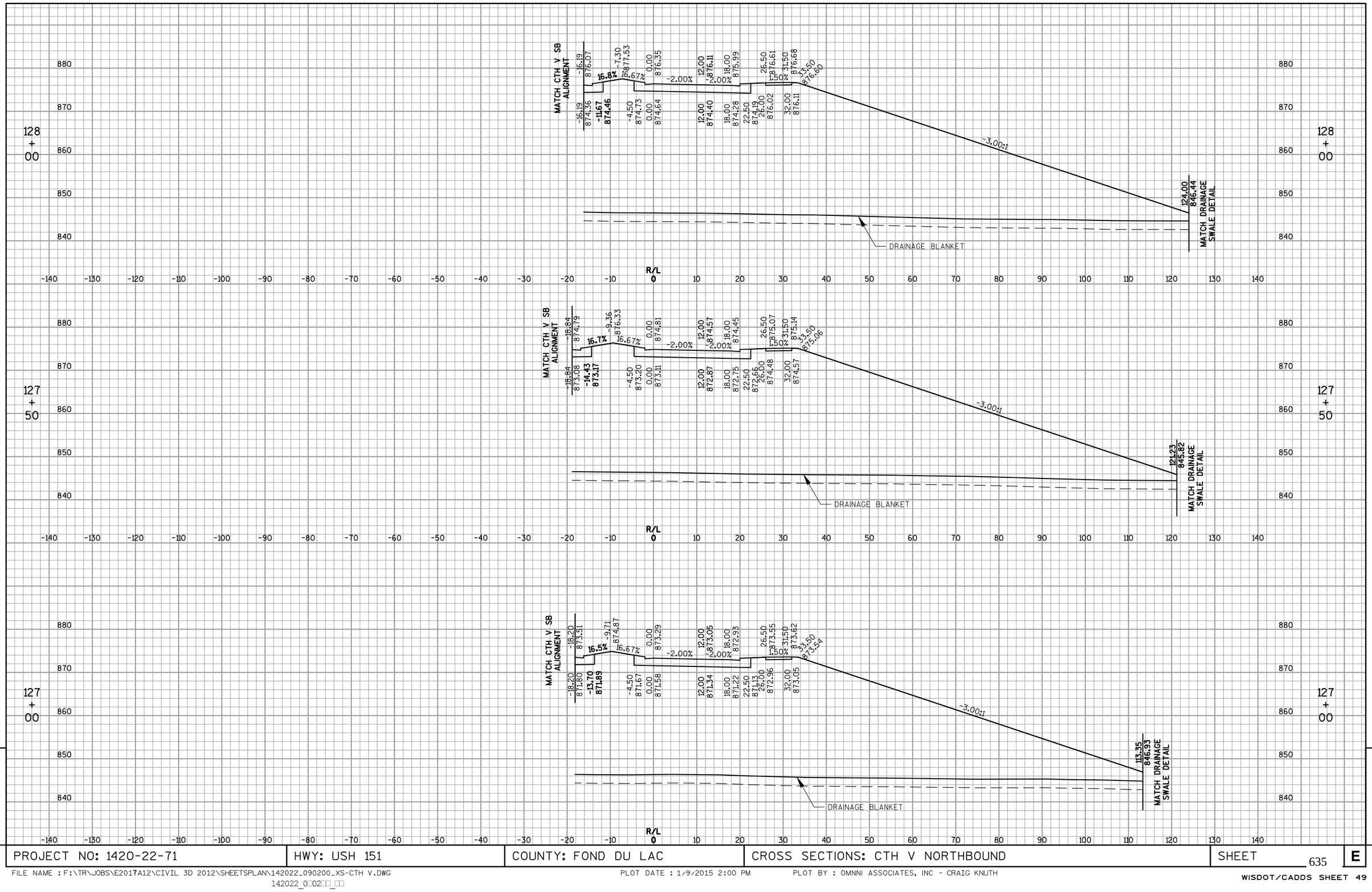

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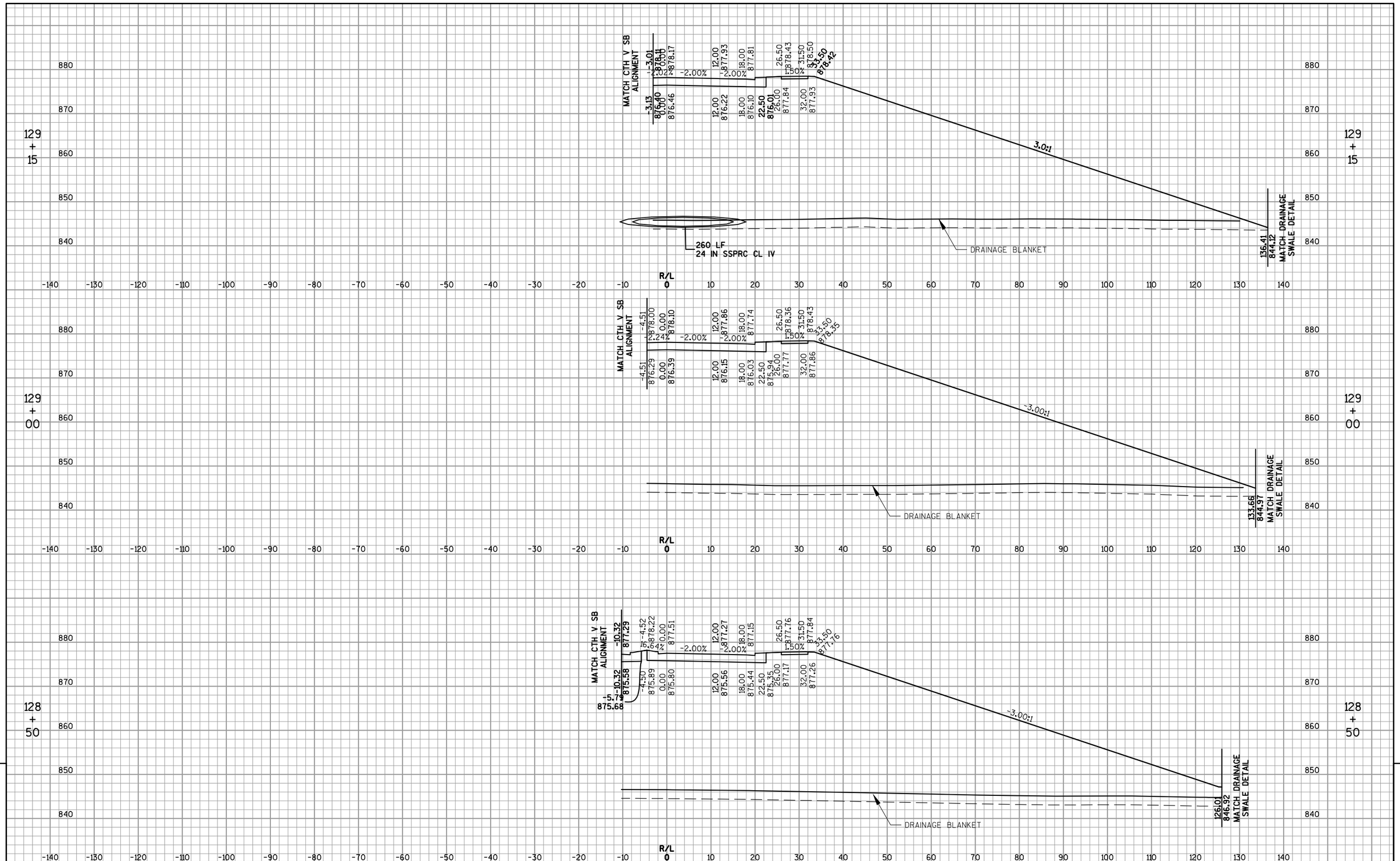
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 635	E



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FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-CTH V.DWG
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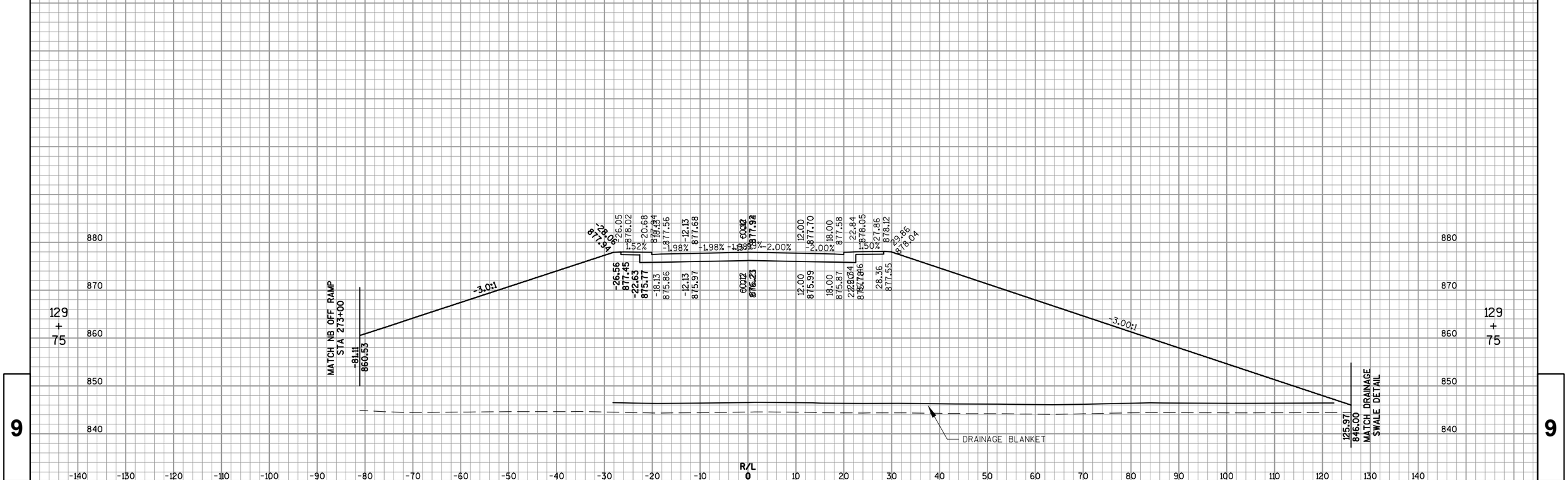
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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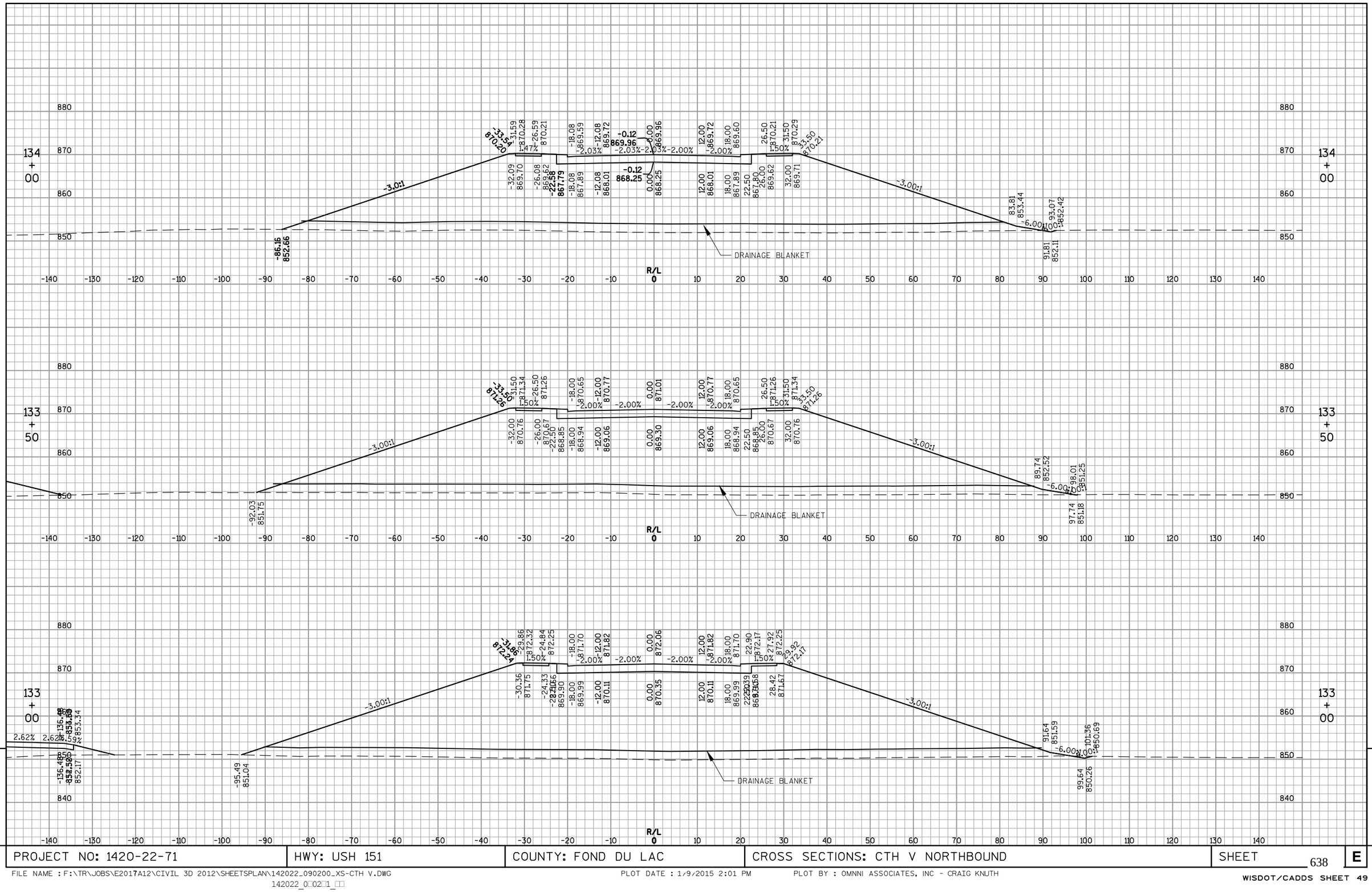

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 638 E

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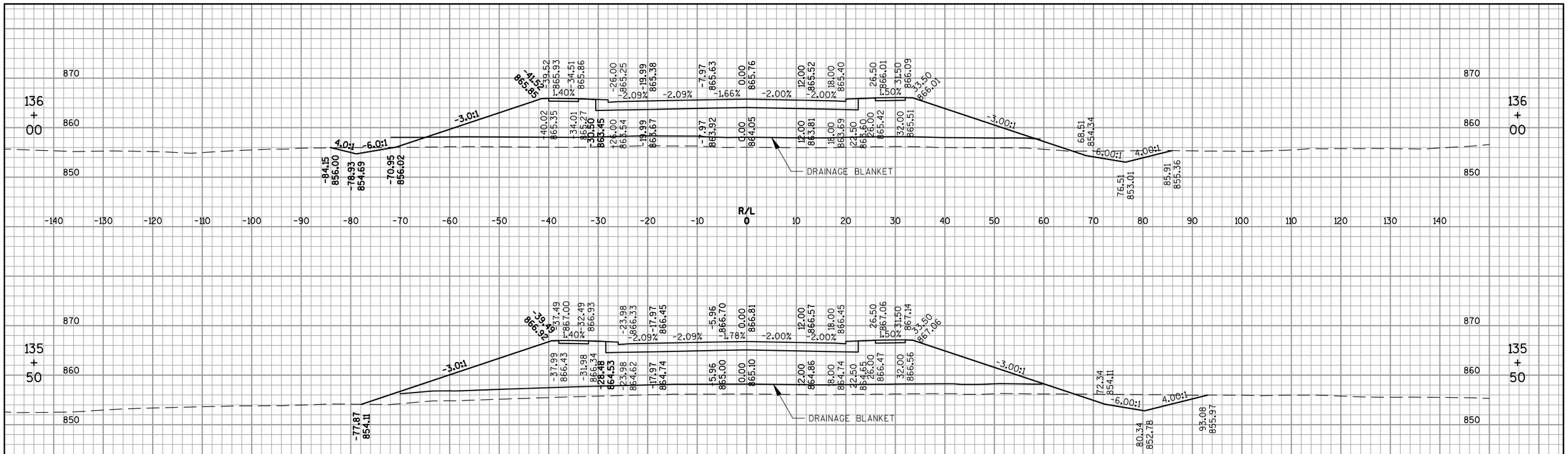
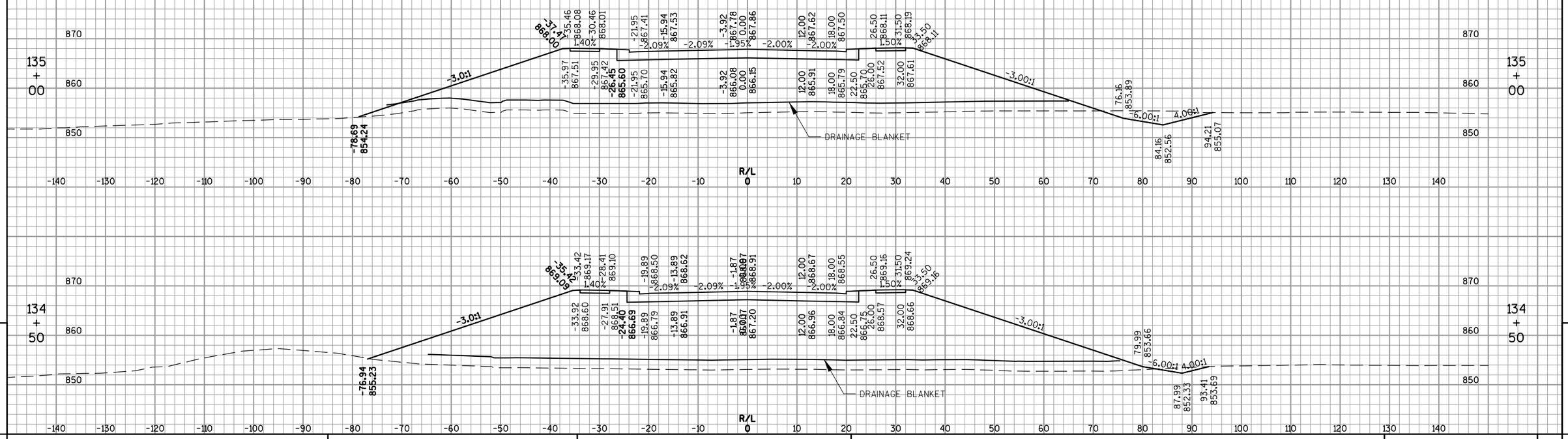
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49





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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 639	E

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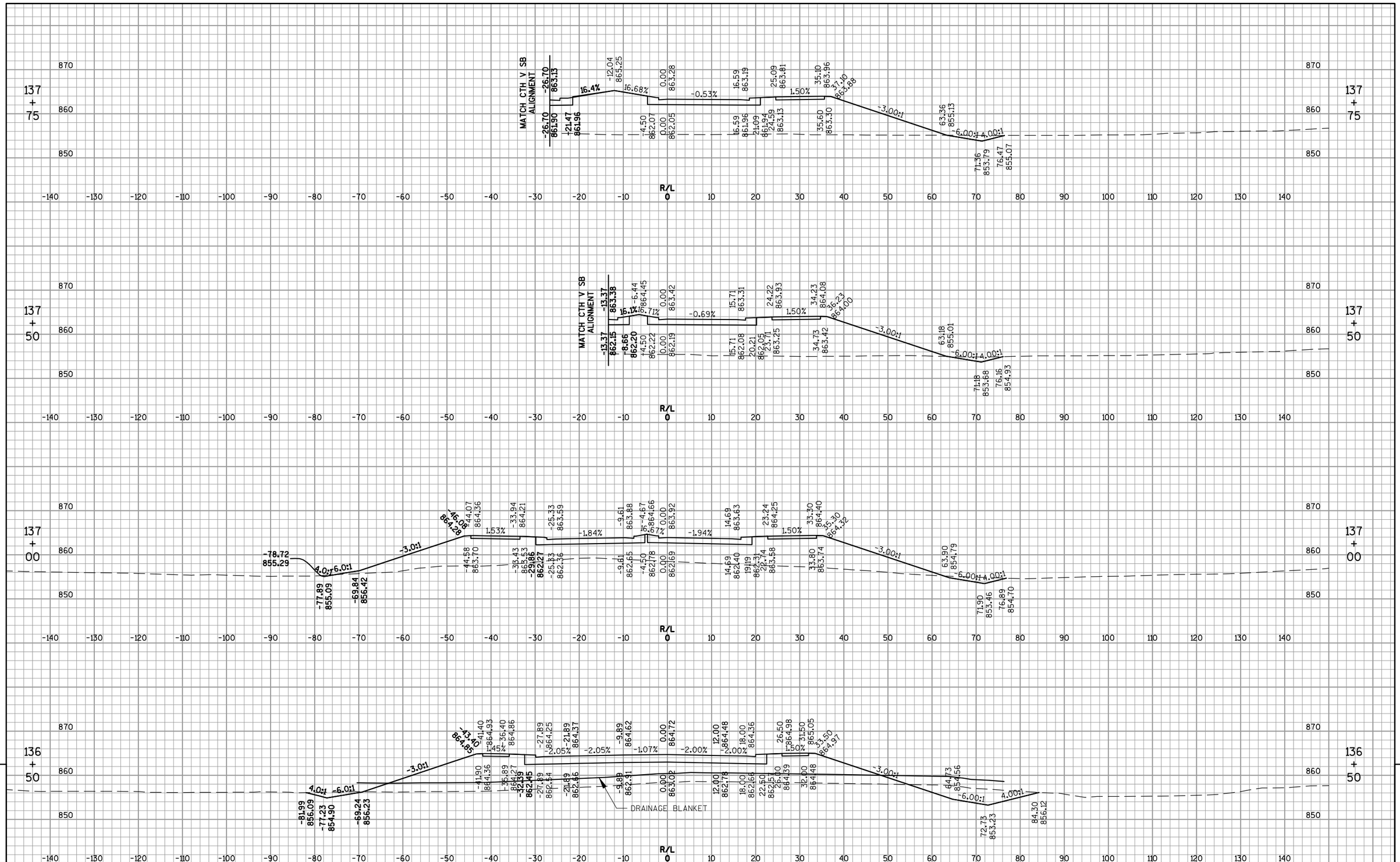
PLOT DATE : 1/9/2015 2:01 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 640	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-CTH V.DWG
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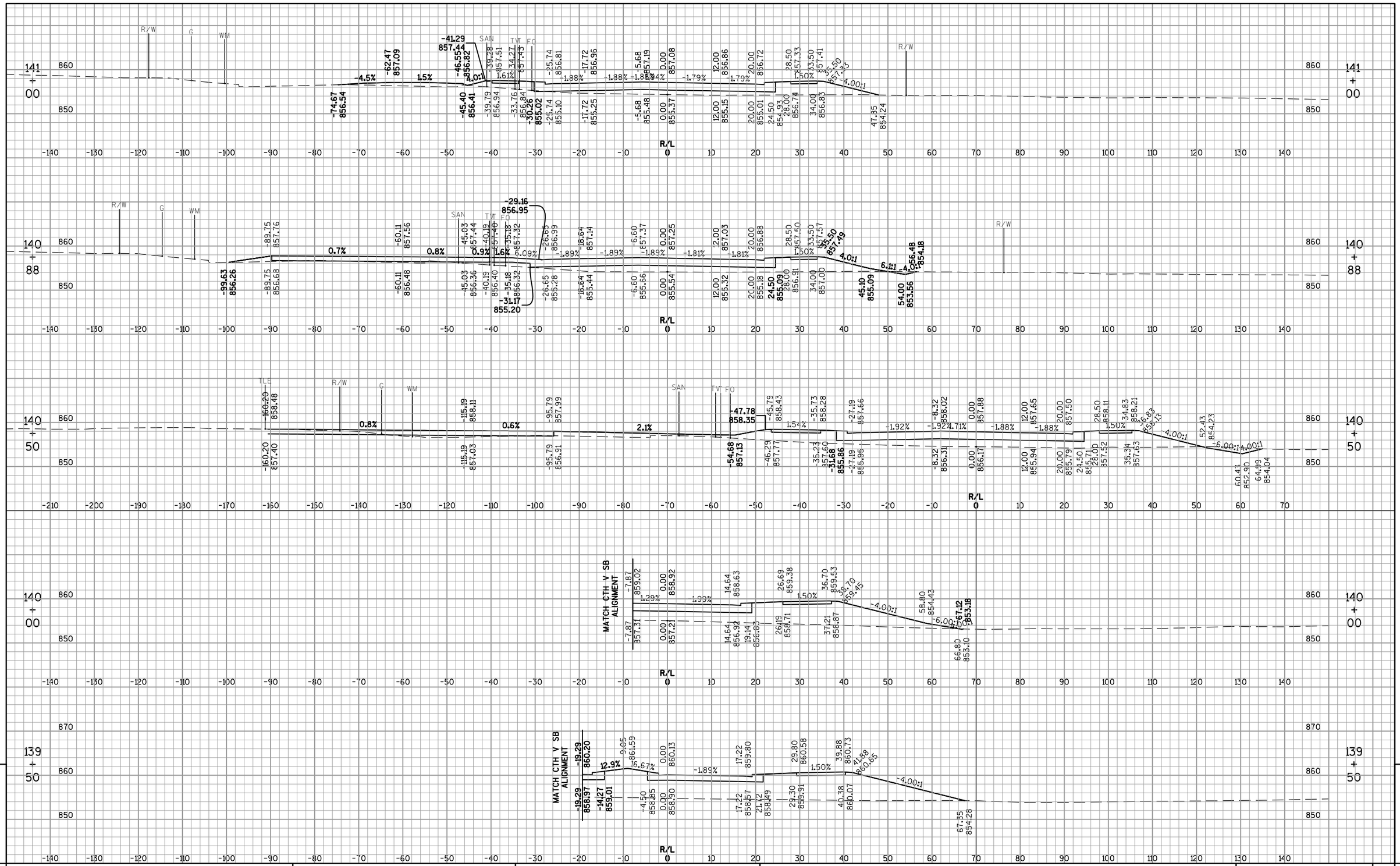
PLOT DATE : 1/9/2015 2:01 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



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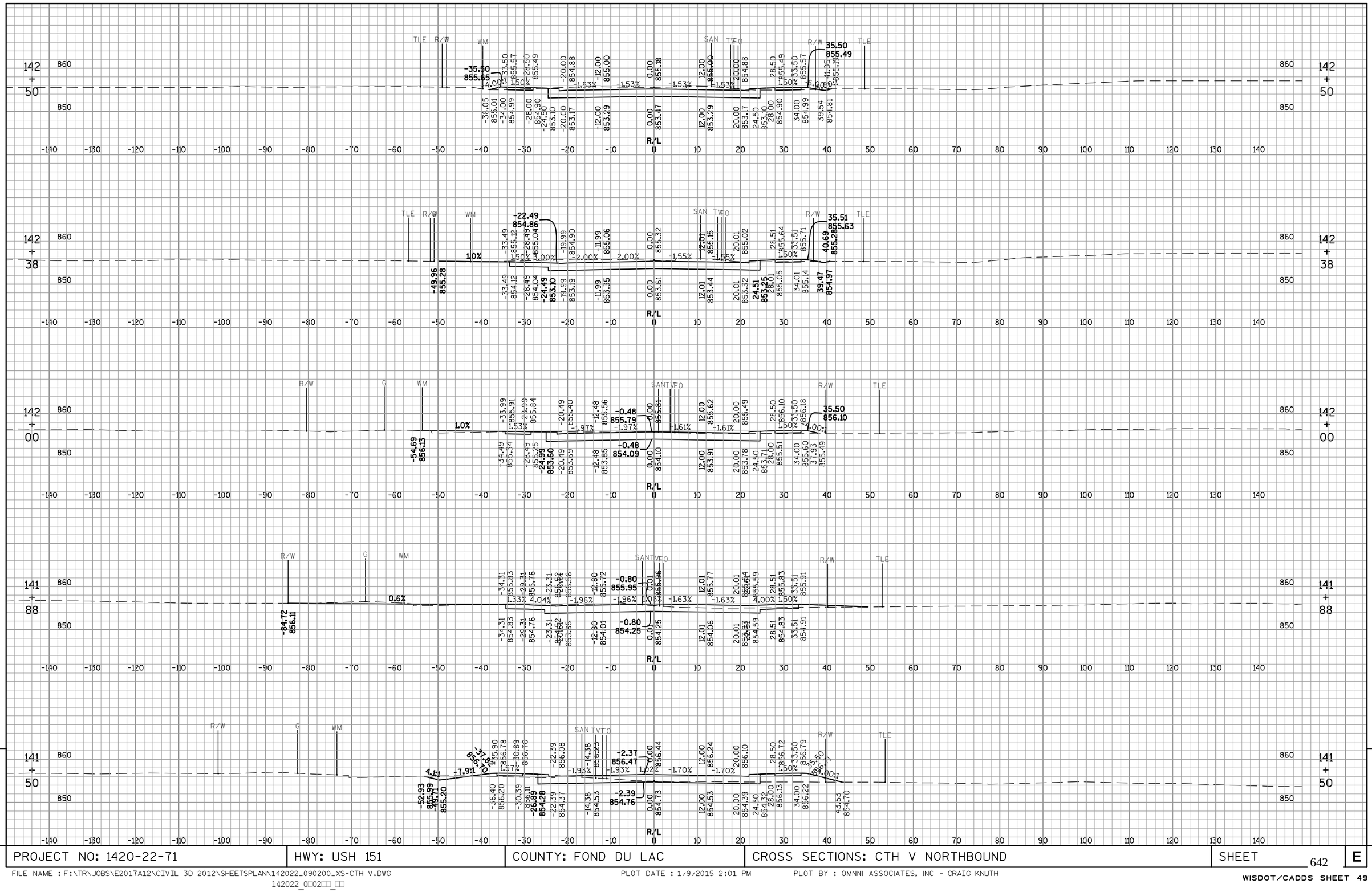
PLOT DATE : 1/9/2015 2:01 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 642	E

