WIS

MAY 2018

PROJECT ID: 6414-00-80/6414-00-81

WITH: 6414-00-84/6414-00-85

COUNTY: PORTAGE

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 = 638



30

N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

VILLAGE OF WHITING, POST ROAD

TOMMY'S TURNPIKE TO ELM STREET
BUSINESS 51
PORTAGE COUNTY

STATE PROJECT NUMBER
6414-00-80

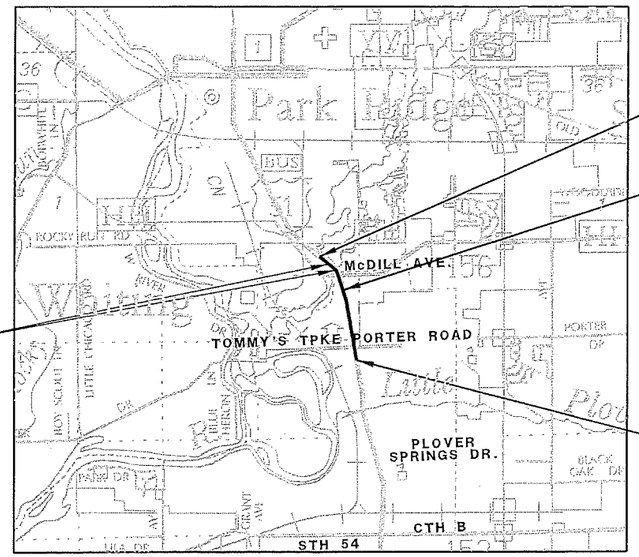
ELM STREET TO MINNESOTA AVENUE
BUSINESS 51
PORTAGE COUNTY

STATE PROJECT NUMBER
6414-00-81

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6414-00-80	WISC 2018265	1
6414-00-81	WISC 2018266	1

R 8 E

T 23 N



END PROJECT 6414-00-81
STA 281+01.00

BEGIN PROJECT 6414-00-81
END PROJECT 6414-00-80
STA 252+50.00
Y = 190946.404
X = 171532.311

EXCEPTION TO NET CENTERLINE LENGTH
STA 263+49.23 TO STA 264+94.92
STRUCTURE B-49-67

BEGIN PROJECT 6414-00-80
STA 208+50.00
Y = 186619.543
X = 172330.437

DESIGN DESIGNATION

A.D.T.	2015	=	18,700
A.D.T.	2035	=	22,900
D.H.V.	2035	=	2420
D.		=	59/41%
T.		=	6.8% ADT
DESIGN SPEED		=	40 M.P.H.
ESALS		=	3,255,800

CONVENTIONAL SYMBOLS

COUNTY LINE
CORPORATE LIMITS
PROPERTY LINE (P.L. + 58.1)
LOT LINE
LIMITED EASEMENT
EARTHWORK BALANCE POINT
EXISTING RIGHT OF WAY
PROPOSED OR NEW R/W LINE
SURVEY LINE
SLOPE INTERCEPT
ORIGINAL GROUND
MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
MARSH AREA
WOODED OR SHRUB AREA

COMBUSTIBLE FLUIDS (CAUTION)
UNDERGROUND UTILITIES
GAS (G)
ELECTRIC (E)
TELEPHONE OR TELEGRAPH (T)
TV/CABLE (TV)
SERVICE PEDESTAL
POWER POLE
TELEPHONE POLE
RAILROAD
SANITARY SEWER (SAN)
STORM SEWER (SS)
WATER (W)
EXISTING CULVERT
PROPOSED CULVERT (Box or Pipe)
CULVERT (Profile View)

LAYOUT
SCALE 0 1.0 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.833 MI. 6414-00-80
TOTAL NET LENGTH OF CENTERLINE = 0.513 MI. 6414-00-81
1.346 MI. TOTAL

Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), Portage County.

ORIGINAL PLANS PREPARED BY:
SHORT ELLIOTT HENDRICKSON INC.

WISCONSIN
VANCE P. POWERS
E-36761
WAUSAU
PROFESSIONAL ENGINEERS
MAR 18

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	SEH
Designer	SEH
Project Manager	JEFF STEWART
Regional Examiner	CHERYL SIMON
Regional Supervisor	NICHOLE LYSNE
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 2/20/19 Jeff Stewart (Signature)

E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-Trans\PLOT\00E-tl.dgn PLOT DATE: 11 May 2018 PLOT TIME: 2:42:36 PM ORG DATE : PLOT NAME : Originator : Olst PLOT SCALE : N/A

WISDOT/CADDS SHEET 10

2

ORDER OF TYPICAL SECTION AND DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
PLAN DETAIL
PLAN DETAIL - TEMPORARY SIDEWALK
EROSION CONTROL
STORM SEWER
PERMANENT SIGNING
PAVEMENT MARKING
LIGHTING DETAILS
LIGHTING
TRAFFIC SIGNAL PLAN
SEQUENCE OF OPERATIONS
TEMPORARY SIGNALS
TRAFFIC CONTROL
ALIGNMENT DIAGRAM
ALIGNMENT DIAGRAM - TEMPORARY SIDEWALK

GENERAL NOTES

WHEN THE QUANTITY OF BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

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

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

ALL CURB AND GUTTER RADII, PAVEMENT DIMENSIONS AND STATIONS ARE SHOWN TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.

CONSTRUCT INSIDE EDGE OF SIDEWALK 1/4 INCH HIGHER THAN THE TOP OF CURB, WHEN THEY ARE ADJACENT TO EACH OTHER.

TOP OF CASTING ELEVATIONS SHOWN FOR INLETS REFER TO THE NORMAL GUTTER FLOWLINE.

ALL STORM SEWER INVERTS, ELEVATIONS, PIPE LENGTHS, AND GRADES ARE COMPUTED CENTER-TO-CENTER OF STRUCTURES.

CURB RAMP TYPES ARE SHOWN ON THE PLAN AND PROFILE SHEETS.

UTILITY CONTACTS

CHUCK BARTELT
AT&T WISCONSIN-COMMUNICATION LINE
70 DIVISION STREET
FOND DU LAC, WI 54935
(920) 929-1013 (OFFICE)
(920) 410-5104 (MOBILE)
CB1461@ATT.COM

RUDI RUDIGER
CHARTER COMMUNICATIONS-COMMUNICATION LINE
5024 HEFFRON STREET
STEVENS POINT, WI 54481
(715) 204-5339
RUDI.RUDIGER@CHARTER.COM

DON LUTZOW
WISCONSIN PUBLIC SERVICE CORPORATION-ELECTRICITY
1700 SHERMAN STREET
PO BOX 1166
WAUSAU, WI 54402-1166
(715) 848-7487 (OFFICE)
(715) 493-7802 (MOBILE)
DALUTZOW@WISCONSINPUBLICSERVICE.COM

RICH BODEN
VILLAGE OF PLOVER-SEWER
PO BOX 37
PLOVER, WI 54467
(715) 345-5259 (OFFICE)
(715) 340-2417 (MOBILE)
RBODEN@PLOVERWI.GOV

MATT SALOUN
VILLAGE OF PLOVER-WATER
PO BOX 37
PLOVER, WI 54467
(715) 345-5254 (OFFICE)
(715) 347-9463 (MOBILE)
MSALOUN@PLOVER.GOV

MATT CURTIN
WISCONSIN PUBLIC SERVICE CORPORATION-GAS/PETROLEUM
1700 SHERMAN STREET
PO BOX 19001
WAUSAU, WI 54402-1166
(715) 848-7463 (OFFICE)
(920) 493-0050 (MOBILE)
MJCURTIN@WISCONSINPUBLICSERVICE.COM

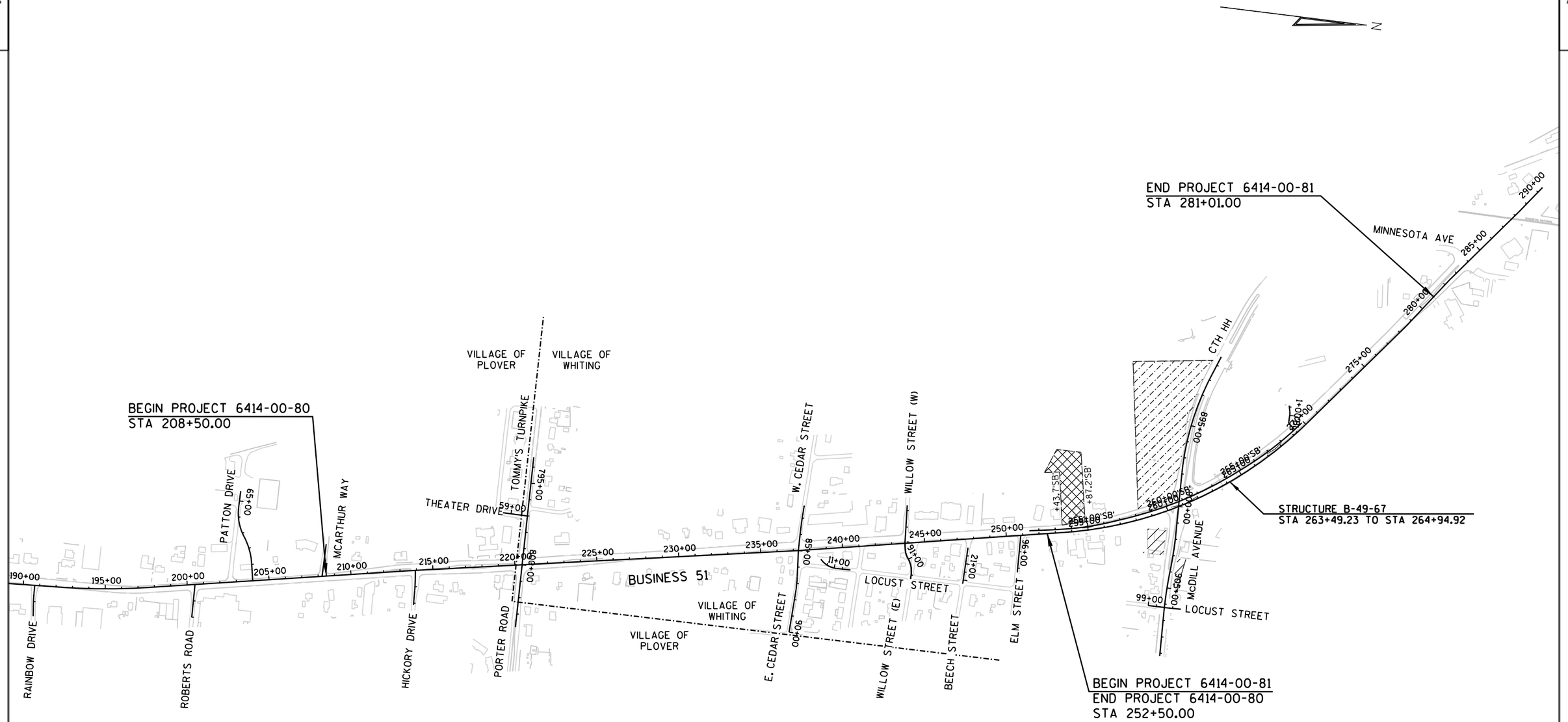
NIC SCHMEISER
VILLAGE OF WHITING - SEWER & WATER
3600 WATER STREET
STEVENS POINT, WI 54481
(715) 344-4545 (OFFICE)
(715) 340-7582 (MOBILE)
NICSCHMEISER@VILLAGEOFWHITING.COM

DNR CONTACT

JIM DOPERALSKI
DNR NORTHEAST REGION HEADQUARTERS
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
(920) 412-0165
james.doperalski@wisconsin.gov

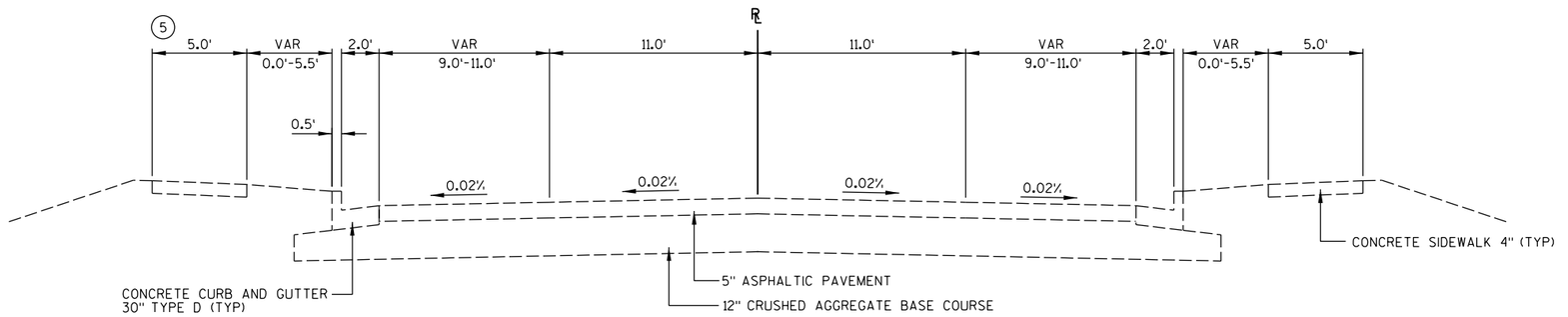
DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

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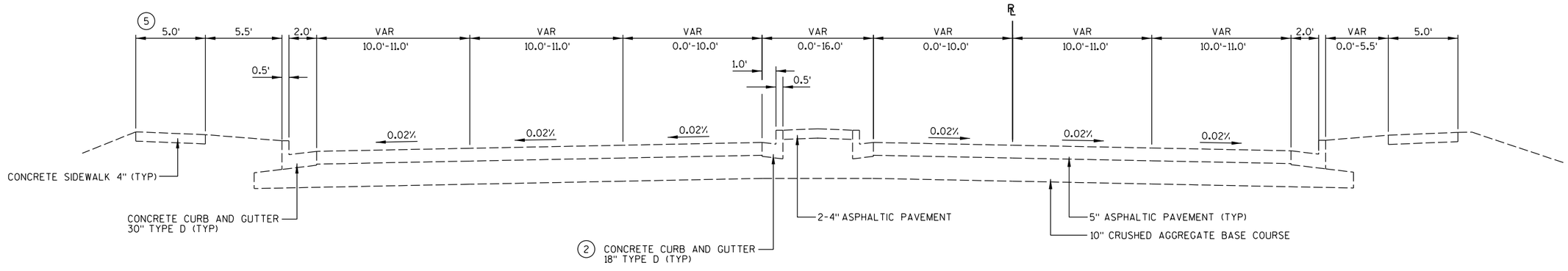
PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	PROJECT OVERVIEW	SHEET 3	E

2



TYPICAL EXISTING SECTION

BUSINESS 51
STA 208+50 TO STA 209+00
STA 227+50 TO 252+50
STA 279+00 TO 281+01



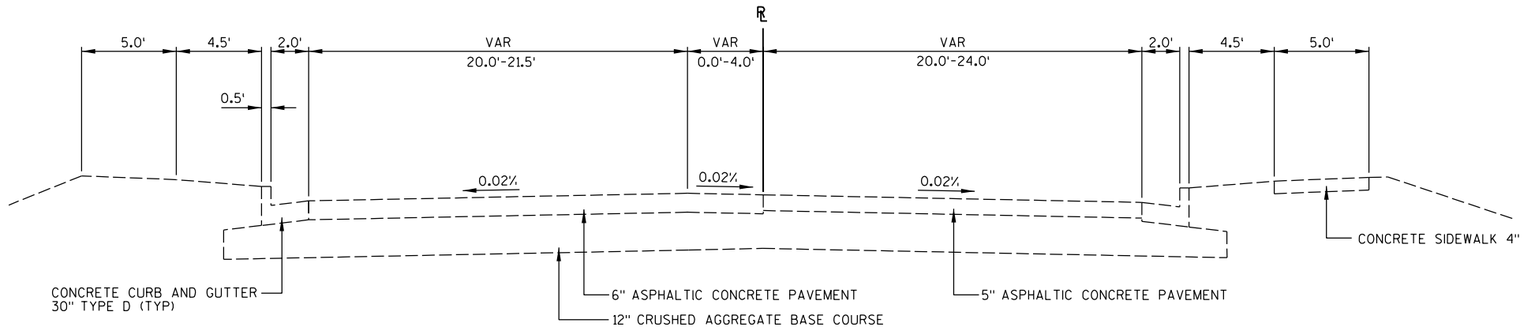
TYPICAL EXISTING SECTION

BUSINESS 51
STA 225+40 TO STA 227+50
STA 252+50 TO STA 262+00

NOTES:

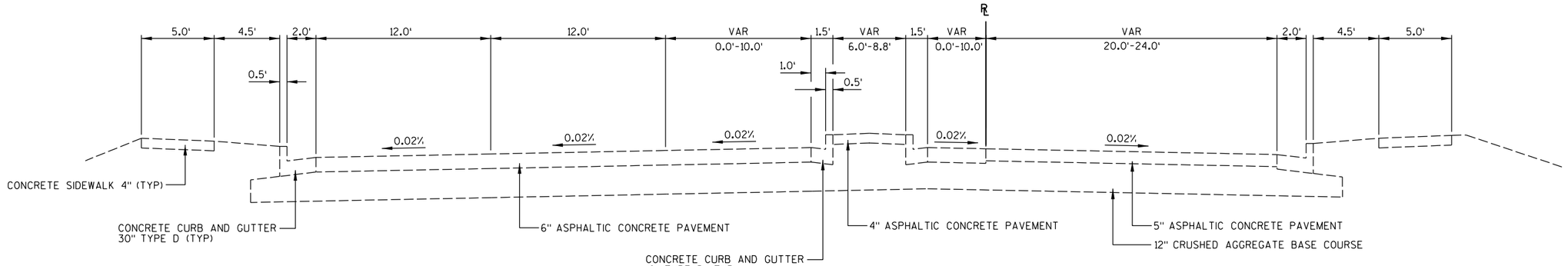
(2) FROM STA 255+00 TO STA 258+50
CONCRETE CURB AND GUTTER
12" TYPE "M"

(5) SIDEWALK ON LT SIDE
EXISTS ONLY FROM
119+31 TO 178+08
214+49 TO 221+66
260+18 TO 262+56



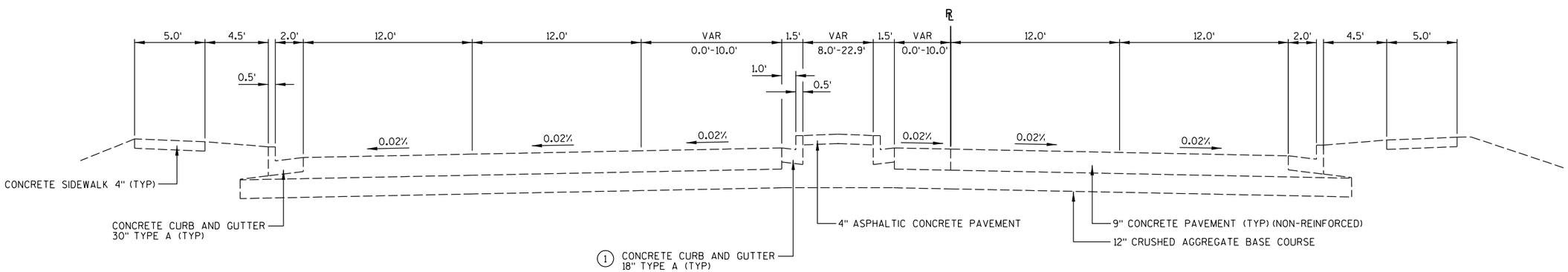
TYPICAL EXISTING SECTION

BUSINESS 51
STA 209+00 TO STA 211+08



TYPICAL EXISTING SECTION

BUSINESS 51
STA 211+08 TO STA 215+53.1



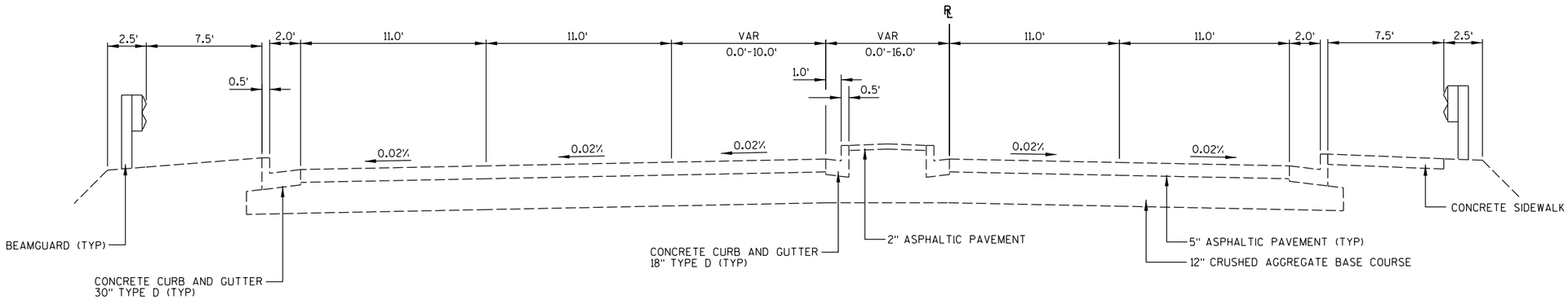
TYPICAL EXISTING SECTION

BUSINESS 51
STA 215+53.1 TO STA 225+40

NOTES:

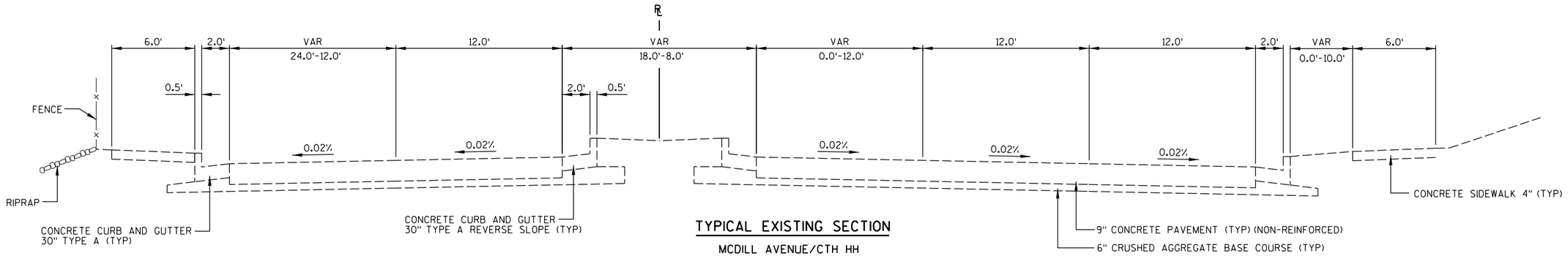
(1) FROM STA 222+53 TO STA 225+40
CONCRETE CURB AND GUTTER
12" TYPE "M"

2



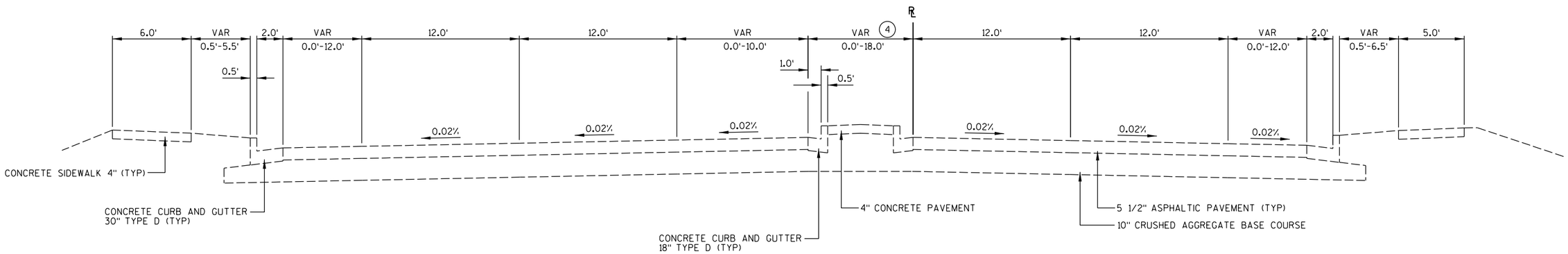
TYPICAL EXISTING SECTION

BUSINESS 51
STA 262+00 TO STA 279+00



TYPICAL EXISTING SECTION

MCDILL AVENUE/CTH HH
STA 891+82.47 TO STA 899+10



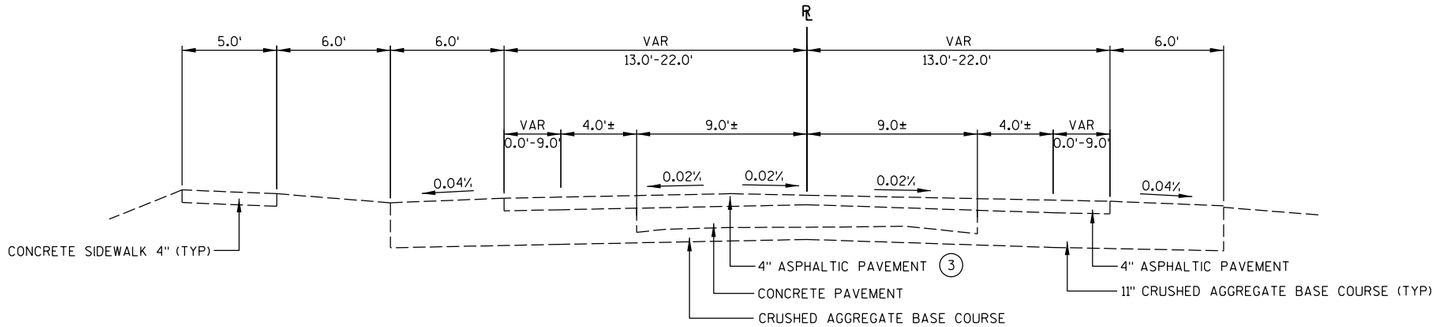
TYPICAL EXISTING SECTION

MCDILL AVENUE/CTH HH
STA 900+10 TO STA 907+34

NOTES:

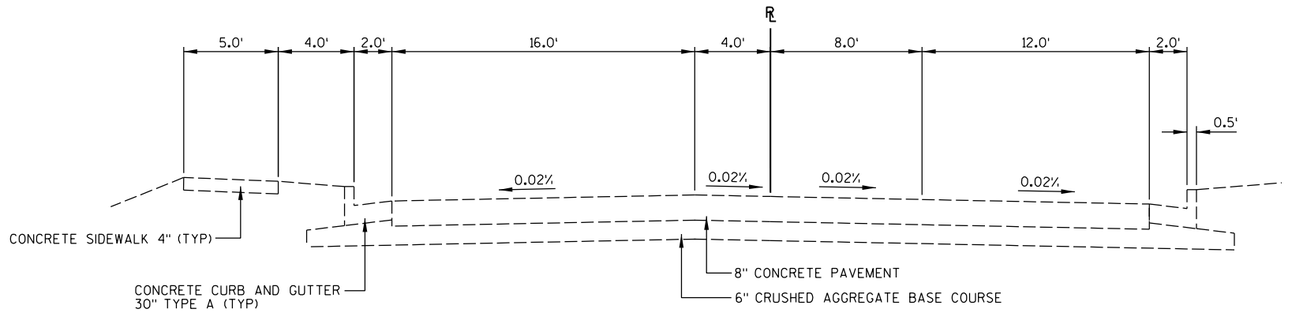
④ MEDIAN VARIES FROM STA 900+10 TO 904+15

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 6	E



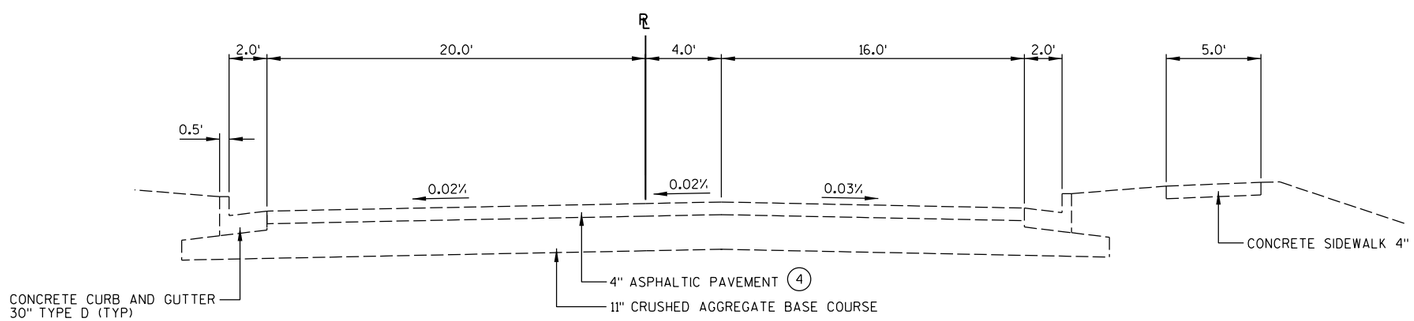
TYPICAL EXISTING SECTION

TOMMY'S TURNPIKE
STA 793+88 TO STA 798+35



TYPICAL EXISTING SECTION

TOMMY'S TURNPIKE
STA 798+35 TO STA 798+88



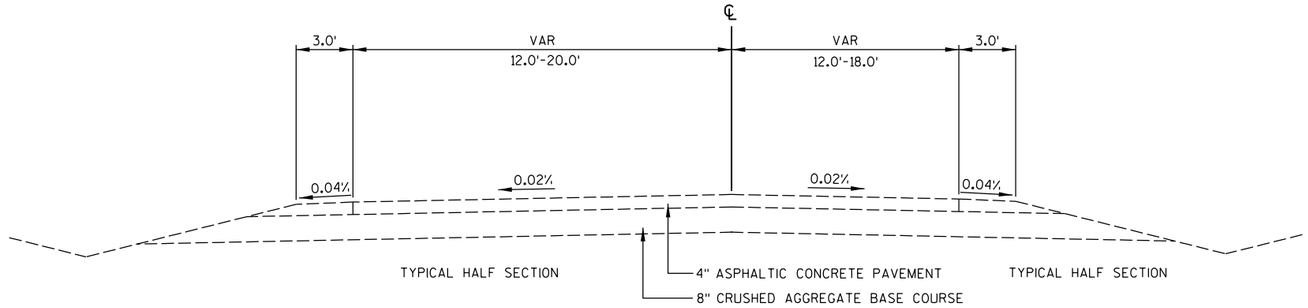
TYPICAL EXISTING SECTION

PORTER ROAD
STA 800+79 TO STA 803+51

NOTES:

(3) 5" ASPHALTIC PAVEMENT OVER 12" CRUSHED AGG. BASE FROM STA 793+88 TO STA 797+25

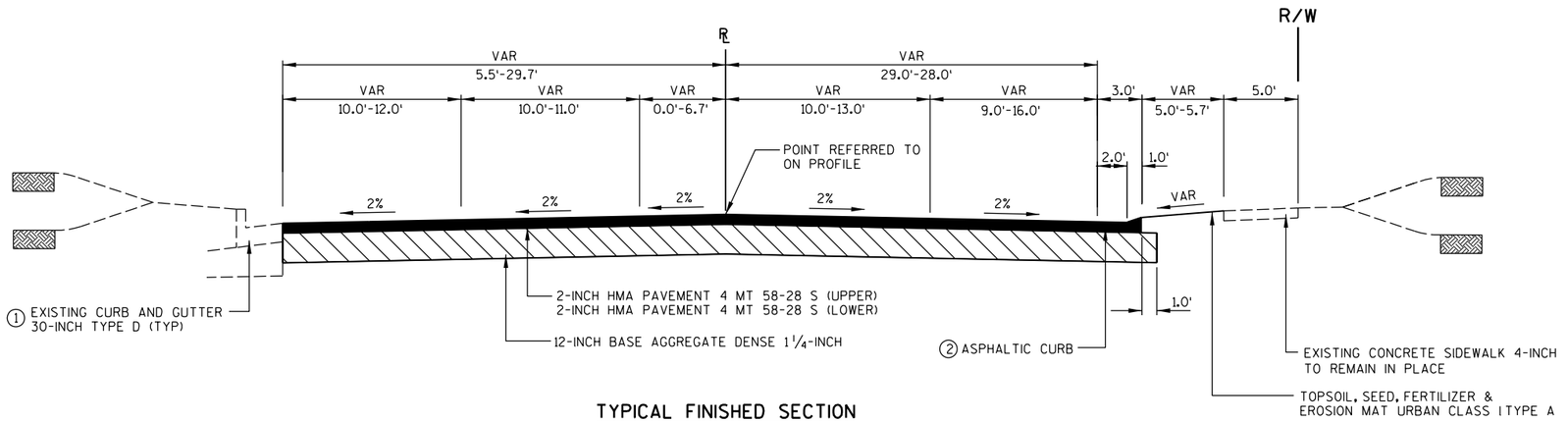
(4) END 8" CONCRETE PAVEMENT OVER 6" CRUSHED AGGREGATE BASE COURSE STA 801+49.6



TYPICAL EXISTING SECTION

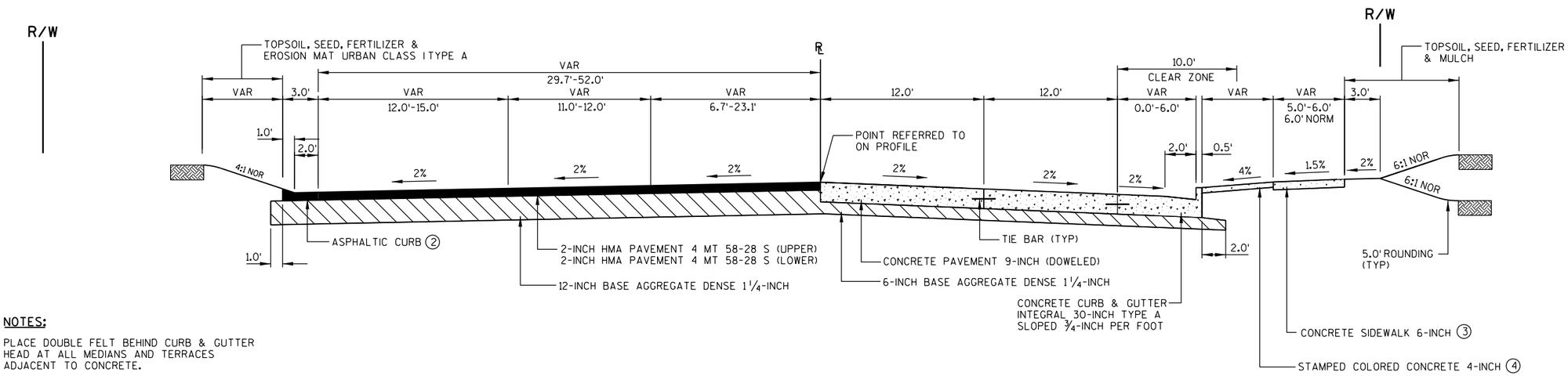
HICKORY DRIVE
THEATER DRIVE
LOCUST STREET
WEST & EAST CEDAR STREET
ROSE STREET
WEST & EAST WILLOW STREET
BEECH STREET
EAST ELM STREET
LOCUST STREET S
LOCUST STREET N

2



TYPICAL FINISHED SECTION

BUSINESS 51
STA 208+50.00 TO STA 211+57.50



TYPICAL FINISHED SECTION

BUSINESS 51
STA 211+57.50 TO STA 214+37.79

NOTES:

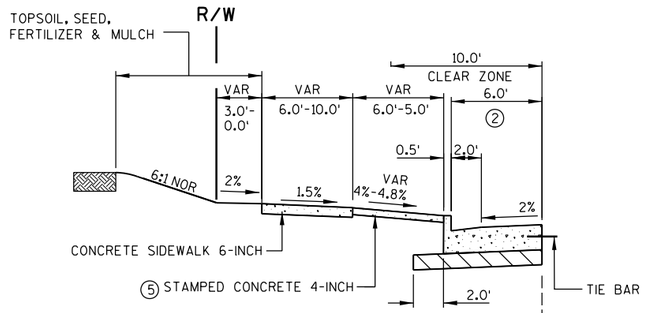
PLACE DOUBLE FELT BEHIND CURB & GUTTER HEAD AT ALL MEDIANS AND TERRACES ADJACENT TO CONCRETE.

① EXISTING CONCRETE CURB AND GUTTER TO REMAIN IN PLACE STA 212+68.8.

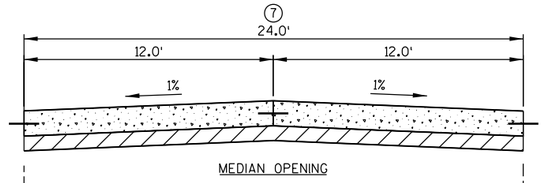
② ASPHALTIC CURB WILL BE PAID FOR AS 4-INCH HMA PAVEMENT TYPE E-3.

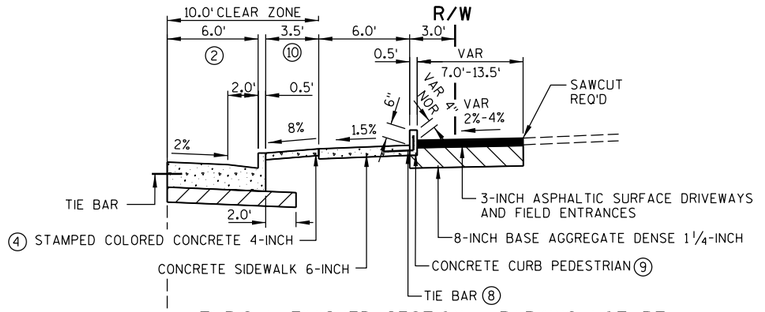
③ BEGIN CONCRETE SIDEWALK 6-INCH AT STA 212+64. MATCH EXISTING SIDEWALK AND TRANSITON PROPOSED SIDEWALK TO FULL 6' WIDTH AT DRIVEWAY.

④ BEGIN STAMPED COLORED CONCRETE 4-INCH AT STA 213+11.5 RT.



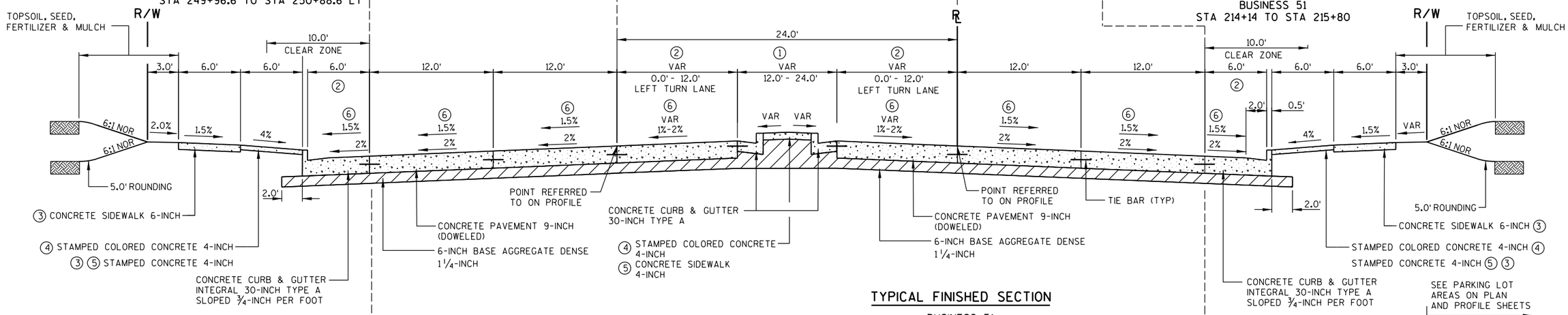
BUSINESS 51
STA 249+96.6 TO STA 250+88.6 LT





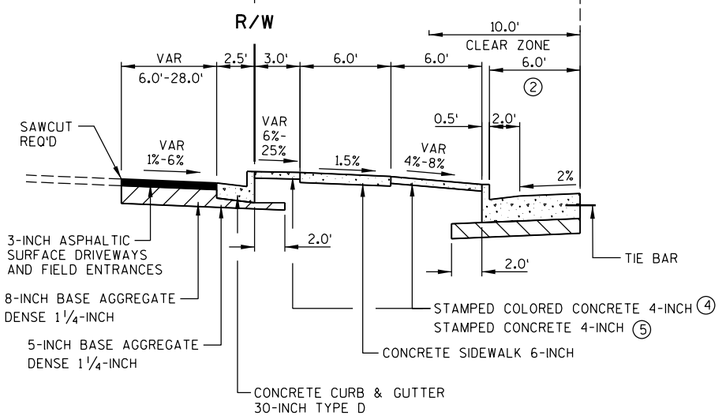
TYPICAL FINISHED SECTION - PARKING LOT RT

BUSINESS 51
STA 214+14 TO STA 215+80



TYPICAL FINISHED SECTION

BUSINESS 51
STA 214+37.79 TO STA 216+49.13
STA 224+39.05 TO STA 251+42.10



TYPICAL FINISHED SECTION - PARKING LOT LT

BUSINESS 51
STA 217+23.1 TO STA 219+15.9
STA 232+09.8 TO STA 233+07.3
STA 233+19.7 TO STA 235+56.5
STA 238+13.8 TO STA 241+90.5
STA 242+69.6 TO STA 243+45.0
STA 244+60.1 TO STA 247+49.3
STA 247+83.2 TO STA 248+49.4

NOTES:

PLACE DOUBLE FELT BEHIND CURB & GUTTER HEAD AT ALL MEDIANS AND TERRACES ADJACENT TO CONCRETE.

① REFER TO PLAN AND PROFILE SHEETS FOR RAISED MEDIAN LOCATIONS AND WIDTHS.

② REFER TO PLAN AND PROFILE SHEETS FOR STATION LOCATIONS AND WIDTHS.

③ END CONCRETE SIDEWALK 6-INCH AND STAMPED CONCRETE 4-INCH STA 251+28.2 LT. PLACE TOPSOIL, SEED, FERTILIZER AND MULCH.

④ MEDIANS AND TERRACE AREA IS STAMPED COLORED CONCRETE 4-INCH WITHIN THE VILLAGE LIMITS OF PLOVER FROM STA 211+57.5 TO STA 220+07.

⑤ MEDIAN AREA IS CONCRETE SIDEWALK 4-INCH AND TERRACE AREA IS STAMPED CONCRETE 4-INCH WITHIN THE VILLAGE LIMITS OF WHITING FROM STA 220+07 TO STA 281+00.

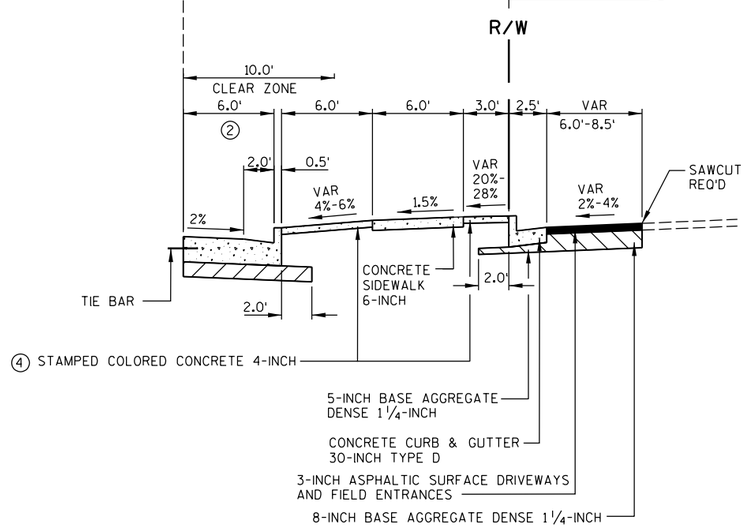
⑥ REFER TO PLAN DETAIL SHEETS FOR PAVEMENT SLOPES AND TRANSITION LIMITS THRU INTERSECTIONS AND MEDIANS.

⑦ REFER TO PLAN AND PROFILE SHEETS FOR MEDIAN OPENING LOCATIONS AND PLAN DETAIL FOR PAVEMENT SLOPES AND TRANSITION LIMITS.

⑧ TIE CONCRETE SIDEWALK 6-INCH TO CONCRETE CURB PEDESTRIAN SEE DETAIL.

⑨ TAPER CONCRETE CURB PEDESTRAIN FROM 6" TO 0" AT DRIVEWAY. REFER TO DETAIL SHEET.

⑩ TERRACE WIDTH VARIES FROM 3.5' TO 6.0'. SEE PLAN DETAIL SHEETS FOR LOCATIONS.



TYPICAL FINISHED SECTION - PARKING LOT RT

BUSINESS 51
STA 212+73.3 TO STA 213+93.5

2

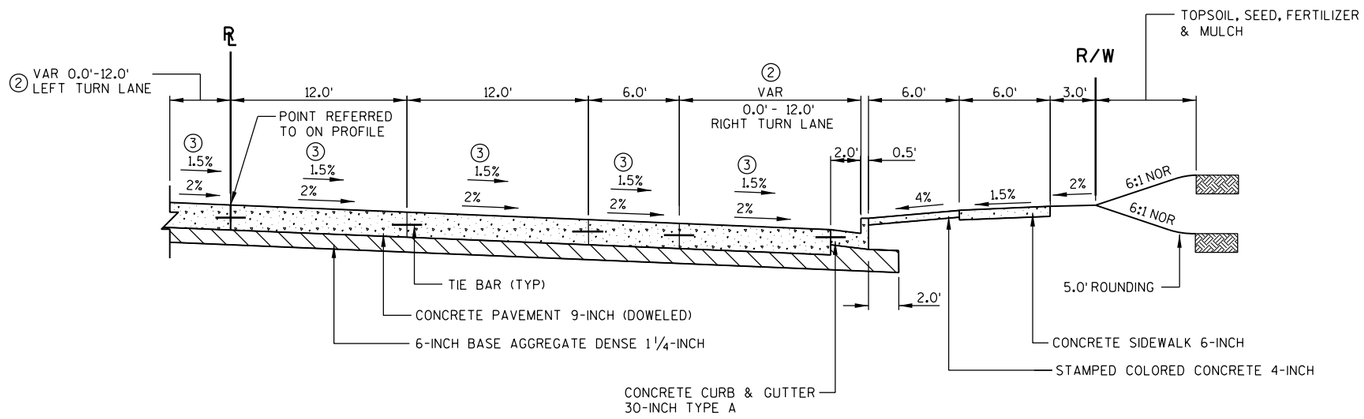
NOTES:

PLACE DOUBLE FELT BEHIND CURB & GUTTER HEAD AT ALL MEDIANS AND TERRACES ADJACENT TO CONCRETE.

(1) REFER TO PLAN AND PROFILE SHEETS FOR RAISED MEDIAN LOCATIONS AND WIDTHS.

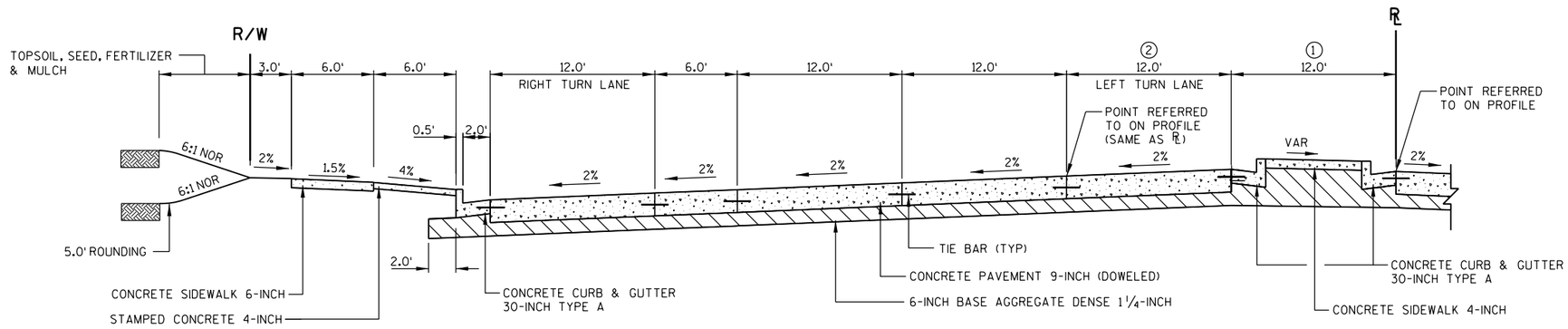
(2) REFER TO PLAN AND PROFILE SHEETS FOR LEFT TURN LANE STATION LOCATIONS AND WIDTHS.

(3) REFER TO PLAN DETAIL SHEETS FOR PAVEMENT SLOPES AND TRANSITION LIMITS THRU INTERSECTIONS AND MEDIANS.



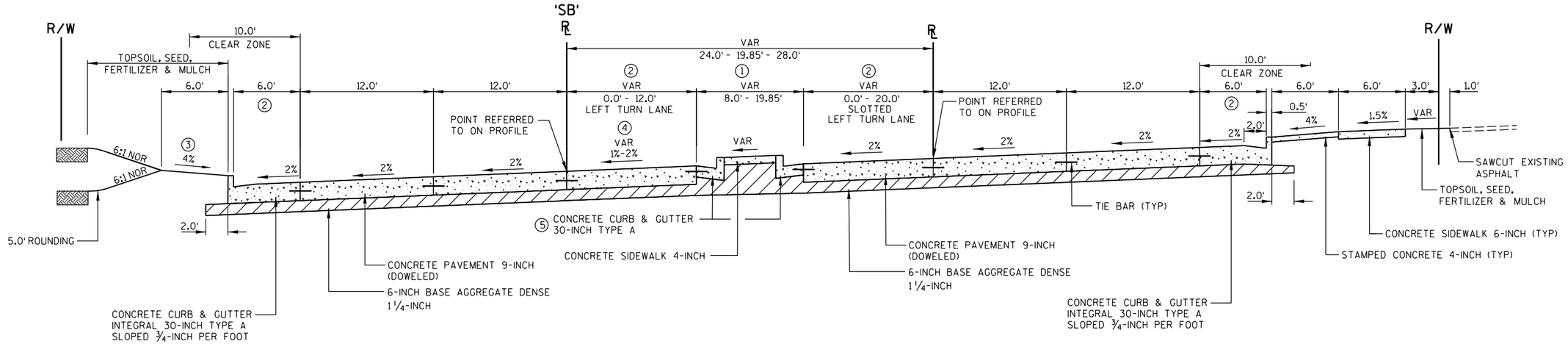
TYPICAL FINISHED SECTION - RIGHT TURN LANE 'NB'

BUSINESS 51
STA 216+49.13 TO STA 220+44.49



TYPICAL FINISHED SECTION - RIGHT TURN LANE 'SB'

BUSINESS 51
STA 220+44.49 TO STA 224+39.05



TYPICAL FINISHED SECTION

BUSINESS 51
STA 251+42.10 TO STA 257+73.87

SUPER ELEVATION TABLE BUSINESS 51 'NB'	
STATION	SE
251+40.0	-2.0%
251+85.0	0.0%
252+30.0	2.0%
255+75.0	2.0%
256+20.0	0.0%
256+65.0	-2.0%

NOTES:

PLACE DOUBLE FELT BEHIND CURB & GUTTER HEAD AT ALL MEDIANS AND TERRACES ADJACENT TO CONCRETE.

① REFER TO PLAN AND PROFILE SHEETS FOR RAISED MEDIAN LOCATIONS AND WIDTHS.

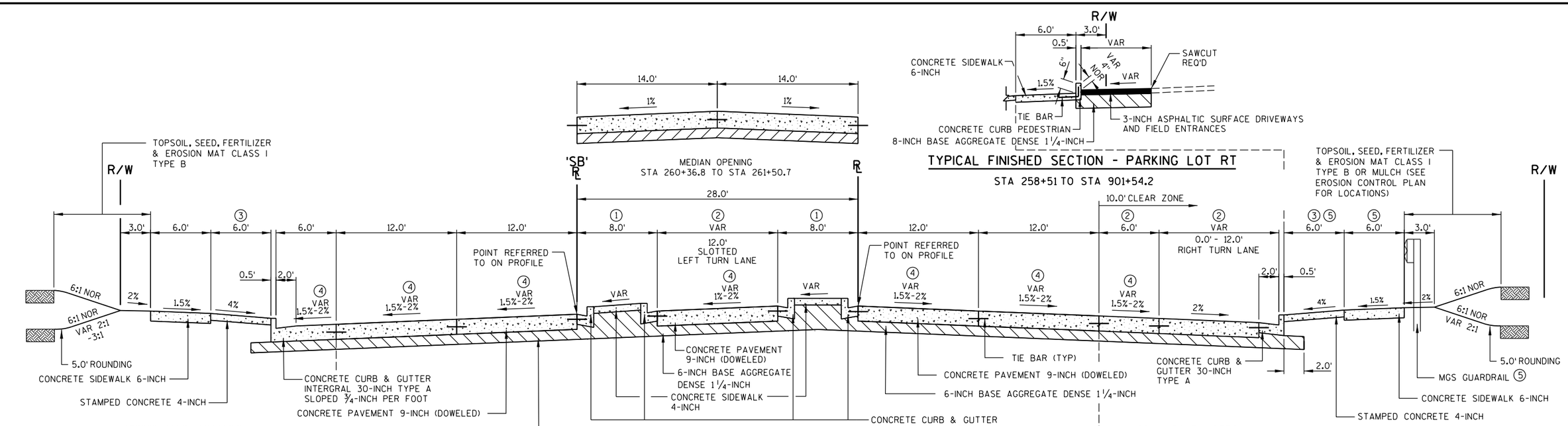
② REFER TO PLAN AND PROFILE SHEETS FOR STATION LOCATIONS AND WIDTHS.

③ SLOPES VARY 4% TO 8% ADJACENT TO HISTORIC PROPERTY STA 253+43.7'SB' TO STA 254+87.2'SB'.

④ REFER TO PLAN DETAIL SHEETS FOR PAVEMENT SLOPES AND TRANSITION LIMITS.

⑤ REFER TO PLAN AND PROFILE SHEETS FOR CONCRETE CURB AND GUTTER 20-INCH TYPE A SPECIAL LOCATIONS.

2



NOTES:

PLACE DOUBLE FELT BEHIND CURB & GUTTER HEAD AT ALL MEDIANS AND TERRACES ADJACENT TO CONCRETE.

(1) REFER TO PLAN AND PROFILE SHEETS FOR RAISED MEDIAN LOCATIONS AND WIDTHS.

(2) REFER TO PLAN AND PROFILE SHEETS FOR STATION LOCATIONS AND WIDTHS.

(3) END STAMPED CONCRETE 4-INCH STA 263+02.9 RT AND STA 263+46.9 LT.

(4) REFER TO PLAN DETAIL SHEETS FOR PAVEMENT SLOPES AND TRANSITION LIMITS THRU INTERSECTIONS AND MEDIANS.

(5) TERRACE AND SIDEWALK WIDTHS VAR AT STRUCTURE ADJACENT TO MSG GUARDRAIL SEE PLAN AND PROFILE SHEETS FOR LOCATIONS.

MCDILL POND NOTES:

E4, E5 - BACKFILL WITH PIT RUN

(A) REMOVE TOPSOIL FROM SLOPES. PAID AS EXCAVATION COMMON.

(B) EXCAVATE A RAMP AND BENCH INTO THE EXISTING FILL TO 2 FEET ABOVE WATER ELEVATION TO ALLOW FOR STABLE EQUIPMENT ACCESS WHILE MAINTAINING SAFE SLOPE AND SEPARATION FROM TRAFFIC. PAYMENT WILL BE INCIDENTAL TO SELECT BORROW ITEM.

(C) REMOVE UNSTABLE MATERIAL AS FAR OUT AS EQUIPMENT CAN PRACTICALLY REACH FROM BENCH, WORKING DOWN SHORELINE.

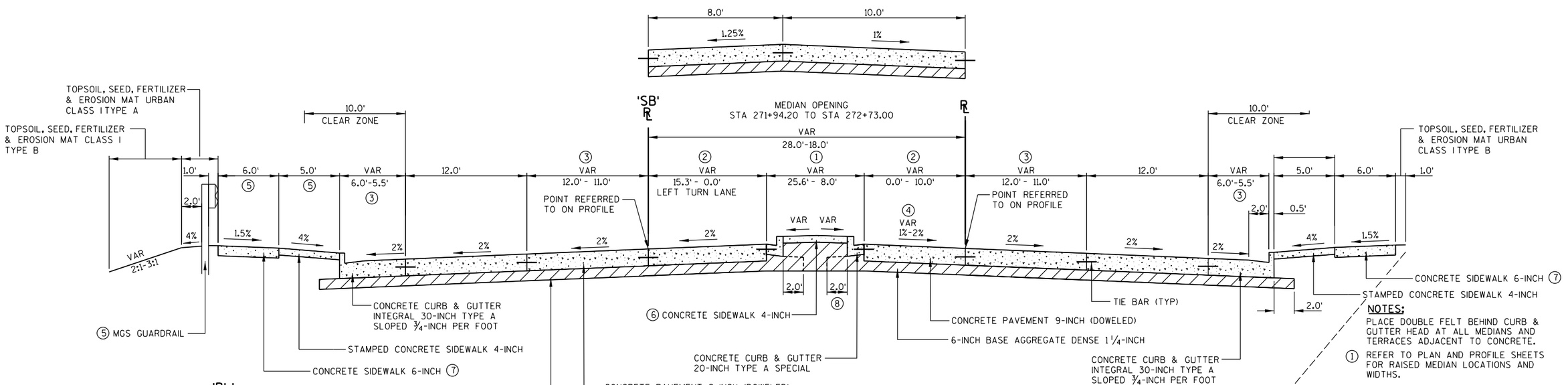
(D) REPLACE THE EXCAVATED MATERIAL 2 FEET ABOVE THE WATER ELEVATION WITH SELECT BORROW, SEGMENTALLY PLACE GEOGRID AND COVER WITH 12" SELECT BORROW.

(E) PROGRESSIVELY REPEAT (C) AND (D).

(F) FROM THE BENCH, PLACE TYPE HR FABRIC AND FOLLOWED BY THE 6-INCHES OF PIT RUN LAYER ON THE CONSTRUCTED SUBMERGED SLOPE TO 1 FOOT ABOVE WATER ELEVATION.

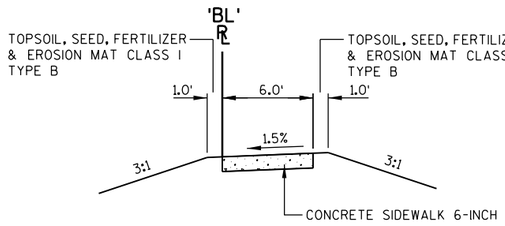
(G) PLACE RIPRAP MEDIUM TO THE DESIGN ELEVATION, EXERCISING CARE TO PROVIDE STRUCTURAL CONTINUITY OF THE FABRIC LAYER AND CROSS SECTIONAL ALIGNMENT OF THE PIT RUN DURING RIPRAP PLACEMENT.

(H) PLACE SELECT BORROW UP TO ELEVATION 1068.



TYPICAL FINISHED SECTION

BUSINESS 51
STA 264+94.92 TO STA 272+73.00



TYPICAL FINISHED SIDEWALK SECTION

BOAT LANDING
STA 0+40.00'BL' TO STA 1+60.00'BL'

NOTES:

PLACE DOUBLE FELT BEHIND CURB & GUTTER HEAD AT ALL MEDIANS AND TERRACES ADJACENT TO CONCRETE.

① REFER TO PLAN AND PROFILE SHEETS FOR RAISED MEDIAN LOCATIONS AND WIDTHS.

② REFER TO PLAN AND PROFILE SHEETS FOR STATION LOCATIONS AND WIDTHS.

③ INSIDE 'NB' AND 'SB' TRAFFIC LANES WIDTHS VARY FROM 12.0' TO 11.0' 'SB' AND 'NB' URBAN SHOULDER VARY FROM 6.0' TO 5.5' FROM STA 264+75.00 TO STA 265+30.00'NB' STA 264+63.41 TO STA 265+16.27'SB'

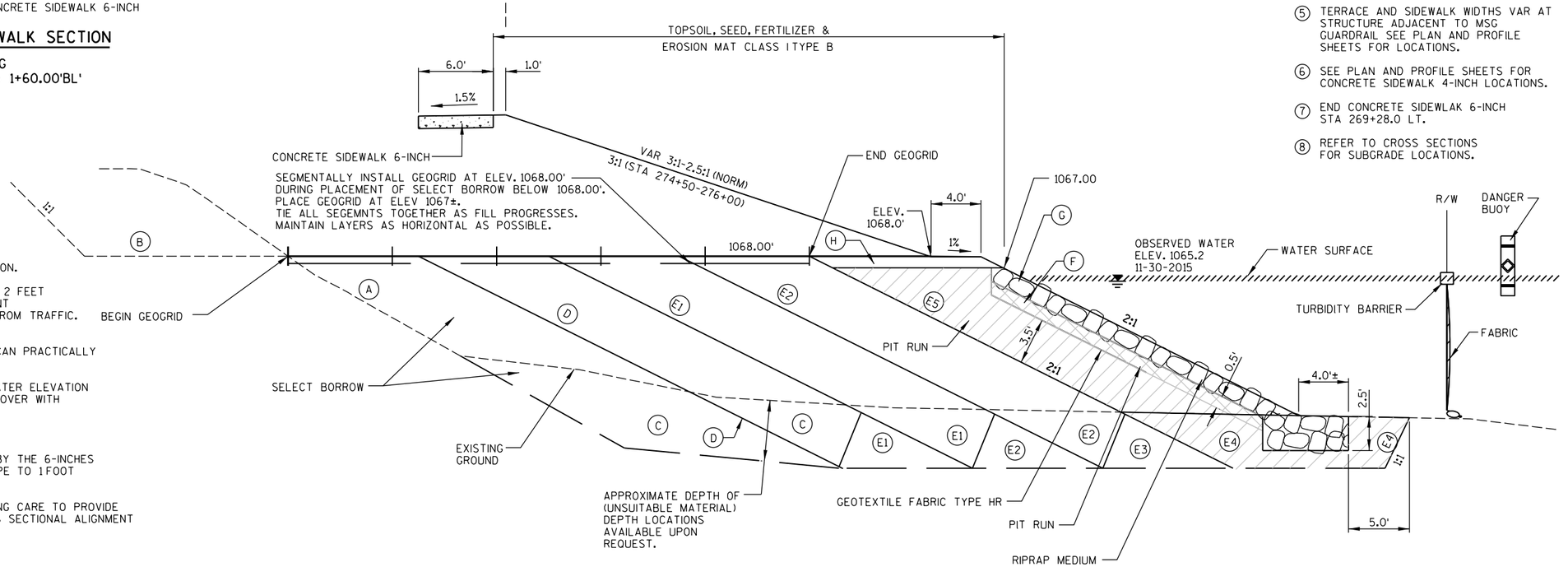
④ REFER TO PLAN DETAIL SHEETS FOR PAVEMENT SLOPES AND TRANSITION LIMITS THRU INTERSECTIONS AND MEDIANS.

⑤ TERRACE AND SIDEWALK WIDTHS VAR AT STRUCTURE ADJACENT TO MSG GUARDRAIL SEE PLAN AND PROFILE SHEETS FOR LOCATIONS.

⑥ SEE PLAN AND PROFILE SHEETS FOR CONCRETE SIDEWALK 4-INCH LOCATIONS.

⑦ END CONCRETE SIDEWLAK 6-INCH STA 269+28.0 LT.

⑧ REFER TO CROSS SECTIONS FOR SUBGRADE LOCATIONS.



MCDILL POND NOTES:

E4, E5 - BACKFILL WITH PIT RUN

(A) REMOVE TOPSOIL FROM SLOPES. PAID AS EXCAVATION COMMON.

(B) EXCAVATE A RAMP AND BENCH INTO THE EXISTING FILL TO 2 FEET ABOVE WATER ELEVATION TO ALLOW FOR STABLE EQUIPMENT ACCESS WHILE MAINTAINING SAFE SLOPE AND SEPARATION FROM TRAFFIC. PAYMENT WILL BE INCIDENTAL TO SELECT BORROW ITEM.

(C) REMOVE UNSTABLE MATERIAL AS FAR OUT AS EQUIPMENT CAN PRACTICALLY REACH FROM BENCH, WORKING DOWN SHORELINE.

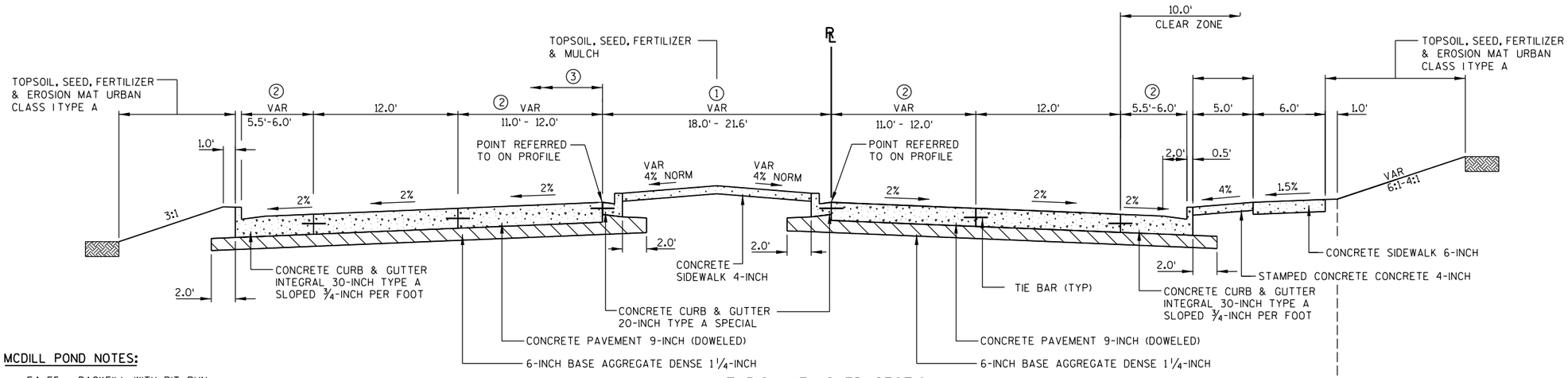
(D) REPLACE THE EXCAVATED MATERIAL 2 FEET ABOVE THE WATER ELEVATION WITH SELECT BORROW, SEGMENTALLY PLACE GEOGRID AND COVER WITH 12" SELECT BORROW.

(E) PROGRESSIVELY REPEAT (C) AND (D).

(F) FROM THE BENCH, PLACE TYPE HR FABRIC AND FOLLOWED BY THE 6-INCHES OF PIT RUN LAYER ON THE CONSTRUCTED SUBMERGED SLOPE TO 1 FOOT ABOVE WATER ELEVATION.

(G) PLACE RIPRAP MEDIUM TO THE DESIGN ELEVATION, EXERCISING CARE TO PROVIDE STRUCTURAL CONTINUITY OF THE FABRIC LAYER AND CROSS SECTIONAL ALIGNMENT OF THE PIT RUN DURING RIPRAP PLACEMENT.

(H) PLACE SELECT BORROW UP TO ELEVATION 1068.



TYPICAL FINISHED SECTION

BUSINESS 51
STA 272+73.00 TO STA 278+84.75 LT
STA 272+73.00 TO STA 281+01.00 RT

MCDILL POND NOTES:

E4, E5 - BACKFILL WITH PIT RUN

(A) REMOVE TOPSOIL FROM SLOPES. PAID AS EXCAVATION COMMON.

(B) EXCAVATE A RAMP AND BENCH INTO THE EXISTING FILL TO 2 FEET ABOVE WATER ELEVATION TO ALLOW FOR STABLE EQUIPMENT ACCESS WHILE MAINTAINING SAFE SLOPE AND SEPARATION FROM TRAFFIC. PAYMENT WILL BE INCIDENTAL TO SELECT BORROW ITEM.

(C) REMOVE UNSTABLE MATERIAL AS FAR OUT AS EQUIPMENT CAN PRACTICALLY REACH FROM BENCH, WORKING DOWN SHORELINE.

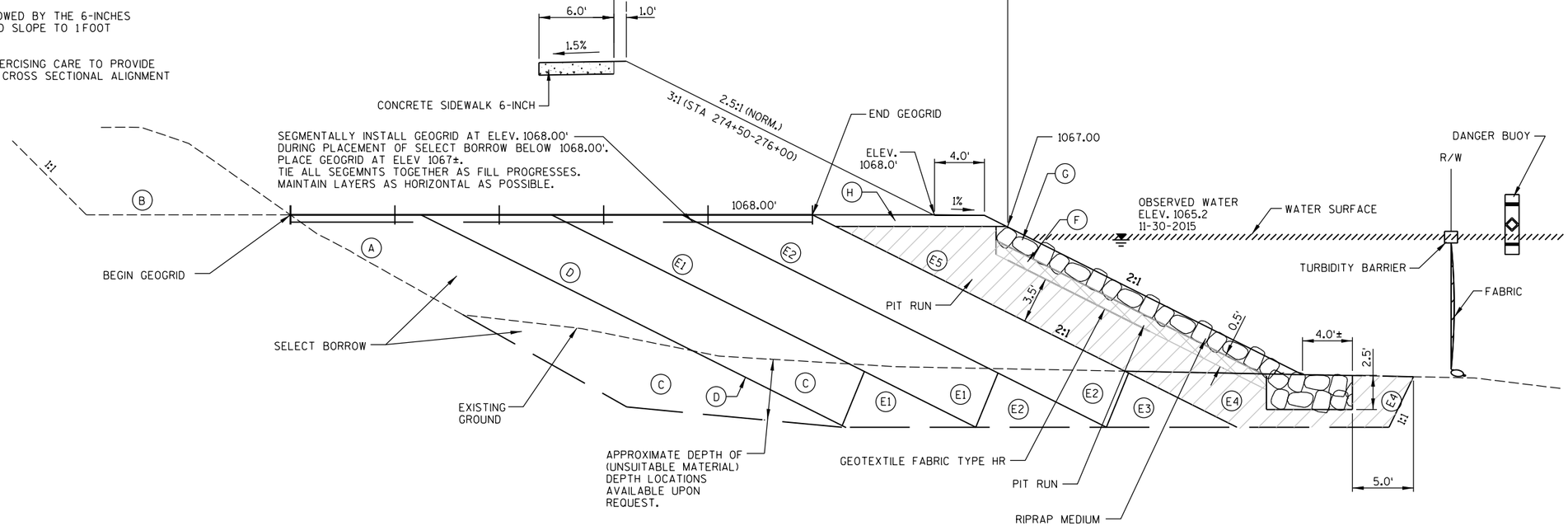
(D) REPLACE THE EXCAVATED MATERIAL 2 FEET ABOVE THE WATER ELEVATION WITH SELECT BORROW, SEGMENTALLY PLACE GEOGRID AND COVER WITH 12" SELECT BORROW.

(E) PROGRESSIVELY REPEAT (C) AND (D).

(F) FROM THE BENCH, PLACE TYPE HR FABRIC AND FOLLOWED BY THE 6-INCHES OF PIT RUN LAYER ON THE CONSTRUCTED SUBMERGED SLOPE TO 1 FOOT ABOVE WATER ELEVATION.

(G) PLACE RIPRAP MEDIUM TO THE DESIGN ELEVATION, EXERCISING CARE TO PROVIDE STRUCTURAL CONTINUITY OF THE FABRIC LAYER AND CROSS SECTIONAL ALIGNMENT OF THE PIT RUN DURING RIPRAP PLACEMENT.

(H) PLACE SELECT BORROW UP TO ELEVATION 1068.



NOTES:

PLACE DOUBLE FELT BEHIND CURB & GUTTER HEAD AT ALL MEDIANS AND TERRACES ADJACENT TO CONCRETE.

(1) REFER TO PLAN AND PROFILE SHEETS FOR RAISED MEDIAN LOCATIONS AND WIDTHS.

(2) INSIDE 'SB' TRAFFIC LANE AND 'SB' URBAN SHOULDER WIDTHS VARY FROM 11.0' -12.0' AND 5.5'-6.0' FROM STA 277+49.60 TO STA 278+84.75.

INSIDE 'NB' TRAFFIC LANE WIDTHS VARY FROM 11.0'-12.0' FROM STA 278+49.57 TO STA 281+01.00.

(3) SB CONSTRUCTION ENDS AT STA 278+84.75 MATCH EXISTING.

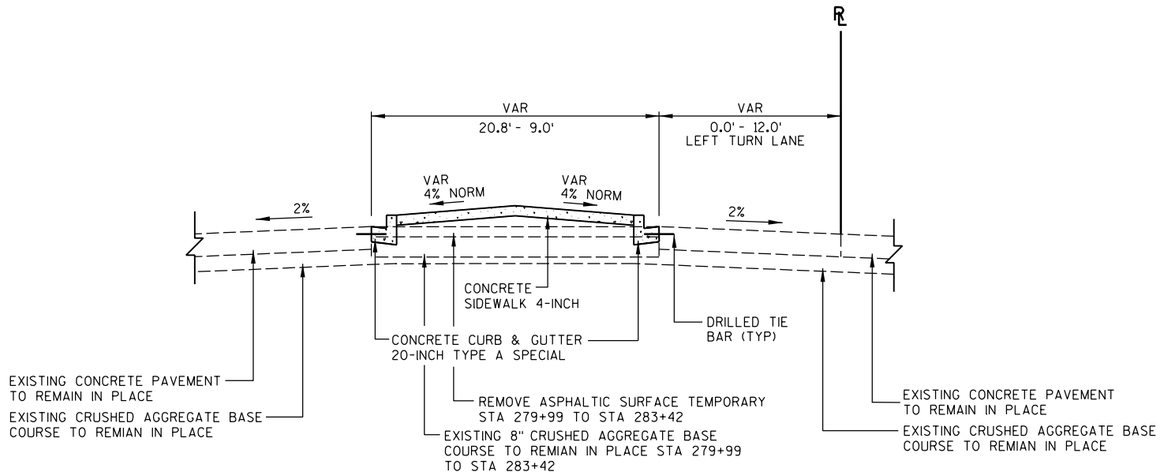
(4) FLAT TERRACE TOE ELEV. VAR FROM 1068.0' TO 1079.0' FROM STA 278+50 TO STA 280+50.

TYPICAL FINISHED SECTION - CAUSEWAY

BUSINESS 51
STA 272+73.00 TO STA 279+00.00

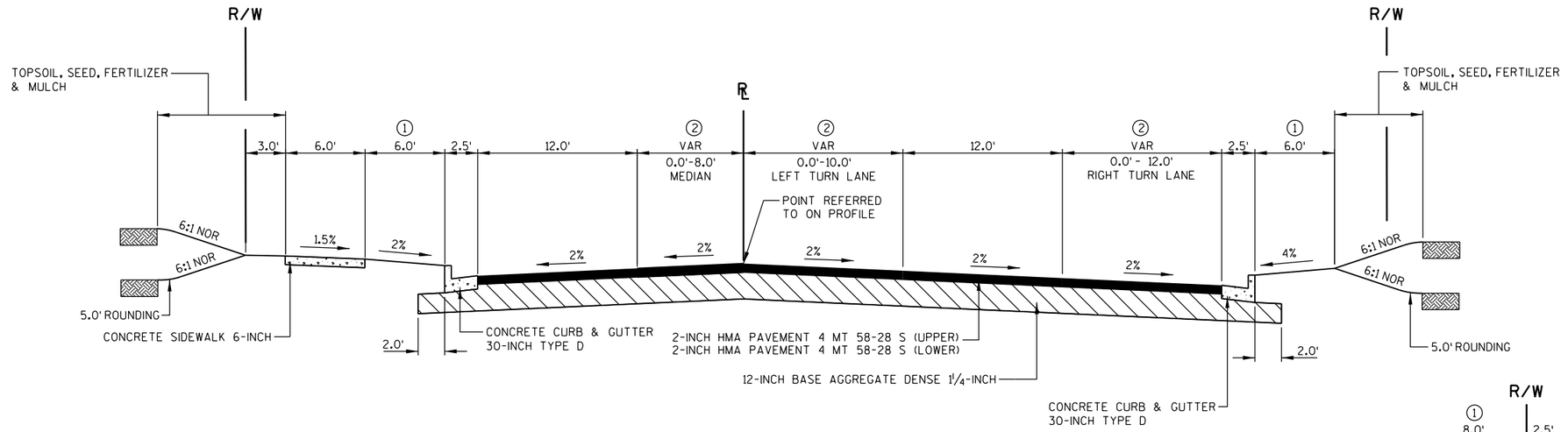
PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 15	E

2



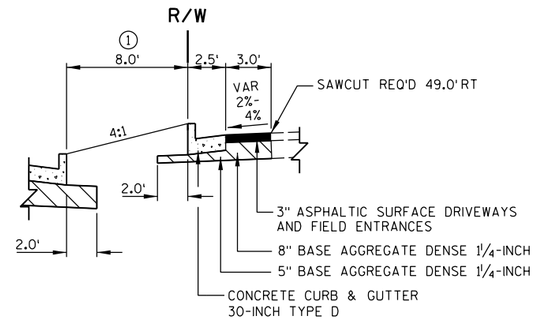
TYPICAL FINISHED SECTION

BUSINESS 51
STA 278+84.75 TO STA 283+42.00 LT
STA 281+01.00 TO STA 283+42.00 RT



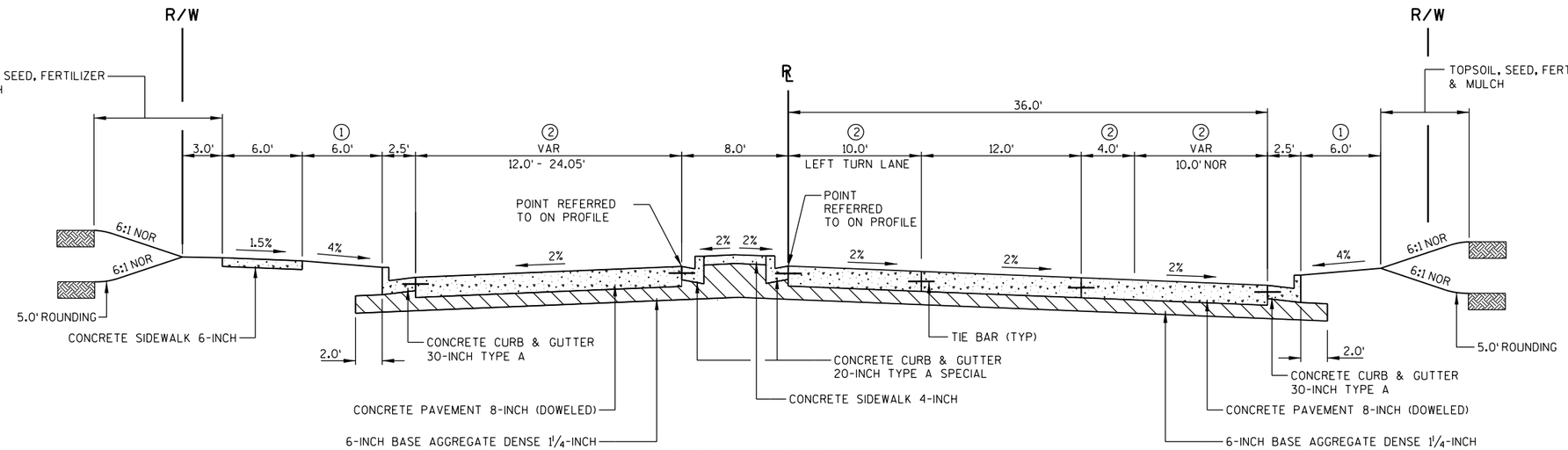
TYPICAL FINISHED SECTION

TOMMY'S TURNPIKE
STA 793+59.50 TO STA 797+95.81



TYPICAL FINISHED SECTION

PARKING LOT RT
STA 797+52.9 TO STA 799+08.6



TYPICAL FINISHED SECTION

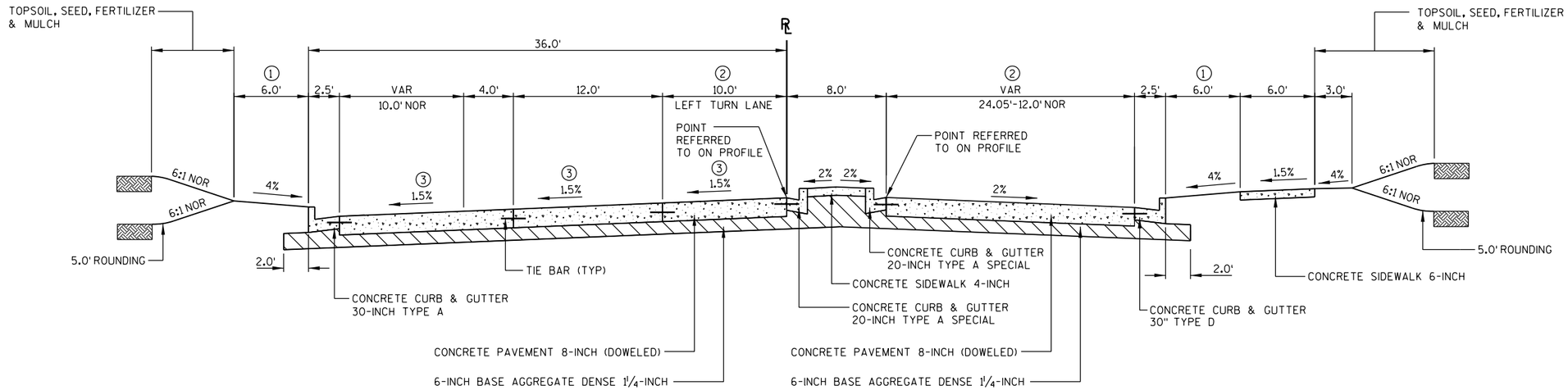
TOMMY'S TURNPIKE
STA 797+95.81 TO STA 799+45.30

NOTES:

PLACE DOUBLE FELT BEHIND CURB & GUTTER HEAD AT ALL MEDIANS AND TERRACES ADJACENT TO CONCRETE.

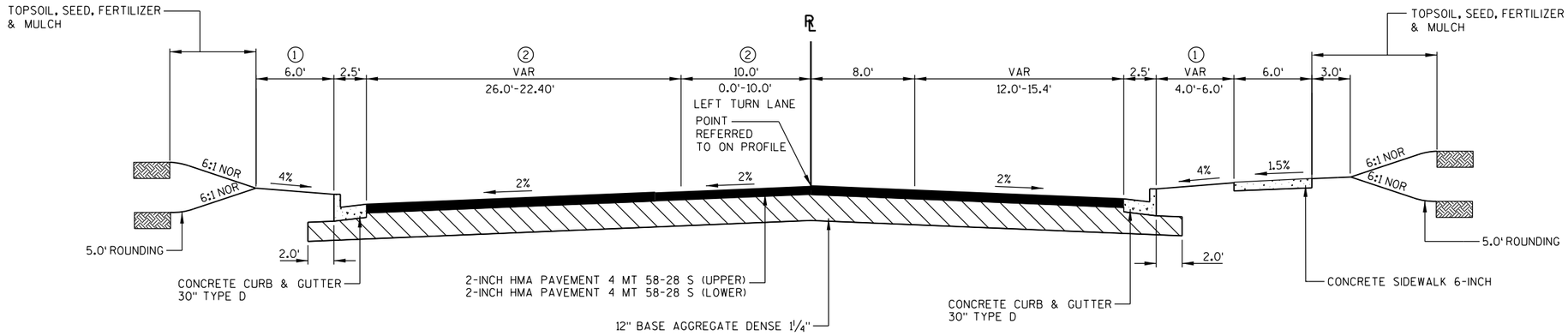
① TOPSOIL, SEED, FERTILIZER AND EROSION MAT URBAN CLASS 1.

② REFER TO PLAN AND PROFILE SHEETS AND PAVEMENT MARKING SHEETS FOR STATION LOCATIONS AND WIDTHS.



TYPICAL FINISHED SECTION

PORTER ROAD
STA 800+30.38 TO STA 802+30.90



TYPICAL FINISHED SECTION

PORTER ROAD
STA 802+30.90 TO STA 803+47.88

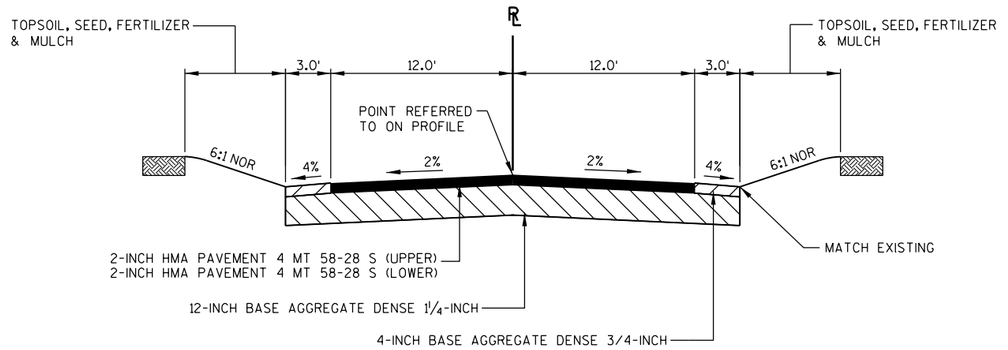
NOTES:

PLACE DOUBLE FELT BEHIND CURB & GUTTER HEAD AT ALL MEDIANS AND TERRACES ADJACENT TO CONCRETE.

① TOPSOIL, SEED, FERTILIZER AND EROSION MAT URBAN CLASS I.

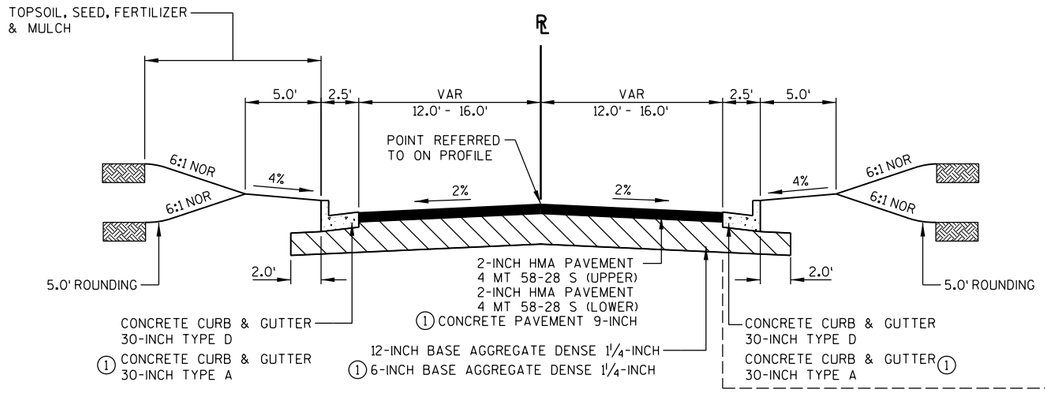
② REFER TO PLAN AND PROFILE SHEETS AND PAVEMENT MARKING SHEETS FOR STATION LOCATIONS AND WIDTHS.

③ PAVEMENT SLOPE IS 1.5% FROM STA 800+66.95 TO STA 801+50.00 LT AND VAR 1.5%-2% TO STA 802+00.



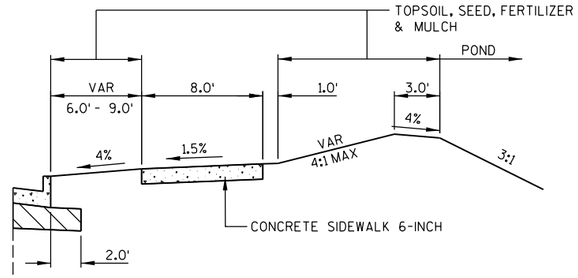
TYPICAL FINISHED SIDEROAD SECTION

EAST CEDAR STREET
STA 86+30.00 TO STA 88+30.00

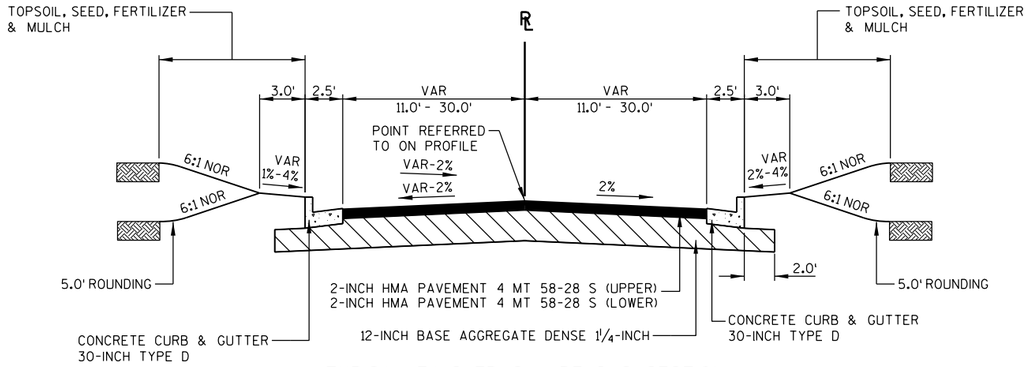


TYPICAL FINISHED SIDEROAD SECTION

HICKORY DRIVE
WEST CEDAR STREET
EAST CEDAR STREET
WEST WILLOW STREET
EAST WILLOW STREET
EAST ELM STREET
THEATER DRIVE
LOCUST STREET



EAST ELM STREET
STA 95+49.0 TO STA 96+24.5



TYPICAL FINISHED CUL-DE-SAC SECTION

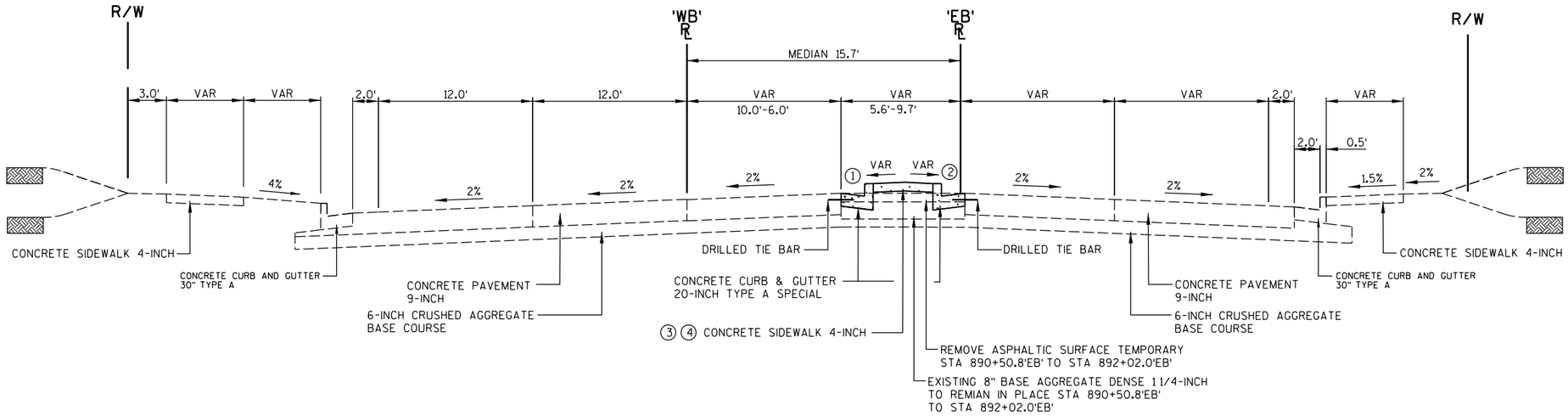
LOCUST STREET
BEECH STREET

NOTES:

PLACE DOUBLE FELT BEHIND CURB & GUTTER HEAD AT ALL MEDIANS AND TERRACES ADJACENT TO CONCRETE.

① FOR CONCRETE PAVEMENT 9-INCH, 6-INCH BASE AGGREGATE DENSE 1¼-INCH AND CONCRETE CURB AND GUTTER 30-INCH TYPE A SEE PLAN AND PROFILE FOR STATION LOCATIONS & WIDTHS.

2



TYPICAL FINISHED SECTION

CTH HH
STA 890+50.8'EB' TO STA 892+02.00'EB'

NOTES:

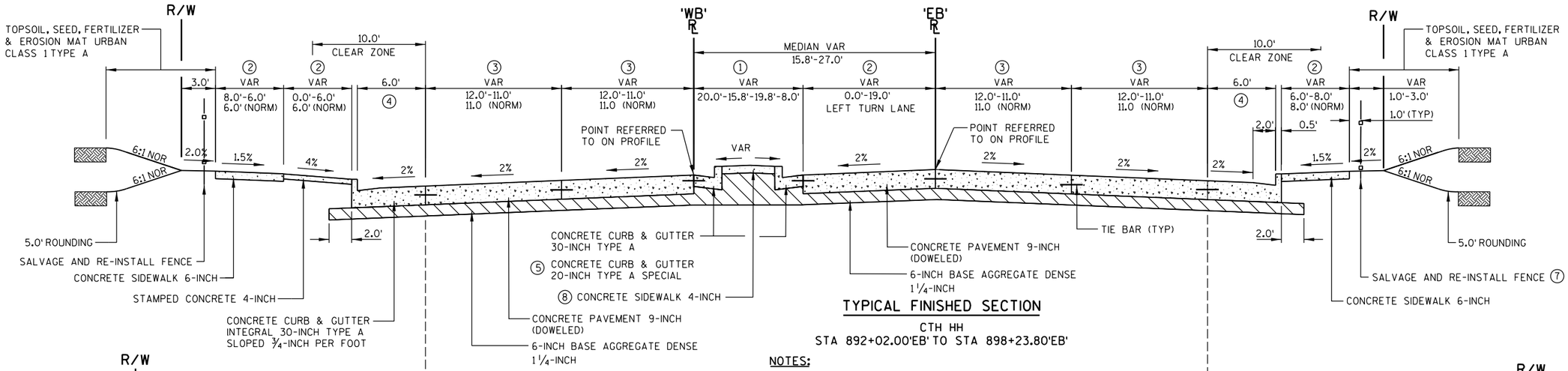
TRANSITION CURB & GUTTER 20-INCH TYPE A SPECIAL TO CONCRETE CURB & GUTTER 30-INCH TYPE A FROM:

① STA 891+01.8'EB' TO STA 891+38.0'EB'

② STA 891+01.8'EB' TO STA 891+38.0'EB'

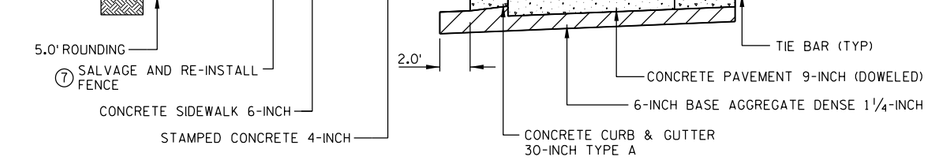
③ END CONCRETE SIDEWALK 4-INCH STA 891+38.0

④ TOPSOIL, SEED, FERTILIZER AND MULCH MEDIAN FROM STA 891+38.0'EB' TO STA 893+75.0'EB'



TYPICAL FINISHED SECTION

CTH HH
STA 892+02.00'EB' TO STA 898+23.80'EB'



NOTES:

PLACE DOUBLE FELT BEHIND CURB & GUTTER HEAD AT ALL MEDIANS AND TERRACES ADJACENT TO CONCRETE.

① REFER TO PLAN AND PROFILE SHEETS FOR RAISED MEDIAN LOCATIONS AND WIDTHS.

② REFER TO PLAN AND PROFILE SHEETS FOR STATION LOCATIONS AND WIDTHS.

③ 'EB' AND 'WB' LANES VARY IN WIDTH FROM 12.0'-11.0' STA 892+02.00'EB' TO STA 892+50.00'EB'.

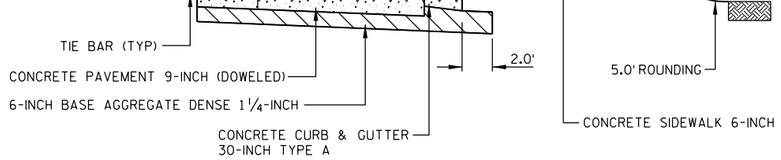
④ URBAN SHOULDERS VARY IN WIDTH FROM 2.0'-6.0' STA 892+02.00'EB' TO STA 892+50.00'EB'.

⑤ REFER TO PLAN AND PROFILE SHEETS FOR CONCRETE CURB AND GUTTER TYPE A SPECIAL LOCATIONS.

⑥ REFER TO PLAN DETAIL SHEETS FOR PAVEMENT SLOPES AND TRANSITION LIMITS THRU INTERSECTION AND MEDIANS.

⑦ SEE PLAN & PROFILE SHEETS FOR SALVAGE AND RE-INSTALL FENCE LOCATIONS.

⑧ TOPSOIL, SEED, FERTILIZER AND MULCH MEDIAN FROM STA 891+38.0'EB' TO STA 893+75.0'EB'.

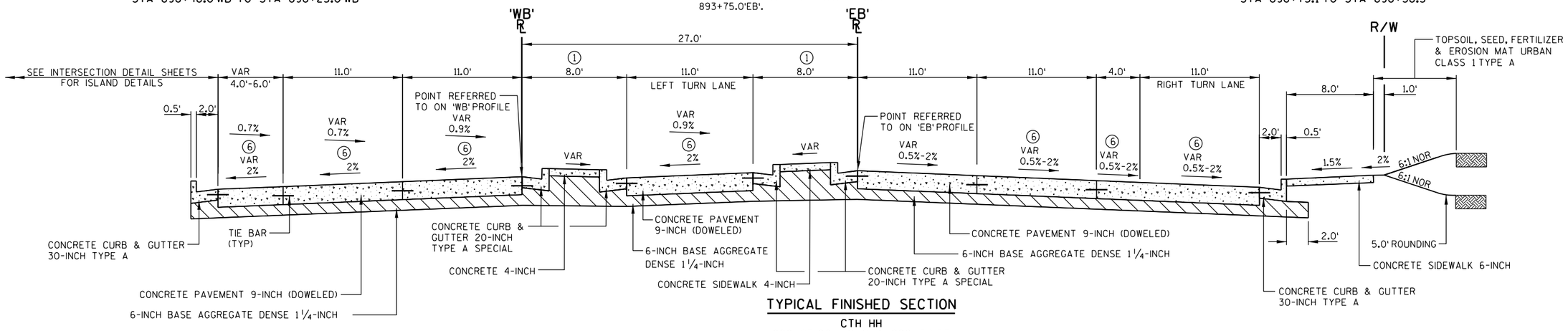


TYPICAL FINISHED SECTION

CTH HH
STA 896+48.0'WB' TO STA 898+25.0'WB'

TYPICAL FINISHED SECTION - RIGHT TURN LANE

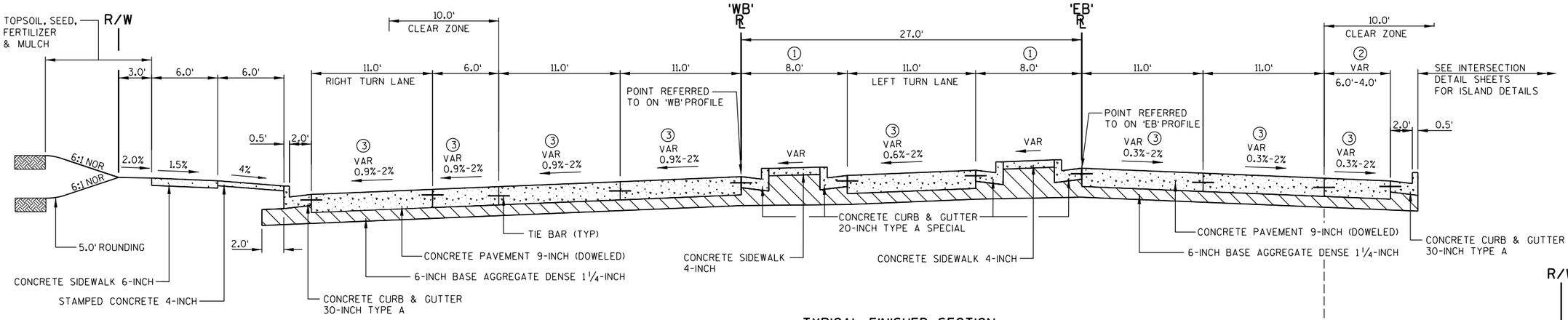
CTH HH
STA 896+75.1 TO STA 898+38.3



TYPICAL FINISHED SECTION

CTH HH
898+23.80 TO STA 899+34.53

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 21	E



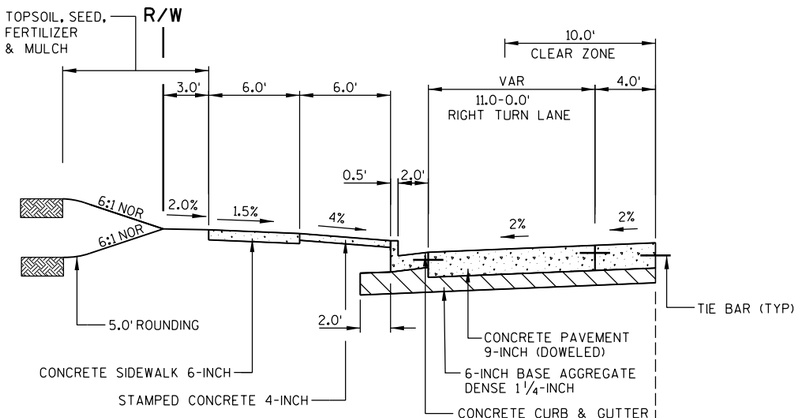
TYPICAL FINISHED SECTION

MCDILL AVENUE
STA 900+49.1'EB' TO STA 901+68.8'EB'

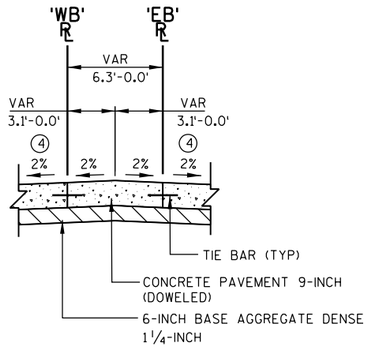
NOTES:

PLACE DOUBLE FELT BEHIND CURB & GUTTER HEAD AT ALL MEDIANS AND TERRACES ADJACENT TO CONCRETE.

1. REFER TO PLAN AND PROFILE SHEETS FOR RAISED MEDIAN LOCATIONS AND WIDTHS.
2. REFER TO PLAN AND PROFILE SHEETS FOR STATION LOCATIONS AND WIDTHS.
3. REFER TO PLAN DETAIL SHEETS FOR PAVEMENT SLOPES AND TRANSITION LIMITS THRU INTERSECTIONS AND MEDIANS.
4. 'EB' AND 'WB' TRAVEL LANES VARY IN WIDTH FROM 11.0-12.0' FROM STA 906+42.5'EB' TO STA 907+38.63'EB' STA 906+59.4'WB' TO STA 907+40.9'WB'.

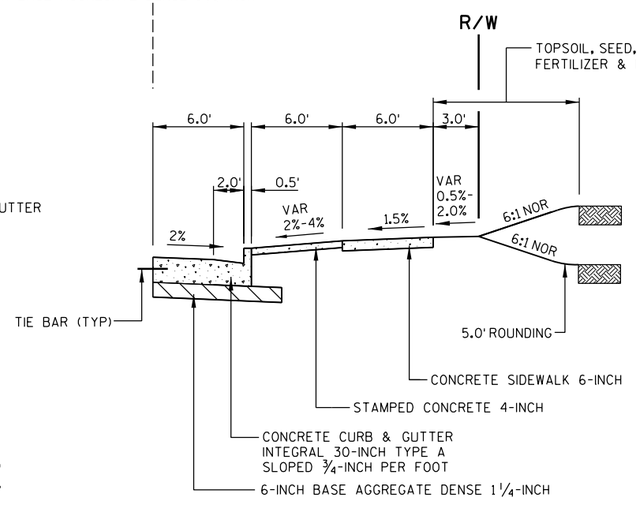


MCDILL AVENUE
STA 901+78.9'EB' TO STA 903+50.8'EB'

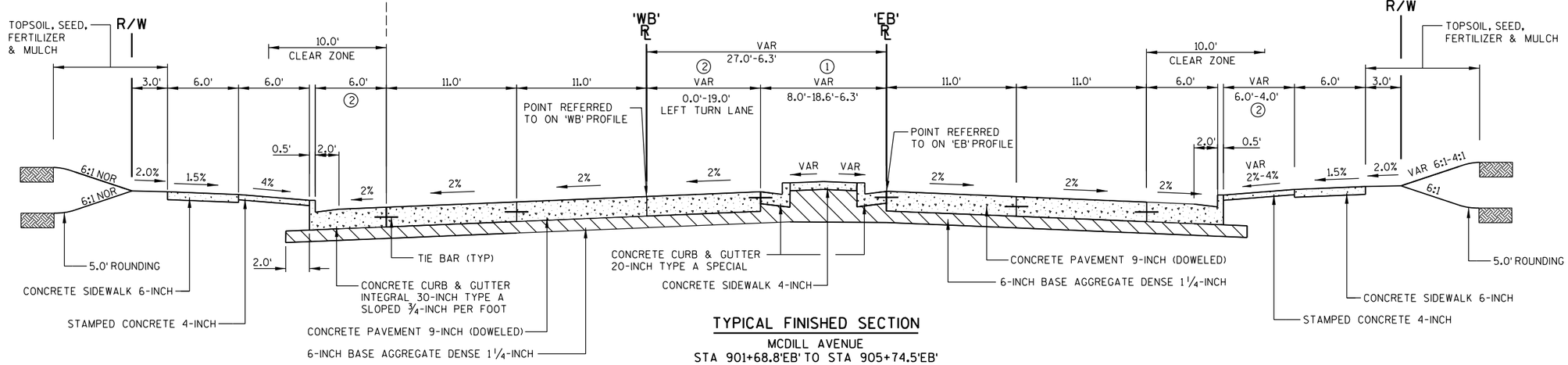


TYPICAL FINISHED SECTION

MCDILL AVENUE
STA 905+74.5'EB' TO STA 907+38.6'EB'



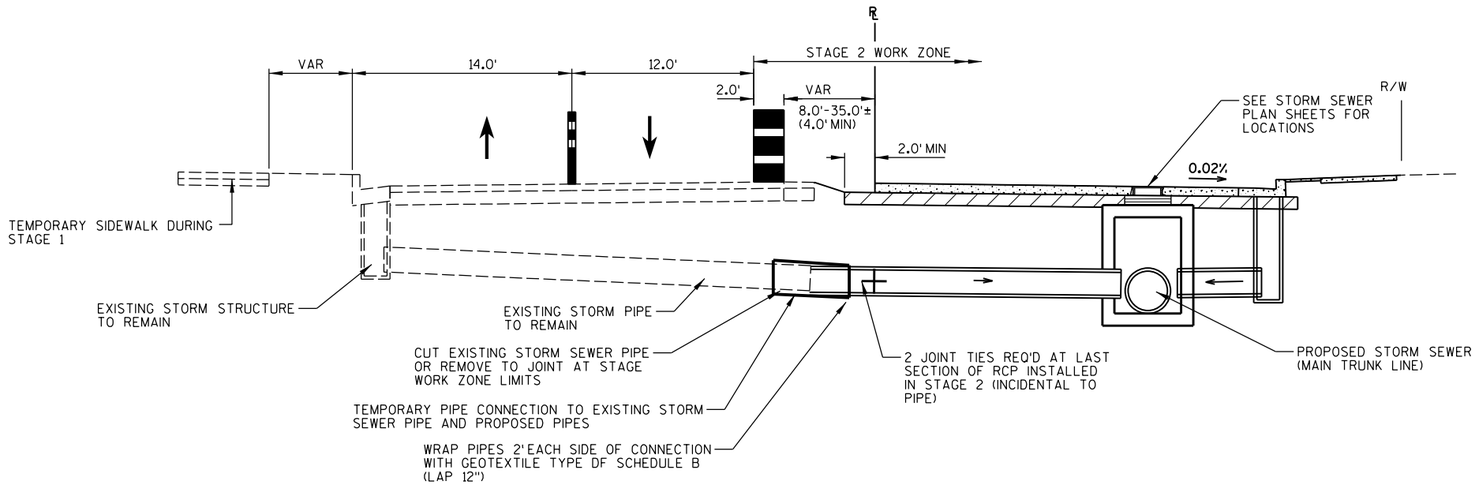
MCDILL AVENUE
STA 901+49.8'EB' TO STA 901+68.8'EB'



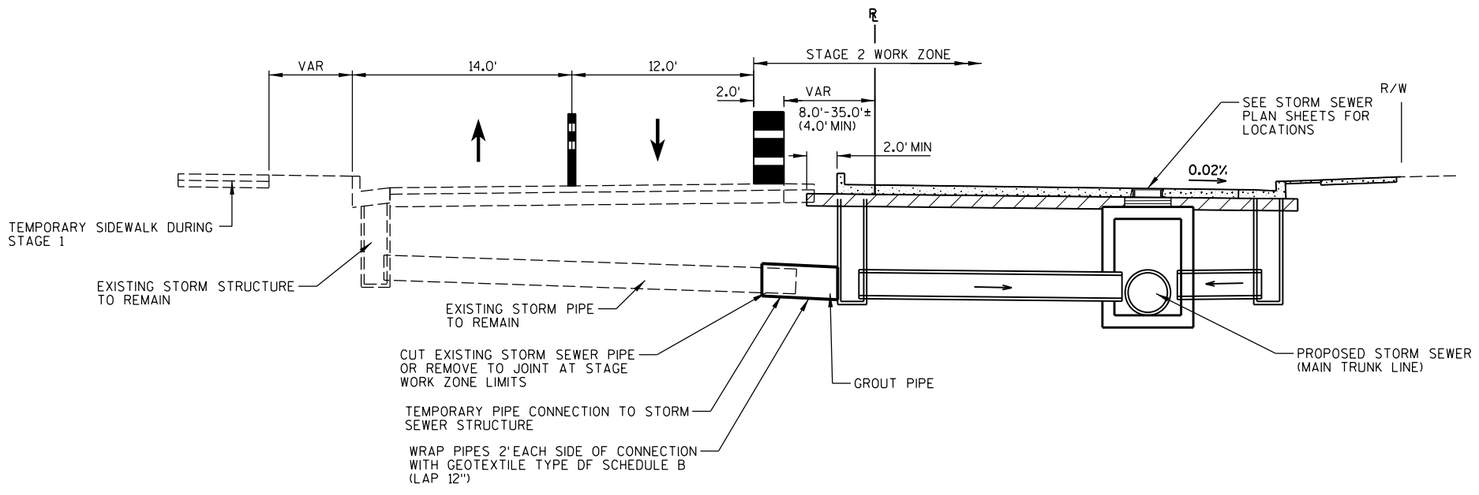
TYPICAL FINISHED SECTION

MCDILL AVENUE
STA 901+68.8'EB' TO STA 905+74.5'EB'

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET 22	E

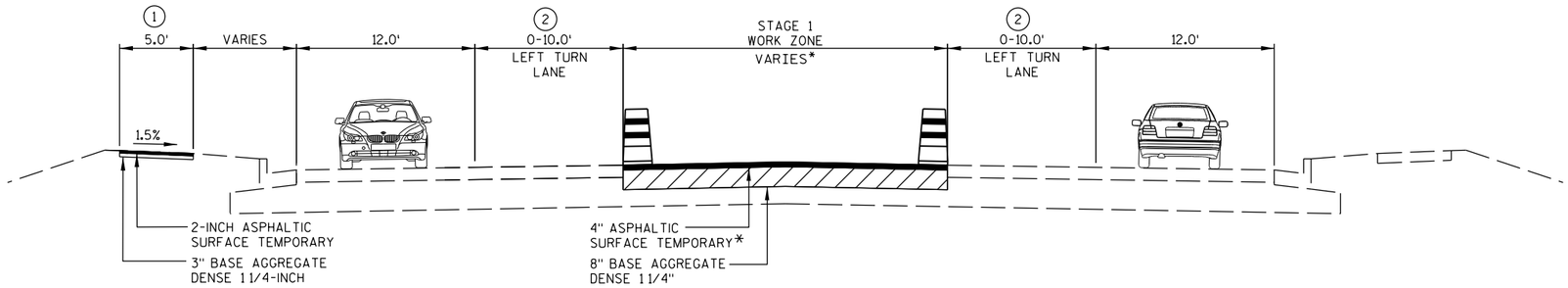


TEMPORARY CONNECTION TO
EXISTING STORM SEWER PIPE
NTS



TEMPORARY CONNECTION TO
STORM SEWER STRUCTURE
NTS

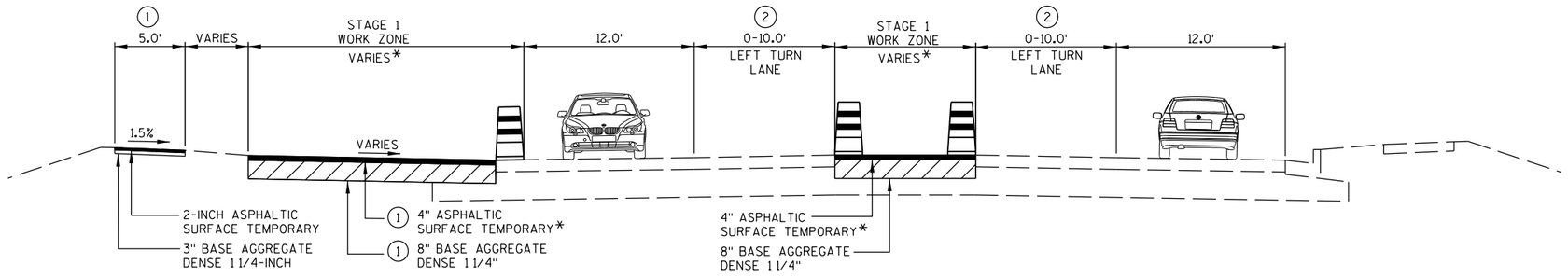
2



TYPICAL SECTION - STAGE 1

BUS 51
STA 208+60 - STA 216+10
STA 223+87 - END

*REFER TO TRAFFIC CONTROL PLANS FOR WORK ZONE LIMITS AND LOCATIONS OF ASPHALTIC SURFACE TEMPORARY.



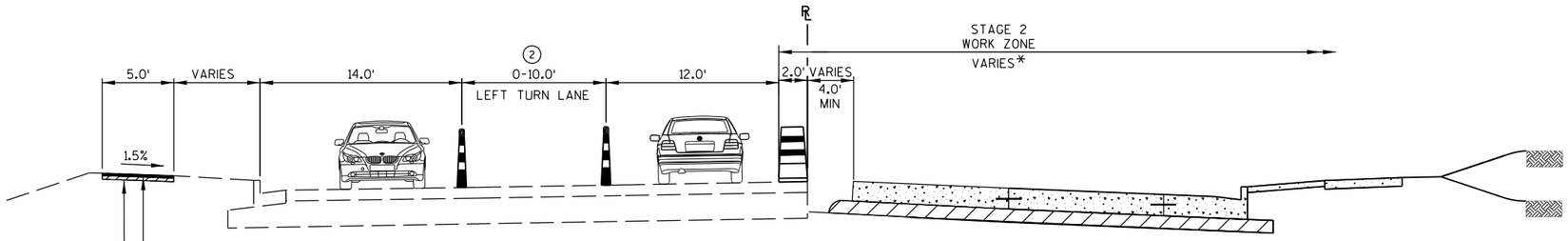
TYPICAL SECTION - STAGE 1

BUS 51
STA 216+10 - STA 223+87

(1) INSTALL TEMPORARY SIDEWALK ALONG WEST SIDE AT LOCATIONS WHERE EXISTING SIDEWALK DOES NOT EXIST. INSTALL PRIOR TO REMOVAL OF EXISTING SIDEWALK ALONG EAST SIDE. MATCH TEMPORARY SIDEWALK INTO EXISTING DRIVEWAYS, PARKING LOTS, SIDE STREETS AND SIDEWALKS ALONG THE WEST SIDE CORRIDOR. REFER TO STAGING PLANS FOR LOCATIONS OF TEMPORARY SIDEWALK.

(2) REFER TO STAGING PLANS FOR LOCATIONS OF TURNING LANES.

2



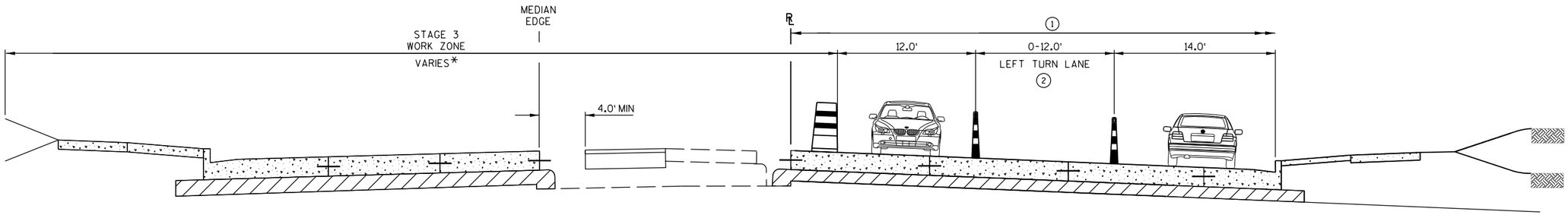
TYPICAL SECTION - STAGE 2
BUS 51
STA 208+50 - END

* REFER TO TRAFFIC CONTROL PLANS FOR WORK ZONE LIMITS.

(2) REFER TO STAGING PLANS FOR LOCATIONS OF TURNING LANES.

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL TYPICAL SECTIONS	SHEET 25	E

2



TYPICAL SECTION - STAGE 3

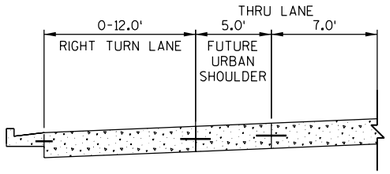
BUS 51
STA 208+50 - END

* REFER TO TRAFFIC CONTROL PLANS FOR WORK ZONE LIMITS.

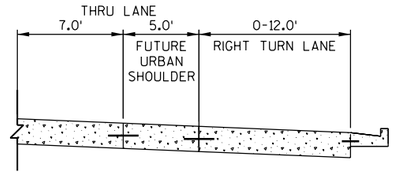
① CONSTRUCTED UNDER STAGE 2

② REFER TO STAGING PLANS FOR LOCATIONS OF TURNING LANES

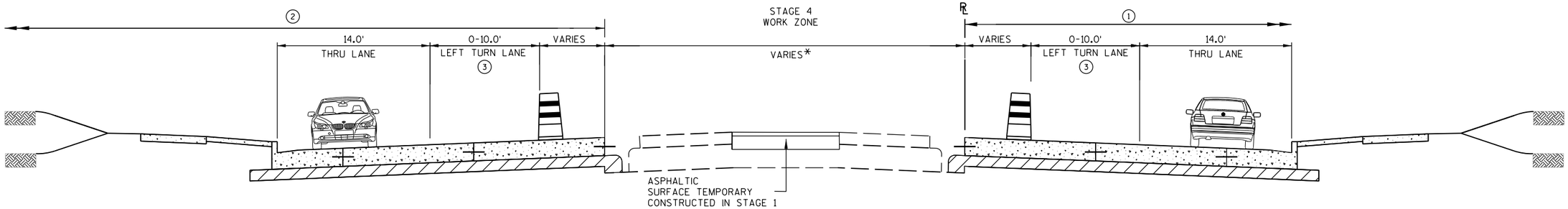
PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL TYPICAL SECTIONS	SHEET 26	E



RIGHT TURN LANE - STAGE 4
BUS 51
STA 216+70 - STA 223+70



RIGHT TURN LANE - STAGE 4
BUS 51
STA 216+70 - STA 223+70



TYPICAL SECTION - STAGE 4
BUS 51
STA 208+50 - STA 216+70
STA 223+70 - END

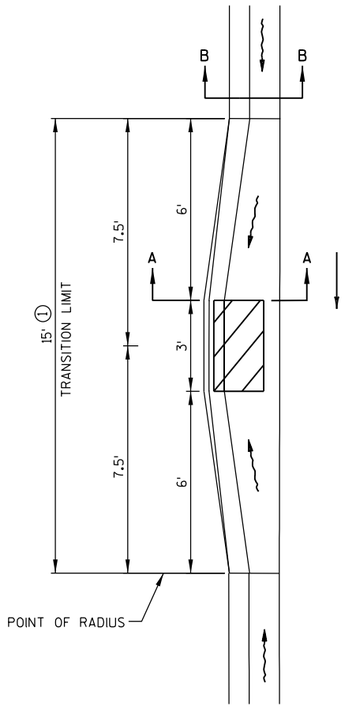
* REFER TO TRAFFIC CONTROL PLANS FOR WORK ZONE LIMITS.

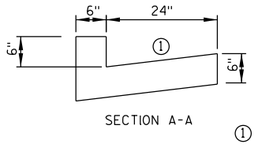
① CONSTRUCTED UNDER STAGE 2

② CONSTRUCTED UNDER STAGE 3

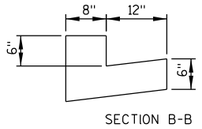
③ REFER TO STAGING PLANS FOR LOCATIONS OF TURNING LANES

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL TYPICAL SECTIONS	SHEET 27	E





① USE TYPE 3 INLET WITH H OR HS CASTING

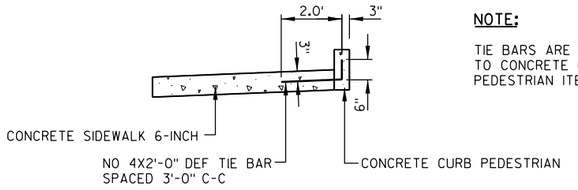


NOTES:

① PAYMENT FOR TRANSITIONS SHALL BE PAID AS THE ITEM OF CONCRETE CURB AND GUTTER 20-INCH TYPE A AND D SPECIAL.

② WHERE REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION WILL BE SHOWN ELSEWHERE IN THE PLANS.

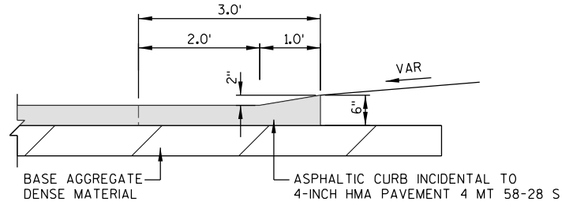
MEDIAN CURB & GUTTER AT INLETS



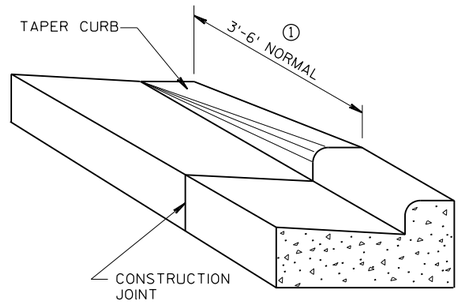
NOTE:

TIE BARS ARE INCIDENTAL TO CONCRETE CURB PEDESTRIAN ITEM.

CONCRETE CURB PEDESTRIAN TIE BAR DETAIL

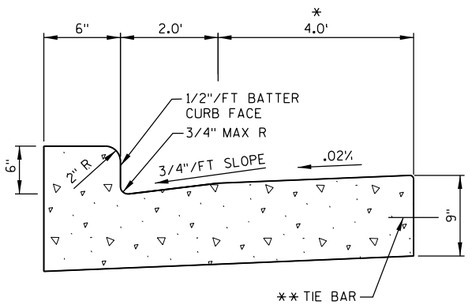


ASPHALTIC CURB DETAIL



① PROVIDE TAPERED CURB HEAD AT APPROACH ENDS. INCIDENTAL TO CONCRETE CURB & GUTTER ITEMS TO WITH IT APPLIES.

CURB & GUTTER TERMINI

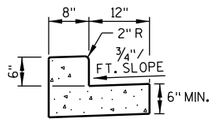


CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE A

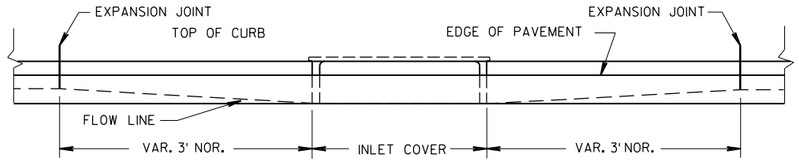
NOTE:

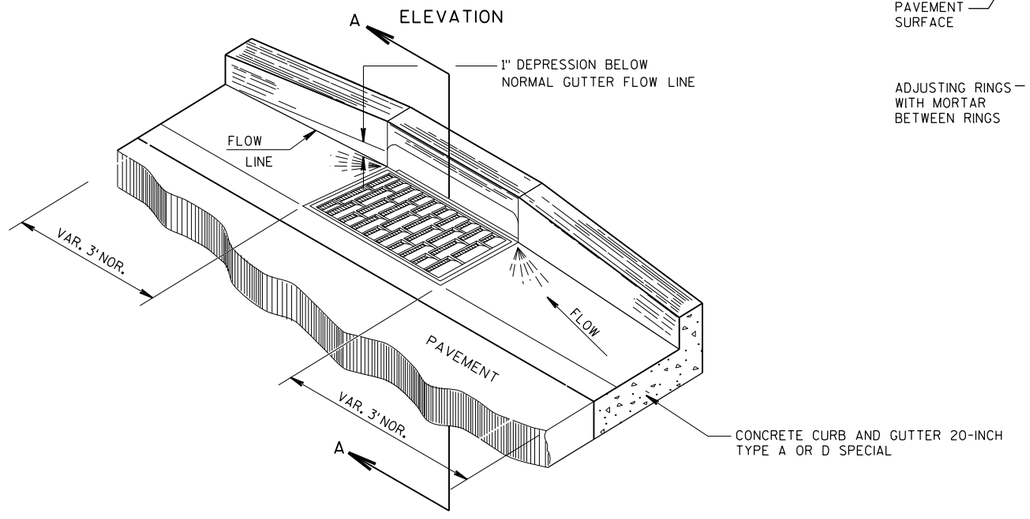
* BEING PAID FOR AS CONCRETE PAVEMENT 9-INCH

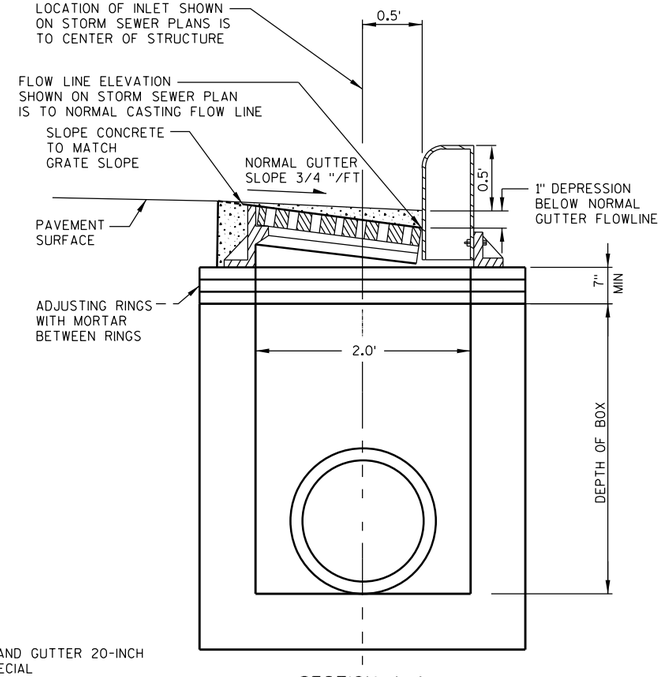
** INCIDENTAL TO CONCRETE PAVEMENT



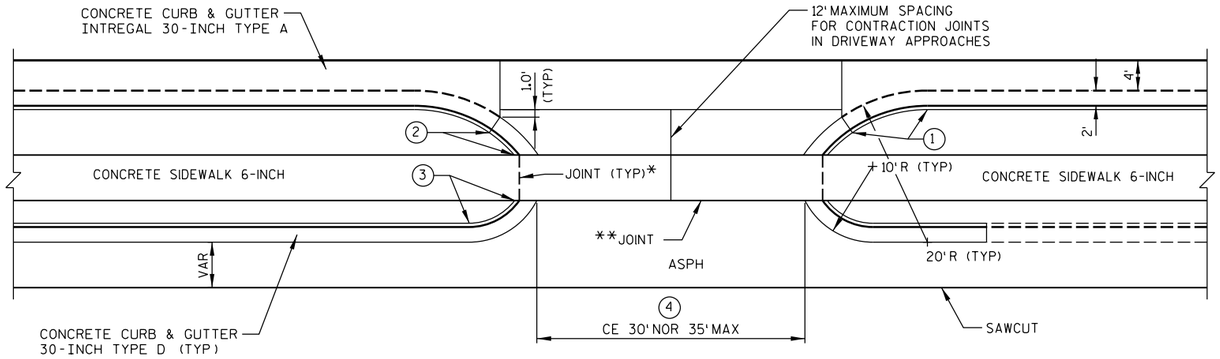
CONCRETE CURB AND GUTTER 20-INCH TYPE A AND D SPECIAL







INLET



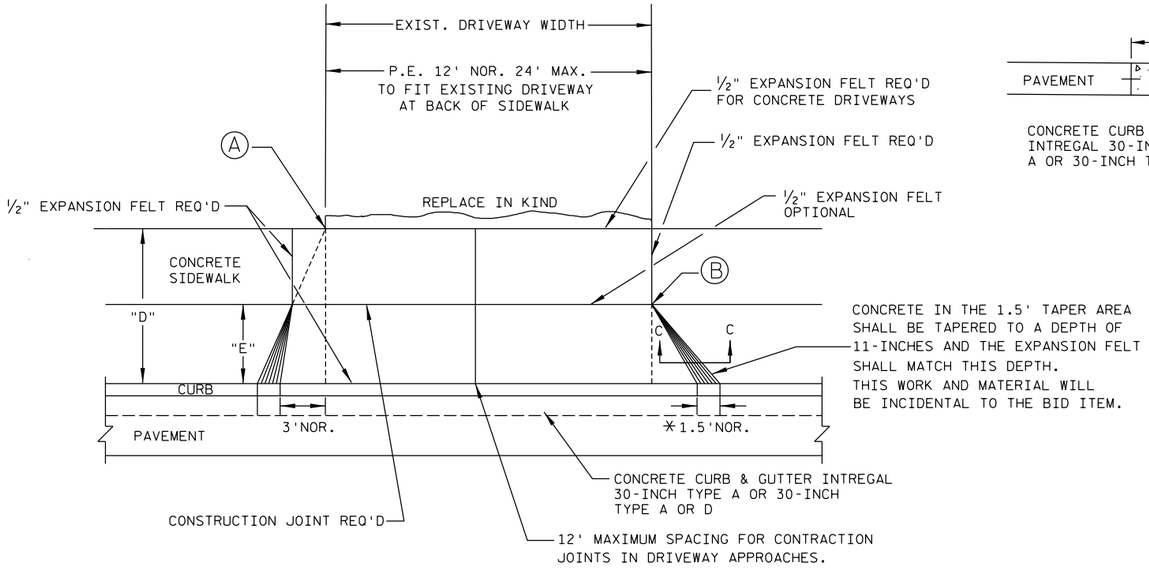
NOTES:

1. TAPER CURB HEAD FROM 6" TO 2" IN 6'-8'(TYP)
2. TAPER CURB HEAD FROM 2" TO 0" TO MATCH SIDEWALK FACE (TYP)
3. TAPER CURB HEAD FROM 6" TO 0" TO MATCH SIDEWALK BACK
4. SEE PLAN AND PROFILE SHEETS FOR DRIVEWAY WIDTHS
5. GUTTER PAN SLOPE IS 6.25% TO MATCH PREVIOUS PROJECT (PHASE 1)

* 1/2" EXPANSION FELT REQ'D

** 1/2" EXPANSION FELT REQ'D FOR CONCRETE DRIVEWAYS

COMMERCIAL ENTRANCE TYPE 1

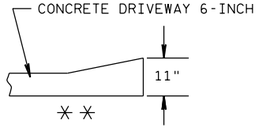


PLAN VIEW

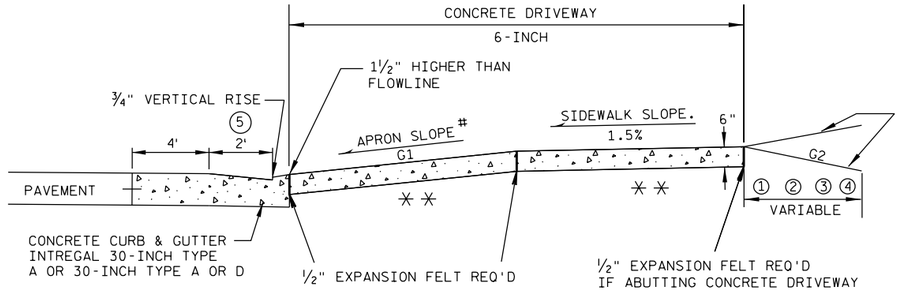
(A) WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

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

* WHEN "E" =0 MAKE CURB TAPER 5'



SECTION C-C



TYPICAL SIDEWALK SECTION

1. CONCRETE PAVEMENT 6-INCH
2. 6" BASE AGGREGATE DENSE 1 1/4-INCH
3. 6" COMPACTED BASE AGGREGATE DENSE 1 1/4-INCH BASE WITH 3" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
4. PARKING LOTS: 8" BASE AGGREGATE DENSE 1 1/4-INCH WITH 3" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

** = 6" BASE AGGREGATE DENSE 1 1/4-INCH REQ'D UNDER CONCRETE DRWY

\#

TERRACE	APRON SLOPE (G1)		
WIDTH	MIN %	DESIRABLE %	MAX %
3 FT	5.0	6.0	8.0
4 FT	5.0	6.0	8.0
5 FT	4.0	6.0	8.0
6 FT	4.0	6.0	8.0
7 FT	3.5	6.0	8.0
8 FT	3.0	6.0	8.0

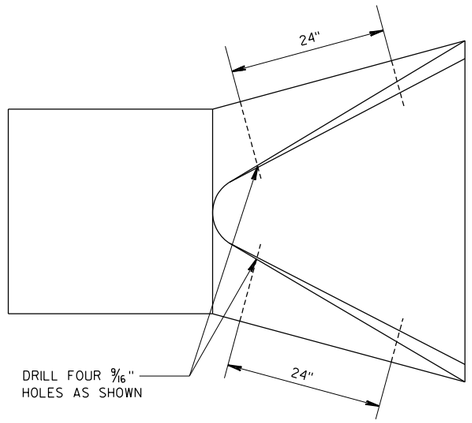
NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

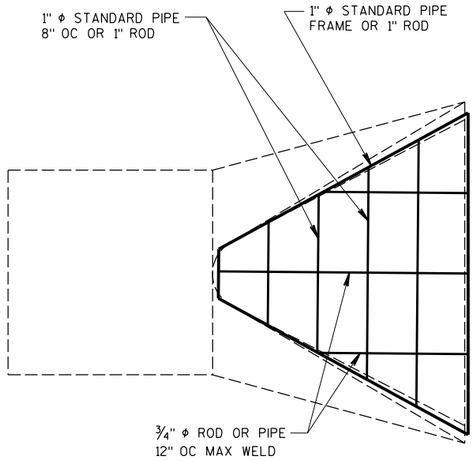
DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE



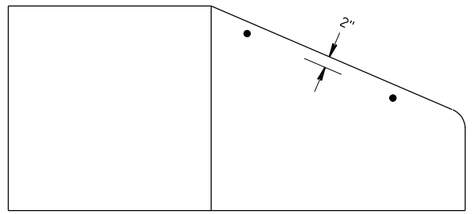
DEPRESSED SIDEWALK PROFILE

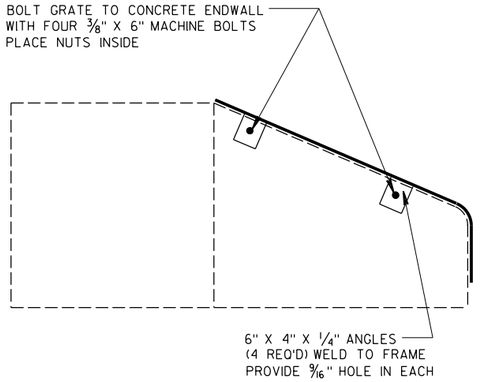
PRIVATE AND COMMERCIAL ENTRANCE TYPE 2

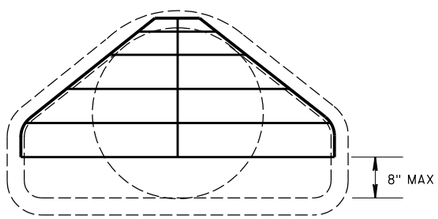




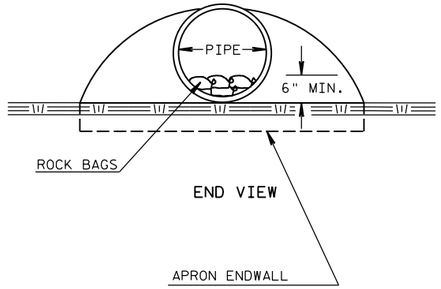
AT EACH PIPE

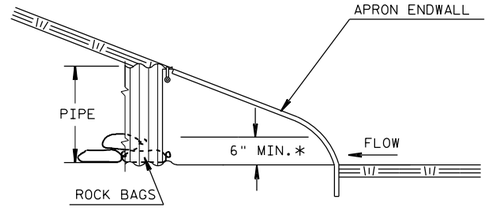






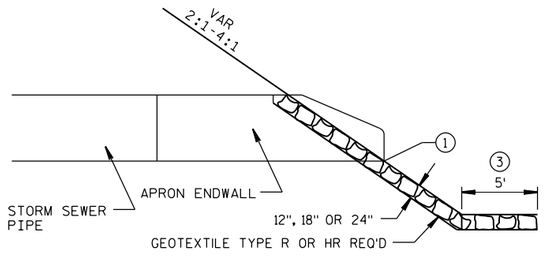
PIPE GRATE



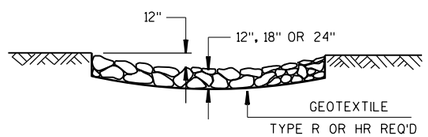


SIDE VIEW

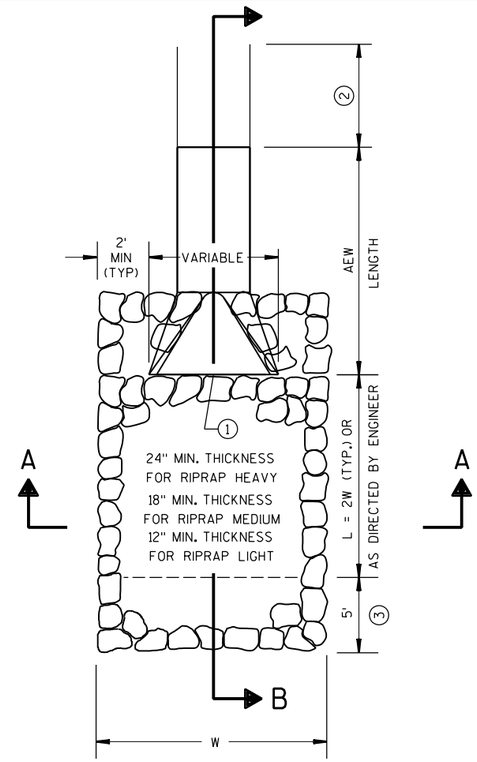
CULVERT PIPE CHECKS



SECTION B-B



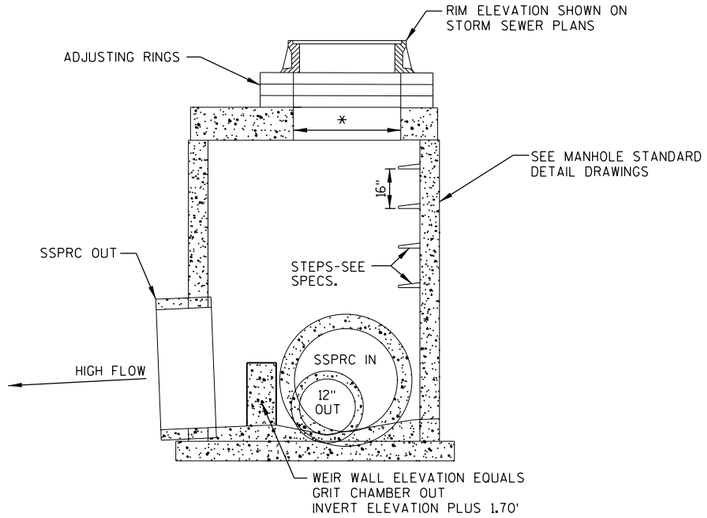
SECTION A-A



RIPRAP TREATMENT AT APRON ENDWALLS

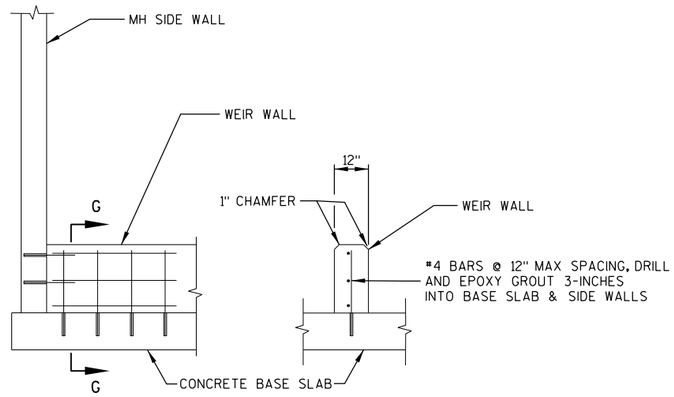
NOTES:

1. REFER TO STORM SEWER PLAN FOR AEW STA AND OFFSET LOCATION.
2. REFER TO STORM SEWER PLAN FOR STORM SEWER PIPE LENGTHS.
3. WIDTH AT INFILTRATION PONDS AS DIRECTED BY ENGINEER.



FRONT VIEW

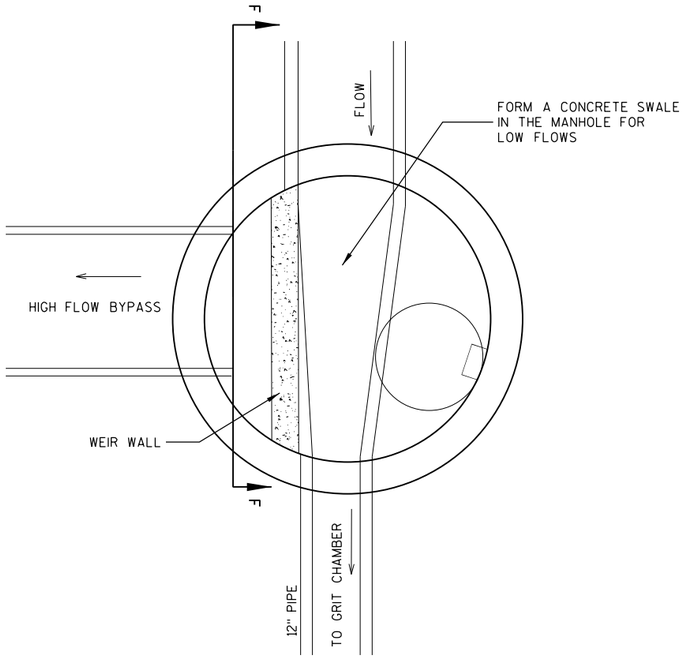
*USE 2'-0" DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS OR 3'-0" DIAMETER WITH TYPE "K" AND "M" COVERS



SECTION F - F

SECTION G - G

CONCRETE WEIR WALL



TOP VIEW

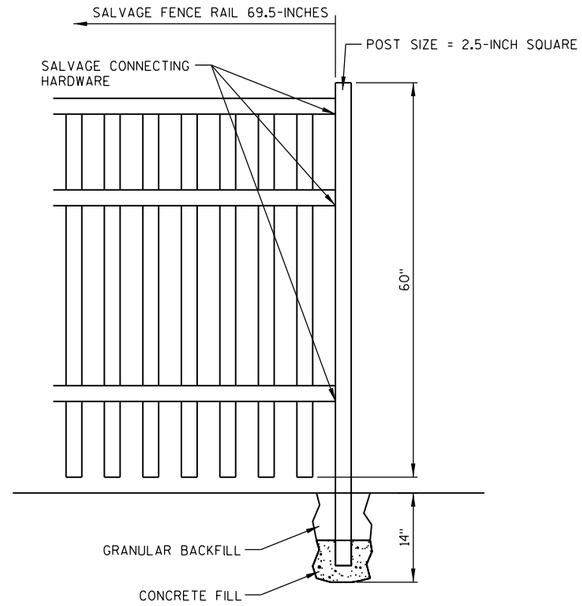
NOTES:

1. CORE-DRILL OR SAW-CUT ALL OPENINGS FOR SMOOTH SURFACES AND SHARP LINES

REINFORCEMENT NOTES:

1. SUBMIT SHOP DRAWING TO ENGINEER FOR REVIEW
2. MIN CONC COVER 1-1/2" FOR ALL BARS
3. SIDE WALLS REQUIRE #4 BARS 12" CC BOTH DIRECTIONS
4. BASE SLAB REQUIRES #4 BARS 6" CC BOTH DIRECTIONS
5. TOP SLAB REQUIRES #4 BARS 6" CC BOTH DIRECTIONS
6. BEND AND TIE ALL CORNERS

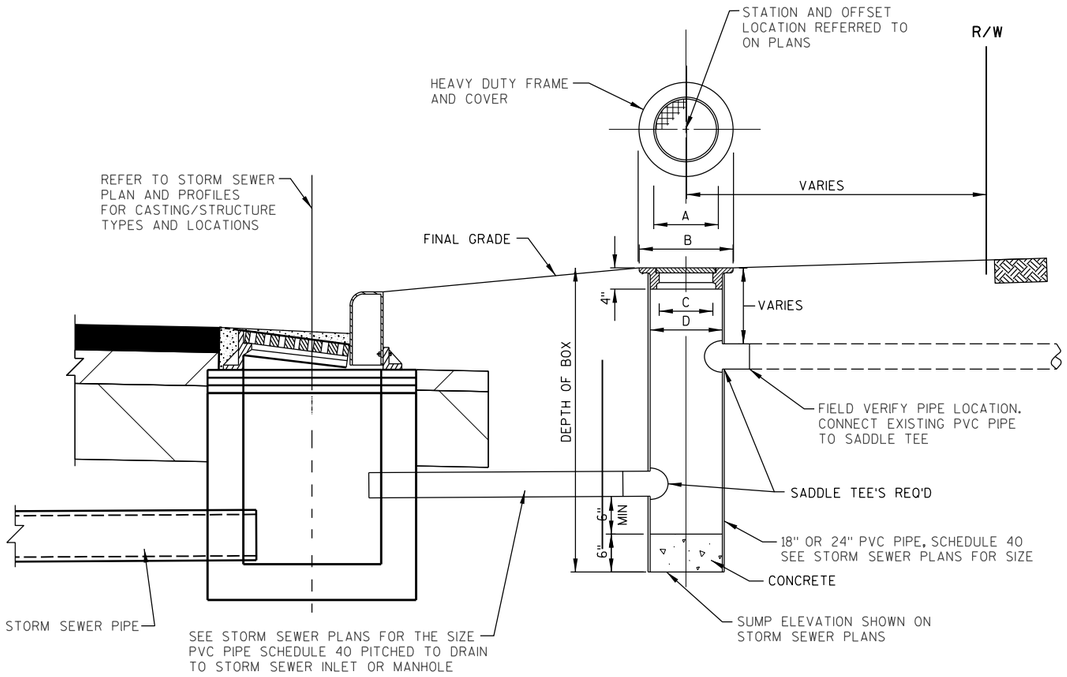
MANHOLE DIVERSION DETAILS



NOTES:

THE BOTTOM 6-INCHES OF EMBEDMENT SHALL BE CONCRETE

SALVAGE AND REINSTALL FENCE



RESIDENTIAL MANHOLE
NOT TO SCALE

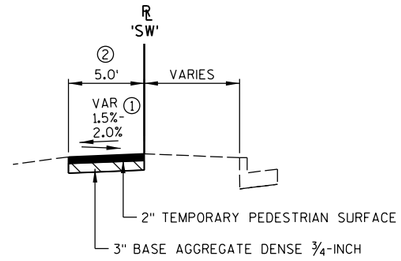
* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5% PLUS OR MINUS OF THE WEIGHT SHOWN

PIPE DIAMETER (INSIDE)	24 (INCHES)
A COVER	22¼
B FRAME	26½
C FRAME	20½
D FRAME	23½
FRAME AND COVER *(LBS)	155

NOTES:

① TEMPORARY SIDEWALK TO BE SLOPED EITHER DIRECTION TO ACCOMMODATE EXISTING DRAINAGE.

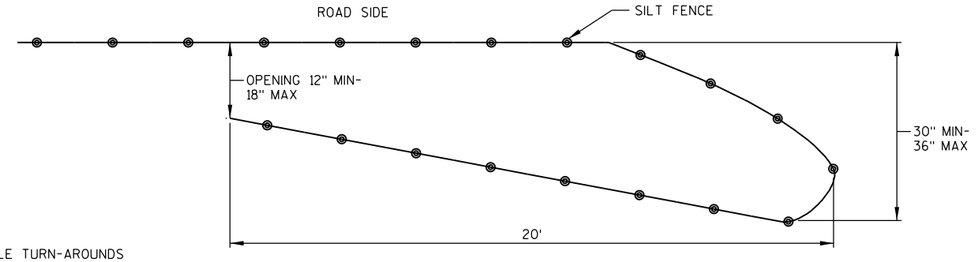
② SEE PLAN DETAIL- 'TEMPORARY SIDEWALK' FOR LOCATIONS.



TEMPORARY SIDEWALK - STAGE 1
NOT TO SCALE

GENERAL NOTES:

THE PURPOSE OF THE TURTLE TURN-AROUNDS ARE TO REDIRECT THE TURTLES AWAY FROM THE CONSTRUCTION ZONE. DESIGN SHOULD INCLUDE TRENCH-IN SEDIMENT FENCING AND FENCING SUPPORTS ON THE UPSLOPE SIDE OF FENCE. SILT FENCE POSTS FOR THE TURN-AROUND SHALL BE ON THE OUTSIDE OF THE TURN-AROUND. AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS.



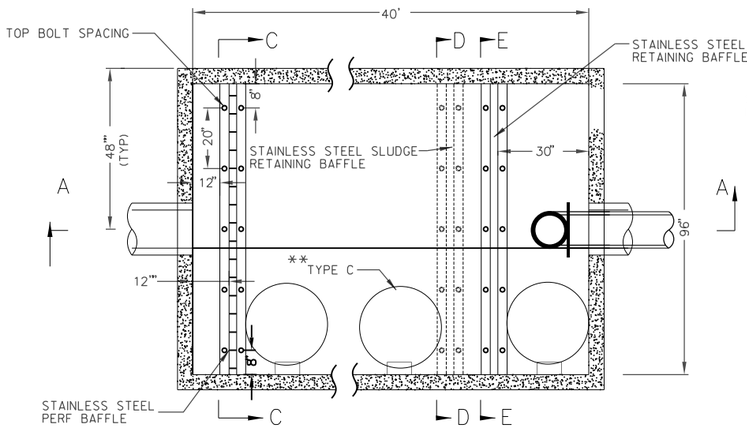
PLAN VIEW

TEMPORARY SMALL ANIMAL TURN-AROUND
(INCLUDE IN SILT FENCE BID ITEM)

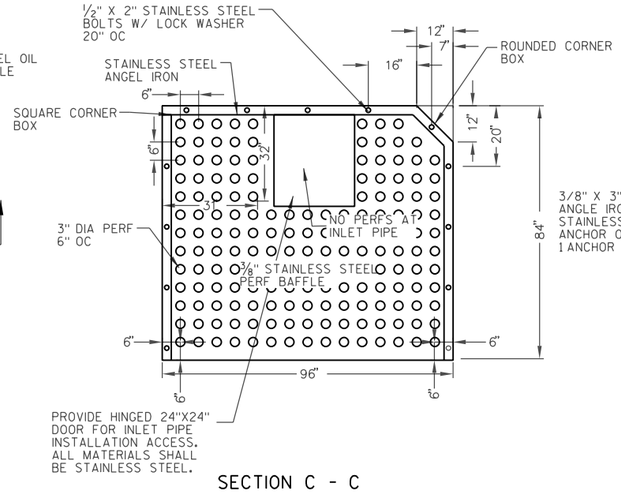
RUNOFF COEFFICIENT TABLE

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

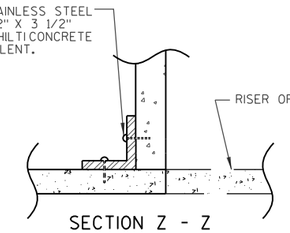
TOTAL PROJECT AREA = 29.66 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 32.26 ACRES



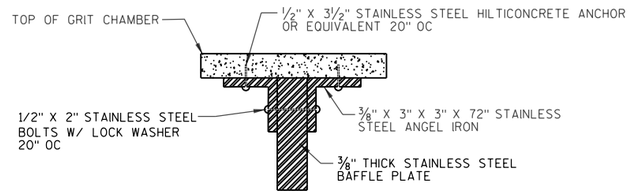
PLAN VIEW B - B



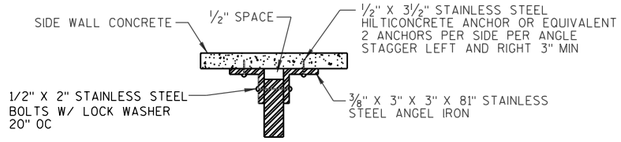
SECTION C - C



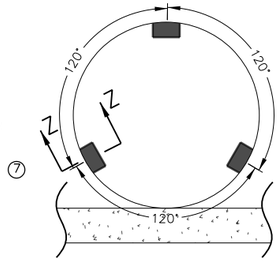
SECTION Z - Z



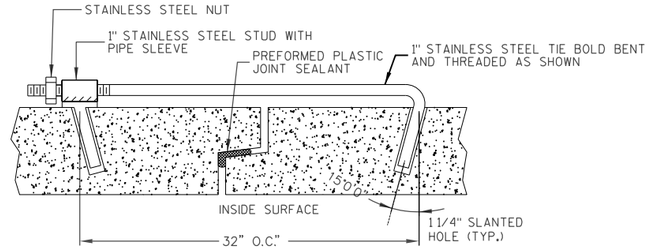
GRIT CHAMBER TOP BOLTING DETAIL



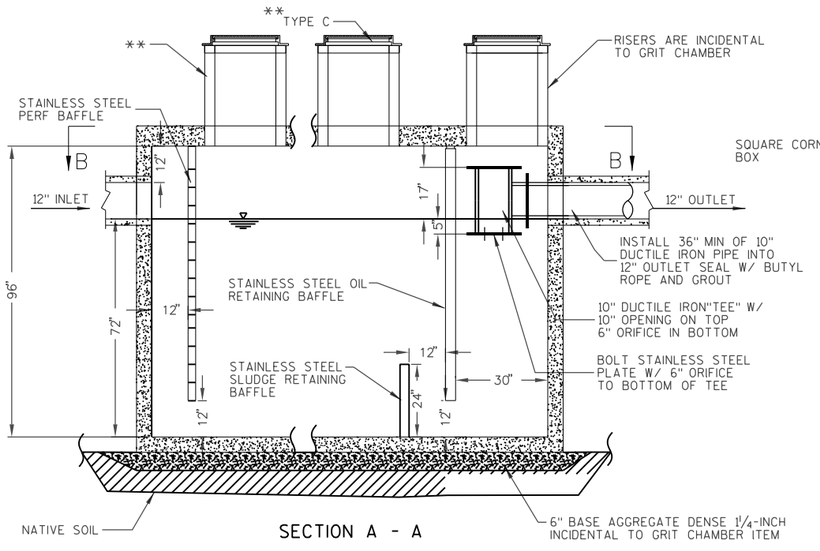
GRIT CHAMBER SIDE BOLTING DETAIL



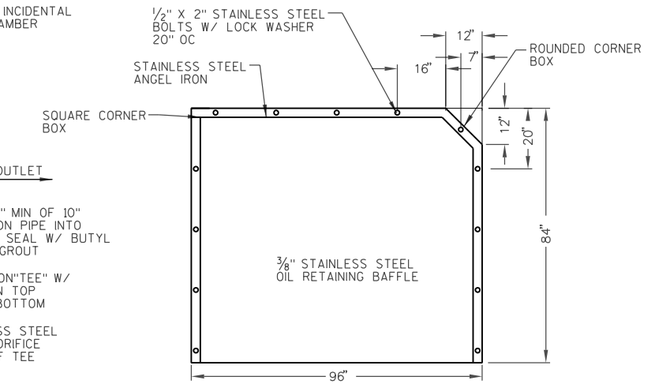
RISER CLIP DETAIL



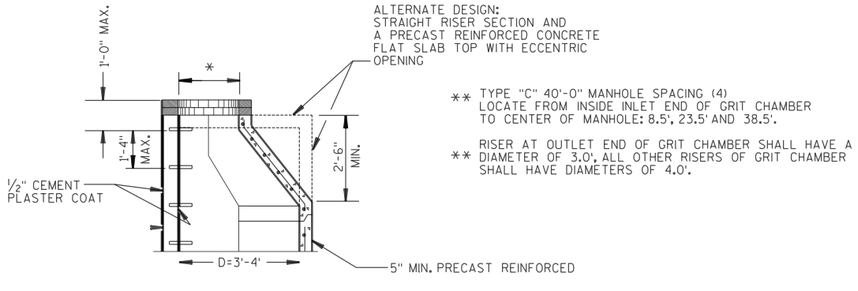
CONCEALED HOLE DESIGN JOINT TIE



SECTION A - A

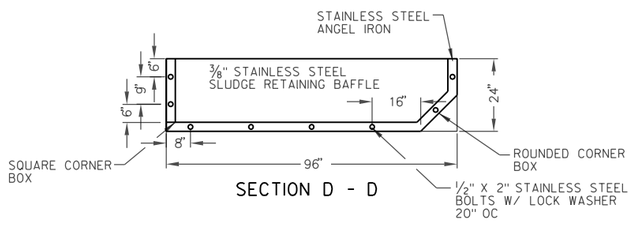


SECTION E - E



** TYPE "C" 40'-0" MANHOLE SPACING (4) LOCATE FROM INSIDE INLET END OF GRIT CHAMBER TO CENTER OF MANHOLE: 8.5', 23.5' AND 38.5'.

** RISER AT OUTLET END OF GRIT CHAMBER SHALL HAVE A DIAMETER OF 3.0', ALL OTHER RISERS OF GRIT CHAMBER SHALL HAVE DIAMETERS OF 4.0'.



SECTION D - D

TYPE C GRIT CHAMBERS

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.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

STEPS SHALL BE INSTALLED IN THE STRUCTURE WITH THE FOLLOWING REQUIREMENTS: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2-INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

LOCATE RISERS TO PROVIDE AREA ON TOP OF GRIT CHAMBER TO SET RISER AND TO ALIGN RISER STEPS WITH GRIT CHAMBER STEPS.

* USE 2'-0" DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 3'-0" DIAMETER WITH TYPE "K" AND "M" COVERS.

(1) CORE-DRILL OR SAW-CUT ALL OPENINGS FOR SMOOTH SURFACES AND SHARP LINES.

(2) SUBMIT SHOP DRAWING TO ENGINEER FOR REVIEW.

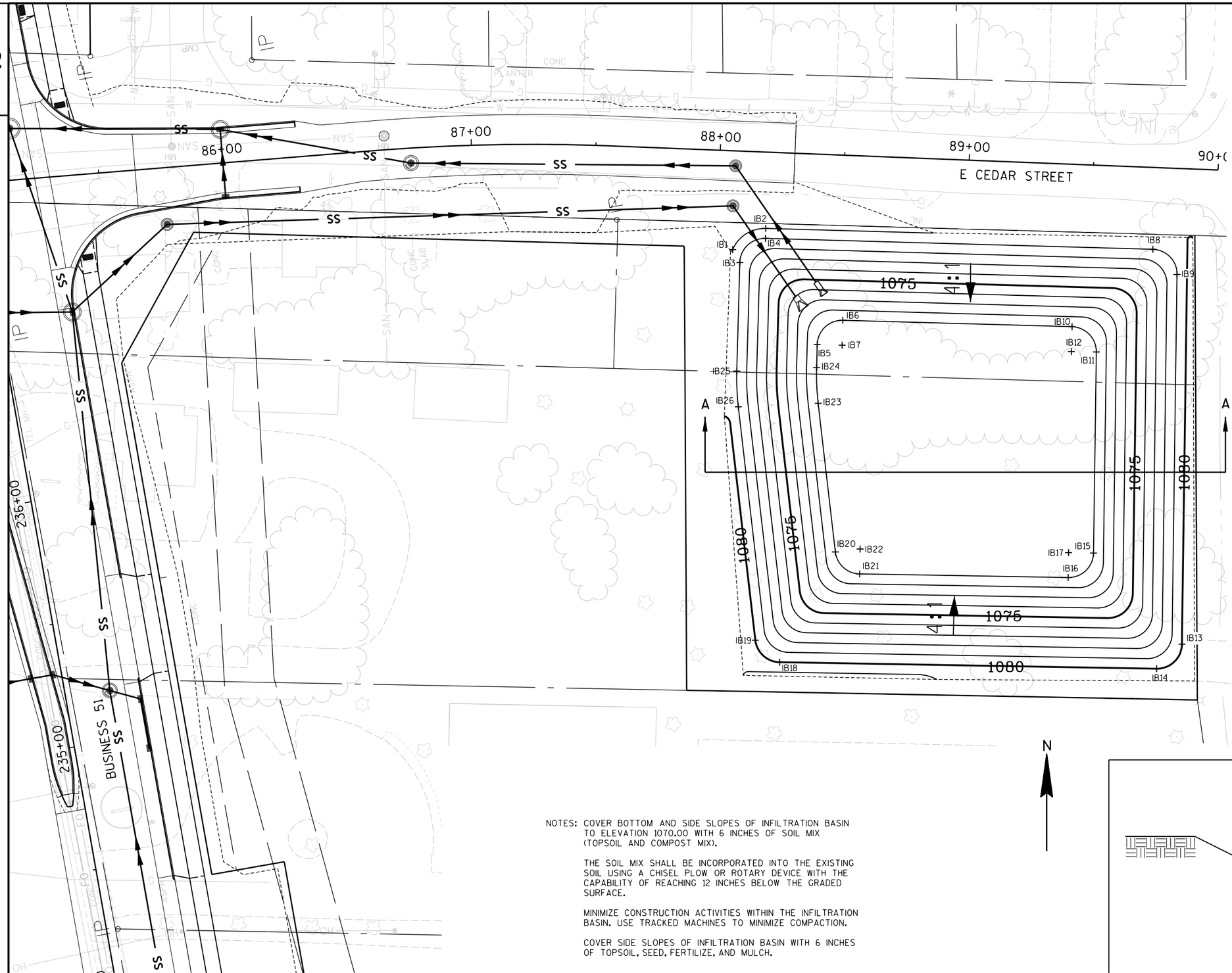
(3) ALL JOINT SECTIONS SHALL BE GASKETED.

(4) ALL JOINT SECTIONS SHALL BE TIED W/ TWO-CONCEALED HOLE TIES EVENLY SPACED ON VERTICAL WALLS.

(5) BAFFEL WIDTHS ARE 7'-11" TO ALLOW FOR A 1/2" GAP FROM SIDE WALLS FOR EXPANSION.

(6) LOCATE INSIDE DIAMETER OF RISER & ACCESS HOLE IN BOX FLUSH WITH INSIDE WALL OF GRIT CHAMBER.

(7) SEE RISER CLIP DETAIL FOR RISER ATTACHMENT TO GRIT CHAMBER.



