EAU DEC 2016

PROJECT ID: 1610-03-72

WITH: 1610-04-74

COUNTY: CLARK

ORDER OF SHEETS

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

TOTAL SHEETS = 274

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1610-03-72	WISC 2016498	1
1610-04-74	WISC 2016499	1

V. DORCHESTER, CENTER AVENUE

CTH A INTERSECTION

STH 13

CLARK COUNTY

STATE PROJECT NUMBER
1610-03-72

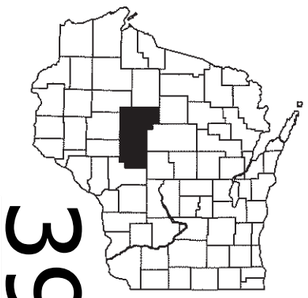
ABBOTSFORD - MEDFORD

PINE STREET TO MINK AVENUE

STH 13

CLARK COUNTY

STATE PROJECT NUMBER
1610-04-74



39

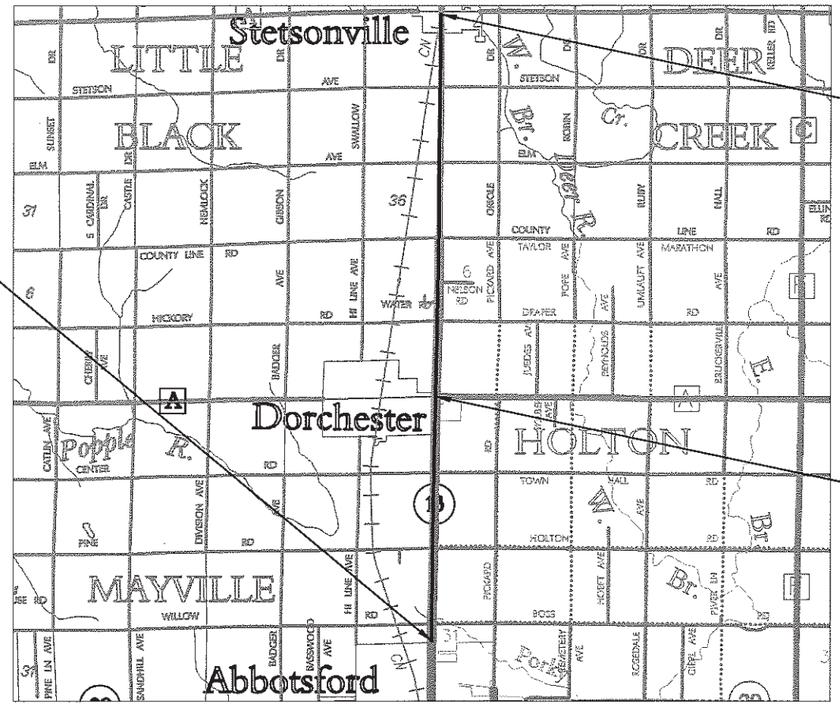
N

DESIGN DESIGNATION 1610-03-02 / 1610-04-04
STH 13 / CTH A

A.A.D.T.	2016	=	7800 / 3000
A.A.D.T.	2036	=	10800 / 4000
D.H.V.		=	11.4 / 5.6
D.D.		=	62/38 / 62/38
T.		=	14.2% / 7.0%
DESIGN SPEED		=	55 / 35 MPH
ESALS		=	3,044,100

BEGIN PROJECT 1610-04-74
STA 28+50
X=757422.915
Y=493792.678

R-7-W



END PROJECT 1610-04-74
STA 463+84
X=757667.629
Y=537322.548

PROJECT 1610-03-72
CTH A INTERSECTION

T-22-N

CONVENTIONAL SYMBOLS

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

LAYOUT
SCALE 0 2 MILE

TOTAL NET LENGTH OF CENTERLINE = 8.245

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, CLARK COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NW REGION
Designer	KOU THAO
Project Manager	STACIE LAMBELE
Regional Examiner	CHRISTINE KOSKI
Regional Supervisor	RICHARD SHERMO

APPROVED FOR THE DEPARTMENT
DATE: 7/28/16 (Signature)

E

LIST OF STANDARD ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
APPROX.	APPROXIMATE
A.E.W.	APRON ENDWALL
ASPH.	ASPHALTIC
A.D.T.	AVERAGE DAILY TRAFFIC
AZ.	AZIMUTH
BK.	BACK
BEG.	BEGIN
B.M.	BENCH MARK
C/L	CENTER LINE
CONC.	CONCRETE
CONST.	CONSTRUCTION
CO.	COUNTY
C.T.H.	COUNTY TRUNK HIGHWAY
X-SEC.	CROSS SECTION
CR.	CRUSHED
CFS	CUBIC FEET/SECOND
C.Y., CU. YD.	CUBIC YARD
CULV.	CULVERT
C.P.	CULVERT PIPE
D.O.T.	DEPARTMENT OF TRANSPORTATION
D.H.V.	DESIGN HOUR VOLUME
DIA.	DIAMETER
D.	DIRECTIONAL DISTRIBUTION
DISCH. OR DIS.	DISCHARGE
EA.	EACH
ELECT.	ELECTRIC
EL. OR ELEV.	ELEVATION
EMB.	EMBANKMENT
E.B.S.	EXCAVATION BELOW SUBGRADE
EXIST.	EXISTING
FERT.	FERTILIZE
F.E.	FIELD ENTRANCE
FIN.	FINISHED
FT.	FOOT
F.L.	FLOW LINE
GA.	GAUGE
HORIZ.	HORIZONTAL
CWT.	HUNDREDWEIGHT
INL.	INLET
LT.	LEFT
L.H.F.	LEFT-HAND FORWARD
LIN.	LINEAR
LIN. FT.	LINEAR FOOT
L.S.	LUMP SUM
MAX.	MAXIMUM
MI.	MILE
MISC.	MISCELLANEOUS
N.E.	NORTH EAST
N.W.	NORTH WEST
PAV'T	PAVEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.O.T.	POINT ON TANGENT
LB.	POUND
P.E.	PRIVATE ENTRANCE
PROJ.	PROJECT
R.	RANGE
REQ'D	REQUIRED
RT.	RIGHT
R.H.F.	RIGHT-HAND FORWARD
R/W	RIGHT OF WAY
RD.	ROAD
SHR.	SHRINKAGE
SL.	SLOPE
STD.	STANDARD
S.D.D.	STANDARD DETAIL DRAWINGS
S.T.H.	STATE TRUNK HIGHWAY
STA.	STATION
S.P.P.A.	STRUCTURAL PLATE PIPE ARCH
STRUCT.	STRUCTURE
SURF.	SURFACE
TEL.	TELEPHONE
TN.	TOWN
T.	TRUCKS (PERCENT OF)
UNCL.	UNCLASSIFIED
U.G.	UNDERGROUND
V.	VELOCITY OR DESIGN SPEED
V.C.	VERTICAL CURVE

GENERAL NOTES

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

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE 4-INCH SALVAGED TOPSOIL, FERTILIZED, SEEDED AND MULCHED.

THE EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S EROSION CONTROL IMPLEMENTATION PLAN (ECIP) AND APPROVED BY THE ENGINEER IN CONSULTATION WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES.

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

LOCATIONS FOR PERMANENT SIGNS SHOWN ON THE PLAN ARE APPROXIMATE. ACTUAL LOCATIONS OF PERMANENT SIGNS ARE TO BE COORDINATED IN THE FIELD BY THE ENGINEER.

THE LOCATIONS OF ALL DRIVEWAYS WILL BE DETERMINED BY THE ENGINEER.

8-INCH HMA PAVEMENT SHALL BE CONSTRUCTED WITH 3-INCH AND 3-INCH 3-MT 58-34 H LOWER LAYERS AND A 2-INCH 4-MT 58-34 H UPPER LAYER.

5-INCH HMA PAVEMENT SHALL BE CONSTRUCTED WITH 3-INCH 3-MT 58-34 H LOWER LAYER AND A 2-INCH 4-MT 58-34 H UPPER LAYER.

3.25-INCH HMA PAVEMENT SHALL BE CONSTRUCTED WITH A 1.25-INCH 4-MT 58-34 H LOWER LAYER AND A 2-INCH 4-MT 58-34 H UPPER LAYER.

2-INCH HMA PAVEMENT SHALL BE CONSTRUCTED WITH A 2-INCH 4-MT 58-34 H UPPER LAYER.

ALL CURB AND GUTTER RADII, PAVEMENT DIMENSIONS AND STATIONS SHOWN IN PLANS ARE MEASURED TO THE EDGE OF PAVEMENT.

EXCAVATION BELOW SUBGRADE (EBS) OR MARSH EXCAVATION LOCATIONS SHOWN IN PLANS AND ON CROSS SECTIONS ARE ESTIMATED. ADDITIONAL EBS OR MARSH EXCAVATION MAY BE REQUIRED AT OTHER LOCATIONS NOT SHOWN IN PLANS WHERE POOR SOILS EXIST. ACTUAL LIMITS OF EBS OR MARSH EXCAVATION IS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

DETAILS OF INSTALLATION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS PLAN SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, STANDARD DETAILS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

UTILITIES

COMMUNICATION LINE

CHARTER COMMUNICATIONS
JESSE GRUNY
508 N CENTRAL AVE, SUITE 103
MARSHFIELD, WI 54449
715-651-5605 (MOBILE)
jesse.gruny@charter.com

FRONTIER COMMUNICATIONS
CALVIN KLADE
1851 N 14TH AVE
WAUSAU, WI 54401
715-847-1525 (OFFICE)
715-573-2110 (MOBILE)
calvin.klade@ftr.com

TDS TELECOM
STEVE JAKUBIEC
10 COLLEGE AVE, SUITE 218A
APPLETON, WI 54911
920-882-4166 (OFFICE)
920-562-7221 (MOBILE)
Steve.jakubiec@tdstelecom.com

ELECTRICITY

DAIRYLAND POWER COOPERATIVE
KURT D CHILDS
3200 EAST AVENUE SOUTH
PO BOX 817
LA CROSSE, WI 54602-0817
608-788-4000 (OFFICE)
kdc@dairynet.com

TAYLOR COUNTY ELECTRIC COOPERATIVE
KEVIN COMSTOCK
N1831 HWY 13
MEDFORD, WI 54451
800-862-2407 (OFFICE)
715-678-2411 (MOBILE)
kevin@taylorelectric.org

XCEL ENERGY
DAVE PEPPER
500 NORTH FIFTH STREET
ABBOTSFORD, WI 54405
715-737-2678 EXT 16 (OFFICE)
715-797-1935 (MOBILE)
dave.pepper@xcelenergy.com
COPY ALL CORRESPONDENCE TO:
DAWN SCHULTZ
1414 W HAMILTON AVE
PO BOX 8
EAU CLAIRE WI 54702-0008
715-737-2482 (OFFICE)
dawn.schultz@xcelenergy.com

ELECTRICITY - TRANSMISSION

DAIRYLAND POWER COOPERATIVE
KURT D CHILDS
3200 EAST AVENUE SOUTH
PO BOX 817
LA CROSSE, WI 54602-0817
608-788-4000 (OFFICE)
kdc@dairynet.com

GAS/PETROLEUM

ANR PIPELINE CO
24-HOUR EMERGENCY
800-447-8066
DUANE PRONDZINSKI
2629 SUNSET DR
STEVENS POINT, WI 54482
715-295-3143 (OFFICE)
715-460-4322 (MOBILE)
duane.prodzinski@transcanada.com

WE ENERGIES
24-HOUR EMERGENCY (GAS)
800-261-5325
RYAN MIENTKE
1921 8TH ST S
WISCONSIN RAPIDS, WI 54494
715-421-7249 (OFFICE)
715-421-9293 (MOBILE)
ryan.mientke@we-energies.com

SEWER AND WATER

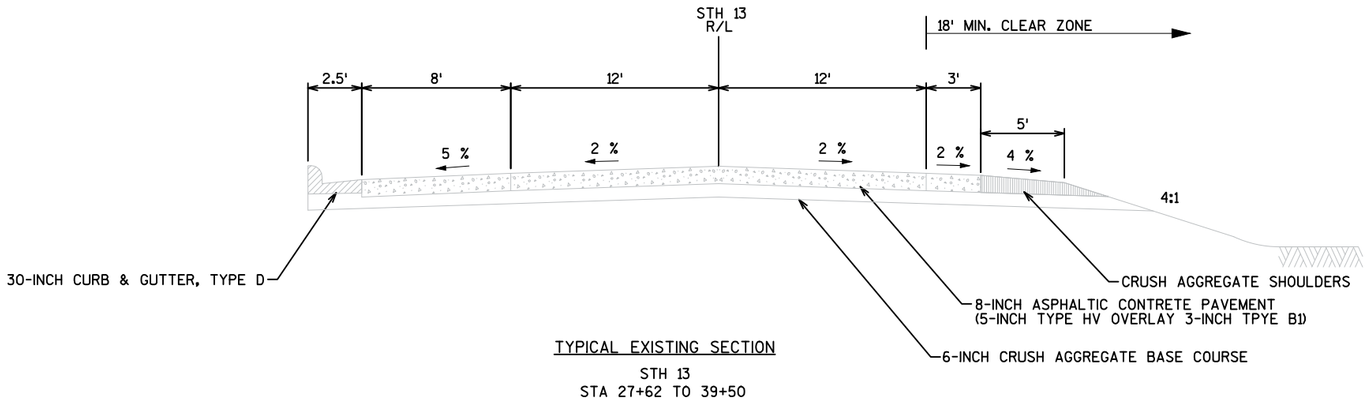
CITY OF ABBOTSFORD - WATER
CRAIG STUTTGEN
PO BOX 589
ABBOTSFORD, WI 54405
715-223-3444 (OFFICE)
715-613-9444 (MOBILE)
C.STUTTGEN@CI.ABBOTSFORD.WI.US

VILLAGE OF DORCHESTER - SEWER/WATER
DEAN FAUDE
PO BOX 176
DORCHESTER, WI 54425
715-654-5006 (OFFICE)
715-965-7347 (MOBILE)
dpwdorchester@tds.net

DEPARTMENT OF NATURAL RESOURCES

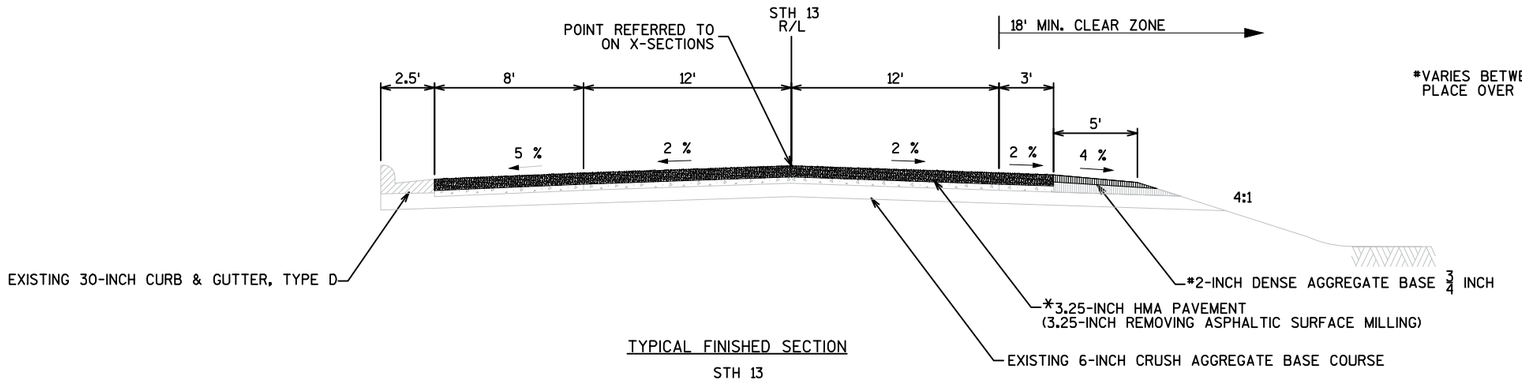
DNR WEST CENTRAL REGION HQ
CHRIS WILLGER
1300 W. CLAIRMONT STREET
EAU CLAIRE, WI 54702
715-839-1609 (OFFICE)
CHRISTOPHERJ.WILLGER@WISCONSIN.GOV

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



TYPICAL EXISTING SECTION

STH 13
STA 27+62 TO 39+50



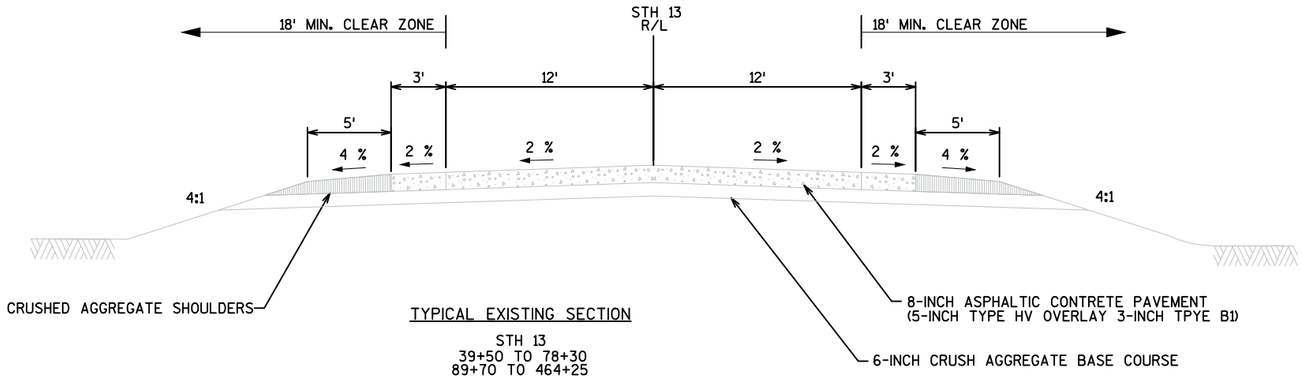
*VARIES BETWEEN 1-2 INCHES.
PLACE OVER EXISTING BASE SHOULDERS.

TYPICAL FINISHED SECTION

STH 13
STA 27+62 TO 39+50

*LOWER 1.25-INCH LAYER-4MT58-34H
UPPER 2-INCH LAYER-4MT58-34H

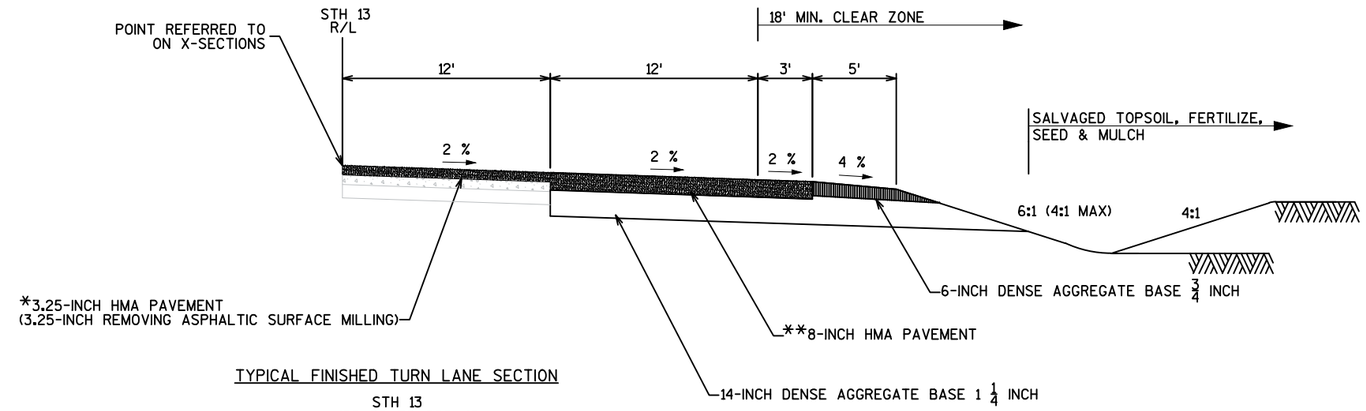
PROJECT NO: 1610-04-74/1610-03-72	HWY: STH 13	COUNTY: CLARK	TYPICAL SECTIONS	SHEET 3	E



TYPICAL EXISTING SECTION

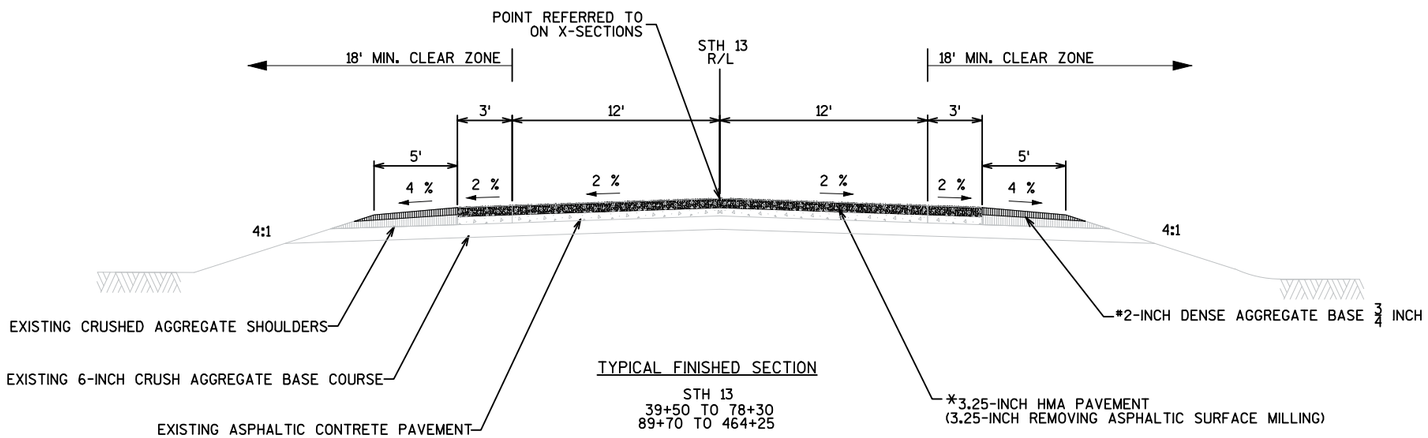
STH 13
39+50 TO 78+30
89+70 TO 464+25

NOTE:
PAVE 3-FT SHOULDERS ALONG WITH 12-FT MAINLINE PASS.



TYPICAL FINISHED TURN LANE SECTION

STH 13
198+86 TO 209+42
210+97 TO 216+73



TYPICAL FINISHED SECTION

STH 13
39+50 TO 78+30
89+70 TO 464+25

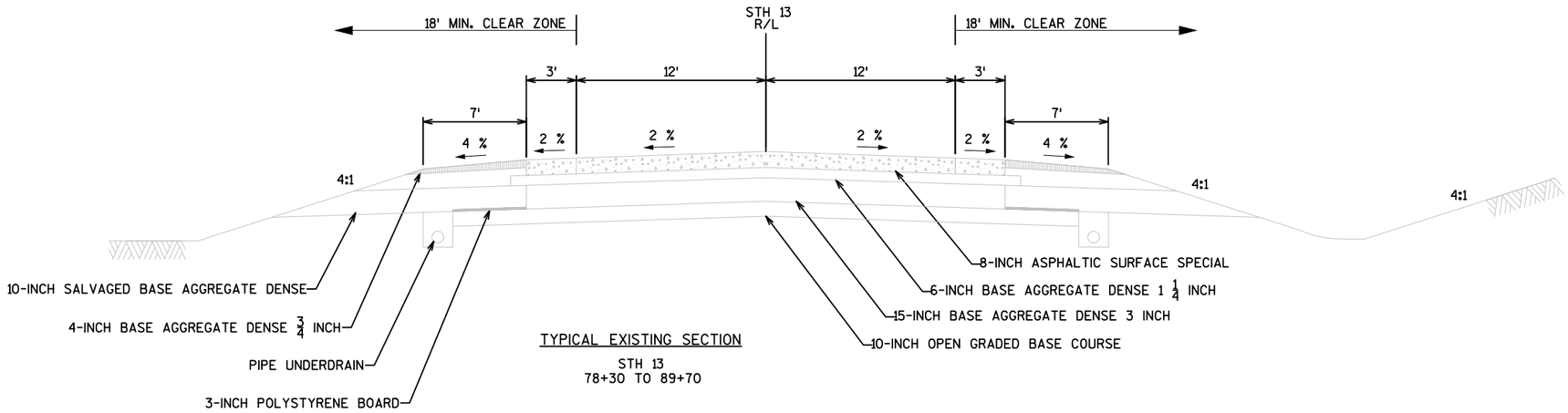
*LOWER 1.25-INCH LAYER-4MT58-34H
UPPER 2-INCH LAYER-4MT58-34H

**LOWER 3-INCH LAYER-3MT58-34H
MIDDLE 3-INCH LAYER-3MT58-34H
UPPER 2-INCH LAYER-4MT58-34H

*VARIES BETWEEN 1-2 INCHES.
PLACE OVER EXISTING BASE SHOULDERS.

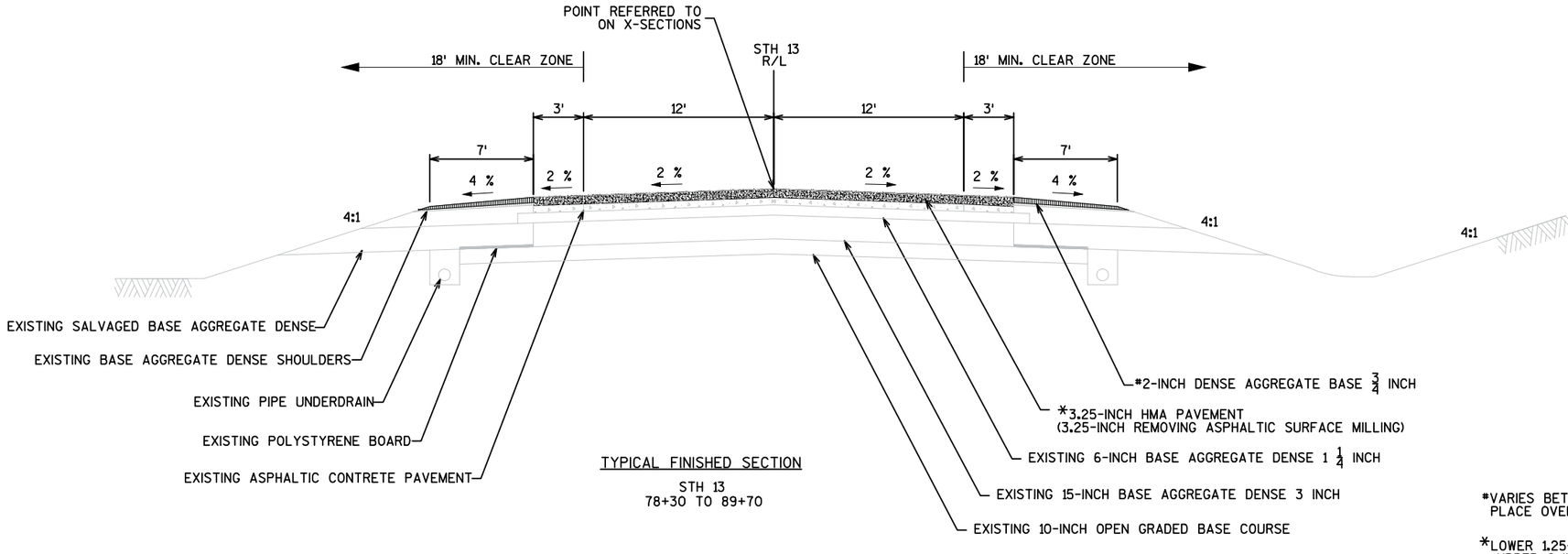
PROJECT NO: 1610-04-74/1610-03-72	HWY: STH 13	COUNTY: CLARK	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\020301_TS_STH13_16100404.DWG
LAYOUT NAME - ****
PLOT DATE : 9/21/2016 11:18 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 0.001429
WISDOT/CADDS SHEET 42



TYPICAL EXISTING SECTION

STH 13
78+30 TO 89+70



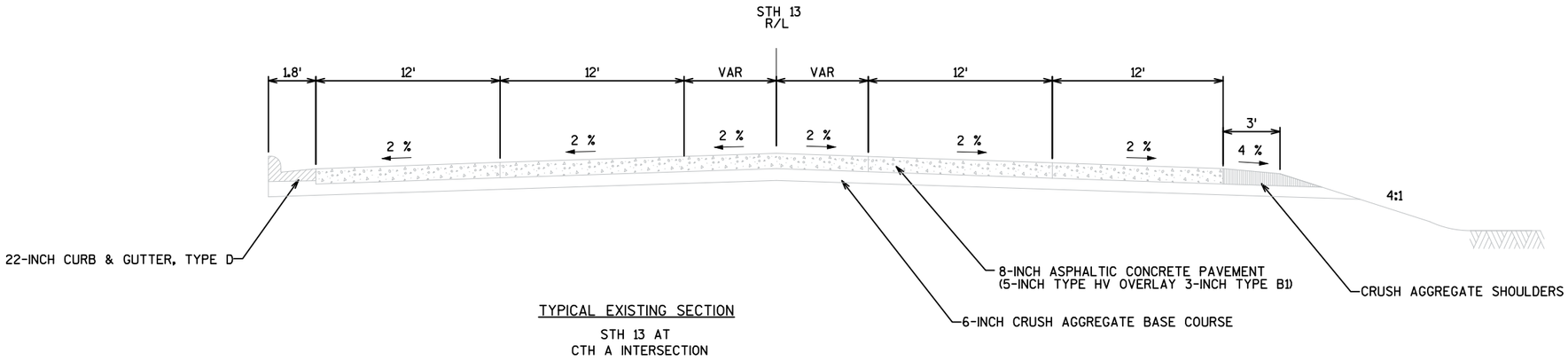
TYPICAL FINISHED SECTION

STH 13
78+30 TO 89+70

*VARIES BETWEEN 1-2 INCHES.
PLACE OVER EXISTING BASE SHOULDERS.

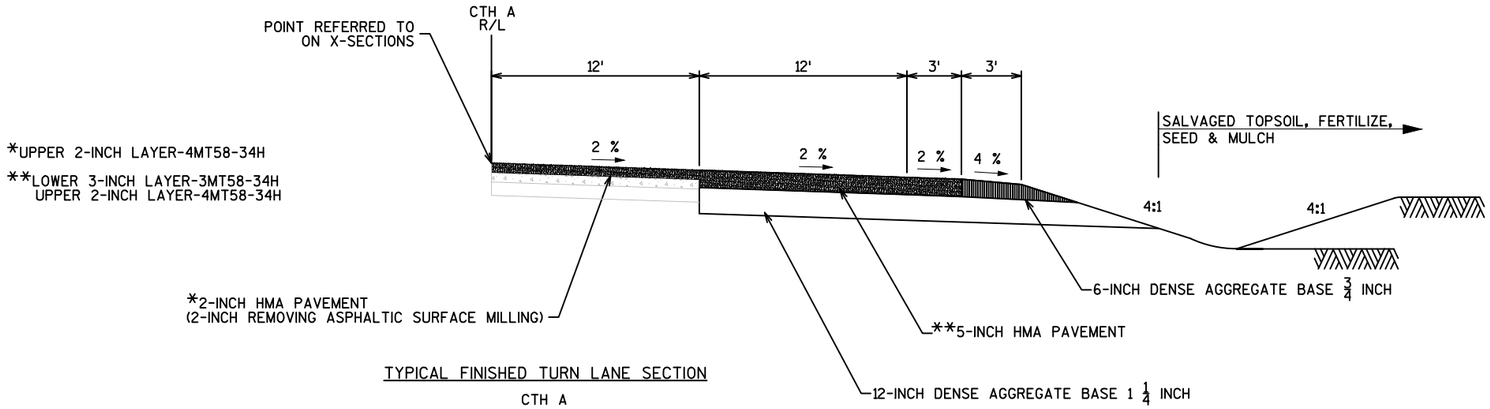
*LOWER 1.25-INCH LAYER-4MT58-34H
UPPER 2-INCH LAYER-4MT58-34H

PROJECT NO: 1610-04-74/1610-03-72	HWY: STH 13	COUNTY: CLARK	TYPICAL SECTIONS	SHEET 5	E



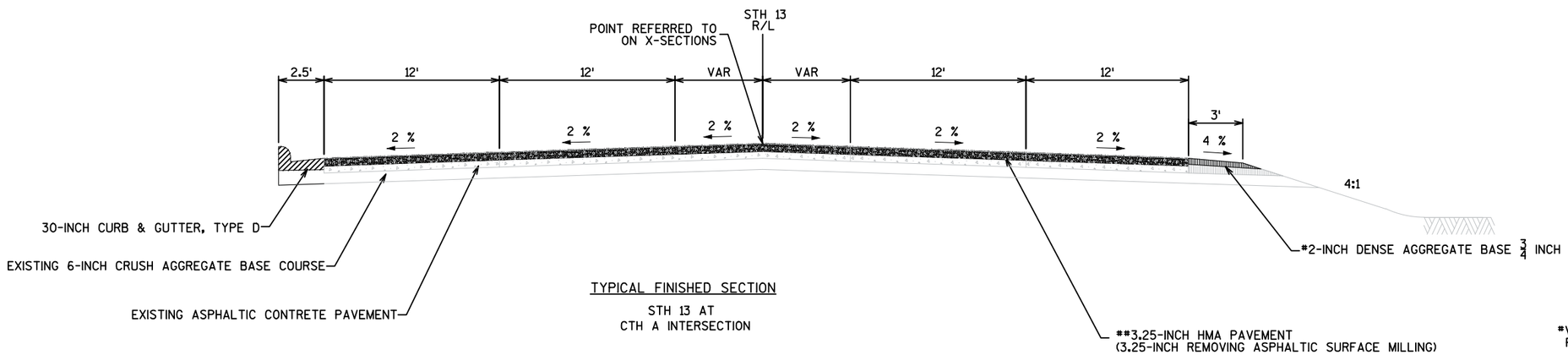
TYPICAL EXISTING SECTION

STH 13 AT
CTH A INTERSECTION



TYPICAL FINISHED TURN LANE SECTION

CTH A



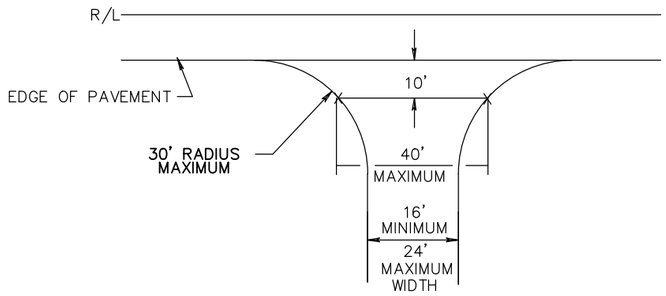
TYPICAL FINISHED SECTION

STH 13 AT
CTH A INTERSECTION

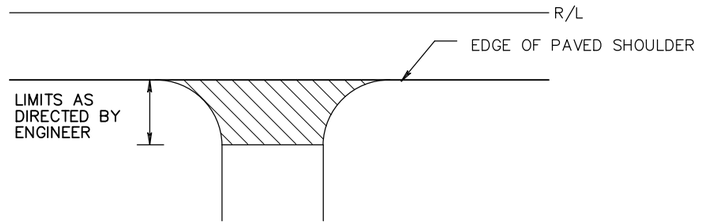
*VARIES BETWEEN 1-2 INCHES.
PLACE OVER EXISTING BASE SHOULDERS.

**LOWER 1.25-INCH LAYER-4MT58-34H
UPPER 2-INCH LAYER-4MT58-34H

PROJECT NO: 1610-04-74/1610-03-72	HWY: STH 13	COUNTY: CLARK	TYPICAL SECTIONS	SHEET 6	E

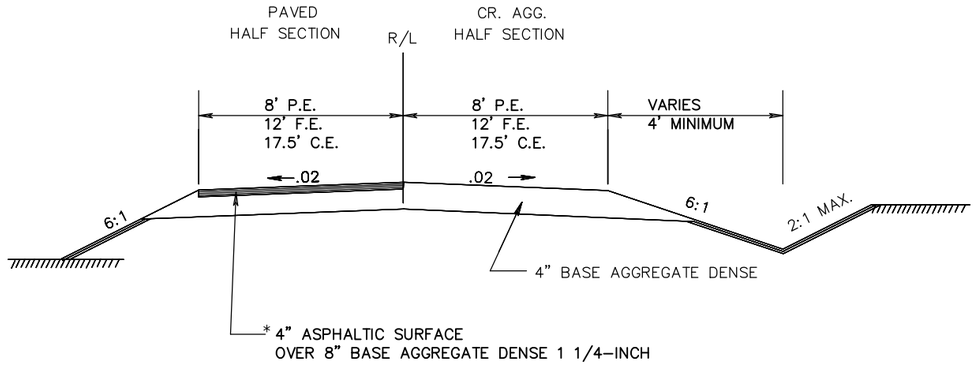


TYPICAL DRIVEWAY DETAIL
(NON–COMMERCIAL RURAL)



ANY ADDITIONAL BASE AGGREGATE DENSE REQ'D. SHALL BE PAID UNDER ITEM – "BASE AGGREGATE DENSE, 1 1/4–INCH"

RURAL DRIVEWAY DETAIL – ASPHALT

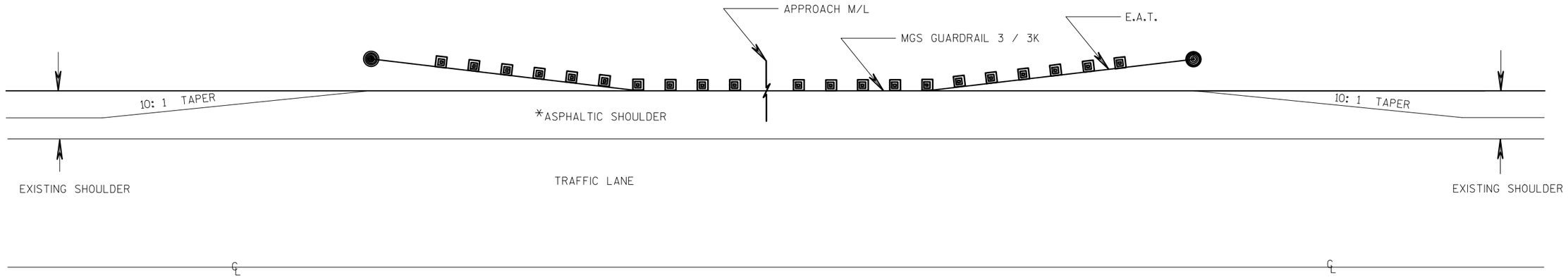


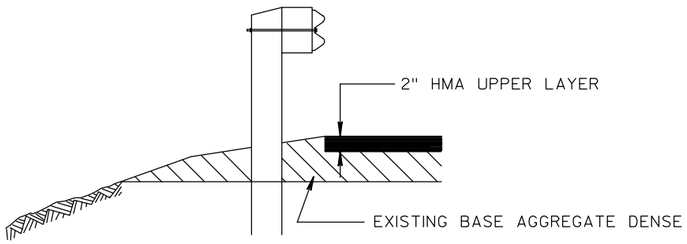
* 6" C.E.
ASPH. DEPTH

TYPICAL SECTION
FOR PRIVATE ENTRANCES

NOTE:
DRIVEWAY PROFILES NOT EXPECTED TO EXCEED 10%. PLACE LOW POINT OF DRIVEWAY PROFILE OVER DITCH FLOW LINE.

2



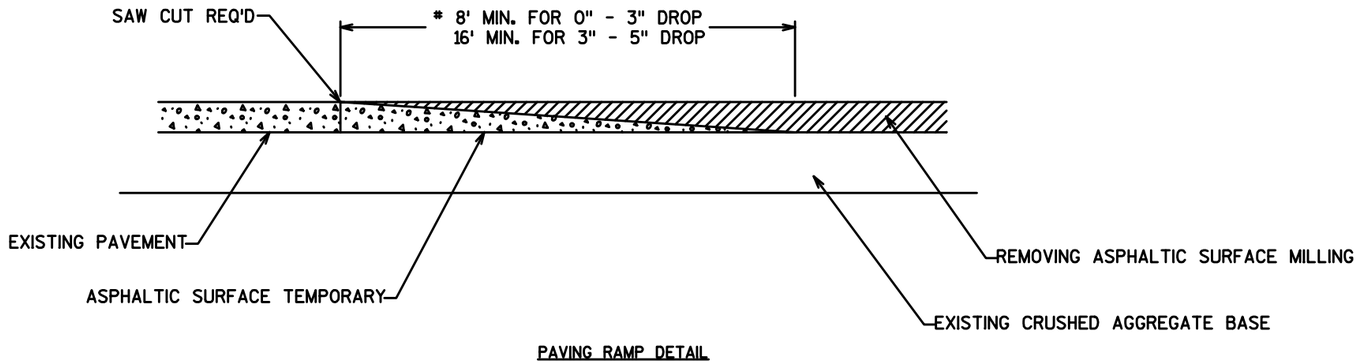


*MAINTAIN THE ADJACENT PAVE SLOPE FOR ENTIRE WIDTH OF PAVED SHOULDER. (SEE CROSS SECTIONS FOR ADDITIONAL DETAILS.)

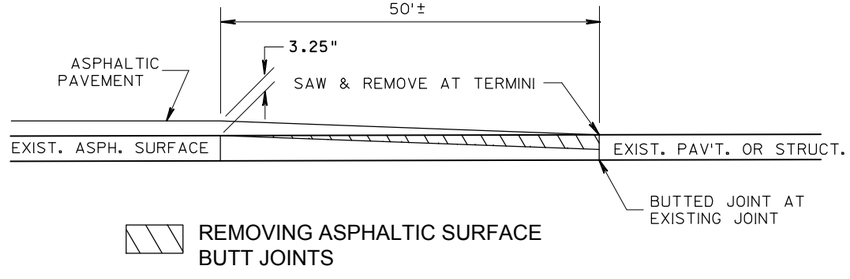
GRADING AND PREPARING THE SHOULDERS AT BEAM GUARD LOCATIONS FOR ASPHALT PAVING ARE PAID FOR AS "PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS."

DETAIL FOR ASPHALTIC SHOULDER AT GUARDRAIL

* EXACT LENGTH TO BE DETERMINED BY THE FIELD ENGINEER

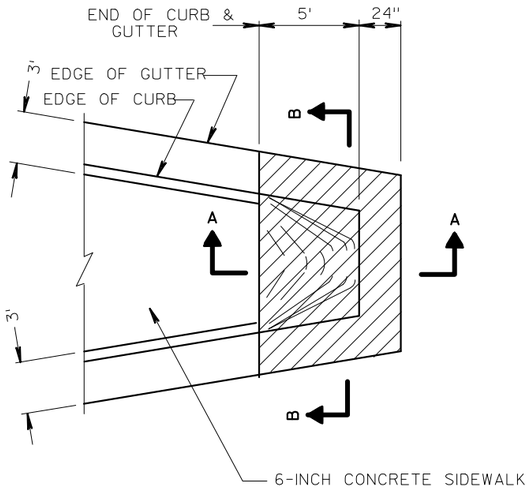


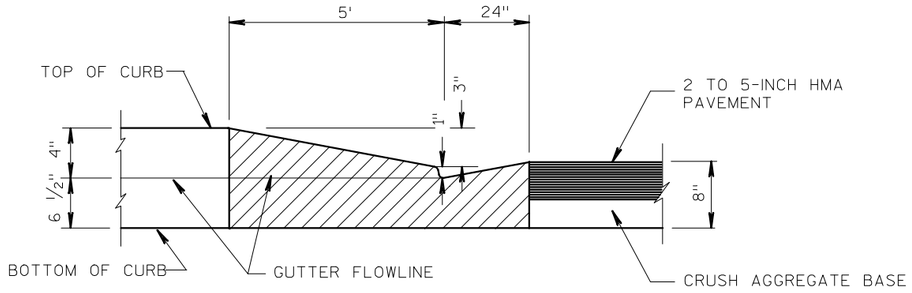
PAVING RAMP DETAIL



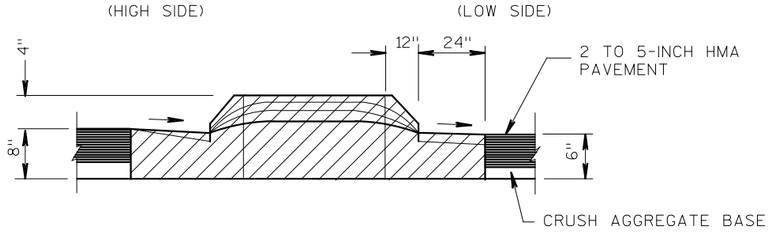
BUTT JOINT DETAIL

PROJECT NO: 1610-04-74/1610-03-72	HWY: STH 13	COUNTY: CLARK	CONSTRUCTION DETAILS	SHEET 8	E





SECTION A-A

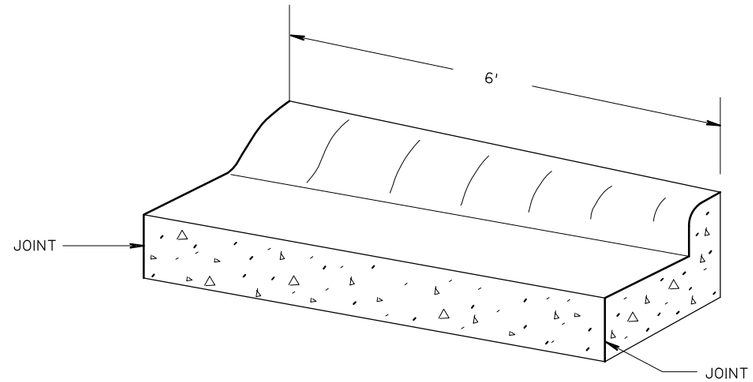


SECTION B-B

SLOPE NOSE NOTE:

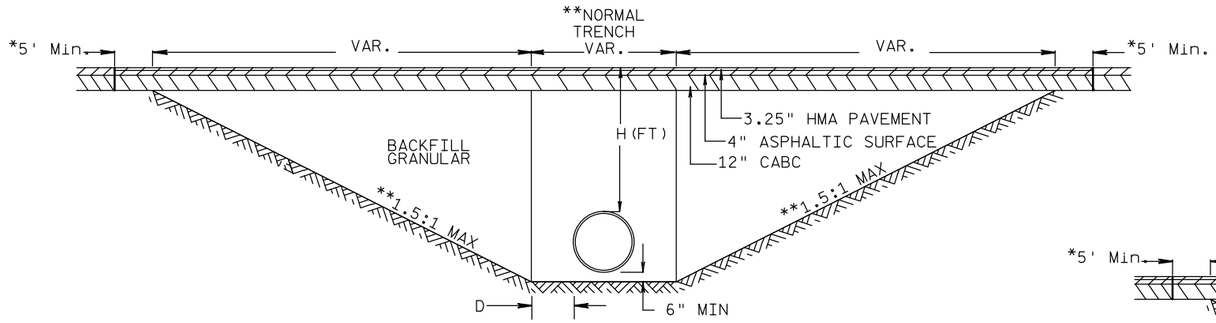
MODIFIED SLOPE NOSE SO THAT GUTTER FLOWLINE WOULD CONTINUE DOWN STREAM.

CONCRETE MEDIAN SLOPE NOSE DETAIL



CURB & GUTTER TRANSITION DETAIL

36" TYPE "T" CURB & GUTTER TO 30" TYPE "D" CURB & GUTTER
(TO BE MEASURED & PAID FOR AS 36" CONC. C&G)



CULVERT PIPE INSTALLATION
FOR H <_ 6'

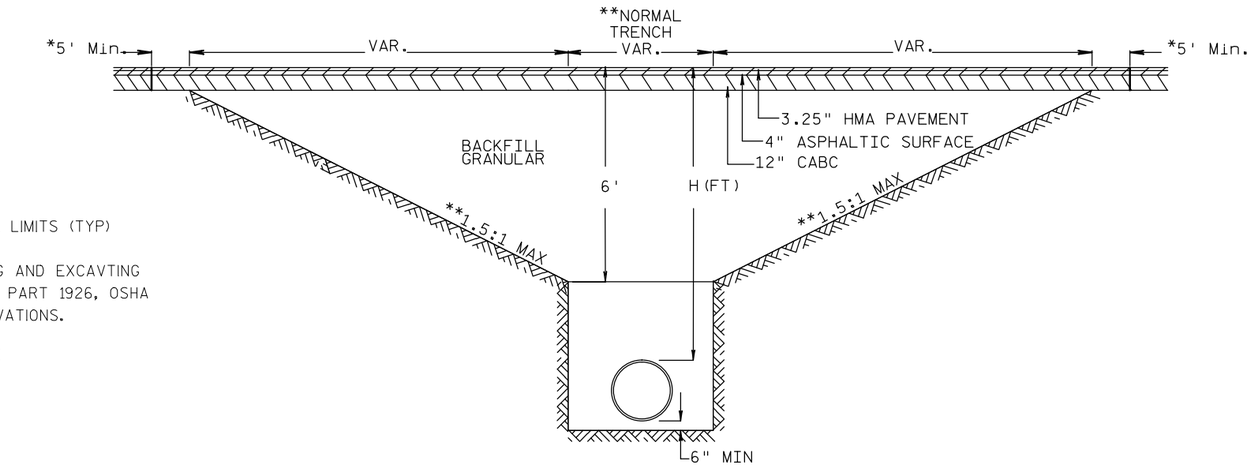
NOTE:

PLACE 1 $\frac{1}{4}$-INCH BASE AGGREGATE DENSE IN PIPE REPLACEMENT AREAS AT 12-INCH DEPTH. THEN PLACE 4-INCH DEPTH OF ASPHALTIC SURFACE MATERIAL TO LEVEL OF MILLING SURFACE.

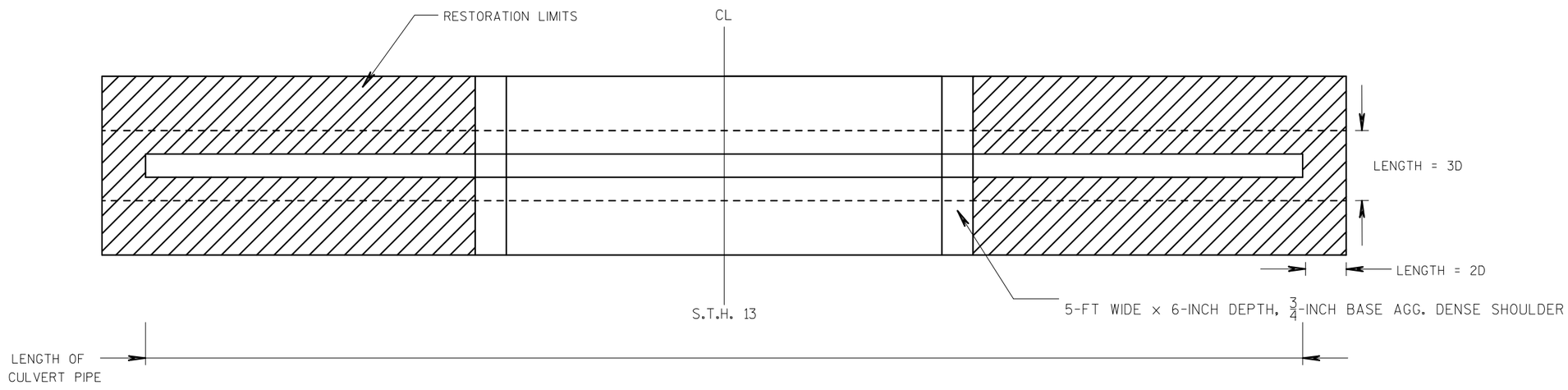
* PAVEMENT REMOVAL LIMITS (TYP)

**PERFORM TRENCHING AND EXCAVTING ACCORDING TO 29 CFR PART 1926, OSHA SUBPART P FOR EXCAVATIONS.

D = DIAMETER OF PIPE

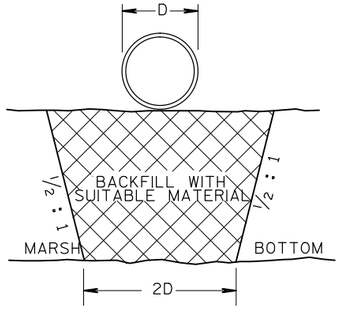


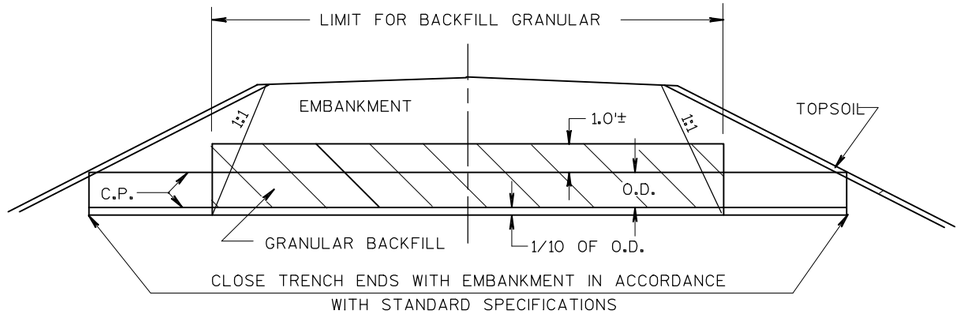
CULVERT PIPE INSTALLATION
FOR H > 6'



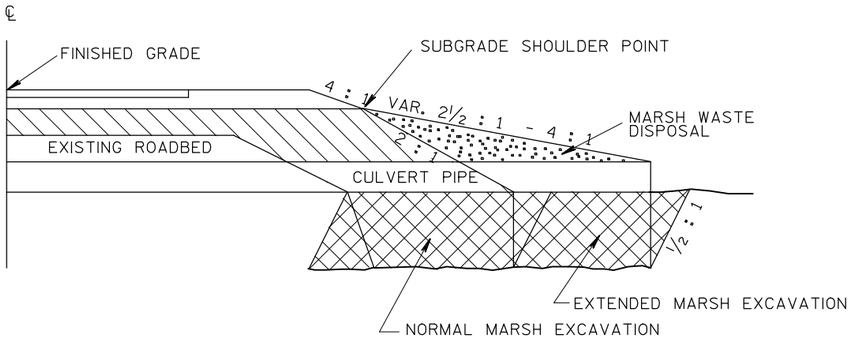
DETAIL FOR CULVERT PIPE INSTALLATION

2

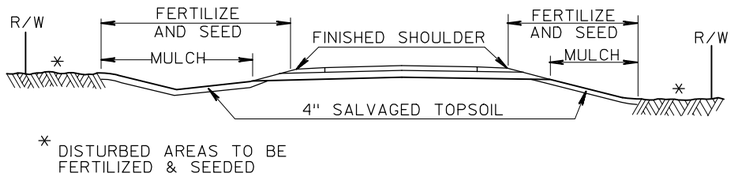




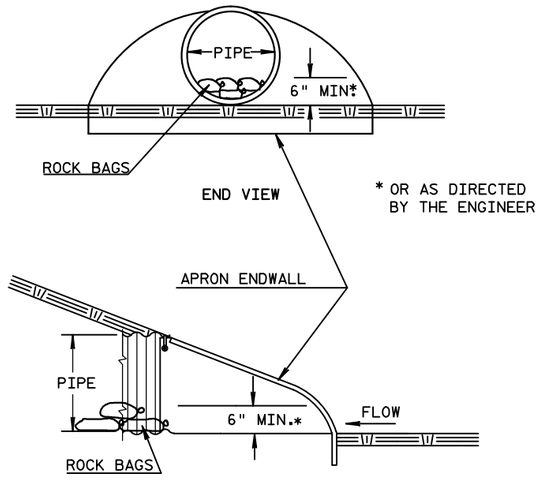
CULVERT BACKFILL DETAIL



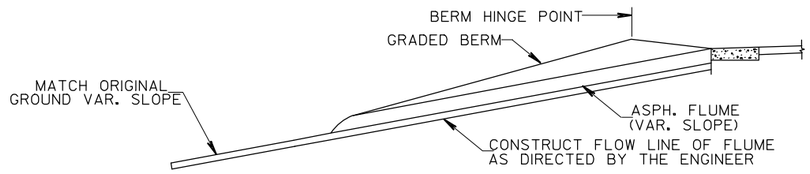
MARSH EXCAVATION AT CULVERT EXTENSIONS



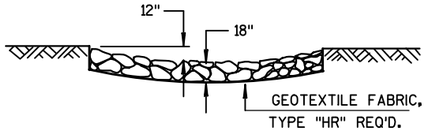
DETAIL FOR FINISHING ITEMS



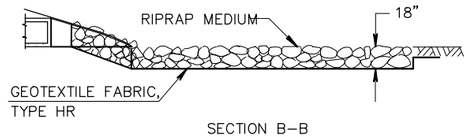
CULVERT PIPE DITCH CHECK



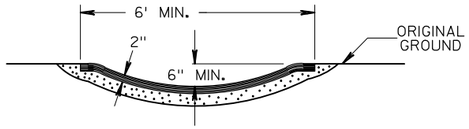
SECTION A-A



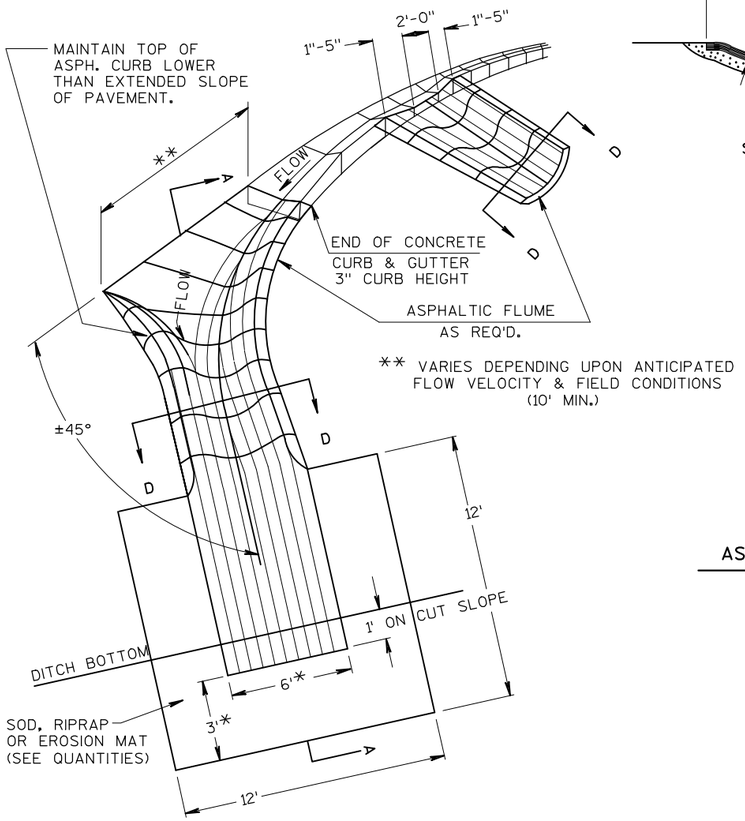
SECTION A-A



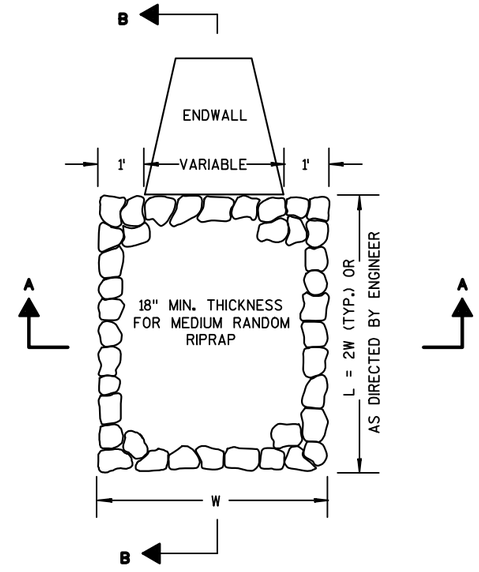
SECTION B–B



SECTION D-D

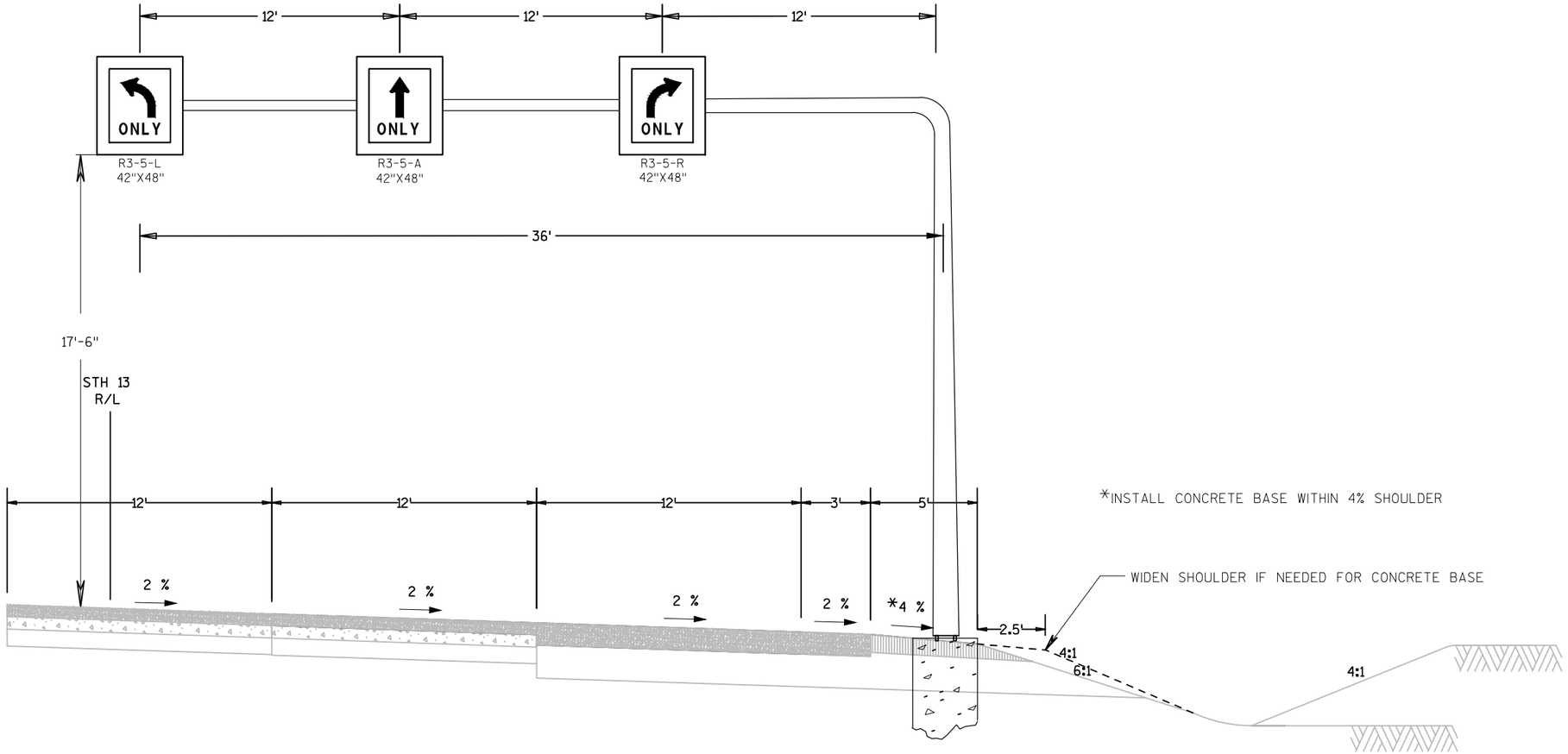


ASPHALTIC FLUME DETAIL



MEDIUM RANDOM RIPRAP TREATMENT AT CULVERTS

2



S-10-007 & S-10-008

OVERHEAD SIGN MOUNTING STRUCTURE - 36' SPAN

AT STH 13 AND CTH A INTERSECTION - STH 13 APPROACH

STA 205+17, RT & 215+22, LT

NOTE - CONTRACTOR SHALL:

1) SUBMIT SHOP DRAWIGNS OF OVERHEAD SIGNS SUPPORT AND FOOTING. (FOOTING IS INCIDENTAL TO OVERHEAD SIGN SUPPORT.)
2) PROVIDE DESIGN CALCULATIONS
3) SHOW SIGNS ON SHOP DRAWINGS

2

LEGEND:

CS6	CONCRETE SIDEWALK 6-INCH
HMA2	HMA PAVEMENT 2-INCH
HMA3.25	HMA PAVEMENT 3.25-INCH
HMA5	HMA PAVEMENT 5-INCH
HMA8	HMA PAVEMENT 8-INCH
CTA8	CONCRETE TRUCK APRON 8-INCH
CG4-36T	CONCRETE CURB & GUTTER 4-INCH SLOPED, 36-INCH TYPE T
CG4-36D	CONCRETE CURB & GUTTER 4-INCH SLOPED, 36-INCH TYPE D
CG30D	CONCRETE CURB & GUTTER 30-INCH TYPE D

XXX REMOVE DRIVEWAY

N

1-130-18
1448.46

1-130-12
1436.36

1-130-2
1450.07

1-130-2
1438.72

XCEL ENERGY

SIGN

FLAG

SIGN

SIGN

SIGN

SIGN

OH

CG30D

PI: 202+36.26

STH 13

199 200 201 202 203 204 205 206

198+86.68
12.31'

203+66.58
20.30'

205+17.40
15.00'

205+17.40
33.30'

206+50.00
15.00'

HMA3.25

SAW CUT

HMA3.25

HMA8

T

SLOPE INTERCEPT

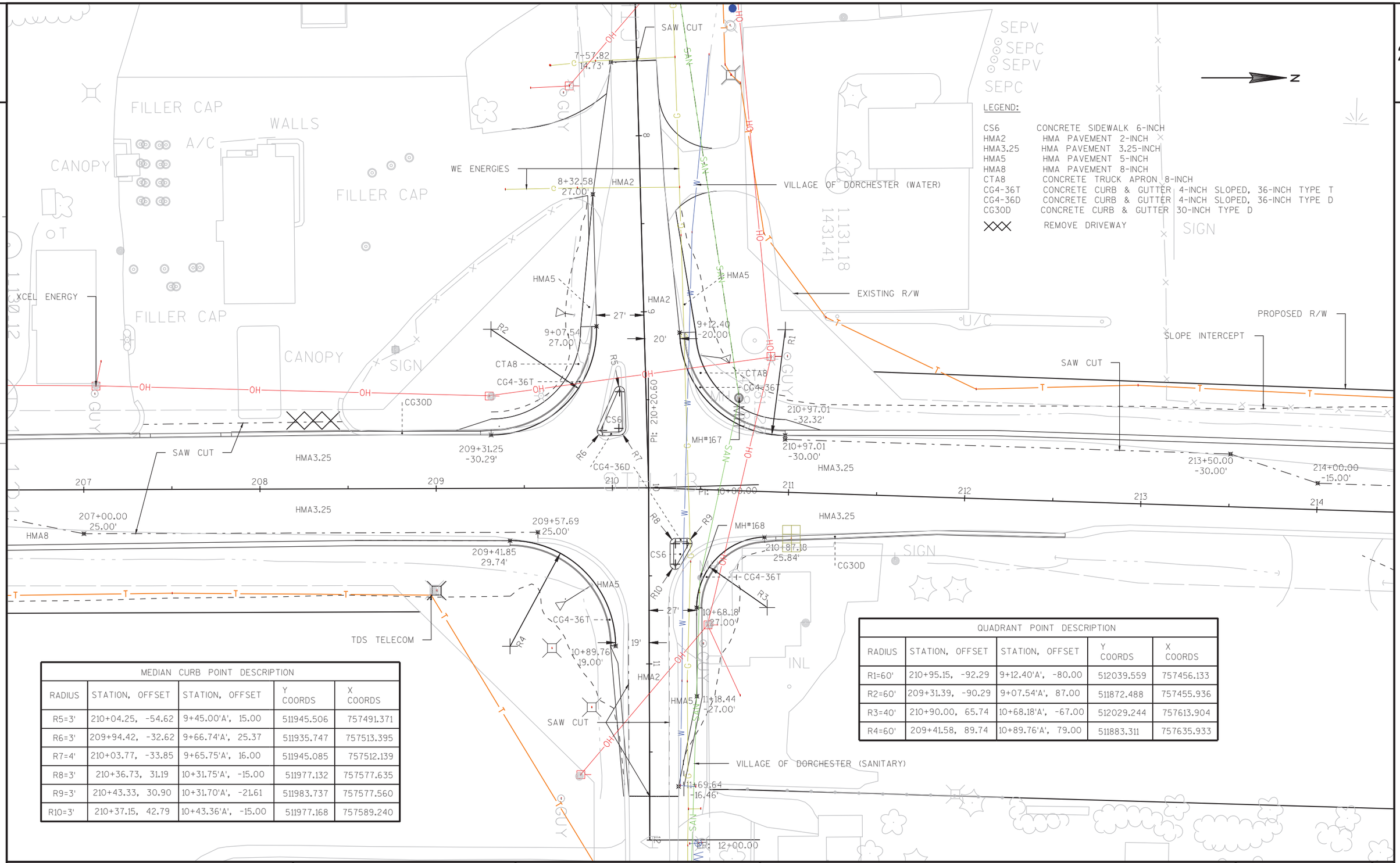
EXISTING R/W

TDS TELECOM

PROPOSED R/W

PROJECT NO: 1610-04-74 / 1610-03-73	HWY: STH 13	COUNTY: CLARK	INTERSECTION DETAILS	SHEET 14	E

2



LEGEND:

CS6	CONCRETE SIDEWALK 6-INCH
HMA2	HMA PAVEMENT 2-INCH
HMA3.25	HMA PAVEMENT 3.25-INCH
HMA5	HMA PAVEMENT 5-INCH
HMA8	HMA PAVEMENT 8-INCH
CTA8	CONCRETE TRUCK APRON 8-INCH
CG4-36T	CONCRETE CURB & GUTTER 4-INCH SLOPED, 36-INCH TYPE T
CG4-36D	CONCRETE CURB & GUTTER 4-INCH SLOPED, 36-INCH TYPE D
CG30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
XXX	REMOVE DRIVEWAY

MEDIAN CURB POINT DESCRIPTION

RADIUS	STATION, OFFSET	STATION, OFFSET	Y COORDS	X COORDS
R5=3'	210+04.25, -54.62	9+45.00'A', 15.00	511945.506	757491.371
R6=3'	209+94.42, -32.62	9+66.74'A', 25.37	511935.747	757513.395
R7=4'	210+03.77, -33.85	9+65.75'A', 16.00	511945.085	757512.139
R8=3'	210+36.73, 31.19	10+31.75'A', -15.00	511977.132	757577.635
R9=3'	210+43.33, 30.90	10+31.70'A', -21.61	511983.737	757577.560
R10=3'	210+37.15, 42.79	10+43.36'A', -15.00	511977.168	757589.240

QUADRANT POINT DESCRIPTION

RADIUS	STATION, OFFSET	STATION, OFFSET	Y COORDS	X COORDS
R1=60'	210+95.15, -92.29	9+12.40'A', -80.00	512039.559	757456.133
R2=60'	209+31.39, -90.29	9+07.54'A', 87.00	511872.488	757455.936
R3=40'	210+90.00, 65.74	10+68.18'A', -67.00	512029.244	757613.904
R4=60'	209+41.58, 89.74	10+89.76'A', 79.00	511883.311	757635.933

PROJECT NO: 1610-04-74 / 1610-03-73	HWY: STH 13	COUNTY: CLARK	INTERSECTION DETAILS	SHEET 15	E

2

2

LEGEND:

CS6	CONCRETE SIDEWALK 6-INCH
HMA2	HMA PAVEMENT 2-INCH
HMA3.25	HMA PAVEMENT 3.25-INCH
HMA5	HMA PAVEMENT 5-INCH
HMA8	HMA PAVEMENT 8-INCH
CTA8	CONCRETE TRUCK APRON 8-INCH
CG4-36T	CONCRETE CURB & GUTTER 4-INCH SLOPED, 36-INCH TYPE T
CG4-36D	CONCRETE CURB & GUTTER 4-INCH SLOPED, 36-INCH TYPE D
CG30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
XXX	REMOVE DRIVEWAY

N

EXISTING R/W

TDS TELECOM

SLOPE INTERCEPT

PROPOSED R/W

215+22.21
-36.00'

216+72.62
-24.00'

216+92.07

MARSH EXCAVATION

PI: 217+95.15

216+50.00
-15.00'

HMA8

HMA3.25

HMA3.25

1-131-12
1423.98

1-132-18
1424.85

1-132-28
1424.8

1-131-12
1426.86

1-134
1430.950

SEPC

W

T

STH 13

215 216 217 218 219 220 221 222

PROJECT NO: 1610-04-74 / 1610-03-73	HWY: STH 13	COUNTY: CLARK	INTERSECTION DETAILS	SHEET 16	E

MULCHING
EROSION MAT CLASS I TYPE B
SILT FENCE
RIP RAP
INLET PROTECTION
TEMPORARY DITCH CHECKS
ROCK BAGS
SURFACE WATER FLOW

XCEL ENERGY
EXISTING R/W
WE ENERGIES
VILLAGE OF DORCHESTER (WATER)
TDS TELECOM
PROPOSED R/W
SLOPE INTERCEPT
VILLAGE OF DORCHESTER (SANITARY)
PI: 10+00.00'A'
EP: 12+00.00'A'
STH 13

EROSION CONTROL: SLOPES

FERTILIZE, SEED, AND MULCH ALL DISTURB AEAS.

PLACE TEMPORARY DITCH CHECKS ALONG DITCHES EVERY 200-FT.

EROSION CONTROL: BEAM GUARD

FERTILIZE, SEED, AND MULCH ALL DISTURB AEAS. SEE MISCELLANEOUS QUANTITIES FOR BARRIER SYSTEM GRADING SHAPING FINISHING.

INSTALL SILT FENCE NEAR THE SLOPE INTERCEPTS WITHIN THE DITCH POINT.

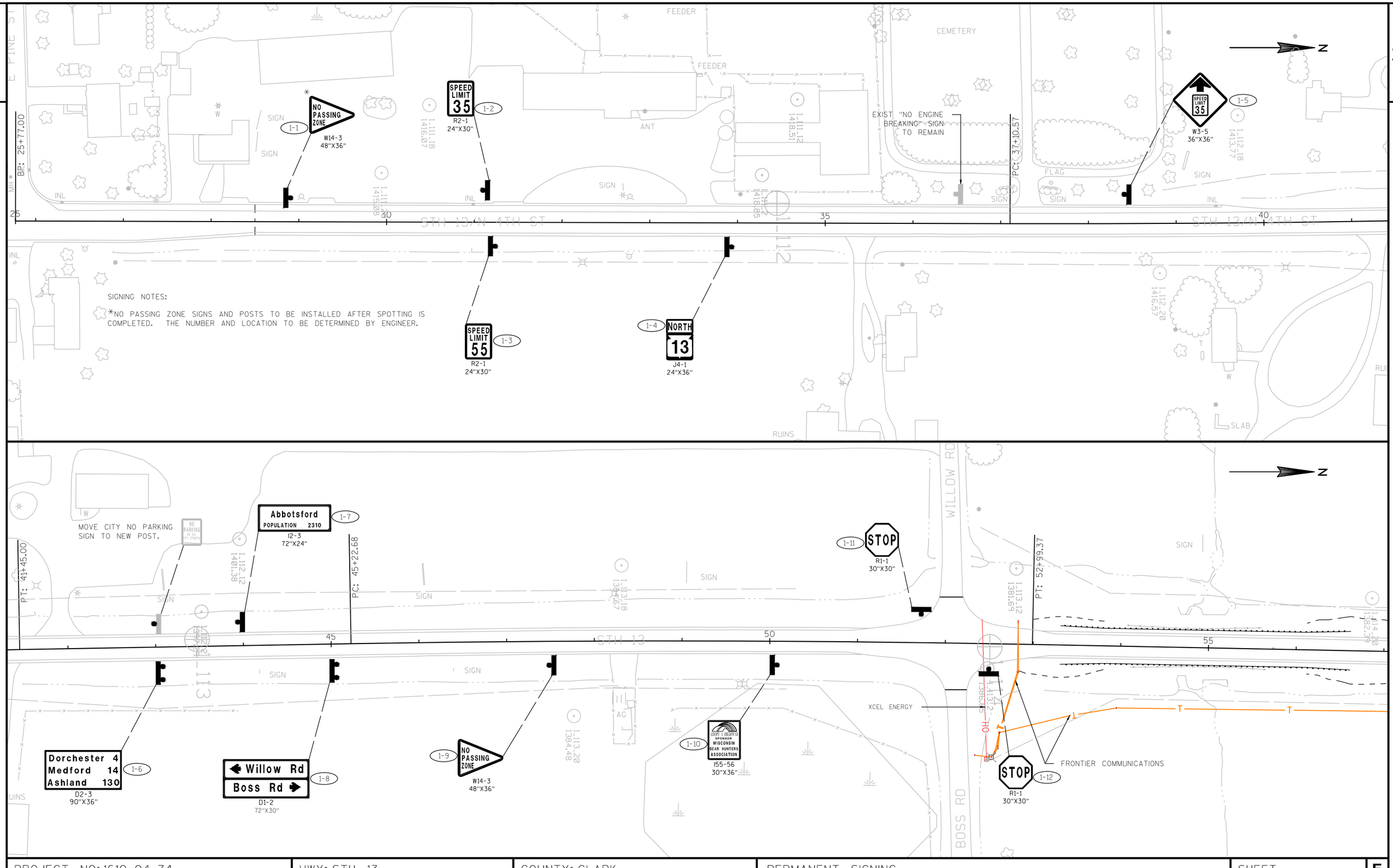
EROSION CONTROL: CULVERTS

FERTILIZE, SEED, AND MULCH ALL DISTURB AEAS.

PLACE ROCK BAGS ON THE INLET ENDS AND RIPRAP ON THE OUTLET ENDS.

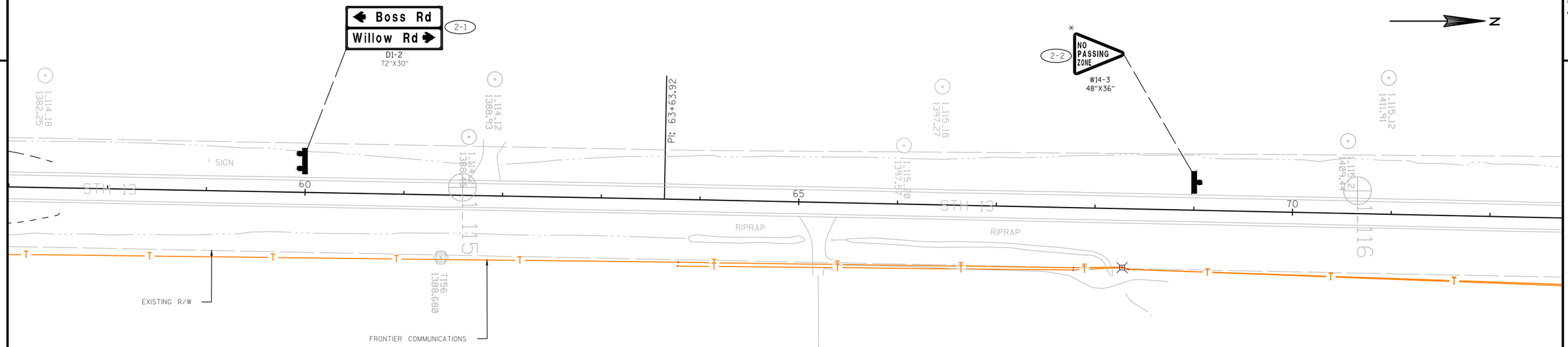
INSTALL SILT FENCE AROUND EXCAVATION AREA. DO NOT BLOCK CULVERT FLOW LINE.

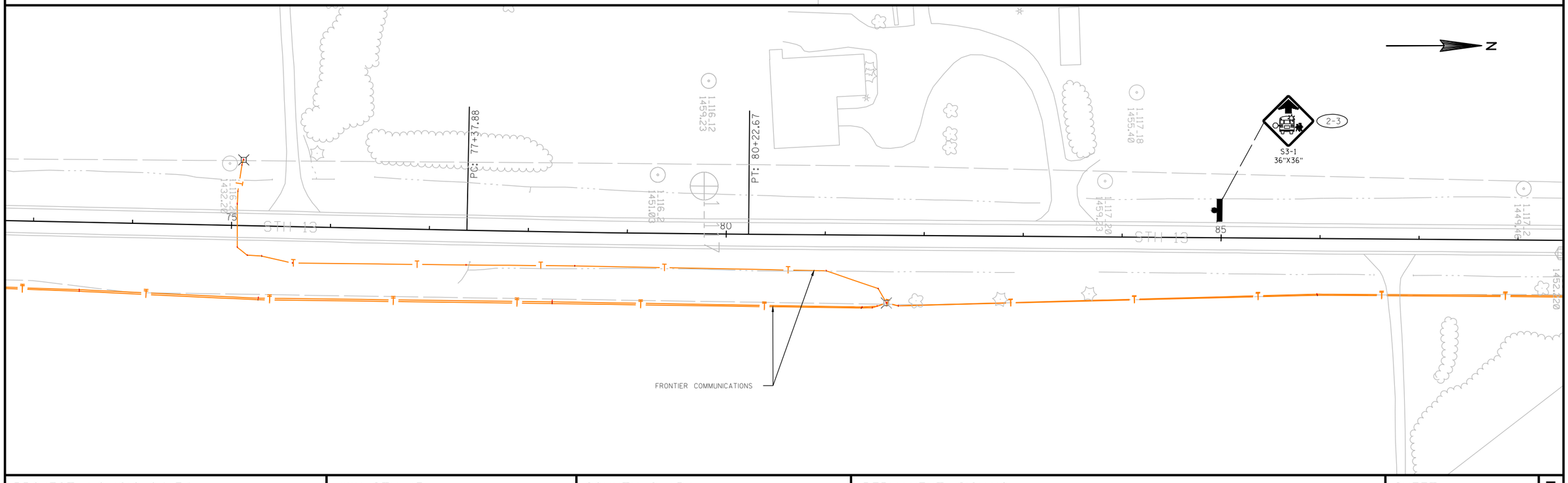
PROJECT NO: 1610-04-74/1610-03-72	HWY: STH 13	COUNTY: CLARK	EROSION CONTROL	SHEET 17	E



PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PERMANENT SIGNING	SHEET 18	E

2





PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PERMANENT SIGNING	SHEET 19	E

*NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY ENGINEER.

SIGNING NOTES:

SIGNING NOTES:

*NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY ENGINEER.

N

PI: 89+41.26

PI: 102+57.66

PC: 118+06.63

STH 13

SIGN

FLAG

FRONTIER COMMUNICATIONS

XCEL ENERGY

3-1 NO PASSING ZONE W14-3 48"X36"

3-2 Pine Rd / Holton Rd D1-2 72"X30"

3-3 STOP R1-1 30"X30"

3-4 STOP R1-1 30"X30"

3-5 Holton Rd / Pine Rd D1-2 72"X30"

PINE

HOLTON RD

OH

ANT

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PERMANENT SIGNING	SHEET 20	E

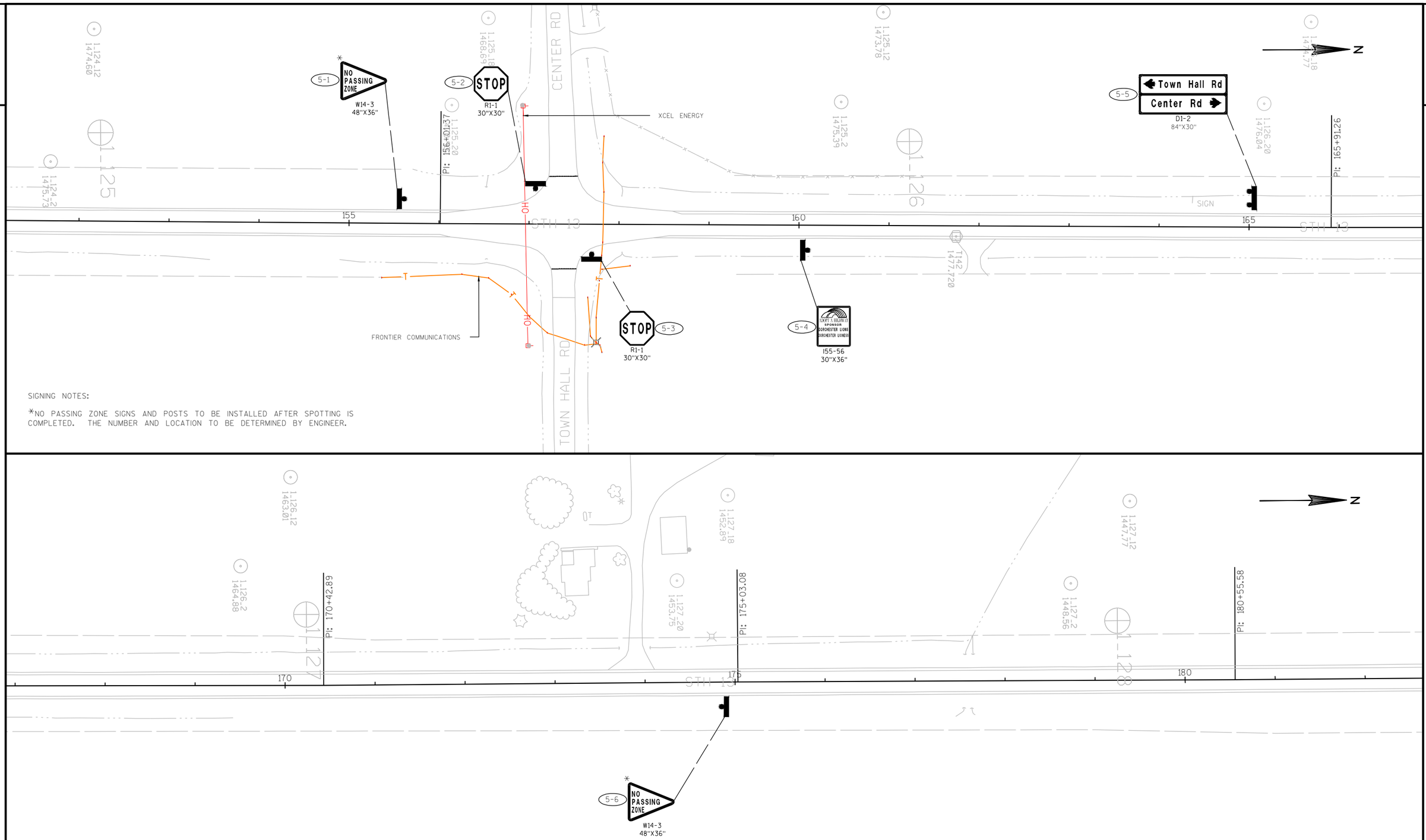
2

SIGNING NOTES:

*NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY ENGINEER.

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PERMANENT SIGNING	SHEET 21	E

2

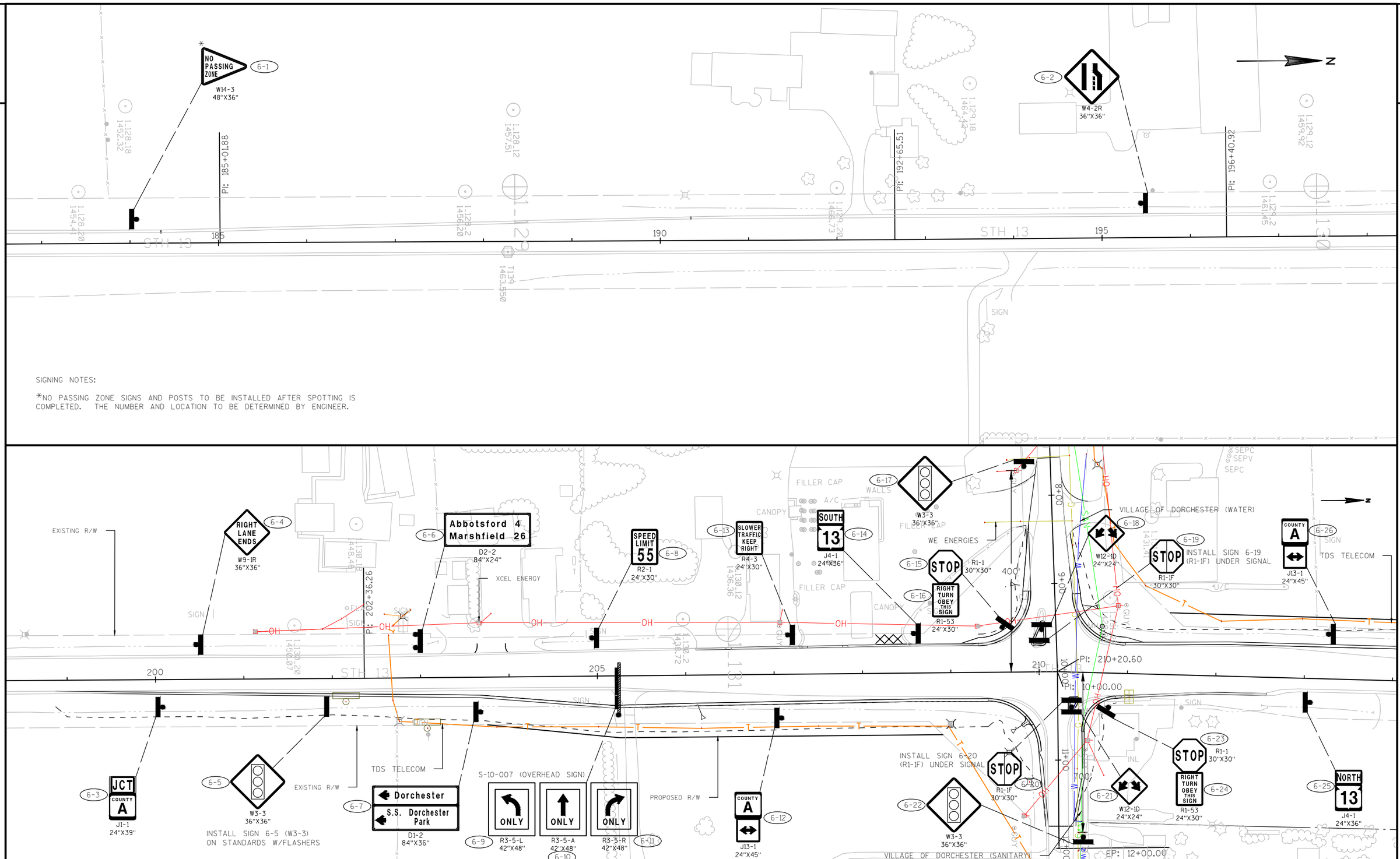


SIGNING NOTES:

*NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY ENGINEER.

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PERMANENT SIGNING	SHEET 22	E

2

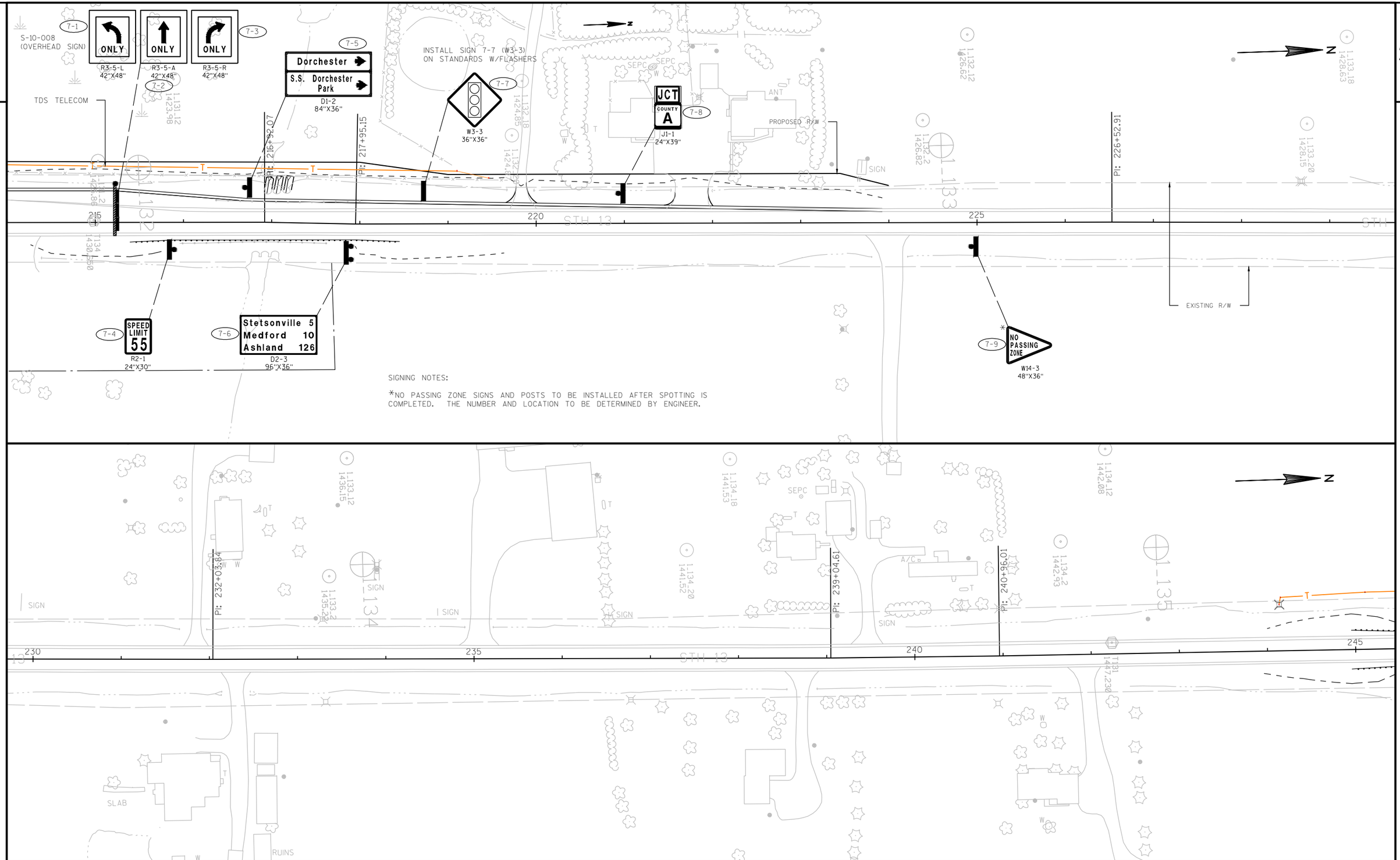


SIGNING NOTES:

*NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY ENGINEER.

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PERMANENT SIGNING	SHEET 23	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\024001_PS_STH13_16100404.DWG
LAYOUT NAME - 050106
PLOT DATE : 9/22/2016 7:38 AM
PLOT BY : THAO, KOU
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44


S-10-008
(OVERHEAD SIGN)
7-1
ONLY
R3-5-L
42"X48"
7-2
ONLY
R3-5-A
42"X48"
ONLY
R3-5-R
42"X48"
7-3
TDS TELECOM
7-5
Dorchester
S.S. Dorchester Park
D1-2
84"X36"
INSTALL SIGN 7-7 (W3-3)
ON STANDARDS W/FLASHERS
7-7
W3-3
36"X36"
JCT
COUNTY
A
7-8
J1-1
24"X39"
PROPOSED R/W
SIGN
PI: 216+92.07
PI: 217+95.15
PI: 226+52.91
EXISTING R/W
215
220
225
STH 13
7-4
SPEED
LIMIT
55
R2-1
24"X30"
7-6
Stetsonville 5
Medford 10
Ashland 126
D2-3
96"X36"
7-9
NO
PASSING
ZONE
W14-3
48"X36"
SIGNING NOTES:
*NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY ENGINEER.
PI: 232+03.84
PI: 239+04.61
PI: 240+96.01
230
235
240
245
STH 13
SLAB
RUINS
SEPC
ANT
A/C

2

2

TDS TELECOM

T

PC: 249+99.53

PI: 252+25.82

PI: 255+50.14

PC: 258+93.94

SIGN

1-135_18
1441.40

1-135_20
1440.59

1-135_12
1446.40

1-135_2
1445.73

1-136

1-136_18
1446.93

1-136_12
1447.90

1-136_2
1447.12

1-137

A/C
SEPC
A/C

N

8-2
ADVERT. A EDUCATIONAL SPONSOR
DORCHESTER LIONS
DORCHESTER LIONS
155-56
30"X36"

STH 13

250

255

260

8-1
Hickory Rd
Draper Rd
D1-2
78"X30"

SIGNING NOTES:

*NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY ENGINEER.

HICKORY RD

8-3
STOP
R1-1
30"X30"

PI: 261+38.20

PI: 264+11.28

1-137_18
1444.06

1-137_20
1444.90

1-137_12
1442.38

1-137_8
1442.73

1-138

PC: 269+10.08

TDS TELECOM

PI: 271+46.96

Draper Rd
Hickory Rd
8-6
D1-2
78"X30"

8-7
STOP
R1-1
30"X30"

PI: 276+13.52

1-138_20
1446.60

1-138_8
1446.18

WATER F

N

SIGN

265

270

275

STH 13

T12
1441.70

A/C

W

8-4
STOP
R1-1
30"X30"

8-5
ADVERT. A EDUCATIONAL SPONSOR
STETSONVILLE
ELEM SCHOOL
155-56
30"X36"

SEPV
SEPC

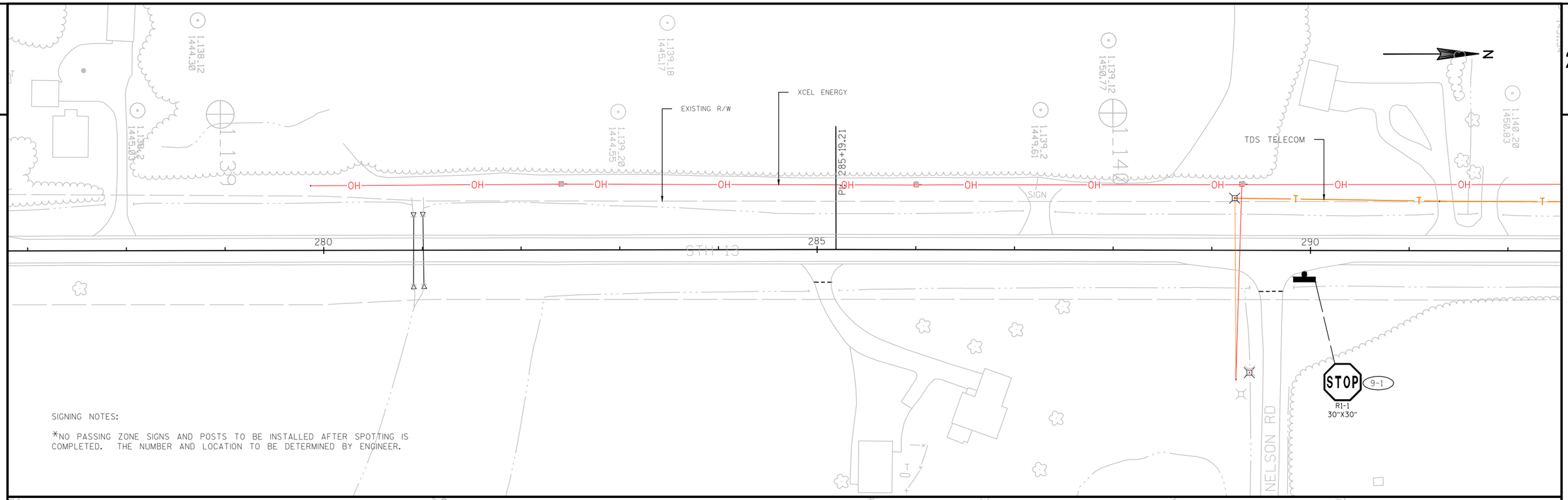
ANT

TANKS

DRAPER RD

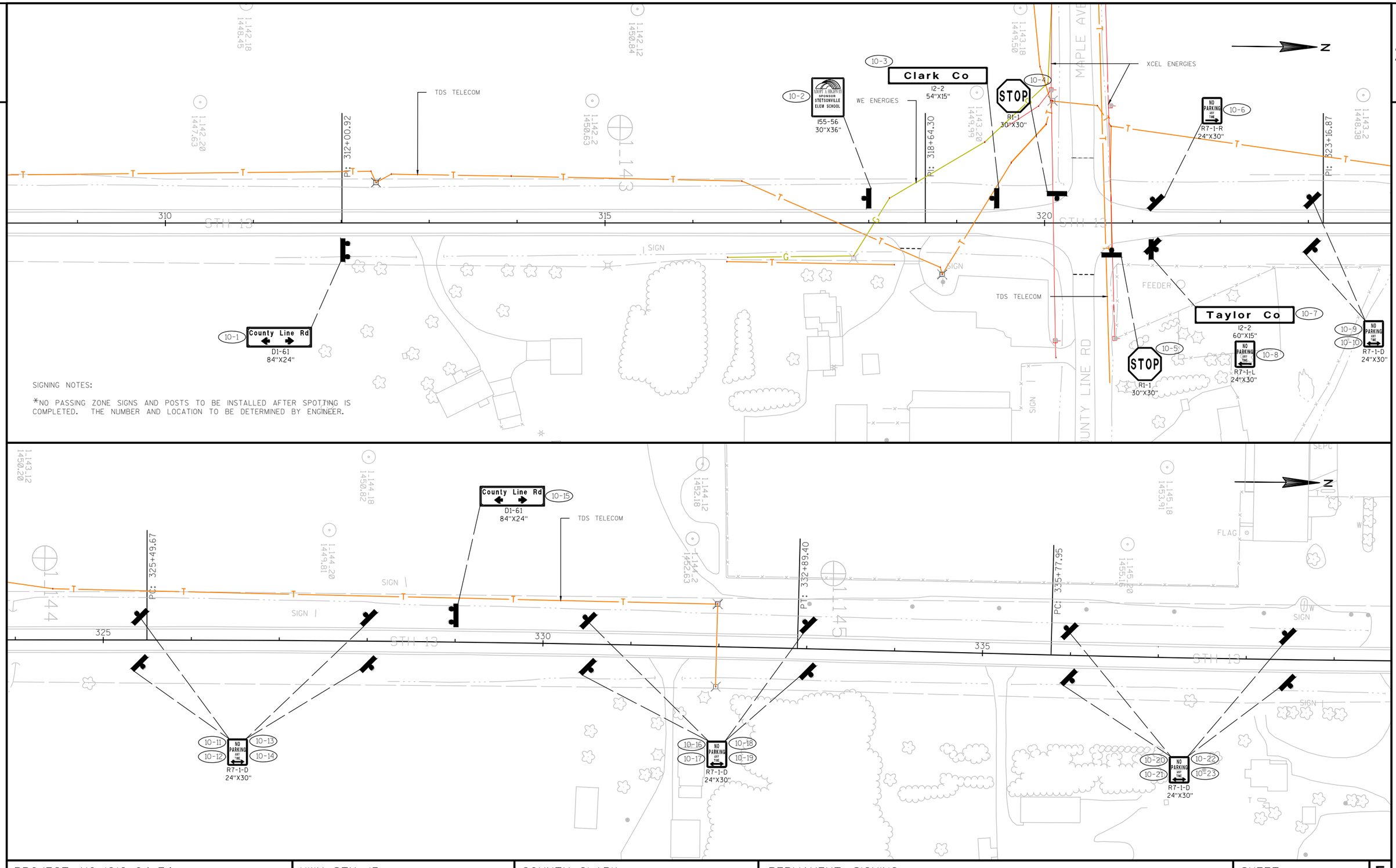
PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PERMANENT SIGNING	SHEET 25	E

2



PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PERMANENT SIGNING	SHEET 26	E

2



PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PERMANENT SIGNING	SHEET 27	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\024001_PS_STH13_16100404.DWG
LAYOUT NAME - 0501019
PLOT DATE : 9/22/2016 7:39 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

SIGNING NOTES:

*NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY ENGINEER.

PI: 341+36.11

PI: 356+67.05

PC: 369+28.13

11-1
11-2
11-3
NO PARKING 1HT THU
R7-1-D
24"X30"
11-4
11-5
11-6

11-7
NO PARKING 1HT THU
R7-1-L
24"X30"

11-8
NO PARKING 1HT THU
R7-1-R
24"X30"

11-9
NO PASSING ZONE
W14-3
48"X36"

11-10
Elm Ave
D1-61
54"X24"

SIGN

SIGN 1

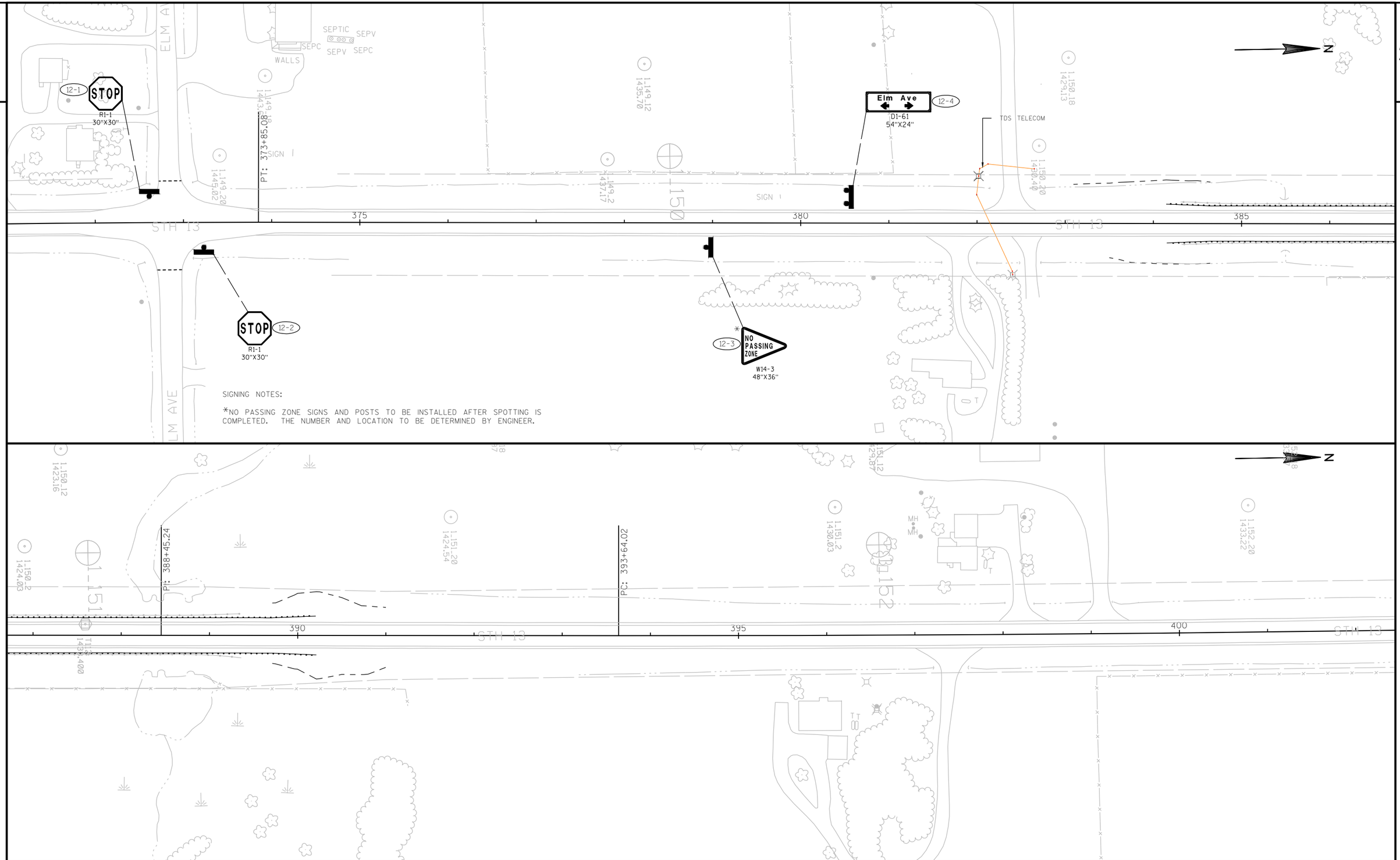
GRAVEL DRIVEWAY

STH 13

STH 13

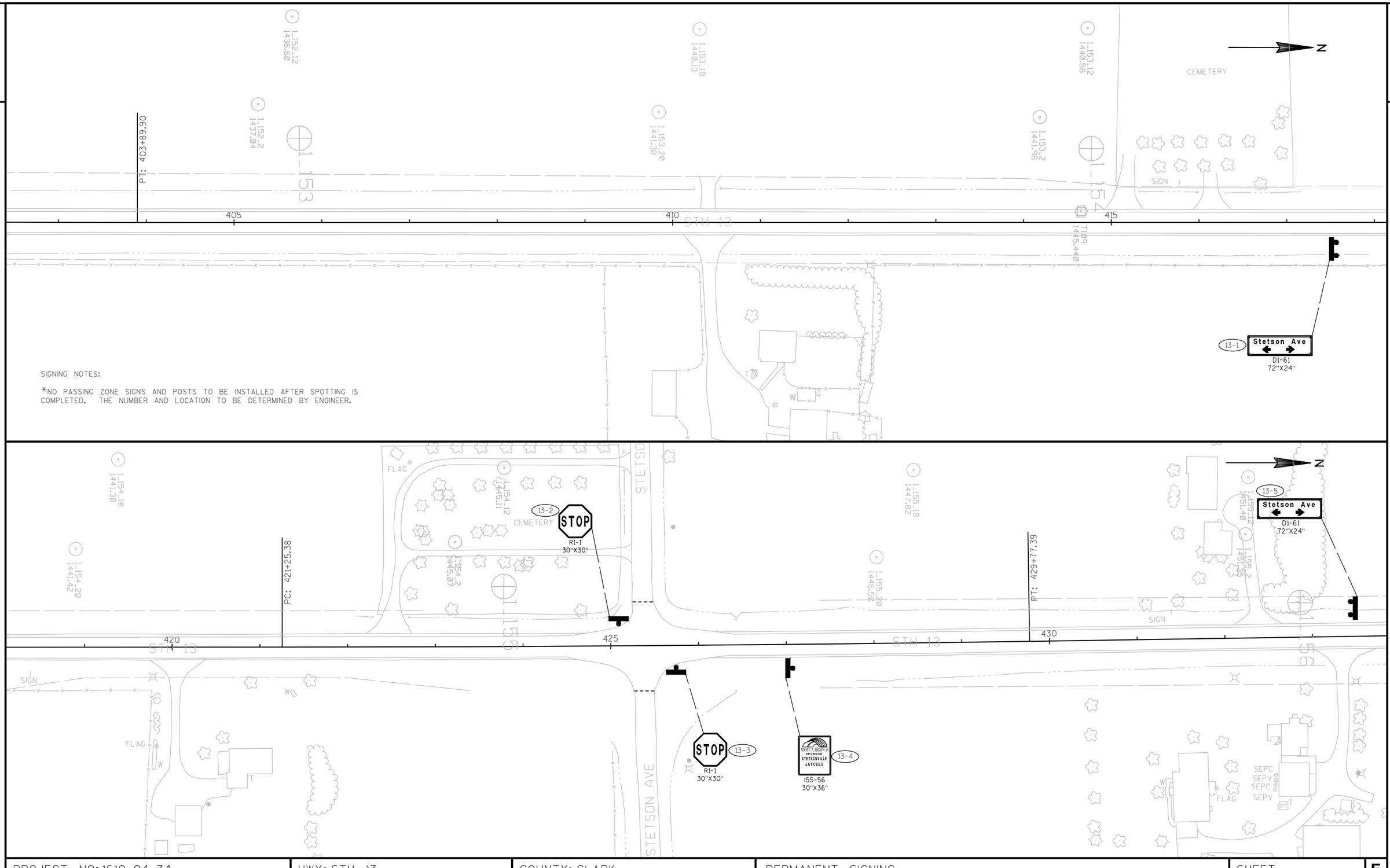
PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PERMANENT SIGNING	SHEET 28	E

2



PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PERMANENT SIGNING	SHEET 29	E

2



SIGNING NOTES:

*NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY ENGINEER.

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PERMANENT SIGNING	SHEET 30	E

2

RUINS

SEPC
SEPC

N

PI: 437+18.15

PI: 443+35.51

435 440 445

STH 13

SIGN

SIGN

SIGN

TANKS

SIGNING NOTES:

*NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE DETERMINED BY ENGINEER.

N

Dorchester 5
Abbotsford 9
Marshfield 31
14-1
D2-3
84"X36"

14-4
NO PASSING ZONE
W14-3
48"X36"

14-5
STOP
SCHOOL BUS FLASHING RED LIGHTS
R59-51
36"X36"

14-6
SOUTH
13
J4-1
24"X36"

14-7
SPEED LIMIT
55
R2-1
24"X30"

PI: 458+30.14

EP: 465+00.05

450 455 460 465

STH 13

SIGN

SIGN

SIGN

14-2
SPEED LIMIT
25
W3-5
36"X36"

14-3
Stetsonville
POPULATION 541
I2-3
78"X24"

EXISTING "VILLAGE PARKING REGULATIONS" SIGN TO REMAIN

14-8
SPEED LIMIT
25
R2-1
24"X30"

WE ENERGIES

XCEL ENERGY

MH

CORN CRIB

BERM

E MINK AVE

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PERMANENT SIGNING	SHEET 31	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\024001_PS_STH13_16100404.DWG
LAYOUT NAME - 0501027

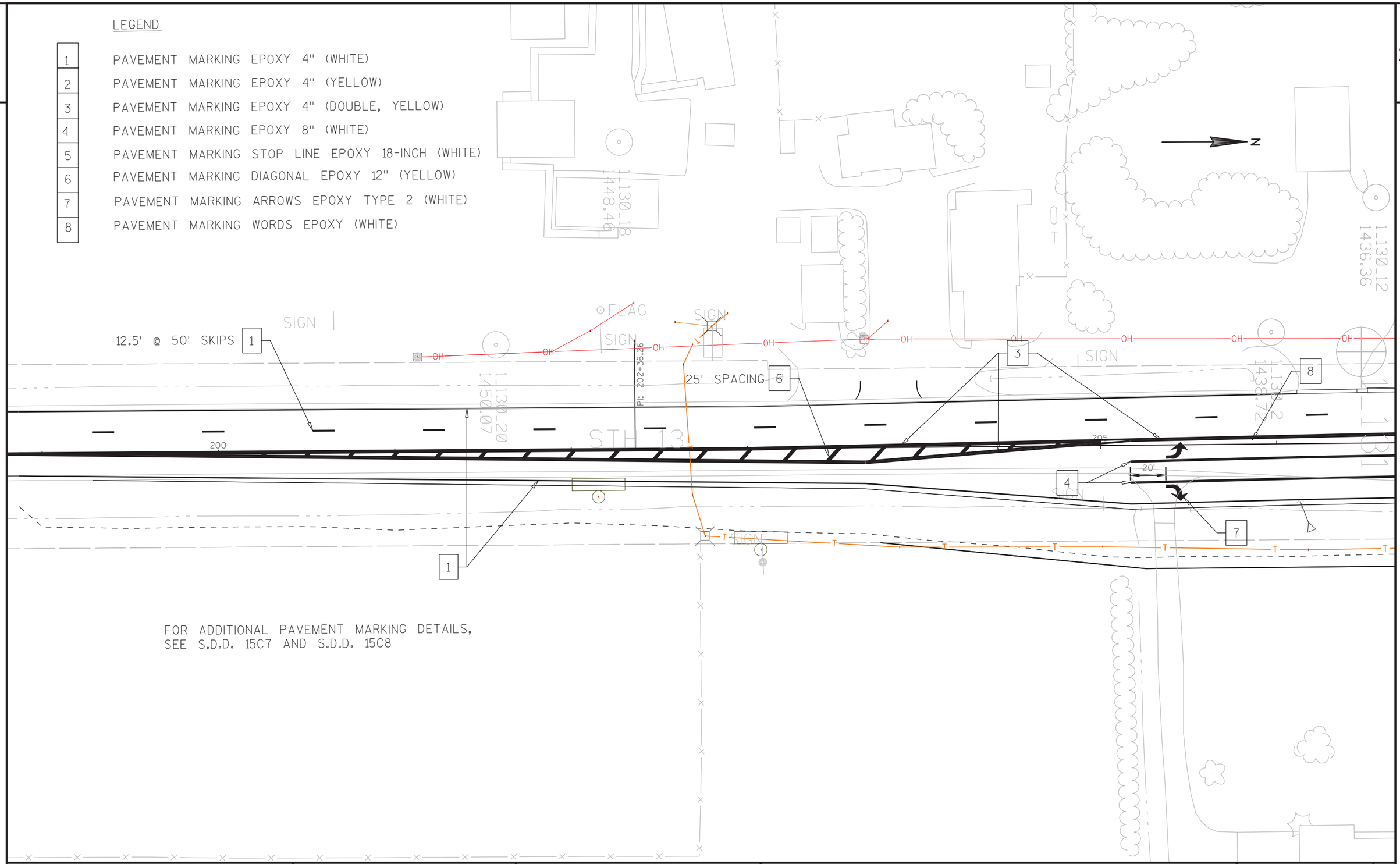
PLOT DATE : 9/22/2016 7:40 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

LEGEND

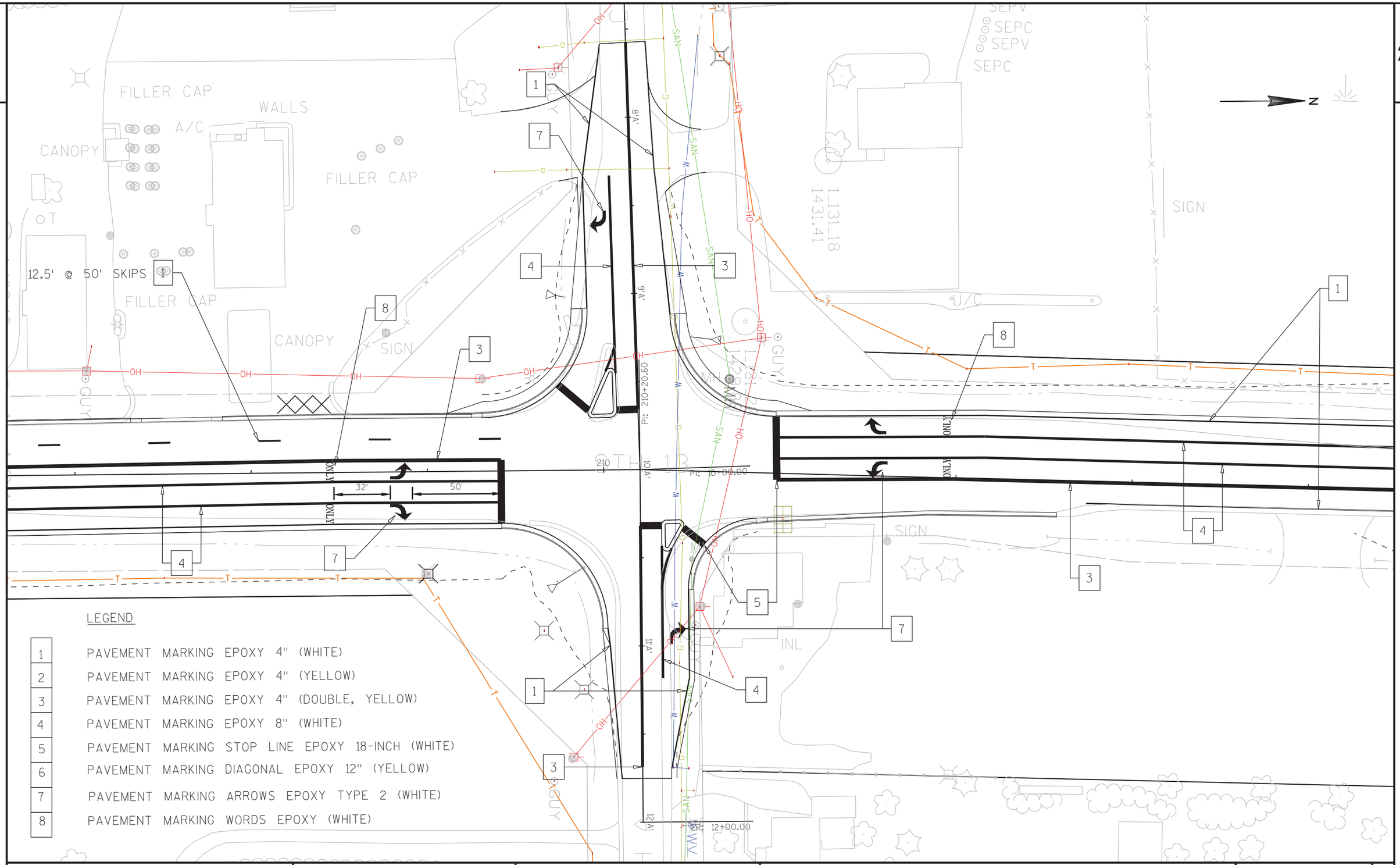
1	PAVEMENT MARKING EPOXY 4" (WHITE)
2	PAVEMENT MARKING EPOXY 4" (YELLOW)
3	PAVEMENT MARKING EPOXY 4" (DOUBLE, YELLOW)
4	PAVEMENT MARKING EPOXY 8" (WHITE)
5	PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
6	PAVEMENT MARKING DIAGONAL EPOXY 12" (YELLOW)
7	PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
8	PAVEMENT MARKING WORDS EPOXY (WHITE)



FOR ADDITIONAL PAVEMENT MARKING DETAILS,
SEE S.D.D. 15C7 AND S.D.D. 15C8

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PAVEMENT MARKING	SHEET 32	E

2

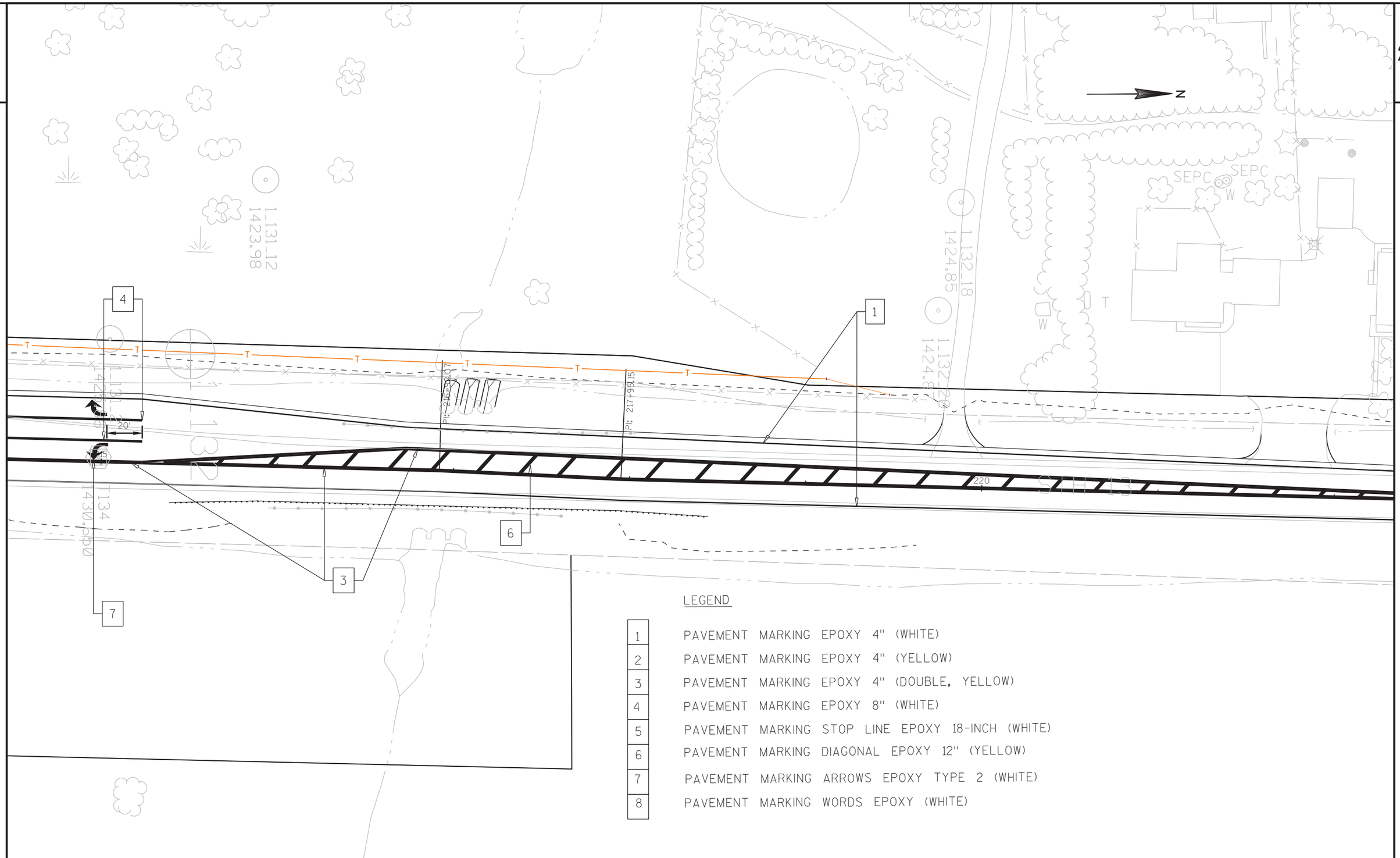


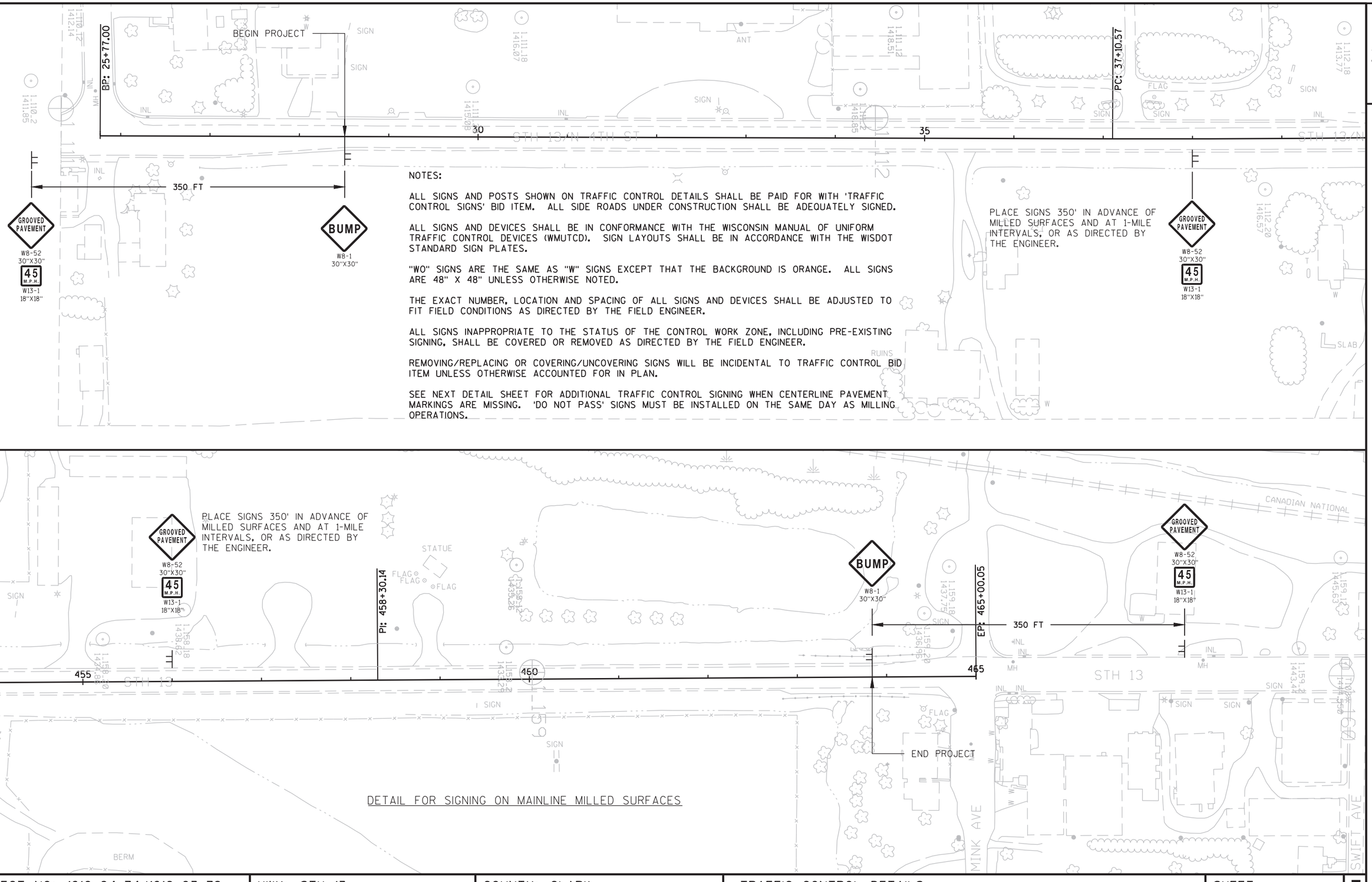
LEGEND

1	PAVEMENT MARKING EPOXY 4" (WHITE)
2	PAVEMENT MARKING EPOXY 4" (YELLOW)
3	PAVEMENT MARKING EPOXY 4" (DOUBLE, YELLOW)
4	PAVEMENT MARKING EPOXY 8" (WHITE)
5	PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
6	PAVEMENT MARKING DIAGONAL EPOXY 12" (YELLOW)
7	PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
8	PAVEMENT MARKING WORDS EPOXY (WHITE)

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PAVEMENT MARKING	SHEET 33	E

2


N
SEPC
SEPC
W
W
T
T
T



NOTES:

ALL SIGNS AND POSTS SHOWN ON TRAFFIC CONTROL DETAILS SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS UNDER CONSTRUCTION SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE FIELD ENGINEER.

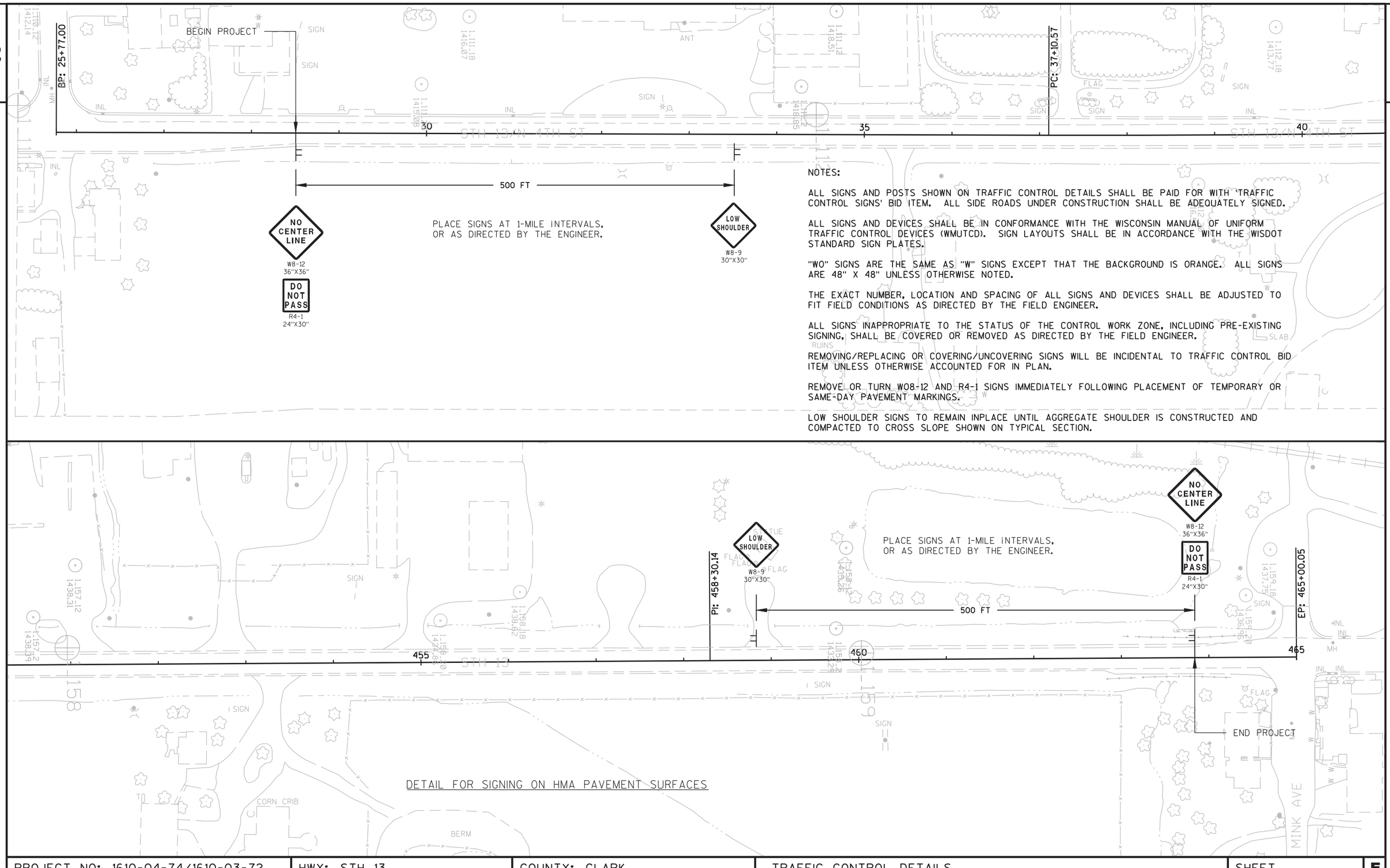
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL WORK ZONE, INCLUDING PRE-EXISTING SIGNING, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE FIELD ENGINEER.

REMOVING/REPLACING OR COVERING/UNCOVERING SIGNS WILL BE INCIDENTAL TO TRAFFIC CONTROL BID ITEM UNLESS OTHERWISE ACCOUNTED FOR IN PLAN.

SEE NEXT DETAIL SHEET FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MARKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

DETAIL FOR SIGNING ON MAINLINE MILLED SURFACES

PROJECT NO: 1610-04-74/1610-03-72	HWY: STH 13	COUNTY: CLARK	TRAFFIC CONTROL DETAILS	SHEET 35	E



NOTES:

ALL SIGNS AND POSTS SHOWN ON TRAFFIC CONTROL DETAILS SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS UNDER CONSTRUCTION SHALL BE ADEQUATELY SIGNED.

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REMOVING/REPLACING OR COVERING/UNCOVERING SIGNS WILL BE INCIDENTAL TO TRAFFIC CONTROL BID ITEM UNLESS OTHERWISE ACCOUNTED FOR IN PLAN.

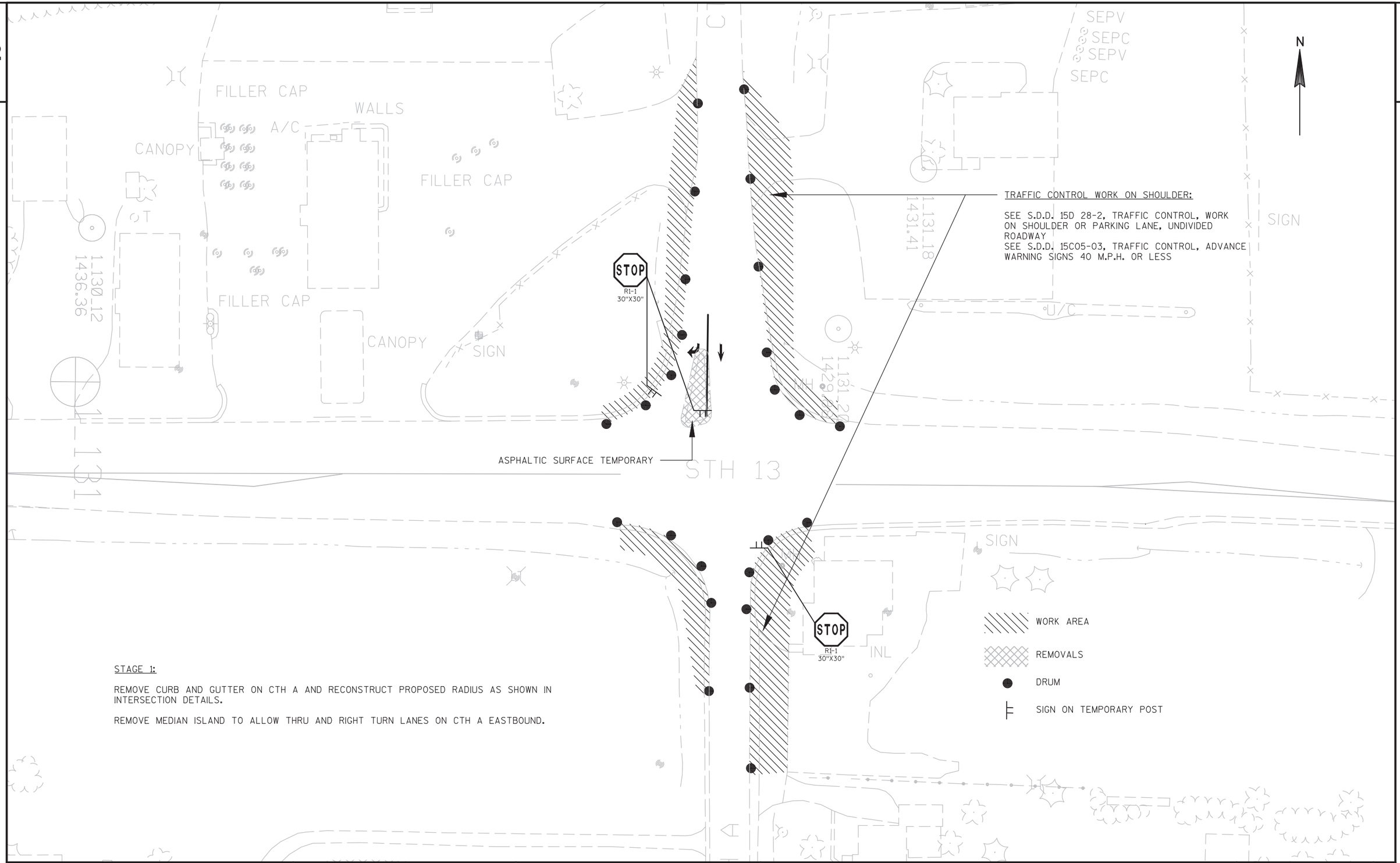
REMOVE OR TURN W08-12 AND R4-1 SIGNS IMMEDIATELY FOLLOWING PLACEMENT OF TEMPORARY OR SAME-DAY PAVEMENT MARKINGS.

LOW SHOULDER SIGNS TO REMAIN INPLACE UNTIL AGGREGATE SHOULDER IS CONSTRUCTED AND COMPACTED TO CROSS SLOPE SHOWN ON TYPICAL SECTION.

DETAIL FOR SIGNING ON HMA PAVEMENT SURFACES

PROJECT NO: 1610-04-74/1610-03-72	HWY: STH 13	COUNTY: CLARK	TRAFFIC CONTROL DETAILS	SHEET 36	E

2



STAGE 1:

REMOVE CURB AND GUTTER ON CTH A AND RECONSTRUCT PROPOSED RADIUS AS SHOWN IN INTERSECTION DETAILS.

REMOVE MEDIAN ISLAND TO ALLOW THRU AND RIGHT TURN LANES ON CTH A EASTBOUND.

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	TRAFFIC CONTROL STAGE 1	SHEET 37	E

2

STAGE 2:

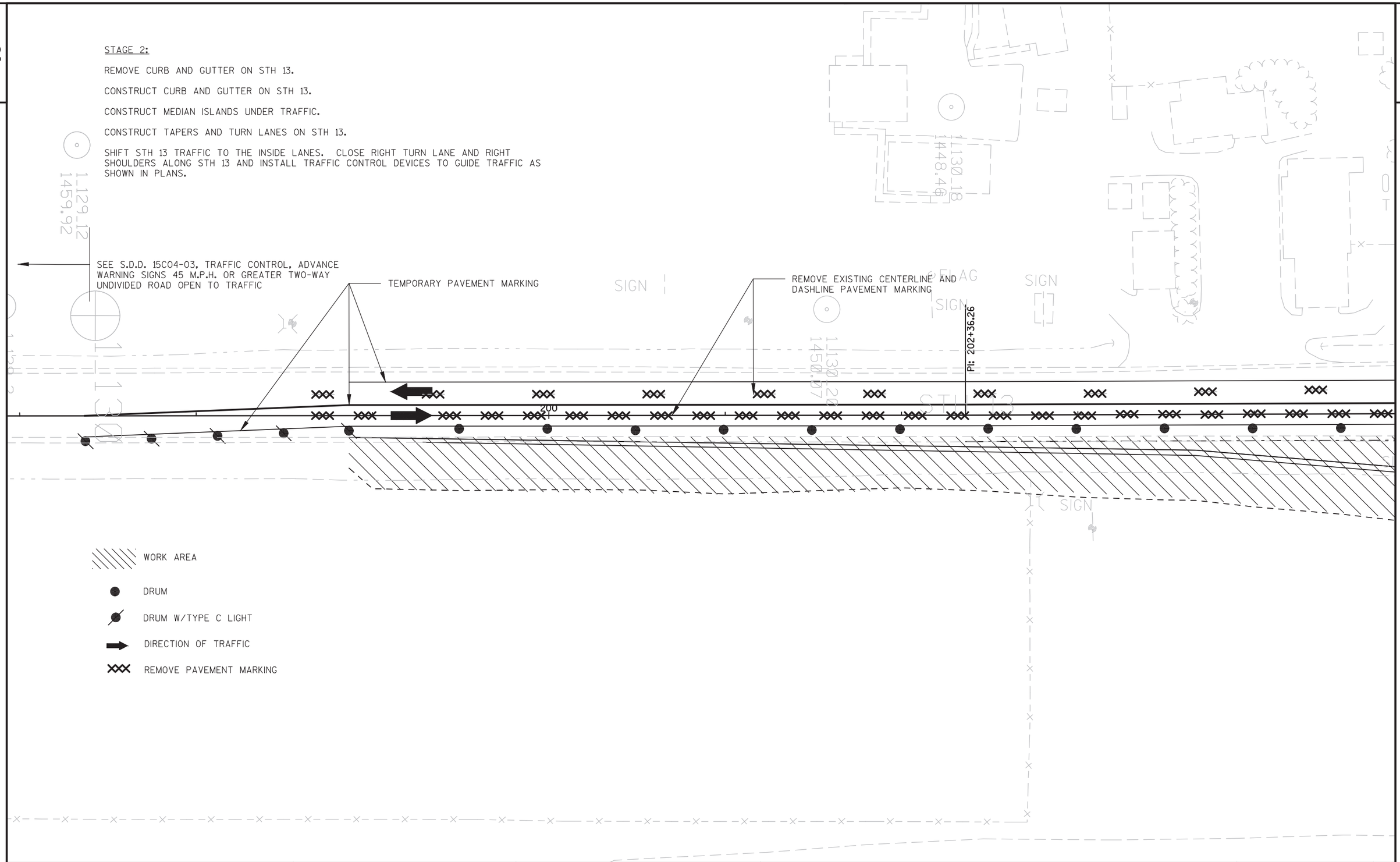
REMOVE CURB AND GUTTER ON STH 13.

CONSTRUCT CURB AND GUTTER ON STH 13.

CONSTRUCT MEDIAN ISLANDS UNDER TRAFFIC.

CONSTRUCT TAPERS AND TURN LANES ON STH 13.

SHIFT STH 13 TRAFFIC TO THE INSIDE LANES. CLOSE RIGHT TURN LANE AND RIGHT SHOULDERS ALONG STH 13 AND INSTALL TRAFFIC CONTROL DEVICES TO GUIDE TRAFFIC AS SHOWN IN PLANS.



PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	TRAFFIC CONTROL: STAGE 2	SHEET 38	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\026002_TC_STH13_16100404.DWG
LAYOUT NAME - ####

PLOT DATE : 6/30/2016 10:12 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

WORK AREA

DRUM

DRUM W/TYPE C LIGHT

DIRECTION OF TRAFFIC

REMOVE PAVEMENT MARKING

REMOVE EXISTING CENTERLINE AND DASHLINE PAVEMENT MARKING

TEMPORARY PAVEMENT MARKING

TEMPORARY PAVEMENT MARKING

STOP
R1-1
30"X30"

COUNTY A
J13-1
24"X45"

ONLY
R3-8-A
36"X30"

COUNTY A
J13-1
24"X45"

STOP
R1-1
30"X30"

PI: 210+20.60

205

210

STH 13

FILLER CAP

WALLS

A/C

CANOPY

FILLER CAP

FILLER CAP

CANOPY

SIGN

SIGN

SIGN

SEPV

SEPC

SEPV

SEPC

1131.18
1431.41

1130.12
1436.36

1131.12
1438.12

1131.12
1429.82

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	TRAFFIC CONTROL: STAGE 2	SHEET 39	E

2

WORK AREA

DRUM

DRUM W/TYPE C LIGHT

DIRECTION OF TRAFFIC

REMOVE PAVEMENT MARKING

SIGN

1_131_12
1423.98

1_132_18
1424.85

1_132_2
1424.8

ONLY
R3-8-A
36"X30"

215

220

PI: 216+92.07

PI: 217+93.15

1_134
1430.650

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	TRAFFIC CONTROL: STAGE 2	SHEET 40	E

2

SEPC
SEPC
W
T
W
ANT
T
STH 13
220
225
1_132_12
1426.62
1_132_2
1426.82
1
SEE S.D.D. 15C04-03, TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
PI: 226+52.91

WORK AREA

DRUM

DRUM W/TYPE C LIGHT

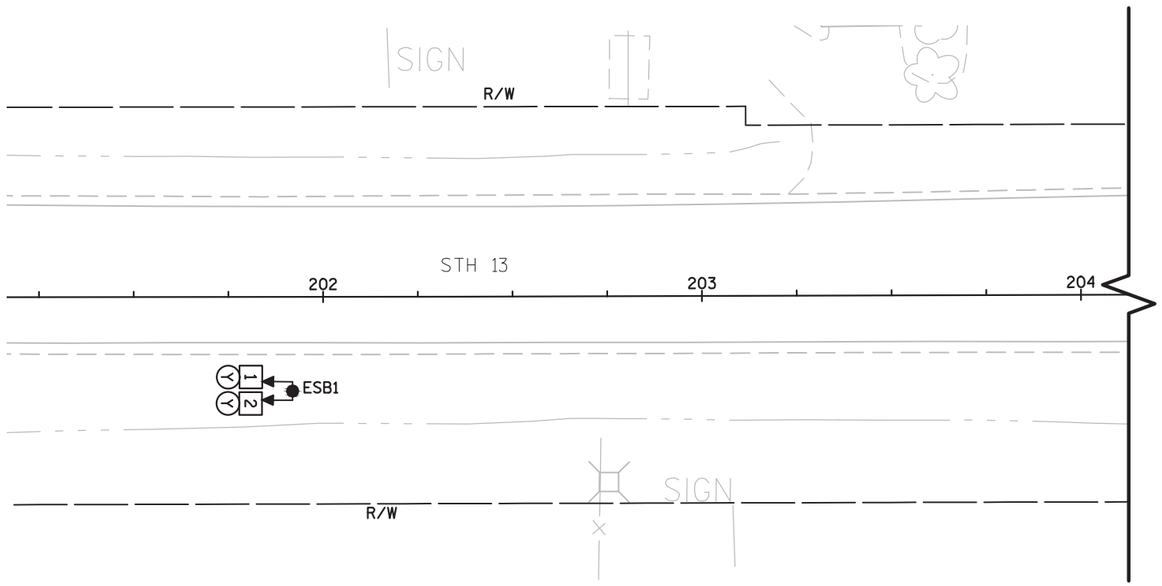
DIRECTION OF TRAFFIC

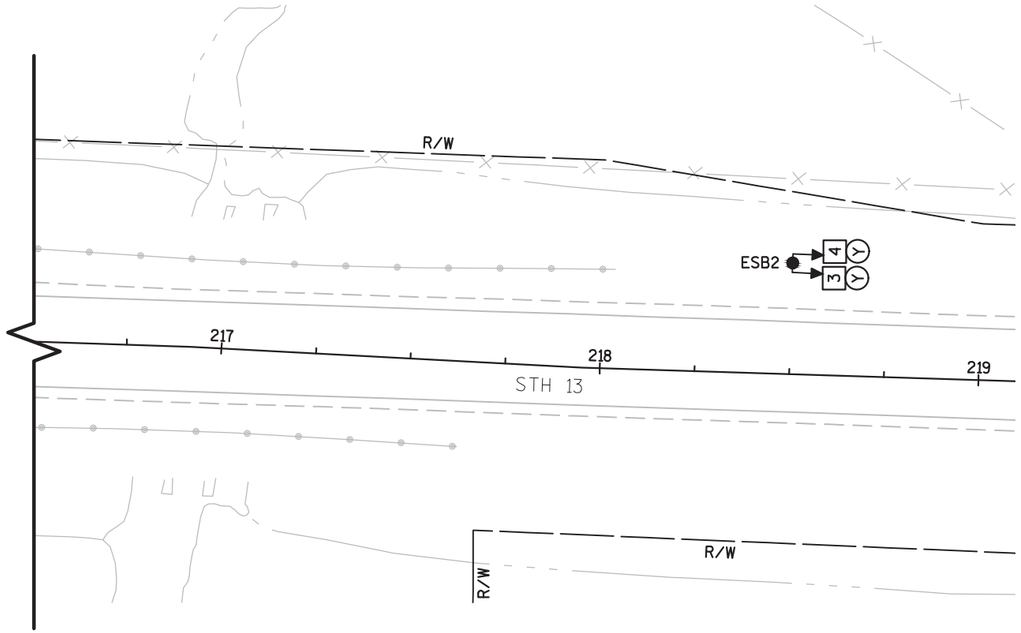
REMOVE PAVEMENT MARKING

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	TRAFFIC CONTROL: STAGE 2	SHEET 41	E

2

N





SAVE FOLDER PATH: P:\UZ\NWITNW\128933\15-CIVIL 3D\16100372\SHEETSPLAN\SEC 02 TYPICAL SECTIONS AND DETAILS

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 42	E

FILE NAME : 024001_SP (SIG REMOVAL PLAN).DWG | PLOT DATE : 5/25/2016 3:30 PM | PLOT BY : SEH INC | LAYOUT NAME : 024002_SP | PLOT SCALE : 1 IN:40 FT

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE (LED CATEGORY C UNLESS OTHERWISE NOTED)
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (715) 839-3787.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
5. ALL LUMINAIRES ARE LED CATEGORY C UNLESS OTHERWISE NOTED.
6. TRAFFIC SIGNAL CABINET AND CONTROLLER TO BE FURNISHED AND INSTALLED BY WISDOT PERSONNEL.
7. WISDOT TO FURNISH ORNAMENTAL MOUNTING HARDWARE, LED MODULES, TRAFFIC SIGNAL STANDARDS.

N

MATCH LINE STA 207+20

MATCH LINE STA 213+00

STH 13

CTH A (CENTER AVENUE)

R/W

CANOPY

SIGN

GUY

INL

SB1 SB2 SB3 SB4 SB6 SB7 SB8

PB1 PB2 PB4 PB5 PB6 PB7 PB12 PB13 PB15 PB16 PB17 PB23

LB4 LED A

CB1

PB14 FUTURE

PB3 FUTURE

B5

225' TO STOPLINE

ONLY

2-2" 2-3" 3-2" 2-1" 3-3"

25' 20'

9'A' 10'A' 11'A'

208 209 210 212

1 2 3 4 5 6 7 8 9 10 11 12 41 42 51 52 63 81 82 83

XX SIGNAL HEAD NUMBER

R RED CIRCULAR INDICATOR

Y YELLOW CIRCULAR INDICATOR

G GREEN CIRCULAR INDICATOR

Y YELLOW ARROW

G GREEN ARROW

S STOP SIGN

LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
STH 13 &
CTH A (CENTER AVENUE)
VILLAGE OF DORCHESTER
CLARK COUNTY

CABINET TYPE: TS-2

SIGNAL NO. S10-1407 CONTROLLER TYPE: ASC/3-1000

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

DATE_____ REGION TRAFFIC ENGINEER

APPROVED

DATE_____ STATE TRAFFIC ENGINEER

REGION CONTACT:
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC.
REVISED BY:

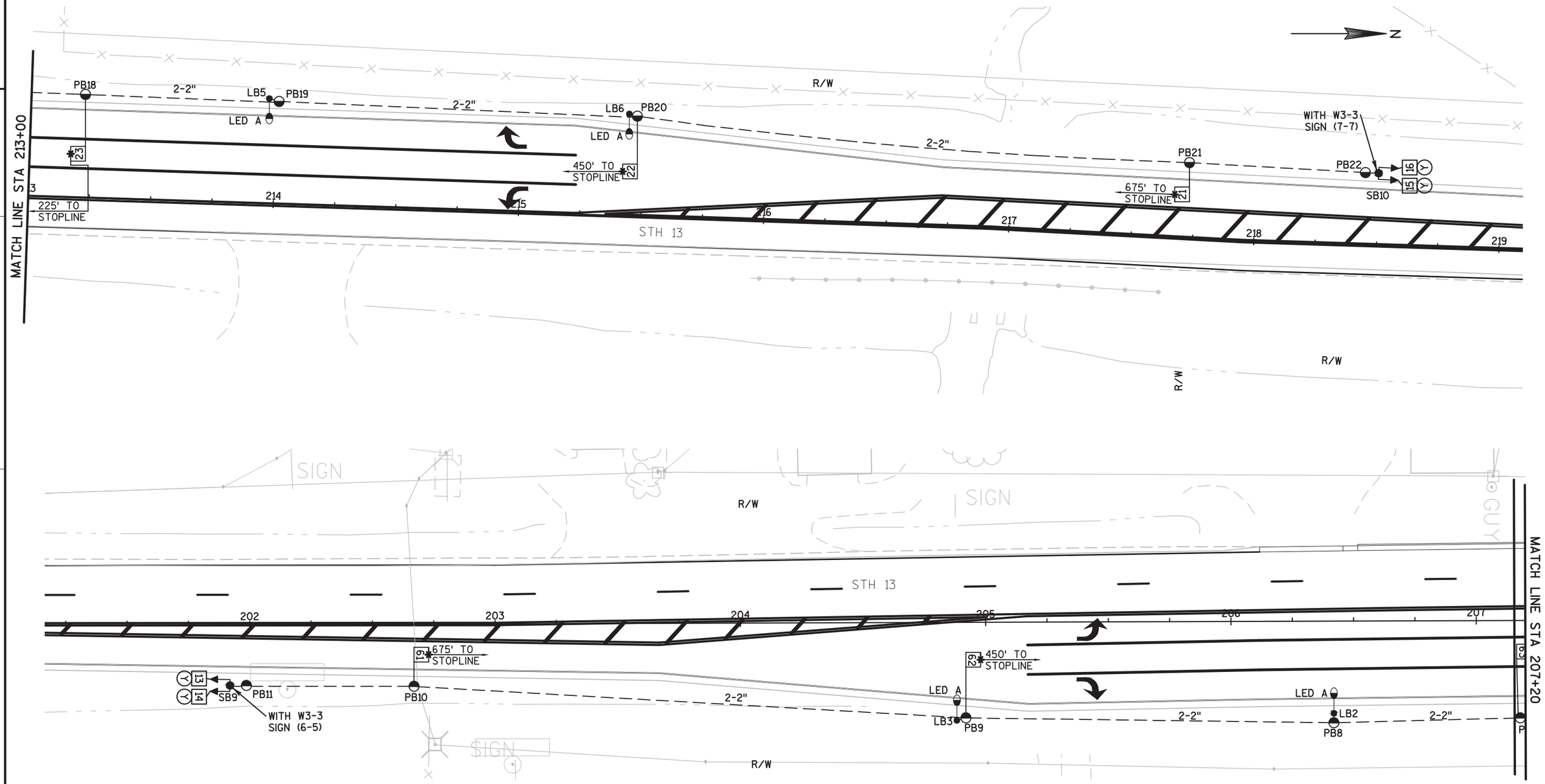
PAGE 1 OF 3

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	TRAFFIC SIGNAL PLAN	SHEET 43	E

SAVE FOLDER PATH: P:\UZ\W\WITNW\128933\15-CIVIL 3D\1610037\SHEETSPLAN\SEC 02 TYPICAL SECTIONS AND DETAILS

FILE NAME : 024001_SP (SIG PLAN).DWG PLOT DATE : 7/29/2016 10:18 AM PLOT BY : SEH INC LAYOUT NAME : 024005_SP PLOT SCALE : 1:40_XREF

2



TRAFFIC CONTROL SIGNAL
STH 13 &
CTH A (CENTER AVENUE)
CITY OF DORCHESTER
CLARK COUNTY

SIGNAL NO. S10-1407

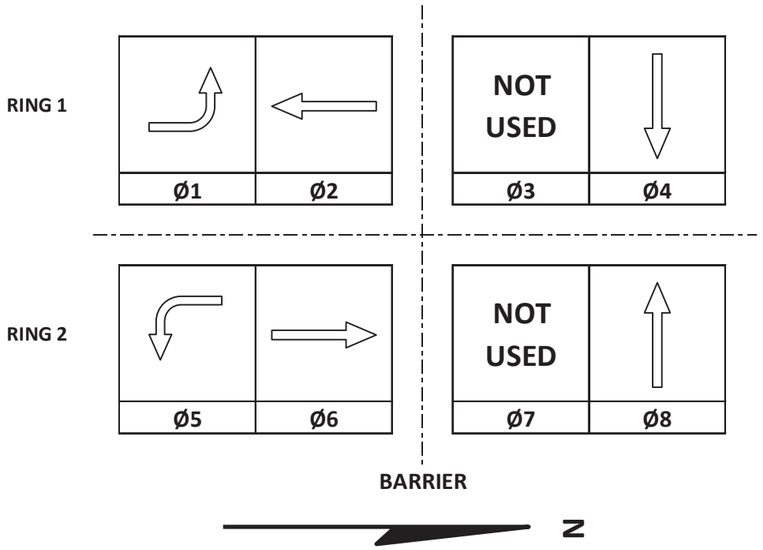
REGION CONTACT: STEVEN BACHMAN
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC.
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	TRAFFIC SIGNAL PLAN	SHEET 44	E

SAVE FOLDER PATH: P:\UZ\W\WITNW\128933\15-CIVIL 3D\1610037\2\SHEETSPLAN\SEC 02 TYPICAL SECTIONS AND DETAILS

	HEAD NUMBERS	FLASH
Ø1	2,3	–
Ø2	4,5,6	R
Ø4	10,11,12	R
Ø5	5,6	–
Ø6	1,2,3	R
Ø8	7,8,9	R



CONTROLLER LOGIC

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

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

TYPE OF COORDINATION	
NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM NO: SS-	

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

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

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NON-CONFLICTING PHASE MAY START TIMING CONCURRENTLY. SEE CHART 1.
3. IF ANY OPPOSING THROUGH PHASES ARE TIMING CONCURRENTLY THEY SHALL TERMINATE DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. NO RED SHOWN ON THE CHART OF PHASES 1 AND 5 SINCE COMPOSITE HEADS ARE USED.
5. USE SPARE CABINET BREAKER TO THE WIG-WAG FLASHERS ON THE NB AND SB SIGNAL AHEAD SIGNS.

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	21	23	42	51	61	63	82
CALLED PHASE	1	2	2	4	5	6	6	8
CALL OPTION	X	X	X	X	X	X	X	X
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME								
USE ADDED INITIAL		X	X			X	X	
CROSS SWITCH PHASE	2				6			

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

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	12	22	41	43*	52	62	81	83*
CALLED PHASE	1	2	4		5	6	8	
CALL OPTION	X	X	X		X	X	X	
DELAY TIME								
EXTENTION OPTION	X	X	X		X	X	X	
EXTEND TIME								
USE ADDED INITIAL		X				X		
CROSS SWITCH PHASE	2				6			

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

CHART 1

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

STH 13 & CTH A (CENTER AVENUE)
VILLAGE OF DORCHESTER
CLARK COUNTY
SIGNAL NO: S10-1407 CABINET TYPE: TS2
CONTROLLER TYPE: ASC/3 - 2100
DATE: 06/16 PAGE NO. 3 OF 3

PROJECT ID:	1610-03-72
INTERSECTION:	STH 13 & CTH A

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

CB_ TO	JUMPER	AWG 14 # OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
					RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING> <YELLOW>	D/WALK	WALK		
SB1		12	7	8	RED	ORG	GRN								
			11	4	RED/BLK	ORG/BLK	GRN/BLK								
SB2		5	12	4	RED	ORG	GRN								
SB3		12	1	6	RED	ORG	GRN								
			5	2 & 5	RED/BLK	ORG/BLK	GRN/BLK		BLK	BLU					
SB4		5	13	N/A		ORG									
			14	N/A		ORG									
SB5		7	6	2 & 5	RED	ORG	GRN		BLK	BLU					
SB6		12	8	8	RED	ORG	GRN								
			10	4	RED/BLK	ORG/BLK	GRN/BLK								
SB7		5	9	8	RED	ORG	GRN								
SB8		12	2	1 & 6	RED	ORG	GRN		BLK	BLU					
			4	2	RED/BLK	ORG/BLK	GRN/BLK								
SB9		5	15	N/A		ORG									
			16	N/A		ORG									
SB10		5	3	1 & 6	RED	ORG	GRN		BLK	BLU					

EQUIPMENT GROUNDING	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB3	SB9
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB7	SB10
SB8	CB1

PULL BOX BONDING JUMPER 10 AWG	
FROM	TO
PB1	CB1
PB2	CB1
PB3	SB1
PB4	SB2
PB5	SB3
PB6	LB1
PB7	LB1
PB8	LB2
PB9	LB3
PB10	SB9
PB11	SB9
PB12	SB4
PB13	SB4
PB14	SB5
PB15	SB6
PB16	SB7
PB17	LB4
PB18	LB4
PB19	LB5
PB20	LB6
PB21	SB10
PB22	SB10
PB23	CB1

LIGHTING UF 2-12 AWG	
FROM	TO
CB1	SB2
SB2	LB1
LB1	SB4
LB1	LB2
LB2	LB3
CB1	SB8
SB8	LB4
LB4	SB6
LB4	LB5
LB5	LB6

EVP CABLE	
FROM	TO

*USE THE WHITE CONDUCTOR IN THE CABLE ASSEMBLY AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS
*ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 12" LONGER THAN THE UNGROUNDED CONDUCTORS.
*AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRAIN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
"OTHER" COLUMN MAY INCLUDE SAHDOW BOX SIGN
*ALL CABLES SHALL BE LABELED WITH SIGNAL BASE NUMBER AT BOTH ENDS OF CABLE.

2

N

PI STA = 0+58.25
Y = 511981.208
X = 757516.038
DELTA = 88°18'27"
D = 95°29'35"
T = 58.25'
L = 92.48'
R = 60.00'
PC STA = -0+00.00
PT STA = 0+92.48

EP: 0+92.48'NW'

BP: -0+00.00'NW'

STA=0+00.00'NW'
N=511979.5823
E=757457.8071

PI STA = 0+38.63
Y = 511989.125
X = 757575.398
DELTA = 88°00'04"
D = 143°14'22"
T = 38.63'
L = 61.44'
R = 40.00'
PC STA = 0+00.00
PT STA = 0+61.44

EP: 0+61.44'NE'

STA=0+00.00'NE'
N=511989.2439
E=757614.0265

BP: 7+00.00'A'

8+00'A'

9+00'A'

10+00'A'

N89° 49' 27"E
200.00'

11+00'A'

EP: 12+00.00'A'

N88° 24' 03"E
300.00'

PI: 10+00.00'A'

PI: 210+20.60

BP: 0+00.00'NE'

EP: 0+94.00'SE'

212+00

211+00

210+00

209+00

STA=7+00.00'A'
N=511953.6624
E=757246.0466

STA=12+00.00'A'
N=511962.6485
E=757745.9288

EP: 0+95.83'SW'

BP: -0+00.00'SW'

PI STA = 0+61.60
Y = 511934.184
X = 757515.836
DELTA = 91°30'23"
D = 95°29'33"
T = 61.60'
L = 95.83'
R = 60.00'
PC STA = -0+00.00
PT STA = 0+95.83

STA=0+00.00'SW'
N=511872.5852
E=757515.9359

BP: 0+00.00'SE'

PI STA = 0+59.75
Y = 511943.127
X = 757575.998
DELTA = 89°45'43"
D = 95°29'34"
T = 59.75'
L = 94.00'
R = 60.00'
PC STA = 0+00.00
PT STA = 0+94.00

STA=0+00.00'SE'
N=511883.3755
E=757575.9329

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	ALIGNMENT DIAGRAM	SHEET 47	E

DATE 03OCT16 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	1610-03-72 QUANTITY	1610-04-74 QUANTITY
0010	203.0100	Removing Small Pipe Culverts	EACH	9.000	2.000	7.000
0020	204.0110	Removing Asphaltic Surface	SY	55.000	55.000	
0030	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,057.000		1,057.000
0040	204.0120	Removing Asphaltic Surface Milling	SY	155,332.000		155,332.000
0050	204.0150	Removing Curb & Gutter	LF	790.000	790.000	
0060	204.9060.S	Removing (item description) 01. Steel Apron Endwalls 57X38-Inch	EACH	3.000	3.000	
0070	205.0100	Excavation Common	CY	2,443.000	2,443.000	
0080	205.0400	Excavation Marsh	CY	120.000	120.000	
0090	208.0100	Borrow	CY	987.000	987.000	
0100	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	67.200		67.200
0110	213.0100	Finishing Roadway (project) 01. 1610-04-74	EACH	1.000		1.000
0120	305.0110	Base Aggregate Dense 3/4-Inch	TON	8,770.000	680.000	8,090.000
0130	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	6,815.000	5,985.000	830.000
0140	305.0500	Shaping Shoulders	STA	871.000		871.000
0150	416.0508	Concrete Roundabout Truck Apron 8-Inch	SY	130.000	130.000	
0160	440.4410	Incentive IRI Ride	DOL	32,980.000		32,980.000
0170	455.0605	Tack Coat	GAL	15,600.000	290.000	15,310.000
0180	460.2000	Incentive Density HMA Pavement	DOL	19,030.000	850.000	18,180.000
0190	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	43,534.000		43,534.000
0200	460.6443	HMA Pavement 3 MT 58-34 H	TON	965.000	965.000	
0210	460.6444	HMA Pavement 4 MT 58-34 H	TON	28,755.000	355.000	28,400.000
0220	465.0105	Asphaltic Surface	TON	168.000		168.000
0230	465.0110	Asphaltic Surface Patching	TON	75.000		75.000
0240	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	115.000	50.000	65.000
0250	465.0125	Asphaltic Surface Temporary	TON	50.000	50.000	
0260	465.0315	Asphaltic Flumes	SY	8.000	8.000	
0270	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	80,385.000		80,385.000
0280	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	36,900.000		36,900.000
0290	520.8700	Cleaning Culvert Pipes	EACH	25.000		25.000
0300	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	2.000	2.000	
0310	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	7.000	6.000	1.000
0320	521.1030	Apron Endwalls for Culvert Pipe Steel 30-Inch	EACH	4.000		4.000
0330	521.1042	Apron Endwalls for Culvert Pipe Steel 42-Inch	EACH	4.000		4.000
0340	521.1249	Apron Endwalls for Pipe Arch Steel 49x33-Inch	EACH	4.000		4.000
0350	521.1257	Apron Endwalls for Pipe Arch Steel 57x38-Inch	EACH	3.000	3.000	
0360	521.1264	Apron Endwalls for Pipe Arch Steel 64x43-Inch	EACH	2.000		2.000
0370	529.0118	Culvert Pipe Corrugated Steel Aluminum Coated 18-Inch	LF	24.000	24.000	
0380	529.0124	Culvert Pipe Corrugated Steel Aluminum Coated 24-Inch	LF	116.000	108.000	8.000
0390	529.0130	Culvert Pipe Corrugated Steel Aluminum Coated 30-Inch	LF	75.000		75.000

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DATE 03OCT16 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	1610-03-72 QUANTITY	1610-04-74 QUANTITY
0400	529.0142	Culvert Pipe Corrugated Steel Aluminum Coated 42-Inch	LF	130.000		130.000
0410	529.0349	Pipe Arch Corrugated Steel Aluminum Coated 49x33-Inch	LF	136.000		136.000
0420	529.0357	Pipe Arch Corrugated Steel Aluminum Coated 57x38-Inch	LF	48.000	48.000	
0430	529.0364	Pipe Arch Corrugated Steel Aluminum Coated 64x43-Inch	LF	60.000		60.000
0440	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	514.000	514.000	
0450	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	108.000	108.000	
0460	601.0582	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type T	LF	356.000	356.000	
0470	602.0415	Concrete Sidewalk 6-Inch	SF	240.000	240.000	
0480	606.0200	Riprap Medium	CY	40.000	40.000	
0490	611.9710	Salvaged Inlet Covers	EACH	1.000	1.000	
0500	614.0010	Barrier System Grading Shaping Finishing	EACH	30.000		30.000
0510	614.0920	Salvaged Rail	LF	3,070.000		3,070.000
0520	614.2300	MGS Guardrail 3	LF	2,225.000		2,225.000
0530	614.2340	MGS Guardrail 3 L	LF	1,150.000		1,150.000
0540	614.2610	MGS Guardrail Terminal EAT	EACH	32.000		32.000
0550	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1610-04-74	EACH	1.000		1.000
0560	619.1000	Mobilization	EACH	1.000	0.300	0.700
0570	620.0300	Concrete Median Sloped Nose	SF	100.000	100.000	
0580	624.0100	Water	MGAL	150.000	125.000	25.000
0590	625.0500	Salvaged Topsoil	SY	5,580.000	5,280.000	300.000
0600	627.0200	Mulching	SY	5,580.000	5,280.000	300.000
0610	628.1504	Silt Fence	LF	7,500.000	2,000.000	5,500.000
0620	628.1520	Silt Fence Maintenance	LF	7,500.000	2,000.000	5,500.000
0630	628.1905	Mobilizations Erosion Control	EACH	3.000		3.000
0640	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000		2.000
0650	628.7015	Inlet Protection Type C	EACH	1.000	1.000	
0660	628.7504	Temporary Ditch Checks	LF	60.000	60.000	
0670	628.7555	Culvert Pipe Checks	EACH	46.000	8.000	38.000
0680	629.0210	Fertilizer Type B	CWT	3.570	3.330	0.240
0690	630.0130	Seeding Mixture No. 30	LB	109.000	96.000	13.000
0700	633.5200	Markers Culvert End	EACH	44.000	8.000	36.000
0710	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	25.000		25.000
0720	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	77.000		77.000
0730	634.0810	Posts Tubular Steel 2x2-Inch X 10-FT	EACH	2.000		2.000
0740	634.0816	Posts Tubular Steel 2x2-Inch X 16-FT	EACH	1.000		1.000
0750	637.2210	Signs Type II Reflective H	SF	806.120		806.120
0760	637.2215	Signs Type II Reflective H Folding	SF	10.360		10.360
0770	637.2230	Signs Type II Reflective F	SF	155.000		155.000
0780	638.2102	Moving Signs Type II	EACH	1.000		1.000
0790	638.2602	Removing Signs Type II	EACH	112.000		112.000
0800	638.3000	Removing Small Sign Supports	EACH	133.000		133.000
0810	641.8100	Overhead Sign Support (structure) 01. S-10-007	LS	1.000	1.000	
0820	641.8100	Overhead Sign Support (structure) 02. S-10-008	LS	1.000	1.000	
0830	642.5001	Field Office Type B	EACH	1.000		1.000
0840	643.0100	Traffic Control (project) 01. 1610-04-74	EACH	1.000		1.000
0850	643.0100	Traffic Control (project) 02. 1610-03-72	EACH	1.000	1.000	

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DATE 03OCT16 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	1610-03-72 QUANTITY	1610-04-74 QUANTITY
0860	643.0300	Traffic Control Drums	DAY	4,268.000	1,708.000	2,560.000
0870	643.0715	Traffic Control Warning Lights Type C	DAY	1,045.000	220.000	825.000
0880	643.0900	Traffic Control Signs	DAY	3,950.000	350.000	3,600.000
0890	645.0120	Geotextile Type HR	SY	176.000	176.000	
0900	646.0106	Pavement Marking Epoxy 4-Inch	LF	88,020.000	6,020.000	82,000.000
0910	646.0126	Pavement Marking Epoxy 8-Inch	LF	1,930.000	1,930.000	
0920	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	30,700.000	9,100.000	21,600.000
0930	646.0600	Removing Pavement Markings	LF	1,200.000	1,200.000	
0940	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	10.000	10.000	
0950	647.0356	Pavement Marking Words Epoxy	EACH	4.000	4.000	
0960	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	136.000	136.000	
0970	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	430.000	430.000	
0980	647.0955	Removing Pavement Markings Arrows	EACH	6.000	6.000	
0990	647.0965	Removing Pavement Markings Words	EACH	6.000	6.000	
1000	648.0100	Locating No-Passing Zones	MI	8.500		8.500
1010	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	4,280.000	4,280.000	
1020	649.1800	Temporary Pavement Marking Arrows Removable Tape	EACH	10.000	10.000	
1030	650.4500	Construction Staking Subgrade	LF	3,080.000	3,080.000	
1040	650.5000	Construction Staking Base	LF	3,080.000	3,080.000	
1050	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	978.000	978.000	
1060	650.6000	Construction Staking Pipe Culverts	EACH	14.000	7.000	7.000
1070	650.8000	Construction Staking Resurfacing Reference	LF	43,600.000		43,600.000
1080	650.9910	Construction Staking Supplemental Control (project) 01. 1610-04-74	LS	1.000		1.000
1090	650.9910	Construction Staking Supplemental Control (project) 02. 1610-03-72	LS	1.000	1.000	
1100	650.9920	Construction Staking Slope Stakes	LF	3,080.000	3,080.000	
1110	652.0210	Conduit Rigid Nonmetallic Schedule 40 1-Inch	LF	12.000	12.000	
1120	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	3,170.000	3,170.000	
1130	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	290.000	290.000	
1140	652.0615	Conduit Special 3-Inch	LF	882.000	882.000	
1150	652.0800	Conduit Loop Detector	LF	1,392.000	1,392.000	
1160	653.0135	Pull Boxes Steel 24x36-Inch	EACH	12.000	12.000	
1170	653.0140	Pull Boxes Steel 24x42-Inch	EACH	11.000	11.000	
1180	654.0101	Concrete Bases Type 1	EACH	4.000	4.000	
1190	654.0102	Concrete Bases Type 2	EACH	6.000	6.000	
1200	654.0105	Concrete Bases Type 5	EACH	6.000	6.000	
1210	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000	1.000	
1220	655.0230	Cable Traffic Signal 5-14 AWG	LF	3,084.000	3,084.000	
1230	655.0240	Cable Traffic Signal 7-14 AWG	LF	592.000	592.000	
1240	655.0260	Cable Traffic Signal 12-14 AWG	LF	704.000	704.000	
1250	655.0320	Cable Type UF 2-10 AWG Grounded	LF	2,310.000	2,310.000	
1260	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	4,238.000	4,238.000	
1270	655.0615	Electrical Wire Lighting 10 AWG	LF	1,170.000	1,170.000	
1280	655.0700	Loop Detector Lead In Cable	LF	5,514.000	5,514.000	
1290	655.0800	Loop Detector Wire	LF	5,266.000	5,266.000	

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DATE 03OCT16 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	1610-03-72 QUANTITY	1610-04-74 QUANTITY
1300	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STH 13 & CTH A	LS	1.000	1.000	
1310	657.0100	Pedestal Bases	EACH	6.000	6.000	
1320	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	10.000	10.000	
1330	657.0310	Poles Type 3	EACH	4.000	4.000	
1340	657.0322	Poles Type 5-Aluminum	EACH	6.000	6.000	
1350	657.0590	Trombone Arms 20-FT	EACH	1.000	1.000	
1360	657.0595	Trombone Arms 25-FT	EACH	3.000	3.000	
1370	657.0705	Luminaire Arms Truss Type 4 1/2-Inch Clamp 10-FT	EACH	6.000	6.000	
1380	657.0709	Luminaire Arms Truss Type 4-Inch Clamp 12-FT	EACH	4.000	4.000	
1390	658.0110	Traffic Signal Face 3-12 Inch Vertical	EACH	6.000	6.000	
1400	658.0120	Traffic Signal Face 5-12 Inch Vertical	EACH	2.000	2.000	
1410	658.0155	Traffic Signal Face 3-12 Inch Horizontal	EACH	2.000	2.000	
1420	658.0165	Traffic Signal Face 5-12 Inch Horizontal	EACH	2.000	2.000	
1430	658.0215	Backplates Signal Face 3 Section 12-Inch	EACH	8.000	8.000	
1440	658.0225	Backplates Signal Face 5 Section 12-Inch	EACH	4.000	4.000	
1450	659.1115	Luminaires Utility LED A	EACH	6.000	6.000	
1460	659.1125	Luminaires Utility LED C	EACH	4.000	4.000	
1470	690.0150	Sawing Asphalt	LF	2,002.000	1,470.000	532.000
1480	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	630.000		630.000
1490	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,000.000		2,000.000
1500	SPV.0060	Special 01. Install State Furnished LED Modules	EACH	44.000	44.000	
1510	SPV.0060	Special 02. Install State Furnished Traffic Signal Standards 13-FT	EACH	2.000	2.000	
1520	SPV.0060	Special 03. Install State Furnished Traffic Signal Standards 15-FT	EACH	2.000	2.000	
1530	SPV.0060	Special 04. Remove, Salvage, and Reinstall Traffic Signal Standard	EACH	2.000	2.000	
1540	SPV.0060	Special 05. Reconstruct Sanitary Sewer Manhole	EACH	2.000	2.000	
1550	SPV.0090	Special 01. Concrete Curb and Gutter Cure and Seal Treatment	LF	978.000	978.000	
1560	SPV.0105	Special 01. Inst Dept Furn Ornamental Signal Mounting Hardware For TS, STH 13 & CTH A	LS	1.000	1.000	
1570	SPV.0105	Special 02. Signal Mounting Hardware for Pole Mountings, STH 13 & CTH A	LS	1.000	1.000	
1580	SPV.0105	Special 03. Prepare Foundation for Asphaltic Paving Special	LS	1.000		1.000
1590	SPV.0105	Special 04. Milling and Removing Temporary Joint	LS	1.000		1.000
1600	SPV.0105	Special 05. Material Transfer Vehicle	LS	1.000		1.000
1610	SPV.0165	Special 01. Concrete Sidewalk Cure and Seal Treatment	SF	240.000	240.000	
1620	SPV.0165	Special 02. Concrete Median Slope Nose Cure and Seal Treatment	SF	100.000	100.000	

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REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	STATION	LOCATION	204.0115 SY	REMARKS
0010	52+10	STH 13, LT & RT	146	WILLOW / BOSS RD
0010	104+90	STH 13, LT & RT	73	PINE RD
0010	157+35	STH 13, LT & RT	152	CENTER RD
0010	210+20	STH 13, LT & RT	148	CTH A
0010	263+00	STH 13, LT & RT	134	HICKORY RD
0010	275+90	STH 13, LT	42	LOCAL RD
0010	289+75	STH 13, RT	50	LOCAL RD
0010	320+20	STH 13, RT	62	COUNTY LINE RD
0010	372+90	STH 13, LT & RT	138	ELM AVE
0010	425+30	STH 13, LT & RT	112	STETSON AVE
		TOTAL 0010	1057	

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STATION	TO	STATION	LOCATION	204.0120 SY	REMARKS
0010	28+50	-	463+84	STH 13	145113	30-FT MAINLINE
0010	28+50	-	39+50	STH 13, LT	611	5-FT SHLD
0010			52+10	STH 13, LT	289	WILLOW RD
0010			52+10	STH 13, RT	233	BOSS RD
0010			104+90	STH 13, LT	316	PINE RD
0010			104+90	STH 13, RT	310	HOLTON RD
0010			157+35	STH 13, LT	288	CENTER RD
0010			157+35	STH 13, RT	301	TOWN HALL RD
0010	184+35	-	209+34	STH 13, LT	3089	SB CLIMBING LN
0010	204+92	-	209+42	STH 13, RT	379	RIGHT TURN LN
0010	209+34	-	210+97	STH 13, LT	856	CTH A RADIUS
0010	209+42	-	210+83	STH 13, RT	539	CTH A RADIUS
0010	210+97	-	216+64	STH 13, LT	704	RIGHT TURN LN
0010	210+83	-	213+35	STH 13, RT	119	TAPER
0010			263+00	STH 13, LT	255	HICKORY (WEST)
0010			263+00	STH 13, RT	189	HICKORY (EAST)
0010			275+90	STH 13, LT	167	LOCAL RD
0010			289+75	STH 13, RT	155	LOCAL RD
0010			320+20	STH 13, LT	239	COUNTY LINE RD (WEST)
0010			320+20	STH 13, RT	258	COUNTY LINE RD (EAST)
0010			372+90	STH 13, LT	236	ELM AVE (WEST)
0010			372+90	STH 13, RT	266	ELM AVE (EAST)
0010			425+30	STH 13, LT	206	STETSON AVE (WEST)
0010			425+30	STH 13, RT	214	STETSON AVE (EAST)
				TOTAL 0010	155332	

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	203.0100 EACH	REMARKS
0010	99+95	STH 13	1	42-INCH CMP
0010	100+07	STH 13	1	42-INCH CMP
0010	106+05	STH 13, RT	1	24-INCH CMP (1 SEC. ONLY)
0010	114+02	STH 13	1	30-INCH CMP
0010	280+91	STH 13	1	49X33-INCH CMPA
0010	281+01	STH 13	1	49X33-INCH CMPA
0010	323+99	STH 13	1	64X43-INCH CMPA
		TOTAL 0010	7	

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

CATEGORY	STATION	TO	STATION	LOCATION	211.0400 STA	REMARKS
0010	53+00	-	57+10	STH 13, LT	4.1	BEAM GUARD SHLDS
0010	52+92	-	57+12	STH 13, RT	4.2	BEAM GUARD SHLDS
0010	98+12	-	101+92	STH 13, RT	3.8	BEAM GUARD SHLDS
0010	115+78	-	119+88	STH 13, LT	4.1	BEAM GUARD SHLDS
0010	116+02	-	120+12	STH 13, RT	4.1	BEAM GUARD SHLDS
0010	214+88	-	218+98	STH 13, RT	4.1	BEAM GUARD SHLDS
0010	244+48	-	248+48	STH 13, LT	4.0	BEAM GUARD SHLDS
0010	244+38	-	248+58	STH 13, RT	4.2	BEAM GUARD SHLDS
0010	267+45	-	271+55	STH 13, LT	4.1	BEAM GUARD SHLDS
0010	267+47	-	271+57	STH 13, RT	4.1	BEAM GUARD SHLDS
0010	301+75	-	305+55	STH 13, LT	3.8	BEAM GUARD SHLDS
0010	301+66	-	305+56	STH 13, RT	3.9	BEAM GUARD SHLDS
0010	383+63	-	390+73	STH 13, LT	7.1	BEAM GUARD SHLDS
0010	383+61	-	390+81	STH 13, RT	7.2	BEAM GUARD SHLDS
0010	462+45	-	464+55	STH 13, LT	2.1	BEAM GUARD SHLDS
0010	462+18	-	464+48	STH 13, RT	2.3	BEAM GUARD SHLDS
				TOTAL 0010	67.2	

BASE AGGREGATE DENSE 3/4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 TON	REMARKS
0010	28+50	-	198+86	STH 13	2850	MAINLINE SHLD
0010	223+92	-	463+84	STH 13	4010	MAINLINE SHLD
0010			99+95	STH 13	19	42-INCH CPCSAC
0010			100+07	STH 13	19	42-INCH CPCSAC
0010			106+05	STH 13, RT	8	24-INCH CPCSAC (1-SECTION)
0010			114+02	STH 13	16	30-INCH CPCSAC
0010			280+91	STH 13	14	49X33-INCH PACSAC
0010			281+01	STH 13	14	49X33-INCH PACSAC
0010			323+99	STH 13	21	64X43-INCH PACSAC
0010	53+00	-	53+81	STH 13, LT	21	EAT SHLD
0010	52+84	-	53+81	STH 13, RT	25	EAT SHLD
0010	56+12	-	57+52	STH 13, LT	35	EAT SHLD
0010	56+12	-	57+52	STH 13, RT	35	EAT SHLD
0010	98+00	-	99+12	STH 13, RT	28	EAT SHLD
0010	100+92	-	102+21	STH 13, RT	32	EAT SHLD
0010	115+28	-	116+82	STH 13, LT	39	EAT SHLD
0010	115+37	-	117+06	STH 13, RT	42	EAT SHLD
0010	118+88	-	120+42	STH 13, LT	39	EAT SHLD
0010	119+11	-	120+80	STH 13, RT	42	EAT SHLD
0010	214+26	-	215+89	STH 13, RT	41	EAT SHLD
0010	217+95	-	219+64	STH 13, RT	42	EAT SHLD
0010	244+00	-	245+45	STH 13, LT	36	EAT SHLD
0010	243+95	-	245+45	STH 13, RT	38	EAT SHLD
0010	247+51	-	248+85	STH 13, LT	34	EAT SHLD
0010	247+51	-	249+08	STH 13, RT	39	EAT SHLD
0010	266+80	-	268+49	STH 13, LT	42	EAT SHLD
0010	266+80	-	268+49	STH 13, RT	42	EAT SHLD
0010	270+55	-	271+81	STH 13, LT	32	EAT SHLD
0010	270+55	-	272+23	STH 13, RT	42	EAT SHLD
0010	301+04	-	302+73	STH 13, LT	42	EAT SHLD
0010	301+04	-	302+73	STH 13, RT	42	EAT SHLD
0010	304+53	-	306+22	STH 13, LT	42	EAT SHLD
0010	304+53	-	306+22	STH 13, RT	42	EAT SHLD
0010	383+09	-	384+65	STH 13, LT	39	EAT SHLD
0010	383+32	-	384+65	STH 13, RT	33	EAT SHLD
0010	389+71	-	391+06	STH 13, LT	34	EAT SHLD
0010	389+71	-	391+25	STH 13, RT	39	EAT SHLD
0010	461+93	-	463+44	STH 13, LT	38	EAT SHLD
0010	461+55	-	463+24	STH 13, RT	42	EAT SHLD
				TOTAL 0010	8090	

TACK COAT

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 GAL	REMARKS
0010	28+50	-	463+84	STH 13	15310	MILL & LOWER LAYER
				TOTAL 0010	15310	

BASE AGGREGATE DENSE 1 1/4-INCH

CATEGORY	STATION	LOCATION	305.0120 TON	REMARKS
0010	99+95	STH 13	150	42-INCH CPCSAC
0010	100+07	STH 13	150	42-INCH CPCSAC
0010	106+05	STH 13, RT	25	24-INCH CPCSAC (1-SECTION)
0010	114+02	STH 13	125	30-INCH CPCSAC
0010	280+91	STH 13	105	49X33-INCH PACSAC
0010	281+01	STH 13	105	49X33-INCH PACSAC
0010	323+99	STH 13	170	64X43-INCH PACSAC
		TOTAL 0010	830	

SHAPING SHOULDERS

CATEGORY	STATION	TO	STATION	LOCATION	305.0500 STA	REMARKS
0010	28+50	-	463+84	STH 13, LT & RT	871	
				TOTAL 0010	871	

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

CATEGORY	STATION	LOCATION	465.0120 TON	REMARKS
0010	261+22	STH 13, LT	15	PRIVATE ENTRANCE
0010	262+60	STH 13, RT	10	PRIVATE ENTRANCE
0010	285+05	STH 13, RT	10	PRIVATE ENTRANCE
0010	295+40	STH 13, RT	15	PRIVATE ENTRANCE
0010	318+50	STH 13, RT	15	PRIVATE ENTRANCE
		TOTAL 0010	65	

REHEATING HMA PAVEMENT LONGITUDINAL JOINTS

CATEGORY	STATION	TO	STATION	LOCATION	460.4110.S LF	REMARKS
0010	28+50	-	463+84	STH 13	43534	
				TOTAL 0010	43534	

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HMA PAVEMENT 4 MT 58-34 H

CATEGORY	STATION TO STATION	LOCATION	460.6444 TON	REMARKS
0010	28+50 - 463+84	STH 13	26411	30-FT MAINLINE
0010	28+50 - 39+50	STH 13, LT	111	5-FT SHLD
0010	52+10	STH 13, LT	32	WILLOW RD
0010	52+10	STH 13, RT	26	BOSS RD
0010	104+90	STH 13, LT	35	PINE RD
0010	104+90	STH 13, RT	35	HOLTON RD
0010	157+35	STH 13, LT	32	CENTER RD
0010	157+35	STH 13, RT	34	TOWN HALL RD
0010	184+35 - 209+34	STH 13, LT	562	SB CLIMBING LN
0010	204+92 - 209+42	STH 13, RT	69	RIGHT TURN LN
0010	209+34 - 210+97	STH 13, LT	96	CTH A RADIUS
0010	209+42 - 210+83	STH 13, RT	60	CTH A RADIUS
0010	210+97 - 216+64	STH 13, LT	128	RIGHT TURN LN
0010	210+83 - 213+35	STH 13, RT	13	TAPER
0010	263+00	STH 13, LT	29	HICKORY (WEST)
0010	263+00	STH 13, RT	21	HICKORY (EAST)
0010	275+90	STH 13, LT	19	LOCAL RD
0010	289+75	STH 13, RT	17	LOCAL RD
0010	320+20	STH 13, LT	27	COUNTY LINE RD (WEST)
0010	320+20	STH 13, RT	29	COUNTY LINE RD (EAST)
0010	372+90	STH 13, LT	26	ELM AVE (WEST)
0010	372+90	STH 13, RT	30	ELM AVE (EAST)
0010	425+30	STH 13, LT	23	STETSON AVE (WEST)
0010	425+30	STH 13, RT	24	STETSON AVE (EAST)
0010	52+10	STH 13, LT & RT	16	WILLOW / BOSS RD JOINT
0010	104+90	STH 13, LT & RT	8	PINE RD JOINT
0010	157+35	STH 13, LT & RT	17	CENTER RD JOINT
0010	210+20	STH 13, LT & RT	17	CTH A JOINT
0010	263+00	STH 13, LT & RT	15	HICKORY RD JOINT
0010	275+90	STH 13, LT	5	LOCAL RD JOINT
0010	289+75	STH 13, RT	6	LOCAL RD JOINT
0010	320+20	STH 13, RT	7	COUNTY LINE RD JOINT
0010	372+90	STH 13, LT & RT	15	ELM AVE JOINT
0010	425+30	STH 13, LT & RT	13	STETSON AVE JOINT
0010	53+00 - 57+10	STH 13, LT	22	BEAM GUARD SHLDS
0010	52+92 - 57+12	STH 13, RT	33	BEAM GUARD SHLDS
0010	98+12 - 101+92	STH 13, RT	21	BEAM GUARD SHLDS
0010	115+78 - 119+88	STH 13, LT	23	BEAM GUARD SHLDS
0010	116+02 - 120+12	STH 13, RT	25	BEAM GUARD SHLDS
0010	214+88 - 218+98	STH 13, RT	23	BEAM GUARD SHLDS
0010	244+48 - 248+48	STH 13, LT	21	BEAM GUARD SHLDS
0010	244+38 - 248+58	STH 13, RT	26	BEAM GUARD SHLDS
0010	267+45 - 271+55	STH 13, LT	20	BEAM GUARD SHLDS
0010	267+47 - 271+57	STH 13, RT	26	BEAM GUARD SHLDS
0010	301+75 - 305+55	STH 13, LT	21	BEAM GUARD SHLDS
0010	301+66 - 305+56	STH 13, RT	21	BEAM GUARD SHLDS
0010	383+63 - 390+73	STH 13, LT	41	BEAM GUARD SHLDS
0010	383+61 - 390+81	STH 13, RT	47	BEAM GUARD SHLDS
0010	462+45 - 464+55	STH 13, LT	9	BEAM GUARD SHLDS
0010	462+18 - 464+48	STH 13, RT	13	BEAM GUARD SHLDS
		TOTAL 0010	28400	

ASPHALTIC SURFACE

CATEGORY	STATION	LOCATION	465.0105 TON	REMARKS
0010	99+95	STH 13	27	42-INCH CPCSAC
0010	100+07	STH 13	27	42-INCH CPCSAC
0010	106+05	STH 13, RT	23	24-INCH CPCSAC (1-SECTION)
0010	114+02	STH 13	23	30-INCH CPCSAC
0010	280+91	STH 13	19	49X33-INCH PACSAC
0010	281+01	STH 13	19	49X33-INCH PACSAC
0010	323+99	STH 13	30	64X43-INCH PACSAC
		TOTAL 0010	168	

ASPHALTIC SURFACE PATCHING

CATEGORY	STATION TO STATION	LOCATION	465.0110 TON	REMARKS
0010	28+50 - 463+84	STH 13	75	
		TOTAL 0010	75	

ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

CATEGORY	STATION TO STATION	LOCATION	465.0425 LF	REMARKS
0010	28+50 - 50+85	STH 13, LT & RT	4470	SEE SDD
0010	53+25 - 103+40	STH 13, LT & RT	10030	SEE SDD
0010	106+05 - 156+00	STH 13, LT & RT	9990	SEE SDD
0010	158+70 - 198+85	STH 13, LT & RT	8030	SEE SDD
0010	198+85 - 205+95	STH 13, LT	710	SEE SDD
0010	212+95 - 223+95	STH 13, RT	1100	SEE SDD
0010	223+95 - 261+80	STH 13, LT & RT	7570	SEE SDD
0010	264+05 - 288+60	STH 13, LT & RT	4910	SEE SDD
0010	288+60 - 290+45	STH 13, LT	185	SEE SDD
0010	290+45 - 319+25	STH 13, LT & RT	5760	SEE SDD
0010	321+50 - 371+80	STH 13, LT & RT	10060	SEE SDD
0010	374+00 - 424+45	STH 13, LT & RT	10090	SEE SDD
0010	426+40 - 463+80	STH 13, LT & RT	7480	SEE SDD
		TOTAL 0010	80385	

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ASPHALT CENTER LINE RUMBLE STRIPS 2-LANE RURAL

CATEGORY	STATION	TO	STATION	LOCATION	465.0475 LF	REMARKS
0010	40+00	-	50+50	STH 13	1050	SEE SDD
0010	53+50	-	103+00	STH 13	4950	SEE SDD
0010	106+50	-	155+50	STH 13	4900	SEE SDD
0010	159+25	-	197+75	STH 13	3850	SEE SDD
0010	224+25	-	261+50	STH 13	3725	SEE SDD
0010	264+50	-	274+50	STH 13	1000	SEE SDD
0010	277+50	-	288+00	STH 13	1050	SEE SDD
0010	291+00	-	318+75	STH 13	2775	SEE SDD
0010	322+00	-	371+50	STH 13	4950	SEE SDD
0010	374+50	-	424+00	STH 13	4950	SEE SDD
0010	426+75	-	463+75	STH 13	3700	SEE SDD
				TOTAL 0010	36900	

CLEANING CULVERT PIPES

CATEGORY	STATION	LOCATION	520.8700 EACH	REMARKS
0010	77+40	STH 13, RT	1	6-INCH P.U. AEW
0010	78+00	STH 13, LT	1	6-INCH P.U. AEW
0010	90+06	STH 13, LT	1	6-INCH P.U. AEW
0010	90+90	STH 13, RT	1	6-INCH P.U. AEW
0010	117+75	STH 13	1	83"x57"x74' CSPA
0010	117+84	STH 13	1	83"x57"x74' CSPA
0010	117+94	STH 13	1	83"x57"x74' CSPA
0010	156+53	STH 13	1	30"x78' CMP
0010	177+55	STH 13	1	42"x29"x58' CSPA
0010	177+64	STH 13	1	42"x29"x58' CSPA
0010	246+42	STH 13	1	42"x66' CMP
0010	246+53	STH 13	1	42"x66' CMP
0010	269+42	STH 13	1	48"x64' CMP
0010	269+53	STH 13	1	48"x64' CMP
0010	269+64	STH 13	1	48"x64' CMP
0010	303+59	STH 13	1	42"x58' CMP
0010	303+69	STH 13	1	42"x58' CMP
0010	353+85	STH 13	1	36"x72' PVC
0010	353+95	STH 13	1	36"x72' PVC
0010	388+30	STH 13	1	72"x78' CMP
0010	388+45	STH 13	1	72"x78' CMP
0010	388+80	STH 13	1	72"x78' CMP
0010	463+64	STH 13	1	64"x43"x56' CSPA
0010	463+71	STH 13	1	64"x43"x56' CSPA
0010	463+79	STH 13	1	64"x43"x56' CSPA
		TOTAL 0010	25	

AEW FOR CULVERT PIPE

CATEGORY	STATION	LOCATION	APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH 521.1024 EACH	APRON ENDWALLS FOR CULVERT PIPE STEEL 30-INCH 521.1030 EACH	APRON ENDWALLS FOR CULVERT PIPE STEEL 42-INCH 521.1042 EACH	APRON ENDWALLS FOR PIPE ARCH STEEL 49X33-INCH 521.1249 EACH	APRON ENDWALLS FOR PIPE ARCH STEEL 64X43-INCH 521.1264 EACH	REMARKS
0010	103+05	STH 13, RT	1	-	-	-	-	
0010	114+02	STH 13	-	2	-	-	-	
0010	156+53	STH 13	-	2	-	-	-	
0010	99+95	STH 13	-	-	2	-	-	
0010	100+07	STH 13	-	-	2	-	-	
0010	280+91	STH 13	-	-	-	2	-	
0010	281+01	STH 13	-	-	-	2	-	
0010	323+99	STH 13	-	-	-	-	2	
		TOTAL 0010	1	4	4	4	2	

CULVERT PIPE

CATEGORY	STATION	LOCATION	CULVERT PIPE CORRUGATED STEEL ALUMINUM COATED 24-INCH 529.0124 LF	CULVERT PIPE CORRUGATED STEEL ALUMINUM COATED 30-INCH 529.0130 LF	CULVERT PIPE CORRUGATED STEEL ALUMINUM COATED 42-INCH 529.0142 LF	PIPE ARCH CORRUGATED STEEL ALUMINUM COATED 49X33-INCH 529.0349 LF	PIPE ARCH CORRUGATED STEEL ALUMINUM COATED 64X43-INCH 529.0364 LF	REMARKS
0010	103+05	STH 13, RT	8	-	-	-	-	MIN. THICKNESS = 0.064"
0010	114+02	STH 13	-	75	-	-	-	MIN. THICKNESS = 0.079"
0010	99+95	STH 13	-	-	65	-	-	MIN. THICKNESS = 0.109"
0010	100+07	STH 13	-	-	65	-	-	MIN. THICKNESS = 0.109"
0010	280+91	STH 13	-	-	-	68	-	MIN. THICKNESS = 0.109"
0010	281+01	STH 13	-	-	-	68	-	MIN. THICKNESS = 0.109"
0010	323+99	STH 13	-	-	-	-	60	MIN. THICKNESS = 0.109"
		TOTAL 0010	8	75	130	136	60	

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614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING

BARRIER SYSTEM GRADING LIMITS (STA)	BORROW FILL FACTOR 1.3 (CY)	SALVAGED TOPSOIL (SY)	FERTILIZER TYPE B (CWT)	TEMPORARY SEEDING (LB)	SEEDING MIX #30 (LB)	MULCHING (SY)	BARRIER SYSTEM GRADING SHAPING FINISHING (EACH)
53+00 - 53+81, LT	2.1	35	0.02	1	1	35	1
52+84 - 53+81, RT	17.8	85	0.05	2	2	85	1
56+12 - 57+52, LT	17.0	134	0.08	4	2	134	1
56+12 - 57+52, RT	21.3	136	0.09	4	2	136	1
98+00 - 99+12, RT	40.8	135	0.09	4	2	135	1
100+92 - 102+21, RT	23.8	130	0.08	4	2	130	1
115+28 - 116+82, LT	5.4	80	0.05	2	1	80	1
115+37 - 117+06, RT	54.1	259	0.16	7	5	259	1
118+88 - 120+42, LT	14.2	123	0.08	3	2	123	1
119+11 - 120+80, RT	104.1	284	0.18	8	5	284	1
214+26 - 215+89, RT	39.0	193	0.12	5	3	193	1
217+95 - 219+64, RT	60.9	270	0.17	7	5	270	1
244+00 - 245+45, LT	26.1	167	0.11	5	3	167	1
243+95 - 245+45, RT	30.2	144	0.09	4	3	144	1
247+51 - 248+85, LT	34.8	187	0.12	5	3	187	1
247+51 - 249+08, RT	51.7	198	0.12	5	4	198	1
266+80 - 268+49, LT	61.3	246	0.16	7	4	246	1
266+80 - 268+49, RT	99.7	292	0.18	8	5	292	1
270+55 - 271+81, LT	20.1	93	0.06	3	2	93	1
270+55 - 272+23, RT	39.7	178	0.11	5	3	178	1
301+04 - 302+73, LT	56.5	213	0.13	6	4	213	1
301+04 - 302+73, RT	74.7	268	0.17	7	5	268	1
304+53 - 306+22, LT	47.1	205	0.13	6	4	205	1
304+53 - 306+22, RT	44.3	214	0.14	6	4	214	1
383+09 - 384+65, LT	183.5	388	0.24	10	7	388	1
383+32 - 384+65, RT	64.9	258	0.16	7	5	258	1
389+71 - 391+06, LT	40.4	234	0.15	6	4	234	1
389+71 - 391+25, RT	50.2	262	0.16	7	5	262	1
461+93 - 463+44, LT	24.8	154	0.10	4	3	154	1
461+55, 463+24, RT	75.2	227	0.14	6	4	227	1
TOTAL	1425.7	5793	3.65	156	104	5793	30

NOTE: ALL QUANTITIES ARE FOR INFORMATION PURPOSES ONLY.
SEE CROSS SECTIONS FOR GRADING DETAILS AT SPECIFIC STATIONS.
BASE AGGREGATE QUANTITIES ARE SHOWN IN MISCELEANOUS QUANTITIES.

SALVAGED RAIL

CATEGORY	STATION	TO	STATION	LOCATION	614.0920 LF	REMARKS
0010	54+09	-	55+65	STH 13, LT & RT	310	
0010	99+30	-	100+84	STH 13, RT	155	
0010	117+15	-	118+69	STH 13, LT	155	
0010	117+30	-	118+84	STH 13, RT	155	
0010	216+36	-	218+03	STH 13, LT	170	
0010	215+95	-	217+63	STH 13, RT	170	
0010	245+78	-	247+33	STH 13, LT	155	
0010	245+63	-	247+18	STH 13, RT	155	
0010	268+75	-	270+42	STH 13. LT	170	
0010	268+77	-	270+32	STH 13. RT	155	
0010	302+92	-	304+47	STH 13. LT	155	
0010	302+78	-	304+33	STH 13. RT	155	
0010	384+31	-	389+36	STH 13. LT	505	
0010	384+31	-	389+36	STH 13. RT	505	
				TOTAL 0010	3070	

MGS GUARDRAIL 3

CATEGORY	STATION	TO	STATION	LOCATION	614.2300 LF	REMARKS
0010	100+15	-	100+90	STH 13, RT	75	
0010	245+48	-	24748	STH 13, LT	200	
0010	245+48	-	24748	STH 13, RT	200	
0010	268+52	-	27052	STH 13, LT	200	
0010	268+52	-	27052	STH 13, RT	200	
0010	302+75	-	304+50	STH 13, LT	175	
0010	302+75	-	304+50	STH 13, RT	175	
0010	384+68	-	389+68	STH 13, LT	500	
0010	384+68	-	389+68	STH 13, RT	500	
				TOTAL 0010	2225	

MGS GUARDRAIL 3 L

CATEGORY	STATION	TO	STATION	LOCATION	614.2340 LF	REMARKS
0010	53+84	-	56+09	STH 13. LT	225	
0010	53+84	-	56+09	STH 13. RT	225	
0010	116+85	-	118+85	STH 13, LT	200	
0010	11709	-	119+09	STH 13, RT	200	
0010	21592	-	217+92	STH 13, RT	200	
0010	463+46	-	463+96	STH 13, LT	50	
0010	463+26	-	46376	STH 13, RT	50	
				TOTAL 0010	1150	

MGS GUARDRAIL TERMINAL EAT

CATEGORY	STATION	TO	STATION	LOCATION	614.2610 EACH	REMARKS
0010	53+31	-	53+84	STH 13. LT	1	
0010	53+31	-	53+84	STH 13. RT	1	
0010	56+09	-	56+62	STH 13. LT	1	
0010	56+09	-	56+62	STH 13. RT	1	
0010	99+62	-	100+15	STH 13. RT	1	
0010	100+90	-	101+43	STH 13. RT	1	
0010	116+32	-	116+85	STH 13, LT	1	
0010	118+85	-	119+38	STH 13, LT	1	
0010	116+56	-	117+09	STH 13. RT	1	
0010	119+09	-	119+62	STH 13. RT	1	
0010	215+39		215+92	STH 13. RT	1	
0010	217+92	-	218+45	STH 13. RT	1	
0010	244+95	-	245+48	STH 13. LT	1	
0010	244+95	-	245+48	STH 13. RT	1	
0010	247+48	-	248+01	STH 13. LT	1	
0010	247+48	-	248+01	STH 13. RT	1	
0010	267+99	-	268+52	STH 13. LT	1	
0010	267+99	-	268+52	STH 13. RT	1	
0010	270+52	-	271+05	STH 13. LT	1	
0010	270+52	-	271+05	STH 13. RT	1	
0010	302+22	-	302+75	STH 13. LT	1	
0010	302+22	-	302+75	STH 13. RT	1	
0010	304+50	-	305+03	STH 13. LT	1	
0010	304+50	-	305+03	STH 13. RT	1	
0010	384+15	-	38468	STH 13. LT	1	
0010	384+15	-	38468	STH 13. RT	1	
0010	389+68	-	390+21	STH 13. LT	1	
0010	389+68	-	390+21	STH 13. RT	1	
0010	46293	-	46346	STH 13. LT	1	
0010	463+96	-	464+49	STH 13. LT	1	
0010	462+73	-	463+26	STH 13. RT	1	
0010	463+76	-	46429	STH 13. RT	1	
				TOTAL 0010	32	

SILT FENCE

CATEGORY	STATION TO	STATION	LOCATION	SILT FENCE 628.1504 LF	SILT FENCE MAINTENANCE 628.1520 LF	REMARKS
0010		99+95	STH 13	160	160	42-INCH CPCSAC
0010		100+07	STH 13	160	160	42-INCH CPCSAC
0010		106+05	STH 13, RT	80	80	24-INCH CPCSAC (1-SECTION)
0010		114+02	STH 13	200	200	30-INCH CPCSAC
0010		280+91	STH 13	120	120	49X33-INCH PACSAC
0010		281+01	STH 13	120	120	49X33-INCH PACSAC
0010		323+99	STH 13	160	160	64X43-INCH PACSAC
0010	52+84 -	463+44	STH 13	4500	4500	EAT GRADING LIMITS
			TOTAL 0010	5500	5500	

CULVERT PIPE CHECKS

CATEGORY	STATION	LOCATION	628.7555 EACH	REMARKS
0010	99+95	STH 13	5	42-INCH CPCSAC
0010	100+07	STH 13	5	42-INCH CPCSAC
0010	106+05	STH 13, RT	2	24-INCH CPCSAC
0010	114+02	STH 13	3	30-INCH CPCSAC
0010	280+91	STH 13	7	49X33-INCH PACSAC
0010	281+01	STH 13	7	49X33-INCH PACSAC
0010	323+99	STH 13	9	64X43-INCH PACSAC
		TOTAL 0010	38	

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633.5200 EACH	REMARKS
0010	77+40	STH 13, RT	1	6-INCH UNDERDRAIN
0010	78+00	STH 13, LT	1	6-INCH UNDERDRAIN
0010	90+06	STH 13, LT	1	6-INCH UNDERDRAIN
0010	90+90	STH 13, RT	1	6-INCH UNDERDRAIN
0010	100+00	STH 13	2	42-INCH CPCSAC
0010	106+05	STH 13	2	24-INCH CPCSAC
0010	103+05	STH 13	2	24-INCH CPCSAC
0010	114+02	STH 13	2	30-INCH CPCSAC
0010	117+85	STH 13	2	83"x57"x74' CSPA
0010	156+53	STH 13	2	30"x78' CMP
0010	177+60	STH 13	2	42"x29"x58' CSPA
0010	246+47	STH 13	2	42"x66' CMP
0010	269+53	STH 13	2	48"x64' CMP
0010	280+96	STH 13	2	49X33-INCH PACSAC
0010	303+64	STH 13	2	42"x58' CMP
0010	323+99	STH 13	2	64X43-INCH PACSAC
0010	353+90	STH 13	2	36"x72' PVC
0010	388+40	STH 13	2	72"x78' CMP
0010	388+80	STH 13	2	72"x78' CMP
0010	463+71	STH 13	2	64"x43"x56' CSPA
		TOTAL 0010	36	

RESTORATION

CATEGORY	STATION	LOCATION	SALVAGED TOPSOIL 625.0500 SY	MULCHING 627.0200 SY	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE NO. 30 630.0130 LB	REMARKS
0010	99+95	STH 13	50	50	0.04	2	42-INCH CPCSAC
0010	100+07	STH 13	50	50	0.04	2	42-INCH CPCSAC
0010	106+05	STH 13, RT	20	20	0.02	1	24-INCH CPCSAC (1-SECTION)
0010	114+02	STH 13	50	50	0.04	2	30-INCH CPCSAC
0010	280+91	STH 13	40	40	0.03	2	49X33-INCH PACSAC
0010	281+01	STH 13	40	40	0.03	2	49X33-INCH PACSAC
0010	323+99	STH 13	50	50	0.04	2	64X43-INCH PACSAC
		TOTAL 0010	300	300	0.24	13	

PERMANENT SIGNING

NOTE: SIGN REMOVALS ARE INCLUDED UNDER SIMILAIR SIGN GROUP NUMBER

APPROX. STATION LOCATION	SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W x H (INCHES)	637.2210 SIGNS TYPE II REFLECTIVE H	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING	637.2230 SIGNS TYPE II REFLECTIVE F	634.0614 POSTS WOOD 4x6-INCH x 14-FT EACH	634.0616 POSTS WOOD 4x6-INCH x 16-FT EACH	634.0810 POST TUBULAR STEEL 2x2-INCH X 10-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORT EACH	REMARKS
28+90, LT	1-1	W14-3	NO PASSING ZONE	48 x 36	-	-	6.00	-	1	-	1	1	
31+15, LT	1-2	R2-1	SPEED LIMIT 35	24 x 30	5.00	-	-	-	1	-	1	1	
31+15, RT	1-3	R2-1	SPEED LIMIT 55	24 x 30	5.00	-	-	-	1	-	1	1	
33+85, RT	1-4	J4-1		24 x 36	6.00	-	-	-	1	-	1	1	
		M3-1	NORTH *Cardinal Route Marker*	24 x 12	-	-	-	-	-	-	-	-	
		M1-6	STATE ROUTE MARKER 13	24 x 24	-	-	-	-	-	-	-	-	
38+50, LT	1-5	W3-5	SPEED LIMIT 35 AHEAD (ARROW)	36 x 36	-	-	9.00	-	1	-	1	1	
43+00, LT	-	-	NO PARKING ON ALL CITY STREETS	-	-	-	-	1	-	-	-	1	MOVE SIGN
43+00, RT	1-6	D2-3	DORCHESTER 4, MEDFORD 14, ASHLAND 130	90 x 36	22.50	-	-	-	2	-	1	2	
44+00, LT	1-7	I2-3	ABBOTSFORD POPULATION 2310	72 x 24	12.00	-	-	-	1	-	1	1	
45+00, RT	1-8	D1-2	← WILLOW RD / BOSS RD →	72 x 30	15.00	-	-	-	2	-	1	2	
47+50, RT	1-9	W14-3	NO PASSING ZONE	48 x 36	-	-	6.00	-	1	-	1	1	
50+00, RT	1-10	I55-56	WISCONSIN BEAR HUNTERS ASSOCIATION	30 X 36	7.50	-	-	1	-	-	1	1	
51+85, LT	1-11	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
52+32, RT	1-12	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
60+00, LT	2-1	D1-2	← BOSS RD / WILLOW RD →	72 x 30	15.00	-	-	-	2	-	1	2	
69+00, LT	2-2	W14-3	NO PASSING ZONE	48 x 36	-	-	6.00	-	1	-	1	1	
85+00, LT	2-3	S3-1	SCHOOL BUS STOP	36 x 36	-	-	9.00	-	1	-	1	1	
94+50, LT	3-1	W14-3	NO PASSING ZONE	48 x 36	-	-	6.00	-	1	-	1	1	
97+80, RT	3-2	D1-2	← PINE RD / HOLTON RD →	72 x 30	15.00	-	-	-	2	-	1	2	
104+50, LT	3-3	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
105+00, RT	3-4	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
112+50, LT	3-5	D1-2	← HOLTON RD / PINE RD →	72 x 30	15.00	-	-	-	2	-	1	2	
150+40, RT	4-1	D1-2	← CENTER RD / TOWN HALL RD →	84 x 30	17.50	-	-	-	2	-	1	2	
155+50, LT	5-1	W14-3	NO PASSING ZONE	48 x 36	-	-	6.00	-	1	-	1	1	
157+15, LT	5-2	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
157+58, RT	5-3	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
160+00, RT	5-4	I55-56	DORCHESTER LIONS DORCHESTER LIONESS	30 X 36	7.50	-	-	1	-	-	1	1	
165+00, LT	5-5	D1-2	← TOWN HALL RD / CENTER RD →	84 x 30	17.50	-	-	-	2	-	1	2	
175+00, RT	5-6	W14-3	NO PASSING ZONE	48 x 36	-	-	6.00	-	1	-	1	1	
184+00, LT	6-1	W14-3	NO PASSING ZONE	48 x 36	-	-	6.00	-	1	-	1	1	
195+50, LT	6-2	W4-2R	LANE REDUCTION TRANSITION SYMBOL-RIGHT	36 x 36	-	-	9.00	-	1	-	1	1	
200+00, RT	6-3	J1-1		24 x 39	6.50	-	-	-	1	-	1	1	
		M2-1	JCT	21 x 15	-	-	-	-	-	-	-	-	
		M1-5A	COUNTY ROUTE MARKER A	24 x 24	-	-	-	-	-	-	-	-	
250+00, LT	6-4	W9-1R	RIGHT LANE ENDS	36 x 36	-	-	9.00	-	1	-	1	1	
205+50, RT	6-5	W3-3	STOP LIGHTS AHEAD	36 x 36	-	-	9.00	-	-	-	1	1	FLASHER POST
203+00, LT	6-6	D2-2	ABBOTSFORD 4 / MARSHFIELD 26	84 x 24	14.00	-	-	-	2	-	1	2	
203+50, RT	6-7	D1-2	← DORCHESTER / ← S.S. DORCHESTER PARK	84 x 36	21.00	-	-	-	2	-	1	2	
205+00, LT	6-8	R2-1	SPEED LIMIT 55	24 x 30	5.00	-	-	-	1	-	1	1	
205+17, RT	6-9	R3-5-L	LEFT TURN ONLY	42 x 48	14.00	-	-	-	-	-	1	1	S-10-007
205+17, RT	6-10	R3-5-A	THRU LANE ONLY	42 x 48	14.00	-	-	-	-	-	-	-	S-10-007
205+17, RT	6-11	R3-5-R	RIGHT TURN ONLY	42 x 48	14.00	-	-	-	-	-	-	-	S-10-007
207+00, RT	6-12	J13-1		24 x 45	7.50	-	-	-	1	-	1	1	
		M1-5A	COUNTY ROUTE MARKER A	24 x 24	-	-	-	-	-	-	-	-	
		M6-4	DOUBLE ARROW LEFT/RIGHT	21 x 21	-	-	-	-	-	-	-	-	
207+20, LT	6-13	R4-3	SLOWER TRAFFIC KEEP RIGHT	24 x 30	5.00	-	-	-	1	-	1	1	
208+60, LT	6-14	J4-1		24 x 36	6.00	-	-	-	1	-	1	1	
		M3-3	SOUTH *Cardinal Route Marker*	24 x 12	-	-	-	-	-	-	-	-	
		M1-6	STATE ROUTE MARKER 13	24 x 24	-	-	-	-	-	-	-	-	
				SUBTOTAL 0010	298.58	0.00	87.00	9	38	0	39	49	

PERMANENT SIGNING

NOTE: SIGN REMOVALS ARE INCLUDED UNDER SIMILAIR SIGN GROUP NUMBER

APPROX. STATION LOCATION	SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W x H (INCHES)	637.2210 SIGNS TYPE II REFLECTIVE H	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING	637.2230 SIGNS TYPE II REFLECTIVE F	634.0614 POSTS WOOD 4x6-INCH x 14-FT EACH	634.0616 POSTS WOOD 4x6-INCH x 16-FT EACH	634.0810 POST TUBULAR STEEL 2x2-INCH X 10-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3 REMOVING SMALL SIGN SUPPORT EACH	REMARKS
209+64, LT	6-15	R1-1	STOP	30 x 30	5.18	-	-	-	-	-	1	1	
209+64, LT	6-16	R1-53	RIGHT TURN OBEY THIS SIGN	24 x 30	5.00	-	-	-	-	-	1	1	
6+00'A', RT	6-17	W3-3	STOP LIGHTS AHEAD	36 x 36	-	-	9.00	-	1	-	1	1	
210+03, LT	6-18	W12-1D	LEFT AND RIGHT DOWNWARD ARROWS	24 x 24	-	-	4.00	-	-	1	-	-	
210+03, LT	6-19	R1-1F	FOLDING STOP SIGN	30 x 30	-	5.18	-	-	-	-	-	-	SIGNAL POST
210+39, RT	6-20	R1-1F	FOLDING STOP SIGN	30 x 30	-	5.18	-	-	-	-	-	-	SIGNAL POST
210+39, RT	6-21	W12-1D	LEFT AND RIGHT DOWNWARD ARROWS	24 x 24	-	-	4.00	-	-	1	-	-	
17+00'A', RT	6-22	W3-3	STOP LIGHTS AHEAD	36 x 36	-	-	9.00	-	1	-	1	1	
210+72, RT	6-23	R1-1	STOP	30 x 30	5.18	-	-	-	1	-	1	1	
210+72, RT	6-24	R1-53	RIGHT TURN OBEY THIS SIGN	24 x 30	5.00	-	-	-	-	-	1	1	6-24 POST
213+00, RT	6-25	J4-1		24 x 36	6.00	-	-	-	1	-	1	1	
		M3-1	NORTH *Cardinal Route Marker*	24 x 12	-	-	-	-	-	-	-	-	
		M1-6	STATE ROUTE MARKER 13	24 x 24	-	-	-	-	-	-	-	-	
213+25, LT	6-26	J13-1		24 x 45	7.50	-	-	-	1	-	1	1	
		M1-5A	COUNTY ROUTE MARKER A	24 x 24	-	-	-	-	-	-	-	-	
		M6-4	DOUBLE ARROW LEFT/RIGHT	21 x 21	-	-	-	-	-	-	-	-	
215+22, LT	7-1	R3-5-L	LEFT TURN ONLY	42 x 48	14.00	-	-	-	-	-	1	1	S-10-008
215+22, LT	7-2	R3-5-A	THRU LANE ONLY	42 x 48	14.00	-	-	-	-	-	-	-	S-10-008
215+22, LT	7-3	R3-5-R	RIGHT TURN ONLY	42 x 48	14.00	-	-	-	-	-	-	-	S-10-008
215+80, LT	7-4	R2-1	SPEED LIMIT 55	24 x 30	5.00	-	-	-	1	-	1	1	
216+77, LT	7-5	D1-2	← DORCHESTER / ← S.S. DORCHESTER PARK	84 x 36	21.00	-	-	-	2	-	1	2	
217+85, RT	7-6	D2-3	STETSONVILLE 5, MEDFORD 10, ASHLAND 126	96 x 36	24.00	-	-	-	2	-	1	2	
218+75, LT	7-7	W3-3	STOP LIGHTS AHEAD	36 x 36	-	-	9.00	-	-	-	1	1	FLASHER POST
221+00, LT	7-8	J1-1		24 x 39	6.50	-	-	-	1	-	1	1	
		M2-1	JCT	21 x 15	-	-	-	-	-	-	-	-	
		M1-5A	COUNTY ROUTE MARKER A	24 x 24	-	-	-	-	-	-	-	-	
225+00, RT	7-9	W14-3	NO PASSING ZONE	48 x 36	-	-	6.00	-	1	-	1	1	
256+00, RT	8-1	D1-2	← HICKORY RD / DRAPER RD →	78 x 30	16.25	-	-	-	2	-	1	2	
260+50, LT	8-2	I55-56	DORCHESTER LIONS DORCHESTER LIONESS	30 X 36	7.50	-	-	1	-	-	1	1	
262+76, LT	8-3	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
263+18, RT	8-4	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
264+12, RT	8-5	I55-56	STETSONVILLE ELEM SCHOOL	30 X 36	7.50	-	-	1	-	-	1	1	
271+70, LT	8-6	D1-2	← DRAPER RD / HICKORY RD →	78 x 30	16.25	-	-	-	2	-	1	2	
275+63, LT	8-7	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
289+75, RT	9-1	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
312+00, RT	10-1	D1-2	COUNTY LINE RD	84 x 24	14.00	-	-	-	2	-	1	2	
318+00, LT	10-2	I55-56	STETSONVILLE ELEM SCHOOL	30 X 36	7.50	-	-	1	-	-	1	1	
319+50, LT	10-3	I2-2	CLARK CO	54 x 15	5.63	-	-	1	-	-	1	1	
320+25, LT	10-4	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
320+65, RT	10-5	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
321+20, LT	10-6	R7-1-R	NO PARKING ANYTIME RT ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
321+20, RT	10-7	I2-2	TAYLOR CO	60 x 15	6.25	-	-	1	-	-	1	1	
321+20, RT	10-8	R7-1-L	NO PARKING ANYTIME LT ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
323+00, LT	10-9	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
323+00, RT	10-10	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
325+50, LT	10-11	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
325+50, RT	10-12	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
328+00, LT	10-13	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
328+00, RT	10-14	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
329+00, LT	10-15	M1-94	COUNTY LINE RD	84 x 24	14.00	-	-	-	2	-	1	2	
				SUBTOTAL 0010	298.32	10.36	41.00	11	20	2	38	44	

PERMANENT SIGNING

NOTE: SIGN REMOVALS ARE INCLUDED UNDER SIMILAIR SIGN GROUP NUMBER

APPROX. STATION LOCATION	SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W x H (INCHES)	637.2210 SIGNS TYPE II REFLECTIVE H	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING	637.2230 SIGNS TYPE II REFLECTIVE F	634.0614 POSTS WOOD 4x6-INCH x 14-FT EACH	634.0616 POSTS WOOD 4x6-INCH x 16-FT EACH	634.0810 POST TUBULAR STEEL 2x2-INCH X 10-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3 REMOVING SMALL SIGN SUPPORT EACH	REMARKS
330+50, LT	10-16	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
330+50, RT	10-17	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
333+00, LT	10-18	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
333+00, RT	10-19	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
336+00, LT	10-20	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
336+00, RT	10-21	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
338+50, LT	10-22	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
338+50, RT	10-23	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
340+50, LT	11-1	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
340+50, RT	11-2	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
343+00, LT	11-3	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
343+00, RT	11-4	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
345+50, LT	11-5	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
345+50, RT	11-6	R7-1-D	NO PARKING ANYTIME DOUBLE ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
348+00, LT	11-7	R7-1-L	NO PARKING ANYTIME LT ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
348+00, RT	11-8	R7-1-R	NO PARKING ANYTIME RT ARROW	24 x 30	5.00	-	-	-	-	-	1	1	
362+00, LT	11-9	W14-3	NO PASSING ZONE	48 x 36	-	-	6.00	-	1	-	1	1	
366+00, RT	11-10	D1-61	← ELM AVE →	54 x 24	9.00	-	-	-	2	-	1	2	
372+68, LT	12-1	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
373+02, RT	12-2	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
379+00, RT	12-3	W14-3	NO PASSING ZONE	48 x 36	-	-	6.00	-	1	-	1	1	
380+50, LT	12-4	D1-61	← ELM AVE →	54 x 24	9.00	-	-	-	2	-	1	2	
417+50, RT	13-1	D1-61	← STETSON AVE →	72 x 24	12.00	-	-	-	2	-	1	2	
425+20, LT	13-2	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
425+55, RT	13-3	R1-1	STOP	30 x 30	5.18	-	-	1	-	-	1	1	
427+00, RT	13-4	I55-56	STETSONVILLE JAYCEES	30 X 36	7.50	-	-	1	-	-	1	1	
433+50, LT	13-5	D1-61	← STETSON AVE →	72 x 24	12.00	-	-	-	2	-	1	2	
456+00, LT	14-1	D2-3	DORCHESTER 5, ABBOTSFORD 9, MARSHFIELD 31	84 x 36	21.00	-	-	-	2	-	1	2	
458+00, RT	14-2	W3-5	SPEED LIMIT 25 AHEAD (ARROW)	36 x 36	-	-	9.00	-	1	-	1	1	
460+00, RT	14-3	I2-3	STETSONVILLE POPULATION 541	78 x 24	13.00	-	-	-	1	-	1	1	
460+00, LT	14-4	W14-3	NO PASSING ZONE	48 x 36	-	-	6.00	-	1	-	1	1	
460+05, LT	14-5	R59-51	STOP SCH00L BUS FLASHING RED LIGHTS	36 x 36	9.00	-	-	-	1	-	1	1	
462+00, LT	14-6	J4-1		24 x 36	6.00	-	-	-	1	-	1	1	
		M3-3	SOUTH *Cardinal Route Marker*	24 x 12	-	-	-	-	-	-	-	-	
		M1-6	STATE ROUTE MARKER 13	24 x 24	-	-	-	-	-	-	-	-	
464+00, LT	14-7	R2-1	SPEED LIMIT 55	24 x 30	5.00	-	-	-	1	-	1	1	
464+00, RT	14-8	R2-1	SPEED LIMIT 25	24 x 30	5.00	-	-	-	1	-	1	1	
				SUBTOTAL 0010	209.22	0.00	27.00	5	19	0	35	40	
				TOTAL 0010	806.12	10.36	155.00	25	77	2	112	133	

MOVING SIGNS TYPE II

CATEGORY	STATION	LOCATION	638.2102 EACH	REMARKS
0010	43+00	STH 13, LT	1	NO PARKING ON ALL CITY STREETS
		TOTAL 0010	1	

POSTS TUBULAR STEEL 2X2-INCH X 16-FT

CATEGORY	STATION	LOCATION	634.0816 EACH	REMARKS
0010	209+64, LT	STH 13	1	SIGN 6-15 & 6-16, REMOVABLE POST
		TOTAL 0010	1	

3

TRAFFIC CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL WARNING LIGHTS TYPE C 643.0715 DAY	TRAFFIC CONTROL SIGNS 643.0900 DAY	REMARKS
0010	28+50	-	463+84	STH 13	780	-	-	CULVERT REPLACEMENT
0010	28+50	-	463+84	STH 13	1780	825	-	BEAM GUARD REPLACEMENT
0010	28+50	-	463+84	STH 13	-	-	600	ADVANCE BEGIN / END OF PROJ
0010	28+50	-	463+84	INTERSECTIONS	-	-	1200	ADVANCE SIDE ROADS
0010	28+50	-	463+84	STH 13	-	-	900	ADVANCE SHLD WORK
0010	28+50	-	463+84	STH 13	-	-	900	MILLING / PAVING
				TOTAL 0010	2560	825	3600	

PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION	PAVEMENT MARKING EPOXY 4-INCH 646.0106 LF	PAVEMENT MARKING SAME DAY EPOXY 4-INCH 646.0406 LF	REMARKS
0010	28+00	-	198+00	STH 13	34000	-	EDGELINE
0010	224+00	-	464+00	STH 13	48000	-	EDGELINE
0010	28+00	-	38+00	STH 13	-	2000	DOUBLE YELLOW
0010	38+00	-	47+50	STH 13	-	1188	SINGLE YELLOW + DASH
0010	47+50	-	69+00	STH 13	-	538	DASH
0010	69+00	-	80+00	STH 13	-	1375	SINGLE YELLOW + DASH
0010	80+00	-	84+00	STH 13	-	800	DOUBLE YELLOW
0010	84+00	-	94+50	STH 13	-	1312	SINGLE YELLOW + DASH
0010	94+50	-	155+50	STH 13	-	1525	DASH
0010	155+50	-	164+50	STH 13	-	1125	SINGLE YELLOW + DASH
0010	164+50	-	165+50	STH 13	-	25	DASH
0010	165+50	-	175+00	STH 13	-	1188	SINGLE YELLOW + DASH
0010	175+00	-	184+00	STH 13	-	225	DASH
0010	184+00	-	194+00	STH 13	-	2000	DOUBLE YELLOW
0010	194+00	-	198+00	STH 13	-	500	SINGLE YELLOW + DASH
0010	224+00	-	225+00	STH 13	-	125	SINGLE YELLOW + DASH
0010	225+00	-	362+00	STH 13	-	3424	DASH
0010	362+00	-	369+00	STH 13	-	875	SINGLE YELLOW + DASH
0010	369+00	-	373+00	STH 13	-	100	DASH
0010	373+00	-	379+00	STH 13	-	750	SINGLE YELLOW + DASH
0010	379+00	-	460+00	STH 13	-	2025	DASH
0010	460+00	-	464+00	STH 13	-	500	SINGLE YELLOW + DASH
				TOTAL 0010	82000	21600	

SAWING ASPHALT

CATEGORY	STATION	LOCATION	690.0150 LF	REMARKS
0010	28+50	STH 13	36	BEGIN PROJECT
0010	52+10	STH 13, LT & RT	52	WILLOW / BOSS RD
0010	104+90	STH 13, LT	28	PINE RD
0010	157+35	STH 13, LT & RT	60	CENTER / TOWN HALL RD
0010	261+22	STH 13, LT	30	PRIVATE ENTRANCE
0010	262+60	STH 13, RT	28	PRIVATE ENTRANCE
0010	263+00	STH 13, LT & RT	52	HICKORY RD
0010	285+05	STH 13, RT	20	PRIVATE ENTRANCE
0010	289+75	STH 13, RT	24	NELSON RD
0010	295+40	STH 13, RT	30	PRIVATE ENTRANCE
0010	318+50	STH 13, RT	18	PRIVATE ENTRANCE
0010	320+20	STH 13, RT	24	COUNTY LINE RD
0010	372+90	STH 13, LT & RT	54	ELM AVE
0010	425+30	STH 13, LT & RT	48	STETSON AVE
0010	463+84	STH 13	28	END PROJECT
		TOTAL 0010	532	

CONSTRUCTION STAKING

CATEGORY	STATION	LOCATION	CONTRUCTION STAKING PIPE CULVERTS 650.6000 EACH	CONTRUCTION STAKING RESURFACING REFERENCE 650.8000 LF	REMARKS
0010	99+95	STH 13	1	-	42-INCH CPCSAC
0010	100+07	STH 13	1	-	42-INCH CPCSAC
0010	106+05	STH 13, RT	1	-	24-INCH CPCSAC
0010	114+02	STH 13	1	-	30-INCH CPCSAC
0010	280+91	STH 13	1	-	49X33-INCH PACSAC
0010	281+01	STH 13	1	-	49X33-INCH PACSAC
0010	323+99	STH 13	1	-	64X43-INCH PACSAC
0010	464+00	STH 13	-	43600	100' INTERVALS
		TOTAL 0010	7	43600	

3

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	203.0100 EACH	REMARKS
0010	219+83	STH 13, LT	1	24-INCH CMP
0010	221+75	STH 13, LT	1	24-INCH CMP
		TOTAL 0010	2	

REMOVING ASPHALTIC SURFACE

CATEGORY	STATION	LOCATION	204.0110 SY	REMARKS
0010	210+00	STH 13, LT	32	MEDIAN ISLAND
0010	210+40	STH 13, RT	23	MEDIAN ISLAND
		TOTAL 0010	55	

REMOVING CURB & GUTTER

CATEGORY	STATION TO	STATION	LOCATION	204.0150 LF	REMARKS
0010	9+17'A'	- 9+67'A'	CTH A NW	60	
0010	9+17'A'	- 9+67'A'	CTH A SW	85	
0010	10+28'A'	- 10+78'A'	CTH A NE	80	
0010	10+28'A'	- 10+78'A'	CTH A SE	75	
0010	206+11	- 209+31	STH 13, LT	320	
0010	210+87	- 212+58	STH 13, RT	170	
			TOTAL 0010	790	

REMOVING (ITEM DESCRIPTION) 01. STEEL APRON ENDWALLS 57X38-INCH)

CATEGORY	STATION	LOCATION	204.9060.S EACH	REMARKS
0010	216+89	STH 13	1	
0010	217+00	STH 13	1	
0010	217+11	STH 13	1	
		TOTAL 0010	3	

EARTHWORK SUMMARY TABLE

FILL FACTOR = 1.3

GROUP CODE	STATION	TO	STATION	LOCATION	205.0100 EXCAVATION COMMON CY	(1) ASPHALTIC PAVEMENT CY	(2) USEABLE MATERIAL CY	EXPANDED FILL CY	208.0100 BORROW CY	(3) SUITABLE WASTE CY	(4) UNSUITABLE WASTE CY	205.0400 EXCAVATION MARSH CY
010	198+86	-	209+42	STH 13	1062	56	1007	168	0	839	0	0
010	210+97	-	223+93	STH 13	811	56	755	1737	982	0	0	0
010	216+81	-	217+30	STH 13	120	0	0	0	0	0	120	120
010	8+35	-	9+08	CTH A	69	5	65	17	0	48	0	0
010	10+68	-	11+69	CTH A	137	12	125	6	0	119	0	0
010	0+00	-	62+00	CTH A NE	71	5	66	0	0	65	0	0
010	0+00	-	93+00	CTH A NW	48	5	43	48	5	0	0	0
010	0+00	-	94+00	CTH A SE	71	5	66	42	0	24	0	0
010	0+00	-	96+00	CTH A SW	54	5	49	8	0	41	0	0
			Total		2443	148	2175	2026	987	1136	120	120

(1) ASPHALTIC PAVEMENT IS INCLUDED IN THE QUANTITY OF EXCAVATION COMMON. ASPHALTIC PAVEMENT IS CONSIDERED SALVAGEABLE FOR PAVEMENT MATERIAL AND IS NOT INCLUDED IN THE QUANTITIY OF USEABLE MATERIAL.

(2) USEABLE MATERIAL = EXCAVATION COMMON - EBS - MARSH - SALVAGED ASPHALT

(3) SUITABLE WASTE IS SURPLUS MATERIAL SUITABLE FOR USE AS FILL THAT IS BEYOND THE VOLUME NEEDED FOR THE PROJECT.

(4) UNSUITABLE WASTE = EBS + MARSH

NOTE: EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE EARTHWORK. QUANTITY IS INCLUDED AND PAID FOR IN THE ITEM OF EXCAVATION COMMON.

3

BASE AGGREGATE DENSE

CATEGORY	STATION TO	STATION	LOCATION	BASE AGGREGATE DENSE 3/4-INCH 305.0110 TON	BASE AGGREGATE DENSE 1 1/4-INCH 305.0120 TON	REMARKS
0010	198+86	209+42	STH 13, RT	275	2755	
0010	210+97	223+93	STH 13, LT	340	2695	
0010	10+68'A'	11+70'A'	CTH A EAST	25	-	
0010	8+32'A'	9+58'A'	CTH A WEST	40	-	
0010	10+28'A'	11+70'A'	CTH A SE	-	125	
0010	10+28'A'	11+70'A'	CTH A NE	-	180	
0010	8+32'A'	9+58'A'	CTH A NW	-	105	
0010	8+32'A'	9+58'A'	CTH A SW	-	125	
			TOTAL 0010	680	5985	

HMA PAVEMENT

CATEGORY	STATION TO	STATION	LOCATION	HMA PAVEMENT 3 MT 58-34 H 460.6443 TON	HMA PAVEMENT 4 MT 58-34 H 460.6444 TON	REMARKS
0010	198+86	209+42	STH 13, RT	367	123	
0010	210+97	223+93	STH 13, LT	501	167	
0010	10+28'A'	11+70'A'	CTH A SE	22	15	
0010	10+28'A'	11+70'A'	CTH A NE	38	25	
0010	8+32'A'	9+58'A'	CTH A NW	24	16	
0010	8+32'A'	9+58'A'	CTH A SW	13	9	
			TOTAL 0010	965	355	

CONCRETE ROUNDABOUT TRUCK APRON 8-INCH

CATEGORY	STATION TO	STATION	LOCATION	416.0508 SY	REMARKS
0010	9+07'A'	9+65'A'	CTH A, SW	65	6-FT TRUCK APRON
0010	9+12'A'	9+70'A'	CTH A, NW	65	6-FT TRUCK APRON
			TOTAL 0010	130	

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

CATEGORY	STATION TO	STATION	LOCATION	465.0120 TON	REMARKS
0010	207+33	208+48	STH 13, LT	23	
0010	8+08'A'	8+32'A'	CTH A, RT	27	
			TOTAL 0010	50	

TACK COAT

CATEGORY	STATION TO	STATION	LOCATION	455.0605 GAL	REMARKS
0010	198+86	209+42	STH 13, RT	110	2 LAYERS
0010	210+97	223+93	STH 13, LT	150	2 LAYERS
0010	10+28'A'	11+70'A'	CTH A SE	7	1 LAYER
0010	10+28'A'	11+70'A'	CTH A NE	12	1 LAYER
0010	8+32'A'	9+58'A'	CTH A NW	7	1 LAYER
0010	8+32'A'	9+58'A'	CTH A SW	4	1 LAYER
			TOTAL 0010	290	

ASPHALTIC SURFACE TEMPORARY

CATEGORY	STATION TO	STATION	LOCATION	465.0125 TON	REMARKS
0010	9+45'A'	9+68'A'	CTH A, RT	50	
			TOTAL 0010	50	

3

ASPHALTIC FLUMES

CATEGORY	STATION	LOCATION	465.0315 SY	REMARKS
0010	10+54'A'	CTH A, SE	8	
		TOTAL 0010	8	

AEW FOR CULVERT PIPE

CATEGORY	STATION	LOCATION	APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH 521.1018 EACH	APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH 521.1024 EACH	APRON ENDWALLS FOR PIPE ARCH STEEL 57X38-INCH 521.1257 EACH	REMARKS
0010	8+99'A'	CTH A, LT	1	-	-	
0010	9+27'A'	CTH A, RT	1	-	-	
0010	206+17	STH 13, RT	-	1	-	
0010	10+64'A'	CTH A, RT	-	1	-	
0010	219+83	STH 13, LT	-	2	-	
0010	221+75	STH 13, LT	-	2	-	
0010	216+89	STH 13	-	-	1	
0010	217+00	STH 13	-	-	1	
0010	217+11	STH 13	-	-	1	
		TOTAL 0010	2	6	3	

CULVERT PIPE

CATEGORY	STATION	LOCATION	CULVERT PIPE CORRUGATED STEEL ALLUMINUM COATED 18-INCH 529.0118 LF	CULVERT PIPE CORRUGATED STEEL ALLUMINUM COATED 24-INCH 529.0124 LF	PIPE ARCH CORRUGATED STEEL ALLUMINUM COATED 57X38-INCH 529.0357 LF	REMARKS
0010	8+99'A'	CTH A, LT	16	-	-	MIN. THICKNESS = 0.064"
0010	9+27'A'	CTH A, RT	8	-	-	MIN. THICKNESS = 0.064"
0010	206+17	STH 13, RT	-	16	-	MIN. THICKNESS = 0.064"
0010	10+64'A'	CTH A, RT	-	16	-	MIN. THICKNESS = 0.064"
0010	219+83	STH 13, LT	-	30	-	MIN. THICKNESS = 0.064"
0010	221+75	STH 13, LT	-	46	-	MIN. THICKNESS = 0.064"
0010	216+89	STH 13, LT	-	-	16	MIN. THICKNESS = 0.109"
0010	217+00	STH 13, LT	-	-	16	MIN. THICKNESS = 0.109"
0010	217+11	STH 13, LT	-	-	16	MIN. THICKNESS = 0.109"
		TOTAL 0010	24	108	48	

CONCRETE CURB AND GUTTER

CATEGORY	STATION TO	STATION	LOCATION	CONCRETE CURB & GUTTER 30-INCH TYPE D 601.0411 LF	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D 601.0553 LF	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T 601.0582 LF	REMARKS
0010	206+11 -	209+25	STH 13, LT	314	-	-	
0010	210+87 -	212+58	STH 13, RT	200	-	-	
0010	9+45'A' -	9+70'A'	CTH A, RT	-	67	-	MEDIAN
0010	10+28'A' -	10+42'A'	CTH A, LT	-	41	-	MEDIAN
0010	9+12'A' -	9+72'A'	CTH A, NW	-	-	93	
0010	9+07'A' -	9+68'A'	CTH A, SW	-	-	102	
0010	10+28'A' -	10+68'A'	CTH A, NE	-	-	68	
0010	10+29'A' -	10+90'A'	CTH A, SE	-	-	93	
			TOTAL 0010	514	108	356	

CONCRETE SIDEWALK 6-INCH

CATEGORY	STATION TO	STATION	LOCATION	602.0415 SF	REMARKS
0010	9+45'A' -	9+68'A'	CTH A, RT	170	MEDIAN
0010	10+30'A' -	10+42'A'	CTH A, LT	70	MEDIAN
			TOTAL 0010	240	

RIPRAP MEDIUM

CATEGORY	STATION	LOCATION	606.0200 CY	REMARKS
0010	206+18	STH 13, RT	5	
0010	9+28'A'	CTH A, LT	5	
0010	216+89	STH 13	10	
0010	217+00	STH 13	10	
0010	217+11	STH 13	10	
		TOTAL 0010	40	

SALVAGED INLET COVERS

CATEGORY	STATION	LOCATION	611.9710 EACH	REMARKS
0010	211+00	STH 13, RT	1	REINSTALL
		TOTAL 0010	1	

CONCRETE MEDIAN SLOPED NOSE

CATEGORY	STATION	LOCATION	620.0300 SF	REMARKS
0010	9+44'A'	CTH A	50	
0010	10+42'A'	CTH A	50	
		TOTAL 0010	100	

WATER

CATEGORY	STATION TO	STATION	LOCATION	624.0100 MGAL	REMARKS
0010	198+86 -	223+93	STH 13 & CTH A	125	BASE AGGREGATE DENSE
			TOTAL 0010	125	

SILT FENCE

CATEGORY	STATION TO	STATION	LOCATION	SILT FENCE 628.1504 LF	SILT FENCE MAINTENANCE 628.1520 LF	REMARKS
0010	203+50 -	209+00	STH 13, LT	550	550	
0010	211+50 -	224+00	STH 13, LT	1250	1250	
0010	211+00 -	213+00	STH 13, RT	200	200	
			TOTAL 0010	2000	2000	

INLET PROTECTION TYPE C

CATEGORY	STATION	LOCATION	628.7015 EACH	REMARKS
0010	211+00	STH 13, RT	1	
		TOTAL 0010	1	

RESTORATION

CATEGORY	STATION TO	STATION	LOCATION	SALVAGED TOPSOIL 625.0500 SY	MULCHING 627.0200 SY	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE NO. 30 630.0130 LB	REMARKS
0010	198+86 -	209+42	STH 13, RT	2250	2250	1.42	41	
0010	210+97 -	223+93	STH 13, LT	2200	2200	1.39	40	
0010	10+28'A' -	11+70'A'	CTH A SE	285	285	0.18	5	
0010	10+28'A' -	11+70'A'	CTH A NE	240	240	0.15	4	
0010	8+32'A' -	9+58'A'	CTH A NW	160	160	0.10	3	
0010	8+32'A' -	9+58'A'	CTH A SW	145	145	0.09	3	
			TOTAL 0010	5280	5280	3.33	96	

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	628.7504 LF	REMARKS
0010	201+00	STH 13, RT	12	
0010	203+00	STH 13, RT	12	
0010	205+00	STH 13, RT	12	
0010	207+00	STH 13, RT	12	
0010	209+00	STH 13, RT	12	
		TOTAL 0010	60	

CULVERT PIPE CHECKS

CATEGORY	STATION	LOCATION	628.7555 EACH	REMARKS
0010	9+00'A'	CTH A, LT	3	18-INCH CPCSAC
0010	10+64'A'	CTH A, LT	5	24-INCH CPCSAC
		TOTAL 0010	8	

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633.5200 EACH	REMARKS
0010	8+99'A'	CTH A, LT	1	
0010	9+27'A'	CTH A, RT	1	
0010	206+17	STH 13, RT & LT	2	
0010	10+64'A'	CTH A, RT	1	
0010	212+52	STH 13, RT	1	
0010	217+00	STH 13, RT & LT	2	
		TOTAL 0010	8	

OVERHEAD SIGN SUPPORT (STRUCTURE) 01. S-10-007

CATEGORY	STATION	LOCATION	641.8100.01 LS	REMARKS
0010	205+17	STH 13, RT	1	
		TOTAL 0010	1	

OVERHEAD SIGN SUPPORT (STRUCTURE) 02. S-10-008

CATEGORY	STATION	LOCATION	641.8100.02 LS	REMARKS
0010	215+22	STH 13, LT	1	
		TOTAL 0010	1	

GEOTEXTILE FABRIC TYPE HR

CATEGORY	STATION	LOCATION	645.0120 SY	REMARKS
0010	206+18	STH 13, RT	22	
0010	9+28'A'	CTH A, LT	22	
0010	216+89	STH 13	44	
0010	217+00	STH 13	44	
0010	217+11	STH 13	44	
		TOTAL 0010	176	

TRAFFIC CONTROL

CATEGORY	STATION TO	STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL WARNING LIGHTS TYPE C 643.0715 DAY	TRAFFIC CONTROL SIGNS 643.0900 DAY	REMARKS
0010	7+00'A'	- 12+00'A'	CTH A	168	-	42	STAGE 1
0010	198+00	- 204+00	STH 13	1540	220	308	STAGE 2
			TOTAL 0010	1708	220	350	

PAVEMENT MARKING

CATEGORY	STATION		TO STATION	LOCATION	PAVEMENT MARKING EPOXY 4-INCH 646.0106 LF	PAVEMENT MARKING EPOXY 8-INCH 646.0126 LF	PAVEMENT MARKING SAME DAY EPOXY 4-INCH 646.0406 LF	PAVEMENT MARKING ARROWS EPOXY TYPE 2 647.0166 EACH	PAVEMENT MARKING WORDS EPOXY 647.0356 EACH	PAVEMENT MARKING STOP LINE EPOXY 18-INCH 647.0566 LF	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH 647.0726 LF	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH 649.0400 LF	TEMPORARY PAVEMENT MARKING ARROWS REMOVABLE TAPE 649.1800 EACH	REMARKS
0010	198+00	-	224+00	STH 13	5520	-	-	-	-	-	-	-	-	EDGELINE
0010	7+50'A'	-	12+75'A'	CTH A	500	-	-	-	-	-	-	-	-	EDGELINE
0010	205+17	-	209+41	STH 13	-	850	-	4	2	-	-	-	-	
0010	210+98	-	215+23	STH 13	-	850	-	4	2	-	-	-	-	
0010	8+32'A'	-	9+45'A'	CTH A	-	130	-	1	-	-	-	-	-	
0010	10+42'A'	-	11+19'A'	CTH A	-	100	-	1	-	-	-	-	-	
0010	198+00	-	224+00	STH 13	-	-	8400	-	-	-	-	-	-	CENTERLINE
0010	7+50'A'	-	12+75'A'	CTH A	-	-	700	-	-	-	-	-	-	CENTERLINE
0010			209+42	STH 13	-	-	-	-	-	36	-	-	-	
0010			210+98	STH 13	-	-	-	-	-	36	-	-	-	
0010			9+50'A'	CTH A	-	-	-	-	-	22	-	-	-	RT TURN
0010			9+65'A'	CTH A	-	-	-	-	-	13	-	-	-	
0010			10+31'A'	CTH A	-	-	-	-	-	13	-	-	-	
0010			10+38'A'	CTH A	-	-	-	-	-	16	-	-	-	RT TURN
0010	199+00	-	205+00	STH 13	-	-	-	-	-	-	140	-	-	
0010	215+00	-	224+00	STH 13	-	-	-	-	-	-	290	-	-	
0010	9+00'A'	-	9+60'A'	CTH A	-	-	-	-	-	-	-	60	-	STAGE 1
0010	197+00	-	209+58	STH 13	-	-	-	-	-	-	-	2800	-	STAGE 2
0010	210+80	-	224+00	STH 13	-	-	-	-	-	-	-	1420	-	STAGE 2
0010	208+50	-	209+50	STH 13, RT	-	-	-	-	-	-	-	-	4	
0010	210+75	-	211+75	STH 13, LT	-	-	-	-	-	-	-	-	4	
0010			9+25'A'	CTH A, RT	-	-	-	-	-	-	-	-	2	
				TOTAL 0010	6020	1930	9100	10	4	136	430	4280	10	

REMOVING PAVEMENT MARKINGS

CATEGORY	STATION		TO STATION	LOCATION	REMOVING PAVEMENT MARKINGS 646.0600 LF	REMOVING PAVEMENT MARKINGS ARROWS 647.0955 EACH	REMOVING PAVEMENT MARKINGS WORDS 647.0965 EACH	REMARKS
0010	198+00	-	210+00	STH 13	1200	-	-	TRAFFIC CONTROL STAGE 2
0010			209+25	STH 13, RT	-	3	-	
0010			211+00	STH 13, LT	-	3	-	
0010			208+75	STH 13, RT	-	-	3	
0010			211+50	STH 13, LT	-	-	3	
				TOTAL 0010	1200	6	6	

CONSTRUCTION STAKING

CATEGORY	STATION TO STATION	LOCATION	CONSTRUCTION STAKING SUBGRADE 650.4500 LF	CONSTRUCTION STAKING BASE 650.5000 LF	CONSTRUCTION STAKING CURB GUTTER AND CURB AND GUTTER 650.5500 LF	CONSTRUCTION STAKING PIPE CULVERTS 650.6000 EACH	CONSTRUCTION STAKING SLOPE STAKES 650.9920 LF	REMARKS
0010	198+86 - 209+42	STH 13, RT	1060	1060	-	-	1060	
0010	210+97 - 223+93	STH 13, LT	1300	1300	-	-	1300	
0010	10+28'A' - 11+70'A'	CTH A SE	180	180	-	-	180	
0010	10+28'A' - 11+70'A'	CTH A NE	180	180	-	-	180	
0010	8+32'A' - 9+58'A'	CTH A NW	180	180	-	-	180	
0010	8+32'A' - 9+58'A'	CTH A SW	180	180	-	-	180	
0010	206+11 - 209+25	STH 13, LT	-	-	314	-	-	
0010	210+87 - 212+58	STH 13, RT	-	-	200	-	-	
0010	9+45'A' - 9+70'A'	CTH A, RT	-	-	67	-	-	MEDIAN
0010	10+28'A' - 10+42'A'	CTH A, LT	-	-	41	-	-	MEDIAN
0010	9+12'A' - 9+72'A'	CTH A, NW	-	-	93	-	-	RADIUS
0010	9+07'A' - 9+68'A'	CTH A, SW	-	-	102	-	-	RADIUS
0010	10+28'A' - 10+68'A'	CTH A, NE	-	-	68	-	-	RADIUS
0010	10+29'A' - 10+90'A'	CTH A, SE	-	-	93	-	-	RADIUS
0010	216+89	STH 13	-	-	-	1	-	
0010	217+00	STH 13	-	-	-	1	-	
0010	217+11	STH 13	-	-	-	1	-	
0010	8+99'A'	CTH A, LT	-	-	-	1	-	
0010	9+27'A'	CTH A, RT	-	-	-	1	-	
0010	206+17	STH 13, RT	-	-	-	1	-	
0010	10+64'A'	CTH A, RT	-	-	-	1	-	
TOTAL 0010			3080	3080	978	7	3080	

SAWING ASPHALT

CATEGORY	STATION TO STATION	LOCATION	690.0150 LF	REMARKS
0010	205+00 - 209+50	STH 13, RT	450	TURN LANE
0010	211+00 - 216+50	STH 13, LT	550	TURN LANE
0010	207+33 - 208+48	STH 13, LT	115	DRIVEWAY JOINT
0010	7+75'A' - 8+35'A'	CTH A, LT	64	DRIVEWAY JOINT
0010	8+08'A' - 8+32'A'	CTH A, RT	26	DRIVEWAY JOINT
0010	10+65'A' - 11+75'A'	CTH A, LT	110	TURN LANE
0010	10+78'A' - 11+75'A'	CTH A, RT	97	WIDENING
0010	7+58'A'	CTH A	28	JOINT
0010	11+75'A'	CTH A	30	JOINT
TOTAL 0010			1470	

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RECONSTRUCT SANITARY SEWER MANHOLE

CATEGORY	STATION	LOCATION	SPV.0060.05 EACH	REMARKS
0020	210+50	STH 13, LT	1	MH 107
0020	210+50	STH 13, RT	1	MH 108
		TOTAL 0010	2	

CONCRETE SIDEWALK CURE AND SEAL TREATMENT

CATEGORY	STATION TO	STATION	LOCATION	SPV.0165.01 SF	REMARKS
0010	9+45'A'	- 9+68'A'	CTH A, RT	170	MEDIAN
0010	10+30'A'	- 10+42'A'	CTH A, LT	70	MEDIAN
			TOTAL 0010	240	

CONCRETE CURB AND GUTTER CURE AND SEAL TREATMENT

CATEGORY	STATION TO	STATION	LOCATION	SPV.0090.01 LF	REMARKS
0010	206+11	- 209+25	STH 13, LT	314	
0010	210+87	- 212+58	STH 13, RT	200	
0010	9+45'A'	- 9+70'A'	CTH A, RT	67	MEDIAN
0010	10+28'A'	- 10+42'A'	CTH A, LT	41	MEDIAN
0010	9+12'A'	- 9+72'A'	CTH A, NW	93	RADIUS
0010	9+07'A'	- 9+68'A'	CTH A, SW	102	RADIUS
0010	10+28'A'	- 10+68'A'	CTH A, NE	68	RADIUS
0010	10+29'A'	- 10+90'A'	CTH A, SE	93	RADIUS
			TOTAL 0010	978	

CONCRETE MEDIAN SLOPED NOSE CURE AND SEAL TREATMENT

CATEGORY	STATION	LOCATION	SPV.0165.02 SF	REMARKS
0010	9+44'A'	CTH A	50	
0010	10+42'A'	CTH A	50	
		TOTAL 0010	100	

2

CONDUIT

FROM	TO	652.021 CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH LF	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615 CONDUIT SPECIAL 3-INCH LF
CB1	PB1	12	18	12	---
PB1	PB2	---	---	38	---
PB2	PB3	---	---	---	90
PB2	PB4	---	---	---	172
PB4	PB5	---	---	84	---
PB5	PB6	---	322	---	---
PB5	PB12	---	---	---	188
PB6	PB7	---	148	---	---
PB7	PB8	---	152	---	---
PB8	PB9	---	300	---	---
PB9	PB10	---	450	---	---
PB10	PB11	---	136	---	---
PB12	PB13	---	---	44	---
PB13	PB14	---	---	---	76
PB13	PB15	---	---	---	182
PB15	PB16	---	---	76	---
PB16	PB17	---	336	---	---
PB16	PB23	---	---	---	174
PB17	PB18	---	142	---	---
PB18	PB19	---	158	---	---
PB19	PB20	---	292	---	---
PB20	PB21	---	452	---	---
PB21	PB22	---	144	---	---
PB23	PB1	---	---	36	---
PB3	SB1	---	5	---	---
PB4	SB2	---	6	---	---
PB5	SB3	---	11	---	---
PB12	SB4	---	32	---	---
PB14	SB5	---	16	---	---
PB15	SB6	---	20	---	---
PB16	SB7	---	10	---	---
PB23	SB8	---	20	---	---
***TOTAL		12	3170	290	882

***ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PULL BOXES STEEL

PULL BOX NUMBER	STATION	LOCATION	653.0135 PULL BOXES STEEL 24 X 36 - INCH EACH	653.0140 PULL BOXES STEEL 24 X 42 - INCH EACH
PB1	210+77.3	51.2' RT	---	1
PB2	210+71.5	69.3' RT	---	1
PB3	210+38.2	39.2' RT	---	1
PB4	209+83.3	70.9' RT	---	1
PB5	209+52.2	42.2' RT	---	1
PB6	207+91.7	39.9' RT	1	---
PB7	207+17.8	39.7' RT	1	---
PB8	206+41.8	41.4' RT	1	---
PB9	204+91.8	38.9' RT	1	---
PB10	202+66.9	25.4' RT	1	---
PB11	201+98.6	24.9' RT	1	---
PB12	209+52.5	52.1' LT	---	1
PB13	209+68.8	66.6' LT	---	1
PB14	210+03.9	52.8' LT	---	1
PB15	210+57.2	68.4' LT	---	1
PB16	210+88.5	46.7' LT	---	1
PB17	212+51.4	42.6' LT	1	---
PB18	213+22.1	42.2' LT	1	---
PB19	214+01.0	41.9' LT	1	---
PB20	215+47.2	40.7' LT	1	---
PB21	217+72.1	30.8' LT	1	---
PB22	218+44.6	29.5' LT	1	---
PB23	210+91.4	40.2' RT	---	1
		***TOTAL	12	11

***ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE BASES

BASE NUMBER	STATION	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0105 CONCRETE BASES TYPE 5 EACH	654.0217 CONCRETE CONTRO CABINET BASES TYPE 9 SPECIAL EACH
SB1	210+39.0	34.3' RT	1	---	---	---
SB2	209+89.1	69.2' RT	---	1	---	---
SB3	209+41.8	37.7 RT	1	---	---	---
SB4	209+23.2	38.8' LT	---	1	---	---
SB5	210+00.2	36.9' RT	1	---	---	---
SB6	210+48.6	86.0' LT	---	1	---	---
SB7	210+97.8	42.8' LT	1	---	---	---
SB8	211+08.9	29.7' RT	---	1	---	---
SB9*	201+91.9	24.9' RT	---	1	---	---
SB10*	218+50.0	29.4' LT	---	1	---	---
LB1	207+91.8	35.9' RT	---	---	1	---
LB2	206+41.8	37.6' RT	---	---	1	---
LB3	204+88.2	39.9' RT	---	---	1	---
LB4	212+46.7	43.6' LT	---	---	1	---
LB5	213+97.1	43.1' LT	---	---	1	---
LB6	215+43.9	41.6' LT	---	---	1	---
CB1	210+81.4	54.8' RT	---	---	---	1
		***TOTAL	4	6	6	1

*EXISTING POLES WILL BE USED
***ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LOOP DETECTOR SCHEDULE

LOOP NUMBER	HOME RUN PB	STATION	LOCATION	SIZE (FT) X (FT)	NO. OF TURNS	PAVEMENT TYPE	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
11	PB5	209+13.8	0.3' LT	6X20	3	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	162	180	496
12	PB5	209+41.8	0.3' LT	6X20	3	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	134	180	412
21	PB21	217+66.8	17.5' LT	6X6	6	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	44	817	274
22	PB20	215+41.9	18.0' LT	6X6	6	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	64	594	394
23	PB18	213+16.9	17.8' LT	6X6	5	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	66	369	340
41	PB14	210+13.1	58.0' LT	6X20	3	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	68	305	214
42	PB14	210+13.8	30.1' LT	6X20	3	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	66	305	208
43	PB14	209+81.0	36.9' LT	6X20	3	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	74	305	232
51	PB16	211+26.2	3.2' LT	6X20	3	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	162	138	496
52	PB16	210+98.2	2.3' LT	6X20	3	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	138	138	424
61	PB10	202+72.9	12.5' RT	6X6	6	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	44	836	274
62	PB9	204+97.9	15.2' RT	6X6	6	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	66	641	406
63	PB7	207+22.5	12.7' RT	6X6	5	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	72	415	370
81	PB3	210+29.3	57.4' RT.	6X20	3	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	86	97	268
82	PB3	210+28.3	29.3' RT	6X20	3	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	72	97	226
83	PB3	210+54.4	33.6' RT	6X20	3	ASPHALT	)P DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTIO	74	97	232
							***TOTAL	1392	5514	5266

***ADDITIONAL QUANTITIES SHOWN ELSEWHERE

rea

TRAFFIC SIGNAL CABLE NO. 14 (ABOVE GROUND)

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5 - 14 AWG LF	655.0240 CABLE TRAFFIC SIGNAL 7 - 14 AWG LF
SB1	HEAD 7	19	---
SB1	HEAD 11	19	---
SB2	HEAD 12	50	---
SB3	HEAD 1	---	23
SB3	HEAD 5	---	23
SB4	HEAD 6	---	52
SB5	HEAD 8	19	---
SB5	HEAD 10	19	---
SB6	HEAD 9	50	---
SB7	HEAD 2	---	23
SB7	HEAD 4	---	23
SB8	HEAD 3	---	47
SB9	HEAD 13	18	---
SB9	HEAD 14	18	
SB10	HEAD 15	18	---
SB10	HEAD 16	18	---
	***TOTAL	248	191

***ADDITIONAL QUANTITIES SHOWN ELSEWHERE

2

TRAFFIC SIGNAL CABLE NO. 14 (BELOW GROUND)

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5 - 14 AWG LF	655.0240 CABLE TRAFFIC SIGNAL 7 - 14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12 - 14 AWG LF
CB1	SB1	---	---	134
CB1	SB2	176	---	---
CB1	SB3	---	---	239
CB1	SB4	370	---	---
CB1	SB5	---	401	---
CB1	SB6	---	---	244
CB1	SB7	180	---	---
CB1	SB8	---	---	87
CB1	SB9	1085	---	---
CB1	SB10	1025	---	---
	***TOTAL	2836	401	704

***ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRICAL SERVICE METER BREAKER PEDESTA
STH 13 & CTH A

BASE NUMBER	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS
CB1	1
TOTAL	1

LIGHTING WIRE

FROM	TO	655.0320 CABLE TYPE UF 2 - 10 AWG GROUNDED LF	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF
CB1	SB2	176	---
SB2	LUMIN	---	117
SB2	LB1	269	---
LB1	LUMIN	---	117
LB1	SB4	347	---
SB4	LUMIN	---	117
LB1	LB2	214	---
LB2	LUMIN	---	117
LB2	LB3	200	---
LB3	LUMIN	---	117
CB1	SB8	87	---
SB8	LUMIN	---	117
SB8	LB4	328	---
LB4	LUMIN	---	117
LB4	SB6	279	---
SB6	LUMIN	---	117
LB4	LB5	215	---
LB5	LUMIN	---	117
LB5	LB6	195	---
LB6	LUMIN	---	117
	***TOTAL	2310	1170

***ADDITIONAL QUANTITIES SHOWN ELSEWHERE

TRAFFIC SIGNAL AND PEDESTRIAN FACES, AND BACKPLATES

SIGNAL HEAD NUMBER	SIGNAL BASE NUMBER	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EACH	658.0120 TRAFFIC SIGNAL FACE 5-12 INCH VERTICAL EACH	658.0155 TRAFFIC SIGNAL FACE 3-12 INCH HORIZONTAL EACH	658.0165 TRAFFIC SIGNAL FACE 5-12 INCH HORIZONTAL EACH	658.0215 BACKPLATES SIGNAL FACE 3 SECTION 12-INCH EACH	658.0225 BACKPLATES SIGNAL FACE 5 SECTION 12-INCH EACH	SPV.0060.01 INSTALL STATE FURNISHED LED MODULES EACH
1	SB3	1	---	---	---	1	---	3
2	SB7	---	1	---	---	---	1	5
3	SB8	---	---	---	1	---	1	5
4	SB7	1	---	---	---	1	---	3
5	SB3	---	1	---	---	---	1	5
6	SB4	---	---	---	1	---	1	5
7	SB1	1	---	---	---	1	---	3
8	SB5	1	---	---	---	1	---	3
9	SB6	---	---	1	---	1	---	3
10	SB5	1	---	---	---	1	---	3
11	SB1	1	---	---	---	1	---	3
12	SB2	---	---	1	---	1	---	3
EXISTING	SB9	---	---	---	---	---	---	---
EXISTING	SB9	---	---	---	---	---	---	---
EXISTING	SB10	---	---	---	---	---	---	---
EXISTING	SB10	---	---	---	---	---	---	---
	***TOTAL	6	2	2	2	8	4	44

***ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CAST BASES, POLES, MONOTUBE ARMS, PUSH BUTTONS, AND LUMINAIRES

SIGNAL BASE NUMBER	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 INCH BOLT CIRCLE EACH	657.0310 POLES TYPE 3 EACH	657.0322 POLES ALUMINUM TYPE 5 EACH	657.0590 TROMBONE ARMS 20 FT EACH	657.0595 TROMBONE ARMS 25 FT EACH	657.0709 LUMINAIRE ARMS TRUSS TYPE 4 -INCH CLAMP 12-FOOT EACH	657.0705 LUMINAIRE ARMS TRUSS TYPE 4 1/2 -INCH CLAMP 10-FOOT EACH	659.1115 LUMINAIRES UTILITY LED A EACH	659.1125 LUMINAIRES UTILITY LED C EACH	SPV.0060.02 INSTALL STATE FURNISHED TRAFFIC SIGNAL STANDARDS ALUMINUM 13 - FT EACH	SPV.0060.03 INSTALL STATE FURNISHED TRAFFIC SIGNAL STANDARDS ALUMINUM 15 - FT EACH
SB1	1	---	---	---	---	---	---	---	---	---	1	---
SB2	---	1	1	---	---	1	1	---	---	1	---	---
SB3	1	---	---	---	---	---	---	---	---	---	---	1
SB4	---	1	1	---	---	1	1	---	---	1	---	---
SB5	1	---	---	---	---	---	---	---	---	---	1	---
SB6	---	1	1	---	---	1	1	---	---	1	---	---
SB7	1	---	---	---	---	---	---	---	---	---	---	1
SB8	---	1	1	---	1	---	1	---	---	1	---	---
*SB9	1	---	---	---	---	---	---	---	---	---	---	---
*SB10	1	---	---	---	---	---	---	---	---	---	---	---
					---	---						
LB1	---	1	---	1	---	---	---	1	1	---	---	---
LB2	---	1	---	1	---	---	---	1	1	---	---	---
LB3	---	1	---	1	---	---	---	1	1	---	---	---
LB4	---	1	---	1	---	---	---	1	1	---	---	---
LB5	---	1	---	1	---	---	---	1	1	---	---	---
LB6	---	1	---	1	---	---	---	1	1	---	---	---
***TOTAL	6	10	4	6	1	3	4	6	6	4	2	2

* EXISTING POLE WILL BE USED

***ADDITIONAL QUANTITIES SHOWN ELSEWHERE

ELECTRIC WIRE TRAFFIC SIGNALS, NO. 10

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
CB1	SB1	134
SB1	SB2	198
SB2	SB3	99
SB3	SB4	177
SB3	SB9	892
SB4	SB5	164
SB5	SB6	221
SB6	SB7	108
SB7	SB8	157
SB7	SB10	889
SB8	CB1	87
PB1	CB1	29
PB2	CB1	64
PB3	SB1	25
PB4	SB2	26
PB5	SB3	31
PB6	LB1	24
PB7	LB1	114
PB8	LB2	24
PB9	LB3	26
PB10	SB9	111
PB11	SB9	27
PB12	SB4	52
PB13	SB4	90
PB14	SB5	36
PB15	SB6	40
PB16	SB7	30
PB17	LB4	25
PB18	LB4	112
PB19	LB5	24
PB20	LB6	24
PB21	SB10	113
PB22	SB10	25
PB23	SB8	40
	***TOTAL	4238

***ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SAVE FOLDER PATH: P:\UZ\WW\WITNW\128933\15-CIVIL 3D\1610372\SHEETSPLAN\SEC 02 TYPICAL SECTIONS AND DETAILS

SIGNAL MOUNTING HARDWARE
STH 13 & CTH A

LOCATION	SPV.0105.01 INST DEPT FURNISHED ORNAMENTAL SIGNAL MOUNTING HARDWARE FOR TRAFFIC SIGNAL LS	SPV.0105.02 SIGNAL MOUNTING HARDWARE FOR POLE MOUNTINGS LS
STH 13 & CTH A	1	1
TOTAL	1	1

REMOVE TRAFFIC SIGNALS
STH 13 & CTH A

STRUCTURE	SPV.0060.04 REMOVE, SALVAGE, AND REINSTALL TRAFFIC SIGNAL STANDARD LS
ESB1	1
ESB2	1
TOTAL	2

SAVE FOLDER PATH: P:\UZ\W\WITNW\128933\15-CIVIL 3D\16100372\SHEETSPLAN\SEC 02 TYPICAL SECTIONS AND DETAILS

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	MISCELLANEOUS QUANTITIES	SHEET 73	E

FILE NAME : 024001_SP (SIG PLAN).DWG
LAYOUT NAME - ****
PLOT DATE : 9/26/2016 12:15 PM PLOT BY : SEH INC LAYOUT NAME : 0240013_SP_PH PLOT SCALE : 1:2

WISDOT/CADDS SHEET 42

RECORDED
12/14/2015 11:39:04 AM
MICHAEL J. SYDOW, REGISTER OF DEEDS
DOC # 1705411

TRANSPORTATION PROJECT PLAT NO: 1610-04-24 - 4.01

THAT PART LOT 4, CSM 14680 AND THE NW¼-NW¼ OF SECTION 18, T-29-N, R-2-E, VILLAGE OF DORCHESTER, MARATHON COUNTY, WISCONSIN

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 11:39AM ON 12/14/2015 AS DOCUMENT # 1705411 AND FILED IN CAD. 3 ENV 5438

Michael J. Sydow
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1610-04-24-4.01
AMENDMENT NO:

CONVENTIONAL SYMBOLS AND ABBREVIATIONS

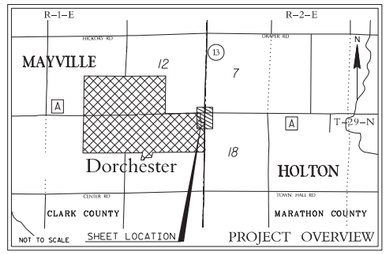
STATE, COUNTY, OR TOWN LINE	
SECTION LINE	
QUARTER LINE	
SIXTEENTH LINE	
PROPOSED REFERENCE LINE	
PROPOSED R/W LINE	
EXISTING H.E. LINE	
PROPERTY LINE	
EASEMENT LINE	
CORPORATE LIMITS	
EXISTING CENTERLINE	
LOT & TIE LINES	
UTILITIES (TELEPHONE, GAS, ELECTRIC, CABLE TV, FIBER OPTIC)	FO (TYPE)
FIRE HYDRANT	
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)	
NO ACCESS (BY ACQUISITION)	
NO ACCESS (BY STATUTORY AUTHORITY)	
FEE (HATCH VARIES)	
TEMPORARY LIMITED EASEMENT	
PERMANENT LIMITED EASEMENT	
R/W BOUNDARY POINT	40000
PLE/TLE POINT	60000
PARCEL NUMBER	8
SIGN NUMBER (OFF PREMISE)	21-1
BUILDING	
FOUND IRON PIPE/PIN	○ (SIZE & TYPE NOTED)
R/W MONUMENT	○ ●(SET)
R/W STANDARD	△ ▲(SET)
SIGN	| SIGN

ACCESS POINT	AP
ACCESS RIGHTS	AR
ACRES	AC.
AND OTHERS	ET.AL.
CENTERLINE	C/L
CERTIFIED SURVEY MAP	CSM
DOCUMENT	DOC.
HIGHWAY EASEMENT	H.E.
LAND CONTRACT	LC
MONUMENT	MON.
PAGE	P.
PROPERTY LINE	PL
PERMANENT LIMITED EASEMENT	PLE
RECORDED AS	(100')
REFERENCE LINE	R/L
REMAINING	REM.
RIGHT-OF-WAY	R/W
SECTION	SEC.
SQUARE FEET	SQ.FT.
STATION	STA.
TEMPORARY LIMITED EASEMENT	TLE
VOLUME	V.

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

	NON COMPENSABLE	COMPENSABLE
POWER POLE	○	●
TELEPHONE POLE	⌀	⌀
TELEPHONE PEDESTAL	⌧	⌧
GUY POLE	⊙	N/A
SECTION CORNER MONUMENT	Ⓐ	
SECTION CORNER	17 / 20 / 29 / 32 / 5 / 8	



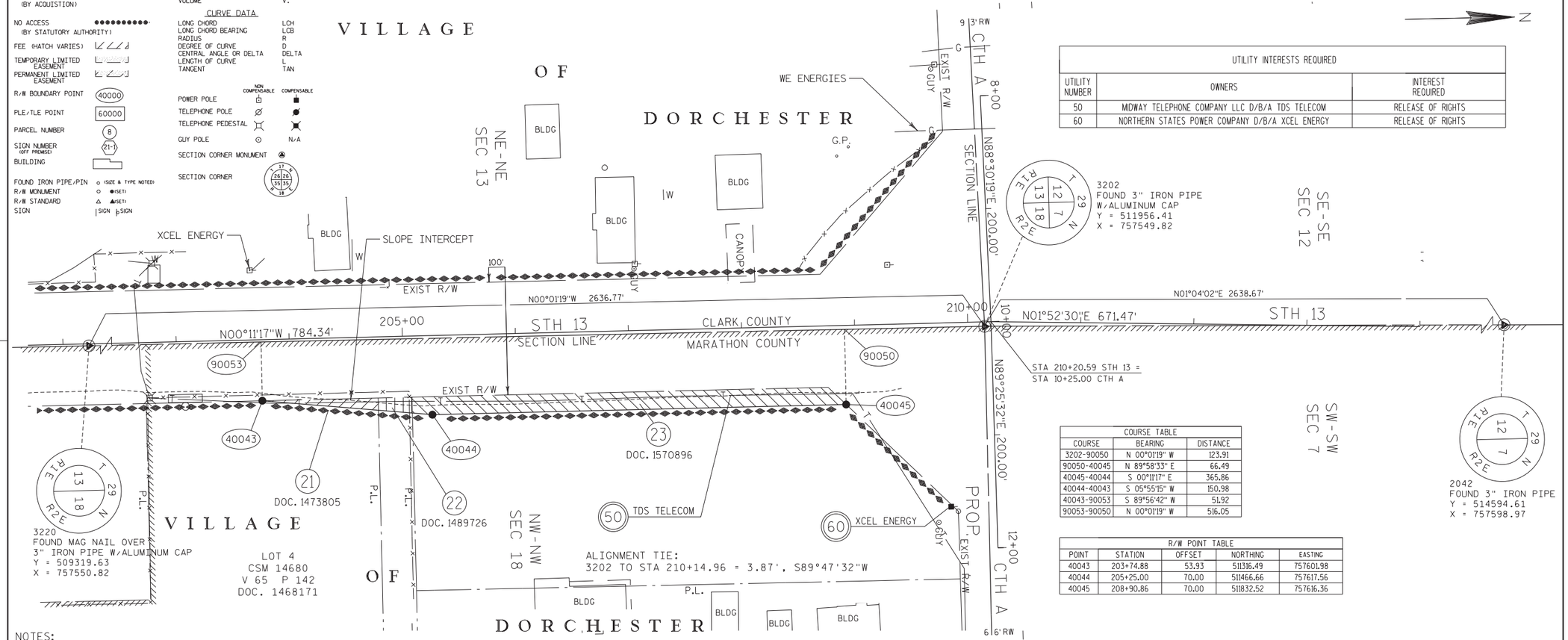
ALIGNMENT DATA STH 13	
PI STA 202+36.25	
Y = 511177.68	
X = 757548.50	
PI STA 210+20.59	
Y = 511962.02	
X = 757545.93	
PI STA 216+92.06	
Y = 512633.13	
X = 757567.90	
PI STA 217+95.14	
Y = 512736.06	
X = 757573.41	

ALIGNMENT DATA CTH A	
POB STA 8+00.00	
Y = 511956.82	
X = 757346.00	
PI STA 10+00.00	
Y = 511962.02	
X = 757545.93	
POE STA 12+00.00	
Y = 511964.04	
X = 757745.92	

PROJECT DESCRIPTION: STH 13 ABBOTSFORD - MEDFORD (PINE STREET TO MINK AVENUE)

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.



UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNERS	INTEREST REQUIRED
50	MIDWAY TELEPHONE COMPANY LLC D/B/A TDS TELECOM	RELEASE OF RIGHTS
60	NORTHERN STATES POWER COMPANY D/B/A XCEL ENERGY	RELEASE OF RIGHTS

COURSE TABLE		
COURSE	BEARING	DISTANCE
3202-90050	N 00°01'19" W	123.91
90050-40045	N 89°58'33" E	66.49
40045-40044	S 00°11'17" E	365.86
40044-40043	S 05°55'15" W	150.98
40043-90053	S 89°56'42" W	51.92
90053-90050	N 00°01'19" W	516.05

R/W POINT TABLE				
POINT	STATION	OFFSET	NORTHING	EASTING
40043	203+74.88	53.93	511316.49	757601.98
40044	205+25.00	70.00	511466.66	757617.56
40045	208+90.86	70.00	511832.52	757616.36

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, CLARK COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY ¾" X 24" REBAR WITH A WDOT CAP) 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".

THE POINT OF INTERSECTIONS DESIGNATED WITH A 90000 SERIES NUMBER HAVE BEEN CREATED FOR THE PURPOSE OF SHOWING A CLOSED TRAVERSE. THE POINTS ARE INTENDED TO BE ON THE RIGHT-OF-WAY LINES BUT NOT NECESSARILY ON OR ANY PART OF A BOUNDARY. SIXTEENTH, QUARTER OR SECTION (P.L.S.S.) LINE. THESE POINTS WILL NOT BE MONUMENTED IN THE FIELD.

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 STH 13 ESTABLISHED FROM PREVIOUS PROJECTS 1614-07-21 & 1614-07-22 AND EXISTING ACCESS CONTROL ALONG STH 13 ESTABLISHED FROM PREVIOUS PROJECTS 1614-07-21 & 1614-07-22.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGIONAL OFFICE - EAU CLAIRE.

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

UTILITY INTEREST TABLE					
UTL	OWNER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION	PLAT ID
-	MIDWAY TELEPHONE COMPANY LLC D/B/A TDS TELECOM	-	CONVEYANCE OF RIGHTS	DOC. 576750	T 04-4 (33)
60	NORTHERN STATES POWER COMPANY D/B/A XCEL ENERGY	-	CONVEYANCE OF RIGHTS	DOC. 576751	T 04-4 (33)
50	MIDWAY TELEPHONE COMPANY LLC D/B/A TDS TELECOM	21	CONVEYANCE OF EASEMENT	DOC. 15147912	-
50	MIDWAY TELEPHONE COMPANY LLC D/B/A TDS TELECOM	22, 23	NO EASEMENT OF RECORD	-	-

SCHEDULE OF LANDS AND INTERESTS REQUIRED							OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT
PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED			TLE ACRES REQUIRED	
			NEW	EXISTING H.E.	TOTAL		
21	D & D MEYER PROPERTIES	FEE	0.04	0.00	0.04	0.00	
22	VILLAGE OF DORCHESTER	FEE	0.01	0.00	0.01	0.00	
23	EDWARD O. BRECKE, JR.	FEE	0.14	0.00	0.14	0.00	

SCALE, FEET
0 50 100

FAA CONSULTING ENGINEERS
Fleming, Andre & Associates, Inc.
3615 N. Hastings Way • Suite 100
Eau Claire, WI 54703

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, JOHN T. MUELLER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN AND UNDER THE DIRECTION OF THE DEPTARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: DATE: 12/2/2015
PRINT NAME: JOHN T. MUELLER
REGISTRATION NUMBER: S-2454

WISCONSIN JOHN T. MUELLER 2454 CHIPPEWA FALLS WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
NORTHWEST REGION - EAU CLAIRE
SIGNATURE: DATE: 12/2/2015
PRINT NAME: MICHAEL PILLER

FILE NAME : F:\Drawings\2012-100\0014\16101024_4.01.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/8/2010
PLOT BY :
PLOT NAME :
PLOT SCALE : 1 in : 100 ft

TRANSPORTATION PROJECT PLAT NO: 1610-04-24 - 4.02

THAT PART OF THE SE¼-SE¼ OF SECTION 12, T-29-N, R-1-E, TOWN OF MAYVILLE AND VILLAGE OF DORCHESTER, CLARK COUNTY, WISCONSIN

PROJECT DESCRIPTION: STH 13 ABBOTSFORD - MEDFORD (PINE STREET TO MINK AVENUE)

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.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Clark COUNTY, WISCONSIN AT 8:00AM ON 12/14/15 AS DOCUMENT # 610408 AND FILED IN Cabinet 2, Pg 223

Peggy L. Walter
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1610-04-24-4.02
AMENDMENT NO:

CONVENTIONAL SYMBOLS AND ABBREVIATIONS

STATE, COUNTY, OR TOWN LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
PROPOSED REFERENCE LINE
PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
EASEMENT LINE
CORPORATE LIMITS
EXISTING CENTERLINE
LOT & TIE LINES
UTILITIES — FO (TYPE) (TELEPHONE, GAS, ELECTRIC, CABLE TV, FIBER OPTIC)
FIRE HYDRANT
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)
NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT 40000
PLE/TLE POINT 60000
PARCEL NUMBER 8
SIGN NUMBER (OFF PREMISE) 21-1
BUILDING
FOUND IRON PIPE/PIN (SIZE & TYPE NOTED)
R/W MONUMENT (SET)
R/W STANDARD (SET)
SIGN

ACCESS POINT	AP
ACCESS RIGHTS	AR
ACRES	AC.
AND OTHERS	ET.AL.
CENTERLINE	C/L
CERTIFIED SURVEY MAP	CSM
DOCUMENT	DOC.
HIGHWAY EASEMENT	H.E.
LAND CONTRACT	LC
MONUMENT	MON.
PAGE	P.
PROPERTY LINE	PL
PERMANENT LIMITED EASEMENT	PLE
RECORDED AS	(100')
REFERENCE LINE	R/L
REMAINING	REM.
RIGHT-OF-WAY	R/W
SECTION	SEC.
SQUARE FEET	SQ.FT.
STATION	STA.
TEMPORARY LIMITED EASEMENT	TLE
VOLUME	V.

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

	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
GUY POLE		N/A

SECTION CORNER MONUMENT
SECTION CORNER

ALIGNMENT DATA
STH 13

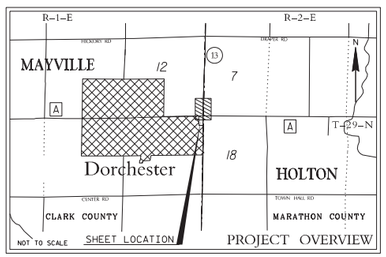
PISTA 202+36.25
Y = 511177.68
X = 757548.50
PISTA 210+20.59
Y = 511962.02
X = 757545.93
PISTA 216+92.06
Y = 512633.13
X = 757567.90
PISTA 217+95.14
Y = 512736.06
X = 757573.41
PISTA 226+52.90
Y = 513593.40
X = 757600.32

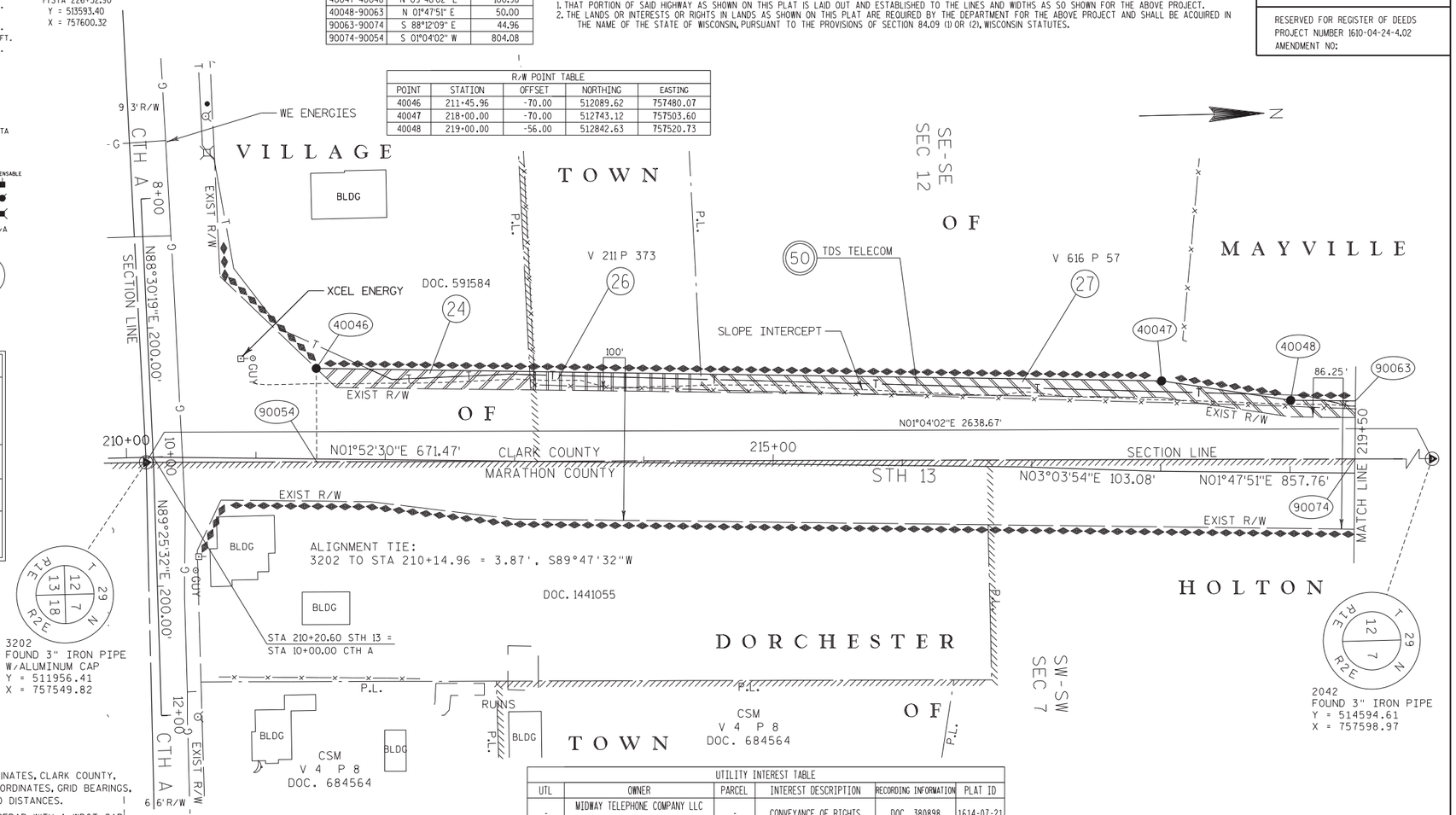
ALIGNMENT DATA
CTH A

POB STA 8+00.00
Y = 511956.82
X = 757346.00
PISTA 10+00.00
Y = 511962.02
X = 757545.93
POE STA 12+00.00
Y = 511964.04
X = 757745.92

COURSE TABLE		
COURSE	BEARING	DISTANCE
3202-90054	N 01°04'02" E	130.87
90054-40046	N 88°07'19" W	72.23
40046-40047	N 02°03'43" E	653.92
40047-40048	N 09°46'02" E	100.98
40048-90063	N 01°47'51" E	50.00
90063-90074	S 88°12'09" E	44.96
90074-90054	S 01°04'02" W	804.08

R/W POINT TABLE				
POINT	STATION	OFFSET	NORTHING	EASTING
40046	211+45.96	-70.00	512089.62	757480.07
40047	218+00.00	-70.00	512743.12	757503.60
40048	219+00.00	-56.00	512842.63	757520.73





UTILITY INTEREST TABLE					
UTL	OWNER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION	PLAT ID
-	MIDWAY TELEPHONE COMPANY LLC D/B/A TDS TELECOM	-	CONVEYANCE OF RIGHTS	DOC. 380898	1614-07-21
50	MIDWAY TELEPHONE COMPANY LLC D/B/A TDS TELECOM	27	R.O.W. AUTHORIZATION	DOC. 385495	-
50	MIDWAY TELEPHONE COMPANY LLC D/B/A TDS TELECOM	24, 26	NO EASEMENT OF RECORD	-	-

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, CLARK COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY ¾" X 24" REBAR WITH A WDOT CAP) 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".