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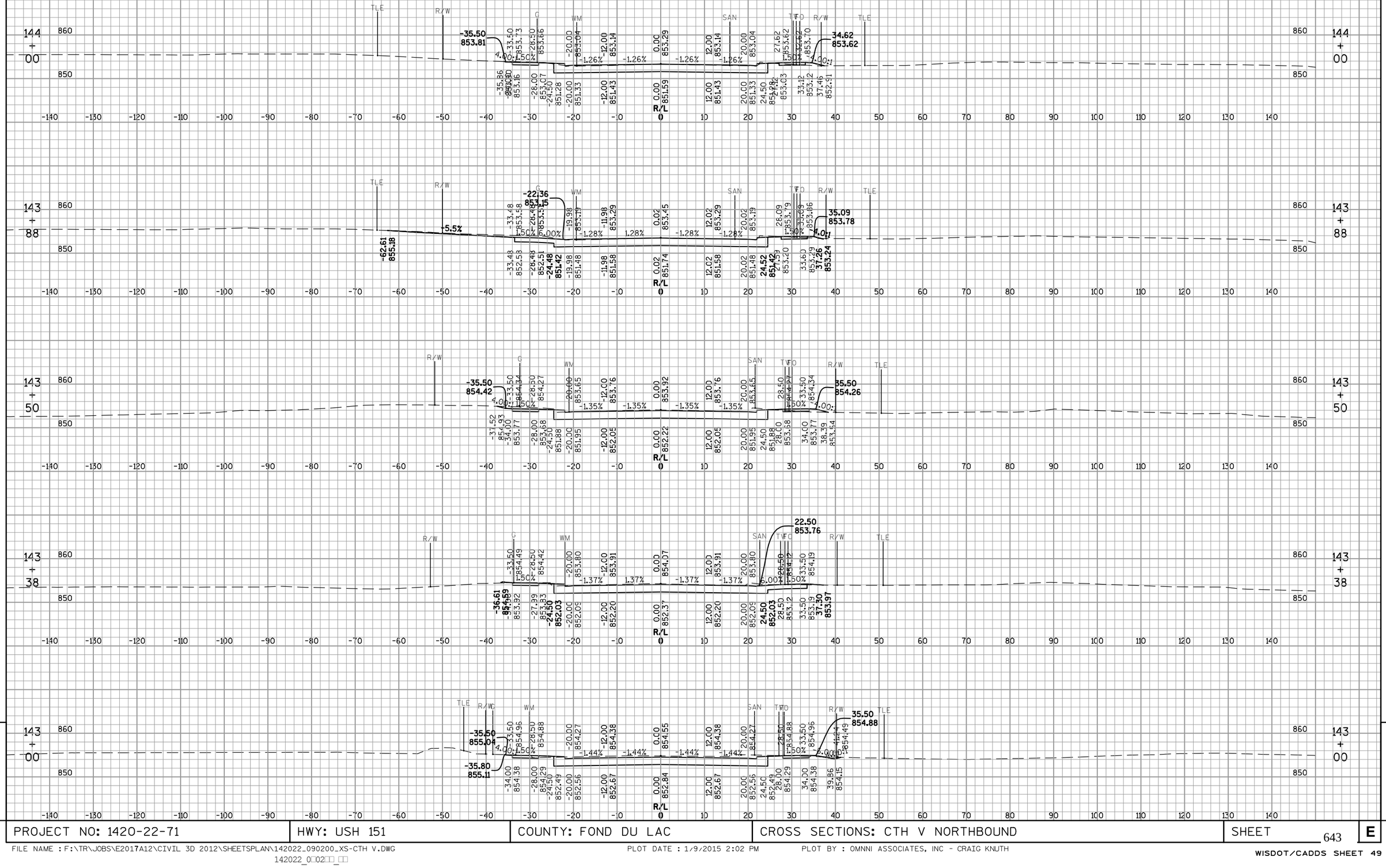
142022_0□02□□_□□

PLOT DATE : 1/9/2015 2:01 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 643	E

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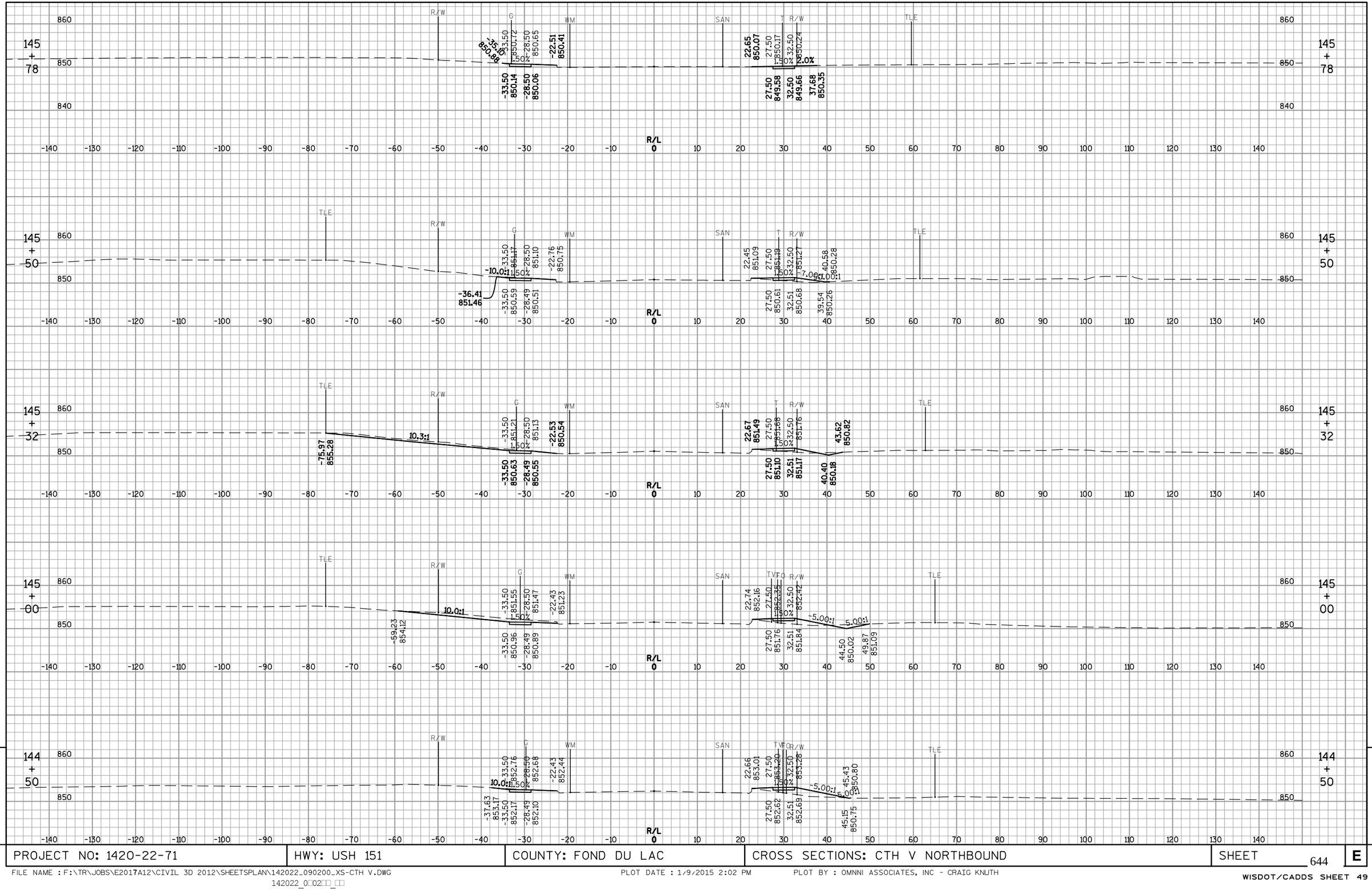
PLOT DATE : 1/9/2015 2:02 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



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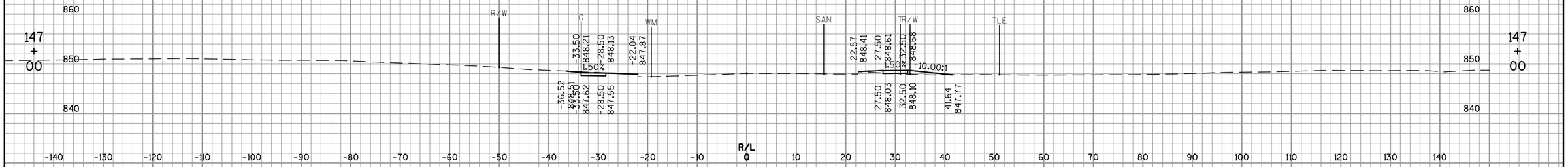
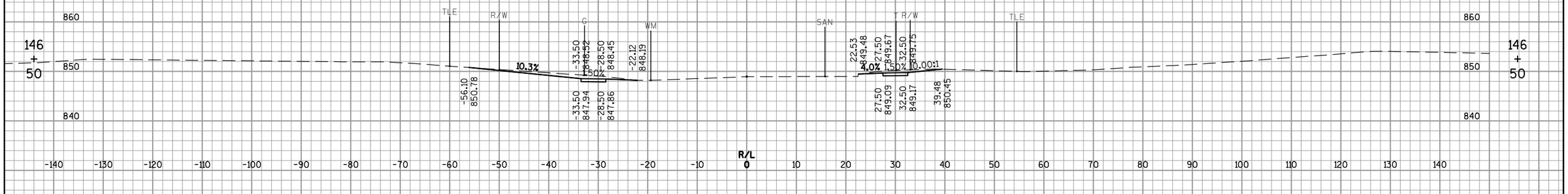
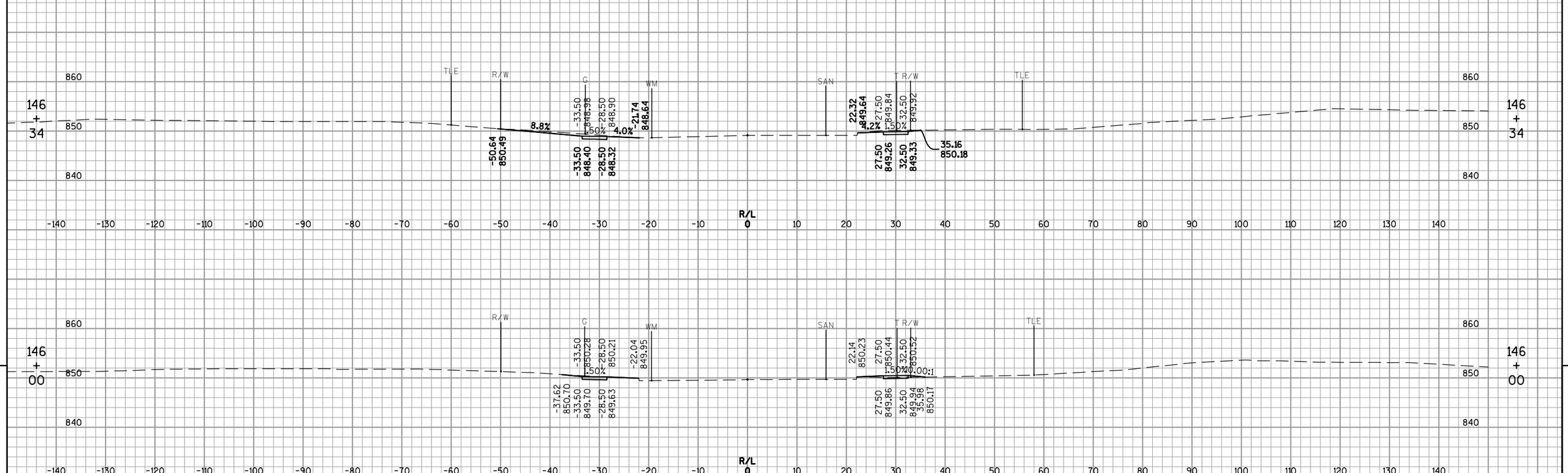
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 644	E







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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 645	E

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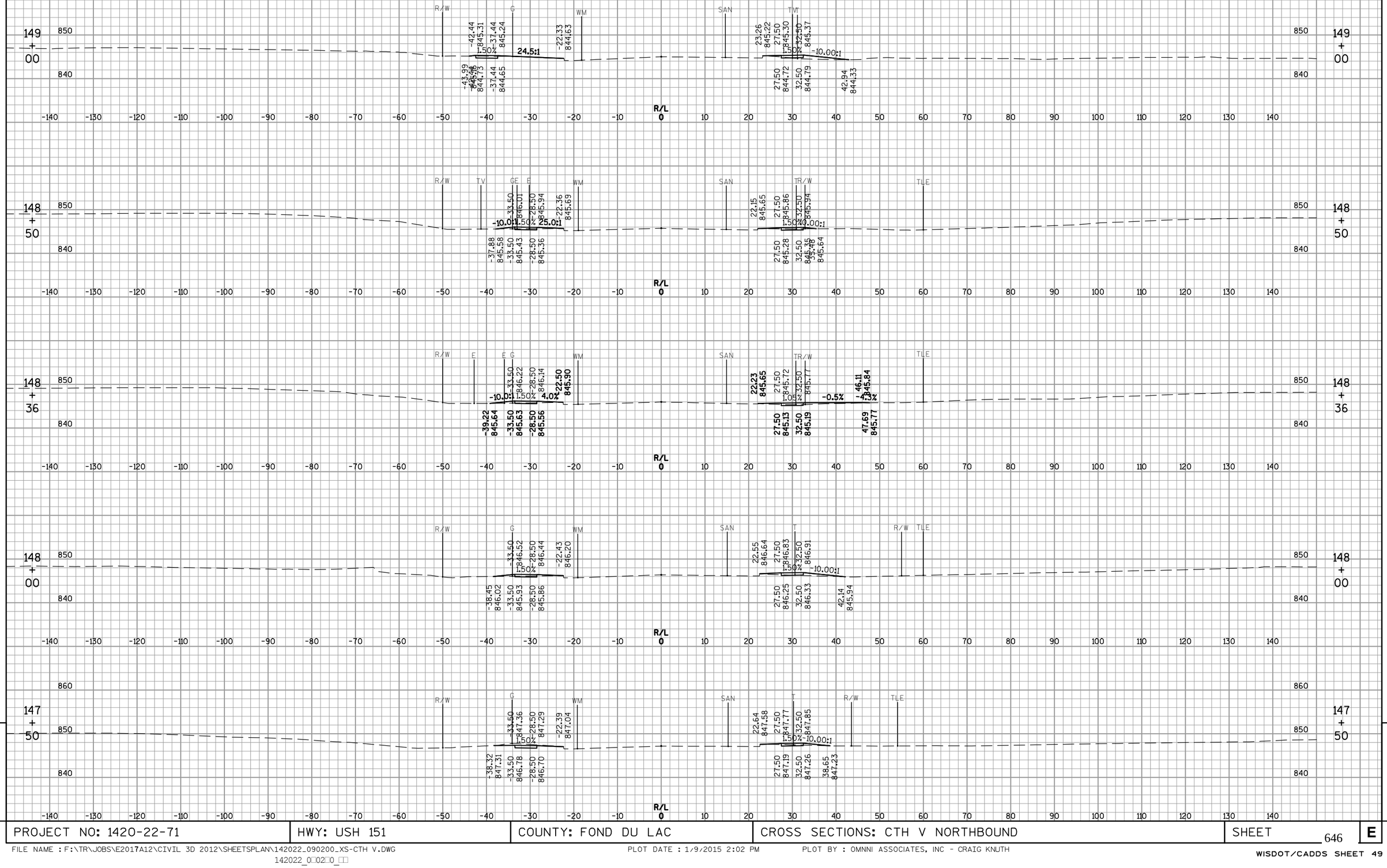
PLOT DATE : 1/9/2015 2:02 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



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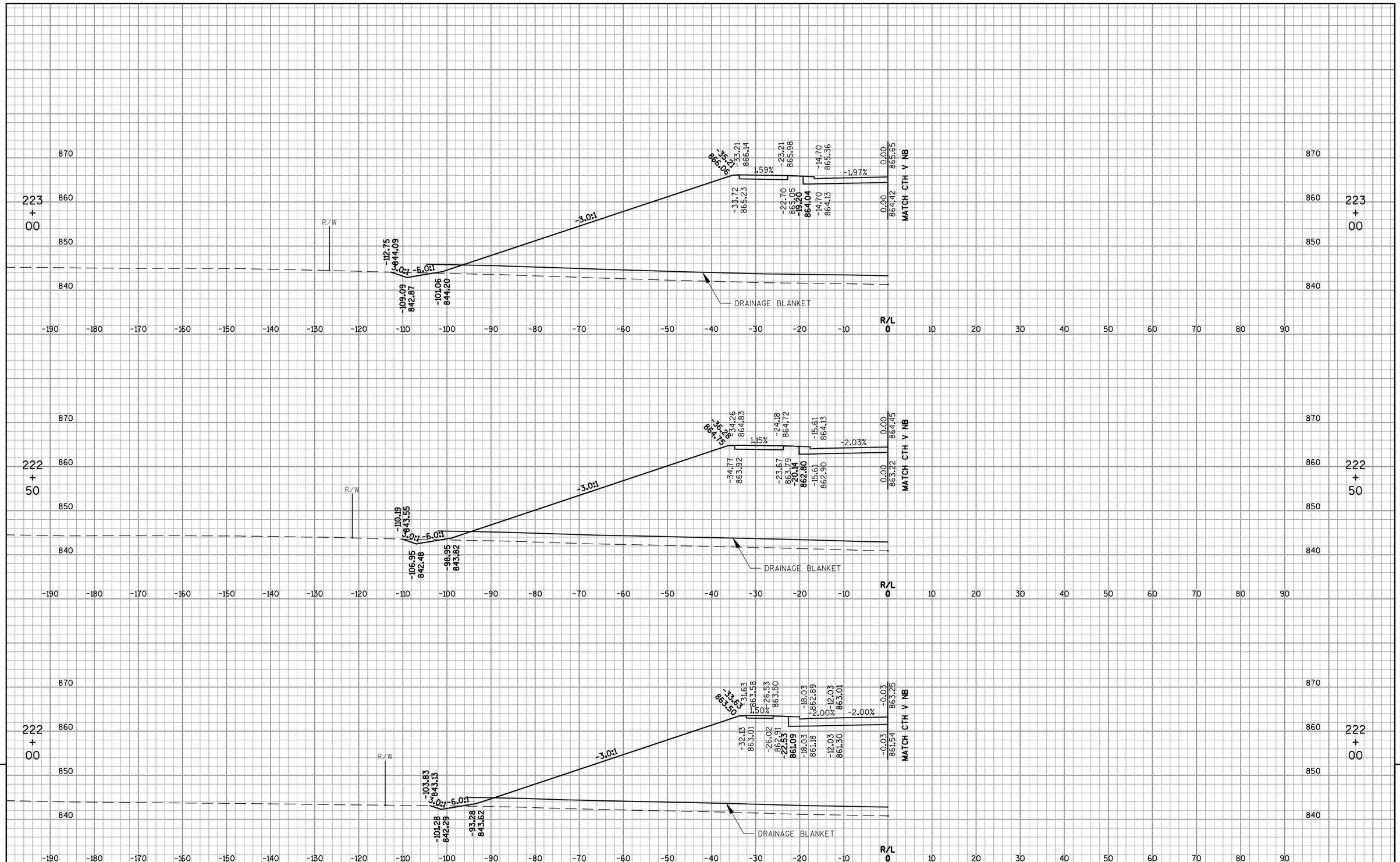
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V NORTHBOUND	SHEET 646	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-CTH V.DWG
142022_0□02□0_□□

PLOT DATE : 1/9/2015 2:02 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SOUTHBOUND	SHEET 647 E

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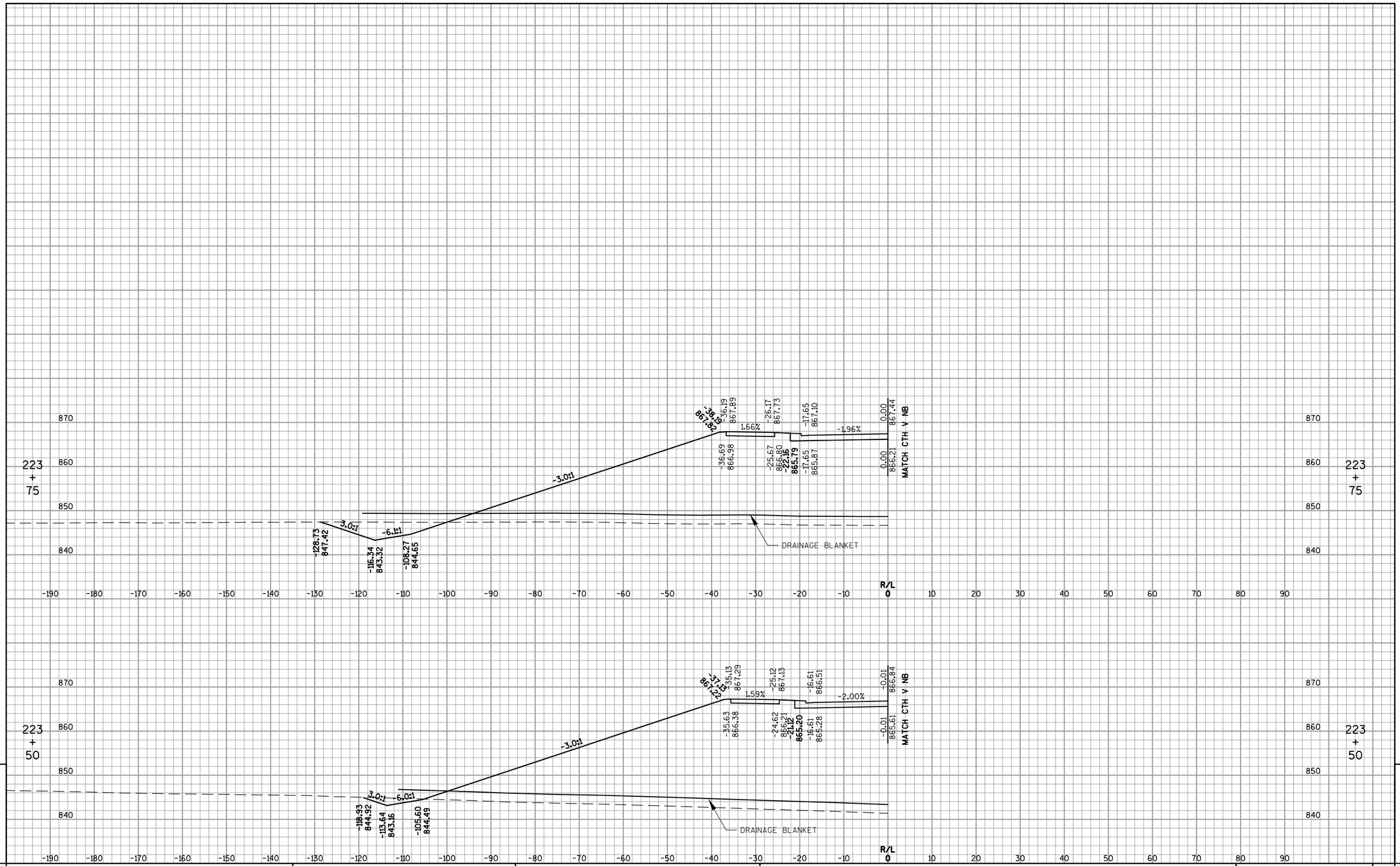
PLOT DATE : 1/9/2015 2:03 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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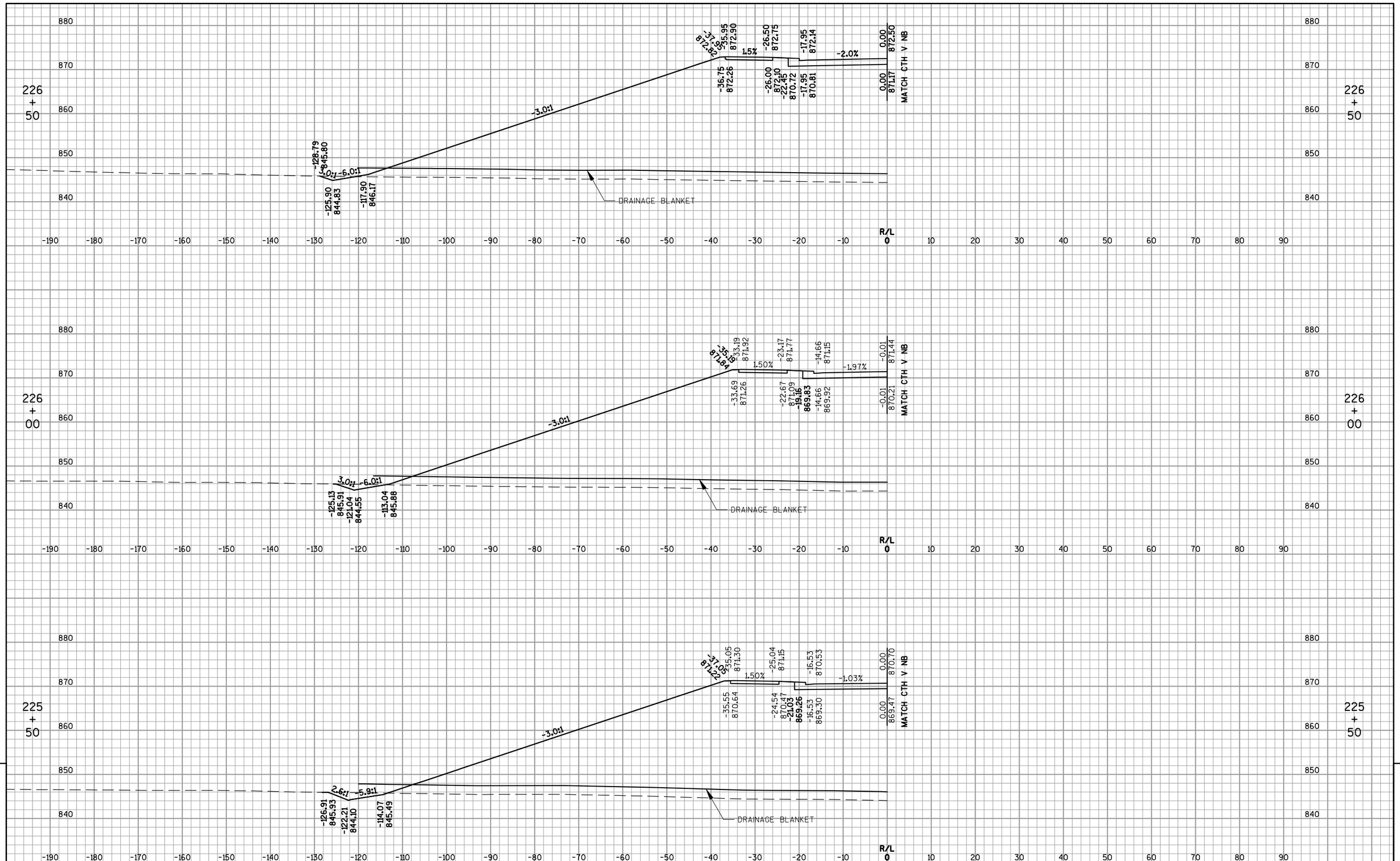
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SOUTHBOUND	SHEET 648	E



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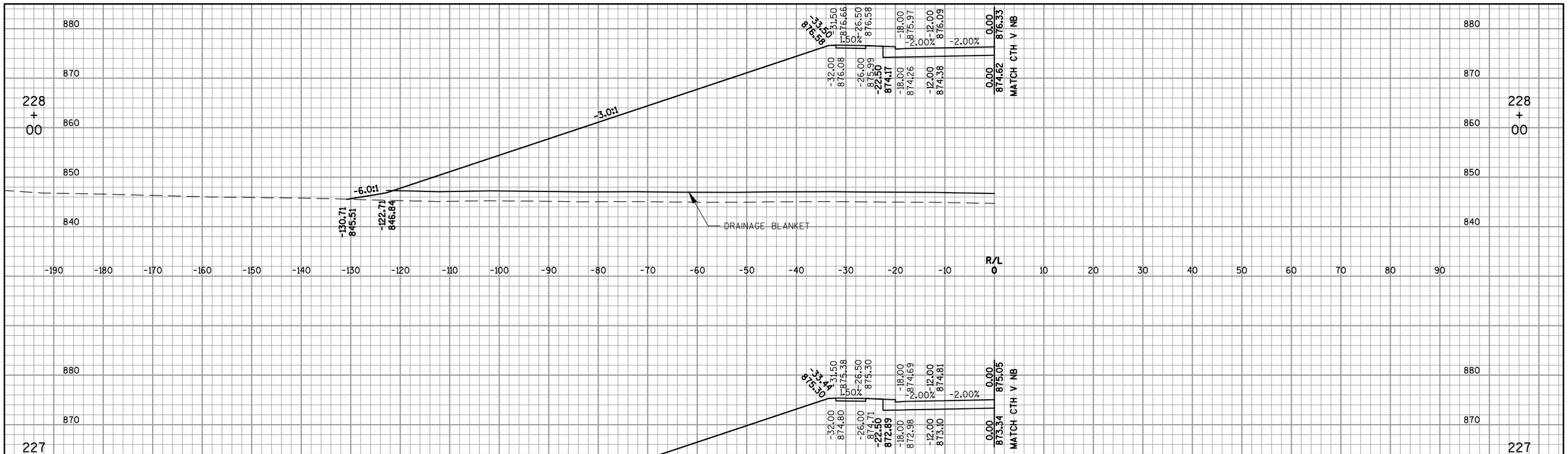
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SOUTHBOUND	SHEET 649	E



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SOUTHBOUND	SHEET 650	E

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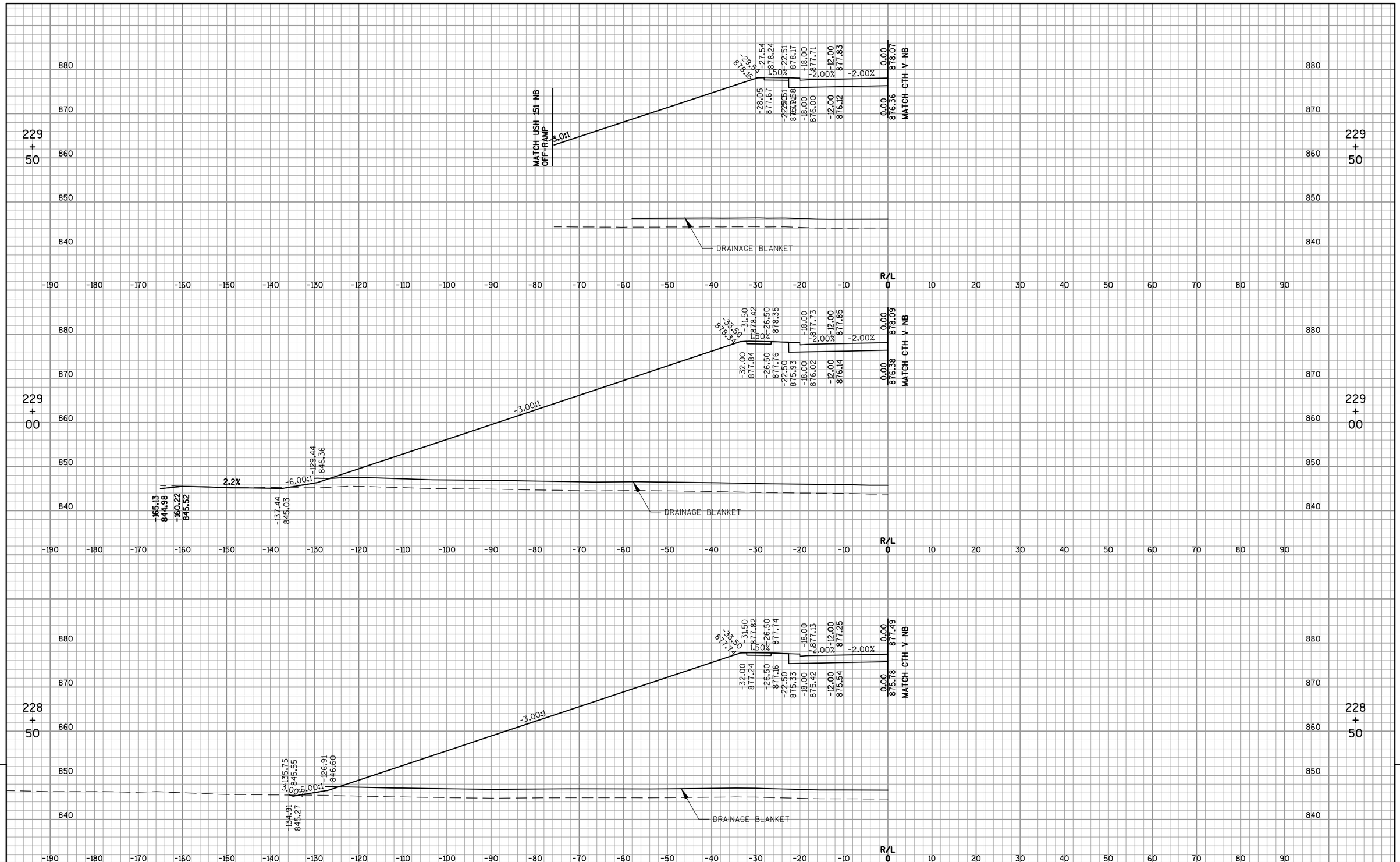
PLOT DATE : 1/9/2015 2:03 PM
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH
WISDOT/CADDS SHEET 49