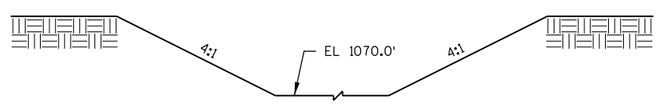
INFILTRATION BASIN POINT TABLE					
POINT	STATION	OFFSET	RADIUS	FINISHED EL	COORDINATES
IB1	236+50.88	294.9' RT		1080.00	Y=189427.568 X=172126.676
IB2	236+56.96	309.5' RT		1080.00	Y=189436.076 X=172139.950
IB3	236+45.26	296.9' RT		1079.00	Y=189422.363 X=172129.561
IB4	236+53.04	308.7' RT		1079.00	Y=189432.078 X=172139.838
IB5	236+07.48	321.8' RT		1071.00	Y=189389.477 X=172160.650
IB6	236+15.27	333.6' RT		1071.00	Y=189399.192 X=172170.926
IB7	236+05.47	331.6' RT	10.0'	1070.00	Y=189389.196 X=172170.646
IB8	236+21.78	461.1' RT		1079.00	Y=189427.709 X=172295.380
IB9	236+10.11	468.9' RT		1079.00	Y=189417.576 X=172305.099
IB10	235+96.77	423.8' RT		1071.00	Y=189396.607 X=172262.950
IB11	235+85.10	431.6' RT		1071.00	Y=189386.474 X=172272.669
IB12	235+86.97	421.7' RT	10.0'	1070.00	Y=189386.611 X=172262.670
IB13	234+63.56	445.1' RT		1080.00	Y=189269.117 X=172307.061
IB14	234+55.61	433.4' RT		1080.00	Y=189259.259 X=172296.889
IB15	235+05.78	416.5' RT		1071.00	Y=189305.737 X=172271.560
IB16	234+96.84	404.8' RT		1071.00	Y=189295.879 X=172261.388
IB17	235+07.65	406.7' RT	10.0'	1070.00	Y=189305.874 X=172261.561
IB18	234+84.42	284.8' RT		1080.00	Y=189261.875 X=172145.563
IB19	234+94.83	276.7' RT		1080.00	Y=189270.722 X=172135.803
IB20	235+24.17	314.5' RT		1071.00	Y=189306.171 X=172167.934
IB21	235+13.77	322.6' RT		1071.00	Y=189297.325 X=172177.695
IB22	235+23.58	324.5' RT	10.0'	1070.00	Y=189307.323 X=172177.868
IB23	235+84.15	318.0' RT		1071.00	Y=189365.857 X=172161.014
IB24	235+98.37	319.9' RT		1071.00	Y=189380.181 X=172160.389
IB25	236+02.55	288.1' RT		1079.00	Y=189378.781 X=172128.337
IB26	235+88.33	286.2' RT		1079.00	Y=189364.456 X=172128.963

NOTES: COVER BOTTOM AND SIDE SLOPES OF INFILTRATION BASIN TO ELEVATION 1070.00 WITH 6 INCHES OF SOIL MIX (TOPSOIL AND COMPOST MIX).

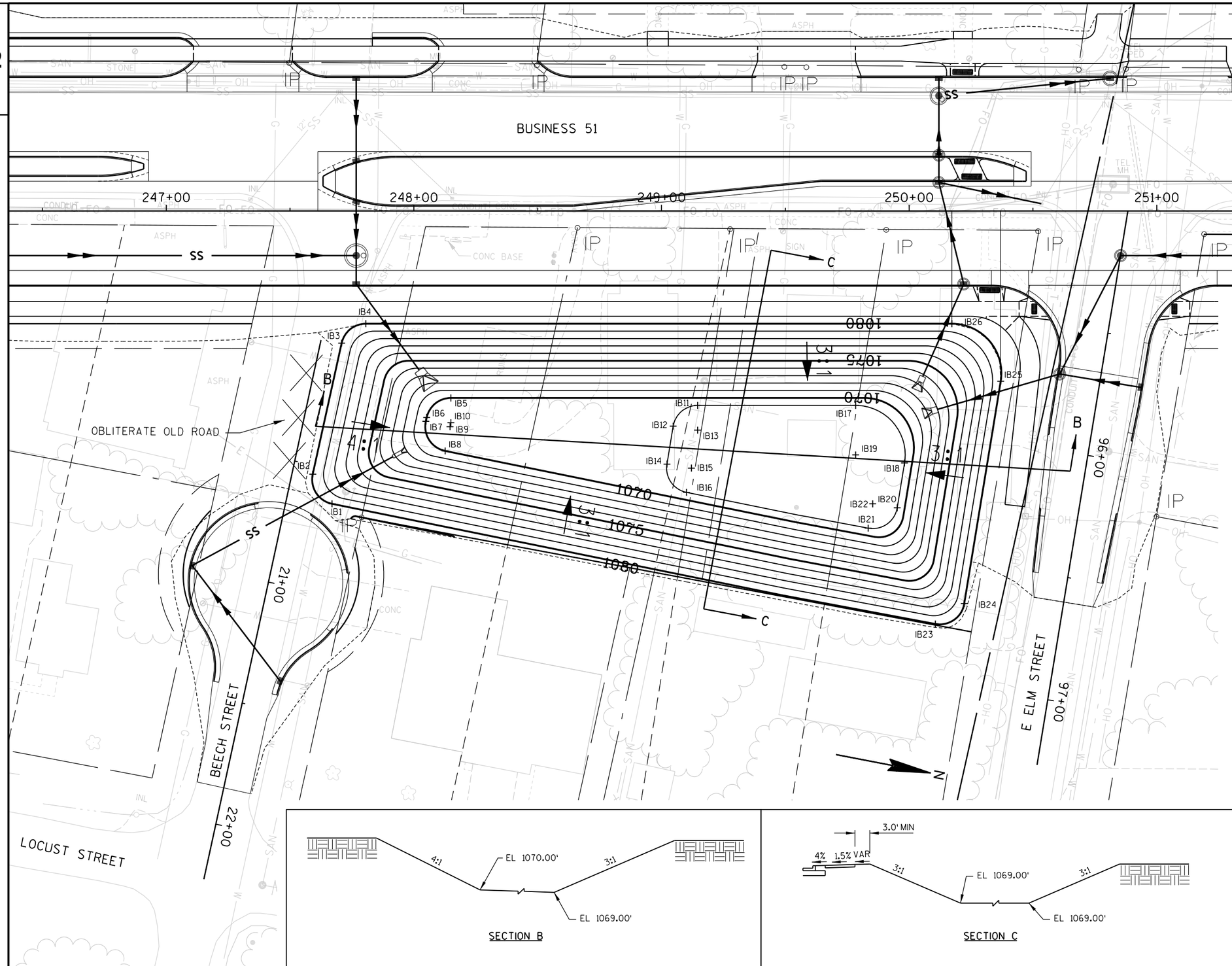
THE SOIL MIX SHALL BE INCORPORATED INTO THE EXISTING SOIL USING A CHISEL PLOW OR ROTARY DEVICE WITH THE CAPABILITY OF REACHING 12 INCHES BELOW THE GRADED SURFACE.

MINIMIZE CONSTRUCTION ACTIVITIES WITHIN THE INFILTRATION BASIN. USE TRACKED MACHINES TO MINIMIZE COMPACTION.

COVER SIDE SLOPES OF INFILTRATION BASIN WITH 6 INCHES OF TOPSOIL, SEED, FERTILIZE, AND MULCH.



SECTION A

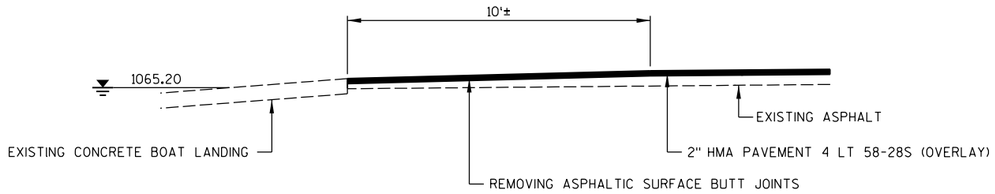


SECTION B

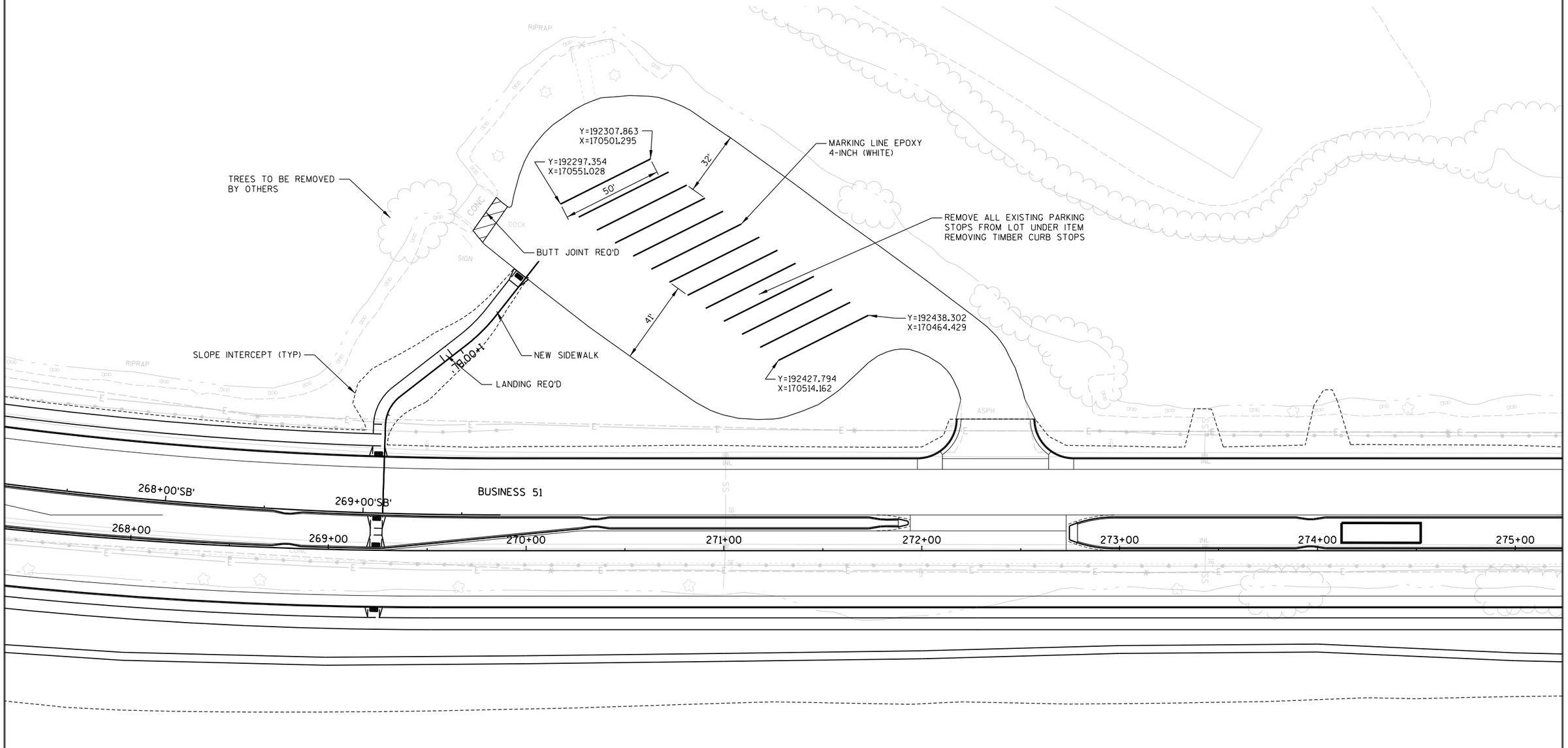
SECTION C

INFILTRATION BASIN POINT TABLE

POINT	STATION	OFFSET	RADIUS	FINISHED EL	COORDINATES
IB1	247+66.96	118.2' RT		1080.00	Y=190494.800 X=171740.542
IB2	247+59.18	106.3' RT		1080.00	Y=190484.885 X=171730.297
IB3	247+70.82	53.4' RT		1080.00	Y=190486.215 X=171676.125
IB4	247+80.59	45.5' RT		1080.00	Y=190494.304 X=171666.555
IB5	248+14.95	75.5' RT		1070.00	Y=190533.754 X=171689.447
IB6	248+05.18	83.4' RT		1070.00	Y=190525.665 X=171699.018
IB7	248+04.83	84.9' RT		1070.00	Y=190525.626 X=171700.632
IB8	248+12.61	96.9' RT		1070.00	Y=190535.540 X=171710.877
IB9	248+14.60	87.1' RT	10.0'		Y=190535.623 X=171700.878
IB10	248+14.95	85.5' RT	10.0'		Y=190535.662 X=171699.263
IB11	249+14.58	78.5' RT		1069.00	Y=190632.127 X=171673.379
IB12	249+04.71	86.9' RT		1069.00	Y=190624.040 X=171683.492
IB13	249+14.58	88.5' RT	10.0'		Y=190634.036 X=171683.195
IB14	249+02.20	102.2' RT		1069.00	Y=190624.502 X=171698.992
IB15	249+12.07	103.8' RT	10.0'		Y=190634.497 X=171698.695
IB16	249+10.08	113.6' RT		1069.00	Y=190634.414 X=171708.694
IB17	249+78.40	78.5' RT		1069.00	Y=190694.775 X=171661.199
IB18	249+98.13	101.7' RT		1069.00	Y=190718.583 X=171680.243
IB19	249+78.40	98.5' RT	20.0'		Y=190698.591 X=171680.832
IB20	249+95.16	119.9' RT		1069.00	Y=190719.123 X=171698.592
IB21	249+83.45	128.1' RT		1069.00	Y=190709.193 X=171708.886
IB22	249+85.30	118.2' RT	10.0'		Y=190709.127 X=171698.886
IB23	250+10.55	166.7' RT		1080.00	Y=190743.173 X=171741.664
IB24	250+22.26	158.5' RT		1080.00	Y=190753.103 X=171731.370
IB25	250+36.99	68.7' RT		1080.00	Y=190750.424 X=171640.435
IB26	250+17.25	45.5' RT		1080.00	Y=190726.616 X=171621.391

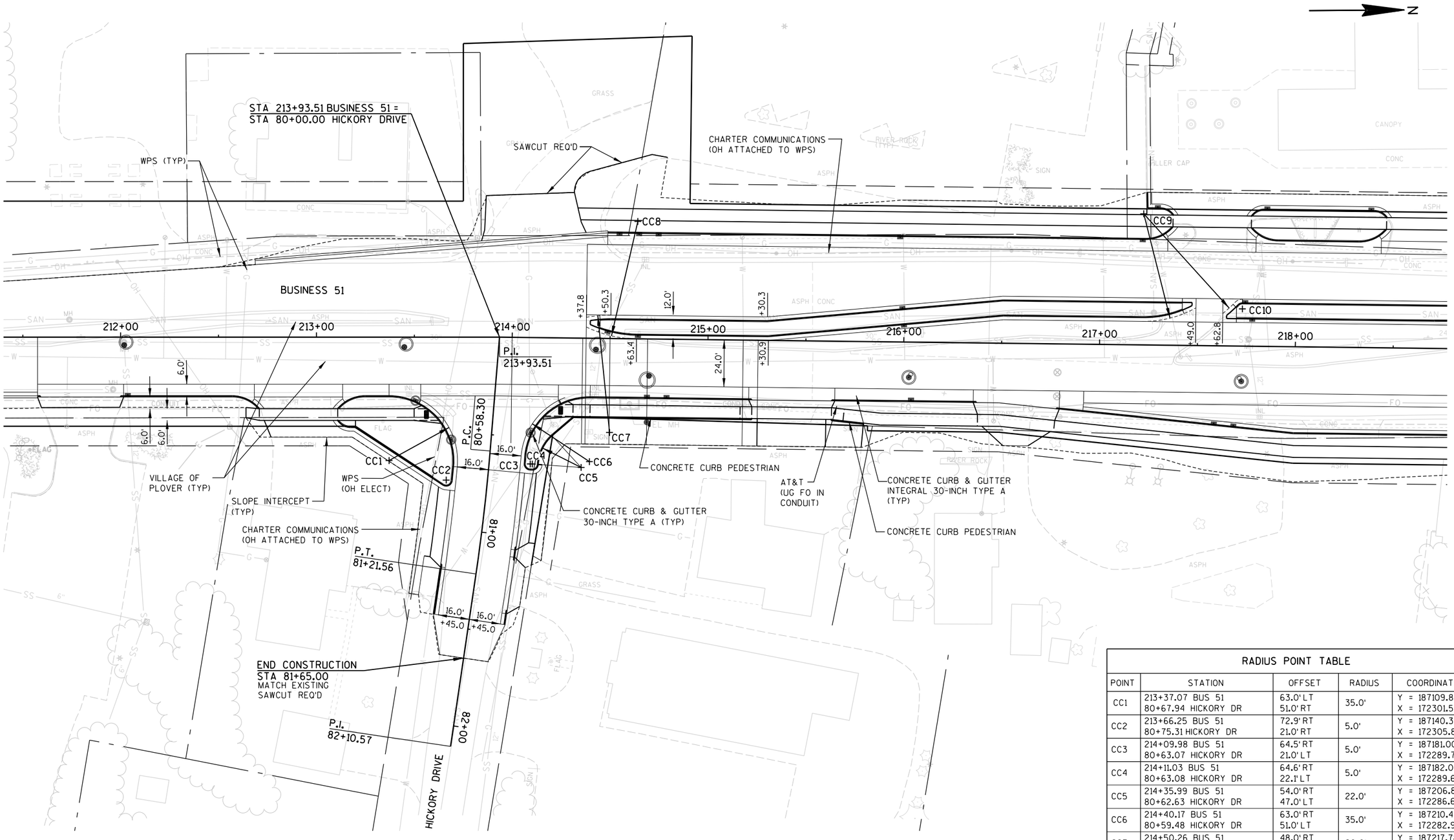


BUTT JOINT DETAIL



PROJECT NO:6414-00-81	HWY:BUSINESS 51	COUNTY:PORTAGE	CONSTRUCTION DETAIL - BOAT LANDING PARKING LOT OVERLAY	SHEET 36	E

2

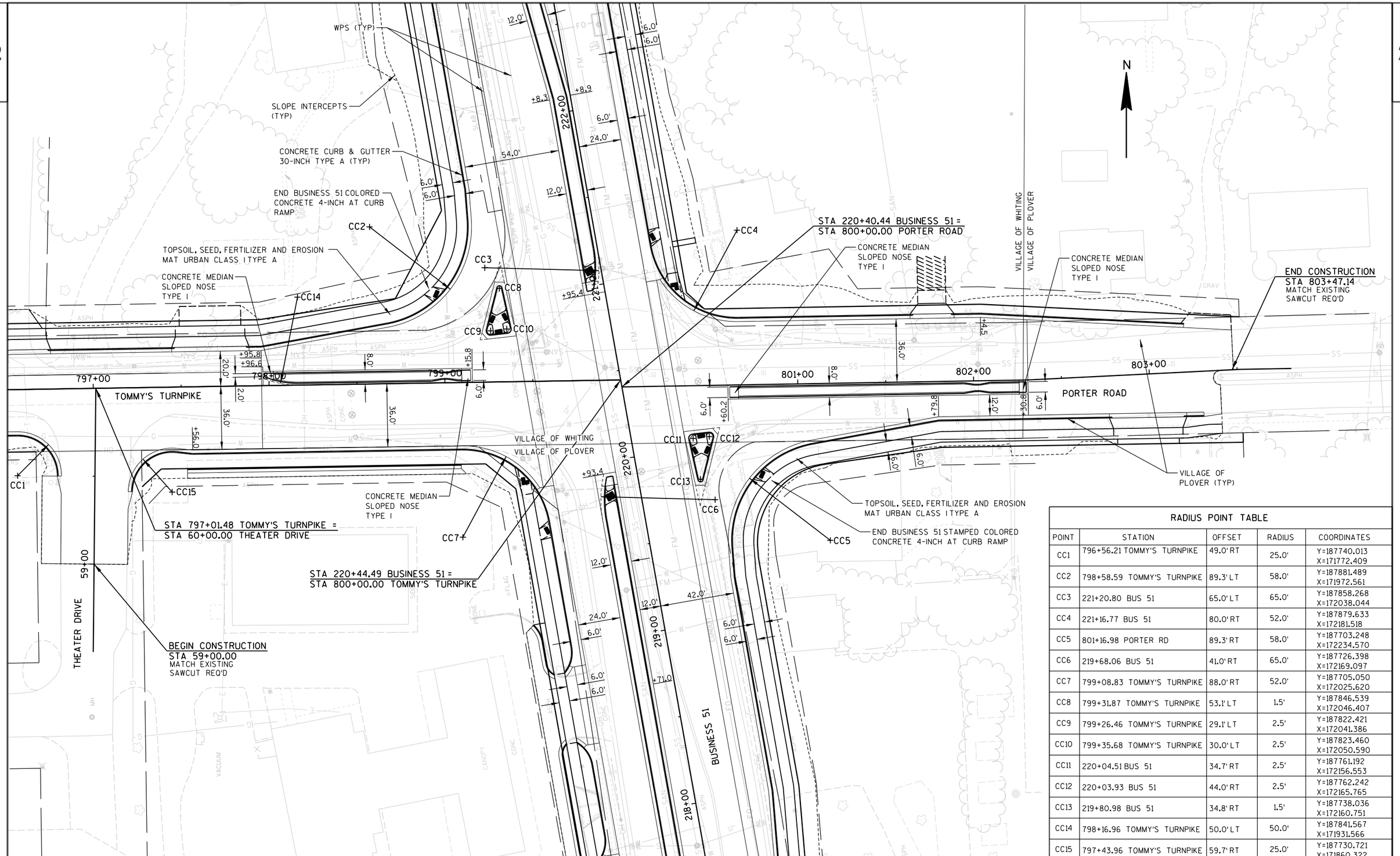


RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	213+37.07 BUS 51 80+67.94 HICKORY DR	63.0' LT 51.0' RT	35.0'	Y = 187109.817 X = 172301.520
CC2	213+66.25 BUS 51 80+75.31 HICKORY DR	72.9' RT 21.0' RT	5.0'	Y = 187140.339 X = 172305.848
CC3	214+09.98 BUS 51 80+63.07 HICKORY DR	64.5' RT 21.0' LT	5.0'	Y = 187181.007 X = 172289.733
CC4	214+11.03 BUS 51 80+63.08 HICKORY DR	64.6' RT 22.1' LT	5.0'	Y = 187182.059 X = 172289.639
CC5	214+35.99 BUS 51 80+62.63 HICKORY DR	54.0' RT 47.0' LT	22.0'	Y = 187206.871 X = 172286.666
CC6	214+40.17 BUS 51 80+59.48 HICKORY DR	63.0' RT 51.0' LT	35.0'	Y = 187210.473 X = 172282.980
CC7	214+50.26 BUS 51 80+43.86 HICKORY DR	48.0' RT 60.0' LT	60.0'	Y = 187217.785 X = 172266.449
CC8	214+63.44 BUS 51	60.0' LT	60.0'	Y = 187211.891 X = 172157.808
CC8	217+21.78 BUS 51	67.0' LT	55.0' 65.0'	Y = 187465.035 X = 172105.784
CC8	217+72.73 BUS 51	19.0' LT	5.0'	Y = 187523.588 X = 172144.144

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	INTERSECTION DETAIL	SHEET 37	E

2

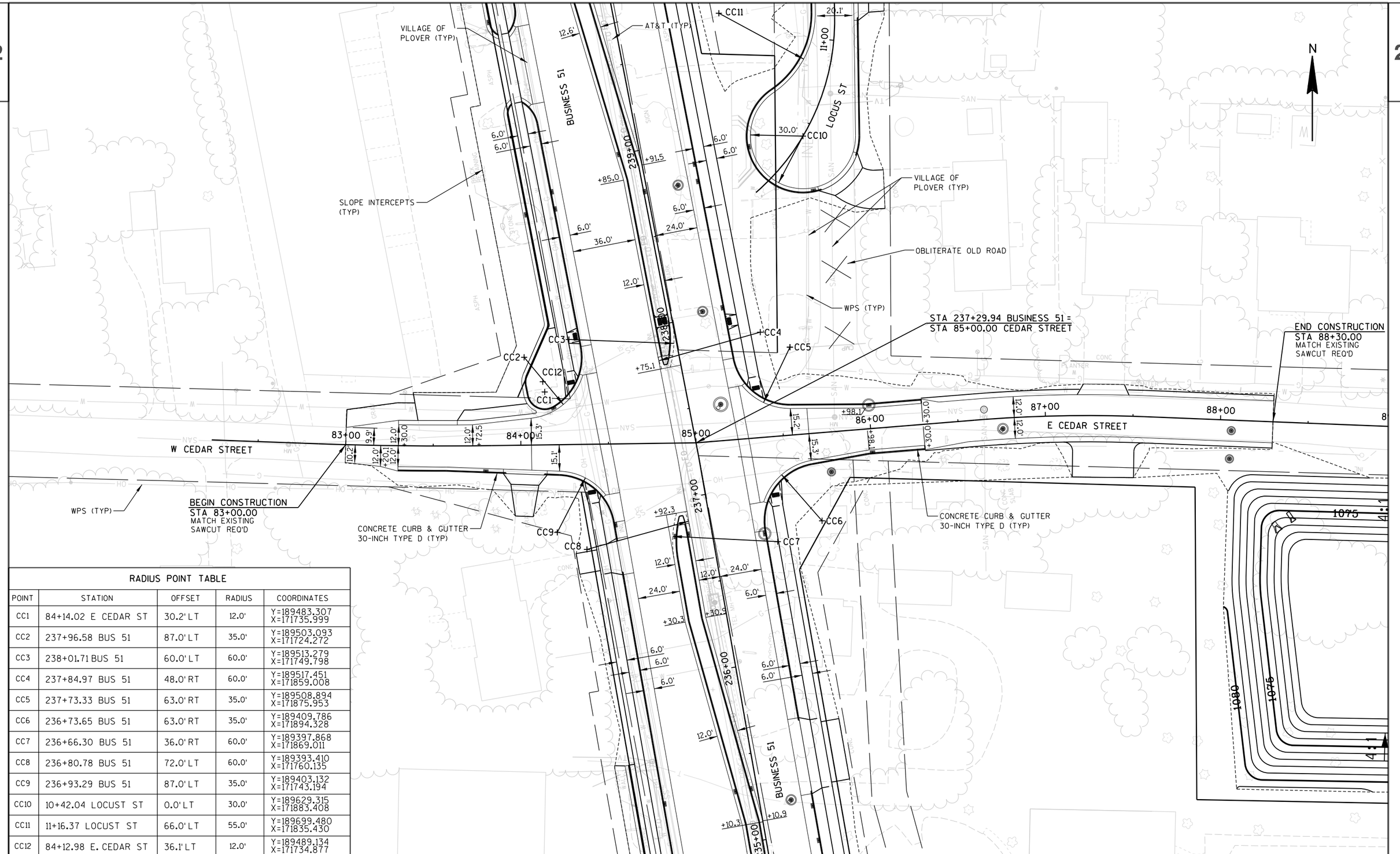


RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	796+56.21 TOMMY'S TURNPIKE	49.0' RT	25.0'	Y=187740.013 X=171772.409
CC2	798+58.59 TOMMY'S TURNPIKE	89.3' LT	58.0'	Y=187881.489 X=171972.561
CC3	221+20.80 BUS 51	65.0' LT	65.0'	Y=187858.268 X=172038.044
CC4	221+16.77 BUS 51	80.0' RT	52.0'	Y=187879.633 X=172181.518
CC5	801+16.98 PORTER RD	89.3' RT	58.0'	Y=187703.248 X=172234.570
CC6	219+68.06 BUS 51	41.0' RT	65.0'	Y=187726.398 X=172169.097
CC7	799+08.83 TOMMY'S TURNPIKE	88.0' RT	52.0'	Y=187705.050 X=172025.620
CC8	799+31.87 TOMMY'S TURNPIKE	53.1' LT	1.5'	Y=187846.539 X=172046.407
CC9	799+26.46 TOMMY'S TURNPIKE	29.1' LT	2.5'	Y=187822.421 X=172041.386
CC10	799+35.68 TOMMY'S TURNPIKE	30.0' LT	2.5'	Y=187823.460 X=172050.590
CC11	220+04.51 BUS 51	34.7' RT	2.5'	Y=187761.192 X=172156.553
CC12	220+03.93 BUS 51	44.0' RT	2.5'	Y=187762.242 X=172165.765
CC13	219+80.98 BUS 51	34.8' RT	1.5'	Y=187738.036 X=172160.751
CC14	798+16.96 TOMMY'S TURNPIKE	50.0' LT	50.0'	Y=187841.567 X=171931.566
CC15	797+43.96 TOMMY'S TURNPIKE	59.7' RT	25.0'	Y=187730.721 X=171860.322

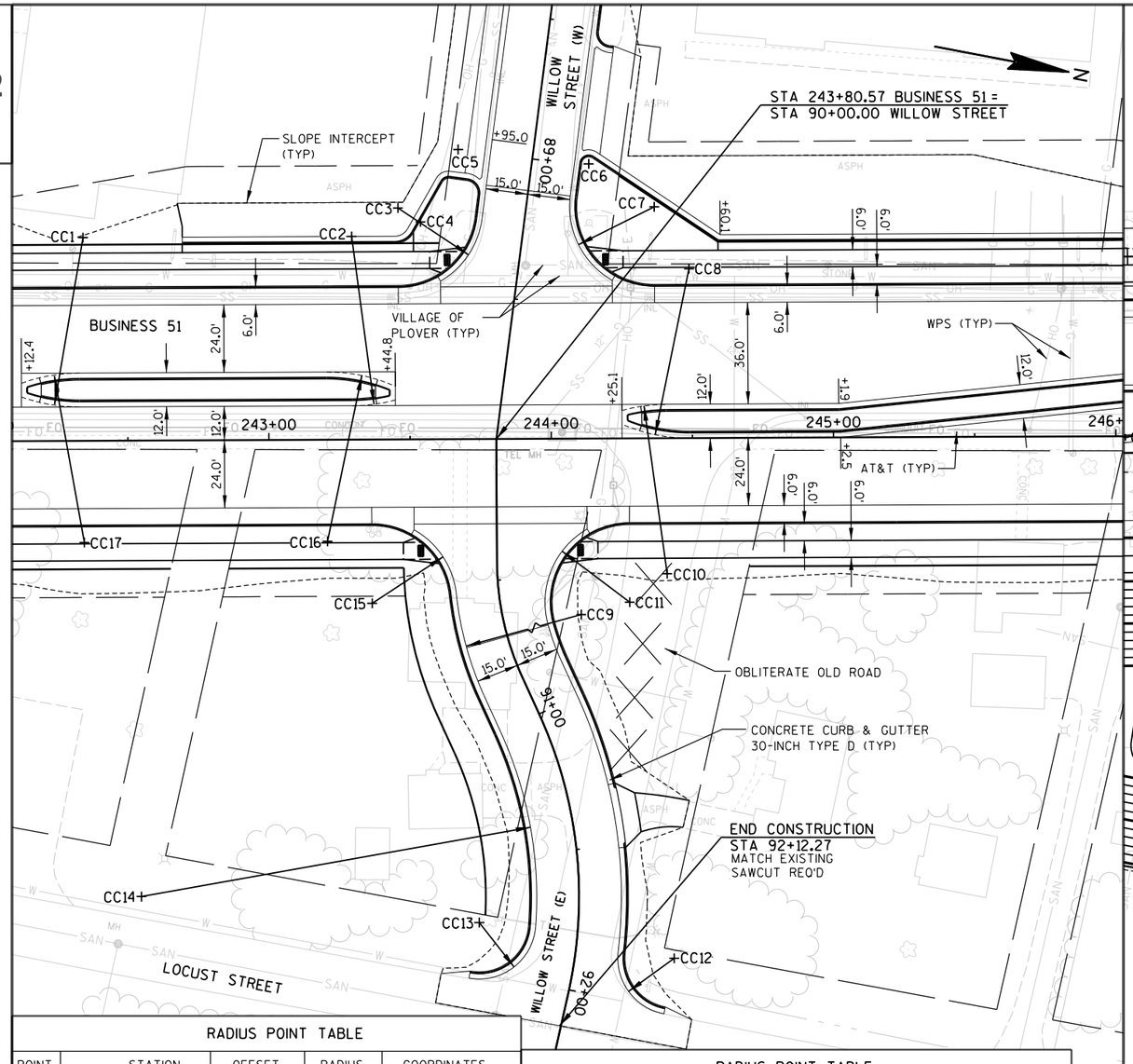
PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	INTERSECTION DETAIL	SHEET 38	E

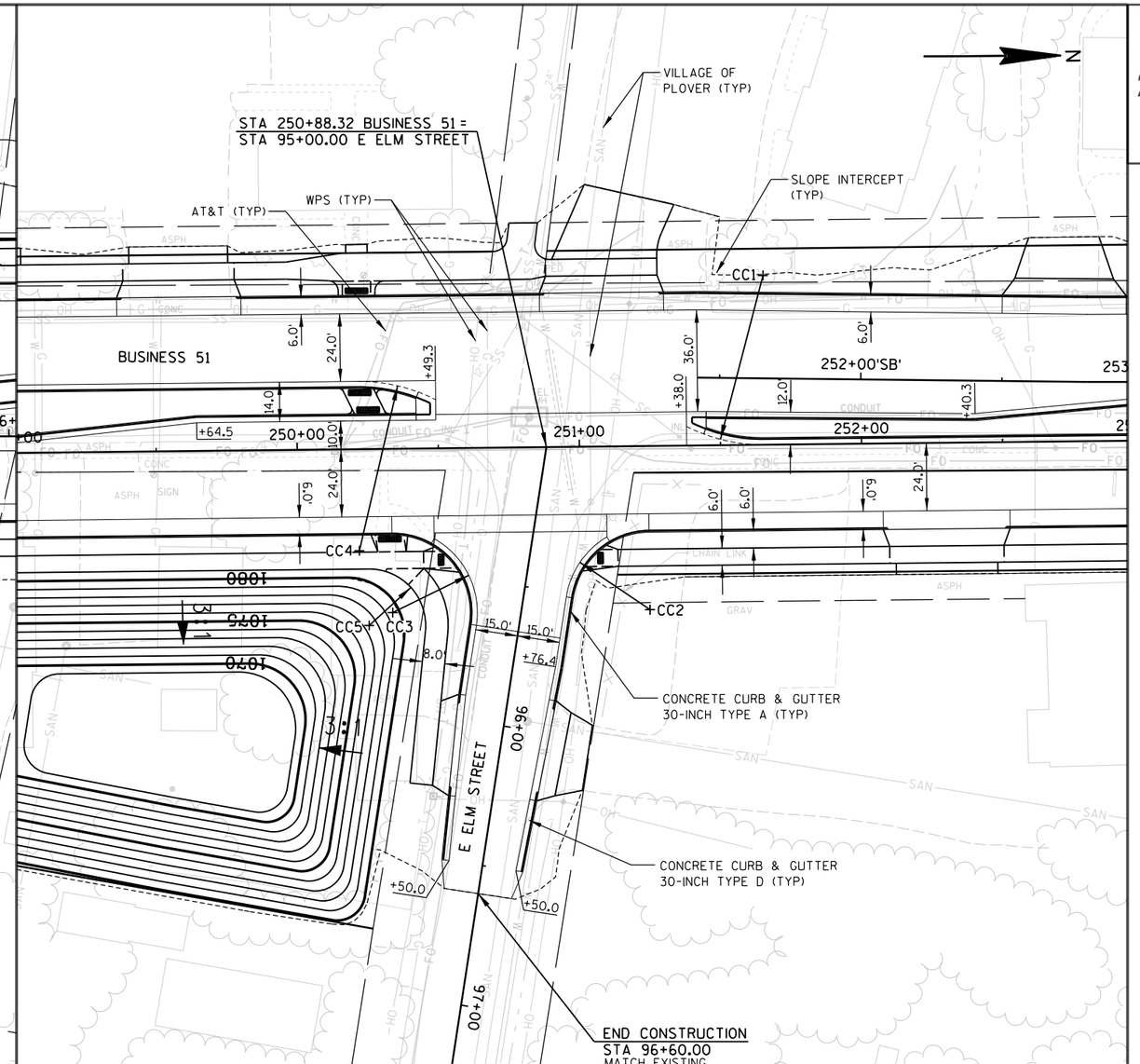
2



RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	84+14.02 E CEDAR ST	30.2' LT	12.0'	Y=189483.307 X=171735.999
CC2	237+96.58 BUS 51	87.0' LT	35.0'	Y=189503.093 X=171724.272
CC3	238+01.71 BUS 51	60.0' LT	60.0'	Y=189513.279 X=171749.798
CC4	237+84.97 BUS 51	48.0' RT	60.0'	Y=189517.451 X=171859.008
CC5	237+73.33 BUS 51	63.0' RT	35.0'	Y=189508.894 X=171875.953
CC6	236+73.65 BUS 51	63.0' RT	35.0'	Y=189409.786 X=171894.328
CC7	236+66.30 BUS 51	36.0' RT	60.0'	Y=189397.868 X=171869.011
CC8	236+80.78 BUS 51	72.0' LT	60.0'	Y=189393.410 X=171760.135
CC9	236+93.29 BUS 51	87.0' LT	35.0'	Y=189403.132 X=171743.194
CC10	10+42.04 LOCUST ST	0.0' LT	30.0'	Y=189629.315 X=171883.408
CC11	11+16.37 LOCUST ST	66.0' LT	55.0'	Y=189699.480 X=171835.430
CC12	84+12.98 E. CEDAR ST	36.1' LT	12.0'	Y=189489.134 X=171734.877

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	INTERSECTION DETAIL	SHEET 39	E





RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	242+34.42 BUS 51	72.0' LT	60.0'	Y=189935.752 X=171655.441
CC2	243+29.61 BUS 51	72.0' LT	60.0'	Y=190029.186 X=171637.277
CC3	243+46.07 BUS 51	82.0' LT	30.0'	Y=190043.436 X=171624.319
CC4	243+53.99 BUS 51	77.0' LT	5.0'	Y=190052.177 X=171627.714
CC5	89+00.5 WILLOW ST	26.48' LT	5.0'	Y=190060.533 X=171599.994
CC6	89+00.8 WILLOW ST	20.0' RT	5.0'	Y=190106.877 X=171596.371
CC7	244+36.86 BUS 51	82.0' LT	30.0'	Y=190132.559 X=171606.993
CC8	244+49.07 BUS 51	60.0' LT	60.0'	Y=190148.741 X=171626.257
CC9	244+80.57 BUS 51	43.4' RT	115.0'	Y=190134.091 X=171753.726

RADIUS POINT TABLE

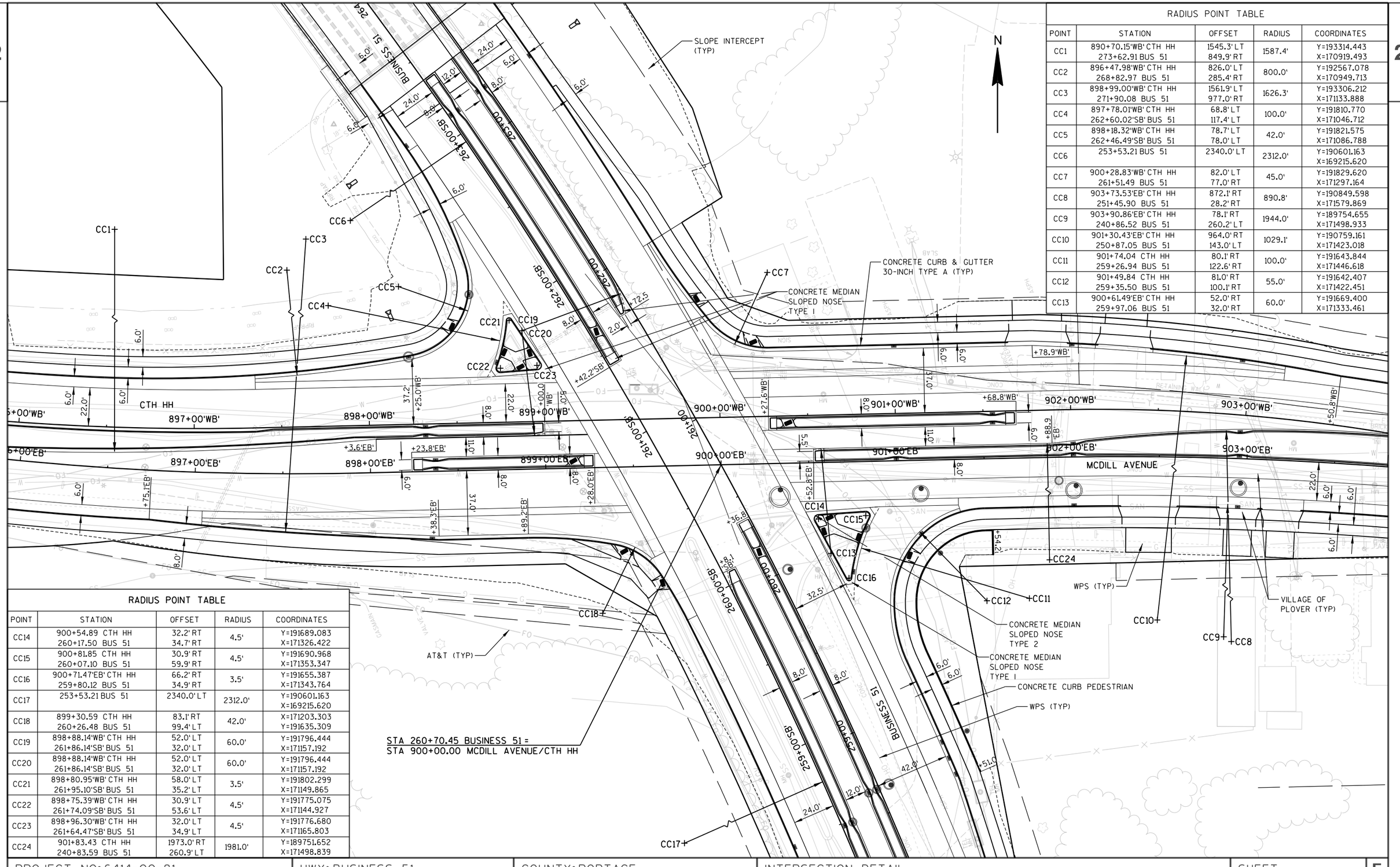
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC10	244+40.82 BUS 51	48.0' RT	60.0'	Y=190161.261 X=171733.847
CC11	244+27.52 BUS 51	58.0' RT	30.0'	Y=190150.116 X=171746.201
CC12	92+21.40 WILLOW ST	35.0' RT	20.0'	Y=190189.150 X=171867.210
CC13	92+15.41 WILLOW ST	35.0' LT	20.0'	Y=190118.908 X=171867.637
CC14	92+00.86 WILLOW ST	155.0' LT	140.0'	Y=189999.645 X=171880.920
CC15	243+36.30 BUS 51	58.0' RT	30.0'	Y=190060.563 X=171763.610
CC16	243+20.57 BUS 51	36.0' RT	60.0'	Y=190040.921 X=171745.018
CC17	242+34.43 BUS 51	36.0' RT	60.0'	Y=189956.375 X=171761.454

RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	251+65.70 BUS 51	60.0' LT	60.0'	Y=190852.206 X=171489.501
CC2	251+24.41 BUS 51	58.0' RT	30.0'	Y=190834.196 X=171613.211
CC3	250+33.21 BUS 51	58.0' RT	30.0'	Y=190744.670 X=171630.616
CC4	250+21.62 BUS 51	36.0' RT	60.0'	Y=190729.091 X=171611.232
CC5	250+24.85 BUS 51	62.5' RT	20.0'	Y=190730.433 X=171641.024

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	INTERSECTION DETAIL	SHEET 40	E

2



RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	890+70.15'WB' CTH HH 273+62.91 BUS 51	1545.3' LT 849.9' RT	1587.4'	Y=193314.443 X=170919.493
CC2	896+47.98'WB' CTH HH 268+82.97 BUS 51	826.0' LT 285.4' RT	800.0'	Y=192567.078 X=170949.713
CC3	898+99.00'WB' CTH HH 271+90.08 BUS 51	1561.9' LT 977.0' RT	1626.3'	Y=193306.212 X=171133.888
CC4	897+78.01'WB' CTH HH 262+60.02'SB' BUS 51	68.8' LT 117.4' LT	100.0'	Y=191810.770 X=171046.712
CC5	898+18.32'WB' CTH HH 262+46.49'SB' BUS 51	78.7' LT 78.0' LT	42.0'	Y=191821.575 X=171086.788
CC6	253+53.21 BUS 51	2340.0' LT	2312.0'	Y=190601.163 X=169215.620
CC7	900+28.83'WB' CTH HH 261+51.49 BUS 51	82.0' LT 77.0' RT	45.0'	Y=191829.620 X=171297.164
CC8	903+73.53'EB' CTH HH 251+45.90 BUS 51	872.1' RT 28.2' RT	890.8'	Y=190849.598 X=171579.869
CC9	903+90.86'EB' CTH HH 240+86.52 BUS 51	78.1' RT 260.2' LT	1944.0'	Y=189754.655 X=171498.933
CC10	901+30.43'EB' CTH HH 250+87.05 BUS 51	964.0' RT 143.0' LT	1029.1'	Y=190759.161 X=171423.018
CC11	901+74.04 CTH HH 259+26.94 BUS 51	80.1' RT 122.6' RT	100.0'	Y=191643.844 X=171446.618
CC12	901+49.84 CTH HH 259+35.50 BUS 51	81.0' RT 100.1' RT	55.0'	Y=191642.407 X=171422.451
CC13	900+61.49'EB' CTH HH 259+97.06 BUS 51	52.0' RT 32.0' RT	60.0'	Y=191669.400 X=171333.461

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC14	900+54.89 CTH HH 260+17.50 BUS 51	32.2' RT 34.7' RT	4.5'	Y=191689.083 X=171326.422
CC15	900+81.85 CTH HH 260+07.10 BUS 51	30.9' RT 59.9' RT	4.5'	Y=191690.968 X=171353.347
CC16	900+71.47'EB' CTH HH 259+80.12 BUS 51	66.2' RT 34.9' RT	3.5'	Y=191655.387 X=171343.764
CC17	253+53.21 BUS 51	2340.0' LT	2312.0'	Y=190601.163 X=169215.620
CC18	899+30.59 CTH HH 260+26.48 BUS 51	83.1' RT 99.4' LT	42.0'	X=171203.303 Y=191635.309
CC19	898+88.14'WB' CTH HH 261+86.14'SB' BUS 51	52.0' LT 32.0' LT	60.0'	Y=191796.444 X=171157.192
CC20	898+88.14'WB' CTH HH 261+86.14'SB' BUS 51	52.0' LT 32.0' LT	60.0'	Y=191796.444 X=171157.192
CC21	898+80.95'WB' CTH HH 261+95.10'SB' BUS 51	58.0' LT 35.2' LT	3.5'	Y=191802.299 X=171149.865
CC22	898+75.39'WB' CTH HH 261+74.09'SB' BUS 51	30.9' LT 53.6' LT	4.5'	Y=191775.075 X=171144.927
CC23	898+96.30'WB' CTH HH 261+64.47'SB' BUS 51	32.0' LT 34.9' LT	4.5'	Y=191776.680 X=171165.803
CC24	901+83.43 CTH HH 240+83.59 BUS 51	1973.0' RT 260.9' LT	1981.0'	Y=189751.652 X=171498.839

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	INTERSECTION DETAIL	SHEET 41	E

LEGEND

- REVERSE SLOPE GUTTER
- CONCRETE SIDEWALK 4-INCH
- STAMPED CONCRETE 4-INCH
- STAMPED COLORED CONCRETE 4-INCH

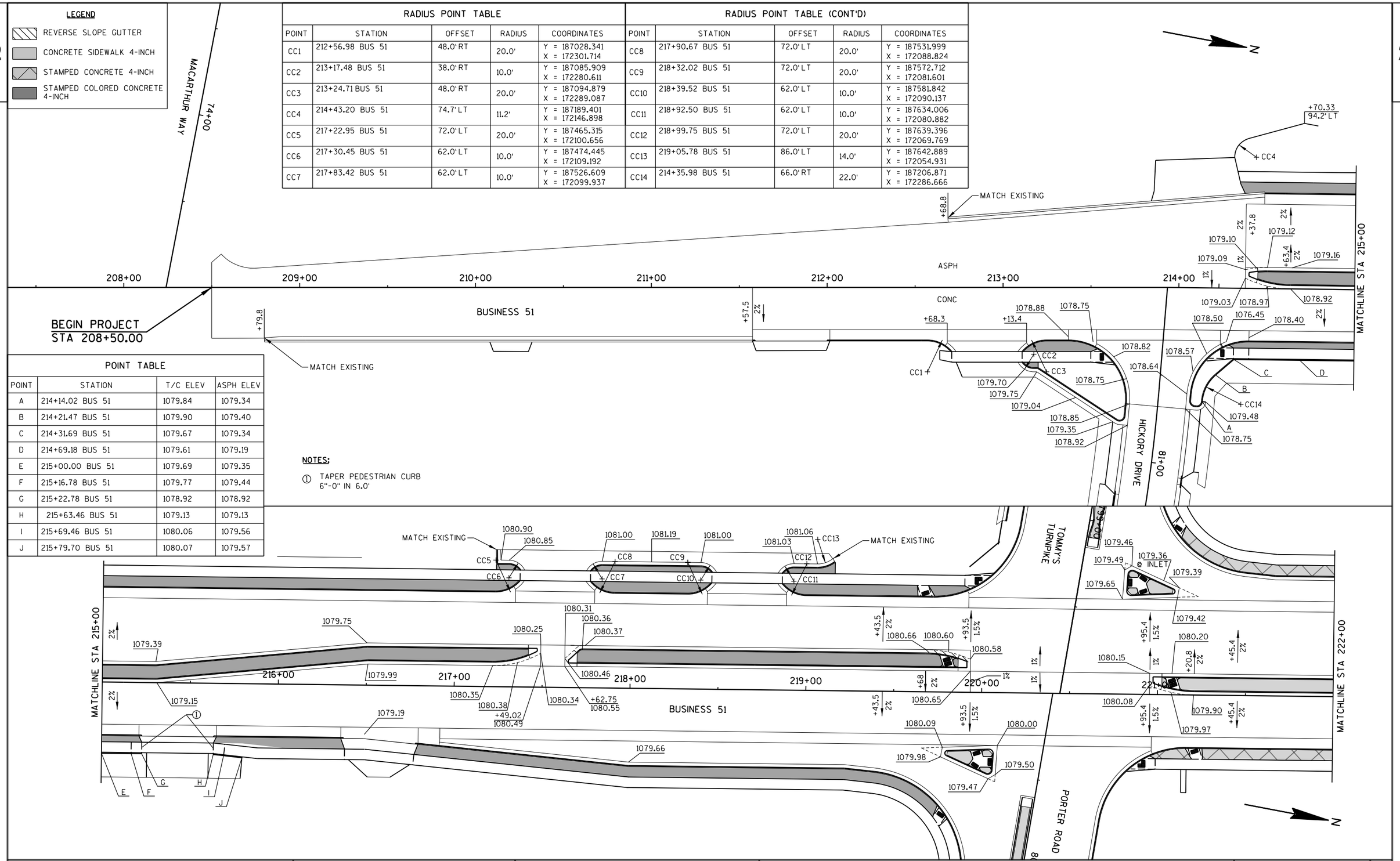
RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	212+56.98 BUS 51	48.0'RT	20.0'	Y = 187028.341 X = 172301.714
CC2	213+17.48 BUS 51	38.0'RT	10.0'	Y = 187085.909 X = 172280.611
CC3	213+24.71 BUS 51	48.0'RT	20.0'	Y = 187094.879 X = 172289.087
CC4	214+43.20 BUS 51	74.7'LT	11.2'	Y = 187189.401 X = 172146.898
CC5	217+22.95 BUS 51	72.0'LT	20.0'	Y = 187465.315 X = 172100.656
CC6	217+30.45 BUS 51	62.0'LT	10.0'	Y = 187474.445 X = 172109.192
CC7	217+83.42 BUS 51	62.0'LT	10.0'	Y = 187526.609 X = 172099.937

RADIUS POINT TABLE (CONT'D)				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC8	217+90.67 BUS 51	72.0'LT	20.0'	Y = 187531.999 X = 172088.824
CC9	218+32.02 BUS 51	72.0'LT	20.0'	Y = 187572.712 X = 172081.601
CC10	218+39.52 BUS 51	62.0'LT	10.0'	Y = 187581.842 X = 172090.137
CC11	218+92.50 BUS 51	62.0'LT	10.0'	Y = 187634.006 X = 172080.882
CC12	218+99.75 BUS 51	72.0'LT	20.0'	Y = 187639.396 X = 172069.769
CC13	219+05.78 BUS 51	86.0'LT	14.0'	Y = 187642.889 X = 172054.931
CC14	214+35.98 BUS 51	66.0'RT	22.0'	Y = 187206.871 X = 172286.666

POINT TABLE			
POINT	STATION	T/C ELEV	ASPH ELEV
A	214+14.02 BUS 51	1079.84	1079.34
B	214+21.47 BUS 51	1079.90	1079.40
C	214+31.69 BUS 51	1079.67	1079.34
D	214+69.18 BUS 51	1079.61	1079.19
E	215+00.00 BUS 51	1079.69	1079.35
F	215+16.78 BUS 51	1079.77	1079.44
G	215+22.78 BUS 51	1078.92	1078.92
H	215+63.46 BUS 51	1079.13	1079.13
I	215+69.46 BUS 51	1080.06	1079.56
J	215+79.70 BUS 51	1080.07	1079.57

NOTES:

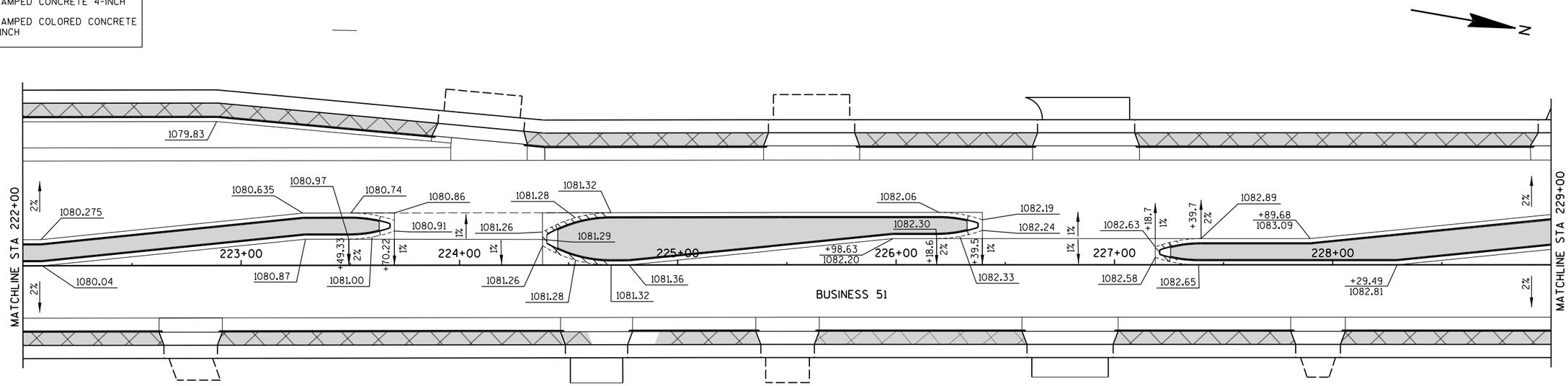
① TAPER PEDESTRIAN CURB 6"-0" IN 6.0'



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN DETAIL	SHEET 42	E

LEGEND

- REVERSE SLOPE GUTTER
- CONCRETE SIDEWALK 4-INCH
- STAMPED CONCRETE 4-INCH
- STAMPED COLORED CONCRETE 4-INCH



RADIUS POINT TABLE

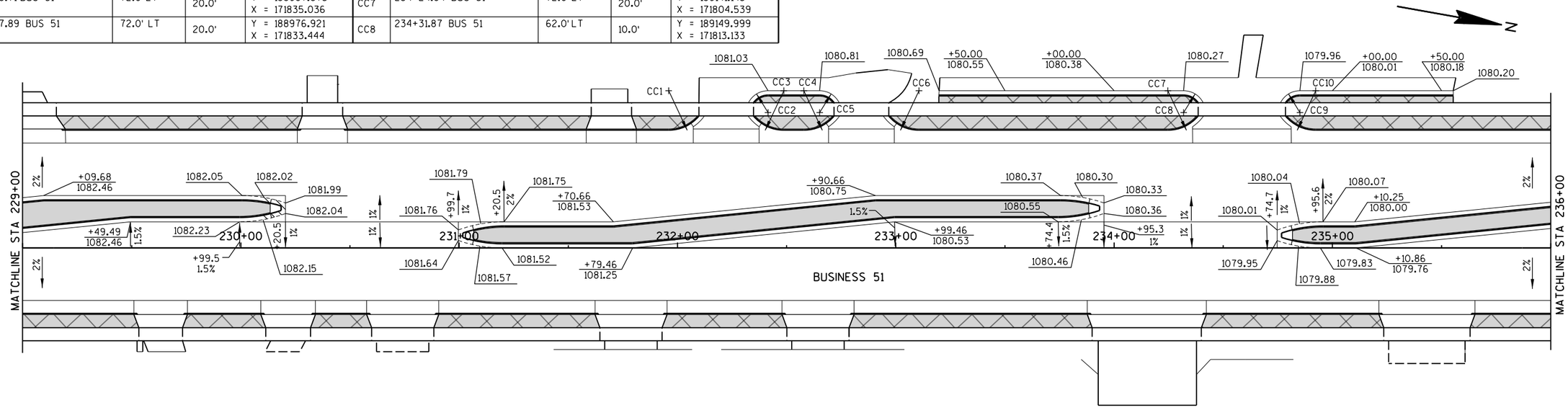
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	231+95.98 BUS 51	72.0'LT	20.0'	Y = 188915.948 X = 171844.176
CC2	232+41.47 BUS 51	62.0'LT	10.0'	Y = 188962.485 X = 171846.139
CC3	232+48.71 BUS 51	72.0'LT	20.0'	Y = 188967.875 X = 171835.036
CC4	232+57.89 BUS 51	72.0' LT	20.0'	Y = 188976.921 X = 171833.444

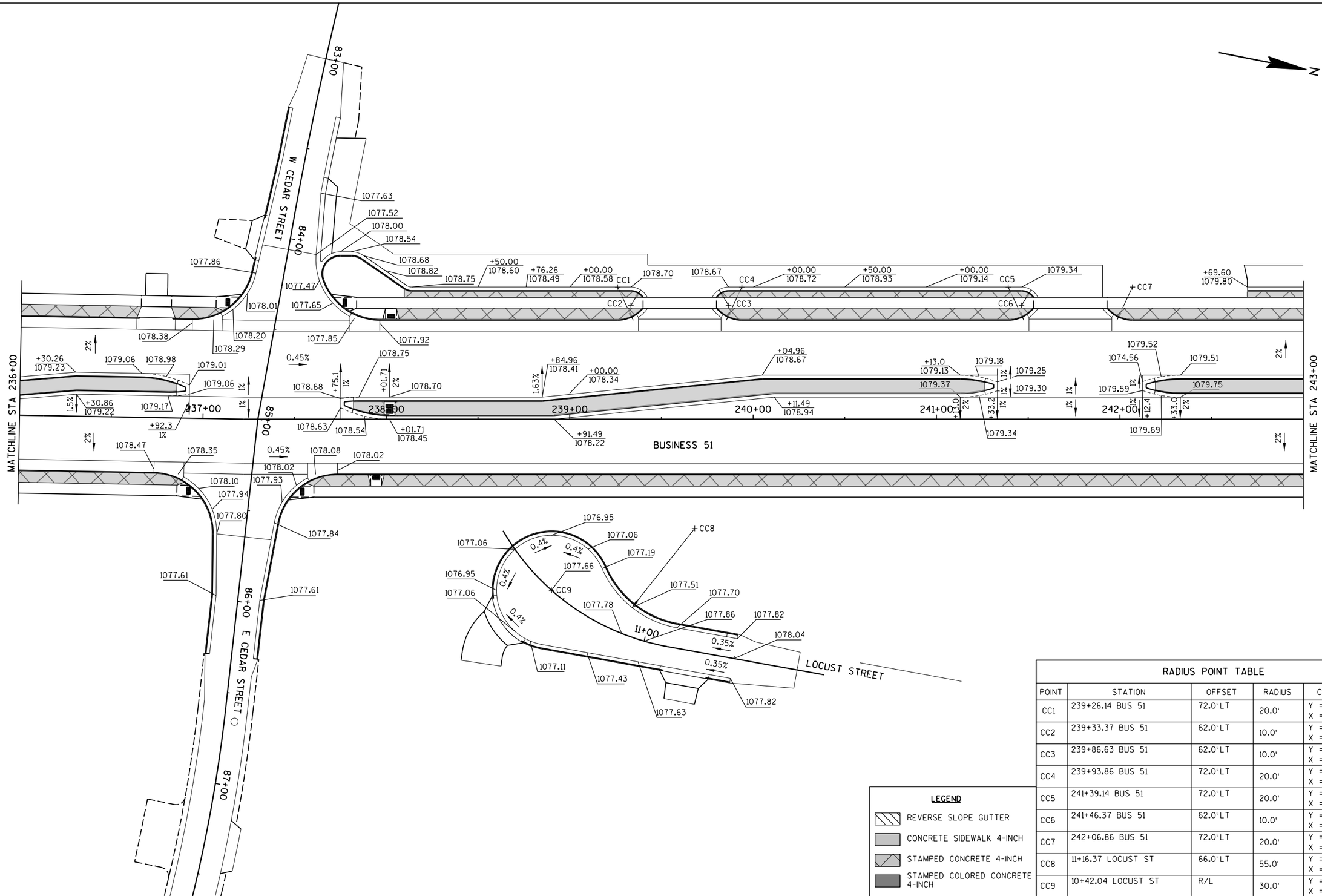
RADIUS POINT TABLE (CONT'D)

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC5	232+65.12 BUS 51	62.0'LT	10.0'	Y = 188985.778 X = 171842.039
CC6	233+10.62 BUS 51	72.0'LT	20.0'	Y = 189028.849 X = 171824.304
CC7	234+24.64 BUS 51	72.0'LT	20.0'	Y = 189141.143 X = 171804.539
CC8	234+31.87 BUS 51	62.0'LT	10.0'	Y = 189149.999 X = 171813.133

RADIUS POINT TABLE (CONT'D)

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC9	234+85.13 BUS 51	62.0'LT	10.0'	Y = 189202.453 X = 171803.901
CC10	234+92.36 BUS 51	72.0'LT	20.0'	Y = 189207.843 X = 171792.798





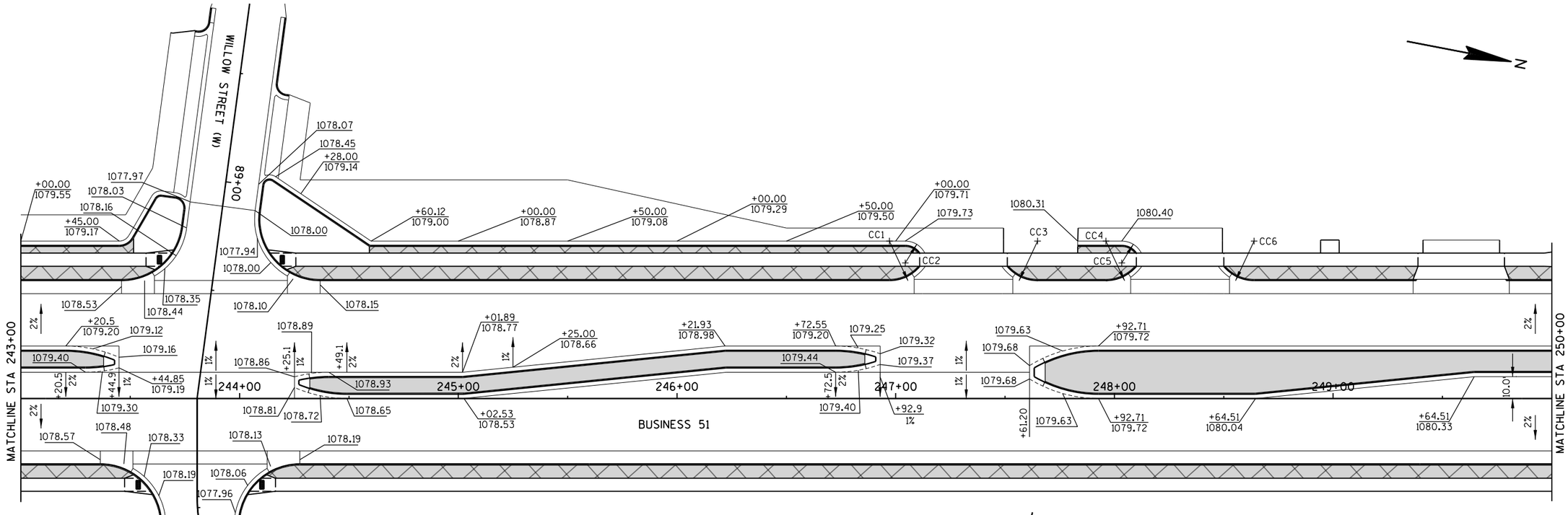
LEGEND

- REVERSE SLOPE GUTTER
- CONCRETE SIDEWALK 4-INCH
- STAMPED CONCRETE 4-INCH
- STAMPED COLORED CONCRETE 4-INCH

RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	239+26.14 BUS 51	72.0'LT	20.0'	Y = 189633.131 X = 171714.273
CC2	239+33.37 BUS 51	62.0'LT	10.0'	Y = 189642.140 X = 171722.709
CC3	239+86.63 BUS 51	62.0'LT	10.0'	Y = 189694.421 X = 171712.545
CC4	239+93.86 BUS 51	72.0'LT	20.0'	Y = 189699.613 X = 171701.348
CC5	241+39.14 BUS 51	72.0'LT	20.0'	Y = 189842.217 X = 171673.625
CC6	241+46.37 BUS 51	62.0'LT	10.0'	Y = 189851.225 X = 171682.061
CC7	242+06.86 BUS 51	72.0'LT	20.0'	Y = 189908.698 X = 171660.701
CC8	11+16.37 LOCUST ST	66.0'LT	55.0'	Y = 189699.480 X = 171835.430
CC9	10+42.04 LOCUST ST	R/L	30.0'	Y = 189629.315 X = 171883.408

2



RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	246+97.14 BUS 51	72.0'LT	20.0'	Y = 190389.962 X = 171567.140
CC2	247+04.37 BUS 51	62.0'LT	10.0'	Y = 190398.970 X = 171575.576
CC3	247+64.86 BUS 51	72.0'LT	20.0'	Y = 190456.443 X = 171554.215
CC4	247+96.14 BUS 51	72.0'LT	20.0'	Y = 190487.142 X = 171548.247
CC5	248+03.37 BUS 51	62.0'LT	10.0'	Y = 190496.151 X = 171556.683
CC6	248+63.86 BUS 51	72.0'LT	20.0'	Y = 190553.624 X = 171535.323

2

N

MATCHLINE STA 250+00

+21.62
1079.90
2%
1079.87
1079.78
1079.84
+21.62
1080.09
2%
+49.3
1%
1079.88
1%
251+00
1%
1079.53
+65.7
2%
252+00'SB'
+40.37
1079.21
253+00'SB'
+61.13
1078.85
254+00'SB'
255+00'SB'
256+00'SB'
257+00'SB'
2%
MATCHLINE STA 257+50
252+00
253+00
254+00
255+00
256+00
257+00
2%
+65.0
2%
+75.0
2%
+20.0
0%
+53.41
1079.80
2%
+35.84
1080.02
2%
1079.29
1079.10
1078.85
1078.90
1079.47
+40.0
2%
1079.29
+85.0
0%
1079.38
+30.0
2%
BUSINESS 51
1078.80
1078.72
1078.57
1078.80
1078.44
1078.52
E ELM STREET
96+00

BEGIN PROJECT 6414-00-81
END PROJECT 6414-00-80
STA 252+50.00

LEGEND

- REVERSE SLOPE GUTTER
- CONCRETE SIDEWALK 4-INCH
- STAMPED CONCRETE 4-INCH
- STAMPED COLORED CONCRETE 4-INCH

CTH HH

89+00EB

89+00WB

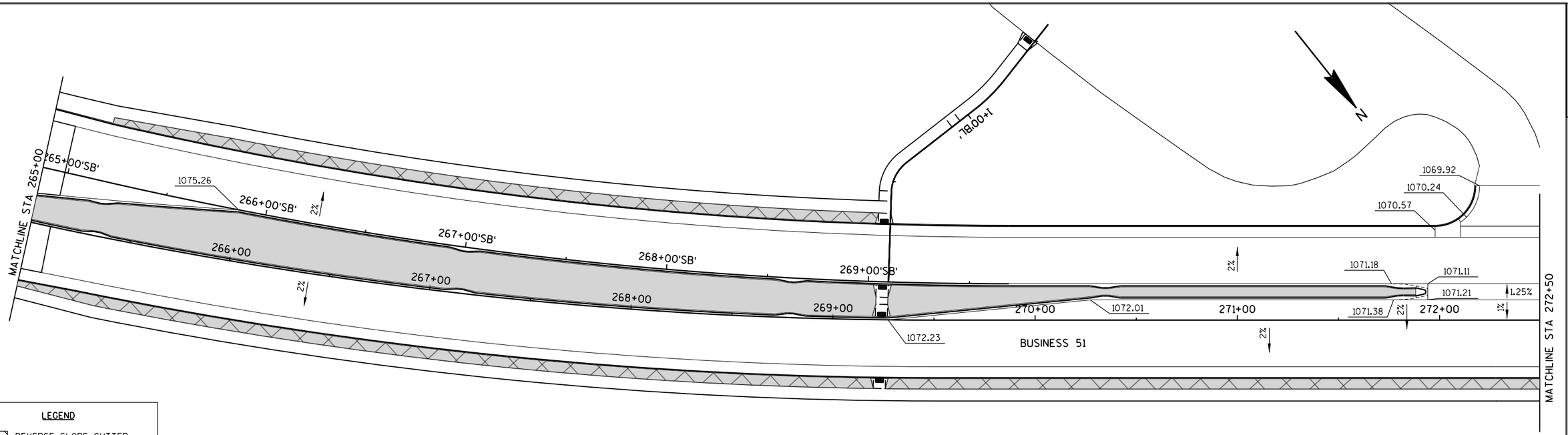
1078.53
1078.66
1078.83
1078.77
+86.2
2%
+36.8
1.5%
1078.98
1079.17
1079.23
0.73%
1079.34
1079.26
1078.54
1078.36
1078.08
+65.6
1.5%
+15.6
2%
1077.98
1077.97
1077.57
1077.34
1077.00
1079.07
1079.15
1078.82
1079.04
1079.00
+50.7
1.5%
+99.7
2%
1078.62
1078.46
1078.26
1078.65
+77.5
2%
+24.3
1.5%
+00.0
1078.54
1078.75
1078.33
1078.23
MCDILL AVENUE
90+00EB
90+00WB
90+00
101+00
258+00'SB'
259+00'SB'
260+00'SB'
261+00'SB'
262+00'SB'
263+00'SB'
264+00'SB'
MATCHLINE STA 257+50
MATCHLINE STA 265+00
258+00
259+00
260+00
261+00
262+00
263+00
264+00
+73.9
1078.70
1078.86
BUSINESS 51

STRUCTURE B-49-67
STA 263+49.23 TO STA 264+94.92

N

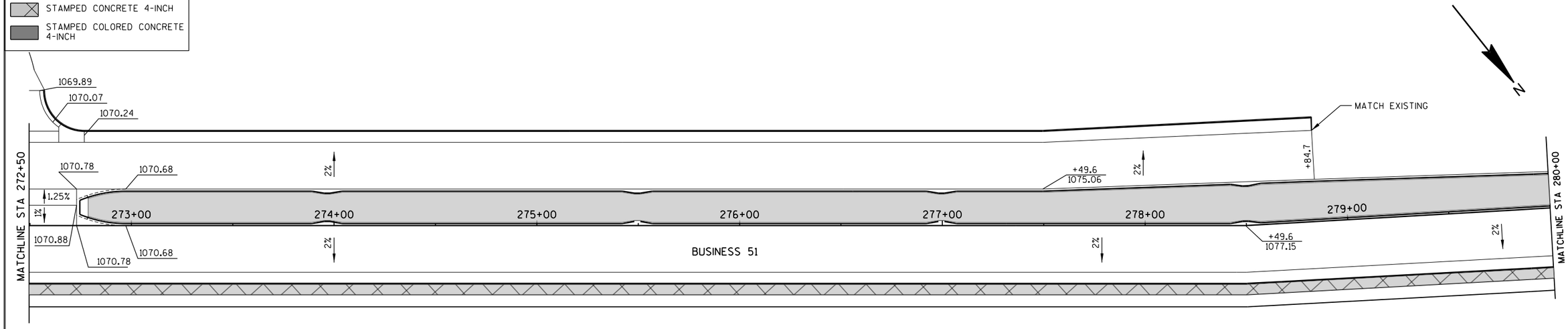
PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN DETAIL	SHEET 46	E

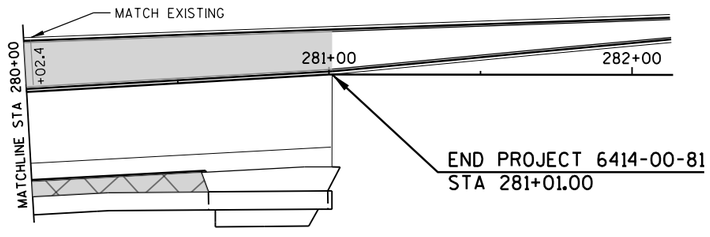
2



LEGEND

- REVERSE SLOPE GUTTER
- CONCRETE SIDEWALK 4-INCH
- STAMPED CONCRETE 4-INCH
- STAMPED COLORED CONCRETE 4-INCH



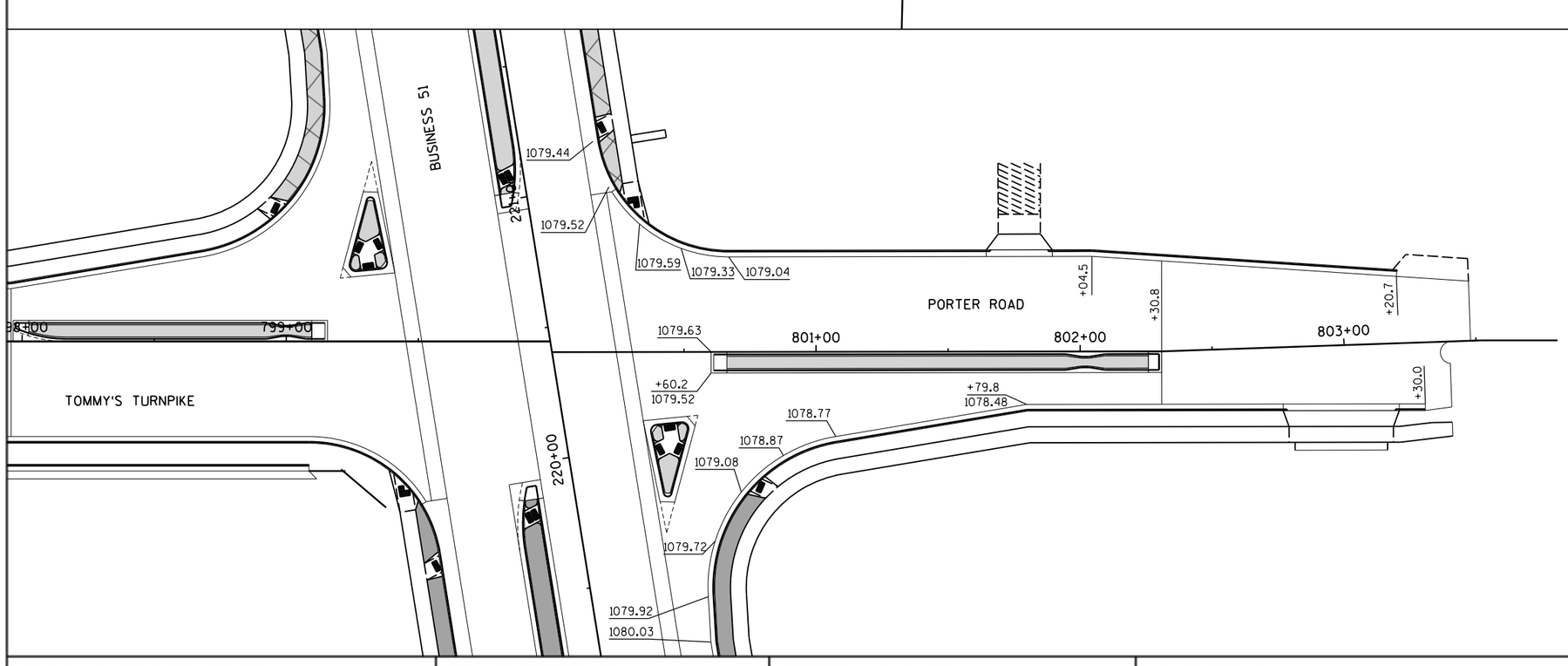


PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN DETAIL	SHEET 47	E

2

N

1082.07
794+00
795+00
+54.0
1081.30
796+00
+54.0
1080.69
797+00
+95.8
1080.05
798+00
+96.6
1080.29
799+00
1079.91
+15.7
1079.91
1080.36
1080.40
1080.36
1079.64
1079.40
1079.13
1079.05
1078.97
1079.03
22+00
BUSINESS 51
PORTER ROAD
801+00
1082.07
+34.0
1081.15
TOMMY'S TURNPIKE
1080.60
1080.40
1080.49
59+00
THEATER DR
1079.97
1080.17
1080.50
+95.8
+00.00
1081.91
+50.00
1081.72
+00.00
1081.18
1079.39
1079.66
1079.96
1080.07
1080.16
220+00



N

LEGEND

- REVERSE SLOPE GUTTER
- CONCRETE SIDEWALK 4-INCH
- STAMPED CONCRETE 4-INCH
- STAMPED COLORED CONCRETE 4-INCH

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN DETAIL	SHEET 48	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\021207 pd.dgn PLOT TIME : 3:46:29 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

2

N

892+00'WB'
892+00'EB'
893+00'WB'
893+00'EB'
894+00'WB'
894+00'EB'
895+00'WB'
895+00'EB'
896+00'WB'
896+00'EB'
897+00'WB'
897+00'EB'
898+00'WB'
898+00'EB'
899+00'WB'
899+00'EB'

1077.57
1077.47
1077.98
1077.21
1077.70
1076.16
1075.75
1072.42
1073.12
1073.96
1074.88
1077.35
1077.51
+00.0
1078.25
+24.9
2%
+18.6
1071.22
1075.54
2%
1076.28
1078.13
1078.76
+75.2
1072.88
+23.8
1076.44
+50.0
2%
+28.0
1078.72
CTH HH
+38.3
1076.02
1077.39
1078.09
1078.70

BUSINESS 51
262+00'SB'
00+292
MATCHLINE STA 899+60'EB'
18S00+162

LEGEND
- REVERSE SLOPE GUTTER
- CONCRETE SIDEWALK 4-INCH
- STAMPED CONCRETE 4-INCH
- STAMPED COLORED CONCRETE 4-INCH

1078.62
1078.65
1078.69
1078.59
1078.45
+0.0
2%
900+00'WB'
1078.79
901+00'WB'
1077.67
902+00'WB'
903+00'WB'
904+00'WB'
905+00'WB'
906+00'WB'
907+00'WB'
1078.90
1077.83
1078.72
900+00'EB'
901+00'EB'
902+00'EB'
903+00'EB'
904+00'EB'
905+00'EB'
906+00'EB'
1078.78
+25.0
2%
McDILL AVENUE
1078.35
1078.25
1077.87
1077.80
1077.71
1078.30
1077.78
1078.23
1077.85
1077.91
1077.85
1078.95
+80.0
+50.0
1078.90
1078.95
+50.0
1078.91
1079.30
1079.07
1079.14
1079.22
1079.30
1079.18
1079.14
1079.22
100+00
99+00
+10.0
1078.97
1078.97

MATCHLINE STA 899+60'EB'
261+00
BUSINESS 51
260+00'SB'
260+00

LOCUST STREET

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN DETAIL	SHEET 49	E

2

2

MACARTHUR WAY

74+00

REMOVE CURB & GUTTER

P.I.
0+54.18'SW'

1+00'SW'

2+00'SW'

3+00'SW'

4+00'SW'

5+00'SW'

6+00'SW'

7+00'SW'

UTILIZE EXISTING CURB RAMPS

208+00

209+00

210+00

211+00

212+00

213+00

214+00

P.I.
5+56.71'SW'

P.I.
6+39.83'SW'

P.I.
7+16.44'SW'

MATCHLINE STA 215+00

P.I.
1+35.51'SW'

BUSINESS 51

P.I.
0+00.00'SW'

BEGIN PROJECT
STA 208+50.00

BEGIN TEMPORARY SIDEWALK
CONSTRUCTION
STA 0+00 = STA 207+86.74

LEGEND

- (A) TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)
- (B) TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)
- REMOVING CURB & GUTTER
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- TRAFFIC CONTROL CONES 42-INCH
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN SURFACE PLYWOOD

HICKORY DRIVE

81+00

N

UTILIZE EXISTING CONCRETE SIDEWALK

P.I.
9+78.87'SW'

TEMPORARY CURB RAMP

TEMPORARY CURB RAMP

10+00'SW'

11+00'SW'

12+00'SW'

REMOVE CURB & GUTTER

TOMMY'S TURNPIKE

69+00

13+00'SW'

UTILIZE EXISTING CURB RAMP

14+00'SW'

8+00'SW'

9+00'SW'

P.I.
9+15.59'SW'

MATCHLINE STA 215+00

216+00

217+00

218+00

219+00

220+00

221+00

P.I.
12+98.50'SW'

P.I.
13+65.56'SW'

P.I.
13+80.82'SW'

MATCHLINE STA 222+00

BUSINESS 51

PORTER ROAD

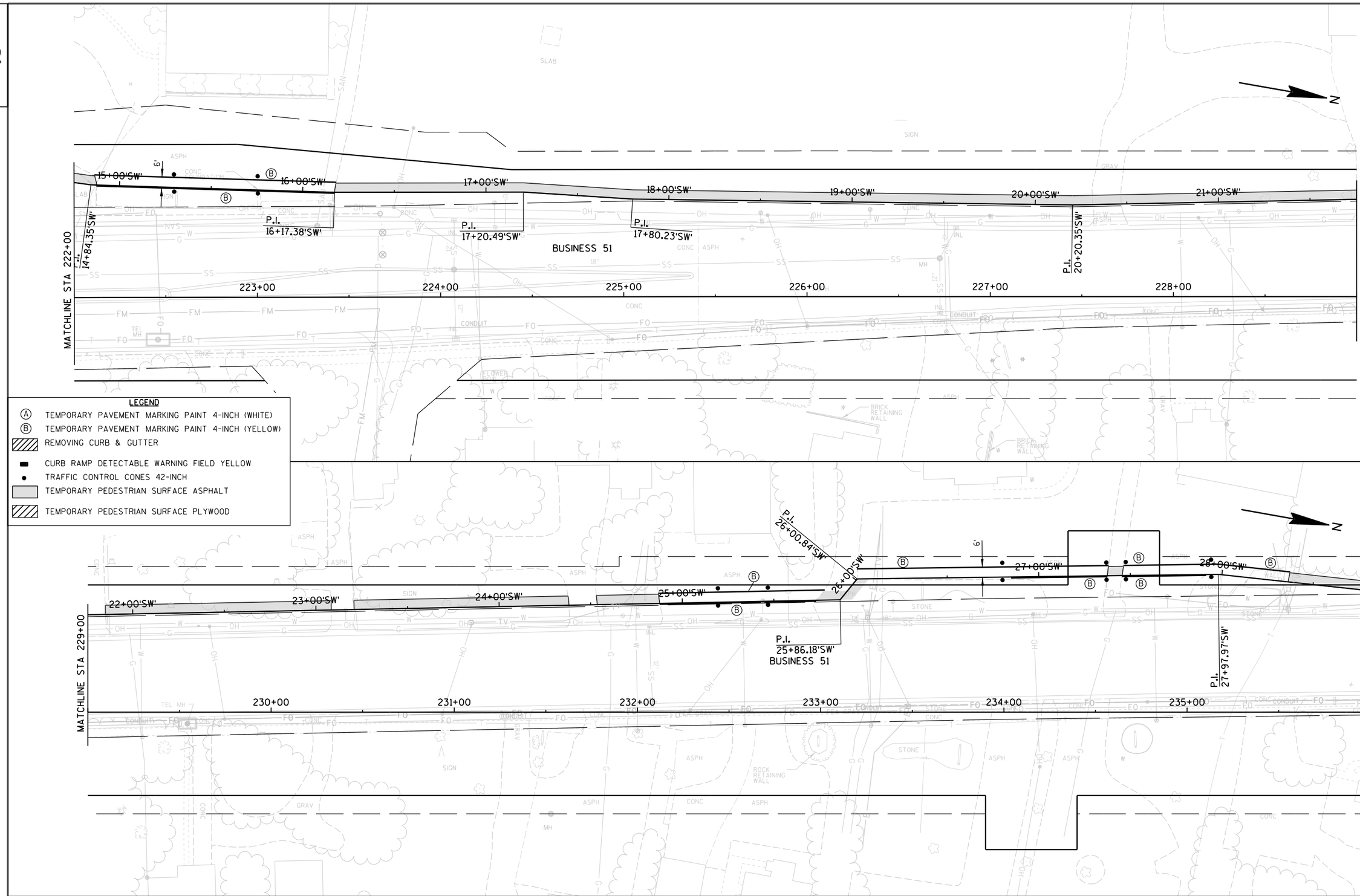
N

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN DETAIL - TEMPORARY SIDEWALK	SHEET	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\021201 pd - temp sw.dgn PLOT TIME : 3:46:34 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

WISDOT/CADDS SHEET 42

2



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN DETAIL - TEMPORARY SIDEWALK	SHEET 51	E

2

N

MATCHLINE STA 236+00

MATCHLINE STA 243+00

MATCHLINE STA 243+00

MATCHLINE STA 250+00

W. CEDAR STREET

E. CEDAR STREET

LOCUST ST

ROSE STREET

WILLOW STREET (W)

WILLOW STREET (E)

BEECH STREET

BUSINESS 51

BUSINESS 51

84+00

85+00

89+00

91+00

P.I. 28+87.97'SW'

29+00'SW'

30+00'SW'

31+00'SW'

32+00'SW'

33+00'SW'

34+00'SW'

35+00'SW'

P.I. 30+38.97'SW'

P.I. 30+50.26'SW'

P.I. 31+42.97'SW'

237+00

238+00

239+00

240+00

241+00

242+00

REMOVE CURB & GUTTER

36+00'SW'

37+00'SW'

38+00'SW'

39+00'SW'

40+00'SW'

41+00'SW'

42+00'SW'

P.I. 36+48.62'SW'

P.I. 37+02.36'SW'

P.I. 40+28.83'SW'

P.I. 40+63.67'SW'

P.I. 41+60.21'SW'

244+00

245+00

246+00

247+00

248+00

249+00

6'

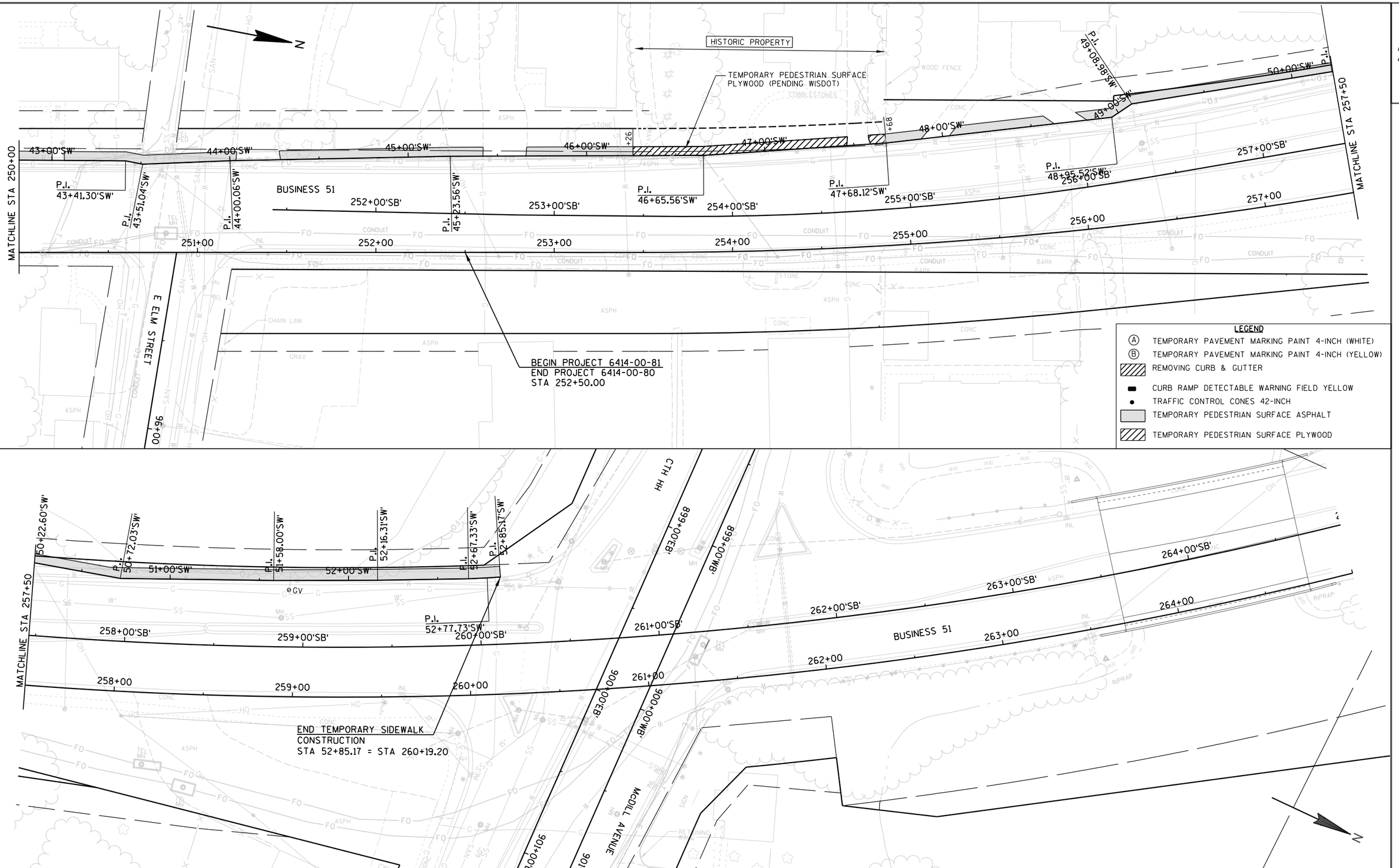
9'

LEGEND

- (A) TEMPORARY PAVEMENT MARKING PAINT 4-INCH (WHITE)
- (B) TEMPORARY PAVEMENT MARKING PAINT 4-INCH (YELLOW)
- REMOVING CURB & GUTTER
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- TRAFFIC CONTROL CONES 42-INCH
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN SURFACE PLYWOOD

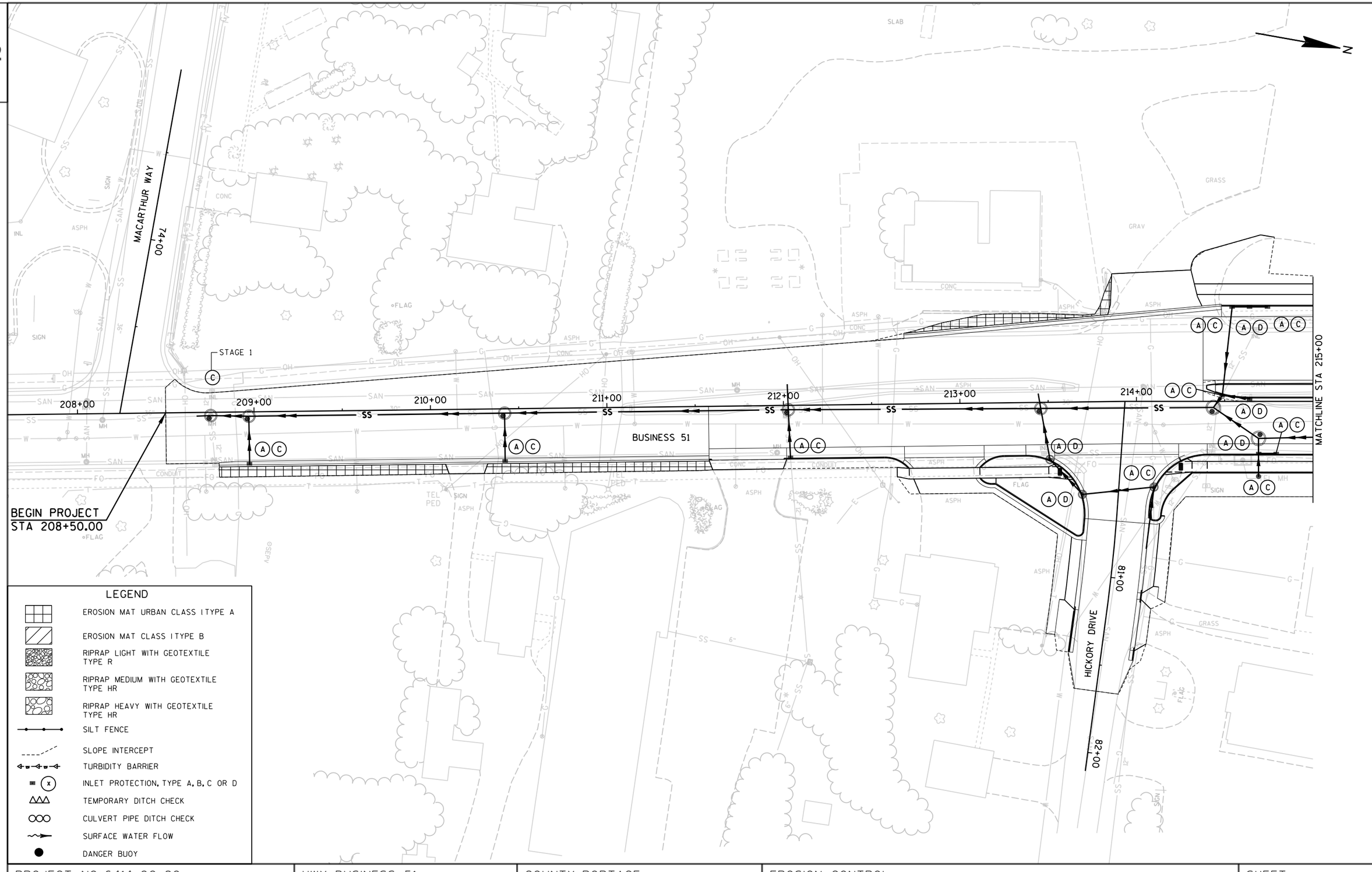
PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN DETAIL - TEMPORARY SIDEWALK	SHEET 52	E

2



PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN DETAIL - TEMPORARY SIDEWALK	SHEET 53	E

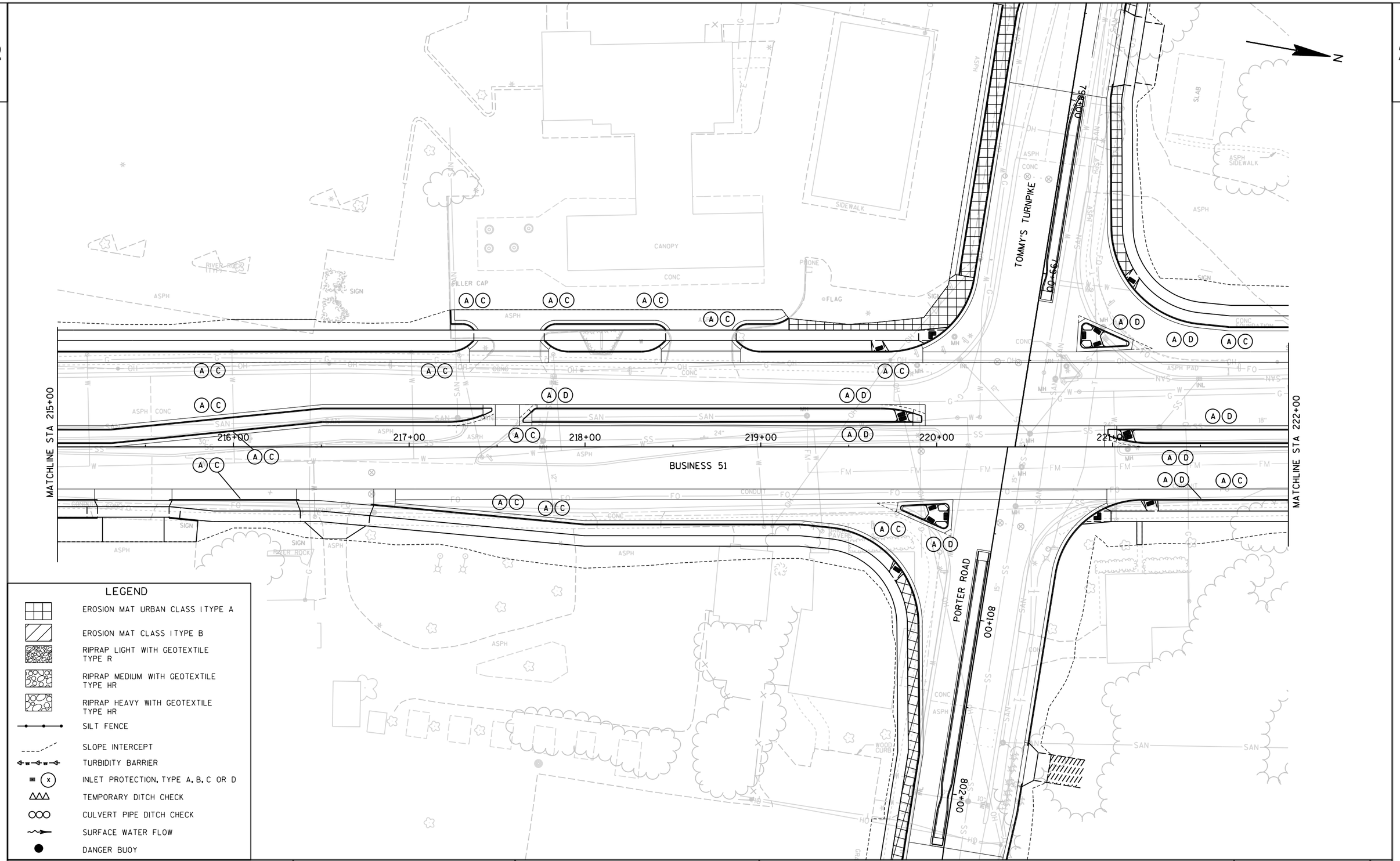
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PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	EROSION CONTROL	SHEET	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\022001 ec.dgn PLOT TIME : 3:46:40 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

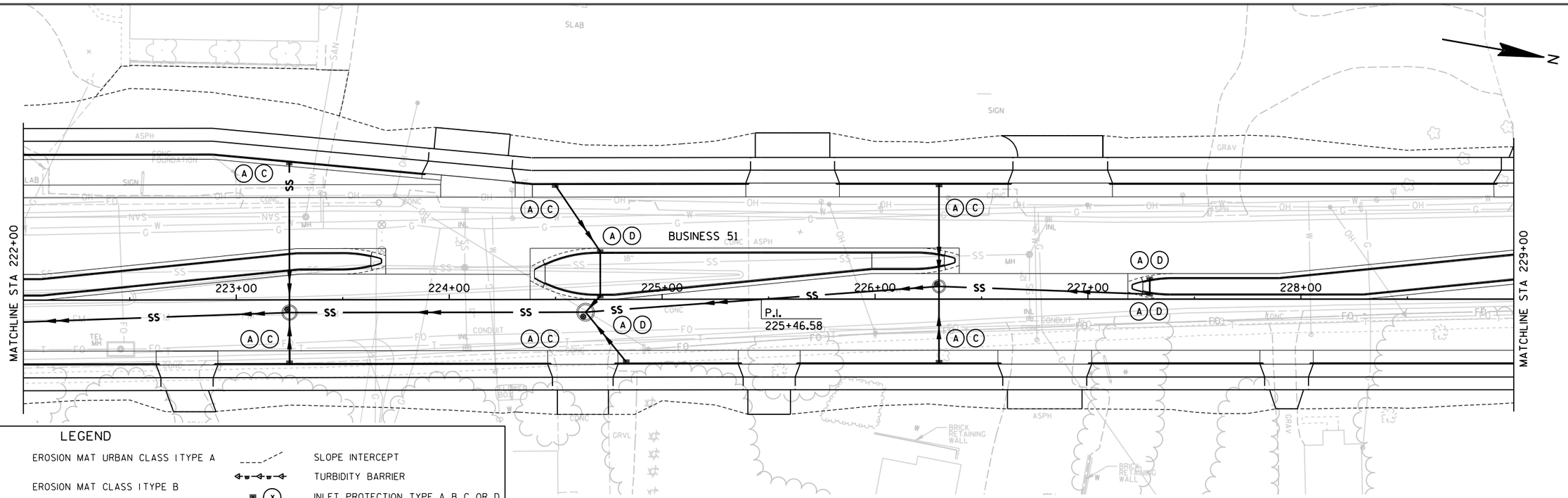
2



LEGEND

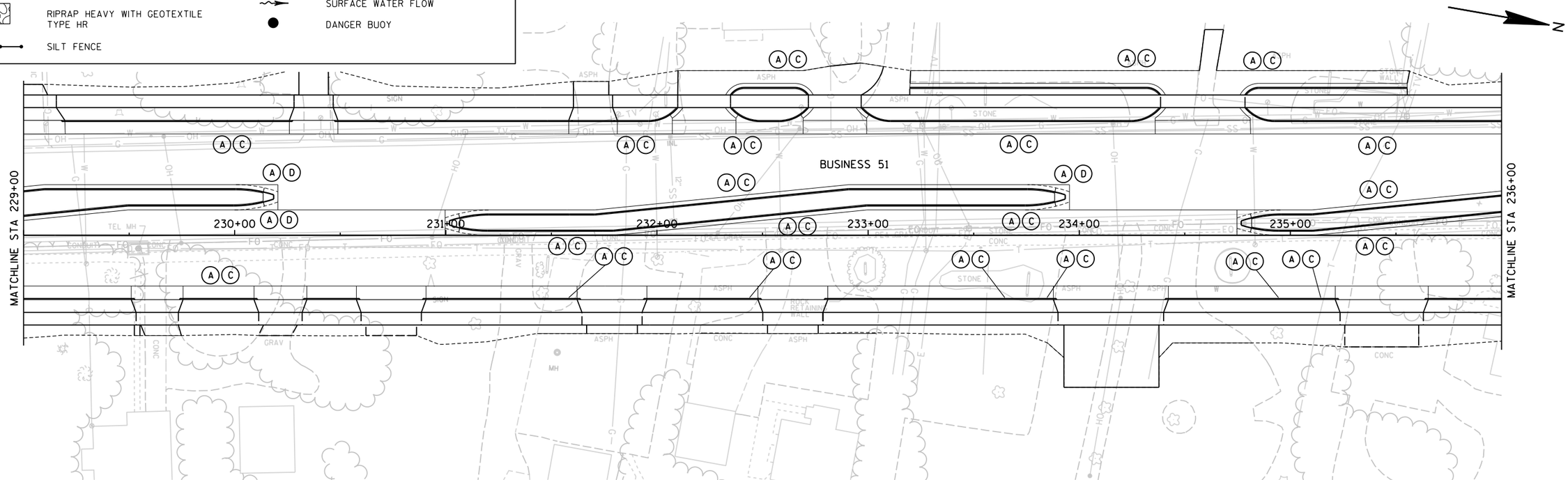
- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT CLASS I TYPE B
- RIPRAP LIGHT WITH GEOTEXTILE TYPE R
- RIPRAP MEDIUM WITH GEOTEXTILE TYPE HR
- RIPRAP HEAVY WITH GEOTEXTILE TYPE HR
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- INLET PROTECTION, TYPE A, B, C OR D
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW
- DANGER BUOY

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	EROSION CONTROL	SHEET 55	E



LEGEND

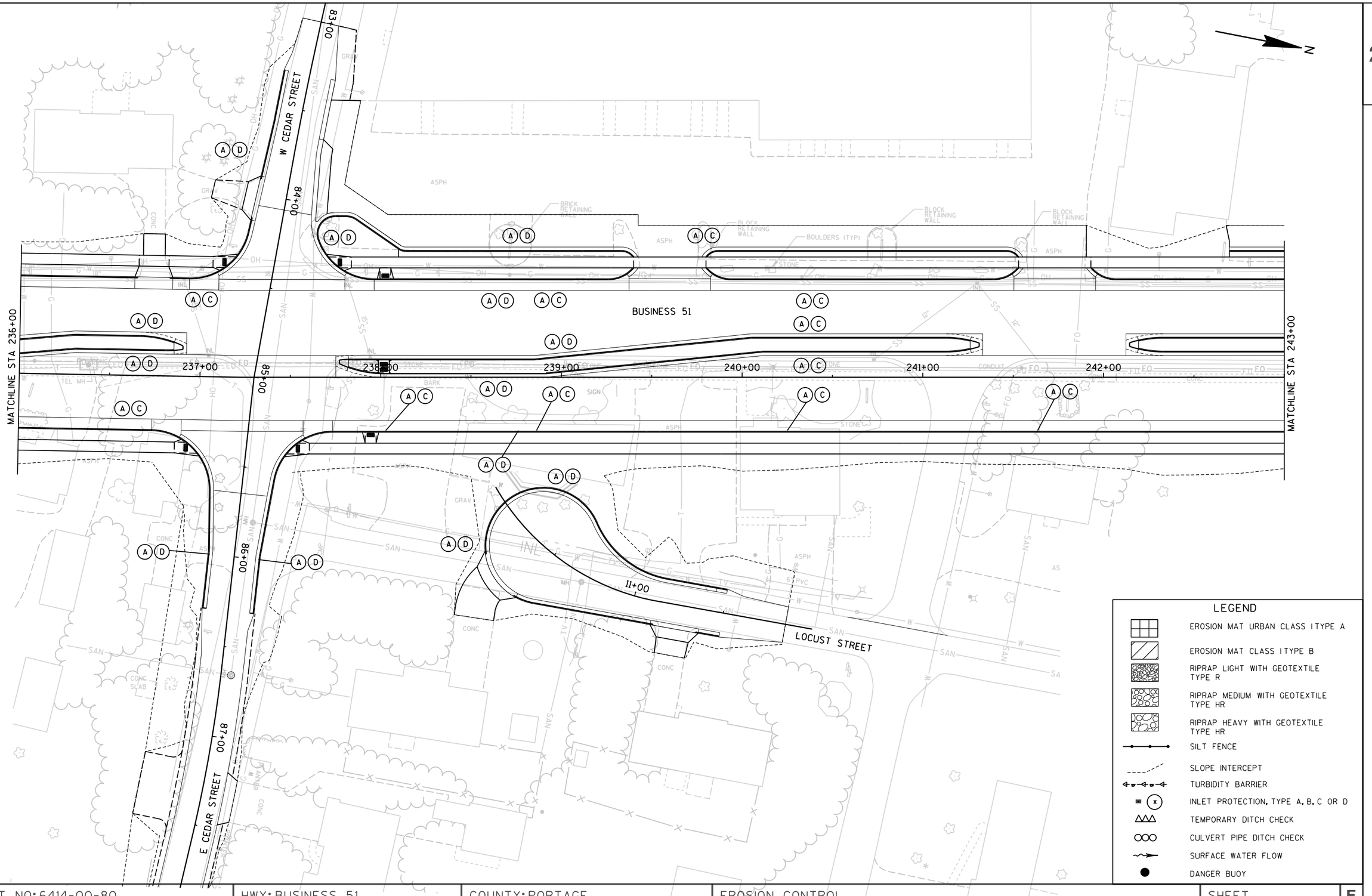
- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT CLASS I TYPE B
- RIPRAP LIGHT WITH GEOTEXTILE TYPE R
- RIPRAP MEDIUM WITH GEOTEXTILE TYPE HR
- RIPRAP HEAVY WITH GEOTEXTILE TYPE HR
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- INLET PROTECTION, TYPE A, B, C OR D
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW
- DANGER BUOY



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	EROSION CONTROL	SHEET 56	E

FILE NAME : P:\UZW\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\022003 ec.dgn PLOT TIME : 3:46:42 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

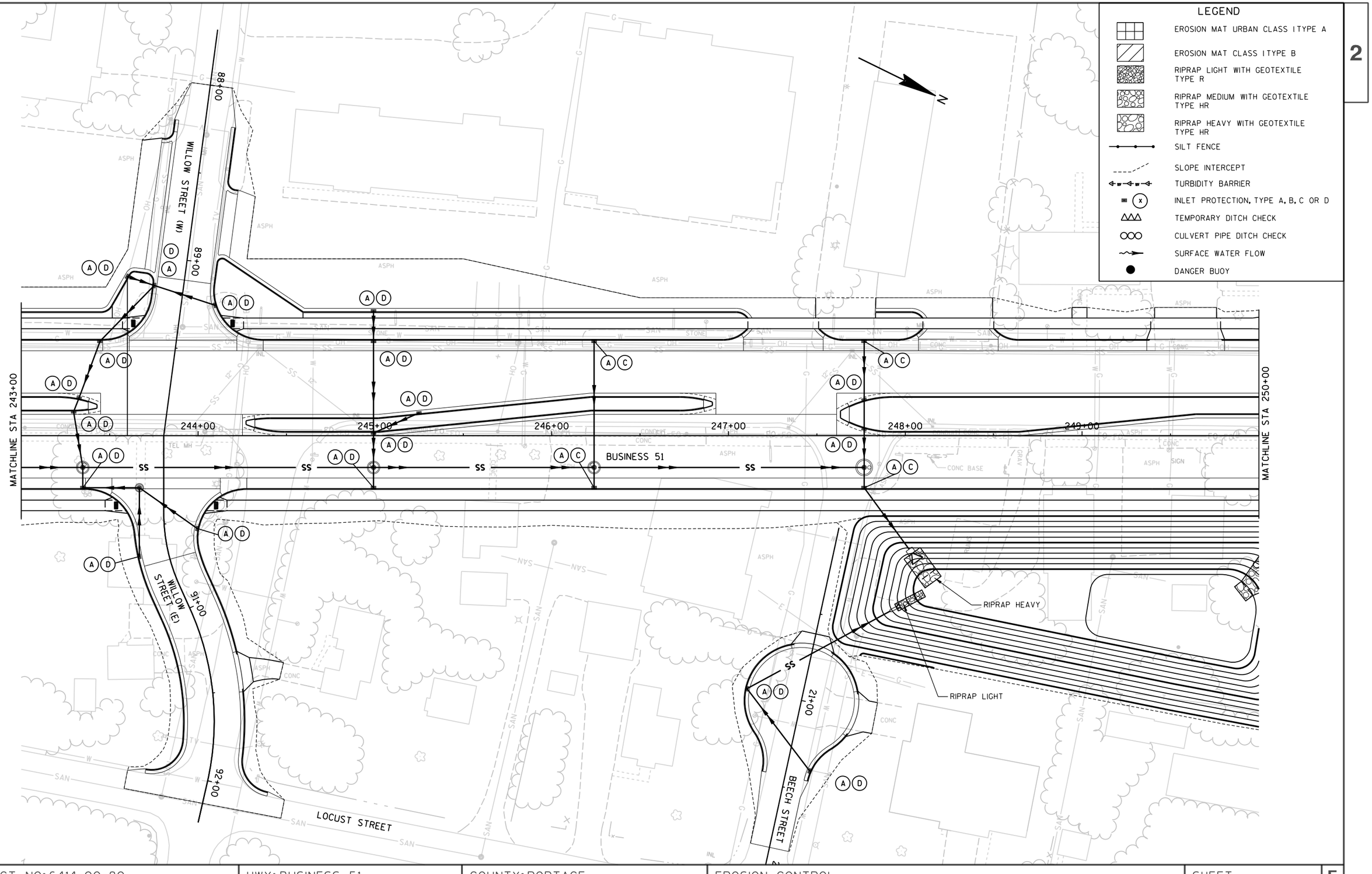
2



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	EROSION CONTROL	SHEET 57	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\022004 ec.dgn PLOT TIME : 3:46:44 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

2



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	EROSION CONTROL	SHEET 58	E

2

MATCHLINE STA 250+00

MATCHLINE STA 257+50

BUSINESS 51

BEGIN PROJECT 6414-00-81
END PROJECT 6414-00-80
STA 252+50.00

E ELM STREET

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT CLASS I TYPE B
- RIPRAP LIGHT WITH GEOTEXTILE TYPE R
- RIPRAP MEDIUM WITH GEOTEXTILE TYPE HR
- RIPRAP HEAVY WITH GEOTEXTILE TYPE HR
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- INLET PROTECTION, TYPE A, B, C OR D
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW
- DANGER BUOY

LEGEND

IMPACT AREA A = 1.53 AC

IMPACT AREA B = 0.70 AC

TOTAL = 2.23 AC

MATCHLINE STA 257+50

MATCHLINE STA 265+00

CTH HH

MCDILL AVENUE

BUSINESS 51

RIPRAP LIGHT

RIPRAP HEAVY SHOWN ON STRUCTURE PLANS

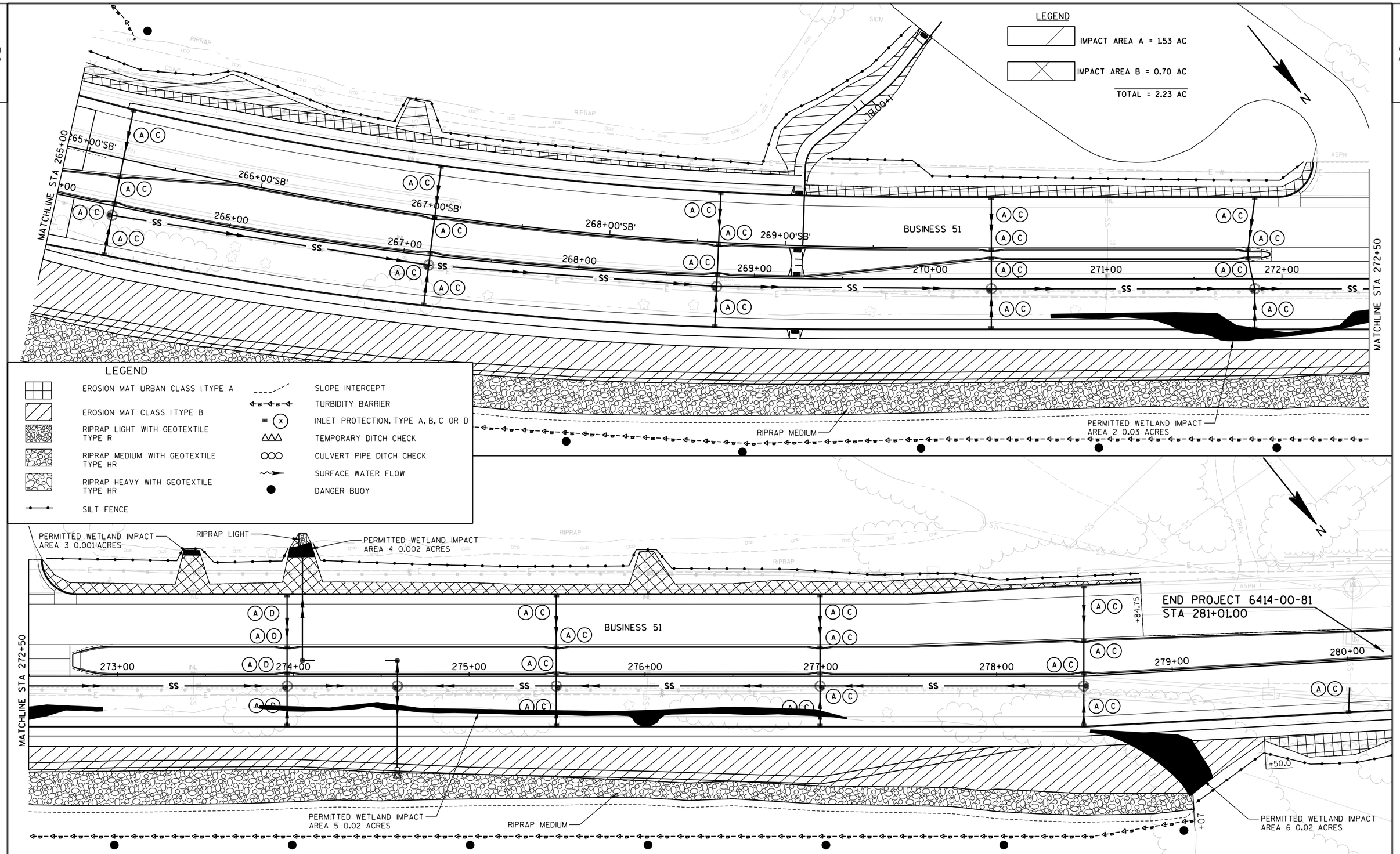
RIPRAP MEDIUM

PERMITTED WETLAND IMPACT AREA 10.01 ACRES

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	EROSION CONTROL	SHEET 59	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\022006 ec.dgn PLOT TIME : 3:46:46 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

2



PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	EROSION CONTROL	SHEET 60	E

2

2

N

TOMMY'S TURNPIKE

794+00

795+00

796+00

797+00

798+00

MATCHLINE

SS

THEATER DRIVE

59+00

ANT

ASPH

GRAV

CONC.

BRICK PAVERS

TEL PED

SLAB

VACUUM

A C

A D

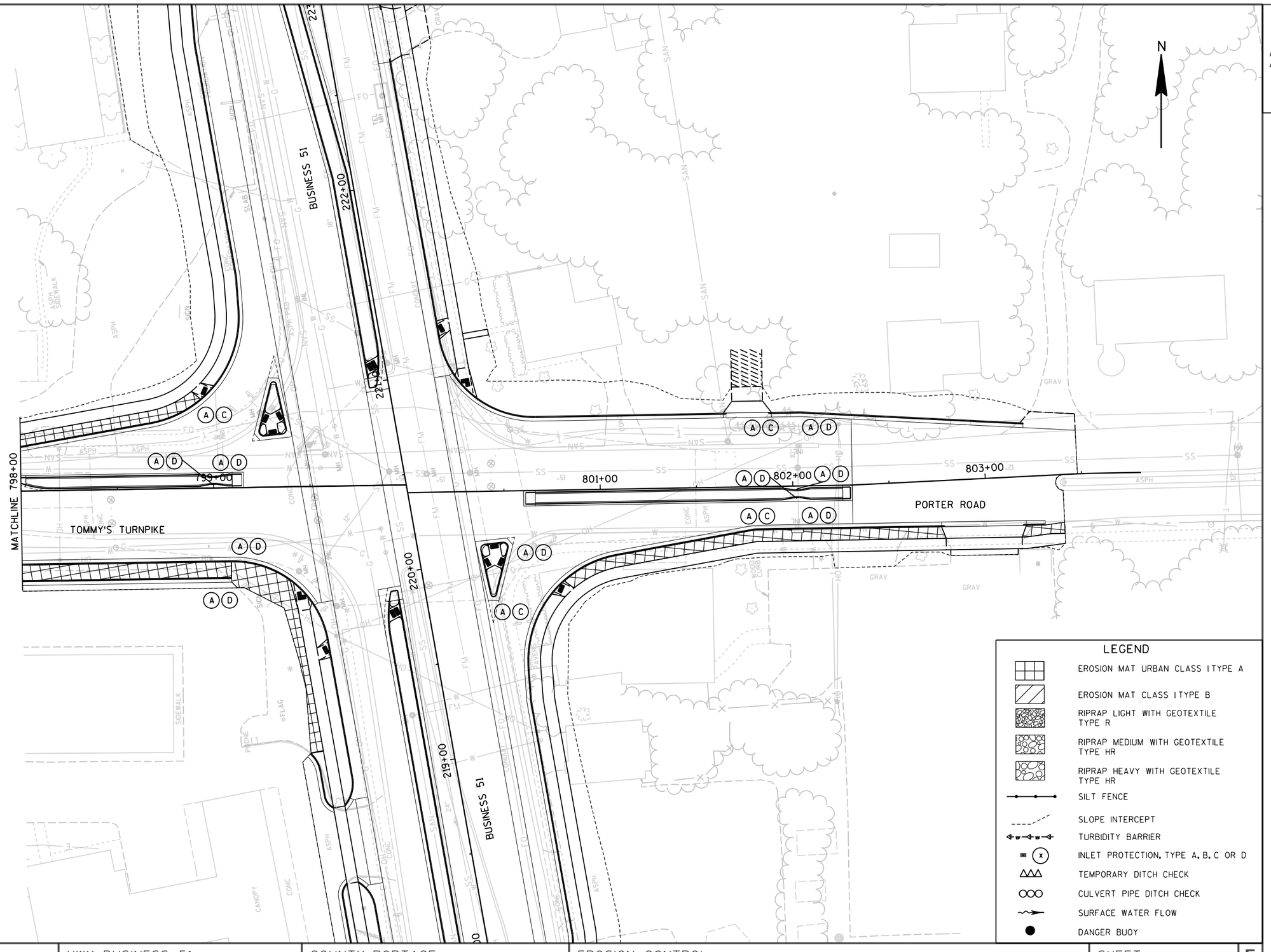
LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT CLASS I TYPE B
- RIPRAP LIGHT WITH GEOTEXTILE TYPE R
- RIPRAP MEDIUM WITH GEOTEXTILE TYPE HR
- RIPRAP HEAVY WITH GEOTEXTILE TYPE HR
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- INLET PROTECTION, TYPE A, B, C OR D
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW
- DANGER BUOY

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	EROSION CONTROL	SHEET 61	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\022008 ec.dgn PLOT TIME : 3:46:51 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

2



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	EROSION CONTROL	SHEET 62	E

2

2

N

W CEDAR STREET

E CEDAR STREET

83+00 84+00 85+00 86+00 87+00 88+00 89+00 90+00

235+00 236+00 237+00 238+00 239+00

BUSINESS 51

RIPRAP MEDIUM

LEGEND

- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT CLASS ITYPE B
- RIPRAP LIGHT WITH GEOTEXTILE TYPE R
- RIPRAP MEDIUM WITH GEOTEXTILE TYPE HR
- RIPRAP HEAVY WITH GEOTEXTILE TYPE HR
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- INLET PROTECTION, TYPE A, B, C OR D
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW
- DANGER BUOY

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	EROSION CONTROL	SHEET 63	E

2

N

RIPRAP LIGHT

RIPRAP LIGHT

RIPRAP LIGHT

892+00'WB'

892+00'EB'

893+00'WB'

893+00'EB'

894+00'WB'

894+00'EB'

895+00'WB'

895+00'EB'

896+00'WB'

896+00'EB'

897+00'WB'

897+00'EB'

898+00'WB'

898+00'EB'

899+00'WB'

899+00'EB'

CTH HH

BUSINESS 51

263+00'SB'

263+00'

262+00'SB'

262+00'

264+

MATCHLINE 899+50

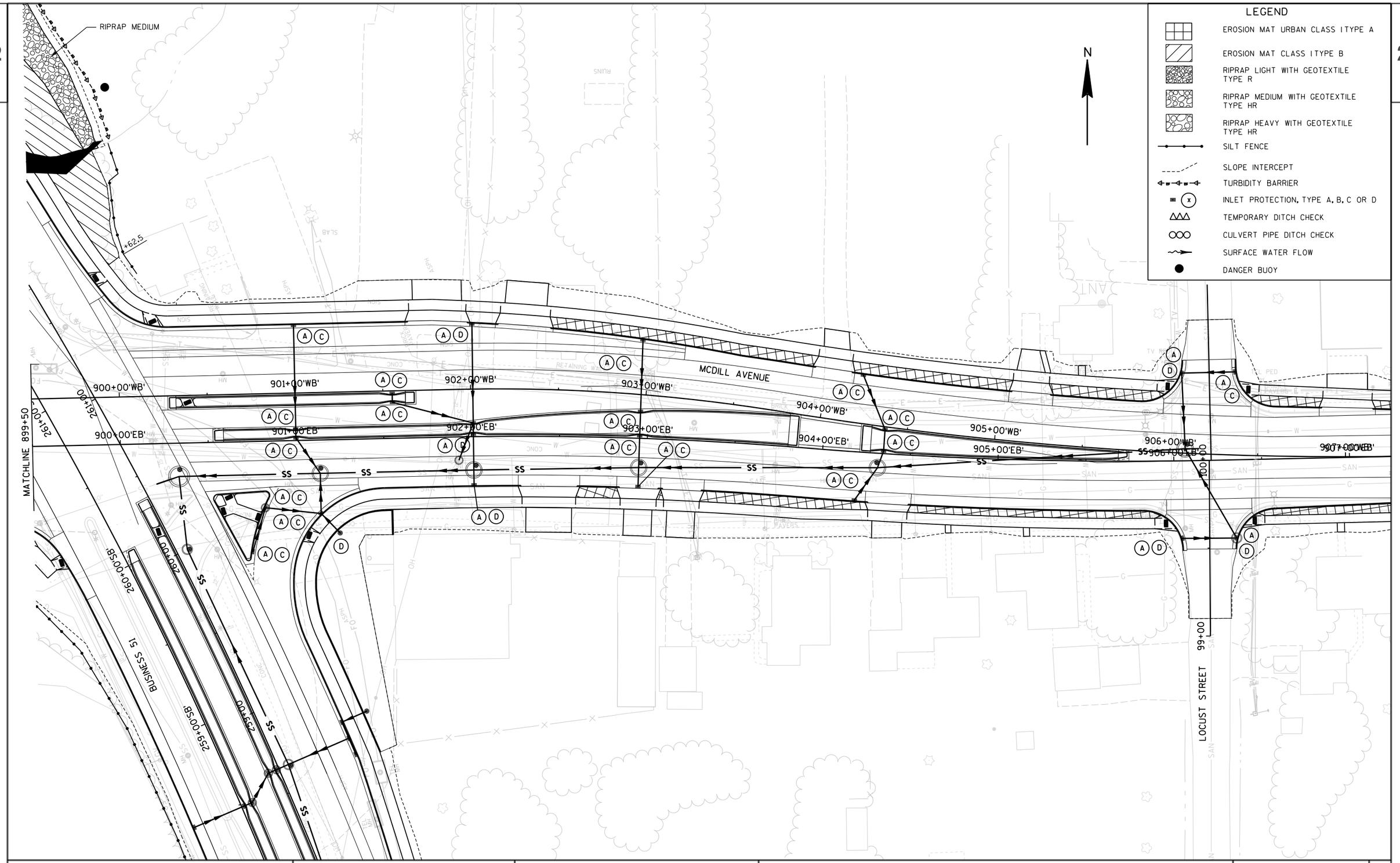
SIGN

LEGEND

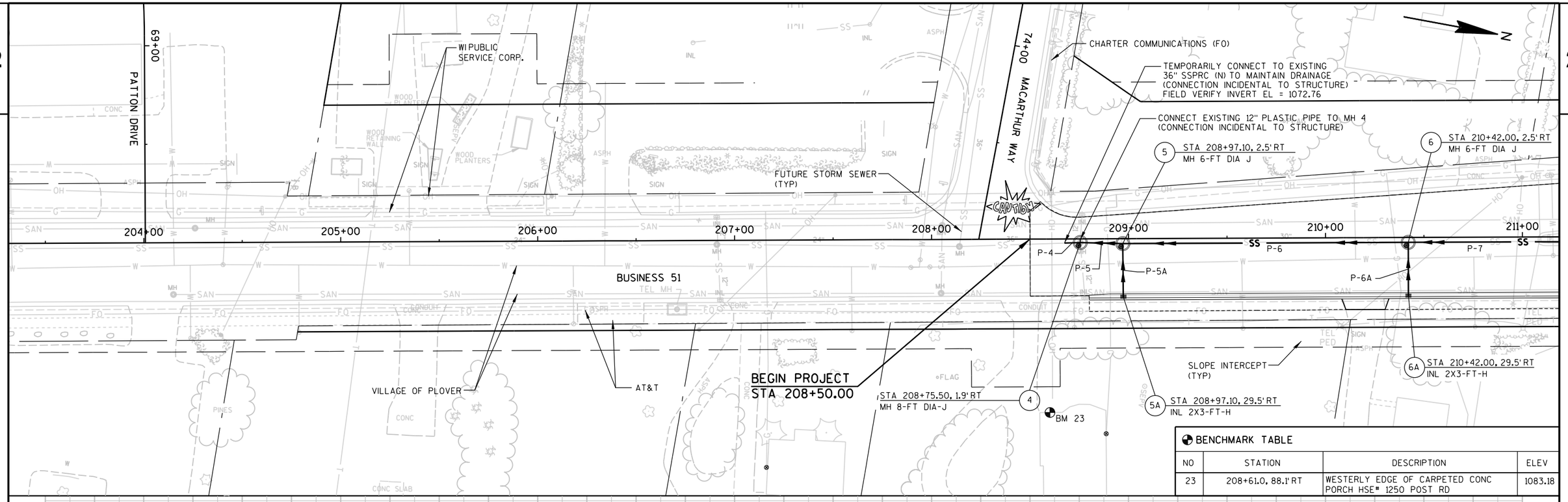
- EROSION MAT URBAN CLASS ITYPE A
- EROSION MAT CLASS ITYPE B
- RIPRAP LIGHT WITH GEOTEXTILE TYPE R
- RIPRAP MEDIUM WITH GEOTEXTILE TYPE HR
- RIPRAP HEAVY WITH GEOTEXTILE TYPE HR
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- INLET PROTECTION, TYPE A, B, C OR D
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW
- DANGER BUOY

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	EROSION CONTROL	SHEET 64	E

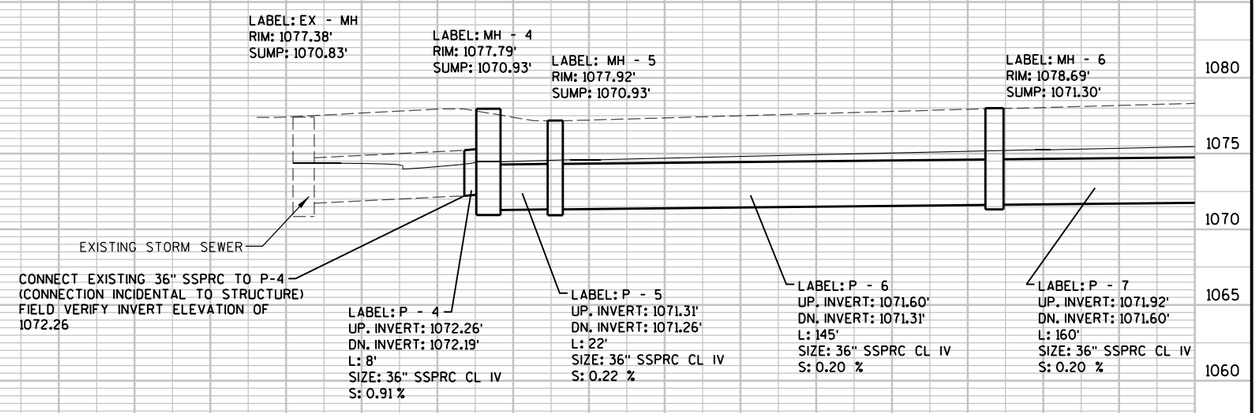
2



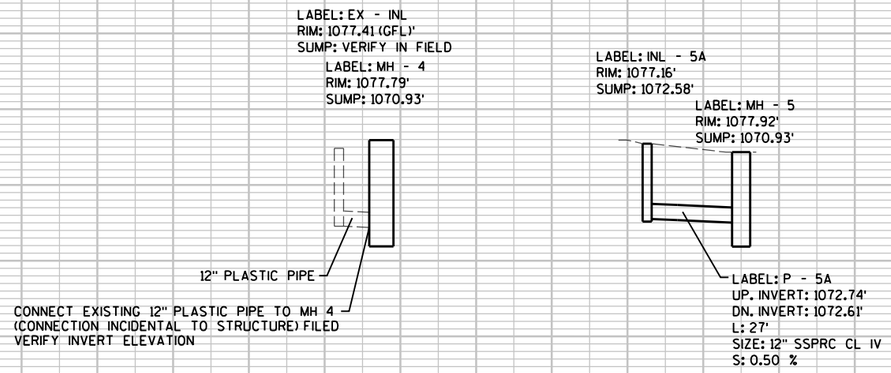
PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	EROSION CONTROL	SHEET 65	E



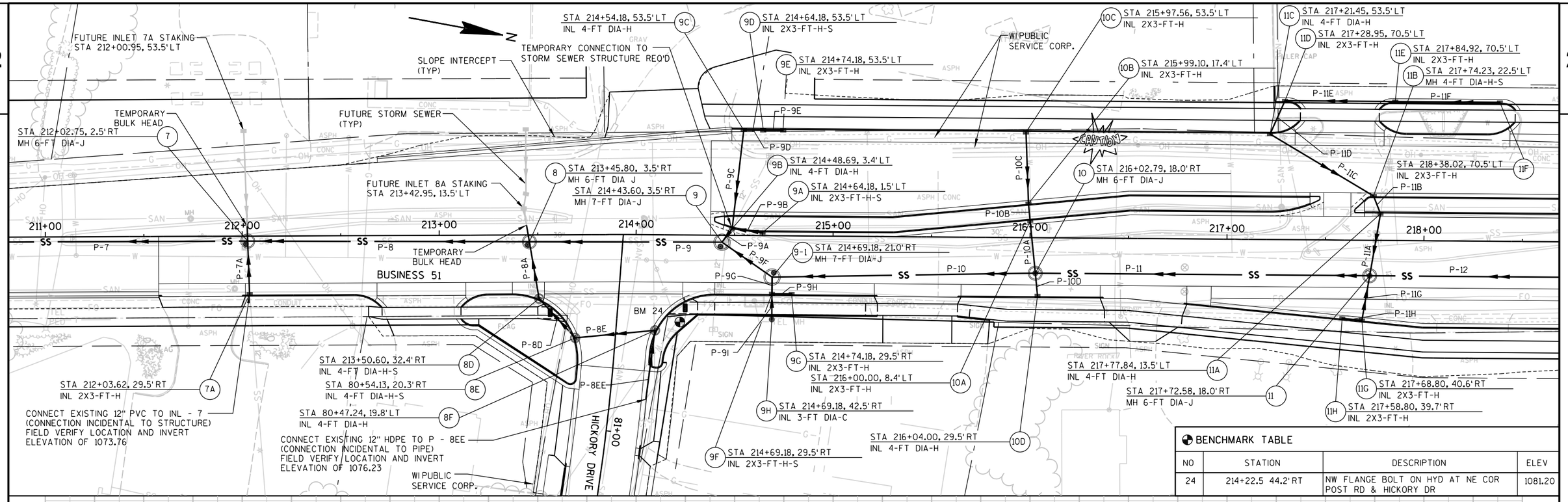
BENCHMARK TABLE			
NO	STATION	DESCRIPTION	ELEV
23	208+61.0, 88.1' RT	WESTERLY EDGE OF CARPETED CONC PORCH HSE# 1250 POST RD	1083.18



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 66	E

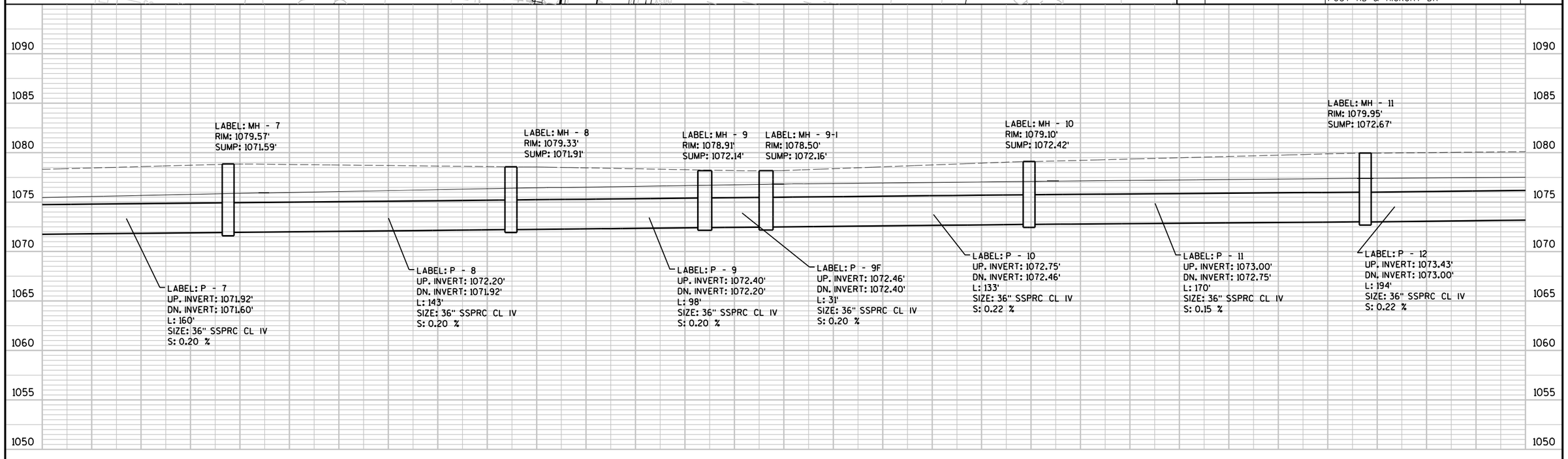

LABEL: EX - INL
RIM: 1077.41 (GFL)'
SUMP: VERIFY IN FIELD
LABEL: MH - 4
RIM: 1077.79'
SUMP: 1070.93'
12" PLASTIC PIPE
CONNECT EXISTING 12" PLASTIC PIPE TO MH 4
(CONNECTION INCIDENTAL TO STRUCTURE) FILED
VERIFY INVERT ELEVATION
LABEL: INL - 5A
RIM: 1077.16'
SUMP: 1072.58'
LABEL: MH - 5
RIM: 1077.92'
SUMP: 1070.93'
LABEL: P - 5A
UP. INVERT: 1072.74'
DN. INVERT: 1072.61'
L: 27'
SIZE: 12" SSPRC CL IV
S: 0.50 %
LABEL: INL - 6A
RIM: 1077.98'
SUMP: 1074.30'
LABEL: MH - 6
RIM: 1078.69'
SUMP: 1071.30'
LABEL: P - 6A
UP. INVERT: 1074.17'
DN. INVERT: 1074.04'
L: 27'
SIZE: 12" SSPRC CL IV
S: 0.50 %

2

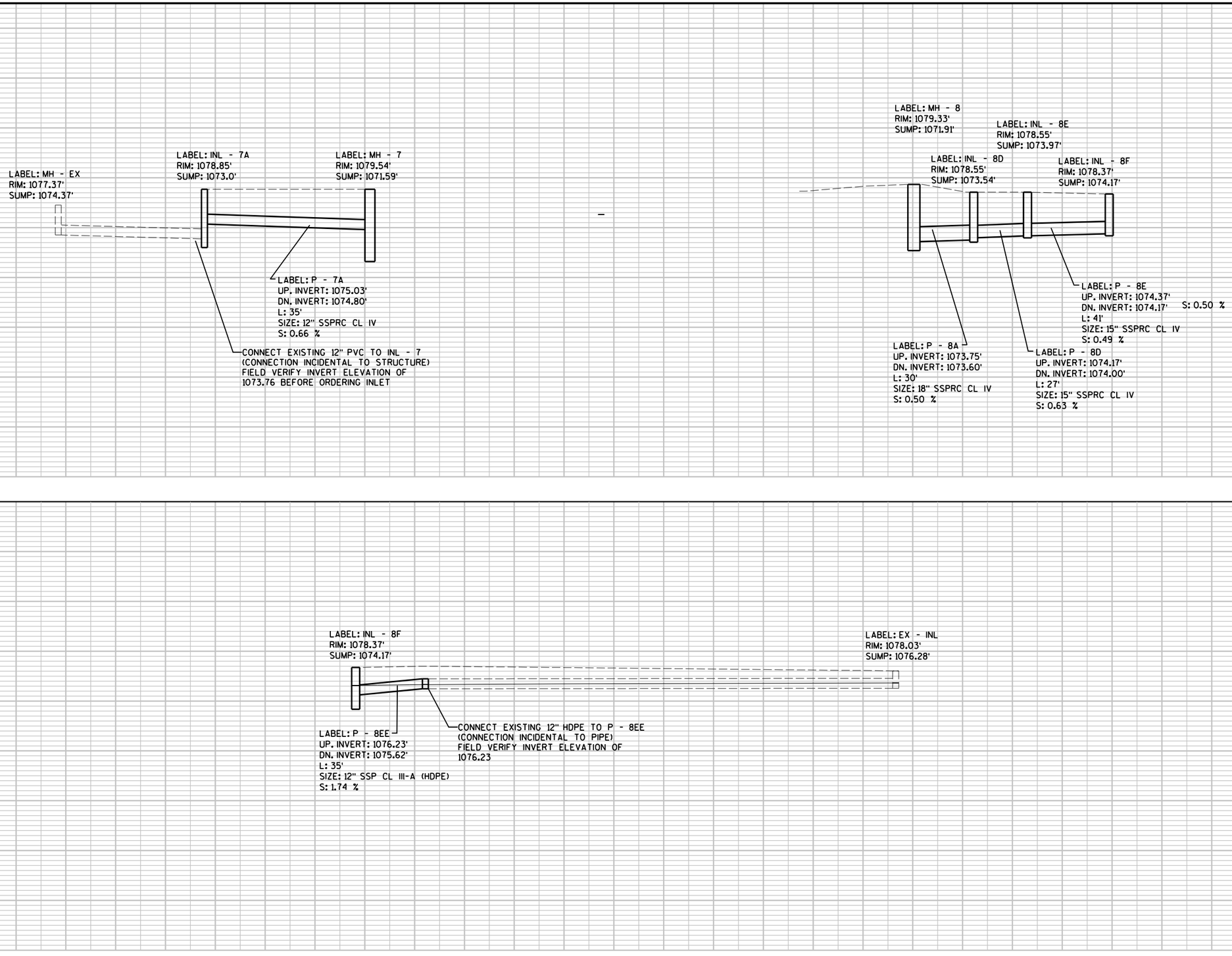


BENCHMARK TABLE

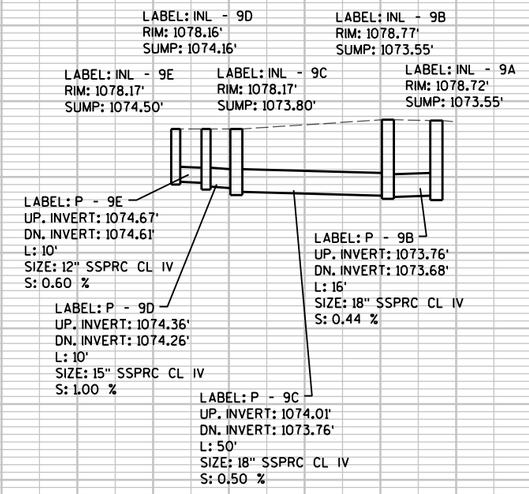
NO	STATION	DESCRIPTION	ELEV
24	214+22.5 44.2'RT	NW FLANGE BOLT ON HYD AT NE COR POST RD & HICKORY DR	1081.20



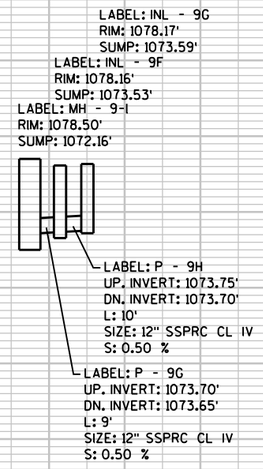
PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 68	E

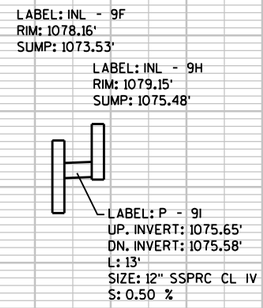


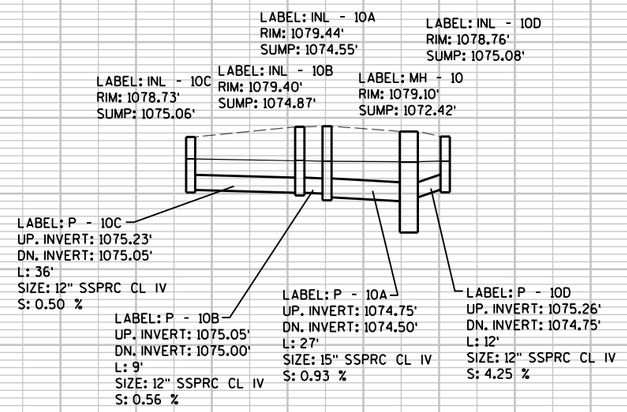
PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 69	E

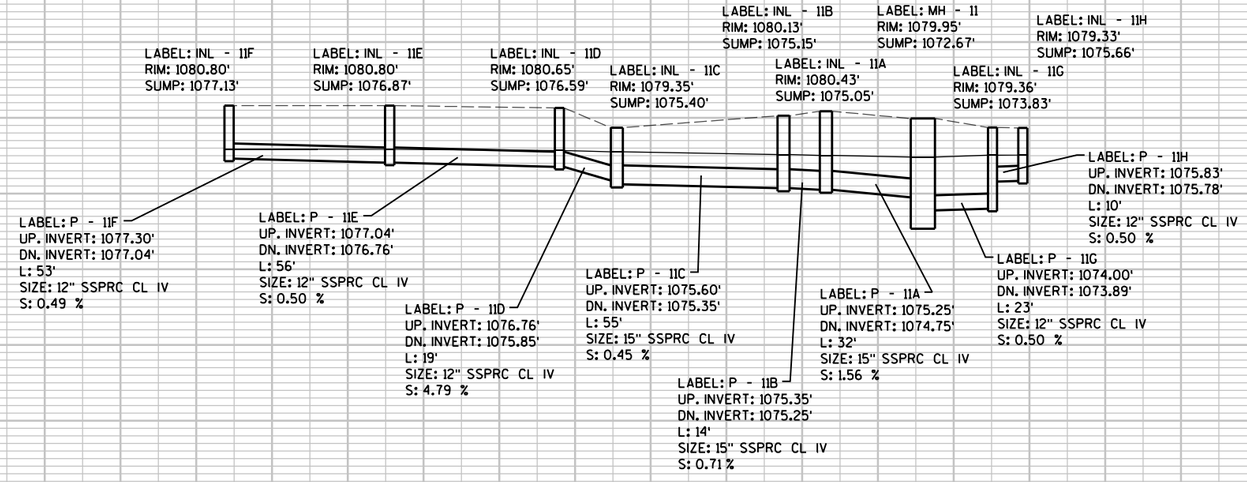

LABEL: INL - 9D
RIM: 1078.16'
SUMP: 1074.16'
LABEL: INL - 9B
RIM: 1078.77'
SUMP: 1073.55'
LABEL: INL - 9E
RIM: 1078.17'
SUMP: 1074.50'
LABEL: INL - 9C
RIM: 1078.17'
SUMP: 1073.80'
LABEL: INL - 9A
RIM: 1078.72'
SUMP: 1073.55'
LABEL: P - 9E
UP. INVERT: 1074.67'
DN. INVERT: 1074.61'
L: 10'
SIZE: 12" SSPRC CL IV
S: 0.60 %
LABEL: P - 9B
UP. INVERT: 1073.76'
DN. INVERT: 1073.68'
L: 16'
SIZE: 18" SSPRC CL IV
S: 0.44 %
LABEL: P - 9D
UP. INVERT: 1074.36'
DN. INVERT: 1074.26'
L: 10'
SIZE: 15" SSPRC CL IV
S: 1.00 %
LABEL: P - 9C
UP. INVERT: 1074.01'
DN. INVERT: 1073.76'
L: 50'
SIZE: 18" SSPRC CL IV
S: 0.50 %

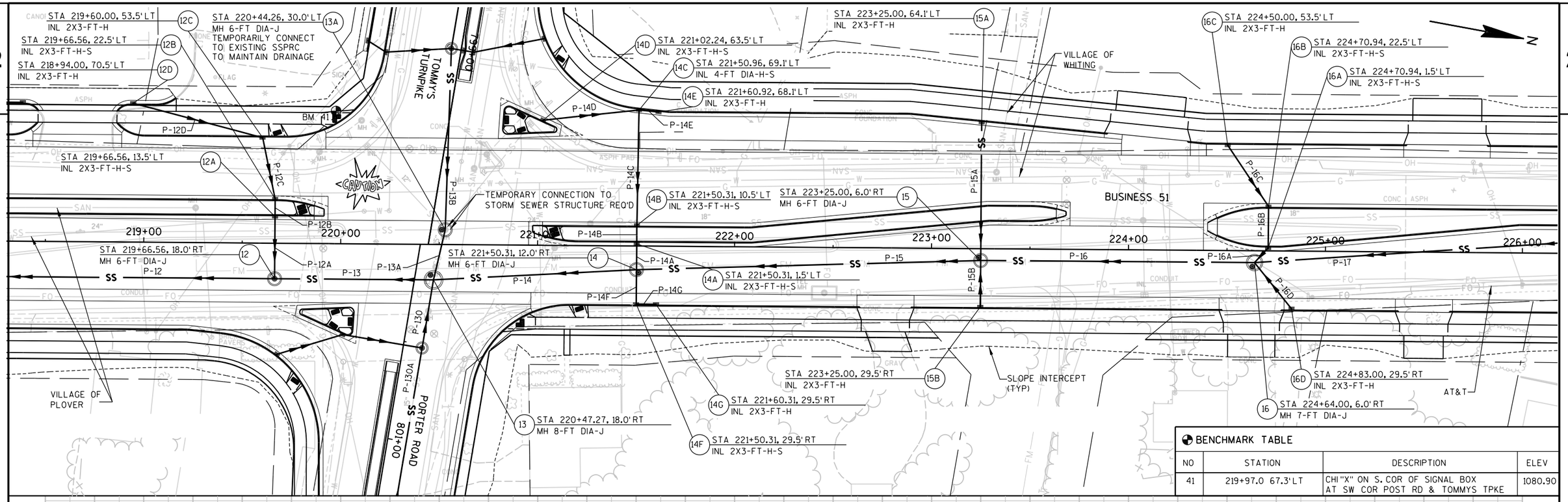

LABEL: INL - 9B
RIM: 1078.77'
SUMP: 1073.55'
LABEL: MH - 9
RIM: 1078.91'
SUMP: 1072.14'
LABEL: P - 9A
UP. INVERT: 1073.68'
DN. INVERT: 1073.59'
L: 9'
SIZE: 18" SSPRC CL IV
S: 1.00 %


LABEL: INL - 9G
RIM: 1078.17'
SUMP: 1073.59'
LABEL: INL - 9F
RIM: 1078.16'
SUMP: 1073.53'
LABEL: MH - 9-I
RIM: 1078.50'
SUMP: 1072.16'
LABEL: P - 9H
UP. INVERT: 1073.75'
DN. INVERT: 1073.70'
L: 10'
SIZE: 12" SSPRC CL IV
S: 0.50 %
LABEL: P - 9G
UP. INVERT: 1073.70'
DN. INVERT: 1073.65'
L: 9'
SIZE: 12" SSPRC CL IV
S: 0.50 %


LABEL: INL - 9F
RIM: 1078.16'
SUMP: 1073.53'
LABEL: INL - 9H
RIM: 1079.15'
SUMP: 1075.48'
LABEL: P - 9I
UP. INVERT: 1075.65'
DN. INVERT: 1075.58'
L: 13'
SIZE: 12" SSPRC CL IV
S: 0.50 %

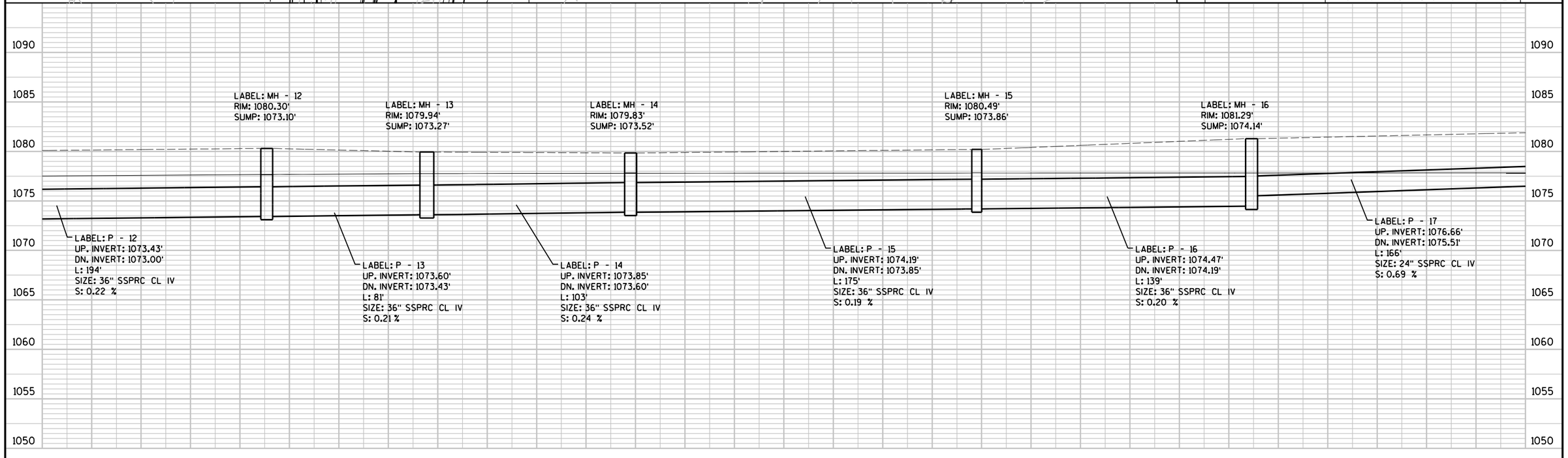

LABEL: INL - 10A
RIM: 1079.44'
SUMP: 1074.55'
LABEL: INL - 10D
RIM: 1078.76'
SUMP: 1075.08'
LABEL: INL - 10B
RIM: 1079.40'
SUMP: 1074.87'
LABEL: INL - 10C
RIM: 1078.73'
SUMP: 1075.06'
LABEL: MH - 10
RIM: 1079.10'
SUMP: 1072.42'
LABEL: P - 10C
UP. INVERT: 1075.23'
DN. INVERT: 1075.05'
L: 36'
SIZE: 12" SSPRC CL IV
S: 0.50 %
LABEL: P - 10B
UP. INVERT: 1075.05'
DN. INVERT: 1075.00'
L: 9'
SIZE: 12" SSPRC CL IV
S: 0.56 %
LABEL: P - 10A
UP. INVERT: 1074.75'
DN. INVERT: 1074.50'
L: 27'
SIZE: 15" SSPRC CL IV
S: 0.93 %
LABEL: P - 10D
UP. INVERT: 1075.26'
DN. INVERT: 1074.75'
L: 12'
SIZE: 12" SSPRC CL IV
S: 4.25 %

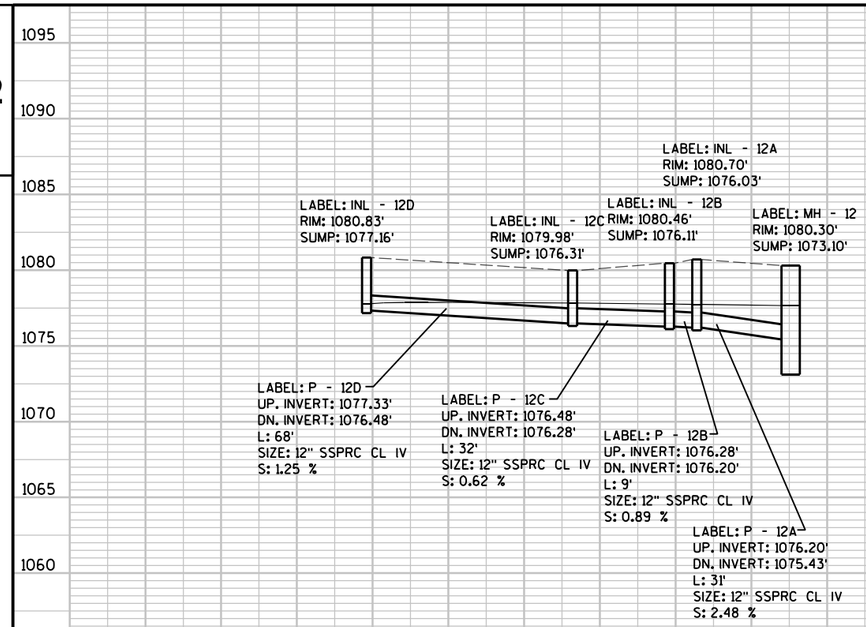

LABEL: INL - 11B
RIM: 1080.13'
SUMP: 1075.15'
LABEL: MH - 11
RIM: 1079.95'
SUMP: 1072.67'
LABEL: INL - 11H
RIM: 1079.33'
SUMP: 1075.66'
LABEL: INL - 11F
RIM: 1080.80'
SUMP: 1077.13'
LABEL: INL - 11E
RIM: 1080.80'
SUMP: 1076.87'
LABEL: INL - 11D
RIM: 1080.65'
SUMP: 1076.59'
LABEL: INL - 11C
RIM: 1079.35'
SUMP: 1075.40'
LABEL: INL - 11A
RIM: 1080.43'
SUMP: 1075.05'
LABEL: INL - 11G
RIM: 1079.36'
SUMP: 1073.83'
LABEL: P - 11F
UP. INVERT: 1077.30'
DN. INVERT: 1077.04'
L: 53'
SIZE: 12" SSPRC CL IV
S: 0.49 %
LABEL: P - 11E
UP. INVERT: 1077.04'
DN. INVERT: 1076.76'
L: 56'
SIZE: 12" SSPRC CL IV
S: 0.50 %
LABEL: P - 11D
UP. INVERT: 1076.76'
DN. INVERT: 1075.85'
L: 19'
SIZE: 12" SSPRC CL IV
S: 4.79 %
LABEL: P - 11C
UP. INVERT: 1075.60'
DN. INVERT: 1075.35'
L: 55'
SIZE: 15" SSPRC CL IV
S: 0.45 %
LABEL: P - 11B
UP. INVERT: 1075.35'
DN. INVERT: 1075.25'
L: 14'
SIZE: 15" SSPRC CL IV
S: 0.71 %
LABEL: P - 11A
UP. INVERT: 1075.25'
DN. INVERT: 1074.75'
L: 32'
SIZE: 15" SSPRC CL IV
S: 1.56 %
LABEL: P - 11H
UP. INVERT: 1075.83'
DN. INVERT: 1075.78'
L: 10'
SIZE: 12" SSPRC CL IV
S: 0.50 %
LABEL: P - 11G
UP. INVERT: 1074.00'
DN. INVERT: 1073.89'
L: 23'
SIZE: 12" SSPRC CL IV
S: 0.50 %

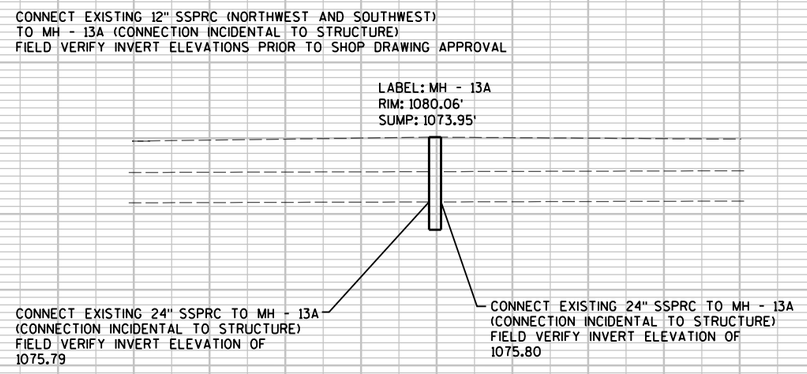


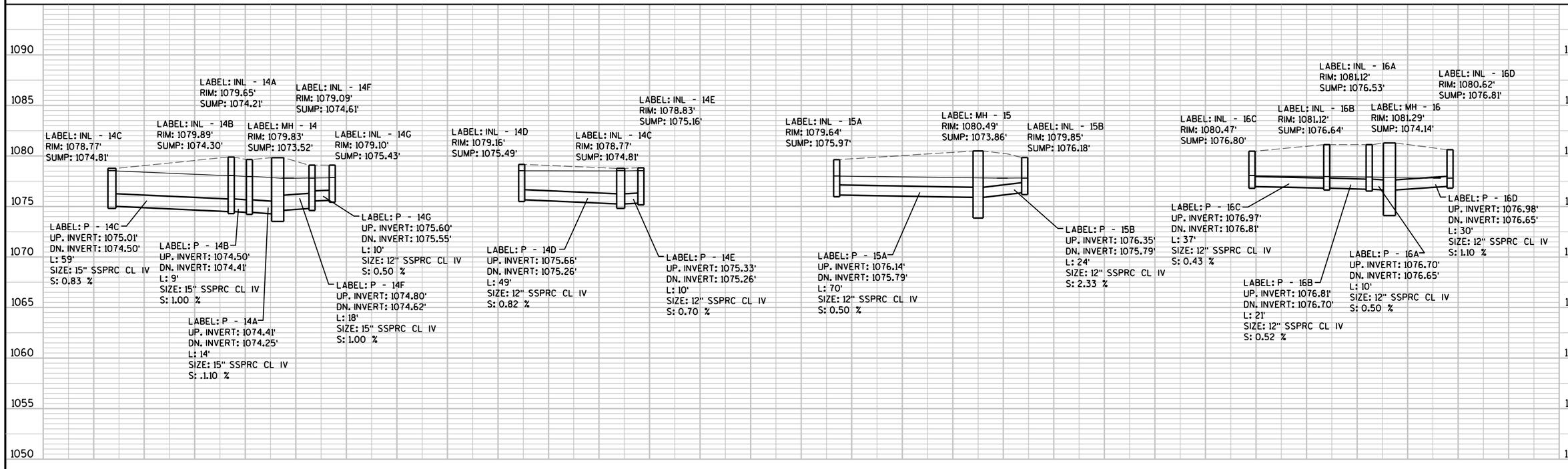
BENCHMARK TABLE

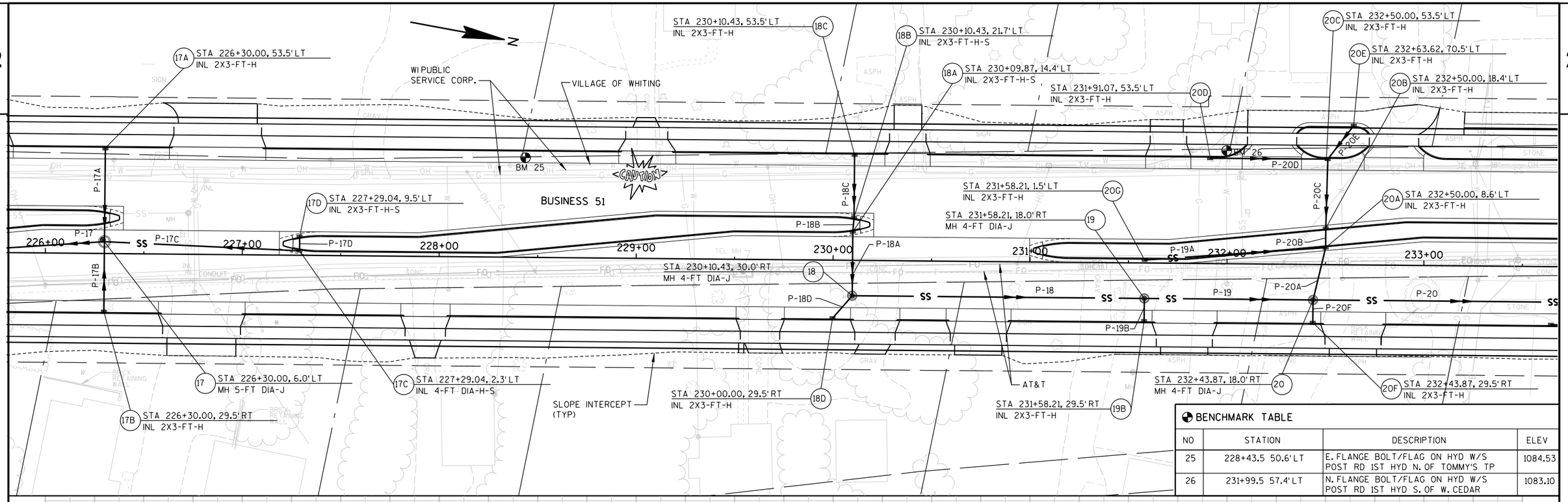
NO	STATION	DESCRIPTION	ELEV
41	219+97.0 67.3'LT	CHI "X" ON S.COR OF SIGNAL BOX AT SW COR POST RD & TOMMYS TPKE	1080.90