THE POINT OF INTERSECTIONS DESIGNATED WITH A 90000 SERIES NUMBER HAVE BEEN CREATED FOR THE PURPOSE OF SHOWING A CLOSED TRAVERSE. THE POINTS ARE INTENDED TO BE ON THE RIGHT-OF-WAY LINES BUT NOT NECESSARILY ON OR ANY PART OF A BOUNDARY, SIXTEENTH, QUARTER OR SECTION (P.L.S.S.) LINE. THESE POINTS WILL NOT BE MONUMENTED IN THE FIELD.

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 STH 13 ESTABLISHED FROM PREVIOUS PROJECTS 1614-07-21 & 1614-07-22 AND EXISTING ACCESS CONTROL ALONG STH 13 ESTABLISHED FROM PREVIOUS PROJECTS 1614-07-21 & 1614-07-22.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGIONAL OFFICE.

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

EXISTING PARCEL, DOC. 1441055, LOCATED IN THE SW-SW OF SECTION 7 IN MARATHON COUNTY, WILL BE AN EARLY ACQUISITION.

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNERS	INTEREST REQUIRED
50	MIDWAY TELEPHONE COMPANY LLC D/B/A TDS TELECOM	RELEASE OF RIGHTS

SCHEDULE OF LANDS AND INTERESTS REQUIRED							
			OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT				
PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED			TLE ACRES REQUIRED
			NEW	EXISTING H.E.	TOTAL	
24	BKD PROPERTIES LLC	FEE	0.05	0.00	0.05	0.00
26	DORCHESTER POLE YARD	FEE	0.04	0.00	0.04	0.00
27	RONALD J. ROBIDA	FEE	0.15	0.00	0.15	0.00

SCALE, FEET
0 50 100

FAA CONSULTING ENGINEERS
Fleming, Andre & Associates, Inc.
3615 N. Hastings Way • Suite 100
Eau Claire, WI 54703

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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

SIGNATURE: DATE: 12/2/2015
PRINT NAME: JOHN T. MUELLER
REGISTRATION NUMBER: S-2454

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
NORTHWEST REGION - EAU CLAIRE
SIGNATURE: DATE: 12/2/2015
PRINT NAME: MICHAEL PILLER

JOHN T. MUELLER 2454 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : F:\Drawings\2012-100\0014\16101024_4.02.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/8/2010
PLOT BY :
PLOT NAME :
PLOT SCALE : 1 in : 100 ft

TRANSPORTATION PROJECT PLAT NO: 1610-04-24 - 4.03

THAT PART OF THE SE¼-SE¼ AND THE NE¼-SE¼ OF SECTION 12, T-29-N, R-1-E,
TOWN OF MAYVILLE, CLARK COUNTY, WISCONSIN

PROJECT DESCRIPTION: STH 13 ABBOTSFORD - MEDFORD (PINE STREET TO MINK AVENUE)

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.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Clark COUNTY, WISCONSIN AT 8:00AM ON 12/14/15 AS DOCUMENT # 610409 AND FILED IN Cabinet 2, Pg 224

Peggy L Walton
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1610-04-24-4.03
AMENDMENT NO:

CONVENTIONAL SYMBOLS AND ABBREVIATIONS

STATE, COUNTY, OR TOWN LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
PROPOSED REFERENCE LINE
PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
EASEMENT LINE
CORPORATE LIMITS
EXISTING CENTERLINE
LOT & TIE LINES
UTILITIES — FO (TYPE) (TELEPHONE, GAS, ELECTRIC, CABLE TV, FIBER OPTIC)
FIRE HYDRANT
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)
NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT 40000
PLE/TLE POINT 60000
PARCEL NUMBER 8
SIGN NUMBER (OFF PREMISE) 21-1
BUILDING
FOUND IRON PIPE/PIN (SIZE & TYPE NOTED)
R/W MONUMENT (SET)
R/W STANDARD (SET)
SIGN

ACCESS POINT	AP
ACCESS RIGHTS	AR
ACRES	AC.
AND OTHERS	ET.AL.
CENTERLINE	C/L
CERTIFIED SURVEY MAP	CSM
DOCUMENT	DOC.
HIGHWAY EASEMENT	H.E.
LAND CONTRACT	LC
MONUMENT	MON.
PAGE	P.
PROPERTY LINE	PL
PERMANENT LIMITED EASEMENT	PLE
RECORDED AS	(100')
REFERENCE LINE	R/L
REMAINING	REM.
RIGHT-OF-WAY	R/W
SECTION	SEC.
SQUARE FEET	SQ.FT.
STATION	STA.
TEMPORARY LIMITED EASEMENT	TLE
VOLUME	V.

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

	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
GUY POLE		N/A

SECTION CORNER MONUMENT
SECTION CORNER (17, 20, 29, 32, 5, 8)

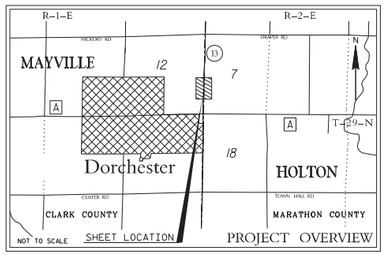
ALIGNMENT DATA
STH 13

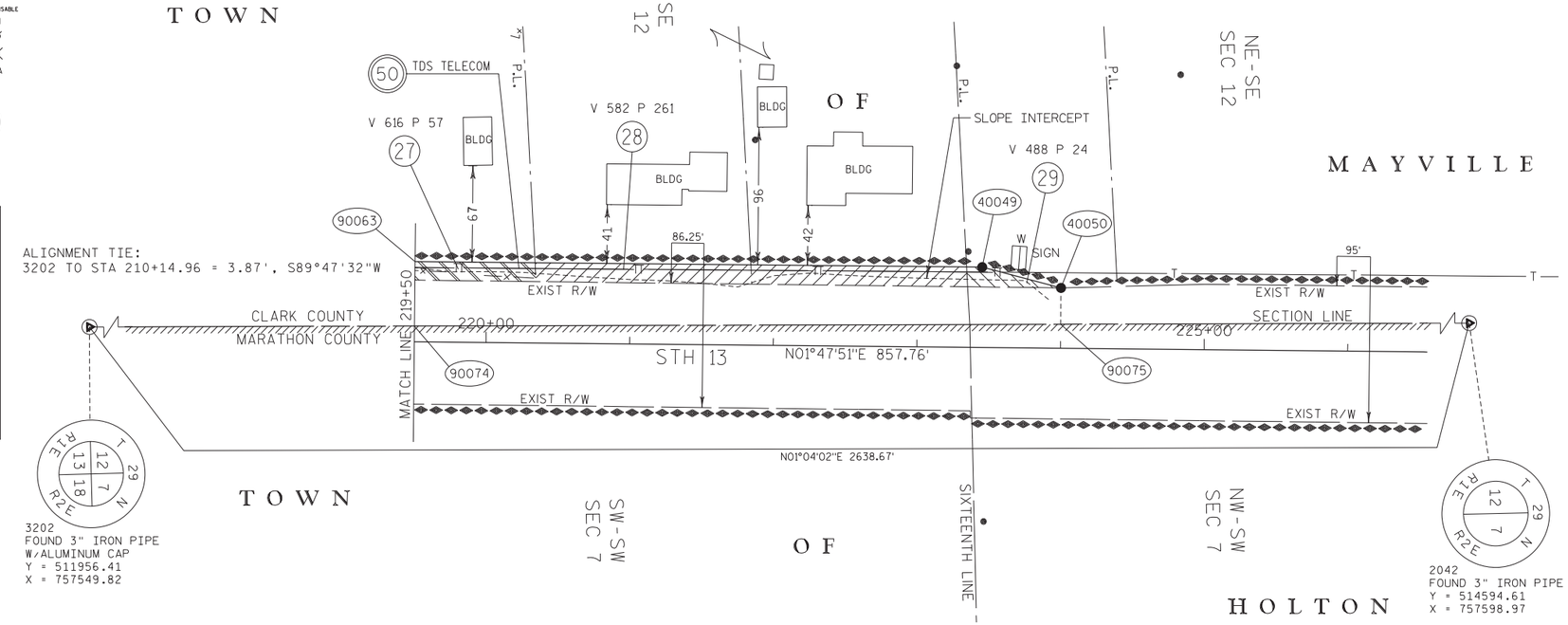
PI STA 217+95.14
Y = 512736.06
X = 757573.41
PI STA 226+52.90
Y = 513593.40
X = 757600.32

COURSE TABLE		
COURSE	BEARING	DISTANCE
3202-90074	N 01°04'02" E	934.95
90074-90063	N 88°12'09" W	44.96
90063-40049	N 01°47'51" E	395.00
40049-40050	N 16°00'10" E	56.73
40050-90075	S 88°12'09" E	25.30
90075-90074	S 01°04'02" W	450.04

R/W POINT TABLE				
POINT	STATION	OFFSET	NORTHING	EASTING
40049	223+45.00	-56.00	513287.41	757534.69
40050	224+00.00	-42.08	513341.95	757550.33

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNERS	INTEREST REQUIRED
50	MIDWAY TELEPHONE COMPANY LLC D/B/A TDS TELECOM	RELEASE OF RIGHTS
70	TAYLOR ELECTRIC COOPERATIVE, INC.	RELEASE OF RIGHTS





UTILITY INTEREST TABLE					
UTL	OWNER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION	PLAT ID
-	MIDWAY TELEPHONE COMPANY LLC D/B/A TDS TELECOM	-	CONVEYANCE OF RIGHTS	DOC. 380898	1614-07-21
50	MIDWAY TELEPHONE COMPANY LLC D/B/A TDS TELECOM	27	R.O.W. AUTHORIZATION	DOC. 385495	-
50	MIDWAY TELEPHONE COMPANY LLC D/B/A TDS TELECOM	29	R.O.W. AUTHORIZATION	DOC. 385496	-
50	MIDWAY TELEPHONE COMPANY LLC D/B/A TDS TELECOM	28	NO EASEMENT OF RECORD	-	-
70	TAYLOR COUNTY ELECTRIC COOPERATIVE	29	R.O.W. EASEMENT FOR RURAL ELECTRIC LINE	DOC. 386668	-
70	TAYLOR COUNTY ELECTRIC COOPERATIVE	29	R.O.W. EASEMENT FOR RURAL ELECTRIC LINE	DOC. 437172	-

SCHEDULE OF LANDS AND INTERESTS REQUIRED						
			OWNER NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT			
PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED			TLE ACRES REQUIRED
			NEW	EXISTING H.E.	TOTAL	
27	RONALD J. ROBIDA	FEE	0.03	0.00	0.03	0.00
28	KENNETH W. AND STELLA L. GRUBE	FEE	0.09	0.00	0.09	0.00
29	VILLAGE OF DORCHESTER	FEE	0.02	0.00	0.02	0.00

SCALE, FEET
0 50 100

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, CLARK COUNTY, NAD83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY ¾" X 24" REBAR WITH A WDOT CAP) 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".

THE POINT OF INTERSECTIONS DESIGNATED WITH A 90000 SERIES NUMBER HAVE BEEN CREATED FOR THE PURPOSE OF SHOWING A CLOSED TRAVERSE. THE POINTS ARE INTENDED TO BE ON THE RIGHT-OF-WAY LINES BUT NOT NECESSARILY ON OR ANY PART OF A BOUNDARY, SIXTEENTH, QUARTER OR SECTION (P.L.S.S.) LINE. THESE POINTS WILL NOT BE MONUMENTED IN THE FIELD.

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 STH 13 ESTABLISHED FROM PREVIOUS PROJECTS 1614-07-21 & 1614-07-22 AND EXISTING ACCESS CONTROL ALONG STH 13 ESTABLISHED FROM PREVIOUS PROJECTS 1614-07-21 & 1614-07-22.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGIONAL OFFICE.

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

FAA CONSULTING ENGINEERS
Fleming, Andre & Associates, Inc.
3615 N. Hastings Way • Suite 100
Eau Claire, WI 54703

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, JOHN T. MUELLER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN AND UNDER THE DIRECTION OF THE DEPTARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: DATE: 12/2/2015
PRINT NAME: JOHN T. MUELLER
REGISTRATION NUMBER: S-2454

WISCONSIN JOHN T. MUELLER 1454 CHIPPEWA FALLS WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
NORTHWEST REGION - EAU CLAIRE
SIGNATURE: DATE: 12/2/2015
PRINT NAME: MICHAEL PILLER

FILE NAME : F:\Drawings\2012-100\0014\16101024_4.03.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/8/2010
PLOT BY :
PLOT NAME :
PLOT SCALE : 1 in : 100 ft

CONVENTIONAL SYMBOLS AND ABBREVIATIONS

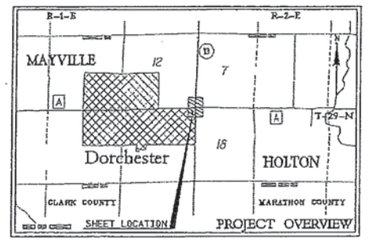
STATE, COUNTY, OR TOWN LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
PROPOSED REFERENCE LINE
PROPOSED R/W LINE
EXISTING H.E. LINE
PROPERTY LINE
EASEMENT LINE
CORPORATE LIMITS
EXISTING CENTERLINE
LOT & TIE LINES
UTILITIES — FO —
(TELEPHONE, GAS, ELECTRIC, CABLE TV, OTHER UTILITIES)
FIRE HYDRANT
ACCESS RESTRICTED (BY PREVIOUS PROJECT CONTROL)
NO ACCESS (BY ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
FEE (HATCH VARIES)
TEMPORARY LIMITED EASEMENT
PERMANENT LIMITED EASEMENT
R/W BOUNDARY POINT 90000
PLE/TLE POINT 60000
PARCEL NUMBER 9
SIGN NUMBER 21
BUILDING
FOUND IRON PIPE/PIN
R/W MONUMENT
R/W STANDARD
SIGN SIGN

ACCESS POINT	AP
ACCESS RIGHTS	AR
ACRES	AC.
AND OTHERS	ET. AL.
CENTERLINE	C/L
CERTIFIED SURVEY MAP	CSM
DOCUMENT	DOC.
HIGHWAY EASEMENT	H.E.
LAND CONTRACT	LC
MONUMENT	MON.
PAGE	P.
PROPERTY LINE	PL
PERMANENT LIMITED EASEMENT	PLE
RECORDED AS	(DOC)
REFERENCE LINE	R/L
REMAINING	REM.
RIGHT-OF-WAY	R/W
SECTION	SEC.
SQUARE FEET	SQ.FT.
STATION	STA.
TEMPORARY LIMITED EASEMENT	TLE
VOLUME	V.

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

POWER POLE
TELEPHONE POLE
TELEPHONE PEDESTAL
GUY POLE — N/A
SECTION CORNER MONUMENT
SECTION CORNER



ALIGNMENT DATA
STH 13

PI STA 202+36.25
Y = 511177.68
X = 751548.50
PI STA 210+20.59
Y = 511962.02
X = 751545.93
PI STA 216+92.06
Y = 512633.13
X = 751567.90
PI STA 217+95.14
Y = 512736.06
X = 751573.41

PARCEL 14, PROJECT 1610-04-24

THAT PART OF THE SW¼-SW¼ OF SECTION 7, T-29-N, R-2-E, TOWN OF HOLTON, MARATHON COUNTY, WISCONSIN

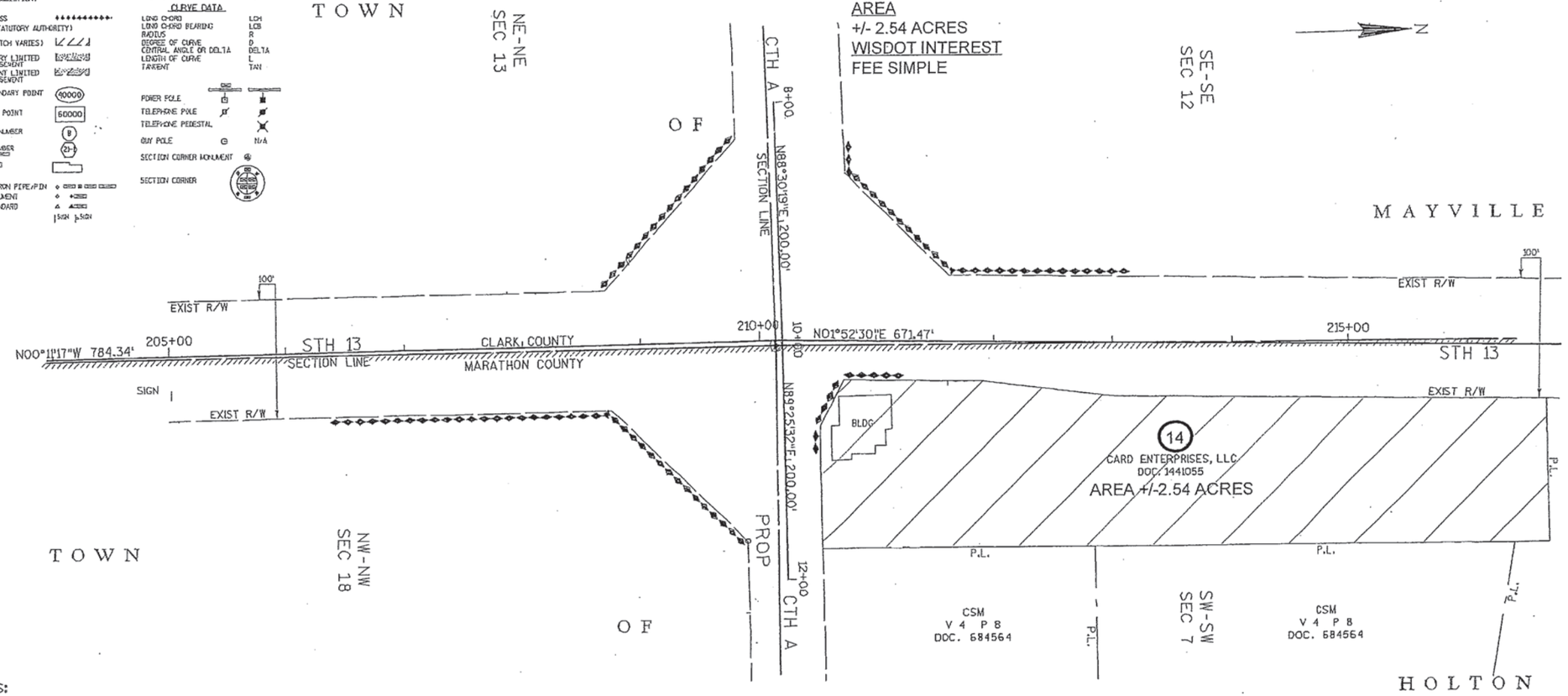
PROPERTY OWNER
CARD ENTERPRISES, LLC
W5340 COUNTY LINE ROAD
DORCHESTER, WI 54425

PROPERTY DESCRIPTION
3694 COUNTY ROAD A

REGISTER OF DEEDS INFORMATION
DOCUMENT 1441055

AREA
+/- 2.54 ACRES

WISDOT INTEREST
FEE SIMPLE



NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, CLARK COUNTY ZONE, NAD83 ( ) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY ¾" X 24" REBAR WITH A WDOT CAP) 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".

THE POINT OF INTERSECTIONS DESIGNATED WITH A 90000 SERIES NUMBER HAVE BEEN CREATED FOR THE PURPOSE OF SHOWING A CLOSED TRAVERSE. THE POINTS ARE INTENDED TO BE ON THE RIGHT-OF-WAY LINES BUT NOT NECESSARILY ON OR ANY PART OF A BOUNDARY, SIXTEENTH, QUARTER OR SECTION (P.L.S.S.) LINE. THESE POINTS WILL NOT BE MONUMENTED IN THE FIELD.

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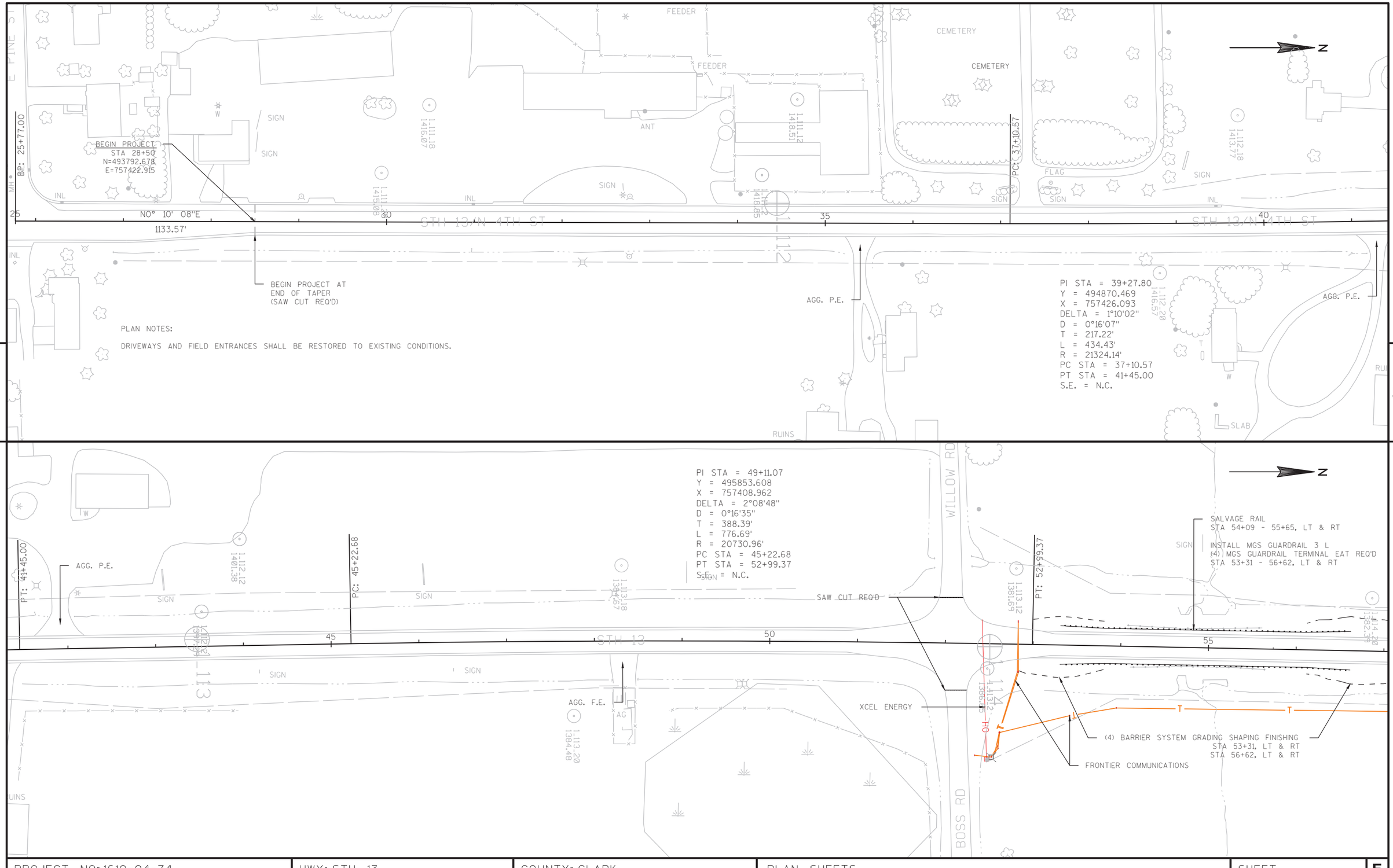
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 13 ESTABLISHED FROM PREVIOUS PROJECTS 1614-07-21 & 1610-07-22 AND EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS.
EXISTING ACCESS CONTROL ALONG STH 13 ESTABLISHED FROM PREVIOUS PROJECTS 1614-07-21 & 1610-07-22.

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

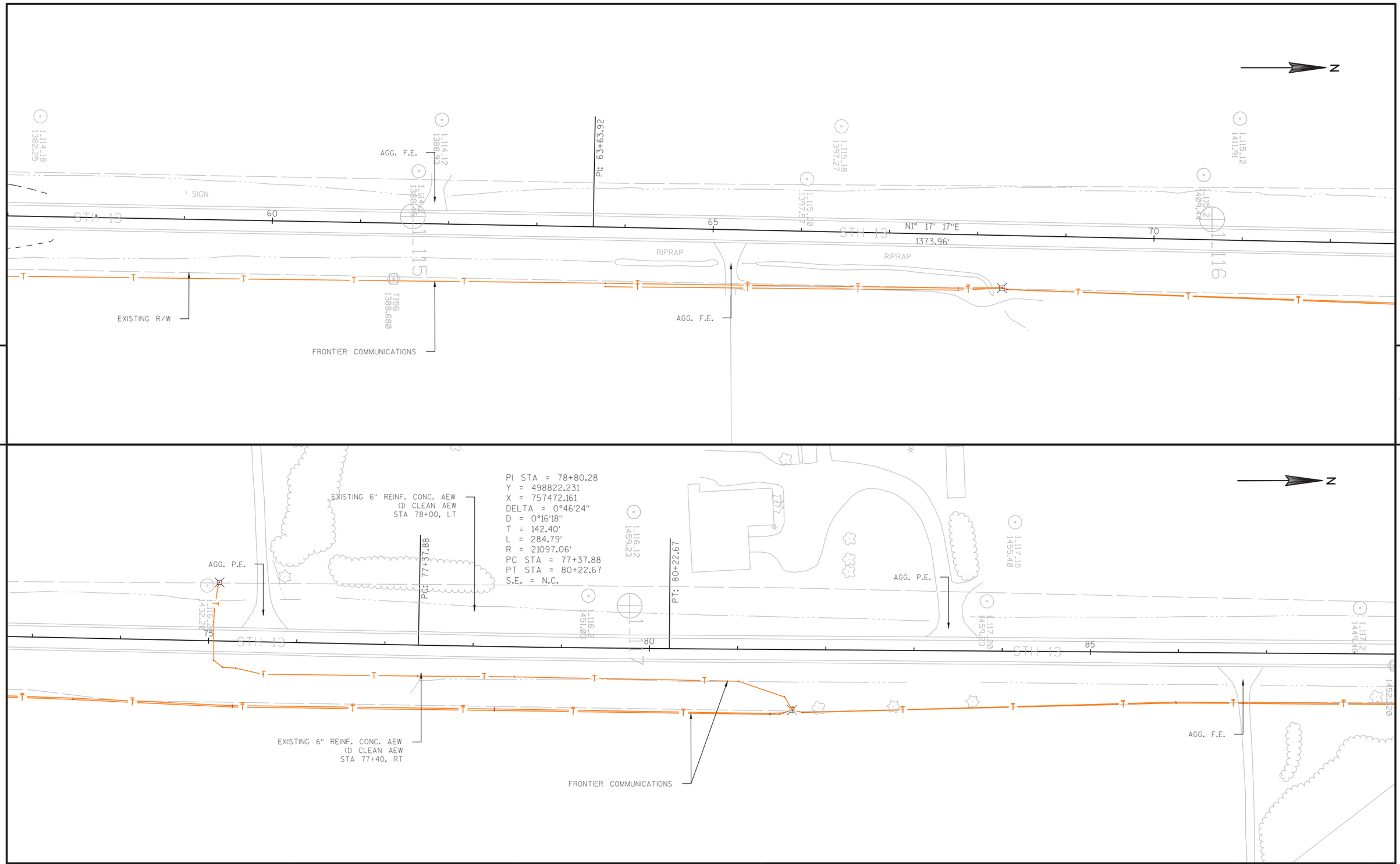
SCALE, FEET
0 50 100

Michael Biller
SIGNATURE (WISDOT REPRESENTATIVE)
10/15/2013
DATE

FILE NAME : F:\Drawings\2012-100\0014\16100404_4.11.dgn
PLOT DATE : 12/8/2010
PLOT BY : $(_USTN_USERNAME_) PLOT NAME :
PLOT SCALE : 1 in : 100 ft
APPRAISAL PLAT DATE :



PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 78	E



5

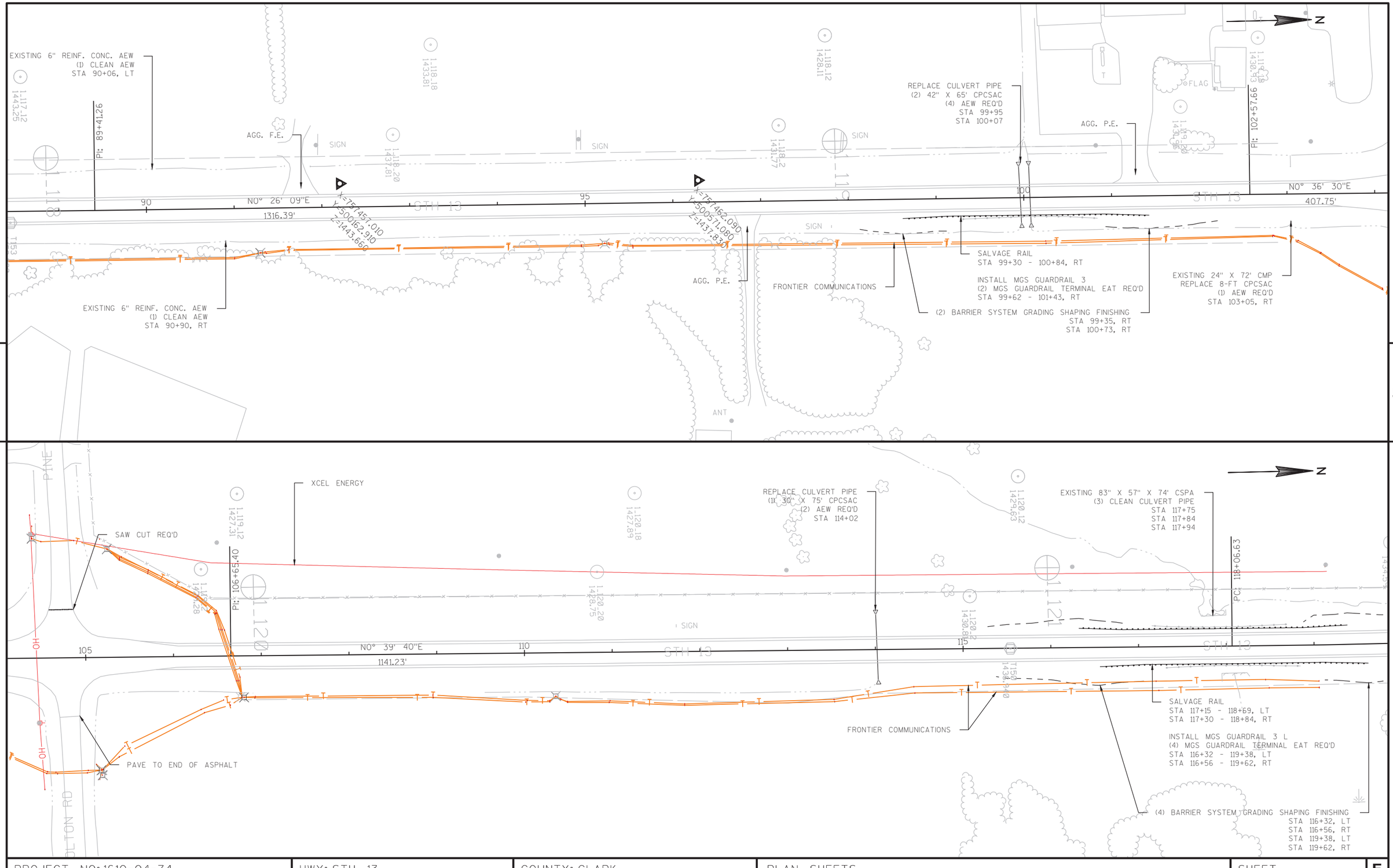
5

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 79	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\051001_PLN_STH13_16100404.DWG
LAYOUT NAME - 050102

PLOT DATE : 7/22/2016 10:24 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 80 E

PI STA = 119+62.91
Y = 502904.684
X = 757511.000
DELTA = 1°20'39"
D = 0°25'48"
T = 156.28'
L = 312.55'
R = 13321.43'
PC STA = 118+06.63
PT STA = 121+19.18
S.E. = N.C.

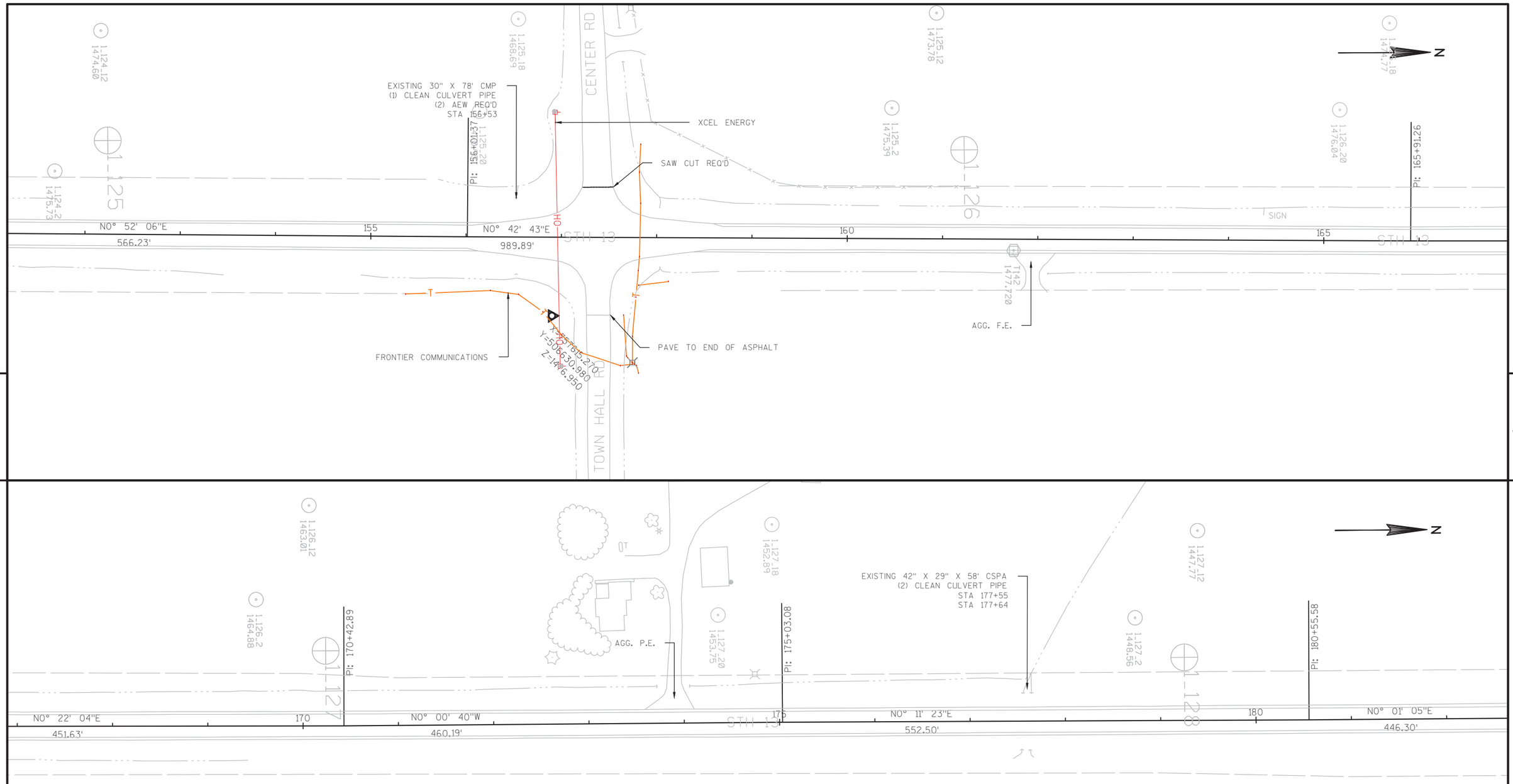
PI STA = 129+69.75
Y = 503911.467
X = 757498.996
DELTA = 1°17'47"
D = 0°17'52"
T = 217.64'
L = 435.27'
R = 19238.62'
PC STA = 127+52.11
PT STA = 131+87.38
S.E. = N.C.

PI: 138+64.18

PI: 150+35.14

1170.96'

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 81 E



PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 82 E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\051001_PLN_STH13_16100404.DWG
LAYOUT NAME - 050105

PLOT DATE : 7/22/2016 10:25 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

5

LEGEND

REMOVE DRIVEWAY

EXISTING R/W

XCEL ENERGY

AGG. P.E.

REMOVE CULVERT
STA 205+23 - 205+50, RT

SAW CUT REQ'D

OVERHEAD SIGN BASE

SLOPE INTERCEPT

EXISTING R/W

TDS TELECOM

PROPOSED R/W

EXTEND CULVERT PIPE
(1) 24" x 16' CPCSAC
(1) AEW REQ'D
STA 206+01, RT

BEGIN PROJECT 1610-03-72
STA 198+86.68
N=510828.118
E=757548.761

STH 13

N0° 11' 17"W
763.54'

200

205

P.I: 202+36.26

1-128.18
1452.32

1-128.20
1454.41

1-128.12
1457.51

1-128.2
1456.20

1-130.18
1448.46

1-130.12
1436.36

1-132.20
1450.07

1-132.2
1437.22

1-133.1
1441.81

1-133.20
1443.50

T13
1463.550

P.I: 185+88.88

185

190

N0° 04' 54"E
763.63'

ASPHALT P.E.
SAW CUT REQ'D

1-123.20
1468.73

P.I: 192+65.51

N0° 07' 42"W
375.41'

AGG. F.E.
SIGN

1-129.18
1464.42

P.I: 196+40.96

195

N0° 02' 29"W
595.34'

1-129.12
1459.92

1-129.2
1461.45

1-131.20
1431.41

SAW CUT REQ'D

FILLER ASPHALT P.E.

WALLS

A/C

CANOPY

WE ENERGIES

EXTEND CULVERT PIPE
(1) 18" x 8' CPCSAC, RT
(1) 18" x 16' CPCSAC, LT
(2) AEW REQ'D
STA 9+15, LT & RT

8-INCH CONCRETE TRUCK APRON (6-FT)

CONCRETE CURB & GUTTER
30-INCH TYPE D

6-INCH CONCRETE SIDEWALK
(REMOVING ASPHALTIC SURFACE)

CONCRETE CURB & GUTTER
4-INCH SLOPED
36-INCH TYPE T
(ALL RADIUS CURBS)

EXTEND CULVERT PIPE
(1) 24" x 16' CPCSAC
(1) AEW REQ'D
STA 10+24, RT

ASPHALTIC FLUME

SAW CUT REQ'D

VILLAGE OF DORCHESTER (WATER)

ASPHALT P.E.

EXISTING R/W

RECONSTRUCT MANHOLE
STA 210+70, LT
STA 210+50, RT

PROPOSED R/W

SLOPE INTERCEPT

TDS TELECOM

SIGN

P.I: 210+21.60

N1° 30' 30"E
671.46'

P.I: 10+00.00'A'

CONCRETE CURB & GUTTER
30-INCH TYPE D

EXISTING R/W

CONCRETE CURB & GUTTER
4-INCH SLOPED
36-INCH TYPE D
(ALL MEDIAN CURBS)

SALVAGED INLET COVER

PROPOSED R/W

VILLAGE OF DORCHESTER (SANITARY)

EP: 12+00.00'A'

PROJECT NO: 1610-04-74/1610-03-72	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 83	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\051001_PLN_STH13_16100404.DWG
LAYOUT NAME - 050106

PLOT DATE : 7/22/2016 10:25 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

(3) REMOVING APRON ENDWALLS 57X38-INCH

EXTEND CULVERTS
(3) 57" x 38" x 16' PACSAC
(3) AEW REQ'D
STA 216+89, LT
STA 217+00, LT
STA 217+11, LT

TDS TELECOM

SLOPE INTERCEPT

MARSH EXCAVATION
(50' x 25' x 3')
STA 216+80 - 217+30, LT

AGG P.E.

REPLACE CULVERT
(1) 24" x 30' CPCSAC
(2) AEW REQ'D
STA 219+83

ASPHALT P.E.
SAW CUT REQ'D

REPLACE CULVERT
(1) 24" x 46' CPCSAC
(2) AEW REQ'D
STA 221+75

PROPOSED R/W

END PROJECT 1610-03-72
STA 223+92.54
N=513333.172
E=757592.151

PI: 216+92.07

PI: 217+95.15

PI: 226+52.91

OVERHEAD SIGN BASE

N3° 03' 54"E
103.08'

N1° 47' 51"E
857.76'

N2° 03' 31"E
550.94'

GRASS P.E.

SALVAGE RAIL
STA 216+36 - 218+03, LT
STA 215+95 - 217+63, RT

INSTALL MGS GUARDRAIL 3 L
(2) MGS GUARDRAIL TERMINAL EAT REQ'D
STA 215+39 - 218+45, RT

(2) BARRIER SYSTEM GRADING SHAPING FINISHING
STA 215+39, RT
STA 218+45, RT

AGG. P.E.

EXISTING R/W

STH 13

AGG. P.E.

PI: 232+03.64

PI: 239+04.61

PI: 240+96.01

N1° 49' 28"E
700.77'

N1° 15' 15"E
191.40'

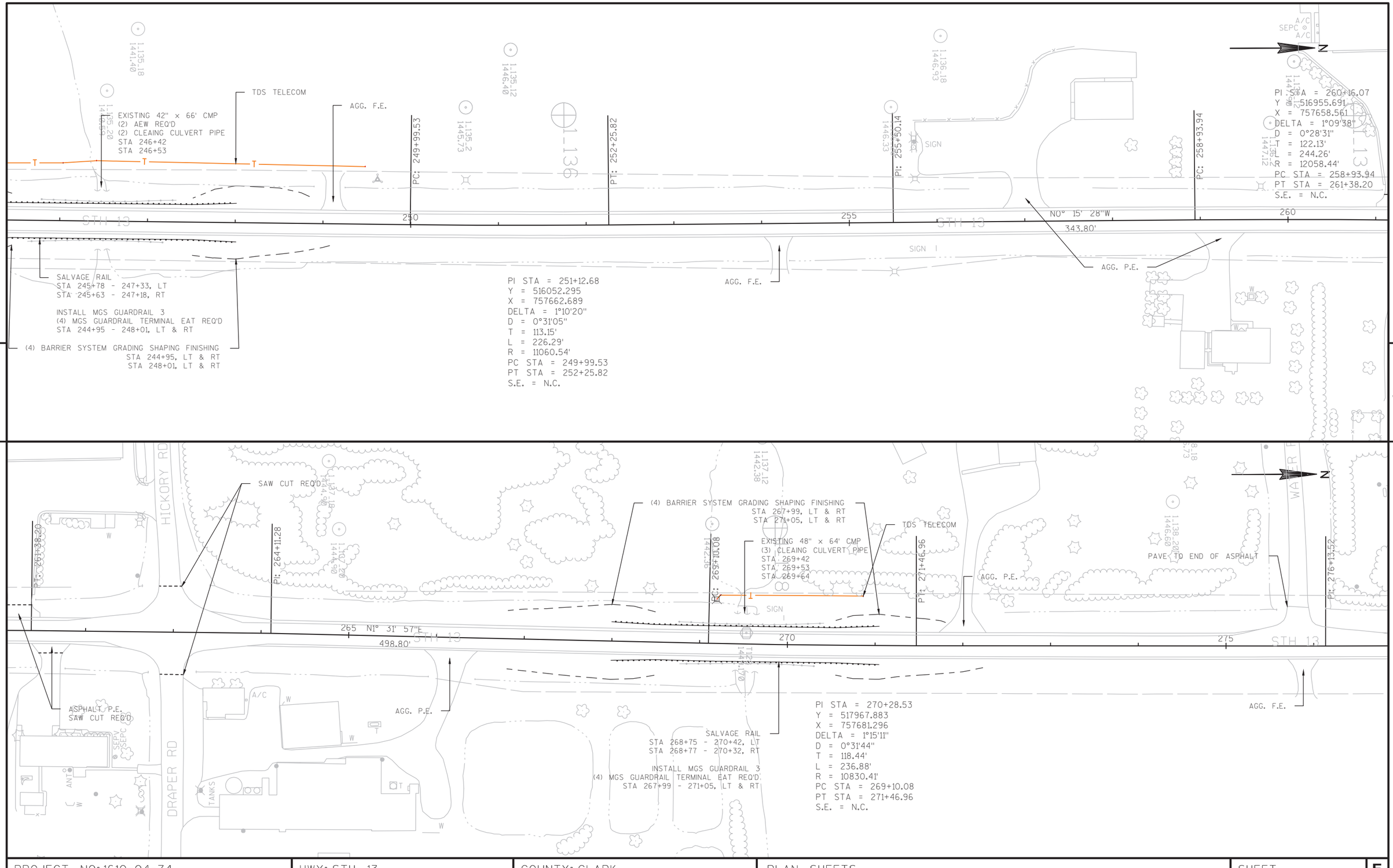
N0° 54' 23"E
903.52'

AGG. P.E.

SLAB

RUINS

PROJECT NO: 1610-04-74/1610-03-72	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 84 E

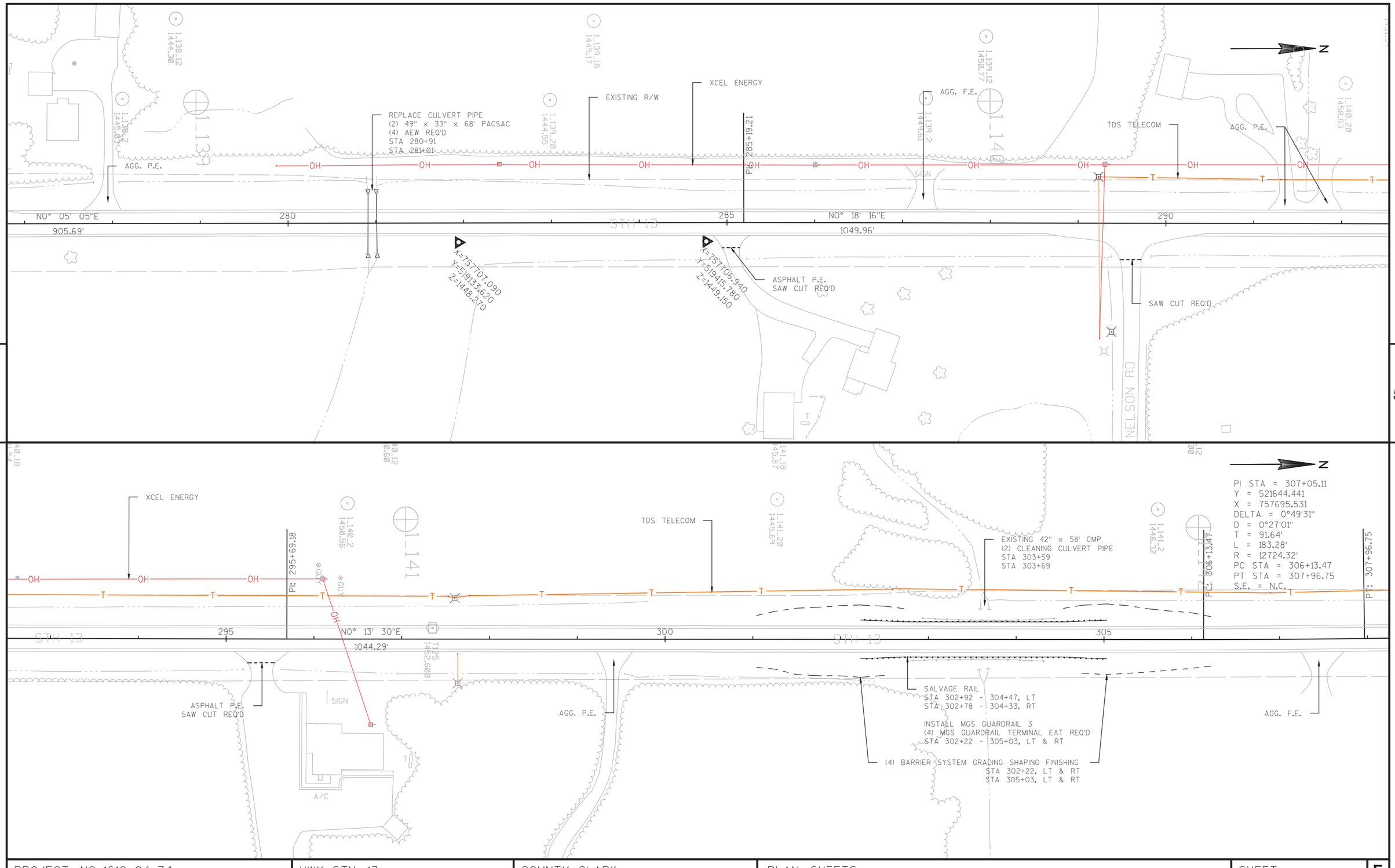


PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 85	E

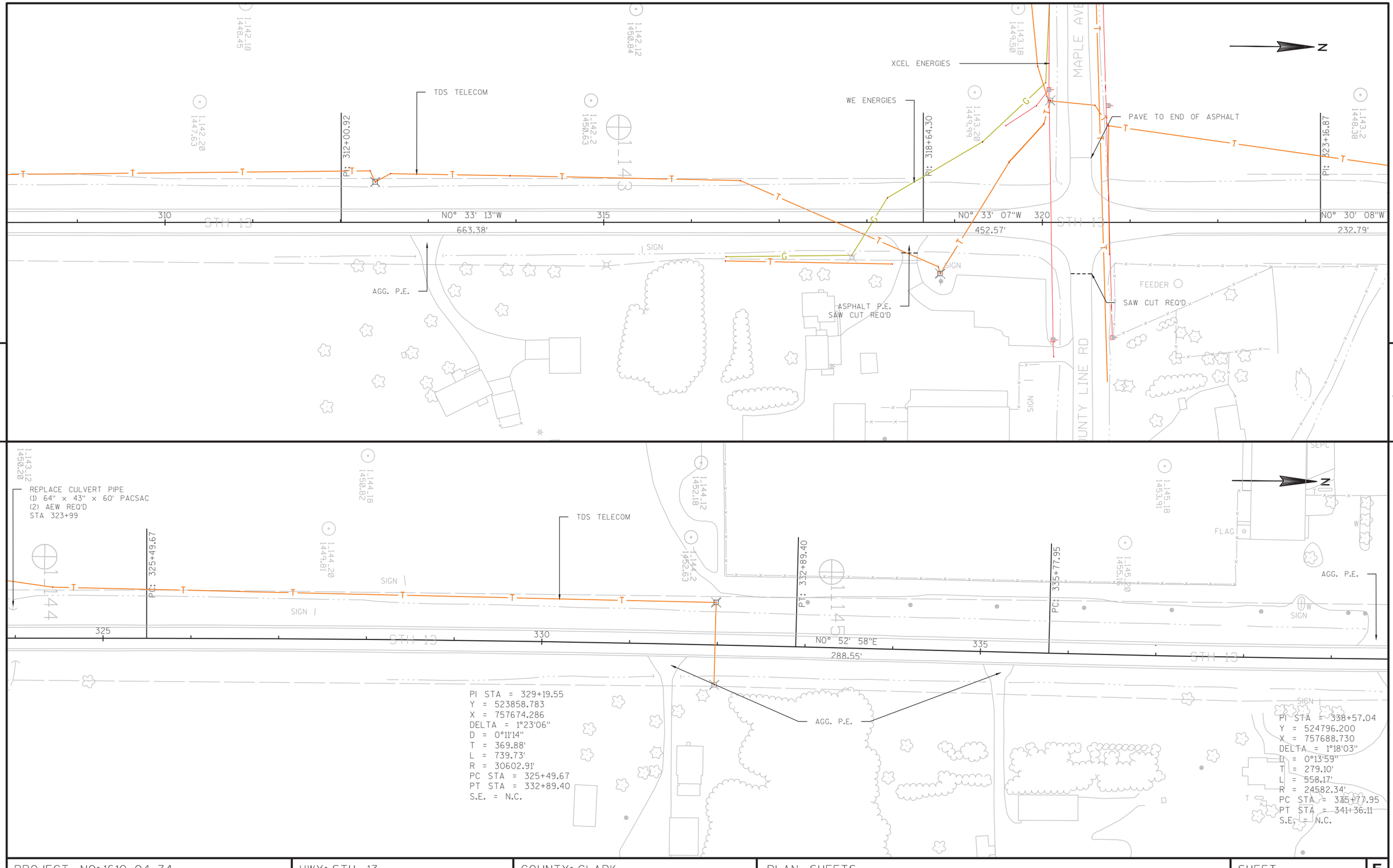
FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\051001_PLN_STH13_16100404.DWG
LAYOUT NAME - 050108

PLOT DATE : 7/22/2016 10:25 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

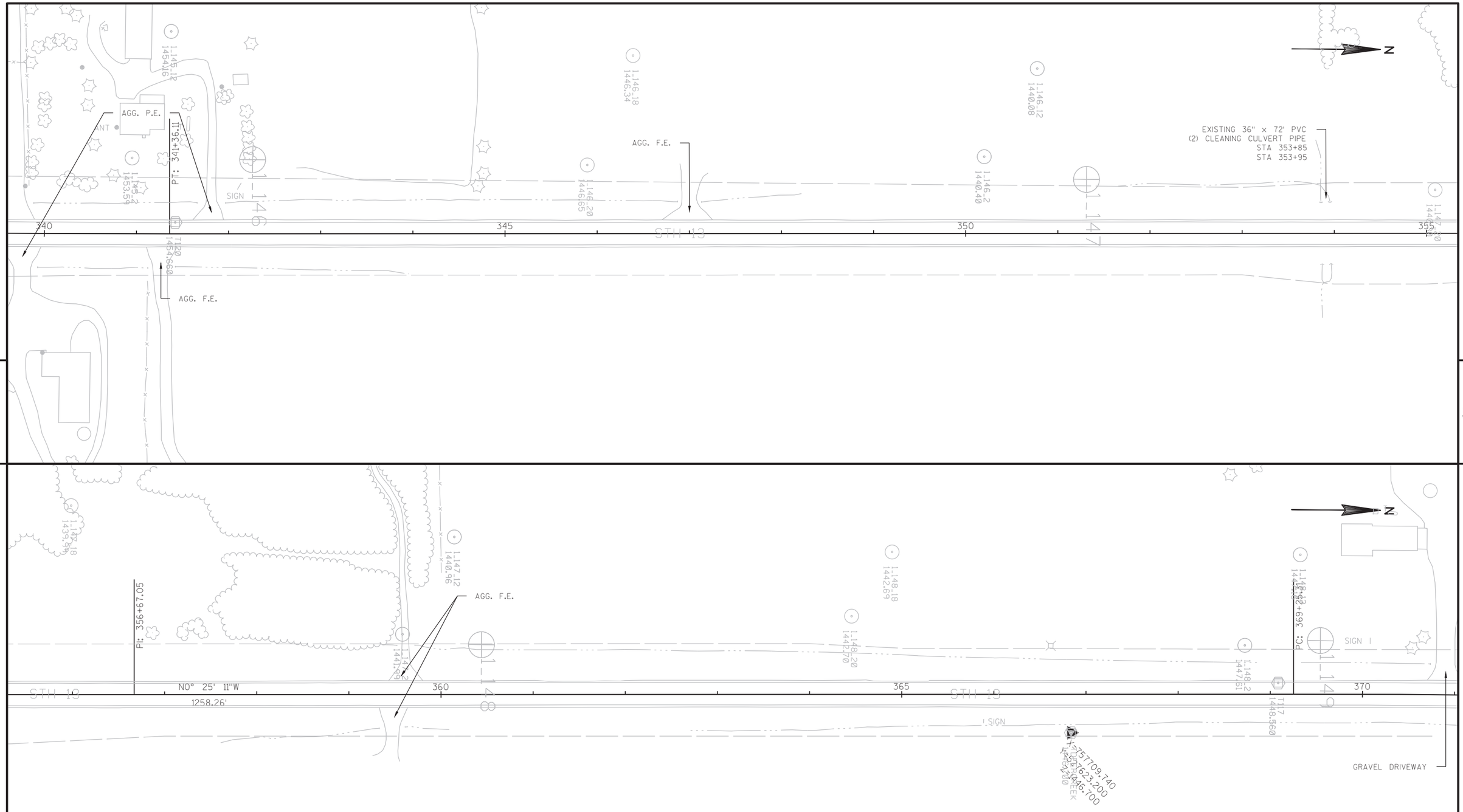
WISDOT/CADDS SHEET 44



PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 86	E



PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 87	E



PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 88	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\051001_PLN_STH13_16100404.DWG
LAYOUT NAME - 0501021

PLOT DATE : 7/22/2016 10:26 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

SAW CUT REQ'D

PT: 373+85.08

SEPTIC SEPV SEPC SEPV SEPC

WALLS

SIGN

1-149.20 1445.02

1-149.12 1435.70

1-149.2 1437.17

1-150 (PI)

SIGN

TDS TELECOM

AGG. P.E.

1-150.18 1429.13

1-150.20 1430.40

(2) BARRIER SYSTEM GRADING SHAPING FINISHING
STA 384+15, LT & RT

375 380 385

STH 13

STH 13

PI STA = 371+55.21
Y = 528094.301
X = 757664.618
DELTA = 1°23'27"
D = 0°18'09"
T = 229.90'
L = 459.77'
R = 18940.00'
PC STA = 369+25.31
PT STA = 373+85.08
S.E. = N.C.

SALVAGE RAIL
STA 384+31 - 389+36, LT & RT

INSTALL MGS GUARDRAIL 3
(4) MGS GUARDRAIL TERMINAL EAT REQ'D
STA 384+15 - 390+21, LT & RT

ELM AVE

N

5

5

1-150.12 1423.16

EXISTING 72" x 78" CMP
(3) CLEANING CULVERT PIPE
STA 388+30
STA 388+45
STA 388+80

PI: 388+45.24

1-151.20 1424.54

1-150.2 1424.03

1-151 (PI)

PC: 393+64.02

1-151.2 1430.03

1-151.12 1429.87

1-152 (PI)

AGG. P.E.

1-152.20 1433.22

N0° 56' 09"E 390

518.78'

395 400

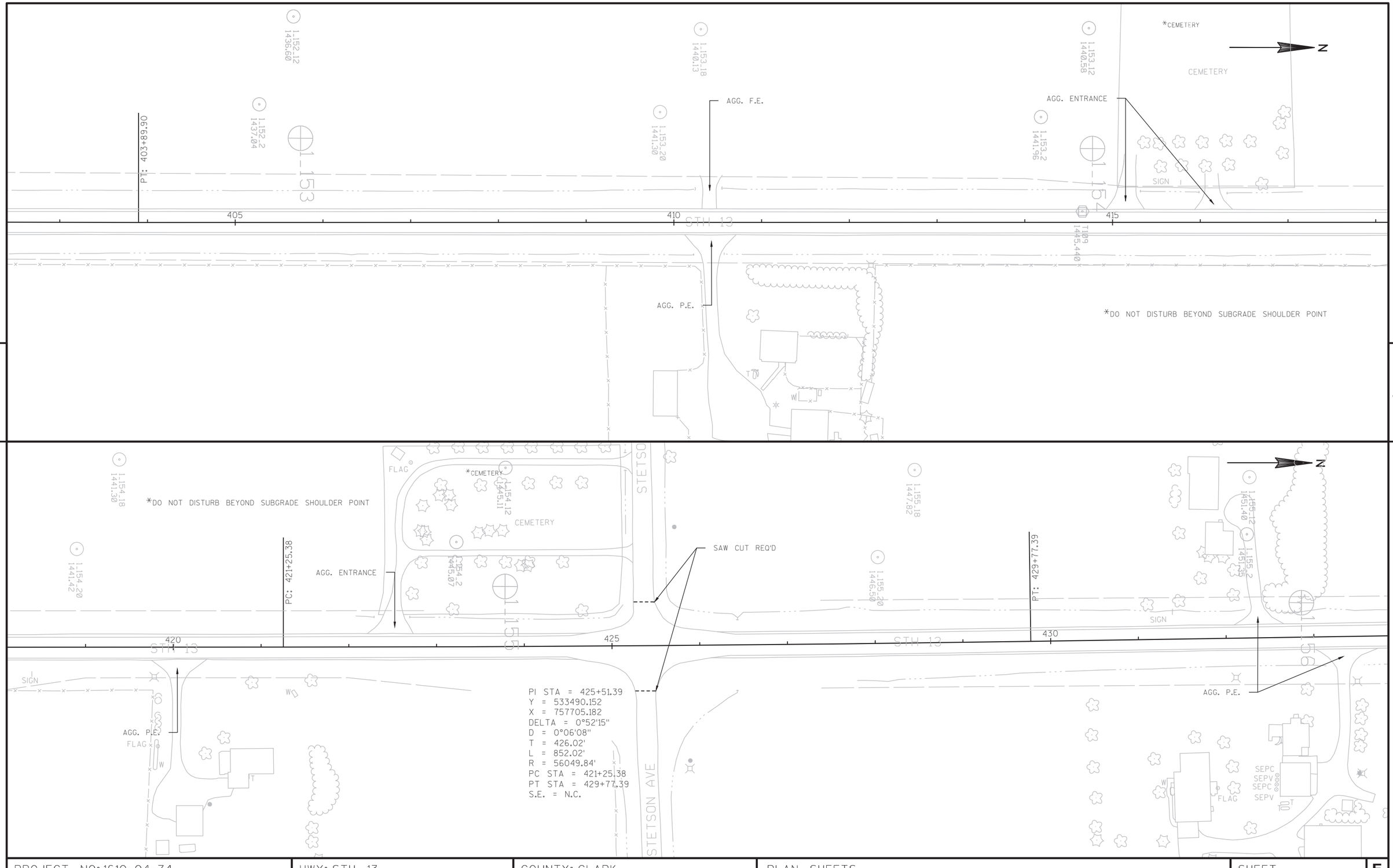
STH 13

STH 13

(2) BARRIER SYSTEM GRADING SHAPING FINISHING
STA 390+21, LT & RT

PI STA = 398+76.98
Y = 530815.711
X = 757710.114
DELTA = 1°02'29"
D = 0°06'05"
T = 512.95'
L = 1025.88'
R = 56437.19'
PC STA = 393+64.02
PT STA = 403+89.90
S.E. = N.C.

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 89	E



PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 90	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\051001_PLN_STH13_16100404.DWG
LAYOUT NAME - 0501025

PLOT DATE : 7/22/2016 10:27 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

5

RUINS

SEPC
SEPC

AGG. P.E.

PI: 437+18.15

1,156.18
1450.36

1,156.20
1447.44

T3
1448.27

435

STH 13

N0° 27' 02"W
617.36'

440

1,156.2
1446.38

1,156.12
1445.35

T
AC

T108
1447.02

PI: 443+35.51

1,157.18
1441.15

1,157.23
1440.55

N0° 21' 36"W 445
1494.63'

STH 13

SIGN

SIGN

SIGN

A/C

TANKS

SEPC
SEPC

N

AGG. P.E.

1,157.12
1438.31

158

450

1,157.12
1438.39

AGG. P.E.

SIGN

1,158.18
1438.62

1,158.18
1438.80

455

STH 13

AGG. P.E.

CORN CRIB

BERM

T

PI: 458+30.14

STATUE

FLAG
FLAG
FLAG

1,158.12
1435.26

N0° 21' 14"W 460
669.91'

1,158.22
1436.22

159

SIGN

SIGN

N

EXISTING 64" x 43" x 56' CSPA
(3) CLEANING CULVERT PIPE
STA 463+64
STA 463+71
STA 463+79

(2) BARRIER SYSTEM GRADING SHAPING FINISHING
STA 462+93, LT
STA 462+73, RT

END PROJECT
STA 463+84
N=537322.548
E=757667.629
(SAW CUT REQ'D)

EP: 465+00.05

1,159.18
1437.75

1,159.20
1436.91

SIGN

465

FLAG

HHW

SALVAGE RAIL
STA 463+07 - 464+42, LT
STA 462+89 - 464+27, RT

INSTALL MGS GUARDRAIL 3L
(4) MGS GUARDRAIL TERMINAL EAT REQ'D
STA 462+93 - 464+49, LT
STA 462+73 - 464+29, RT

WE ENERGIES

XCEL ENERGY

E MINK AVE

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	PLAN SHEETS	SHEET 91	E

NOTES:

SEE PLAN SHEETS AND INTERSECTION DETAILS FOR ADDITIONAL INFORMATION.

TURN LANE CONSTRUCTION MATCHES EDGE OF EXISTING MAINLINE LANES.
USE EXISTING STH 13 ROADWAY ALIGNMENT AND PROFILE.

N

PI: 196+40.92

PI: 202+36.26

NO° 02' 29"W
595.34'

NO° 11' 17"W
784.34'

200

205

210

PI: 21

PI: 10+00

STH 13

SIGN

OH

FILLER CAP

WALLS

A/C

CANOPY

XCEL ENERGY

WE ENERGIES

VILLAGE OF DORCHESTER (WATER)

VILLAGE OF DORCHESTER (SANITARY)

GUY

T

TDS TELECOM

SLOPE INTERCEPT

EXISTING R/W

PROPOSED R/W

BEGIN PROJECT
STA 198+86.68
N=510828.118
E=757548.761

STA=198+86.68
ELEV=1458.48

EXISTING & PROPOSE
ROADWAY PROFILE

-2.5%

1460

1450

1440

1430

195 196 197 198 199 200 201 202 203 204 205 206 207 208 209

1465.47 1464.98 1464.24 1463.28 1462.41 1461.21 1460.44 1459.35 1458.19 1457.17 1455.98 1454.83 1453.71 1452.57 1451.21 1449.94 1448.65 1447.35 1445.97 1444.78 1443.59 1442.46 1441.06 1439.78 1438.58 1437.38 1436.39 1435.52 1434.68 1433.69 1433.08

5

5

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	PLAN AND PROFILE: STH 13	SHEET 92	E

EXISTING R/W

SLOPE INTERCEPT

PROPOSED R/W

TDS TELECOM

SIGN

SEPC

ANT

N

1-1133

STH 13

N1° 52' 30"E
671.46'

N3° 03' 54"E
103.08'

N1° 47' 51"E 220
857.76'

225

215

216+92.07

217+95.15

0+20.60

.00'A'

12+00.00'A

INL

NOTES:

SEE PLAN SHEETS AND INTERSECTION DETAILS FOR ADDITIONAL INFORMATION.

TURN LANE CONSTRUCTION MATCHES EDGE OF EXISTING MAINLINE LANES.
USE EXISTING STH 13 ROADWAY ALIGNMENT AND PROFILE.

END PROJECT
STA 223+92.54
N=513333.172
E=757592.151

C/L CTH A
STA 210+20.6

EXISTING & PROPOSE
ROADWAY PROFILE

0.1%

STA=223+92.54
ELEV=1431.22

1440
1430
1420
1410

209 211 212 213 214 215 216 217 218 219 220 221 222 223 224

1433.08 1433.08 1432.52 1432.52 1431.97 1431.97 1431.58 1431.58 1431.27 1431.27 1430.96 1430.96 1430.77 1430.77 1430.75 1430.75 1430.76 1430.76 1430.76 1430.76 1430.64 1430.64 1430.52 1430.52 1430.51 1430.51 1430.50 1430.50 1430.49 1430.49 1430.65 1430.65 1430.71 1430.71 1430.79 1430.79 1430.86 1430.86 1430.92 1430.92 1430.94 1430.94 1431.02 1431.02 1431.06 1431.06 1431.06 1431.06 1431.07 1431.07 1431.05 1431.05 1431.06 1431.06 1431.11 1431.11 1431.22 1431.22 1431.23 1431.23 1431.32

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	PLAN AND PROFILE: STH 13	SHEET 93	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\051002_PP_STH13_16100404.DWG
LAYOUT NAME - PP (1)

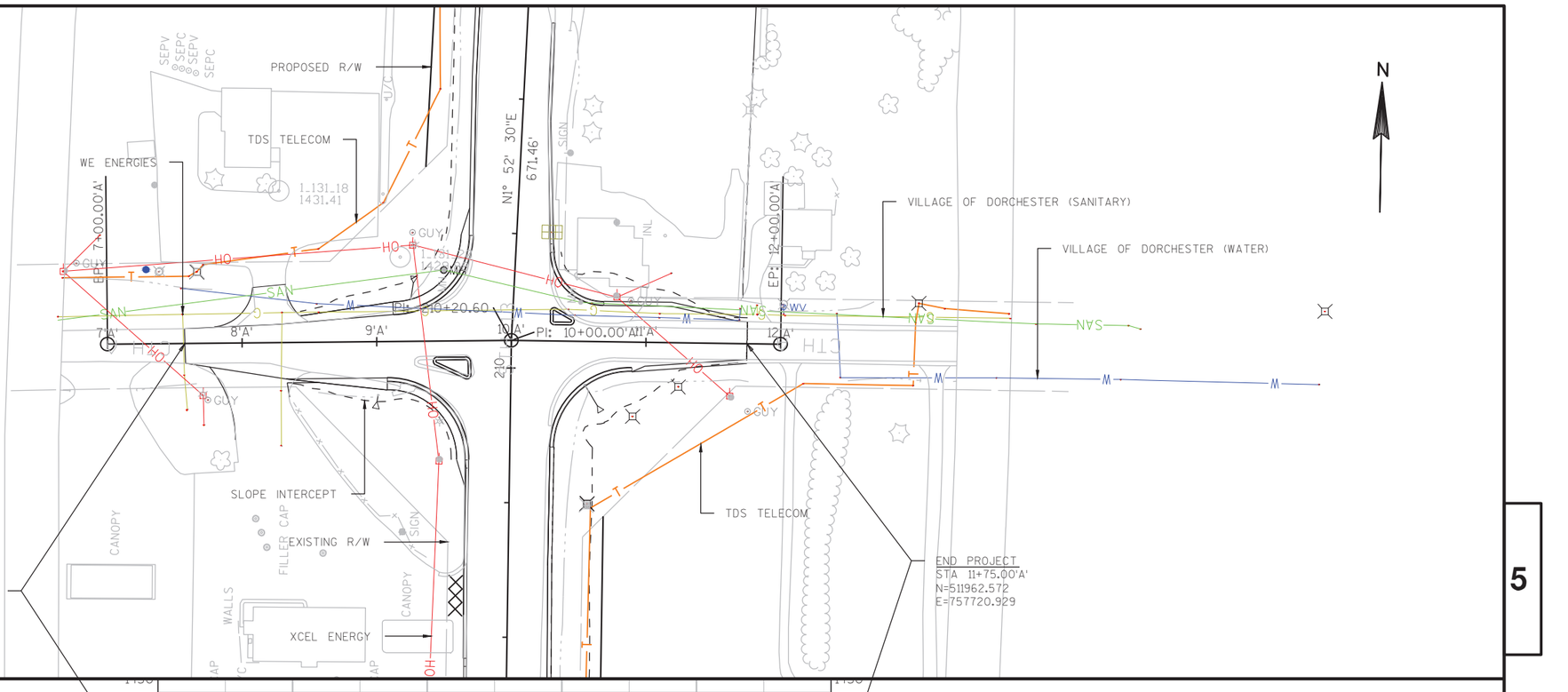
PLOT DATE : 7/8/2016 12:51 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

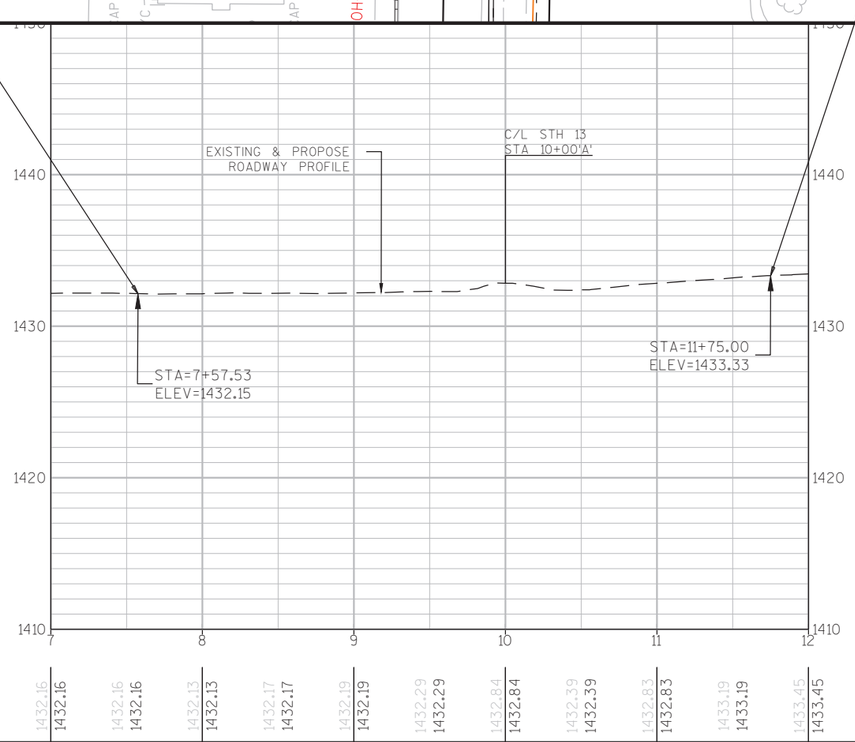
WISDOT/CADDS SHEET 44

NOTES:

SEE PLAN SHEETS AND INTERSECTION DETAILS FOR ADDITIONAL INFORMATION.

TURN LANE AND RADIUS CONSTRUCTION MATCHES EDGE OF EXISTING ROADWAY.
USE EXISTING CTH A ROADWAY ALIGNMENT AND PROFILE.





PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	PLAN AND PROFILE: CTH A	SHEET 94 E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\051002_PP_STH13_16100404.DWG
LAYOUT NAME - 0501001

PLOT DATE : 7/8/2016 12:51 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

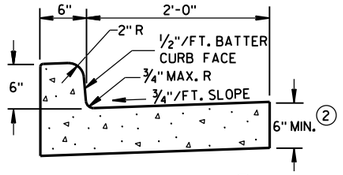
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E01-14B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-14D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E05-06	TRAFFIC SIGNAL STANDARD ORNAMENTAL BRACKET MOUNTINGS TYPICAL FOR 13 FT. OR 15 FT.
09F08-04	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
11B02-02	CONCRETE MEDIAN NOSE
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13A10-01A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B42-03A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B43-03A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-03B	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-03C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
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)
14B45-04A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING 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)
15C18-03	MEDIAN ISLAND MARKING
15C19-03A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C22-03	24" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE
15C23-03	30" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

6

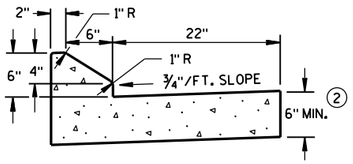
Standard Detail Drawing List

15C24-03	36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE
15C25-03	42" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

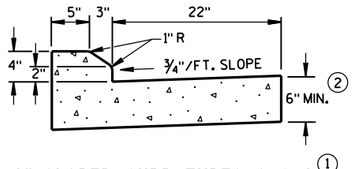
6



TYPES A & D ①

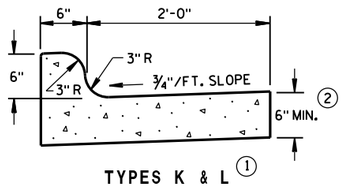


6" SLOPED CURB TYPES G & J ①

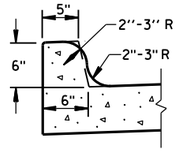


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

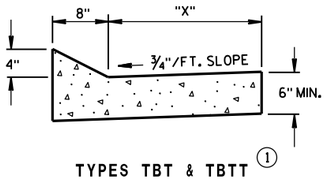


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

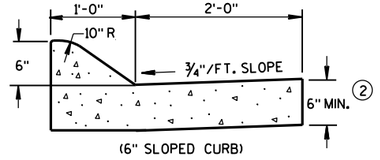
CONCRETE CURB & GUTTER 30"



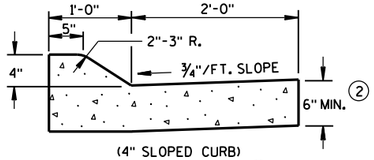
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"

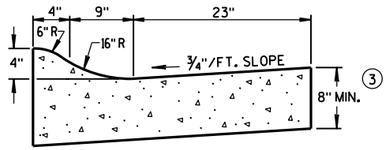


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

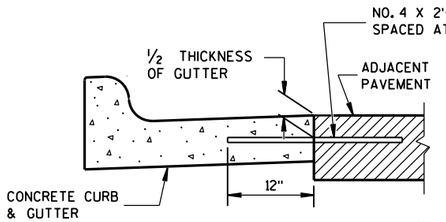
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

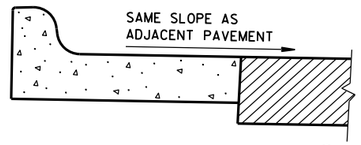
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

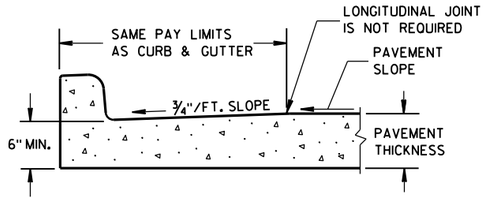
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



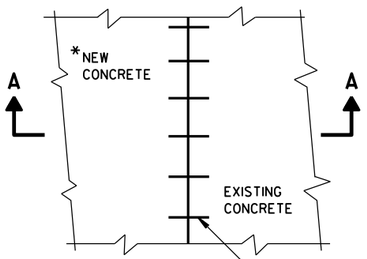
TYPICAL TIE BAR LOCATION ①



REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)

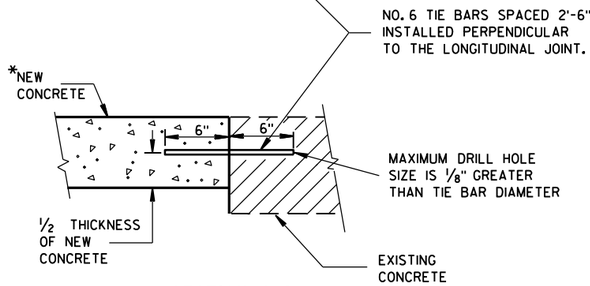


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



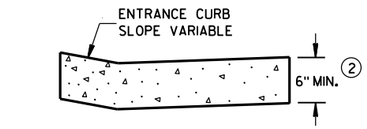
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

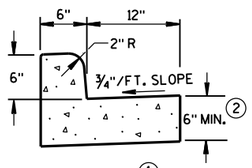


SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT

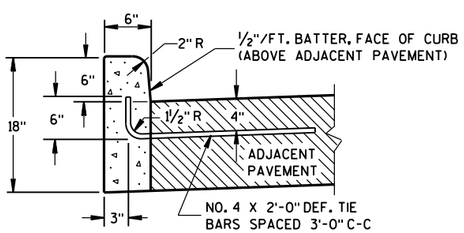


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

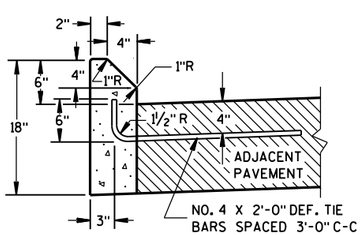


① TYPES A & D

CONCRETE CURB & GUTTER 18"

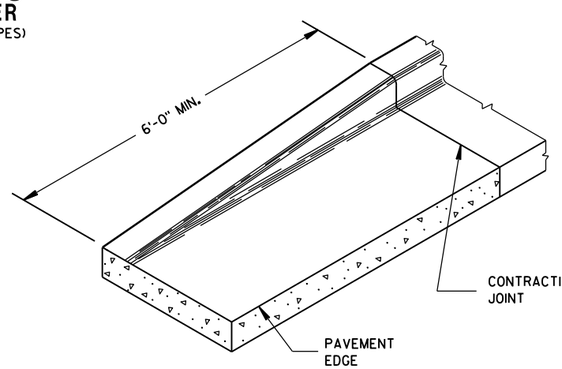


① TYPES A & D



① TYPES G & J

CONCRETE CURB



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

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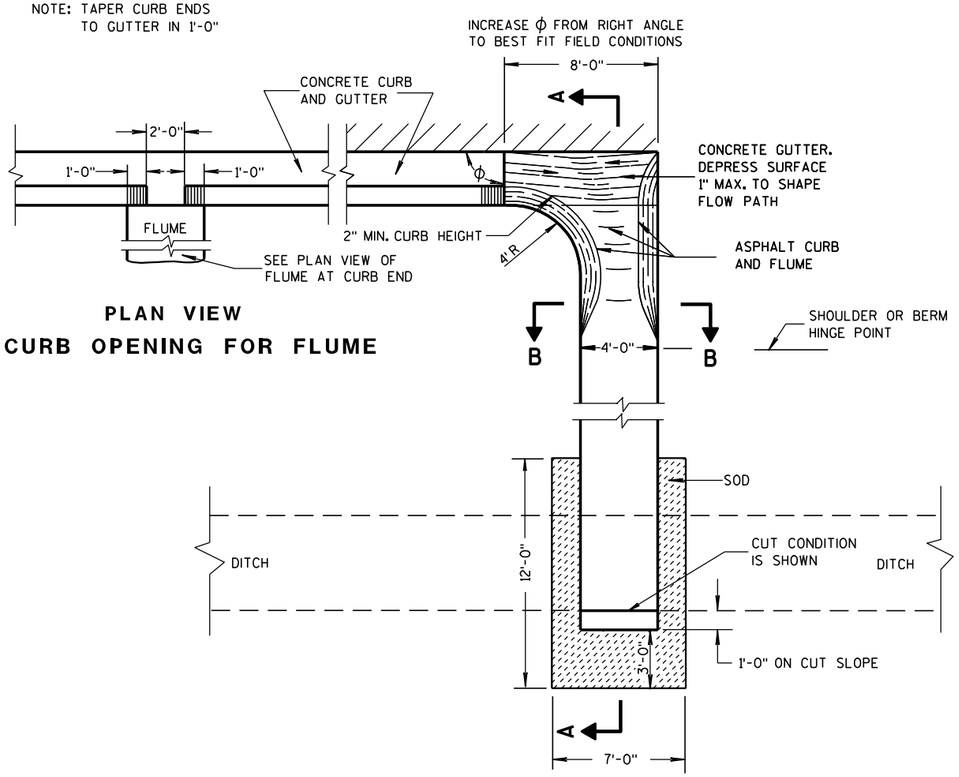
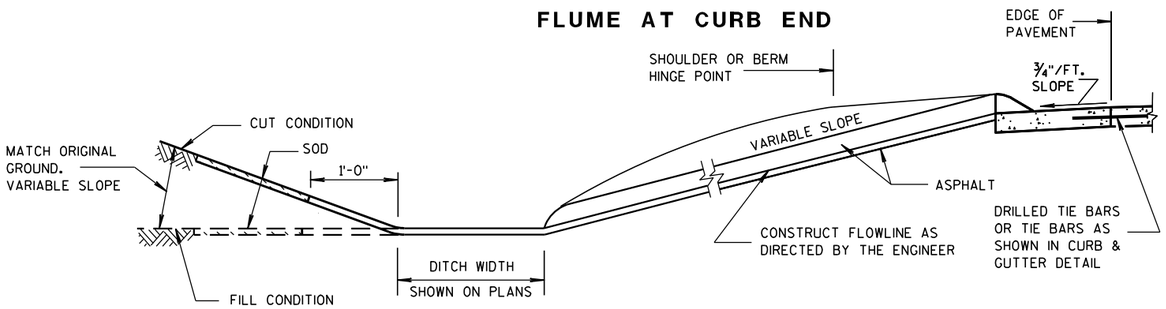
ASPHALTIC FLUME

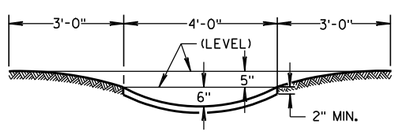


PLAN VIEW
CURB OPENING FOR FLUME

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.

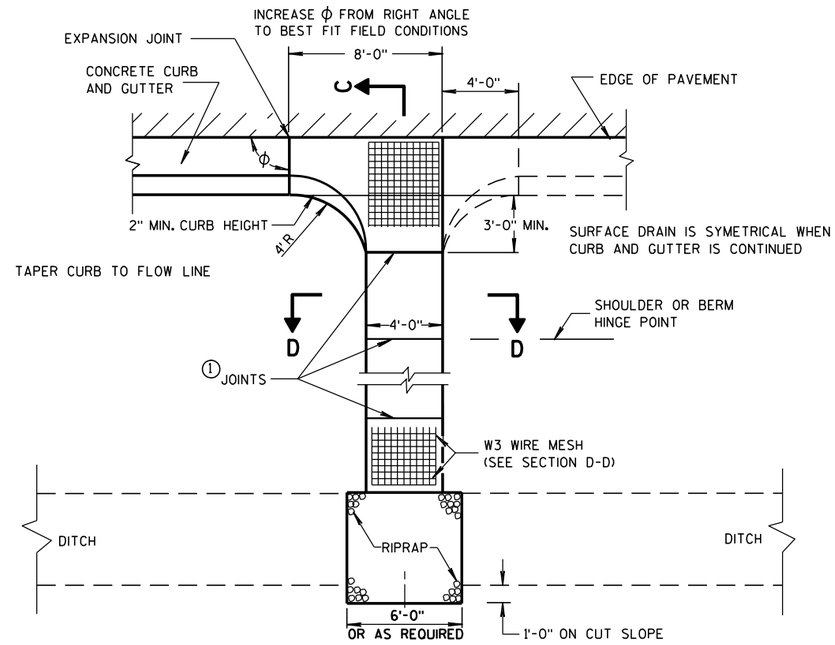
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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.

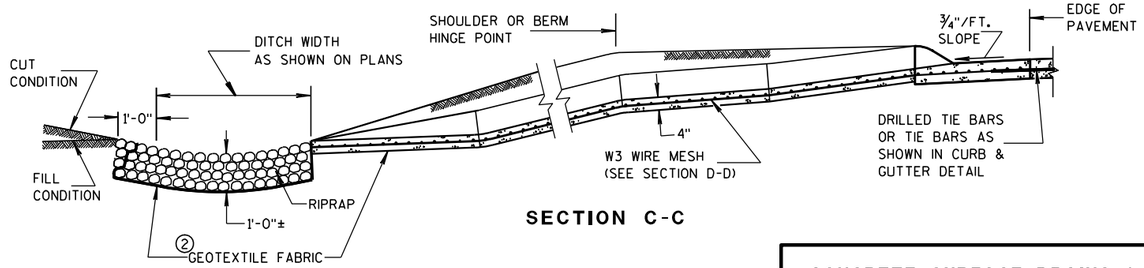
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

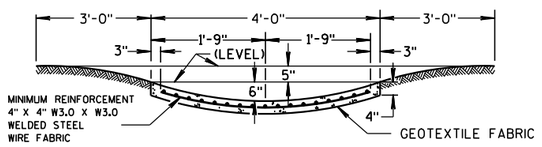
③ CONCRETE SURFACE DRAIN



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
98
MENT
FHWA

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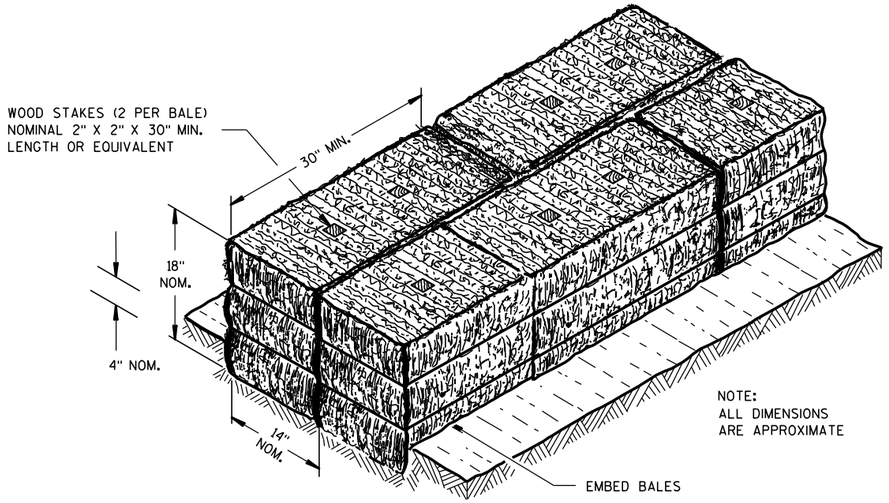
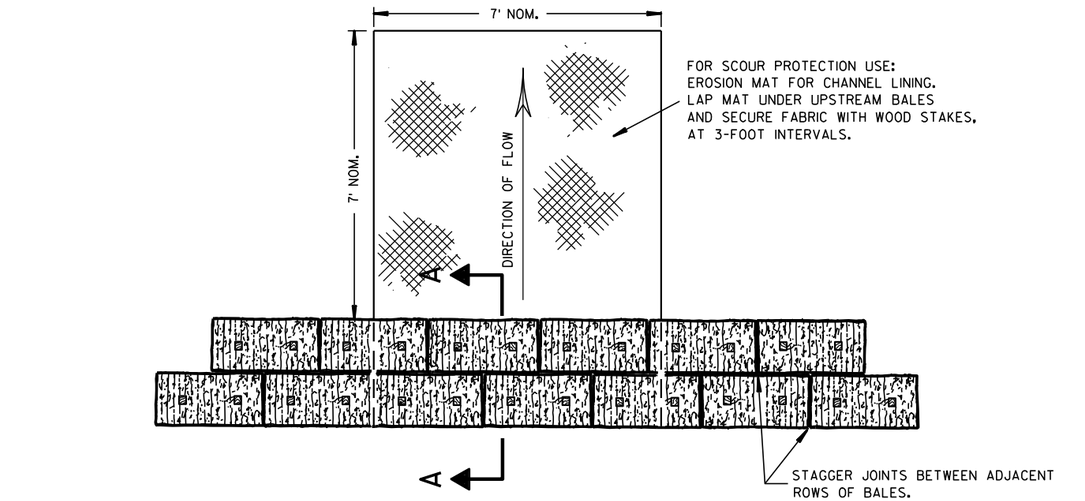
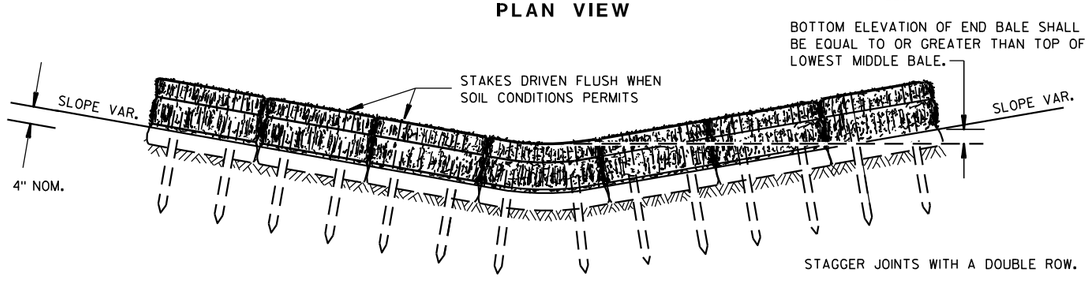


SECTION A-A



PLAN VIEW



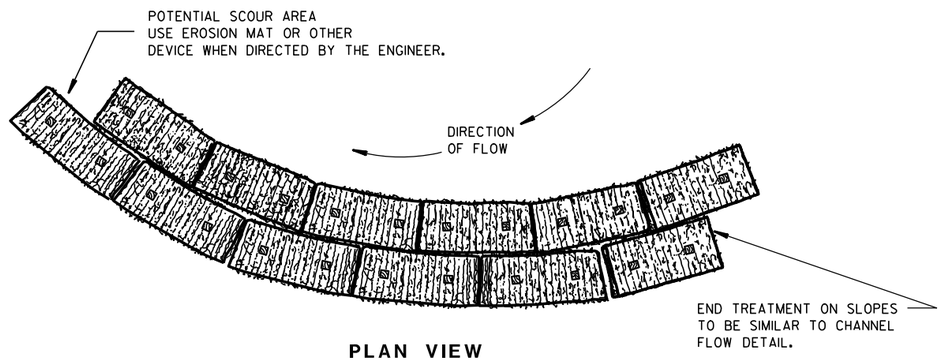
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

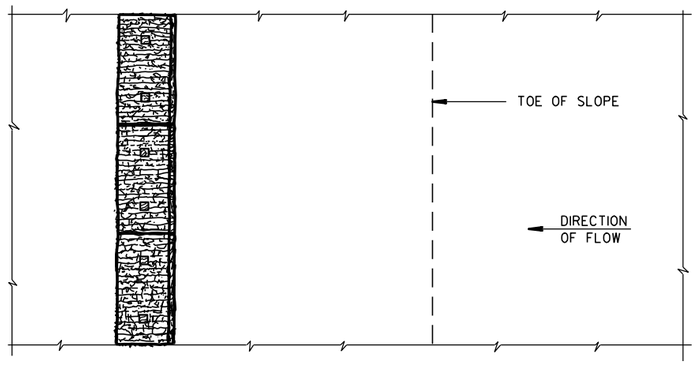
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

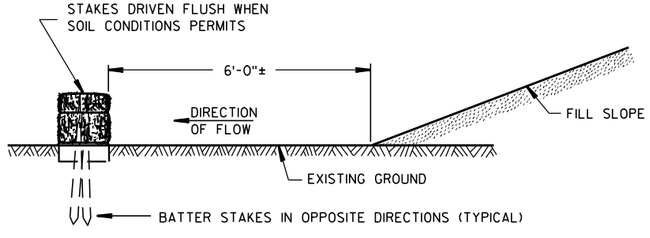


PLAN VIEW

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

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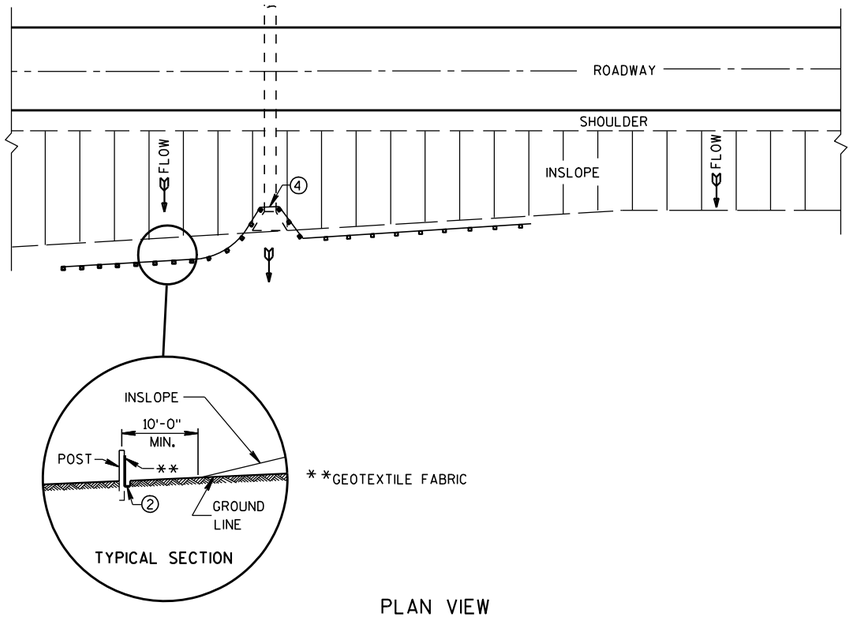
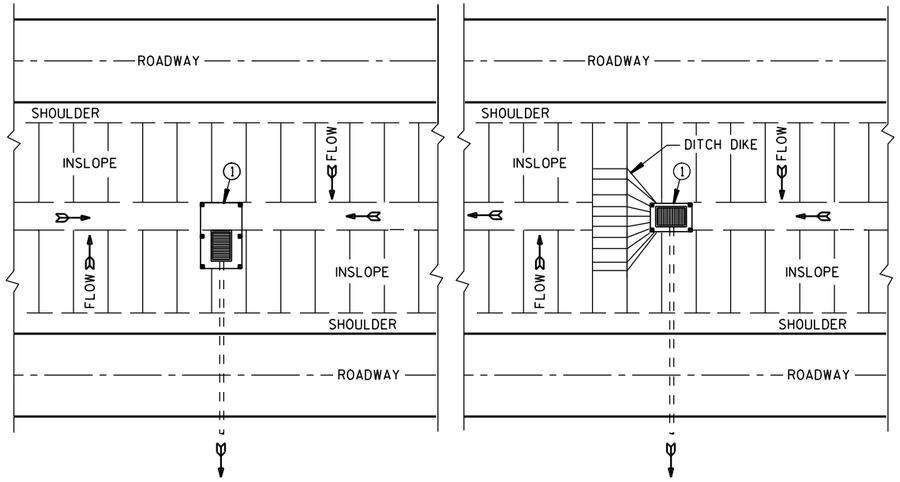
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

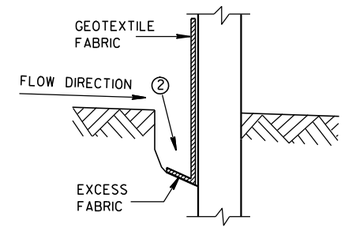
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

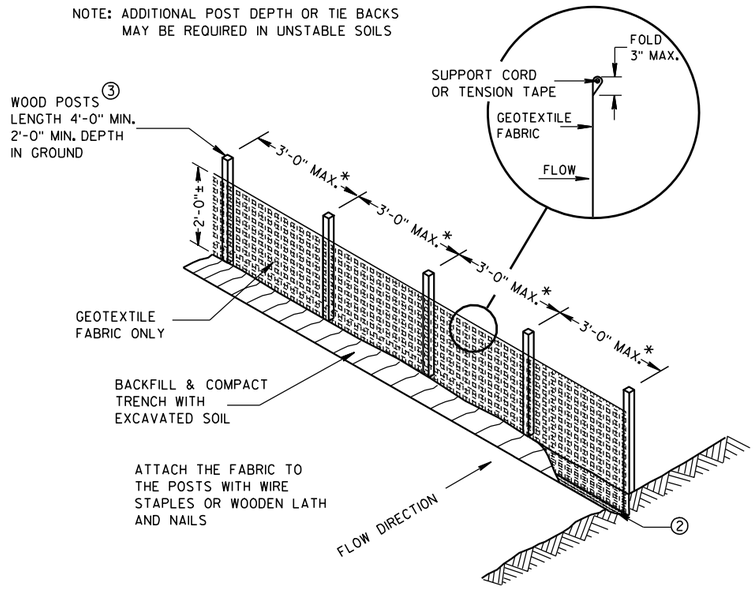
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

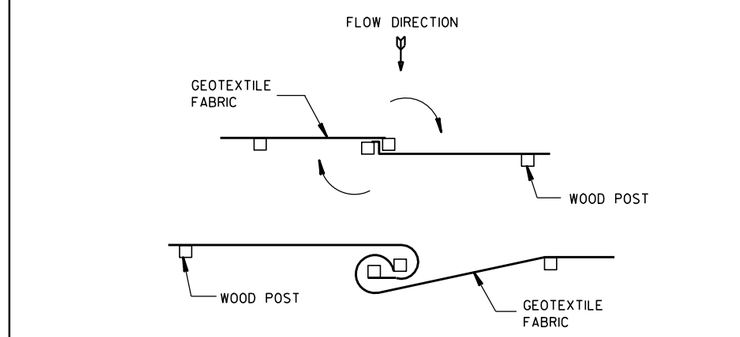


TRENCH DETAIL

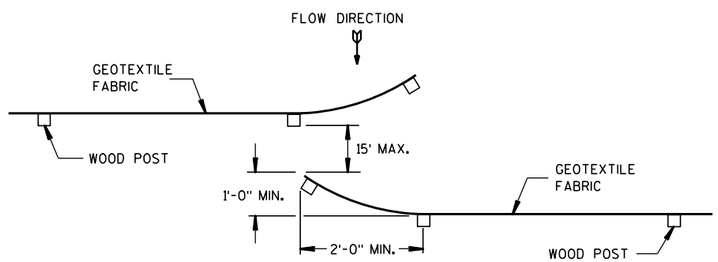


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

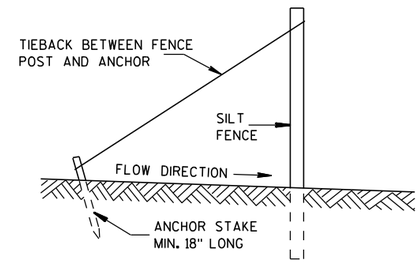


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 9-6

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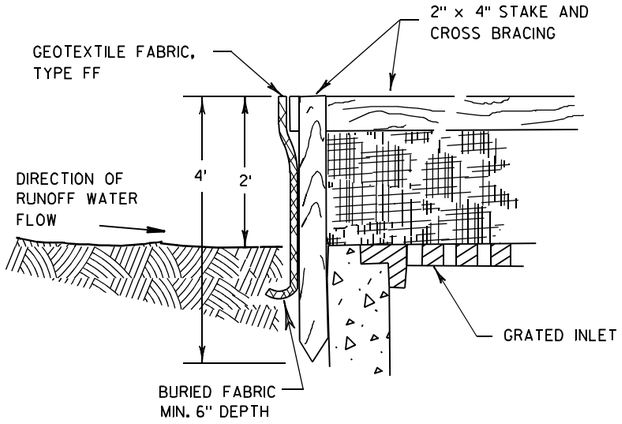
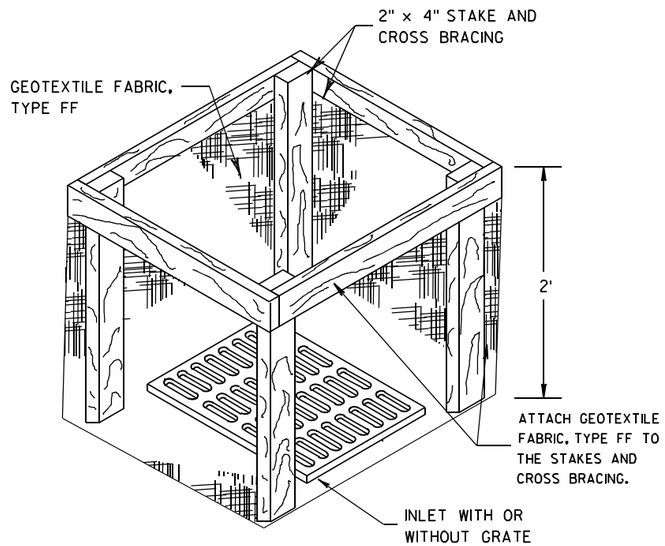
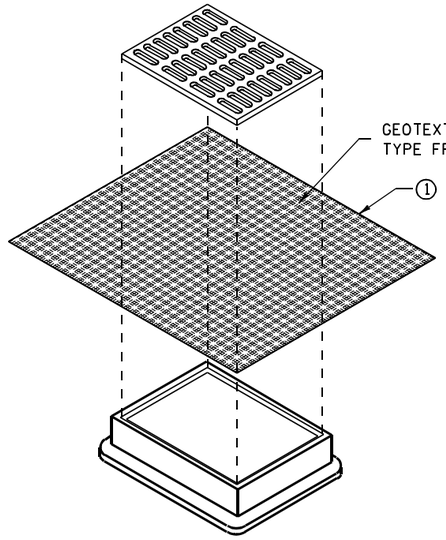
S.D.D. 8 E 9-6



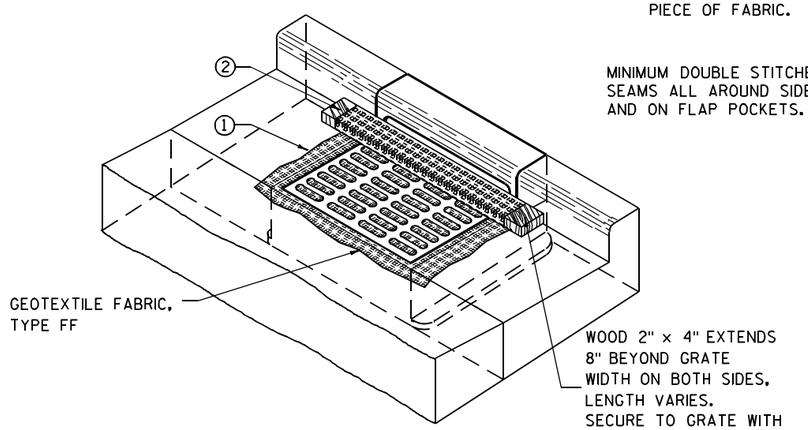


INLET PROTECTION, TYPE A

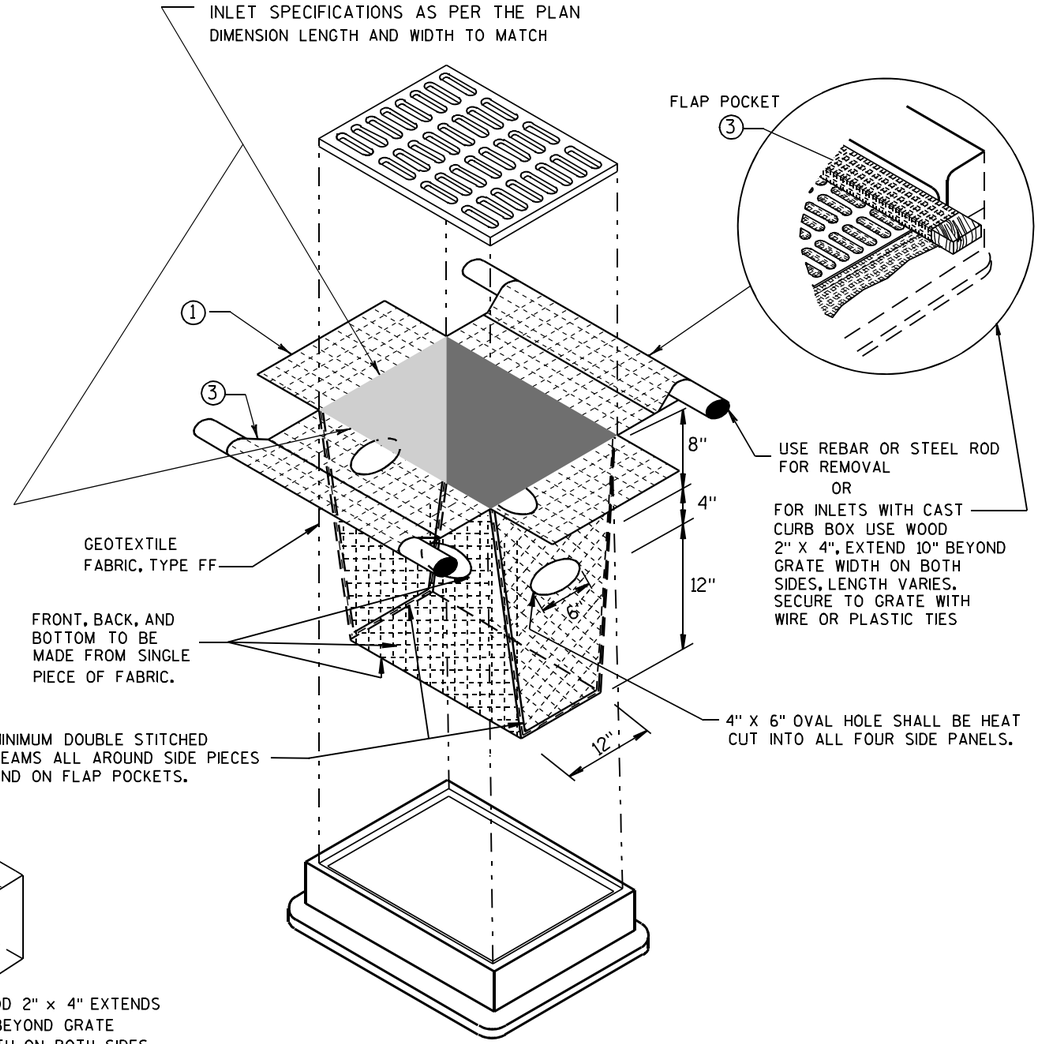


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 10-2

METAL APRON ENDWALLS

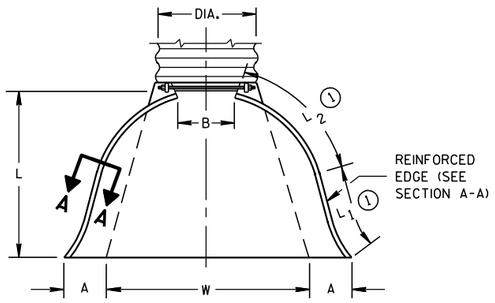
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

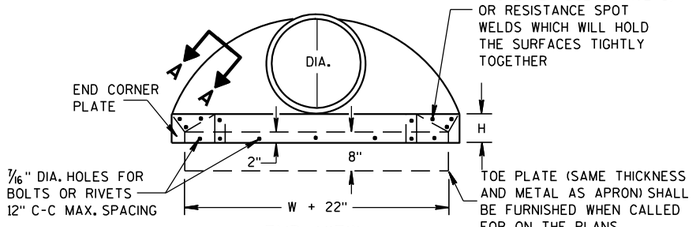
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

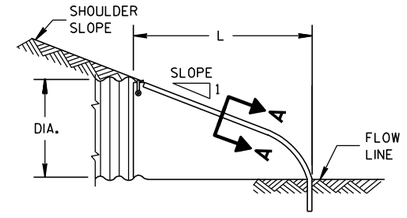
* MINIMUM
** MAXIMUM



PLAN VIEW

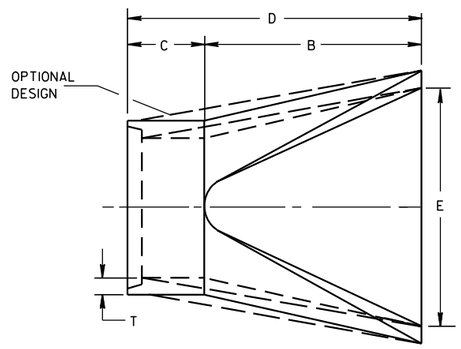


END VIEW

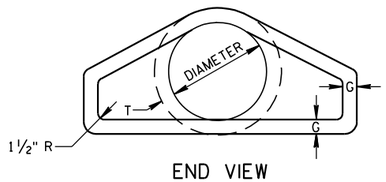


SIDE ELEVATION

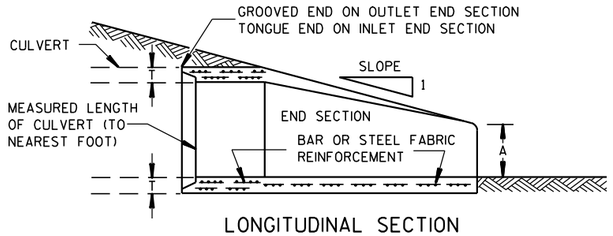
METAL ENDWALLS



PLAN

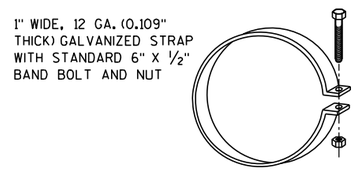


END VIEW



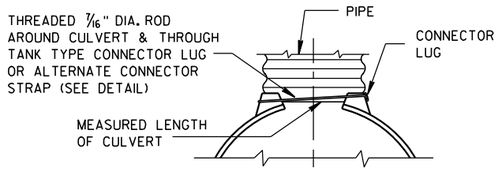
LONGITUDINAL SECTION

CONCRETE ENDWALLS

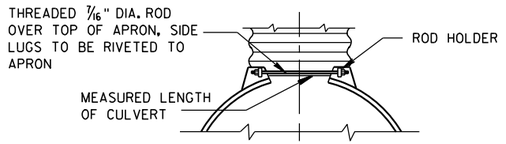


ALTERNATE FOR TYPE 1 CONNECTION

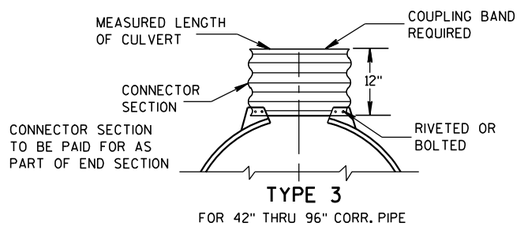
END SECTION CONNECTOR STRAP



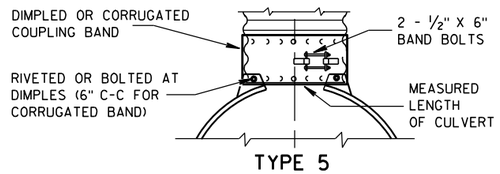
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

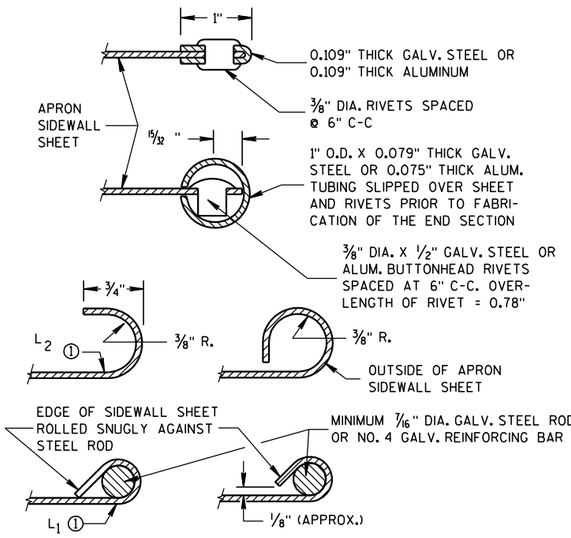
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

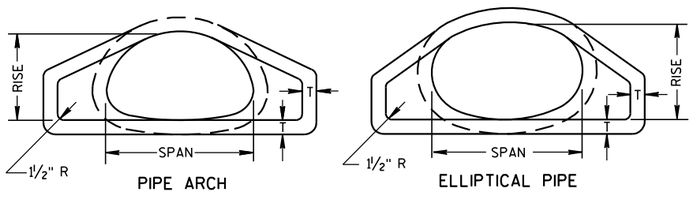
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

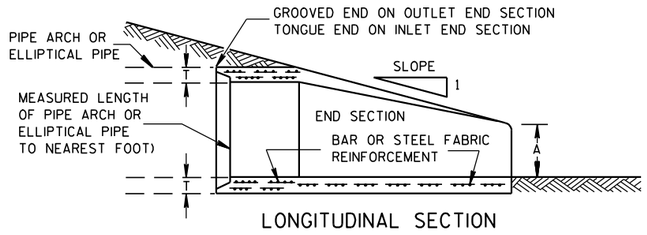
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

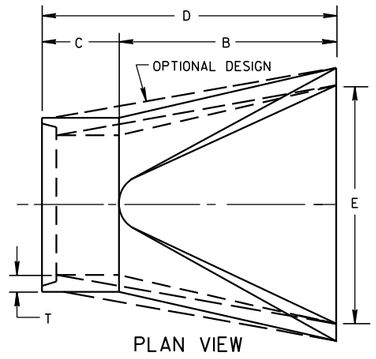
6
S.D.D. 8 F 1-11



END VIEW

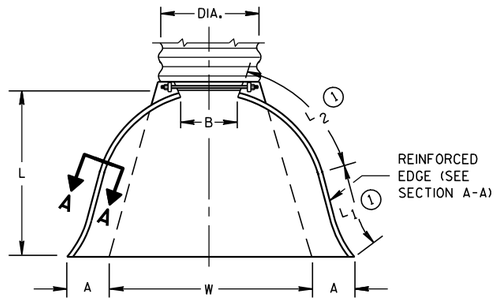


LONGITUDINAL SECTION

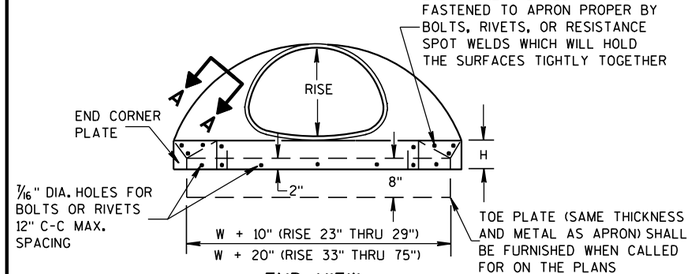


PLAN VIEW

CONCRETE ENDWALLS

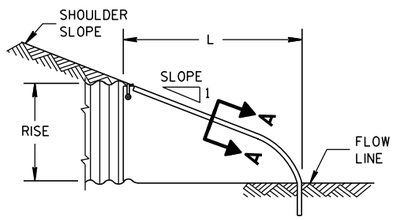


PLAN VIEW



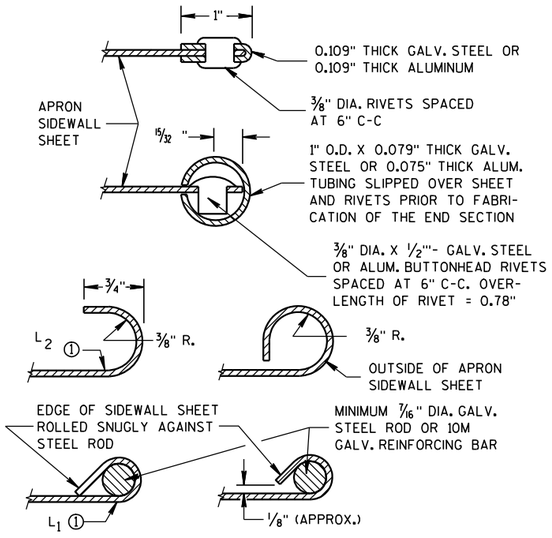
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

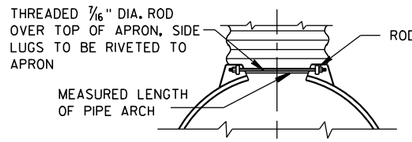
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

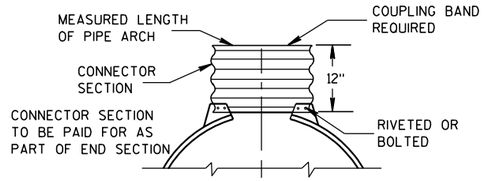
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



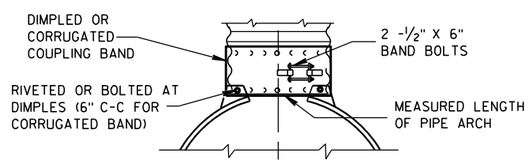
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

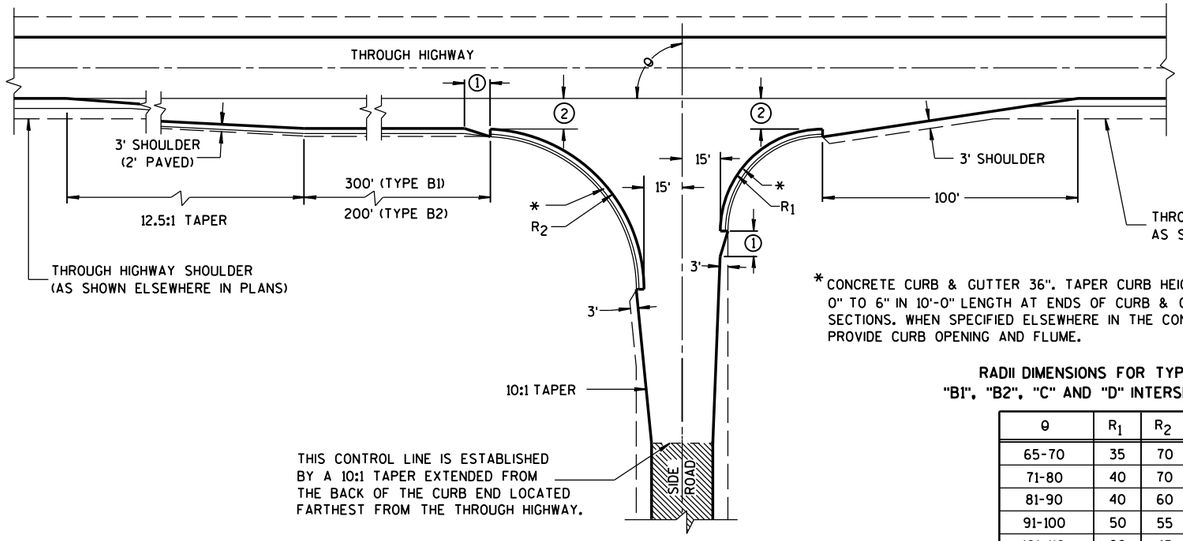
FHWA

6

S.D.D. 8 F 2-1

6

S.D.D. 8 F 2-1

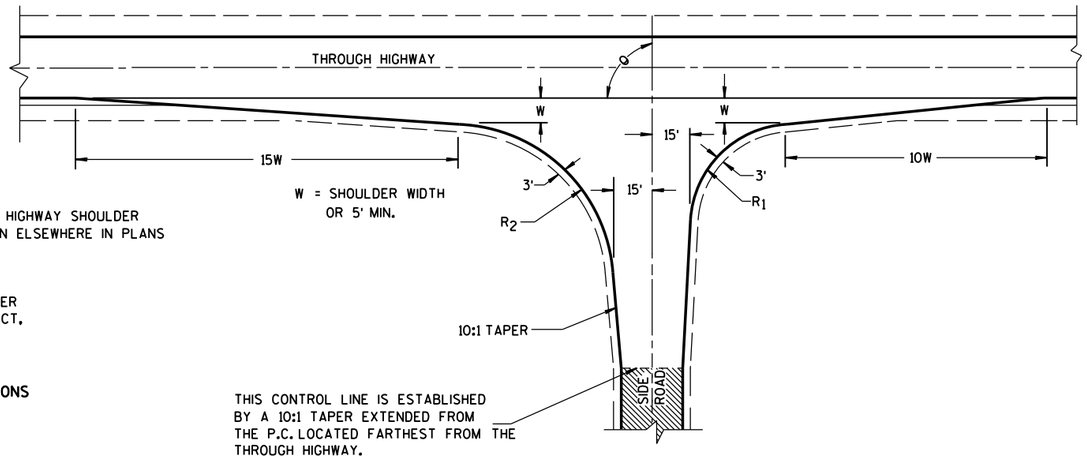


TYPE "B1" AND "B2"

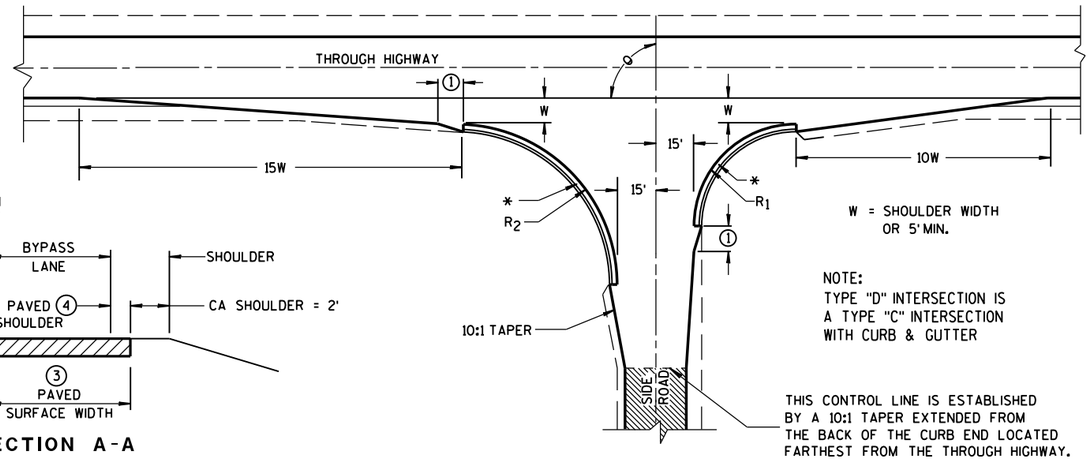
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

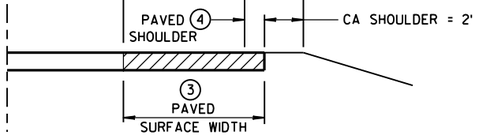
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

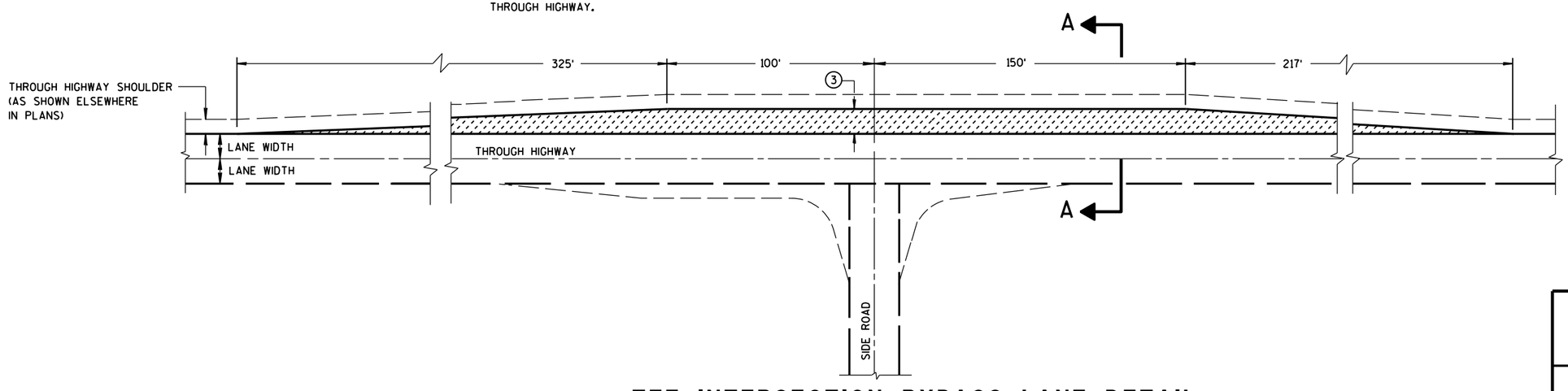
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)

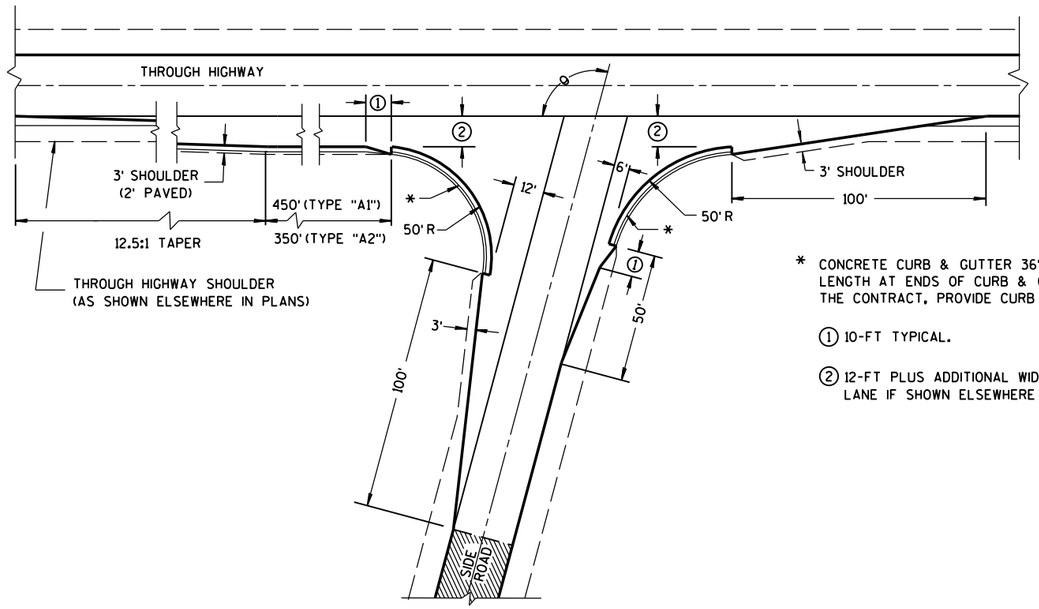


TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 9 A 1-13a



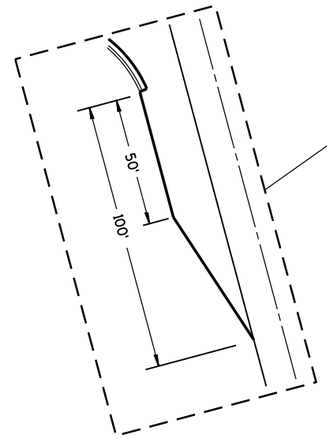
θ = MORE THAN 80°

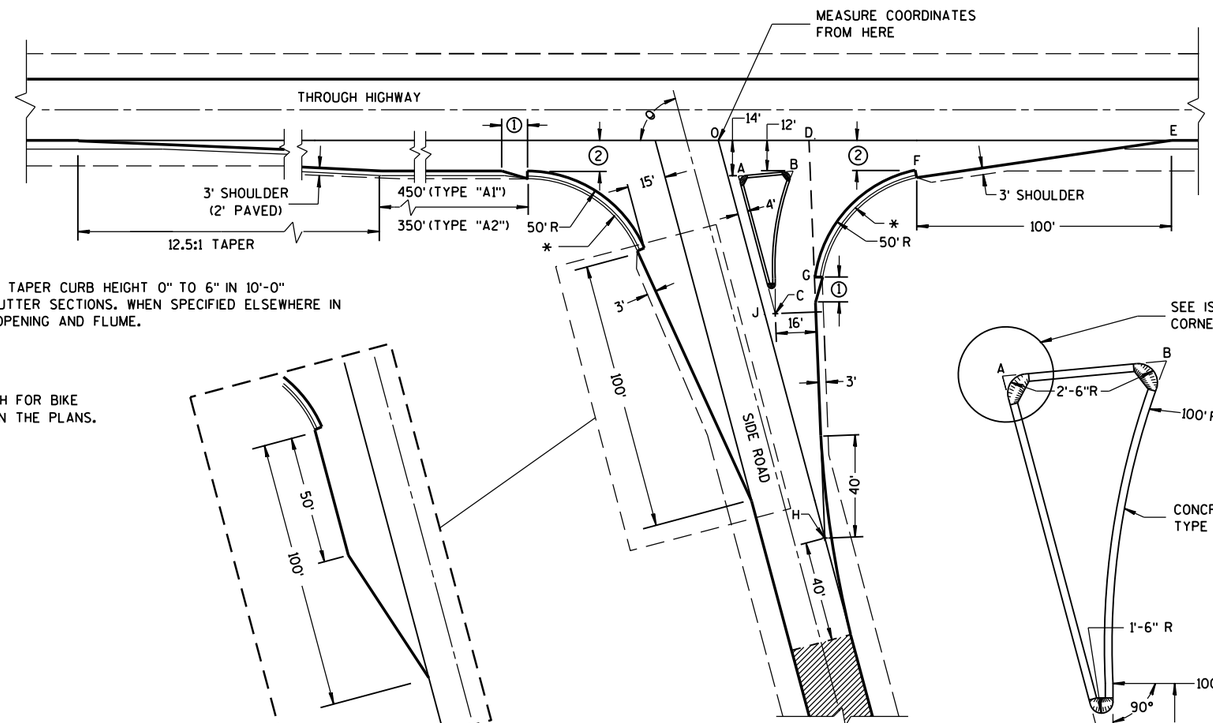
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

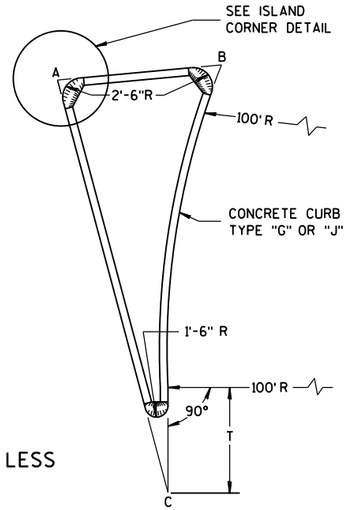
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.

EXISTING PAVED SURFACE

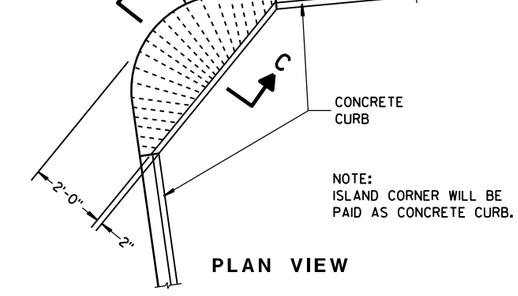




θ = ACUTE ANGLES 80° OR LESS

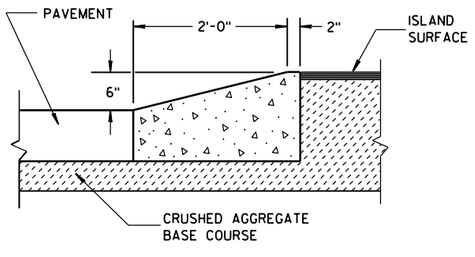


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE
THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS



NOTE:
ISLAND CORNER WILL BE
PAID AS CONCRETE CURB.

PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X/Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/18/12 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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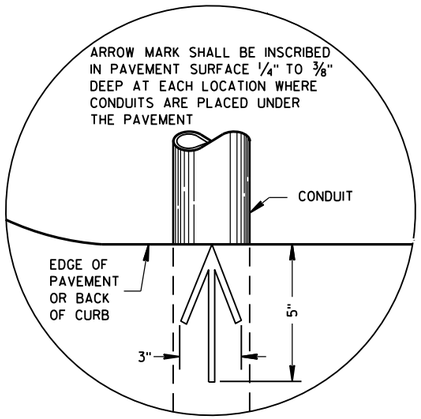
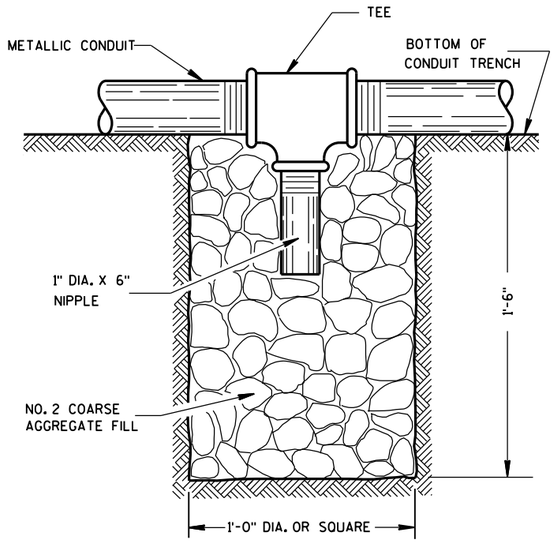
S.D.D. 9 A 1-13b



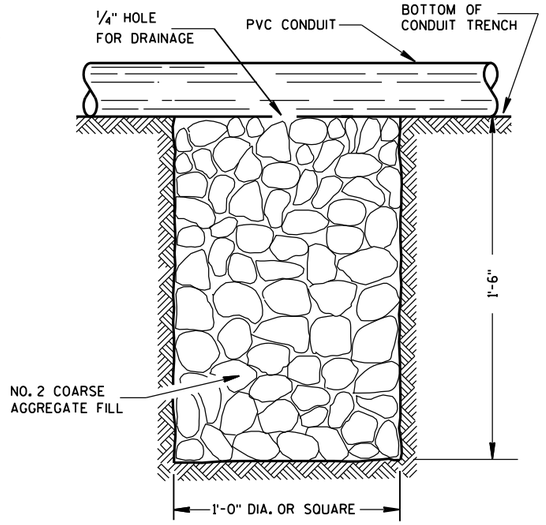
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

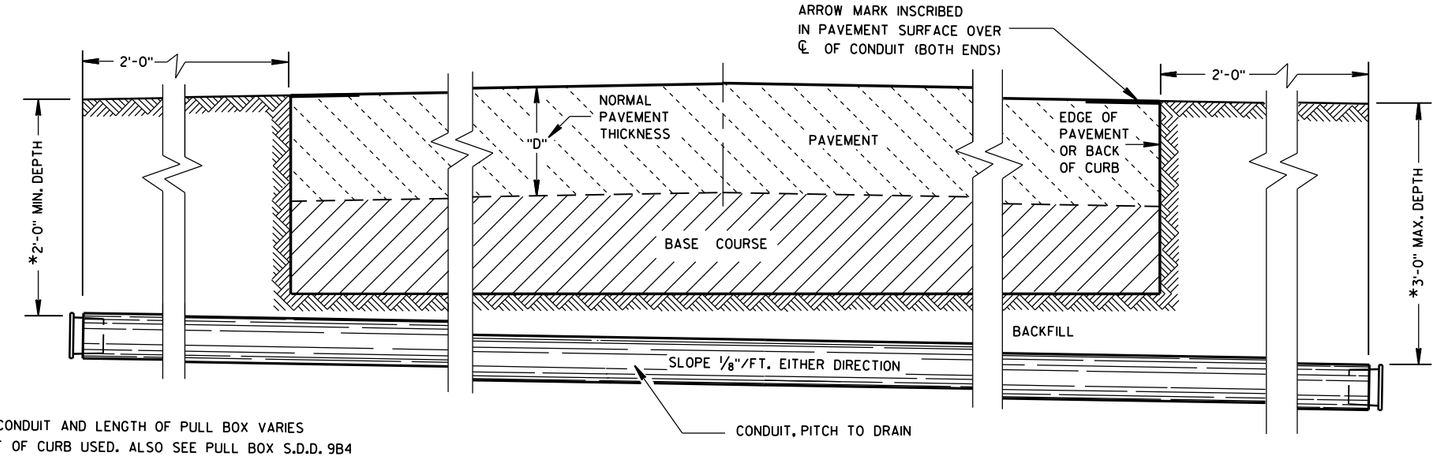
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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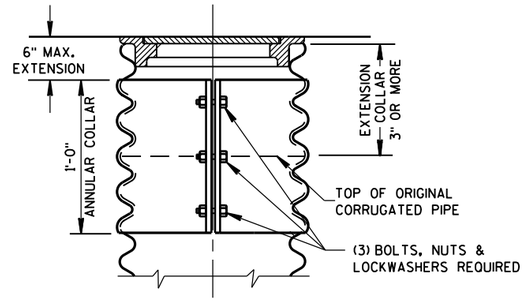
S.D.D. 9 B 2-9

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

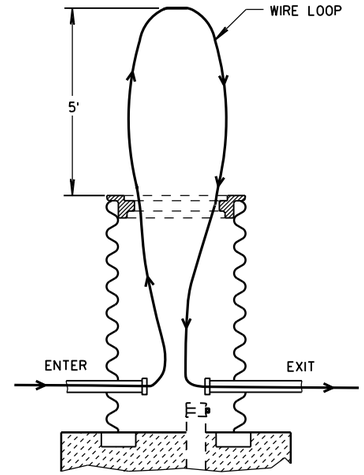
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

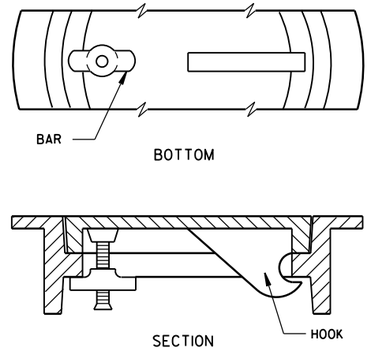
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

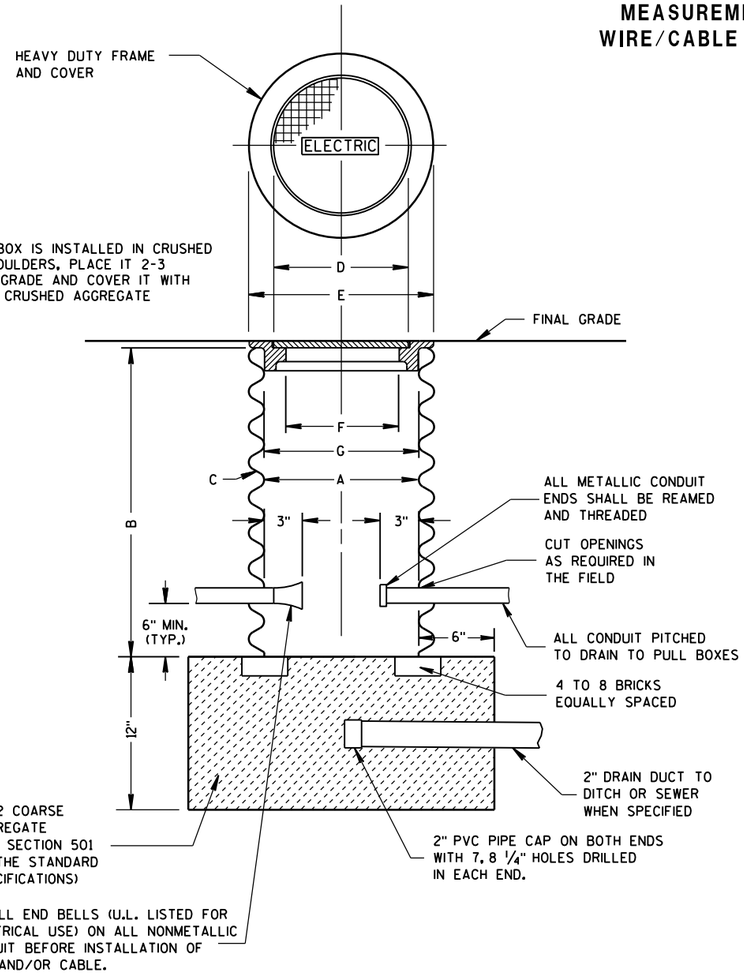


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

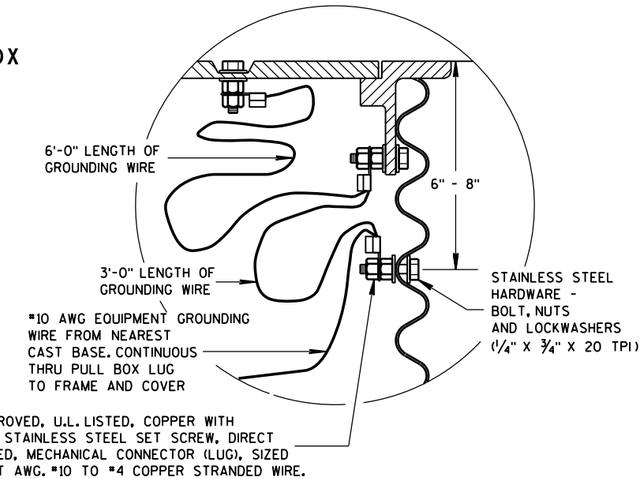


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

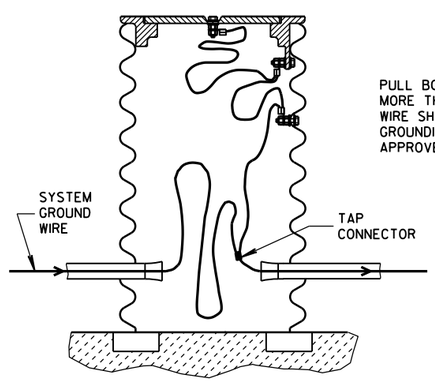
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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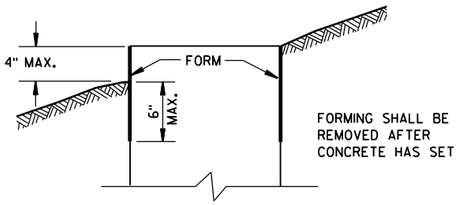
S.D.D. 9 B 4-11

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



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

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

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

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

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

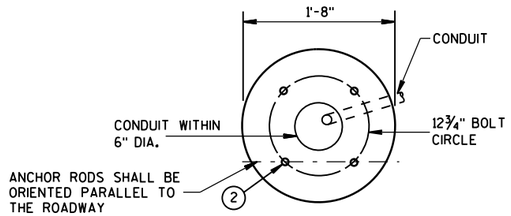
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

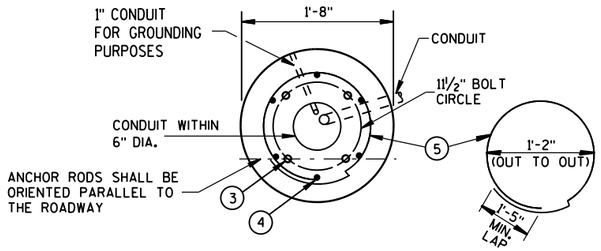
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

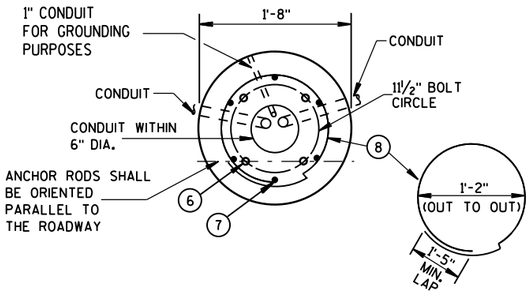
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



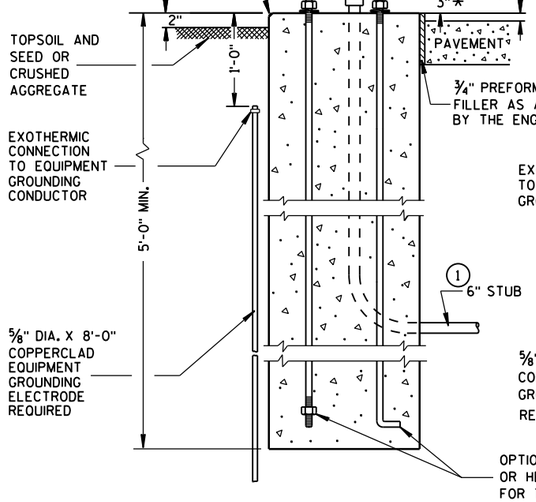




FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

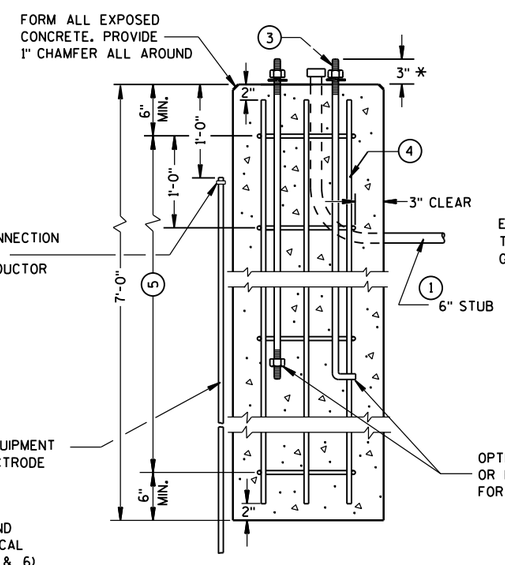
HALF SECTION IN UNPAVED AREA

(TYPICAL FOR TYPES 1, 2, 5, & 6)

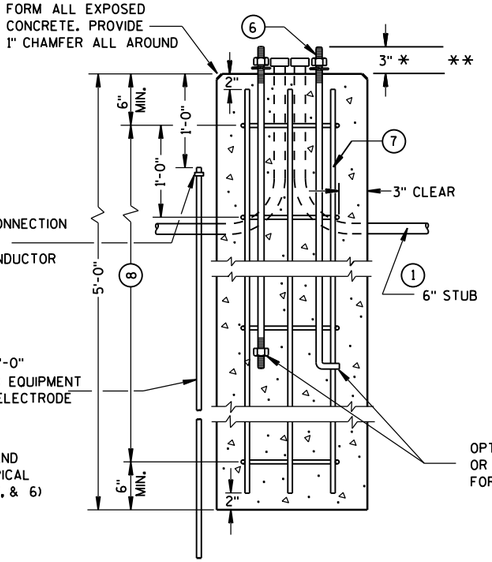


HALF SECTION IN PAVEMENT

(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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.