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SOUTHBOUND	SHEET 651	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-CTH V.DWG
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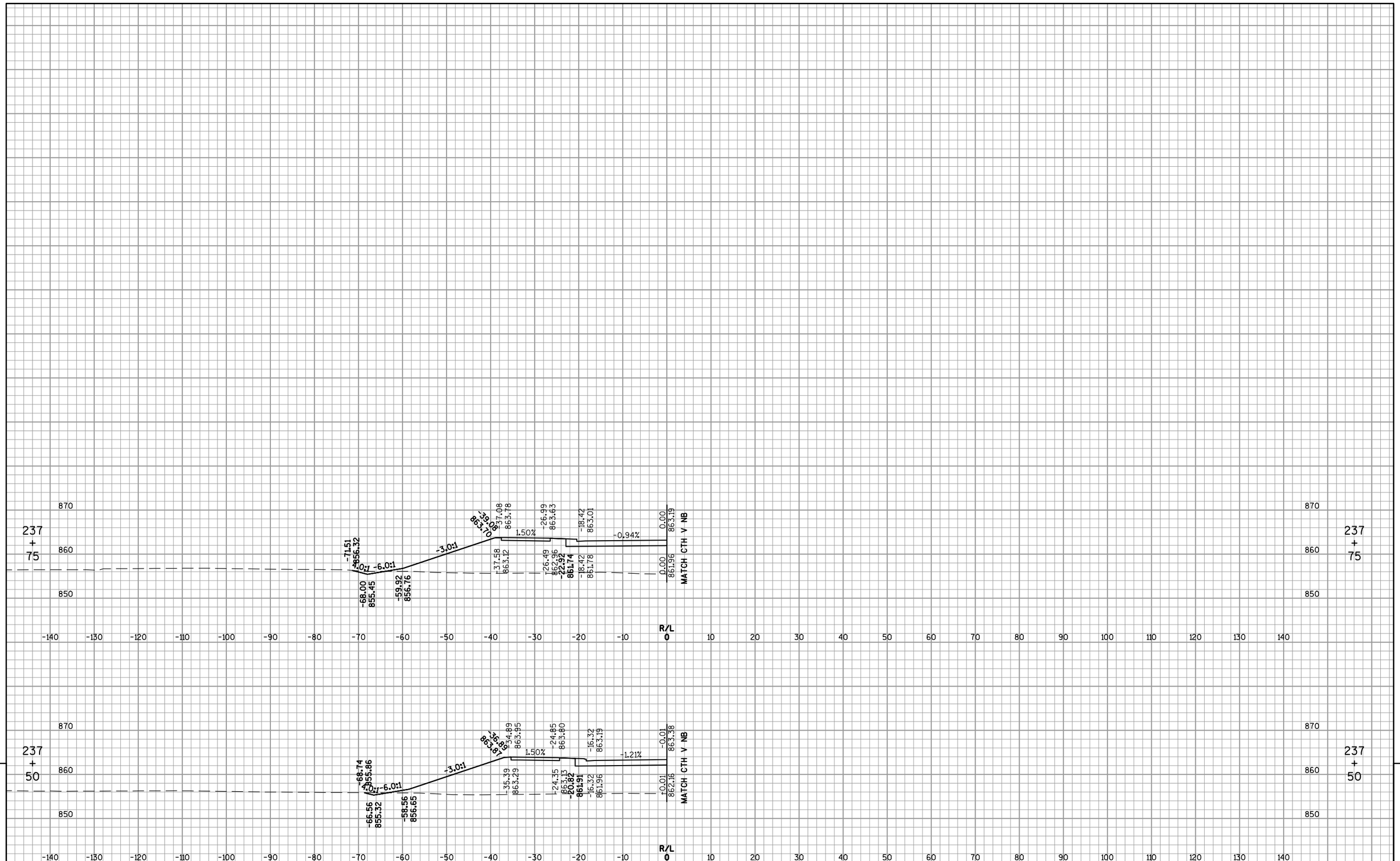
PLOT DATE : 1/9/2015 2:03 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SOUTHBOUND	SHEET 652	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-CTH V.DWG
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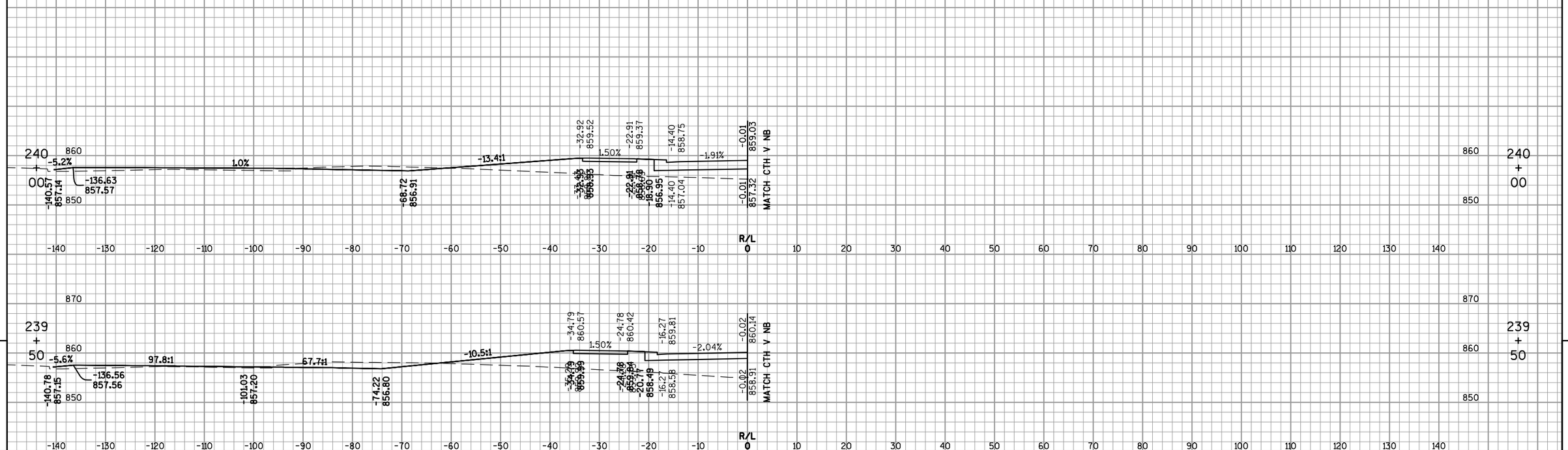
PLOT DATE : 1/9/2015 2:04 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: CTH V SOUTHBOUND	SHEET 653	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-CTH V.DWG
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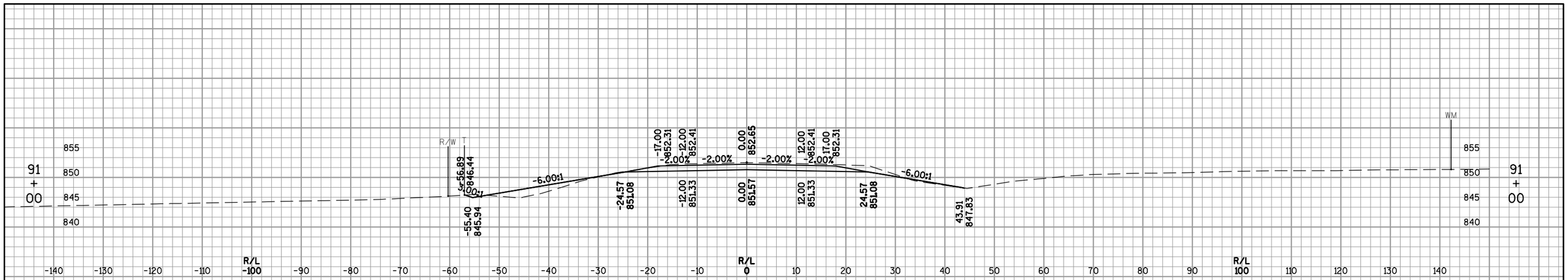
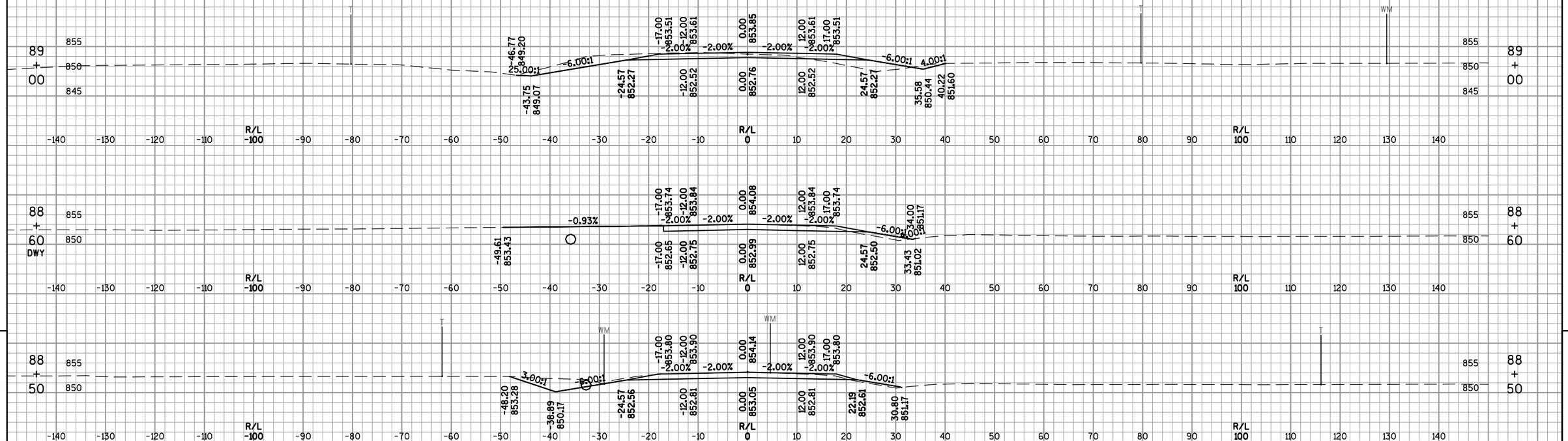
PLOT DATE : 1/9/2015 2:04 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH





PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: OLD CTH V SOUTH	SHEET 654	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-SIDEROADS.DWG
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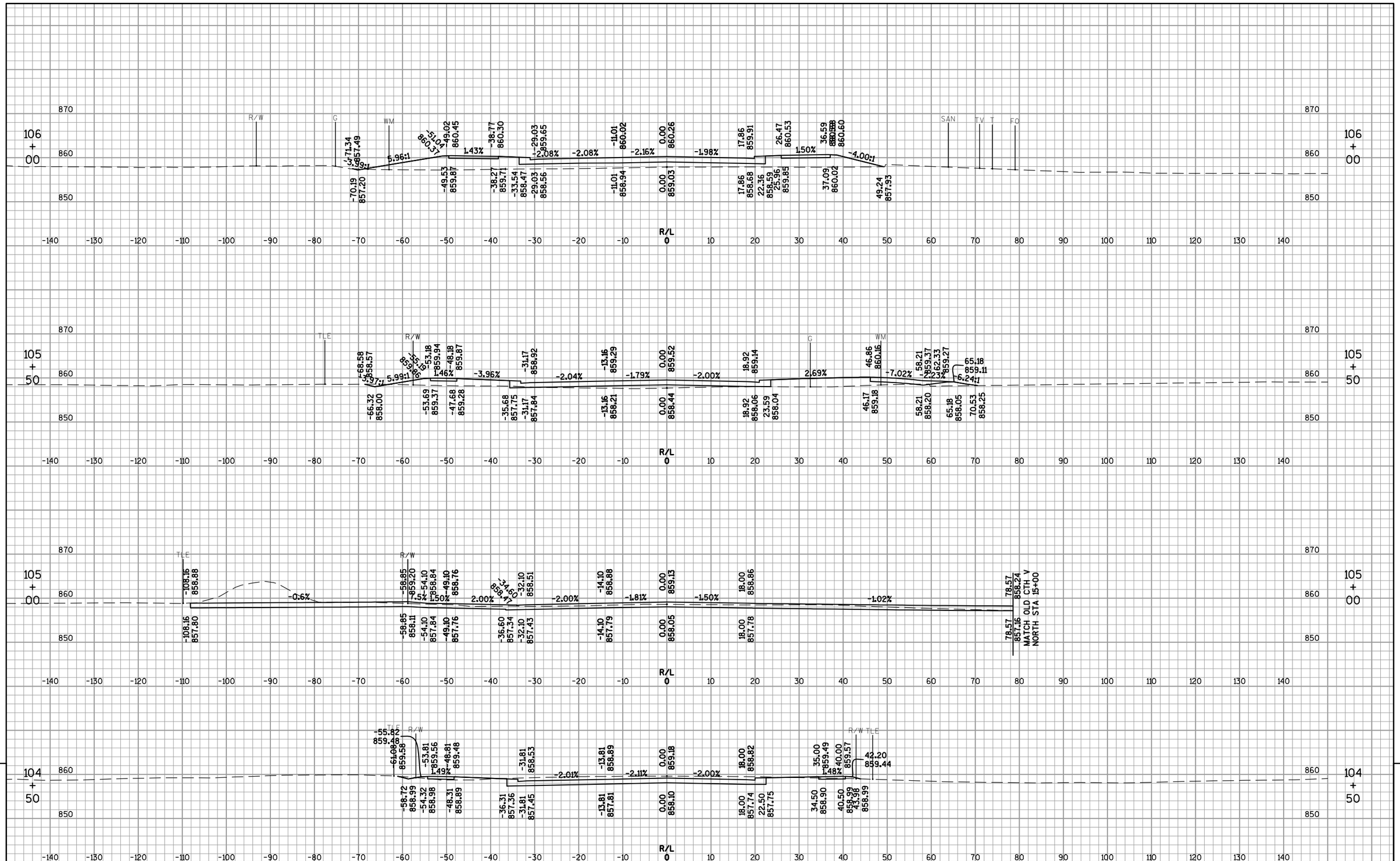
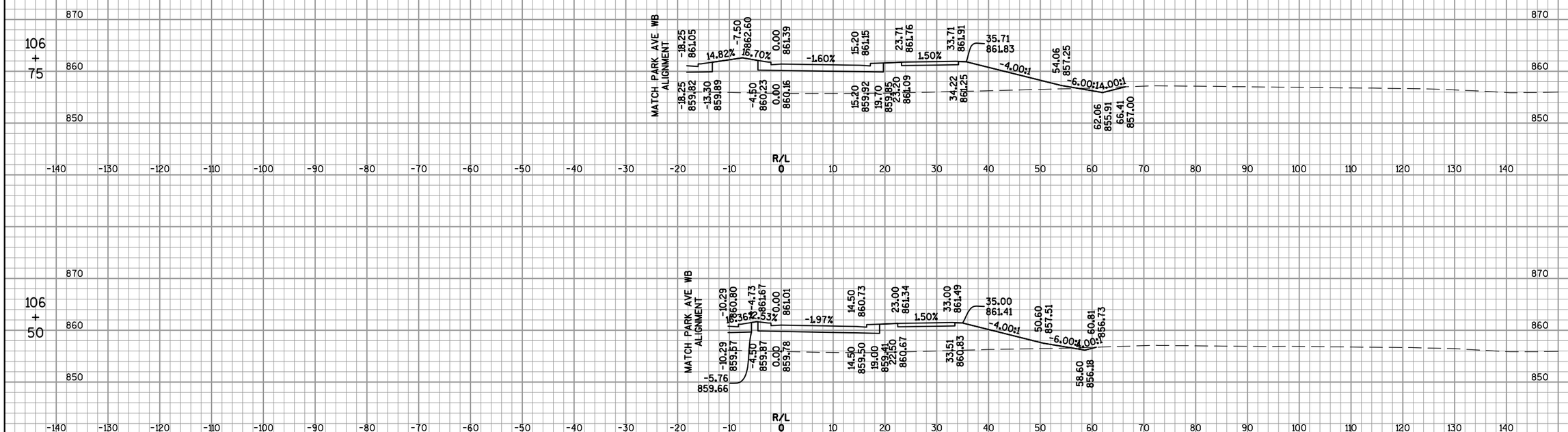
PLOT DATE : 1/9/2015 2:08 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49


106 + 00
105 + 50
105 + 00
104 + 50
R/W
G
WM
SAN
TV
T
FO
TLE
MATCH OLD CTH V NORTH STA 15+00
R/L
870
860
850
-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



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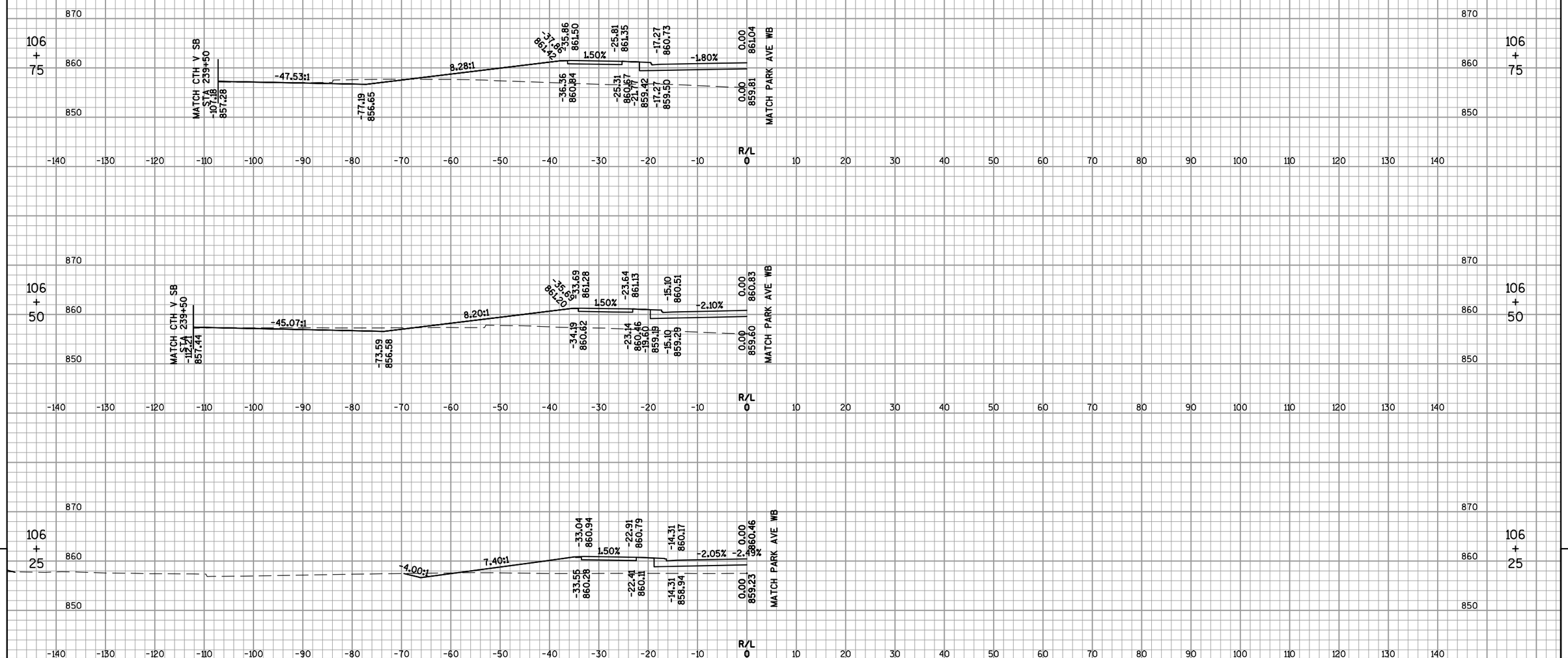
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: PARK AVENUE EASTBOUND	SHEET 656	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-SIDEROADS.DWG
142022_0□0□22_□□

PLOT DATE : 1/9/2015 2:11 PM

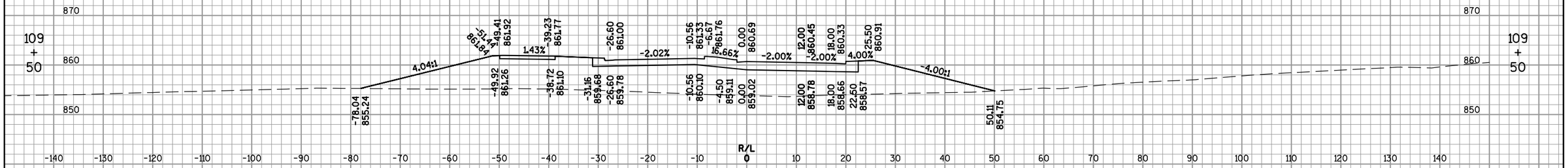
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

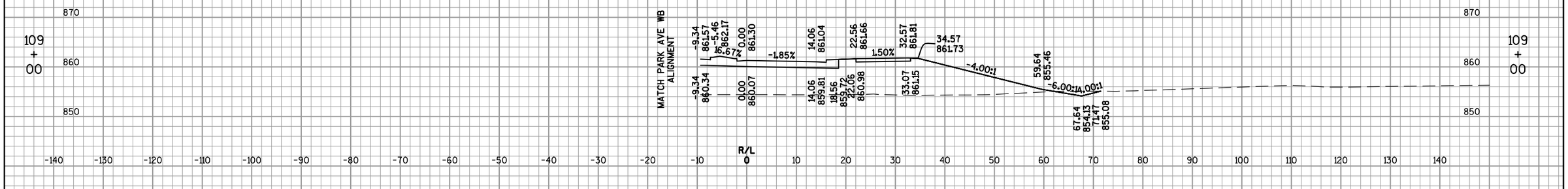
WISDOT/CADDS SHEET 49

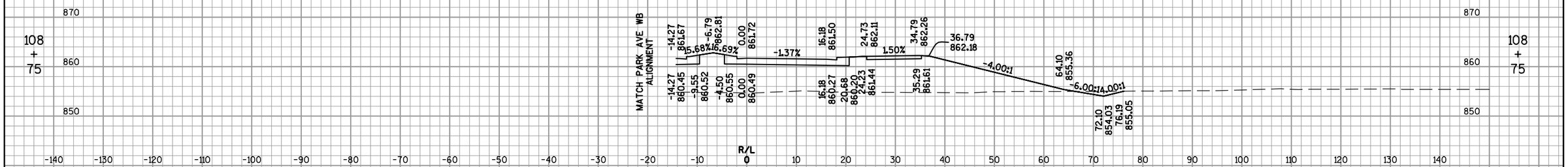


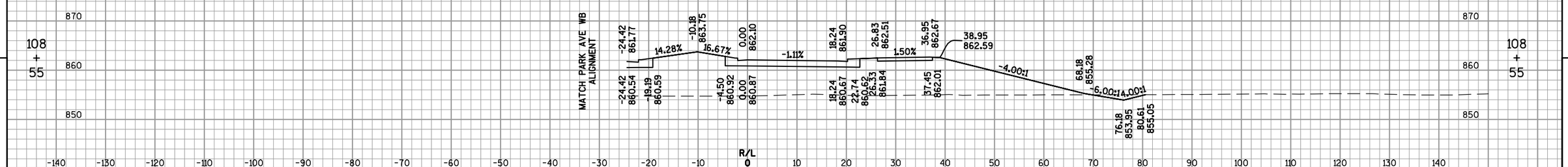
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: PARK AVENUE WESTBOUND	SHEET 657	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-SIDEROADS.DWG
142022_0□0□2□_□□
PLOT DATE : 1/9/2015 2:11 PM
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH
WISDOT/CADDS SHEET 49









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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: FRONTAGE ROAD EASTBOUND	SHEET 658	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-SIDEROADS.DWG
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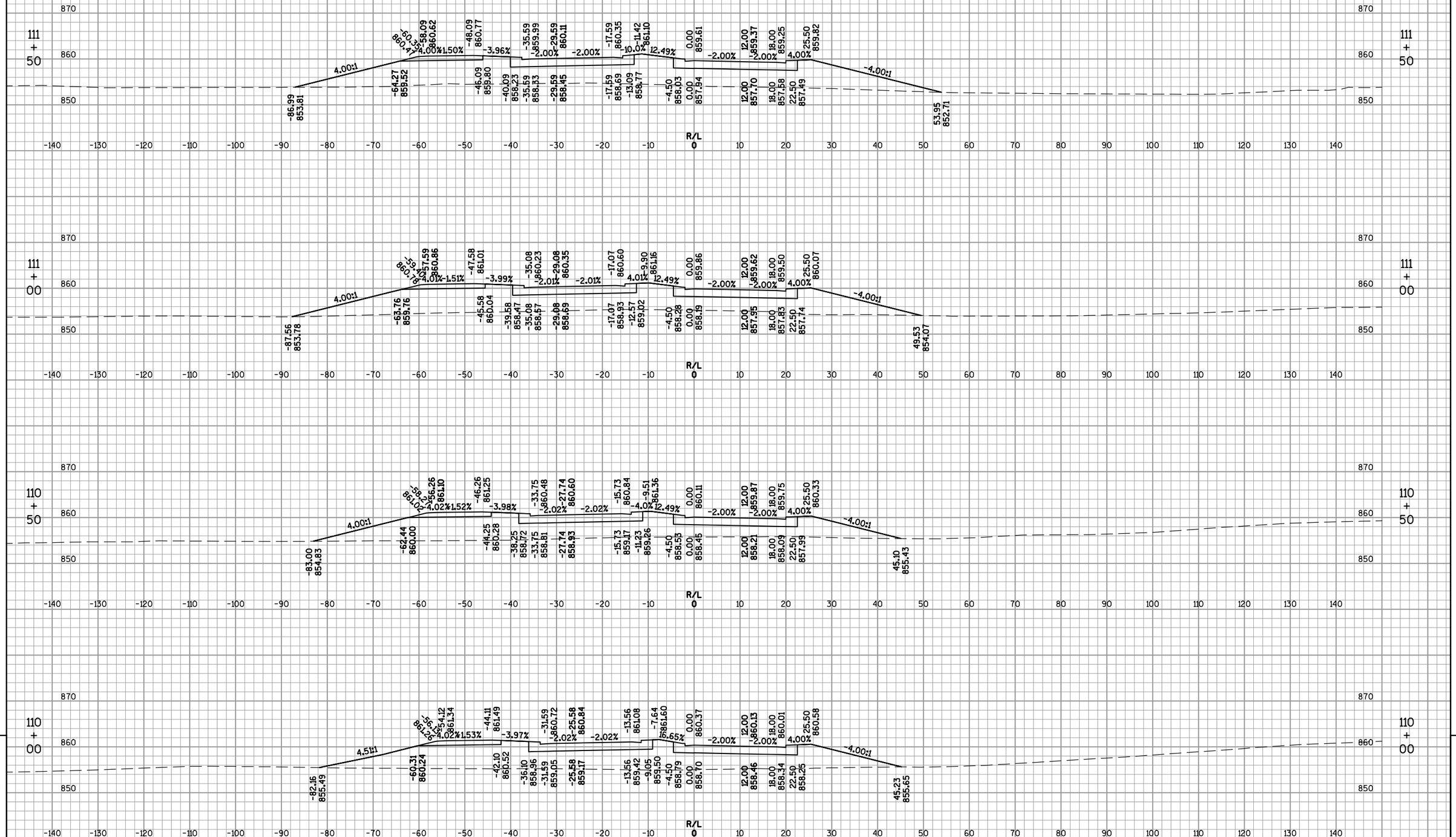
PLOT DATE : 1/9/2015 2:11 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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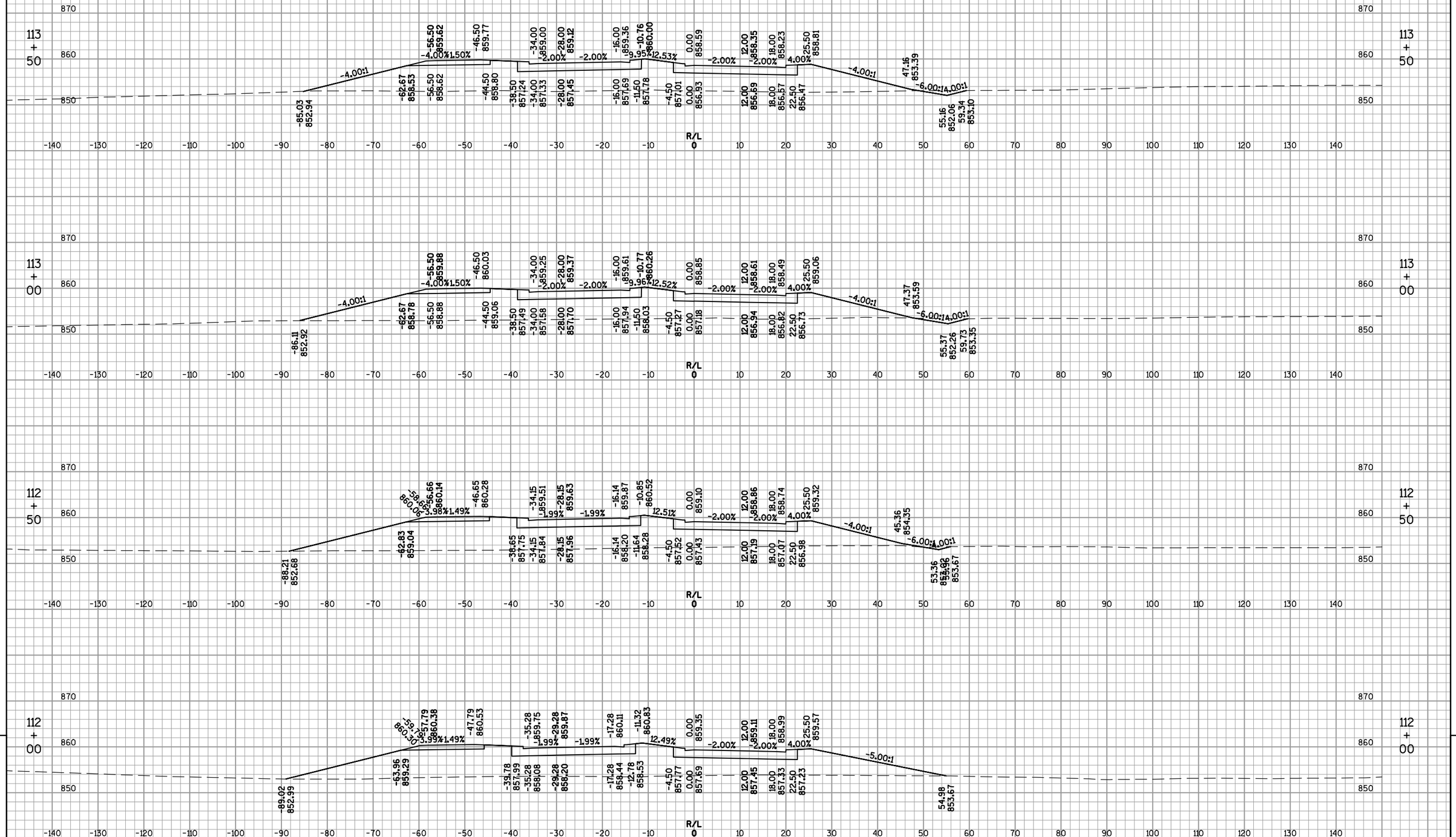
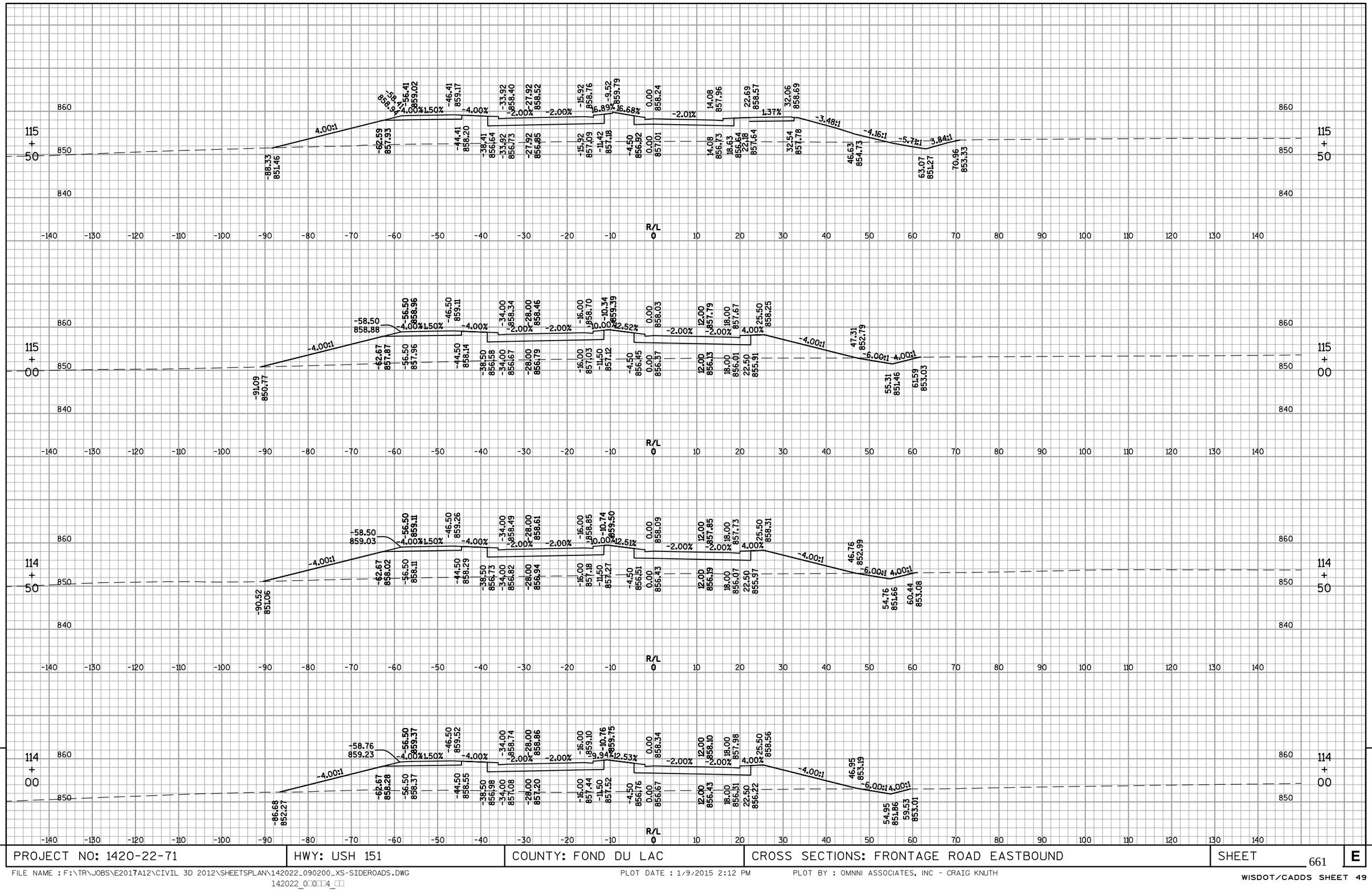
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: FRONTAGE ROAD EASTBOUND	SHEET 659	E