LABEL: INL - 12A
RIM: 1080.70'
SUMP: 1076.03'
LABEL: INL - 12D
RIM: 1080.83'
SUMP: 1077.16'
LABEL: INL - 12C
RIM: 1079.98'
SUMP: 1076.31'
LABEL: INL - 12B
RIM: 1080.46'
SUMP: 1076.11'
LABEL: MH - 12
RIM: 1080.30'
SUMP: 1073.10'
LABEL: P - 12D
UP. INVERT: 1077.33'
DN. INVERT: 1076.48'
L: 68'
SIZE: 12" SSPRC CL IV
S: 1.25 %
LABEL: P - 12C
UP. INVERT: 1076.48'
DN. INVERT: 1076.28'
L: 32'
SIZE: 12" SSPRC CL IV
S: 0.62 %
LABEL: P - 12B
UP. INVERT: 1076.28'
DN. INVERT: 1076.20'
L: 9'
SIZE: 12" SSPRC CL IV
S: 0.89 %
LABEL: P - 12A
UP. INVERT: 1076.20'
DN. INVERT: 1075.43'
L: 31'
SIZE: 12" SSPRC CL IV
S: 2.48 %
1095
1090
1085
1080
1075
1070
1065
1060
1055
1050

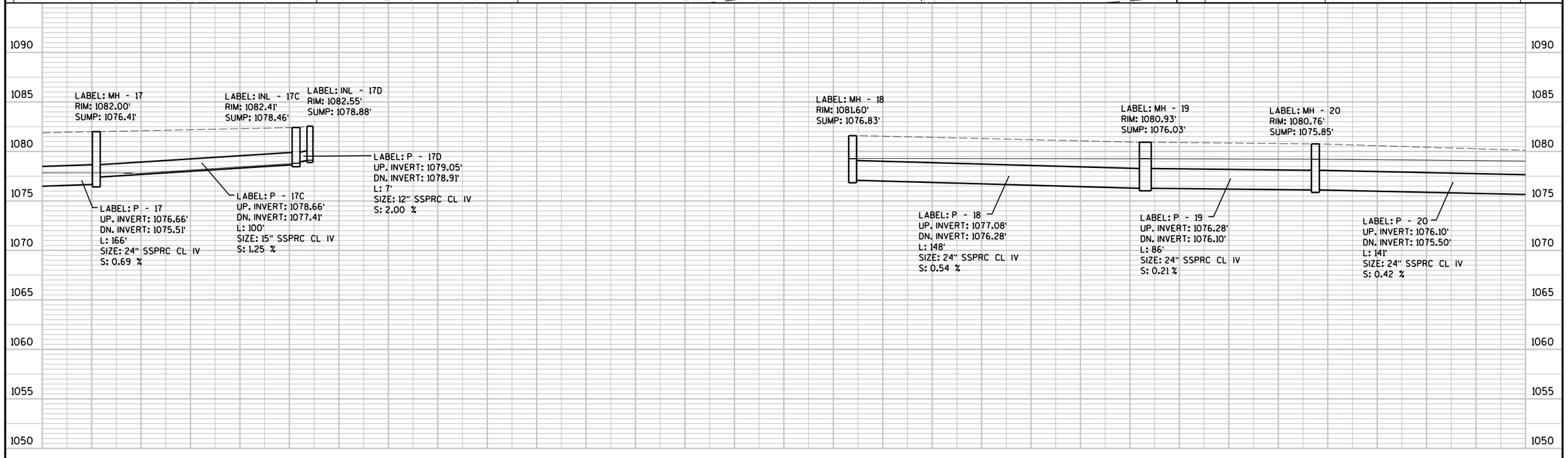

CONNECT EXISTING 12" SSPRC (NORTHWEST AND SOUTHWEST)
TO MH - 13A (CONNECTION INCIDENTAL TO STRUCTURE)
FIELD VERIFY INVERT ELEVATIONS PRIOR TO SHOP DRAWING APPROVAL
LABEL: MH - 13A
RIM: 1080.06'
SUMP: 1073.95'
CONNECT EXISTING 24" SSPRC TO MH - 13A
(CONNECTION INCIDENTAL TO STRUCTURE)
FIELD VERIFY INVERT ELEVATION OF
1075.79
CONNECT EXISTING 24" SSPRC TO MH - 13A
(CONNECTION INCIDENTAL TO STRUCTURE)
FIELD VERIFY INVERT ELEVATION OF
1075.80


LABEL: INL - 14A
RIM: 1079.65'
SUMP: 1074.21'
LABEL: INL - 14F
RIM: 1079.09'
SUMP: 1074.61'
LABEL: INL - 14B
RIM: 1079.89'
SUMP: 1074.30'
LABEL: MH - 14
RIM: 1079.83'
SUMP: 1073.52'
LABEL: INL - 14G
RIM: 1079.10'
SUMP: 1075.43'
LABEL: INL - 14C
RIM: 1078.77'
SUMP: 1074.81'
LABEL: P - 14C
UP. INVERT: 1075.01'
DN. INVERT: 1074.50'
L: 59'
SIZE: 15" SSPRC CL IV
S: 0.83 %
LABEL: P - 14B
UP. INVERT: 1074.50'
DN. INVERT: 1074.41'
L: 9'
SIZE: 15" SSPRC CL IV
S: 1.00 %
LABEL: P - 14A
UP. INVERT: 1074.41'
DN. INVERT: 1074.25'
L: 14'
SIZE: 15" SSPRC CL IV
S: .1.10 %
LABEL: P - 14G
UP. INVERT: 1075.60'
DN. INVERT: 1075.55'
L: 10'
SIZE: 12" SSPRC CL IV
S: 0.50 %
LABEL: P - 14F
UP. INVERT: 1074.80'
DN. INVERT: 1074.62'
L: 18'
SIZE: 15" SSPRC CL IV
S: 1.00 %
LABEL: INL - 14D
RIM: 1079.16'
SUMP: 1075.49'
LABEL: INL - 14E
RIM: 1078.83'
SUMP: 1075.16'
LABEL: INL - 14C
RIM: 1078.77'
SUMP: 1074.81'
LABEL: P - 14D
UP. INVERT: 1075.66'
DN. INVERT: 1075.26'
L: 49'
SIZE: 12" SSPRC CL IV
S: 0.82 %
LABEL: P - 14E
UP. INVERT: 1075.33'
DN. INVERT: 1075.26'
L: 10'
SIZE: 12" SSPRC CL IV
S: 0.70 %
LABEL: INL - 15A
RIM: 1079.64'
SUMP: 1075.97'
LABEL: MH - 15
RIM: 1080.49'
SUMP: 1073.86'
LABEL: INL - 15B
RIM: 1079.85'
SUMP: 1076.18'
LABEL: P - 15A
UP. INVERT: 1076.14'
DN. INVERT: 1075.79'
L: 70'
SIZE: 12" SSPRC CL IV
S: 0.50 %
LABEL: P - 15B
UP. INVERT: 1076.35'
DN. INVERT: 1075.79'
L: 24'
SIZE: 12" SSPRC CL IV
S: 2.33 %
LABEL: INL - 16A
RIM: 1081.12'
SUMP: 1076.53'
LABEL: INL - 16D
RIM: 1080.62'
SUMP: 1076.81'
LABEL: INL - 16C
RIM: 1080.47'
SUMP: 1076.80'
LABEL: INL - 16B
RIM: 1081.12'
SUMP: 1076.64'
LABEL: MH - 16
RIM: 1081.29'
SUMP: 1074.14'
LABEL: P - 16C
UP. INVERT: 1076.97'
DN. INVERT: 1076.81'
L: 37'
SIZE: 12" SSPRC CL IV
S: 0.43 %
LABEL: P - 16B
UP. INVERT: 1076.81'
DN. INVERT: 1076.70'
L: 21'
SIZE: 12" SSPRC CL IV
S: 0.52 %
LABEL: P - 16A
UP. INVERT: 1076.70'
DN. INVERT: 1076.65'
L: 10'
SIZE: 12" SSPRC CL IV
S: 0.50 %
LABEL: P - 16D
UP. INVERT: 1076.98'
DN. INVERT: 1076.65'
L: 30'
SIZE: 12" SSPRC CL IV
S: 1.10 %
1090
1085
1080
1075
1070
1065
1060
1055
1050

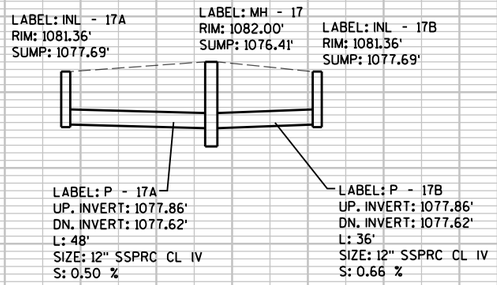


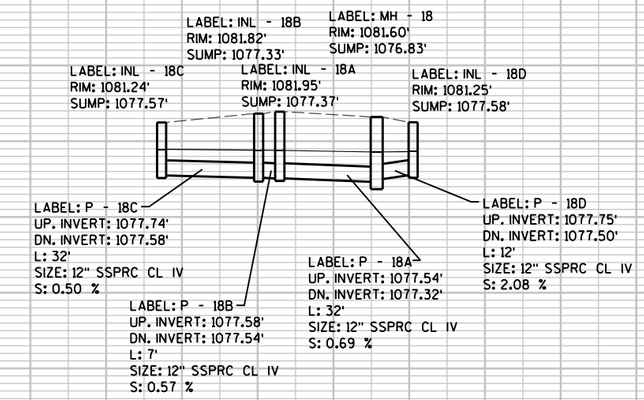
BENCHMARK TABLE

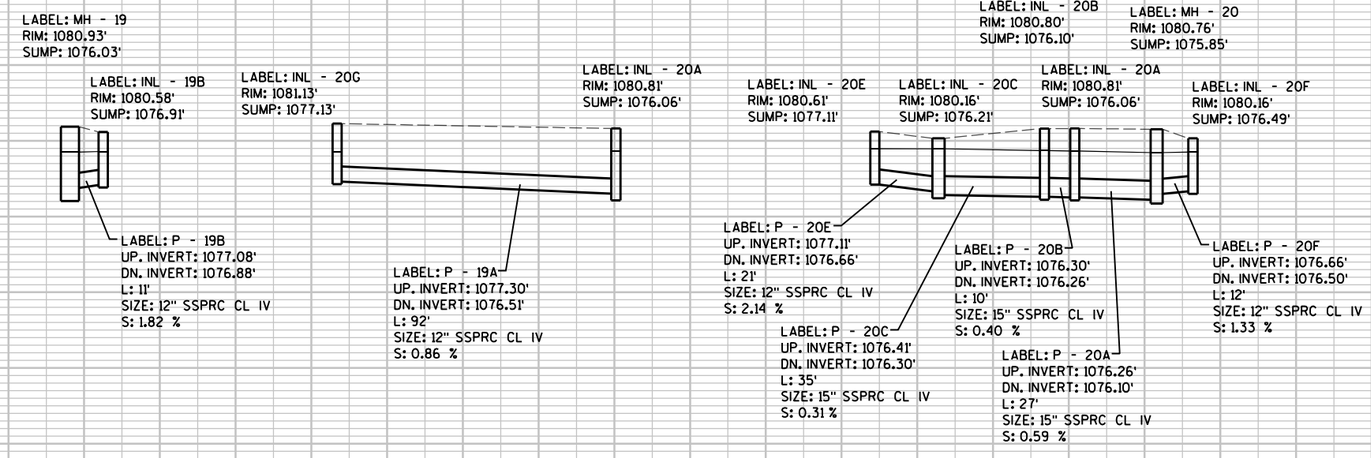
NO	STATION	DESCRIPTION	ELEV
25	228+43.5 50.6'LT	E. FLANGE BOLT/FLAG ON HYD W/S POST RD 1ST HYD N. OF TOMMY'S TP	1084.53
26	231+99.5 57.4'LT	N. FLANGE BOLT/FLAG ON HYD W/S POST RD 1ST HYD S. OF W. CEDAR	1083.10

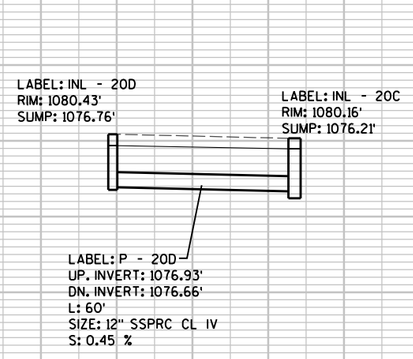


PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 73	E


LABEL: INL - 17A
RIM: 1081.36'
SUMP: 1077.69'
LABEL: MH - 17
RIM: 1082.00'
SUMP: 1076.41'
LABEL: INL - 17B
RIM: 1081.36'
SUMP: 1077.69'
LABEL: P - 17A
UP. INVERT: 1077.86'
DN. INVERT: 1077.62'
L: 48'
SIZE: 12" SSPRC CL IV
S: 0.50 %
LABEL: P - 17B
UP. INVERT: 1077.86'
DN. INVERT: 1077.62'
L: 36'
SIZE: 12" SSPRC CL IV
S: 0.66 %


LABEL: INL - 18B
RIM: 1081.82'
SUMP: 1077.33'
LABEL: MH - 18
RIM: 1081.60'
SUMP: 1076.83'
LABEL: INL - 18C
RIM: 1081.24'
SUMP: 1077.57'
LABEL: INL - 18A
RIM: 1081.95'
SUMP: 1077.37'
LABEL: INL - 18D
RIM: 1081.25'
SUMP: 1077.58'
LABEL: P - 18C
UP. INVERT: 1077.74'
DN. INVERT: 1077.58'
L: 32'
SIZE: 12" SSPRC CL IV
S: 0.50 %
LABEL: P - 18B
UP. INVERT: 1077.58'
DN. INVERT: 1077.54'
L: 7'
SIZE: 12" SSPRC CL IV
S: 0.57 %
LABEL: P - 18A
UP. INVERT: 1077.54'
DN. INVERT: 1077.32'
L: 32'
SIZE: 12" SSPRC CL IV
S: 0.69 %
LABEL: P - 18D
UP. INVERT: 1077.75'
DN. INVERT: 1077.50'
L: 12'
SIZE: 12" SSPRC CL IV
S: 2.08 %


LABEL: MH - 19
RIM: 1080.93'
SUMP: 1076.03'
LABEL: INL - 19B
RIM: 1080.58'
SUMP: 1076.91'
LABEL: INL - 20G
RIM: 1081.13'
SUMP: 1077.13'
LABEL: INL - 20A
RIM: 1080.81'
SUMP: 1076.06'
LABEL: P - 19B
UP. INVERT: 1077.08'
DN. INVERT: 1076.88'
L: 11'
SIZE: 12" SSPRC CL IV
S: 1.82 %
LABEL: P - 19A
UP. INVERT: 1077.30'
DN. INVERT: 1076.51'
L: 92'
SIZE: 12" SSPRC CL IV
S: 0.86 %
LABEL: INL - 20B
RIM: 1080.80'
SUMP: 1076.10'
LABEL: MH - 20
RIM: 1080.76'
SUMP: 1075.85'
LABEL: INL - 20E
RIM: 1080.61'
SUMP: 1077.11'
LABEL: INL - 20C
RIM: 1080.16'
SUMP: 1076.21'
LABEL: INL - 20A
RIM: 1080.81'
SUMP: 1076.06'
LABEL: INL - 20F
RIM: 1080.16'
SUMP: 1076.49'
LABEL: P - 20E
UP. INVERT: 1077.11'
DN. INVERT: 1076.66'
L: 21'
SIZE: 12" SSPRC CL IV
S: 2.14 %
LABEL: P - 20C
UP. INVERT: 1076.41'
DN. INVERT: 1076.30'
L: 35'
SIZE: 15" SSPRC CL IV
S: 0.31 %
LABEL: P - 20B
UP. INVERT: 1076.30'
DN. INVERT: 1076.26'
L: 10'
SIZE: 15" SSPRC CL IV
S: 0.40 %
LABEL: P - 20A
UP. INVERT: 1076.26'
DN. INVERT: 1076.10'
L: 27'
SIZE: 15" SSPRC CL IV
S: 0.59 %
LABEL: P - 20F
UP. INVERT: 1076.66'
DN. INVERT: 1076.50'
L: 12'
SIZE: 12" SSPRC CL IV
S: 1.33 %


LABEL: INL - 20D
RIM: 1080.43'
SUMP: 1076.76'
LABEL: INL - 20C
RIM: 1080.16'
SUMP: 1076.21'
LABEL: P - 20D
UP. INVERT: 1076.93'
DN. INVERT: 1076.66'
L: 60'
SIZE: 12" SSPRC CL IV
S: 0.45 %

2

STA 233+85.32, 53.5'LT
INL 2X3-FT-H
21C

STA 233+85.32, 21.7'LT
INL 2X3-FT-H-S
21B

STA 234+30.37, 70.5'LT
INL 2X3-FT-H
22E

STA 233+84.77, 14.4'LT
INL 2X3-FT-H
21A

STA 235+30.00, 53.5'LT
INL 2X3-FT-H
22C

STA 235+30.00, 12.5'LT
INL 2X3-FT-H
22B

SLOPE INTERCEPT (TYP)

STA 236+91.79, 53.5'LT
INL 2X3-FT-H
WI PUBLIC SERVICE CORP.
23C

W CEDAR STREET

84+00

BM 27

STA 237+48.79, 18.0'RT
MH 7-FT DIA-J
24

STA 238+76.26, 53.5'LT
INL 2X3-FT-H-S
26C

STA 239+87.10, 70.5'LT
INL 2X3-FT-H
27D

STA 240+25.00, 53.5'LT
INL 2X3-FT-H
27C

STA 238+76.26, 70.5'LT
INL 2X3-FT-H-S
26D

STA 238+86.26, 53.5'LT
INL 2X3-FT-H
26E

P-22E

P-22D

P-22C

P-21C

P-26D

P-26E

P-27D

P-27C

CAUTION

BUSINESS 51

STA 234+86.63, 70.5'LT
INL 2X3-FT-H
22D

STA 235+19.83, 18.0'RT
MH 5-FT DIA-J
22

STA 236+79.32, 21.0'LT
INL 2X3-FT-H-S
23B

P-23C

STA 238+76.26, 18.0'RT
MH 5-FT DIA-J
26

STA 238+76.26, 1.5'LT
INL 4-FT DIA-H-S
26A

STA 239+00.00, 12.0'LT
INL 2X3-FT-H-S
26B

STA 240+25.00, 22.5'LT
INL 2X3-FT-H
27B

P-21B

P-22B

P-23B

P-24A

P-26B

P-27B

AT&T

234+00

235+00

236+00

237+00

238+00

239+00

240+00

241+00

85+00

STA 233+84.77, 18.0'RT
MH 4-FT DIA-J
21

STA 236+79.28, 13.5'LT
INL 2X3-FT-H
23A

STA 238+02.78, 18.0'RT
MH 5-FT DIA-J
25

STA 240+25.00, 13.5'LT
INL 2X3-FT-H
27A

P-20

P-21

P-22

P-23

P-24

P-25

P-26

P-27

P-21A

P-22A

P-23A

P-26A

P-27A

P-21D

P-21E

P-22G

P-22F

P-23F

P-24C

P-25A

P-26F

P-26H

P-27E

P-26G

STA 235+30.00, 3.4'LT
INL 2X3-FT-H
22A

STA 238+86.26, 29.5'RT
INL 2X3-FT-H
26H

STA 240+25.00, 29.5'RT
INL 2X3-FT-H
27E

STA 233+84.77, 29.5'RT
INL 2X3-FT-H
21D

STA 235+14.37, 29.5'RT
INL 2X3-FT-H
22F

STA 238+02.78, 29.5'RT
INL 2X3-FT-H
25A

STA 10+16.79, 21.5'LT
INL 2X3-FT-H-S
26G

STA 240+25.00, 18.0'RT
MH 5-FT DIA-J
27

STA 233+64.77, 29.5'RT
INL 2X3-FT-H
21E

STA 234+94.37, 29.5'RT
INL 2X3-FT-H
22G

STA 236+72.15, 29.5'RT
INL 6-FT DIA-H DIVERSION
23

E CEDAR STREET

86+00

STA 238+76.26, 29.5'RT
INL 2X3-FT-H-S
VILLAGE OF WHITING
26F

STA 10+21.94, 22.8'RT
INL 2X3-FT-H-S
26I

P-26I

P-26C

P-26A

P-22

P-23

P-24

P-25

P-26

P-27

SS

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
27	237+70.0 71.3'LT	WESTERLY FLANGE BOLT/FLAG ON HYD AT NW COR POST RD & W. CEDAR ST	1081.21

1090
1085
1080
1075
1070
1065
1060
1055
1050

LABEL: MH - 21
RIM: 1079.91'
SUMP: 1075.25'

LABEL: MH - 22
RIM: 1079.31'
SUMP: 1074.51'

LABEL: MH - 23
RIM: 1078.27'
SUMP: 1073.88'

LABEL: MH - 24
RIM: 1078.29'
SUMP: 1073.02'

LABEL: MH - 25
RIM: 1078.04
SUMP: 1072.98'

LABEL: MH - 26
RIM: 1077.80'
SUMP: 1072.37'

LABEL: MH - 27
RIM: 1078.35
SUMP: 1072.30'

LABEL: P - 21
UP. INVERT: 1075.50'
DN. INVERT: 1074.76'
L: 135'
SIZE: 24" SSPRC CL IV
S: 0.54 %

LABEL: P - 20
UP. INVERT: 1076.10'
DN. INVERT: 1075.50'
L: 141'
SIZE: 24" SSPRC CL IV
S: 0.42 %

LABEL: P - 22
UP. INVERT: 1074.76'
DN. INVERT: 1074.13'
L: 153'
SIZE: 24" SSPRC CL IV
S: 0.41 %

LABEL: P - 23F
UP. INVERT: 1074.63'
DN. INVERT: 1074.31'
L: 78'
SIZE: 18" SSPRC CL IV
S: 0.41 %

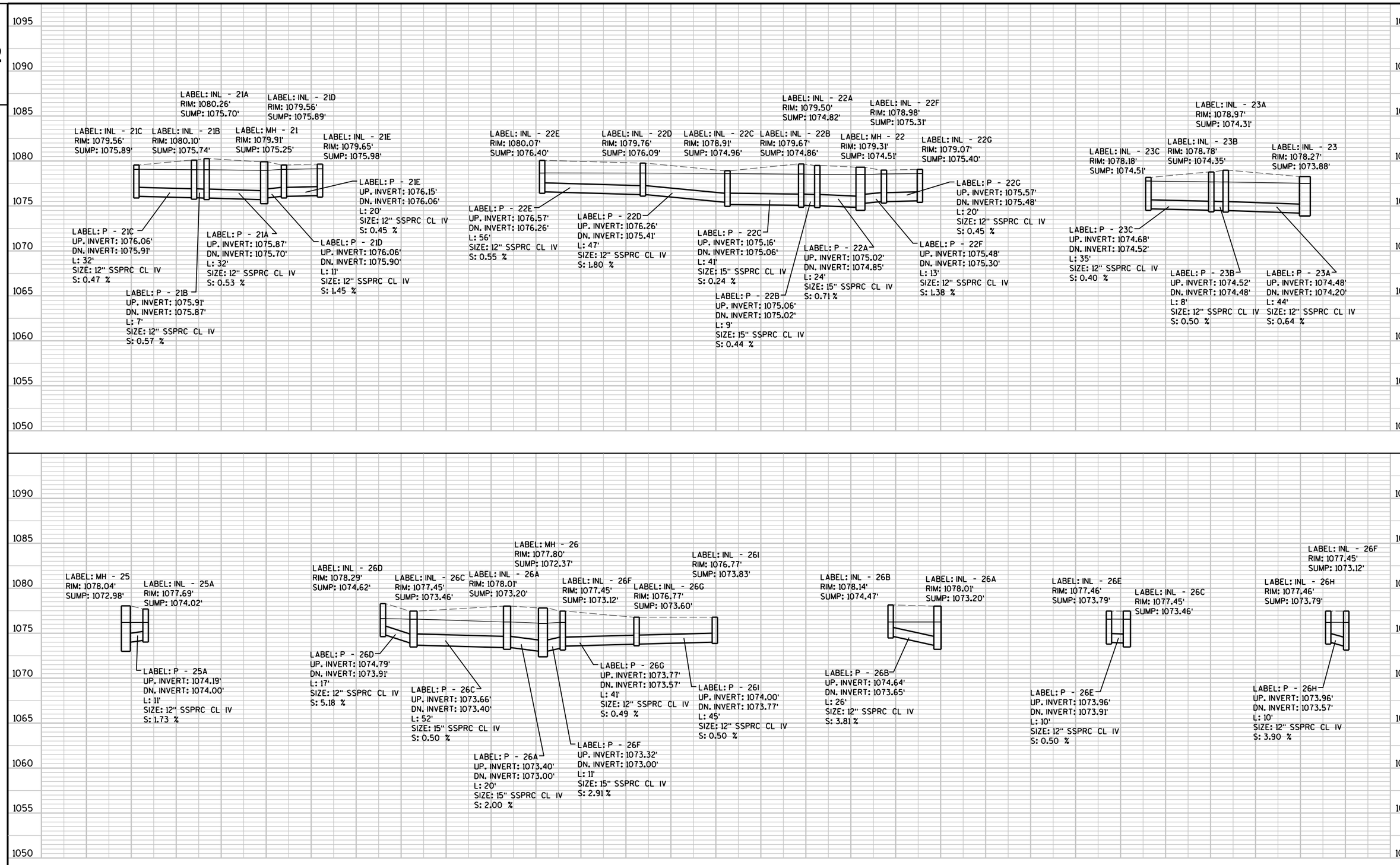
LABEL: P - 24
UP. INVERT: 1073.31'
DN. INVERT: 1073.27'
L: 54'
SIZE: 30" SSPRC CL IV
S: 0.07 %

LABEL: P - 25
UP. INVERT: 1073.27'
DN. INVERT: 1073.20'
L: 73'
SIZE: 30" SSPRC CL IV
S: 0.10 %

LABEL: P - 26
UP. INVERT: 1072.70'
DN. INVERT: 1072.63'
L: 149'
SIZE: 36" SSPRC CL IV
S: 0.05 %

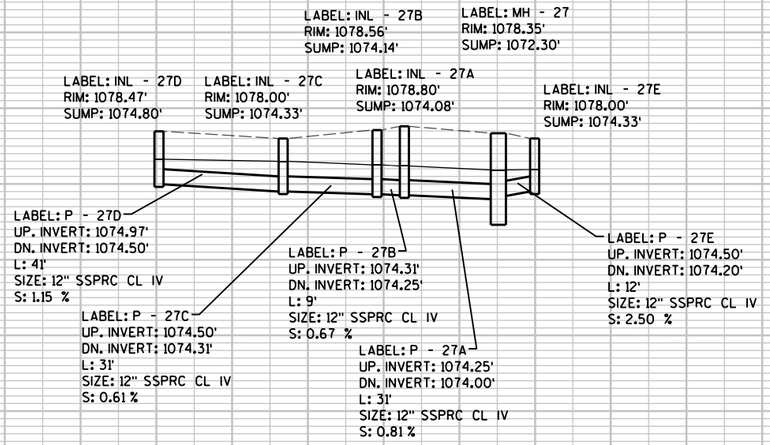
LABEL: P - 27
UP. INVERT: 1072.63'
DN. INVERT: 1072.56'
L: 138'
SIZE: 36" SSPRC CL IV
S: 0.05 %

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 75	E



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 76	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\022505a ss.dgn PLOT TIME : 3:47:17 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A
WISDOT/CADDS SHEET 40



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 77	E

2

STA 89+16.51, 16.5'RT
INL 4-FT DIA-H-S (29D)

STA 243+60.00, 90.0'LT
INL 2X3-FT-H (29E)

STA 243+44.57, 53.5'LT
INL 4-FT DIA-H (29C)

STA 243+32.67, 21.2'LT
INL 2X3-FT-H-S (29B)

STA 243+29.61, 13.5'LT
INL 2X3-FT-H (29A)

STA 89+23.07, 19.0'LT
INL 2X3-FT-H-S (29F)

WILLOW STREET (N)

89+00

VILLAGE OF WHITING

WI PUBLIC SERVICE CORP.

BUSINESS 51

STA 244+99.26, 70.5'LT
INL 2X3-FT-H-S (30D)

STA 244+99.26, 53.5'LT
INL 2X3-FT-H-S (30C)

STA 244+99.26, 18.0'RT
MH 6-FT DIA-J (30)

STA 245+25.00, 12.8'LT
INL 2X3-FT-H-S (30B)

STA 244+99.26, 1.5'LT
INL 4-FT DIA-H-S (30A)

STA 244+99.26, 29.5'RT
INL 2X3-FT-H-S (30E)

STA 246+24.00, 53.5'LT
INL 2X3-FT-H (31A)

STA 247+76.74, 18.0'RT
MH 8-FT DIA-J (32)

STA 246+24.00, 18.0'RT
MH 6-FT DIA-J (31)

STA 246+24.00, 29.5'RT
INL 2X3-FT-H (31B)

STA 247+76.74, 29.5'RT
INL 6-FT DIA-H (32D)

STA 247+76.74, 53.5'LT
INL 2X3-FT-H (32C)

STA 247+76.74, 20.3'LT
INL 2X3-FT-H-S (32B)

STA 247+76.74, 3.7'LT
INL 2X3-FT-H-S (32A)

STA 248+07.00, 70.8'RT
AEW 42-INCH RCP (32E)

STA 20+36.00, 43.0'LT
AEW 12-INCH RCP (33B)

STA 21+00.00, 31.5'RT
INL 4-FT DIA-H-S (33A)

STA 21+38.01, 13.1'LT
INL 2X3-FT-H-S (33)

241+00 242+00 243+00 244+00 245+00 246+00 247+00 248+00

P-27 P-28 P-29 P-30 P-31 P-32

P-28A P-29A P-29B P-29C P-29D P-29E P-29F P-29G P-29H P-29I P-29J P-30A P-30B P-30C P-30D P-30E P-31A P-31B P-32A P-32B P-32C P-32D P-33A P-33

STA 243+34.80, 18.0'RT
MH 6-FT DIA-J (29)

STA 243+34.80, 29.5'RT
INL 2X3-FT-H (29G)

STA 90+65.00, 16.5'RT
INL 2X3-FT-H-S (29I)

STA 90+54.66, 18.5'LT
INL 2X3-FT-H-S (29J)

STA 243+66.80, 29.5'RT
MH 4-FT DIA-J (29H)

STA 241+63.45, 29.5'RT
INL 2X3-FT-H (28A)

STA 241+63.45, 18.0'RT
MH 5-FT DIA-J (28)

AT&T

SLOPE INTERCEPT (TYP)

WILLOW STREET (E)

91+00

92+00

21+00

ROSE STREET

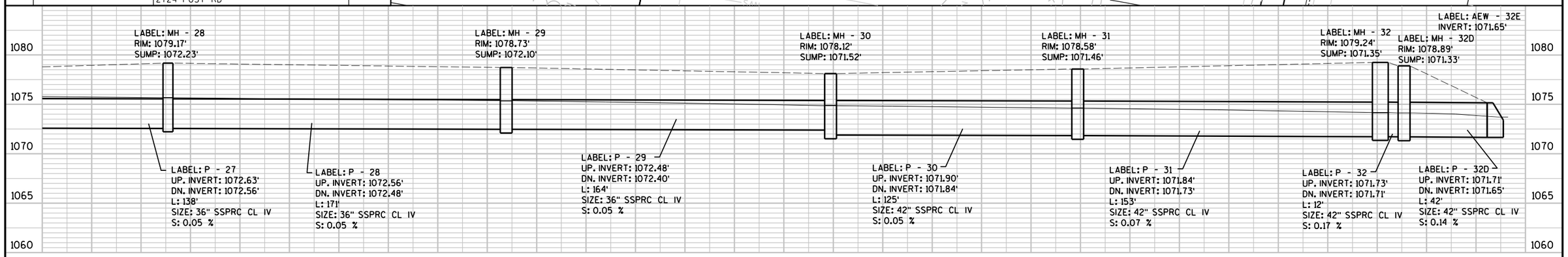
LOCUST STREET

BEECH STREET

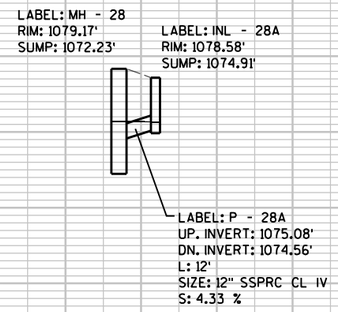
SAN MH CONC ASPH SS FO TEL MH

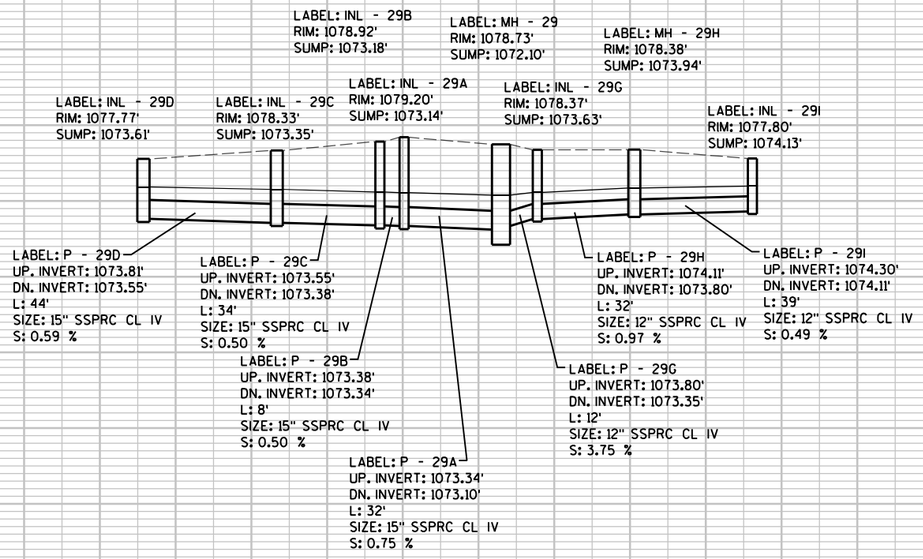
N

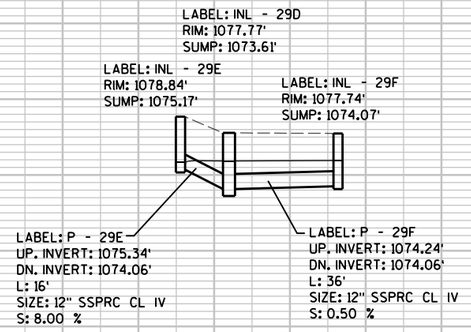
BENCHMARK TABLE			
NO	STATION	DESCRIPTION	ELEV
28		NW COR FLAGSTON PORCH ON 2724 POST RD	1080.76

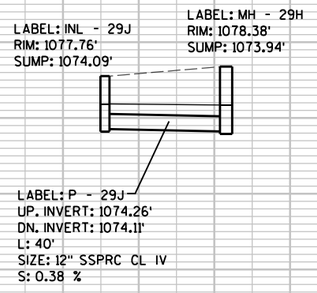


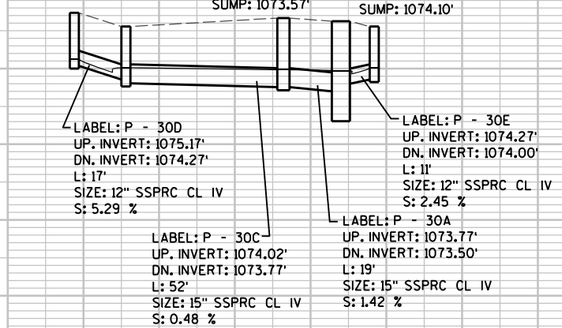
PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 78	E

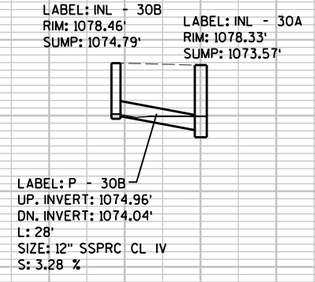


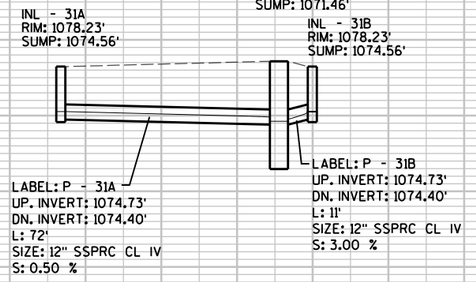


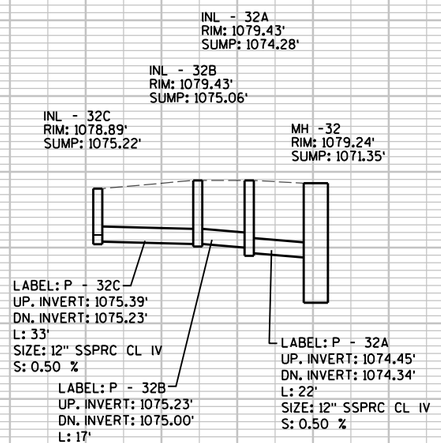






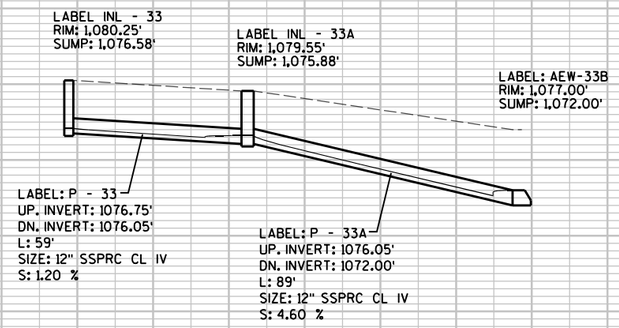






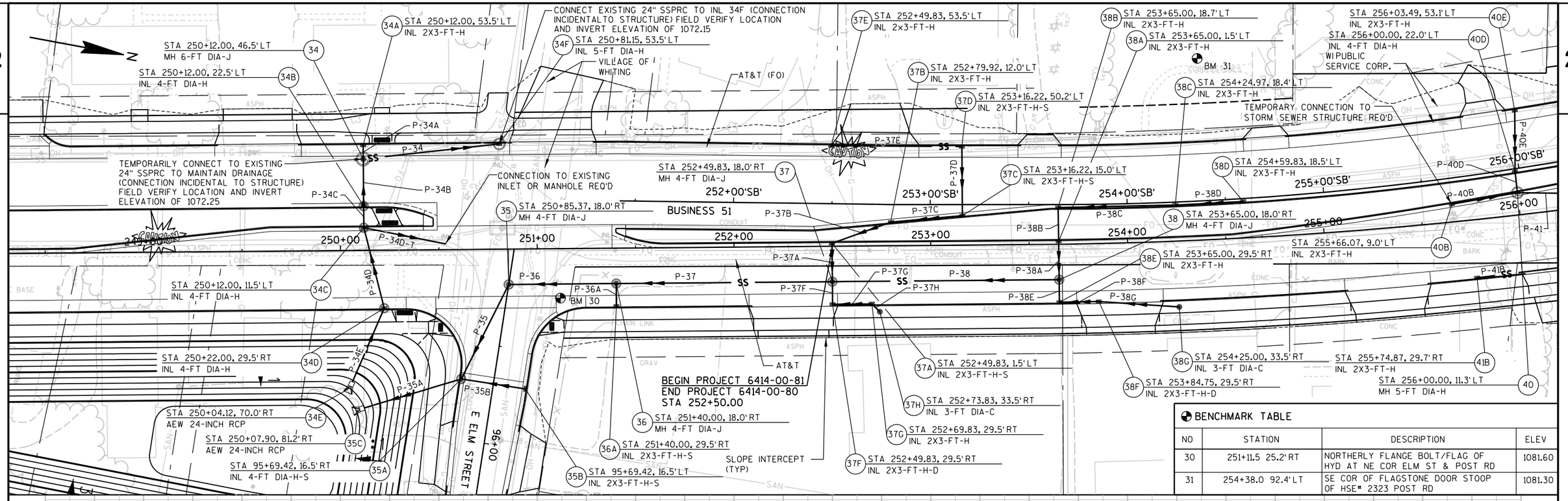
PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 79	E

1095
1090
1085
1080
1075
1070
1065
1060
1055



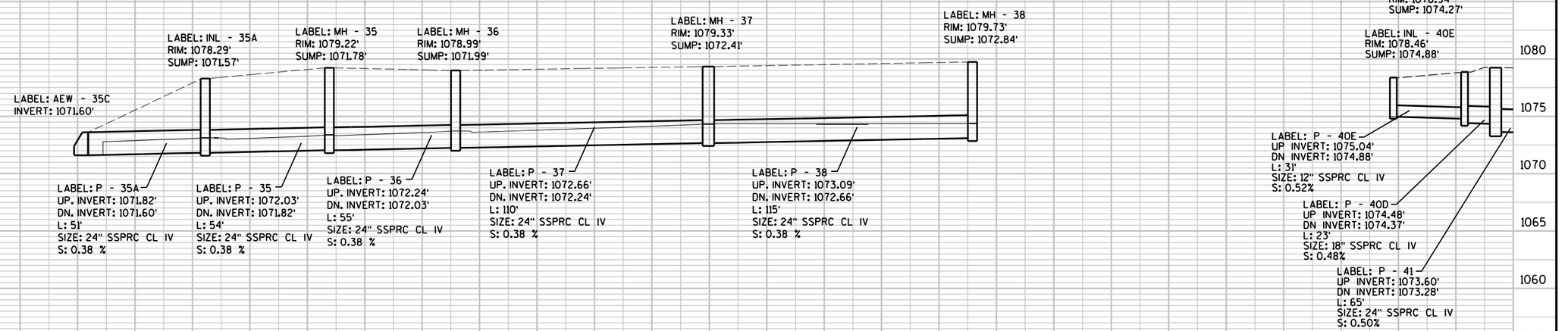
1095
1090
1085
1080
1075
1070
1065
1060
1055

2

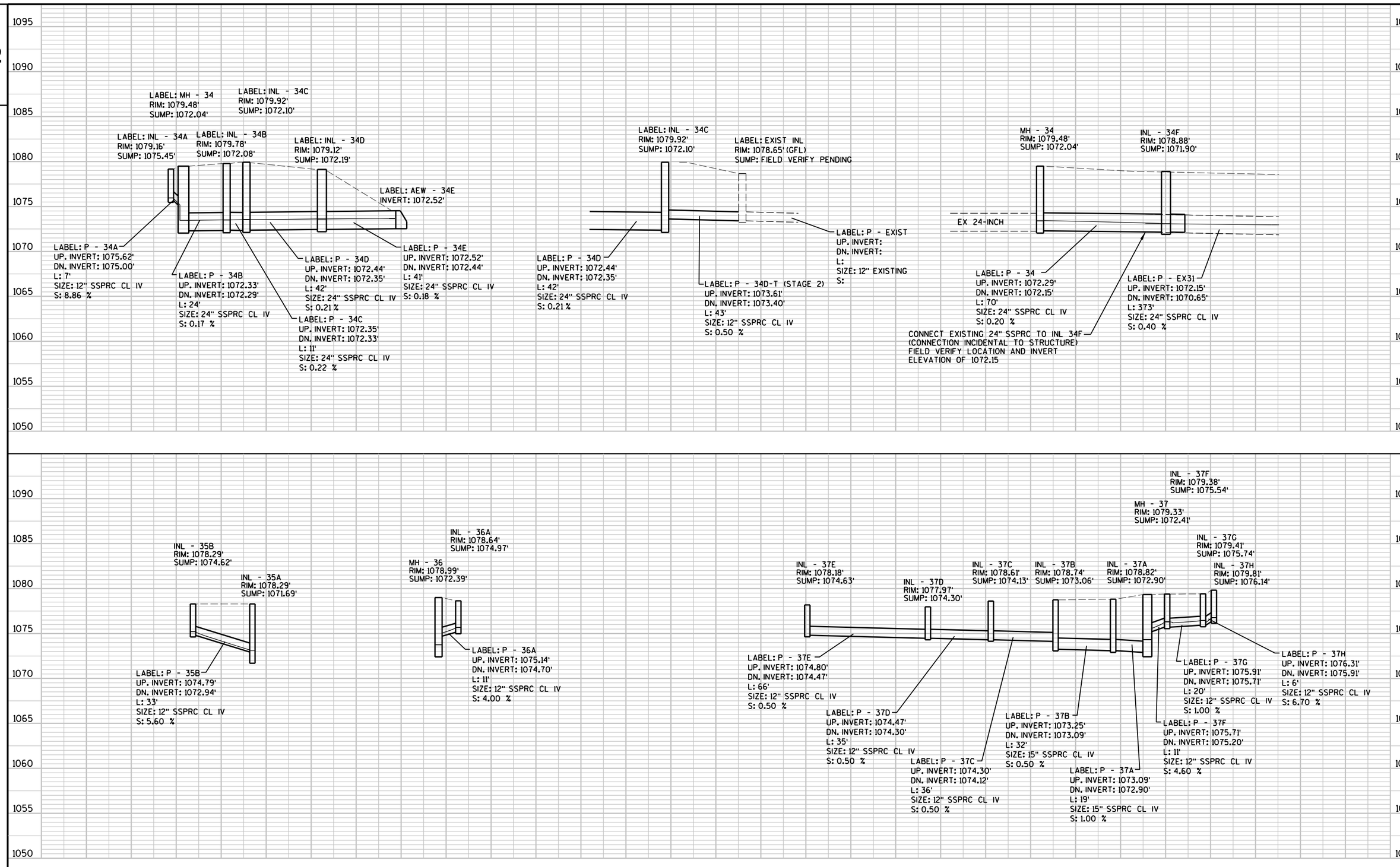


BENCHMARK TABLE

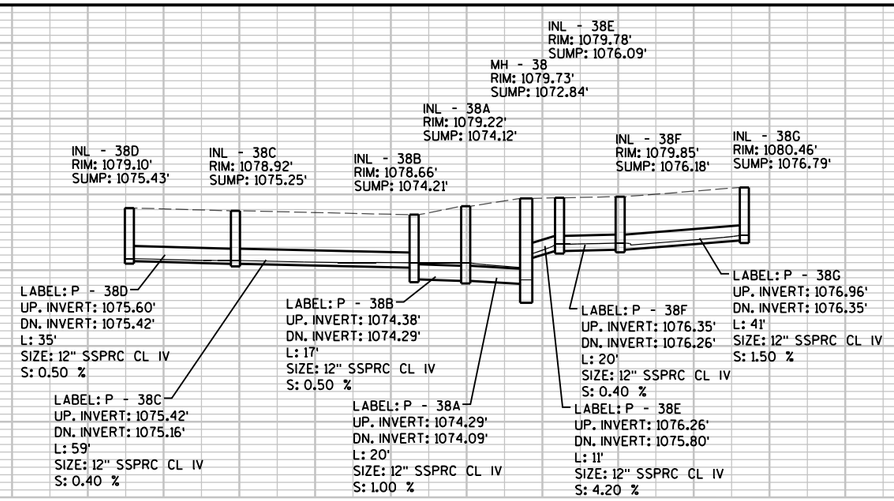
NO	STATION	DESCRIPTION	ELEV
30	251+11.5 25.2'RT	NORTHERLY FLANGE BOLT/FLAG OF HYD AT NE COR ELM ST & POST RD	1081.60
31	254+38.0 92.4'LT	SE COR OF FLAGSTONE DOOR STOOP OF HSE# 2323 POST RD	1081.30

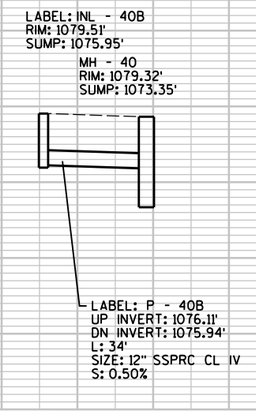


PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 81	E



PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 82	E





PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 83	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\022507b ss.dgn PLOT TIME : 3:47:28 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

WISDOT/CADDS SHEET 40

2

N

41D STA 256+65.00, 24.9'LT
INL 2X3-FT-H

41E STA 256+65.15, 55.9'LT
INL 2X3-FT-H

41C STA 256+65.00, 15.6'LT
INL 2X3-FT-H

41 STA 256+65.00, 2.0'LT
MH 5-FT DIA-J

41A STA 256+65.00, 29.5'RT
INL 2X3-FT-H

42H STA 258+53.27, 57.5'LT
INL 2X3-FT-H-S

42G STA 258+53.52, 26.7'LT
INL 2X3-FT-H-S

42F STA 258+53.27, 21.5'LT
INL 4-FT DIA-H-S

42E STA 258+65.00, 6.5'LT
INL 4-FT DIA-H-S

42X STA 260+00.00, 6.0'RT
MH 5-FT DIA-J

42D STA 258+65.00, 1.5'LT
INL 4-FT DIA-H-S

42 STA 258+65.00, 6.0'RT
MH 5-FT DIA-J

42A STA 258+55.18, 43.5'RT
INL 4-FT DIA-H-S

42B STA 258+65.00, 43.5'RT
INL 4-FT DIA-H-S

42I STA 258+74.82, 59.0'RT
INL 3-FT DIA-C

42C STA 258+74.82, 43.5'RT
INL 4-FT DIA-H-S

43 STA 260+36.83, 20.9'RT
MH 10-FT DIA-J

74 STA 263+22.57, 26.5'LT
INL 2X3-FT-H

5 STA 263+22.57, 98.1'LT
AEW 18-INCH RCP

73 STA 263+22.57, 57.5'LT
INL 2X3-FT-H

75 STA 263+22.57, 21.5'LT
INL 4-FT DIA-H

76 STA 263+25.00, 6.5'LT
INL 4-FT DIA-H

77 STA 263+25.00, 1.5'LT
INL 2X3-FT-H

78 STA 263+25.00, 29.5'RT
INL 2X3-FT-H

6 STA 263+25.00, 59.1'RT
AEW 18-INCH RCP

WI PUBLIC SERVICE CORP.

WI PUBLIC SERVICE CORP.

CHARTER COMMUNICATIONS

VILLAGE OF WHITING

SENSITIVE AREA

AT&T

SLOPE INTERCEPT (TYP)

BM 40

BUSINESS 51

MCDILL AVENUE

CTH HH

CAUTION

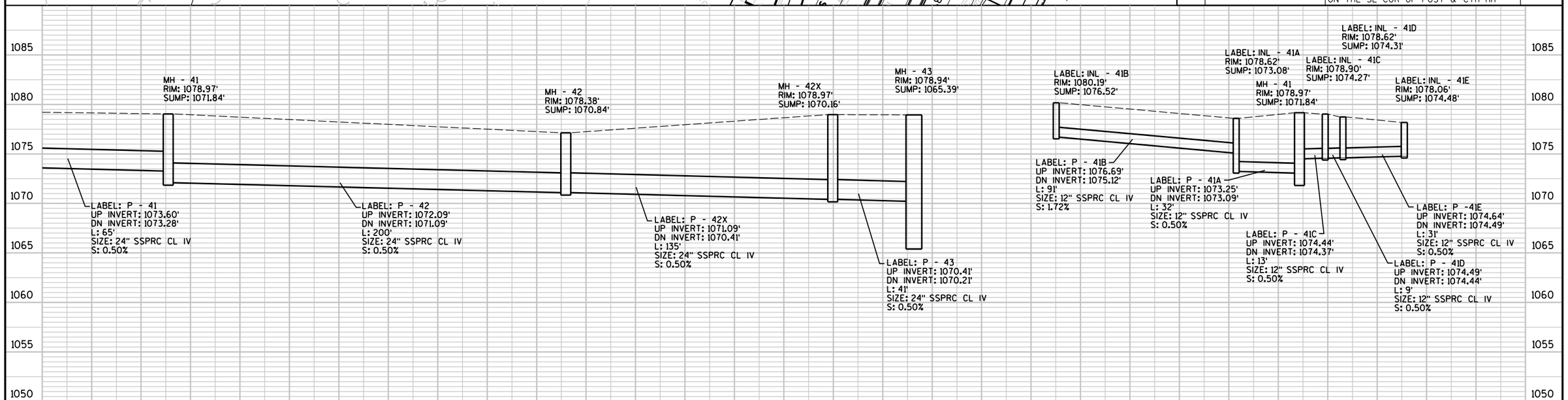
P-40B P-41 P-41B P-41A P-41D P-41C P-41E P-42H P-42G P-42F P-42E P-42X P-42D P-42 P-42A P-42C P-42B P-42I P-43 P-43-B P-73 P-74 P-75 P-76 P-77 P-78

256+00'SB' 256+00 257+00'SB' 257+00 258+00'SB' 258+00 259+00'SB' 259+00 260+00'SB' 260+00 261+00'SB' 261+00 262+00'SB' 262+00 263+00'SB' 263+00

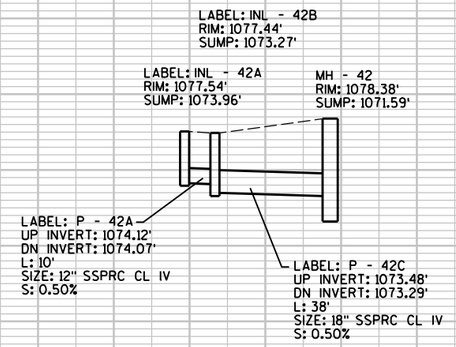
900+00'EB 900+00'WB 899+00'EB 899+00'WB 898+00'EB 898+00'WB 897+00'EB 897+00'WB

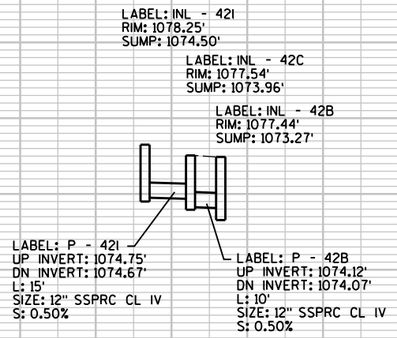
BENCHMARK TABLE

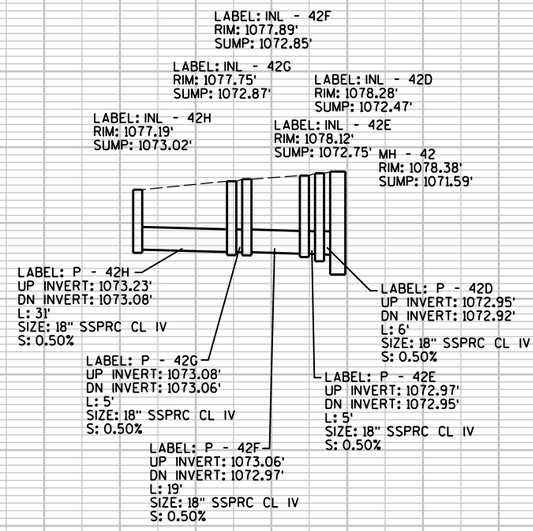
NO	STATION	DESCRIPTION	ELEV
40	259+66.5 32.6'RT	CHI "X" ON SE COR OF SIGNAL BOX ON THE SE COR OF POST & CTH HH	1079.25

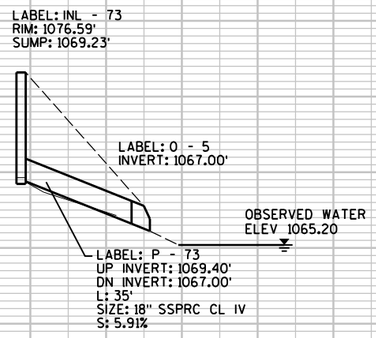


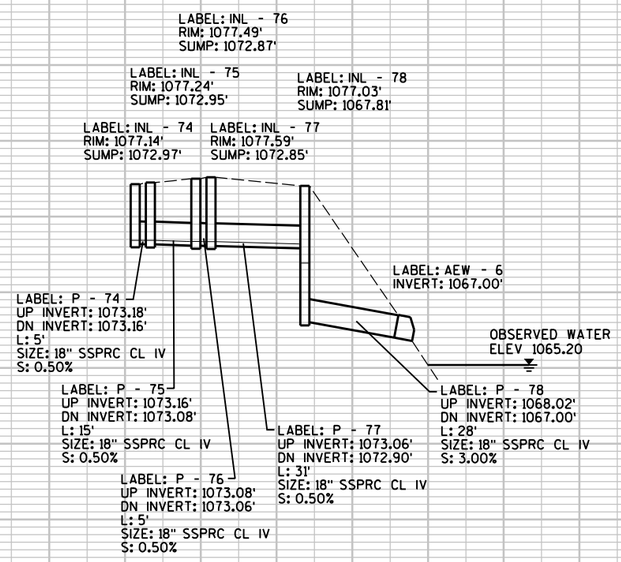
PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 84	E



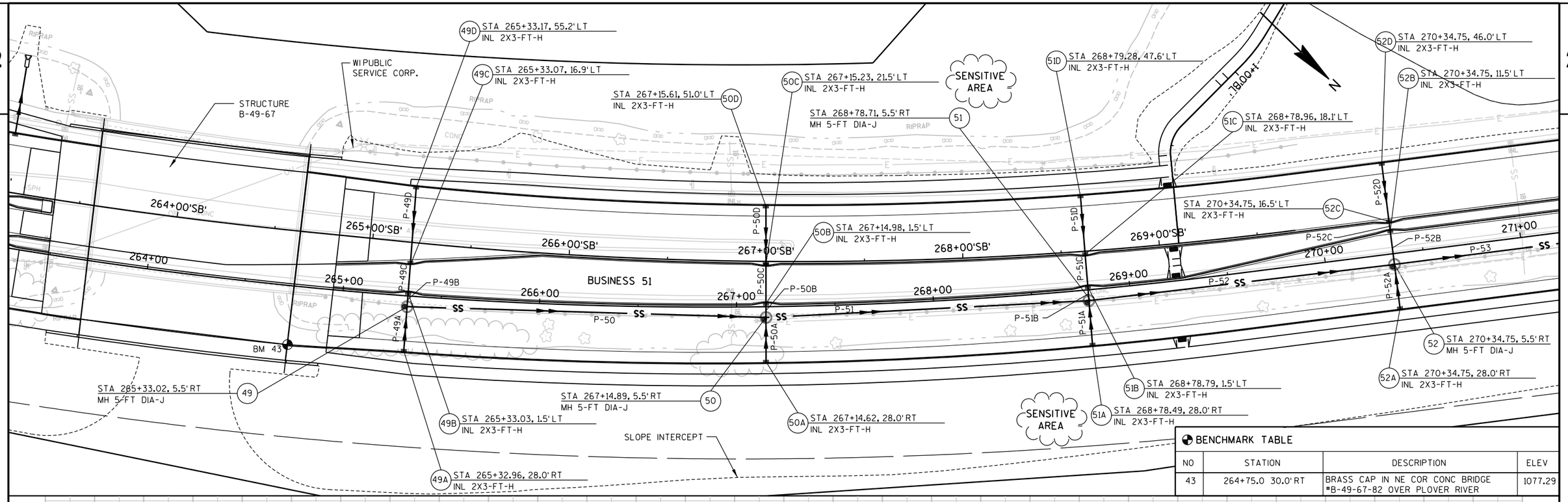


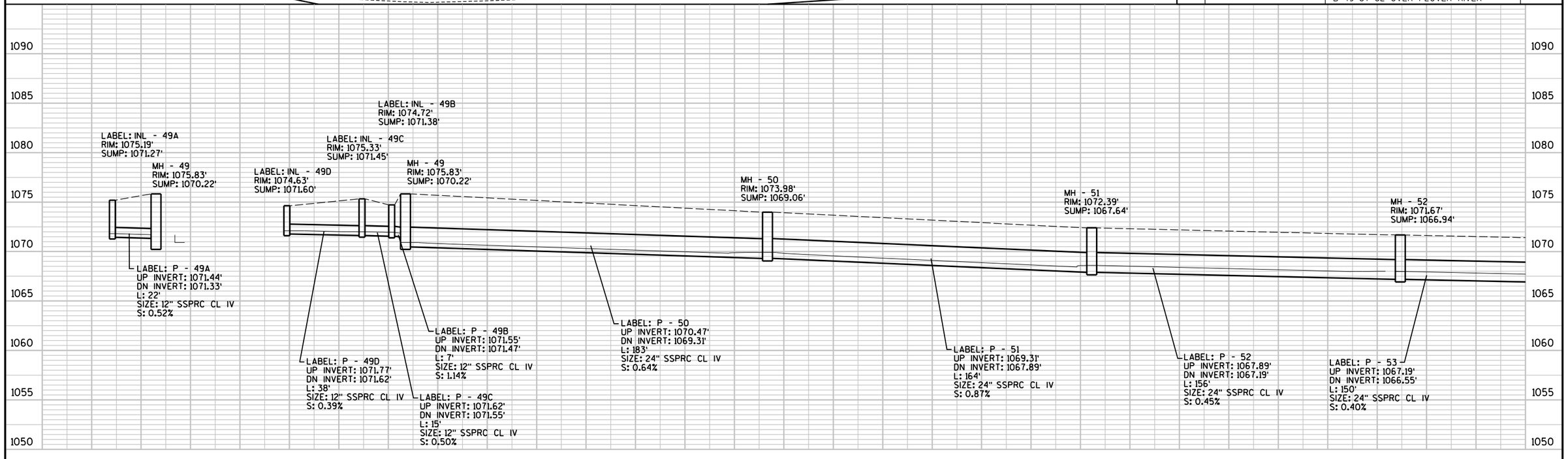




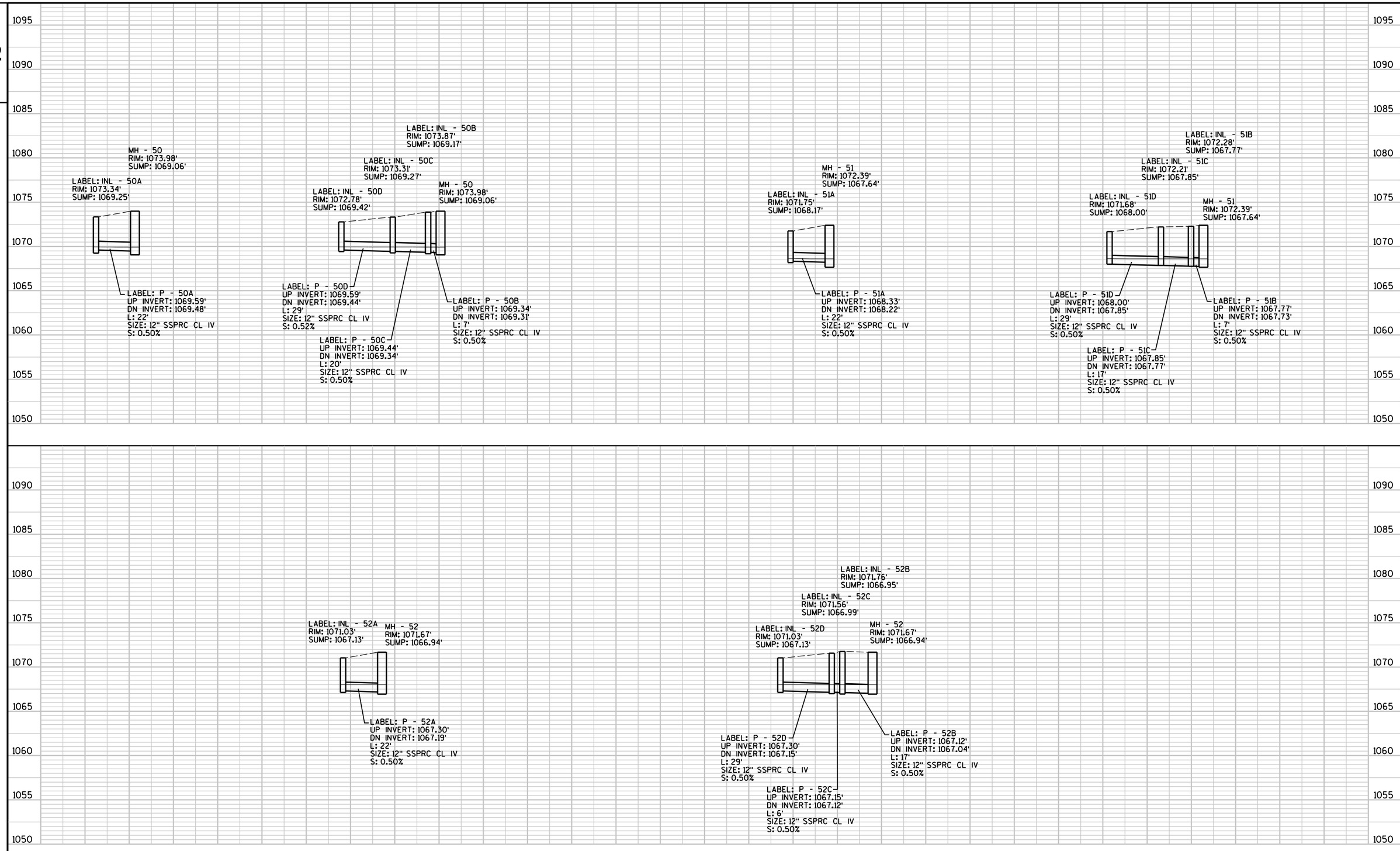


PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 85	E

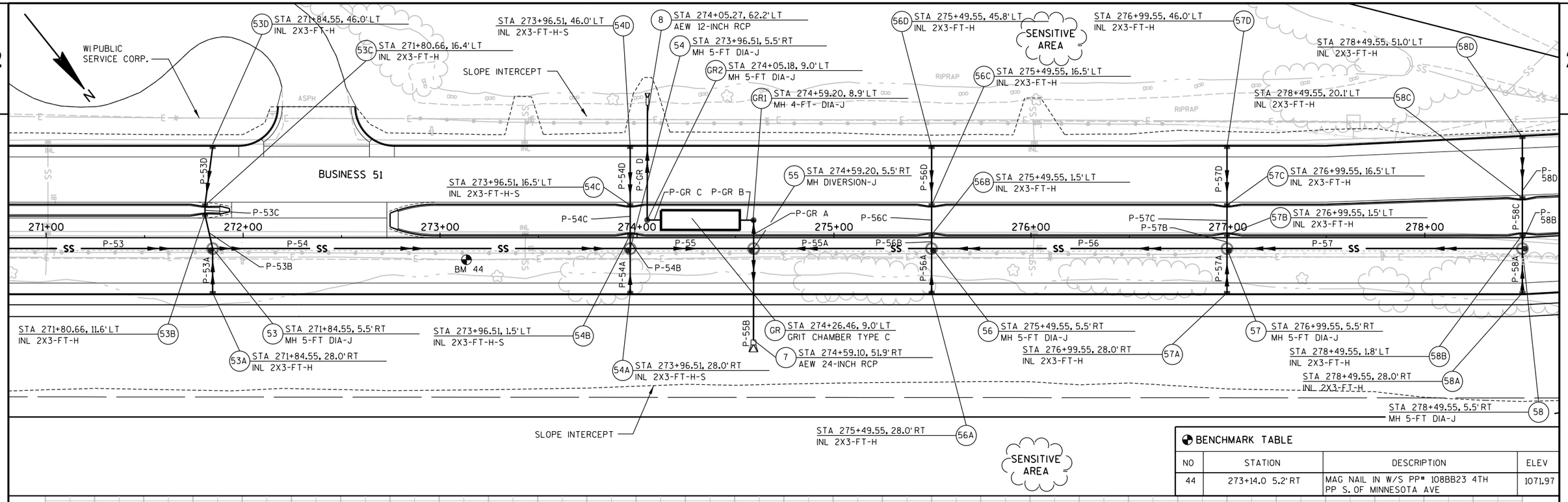




PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 86	E

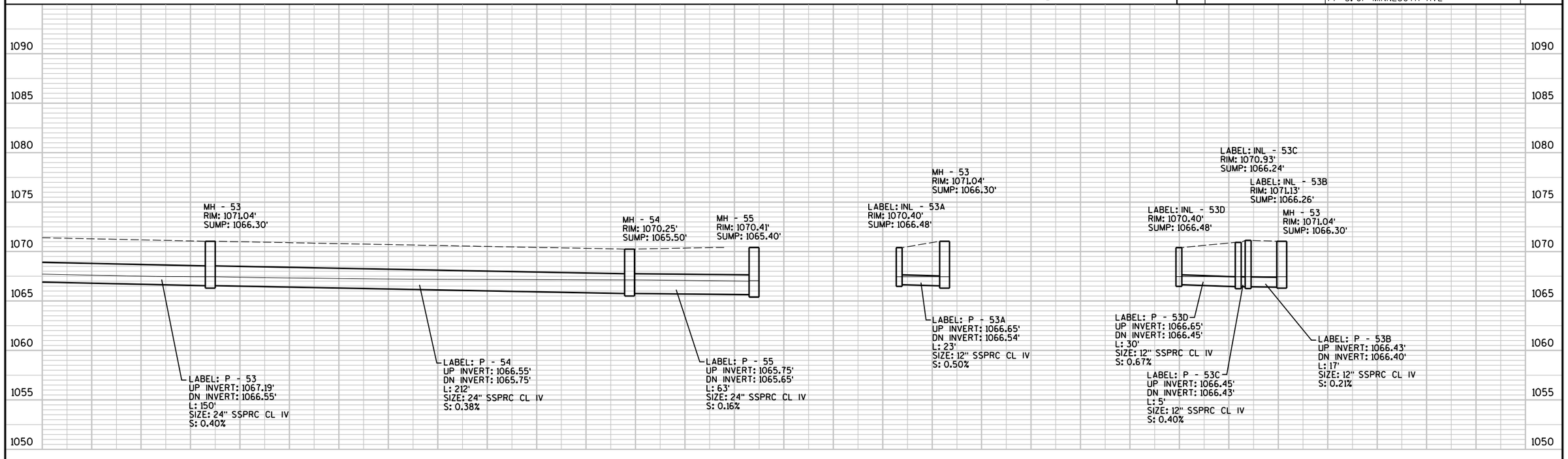


PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 87	E

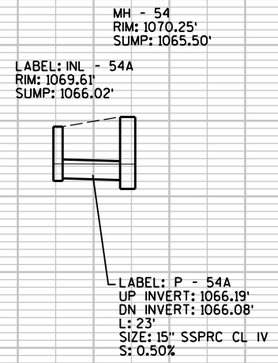


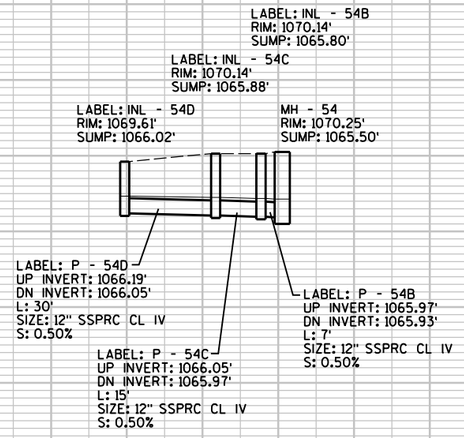
BENCHMARK TABLE

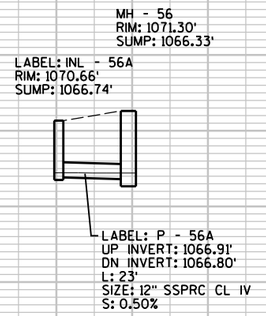
NO	STATION	DESCRIPTION	ELEV
44	273+14.0 5.2'RT	MAG NAIL IN W/S PP* 108BB23 4TH PP S. OF MINNESOTA AVE	1071.97

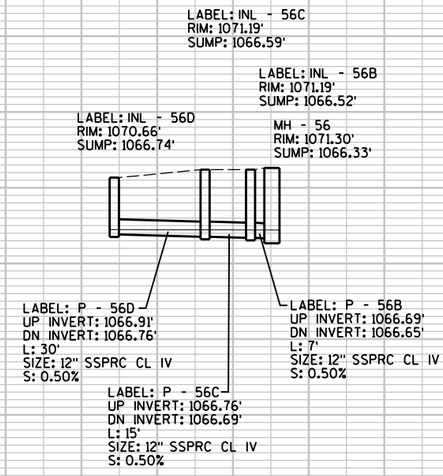


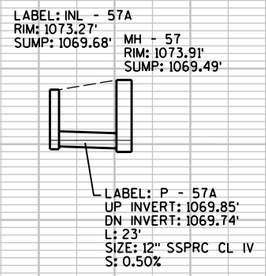
PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 88	E

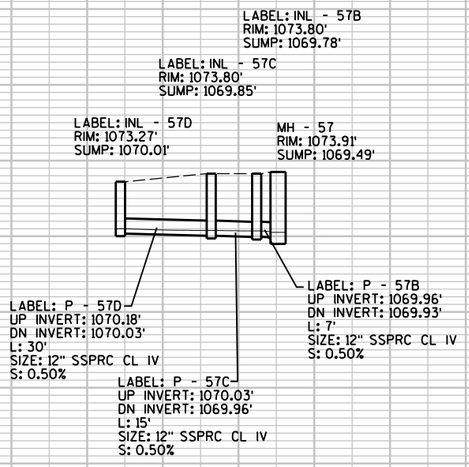

MH - 54
RIM: 1070.25'
SUMP: 1065.50'
LABEL: INL - 54A
RIM: 1069.61'
SUMP: 1066.02'
LABEL: P - 54A
UP INVERT: 1066.19'
DN INVERT: 1066.08'
L: 23'
SIZE: 15" SSPRC CL IV
S: 0.50%

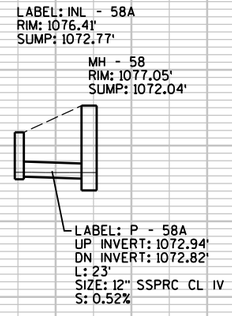

LABEL: INL - 54B
RIM: 1070.14'
SUMP: 1065.80'
LABEL: INL - 54C
RIM: 1070.14'
SUMP: 1065.88'
LABEL: INL - 54D
RIM: 1069.61'
SUMP: 1066.02'
MH - 54
RIM: 1070.25'
SUMP: 1065.50'
LABEL: P - 54D
UP INVERT: 1066.19'
DN INVERT: 1066.05'
L: 30'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 54C
UP INVERT: 1066.05'
DN INVERT: 1065.97'
L: 15'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 54B
UP INVERT: 1065.97'
DN INVERT: 1065.93'
L: 7'
SIZE: 12" SSPRC CL IV
S: 0.50%

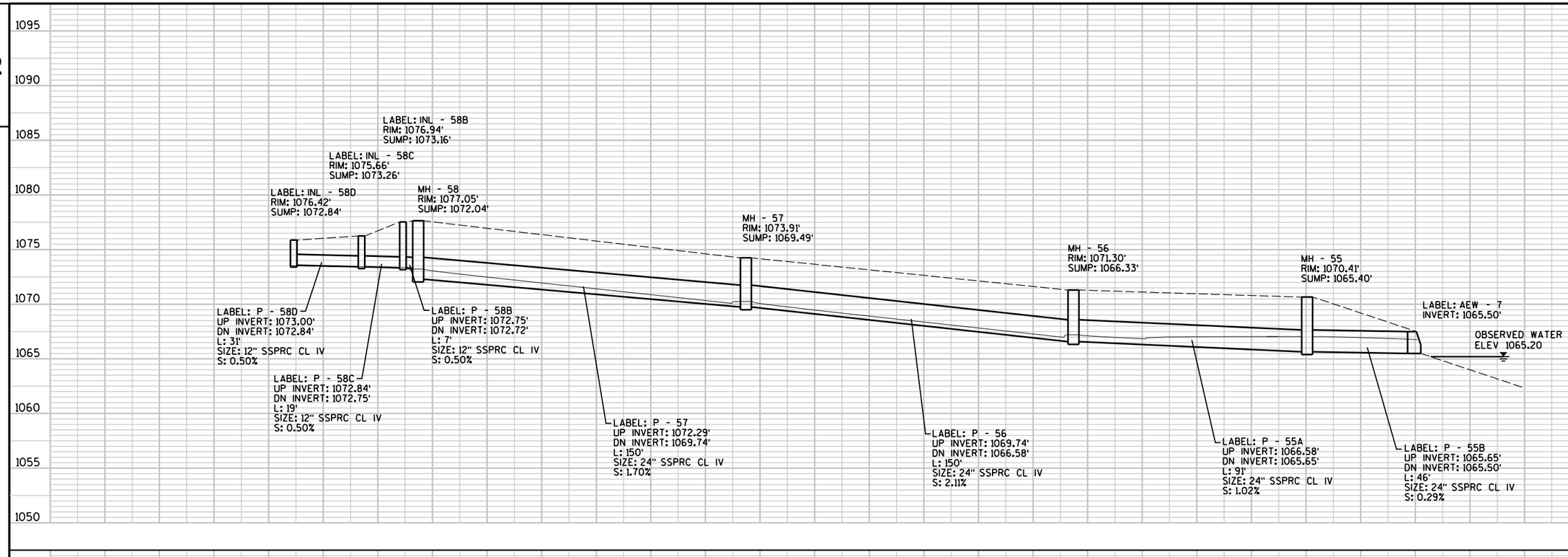

MH - 56
RIM: 1071.30'
SUMP: 1066.33'
LABEL: INL - 56A
RIM: 1070.66'
SUMP: 1066.74'
LABEL: P - 56A
UP INVERT: 1066.91'
DN INVERT: 1066.80'
L: 23'
SIZE: 12" SSPRC CL IV
S: 0.50%

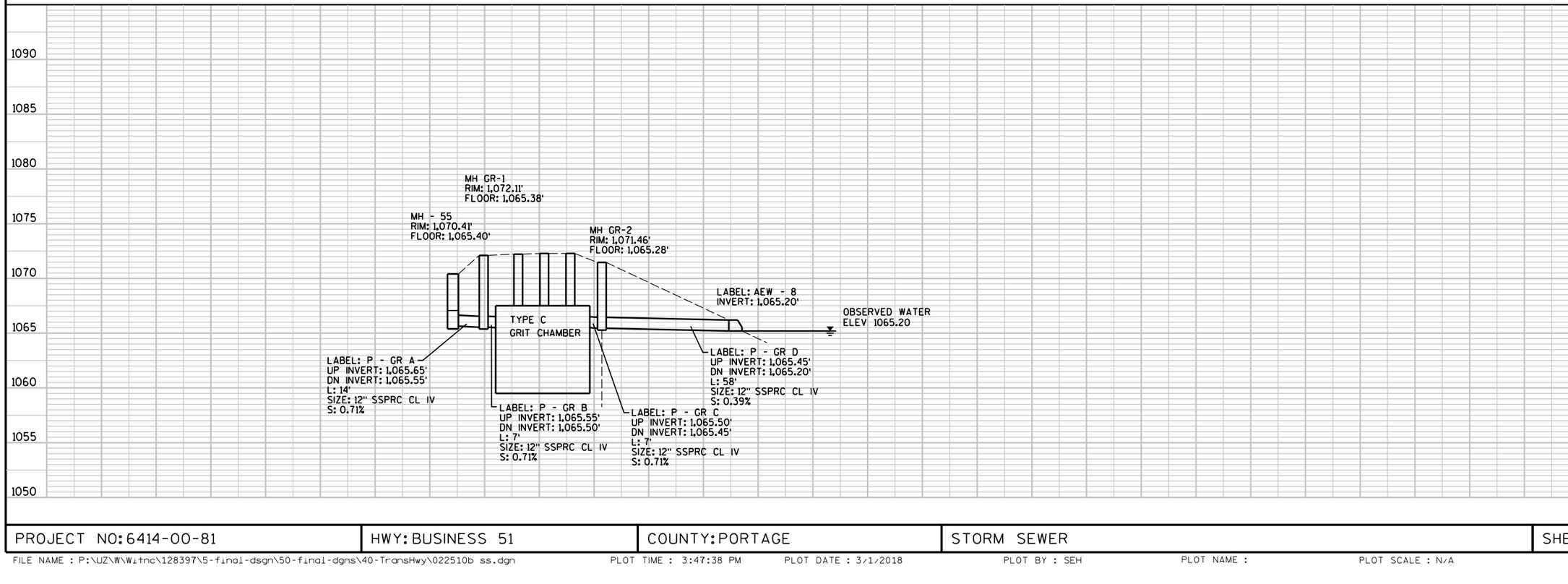

LABEL: INL - 56C
RIM: 1071.19'
SUMP: 1066.59'
LABEL: INL - 56B
RIM: 1071.19'
SUMP: 1066.52'
LABEL: INL - 56D
RIM: 1070.66'
SUMP: 1066.74'
MH - 56
RIM: 1071.30'
SUMP: 1066.33'
LABEL: P - 56D
UP INVERT: 1066.91'
DN INVERT: 1066.76'
L: 30'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 56C
UP INVERT: 1066.76'
DN INVERT: 1066.69'
L: 15'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 56B
UP INVERT: 1066.69'
DN INVERT: 1066.65'
L: 7'
SIZE: 12" SSPRC CL IV
S: 0.50%


LABEL: INL - 57A
RIM: 1073.27'
SUMP: 1069.68'
MH - 57
RIM: 1073.91'
SUMP: 1069.49'
LABEL: P - 57A
UP INVERT: 1069.85'
DN INVERT: 1069.74'
L: 23'
SIZE: 12" SSPRC CL IV
S: 0.50%


LABEL: INL - 57B
RIM: 1073.80'
SUMP: 1069.78'
LABEL: INL - 57C
RIM: 1073.80'
SUMP: 1069.85'
LABEL: INL - 57D
RIM: 1073.27'
SUMP: 1070.01'
MH - 57
RIM: 1073.91'
SUMP: 1069.49'
LABEL: P - 57D
UP INVERT: 1070.18'
DN INVERT: 1070.03'
L: 30'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 57C
UP INVERT: 1070.03'
DN INVERT: 1069.96'
L: 15'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 57B
UP INVERT: 1069.96'
DN INVERT: 1069.93'
L: 7'
SIZE: 12" SSPRC CL IV
S: 0.50%


LABEL: INL - 58A
RIM: 1076.41'
SUMP: 1072.77'
MH - 58
RIM: 1077.05'
SUMP: 1072.04'
LABEL: P - 58A
UP INVERT: 1072.94'
DN INVERT: 1072.82'
L: 23'
SIZE: 12" SSPRC CL IV
S: 0.52%





PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 90	E

2

SLOPE INTERCEPT (TYP)

279+00 280+00 281+00 282+00 283+00

BUSINESS 51

BM 45

P-1X

BM 46

END PROJECT 6414-00-81
STA 281+01.00

1X STA 279+99.69, 13.8' RT
INL 2X3 FT - H

MINNESOTA AVENUE

SIGN

N

BENCHMARK TABLE

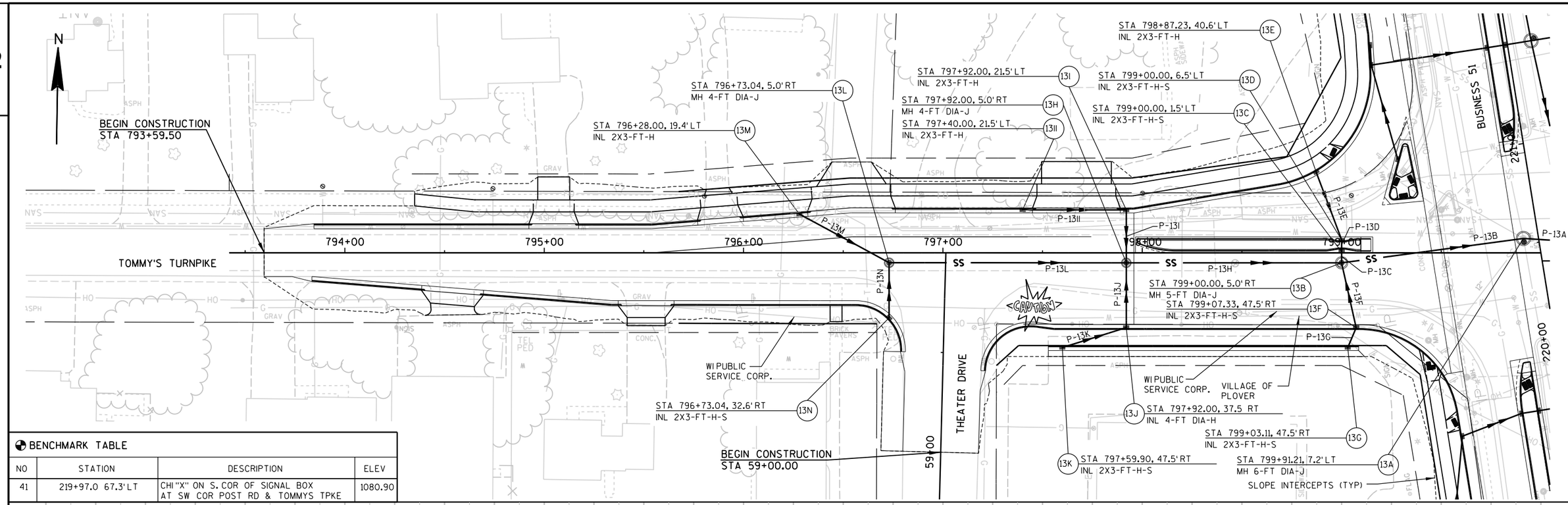
NO	STATION	DESCRIPTION	ELEV
45	279+10.1 5.6' RT	MAG NAIL IN W/S PP# 108AA12 2ND S OF MINNESOTA AVE ON E/S POST R	1072.55
46	282+67.0 34.1' RT	NORTHERLY FLANGE BOLT/ FLAG ON HYD AT SE COR MINN & POST RD	1086.75

1090 1085 1080 1075 1070 1065 1060 1055 1050

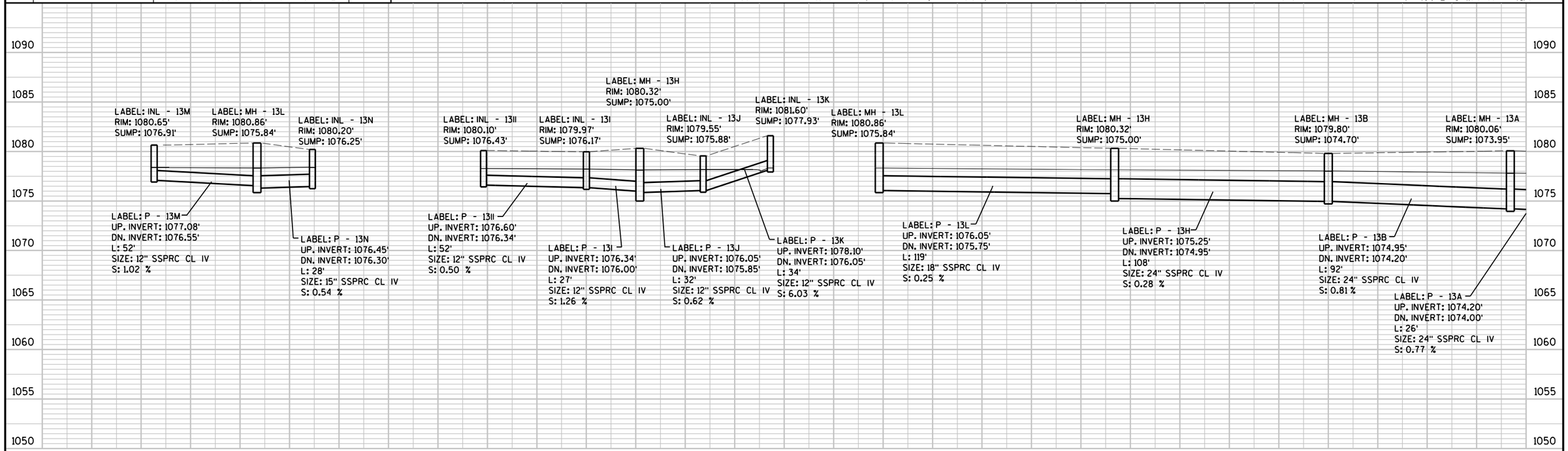
LABEL: INL - 1X
RIM: 1079.98'
SUMP: 1075.81'

LABEL: P - 1X
UP INVERT: 1076.02'
DN INVERT: MATCH EXISTING
L: 14'
SIZE: 18" SSPRC CL IV
S: MATCH EXISTING

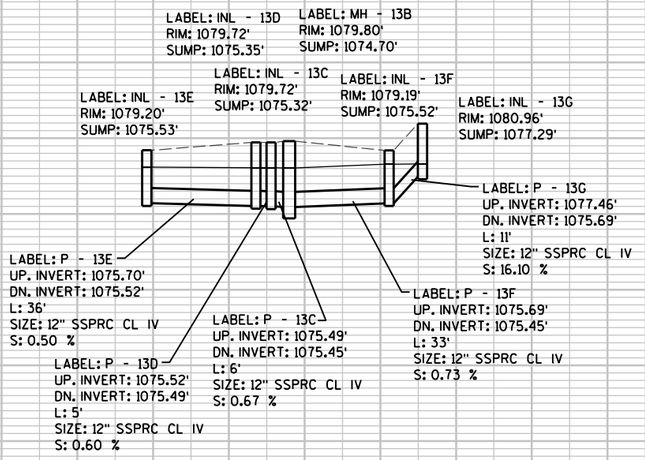
PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 91	E

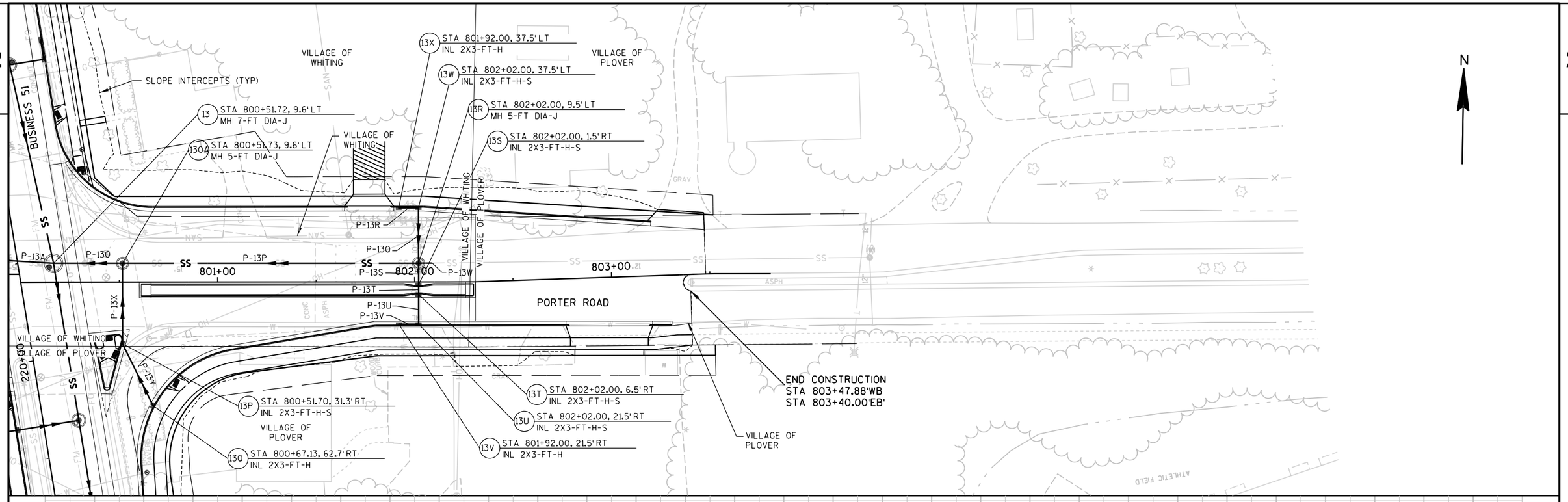


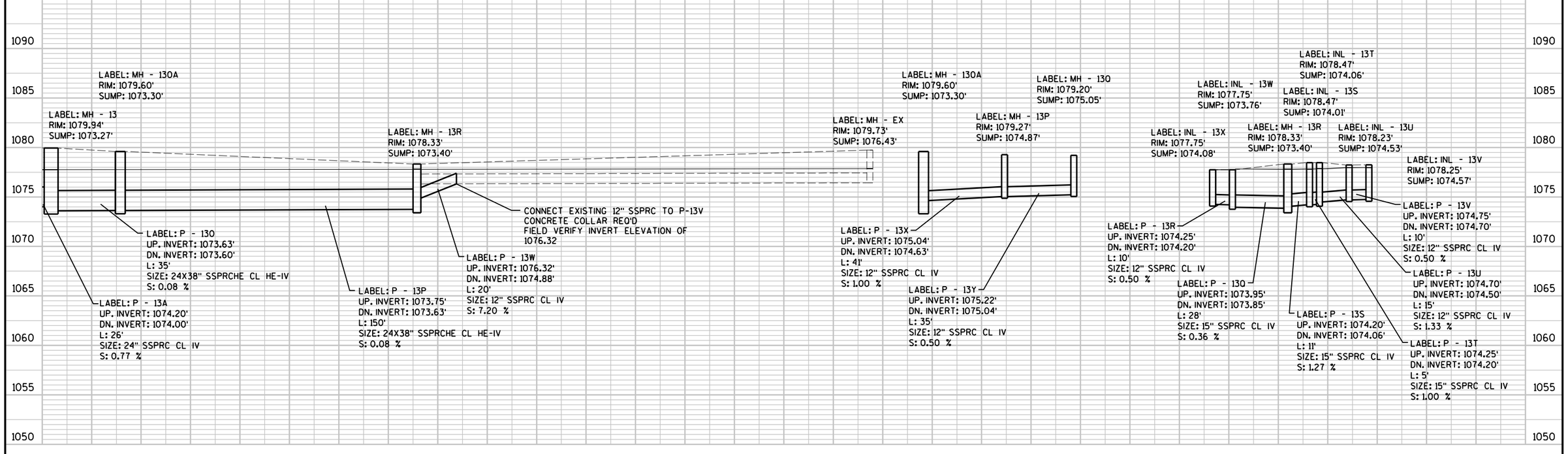
BENCHMARK TABLE			
NO	STATION	DESCRIPTION	ELEV
41	219+97.0 67.3'LT	CHI "X" ON S. COR OF SIGNAL BOX AT SW COR POST RD & TOMMYS TPKE	1080.90



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 92	E

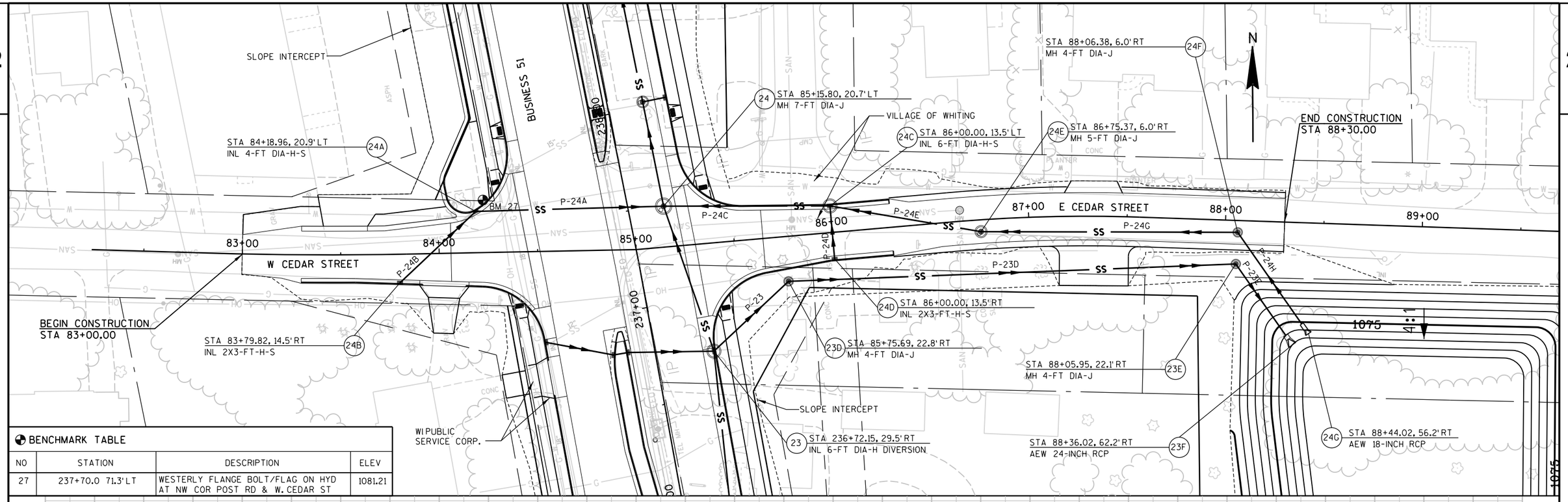

LABEL: INL - 13D
RIM: 1079.72'
SUMP: 1075.35'
LABEL: MH - 13B
RIM: 1079.80'
SUMP: 1074.70'
LABEL: INL - 13C
RIM: 1079.72'
SUMP: 1075.32'
LABEL: INL - 13F
RIM: 1079.19'
SUMP: 1075.52'
LABEL: INL - 13E
RIM: 1079.20'
SUMP: 1075.53'
LABEL: INL - 13G
RIM: 1080.96'
SUMP: 1077.29'
LABEL: P - 13G
UP. INVERT: 1077.46'
DN. INVERT: 1075.69'
L: 11'
SIZE: 12" SSPRC CL IV
S: 16.10 %
LABEL: P - 13E
UP. INVERT: 1075.70'
DN. INVERT: 1075.52'
L: 36'
SIZE: 12" SSPRC CL IV
S: 0.50 %
LABEL: P - 13C
UP. INVERT: 1075.49'
DN. INVERT: 1075.45'
L: 6'
SIZE: 12" SSPRC CL IV
S: 0.67 %
LABEL: P - 13F
UP. INVERT: 1075.69'
DN. INVERT: 1075.45'
L: 33'
SIZE: 12" SSPRC CL IV
S: 0.73 %
LABEL: P - 13D
UP. INVERT: 1075.52'
DN. INVERT: 1075.49'
L: 5'
SIZE: 12" SSPRC CL IV
S: 0.60 %





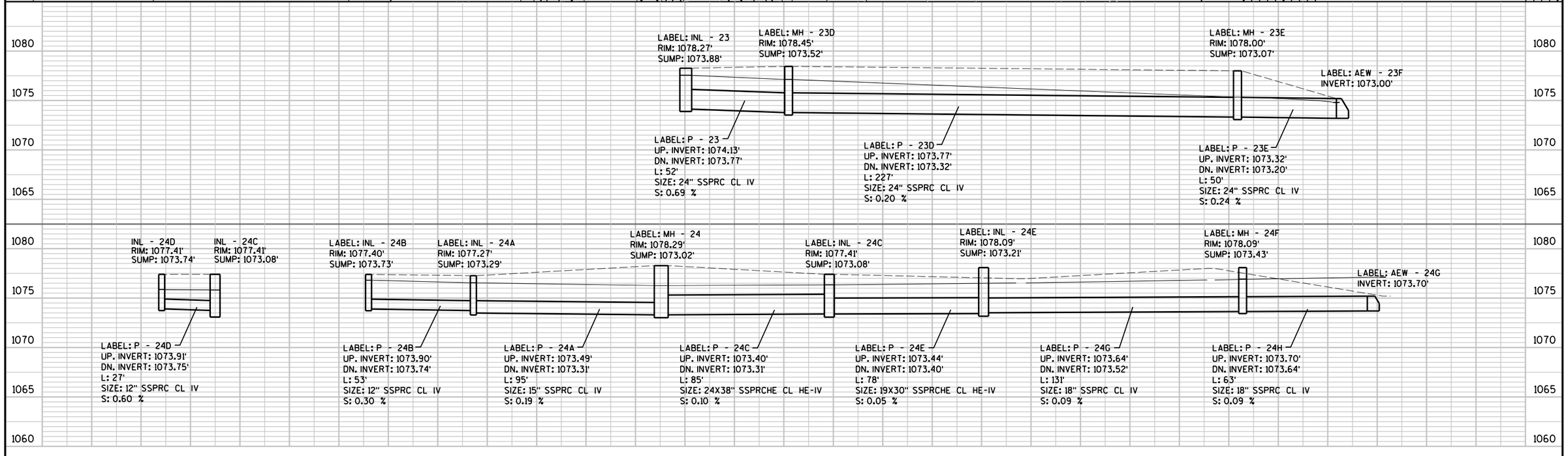
PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 94	E

2

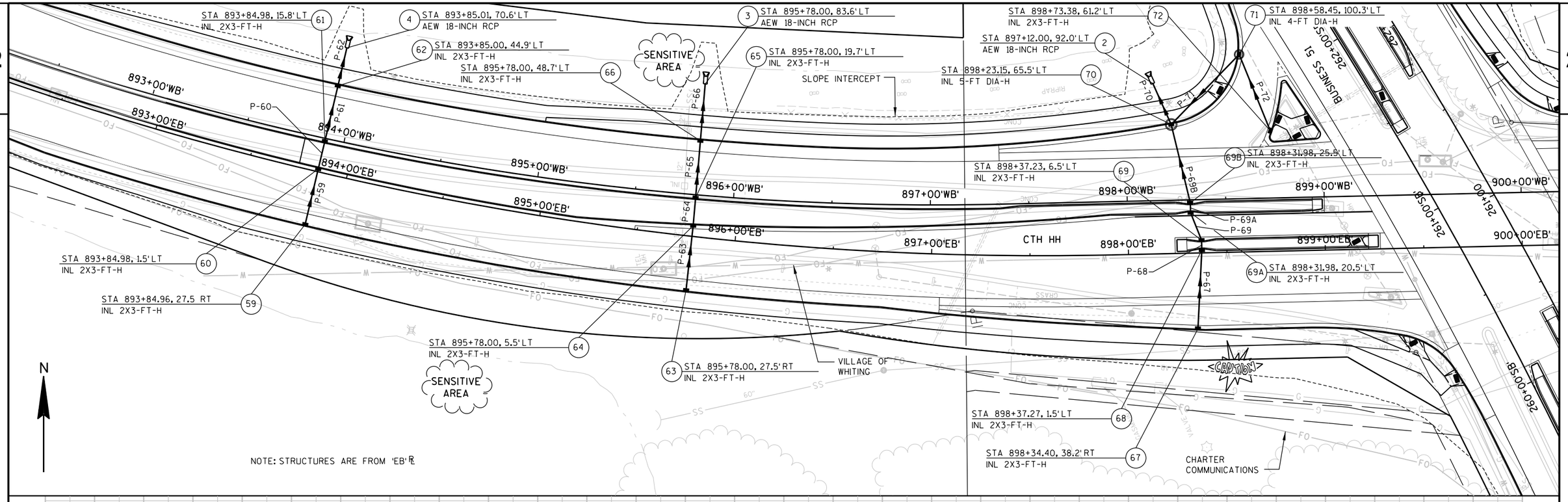


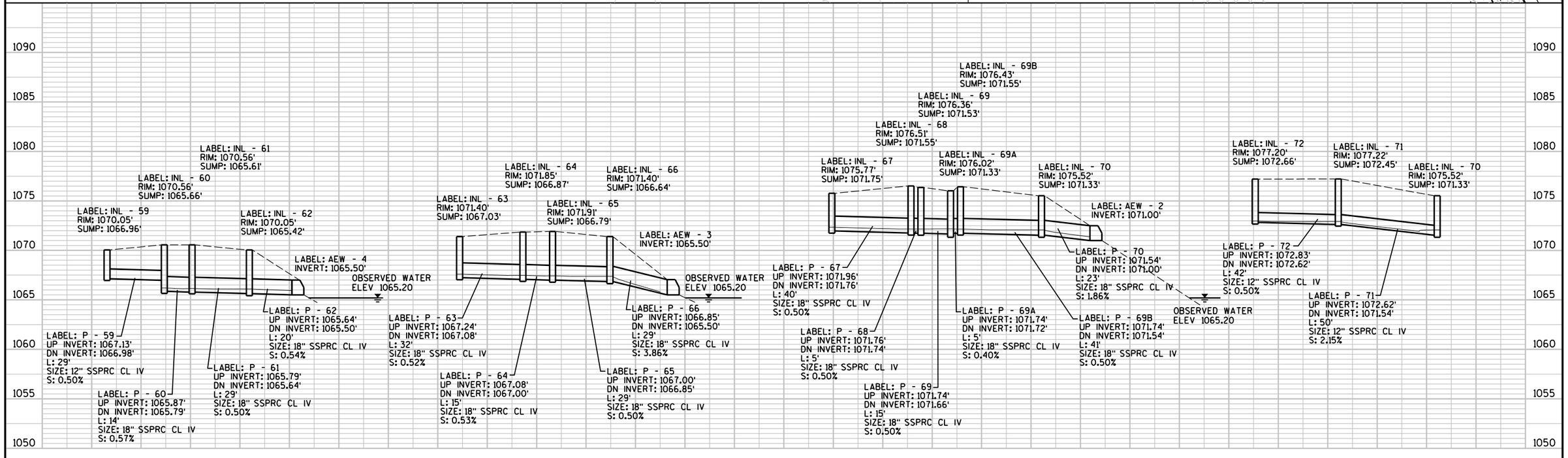
BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
27	237+70.0 71.3'LT	WESTERLY FLANGE BOLT/FLAG ON HYD AT NW COR POST RD & W. CEDAR ST	1081.21

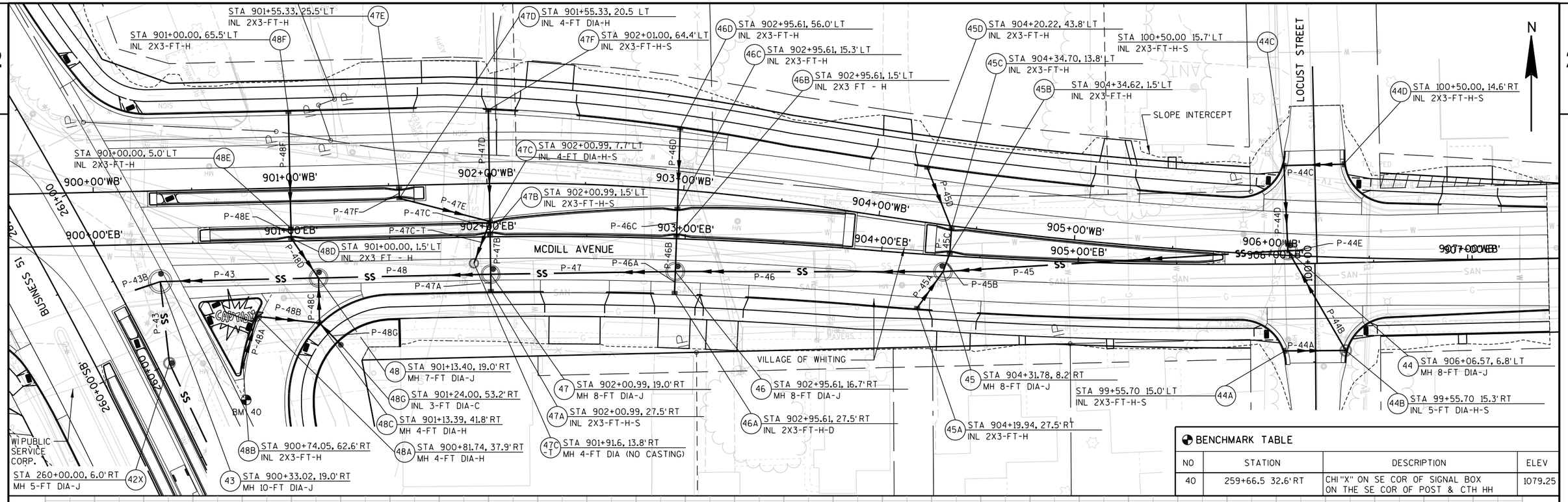


PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 95	E


STA 893+84.98, 15.8'LT
INL 2X3-FT-H
61
P-62
4
STA 893+85.01, 70.6'LT
AEW 18-INCH RCP
62
STA 893+85.00, 44.9'LT
INL 2X3-FT-H
STA 895+78.00, 48.7'LT
INL 2X3-FT-H
66
SENSITIVE AREA
3
STA 895+78.00, 83.6'LT
AEW 18-INCH RCP
65
STA 895+78.00, 19.7'LT
INL 2X3-FT-H
SLOPE INTERCEPT
STA 898+73.38, 61.2'LT
INL 2X3-FT-H
72
STA 897+12.00, 92.0'LT
AEW 18-INCH RCP
2
STA 898+23.15, 65.5'LT
INL 5-FT DIA-H
70
71
STA 898+58.45, 100.3'LT
INL 4-FT DIA-H
BUSINESS 51
262+00'SF
262
893+00'WB'
893+00'EB'
894+00'WB'
894+00'EB'
895+00'WB'
895+00'EB'
896+00'WB'
896+00'EB'
897+00'WB'
897+00'EB'
898+00'WB'
898+00'EB'
899+00'WB'
899+00'EB'
900+00'WB'
900+00'EB'
85+00+192
P-60
P-61
P-62
P-59
P-63
P-64
P-65
P-66
P-70
P-71
P-72
P-69B
P-69A
P-69
P-68
P-67
STA 898+37.23, 6.5'LT
INL 2X3-FT-H
69
69B
STA 898+31.98, 25.5'LT
INL 2X3-FT-H
CTH HH
69A
STA 898+31.98, 20.5'LT
INL 2X3-FT-H
STA 893+84.98, 1.5'LT
INL 2X3-FT-H
60
STA 893+84.96, 27.5 RT
INL 2X3-FT-H
59
STA 895+78.00, 5.5'LT
INL 2X3-FT-H
64
SENSITIVE AREA
63
STA 895+78.00, 27.5'RT
INL 2X3-FT-H
VILLAGE OF WHITING
CAUTION
STA 898+37.27, 1.5'LT
INL 2X3-FT-H
68
STA 898+34.40, 38.2'RT
INL 2X3-FT-H
67
CHARTER COMMUNICATIONS
N
NOTE: STRUCTURES ARE FROM 'EB'℄

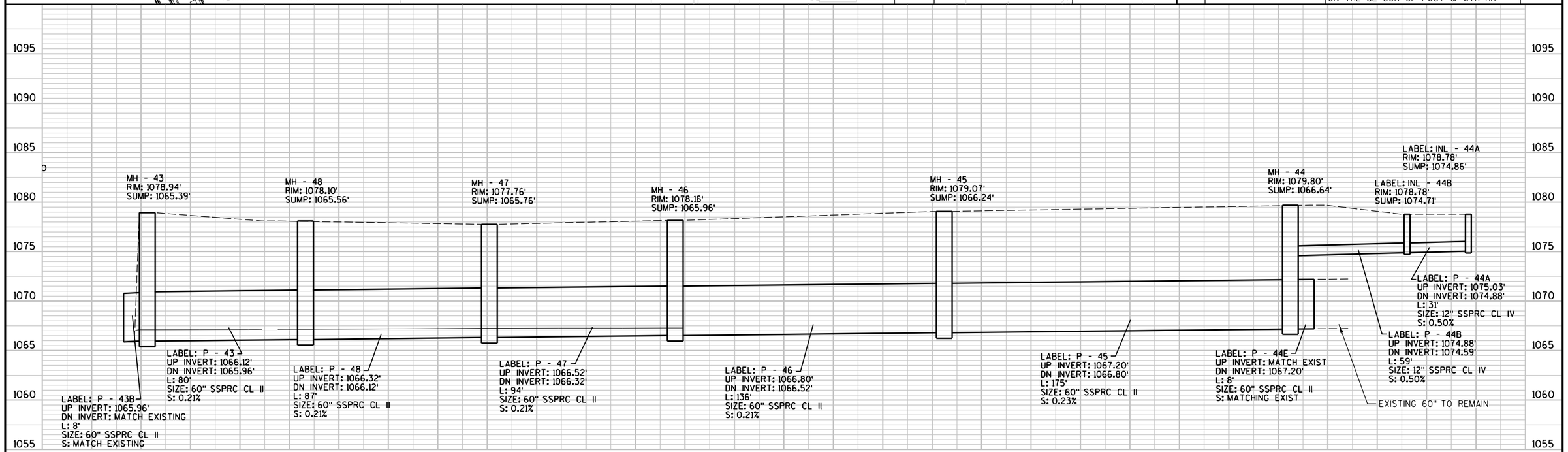

1090
1085
1080
1075
1070
1065
1060
1055
1050
LABEL: INL - 59
RIM: 1070.05'
SUMP: 1066.96'
LABEL: INL - 60
RIM: 1070.56'
SUMP: 1065.66'
LABEL: INL - 61
RIM: 1070.56'
SUMP: 1065.61'
LABEL: INL - 62
RIM: 1070.05'
SUMP: 1065.42'
LABEL: AEW - 4
INVERT: 1065.50'
OBSERVED WATER ELEV 1065.20
LABEL: P - 59
UP INVERT: 1067.13'
DN INVERT: 1066.98'
L: 29'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 60
UP INVERT: 1065.87'
DN INVERT: 1065.79'
L: 14'
SIZE: 18" SSPRC CL IV
S: 0.57%
LABEL: P - 61
UP INVERT: 1065.79'
DN INVERT: 1065.64'
L: 29'
SIZE: 18" SSPRC CL IV
S: 0.50%
LABEL: P - 62
UP INVERT: 1065.64'
DN INVERT: 1065.50'
L: 20'
SIZE: 18" SSPRC CL IV
S: 0.54%
LABEL: INL - 63
RIM: 1071.40'
SUMP: 1067.03'
LABEL: INL - 64
RIM: 1071.85'
SUMP: 1066.87'
LABEL: INL - 65
RIM: 1071.91'
SUMP: 1066.79'
LABEL: INL - 66
RIM: 1071.40'
SUMP: 1066.64'
LABEL: AEW - 3
INVERT: 1065.50'
OBSERVED WATER ELEV 1065.20
LABEL: P - 63
UP INVERT: 1067.24'
DN INVERT: 1067.08'
L: 32'
SIZE: 18" SSPRC CL IV
S: 0.52%
LABEL: P - 64
UP INVERT: 1067.08'
DN INVERT: 1067.00'
L: 15'
SIZE: 18" SSPRC CL IV
S: 0.53%
LABEL: P - 65
UP INVERT: 1067.00'
DN INVERT: 1066.85'
L: 29'
SIZE: 18" SSPRC CL IV
S: 0.50%
LABEL: P - 66
UP INVERT: 1066.85'
DN INVERT: 1065.50'
L: 29'
SIZE: 18" SSPRC CL IV
S: 3.86%
LABEL: INL - 67
RIM: 1075.77'
SUMP: 1071.75'
LABEL: INL - 68
RIM: 1076.51'
SUMP: 1071.55'
LABEL: INL - 69
RIM: 1076.36'
SUMP: 1071.53'
LABEL: INL - 69B
RIM: 1076.43'
SUMP: 1071.55'
LABEL: INL - 69A
RIM: 1076.02'
SUMP: 1071.33'
LABEL: INL - 70
RIM: 1075.52'
SUMP: 1071.33'
LABEL: AEW - 2
INVERT: 1071.00'
LABEL: P - 67
UP INVERT: 1071.96'
DN INVERT: 1071.76'
L: 40'
SIZE: 18" SSPRC CL IV
S: 0.50%
LABEL: P - 68
UP INVERT: 1071.76'
DN INVERT: 1071.74'
L: 5'
SIZE: 18" SSPRC CL IV
S: 0.50%
LABEL: P - 69
UP INVERT: 1071.74'
DN INVERT: 1071.66'
L: 15'
SIZE: 18" SSPRC CL IV
S: 0.50%
LABEL: P - 69A
UP INVERT: 1071.74'
DN INVERT: 1071.72'
L: 5'
SIZE: 18" SSPRC CL IV
S: 0.40%
LABEL: P - 69B
UP INVERT: 1071.74'
DN INVERT: 1071.54'
L: 41'
SIZE: 18" SSPRC CL IV
S: 0.50%
LABEL: P - 70
UP INVERT: 1071.54'
DN INVERT: 1071.00'
L: 23'
SIZE: 18" SSPRC CL IV
S: 1.86%
OBSERVED WATER ELEV 1065.20
LABEL: INL - 72
RIM: 1077.20'
SUMP: 1072.66'
LABEL: INL - 71
RIM: 1077.22'
SUMP: 1072.45'
LABEL: INL - 70
RIM: 1075.52'
SUMP: 1071.33'
LABEL: P - 72
UP INVERT: 1072.83'
DN INVERT: 1072.62'
L: 42'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 71
UP INVERT: 1072.62'
DN INVERT: 1071.54'
L: 50'
SIZE: 12" SSPRC CL IV
S: 2.15%

2

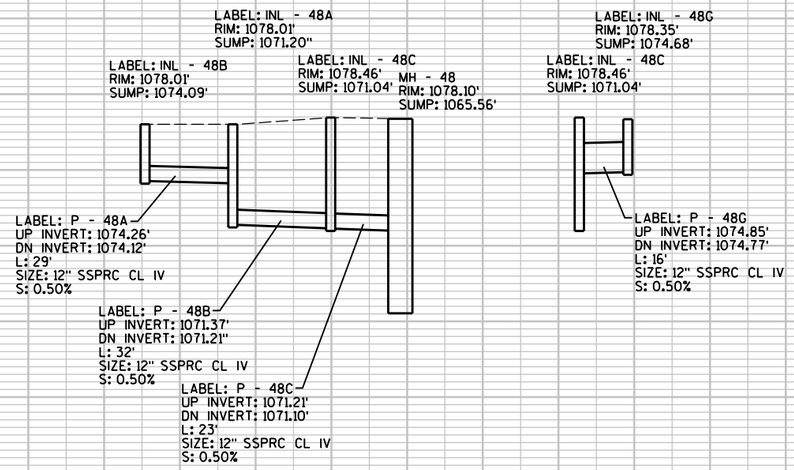


BENCHMARK TABLE

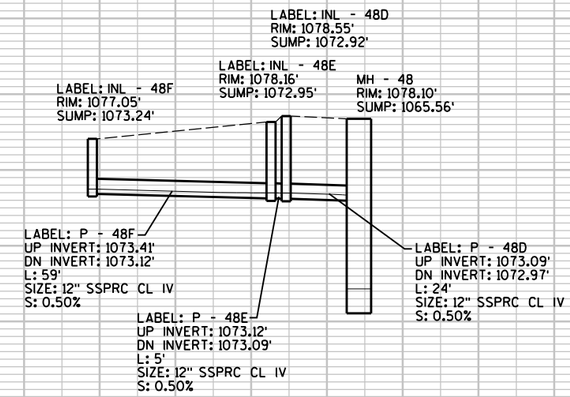
NO	STATION	DESCRIPTION	ELEV
40	259+66.5 32.6'RT	CHI "X" ON SE COR OF SIGNAL BOX ON THE SE COR OF POST & CTH HH	1079.25

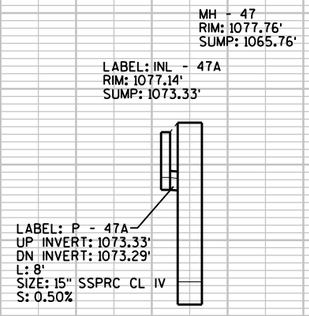


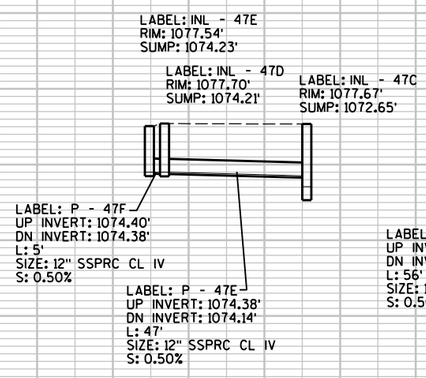
PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	STORM SEWER	SHEET 97	E

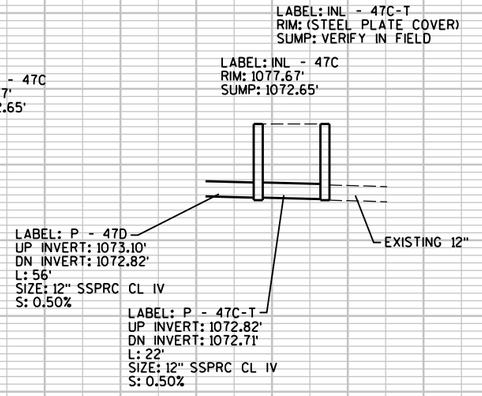

LABEL: INL - 48A
RIM: 1078.01'
SUMP: 1071.20"
LABEL: INL - 48B
RIM: 1078.01'
SUMP: 1074.09'
LABEL: INL - 48C
RIM: 1078.46'
SUMP: 1071.04'
MH - 48
RIM: 1078.10'
SUMP: 1065.56'
LABEL: P - 48A
UP INVERT: 1074.26'
DN INVERT: 1074.12'
L: 29'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 48B
UP INVERT: 1071.37'
DN INVERT: 1071.21"
L: 32'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 48C
UP INVERT: 1071.21'
DN INVERT: 1071.10'
L: 23'
SIZE: 12" SSPRC CL IV
S: 0.50%

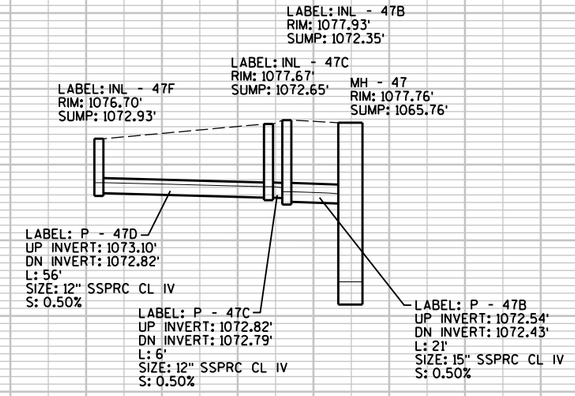
LABEL: INL - 48G
RIM: 1078.35'
SUMP: 1074.68'
LABEL: INL - 48C
RIM: 1078.46'
SUMP: 1071.04'
LABEL: P - 48G
UP INVERT: 1074.85'
DN INVERT: 1074.77'
L: 16'
SIZE: 12" SSPRC CL IV
S: 0.50%

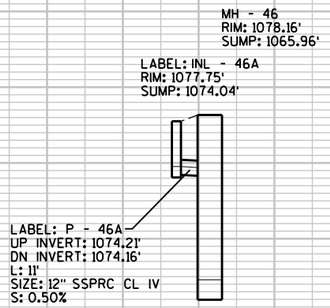

LABEL: INL - 48D
RIM: 1078.55'
SUMP: 1072.92'
LABEL: INL - 48E
RIM: 1078.16'
SUMP: 1072.95'
MH - 48
RIM: 1078.10'
SUMP: 1065.56'
LABEL: INL - 48F
RIM: 1077.05'
SUMP: 1073.24'
LABEL: P - 48F
UP INVERT: 1073.41'
DN INVERT: 1073.12'
L: 59'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 48E
UP INVERT: 1073.12'
DN INVERT: 1073.09'
L: 5'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 48D
UP INVERT: 1073.09'
DN INVERT: 1072.97'
L: 24'
SIZE: 12" SSPRC CL IV
S: 0.50%

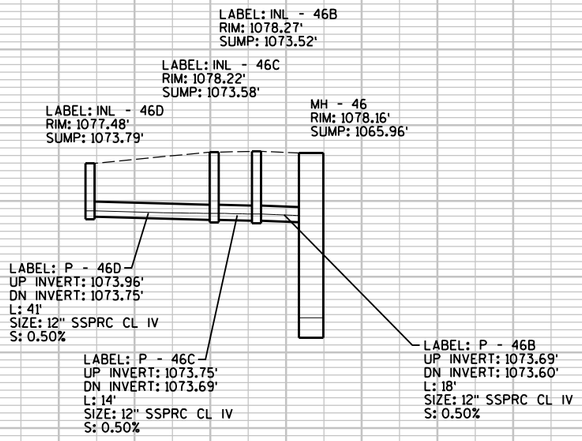

MH - 47
RIM: 1077.76'
SUMP: 1065.76'
LABEL: INL - 47A
RIM: 1077.14'
SUMP: 1073.33'
LABEL: P - 47A
UP INVERT: 1073.33'
DN INVERT: 1073.29'
L: 8'
SIZE: 15" SSPRC CL IV
S: 0.50%

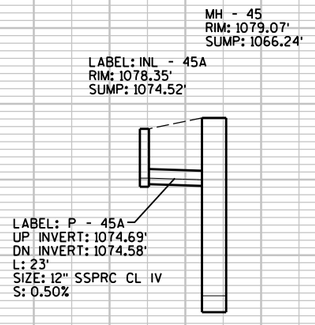

LABEL: INL - 47E
RIM: 1077.54'
SUMP: 1074.23'
LABEL: INL - 47D
RIM: 1077.70'
SUMP: 1074.21'
LABEL: INL - 47C
RIM: 1077.67'
SUMP: 1072.65'
LABEL: P - 47F
UP INVERT: 1074.40'
DN INVERT: 1074.38'
L: 5'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 47E
UP INVERT: 1074.38'
DN INVERT: 1074.14'
L: 47'
SIZE: 12" SSPRC CL IV
S: 0.50%

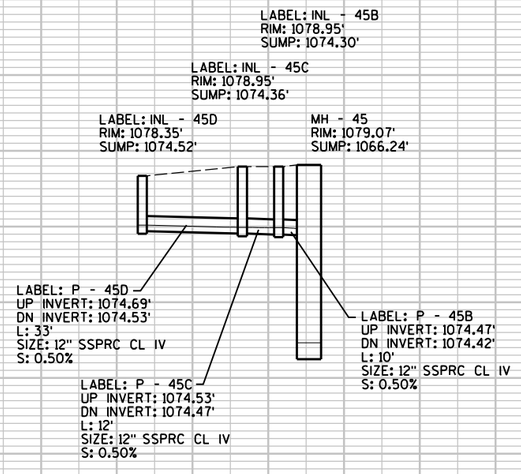

LABEL: INL - 47C-T
RIM: (STEEL PLATE COVER)
SUMP: VERIFY IN FIELD
LABEL: INL - 47C
RIM: 1077.67'
SUMP: 1072.65'
LABEL: P - 47D
UP INVERT: 1073.10'
DN INVERT: 1072.82'
L: 56'
SIZE: 12" SSPRC CL IV
S: 0.50%
EXISTING 12"
LABEL: P - 47C-T
UP INVERT: 1072.82'
DN INVERT: 1072.71'
L: 22'
SIZE: 12" SSPRC CL IV
S: 0.50%

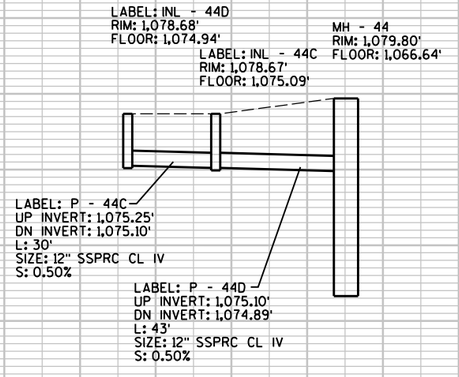

LABEL: INL - 47B
RIM: 1077.93'
SUMP: 1072.35'
LABEL: INL - 47C
RIM: 1077.67'
SUMP: 1072.65'
MH - 47
RIM: 1077.76'
SUMP: 1065.76'
LABEL: INL - 47F
RIM: 1076.70'
SUMP: 1072.93'
LABEL: P - 47D
UP INVERT: 1073.10'
DN INVERT: 1072.82'
L: 56'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 47C
UP INVERT: 1072.82'
DN INVERT: 1072.79'
L: 6'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 47B
UP INVERT: 1072.54'
DN INVERT: 1072.43'
L: 21'
SIZE: 15" SSPRC CL IV
S: 0.50%


MH - 46
RIM: 1078.16'
SUMP: 1065.96'
LABEL: INL - 46A
RIM: 1077.75'
SUMP: 1074.04'
LABEL: P - 46A
UP INVERT: 1074.21'
DN INVERT: 1074.16'
L: 11'
SIZE: 12" SSPRC CL IV
S: 0.50%


LABEL: INL - 46B
RIM: 1078.27'
SUMP: 1073.52'
LABEL: INL - 46C
RIM: 1078.22'
SUMP: 1073.58'
LABEL: INL - 46D
RIM: 1077.48'
SUMP: 1073.79'
MH - 46
RIM: 1078.16'
SUMP: 1065.96'
LABEL: P - 46D
UP INVERT: 1073.96'
DN INVERT: 1073.75'
L: 41'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 46C
UP INVERT: 1073.75'
DN INVERT: 1073.69'
L: 14'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 46B
UP INVERT: 1073.69'
DN INVERT: 1073.60'
L: 18'
SIZE: 12" SSPRC CL IV
S: 0.50%


MH - 45
RIM: 1079.07'
SUMP: 1066.24'
LABEL: INL - 45A
RIM: 1078.35'
SUMP: 1074.52'
LABEL: P - 45A
UP INVERT: 1074.69'
DN INVERT: 1074.58'
L: 23'
SIZE: 12" SSPRC CL IV
S: 0.50%


LABEL: INL - 45B
RIM: 1078.95'
SUMP: 1074.30'
LABEL: INL - 45C
RIM: 1078.95'
SUMP: 1074.36'
LABEL: INL - 45D
RIM: 1078.35'
SUMP: 1074.52'
MH - 45
RIM: 1079.07'
SUMP: 1066.24'
LABEL: P - 45D
UP INVERT: 1074.69'
DN INVERT: 1074.53'
L: 33'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 45C
UP INVERT: 1074.53'
DN INVERT: 1074.47'
L: 12'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 45B
UP INVERT: 1074.47'
DN INVERT: 1074.42'
L: 10'
SIZE: 12" SSPRC CL IV
S: 0.50%


LABEL: INL - 44D
RIM: 1,078.68'
FLOOR: 1,074.94'
MH - 44
RIM: 1,079.80'
FLOOR: 1,066.64'
LABEL: INL - 44C
RIM: 1,078.67'
FLOOR: 1,075.09'
LABEL: P - 44C
UP INVERT: 1,075.25'
DN INVERT: 1,075.10'
L: 30'
SIZE: 12" SSPRC CL IV
S: 0.50%
LABEL: P - 44D
UP INVERT: 1,075.10'
DN INVERT: 1,074.89'
L: 43'
SIZE: 12" SSPRC CL IV
S: 0.50%

2

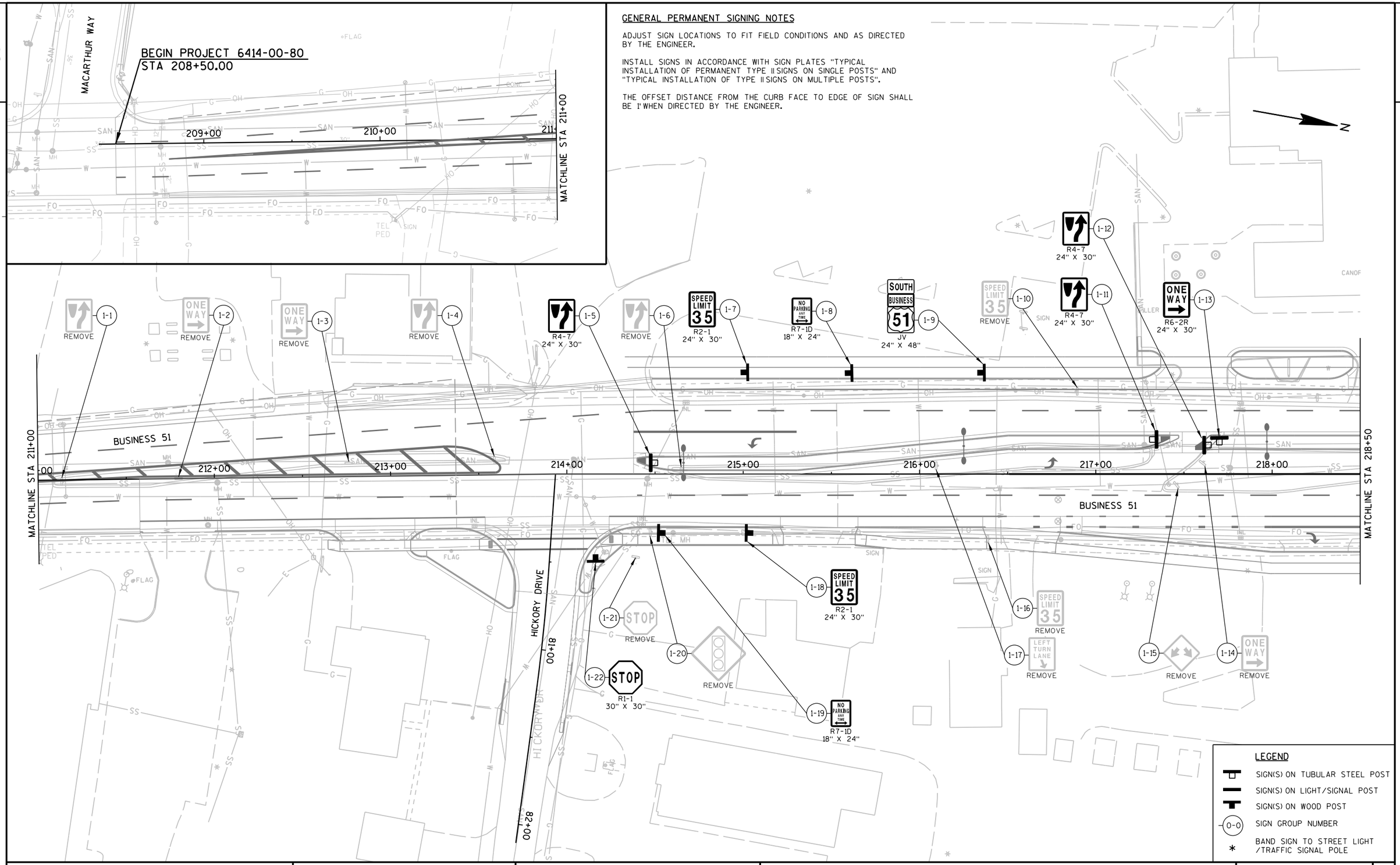
GENERAL PERMANENT SIGNING NOTES

ADJUST SIGN LOCATIONS TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER.

INSTALL SIGNS IN ACCORDANCE WITH SIGN PLATES "TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS" AND "TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS".

THE OFFSET DISTANCE FROM THE CURB FACE TO EDGE OF SIGN SHALL BE 1' WHEN DIRECTED BY THE ENGINEER.

2



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET 100	E

2

N

MATCHLINE STA 218+50

MATCHLINE STA 226+00

BUSINESS 51

BUSINESS 51

219+00 220+00 221+00 222+00 223+00 224+00 225+00 226

TOMMY'S TURNPIKE

PORTER DRIVE

800+00

802+00

2-1 ONE WAY R6-2R 24" X 30"

2-2 W12-1D 24" X 24"

2-3 STOP R1-1F 36" X 36"

2-4 R4-7 24" X 30"

2-5 PLOVER POPULATION 12,123 REMOVE

2-6 PLOVER POPULATION 12,123 I2-3 60" X 24"

2-7 STOP R1-1F 36" X 36"

2-8 STOP R1-1F 36" X 36"

2-9 STOP R1-1F 36" X 36"

2-10 W12-1D 24" X 24"

2-11 YIELD R1-2 36" X 31"

2-12 YIELD REMOVE

2-14 HEAVY TRAFFIC PROHIBITED ON VILLAGE OF EXCEPT ON TRUCK ROUTES REMOVE

2-15 R4-7 24" X 30"

2-16 R4-7 24" X 30"

2-17 SPEED LIMIT 35 REMOVE

2-18 NO PARKING ANY TIME R7-1D 18" X 24"

2-19 SNOWMOBILE ROUTE REMOVE

2-20 SPEED LIMIT 35 R2-1 24" X 30"

2-21 NO PARKING ANY TIME R7-1D 18" X 24"

2-22 R4-7 24" X 30"

2-23 WHITING POPULATION 1724 REMOVE

2-24 NO PARKING REMOVE

2-25 STOP R1-1F 36" X 36"

2-26 STOP R1-1F 36" X 36"

2-27 R4-7 24" X 30"

2-28 YIELD R1-2 36" X 31"

2-29 STOP R1-1F 36" X 36"

2-30 ONE WAY REMOVE

2-31 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50 30" X 36"

2-32 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50 30" X 36"

2-33 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50 30" X 36"

2-34 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50 30" X 36"

2-35 WHITING POPULATION 1724 I2-3 60" X 24"

GENERAL PERMANENT SIGNING NOTES

ADJUST SIGN LOCATIONS TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER.

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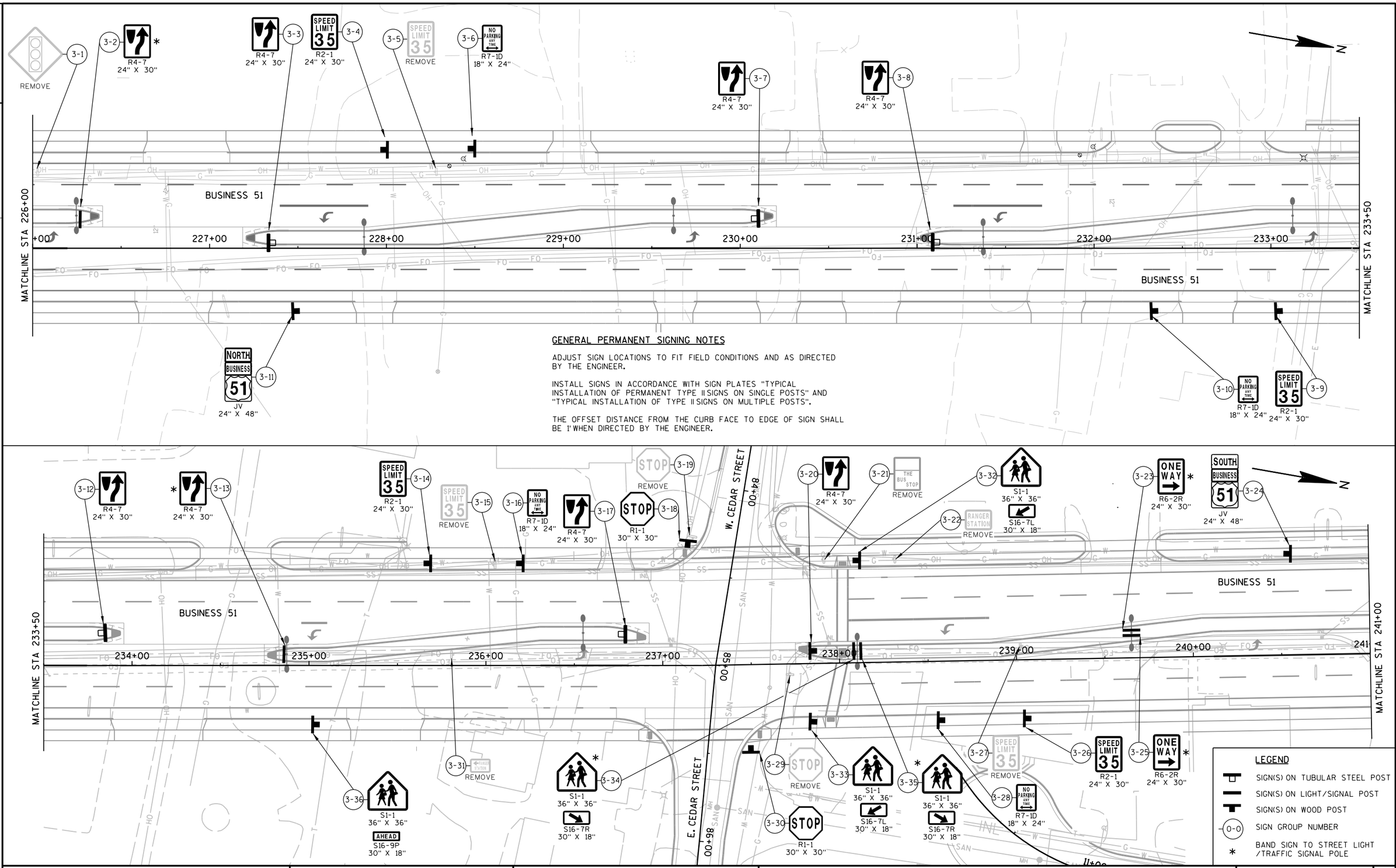
THE OFFSET DISTANCE FROM THE CURB FACE TO EDGE OF SIGN SHALL BE 1' WHEN DIRECTED BY THE ENGINEER.

LEGEND

- SIGN(S) ON TUBULAR STEEL POST
- SIGN(S) ON LIGHT/SIGNAL POST
- SIGN(S) ON WOOD POST
- (0-0) SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT /TRAFFIC SIGNAL POLE

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET 101	E

2



GENERAL PERMANENT SIGNING NOTES

ADJUST SIGN LOCATIONS TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER.

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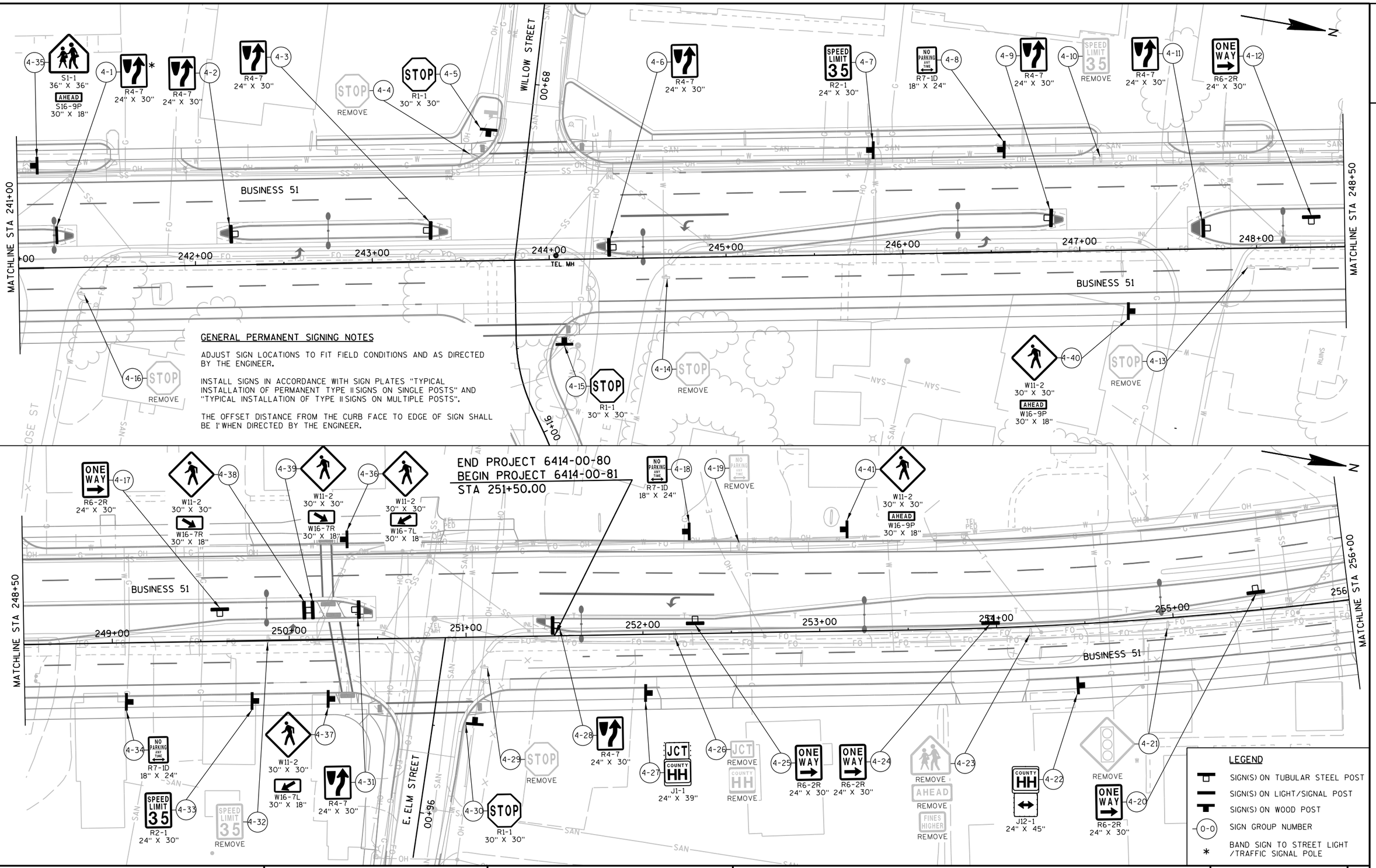
THE OFFSET DISTANCE FROM THE CURB FACE TO EDGE OF SIGN SHALL BE 1' WHEN DIRECTED BY THE ENGINEER.

LEGEND

- SIGN(S) ON TUBULAR STEEL POST
- SIGN(S) ON LIGHT/SIGNAL POST
- SIGN(S) ON WOOD POST
- (0-0) SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT /TRAFFIC SIGNAL POLE

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET 102	E

2



GENERAL PERMANENT SIGNING NOTES

ADJUST SIGN LOCATIONS TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER.

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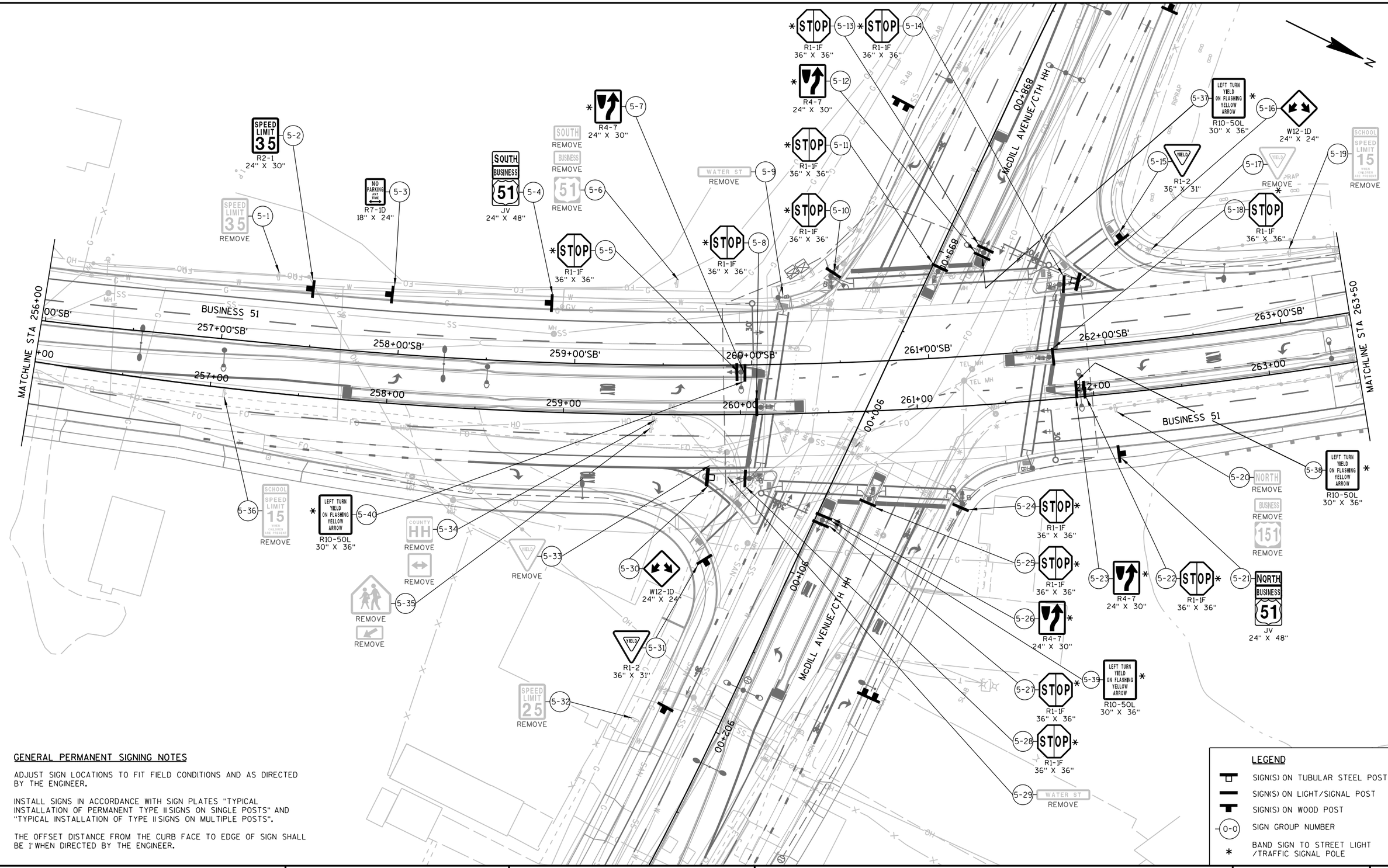
THE OFFSET DISTANCE FROM THE CURB FACE TO EDGE OF SIGN SHALL BE 1' WHEN DIRECTED BY THE ENGINEER.

LEGEND

- SIGN(S) ON TUBULAR STEEL POST
- SIGN(S) ON LIGHT/SIGNAL POST
- SIGN(S) ON WOOD POST
- (0-0) SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT /TRAFFIC SIGNAL POLE

PROJECT NO: 6414-00-80, 81	HWY: BUSINESS 51	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET 103	E

2



GENERAL PERMANENT SIGNING NOTES

ADJUST SIGN LOCATIONS TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER.

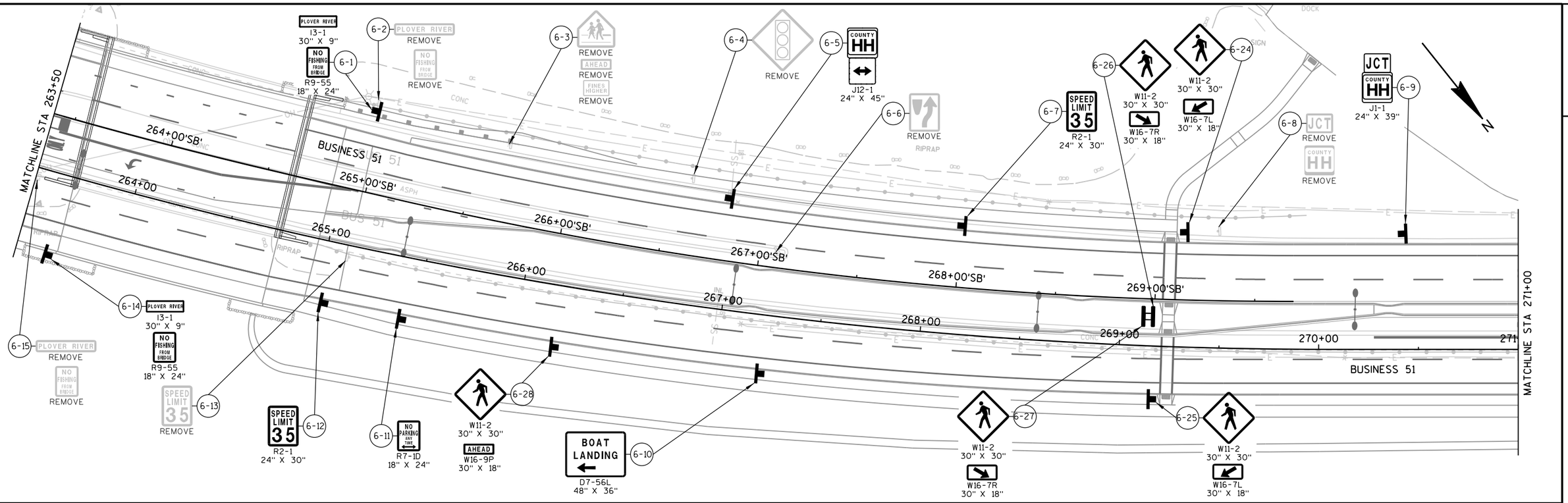
INSTALL SIGNS IN ACCORDANCE WITH SIGN PLATES "TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS" AND "TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS".

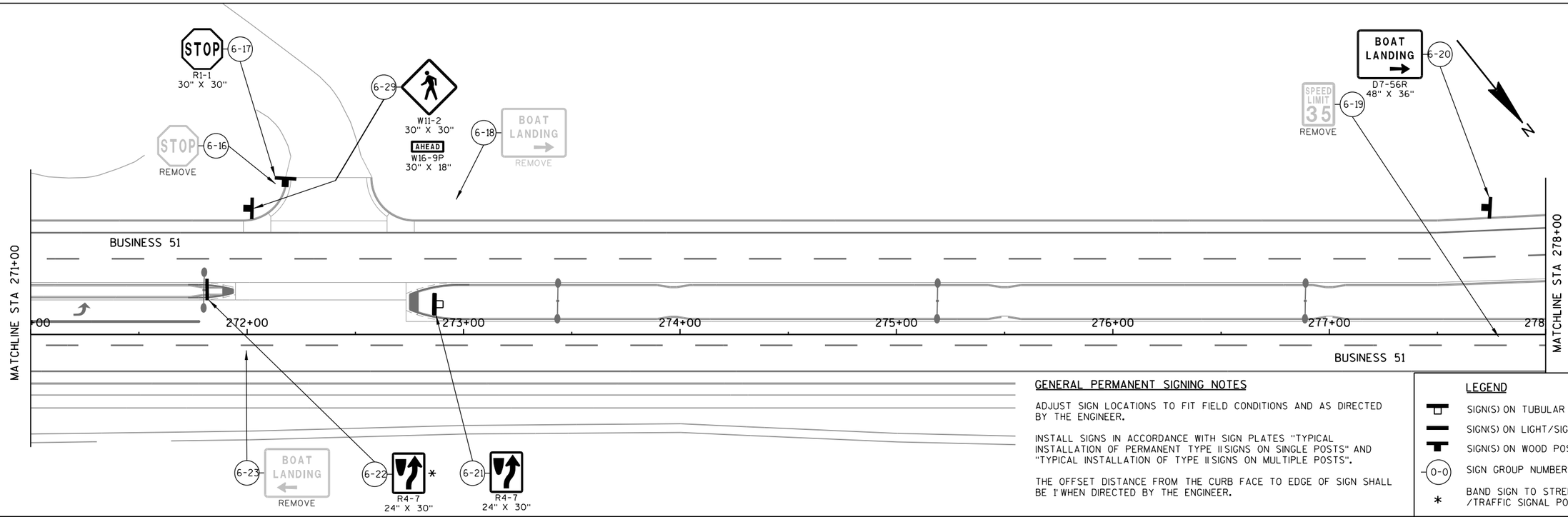
THE OFFSET DISTANCE FROM THE CURB FACE TO EDGE OF SIGN SHALL BE 1' WHEN DIRECTED BY THE ENGINEER.

LEGEND

- SIGN(S) ON TUBULAR STEEL POST
- SIGN(S) ON LIGHT/SIGNAL POST
- SIGN(S) ON WOOD POST
- -0-0 SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT /TRAFFIC SIGNAL POLE

2





GENERAL PERMANENT SIGNING NOTES

ADJUST SIGN LOCATIONS TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER.

INSTALL SIGNS IN ACCORDANCE WITH SIGN PLATES "TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS" AND "TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS".

THE OFFSET DISTANCE FROM THE CURB FACE TO EDGE OF SIGN SHALL BE 1' WHEN DIRECTED BY THE ENGINEER.

LEGEND

- SIGN(S) ON TUBULAR STEEL POST
- SIGN(S) ON LIGHT/SIGNAL POST
- SIGN(S) ON WOOD POST
- (0-0) SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT /TRAFFIC SIGNAL POLE

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET 105	E

2

7-1 SPEED LIMIT 35
R2-1
24" X 30"

7-2 SPEED LIMIT 35
REMOVE

7-3 NO PARKING ANY TIME
R7-1D
18" X 24"

7-4 REMOVE

7-5 LEFT TURN LANE
REMOVE

BUSINESS 51

MATCHLINE STA 278+00

278+00 279+00 280+00 281+00 282+00 283+00 284+00 285+00

BUSINESS 51

END PROJECT 6414-00-81
STA 281+01.00

7-7 NO PARKING ANY TIME
R7-1D
18" X 24"

7-6 SPEED LIMIT 35
R2-1
24" X 30"

MINNESOTA AVENUE

MINNESOTA AVENUE

SIGN

SIGN

FLAG

N

GENERAL PERMANENT SIGNING NOTES

ADJUST SIGN LOCATIONS TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER.

INSTALL SIGNS IN ACCORDANCE WITH SIGN PLATES "TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS" AND "TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS".

THE OFFSET DISTANCE FROM THE CURB FACE TO EDGE OF SIGN SHALL BE 1' WHEN DIRECTED BY THE ENGINEER.

LEGEND

- SIGN(S) ON TUBULAR STEEL POST
- SIGN(S) ON LIGHT/SIGNAL POST
- SIGN(S) ON WOOD POST
- (0-0) SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT /TRAFFIC SIGNAL POLE

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET 106	E

2

2

N

794+00

TOMMY'S TURNPIKE

795+00

796+00

797+00

798

798+00

MATCHLINE

8-1

STOP

R1-1
30" X 30"

THEATER DRIVE

WANTA DRIVE

GENERAL PERMANENT SIGNING NOTES

ADJUST SIGN LOCATIONS TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER.

INSTALL SIGNS IN ACCORDANCE WITH SIGN PLATES "TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS" AND "TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS".

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- SIGN(S) ON TUBULAR STEEL POST
- SIGN(S) ON LIGHT/SIGNAL POST
- SIGN(S) ON WOOD POST
- (0-0) SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT /TRAFFIC SIGNAL POLE

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET 107	E

2

N

BUSINESS 51

222+00

221+00

220+00

219+00

MATCHLINE 798+00

799+00

801+00

802+00

803+00

TOMMY'S TURNPIKE

PORTER DRIVE

9-1
NO PARKING ANY TIME
R7-1D
18" X 24"

9-4
R4-7
24" X 30"

9-3
NO PARKING ANY TIME
R7-1D
18" X 24"

9-2
R4-7
24" X 30"

GENERAL PERMANENT SIGNING NOTES

ADJUST SIGN LOCATIONS TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER.

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LEGEND

- SIGN(S) ON TUBULAR STEEL POST
- SIGN(S) ON LIGHT/SIGNAL POST
- SIGN(S) ON WOOD POST
- (0-0) SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT /TRAFFIC SIGNAL POLE

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET 108	E

2

2

N

BUSINESS 51

263+00

00+20

MATCHLINE 899+50

McDILL AVENUE/CTH HH

892+00

893+00

894+00

895+00

896+00

897+00

898+00

899+00

10-1 SPEED LIMIT 35 R2-1 24" X 30"

10-2 NO PARKING ANY TIME R7-1D 18" X 24"

10-3 WEST COUNTY HH J1-1 24" X 39"

10-4 YIELD REMOVE

10-5 NORTH SOUTH BUSINESS BUSINESS 51 51 JV 48" X 69"

10-6 NORTH SOUTH REMOVE REMOVE; BUSINESS BUSINESS REMOVE REMOVE; 51 51 REMOVE REMOVE; ← → REMOVE REMOVE

10-7 EAST REMOVE; COUNTY HH REMOVE; ↑ REMOVE

10-8 BEGIN RIGHT TURN LANE YIELD TO BIKES R4-4 36" X 30"

10-9 NO PARKING ANY TIME R7-1D 18" X 24"

10-10 ONLY ONLY ONLY ONLY REMOVE

10-11 REMOVE

10-12 W3-3 36" X 36"

10-13 JCT REMOVE; BUSINESS REMOVE; 51 REMOVE

10-14 JCT BUSINESS 51 JV 24" X 51"

10-15 NO PARKING ANY TIME R7-1D 18" X 24"

GENERAL PERMANENT SIGNING NOTES

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LEGEND

- SIGN(S) ON TUBULAR STEEL POST
- SIGN(S) ON LIGHT/SIGNAL POST
- SIGN(S) ON WOOD POST
- (0-0) SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT /TRAFFIC SIGNAL POLE

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET 109	E

2

2

N

MATCHLINE 899+50

261+00

260+00

259+00

900+00

901+00

902+00

903+00

904+00

905+00

906+00

907+00

McDILL AVENUE/CTH HH

BUSINESS 51

11-1 SOUTH BUSINESS 51 / NORTH BUSINESS 51
JV
48" X 69"

11-2 BUSINESS 51
REMOVE
REMOVE
REMOVE

11-3
REMOVE

11-4
W3-3
36" X 36"

11-5 BEGIN RIGHT TURN LANE YIELD TO BIKES
R4-4
36" X 30"

11-6 NO PARKING ANY TIME
R7-1D
18" X 24"

11-7 STOP
R1-1
30" X 30"

11-8 STOP
REMOVE

11-9 NO PARKING ANY TIME
R7-1D
18" X 24"

11-10 THE BUS STOP
REMOVE

11-11 STOP
R1-1
30" X 30"

11-12
S1-1
36" X 36"
AHEAD
W16-9P
24" X 8"
NO PARKING ANY TIME
R7-1D
18" X 24"

11-13
REMOVE
AHEAD
REMOVE

11-14
REMOVE

11-15 EAST COUNTY HH
J4-1
24" X 36"
NO PARKING ANY TIME
R7-1D
18" X 24"

AUTO SALVAGE YARD

TV PED

TEL PED

GENERAL PERMANENT SIGNING NOTES

ADJUST SIGN LOCATIONS TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER.

INSTALL SIGNS IN ACCORDANCE WITH SIGN PLATES "TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS" AND "TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS".

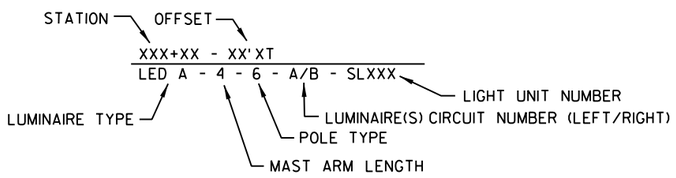
THE OFFSET DISTANCE FROM THE CURB FACE TO EDGE OF SIGN SHALL BE 1' WHEN DIRECTED BY THE ENGINEER.