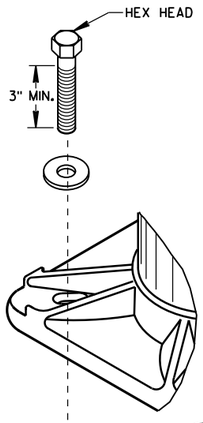
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

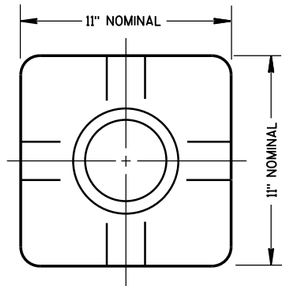
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

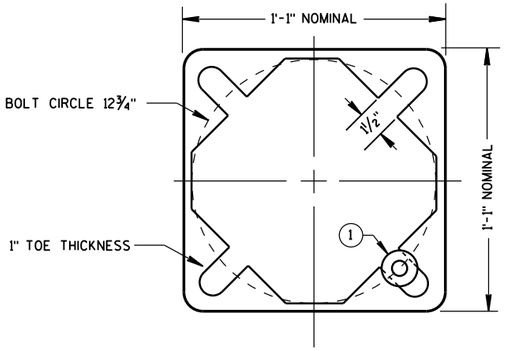
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

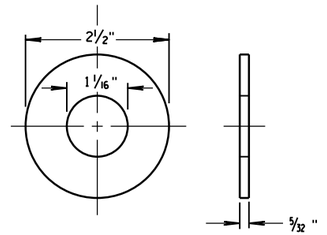




TOP VIEW
(PEDESTAL BASE)

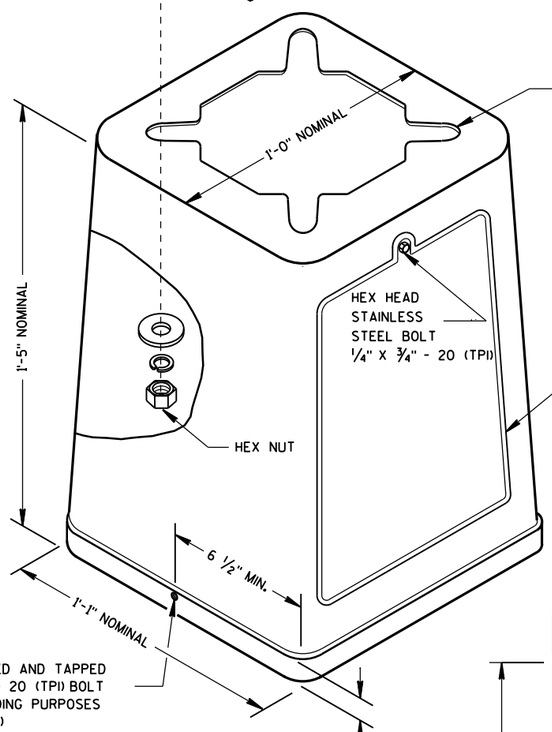


BOTTOM VIEW
(PEDESTAL BASE)

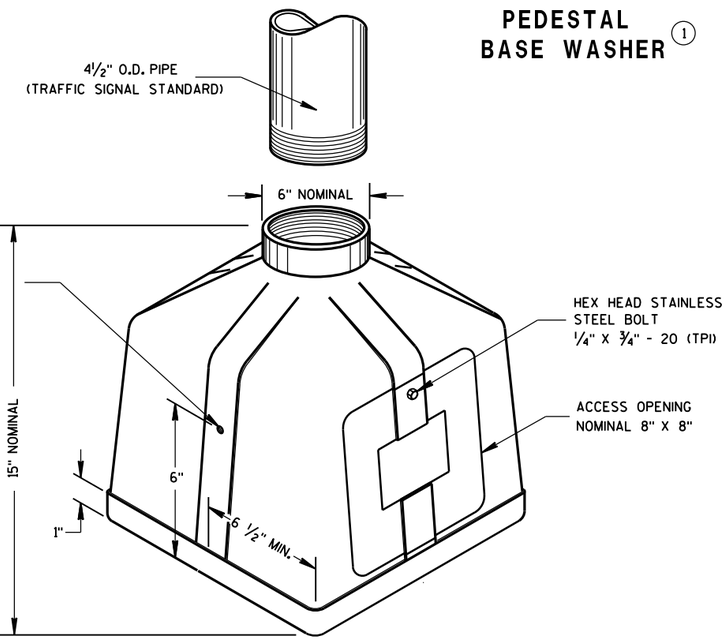


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

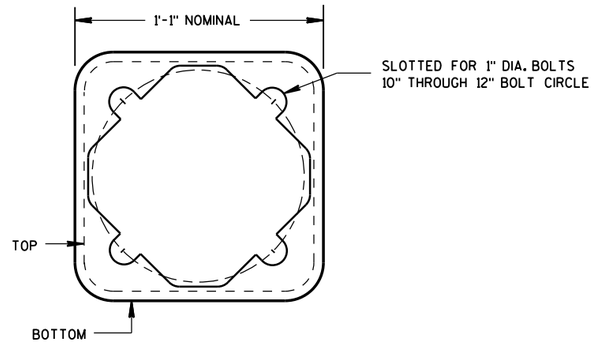


ISOMETRIC VIEW

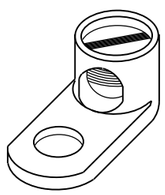


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

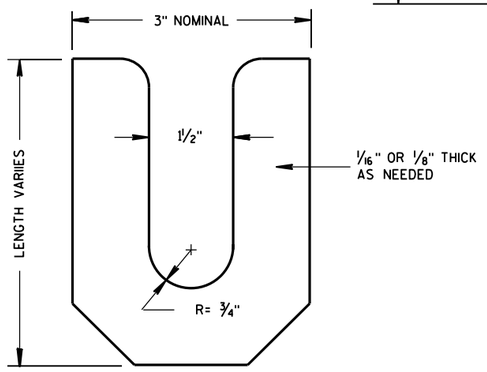


TYPICAL MECHANICAL CONNECTOR LUG

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

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Sept. 2014 — DATE
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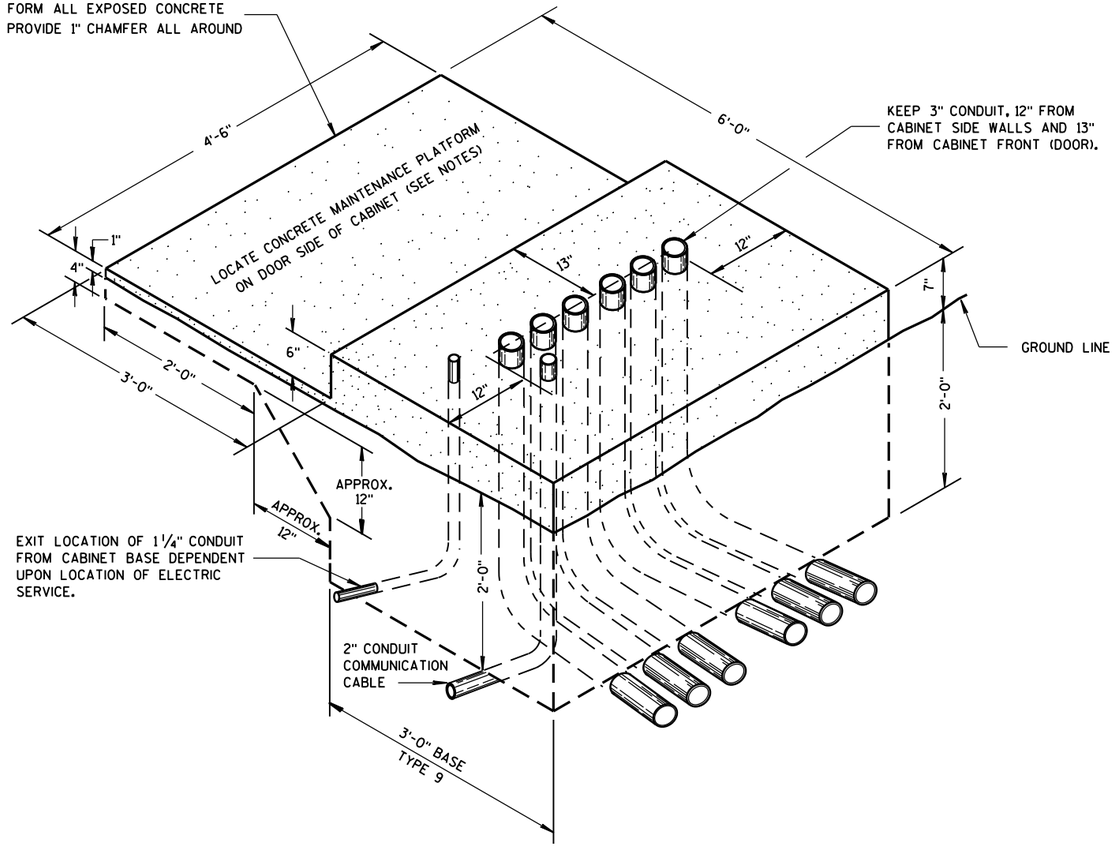
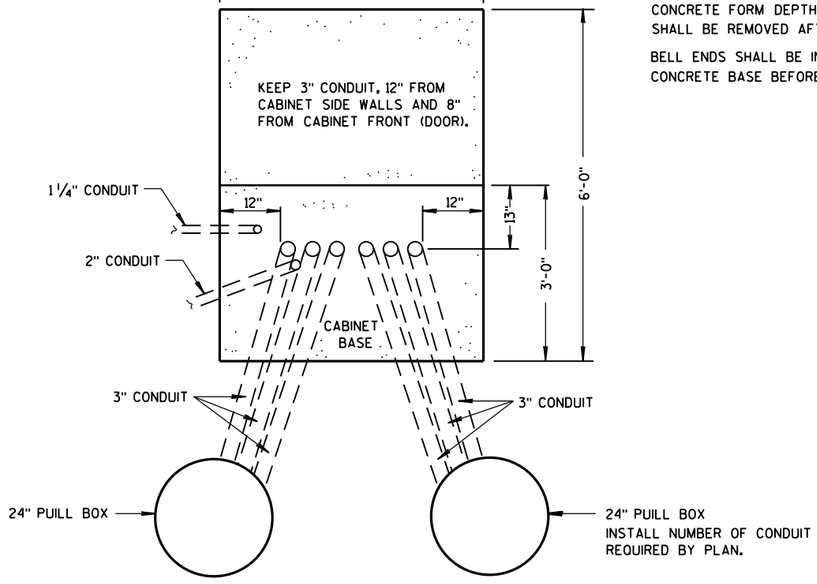


ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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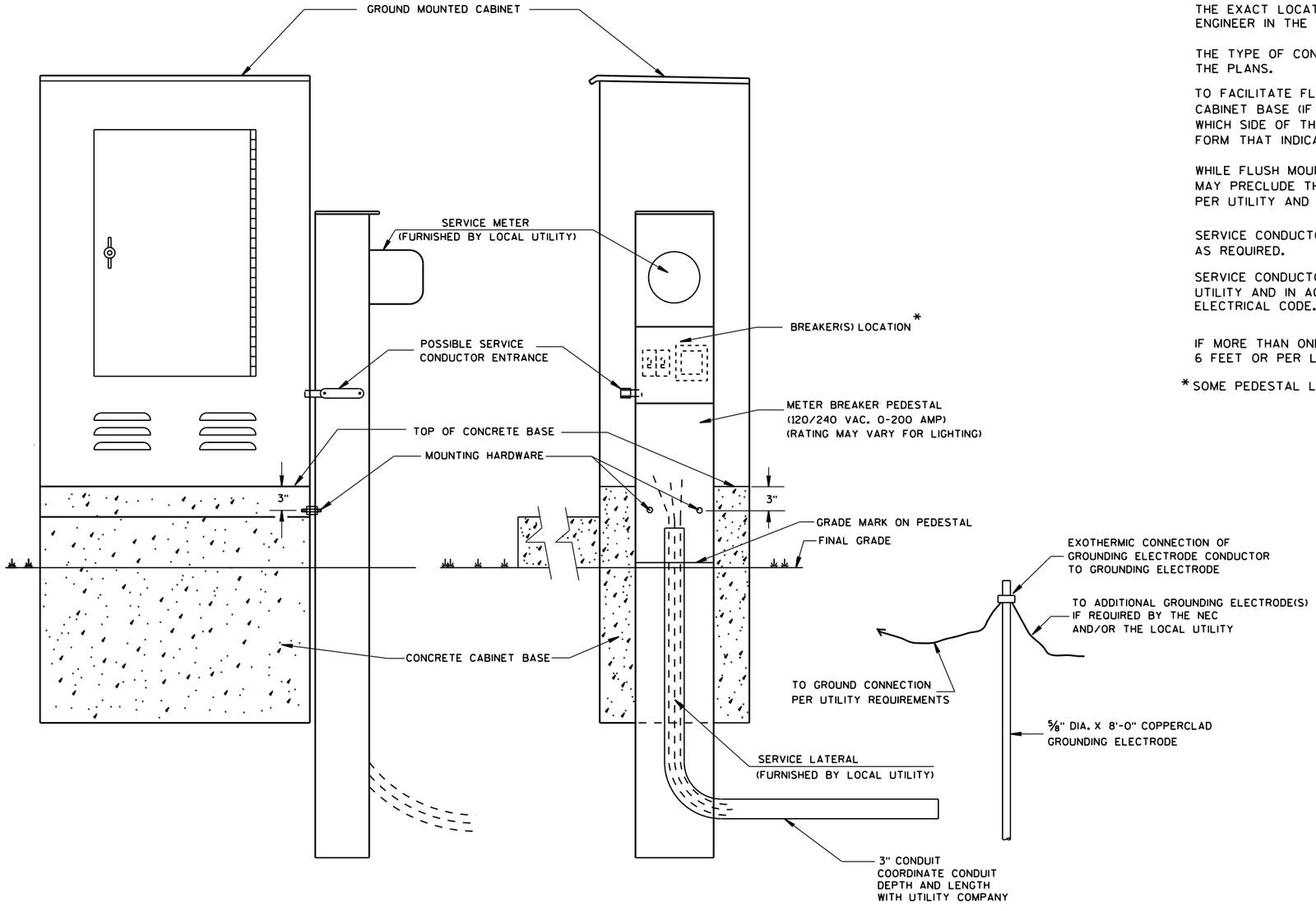

TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

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

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

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

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
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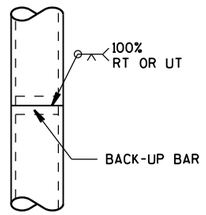
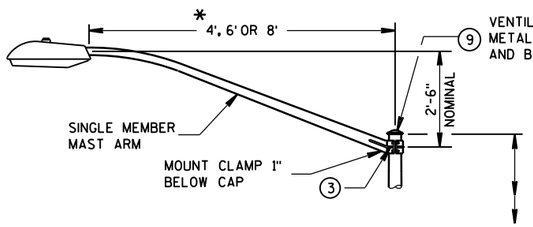
FOR MANUFACTURERS USE ONLY

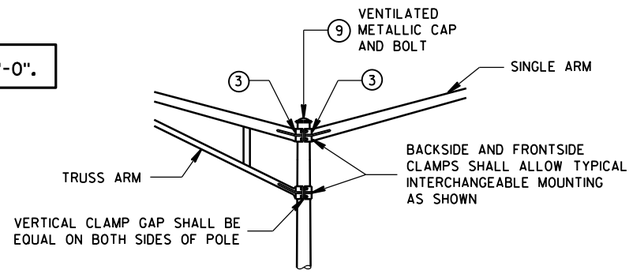
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.

*RISE FOR 4' ARM SHALL BE 2'-0".





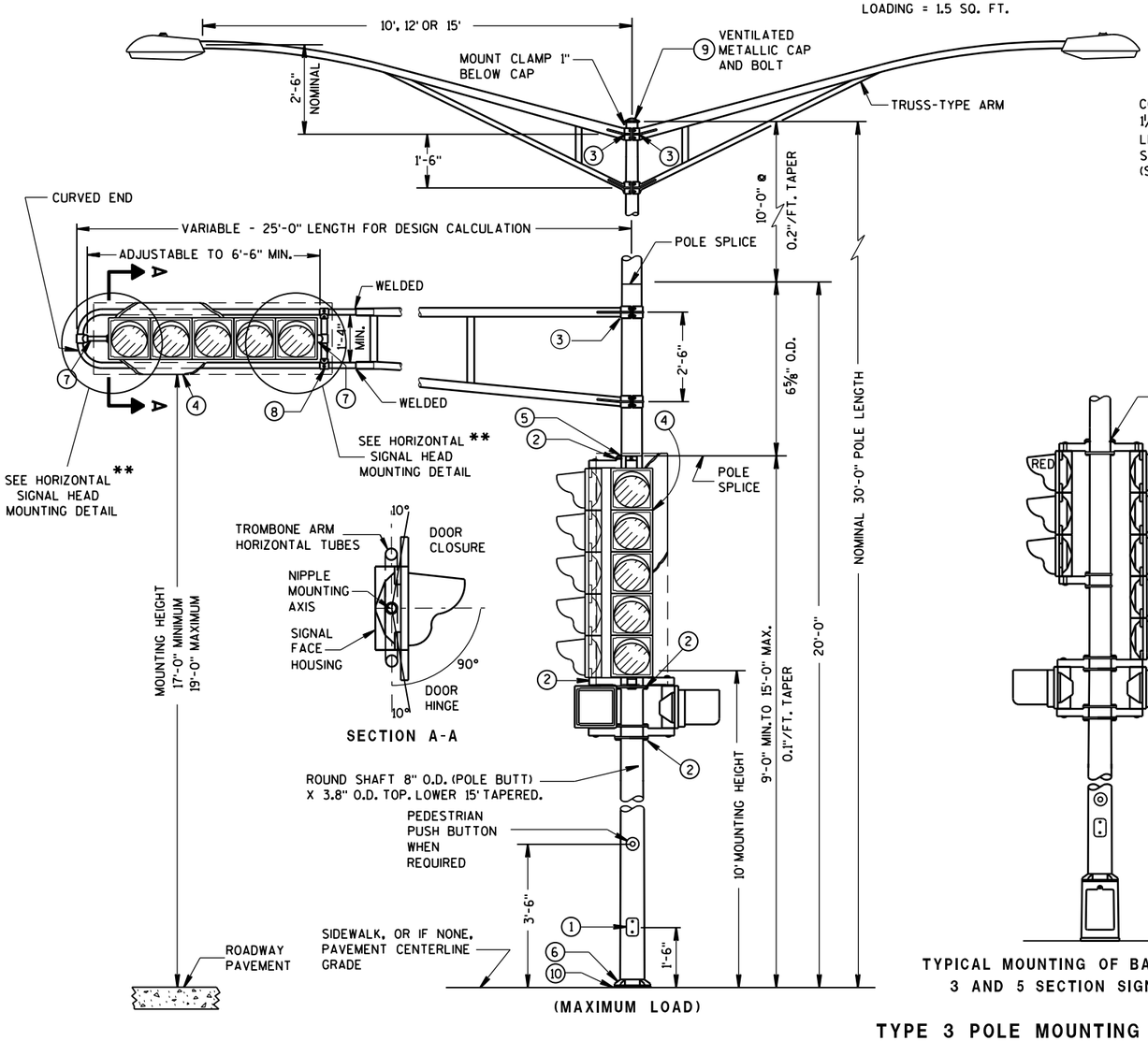
POLE SPLICE DETAIL

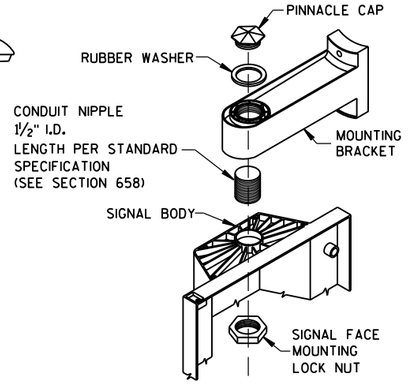


INTERCHANGEABLE MOUNTING DETAIL

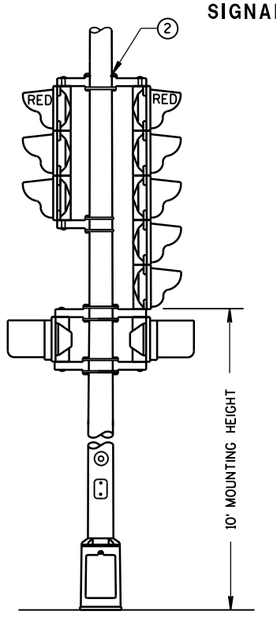
LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

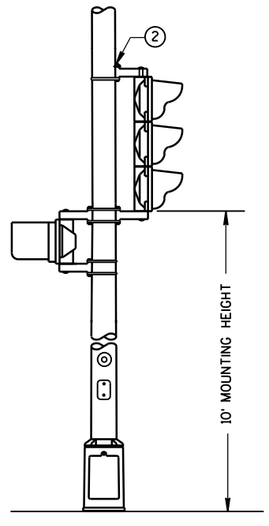




SIGNAL FACE MOUNTING DETAIL
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK
3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION
SIGNAL FACE

GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652, SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) TYPE 3 POLE CONFIGURATIONS SHALL BE MOUNTED DIRECTLY TO THEIR CONCRETE BASES.

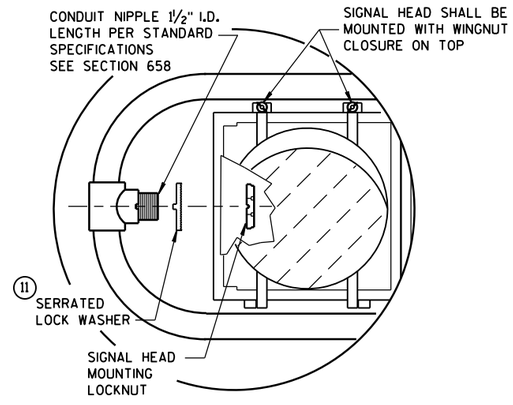
(7) MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658)

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4 " X ¾" -20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.



HORIZONTAL SIGNAL HEAD MOUNTING DETAIL **

** SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR

TYPE 3 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR
TRAFFIC SIGNALS AND
LIGHTING UNITS, TYPE 3
(HEAVY DUTY)

STATE OF WISCONSIN
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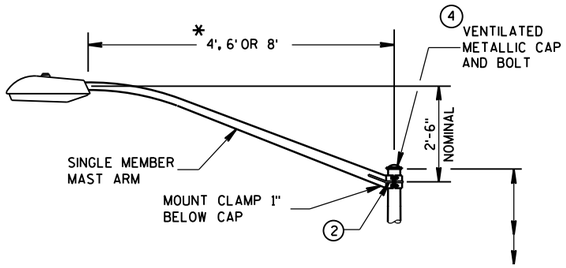
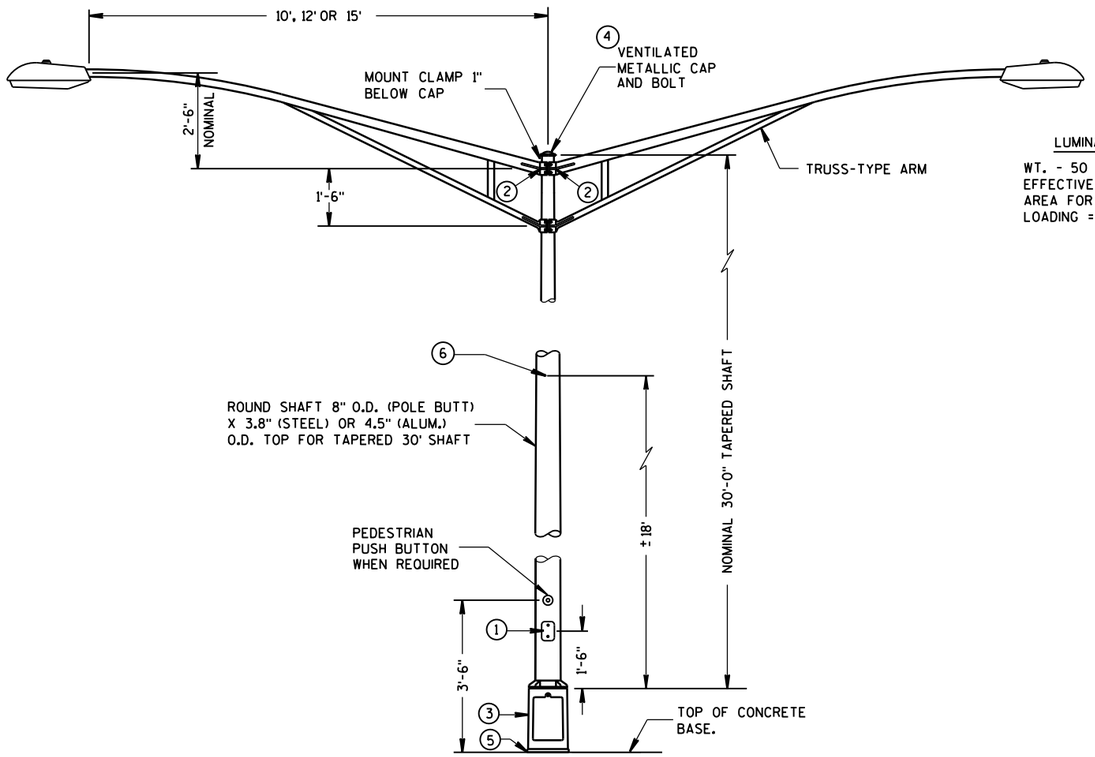
*RISE FOR 4' ARM SHALL BE 2'-0".

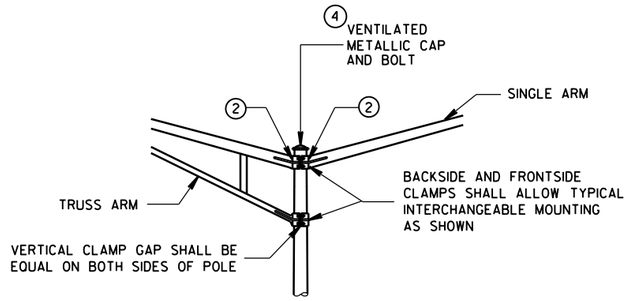




TYPE 5 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

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POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

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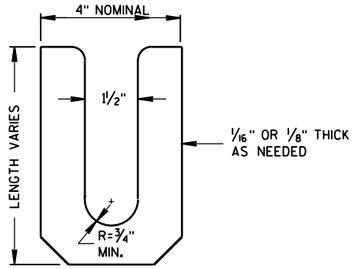
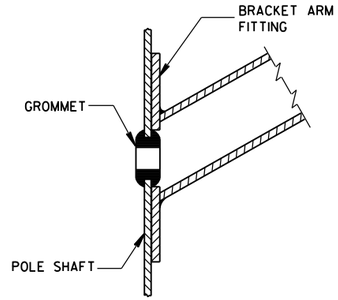
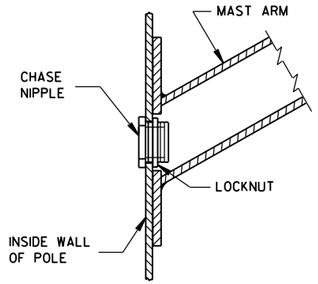


LEVELING SHIM (13)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

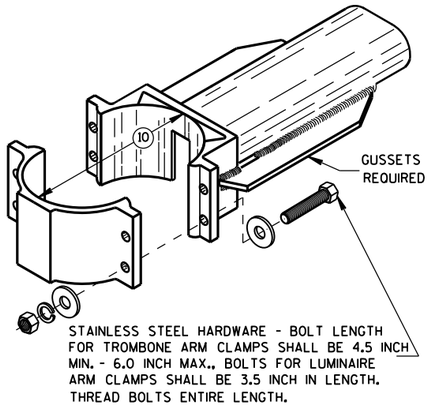
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

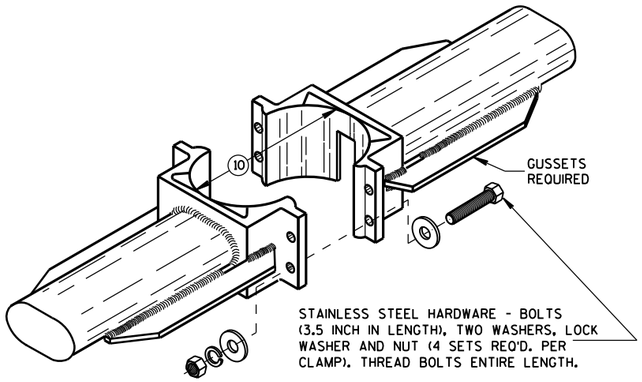
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

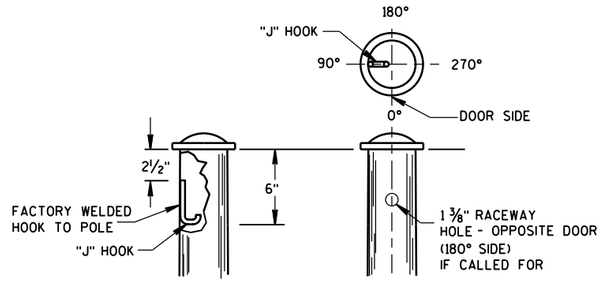
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



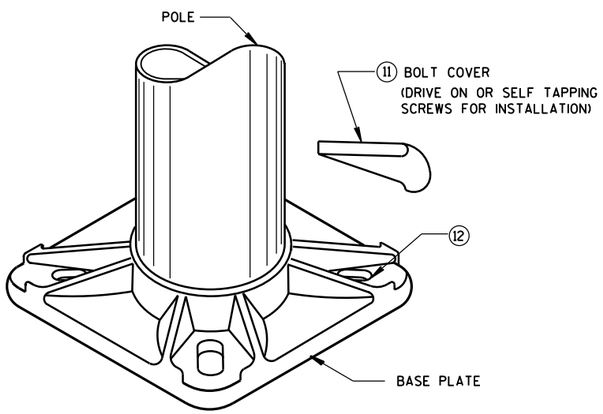
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



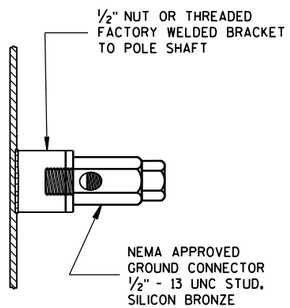
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

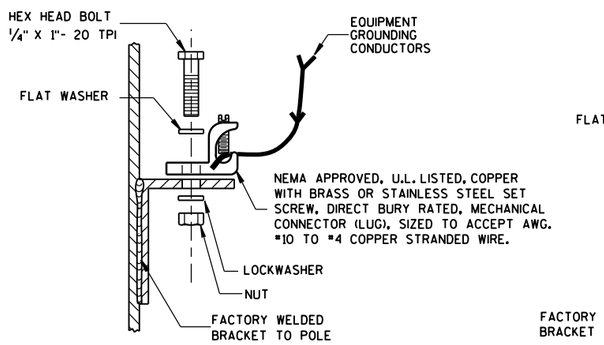


TYPICAL "J" HOOK LOCATION



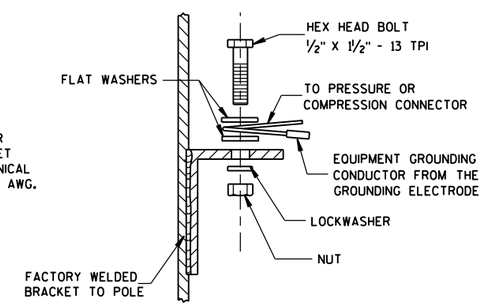
BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

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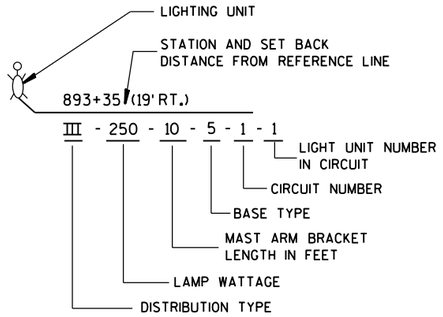
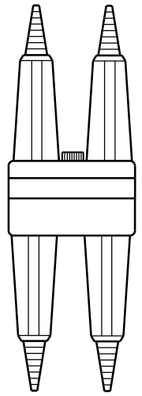
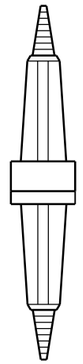


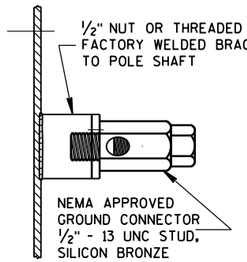
LIGHTING UNIT CODE
(TYPICAL)

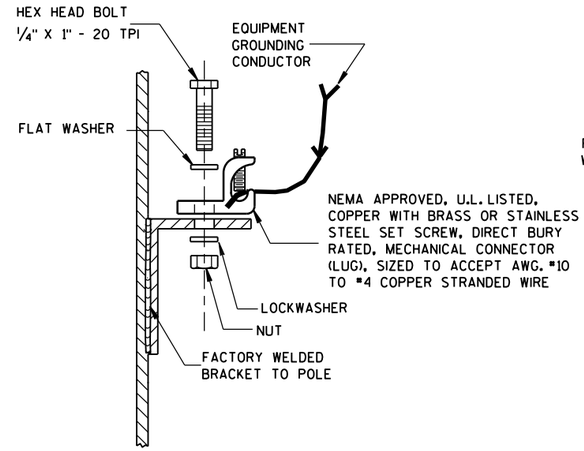


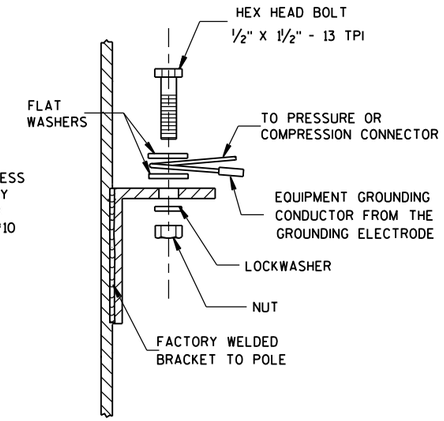
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



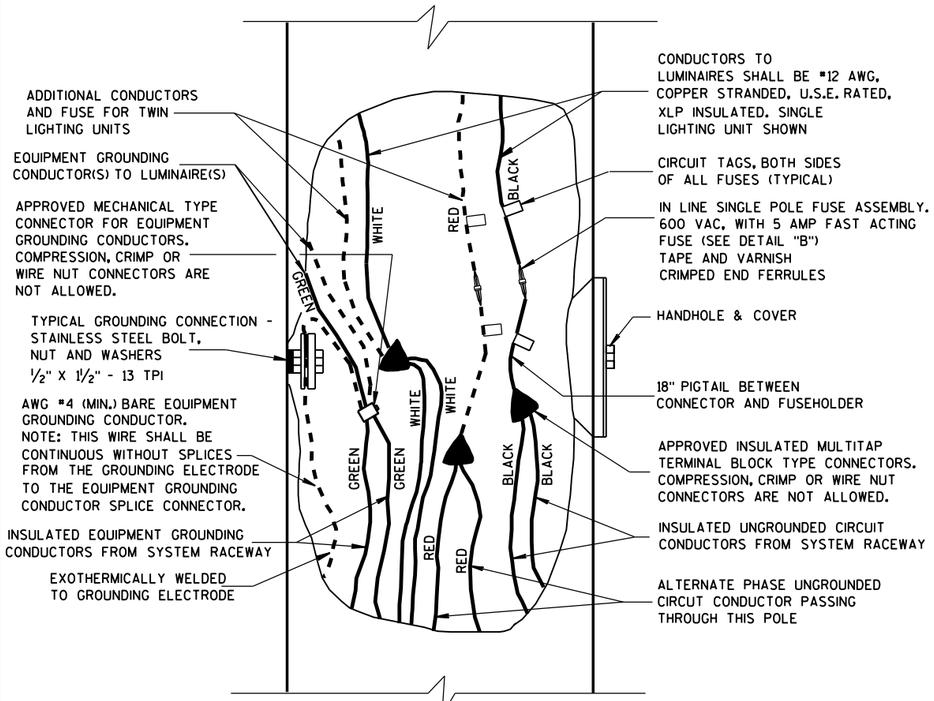
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



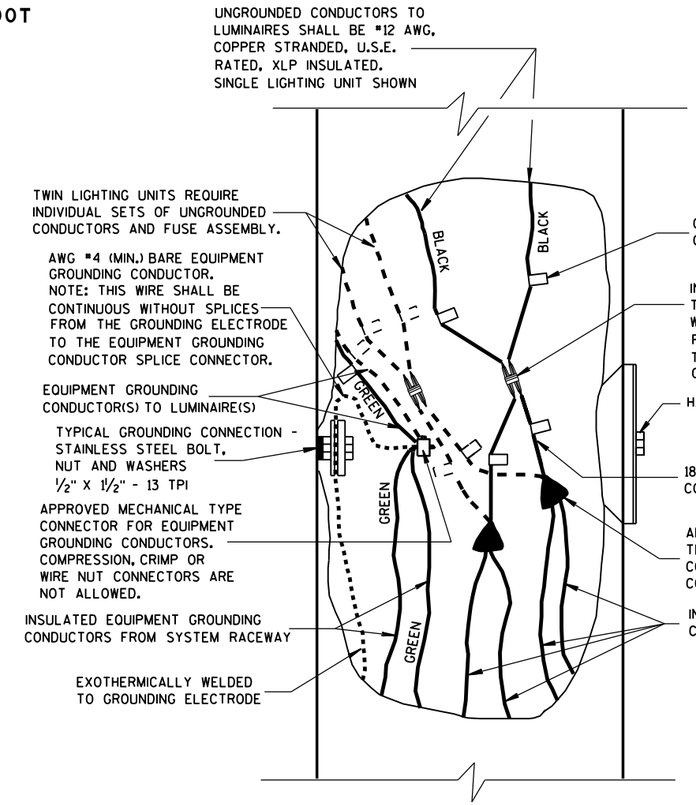




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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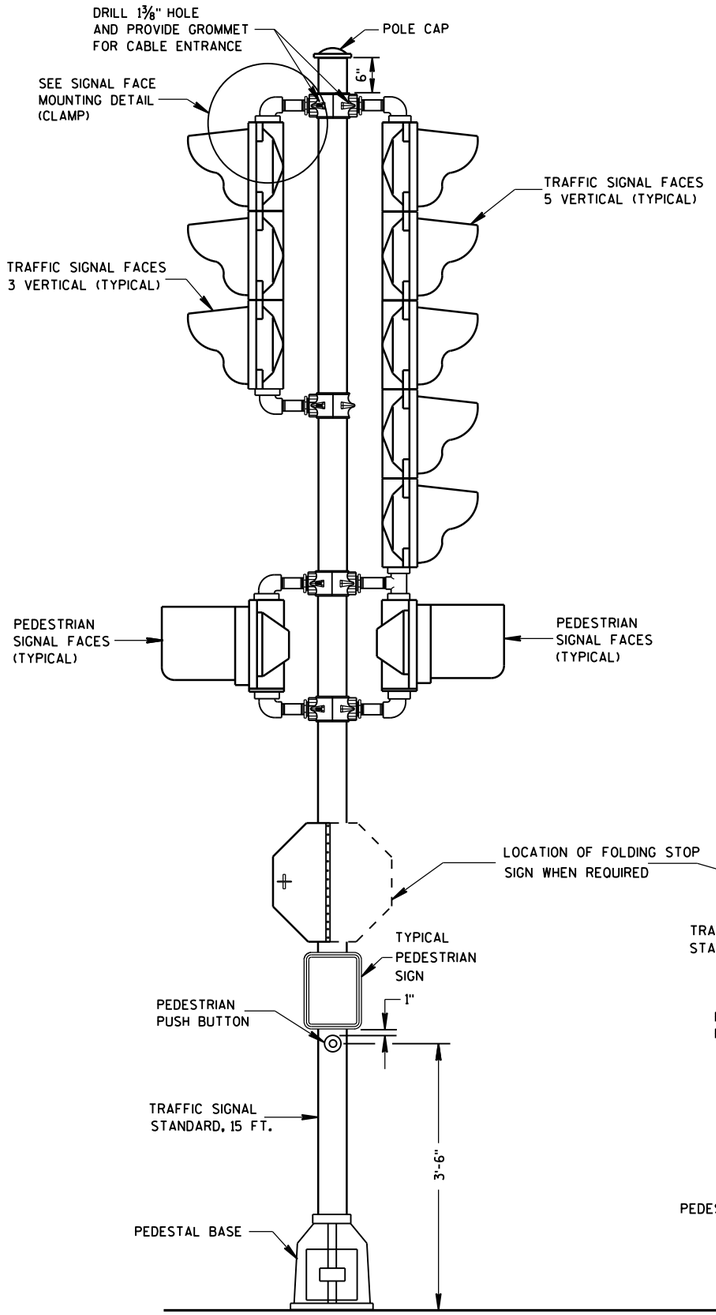
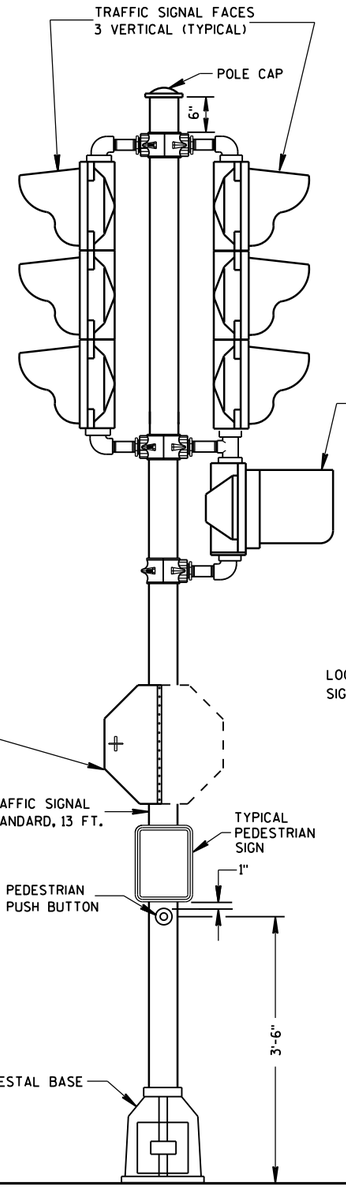
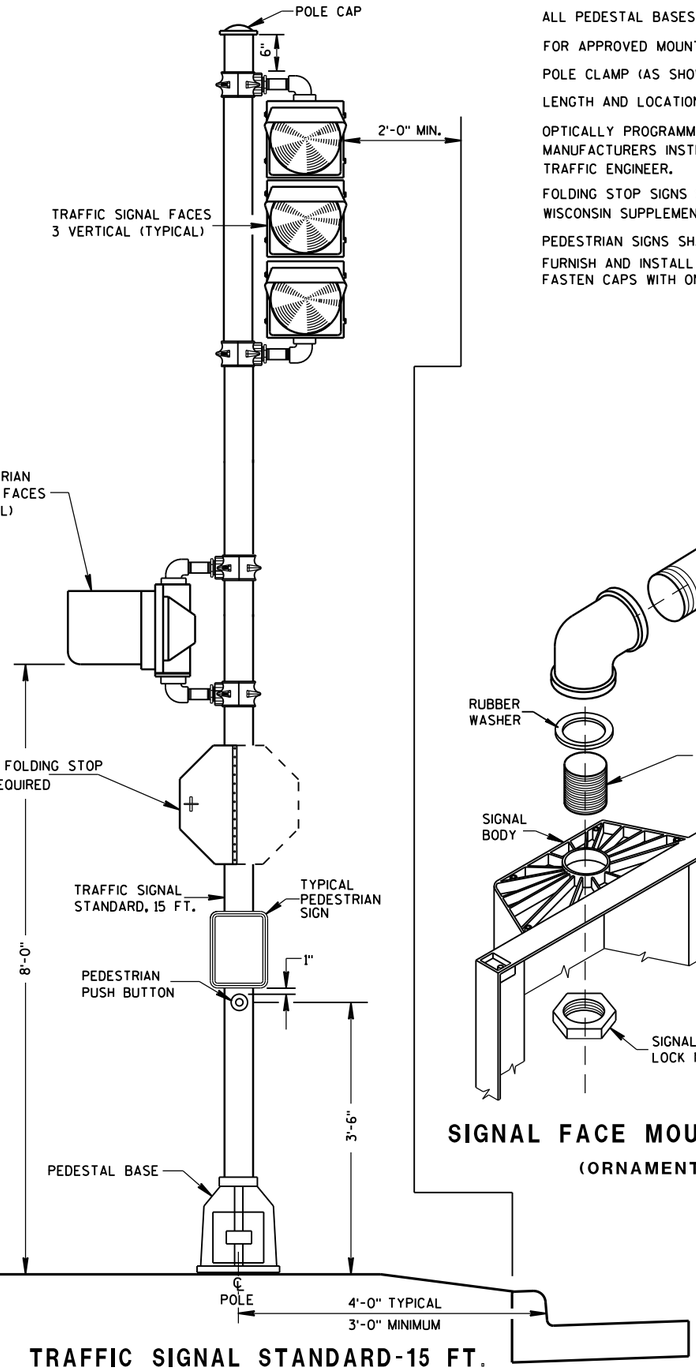


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLE CLAMP (AS SHOWN) MOUNTING BRACKETS SHALL BE USED.

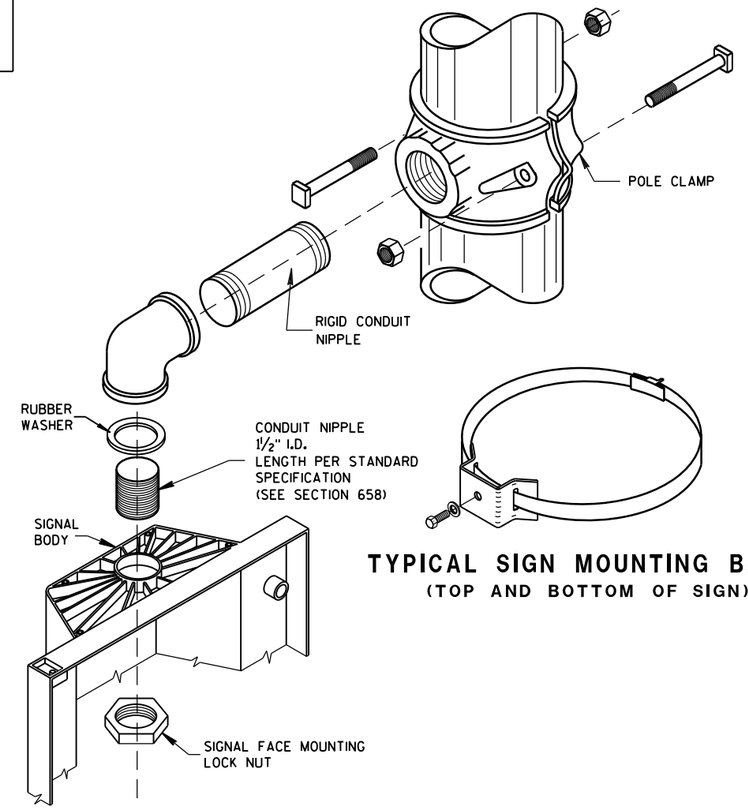
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SIGNAL FACE MOUNTING DETAIL
(ORNAMENTAL)

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)

TRAFFIC SIGNAL STANDARD
ORNAMENTAL BRACKET MOUNTINGS
TYPICAL FOR 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013 DATE
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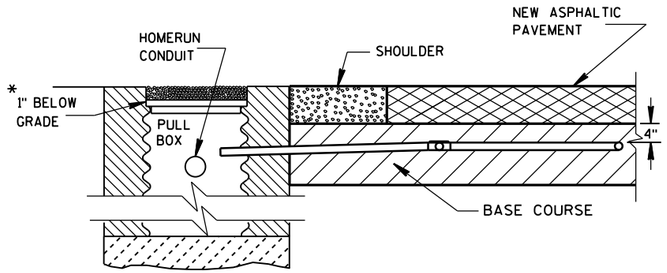
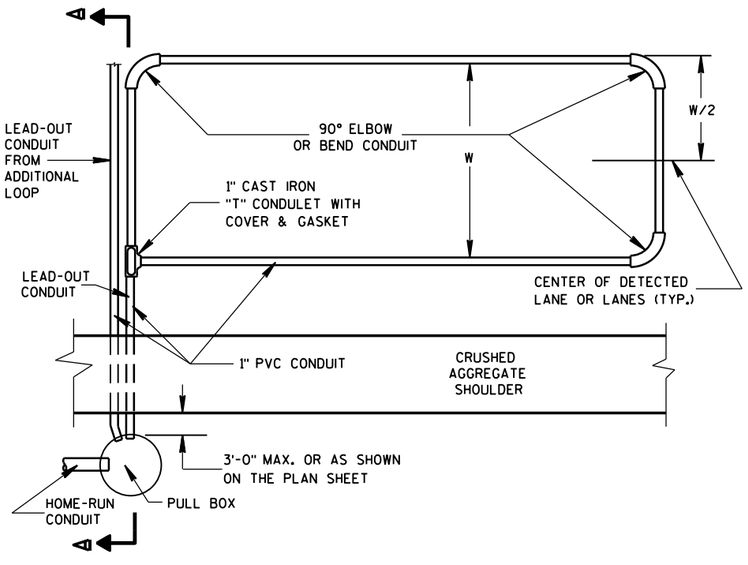


SECTION A-A
NO CURB & GUTTER

DETECTOR LOOP INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF LOOP DETECTOR

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD-OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

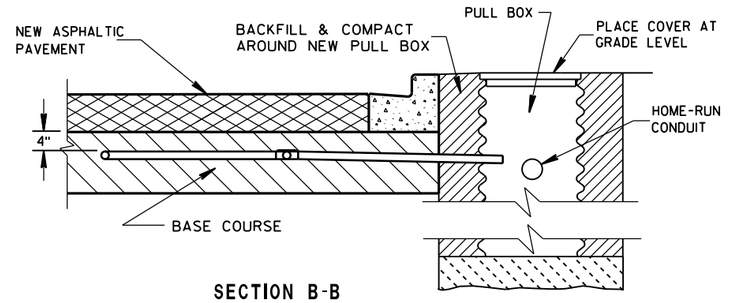
SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT AND CONDULET SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE ASPHALTIC PAVEMENT IS PLACED.

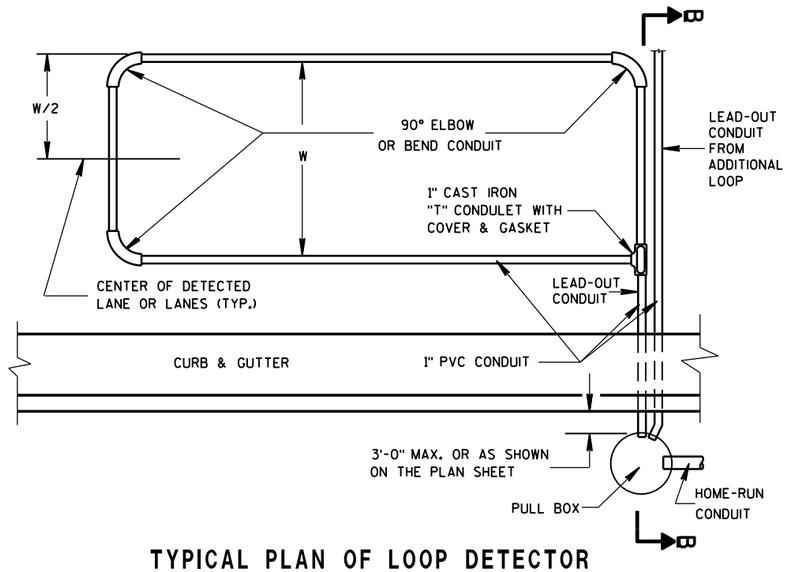
WHEN MULTIPLE LAYERS OF ASPHALTIC PAVEMENT ARE TO BE PLACED, LOOPS MAY BE INSTALLED BY SAWING A TWO INCH WIDE SLOT IN THE FIRST LAYER, DIG OUT THE ASPHALTIC MATERIAL AND BASE COURSE, PLACE THE LOOP, FILL THE SLOT WITH BASE COURSE MATERIAL AND NEW ASPHALTIC MATERIAL AND TAMP THE ASPHALTIC MATERIAL IN PLACE.

SHOULD TRAFFIC BE ALLOWED TO USE THE AREA OF ROADWAY WITH THE NEWLY INSTALLED LOOP BEFORE THE PLACEMENT OF THE NEXT LAYER OF ASPHALTIC PAVEMENT, THE SLOT/PAVEMENT OPENING SHALL BE SEALED WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".



SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR

LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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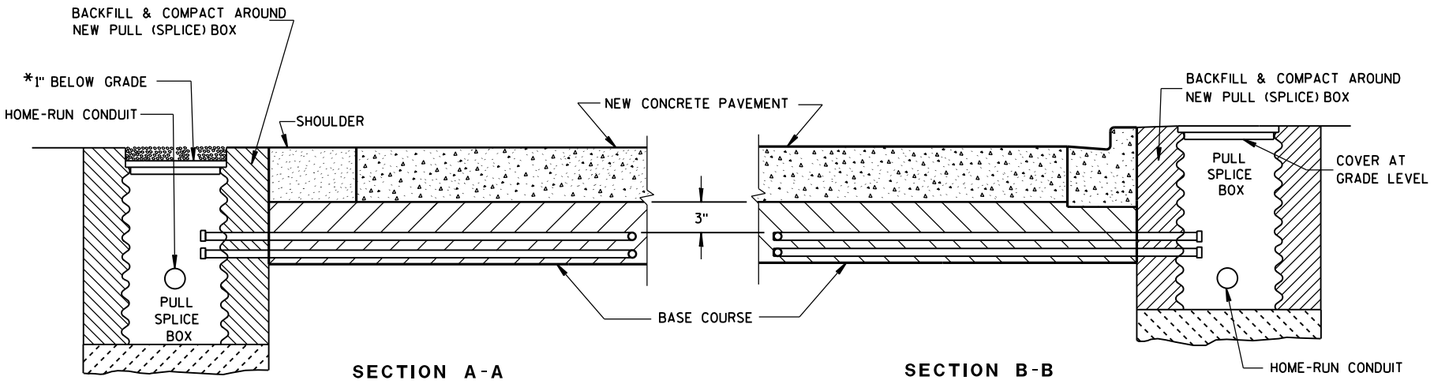


SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

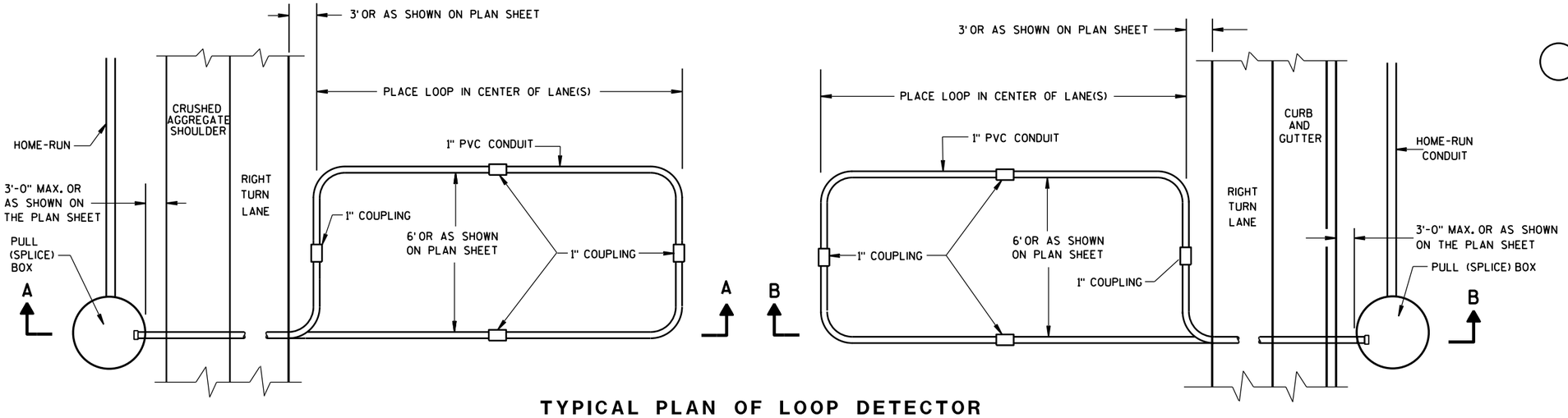
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

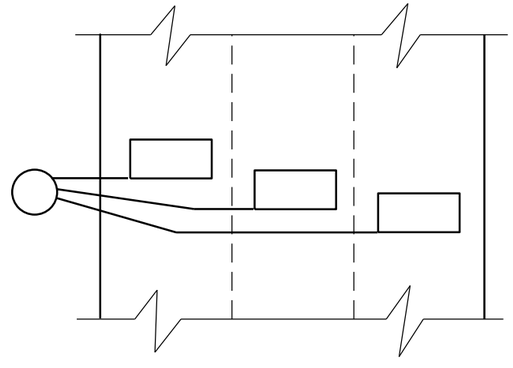
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



MULTI-LANE INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 F 15-4b

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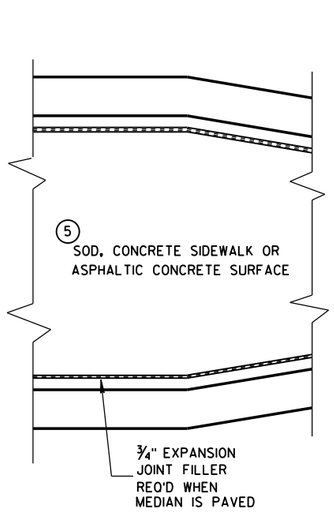
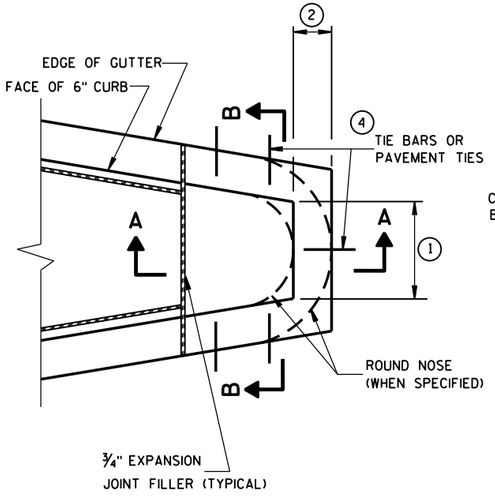
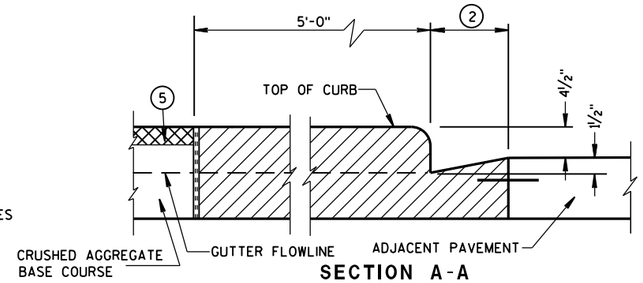
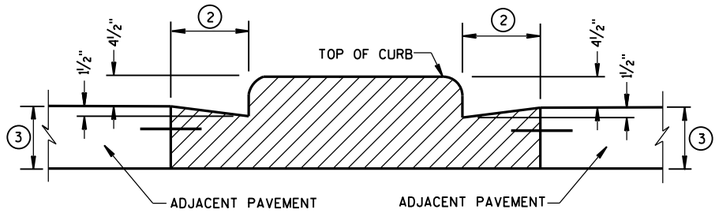
S.D.D. 9 F 15-4b







SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

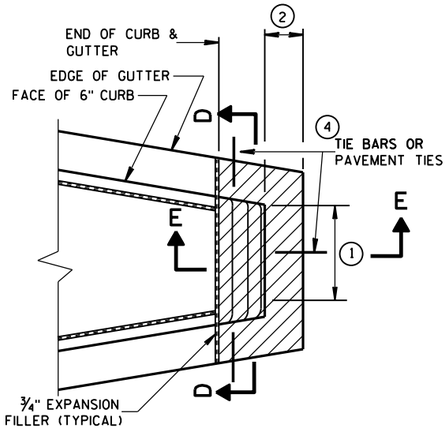
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

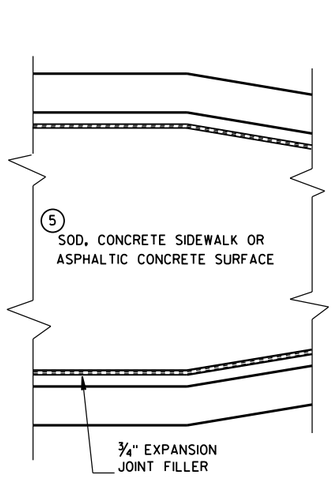
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

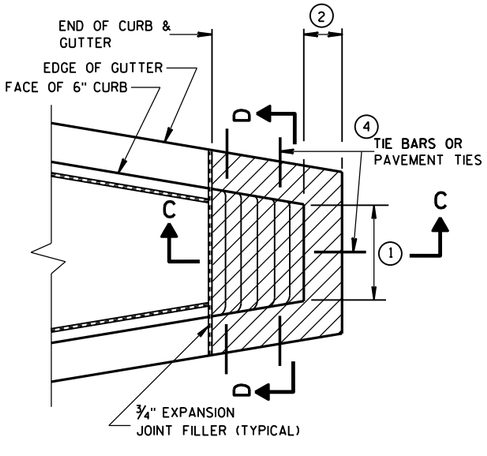
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

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

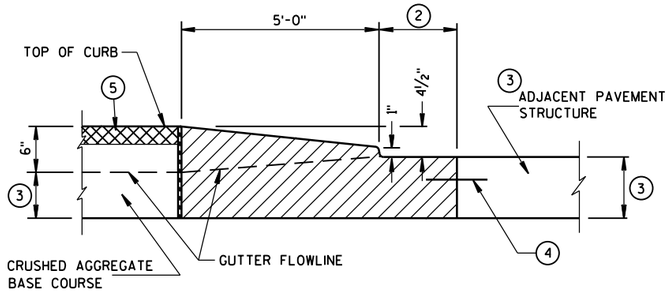
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



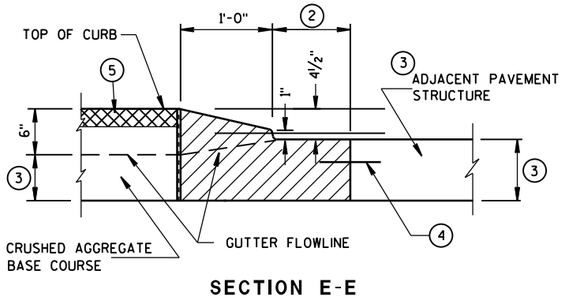




CONCRETE MEDIAN SLOPED NOSE TYPE 1

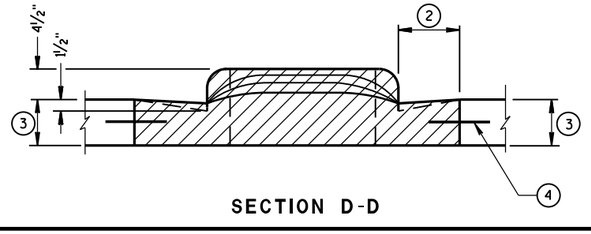


SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2



SECTION D-D

CONCRETE MEDIAN NOSE

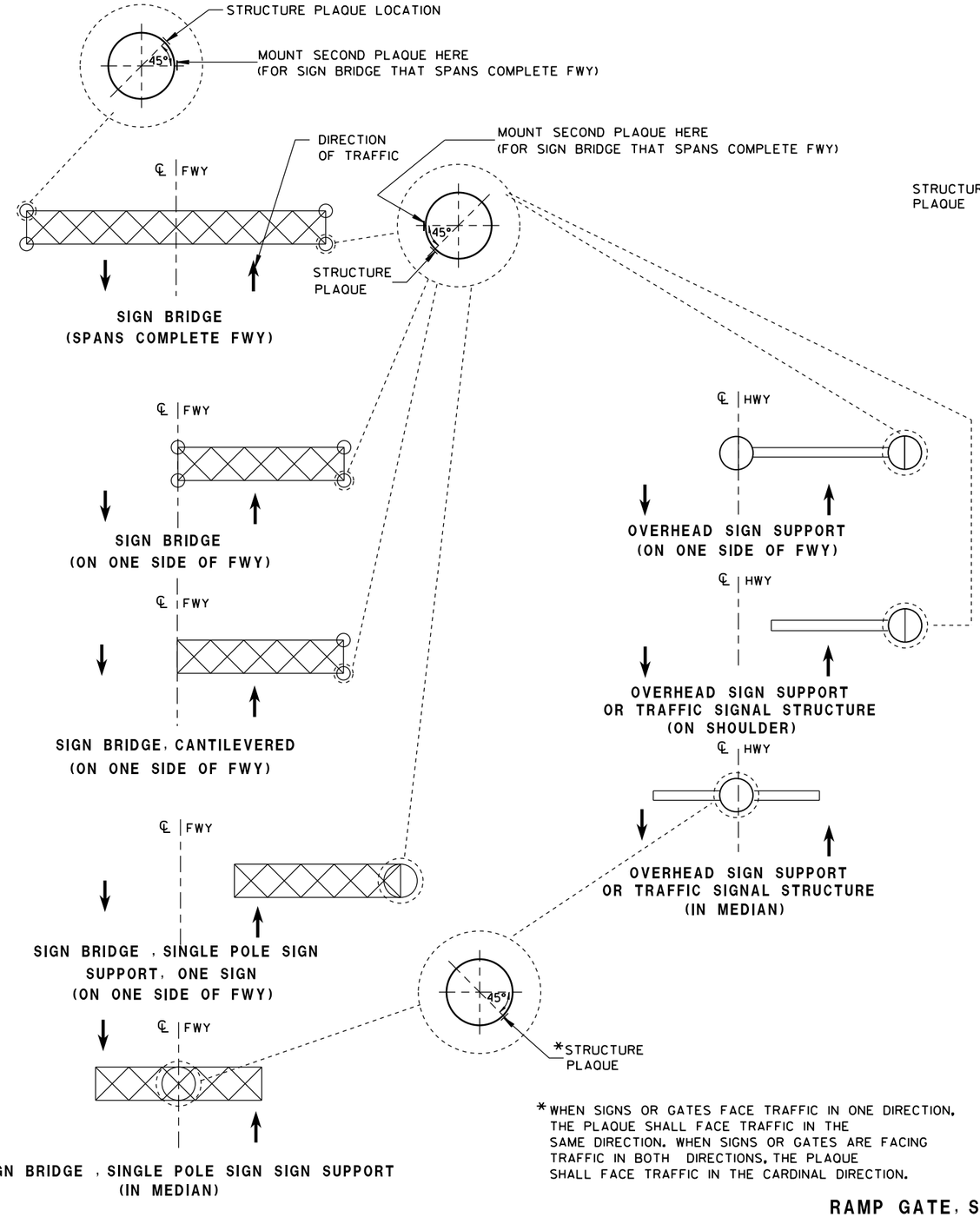
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

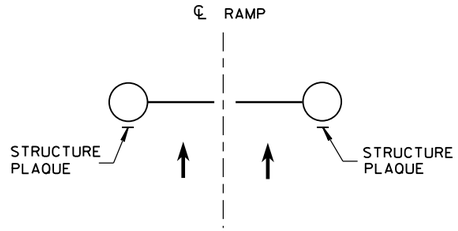
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER

FHWA



*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)**

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.

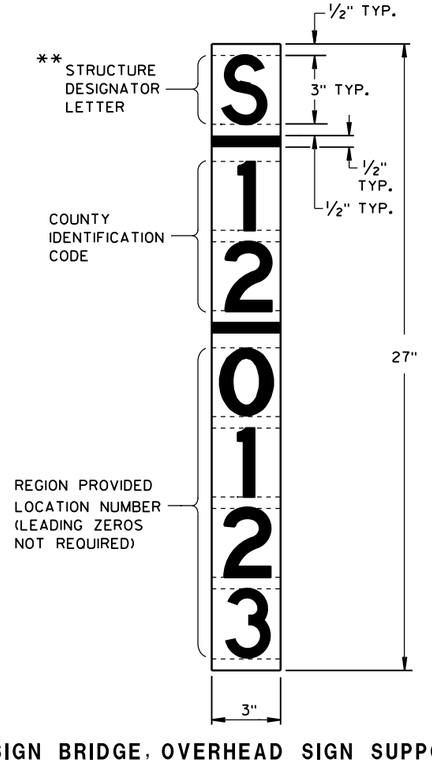
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

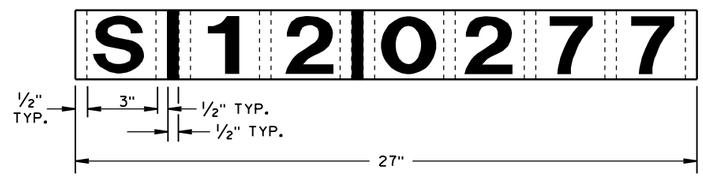
LINES - BLACK, ½" WIDE, SELF-ADHESIVE

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

** 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

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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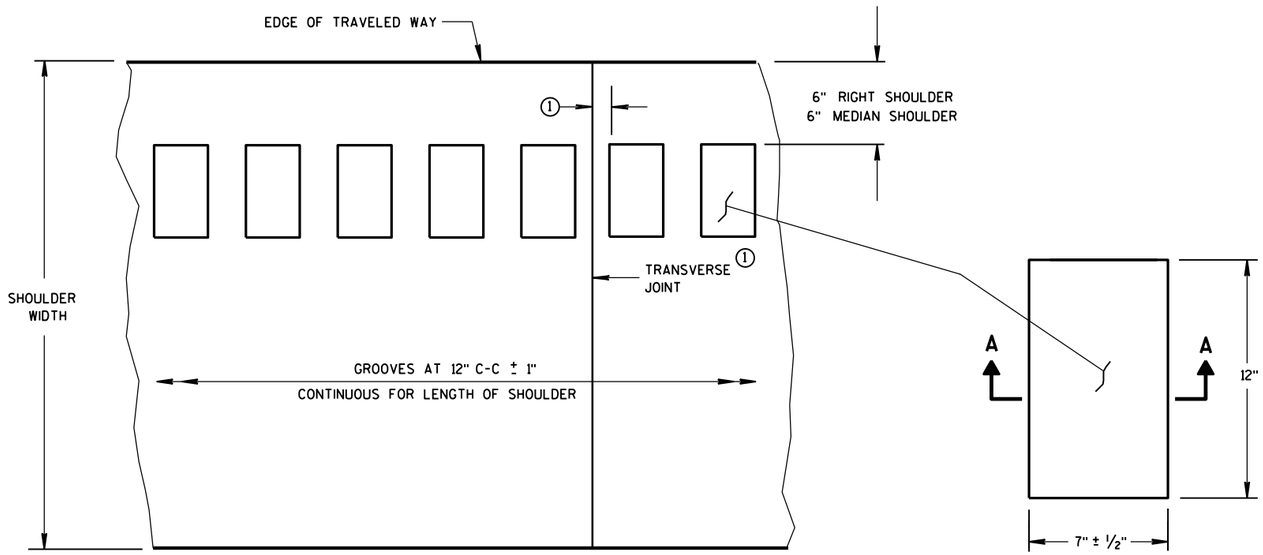
S.D.D. 12 A 4-3



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

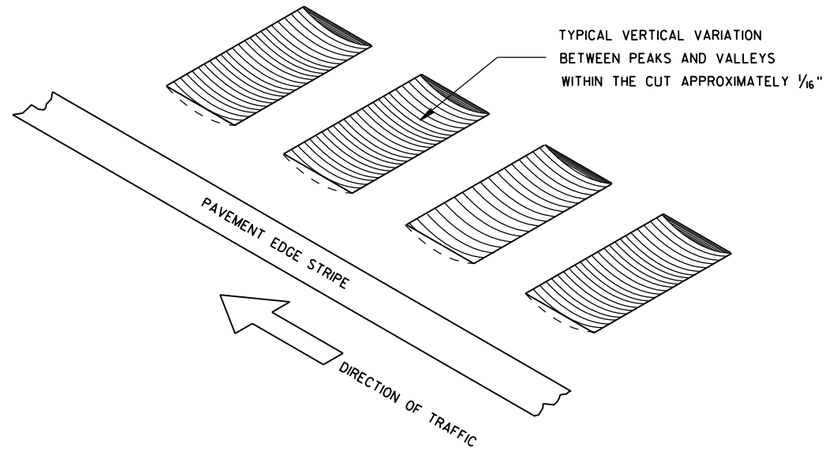
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



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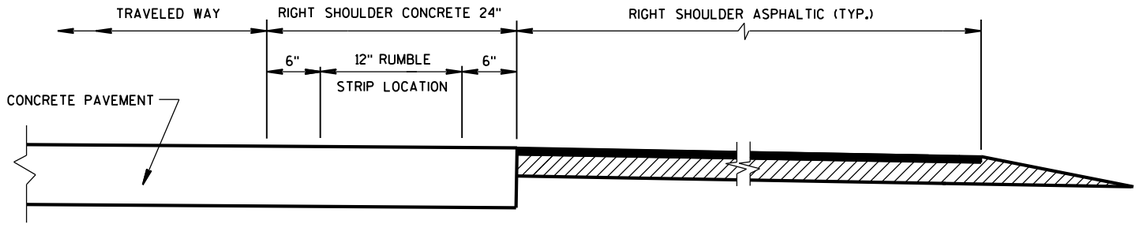
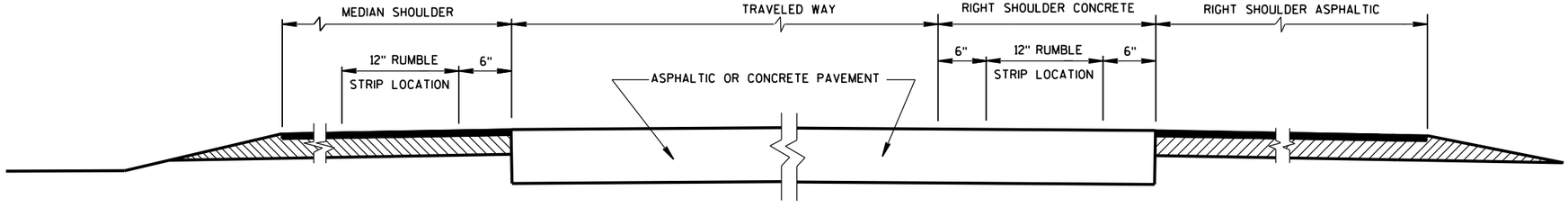


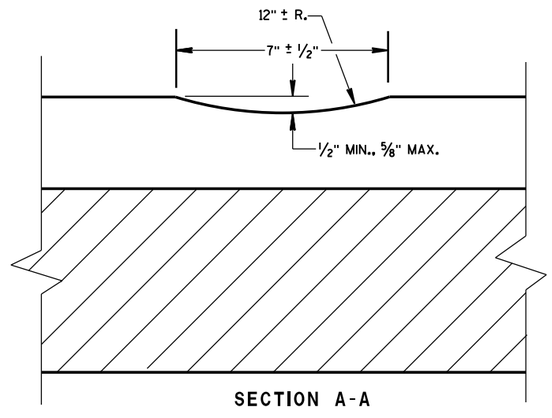
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 13 A 5-5a

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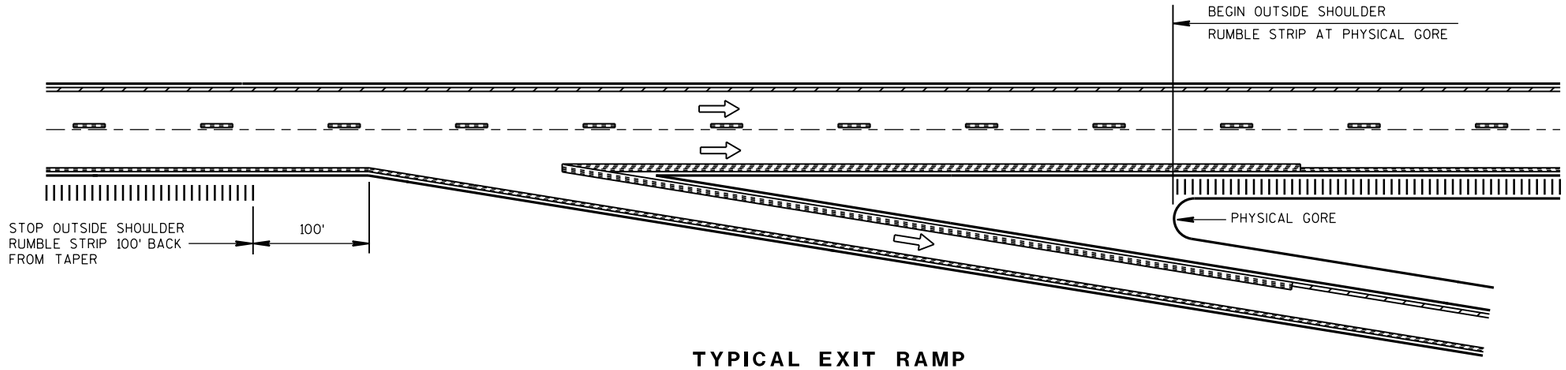
S.D.D. 13 A 5-5a



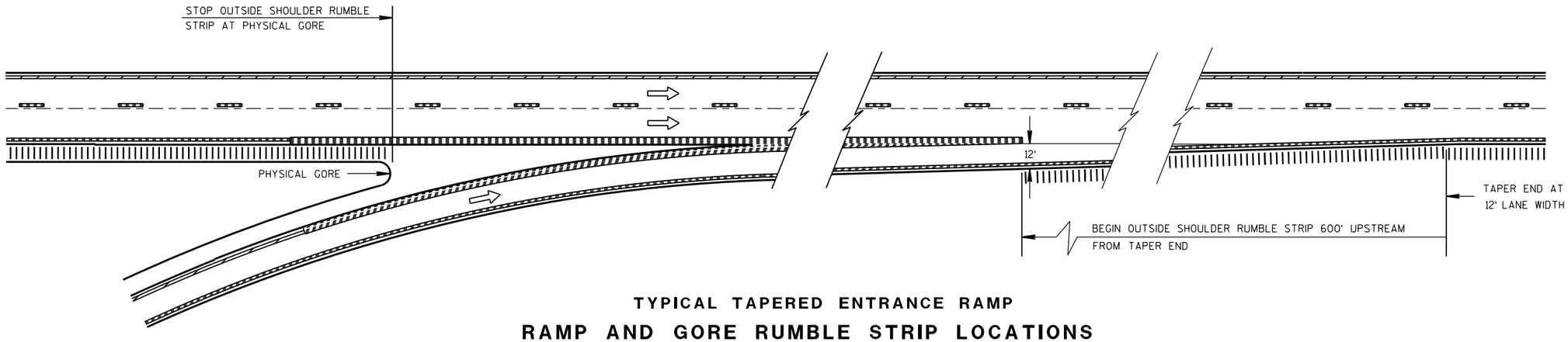
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

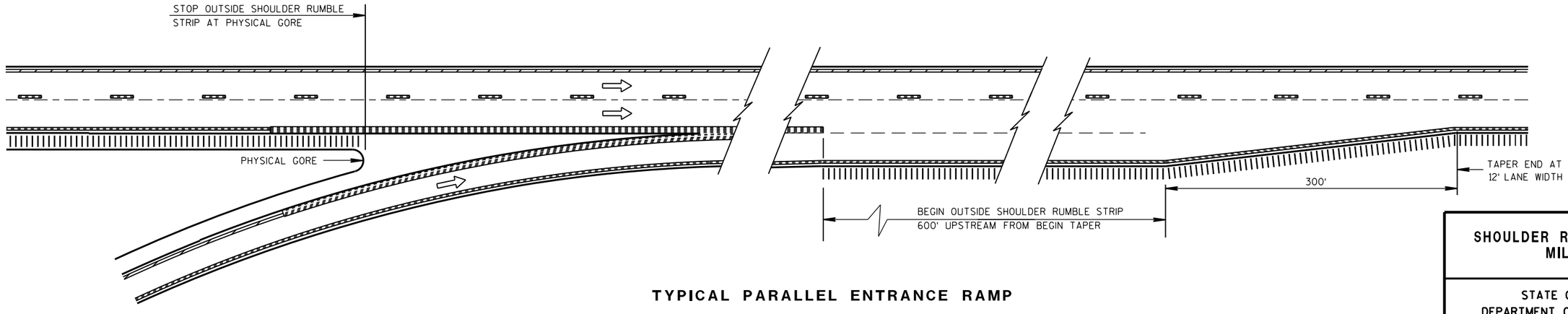
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

FHWA

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S.D.D. 13 A 5-5b

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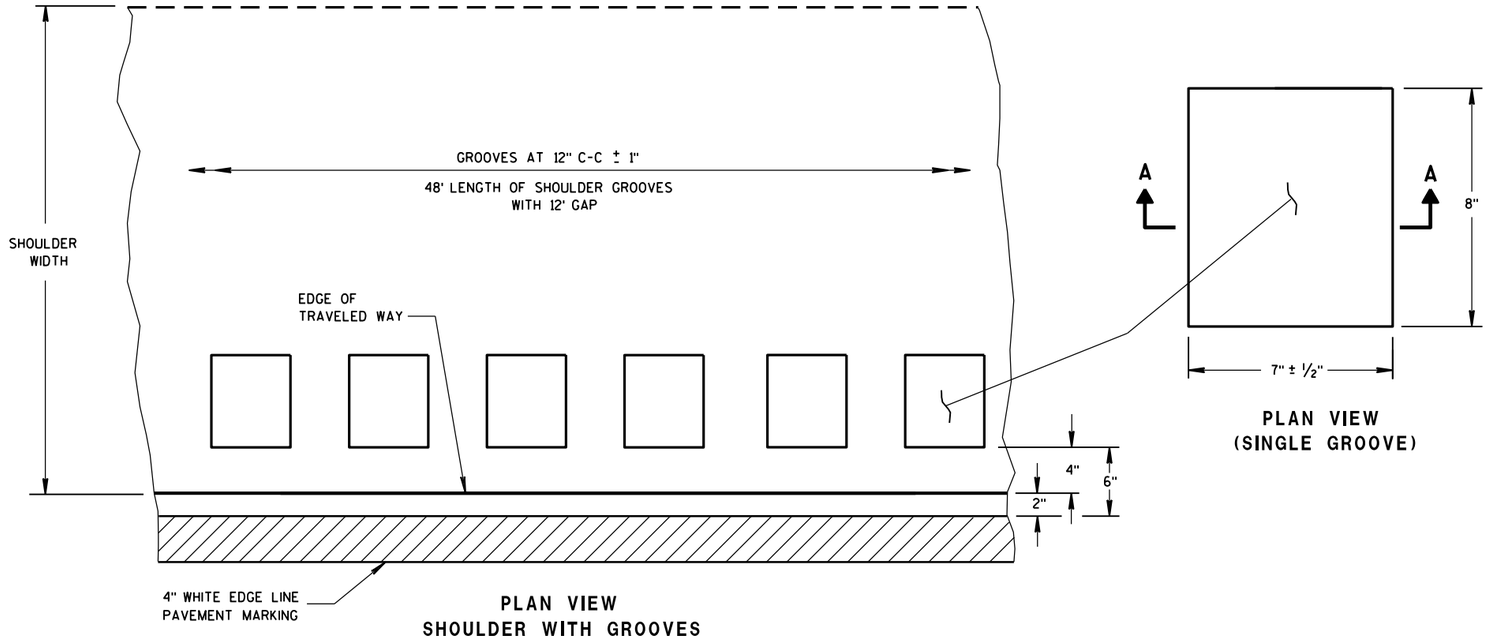
S.D.D. 13 A 5-5b



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

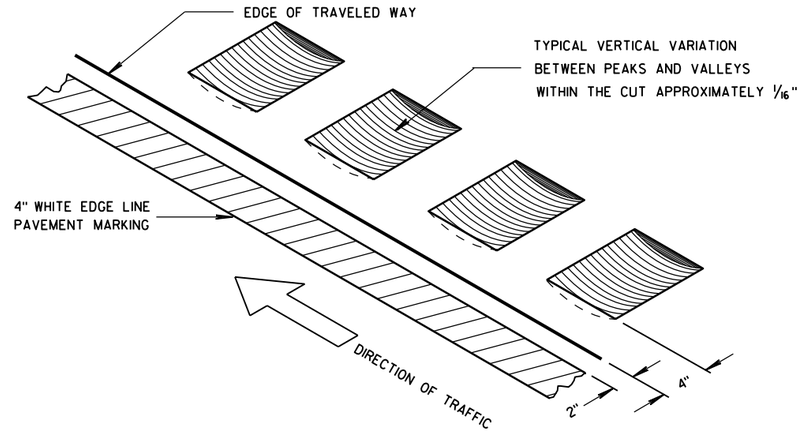
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



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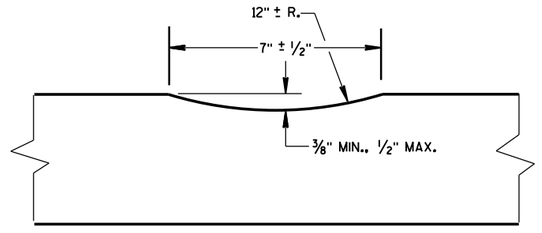
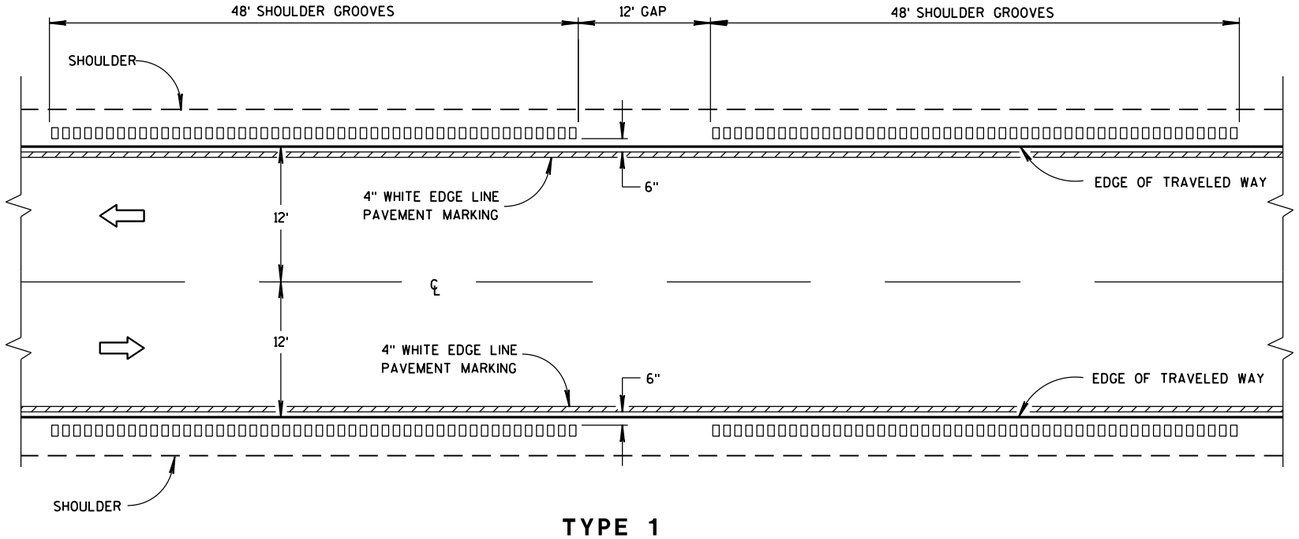


SECTION A-A



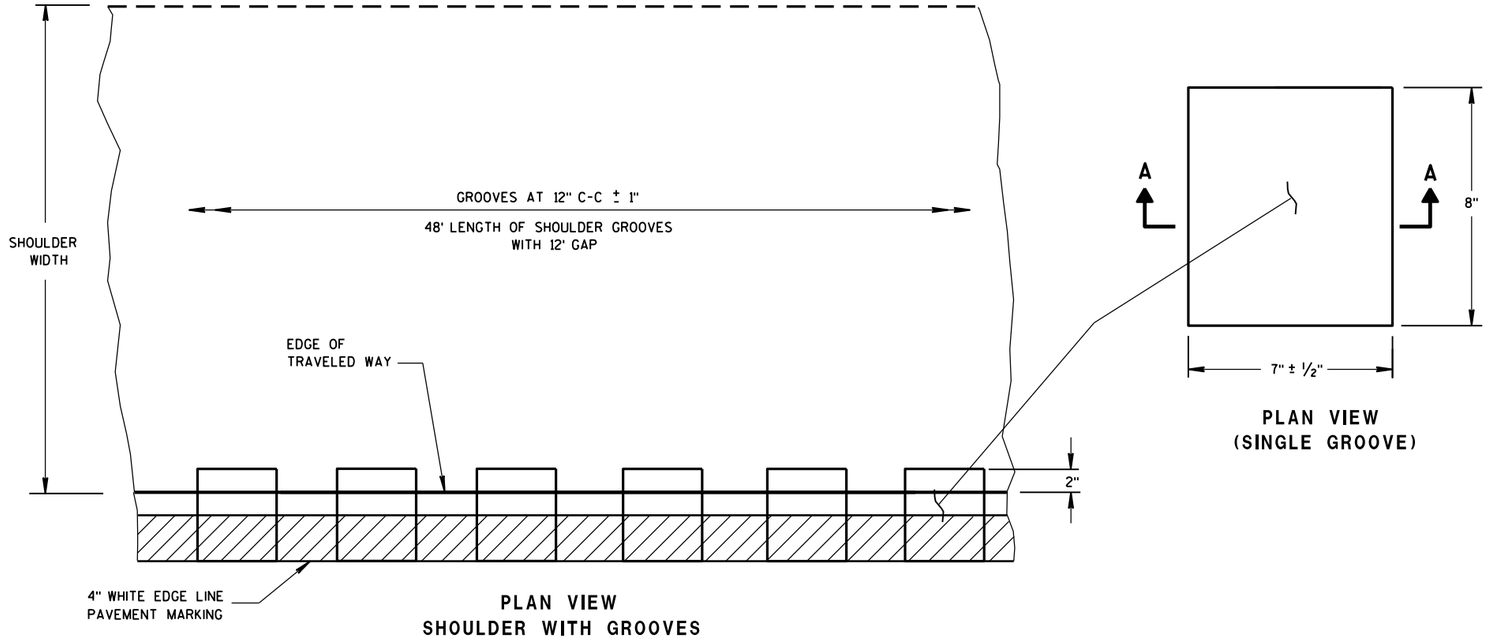
TYPE 1
2-LANE SHOULDER RUMBLE STRIP

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

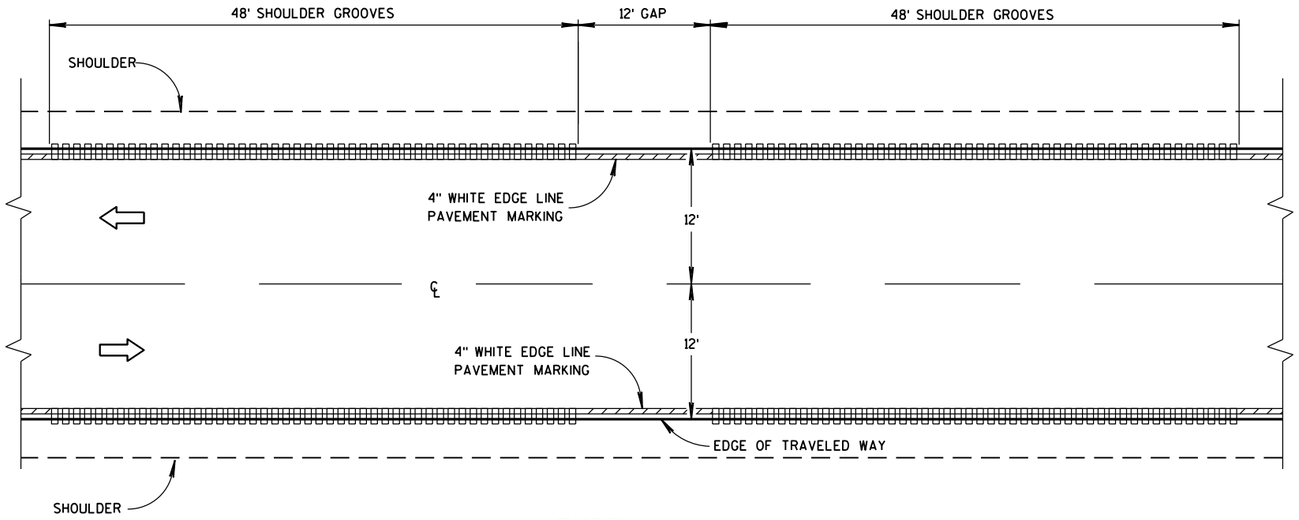
S.D.D. 13 A 10-1a



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP



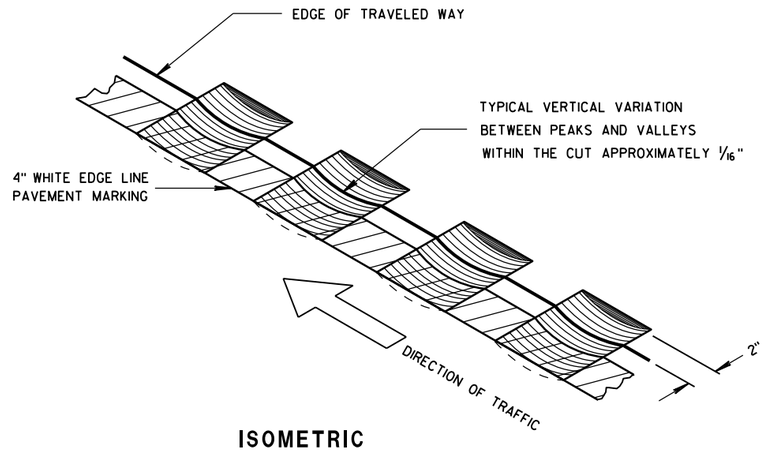
TYPE 2
2-LANE SHOULDER RUMBLE STRIP

GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



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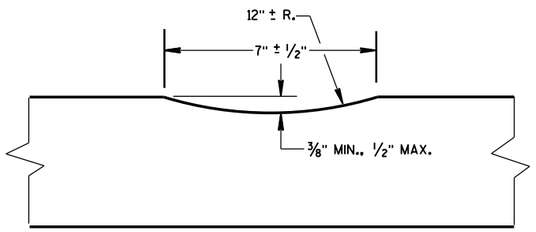


SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

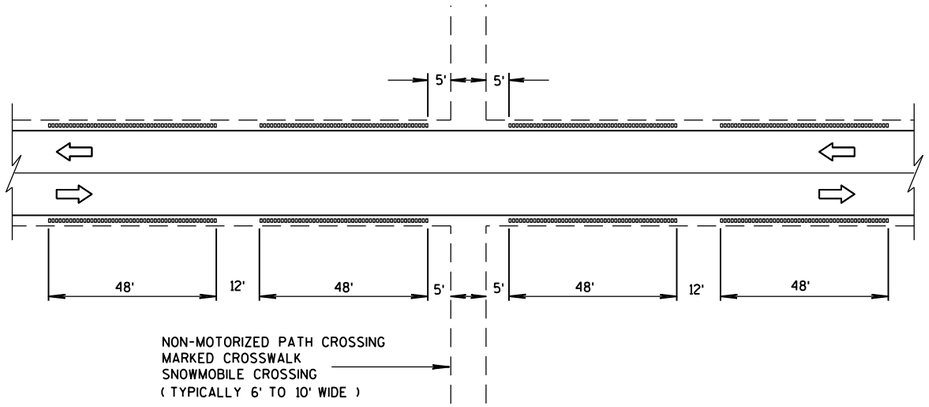
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

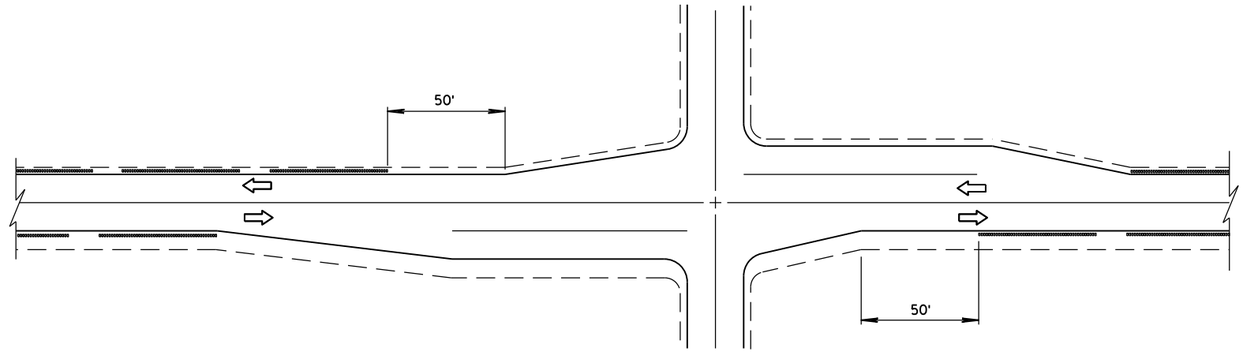
S.D.D. 13 A 10-1b

6

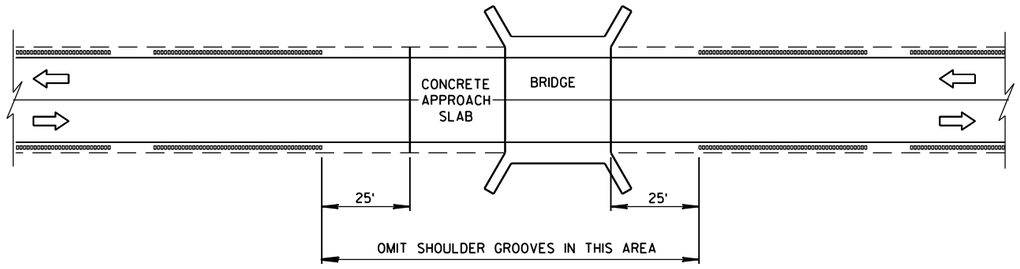
S.D.D. 13 A 10-1b



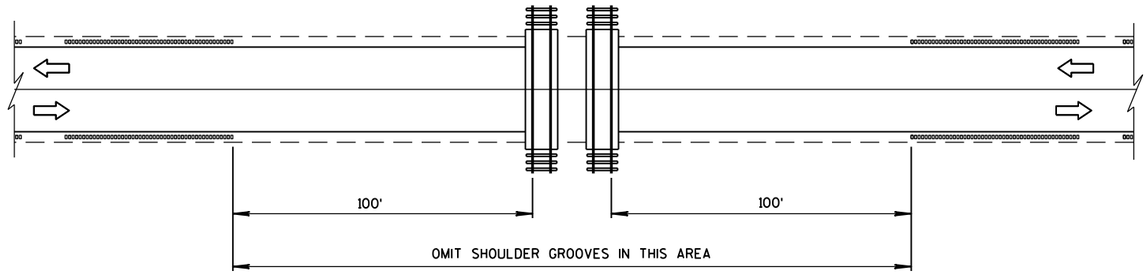
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



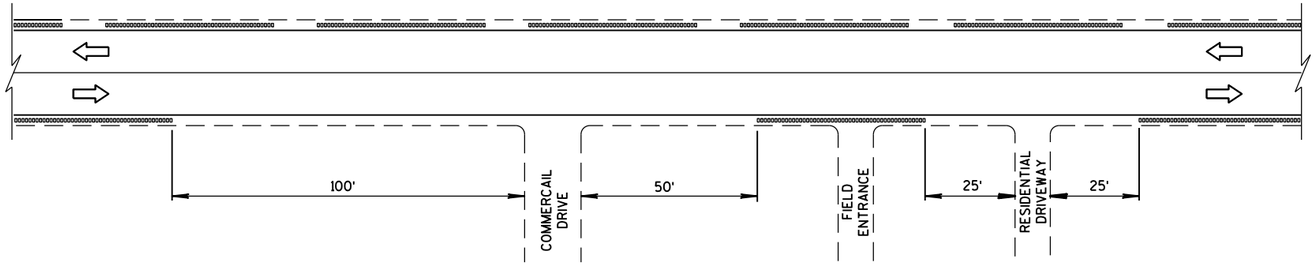
SHOULDER GROOVES AT INTERSECTIONS



SHOULDER GROOVES AT BRIDGES



SHOULDER GROOVES AT RAILROADS

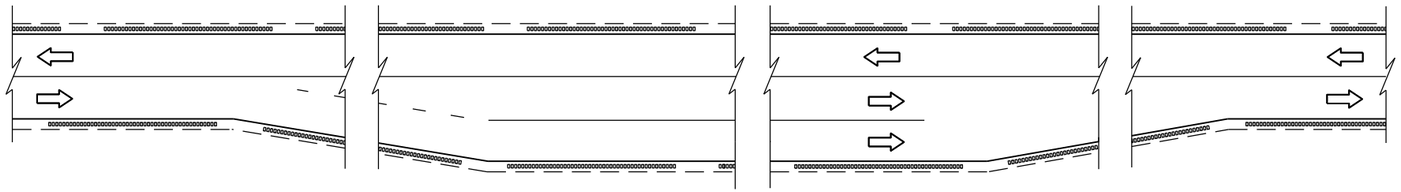


SHOULDER GROOVES AT DRIVEWAYS (1)

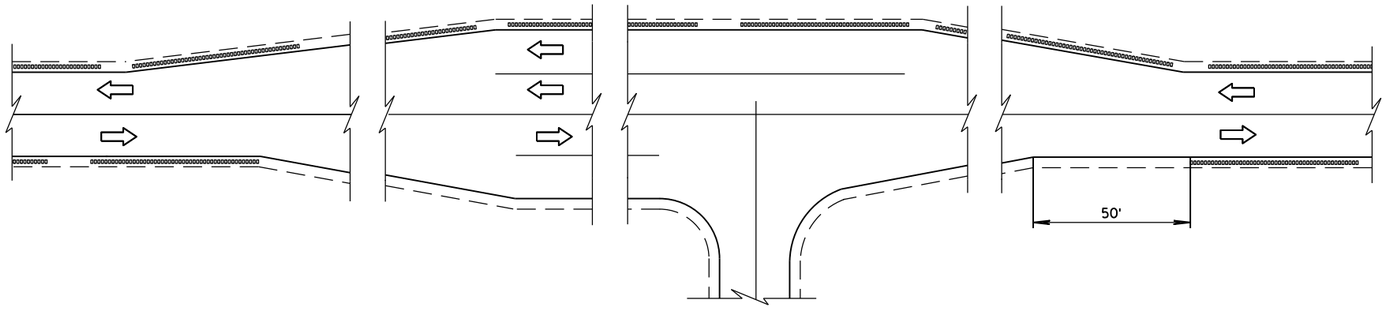
2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 13 A 10-1c



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

6

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

S.D.D. 13 A 10-1d

S.D.D. 13 A 10-1d

GENERAL NOTES

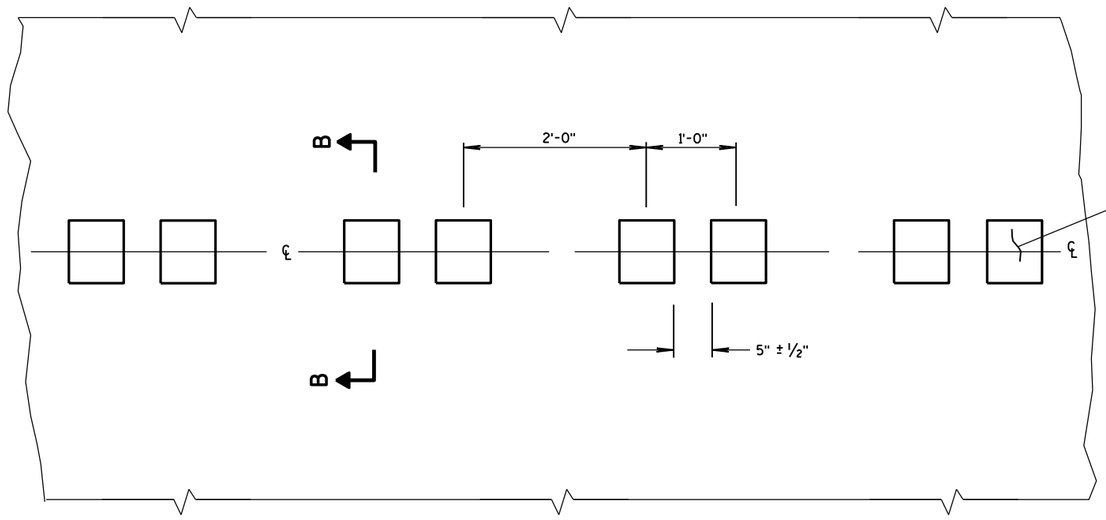
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

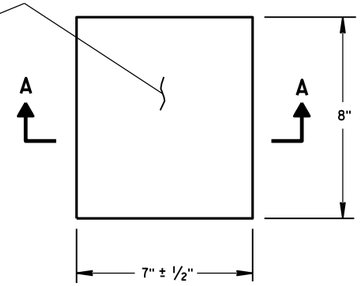
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

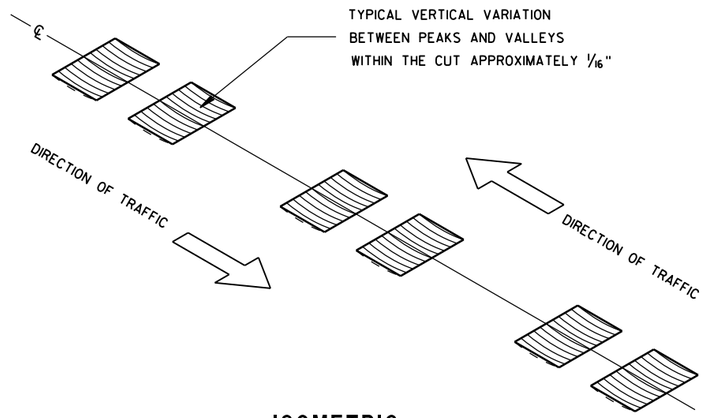
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



PLAN VIEW
CENTER LINE WITH GROOVES

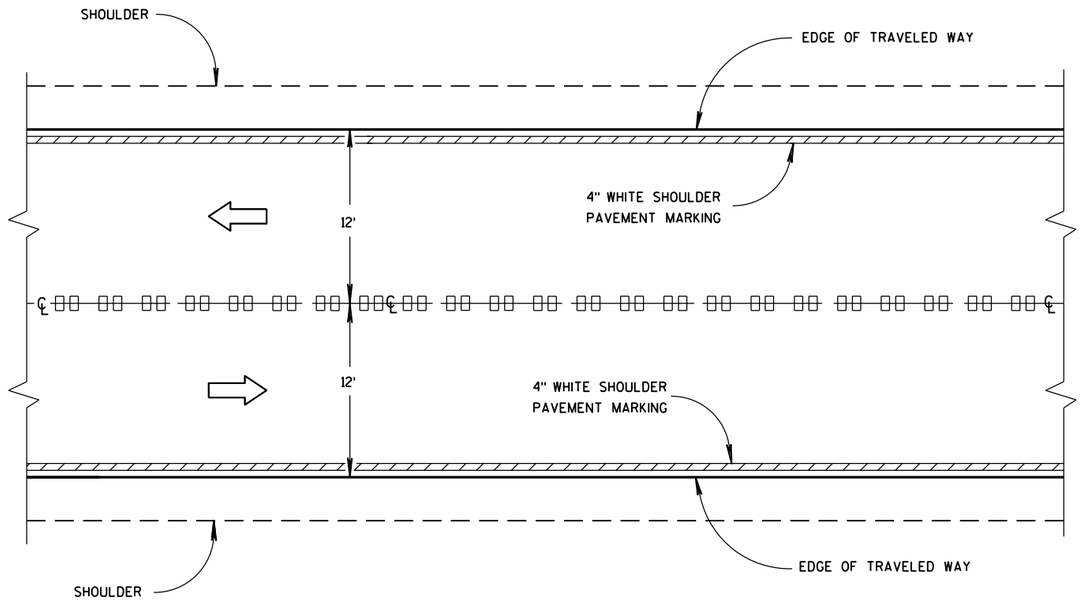


PLAN VIEW
(SINGLE GROOVE)

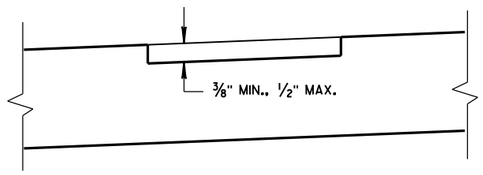


ISOMETRIC

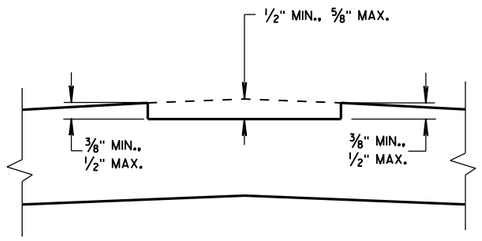
PLACEMENT DETAIL FOR MILLED RUMBLE STRIP



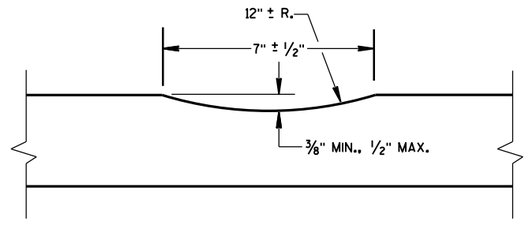
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY



SECTION A-A

6

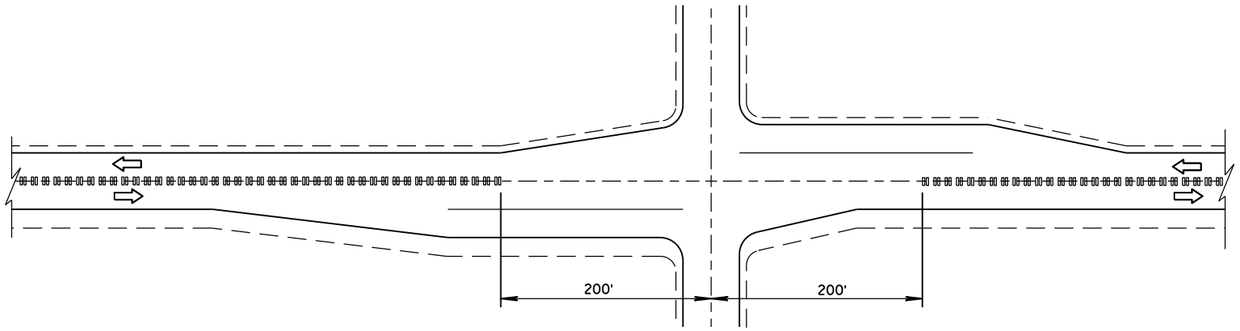
S.D.D. 13 A 11-2a

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

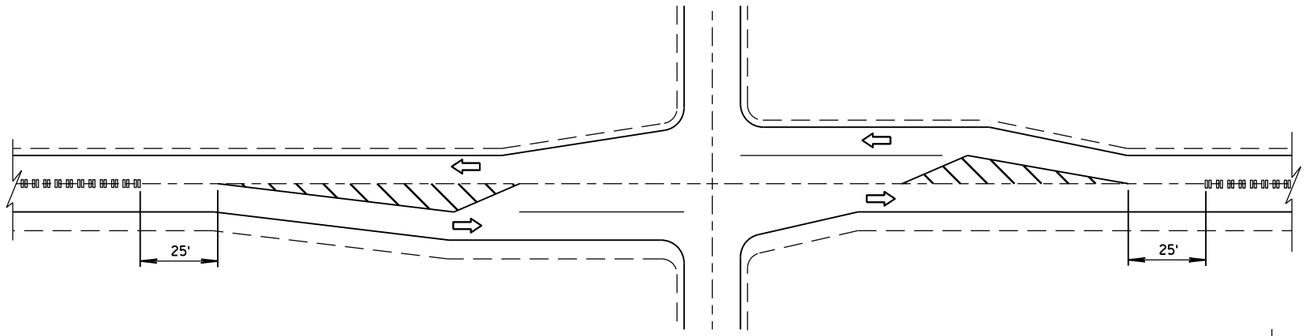
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

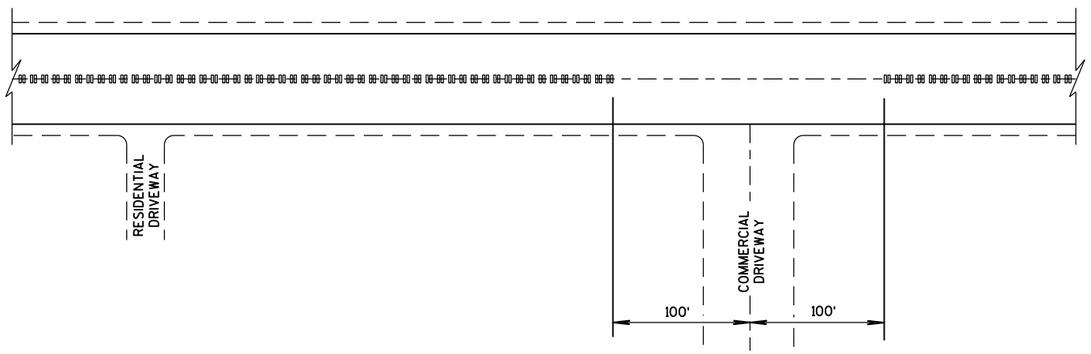
S.D.D. 13 A 11-2a



CENTER LINE GROOVES AT INTERSECTIONS

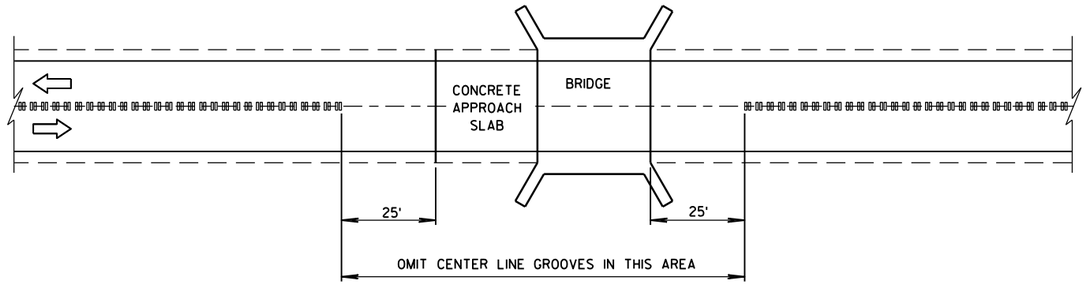


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

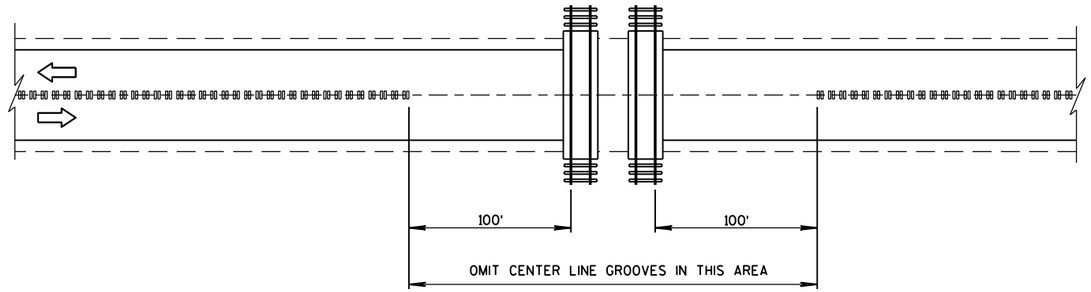


CENTER LINE GROOVES AT DRIVEWAYS (1)

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

6

S.D.D. 13 A 11-2b

6

S.D.D. 13 A 11-2b

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/15/2013
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

NT

FHWA

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.

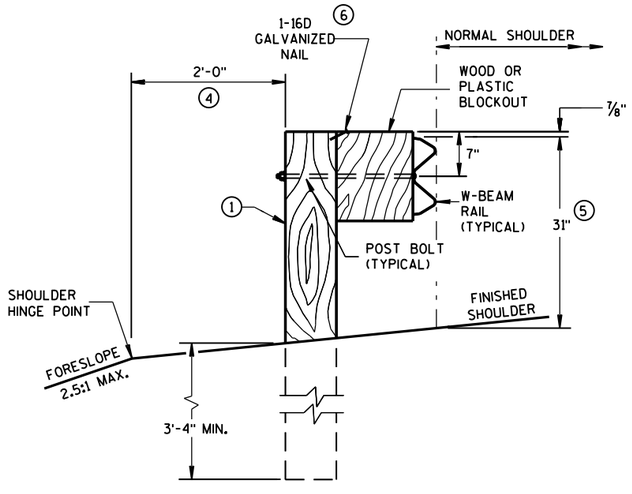
2. USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

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).

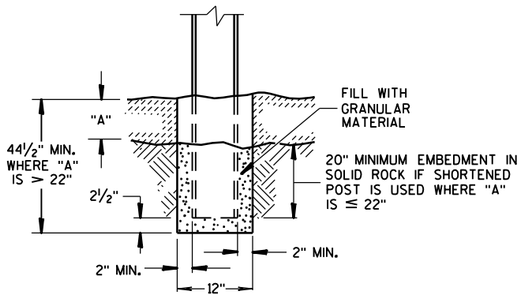
5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

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.



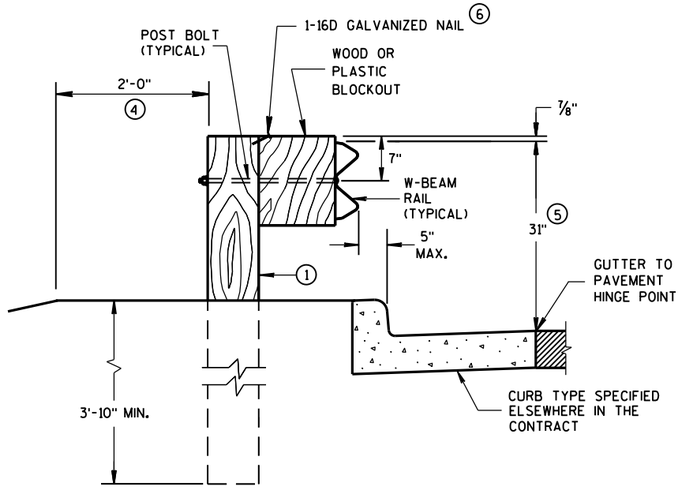
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



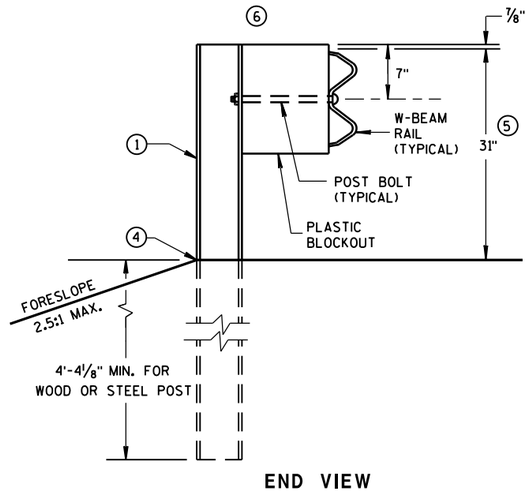
END VIEW

SETTING STEEL OR WOOD POST IN ROCK 3



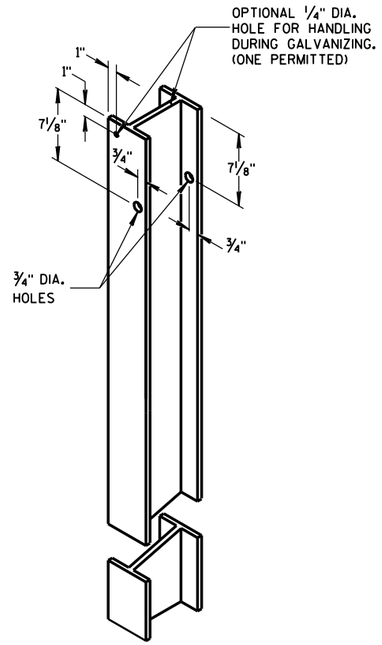
END VIEW

LOCATED ALONG A CURBED ROADWAY

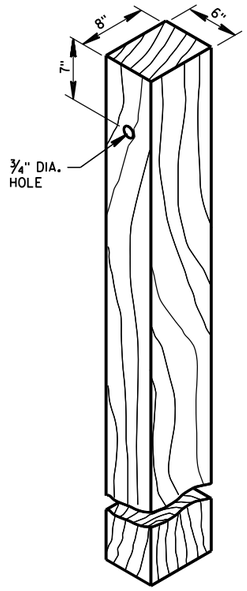


END VIEW

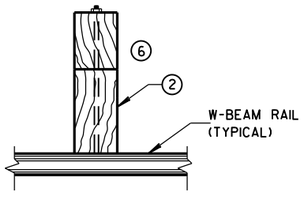
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



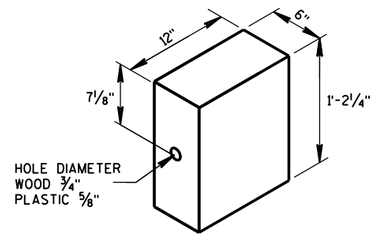
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) 1



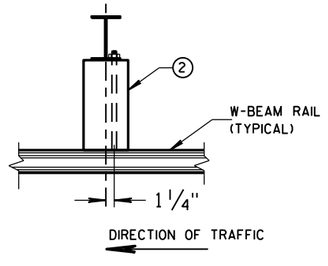
WOOD POST
(6" X 8") NOMINAL 1



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT 2

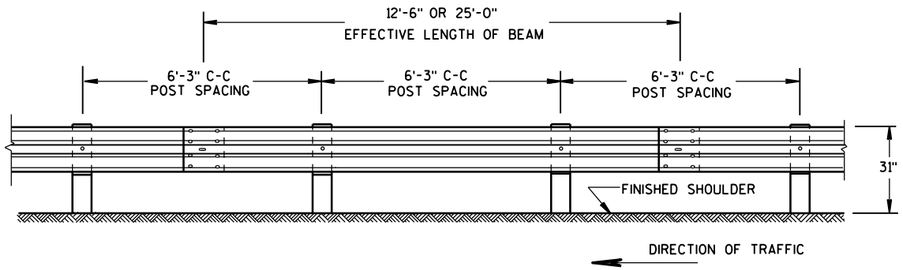


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

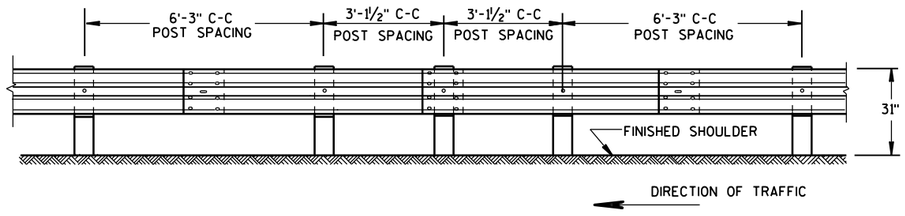
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 42-3a



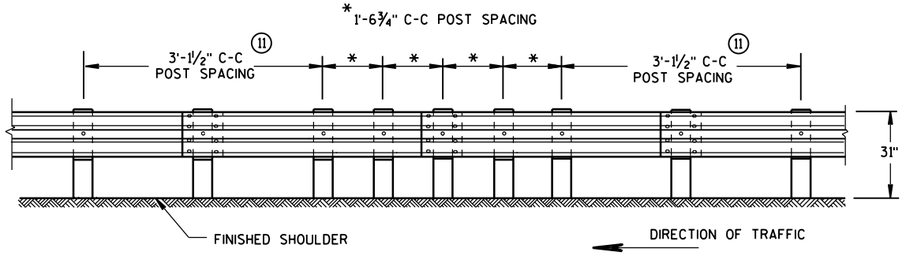
FRONT VIEW

POST SPACING STANDARD INSTALLATION



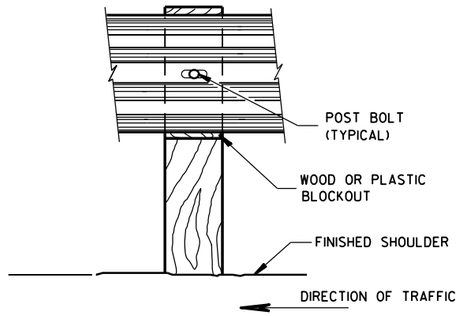
FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

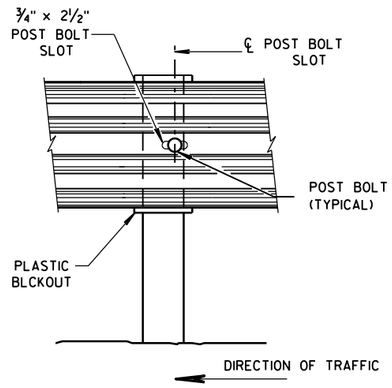


FRONT VIEW

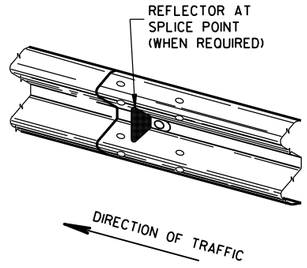
QUARTER POST SPACING (QS)

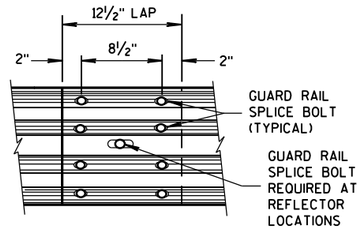


FRONT VIEW AT WOOD POST



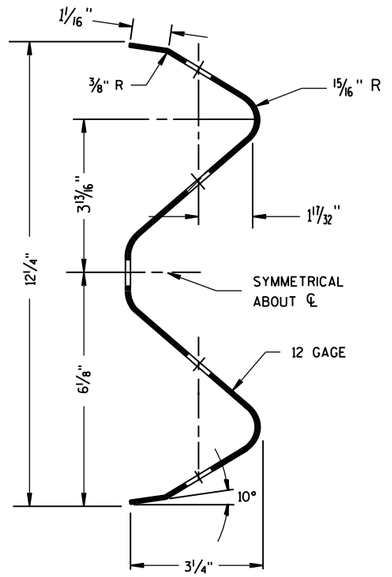
FRONT VIEW AT STEEL POST



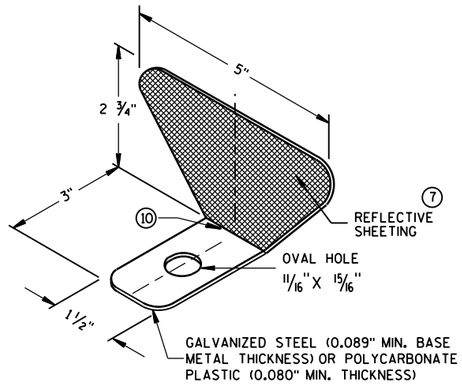


FRONT VIEW

MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ⑦

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 ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

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	

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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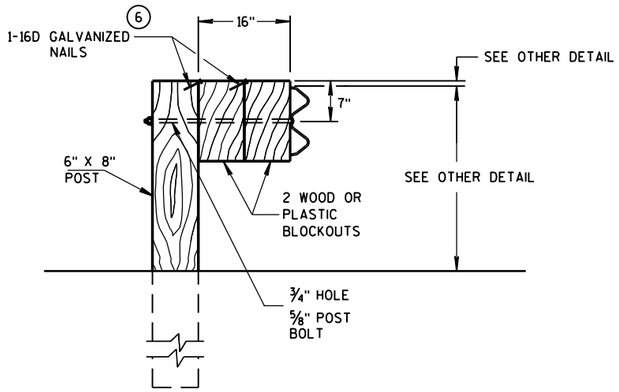
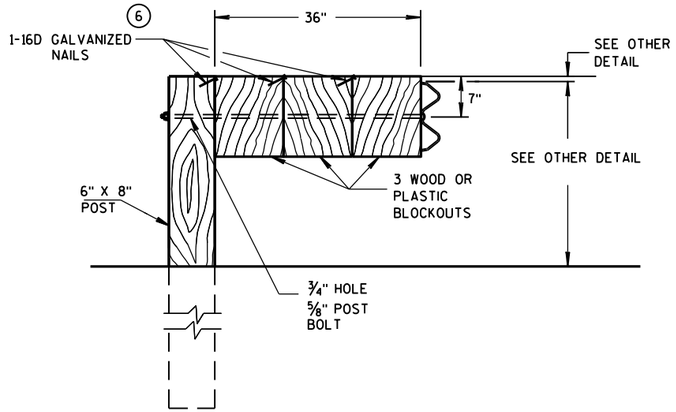
S.D.D. 14 B 42-3b



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.

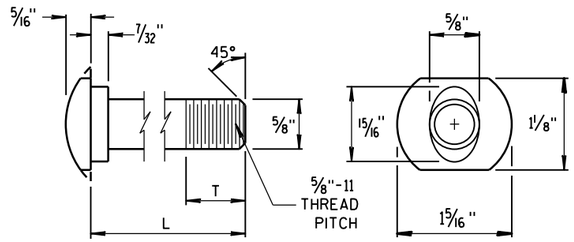


DETAIL FOR 36" BLOCKOUT DEPTH

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.

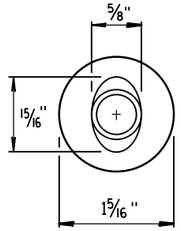
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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.

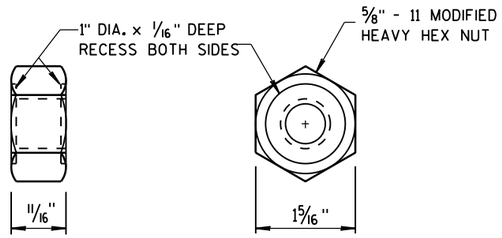


POST BOLT TABLE

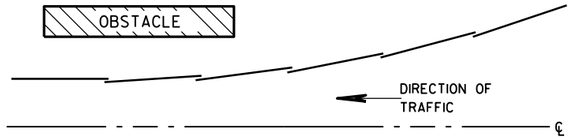
L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

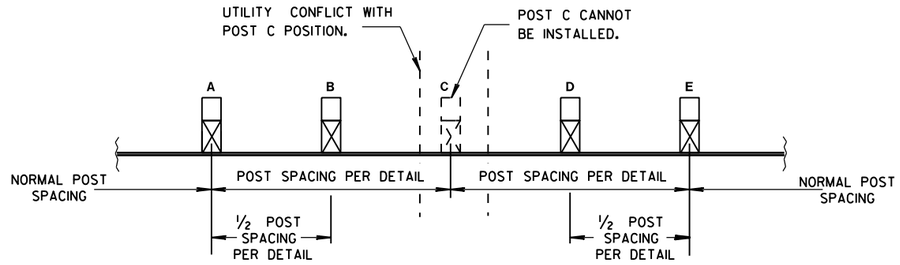


POST BOLT AND RECESS NUT

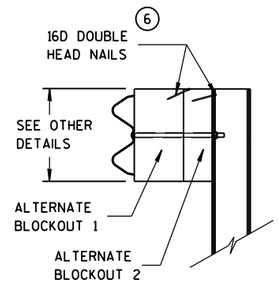


PLAN VIEW

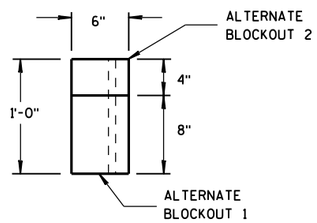
BEAM LAPPING DETAIL



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 DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 14 B 42-3c

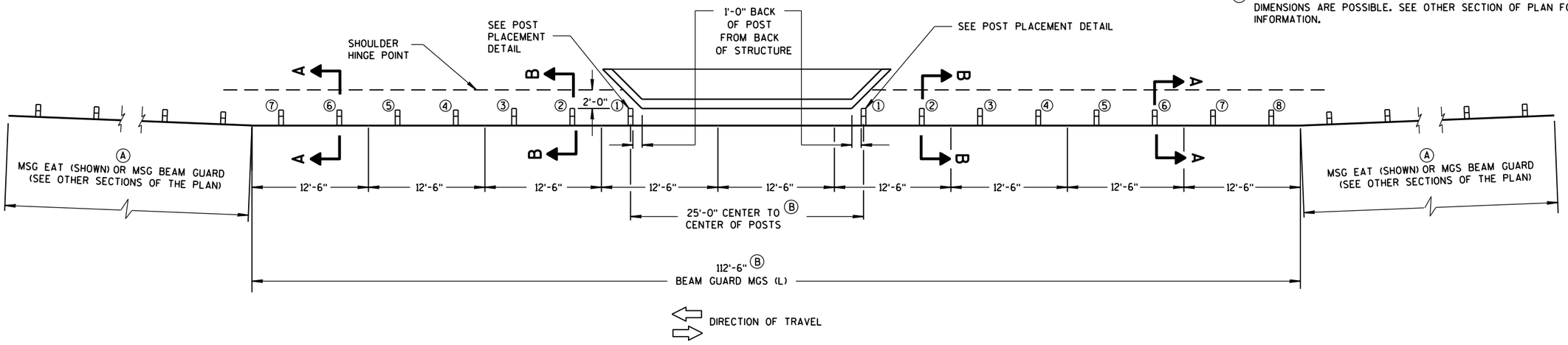
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

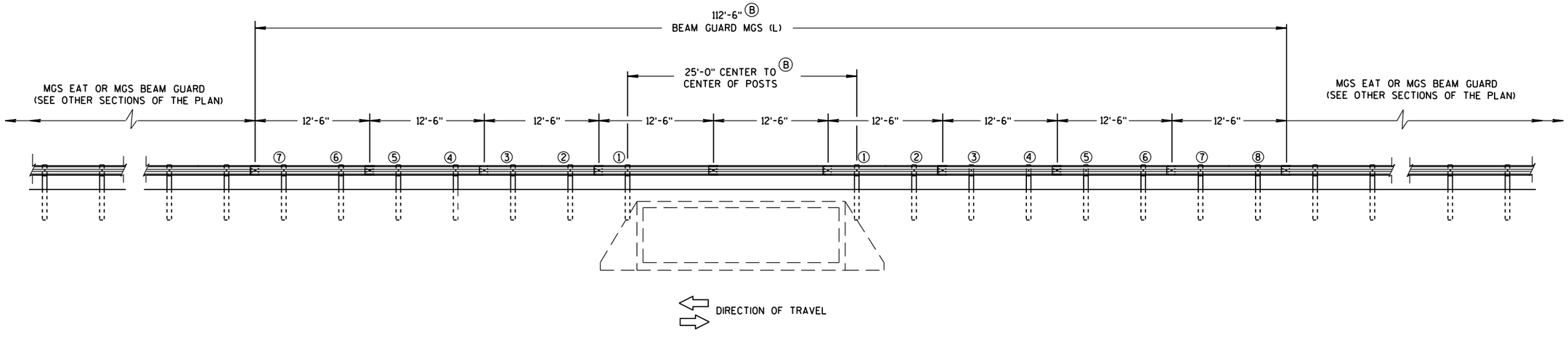
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) TWO-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPOI	132

6

S.D.D. 14 B 43-3a

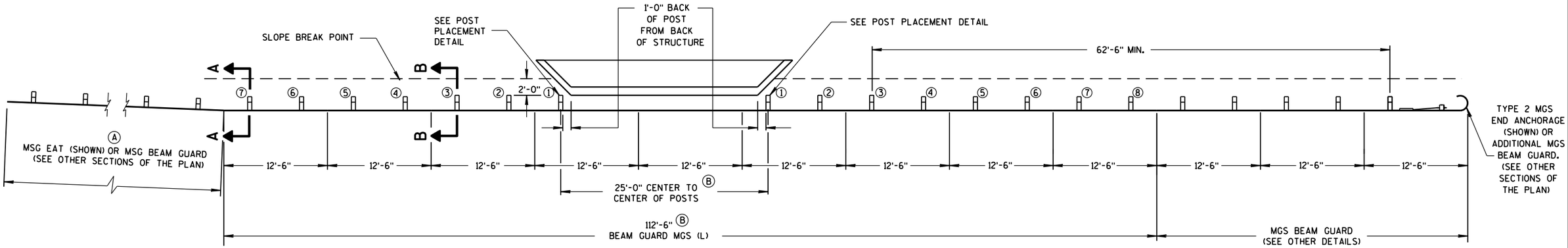
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

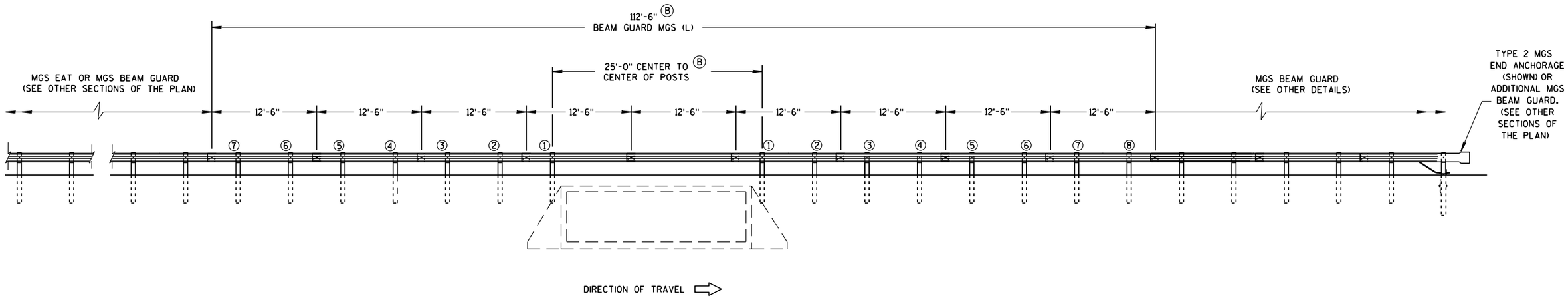
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

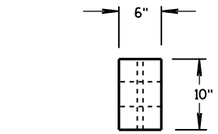
MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) ONE-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

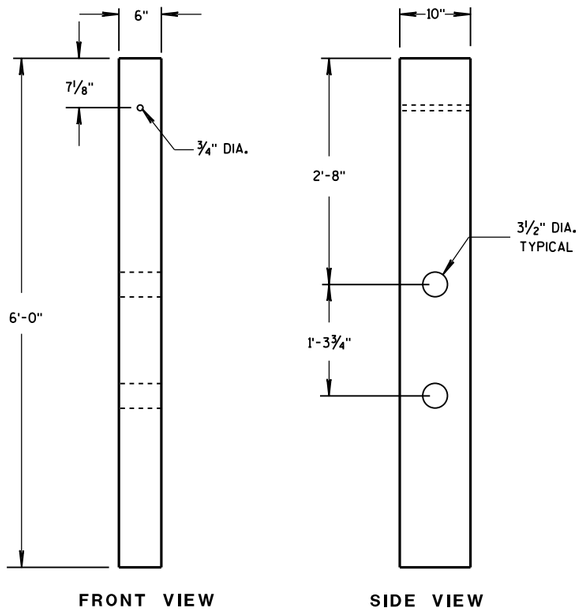
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 43-3b

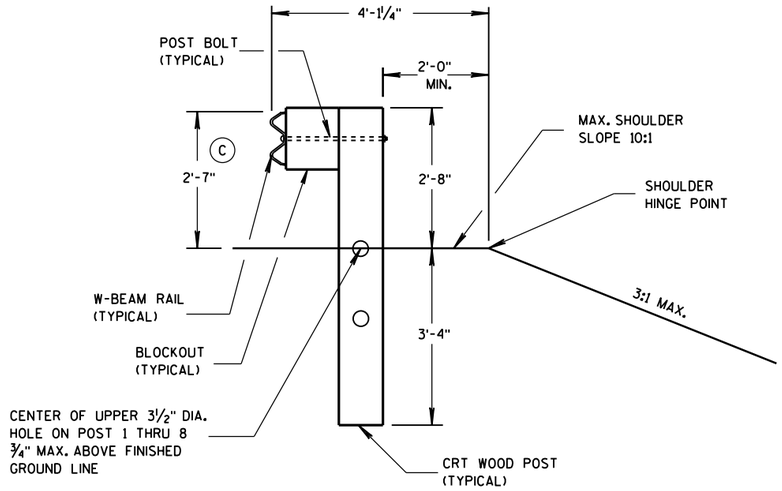


PLAN VIEW



FRONT VIEW SIDE VIEW

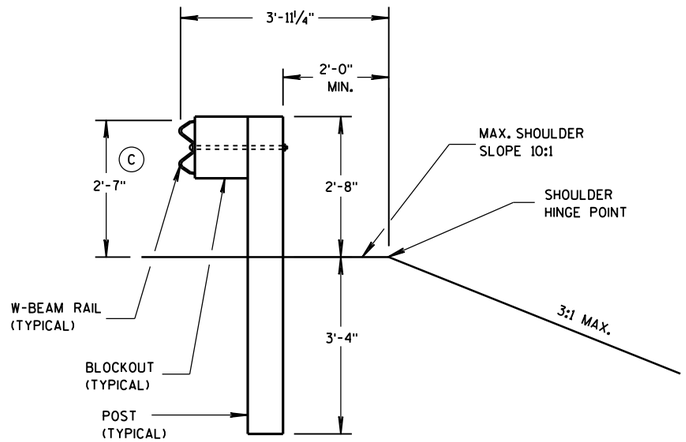
CRT WOOD POST



SECTION B-B

POSTS NO. 1-3

SEE OTHER DETAILS



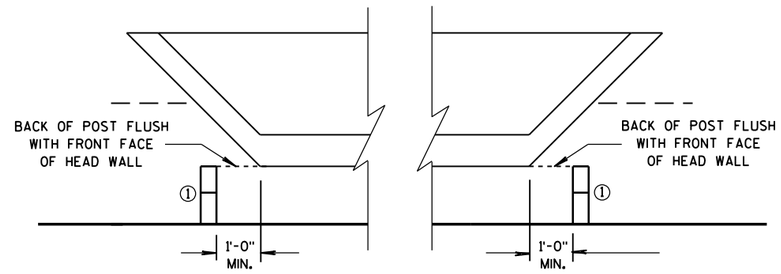
SECTION A-A

POSTS NO. 4-8

SEE OTHER DETAILS

GENERAL NOTES

(C) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



POST PLACEMENT DETAIL

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/10/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

6
S.D.D. 14 B 43-3c

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.