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: FRONTAGE ROAD EASTBOUND	SHEET 660 E


115 + 50
860
850
840
-88.33 851.46
4.00:1
-62.59 857.93
-56.41 859.02
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-44.41 858.20
-38.41 856.64
-33.92 858.40
-33.92 856.73
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-15.92 858.76
-15.92 857.09
-9.52 859.79
-11.42 857.18
-4.50 856.92
0.00 858.24
0.00 857.01
14.08 857.96
14.08 856.73
18.63 856.64
22.69 858.57
22.18 857.64
32.06 858.69
32.54 857.78
46.63 854.73
63.07 851.27
70.96 853.33
4.00%
1.50%
-4.00%
2.00%
-2.00%
6.89%
16.68%
-2.01%
1.37%
-3.48:1
-4.16:1
-5.7:1
3.84:1
R/L 0
-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 10 20 30 40 50 60 70 80 90 100 110 120 130 140
115 + 00
-91.09 850.77
-58.50 858.88
-56.50 858.96
-46.50 859.11
-34.00 858.34
-28.00 858.46
-16.00 858.70
-10.34 859.39
0.00 858.03
12.00 857.79
18.00 857.67
25.50 858.25
47.31 852.79
55.31 851.46
61.59 853.03
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-56.50 857.96
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-28.00 856.79
-16.00 857.03
-11.50 857.12
-4.50 856.45
0.00 856.37
12.00 856.13
18.00 856.01
22.50 855.91
-4.00:1
-6.00:1
114 + 50
-90.52 851.06
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-16.00 858.85
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0.00 858.09
12.00 857.85
18.00 857.73
25.50 858.31
46.76 852.99
54.76 851.66
60.44 853.08
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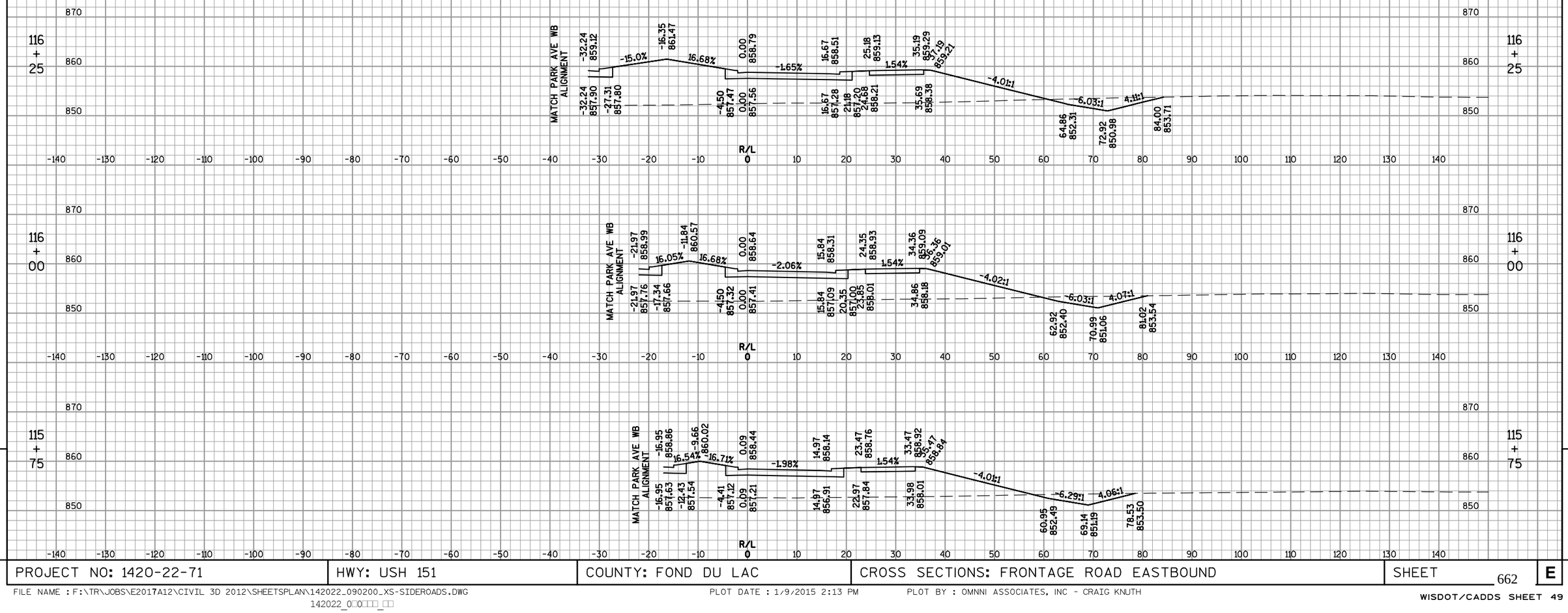
-34.00 856.82
-28.00 856.94
-16.00 857.18
-11.50 857.27
-4.50 856.51
0.00 856.43
12.00 856.19
18.00 856.07
22.50 855.97
12.51%
114 + 00
-86.68 852.27
-58.76 859.23
-56.50 859.37
-46.50 859.52
-34.00 858.74
-28.00 858.86
-16.00 859.10
-10.76 859.75
0.00 858.34
12.00 858.10
18.00 857.98
25.50 858.56
46.95 853.19
54.95 851.86
59.53 853.01
-62.67 858.28
-56.50 858.37
-44.50 858.55
-38.50 856.98
-34.00 857.08
-28.00 857.20
-16.00 857.44
-11.50 857.52
-4.50 856.76
0.00 856.67
12.00 856.43
18.00 856.31
22.50 856.22
12.53%
9
PROJECT NO: 1420-22-71
HWY: USH 151
COUNTY: FOND DU LAC
CROSS SECTIONS: FRONTAGE ROAD EASTBOUND
SHEET 661
E
FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-SIDEROADS.DWG
142022_0□0□4_□□
PLOT DATE : 1/9/2015 2:12 PM
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH
WISDOT/CADDS SHEET 49



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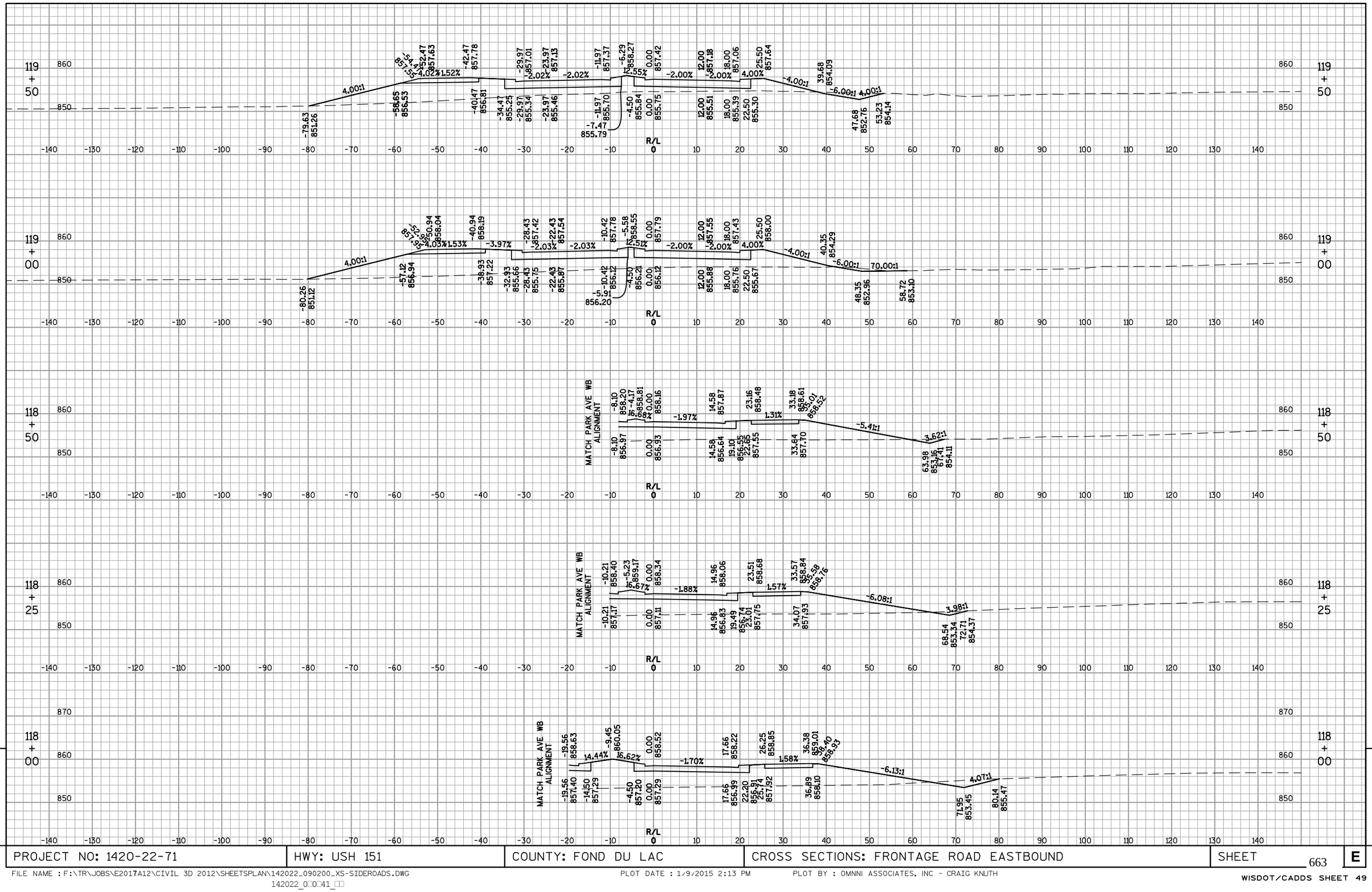
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: FRONTAGE ROAD EASTBOUND	SHEET 662	E



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: FRONTAGE ROAD EASTBOUND	SHEET 663	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-SIDEROADS.DWG
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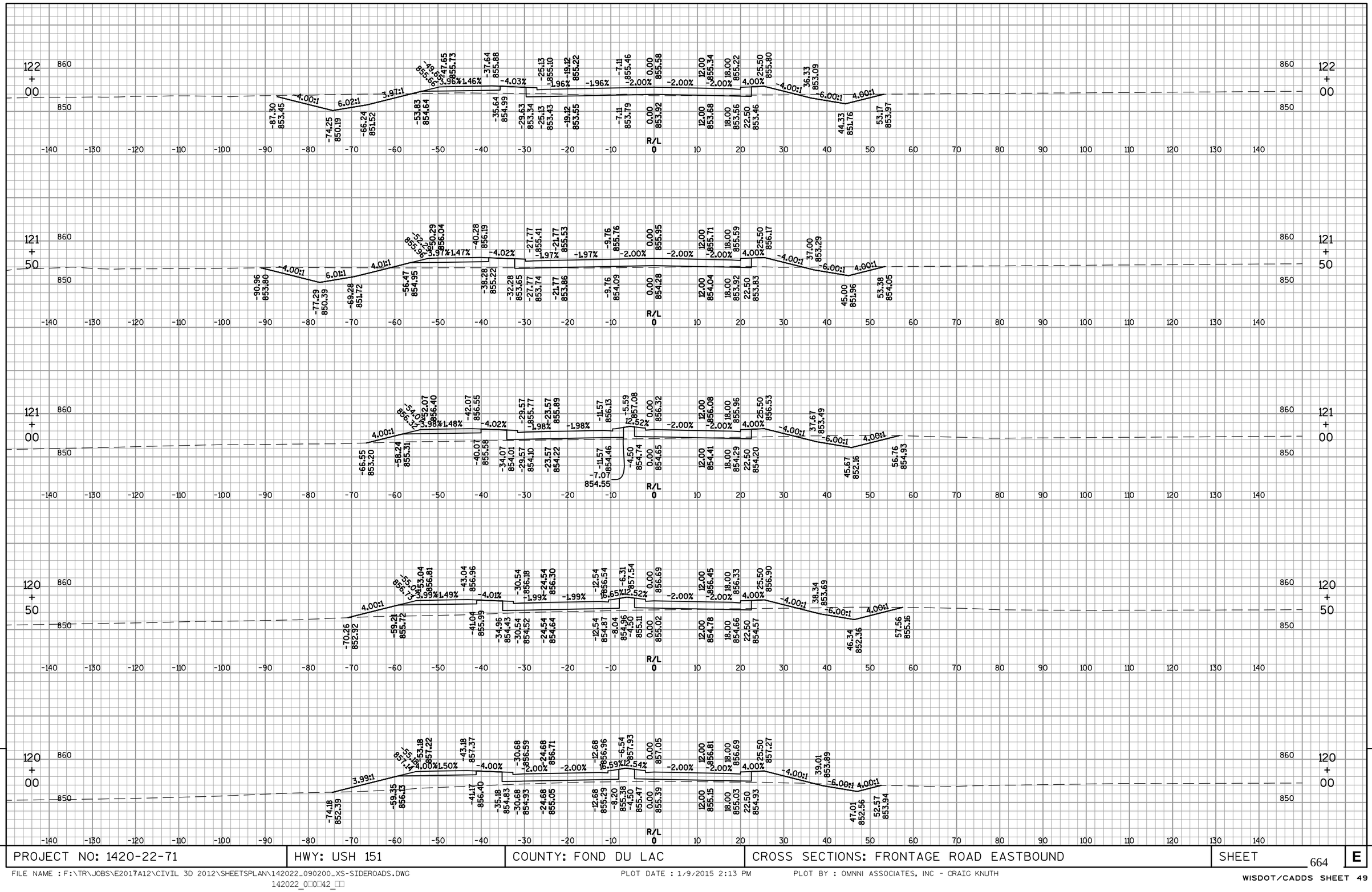
PLOT DATE : 1/9/2015 2:13 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: FRONTAGE ROAD EASTBOUND	SHEET 664 E

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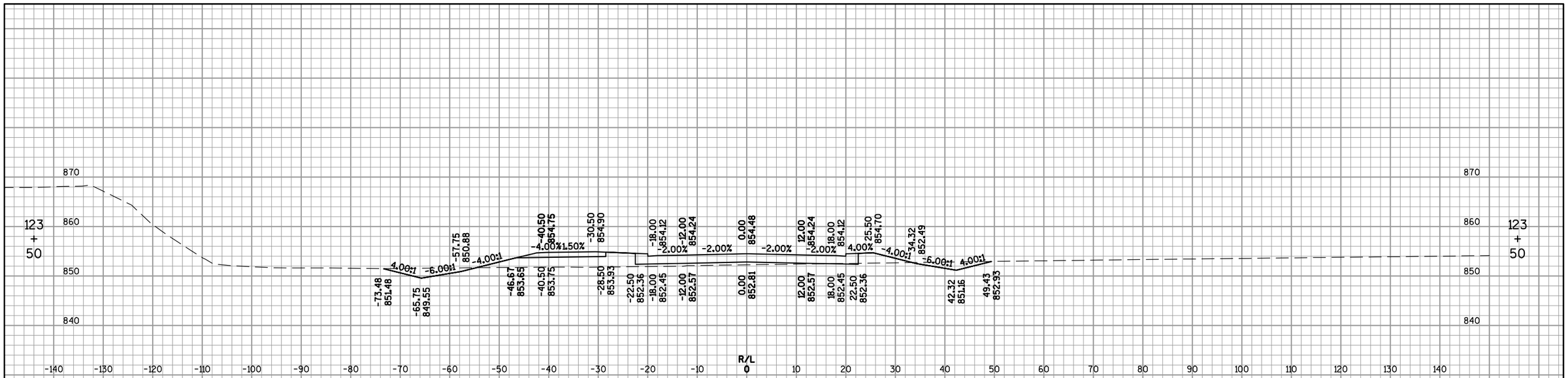
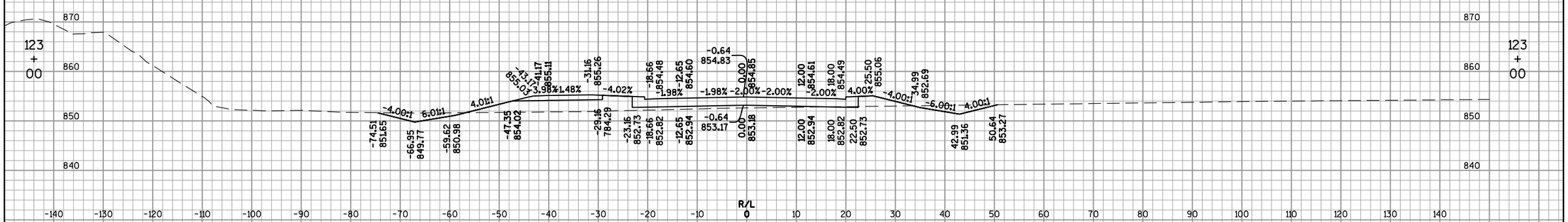
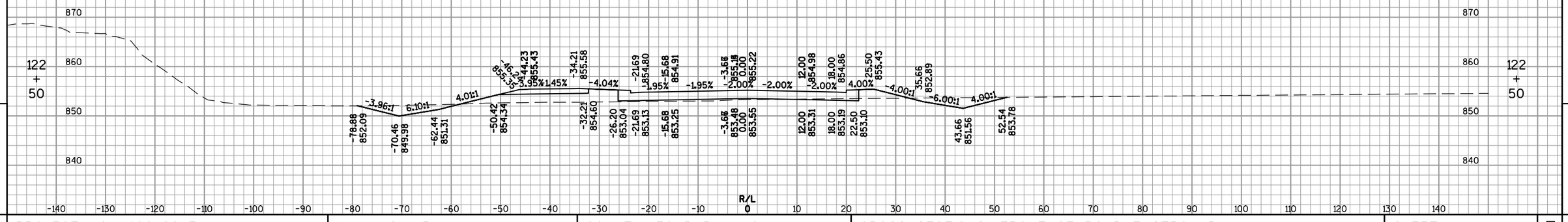
PLOT DATE : 1/9/2015 2:13 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH







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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: FRONTAGE ROAD EASTBOUND	SHEET 665	E

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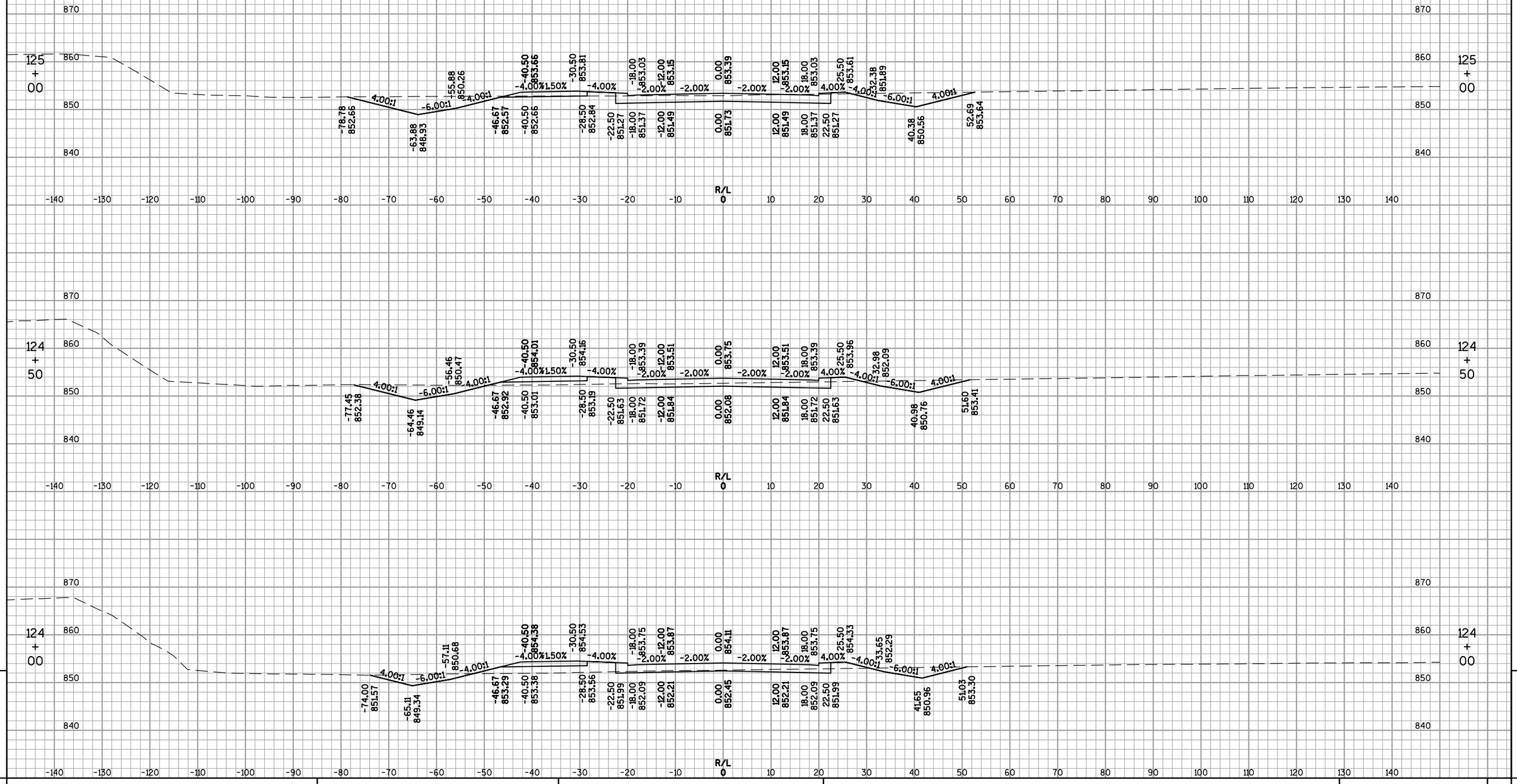
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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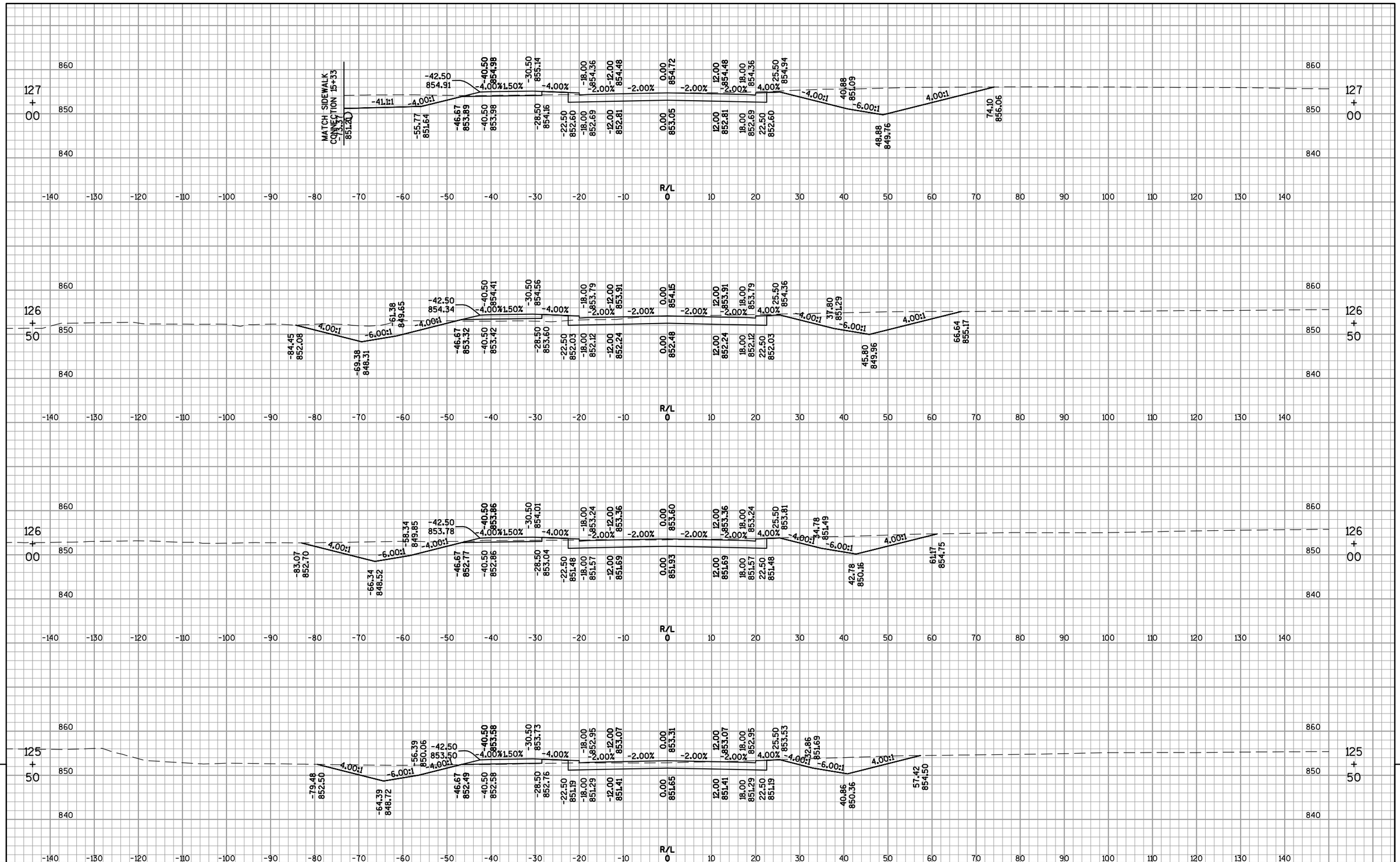
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: FRONTAGE ROAD EASTBOUND	SHEET 666	E