LEGEND

- SIGN(S) ON TUBULAR STEEL POST
- SIGN(S) ON LIGHT/SIGNAL POST
- SIGN(S) ON WOOD POST
- 0-0 SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT /TRAFFIC SIGNAL POLE

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET 110	E

LIGHTING PLAN LEGEND



LIGHTING UNIT

LIGHTING UNIT INCLUDED IN SIGNAL PLANS

LIGHTING CONTROL CABINET

PULL BOX NON-CONDUCTIVE (24"X42")

CONDUIT RIGID NONMETALLIC SCHEDULE 40

GENERAL STREET LIGHTING NOTES:

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

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

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

4. CHECK FOR OVERHEAD UTILITY CONFLICTS PRIOR TO CONSTRUCTING CONCRETE BASES.

5. REFER TO STREETSCAPE DETAILS FOR ADDITIONAL INFORMATION FOR LOCATING BASES IN PAVED TERRACE AREAS.

6. STUB OUT CONDUIT FOR FUTURE USE IN STREET LIGHT BASES WHERE CIRCUIT RUNS END.

7. UTILITY OWNED STREET LIGHTS ARE NOT SHOWN ON THIS PLAN AND ARE TO BE REMOVED BY OTHERS.

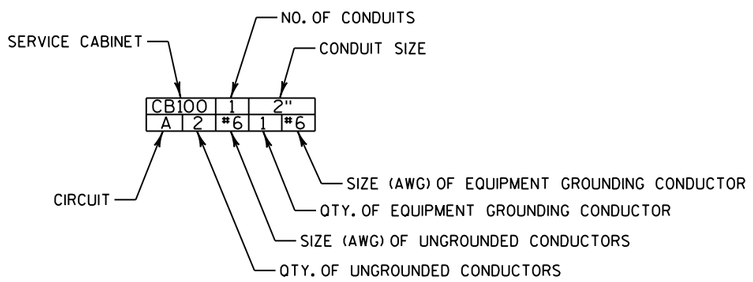
STREET LIGHTING PLANS PREPARED BY

WISCONSIN
MIKE D. SCARMON
E-37613
EVANSVILLE, WI
PROFESSIONAL ENGINEER

1/26/2018
(DATE)

(SIGNATURE)

CONDUIT/CONDUCTOR LEGEND



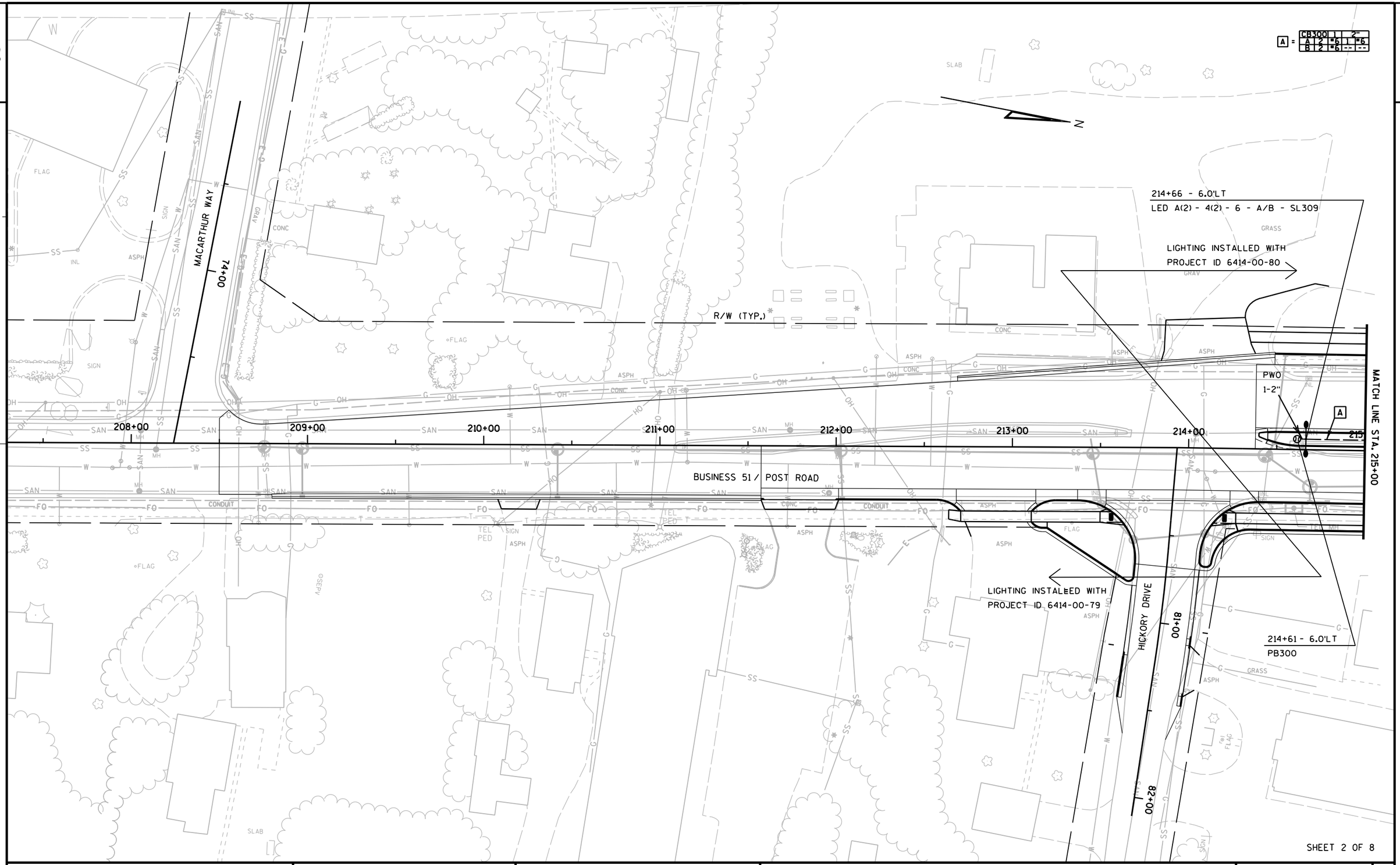
PWO = PULL WIRE ONLY

CONDUCTOR COLOR LEGEND

A - BLACK B - RED C - BLACK D - RED E - BLACK F - RED
240V PHASE TO PHASE

SHEET 1 OF 8

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET 111	E



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET 112 E

2

A = CB300 | 1 | 2"
A | 2 | ▪6 | 1 | ▪6
B | 2 | ▪6 | -- | --

B = CB300 | 1 | 3"
A | 2 | ▪6 | 1 | ▪6
B | 2 | ▪6 | -- | --

C = CB300 | 1 | 3"
C | 2 | ▪6 | 1 | ▪6
D | 2 | ▪6 | -- | --
E | 2 | ▪6 | 1 | ▪6
F | 2 | ▪6 | -- | --

D = CB300 | 1 | 2"
C | 2 | ▪6 | 1 | ▪6
D | 2 | ▪6 | -- | --

E = CB300 | 1 | 3"
E | 2 | ▪6 | 1 | ▪6
F | 2 | ▪6 | -- | --

F = CB300 | 1 | 2"
E | 2 | ▪6 | 1 | ▪6
F | 2 | ▪6 | -- | --

CB300 | 1 | 2"
A | 4 | ▪6 | 2 | ▪6
B | 4 | ▪6 | -- | --

N

216+25 - 15.5'LT
LED A(2) - 4(2) - 6 - B/A - SL310

217+97 - 18.0'LT
LED A(2) - 4(2) - 6 - A/B - SL311

798+81 - 43.2'RT
PB303

798+81 - 41.9'LT
PB304

221+36 - 93.9'LT
CB300

221+71 - 71.5'LT
PB305

219+29 - 57.5'LT
PB302

MATCH LINE STA. 798+50

MATCH LINE STA. 215+00

MATCH LINE STA. 222+50

MATCH LINE STA. 801+50

TOMMY'S TURNPIKE

799+00

BUSINESS 51 / POST ROAD

PORTER ROAD

800+08

PWO 1-3"

R/W (TYP.)

219+29 - 18.0'LT
PB301

219+29 - 48.2'RT
PB311

800+95 - 41.5'RT
PB310

800+95 - 4.0'RT
PB309

221+71 - 33.5'RT
PB307

221+71 - 6.0'LT
PB306

800+95 - 41.5'LT
PB308

NOTES:

1) STREET LIGHTS AT INTERSECTION INCLUDED IN TRAFFIC SIGNAL PLAN

SHEET 3 OF 8

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET 113	E

FILE NAME : G:\SEH\10026-001_002\DGN\SHEETS\6414-07-80\023615_lp.dgn PLOT DATE : 1/26/2018 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

2

D = CB300 | 1 | 2"

C	2	#6	1	#6
D	2	#6	--	--

222+78 - 12.9'LT
LED A(2) - 4(2) - 6 - C/D - SL312

224+55 - 12.0'LT
LED A(2) - 4(2) - 6 - D/C - SL313

226+25 - 18.1'LT
LED A(2) - 4(2) - 6 - C/D - SL314

227+88 - 6.0'LT
LED A(2) - 4(2) - 6 - D/C - SL315

229+63 - 18.0'LT
LED A(2) - 4(2) - 6 - C/D - SL316

MATCH LINE STA. 222+50

MATCH LINE STA. 230+00

223+00 224+00 225+00 226+00 227+00 228+00 229+00 230

BUSINESS 51 / POST ROAD

R/W (TYP.)

N

SHEET 4 OF 8

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET 114	E

2

D = CB300 | 1 | 2"
C | 2 | #6 | 1 | #6
D | 2 | #6 | -- | --

231+38 - 6.0'LT
LED A(2) - 4(2) - 6 - D/C - SL317

233+13 - 18.0'LT
LED A(2) - 4(2) - 6 - C/D - SL318

234+88 - 5.9'LT
LED A(2) - 4(2) - 6 - D/C - SL319

R/W (TYP.)

BUSINESS 51 / POST ROAD

MATCH LINE STA. 230+00

MATCH LINE STA. 236+50

231+00 232+00 233+00 234+00 235+00 236+00

N

SHEET 5 OF 8

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET	E

FILE NAME : G:\SEH\10026-001_002\DGN\SHEETS\6414-07-80\023616_B_lp.dgn PLOT DATE : 1/26/2018 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

236+55 - 18.0'LT
LED A(2) - 4(2) - 6 - C/D - SL320

238+10 - 6.0'LT
LED A(2) - 4(2) - 6 - D/C - SL321

239+66 - 13.7'LT
LED A(2) - 4(2) - 6 - C/D - SL322

241+21 - 18.0'LT
LED A(2) - 4(2) - 6 - A/B - SL400

242+76 - 18.0'LT
LED A(2) - 4(2) - 6 - B/A - SL401

D = CB300 | 1 | 2"
C | 2 | #6 | 1 | #6
D | 2 | #6 | -- | --

G = CB400 | 1 | 2"
A | 2 | #6 | 1 | #6
B | 2 | #6 | -- | --

N

W CEDAR STREET

E CEDAR STREET

LOCUST STREET

ROSE STREET

BUSINESS 51 / POST ROAD

R/W (TYP.)

PWO
1-2"

83+00

84+00

85+00

00+98

01+18

237+00

238+00

239+00

240+00

241+00

242+00

243+00

MATCH LINE STA. 236+50

MATCH LINE STA. 243+50

GRAV
ASPH
CONC
CONC SLAB
STONE
BARK
BRICK RETAINING WALL
BLOCK RETAINING WALL
BOULDERS (TYP)
SIGN
CONDUIT
SAN
MH
INL
OH
FO
W
G
SS

SHEET 6 OF 8

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET 116	E

2

G = CB400 | 1 | 2"
A | 2 | ■6 | 1 | ■6
B | 2 | ■6 | -- | --

N

W WILLOW STREET

88+00

00+68

244+53 - 6.0'LT
LED A(2) - 4(2) - 6 - A/B - SL402

246+32 - 18.0'LT
LED A(2) - 4(2) - 6 - B/A - SL403

249+88 - 18.0'LT
LED A(2) - 4(2) - 6 - B/A - SL405

248+15 - 12.0'LT
LED A(2) - 4(2) - 6 - A/B - SL404

LIGHTING INSTALLED WITH
PROJECT ID 6414-00-80

BUSINESS 51 / POST ROAD

244+00 245+00 246+00 247+00 248+00 249+00 250+00

MATCH LINE STA. 243+50

E WILLOW STREET

00+16

92+00

R/W (TYP.)

250+06 - 17.6'LT
PB400

LIGHTING INSTALLED WITH
PROJECT ID 6414-00-81

BEECH STREET

96+00

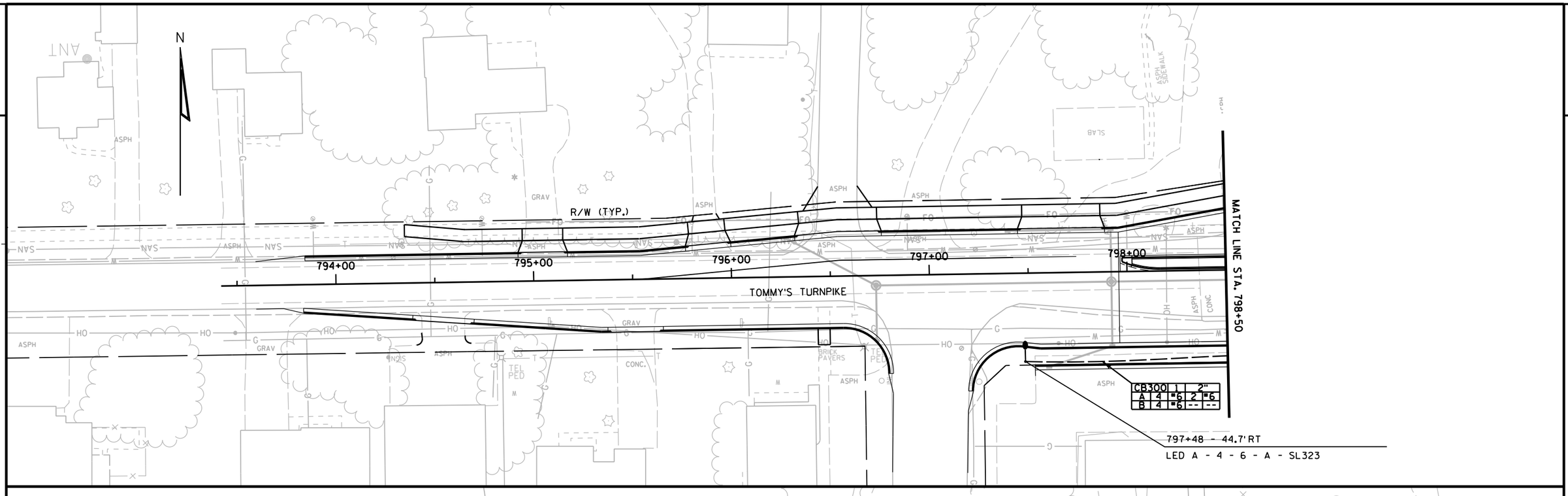
E ELM STREET

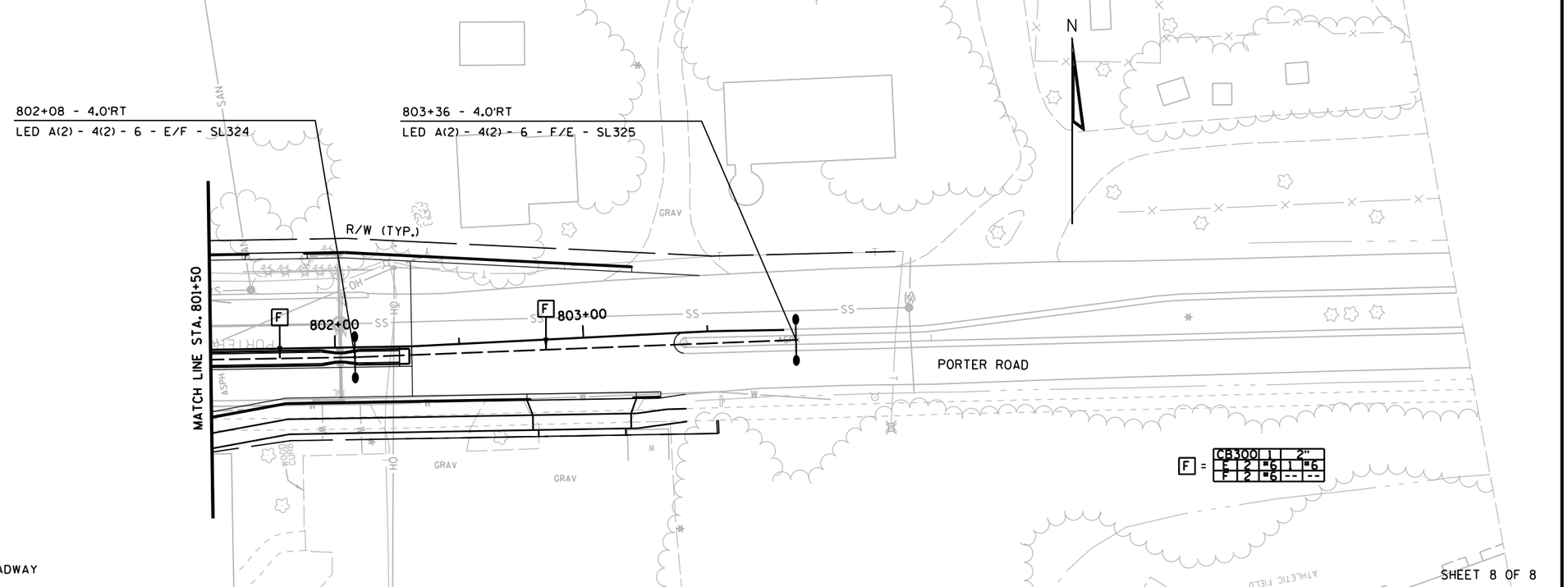
97+00

SHEET 7 OF 8

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET E

FILE NAME : G:\SEH\10026-001_002\DGN\SHEETS\6414-07-80\023618_lp.dgn PLOT DATE : 1/26/2018 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :





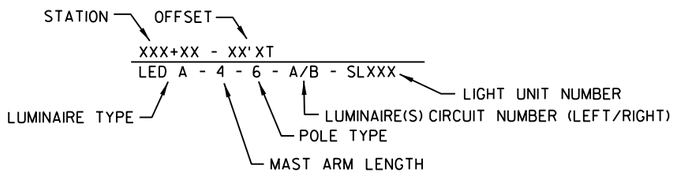
NOTES:
1) HORIZONTALLY BORE CONDUIT UNDER EXISTING ROADWAY

SHEET 8 OF 8

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET 118	E

FILE NAME : G:\SEH\10026-001_002\DGN\SHEETS\6414-07-80\023624_lp.dgn | PLOT DATE : 1/26/2018 | PLOT BY : KL Engineering | PLOT NAME : | PLOT SCALE :

LIGHTING PLAN LEGEND



LIGHTING UNIT

LIGHTING UNIT INCLUDED IN SIGNAL PLANS

EXISTING LIGHTING UNIT

LIGHTING CONTROL CABINET

PULL BOX NON-CONDUCTIVE (24"X42")

CONDUIT RIGID NONMETALLIC SCHEDULE 40

GENERAL STREET LIGHTING NOTES:

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

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

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

4. CHECK FOR OVERHEAD UTILITY CONFLICTS PRIOR TO CONSTRUCTING CONCRETE BASES.

5. REFER TO STREETSCAPE DETAILS FOR ADDITIONAL INFORMATION FOR LOCATING BASES IN PAVED TERRACE AREAS.

6. STUB OUT CONDUIT FOR FUTURE USE IN STREET LIGHT BASES WHERE CIRCUIT RUNS END.

7. UTILITY OWNED STREET LIGHTS ARE NOT SHOWN ON THIS PLAN AND ARE TO BE REMOVED BY OTHERS.

STREET LIGHTING PLANS PREPARED BY

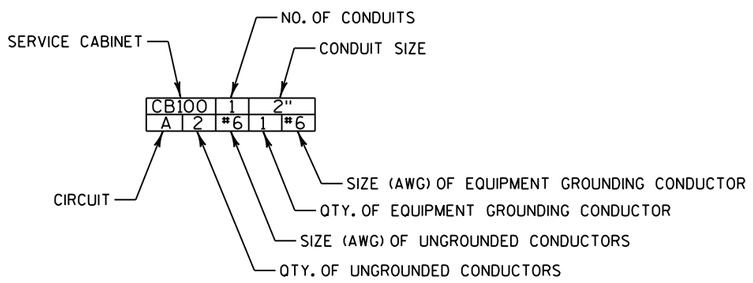
WISCONSIN
MIKE D. SCARMON
E-37613
EVANSVILLE, WI
PROFESSIONAL ENGINEER

1/26/2018
(DATE)

(SIGNATURE)

2

CONDUIT/CONDUCTOR LEGEND



PWO = PULL WIRE ONLY

CONDUCTOR COLOR LEGEND

A - BLACK B - RED C - BLACK D - RED E - BLACK F - RED G - BLACK H - RED
240V PHASE TO PHASE

SHEET 1 OF 7

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET 119	E

2

A =	CB400	1	2"
	A	2 #6	1 #6
	B	2 #6	-- --

PB312 INSTALLED WITH
PROJECT ID 6414-00-80

LIGHTING INSTALLED WITH
PROJECT ID 6414-00-80

251+66 - 5.8'LT
LED A(2) - 4(2) - 6 - A/B - SL406

253+26 - 8.7'LT
LED A(2) - 4(2) - 6 - B/A - SL407

254+94 - 11.6'LT
LED A(2) - 4(2) - 6 - A/B - SL408

256+58 - 19.9'LT
LED A(2) - 4(2) - 6 - B/A - SL409

R/W (TYP.)

MATCH LINE STA. 257+50

250+00 251+00 252+00 253+00 254+00 255+00 256+00 257+00

BUSINESS 51 / POST ROAD

E ELM STREET

00+96 00+16

LIGHTING INSTALLED WITH
PROJECT ID 6414-00-81

SHEET 2 OF 7

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET 120	E

2

A =	CB400	1	2"		
	A	2	#6	1	#6
	B	2	#6	--	--
B =	CB400	1	3"		
	A	2	#6	1	#6
	B	2	#6	--	--
	C	2	#6	1	#6
	D	2	#6	--	--
C =	CB400	1	2"		
	C	2	#6	1	#6
	D	2	#6	--	--
D =	CB400	1	3"		
	C	2	#6	1	#6
	D	2	#6	--	--
E =	CB400	1	2"		
	E	2	#6	1	#6
	F	2	#6	--	--
F =	CB400	1	3"		
	E	2	#6	1	#6
	F	2	#6	--	--
G =	CB400	1	2"		
	G	2	#6	1	#6
	H	2	#6	--	--
H =	CB400	1	3"		
	E	2	#6	1	#6
	F	2	#6	--	--
	G	2	#6	1	#6
	H	2	#6	--	--

898+11 - 48.5'RT
LED A - 4 - 6 - G - SL422

CB400	1	2"			
G	4	#6	2	#6	
H	4	#6	--	--	

898+41 - 50.5'RT
PB403

REMOVE EXISTING
STREET LIGHT

260+32 - 78.7'LT
CB400

259+70 - 61.5'LT
PB402

258+31 - 23.9'LT
LED A(2) - 4(2) - 6 - A/B - SL410

259+70 - 23.9'LT
PB401

MATCH LINE STA. 898+00

898+41 - 23.0'LT
PB404

REMOVE EXISTING
STREET LIGHT

898+41 - 76.8'LT
PB405

262+18 - 4.0'LT
PB406

CTH HH / WATER STREET

00+669

MATCH LINE STA. 264+50

MATCH LINE STA. 257+50

258+00 259+00 260+00 261+00 262+00 263+00 264+00

00+005

BUSINESS 51 / POST ROAD

CB400	1	STR			
E	2	#6	1	#6	
F	2	#6	--	--	

263+31 - 3.6'LT
LED A(2) - 4(2) - 6 - E/F - SL411

R/W (TYP.)

REMOVE EXISTING
STREET LIGHT

CB400	1	3"			
C	4	#6	2	#6	
D	4	#6	--	--	

901+04 - 69.5'LT
PB407

CB400	1	2"			
C	4	#6	2	#6	
D	4	#6	--	--	

REMOVE EXISTING
STREET LIGHT

259+70 - 65.8'RT
PB410

901+04 - 4.0'LT
PB408

00+106

CTH HH / MCDILL AVENUE

MATCH LINE STA. 902+00

00+206

901+40 - 70.7'LT
LED A - 4 - 6 - C - SL427

NOTES:
1) STREET LIGHTS AT INTERSECTION INCLUDED IN TRAFFIC SIGNAL PLAN
2) SEE STRUCTURE PLANS FOR CONDUIT EMBEDDED IN PARAPET

SHEET 3 OF 7

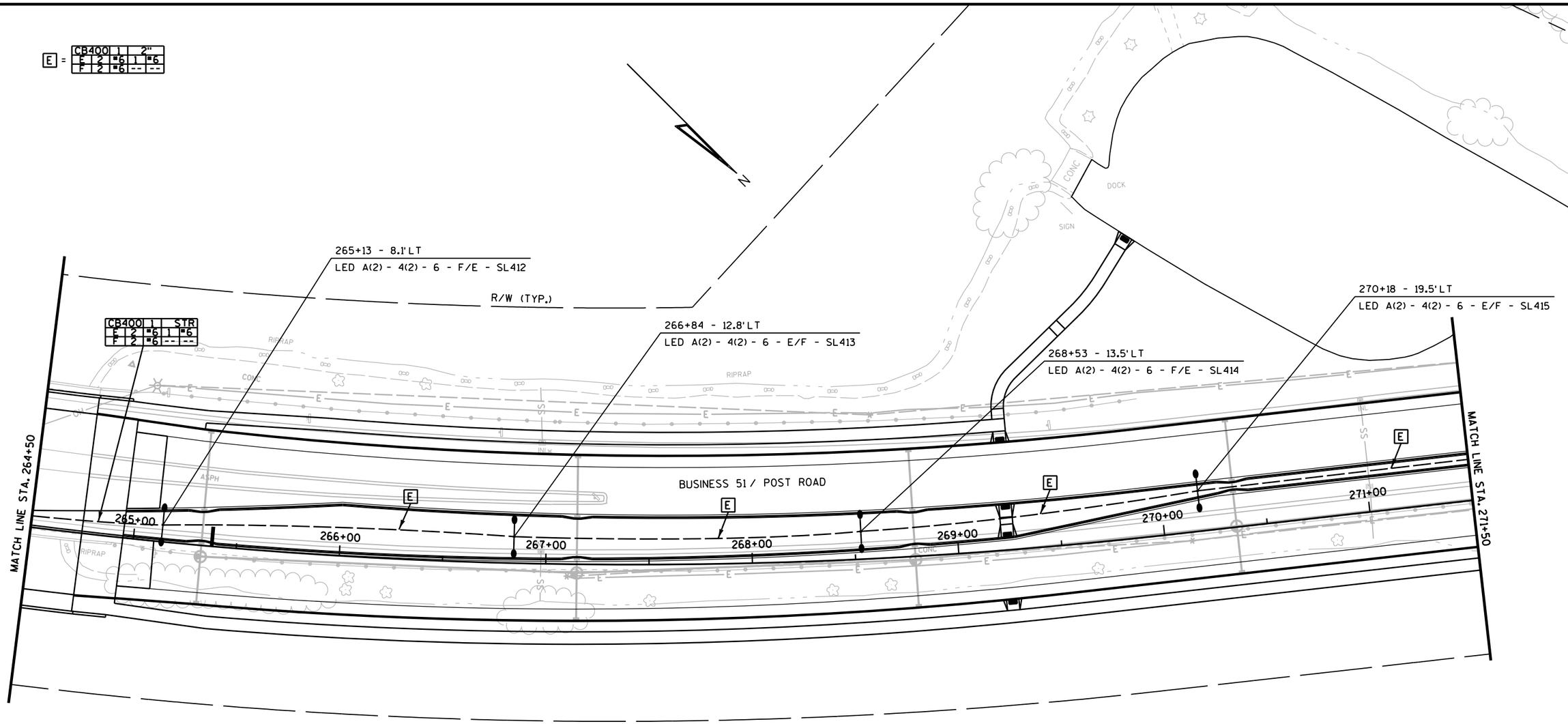
PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET 121	E

FILE NAME : G:\SEH\10026-001_002\DGN\SHEETS\6414-07-81\023620_lp.dgn PLOT DATE : 1/26/2018 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

E =	CB400	J	2"
	E	2	▪6	1	▪6
	F	2	▪6	--	--



NOTES:

1) SEE STRUCTURE PLANS FOR CONDUIT EMBEDDED IN PARAPET

SHEET 4 OF 7

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET 122	E

FILE NAME : G:\SEH\10026-001_002\DGN\SHEETS\6414-07-81\023621_lp_A.dgn PLOT DATE : 1/26/2018 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

2

E = CB400 | L | 2"
E | 2 | #5 | 1 | #6
F | 2 | #5 | -- | --

N

271+71 - 91.9' LT
PB412

R/W (TYP.)

271+76 - 20.0' LT
LED A(2) - 4(2) - 6 - F/E - SL416

273+43 - 15.0' LT
LED A(2) - 4(2) - 6 - E/F - SL417

275+19 - 15.0' LT
LED A(2) - 4(2) - 6 - F/E - SL418

276+89 - 15.0' LT
LED A(2) - 4(2) - 6 - E/F - SL419

PWO
1-3"

CB400 | L | 3"
E | 4 | #5 | 2 | #6
F | 4 | #5 | -- | --

ASPH

RIPRAP

RIPRAP

BUSINESS 51 / POST ROAD

MATCH LINE STA. 271+50

MATCH LINE STA. 278+50

272+00

273+00

274+00

275+00

276+00

277+00

278+00

271+71 - 20.0' LT
PB411

SHEET 5 OF 7

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING	SHEET 123	E

E = CB400 | 1 | 2"
E | 2 | #6 | 1 | #6
F | 2 | #6 | -- | --

278+60 - 16.9' LT
LED A(2) - 4(2) - 6 - F/E - SL420

280+30 - 17.4' LT
LED A(2) - 4(2) - 6 - E/F - SL421

R/W (TYP.)

MATCH LINE STA. 278+50

MATCH LINE

BUSINESS 51 / POST ROAD

MINNESOTA AVENUE

VIVIAN LANE

279+00 280+00 281+00 282+00 283+00 284+00 285+00

ASPH SIGN FLAG CONC INL GRAV SS E 3 G HO

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET	E

FILE NAME : G:\SEH\10026-001_002\DGN\SHEETS\6414-07-81\023622_lp.dgn PLOT DATE : 1/26/2018 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

2

G = CB400 | 1 | 2"
C | 2 | *6 | 1 | *6
H | 2 | *6 | -- | --

891+00
892+00
893+00
894+00
895+00
896+00
897+00
898

R/W (TYP.)

REMOVE EXISTING
STREET LIGHT

CTH HH / WATER STREET

MATCH LINE STA. 898+00

N

893+15 - 8.0' LT
LED A(2) - 4(2) - 6 - H/G - SL426

894+56 - 9.1' LT
LED A(2) - 4(2) - 6 - G/H - SL425

895+96 - 13.3' LT
LED A(2) - 4(2) - 6 - H/G - SL424

REMOVE EXISTING
STREET LIGHT

897+38 - 20.5' LT
LED A(2) - 4(2) - 6 - G/H - SL423

C = CB400 | 1 | 2"
C | 2 | *6 | 1 | *6
D | 2 | *6 | -- | --

REMOVE EXISTING
STREET LIGHT

902+19 - 5.7' LT
LED A(2) - 4(2) - 6 - D/C - SL428

903+67 - 9.3' LT
LED A(2) - 4(2) - 6 - C/D - SL429

905+16 - 5.7' LT
LED A(2) - 4(2) - 6 - D/C - SL430

REMOVE EXISTING
STREET LIGHT

MATCH LINE STA. 902+00

R/W (TYP.)

902+00
903+00
904+00
905+00
906+00
907+00
908+00
909+00

CTH HH / MCDILL AVENUE

CB400 | 1 | 2"
D | 2 | *6 | 1 | *6

CB400 | 1 | 2"
D | 2 | *6 | 1 | *6

LOCUST STREET

906+58 - 29.3' RT
LED A - 4 - 6 - D - SL431

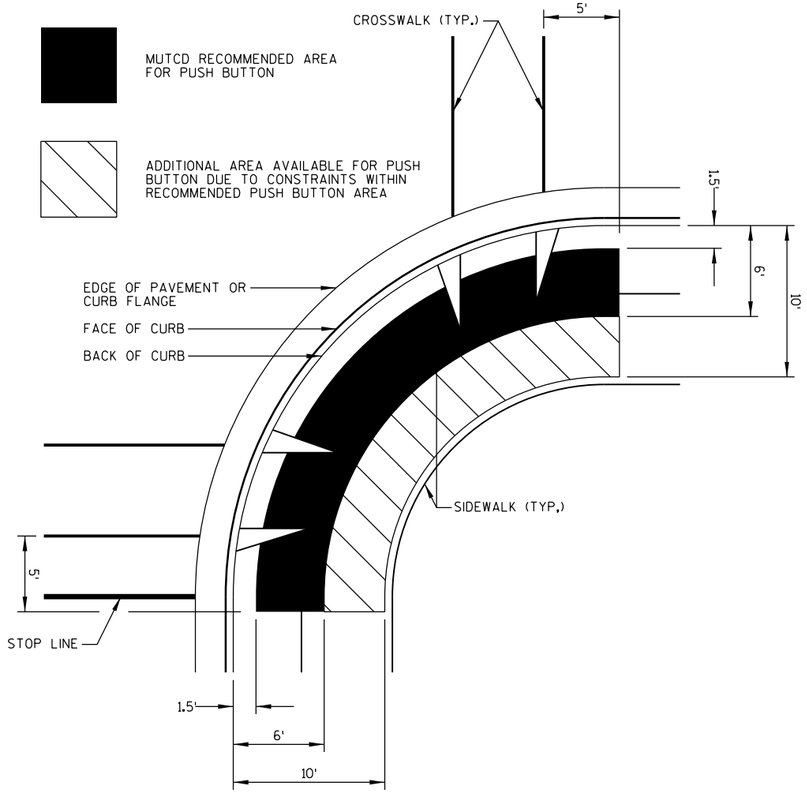
REMOVE EXISTING
STREET LIGHT

REMOVE EXISTING
STREET LIGHT

905+16 - 29.9' RT
PB409

SHEET 7 OF 7

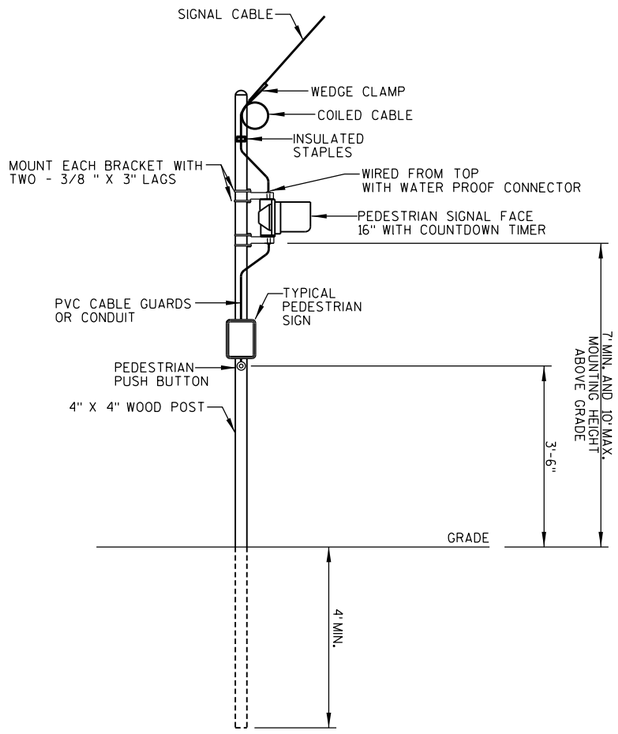
PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	LIGHTING PLANS	SHEET 125	E



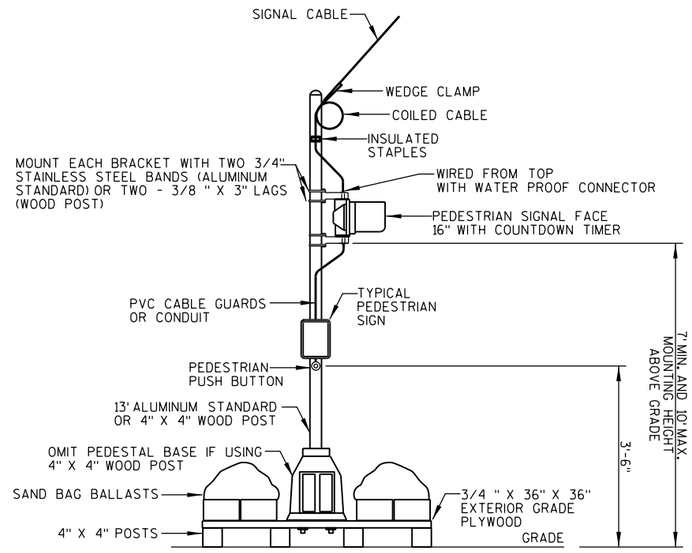
PUSH BUTTON LOCATION NOTES:

1. PUSHBUTTONS SHOULD BE CAPABLE OF EASY ACTIVATION AND CONVENIENTLY LOCATED NEAR EACH END OF CROSSWALK OR CROSSING AREA.
2. PUSHBUTTONS SHOULD BE PLACED UNOBSTRUCTED AND ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR.
3. PUSHBUTTONS SHOULD BE PLACED WHERE THERE IS AN ALL-WEATHER SURFACE, A WHEELCHAIR ACCESSIBLE ROUTE FROM THE PUSHBUTTON TO THE RAMP.
4. PUSHBUTTONS SHOULD BE PLACED BETWEEN THE EDGE OF THE CROSSWALK LINE (EXTENDED) FARTHEST FROM THE CENTER OF THE INTERSECTION AND THE SIDE OF A CURB RAMP (IF PRESENT), BUT NOT GREATER THAN 5-FEET FROM SAID CROSSWALK LINE.
5. PUSHBUTTONS SHOULD BE PLACED BETWEEN 1.5-FEET AND 6-FEET FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT. IF THERE ARE PHYSICAL CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5-FEET AND 6-FEET FORM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FARTHER THAN 10-FEET FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
6. PUSHBUTTONS SHOULD BE PLACED WITH THE FACE OF THE PUSH BUTTON PARALLEL TO THE CROSSWALK TO BE USED.
7. PUSHBUTTONS ON THE SAME CORNER OF AN INTERSECTION SHOULD BE SEPARATED BY A DISTANCE OF AT LEAST 10-FEET. WHERE THERE ARE PHYSICAL CONSTRAINTS ON A PARTICULAR CORNER THAN MAKE IT IMPRACTICAL TO PROVIDE THE 10-FOOT SEPARATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.
8. PUSHBUTTON POLES SHALL BE PLACED SO THAT ALL EQUIPMENT ATTACHED TO THE POLE (PEDESTRIAN SIGNAL HEAD, PUSHBUTTON, SIGN, ETC.) IS OUTSIDE THE MINIMUM LATERAL CLEARANCE DISTANCE OF 2-FEET FROM FACE OF CURB OR EDGE OF TRAVELED WAY.
9. PUSHBUTTONS SHOULD BE PLACED SO THE THE REACH DISTANCE FROM THE EDGE OF THE FLAT SURFACE ADJACENT TO THE PUSHBUTTON DOES NOT EXCEED THE MAXIMUM ADA REACH DISTANCE OF 2-FEET.

TEMPORARY PEDESTRIAN SIGNAL AREA



WOOD POST



SKID TYPE

TEMPORARY PEDESTRIAN SIGNAL NOTES:

1. SIGNAL DROP CABLES SHALL BE PLACED A MINIMUM OF 12-FEET ABOVE GROUND NOT SUBJECT TO VEHICULAR TRAFFIC.
2. SIGNAL DROP CABLES SHALL BE PLACED A MINIMUM OF 17-FEET ABOVE GROUND SUBJECT TO VEHICULAR TRAFFIC, INCLUDING CONSTRUCTION VEHICLES.
3. SKID TYPE TEMPORARY MAY BE USED FOR PEDESTRIAN PUSH BUTTONS AS LONG AS THE REACH DISTANCE FROM THE EDGE OF THE SKID TO THE PUSH BUTTON DOES NOT EXCEED THE MAXIMUM ADA REACH DISTANCE OF 2-FEET.
4. PUSHBUTTONS SHOULD BE PLACED AT A MOUNTING HEIGHT OF 3.5-FEET ABOVE THE WALKING SURFACE.
5. MAINTAIN ADA ACCESSIBLE ROUTE AND PEDESTRIAN ACCESSIBILITY REQUIREMENTS FOR ALL ACTIVE PEDESTRIAN SIGNAL INDICATION CROSSING AREAS.
6. MAINTAIN TEMPORARY PEDESTRIAN SIGNALS THROUGHOUT CONSTRUCTION TO ENSURE THAT THE PLACEMENT OF THE TEMPORARY PEDESTRIAN SIGNALS COMPLIES WITH ALL APPLICABLE ADA AND MUTCD SIGNAL PLACEMENT REQUIREMENTS.

TEMPORARY PEDESTRIAN SIGNAL

2

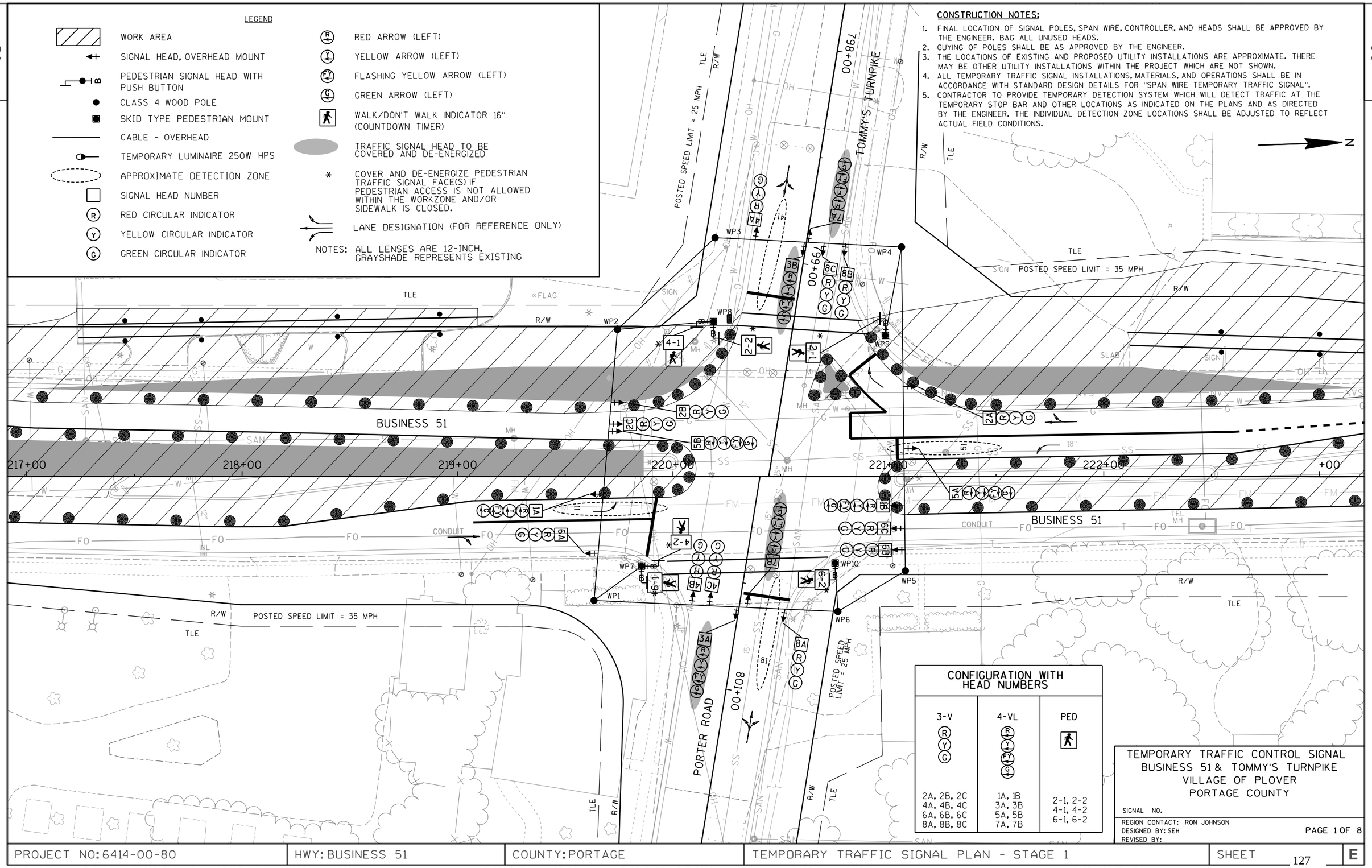
LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW (LEFT)
- (Y) YELLOW ARROW (LEFT)
- (FY) FLASHING YELLOW ARROW (LEFT)
- (G) GREEN ARROW (LEFT)
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORKZONE AND/OR SIDEWALK IS CLOSED.
- LANE DESIGNATION (FOR REFERENCE ONLY)

NOTES: ALL LENSES ARE 12-INCH, GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SPAN WIRE, CONTROLLER, AND HEADS SHALL BE APPROVED BY THE ENGINEER. BAG ALL UNUSED HEADS.
2. GUYING OF POLES SHALL BE AS APPROVED BY THE ENGINEER.
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. ALL TEMPORARY TRAFFIC SIGNAL INSTALLATIONS, MATERIALS, AND OPERATIONS SHALL BE IN ACCORDANCE WITH STANDARD DESIGN DETAILS FOR "SPAN WIRE TEMPORARY TRAFFIC SIGNAL".
5. CONTRACTOR TO PROVIDE TEMPORARY DETECTION SYSTEM WHICH WILL DETECT TRAFFIC AT THE TEMPORARY STOP BAR AND OTHER LOCATIONS AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE INDIVIDUAL DETECTION ZONE LOCATIONS SHALL BE ADJUSTED TO REFLECT ACTUAL FIELD CONDITIONS.



CONFIGURATION WITH HEAD NUMBERS

3-V	4-VL	PED
2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C 8A, 8B, 8C	1A, 1B 3A, 3B 5A, 5B 7A, 7B	2-1, 2-2 4-1, 4-2 6-1, 6-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & TOMMY'S TURNPIKE
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 1 OF 8

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1	SHEET 127	E

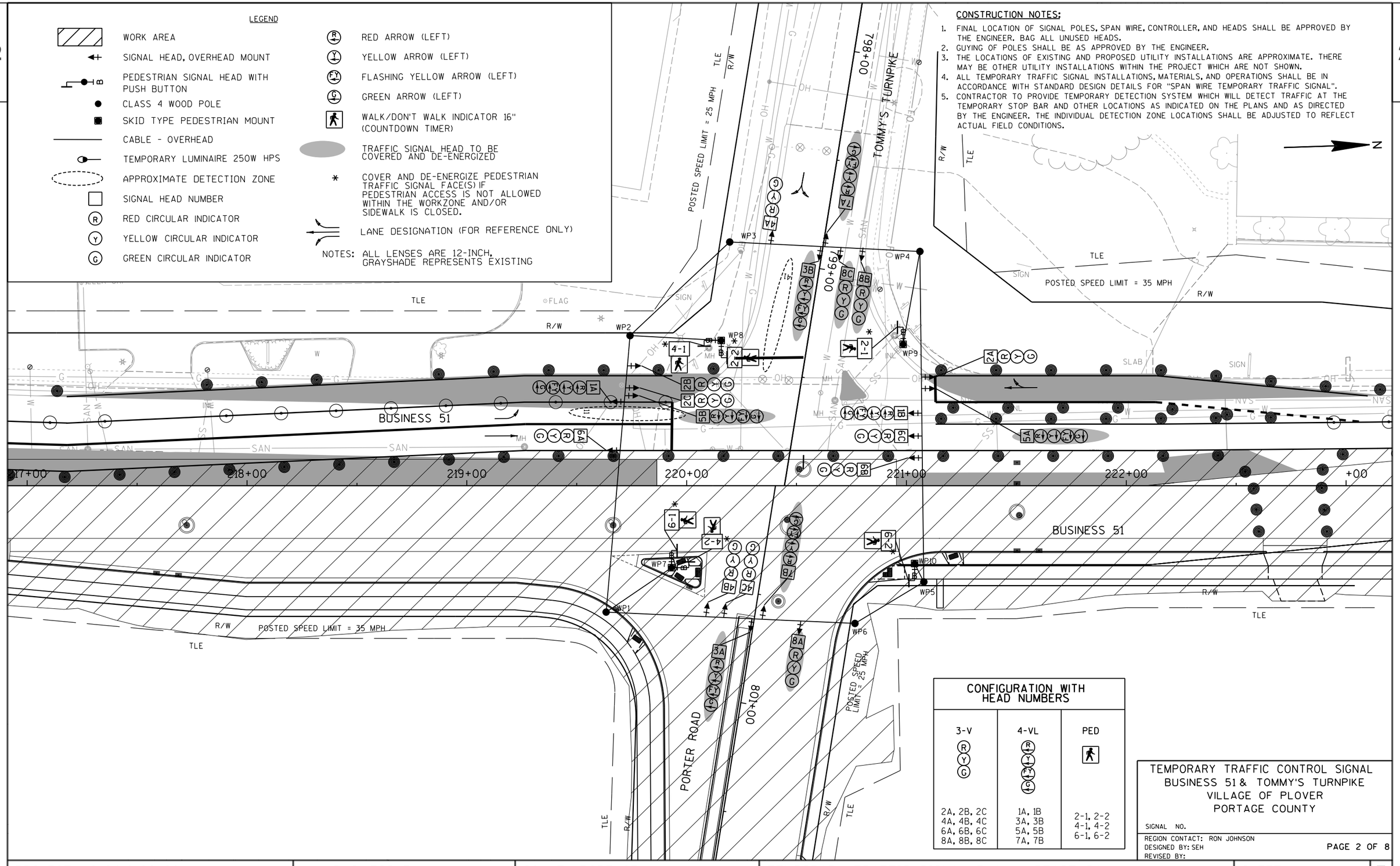
LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
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- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW (LEFT)
- (Y) YELLOW ARROW (LEFT)
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- (G) GREEN ARROW (LEFT)
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORKZONE AND/OR SIDEWALK IS CLOSED.
- LANE DESIGNATION (FOR REFERENCE ONLY)

NOTES: ALL LENSES ARE 12-INCH, GRAYSHADE REPRESENTS EXISTING

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POSTED SPEED LIMIT = 25 MPH
TLE
R/W
798+00
TOMMY'S TURNPIKE
799+00
WP1
WP2
WP3
WP4
WP5
WP6
WP7
WP8
WP9
WP10
TLE
R/W
FLAG
SIGN
BUSINESS 51
SAN
SAN
SAN

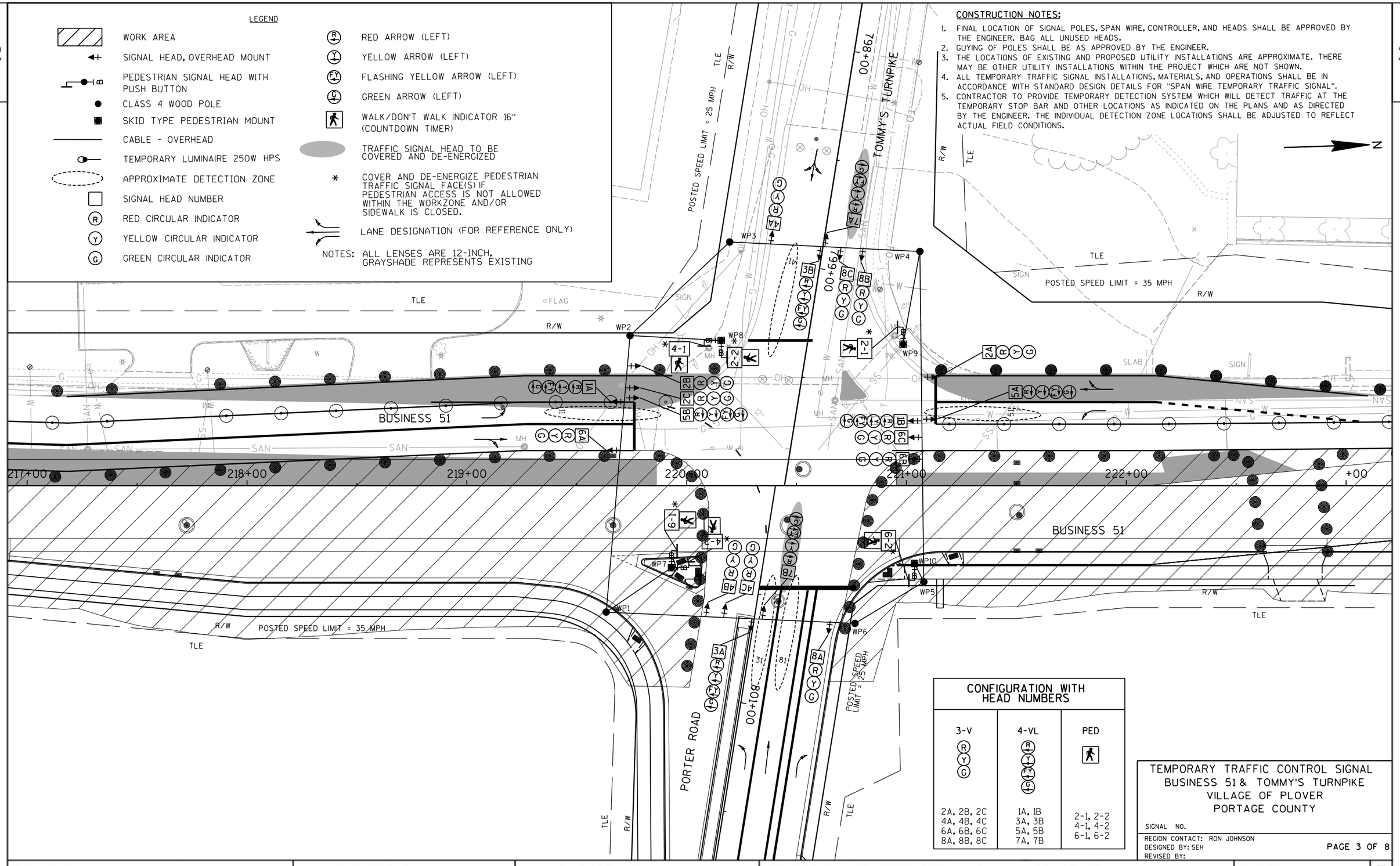
LEGEND

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POSTED SPEED LIMIT = 25 MPH
TLE
R/W
798+00
TOMMY'S TURNPIKE
799+00
WP1
WP2
WP3
WP4
WP5
WP6
WP7
WP8
WP9
WP10
TLE
FLAG
SIGN
R/W
BUSINESS 51
SAN
SAN
SAN

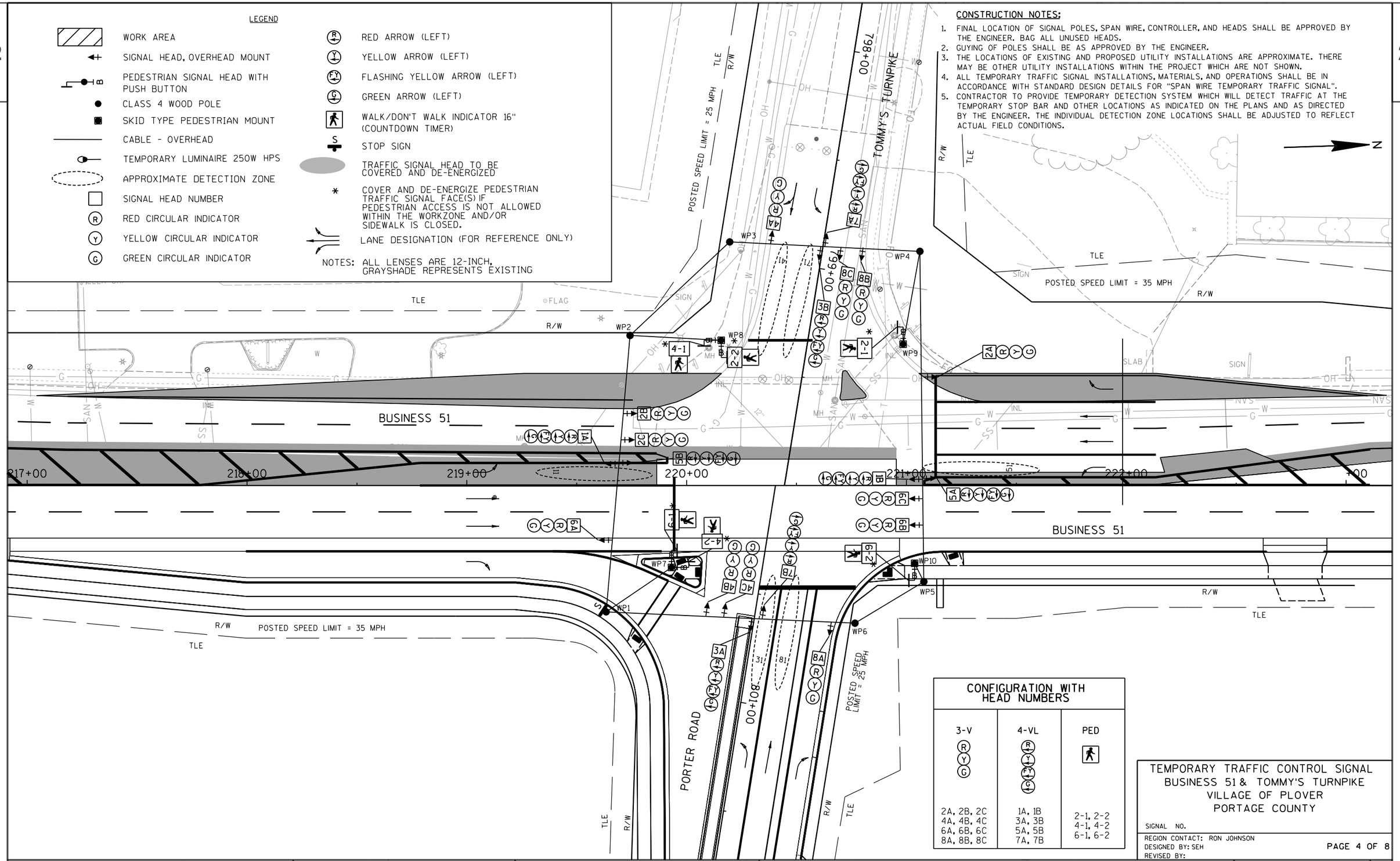
LEGEND

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3-V	4-VL	PED
2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C 8A, 8B, 8C	1A, 1B 3A, 3B 5A, 5B 7A, 7B	2-1, 2-2 4-1, 4-2 6-1, 6-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & TOMMY'S TURNPIKE
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE WINTER SHUTDOWN	SHEET 130	E

FILE NAME : Y:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\023912WS_temp_sp.dgn PLOT TIME : 11:39:41 AM PLOT DATE : 3/6/2018 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression
WISDOT/CADDS SHEET 42

2

LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
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N

BUSINESS 51

TOMMY'S TURNPIKE

POSTED SPEED LIMIT = 25 MPH

POSTED SPEED LIMIT = 35 MPH

PORTER ROAD

TLE

R/W

WP1 WP2 WP3 WP4 WP5 WP6 WP7 WP8 WP9 WP10

217+00 218+00 219+00 220+00 221+00 222+00 +00 79+00 80+00

CONFIGURATION WITH HEAD NUMBERS

3-V	4-VL	PED
2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C 8A, 8B, 8C	1A, 1B 3A, 3B 5A, 5B 7A, 7B	2-1, 2-2 4-1, 4-2 6-1, 6-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & TOMMY'S TURNPIKE
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3A	SHEET 131	E

FILE NAME : Y:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\023913A_temp_sp.dgn PLOT TIME : 11:39:44 AM PLOT DATE : 3/6/2018 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression
WISDOT/CADDS SHEET 42

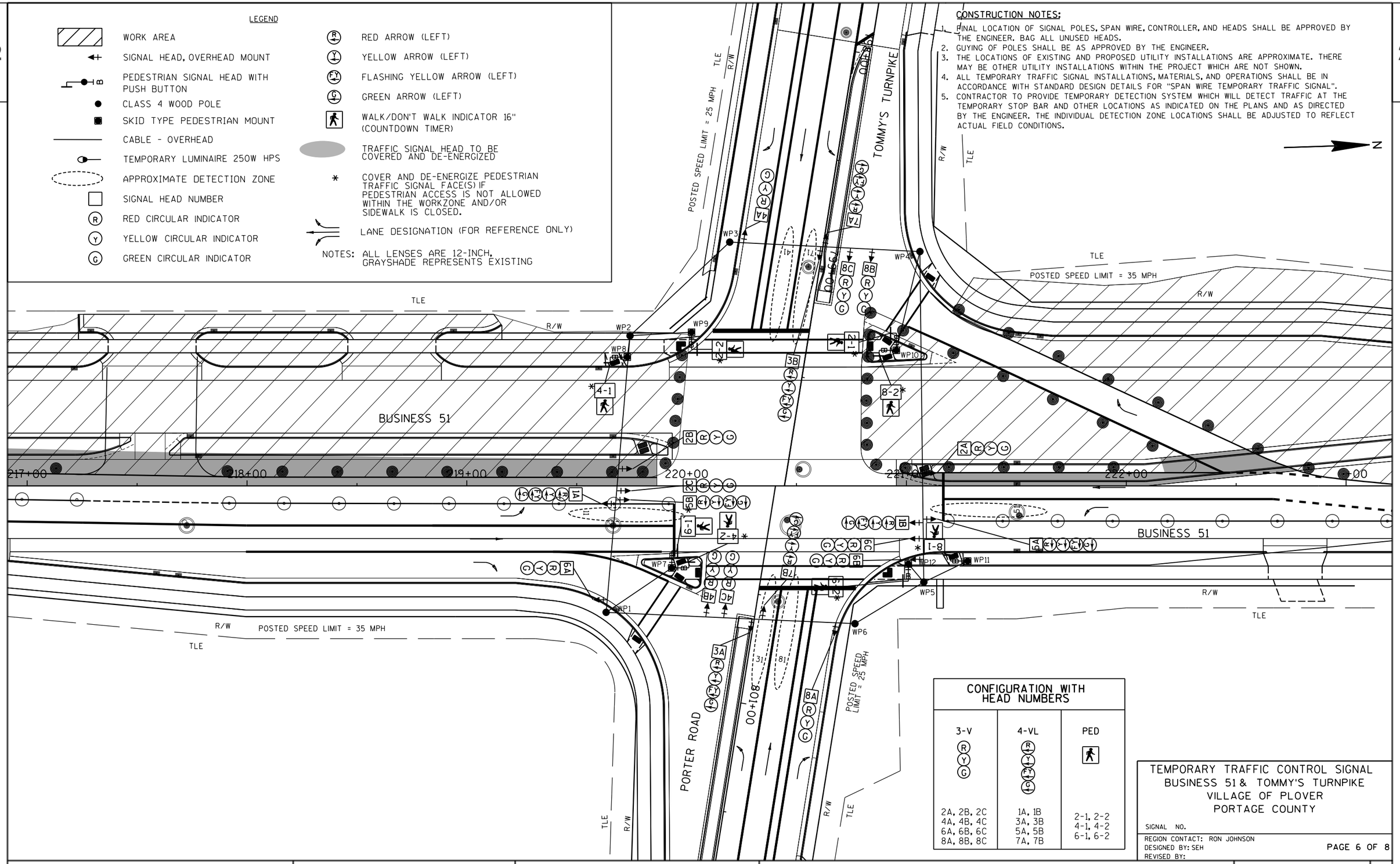
LEGEND

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- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
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- SIGNAL HEAD NUMBER
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CONFIGURATION WITH HEAD NUMBERS

3-V	4-VL	PED
2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C 8A, 8B, 8C	1A, 1B 3A, 3B 5A, 5B 7A, 7B	2-1, 2-2 4-1, 4-2 6-1, 6-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & TOMMY'S TURNPIKE
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 6 OF 8

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3B	SHEET 132	E

LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
- SIGNAL HEAD NUMBER
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N

TLE
R/W
POSTED SPEED LIMIT = 25 MPH
TOMMY'S TURNPIKE
POSTED SPEED LIMIT = 35 MPH
BUSINESS 51
PORTER ROAD
POSTED SPEED LIMIT = 25 MPH
WP1
WP2
WP3
WP4
WP5
WP6
WP7
WP8
WP9
WP10
WP11
WP12
217+00
218+00
219+00
220+00
221+00
222+00
00+100

CONFIGURATION WITH HEAD NUMBERS

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TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & TOMMY'S TURNPIKE
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4	SHEET 133	E

FILE NAME : Y:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\023914_temp_sp.dgn PLOT TIME : 11:39:51 AM PLOT DATE : 3/6/2018 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression
WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO						Ø2 R/W	Ø2 CLEAR TO						Ø3 R/W	Ø3 CLEAR TO						Ø4 R/W	Ø4 CLEAR TO						FLASH
Ø1	1A,1B	G	-	-					-	-	-					-	-	-					-	-	-					-
Ø2	2A,2B,2C	R	R	R					G	Y	R					R	R	R					R	R	R					R
Ø3	3A,3B	-	-	-					-	-	-					G	-	-					-	-	-					-
Ø4	4A,4B,4C	R	R	R					R	R	R					R	R	R					G	Y	R					R
Ø5	5A,5B	-	-	-					-	-	-					-	-	-					-	-	-					-
Ø6	6A,6B,6C	R	R	R					R	R	R					R	R	R					R	R	R					R
Ø7	7A,7B	-	-	-					-	-	-					-	-	-					-	-	-					-
Ø8	8A,8B,8C	R	R	R					R	R	R					R	R	R					R	R	R					R
OLE	1A,1B	-	Y	R					FY	Y	R					R	R	R					R	R	R					R
OLF	3A,3B	R	R	R					R	R	R					-	Y	R					FY	Y	R					R
OLG	5A,5B	R	R	R					R	R	R					R	R	R					R	R	R					R
OLH	7A,7B	R	R	R					R	R	R					R	R	R					R	R	R					R
Ø2P	2-1,2-2	DW	DW	DW					*	DW	DW					DW	DW	DW					DW	DW	DW					
Ø4P	4-1,4-2	DW	DW	DW					DW	DW	DW					DW	DW	DW					*	DW	DW					
Ø6P	6-1,6-2	DW	DW	DW					DW	DW	DW					DW	DW	DW					DW	DW	DW					
Ø8P	8-1,8-2	DW	DW	DW					DW	DW	DW					DW	DW	DW					DW	DW	DW					

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO						Ø6 R/W	Ø6 CLEAR TO						Ø7 R/W	Ø7 CLEAR TO						Ø8 R/W	Ø8 CLEAR TO					
Ø1	1A,1B	-	-	-					-	-	-					-	-	-					-	-	-				
Ø2	2A,2B,2C	R	R	R					R	R	R					R	R	R					R	R	R				
Ø3	3A,3B	-	-	-					-	-	-					-	-	-					-	-	-				
Ø4	4A,4B,4C	R	R	R					R	R	R					R	R	R					R	R	R				
Ø5	5A,5B	G	-	-					-	-	-					-	-	-					-	-	-				
Ø6	6A,6B,6C	R	R	R					G	Y	R					R	R	R					R	R	R				
Ø7	7A,7B	-	-	-					-	-	-					G	-	-					-	-	-				
Ø8	8A,8B,8C	R	R	R					R	R	R					R	R	R					G	Y	R				
OLE	1A,1B	R	R	R					R	R	R					R	R	R					R	R	R				
OLF	3A,3B	R	R	R					R	R	R					R	R	R					R	R	R				
OLG	5A,5B	-	Y	R					FY	Y	R					R	R	R					R	R	R				
OLH	7A,7B	R	R	R					R	R	R					-	Y	R					FY	Y	R				
Ø2P	2-1,2-2	DW	DW	DW					DW	DW	DW					DW	DW	DW					DW	DW	DW				
Ø4P	4-1,4-2	DW	DW	DW					DW	DW	DW					DW	DW	DW					DW	DW	DW				
Ø6P	6-1,6-2	DW	DW	DW					*	DW	DW					DW	DW	DW					DW	DW	DW				
Ø8P	8-1,8-2	DW	DW	DW					DW	DW	DW					DW	DW	DW					*	DW	DW				

FY=FLASHING YELLOW

BARRIER

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH
11		X			1	1			
31		X			3	3			
41		X			4	4			
42		X			4	4		X	
51		X			5	5			
71		X			7	7			
81		X			8	8			
82		X			8	8		X	

CONTROLLER LOGIC

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

SPECIAL OVERLAPS

	PROTECTED	PERMISSIVE
OLE	1	2
OLF	3	4
OLG	5	6
OLH	7	8

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

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
QUEUE DETECTOR	
LIFT BRIDGE	

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

CHART 1

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

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. WHEN OPPOSING THRU PHASES ARE TIMING CONCURRENTLY THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

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

BUSINESS 51 &
TOMMY'S TURNPIKE
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

CONTROLLER TYPE: TEMP

DATE

FILE NAME : ...\023919_Temp_SP_PH.dgn PLOT DATE : 3/21/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

2

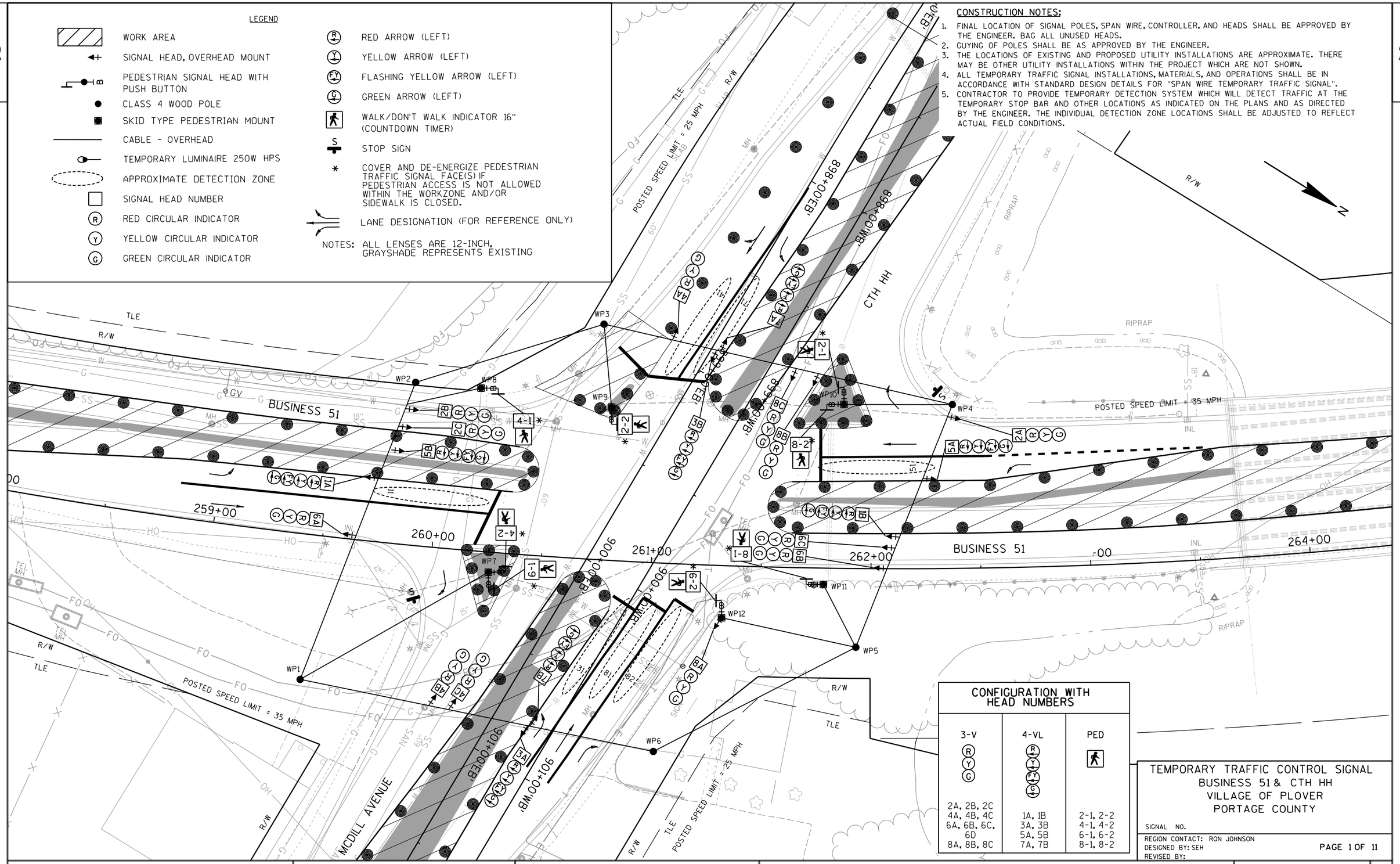
LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW (LEFT)
- (Y) YELLOW ARROW (LEFT)
- (FY) FLASHING YELLOW ARROW (LEFT)
- (G) GREEN ARROW (LEFT)
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORKZONE AND/OR SIDEWALK IS CLOSED.
- LANE DESIGNATION (FOR REFERENCE ONLY)

NOTES: ALL LENSES ARE 12-INCH, GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SPAN WIRE, CONTROLLER, AND HEADS SHALL BE APPROVED BY THE ENGINEER. BAG ALL UNUSED HEADS.
2. GUYING OF POLES SHALL BE AS APPROVED BY THE ENGINEER.
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. ALL TEMPORARY TRAFFIC SIGNAL INSTALLATIONS, MATERIALS, AND OPERATIONS SHALL BE IN ACCORDANCE WITH STANDARD DESIGN DETAILS FOR "SPAN WIRE TEMPORARY TRAFFIC SIGNAL".
5. CONTRACTOR TO PROVIDE TEMPORARY DETECTION SYSTEM WHICH WILL DETECT TRAFFIC AT THE TEMPORARY STOP BAR AND OTHER LOCATIONS AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE INDIVIDUAL DETECTION ZONE LOCATIONS SHALL BE ADJUSTED TO REFLECT ACTUAL FIELD CONDITIONS.



CONFIGURATION WITH HEAD NUMBERS

3-V	4-VL	PED
2A, 2B, 2C	1A, 1B	2-1, 2-2
4A, 4B, 4C	3A, 3B	4-1, 4-2
6A, 6B, 6C, 6D	5A, 5B	6-1, 6-2
8A, 8B, 8C	7A, 7B	8-1, 8-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 1 OF 11

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1	SHEET 135	E

FILE NAME : G:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\023921_temp_sp.dgn PLOT TIME : 9:10:29 AM PLOT DATE : 3/22/2018 PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

2

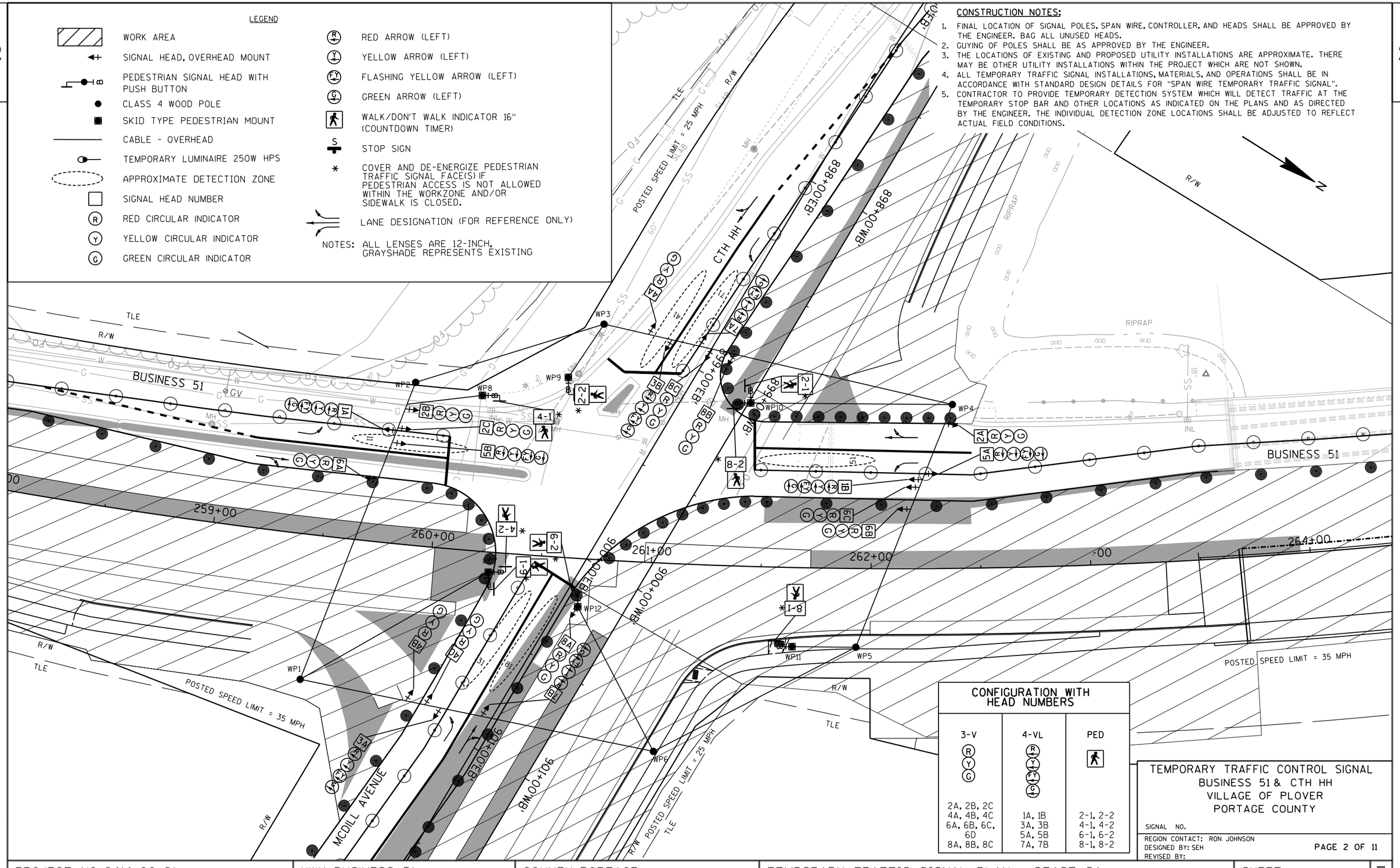
LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW (LEFT)
- (Y) YELLOW ARROW (LEFT)
- (FY) FLASHING YELLOW ARROW (LEFT)
- (G) GREEN ARROW (LEFT)
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORKZONE AND/OR SIDEWALK IS CLOSED.
- LANE DESIGNATION (FOR REFERENCE ONLY)

NOTES: ALL LENSES ARE 12-INCH, GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SPAN WIRE, CONTROLLER, AND HEADS SHALL BE APPROVED BY THE ENGINEER. BAG ALL UNUSED HEADS.
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5. CONTRACTOR TO PROVIDE TEMPORARY DETECTION SYSTEM WHICH WILL DETECT TRAFFIC AT THE TEMPORARY STOP BAR AND OTHER LOCATIONS AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE INDIVIDUAL DETECTION ZONE LOCATIONS SHALL BE ADJUSTED TO REFLECT ACTUAL FIELD CONDITIONS.



CONFIGURATION WITH HEAD NUMBERS

3-V	4-VL	PED
2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C, 6D 8A, 8B, 8C	1A, 1B 3A, 3B 5A, 5B 7A, 7B	2-1, 2-2 4-1, 4-2 6-1, 6-2 8-1, 8-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 2 OF 11

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2A	SHEET 136	E

2

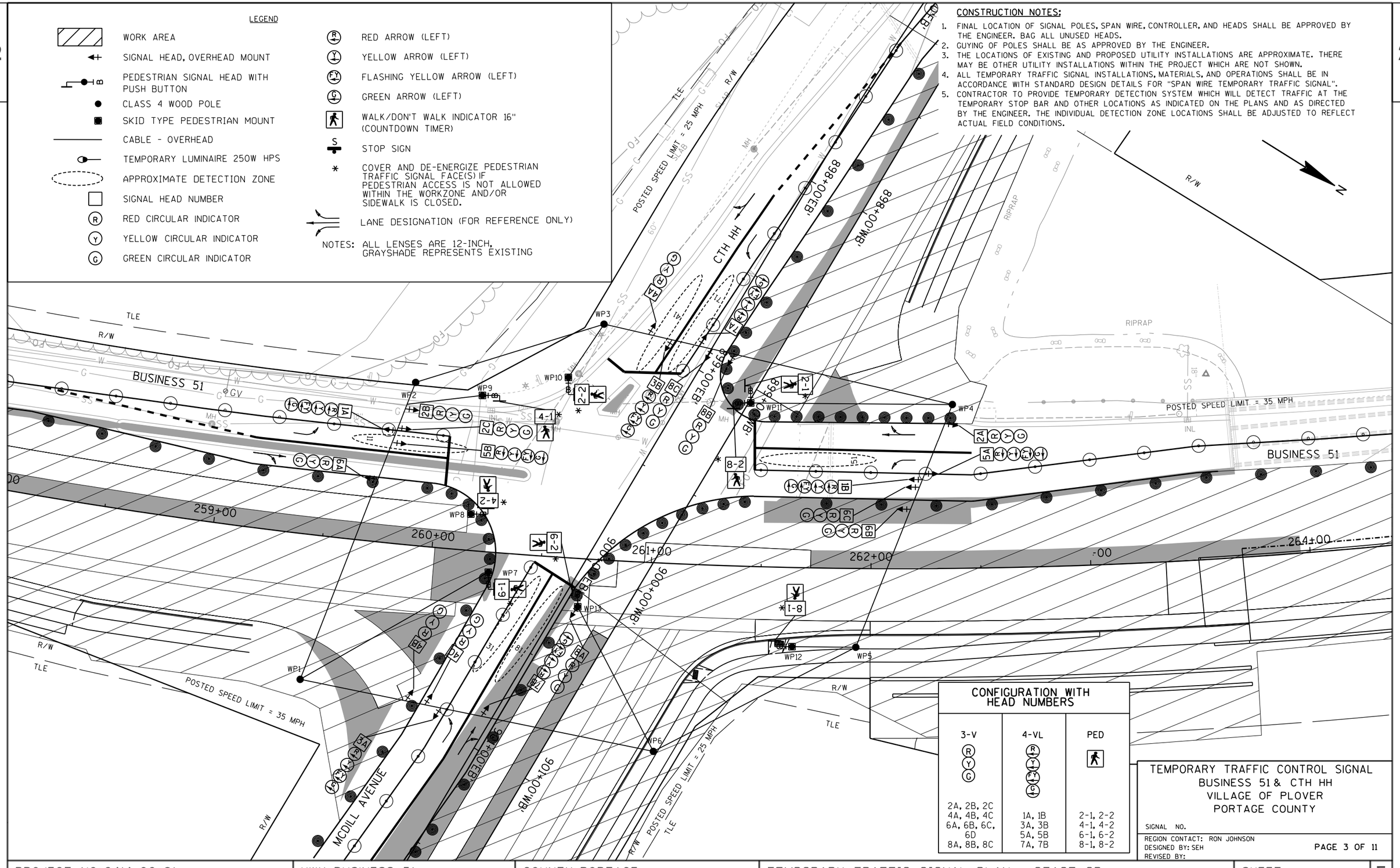
LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW (LEFT)
- (Y) YELLOW ARROW (LEFT)
- (FY) FLASHING YELLOW ARROW (LEFT)
- (G) GREEN ARROW (LEFT)
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORKZONE AND/OR SIDEWALK IS CLOSED.
- LANE DESIGNATION (FOR REFERENCE ONLY)

NOTES: ALL LENSES ARE 12-INCH, GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

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5. CONTRACTOR TO PROVIDE TEMPORARY DETECTION SYSTEM WHICH WILL DETECT TRAFFIC AT THE TEMPORARY STOP BAR AND OTHER LOCATIONS AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE INDIVIDUAL DETECTION ZONE LOCATIONS SHALL BE ADJUSTED TO REFLECT ACTUAL FIELD CONDITIONS.



CONFIGURATION WITH HEAD NUMBERS		
3-V	4-VL	PED
2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C, 6D 8A, 8B, 8C	1A, 1B 3A, 3B 5A, 5B 7A, 7B	2-1, 2-2 4-1, 4-2 6-1, 6-2 8-1, 8-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 3 OF 11

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2B	SHEET 137	E

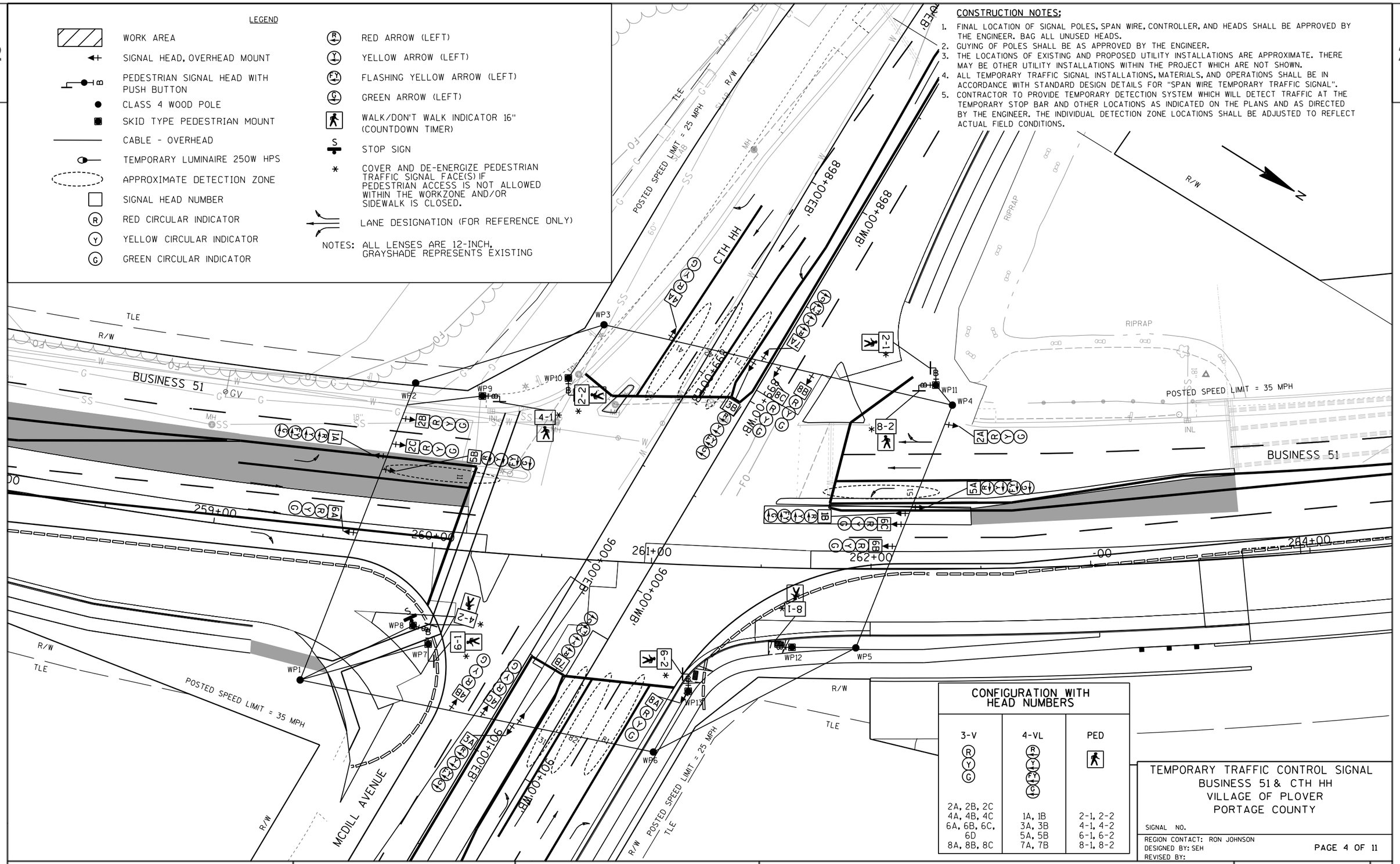
LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW (LEFT)
- (Y) YELLOW ARROW (LEFT)
- (FY) FLASHING YELLOW ARROW (LEFT)
- (G) GREEN ARROW (LEFT)
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORKZONE AND/OR SIDEWALK IS CLOSED.
- LANE DESIGNATION (FOR REFERENCE ONLY)

NOTES: ALL LENSES ARE 12-INCH, GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

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3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
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5. CONTRACTOR TO PROVIDE TEMPORARY DETECTION SYSTEM WHICH WILL DETECT TRAFFIC AT THE TEMPORARY STOP BAR AND OTHER LOCATIONS AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE INDIVIDUAL DETECTION ZONE LOCATIONS SHALL BE ADJUSTED TO REFLECT ACTUAL FIELD CONDITIONS.



CONFIGURATION WITH HEAD NUMBERS		
3-V (R Y G)	4-VL (R Y Y G)	PED
2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C, 6D 8A, 8B, 8C	1A, 1B 3A, 3B 5A, 5B 7A, 7B	2-1, 2-2 4-1, 4-2 6-1, 6-2 8-1, 8-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 4 OF 11

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE WINTER SHUTDOWN	SHEET 138	E

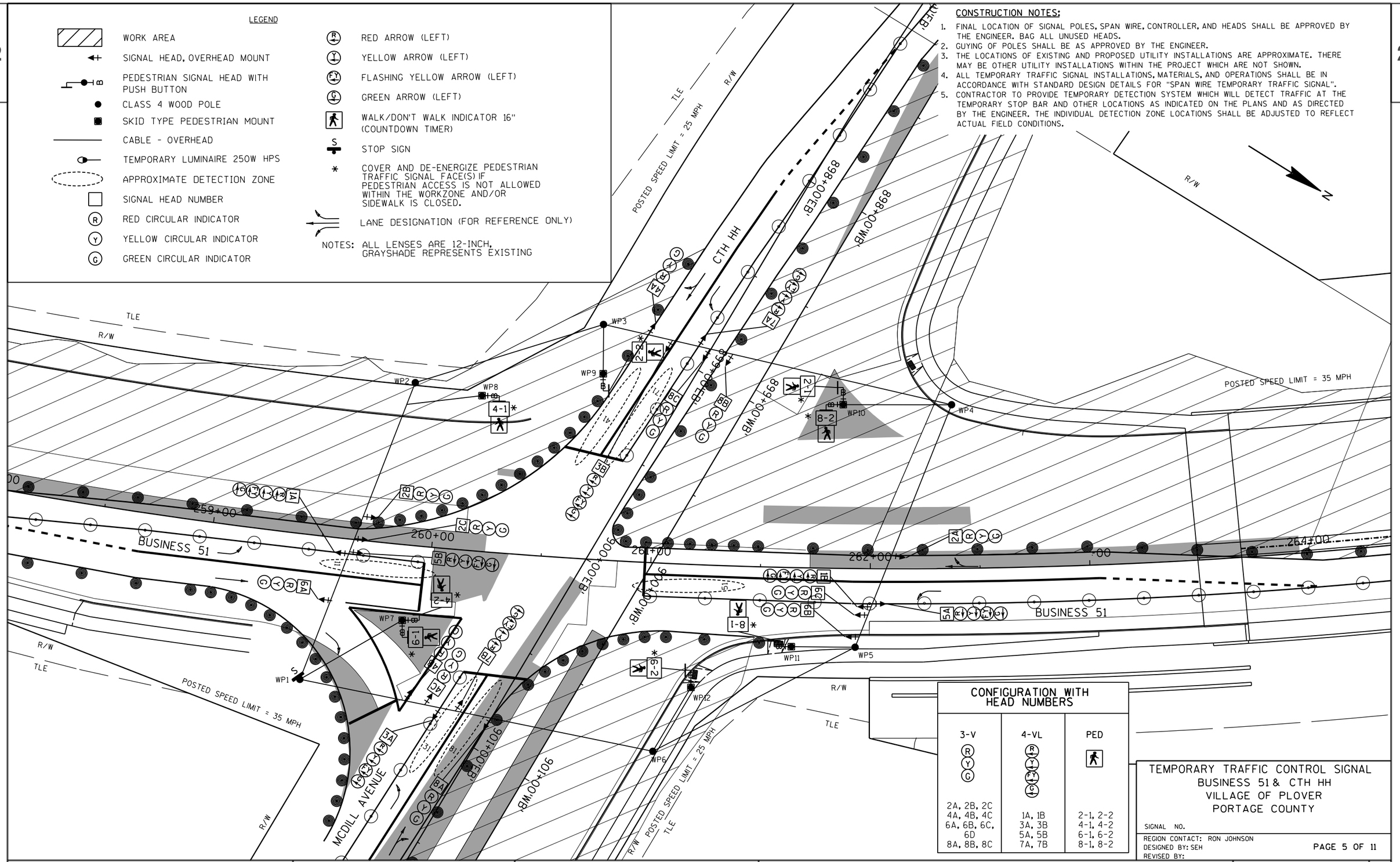
LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW (LEFT)
- (Y) YELLOW ARROW (LEFT)
- (FY) FLASHING YELLOW ARROW (LEFT)
- (G) GREEN ARROW (LEFT)
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORKZONE AND/OR SIDEWALK IS CLOSED.
- LANE DESIGNATION (FOR REFERENCE ONLY)

NOTES: ALL LENSES ARE 12-INCH, GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

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5. CONTRACTOR TO PROVIDE TEMPORARY DETECTION SYSTEM WHICH WILL DETECT TRAFFIC AT THE TEMPORARY STOP BAR AND OTHER LOCATIONS AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE INDIVIDUAL DETECTION ZONE LOCATIONS SHALL BE ADJUSTED TO REFLECT ACTUAL FIELD CONDITIONS.



CONFIGURATION WITH HEAD NUMBERS

3-V	4-VL	PED
(R) (Y) (G)	(R) (Y) (FY) (G)	
2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C, 6D 8A, 8B, 8C	1A, 1B 3A, 3B 5A, 5B 7A, 7B	2-1, 2-2 4-1, 4-2 6-1, 6-2 8-1, 8-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 5 OF 11

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3A-1	SHEET 139	E

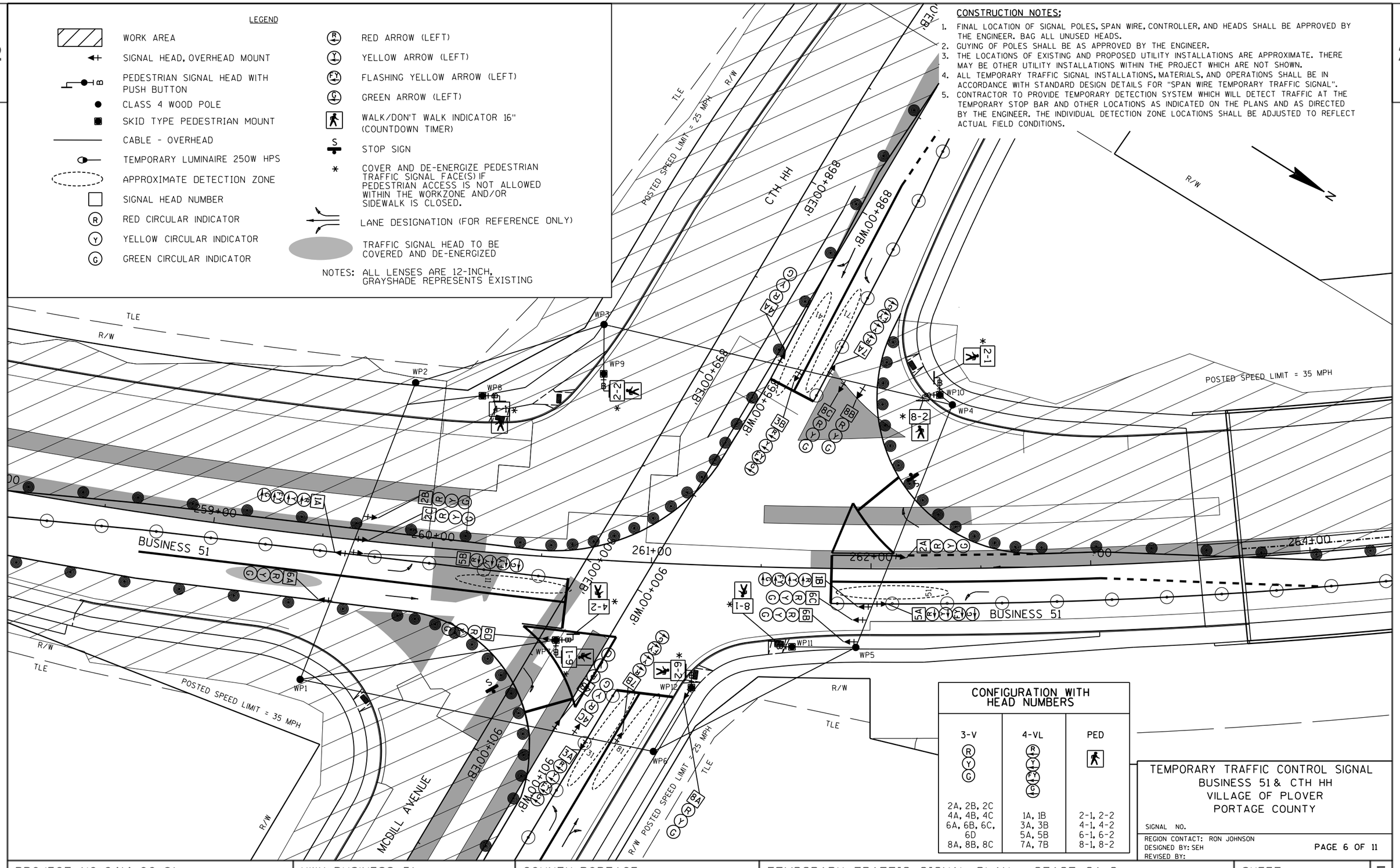
LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW (LEFT)
- (Y) YELLOW ARROW (LEFT)
- (FY) FLASHING YELLOW ARROW (LEFT)
- (G) GREEN ARROW (LEFT)
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORKZONE AND/OR SIDEWALK IS CLOSED.
- LANE DESIGNATION (FOR REFERENCE ONLY)
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES: ALL LENSES ARE 12-INCH, GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SPAN WIRE, CONTROLLER, AND HEADS SHALL BE APPROVED BY THE ENGINEER. BAG ALL UNUSED HEADS.
2. GUYING OF POLES SHALL BE AS APPROVED BY THE ENGINEER.
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. ALL TEMPORARY TRAFFIC SIGNAL INSTALLATIONS, MATERIALS, AND OPERATIONS SHALL BE IN ACCORDANCE WITH STANDARD DESIGN DETAILS FOR "SPAN WIRE TEMPORARY TRAFFIC SIGNAL".
5. CONTRACTOR TO PROVIDE TEMPORARY DETECTION SYSTEM WHICH WILL DETECT TRAFFIC AT THE TEMPORARY STOP BAR AND OTHER LOCATIONS AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE INDIVIDUAL DETECTION ZONE LOCATIONS SHALL BE ADJUSTED TO REFLECT ACTUAL FIELD CONDITIONS.



CONFIGURATION WITH HEAD NUMBERS		
3-V	4-VL	PED
2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C, 6D 8A, 8B, 8C	1A, 1B 3A, 3B 5A, 5B 7A, 7B	2-1, 2-2 4-1, 4-2 6-1, 6-2 8-1, 8-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 6 OF 11

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3A-2	SHEET 140	E

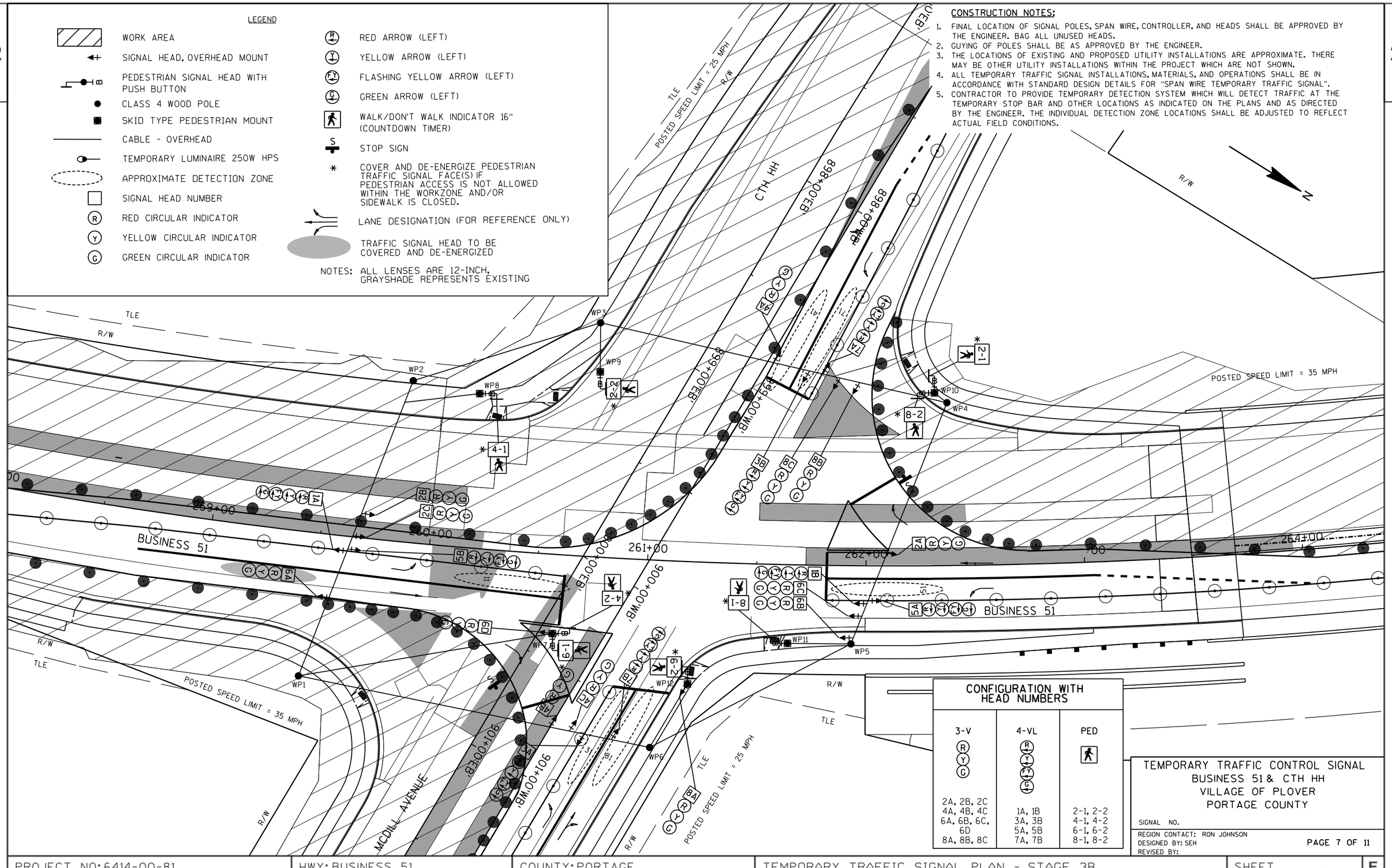
LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW (LEFT)
- (Y) YELLOW ARROW (LEFT)
- (FY) FLASHING YELLOW ARROW (LEFT)
- (G) GREEN ARROW (LEFT)
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORKZONE AND/OR SIDEWALK IS CLOSED.
- LANE DESIGNATION (FOR REFERENCE ONLY)
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

NOTES: ALL LENSES ARE 12-INCH, GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SPAN WIRE, CONTROLLER, AND HEADS SHALL BE APPROVED BY THE ENGINEER. BAG ALL UNUSED HEADS.
2. GUYING OF POLES SHALL BE AS APPROVED BY THE ENGINEER.
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. ALL TEMPORARY TRAFFIC SIGNAL INSTALLATIONS, MATERIALS, AND OPERATIONS SHALL BE IN ACCORDANCE WITH STANDARD DESIGN DETAILS FOR "SPAN WIRE TEMPORARY TRAFFIC SIGNAL".
5. CONTRACTOR TO PROVIDE TEMPORARY DETECTION SYSTEM WHICH WILL DETECT TRAFFIC AT THE TEMPORARY STOP BAR AND OTHER LOCATIONS AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE INDIVIDUAL DETECTION ZONE LOCATIONS SHALL BE ADJUSTED TO REFLECT ACTUAL FIELD CONDITIONS.



CONFIGURATION WITH HEAD NUMBERS

3-V	4-VL	PED
2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C, 6D 8A, 8B, 8C	1A, 1B 3A, 3B 5A, 5B 7A, 7B	2-1, 2-2 4-1, 4-2 6-1, 6-2 8-1, 8-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 7 OF 11

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3B	SHEET 141	E

2

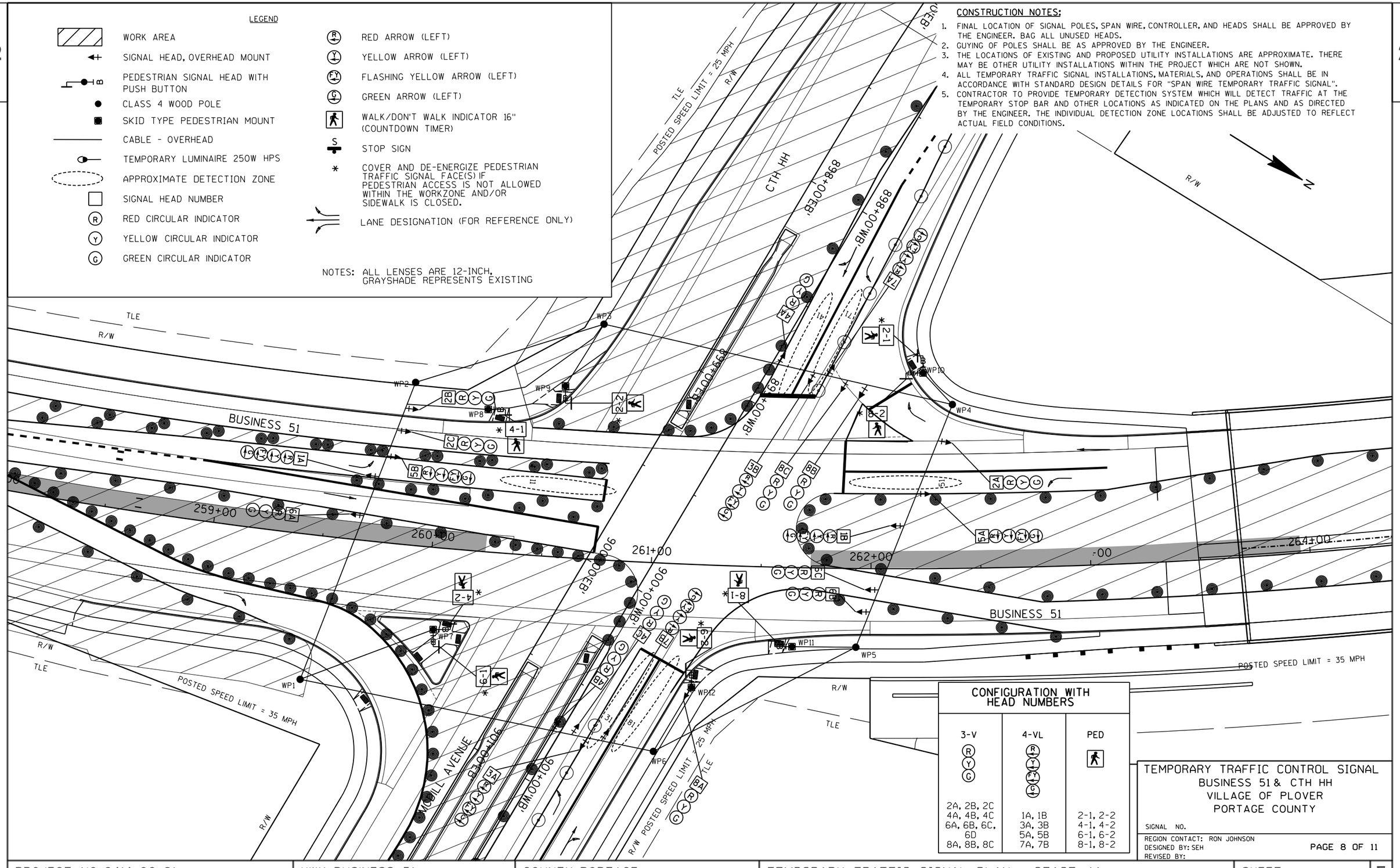
LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW (LEFT)
- (Y) YELLOW ARROW (LEFT)
- (FY) FLASHING YELLOW ARROW (LEFT)
- (G) GREEN ARROW (LEFT)
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORKZONE AND/OR SIDEWALK IS CLOSED.
- LANE DESIGNATION (FOR REFERENCE ONLY)

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CONFIGURATION WITH HEAD NUMBERS		
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2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C, 6D 8A, 8B, 8C	1A, 1B 3A, 3B 5A, 5B 7A, 7B	2-1, 2-2 4-1, 4-2 6-1, 6-2 8-1, 8-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 8 OF 11

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4A	SHEET 142	E

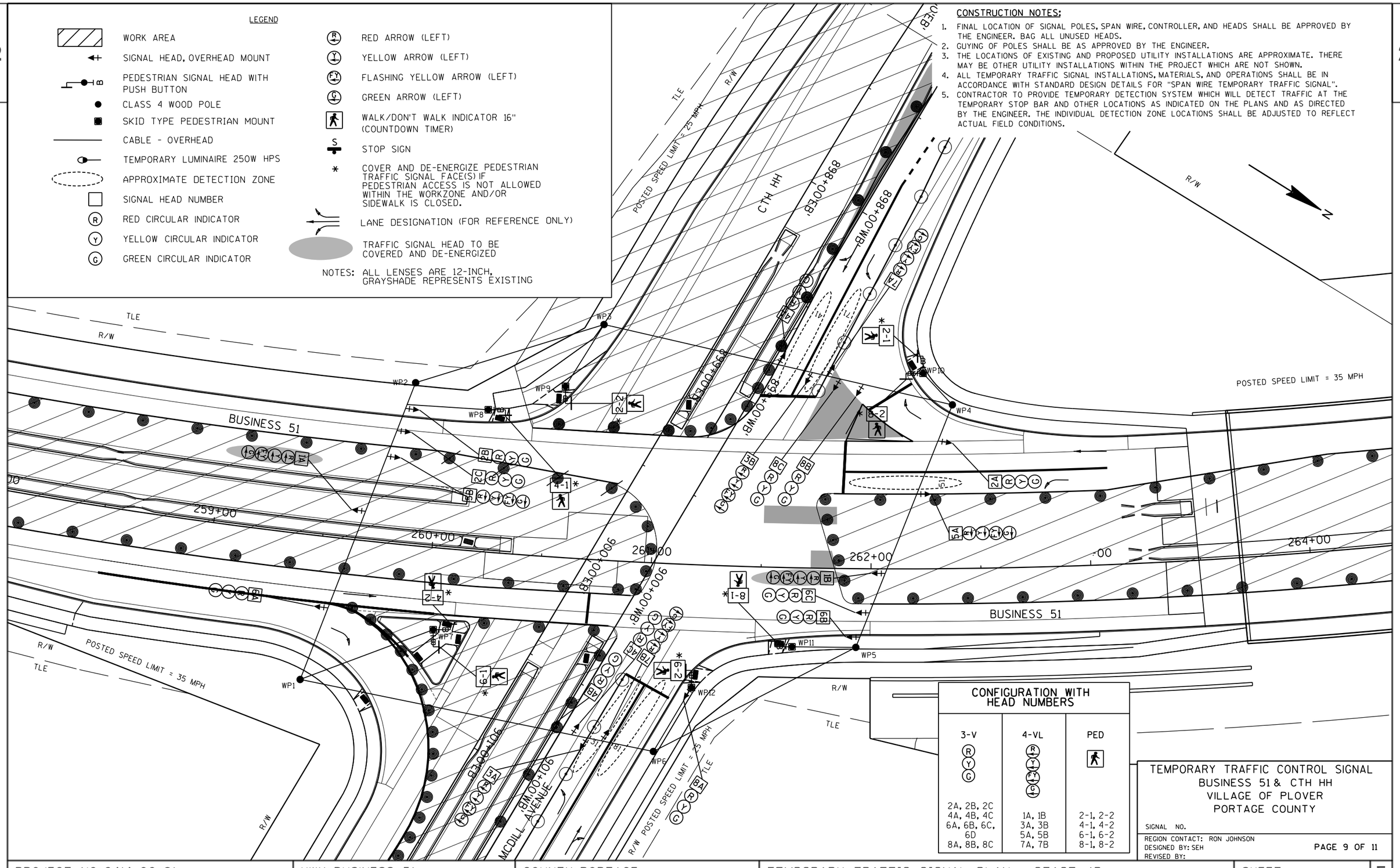
LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW (LEFT)
- (Y) YELLOW ARROW (LEFT)
- (FY) FLASHING YELLOW ARROW (LEFT)
- (G) GREEN ARROW (LEFT)
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORKZONE AND/OR SIDEWALK IS CLOSED.
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CONFIGURATION WITH HEAD NUMBERS		
3-V (R Y G)	4-VL (R Y FY G)	PED
2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C, 6D 8A, 8B, 8C	1A, 1B 3A, 3B 5A, 5B 7A, 7B	2-1, 2-2 4-1, 4-2 6-1, 6-2 8-1, 8-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 9 OF 11

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4B	SHEET 143	E

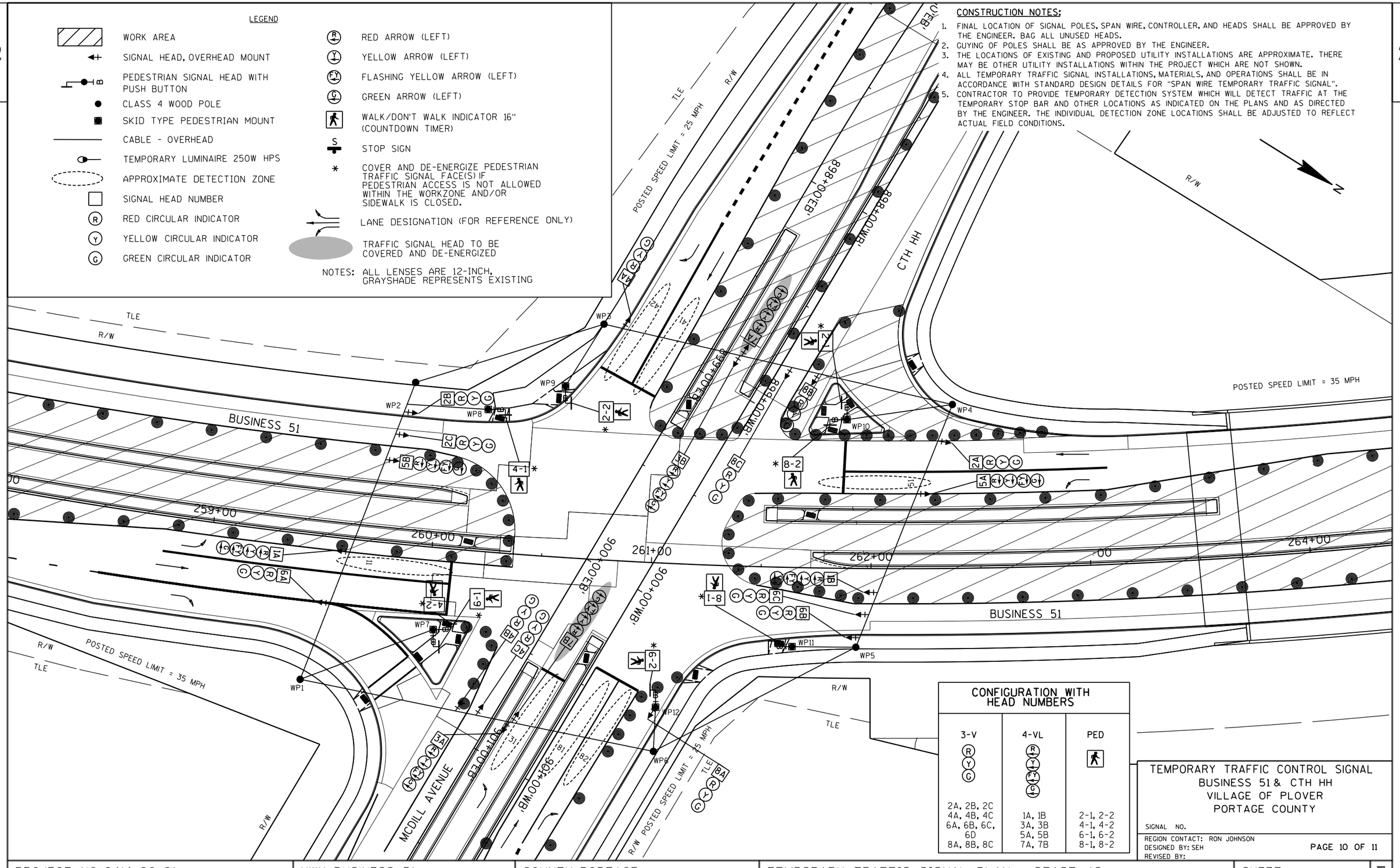
LEGEND

- WORK AREA
- SIGNAL HEAD, OVERHEAD MOUNT
- PEDESTRIAN SIGNAL HEAD WITH PUSH BUTTON
- CLASS 4 WOOD POLE
- SKID TYPE PEDESTRIAN MOUNT
- CABLE - OVERHEAD
- TEMPORARY LUMINAIRE 250W HPS
- APPROXIMATE DETECTION ZONE
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW (LEFT)
- (Y) YELLOW ARROW (LEFT)
- (FY) FLASHING YELLOW ARROW (LEFT)
- (G) GREEN ARROW (LEFT)
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORKZONE AND/OR SIDEWALK IS CLOSED.
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CONFIGURATION WITH HEAD NUMBERS		
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2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C, 6D 8A, 8B, 8C	1A, 1B 3A, 3B 5A, 5B 7A, 7B	2-1, 2-2 4-1, 4-2 6-1, 6-2 8-1, 8-2

TEMPORARY TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 10 OF 11

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4C	SHEET 144 E

FILE NAME : B:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\023924C_temp_sp.dgn PLOT TIME : 11:20:31 AM PLOT DATE : 3/22/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO ✳✳					Ø2 R/W	Ø2 CLEAR TO ✳✳					Ø3 R/W	Ø3 CLEAR TO ✳✳					Ø4 R/W	Ø4 CLEAR TO ✳✳					FLASH
Ø1	1A,1B	G←	-	-				-	-	-				-	-	-				-	-	-				-
Ø2	2A,2B,2C	R	R	R				G	Y	R				R	R	R				R	R	R				R
Ø3	3A,3B	-	-	-				-	-	-				G←	-	-				-	-	-				-
Ø4	4A,4B,4C	R	R	R				R	R	R				R	R	R				G	Y	R				R
Ø5	5A,5B	-	-	-				-	-	-				-	-	-				-	-	-				-
Ø6	6A,6B,6C	R	R	R				R	R	R				R	R	R				R	R	R				R
Ø7	7A,7B	-	-	-				-	-	-				-	-	-				-	-	-				-
Ø8	8A,8B,8C	R	R	R				R	R	R				R	R	R				R	R	R				R
OLE	1A,1B	-	Y	R				FY	Y	R				R	R	R				R	R	R				R
OLF	3A,3B	R←	R←	R←				R←	R←	R←				-	Y	R				FY←	Y←	R←				R←
OLG	5A,5C	R←	R←	R←				R←	R←	R←				R←	R←	R←				R←	R←	R←				R←
OLH	7A,7B	R←	R←	R←				R←	R←	R←				R←	R←	R←				R←	R←	R←				R←
Ø2P	2-1,2-2	DW	DW	DW				*	DW	DW				DW	DW	DW				DW	DW	DW				
Ø4P	4-1,4-2	DW	DW	DW				DW	DW	DW				DW	DW	DW				*	DW	DW				
Ø6P	6-1,6-2	DW	DW	DW				DW	DW	DW				DW	DW	DW				DW	DW	DW				
Ø8P	8-1,8-2	DW	DW	DW				DW	DW	DW				DW	DW	DW				DW	DW	DW				

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO ✳✳					Ø6 R/W	Ø6 CLEAR TO ✳✳					Ø7 R/W	Ø7 CLEAR TO ✳✳					Ø8 R/W	Ø8 CLEAR TO ✳✳				
Ø1	1A,1B	-	-	-				-	-	-				-	-	-				-	-	-			
Ø2	2A,2B,2C	R	R	R				R	R	R				R	R	R				R	R	R			
Ø3	3A,3B	-	-	-				-	-	-				-	-	-				-	-	-			
Ø4	4A,4B,4C	R	R	R				R	R	R				R	R	R				R	R	R			
Ø5	5A,5B	G←	-	-				-	-	-				-	-	-				-	-	-			
Ø6	6A,6B,6C	R	R	R				G	Y	R				R	R	R				R	R	R			
Ø7	7A,7B	-	-	-				-	-	-				G←	-	-				-	-	-			
Ø8	8A,8B,8C	R	R	R				R	R	R				R	R	R				G	Y	R			
OLE	1A,1B	R←	R←	R←				R←	R←	R←				R←	R←	R←				R←	R←	R←			
OLF	3A,3B	R←	R←	R←				R←	R←	R←				R←	R←	R←				R←	R←	R←			
OLG	5A,5B	-	Y	R				FY	Y	R				R	R	R				R	R	R			
OLH	7A,7B	R←	R←	R←				R←	R←	R←				-	Y	R				FY←	Y←	R←			
Ø2P	2-1,2-2	DW	DW	DW				DW	DW	DW				DW	DW	DW				DW	DW	DW			
Ø4P	4-1,4-2	DW	DW	DW				DW	DW	DW				DW	DW	DW				DW	DW	DW			
Ø6P	6-1,6-2	DW	DW	DW				*	DW	DW				DW	DW	DW				DW	DW	DW			
Ø8P	8-1,8-2	DW	DW	DW				DW	DW	DW				DW	DW	DW				*	DW	DW			

FY=FLASHING YELLOW

BARRIER

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH
11		X			1	1			
31		X			3	3			
41		X			4	4			
42		X			4	4		X	
51		X			5	5			
71		X			7	7			
81		X			8	8			
82		X			8	8			
83		X			8	8		X	

CONTROLLER LOGIC

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

SPECIAL OVERLAPS

	PROTECTED	PERMISSIVE
OLE	1	2
OLF	3	4
OLG	5	6
OLH	7	8

N

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

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
QUEUE DETECTOR	
LIFT BRIDGE	

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

CHART 1

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

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. WHEN OPPOSING THRU PHASES ARE TIMING CONCURRENTLY THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

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

BUSINESS 51 &
CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO.

CONTROLLER TYPE: TEMP

DATE

FILE NAME : ...\023929_Temp_SP_PH.dgn PLOT DATE : 3/21/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

LEGEND

- CONTROL CABINET (TYPE 9 SPECIAL)
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT TYPE 1 BASE (WITH BACKPLATE)
- (XX) SIGNAL HEAD, MAST ARM MOUNT TYPE 2 BASE (WITH BACKPLATE)
- LOCALLY MAINTAINED LUMINAIRE (SEE SEPERATE LIGHTING REMOVAL PLAN FOR DETAILS)
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT SIDE PULL LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL BOX OFF ROADWAY (OPTION 2)
- PULL BOX, 12" X 24"
- PULL BOX, STEEL, 24" X 36"
- 2A SIGNAL HEAD NUMBER
- PED INDICATOR (WALK/DON'T WALK)
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR

NOTE: GRAYSHADE REPRESENTS EXISTING TO REMAIN. BOLD REPRESENTS EXISTING TO BE REMOVED.

CONSTRUCTION NOTES:

1. CONTACT THE DEPARTMENTS ELECTRICIAN REGARDING REMOVAL OF THE EXISTING SIGNAL CABINET AND CONTROLLER. WISDOT WILL BE RESPONSIBLE FOR THIS REMOVAL.
2. ALL EXISTING EQUIPMENT TO BE REMOVED, SALVAGED, OR ABANDONED. SEE SPECIAL PROVISIONS REGARDING SALVAGING WISDOT SIGNAL AND LIGHTING EQUIPMENT.
3. ALL EXISTING CONDUIT AND PULL BOXES TO BE REMOVED OR ABANDONED. EXISTING CABLE AND WIRE SHALL BECOME THE CONTRACTORS PROPERTY AFTER REMOVAL. PULL BOX RIMS AND COVERS SHALL BE RETAINED BY WISDOT PER SALVAGING PROVISIONS.

N

BUSINESS 51

TOMMY'S TURNPIKE

PORTER ROAD

MATCHLINE STA 217+00

MATCHLINE STA 223+00

TRAFFIC CONTROL SIGNAL
BUSINESS 51 & TOMMY'S TURNPIKE
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO. S49-0440

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

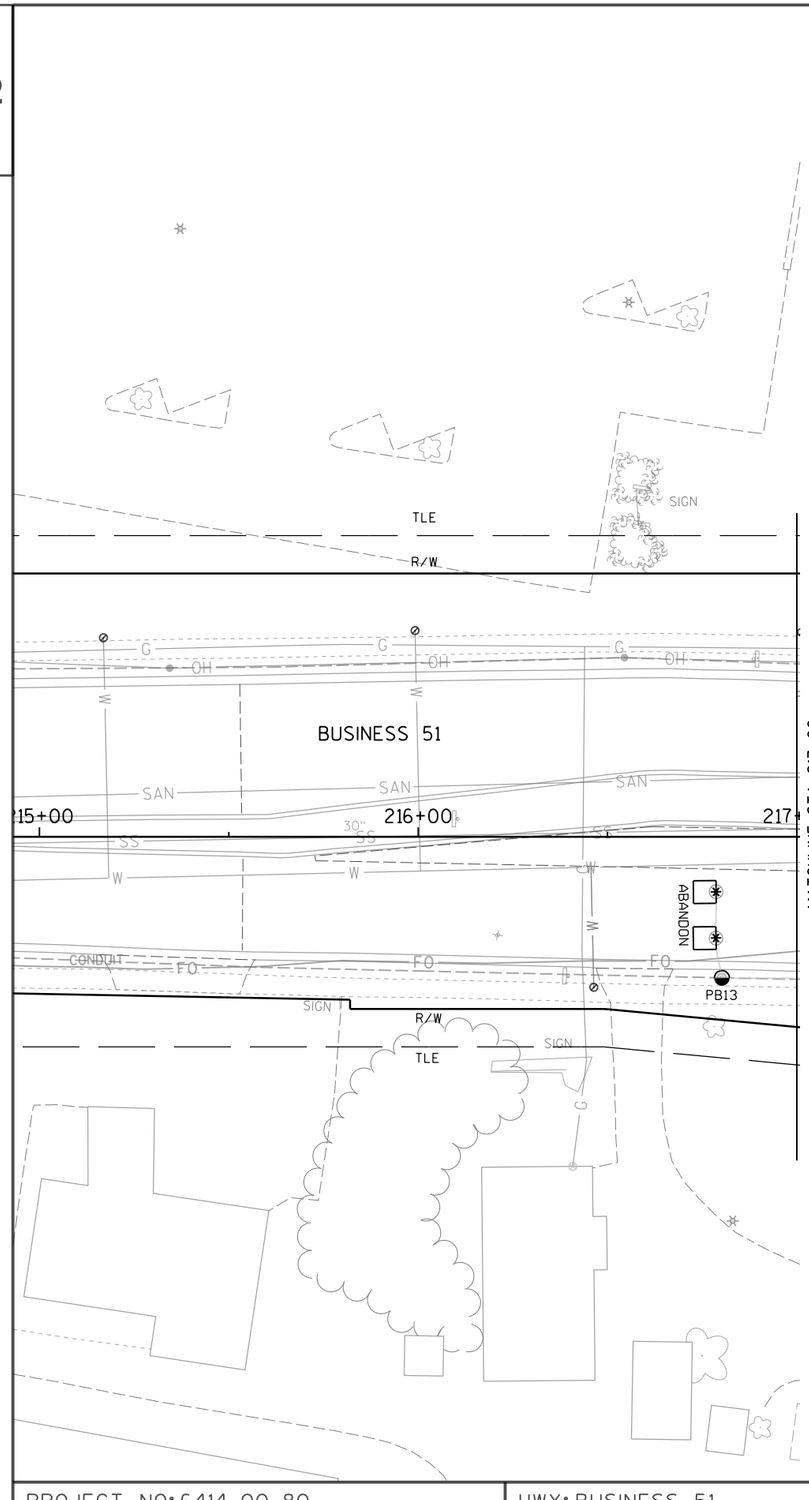
PAGE 1 OF 2

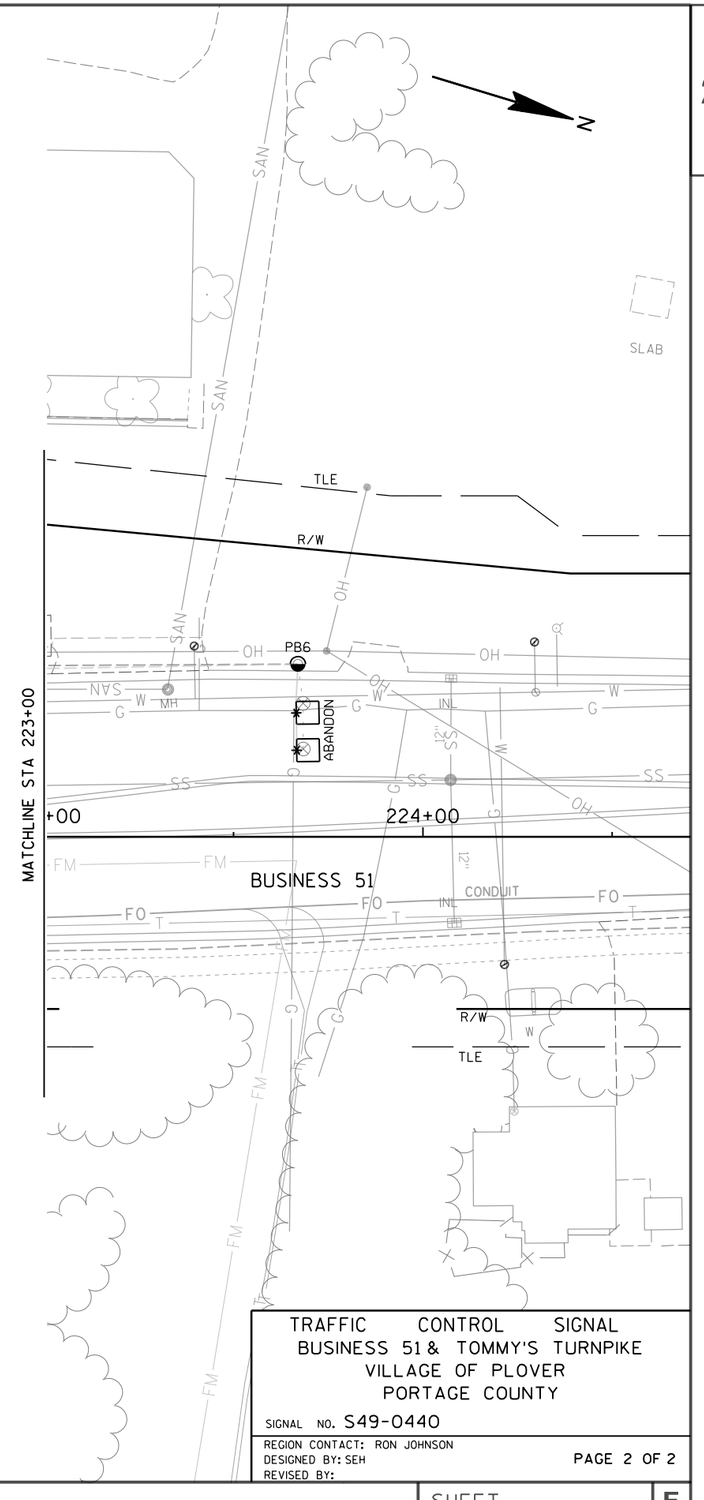
PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 146	E

FILE NAME : B:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\024021_sp.dgn PLOT TIME : 4:17:14 PM PLOT DATE : 3/21/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

WISDOT/CADDS SHEET 42

2





2

TRAFFIC CONTROL SIGNAL
BUSINESS 51 & TOMMY'S TURNPIKE
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO. S49-0440

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 2 OF 2

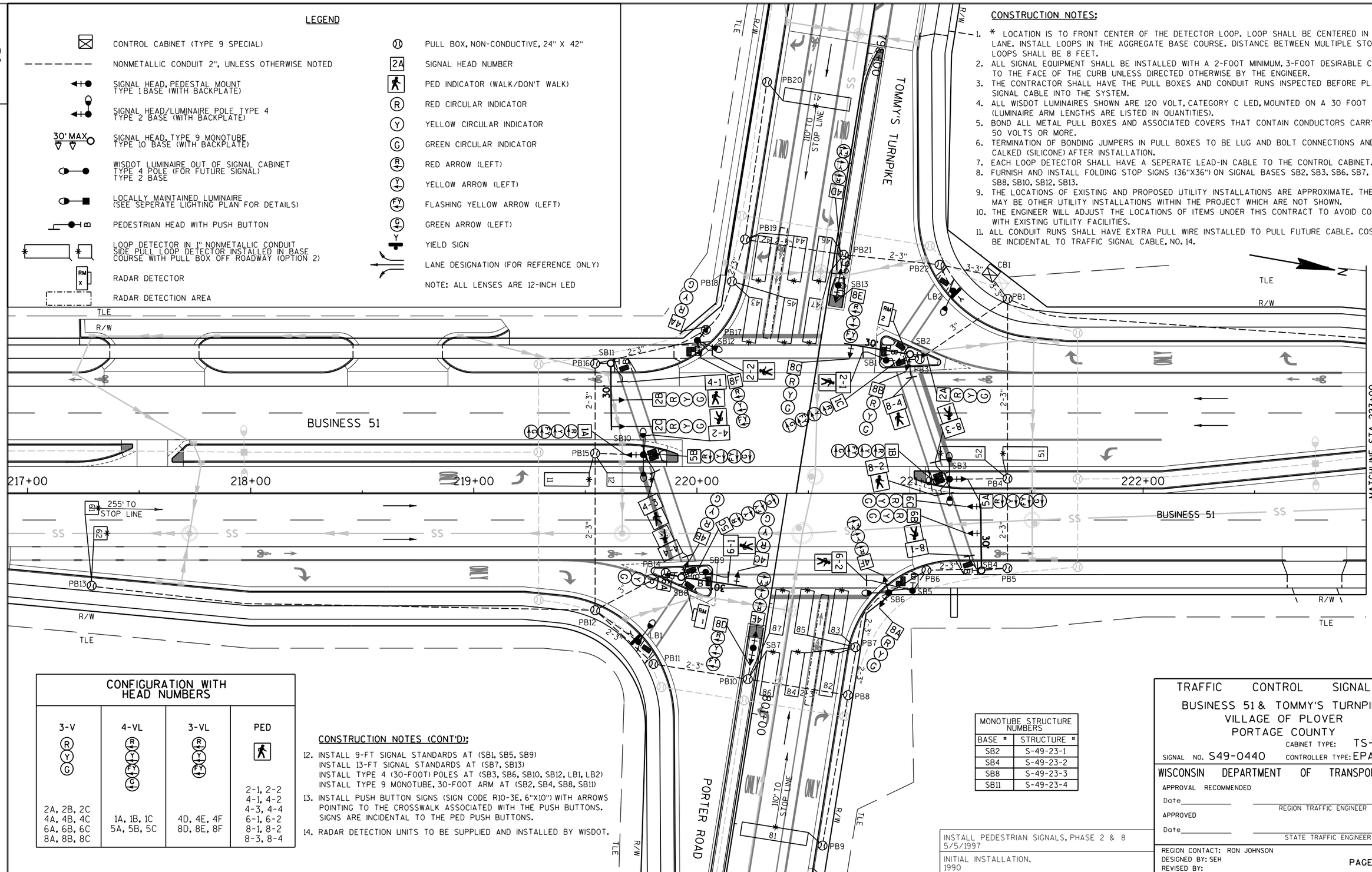
PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 147	E

LEGEND

- CONTROL CABINET (TYPE 9 SPECIAL)
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT TYPE 1 BASE (WITH BACKPLATE)
- SIGNAL HEAD/LUMINAIRE POLE TYPE 4 TYPE 2 BASE (WITH BACKPLATE)
- 30' MAX — SIGNAL HEAD, TYPE 9 MONOTUBE TYPE 10 BASE (WITH BACKPLATE)
- WISDOT LUMINAIRE OUT OF SIGNAL CABINET TYPE 4 POLE (FOR FUTURE SIGNAL) TYPE 2 BASE
- LOCALLY MAINTAINED LUMINAIRE (SEE SEPERATE LIGHTING PLAN FOR DETAILS)
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT SIDE PULL LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL BOX OFF ROADWAY (OPTION 2)
- RM X — RADAR DETECTOR
- RADAR DETECTION AREA
- PULL BOX, NON-CONDUCTIVE, 24" X 42"
- 2A — SIGNAL HEAD NUMBER
- PED INDICATOR (WALK/DON'T WALK)
- R — RED CIRCULAR INDICATOR
- Y — YELLOW CIRCULAR INDICATOR
- G — GREEN CIRCULAR INDICATOR
- RA — RED ARROW (LEFT)
- YA — YELLOW ARROW (LEFT)
- FY — FLASHING YELLOW ARROW (LEFT)
- GA — GREEN ARROW (LEFT)
- Y — YIELD SIGN
- LANE DESIGNATION (FOR REFERENCE ONLY)
- NOTE: ALL LENSES ARE 12-INCH LED

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF THE DETECTOR LOOP. LOOP SHALL BE CENTERED IN TRAFFIC LANE. INSTALL LOOPS IN THE AGGREGATE BASE COURSE. DISTANCE BETWEEN MULTIPLE STOP BAR LOOPS SHALL BE 8 FEET.
2. ALL SIGNAL EQUIPMENT SHALL BE INSTALLED WITH A 2-FOOT MINIMUM, 3-FOOT DESIRABLE CLEARANCE TO THE FACE OF THE CURB UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED BEFORE PLACING SIGNAL CABLE INTO THE SYSTEM.
4. ALL WISDOT LUMINAIRES SHOWN ARE 120 VOLT, CATEGORY C LED, MOUNTED ON A 30 FOOT POLE (LUMINAIRE ARM LENGTHS ARE LISTED IN QUANTITIES).
5. BOND ALL METAL PULL BOXES AND ASSOCIATED COVERS THAT CONTAIN CONDUCTORS CARRYING 50 VOLTS OR MORE.
6. TERMINATION OF BONDING JUMPERS IN PULL BOXES TO BE LUG AND BOLT CONNECTIONS AND CALKED (SILICONE) AFTER INSTALLATION.
7. EACH LOOP DETECTOR SHALL HAVE A SEPERATE LEAD-IN CABLE TO THE CONTROL CABINET.
8. FURNISH AND INSTALL FOLDING STOP SIGNS (36"X36") ON SIGNAL BASES SB2, SB3, SB6, SB7, SB8, SB10, SB12, SB13.
9. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
10. THE ENGINEER WILL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
11. ALL CONDUIT RUNS SHALL HAVE EXTRA PULL WIRE INSTALLED TO PULL FUTURE CABLE. COST SHALL BE INCIDENTAL TO TRAFFIC SIGNAL CABLE, NO. 14.



CONFIGURATION WITH HEAD NUMBERS			
3-V	4-VL	3-VL	PED
2A, 2B, 2C 4A, 4B, 4C 6A, 6B, 6C 8A, 8B, 8C	1A, 1B, 1C 5A, 5B, 5C	4D, 4E, 4F 8D, 8E, 8F	2-1, 2-2 4-1, 4-2 4-3, 4-4 6-1, 6-2 8-1, 8-2 8-3, 8-4

CONSTRUCTION NOTES (CONT'D):

12. INSTALL 9-FT SIGNAL STANDARDS AT (SB1, SB5, SB9)
    INSTALL 13-FT SIGNAL STANDARDS AT (SB7, SB13)
    INSTALL TYPE 4 (30-FOOT) POLES AT (SB3, SB6, SB10, SB12, LB1, LB2)
    INSTALL TYPE 9 MONOTUBE, 30-FOOT ARM AT (SB2, SB4, SB8, SB11)
13. INSTALL PUSH BUTTON SIGNS (SIGN CODE R10-3E, 6"X10") WITH ARROWS POINTING TO THE CROSSWALK ASSOCIATED WITH THE PUSH BUTTONS. SIGNS ARE INCIDENTAL TO THE PED PUSH BUTTONS.
14. RADAR DETECTION UNITS TO BE SUPPLIED AND INSTALLED BY WISDOT.

MONOTUBE STRUCTURE NUMBERS	
BASE #	STRUCTURE #
SB2	S-49-23-1
SB4	S-49-23-2
SB8	S-49-23-3
SB11	S-49-23-4

INSTALL PEDESTRIAN SIGNALS, PHASE 2 & 8
5/5/1997

INITIAL INSTALLATION.
1990

TRAFFIC CONTROL SIGNAL

BUSINESS 51 & TOMMY'S TURNPIKE
VILLAGE OF PLOVER
PORTAGE COUNTY

CABINET TYPE: TS-2
SIGNAL NO. S49-0440 CONTROLLER TYPE: EPAC M51

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date _____ REGION TRAFFIC ENGINEER

APPROVED
Date _____ STATE TRAFFIC ENGINEER

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 1 OF 4

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC SIGNAL PLAN	SHEET 148 E

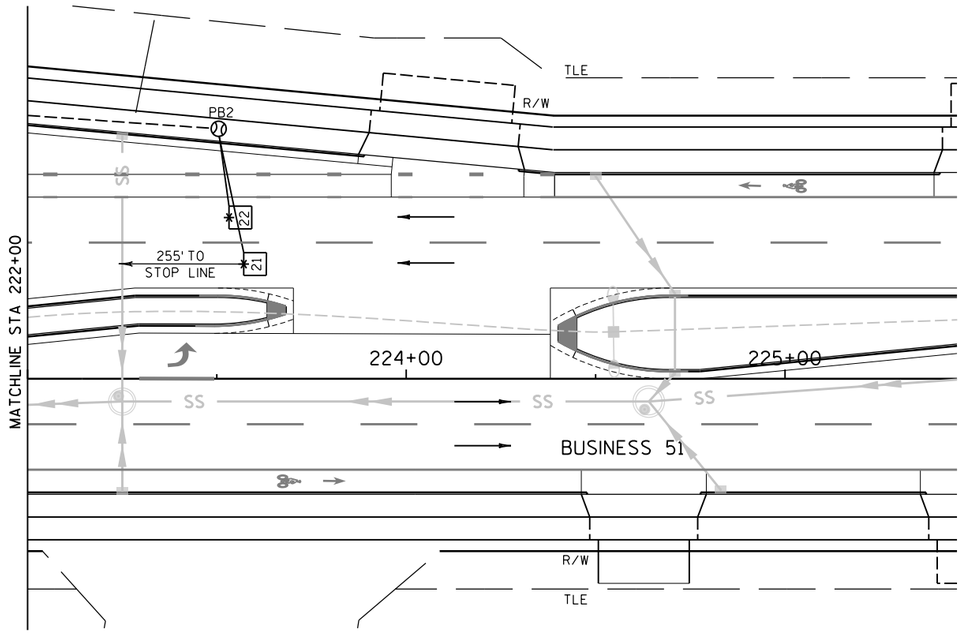
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WISDOT/CADDS SHEET 42

2

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SEE "LEGEND AND CONSTRUCTION NOTES" ON MAIN PLAN SHEET



TRAFFIC CONTROL SIGNAL
BUSINESS 51 & TOMMY'S TURNPIKE
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO. S49-0440

REGION CONTACT: RON JOHNSON
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PAGE 2 OF 4

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC SIGNAL PLAN	SHEET 149	E

FILE NAME : B:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\024026_sp.dgn PLOT TIME : 4:17:27 PM PLOT DATE : 3/21/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **	Ø2 R/W	Ø2 CLEAR TO **	Ø3 R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
Ø1	1A,1B,1C	G	- -	-	- -			-	- -	-
Ø2	2A,2B,2C	R	R R	G	Y R			R	R R	R
Ø3										
Ø4	4A,4B,4C	R	R R	R	R R			G	Y R	R
Ø5	5A,5B,5C	-	- -	-	- -			-	- -	-
Ø6	6A,6B,6C	R	R R	R	R R			R	R R	R
Ø7										
Ø8	8A,8B,8C	R	R R	R	R R			R	R R	R
OLA	1A,1B,1C	-	Y R	FY	Y R			R	R R	R
OLB	8D,8E,8F	R	R R	R	R R			FY	Y R	R
OLC	5A,5B,5C	R	R R	R	R R			R	R R	R
OLD	4D,4E,4F	R	R R	R	R R			R	R R	R
Ø2P	2-1,2-2	D	D D	*	D D			D	D D	
Ø4P	4-1,4-2,4-3,4-4	D	D D	D	D D			*	D D	
Ø6P	6-1,6-2	D	D D	D	D D			D	D D	
Ø8P	8-1,8-2,8-3,8-4	D	D D	D	D D			D	D D	

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **	Ø6 R/W	Ø6 CLEAR TO **	Ø7 R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
Ø1	1A,1B,1C	-	- -	-	- -			-	- -
Ø2	2A,2B,2C	R	R R	R	R R			R	R R
Ø3									
Ø4	4A,4B,4C	R	R R	R	R R			R	R R
Ø5	5A,5B,5C	G	- -	-	- -			-	- -
Ø6	6A,6B,6C	R	R R	G	Y R			R	R R
Ø7									
Ø8	8A,8B,8C	R	R R	R	R R			G	Y R
OLA	1A,1B,1C	R	R R	R	R R			R	R R
OLB	8D,8E,8F	R	R R	R	R R			R	R R
OLC	5A,5B,5C	-	Y R	FY	Y R			R	R R
OLD	4D,4E,4F	R	R R	R	R R			FY	Y R
Ø2P	2-1,2-2	D	D D	D	D D			D	D D
Ø4P	4-1,4-2,4-3,4-4	D	D D	D	D D			D	D D
Ø6P	6-1,6-2	D	D D	*	D D			D	D D
Ø8P	8-1,8-2,8-3,8-4	D	D D	D	D D			*	D D

FY=FLASHING YELLOW

BARRIER

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	61	11	21	51	41	42	44	46
CALLS & EXTENDS	X	X	X	X		X	X	X
CALLS ONLY								
EXTENDS ONLY					X			
PHASE CALLED	6	1	2	5		4	4	4
PHASE EXTENDED	6	1	2	5	4	4	4	4
DISCONNECT PHASE								
CALLING DELAY						X		
EXTENSION STRETCH					X			
SIZE	6x6	6x20	6x6	6x20	6x30	6x20	6x20	6x20
NUMBER OF TURNS	4	3	4	3	3	3	3	3
DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)	62	12	22	52		43	45	47
CALLS & EXTENDS	X	X	X	X		X	X	X
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED	6	1	2	5		4	4	4
PHASE EXTENDED	6	1	2	5		4	4	4
DISCONNECT PHASE								
CALLING DELAY						X		
EXTENSION STRETCH								
SIZE	6x6	6x20	6x6	6x20		6x20	6x20	6x20
NUMBER OF TURNS	4	3	4	3		3	3	3

DETECTOR INPUT	19	17	23	21	27	25	31	29
DETECTOR #(S)	81	82	84	86				
CALLS & EXTENDS		X	X	X				
CALLS ONLY								
EXTENDS ONLY	X							
PHASE CALLED		8	8	8				
PHASE EXTENDED	8	8	8	8				
DISCONNECT PHASE								
CALLING DELAY		X						
EXTENSION STRETCH	X							
SIZE	6x30	6x20	6x20	6x20				
NUMBER OF TURNS	3	3	3	3				
DETECTOR INPUT	20	18	24	22	28	26	32	30
DETECTOR #(S)		83	85	87				
CALLS & EXTENDS		X	X	X				
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED		8	8	8				
PHASE EXTENDED		8	8	8				
DISCONNECT PHASE								
CALLING DELAY		X						
EXTENSION STRETCH								
SIZE		6x20	6x20	6x20				
NUMBER OF TURNS		3	3	3				

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

TYPE OF PRE-EMPT	
NONE	x
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

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

SPECIAL OVERLAPS

	PROTECTED	PERMISSIVE
OLA	1	2
OLB		4
OLC	5	6
OLD		8

CONTROLLER LOGIC

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

N

CHART 1

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

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. WHEN OPPOSING THRU PHASES ARE TIMING CONCURRENTLY THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

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

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

TRAFFIC CONTROL SIGNAL
BUSINESS 51 & TOMMY'S TURNPIKE
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO. S49-0440

CONTROLLER TYPE: EPAC M51

DATE 09/17

FILE NAME : B:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\024029_sp.dgn PLOT TIME : 4:17:28 PM PLOT DATE : 3/21/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A
WISDOT/CADDS SHEET 42

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DETECTOR LOGIC

BIU 11

DETECTOR INPUT	35	33	39	37	43	41	47	45
DETECTOR #(S)		WT BIKE 48						
CALLS & EXTENDS		X						
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED		4						
PHASE EXTENDED		4						
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE		50 FT						
NUMBER OF TURNS		NA						
DETECTOR INPUT	36	34	40	38	44	42	48	46
DETECTOR #(S)		WT BIKE 88						
CALLS & EXTENDS		X						
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED		8						
PHASE EXTENDED		8						
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE		50 FT						
NUMBER OF TURNS		NA						

WAVETRONIX DETECTOR ASSIGNMENTS (FOR "BIKE DETECTION")

BIU 12

51	49	55	53	59	57	63	61
52	50	56	54	60	58	64	62

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VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO. S49-0440

CONTROLLER TYPE: EPAC M51

DATE 09/17

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WISDOT/CADDS SHEET 42

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PROJECT ID:	6414-00-80
INTERSECTION:	B51 @ TOMMY'S TURNPIKE, S49-0440

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

					SIGNAL INDICATION WIRE COLOR									
CB1 TO	JUMPER	AWG 14 # OF COND.	HEAD NO.	PHASE	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING> <YELLOW>	D/WALK	WALK	PED BUTTON
SB1		5	2-1	PED 2								RED	GRN	BLK
SB2		16	1C	1				RED/WHT	BLU/WHT	GRN/WHT				
			1C	0LA							BLK/WHT			
			2A	2	RED	ORG	GRN							
			8B, 8C	3	RED/BLK	ORG/BLK	GRN/BLK							
			8-4	PED 8								BLK	BLU	WHT/BLK
SB3		12	1B	1				RED	ORG	GRN				
			1B	O_A							BLK			
			5A	5				RED/BLK	ORG/BLK	GRN/BLK				
			5A	O_C							BLK/WHT			
			8-2, 8-3	PED 8								BLU/BLK	BLU	WHT/BLK
SB4		9	8B, 8C	3	RED	ORG	GRN							
			8-1	PED 8								BLK	BLU	WHT/BLK
SB5		5	6-2	PED 6								RED	GRN	BLK
SB6		9	4F	4				RED	ORG		BLK			
			8A	3	RED/BLK	BLU	GRN/BLK							
SB7		9	4E	4				RED	ORG					
			4E	O_D							BLK			
			8D	3				RED/BLK	BLU					
			8D	O_B							GRN/BLK			
SB8		16	4B, 4C	4	T	BLU/WHT	GRN/WHT							
			5C	5				RED/BLK	ORG/BLK	GRN/BLK				
			5C	O_C							BLK/WHT			
			6A	3	RED	ORG	GRN							
			4-4	PED 4								BLK	BLU	WHT/BLK
SB9		5	6-1	PED 6								RED	GRN	BLK
SB10		12	1A	1				RED	ORG	GRN				
			1A	O_A							BLU/BLK			
			5B	5				RED/BLK	ORG/BLK	GRN/BLK				
			5B	O_C							BLK/WHT			
			4-2, 4-3	PED 4								BLK	BLU	
SB11		9	2B, 2C	2	RED	ORG	GRN							
			4-1	PED 4								RD/BLK	GRN/BLK	WHT/BLK
SB12		12	4A	4	RED	ORG	GRN							
			8F	3				RED/BLK	ORG/BLK					
			8F	O_B							BLK/WHT			
			2-2	PED 2								BLK	BLU	WHT/BLK
SB13		9	4D	4				RED	ORG					
			4D	O_D							BLK			
			8E	3				RED/BLK	ORG/BLK					
			8E	O_B							BLU			

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

PULL BOX BONDING JUMPER 10 AWG GREEN XLP	
FROM	TO

LIGHTING UF #12/2 W/GROUND	
FROM	TO
CB1	SB3
CB1	SB6
CB1	SB10
CB1	SB12
CB1	LB1
CB1	LB2

EMERGENCY VEHICLE PREEMPTION	
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 PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
"OTHER" COLUMN MAY INCLUDE SHADOW BOX SIGN

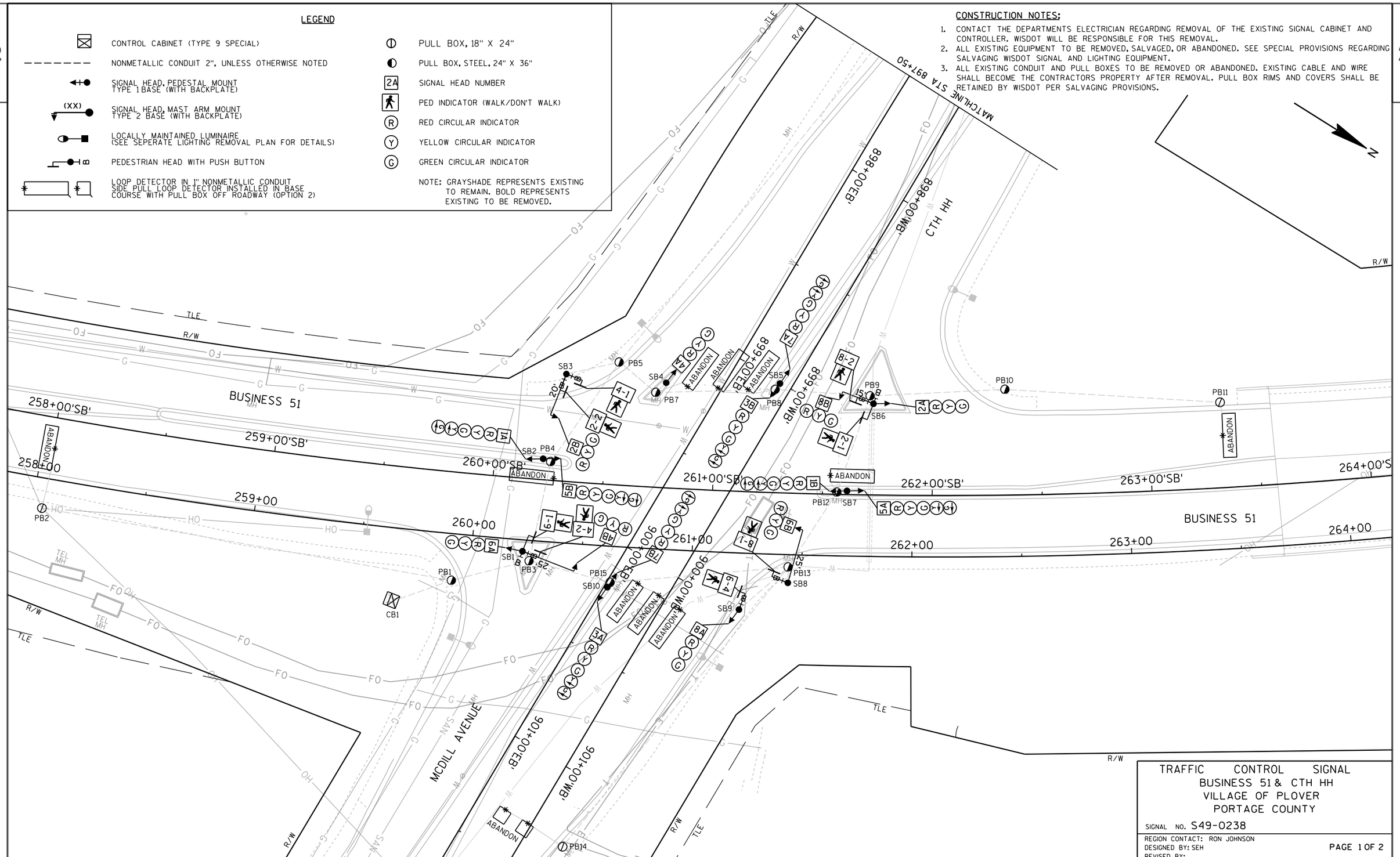
LEGEND

- CONTROL CABINET (TYPE 9 SPECIAL)
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT TYPE 1 BASE (WITH BACKPLATE)
- (XX) SIGNAL HEAD, MAST ARM MOUNT TYPE 2 BASE (WITH BACKPLATE)
- LOCALLY MAINTAINED LUMINAIRE (SEE SEPERATE LIGHTING REMOVAL PLAN FOR DETAILS)
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT SIDE PULL LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL BOX OFF ROADWAY (OPTION 2)
- PULL BOX, 18" X 24"
- PULL BOX, STEEL, 24" X 36"
- 2A SIGNAL HEAD NUMBER
- PED INDICATOR (WALK/DON'T WALK)
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR

NOTE: GRAYSHADE REPRESENTS EXISTING TO REMAIN. BOLD REPRESENTS EXISTING TO BE REMOVED.

CONSTRUCTION NOTES:

1. CONTACT THE DEPARTMENTS ELECTRICIAN REGARDING REMOVAL OF THE EXISTING SIGNAL CABINET AND CONTROLLER. WISDOT WILL BE RESPONSIBLE FOR THIS REMOVAL.
2. ALL EXISTING EQUIPMENT TO BE REMOVED, SALVAGED, OR ABANDONED. SEE SPECIAL PROVISIONS REGARDING SALVAGING WISDOT SIGNAL AND LIGHTING EQUIPMENT.
3. ALL EXISTING CONDUIT AND PULL BOXES TO BE REMOVED OR ABANDONED. EXISTING CABLE AND WIRE SHALL BECOME THE CONTRACTORS PROPERTY AFTER REMOVAL. PULL BOX RIMS AND COVERS SHALL BE RETAINED BY WISDOT PER SALVAGING PROVISIONS.



CONSTRUCTION NOTES:

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TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

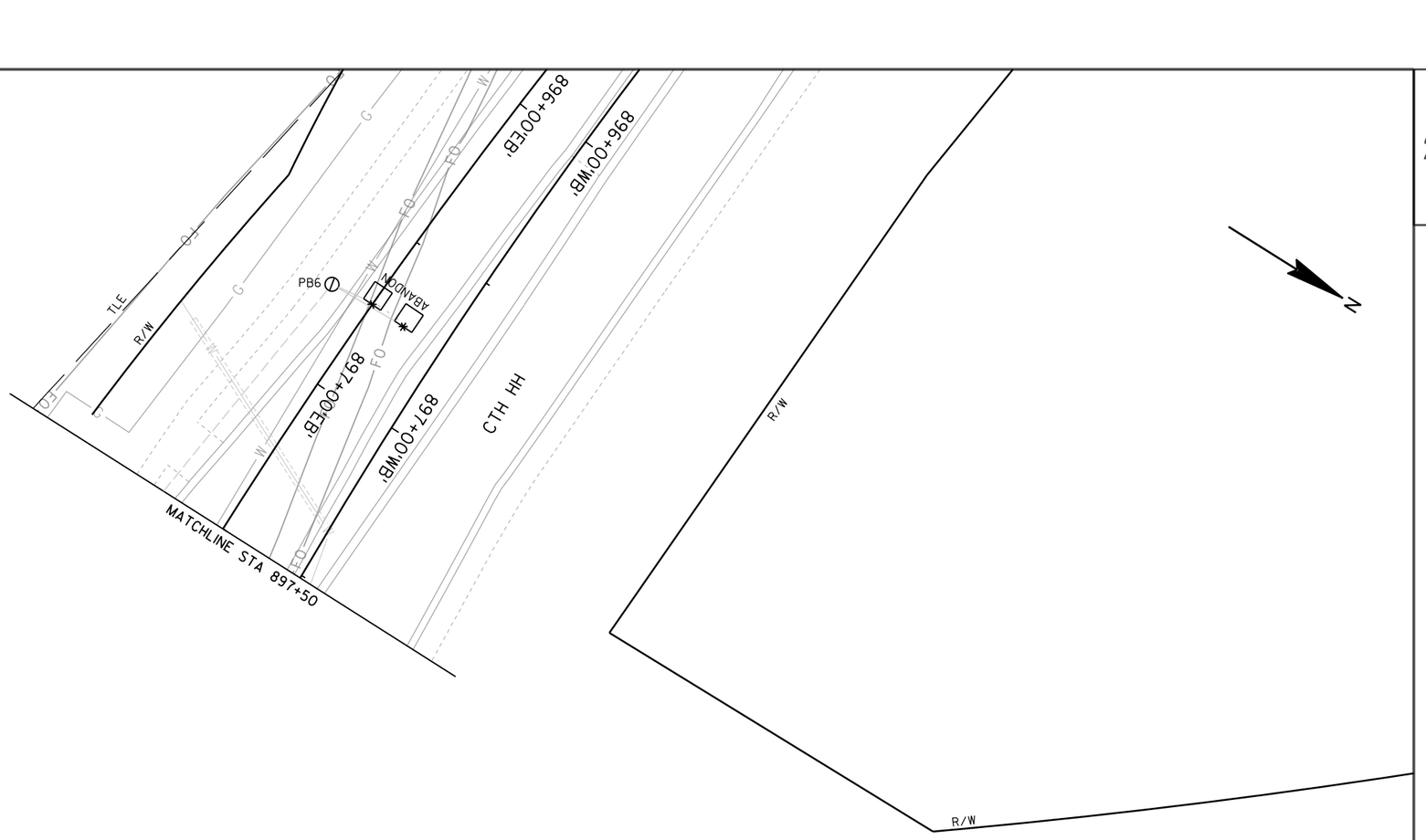
SIGNAL NO. S49-0238

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

PAGE 1 OF 2

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 153	E

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TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO. S49-0238

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REVISED BY:

PAGE 2 OF 2

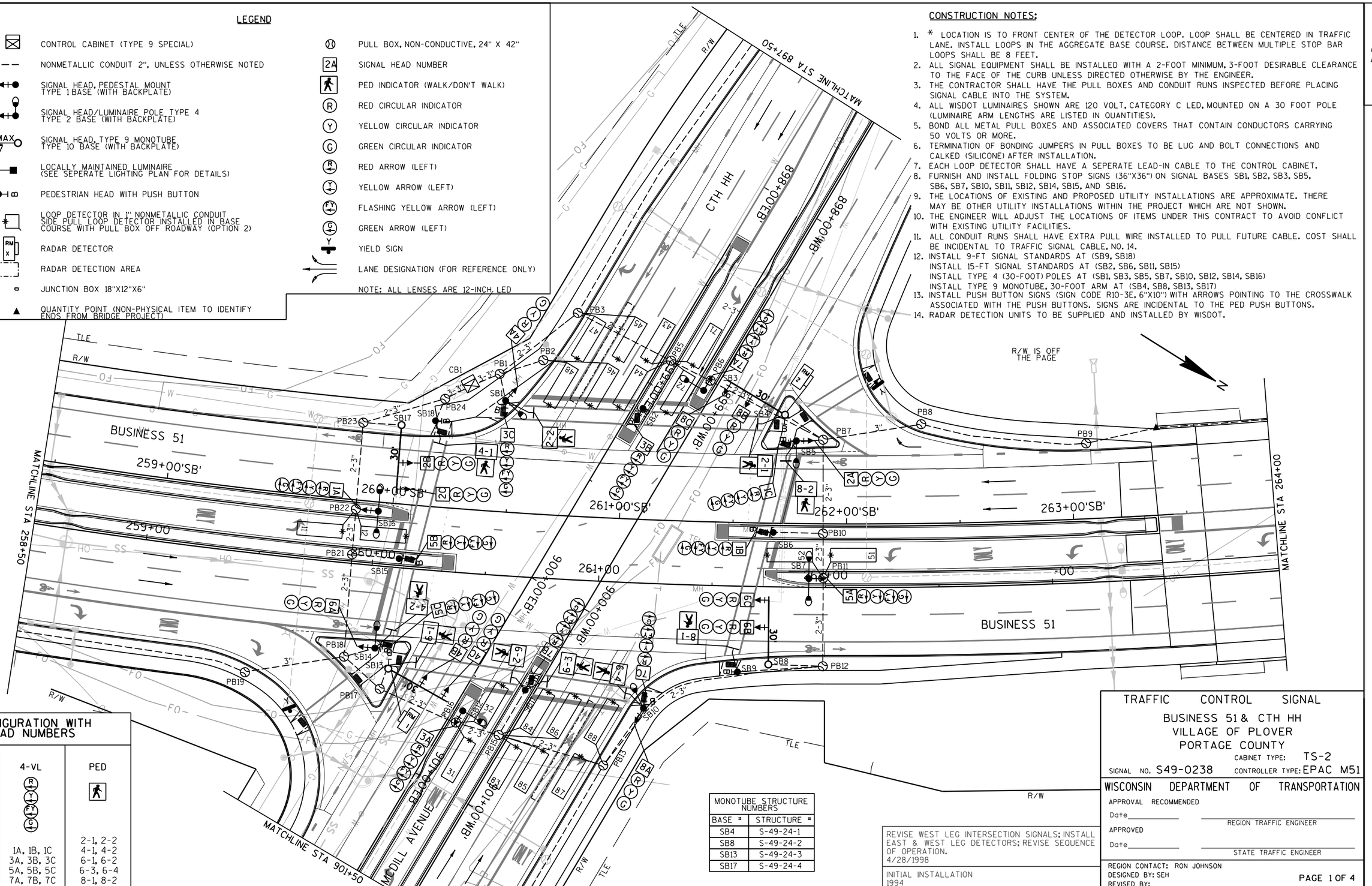
PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 154	E

LEGEND

- CONTROL CABINET (TYPE 9 SPECIAL)
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, PEDESTAL MOUNT TYPE 1 BASE (WITH BACKPLATE)
- SIGNAL HEAD/LUMINAIRE POLE TYPE 4 TYPE 2 BASE (WITH BACKPLATE)
- 30' MAX — SIGNAL HEAD, TYPE 9 MONOTUBE TYPE 10 BASE (WITH BACKPLATE)
- LOCALLY MAINTAINED LUMINAIRE (SEE SEPERATE LIGHTING PLAN FOR DETAILS)
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT SIDE PULL LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL BOX OFF ROADWAY (OPTION 2)
- RM X — RADAR DETECTOR
- RADAR DETECTION AREA
- JUNCTION BOX 18"X12"X6"
- QUANTITY POINT (NON-PHYSICAL ITEM TO IDENTIFY ENDS FROM BRIDGE PROJECT)
- PULL BOX, NON-CONDUCTIVE, 24" X 42"
- 2A — SIGNAL HEAD NUMBER
- PED INDICATOR (WALK/DON'T WALK)
- R — RED CIRCULAR INDICATOR
- Y — YELLOW CIRCULAR INDICATOR
- G — GREEN CIRCULAR INDICATOR
- RA — RED ARROW (LEFT)
- YA — YELLOW ARROW (LEFT)
- FY — FLASHING YELLOW ARROW (LEFT)
- GA — GREEN ARROW (LEFT)
- Y — YIELD SIGN
- LANE DESIGNATION (FOR REFERENCE ONLY)
- NOTE: ALL LENSES ARE 12-INCH, LED

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF THE DETECTOR LOOP. LOOP SHALL BE CENTERED IN TRAFFIC LANE. INSTALL LOOPS IN THE AGGREGATE BASE COURSE. DISTANCE BETWEEN MULTIPLE STOP BAR LOOPS SHALL BE 8 FEET.
2. ALL SIGNAL EQUIPMENT SHALL BE INSTALLED WITH A 2-FOOT MINIMUM, 3-FOOT DESIRABLE CLEARANCE TO THE FACE OF THE CURB UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED BEFORE PLACING SIGNAL CABLE INTO THE SYSTEM.
4. ALL WISDOT LUMINAIRES SHOWN ARE 120 VOLT, CATEGORY C LED, MOUNTED ON A 30 FOOT POLE (LUMINAIRE ARM LENGTHS ARE LISTED IN QUANTITIES).
5. BOND ALL METAL PULL BOXES AND ASSOCIATED COVERS THAT CONTAIN CONDUCTORS CARRYING 50 VOLTS OR MORE.
6. TERMINATION OF BONDING JUMPERS IN PULL BOXES TO BE LUG AND BOLT CONNECTIONS AND CALKED (SILICONE) AFTER INSTALLATION.
7. EACH LOOP DETECTOR SHALL HAVE A SEPERATE LEAD-IN CABLE TO THE CONTROL CABINET.
8. FURNISH AND INSTALL FOLDING STOP SIGNS (36"X36") ON SIGNAL BASES SB1, SB2, SB3, SB5, SB6, SB7, SB10, SB11, SB12, SB14, SB15, AND SB16.
9. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
10. THE ENGINEER WILL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
11. ALL CONDUIT RUNS SHALL HAVE EXTRA PULL WIRE INSTALLED TO PULL FUTURE CABLE. COST SHALL BE INCIDENTAL TO TRAFFIC SIGNAL CABLE, NO. 14.
12. INSTALL 9-FT SIGNAL STANDARDS AT (SB9, SB18)
    INSTALL 15-FT SIGNAL STANDARDS AT (SB2, SB6, SB11, SB15)
    INSTALL TYPE 4 (30-FOOT) POLES AT (SB1, SB3, SB5, SB7, SB10, SB12, SB14, SB16)
    INSTALL TYPE 9 MONOTUBE, 30-FOOT ARM AT (SB4, SB8, SB13, SB17)
13. INSTALL PUSH BUTTON SIGNS (SIGN CODE R10-3E, 6"X10") WITH ARROWS POINTING TO THE CROSSWALK ASSOCIATED WITH THE PUSH BUTTONS. SIGNS ARE INCIDENTAL TO THE PED PUSH BUTTONS.
14. RADAR DETECTION UNITS TO BE SUPPLIED AND INSTALLED BY WISDOT.