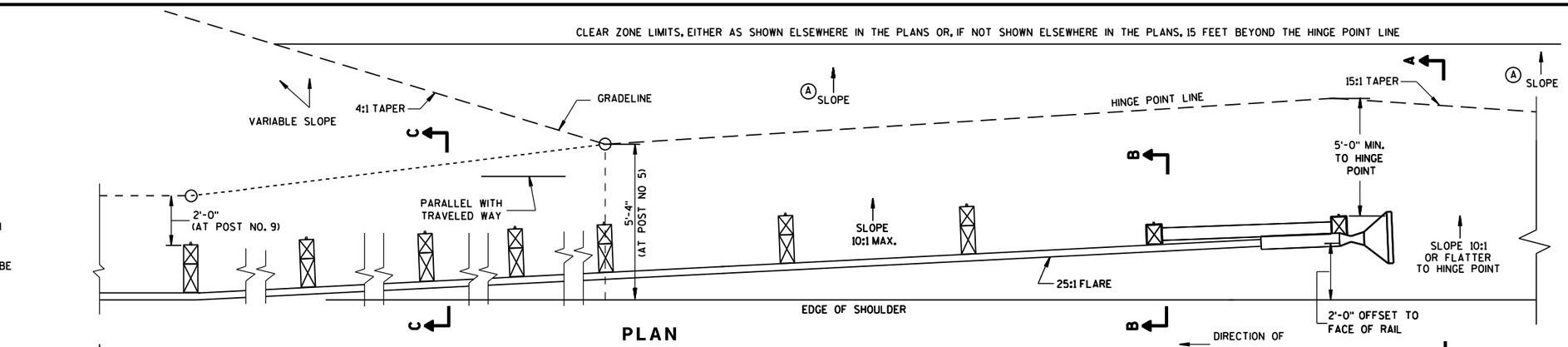
SEE SDD 14B42 FOR MORE INFORMATION.

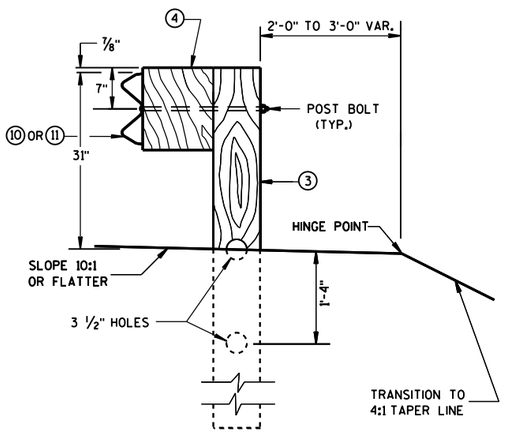
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

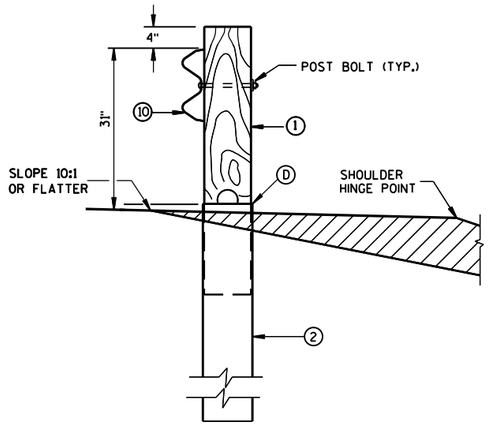
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

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.

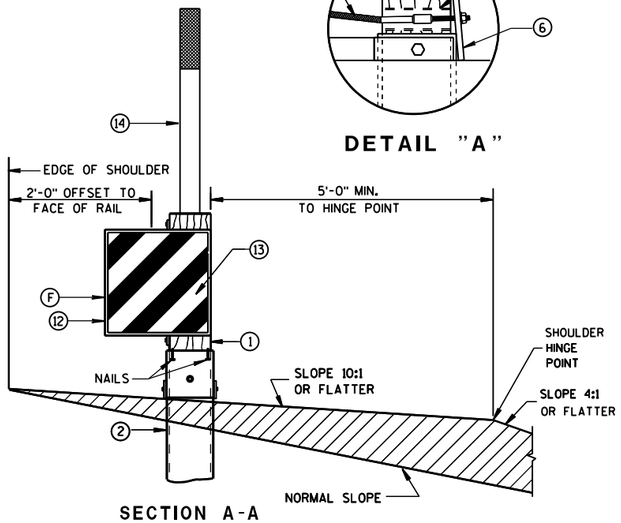




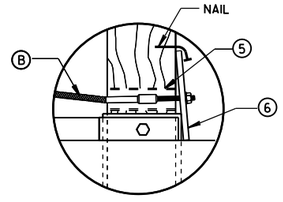
SECTION C-C
TYPICAL AT POST NOS. 3-9



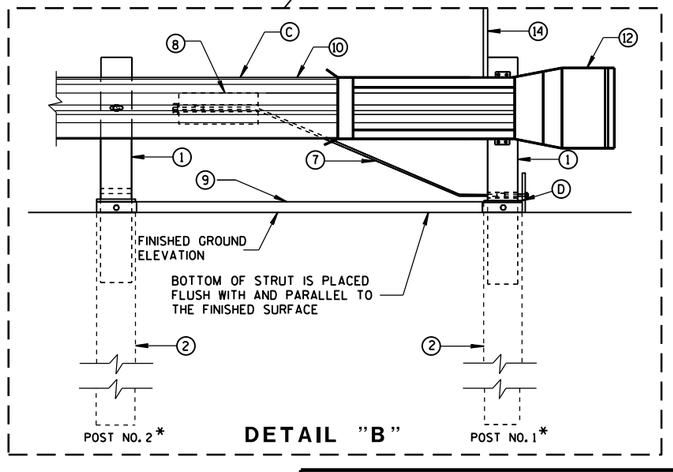
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



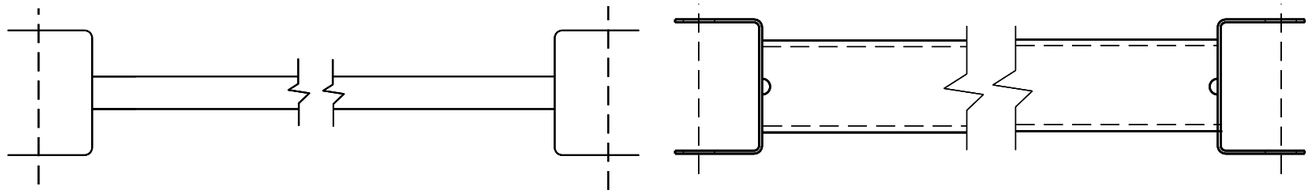
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

S.D.D. 14 B 44-2a

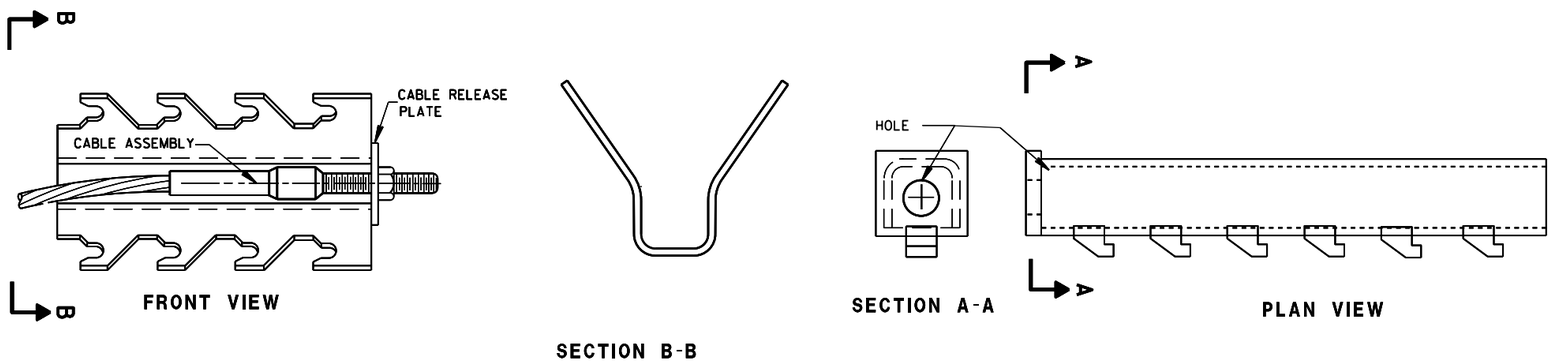
S.D.D. 14 B 44-2a



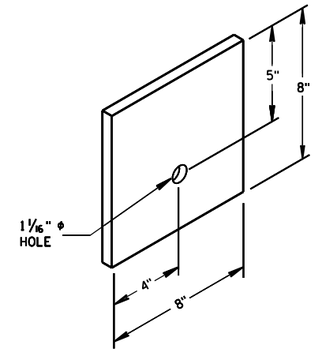
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



GENERIC ANCHOR CABLE BOX (8) (H)

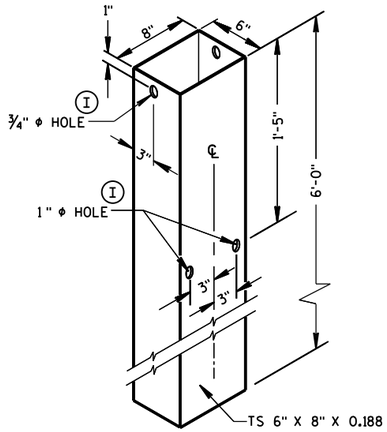


BEARING PLATE (6)

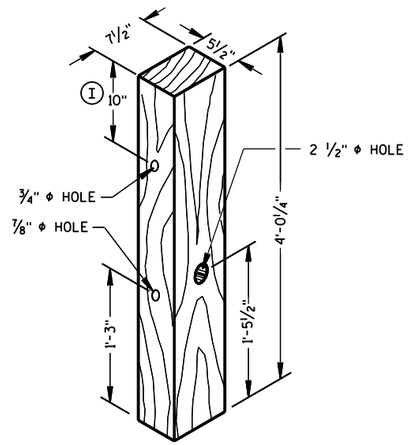
MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 44-2b

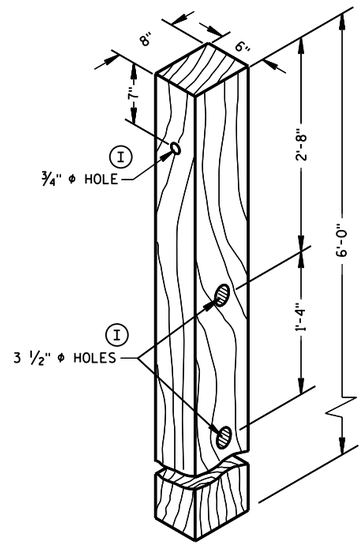


FOUNDATION TUBE (2)



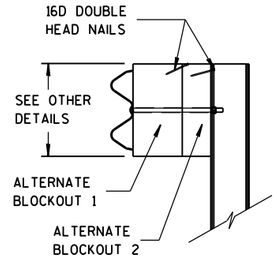
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

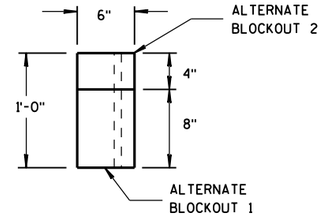


POSTS NUMBER 3-9

WOOD CRT POST (3)

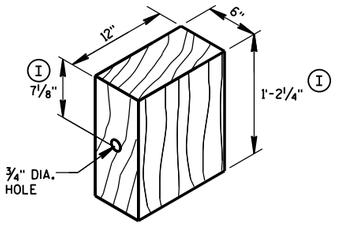


SIDE VIEW



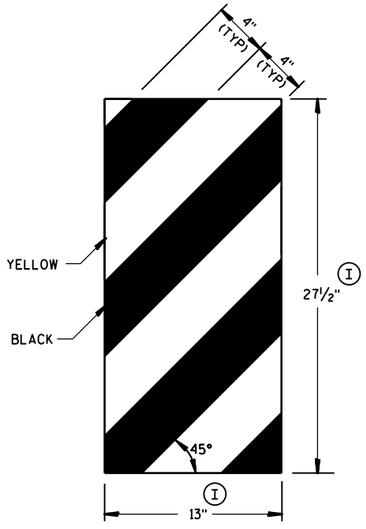
TOP VIEW

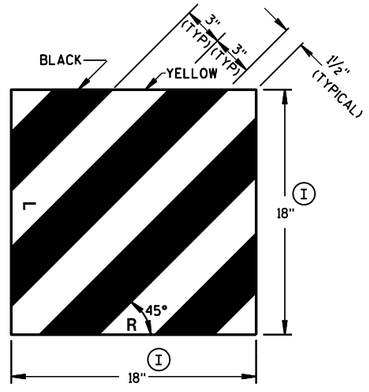
ALTERNATE WOOD BLOCKOUT DETAIL



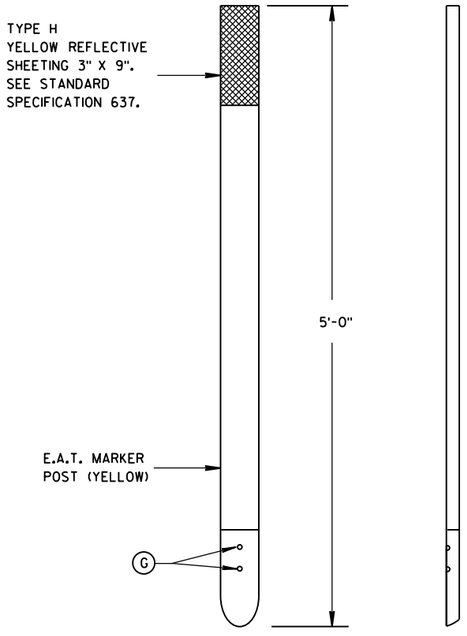
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





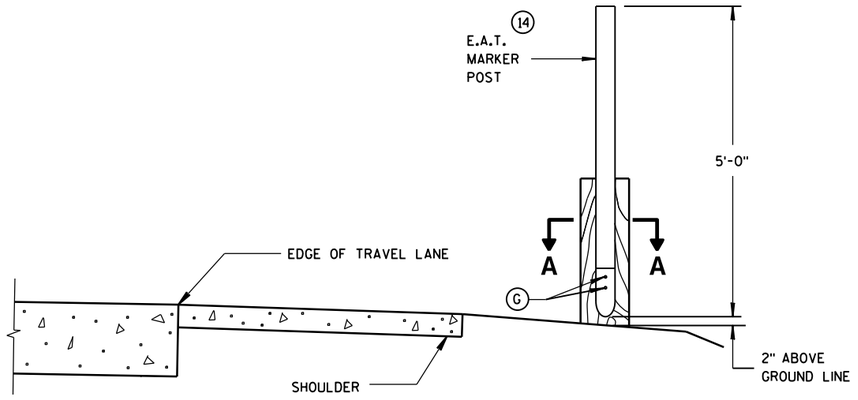
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

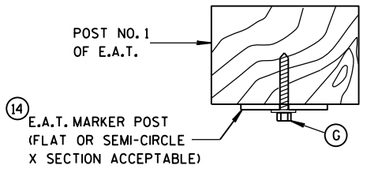
SIDE VIEW

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

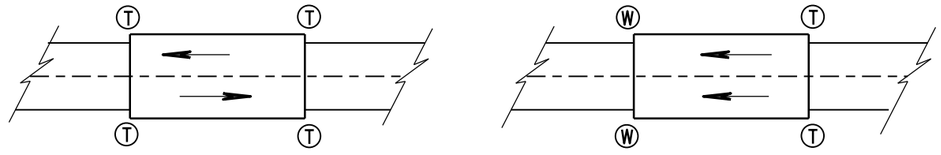
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

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



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

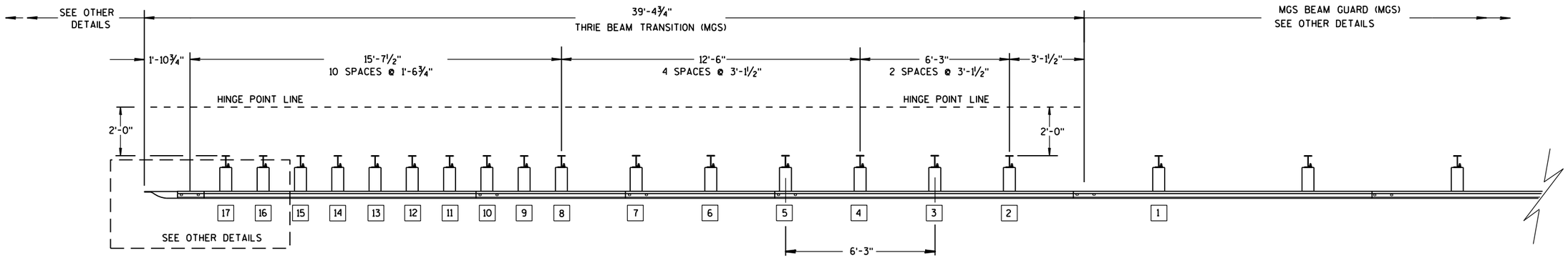
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

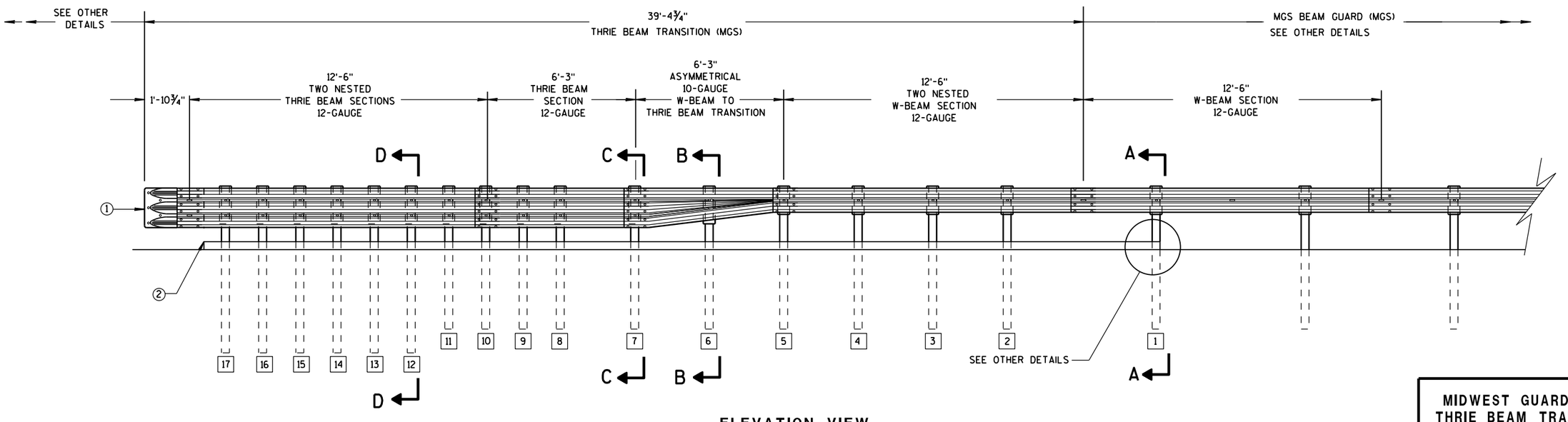
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-4a

6

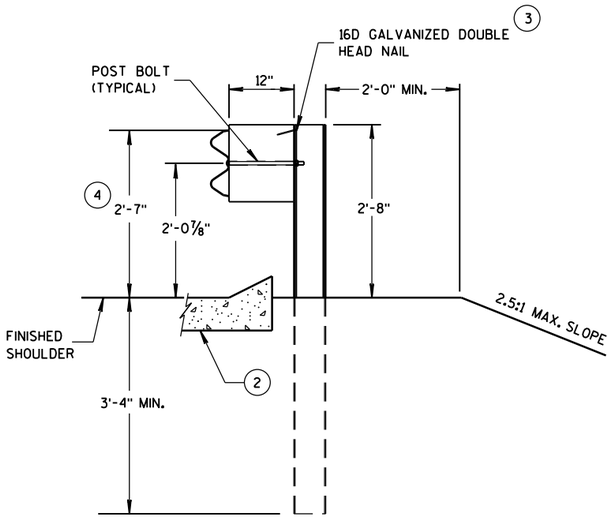
S.D.D. 14 B 45-4a

GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE_FEATURE SEE PLAN FOR INFORMATION.

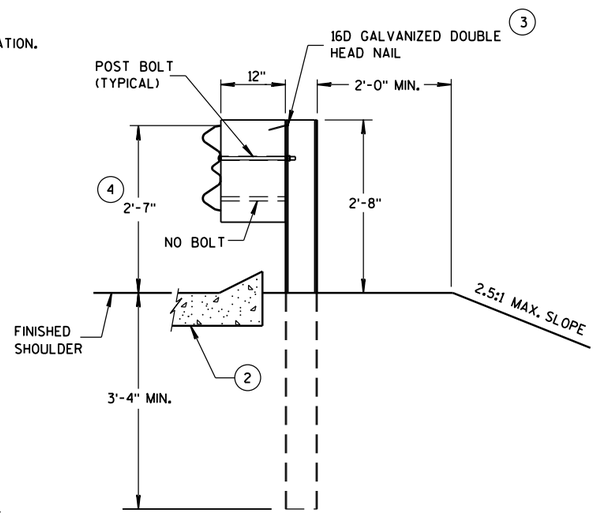
(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



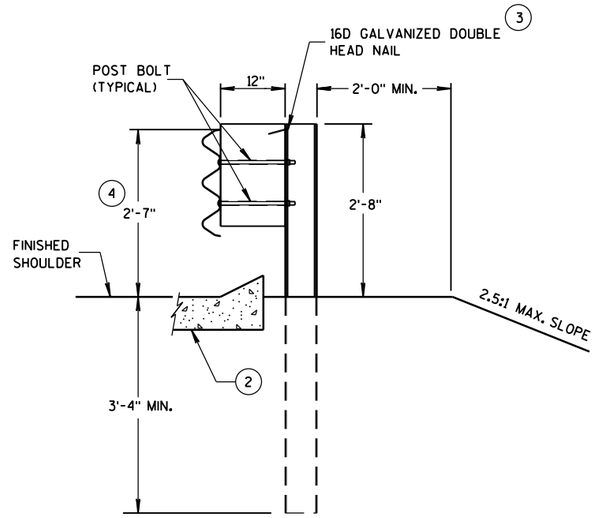
SECTION A-A

POSTS 1-5



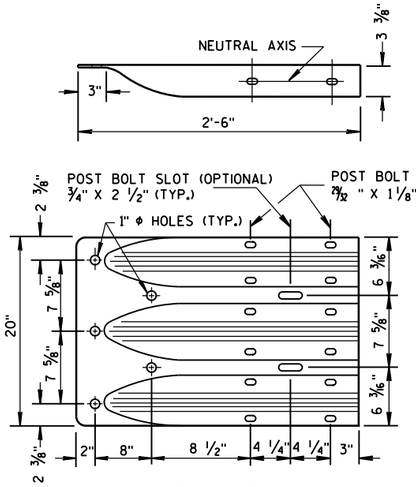
SECTION B-B

POST 6



SECTION C-C

POSTS 7-11



THRIE BEAM TERMINAL CONNECTOR

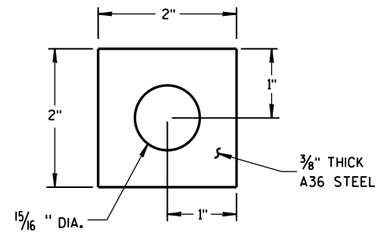
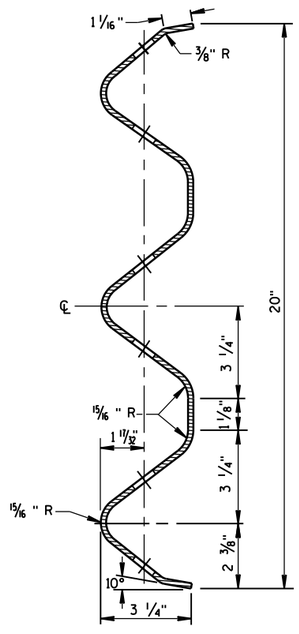
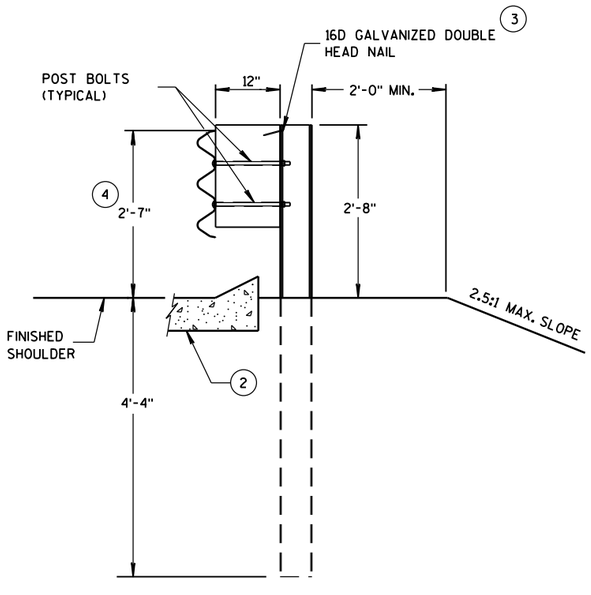


PLATE WASHER DETAIL

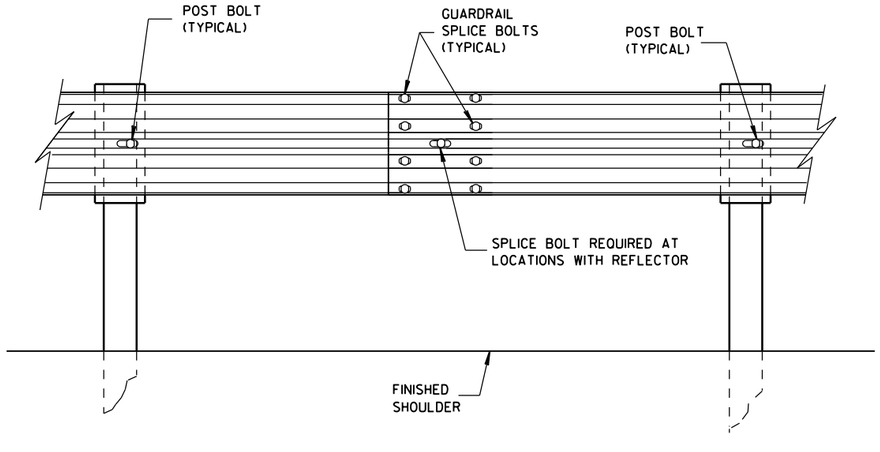


SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION D-D

POSTS 12-17



SPLICE DETAIL

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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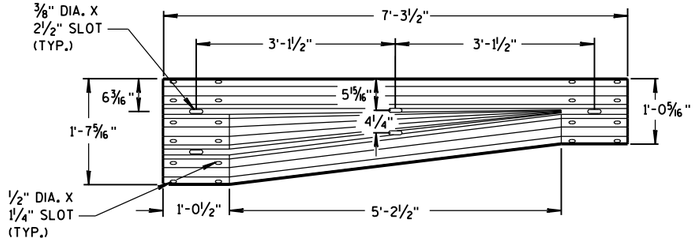
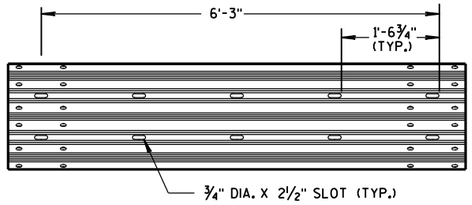
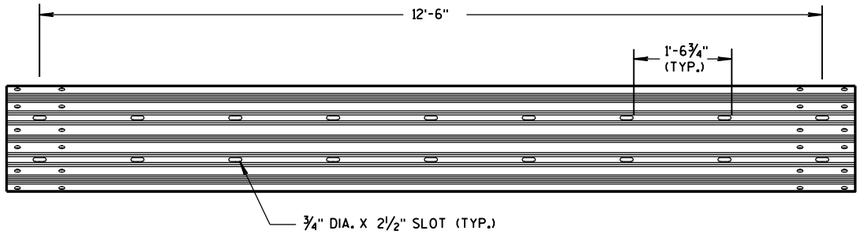


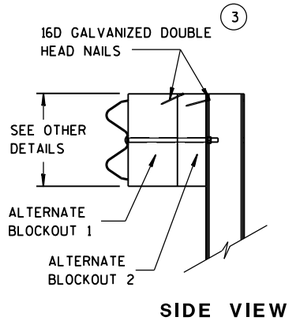
W-BEAM TO THRIE BEAM TRANSITION SECTION



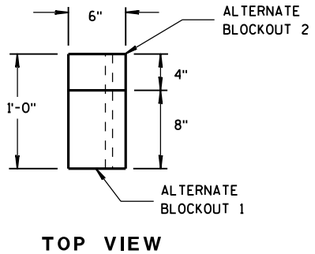
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

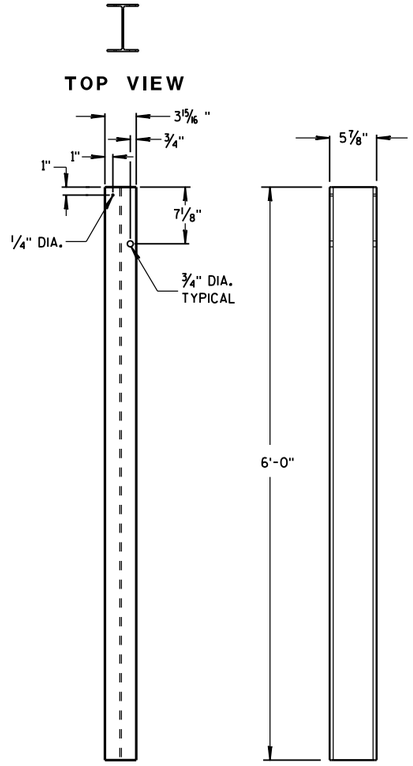


SIDE VIEW

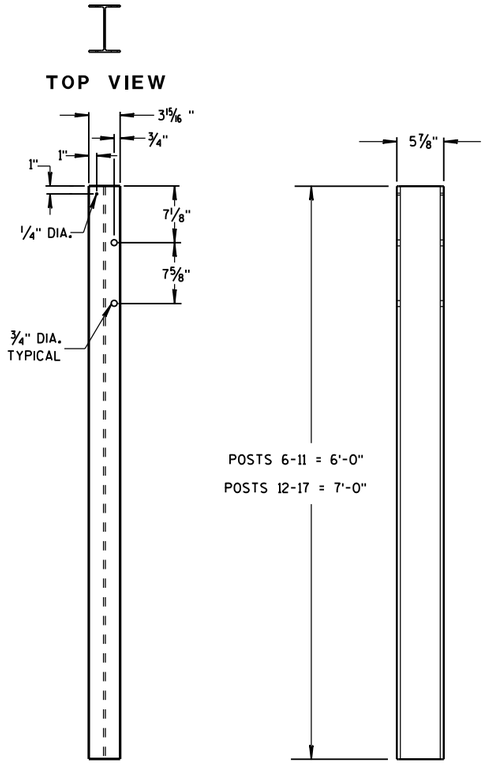


TOP VIEW

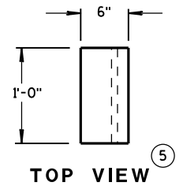
ALTERNATE WOOD BLOCKOUT DETAIL



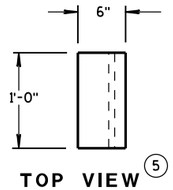
STEEL POSTS 1-5



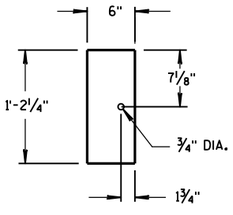
STEEL POSTS 6-17



TOP VIEW (5)

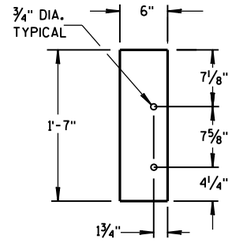


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS 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.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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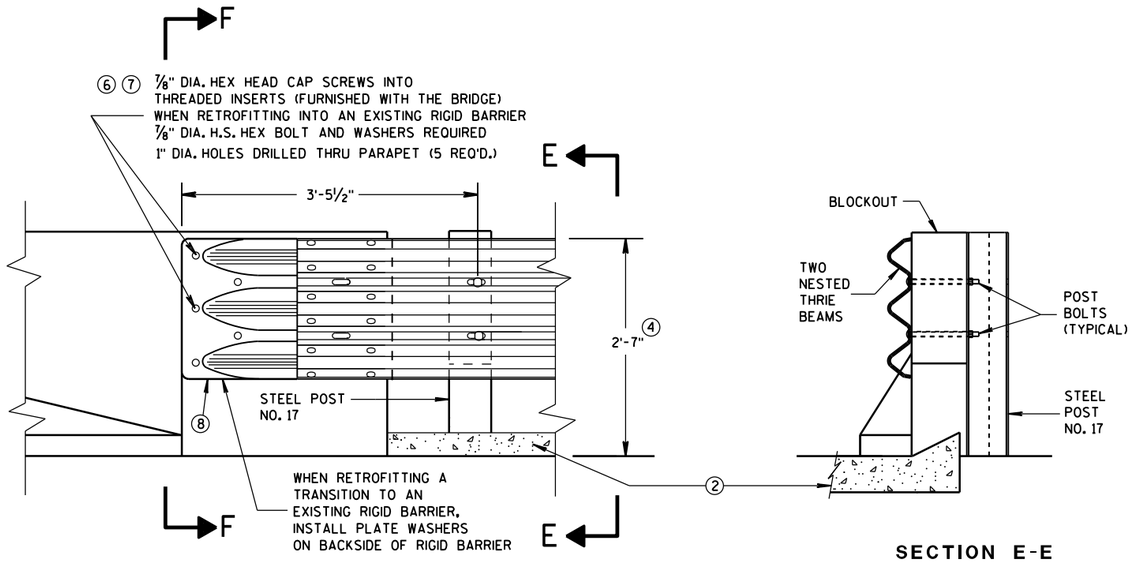
S.D.D. 14 B 45-4c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

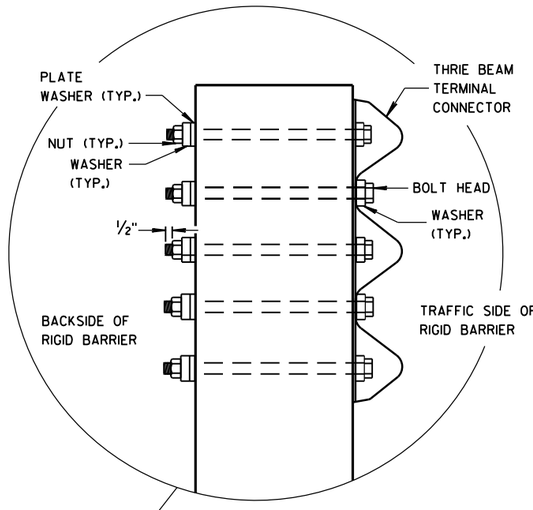
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

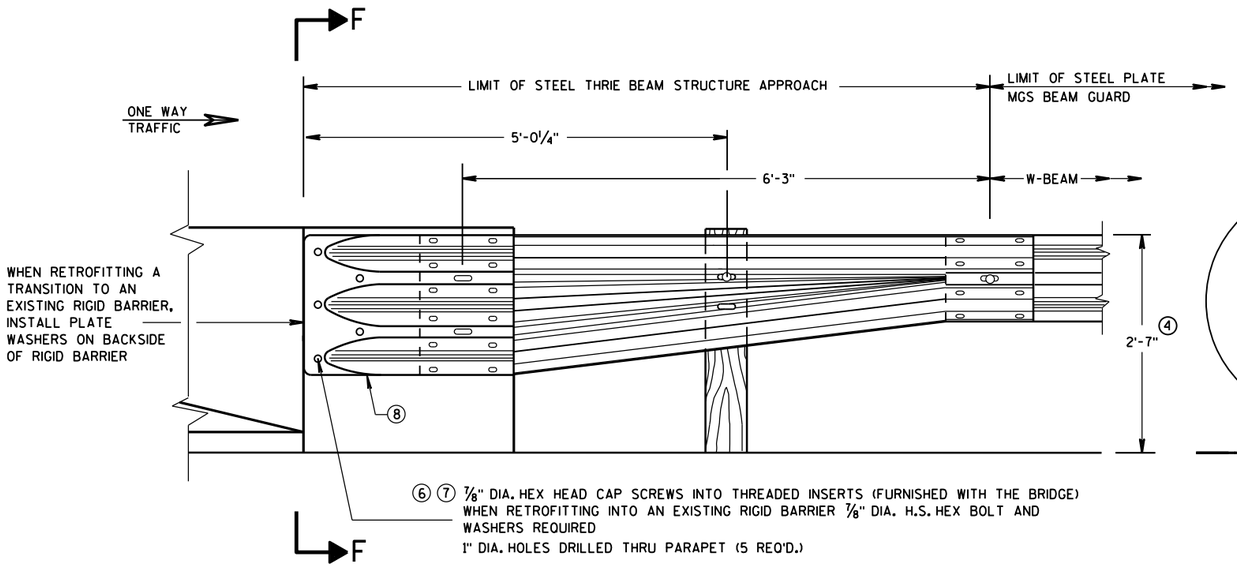
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

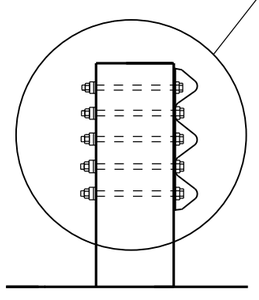
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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.

⑧ 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".

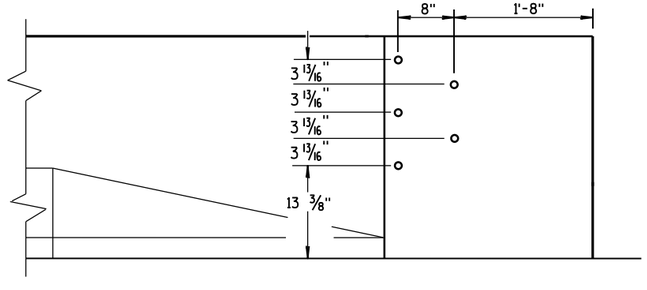




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

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
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 14 B 45-4d

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S.D.D. 14 B 45-4d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

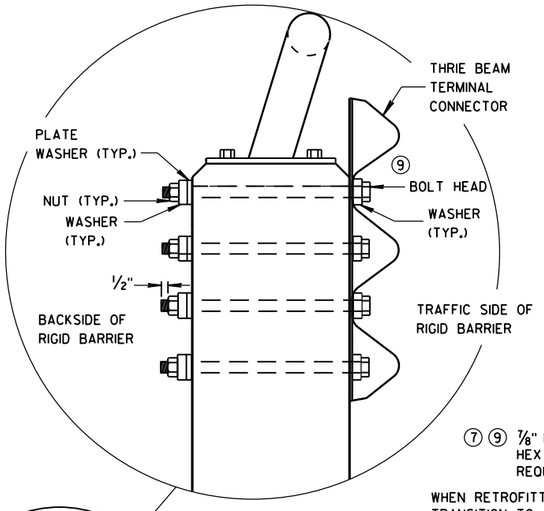
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

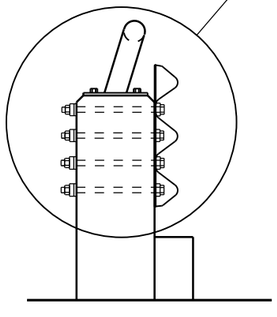
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) 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.

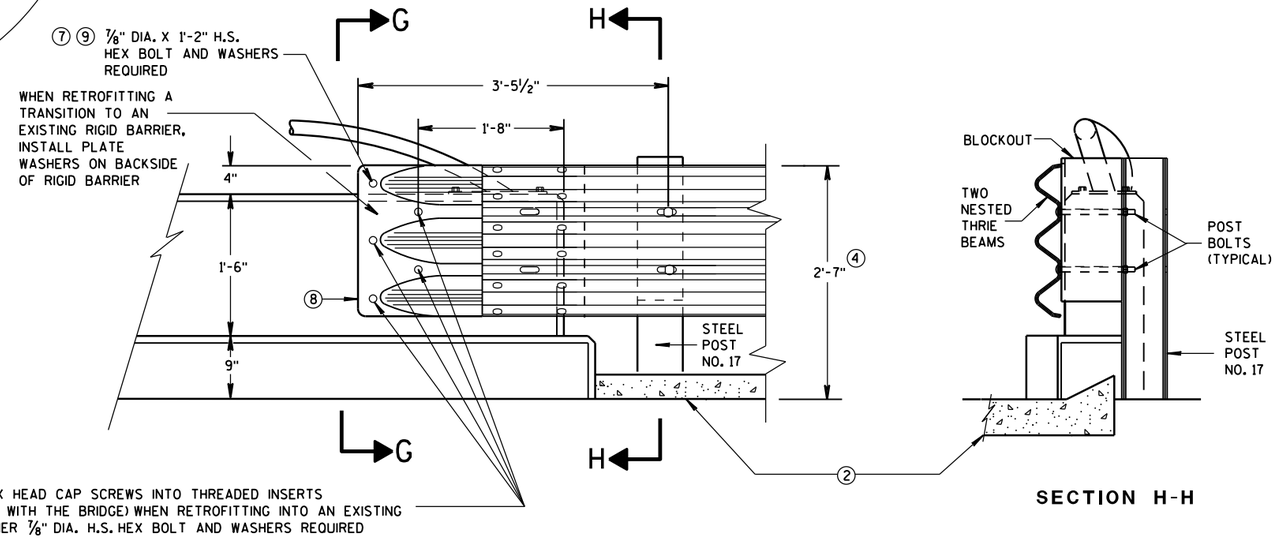
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

(9) 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.





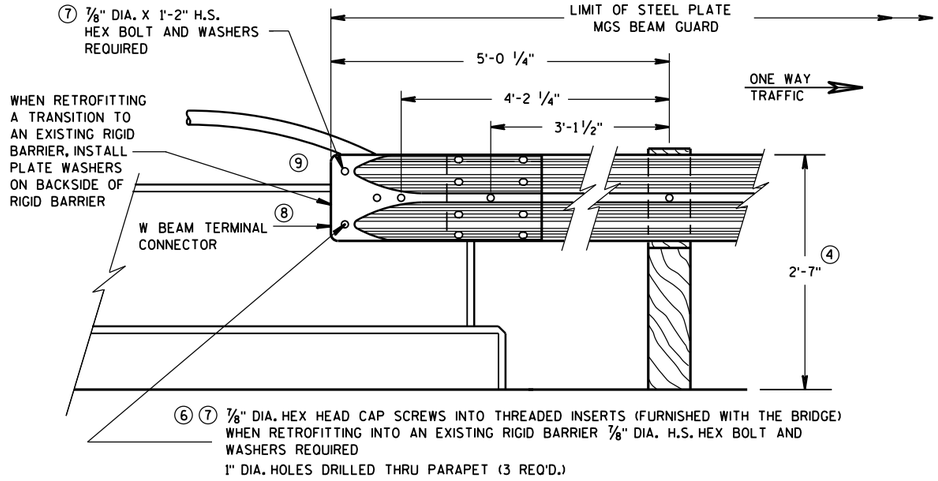
SECTION G-G



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

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
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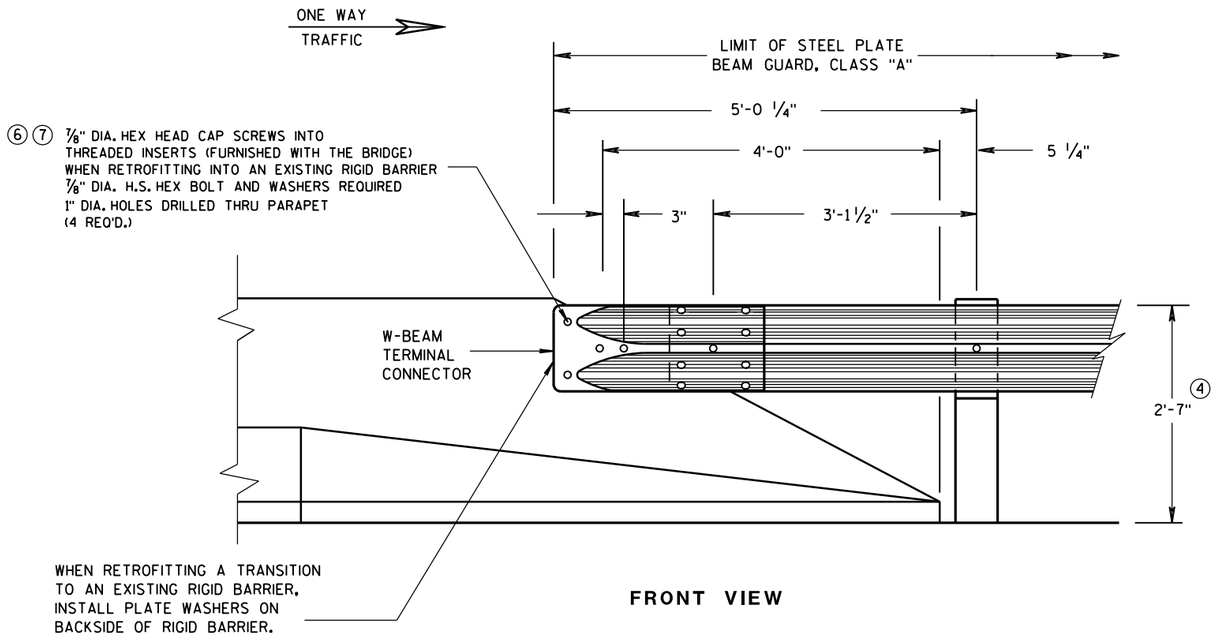


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

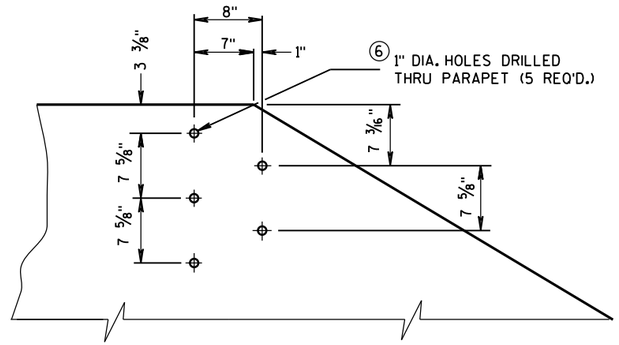
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

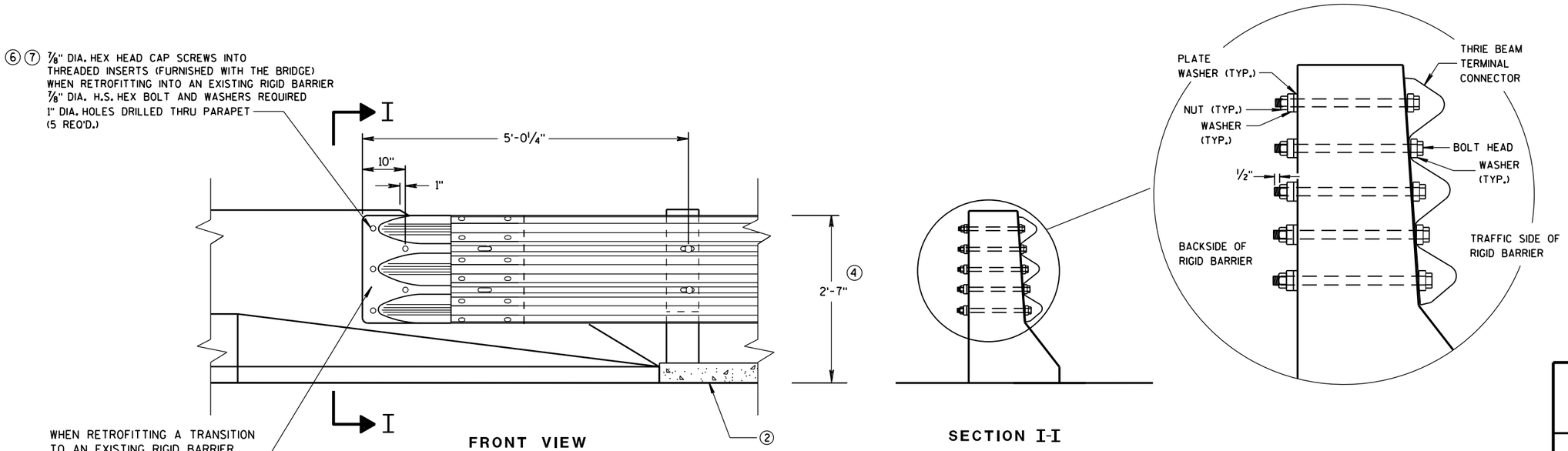
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

⑦ 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.



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

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
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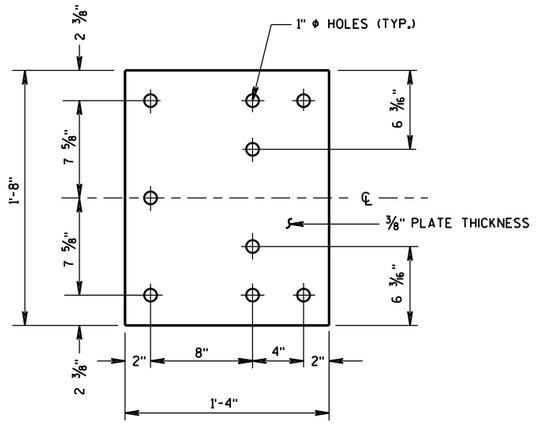
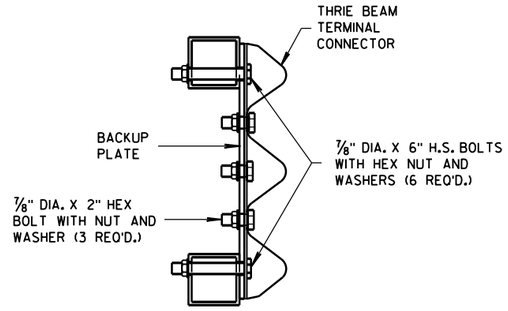
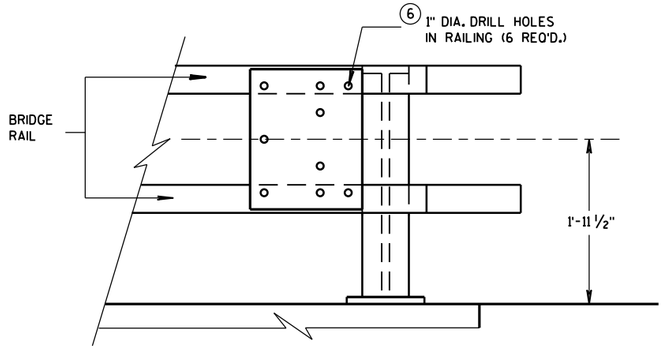


BACK-UP PLATE DETAIL



SECTION J-J

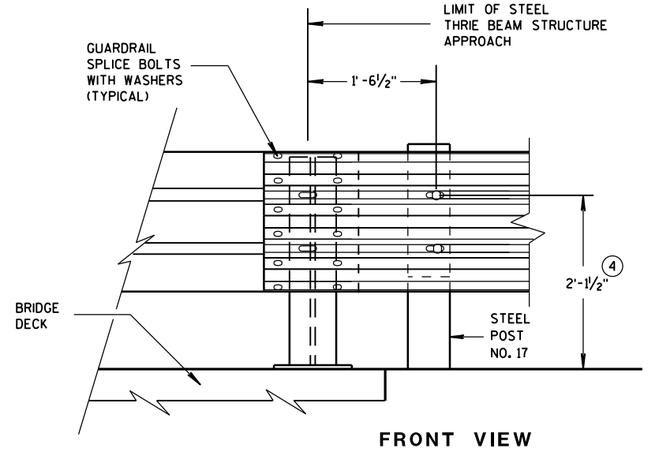


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

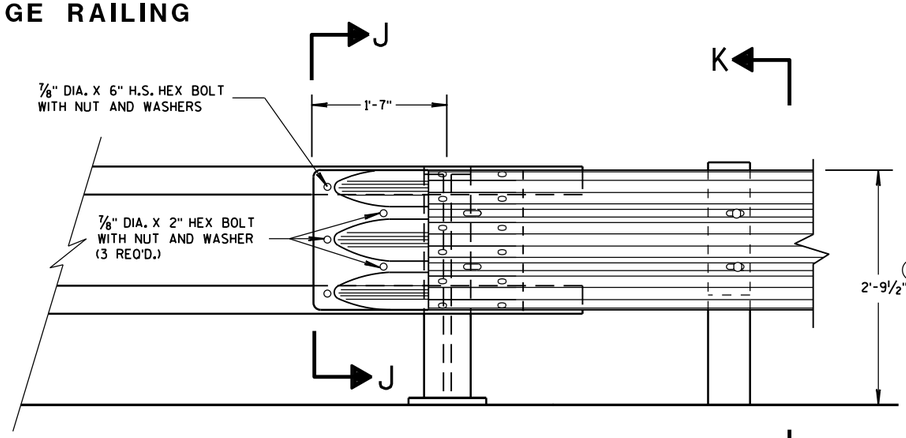
4 TOLERANCE FOR TOP OF BEAM IS ± 1".

6 DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

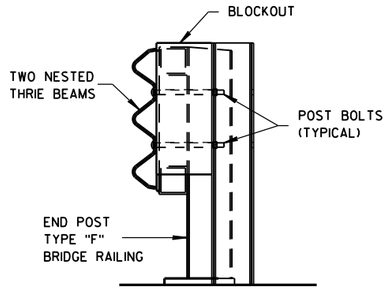


FRONT VIEW

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
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
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S.D.D. 14 B 45-4g

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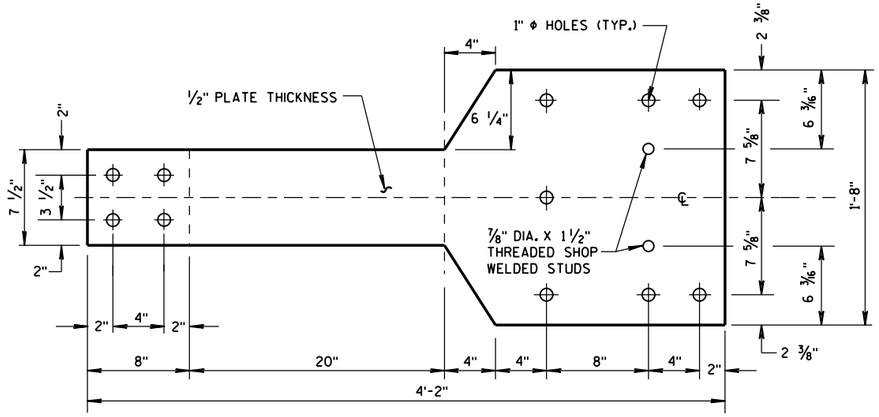
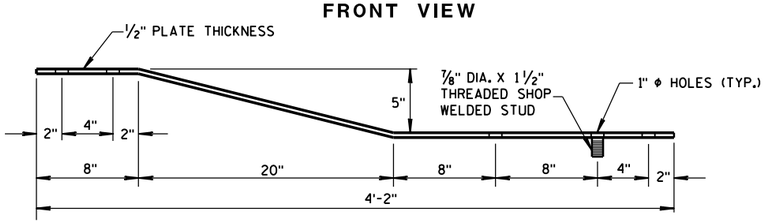
S.D.D. 14 B 45-4g

GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

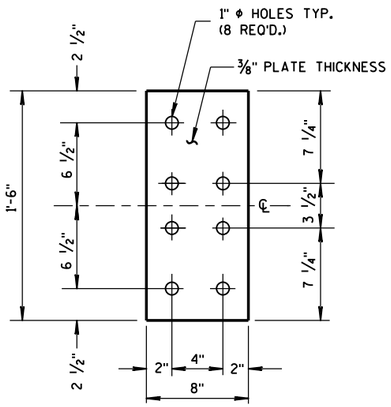


FRONT VIEW



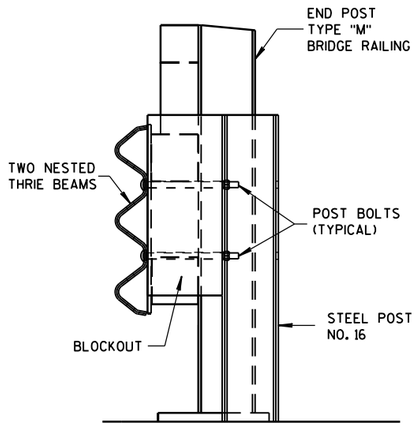
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

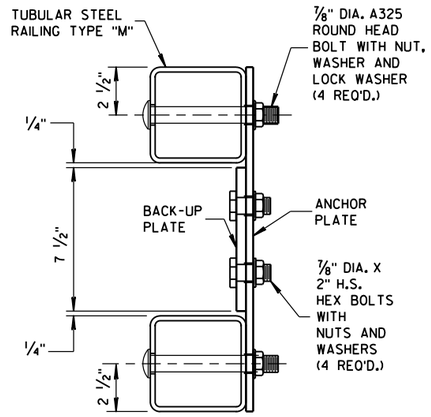


FRONT VIEW

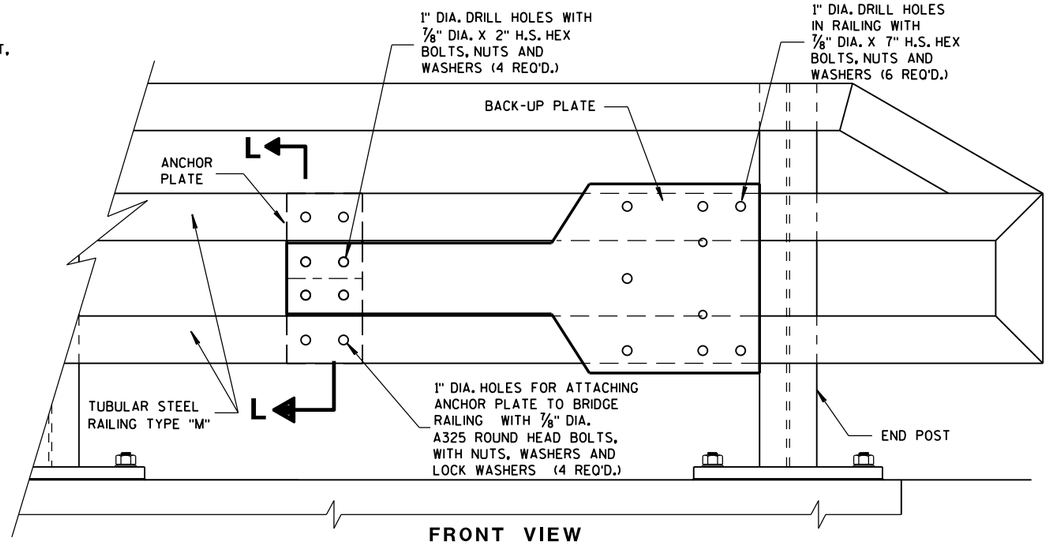
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

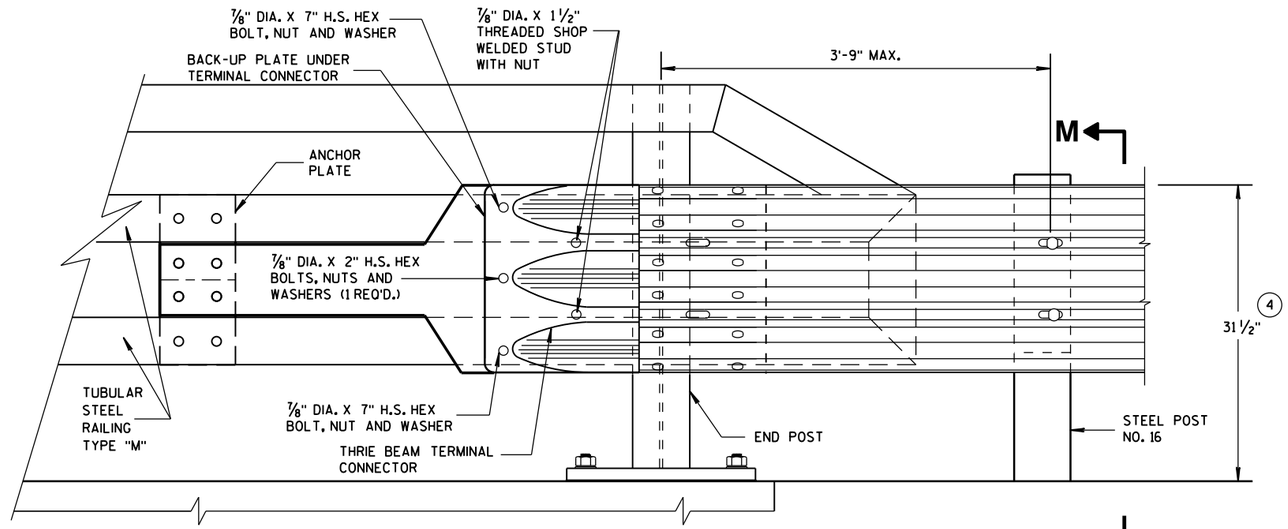


SECTION L-L

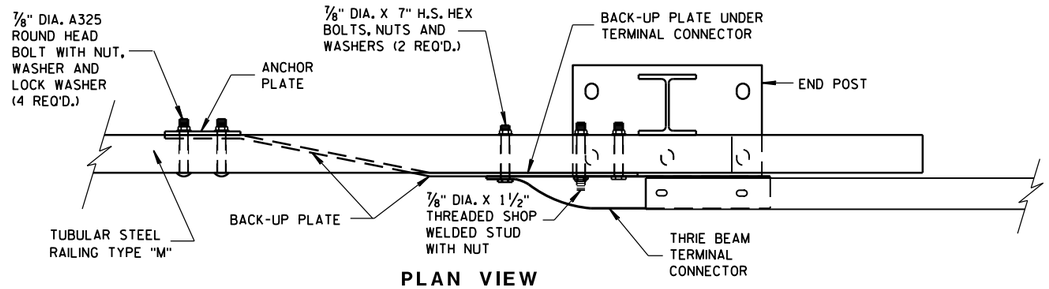


FRONT VIEW

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
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 14 B 45-4h

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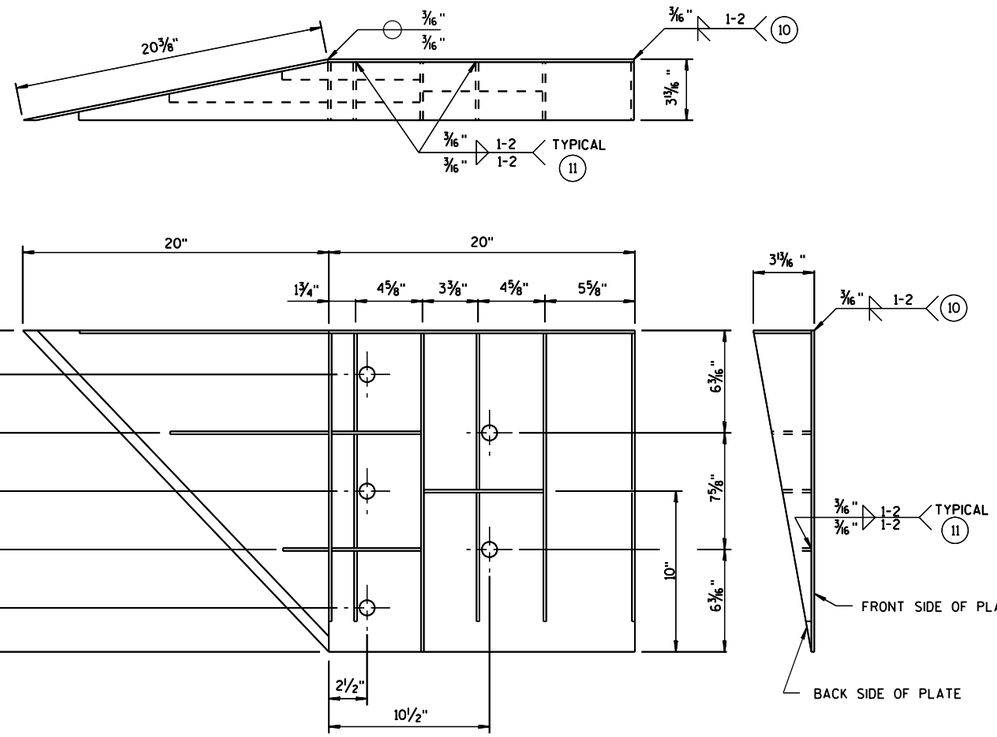

WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

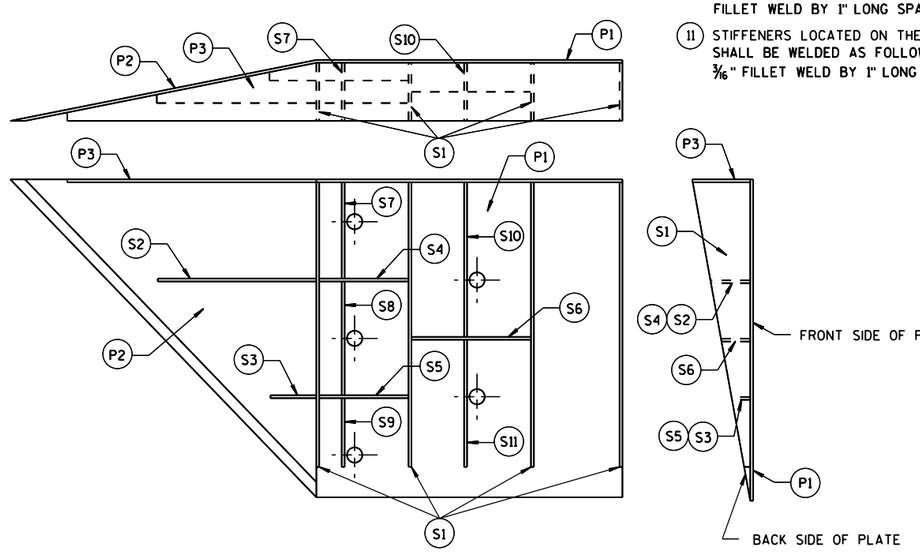

PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

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.

(10) 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.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

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 3/8" 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 1/32"	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
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
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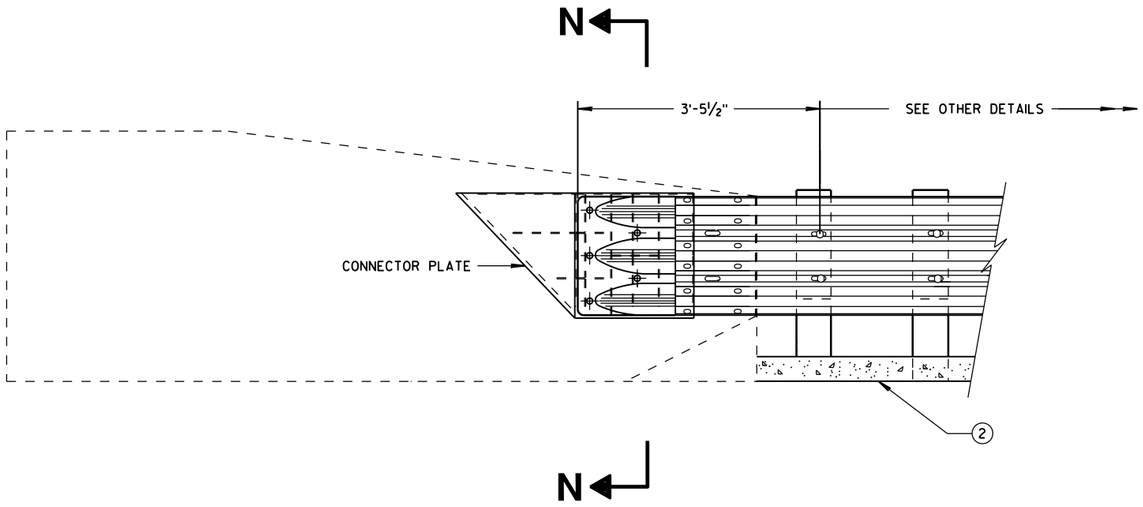
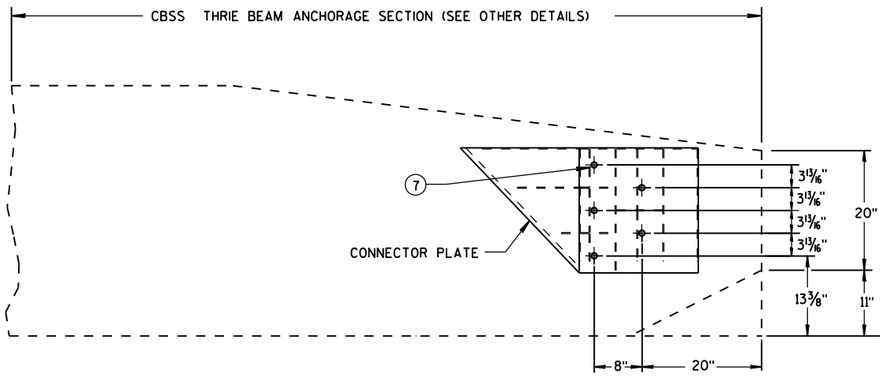


THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



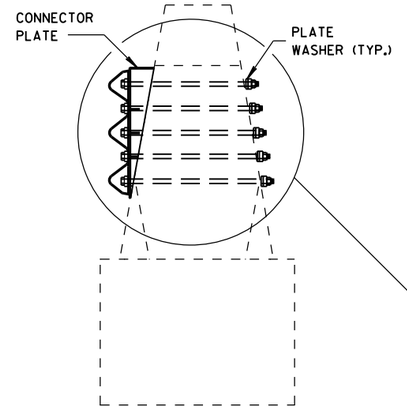
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

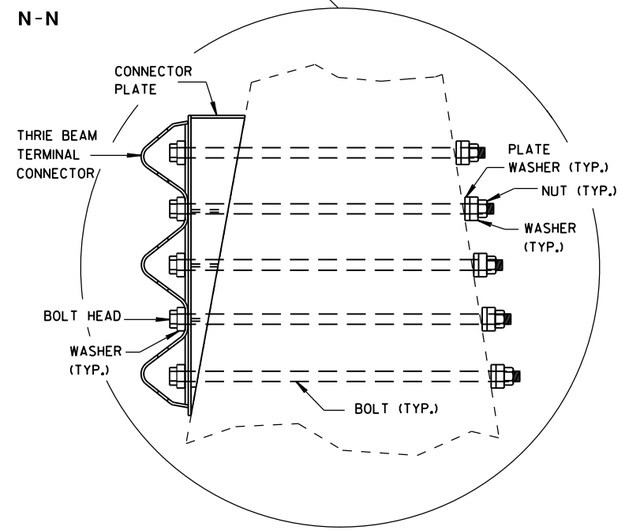
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) 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
June, 2015 — DATE
/S/ Jerry H. Zoga — ROADWAY STANDARDS DEVELOPMENT ENGINEER
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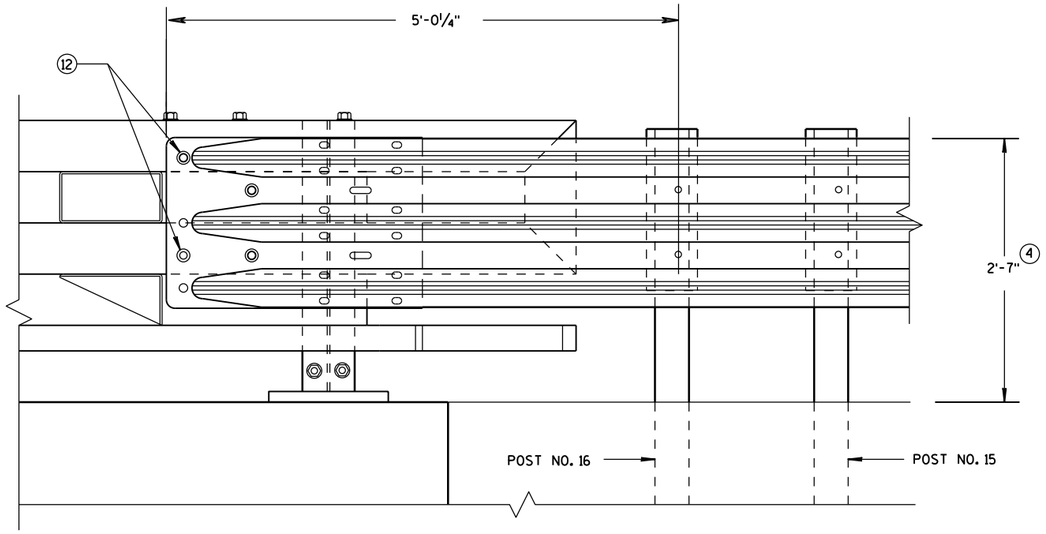
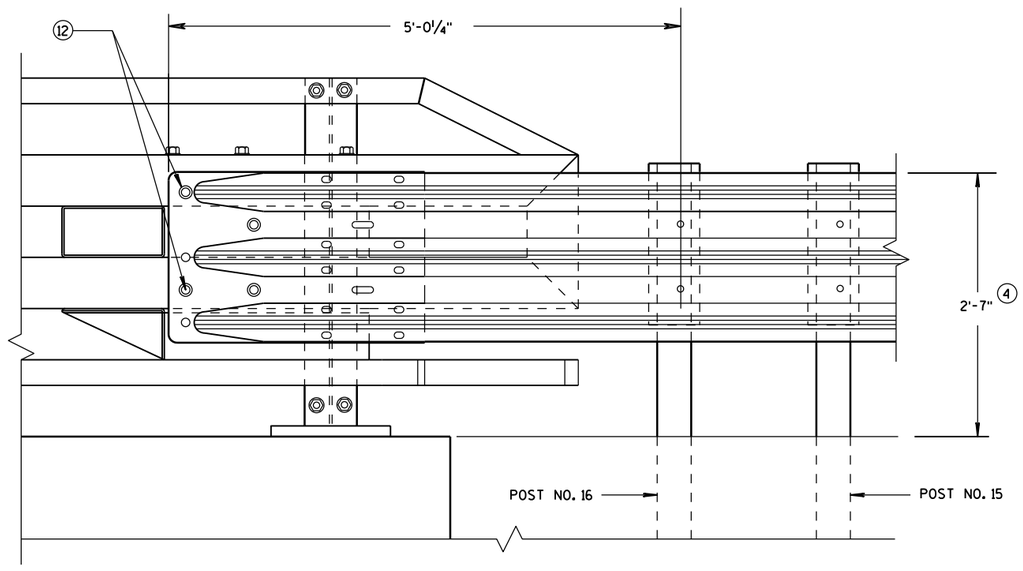


ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND ½-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER

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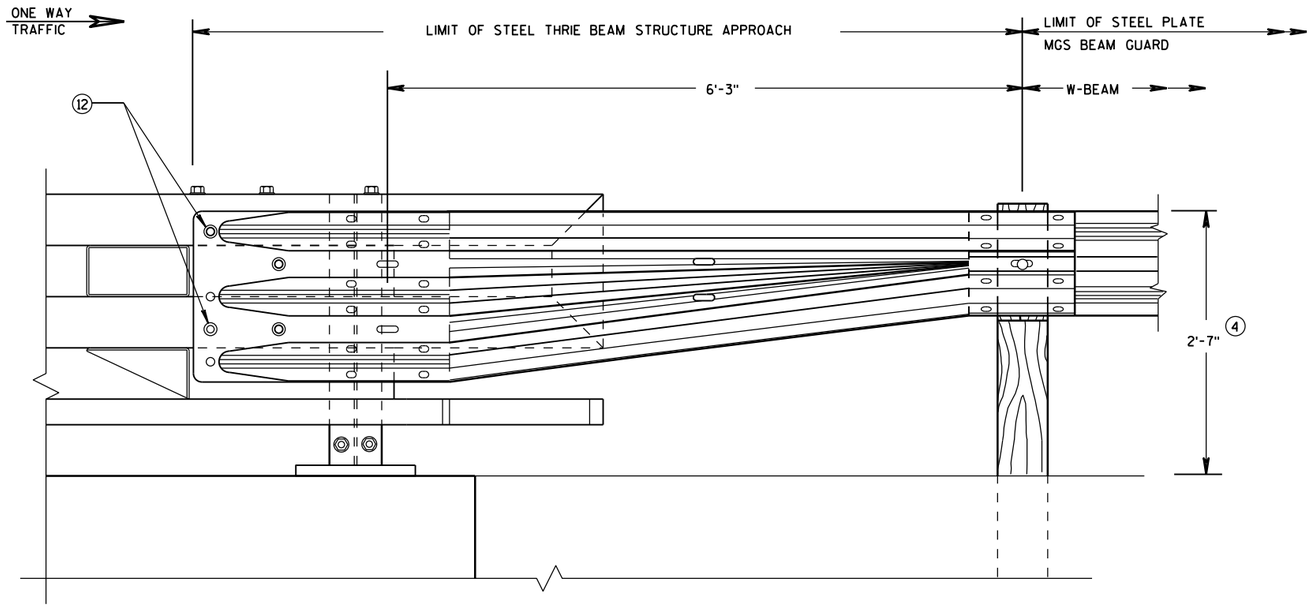


FRONT VIEW

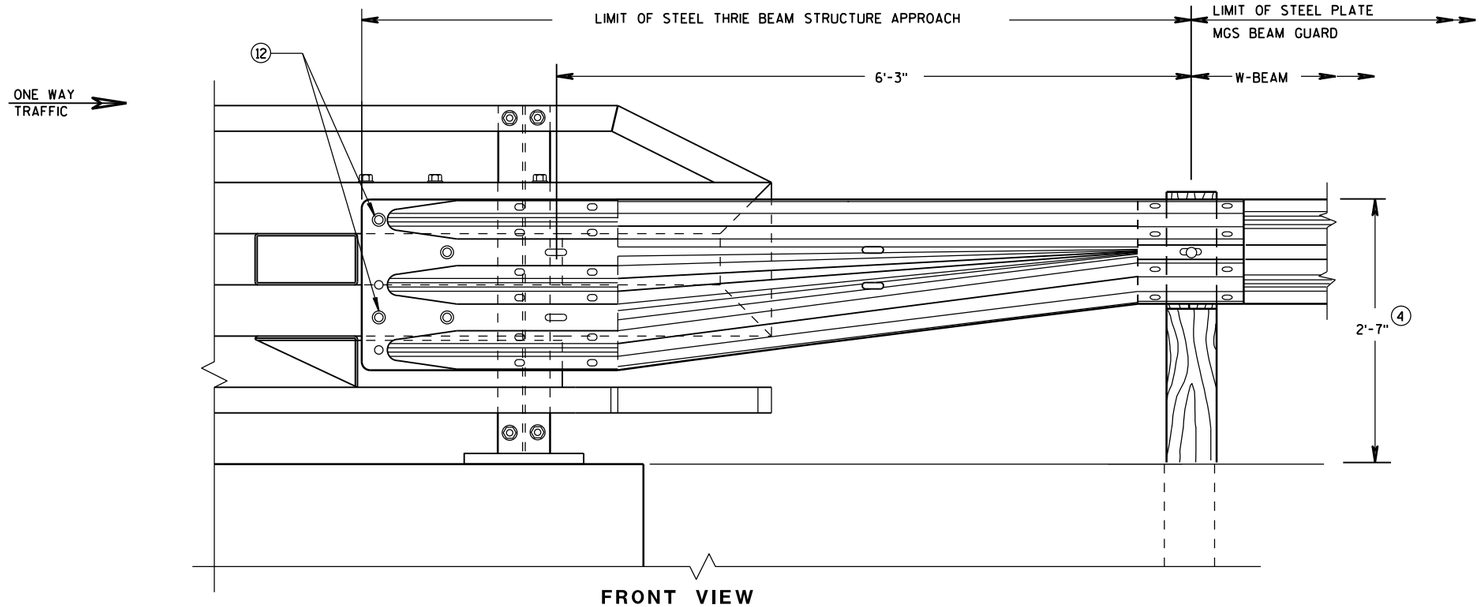
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND ½-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(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
June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
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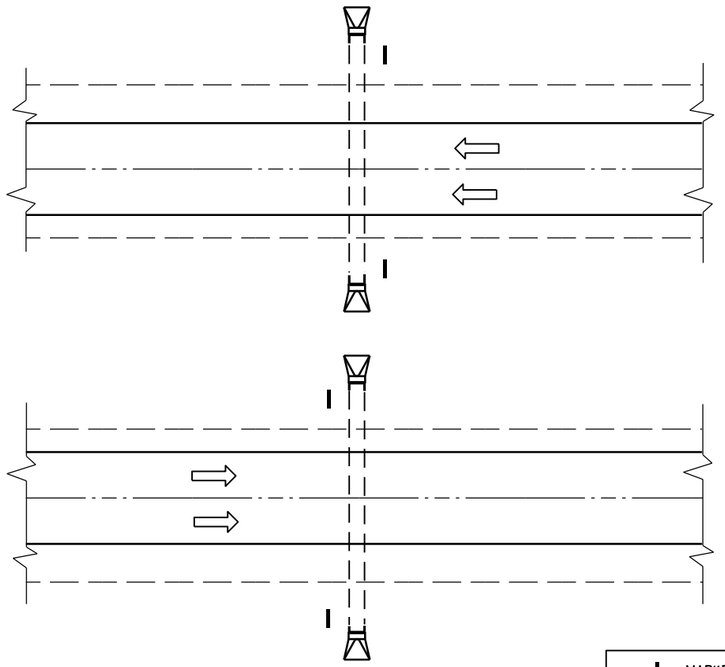
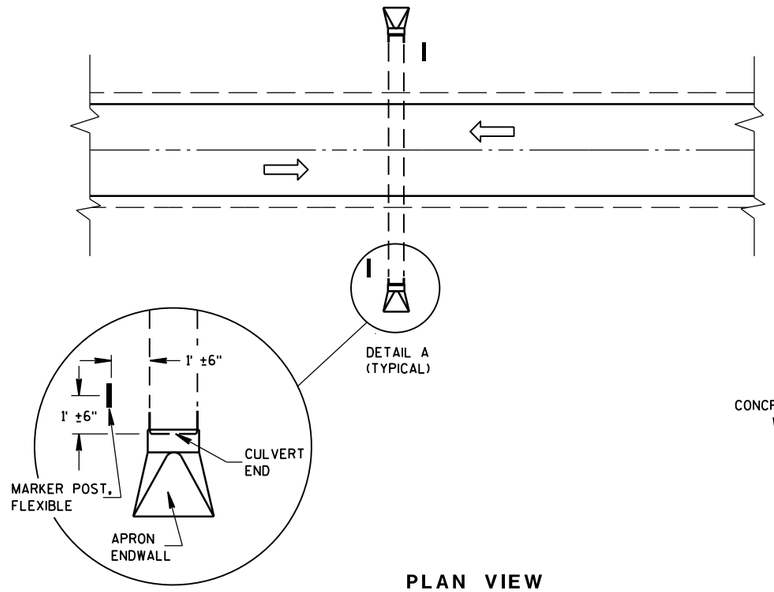


PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

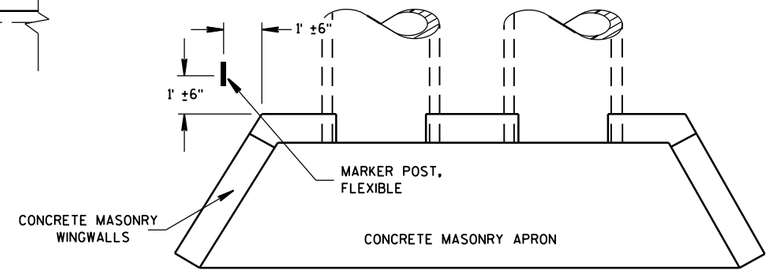
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

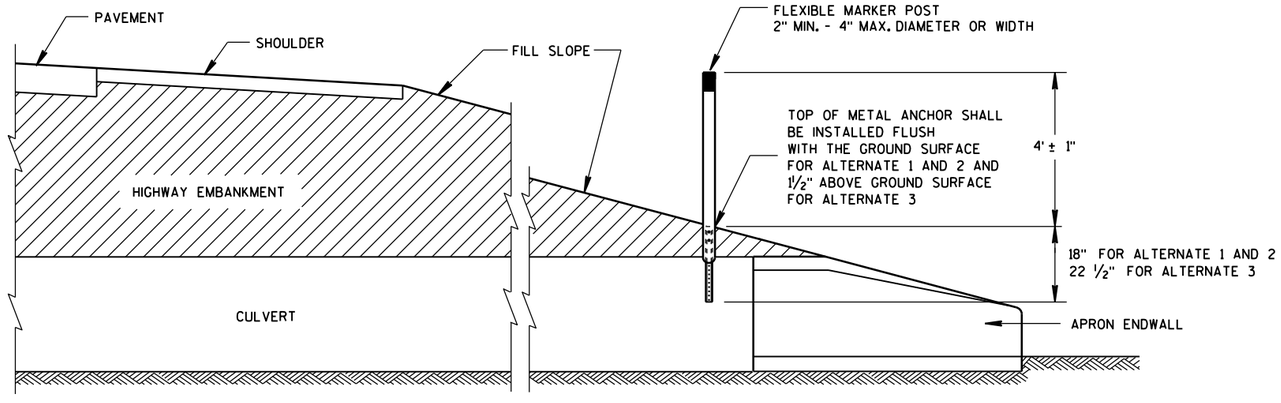
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

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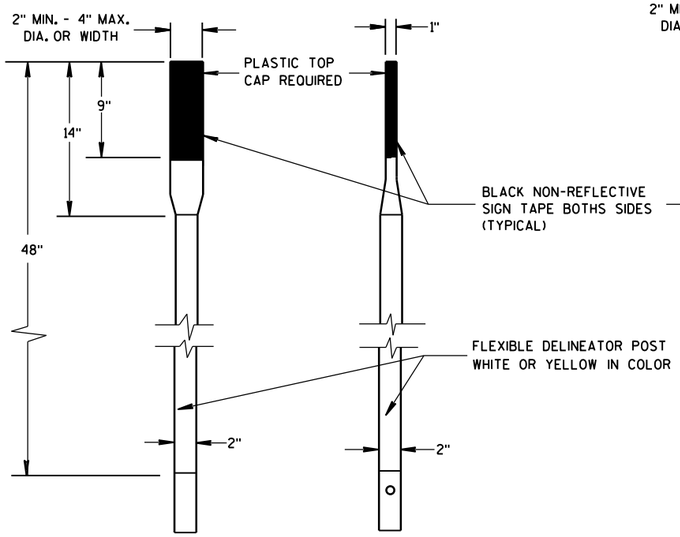
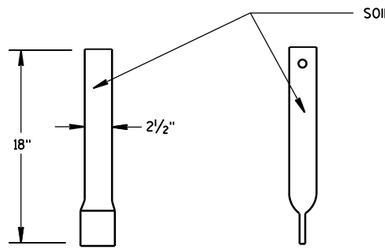
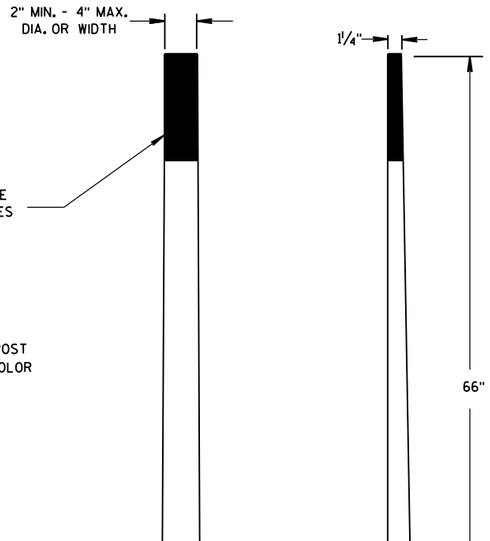




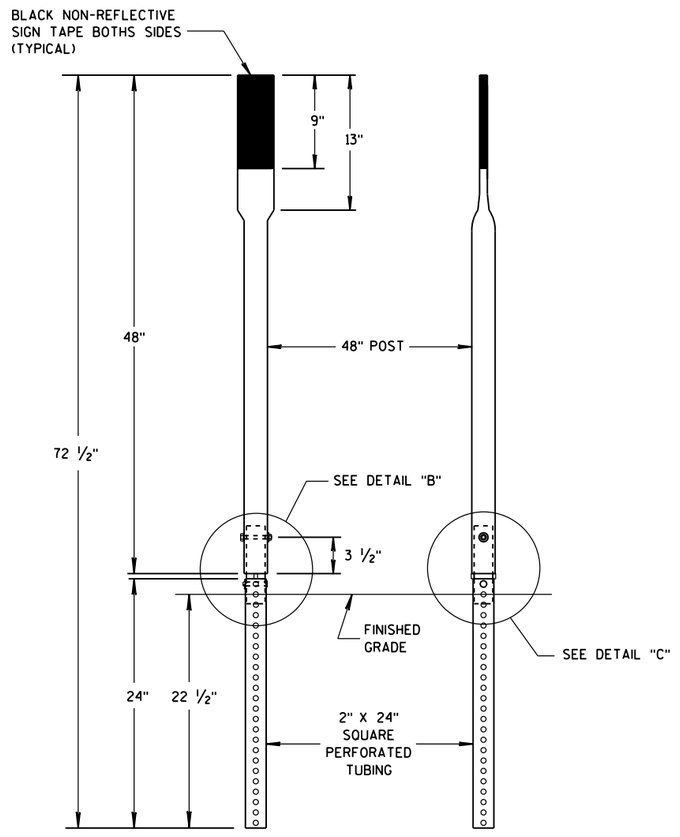
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

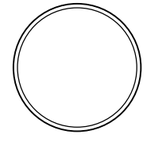
ALTERNATE 2



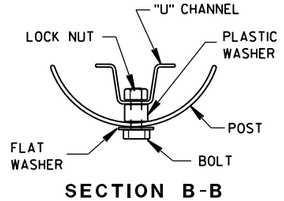
FRONT VIEW SIDE VIEW

ALTERNATE 3

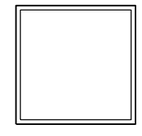
FLEXIBLE MARKER POSTS



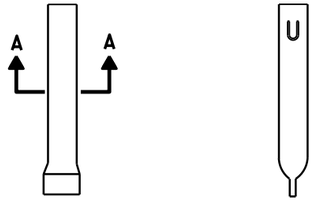
SECTION A-A



SECTION B-B

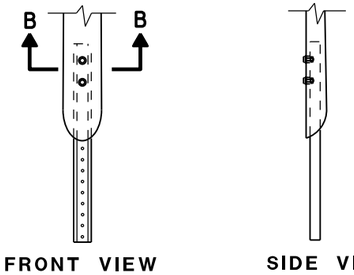


SECTION C-C



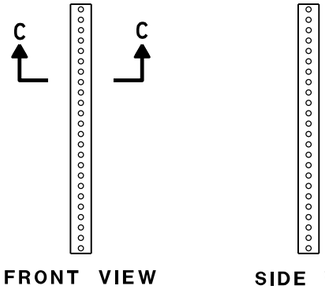
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

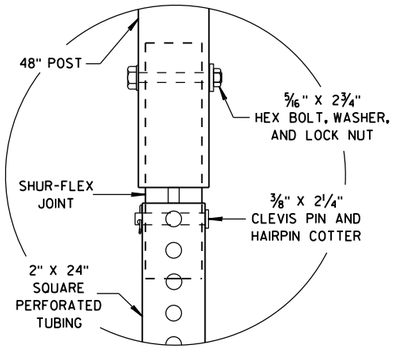
ALTERNATE 2



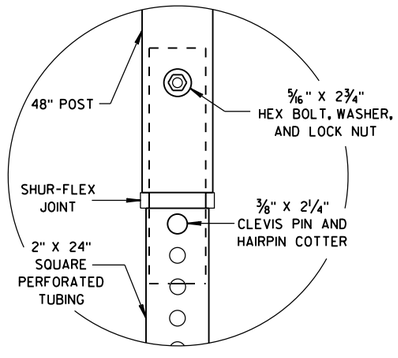
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

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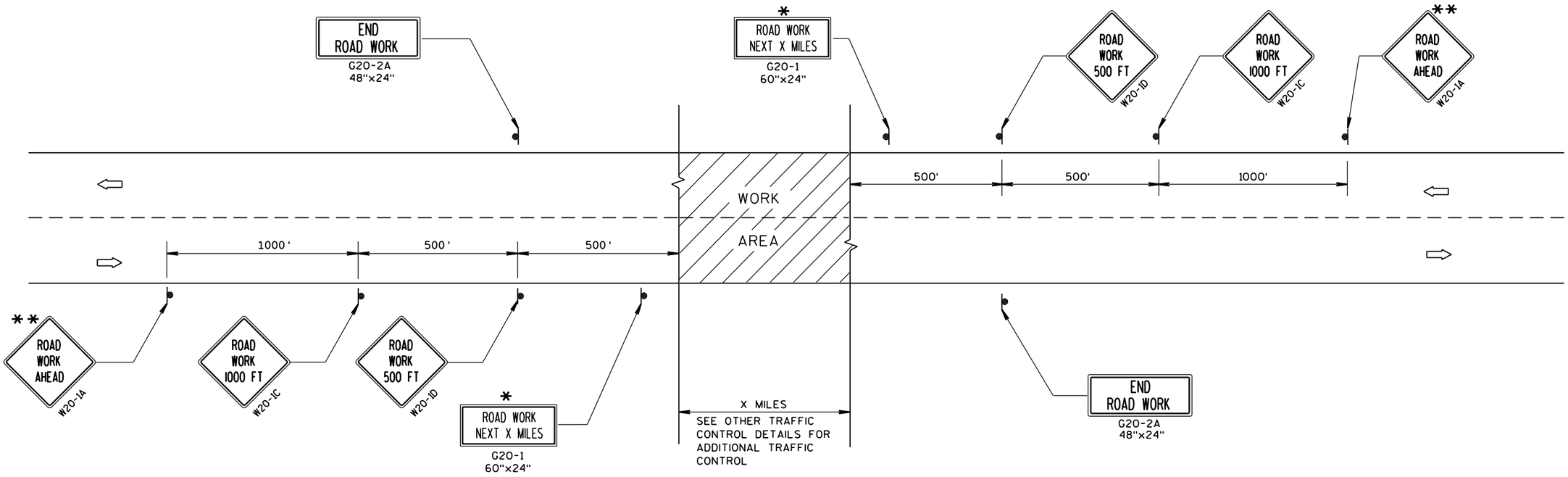


TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

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.

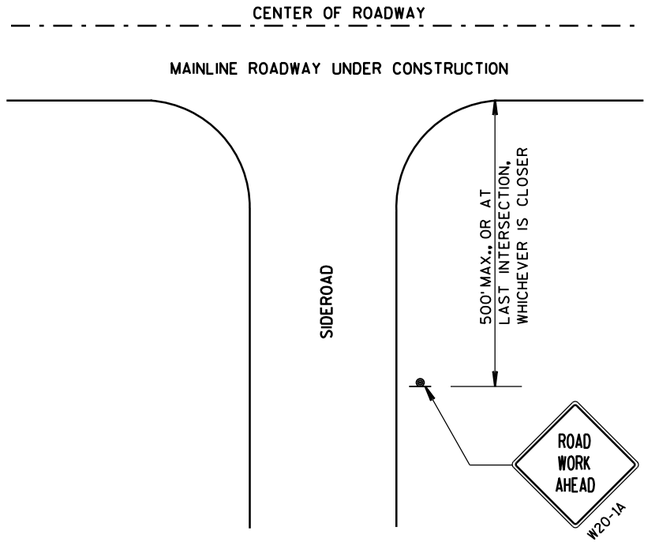
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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 W20-1A "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

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER

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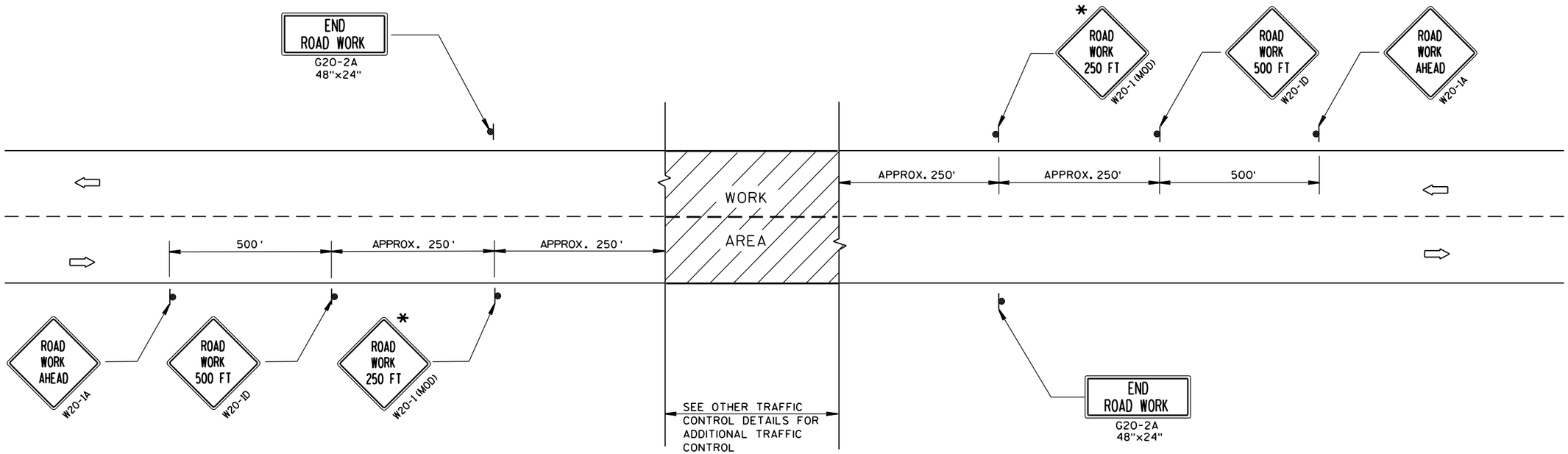
S.D.D. 15 C 4-3



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

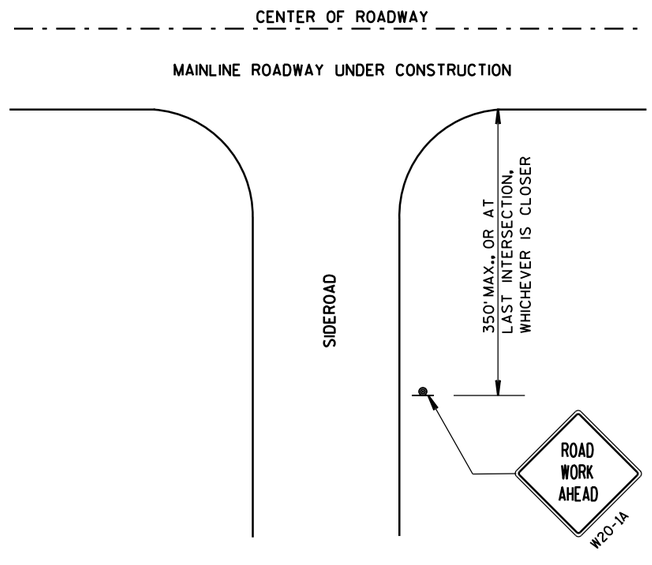
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"×36" SIGNS MAY BE USED INSTEAD OF 48"×48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZOI SAFETY ENGIN — IC
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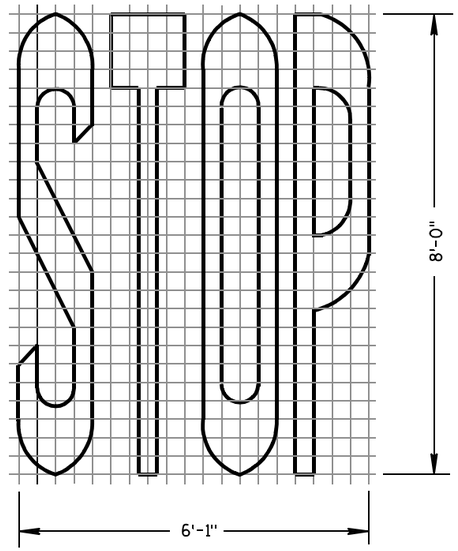
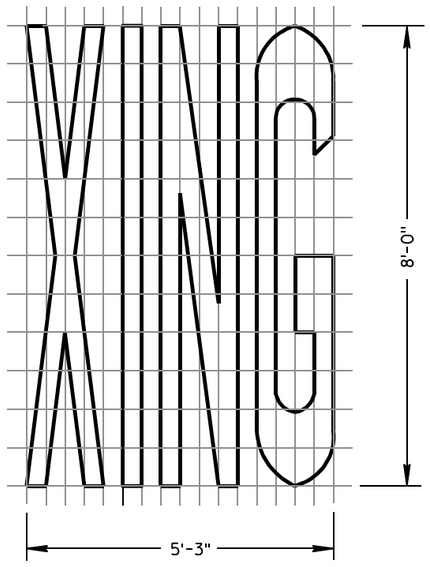
S.D.D. 15 C 5-3

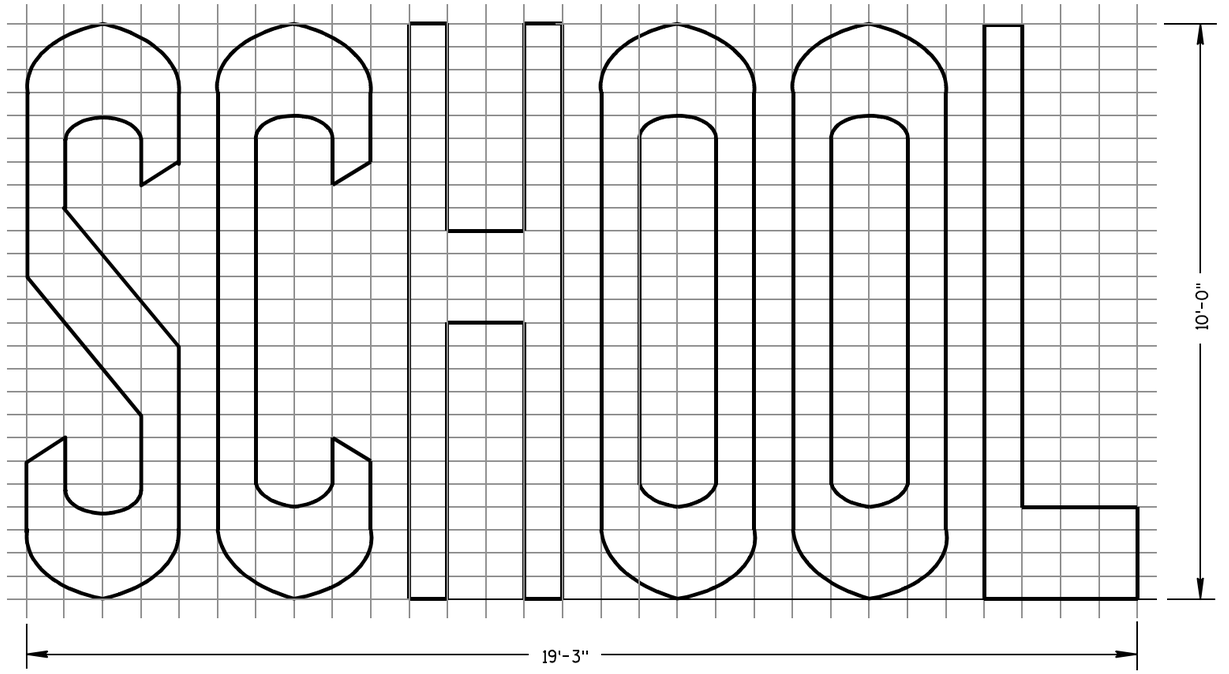
GENERAL NOTES

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

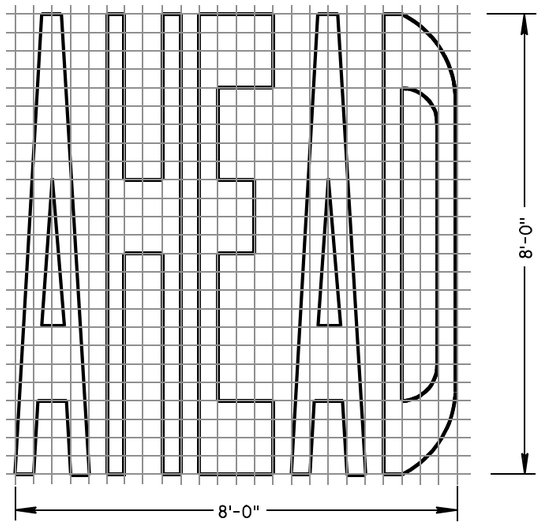
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

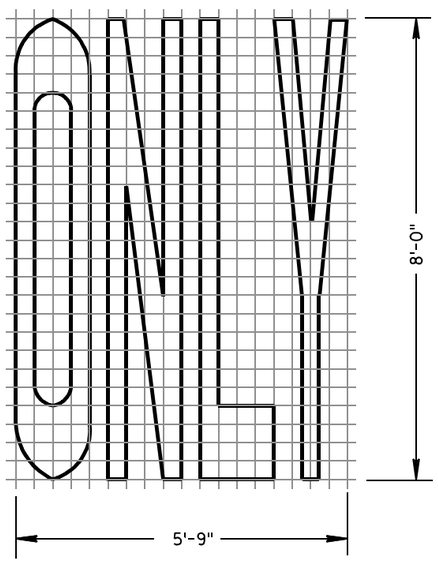


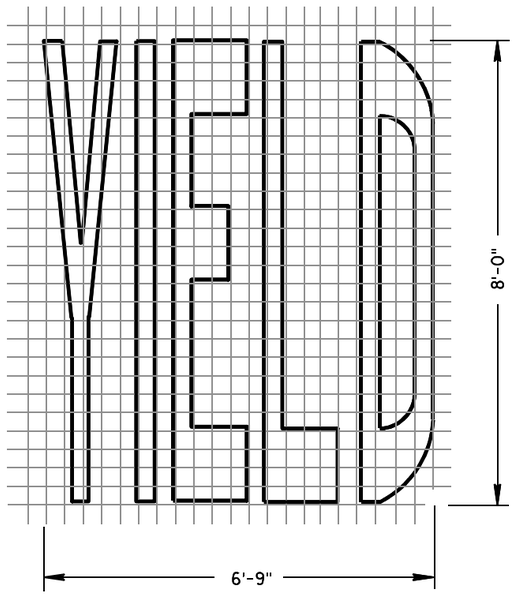


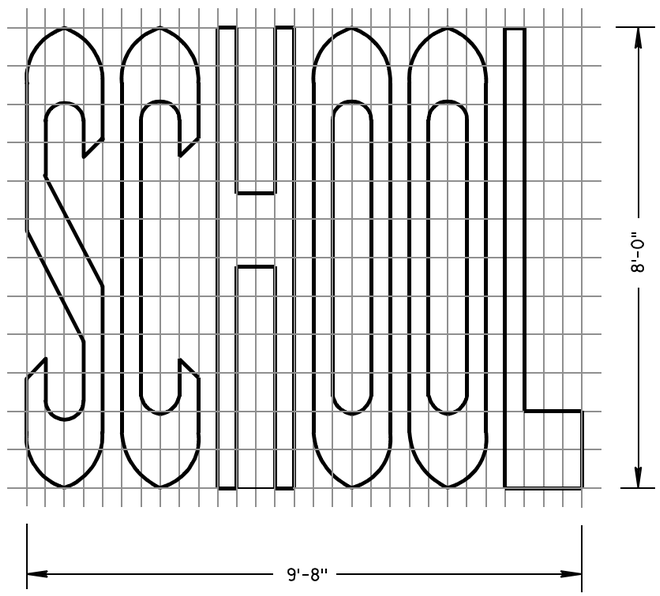


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE — /S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER

FHWA

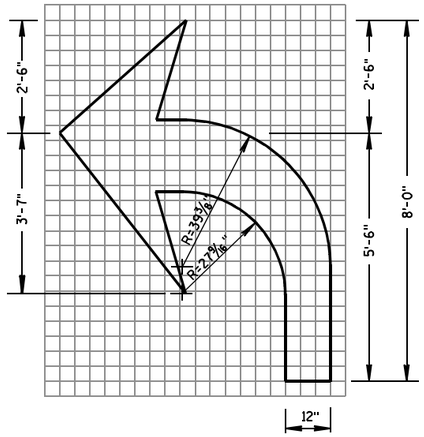
IGN

6

S.D.D. 15 C 7-12b

6

S.D.D. 15 C 7-12b



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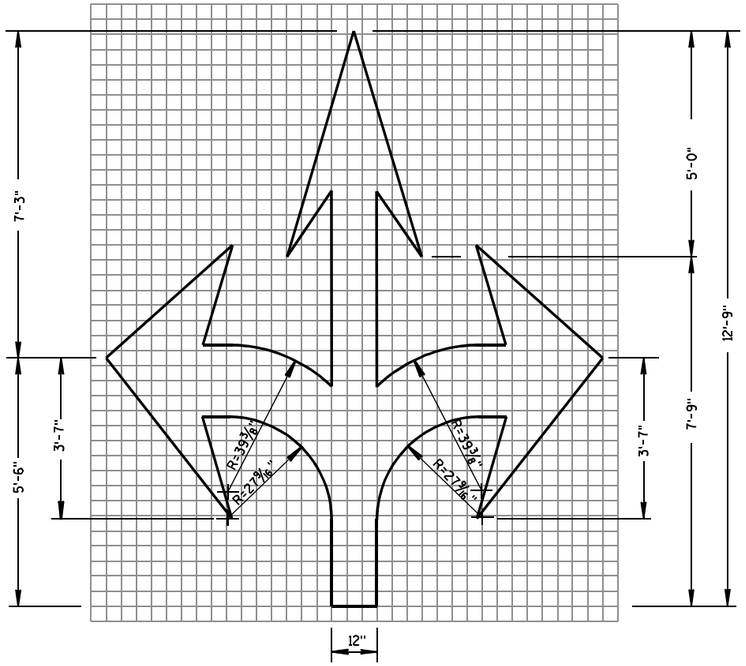

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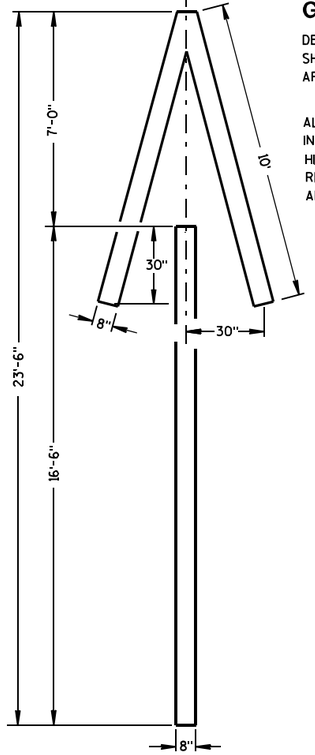
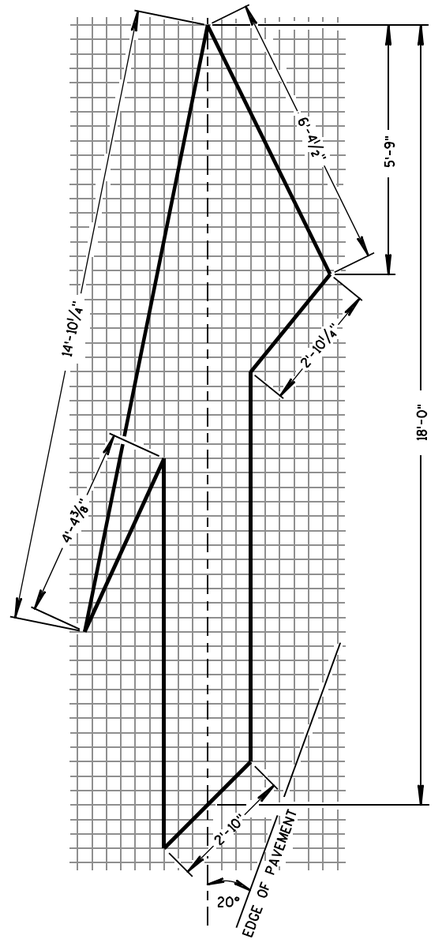


TYPE 4

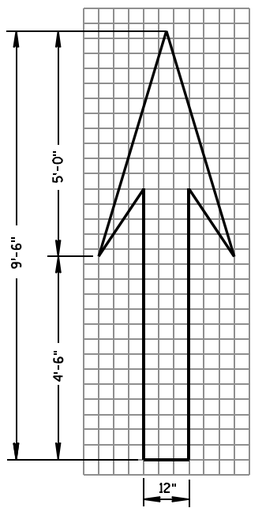
GENERAL NOTES

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.

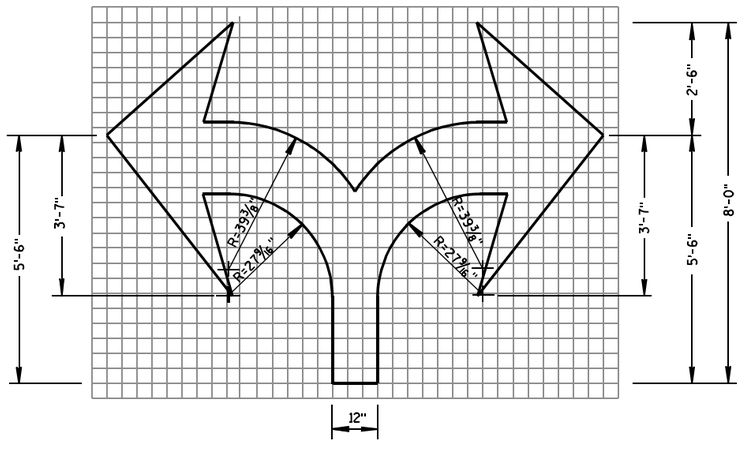
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



TYPE 5 LANE DROP ARROW



TYPE 1



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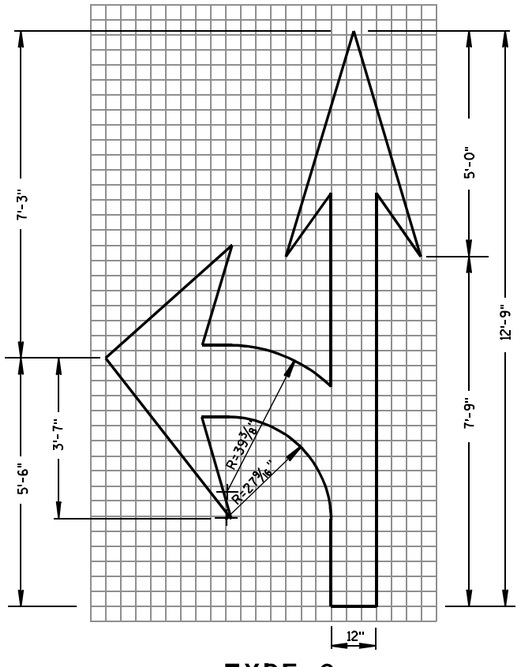

TYPE 3

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

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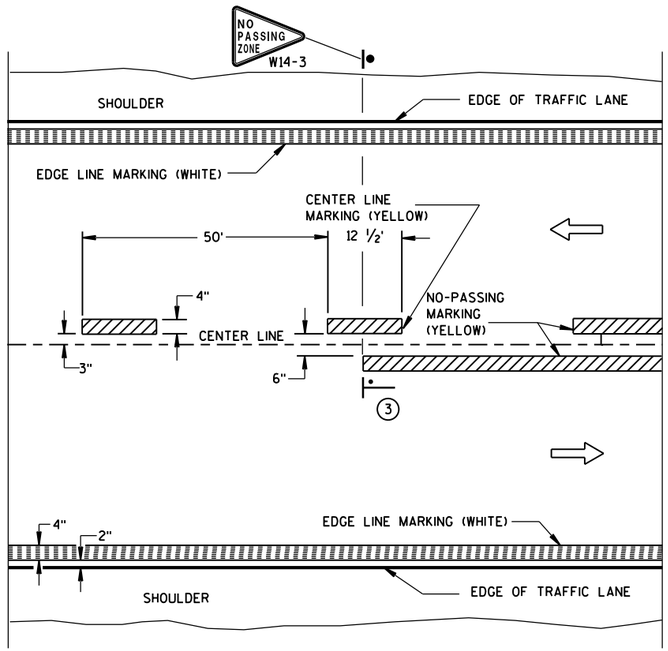
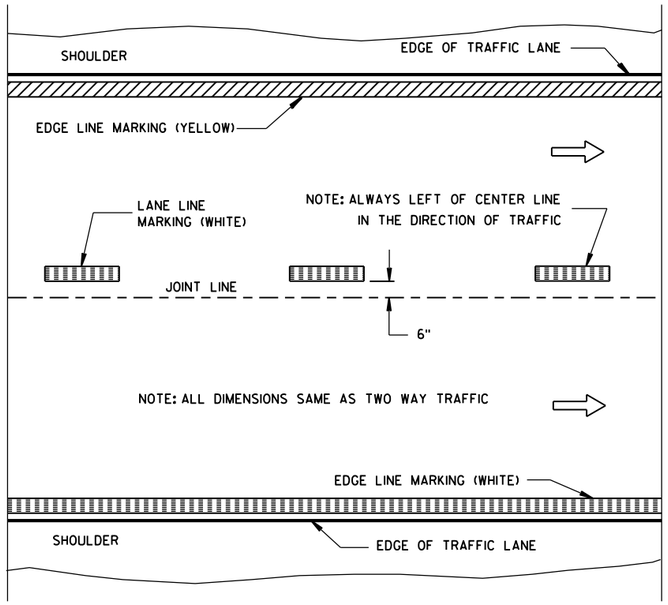
S.D.D. 15 C 7-12c

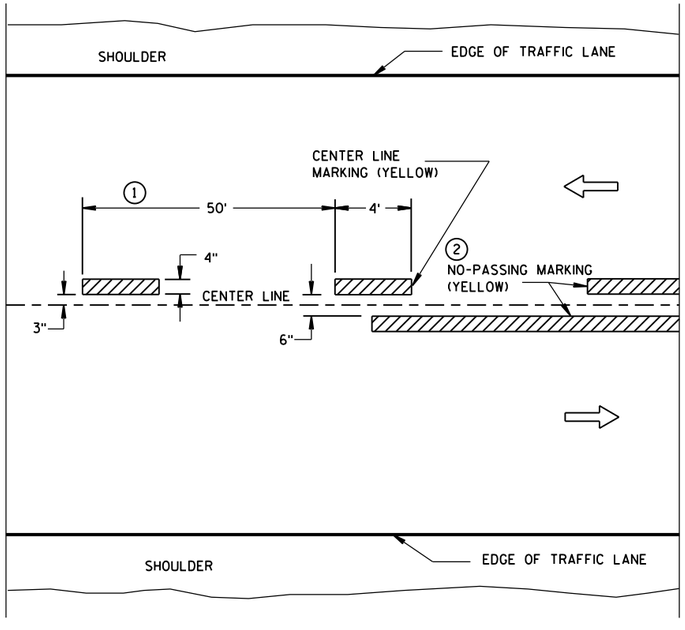


TWO WAY TRAFFIC

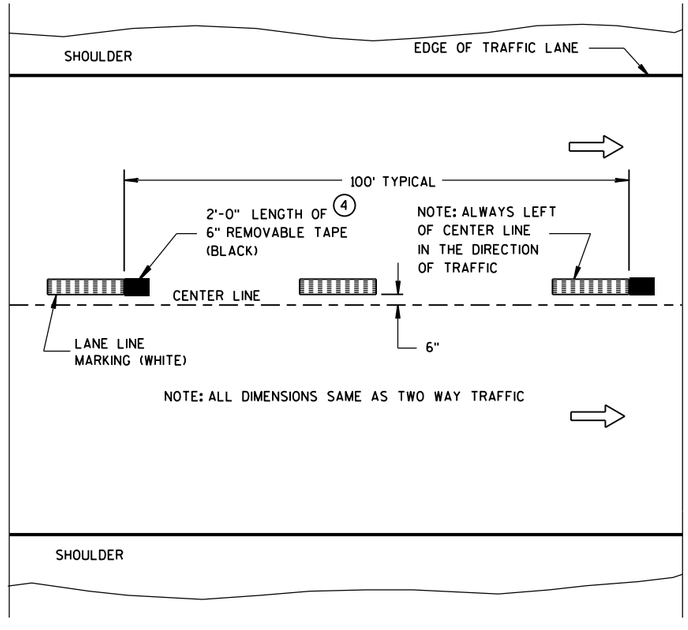


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

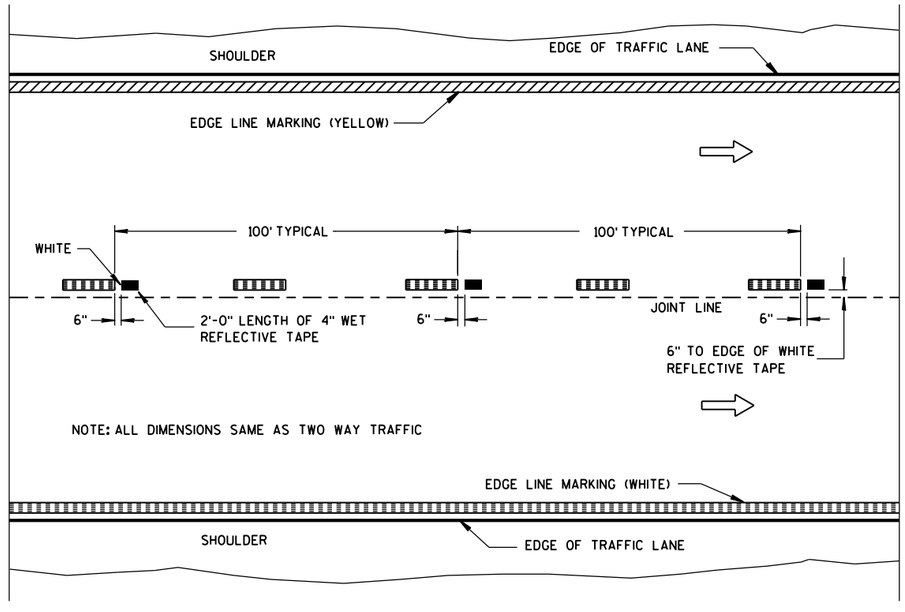
GENERAL NOTES

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

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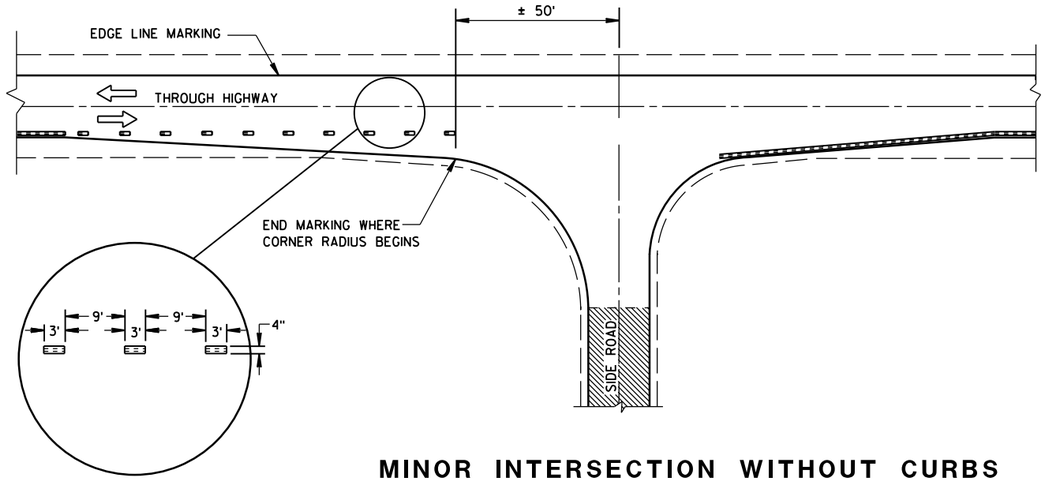
S.D.D. 15 C 8-16a



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.

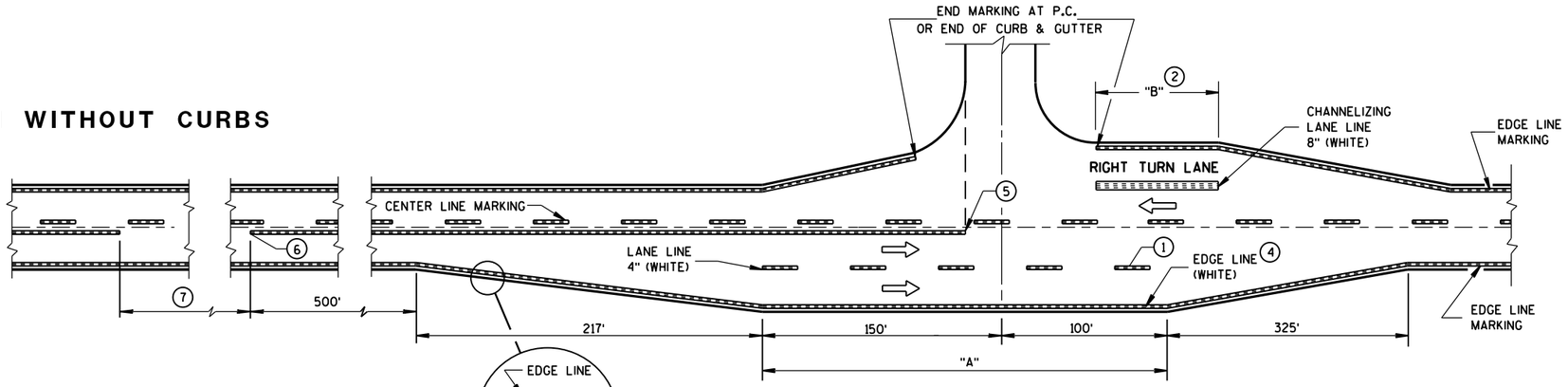
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

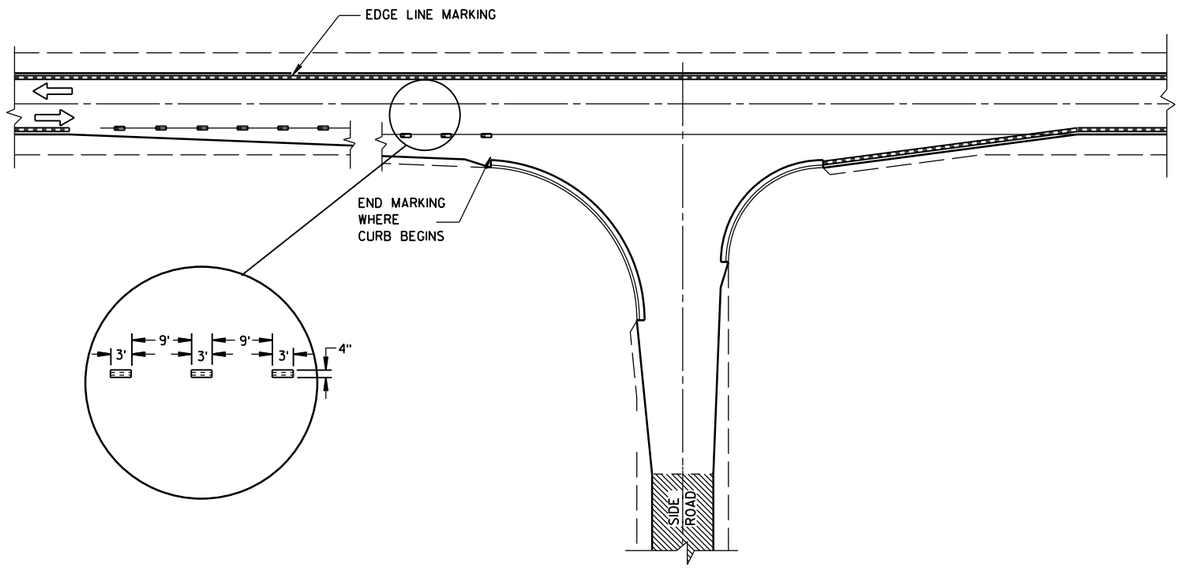
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



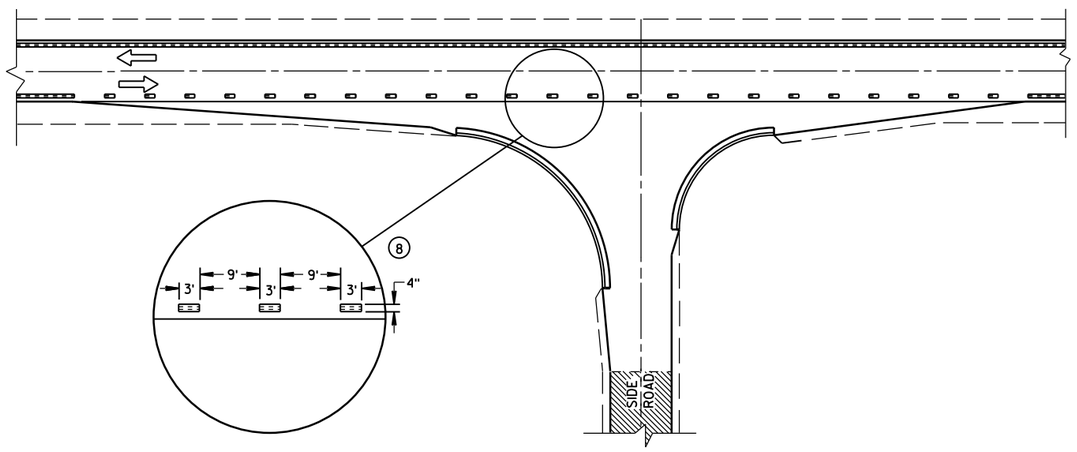
MAJOR INTERSECTIONS

(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

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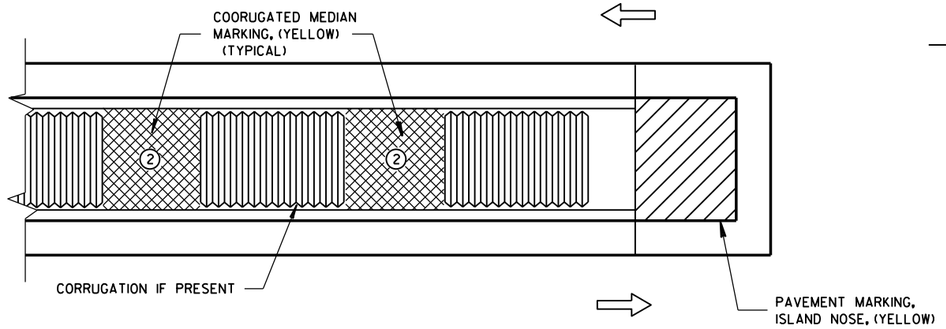
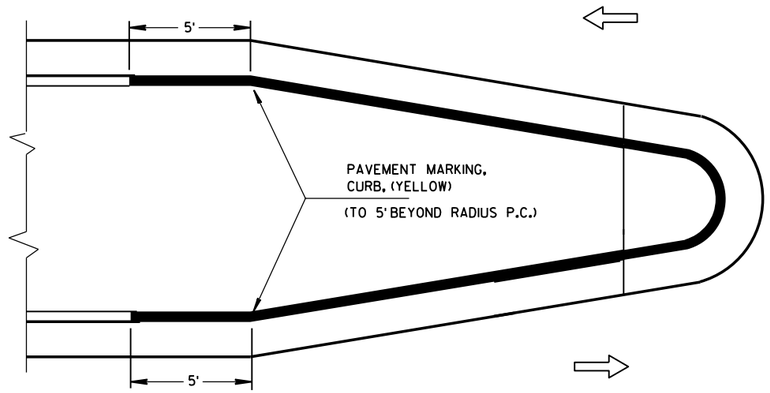
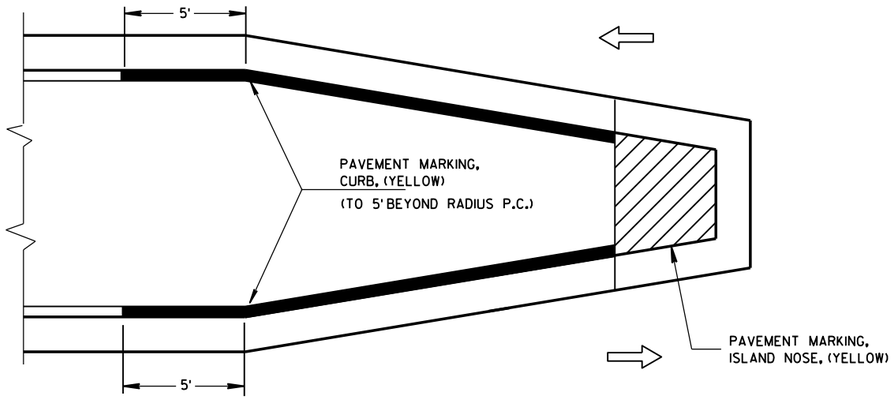
S.D.D. 15 C 8-16b



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

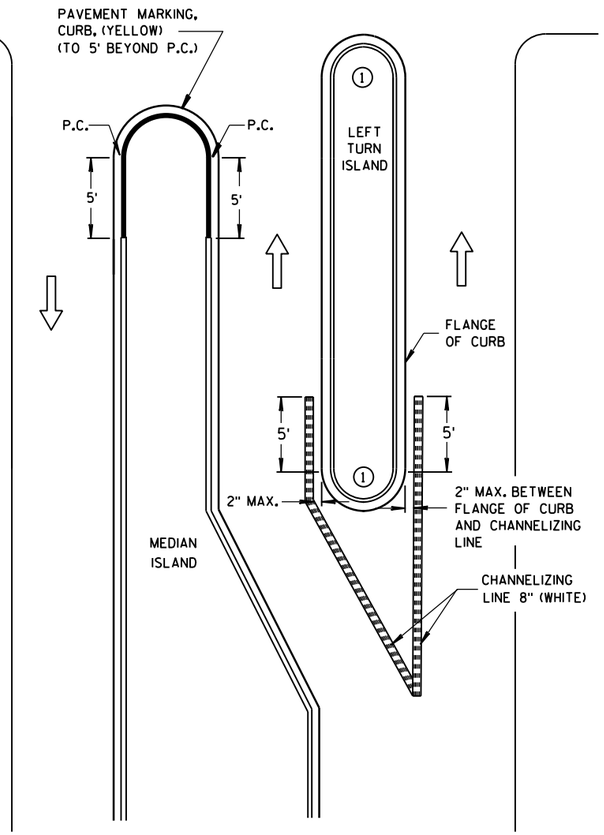


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

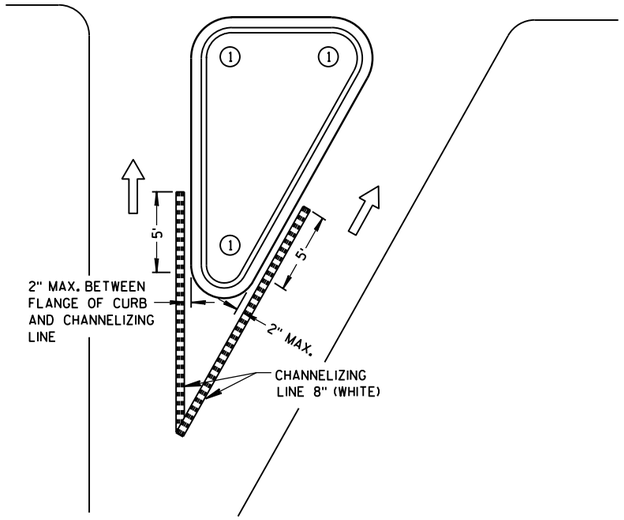


LEFT TURN & MEDIAN ISLAND

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

6

S.D.D. 15 C 8-16f

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

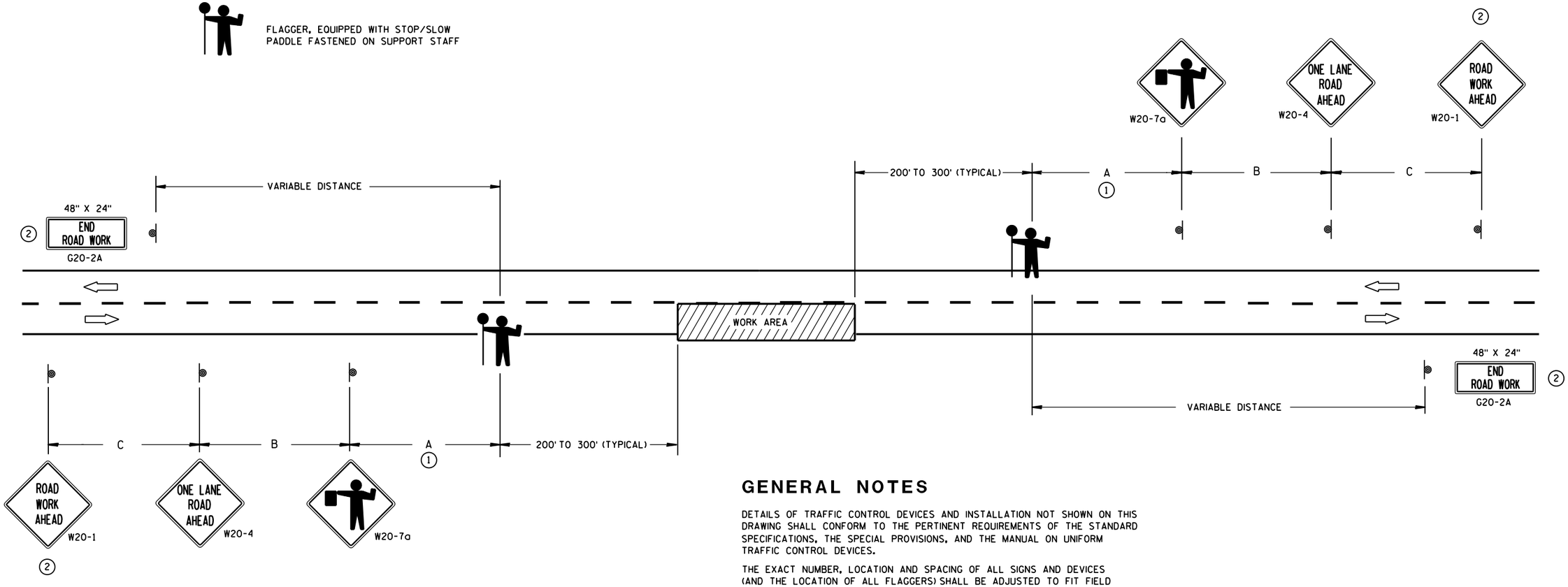
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

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

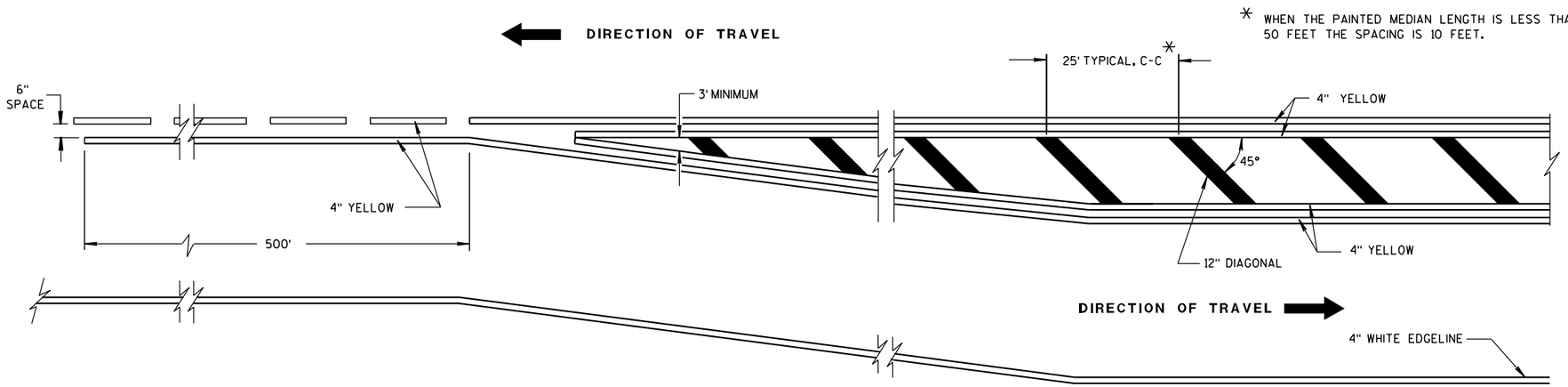
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 12-4

6

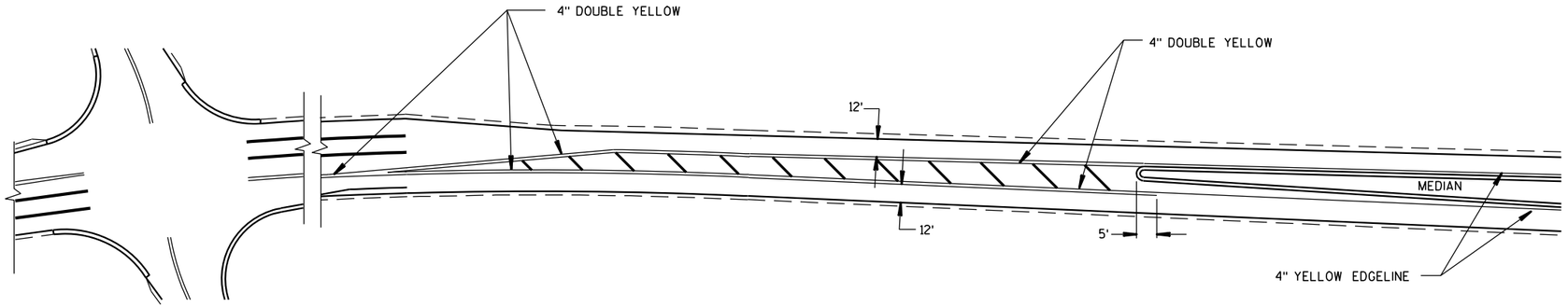
S.D.D. 15 C 12-4



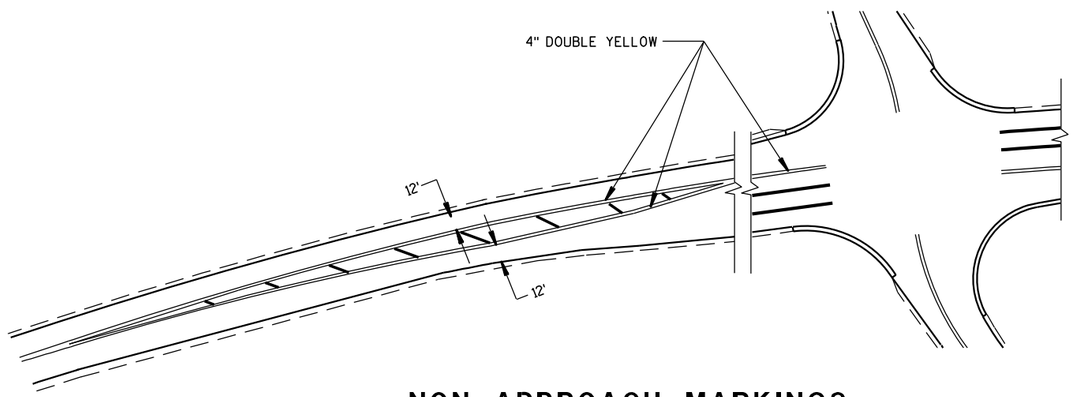
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

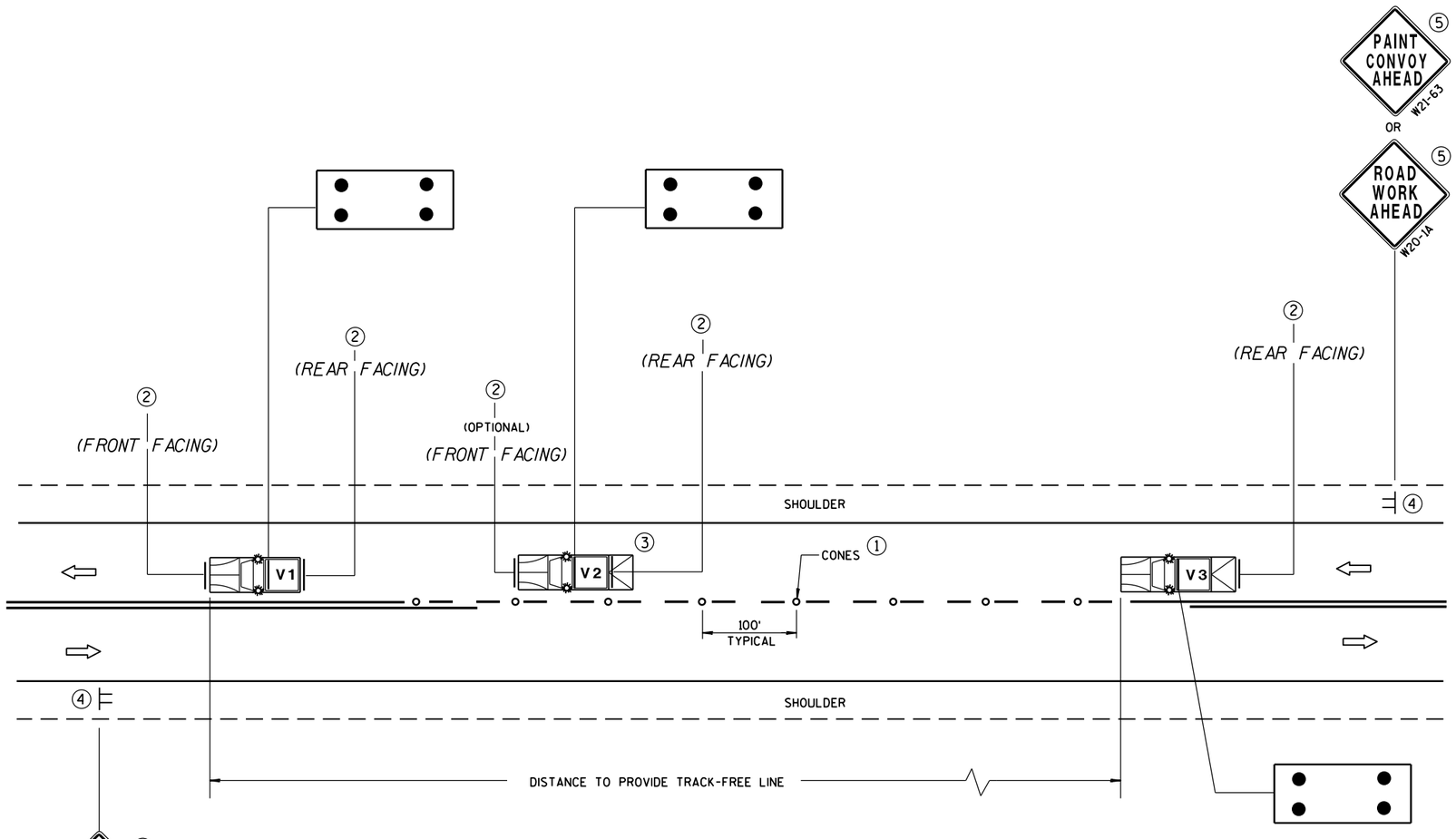
MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER
FHWA	160 IGN

6

S.D.D. 15 C 18-3

6

S.D.D. 15 C 18-3



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
o	CONES
⁘	FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

/S/ Peter Amakobe Atepe

DATE

STATEWIDE WORK ZOI SAFETY ENGIN

FHWA

6

S.D.D. 15 C 19-3a

6

S.D.D. 15 C 19-3a

GENERAL NOTES

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER FABRICATION DRAWING.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

SIGN SUPPORTS SHALL BE LOCATED NORMAL TO ROADWAY.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

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

BAR CAGE TO BE ASSEMBLED USING TIE WIRES ONLY, NO WELDING.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACK FILLING AROUND THE BASE. ANY REQUIRED BACKFILL SHALL BE WELL COMPACTED IN LAYERS OF 1 FOOT OR LESS. COMPACTION SHALL BE BY MECHANICAL MEANS. CARE SHALL BE TAKEN SO NO DAMAGE OCCURS TO THE CONCRETE BASE DURING COMPACTION.