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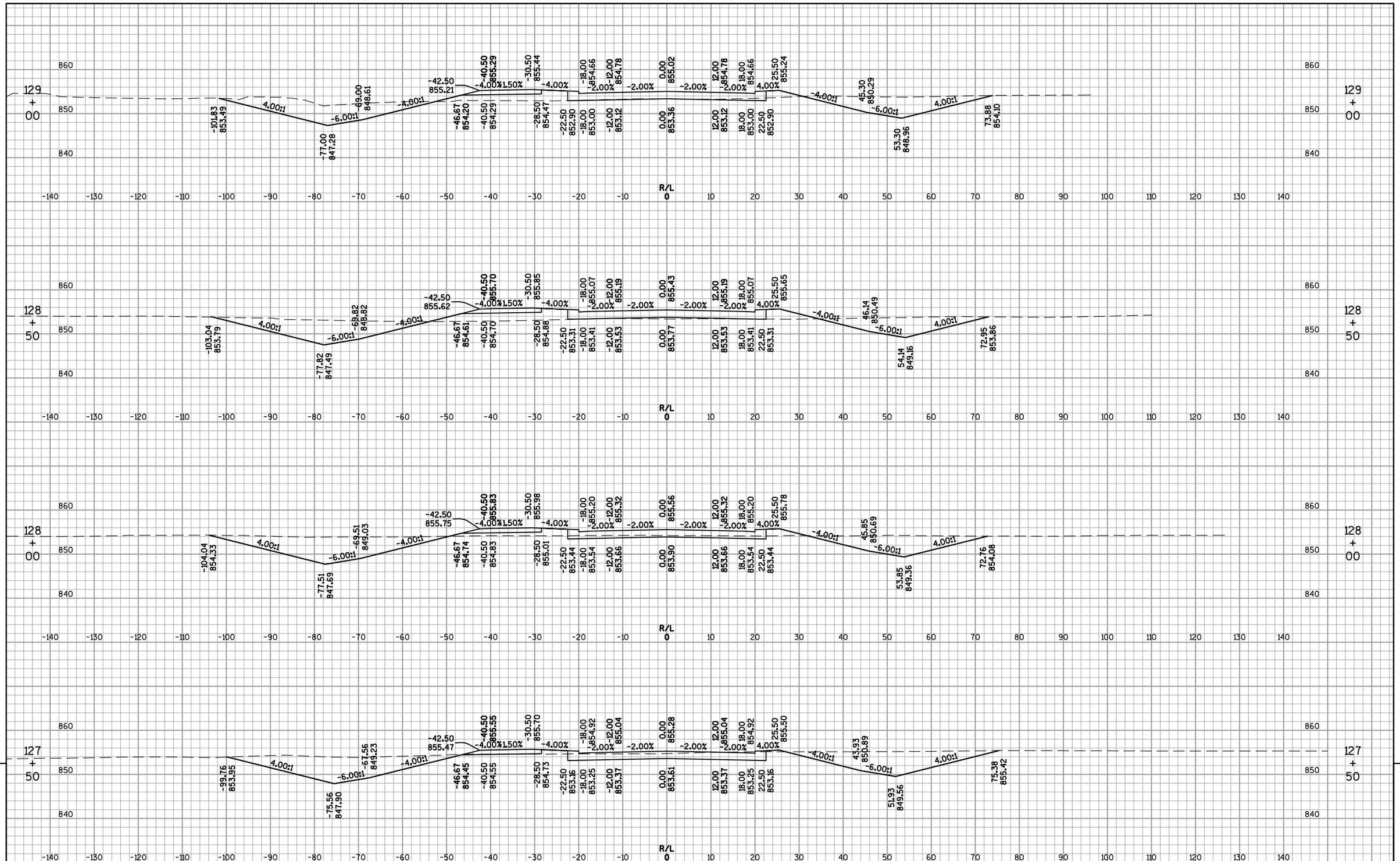

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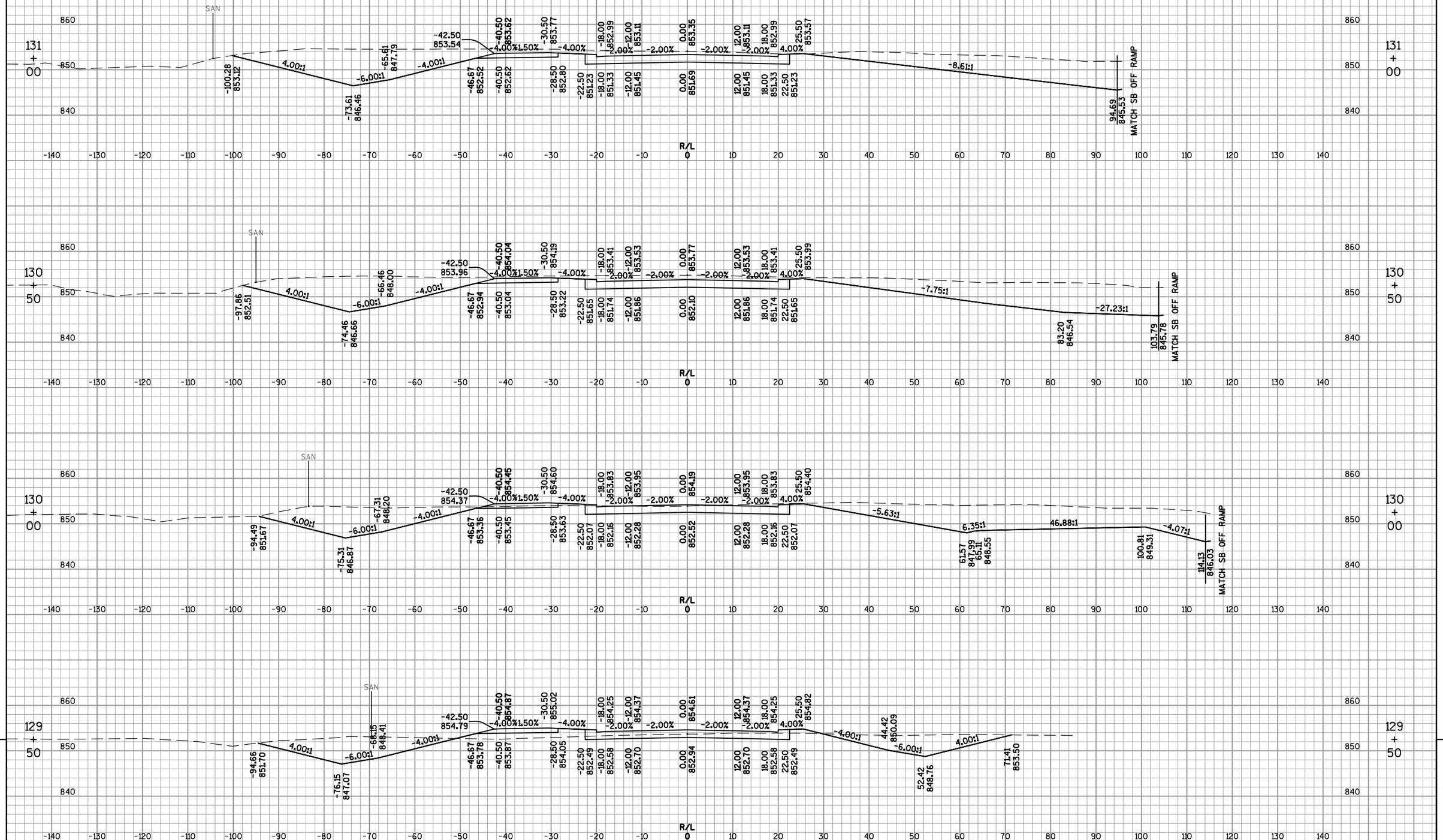

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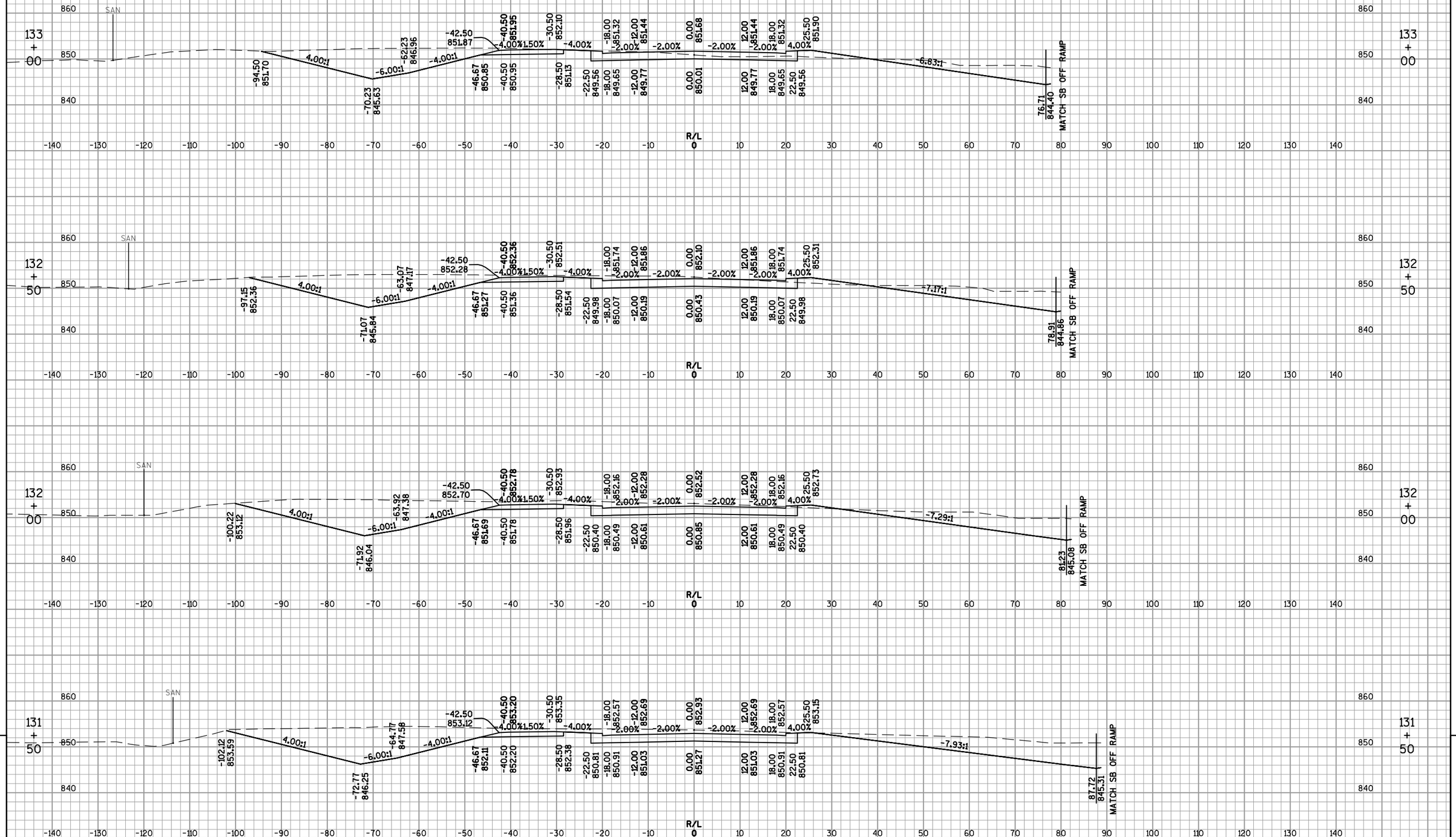

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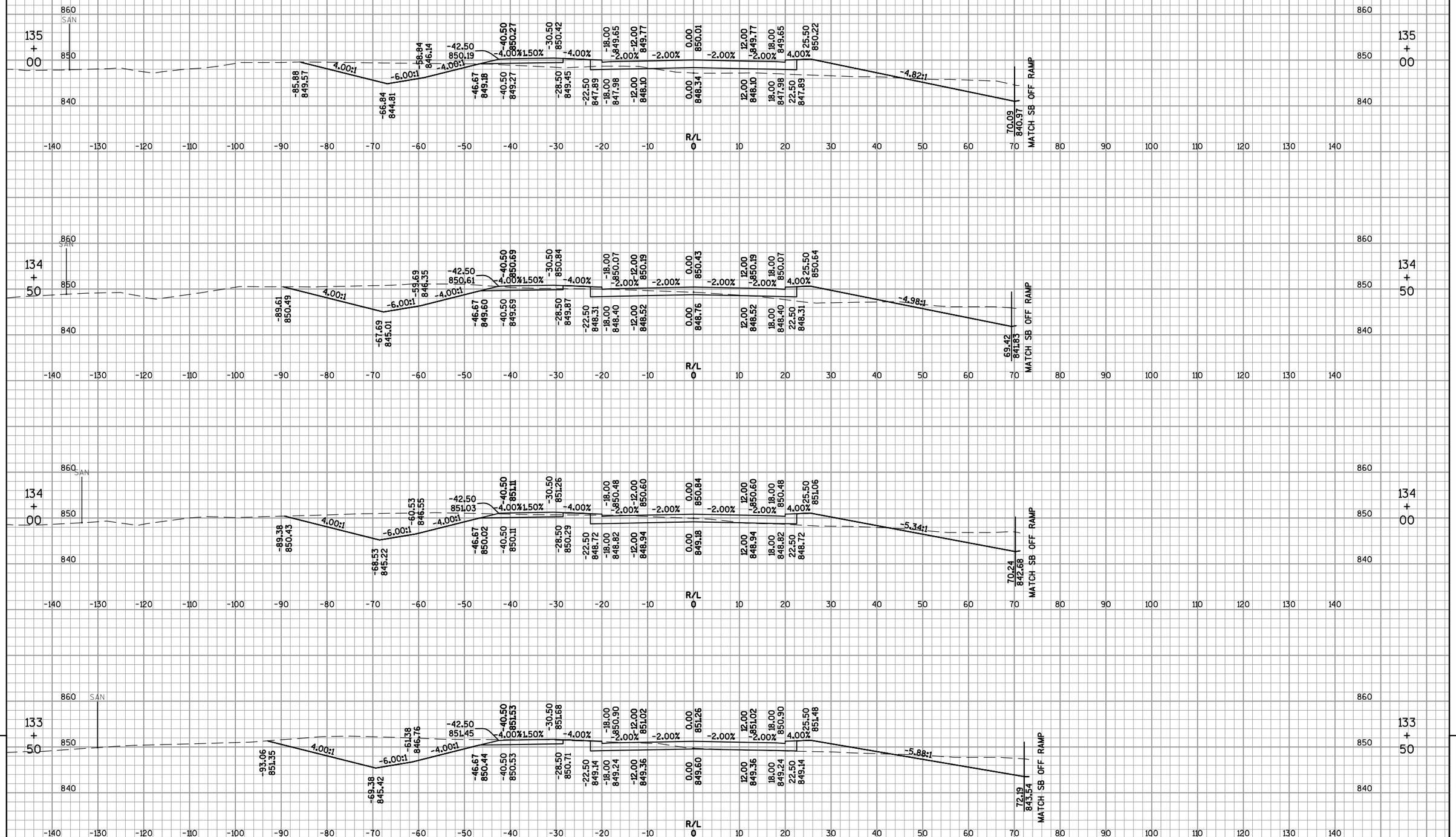
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: FRONTAGE ROAD EASTBOUND	SHEET 670	E



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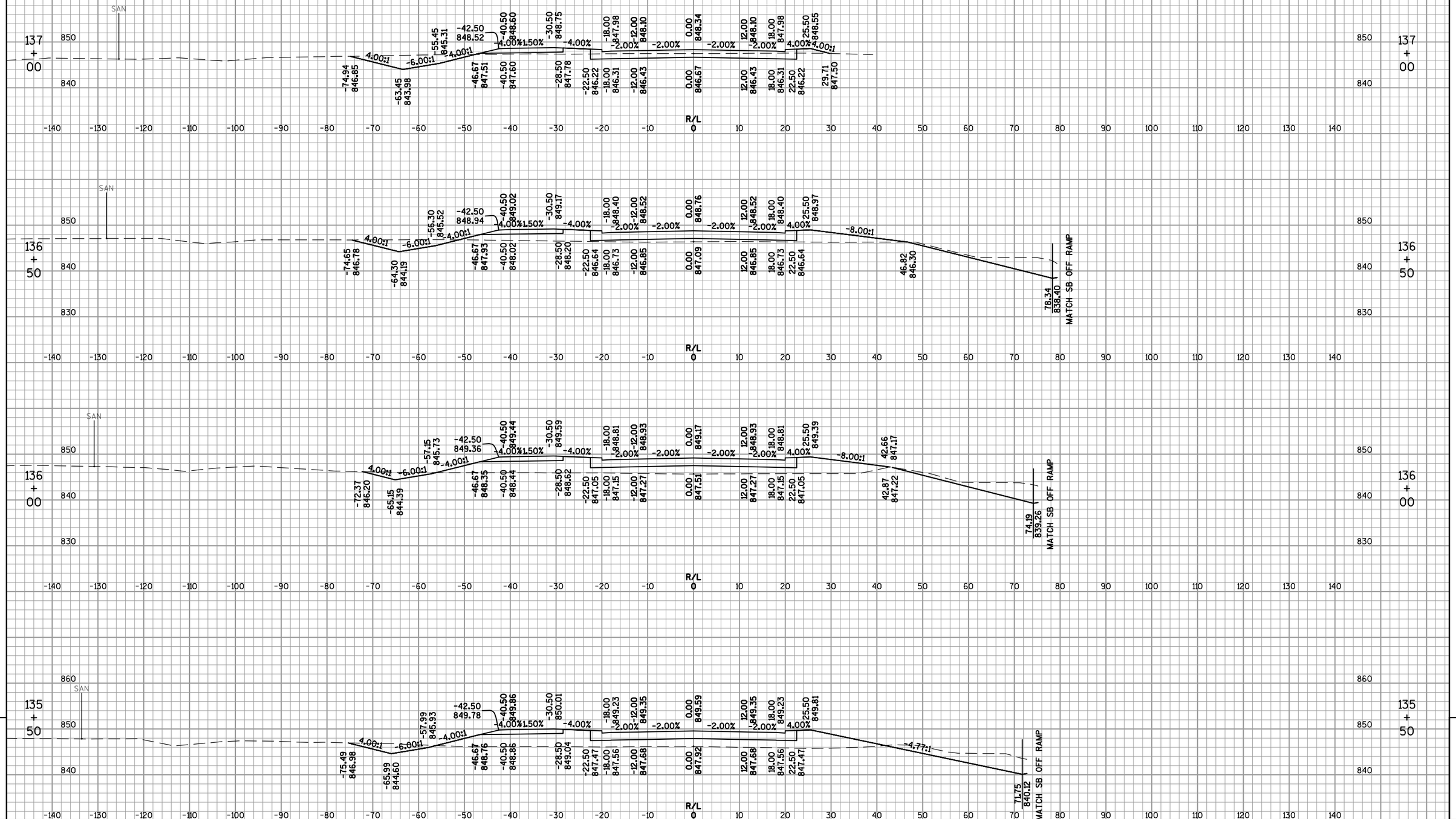
PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: FRONTAGE ROAD EASTBOUND	SHEET 671	E



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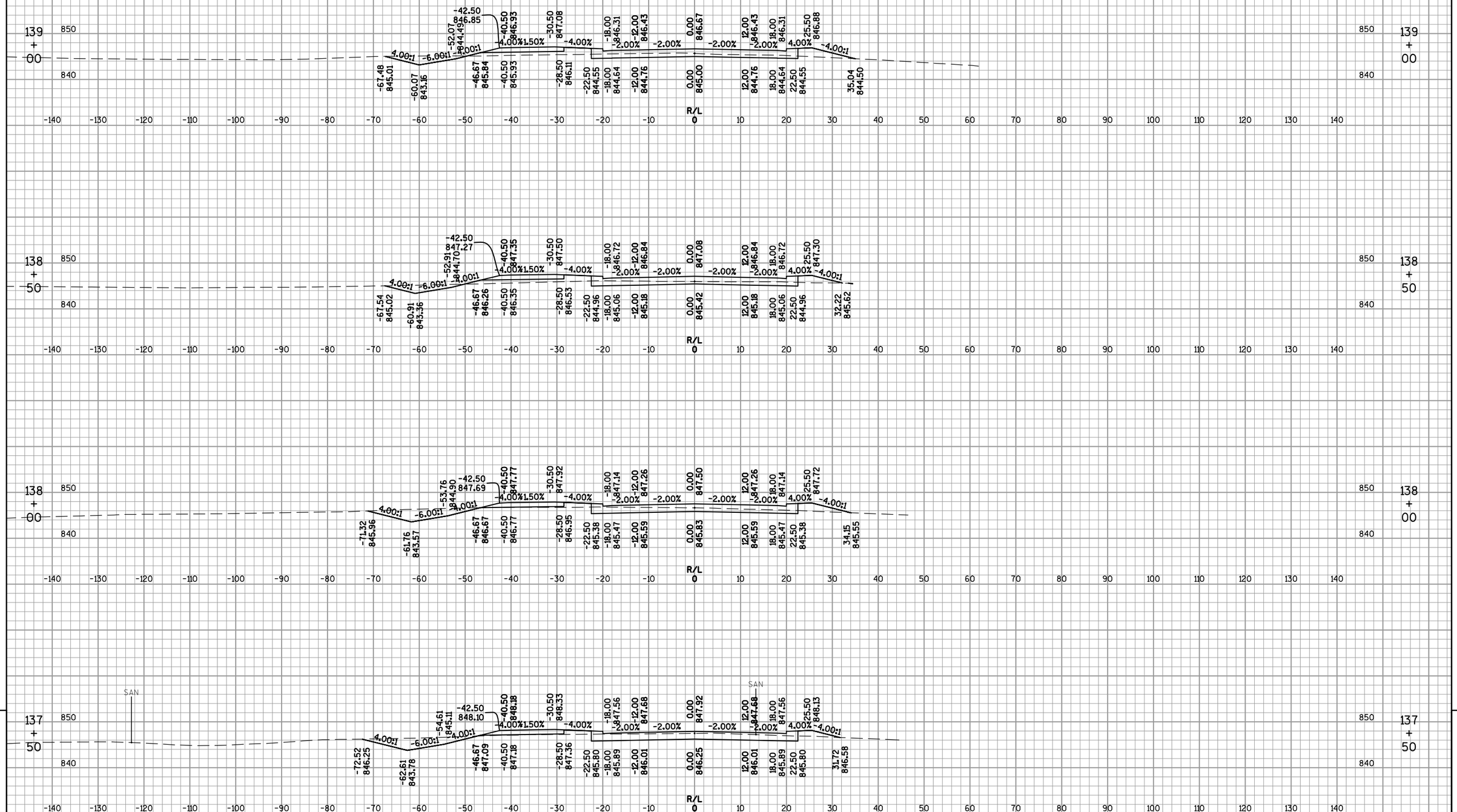

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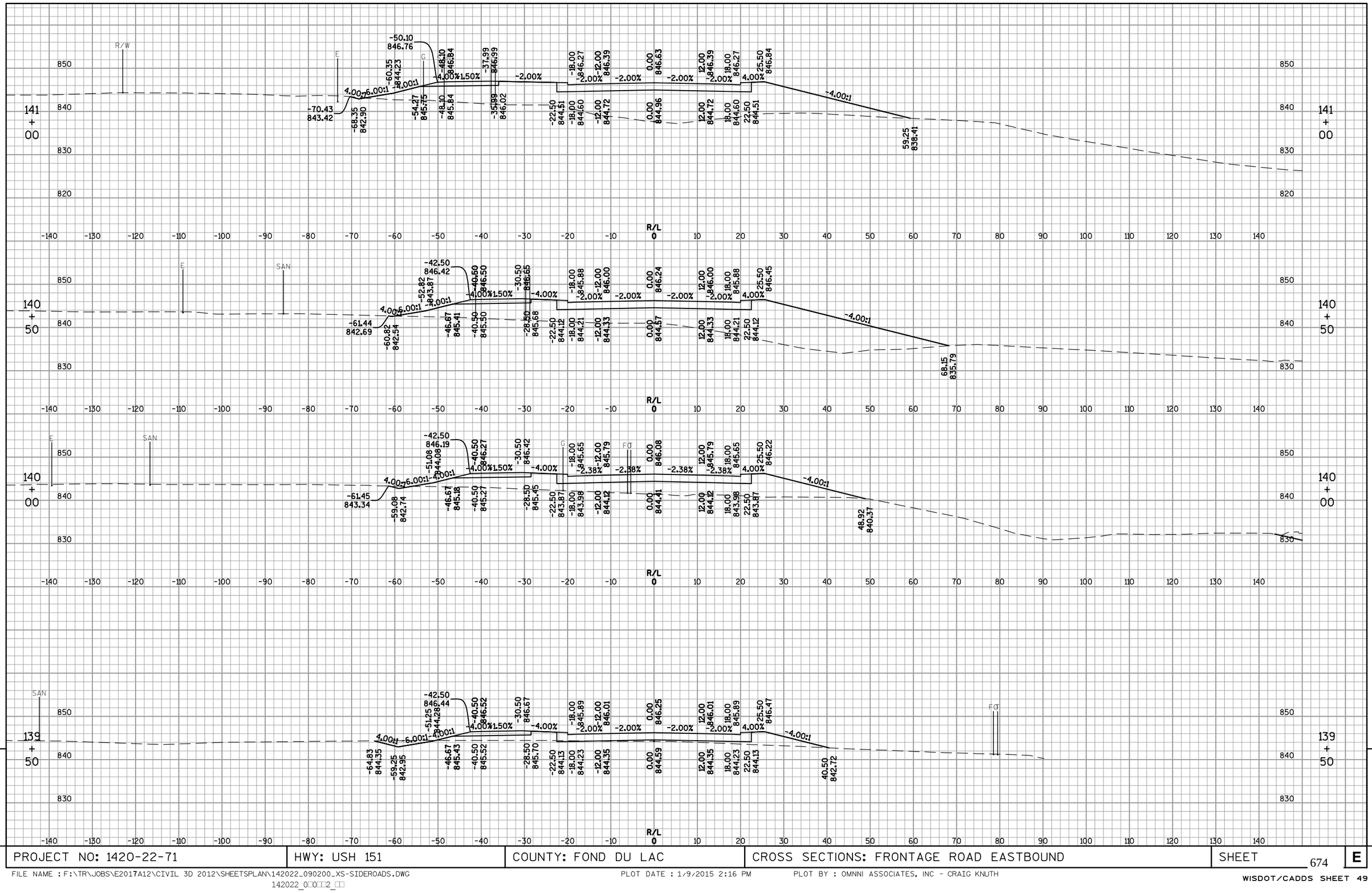

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: FRONTAGE ROAD EASTBOUND	SHEET 674	E

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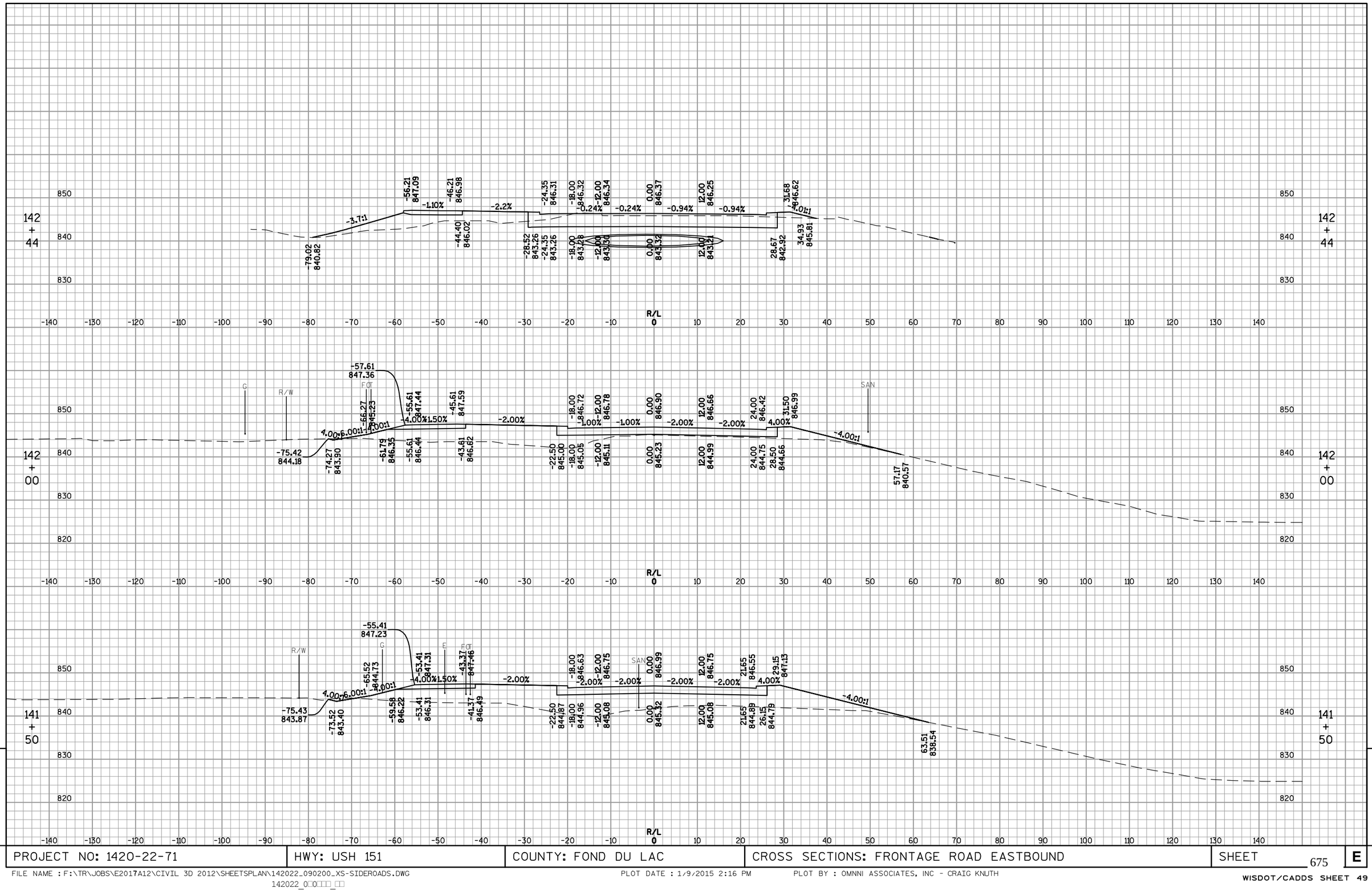
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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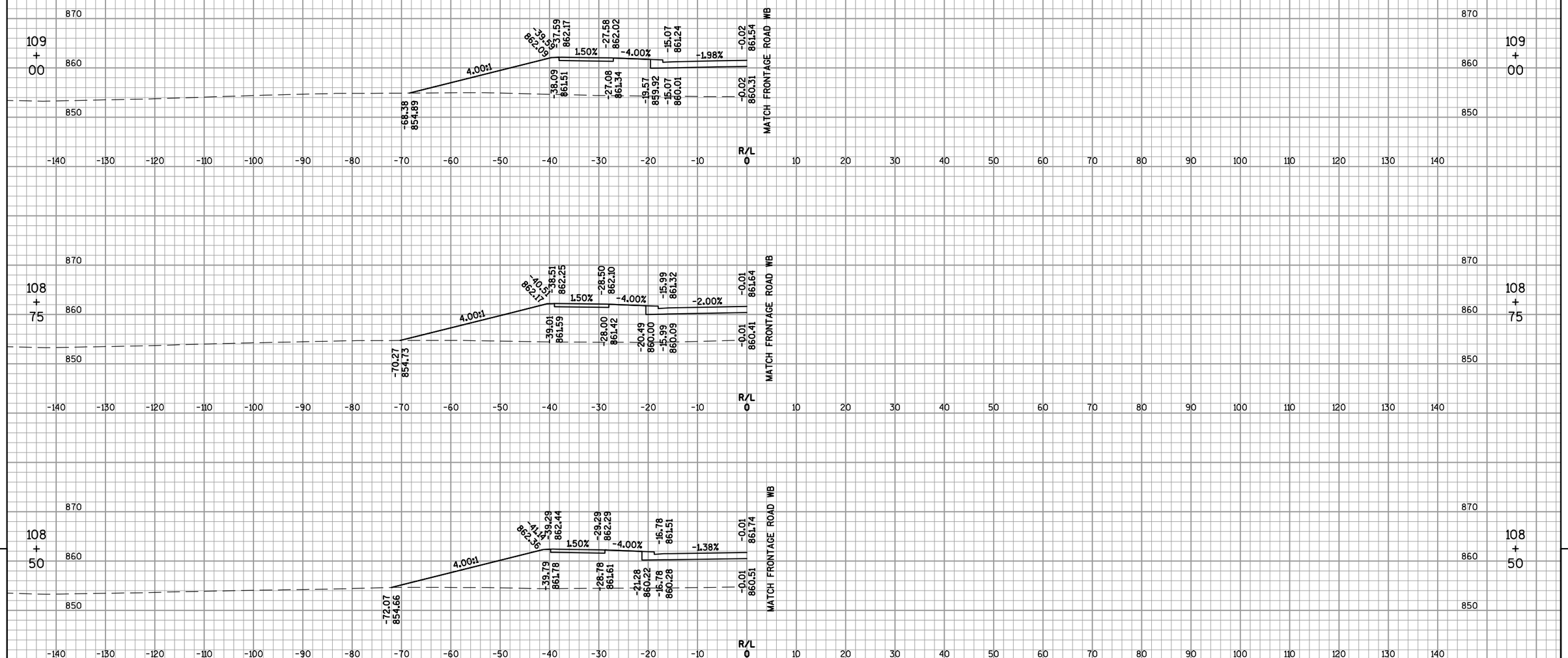