CONFIGURATION WITH HEAD NUMBERS		
3-V (R Y G)	4-VL (RA YA GA)	PED
2A, 2B, 2C	1A, 1B, 1C	2-1, 2-2
4A, 4B, 4C	3A, 3B, 3C	4-1, 4-2
6A, 6B, 6C	5A, 5B, 5C	6-1, 6-2
8A, 8B, 8C	7A, 7B, 7C	6-3, 6-4
		8-1, 8-2

MONOTUBE STRUCTURE NUMBERS	
BASE #	STRUCTURE #
SB4	S-49-24-1
SB8	S-49-24-2
SB13	S-49-24-3
SB17	S-49-24-4

REVISE WEST LEG INTERSECTION SIGNALS; INSTALL EAST & WEST LEG DETECTORS; REVISE SEQUENCE OF OPERATION.
4/28/1998

INITIAL INSTALLATION
1994

TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY
CABINET TYPE: TS-2
SIGNAL NO. S49-0238 CONTROLLER TYPE: EPAC M51

WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
Date_____ REGION TRAFFIC ENGINEER
APPROVED
Date_____ STATE TRAFFIC ENGINEER

REGION CONTACT: RON JOHNSON
DESIGNED BY: SEH
REVISED BY:

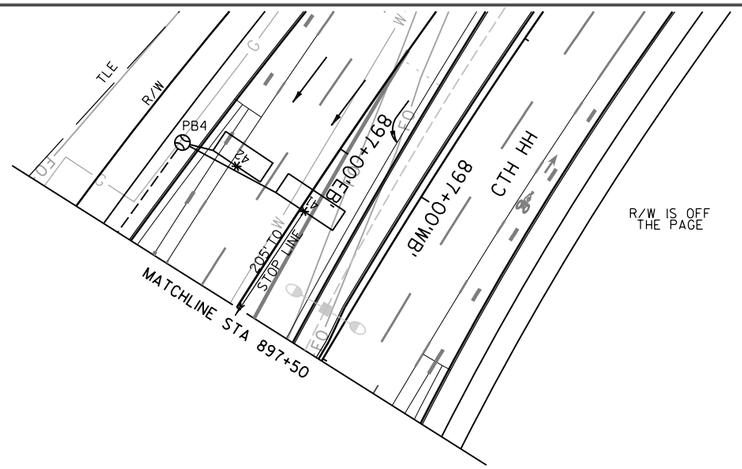
PAGE 1 OF 4

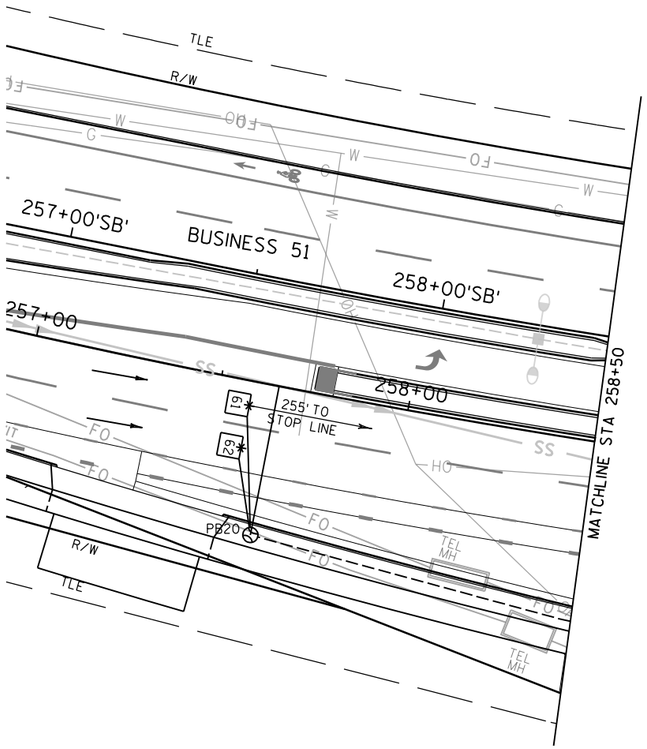
PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC SIGNAL PLAN	SHEET 155 E

FILE NAME : B:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\024035_sp.dgn PLOT TIME : 4:18:11 PM PLOT DATE : 3/21/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

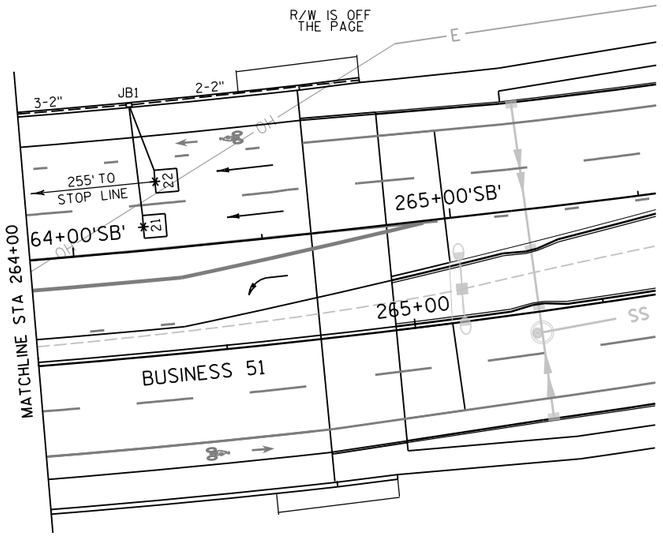
WISDOT/CADDS SHEET 42

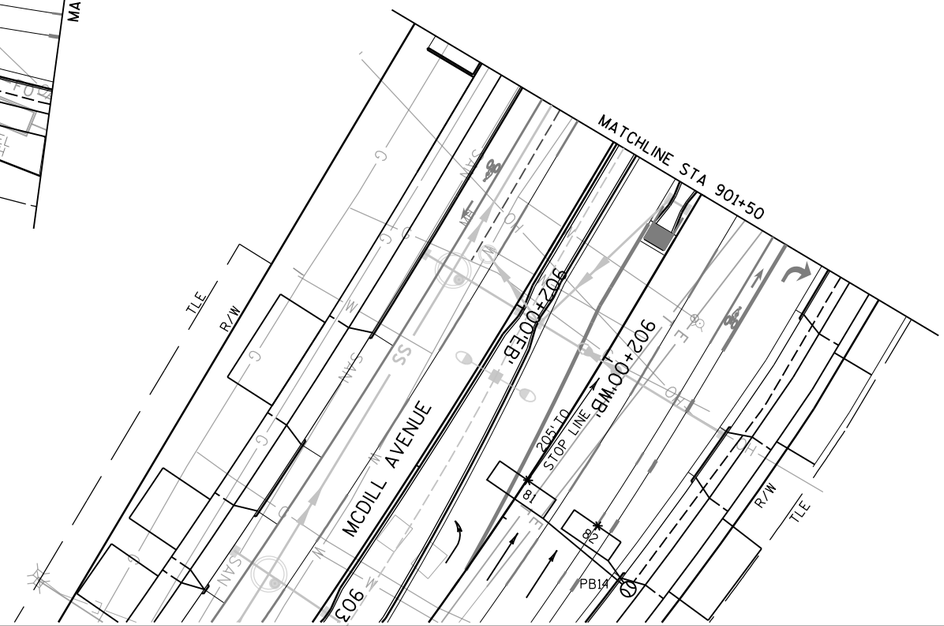
2





SEE "LEGEND AND CONSTRUCTION NOTES" ON MAIN PLAN SHEET





TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO. S49-0238

REGION CONTACT:
DESIGNED BY: SEH
REVISED BY:

PAGE 2 OF 4

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC SIGNAL PLAN	SHEET 156	E

SEQUENCE OF OPERATION









RING 1

	HEAD NUMBERS	Ø1 CLEAR TO R/W	Ø1 CLEAR TO **					Ø2 CLEAR TO R/W	Ø2 CLEAR TO **					Ø3 CLEAR TO R/W	Ø3 CLEAR TO **					Ø4 CLEAR TO R/W	Ø4 CLEAR TO **					FLASH
Ø1	1A,1B,1C	G	-	-				-	-	-				-	-	-				-	-	-				-
Ø2	2A,2B,2C	R	R	R				G	Y	R				R	R	R				R	R	R				R
Ø3	3A,3B,3C	-	-	-				-	-	-				G	-	-				-	-	-				-
Ø4	4A,4B,4C	R	R	R				R	R	R				R	R	R				G	Y	R				R
Ø5	5A,5B,5C	-	-	-				-	-	-				-	-	-				-	-	-				-
Ø6	6A,6B,6C	R	R	R				R	R	R				R	R	R				R	R	R				R
Ø7	7A,7B,7C	-	-	-				-	-	-				-	-	-				-	-	-				-
Ø8	8A,8B,8C	R	R	R				R	R	R				R	R	R				R	R	R				R
OLA	1A,1B,1C	-	Y	R				FY	Y	R				R	R	R				R	R	R				R
OLB	3A,3B,3C	R	R	R				R	R	R				-	Y	R				FY	Y	R				R
OLC	5A,5B,5C	R	R	R				R	R	R				R	R	R				R	R	R				R
OLD	7A,7B,7C	R	R	R				R	R	R				R	R	R				R	R	R				R
Ø2P	2-1,2-2	D	D	D				*	D	D				D	D	D				D	D	D				
Ø4P	4-1,4-2	D	D	D				D	D	D				D	D	D				*	D	D				
Ø6P	6-1,6-2,6-3,6-4	D	D	D				D	D	D				D	D	D				D	D	D				
Ø8P	8-1,8-2	D	D	D				D	D	D				D	D	D				D	D	D				









RING 2

	HEAD NUMBERS	Ø5 CLEAR TO R/W	Ø5 CLEAR TO **					Ø6 CLEAR TO R/W	Ø6 CLEAR TO **					Ø7 CLEAR TO R/W	Ø7 CLEAR TO **					Ø8 CLEAR TO R/W	Ø8 CLEAR TO **				
Ø1	1A,1B,1C	-	-	-				-	-	-				-	-	-				-	-	-			
Ø2	2A,2B,2C	R	R	R				R	R	R				R	R	R				R	R	R			
Ø3	3A,3B,3C	-	-	-				-	-	-				-	-	-				-	-	-			
Ø4	4A,4B,4C	R	R	R				R	R	R				R	R	R				R	R	R			
Ø5	5A,5B,5C	G	-	-				-	-	-				-	-	-				-	-	-			
Ø6	6A,6B,6C	R	R	R				G	Y	R				R	R	R				R	R	R			
Ø7	7A,7B,7C	-	-	-				-	-	-				G	-	-				-	-	-			
Ø8	8A,8B,8C	R	R	R				R	R	R				R	R	R				G	Y	R			
OLA	1A,1B,1C	R	R	R				R	R	R				R	R	R				R	R	R			
OLB	3A,3B,3C	R	R	R				R	R	R				R	R	R				R	R	R			
OLC	5A,5B,5C	-	Y	R				FY	Y	R				R	R	R				R	R	R			
OLD	7A,7B,7C	R	R	R				R	R	R				-	Y	R				FY	Y	R			
Ø2P	2-1,2-2	D	D	D				D	D	D				D	D	D				D	D	D			
Ø4P	4-1,4-2	D	D	D				D	D	D				D	D	D				D	D	D			
Ø6P	6-1,6-2,6-3,6-4	D	D	D				*	D	D				D	D	D				D	D	D			
Ø8P	8-1,8-2	D	D	D				D	D	D				D	D	D				*	D	D			

FY=FLASHING YELLOW

BARRIER

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29
DETECTOR #(S)	61	11	21	51	41	43	45	47	71	81	83	85	87	31		
CALLS & EXTENDS	X	X	X	X		X	X	X	X		X	X	X	X		
CALLS ONLY																
EXTENDS ONLY					X					X						
PHASE CALLED	6	1	2	5		4	4	4	7		8	8	8	3		
PHASE EXTENDED	6	1	2	5	4	4	4	4	7	8	8	8	8	3		
DISCONNECT PHASE																
CALLING DELAY								X					X			
EXTENSION STRETCH					X					X						
SIZE	6x6	6x20	6x6	6x20	6x18	6x20	6x20	6x20	6x20	6x18	6x20	6x20	6x20	6x20		
NUMBER OF TURNS	4	3	4	3	3	3	3	3	3	3	3	3	3	3		
DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30
DETECTOR #(S)	62	12	22	52	42	44	46	48	72	82	84	86	88	32		
CALLS & EXTENDS	X	X	X	X		X	X	X	X		X	X	X	X		
CALLS ONLY																
EXTENDS ONLY					X					X						
PHASE CALLED	6	1	2	5		4	4	4	7		8	8	8	3		
PHASE EXTENDED	6	1	2	5	4	4	4	4	7	8	8	8	8	3		
DISCONNECT PHASE																
CALLING DELAY								X					X			
EXTENSION STRETCH					X					X						
SIZE	6x6	6x20	6x6	6x20	6x15	6x20	6x20	6x20	6x20	6x16	6x20	6x20	6x20	6x20		
NUMBER OF TURNS	4	3	4	3	3	3	3	3	3	3	3	3	3	3		

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

TYPE OF PRE-EMPT	
NONE	x
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

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

SPECIAL OVERLAPS

	PROTECTED	PERMISSIVE
OLA	1	2
OLB	3	4
OLC	5	6
OLD	7	8

CONTROLLER LOGIC

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

N

CHART 1

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

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

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

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. WHEN OPPOSING THRU PHASES ARE TIMING CONCURRENTLY THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO. S49-0238

CONTROLLER TYPE: EPAC M51

DATE 09/17

FILE NAME : B:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\024039_sp.dgn PLOT TIME : 4:18:13 PM PLOT DATE : 3/21/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A
WISDOT/CADDS SHEET 42

2

DETECTOR LOGIC

	BIU 11							
DETECTOR INPUT	35	33	39	37	43	41	47	45
DETECTOR #(S)		WT BIKE 49						
CALLS & EXTENDS		X						
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED		4						
PHASE EXTENDED		4						
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE		50 FT						
NUMBER OF TURNS		NA						
DETECTOR INPUT	36	34	40	38	44	42	48	46
DETECTOR #(S)		WT BIKE 89						
CALLS & EXTENDS		X						
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED		8						
PHASE EXTENDED		8						
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE		50 FT						
NUMBER OF TURNS		NA						

WAVETRONIX DETECTOR ASSIGNMENTS (FOR "BIKE DETECTION")

BIU 12							
51	49	55	53	59	57	63	61
52	50	56	54	60	58	64	62

TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH HH
VILLAGE OF PLOVER
PORTAGE COUNTY

SIGNAL NO. S49-0238

CONTROLLER TYPE: EPAC M51

DATE 09/17

FILE NAME : B:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\024039A_sp.dgn PLOT TIME : 4:18:18 PM PLOT DATE : 3/21/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

WISDOT/CADDS SHEET 42

2

PROJECT ID:	6414-00-81
INTERSECTION:	B51 @ CTH HH, S49-0238

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

					SIGNAL INDICATION WIRE COLOR									
CB1 TO	JUMPER	AWG 14 # OF COND.	HEAD NO.	PHASE	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING> <YELLOW>	D/WALK	WALK	PED BUTTON
SB1		12	4A	4	RED	ORG	GRN							
			3C	3				RED/BLK	ORG/BLK	GRN/BLK				
			3C	CLB							BLK			
			2-2	PED 2								BLK/WHT	BLU/BLK	WHT/BLK
SB2		9	3B	3				RED	ORG	GRN				
			3B	CLB							BLK			
				PED 2										WHT/BLK
SB3		5	7A	7				RED	ORG	GRN				
			7A	CLD							BLK			
SB4		9	8B, 8C	8	RED	ORG	GRN							
			2-1	PED 2								BLK	BLU	WHT/BLK
SB5		12	1C	1				RED/BLK	ORG/BLK	GRN/BLK				
			1C	CLA							BLK			
			2A	2	RED	ORG	GRN							
			8-2	PED 8								BLK/WHT	BLU/BLK	WHT/BLK
SB6		9	1B	1				RED	ORG	GRN				
			1B	CLA							BLK			
				PED 8										WHT/BLK
SB7		5	5A	5				RED	ORG	GRN				
			5A	CLC							BLK			
SB8		5	6B, 6C	6	RED	ORG	GRN							
SB9		5	8-1	PED 8								RED	GRN	WHT/BLK
SB10		12	7C	7				RED/BLK	ORG/BLK	GRN/BLK				
			7C	CLD							BLK			
			8A	8	RED	ORG	GRN							
			6-4	PED 6								BLK/WHT	BLU/BLK	WHT/BLK
SB11		9	7B	7				RED	ORG	GRN				
			7B	CLD							BLK			
			6-3, 6-2	PED 6								RED/BLK	BRN/BLK	WHT/BLK
SB12		5	3A	3				RED	ORG	GRN				
			3A	CLB							BLK			
SB13		9	4B, 4C	4	RED	ORG	GRN							
			6-1	PED 6								BLK	BLU	WHT/BLK
SB14		12	6A	6	RED	ORG	GRN							
			5C	5				RED/BLK	ORG/BLK	GRN/BLK				
			5C	CLC							BLK			
			4-2	PED 4								BLK/WHT	BLU/BLK	WHT/BLK
SB15		9	5B	5				RED	ORG	GRN				
			5B	CLC							BLK			
				PED 4										WHT/BLK
SB16		5	1A	1				RED	ORG	GRN				
			1A	CLA							BLK			
SB17		5	2B, 2C	2	RED	ORG	GRN							
SB18		5	4-1	PED 4								RED	GRN	WHT/BLK

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GREEN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	SB14
SB14	SB15
SB15	SB16
SB16	SB17
SB17	SB18
SB18	CB1

PULL BOX BONDING JUMPER 10 AWG GREEN XLP	
FROM	TO

LIGHTING UF #12/2 W/GROUND	
FROM	TO
CB1	SB1
CB1	SB3
CB1	SB5
CB1	SB7
CB1	SB10
CB1	SB12
CB1	SB14
CB1	SB16

EMERGENCY VEHICLE PREEMPTION	
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 PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
"OTHER" COLUMN MAY INCLUDE SHADOW BOX SIGN

LEGEND

- PEDESTAL MOUNT TYPE I BASE
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- PULL BOX, STEEL, 24" X 42"
- LANE DESIGNATION (FOR REFERENCE ONLY)

2

N

W CEDAR STREET

E CEDAR STREET

LOCUST STREET

BUSINESS 51

BUSINESS 51

R/W

TLE

SB1

SB2

SB3

PB1

TEL MH

CONDUIT

83+00

84+00

85+00

86+00

235+00

236+00

237+00

238+00

239+00

240+00

11+00

2

LEGEND

- PEDESTAL MOUNT TYPE I BASE
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- PULL BOX, STEEL, 24" X 42"
- LANE DESIGNATION (FOR REFERENCE ONLY)

N

TLE
R/W
SB6
PB2
SB5
SB4
248+00
249+00
250+00
251+00
252+00
253+00
E ELM STREET
00+96
CONDUIT
FO
SAN
SS
OH
TEL MH
TEL PED
MH

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PEDESTRAIN CROSSINGS	SHEET 161	E

2

LEGEND

- PEDESTAL MOUNT TYPE 1 BASE
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- PULL BOX, STEEL, 24" X 42"
- LANE DESIGNATION (FOR REFERENCE ONLY)

N

R/W

1+00'BL'

SB7

BUSINESS 51

266+00'SB'

267+00'SB'

268+00'SB'

269+00'SB'

267+00

268+00

269+00

270+00

271+00

272+00

PB3

SB6

SB5

SB4

E

SS

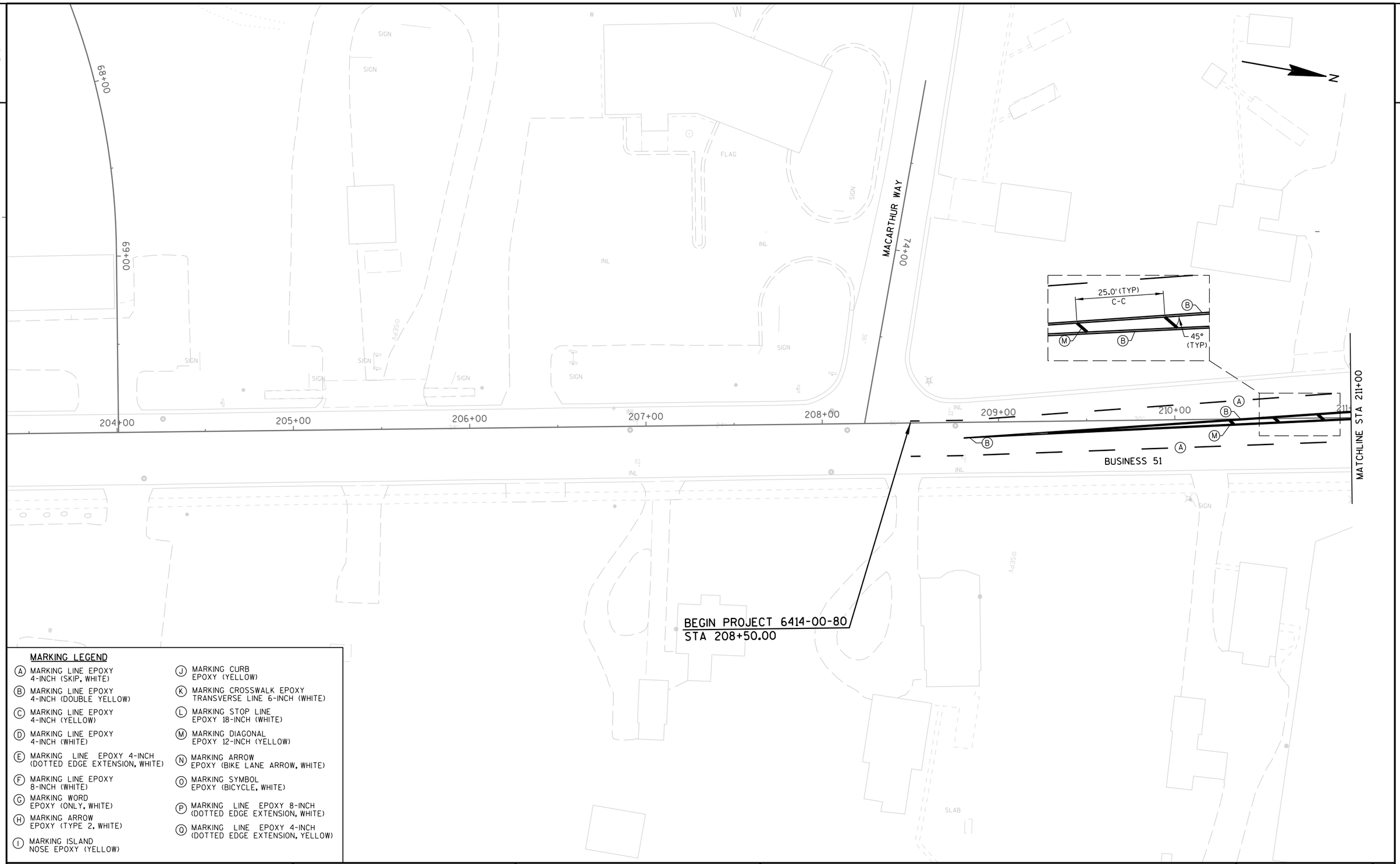
R/W

R/W

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PEDESTRIAN CROSSINGS	SHEET 162	E

2

2

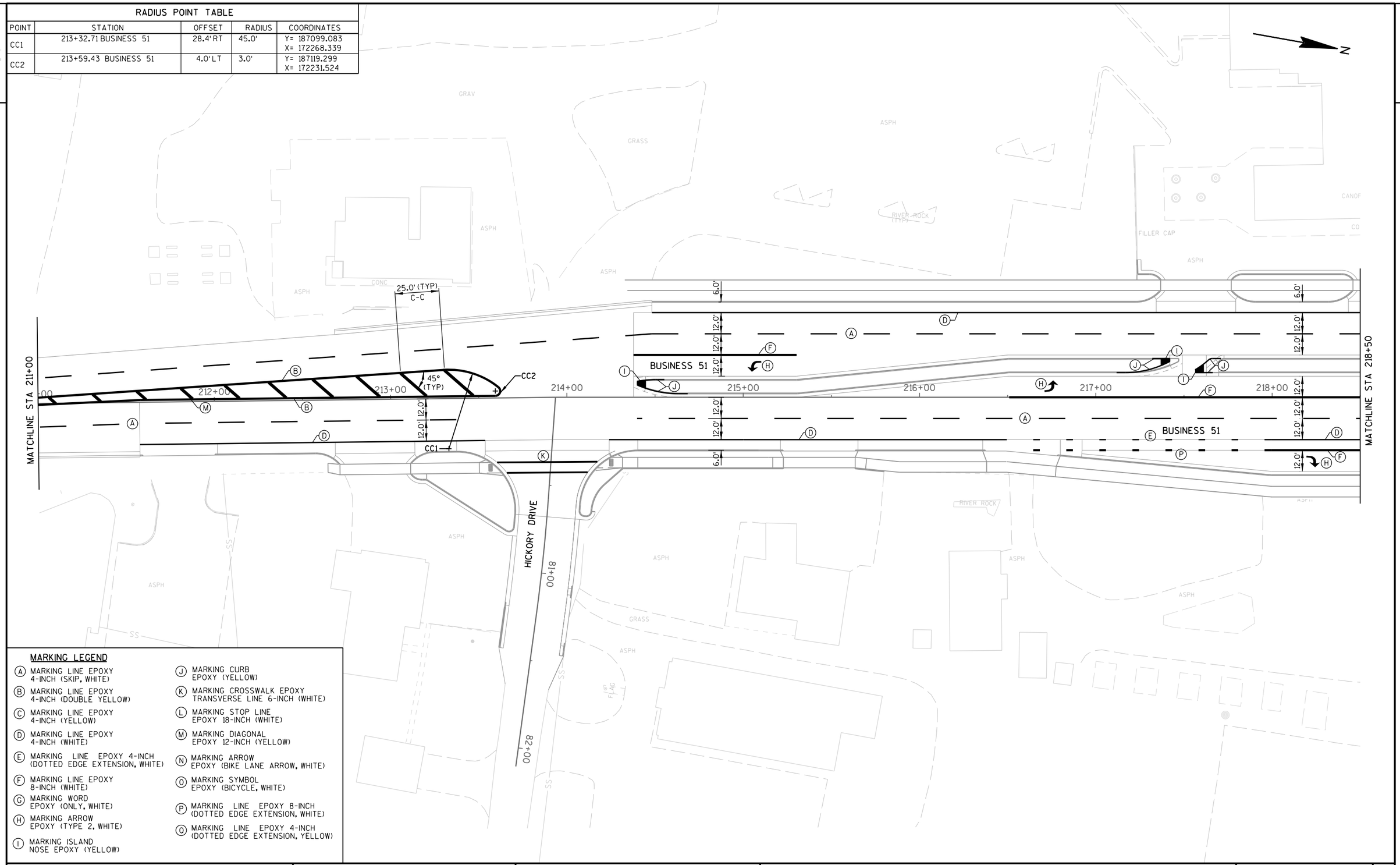


MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (SKIP, WHITE)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (YELLOW)
- (D) MARKING LINE EPOXY 4-INCH (WHITE)
- (E) MARKING LINE EPOXY 4-INCH (DOTTED EDGE EXTENSION, WHITE)
- (F) MARKING LINE EPOXY 8-INCH (WHITE)
- (G) MARKING WORD EPOXY (ONLY, WHITE)
- (H) MARKING ARROW EPOXY (TYPE 2, WHITE)
- (I) MARKING ISLAND NOSE EPOXY (YELLOW)
- (J) MARKING CURB EPOXY (YELLOW)
- (K) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (L) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (M) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (N) MARKING ARROW EPOXY (BIKE LANE ARROW, WHITE)
- (O) MARKING SYMBOL EPOXY (BICYCLE, WHITE)
- (P) MARKING LINE EPOXY 8-INCH (DOTTED EDGE EXTENSION, WHITE)
- (Q) MARKING LINE EPOXY 4-INCH (DOTTED EDGE EXTENSION, YELLOW)

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 163	E

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	213+32.71 BUSINESS 51	28.4' RT	45.0'	Y= 187099.083 X= 172268.339
CC2	213+59.43 BUSINESS 51	4.0' LT	3.0'	Y= 187119.299 X= 172231.524



MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (SKIP, WHITE)
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2

2

N

MATCHLINE STA 218+50

MATCHLINE STA 226+00

BUSINESS 51

BUSINESS 51

TOMMY'S TURNPIKE

PORTER DRIVE

219+00

220+00

221+00

222+00

223+00

224+00

225+00

226

SIDEWALK

ASPH

SLAB

ASPH SIDEWALK

ASPH

SIGN

PHONE

FLAG

ASPH

CONC

GRAV

WOOD CURB

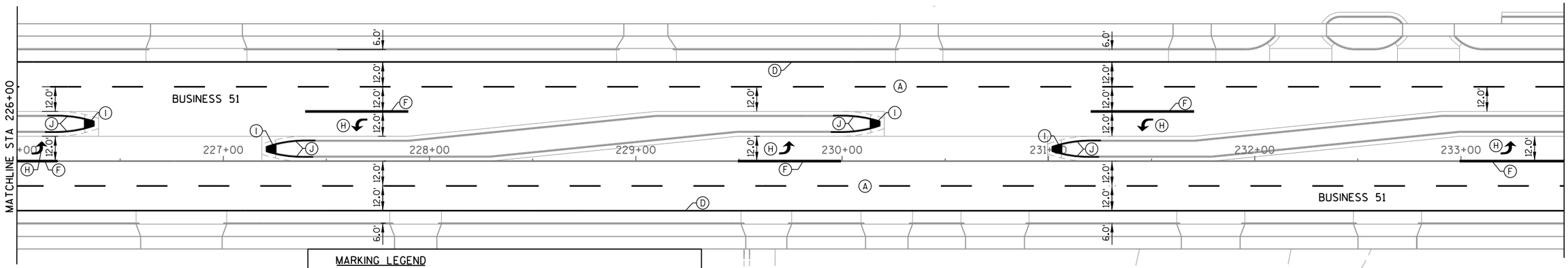
ASPH

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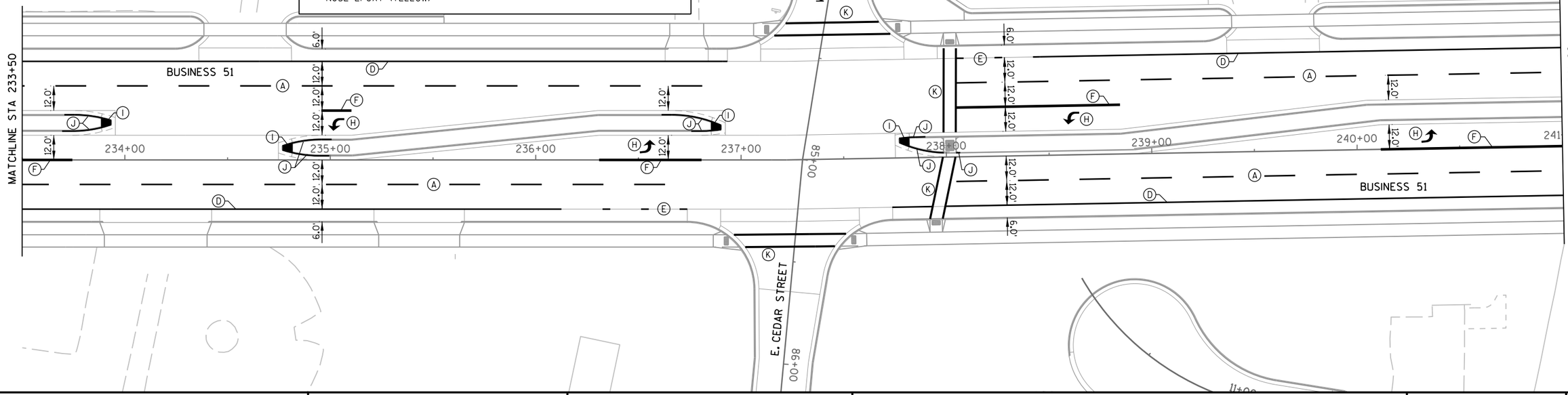
PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 165	E

2



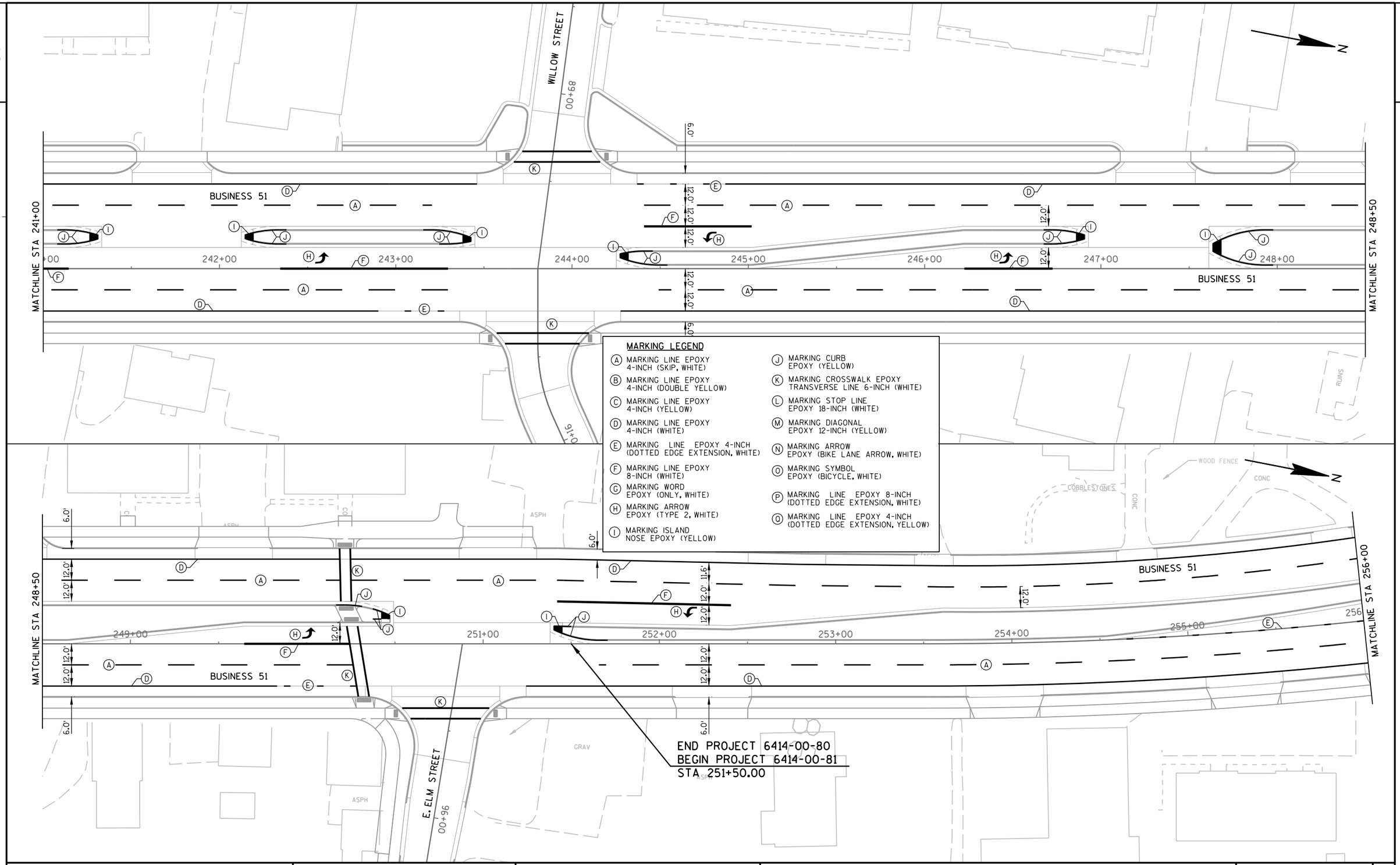
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PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 166	E

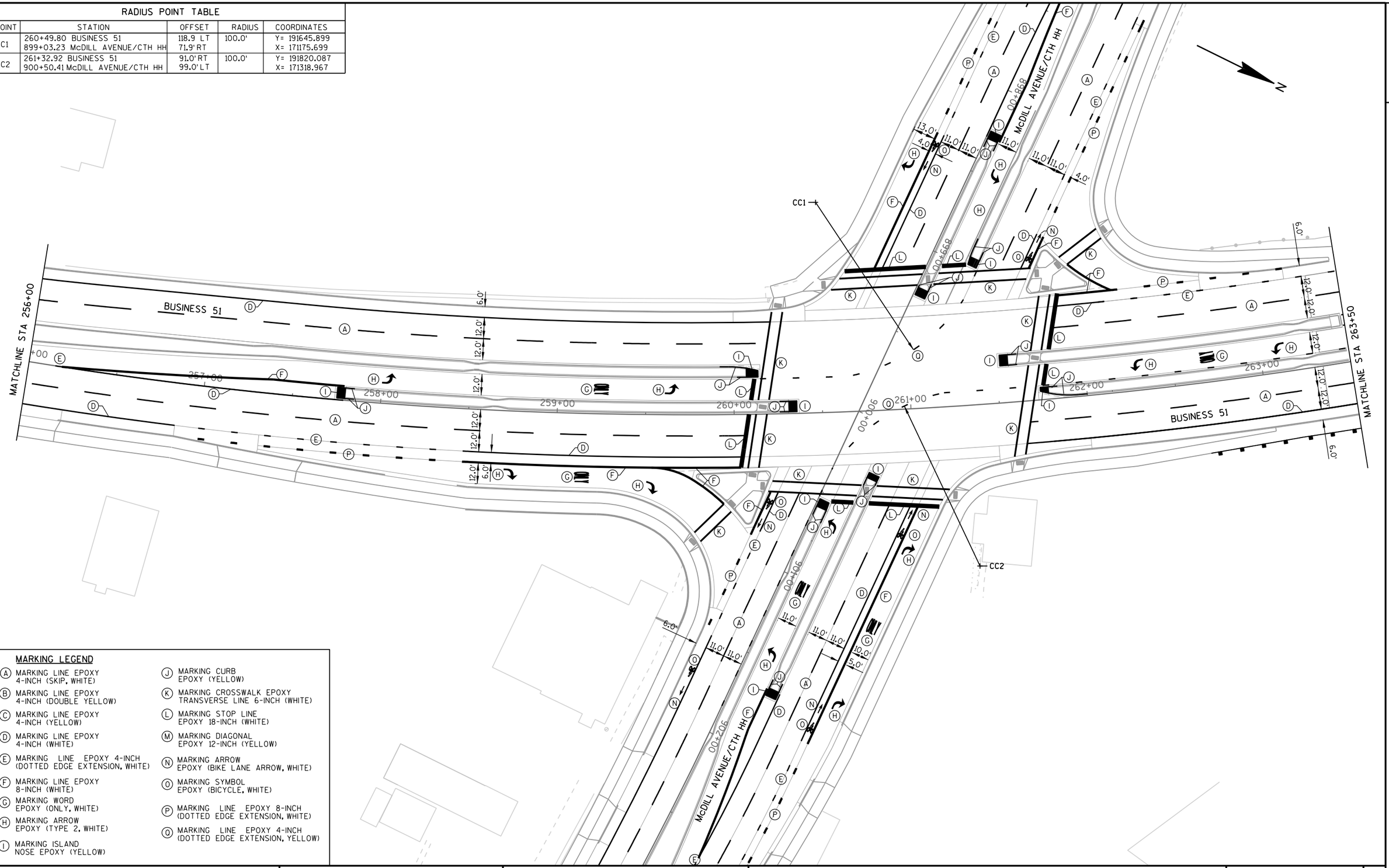
2



PROJECT NO: 6414-00-80, 81	HWY: BUSINESS 51	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 167	E

2

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	260+49.80 BUSINESS 51 899+03.23 McDILL AVENUE/CTH HH	118.9' LT 71.9' RT	100.0'	Y= 191645.899 X= 171175.699
CC2	261+32.92 BUSINESS 51 900+50.41 McDILL AVENUE/CTH HH	91.0' RT 99.0' LT	100.0'	Y= 191820.087 X= 171318.967

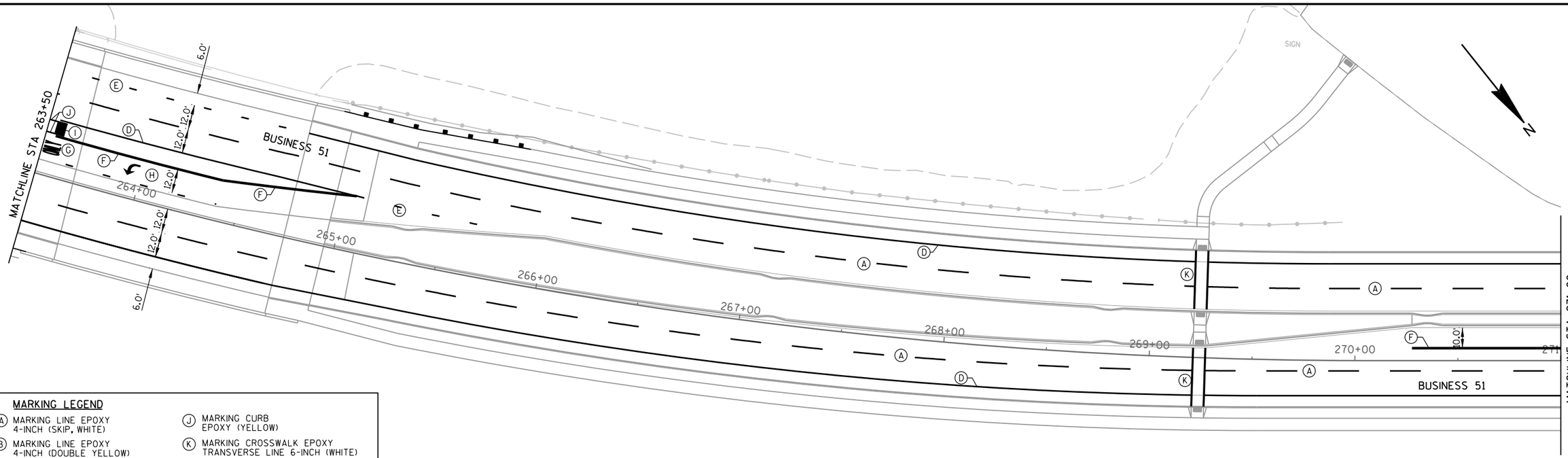


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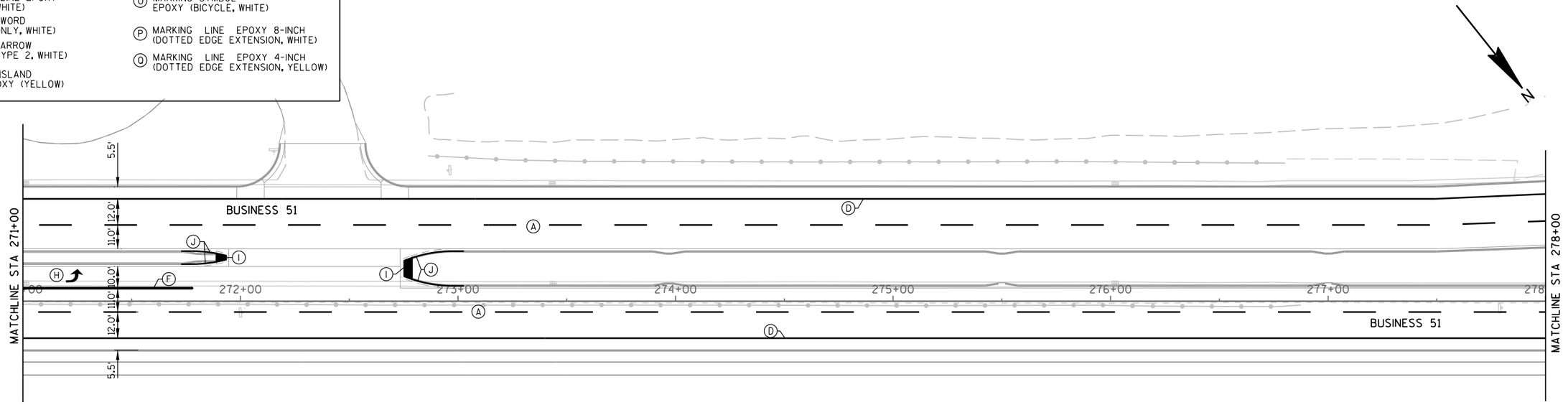
PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 168	E

2



MARKING LEGEND

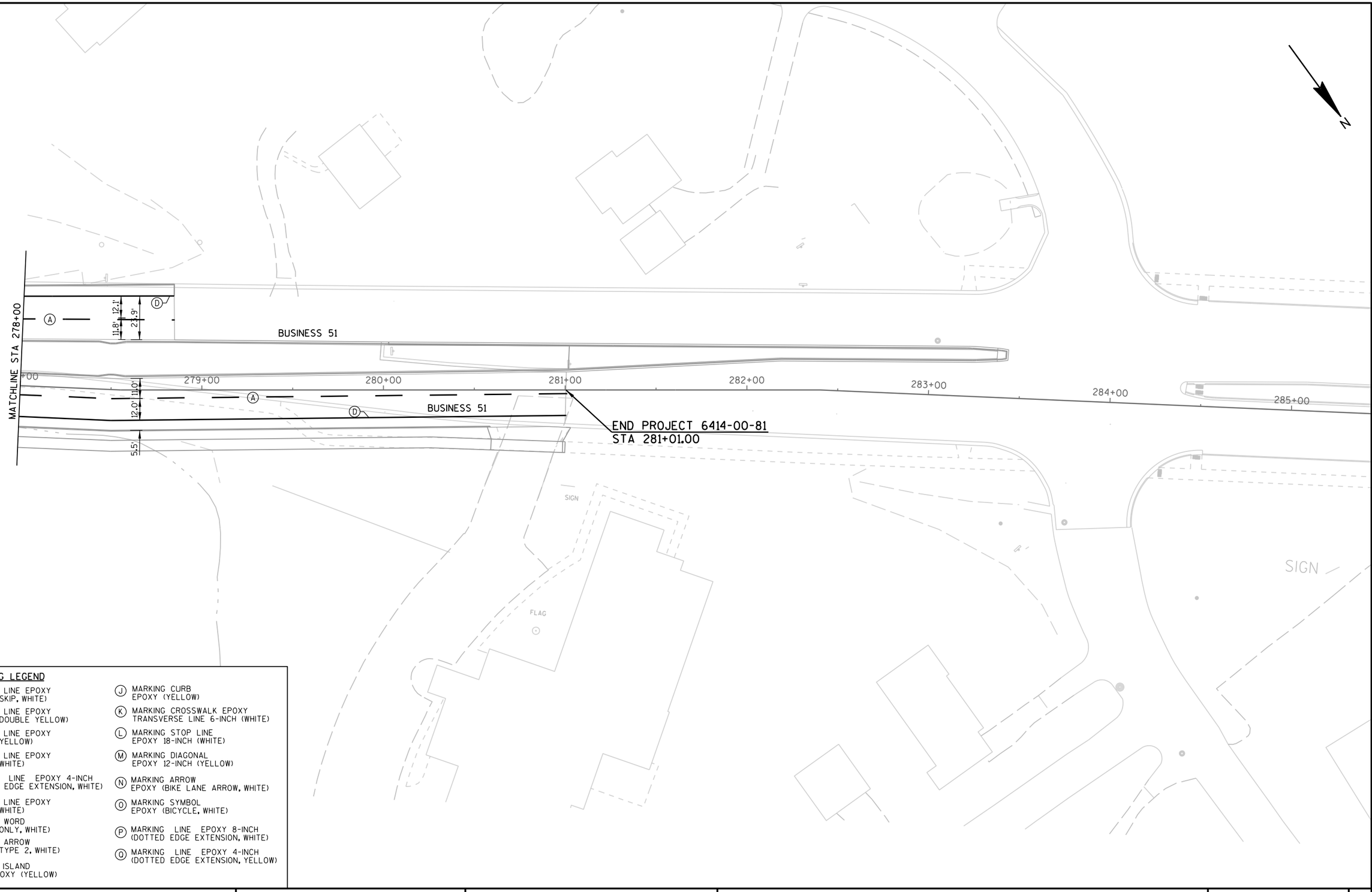
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PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 169	E

2

2



MARKING LEGEND

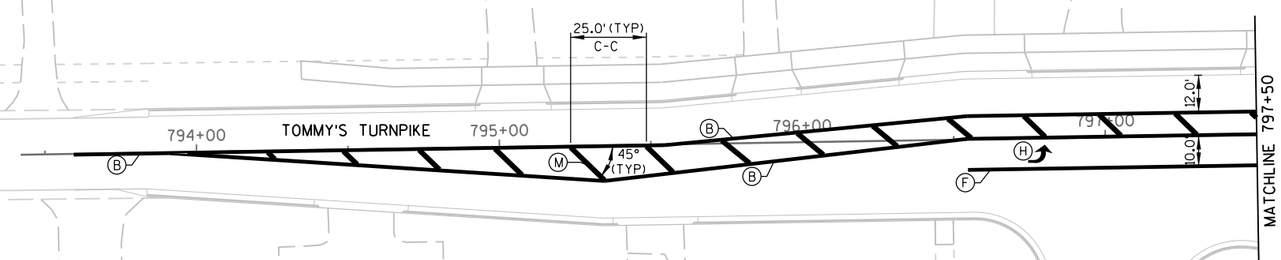
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PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 170	E

2

2

N



MARKING LEGEND

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PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 171	E

2

N

BUSINESS 51

TOMMY'S TURNPIKE

PORTER DRIVE

MATCHLINE 797+50

799+00

802+00

803+00

222+00

220+00

219+00

12.0'

6.0'

6.5'

4.0'

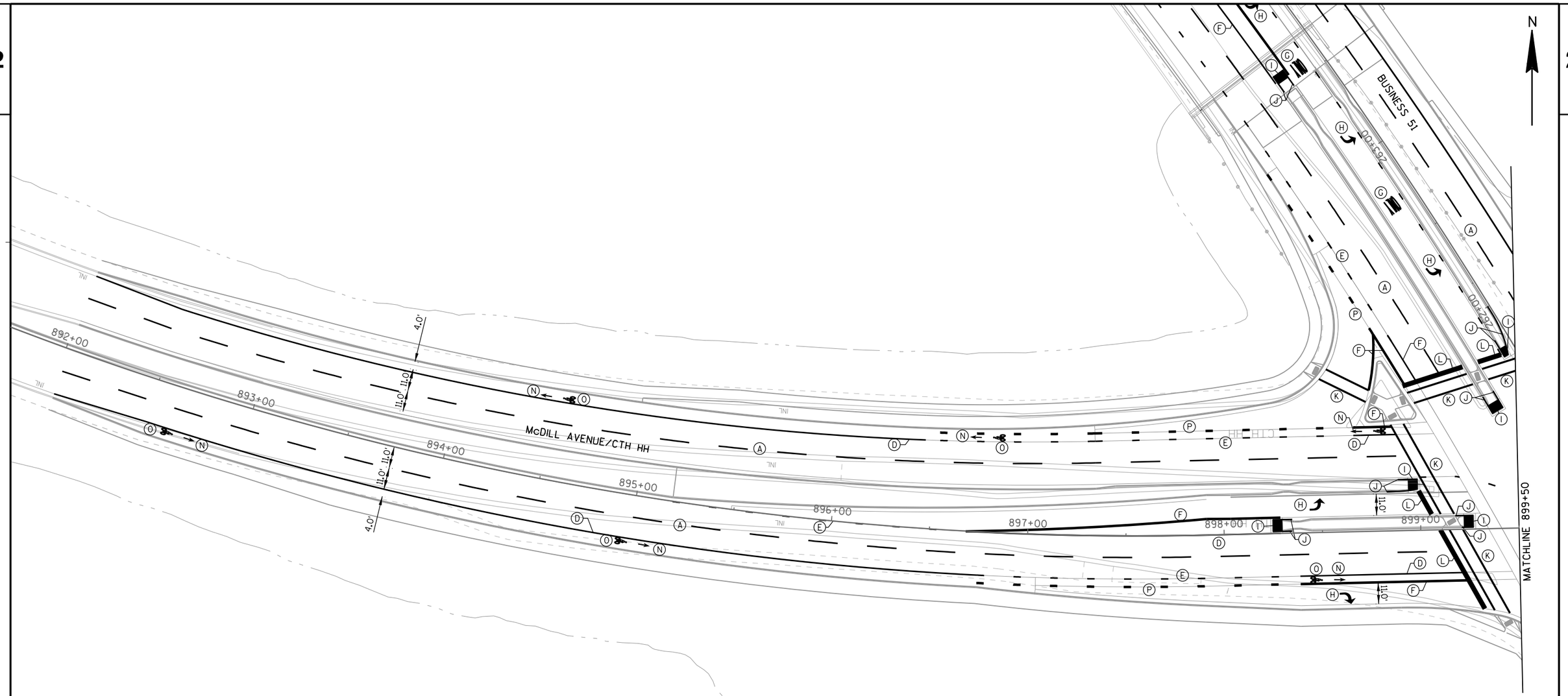
CANOPY

MARKING LEGEND

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PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 172	E

2

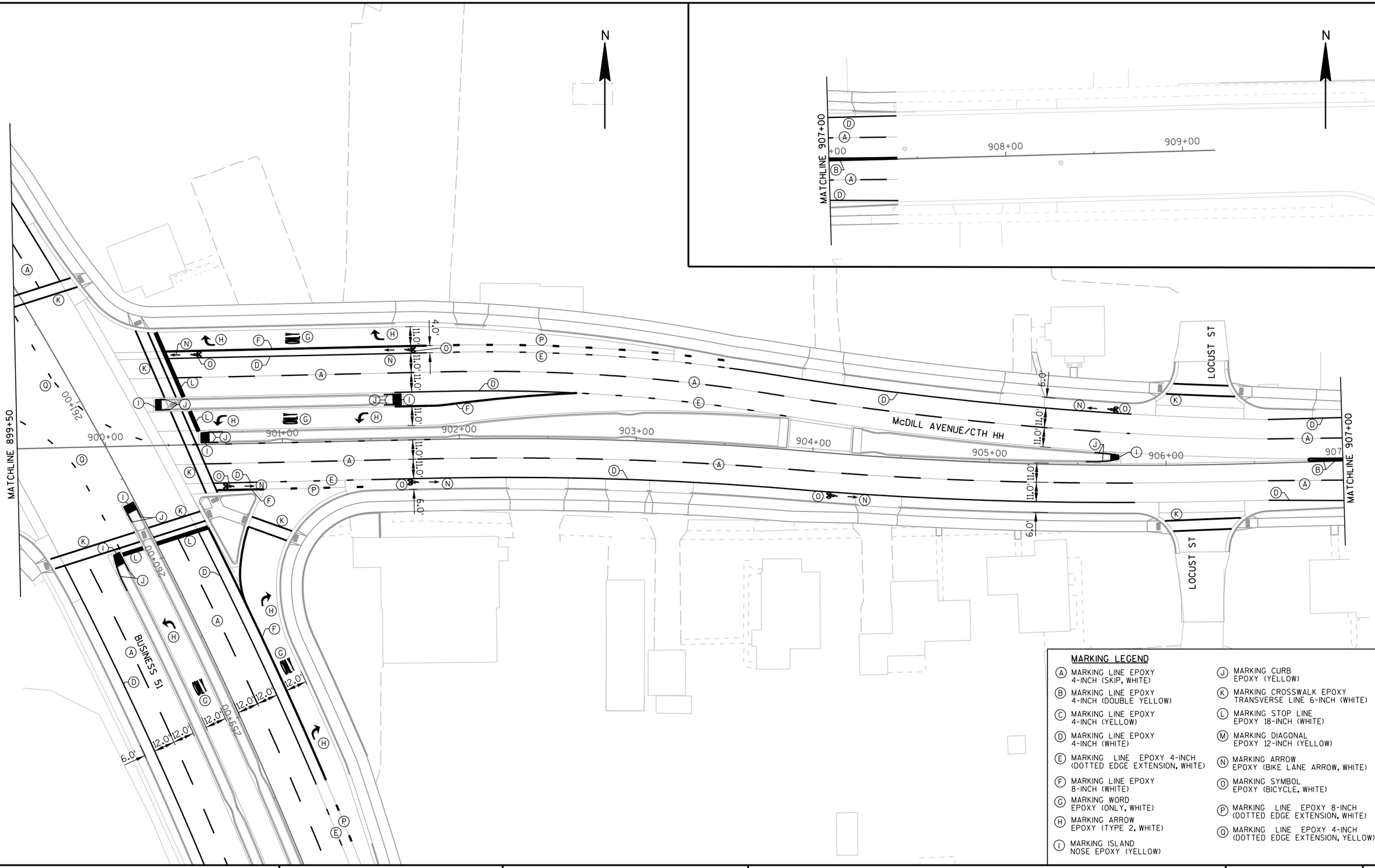


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PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 173	E

2

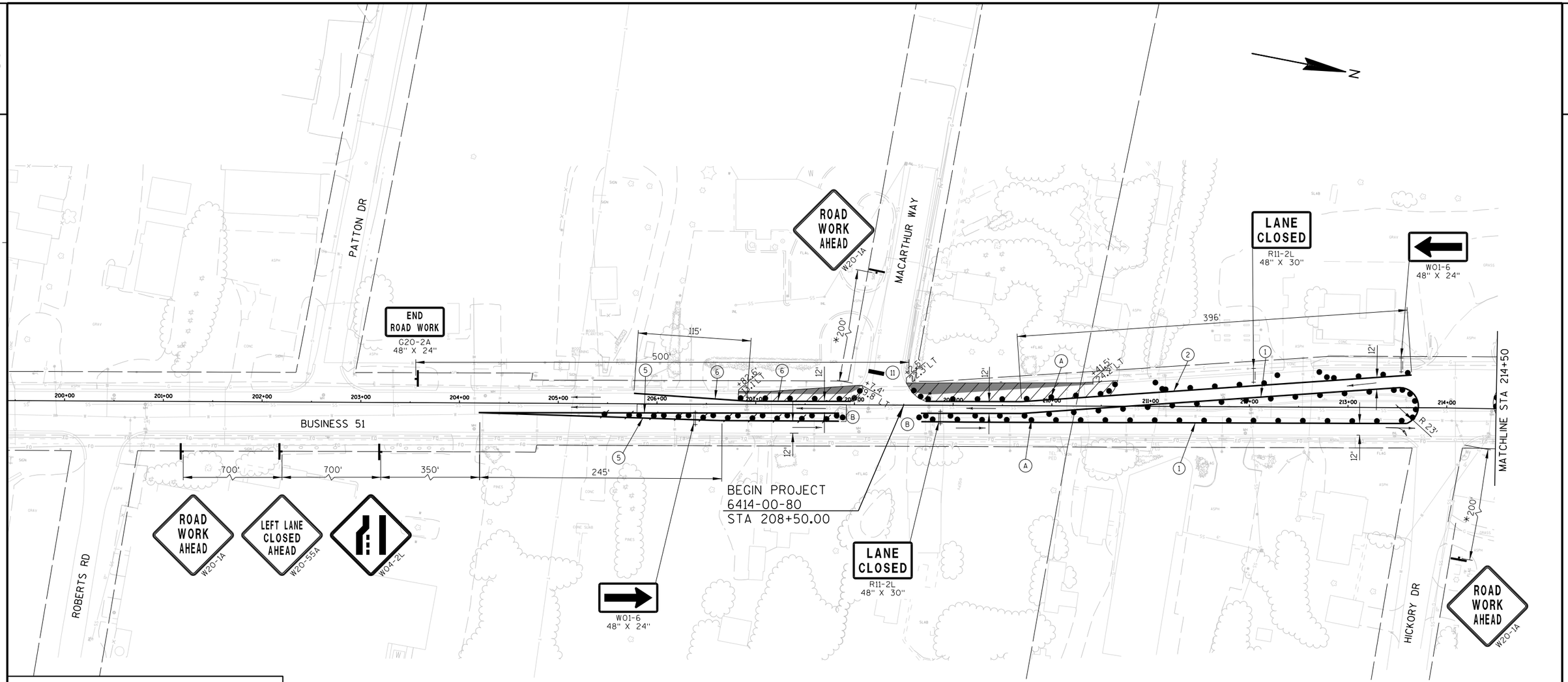


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PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 174	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

STAGE 1 DESCRIPTION:

TRAFFIC ON BUSINESS 51 AND CTH HH SHALL BE REDUCED TO ONE LANE IN EACH DIRECTION AND SHALL REMAIN THIS WAY THROUGHOUT CONSTRUCTION. UNLESS NOTED OTHERWISE IN STAGES 1A THRU 1D, TRAFFIC SHALL UTILIZE THE EXISTING OUTSIDE LANES OF BUSINESS 51 AND CTH HH. THE PURPOSE OF STAGE 1 IS TO REPLACE CENTER MEDIANS AND WIDEN BUSINESS 51 WITH TEMPORARY PAVEMENT WHERE SHOWN, INSTALL THE SOUTH PORTION OF THE STORM SEWER TRUNK LINE, AND INSTALL THE TEMPORARY SIDEWALK IN ADVANCE OF STAGE 2. THROUGH LANES SHALL BE A MINIMUM OF 12 FEET WIDE AND TURN LANES SHALL BE A MINIMUM OF 10 FEET WIDE THROUGHOUT ALL STAGES OF CONSTRUCTION, UNLESS NOTED OTHERWISE.

STAGE 1A DESCRIPTION:

THE PURPOSE OF STAGE 1A IS TO WIDEN BUSINESS 51 AND PLACE TEMPORARY PAVEMENT IN ADVANCE OF INSTALLING THE STORM SEWER TRUNK LINE FROM MH 4 TO INLET 8A IN STAGE 1B. THE INSTALLATION OF THE TEMPORARY SIDEWALK NORTH OF HICKORY DRIVE CAN BE OCCURING DURING THIS STAGE.

SHEET NOTES

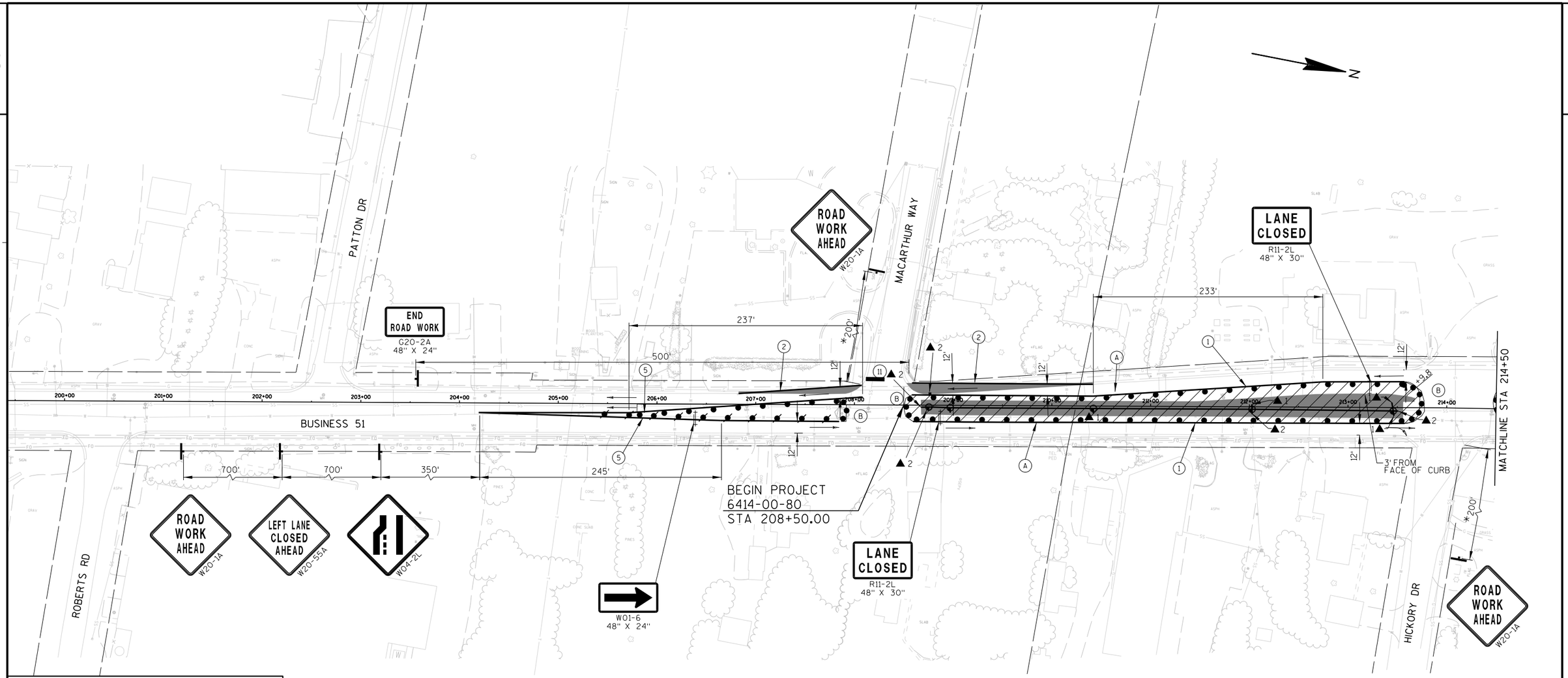
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (1) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)
- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVERABLE TAPE 4-INCH (WHITE)
- (11) USE EXISTING PAVEMENT MARKING

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 1A	SHEET 175	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

STAGE 1B DESCRIPTION:

THE PURPOSE OF STAGE 1B IS TO INSTALL THE STORM SEWER TRUNK LINE FROM MH 4 TO INLET 8A AND REPLACE THE CENTER MEDIAN WITH TEMPORARY PAVEMENT. THE INSTALLATION OF THE TEMPORARY SIDEWALK NORTH OF HICKORY DRIVE CAN BE OCCURING DURING THIS STAGE.

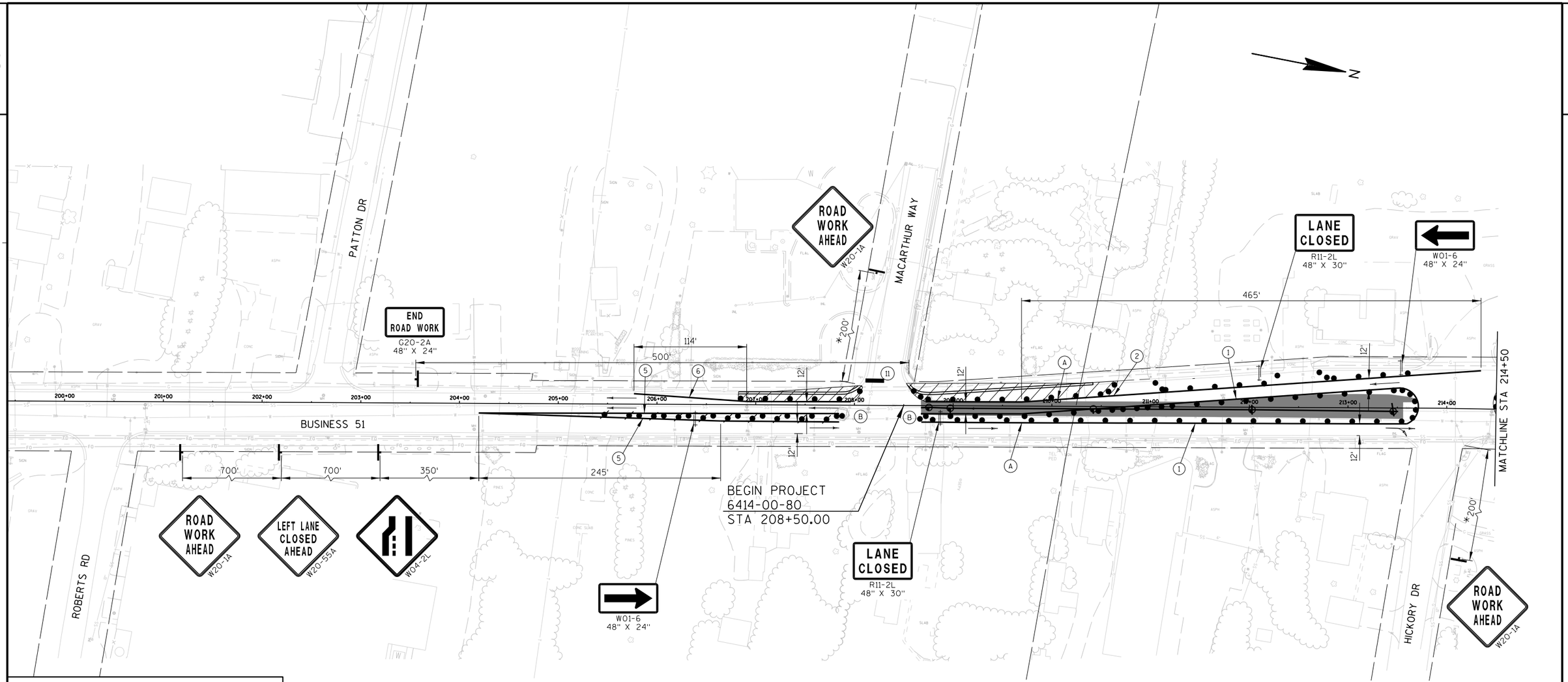
SHEET NOTES

- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (1) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)
- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (11) USE EXISTING PAVEMENT MARKING

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

STAGE 1C DESCRIPTION:

THE PURPOSE OF STAGE 1C IS TO REMOVE THE TEMPORARY ASPHALT PLACED IN STAGE 1A AND INSTALL THE SOUTHBOUND OUTSIDE CURB & GUTTER AND ENTRANCE APRON REMOVED IN STAGE 1A. THE INSTALLATION OF THE TEMPORARY SIDEWALK NORTH OF HICKORY DRIVE CAN BE OCCURING DURING THIS STAGE. THE TEMPORARY SIDEWALK SOUTH OF HICKORY DRIVE MAY BE INSTALLED DURING THIS STAGE.

SHEET NOTES

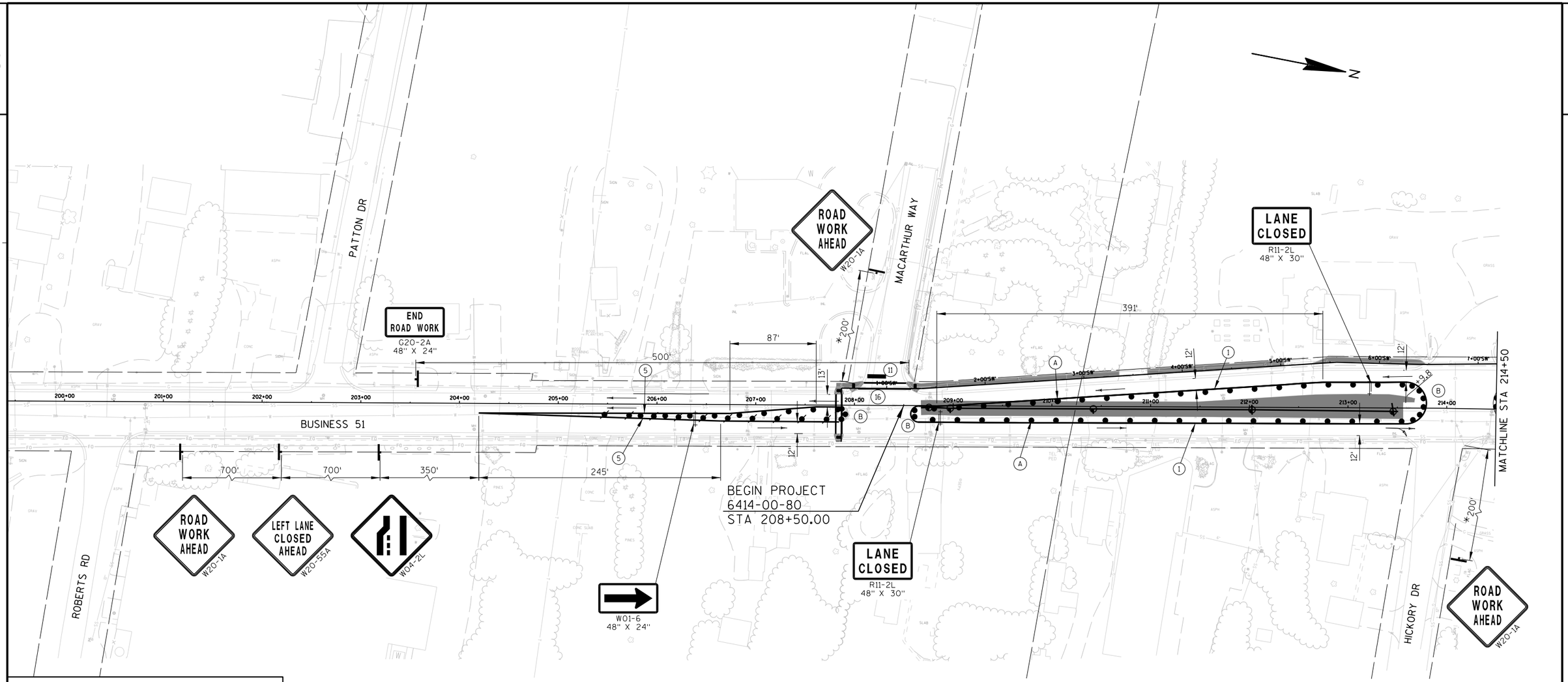
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (1) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)
- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE 4-INCH (WHITE)
- (11) USE EXISTING PAVEMENT MARKING

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 1C	SHEET 177	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

STAGE 1D DESCRIPTION:

THE PURPOSE OF STAGE 1D IS TO INSTALL TEMPORARY SIDEWALK FROM MACARTHUR WAY TO HICKORY DRIVE. THE INSTALLATION OF THE TEMPORARY SIDEWALK NORTH OF HICKORY DRIVE CAN BE OCCURING DURING THIS STAGE.

SHEET NOTES

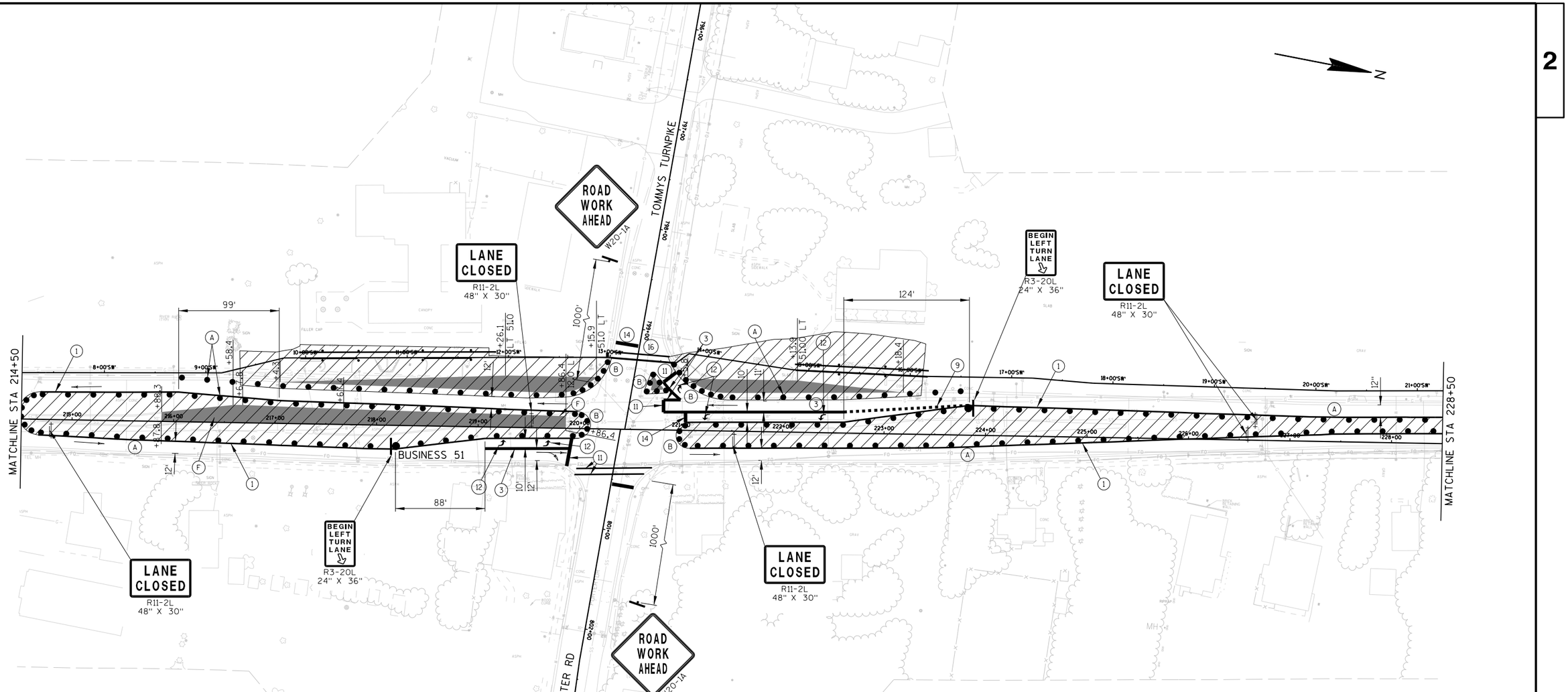
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (1) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)
- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (11) USE EXISTING PAVEMENT MARKING
- (14) TEMPORARY MARKING STOP LINE PAINT 18-INCH (WHITE)
- (16) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 1D	SHEET 178	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

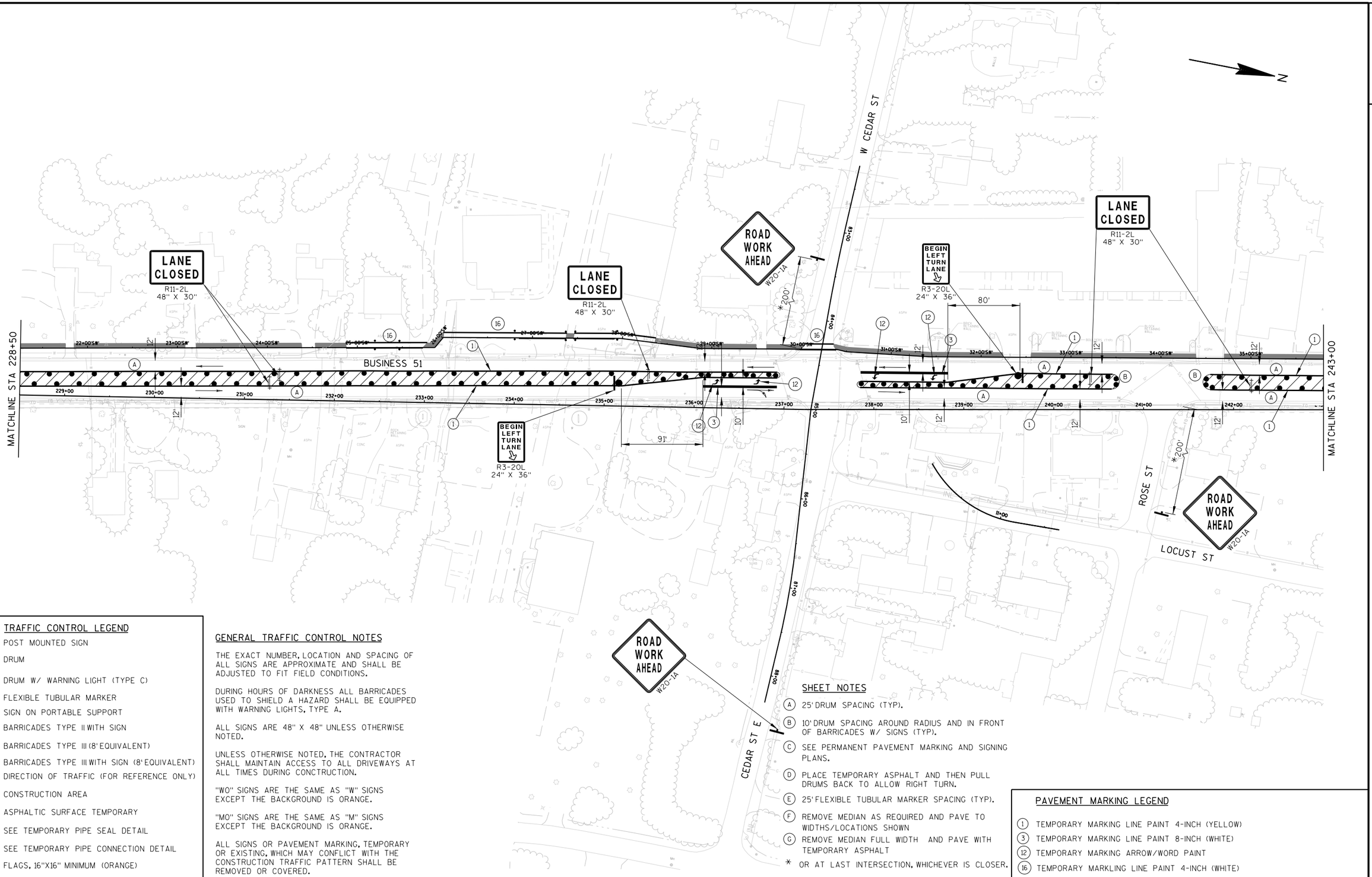
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- (F) REMOVE MEDIAN AS REQUIRED AND PAVE TO WIDTHS/LOCATIONS SHOWN
- (G) REMOVE MEDIAN FULL WIDTH AND PAVE WITH TEMPORARY ASPHALT
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (1) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)
- (3) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
- (9) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE, SHORT SKIP)
- (11) USE EXISTING PAVEMENT MARKING
- (12) TEMPORARY MARKING ARROW/WORD PAINT
- (14) TEMPORARY MARKING STOP LINE PAINT 18-INCH (WHITE)
- (15) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 4-INCH (WHITE)
- (16) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)

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2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

(F) REMOVE MEDIAN AS REQUIRED AND PAVE TO WIDTHS/LOCATIONS SHOWN

(G) REMOVE MEDIAN FULL WIDTH AND PAVE WITH TEMPORARY ASPHALT

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

(1) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)

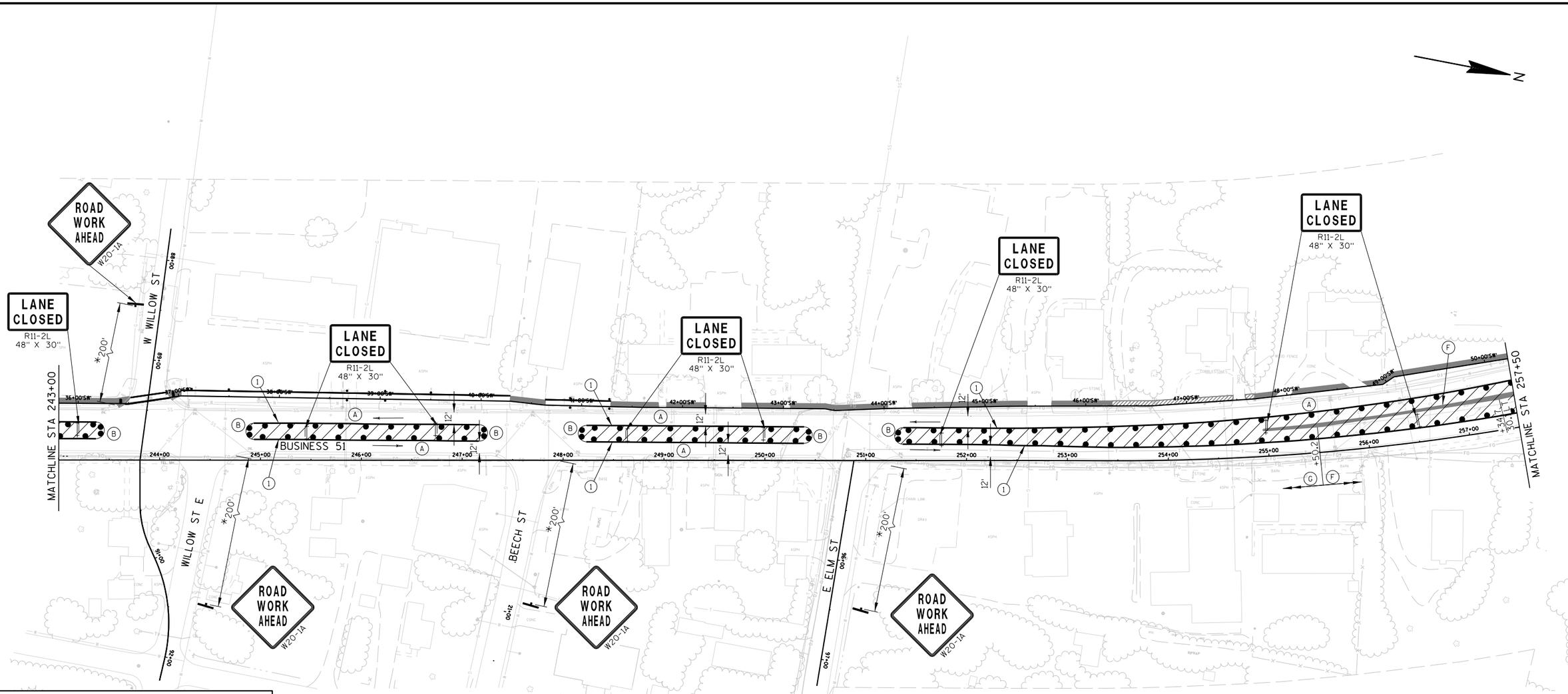
(3) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)

(12) TEMPORARY MARKING ARROW/WORD PAINT

(16) TEMPORARY MARKLING LINE PAINT 4-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 1	SHEET 180	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

(F) REMOVE MEDIAN AS REQUIRED AND PAVE TO WIDTHS/LOCATIONS SHOWN

(G) REMOVE MEDIAN FULL WIDTH AND PAVE WITH TEMPORARY ASPHALT

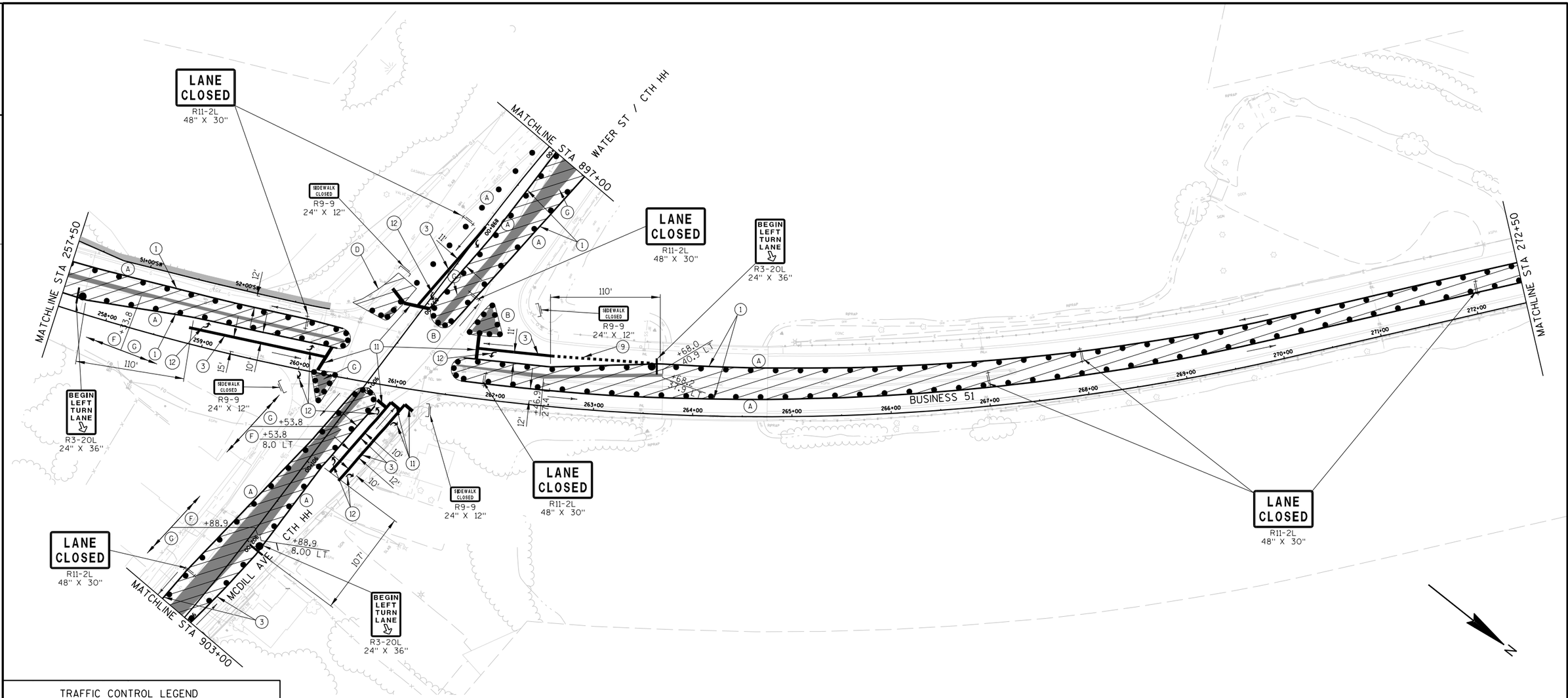
* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

(1) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 1	SHEET 181	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

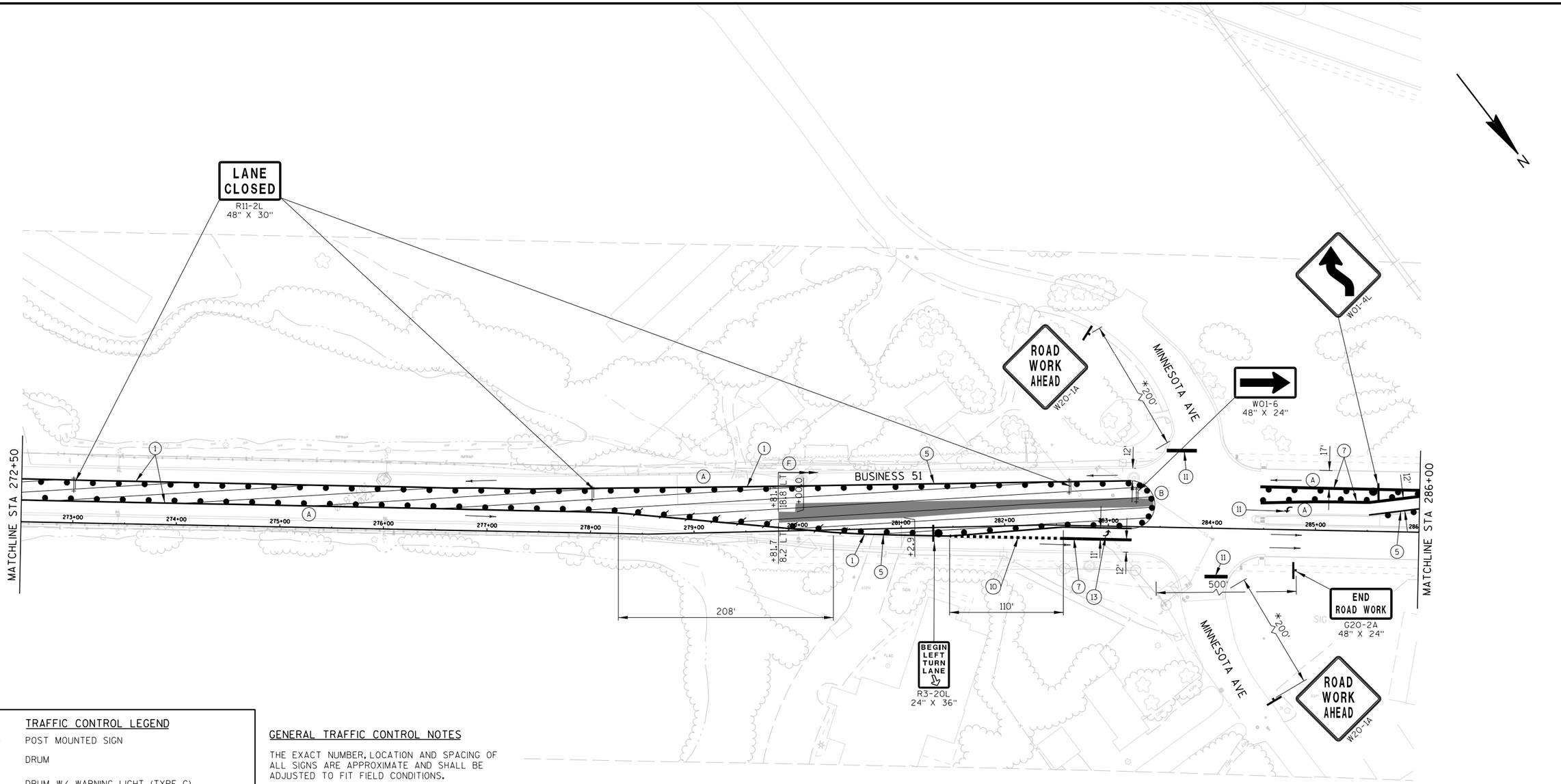
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- (F) REMOVE MEDIAN AS REQUIRED AND PAVE TO WIDTHS/LOCATIONS SHOWN
- (G) REMOVE MEDIAN FULL WIDTH AND PAVE WITH TEMPORARY ASPHALT
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (1) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)
- (3) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
- (9) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE, SHORT SKIP)
- (11) USE EXISTING PAVEMENT MARKING
- (12) TEMPORARY MARKING ARROW/WORD PAINT

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2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

(F) REMOVE MEDIAN AS REQUIRED AND PAVE TO WIDTHS/LOCATIONS SHOWN

(G) REMOVE MEDIAN FULL WIDTH AND PAVE WITH TEMPORARY ASPHALT

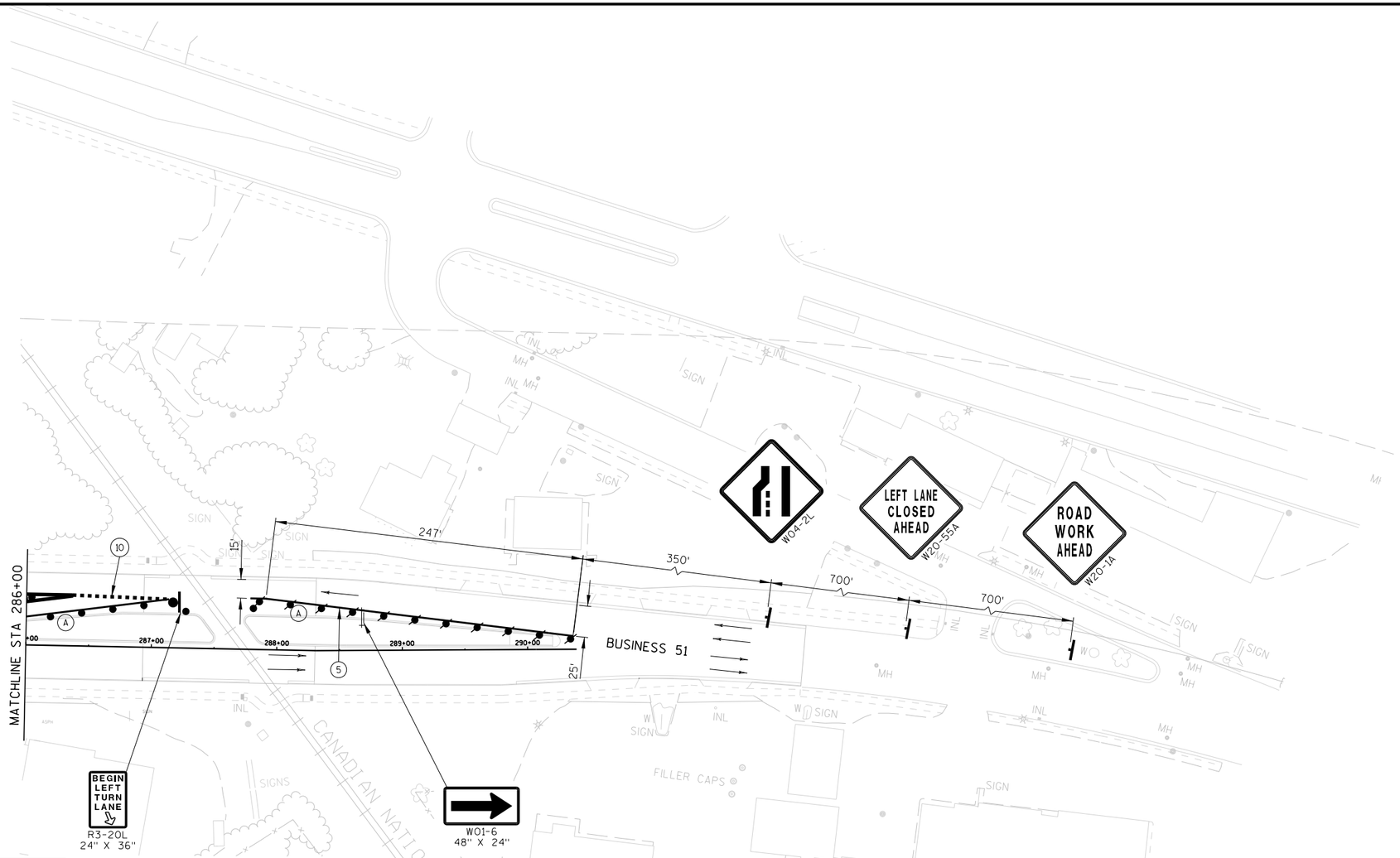
* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

(1) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)
(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
(7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
(10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)
(11) USE EXISTING PAVEMENT MARKING
(13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 1	SHEET 183	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

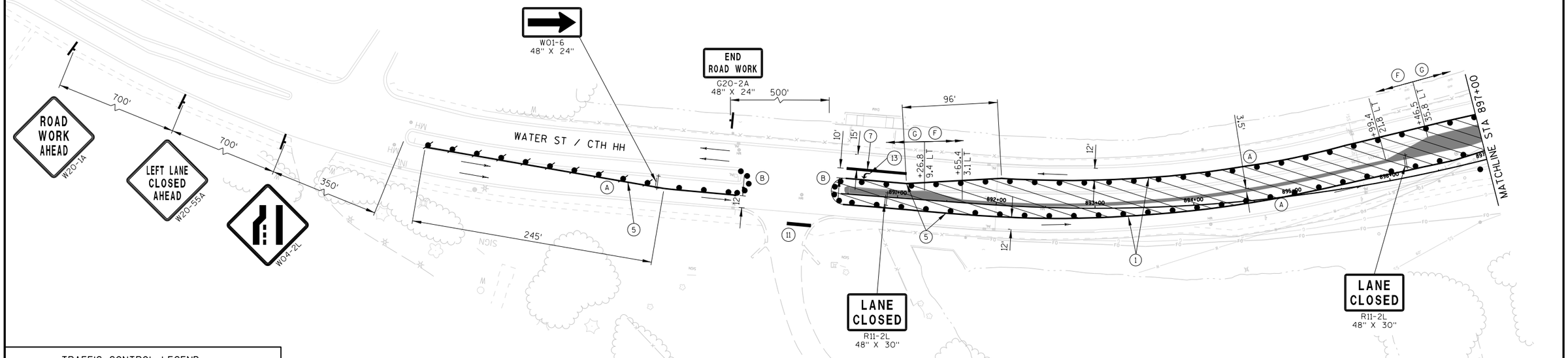
PAVEMENT MARKING LEGEND

(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

(10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 1	SHEET 184	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

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SHEET NOTES

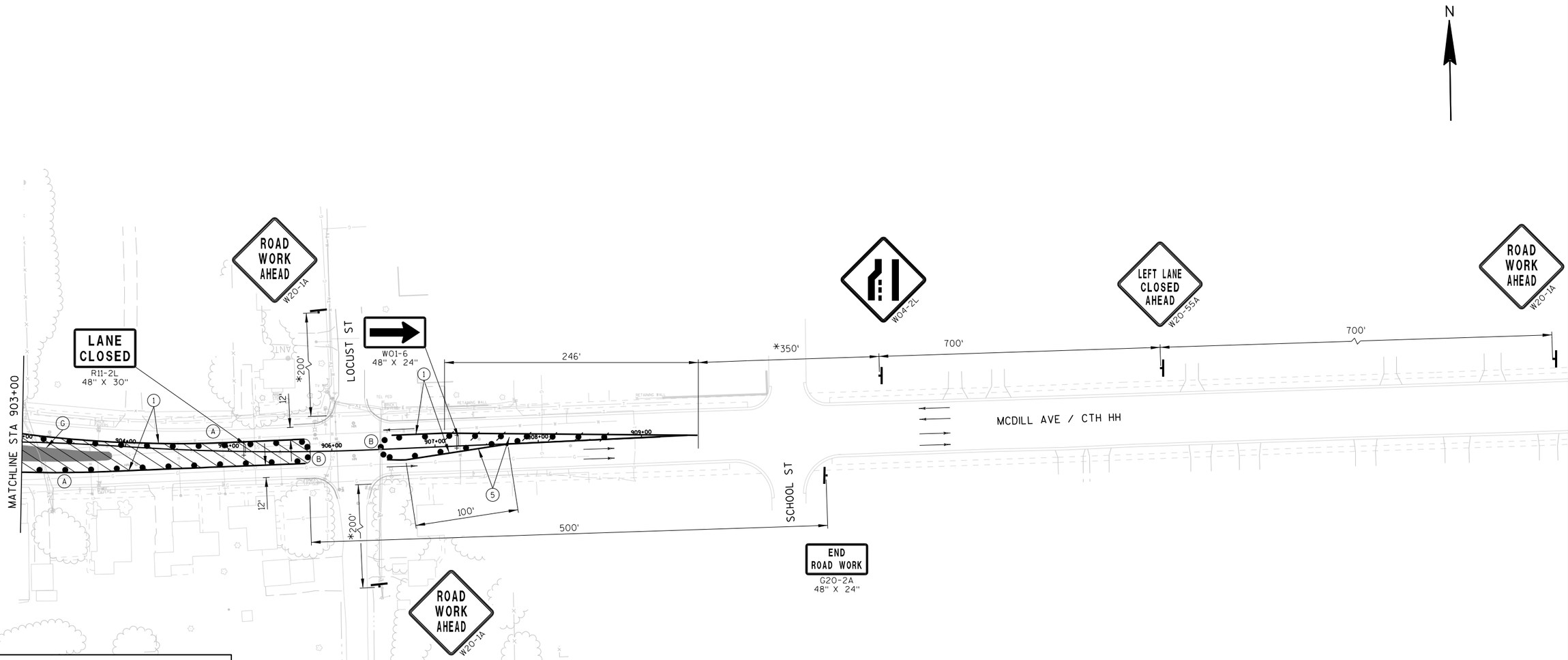
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- (F) REMOVE MEDIAN AS REQUIRED AND PAVE TO WIDTHS/LOCATIONS SHOWN
- (G) REMOVE MEDIAN FULL WIDTH AND PAVE WITH TEMPORARY ASPHALT
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (1) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)
- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
- (11) USE EXISTING PAVEMENT MARKING
- (13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 1	SHEET 185	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
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- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

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SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

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(F) REMOVE MEDIAN AS REQUIRED AND PAVE TO WIDTHS/LOCATIONS SHOWN

(G) REMOVE MEDIAN FULL WIDTH AND PAVE WITH TEMPORARY ASPHALT

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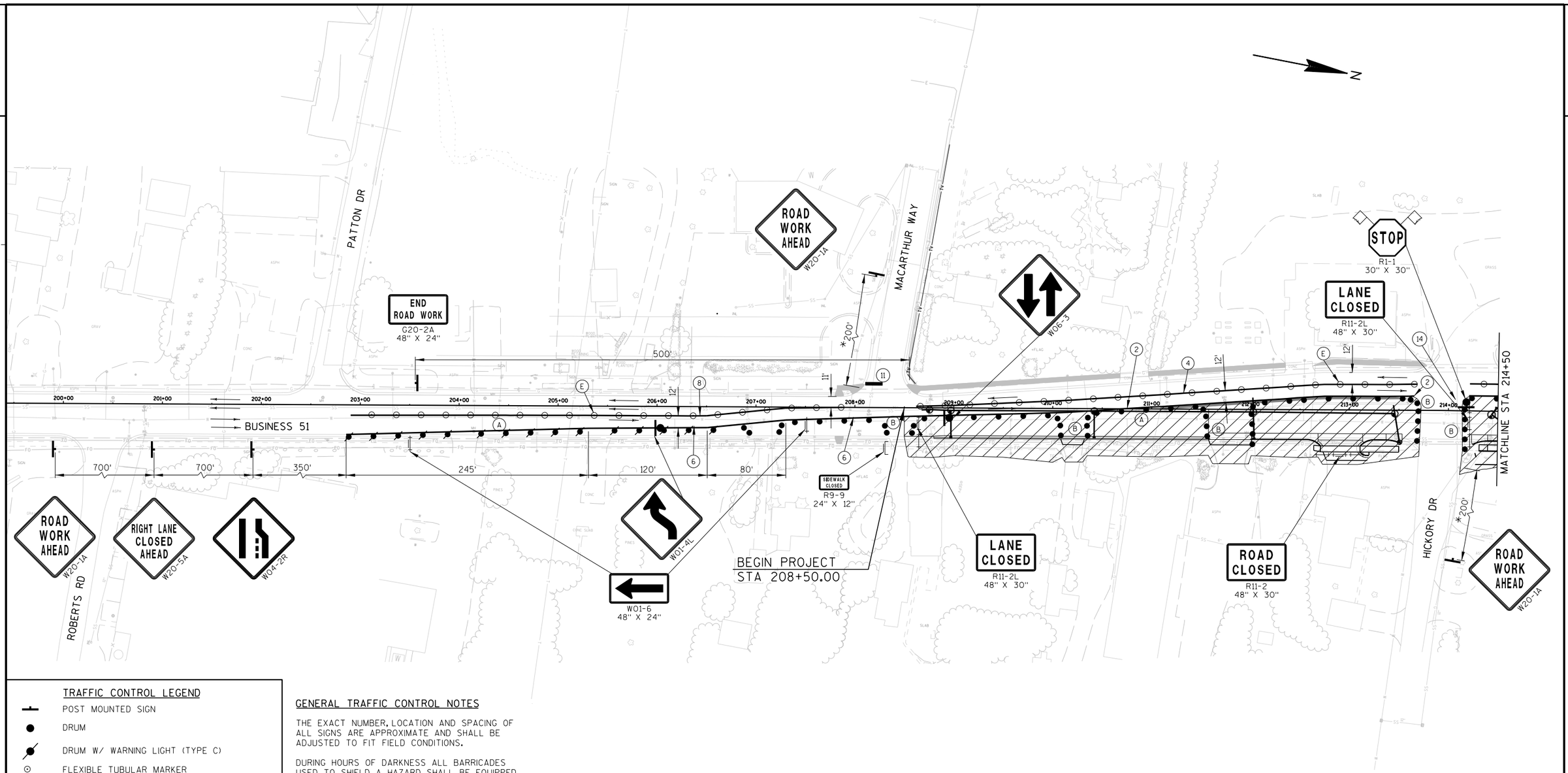
PAVEMENT MARKING LEGEND

(1) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)

(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 1	SHEET 186	E

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TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
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- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
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GENERAL TRAFFIC CONTROL NOTES

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

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STAGE 2A DESCRIPTION:

BUSINESS 51 TRAFFIC IS SHIFTED TO THE WEST SIDE WHILE THE EAST SIDE IS CONSTRUCTED. CTH HH TRAFFIC IS SHIFTED TO THE SOUTH SIDE AS THE NORTH SIDE IS CONSTRUCTED. PORTER RD AND WILLOW ST SHALL BE CLOSED WHILE BEING RECONSTRUCTED. CEDAR ST AND ELM ST SHALL REMAIN OPEN TO TRAFFIC.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

(2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)

(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

(8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

(11) USE EXISTING PAVEMENT MARKING

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2A	SHEET 187	E

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N

TOMMYS TURNPIKE

W06-3

W01-4L

ROAD WORK AHEAD
W20-1A

1000'

102'

MATCHLINE STA 214+50

MATCHLINE STA 228+50

BUSINESS 51

PORTER RD

R3-2
24" X 24"

LANE CLOSED
R11-2L
96" 48" X 30"

W01-4R

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

W06-3

LANE CLOSED
R11-2L
48" X 30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

PLACE AT LAST INTERSECTION PRIOR TO CLOSURE

ROAD CLOSED AHEAD
W20-3A

TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
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- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
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SHEET NOTES

- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (3) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
- (4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- (9) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE, SHORT SKIP)
- (12) TEMPORARY MARKING ARROW/WORD PAINT
- (14) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2A	SHEET 188	E

2

N

MATCHLINE STA 228+50

MATCHLINE STA 243+00

BUSINESS 51

W CEDAR ST

CEDAR ST E

LOCUST ST

ROSE ST

W06-3

ROAD WORK AHEAD
W20-1A

LANE CLOSED
R11-2L
48" X 30"

102'

*200'

STOP
R1-1
30" X 30"

103'

W01-4L

W06-3

ROAD CLOSED
R11-2
48" X 30"

W01-4R

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

ROAD WORK AHEAD
W20-1A

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ROAD WORK AHEAD
W20-1A

229+00 230+00 231+00 232+00 233+00 234+00 235+00 236+00 237+00 238+00 239+00 240+00 241+00 242+00

66'-00

60'-00

60'-16

60'-88

11'-00

12' 10' 12'

TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
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- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
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- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
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- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
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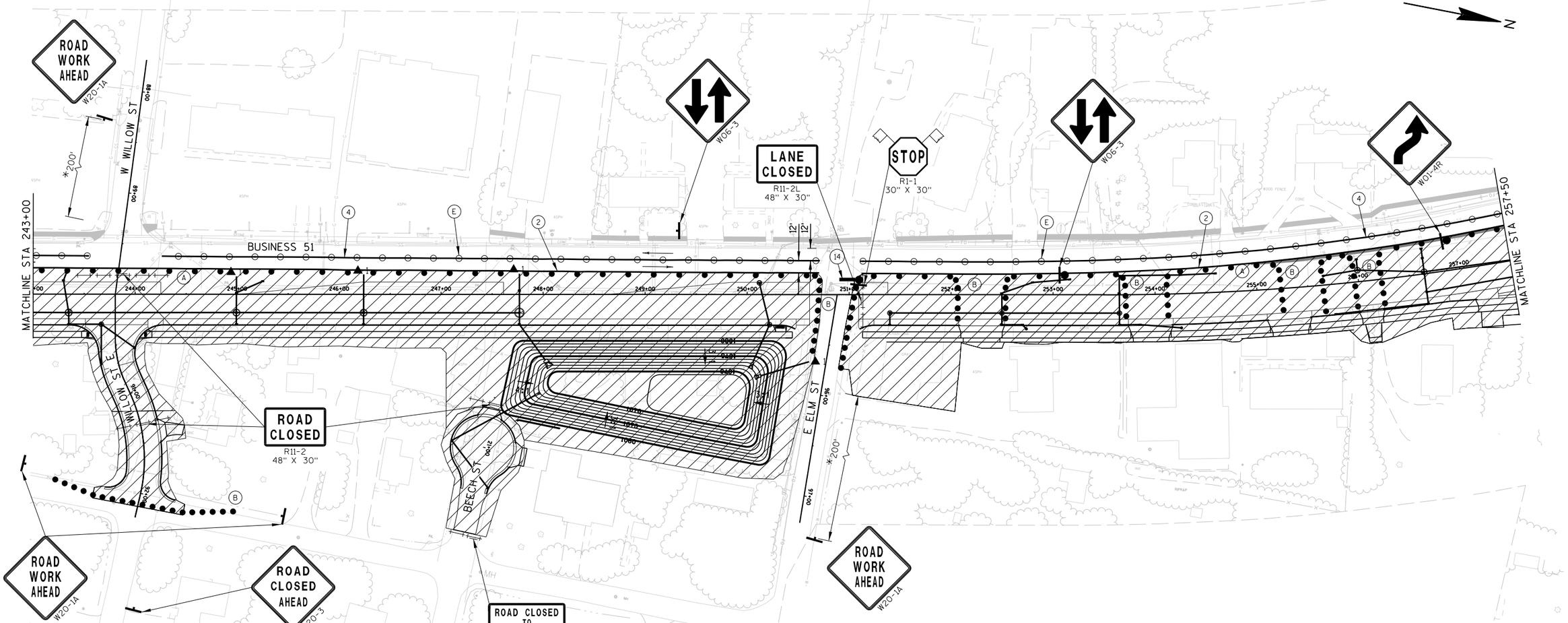
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PAVEMENT MARKING LEGEND

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(9) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE, SHORT SKIP)
(12) TEMPORARY MARKING ARROW/WORD PAINT
(14) TEMPORARY MARKING STOP LINE PAINT 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2A	SHEET 189	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
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- SIGN ON PORTABLE SUPPORT
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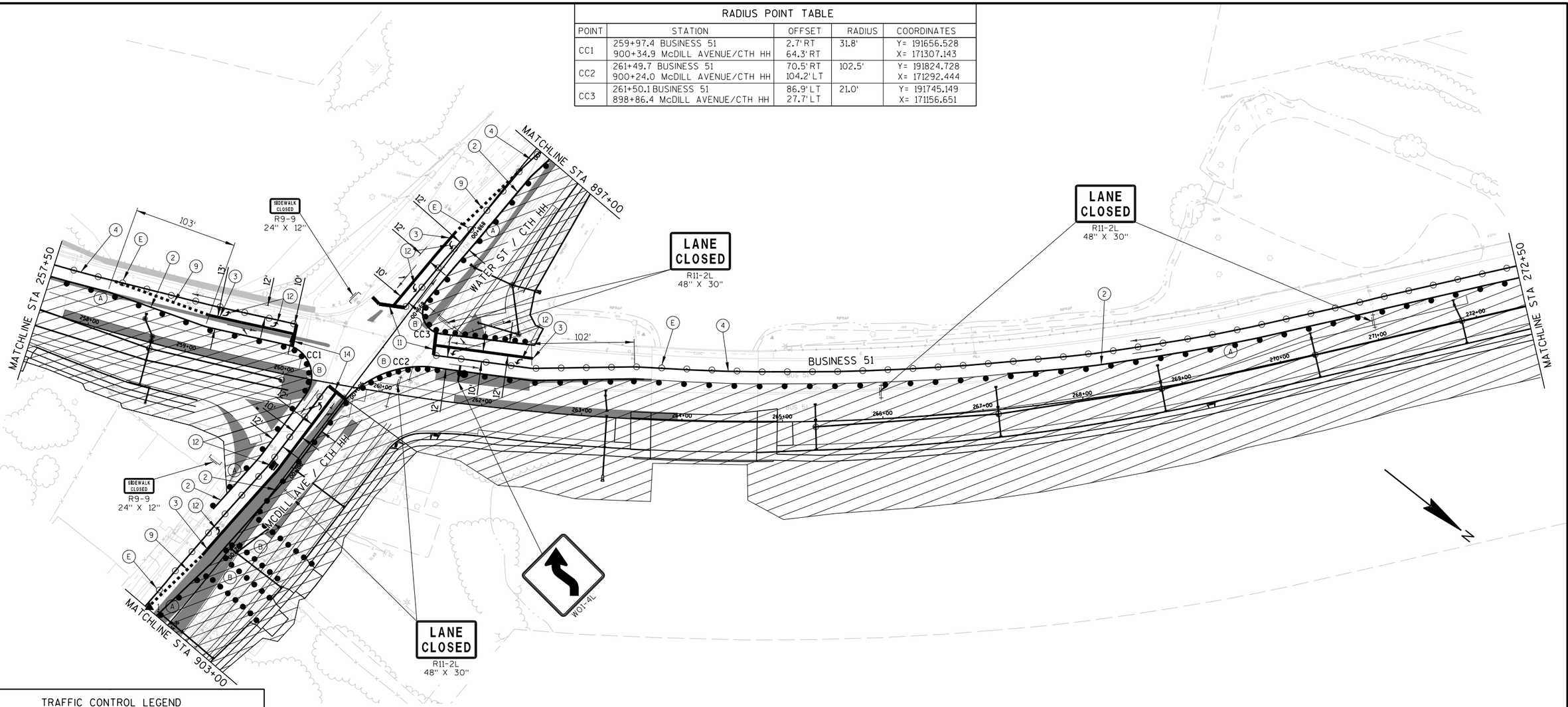
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PAVEMENT MARKING LEGEND

- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
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PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2A	SHEET 190	E

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	259+97.4 BUSINESS 51 900+34.9 McDILL AVENUE/CTH HH	2.7'RT 64.3'RT	31.8'	Y= 191656.528 X= 171307.143
CC2	261+49.7 BUSINESS 51 900+24.0 McDILL AVENUE/CTH HH	70.5'RT 104.2'LT	102.5'	Y= 191824.728 X= 171292.444
CC3	261+50.1 BUSINESS 51 898+86.4 McDILL AVENUE/CTH HH	86.9'LT 27.7'LT	21.0'	Y= 191745.149 X= 171156.651



TRAFFIC CONTROL LEGEND

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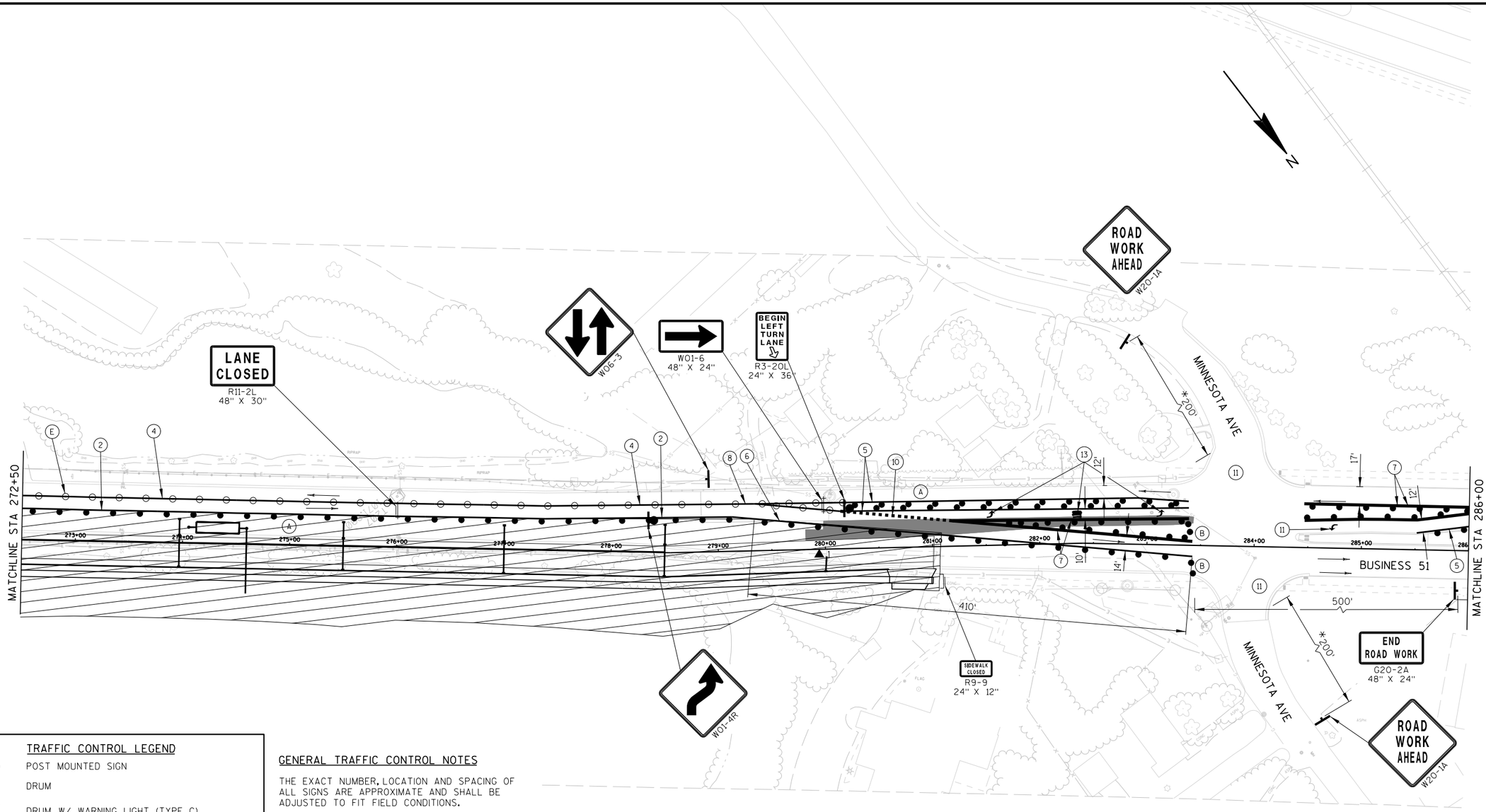
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PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2A	SHEET 191	E

2



TRAFFIC CONTROL LEGEND

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SHEET NOTES

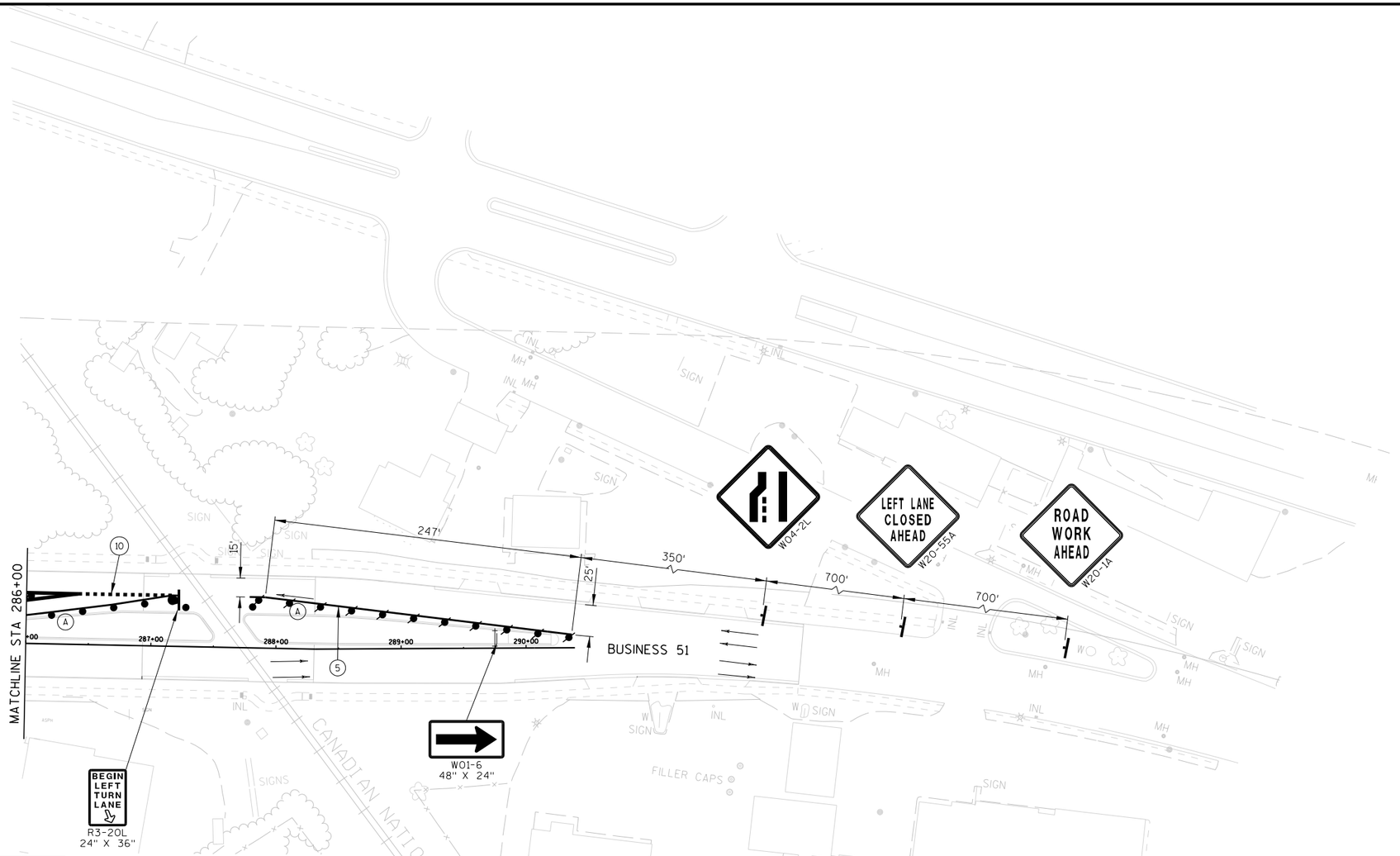
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- (9) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE, SHORT SKIP)
- (10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)
- (11) USE EXISTING PAVEMENT MARKING
- (13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2A	SHEET 192	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

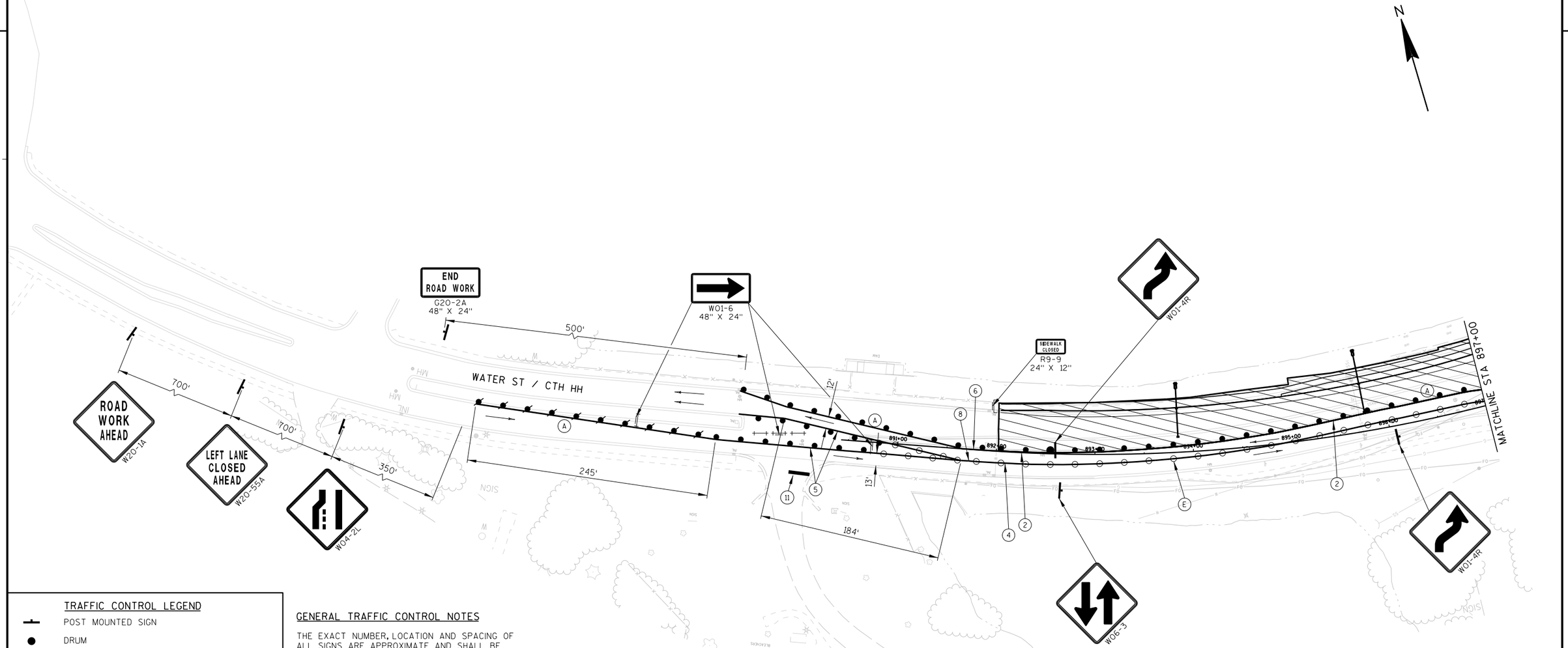
PAVEMENT MARKING LEGEND

(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

(10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2A	SHEET 193	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

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SHEET NOTES

- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

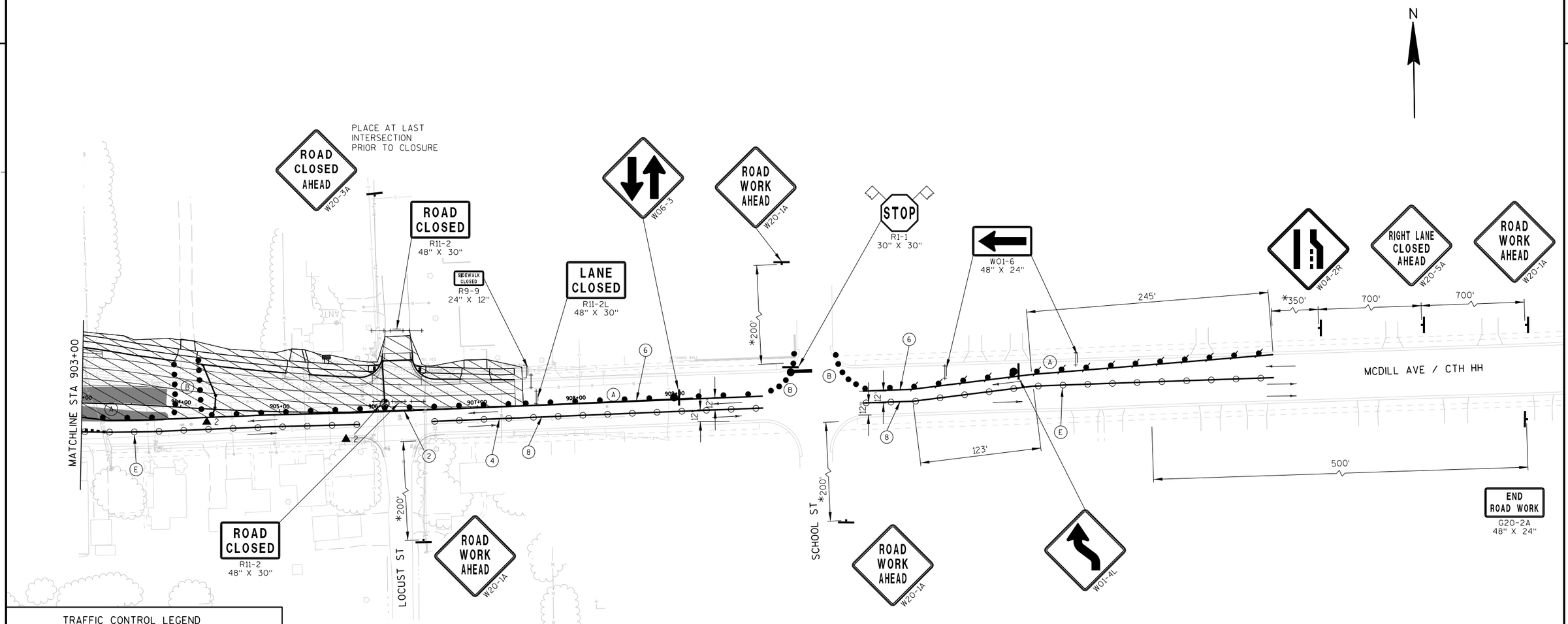
* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- (11) USE EXISTING PAVEMENT MARKING

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2A	SHEET 194	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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SHEET NOTES

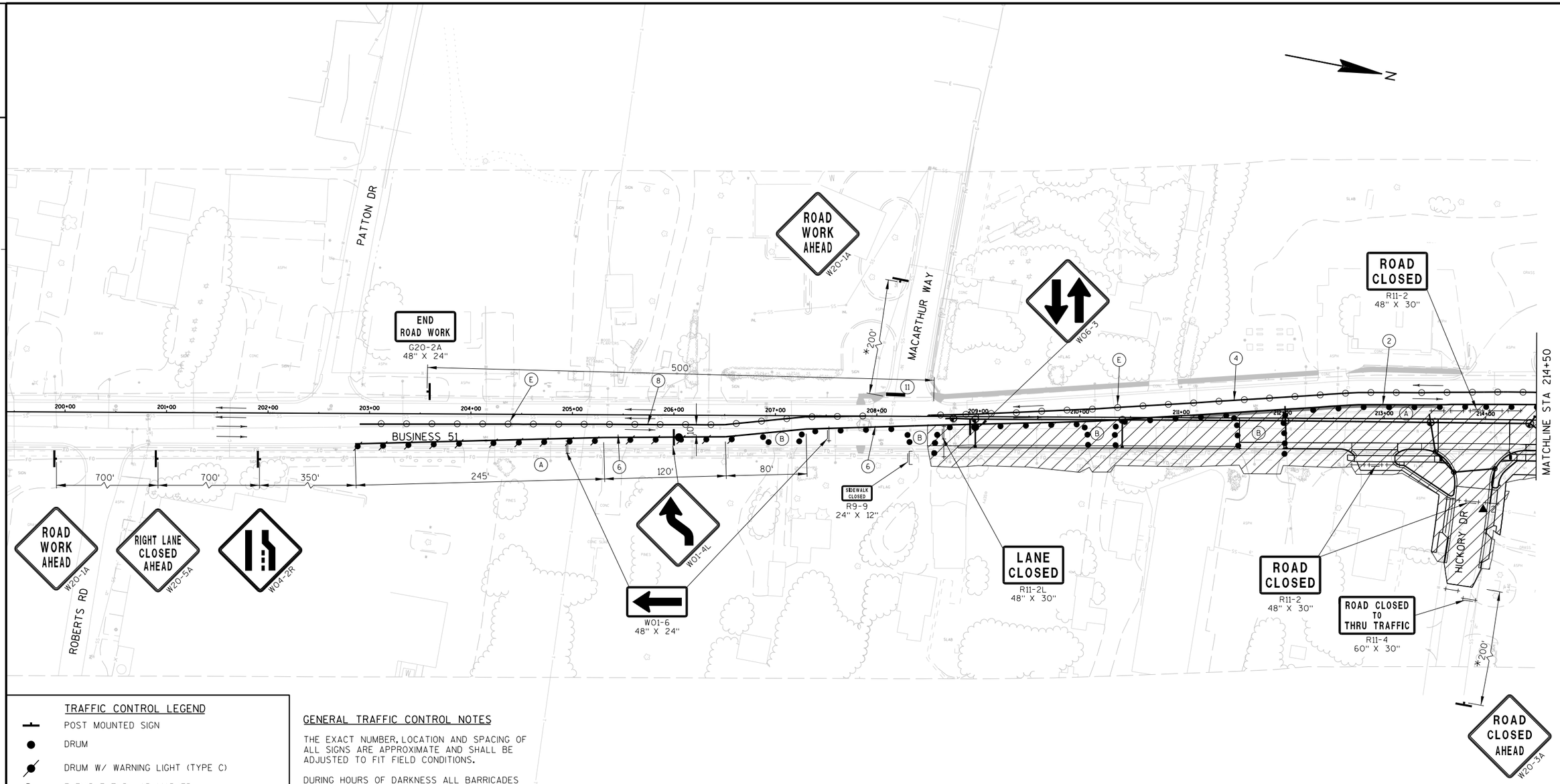
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- (14) TEMPORARY MARKING STOP LINE PAINT 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2A	SHEET 195	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

STAGE 2B DESCRIPTION:

BUSINESS 51 AND CTH HH TRAFFIC IS CONTROLLED AS IN STAGE 2A. PORTER RD AND WILLOW ST ARE OPEN TO TRAFFIC WHILE CEDAR ST, HICKORY DR AND ELM ST ARE CLOSED FOR CONSTRUCTION.

SHEET NOTES

- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

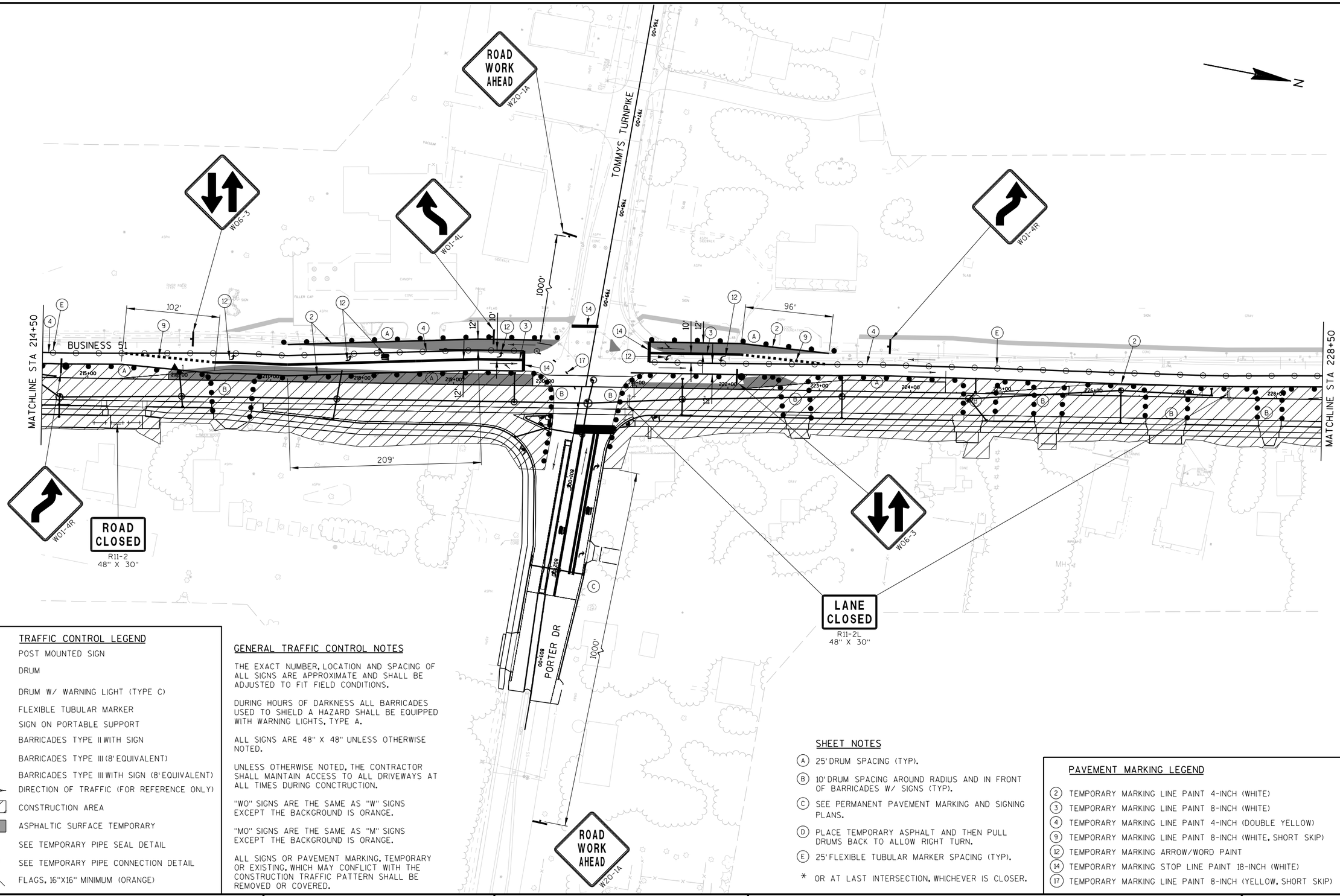
PAVEMENT MARKING LEGEND

- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- (11) USE EXISTING PAVEMENT MARKING

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2B	SHEET 196	E

FILE NAME : P:\SEHIN\14002 - Bus 51_Tmy's Trnpke-Elm St (-10)\Cad\025019-tc stage2B.dgn PLOT DATE : 3/15/2018 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

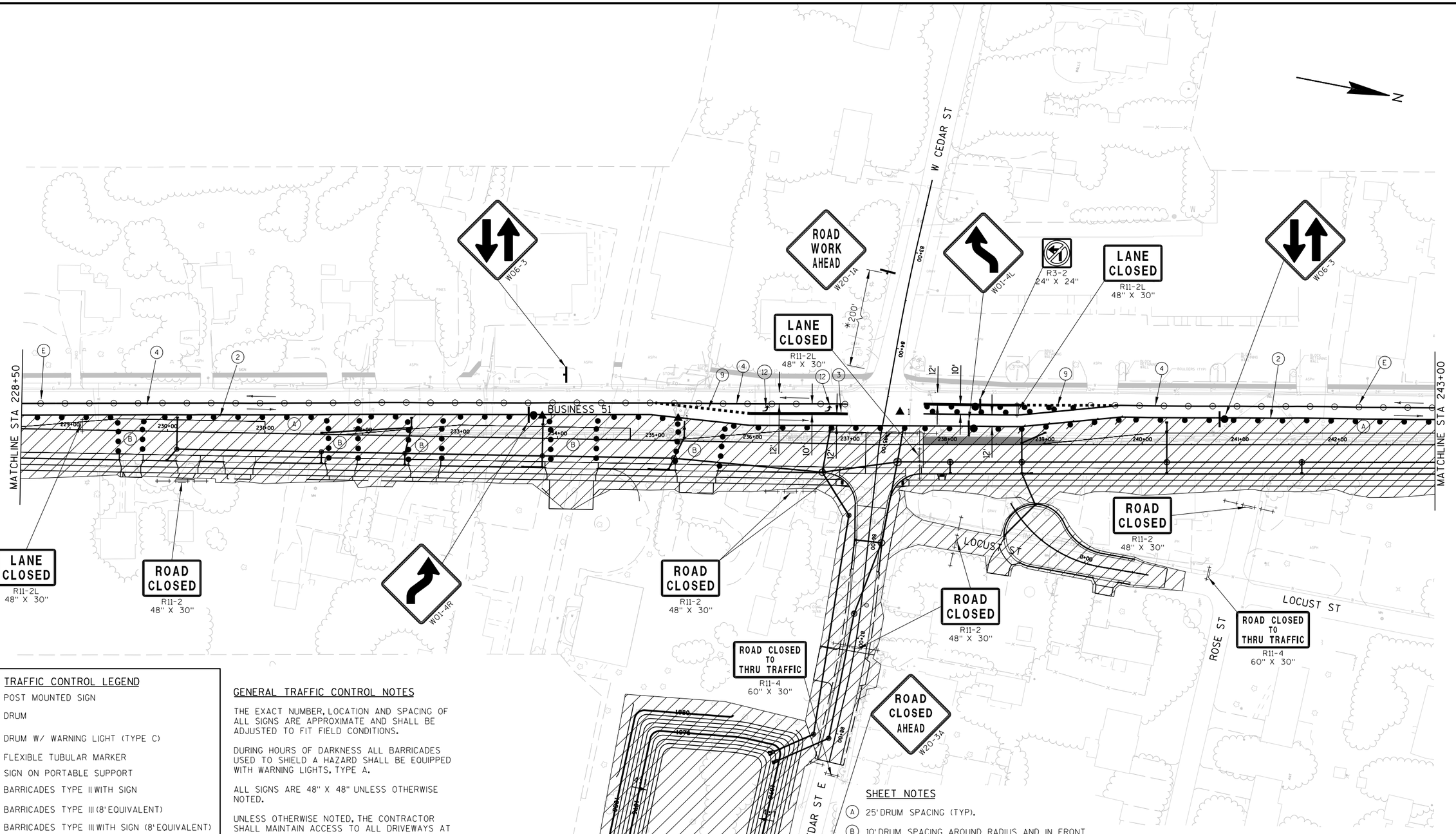
* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (3) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
- (4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- (9) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE, SHORT SKIP)
- (12) TEMPORARY MARKING ARROW/WORD PAINT
- (14) TEMPORARY MARKING STOP LINE PAINT 18-INCH (WHITE)
- (17) TEMPORARY MARKING LINE PAINT 8-INCH (YELLOW, SHORT SKIP)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2B	SHEET 197	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

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SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

(2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)

(3) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)

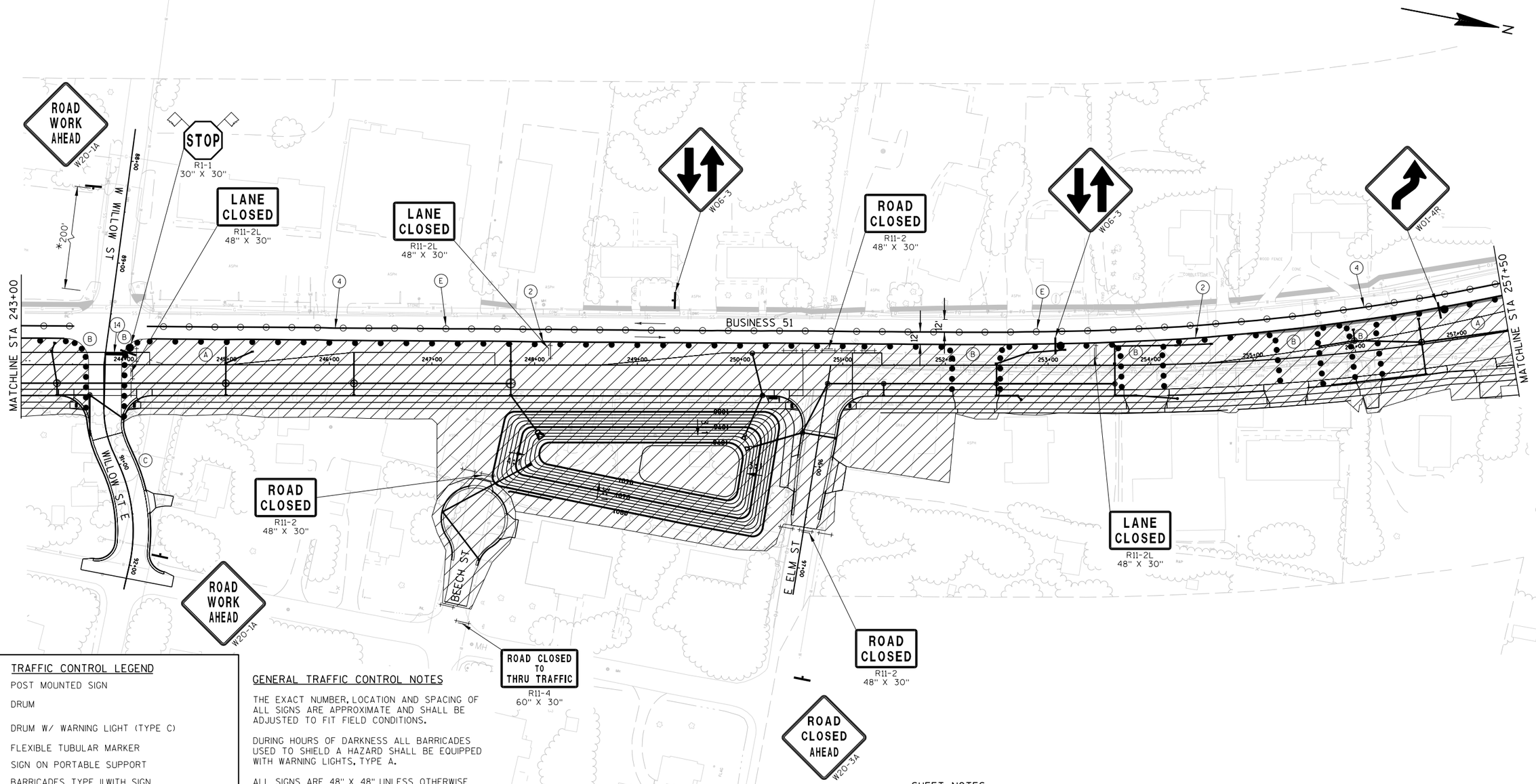
(4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)

(9) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE, SHORT SKIP)

(12) TEMPORARY MARKING ARROW/WORD PAINT

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2B	SHEET 198	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
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SHEET NOTES

(A) 25' DRUM SPACING (TYP).