EXCAVATION OF MATERIALS NOT OCCUPIED BY CONCRETE SHALL BE MINIMIZED TO REDUCE DISTURBANCE OF THE SURROUNDING SOILS.

THE BOTTOM OF THE DRILLED HOLE SHALL BE FIRM AND THOROUGHLY CLEANED SO NO LOOSE OR COMPRESSIBLE MATERIALS ARE PRESENT AT THE TIME OF THE CONCRETE PLACEMENT.

IF THE DRILLED HOLE CONTAINS STANDING WATER, THE CONCRETE SHALL BE PLACED USING A TREMIE TO DISPLACE THE WATER.

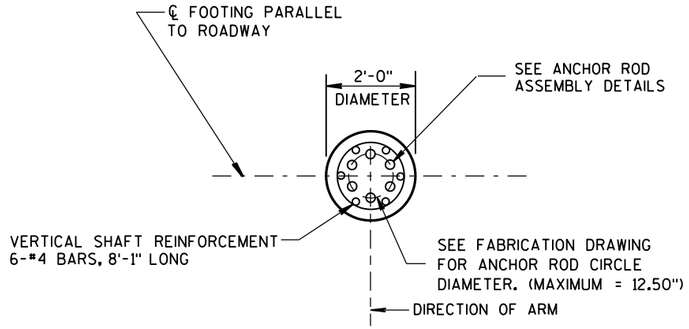
THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

FORM ALL EXPOSED CONCRETE CORNERS WITH ¾" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

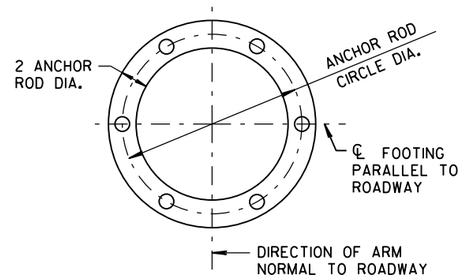
ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554, GRADE 55	fy=55,000 p.s.i.
ASTM A563A HEAVY HEX NUTS, AND ASTM F436 WASHERS.	
PLATES, ASTM A709, GRADE 36	fy=36,000 p.s.i.

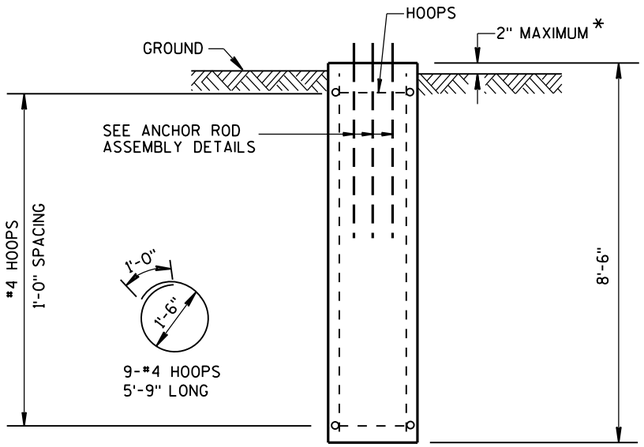
THIS FOOTING HAS BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 20 DEGREES (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 350 PSF (COHESIVE SOILS).



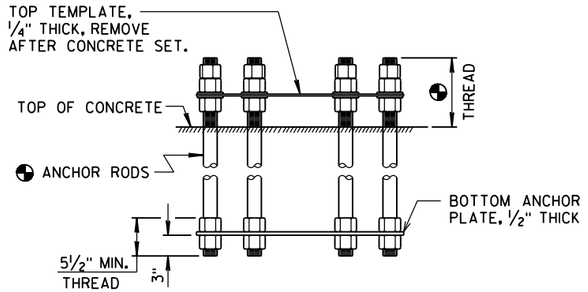
PLAN VIEW



TOP TEMPLATE AND BOTTOM ANCHOR PLATE



ELEVATION VIEW



ANCHOR ROD ASSEMBLY DETAILS

* FOR OVERHEAD SIGN SUPPORTS THAT ARE INSTALLED ADJACENT TO SIDEWALKS, THE TOP OF THE BASE SHALL BE POURED FLUSH WITH THE GROUND.

◔ MINIMUM OF 6 ANCHOR RODS, EXACT NUMBER, SIZE, DIMENSION AND ORIENTATION AS SHOWN ON FABRICATION DRAWING.

CONCRETE - 1.0 C.Y. PER FOOTING
H.S. REINFORCEMENT - 67 LBS. PER FOOTING

24" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2016 — DATE
/S/ Vu Thao — WIND LOADED STRU PROGRAM LEA
FHWA

6

S.D.D. 15 C 22-3

6

S.D.D. 15 C 22-3

GENERAL NOTES

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER FABRICATION DRAWING.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

SIGN SUPPORTS SHALL BE LOCATED NORMAL TO ROADWAY.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

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

BAR CAGE TO BE ASSEMBLED USING TIE WIRES ONLY, NO WELDING.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACK FILLING AROUND THE BASE. ANY REQUIRED BACKFILL SHALL BE WELL COMPACTED IN LAYERS OF 1 FOOT OR LESS. COMPACTION SHALL BE BY MECHANICAL MEANS. CARE SHALL BE TAKEN SO NO DAMAGE OCCURS TO THE CONCRETE BASE DURING COMPACTION.

EXCAVATION OF MATERIALS NOT OCCUPIED BY CONCRETE SHALL BE MINIMIZED TO REDUCE DISTURBANCE OF THE SURROUNDING SOILS.

THE BOTTOM OF THE DRILLED HOLE SHALL BE FIRM AND THOROUGHLY CLEANED SO NO LOOSE OR COMPRESSIBLE MATERIALS ARE PRESENT AT THE TIME OF THE CONCRETE PLACEMENT.

IF THE DRILLED HOLE CONTAINS STANDING WATER, THE CONCRETE SHALL BE PLACED USING A TREMIE TO DISPLACE THE WATER.

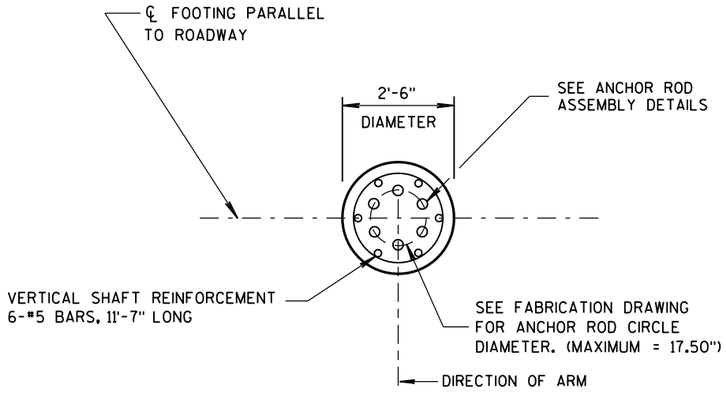
THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

FORM ALL EXPOSED CONCRETE CORNERS WITH ¾" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

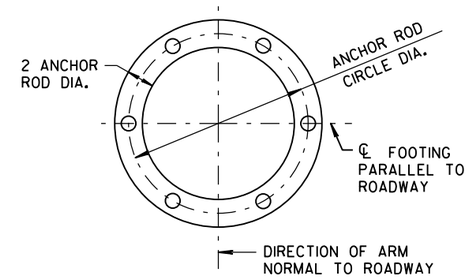
ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554, GRADE 55	fy=55,000 p.s.i.
ASTM A563A HEAVY HEX NUTS, AND ASTM F436 WASHERS.	
PLATES, ASTM A709, GRADE 36	fy=36,000 p.s.i.

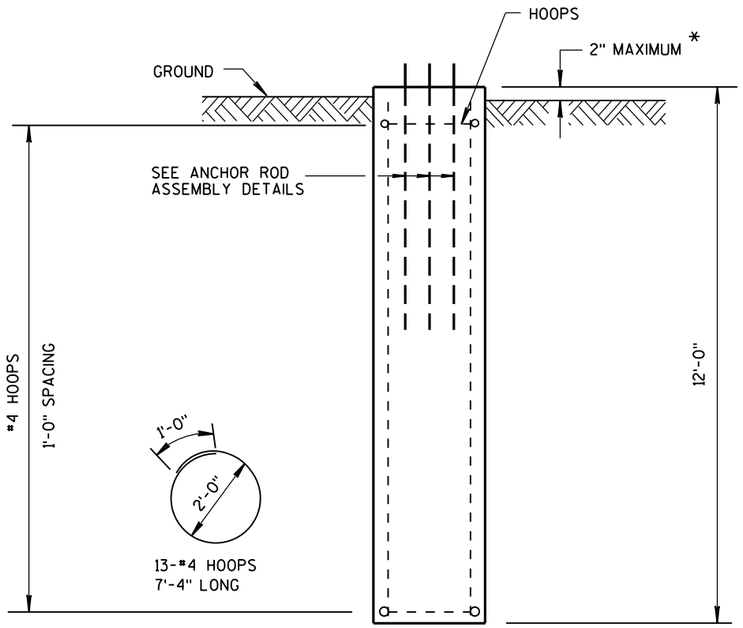
THIS FOOTING HAS BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 20 DEGREES (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 350 PSF (COHESIVE SOILS).



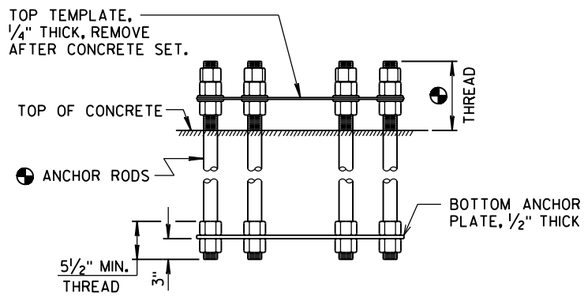
PLAN VIEW



TOP TEMPLATE AND BOTTOM ANCHOR PLATE



ELEVATION VIEW



ANCHOR ROD ASSEMBLY DETAILS

* FOR OVERHEAD SIGN SUPPORTS THAT ARE INSTALLED ADJACENT TO SIDEWALKS, THE TOP OF THE BASE SHALL BE POURED FLUSH WITH THE GROUND.

⊕ MINIMUM OF 6 ANCHOR RODS, EXACT NUMBER, SIZE, DIMENSION AND ORIENTATION AS SHOWN ON FABRICATION DRAWING.

CONCRETE - 2.2 C.Y. PER FOOTING
H.S. REINFORCEMENT - 136 LBS. PER FOOTING

30" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2016 — DATE
/S/ Vu Thao
WIND LOADED STRU
PROGRAM LEAD
FHWA

6

S.D.D. 15 C 23-3

6

S.D.D. 15 C 23-3

GENERAL NOTES

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER FABRICATION DRAWING.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

SIGN SUPPORTS SHALL BE LOCATED NORMAL TO ROADWAY.

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EXCAVATION OF MATERIALS NOT OCCUPIED BY CONCRETE SHALL BE MINIMIZED TO REDUCE DISTURBANCE OF THE SURROUNDING SOILS.

THE BOTTOM OF THE DRILLED HOLE SHALL BE FIRM AND THOROUGHLY CLEANED SO NO LOOSE OR COMPRESSIBLE MATERIALS ARE PRESENT AT THE TIME OF THE CONCRETE PLACEMENT.

IF THE DRILLED HOLE CONTAINS STANDING WATER, THE CONCRETE SHALL BE PLACED USING A TREMIE TO DISPLACE THE WATER.

THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

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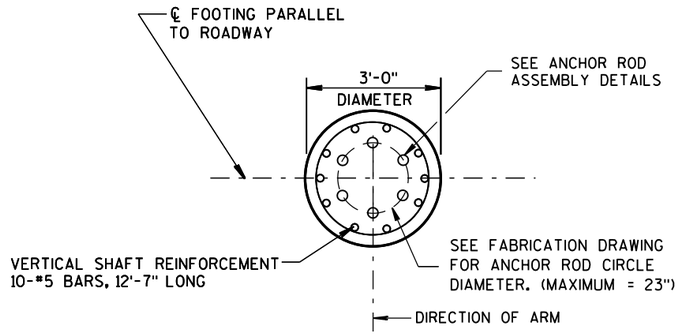
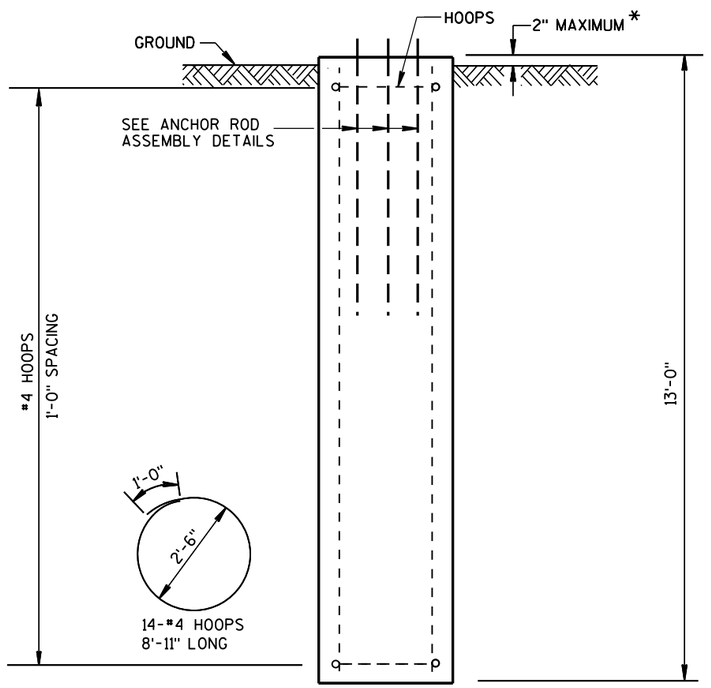
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554, GRADE 55	fy=55,000 p.s.i.
ASTM A563A HEAVY HEX NUTS, AND ASTM F436 WASHERS.	
PLATES, ASTM A709, GRADE 36	fy=36,000 p.s.i.

THIS FOOTING HAS BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 20 DEGREES (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 350 PSF (COHESIVE SOILS).

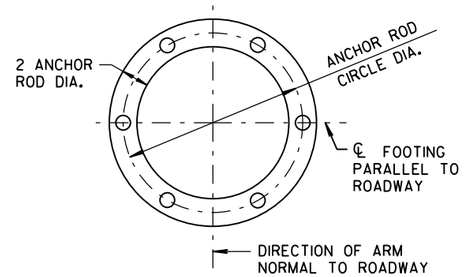


PLAN VIEW

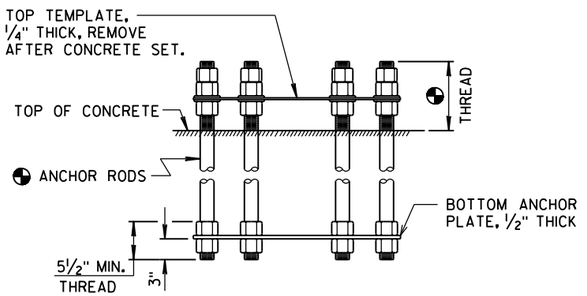


ELEVATION VIEW

* FOR OVERHEAD SIGN SUPPORTS THAT ARE INSTALLED ADJACENT TO SIDEWALKS, THE TOP OF THE BASE SHALL BE POURED FLUSH WITH THE GROUND.



TOP TEMPLATE AND BOTTOM ANCHOR PLATE



ANCHOR ROD ASSEMBLY DETAILS

◔ MINIMUM OF 6 ANCHOR RODS, EXACT NUMBER, SIZE, DIMENSION AND ORIENTATION AS SHOWN ON FABRICATION DRAWING.

CONCRETE - 3.4 C.Y. PER FOOTING
H.S. REINFORCEMENT - 215 LBS. PER FOOTING

36" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2016 — DATE
FHWA

/S/ Vu Thao
WIND LOADED STRU PROGRAM LEAD

6

S.D.D. 15 C 24-3

6

S.D.D. 15 C 24-3

GENERAL NOTES

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER FABRICATION DRAWING.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

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EXCAVATION OF MATERIALS NOT OCCUPIED BY CONCRETE SHALL BE MINIMIZED TO REDUCE DISTURBANCE OF THE SURROUNDING SOILS.

THE BOTTOM OF THE DRILLED HOLE SHALL BE FIRM AND THOROUGHLY CLEANED SO NO LOOSE OR COMPRESSIBLE MATERIALS ARE PRESENT AT THE TIME OF THE CONCRETE PLACEMENT.

IF THE DRILLED HOLE CONTAINS STANDING WATER, THE CONCRETE SHALL BE PLACED USING A TREMIE TO DISPLACE THE WATER.

THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

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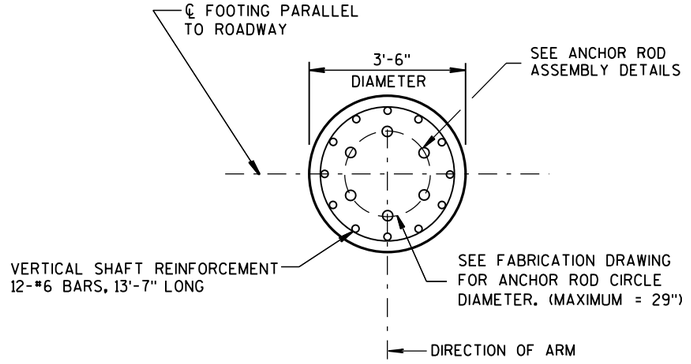
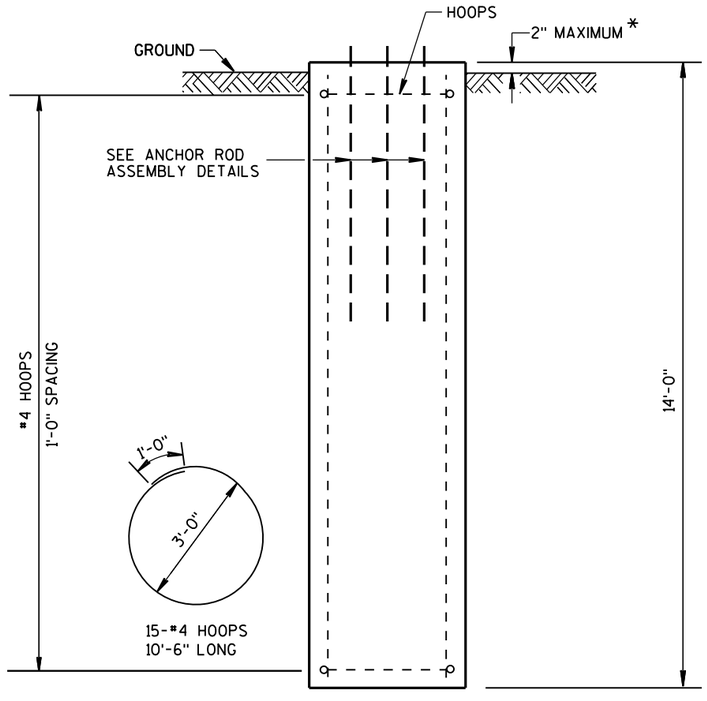
ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554, GRADE 55	fy=55,000 p.s.i.
ASTM A563A HEAVY HEX NUTS, AND ASTM F436 WASHERS.	
PLATES, ASTM A709, GRADE 36	fy=36,000 p.s.i.

THIS FOOTING HAS BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 20 DEGREES (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 350 PSF (COHESIVE SOILS).



PLAN VIEW



ELEVATION VIEW

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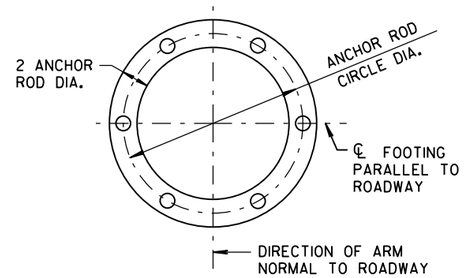
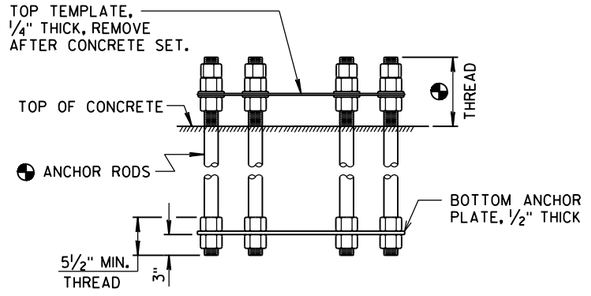


TOP TEMPLATE AND BOTTOM ANCHOR PLATE



ANCHOR ROD ASSEMBLY DETAILS

◔ MINIMUM OF 6 ANCHOR RODS, EXACT NUMBER, SIZE, DIMENSION AND ORIENTATION AS SHOWN ON FABRICATION DRAWING.

CONCRETE - 5.0 C.Y. PER FOOTING
H.S. REINFORCEMENT - 350 LBS. PER FOOTING

42" DIAMETER CANTILEVER OVERHEAD SIGN SUPPORT BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

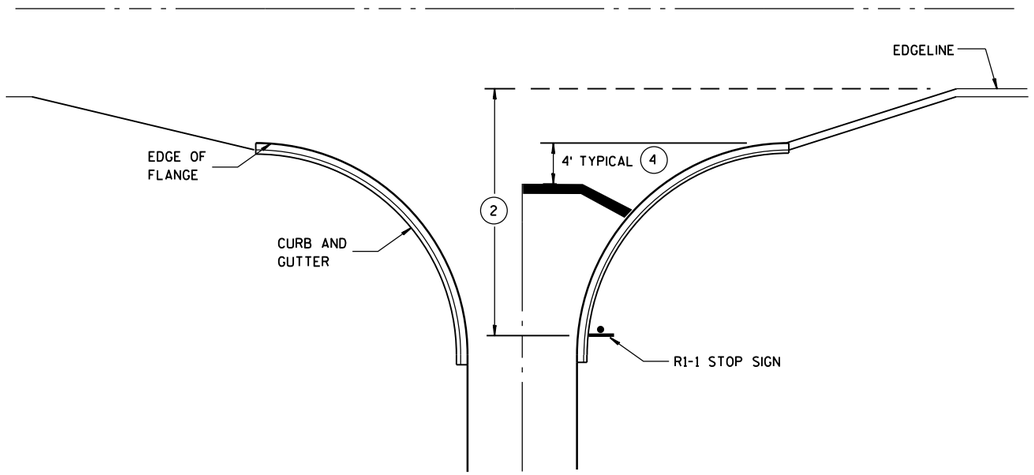
APPROVED
March 2016 — DATE
FHWA
/S/ Vu Thao — WIND LOADED STR PROGRAM LEA

6

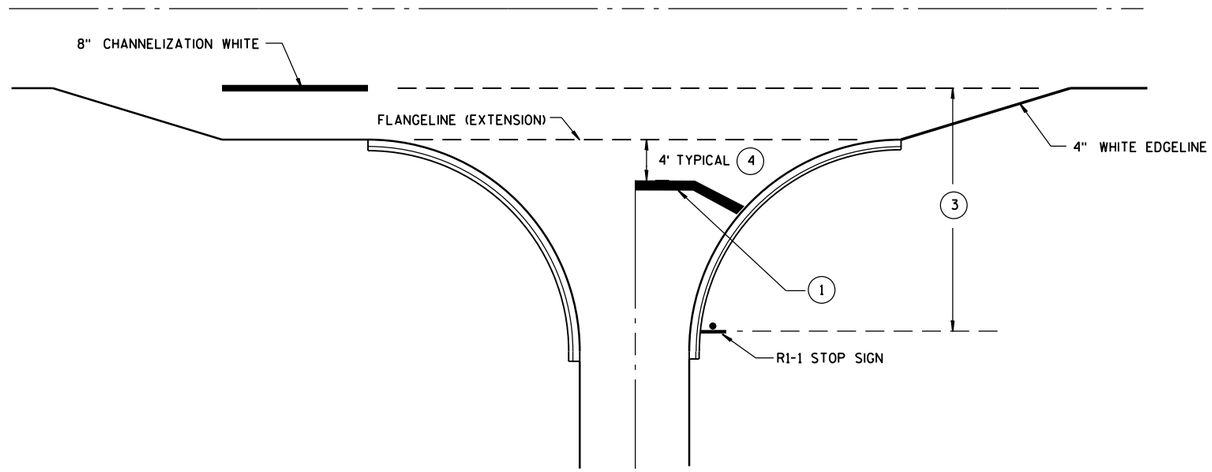
S.D.D. 15 C 25-3

6

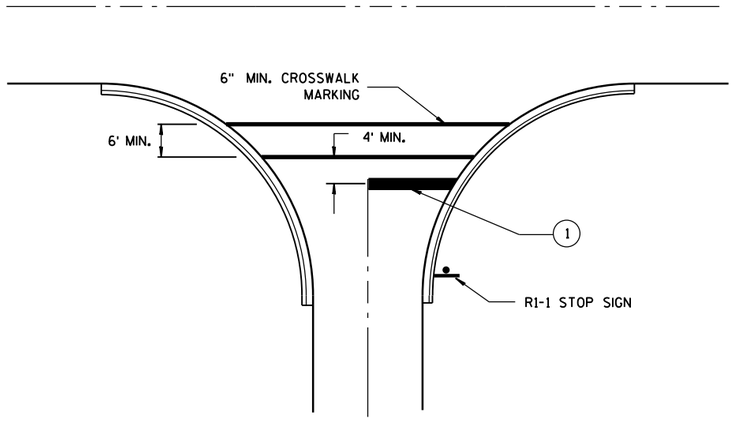
S.D.D. 15 C 25-3



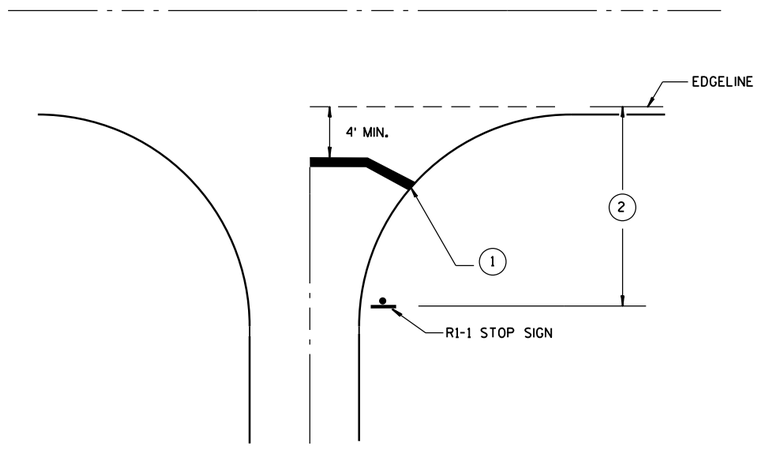
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

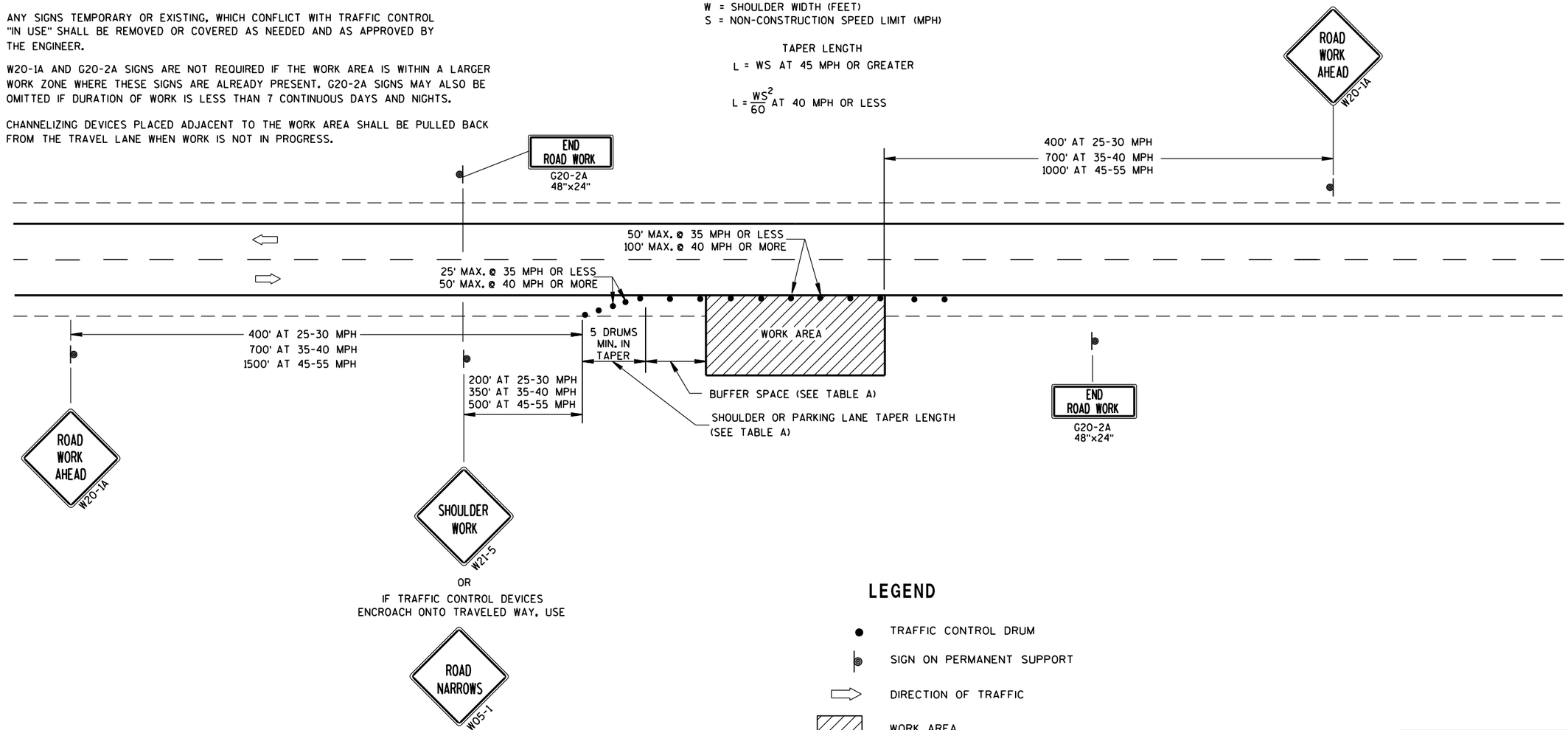
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

July 14, 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible] FIC

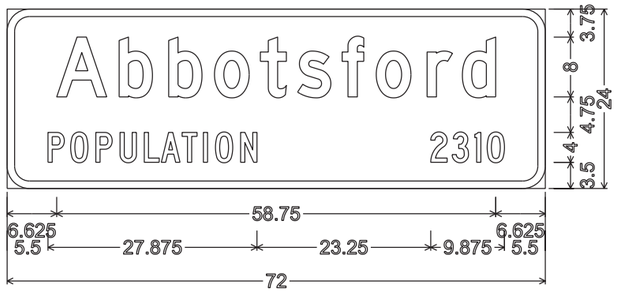
FHWA

6

S.D.D. 15 D 28-3

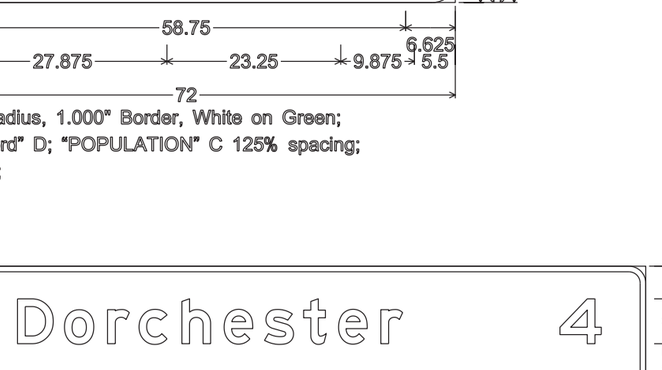
6

S.D.D. 15 D 28-3

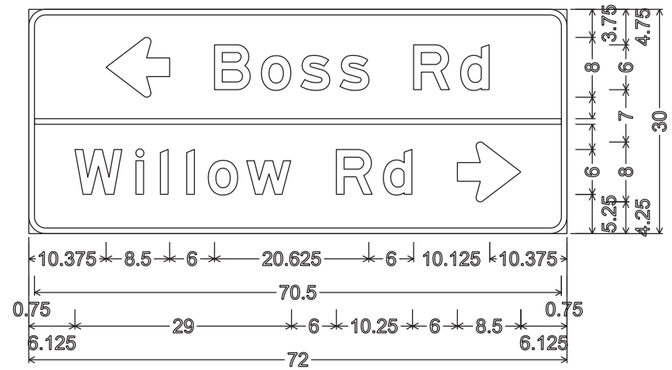


3.000" Radius, 1.000" Border, White on Green;
"Abbotsford" D; "POPULATION" C 125% spacing;
"2310" C;

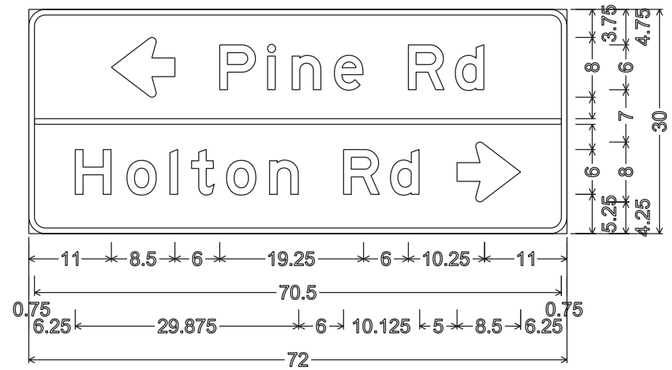
2.250" Radius, 0.750" Border, White on Green;
"Dorchester" E; "4" E; "Medford" E; "14" E; "Ashland" E; "130" E;



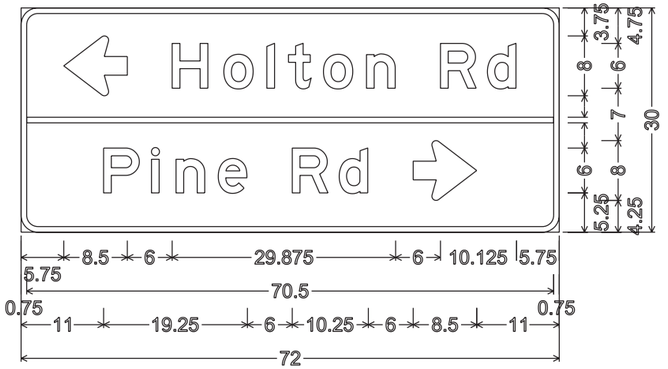
2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°; "Willow" E;
"Rd" E; "Boss" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;



2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°; "Boss" E;
"Rd" E; "Willow" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;



2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°; "Pine" E;
"Rd" E; "Holton" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;



2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°; "Holton" E;
"Rd" E; "Pine" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;

NOTES

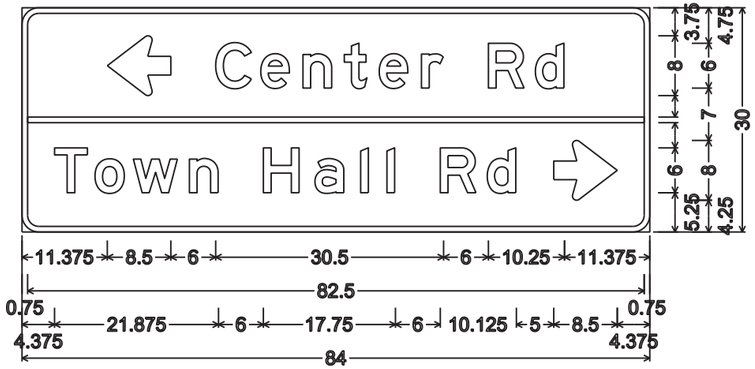
1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E except as Shown

7

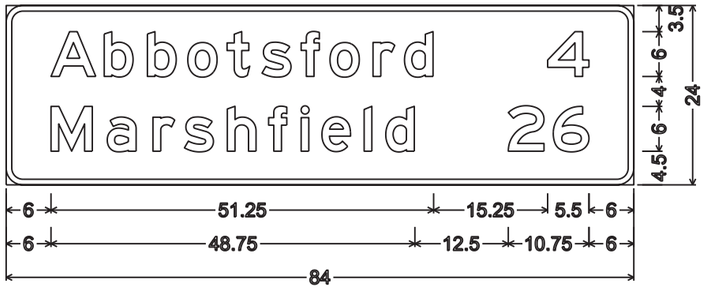
7

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK & TAYLOR	PERMANENT SIGNING	SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_d6\6102A616.dgn PLOT DATE : 20-JUN-2016 14:00 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 15.566735:1.000000
WISDOT/CADDS SHEET 42



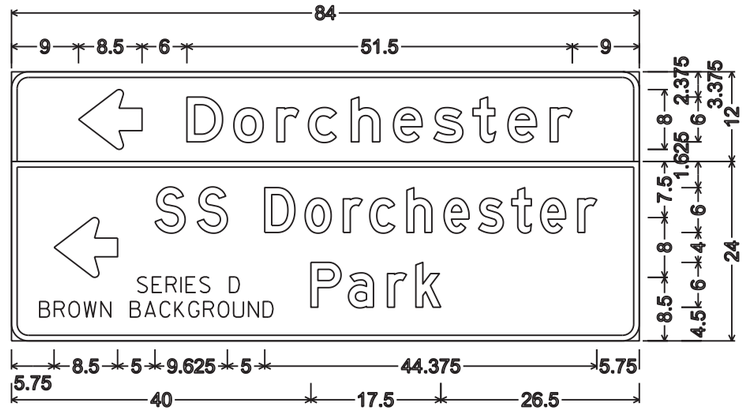
2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°; "Center" E; "Rd" E;
"Town" E; "Hall" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;



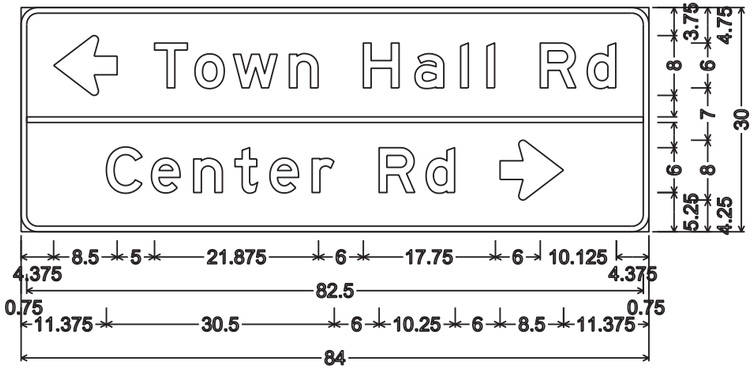
2.250" Radius, 0.750" Border, White on Green;
"Abbotsford" E; "4" E; "Marshfield" E; "26" E;

NOTES

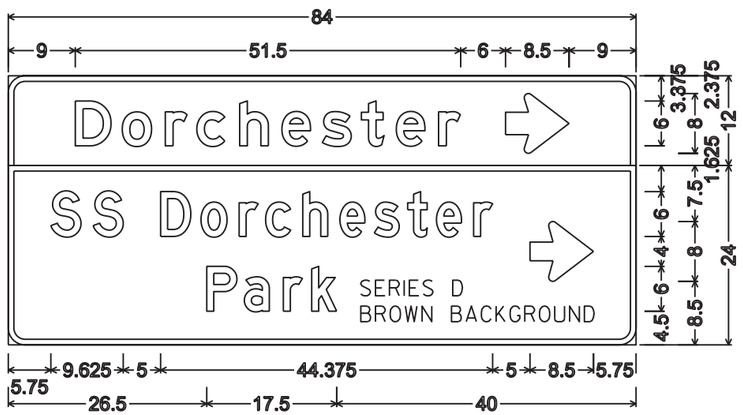
1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN except as Shown
   Message - WHITE
3. Message Series - E except as Shown



2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°; "Dorchester" E;
2.250" Radius, 0.750" Border, White on Brown;
Standard Arrow Custom 8.500" X 8.000" 180°; "SS" D;
"Dorchester" D; "Park" D;



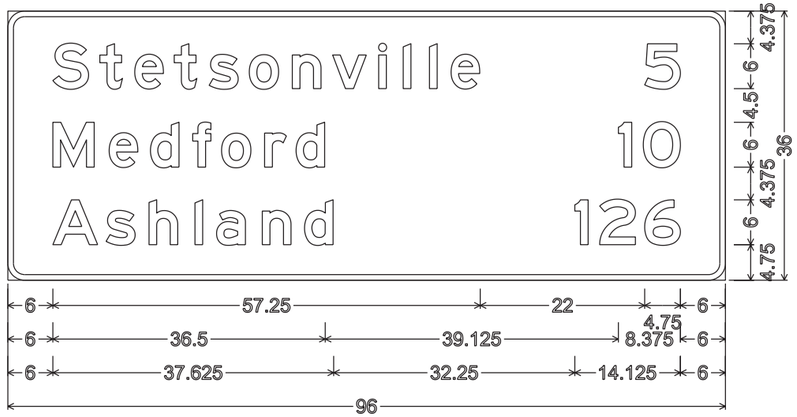
2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°; "Town" E; "Hall" E;
"Rd" E; "Center" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;



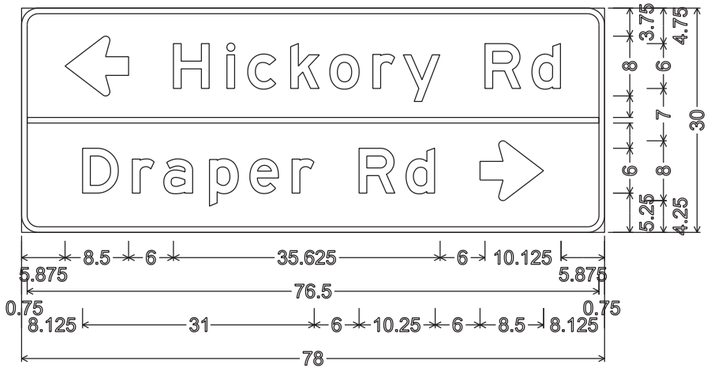
2.250" Radius, 0.750" Border, White on Green;
"Dorchester" E; Standard Arrow Custom 8.500" X 8.000" 0°;
2.250" Radius, 0.750" Border, White on Brown;
"SS" D; "Dorchester" D; "Park" D;
Standard Arrow Custom 8.500" X 8.000" 0°;

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK & TAYLOR	PERMANENT SIGNING	SHEET NO:	E

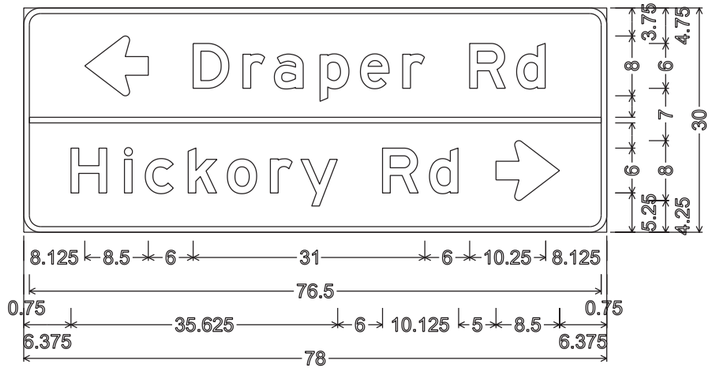
FILE NAME : C:\CAEfiles\Projects\tr_d6\61024616.DGN PLOT DATE : 28-JUN-2016 15:48 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 15.566735:1.000000



2.250" Radius, 0.750" Border, White on Green;
"Stetsonville" E; "5" E; "Medford" E; "10" E; "Ashland" E; "126" E;



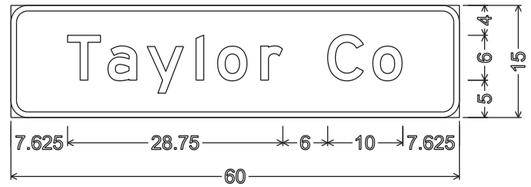
2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°; "Hickory" E;
"Rd" E; "Draper" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;



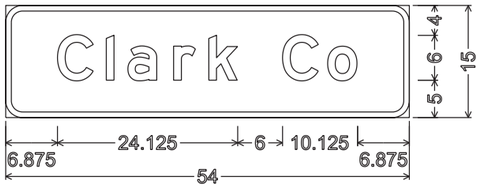
2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°; "Draper" E;
"Rd" E; "Hickory" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 0°;

NOTES

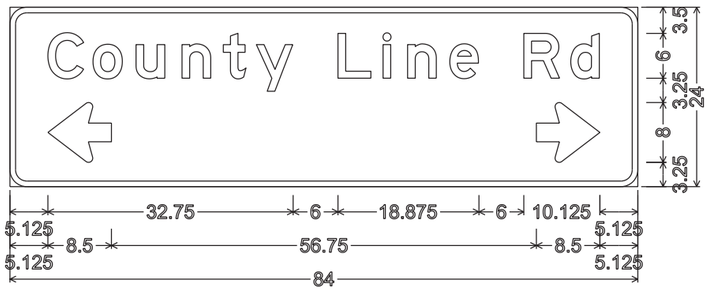
1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E



2.250" Radius, 0.750" Border, White on Green;
"Taylor" E; "Co" E;



2.250" Radius, 0.750" Border, White on Green;
"Clark" E; "Co" E;



2.250" Radius, 0.750" Border, White on Green;
"County" E; "Line" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 180°;
Standard Arrow Custom 8.500" X 8.000" 0°;

7

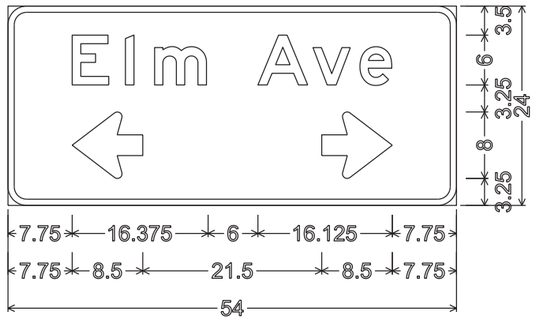
7

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK & TAYLOR	PERMANENT SIGNING	SHEET NO:	E

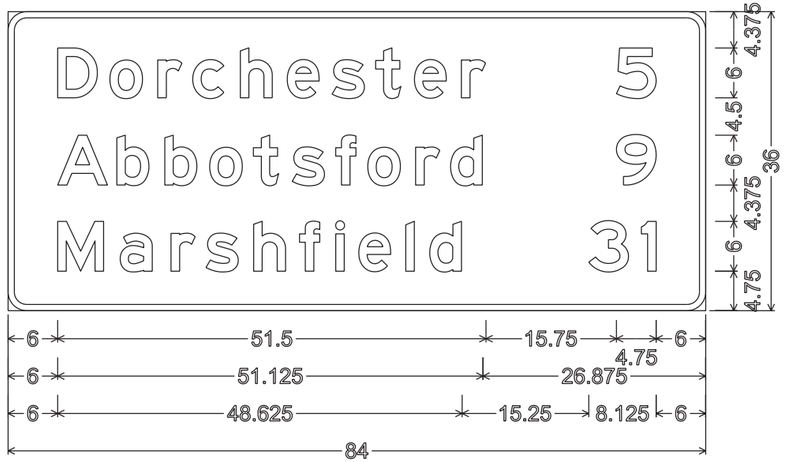
FILE NAME : C:\CAEFiles\Projects\tr_d6\6102A616.dgn PLOT DATE : 20-JUN-2016 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 15.566735:1.000000 WISDOT/CADDS SHEET 42

NOTES

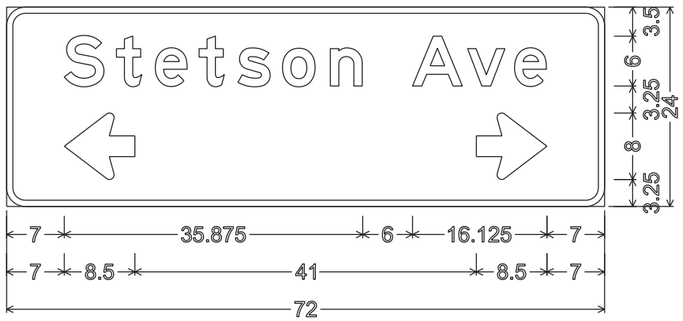
1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E



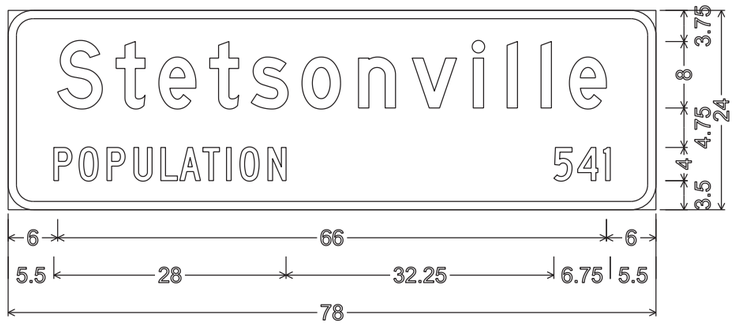
2.250" Radius, 0.750" Border, White on Green;
"Elm" E; "Ave" E;
Standard Arrow Custom 8.500" X 8.000" 180°;
Standard Arrow Custom 8.500" X 8.000" 0°;



2.250" Radius, 0.750" Border, White on Green;
"Dorchester" E; "5" E; "Abbotsford" E; "9" E; "Marshfield" E; "31" E;



2.250" Radius, 0.750" Border, White on Green;
"Stetson" E; "Ave" E;
Standard Arrow Custom 8.500" X 8.000" 180°;
Standard Arrow Custom 8.500" X 8.000" 0°;



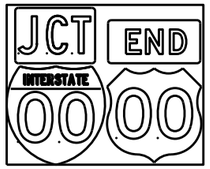
GRE 14775-14968 1EA;
3.000" Radius, 1.000" Border, White on Green;
"Stetsonville" D; "POPULATION" C 125% spacing; "541" C;

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK & TAYLOR	PERMANENT SIGNING	SHEET NO:	E

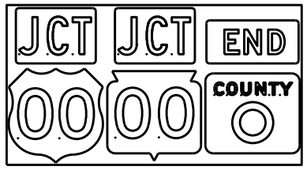
FILE NAME : C:\CAEFiles\Projects\tr_d6\6102A616.dgn PLOT DATE : 20-JUN-2016 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 14.010062:1.000000
WISDOT/CADDS SHEET 42

TYPICAL ASSEMBLIES

J1-1

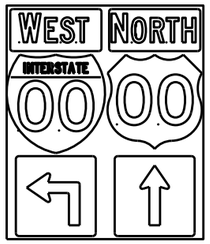


J1-2

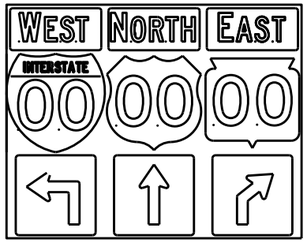


J1-3

J2-1



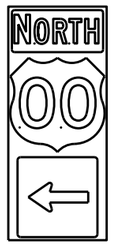
J2-2



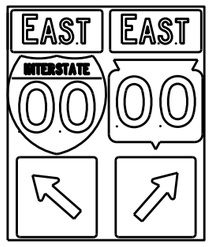
J2-3

JV

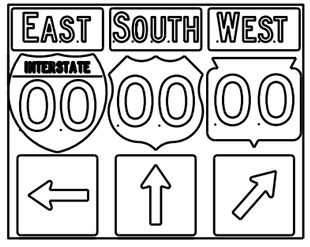
(Typical Vertical J-Assembly
See Note 10 and 11)



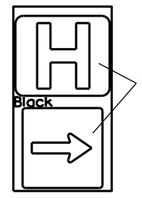
J3-1



J3-2

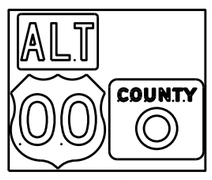


J3-3

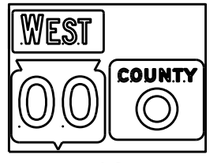


JH-1

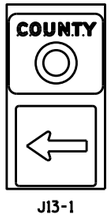
J4-1



J4-2



J4-2



J13-1

J12-1

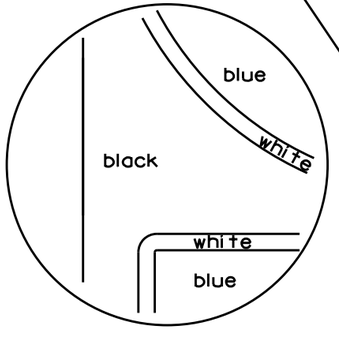
J32-1

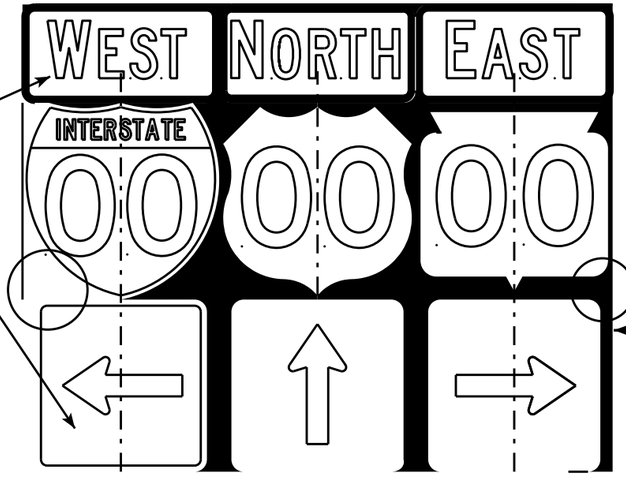
J33-1

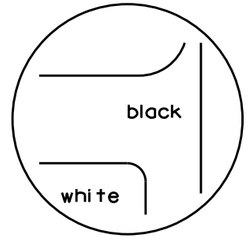
J23-1

J22-1

blue background
with interstate







black background

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

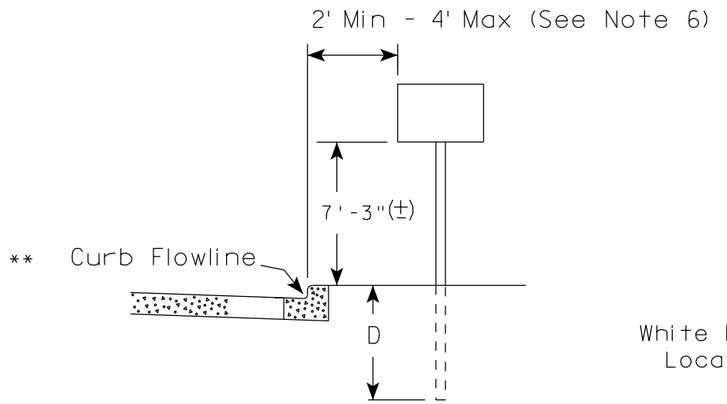
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

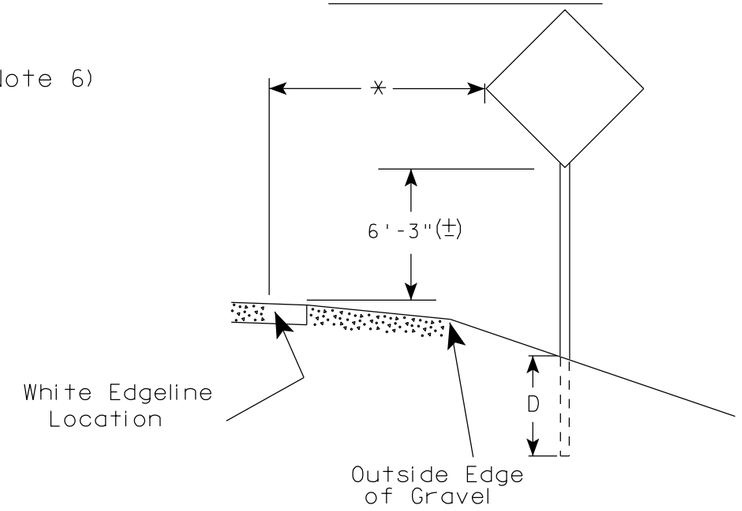
PROJECT NO: | SHEET NO: E

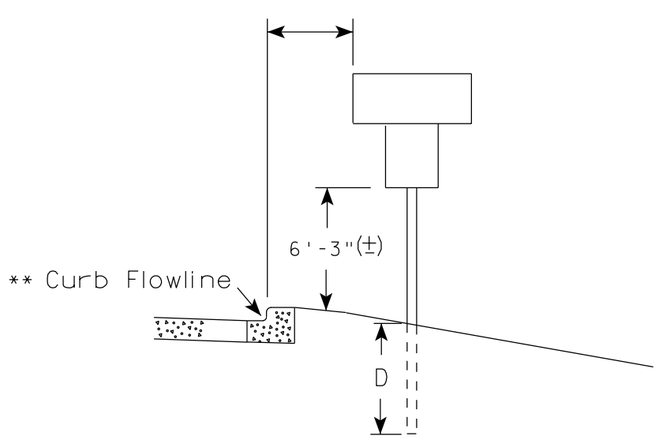
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :
WISDOT/CADDS SHEET 42

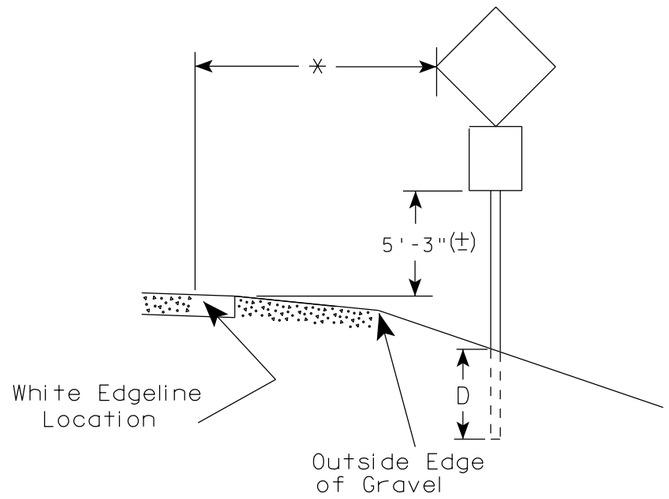
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

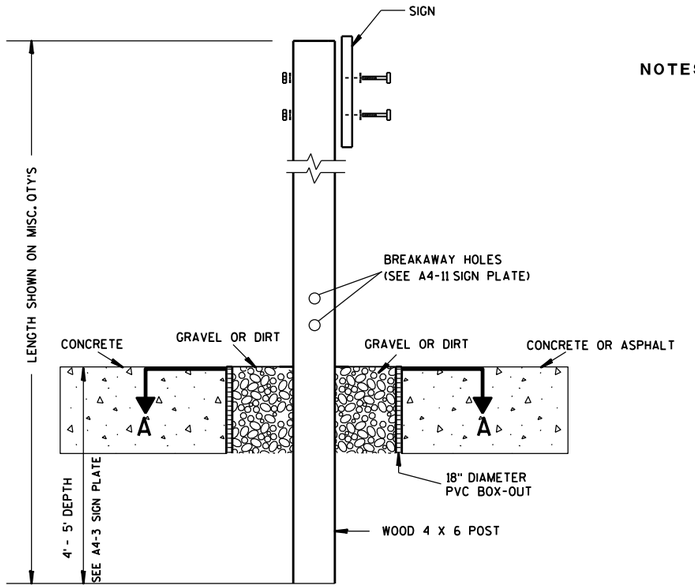
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

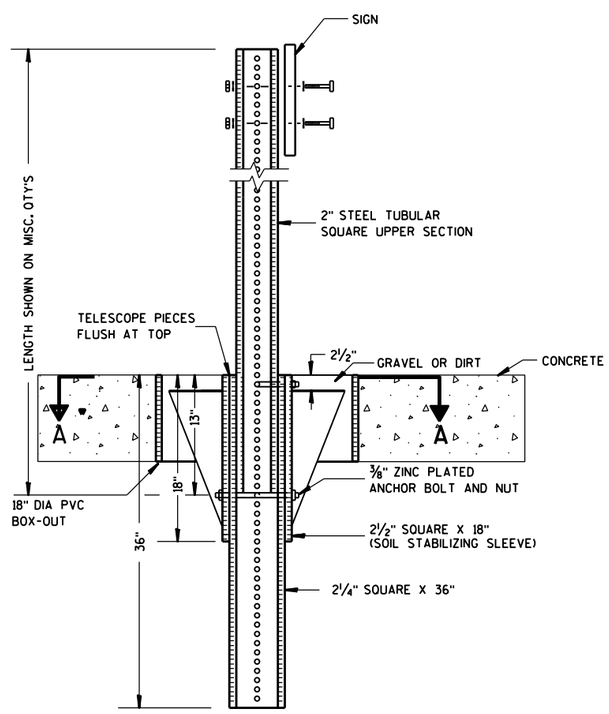
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

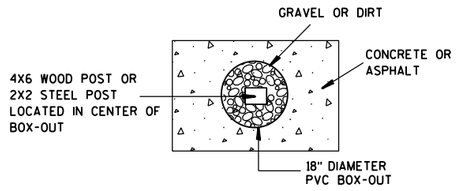
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

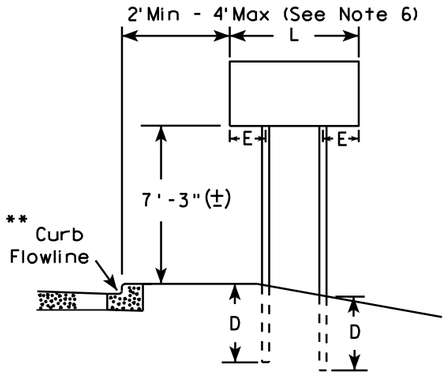
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

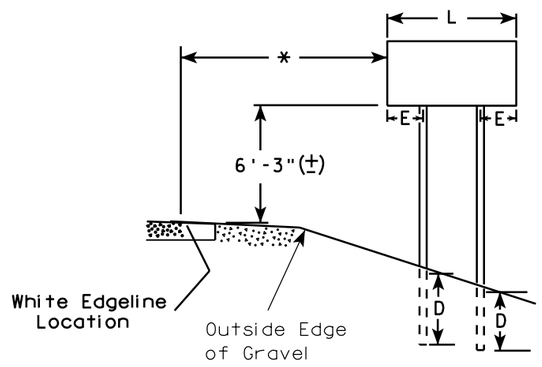
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

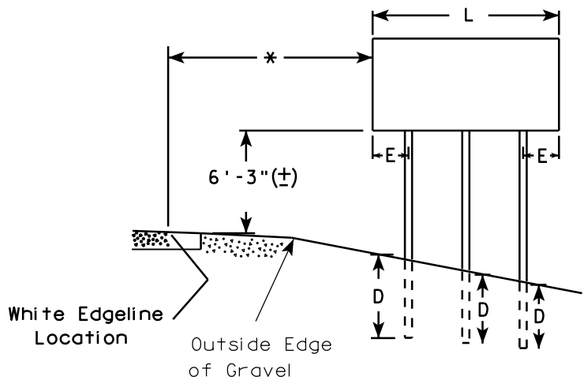
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

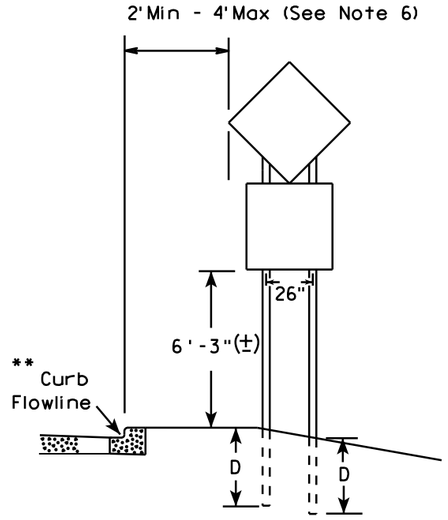
URBAN AREA



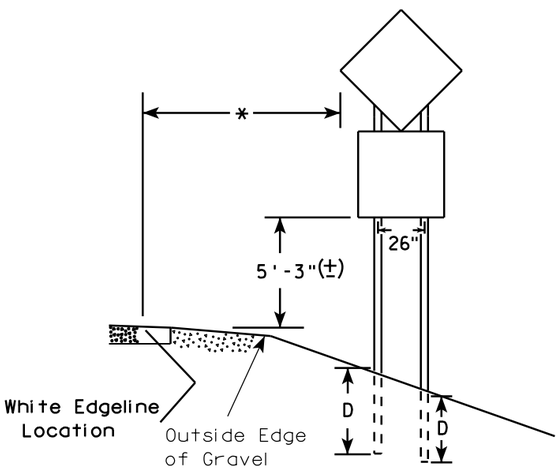
RURAL AREA (See Note 3)







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'

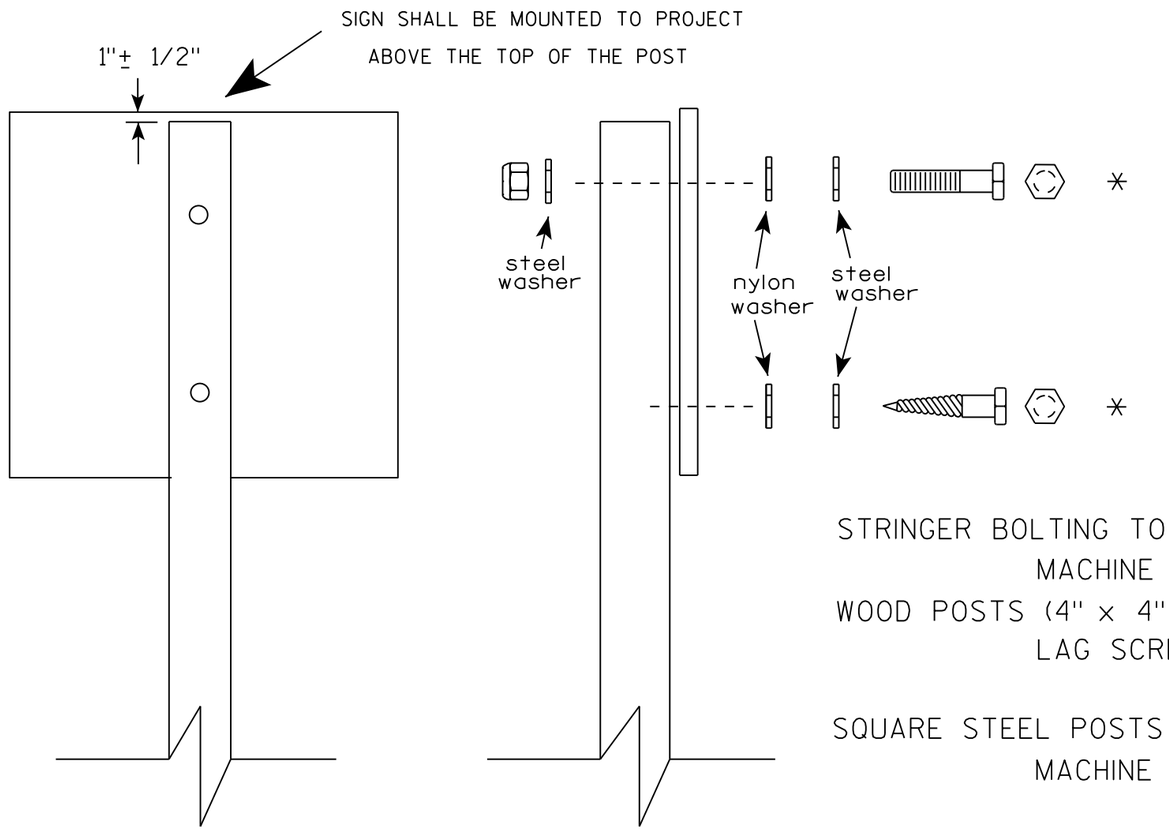
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 175 14

PROJECT NO:	HWY:	COUNTY:		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.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)

3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)

3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

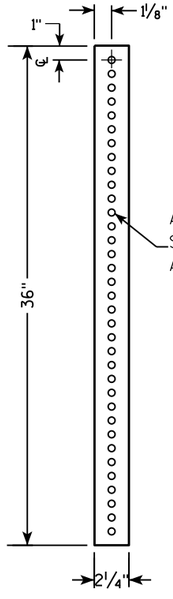
PROJECT NO:

SHEET NO: E

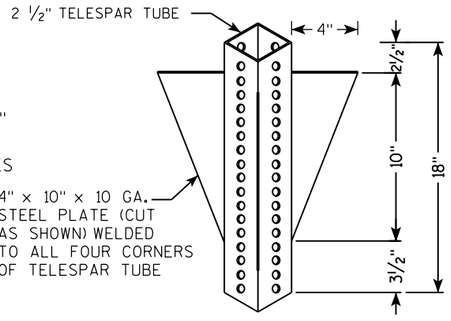
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

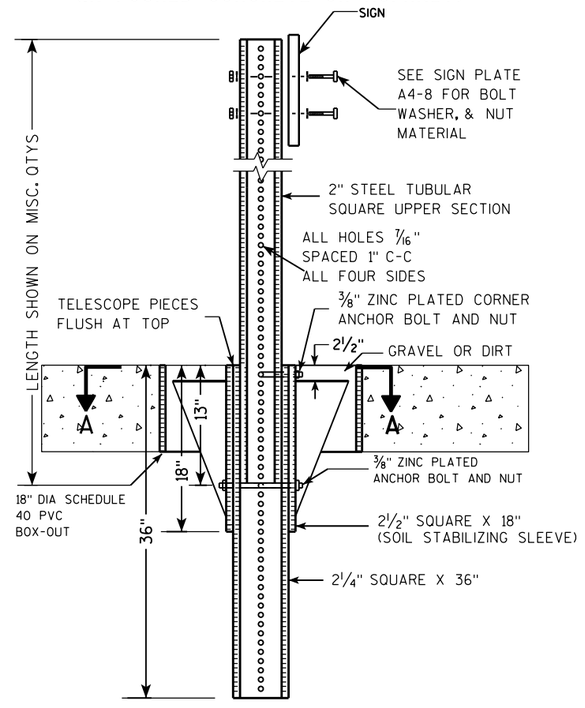
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



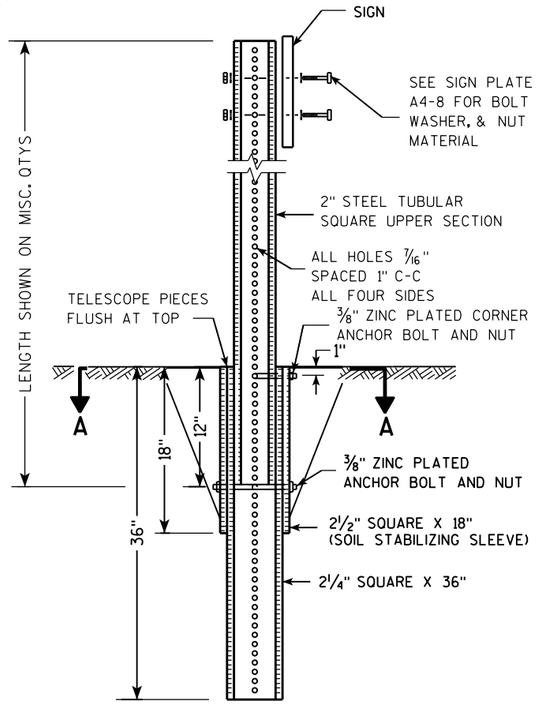
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

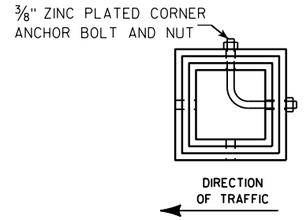


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

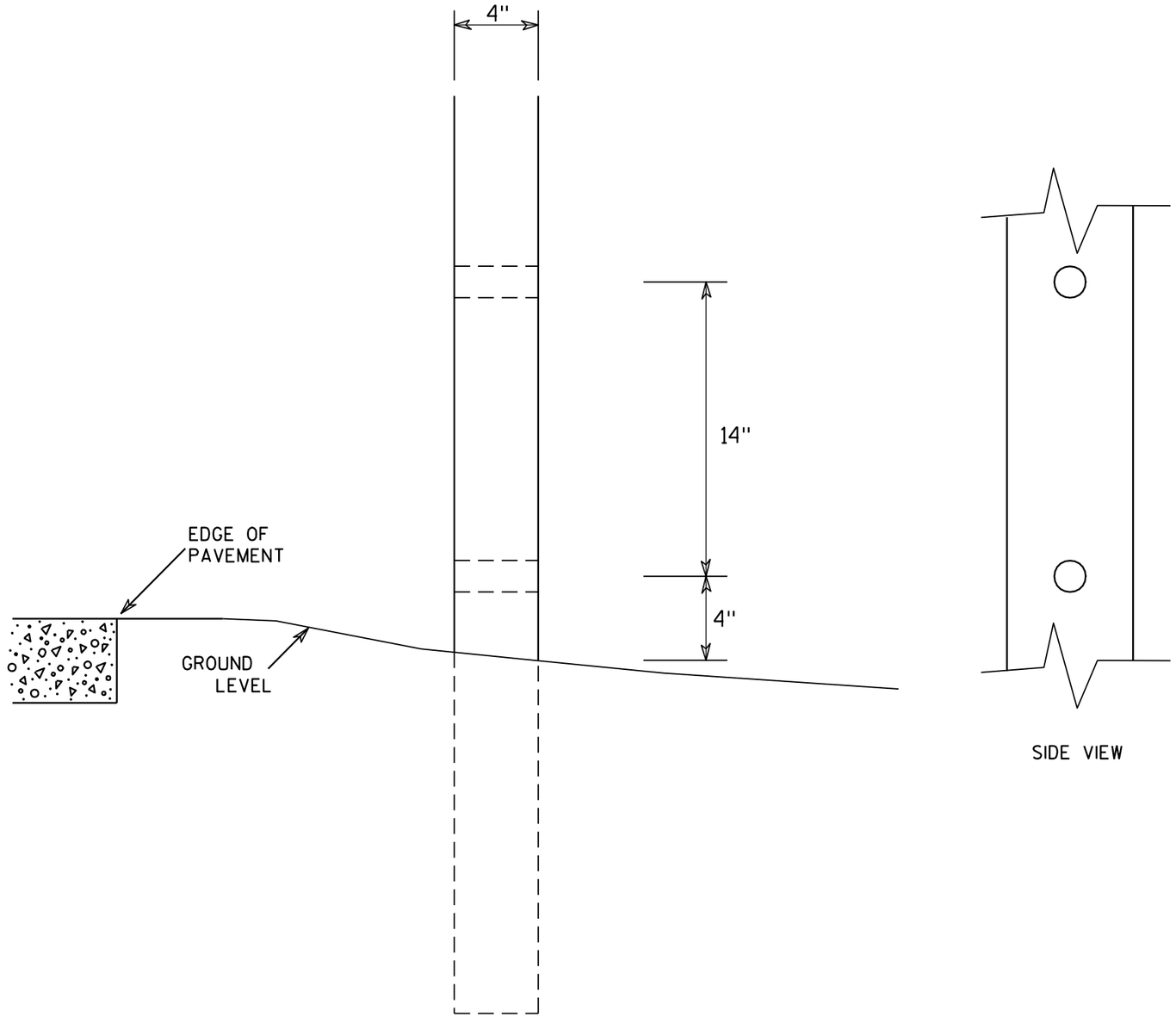
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 177 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

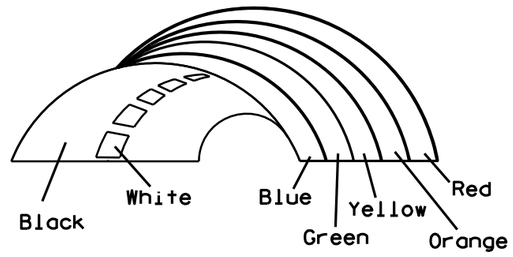
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 178	E

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - (See Note 5)
3. Message Series - (See Note 6)
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Border - Blue
   Line 1 - Red
   Line 2 - Black
   Line 3-5 - Blue
6. Line 1 - Dutch 8011L
   Line 2 - Series E
   Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

STANDARD SIGN
I55-56

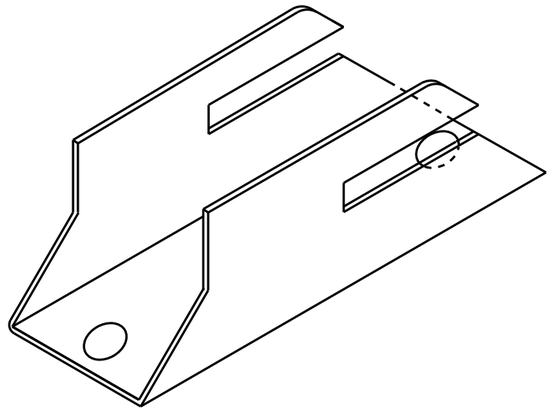
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

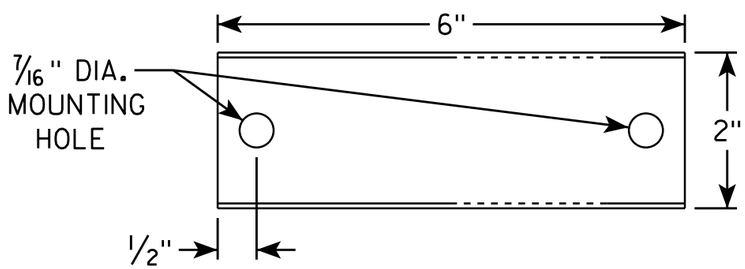
DATE 4/27/11 PLATE NO. 155-56.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 179

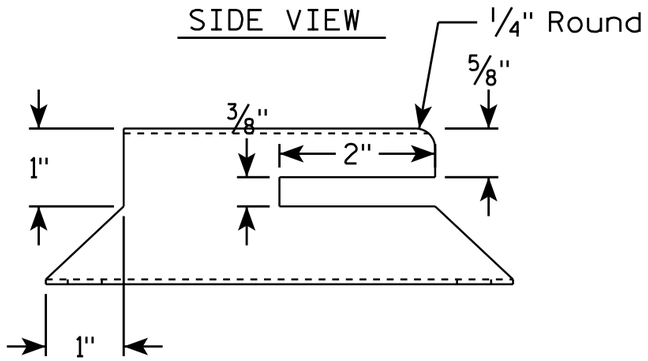
ISOMETRIC VIEW



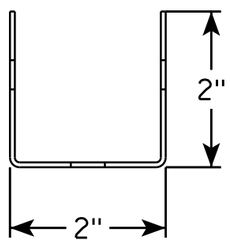
TOP VIEW



SIDE VIEW



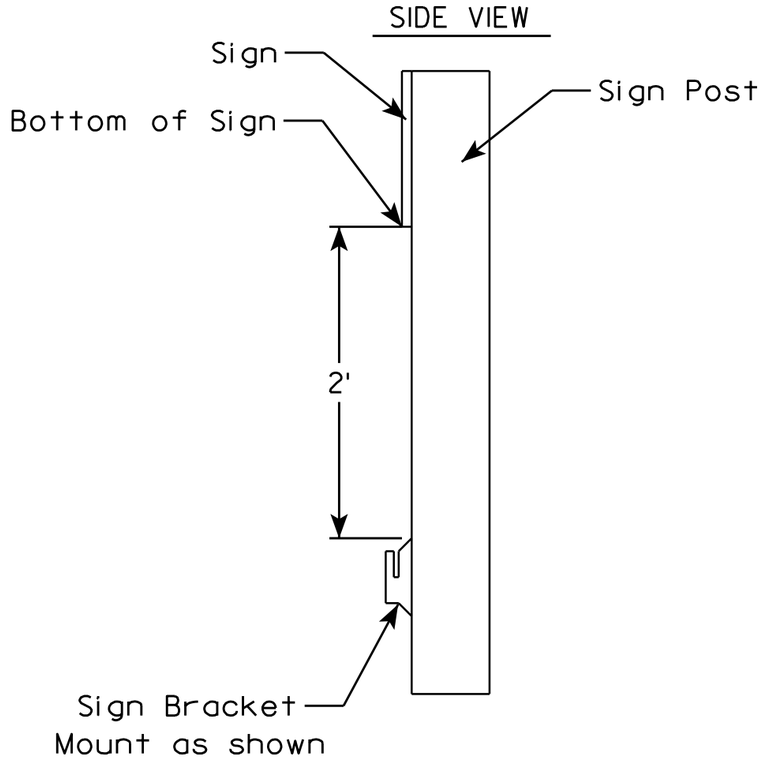
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

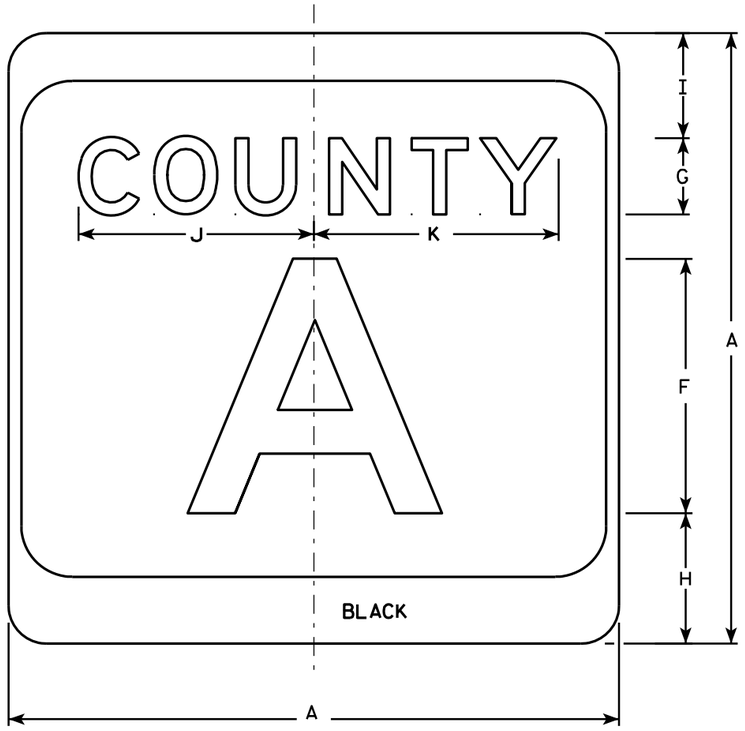
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

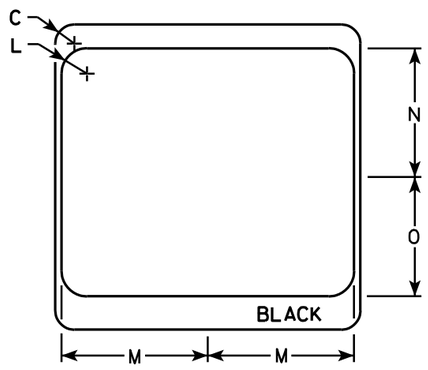
DATE 4/26/16 PLATE I55-56B.2

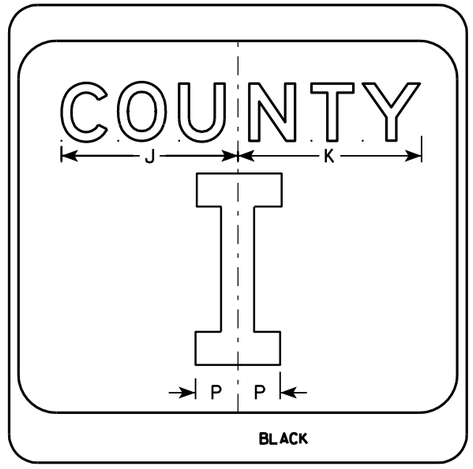
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

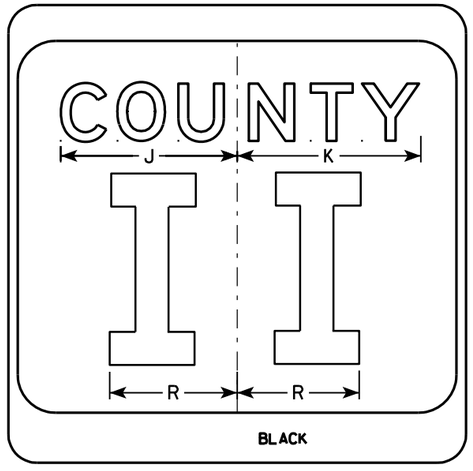
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\I5556B.DGN PLOT DATE : 26-APR-2016 17:29 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 1.945842:1.000000
WISDOT/CADDS SHEET 42



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

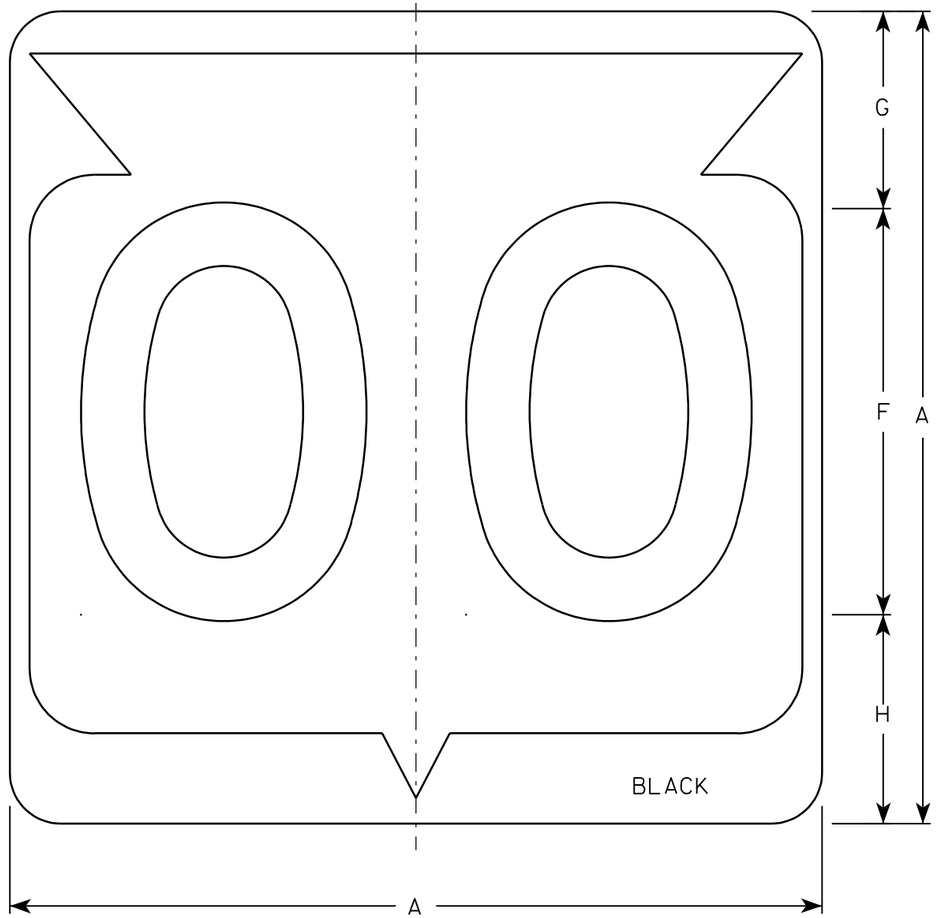
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

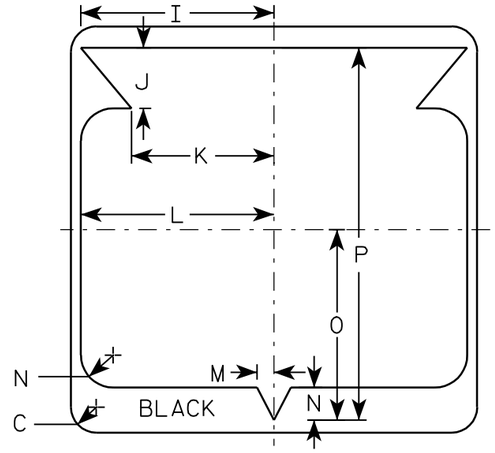
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 181	E



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

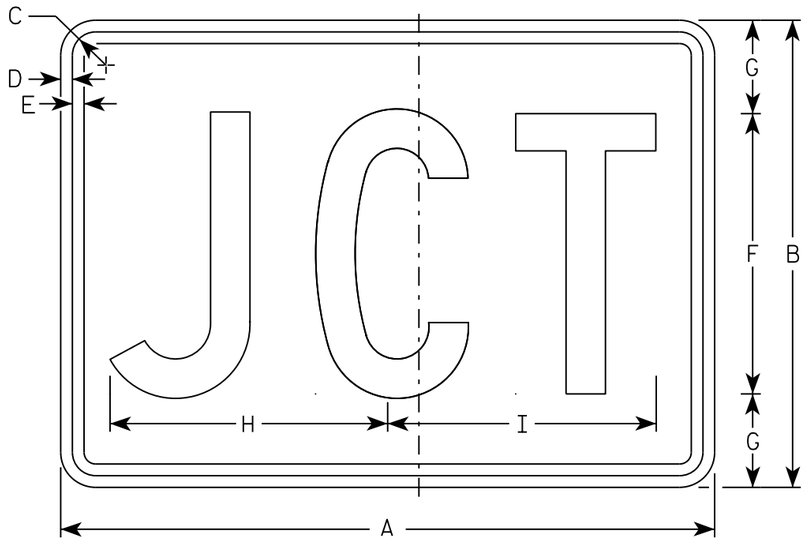
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

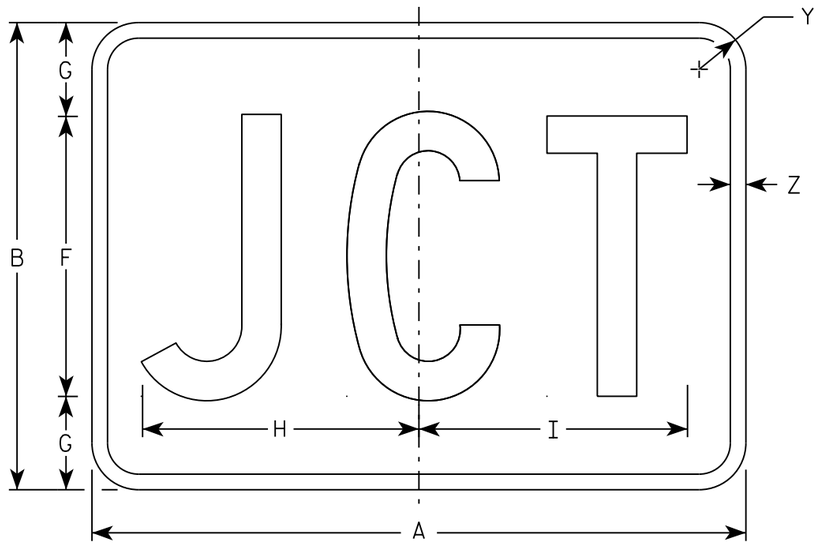
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 182	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

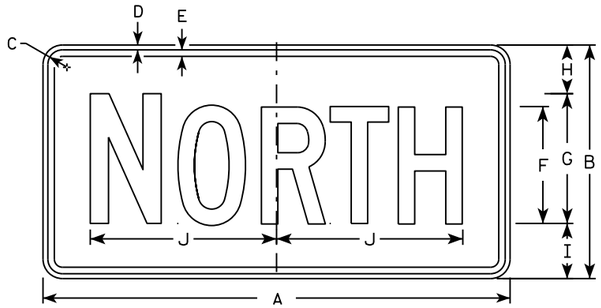
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

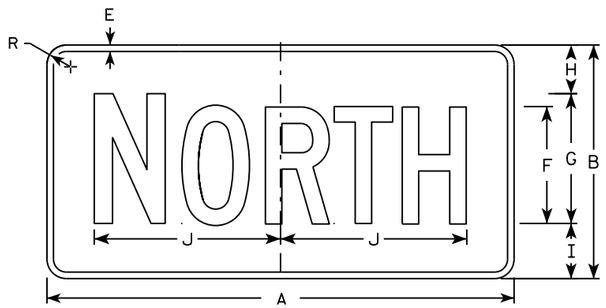
DATE 10/15/15 PLATE 183 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



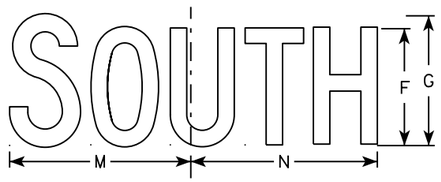
M3-1
MM3-1
MP3-1



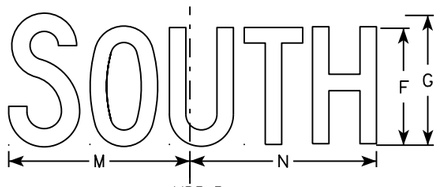
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

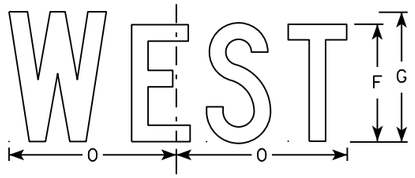
MB3-2
MK3-2
MN3-2



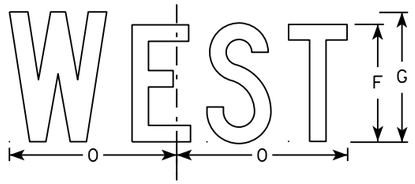
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

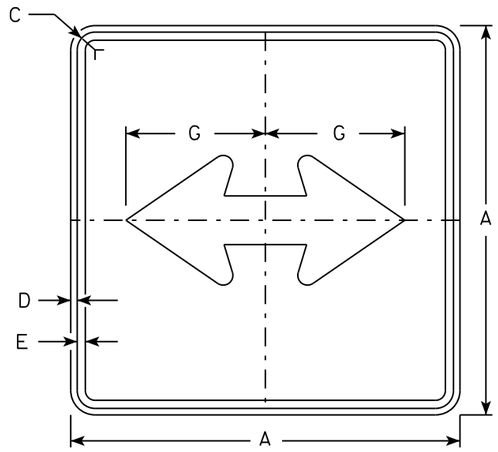
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

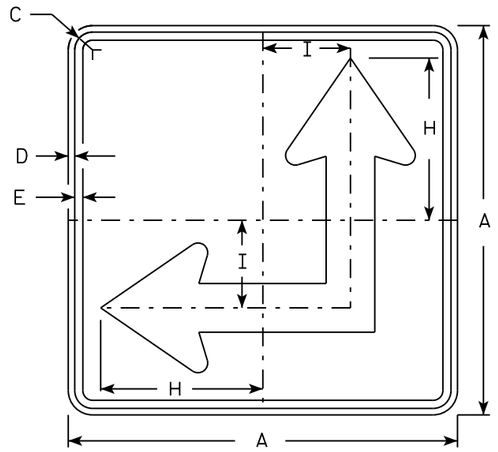
DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



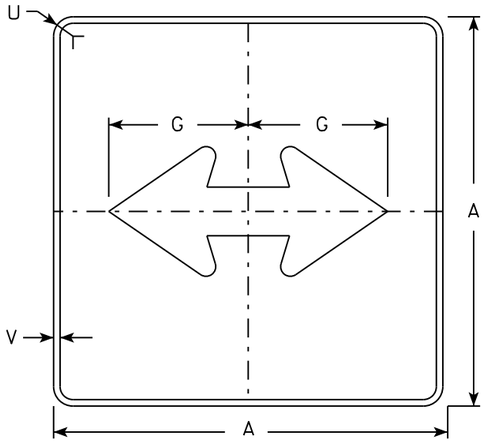
M6-4
MM6-4
MO6-4
MP6-4



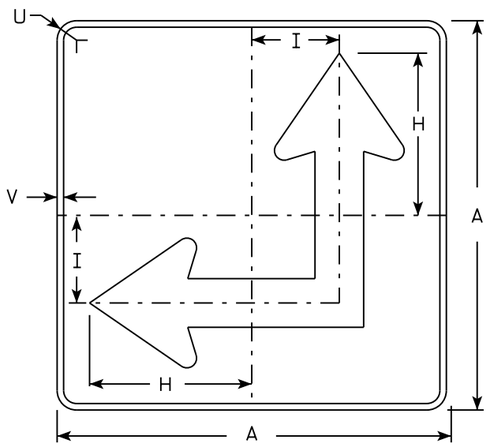
M6-6
MM6-6
MO6-6
MP6-6

NOTES

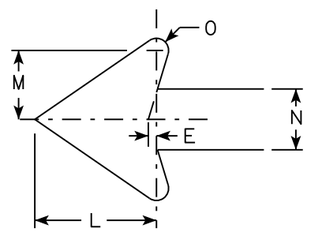
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

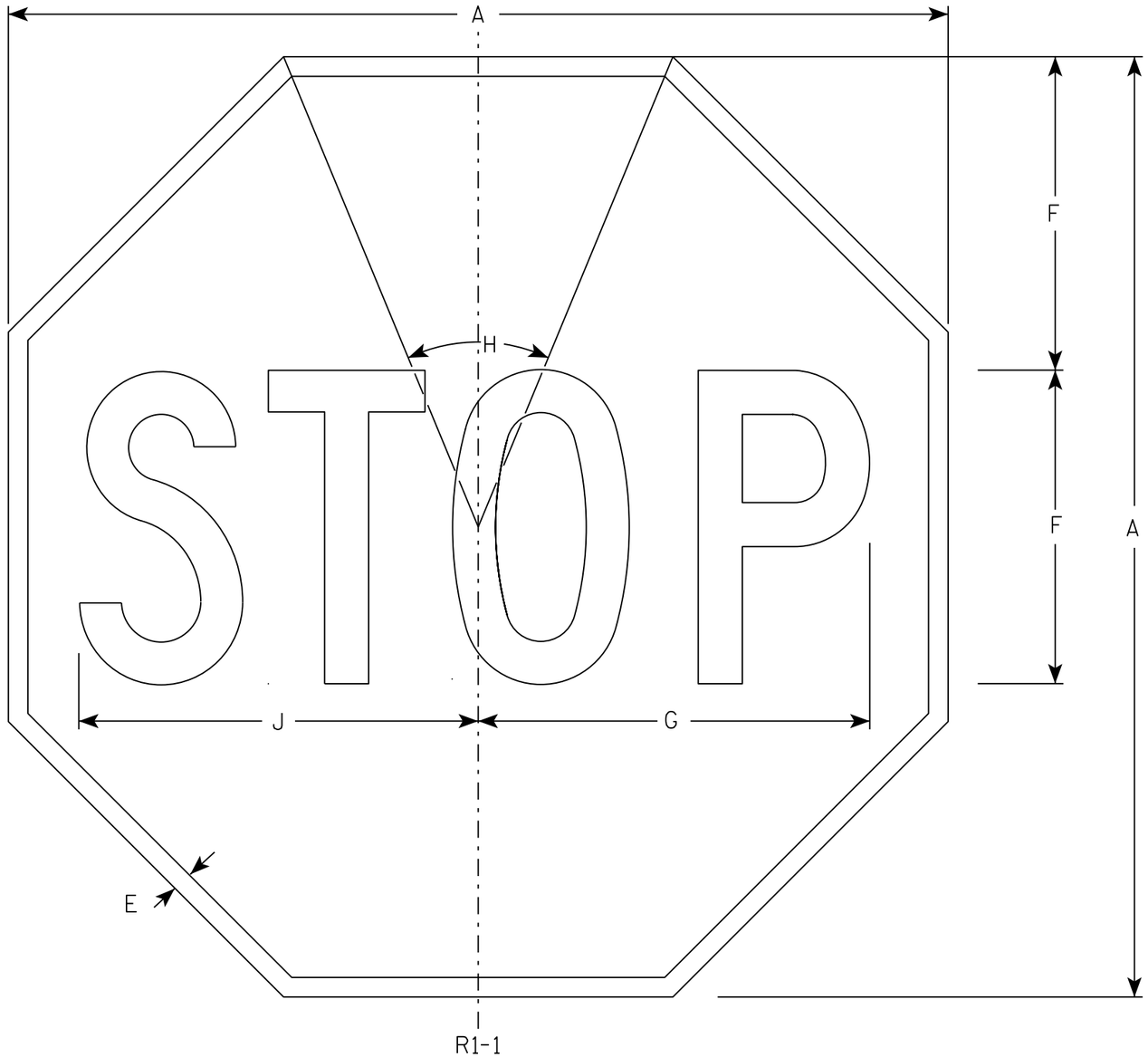
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 185 M6-4.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



R1-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1-1

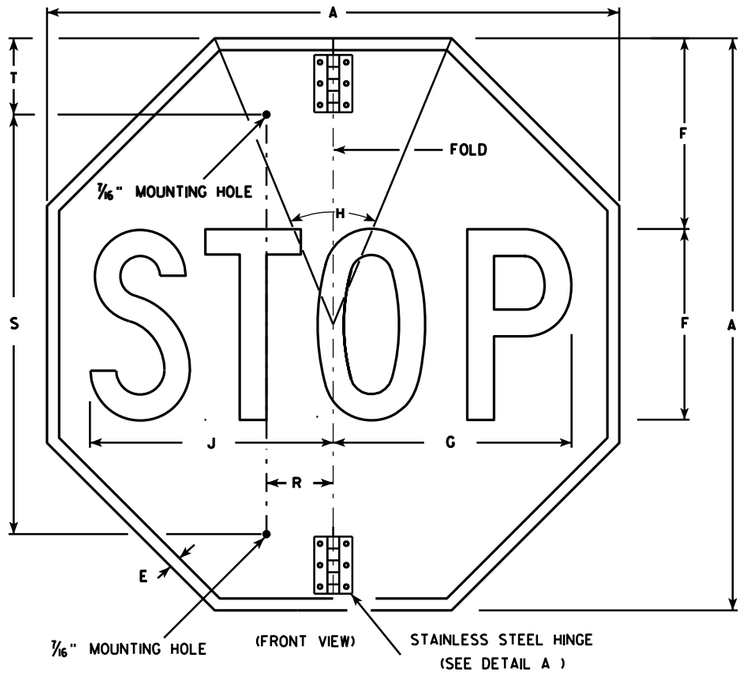
WISCONSIN DEPT OF TRANSPORTATION

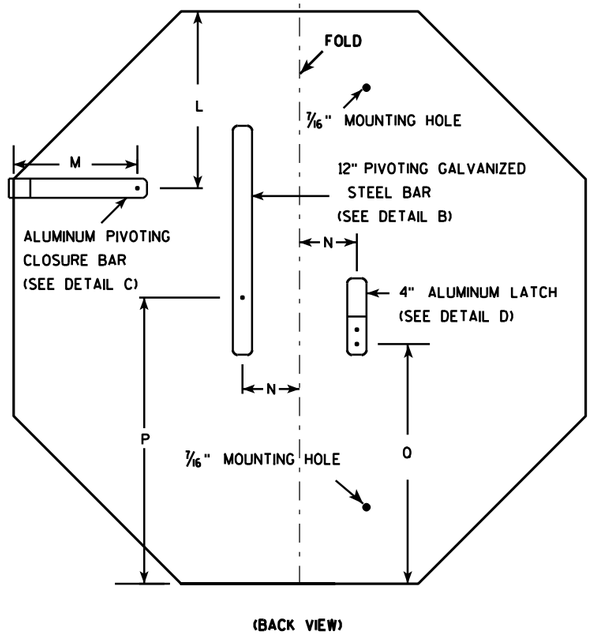
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

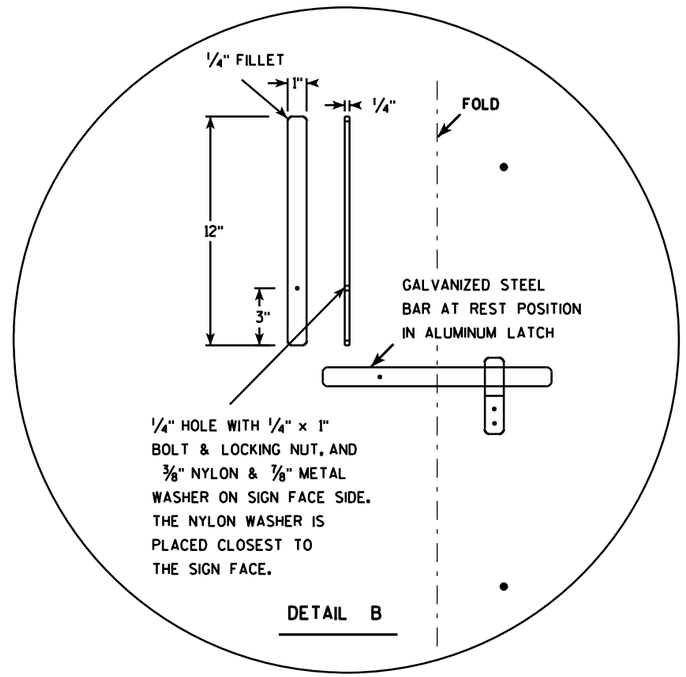
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000



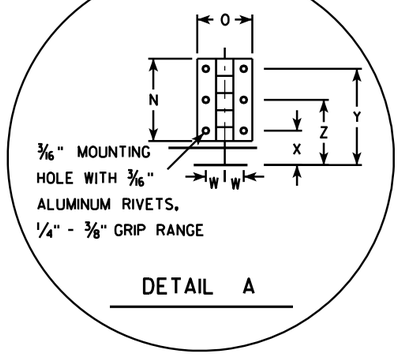


NOTES

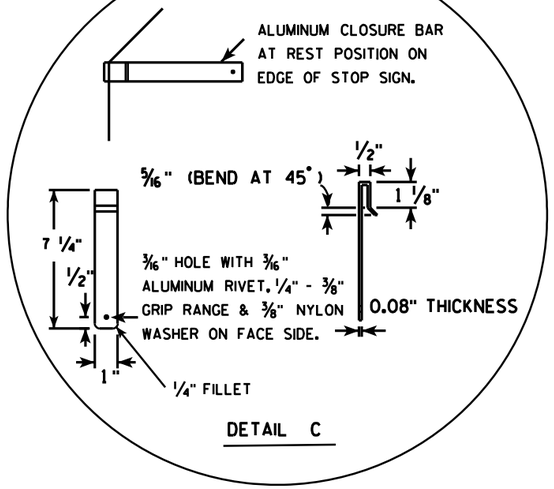
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



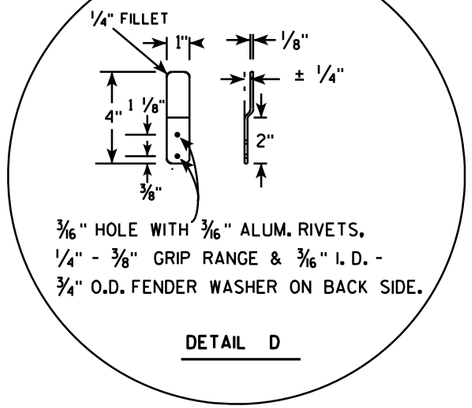
DETAIL B



DETAIL A



DETAIL C



DETAIL D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

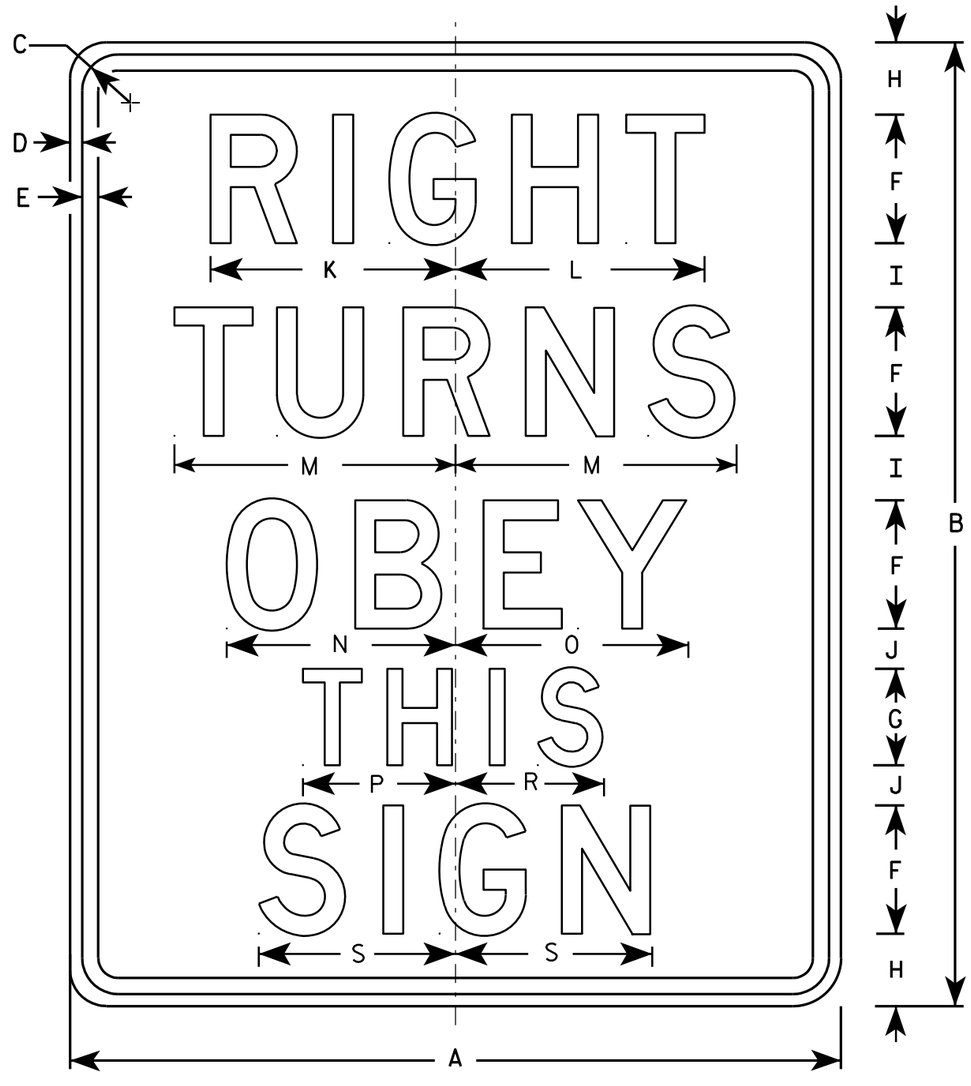
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 187 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R11F.DGN PLOT DATE : 02-DEC-2010 15:26 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 7.945391:1.000000

WISDOT/CADDS SHEET 42

7

7



R1-53

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	4	3	2 1/4	2	1 1/4	7 5/8	7 3/4	8 3/4	7 1/8	7 1/4	4 3/4		4 5/8	6 1/8								5.0
2M	24	30	1 1/8	3/8	1/2	4	3	2 1/4	2	1 1/4	7 5/8	7 3/4	8 3/4	7 1/8	7 1/4	4 3/4		4 5/8	6 1/8								5.0
3																											
4																											
5																											

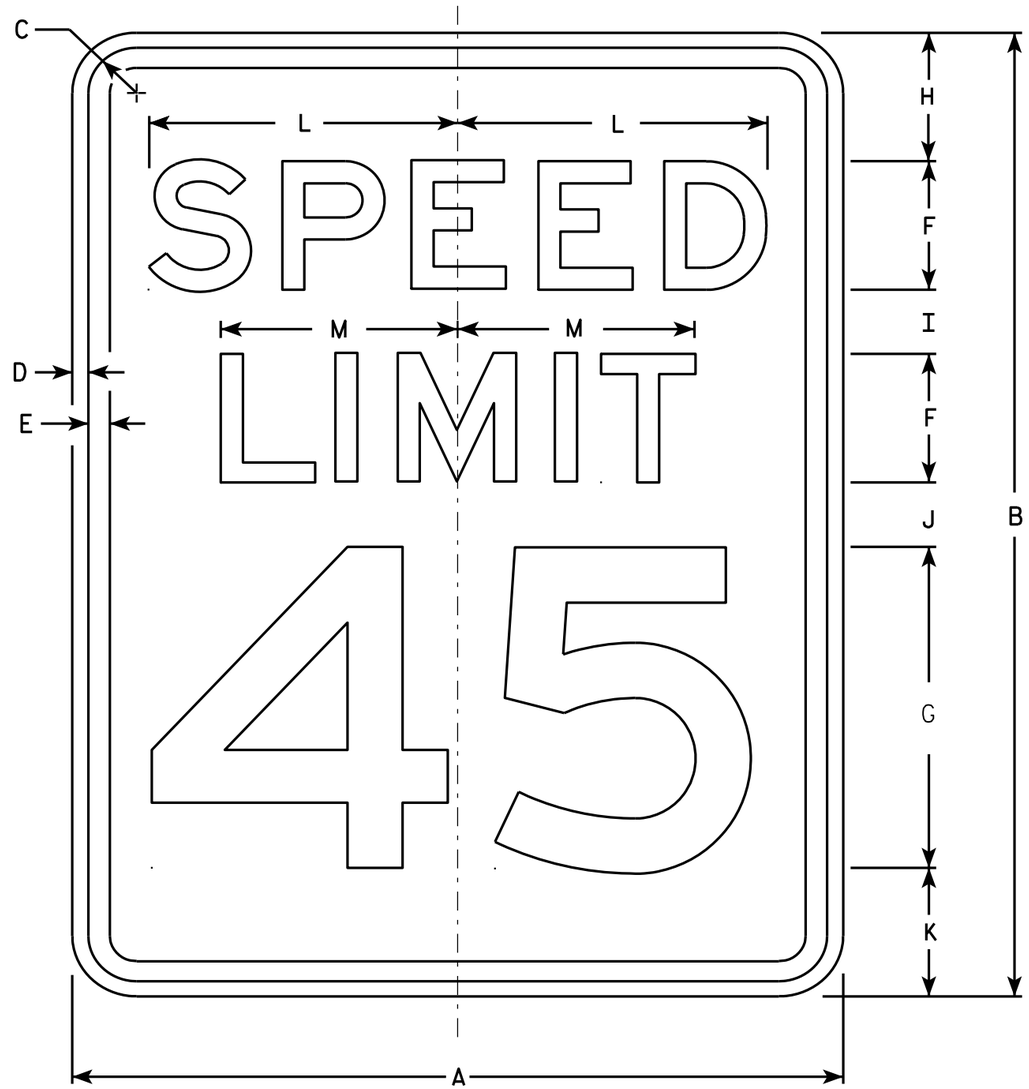
STANDARD SIGN
R1-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-53.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 188 | 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

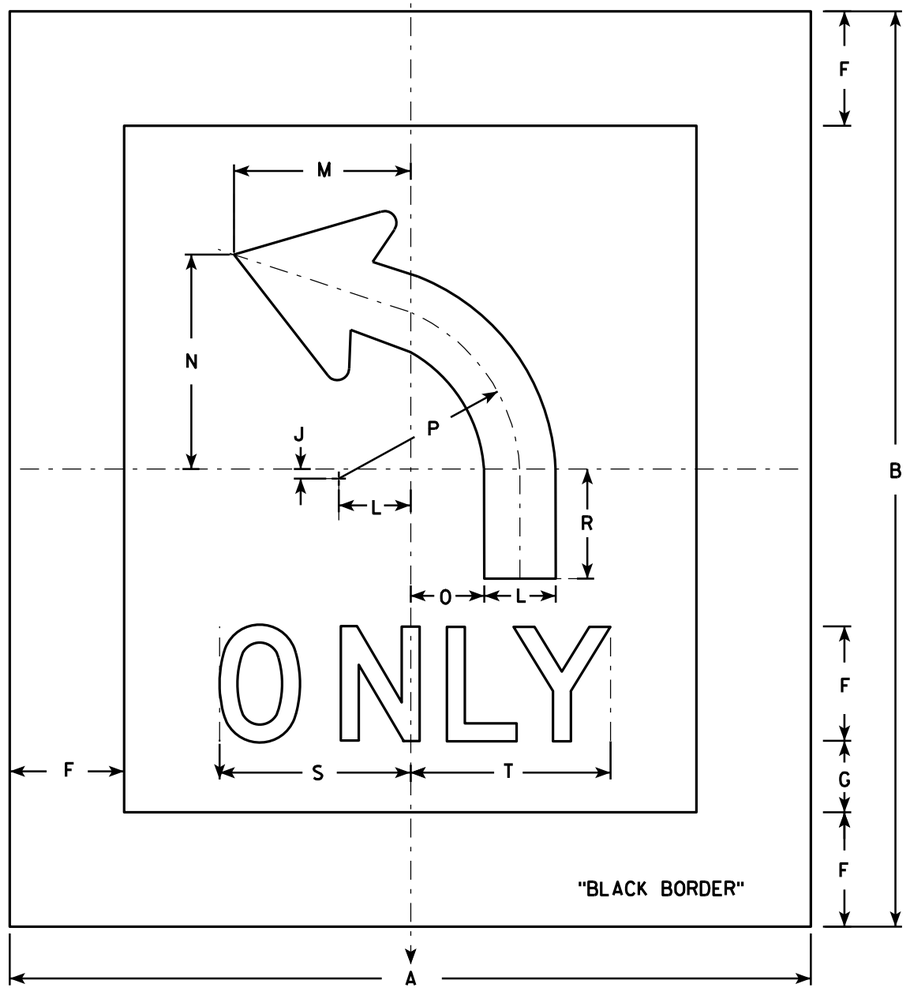
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

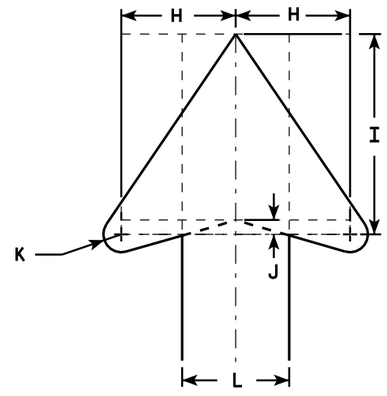
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 189	E



R3-5L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
5. R3-5R is the same as R3-5L except curved portion of arrow points right.
6. The 6" border is non-reflective black.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	42	48				6	3 3/4	4	7	1/2	5/8	3 3/4	9 1/4	11 1/4	3 7/8	9 1/2		5 3/4	10	10 1/2							1.26
2M	42	48				6	3 3/4	4	7	1/2	5/8	3 3/4	9 1/4	11 1/4	3 7/8	9 1/2		5 3/4	10	10 1/2							1.26
3																											
4																											
5																											

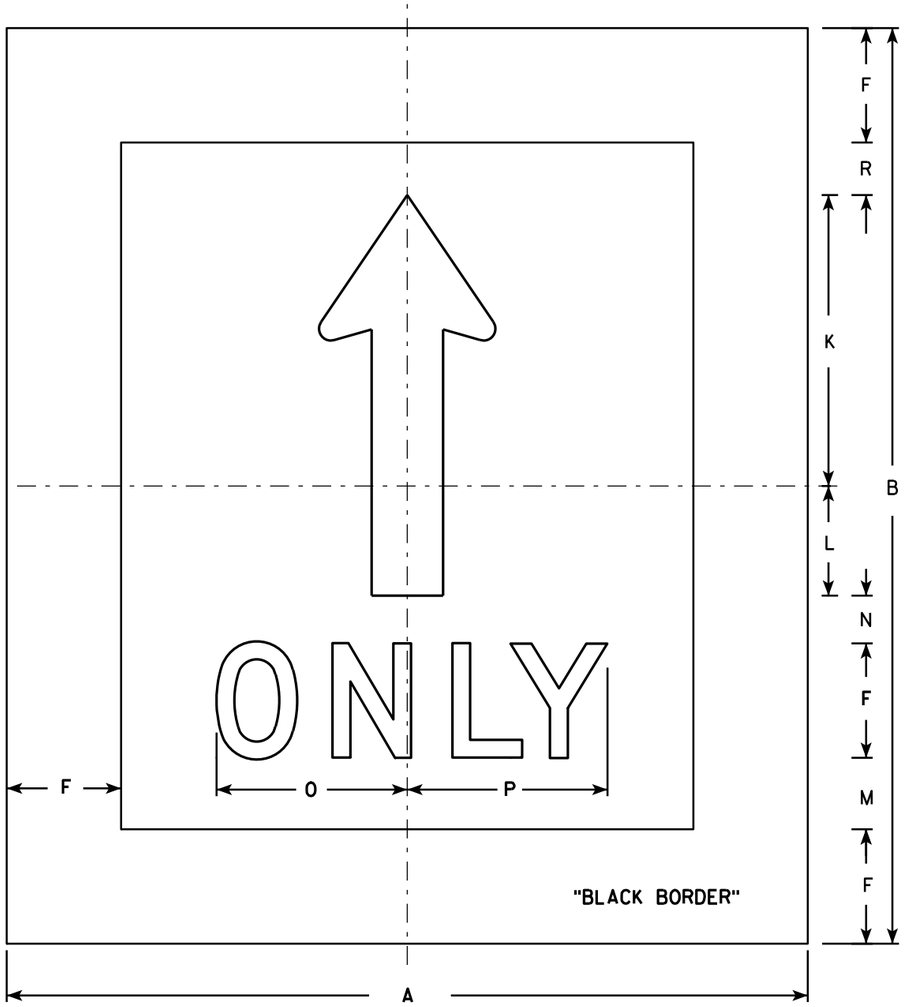
STANDARD SIGN
R3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/24/11 PLATE NO. R3-5.6

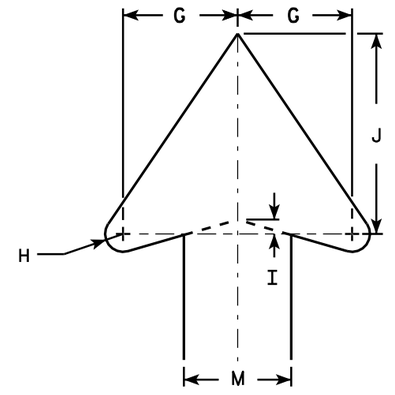
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 190 | E



R3-5A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood. When base material is metal, the corners shall be rounded.
5. The 6" border is non-reflective black.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	42	48				6	4	5/8	1/2	7	15 1/4	5 3/4	3 3/4	2 1/2	10	10 1/2		2 3/4									1.26
2M	42	48				6	4	5/8	1/2	7	15 1/4	5 3/4	3 3/4	2 1/2	10	10 1/2		2 3/4									1.26
3																											
4																											
5																											

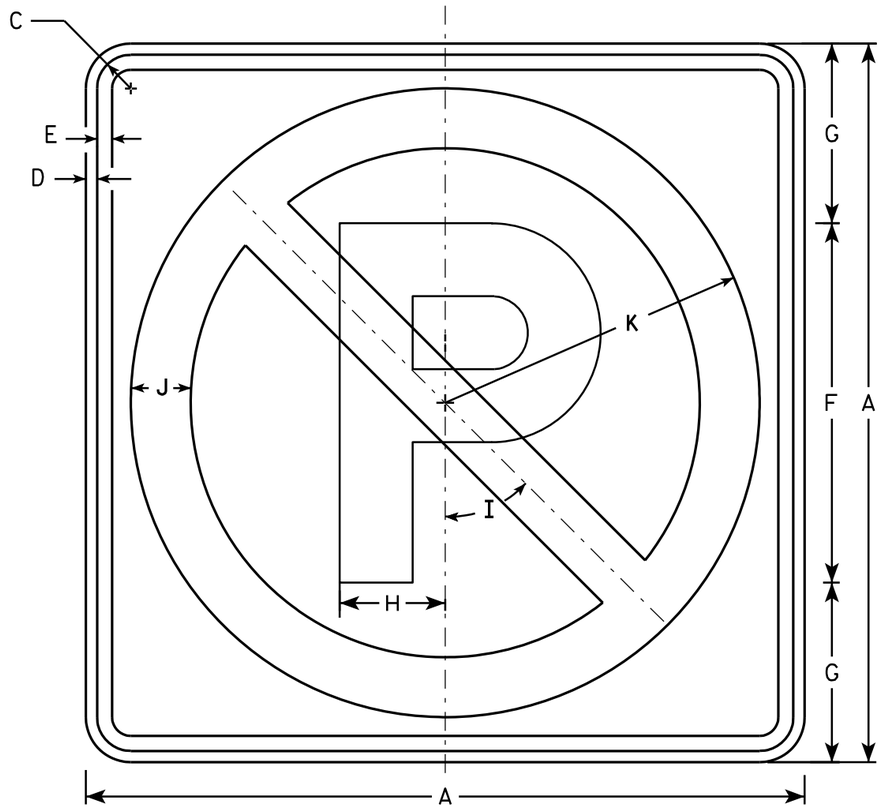
STANDARD SIGN
R3-5A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/24/11 PLATE NO. R3-5A.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 191	E



R3-8A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Letter P are non reflective black, the circle with diagonal bar is reflective red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2	12	6	3 1/2	45°	2	10 1/2																4.0
2M	24		1 1/8	3/8	1/2	12	6	3 1/2	45°	2	10 1/2																4.0
3																											
4																											
5																											

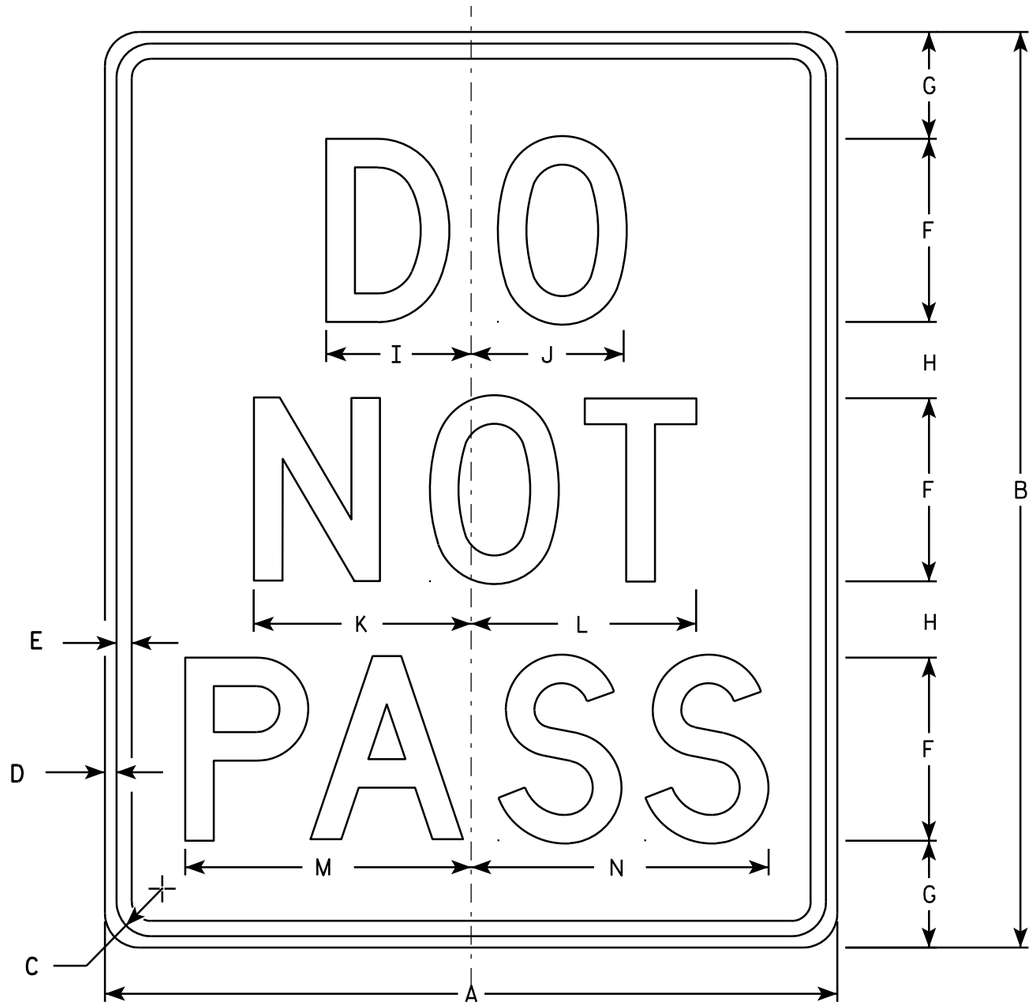
STANDARD SIGN
R3-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/01/12 PLATE NO. R3-8A.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 192 | E



R4-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 7/8	12 1/4	15 5/8	16 1/4													20.0

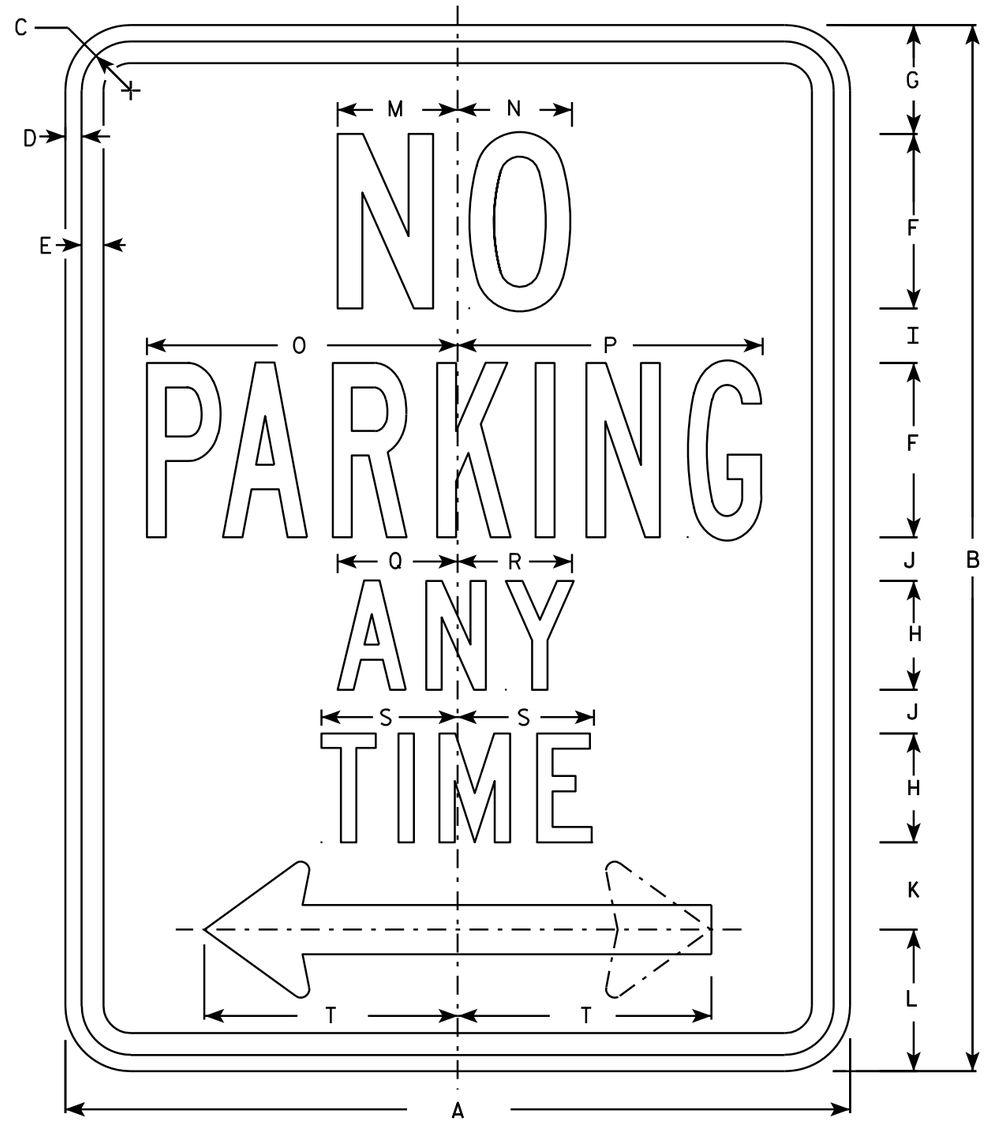
STANDARD SIGN
R4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-1.7

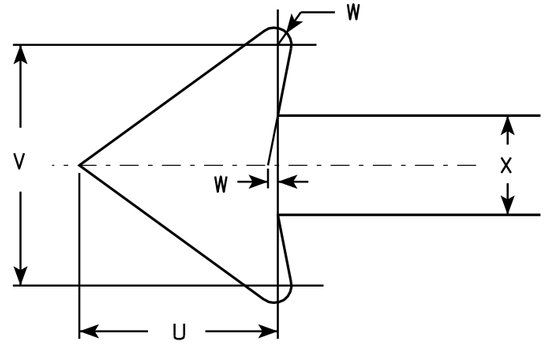
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 193 | E



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

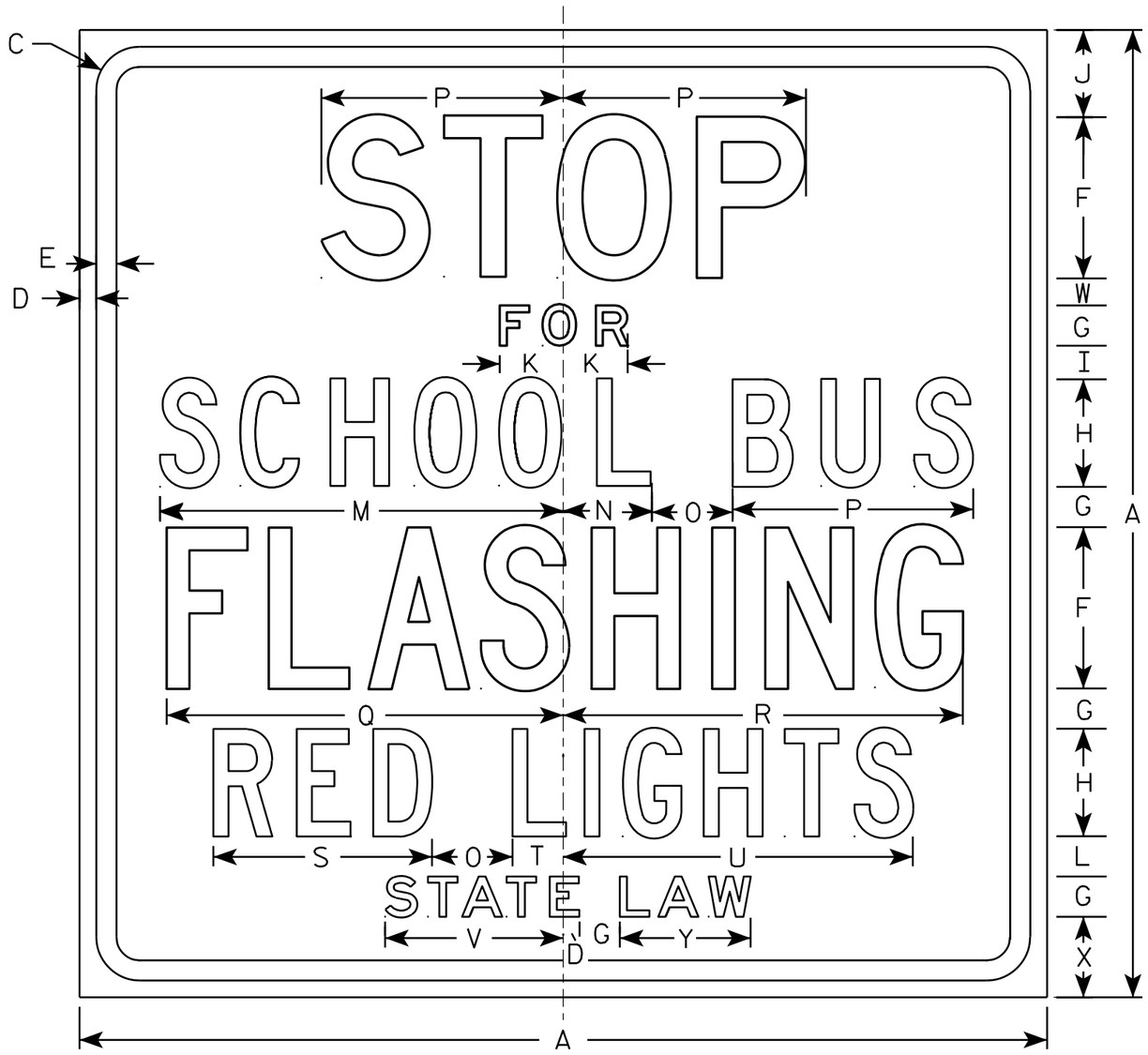
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 194 | E



R59-51

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D
   Lines 2 & 6 are Series E
   Line 3, 4 & 5 are Series C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	5/8	3/4	6	1 1/2	4	1 1/4	3 1/4	2 3/8	1 1/2	15	3 1/4	3	9	14 3/4	14 7/8	8 1/8	1 7/8	13	6 5/8	1	3	4 7/8		9.0
2M	36		1 5/8	5/8	3/4	6	1 1/2	4	1 1/4	3 1/4	2 3/8	1 1/2	15	3 1/4	3	9	14 3/4	14 7/8	8 1/8	1 7/8	13	6 5/8	1	3	4 7/8		9.0
3	48		2 1/4	3/4	1	8	2	6	1 1/4	4 3/4	3 1/4	1 1/2	20 1/4	5	3 5/8	12	19 1/2	20	11 5/8	3 3/4	19	9 1/2	1	3 1/2	6 3/4		16.0
4	48		2 1/4	3/4	1	8	2	6	1 1/4	4 3/4	3 1/4	1 1/2	20 1/4	5	3 5/8	12	19 1/2	20	11 5/8	3 3/4	19	9 1/2	1	3 1/2	6 3/4		16.0
5																											

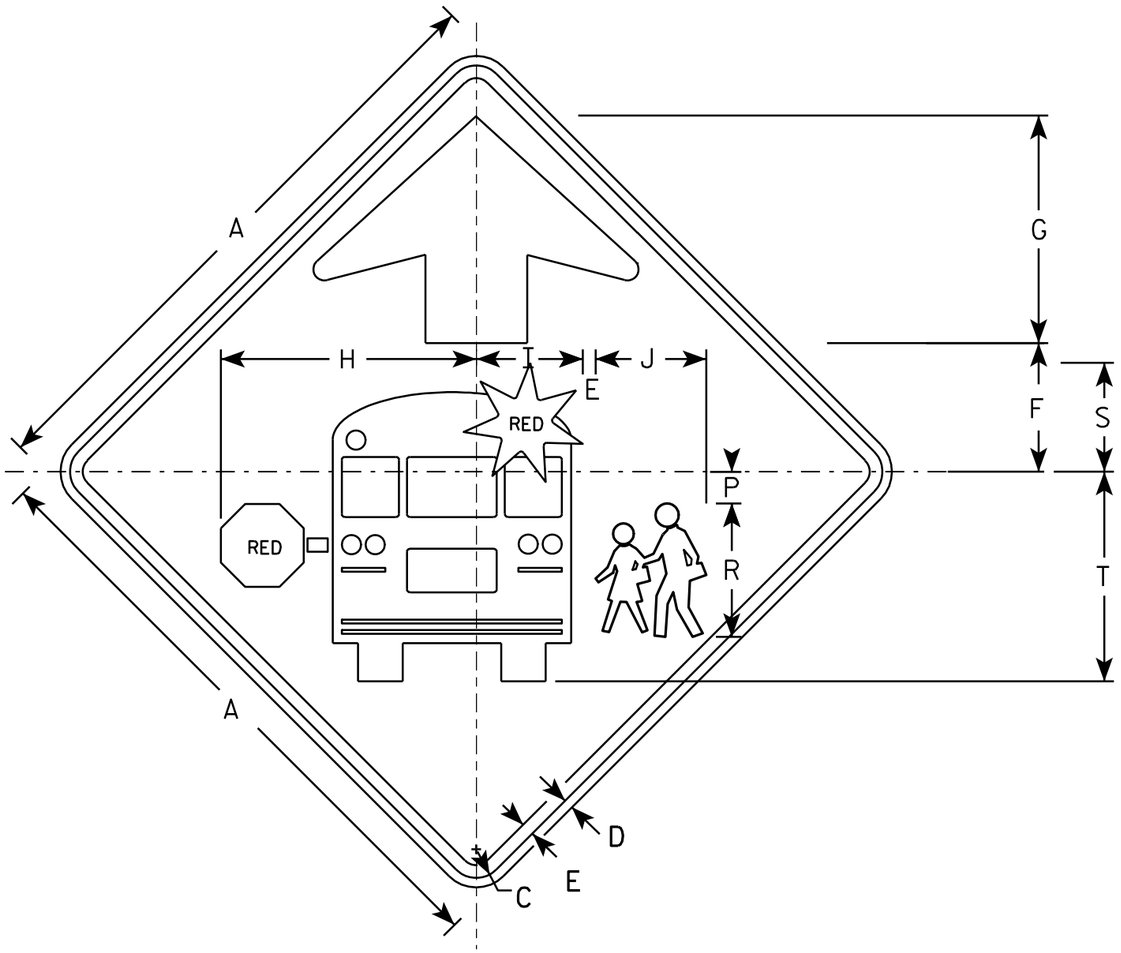
STANDARD SIGN
R59-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/30/11 PLATE NO. R59-51.10

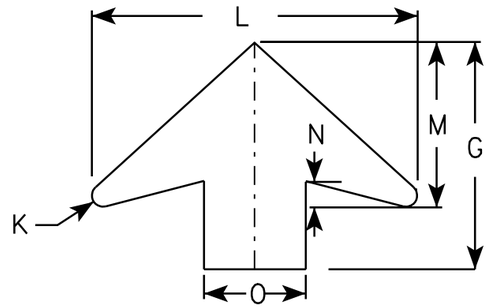
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 195 | E



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

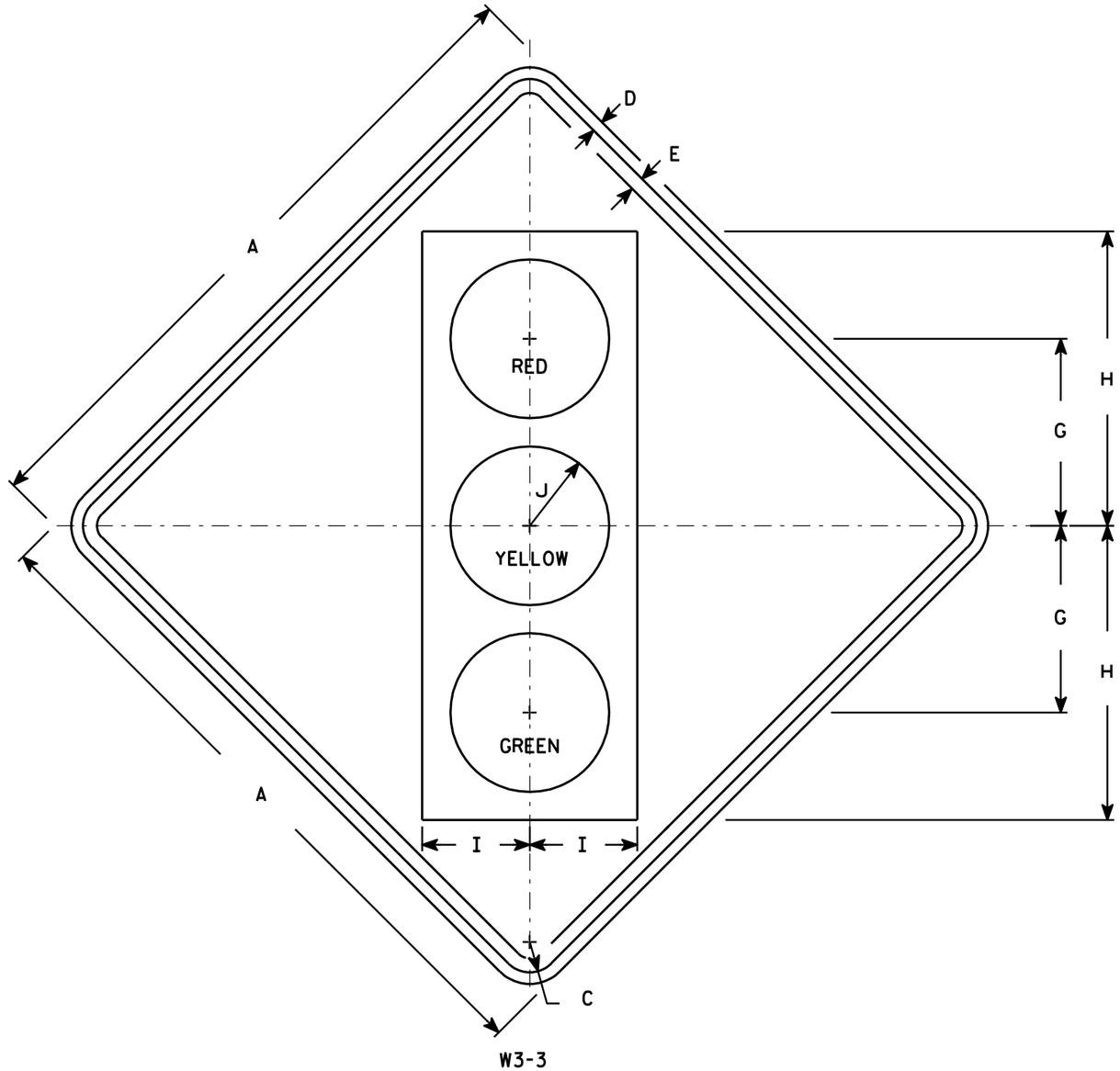
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/8/10 PLATE NO. S3-1.6

PROJECT NO:

SHEET NO: 196 E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

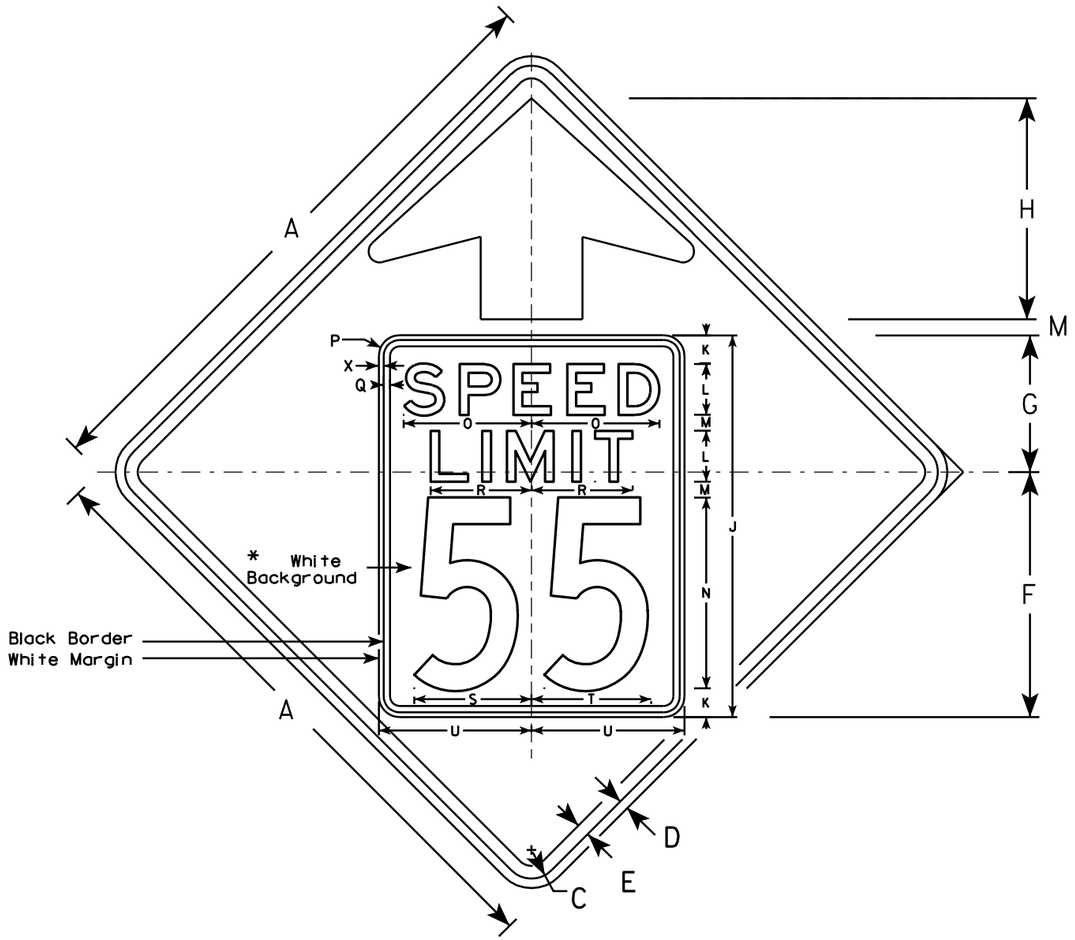
STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 197 | E

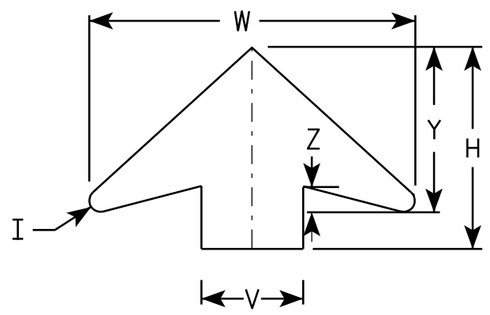


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - YELLOW*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

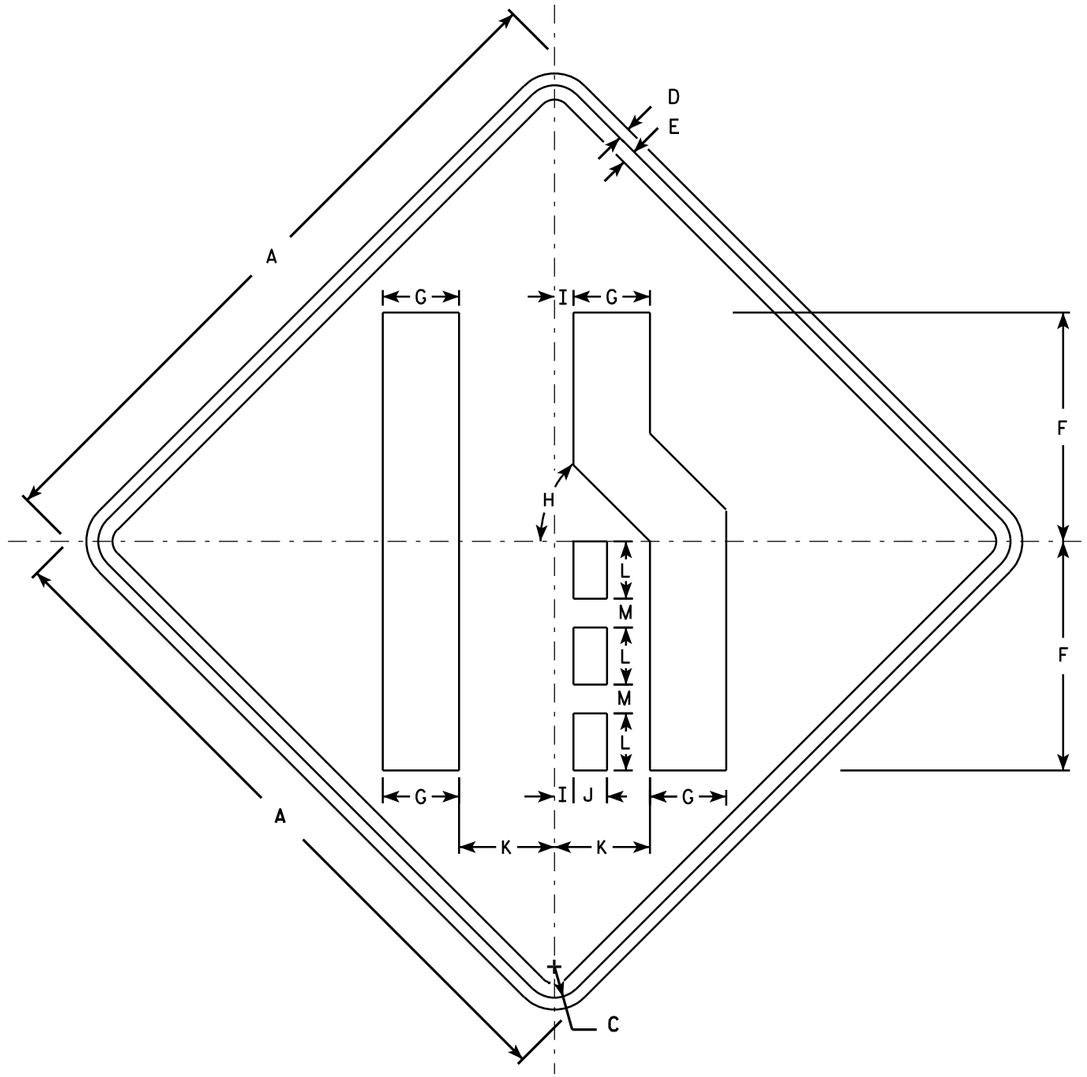
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 198 E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W4-2

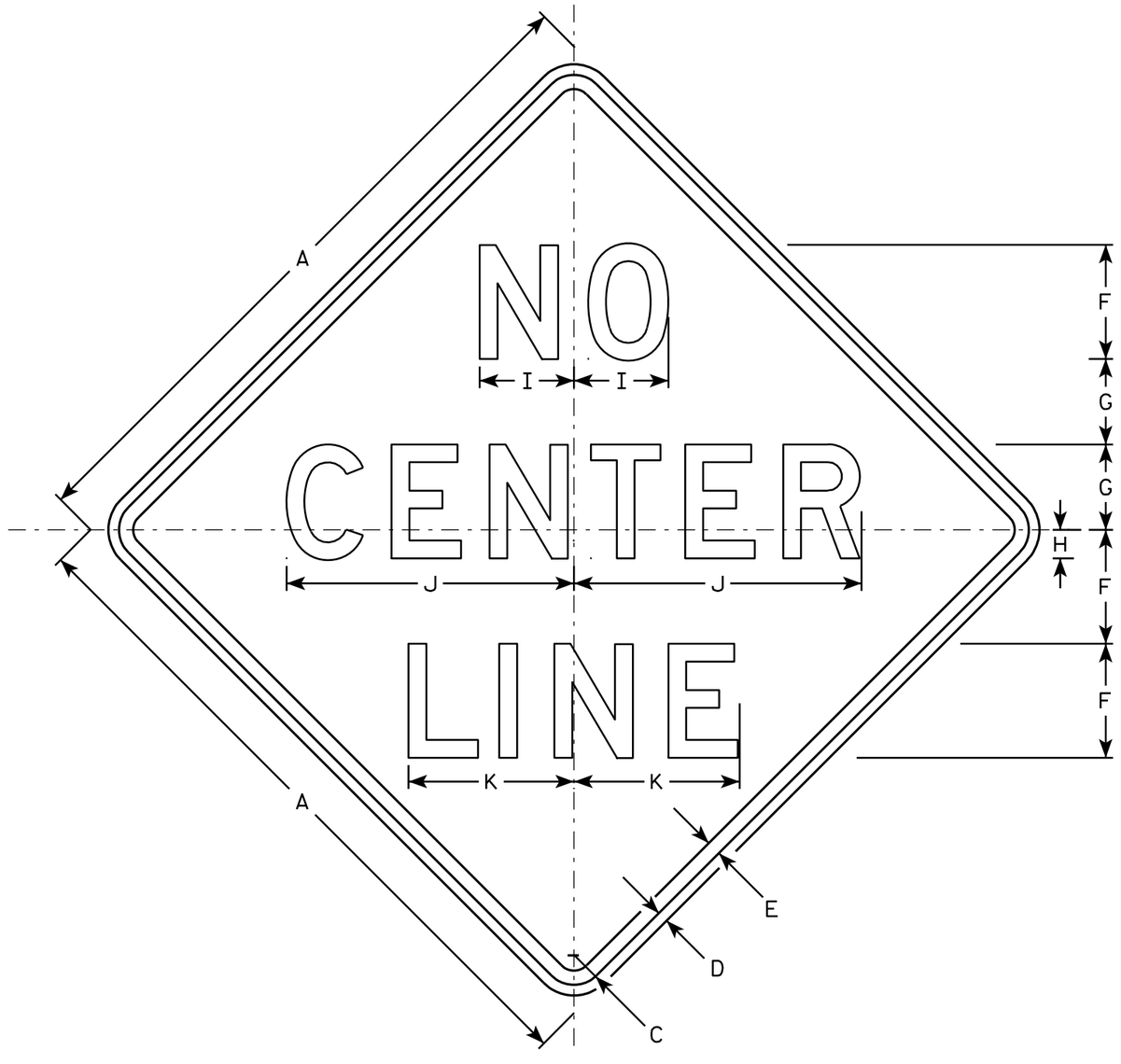
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 199 E



W8-12

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.