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PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

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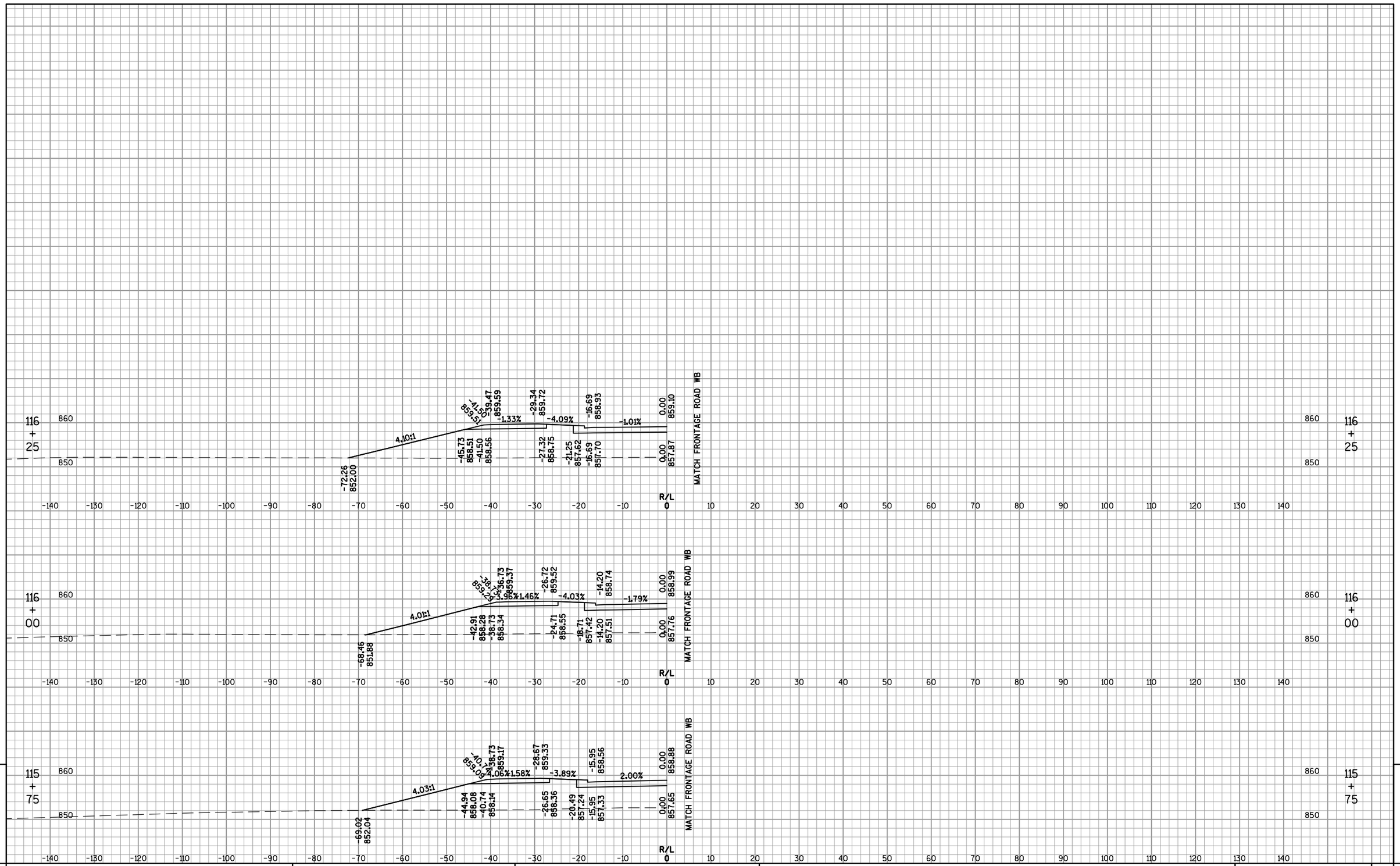

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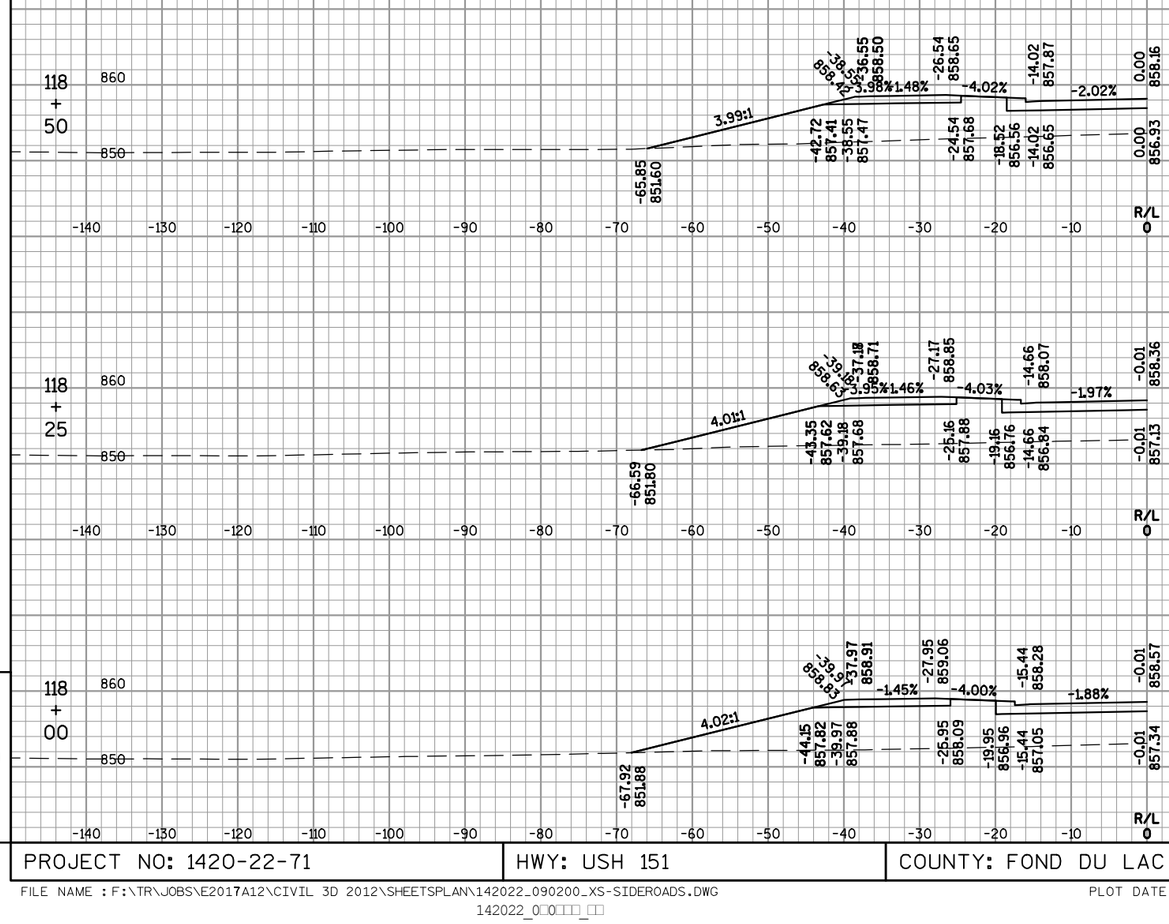

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: FRONTAGE ROAD WESTBOUND	SHEET 678	E

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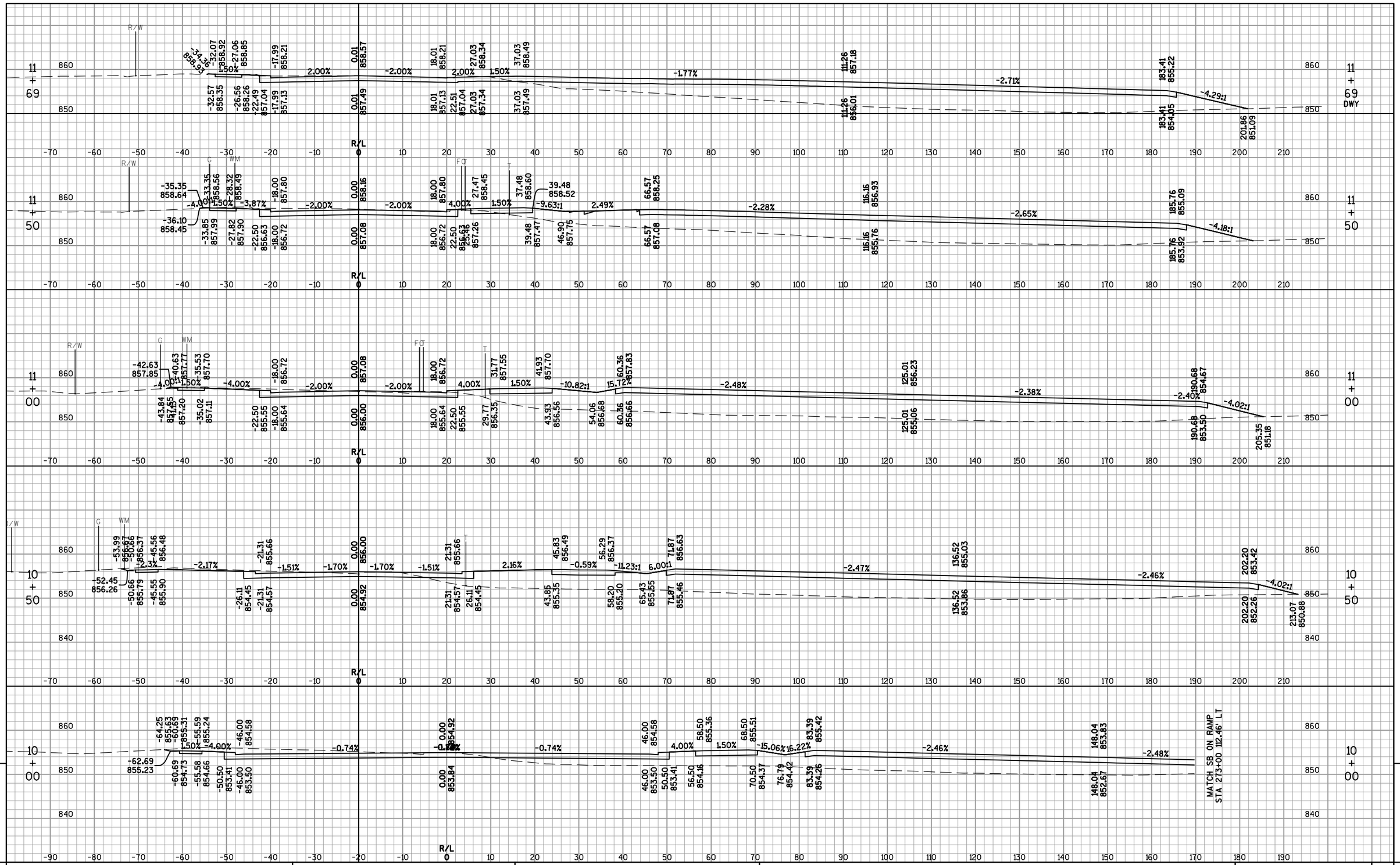

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: OLD CTH V NORTH	SHEET 679	E

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PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

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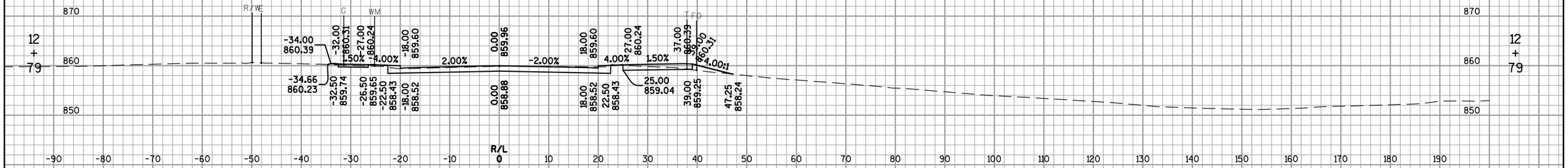

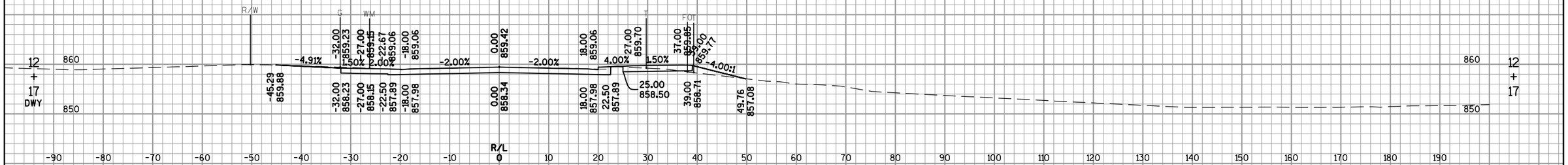

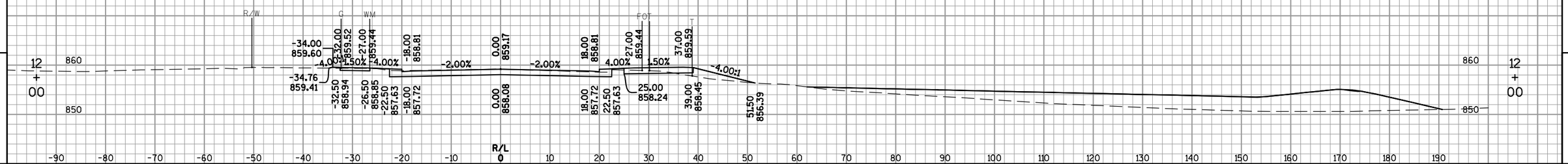

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: OLD CTH V NORTH	SHEET 680	E

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PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

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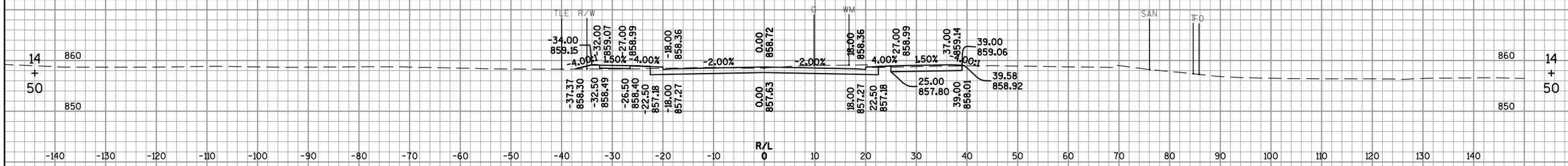

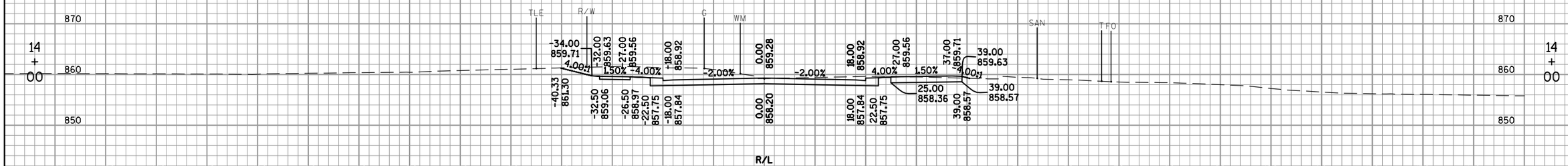

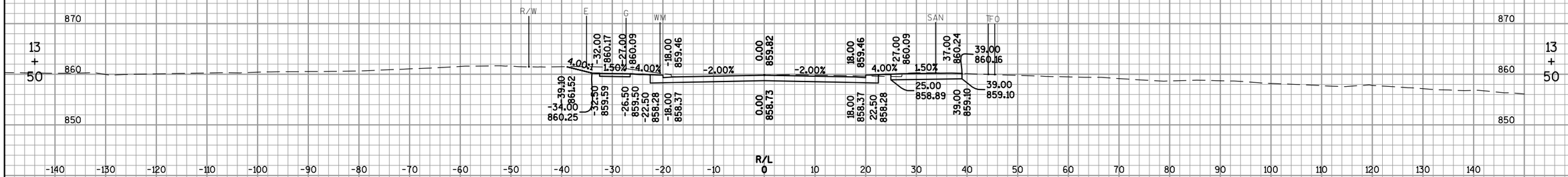

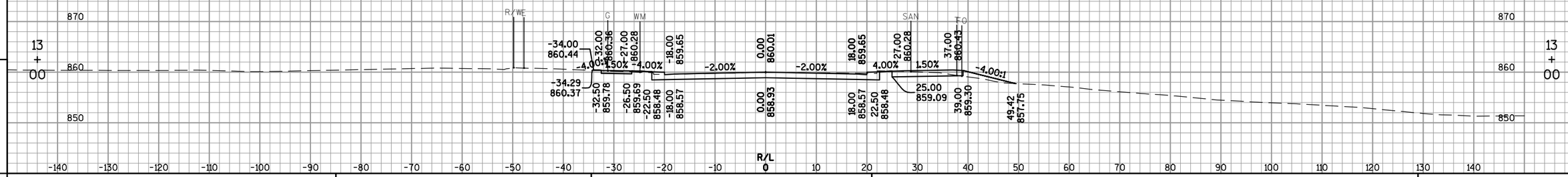

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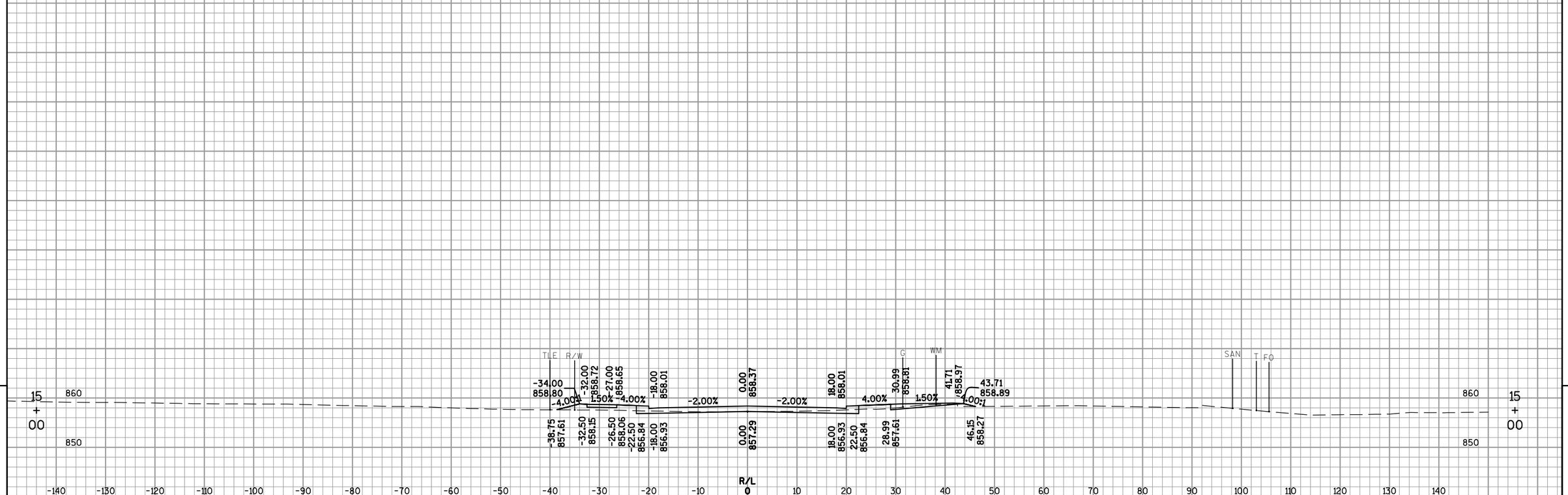

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: OLD CTH V NORTH	SHEET 682	E

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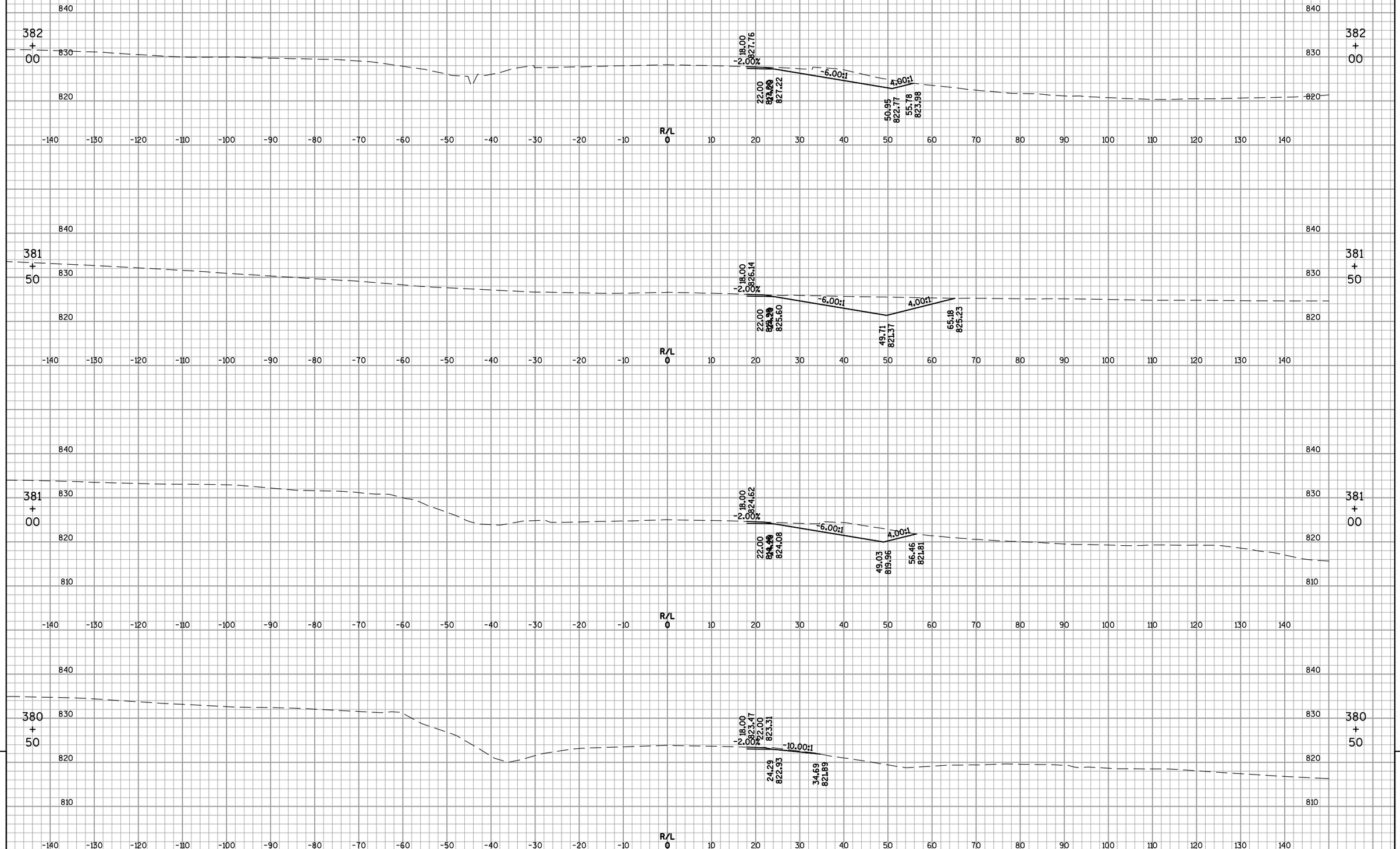
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



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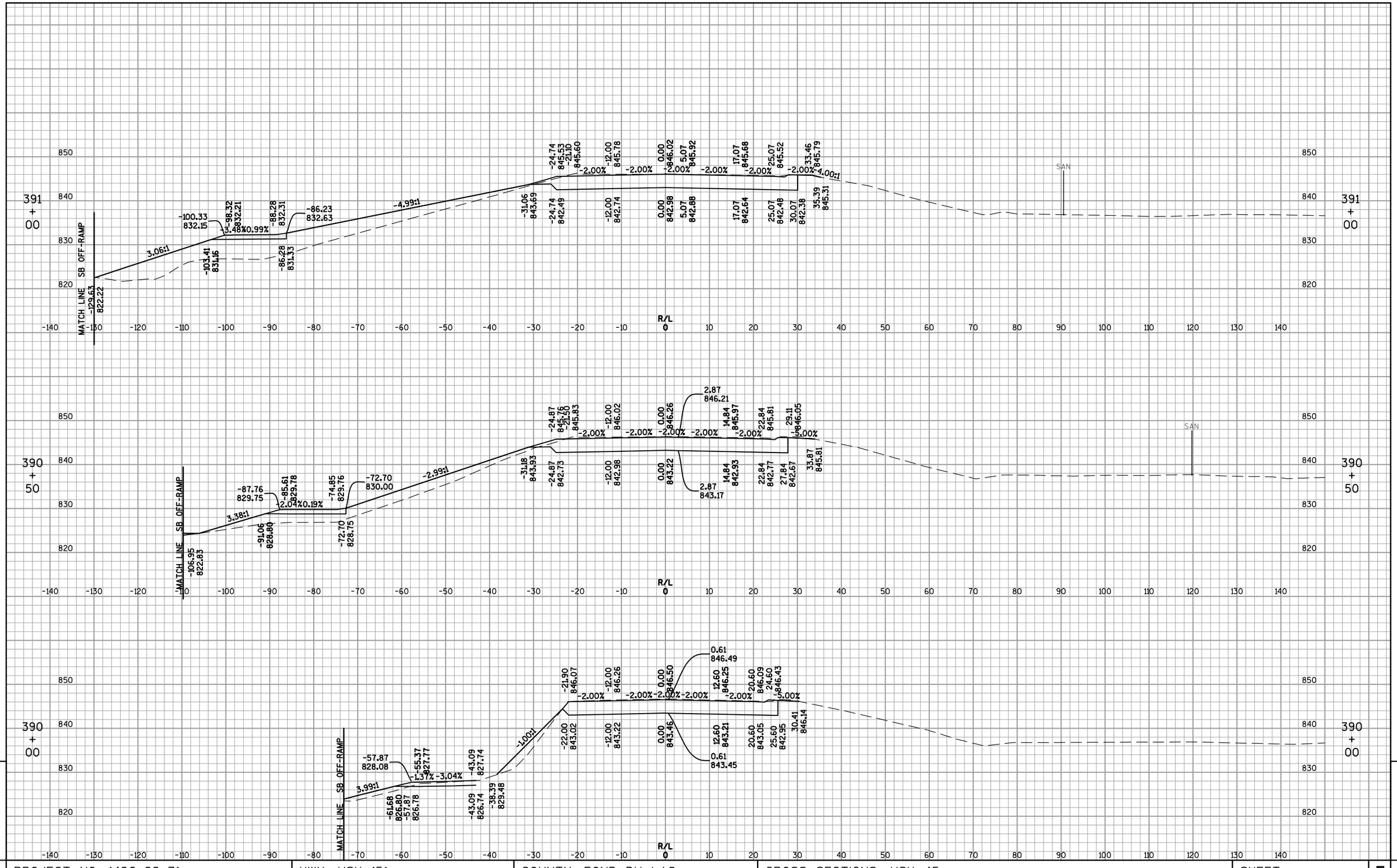