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(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

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PAVEMENT MARKING LEGEND

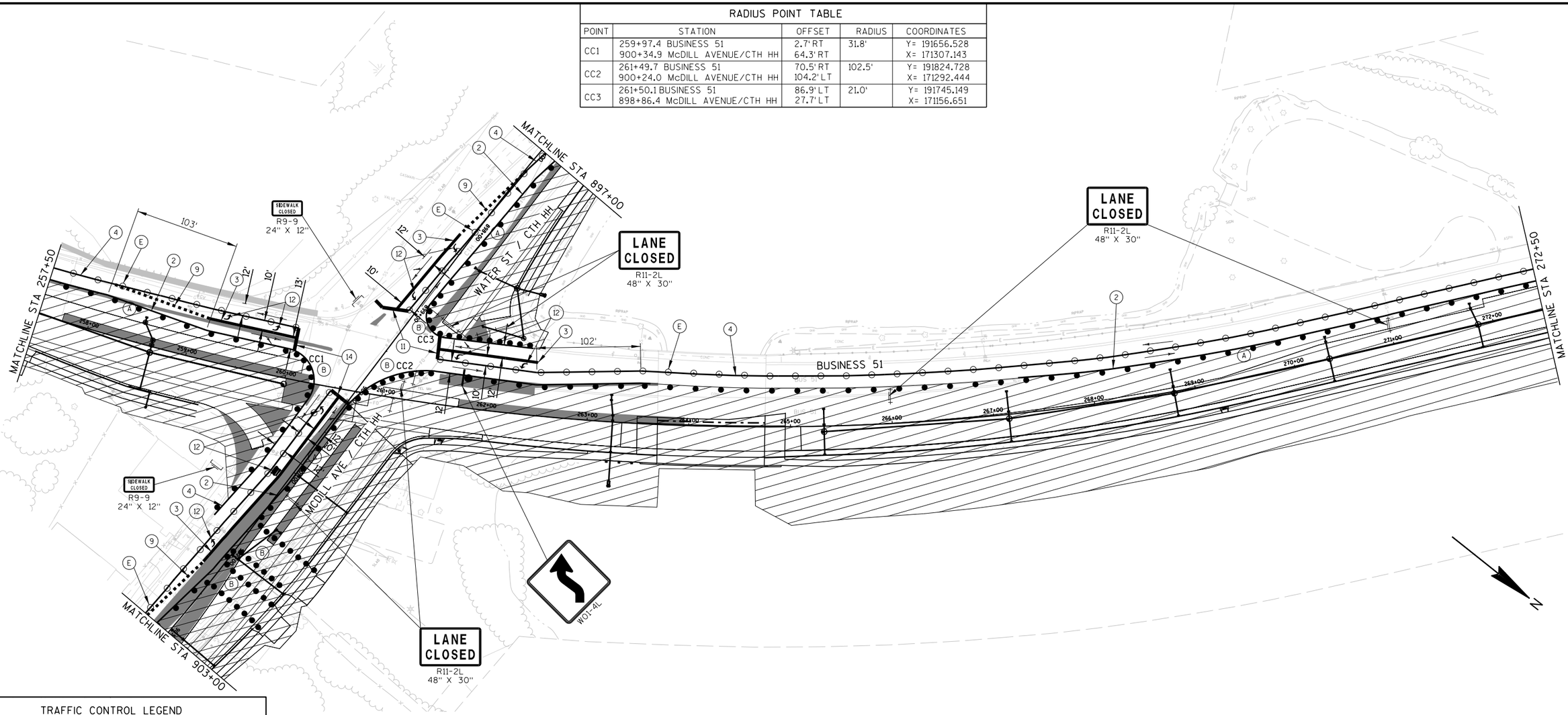
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(4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)

(14) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2B	SHEET 199	E

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	259+97.4 BUSINESS 51 900+34.9 McDILL AVENUE/CTH HH	2.7'RT 64.3'RT	31.8'	Y= 191656.528 X= 171307.143
CC2	261+49.7 BUSINESS 51 900+24.0 McDILL AVENUE/CTH HH	70.5'RT 104.2'LT	102.5'	Y= 191824.728 X= 171292.444
CC3	261+50.1 BUSINESS 51 898+86.4 McDILL AVENUE/CTH HH	86.9'LT 27.7'LT	21.0'	Y= 191745.149 X= 171156.651



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

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SHEET NOTES

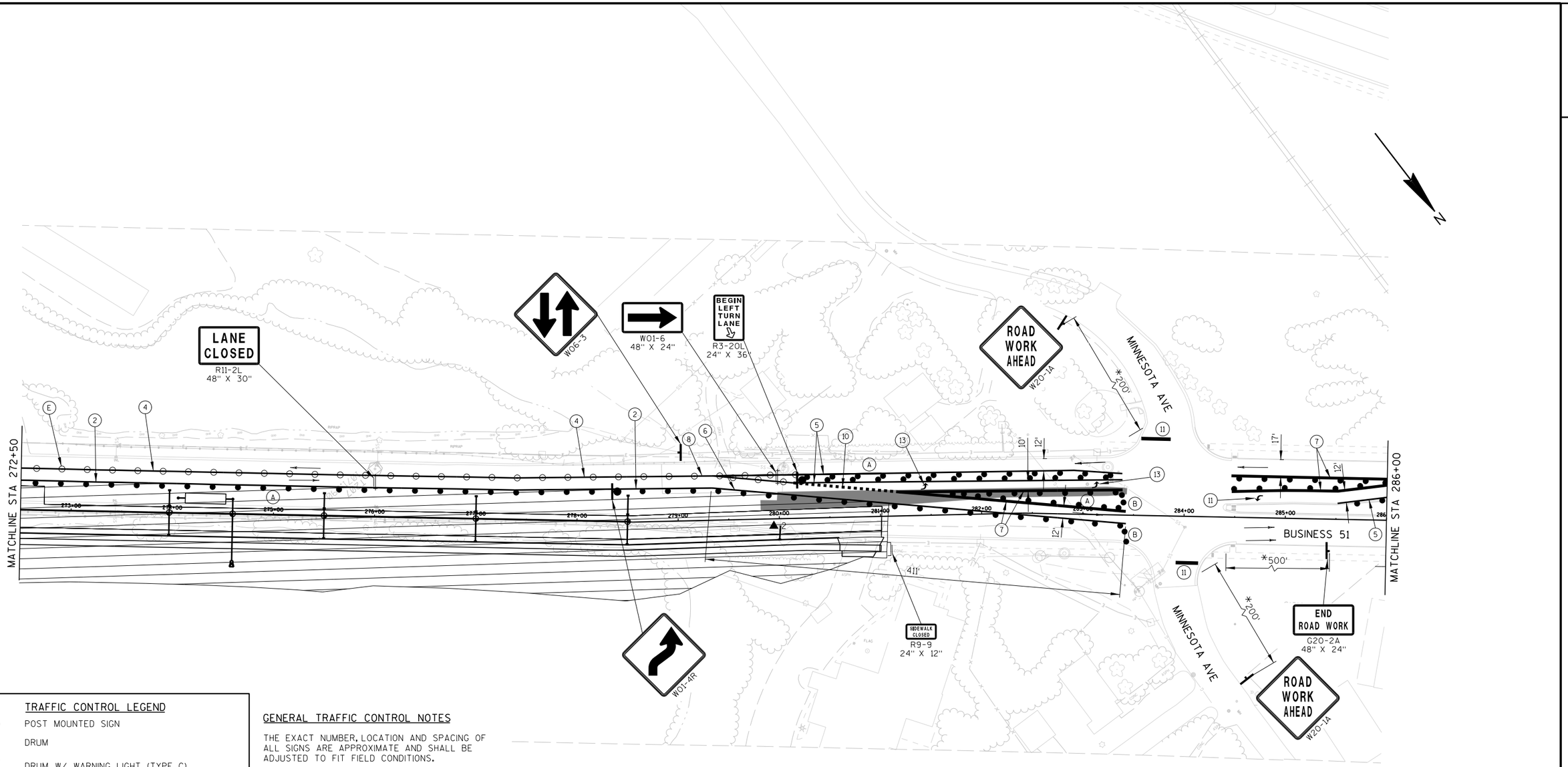
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- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (3) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
- (4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- (9) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE, SHORT SKIP)
- (11) USE EXISTING PAVEMENT MARKING
- (12) TEMPORARY MARKING ARROW/WORD PAINT
- (14) TEMPORARY MARKING STOP LINE PAINT 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2B	SHEET 200	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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SHEET NOTES

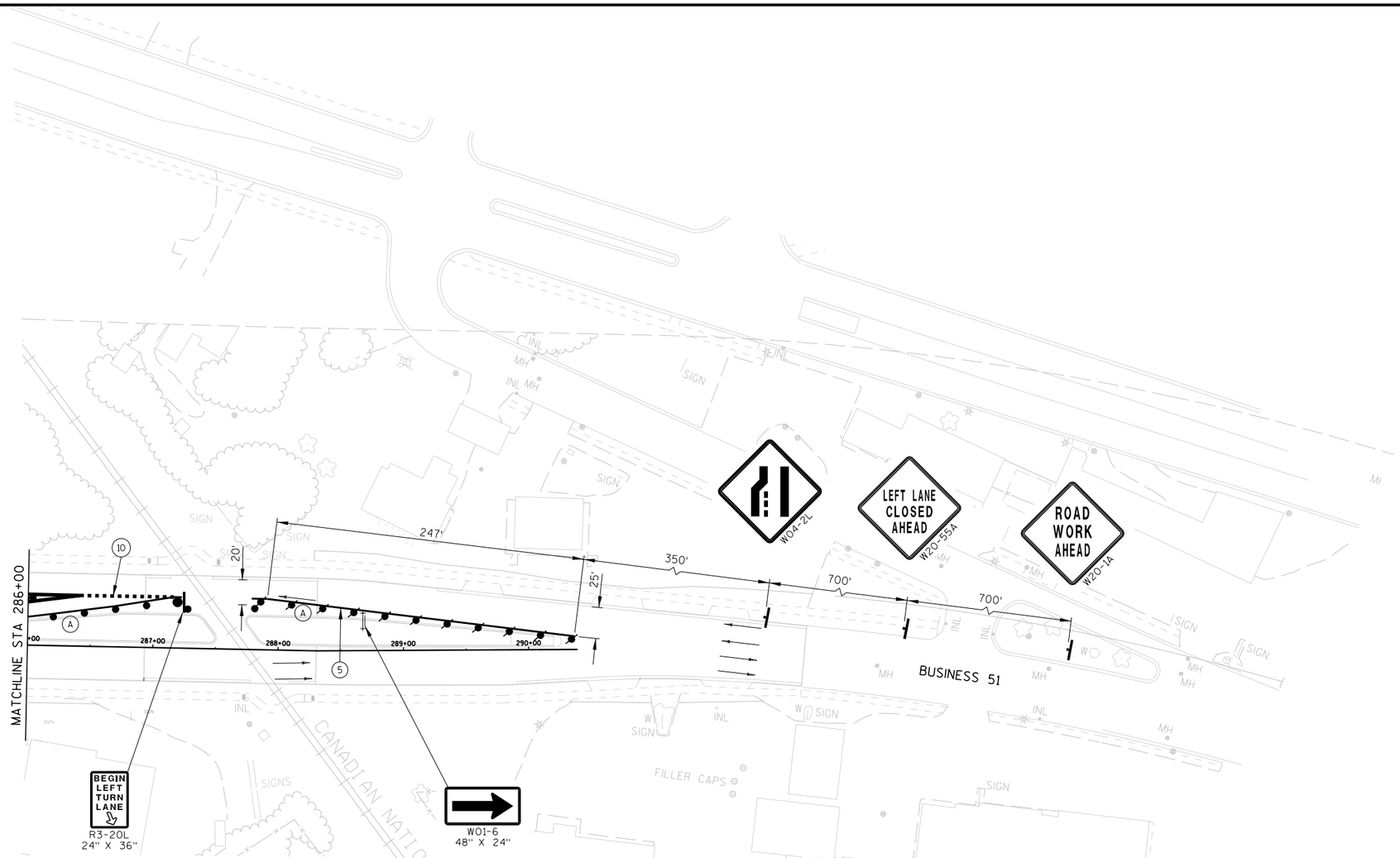
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- (10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)
- (11) USE EXISTING PAVEMENT MARKING
- (13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2B	SHEET 201	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

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SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

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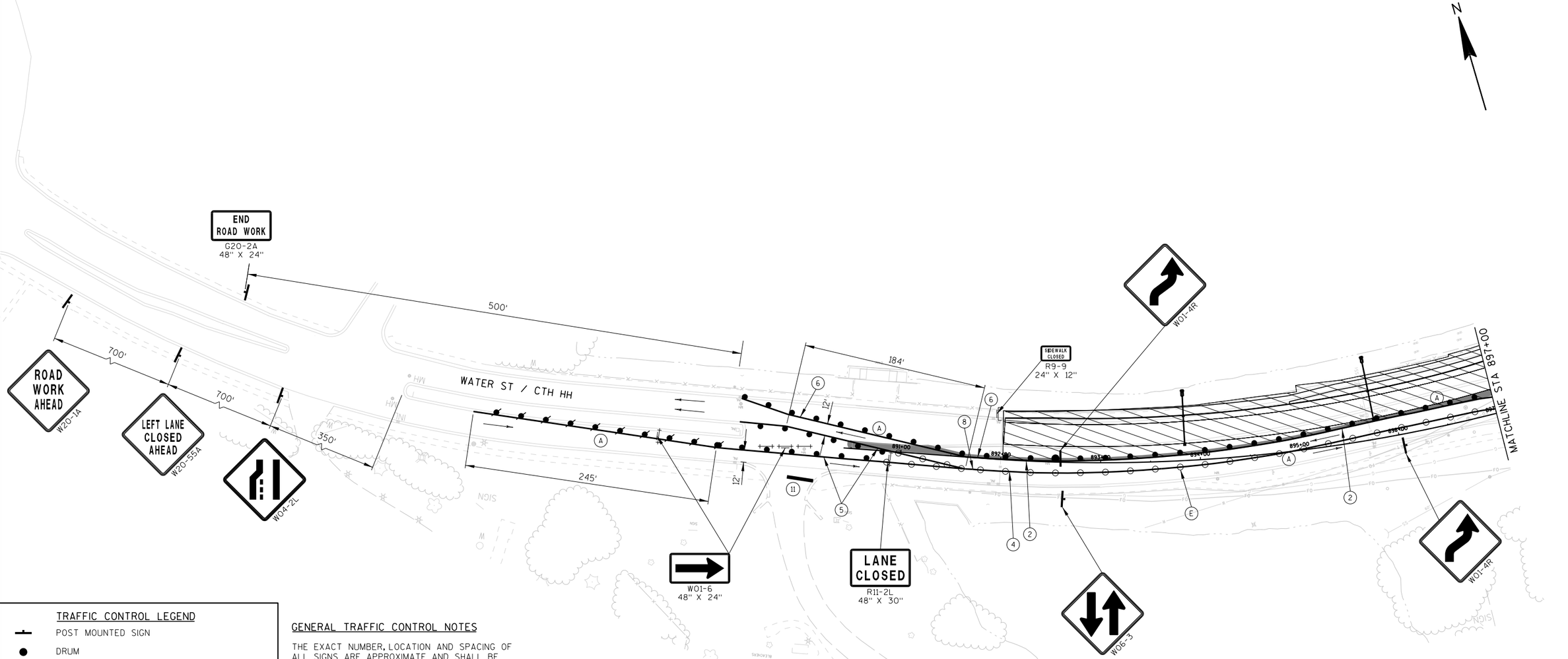
PAVEMENT MARKING LEGEND

(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

(10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2B	SHEET 202	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
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- SIGN ON PORTABLE SUPPORT
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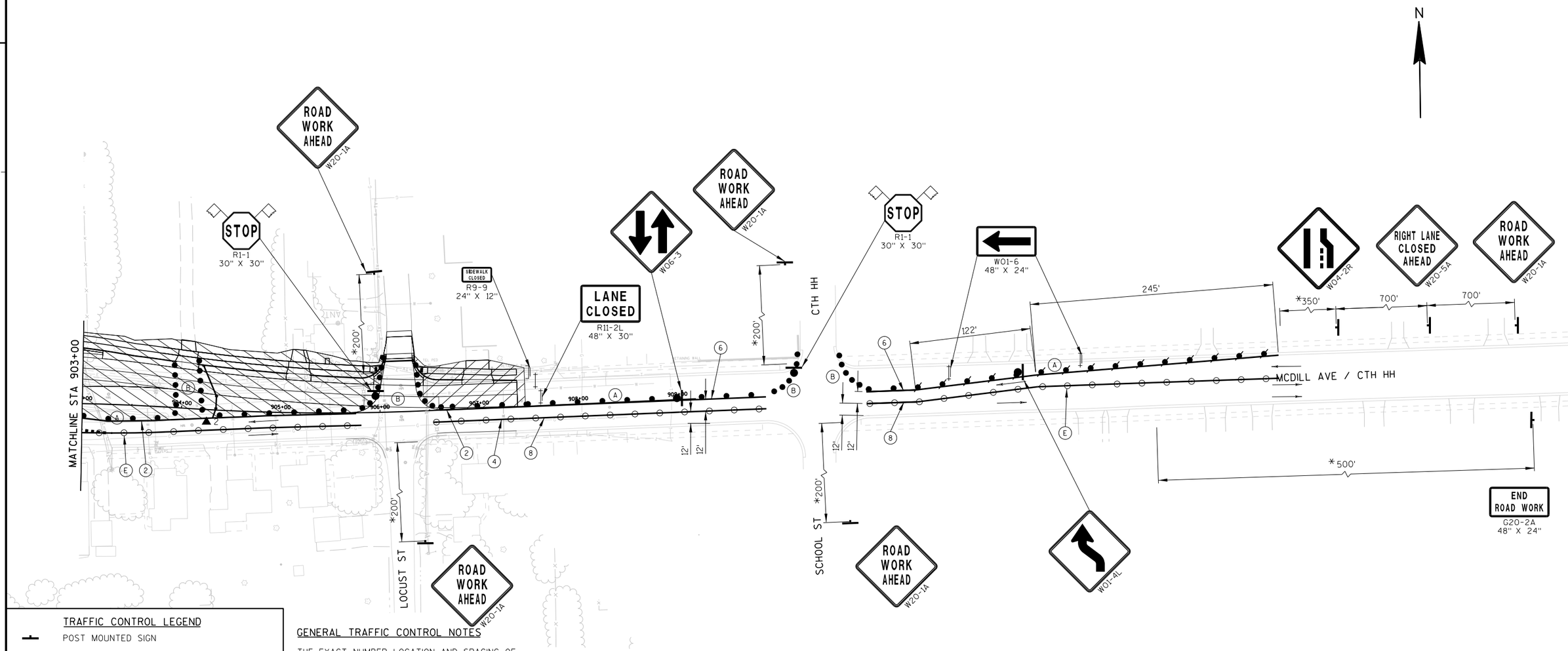
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- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- (11) USE EXISTING PAVEMENT MARKING

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2B	SHEET 203	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
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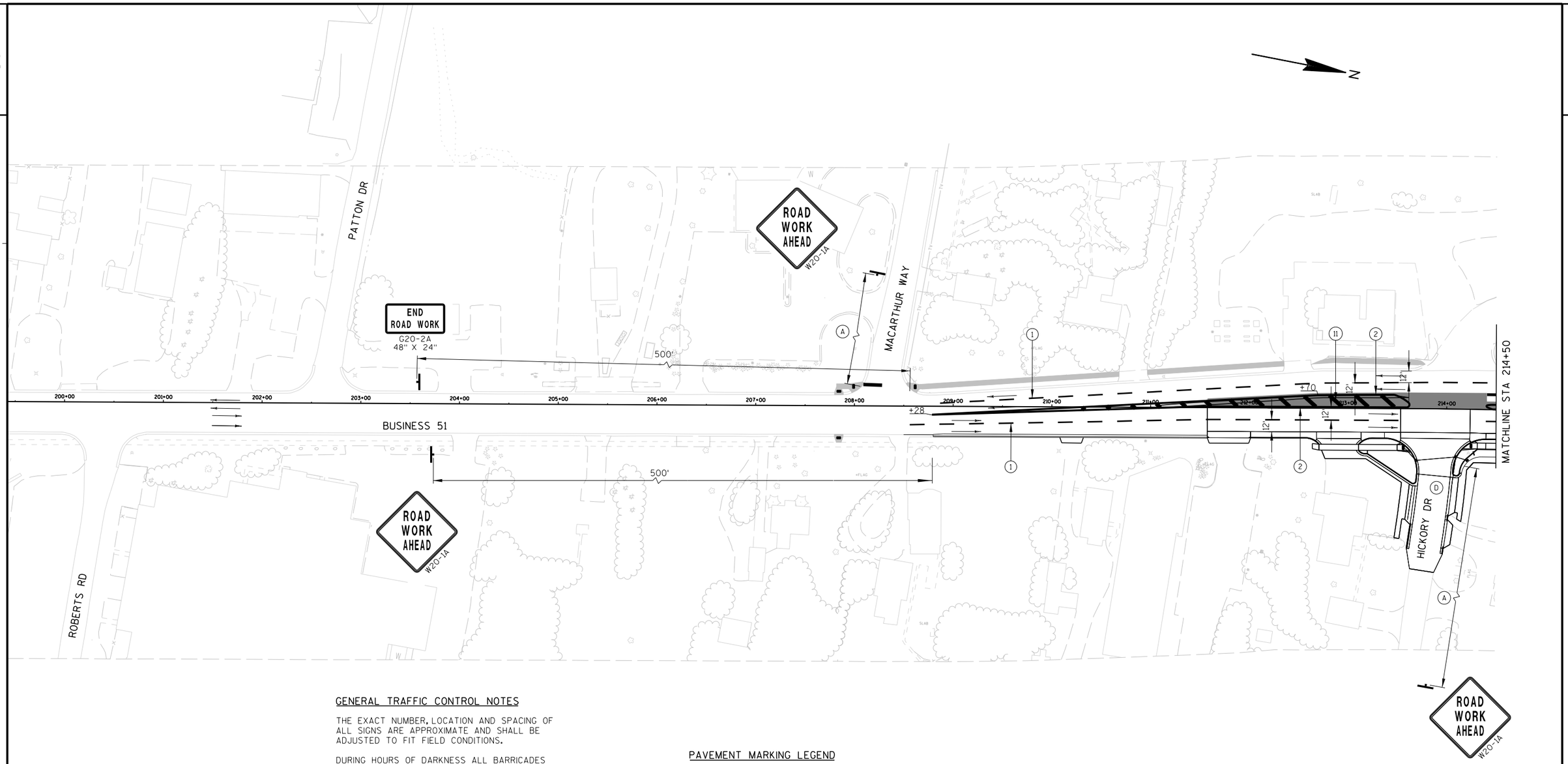
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- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 2B	SHEET 204	E

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GENERAL TRAFFIC CONTROL NOTES

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TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- PLACED JUST PRIOR TO WINTER SHUTDOWN
- ASPHALTIC SURFACE TEMPORARY (PLACED IN STAGES 1-4)
- CC CRASH CUSHION TEMPORARY

PAVEMENT MARKING LEGEND

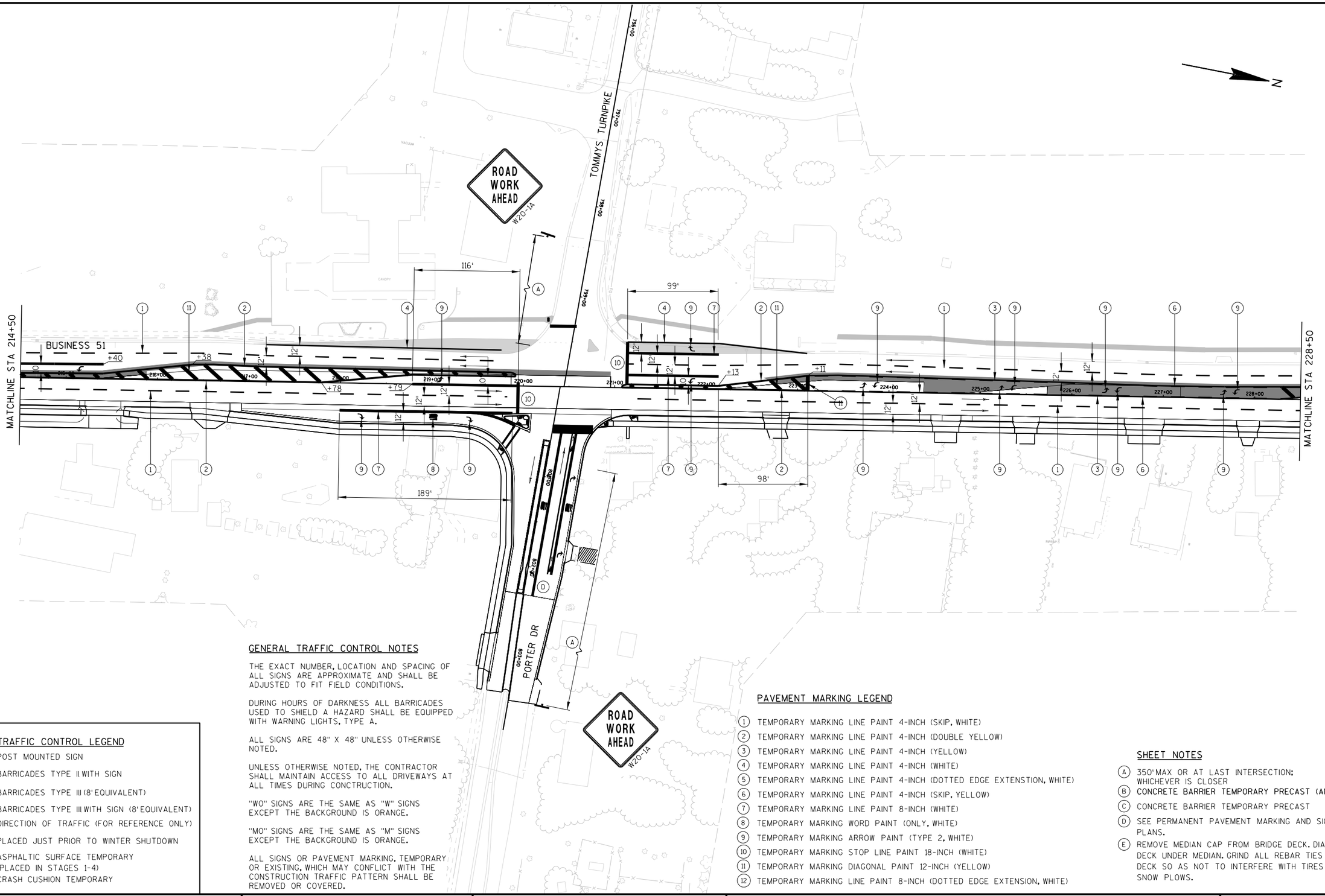
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4. TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
5. TEMPORARY MARKING LINE PAINT 4-INCH (DOTTED EDGE EXTENSTION, WHITE)
6. TEMPORARY MARKING LINE PAINT 4-INCH (SKIP, YELLOW)
7. TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
8. TEMPORARY MARKING WORD PAINT (ONLY, WHITE)
9. TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
10. TEMPORARY MARKING STOP LINE PAINT 18-INCH (WHITE)
11. TEMPORARY MARKING DIAGONAL PAINT 12-INCH (YELLOW)
12. TEMPORARY MARKING LINE PAINT 8-INCH (DOTTED EDGE EXTENSION, WHITE)

SHEET NOTES

- (A) 350' MAX OR AT LAST INTERSECTION; WHICHEVER IS CLOSER
- (B) CONCRETE BARRIER TEMPORARY PRECAST (ANCHORED)
- (C) CONCRETE BARRIER TEMPORARY PRECAST
- (D) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (E) REMOVE MEDIAN CAP FROM BRIDGE DECK. DIAMOND GRIND DECK UNDER MEDIAN. GRIND ALL REBAR TIES FLUSH TO DECK SO AS NOT TO INTERFERE WITH TIRES AND SNOW PLOWS.

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL - WINTER SHUT DOWN	SHEET 205	E

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GENERAL TRAFFIC CONTROL NOTES

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TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- PLACED JUST PRIOR TO WINTER SHUTDOWN
- ASPHALTIC SURFACE TEMPORARY (PLACED IN STAGES 1-4)
- CC — CRASH CUSHION TEMPORARY

PAVEMENT MARKING LEGEND

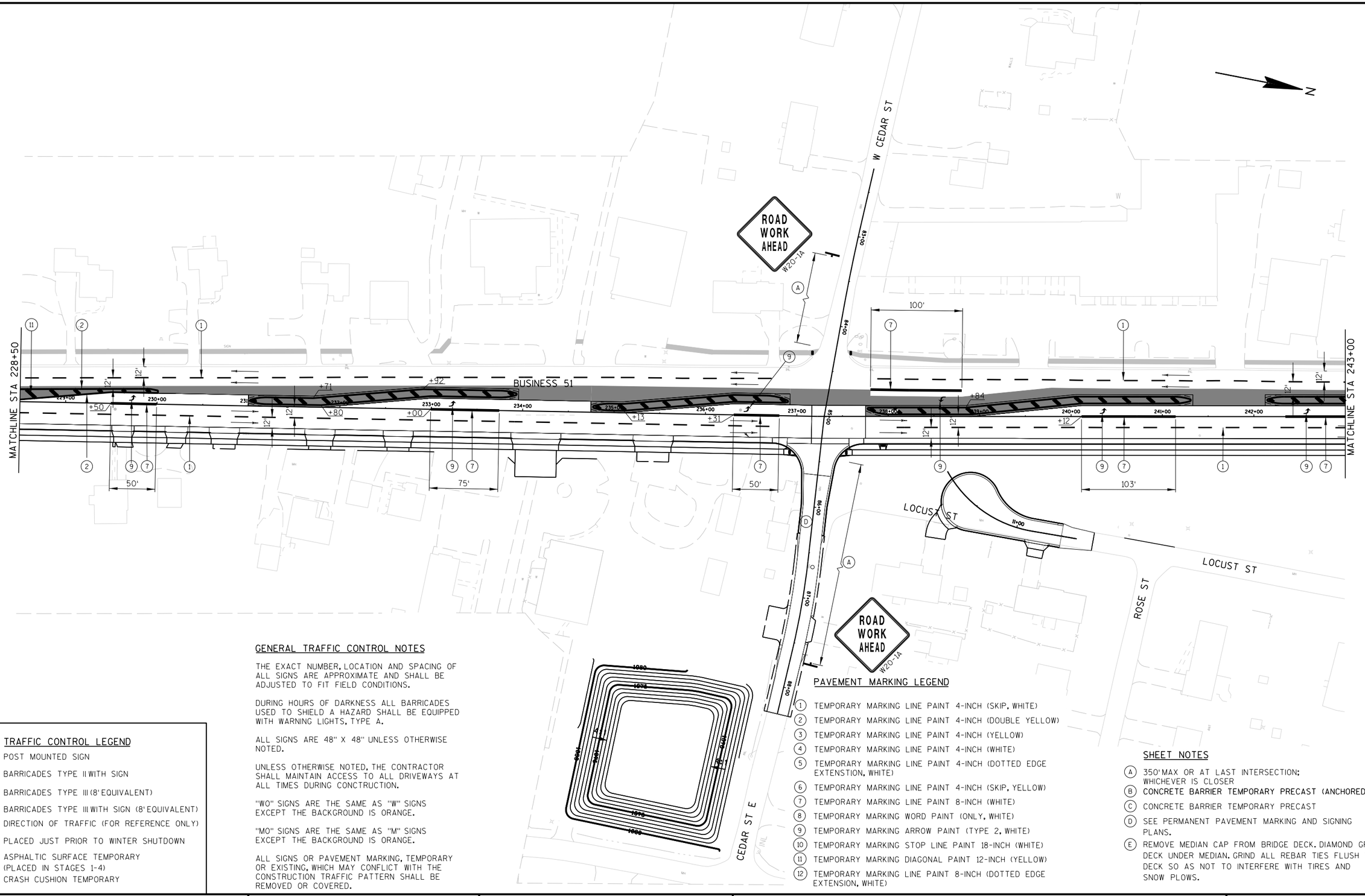
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SHEET NOTES

- (A) 350' MAX OR AT LAST INTERSECTION; WHICHEVER IS CLOSER
- (B) CONCRETE BARRIER TEMPORARY PRECAST (ANCHORED)
- (C) CONCRETE BARRIER TEMPORARY PRECAST
- (D) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (E) REMOVE MEDIAN CAP FROM BRIDGE DECK. DIAMOND GRIND DECK UNDER MEDIAN. GRIND ALL REBAR TIES FLUSH TO DECK SO AS NOT TO INTERFERE WITH TIRES AND SNOW PLOWS.

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TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- PLACED JUST PRIOR TO WINTER SHUTDOWN
- ASPHALTIC SURFACE TEMPORARY (PLACED IN STAGES 1-4)
- CC — CRASH CUSHION TEMPORARY

GENERAL TRAFFIC CONTROL NOTES

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PAVEMENT MARKING LEGEND

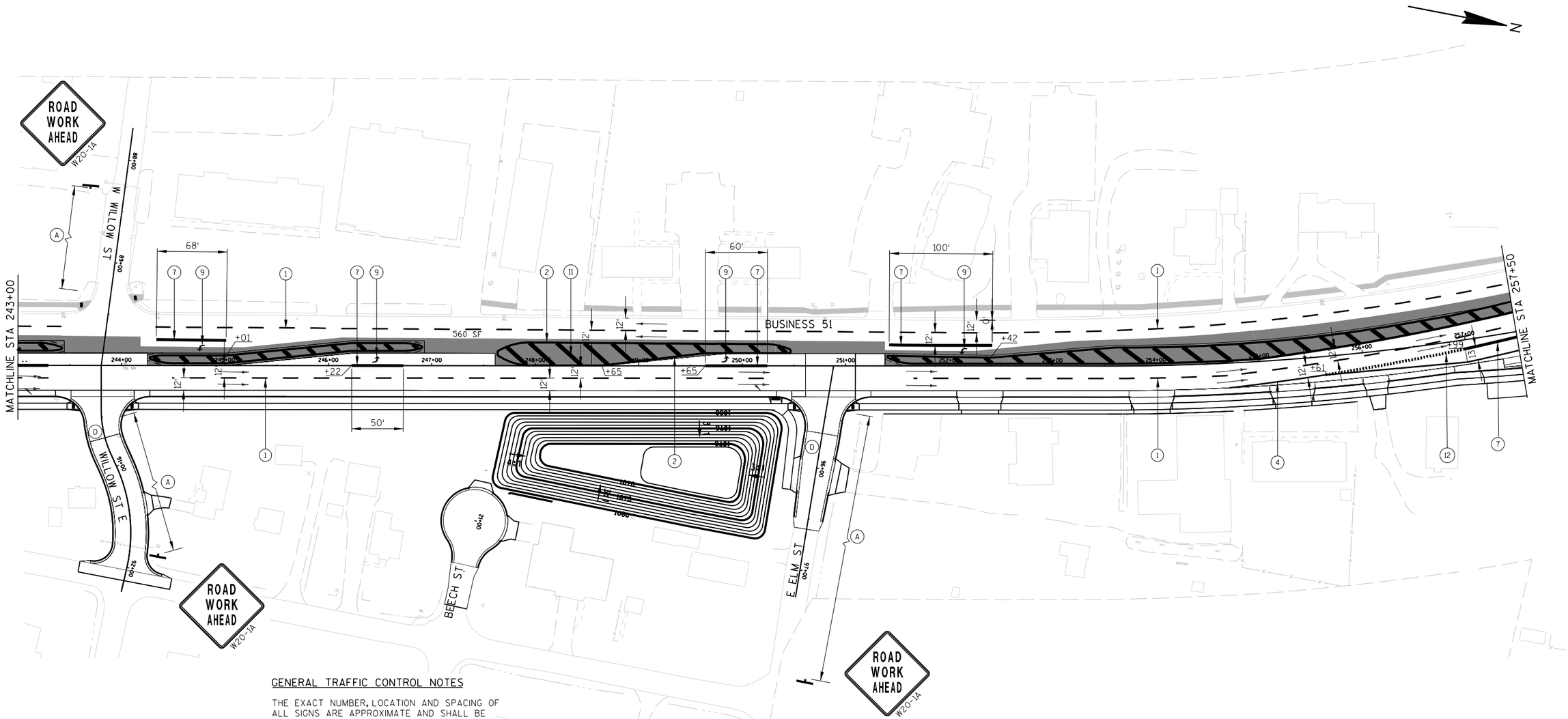
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SHEET NOTES

- (A) 350' MAX OR AT LAST INTERSECTION; WHICHEVER IS CLOSER
- (B) CONCRETE BARRIER TEMPORARY PRECAST (ANCHORED)
- (C) CONCRETE BARRIER TEMPORARY PRECAST
- (D) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (E) REMOVE MEDIAN CAP FROM BRIDGE DECK. DIAMOND GRIND DECK UNDER MEDIAN. GRIND ALL REBAR TIES FLUSH TO DECK SO AS NOT TO INTERFERE WITH TIRES AND SNOW PLOWS.

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL - WINTER SHUT DOWN	SHEET 207	E

2



GENERAL TRAFFIC CONTROL NOTES

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TRAFFIC CONTROL LEGEND

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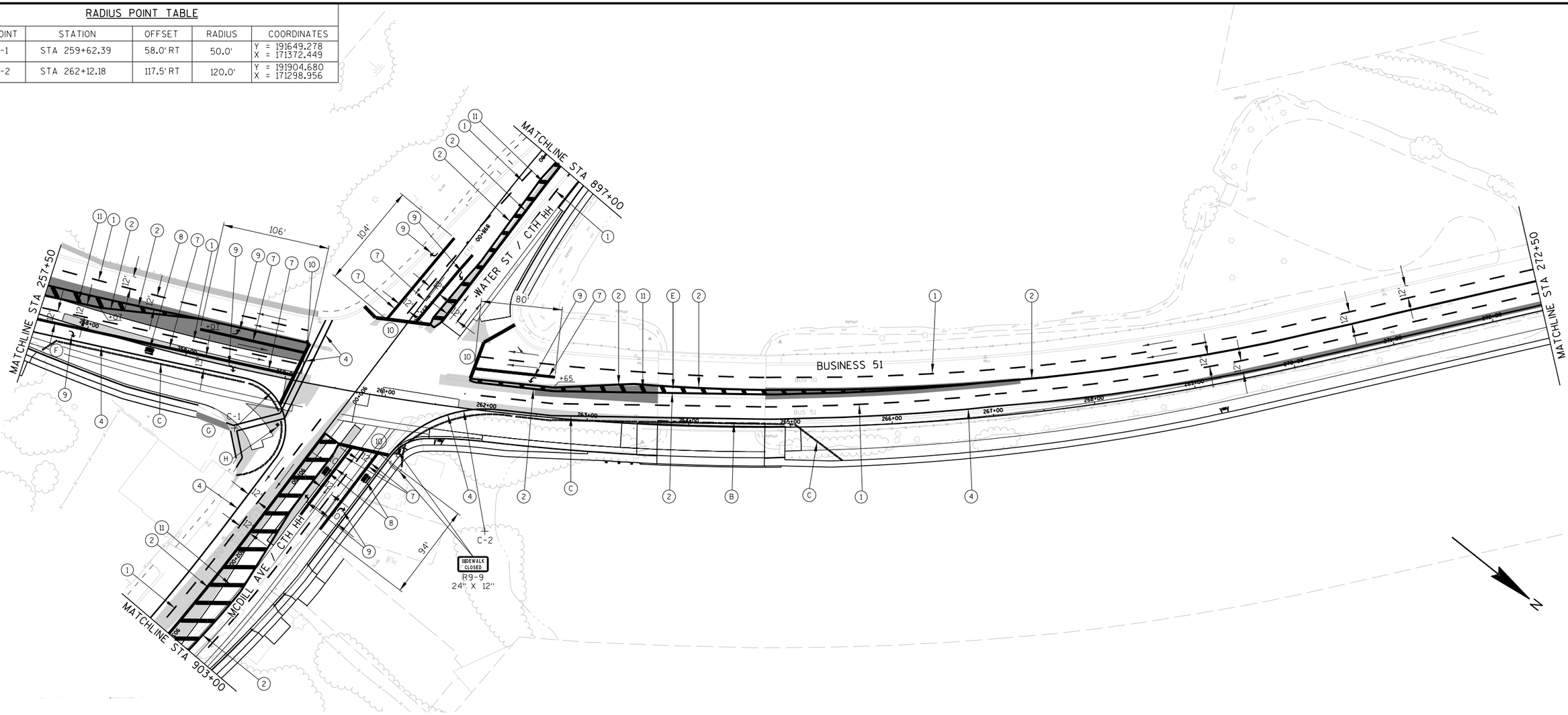
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PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL - WINTER SHUT DOWN	SHEET 208	E

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RADIUS POINT TABLE

POINT	STATION	OFFSET	RADIUS	COORDINATES
C-1	STA 259+62.39	58.0' RT	50.0'	Y = 191649.278 X = 171372.449
C-2	STA 262+12.18	117.5' RT	120.0'	Y = 191904.680 X = 171298.956



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- ASPHALTIC SURFACE TEMPORARY (PLACED IN STAGES 1-4)
- CC CRASH CUSHION TEMPORARY

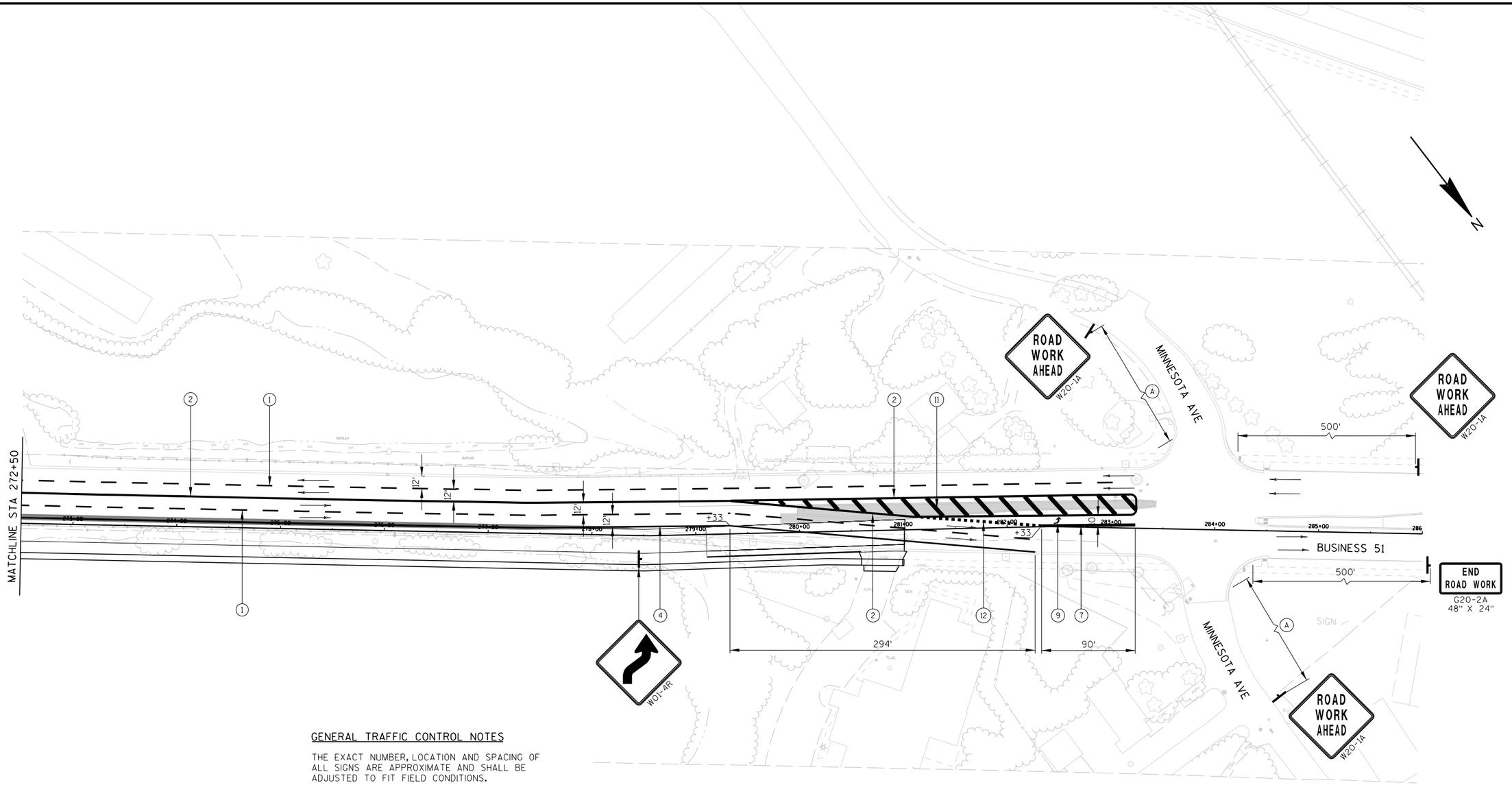
PAVEMENT MARKING LEGEND

1. TEMPORARY MARKING LINE PAINT 4-INCH (SKIP, WHITE)
2. TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
3. TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)
4. TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
5. TEMPORARY MARKING LINE PAINT 4-INCH (DOTTED EDGE EXTENSTION, WHITE)
6. TEMPORARY MARKING LINE PAINT 4-INCH (SKIP, YELLOW)
7. TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
8. TEMPORARY MARKING WORD PAINT (ONLY, WHITE)
9. TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
10. TEMPORARY MARKING STOP LINE PAINT 18-INCH (WHITE)
11. TEMPORARY MARKING DIAGONAL PAINT 12-INCH (YELLOW)
12. TEMPORARY MARKING LINE PAINT 8-INCH (DOTTED EDGE EXTENSION, WHITE)

SHEET NOTES

- (A) 350' MAX OR AT LAST INTERSECTION; WHICHEVER IS CLOSER
- (B) CONCRETE BARRIER TEMPORARY PRECAST (ANCHORED)
- (C) CONCRETE BARRIER TEMPORARY PRECAST
- (D) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (E) REMOVE MEDIAN CAP FROM BRIDGE DECK. DIAMOND GRIND DECK UNDER MEDIAN. GRIND ALL REBAR TIES FLUSH TO DECK SO AS NOT TO INTERFERE WITH TIRES AND SNOW PLOWS.
- (F) PLACE CONCRETE BARRIER AT 45° AT CORNER.
- (G) TEMPORARY SIDEWALK PLACED JUST PRIOR TO WINTER SHUT DOWN.
- (H) PUSH BUTTON CROSSWALK ACTIVATION BUTTON MOUNTED TO TEMPORARY SUPPORT.

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- PLACED JUST PRIOR TO WINTER SHUTDOWN
- ASPHALTIC SURFACE TEMPORARY (PLACED IN STAGES 1-4)
- CC — CRASH CUSHION TEMPORARY

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

PAVEMENT MARKING LEGEND

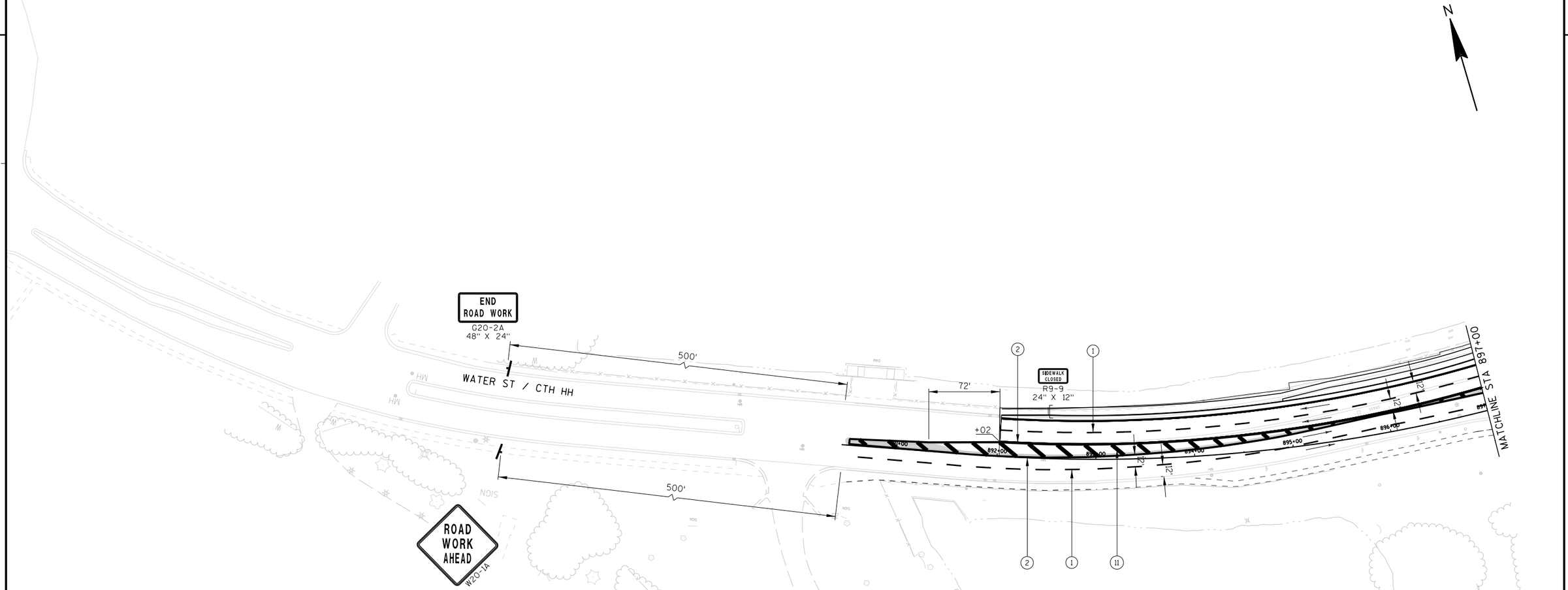
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4. TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
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7. TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
8. TEMPORARY MARKING WORD PAINT (ONLY, WHITE)
9. TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
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11. TEMPORARY MARKING DIAGONAL PAINT 12-INCH (YELLOW)
12. TEMPORARY MARKING LINE PAINT 8-INCH (DOTTED EDGE EXTENSION, WHITE)

SHEET NOTES

- (A) 350' MAX OR AT LAST INTERSECTION; WHICHEVER IS CLOSER
- (B) CONCRETE BARRIER TEMPORARY PRECAST (ANCHORED)
- (C) CONCRETE BARRIER TEMPORARY PRECAST
- (D) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (E) REMOVE MEDIAN CAP FROM BRIDGE DECK. DIAMOND GRIND DECK UNDER MEDIAN. GRIND ALL REBAR TIES FLUSH TO DECK SO AS NOT TO INTERFERE WITH TIRES AND SNOW PLOWS.

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL - WINTER SHUT DOWN	SHEET 210	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- PLACED JUST PRIOR TO WINTER SHUTDOWN
- ASPHALTIC SURFACE TEMPORARY (PLACED IN STAGES 1-4)
- CC — CRASH CUSHION TEMPORARY

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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PAVEMENT MARKING LEGEND

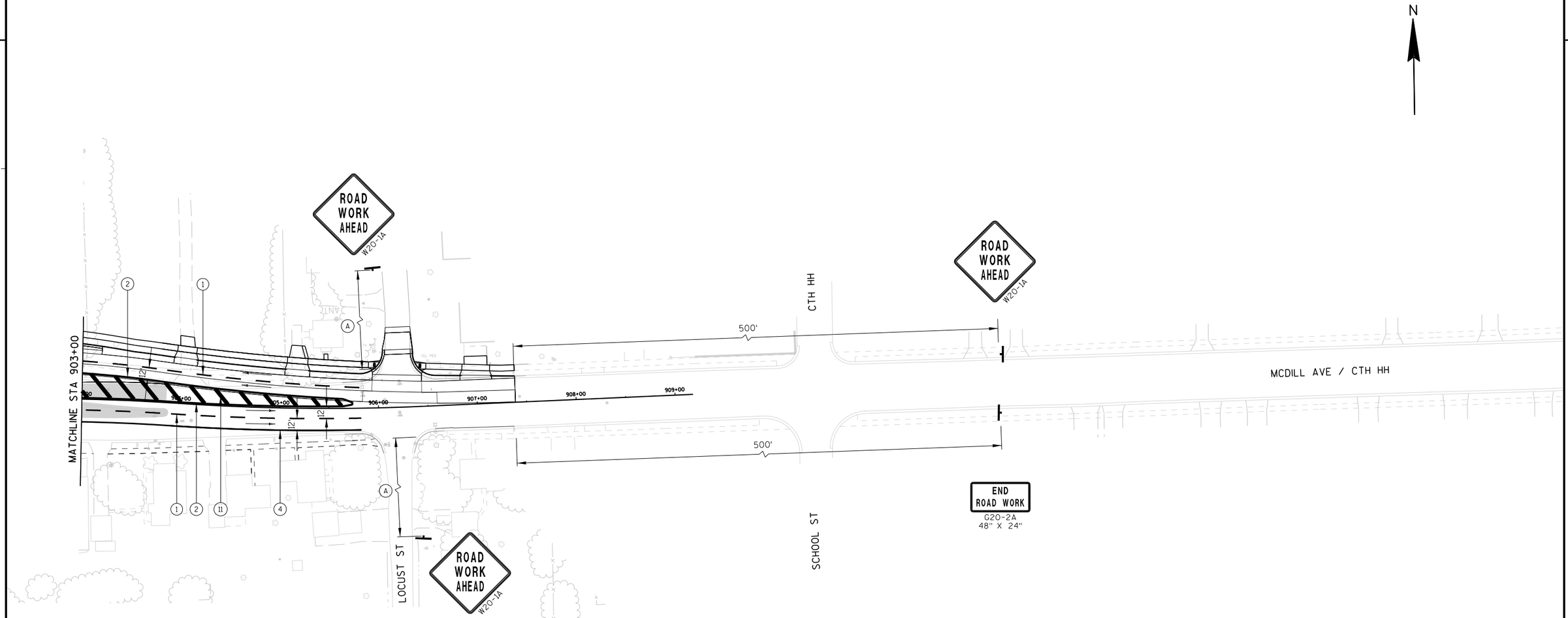
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6. TEMPORARY MARKING LINE PAINT 4-INCH (SKIP, YELLOW)
7. TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
8. TEMPORARY MARKING WORD PAINT (ONLY, WHITE)
9. TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
10. TEMPORARY MARKING STOP LINE PAINT 18-INCH (WHITE)
11. TEMPORARY MARKING DIAGONAL PAINT 12-INCH (YELLOW)
12. TEMPORARY MARKING LINE PAINT 8-INCH (DOTTED EDGE EXTENSION, WHITE)

SHEET NOTES

- (A) 350' MAX OR AT LAST INTERSECTION; WHICHEVER IS CLOSER
- (B) CONCRETE BARRIER TEMPORARY PRECAST (ANCHORED)
- (C) CONCRETE BARRIER TEMPORARY PRECAST
- (D) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (E) REMOVE MEDIAN CAP FROM BRIDGE DECK. DIAMOND GRIND DECK UNDER MEDIAN. GRIND ALL REBAR TIES FLUSH TO DECK SO AS NOT TO INTERFERE WITH TIRES AND SNOW PLOWS.

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL - WINTER SHUT DOWN	SHEET 211	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- PLACED JUST PRIOR TO WINTER SHUTDOWN
- ASPHALTIC SURFACE TEMPORARY (PLACED IN STAGES 1-4)
- CC CRASH CUSHION TEMPORARY

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

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"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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PAVEMENT MARKING LEGEND

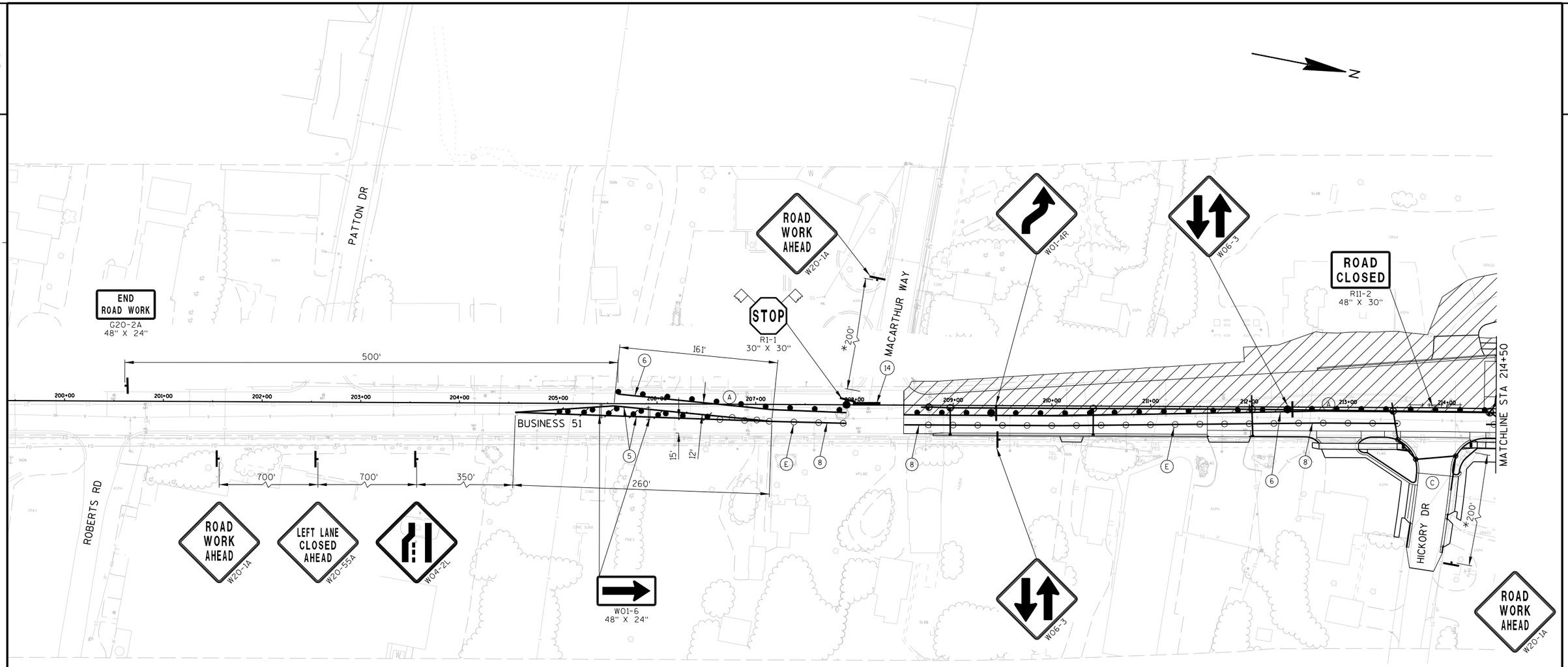
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4. TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
5. TEMPORARY MARKING LINE PAINT 4-INCH (DOTTED EDGE EXTENSTION, WHITE)
6. TEMPORARY MARKING LINE PAINT 4-INCH (SKIP, YELLOW)
7. TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
8. TEMPORARY MARKING WORD PAINT (ONLY, WHITE)
9. TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
10. TEMPORARY MARKING STOP LINE PAINT 18-INCH (WHITE)
11. TEMPORARY MARKING DIAGONAL PAINT 12-INCH (YELLOW)
12. TEMPORARY MARKING LINE PAINT 8-INCH (DOTTED EDGE EXTENSION, WHITE)

SHEET NOTES

- (A) 350' MAX OR AT LAST INTERSECTION; WHICHEVER IS CLOSER
- (B) CONCRETE BARRIER TEMPORARY PRECAST (ANCHORED)
- (C) CONCRETE BARRIER TEMPORARY PRECAST
- (D) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (E) REMOVE MEDIAN CAP FROM BRIDGE DECK. DIAMOND GRIND DECK UNDER MEDIAN. GRIND ALL REBAR TIES FLUSH TO DECK SO AS NOT TO INTERFERE WITH TIRES AND SNOW PLOWS.

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL - WINTER SHUT DOWN	SHEET 212	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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STAGE 3A DESCRIPTION:

BUSINESS 51 TRAFFIC IS SHIFTED TO THE NEWLY CONSTRUCTED EAST SIDE WHILE THE WEST SIDE IS CONSTRUCTED. CTH HH TRAFFIC REMAINS AS IN STAGE 2B. TOMMY'S TURNPIKE AND WILLOW ST ARE CLOSED TO TRAFFIC WHILE BEING RECONSTRUCTED. CEDAR ST REMAINS OPEN TO TRAFFIC.

SHEET NOTES

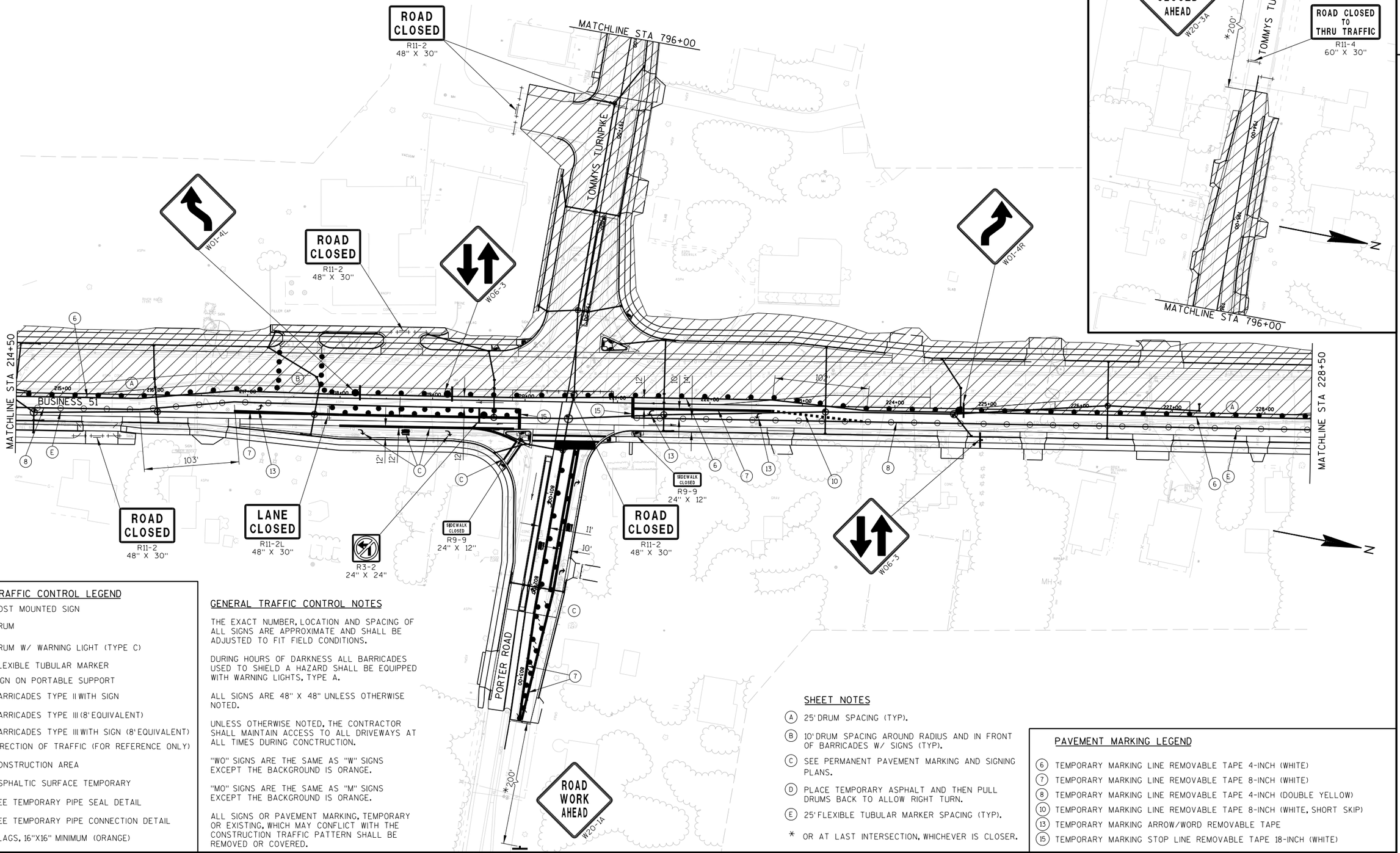
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- (14) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3A	SHEET 213	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

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SHEET NOTES

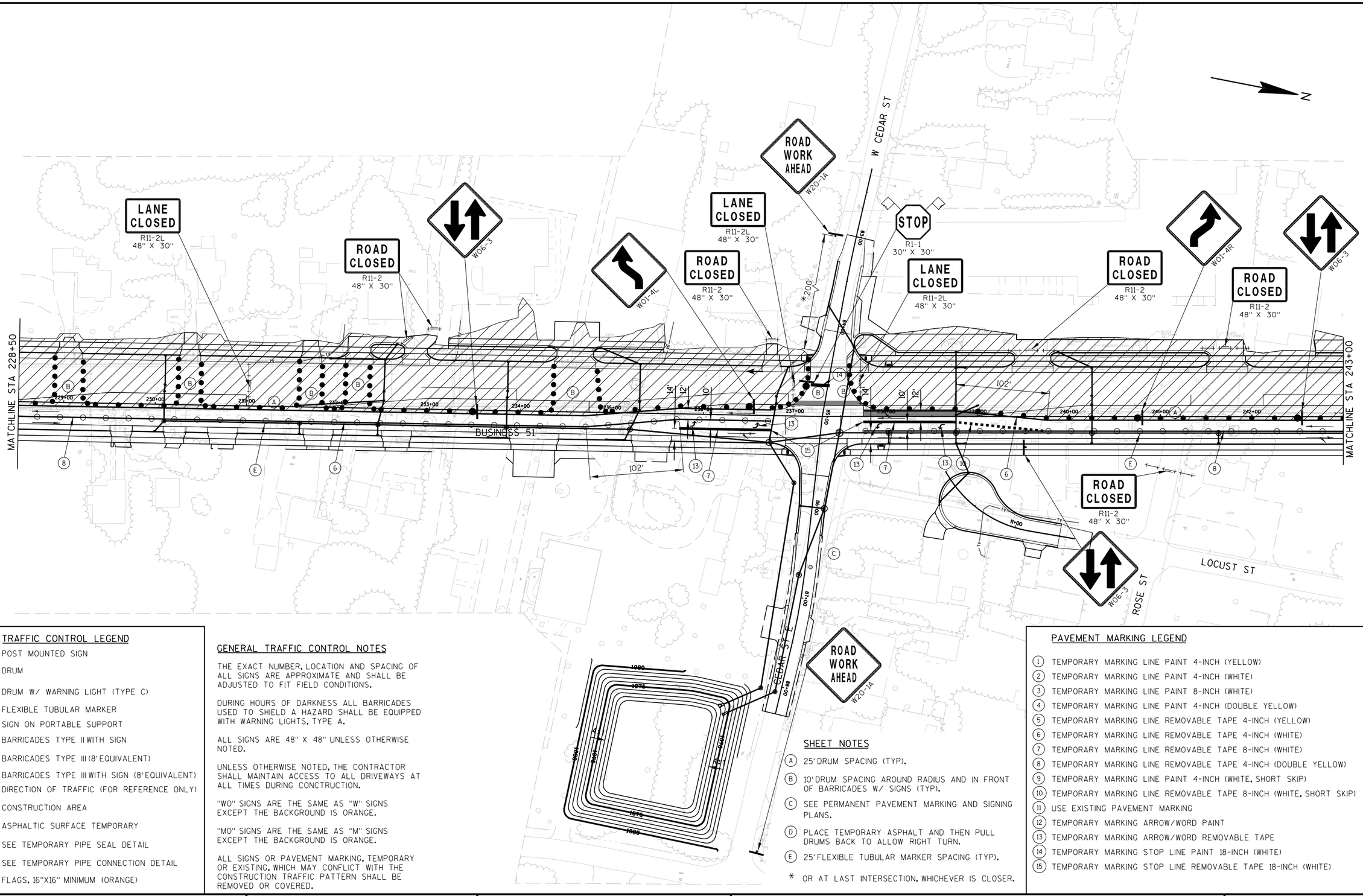
- (A) 25' DRUM SPACING (TYP).
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- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- (10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)
- (13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE
- (15) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3A	SHEET 214	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

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

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ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

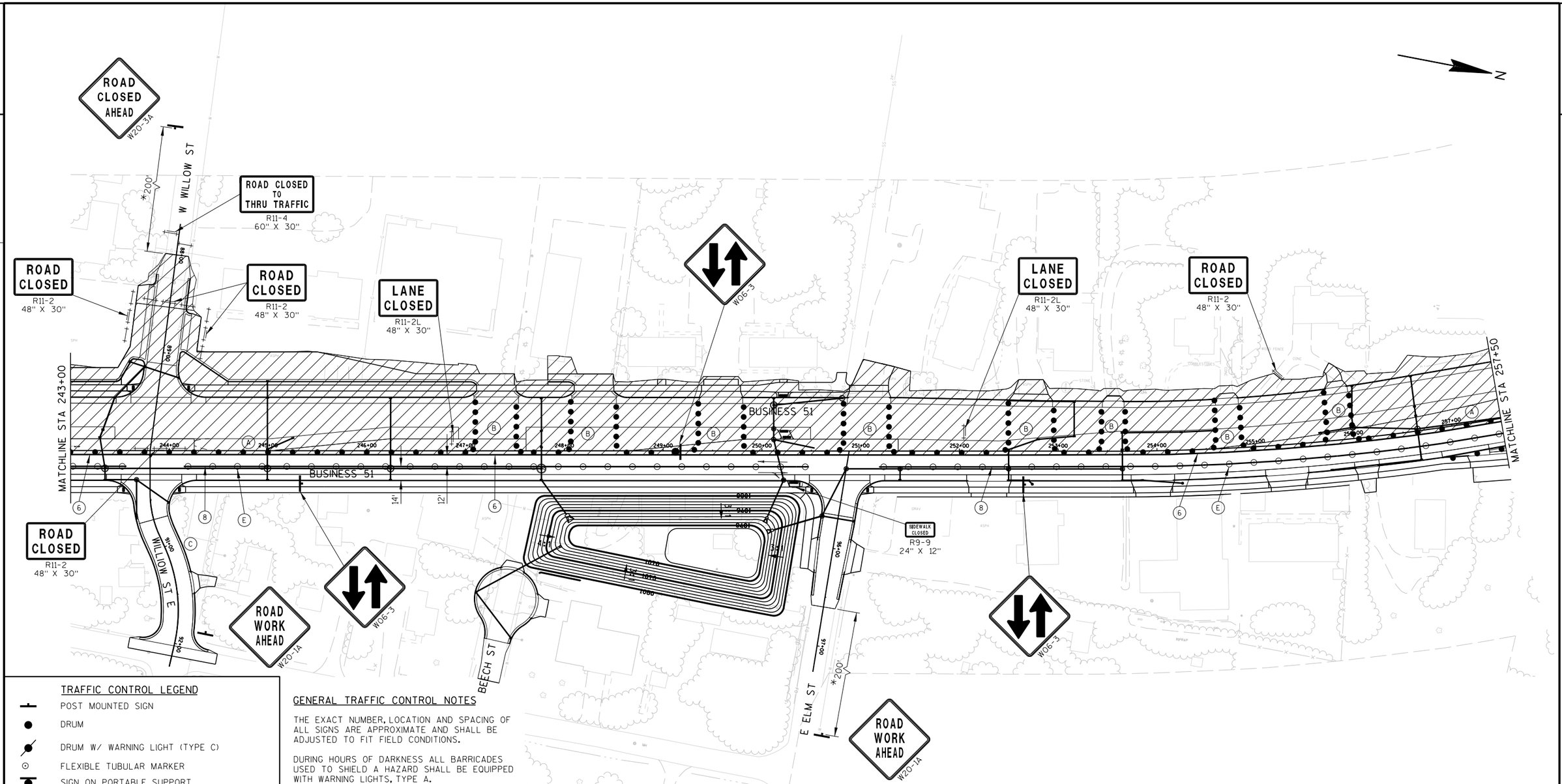
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PAVEMENT MARKING LEGEND

1. TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW)
2. TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
3. TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
4. TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
5. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
6. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
7. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
8. TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
9. TEMPORARY MARKING LINE PAINT 4-INCH (WHITE, SHORT SKIP)
10. TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)
11. USE EXISTING PAVEMENT MARKING
12. TEMPORARY MARKING ARROW/WORD PAINT
13. TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE
14. TEMPORARY MARKING STOP LINE PAINT 18-INCH (WHITE)
15. TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3A	SHEET 215	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

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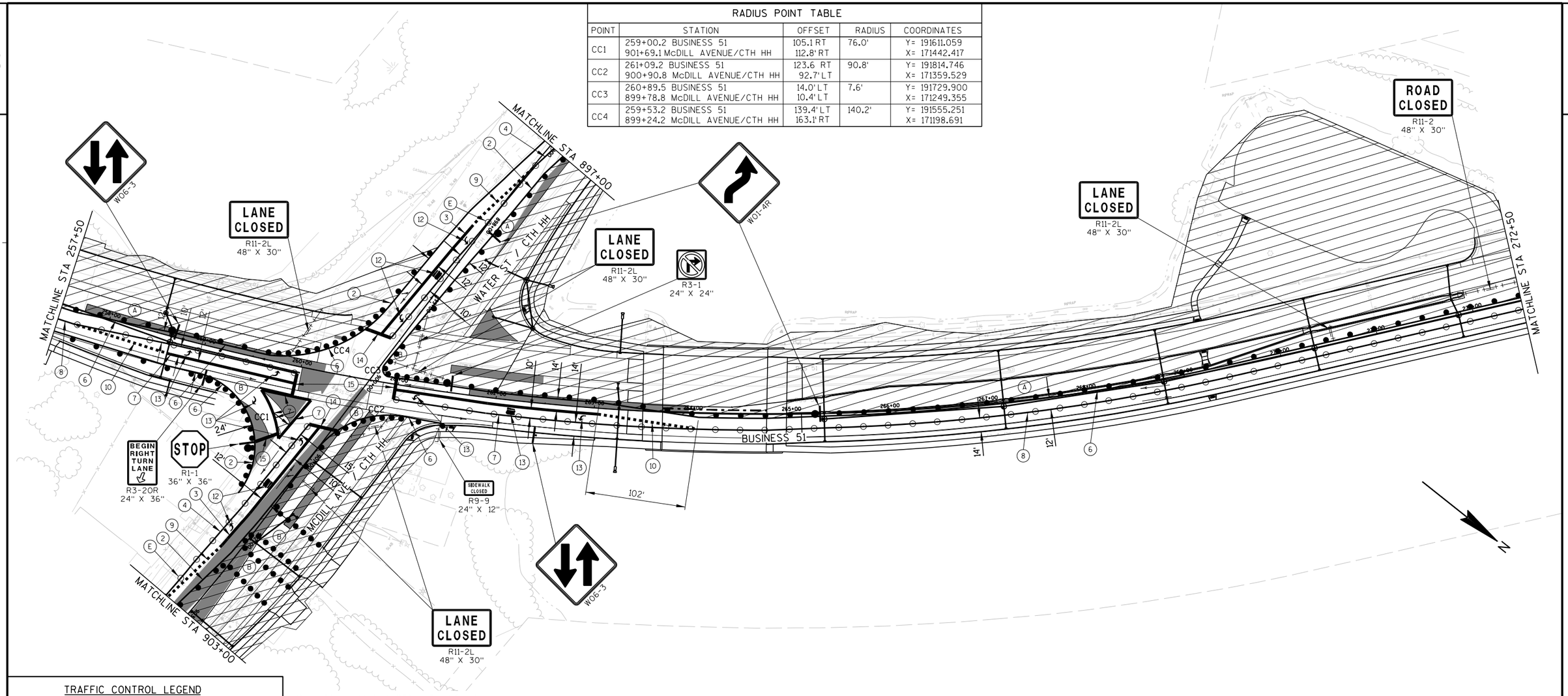
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- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3A	SHEET 216	E

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	259+00.2 BUSINESS 51 901+69.1 McDILL AVENUE/CTH HH	105.1'RT 112.8'RT	76.0'	Y= 191611.059 X= 171442.417
CC2	261+09.2 BUSINESS 51 900+90.8 McDILL AVENUE/CTH HH	123.6 RT 92.7'LT	90.8'	Y= 191814.746 X= 171359.529
CC3	260+89.5 BUSINESS 51 899+78.8 McDILL AVENUE/CTH HH	14.0'LT 10.4'LT	7.6'	Y= 191729.900 X= 171249.355
CC4	259+53.2 BUSINESS 51 899+24.2 McDILL AVENUE/CTH HH	139.4'LT 163.1'RT	140.2'	Y= 191555.251 X= 171198.691



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

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UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

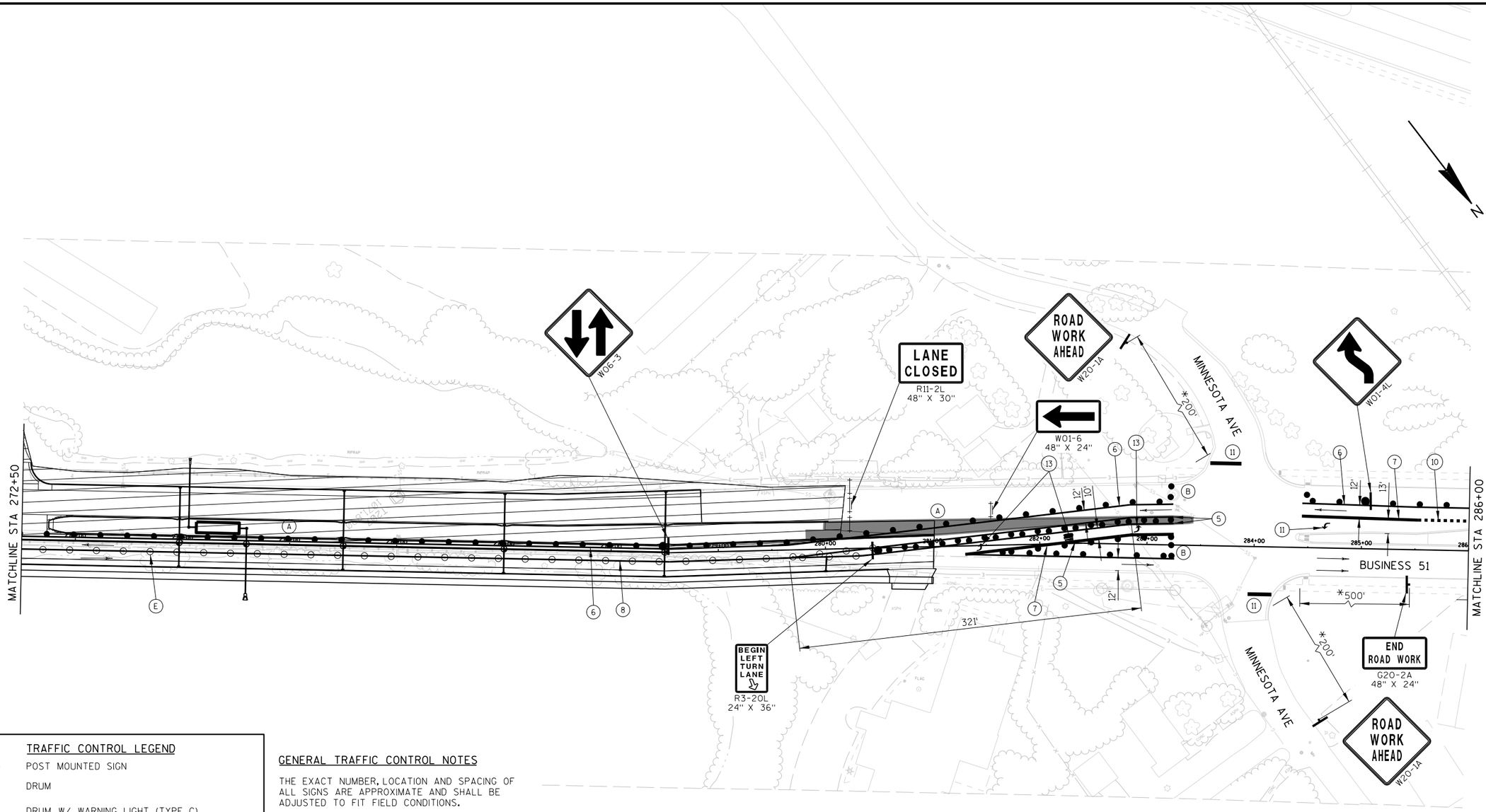
* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

(2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
(3) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
(4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
(7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
(8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
(9) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE, SHORT SKIP)
(10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)
(12) TEMPORARY MARKING ARROW/WORD PAINT
(13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE
(14) TEMPORARY MARKING STOP LINE PAINT 18-INCH (WHITE)
(15) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3A	SHEET 217	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

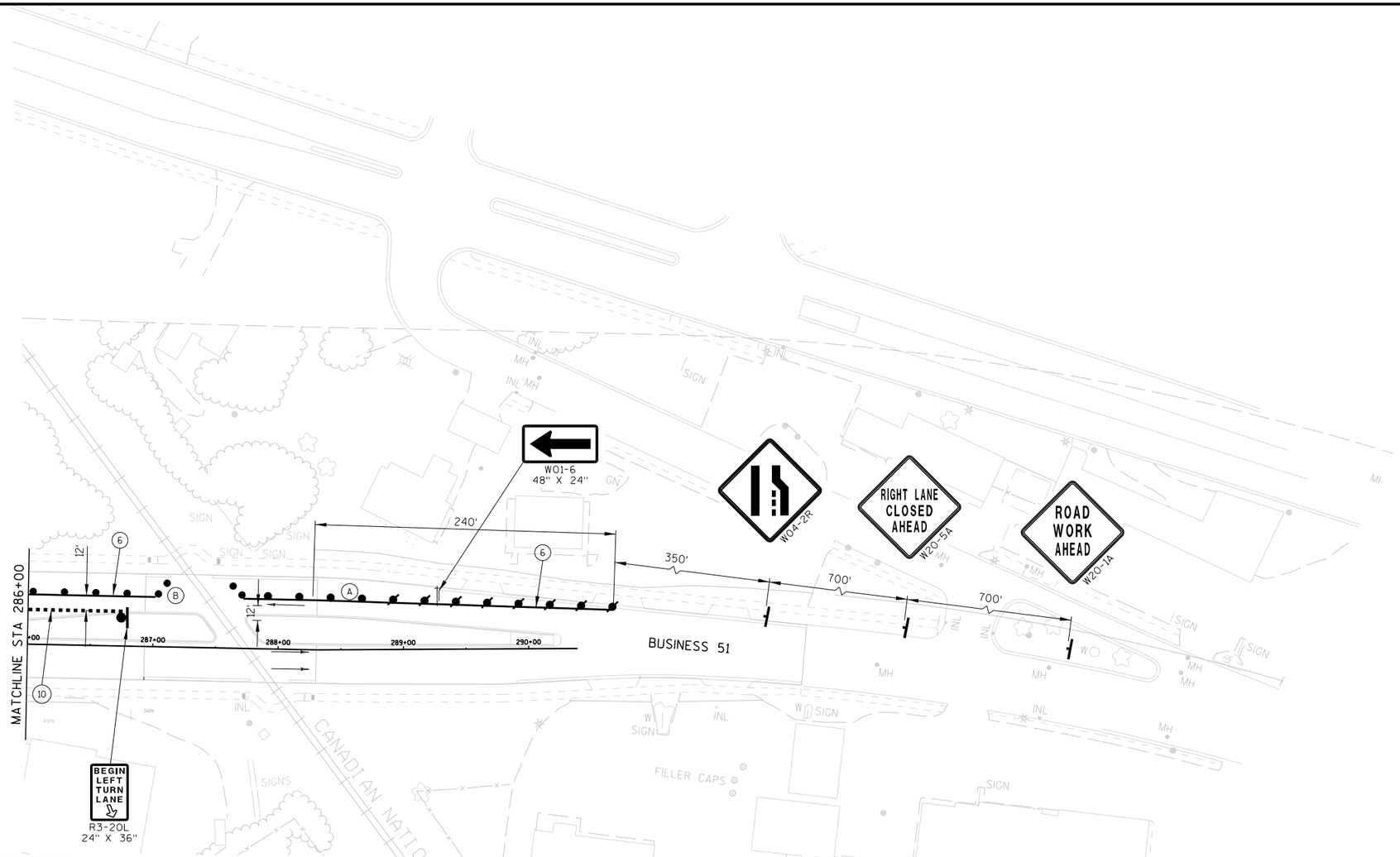
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- (10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)
- (11) USE EXISTING PAVEMENT MARKING
- (13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3A	SHEET 218	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

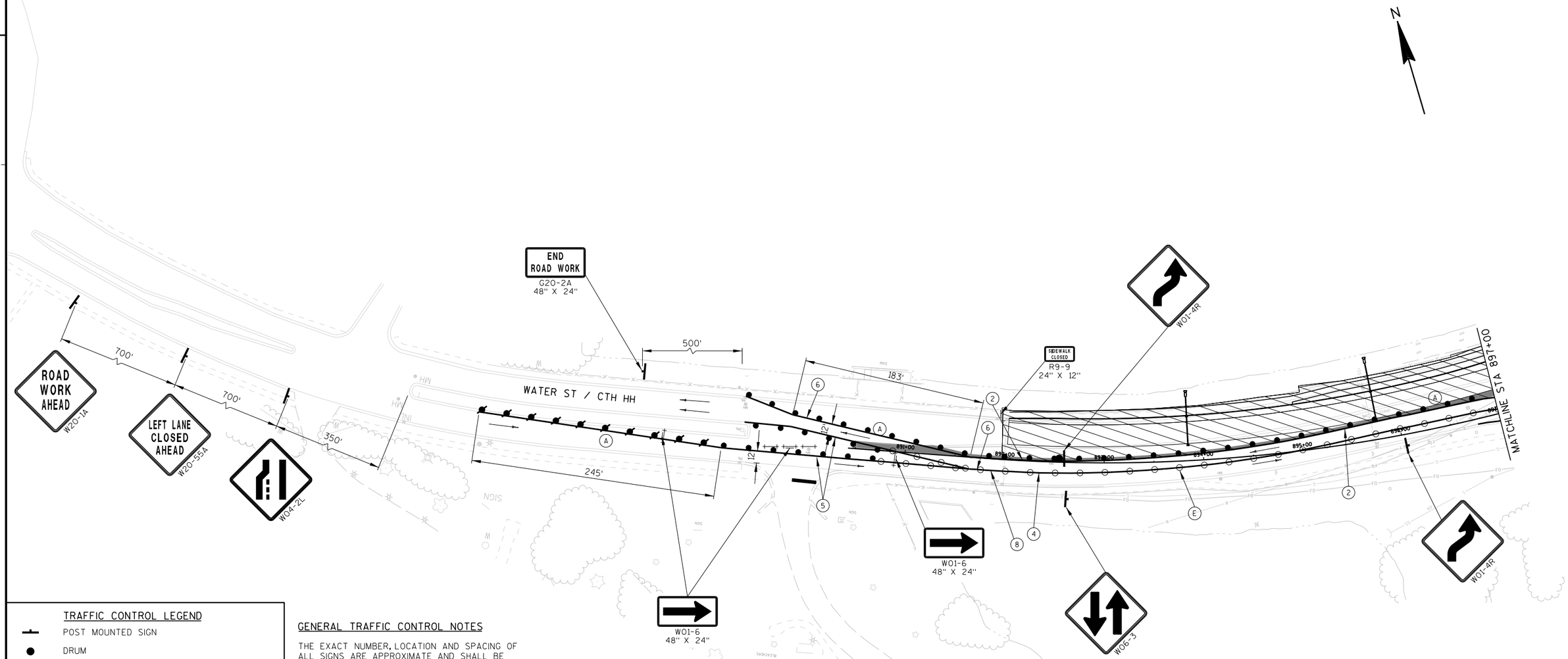
PAVEMENT MARKING LEGEND

(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

(10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3A	SHEET 219	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

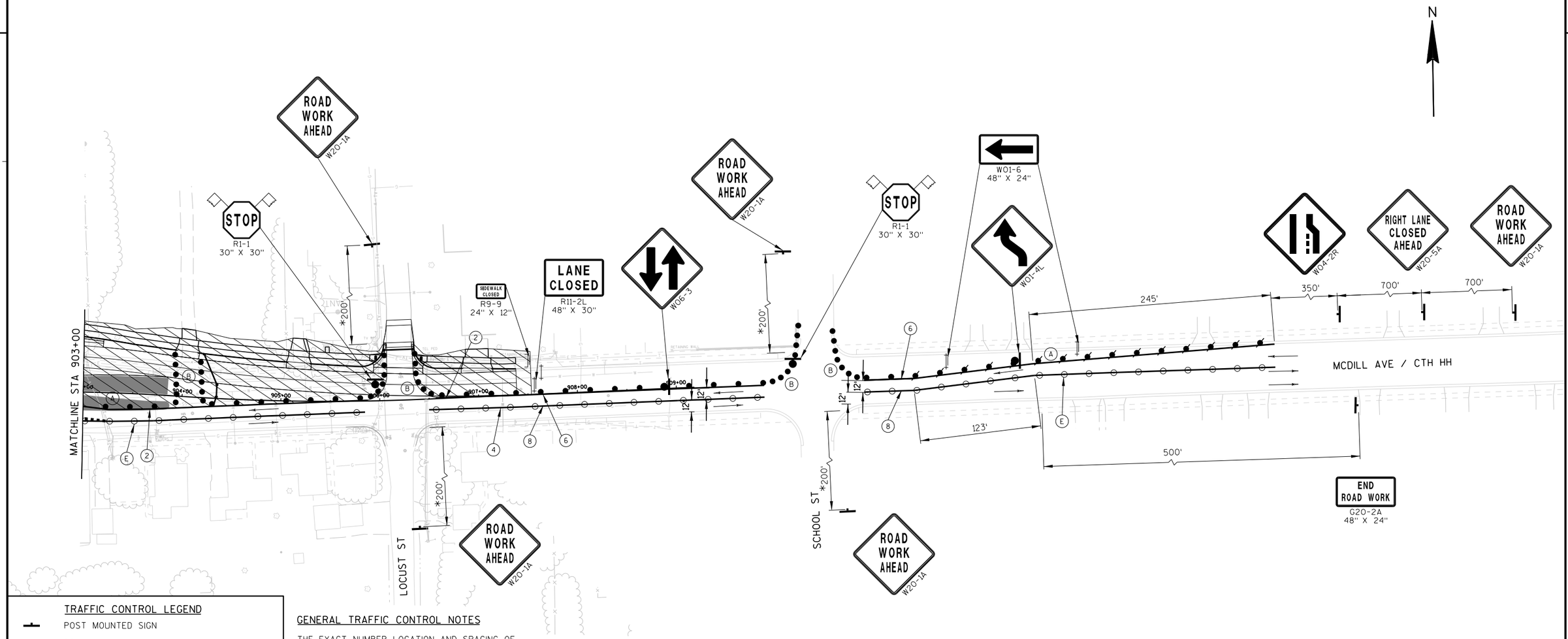
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3A-1	SHEET 220	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

(2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)

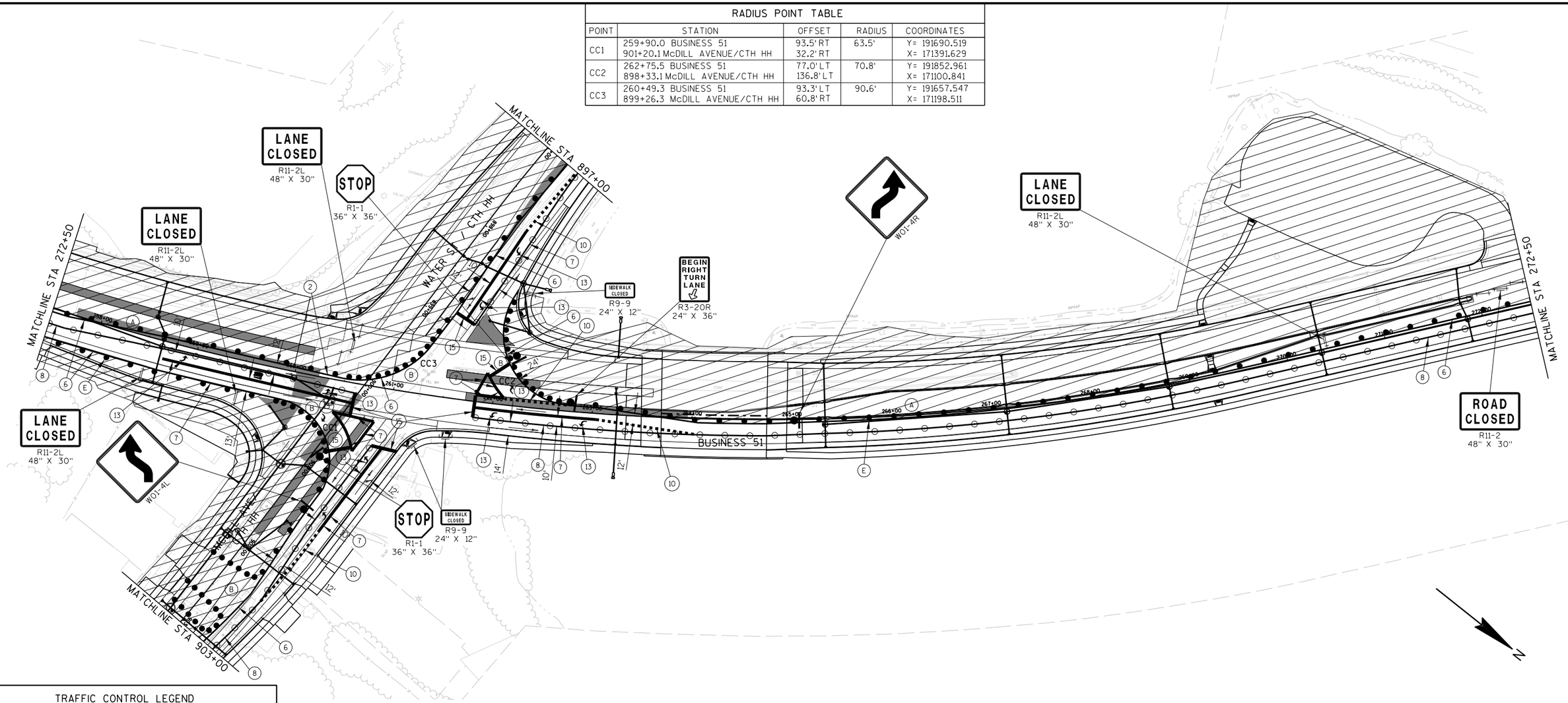
(4) TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)

(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

(8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3A	SHEET 221	E

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	259+90.0 BUSINESS 51 901+20.1 McDILL AVENUE/CTH HH	93.5'RT 32.2'RT	63.5'	Y= 191690.519 X= 171391.629
CC2	262+75.5 BUSINESS 51 898+33.1 McDILL AVENUE/CTH HH	77.0'LT 136.8'LT	70.8'	Y= 191852.961 X= 171100.841
CC3	260+49.3 BUSINESS 51 899+26.3 McDILL AVENUE/CTH HH	93.3'LT 60.8'RT	90.6'	Y= 191657.547 X= 171198.511



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

STAGE 3A2 DESCRIPTION:

BUSINESS 51 TRAFFIC REMAINS AS IN STAGE 3A. CTH HH TRAFFIC IS SHIFTED TO THE NORTH SIDE AND THE SOUTH SIDE IS CONSTRUCTED.

SHEET NOTES

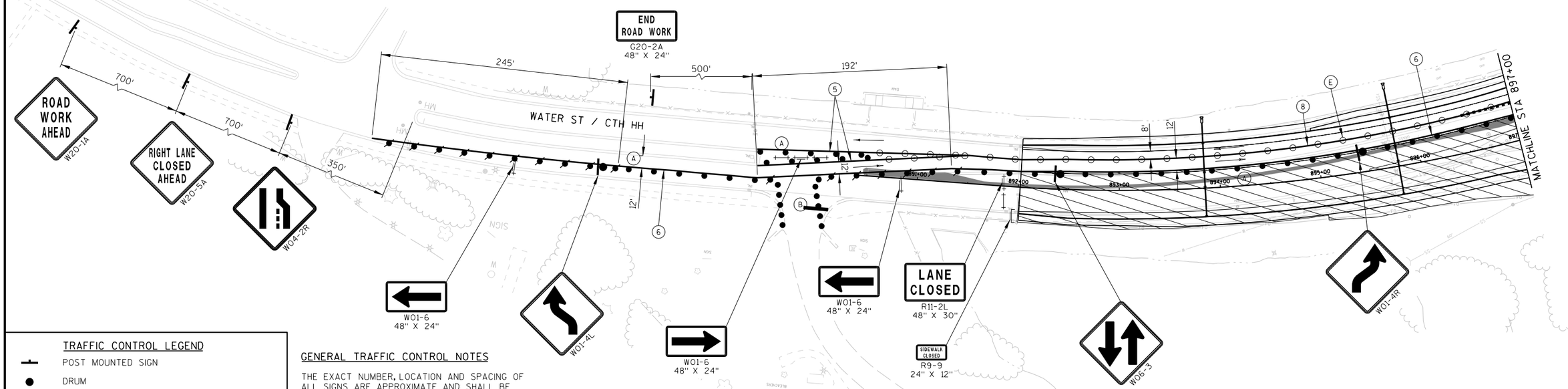
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (2) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- (10) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE, SHORT SKIP)
- (13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE
- (15) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3A-2	SHEET 222	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

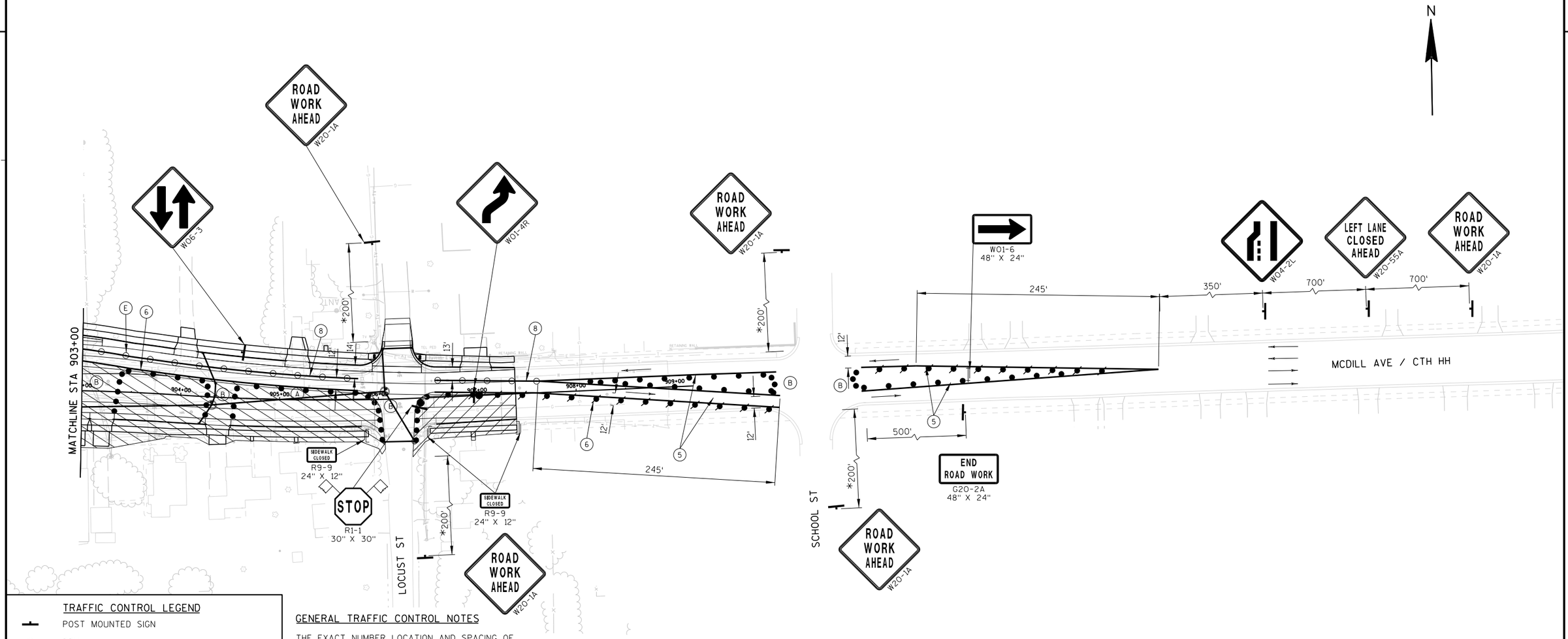
(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

(8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3A-2	SHEET 223	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

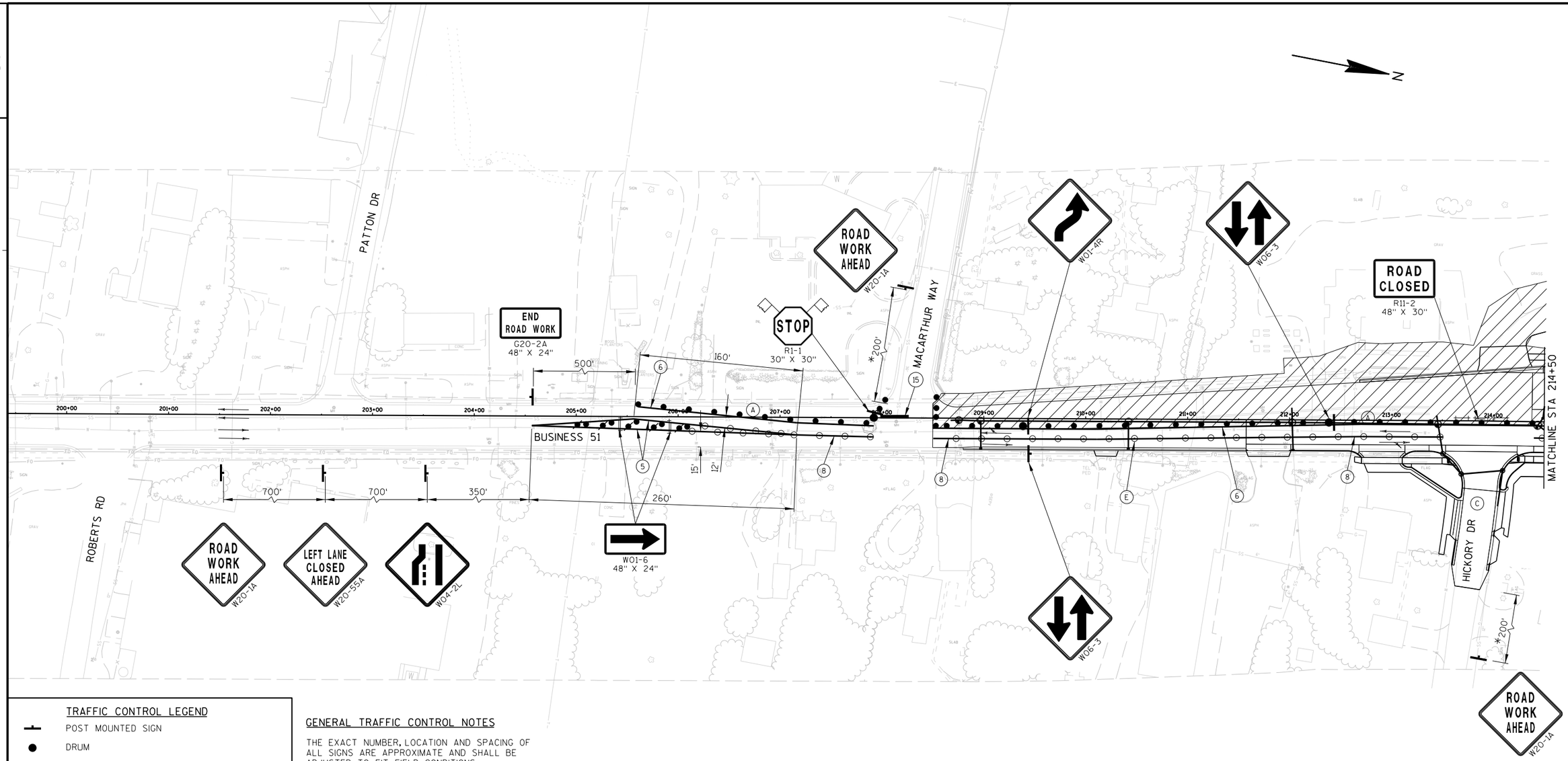
(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

(8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3A-2	SHEET 224	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

STAGE 3B DESCRIPTION:

BUSINESS 51 AND CTH HH TRAFFIC IS CONTROLLED AS IN STAGE 3A-2. TOMMY'S TURNPIKE AND WILLOW ST ARE OPEN TO TRAFFIC AND CEDAR ST IS CLOSED FOR CONSTRUCTION.

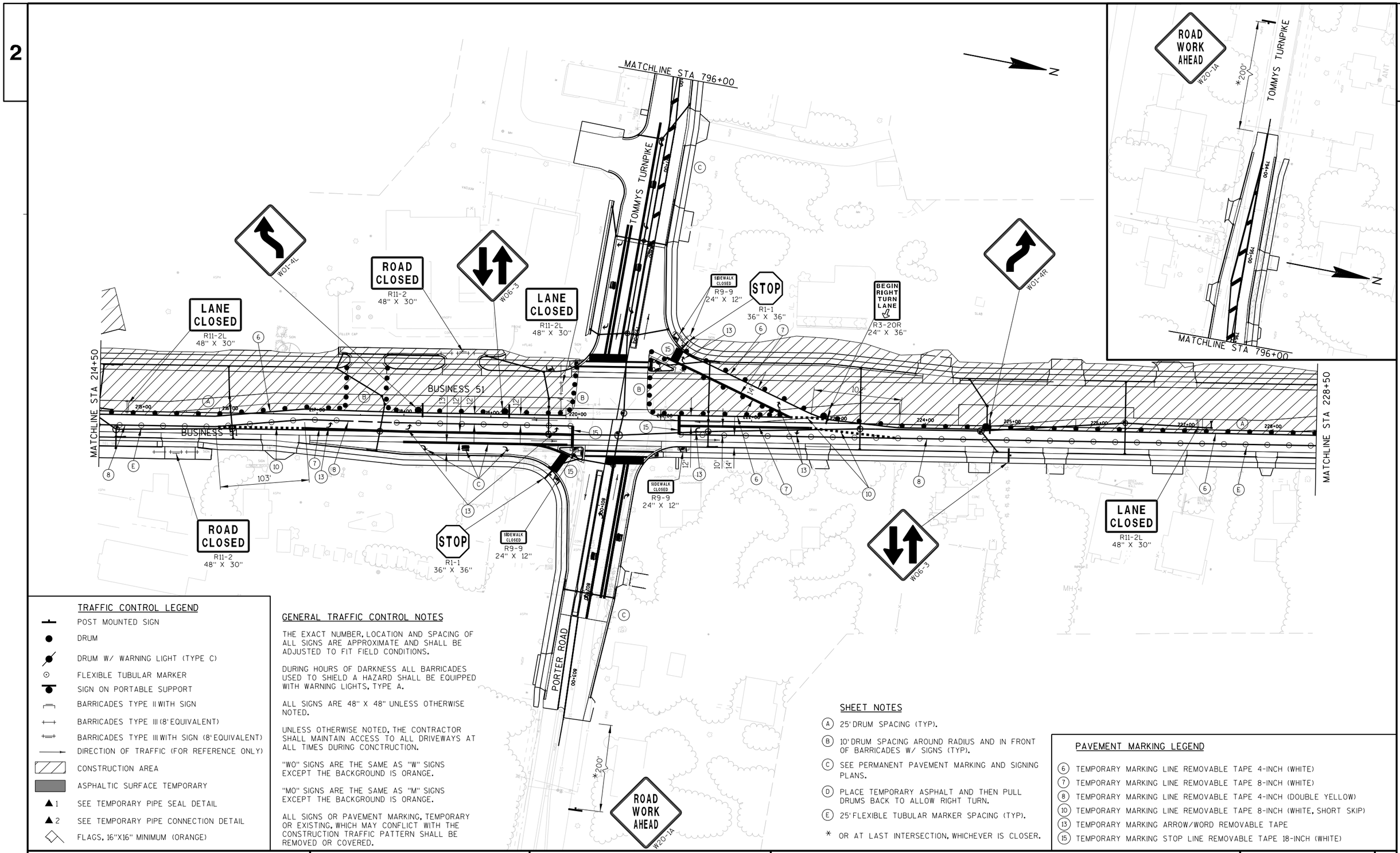
SHEET NOTES

- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- (15) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3B	SHEET 225	E



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

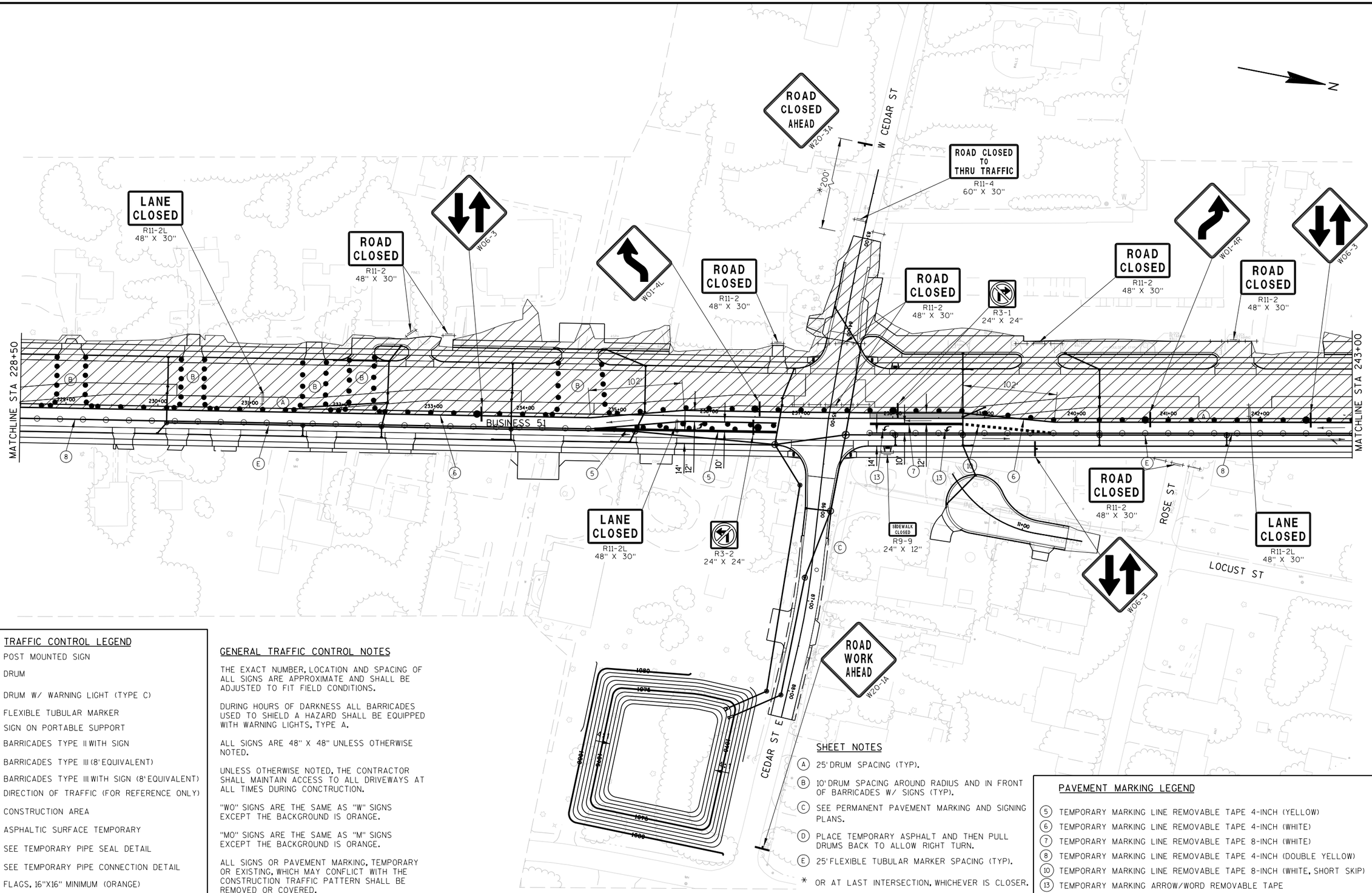
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

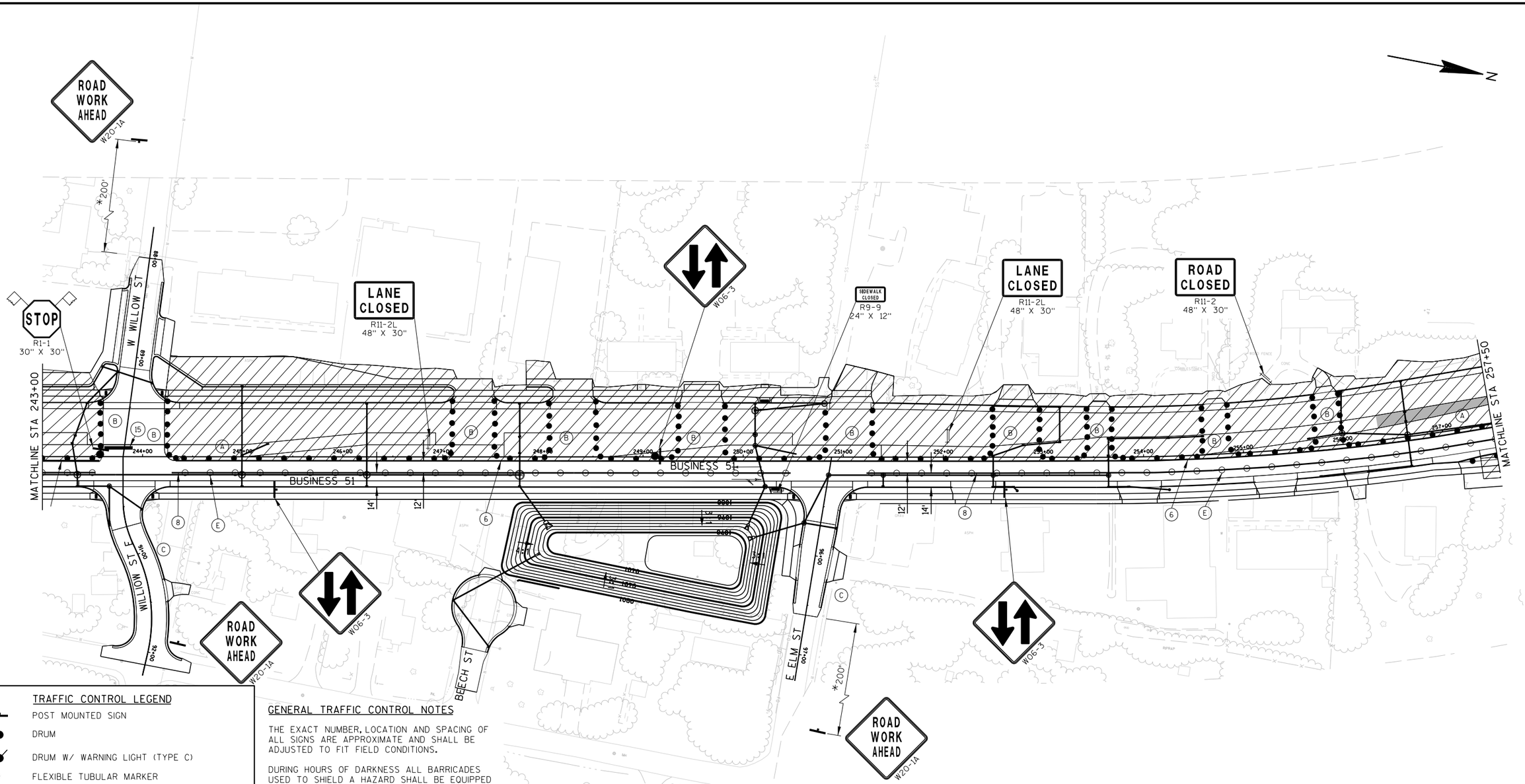
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- (10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)
- (13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE
- (15) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3B	SHEET 226	E

2


N
ROAD CLOSED AHEAD
W20-3A
W CEDAR ST
*200'
ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"
LANE CLOSED
R11-2L
48" X 30"
ROAD CLOSED
R11-2
48" X 30"
W06-3
W01-4L
ROAD CLOSED
R11-2
48" X 30"
ROAD CLOSED
R11-2
48" X 30"
R3-1
24" X 24"
W01-4R
ROAD CLOSED
R11-2
48" X 30"
W06-3
ROAD CLOSED
R11-2
48" X 30"
MATCHLINE STA 228+50
MATCHLINE STA 243+00
BUSINESS 51
102'
102'
14'
12'
10'
14'
10'
12'
LANE CLOSED
R11-2L
48" X 30"
R3-2
24" X 24"
SIDEWALK CLOSED
R9-9
24" X 12"
ROAD CLOSED
R11-2
48" X 30"
ROSE ST
LANE CLOSED
R11-2L
48" X 30"
LOCUST ST
W06-3
ROAD WORK AHEAD
W20-1A
CEDAR ST E
60'
60'
60'

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

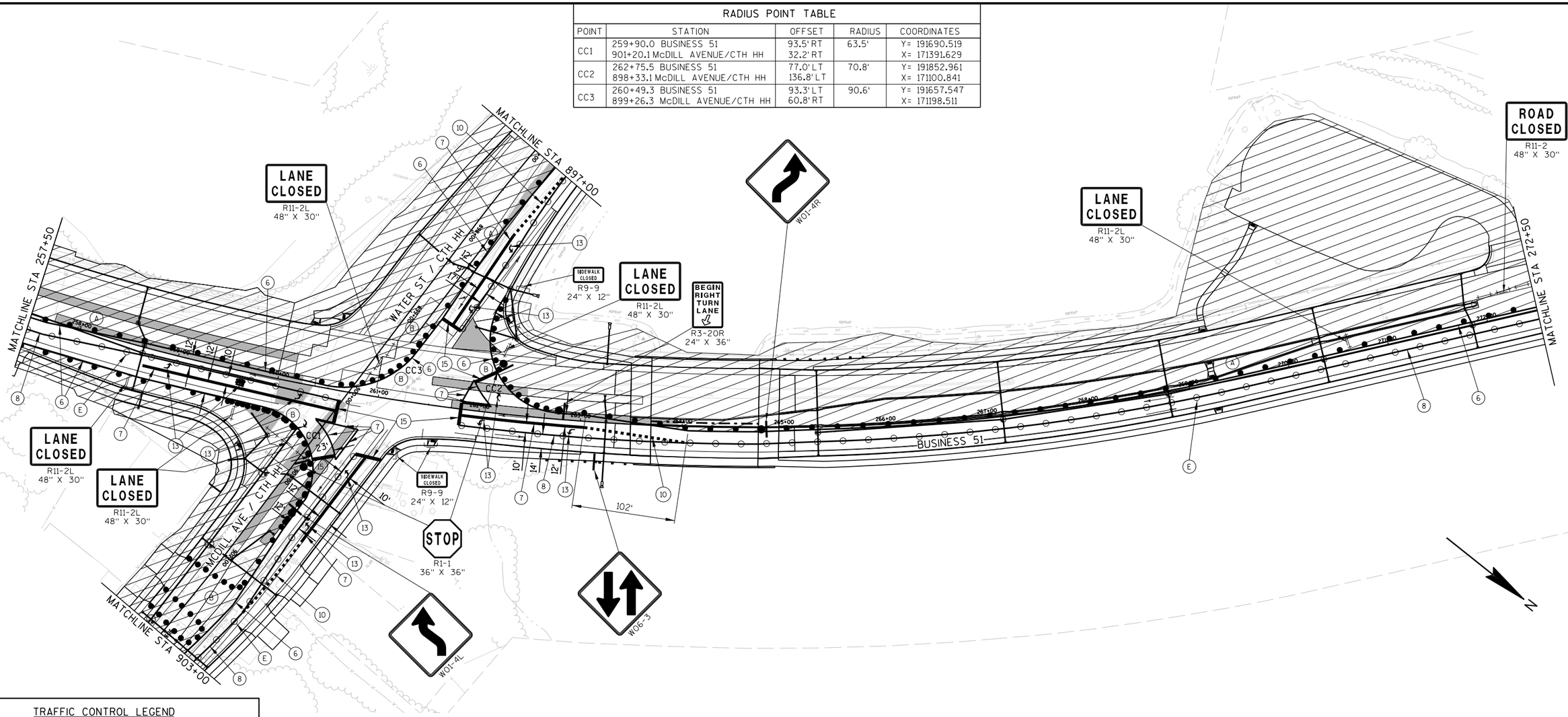
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(8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

(15) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3B	SHEET 228	E

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	259+90.0 BUSINESS 51 901+20.1 McDILL AVENUE/CTH HH	93.5'RT 32.2'RT	63.5'	Y= 191690.519 X= 171391.629
CC2	262+75.5 BUSINESS 51 898+33.1 McDILL AVENUE/CTH HH	77.0'LT 136.8'LT	70.8'	Y= 191852.961 X= 171100.841
CC3	260+49.3 BUSINESS 51 899+26.3 McDILL AVENUE/CTH HH	93.3'LT 60.8'RT	90.6'	Y= 191657.547 X= 171198.511



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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SHEET NOTES

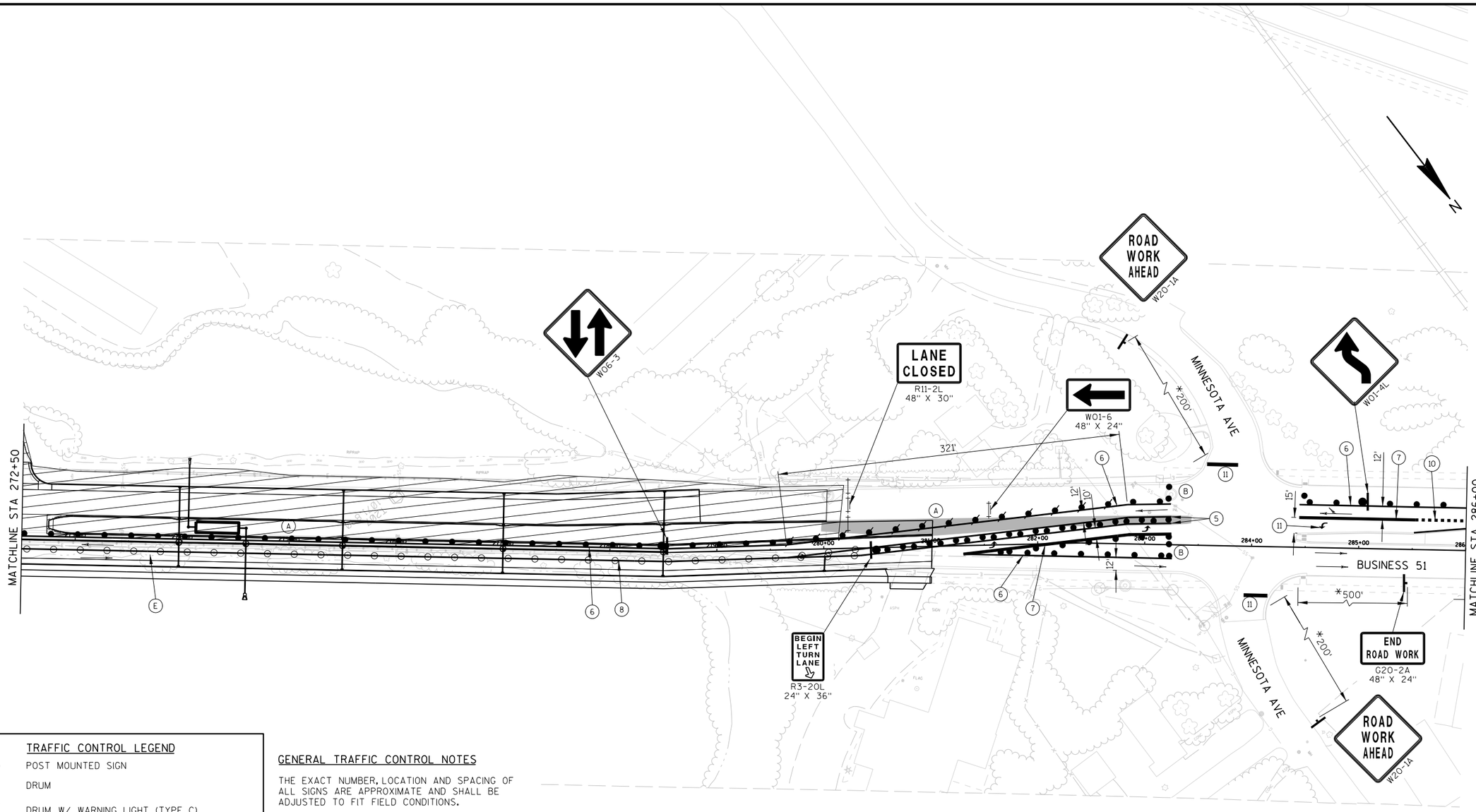
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- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
- (10) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE, SHORT SKIP)
- (13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE
- (15) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3B	SHEET 229	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

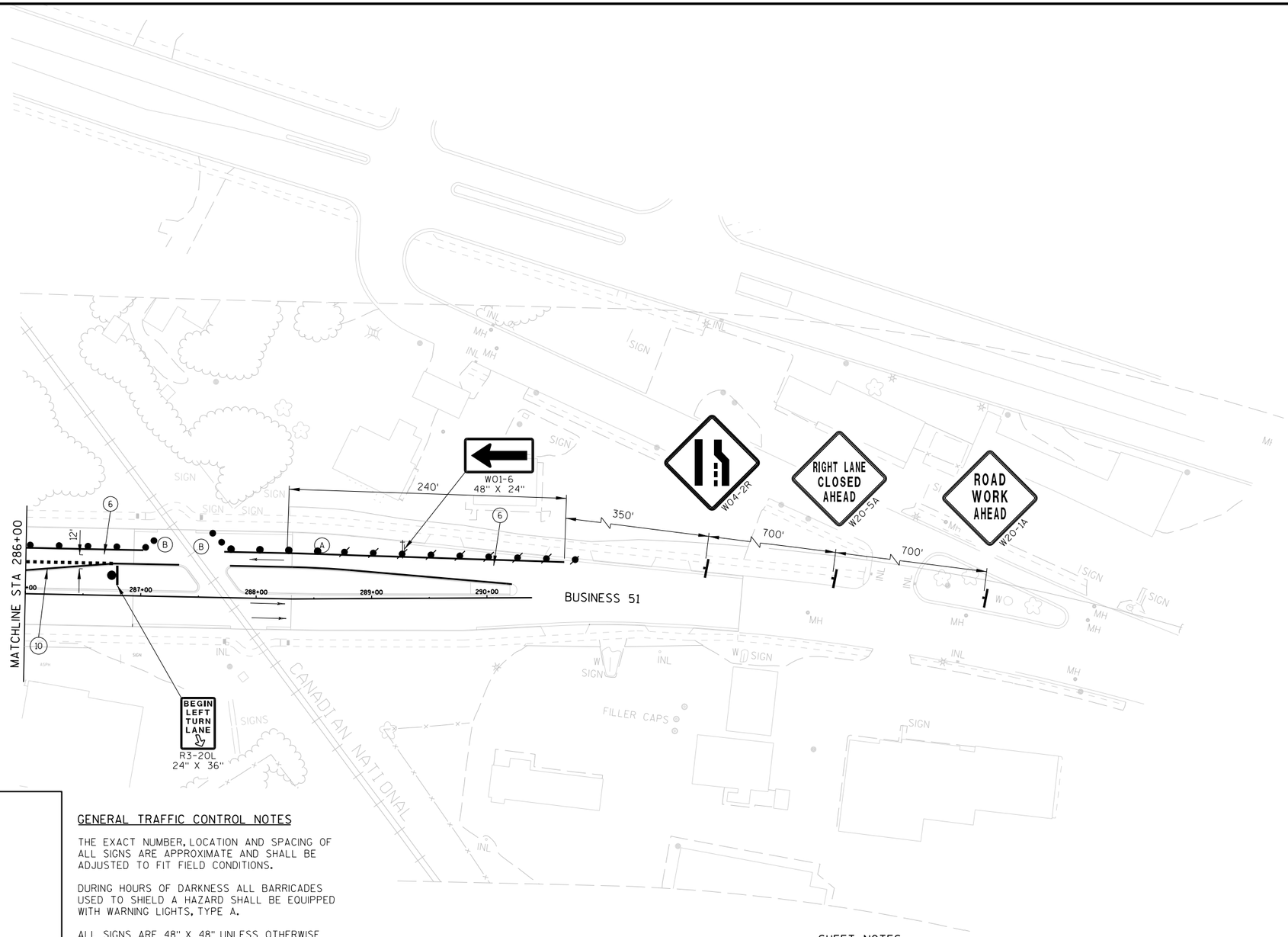
* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
(7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
(8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
(10) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE, SHORT SKIP)
(11) USE EXISTING PAVEMENT MARKING

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3B	SHEET 230	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

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SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

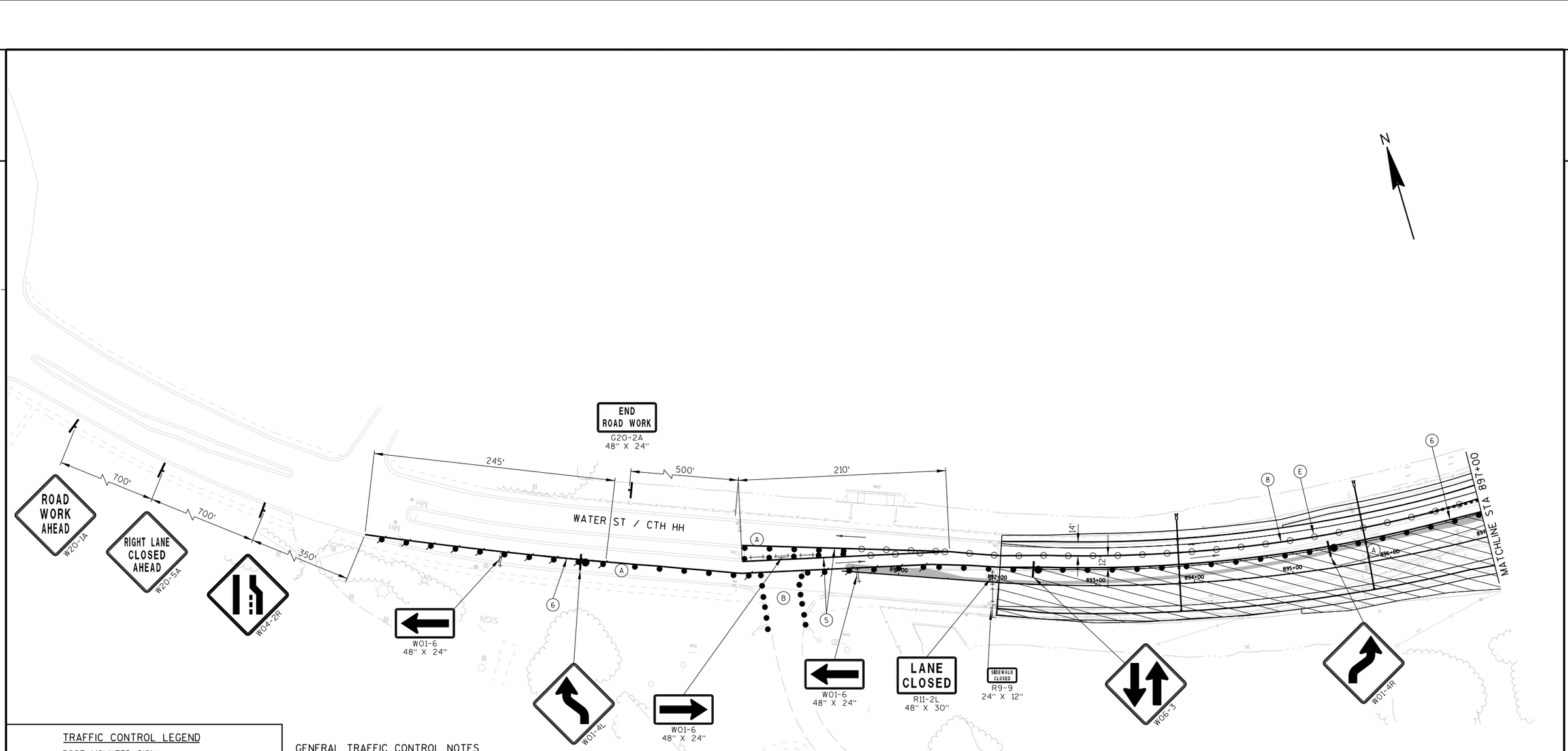
PAVEMENT MARKING LEGEND

(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

(10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3B	SHEET 231	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

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

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SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

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PAVEMENT MARKING LEGEND

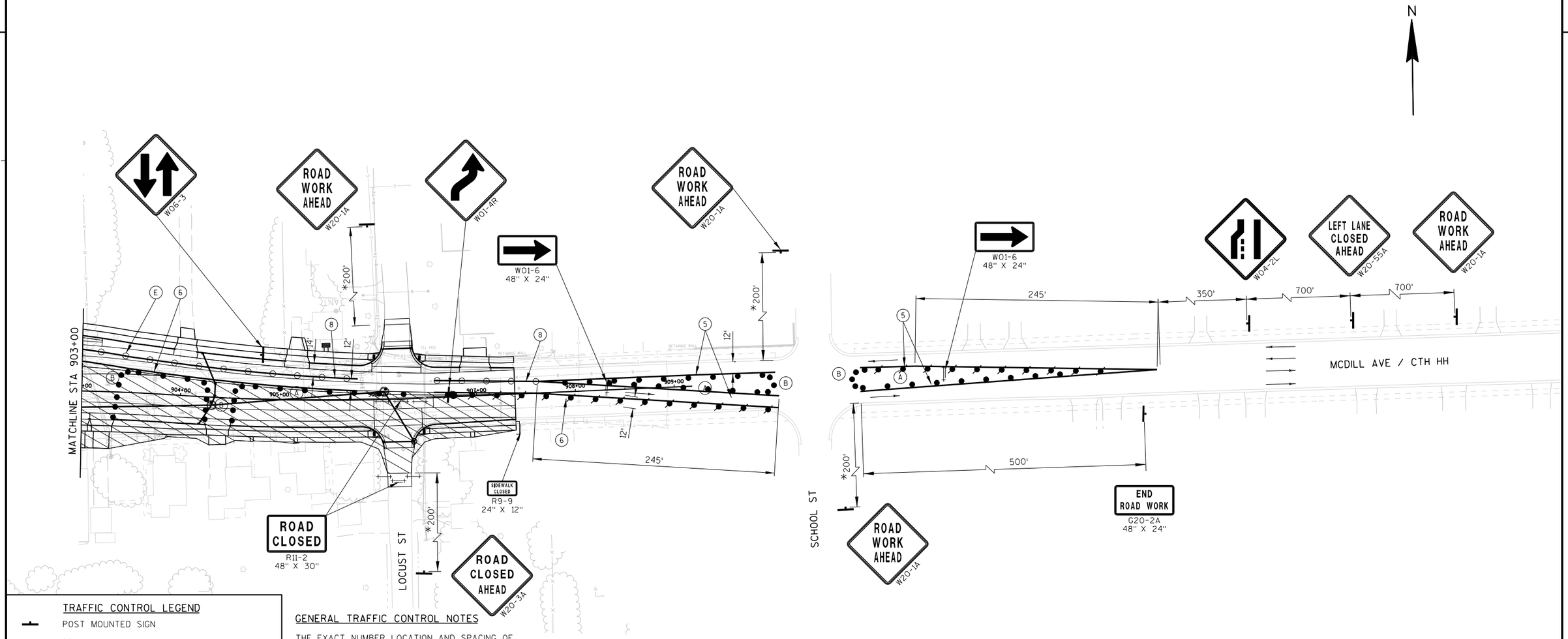
(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

(8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3B	SHEET 232	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

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SHEET NOTES

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(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

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PAVEMENT MARKING LEGEND

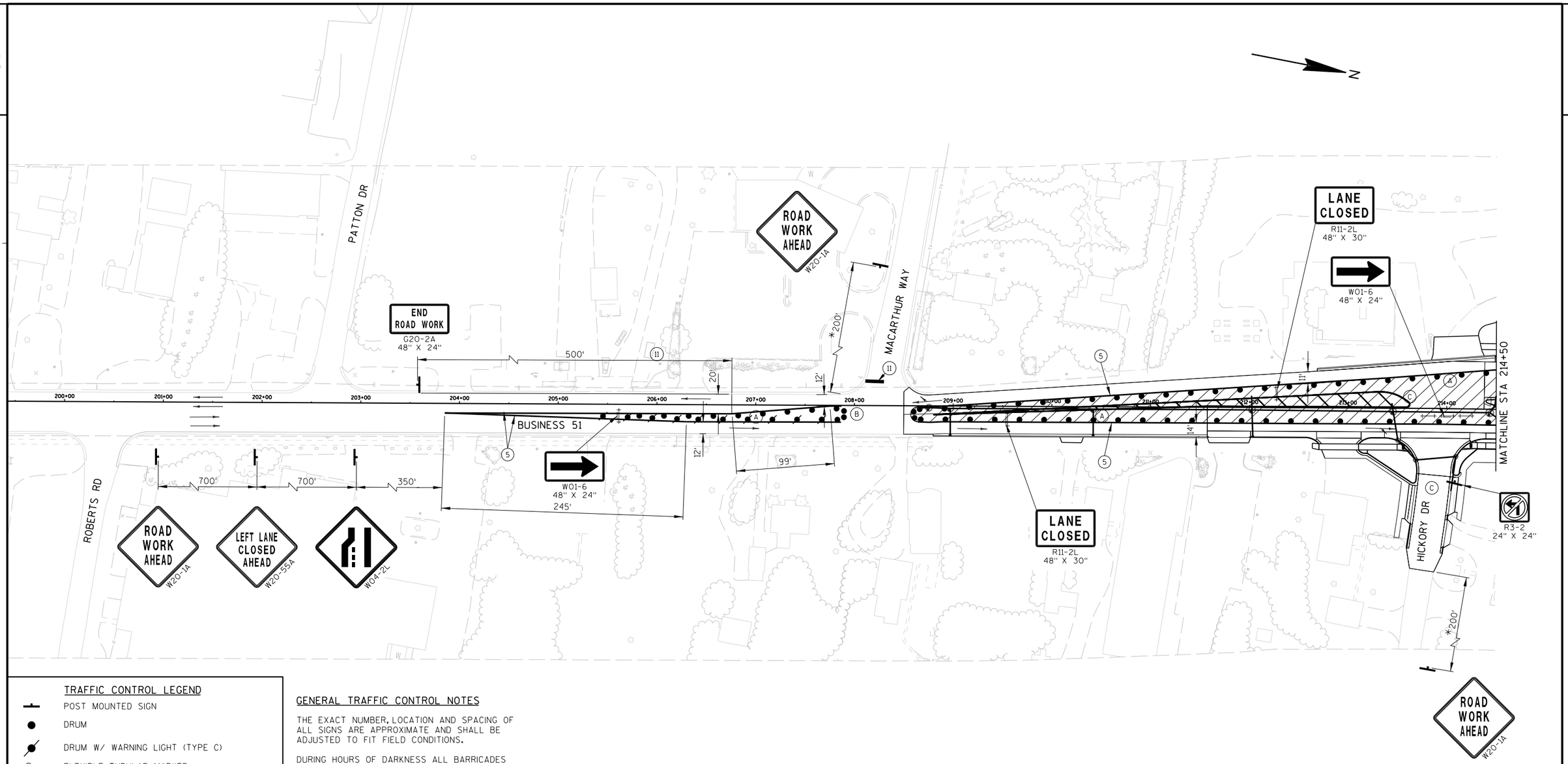
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PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 3B	SHEET 233	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
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- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
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GENERAL TRAFFIC CONTROL NOTES

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ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

STAGE 4A DESCRIPTION:

BUSINESS 51 TRAFFIC IS PLACED ON THE OUTSIDE LANES OF THE NEWLY CONSTRUCTED ROADWAY WHILE THE MEDIANS ARE CONSTRUCTED. NB BUSINESS 51 TRAFFIC IS SHIFTED WEST AT THE INTERSECTION WITH CTH HH TO ALLOW ISLAND AND PAVEMENT CONSTRUCTION. CTH HH TRAFFIC REMAINS AS IN STAGE 3B.

SHEET NOTES

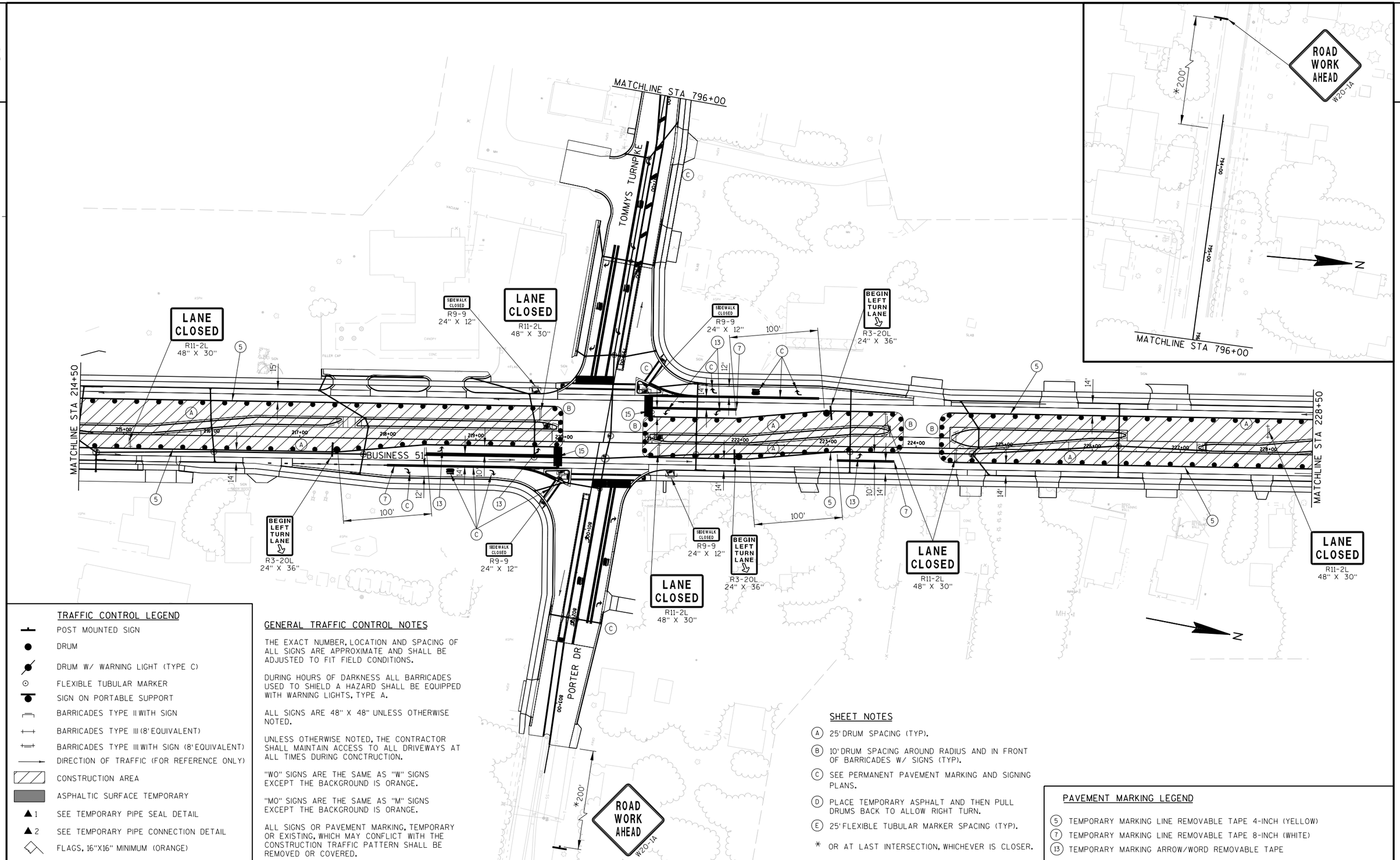
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- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (11) USE EXISTING PAVEMENT MARKING

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4A	SHEET 234	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

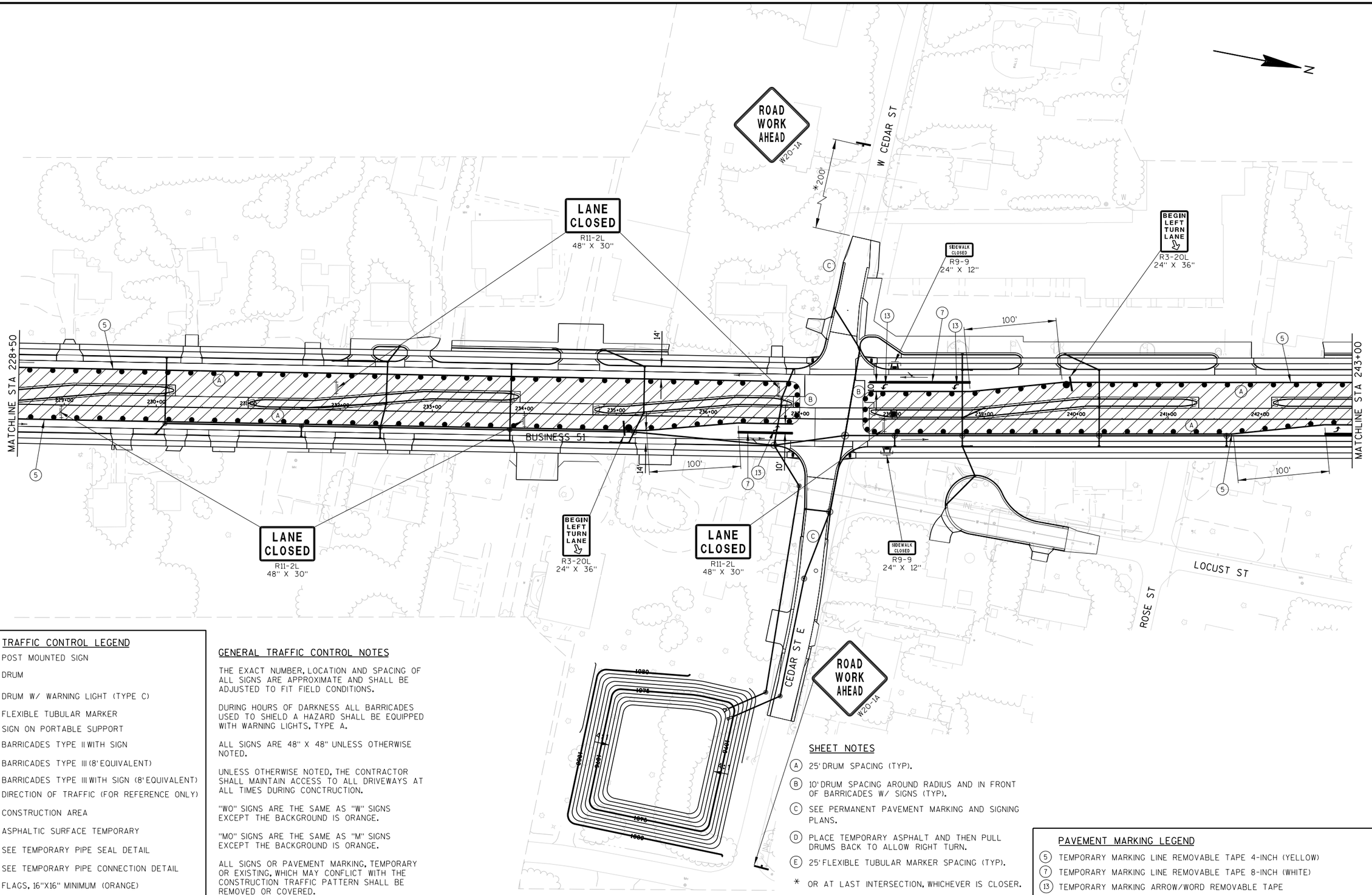
(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

(7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)

(13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4A	SHEET 235	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

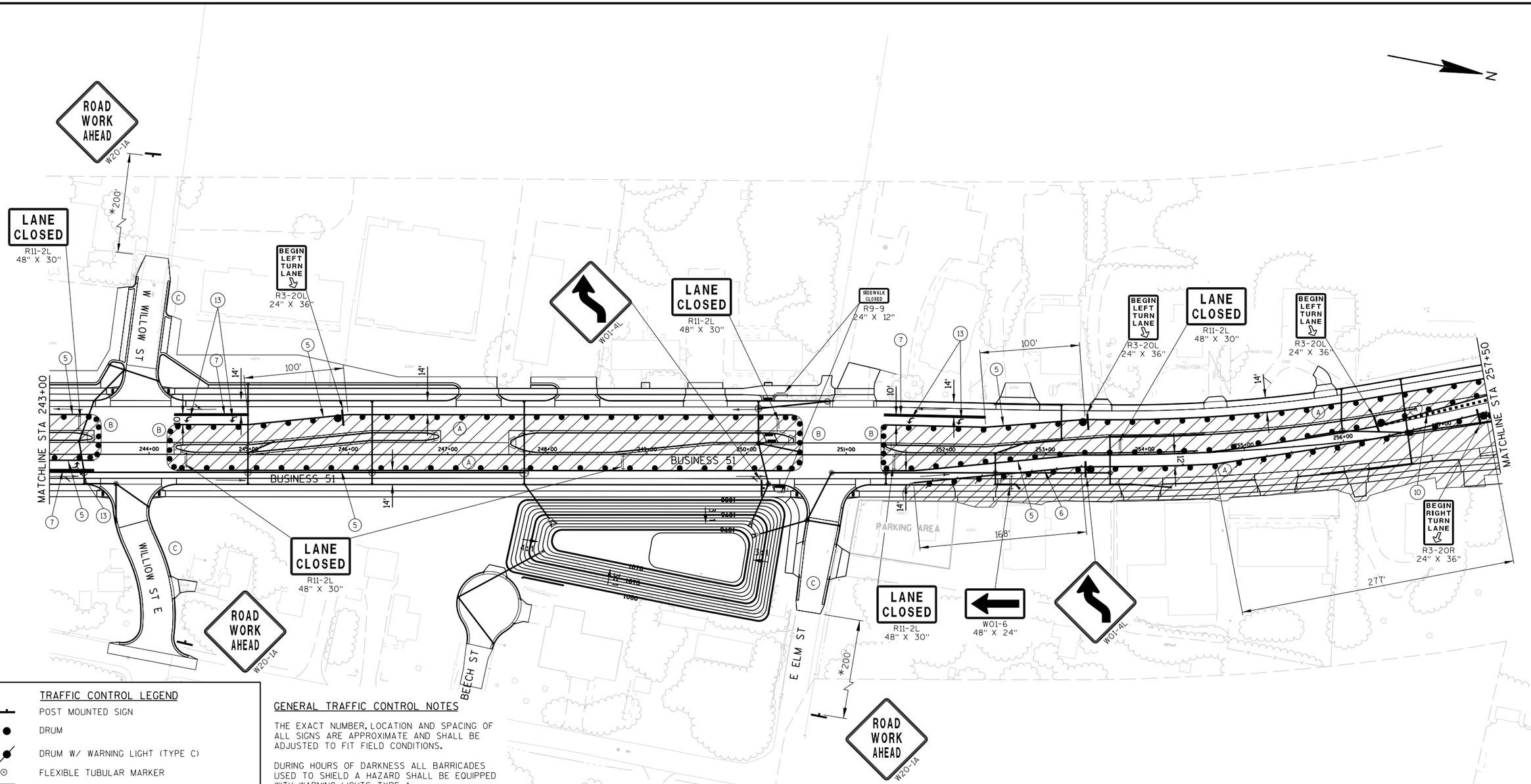
(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

(7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)

(13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4A	SHEET 236	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

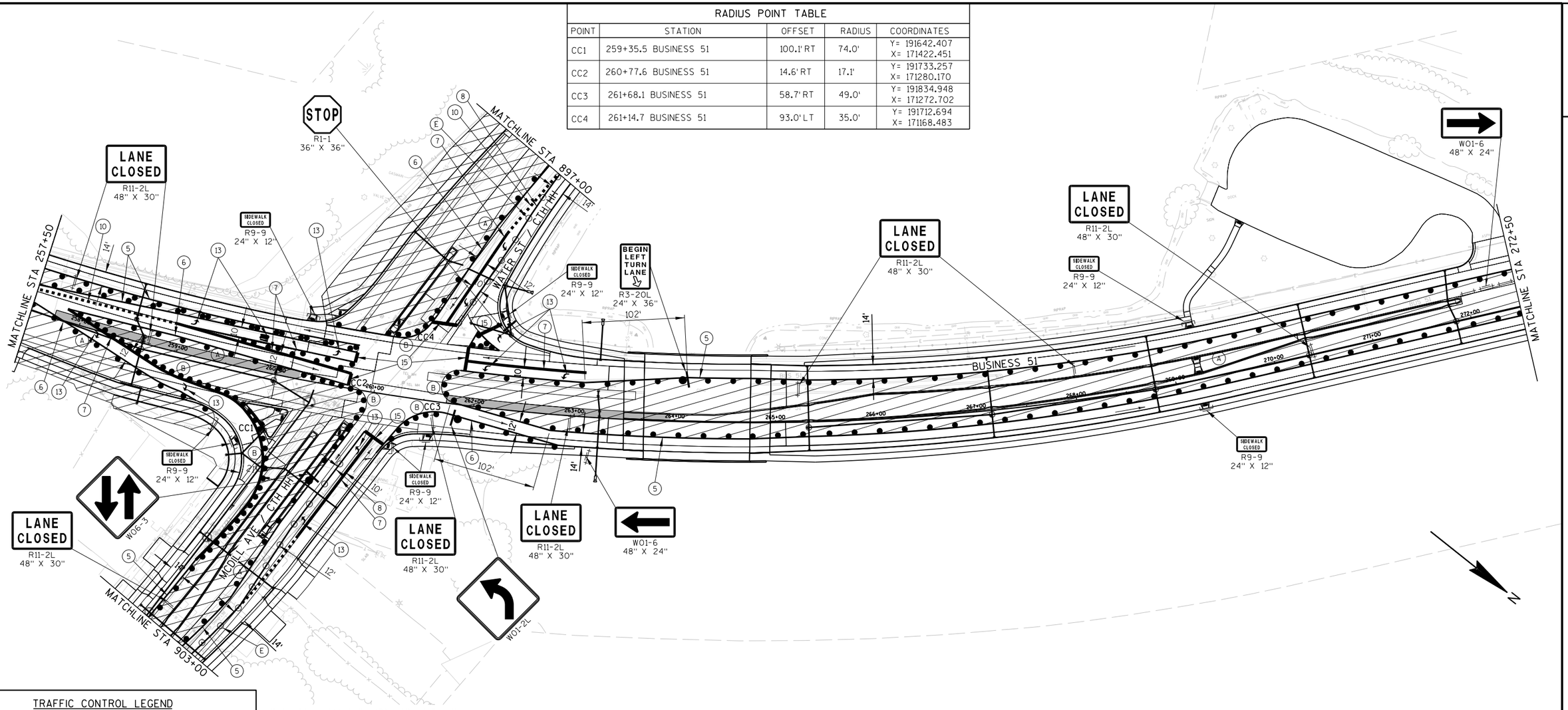
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
- (10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)
- (13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4A	SHEET 237	E

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	259+35.5 BUSINESS 51	100.1' RT	74.0'	Y= 191642.407 X= 171422.451
CC2	260+77.6 BUSINESS 51	14.6' RT	17.1'	Y= 191733.257 X= 171280.170
CC3	261+68.1 BUSINESS 51	58.7' RT	49.0'	Y= 191834.948 X= 171272.702
CC4	261+14.7 BUSINESS 51	93.0' LT	35.0'	Y= 191712.694 X= 171168.483



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

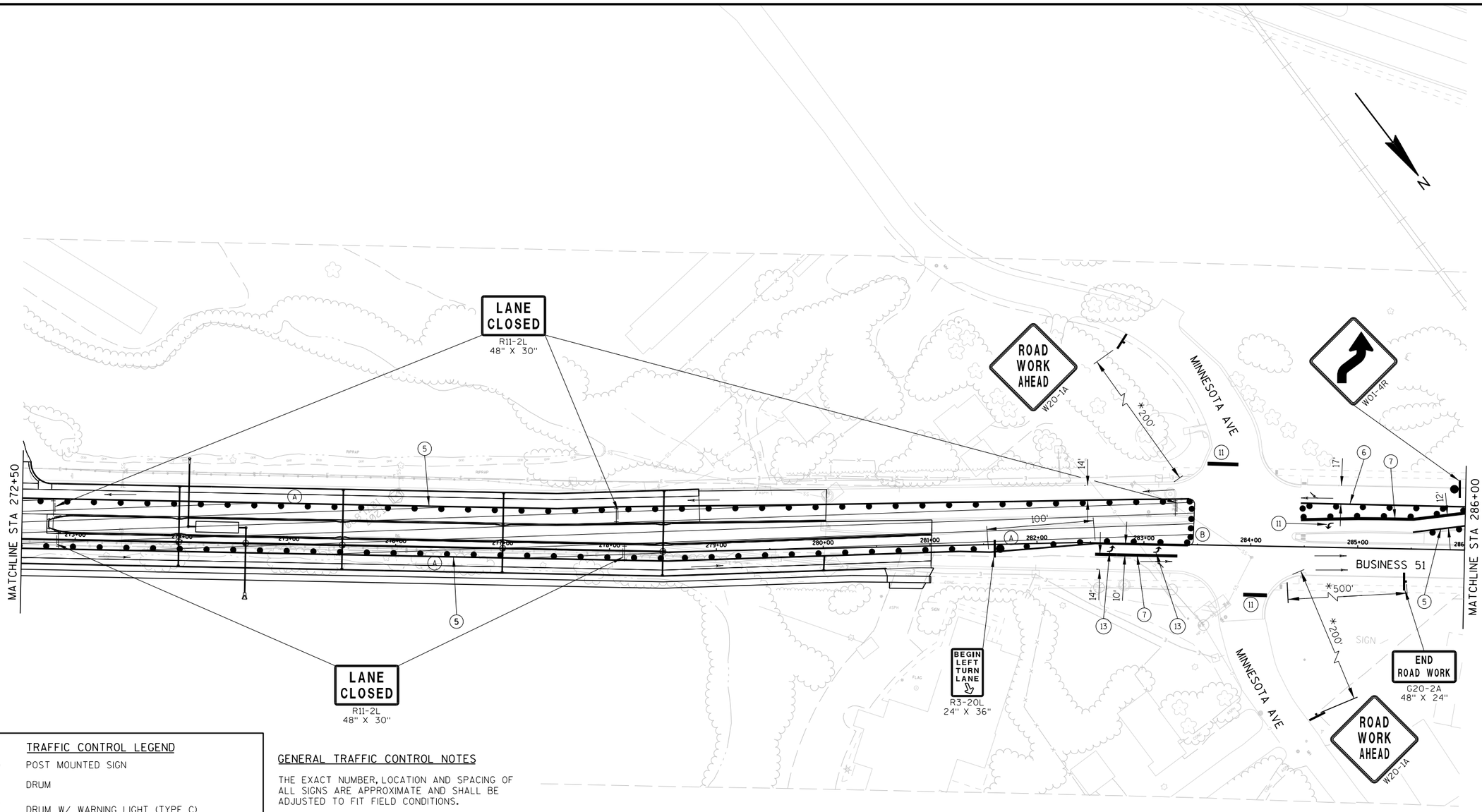
* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
(7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
(8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
(10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)
(13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE
(15) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4A	SHEET 238	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

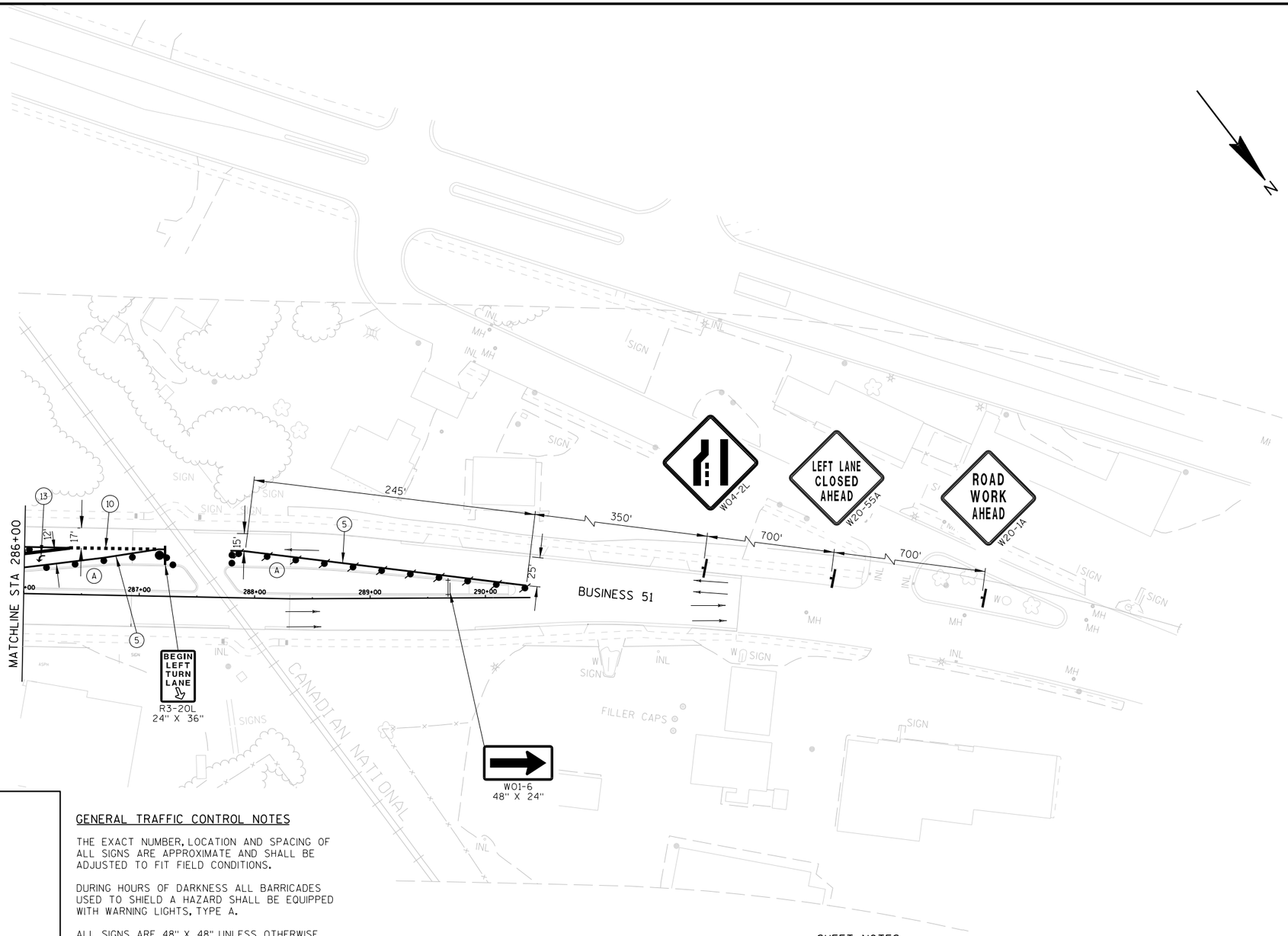
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
- (11) USE EXISTING PAVEMENT MARKING
- (13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4A	SHEET 239	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

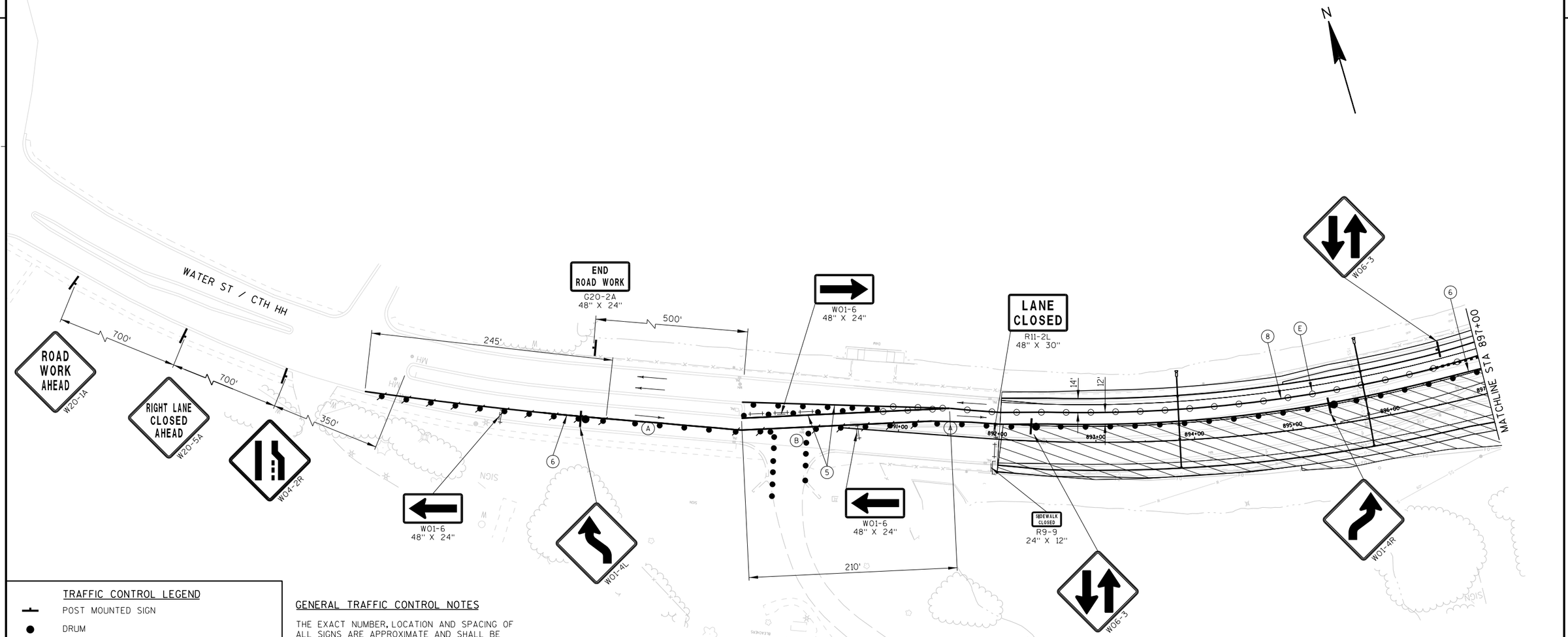
(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

(10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)

(13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4A	SHEET 240	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

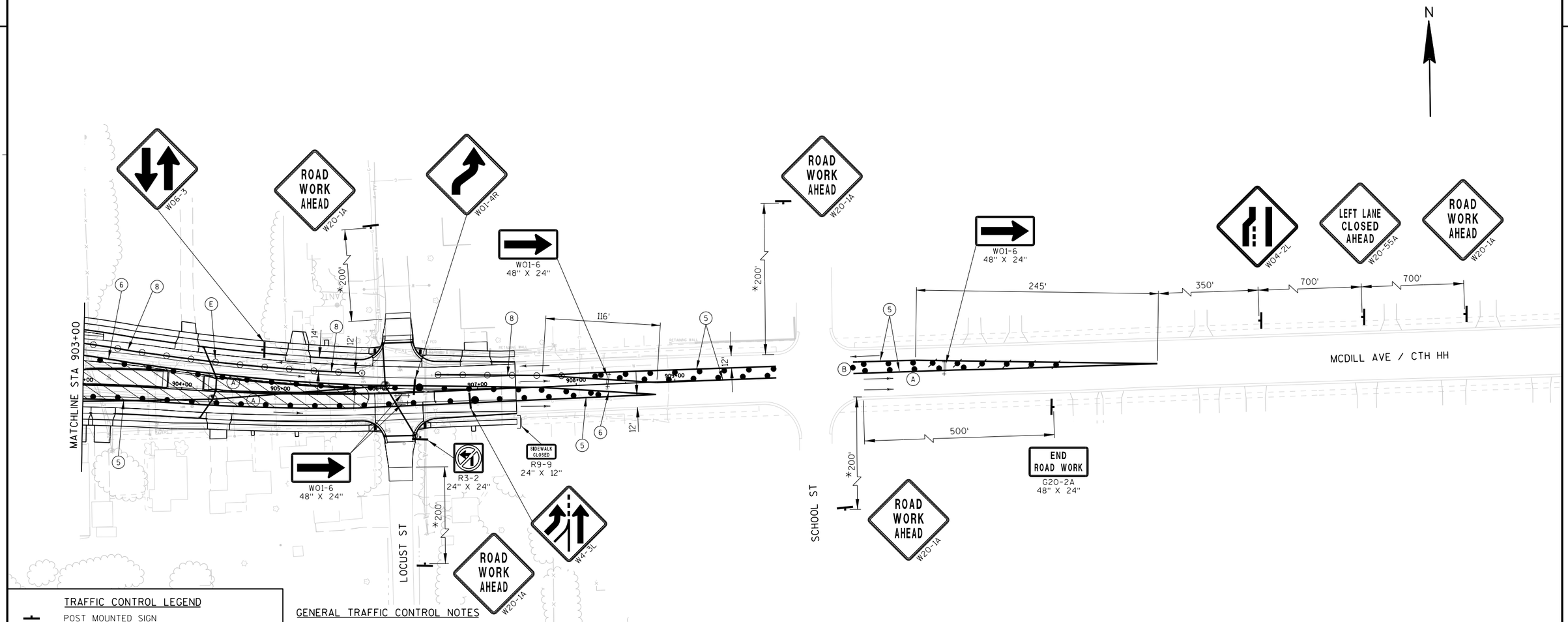
(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

(8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4A	SHEET 241	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

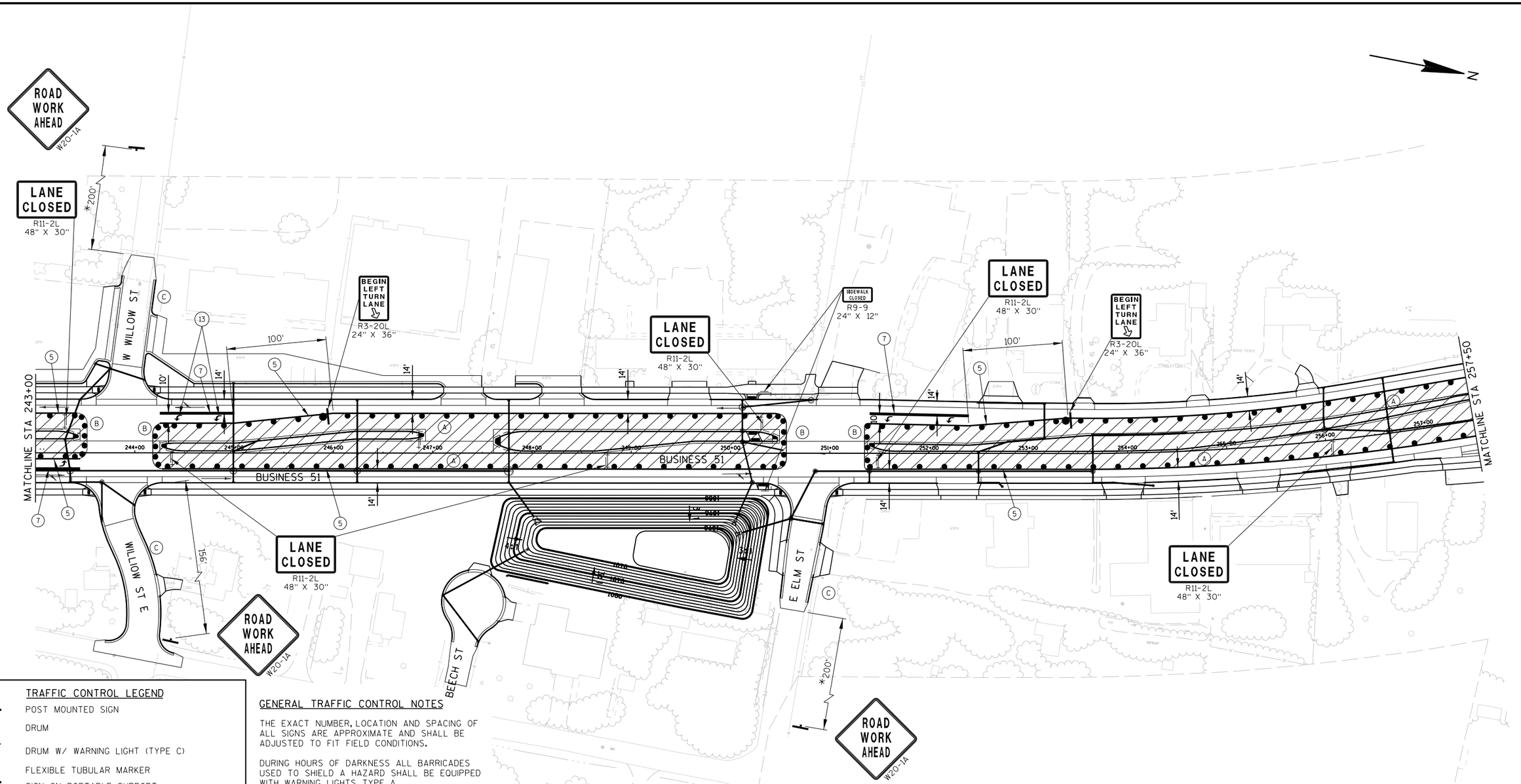
(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

(8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4A	SHEET 242	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

STAGE 4B DESCRIPTION:

TRAFFIC REMAINS CONTROLLED AS IN STAGE 4A EXCEPT NB BUSINESS 51 TRAFFIC IS SHIFTED EAST AT THE INTERSECTION WITH CTH HH TO ALLOW FOR MEDIAN AND PAVEMENT CONSTRUCTION.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

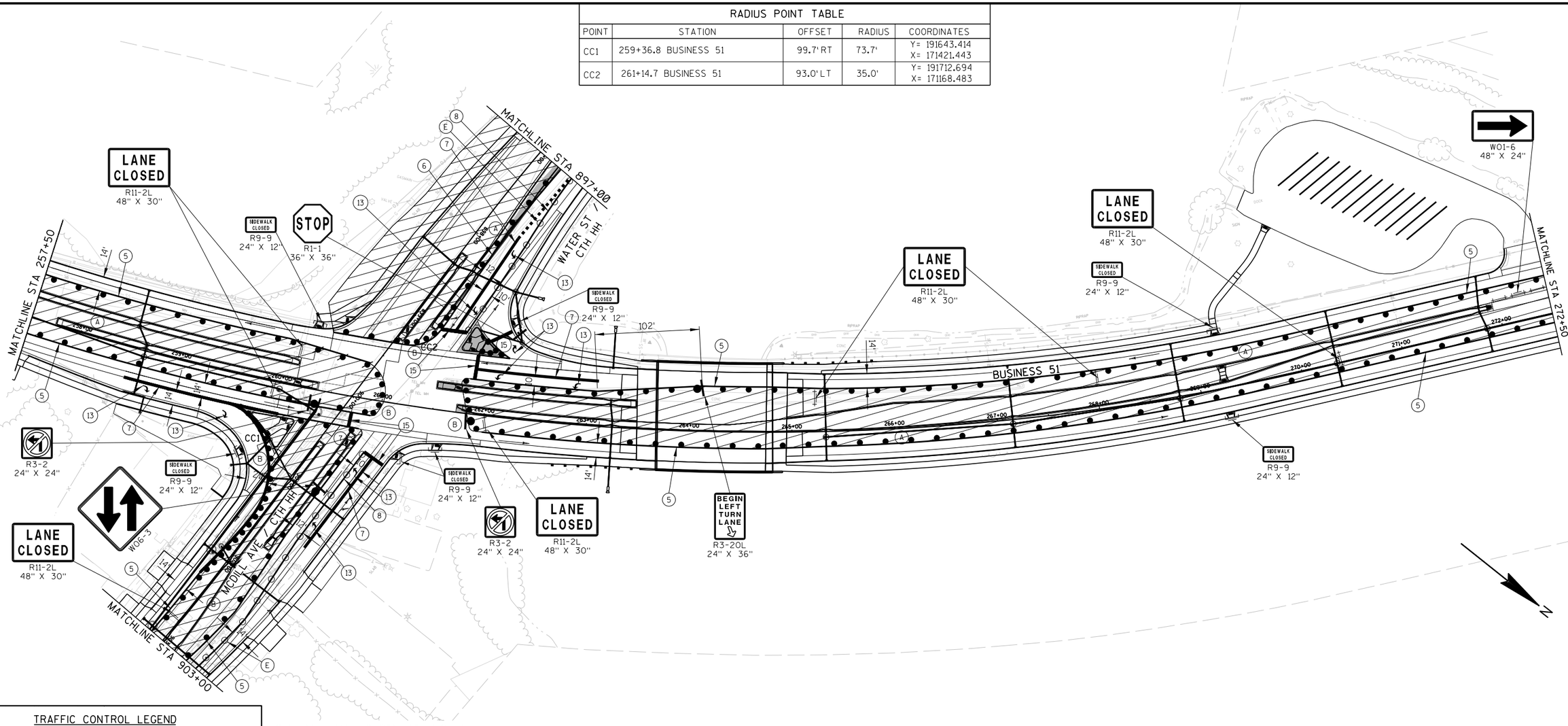
(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

(7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4B	SHEET 243	E

FILE NAME : P:\SEHIN\14002 - Bus 51_Tmy's Trnpke-Elm St (-10)\Cad\025058-tc stage4B.dgn PLOT DATE : 3/15/2018 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	259+36.8 BUSINESS 51	99.7' RT	73.7'	Y= 191643.414 X= 171421.443
CC2	261+14.7 BUSINESS 51	93.0' LT	35.0'	Y= 191712.694 X= 171168.483



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

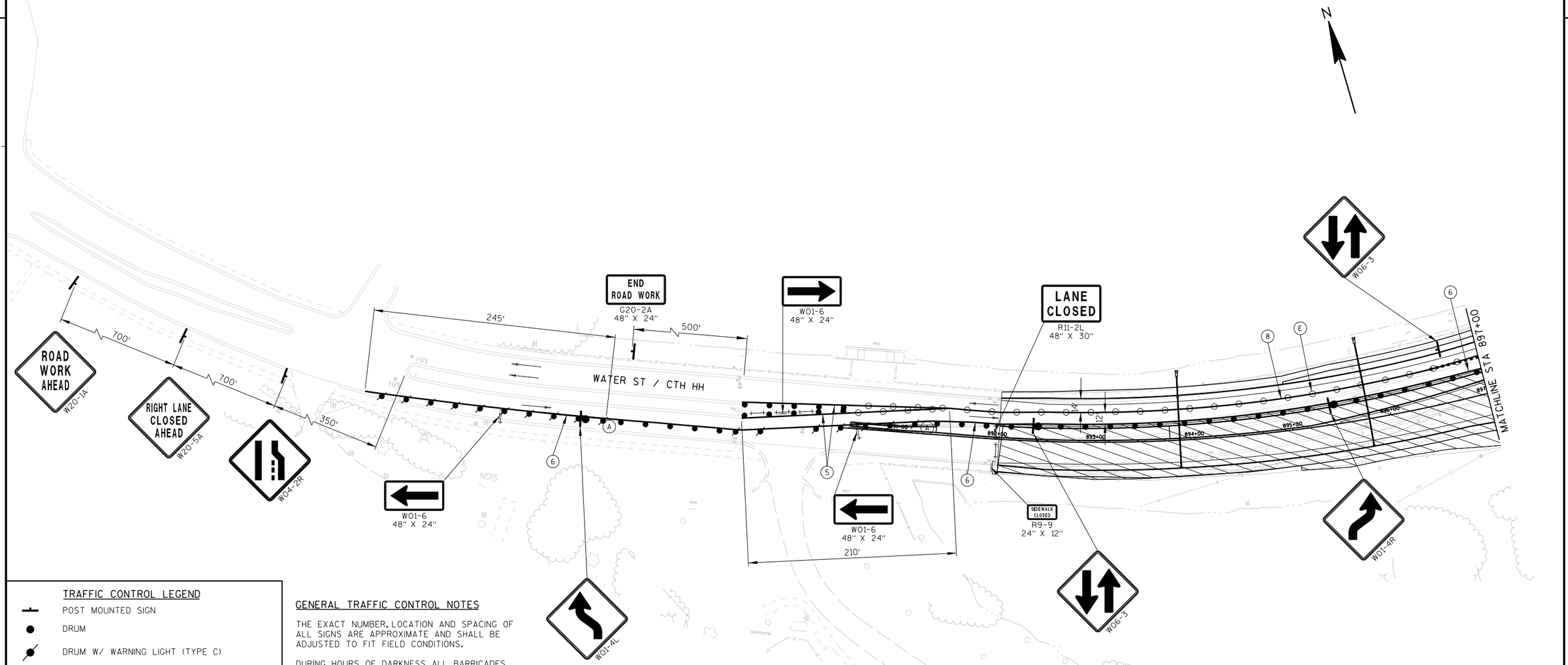
* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
(7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
(8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)
(13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE
(15) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4B	SHEET 244	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

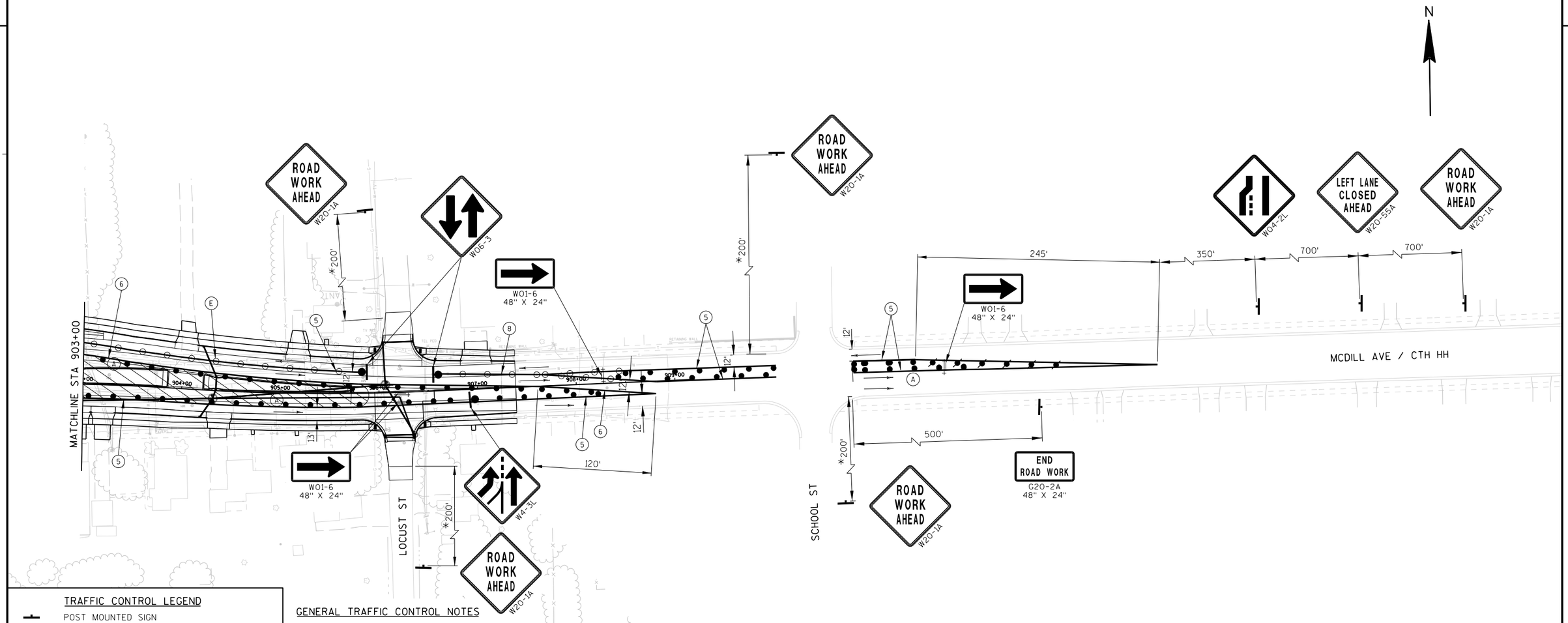
(6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

(8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

(9) TEMPORARY MARKING LINE PAINT 8-INCH (WHITE, SHORT SKIP)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4B	SHEET 245	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

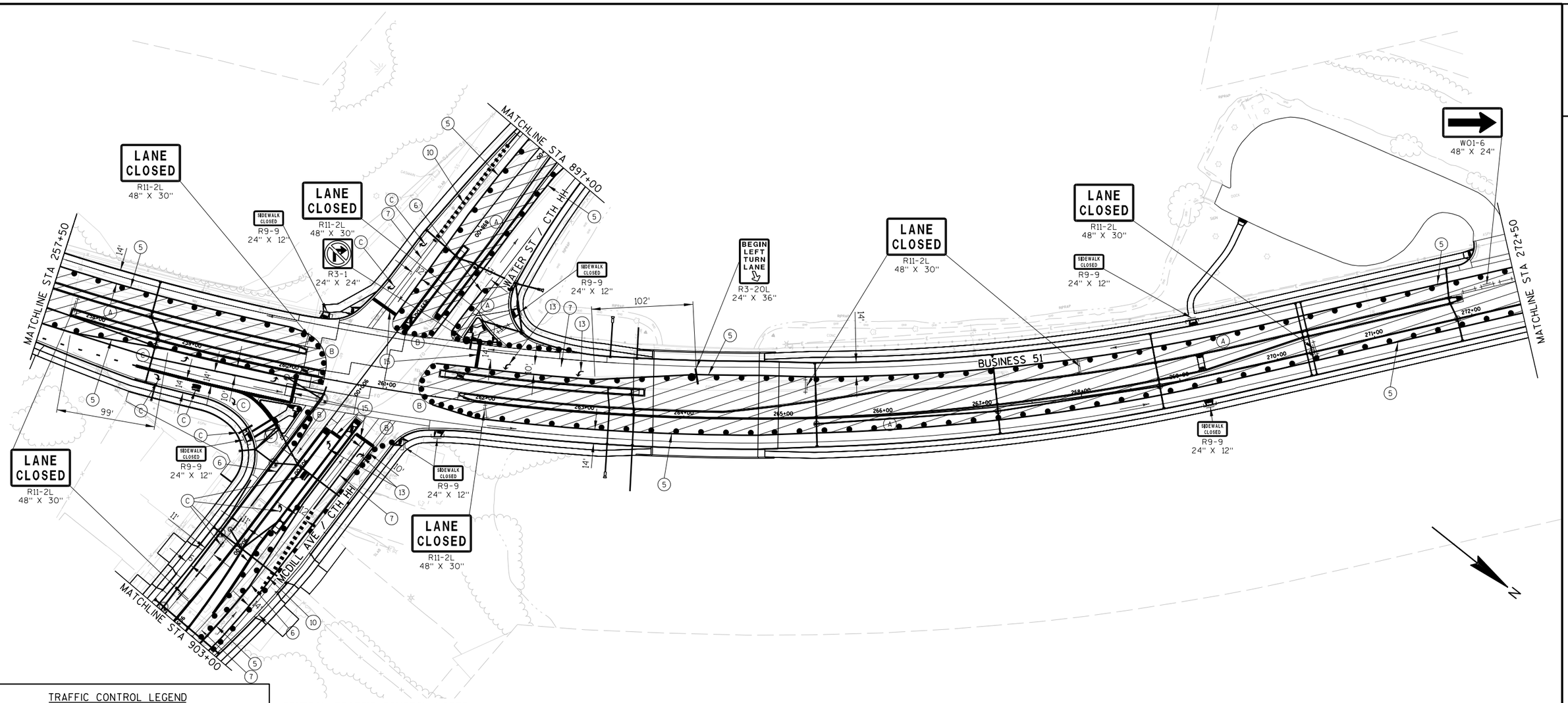
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (8) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4B	SHEET 246	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

STAGE 4C DESCRIPTION:

TRAFFIC REMAINS CONTROLLED AS IN STAGE 4B ON BUSINESS 51. CTH HH IS SHIFTED TO THE OUTSIDE LANES OF THE NEWLY CONSTRUCTED ROADWAY TO ALLOW FOR MEDIAN CONSTRUCTION.