SIZE	A	B	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		1 5/8	5/8	3/4	6	4 1/2	1 1/2	5 1/8	16	9																9.0
2M	36		1 5/8	5/8	3/4	6	4 1/2	1 1/2	5 1/8	16	9																9.0
3	48		2 1/4	3/4	1	8	6	2	6 5/8	20 1/4	11 5/8																16.0
4	48		2 1/4	3/4	1	8	6	2	6 5/8	20 1/4	11 5/8																16.0
5	48		2 1/4	3/4	1	8	6	2	6 5/8	20 1/4	11 5/8																16.0

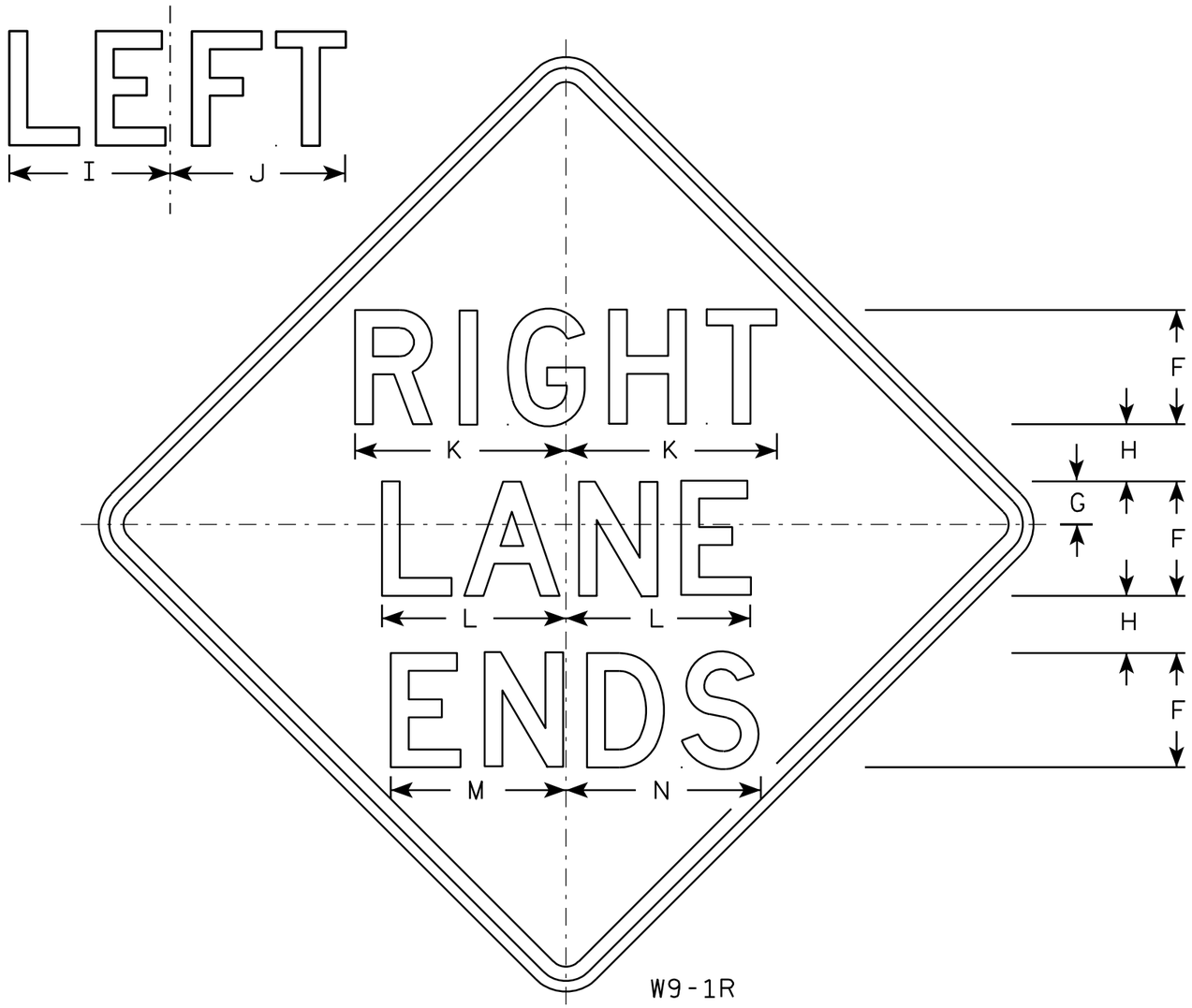
STANDARD SIGN
W8-12

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rausch
for State Traffic Engineer

DATE 8/24/10 PLATE NO. W8-12.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 200	E



W9-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. W9-1L same as W9-1R except the word Left replaces 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	30		1 3/8	1/2	5/8	5	1 1/2	2 1/2	7 1/8	7 5/8	9 1/4	8 1/8	7 5/8	8 5/8													6.25
2S	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
2M	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
3	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
4	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
5	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0

STANDARD SIGN
W9-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/18/13 PLATE NO. W9-1.8

PROJECT NO:

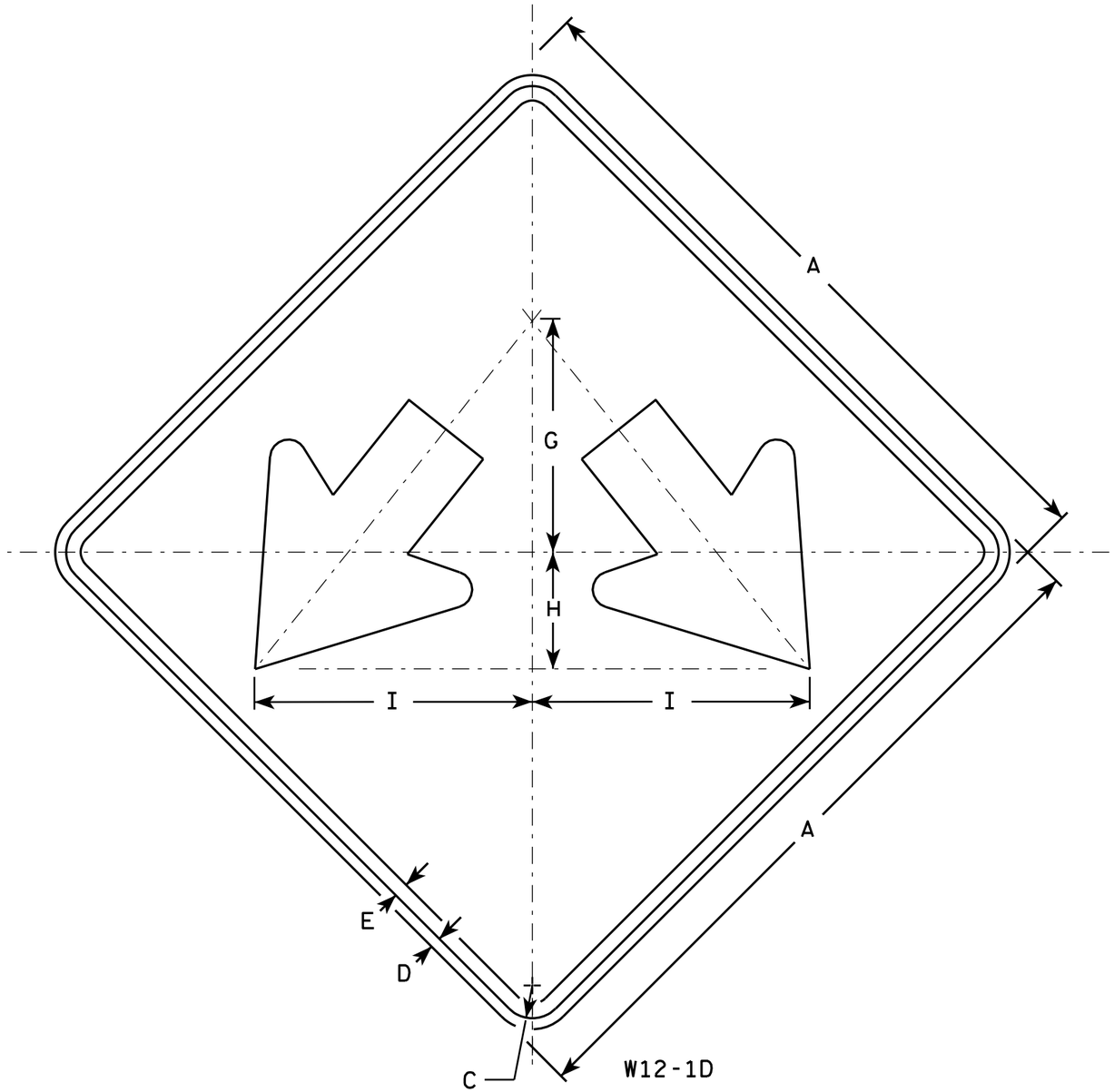
SHEET NO: 201 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W91.DGN PLOT DATE : 18-MAR-2013 11:42 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

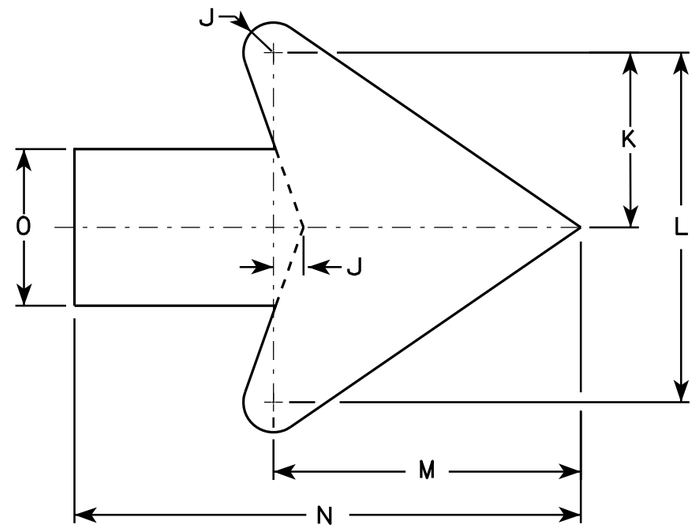
7

7



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

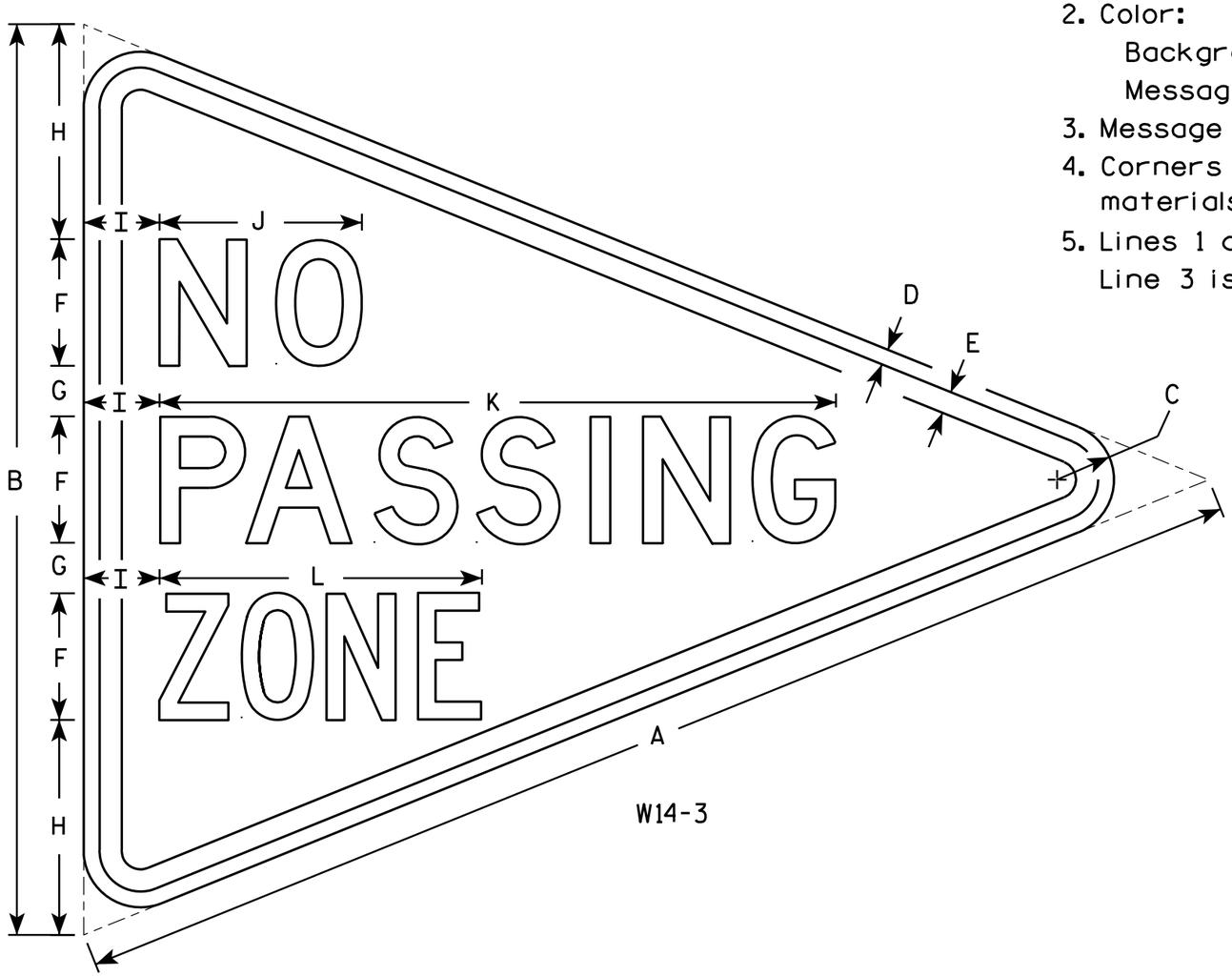
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 202	E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See note 5
4. Corners and borders shall be rounded on all base materials for this sign.
5. Lines 1 and 2 are Series D.
   Line 3 is series C.



W14-3

SIZE	A	B	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	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

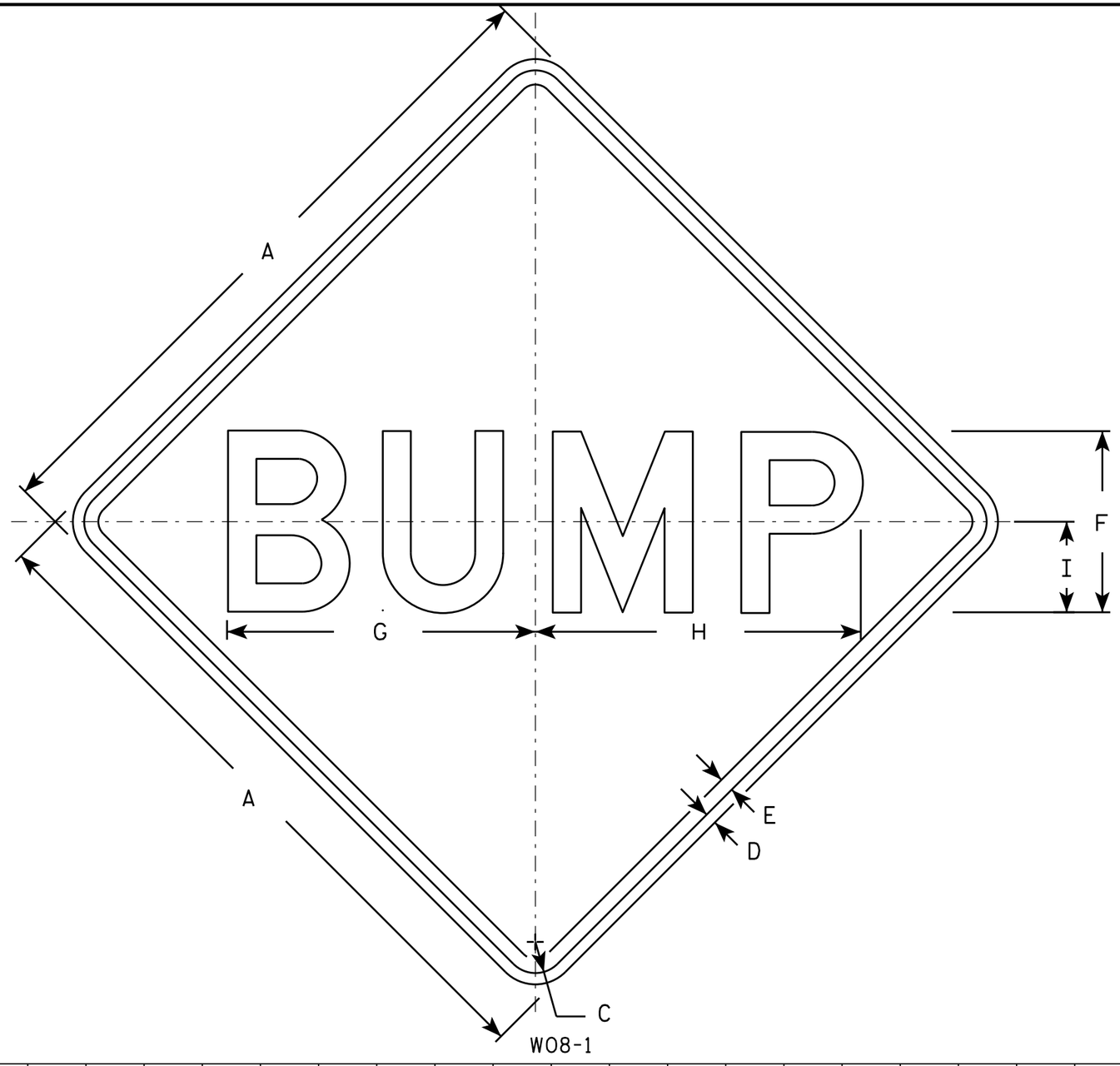
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 203	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 - 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.

SIZE	A	B	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	10	16 7/8	17 7/8	5																		9.0
2S	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
2M	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
3	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
4	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
5	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0

STANDARD SIGN
W08-1

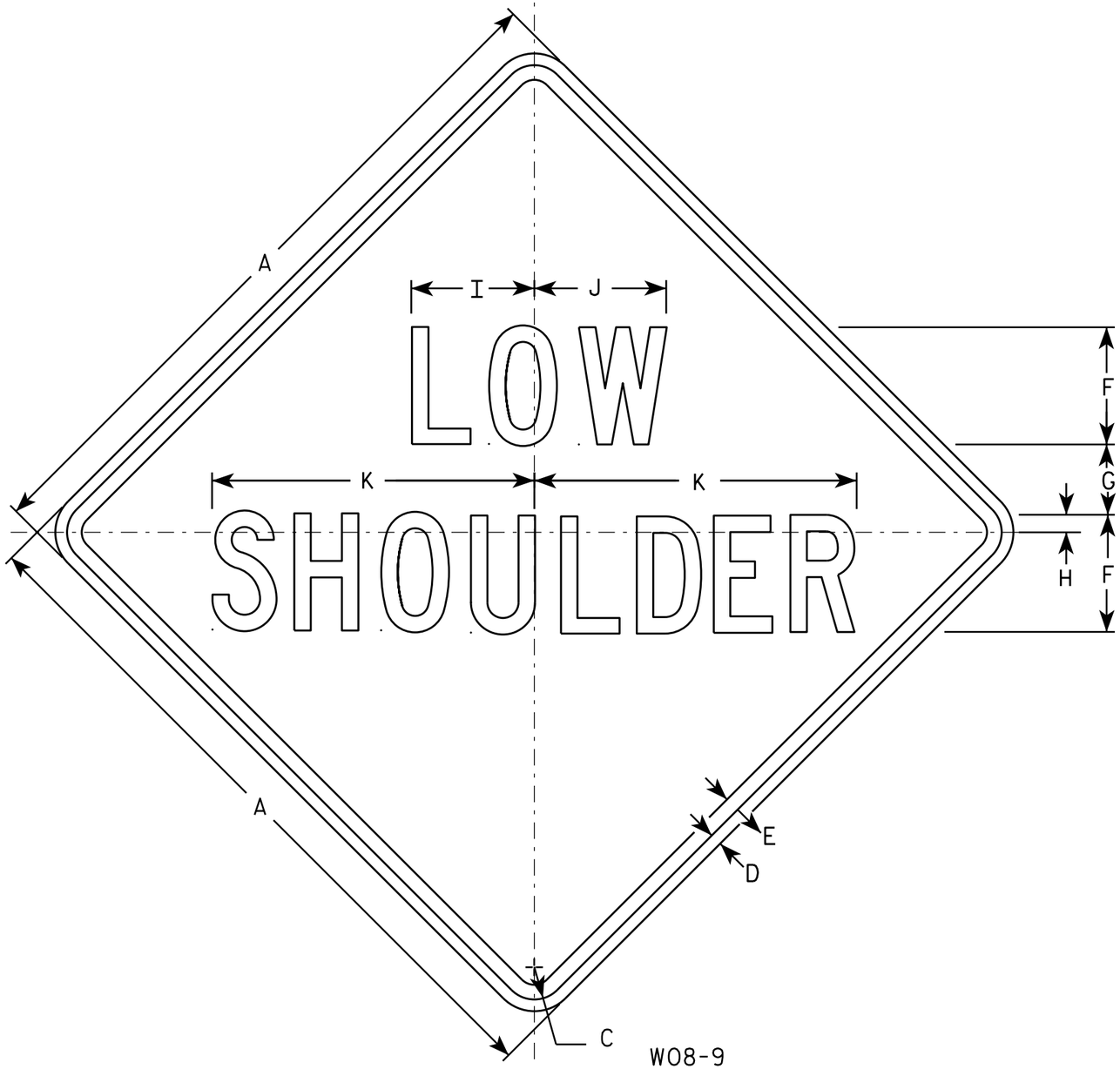
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 1 of 204 W08-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W081.DGN PLOT DATE : 20-NOV-2013 12:24 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.688833:1.000000 WISDOT/CADDS SHEET 42



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	3 1/2	1	6 1/4	6 3/4	16 1/2																9.0
2S	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
2M	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
3	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
4	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
5	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0

STANDARD SIGN
W08-9

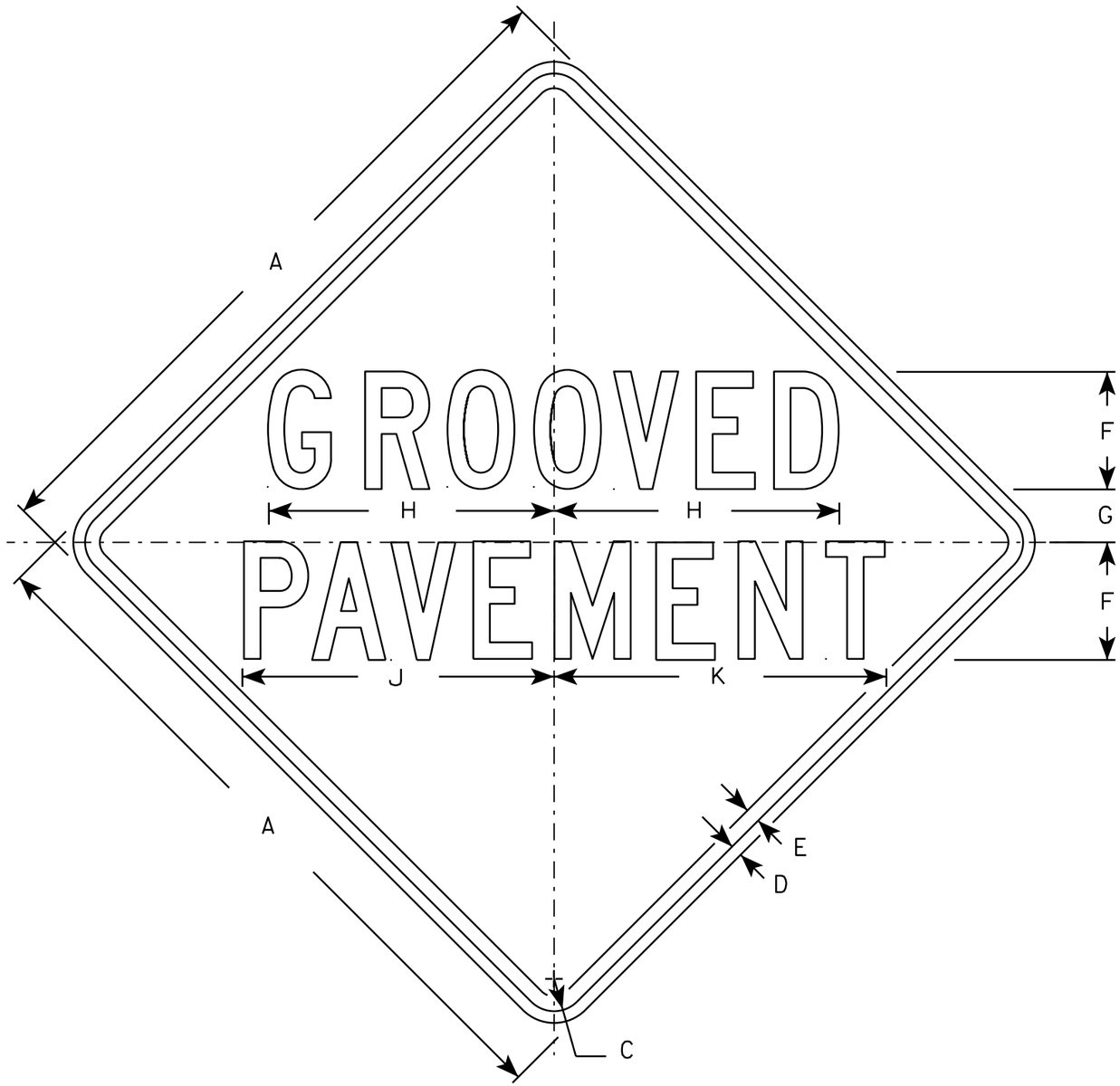
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W08-9.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W089.DGN PLOT DATE : 20-NOV-2013 14:06 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42



W08-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	2 5/8	14 1/2		15 7/8	17																9.0
2S	48		2 1/4	3/4	1	8	3 1/2	19 3/8		21 1/4	22 5/8																16.0
2M	48		2 1/4	3/4	1	8	3 1/2	19 3/8		21 1/4	22 5/8																16.0
3	48		2 1/4	3/4	1	8	3 1/2	19 3/8		21 1/4	22 5/8																16.0
4	48		2 1/4	3/4	1	8	3 1/2	19 3/8		21 1/4	22 5/8																16.0
5	48		2 1/4	3/4	1	8	3 1/2	19 3/8		21 1/4	22 5/8																16.0

STANDARD SIGN
W08-52

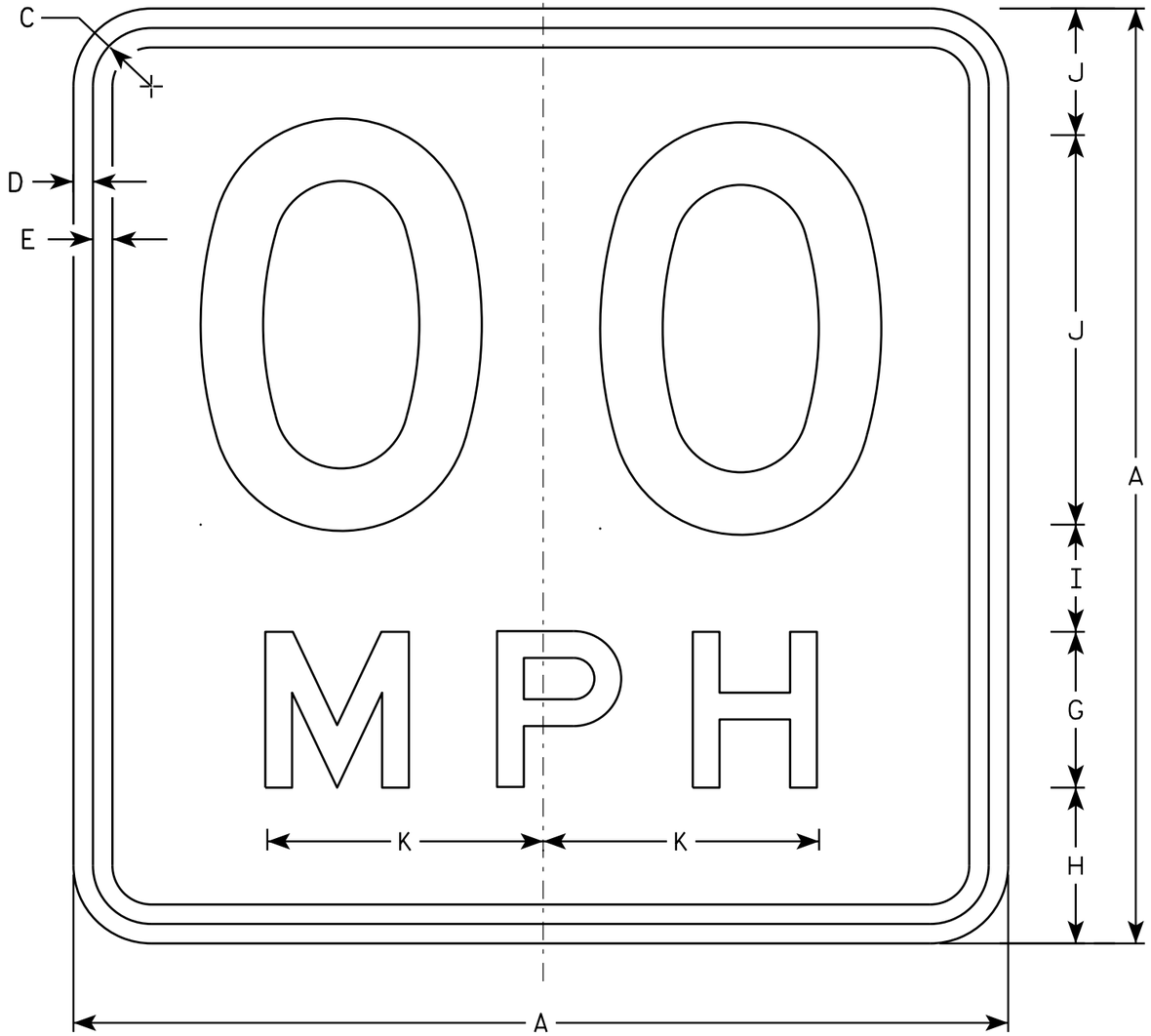
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 11/20/13 PLATE NO W08-52.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W0852.DGN PLOT DATE : 28-FEB-2014 11:41 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.997243:1.000000
WISDOT/CADDS SHEET 42



W013-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W013-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/13 PLATE 207 W013-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

Alignment: EXIST-STH13-SURVEYCL
Start Sta: 198+86.68
End Sta: 223+92.54

FILL FACTOR = 1.3

Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
TURN LANES									
198+86.683	15.62	0	0	0	0	0	0	0	0
199+00.000	16.9	8.0	8.0	0.0	0.0	8.0	8.0	0.0	8.0
199+50.000	14.7	29.2	29.2	2.5	3.0	37.3	37.3	3.0	34.3
200+00.000	15.2	27.7	27.7	2.1	5.6	64.9	64.9	8.6	56.3
200+50.000	15.2	28.1	28.1	2.7	5.8	93.1	93.1	14.4	78.7
201+00.000	13.8	26.8	26.8	3.3	7.2	119.8	119.8	21.7	98.2
201+50.000	12.7	24.5	24.5	5.3	10.4	144.4	144.4	32.1	112.3
202+00.000	16.2	26.8	26.8	2.9	9.9	171.1	171.1	42.0	129.1
202+50.000	18.1	31.7	31.7	1.2	5.0	202.9	202.9	47.0	155.9
203+00.000	18.2	33.6	33.6	3.1	5.2	236.5	236.5	52.2	184.3
203+50.000	20.3	35.7	35.7	3.6	8.1	272.1	272.1	60.3	211.8
203+66.578	20.5	12.6	12.6	3.3	2.8	284.7	284.7	63.1	221.6
204+00.000	27.0	29.4	29.4	2.9	5.0	314.1	314.1	68.1	246.1
204+50.000	29.8	52.6	52.6	4.5	8.8	366.7	366.7	76.9	289.8
205+00.000	38.4	63.1	63.1	6.9	13.6	429.8	429.8	90.5	339.3
205+17.400	43.6	26.4	26.4	6.3	5.5	456.2	456.2	96.0	360.2
205+50.000	50.6	56.9	56.9	0.0	5.0	513.0	513.0	101.0	412.1
205+87.389	48.5	68.6	68.6	9.5	8.5	581.6	581.6	109.5	472.1
206+00.000	50.2	23.1	23.1	10.0	5.9	604.7	604.7	115.4	489.3
206+50.000	46.0	89.1	89.1	9.5	23.5	693.8	693.8	138.9	554.9
207+00.000	30.2	70.6	70.6	4.7	17.1	764.3	764.3	155.9	608.4
207+50.000	33.0	58.5	58.5	1.1	7.0	822.8	822.8	162.9	659.9
208+00.000	34.8	62.8	62.8	0.4	1.8	885.6	885.6	164.7	720.9
208+50.000	32.6	62.4	62.4	0.7	1.3	948.0	948.0	166.0	782.0
209+00.000	35.7	63.2	63.2	0.1	0.9	1011.2	1011.2	166.9	844.3
209+41.847	30.0	50.9	50.9	0.7	0.8	1062.1	1062.1	167.7	894.5
GAP - CTH A	-	-	-	-	-	-	-	-	-
210+97.279	19.4	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0
211+00.000	18.8	1.9	1.9	2.7	0.4	1.9	1.9	0.4	1.6
211+50.000	14.8	31.1	31.1	3.4	7.3	33.0	33.0	7.7	25.4
212+00.000	17.0	29.4	29.4	4.2	9.1	62.4	62.4	16.8	45.6
212+50.000	16.0	30.5	30.5	5.7	11.9	92.9	92.9	28.7	64.2
213+00.000	13.2	27.0	27.0	10.2	19.2	119.9	119.9	47.9	72.0
213+50.000	8.7	20.3	20.3	15.9	31.4	140.1	140.1	79.3	60.9
214+00.000	28.6	34.6	34.6	30.6	56.0	174.7	174.7	135.3	39.4
214+50.000	23.8	48.5	48.5	43.9	89.8	223.2	223.2	225.0	-1.8
215+00.000	20.9	41.4	41.4	50.7	114.0	264.6	264.6	339.0	-74.4
215+22.211	20.3	17.0	17.0	51.2	54.5	281.5	281.5	393.5	-112.0
215+50.000	18.1	19.8	19.8	50.9	68.3	301.3	301.3	461.8	-160.5
216+00.000	16.2	31.7	31.7	48.8	120.1	333.0	333.0	581.9	-248.9
216+50.000	17.0	30.7	30.7	42.4	109.8	363.7	363.7	691.7	-328.0
216+72.615	13.8	12.9	12.9	47.5	48.9	376.6	376.6	740.6	-364.0
217+00.000	13.1	13.8	13.8	75.9	83.9	390.4	390.4	824.5	-434.1
217+50.000	16.4	27.3	27.3	45.6	146.3	417.7	417.7	970.7	-553.0
218+00.000	22.9	36.1	36.1	39.3	100.3	453.8	453.8	1071.0	-617.3

9

PROJECT NO: 1610-04-74 / 1610-03-72	HWY: STH 13	COUNTY: CLARK	EARTHWORK TABULATIONS	SHEET: 208	E

File: N:\PDS\Projects-LET\1020-06-76\PSE\misq\030201_mq_1020-06-76 MISC sheets - normal.ppt
PLOT DATE : 2/27/2007 4:34:45 PM PLOT BY : DOTK7T PLOT NAME : _____ PLOT SCALE : 1:1

218+50.000	16.7	36.6	36.6	45.2	101.7	490.4	490.4	1172.7	-682.3
219+00.000	16.1	30.3	30.3	43.0	106.1	520.7	520.7	1278.8	-758.0
219+50.000	14.9	28.8	28.8	47.2	108.5	549.5	549.5	1387.3	-837.8
219+67.256	17.2	10.3	10.3	32.7	33.2	559.8	559.8	1420.4	-860.7
219+83.000	30.9	14.0	14.0	0.0	12.4	573.8	573.8	1432.8	-859.1
219+97.248	17.5	12.8	12.8	24.8	8.5	586.5	586.5	1441.3	-854.8
220+00.000	16.5	1.7	1.7	35.2	4.0	588.3	588.3	1445.3	-857.0
220+50.000	14.2	28.5	28.5	31.9	80.8	616.7	616.7	1526.0	-909.3
221+00.000	13.0	25.2	25.2	28.1	72.2	641.9	641.9	1598.2	-956.3
221+50.000	13.5	24.5	24.5	22.0	60.3	666.4	666.4	1658.5	-992.1
221+53.432	19.5	2.1	2.1	7.2	2.4	668.5	668.5	1660.9	-992.4
221+75.002	30.2	19.8	19.8	0.0	3.7	688.4	688.4	1664.6	-976.3
222+00.000	16.1	21.4	21.4	15.6	9.4	709.8	709.8	1674.0	-964.2
222+50.000	14.9	28.7	28.7	10.1	30.9	738.5	738.5	1704.9	-966.4
223+00.000	13.7	26.4	26.4	5.4	18.6	764.9	764.9	1723.6	-958.6
223+50.000	14.0	25.6	25.6	3.1	10.2	790.5	790.5	1733.8	-943.3
223+92.542	13.5	21.6	21.6	0.0	3.2	812.1	812.1	1736.9	-924.8
MARSH EXCAVATION									
216+81.275	66.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
217+00.000	66.3	48.0	48.0	0.0	0.0	48.0	48.0	0.0	48.0
217+29.299	66.2	71.9	71.9	0.0	0.0	119.9	119.9	0.0	119.9

Alignment: ALI-CTHA-BESTFIT
Start Sta: 8+35.05
End Sta: 11+68.67

FILL FACTOR = 1.3

Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
CTH A WEST									
8+35.046	21.22	0	0	0	0	0	0	0	0
8+43.182	31.19	7.9	7.9	0.01	0	7.9	7.9	0	7.89
8+50.000	30.77	7.82	7.82	0.01	0	15.72	15.72	0	15.71
8+75.000	26.5	26.5	26.5	4.6	2.8	42.3	42.3	2.8	39.5
9+00.000	28.0	25.2	25.2	10.2	8.9	67.5	67.5	11.7	55.8
9+07.623	28.1	7.9	7.9	9.1	3.5	75.4	75.4	15.2	60.2
CTH A EAST									
10+68.419	47.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10+90.000	56.1	41.3	41.3	4.0	2.1	41.3	41.3	2.1	39.2
11+00.000	49.4	19.5	19.5	3.2	1.7	60.8	60.8	3.8	57.0
11+18.679	41.0	31.3	31.3	0.7	1.8	92.1	92.1	5.6	86.5
11+25.000	35.6	9.0	9.0	0.1	0.1	101.0	101.0	5.7	95.4
11+50.000	16.1	23.9	23.9	0.0	0.0	125.0	125.0	5.7	119.2
11+68.671	19.3	12.2	12.2	0.2	0.1	137.2	137.2	5.8	131.4

Alignment: RADIUS-CTHA-NE
Start Sta: 0+00
End Sta: 0+61.71

FILL FACTOR = 1.3

Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
CTH A NE									
0+00.000	47.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0+10.000	45.9	19.0	19.0	0.2	0.1	19.0	19.0	0.1	18.9
0+20.000	44.3	18.4	18.4	0.0	0.1	37.4	37.4	0.2	37.2
0+30.000	34.3	15.8	15.8	0.0	0.0	53.1	53.1	0.2	53.0
0+40.000	21.2	10.8	10.8	0.0	0.0	64.0	64.0	0.2	63.8
0+50.000	9.7	5.8	5.8	0.0	0.0	69.7	69.7	0.2	69.6
0+60.000	5.0	2.6	2.6	0.0	0.0	72.4	72.4	0.2	72.2
0+61.714	4.8	0.3	0.3	0.0	0.0	72.7	72.7	0.2	72.5

Alignment: RADIUS-CTHA-NW
Start Sta: 0+00
End Sta: 0+92.46

FILL FACTOR = 1.3

Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
CTH A NW									
0	11.2	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0
0+10.000	12.3	4.2	4.2	15.3	4.4	4.2	4.2	4.4	-0.2
0+20.000	10.6	4.1	4.1	19.3	6.4	8.3	8.3	10.8	-2.5
0+30.000	25.0	6.8	6.8	15.0	6.3	15.0	15.0	17.1	-2.0
0+40.000	15.1	7.5	7.5	11.5	4.8	22.5	22.5	21.9	0.7
0+50.000	13.4	5.0	5.0	11.7	4.3	27.5	27.5	26.1	1.4
0+60.000	11.2	4.3	4.3	14.7	5.0	31.8	31.8	31.1	0.7
0+70.000	11.4	3.9	3.9	14.2	5.4	35.7	35.7	36.6	-0.8
0+80.000	9.6	3.6	3.6	15.4	5.4	39.4	39.4	42.0	-2.6
0+90.000	8.7	3.2	3.2	16.5	5.8	42.5	42.5	47.8	-5.3
0+92.464	8.5	0.7	0.7	17.0	1.5	43.3	43.3	49.3	-6.0

Alignment: RADIUS-CTHA-SE
Start Sta: 0+00
End Sta: 0+93.44

FILL FACTOR = 1.3

Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
CTH A SE									
0+00.000	11.9	0.0	0.0	13.1	0.0	0.0	0.0	0.0	0.0
0+10.000	10.7	3.6	3.6	7.3	4.1	3.6	3.6	4.1	-0.6
0+20.000	12.9	4.1	4.1	6.3	2.8	7.7	7.7	6.9	0.7
0+30.000	16.8	5.4	5.4	11.1	3.7	13.0	13.0	10.7	2.3
0+40.000	20.8	6.7	6.7	17.1	6.1	19.7	19.7	16.8	2.9
0+50.000	27.0	7.9	7.9	20.8	8.2	27.6	27.6	25.0	2.7
0+60.000	27.8	8.7	8.7	16.1	7.9	36.3	36.3	32.9	3.4
0+70.000	33.8	10.0	10.0	10.2	5.6	46.3	46.3	38.5	7.8
0+80.000	31.7	11.0	11.0	8.0	3.9	57.3	57.3	42.3	14.9
0+90.000	27.6	10.0	10.0	6.5	3.1	67.2	67.2	45.4	21.8
0+93.443	7.5	2.1	2.1	12.8	1.4	69.3	69.3	46.8	22.5

Alignment: RADIUS-CTHA-SW
Start Sta: 0+00
End Sta: 0+95.86

FILL FACTOR = 1.3

Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
CTH A SW									
0+00.006	8.6	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
0+10.000	8.3	2.9	2.9	1.1	0.4	2.9	2.9	0.4	2.5
0+20.000	8.8	2.9	2.9	2.5	0.8	5.8	5.8	1.2	4.6
0+30.000	10.31	3.26	3.26	4.4	1.7	9.04	9.04	2.9	6.13
0+40.000	13.27	4.03	4.03	2.46	1.76	13.06	13.06	4.66	8.4
0+50.000	17.98	5.53	5.53	0.42	0.77	18.59	18.59	5.43	13.15
0+60.000	24.96	8.35	8.35	0.02	0.13	26.93	26.93	5.57	21.37
0+70.000	29.5	11.11	11.11	0.21	0.05	38.04	38.04	5.61	32.43
0+80.000	11.39	8.02	8.02	2.42	0.56	46.06	46.06	6.17	39.89
0+90.000	14.38	4.61	4.61	3.94	1.28	50.68	50.68	7.45	43.23
0+95.885	15.5	3.2	3.2	4.2	0.9	53.9	53.9	8.4	45.5

Alignment: EXIST-STH13-SURVEYCL
Start Sta: 52+84.09
End Sta: 463+43.30

BEAM GUARD TERMINALS

FILL FACTOR = 1.3

Station	Cut Area (Sq.ft.)	Cut Volume (Cu.yd.)	Reusable Volume (Cu.yd.)	Fill Area (Sq.ft.)	Fill Volume (Cu.yd.)	Cum. Cut Vol. (Cu.yd.)	Cum. Reusable Vol. (Cu.yd.)	Cum. Fill Vol. (Cu.yd.)	Cum. Net Vol. (Cu.yd.)
53LT									
53+00.000	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53+30.938	0.1	0.2	0.2	1.3	1.0	0.2	0.2	1.0	-0.8
53+55.885	0.1	0.1	0.1	0.3	1.0	0.2	0.2	2.0	-1.7
53+80.885	0.1	0.1	0.1	0.0	0.2	0.3	0.3	2.1	-1.8
53RT									
52+84.094	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
53+30.938	0.0	0.0	0.0	7.7	8.8	0.0	0.0	8.8	-8.8
53+55.885	0.0	0.0	0.0	3.6	6.8	0.0	0.0	15.6	-15.6
53+80.885	0.0	0.0	0.0	0.1	2.2	0.0	0.0	17.8	-17.8
56LT									
56+11.957	0.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
56+36.957	0.1	0.1	0.1	2.5	1.9	0.1	0.1	1.9	-1.8
56+62.007	0.1	0.1	0.1	5.5	4.8	0.2	0.2	6.7	-6.6
57+00.000	0.1	0.1	0.1	2.7	7.4	0.3	0.3	14.2	-13.9
57+43.889	0.1	0.2	0.2	0.0	2.8	0.4	0.4	17.0	-16.6
56RT									
56+11.957	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
56+36.957	0.0	0.0	0.0	1.5	1.0	0.0	0.0	1.0	-1.0
56+62.007	0.0	0.0	0.0	5.5	4.2	0.0	0.0	5.2	-5.2
57+00.000	0.0	0.0	0.0	5.1	9.7	0.0	0.0	14.9	-14.8
57+52.216	0.0	0.0	0.0	0.0	6.4	0.1	0.1	21.3	-21.2
98RT									
98+00.000	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98+61.674	0.0	0.6	0.6	13.3	19.8	0.6	0.6	19.8	-19.2
98+86.660	0.0	0.0	0.0	9.3	13.6	0.6	0.6	33.4	-32.8
99+11.660	0.1	0.0	0.0	3.0	7.4	0.6	0.6	40.8	-40.1

101RT									
100+92.671	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0
101+17.667	0.0	0.0	0.0	6.3	5.8	0.0	0.0	5.8	-5.8
101+42.667	0.0	0.0	0.0	5.8	7.2	0.0	0.0	13.0	-13.0
102+20.552	0.0	0.1	0.1	0.0	10.8	0.1	0.1	23.8	-23.7
115LT									
115+28.085	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116+00.000	0.03	0.07	0.07	0.84	1.46	0.07	0.07	1.46	-1.38
116+32.102	0.02	0.03	0.03	2.1	2.28	0.1	0.1	3.74	-3.63
116+57.129	0.02	0.02	0.02	0.36	1.48	0.12	0.12	5.22	-5.1
116+82.129	0.02	0.02	0.02	0	0.21	0.13	0.13	5.43	-5.3
115RT									
115+37.279	0.05	0	0	0.94	0	0	0	0	0
116+00.000	0.04	0.11	0.11	3.36	6.49	0.11	0.11	6.49	-6.39
116+55.739	0.0	0.1	0.1	15.1	24.7	0.2	0.2	31.2	-31.1
116+80.719	0.0	0.0	0.0	8.6	14.3	0.2	0.2	45.5	-45.3
117+05.727	0.0	0.0	0.0	5.7	8.6	0.2	0.2	54.1	-53.9
119LT									
118+88.231	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119+13.267	0.1	0.0	0.0	2.7	1.6	0.0	0.0	1.6	-1.6
119+38.303	0.1	0.1	0.1	3.6	3.8	0.1	0.1	5.5	-5.4
120+00.000	0.1	0.1	0.1	1.4	7.4	0.2	0.2	12.9	-12.6
120+41.987	0.1	0.1	0.1	0.0	1.4	0.3	0.3	14.2	-13.9
119RT									
119+11.609	0.0	0.0	0.0	11.6	0.0	0.0	0.0	0.0	0.0
119+36.571	0.3	0.1	0.1	15.7	16.4	0.1	0.1	16.4	-16.3
119+61.508	0.0	0.1	0.1	23.8	23.7	0.3	0.3	40.1	-39.8
120+00.000	0.0	0.0	0.0	13.3	34.4	0.3	0.3	74.5	-74.2
120+79.886	0.0	0.1	0.1	2.1	29.6	0.3	0.3	104.1	-103.7
214RT									
214+26.563	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
215+00.000	0.0	0.0	0.0	7.6	13.4	0.0	0.0	13.4	-13.4
215+39.159	0.0	0.0	0.0	8.8	15.4	0.0	0.0	28.8	-28.8
215+64.107	0.0	0.0	0.0	4.1	7.7	0.0	0.0	36.6	-36.6
215+89.103	0.3	0.2	0.2	0.0	2.5	0.2	0.2	39.0	-38.9
218RT									
217+95.147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
218+20.143	0	0.02	0.02	3.77	2.33	0.02	0.02	2.33	-2.31
218+45.139	0	0	0	14.36	10.91	0.02	0.02	13.23	-13.21
219+00.000	0	0	0	9.59	31.63	0.02	0.02	44.86	-44.84
219+63.600	0	0	0	0.9	16.06	0.02	0.02	60.92	-60.9
244LT									
244+00.000	0.02	0	0	0	0	0	0	0	0
244+50.000	0.2	0.2	0.2	3.2	3.9	0.2	0.2	3.9	-3.8
244+95.330	0.1	0.2	0.2	7.8	12.1	0.4	0.4	16.0	-15.6
245+20.304	0.1	0.1	0.1	4.4	7.3	0.5	0.5	23.3	-22.8
245+45.304	0.1	0.1	0.1	0.3	2.8	0.6	0.6	26.1	-25.5

244RT									
243+95.598	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
244+50.000	0.0	0.0	0.0	3.3	4.4	0.0	0.0	4.4	-4.4
244+95.330	0.0	0.0	0.0	8.8	13.3	0.0	0.0	17.6	-17.6
245+20.304	0.0	0.0	0.0	6.0	8.9	0.0	0.0	26.5	-26.5
245+45.304	0.0	0.0	0.0	0.2	3.7	0.0	0.0	30.2	-30.2
247LT									
247+51.330	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
247+76.330	0.0	0.0	0.0	3.4	2.0	0.0	0.0	2.0	-2.0
248+01.368	0.0	0.0	0.0	9.2	7.6	0.0	0.0	9.6	-9.6
248+50.000	0.0	0.0	0.0	7.0	19.0	0.0	0.0	28.7	-28.7
248+84.499	0.1	0.1	0.1	0.3	6.1	0.1	0.1	34.8	-34.7
247RT									
247+51.330	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0
247+76.330	0.0	0.0	0.0	11.0	10.2	0.0	0.0	10.2	-10.2
248+01.330	0.0	0.0	0.0	13.5	14.7	0.0	0.0	24.9	-24.9
248+50.000	0.0	0.0	0.0	4.3	20.8	0.0	0.0	45.7	-45.7
249+08.090	0.0	0.0	0.0	0.0	6.0	0.0	0.0	51.7	-51.7
267LT									
266+80.780	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0
267+50.000	0.0	0.0	0.0	7.5	15.4	0.0	0.0	15.4	-15.4
267+99.184	0.0	0.0	0.0	13.5	24.9	0.0	0.0	40.2	-40.2
268+24.148	0.0	0.0	0.0	9.5	13.8	0.0	0.0	54.0	-54.0
268+49.148	0.0	0.0	0.0	2.6	7.3	0.0	0.0	61.3	-61.3
267RT									
266+80.708	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
267+50.000	0.0	0.0	0.0	12.3	25.5	0.0	0.0	25.5	-25.4
267+99.184	0.0	0.0	0.0	20.7	39.1	0.0	0.0	64.5	-64.5
268+24.148	0.0	0.0	0.0	16.2	22.2	0.0	0.0	86.7	-86.7
268+49.148	0.0	0.0	0.0	5.4	13.0	0.0	0.0	99.7	-99.6
270LT									
270+54.974	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
270+79.924	0.0	0.0	0.0	4.6	2.9	0.0	0.0	2.9	-2.9
271+04.872	0.0	0.0	0.0	6.2	6.5	0.0	0.0	9.4	-9.4
271+50.000	0.0	0.0	0.0	2.2	9.1	0.0	0.0	18.5	-18.5
271+80.487	0.0	0.0	0.0	0.0	1.6	0.0	0.0	20.1	-20.1
270RT									
270+54.974	0.1	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0
270+79.924	0.0	0.1	0.1	8.8	7.5	0.1	0.1	7.5	-7.4
271+04.872	0.0	0.0	0.0	10.0	11.3	0.1	0.1	18.8	-18.7
271+50.000	0.0	0.0	0.0	3.5	14.7	0.1	0.1	33.5	-33.4
272+23.084	0.0	0.0	0.0	0.0	6.2	0.1	0.1	39.7	-39.6
301LT									
301+04.147	0.4	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
301+50.000	0	0.32	0.32	5.6	6.87	0.32	0.32	6.87	-6.55
302+22.453	0	0	0	12.35	31.31	0.32	0.32	38.18	-37.86
302+47.446	0	0	0	8.37	12.47	0.32	0.32	50.64	-50.32
302+72.446	0.01	0	0	1.43	5.9	0.33	0.33	56.54	-56.21

301RT									
301+04.137	0	0	0	0.57	0	0	0	0	0
301+50.000	0	0	0	6.83	8.17	0	0	8.17	-8.17
302+22.453	0.0	0.0	0.0	17.8	43.0	0.0	0.0	51.2	-51.2
302+47.446	0.0	0.0	0.0	10.6	17.1	0.0	0.0	68.3	-68.3
302+72.446	0.1	0.0	0.0	0.0	6.4	0.0	0.0	74.7	-74.6
304LT									
304+53.447	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
304+78.447	0.0	0.1	0.1	8.7	5.6	0.1	0.1	5.6	-5.5
305+03.456	0.0	0.0	0.0	12.6	12.8	0.1	0.1	18.4	-18.3
305+50.000	0.0	0.0	0.0	5.0	19.7	0.1	0.1	38.1	-38.0
306+21.748	0	0	0	0.22	9	0.1	0.1	47.05	-46.95
304RT									
304+53.447	0	0	0	0	0	0	0	0	0
304+78.447	0	0	0	6.65	4	0	0	4	-4
305+03.447	0	0	0	10.23	10.16	0	0	14.16	-14.15
305+50.000	0	0	0	6.13	18.33	0	0	32.49	-32.49
306+21.864	0	0	0	0.66	11.75	0	0	44.25	-44.24
383LT									
383+09.240	0.3	0.0	0.0	18.7	0.0	0.0	0.0	0.0	0.0
383+50.000	0.0	0.2	0.2	25.6	43.5	0.2	0.2	43.5	-43.3
384+14.457	0.0	0.0	0.0	34.1	92.7	0.2	0.2	136.2	-136.0
384+39.530	0.1	0.1	0.1	16.8	30.7	0.2	0.2	166.9	-166.7
384+64.530	0.1	0.1	0.1	10.7	16.6	0.3	0.3	183.5	-183.2
383RT									
383+31.993	0.13	0	0	0	0	0	0	0	0
383+50.000	0	0.04	0.04	5.38	2.33	0.04	0.04	2.33	-2.29
384+15.203	0.18	0.21	0.21	17.62	36.1	0.26	0.26	38.43	-38.18
384+39.530	0.16	0.15	0.15	8.84	15.49	0.41	0.41	53.93	-53.52
384+64.530	0	0.07	0.07	9.32	10.93	0.48	0.48	64.85	-64.37
389LT									
389+71.217	0.1	0	0	2	0	0	0	0	0
389+96.217	0.0	0.1	0.1	6.5	5.1	0.1	0.1	5.1	-5.1
390+21.210	0.0	0.0	0.0	14.9	12.9	0.1	0.1	18.0	-17.9
390+75.000	0.1	0.1	0.1	1.6	21.3	0.1	0.1	39.3	-39.2
391+05.618	0.2	0.1	0.1	0.0	1.2	0.2	0.2	40.4	-40.2
389RT									
389+71.217	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0
389+96.217	0.0	0.0	0.0	5.4	4.0	0.0	0.0	4.0	-4.0
390+21.210	0.0	0.0	0.0	13.7	11.5	0.0	0.0	15.4	-15.4
390+75.000	0.0	0.0	0.0	6.8	26.6	0.0	0.0	42.0	-42.0
391+25.000	0.5	0.5	0.5	0.0	8.2	0.5	0.5	50.2	-49.7
461LT									
461+93.577	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
462+00.000	0.6	0.2	0.2	2.9	0.5	0.2	0.2	0.5	-0.3
462+50.000	0.3	0.8	0.8	5.8	10.4	1.0	1.0	10.9	-9.9
462+93.316	1.0	1.0	1.0	3.4	9.6	2.0	2.0	20.4	-18.5
463+18.304	1.7	1.2	1.2	1.9	3.2	3.2	3.2	23.6	-20.4
463+43.304	1.2	1.3	1.3	0.1	1.2	4.6	4.6	24.8	-20.2

461RT									
461+54.914	0.3	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0
462+00.000	0.0	0.2	0.2	11.5	15.4	0.2	0.2	15.4	-15.2
462+50.000	0.6	0.6	0.6	11.5	27.7	0.8	0.8	43.1	-42.3
462+73.341	0.7	0.6	0.6	10.6	12.4	1.4	1.4	55.5	-54.2
462+98.354	0.0	0.3	0.3	6.4	10.3	1.7	1.7	65.8	-64.1
463+23.354	0.0	0.0	0.0	9.2	9.4	1.7	1.7	75.2	-73.5

File: N:\PDS\Projects-LET\1020-06-76\PSE\misq\030201_mq_1020-06-76 MISC sheets - normal.ppt

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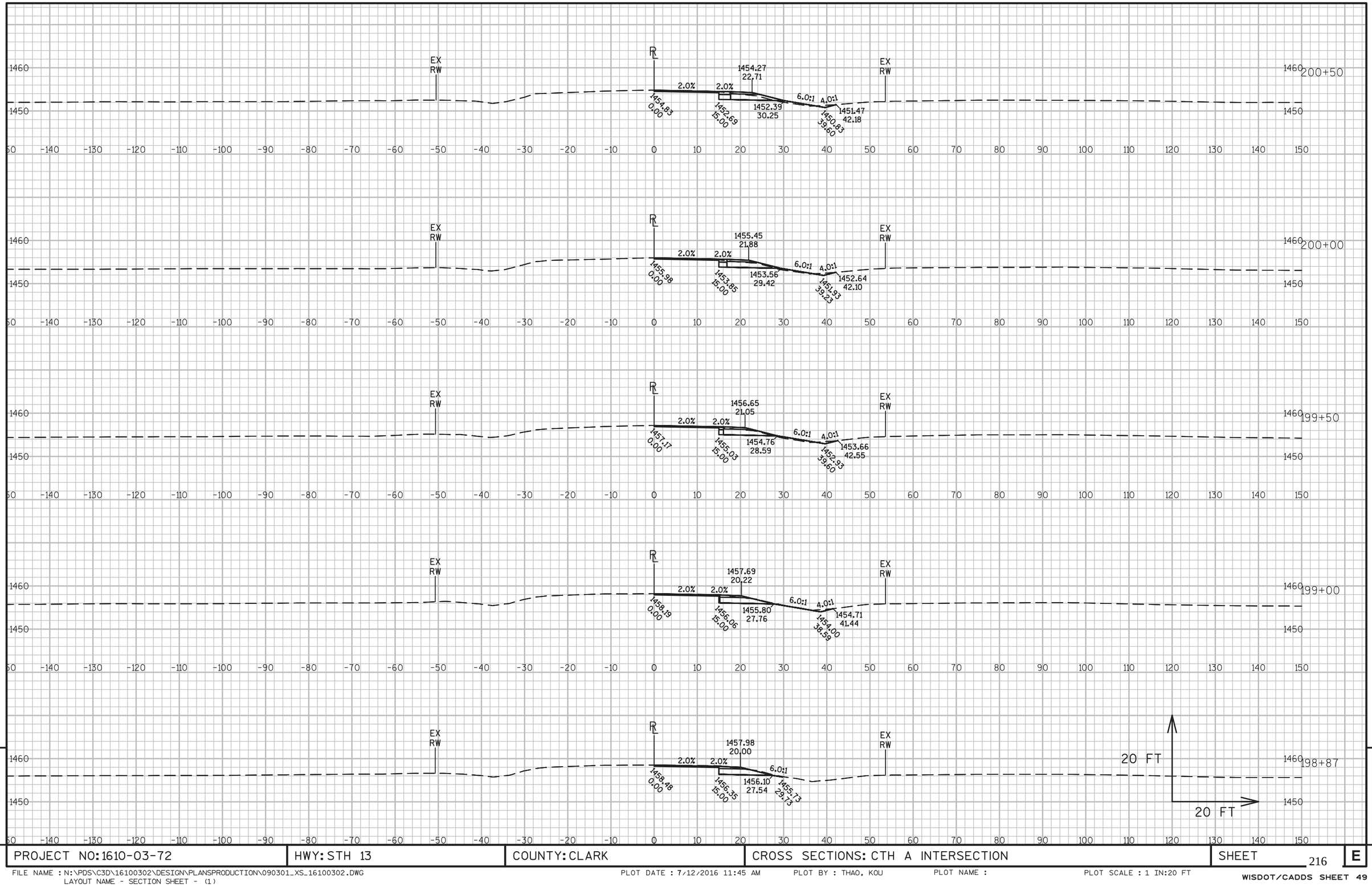
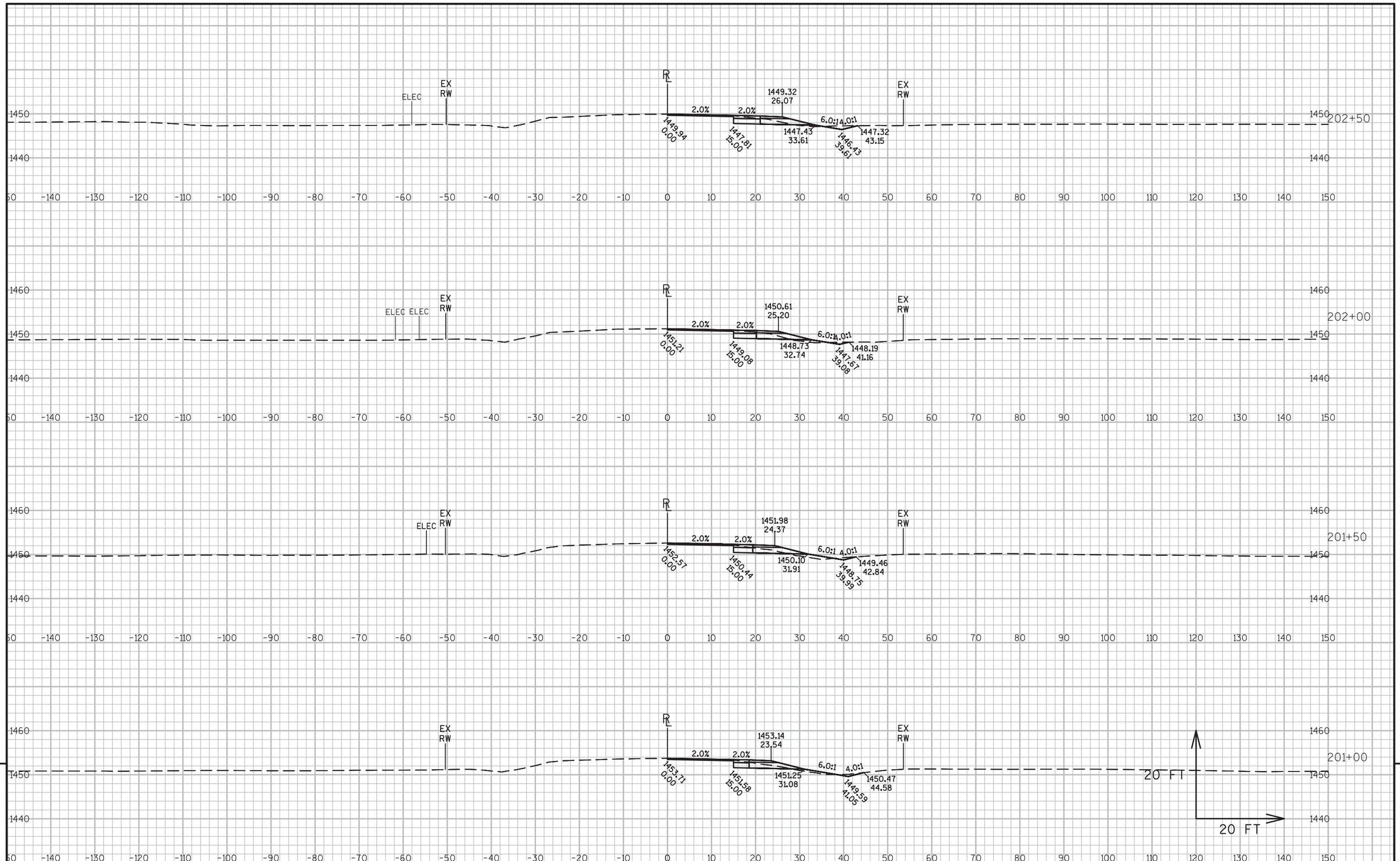


9

9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 216	E

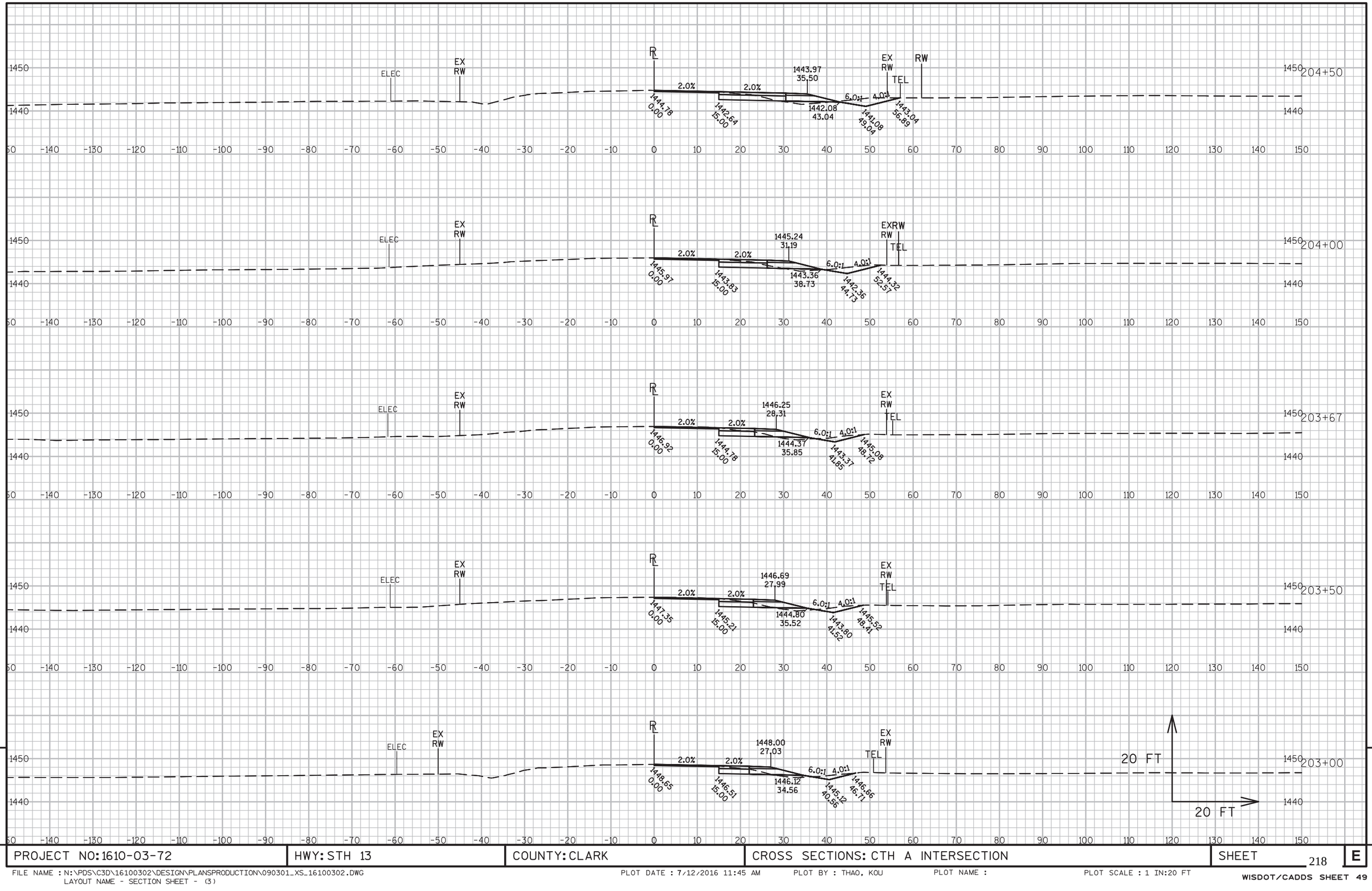


PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 217 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090301_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (2)

PLOT DATE : 7/12/2016 11:45 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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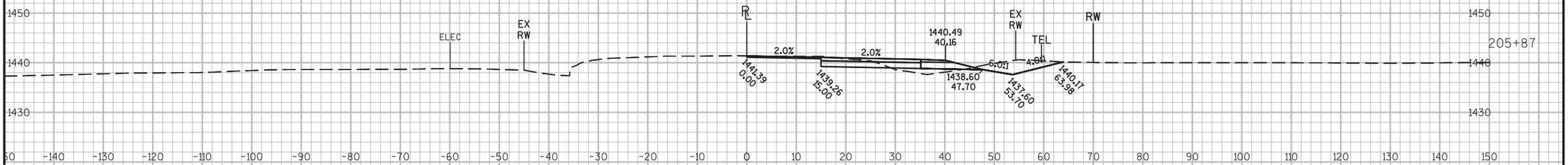
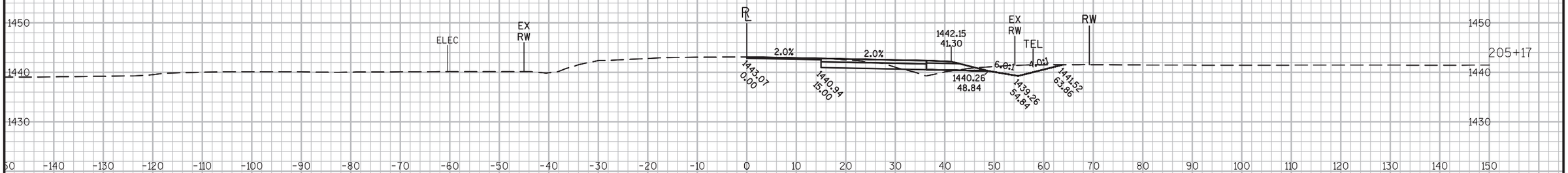
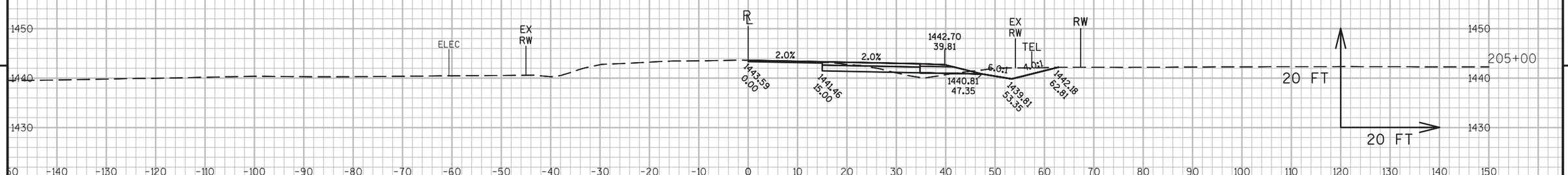
9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 218	E





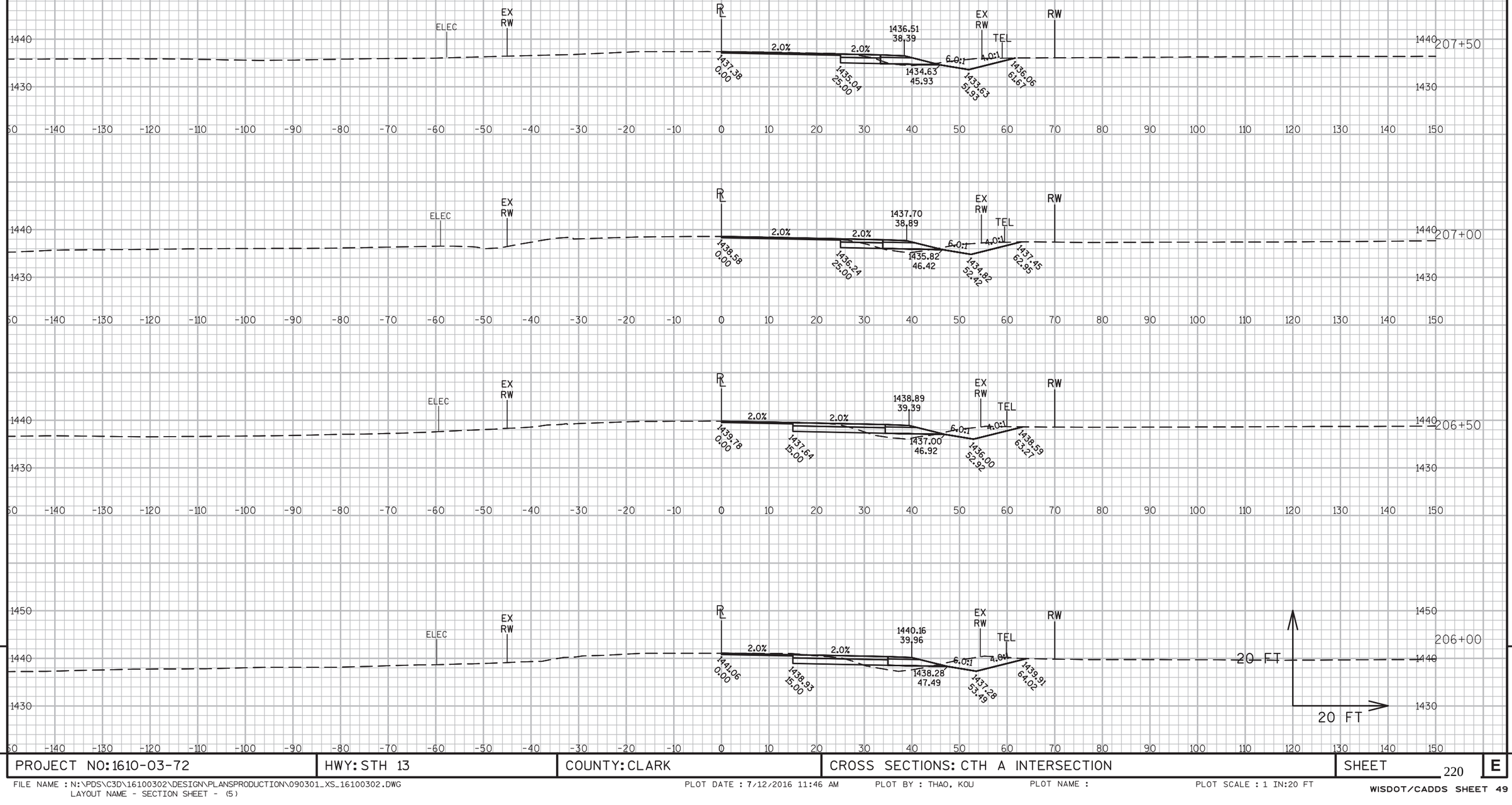


PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 219	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090301_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (4)

PLOT DATE : 7/12/2016 11:45 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

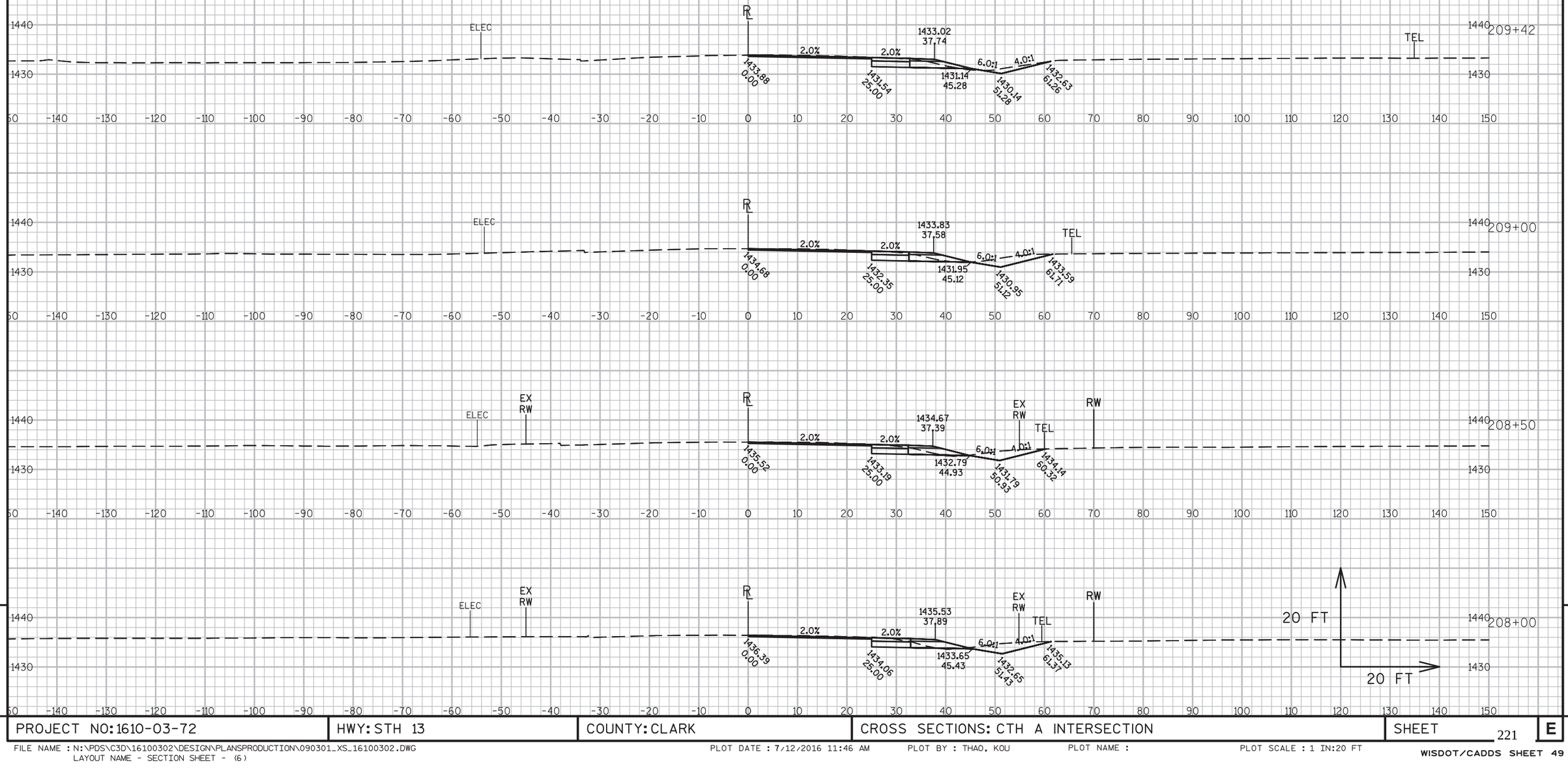


PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 220	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090301_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (5)

PLOT DATE : 7/12/2016 11:46 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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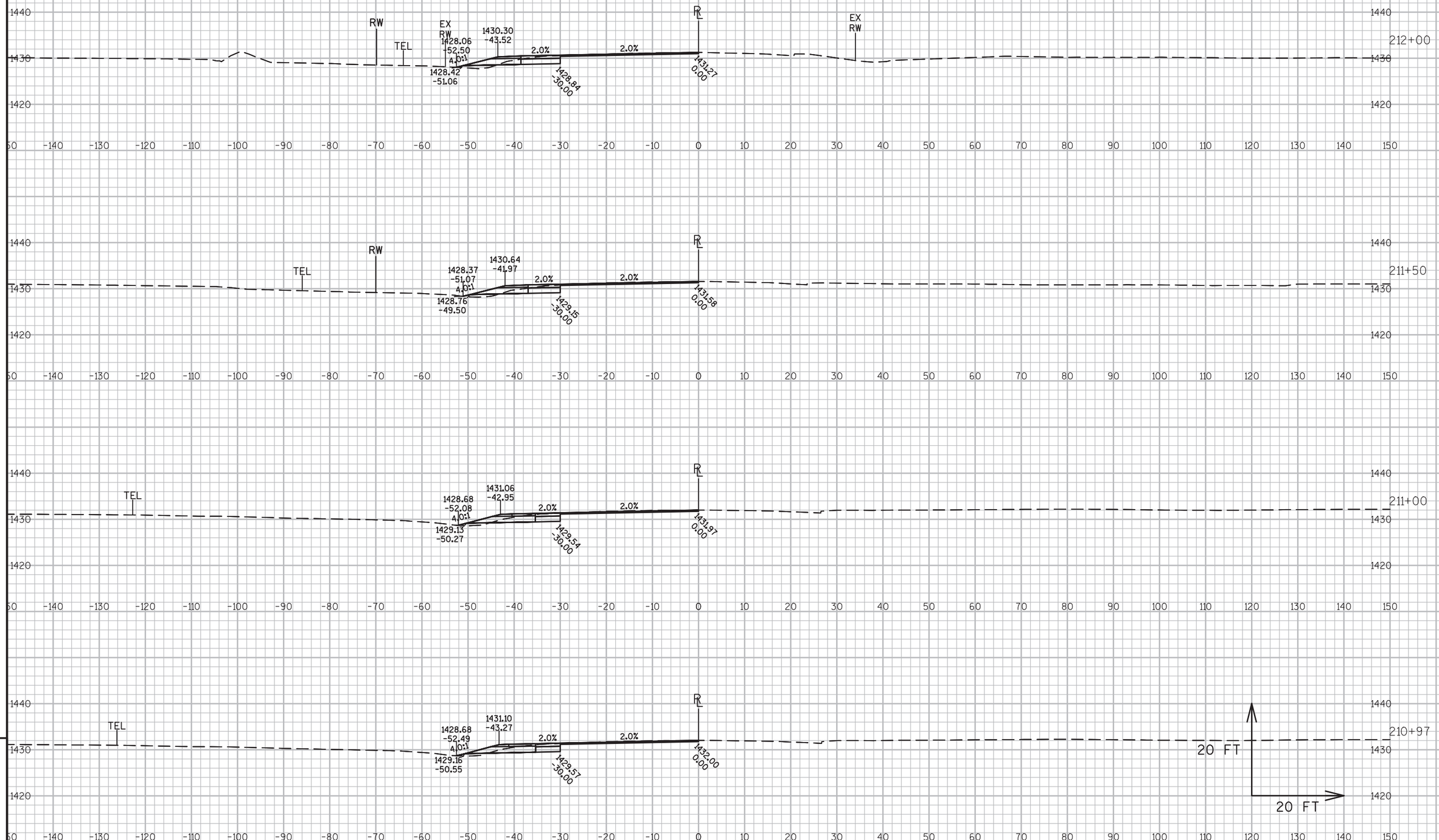
PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 221	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090301_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (6)

PLOT DATE : 7/12/2016 11:46 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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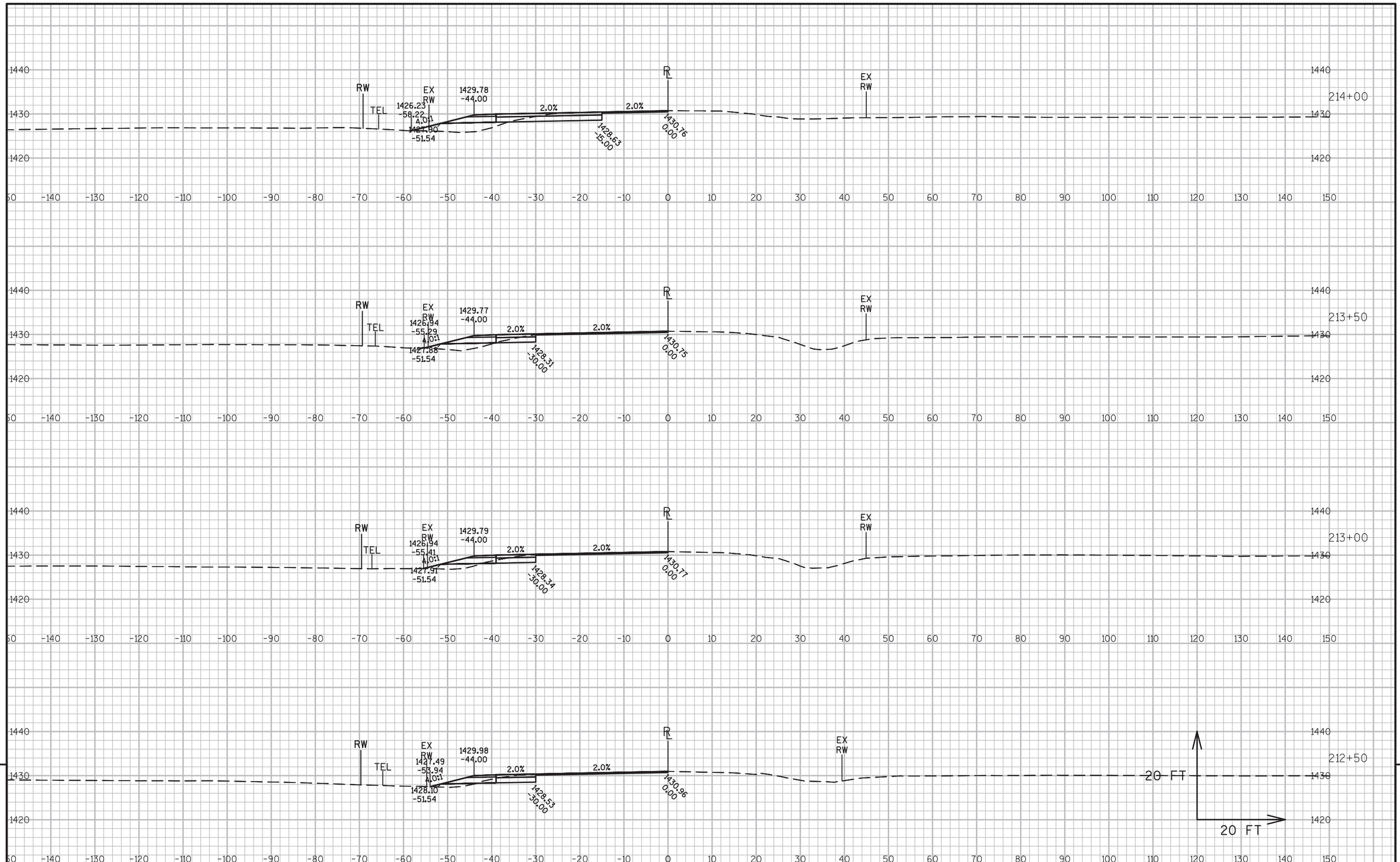
PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 222	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090301_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (7)
PLOT DATE : 7/12/2016 11:46 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



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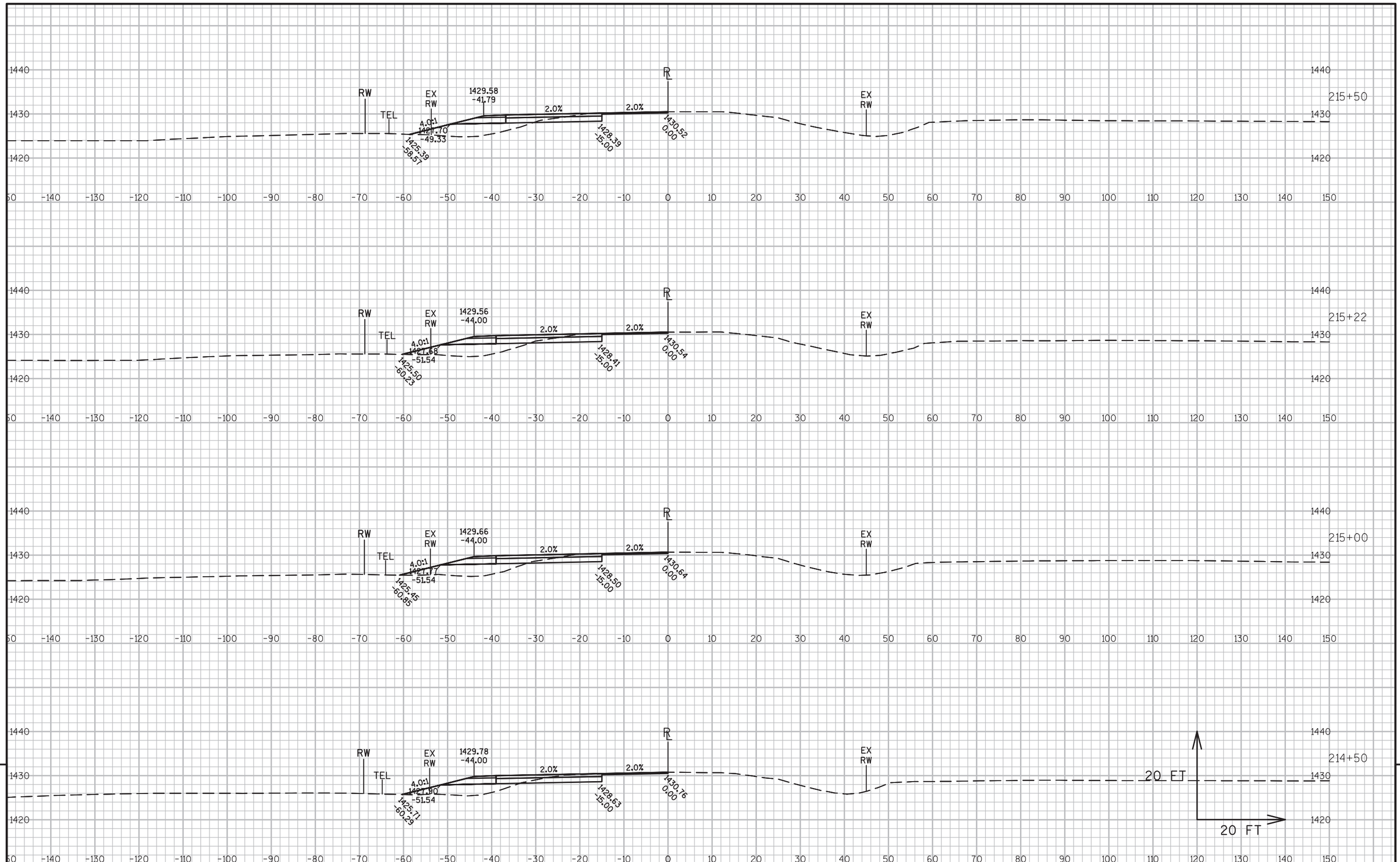
PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 223	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090301_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (8)
PLOT DATE : 7/12/2016 11:46 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



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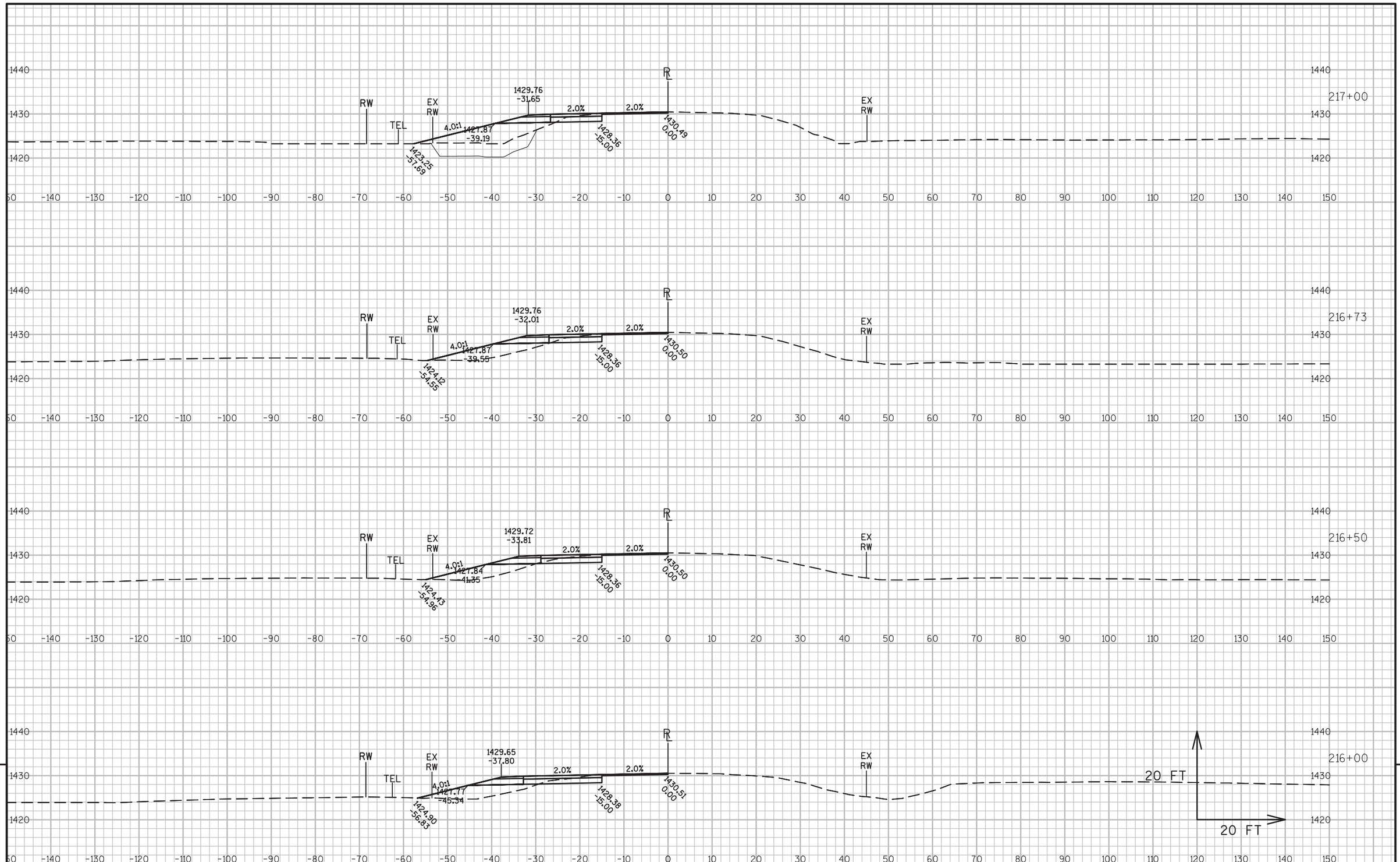
9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 224	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090301_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (9)
PLOT DATE : 7/12/2016 11:47 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 225	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090301_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (10)
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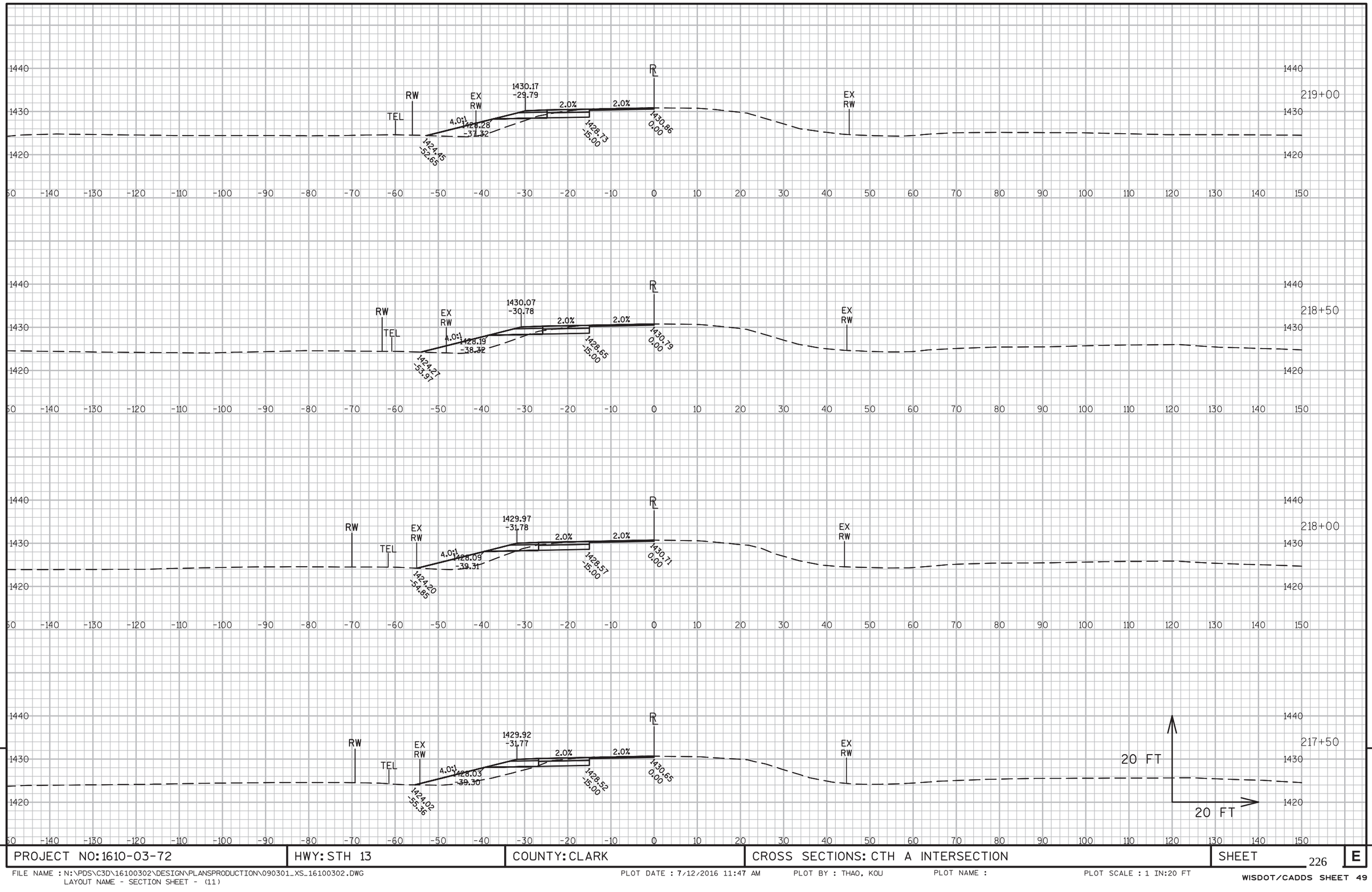
WISDOT/CADDS SHEET 49



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PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 226 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090301_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (11)
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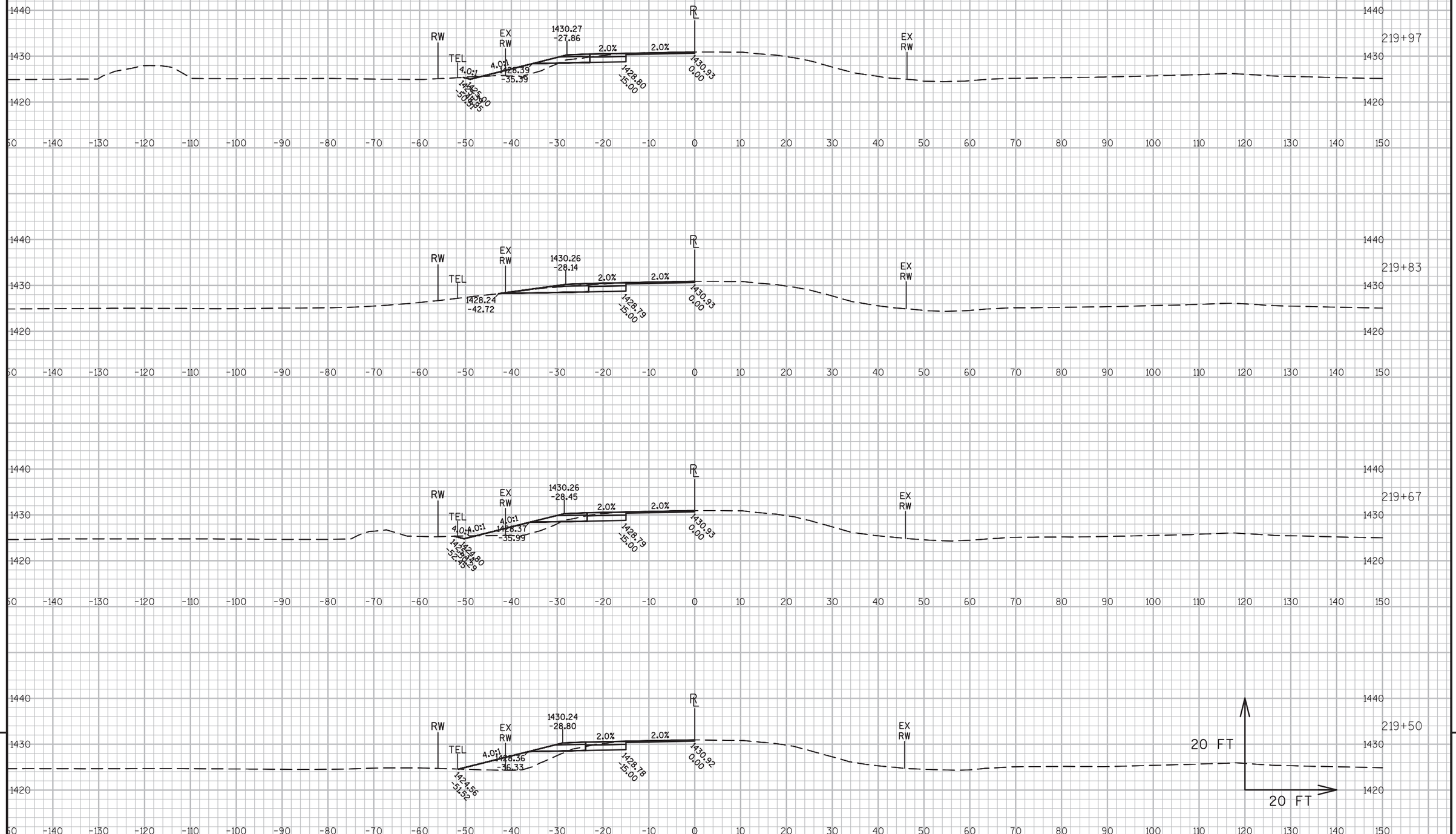
WISDOT/CADDS SHEET 49



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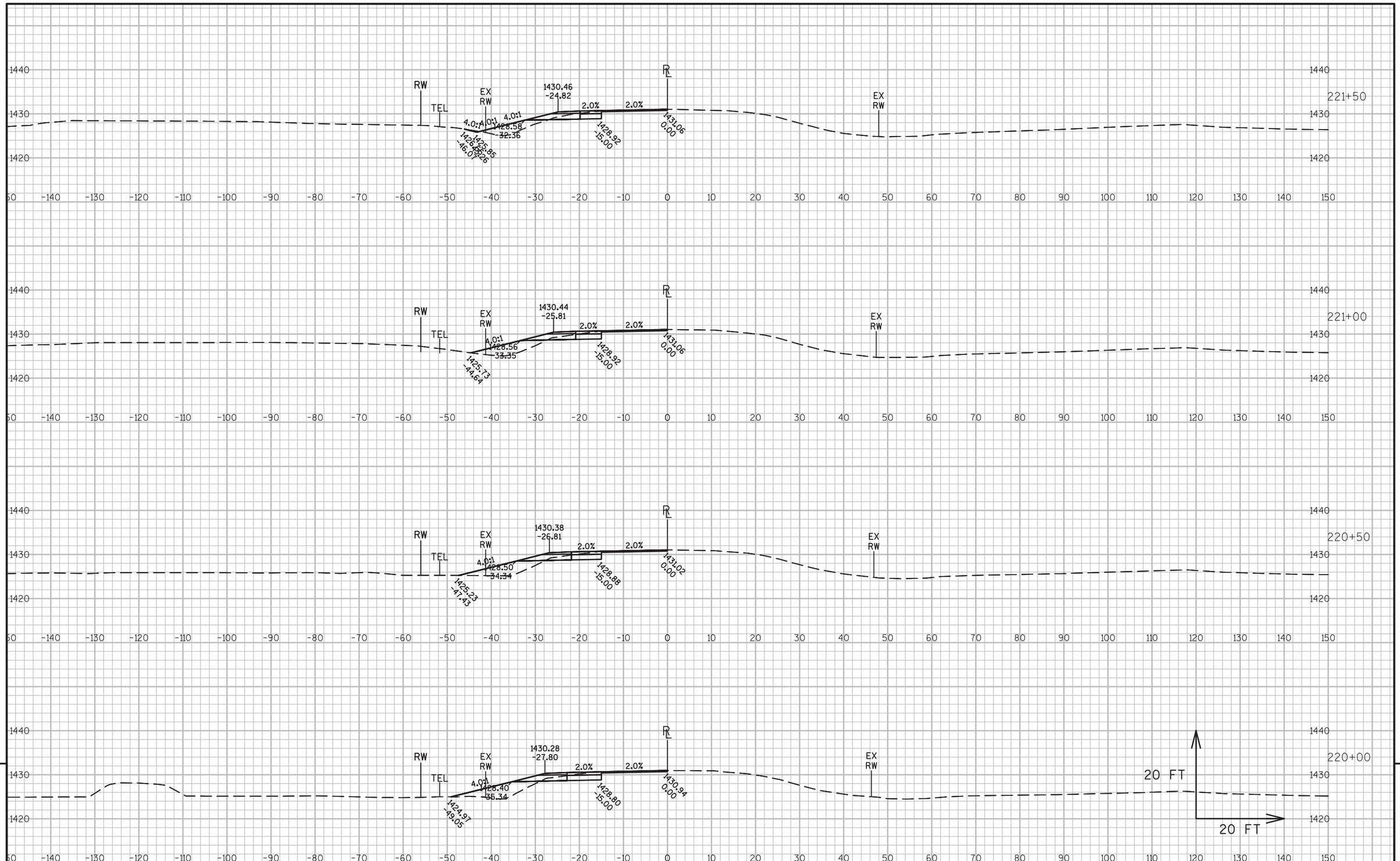
PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 227 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090301_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (12)
PLOT DATE : 7/12/2016 11:47 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 228 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090301_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (13)
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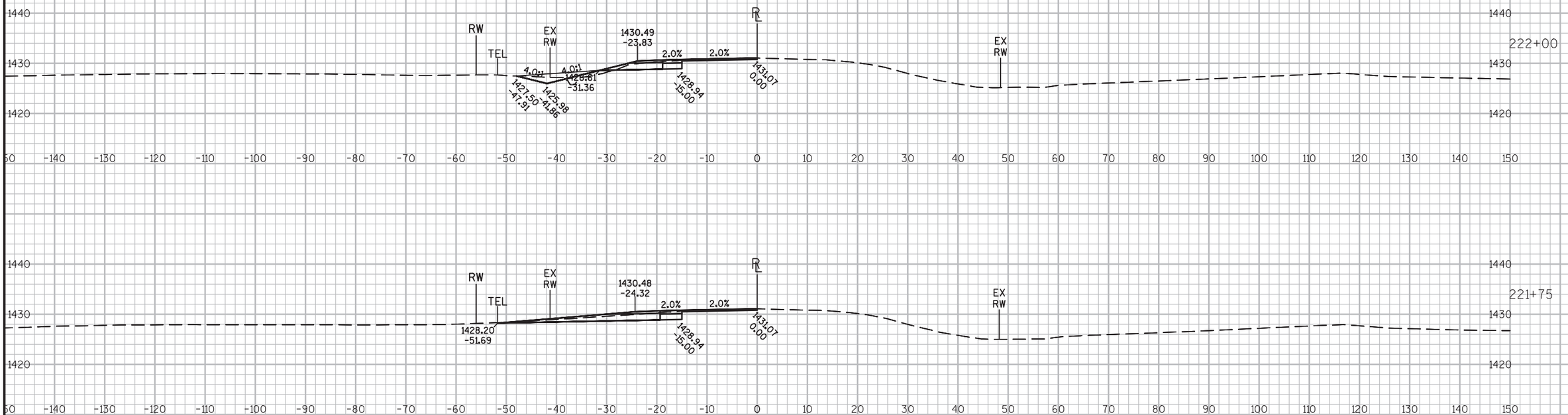
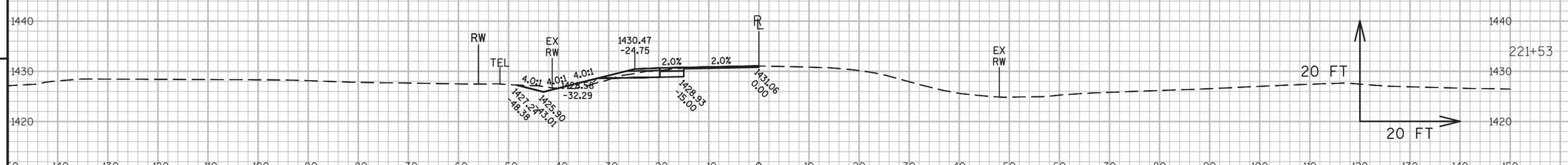
WISDOT/CADDS SHEET 49





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9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 229 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090301_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (14)
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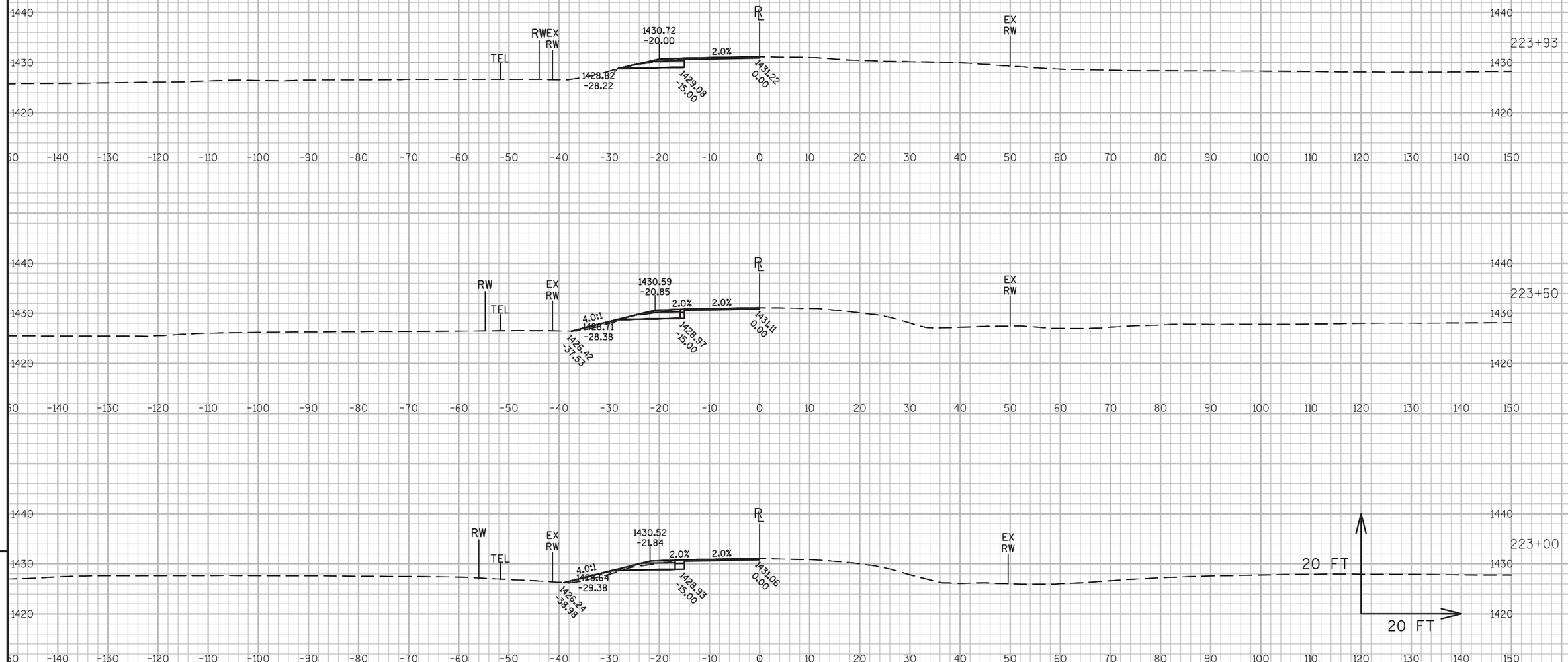
WISDOT/CADDS SHEET 49



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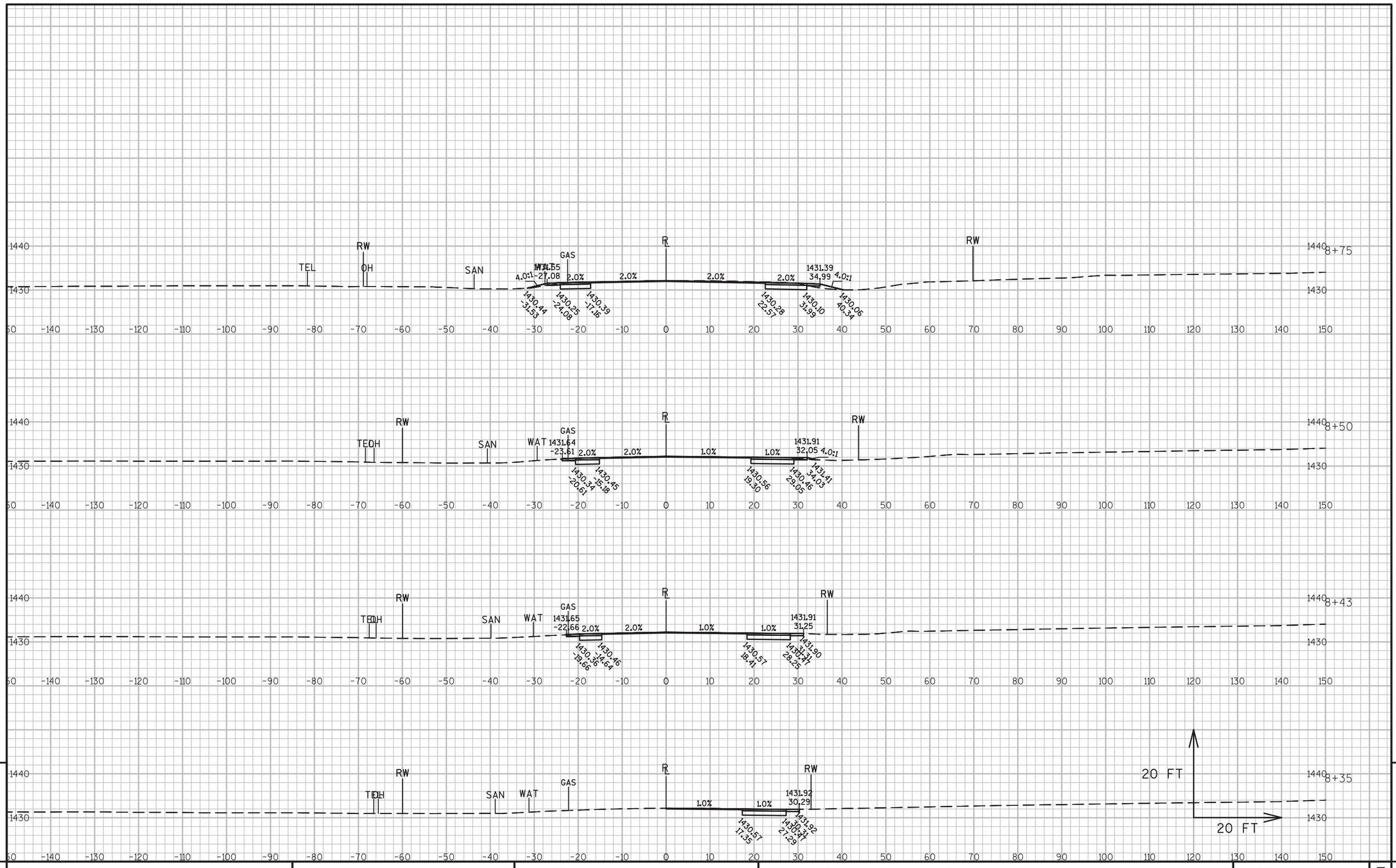
9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A INTERSECTION	SHEET 230	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090301_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (15)
PLOT DATE : 7/12/2016 11:48 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



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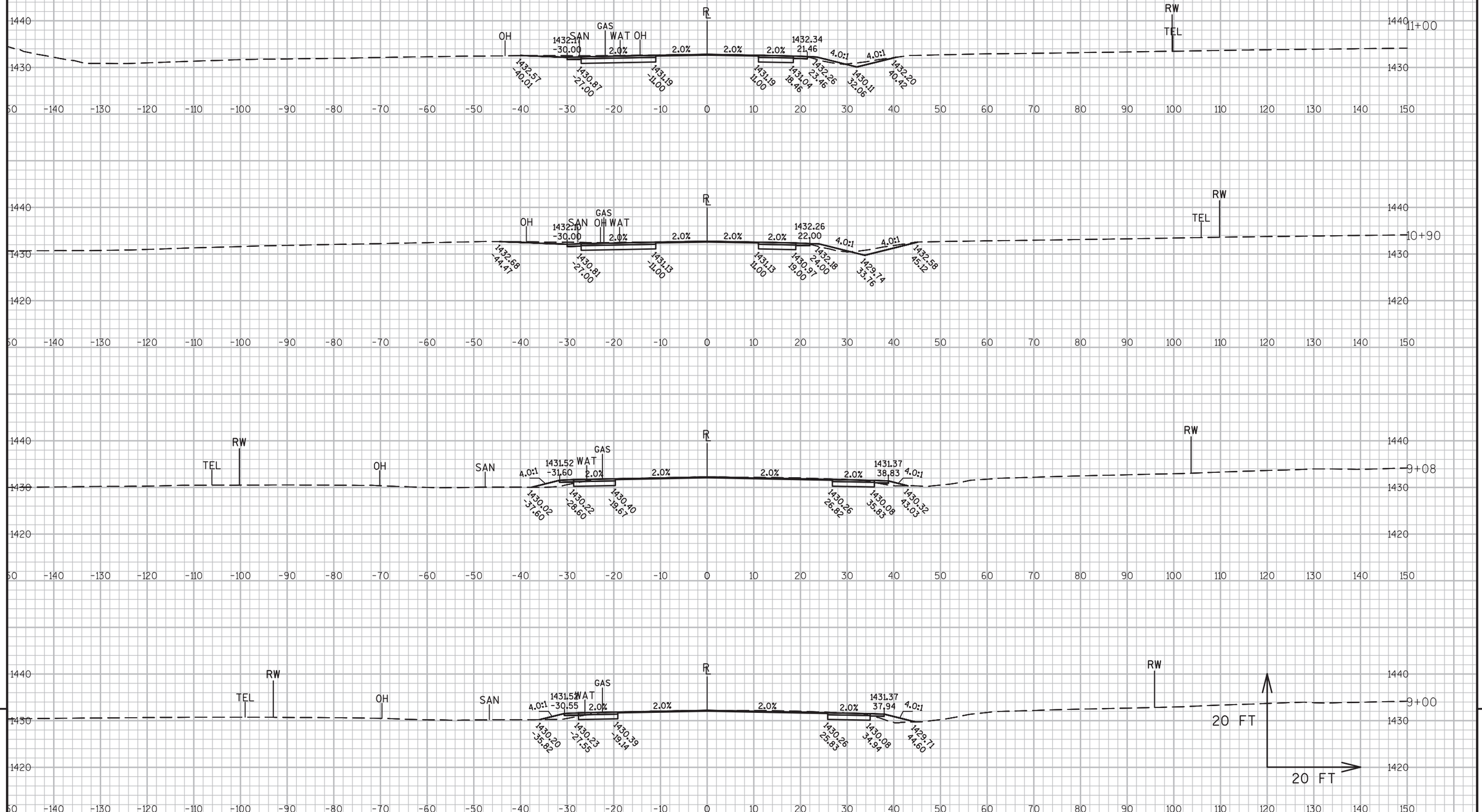
9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: COUNTY ROAD A	SHEET 231	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090302_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (20)

PLOT DATE : 7/12/2016 1:11 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT

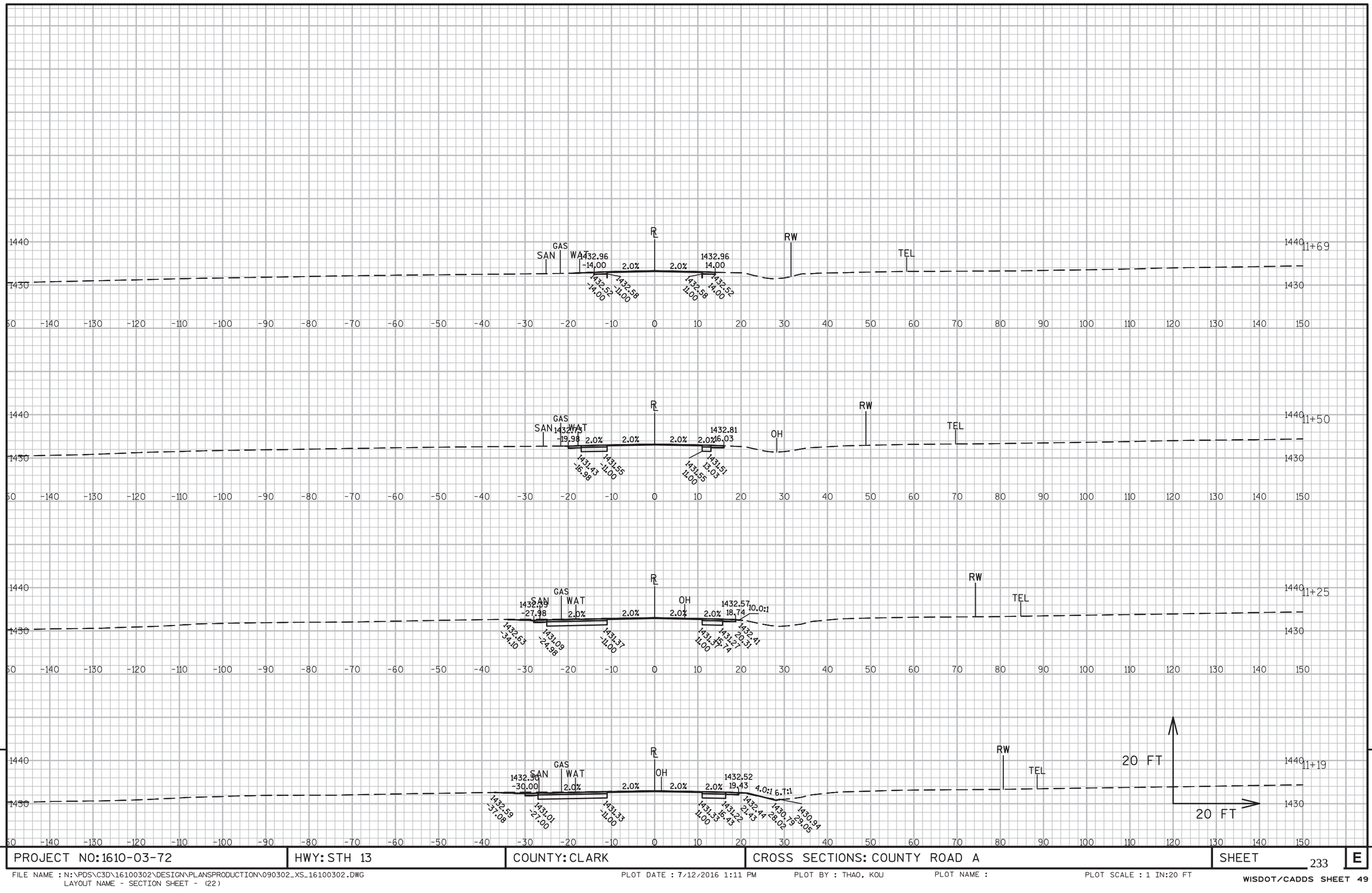


9

9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: COUNTY ROAD A	SHEET 232 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090302_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (21)
PLOT DATE : 7/12/2016 1:11 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