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: USH 45	SHEET 684	E

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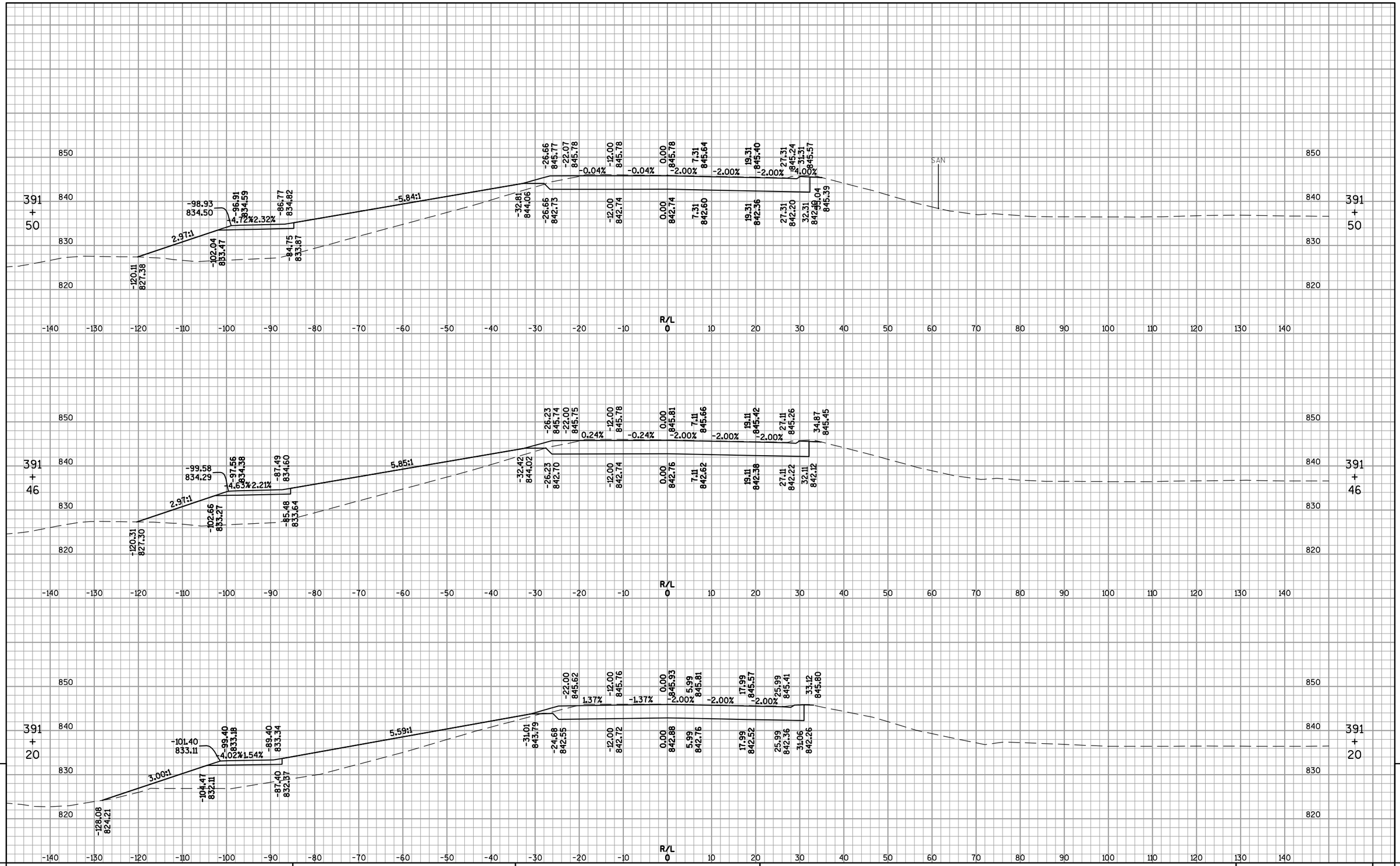
WISDOT/CADDS SHEET 49



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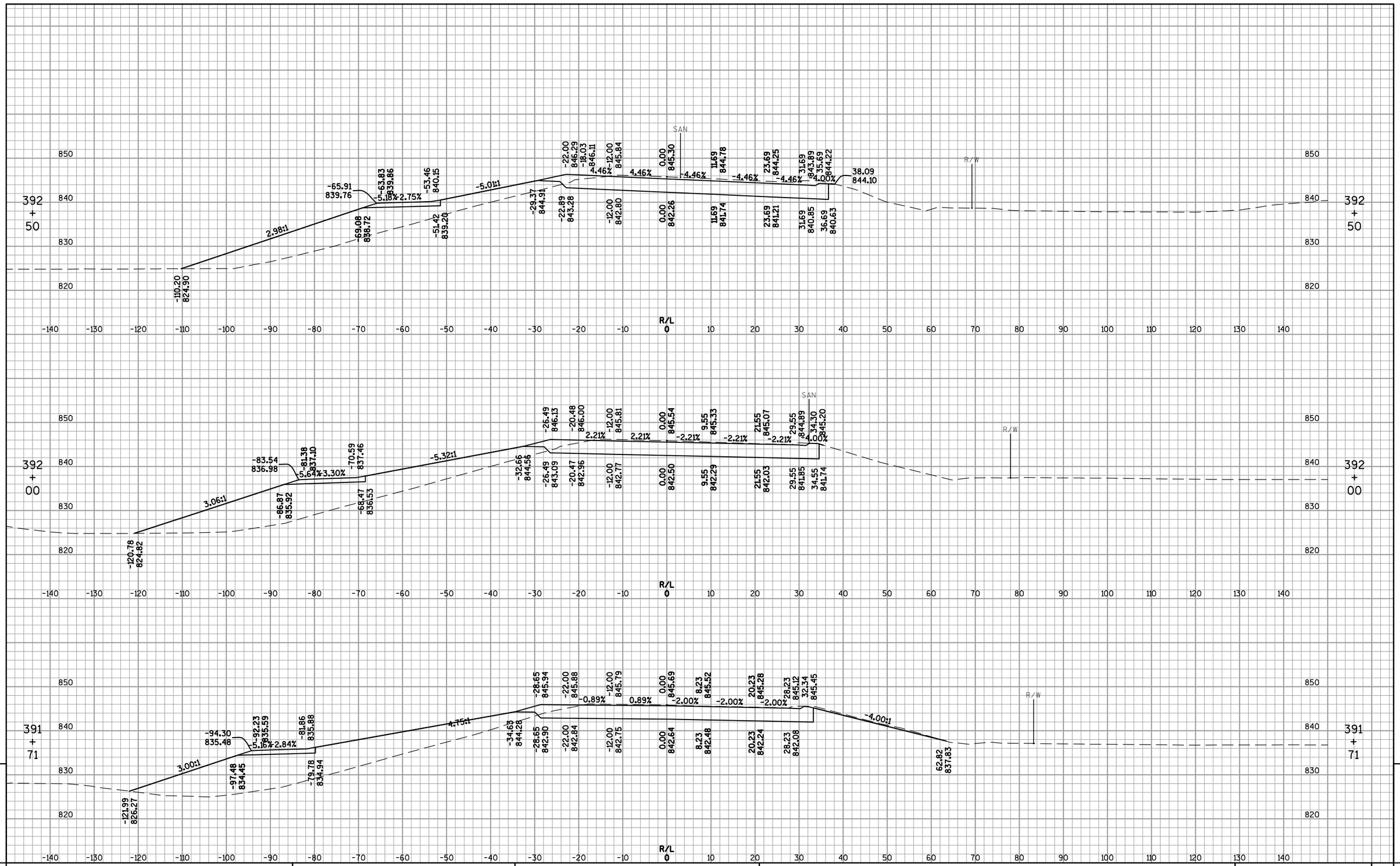
WISDOT/CADDS SHEET 49



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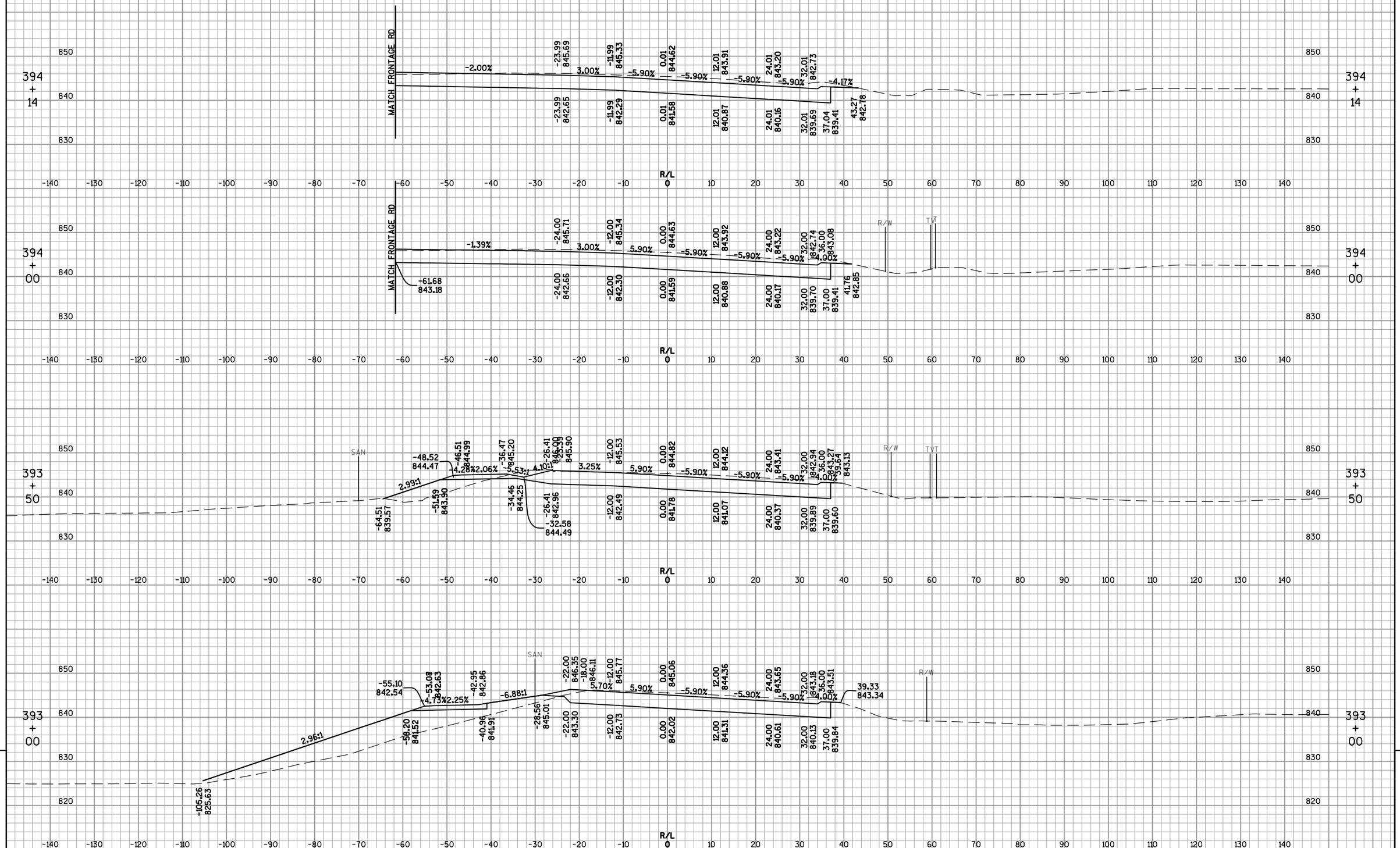

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PLOT DATE : 1/9/2015 2:20 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

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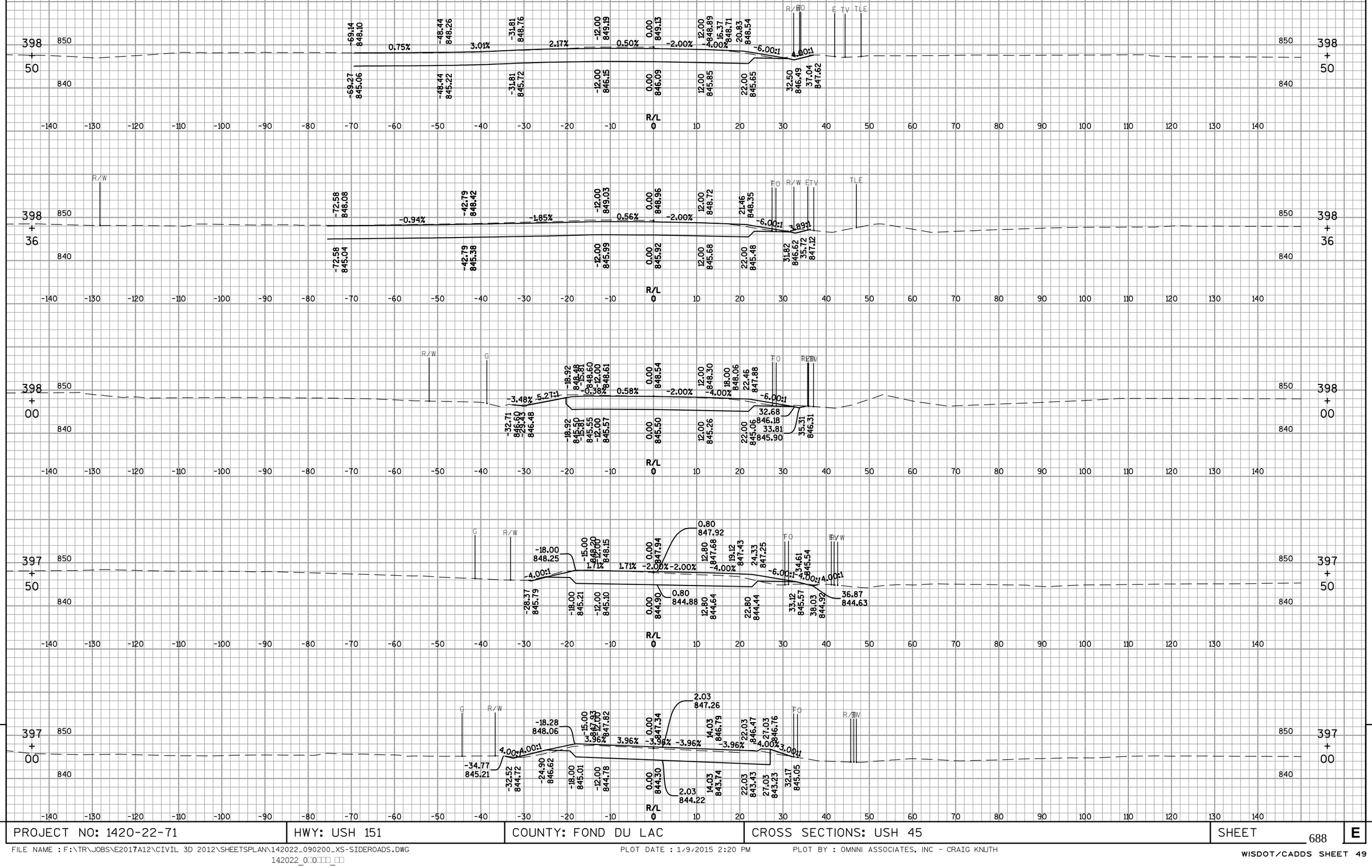

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PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

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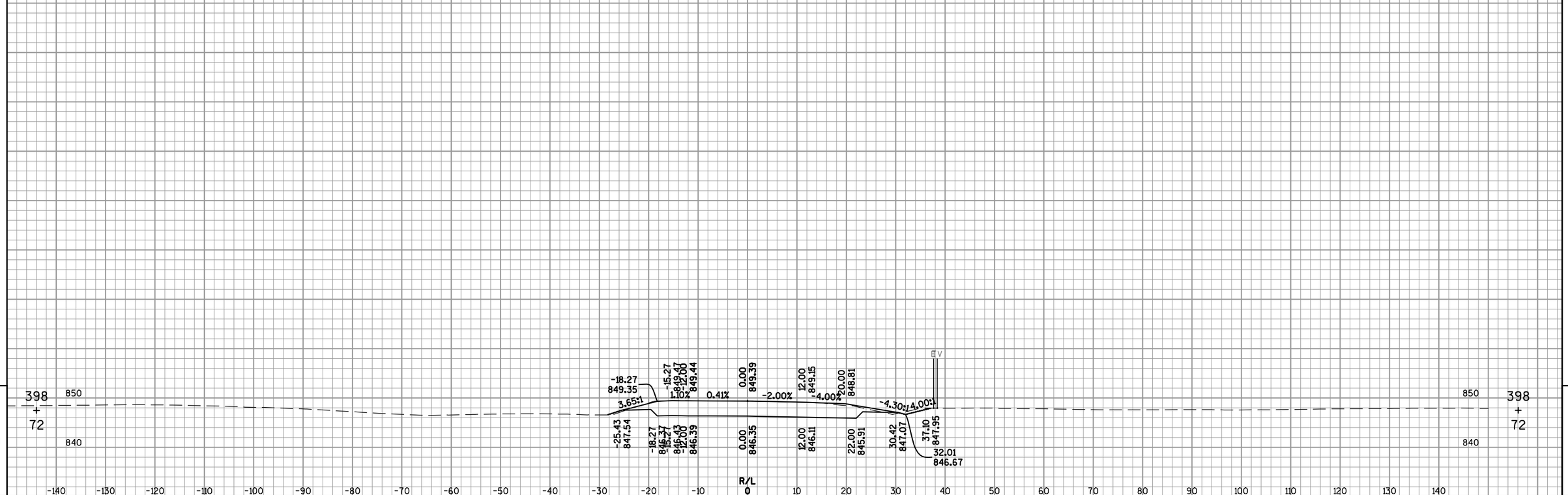

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PROJECT NO: 1420-22-71 | HWY: USH 151 | COUNTY: FOND DU LAC | CROSS SECTIONS: USH 45 | SHEET 689 | E

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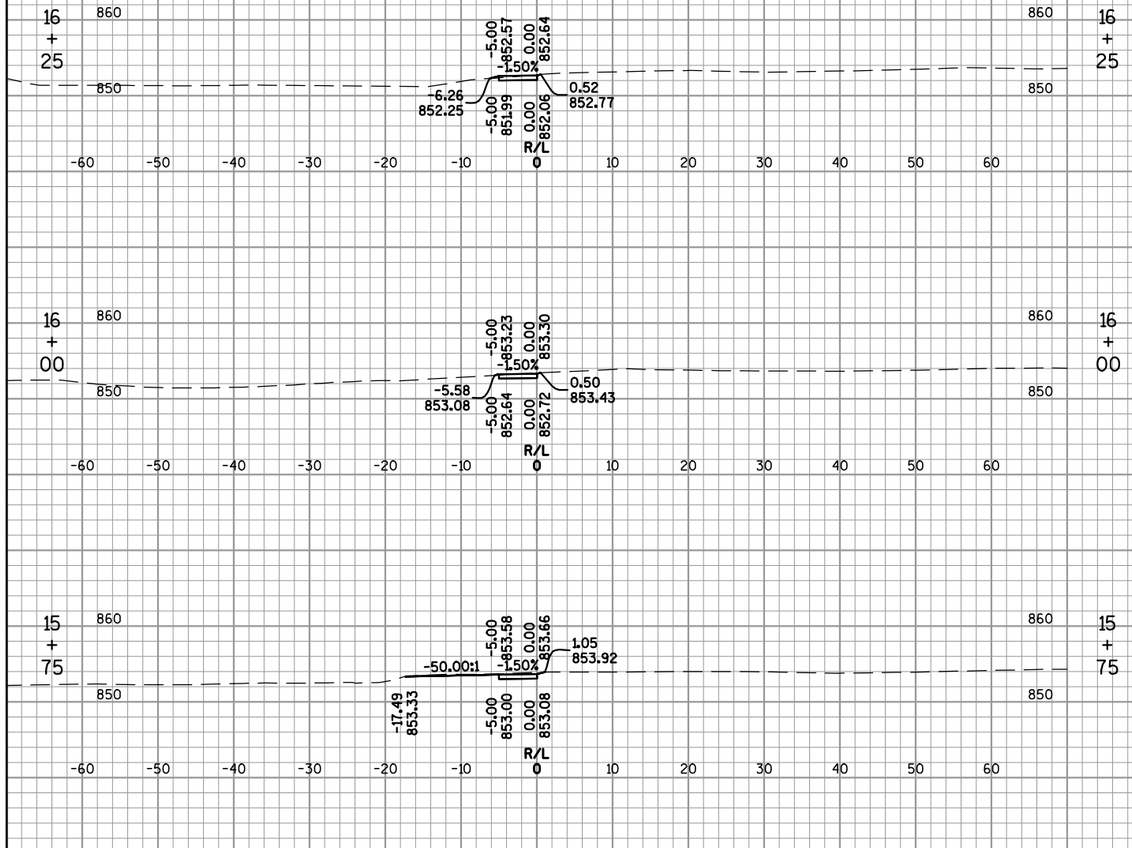
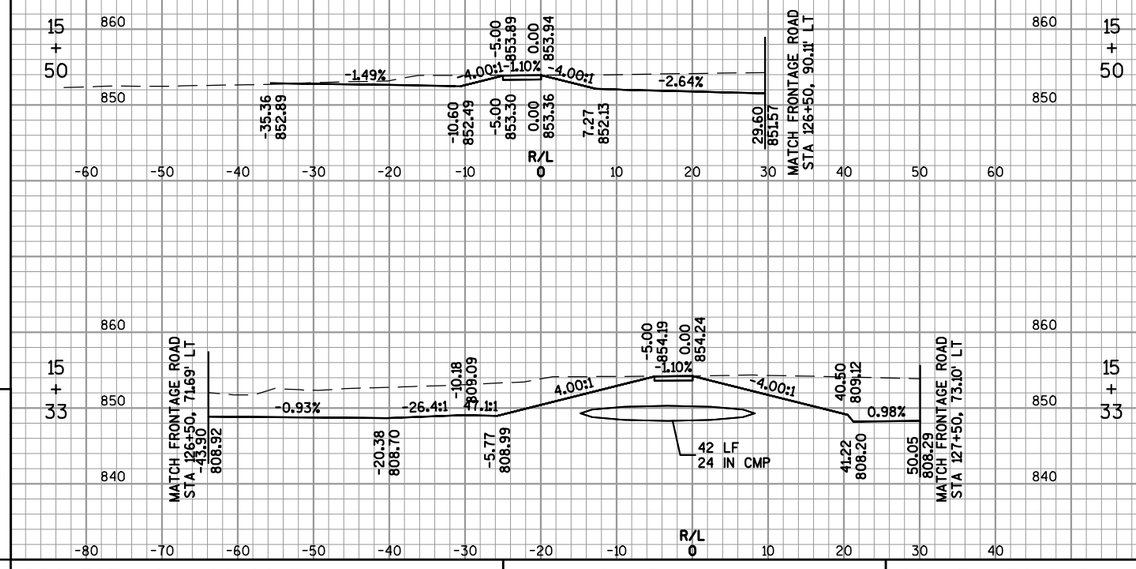
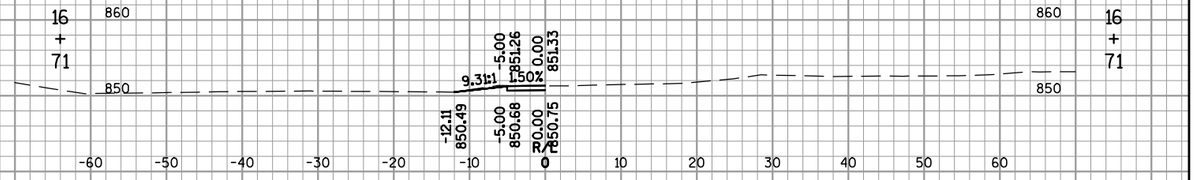
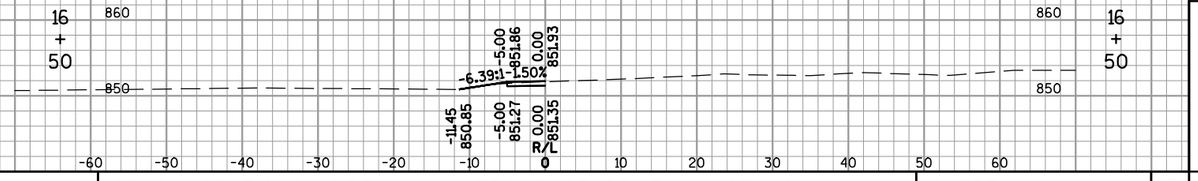
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49









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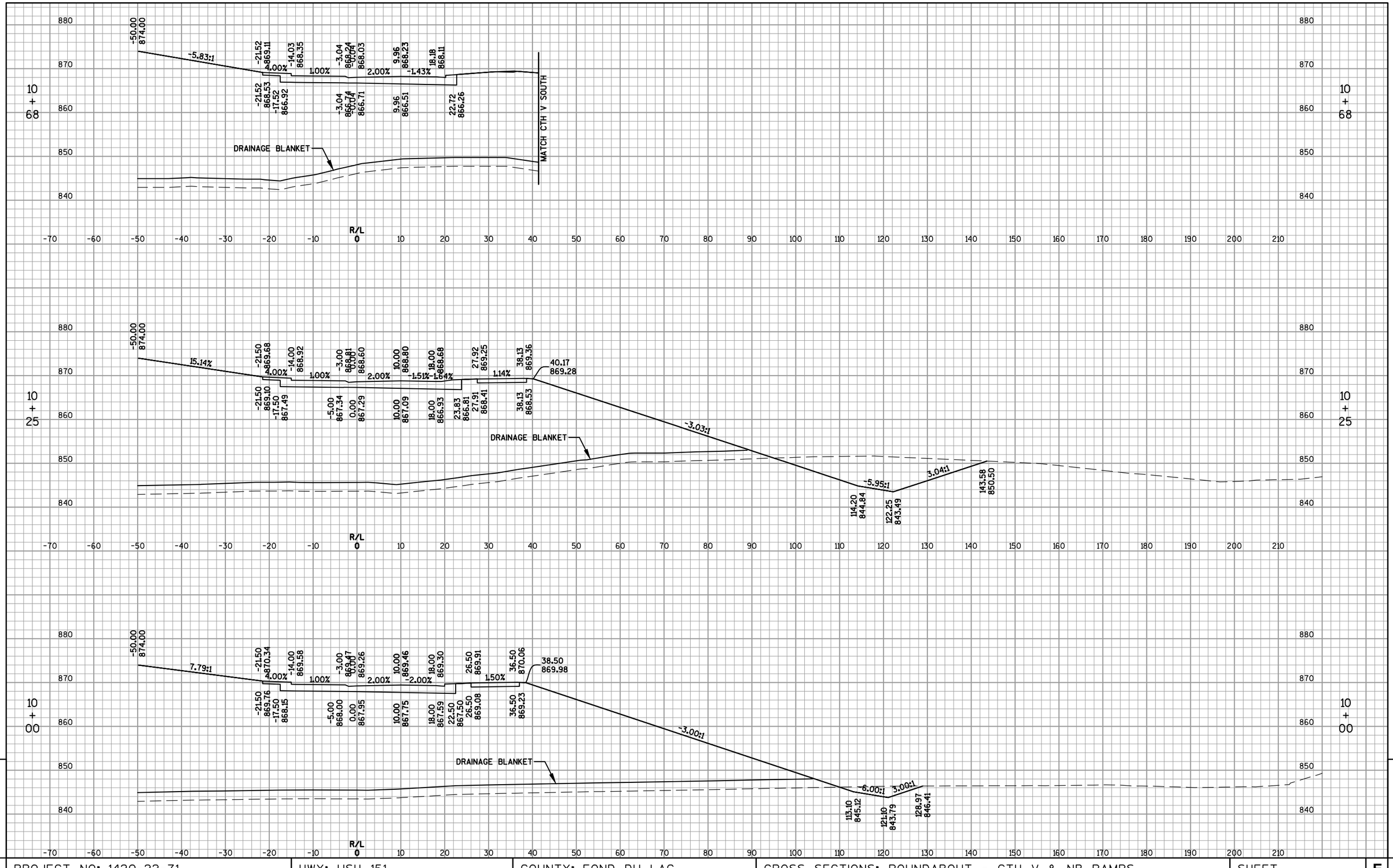

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: ROUNDABOUT - CTH V & NB RAMPS	SHEET 691	E

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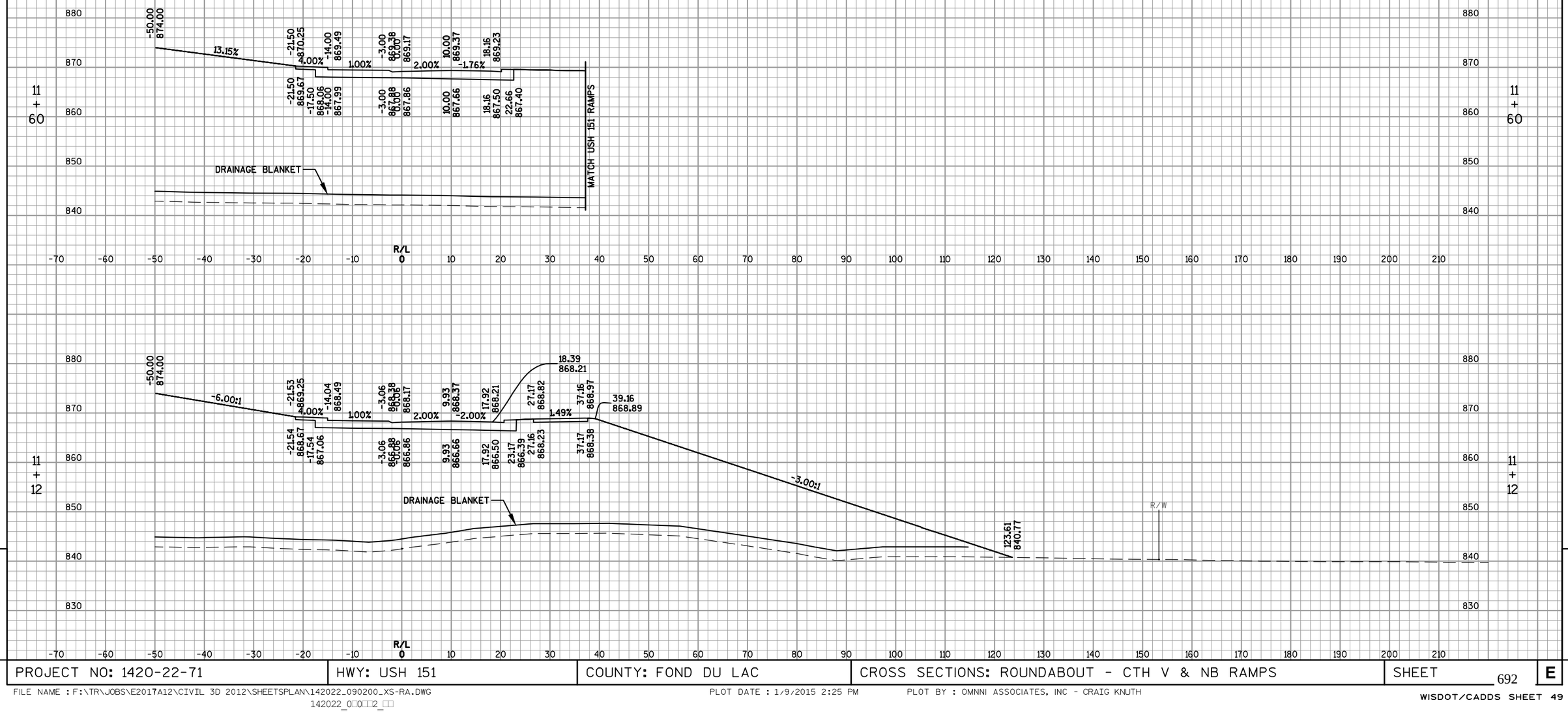
142022_0□0□1_□□

PLOT DATE : 1/9/2015 2:25 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: ROUNDABOUT - CTH V & NB RAMPS	SHEET 692	E

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PLOT DATE : 1/9/2015 2:25 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