SHEET NOTES

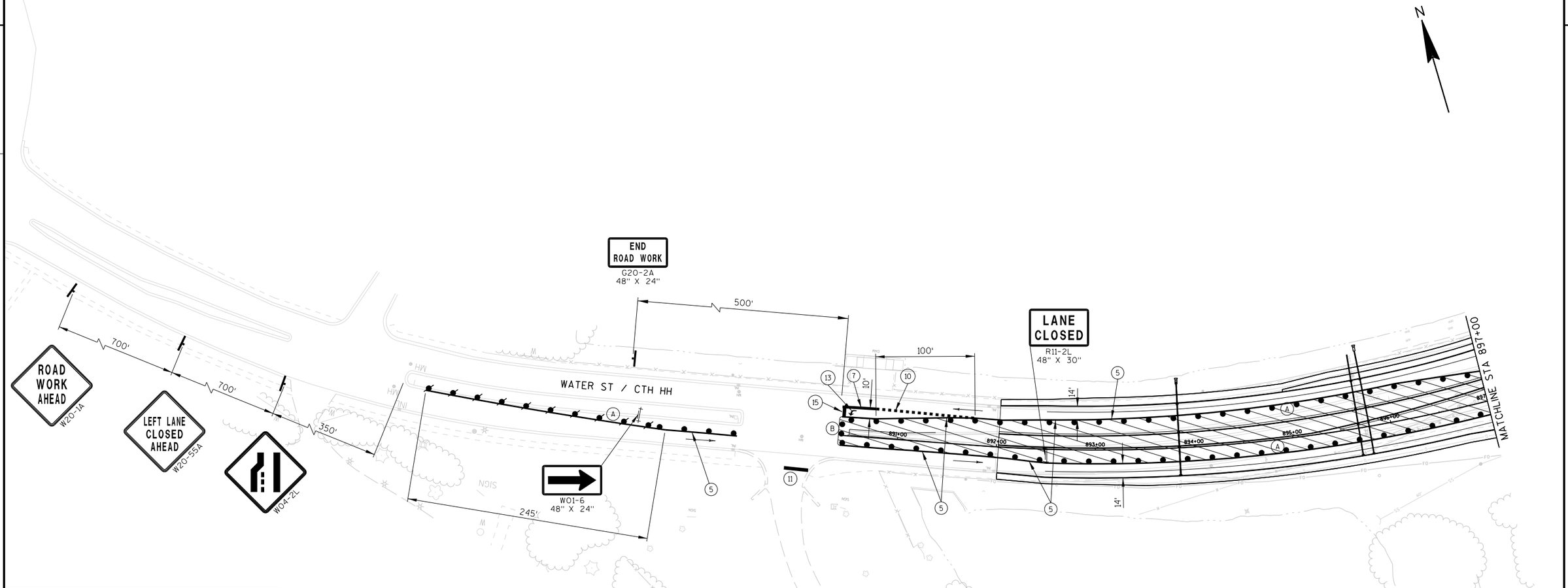
- (A) 25' DRUM SPACING (TYP).
- (B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).
- (C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.
- (D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.
- (E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).
- * OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

- (5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (6) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
- (10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)
- (13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE
- (15) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4C	SHEET 247	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONCTRUCTION.

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"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

(C) SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

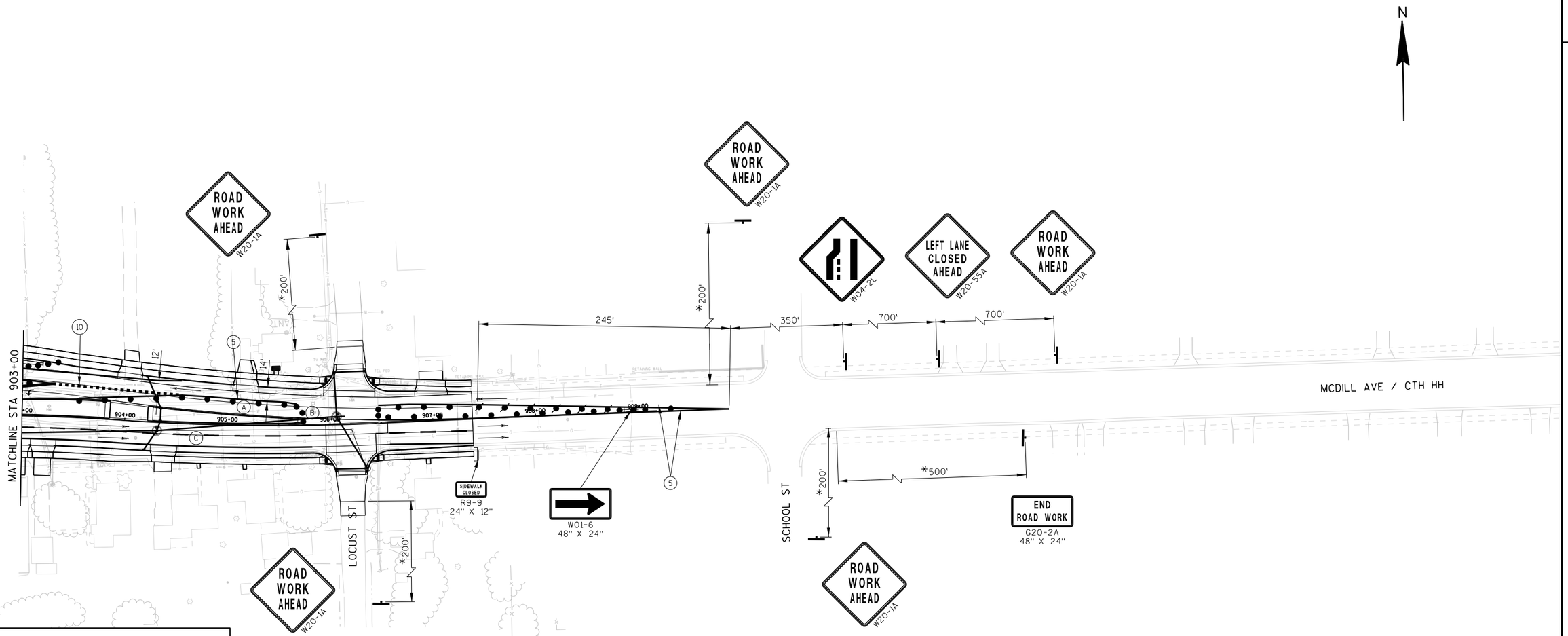
* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
(7) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
(10) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE, SHORT SKIP)
(11) USE EXISTING PAVEMENT MARKING
(13) TEMPORARY MARKING ARROW/WORD REMOVABLE TAPE
(15) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4C	SHEET 248	E

2



TRAFFIC CONTROL LEGEND

- POST MOUNTED SIGN
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- FLEXIBLE TUBULAR MARKER
- SIGN ON PORTABLE SUPPORT
- BARRICADES TYPE II WITH SIGN
- BARRICADES TYPE III (8' EQUIVALENT)
- BARRICADES TYPE III WITH SIGN (8' EQUIVALENT)
- DIRECTION OF TRAFFIC (FOR REFERENCE ONLY)
- CONSTRUCTION AREA
- ASPHALTIC SURFACE TEMPORARY
- ▲1 SEE TEMPORARY PIPE SEAL DETAIL
- ▲2 SEE TEMPORARY PIPE CONNECTION DETAIL
- FLAGS, 16"X16" MINIMUM (ORANGE)

GENERAL TRAFFIC CONTROL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS OR PAVEMENT MARKING, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE REMOVED OR COVERED.

SHEET NOTES

(A) 25' DRUM SPACING (TYP).

(B) 10' DRUM SPACING AROUND RADIUS AND IN FRONT OF BARRICADES W/ SIGNS (TYP).

SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS.

(D) PLACE TEMPORARY ASPHALT AND THEN PULL DRUMS BACK TO ALLOW RIGHT TURN.

(E) 25' FLEXIBLE TUBULAR MARKER SPACING (TYP).

* OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.

PAVEMENT MARKING LEGEND

(5) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

(10) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE, SHORT SKIP)

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	TRAFFIC CONTROL STAGE 4C	SHEET 249	E

2

P.I. STA. 6+39.83'SB'
Y = 187123.553
X = 172189.871
DELTA = 2°02'46" LT

P.I. STA. 7+16.44'SB'
Y = 187198.640
X = 172174.638
DELTA = 0°31'58" RT

P.I. STA. 9+15.59'SB'
Y = 187394.173
X = 172136.859
DELTA = 13°33'54" LT

P.I. STA. 9+78.87'SB'
Y = 187451.749
X = 172110.619
DELTA = 13°19'48" RT

P.I. STA. 12+98.50'SB'
Y = 187765.325
X = 172048.697
DELTA = 4°47'45" RT

P.I. STA. 13+65.56'SB'
Y = 187831.971
X = 172041.252
DELTA = 40°07'05" LT

P.I. STA. 13+80.82'SB'
Y = 187842.479
X = 172030.182
DELTA = 44°12'24" RT

P.I. STA. 14+84.35'SB'
Y = 187945.922
X = 172026.052
DELTA = 5°56'41" LT

P.I. STA. 16+17.38'SB'
Y = 188077.585
X = 172007.007
DELTA = 1°49'49" LT

P.I. STA. 17+20.49'SB'
Y = 188179.107
X = 171988.994
DELTA = 3°46'57" RT

P.I. STA. 17+80.23'SB'
Y = 188238.492
X = 171982.460
DELTA = 2°56'31"

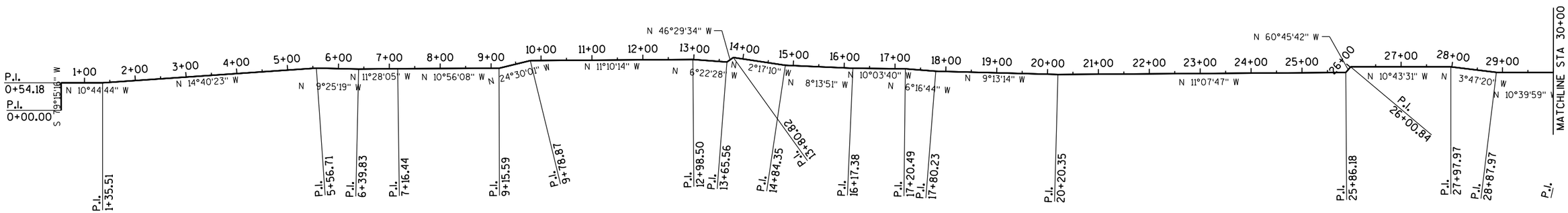
P.I. STA. 20+20.35'SB'
Y = 188475.506
X = 171943.984
DELTA = 1°54'33" LT

P.I. STA. 25+86.18'SB'
Y = 189030.692
X = 171834.761
DELTA = 49°37'54" LT

P.I. STA. 26+00.84'SB'
Y = 189037.855
X = 171821.965
DELTA = 50°02'11" RT

P.I. STA. 27+97.97'SB'
Y = 189231.540
X = 171785.280
DELTA = 6°56'11" RT

P.I. STA. 28+87.97'SB'
Y = 189321.347
X = 171779.332
DELTA = 6°52'39" LT



P.I. STA. 0+54.18'SB'
Y = 186554.189
X = 172325.332
DELTA = 90°00'00"

P.I. STA. 1+35.51'SB'
Y = 186634.091
X = 172310.169
DELTA = 3°55'39" LT

P.I. STA. 5+56.71'SB'
Y = 187041.555
X = 172203.478
DELTA = 5°15'04" RT

P.I. STA. 30+38.97'SB'
Y = 189469.735
X = 171751.384
DELTA = 12°33'46" RT

P.I. STA. 30+50.26'SB'
Y = 189481.024
X = 171751.758
DELTA = 9°28'41" LT

P.I. STA. 31+42.97'SB'
Y = 189572.924
X = 171739.526
DELTA = 3°06'50" LT

P.I. STA. 36+48.62'SB'
Y = 190069.781
X = 171645.684
DELTA = 8°36'20" LT

P.I. STA. 37+02.36'SB'
Y = 190120.508
X = 171627.918
DELTA = 9°12'25" RT

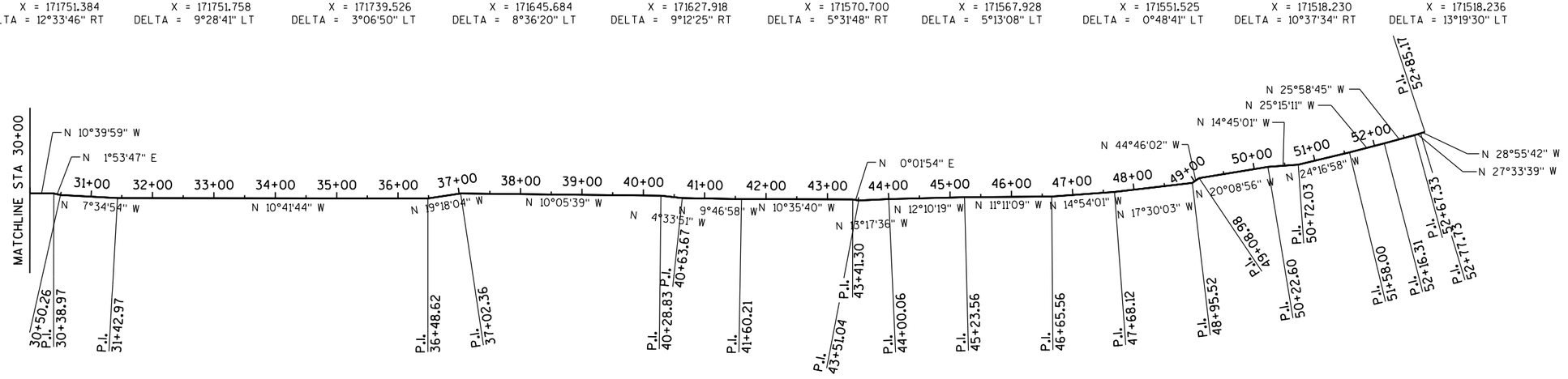
P.I. STA. 40+28.83'SB'
Y = 190441.920
X = 171570.700
DELTA = 5°31'48" RT

P.I. STA. 40+63.67'SB'
Y = 190476.653
X = 171567.928
DELTA = 5°13'08" LT

P.I. STA. 41+60.21'SB'
Y = 190571.784
X = 171551.525
DELTA = 0°48'41" LT

P.I. STA. 43+41.30'SB'
Y = 190749.787
X = 171518.230
DELTA = 10°37'34" RT

P.I. STA. 43+51.04'SB'
Y = 190759.525
X = 171518.236
DELTA = 13°19'30" LT



P.I. STA. 44+00.06'SB'
Y = 190807.234
X = 171506.964
DELTA = 1°07'17" RT

P.I. STA. 45+23.56'SB'
Y = 190927.961
X = 171480.924
DELTA = 0°59'10" RT

P.I. STA. 46+65.56'SB'
Y = 191067.265
X = 171453.377
DELTA = 3°42'52" LT

P.I. STA. 47+68.12'SB'
Y = 191166.375
X = 171427.005
DELTA = 2°36'02" LT

P.I. STA. 48+95.52'SB'
Y = 191287.880
X = 171388.693
DELTA = 27°16'00" LT

P.I. STA. 49+08.98'SB'
Y = 191297.434
X = 171379.216
DELTA = 24°37'06" RT

P.I. STA. 50+22.60'SB'
Y = 191404.105
X = 171340.077
DELTA = 5°23'56" RT

P.I. STA. 50+72.03'SB'
Y = 191451.902
X = 171327.493
DELTA = 9°31'58" LT

P.I. STA. 51+58.00'SB'
Y = 191530.265
X = 171292.138
DELTA = 0°58'13" LT

P.I. STA. 52+16.31'SB'
Y = 191583.005
X = 171267.261
DELTA = 0°43'33" LT

P.I. STA. 52+67.33'SB'
Y = 191628.870
X = 171244.912
DELTA = 1°34'54" LT

P.I. STA. 52+77.73'SB'
Y = 191638.088
X = 171240.101
DELTA = 1°22'03" LT

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	ALIGNMENT DIAGRAM - TEMPORARY SIDEWALK	SHEET 250	E

2

P.I. 64+39.98

P.C. 65+39.61

65+00

N 90°00'00" E

PATTON DRIVE

P.R.C. 67+23.98

P.T. 68+94.80

N 79°51'16" E

MAC ARTHUR WAY

P.I. 73+02.24

73+02

S 89°59'02" E

+00

205+00

BUSINESS 51

N 10°44'44" W

64+02

BEGIN PROJECT 6414-00-80
STA 208+50.00

P.I. STA. 213+93.51
Y = 187153.527
X = 172229.100
DELTA = 0°41'04" RT

STA 213+93.51 BUSINESS 51 =
STA 80+00.00 HICKORY DRIVE
Y=187153.527
X=172229.100

P.I. 213+93.51

210+00

N 83°59'50" E

P.C. 80+58.30

P.T. 81+21.56

P.I. 82+10.57

N 87°37'18" E

82+11

HICKORY DRIVE

P.C. STA 80+58.30
Y=187159.624
X=172287.079
P.I. STA. 80+89.94
Y = 187162.933
X = 172318.545
P.T. STA 81+21.56
Y=187164.246
X=172350.158
DELTA = 3°37'28" RT
T = 31.64'
L = 63.26'
R = 1000.00'
E = 0.50'
SE=NC

215+00

N 10°03'40" W

P.I. 793+41.99

TOMMY'S TURNPIKE

795+00

N 89°58'08" E

THEATER DRIVE
59+00

P.I. 58+50.00

STA 797+01.48 TOMMY'S TURNPIKE =
STA 60+00.00 THEATER DRIVE
Y=187789.730
X=171816.898

N

STA 220+44.49 BUSINESS 51 =
STA 800+00.00 TOMMY'S TURNPIKE
Y=187794.494
X=172115.375

220+00

225+00

N 9°58'58" W

MATCHLINE STA 230+00

STA 220+40.44 BUSINESS 51 =
STA 800+00.00 PORTER ROAD
Y=187790.500
X=172116.083

N 89°01'12" E

PORTER ROAD

P.I. 802+30.83

N 87°07'51" E

P.I. 803+52.18

P.I. 803+80.87

N 89°01'14" E

803+81

P.I. STA. 802+30.83
Y = 187794.449
X = 172346.879
DELTA = 1°53'21"

P.I. STA. 803+52.18
Y = 187800.523
X = 172468.082
DELTA = 1°53'23"

P.I. 225+46.58

P.I. STA. 225+46.58
Y = 188288.857
X = 172027.661
DELTA = 0°04'42" RT

P.C. STA. 82+84.45
Y = 189453.743
X = 171606.866
P.I. STA. 83+33.94
Y = 189451.980
X = 171656.320
P.T. STA. 83+83+40
Y = 189452.664
X = 171705.801
DELTA = 2°50'05" LT
T = 49.49'
L = 98.95'
R = 2000.00'
E = 0.61'
SE=NC

P.I. 82+23.50

P.C. 82+84.45

S 87°57'29" E

W CEDAR STREET

P.T. 83+83.40

N 89°12'26" E

P.I. STA. 85+00.00
Y = 189454.277
X = 171822.391
DELTA = 3°51'14" LT

STA 237+29.94 BUSINESS 51 =
STA 85+00.00 E CEDAR STREET
Y=189454.277
X=171822.391

MATCHLINE STA 230+00

BUSINESS 51

235+00

N 9°58'58" W

P.I. STA. 237+22.32
Y = 189446.802
X = 171823.844
DELTA = 1°01'08" LT

P.C. STA. 86+59.55
Y = 189467.202
X = 171981.415
P.I. STA. 87+07.94
Y = 189471.122
X = 172029.641
P.T. STA. 87+56.21
Y = 189469.200
X = 172077.994
DELTA = 6°55'21" RT
T = 48.39'
L = 96.66'
R = 800.00'
E = 1.46'
SE=NC

P.I. 237+22.32

N 85°21'12" E

P.C. 86+59.55

P.T. 87+56.21

E CEDAR STREET

00+88

S 87°43'26" E

P.C. 10+00.00

10+00

N 01°17'12" W

11+67

P.T. 11+16.44

P.I. 11+66.78

P.C. STA. 10+00.00
Y = 189598.209
X = 171855.690
P.I. STA. 10+62.45
Y = 189638.325
X = 171903.552
P.T. STA. 11+16.44
Y = 189700.760
X = 171902.150
DELTA = 51°19'06" LT
T = 62.45'
L = 116.44'
R = 130.00'
E = 14.22'
SE=NC

P.I. 87+68.36

87+68

N 89°43'09" E

W WILLOW STREET

STA 243+80.57 BUSINESS 51=
STA 90+00.00 WILLOW STREET
Y=190092.948
X=171698.229

N 78°59'55" E

P.C. 90+43.44

240+00

BUSINESS 51

245+00

P.T. 90+85.95

N 54°38'24" E

P.C. 91+00.13

P.T. 92+00.86

S 88°07'36" E

P.I. 92+24.21

92+24

E WILLOW STREET

P.C. STA. 90+43.44
Y = 190101.237
X = 171740.868
P.I. STA. 90+65.02
Y = 190105.356
X = 171762.054
P.T. STA. 90+85.95
Y = 190117.846
X = 171779.656
DELTA = 24°21'31" LT
T = 21.58'
L = 42.51'
R = 100.00'
E = 2.30'
SE=NC

P.C. STA. 91+00.13
Y = 190126.052
X = 171791.220
P.I. STA. 91+52.34
Y = 190156.269
X = 171833.802
P.T. STA. 91+00.86
Y = 190154.562
X = 171885.987
DELTA = 37°14'01" RT
T = 52.21'
L = 100.73'
R = 155.00'
E = 8.56'
SE=NC

P.I. 20+00.00

20+00

S 88°44'29" E

BEECH STREET

P.I. 22+22.72

22+23

N 11°00'05" W

250+00

P.I. 97+26.60

97+27

E ELM STREET

N 89°18'33" E

STA 250+88.32 BUSINESS 51 =
STA 95+00.00 E ELM STREET
Y=190787.699
X=171563.165

STA 251+42.10'SB' =
STA 251+42.10

N9°45'5" W

N10°27'48" W

P.C. 253+61.09'SB'

P.I. 251+42.10'SB'

P.I. 252+80.12'SB'

P.C. 253+53.21

MATCHLINE STA 255+00

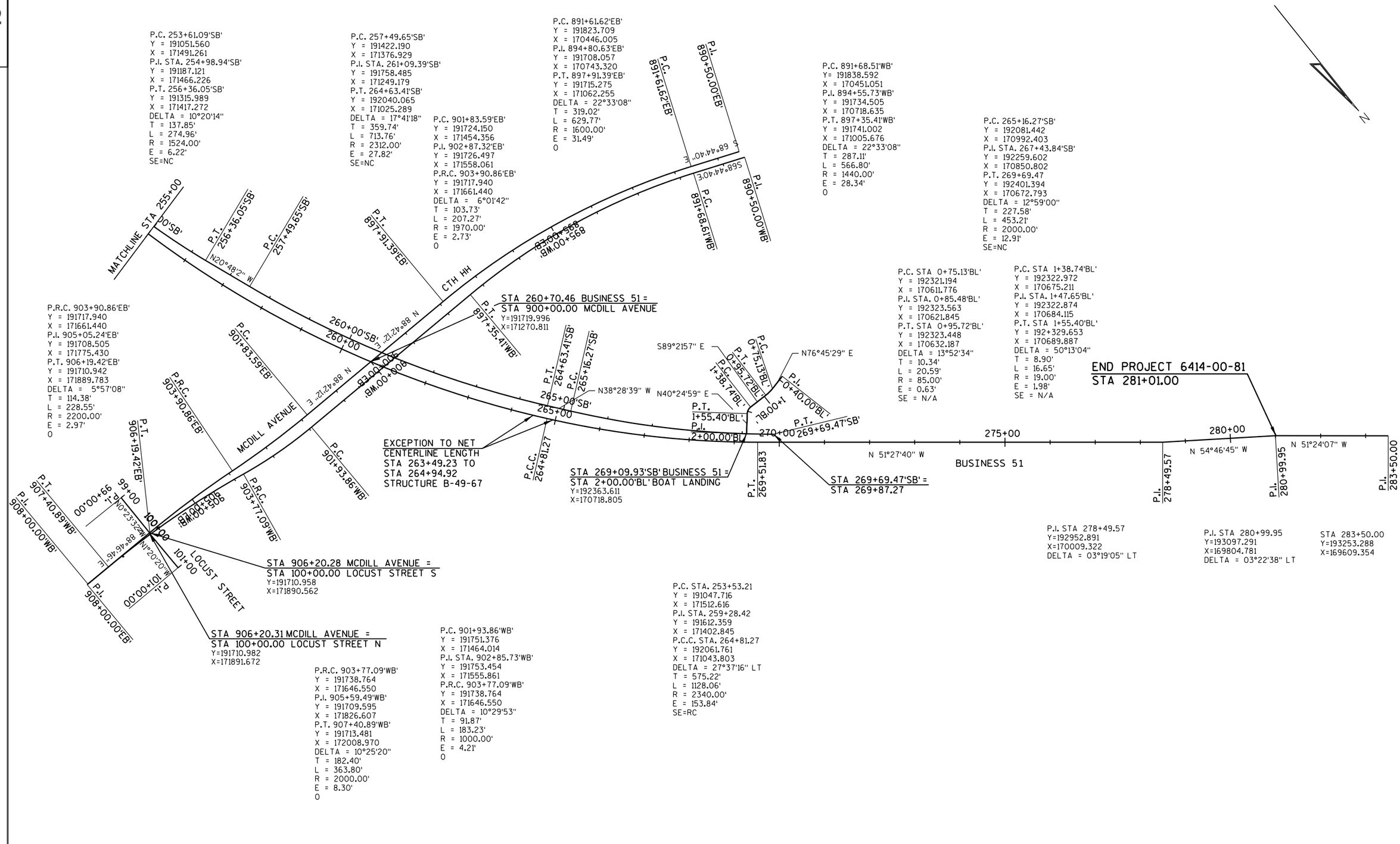
P.C. 253+61.09'SB'
Y = 191051.560
X = 171491.261
P.I. STA. 254+98.94'SB'
Y = 191187.121
X = 171466.226
P.T. 256+36.05'SB'
Y = 191315.989
X = 171417.272
DELTA = 10°20'14"
T = 137.85'
L = 274.96'
R = 1524.00'
E = 6.22'
SE=NC

P.C. STA. 253+53.21
Y = 191047.716
X = 171512.616
P.I. STA. 259+28.42
Y = 191612.359
X = 171402.845
P.C.C. STA. 264+81.27
Y = 192061.761
X = 171043.803
DELTA = 27°37'16" LT
T = 575.22'
L = 1128.06'
R = 2340.00'
E = 153.84'
SE=RC

END PROJECT 6414-00-80
BEGIN PROJECT 6414-00-81
STA 252+50.00

PROJECT NO: 6414-00-80/81	HWY: BUSINESS 51	COUNTY: PORTAGE	ALIGNMENT DIAGRAM	SHEET 251	E

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PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	ALIGNMENT DIAGRAM	SHEET 252	E

					6414-00-80	6414-00-81
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0002	201.0105	Clearing	STA	63.000	45.000	18.000
0004	201.0205	Grubbing	STA	63.000	45.000	18.000
0006	203.0200	Removing Old Structure (station) 01. B-49-67	LS	1.000		1.000
0008	203.0210.S	Abatement of Asbestos Containing Material (structure) 01. B-49-67	LS	1.000		1.000
0010	203.0225.S	Debris Containment (structure) 01. B-49-67	LS	1.000		1.000
0012	204.0100	Removing Pavement	SY	15,951.000	10,182.000	5,769.000
0014	204.0110	Removing Asphaltic Surface	SY	419.000	3.000	416.000
0016	204.0115	Removing Asphaltic Surface Butt Joints	SY	20.000		20.000
0018	204.0150	Removing Curb & Gutter	LF	19,885.000	8,675.000	11,210.000
0020	204.0155	Removing Concrete Sidewalk	SY	7,834.000	2,900.000	4,934.000
0022	204.0165	Removing Guardrail	LF	2,838.000		2,838.000
0024	204.0170	Removing Fence	LF	105.000	105.000	
0026	204.0195	Removing Concrete Bases	EACH	31.000	10.000	21.000
0028	204.0210	Removing Manholes	EACH	17.000	10.000	7.000
0030	204.0220	Removing Inlets	EACH	66.000	36.000	30.000
0032	204.0245	Removing Storm Sewer (size) 01. 10-Inch	LF	42.000	42.000	
0034	204.0245	Removing Storm Sewer (size) 02. 12-Inch	LF	1,850.000	1,398.000	452.000
0036	204.0245	Removing Storm Sewer (size) 03. 15-Inch	LF	464.000	313.000	151.000
0038	204.0245	Removing Storm Sewer (size) 04. 18-Inch	LF	2,199.000	1,320.000	879.000
0040	204.0245	Removing Storm Sewer (size) 05. 24-Inch	LF	1,649.000	1,649.000	
0042	204.0245	Removing Storm Sewer (size) 06. 30-Inch	LF	901.000	901.000	
0044	204.0245	Removing Storm Sewer (size) 07. 36-Inch	LF	8.000	8.000	
0046	204.0245	Removing Storm Sewer (size) 08. 60-Inch	LF	586.000		586.000
0058	204.9105.S	Removing (item description) 01. Timber Curb Stops	LS	1.000		1.000
0060	205.0100	Excavation Common	CY	64,979.000	50,923.000	14,056.000
0062	205.0400	Excavation Marsh	CY	17,500.000		17,500.000
0064	206.1000	Excavation for Structures Bridges (structure) 01. B-49-67	LS	1.000		1.000
0066	208.1100	Select Borrow	CY	29,700.000		29,700.000
0068	210.1100	Backfill Structure Type A	CY	462.000		462.000
0070	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 6414-00-80	LS	1.000	1.000	
0072	211.0100	Prepare Foundation for Asphaltic Paving (project) 02. 6414-00-81	LS	1.000		1.000
0074	211.0200	Prepare Foundation for Concrete Pavement (project) 01. 6414-00-80	LS	1.000	1.000	
0076	211.0200	Prepare Foundation for Concrete Pavement (project) 02. 6414-00-81	LS	1.000		1.000
0078	211.0300	Prepare Foundation for Concrete Base (project) 01. 6414-00-80	LS	1.000	1.000	

					6414-00-80	6414-00-81
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0080	211.0300	Prepare Foundation for Concrete Base (project) 02. 6414-00-81	LS	1.000		1.000
0082	211.0500	Prepare Foundation for Base Aggregate	STA	73.000	44.000	29.000
0084	213.0100	Finishing Roadway (project) 01. 6414-00-80	EACH	1.000	1.000	
0086	213.0100	Finishing Roadway (project) 02. 6414-00-81	EACH	1.000		1.000
0088	214.0100	Obliterating Old Road	STA	4.000	4.000	
0090	305.0110	Base Aggregate Dense 3/4-Inch	TON	30.000	30.000	
0092	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	43,815.000	27,138.000	16,677.000
0094	313.0115	Pit Run	CY	7,770.000		7,770.000
0096	405.1000	Stamping Colored Concrete	CY	1,020.000	1,020.000	
0098	415.0080	Concrete Pavement 8-Inch	SY	2,299.000	2,299.000	
0100	415.0090	Concrete Pavement 9-Inch	SY	60,757.000	32,511.000	28,246.000
0102	415.0410	Concrete Pavement Approach Slab	SY	204.000		204.000
0104	415.4100	Concrete Pavement Joint Filling	SY	70,707.000	39,443.000	31,264.000
0106	415.5110.S	Concrete Pavement Joint Layout 01. 6414-00-80	LS	1.000	1.000	
0108	415.5110.S	Concrete Pavement Joint Layout 02. 6414-00-81	LS	1.000		1.000
0110	416.0160	Concrete Driveway 6-Inch	SY	1,266.000	1,103.000	163.000
0112	416.0260	Concrete Driveway HES 6-Inch	SY	1,819.000	1,203.000	616.000
0114	416.0610	Drilled Tie Bars	EACH	317.000		317.000
0116	440.4410	Incentive IRI Ride	DOL	12,000.000	6,000.000	6,000.000
0118	455.0605	Tack Coat	GAL	746.000	572.000	174.000
0120	460.2000	Incentive Density HMA Pavement	DOL	1,600.000	1,370.000	230.000
0122	460.5224	HMA Pavement 4 LT 58-28 S	TON	304.000		304.000
0124	460.6224	HMA Pavement 4 MT 58-28 S	TON	2,178.000	2,137.000	41.000
0126	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	1,140.000	582.000	558.000
0128	465.0125	Asphaltic Surface Temporary	TON	1,279.000	639.000	640.000
0130	502.0100	Concrete Masonry Bridges	CY	873.000		873.000
0132	502.1100	Concrete Masonry Seal	CY	2.000		2.000
0134	502.3200	Protective Surface Treatment	SY	1,856.000		1,856.000
0136	502.3210	Pigmented Surface Sealer	SY	132.000		132.000
0138	502.4205	Adhesive Anchors No. 5 Bar	EACH	274.000		274.000
0140	502.4206	Adhesive Anchors No. 6 Bar	EACH	24.000		24.000
0142	502.4208	Adhesive Anchors No. 8 Bar	EACH	24.000		24.000
0144	505.0400	Bar Steel Reinforcement HS Structures	LB	29,610.000		29,610.000
0146	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	114,110.000		114,110.000
0148	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	1,140.000		1,140.000
0150	506.0105	Structural Steel Carbon	LB	7,860.000		7,860.000
0152	506.0605	Structural Steel HS	LB	94,740.000		94,740.000
0154	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	26.000		26.000
0156	506.3005	Welded Stud Shear Connectors 7/8x4-Inch	EACH	4,524.000		4,524.000

					6414-00-80	6414-00-81
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0158	506.7050.S	Removing Bearings (structure) 01. B-49-67	EACH	18.000		18.000
0160	506.7060.S	Bridge Jacking (structure) 01. B-49-67	LS	1.000		1.000
0162	511.1200	Temporary Shoring (structure) 01. B-49-67	SF	600.000		600.000
0164	513.8031	Railing Steel Pedestrian Type C6 (structure) 01. B-49-67	LF	292.000		292.000
0166	516.0500	Rubberized Membrane Waterproofing	SY	52.000		52.000
0168	517.0600	Painting Epoxy System (structure) 01. B-49-67	LS	1.000		1.000
0170	517.0900.S	Preparation and Coating of Top Flanges (structure) 01. B-49-67	LS	1.000		1.000
0172	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	2.000	1.000	1.000
0174	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	6.000	1.000	5.000
0176	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	4.000	3.000	1.000
0178	522.1042	Apron Endwalls for Culvert Pipe Reinforced Concrete 42-Inch	EACH	1.000	1.000	
0180	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	630.000		630.000
0182	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	11,434.000	7,941.000	3,493.000
0184	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	4,236.000	4,236.000	
0186	601.0600	Concrete Curb Pedestrian	LF	322.000	138.000	184.000
0188	602.0405	Concrete Sidewalk 4-Inch	SF	62,247.000	19,520.000	42,727.000
0190	602.0415	Concrete Sidewalk 6-Inch	SF	79,791.000	42,613.000	37,178.000
0192	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	616.000	416.000	200.000
0194	603.8000	Concrete Barrier Temporary Precast Delivered	LF	821.000		821.000
0196	603.8125	Concrete Barrier Temporary Precast Installed	LF	821.000		821.000
0198	603.8505	Anchoring Concrete Barrier on Bridge Decks	LF	150.000		150.000
0200	606.0100	Riprap Light	CY	25.000	3.000	22.000
0202	606.0200	Riprap Medium	CY	2,198.000	23.000	2,175.000
0204	606.0300	Riprap Heavy	CY	391.000	39.000	352.000
0206	608.0260	Storm Sewer Pipe Reinforced Concrete Class II 60-Inch	LF	588.000		588.000
0208	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	5,051.000	2,952.000	2,099.000
0210	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	1,089.000	1,037.000	52.000
0212	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	1,104.000	496.000	608.000
0214	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	3,622.000	1,701.000	1,921.000
0216	608.0430	Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	LF	127.000	127.000	
0218	608.0436	Storm Sewer Pipe Reinforced Concrete Class IV 36-	LF	2,224.000	2,224.000	

					6414-00-80	6414-00-81
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
		Inch				
0220	608.0442	Storm Sewer Pipe Reinforced Concrete Class IV 42-Inch	LF	332.000	332.000	
0222	608.2419	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	78.000	78.000	
0224	608.2424	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	LF	270.000	270.000	
0226	608.3012	Storm Sewer Pipe Class III-A 12-Inch	LF	35.000	35.000	
0228	611.0530	Manhole Covers Type J	EACH	67.000	45.000	22.000
0230	611.0612	Inlet Covers Type C	EACH	4.000		4.000
0232	611.0624	Inlet Covers Type H	EACH	166.000	80.000	86.000
0234	611.0639	Inlet Covers Type H-S	EACH	83.000	61.000	22.000
0236	611.2004	Manholes 4-FT Diameter	EACH	20.000	15.000	5.000
0238	611.2005	Manholes 5-FT Diameter	EACH	24.000	10.000	14.000
0240	611.2006	Manholes 6-FT Diameter	EACH	13.000	13.000	
0242	611.2007	Manholes 7-FT Diameter	EACH	5.000	4.000	1.000
0244	611.2008	Manholes 8-FT Diameter	EACH	7.000	3.000	4.000
0246	611.3003	Inlets 3-FT Diameter	EACH	5.000	1.000	4.000
0248	611.3004	Inlets 4-FT Diameter	EACH	33.000	21.000	12.000
0250	611.3230	Inlets 2x3-FT	EACH	211.000	118.000	93.000
0252	611.8120.S	Cover Plates Temporary	EACH	6.000	3.000	3.000
0254	611.9800.S	Pipe Grates	EACH	5.000	4.000	1.000
0256	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	344.000		344.000
0260	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	4.000		4.000
0262	614.0920	Salvaged Rail	LF	268.000		268.000
0264	614.2500	MGS Thrie Beam Transition	LF	78.800		78.800
0266	614.2610	MGS Guardrail Terminal EAT	EACH	2.000		2.000
0268	616.0204	Fence Chain Link 4-FT	LF	168.000		168.000
0270	618.0100	Maintenance And Repair of Haul Roads (project) 01. 6414-00-80	EACH	1.000	1.000	
0272	618.0100	Maintenance And Repair of Haul Roads (project) 02. 6414-00-81	EACH	1.000		1.000
0274	619.1000	Mobilization	EACH	0.850	0.380	0.470
0276	620.0300	Concrete Median Sloped Nose	SF	2,121.000	1,258.000	863.000
0278	624.0100	Water	MGAL	650.000	410.000	240.000
0280	625.0100	Topsoil	SY	23,230.000	8,603.000	14,627.000
0282	627.0200	Mulching	SY	23,230.000	8,603.000	14,627.000
0284	628.1504	Silt Fence	LF	4,486.000		4,486.000
0286	628.1520	Silt Fence Maintenance	LF	4,486.000		4,486.000
0288	628.1905	Mobilizations Erosion Control	EACH	2.000	1.000	1.000
0290	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	1.000	1.000

					6414-00-80	6414-00-81
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0292	628.2004	Erosion Mat Class I Type B	SY	5,014.000		5,014.000
0294	628.2006	Erosion Mat Urban Class I Type A	SY	1,863.000	1,155.000	708.000
0296	628.6005	Turbidity Barriers	SY	2,424.000		2,424.000
0298	628.7005	Inlet Protection Type A	EACH	257.000	148.000	109.000
0300	628.7010	Inlet Protection Type B	EACH	1.000		1.000
0302	628.7015	Inlet Protection Type C	EACH	165.000	78.000	87.000
0304	628.7020	Inlet Protection Type D	EACH	94.000	71.000	23.000
0306	628.7504	Temporary Ditch Checks	LF	100.000		100.000
0308	628.7555	Culvert Pipe Checks	EACH	2.000	2.000	
0310	628.7570	Rock Bags	EACH	20.000	10.000	10.000
0312	630.0140	Seeding Mixture No. 40	LB	267.000	153.000	114.000
0314	630.0175	Seeding Mixture No. 75	LB	107.000		107.000
0316	630.0200	Seeding Temporary	LB	145.000	117.000	28.000
0318	630.0400	Seeding Nurse Crop	LB	120.000		120.000
0320	631.0300	Sod Water	MGAL	1,021.000	391.000	630.000
0322	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	81.000	42.000	39.000
0324	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	10.000		10.000
0326	634.0811	Posts Tubular Steel 2x2-Inch X 11-FT	EACH	22.000	17.000	5.000
0328	637.2210	Signs Type II Reflective H	SF	671.580	332.840	338.740
0330	637.2215	Signs Type II Reflective H Folding	SF	149.200	59.680	89.520
0332	637.2230	Signs Type II Reflective F	SF	217.000	121.000	96.000
0334	638.2602	Removing Signs Type II	EACH	78.000	36.000	42.000
0336	638.3000	Removing Small Sign Supports	EACH	72.000	33.000	39.000
0338	642.5401	Field Office Type D	EACH	1.000	0.500	0.500
0340	643.0300	Traffic Control Drums	DAY	369,659.000	170,339.000	199,320.000
0342	643.0410	Traffic Control Barricades Type II	DAY	4,708.000	1,602.000	3,106.000
0344	643.0420	Traffic Control Barricades Type III	DAY	59,998.000	36,848.000	23,150.000
0346	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	825.000	344.000	481.000
0348	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	825.000	344.000	481.000
0350	643.0705	Traffic Control Warning Lights Type A	DAY	68,788.000	42,692.000	26,096.000
0352	643.0715	Traffic Control Warning Lights Type C	DAY	23,325.000	7,664.000	15,661.000
0354	643.0900	Traffic Control Signs	DAY	47,699.000	22,647.000	25,052.000
0356	643.1070	Traffic Control Cones 42-Inch	DAY	1,406.000	1,406.000	
0358	643.5000	Traffic Control	EACH	1.000	0.500	0.500
0360	644.1410.S	Temporary Pedestrian Surface Asphalt	SF	17,905.000	13,980.000	3,925.000
0362	644.1420.S	Temporary Pedestrian Surface Plywood	SF	647.000		647.000
0364	644.1601.S	Temporary Curb Ramp	EACH	9.000	9.000	
0366	645.0111	Geotextile Type DF Schedule A	SY	106.000		106.000
0368	645.0120	Geotextile Type HR	SY	4,745.000	187.000	4,558.000
0370	645.0130	Geotextile Type R	SY	121.000		121.000

					6414-00-80	6414-00-81
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0372	645.0220	Geogrid Type SR	SY	7,800.000		7,800.000
0374	646.1020	Marking Line Epoxy 4-Inch	LF	22,805.000	12,771.000	10,034.000
0376	646.3020	Marking Line Epoxy 8-Inch	LF	4,149.000	2,666.000	1,483.000
0378	646.5020	Marking Arrow Epoxy	EACH	61.000	35.000	26.000
0380	646.5120	Marking Word Epoxy	EACH	14.000	7.000	7.000
0382	646.5220	Marking Symbol Epoxy	EACH	15.000	4.000	11.000
0384	646.6120	Marking Stop Line Epoxy 18-Inch	LF	359.000	178.000	181.000
0386	646.7120	Marking Diagonal Epoxy 12-Inch	LF	292.000	292.000	
0388	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	2,278.000	1,451.000	827.000
0390	646.8120	Marking Curb Epoxy	LF	1,480.000	1,104.000	376.000
0392	646.8220	Marking Island Nose Epoxy	EACH	42.000	27.000	15.000
0394	649.0105	Temporary Marking Line Paint 4-Inch	LF	82,776.000	38,543.000	44,233.000
0396	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	67,933.000	25,205.000	42,728.000
0398	649.0205	Temporary Marking Line Paint 8-Inch	LF	5,467.000	2,979.000	2,488.000
0400	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	6,472.000	2,429.000	4,043.000
0402	649.0505	Temporary Marking Arrow Paint	EACH	70.000	40.000	30.000
0404	649.0550	Temporary Marking Arrow Removable Tape	EACH	69.000	28.000	41.000
0406	649.0605	Temporary Marking Word Paint	EACH	8.000	2.000	6.000
0408	649.0650	Temporary Marking Word Removable Tape	EACH	5.000		5.000
0410	649.0805	Temporary Marking Stop Line Paint 18-Inch	LF	298.000	195.000	103.000
0412	649.0850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	715.000	319.000	396.000
0414	649.0905	Temporary Marking Diagonal Paint 12-Inch	LF	2,580.000	1,052.000	1,528.000
0416	650.4000	Construction Staking Storm Sewer	EACH	324.000	190.000	134.000
0418	650.5000	Construction Staking Base	LF	2,692.000	2,629.000	63.000
0420	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	2,970.000	2,872.000	98.000
0422	650.6500	Construction Staking Structure Layout (structure) 01. B-49-67	LS	1.000		1.000
0424	650.7000	Construction Staking Concrete Pavement	LF	17,530.000	8,873.000	8,657.000
0426	650.9000	Construction Staking Curb Ramps	EACH	57.000	29.000	28.000
0428	650.9910	Construction Staking Supplemental Control (project) 01. 6414-00-80	LS	1.000	1.000	
0430	650.9910	Construction Staking Supplemental Control (project) 02. 6414-00-81	LS	1.000		1.000
0432	652.0125	Conduit Rigid Metallic 2-Inch	LF	279.000		279.000
0434	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	9,664.000	4,651.000	5,013.000
0436	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	4,545.000	2,328.000	2,217.000
0438	652.0310	Conduit Rigid Nonmetallic Schedule 80 1-Inch	LF	137.000		137.000
0440	652.0325	Conduit Rigid Nonmetallic Schedule 80 2-Inch	LF	446.000		446.000
0442	652.0605	Conduit Special 2-Inch	LF	180.000	180.000	
0444	652.0800	Conduit Loop Detector	LF	2,924.000	1,212.000	1,712.000

					6414-00-80	6414-00-81
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0446	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	74.000	37.000	37.000
0448	653.0222	Junction Boxes 18x12x6-Inch	EACH	2.000		2.000
0450	653.0905	Removing Pull Boxes	EACH	29.000	14.000	15.000
0452	654.0101	Concrete Bases Type 1	EACH	21.000	11.000	10.000
0454	654.0102	Concrete Bases Type 2	EACH	12.000	4.000	8.000
0456	654.0105	Concrete Bases Type 5	EACH	2.000	2.000	
0458	654.0106	Concrete Bases Type 6	EACH	49.000	23.000	26.000
0460	654.0110	Concrete Bases Type 10	EACH	8.000	4.000	4.000
0462	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	2.000	1.000	1.000
0464	654.0230	Concrete Control Cabinet Bases Type L30	EACH	2.000	1.000	1.000
0466	655.0230	Cable Traffic Signal 5-14 AWG	LF	4,066.000	1,592.000	2,474.000
0468	655.0240	Cable Traffic Signal 7-14 AWG	LF	330.000	132.000	198.000
0470	655.0250	Cable Traffic Signal 9-14 AWG	LF	3,052.000	1,315.000	1,737.000
0472	655.0260	Cable Traffic Signal 12-14 AWG	LF	1,880.000	810.000	1,070.000
0474	655.0270	Cable Traffic Signal 15-14 AWG	LF	624.000	624.000	
0476	655.0320	Cable Type UF 2-10 AWG Grounded	LF	3,771.000	1,620.000	2,151.000
0478	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	3,869.000	1,857.000	2,012.000
0480	655.0610	Electrical Wire Lighting 12 AWG	LF	13,254.000	6,345.000	6,909.000
0482	655.0615	Electrical Wire Lighting 10 AWG	LF	2,322.000	1,044.000	1,278.000
0484	655.0625	Electrical Wire Lighting 6 AWG	LF	53,538.000	25,010.000	28,528.000
0486	655.0700	Loop Detector Lead In Cable	LF	8,711.000	3,576.000	5,135.000
0488	655.0800	Loop Detector Wire	LF	9,212.000	3,782.000	5,430.000
0490	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. Tommy's Turnpike	LS	1.000	1.000	
0492	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. CTH HH	LS	1.000		1.000
0494	656.0200	Electrical Service Meter Breaker Pedestal (location) 03. CB 300	LS	1.000	1.000	
0496	656.0200	Electrical Service Meter Breaker Pedestal (location) 04. CB300	LS	1.000		1.000
0498	657.0100	Pedestal Bases	EACH	21.000	11.000	10.000
0500	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	63.000	29.000	34.000
0502	657.0315	Poles Type 4	EACH	12.000	4.000	8.000
0504	657.0322	Poles Type 5-Aluminum	EACH	2.000	2.000	
0506	657.0327	Poles Type 6-Aluminum	EACH	49.000	23.000	26.000
0508	657.0410	Traffic Signal Standards Aluminum 9-FT	EACH	5.000	3.000	2.000
0510	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	2.000	2.000	
0512	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	14.000	6.000	8.000
0514	657.0605	Luminaire Arms Single Member 4 1/2-Inch Clamp 4-FT	EACH	94.000	45.000	49.000
0516	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	16.000	6.000	10.000
0518	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	2.000	2.000	

					6414-00-80	6414-00-81
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0520	657.1345	Install Poles Type 9	EACH	8.000	4.000	4.000
0522	657.1530	Install Monotube Arms 30-FT	EACH	8.000	4.000	4.000
0524	658.0173	Traffic Signal Face 3S 12-Inch	EACH	30.000	18.000	12.000
0526	658.0174	Traffic Signal Face 4S 12-Inch	EACH	18.000	6.000	12.000
0528	658.0416	Pedestrian Signal Face 16-Inch	EACH	22.000	12.000	10.000
0530	658.0500	Pedestrian Push Buttons	EACH	20.000	8.000	12.000
0532	658.5069	Signal Mounting Hardware (location) 01. Bussiness 51 & Tommy's Turnpike	LS	1.000	1.000	
0534	658.5069	Signal Mounting Hardware (location) 02. CTH HH	LS	1.000		1.000
0536	659.1115	Luminaires Utility LED A	EACH	94.000	45.000	49.000
0538	659.1125	Luminaires Utility LED C	EACH	18.000	8.000	10.000
0540	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	2.000	1.000	1.000
0542	661.0200	Temporary Traffic Signals for Intersections (location) 01. Business 51 & Tommy's Turnpike	LS	1.000	1.000	
0544	661.0200	Temporary Traffic Signals for Intersections (location) 02. CTH HH	LS	1.000		1.000
0546	661.0300	Generators	DAY	4.000	2.000	2.000
0548	690.0150	Sawing Asphalt	LF	4,947.000	4,165.000	782.000
0550	690.0250	Sawing Concrete	LF	3,448.000	1,233.000	2,215.000
0552	715.0415	Incentive Strength Concrete Pavement	DOL	18,917.000	10,443.000	8,474.000
0554	715.0502	Incentive Strength Concrete Structures	DOL	5,238.000		5,238.000
0556	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,100.000	2,100.000	
0558	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	4,800.000	4,800.000	
0560	SPV.0030	Special 01. Fertilizer for Lawn Type Turf	CWT	14.000	5.000	9.000
0640	SPV.0060	Special 40. Grit Chamber Type C	EACH	1.000		1.000
0642	SPV.0060	Special 41. Inlet Covers Type H-D	EACH	2.000		2.000
0644	SPV.0060	Special 42. Manhole 10-FT Diameter	EACH	1.000		1.000
0646	SPV.0060	Special 43. Inlet 5-FT Diameter	EACH	3.000	1.000	2.000
0648	SPV.0060	Special 44. Inlet 6-FT Diameter	EACH	4.000	4.000	
0650	SPV.0060	Special 45. Manhole Diversion	EACH	1.000		1.000
0652	SPV.0060	Special 46. Remove and Salvage Lighting Unit	EACH	10.000		10.000
0654	SPV.0060	Special 47. Temporary Connection to Storm Sewer Structure	EACH	3.000	3.000	
0656	SPV.0060	Special 48. Connection to Existing Inlet or Manhole	EACH	2.000		2.000
0658	SPV.0060	Special 49. Residential Manhole	EACH	6.000	3.000	3.000
0660	SPV.0060	Special 50. Temporary Connection to Existing Storm Sewer Pipe	EACH	10.000	5.000	5.000
0688	SPV.0090	Special 14. Concrete Curb and Gutter Intergral 30-Inch Type A	LF	13,068.000	6,513.000	6,555.000
0690	SPV.0090	Special 15. Concrete Curb and Gutter 20-Inch Type A	LF	7,657.000	545.000	7,112.000
0692	SPV.0090	Special 16. Salvage and Reinstall Fence	LF	665.000		665.000

					6414-00-80	6414-00-81
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0694	SPV.0090	Special 17. Concrete Curb and Gutter Cure & Seal Treatment	LF	36,395.000	19,235.000	17,160.000
0698	SPV.0105	Special 02. Construction Staking Infiltration Basin	LS	1.000	1.000	
0700	SPV.0105	Special 03. Remove and Salvage Traffic Signals Business 51 & Tommy's Turnpike	LS	1.000	1.000	
0702	SPV.0105	Special 04. Remove and Salvage Traffic Signals Business 51 & CTH HH	LS	1.000		1.000
0704	SPV.0105	Special 05. Transport Dept. Furnished Traffic Signal Monotube Materials Tommy's Turnpike	LS	1.000	1.000	
0706	SPV.0105	Special 06. Transport Dept. Furnished Traffic Signal Monotube Materials CTH HH	LS	1.000		1.000
0708	SPV.0105	Special 07. Temporary Vehicle Detection Business 51 &Tommy's Turnpike	LS	1.000	1.000	
0710	SPV.0105	Special 08. Temporary Vehicle Detection Business 51 & CTH HH	LS	1.000		1.000
0714	SPV.0165	Special 01. Stamped Concrete 4-Inch	SF	4,439.000	3,444.000	995.000
0716	SPV.0165	Special 02. Concrete Cure & Seal Treatment	SF	212,620.000	114,203.000	98,417.000
0718	SPV.0180	Special 01. Preparing Topsoil for Lawn Type Turf	SY	23,115.000	8,488.000	14,627.000
0720	SPV.0180	Special 02. Infiltration Basin Soil Mix	SY	6,538.000	6,538.000	

CLEARING AND GRUBBING

STATION	LOCATION	CLEARING 201.0105 STA	GRUBBING 201.0205 STA
PROJECT 6414-00-80			
STAGE 2			
208+00 - 209+00	RT	1	1
210+00 - 211+00	RT	1	1
219+00 - 220+00	RT	1	1
221+50 - 226+50	RT	5	5
227+00 - 231+00	RT	4	4
235+00 - 237+00	RT	2	2
238+00 - 240+00	RT	2	2
240+00 - 245+00	RT	5	5
248+00 - 250+00	RT	2	2
PORTER ROAD			
801+00 - 803+00	LT	2	2
E CEDAR ST			
85+00 - 88+30	RT	3	3
WILLOW ST (E)			
90+00 - 92+00	LT & RT	2	2
BEECH STREET			
20+50 - 21+50	RT	1	1
E ELM STREET			
96+00 -97+00	RT	1	1
STAGE 2 SUBTOTAL		32	32
STAGE 3			
228+50 - 232+50	LT	4	4
236+00 - 237+00	LT	1	1
247+50 - 250+50	LT	3	3
251+50 -252+50	LT	1	1
TOMMY'S TURNPIKE			
793+50 - 796+50	LT & RT	3	3
797+00 - 798+00	LT & RT	1	1
STAGE 3 SUBTOTAL		13	13
PROJECT 6414-00-80 SUBTOTAL		45	45
PROJECT 6414-00-81			
STAGE 2			
256+00 - 258+00	RT	2	2
261+00 - 264+00	RT	3	3
265+00 - 268+00	RT	3	3
273+00 - 274+00	RT	1	1
275+00 - 281+00	RT	6	6
MCDILL AVENUE			
902+50 - 903+50	LT	1	1
905+00 - 906+00	LT & RT	1	1
906+50 -907+50	RT	1	1
STAGE 2 SUBTOTAL		18	18
PROJECT 6414-00-81 SUBTOTAL		18	18
ITEM TOTAL		63	63

ABATEMENT OF ASBESTOS CONTAINING MATERIAL

STATION	LOCATION	203.0210.S LS
PROJECT 6414-00-81		
STRUCTURE B-49-67	LT & RT	1
PROJECT 6414-00-81 SUBTOTAL		1
ITEM TOTAL		1

REMOVING PAVEMENT

STATION	LOCATION	204.0100 SY	COMMENT
PROJECT 6414-00-80			
STAGE 1			
217+50	LT	20	DRIVEWAY
218+65	LT	22	DRIVEWAY
STAGE 1 SUBTOTAL		42	
STAGE 2			
211+80	RT	25	DRIVEWAY
215+37	RT	17	DRIVEWAY
215+54 - 225+41	RT	3386	
216+57	RT	9	DRIVEWAY
218+25	RT	18	DRIVEWAY
222+33	RT	11	DRIVEWAY
224+27	RT	76	DRIVEWAY
226+79	RT	20	DRIVEWAY
227+92	RT	10	DRIVEWAY
229+63	RT	48	DRIVEWAY
230+29	RT	8	DRIVEWAY
231+34	RT	9	DRIVEWAY
231+83	RT	16	DRIVEWAY
232+58	RT	92	DRIVEWAY
234+07	RT	18	DRIVEWAY
234+42	RT	20	DRIVEWAY
235+45	RT	91	DRIVEWAY
236+50	RT	12	DRIVEWAY
238+50	RT	19	DRIVEWAY
239+63	RT	20	DRIVEWAY
248+44	RT	16	DRIVEWAY
252+38	RT	13	DRIVEWAY
PORTER ROAD			
800+31 - 801+50	LT & RT	694	
801+13	LT	77	DRIVEWAY
802+36	RT	24	DRIVEWAY
803+00	RT	24	DRIVEWAY
LOCUST STREET			
11+26	RT	36	DRIVEWAY
WILLOW STREET			
91+25	RT	86	DRIVEWAY
BEECH STREET			
21+00	LT	63	DRIVEWAY
STAGE 2 SUBTOTAL		4958	
STAGE 3			
215+54 - 225+41	LT	3180	
223+22	LT	43	DRIVEWAY
223+86	LT	12	DRIVEWAY
224+90	LT	6	DRIVEWAY
226+62	LT	19	DRIVEWAY
229+05	LT	35	DRIVEWAY
236+74	LT	34	DRIVEWAY
248+25	LT	20	DRIVEWAY
249+60	LT	23	DRIVEWAY
251+33	LT	18	DRIVEWAY
TOMMY'S TURNPIKE			
793+59.5 - 798+36.5	LT & RT	954	
798+36 - 799+63	LT & RT	838	
STAGE 3 SUBTOTAL		5182	
PROJECT 6414-00-80 SUBTOTAL		10182	

REMOVING PAVEMENT (CONT'D)

STATION	LOCATION	204.0100 SY	COMMENT
PROJECT 6414-00-81			
STAGE 2			
252+73	RT	13	DRIVEWAY
253+45	RT	13	DRIVEWAY
253+89	RT	16	DRIVEWAY
254+17 - 254+43	38' RT	26	DRIVEWAY
254+67	RT	19	DRIVEWAY
254+83 - 255+93	RT	287	DRIVEWAY
256+09	RT	11	DRIVEWAY
258+31	RT	35	DRIVEWAY
280+80	RT	33	DRIVEWAY
CTH HH			
892+02.00 - 899+11.0	LT	2352	
MCDILL AVENUE			
902+23	LT	70	DRIVEWAY
904+08	LT	19	DRIVEWAY
905+17	LT	16	DRIVEWAY
907+00	LT	43	DRIVEWAY
STAGE 2 SUBTOTAL		2953	
STAGE 3			
254+73	LT	6	DRIVEWAY
255+15	LT	28	DRIVEWAY
256+00	LT	37	DRIVEWAY
CTH HH			
892+02.00 - 899+62.0	LT & RT	2650	
MCDILL AVENUE			
901+31	RT	40	DRIVEWAY
902+43	RT	20	DRIVEWAY
903+19	RT	15	DRIVEWAY
904+36	RT	20	DRIVEWAY
STAGE 3 SUBTOTAL		2816	
PROJECT 6414-00-81 SUBTOTAL		5769	
ITEM TOTAL		15951	

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

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REMOVING ASPHALTIC SURFACE

STATION	LOCATION	204.0110 SY
PROJECT 6414-00-80		
STAGE 2		
207+81.74 - 207+86.74	RT	3
STAGE 2 SUBTOTAL		3
PROJECT 6414-00-80 SUBTOTAL		3
PROJECT 6414-00-81		
STAGE 3		
252+50.00 - 260+19.20	LT	416
STAGE 3 SUBTOTAL		416
PROJECT 6414-00-81 SUBTOTAL		416
ITEM TOTAL		419

REMOVING ASPHALTIC SURFACE BUTT JOINT

STATION	LOCATION	204.0115 SY
PROJECT 6414-00-81		
STAGE 3		
269+60.9	LT	20
STAGE 3 SUBTOTAL		20
PROJECT 6414-00-81 SUBTOTAL		20
ITEM TOTAL		20

REMOVING TIMBER CURB STOPS

STATION	204.9105.S LS
PROJECT 6414-00-81	
BOAT LANDING PARKING LOT	1
PROJECT 6414-00-81 SUBTOTAL	1
ITEM TOTAL	1

REMOVING CONCRETE BASES

EXISTING BASE NUMBER	204.0195* EACH
PROJECT 6414-00-80	
BUS 51 & TOMMY'S TURNPIKE	
SB1	1
SB2	1
SB3	1
SB4	1
SB5	1
SB6	1
SB7	1
SB8	1
SB9	1
CB1	1
PROJECT 6414-00-80 SUBTOTAL	10
PROJECT 6414-00-81	
BUS 51 & CTH HH	
SB1	1
SB2	1
SB3	1
SB4	1
SB5	1
SB6	1
SB7	1
SB8	1
SB9	1
SB10	1
CB1	1
PROJECT 6414-00-81 SUBTOTAL	11
ITEM TOTAL	21

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

REMOVING CURB AND GUTTER

STATION	LOCATION	204.0150 LF	COMMENTS
PROJECT 6414-00-80			
STAGE 1			
206+82.0 - 208+10.0	LT	132	STAGE 1A WIDENING
207+79.7 - 207+88.7	RT	10	STAGE 1 TEMP SIDEWALK
208+52.0 - 210+41.5	LT	194	STAGE 1A WIDENING
211+08.0 - 213+68.0	LT	516	STAGE 1B (FOR SS)
215+88.0 - 217+32.0	LT	292	STAGE 1 MEDIAN
217+04.0 - 220+16.0	LT	313	STAGE 1A WIDENING
217+45.0 - 219+86.0	LT	381	STAGE 1 MEDIAN
220+70.0 - 220+83.0	LT	42	STAGE 1 ISLAND
221+05.0 - 223+19.0	LT	216	STAGE 1A WIDENING
243+59.0 - 244+14.0	LT	24	TEMP SIDEWALK
STAGE 1 SUBTOTAL		2120	
STAGE 2			
208+50 - 213+70	RT	523	INCLUDES HICKORY DR RT
214+17 - 215+54	RT	140	INCLUDES HICKORY DR LT
214+58 - 215+88	LT & RT	242	MEDIAN
225+41 - 237+27	RT	1191	INCLUDES CEDAR ST E RT
237+73 - 252+50	RT	1366	INCLUDES SIDEROAD RADIUSES
PORTER ROAD			
801+50 - 802+14	LT & RT	128	
STAGE 2 SUBTOTAL		3590	
STAGE 3			
212+65 - 215+53	LT	291	
225+41 - 237+15	LT	1178	INCLUDES W CEDAR ST RT
237+59 - 243+75	LT	637	INCLUDES WILLOW ST RT
244+07 - 252+50	LT	859	INCLUDES WILLOW ST LT
STAGE 3 SUBTOTAL		2965	
PROJECT 6414-00-80 SUBTOTAL		8675	
PROJECT 6414-00-81			
STAGE 1			
254+92 - 260+42	LT	808	MEDIAN
260+16 - 260+37	RT	65	ISLAND
261+56 - 263+68	LT	212	MEDIAN
261+63 - 262+00	LT	92	MEDIAN
279+97 - 283+42	LT	628	ISLAND
CTH HH			
890+50.8'EB' - 899+10'EB'	LT	858	MEDIAN
890+54'WB' - 891+46'WB'	RT	92	MEDIAN
896+38'WB' - 899+10'WB'	LT & RT	275	MEDIAN
MCDILL AVENUE			
900+10'EB' - 903+88'EB'	RT	756	MEDIAN
STAGE 1 SUBTOTAL		3786	
STAGE 2			
252+50 - 259+57	RT	707	
254+92 - 258+23	R/L	331	MEDIAN
261+55 - 263+68	LT	213	MEDIAN
261+78 - 263+68	RT	190	
264+75 - 267+30	LT	255	MEDIAN
264+75 - 281+01	RT	1625	
MCDILL AVENUE			
899+47'EB' - 907+39'EB'	LT	805	INCLUDES LOCUST ST
STAGE 2 SUBTOTAL		4126	
STAGE 3			
252+50 - 260+49	LT	800	
262+45 - 263+67	LT	122	
264+75 - 267+30	LT	255	MEDIAN
264+76 - 279+55	LT	1463	
MCDILL AVENUE			
900+49'EB' - 907+39'EB'	RT	658	INCLUDES LOCUST ST
STAGE 3 SUBTOTAL		3298	
PROJECT 6414-00-81 SUBTOTAL		11210	
ITEM TOTAL		19885	

3

REMOVING CONCRETE SIDEWALK

STATION	LOCATION	204.0155 SY	COMMENT
PROJECT 6414-00-80			
STAGE 1			
217+35 - 220+08	LT	148	
220+70 - 220+82	LT	10	ISLAND
STAGE 1 SUBTOTAL		158	
STAGE 2			
212+64 - 213+65	RT	60	
214+57 - 219+93	RT	316	
220+68 - 237+26	RT	895	
237+73 - 252+50	RT	760	
PORTER ROAD			
800+54 - 803+40	LT & RT	165	
STAGE 2 SUBTOTAL		2196	
STAGE 3			
214+49 - 217+35	LT	160	
222+10	LT	4	SLAB
249+00	LT	22	
250+23	LT	20	
TOMMY'S TURN PIKE			
794+35 - 799+26	LT & RT	340	
STAGE 3 SUBTOTAL		546	
PROJECT 6414-00-80 SUBTOTAL		2900	
PROJECT 6414-00-81			
STAGE 1			
260+16 - 260+38	RT	22	ISLAND
260+18 - 260+38		7	
261+56 - 262+82	LT	8	MEDIAN
261+63 - 267+00	LT	45	ISLAND
279+97 - 283+42	LT	315	MEDIAN
CTH HH			
890+50 - 891+02	R/L	14	
896+06 - 899+10	R/L	254	
899+21 - 899+39	RT	5	ISLAND
MCDILL AVENUE			
900+10 - 903+88	R/L	357	
STAGE 1 SUBTOTAL		1027	
STAGE 2			
252+50 - 260+35	RT	427	
261+28 - 263+69	RT	182	
264+75 - 281+01	RT	1250	
CTH HH			
892+09 - 898+96	LT	510	
MCDILL AVENUE			
899+86 - 907+39	LT	517	
STAGE 2 SUBTOTAL		2886	
STAGE 3			
254+65 - 256+90	LT	70	
CTH HH			
892+09 - 899+38	RT	547	
MCDILL AVENUE			
900+58 - 907+39	RT	404	
STAGE 3 SUBTOTAL		1021	
PROJECT 6414-00-81 SUBTOTAL		4934	
ITEM TOTAL		7834	

REMOVING GUARDRAIL

STATION	LOCATION	204.0165 LF
PROJECT 6414-00-81		
STAGE 2		
262+00 - 263+57	RT	157
264+87 - 279+33	RT	1448
STAGE 2 SUBTOTAL		1605
STAGE 3		
262+73 - 263+55	LT	79
264+89 - 269+93	LT	490
272+86 - 279+53	LT	664
STAGE 3 SUBTOTAL		1233
PROJECT 6414-00-81 SUBTOTAL		2838
ITEM TOTAL		2838

REMOVING FENCE

STATION	LOCATION	204.0170 LF
PROJECT 6414-00-80		
STAGE 2		
E ELM STREET		
95+4.88 - 96+91.62	LT	105
STAGE 2 SUBTOTAL		105
PROJECT 6414-00-80 SUBTOTAL		105
ITEM TOTAL		105

REMOVING

STATION	LOCATION	204.0210 MANHOLES EACH	204.0220 INLETS EACH
STAGE 2			
208+75	MEDIAN	1	
208+78	RT		1
212+02	MEDIAN	1	
213+47	RT		1
214+43	RT		1
214+46	MEDIAN	1	
217+76	LT	1	
217+82	RT		1
220+45	RT	1	
220+48	RT	1	
220+53	LT	1	
221+27	LT	1	
224+07	LT	1	
224+08	RT		1
226+73	RT		1
232+08	LT		1
237+05	LT		1
237+94	LT		1
240+73	LT		1
241+63	LT		1
243+99	LT		1
244+90	LT		1
247+34	LT		1
248+15	LT		1
250+53	LT		1
251+36	LT		1
PORTER ROAD			
802+03	LT & RT	1	2
STAGE 2 SUBTOTAL		10	19
STAGE 3			
208+76	LT		1
214+68	LT		1
217+82	LT		1
220+13	LT		1
220+96	LT		1
221+49	LT		1
224+07	LT		1
226+72	LT		1
226+81	LT		1
232+06	LT		1
236+90	LT		1
237+81	LT		1
241+30	LT		1
243+44	LT		1
244+35	LT		1
247+70	LT		1
250+80	LT		1
STAGE 3 SUBTOTAL			17
PROJECT 6414-00-80 SUBTOTAL		10	36
PROJECT 6414-00-81			
STAGE 2			
255+66	LT		1
259+61	LT		1
263+47	LT		1
266+98	LT		1
271+01	LT		1
273+43	LT		1
276+02	LT		1
279+99	RT		1
CTH HH			
895+69	LT		2

REMOVING (CONT'D)

STATION	LOCATION	204.0210 MANHOLES EACH	204.0220 INLETS EACH
MCDILL AVENUE			
900+25	LT		1
900+27	LT		1
900+37	LT		1
901+95	LT		2
903+73	LT		1
906+07	LT	1	
STAGE 2 SUBTOTAL		1	16
STAGE 3			
255+65	LT		1
256+35	LT	1	
258+93	LT	1	
260+22	LT		1
260+53	LT	1	
263+48	LT		1
266+98	LT		1
271+01	LT		1
273+43	LT		1
276+02	LT		1
CTH HH			
895+74	RT		1
MCDILL AVENUE			
900+28	RT	1	
900+72	RT		1
901+88	RT	1	
901+93	RT		2
903+73	RT	1	1
905+92	RT		1
906+35	RT		1
STAGE 3 SUBTOTAL		6	14
PROJECT 6414-00-81 SUBTOTAL		7	30
ITEM TOTALS		17	66

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

REMOVING STORM SEWER (SIZE)

STATION	LOCATION	204.0245 10-INCH LF	204.0245 12-INCH LF	204.0245 15-INCH LF	204.0245 18-INCH LF	204.0245 24-INCH LF	204.0245 30-INCH LF	204.0245 36-INCH LF	204.0245 60-INCH LF
PROJECT 6414-00-80									
STAGE 2									
208+67 - 212+02	MEDIAN						326	8	
208+75	RT		28						
212+02 - 214+46	MEDIAN						244		
212+02	RT		27						
213+47 - 214+43	RT		95						
214+46	RT		26						
214+46 - 217+76	LT & RT						331		
217+76	RT		40						
217+76 - 220+53	LT			19		277			
224+07	RT		38						
226+72	RT		30						
232+08	LT		18						
237+05	LT		8						
237+94	LT & RT		23	8					
240+73	LT		30						
241+63	LT		22						
244+90	LT		29						
247+34	LT		24						
248+15	LT		26						
250+53	LT		21						
251+36	LT		29						
HICKORY DRIVE									
80+25 - 80+82	LT		66						
PORTER ROAD									
800+10 - 801+09	LT & RT	42	53	199					
STAGE 2 SUBTOTAL		42	633	226		277	901	8	
STAGE 3									
208+75	LT		14						
214+46 - 214+48	LT		48						
217+76	LT		37						
220+13 - 220+53	LT		58						
220+53 - 220+96	LT		68						
220+53 - 221+27	LT					74			
221+27 - 221+49	LT		35						
221+27 - 224+07	LT				281				
224+07	LT		27						
224+07 - 226+72	LT		18		265				
232+06 - 236+90	LT		25		484				
236+90	LT		37						
236+90 - 237+81	LT			37	90				
237+81 - 241+30	LT					349			
241+30 - 243+44	LT		73			213			
243+44 - 244+35	LT					91			
244+35	LT		96						
244+35 - 247+70	LT					335			
247+70 - 250+80	LT		29			310			
STAGE 3 SUBTOTAL			565	37	1120	1372			
UNDISTRIBUTED			200	50	200				
PROJECT 6414-00-80 SUBTOTAL		42	1398	313	1320	1649	901	8	

REMOVING STORM SEWER (SIZE) (CONTN'D)

STATION	LOCATION	204.0245 10-INCH LF	204.0245 12-INCH LF	204.0245 15-INCH LF	204.0245 18-INCH LF	204.0245 24-INCH LF	204.0245 30-INCH LF	204.0245 36-INCH LF	204.0245 60-INCH LF
PROJECT 6414-00-81									
STAGE 2									
255+66	LT				28				
255+66 - 256+12	LT				25				
259+61	RT		59						
263+47	RT				25				
266+98	RT				24				
271+01	LT & RT				42				
273+43	RT				20				
276+02	RT				22				
279+99	RT				4				
CTH HH									
895+69	LT		55						
MCDILL AVENUE									
900+25	LT		50						
901+95	LT		26	7					
903+73	LT		28						
STAGE 2 SUBTOTAL			218	7	190				
STAGE 3									
255+66	LT				25				
256+12 - 256+35	LT				27				
256+35 - 258+93	LT				253				
258+93 - 260+53	LT		30		157				
263+48	LT				34				
266+98	LT				27				
271+01	LT				23				
273+43	LT				20				
276+02	LT				23				
CTH HH									
895+24	RT		25						
MCDILL AVENUE									
900+20	RT								8
900+28 - 901+88	RT			76					160
901+88 - 903+73	RT		19	18					185
903+73 - 906+35	RT		28						233
905+92	RT		38						
906+35	RT		44						
STAGE 3 SUBTOTAL			184	94	589				586
UNDISTRIBUTED			50	50	100				
PROJECT 6414-00-81 SUBTOTAL			452	151	879				586
ITEM TOTALS		42	1850	464	2199	1649	901	8	586

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

EARTHWORK SUMMARY

DIVISION	STATION	LOCATION	(1) 205.0100 EXCAVATION COMMON CY	(2)(3) SALVAGED/ UNUSABLE MATERIAL CY	(4) AVAILABLE MATERIAL CY	(5) 205.0400 EXCAVATION MARSH CY	(6) 208.1100 SELECT BORROW CY	313.0115 PIT RUN CY	(7) UNEXPANDED FILL CY	(7) EXPANDED FILL CY	(8) MASS ORDINATE CY	WASTE CY	COMMENTS
DIVISION 1 (STAGE 1)													
PROJECT 6414-00-80													
BUSINESS 51													
	206+82 - 207+08	WIDENING - LT	20	7	13	0	0	0	0	0	13	7	STAGE 1A
	208+52 - 210+42	WIDENING - LT	60	11	49	0	0	0	0	0	49	11	STAGE 1A
	208+67 - 213+68	MEDIAN	325	140	185	0	0	0	0	0	185	140	STAGE1B
	206+82 - 207+08	WIDENING - LT	10	7	3	0	0	0	0	0	3	7	STAGE 1C
	208+52 - 210+42	WIDENING - LT	20	16	4	0	0	0	0	0	4	16	STAGE 1C
	207+82 - 252+50	TEMPORARY SIDEWALK - LT	260	4	256	0	0	0	0	0	256	4	
	215+88 - 217+32	MEDIAN	110	35	75	0	0	0	0	0	75	35	
	217+45 - 219+87	MEDIAN	150	45	105	0	0	0	0	0	105	45	
	217+04 - 220+16	WIDENING - LT	155	45	110	0	0	0	0	0	110	45	
	220+69 - 220+83	ISLAND - LT	8	4	4	0	0	0	0	0	4	4	
	221+09 - 223+18	WIDENING - LT	110	17	93	0	0	0	0	0	804	17	
PROJECT 6414-00-80 SUBTOTAL			1228	331	897	0	0	0	0	0	1608	331	
PROJECT 6414-00-81													
BUSINESS 51	252+50 - 260+19	TEMPORARY SIDEWALK - LT	70	0	70	0	0	0	0	0	70	0	
	254+95 - 260+42	MEDIAN	125	60	65	0	0	0	0	0	65	60	
	260+16 - 260+38	ISLAND - RT	17	6	11	0	0	0	0	0	11	6	
	261+65 - 262+00	ISLAND - LT	26	8	18	0	0	0	0	0	18	8	
	261+56 - 263+68	MEDIAN	32	13	19	0	0	0	0	0	19	13	
	279+99 - 283+41	MEDIAN	210	66	144	0	0	0	0	0	144	66	
CTH HH	890+46'EB' - 899+10'EB'	MEDIAN	280	115	165	0	0	0	0	0	165	115	
	899+18'EB' - 899+41'EB'	ISLAND - RT	8	4	4	0	0	0	0	0	4	4	
MCDILL AVENUE	900+10'EB' - 903+88'EB'	MEDIAN	280	75	205	0	0	0	0	0	205	75	
PROJECT 6414-00-81 SUBTOTAL			1048	347	701	0	0	0	0	0	701	347	
DIVISION 1 (STAGE 1) TOTAL			**2276**	**678**	**1598**	**0**	**0**	**0**	**0**	**0**	**2309**	**678**	
DIVISION 2 (STAGE 2)													
PROJECT 6414-00-80													
	208+50 - 214+00	BUSINESS 51	1115	355	760	0	0	0	4	5	755	355	
	80+28 - 81+65	HICKORY DRIVE	420	100	320	0	0	0	0	0	320	100	
	214+00 - 220+50	BUSINESS 51	1170	640	530	0	0	0	96	125	405	640	
	800+30 - 803+48	PORTER DRIVE	1400	325	1075	0	0	0	42	55	1020	325	
	220+50 - 237+00	BUSINESS 51	4900	815	4085	0	0	0	61	80	4005	815	
	85+30 - 88+30	E. CEDAR STREET	670	100	570	0	0	0	0	0	570	100	
	88+00 - 90+00	INFILTRATION POND	6880	0	6880	0	0	0	0	0	6880	0	
	237+00 - 243+50	BUSINESS 51	1990	105	1885	0	0	0	85	110	1775	105	
	10+18 - 11+85	LOCUST STREET CUL-DE-SAC	445	65	380	0	0	0	39	50	330	65	
	90+30 - 92+12	E. WILLOW STREET	620	60	560	0	0	0	8	10	550	60	
	243+50 - 250+50	BUSINESS 51	2190	200	1990	0	0	0	0	0	1990	200	
	20+75 - 21+85	BEECH STREET CUL-DE-SAC	295	45	250	0	0	0	0	0	250	45	
	247+10 - 250+40	INFILTRATION POND	7640	35	7605	0	0	0	0	0	7605	35	
	95+30 - 96+60	ELM STREET	510	50	460	0	0	0	27	35	425	50	
	250+50 - 252+50	BUSINESS 51	450	60	390	0	0	0	0	0	390	60	
PROJECT 6414-00-80 SUBTOTAL			30695	2955	27740	0	0	0	362	470	27270	2955	

(1) EXCAVATION COMMON IS THE TOTAL VOLUME OF CUT. ITEM NUMBER 205.0100

(2) SALVAGED/ UNUSABLE PAVEMENT MATERIAL ARE INCLUDED IN THE QUANTITY OF EXCAVATION COMMON.

(3) SALVAGED/ UNUSABLE PAVEMENT MATERIAL. INCLUDES PAVEMENT, ASPHALT, CURB AND GUTTER AND SIDEWALKS.
ASPHALT DRIVEWAYS AND PARKING LOTS WERE ESTIMATED AT 3" DEPTH.

(4) AVAILABLE MATERIAL = EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL.

(5) MARSH EXCAVATION WAS ASSUMMED AT A DEPTH OF 5.0'. NINE HAND AUGER DEPTHS WERE TAKEN TO A DEPTH OF 4'-5'.

(6) ALL EXCAVATED MARSH AREAS AND FILL AREAS TO ELEVATION 1068.00 WITHIN THE CAUSEWAY LIMITS WILL BE FILLED WITH THE ITEM OF SELECT BORROW. WASTE MATERIAL BELOW THE ROADWAY SUBGRADE LIMITS DOWN TO ELEVATION 1068.00 MAY BE USED WITH THE APPROVAL OF THE ENGINEER IN THE FIELD AND WILL BE FREE OF ALL UNUSABLE MATERIAL. THE SELECT BORROW INCLUDES 25% UNDISTRIBUTED QTY.

(7) STAGES 1, 2, 3 AND 4 EXPANDED FILL FACTOR = 1.30

(8) THE MASS ORDINATE + OR - QTY FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL AND A MINUS QUANTITY INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

THE MASS ORDINATE IS = EXCAVATION COMMON - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

BUSINESS 51 STAGE 2 EARTHWORK VOLUMES ARE ESTIMATED FROM 4.0' LEFT OF THE NB REFERENCE LINE AND COULD VARY DEPENDING ON ACTUAL CONTRACTOR OPERATIONS IN THE FIELD.

BUSINESS 51 STAGE 3 EARTHWORK VOLUMES ARE ESTIMATED FROM 4.0' RIGHT OF THE SB MEDIAN EDGE AND COULD VARY DEPENDING ON ACTUAL CONTRACTOR OPERATIONS IN THE FIELD.

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

EARTHWORK SUMMARY (CONT'D)

DIVISION	STATION	LOCATION	(1) 205.0100 EXCAVATION COMMON CY	(2)(3) SALVAGED/ UNUSABLE MATERIAL CY	(4) AVAILABLE MATERIAL CY	(5) 205.0400 EXCAVATION MARSH CY	(6) 208.1100 SELECT BORROW CY	313.0115 PIT RUN CY	UNEXPANDED FILL CY	(7) EXPANDED FILL CY	(8) MASS ORDINATE CY	WASTE CY	COMMENTS
PROJECT 6414-00-81													
	252+50 - 260+50	BUSINESS 51	1605	325	1280	0	0	0	69	90	1190	325	
	900+20 - 907+39	MCDILL AVENUE	3420	910	2510	0	0	0	50	65	2445	910	
	99+10 - 99+72	LOCUST STREET S	125	30	95	0	0	0	0	0	95	30	
	100+35 - 100+80	LOCUST STREET N	90	25	65	0	0	0	0	0	65	25	
	260+50 - 263+49	BUSINESS 51	30	85	-55	1900	3300	970	1988	2585	-2640	85	
	264+95 - 281+01	BUSINESS 51	965	335	630	15600	26400	6800	9169	11920	-11290	335	
PROJECT 6414-00-81 SUBTOTAL			6235	1710	4525	17500	29700	7770	11276	14660	-10135	1710	
DIVISION 2 (STAGE 2) TOTAL			**36930**	**4665**	**32265**	**17500**	**29700**	**7770**	**11638**	**15130**	**17135**	**4665**	
DIVISION 3 (STAGE 3)													
PROJECT 6414-00-80													
	208+50 - 214+00	BUSINESS 51	795	240	555	0	0	0	0	0	555	240	
	214+00 - 220+50	BUSINESS 51	1010	470	540	0	0	0	8	10	530	470	
	793+60 - 799+46	TOMMY'S TURNPIKE	2855	555	2300	0	0	0	96	125	2175	555	
	59+00 - 59+70	THEATER DRIVE	265	40	225	0	0	0	0	0	225	40	
	220+50 - 237+00	BUSINESS 51	5230	950	4280	0	0	0	42	55	4225	950	
	83+00 - 84+46	W. CEDAR STREET	495	70	425	0	0	0	0	0	425	70	
	237+00 - 243+50	BUSINESS 51	2125	440	1685	0	0	0	0	0	1685	440	
	88+00 - 89+46	W. WILLOW STREET	510	95	415	0	0	0	0	0	415	95	
	243+50 - 250+50	BUSINESS 51	2160	465	1695	0	0	0	0	0	1695	465	
	250+50 - 252+50	BUSINESS 51	570	100	470	0	0	0	0	0	470	100	
PROJECT 6414-00-80 SUBTOTAL			16015	3425	12590	0	0	0	146	190	12400	3425	
PROJECT 6414-00-81													
	252+50 - 260+50	BUSINESS 51	1580	500	1080	0	0	0	62	80	1000	500	
	892+03 - 899+35	CTH - HH	2650	1500	1150	0	0	0	254	330	820	1500	
	260+50 - 263+49	BUSINESS 51	95	180	-85	0	0	0	504	655	-740	180	
	264+95 - 281+01	BUSINESS 51	1920	420	1500	0	0	0	388	505	995	420	
	0+40 - 1+60	BOAT LANDING SW	1	0	1	0	0	0	103	135	-134	0	
PROJECT 6414-00-81 SUBTOTAL			6246	2600	3646	0	0	0	1311	1705	1941	2600	

(1) EXCAVATION COMMON IS THE TOTAL VOLUME OF CUT. ITEM NUMBER 205.0100

(2) SALVAGED/ UNUSABLE PAVEMENT MATERIAL ARE INCLUDED IN THE QUANTITY OF EXCAVATION COMMON.

(3) SALVAGED/ UNUSABLE PAVEMENT MATERIAL. INCLUDES PAVEMENT, ASPHALT, CURB AND GUTTER AND SIDEWALKS.
ASPHALT DRIVEWAYS AND PARKING LOTS WERE ESTIMATED AT 3" DEPTH.

(4) AVAILABLE MATERIAL = EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL.

(5) MARSH EXCAVATION WAS ASSUMMED AT A DEPTH OF 5.0'. NINE HAND AUGER DEPTHS WERE TAKEN TO A DEPTH OF 4'-5'.

(6) ALL EXCAVATED MARSH AREAS AND FILL AREAS TO ELEVATION 1068.00 WITHIN THE CAUSEWAY LIMITS WILL BE FILLED WITH THE ITEM OF SELECT BORROW. WASTE MATERIAL BELOW THE ROADWAY SUBGRADE LIMITS DOWN TO ELEVATION 1068.00 MAY BE USED WITH THE APPROVAL OF THE ENGINEER IN THE FIELD AND WILL BE FREE OF ALL UNUSABLE MATERIAL. THE SELECT BORROW INCLUDES 25% UNDISTRIBUTED QTY.

(7) STAGES 1, 2, 3 AND 4 EXPANDED FILL FACTOR = 1.30

(8) THE MASS ORDINATE + OR - QTY FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL AND A MINUS QUANTITY INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

THE MASS ORDINATE IS = EXCAVATION COMMON - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

BUSINESS 51 STAGE 2 EARTHWORK VOLUMES ARE ESTIMATED FROM 4.0' LEFT OF THE NB REFERENCE LINE AND COULD VARY DEPENDING ON ACTUAL CONTRACTOR OPERATIONS IN THE FIELD.

BUSINESS 51 STAGE 3 EARTHWORK VOLUMES ARE ESTIMATED FROM 4.0' RIGHT OF THE SB MEDIAN EDGE AND COULD VARY DEPENDING ON ACTUAL CONTRACTOR OPERATIONS IN THE FIELD.

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

EARTHWORK SUMMARY (CONT'D)

DIVISION	STATION	LOCATION	(1) 205.0100 EXCAVATION COMMON CY	(2)(3) SALVAGED/ UNUSABLE MATERIAL CY	(4) AVAILABLE MATERIAL CY	(5) 205.0400 EXCAVATION MARSH CY	(6) 208.1100 SELECT BORROW CY	313.0115 PIT RUN CY	UNEXPANDED FILL CY	(7) EXPANDED FILL CY	(8) MASS ORDINATE CY	WASTE CY	COMMENTS
DIVISION 3 (STAGE 3) TOTAL			**22261**	**6025**	**16236**	**0**	**0**	**0**	**1457**	**1895**	**14341**	**6025**	
DIVISION 4 (STAGE 4)													
PROJECT 6414-00-80													
	208+50 - 214+00	BUSINESS 51	25	0	25	0	0	0	0	0	25	0	
	214+00 - 220+50	BUSINESS 51	345	300	45	0	0	0	4	5	40	300	
	220+50 - 237+00	BUSINESS 51	1370	470	900	0	0	0	0	0	900	470	
	237+00 - 243+50	BUSINESS 51	535	135	400	0	0	0	0	0	400	135	
	243+50 - 250+50	BUSINESS 51	550	170	380	0	0	0	69	90	290	170	
	250+50 - 252+50	BUSINESS 51	160	50	110	0	0	0	4	5	105	50	
PROJECT 6414-00-80 SUBTOTAL			2985	1125	1860	0	0	0	77	100	1760	1125	
PROJECT 6414-00-81													
	252+50 - 260+50	BUSINESS 51	425	210	215	0	0	0	8	10	205	210	
	260+50 - 263+49	BUSINESS 51	0	100	-100	0	0	0	77	100	-200	100	
	264+95 - 281+01	BUSINESS 51	10	150	-140	0	0	0	773	1005	-1145	150	
	279+99 - 283+42	BUSINESS 51	73	49	24	0	0	0	773	1005	-981	49	
	890+50 - 892+02	CTH-HH	19	13	6	0	0	0	773	1005	-999	13	
PROJECT 6414-00-81 SUBTOTAL			527	522	5	0	0	0	2404	3125	-3120	522	
DIVISION 4 (STAGE 4) TOTAL			**3512**	**1647**	**1865**	**0**	**0**	**0**	**2481**	**3225**	**-1360**	**1647**	
PROJECT 6414-00-80 TOTAL			50923			0	0	0					
PROJECT 6414-00-81 TOTAL			14056			17500	29700	7770					
		GRAND TOTALS	**64979**			**17500**	**29700**	**7770**					

(1) EXCAVATION COMMON IS THE TOTAL VOLUME OF CUT. ITEM NUMBER 205.0100

(2) SALVAGED/ UNUSABLE PAVEMENT MATERIAL ARE INCLUDED IN THE QUANTITY OF EXCAVATION COMMON.

(3) SALVAGED/ UNUSABLE PAVEMENT MATERIAL. INCLUDES PAVEMENT, ASPHALT, CURB AND GUTTER AND SIDEWALKS.
ASPHALT DRIVEWAYS AND PARKING LOTS WERE ESTIMATED AT 3" DEPTH.

(4) AVAILABLE MATERIAL = EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL.

(5) MARSH EXCAVATION WAS ASSUMMED AT A DEPTH OF 5.0'. NINE HAND AUGER DEPTHS WERE TAKEN TO A DEPTH OF 4'-5'.

(6) ALL EXCAVATED MARSH AREAS AND FILL AREAS TO ELEVATION 1068.00 WITHIN THE CAUSEWAY LIMITS WILL BE FILLED WITH THE ITEM OF SELECT BORROW. WASTE MATERIAL BELOW THE ROADWAY SUBGRADE LIMITS DOWN TO ELEVATION 1068.00 MAY BE USED WITH THE APPROVAL OF THE ENGINEER IN THE FIELD AND WILL BE FREE OF ALL UNUSABLE MATERIAL. THE SELECT BORROW INCLUDES 25% UNDISTRIBUTED QTY.

(7) STAGES 1, 2, 3 AND 4 EXPANDED FILL FACTOR = 1.30

(8) THE MASS ORDINATE + OR - QTY FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL AND A MINUS QUANTITY INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

THE MASS ORDINATE IS = EXCAVATION COMMON - SALVAGED/UNUSABLE PAVEMENT MATERIAL - EXPANDED FILL.

BUSINESS 51 STAGE 2 EARTHWORK VOLUMES ARE ESTIMATED FROM 4.0' LEFT OF THE NB REFERENCE LINE AND COULD VARY DEPENDING ON ACTUAL CONTRACTOR OPERATIONS IN THE FIELD.

BUSINESS 51 STAGE 3 EARTHWORK VOLUMES ARE ESTIMATED FROM 4.0' RIGHT OF THE SB MEDIAN EDGE AND COULD VARY DEPENDING ON ACTUAL CONTRACTOR OPERATIONS IN THE FIELD.

PREPARE FOUNDATION FOR

STATION	LOCATION	211.0100 ASPHALTIC PAVING (PROJECT) LS	211.0200 CONCRETE PAVING (PROJECT) LS	211.0300 CONCRETE BASE (PROJECT) LS	211.0500 BASE AGGREGATE STA
PROJECT 6414-00-80	LT & RT	1	1	1	44
PROJECT 6414-00-80 SUBTOTAL		1	1	1	44
PROJECT 6414-00-81	LT & RT	1	1	1	29
PROJECT 6414-00-81 SUBTOTAL		1	1	1	29
ITEM TOTALS		2	2	2	73

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

FINISHING ROADWAY (PROJECT)

STATION	LOCATION	213.0100 EACH
PROJECT 6414-00-80	LT & RT	1
PROJECT 6414-00-80 SUBTOTAL		1
PROJECT 6414-00-81	LT & RT	1
PROJECT 6414-00-81 SUBTOTAL		1
ITEM TOTALS		2

OBLITERATING OLD ROAD

STATION	LOCATION	214.0100 STA	COMMENTS
PROJECT 6414-00-80			
STAGE 2			
237+37-238+63	RT	1	LOCUST ST
241+09	RT	1	ROSE ST
244+33	RT	1	WILLOW ST (E)
247+65	RT	1	BEECH ST
STAGE 2 SUBTOTAL		4	
PROJECT 6414-00-80 SUBTOTAL		4	
ITEM TOTAL		4	

BASE AGGREGATE

STATION	LOCATION	305.0110 DENSE 3/4-INCH TON	305.0120 * DENSE 1 1/4-INCH TON	COMMENTS
PROJECT 6414-00-80				
STAGE 1				
206+82.6 - 208+07.4	LT		27	STAGE 1A WIDENING
208+52.5 - 210+41.5	LT		65	STAGE 1A WIDENING
208+67.0 - 213+68.0	MEDIAN		432	STAGE 1B
215+88 - 217+32	MEDIAN		98	MEDIAN
217+04 - 220+16	LT		145	WIDENING
217+45 - 219+87	MEDIAN		140	MEDIAN
220+69 - 220+83	LT		7	ISLAND STAGE 1
221+09 - 223+18	LT		93	WIDENING
STAGE 1 SUBTOTAL			1007	
STAGE 2				
208+50 - 211+57.50	RT		738	
211+57.50 - 220+95.41	RT		1365	
214+31.69 - 215+79.70	RT		110	PARKING LOT
220+95.41 - 237+75.14	RT		2060	
237+75.14 - 252+50.00	RT		1811	
HICKORY DRIVE				
80+32.61 - 81+65.00	LT & RT		352	
PORTER ROAD				
800+47.09 - 803+47.88	LT & RT		1011	
E CEDAR STREET				
85+32.29 - 88+30.00	LT & RT	30	675	
LOCUST STREET				
10+07.44 - 11+83.80	LT & RT		537	
WILLOW STREET E				
90+32.50 - 92+12.27	LT & RT		542	
BEECH STREET				
20+65.50 - 21+85.00	LT & RT		386	
E ELM STREET				
95+32.90 - 96+60.00	LT & RT		308	
DRIVEWAYS				
210+22.0	RT		4	
211+80.0	RT		6	
212+90.8	RT		21	
215+42.7	RT		100	
216+57.9	RT		23	
222+76.8	RT		17	
224+62.7	RT		21	
225+50.2	RT		18	
226+79.7	RT		27	
227+93.3	RT		13	
229+63.3	RT		11	
230+21.6	RT		11	
230+74.1	RT		19	
231+78.7	RT		15	
232+64.4	RT		15	
234+17.2	RT		68	
235+43.3	RT		29	
252+29.8	RT		21	
80+85.1	LT		18	
80+98.3	RT		20	
81+25.2	LT		4	
801+77	LT		8	
802+97.6	RT		19	
803+38.0	LT		9	
87+33.2	LT		6	
87+33.2	RT		27	
10+34.8	RT		21	
11+24.8	RT		9	
91+40.5	LT		10	
20+62.5	~		4	
21+01.0	LT		6	
96+06.6	LT		14	
96+09.0	RT		5	
STAGE 2 SUBTOTAL		30	10514	

BASE AGGREGATE (CONT'D)

		305.0110 DENSE 3/4-INCH	305.0120 * DENSE 1 1/4-INCH	
STAGE 3				
208+50 - 214+37.79	LT		1399	
214+37.79 - 220+95.41	LT		857	
220+95.41 -237+75.14	LT		2191	
237+75.14 - 252+50.00	LT		1812	
242+67.82 - 243+63.76	LT		76	PARKING LOT
244+13.29 - 247+04.37	LT		319	PARKING LOT
TOMMY'S TURNPIKE				
793+59.50 - 799+87.84	LT & RT		1992	
THEATER DRIVE				
59+00.00 - 59+66.13	LT & RT		261	
W CEDAR STREET				
83+00.00 - 84+42.31	LT & RT		348	
WILLOW STREET				
88+00.00 - 89+43.00	LT & RT		362	
DRIVEWAYS				
214+08.0	LT		37	
217+56.8	LT		68	
218+65.9	LT		74	
224+09.3	LT		28	
225+61.4	LT		30	
226+87.0	LT		33	
229+04.4	LT		11	
230+37.4	LT		14	
231+68.8	LT		11	
232+22.3	LT		38	
232+84.3	LT		46	
234+58.8	LT		219	
236+73.5	LT		12	
239+60.0	LT		296	
241+73.0	LT		123	
247+31.0	LT		45	
248+30.0	LT		55	
249+58.6	LT		23	
251+05.7	LT		43	
794+54.0	RT		8	
795+04.8	LT		15	
795+51.2	RT		4	
795+87.0	LT		9	
795+54.1	LT		27	
797+67.0	LT		30	
83+88.1	LT		42	
84+02.0	RT		12	
88+71.8	RT		46	
88+76.7	LT		22	
STAGE 3 SUBTOTAL			11038	
STAGE 4				
214+37.79 - 219+93.44	MEDIAN		754	
220+95.41 -236+62.33	MEDIAN		2040	
237+75.14 - 252+50.00	MEDIAN		1785	
STAGE 4 SUBTOTAL			4579	
PROJECT 6414-00-80 SUBTOTAL		30	27138	

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*ADDITIONAL QUANTITIES SHOWN IN BRIDGE PLANS

BASE AGGREGATE (CONT'D)

		305.0110 DENSE 3/4-INCH	305.0120 DENSE 1 1/4-INCH *	
PROJECT 6414-00-81				
STAGE 1				
254+95 - 260+42	MEDIAN		150	MEDIAN
260+16 - 260+38	RT		17	ISLAND
261+56 - 263+68	MEDIAN		35	MEDIAN
261+65 - 262+00	LT		25	ISLAND
279+99 - 283+41	LT		195	
CTH HH				
890+46 - 899+10	LT & RT		295	MEDIAN
899+18 - 899+41	RT		10	ISLAND
MCDILL AVENUE				
900+10 - 903+88	MEDIAN		295	MEDIAN
STAGE 1 SUBTOTAL			1022	
STAGE 2				
252+50 - 263+67.82	RT		1502	
258+51 - 259+69.00	RT		152	MCDILL PARKING
264+81.27 - 281+01.00	RT		1870	
CTH HH				
892+02.00 - 899+08.08	LT		852	
MCDILL AVENUE				
900+28.32 - 907+40.96	LT		922	
LOCUST STREET				
100+34.38 -100+80.00	LT & RT		88	
DRIVEWAYS				
253+95.4	RT		21	
255+30.0	RT		21	
256+10.7	RT		18	
257+34.0	RT		39	
280+75.0	RT		25	
901+82.0	LT		25	
902+32.0	LT		23	
904+03.3	LT		13	
905+17.7	LT		16	
907+00.3	LT		17	
STAGE 2 SUBTOTAL			5604	
STAGE 3				
252+50 - 263+67.82	LT		1386	
264+81.27 - 281+01.00	LT		1603	
CTH HH				
892+02.00 - 899+24.32	RT		916	
MCDILL AVENUE				
900+43.15 - 907+40.96	RT		847	
LOCUST STREET				
99+10.00 - 99+69.65	LT & RT		120	
DRIVEWAYS				
252+72.5	LT		22	
253+55.9	LT		3	
254+68.4	LT		2	
255+86.4	LT		12	
272+37.3	LT		34	
902+44.2	RT		27	
902+96.0	RT		18	
903+21.0	RT		18	
904+39.4	RT		13	
STAGE 3 SUBTOTAL			5021	
STAGE 4				
252+50 - 263+34.23	MEDIAN		1501	
265+09.92 - 281+01.00	MEDIAN		1767	
CTH HH				
892+02.00 - 899+08.08	MEDIAN		563	
MCDILL AVENUE				
900+28.32 - 907+40.96	MEDIAN		432	
STAGE 4 SUBTOTAL			4263	
PROJECT 6414-00-81 SUBTOTAL			15910	
ITEM TOTALS		30	43048	

STAMPING COLORED CONCRETE

STATION	LOCATION	405.1000 4-INCH SY
PROJECT 6414-00-80		
CAT 030		
STAGE 2		
213+11.52 - 220+95.41	RT	301
STAGE 2 SUBTOTAL		301
STAGE 3		
211+57.50 - 220+95.41	LT	332
STAGE 3 SUBTOTAL		332
STAGE 4		
211+57.50 - 220+95.41	MEDIAN	387
STAGE 4 SUBTOTAL		387
CAT 030 SUBTOTAL		1048
PROJECT 6414-00-80 SUBTOTAL		1020
ITEM TOTAL		1020

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*ADDITIONAL QUANTITIES SHOWN IN BRIDGE PLANS

CONCRETE PAVEMENT

STATION	LOCATION	415.0080 8-INCH SY	415.0090 9-INCH SY	415.4100 CONCRETE PAVEMENT JOINT FILLING SY
PROJECT 6414-00-80				
STAGE 2				
211+57.50 - 220+95.41	RT		3506	3787
220+95.41 -237+75.14	RT		5339	5694
237+75.14 - 252+50.00	RT		4695	4999
HICKORY DRIVE				
80+28.39 - 80+67.94	LT & RT		200	204
PORTER ROAD				
800+47.09 - 802+30.90	LT & RT	1218		1398
E CEDAR STREET				
85+27.77 - 85+64.61	LT & RT		183	186
WILLOW STREET E				
90+28.00 - 90+70.23	LT & RT		188	194
E ELM STREET				
95+28.37 - 95+66.15	LT & RT		172	175
STAGE 2 SUBTOTAL		1218	14284	16637
STAGE 3				
214+37.79 - 220+95.41	LT		2242	3653
220+95.41 -237+75.14	LT		5736	9530
237+75.14 - 252+50.00	LT		4696	8025
TOMMY'S TURNPIKE				
797+95.81 - 799+39.97	LT & RT	1081		1225
W CEDAR STREET				
84+06.02 - 84+46.54	LT & RT		199	204
WILLOW STREET				
89+11.30 - 89+47.54	LT & RT		165	169
STAGE 3 SUBTOTAL		1081	13039	22806
STAGE 4				
211+57.50 - 220+95.41	R/L		775	
220+95.41 -237+75.14	R/L		2402	
237+75.14 - 252+50.00	R/L		2011	
STAGE 4 SUBTOTAL			5189	
PROJECT 6414-00-80 SUBTOTAL		2299	32511	39443
PROJECT 6414-00-81				
STAGE 2				
252+50 - 263+34.23	RT		3802	4250
265+09.92 - 281+01.00	RT		4707	5200
CTH HH				
892+09.29 - 899+16.38	LT		2263	2403
MCDILL AVENUE				
900+23.24 - 907+40.96	LT		2409	2605
LOCUST STREET				
100+29.87 -100+57.29	LT & RT		109	110
STAGE 2 SUBTOTAL			13290	14568
STAGE 3				
252+50 - 263+31.87	LT		3424	6070
265+11.23 - 281+01.00	LT		4015	5563
CTH HH				
892+09.29 - 899+31.68	RT		2400	2590
MCDILL AVENUE				
900+38.07 - 907+40.96	RT		2179	2368
LOCUST STREET				
99+49.54 - 99+75.15	LT & RT		101	102
STAGE 3 SUBTOTAL			12118	16693
STAGE 4				
252+50 - 263+33.33	R/L		1422	
264+11.23 - 281+01.00	R/L		469	
CTH HH				
892+09.19 - 899+08.08	R/L		478	
MCDILL AVENUE				
900+28.32 - 907+40.96	R/L		469	
STAGE 4 SUBTOTAL			2838	
PROJECT 6414-00-81 SUBTOTAL			28246	31261
ITEM TOTALS		2299	60757	70704

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CONCRETE PAVEMENT APPROACH SLAB

STATION	LOCATION	415.0410 SY
PROJECT 6414-00-81		
STAGE 2		
263+34.23 - 263+49.23	RT	41
264+94.92 - 265+09.92	RT	40
STAGE 2 SUBTOTAL		81
STAGE 3		
263+21.19'SB' - 263+48.15'SB'	LT	41
264+82.97'SB' - 264+98.49'SB'	LT	62
STAGE 3 SUBTOTAL		103
STAGE 4		
263+33.33 - 263+48.92	R/L	20
STAGE 4 SUBTOTAL		20
PROJECT 6414-00-81 SUTOTAL		204
ITEM TOTAL		204

CONCRETE PAVEMENT JOINT LAYOUT

STATION	LOCATION	415.5110.S LS
PROJECT 01.6414-00-80	LT & RT	1.0
PROJECT 02.6414-00-81	LT & RT	1.0
ITEM TOTAL		2.0

CONCRETE DRIVEWAY

STATION	LOCATION	416.0160 6-INCH SY	416.0260 6-INCH HES SY
PROJECT 6414-00-80			
STAGE 2			
212+90.8	RT		57
215+42.7	RT		44
216+57.9	RT	54	
222+76.8	RT		34
224+62.7	RT		70
225+50.2	RT	34	
226+79.7	RT	54	
227+93.3	RT	29	
229+63.3	RT	38	
230+21.6	RT	29	
230+74.1	RT	39	
231+78.7	RT		40
232+64.4	RT		40
234+17.2	RT	68	
235+43.3	RT	54	
252+29.8	RT	56	
80+85.1	LT	25	
80+98.3	RT		25
81+25.2	LT	16	
801+77.0	LT		14
802+97.6	RT	54	
87+33.2	LT		18
10+34.8	RT		67
11+24.8	RT		32
91+40.5	LT		34
20+62.5	R/L	15	
21+01.0	LT		24
96+06.6	LT	22	
96+09.0	RT	22	
STAGE 2 SUBTOTAL		609	497
STAGE 3			
217+56.8	LT		57
218+65.9	LT	57	
224+09.3	LT	54	
225+61.4	LT	54	
226+87.0	LT		61
229+04.4	LT		37
230+37.4	LT		26
231+68.8	LT		26
232+22.3	LT	37	
232+84.3	LT		37
234+58.8	LT		57
236+73.5	LT	40	
239+60.0	LT	57	
241+73.0	LT	57	
247+31.0	LT		57
248+30.0	LT		57
249+58.6	LT		54
251+05.7	LT		54
794+54.0	RT	18	
795+04.8	LT		29
795+51.2	RT		24
795+87.0	LT		26
796+54.1	LT		54
797+67.0	LT	54	
83+88.1	LT	27	
84+02.0	RT	14	
88+71.8	RT		49
88+76.7	LT	26	
STAGE 3 SUBTOTAL		494	706
PROJECT 6414-00-80 SUBTOTAL		1103	1203

CONCRETE DRIVEWAY (CONT'D)

STATION	LOCATION	416.0160 6-INCH SY	416.0260 6-INCH HES SY
PROJECT 6414-00-81			
STAGE 2			
253+95.4	RT		54
255+30.0	RT		54
256+10.7	RT		29
257+34.0	RT	61	
280+75.0	RT	62	
901+82.0	LT		45
902+32.0	LT	39	
904+03.3	LT		28
905+17.7	LT		29
907+00.3	LT		57
STAGE 2 SUBTOTAL		163	295
STAGE 3			
252+72.5	LT		26
253+55.9	LT		10
254+68.4	LT		10
255+86.4	LT		38
272+37.3	LT		93
902+44.2	RT		42
902+96.0	RT		29
903+21.0	RT		29
904+39.4	RT		43
STAGE 3 SUBTOTAL			321
PROJECT 6414-00-81 SUBTOTAL		163	616
ITEM TOTAL		1265	1819

DRILLED TIE BARS

STATION	LOCATION	416.0610 EACH
PROJECT 6414-00-81		
STAGE 4		
278+84 - 283+42	LT (SB LANE)	154
281+01.0 - 283+42.0	LT (TURN LANE NB)	82
CTH HH		
890+50.8 - 891+38.0	LT (WB LANE)	30
890+50.8 - 892+02.0	R/L (EB LANE)	51
STAGE 4 SUBTOTAL		317
PROJECT 6414-00-81 SUBTOTAL		317
ITEM TOTAL		317

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ASPHALTIC CONCRETE PAVEMENT ITEMS

STATION	LOCATION	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON
PROJECT 6414-00-80				
STAGE 2				
208+50.00 - 211+57.50	RT	61		229
HICKORY DRIVE				
80+67.94 - 81+65.00	LT & RT	21		77
PORTER ROAD				
802+30.90 - 803+47.88	LT & RT	38		142
E CEDAR STREET				
85+64.62 - 88+30.00	LT & RT	43		162
LOCUST STREET				
10+08.26 - 11+83.80	LT & RT	38		142
WILLOW STREET E				
90+70.25 - 92+12.27	LT & RT	34		128
BEECH STREET				
20+67.50 - 21+85.00	LT & RT	28		104
E ELM STREET				
95+66.15 - 96+60.00	LT & RT	17		64
STAGE 2 SUBTOTAL		280		1047
STAGE 3				
208+50.00 - 214+37.79	LT	118		439
TOMMY'S TURNPIKE				
793+59.50 - 797+95.81	LT & RT	114		427
THEATER DRIVE				
59+00.00 - 59+70.66	LT & RT	20		74
W CEDAR STREET				
83+00.00 - 84+06.02	LT & RT	18		66
WILLOW STREET				
88+00.00 - 89+11.30	LT & RT	22		83
STAGE 3 SUBTOTAL		292		1090
PROJECT 6414-00-80 SUBTOTAL		572		2137
PROJECT 6414-00-81				
STAGE 2				
LOCUST STREET				
100+57.29 -100+80.00	LT & RT	4		16
STAGE 2 SUBTOTAL		4		16
STAGE 3				
BOAT LANDING		163	304	
LOCUST STREET				
99+10.00 - 99+49.54	LT & RT	7		25
STAGE 3 SUBTOTAL		170	304	25
PROJECT 6414-00-80 SUBTOTAL		174	304	41
ITEM TOTALS		746	304	2178

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

STATION	LOCATION	465.0120 TON
PROJECT 6414-00-80		
STAGE 2		
210+22.0	RT	2
211+80.0	RT	4
212+90.8	RT	7
215+42.7	RT	41
216+57.9	RT	4
226+79.7	RT	6
231+78.7	RT	2
232+64.4	RT	2
234+17.2	RT	25
252+29.8	RT	3
80+85.1	LT	6
80+98.3	RT	9
802+97.6	RT	2
96+06.6	LT	4
STAGE 2 SUBTOTAL		117
STAGE 3		
214+08.0	LT	20
217+56.8	LT	15
218+65.9	LT	15
226+87.0	LT	8
230+37.4	LT	3
231+68.8	LT	2
232+22.3	LT	7
232+84.3	LT	10
234+58.8	LT	59
237+80-239+33	LT	49
239+60.0	LT	17
239+87-241+46	LT	36
241+73.0	LT	14
242+68-243+48	RT	18
244+28-247+04	LT	95
247+31.0	LT	9
248+30.0	LT	11
249+58.6	LT	4
251+05.7	LT	15
794+54.0	RT	2
795+87.0	LT	1
796+54.1	LT	6
59+00-59+50	LT	10
83+88.1	LT	14
88+71.8	RT	18
88+76.7	LT	7
STAGE 3 SUBTOTAL		465
PROJECT 6414-00-80 SUBTOTAL		582
PROJECT 6414-00-81		
STAGE 2		
253+95.4	RT	3
255+30.0	RT	3
257+34	RT	11
258+51 - 259+69.00	MC DILL PARKING RT	56
280+75.0	RT	3
901+81.0	LT	6
STAGE 2 SUBTOTAL		82
STAGE 3		
252+72.5	LT	8
272+37.3	LT	456
902+44.2	RT	7
902+96.0	RT	5
STAGE 3 SUBTOTAL		476
PROJECT 6414-00-81 SUBTOTAL		558
ITEM TOTAL		1140

ASPHALTIC SURFACE TEMPORARY

STATION	LOCATION	465.0125 TON	COMMENTS
PROJECT 6414-00-80			
STAGE 1			
206+82.6 - 208+07.4	LT	14	STAGE 1A WIDENING
208+52.5 - 210+41.5	LT	33	STAGE 1A WIDENING
208+67.0 - 213+68.0	MEDIAN	218	STAGE 1B
215+88 - 217+32	R/L	49	MEDIAN
217+04 - 220+16	LT	75	WIDENING
217+45 - 219+87	R/L	71	MEDIAN
220+69 - 220+83	LT	4	ISLAND
221+09 - 223+18	LT	47	WIDENING
STAGE 1 SUBTOTAL		511	
UNDISTRIBUTED		128	
PROJECT 6414-00-80 SUBTOTAL		639	
PROJECT 6414-00-81			
STAGE 1			
254+95 - 260+42	R/L	75	MEDIAN
260+16 - 260+38	RT	8	ISLAND
261+56 - 263+68	R/L	17	MEDIAN
261+65 - 262+00	LT	13	ISLAND
279+99 - 283+41	LT	100	
CTH HH			
890+46 - 899+10	LT & RT	145	MEDIAN
899+18 - 899+41	RT	4	ISLAND
MCDILL AVENUE			
900+10 - 903+88	R/L	150	MEDIAN
STAGE 1 SUBTOTAL		512	
UNDISTRIBUTED		128	
PROJECT 6414-00-81 SUBTOTAL		640	
ITEM TOTAL		1280	

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

APRON ENDWALLS FOR CULVERT PIPE
REINFORCED CONCRETE

STATION	LOCATION	522.1012 12-INCH EACH	522.1018 18-INCH EACH	522.1024 24-INCH EACH	522.1042 42-INCH EACH	611.9800.S PIPE GRATES EACH
PROJECT 6414-00-80						
STAGE 2						
248+07.00	RT				1	1
250+04.12	RT			1		1
250+07.90	RT			1		1
E CEDAR STREET						
88+36.02	RT			1		1
88+44.02	RT		1			
BEECH STREET						
20+36.00	LT	1				
STAGE 2 SUBTOTAL		1	1	3	1	4
PROJECT 6414-00-80 SUBTOTAL		1	1	3	1	4
PROJECT 6414-00-81						
STAGE 2						
263+25.00	RT		1			
274+59.10	RT			1		1
STAGE 2 SUBTOTAL			1	1		1
STAGE 3						
263+22.57	LT		1			
274+05.27	LT	1				
CTH HH						
893+85.01	LT		1			
895+78.00	LT		1			
897+13.30	LT		1			
STAGE 3 SUBTOTAL		1	4			
PROJECT 6414-00-81 SUBTOTAL		1	5	1		1
ITEM TOTALS		2	6	4	1	5

CONCRETE CURB & GUTTER

STATION	LOCATION	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	601.0600 CONCRETE CURB PEDESTRIAN LF	SPV.0090.14 INTEGRAL 30-INCH TYPE A LF	SPV.0090.15 20-INCH TYPE A LF	SPV.0090.17 CURE & SEAL TREATMENT LF	NOTES
PROJECT 6414-00-80								
STAGE 1C								
206+82.6 - 208+10.0	LT		132				132	STAGE 1C (1)
208+52.0- 210+41.5	LT		194				194	STAGE 1C (1)
STAGE 1C SUBTOTAL			326				326	
STAGE 2								
211+57.50 - 213+69.93	RT	39	70		148		257	
214+07.26 - 219+89.83	RT	373			222		595	
214+31.69 - 215+22.77	RT			91				30 PEDESTRIAN TIE BARS
215+63.46 - 215+79.70	RT			16				5 PEDESTRIAN TIE BARS
219+80.91 - 220+07.00	RT	67					67	ISLAND
220+67.39 - 237+06.65	RT				1593		1593	
237+40.89 - 243+64.16	RT				594		594	
244+00.53 - 250+60.84	RT				635		635	
250+96.78 - 252+50.00	RT				140		140	
HICKORY DRIVE								
80+34.00 - 81+45.00	LT & RT	81	223				304	
80+37.70 - 80+63.03				31				10 PEDESTRIAN TIE BARS
PORTER ROAD								
800+60.20 - 803+30.00	LT & RT	321	148			320	789	
E CEDAR STREET								
85+30.46 - 86+30.00	LT & RT	74	130				204	
LOCUST STREET								
10+09.96 - 11+50.00	LT & RT		298				298	
WILLOW STREET E								
90+53.50 - 92+03.67	LT & RT	84	365				449	
BEECH STREET								
20+68.00 - 21+43.81	LT & RT		199				199	
E ELM STREET								
95+51.40 - 96+50.00	LT & RT	74	165				239	
STAGE 2 SUBTOTAL		1113	1598	138	3332	320	6363	
STAGE 3								
214+48.20 - 220+21.47	LT		125		452		577	
220+81.84 - 221+07.85	LT	66					66	ISLAND
220+99.10 - 237+25.56	LT	591	237		1270		2098	
237+65.50 - 243+73.82	LT		460		625		1085	
244+09.10 - 252+50.00	LT		352		834		1186	
TOMMY'S TURN PIKE								
793+83.46 - 799+08.83	LT & RT	319	804			225	1348	
W CEDAR STREET								
83+30.00 - 84+21.77	LT & RT	89	156				245	
WILLOW STREET								
88+22.00 - 89+11.30	LT & RT	75	178				253	
STAGE 3 SUBTOTAL		1140	2312		3181	225	6858	
STAGE 4								
214+44.74 - 219+86.44	LT	1039					1039	
221+02.41 - 223+63.34	LT	524					524	
224+44.84 - 226+32.64	LT	370					370	
227+25.62 - 230+13.58	LT	578					578	
231+06.56 - 233+88.47	LT	566					566	
234+81.57 - 236+85.37	LT	410					410	
237+82.12 - 241+26.31	LT	690					690	
242+19.26 - 243+38.01	LT	238					238	
244+32.02 - 246+86.00	LT	510					510	
247+68.13 - 250+42.45	LT	552					552	
251+45.04 - 252+50.00	LT	211					211	
STAGE 4 SUBTOTAL		5688					5688	
PROJECT 6414-00-80 SUBTOTAL		7941	4236	138	6513	545	19235	

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

(1) PROVIDE CURB CUTS FOR TEMPORARY SIDEWALK

CONCRETE CURB & GUTTER (CONT'D)

		601.0409 30-INCH TYPE A	601.0411 30-INCH TYPE D	601.0600 CONCRETE CURB PEDESTRIAN	SPV.0090.14 INTEGRAL 30-INCH TYPE A	SPV.0090.15 20-INCH TYPE A	SPV.0090.17 CURE & SEAL TREATMENT	
PROJECT 6414-00-81								
STAGE 2								
252+50.00 - 259+59.88	RT	227			487		714	
258+51.00 - 259+69.00	RT			184				MCDILL PARKING ISLAND
259+80.08 - 260+17.43	RT	107					107	
261+14.88 - 263+34.23	RT				205		205	
265+09.92 - 281+01.00	RT				1613		1613	
CTH HH								
892+09.37 - 898+98.41	LT	184			531		715	INCLUDES ISLAND
MCDILL AVENUE								
900+28.83 - 907+40.96	LT	332			368		700	
LOCUST STREET								
100+37.05 -100+57.29	LT & RT	52					52	
STAGE 2 SUBTOTAL		902		184	3204		4106	
STAGE 3								
252+50.00 - 260+17.43	LT				775		775	
262+17.34 - 263+34.23	LT				74		74	
265+09.92- 278+84.74	LT				1438		1438	
CTH HH								
892+02.00 - 899+38.51	RT	258			511		769	
MCDILL AVENUE								
900+96.98 - 907+40.96	RT	65			553		618	
LOCUST STREET								
99+49.54- 99+68.09	LT & RT	46					46	
STAGE 3 SUBTOTAL		369			3351		3720	
STAGE 4								
252+50.00 - 260+30.80	MEDIAN	970				1045	2015	
261+56.75 - 263+49.23	MEDIAN					708	708	
264+94.90 - 271+88.28	MEDIAN					1384	1384	
272+78.50 - 283+36.5	MEDIAN					2118	2118	
CTH HH								
890+56.8 - 891+01.8	LT					45		
890+56.8 - 891+01.8	R/L					45		
891+01.8 - 891+38.0	LT	37						
891+01.8 - 892+02.0	R/L	100						
892+02.0 - 898+98.96	MEDIAN	1115				475	1590	
MCDILL AVENUE								
900+28.32 - 905+68.45	MEDIAN					1292	1292	
STAGE 4 SUBTOTAL		2222				7112	9334	
PROJECT 6414-00-81 SUBTOTAL		3493		184	6555	7112	17160	
ITEM TOTALS		11434	4236	322	13068	7657	36395	

CONCRETE SIDEWALK

STATION	LOCATION	602.0405 4-INCH SF	602.0415 6-INCH SF
PROJECT 6414-00-80			
STAGE 2			
212+64.00 - 213+63.44	RT		342
214+13.80 - 220+06.50	RT		3167
220+82.79 - 237+00.00	RT		7653
237+46.96 - 243+59.97	RT		3716
244+03.86 - 250+56.88	RT		3970
251+00.75 - 252+09.62	RT		645
PORTER ROAD			
800+85.56 - 803+40.00	RT		2032
E ELM STREET			
95+50.15 - 96+24.54	RT		650
STAGE 2 SUBTOTAL			22175
STAGE 3			
214+32.83 - 220+06.08	LT		2983
221+07.20 - 237+19.66	LT		8054
237+70.20 - 243+69.74	LT		3142
244+13.19 - 250+88.64	LT		3470
TOMMY'S TURN PIKE			
794+35.00 - 799+37.18	LT & RT		2789
STAGE 3 SUBTOTAL			20438
STAGE 4			
219+80.74	MEDIAN	41	
221+02.41 - 236+85.33	MEDIAN	10030	
237+82.14 - 243+37.86	MEDIAN	3410	
244+32.10 - 250+42.27	MEDIAN	5427	
251+45.04 - 252+50.00	MEDIAN	612	
STAGE 4 SUBTOTAL		19520	
PROJECT 6414-00-80		19520	42613
PROJECT 6414-00-81			
STAGE 2			
252+50.00 - 260+18.77	RT		3596
261+24.40 - 280+58.04	RT		12223
CTH HH			
892+02.00 - 898+42.08	LT		4160
MCDILL AVENUE			
900+21.58 - 907+40.96	LT		3381
STAGE 2 SUBTOTAL			23360
STAGE 3			
261+73.44 - 269+96.15	LT		4788
CTH HH			
892+02.00 - 899+68.94	RT		6100
MCDILL AVENUE			
900+12.53 - 907+40.96	RT		2930
STAGE 3 SUBTOTAL			13818
STAGE 4			
252+50.00 - 260+30.81	MEDIANS	7544	
261+56.74 - 263+49.17	MEDIANS	1608	
264+94.90 - 271+88.20	MEDIAN	9455	
272+78.72 - 283+36.56	MEDIAN	14000	
CTH HH			
890+50.8 - 891+38.0	MEDIAN	262	
893+75.00 - 899+21.98	MEDIANS	5332	
MCDILL AVENUE			
900+32.20 - 905+68.45	MEDIANS	4526	
STAGE 4 SUBTOTAL		42727	
PROJECT 6414-00-81		42727	37178
ITEM TOTAL		62247	79791

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

CURB RAMP DETECTABLE WARNING
FIELD YELLOW

STATION	LOCATION	602.0505 SF	COMMENTS
PROJECT 6414-00-80			
STAGE 1			
207+86.74 - 260+19.20	LT	72	
STAGE 1 SUBTOTAL		72	
STAGE 2			
221+21.12	RT	8	
237+94.47	RT	8	
250+32.47	RT	20	
HICKORY DRIVE			
80+37.52		8	
80+42.35		8	
PORTER ROAD			
800+30.96	LT	12	
800+44.43	RT	24	ISLAND
800+78.15	RT	8	
E CEDAR STREET			
85+36.68	LT	8	
85+42.82	RT	8	
WILLOW STREET (E)			
90+39.50	LT	8	
90+39.50	RT	8	
E ELM STREET			
95+36.11	LT	8	
95+44.93	RT	8	
STAGE 2 SUBTOTAL		144	
STAGE 3			
219+67.72	LT	8	
238+02.61	LT	8	
250+21.60	LT	20	
TOMMY'S TURNPIKE			
798+96.79	LT	8	
799+31.22	LT	24	ISLAND
799+44.78	RT	12	
W CEDAR STREET			
84+29.27	LT	8	
84+40.09	RT	8	
WILLOW STREET (W)			
89+32.05	LT	8	
89+39.18	RT	8	
STAGE 3 SUBTOTAL		112	
STAGE 4			
219+81.07	LT	16	
221+09.24	LT	16	
238+01.74	LT	16	
250+25.30	LT	40	
STAGE 4 SUBTOTAL		88	
PROJECT 6414-00-80		416	

CURB RAMP DETECTABLE WARNING
FIELD YELLOW (CONT'D)

STATION	LOCATION	602.0505 SF	COMMENTS
PROJECT 6414-00-81			
STAGE 2			
261+59.00	RT	8	
269+23.55	RT	8	
CTH HH			
898+49.23	LT	8	
898+91.34	RT	24	ISLAND
MCDILL AVENUE			
900+20.23	LT	8	
LOCUST STREET			
100+39.84	RT	8	
100+43.08	LT	8	
STAGE 2 SUBTOTAL		72	
STAGE 3			
260+25.91	LT	8	
269+24.83	LT	8	
269+95.78	LT	8	
CTH HH			
899+43.17	RT	8	
MCDILL AVENUE			
900+76.50	RT	24	ISLAND
901+05.45	RT	8	
LOCUST STREET			
100+64.28	LT	8	
100+65.65	RT	8	
STAGE 3 SUBTOTAL		80	
STAGE 4			
260+25.91	LT	8	
261+72.00	LT	8	
269+24.03	LT	16	
CTH HH			
899+16.26	LT	8	
MCDILL AVENUE			
900+39.17	LT	8	
STAGE 4 SUBTOTAL		48	
PROJECT 6414-00-81		200	
ITEM TOTAL		616	

RIPRAP

STATION	LOCATION	606.0100 LIGHT CY	606.0200 MEDIUM CY	606.0300 HEAVY CY
PROJECT 6414-00-80				
STAGE 2				
248+04.18	RT	3		15
250+10.01	RT			24
E CEDAR STREET				
88+38.44	RT		23	
STAGE 2 SUBTOTAL		3		39
PROJECT SUBTOTAL 6414-00-80		3	23	39
PROJECT 6414-00-81				
STAGE 2				
262+22 - 279+07	RT		2175	
CTH HH				
893+95	LT	5		
895+75	LT	5		
898+06	LT	5		
STAGE 2 SUBTOTAL		15	2175	
STAGE 3				
263+23	LT	5		
274+05	LT	2		
STAGE 3 SUBTOTAL		7		
PROJECT SUBTOTAL 6414-00-81		22	2175	
ITEM TOTAL		25	2198	39

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

3

CONCRETE BARRIER TEMPORARY ITEMS

		603.8000	603.8125	603.8505
		CONCRETE BARRIER TEMPORARY PRECAST		ANCHORING CONCRETE BARRIER ON BRIDGE DECKS
		DELIVERED	INSTALLED	
STATION - STATION	LOCATION	LF	LF	LF
6414-00-81				
WINTER SHUTDOWN				
BUSINESS 51				
252+50 - 260+71	LT & RT	336	336	
260+71 - 281+00	LT & RT	485	485	150
6414-00-81 SUBTOTAL		821	821	150
ITEM TOTAL		821	821	150

FILE NAME : P:\SEHIN\14002 - Bus 51_Tmy's Trnpke-Elm St (-10)\Cad\MQ_TEMP BARR WALL.dgn PLOT DATE : 3/19/2018 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

STORM SEWER

STATION	LOCATION	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 15-INCH LF	608.0418 18-INCH LF	608.0424 24-INCH LF	608.043 30-INCH LF	608.0436 36-INCH LF	608.0442 42-INCH LF	608.0260 II 60-INCH LF	608.3012 CLASS III-A 12-INCH LF	608.2419 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH LF	608.2424 24X38-INCH LF	611.0530 MANHOLE COVERS TYPE J EACH	611.0612 INLET COVERS TYPE C EACH	611.0624 H EACH	611.0639 H-S EACH	SPV.0060.41 H-D EACH	SPV.0060.45 DIVERSION EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 5-FT EACH	611.2006 6-FT EACH	611.2007 7-FT EACH	611.2008 8-FT EACH	SPV.0060.42 10-FT EACH	611.3003 INLETS 3-FT EACH	611.3004 4-FT EACH	SPV.0060.43 5-FT EACH	SPV.0060.44 6-FT EACH	611.3230 2X3-FT EACH	SPV.0060.40 GRIT CHAMBER TYPE C EACH
PROJECT 6414-00-80																															
STAGE 1																															
208+75.50	RT						30						1											1							
208+97.10	RT						145						1									1									
208+97.10	RT	27													1															1	
210+42.00	RT						160						1									1									
210+42.00	RT	27													1															1	
212+02.75	RT						143						1									1									
212+03.62	RT	35													1															1	
213+45.80							98						1																1		
213+50.60	RT			30												1											1				
214+43.60	RT												1										1								
214+48.69	LT			9											1												1				
214+64.18	LT			16												1														1	
STAGE 1 SUBTOTAL		89		55			576						6		4	2					3	1	1			2		1	4	
STAGE 2																															
214+69.18	RT						164						1										1								
214+69.18	RT	9														1														1	
214+69.18	RT	13												1													1				
214+74.18	RT	10													1															1	
216+02.79	RT						170						1									1									
216+04.00	RT	12													1												1				
217+58.80	RT	10													1															1	
217+68.80	RT	23													1															1	
217+72.58	RT						194						1									1									
219+66.56	RT						81						1									1									
220+47.27	RT						103						1											1							
221+50.31	RT						175						1									1									
221+50.31	RT		18													1														1	
221+60.31	RT	10														1														1	
223+25.00	RT						139						1									1									
223+25.00	RT	24													1															1	
224+83.00	RT	30													1															1	
224+64.00	RT				166								1										1								
226+30.00	RT	36													1															1	
230+00.00	RT	12													1															1	
230+10.43	RT				148								1							1											
231+58.21	RT												1							1											
231+58.21	RT	11													1															1	
232+43.87	RT				141								1							1											
232+43.87	RT	12													1															1	
233+64.77	RT	20													1															1	
233+84.77	RT	11											1							1											
233+84.77	RT				135								1							1											
234+94.37	RT	20													1															1	
235+14.37	RT	13													1															1	
235+19.83	RT				153								1								1										
236+72.15	RT			78																										1	
237+48.79	RT					54							1										1								
238+02.78	RT					73							1								1										
238+02.78	RT	11													1															1	
238+76.26	RT						149						1								1										
238+76.26	RT		11													1														1	
238+86.26	RT	10														1														1	
240+25.00	RT						138						1								1										
240+25.00	RT	12													1															1	
241+63.45	RT						171						1								1										
241+63.45	RT	12													1															1	
243+34.80	RT						164						1									1									
243+34.80	RT	12													1															1	
243+66.80	RT	32											1							1											
244+99.26	RT							125					1									1									
244+99.26	RT	11														1														1	
246+24.00	RT							153					1									1									
246+24.00	RT	11													1															1	
247+76.74	RT							12					1											1							
247+76.74	RT							42							1														1		
248+07.00	RT																														
250+22.00	RT				83										1												1				
250+85.37	RT				54								1							1											
251+40.00	RT				110								1							1											
251+40.00	RT	11														1														1	
252+49.83	RT		19										1							1											
252+49.83	RT	11															1													1	
HICKORY DRIVE																															
80+47.24	LT		41							35					1												1				
80+54.13	RT		27													1											1				

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STORM SEWER (CONT'D)

		608.0412	608.0415	608.0418	608.0424	608.043	608.0436	608.0442	608.0260	608.3012	608.2419	608.2424	611.0530	611.0612	611.0624	611.0639	SPV.0060.41	SPV.0060.45	611.2004	611.2005	611.2006	611.2007	611.2008	SPV.0060.42	611.3003	611.3004	SPV.0060.43	SPV.0060.44	611.3230	SPV.0060.40
		STORM SEWER PIPE REINFORCED CONCRETE CLASS IV							II	CLASS III-A	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV		MANHOLE COVERS	INLET COVERS TYPE					MANHOLES 4-FT	5-FT	6-FT	7-FT	8-FT	10-FT	INLETS 3-FT	4-FT	5-FT	6-FT		GRIT CHAMBER
PORTER ROAD																														
800+57.73	LT											35	1							1										
800+51.70	RT	41														1												1		
800+67.13	RT	35													1													1		
801+92.00	LT	10													1													1		
801+92.00	RT	10													1													1		
802+02.00	LT	20														1												1		
802+02.00	LT		28									150	1							1										
802+02.00	RT		11													1												1		
802+02.00	RT	5														1												1		
802+02.00	RT	15														1												1		
E CEDAR STREET																														
85+75.69	RT				279								1						1											
86+00.00	LT										78	85				1											1			
86+00.00	RT	27														1												1		
86+75.37	RT			131									1							1										
88+05.95	RT				50								1						1											
88+06.38	RT			63									1						1											
LOCUST STREET																														
10+16.79	LT	41														1												1		
10+21.94	RT	45														1												1		
WILLOW ST (E)																														
90+54.66	LT	40														1												1		
90+65.00	RT	39														1												1		
BEECH STREET																														
21+00.00	RT	89														1										1				
21+38.01	LT	59														1												1		
E ELM STREET																														
95+69.42	LT	33														1												1		
95+69.42	RT				51											1										1				
STAGE 2 SUBTOTAL		918	155	272	1370	127	1648	332		35	78	270	33		24	23			12	8	8	3	2			6		3	40	
STAGE 3																														
214+54.18	LT			50											1											1				
214+64.18	LT		10													1												1		
214+74.18	LT	10													1													1		
215+97.56	LT	36													1													1		
215+99.10	LT	9													1													1		
216+00.00	LT		27												1													1		
217+21.45	LT		55												1											1				
217+28.95	LT	19													1													1		
217+74.23	LT		14																1											
217+77.84	LT		32												1											1				
217+84.92	LT	56													1													1		
218+38.02	LT	53													1													1		
218+94.00	LT	68													1													1		
219+60.00	LT	32													1													1		
219+66.56	LT	9														1												1		
219+66.56	LT	31														1												1		
220+44.26	LT				26								1								1									
221+02.24	LT	49														1												1		
221+50.31	LT		9													1												1		
221+50.31	LT		14													1												1		
221+50.96	LT		59													1										1				
221+60.92	LT	10													1													1		
223+25.00	LT	70													1													1		
224+50.00	LT	37													1													1		
224+70.94	LT	33														1												1		
226+30.00	LT	48													1													1		
226+30.00	LT		100										1							1										
227+29.04	LT	7														1										1				
227+29.04	LT															1												1		
230+09.87	LT	32														1												1		
230+10.43	LT	32													1													1		
230+10.43	LT	7														1												1		
231+58.21	LT	92													1													1		
231+91.07	LT	60													1													1		
232+50.00	LT		35												1													1		
232+50.00	LT		10												1													1		
232+50.00	LT		27												1													1		
232+63.62	LT	21													1													1		
233+84.77	LT	32													1													1		
233+85.32	LT	32													1													1		
233+85.32	LT	7														1												1		
234+30.37	LT	56													1													1		
234+86.63	LT	47													1													1		

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STORM SEWER (CONT'D)

		608.0412	608.0415	608.0418	608.0424	608.043	608.0436	608.0442	608.0260	608.3012	608.2419	608.2424	611.0530	611.0612	611.0624	611.0639	SPV.0060.41	SPV.0060.45	611.2004	611.2005	611.2006	611.2007	611.2008	SPV.0030.42	611.3003	611.3004	SPV.0060.43	SPV.0060.44	611.3230	SPV.0060.40
		STORM SEWER PIPE REINFORCED CONCRETE CLASS IV							II	CLASS III-A	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV		MANHOLE COVERS	INLET COVERS TYPE					MANHOLES 4-FT	5-FT	6-FT	7-FT	8-FT	10-FT	INLETS 3-FT	4-FT	5-FT	6-FT		GRIT CHAMBER
235+30.00	LT		41												1														1	
235+30.00	LT		9												1														1	
235+30.00	LT		24												1														1	
236+79.28	LT	44													1														1	
236+79.32	LT	8														1													1	
236+91.79	LT	35													1														1	
238+76.26	LT	17														1													1	
238+76.26	LT		52													1													1	
238+76.26	LT		20													1														
238+86.26	LT	10													1											1			1	
239+00.00	LT	26														1													1	
239+87.10	LT	41													1														1	
240+25.00	LT	31													1														1	
240+25.00	LT	9													1														1	
240+25.00	LT	31													1														1	
243+29.61	LT		32												1														1	
243+32.67	LT		8													1													1	
243+44.57	LT		34												1											1				
243+60.00	LT	16													1														1	
244+99.26	LT		19													1										1				
244+99.26	LT		52													1													1	
244+99.26	LT	17														1													1	
245+25.00	LT	28														1													1	
246+24.00	LT	72													1														1	
247+76.74	LT	22														1													1	
247+76.74	LT	17														1													1	
247+76.74	LT	33													1														1	
250+12.00	LT	43													1											1				
250+12.00	LT				11										1											1				
250+12.00	LT				24								1								1									
250+12.00	LT	7													1														1	
250+81.15	LT				70										1												1				
252+49.83	LT		32													1													1	
252+49.83	LT	66													1														1	
TOMMY'S TURNPIKE																														
796+28.00	LT	52													1														1	
796+73.04	RT			119									1						1											
796+73.04	RT		28													1													1	
797+40.00	LT	52													1														1	
797+59.90	RT	34														1													1	
797+92.00	LT	27													1														1	
797+92.00	RT				108								1						1											
797+92.00	RT	32													1											1				
798+87.23	LT	36													1														1	
799+00.00	LT	5														1													1	
799+00.00	LT	6														1													1	
799+00.00	RT				92								1							1										
799+03.11	RT	11														1													1	
799+07.33	RT	33														1													1	
W CEDAR STREET																														
83+79.82	RT	53														1													1	
84+18.96	LT		95													1										1				
WILLOW STREET (W)																														
89+16.51	RT		44													1										1				
89+23.07	LT	36														1													1	
STAGE 3 SUBTOTAL		1945	882	169	331								6	52	36				3	2	2					13	1		74	
PROJECT 6414-00-80 SUBTOTAL		2952	1037	496	1701	127	2224	332	0	35	78	270	45	80	61				15	10	13	4	3		1	21	1	4	118	

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STORM SEWER (CONT'D)

			608.0412	608.0415	608.0418	608.0424	608.043	608.0436	608.0442	608.0260	608.3012	608.2419	608.2424	611.0530	611.0612	611.0624	611.0639	SPV.0060.41	SPV.0060.45	611.2004	611.2005	611.2006	611.2007	611.2008	SPV.0060.42	611.3003	611.3004	SPV.0060.43	SPV.0060.44	611.3230	SPV.0060.40
			STORM SEWER PIPE REINFORCED CONCRETE CLASS IV							II	CLASS III-A	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV		MANHOLE COVERS	INLET COVERS TYPE					MANHOLES 4-FT	5-FT	6-FT	7-FT	8-FT	10-FT	INLETS 3-FT	4-FT	5-FT	6-FT		GRIT CHAMBER
PROJECT 6414-00-81																														
STAGE 2																														
252+69.83	RT	20														1													1	
252+73.83	RT	6													1											1					
253+65.00	RT	20				115								1						1											
253+65.00	RT	11														1													1	
253+84.75	RT	20																1											1	
254+25.00	RT	41													1											1					
255+74.87	RT	91														1													1	
256+65.00	RT	32														1													1	
258+55.18	RT	10															1										1			
258+65.00	RT				38												1										1			
258+65.00	RT					135								1							1									
258+74.82	RT	10															1										1			
258+74.82	RT	15													1											1					
260+00.00	RT					41								1							1									
260+36.83	RT									8				1											1					
263+25.00	RT				79											1													1	
265+32.96	RT	22														1													1	
265+33.02	RT					183								1							1									
267+14.62	RT	22														1													1	
267+14.89	RT					164								1							1									
268+78.49	RT	22														1													1	
268+78.71	RT					156								1							1									
270+34.75	RT					150								1							1									
270+34.75	RT	22														1													1	
271+84.55	RT					212								1							1									
271+84.55	RT	23														1													1	
273+96.51	RT					63								1							1									
273+96.51	RT			23													1													1	
274+26.46	RT																													1
274+59.20	RT					137								1					1											
275+49.55	RT					150								1							1									
275+49.55	RT	23														1													1	
276+99.55	RT					150								1							1									
276+99.55	RT	23														1													1	
278+49.55	RT													1							1									
278+49.55	RT	23														1													1	
279+99.69	RT				14											1													1	
MCDILL AVENUE																														
900+74.05	RT	29														1													1	
900+81.74	RT	32														1			1											
901+00.00	LT	59														1													1	
901+00.00	LT	5														1													1	
901+00.00	LT	24														1													1	
901+13.39	RT	23														1			1											
901+13.40	RT									167				1								1								
901+24.00	RT	16													1										1					
901+55.33	LT	5														1													1	
901+55.33	LT	47														1										1				
901+91.6	RT	22																	1											
902+00.99	RT									94				1										1						
902+00.99	RT			8													1												1	
902+00.99	LT			21													1												1	
902+00.99	LT	6															1									1				
902+01.00	LT	56															1												1	
902+95.61	RT									136				1										1						
902+95.61	RT	11																1											1	
902+95.61	LT	18														1													1	
902+95.61	LT	14														1													1	
902+95.61	LT	41														1													1	
904+19.94	RT	23														1													1	
904+20.22	LT	33														1													1	
904+31.78	RT									175				1										1						
904+34.62	LT	10														1													1	
904+34.70	LT	12														1													1	
906+06.57	LT									8				1										1						
LOCUST STREET																														
99+55.70	LT	31															1												1	
99+55.70	RT	59															1										1			
100+50.00	LT	43															1												1	
100+50.00	RT	30															1												1	
STAGE 2 SUBTOTAL		1105	52	131	1656					588				19	4	29	12	2	1	4	11	1	4	1	4	5	1		35	1
STAGE 3																														
252+79.92	LT	30														1													1	
253+16.22	LT	36															1												1	
253+16.22	LT	35															1												1	
253+65.00	LT	17														1													1	
253+65.00	LT	59														1													1	
254+24.97	LT	35														1													1	
254+59.83	LT															1													1	
255+66.07	LT	34														1													1	
256+00.00	LT					65										1					1									
256+00.00	LT				23											1														

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STORM SEWER (CONT'D)

		608.0412	608.0415	608.0418	608.0424	608.043	608.0436	608.0442	608.0260	608.3012	608.2419	608.2424	611.0530	611.0612	611.0624	611.0639	SPV.0060.41	SPV.0060.45	611.2004	611.2005	611.2006	611.2007	611.2008	SPV.0030.42	611.3003	611.3004	SPV.0060.43	SPV.0060.44	611.3230	SPV.0060.40
		STORM SEWER PIPE REINFORCED CONCRETE CLASS IV							II	CLASS III-A	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV		MANHOLE COVERS	INLET COVERS TYPE					MANHOLES 4-FT	5-FT	6-FT	7-FT	8-FT	10-FT	INLETS 3-FT	4-FT	5-FT	6-FT		GRIT CHAMBER
256+03.49	LT	31													1														1	
256+65.00	LT				200								1							1										
256+65.00	LT	13													1														1	
256+65.00	LT	9													1														1	
256+65.15	LT	31													1														1	
258+53.27	LT			31												1													1	
258+53.27	LT			19												1										1				
258+53.52	LT			5												1													1	
258+65.00	LT			5												1										1				
258+65.00	LT			6												1										1				
263+22.57	LT			33											1														1	
263+22.57	LT			5											1														1	
263+22.57	LT			15											1											1				
263+25.00	LT			5											1											1				
263+25.00	LT														1														1	
265+33.03	LT	7													1														1	
265+33.07	LT	15													1														1	
265+33.17	LT	38													1														1	
267+14.98	LT	7													1														1	
267+15.23	LT	20													1														1	
267+15.61	LT	29													1														1	
268+79.28	LT	29													1														1	
268+78.96	LT	17													1														1	
268+78.79	LT	7													1														1	
270+34.75	LT	17													1														1	
270+34.75	LT	6													1														1	
270+34.75	LT	29													1														1	
271+80.66	LT	17													1														1	
271+80.66	LT	5													1														1	
271+84.55	LT	30													1														1	
273+96.51	LT	7														1													1	
273+96.51	LT	15														1													1	
273+96.51	LT	30														1													1	
274+05.18	LT	65											1							1										
274+59.20	LT	21											1						1											
275+49.55	LT	7													1														1	
275+49.55	LT	15													1														1	
275+49.55	LT	30													1														1	
276+99.55	LT	7													1														1	
276+99.55	LT	15													1														1	
276+99.55	LT	30													1														1	
278+49.55	LT	7													1														1	
278+49.55	LT	19													1														1	
278+49.55	LT	31													1														1	
CTH HH																														
893+84.96	RT			29											1														1	
893+84.98	LT			14											1														1	
893+84.98	LT			29											1														1	
893+85.00	LT			23											1														1	
895+78.00	RT			32											1														1	
895+78.00	LT			15											1														1	
895+78.00	LT			29											1														1	
895+78.00	LT			27											1														1	
898+23.15	LT			26											1												1			
898+31.98	LT			5											1														1	
898+31.98	LT			41											1														1	
898+34.40	RT			40											1														1	
898+37.23	LT			5											1														1	
898+37.23	LT			15											1														1	
898+58.45	LT	50													1											1				
898+73.38	LT	42													1														1	
STAGE 3 SUBTOTAL		994		477	265								3		57	10			1	3						7	1		58	
PROJECT 6414-00-81 SUBTOTAL		2099	52	608	1921				588				22	4	86	22	2	1	5	14		1	4	1	4	12	2		93	1
ITEM TOTALS		5051	1089	1104	3622	127	2224	332	588	35	78	270	67	4	166	83	2	1	20	24	13	5	7	1	5	33	3	4	211	1

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COVER PLATES TEMPORARY

STATION	LOCATION	611.8120.S* EACH
PROJECT 6414-00-80		
STAGE 1		
217+82.2	39.9' LT	1
220+13.1	49.7' LT	1
221+49.3	38.6' LT	1
STAGE 1 SUBTOTAL		3
PROJECT 6414-00-80 SUBTOTAL		3
PROJECT 6414-00-81		
STAGE 1		
MCDILL AVENUE		
900+24.1	2.0' RT	1
900+25.5	3.6' LT	1
901+91.6	13.8' RT	1
STAGE 1 SUBTOTAL		3
PROJECT 6414-00-81 SUBTOTAL		3
ITEM TOTAL		6

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON UTILITY PLANS

FENCE CHAIN LINK 4-FT

STATION	LOCATION	616.0204 LF
PROJECT 6414-00-81		
STAGE 2		
262+00.00 - 263+67.82	RT	168
PROJECT 6414-00-81 SUBTOTAL		168
ITEM TOTAL		168

CONCRETE MEDIAN SLOPED NOSE

STATION	LOCATION	620.0300 SF	TYPE
PROJECT 6414-00-80			
STAGE 2			
PORTER ROAD			
800+60.2	RT	48	1
802+30.9	RT	40	1
STAGE 2 SUBTOTAL		88	
STAGE 3			
TOMMY'S TURNPIKE			
797+96.6	LT	29	1
799+15.7	LT	48	1
STAGE 3 SUBTOTAL		77	
STAGE 4			
214+37.8	LT	48	1
217+49.0	LT	14	1
217+62.8	LT	19	1
219+93.4	LT	57	1
220+95.4	LT	57	1
223+70.2	LT	48	1
224+38.1	LT	68	1
225+39.5	LT	48	1
227+18.7	LT	48	1
230+20.5	LT	48	1
230+99.4	LT	48	1
233+95.3	LT	47	1
234+74.7	LT	47	1
236+92.3	LT	48	1
237+75.1	LT	48	1
241+33.2	LT	47	1
242+12.4	LT	47	1
243+44.9	LT	48	1
244+25.1	LT	48	1
245+92.9	LT	48	1
247+61.2	LT	68	1
250+49.3	LT	47	1
251+38.0	LT	47	1
STAGE 4 SUBTOTAL		1093	
PROJECT 6414-00-80 SUBTOTAL		1258	
PROJECT 6414-00-81			
STAGE 4			
257+73.9	LT	48	1
260+15.0	LT	51	1
260+36.8	LT	48	1
261+50.7	LT	48	1
261+72.5	LT	28	1
263+41.8	LT	48	1
271+94.2	LT	27	1
272+73	LT	57	1
283+36.6	LT	41	1
CTH HH			
890+50.8'EB'	LT	34	1
898+23.8	LT	30	1
899+00 WB	RT	44	1
899+28 EB	LT	48	1
MCDILL AVENUE			
900+26.2 WB	RT	37	1
900+52.8 EB	LT	46	1
901+68.8 WB	RT	48	1
903+89.0 WB	RT	112	1
904+23.8 WB	RT	96	1
905+74.5 EB	LT	29	1
STAGE 4 SUBTOTAL		920	
PROJECT 6414-00-81 SUBTOTAL		863	
ITEM TOTAL		2121	

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

MGS

STATION	LOCATION	614.2500 THRIE BEAM TRANSITION LF	614.2610 GUARDRAIL TERMINAL EAT EACH
PROJECT 6414-00-81			
STAGE 2			
262+65.48 - 263+17.70	RT		1
263+17.70 - 263+56.48	RT	39.4	
STAGE 2 SUBTOTAL		39.4	1
STAGE 3			
264+77.65'SB' - 265+17.59'SB'	LT	39.4	
265+17.59'SB' - 265+76.65'SB'	LT		1
STAGE 3 SUBTOTAL		39.4	1
PROJECT 6414-00-81 SUBTOTAL		78.8	2
ITEM TOTALS		78.8	2

MAINTENANCE & REPAIR OF HAUL ROADS

STATION	LOCATION	618.0100 EACH
PROJECT 6414-00-80	LT & RT	1
PROJECT 6414-00-80 SUBTOTAL		1
PROJECT 6414-00-81	LT & RT	1
PROJECT 6414-00-81 SUBTOTAL		1
ITEM TOTAL		2

WATER

STATION	LOCATION	624.0100 MGAL	COMMENT
PROJECT 6414-00-80	LT & RT	410	FOR BASE AGGREGATE 1 1/4-INCH COMPACTION
PROJECT 6414-00-80 SUBTOTAL		410	
PROJECT 6414-00-81	LT & RT	240	FOR BASE AGGREGATE 1 1/4-INCH COMPACTION
PROJECT 6414-00-81 SUBTOTAL		240	
ITEM TOTAL		650	

TOPSOIL ITEMS

STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	631.0300 SCD WATER MGAL	SPV.0030.01 FERTILIZER FOR LAWN TYPE TURF CWT	SPV.0180.01 PREPARING TOPSOIL FOR LAWN TYPE TURF SY	630.0140 SEEDING MIXTURE NO. 40 LB	630.0175 SEEDING MIXTURE NO. 75 LB	630.0200 SEEDING TEMPORARY LB	630.4000 SEEDING NURSE CROP LB
PROJECT 6414-00-80										
STAGE 1C										
206+82.6 - 208+07.4	LT	25	25						1	
208+52.5 - 210+04.5	LT	90	90						2	
STAGE 1C SUBTOTAL		115	115						3	
STAGE 2										
208+50.00 - 213+69.43	RT	297	297	14	0.2	297	5			
214+07.49 - 219+50.00	RT	365	365	17	0.2	365	7			
220+73.53 - 237+05.74	RT	1122	1122	51	0.7	1122	20			
237+42.84 - 243+59.97	RT	565	565	26	0.4	565	10			
244+01.68 - 252+50.00	RT	511	511	23	0.3	511	9			
HICKORY DRIVE		0								
81+02.32 - 81+65.00	LT & RT	57	57	3	0.0	57	1			
PORTER ROAD										
800+50.00 - 803+47.88	LT & RT	594	594	27	0.4	594	11			
E CEDAR STREET										
85+50.00 - 88+30.00	LT & RT	366	366	17	0.2	366	7			
LOCUST STREET										
10+07.44 - 11+83.80	LT & RT	439	439	20	0.3	439	8			
WILLOW STREET E										
90+50.00 - 92+12.27	LT & RT	263	263	12	0.2	263	5			
BEECH STREET										
20+65.50 - 21+85.00	LT & RT	164	164	8	0.1	164	3			
E ELM STREET										
95+50.00 - 96+60.00	LT & RT	246	246	12	0.2	246	4			
STAGE 2 SUBTOTAL		4989	4989	230	3.1	4989	90			
STAGE 3										
212+12.75 - 220+15.72	LT	381	381	18	0.2	381	7		21	
220+20.39 - 237+10.00	LT	1192	1192	54	0.8	1192	21		62	
237+65.97 -243+74.42	LT	219	219	10	0.1	219	4		15	
244+09.60 - 252+50.00	LT	421	421	19	0.3	421	8		16	
TOMMY'S TURNPIKE										
793+59.50 - 799+25.00	LT & RT	1054	1054	48	0.7	1054	19			
W CEDAR STREET										
83+00.00 - 84+42.31	LT & RT	159	159	8	0.1	159	3			
WILLOW STREET										
88+00.00 - 89+43.00	LT & RT	73	73	4	0.05	73	1			
STAGE 3 SUBTOTAL		3499	3499	161	2	3499	63		114	
PROJECT 6414-00-80 SUBTOTAL		8603	8603	391	5	8488	153		117	