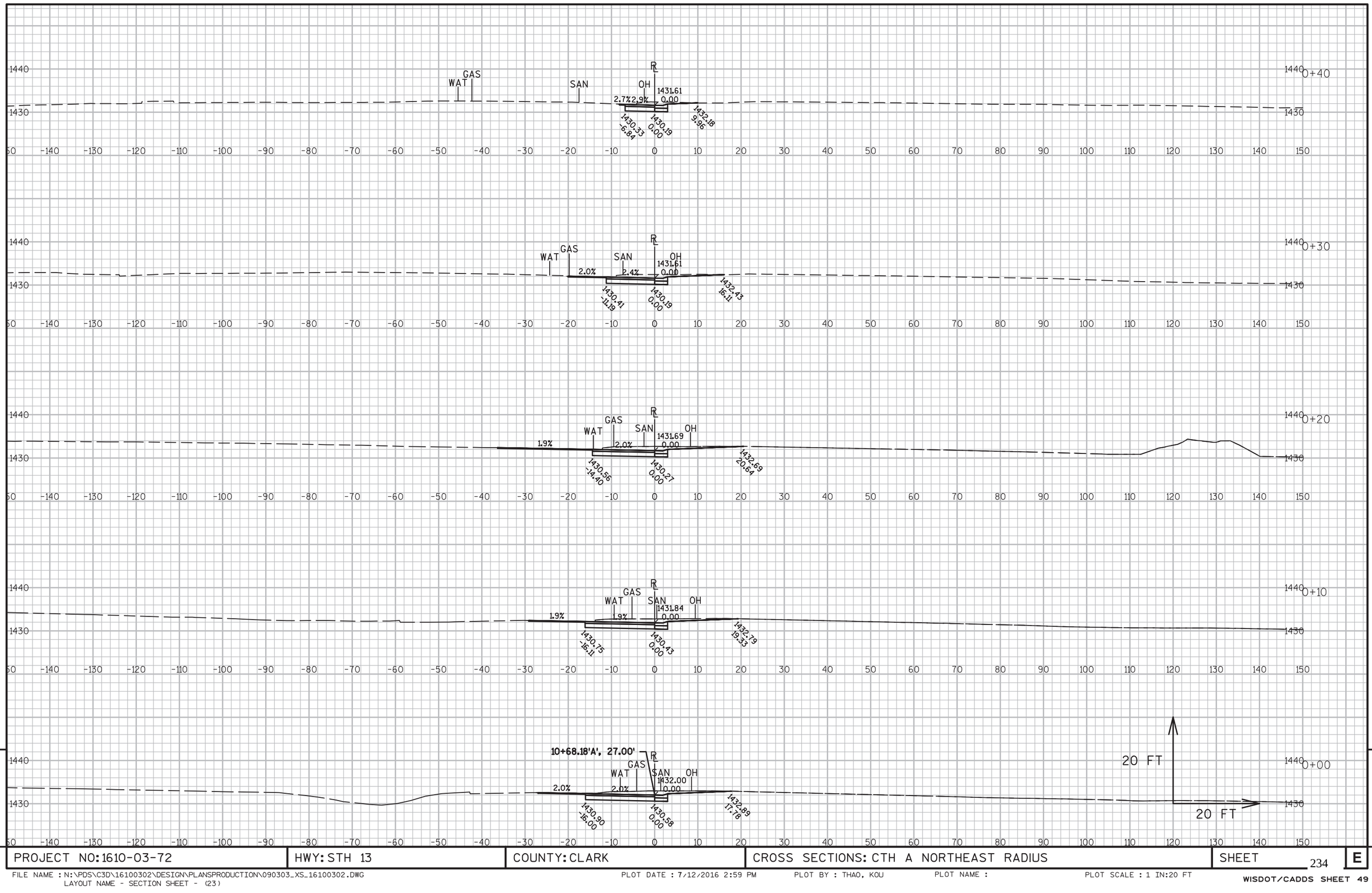


9

9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: COUNTY ROAD A	SHEET 233	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090302_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (22)
PLOT DATE : 7/12/2016 1:11 PM
PLOT BY : THAO, KOU
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



9

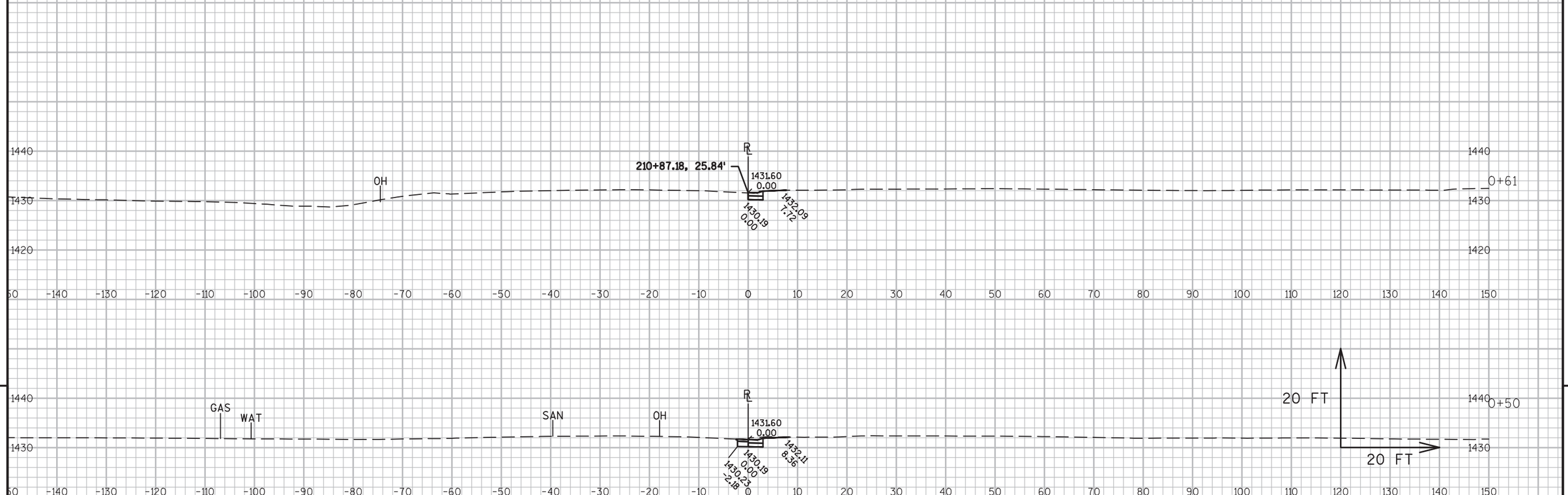
9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A NORTHEAST RADIUS	SHEET 234	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090303_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (23)

PLOT DATE : 7/12/2016 2:59 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT

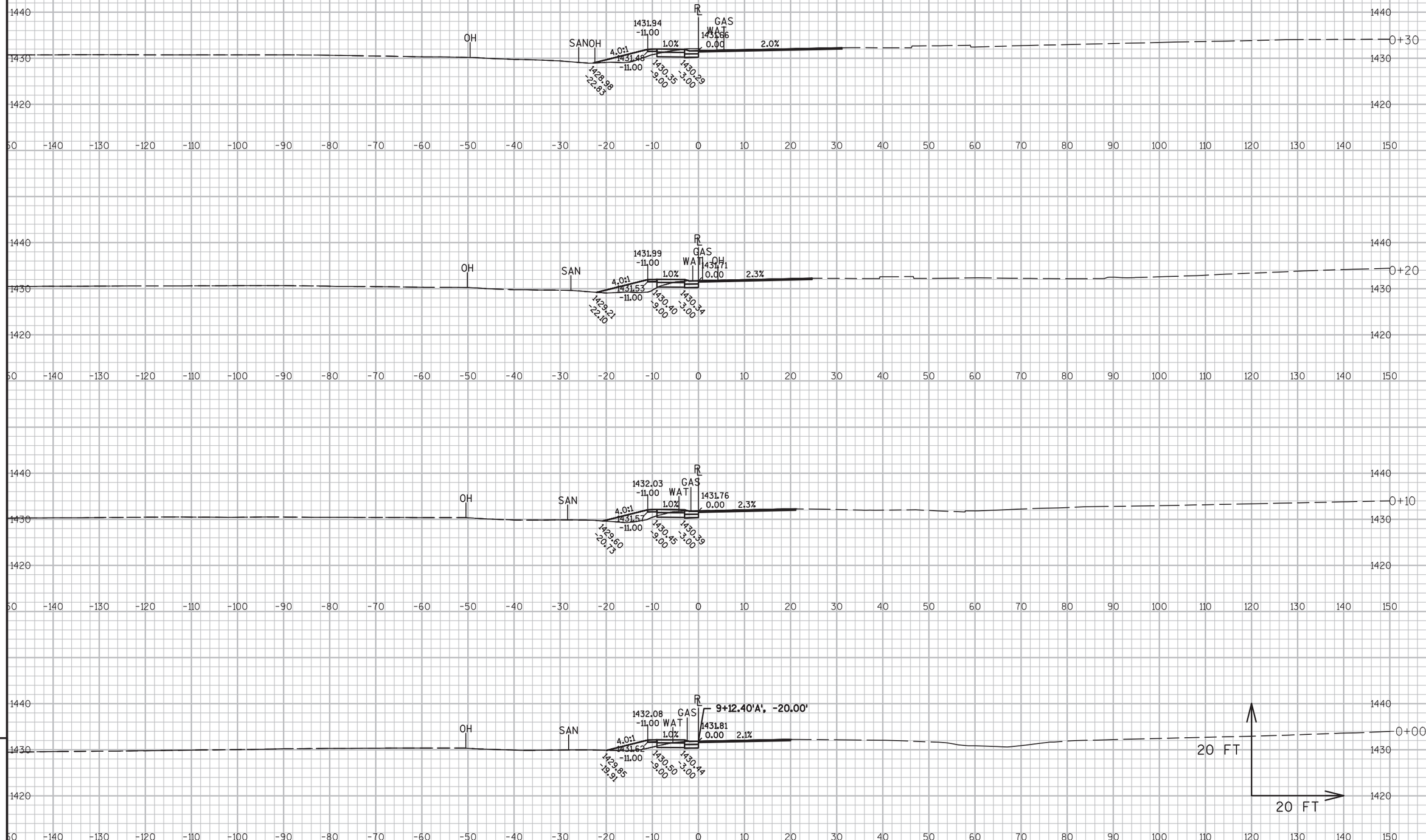
WISDOT/CADDS SHEET 49



9 9

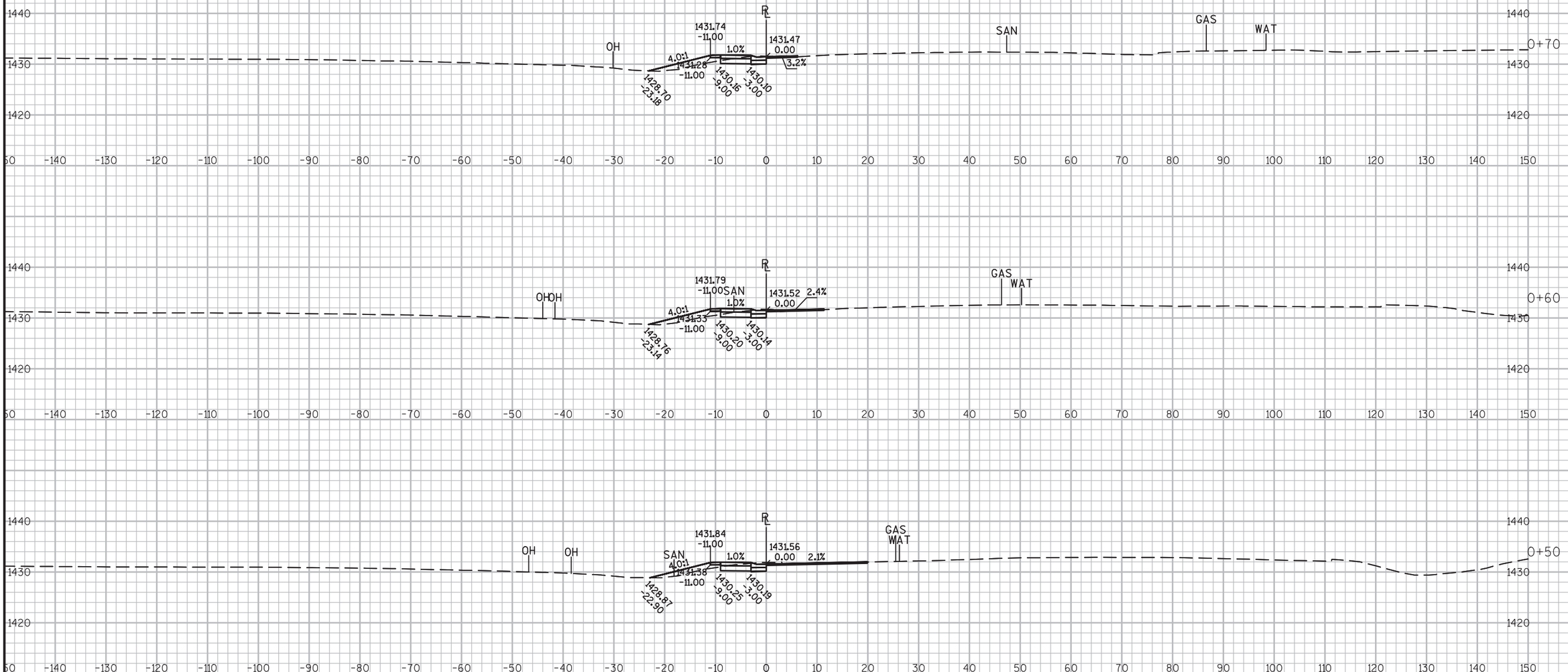
PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A NORTHEAST RADIUS	SHEET 235 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090303_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (24)
PLOT DATE : 7/12/2016 2:59 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A NORTHWEST RADIUS	SHEET 236 E



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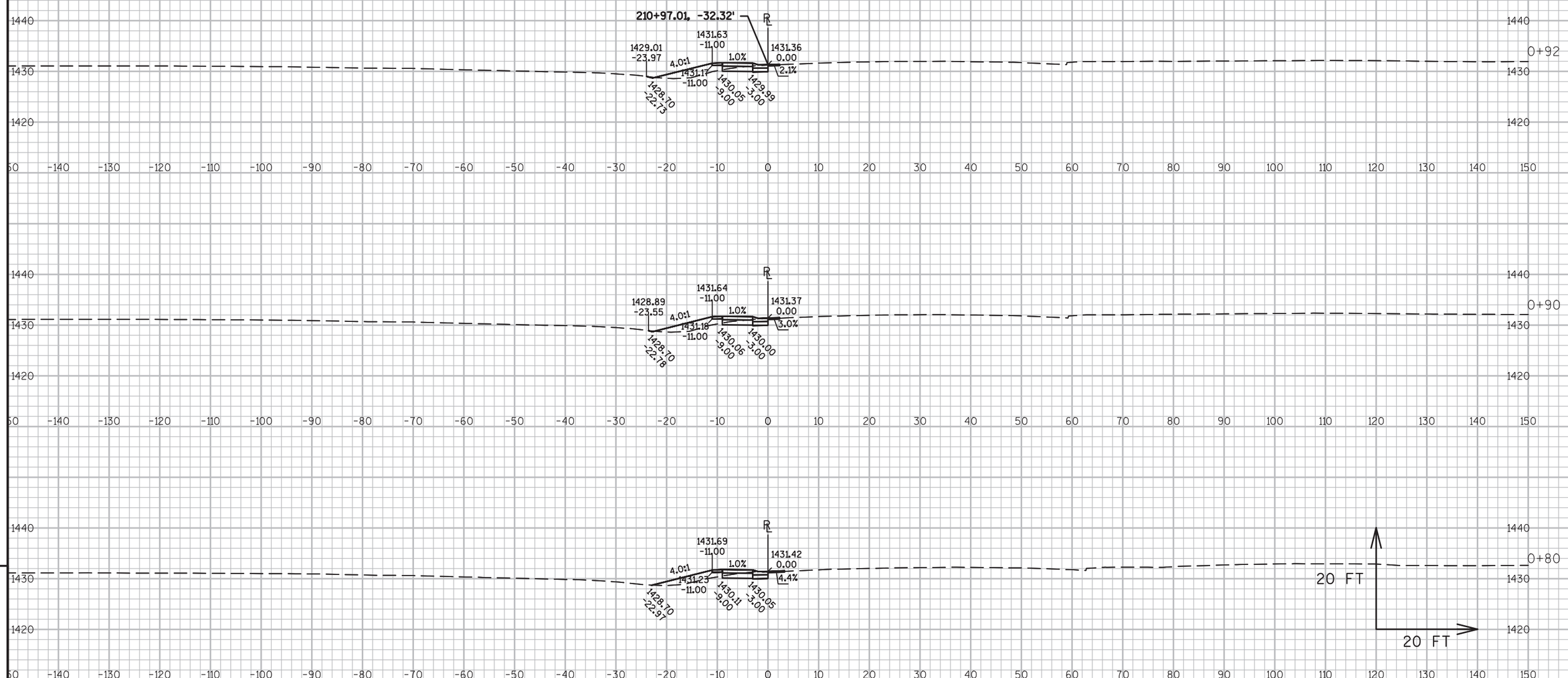
9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A NORTHWEST RADIUS	SHEET 237 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090303_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (29)

PLOT DATE : 7/12/2016 2:59 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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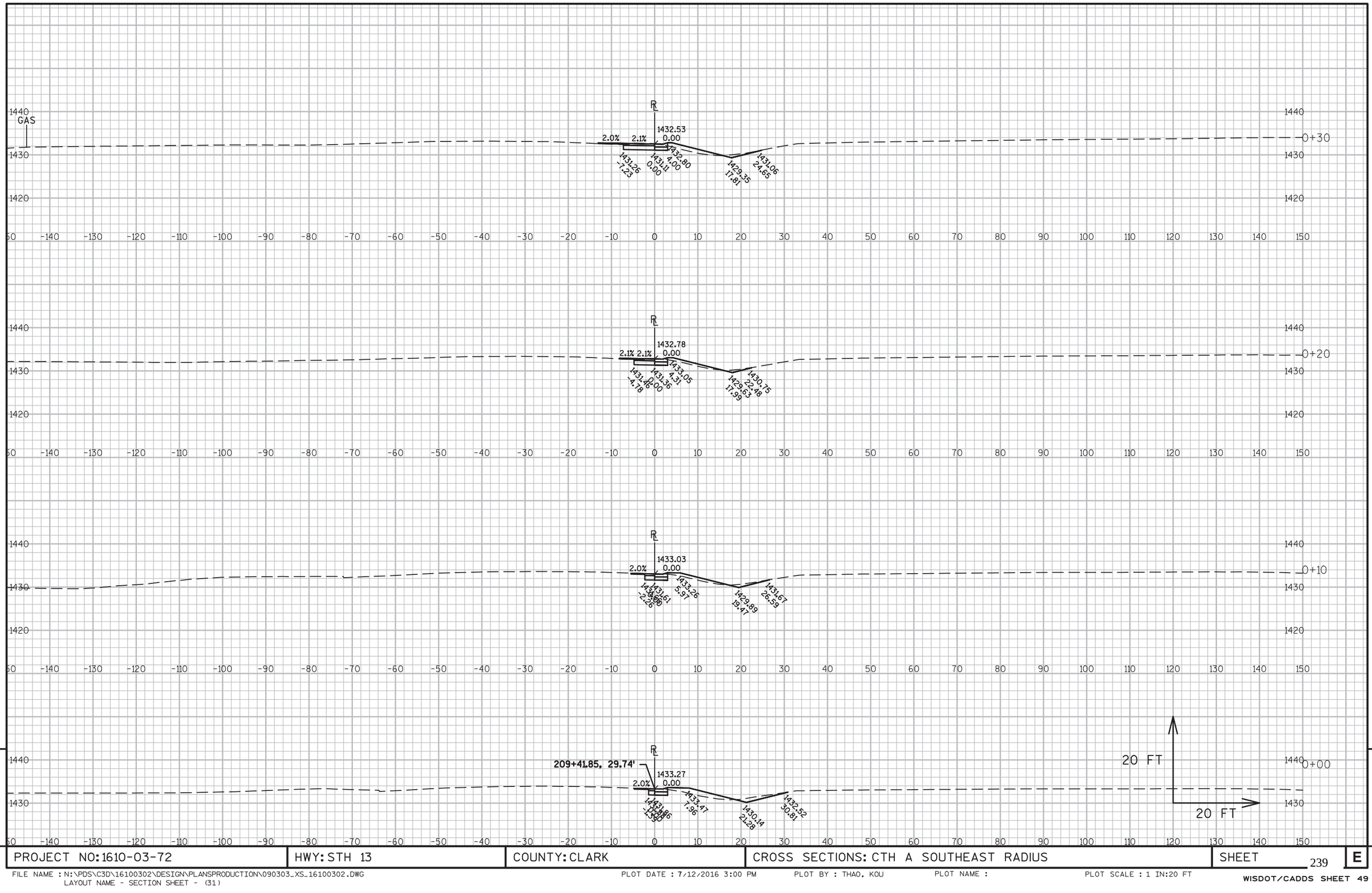
9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A NORTHWEST RADIUS	SHEET 238 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090303_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (30)

PLOT DATE : 7/12/2016 3:00 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

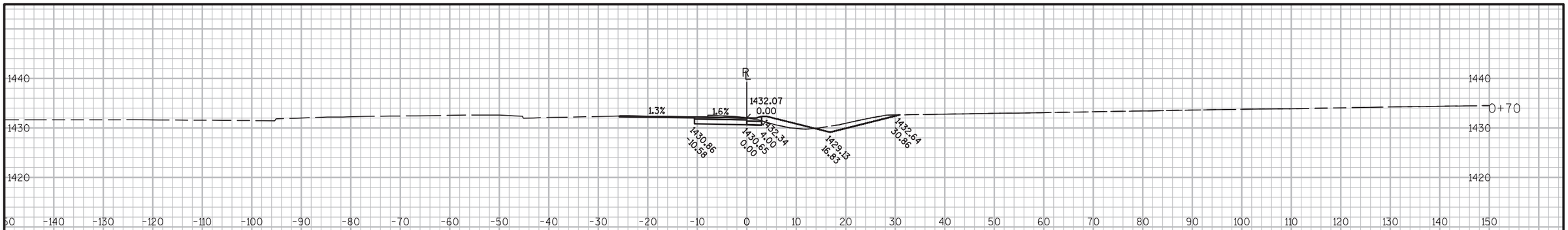


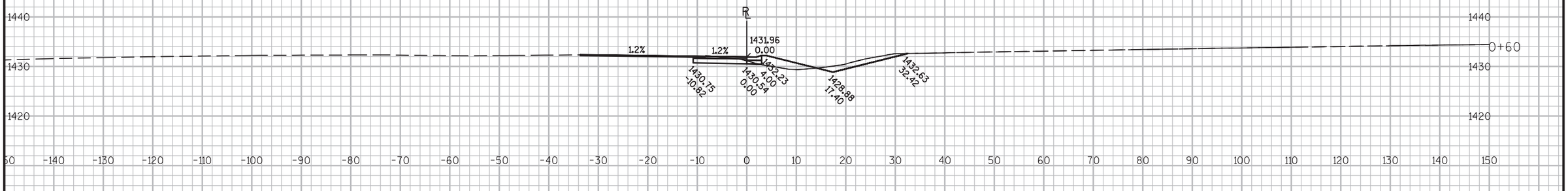
9

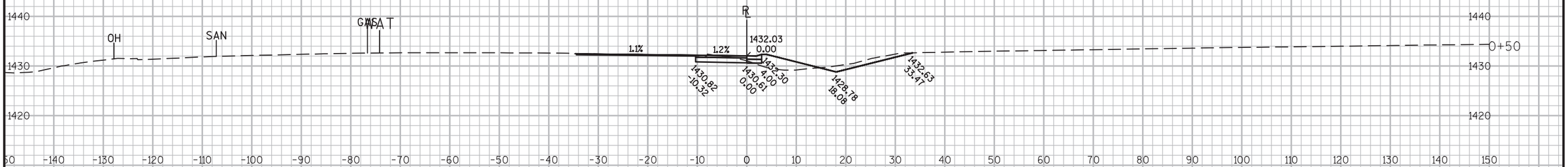
9

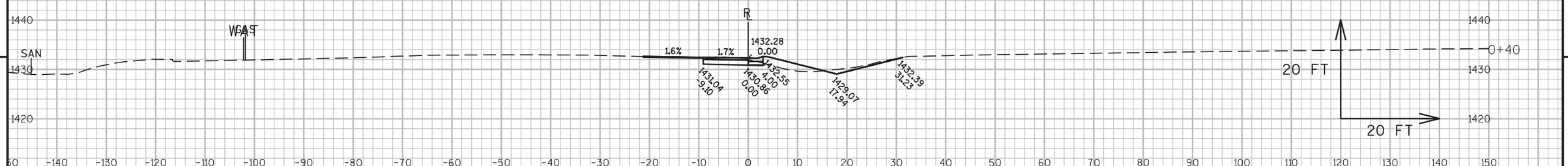
PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A SOUTHEAST RADIUS	SHEET 239 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090303_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (31)
PLOT DATE : 7/12/2016 3:00 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49









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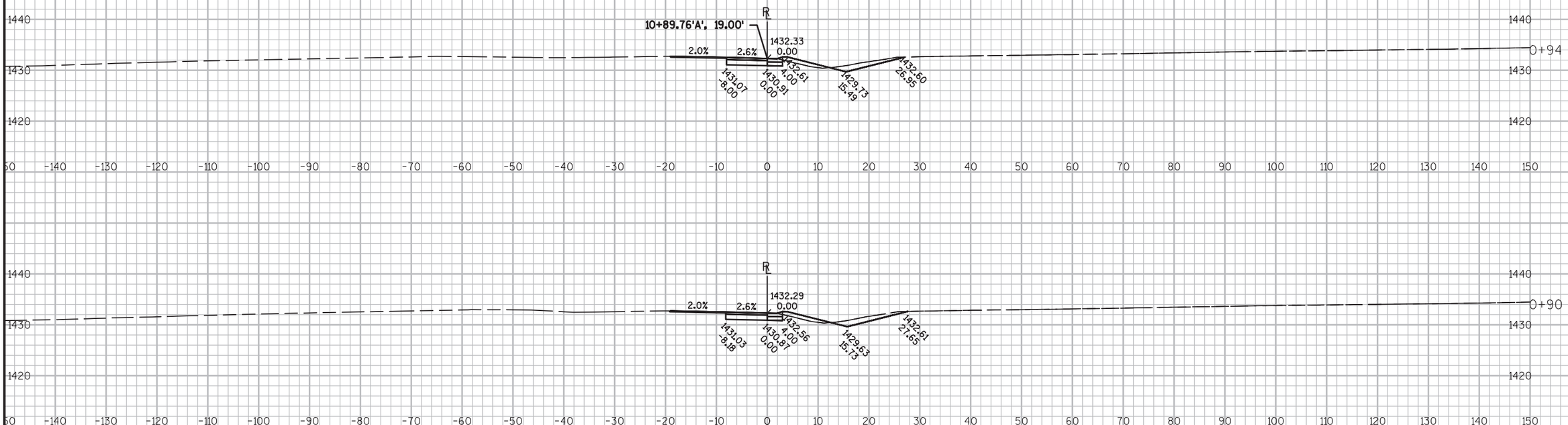
9

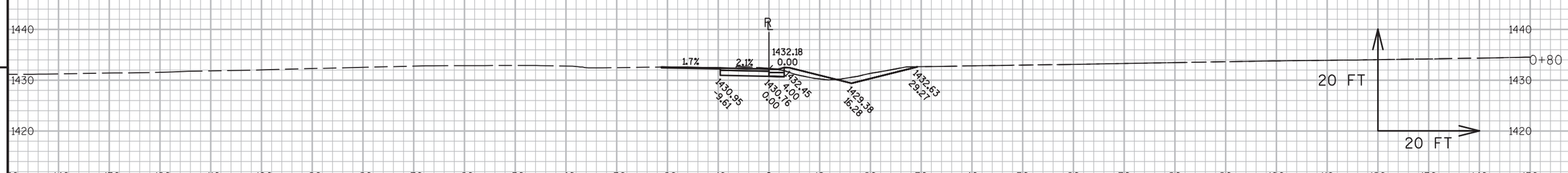
PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A SOUTHEAST RADIUS	SHEET 240 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090303_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (32)

PLOT DATE : 7/12/2016 3:00 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49





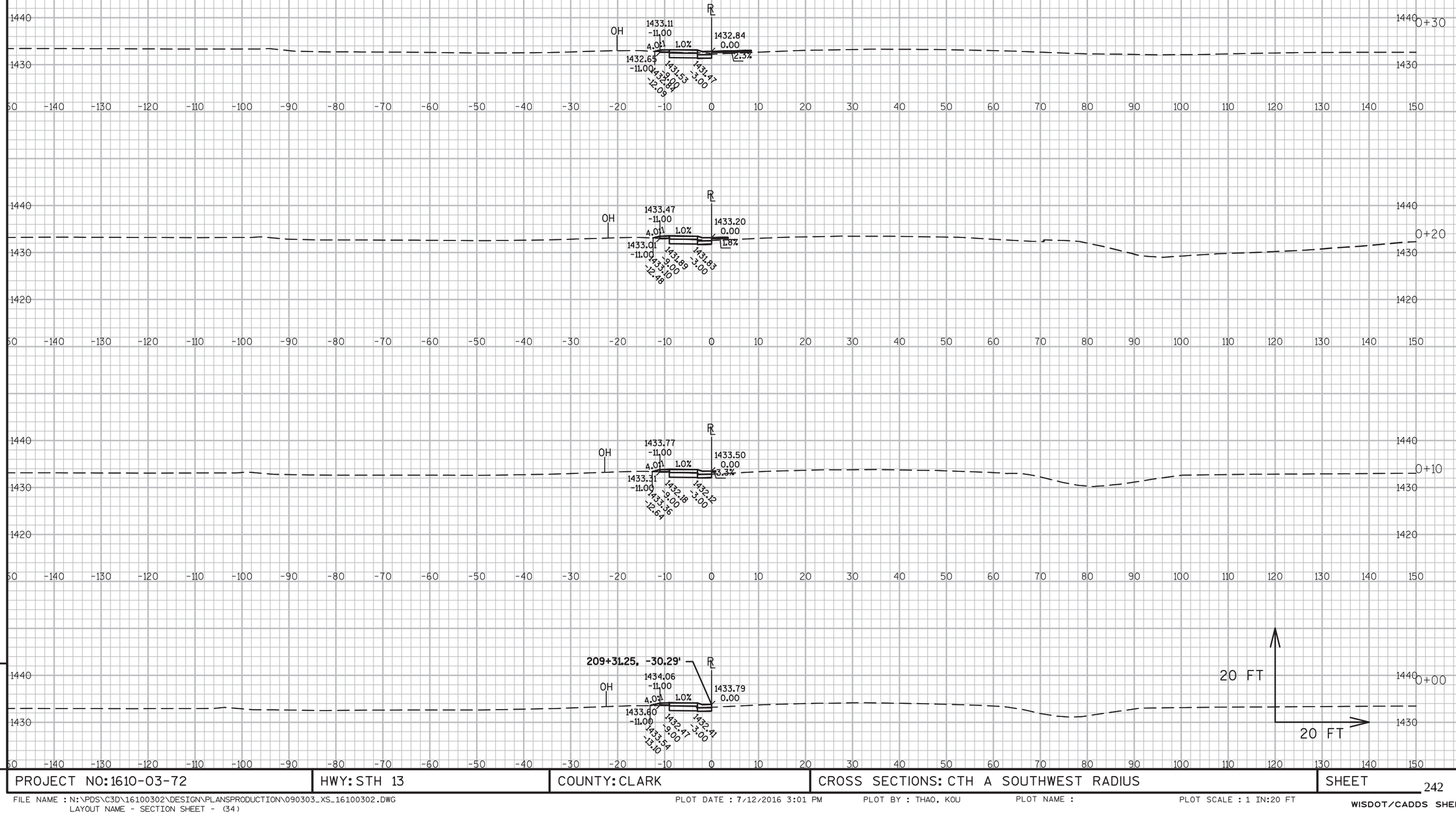
9 9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A SOUTHEAST RADIUS	SHEET 241 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090303_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (33)

PLOT DATE : 7/12/2016 3:00 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

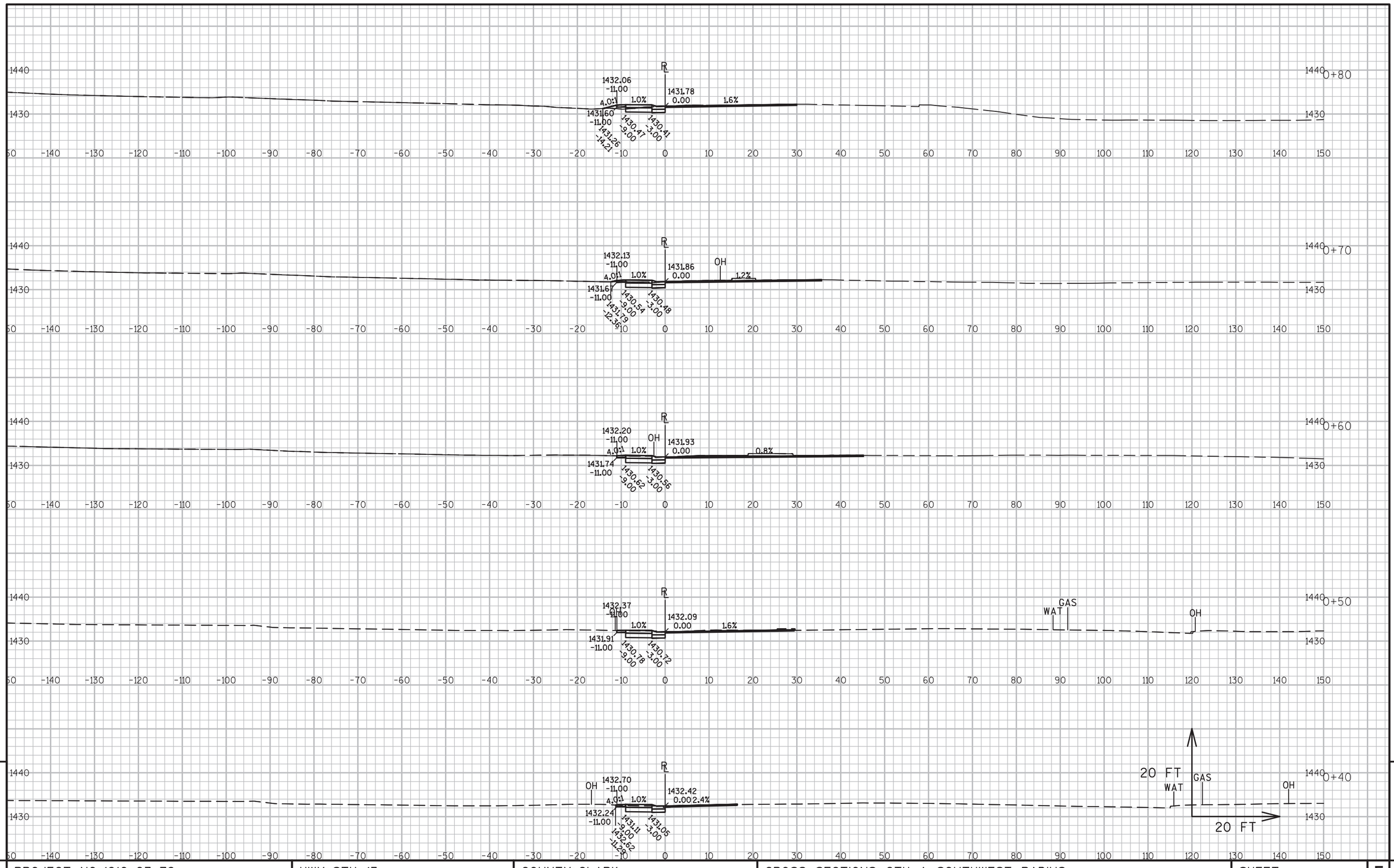


9 9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A SOUTHWEST RADIUS	SHEET 242 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090303_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (34)

PLOT DATE : 7/12/2016 3:01 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT



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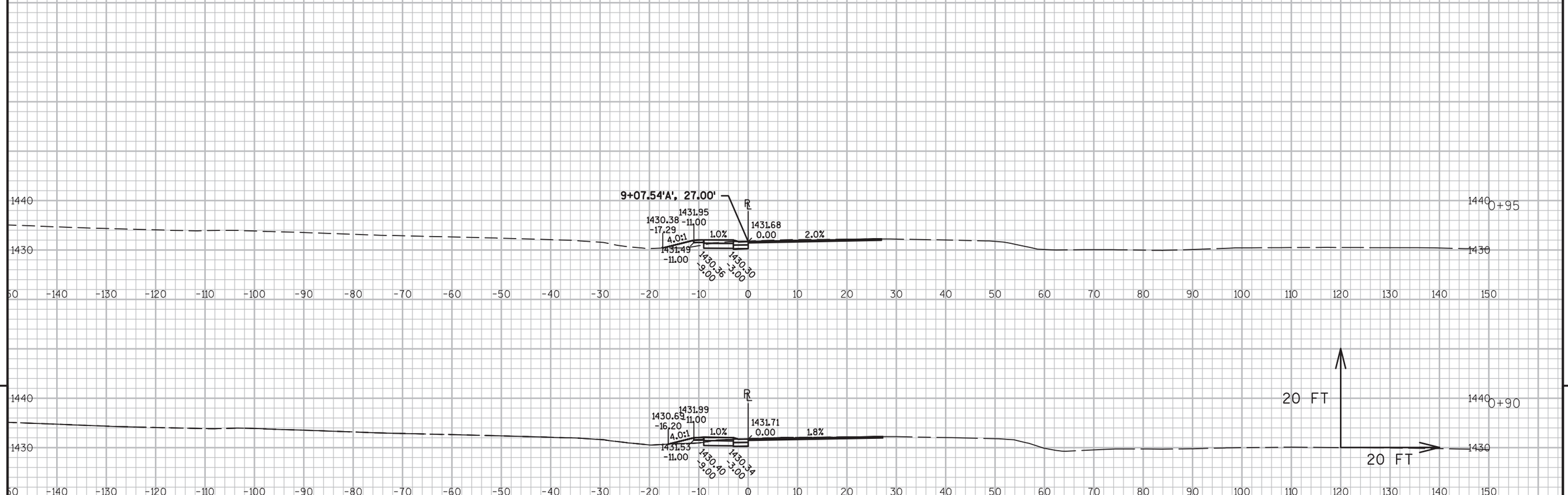
PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A SOUTHWEST RADIUS	SHEET 243	E

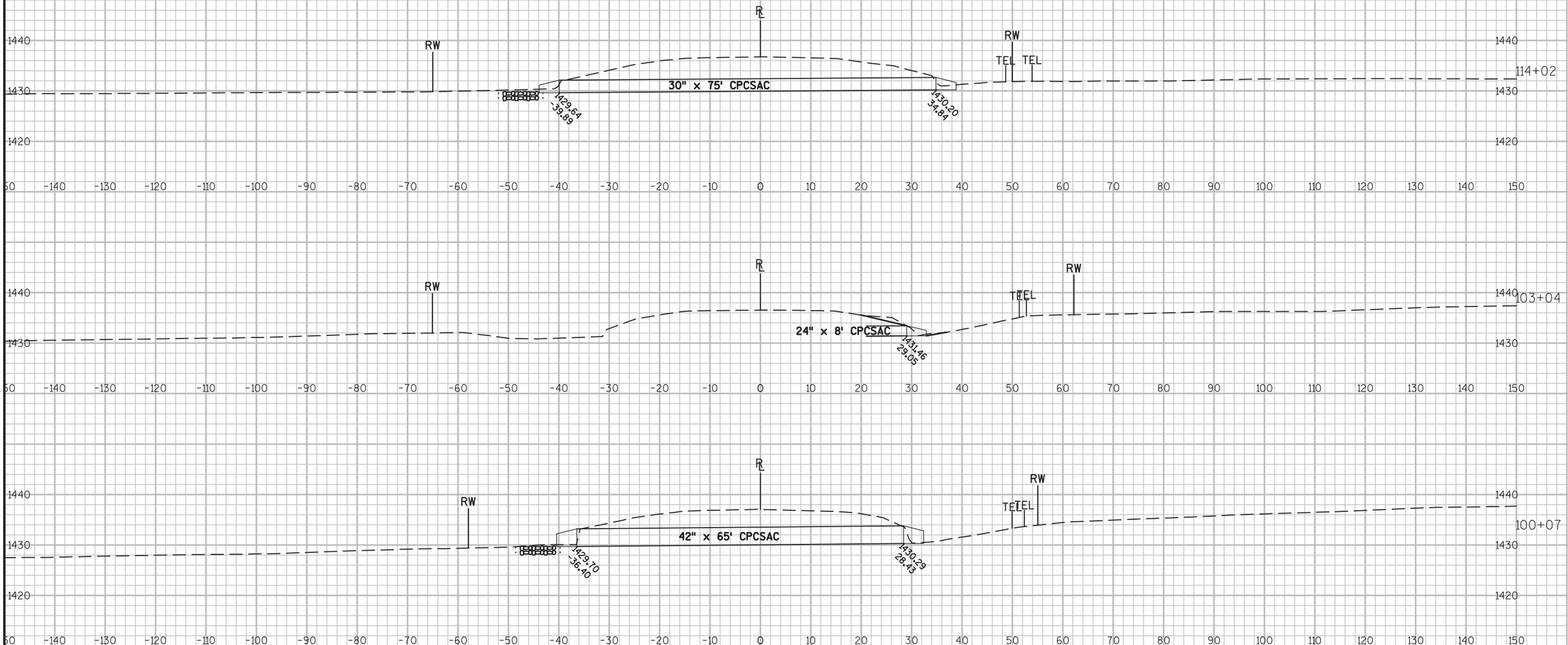
FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090303_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (35)
PLOT DATE : 7/12/2016 3:01 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

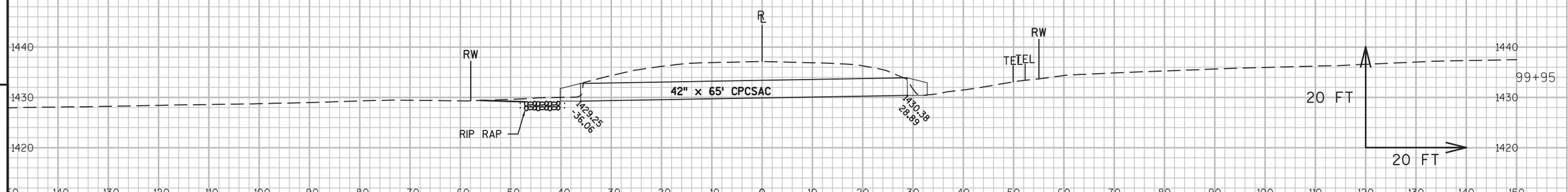


9 9

PROJECT NO: 1610-03-72	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CTH A SOUTHWEST RADIUS	SHEET 244 E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090303_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (36)
PLOT DATE : 7/12/2016 3:01 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49





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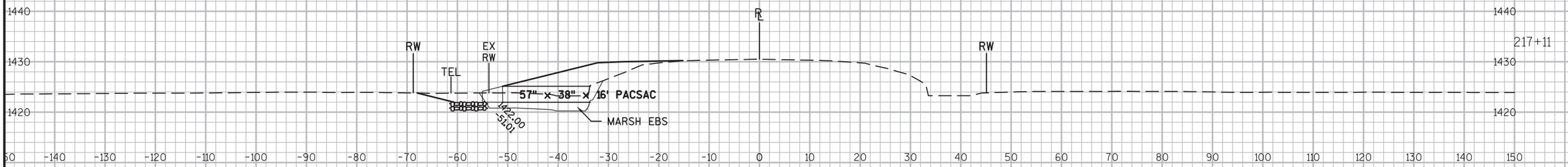
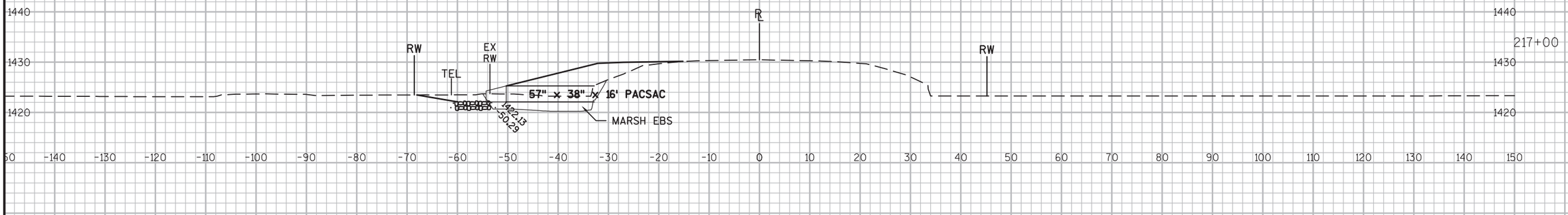
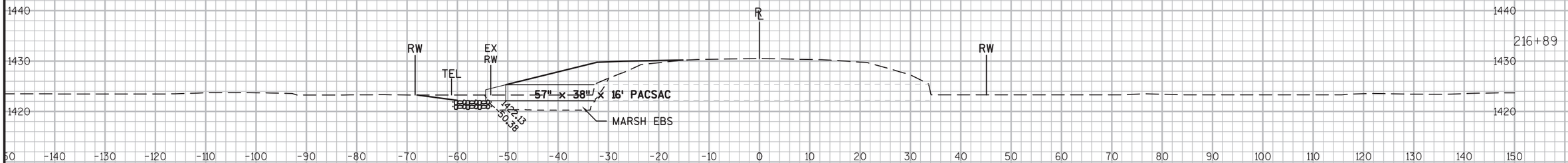
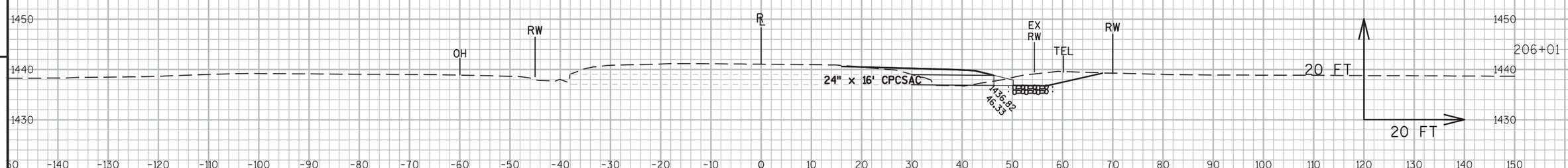
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CULVERT PIPES	SHEET 245 E







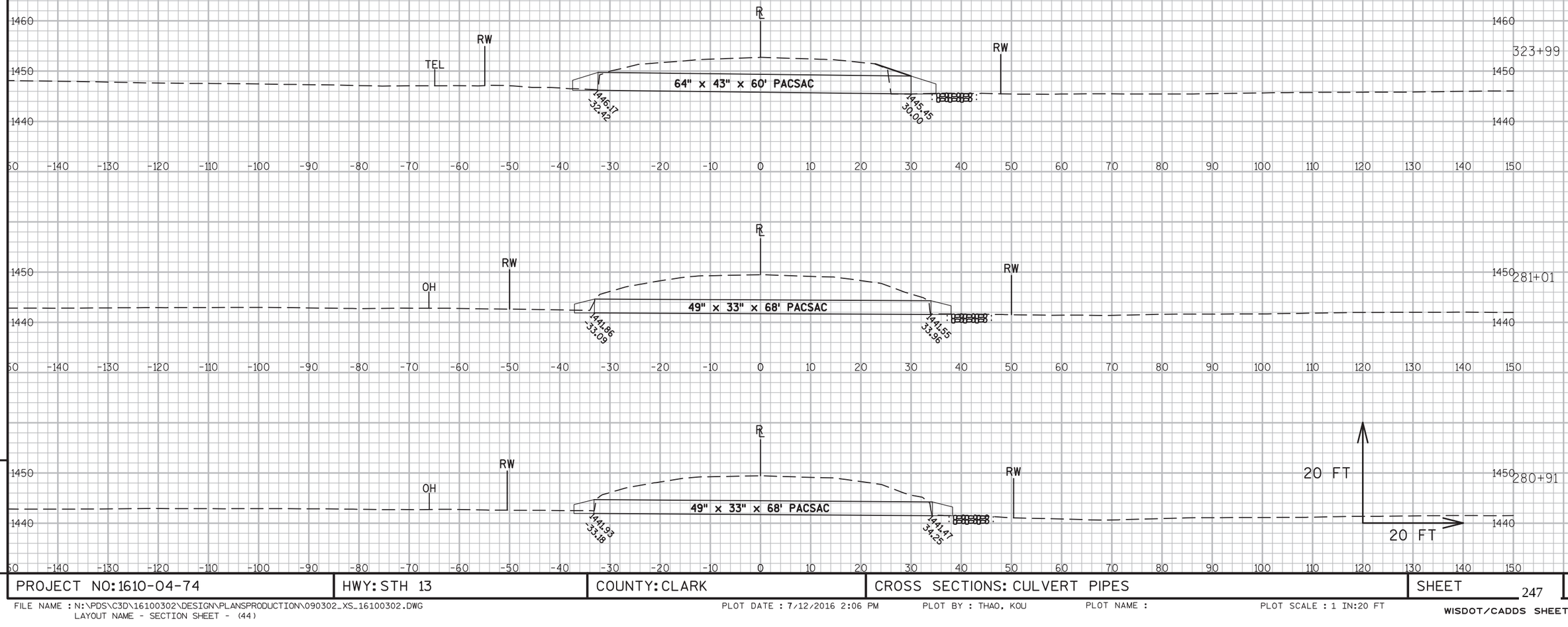


9

9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CULVERT PIPES	SHEET 246	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090302_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (43)
PLOT DATE : 7/12/2016 2:06 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



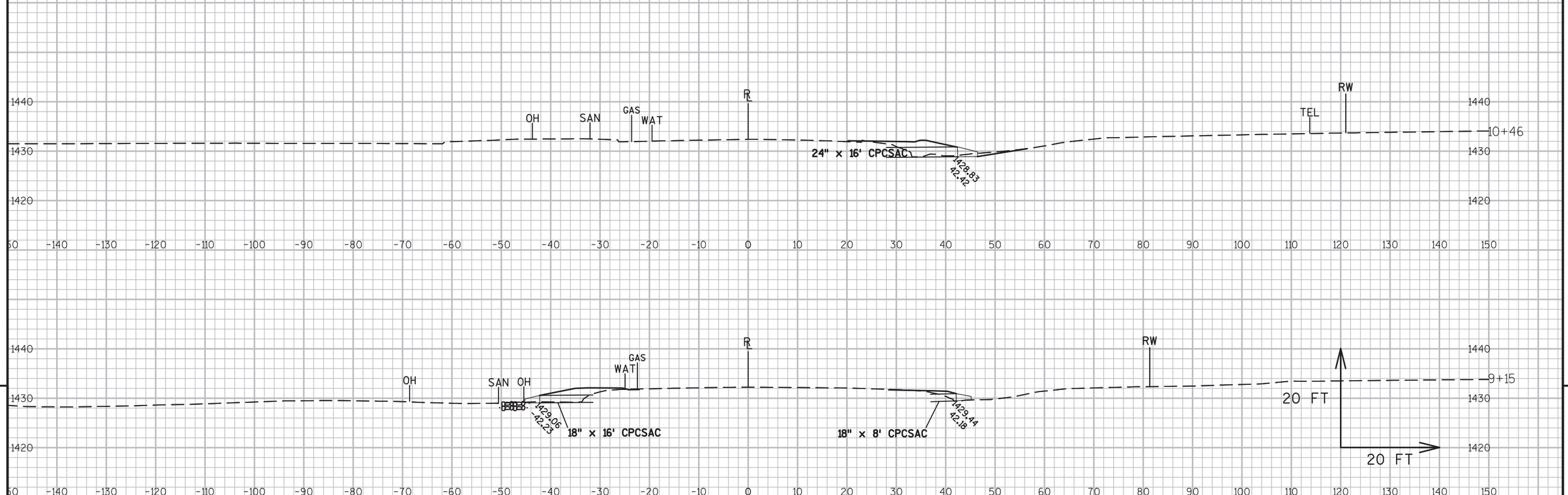
9 9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CULVERT PIPES	SHEET 247	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090302_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (44)

PLOT DATE : 7/12/2016 2:06 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

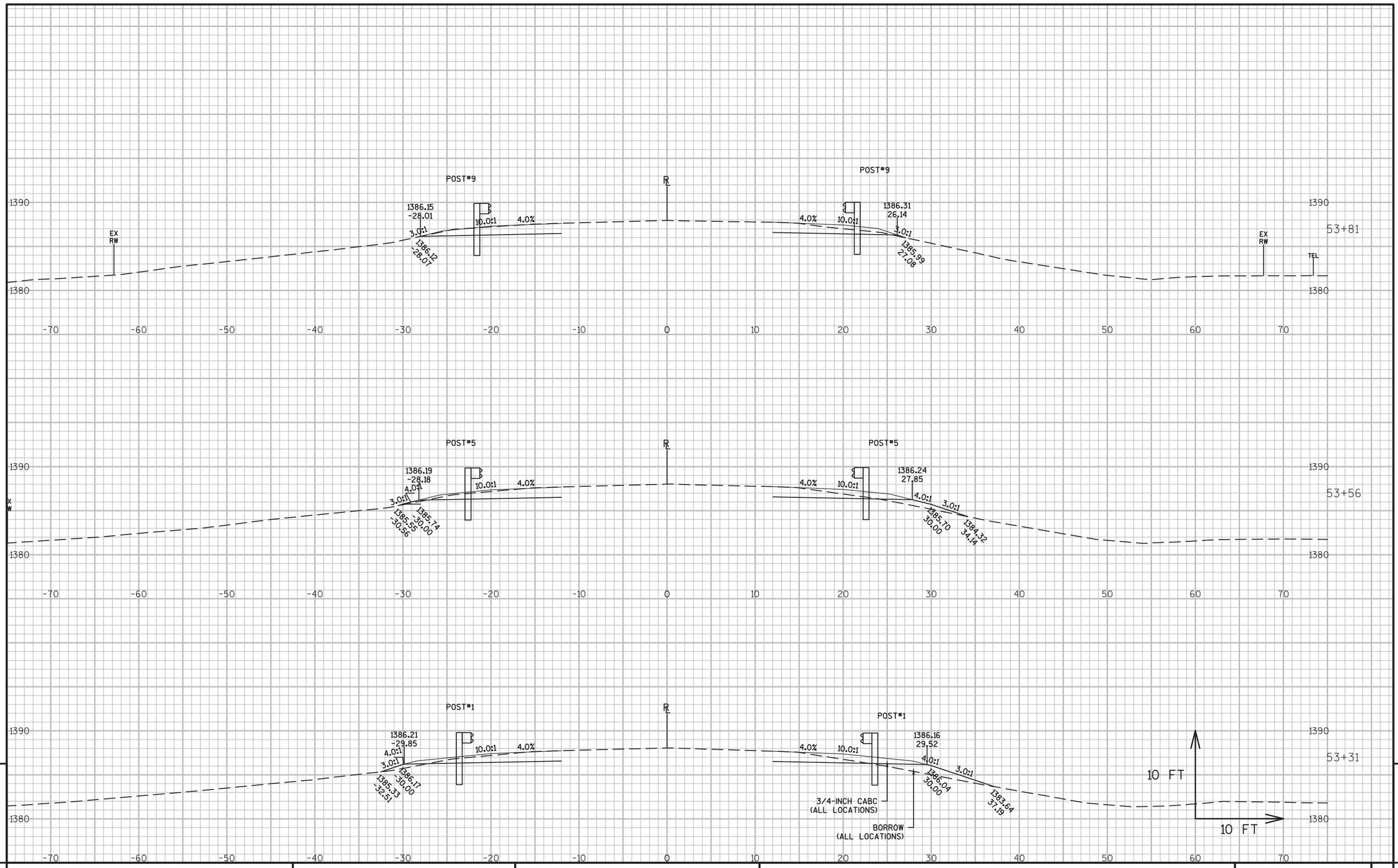
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: CULVERT PIPES	SHEET 248	E

FILE NAME : N:\PDS\C3D\16100302\DESIGN\PLANSPRODUCTION\090302_XS_16100302.DWG
LAYOUT NAME - SECTION SHEET - (41)

PLOT DATE : 7/12/2016 2:06 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



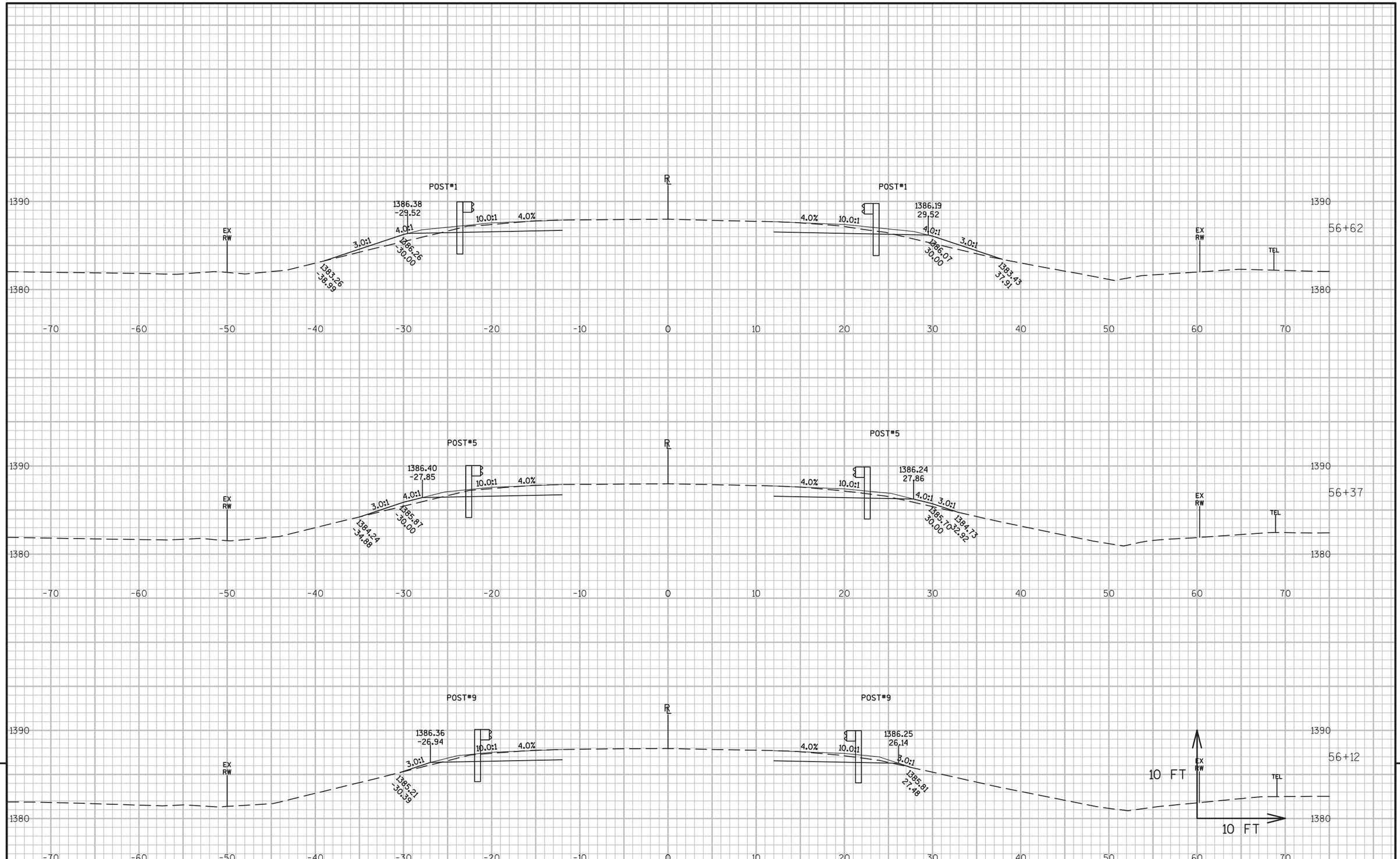
9

9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 249	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (1)

PLOT DATE : 7/12/2016 8:12 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT



9

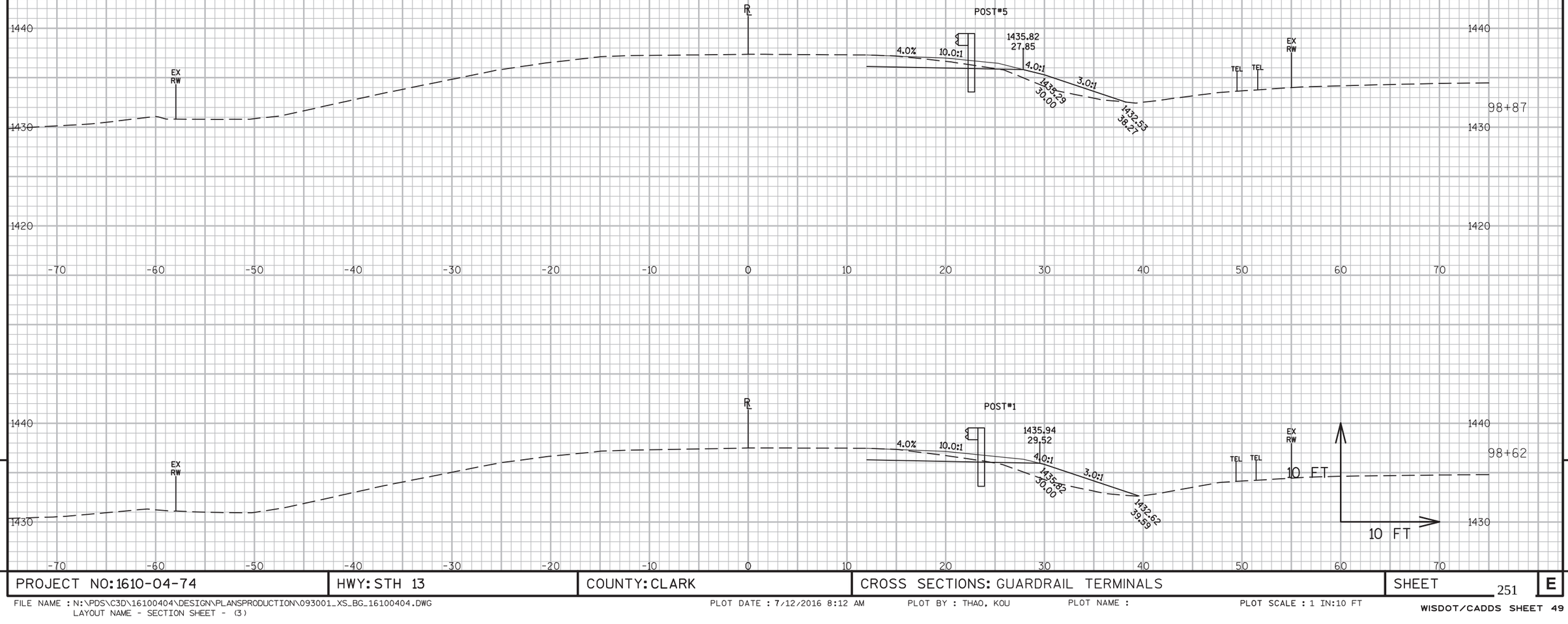
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 250	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (2)

PLOT DATE : 7/12/2016 8:12 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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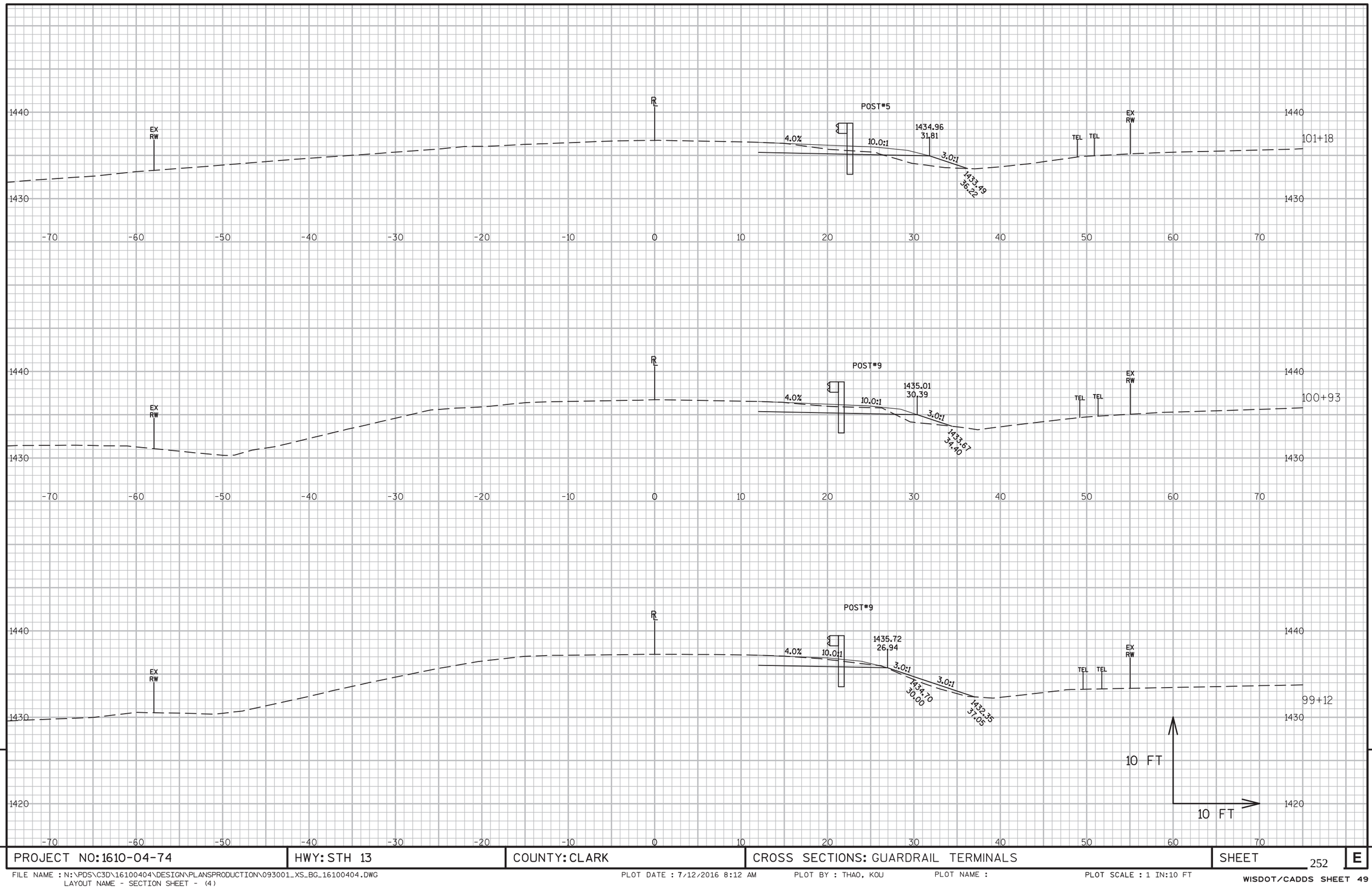
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 251	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (3)

PLOT DATE : 7/12/2016 8:12 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

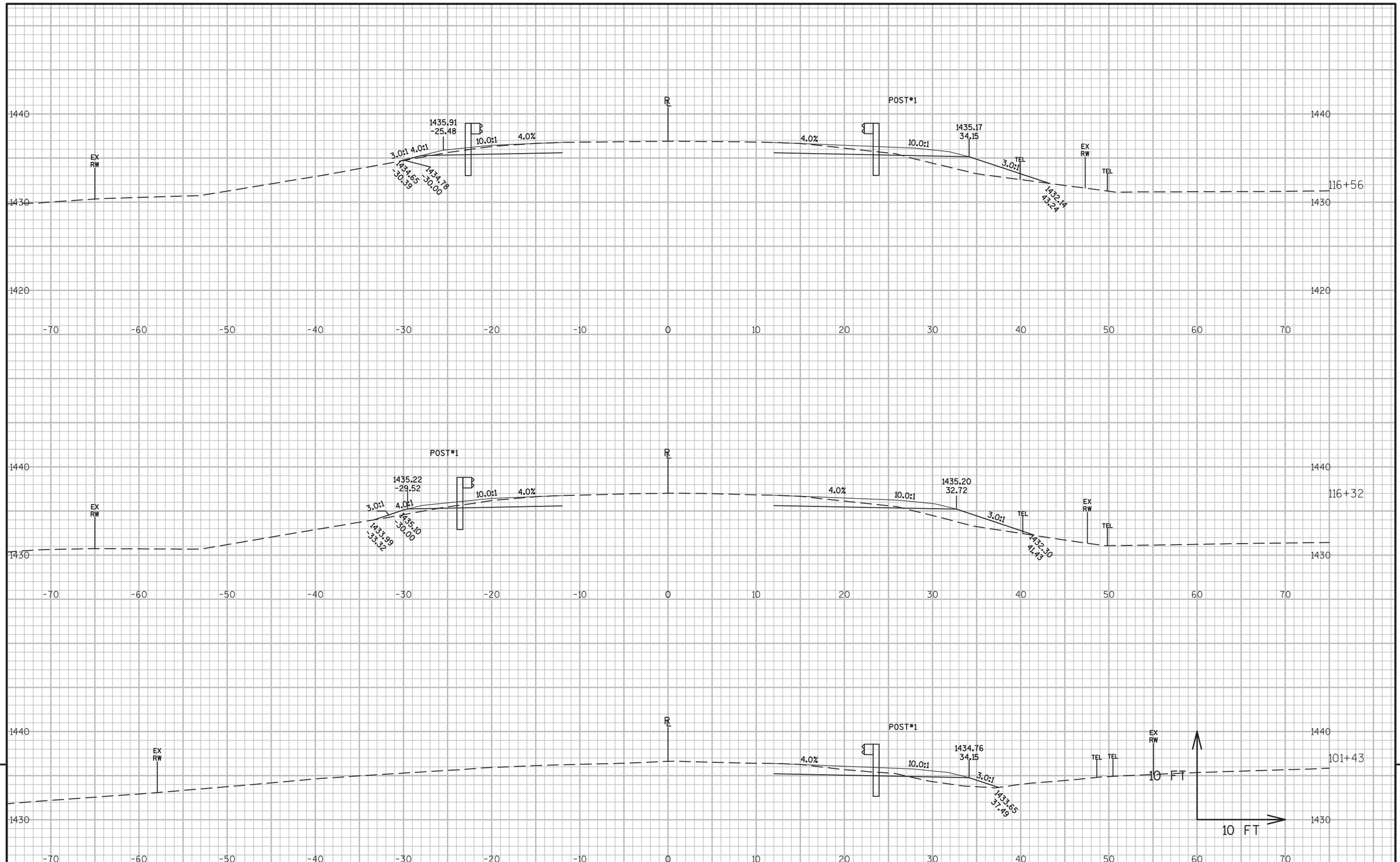
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 252	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (4)

PLOT DATE : 7/12/2016 8:12 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

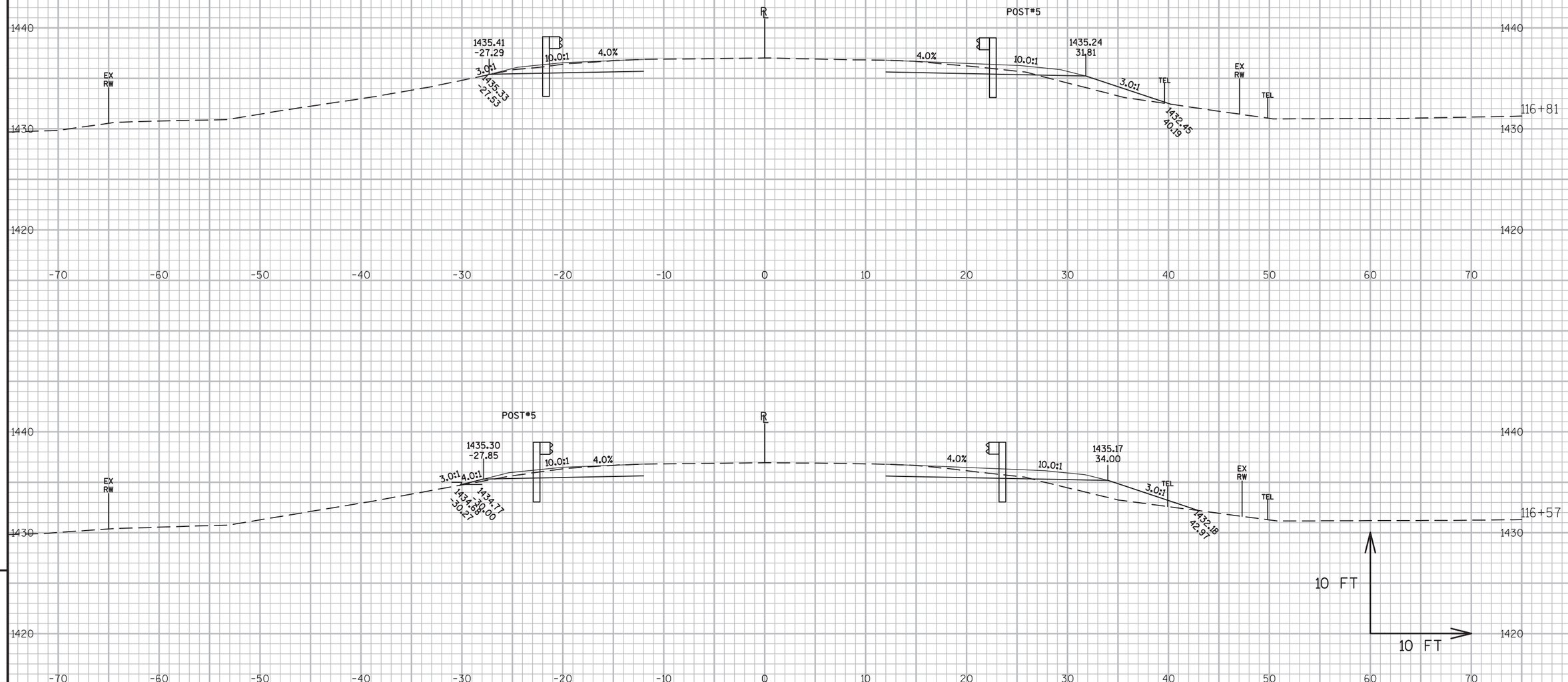
WISDOT/CADDS SHEET 49



PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 253	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (5)

PLOT DATE : 7/12/2016 8:12 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

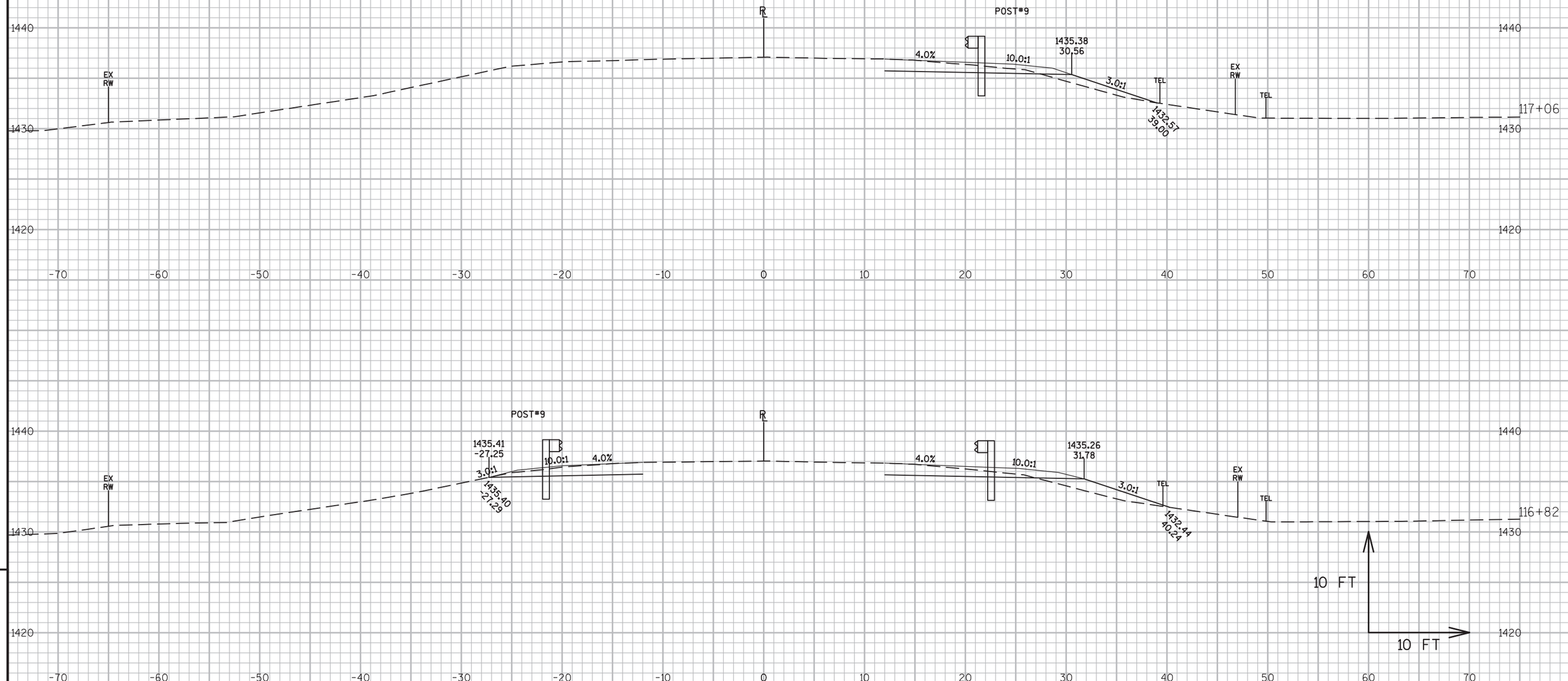


PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 254	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (6)

PLOT DATE : 7/12/2016 8:13 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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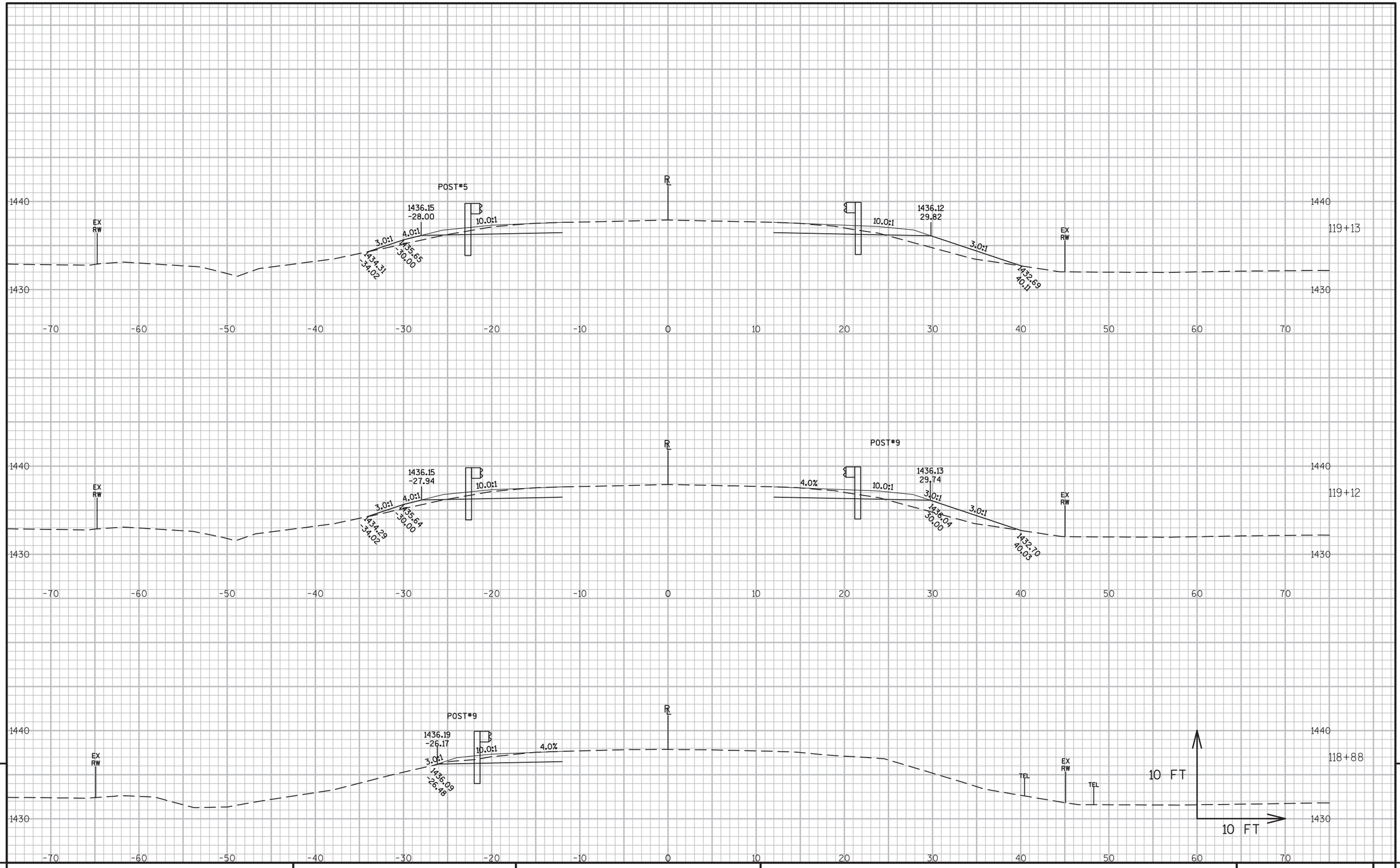
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 255	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (7)

PLOT DATE : 7/12/2016 8:13 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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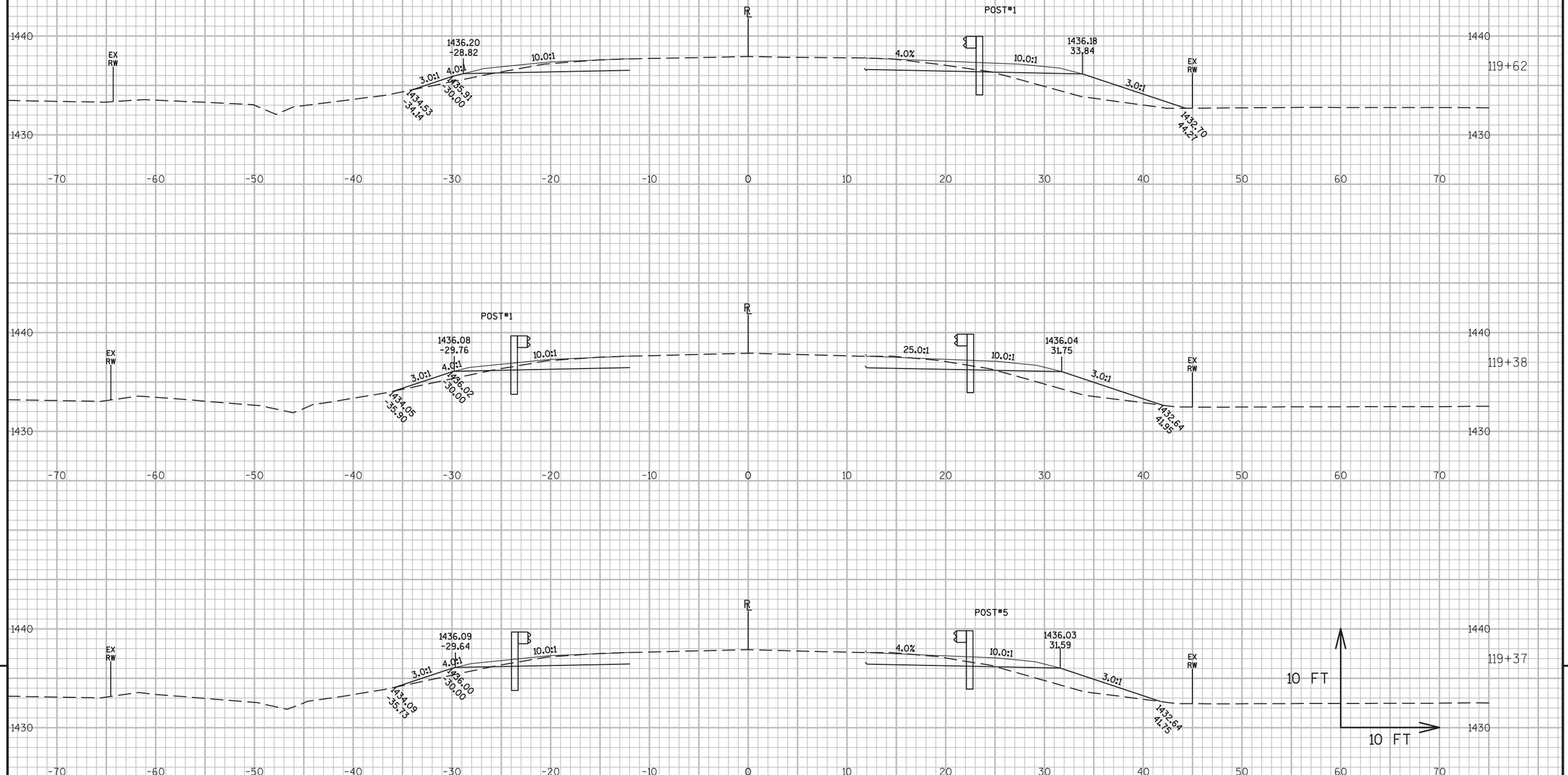
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 256	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (8)

PLOT DATE : 7/12/2016 8:13 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

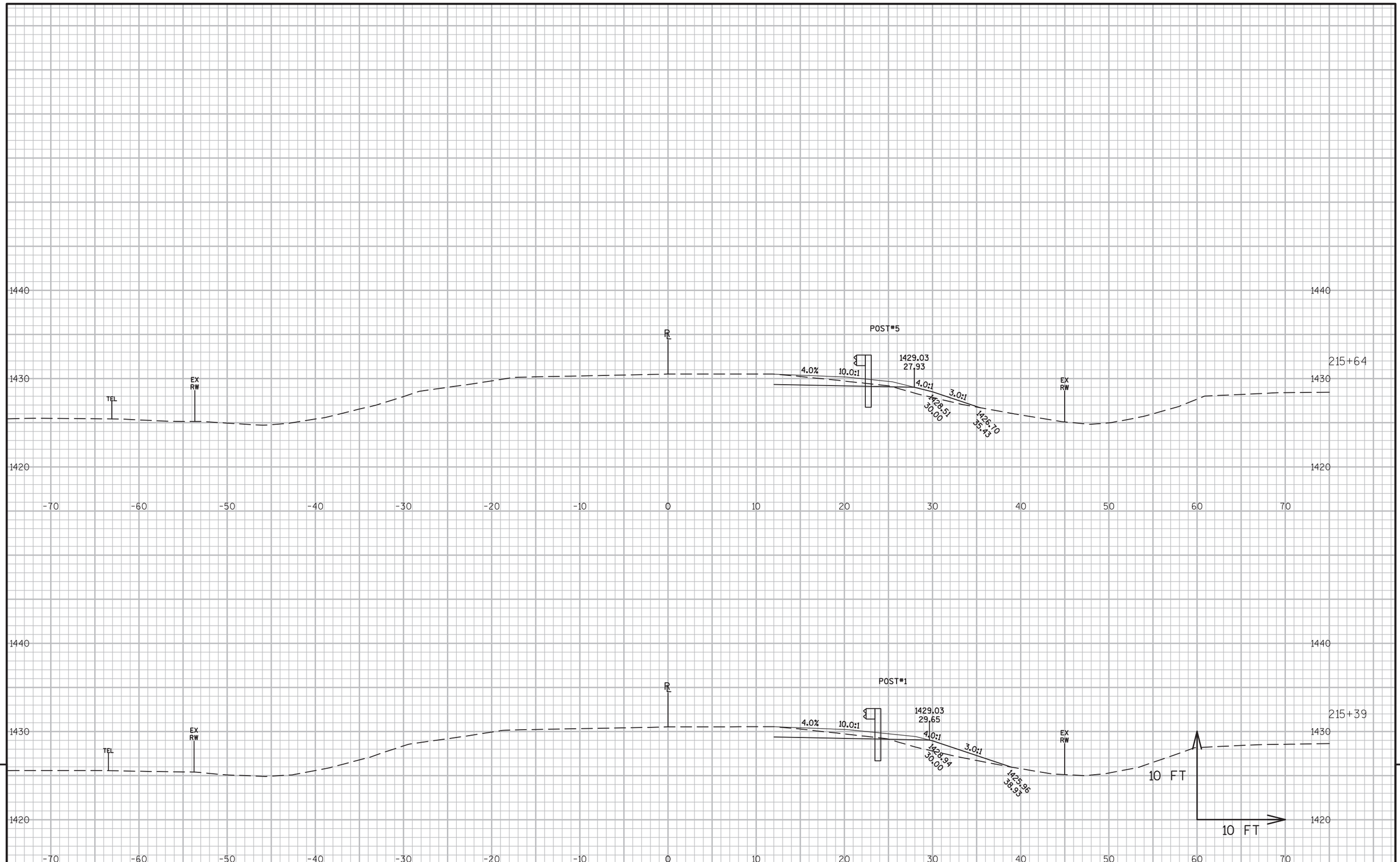
PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 257	E

9

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (9)

PLOT DATE : 7/12/2016 8:13 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

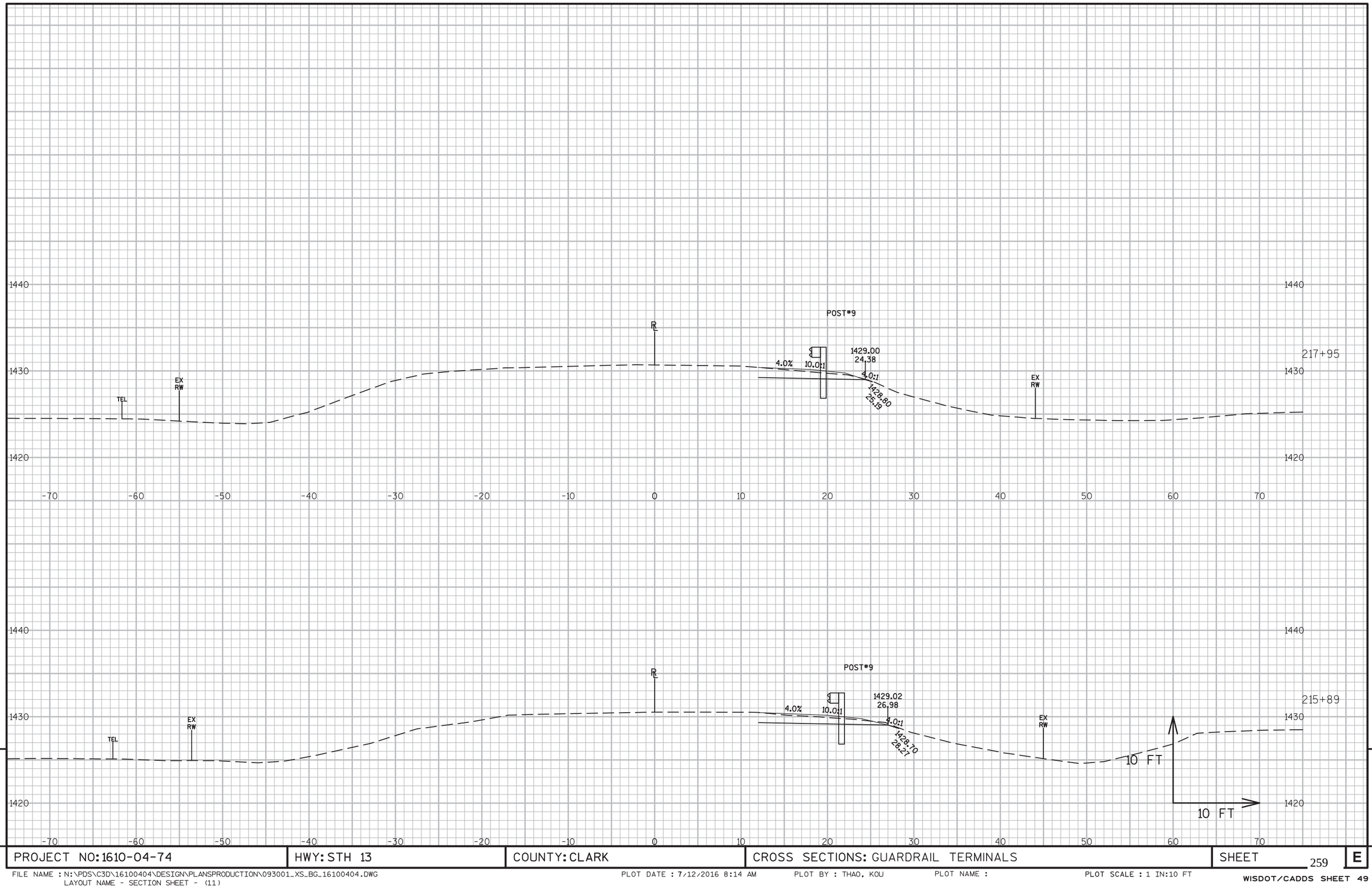
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 258	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (10)

PLOT DATE : 7/12/2016 8:13 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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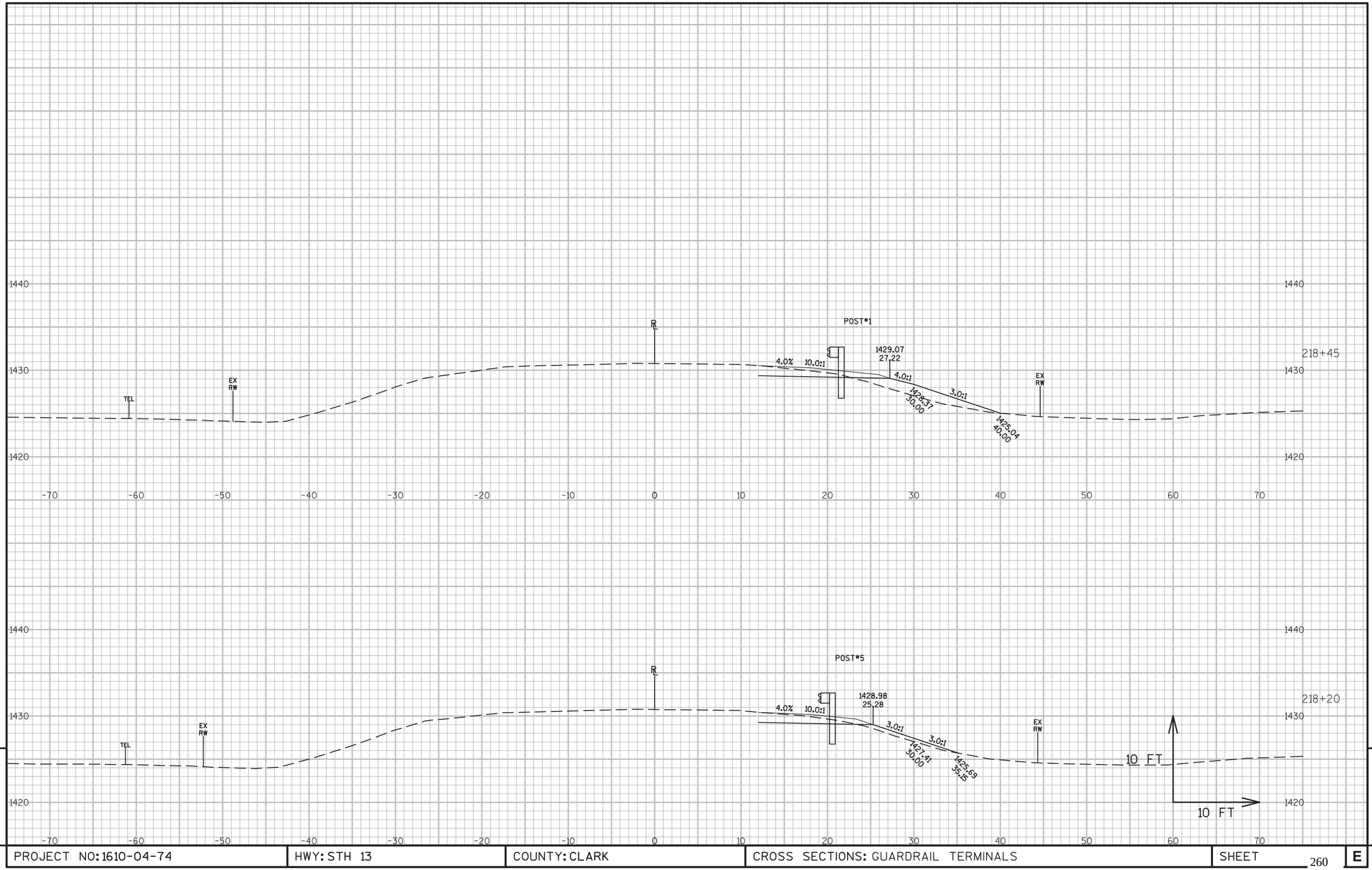
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 259	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (11)

PLOT DATE : 7/12/2016 8:14 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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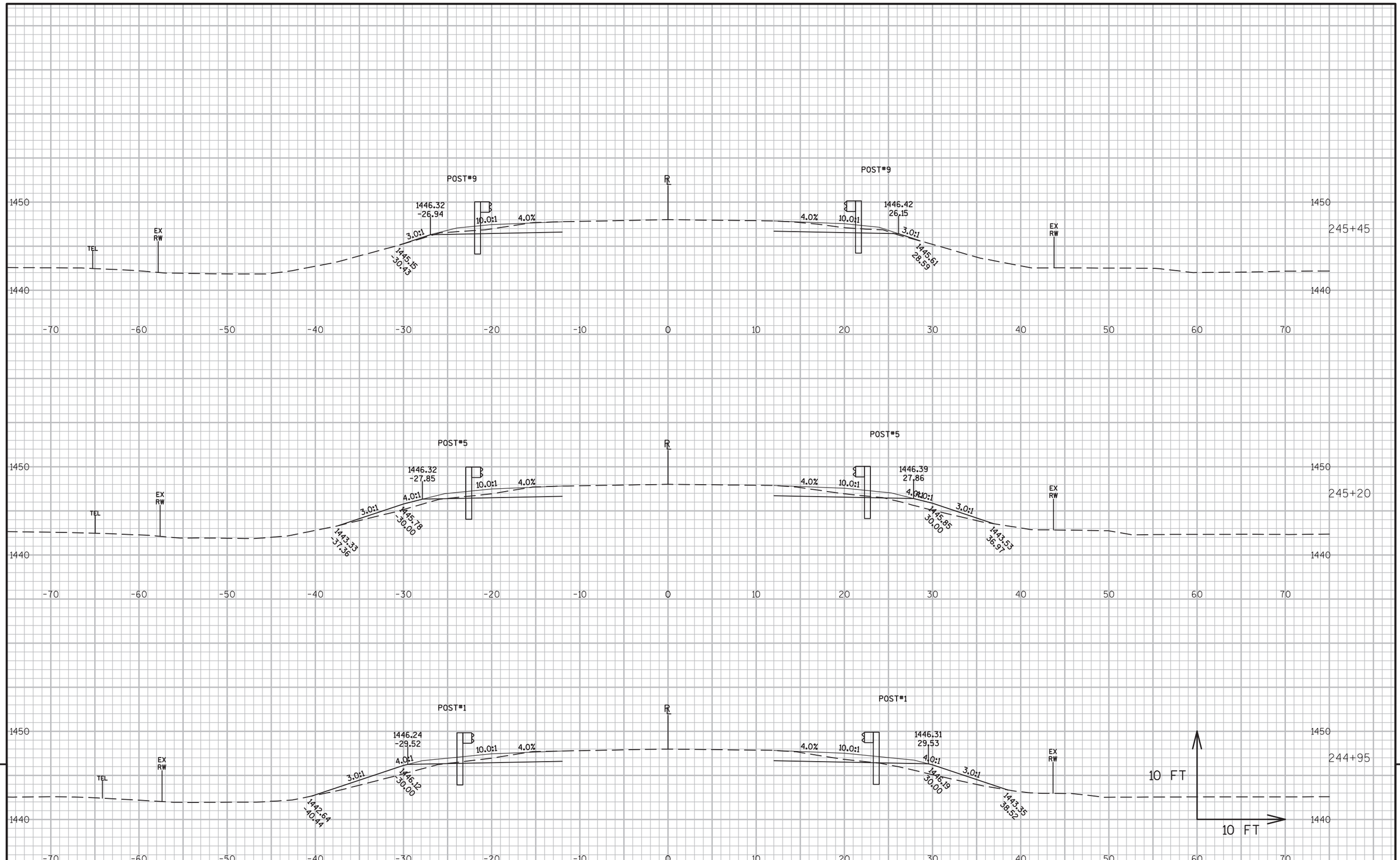
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 260	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (12)

PLOT DATE : 7/12/2016 8:14 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

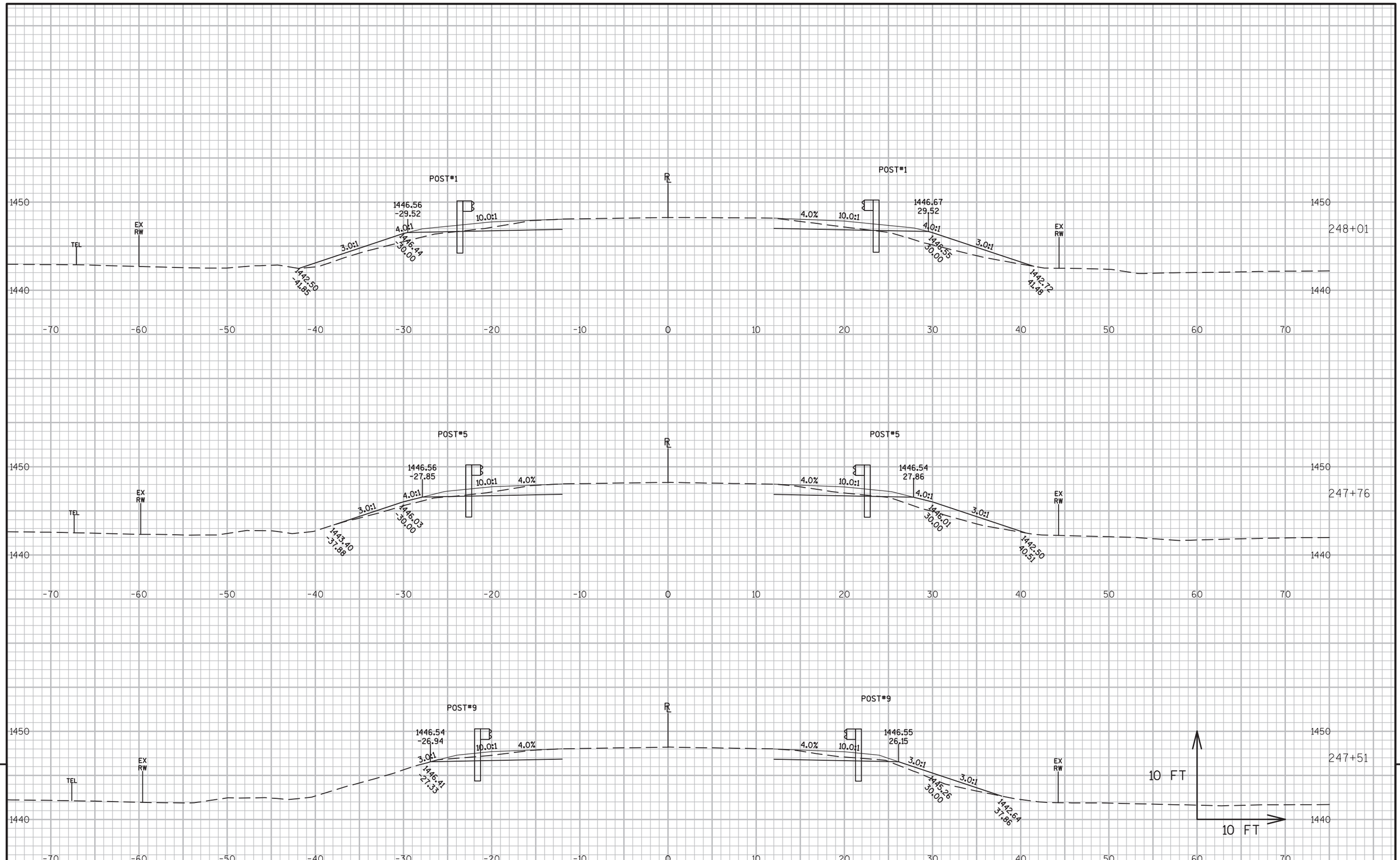
WISDOT/CADDS SHEET 49



9

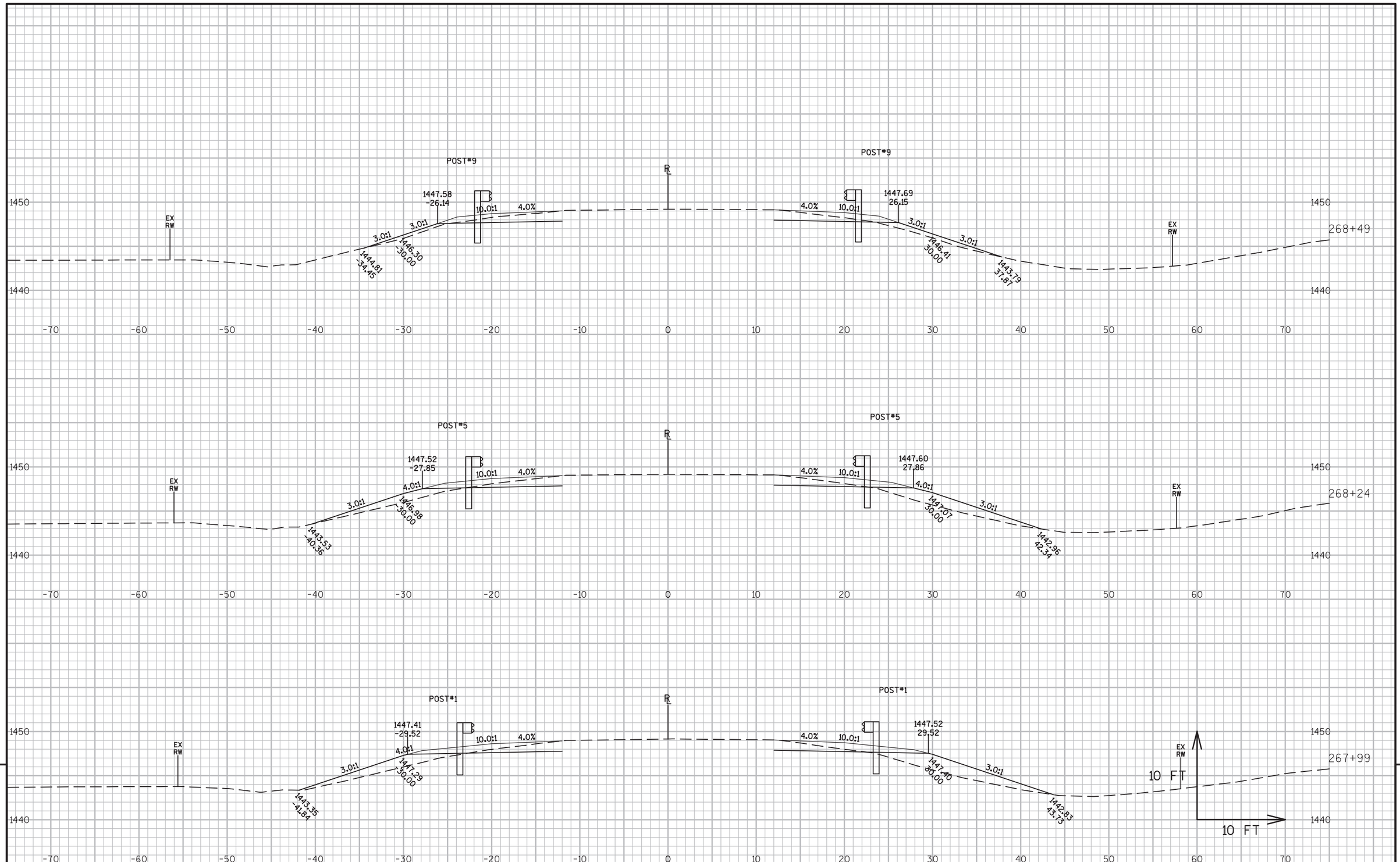
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 261	E



PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 262	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (14)
PLOT DATE : 7/12/2016 8:14 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 49



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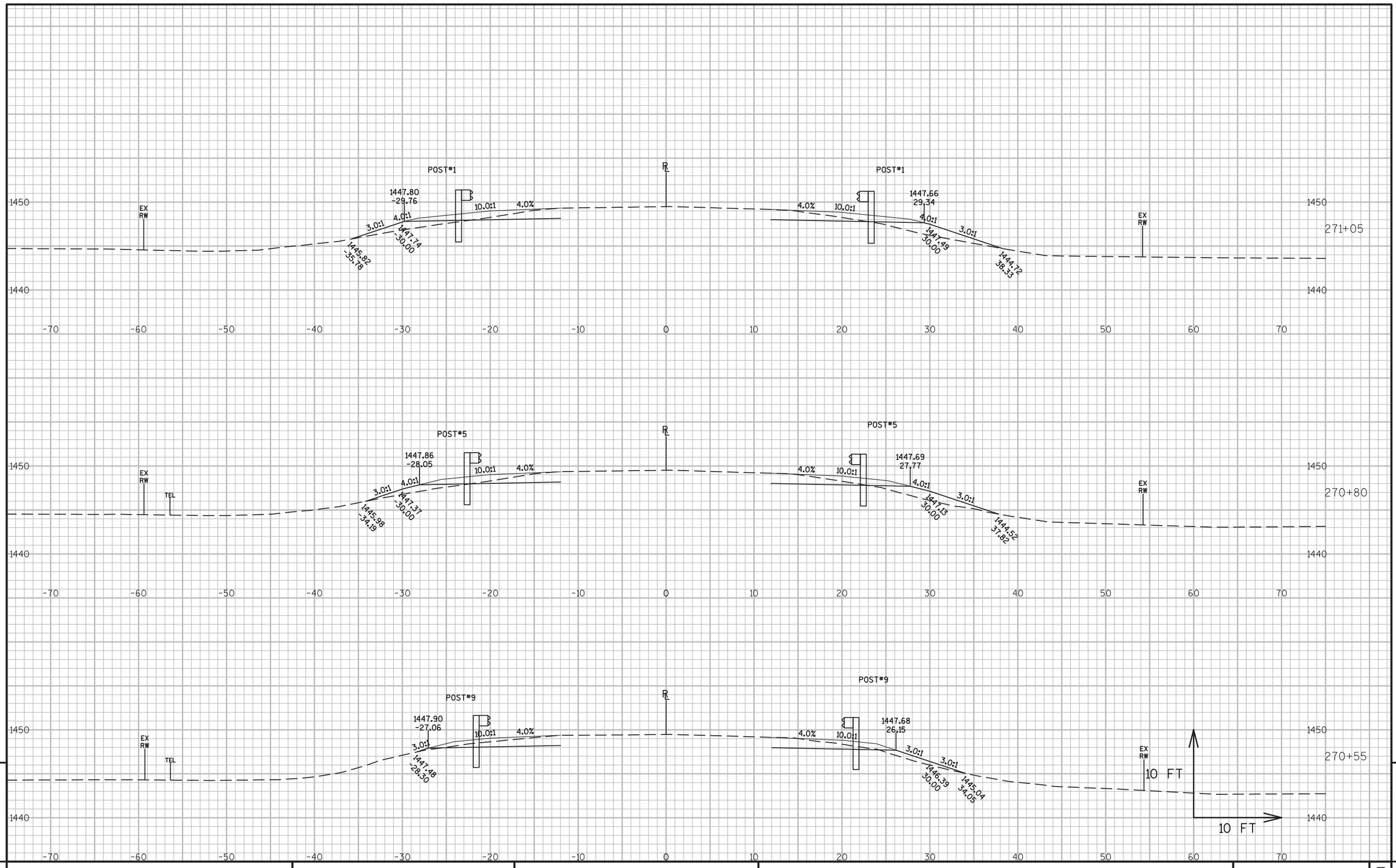
PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 263	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (15)

PLOT DATE : 7/12/2016 8:14 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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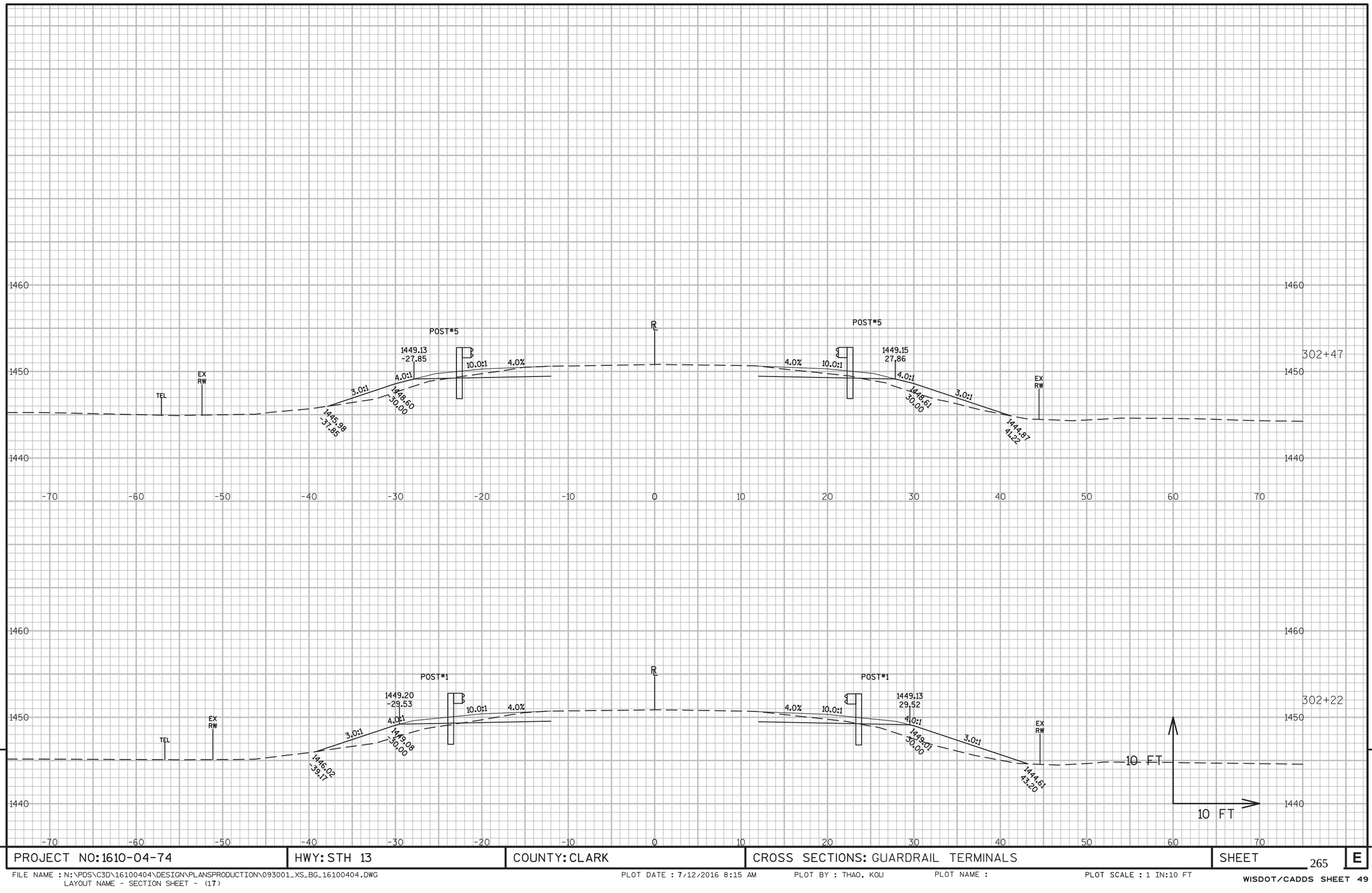
PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 264	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (16)

PLOT DATE : 7/12/2016 8:14 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

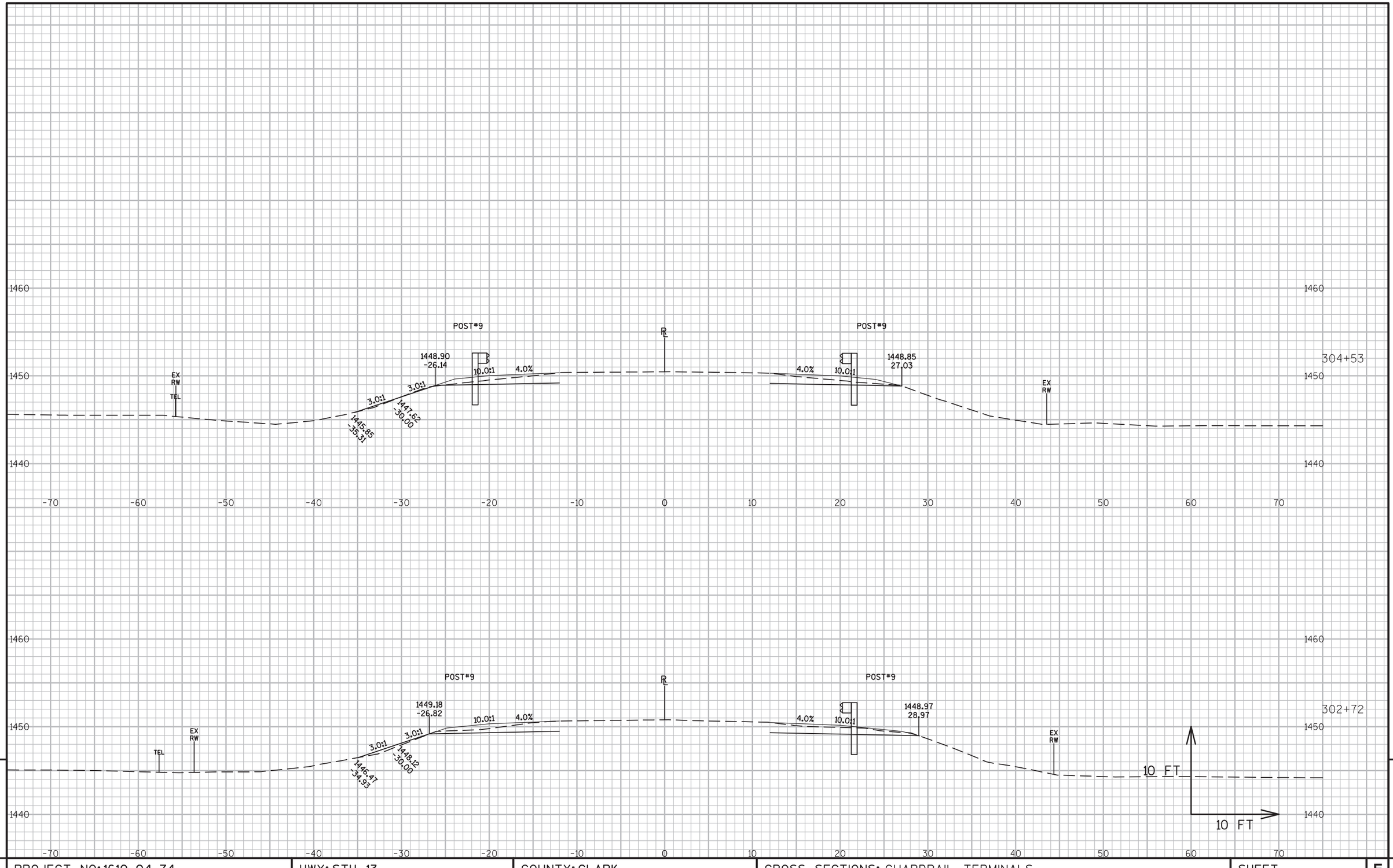


PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 265	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (17)

PLOT DATE : 7/12/2016 8:15 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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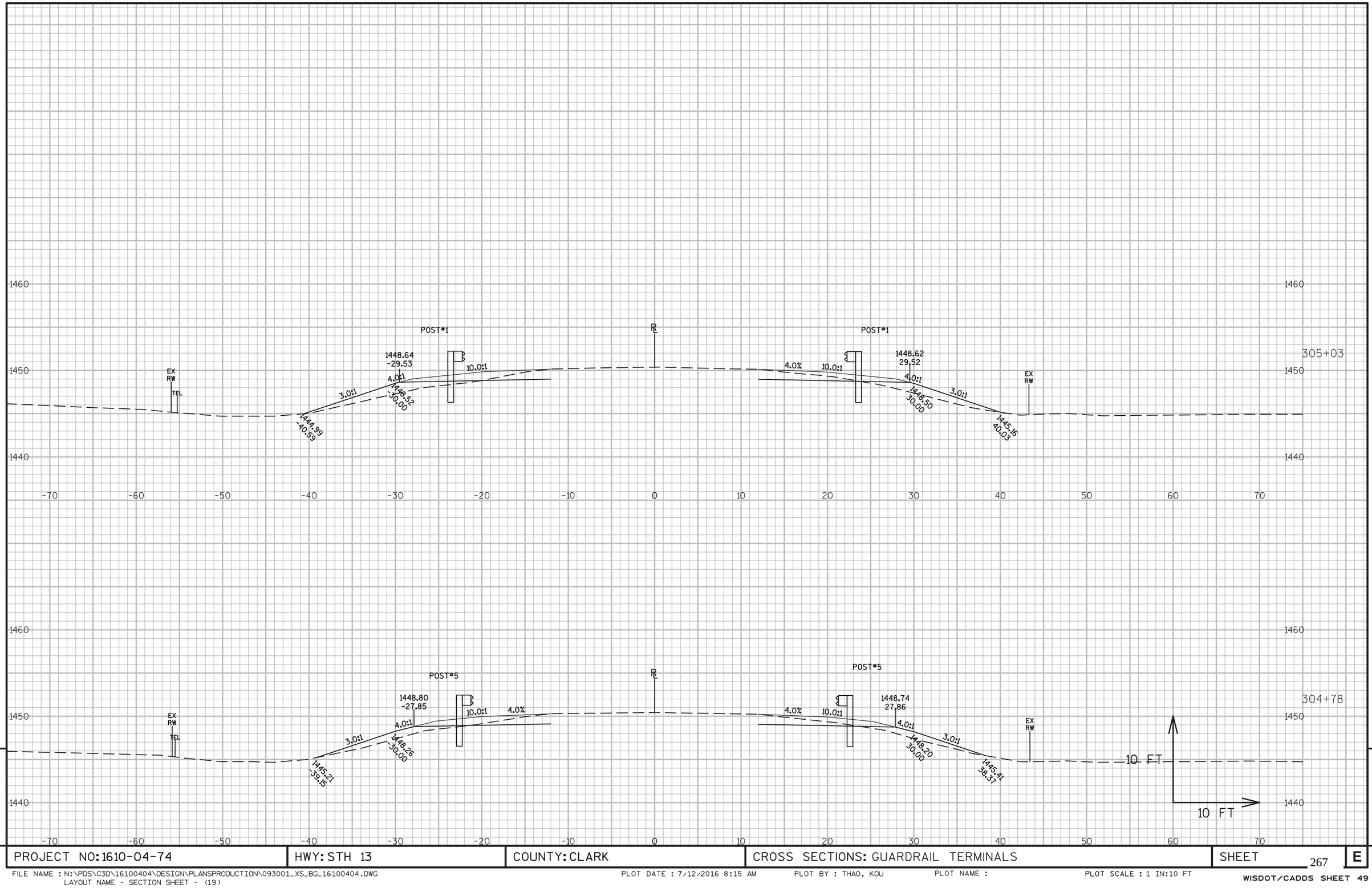
PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 266	E

9

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (18)

PLOT DATE : 7/12/2016 8:15 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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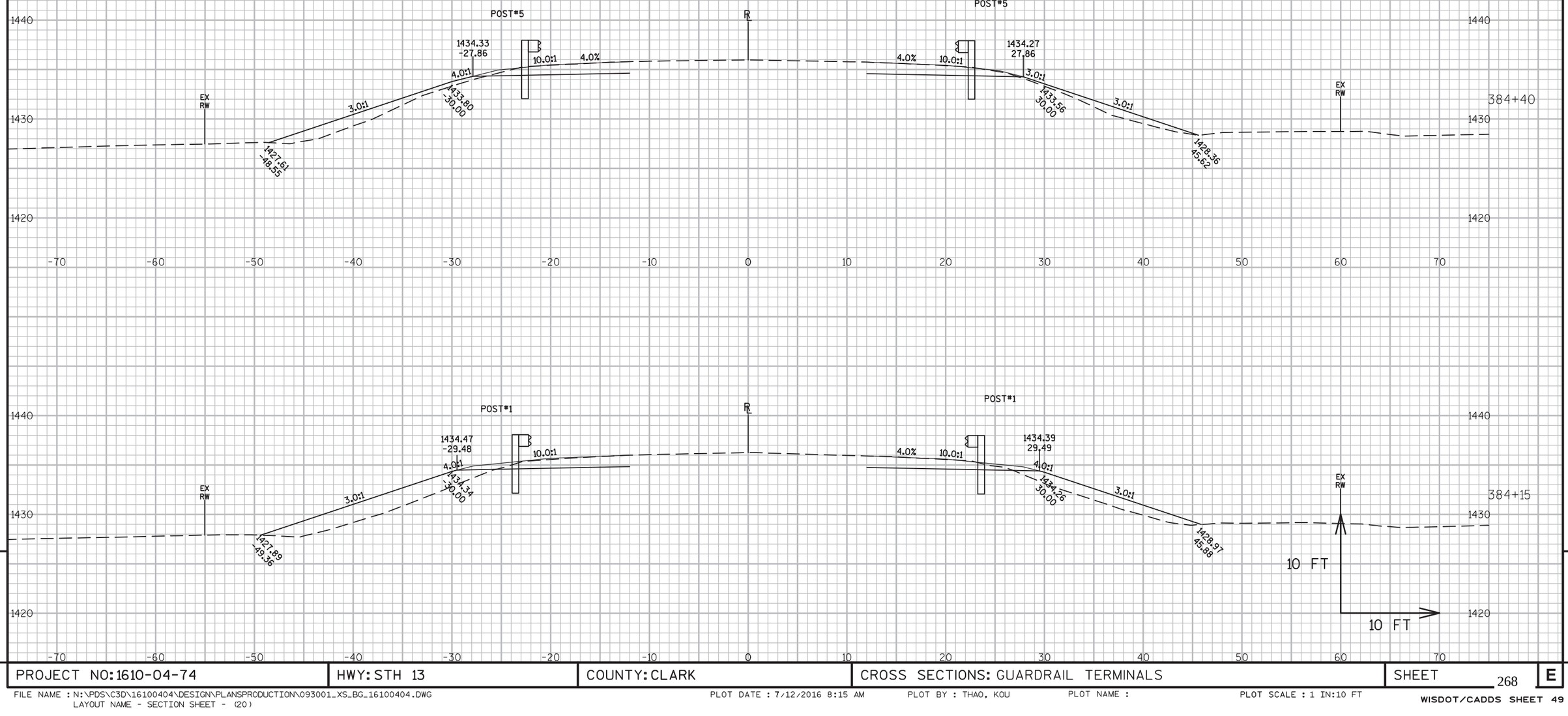
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 267	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (19)

PLOT DATE : 7/12/2016 8:15 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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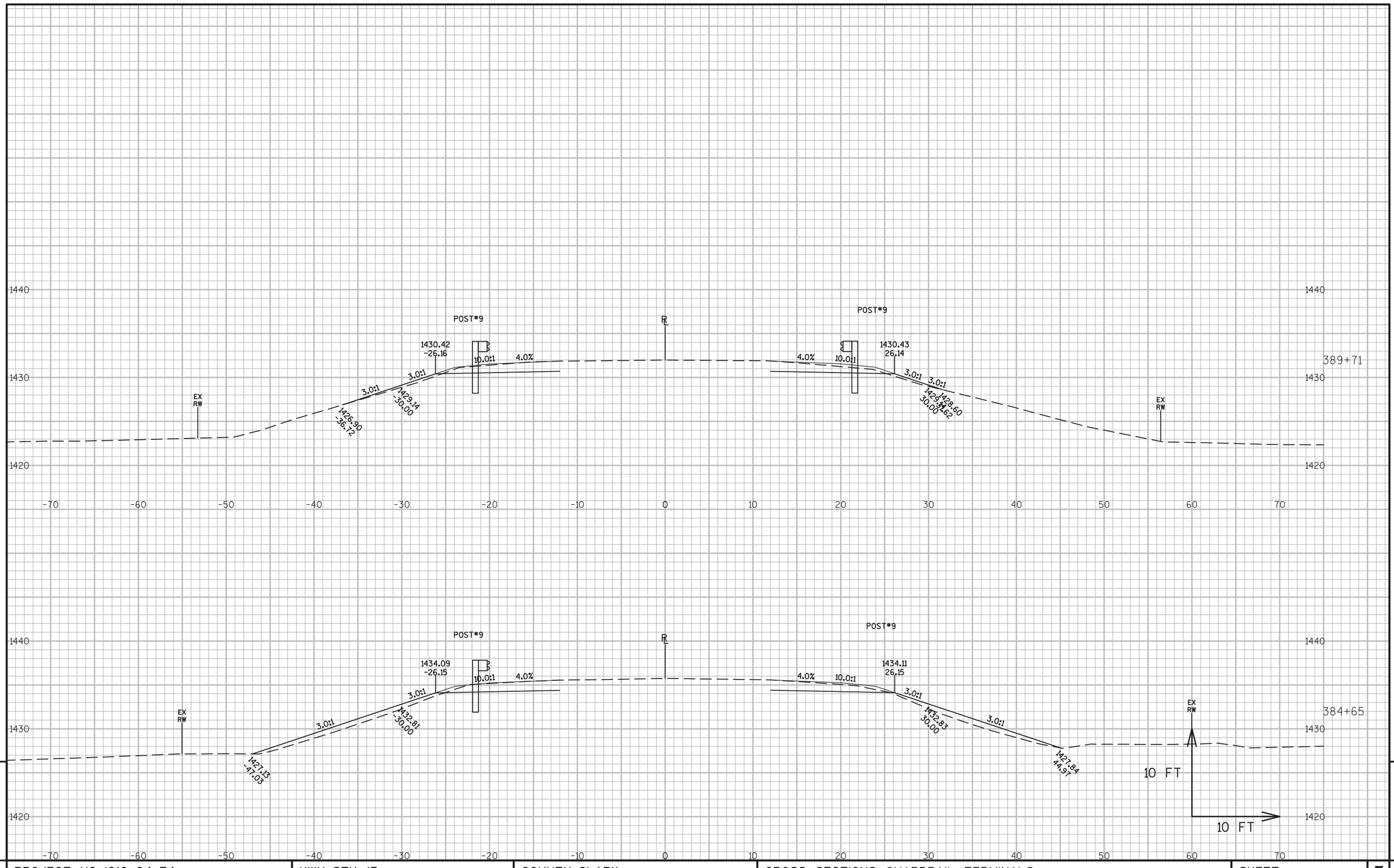
PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 268	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (20)

PLOT DATE : 7/12/2016 8:15 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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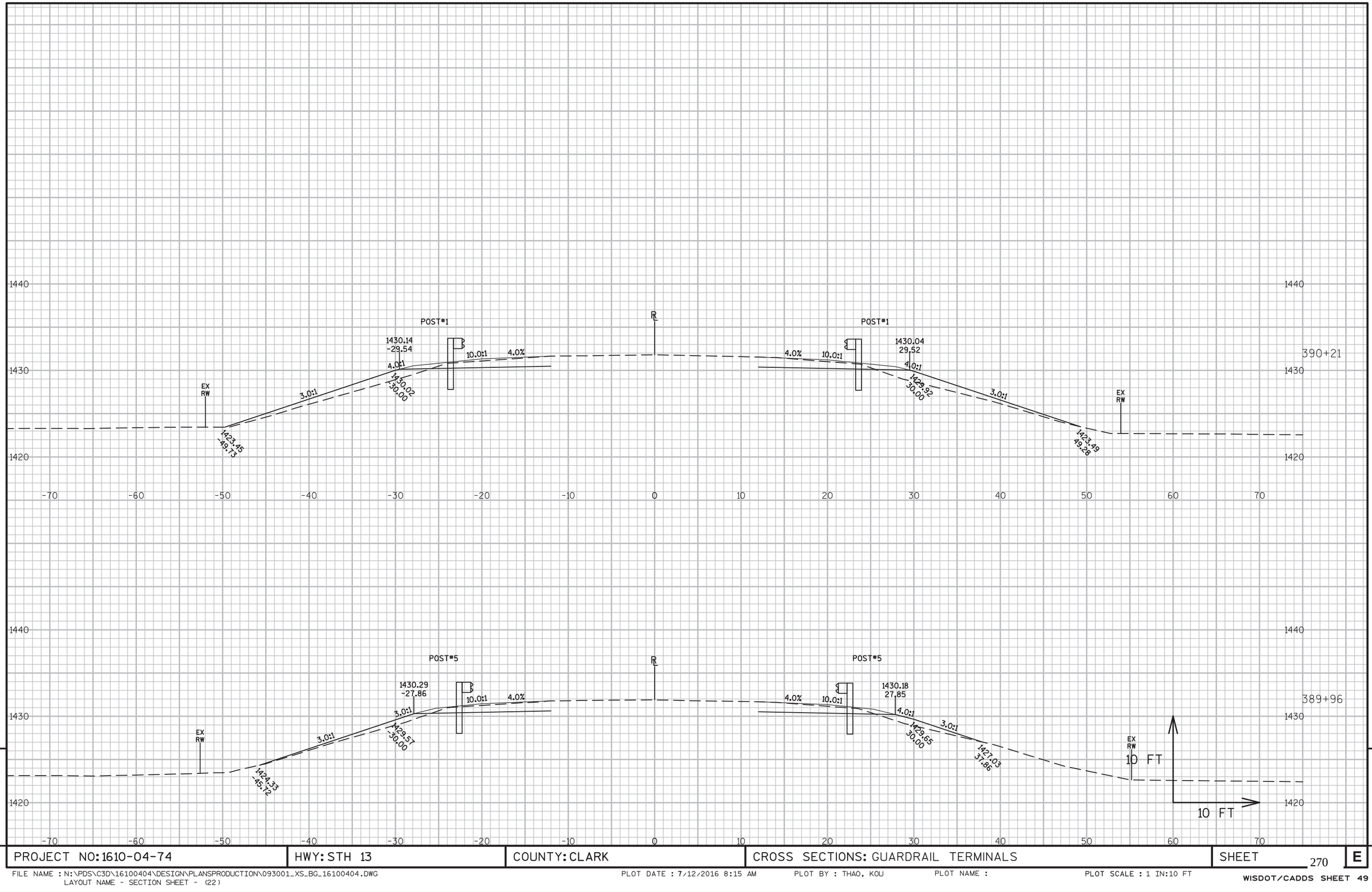
PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 269	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (21)

PLOT DATE : 7/12/2016 8:15 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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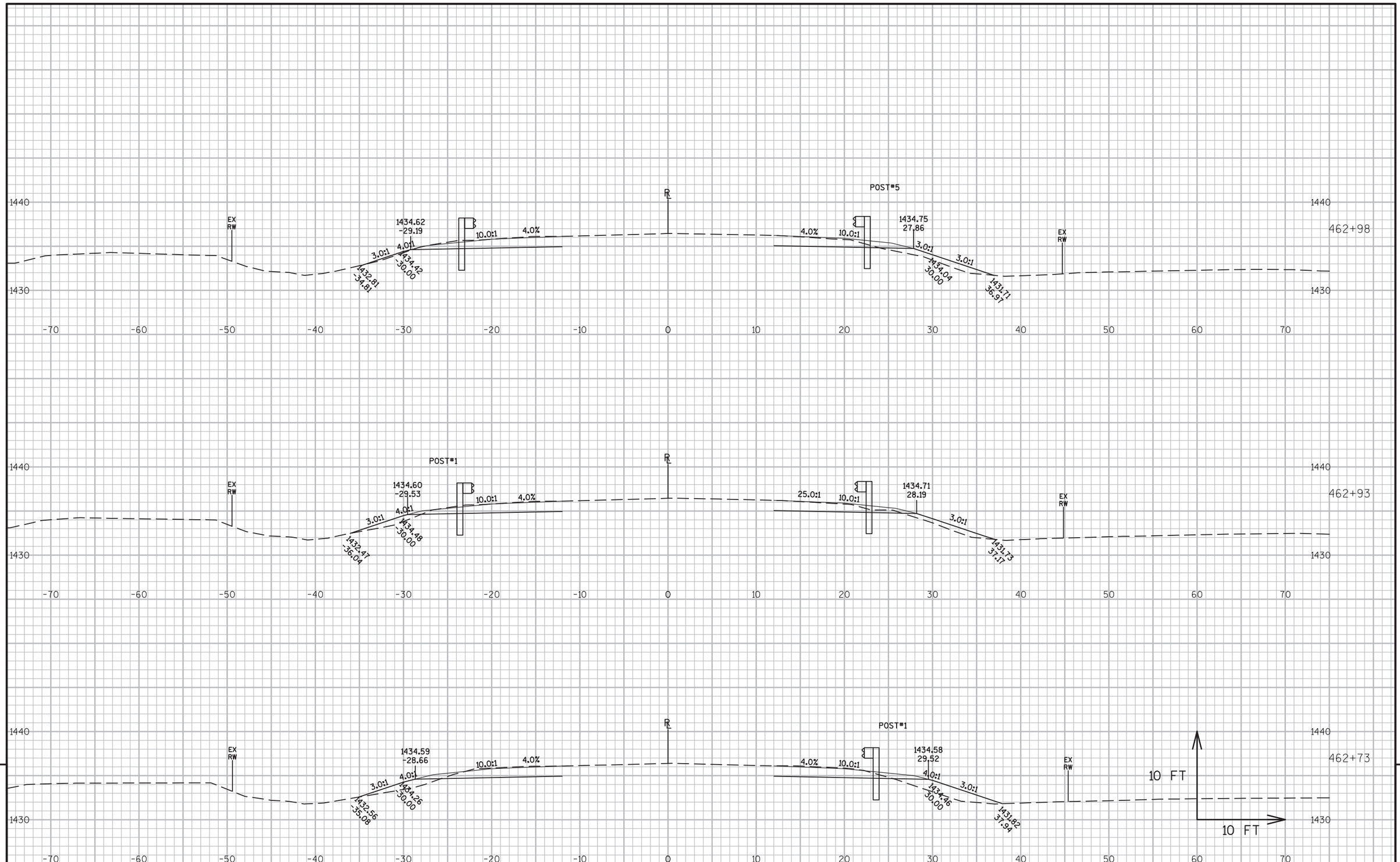
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 270	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (22)

PLOT DATE : 7/12/2016 8:15 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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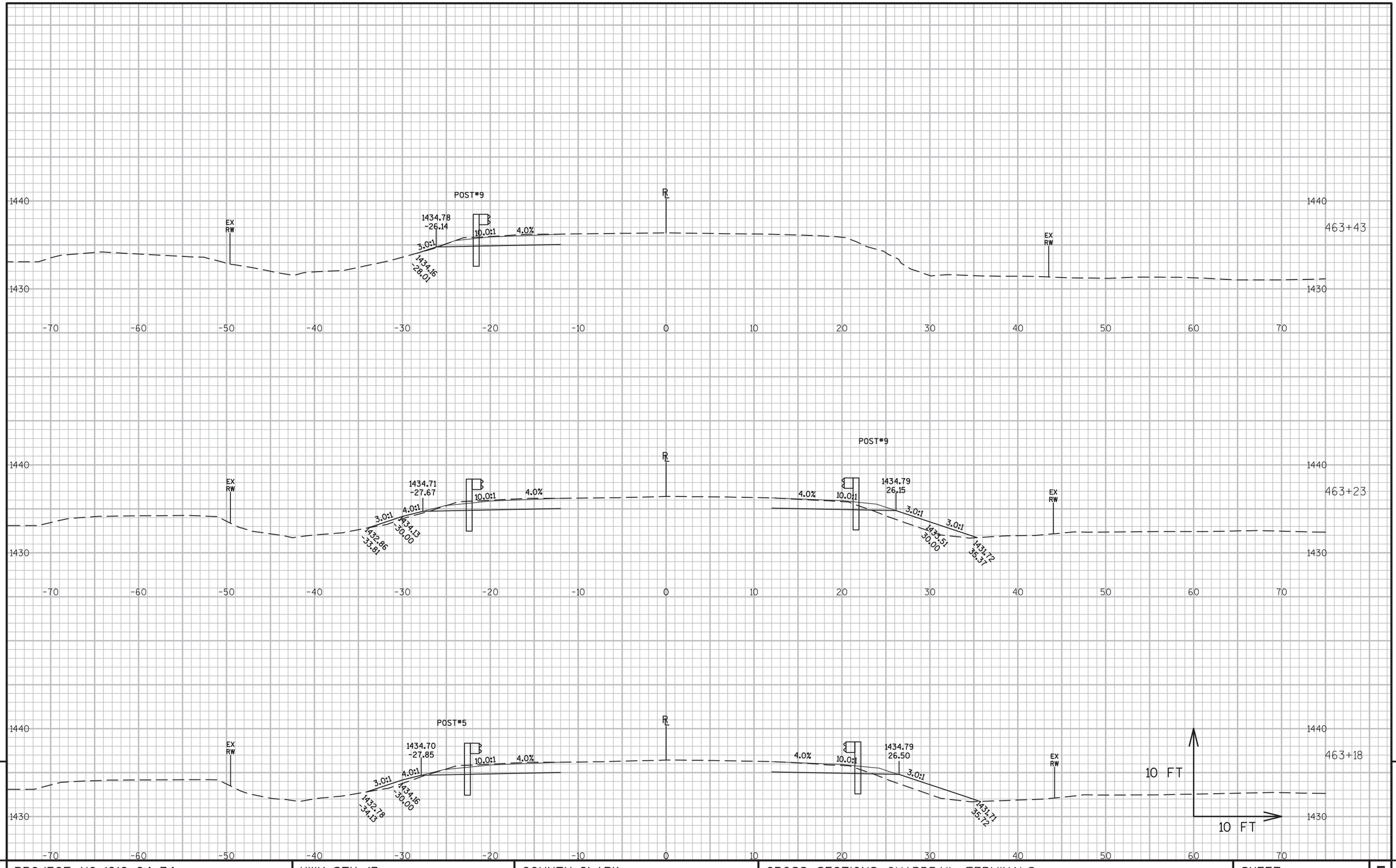
9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 271	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (23)

PLOT DATE : 7/12/2016 8:16 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1610-04-74	HWY: STH 13	COUNTY: CLARK	CROSS SECTIONS: GUARDRAIL TERMINALS	SHEET 272	E

FILE NAME : N:\PDS\C3D\16100404\DESIGN\PLANSPRODUCTION\093001_XS_BG_16100404.DWG
LAYOUT NAME - SECTION SHEET - (24)

PLOT DATE : 7/12/2016 8:16 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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