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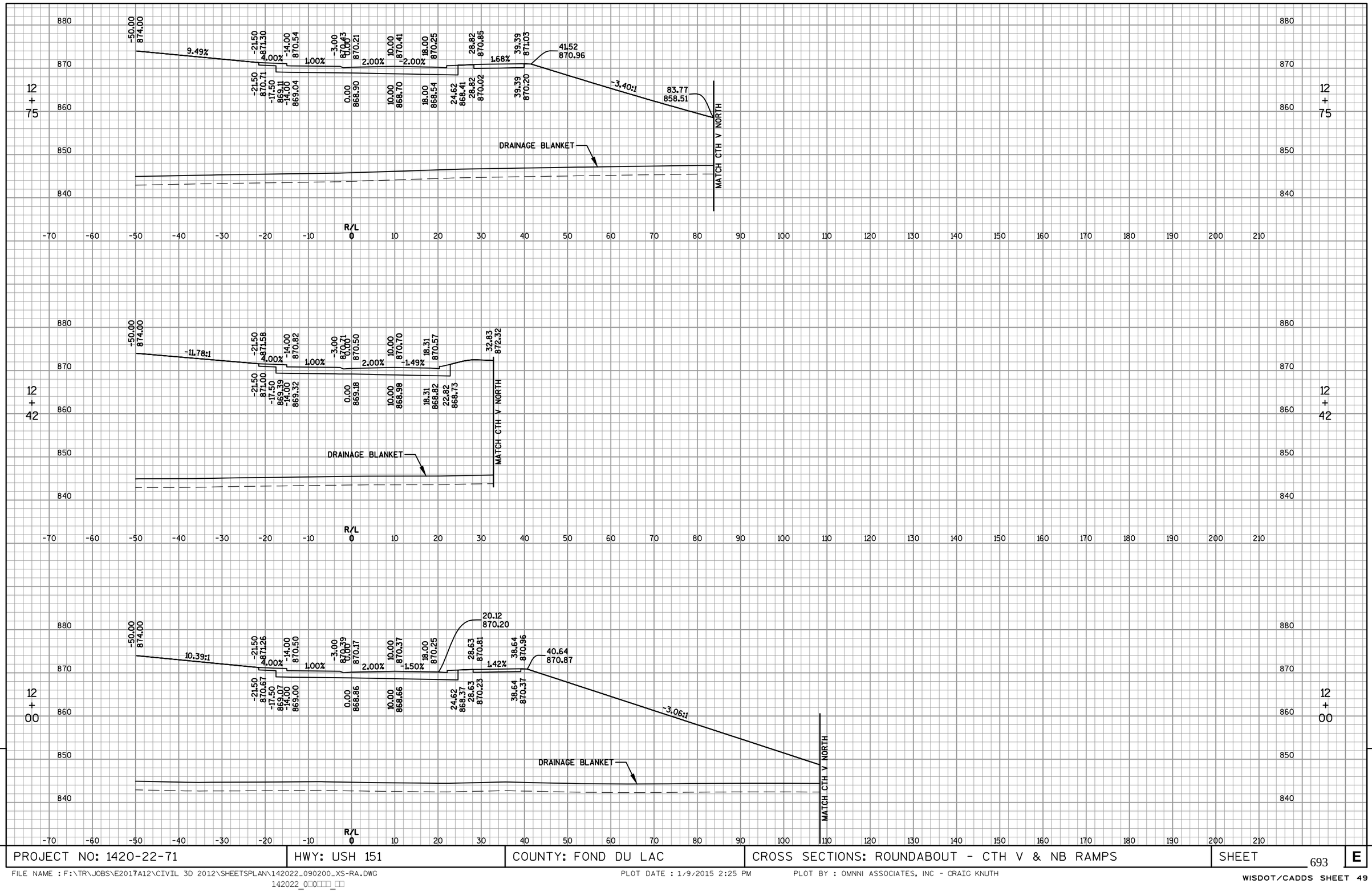

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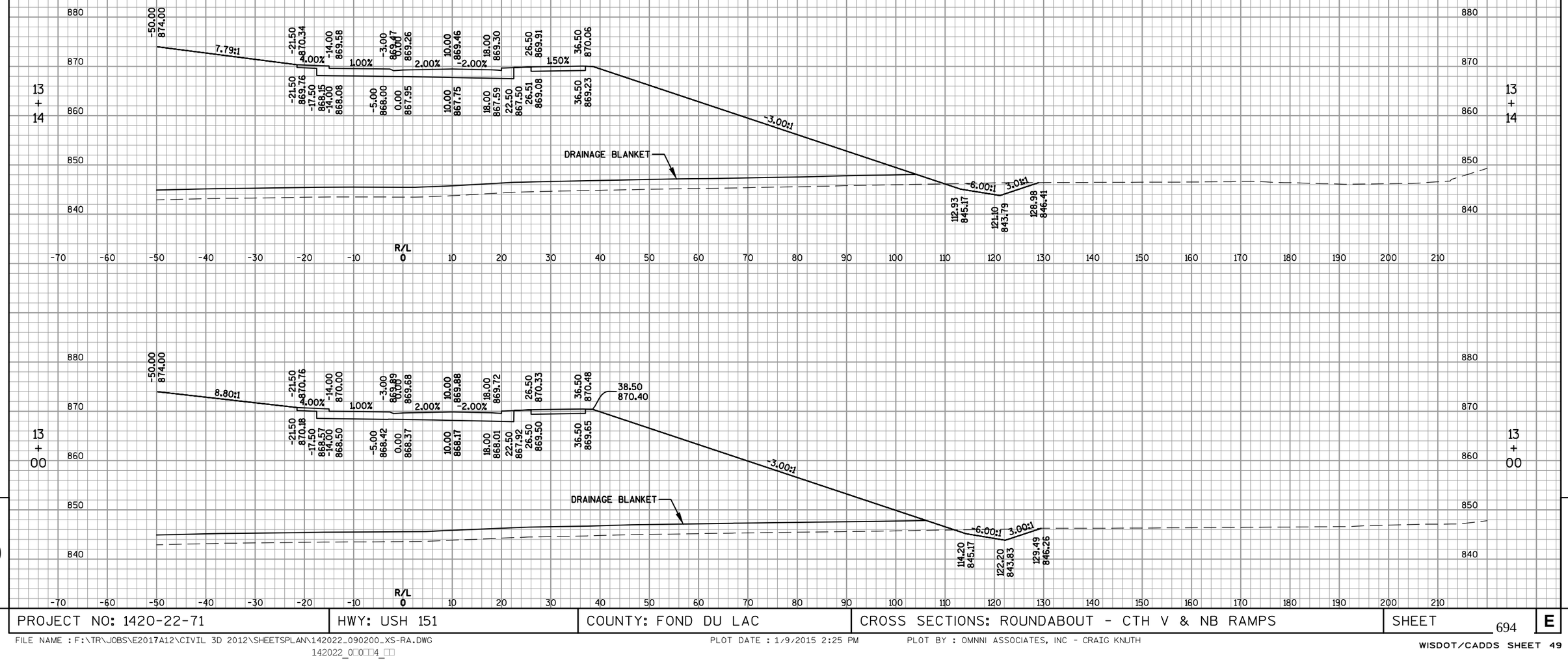

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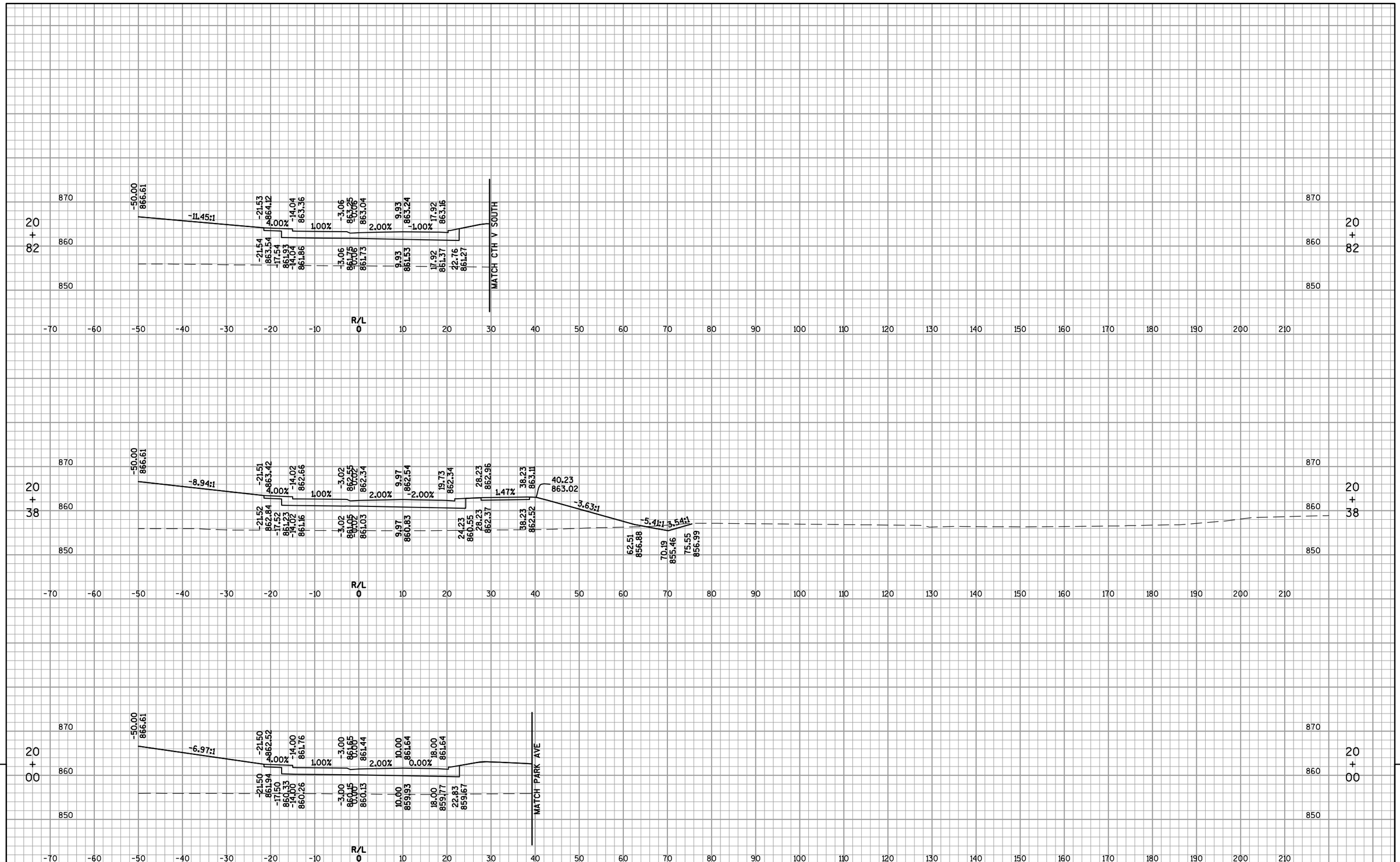

PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: ROUNDABOUT - CTH V & PARK AVENUE	SHEET 695

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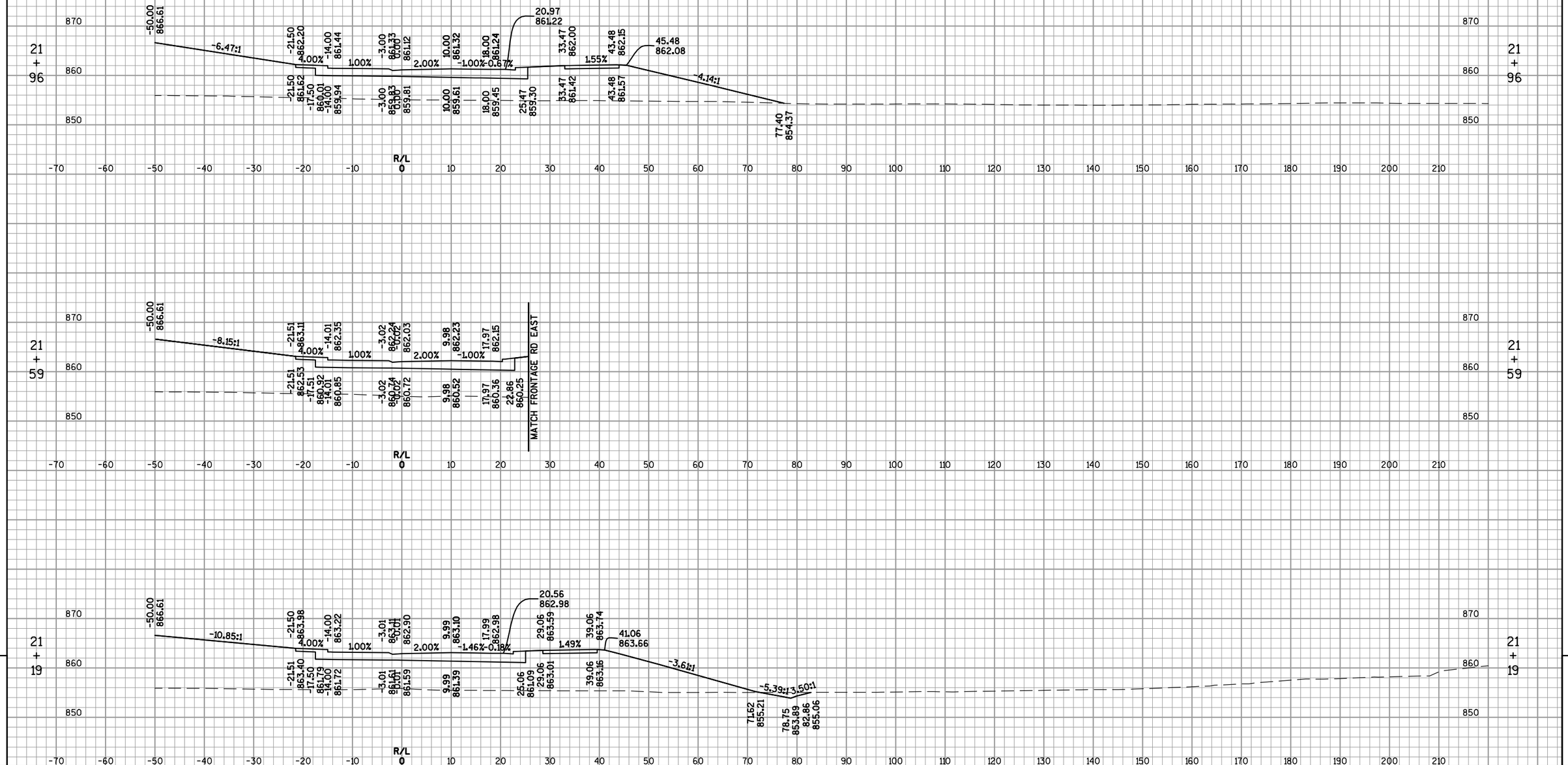
PLOT DATE : 1/9/2015 2:25 PM
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH
WISDOT/CADDS SHEET 49



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: ROUNDABOUT - CTH V & PARK AVENUE	SHEET 696

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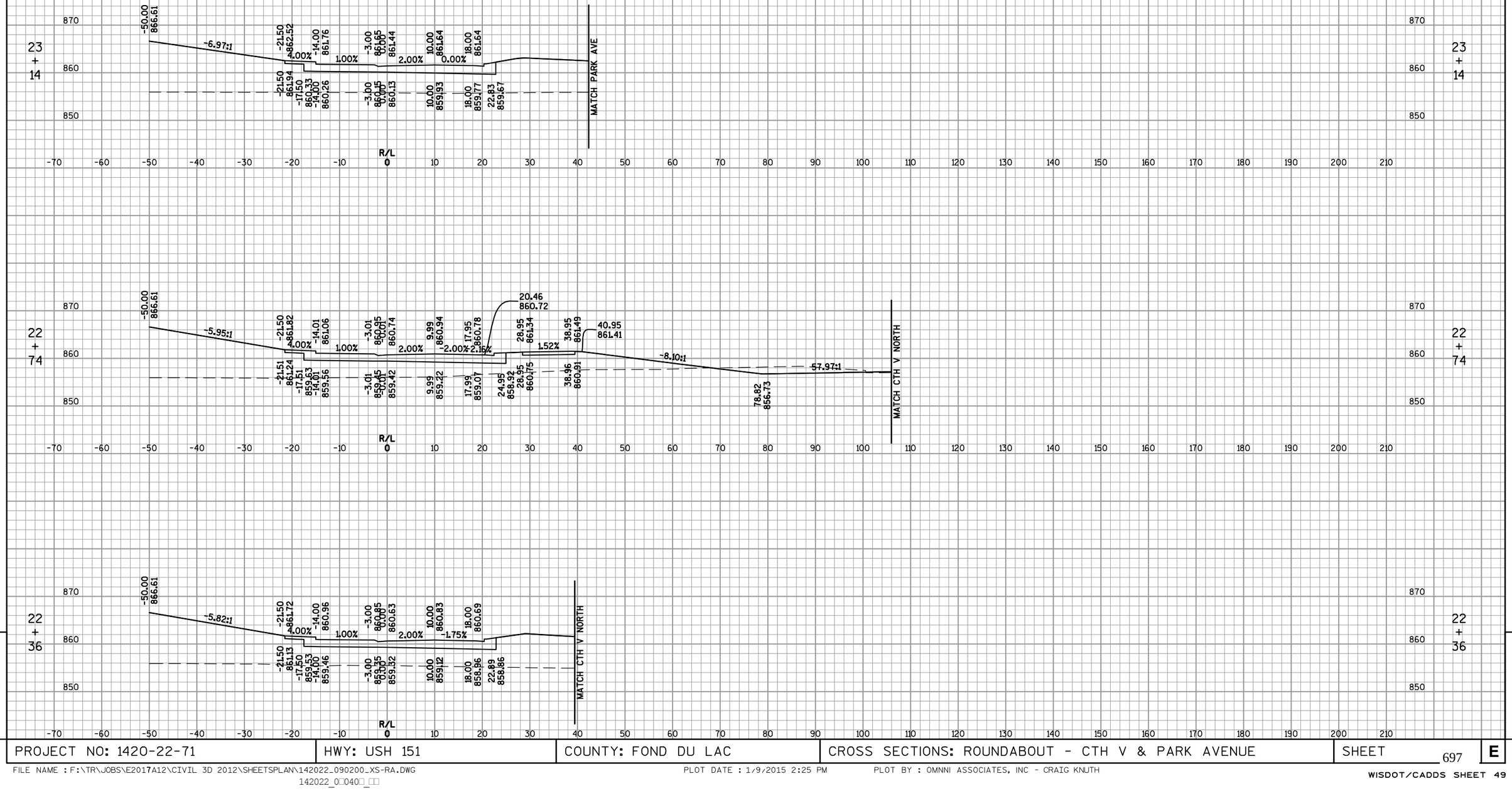
PLOT DATE : 1/9/2015 2:25 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: ROUNDABOUT - CTH V & PARK AVENUE	SHEET 697	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RA.DWG
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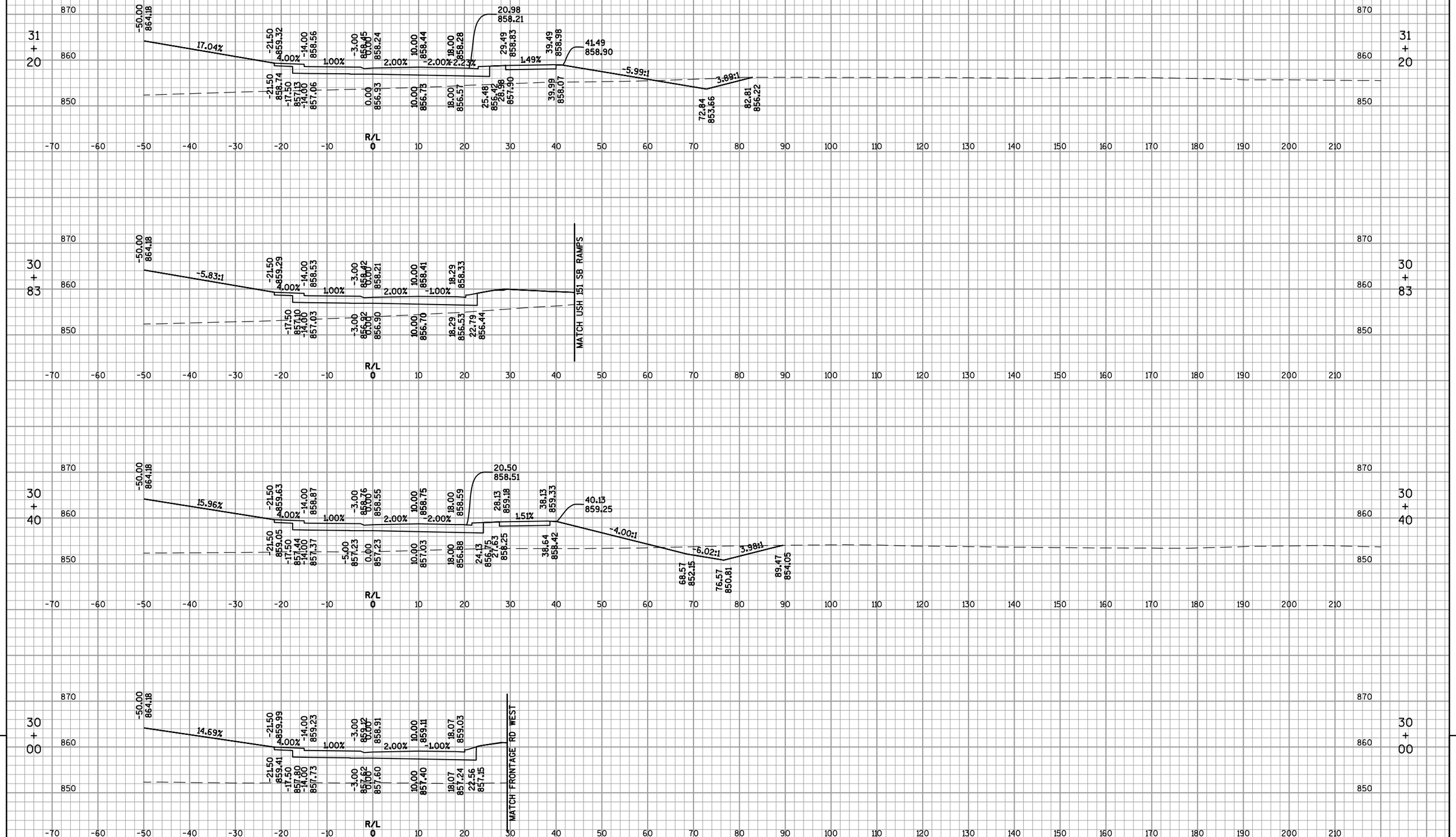
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH



PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: ROUNDABOUT - FRONTAGE ROAD & SB RAMPS	SHEET 698	E

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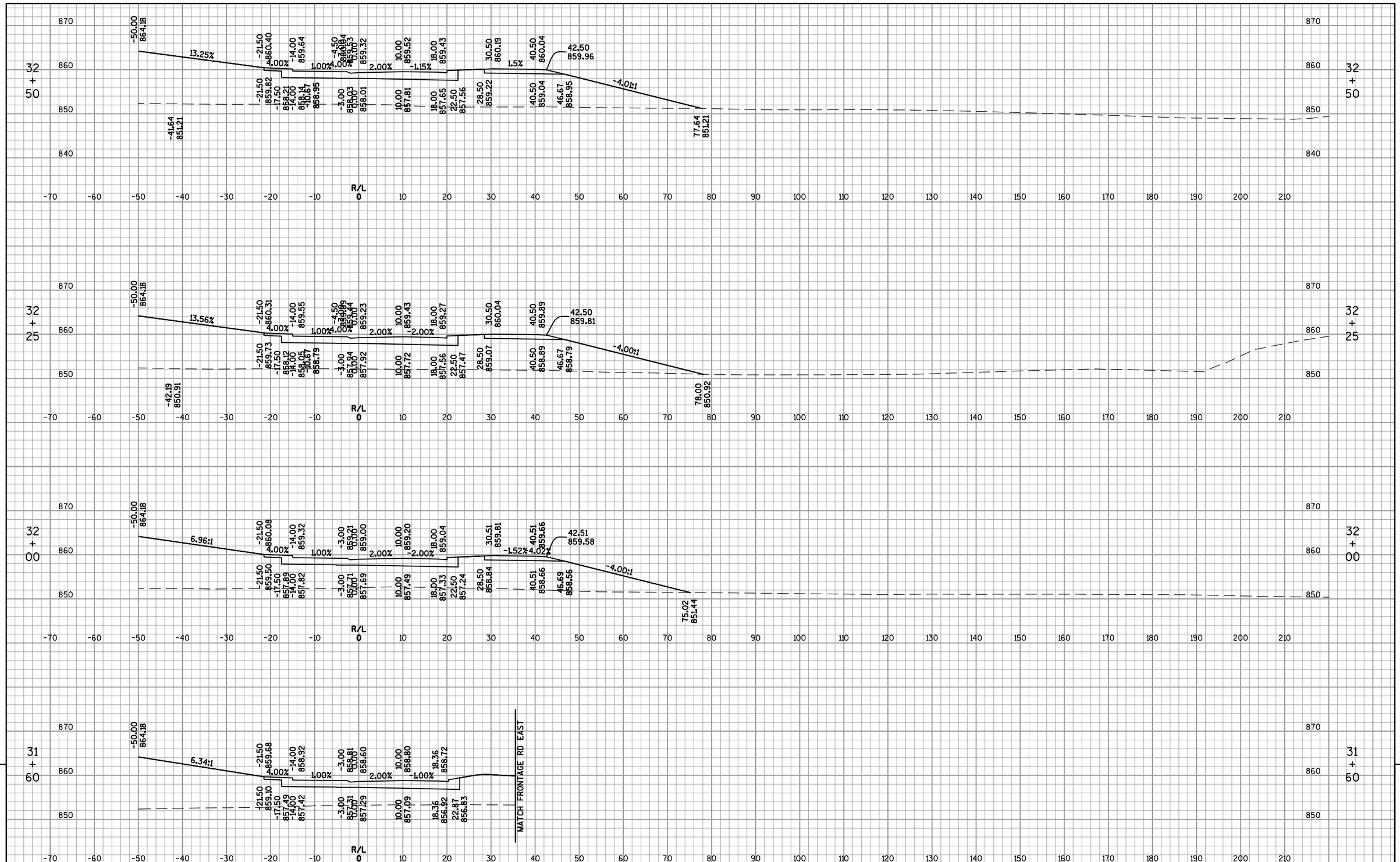
PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

WISDOT/CADDS SHEET 49



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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: ROUNDABOUT - FRONTAGE ROAD & SB RAMPS	SHEET 699	E

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PLOT DATE : 1/9/2015 2:25 PM

PLOT BY : OMNNI ASSOCIATES, INC - CRAIG KNUTH

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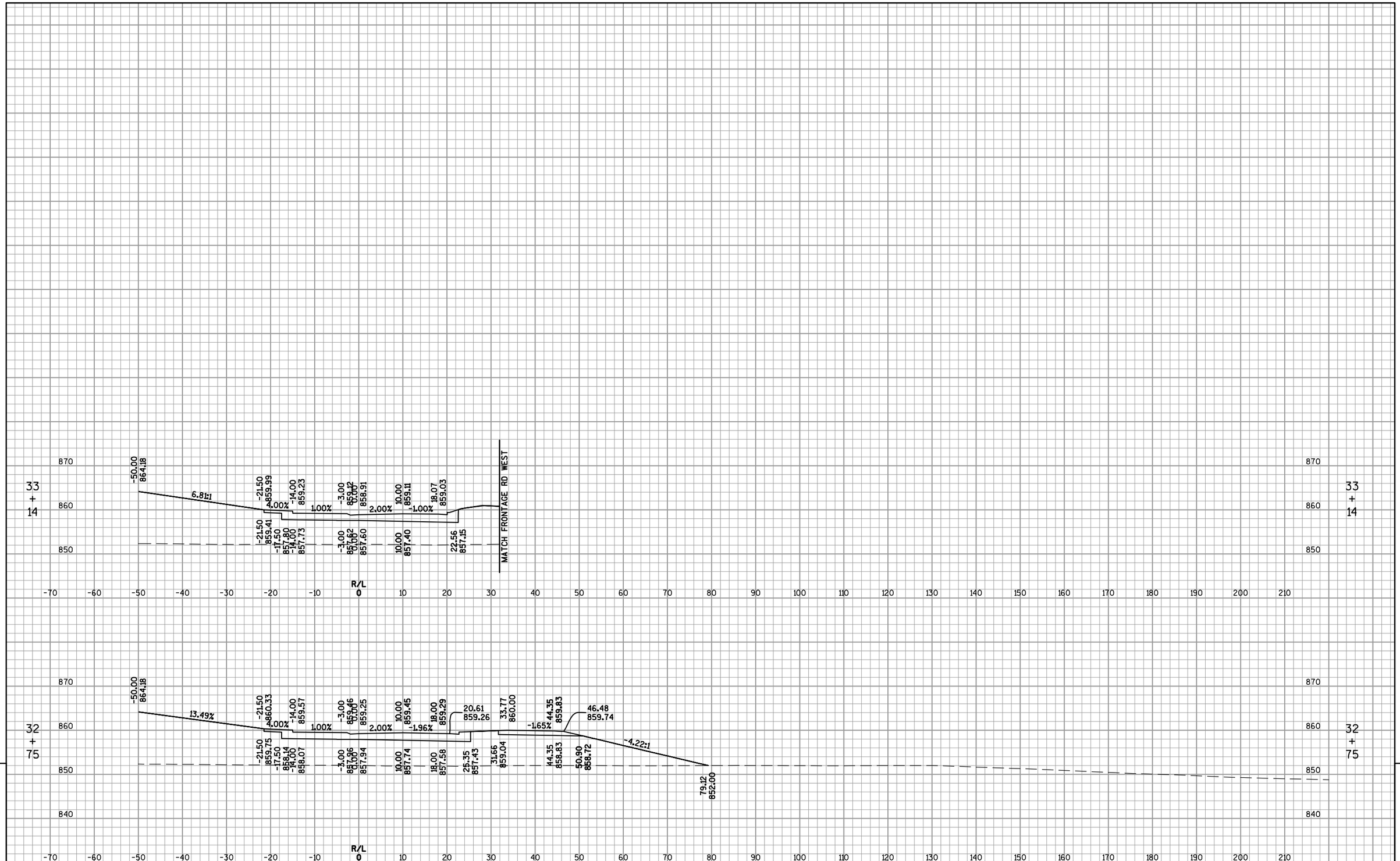

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PROJECT NO: 1420-22-71	HWY: USH 151	COUNTY: FOND DU LAC	CROSS SECTIONS: ROUNDABOUT - FRONTAGE ROAD & SB RAMPS	SHEET 700	E

FILE NAME : F:\TR\JOBS\E2017A12\CIVIL 3D 2012\SHEETSPLAN\142022_090200_XS-RA.DWG
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PLOT DATE : 1/9/2015 2:25 PM

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Notes

Wisconsin Department of Transportation

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