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

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TOPSOIL ITEMS (CONT'D)

STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	631.0300 SCD WATER MGAL	SPV.0030.01 FERTILIZER FOR LAWN TYPE TURF CWT	SPV.0180.01 PREPARING TOPSOIL FOR LAWN TYPE TURF SY	630.0140 SEEDING MIXTURE NO. 40 LB	630.0175 SEEDING MIXTURE NO. 75 LB	630.0200 SEEDING TEMPORARY LB	630.4000 SEEDING NURSE CROP LB
PROJECT 6414-00-81										
STAGE 2										
252+50.00 - 263+67.82	RT	1329	1329	60	0.8	1329		17		20
264+81.27 - 281+01.00	RT	6927	6927	311	4.4	6927		90		100
CTH HH										
892+09.19 - 898+23.76	LT	359	359	17	0.2	359	6			
MCDILL AVENUE										
900+16.32 - 907+40.96	LT	699	699		0.4	699	13			
LOCUST STREET										
100+35.18 -100+80.00	LT & RT	62	62	3	0.0	62	1			
STAGE 2 SUBTOTAL		9376	9376	391	6	9376	20	107		120
STAGE 3										
252+50.00 - 263+67.82	LT	939	939	43	0.6	939	17		28	
264+81.27 - 281+01.00	LT	2953	2953	133	1.9	2953	53			
CTH HH										
892+02.00 - 899+50.00	RT	496	496	23	0.3	496	9			
MCDILL AVENUE										
901+25.00 - 907+40.96	RT	528	528	24	0.3	528	10			
LOCUST STREET										
99+10.00 - 99+60.95	LT & RT	60	60	3	0.0	60	1			
STAGE 3 SUBTOTAL		4977	4977	226	3	4977	90		28	
STAGE 4										
CTH HH										
891+38.00 - 893+75.00	MEDIAN	274	274	13	0.2	274	5			
STAGE 4 SUBTOTAL		274	274	13		274	5			
PROJECT 6414-00-81 SUBTOTAL		14627	14627	630	9	14627	115	107	28	120
ITEM TOTALS		23230	23230	1021	14	23115	268	107	145	120

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EROSION CONTROL ITEMS

STATION	LOCATION	628.1104 EROSION BALES EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2004 EROSION MAT CLASS I TYPE B SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.6005 TURBIDITY BARRIERS SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH	COMMENT
PROJECT 6414-00-80													
STAGE 2													
208+50 - 211+57	RT				1	1		159					
252+09	RT										1		
PORTER ROAD													
800+81 - 803+40	RT							144					
E CEDAR STREET													
88+44.02	RT										1		
UNDISTRIBUTED								78				10	
STAGE 2 SUBTOTAL					1	1		381			2	10	
STAGE 3													
212+50 - 213+87	LT							56					
219+16 - 220+21	LT							95					
TOMMY'S TURNPIKE													
793+59 - 799+09	LT & RT							468					
UNDISTRIBUTED								155				10	
STAGE 3 SUBTOTAL								774					
PROJECT 6414-00-80 SUBTOTAL					1	1		1155			2	10	
PROJECT 6414-00-81													
STAGE 2													
260+62 - 281+01	RT	238	238	1	1	4011	92	1863					
CTH HH													
892+02 - 897+95	LT	587	587										
MCDILL AVENUE													
902+46 - 907+41	LT							237					
UNDISTRIBUTED		206	206			1003	82	466	50				
STAGE 2 SUBTOTAL		1031	1031	1	1	5014	411	2329	50				
STAGE 3													
255+90 - 281+01	LT	1954	1954			628	867	378					INCLUDES BOAT LANDING
CTH HH													
892+02 - 897+95	RT	810	810										
MCDILL AVENUE													
902+60 - 907+41	RT							181					
UNDISTRIBUTED		691	691			157	116	95	50			10	
STAGE 3 SUBTOTAL		3455	3455				297	95	50			10	
PROJECT 6414-00-81 SUBTOTAL		4486	4486	1	1	5014	708	2424	100			10	
ITEM TOTALS		4486	4486	2	2	5014	1863	2424	100	2		20	

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

INLET PROTECTION

STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH
PROJECT 6414-00-80					
STAGE 1					
208+76	LT			1	
208+97.10	RT	1		1	
210+42.00	RT	1		1	
212+03.62	RT	1		1	
213+50.60	RT	1			1
214+48.69	LT	1		1	
214+64.18	LT	1			1
STAGE 1 SUBTOTAL		6		5	2
STAGE 2					
214+69.18	RT	1		1	
214+69.18	RT	1			1
214+74.18	RT	1		1	
216+04.00	RT	1		1	
217+58.80	RT	1		1	
217+68.80	RT	1		1	
221+50.31	RT	2			2
221+60.31	RT	1		1	
223+25.00	RT	1		1	
224+53.00	RT	1		1	
226+30.00	RT	1		1	
230+00.00	RT	1		1	
231+58.21	RT	1		1	
232+43.87	RT	1		1	
233+64.77	RT	1		1	
233+84.77	RT	1		1	
234+94.37	RT	1		1	
235+14.37	RT	1		1	
236+72.15	RT	1		1	
238+02.78	RT	1		1	
238+76.26	RT	1			1
238+86.26	RT	1		1	
240+25.00	RT	1		1	
241+63.45	RT	1		1	
243+34.80	RT	1			1
244+99.26	RT	1			1
246+24.00	RT	1		1	
247+76.74	RT	1		1	
250+22.00	RT	1			1
251+40.00	RT	1			1
252+49.83	RT	1		1	
HICKORY DRIVE					
80+47.24	LT	1		1	
80+54.13	RT	1			1
PORTER ROAD					
800+51.70	RT	1			1
800+57.73	RT	1		1	
801+92.00	LT	1		1	
801+92.00	RT	1		1	
802+02.00	LT	1			1
802+02.00	RT	3			3
E CEDAR STREET					
86+00.00	LT	1			1
86+00.00	RT	1			1
LOCUST STREET					
10+16.79	LT	1			1
10+21.94	RT	1			1
WILLOW ST (E)					
90+54.66	LT	1			1
90+65.00	RT	1			1
BEECH STREET					
21+00.00	RT	1			1
21+38.01	LT	1			1
E ELM STREET					
95+69.42	LT	1			1
95+69.42	RT	1			1
STAGE 2 SUBTOTAL		52	28		24

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

INLET PROTECTION (CONT'D)

STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH
STAGE 3					
214+54.18	LT	1		1	
214+64.18	LT	1			1
214+74.18	LT	1		1	
215+97.56	LT	1		1	
215+99.10	LT	1		1	
216+00.00	LT	1		1	
217+21.45	LT	1		1	
217+28.95	LT	1		1	
217+74.23	LT	1			1
217+77.84	LT	1		1	
217+84.92	LT	1		1	
218+38.02	LT	1		1	
218+94.00	LT	1		1	
219+60.00	LT	1		1	
219+66.56	LT	2			2
221+02.24	LT	1			1
221+50.31	LT	2			2
221+50.96	LT	1			1
221+60.92	LT	1		1	
223+25.00	LT	1		1	
224+50.00	LT	1		1	
224+70.94	LT	2			2
226+30.00	LT	1		1	
227+29.04	LT	2			2
230+09.87	LT	1			1
230+10.43	LT	2		1	1
231+58.21	LT	1		1	
231+91.07	LT	1		1	
232+50.00	LT	3		3	
232+63.62	LT	1		1	
233+84.77	LT	1		1	
233+85.32	LT	2		1	1
234+30.37	LT	1		1	
234+86.63	LT	1		1	
235+30.00	LT	3		3	
236+79.28	LT	2			2
236+91.79	LT	1		1	
238+76.26	LT	3			3
238+86.26	LT	1		1	
239+00.00	LT	1			1
239+87.10	LT	1		1	
240+25.00	LT	3		3	
243+29.61	LT	1			1
243+32.67	LT	1			1
243+44.57	LT	1			1
243+60.00	LT	1			1
244+99.26	LT	3			3
245+25.00	LT	1			1
246+24.00	LT	1		1	
247+76.74	LT	3		1	2
250+12.00	LT	2		2	
250+26.00	LT	1			1
250+81.15	LT	1			1
252+49.83	LT	2			2
TOMMY'S TURNPIKE					
796+35.00	LT	1		1	
796+73.04	RT	1			1
797+40.00	LT	1		1	
797+59.90	RT	1			1
797+92.00	LT	1		1	
797+92.00	RT	1		1	
798+87.23	LT	1		1	
799+00.00	LT	1			1
799+00.00	LT	1			1
799+03.11	RT	1			1
799+07.33	RT	1			1
W CEDAR STREET					
83+79.82	RT	1			1
84+18.96	LT	1			1
WILLOW STREET (W)					
89+16.51	RT	1			1
89+23.07	LT	1			1
STAGE 3 SUBTOTAL		90		45	45
PROJECT 6414-00-80 SUBTOTAL		148		78	71

3

INLET PROTECTION (CONT'D)

STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH
PRCJECT 6414-00-81					
STAGE 2					
252+69.83	RT	1		1	
253+65.00	RT	1		1	
253+84.75	RT	1		1	
254+25.00	RT	1	1		
255+74.87	RT	1		1	
256+65.00	RT	1		1	
258+55.18	RT	1			1
258+65.00	RT	1			1
258+74.82	RT	1			2
263+25.00	RT	1		1	
265+32.96	RT	1		1	
267+14.62	RT	1		1	
268+78.49	RT	1		1	
270+34.75	RT	1		1	
271+84.55	RT	1		1	
273+96.51	RT	1			1
275+49.55	RT	1		1	
276+99.55	RT	1		1	
278+49.55	RT	1		1	
279+99.69	RT	1		1	
CTH HH					
893+85.00	LT	3		3	
895+78.00	LT	3		3	
898+23.15	LT	1		1	
898+31.98	LT	4		4	
898+73.38	LT	1		1	
MCDILL AVENUE					
901+00.00	LT	3		3	
901+55.33	LT	2		2	
902+00.99	LT & RT	2			2
902+95.61	LT	3		3	
904+20.22	LT	1		1	
904+34.62	LT	2		2	
LOCUST STREET					
99+55.70	LT	1			1
99+55.70	RT	1			1
100+50.00	LT	1			1
100+50.00	RT	1		1	
STAGE 2 SUBTOTAL		49	1	39	10

INLET PROTECTION (CONT'D)

STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH
STAGE 3					
252+79.92	LT	1			1
253+16.22	LT	2			2
253+65.00	LT	2		2	
254+24.97	LT	1		1	
254+59.83	LT	1		1	
255+66.07	LT	1		1	
256+00.00	LT	2		2	
256+03.49	LT	1		1	
256+65.00	LT	3		3	
258+53.27	LT	3			3
258+65.00	LT	2			2
263+22.57	LT	3		3	
263+25.00	LT	2		2	
265+33.03	LT	3		3	
267+14.98	LT	3		3	
268+79.28	LT	3		3	
270+34.75	LT	3		3	
271+80.66	LT	2		2	
271+84.55	LT	1		1	
273+96.51	LT	3			3
275+49.55	LT	3		3	
276+99.55	LT	3		3	
278+49.55	LT	3		3	
CTH HH					
893+84.96	RT	1		1	
895+78.00	RT	1		1	
898+34.40	RT	1		1	
MCDILL AVENUE					
900+74.05	RT	1		1	
900+81.74	RT	1		1	
901+13.39	RT	1		1	
901+24.00	rt				1
902+01.52	RT	1			1
902+95.61	RT	1		1	
904+19.94	RT	1		1	
STAGE 3 SUBTOTAL		60		48	13
PROJECT 6414-00-81 SUBTOTAL		109	1	87	23
ITEM TOTALS		257	1	165	94

FIELD OFFICE TYPE D

STATION	LOCATION	642.5401 EACH
PROJECT 6414-00-80/81		1
ITEM TOTAL		1

TRAFFIC CONTROL CONES 42-INCH

STATION	LOCATION	643.1070 DAY
PROJECT 6414-00-80		
STAGE 2		
207+86.74 - 260+19.20	LT	1406
STAGE 1 SUBTOTAL		1406
ITEM TOTAL		1406

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\030201 mq.dgn PLOT TIME : 3:53:00 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

WISDOT/CADDS SHEET 43

TRAFFIC CONTROL

STATION - STATION	DAYS	LOCATION	643.0300 DRUMS NO.	643.0300 DRUMS DAY	643.0500 FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 FLEXIBLE TUBULAR MARKER BASES EACH	643.0900 SIGNS NO.	643.0900 SIGNS DAY	643.0410 BARRICADES TYPE II NO.	643.0410 BARRICADES TYPE II DAY	643.0420 BARRICADES TYPE III NO.	643.0420 BARRICADES TYPE III DAY	643.0705 WARNING LIGHTS TYPE A NO.	643.0705 WARNING LIGHTS TYPE A DAY	643.0715 WARNING LIGHTS TYPE C NO.	643.0715 WARNING LIGHTS TYPE C DAY
6414-00-80																
STAGE 1	17															
BUSINESS 51																
208+50 - 213+95		LT & RT	97	1649			9	153			4	68	6	102	12	204
213-95 - 220+45		LT & RT	97	1649			3	51			2	34	4	68	0	0
220+45 - 237+30		LT & RT	174	2958			8	136			6	102	12	204	0	0
237+30 - 243+81		LT & RT	47	799			5	85			3	51	6	102	0	0
243+81 - 252+50		LT & RT	74	1258			6	102			5	85	10	170	6	102
HICKORY DR		LT & RT	0	0			1	17			0	0	0	0	0	0
PORTER DR		LT & RT	0	0			1	17			0	0	0	0	0	0
TOMMY'S TURNPIKE		LT & RT	0	0			1	17			0	0	0	0	0	0
E CEDAR ST		LT & RT	0	0			1	17			0	0	0	0	0	0
W CEDAR ST		LT & RT	0	0			1	17			0	0	0	0	0	0
WILLOW ST (SOUTH LEG)		LT & RT	0	0			1	17			0	0	0	0	0	0
WILLOW ST (NORTH LEG)		LT & RT	0	0			1	17			0	0	0	0	0	0
ELM ST		LT & RT	0	0			1	17			0	0	0	0	0	0
STAGE 1 SUBTOTALS			489	8313			39	663			20	340	38	646	18	306
STAGE 2	142															
BUSINESS 51																
208+50 - 213+95		LT & RT	83	11786	41	41	12	1704	1	142	14	1988	18	2556	16	2272
213-95 - 220+45		LT & RT	65	9230	24	24	6	852	0	0	17	2414	19	2698	0	0
220+45 - 237+30		LT & RT	200	28400	57	57	11	1562	0	0	32	4544	30	4260	0	0
237+30 - 243+81		LT & RT	45	6390	24	24	6	852	0	0	26	3692	27	3834	4	568
243+81 - 252+50		LT & RT	64	9088	26	26	7	994	0	0	23	3266	27	3834	0	0
HICKORY DR		LT & RT	0	0	0	0	3	426	0	0	9	1278	12	1704	0	0
PORTER DR		LT & RT	0	0	0	0	3	426	0	0	16	2272	17	2414	3	426
TOMMY'S TURNPIKE		LT & RT	0	0	0	0	1	142	0	0	0	0	0	0	0	0
E CEDAR ST		LT & RT	0	0	0	0	4	568	0	0	13	1846	12	1704	4	568
W CEDAR ST		LT & RT	0	0	0	0	1	142	0	0	0	0	0	0	0	0
WILLOW ST (SOUTH LEG)		LT & RT	0	0	0	0	2	284	0	0	0	0	0	0	0	0
WILLOW ST (NORTH LEG)		LT & RT	19	2698	0	0	4	568	0	0	5	710	6	852	0	0
ELM ST		LT & RT	0	0	0	0	2	0	0	0	4	0	0	0	5	0
STAGE 2 SUBTOTALS			476	67592	172	172	62	8520	1	142	159	22010	168	23856	32	3834
STAGE 3	76															
BUSINESS 51																
208+50 - 213+95		LT & RT	52	3952	28	28	12	912	0	0	8	608	10	760	7	532
213-95 - 220+45		LT & RT	61	4636	21	21	6	456	0	0	25	1900	29	2204	0	0
220+45 - 237+30		LT & RT	160	12160	63	63	12	912	1	76	22	1672	28	2128	0	0
237+30 - 243+81		LT & RT	39	2964	24	24	10	760	0	0	28	2128	32	2432	0	0
243+81 - 252+50		LT & RT	99	7524	36	36	4	304	1	76	8	608	11	836	0	0
HICKORY DR		LT & RT	0	0	0	0	1	76	0	0	0	0	0	0	0	0
PORTER DR		LT & RT	19	1444	0	0	2	152	1	76	0	0	0	0	11	836
TOMMY'S TURNPIKE		LT & RT	0	0	0	0	4	304	0	0	14	1064	17	1292	0	0
E CEDAR ST		LT & RT	0	0	0	0	1	76	0	0	0	0	0	0	0	0
W CEDAR ST		LT & RT	0	0	0	0	3	228	0	0	8	608	9	684	0	0
WILLOW ST (SOUTH LEG)		LT & RT	0	0	0	0	1	76	0	0	0	0	0	0	0	0
WILLOW ST (NORTH LEG)		LT & RT	0	0	0	0	5	380	0	0	19	1444	0	0	0	0
ELM ST		LT & RT	0	0	0	0	1	76	0	0	0	0	0	0	0	0
STAGE 3 SUBTOTALS			430	32680	172	172	62	4712	3	228	132	10032	136	10336	18	1368
STAGE 4	154															
BUSINESS 51																
208+50 - 213+95		LT & RT	59	9086	0	0	9	1386	0	0	9	1386	13	2002	10	1540
213-95 - 220+45		LT & RT	54	8316	0	0	6	924	2	308	6	924	10	1540	0	0
220+45 - 237+30		LT & RT	150	23100	0	0	12	1848	2	308	8	1232	16	2464	0	0
237+30 - 243+81		LT & RT	53	8162	0	0	5	770	2	308	2	308	4	616	0	0
243+81 - 252+50		LT & RT	85	13090	0	0	8	1232	2	308	4	616	8	1232	4	616
HICKORY DR		LT & RT	0	0	0	0	1	154	0	0	0	0	0	0	0	0
PORTER DR		LT & RT	0	0	0	0	1	154	0	0	0	0	0	0	0	0
TOMMY'S TURNPIKE		LT & RT	0	0	0	0	1	154	0	0	0	0	0	0	0	0
E CEDAR ST		LT & RT	0	0	0	0	1	154	0	0	0	0	0	0	0	0
W CEDAR ST		LT & RT	0	0	0	0	1	154	0	0	0	0	0	0	0	0
WILLOW ST (SOUTH LEG)		LT & RT	0	0	0	0	1	154	0	0	0	0	0	0	0	0
WILLOW ST (NORTH LEG)		LT & RT	0	0	0	0	1	154	0	0	0	0	0	0	0	0
ELM ST		LT & RT	0	0	0	0	1	154	0	0	0	0	0	0	0	0
STAGE 4 SUBTOTALS			401	61754	0	0	48	7392	8	1232	29	4466	51	7854	14	2156

TRAFFIC CONTROL (CONTINUED)

STATION - STATION	DAYS	LOCATION	643.0300 DRUMS NO.	643.0300 DRUMS DAY	643.0500 FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 FLEXIBLE TUBULAR MARKER BASES EACH	643.0900 SIGNS NO.	643.0900 SIGNS DAY	643.0410 BARRICADES TYPE II NO.	643.0410 BARRICADES TYPE II DAY	643.0420 BARRICADES TYPE III NO.	643.0420 BARRICADES TYPE III DAY	643.0705 WARNING LIGHTS TYPE A NO.	643.0705 WARNING LIGHTS TYPE A DAY	643.0715 WARNING LIGHTS TYPE C NO.	643.0715 WARNING LIGHTS TYPE C DAY
WINTER SHUTDOWN	136															
BUSINESS 51																
208+50 - 213+95		LT & RT	0	0	0	0	2	272	0	0	0	0	0	0	0	0
213+95 - 220+45		LT & RT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220+45 - 237+30		LT & RT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
237+30 - 243+81		LT & RT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
243+81 - 252+50		LT & RT	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HICKORY DR		LT & RT	0	0	0	0	1	136	0	0	0	0	0	0	0	0
PORTER DR		LT & RT	0	0	0	0	1	136	0	0	0	0	0	0	0	0
TOMMY'S TURNPIKE		LT & RT	0	0	0	0	1	136	0	0	0	0	0	0	0	0
E CEDAR ST		LT & RT	0	0	0	0	1	136	0	0	0	0	0	0	0	0
W CEDAR ST		LT & RT	0	0	0	0	1	136	0	0	0	0	0	0	0	0
WILLOW ST (SOUTH LEG)		LT & RT	0	0	0	0	1	136	0	0	0	0	0	0	0	0
WILLOW ST (NORTH LEG)		LT & RT	0	0	0	0	1	136	0	0	0	0	0	0	0	0
ELM ST		LT & RT	0	0	0	0	1	136	0	0	0	0	0	0	0	0
WINTER SHUTDOWN SUBTOTALS			0	0	0	0	10	1360	0	0	0	0	0	0	0	0
6414-00-80 SUBTOTALS			1796	170339	344	344	221	22647	12	1602	340	36848	393	42692	82	7664
6414-00-81																
STAGE 1	17															
BUSINESS 51																
252+50 - 260+71		LT & RT	63	1071			4	68	0	0	3	51	6	102	0	0
260+71 - 281+00		LT & RT	230	3910			18	306	0	0	9	153	18	306	20	340
MCDILL AVE / CTH HH		LT & RT	83	1411			12	204	2	34	3	51	6	102	11	187
WATER ST / CTH HH		LT & RT	120	2040			10	170	2	34	5	85	10	170	6	102
STAGE 1 SUBTOTALS			496	8432			44	748	4	68	20	340	40	680	37	629
STAGE 2	142															
BUSINESS 51																
252+50 - 260+71		LT & RT	79	11218	34	34	2	284	0	0	0	0	0	0	0	0
260+71 - 281+00		LT & RT	178	25276	78	78	17	2414	1	142	11	1562	17	2414	11	1562
MCDILL AVE / CTH HH		LT & RT	144	20448	54	54	17	2414	2	284	17	2414	23	3266	13	1846
WATER ST / CTH HH		LT & RT	77	10934	38	38	14	1988	2	284	25	3550	29	4118	10	1420
STAGE 2 SUBTOTALS			478	67876	204	204	50	7100	5	710	53	7526	69	9798	34	4828
STAGE 3	76															
BUSINESS 51																
252+50 - 260+71		LT & RT	106	8056	46	46	8	608	0	0	12	912	10	760	0	0
260+71 - 281+00		LT & RT	169	12844	82	82	21	1596	0	0	44	3344	32	2432	8	608
MCDILL AVE / CTH HH		LT & RT	128	9728	47	47	18	1368	4	304	22	1672	21	1596	19	1444
WATER ST / CTH HH		LT & RT	93	7068	40	40	12	912	1	76	38	2888	27	2052	10	760
STAGE 3 SUBTOTALS			496	37696	215	215	59	4484	5	380	116	8816	90	6840	37	2812
STAGE 4	154															
BUSINESS 51																
252+50 - 260+71		LT & RT	139	21406	0	0	8	1232	1	154	3	462	6	924	15	2310
260+71 - 281+00		LT & RT	218	33572	0	0	30	4620	3	462	22	3388	27	4158	11	1694
MCDILL AVE / CTH HH		LT & RT	110	16940	27	27	19	2926	3	462	5	770	10	1540	7	1078
WATER ST / CTH HH		LT & RT	87	13398	35	35	15	2310	3	462	12	1848	14	2156	15	2310
STAGE 4 SUBTOTALS			554	85316	62	62	72	11088	10	1540	42	6468	57	8778	48	7392
WINTER SHUTDOWN	136															
BUSINESS 51																
252+50 - 260+71		LT & RT	0	0	0	0	1	136	0	0	0	0	0	0	0	0
260+71 - 281+00		LT & RT	0	0	0	0	5	680	0	0	0	0	0	0	0	0
MCDILL AVE / CTH HH		LT & RT	0	0	0	0	4	544	2	272	0	0	0	0	0	0
WATER ST / CTH HH		LT & RT	0	0	0	0	2	272	1	136	0	0	0	0	0	0
WINTER SHUTDOWN SUBTOTALS			0	0	0	0	12	1632	3	408	0	0	0	0	0	0
6414-00-81 SUBTOTAL			2024	199320	481	481	237	25052	27	3106	231	23150	256	26096	156	15661
ITEM TOTAL				369659	825	825		47699		4708		59998		68788		23325

PERMANENT SIGNING ITEMS

SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIZE	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0614 POSTS WOOD 4x6-INCH 14-FT EACH	634.0616 POSTS WOOD 4x6-INCH 16-FT EACH	634.0811 POSTS TUBULAR STEEL 2x2-INCH 11-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS	SIGN GROUP NUMBER
6414-00-80													
1-1										1	1		1-1
1-2										1	1		1-2
1-3										1	1		1-3
1-4										1	1		1-4
1-5	R4-7	KEEP RIGHT	24 X 30		5.00				1				1-5
1-6										1	1		1-6
1-7	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						1-7
1-8	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						1-8
1-9	JV	SOUTH BUS 51	24 X 48		8.00								1-9
1-10										1	1		1-10
1-11	R4-7	KEEP RIGHT	24 X 30		5.00				1				1-11
1-12	R4-7	KEEP RIGHT	24 X 30		5.00				1				1-12
1-13	R6-2R	ONE WAY RIGHT	24 X 30		5.00		1						1-13
1-14										1	1		1-14
1-15										1	1		1-15
1-16										1	1		1-16
1-17										1	1		1-17
1-18	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						1-18
1-19	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						1-19
1-20										1	1		1-20
1-21										1	1		1-21
1-22	R1-1	STOP	30 X 30		5.18		1						1-22
2-1	R6-2R	ONE WAY RIGHT	24 X 30		5.00		1						2-1
2-2	W12-1D	DOUBLE DIAGONAL ARROW	24 X 24			4.00	1						2-2
2-3	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	2-3
2-4	R4-7	KEEP RIGHT	24 X 30		5.00							BAND SIGN TO POLE	2-4
2-5										1	2		2-5
2-6	R4-7	POPULATION (PLOVER)	60 X 24		10.00		2						2-6
2-7	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	2-7
2-8	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	2-8
2-9	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	2-9
2-10	W12-1D	DOUBLE DIAGONAL ARROW	24 X 24			4.00	1						2-10
2-11	R1-2	YIELD	36 X 31		3.88							BAND SIGN TO POLE	2-11
2-12										1	1		2-12
2-13	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	2-13
2-14										1	1		2-14
2-15	R4-7	KEEP RIGHT	24 X 30		5.00				1				2-15
2-16	R4-7	KEEP RIGHT	24 X 30		5.00							BAND SIGN TO POLE	2-16
2-17										1			2-17
2-18	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						2-18
2-19										1	1		2-19
2-20	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						2-20
2-21	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						2-21
2-22	R4-7	KEEP RIGHT	24 X 30		5.00							BAND SIGN TO POLE	2-22
2-23										1			2-23
2-24										1			2-24
2-25	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	2-25
2-26	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	2-26
2-27	R4-7	KEEP RIGHT	24 X 30		5.00							BAND SIGN TO POLE	2-27
2-28	R1-2	YIELD	36 X 31		3.88							BAND SIGN TO POLE	2-28
2-29	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	2-29
2-30										1	1		2-30
2-31	R10-50L	LT. TURN YIELD FLSHG YELL ARROW	30 x36		7.50							BAND SIGN TO POLE	2-31

SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIZE	SIGNS TYPE II REFLECTIVE H FOLDING SF	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	POSTS WOOD 4x6-INCH 14-FT EACH	POSTS WOOD 4x6-INCH 16-FT EACH	POSTS TUBULAR STEEL 2x2-INCH 11-FT EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	REMARKS	SIGN GROUP NUMBER
2-32	R10-50L	LT. TURN YIELD FLSHG YELL ARROW	30 x36		7.50							BAND SIGN TO POLE	2-32
2-33	R10-50L	LT. TURN YIELD FLSHG YELL ARROW	30 x36		7.50							BAND SIGN TO POLE	2-33
2-34	R10-50L	LT. TURN YIELD FLSHG YELL ARROW	30 x36		7.50							BAND SIGN TO POLE	2-34
2-35	I2-3	POPULATION (WHITING)	60 X 24		10.00		2						2-35
3-1										1	1		3-1
3-2	R4-7	KEEP RIGHT	24 X 30		5.00							BAND SIGN TO POLE	3-2
3-3	R4-7	KEEP RIGHT	24 X 30		5.00				1				3-3
3-4	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						3-4
3-5										1	1		3-5
3-6	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						3-6
3-7	R4-7	KEEP RIGHT	24 X 30		5.00				1				3-7
3-8	R4-7	KEEP RIGHT	24 X 30		5.00				1				3-8
3-9	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						3-9
3-10	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						3-10
3-11	JV	NORTH BUS 51	24 X 48		8.00								3-11
3-12	R4-7	KEEP RIGHT	24 X 30		5.00				1				3-12
3-13	R4-7	KEEP RIGHT	24 X 30		5.00							BAND SIGN TO POLE	3-13
3-14	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						3-14
3-15										1	1		3-15
3-16	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						3-16
3-17	R4-7	KEEP RIGHT	24 X 30		5.00				1				3-17
3-18	R1-1	STOP	30 X 30		5.18		1						3-18
3-19										1	1		3-19
3-20	R4-7	KEEP RIGHT	24 X 30		5.00				1				3-20
3-21										1	1		3-21
3-22										1	1		3-22
3-23	R6-2R	ONE WAY RIGHT	24 X 30		5.00							BAND SIGN TO POLE	3-23
3-24	JV	SOUTH BUS 51	24 X 48		8.00								3-24
3-25	R6-2R	ONE WAY RIGHT	24 X 30		5.00							BAND SIGN TO POLE	3-25
3-26	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						3-26
3-27										1			3-27
3-28	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						3-28
3-29										1	1		3-29
3-30	R1-1	STOP	30 X 30		5.18		1						3-30
3-31										1	1		3-31
3-32	S1-1	SCHOOL CROSSING	36 X 36			6.75	1						3-32
	S16-7L	DOWN ARROW	30 X 18			3.75							
3-33	S1-1	SCHOOL CROSSING	36 X 36			6.75	1						3-33
	S16-7L	DOWN ARROW	30 X 18			3.75							
3-34	S1-1	SCHOOL CROSSING	36 X 36			6.75						BAND SIGN TO POLE	3-34
	S16-7R	DOWN ARROW	30 X 18			3.75						BAND SIGN TO POLE	
3-35	S1-1	SCHOOL CROSSING	36 X 36			6.75						BAND SIGN TO POLE	3-35
	S16-7R	DOWN ARROW	30 X 18			3.75						BAND SIGN TO POLE	
3-36	S1-1	SCHOOL ADVANCE CROSSING	36 X 36			6.75	1						3-36
	S16-9P	AHEAD	30 X 18			3.75							
4-1	R4-7	KEEP RIGHT	24 X 30		5.00							BAND SIGN TO POLE	4-1
4-2	R4-7	KEEP RIGHT	24 X 30		5.00				1				4-2
4-3	R4-7	KEEP RIGHT	24 X 30		5.00				1				4-3
4-4										1	1		4-4
4-5	R1-1	STOP	30 X 30		5.18		1						4-5
4-6	R4-7	KEEP RIGHT	24 X 30		5.00				1				4-6
4-7	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						4-7
4-8	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						4-8

SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIZE	SIGNS TYPE II REFLECTIVE H FOLDING SF	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	POSTS WOOD 4x6-INCH 14-FT EACH	POSTS WOOD 4x6-INCH 16-FT EACH	POSTS TUBULAR STEEL 2x2-INCH 11-FT EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	REMARKS	SIGN GROUP NUMBER
4-9	R4-7	KEEP RIGHT	24 X 30		5.00				1				4-9
4-10										1	1		4-10
4-11	R4-7	KEEP RIGHT	24 X 30		5.00				1				4-11
4-12	R6-2R	ONE WAY RIGHT	24 X 30		5.00		1						4-12
4-13										1	1		4-13
4-14										1	1		4-14
4-15	R1-1	STOP	30 X 30		5.18		1						4-15
4-16										1	1		4-16
4-17	R6-2R	ONE WAY RIGHT	24 X 30		5.00		1						4-17
4-29										1	1		4-29
4-30	R1-1	STOP	30 X 30		5.18		1						4-30
4-31	R4-7	KEEP RIGHT	24 X 30		5.00				1				4-31
4-32										1	1		4-32
4-33	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						4-33
4-34	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						4-34
4-35	S1-1	SCHOOL ADVANCE CROSSING	36 X 36			6.75	1						4-35
	S16-9P	AHEAD	30 X 18			3.75							
4-36	W11-2	PEDESTRIAN CROSSING	30 X 30			6.25	1						4-36
	W16-7L	DOWN ARROW	30 X 18			3.75							
4-37	W11-2	PEDESTRIAN CROSSING	30 X 30			6.25	1						4-37
	W16-7L	DOWN ARROW	30 X 18			3.75							
4-38	W11-2	PEDESTRIAN CROSSING	30 X 30			6.25			1				4-38
	W16-7R	DOWN ARROW	30 X 18			3.75							
4-39	W11-2	PEDESTRIAN CROSSING	30 X 30			6.25							4-39
	W16-7R	DOWN ARROW	30 X 18			3.75							
4-40	W11-2	PEDESTRIAN ADVANCE CROSSING	30 X 30			6.25	1						4-40
	W16-9P	AHEAD	30 X 18			3.75							
6414-00-80 SUBTOTAL				59.68	332.84	121.00	42	0	17	36	33		
6414-00-81													
4-18	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						4-18
4-19										1	1		4-19
4-20	R6-2R	ONE WAY RIGHT	24 X 30		5.00		1						4-20
4-21										1	1		4-21
4-22	J12-1	CTH HH	24 X 45										4-22
4-23										1	1		4-23
4-24	R6-2R	ONE WAY RIGHT	24 X 30		5.00		1						4-24
4-25	R6-2R	ONE WAY RIGHT	24 X 30		5.00		1						4-25
4-26										1	1		4-26
4-27	J1-1	JCT CTH HH	24 X 30		5.00								4-27
4-28	R4-7	KEEP RIGHT	24 X 30		5.00				1				4-28
4-41	W11-2	PEDESTRIAN ADVANCE CROSSING	30 X 30			6.25	1						4-41
	W16-9P	AHEAD	30 X 18			3.75							
5-1										1	1		5-1
5-2	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						5-2
5-3	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						5-3
5-4	JV	SOUTH BUS 51	24 X 48		8.00								5-4
5-5	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	5-5
5-6										1	1		5-6
5-7	R4-7	KEEP RIGHT	24 X 30		5.00							BAND SIGN TO POLE	5-7
5-8	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	5-8
5-9										1	1		5-9
5-10	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	5-10
5-11	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	5-11
5-12	R4-7	KEEP RIGHT	24 X 30		5.00							BAND SIGN TO POLE	5-12
5-13	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	5-13
5-14	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	5-14
5-15	R1-2	YIELD	36 X 31		3.88		1						5-15

SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIZE	SIGNS TYPE II REFLECTIVE H FOLDING SF	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	POSTS WOOD 4x6-INCH 14-FT EACH	POSTS WOOD 4x6-INCH 16-FT EACH	POSTS TUBULAR STEEL 2x2-INCH 11-FT EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	REMARKS	SIGN GROUP NUMBER
5-16	W12-1D	DOUBLE DIAGONAL ARROW	24 X 24			4.00	1						5-16
5-17										1	1		5-17
5-18	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	5-18
5-19										1	1		5-19
5-20										1	1		5-20
5-21	JV	NORTH BUS 51	24 X 48		8.00								5-21
5-22	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	5-22
5-23	R4-7	KEEP RIGHT	24 X 30		5.00							BAND SIGN TO POLE	5-23
5-24	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	5-24
5-25	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	5-25
5-26	R4-7	KEEP RIGHT	24 X 30		5.00							BAND SIGN TO POLE	5-26
5-27	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	5-27
5-28	R1-1F	STOP (FOLDING)	36 X 36	7.46								BAND SIGN TO POLE	5-28
5-29										1	1		5-29
5-30	W12-1D	DOUBLE DIAGONAL ARROW	24 X 24			4.00	1						5-30
5-31	R1-2	YIELD	36 X 31		3.88		1						5-31
5-32										1	1		5-32
5-33										1	1		5-33
5-34										1			5-34
5-35										1	1		5-35
5-36										1	1		5-36
5-37	R10-50L	LT. TURN YIELD FLSHG YELL ARROW	30 x36		7.50							BAND SIGN TO POLE	5-37
5-38	R10-50L	LT. TURN YIELD FLSHG YELL ARROW	30 x36		7.50							BAND SIGN TO POLE	5-38
5-39	R10-50L	LT. TURN YIELD FLSHG YELL ARROW	30 x36		7.50							BAND SIGN TO POLE	5-39
5-40	R10-50L	LT. TURN YIELD FLSHG YELL ARROW	30 x36		7.50							BAND SIGN TO POLE	5-40
6-1	I3-1	PLOVER RIVER	30 X 9		1.88		1						6-1
6-2	R9-55	NO FISHING FROM BRIDGE	18 X 24		3.00					1			6-2
6-3										1	1		6-3
6-4										1	1		6-4
6-5	J12-1	DIRECTIONAL SIGN CTH HH	24 X 45		7.50								6-5
6-6										1	1		6-6
6-7	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						6-7
6-8										1	1		6-8
6-9	J1-1	JCT CTH HH	24 X 39		6.50			1					6-9
6-10	D7-56L	BOAT LANDING LEFT	48 X 36		12.00			1					6-10
6-11	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						6-11
6-12	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						6-12
6-13										1	1		6-13
6-14	I3-1	PLOVER RIVER	30 X 9		1.88		1						6-14
6-15										1	1		6-15
6-16										1	1		6-16
6-17	R1-1	STOP	30 X 30		5.18		1						6-17
6-18										1	1		6-18
6-19										1	1		6-19
6-20	D7-56R	BOAT LANDING RIGHT	48 X 36		12.00		1						6-20
6-21	R4-7	KEEP RIGHT	24 X 30		5.00				1				6-21
6-22	R4-7	KEEP RIGHT	24 X 30		5.00				1				6-22
6-23										1	1		6-23
6-24	W11-2	PEDESTRIAN CROSSING	30 X 30			6.25	1						6-24
	W16-7L	DOWN ARROW	30 X 18			3.75							0
6-25	W11-2	PEDESTRIAN CROSSING	30 X 30			6.25	1						6-25
	W16-7L	DOWN ARROW	30 X 18			3.75							
6-26	W11-2	PEDESTRIAN CROSSING	30 X 30			6.25			1				6-26
	W16-7R	DOWN ARROW	30 X 18			3.75							

SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIZE	SIGNS TYPE II REFLECTIVE H FOLDING SF	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	POSTS WOOD 4x6-INCH 14-FT EACH	POSTS WOOD 4x6-INCH 16-FT EACH	POSTS TUBULAR STEEL 2x2-INCH 11-FT EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	REMARKS	SIGN GROUP NUMBER
6-27	W11-2	PEDESTRIAN CROSSING	30 X 30			6.25							6-27
	W16-7R	DOWN ARROW	30 X 18			3.75							
6-28	W11-2	PEDESTRIAN ADVANCE CROSSING	30 X 30			6.25	1						6-28
	W16-9P	AHEAD	30 X 18			3.75							
6-29	W11-2	PEDESTRIAN ADVANCE CROSSING	30 X 30			6.25	1						6-29
	W16-9P	AHEAD	30 X 18			3.75							
7-1	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						7-1
7-2										1	1		7-2
7-3	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						7-3
7-4										1	1		7-4
7-5										1	1		7-5
7-6	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						7-6
7-7	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						7-7
8-1	R1-1	STOP	30 X 30		5.18		1						8-1
9-1	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						9-1
9-2	R4-7	KEEP RIGHT	24 X 30		5.00							BAND SIGN TO POLE	9-2
9-3	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						9-3
9-4	R4-7	KEEP RIGHT	24 X 30		5.00				1				9-4
10-1	R2-1	SPEED LIMIT 35	24 X 30		5.00		1						10-1
10-2	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						10-2
10-3	J1-1	WEST CTH HH	24 X 39		6.50			1					10-3
10-4										1	1		10-4
10-5	JV	SOUTH/ NORTH BUS 51	48 X 69		23.00			2					10-5
10-6										1	1		10-6
10-7										1	1		10-7
10-8	R4-4	BEGIN RIGHT TURN LANE	36 X 30		7.50		1						10-8
10-9	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						10-9
10-10										1	1		10-10
10-11										1	1		10-11
10-12	W3-3	TRAFFIC SIGNALS AHEAD	36 X 36			9.00		1					10-12
10-13										1	1		10-13
10-14	JV	JCT BUS 51	24 X 51		8.50								10-14
10-15	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						10-15
11-1	JV	SOUTH/ NORTH BUS 51	48 X 69		23.00			2					11-1
11-2										1			11-2
11-3										1	1		11-3
11-4	W3-3	TRAFFIC SIGNALS AHEAD	36 X 36			9.00		1					11-4
11-5	R4-4	BEGIN RIGHT TURN LANE	36 X 30		7.50		1						11-5
11-6	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						11-6
11-7	R1-1	STOP	30 X 30		5.18		1						11-7
11-8										1	1		11-8
11-9	R7-1D	NO PARKING ANY TIME	18 X 24		3.00		1						11-9
11-10										1	1		11-10
11-11	R1-1	STOP	30 X 30		5.18		1						11-11
11-12	S1-1	SCHOOL ZONE	24 X 39		6.50			1					11-12
11-13										1	1		11-13
11-14										1	1		11-14
11-15	J4-1	WEST CTH HH	24 X 36		6.00								11-15
6414-00-81 SUBTOTAL				89.52	338.74	96.00	39	10	5	42	39		
ITEM TOTAL				149.20	671.58	217.00	81	10	22	78	72		

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TEMPORARY PEDESTRIAN SURFACE

STATION	LOCATION	644.1410.S ASPHALT SF	644.1420.S PLYWOOD SF	COMMENT
PROJECT 6414-00-80				
STAGE 1				
207+86.74 - 252+50.00	LT	13980		
STAGE 1 SUBTOTAL		13980		
PROJECT 6414-00-80 SUBTOTAL		13980		
PROJECT 6414-00-81				
STAGE 1				
252+50.00 - 260+19.20	LT	2925	647	
STAGE 1 SUBTOTAL		2925	647	
UNDISTRIBUTED		1000		PATCHING SIGN POSTS
PROJECT 6414-00-81 SUBTOTAL		3925	647	
ITEM TOTAL		17905	647	

TEMPORARY CURB RAMP

STATION	LOCATION	644.1601.S EACH
PROJECT 6414-00-80		
STAGE 1		
207+86.74 - 260+19.20	LT	9
STAGE 1 SUBTOTAL		9
ITEM TOTAL		9

GEOTEXTILE

STATION	LOCATION	645.0120 TYPE HR SY	645.0130 TYPE R SY
PROJECT 6414-00-80			
STAGE 2			
248+04.18	RT	61	
250+10.01	RT	59	
E CEDAR STREET			
88+38.44	RT	67	
STAGE 2 SUBTOTAL		187	
PROJECT SUBTOTAL 6414-00-80		187	
PROJECT 6414-00-81			
STAGE 2			
262+22 - 279+07	RT	3882	
CTH HH			
893+95	LT		27
895+75	LT		27
898+06	LT		27
STAGE 2 SUBTOTAL		3882	81
STAGE 3			
263+23	LT		27
274+05	LT		13
STAGE 3 SUBTOTAL			40
PROJECT SUBTOTAL 6414-00-81		3882	121
ITEM TOTALS		4069	121

GEOGRID

STATION	LOCATION	645.0220 TYPE SR SY
PROJECT 6414-00-81		
STAGE 2		
262+00 - 264+00	RT	702
264+48 - 279+10	RT	5542
UNDISTRIBUTED		1556
STAGE 2 SUBTOTAL		7800
ITEM TOTAL		7800

TEMPORARY MARKING LINE PAINT 4-INCH

STATION	LOCATION	649.0105* (YELLOW) LF	(WHITE) LF	COMMENT
PROJECT 6414-00-80				
STAGE 1				
207+86.74 - 260+19.20	LT	1451	448	TEMP SIDEWALK
STAGE 1 SUBTOTAL		1451	448	
ITEM TOTAL		1899		

*ADDITIONAL QUANTITES SHOWN ELESWHERE

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

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TEMPORARY MARKING ITEMS

		649.0105*		649.0205	649.0150		649.0250	649.0505	649.0550	649.0605	649.0650	649.0905	649.0805	649.0850
		TEMPORARY MARKING LINE						TEMPORARY MARKING					TEMPORARY MARKING STOP LINE	
		PAINT			REMOVABLE TAPE			ARROW		WORD		DIAGONAL PAINT	PAINT	REMOVABLE
		4-INCH		8-INCH	4-INCH		8-INCH	PAINT	REMOVABLE TAPE	PAINT	REMOVABLE TAPE	12-INCH		TAPE
		(YELLOW)	(WHITE)	(WHITE)	(YELLOW)	(WHITE)	(WHITE)					(YELLOW)	18-INCH	18-INCH
STATION - STATION	LOCATION	LF	LF	LF	LF	LF	LF	EACH	EACH	EACH	EACH	LF	LF	LF
6414-00-80														
STAGE 1A & 1														
BUSINESS 51														
208+50 - 213+95	LT & RT	1032	494	0	952	0	0	0	0	0	0	0	17	0
213-95 - 220+45	LT & RT	1059	297	84	0	0	0	2	0	0	0	0	0	0
220+45 - 237+30	LT & RT	3174	797	396	0	0	0	5	0	0	0	0	11	0
237+30 - 243+81	LT & RT	887	0	98	0	0	0	2	0	0	0	0	0	0
243+81 - 252+50	LT & RT	1104	392	0	0	0	0	0	0	0	0	0	0	0
MACARTHUR WAY	LT & RT	0	0	0	0	0	0	0	0	0	0	0	12	0
TOMMY'S TURNPIKE	LT & RT	0	118	0	0	0	0	0	0	0	0	0	0	0
W CEDAR ST	LT & RT	0	73	0	0	0	0	0	0	0	0	0	0	0
STAGE 1A & 1 SUBTOTALS		7256	2171	578	952	0	0	9	0	0	0	0	40	0
STAGE 1B														
BUSINESS 51														
208+50 - 213+95	LT & RT	417	309	0	238	0	0	0	0	0	0	0	0	0
STAGE 1C														
BUSINESS 51														
208+50 - 213+95	LT & RT	383	565	0	250	221	0	0	0	0	0	0	0	0
STAGE 1D														
BUSINESS 51														
208+50 - 213+95	LT & RT	496	97	0	112	0	0	0	0	0	0	0	0	0
STAGE 2A														
BUSINESS 51														
208+50 - 213+95	LT & RT	1018	481	0	734	571	0	0	0	0	0	0	24	0
213-95 - 220+45	LT & RT	1088	813	431	0	0	0	3	0	1	0	0	0	0
220+45 - 237+30	LT & RT	3170	1922	346	0	0	0	2	0	0	0	0	0	0
237+30 - 243+81	LT & RT	1160	601	100	0	0	0	2	0	0	0	0	18	0
243+81 - 252+50	LT & RT	1290	836	0	0	0	0	0	0	0	0	0	0	0
STAGE 2A SUBTOTALS		7726	4653	877	734	571	0	7	0	1	0	0	42	0
STAGE 2B														
BUSINESS 51														
208+50 - 213+95	LT & RT													
213-95 - 220+45	LT & RT	120	70	0	0	0	0	0	0	0	0	0	22	0
220+45 - 237+30	LT & RT	0	0	0	0	0	0	0	0	0	0	0	22	0
237+30 - 243+81	LT & RT	0	104	77	0	0	0	0	0	0	0	0	0	0
243+81 - 252+50	LT & RT	90	0	0	0	0	0	0	0	0	0	0	0	18
STAGE 2B SUBTOTALS		210	174	77	0	0	0	0	0	0	0	0	44	18
STAGE 3A														
BUSINESS 51														
208+50 - 213+95	LT & RT	0	0	0	1677	574	0	0	0	0	0	0	0	28
213-95 - 220+45	LT & RT	0	0	0	1112	662	555	0	1	0	0	0	0	22
220+45 - 237+30	LT & RT	0	0	0	3118	1658	427	0	4	0	0	0	21	122
237+30 - 243+81	LT & RT	0	0	0	1124	590	177	0	2	0	0	0	0	100
243+81 - 252+50	LT & RT	0	0	0	1532	915	0	0	0	0	0	0	0	0
STAGE 3A SUBTOTALS		0	0	0	8563	4399	1159	0	7	0	0	0	21	272
STAGE 3B														
BUSINESS 51														
208+50 - 213+95	LT & RT	0	0	0	0	0	0	0	0	0	0	0	0	0
213-95 - 220+45	LT & RT	0	0	0	32	26	77	0	2	0	0	0	0	0
220+45 - 237+30	LT & RT	0	0	0	203	307	159	0	4	0	0	0	0	29
237+30 - 243+81	LT & RT	0	0	0	0	0	0	0	2	0	0	0	0	0
243+81 - 252+50	LT & RT	0	0	0	0	0	0	0	0	0	0	0	0	0
STAGE 3B SUBTOTALS		0	0	0	235	333	236	0	8	0	0	0	0	29

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

TEMPORARY MARKING (CONTINUED)

STATION - STATION	LOCATION	649.0105* TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW) LF	649.0105* TEMPORARY MARKING LINE PAINT 4-INCH (WHITE) LF	649.0205 TEMPORARY MARKING LINE PAINT 8-INCH (WHITE) LF	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW) LF	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE) LF	649.0250 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE) LF	649.0505 TEMPORARY MARKING ARROW PAINT EACH	649.0550 TEMPORARY MARKING ARROW REMOVABLE TAPE EACH	649.0605 TEMPORARY MARKING WORD PAINT EACH	649.0650 TEMPORARY MARKING WORD REMOVABLE TAPE EACH	649.0905 TEMPORARY MARKING DIAGONAL PAINT 12-INCH (YELLOW) LF	649.0805 TEMPORARY MARKING STOP LINE PAINT 18-INCH LF	649.0850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF
STAGE 4A														
BUSINESS 51														
208+50 - 213+95	LT & RT	0	0	0	1811	0	0	0	0	0	0	0	0	0
213-95 - 220+45	LT & RT	0	0	0	1144	0	263	0	2	0	0	0	0	0
220+45 - 237+30	LT & RT	0	0	0	3043	0	408	0	4	0	0	0	0	0
237+30 - 243+81	LT & RT	0	0	0	1136	0	185	0	3	0	0	0	0	0
243+81 - 252+50	LT & RT	0	0	0	1463	0	178	0	4	0	0	0	0	0
STAGE 4A SUBTOTALS		0	0	0	8597	0	1034	0	13	0	0	0	0	0
WINTER SHUTDOWN														
BUSINESS 51														
208+50 - 213+95	LT & RT	1950	510	0	0	0	0	0	0	0	0	138	0	0
213-95 - 220+45	LT & RT	2200	820	451	0	0	0	3	0	1	0	521	0	0
220+45 - 237+30	LT & RT	3094	1760	390	0	0	0	14	0	0	0	156	0	0
237+30 - 243+81	LT & RT	0	560	298	0	0	0	3	0	0	0	0	0	0
243+81 - 252+50	LT & RT	580	713	308	0	0	0	4	0	0	0	237	0	0
MACARTHUR WAY	LT & RT	0	0	0	0	0	0	0	0	0	0	0	19	0
TOMMY'S TURNPIKE	LT & RT	0	0	0	0	0	0	0	0	0	0	0	29	0
W CEDAR ST	LT & RT	0	0	0	0	0	0	0	0	0	0	0	0	0
WINTER SHUTDOWN SUBTOTALS		7824	4363	1447	0	0	0	24	0	1	0	1052	48	0
6414-00-80 SUBTOTAL		36644		2979	25205		2429	40	28	2	0	1052	195	319
6414-00-81														
STAGE 1														
BUSINESS 51														
252+50 - 260+71	LT & RT	1554	26	141	0	0	0	2	0	0	0	0	0	0
260+71 - 281+00	LT & RT	3554	26	150	1821	48	584	1	1	0	0	0	0	0
WATER ST / CTH HH	LT & RT	1389	23	106	524	0	61	2	1	0	0	0	0	0
MCDILL AVE / CTH HH	LT & RT	1218	26	196	501	0	0	4	0	0	0	0	0	0
STAGE 1 SUBTOTAL		7715	101	593	2846	48	645	9	2	0	0	0	0	0
STAGE 2A														
BUSINESS 51														
252+50 - 260+71	LT & RT	1764	789	88	0	0	0	2	0	0	0	0	23	0
260+71 - 281+00	LT & RT	3542	1500	99	264	455	838	2	2	0	1	0	0	0
WATER ST / CTH HH	LT & RT	1412	1384	98	800	150	0	2	0	0	0	0	0	0
MCDILL AVE / CTH HH	LT & RT	1442	798	210	1206	655	0	2	0	1	0	0	22	0
STAGE 2A SUBTOTAL		8160	4471	495	2270	1260	838	8	2	1	1	0	45	0
STAGE 3A														
BUSINESS 51														
252+50 - 260+71	LT & RT	0	0	0	1504	878	130	0	3	0	0	0	0	23
260+71 - 281+00	LT & RT	0	0	0	4480	2904	515	0	4	0	2	0	0	44
WATER ST / CTH HH	LT & RT	1052	679	142	799	274	0	2	0	1	0	0	28	0
MCDILL AVE / CTH HH	LT & RT	692	926	156	1090	1278	156	1	1	1	0	0	30	24
STAGE 3A SUBTOTAL		1744	1605	298	7873	5334	801	3	8	2	2	0	58	91
STAGE 3A-2														
BUSINESS 51														
252+50 - 260+71	LT & RT	0	0	0	138	126	69	0	3	0	1	0	0	46
260+71 - 281+00	LT & RT	0	0	0	0	168	84	0	3	0	0	0	0	46
WATER ST / CTH HH	LT & RT	0	0	0	1344	1279	106	0	2	0	0	0	0	22
MCDILL AVE / CTH HH	LT & RT	0	0	0	1892	565	231	0	2	0	0	0	0	26
STAGE 3A-2 SUBTOTAL		0	0	0	3374	2138	490	0	10	0	1	0	0	140

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

TEMPORARY MARKING (CONTINUED)

STATION - STATION	LOCATION	649.0105* TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW) LF	649.0105* TEMPORARY MARKING LINE PAINT 4-INCH (WHITE) LF	649.0205 TEMPORARY MARKING LINE PAINT 8-INCH (WHITE) LF	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW) LF	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE) LF	649.0250 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE) LF	649.0505 TEMPORARY MARKING ARROW PAINT EACH	649.0550 TEMPORARY MARKING ARROW REMOVABLE TAPE EACH	649.0605 TEMPORARY MARKING WORD PAINT EACH	649.0650 TEMPORARY MARKING WORD REMOVABLE TAPE EACH	649.0905 TEMPORARY MARKING DIAGONAL PAINT 12-INCH (YELLOW) LF	649.0805 TEMPORARY MARKING STOP LINE PAINT 18-INCH LF	649.0850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF
STAGE 4A														
BUSINESS 51														
252+50 - 260+71	LT & RT	0	0	0	1637	1093	560	0	4	0	1	0	0	22
260+71 - 281+00	LT & RT	0	0	0	4433	414	394	0	6	0	0	0	0	24
WATER ST / CTH HH	LT & RT	0	0	0	1862	1478	0	0	2	0	0	0	0	26
MCDILL AVE / CTH HH	LT & RT	0	0	0	2685	867	0	0	2	0	0	0	0	46
STAGE 4A SUBTOTAL		0	0	0	10617	3852	954	0	14	0	1	0	0	118
STAGE 4B														
BUSINESS 51														
252+50 - 260+71	LT & RT	0	0	0	960	82	155	0	2	0	0	0	0	14
260+71 - 281+00	LT & RT	0	0	0	580	0	125	0	0	0	0	0	0	0
WATER ST / CTH HH	LT & RT	0	0	0	0	0	0	0	0	0	0	0	0	23
MCDILL AVE / CTH HH	LT & RT	0	0	0	0	0	0	0	0	0	0	0	0	0
STAGE 4B SUBTOTAL		0	0	0	1540	82	280	0	2	0	0	0	0	37
STAGE 4C														
BUSINESS 51														
252+50 - 260+71	LT & RT	0	0	0	259	0	0	0	0	0	0	0	0	0
260+71 - 281+00	LT & RT	0	0	0	0	0	0	0	0	0	0	0	0	0
WATER ST / CTH HH	LT & RT	0	0	0	216	110	35	0	1	0	0	0	0	10
MCDILL AVE / CTH HH	LT & RT	0	0	0	785	124	0	0	2	0	0	0	0	0
STAGE 4C SUBTOTAL		0	0	0	1260	234	35	0	3	0	0	0	0	10
WINTER SHUTDOWN														
BUSINESS 51														
252+50 - 260+71	LT & RT	940	1389	519	0	0	0	4	0	1	0	228	0	0
260+71 - 281+00	LT & RT	6034	4252	213	0	0	0	2	0	0	0	409	0	0
WATER ST / CTH HH	LT & RT	3414	1288	191	0	0	0	2	0	0	0	336	0	0
MCDILL AVE / CTH HH	LT & RT	2140	980	179	0	0	0	2	0	2	0	555	0	0
WINTER SHUTDOWN SUBTOTALS		12528	7909	1102	0	0	0	10	0	3	0	1528	0	0
6414-00-81 SUBTOTAL		44233		2488	42728		4043	30	41	6	5	1528	103	396
ITEM TOTAL		80877		5467	67933	0	6472	70	69	8	5	2580	298	715

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

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PAVEMENT MARKING

STATION - STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH (YELLOW) LF	646.1020 MARKING LINE EPOXY 4-INCH (WHITE) LF	646.3020 MARKING LINE EPOXY 8-INCH (WHITE) LF	646.5020 MARKING ARROW EPOXY (TYPE 2) EACH	646.5020 MARKING ARROW EPOXY (BIKE LANE) EACH	646.5120 MARKING WORD EPOXY (ONLY) EACH	646.5220 MARKING SYMBOL EPOXY (BICYCLE) EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE LINE 6-INCH LF	646.8120 MARKING CURB EPOXY LF	646.8220 MARKING ISLAND NOSE EPOXY EACH
6414-00-80													
BUSINESS 51													
208+50 - 213+95	LT & RT	1943	455	0	0	0	0	0	0	139	0	0	0
213-95 - 220+45	LT & RT		1253	646	5	0	2	0	45	0	155	136	4
220+45 - 237+30	LT & RT		3767	705	11	0	1	0	45	0	155	465	10
237+30 - 243+81	LT & RT		1270	278	3	0	0	0	0	0	144	179	4
243+81 - 252+50	LT & RT		1831	258	4	0	0	0	0	0	115	236	5
HICKORY DR	LT & RT		0	0	0	0	0	0	0	0	103	0	0
PORTER DR	LT & RT	226	161	347	4	2	2	2	44	0	152	38	2
TOMMY'S TURNPIKE	LT & RT	1710	155	432	4	2	2	2	44	153	152	50	2
E CEDAR ST	LT & RT		0	0	0	0	0	0	0	0	99	0	0
W CEDAR ST	LT & RT		0	0	0	0	0	0	0	0	102	0	0
WILLOW ST (SOUTH LEG)	LT & RT		0	0	0	0	0	0	0	0	95	0	0
WILLOW ST (NORTH LEG)	LT & RT		0	0	0	0	0	0	0	0	89	0	0
ELM ST	LT & RT		0	0	0	0	0	0	0	0	90	0	0
6414-00-80 SUBTOTAL		3879	8892	2666	31	4	7	4	178	292	1451	1104	27
6414-00-81													
BUSINESS 51													
252+50 - 260+71	LT & RT		1976	402	5	0	3	0	33	0	163	75	3
260+71 - 281+00	LT & RT	175	4328	385	4	0	2	0	35	0	281	151	5
MCDILL AVE / CTH HH	LT & RT		1285	335	4	5	2	5	53	0	182	88	4
WATER ST / CTH HH	LT & RT		1620	361	2	6	0	6	60	0	201	62	3
BOAT LANDING			650										
6414-00-81 SUBTOTAL		175	9859	1483	15	11	7	11	181	0	827	376	15
SUBTOTAL		4054	18751	4149	46	15	14	15	359	292	2278	1480	42
ITEM TOTAL		22805		4149	61		14	15	359	292	2278	1480	42

CONSTRUCTION STAKING STORM SEWER

STATION	LOCATION	650.4000 EACH
PROJECT 6414-00-80		
STAGE 1		
208+75.50	RT	1
208+97.10	RT	1
208+97.10	RT	1
210+42.00	RT	1
210+42.00	RT	1
212+02.75	RT	1
212+03.62	RT	1
213+45.80		1
213+50.60	RT	1
214+43.60	RT	1
214+48.69	LT	1
214+64.18	LT	1
STAGE 1 SUBTOTAL		12
STAGE 2		
214+69.18	RT	1
214+69.18	RT	1
214+69.18	RT	1
214+74.18	RT	1
216+02.79	RT	1
216+04.00	RT	1
217+58.80	RT	1
217+68.80	RT	1
217+72.58	RT	1
219+66.56	RT	1
220+47.27	RT	1
221+50.31	RT	1
221+50.31	RT	1
221+60.31	RT	1
223+25.00	RT	1
223+25.00	RT	1
224+53.00	RT	1
224+64.00	RT	1
226+30.00	RT	1
230+00.00	RT	1
230+10.43	RT	1
231+58.21	RT	1
231+58.21	RT	1
232+43.87	RT	1
232+43.87	RT	1
233+64.77	RT	1
233+84.77	RT	1
233+84.77	RT	1
234+94.37	RT	1
235+14.37	RT	1
235+19.83	RT	1
236+72.15	RT	1
237+48.79	RT	1
238+02.78	RT	1
238+02.78	RT	1
238+76.26	RT	1
238+76.26	RT	1
238+86.26	RT	1
240+25.00	RT	1
240+25.00	RT	1
241+63.45	RT	1
241+63.45	RT	1
243+34.80	RT	1
243+34.80	RT	1
243+66.80	RT	1
244+99.26	RT	1
244+99.26	RT	1
246+24.00	RT	1
246+24.00	RT	1
247+76.74	RT	1
247+76.74	RT	1
250+26.00	RT	1

CONSTRUCTION STAKING STORM SEWER (CONT'D)

STATION	LOCATION	650.4000 EACH
250+85.37	RT	1
251+40.00	RT	1
251+40.00	RT	1
252+49.83	RT	1
252+49.83	RT	1
HICKORY DRIVE		
80+47.24	LT	1
80+54.13	RT	1
PORTER ROAD		
800+57.73	LT	1
800+51.70	RT	1
800+67.13	RT	1
801+92.00	LT	1
801+92.00	RT	1
802+02.00	LT	1
802+02.00	LT	1
802+02.00	RT	1
802+02.00	RT	1
802+02.00	RT	1
E CEDAR STREET		
85+75.69	RT	1
86+00.00	LT	1
86+00.00	RT	1
86+75.37	RT	1
88+05.95	RT	1
88+06.38	RT	1
LOCUST STREET		
10+16.79	LT	1
10+21.94	RT	1
WILLOW ST (E)		
90+54.66	LT	1
90+65.00	RT	1
BEECH STREET		
21+00.00	RT	1
21+38.01	LT	1
E ELM STREET		
95+69.42	LT	1
95+69.42	RT	1
STAGE 2 SUBTOTAL		83
STAGE 3		
214+54.18	LT	1
214+64.18	LT	1
214+74.18	LT	1
215+97.56	LT	1
215+99.10	LT	1
216+00.00	LT	1
217+21.45	LT	1
217+28.95	LT	1
217+74.23	LT	1
217+77.84	LT	1
217+84.92	LT	1
218+38.02	LT	1
218+94.00	LT	1
219+60.00	LT	1
219+66.56	LT	1
219+66.56	LT	1
220+44.26	LT	1
221+02.24	LT	1
221+50.31	LT	1
221+50.31	LT	1
221+50.96	LT	1
221+60.92	LT	1
223+25.00	LT	1
224+50.00	LT	1
224+70.94	LT	1
226+30.00	LT	1
226+30.00	LT	1
227+29.04	LT	1
227+29.04	LT	1

CONSTRUCTION STAKING STORM SEWER (CONT'D)

STATION	LOCATION	650.4000 EACH
230+09.87	LT	1
230+10.43	LT	1
230+10.43	LT	1
231+58.21	LT	1
231+91.07	LT	1
232+50.00	LT	1
232+50.00	LT	1
232+50.00	LT	1
232+63.62	LT	1
233+84.77	LT	1
233+85.32	LT	1
233+85.32	LT	1
234+30.37	LT	1
234+86.63	LT	1
235+30.00	LT	1
235+30.00	LT	1
235+30.00	LT	1
236+79.28	LT	1
236+79.32	LT	1
236+91.79	LT	1
238+76.26	LT	1
238+76.26	LT	1
238+76.26	LT	1
238+86.26	LT	1
239+00.00	LT	1
239+87.10	LT	1
240+25.00	LT	1
240+25.00	LT	1
240+25.00	LT	1
243+29.61	LT	1
243+32.67	LT	1
243+44.57	LT	1
243+60.00	LT	1
244+99.26	LT	1
244+99.26	LT	1
244+99.26	LT	1
244+99.26	LT	1
245+25.00	LT	1
246+24.00	LT	1
247+76.74	LT	1
247+76.74	LT	1
247+76.74	LT	1
250+21.62	LT	1
250+21.62	LT	1
250+26.00	LT	1
250+26.00	LT	1
250+81.15	LT	1
252+49.83	LT	1
252+49.83	LT	1
TOMMY'S TURNPIKE		
796+35.00	LT	1
796+73.04	RT	1
796+73.04	RT	1
797+40.00	LT	1
797+59.90	RT	1
797+92.00	LT	1
797+92.00	RT	1
797+92.00	RT	1
798+87.23	LT	1
799+00.00	LT	1
799+00.00	LT	1
799+00.00	RT	1
799+03.11	RT	1
799+07.33	RT	1

CONSTRUCTION STAKING STORM SEWER (CONT'D)

STATION	LOCATION	650.4000 EACH
W CEDAR STREET		
83+79.82	RT	1
84+18.96	LT	1
WILLOW STREET (W)		
89+16.51	RT	1
89+23.07	LT	1
STAGE 3 SUBTOTAL		95
PROJECT 6414-00-80 SUBTOTAL		190
PROJECT 6414-00-81		
STAGE 2		
252+69.83	RT	1
252+73.83	RT	1
253+65.00	RT	1
253+65.00	RT	1
253+84.75	RT	1
254+25.00	RT	1
255+74.87	RT	1
256+65.00	RT	1
258+55.18	RT	1
258+65.00	RT	1
258+65.00	RT	1
258+74.82	RT	1
260+00.00	RT	1
260+36.83	RT	1
263+25.00	RT	1
265+32.96	RT	1
265+33.02	RT	1
267+14.62	RT	1
267+14.89	RT	1
268+78.49	RT	1
268+78.71	RT	1
270+34.75	RT	1
270+34.75	RT	1
271+84.55	RT	1
271+84.55	RT	1
273+96.51	RT	1
273+96.51	RT	1
274+59.20	RT	1
275+49.55	RT	1
275+49.55	RT	1
276+99.55	RT	1
276+99.55	RT	1
278+49.55	RT	1
278+49.55	RT	1
279+99.69	RT	1
MCDILL AVENUE		
900+74.05	RT	1
900+81.74	RT	1
901+00.00	LT	1
901+00.00	LT	1
901+00.00	LT	1
901+13.39	RT	1
901+13.40	RT	1
901+55.33	LT	1
901+55.33	LT	1
902+00.99	RT	1
902+00.99	RT	1
902+00.99	LT	1
902+00.99	LT	1

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

CONSTRUCTION STAKING STORM SEWER (CONT'D)

STATION	LOCATION	650.4000 EACH
902+01.00	LT	1
902+95.61	RT	1
902+95.61	RT	1
902+95.61	LT	1
902+95.61	LT	1
902+95.61	LT	1
904+19.94	RT	1
904+20.22	LT	1
904+31.78	RT	1
904+34.62	LT	1
904+34.70	LT	1
906+06.57		1
LOCUST STREET		
99+55.70	LT	1
99+55.70	RT	1
100+50.00	LT	1
100+50.00	RT	1
STAGE 2 SUBTOTAL		64
STAGE 3		
252+79.92	LT	1
253+16.22	LT	1
253+16.22	LT	1
253+65.00	LT	1
253+65.00	LT	1
254+24.97	LT	1
254+59.83	LT	1
255+66.07	LT	1
256+00.00	LT	1
256+00.00	LT	1
256+03.49	LT	1
256+65.00	LT	1
256+65.00	LT	1
256+65.00	LT	1
256+65.15	LT	1
258+53.27	LT	1
258+53.27	LT	1
258+53.52	LT	1
258+65.00	LT	1
258+65.00	LT	1
263+22.57	LT	1
263+22.57	LT	1
263+22.57	LT	1
263+25.00	LT	1
263+25.00	LT	1
265+33.03	LT	1
265+33.07	LT	1
265+33.17	LT	1
267+14.98	LT	1
267+15.23	LT	1
267+15.61	LT	1
268+79.28	LT	1
268+78.96	LT	1
268+78.79	LT	1

CONSTRUCTION STAKING STORM SEWER (CONT'D)

STATION	LOCATION	650.4000 EACH
270+34.75	LT	1
270+34.75	LT	1
270+34.75	LT	1
271+80.66	LT	1
271+80.66	LT	1
271+84.55	LT	1
273+96.51	LT	1
273+96.51	LT	1
273+96.51	LT	1
274+05.18	LT	1
274+59.20	LT	1
275+49.55	LT	1
275+49.55	LT	1
275+49.55	LT	1
276+99.55	LT	1
276+99.55	LT	1
276+99.55	LT	1
278+49.55	LT	1
278+49.55	LT	1
278+49.55	LT	1
CTH HH		
893+84.96	RT	1
893+84.98	LT	1
893+84.98	LT	1
893+85.00	LT	1
895+78.00	RT	1
895+78.00	LT	1
895+78.00	LT	1
895+78.00	LT	1
898+23.15	LT	1
898+31.98	LT	1
898+31.98	LT	1
898+34.40	RT	1
898+37.23	LT	1
898+37.23	LT	1
898+58.45	LT	1
898+73.38	LT	1
STAGE 3 SUBTOTAL		70
PROJECT 6414-00-81 SUBTOTAL		134
ITEM TOTALS		324

CONSTRUCTION STAKING BASE

STATION	LOCATION	650.5000 LF
PROJECT 6414-00-80		
STAGE 2		
208+50.00 - 211+57.50	RT	308
HICKORY DRIVE		
80+67.94 - 81+65.00	LT & RT	97
PORTER ROAD		
802+30.90 - 803+47.88	LT & RT	117
E CEDAR STREET		
85+64.62 - 88+30.00	LT & RT	265
LOCUST STREET		
10+08.26 - 11+83.80	LT & RT	176
WILLOW STREET E		
90+70.25 - 92+12.27	LT & RT	142
BEECH STREET		
20+67.50 - 21+85.00	LT & RT	118
E ELM STREET		
95+66.15 - 96+60.00	LT & RT	94
STAGE 2 SUBTOTAL		1317
STAGE 3		
208+50.00 - 214+37.79	LT	588
TOMMY'S TURNPIKE		
793+59.50 - 797+95.81	LT & RT	436
THEATER DRIVE		
59+00.00 - 59+70.66	LT & RT	71
W CEDAR STREET		
83+00.00 - 84+06.02	LT & RT	106
WILLOW STREET		
88+00.00 - 89+11.30	LT & RT	111
STAGE 3 SUBTOTAL		1312
PROJECT 6414-00-80 SUBTOTAL		2629
PROJECT 6414-00-81		
STAGE 2		
LOCUST STREET		
100+57.29 -100+80.00	LT & RT	23
STAGE 2 SUBTOTAL		23
STAGE 3		
LOCUST STREET		
99+10.00 - 99+49.54	LT & RT	40
STAGE 3 SUBTOTAL		40
PROJECT 6414-00-81 SUBTOTAL		63
ITEM TOTAL		2692

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

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CONSTRUCTION STAKING

STATION	LOCATION	650.5500 CURB GUTTER AND CURB & GUTTER LF
PROJECT 6414-00-80		
STAGE 1C		
206+82.6 - 208+10.0	LT	132
208+52.5 - 210+41.5	LT	194
STAGE 1C SUBTOTAL		326
STAGE 2		
HICKORY DRIVE		
80+67.94 - 81+45.00	LT & RT	141
PORTER ROAD		
802+30.90 - 803+30.00	LT & RT	189
E CEDAR STREET		
85+64.62 - 86+30.00	LT & RT	132
LOCUST STREET		
10+09.96 - 11+50.00	LT & RT	298
WILLOW STREET E		
90+70.25 - 92+03.67	LT & RT	280
BEECH STREET		
20+68.00 - 21+43.81	LT & RT	199
E ELM STREET		
95+66.15 - 96+50.00	LT & RT	168
STAGE 2 SUBTOTAL		1407
STAGE 3		
TOMMY'S TURN PIKE		
793+83.46 - 797+95.81	LT & RT	809
W CEDAR STREET		
83+30.00 - 84+06.02	LT & RT	152
WILLOW STREET		
88+22.00 - 89+11.30	LT & RT	178
STAGE 3 SUBTOTAL		1139
PROJECT 6414-00-80 SUBTOTAL		2872
PROJECT 6414-00-81		
STAGE 2		
LOCUST STREET		
100+37.05 -100+57.29	LT & RT	52
STAGE 2 SUBTOTAL		52
STAGE 3		
LOCUST STREET		
99+49.54- 99+68.09	LT & RT	46
STAGE 3 SUBTOTAL		46
PROJECT 6414-00-81 SUBTOTAL		98
ITEM TOTAL		2970

CONSTRUCTION STAKING

STATION	LOCATION	650.6500 STRUCTURE LAYOUT B-49-67 LS
PROJECT 6414-00-81	LT & RT	1
PROJECT 6414-00-81 SUBTOTAL		1
ITEM TOTAL		1

CONSTRUCTION STAKING CONCRETE PAVEMENT

STATION	LOCATION	650.7000 LF
PROJECT 6414-00-80		
STAGE 2		
211+57.50 - 220+95.41	RT	938
220+95.41 -237+75.14	RT	1680
237+75.14 - 252+50.00	RT	1475
HICKORY DRIVE		
80+00.00 - 80+67.94	LT & RT	68
PORTER ROAD		
800+00.00 - 802+30.90	LT & RT	31
E CEDAR STREET		
85+00.00 - 85+64.62	LT & RT	65
WILLOW STREET E		
89+11.30 - 90+00.00	LT & RT	89
E ELM STREET		
95+00.00 - 95+66.15	LT & RT	66
STAGE 2 SUBTOTAL		4412
STAGE 3		
211+57.50 - 220+95.41	LT	938
220+95.41 -237+75.14	LT	1680
237+75.14 - 252+50.00	LT	1475
TOMMY'S TURNPIKE		
797+95.81 - 800+00.00	LT & RT	204
W CEDAR STREET		
84+06.02 - 85+00.00	LT & RT	94
WILLOW STREET		
90+00.00 - 90+70.25	LT & RT	70
STAGE 3 SUBTOTAL		4461
PROJECT 6414-00-80 SUBTOTAL		8873
PROJECT 6414-00-81		
STAGE 2		
252+50 - 263+67.82	RT	1118
264+81.27 - 281+01.00	RT	1620
CTH HH		
892+02.00 - 900+00.00	LT	798
MCDILL AVENUE		
900+00.00 - 907+38.63	LT	739
LOCUST STREET		
100+00.00 -100+57.29	LT & RT	57
STAGE 2 SUBTOTAL		4332
STAGE 3		
252+50 - 263+67.82	LT	1118
264+81.27 - 281+01.00	LT	1620
CTH HH		
892+02.00 - 900+00.00	RT	798
MCDILL AVENUE		
900+00.00 - 907+38.63	RT	739
LOCUST STREET		
99+49.54 - 100+00.00	LT & RT	50
STAGE 3 SUBTOTAL		4325
PROJECT 6414-00-81 SUBTOTAL		8657
ITEM TOTAL		17530

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

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CONSTRUCTION STAKING

STATION	LOCATION	650.9000 CURB RAMPS EACH
PROJECT 6414-00-80	LT & RT	29
PROJECT 6414-00-80 SUBTOTAL		29
PROJECT 6414-00-81	LT & RT	28
PROJECT 6414-00-81 SUBTOTAL		28
ITEM TOTAL		57

CONSTRUCTION STAKING

STATION	LOCATION	650.9910 SUPPLEMENTAL CONTROL (PROJECT) LS
PROJECT 6414-00-80 208+50.00 - 252+50.00	LT & RT	1
PROJECT 6414-00-80 SUBTOTAL		1
PROJECT 6414-00-81 252+50 - 281+01.00	LT & RT	1
PROJECT 6414-00-81 SUBTOTAL		1
ITEM TOTAL		2

CONDUIT

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
PROJECT 6414-00-80			
BUS 51 & TOMMY'S TURNPIKE			
CB1	PB1	--	39
PB1	PB2	215	--
PB1	PB3	--	48
PB1	PB4	--	162
PB4	PB5	--	80
PB5	PB6	--	72
PB6	PB7	--	100
PB7	PB8	--	44
PB8	PB9	68	--
PB8	PB10	--	90
PB10	PB11	--	86
PB11	PB12	--	72
PB12	PB13	226	--
PB12	PB14	--	36
PB12	PB15	--	140
PB15	PB16	--	80
PB16	PB17	--	104
PB17	PB18	--	50
PB18	PB19	--	40
PB19	PB20	71	--
PB19	PB21	--	90
PB21	PB22	--	86
PB22	CB1	--	69
PB3	SB1	15	--
PB3	SB2	5	--
PB4	SB3	26	--
PB5	SB4	12	--
PB6	SB5	11	--
PB6	SB6	20	--
PB10	SB7	14	--
PB12	LB1	24	--
PB14	SB8	7	--
PB14	SB9	18	--
PB15	SB10	22	--
PB16	SB11	7	--
PB17	SB12	6	--
PB21	SB13	14	--
PB22	LB2	13	--
PEDESTRIAN CROSSINGS			
PB1	SB1	42	--
PB1	SB2	10	--
PB1	SB3	55	--
PB2	SB4	52	--
PB2	SB5	4	--
PB2	SB6	49	--
PROJECT 6414-00-80 SUBTOTAL		1006	1488

FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
PROJECT 6414-00-81			
BUS 51 & CTH HH			
CB1	PB1	--	42
PB1	PB2	20	--
PB1	PB3	--	88
PB3	PB4	170	--
PB3	PB5	--	92
PB5	PB6	--	38
PB6	PB7	--	132
PB7	PB8	--	44
PB8	PB9	73	--
PB9	STRUCUTRE	31	--
PB7	PB10	--	82
PB10	PB11	--	40
PB11	PB12	--	78
PB12	PB13	--	226
PB13	PB14	195	--
PB13	PB15	--	96
PB15	PB16	--	40
PB16	PB17	--	74
PB17	PB18	21	--
PB18	PB19	--	44
PB19	PB20	190	--
PB18	PB21	--	90
PB21	PB22	--	40
PB22	PB23	--	76
PB23	PB24	--	76
PB24	CB1	--	39
PB1	SB1	12	--
PB5	SB2	24	--
PB6	SB3	5	--
PB7	SB4	20	--
PB7	SB5	12	--
PB10	SB6	22	--
PB11	SB7	6	--
PB12	SB8	24	--
PB12	SB9	38	--
PB13	SB10	31	--
PB15	SB11	23	--
PB16	SB12	6	--
PB17	SB13	10	--
PB18	SB14	14	--
PB21	SB15	21	--
PB22	SB16	10	--
PB23	SB17	17	--
PB24	SB18	11	--
PEDESTRIAN CROSSINGS			
PB3	SB7	43	--
PB3	SB8	6	--
PB3	SB9	14	--
PB3	SB10	44	--
PROJECT 6414-00-81 SUBTOTAL		1113	1437
ITEM TOTAL		2119	2925

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

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LOOP DETECTOR SCHEDULE

LOOP NUMBER	HOME RUN PB	STATION	LOCATION	SIZE (FT)X(FT)	NO. OF TURNS	PAVEMENT TYPE	652.0800 CONDUIT LOOP DETECTOR LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
PROJECT 6414-00-80									
BUS 51 & TOMMY'S TURNPIKE									
11	PB15	219+51.7	6.2' LT	6X20	3		66	275	198
12	PB15	219+79.7	6.0' LT	6X20	3		68	275	204
21	PB2	223+57.1	30.3' LT	6X6	4		86	252	344
22	PB2	223+53.2	42.6' LT	6X6	4		62	252	248
41	PB20	798+27.2	18.8' RT	6X30	3		90	209	270
42	PB19	799+8.5	31.9' RT	6X20	3		60	138	180
43	PB18	799+36.5	31.8' RT	6X20	3		68	158	204
44	PB19	799+6.2	16.1' RT	6X20	3		94	138	282
45	PB18	799+34.2	16.0' RT	6X20	3		98	158	294
46	PB21	799+4.5	5.1' RT	6X20	3		66	93	198
47	PB21	799+32.4	4.9' RT	6X20	3		94	93	282
51	PB4	221+37.2	17.9' LT	6X20	3		66	122	198
52	PB4	221+9.2	18.0' LT	6X20	3		76	122	228
61	PB13	217+31.7	6.6' RT	6X6	4		84	571	336
62	PB13	217+35.7	17.9' RT	6X6	4		62	571	248
81	PB9	801+48.7	18.4' LT	6X30	3		86	302	258
82	PB7	800+67.0	31.3' LT	6X20	3		64	212	192
83	PB7	800+39.0	31.1' LT	6X20	3		64	212	192
84	PB7	800+69.4	16.1' LT	6X20	3		94	212	282
85	PB7	800+41.5	16.0' LT	6X20	3		92	212	276
86	PB10	800+71.2	5.1' LT	6X20	3		78	279	234
87	PB10	800+43.2	5.0' LT	6X20	3		94	279	282
PROJECT 6414-00-80 SUBTOTAL							1212	3576	3782
PROJECT 6414-00-81									
BUS 51 & CTH HH									
11	PB5	259+85.6	13.6' LT	6X20	3		70	116	210
12	PB5	260+28.2	14.0' LT	6X20	3		68	116	204
21	JB1	264+19.1'SB'	6.3' LT	6X6	4		--	442	328
22	JB1	264+23.2'SB'	17.9' LT	6X6	4		--	442	240
31	PB22	900+75.4'WB'	13.7' RT	6X20	3		66	239	198
32	PB22	900+47.4'WB'	13.6' RT	6X20	3		68	239	204
41	PB10	897+19.0'EB'	1.2' LT	6X18	3		104	255	312
42	PB10	897+18.9'EB'	20.2' RT	6X15	3		58	255	174
43	PB11	898+92.1'EB'	5.5' RT	6X20	3		70	131	210
44	PB11	899+15.9'EB'	5.5' RT	6X20	3		74	131	222
45	PB9	898+98.0'EB'	16.5' RT	6X20	3		102	85	306
46	PB8	899+21.8'EB'	16.5' RT	6X20	3		108	61	324
47	PB9	899+7.0'EB'	32.1' RT	6X20	3		66	85	198
48	PB8	899+30.8'EB'	32.1' RT	6X20	3		72	61	216
51	PB17	262+2.2	14.2' LT	6X20	3		68	277	204
52	PB17	261+74.0	14.0' LT	6X20	3		70	277	210
61	PB2	257+58.6	6.5' RT	6X6	4		86	415	344
62	PB2	257+58.7	17.9' RT	6X6	4		64	415	256
71	PB11	898+83.4'EB'	13.2' LT	6X20	3		66	131	198
72	PB11	899+7.3'EB'	13.7' LT	6X20	3		66	131	198
81	PB20	902+38.4'WB'	0.3' LT	6X18	3		106	502	318
82	PB20	902+38.3'WB'	22.3' LT	6X15	3		60	502	180
83	PB21	900+67.5'WB'	5.4' LT	6X20	3		64	259	192
84	PB21	900+39.5'WB'	5.5' LT	6X20	3		72	259	216
85	PB21	900+63.0'WB'	16.4' LT	6X20	3		88	259	264
86	PB21	900+35.0'WB'	16.5' LT	6X20	3		104	259	312
87	PB19	900+56.7'WB'	31.9' LT	6X20	3		68	307	204
88	PB19	900+28.6'WB'	31.9' LT	6X20	3		72	307	216
PROJECT 6414-00-81 SUBTOTAL							1712	5135	5430
ITEM TOTAL							2924	8711	9212

PULL BOX

PULL BOX NUMBER	STATION	LOCATION	653.0164* PULL BOXES NON-CONDUCTIVE 24 X 42 - INCH EACH
PROJECT 6414-00-80			
BUS 51 & TOMMY'S TURNPIKE			
PB1	798+98.8	79.7' LT	1
PB2	223+50.5	66.0' LT	1
PB3	799+31.8	45.1' LT	1
PB4	221+39.2	6.6' LT	1
PB5	221+39.0	33.6' RT	1
PB6	221+2.9	34.6' RT	1
PB7	800+63.4	41.2' LT	1
PB8	800+85.1	41.3' LT	1
PB9	800+53.5	40.6' LT	1
PB10	800+85.1	4.2' RT	1
PB11	800+53.5	47.1' RT	1
PB12	219+54.4	52.5' RT	1
PB13	217+28.7	41.4' RT	1
PB14	219+86.0	35.8' RT	1
PB15	219+54.4	17.9' LT	1
PB16	219+54.4	58.1' LT	1
PB17	799+34.1	51.6' RT	1
PB18	799+10.8	43.5' RT	1
PB19	798+91.3	40.7' RT	1
PB20	798+20.0	42.2' RT	1
PB21	798+91.0	4.0' LT	1
PB22	798+88.6	47.2' LT	1
PEDESTRIAN CROSSINGS			
PB1	237+96.4	6.0' LT	1
PB2	250+34.8	16.1' LT	1
PROJECT 6414-00-80 SUBTOTAL			24
PROJECT 6414-00-81			
BUS 51 & CTH HH			
PB1	899+30.2'EB'	57.9' RT	1
PB2	899+15.1'EB'	44.5' RT	1
PB3	898+89.5'EB'	42.1' RT	1
PB4	897+21.5'EB'	35.7' RT	1
PB5	898+86.5'EB'	4.0' LT	1
PB6	898+85.2'WB'	3.6' RT	1
PB7	261+89.5'SB'	37.0' LT	1
PB8	262+33.4'SB'	43.7' LT	1
PB9	263+7.0'SB'	33.2' LT	1
PB10	261+89.7'SB'	4.3' RT	1
PB11	261+98.9	4.1' LT	1
PB12	261+99.0	34.7'RT	1
PB13	900+54.9'WB'	42.5' LT	1
PB14	902+47.5'WB'	38.2' LT	1
PB15	900+67.0'WB'	4.0' RT	1
PB16	900+71.9'EB'	4.0' LT	1
PB17	900+76.3'EB'	35.6' RT	1
PB18	259+91.5	41.2' RT	1
PB19	259+47.9	52.5' RT	1
PB20	257+65.4	40.0' RT	1
PB21	259+90.8	4.0' LT	1
PB22	259+84.0'SB'	4.0' RT	1
PB23	259+83.6'SB'	34.2' LT	1
PB24	260+8.1'SB'	47.8' LT	1
PEDESTRIAN CROSSINGS			
PB3	269+15.6	10.2' LT	1
PROJECT 6414-00-81 SUBTOTAL			25
ITEM TOTAL			49

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

REMOVING PULL BOXES

EXISTING PULL BOX NUMBER	653.0905 REMOVE PULL BOXES EACH
PROJECT 6414-00-80	
BUS 51 & TOMMY'S TURNPIKE	
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
PB13	1
PB14	1
PROJECT 6414-00-80 SUBTOTAL	14
PROJECT 6414-00-81	
BUS 51 & CTH HH	
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
PB13	1
PB14	1
PB15	1
PROJECT 6414-00-81 SUBTOTAL	15
ITEM TOTAL	29

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

CONCRETE BASES

BASE NUMBER	STATION	LOCATION	654.0101 TYPE 1 EACH	654.0102 TYPE 2 EACH	654.0105 TYPE 5 EACH	654.0110 TYPE 10 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
PROJECT 6414-00-80							
BUS 51 & TOMMY'S TURNPIKE							
SB1	799+34.7	30.3' LT	1	--	--	--	--
SB2	799+30.3	40.5' LT	--	--	--	1	--
SB3	221+13.2	6.3' LT	--	1	--	--	--
SB4	221+27.6	34.6' RT	--	--	--	1	--
SB5	220+96.7	43.7' RT	1	--	--	--	--
SB6	220+86.0	44.6' RT	--	1	--	--	--
SB7	800+70.8	4.0' RT	1	--	--	--	--
SB8	800+44.6	40.9' RT	--	--	--	1	--
SB9	800+40.7	30.4' RT	1	--	--	--	--
SB10	219+76.0	93.3' LT	--	1	--	--	--
SB11	219+61.4	58.3' LT	--	--	--	1	--
SB12	799+39.4	54.6' RT	--	1	--	--	--
SB13	799+4.9	3.8' LT	1	--	--	--	--
LB1	800+76.3	55.4' RT	--	--	1	--	--
LB2	798+99.2	55.1' LT	--	--	1	--	--
CB1	798+89.5	70.1' LT	--	--	--	--	1
PEDESTRIAN CROSSINGS							
SB1	237+90.2	35.5' RT	1	--	--	--	--
SB2	238+6.2	5.7' LT	1	--	--	--	--
SB3	238+6.9	59.5' LT	1	--	--	--	--
SB4	250+26.9	35.6' RT	1	--	--	--	--
SB5	250+30.5	16.9' LT	1	--	--	--	--
SB6	250+14.7	60.6' LT	1	--	--	--	--
PROJECT 6414-00-80 SUBTOTAL			11	4	2	4	1
PROJECT 6414-00-81							
BUS 51 & CTH HH							
SB1	260+46.4'SB'	49.0' LT	--	1	--	--	--
SB2	899+10.9'EB'	3.8' LT	1	--	--	--	--
SB3	898+90.5'WB'	4.0' RT	--	1	--	--	--
SB4	898+81.3'WB'	32.3' LT	--	--	--	1	--
SB5	261+77.5'SB'	36.4' LT	--	1	--	--	--
SB6	261+67.8'SB'	4.0' RT	1	--	--	--	--
SB7	261+92.6	3.8' LT	--	1	--	--	--
SB8	261+75.4	34.2' RT	--	--	--	1	--
SB9	261+62.1	37.7' RT	1	--	--	--	--
SB10	900+24.2'WB'	44.8' LT	--	1	--	--	--
SB11	900+44.0'WB'	4.0' RT	1	--	--	--	--
SB12	900+65.9'EB'	4.0' LT	--	1	--	--	--
SB13	900+66.7'EB'	33.7' RT	--	--	--	1	--
SB14	260+4.5	36.2' RT	--	1	--	--	--
SB15	260+11.6	4.0' LT	1	--	--	--	--
SB16	259+93.9'SB'	4.0' RT	--	1	--	--	--
SB17	260+0.7'SB'	34.7' LT	--	--	--	1	--
SB18	260+15.7'SB'	37.8' LT	1	--	--	--	--
CB1	899+41.0'EB'	66.0' RT	--	--	--	--	1
PEDESTRIAN CROSSINGS							
SB7	269+18.4	32.9' RT	1	--	--	--	--
SB8	269+19.8	5.3' LT	1	--	--	--	--
SB9	269+11.0	5.2' RT	1	--	--	--	--
SB10	269+11.8	33.4' LT	1	--	--	--	--
PROJECT 6414-00-81 SUBTOTAL			10	8	0	4	1
*ITEM TOTAL			21	12	2	8	2

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

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
PROJECT 6414-00-80			
BUS 51 & TOMMY'S TURNPIKE			
SB1	HEAD 2-1	15	--
SB2	HEAD 1C	--	22
SB2	HEAD 2A	19	--
SB2	HEAD 8B	19	--
SB2	HEAD 8C	55	--
SB2	HEAD 8-4	15	--
SB3	HEAD 1B	--	22
SB3	HEAD 5A	--	22
SB3	HEAD 8-2	15	--
SB3	HEAD 8-3	15	--
SB4	HEAD 6B	45	--
SB4	HEAD 6C	58	--
SB4	HEAD 8-1		
SB5	HEAD 6-2	15	--
SB6	HEAD 4F	19	--
SB6	HEAD 8A	19	--
SB7	HEAD 4E	19	--
SB7	HEAD 8D	19	--
SB8	HEAD 4B	19	--
SB8	HEAD 4C	53	--
SB8	HEAD 5C	--	22
SB8	HEAD 6A	19	--
SB8	HEAD 4-4	15	--
SB9	HEAD 6-1	15	--
SB10	HEAD 1A	--	22
SB10	HEAD 5B	--	22
SB10	HEAD 4-2	15	--
SB10	HEAD 4-3	15	--
SB11	HEAD 2B	45	--
SB11	HEAD 2C	56	--
SB11	HEAD 4-1		
SB12	HEAD 4A	19	--
SB12	HEAD 8F	19	--
SB12	HEAD 2-2	15	--
SB13	HEAD 4D	19	--
SB13	HEAD 8E	19	--
PROJECT 6414-00-80 SUBTOTAL		690	132

TRAFFIC SIGNAL CABLE NO. 14 (ABOVE GROUND) (CONT'D)

FROM	TO	655.0230* CABLE TRAFFIC SIGNAL 5 - 14 AWG LF	655.0240 CABLE TRAFFIC SIGNAL 7 - 14 AWG LF
PROJECT 6414-00-81			
BUS 51 & CTH HH			
SB1	HEAD 2-2	15	--
SB1	HEAD 3C	--	22
SB1	HEAD 4A	19	--
SB2	HEAD 3B	--	22
SB3	HEAD 7A	--	22
SB4	HEAD 2-1	15	--
SB4	HEAD 8B	45	--
SB4	HEAD 8C	56	--
SB5	HEAD 1C	--	22
SB5	HEAD 2A	19	--
SB5	HEAD 8-2	15	--
SB6	HEAD 1B	--	22
SB7	HEAD 5A	--	22
SB8	HEAD 6B	44	--
SB8	HEAD 6C	56	--
SB9	HEAD 8-1	15	--
SB10	HEAD 6-4	15	--
SB10	HEAD 7C	--	22
SB10	HEAD 8A	19	--
SB11	HEAD 6-2	15	--
SB11	HEAD 6-3	15	--
SB11	HEAD 7B	--	22
SB12	HEAD 3A	--	22
SB13	HEAD 4B	42	--
SB13	HEAD 4C	55	--
SB13	HEAD 6-1	15	--
SB14	HEAD 4-2	15	--
SB14	HEAD 5C	--	22
SB14	HEAD 6A	19	--
SB15	HEAD 5B	--	22
SB16	HEAD 1A	--	22
SB17	HEAD 2B	45	--
SB17	HEAD 2C	56	--
SB18	HEAD 4-1	15	--
PROJECT 6414-00-81 SUBTOTAL		475	198
ITEM TOTAL		1165	330

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

TRAFFIC SIGNAL CABLE NO. 14 (BELOW GROUND)

FROM	TO	655.0230* CABLE TRAFFIC SIGNAL 5 - 14 AWG LF	655.0250 CABLE TRAFFIC SIGNAL 9 - 14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12 - 14 AWG LF	655.0270 CABLE TRAFFIC SIGNAL 15 -14 AWG LF
PROJECT 6414-00-80					
BUS 51 & TOMMY'S TURNPIKE					
CB1	SB1	118	--	--	--
CB1	SB2	--	--	--	108
CB1	SB3	--	--	164	-
CB1	SB4	--	179	--	-
CB1	SB5	257	--	--	-
CB1	SB6	--	266	--	-
CB1	SB7	--	425	--	-
CB1	SB8	--	--	--	516
CB1	SB9	527	--	--	-
CB1	SB10	--	--	393	-
CB1	SB11	--	322	--	-
CB1	SB12	--	--	253	-
CB1	SB13	--	123	--	-
PROJECT 6414-00-80 SUBTOTAL		902	1315	810	624
PROJECT 6414-00-81					
BUS 51 & CTH HH					
CB1	SB1	--	--	53	--
CB1	SB2	--	187	--	--
CB1	SB3	203	--	--	--
CB1	SB4	--	300	--	--
CB1	SB5	--	--	292	--
CB1	SB6	--	359	--	--
CB1	SB7	379	--	--	--
CB1	SB8	452	--	--	--
CB1	SB9	466	--	--	--
CB1	SB10	--	--	466	--
CB1	SB11	--	394		--
CB1	SB12	341	--	--	--
CB1	SB13	--	292	--	--
CB1	SB14	--	--	259	--
CB1	SB15	--	205	--	--
CB1	SB16	158	--	--	--
CB1	SB17	111	--	--	--
CB1	SB18	51	--	--	--
PROJECT 6414-00-81 SUBTOTAL		1999	1737	1070	0
ITEM TOTAL		2901	3052	1880	624

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

LIGHTING WIRE

FROM	TO	655.0320 CABLE TYPE UF 2 - 10 AWG GROUNDED LF	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF
PROJECT 6414-00-80			
BUS 51 & TOMMY'S TURNPIKE			
CB1	SB3	164	--
SB3	LUMIN	--	288
CB1	SB6	266	--
SB6	LUMIN	--	117
CB1	LB1	481	--
LB1	LUMIN	--	117
CB1	LB2	63	--
LB2	LUMIN	--	117
CB1	SB12	253	--
SB13	LUMIN	--	117
CB1	SB10	393	--
SB11	LUMIN	--	288
PROJECT 6414-00-80 SUBTOTAL		1620	1044
PROJECT 6414-00-81			
BUS 51 & CTH HH			
CB1	SB1	53	--
SB1	LUMIN	--	117
CB1	SB3	203	--
SB3	LUMIN	--	117
CB1	SB5	292	--
SB5	LUMIN	--	117
CB1	SB7	379	--
SB7	LUMIN	--	288
CB1	SB16	158	--
SB16	LUMIN	--	288
CB1	SB14	259	--
SB14	LUMIN	--	117
CB1	SB12	341	--
SB12	LUMIN	--	117
CB1	SB10	466	--
SB10	LUMIN	--	117
PROJECT 6414-00-81 SUBTOTAL		2151	1278
ITEM TOTAL		3771	2322

ELECTRIC WIRE TRAFFIC SIGNALS, NO. 10

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
PROJECT 6414-00-80		
BUS 51 & TOMMY'S TURNPIKE		
CB1	SB1	118
SB1	SB2	44
SB2	SB3	222
SB3	SB4	118
SB4	SB5	99
SB5	SB6	55
SB6	SB7	223
SB7	SB8	208
SB8	SB9	49
SB9	SB10	202
SB10	SB11	109
SB11	SB12	105
SB12	SB13	182
SB13	CB1	123
PROJECT 6414-00-80 SUBTOTAL		1857
PROJECT 6414-00-81		
BUS 51 & CTH HH		
CB1	SB1	53
SB1	SB2	182
SB2	SB3	88
SB3	SB4	131
SB4	SB5	56
SB5	SB6	115
SB6	SB7	88
SB7	SB8	109
SB8	SB9	86
SB9	SB10	222
SB10	SB11	142
SB11	SB12	89
SB12	SB13	93
SB13	SB14	85
SB14	SB15	120
SB15	SB16	91
SB16	SB17	105
SB17	SB18	106
SB18	CB1	51
PROJECT 6414-00-81 SUBTOTAL		2012
ITEM TOTAL		3869

ELECTRICAL SERVICE METER BREAKER PEDESTAL

BASE NUMBER	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS	656.0200.02 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS
PROJECT 6414-00-80		
BUS 51 & TOMMY'S TURNPIKE	1	--
PROJECT 6414-00-80 SUBTOTAL	1	
PROJECT 6414-00-81		
BUS 51 & CTH HH	--	1
PROJECT 6414-00-81 SUBTOTAL		1
TOTAL	1	1

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

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	657.0315 POLES TYPE 4 EACH	657.0322 POLES TYPE 5 ALUMINUM EACH	657.0410 TRAFFIC SIGNAL STANDARDS ALUMINUM 9 - FT EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13 - FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15 - FT EACH	657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FOOT EACH	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2 -INCH CLAMP 6-FOOT EACH	657.1345 INSTALL PCLES TYPE 9 EACH	657.1530 INSTALL MONOTUBE ARMS 30-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	659.1125 LUMINAIRES UTILITY LED C EACH
PROJECT 6414-00-80													
BUS 51 & TOMMY'S TURNPIKE													
SB1	1	--	--	--	1	--	--	--	--	--	--	1	--
SB2	--	--	--	--	--	--	--	--	--	1	1	1	--
SB3	--	1	1	--	--	--	--	2	--	--	--	--	2
SB4	--	--	--	--	--	--	--	--	--	1	1	1	--
SB5	1	--	--	--	1	--	--	--	--	--	--	1	--
SB6	--	1	1	--	--	--	--	1	--	--	--	--	1
SB7	1	--	--	--	--	1	--	--	--	--	--	--	--
SB8	--	--	--	--	--	--	--	--	--	1	1	1	--
SB9	1	--	--	--	1	--	--	--	--	--	--	1	--
SB10	--	1	1	--	--	--	--	2	--	--	--	--	2
SB11	--	--	--	--	--	--	--	--	--	1	1	1	--
SB12	--	1	1	--	--	--	--	1	--	--	--	1	1
SB13	1	--	--	--	--	1	--	--	--	--	--	--	--
LB1	--	1	--	1	--	--	--	--	1	--	--	--	1
LB2	--	1	--	1	--	--	--	--	1	--	--	--	1
PEDESTRIAN CROSSINGS													
SB1	1	--	--	--	--	--	1	--	--	--	--	--	--
SB2	1	--	--	--	--	--	1	--	--	--	--	--	--
SB3	1	--	--	--	--	--	1	--	--	--	--	--	--
SB4	1	--	--	--	--	--	1	--	--	--	--	--	--
SB5	1	--	--	--	--	--	1	--	--	--	--	--	--
SB6	1	--	--	--	--	--	1	--	--	--	--	--	--
PROJECT 6414-00-80 SUBTOTAL	11	6	4	2	3	2	6	6	2	4	4	8	8
PROJECT 6414-00-81													
BUS 51 & CTH HH													
SB1	--	1	1	--	--	--	--	1	--	--	--	1	1
SB2	1	--	--	--	--	--	1	--	--	--	--	1	--
SB3	--	1	1	--	--	--	--	1	--	--	--	--	1
SB4	--	--	--	--	--	--	--	--	--	1	1	1	--
SB5	--	1	1	--	--	--	--	1	--	--	--	1	1
SB6	1	--	--	--	--	--	1	--	--	--	--	1	--
SB7	--	1	1	--	--	--	--	2	--	--	--	--	2
SB8	--	--	--	--	--	--	--	--	--	1	1	--	--
SB9	1	--	--	--	1	--	--	--	--	--	--	1	--
SB10	--	1	1	--	--	--	--	1	--	--	--	1	1
SB11	1	--	--	--	--	--	1	--	--	--	--	1	--
SB12	--	1	1	--	--	--	--	1	--	--	--	--	1
SB13	--	--	--	--	--	--	--	--	--	1	1	1	--
SB14	--	1	1	--	--	--	--	1	--	--	--	1	1
SB15	1	--	--	--	--	--	1	--	--	--	--	1	--
SB16	--	1	1	--	--	--	--	2	--	--	--	--	2
SB17	--	--	--	--	--	--	--	--	--	1	1	--	--
SB18	1	--	--	--	1	--	--	--	--	--	--	1	--
PEDESTRIAN CROSSINGS													
SB7	1	--	--	--	--	--	1	--	--	--	--	--	--
SB8	1	--	--	--	--	--	1	--	--	--	--	--	--
SB9	1	--	--	--	--	--	1	--	--	--	--	--	--
SB10	1	--	--	--	--	--	1	--	--	--	--	--	--
PROJECT 6414-00-81 SUBTOTAL	10	8	8	0	2	0	8	10	0	4	4	12	10
ITEM TOTAL	21	14	12	2	5	2	14	16	2	8	8	20	18

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

3

TRAFFIC SIGNAL AND PEDESTRIAN FACES, AND BACKPLATES

SIGNAL HEAD NUMBER	SIGNAL BASE NUMBER	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH
PROJECT 6414-00-80 BUS 51 & TOMMY'S TURNPIKE				
1A	SB10	--	1	--
1B	SB3	--	1	--
1C	SB2	--	1	--
2A	SB2	1	--	--
2B	SB11	1	--	--
2C	SB11	1	--	--
4A	SB12	1	--	--
4B	SB8	1	--	--
4C	SB8	1	--	--
4D	SB13	1	--	--
4E	SB7	1	--	--
4F	SB6	1	--	--
5A	SB3	--	1	--
5B	SB10	--	1	--
5C	SB1	--	1	--
6A	SB8	1	--	--
6B	SB4	1	--	--
6C	SB4	1	--	--
8A	SB6	1	--	--
8B	SB2	1	--	--
8C	SB2	1	--	--
8D	SB7	1	--	--
8E	SB13	1	--	--
8F	SB12	1	--	--
2-1	SB1	--	--	1
2-2	SB12	--	--	1
4-1	SB11	--	--	1
4-2	SB10	--	--	1
4-3	SB10	--	--	1
4-4	SB8	--	--	1
6-1	SB9	--	--	1
6-2	SB5	--	--	1
8-1	SB4	--	--	1
8-2	SB3	--	--	1
8-3	SB3	--	--	1
8-4	SB2	--	--	1
PROJECT 6414-00-80 SUBTOTAL		18	6	12

TRAFFIC SIGNAL AND PEDESTRIAN FACES, AND BACKPLATES (CONT'D)

SIGNAL HEAD NUMBER	SIGNAL BASE NUMBER	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH
PROJECT 6414-00-81 BUS 51 & CTH HH				
1A	SB16	--	1	--
1B	SB6	--	1	--
1C	SB5	--	1	--
2A	SB5	1	--	--
2B	SB17	1	--	--
2C	SB17	1	--	--
3A	SB12	--	1	--
3B	SB2	--	1	--
3C	SB1	--	1	--
4A	SB1	1	--	--
4B	SB13	1	--	--
4C	SB13	1	--	--
5A	SB7	--	1	--
5B	SB15	--	1	--
5C	SB14	--	1	--
6A	SB14	1	--	--
6B	SB8	1	--	--
6C	SB8	1	--	--
7A	SB3	--	1	--
7B	SB11	--	1	--
7C	SB10	--	1	--
8A	SB10	1	--	--
8B	SB4	1	--	--
8C	SB4	1	--	--
2-1	SB4	--	--	1
2-2	SB1	--	--	1
4-1	SB18	--	--	1
4-2	SB14	--	--	1
6-1	SB13	--	--	1
6-2	SB11	--	--	1
6-3	SB11	--	--	1
6-4	SB10	--	--	1
8-1	SB9	--	--	1
8-2	SB5	--	--	1
PROJECT 6414-00-81 SUBTOTAL		12	12	10
ITEM TOTAL		30	18	22

SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.01 SIGNAL MOUNTING HARDWARE LS	658.5069.02 SIGNAL MOUNTING HARDWARE LS
PROJECT 6414-00-80 BUS 51 & TOMMY'S TURNPIKE	1	--
PROJECT 6414-00-80 SUBTOTAL	1	
PROJECT 6414-00-81 BUS 51 & CTH HH	--	1
PROJECT 6414-00-81 SUBTOTAL		1
ITEM TOTAL	1	1

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0200.01 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS LS	661.0200.02 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS LS	661.0300 GENERATORS DAY
PROJECT 6414-00-80 BUS 51 & TOMMY'S TURNPIKE	1	--	2
PROJECT 6414-00-80 SUBTOTAL	1		2
PROJECT 6414-00-81 BUS 51 & CTH HH	--	1	2
PROJECT 6414-00-81 SUBTOTAL		1	2
ITEM TOTAL	1	1	4

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

SAWING

STATION	LOCATION	690.0150 ASPHALT LF	690.0250 * CONCRETE LF	COMMENT
PROJECT 6414-00-80				
STAGE 1				
208+67.0 - 211+48.9	LT	286		STAGE 1B
208+67.0 - 213+56.0	RT	510		STAGE 1B
215+88 - 217+32			144	STAGE 1 MEDIAN
217+04 - 220+16	LT		313	STAGE 1 WIDENING
221+05 - 223+18	LT		216	STAGE 1 WIDENING
217+61 - 219+87			318	STAGE 1 MEDIAN
220+70 - 220+83	LT		42	ISLAND
STAGE 1 SUBTOTAL		796	1033	
STAGE 2				
208+50	RT	25		
213+18.3 - 213+54.5	RT	43		
214+21.2 - 215+79.4	RT	161		
220+27	LT		10	
221+15	RT		3	
HICKORY DRIVE				
81+65.00	LT & RT	25		
PORTER ROAD				
803+47.88	LT & RT	40		
E CEDAR STREET				
88+30.00	LT & RT	24		
LOCUST STREET				
11+83.80	LT & RT	20		
WILLOW STREET E				
92+12.27	LT & RT	112		
BEECH STREET				
21+85.00	LT & RT	22		
E ELM STREET				
96+60.00	LT & RT	24		
DRIVEWAYS				
210+22.0	RT	20		
211+80.0	RT	40		
212+90.8	RT	41		
216+57.9	RT	13		
224+75.1	RT		24	
226+79.7	RT	35		
229+63.3	RT		17	
231+78.7	RT	63		
232+64.4	RT	84		
234+17.2	RT	102		
252+29.8	RT	113		
80+85.1	LT	53		
80+98.3	RT	20		
81+25.2	LT		18	
801+08.8	LT	31		
802+97.6	RT			
803+38.0	RT		5	
87+33.2	LT	23		
10+34.8	RT		22	
11+24.8	RT		17	
91+40.5	LT		10	
20+62.5	R/L	16		
21+01.0	LT		18	
96+06.6	LT	23		
STAGE 2 SUBTOTAL		1173	144	
STAGE 3				
208+50	LT	25		
215+98.5 - 216+46.7	LT	48		
222+34 - 223+53	LT	148		
233+19.7 - 235+56.5	LT	238		
237+80.1 - 241+90.5	LT	422		
242+69.6 - 243+60.3	LT	105		
244+27.7 - 247+49.3	LT	323		
248+98.5	LT		8	
250+21.7	LT		8	
TOMMY'S TURNPIKE				
793+59.50	LT & RT	24		
THEATER DRIVE				
59+00.00	LT & RT	38		
W CEDAR STREET				
83+00.00	LT & RT	20		
WILLOW STREET				
88+00.00	LT & RT	23		

SAWING (CONT'D)

STATION	LOCATION	690.0150 ASPHALT LF	690.0250 * CONCRETE LF	COMMENT
DRIVEWAYS				
214+08.0	LT	100		
217+56.8 - 219+15.9	LT	190		
229+04.4	LT		9	
230+37.4	LT	14		
231+68.8	LT	17		
232+22.3 - 233+07.3	LT	24		
236+73.5	LT		12	
248+30.0	LT	66		
249+58.6	LT	35		
251+05.7	LT	50		
794+54.0	RT	29		
795+51.2	RT		19	
795+87.0	LT	11		
795+54.1	LT	20		
59+00 - 59+49.99	LT	70		
83+88.1	LT	47		
88+71.8	RT	63		
88+76.7	LT	46		
STAGE 3 SUBTOTAL		2196	56	
PROJECT 6414-00-80 SUBTOTAL		4165	1233	
PROJECT 6414-00-81				
STAGE 1				
261+63 - 262+00	LT		70	ISLAND
279+97 - 283+42	LT		345	MEDIAN
CTH HH				
890+46'EB' - 899+10'EB'	LT MEDIAN		858	C & G
890+54'WB' - 891+46'WB'	RT MEDIAN		92	C & G
896+38'WB' - 899+10'WB'	LT MEDIAN		275	C & G
899+21'EB' - 899+39'EB'	RT		48	ISLAND
STAGE 1 SUBTOTAL			1688	
STAGE 2				
252+50 - 254+72.9	RT	225		
258+51.00 - 259+69.00	RT	148		MCDILL PARKING
281+01.00	RT	24	6	
CTH HH				
892+02.00	LT	24	6	
MCDILL AVENUE				
907+38.63	LT	24	6	
LOCUST STREET				
100+80.00	LT & RT	25		
DRIVEWAYS				
255+30.0	RT		111	
258+25.0	RT	35		
280+75.06	RT	31		
901+81.0	LT	59		
902+32.2	LT	24		
907+00.3	LT		23	
STAGE 2 SUBTOTAL		619	152	
STAGE 3				
278+84.7	LT	24		
CTH HH				
892+02.00	RT	24	6	
MCDILL AVENUE				
907+38.63	RT	24	5	
LOCUST STREET				
99+10.00	LT & RT	24		
DRIVEWAYS				
252+72.5	LT	25		
254+68.4	LT		14	
255+86.4	LT		22	
272+37.3	LT			
902+44.2	RT	26		
902+96.0	RT	16		
904+39.4	RT		17	
904+73.5	LT		3	
905+17.3	LT		4	
906+94.3	LT		4	
STAGE 3 SUBTOTAL		163	75	
PROJECT 6414-00-81 SUBTOTAL		782	1915	
ITEM TOTALS		4947	3148	

TEMPORARY CONNECTION TO STORM SEWER STRUCTURE

STATION	LOCATION	SPV.0060.47 EACH	COMMENT
PROJECT 6414-00-80			
STAGE 2			
214+48.7	3.4' LT	1	12-INCH
220+53.0	7.5' LT	1	12-INCH
220+53.0	7.5' LT	1	24-INCH
STAGE 2 SUBTOTAL		3	
PROJECT 6414-00-80 SUBTOTAL		3	
ITEM TOTAL		3	

CONNECTION TO EXISTING INLET OR MANHOLE

STATION	LOCATION	SPV.0060.48 EACH
PROJECT 6414-00-81		
STAGE 1		
MCDILL AVENUE		
901+91.6	13.8' RT	1
STAGE 1 SUBTOTAL		1
STAGE 2		
250+53.4	3.0' LT	1
STAGE 2 SUBTOTAL		1
PROJECT 6414-00-81 SUBTOTAL		2
ITEM TOTAL		2

RESIDENTIAL MANHOLE

STATION	LOCATION	SPV.0060.49 EACH
PROJECT 6414-00-80	UNDISTRIBUTED	3
PROJECT 6414-00-80 SUBTOTAL		3
PROJECT 6414-00-81	UNDISTRIBUTED	3
PROJECT 6414-00-81 SUBTOTAL		3
ITEM TOTAL		6

TEMPORARY CONNECTION TO EXISTING STORM SEWER PIPE

STATION	SPV.0060.50 EACH
PROJECT 6414-00-80	5
PROJECT 6414-00-80 SUBTOTAL	5
PROJECT 6414-00-81	5
PROJECT 6414-00-81 SUBTOTAL	5
ITEM TOTAL	10

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

*ADDITIONAL QUANTITIES SHOWN IN BRIDGE PLANS

3

SALVAGE AND REINSTALL FENCE

STATION	LOCATION	SPV.0090.16 LF
PROJECT 6414-00-81		
STAGE 2		
892+00'EB' - 894+27'EB'	LT	227
897+78'EB' - 898+44'EB'	LT	100
STAGE 2 SUBTOTAL		327
STAGE 3		
892+00 - 895+38	RT	338
STAGE 2 SUBTOTAL		338
ITEM TOTAL		665

CONSTRUCTION STAKING INFILTRATION BASIN

STATION	LOCATION	SPV.0105.02 LS
PROJECT 6414-00-80	LT & RT	1
ITEM TOTAL		1

REMOVE TRAFFIC SIGNALS

LOCATION	SPV.0105.03 REMOVE AND SALVAGE EXISTING TRAFFIC SIGNALS LS	SPV.0105.04 REMOVE AND SALVAGE EXISTING TRAFFIC SIGNALS LS
PROJECT 6414-00-80		
BUS 51 & TOMMY'S TURNPIKE	1	–
PROJECT 6414-00-80 SUBTOTAL	1	
PROJECT 6414-00-81		
BUS 51 & CTH HH	–	1
PROJECT 6414-00-81 SUBTOTAL		1
ITEM TOTAL	1	1

TRANSPORTING SIGNAL AND LIGHTING MATERIALS

	SPV.0105.05 TRANSPORT DEPARTMENT FURNISHED TRAFFIC SIGNAL MONOTUBE EQUIPMENT LS	SPV.0105.06 TRANSPORT DEPARTMENT FURNISHED TRAFFIC SIGNAL MONOTUBE EQUIPMENT LS
PROJECT 6414-00-80		
BUS 51 & TOMMY'S TURNPIKE	1	–
PROJECT 6414-00-80 SUBTOTAL	1	
PROJECT 6414-00-81		
BUS 51 & CTH HH	--	1
PROJECT 6414-00-81 SUBTOTAL		1
ITEM TOTAL	1	1

TEMPORARY VEHICLE DETECTION

	SPV.0105.07 TEMPORARY VEHICLE DETECTION LS	SPV.0105.08 TEMPORARY VEHICLE DETECTION LS
PROJECT 6414-00-80		
BUS 51 & TOMMY'S TURNPIKE	1	–
PROJECT 6414-00-80 SUBTOTAL	1	
PROJECT 6414-00-81		
BUS 51 & CTH HH	–	1
PROJECT 6414-00-81 SUBTOTAL		1
ITEM TOTAL	1	1

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\030201 mq.dgn PLOT TIME : 11:26:51 AM PLOT DATE : 3/14/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

WISDOT/CADDS SHEET 43

3

STAMPED CONCRETE

STATION	LOCATION	SPV.0165.01 4-INCH SY
PROJECT 6414-00-80		
CAT 020		
STAGE 2		
220+95.41 -237+75.14	RT	793
237+75.14 - 252+50.00	RT	862
STAGE 2 SUBTOTAL		1655
STAGE 3		
220+95.41 -237+75.14	LT	927
237+75.14 - 252+50.00	LT	861
STAGE 3 SUBTOTAL		1789
CAT 020 SUBTOTAL		3444
PROJECT 6414-00-80 SUBTOTAL		3444
PROJECT 6414-00-81		
CAT 030		
STAGE 2		
252+50 - 263+67.82	RT	490
CTH HH		
892+09.29 - 899+16.38	LT	218
MCDILL AVENUE		
900+23.24 - 907+40.96	LT	105
STAGE 2 SUBTOTAL		813
STAGE 3		
252+50 - 263+67.82	LT	77
CTH HH		
892+09.29 - 899+31.68	RT	23
MCDILL AVENUE		
900+38.07 - 907+40.96	RT	82
STAGE 3 SUBTOTAL		182
CAT 030 SUBTOTAL		995
PROJECT 6414-00-81 SUBTOTAL		995
ITEM TOTAL		4439

CONCRETE CURE & SEAL TREATMENT

STATION	LOCATION	SPV.0165.02 SF
PROJECT 6414-00-80		
STAGE 2		
208+50.00 - 220+40.44	RT	3171
220+40.44 - 237+29.94	RT	14789
237+29.94 - 243+80.57	RT	4578
243+80.57 - 252+50.00	RT	4591
PORTER ROAD		
800+85.56 - 803+40.00	RT	2032
E ELM STREET		
95+50.15 - 96+50.31	RT	633
DRIVEWAYS		
210+24.0	RT	259
211+80.0	RT	488
212+90.8	RT	513
215+37.7	RT	513
216+57.9	RT	484
222+76.8	RT	308
224+75.1	RT	632
225+50.2	RT	307
226+79.7	RT	488
227+93.3	RT	260
229+63.3	RT	341
230+21.6	RT	259
230+74.1	RT	355
231+78.7	RT	356
232+64.4	RT	356
234+17.2	RT	614
235+43.3	RT	488
252+29.8	RT	500
80+85.1	LT	225
80+98.3	RT	224
81+25.2	LT	147
802+97.6	RT	488
87+33.2	LT	159
10+34.8	RT	603
11+24.8	RT	288
91+40.5	LT	306
20+62.5	R/L	132
21+01.0	LT	213
96+06.6	LT	198
96+09.0	RT	198
STAGE 2 SUBTOTAL		40496
STAGE 3		
208+50.00 - 220+40.44	LT	5974
220+40.44 - 237+29.94	LT	16604
237+29.94 - 243+80.57	LT	10895
243+80.57 - 252+50.00	LT	3470
TOMMY'S TURN PIKE		
793+84.51 - 799+37.18	LT & RT	3132
DRIVEWAYS		
217+56.8	LT	512
218+65.9	LT	512
224+09.3	LT	484
225+61.4	LT	487
226+87.0	LT	548
229+04.4	LT	337
230+37.4	LT	236
231+68.8	LT	236
232+22.3	LT	332
232+84.3	LT	332
234+58.8	LT	512
236+73.5	LT	356
239+60.0	LT	512

CONCRETE CURE & SEAL TREATMENT (CONT'D)

STATION	LOCATION	SPV.0165.02 SF
241+73.0	LT	512
247+31.0	LT	512
248+30.0	LT	512
249+58.6	LT	488
251+05.7	LT	488
794+54.0	RT	159
795+04.8	LT	260
795+51.2	RT	217
795+87.0	LT	236
795+54.1	LT	309
797+67.0	LT	488
83+88.1	LT	245
84+02.0	RT	123
88+71.8	RT	439
88+76.7	LT	232
STAGE 3 SUBTOTAL		50691
STAGE 4		
208+50.00 - 220+40.44	MEDIAN	3537
220+40.44 - 237+29.94	MEDIAN	10030
237+29.94 - 243+80.57	MEDIAN	3410
243+80.57 - 252+50.00	MEDIAN	6039
STAGE 4 SUBTOTAL		23016
PROJECT 6414-00-80		114203
PROJECT 6414-00-81		
STAGE 2		
252+50.00 - 260+18.77	RT	9603
261+24.40 - 280+58.04	RT	12223
CTH HH		
892+09.37 - 898+42.08	LT	6125
MCDILL AVENUE		
900+21.58 - 907+40.96	LT	4329
DRIVEWAYS		
253+95.4	RT	488
255+30.0	RT	487
256+10.7	RT	260
258+25.0	RT	487
280+75.06	RT	561
901+81.0	LT	405
902+32.2	LT	355
904+03.3	LT	248
905+17.7	LT	260
907+00.3	LT	510
STAGE 2 SUBTOTAL		36341
STAGE 3		
261+73.44 - 269+96.15	LT	6147
CTH HH		
892+02.00 - 899+68.94	RT	6303
MCDILL AVENUE		
900+12.53 - 907+40.96	RT	3669

CONCRETE CURE & SEAL TREATMENT (CONT'D)

STATION	LOCATION	SPV.0165.02 SF
DRIVEWAYS		
252+72.5	LT	238
253+55.9	LT	89
254+68.4	LT	94
255+86.4	LT	341
272+37.3	LT	838
902+44.2	RT	380
902+96.0	RT	260
903+21.0	RT	257
904+39.4	RT	388
STAGE 3 SUBTOTAL		19004
STAGE 4		
252+50.00 - 260+30.81	MEDIANS	7544
261+56.74 - 263+49.17	MEDIANS	1608
264+94.92 - 281+01.00	MEDIAN	22066
CTH HH		
892+02.00 - 899+21.98	MEDIANS	7328
MCDILL AVENUE		
900+32.20 - 905+68.45	MEDIANS	4526
STAGE 4 SUBTOTAL		43072
PROJECT 6414-00-81		98417
ITEM TOTAL		212620

INFILTRATION BASIN SOIL MIX

STATION	LOCATION	SPV.0180.02 SY
PROJECT 6414-00-80		
STAGE 2		
247+70.82 - 250+37.94	RT	2956
E CEDAR STREET		
88+00 - 89+91	RT	3582
STAGE 2 SUBTOTAL		6538
ITEM TOTAL		6538

NOTE: ALL ITEMS AND QUANTITIES ON THIS SHEET ARE FOR ENGINEER ESTIMATE CATEGORY 0010 FOR PROJECT LISTED UNLESS OTHERWISE NOTED.

LIGHTING CONDUIT AND WIRE

FROM	-	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0605 CONDUIT SPECIAL 2-INCH LF	655.0625* ELECTRICAL WIRE LIGHTING 6 AWG LF	REMARKS
ALL ITEMS ARE CATEGORY 0010							
PB 300	-	SL 309	10	--	--	--	PULL WIRE ONLY
SL 309	-	SL 310	165	--	--	875	--
SL 310	-	SL 311	175	--	--	925	--
SL 311	-	PB 301	135	--	--	740	--
PB 301	-	PB 311	--	70	--	--	PULL WIRE ONLY
PB 311	-	PB 310	--	75	--	--	PULL WIRE ONLY
PB 310	-	PB 309	--	40	--	--	PULL WIRE ONLY
PB 309	-	SL 324	115	--	--	640	--
SL 324	-	SL 325	--	--	180	950	--
PB 309	-	PB 308	--	50	--	330	--
PB 308	-	PB 307	--	140	--	780	--
PB 307	-	PB 306	--	40	--	280	--
PB 306	-	SL 312	110	--	--	615	--
SL 312	-	SL 313	180	--	--	950	--
SL 313	-	SL 314	175	--	--	925	--
SL 314	-	SL 315	170	--	--	900	--
SL 315	-	SL 316	180	--	--	950	--
SL 316	-	SL 317	175	--	--	925	--
SL 317	-	SL 318	180	--	--	950	--
SL 318	-	SL 319	180	--	--	950	--
SL 319	-	SL 320	170	--	--	900	--
SL 320	-	SL 321	160	--	--	850	--
SL 321	-	SL 322	160	--	--	850	--
SL 322	-	SL 400	160	--	--	--	PULL WIRE ONLY
SL 400	-	SL 401	160	--	--	850	--
SL 401	-	SL 402	180	--	--	950	--
SL 402	-	SL 403	180	--	--	950	--
SL 403	-	SL 404	185	--	--	975	--
SL 404	-	SL 405	180	--	--	950	--
SL 405	-	PB 400	20	--	--	125	--
PB 306	-	PB 305	--	70	--	860	--
PB 305	-	CB 300	--	50	--	680	--
CB 300	-	PB 304	--	45	--	315	--
PB 304	-	PB 303	--	90	--	530	--
PB 303	-	SL 323	140	--	--	1,530	--
PB 303	-	PB 302	--	130	--	730	--
PB 302	-	PB 301	--	40	--	280	--
PROJECT TOTALS			3,645	840	180	25,010	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

LIGHTING PULLBOXES

PULLBOX NUMBER	STATION	OFFSET	R/L	653.0164* PULL BOX NON-CONDUCTIVE 24 X 42-INCH EACH
ALL ITEMS ARE CATEGORY 0010				
PB 300	214+61	6.0	LT	1
PB 301	219+29	18.0'	LT	1
PB 302	219+29	57.5'	LT	1
PB 303	798+81	43.2'	RT	1
PB 304	798+81	41.9'	LT	1
PB 305	221+71	71.5'	LT	1
PB 306	221+71	6.0'	LT	1
PB 307	221+71	33.5'	RT	1
PB 308	800+95	41.5'	LT	1
PB 309	800+95	4.0'	RT	1
PB 310	800+95	41.5'	RT	1
PB 311	219+29	48.2'	RT	1
PB 400	250+06	17.6'	LT	1
PROJECT TOTALS				13

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

3

STREET LIGHTS

LIGHT NUMBER	STATION	OFFSET	R/L	654.0106* CONCRETE BASES TYPE 6 EACH	657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0327* POLES TYPE 6 ALUMINUM EACH	657.0605* LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 4-FT EACH	659.1115* LUMINAIRES UTILITY LED A EACH	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF
ALL ITEMS ARE CATEGORY 0010									
SL 309	214+66	6.0'	LT	1	1	1	2	2	282
SL 310	216+25	15.5'	LT	1	1	1	2	2	282
SL 311	217+97	18.0'	LT	1	1	1	2	2	282
SL 312	222+78	12.9'	LT	1	1	1	2	2	282
SL 313	224+55	12.0'	LT	1	1	1	2	2	282
SL 314	226+25	18.1'	LT	1	1	1	2	2	282
SL 315	227+88	6.0'	LT	1	1	1	2	2	282
SL 316	229+63	18.0'	LT	1	1	1	2	2	282
SL 317	231+38	6.0'	LT	1	1	1	2	2	282
SL 318	233+13	18.0'	LT	1	1	1	2	2	282
SL 319	234+88	5.9'	LT	1	1	1	2	2	282
SL 320	236+55	18.0'	LT	1	1	1	2	2	282
SL 321	238+10	6.0'	LT	1	1	1	2	2	282
SL 322	239+66	13.7'	LT	1	1	1	2	2	282
SL 323	797+48	44.7'	RT	1	1	1	1	1	141
SL 324	802+08	4.0'	RT	1	1	1	2	2	282
SL 325	803+36	4.0'	RT	1	1	1	2	2	282
SL 400	241+21	18.0'	LT	1	1	1	2	2	282
SL 401	242+76	18.0'	LT	1	1	1	2	2	282
SL 402	244+53	6.0'	LT	1	1	1	2	2	282
SL 403	246+32	18.0'	LT	1	1	1	2	2	282
SL 404	248+15	12.0'	LT	1	1	1	2	2	282
SL 405	249+88	18.0'	LT	1	1	1	2	2	282
PROJECT TOTALS				23	23	23	45	45	6345

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

LIGHTING CONTROL

CABINET NUMBER	STATION	OFFSET	R/L	654.0230* CONCRETE CONTROL CABINET BASES TYPE L30 EACH	656.0200.03 ELECTRICAL SERVICE METER BREAKER PEDESTAL (CB300) EACH	659.2130* LIGHTING CONTROL CABINETS 120/240 30-INCH EACH
ALL ITEMS ARE CATEGORY 0010						
CB300	221+36	93.9'	LT	1	1	1
PROJECT TOTALS				1	1	1

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

LIGHTING CONDUIT AND WIRE

FROM	-	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	655.0625* ELECTRICAL WIRE LIGHTING 6 AWG LF	REMARKS
ALL ITEMS ARE CATEGORY 0010						
PB 400	-	SL 406	165	--	890	--
SL 406	-	SL 407	160	--	850	--
SL 407	-	SL 408	170	--	900	--
SL 408	-	SL 409	170	--	900	--
SL 409	-	SL 410	175	--	925	--
SL 410	-	PB 401	140	--	765	--
PB 401	-	PB 410	--	90	530	--
PB 410	-	PB 408	--	70	430	--
PB 408	-	PB 407	--	70	860	--
PB 407	-	SL 427	40	--	530	--
PB 408	-	SL 428	120	--	665	--
SL 428	-	SL 429	150	--	800	--
SL 429	-	SL 430	150	--	800	--
SL 430	-	PB 409	40	--	159	--
PB 409	-	SL 431	150	--	489	--
PB 401	-	PB 402	--	40	560	--
PB 402	-	CB 400	--	70	880	--
CB 400	-	PB 403	--	115	1,330	--
PB 403	-	SL 422	30	--	430	--
PB 403	-	PB 404	--	75	910	--
PB 404	-	SL 423	110	--	615	--
SL 423	-	SL 424	150	--	800	--
SL 424	-	SL 425	145	--	775	--
SL 425	-	SL 426	145	--	775	--
PB 404	-	PB 405	--	60	380	--
PB 405	-	PB 406	--	100	580	--
PB 406	-	SL 411	115	--	640	--
SL 411	-	SL 412	40	--	975	--
SL 412	-	SL 413	175	--	925	--
SL 413	-	SL 414	170	--	900	--
SL 414	-	SL 415	170	--	900	--
SL 415	-	PB 411	155	--	840	--
PB 411	-	PB 412	--	80	--	PULL WIRE ONLY
PB 411	-	SL 416	--	10	230	--
PB 411	-	SL 417	175	--	940	--
SL 417	-	SL 418	175	--	925	--
SL 418	-	SL 419	170	--	900	--
SL 419	-	SL 420	170	--	900	--
SL 420	-	SL 421	175	--	925	--
PROJECT TOTALS			3,900	780	28,528	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

STREET LIGHTING REMOVALS

	STATION	R/L	204.0195* REMOVING CONCRETE BASES EACH	SPV.0060.46 REMOVE AND SALVAGE LIGHITNG UNIT EACH
ALL ITEMS CATEGORY 0010				
EXSL	894+13	LT	1	1
EXSL	896+48	RT	1	1
EXSL	898+22	LT	1	1
EXSL	899+09	RT	1	1
EXSL	900+26	LT	1	1
EXSL	900+76	RT	1	1
EXSL	902+02	LT	1	1
EXSL	903+81	RT	1	1
EXSL	905+87	LT	1	1
EXSL	906+53	RT	1	1
PROJECT TOTALS			10	10

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

LIGHTING PULLBOXES

PULLBOX NUMBER	STATION	OFFSET	R/L	653.0164* PULL BOX NON-CONDUCTIVE 24 X 42-INCH EACH
ALL ITEMS ARE CATEGORY 0010				
PB 401	259+70	23.9'	LT	1
PB 402	259+70	61.5'	LT	1
PB 403	898+41	50.5'	RT	1
PB 404	898+41	23.0'	LT	1
PB 405	898+41	76.8'	LT	1
PB 406	262+18	4.0'	LT	1
PB 407	901+04	69.5'	LT	1
PB 408	901+04	4.0'	LT	1
PB 409	905+16	29.9'	RT	1
PB 410	259+70	65.8'	RT	1
PB 411	271+71	20.0'	LT	1
PB 412	271+71	91.9'	LT	1
PROJECT TOTALS				12

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

3

STREET LIGHTS

LIGHT NUMBER	STATION	OFFSET	R/L	654.0106* CONCRETE BASES TYPE 6 EACH	657.0255* TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0327* POLES TYPE 6 ALUMINUM EACH	657.0605* LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 4-FT EACH	659.1115* LUMINAIRES UTILITY LED A EACH	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF
ALL ITEMS ARE CATEGORY 0010									
SL 406	251+66	5.8'	LT	1	1	1	2	2	282
SL 407	253+26	8.7'	LT	1	1	1	2	2	282
SL 408	254+94	11.6'	LT	1	1	1	2	2	282
SL 409	256+58	19.9'	LT	1	1	1	2	2	282
SL 410	258+31	23.9'	LT	1	1	1	2	2	282
SL 411	263+31	3.6'	LT	1	1	1	2	2	282
SL 412	265+13	8.1'	LT	1	1	1	2	2	282
SL 413	266+84	12.8'	LT	1	1	1	2	2	282
SL 414	268+53	13.5'	LT	1	1	1	2	2	282
SL 415	270+18	19.5'	LT	1	1	1	2	2	282
SL 416	271+76	20.0'	LT	1	1	1	2	2	282
SL 417	273+43	15.0'	LT	1	1	1	2	2	282
SL 418	275+19	15.0'	LT	1	1	1	2	2	282
SL 419	276+89	15.0'	LT	1	1	1	2	2	282
SL 420	278+60	16.9'	LT	1	1	1	2	2	282
SL 421	280+30	17.4'	LT	1	1	1	2	2	282
SL 422	898+11	48.5'	RT	1	1	1	1	1	141
SL 423	897+38	20.5'	LT	1	1	1	2	2	282
SL 424	895+96	13.3'	LT	1	1	1	2	2	282
SL 425	894+56	9.1'	LT	1	1	1	2	2	282
SL 426	893+15	8.0'	LT	1	1	1	2	2	282
SL 427	901+40	70.7'	LT	1	1	1	1	1	141
SL 428	902+19	5.7'	LT	1	1	1	2	2	282
SL 429	903+67	9.3'	LT	1	1	1	2	2	282
SL 430	905+16	5.7'	LT	1	1	1	2	2	282
SL 431	906+58	29.3'	RT	1	1	1	1	1	141
PROJECT TOTALS				26	26	26	49	49	6909

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

LIGHTING CONTROL

CABINET NUMBER	STATION	OFFSET	R/L	654.0230* CONCRETE CONTROL CABINET BASES TYPE L30 EACH	656.0200.04 ELECTRICAL SERVICE METER BREAKER PEDESTAL (CB300) EACH	659.2130* LIGHTING CONTROL CABINETS 120/240 30-INCH EACH
ALL ITEMS ARE CATEGORY 0010						
CB400	260+32	78.7'	LT	1	1	1
PROJECT TOTALS				1	1	1

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

765584

TRANSPORTATION PROJECT PLAT TITLE SHEET

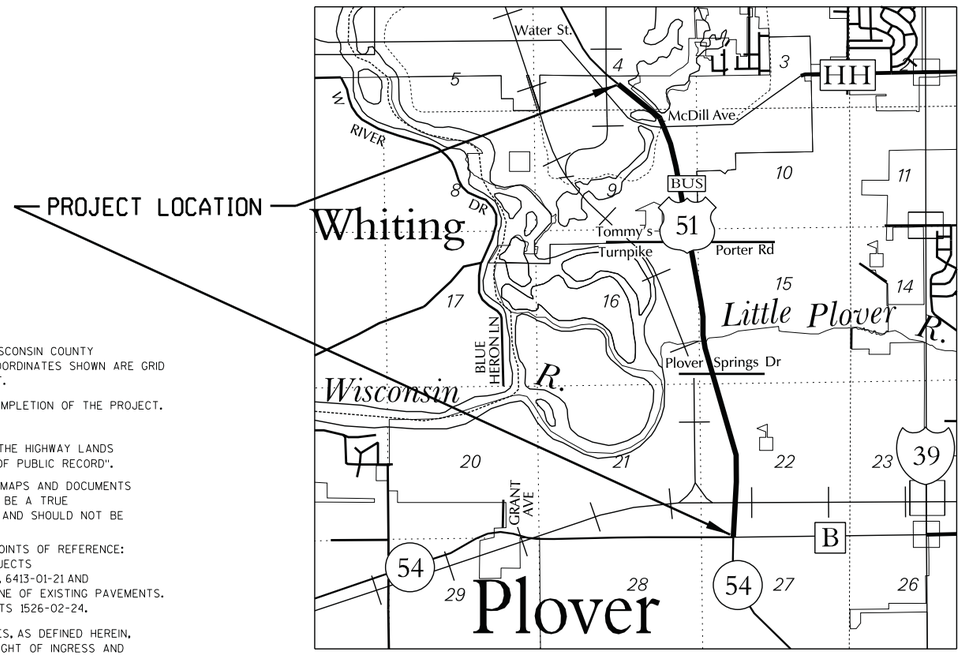
PROJECT NO. 6414-00-25
BUSINESS 51, VILLAGE OF PLOVER & WHITING
(STH 54 TO MINNESOTA AVENUE)
PORTAGE COUNTY

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Portage COUNTY, WISCONSIN AT 9:15 AM ON December 20, 2011 AS DOCUMENT # 765584 AND FILED IN _____

Cynthia Wiesneski
SIGNATURE OF REGISTER OF DEEDS
env. $.50 $26.00



R 8 E



NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, PORTAGE COUNTY ZONE, NAD83 (2007) 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 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT. (TYPICALLY 3/4"X24" RE-BAR)

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR BUS 51 ESTABLISHED FROM PREVIOUS PROJECTS 1526-02-24, 6998-01-21, F05-3(34), 6998-01-21, 6414-01-71, 6414-00-21, 6998-01-16, 6413-01-21 AND EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS. EXISTING ACCESS CONTROL ALONG BUS 51 ESTABLISHED FROM PREVIOUS PROJECTS 1526-02-24.

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

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

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

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

DISTANCES SHOWN TO BUILDINGS ARE APPROXIMATE.

EXISTING RIGHT OF WAY COMPUTATIONS AND EXISTING MONUMENT COORDINATES VALUES PROVIDED BY AECOM UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTH CENTRAL REGION.

N

LAYOUT
SCALE 0 .5 MI.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	**CURVE DATA**	
HIGHWAY EASEMENT	H.E.	LONG CHORD	LCH
LAND CONTRACT	LC	LONG CHORD BEARING	LCB
MONUMENT	MON.	RADIUS	R
PAGE	P.	DEGREE OF CURVE	D
PERMANENT LIMITED EASEMENT	PLE	CENTRAL ANGLE OR DELTA	DELTA
PROPERTY LINE	PL	LENGTH OF CURVE	L
RECORDED AS	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	Ø (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	●(SET)	PROPERTY LINE	
R/W STANDARD	▲(SET)	LOT & TIE LINES	
SIGN	ISIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS RESTRICTION (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS RESTRICTION (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		ACCESS RESTRICTION (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RWB20	QUARTER LINE	
PARCEL NUMBER	102	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

SEH
401 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME : P:\UZ\W\Witnc\112424\CAD\040101 RP.dgn
PLOT DATE : 12/8/2011
PLOT BY : SEH
PLOT NAME :
PLOT SCALE : N/A
APPRAISAL PLAT DATE :

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 6414-00-25 - 4.01 AMENDMENT NO. 2

AMENDS UTILITY NO. 200 AND PROVIDES CLARIFICATION OF ALL UTILITY LOCATIONS TO TRANSPORTATION PROJECT PLAT NO. 6414-00-25-4.01 AMENDMENT NO. 1 RECORDED AS DOCUMENT NO. 786948

BUS. 51 VILLAGE OF PLOVER & WHITING, (STH 54 - MINNESOTA AVE.)

PART OF LOT 1, CSM NO. 6847, PART OF LOT 2, CSM NO. 6843, AND PART OF LOT 13, PLOVER ASSESSOR'S PLAT NO. 2 LOCATED IN AND INCLUDING PART OF THE SW 1/4 OF THE SW 1/4; PART OF LOTS 6, 8, & 13 OF PLOVER ASSESSOR'S PLAT NO. 2, AND PART OF LOT 1, CSM NO. 10059, LOCATED IN AND INCLUDING PART OF THE SE 1/4 OF THE SW 1/4; ALL IN SECTION 22, T23N, R8E, VILLAGE OF PLOVER, PORTAGE COUNTY WISCONSIN.

RELOCATION ORDER BUS. 51 PORTAGE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

UTILITY INTEREST TABLE			
UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION
200	3	EASEMENT	DOC. # 367991
	4	EASEMENT	DOC. #368011
	4	EASEMENT	DOC. # 368272
	4	EASEMENT	DOC. # 368273
	13	EASEMENT	DOC. # 367998
	14	EASEMENT	VOL. 440 PG. 506
210	14	EASEMENT	VOL. 144 PG. 497

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
3	M&I MID-STATE BANK NA	FEE/AR/TLE	1245	-	1245	1525
4	VILLAGE OF PLOVER	FEE/TLE	2405	-	2405	2795
11	JASA VENTURES LLC	FEE/AR	1565	-	1565	-
12	SANDY'S BAR LLC.	FEE/AR/TLE	955	-	955	570
13	JOHN W. FAHRNER, JEROLD P FAHRNER, ETAL.	FEE/AR/TLE	2860	-	2860	1370
14	JOHN D. & THERESA K. CARPONTER	FEE/AR/TLE	3690	-	3690	160

794550

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Portage COUNTY, WISCONSIN AT 9:00AM ON April 8, 2014 AS DOCUMENT # 794550 AND FILED IN Vol. 1-50

SIGNATURE OF REGISTER OF DEEDS

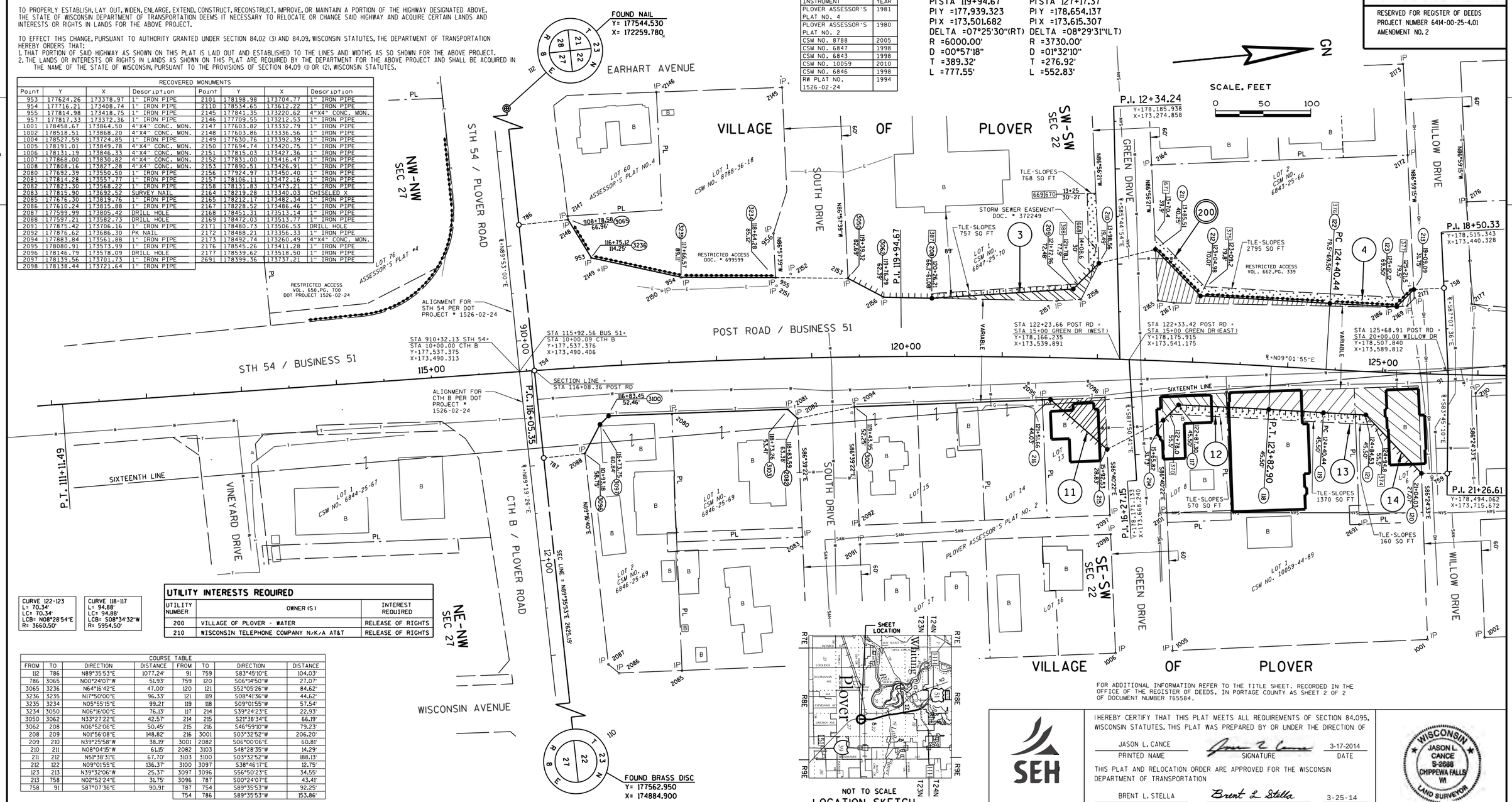
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25-4.01
AMENDMENT NO. 2

BASIS OF R/W	
INSTRUMENT	YEAR
PLOVER ASSESSOR'S PLAT NO. 4	1981
PLOVER ASSESSOR'S PLAT NO. 2	1980
CSM NO. 8788	2005
CSM NO. 6847	1998
CSM NO. 6843	1998
CSM NO. 10059	2010
CSM NO. 6846	1998
RW PLAT NO. 1526-02-24	1994

PISTA 119+94.67
PIY =177,939.323
PIX =173,501.682
DELTA =07°25'30"(RT)
R =6000.00'
D =00°57'18"
T =389.32'
L =777.55'

PISTA 127+17.37
PIY =178,654.137
PIX =173,615.307
DELTA =08°29'31"(LT)
R =3730.00'
D =01°32'10"
T =276.92'
L =552.83'

RECOVERED MONUMENTS							
Point	Y	X	Description	Point	Y	X	Description
953	177624.26	173378.97	1" IRON PIPE	2101	178198.98	173704.77	1" IRON PIPE
954	177716.21	173408.74	1" IRON PIPE	2110	178534.65	173612.22	1" IRON PIPE
955	177814.98	173418.75	1" IRON PIPE	2145	177841.35	173220.62	4"X4" CONC. MON.
957	177817.33	173372.36	1" IRON PIPE	2146	177709.55	173212.53	1" IRON PIPE
1001	178458.67	173864.50	4"X4" CONC. MON.	2147	177603.82	173332.79	1" IRON PIPE
1002	178518.51	173868.20	4"X4" CONC. MON.	2148	177603.86	173336.56	1" IRON PIPE
1004	178527.59	173724.85	1" IRON PIPE	2149	177630.78	173392.39	1" IRON PIPE
1005	178191.01	173849.78	4"X4" CONC. MON.	2150	177694.74	173420.75	1" IRON PIPE
1006	178131.19	173846.33	4"X4" CONC. MON.	2151	177815.03	173427.36	1" IRON PIPE
1007	177868.00	173830.82	4"X4" CONC. MON.	2152	177831.00	173416.47	1" IRON PIPE
1008	177808.16	173827.28	4"X4" CONC. MON.	2153	177890.51	173426.91	1" IRON PIPE
2080	177692.39	173550.50	1" IRON PIPE	2156	177924.97	173450.40	1" IRON PIPE
2081	177814.28	173557.77	1" IRON PIPE	2157	178106.11	173472.16	1" IRON PIPE
2082	177823.30	173568.22	1" IRON PIPE	2158	178131.83	173473.21	1" IRON PIPE
2083	177815.90	173692.52	SURVEY NAIL	2164	178219.28	173340.03	CHISELED X
2085	177676.30	173819.76	1" IRON PIPE	2165	178212.17	173482.34	1" IRON PIPE
2086	177610.24	173815.88	1" IRON PIPE	2167	178228.52	173486.46	1" IRON PIPE
2087	177599.99	173805.42	DRILL HOLE	2168	178451.31	173513.14	1" IRON PIPE
2088	177597.21	173582.73	DRILL HOLE	2169	178472.03	173513.77	1" IRON PIPE
2091	177875.42	173706.16	1" IRON PIPE	2171	178480.73	173506.93	DRILL HOLE
2092	177876.62	173686.30	PK NAIL	2172	178488.21	173356.33	1" IRON PIPE
2094	177883.84	173561.88	1" IRON PIPE	2173	178492.74	173260.49	4"X4" CONC. MON.
2095	178080.91	173573.99	1" IRON PIPE	2176	178545.26	173411.28	1" IRON PIPE
2096	178146.79	173578.09	DRILL HOLE	2177	178539.62	173518.50	1" IRON PIPE
2097	178139.56	173701.73	1" IRON PIPE	2691	178399.36	173737.21	1" IRON PIPE
2098	178138.44	173721.64	1" IRON PIPE				



CURVE 122-123
L= 70.34'
LC= 70.34'
LCB= N08°28'54"E
R= 3660.50'

CURVE 118-117
L= 94.88'
LC= 94.88'
LCB= S08°34'32"W
R= 5954.50'

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
200	VILLAGE OF PLOVER - WATER	RELEASE OF RIGHTS
210	WISCONSIN TELEPHONE COMPANY N/K/A AT&T	RELEASE OF RIGHTS

COURSE TABLE							
FROM	TO	DIRECTION	DISTANCE	FROM	TO	DIRECTION	DISTANCE
112	786	N89°35'53"E	1077.24'	91	759	S83°45'10"E	104.03'
786	3065	N00°24'07"W	51.93'	759	120	S06°14'50"W	27.07'
3065	3236	N64°16'42"E	47.00'	120	121	S52°05'26"W	84.62'
3236	3235	N17°50'00"E	96.33'	121	119	S08°41'36"W	44.62'
3235	3234	N05°55'15"E	99.21'	119	118	S09°01'55"W	57.54'
3234	3050	N06°16'00"E	76.13'	117	214	S39°24'23"E	22.93'
3050	3062	N33°27'22"E	42.57'	214	215	S21°38'34"E	66.19'
3062	208	N06°52'06"E	50.45'	215	216	S46°59'10"W	79.23'
208	209	N01°56'08"E	148.82'	216	3001	S03°32'52"W	206.20'
209	210	N39°25'58"W	38.19'	3001	2082	S06°00'06"E	60.81'
210	211	N08°04'15"W	61.15'	2082	3103	S48°28'35"W	14.29'
211	212	N51°38'31"E	67.70'	3103	3100	S03°32'52"W	188.13'
212	122	N09°01'55"E	136.37'	3100	3097	S38°46'17"E	12.75'
123	213	N39°32'06"W	25.37'	3097	3096	S56°50'23"E	34.55'
213	758	N02°52'24"E	31.75'	3096	787	S00°24'07"E	43.41'
758	91	S87°07'36"E	90.91'	787	754	S89°35'53"W	92.25'
				754	786	S89°35'53"W	153.86'

FOUND BRASS DISC
Y= 177562.950
X= 174884.900

SHEET LOCATION

NOT TO SCALE
LOCATION SKETCH

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET. RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN PORTAGE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 765584.

SEH

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JASON L. CANCE — PRINTED NAME — SIGNATURE — 3-17-2014 — DATE

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

BRENT L. STELLA — PRINTED NAME — Brent L Stella — SIGNATURE — 3-25-14 — DATE

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : P:\UZ\W\Witnc\112545\5-final-dsgn\51-drawings\40-TransHwy\040102 RP.dgn
PLOT DATE : 3/17/2014 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A
APPRAISAL PLAT DATE :

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 6414-00-25 - 4.02 AMENDMENT NO. 2

AMENDS UTILITY NO. 200 AND PROVIDES CLARIFICATION OF ALL UTILITY LOCATIONS TO TRANSPORTATION PROJECT PLAT NO. 6414-00-25 AMENDMENT NO. 1 RECORDED AS DOCUMENT NO. 786949.

BUS. 51, VILLAGE OF PLOVER & WHITING (STH 54 - MINNESOTA AVE.)

PART OF LOTS 1, 2, & OUTLOT 1 OF PLOVER ASSESSOR'S PLAT NO. 2, PART OF OUTLOT 1 & LOT 67 PLOVER ASSESSOR'S PLAT NO. 3, PART OF LOT 1, CSM NO. 6792, LOCATED IN AND INCLUDING PART OF THE SE 1/4 OF THE SW 1/4, PART OF LOTS 38, 39, 42, 66, 67 & OUTLOT 1 OF PLOVER ASSESSOR'S PLAT NO. 3, PART OF LOTS 56, 58, & 59 OF PLOVER ASSESSOR'S PLAT NO. 5, PART OF LOTS 1 & 2 OF CSM NO. 3672, LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE SW 1/4; PART OF OUTLOT 2 OF PLOVER ASSESSOR'S PLAT NO. 4, PART OF OUTLOT 2 OF PLOVER ASSESSOR'S PLAT NO. 5 AND PART OF LOT 1, CSM NO. 6843, PART OF POST ROAD PROPERTIES CONDOMINIUM, LOCATED IN AND INCLUDING PART OF THE SW 1/4 OF THE SW 1/4; PART OF LOTS 56, 58 THRU 59, 61, & OUTLOT 2 OF ASSESSOR'S PLAT NO. 5, PART OF POST ROAD PROPERTIES CONDOMINIUM, PART OF LOT 79.1, CSM NO. 2950, LOCATED IN AND INCLUDING PART OF THE NW 1/4 OF THE SW 1/4; ALL IN SECTION 22, T23N, R8E, VILLAGE OF PLOVER, PORTAGE COUNTY, WISCONSIN

RELOCATION ORDER BUS 51 PORTAGE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

UTILITY INTEREST TABLE

UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION
200	16	EASEMENT	DOC. # 367999
	16	EASEMENT	DOC. # 368000
	16	EASEMENT	DOC. # 368131
	16	EASEMENT	DOC. # 368021
	16	EASEMENT	DOC. # 368023
	18	EASEMENT	DOC. # 367996
	20	EASEMENT	DOC. # 368002
	21	EASEMENT	DOC. # 367997
	22	EASEMENT	DOC. # 368140
	23	EASEMENT	DOC. # 368142
	23	EASEMENT	DOC. # 367993
	24	EASEMENT	DOC. # 368014
	25	EASEMENT	DOC. # 368012
	29	EASEMENT	DOC. # 368025
201	22	NO EASEMENT OF RECORD	
	23	EASEMENT	DOC. # 452907
	28	NO EASEMENT OF RECORD	
210	18	EASEMENT	DOC. # 387220
	19	NO EASEMENT OF RECORD	
	23	EASEMENT	DOC. # 231281
	23	CON. OF RIGHTS	DOC. # 367100
	23	NO EASEMENT OF RECORD	
	26	EASEMENT	DOC. # 230558
	27	EASEMENT	DOC. # 230558
220	16	NO EASEMENT OF RECORD	
221	18	NO EASEMENT OF RECORD	
	18	EASEMENT	DOC. # 387220
	28	NO EASEMENT OF RECORD	

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	R/W S.F. REQUIRED EXISTING	R/W S.F. REQUIRED TOTAL	HE S.F.	TLE S.F.
16	ASSOCIATED BANK, NATIONAL ASSOCIATION	FEE/AR/TLE	2270	-	2270	-	2625
17	WISCONSIN CENTRAL LTD.	HE/TLE	-	-	-	3685	1275
18	BEST INVESTMENT PROPERTIES LLC.	FEE/AR/TLE	1775	-	1775	-	2500
19	THEODORE MILLER	FEE/AR/TLE	2910	-	2910	-	6525
20	WOW COMMERCIAL VENTURES LLC.	FEE/AR/TLE	8990	-	8990	-	4080
21	MAYNARD & JUDITH A. KLOSINSKI	FEE/AR/TLE	11815	-	11815	-	880
22	DANIEL L. & MARY A. KOWALSKI	FEE/AR/TLE	5565	-	5565	-	1005
23	JMK DEVELOPMENT LLC.	FEE/AR/TLE	8790	-	8790	-	5865
24	EMERANCE D. & MARION DANIELSKI	FEE/AR/TLE	5375	-	5375	-	1415
25	KENNETH L. LEPACK (VENDOR) ST. VINCENT DEPAUL COMMUNITY CENTER OF PORTAGE COUNTY INC. (PURCHASER)	FEE/AR/TLE	4585	-	4585	-	1140
26	COMMUNITY FIRST BANK	FEE/AR/TLE	4830	-	4830	-	3215
27	SCOTT DONALD SHURPIT	FEE/AR/TLE	5950	-	5950	-	4775
28	DENNIS J. & NANCY S. FREUND	FEE	26915	-	26915	-	-
29	BRUCE MICHALSKI	FEE/AR/TLE	9920	-	9920	-	685

794551

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Portage COUNTY, WISCONSIN AT 9:06 AM ON April 2, 2014 AS DOCUMENT # 794551 AND FILED IN Env. 1.50

SIGNATURE OF REGISTER OF DEEDS $25.00

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25-4.02
AMENDMENT NO. 2

PISTA 498+06.75
PIY =179,164.382
PIX =173,427.078
DELTA =07°23'05"(LT)
R =300.00'
D =19°05'55"
T =19.36'
L =38.67'

PISTA 498+40.47
PIY =179,167.449
PIX =173,460.709
DELTA =08°14'32"(RT)
R =200.00'
D =28°38'52"
T =14.41'
L =28.77'

CURVE 809-895
L= 188.44'
LC= 188.42'
LCB= N03°17'04"E
R= 3799.50'

CURVE 898-224
L= 61.52'
LC= 61.52'
LCB= N05°56'14"E
R= 3799.50'

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
200	VILLAGE OF PLOVER - WATER	RELEASE OF RIGHTS
201	VILLAGE OF PLOVER - SANITARY SEWER	RELEASE OF RIGHTS
210	WISCONSIN TELEPHONE COMPANY N/K/A AT&T	RELEASE OF RIGHTS
220	WISCONSIN PUBLIC SERVICE - GAS	RELEASE OF RIGHTS
221	WISCONSIN PUBLIC SERVICE - ELECTRIC	RELEASE OF RIGHTS

PISTA 136+83.01
PIY =179,620.751
PIX =173,624.418
DELTA =06°25'10"(RT)
R =3730.00'
D =01°32'10"
T =209.18'
L =417.92'

PISTA 127+17.37
PIY =178,654.137
PIX =173,615.307
DELTA =08°29'31"(LT)
R =3730.00'
D =01°32'10"
T =276.92'
L =552.83'

PISTA 501+65.68
PIY =179,144.086
PIX =173,785.456
DELTA =06°59'42"(RT)
R =300.00'
D =19°05'55"
T =18.34'
L =36.63'

PISTA 501+35.15
PIY =179,141.583
PIX =173,754.999
DELTA =06°59'42"(LT)
R =200.00'
D =28°38'52"
T =12.22'
L =24.42'

COURSE TABLE

From	To	Direction	Distance	From	To	Direction	Distance
112	715	N89°35'53"E	1312.59'	32	751	S86°04'46"E	130.00'
715	763	N00°47'20"E	954.41'	751	805	S03°55'39"W	30.87'
763	764	N87°07'36"W	117.51'	805	804	S03°55'14"W	7.13'
764	218	N02°52'24"E	28.33'	804	400	N86°04'46"W	37.54'
218	219	N48°11'00"E	80.90'	400	401	S50°10'58"W	70.48'
220	221	N00°32'24"E	180.56'	402	403	S19°44'32"E	65.13'
221	222	N43°12'52"W	22.38'	403	803	S32°58'57"W	44.40'
222	223	N85°39'25"W	61.64'	803	498	S00°32'24"W	60.54'
223	259	N84°26'09"W	21.77'	498	499	S86°50'31"E	110.40'
259	124	N26°30'36"E	54.59'	499	3294	S03°34'32"W	66.26'
124	125	N76°34'59"E	77.04'	3294	3295	S87°35'11"E	20.00'
125	806	N00°32'24"E	186.34'	3295	3290	S86°53'50"E	124.92'
806	807	N89°27'36"W	50.50'	3290	3136	S03°35'08"W	99.75'
807	808	N01°03'43"E	112.77'	3136	3137	S03°35'10"W	60.00'
808	809	S88°08'11"E	50.50'	3137	406	N86°55'41"W	181.39'
895	896	N85°17'40"W	25.50'	406	407	S46°25'07"W	86.17'
896	897	N05°05'22"E	51.27'	407	408	S00°32'24"W	128.08'
897	898	S84°31'35"E	25.50'	409	410	S38°49'51"E	26.83'
224	225	N43°35'20"W	24.98'	410	762	S06°14'51"W	31.17'
225	761	N00°24'04"W	29.02'	762	91	N83°45'10"W	64.87'
761	32	N89°35'55"E	93.09'	91	763	N87°07'36"W	4.34'

CURVE 219-220
L= 336.16'
LC= 336.04'
LCB= N03°10'15"E
R= 3660.50'

CURVE 401-402
L= 252.36'
LC= 252.31'
LCB= S03°59'20"W
R= 3684.50'

CURVE 408-409
L= 378.78'
LC= 378.62'
LCB= S03°24'51"W
R= 3775.50'

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET. RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN PORTAGE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 765584.

BASIS OF R/W

INSTRUMENT	YEAR
PLOVER ASSESSOR'S PLAT NO. 4	1981
PLOVER ASSESSOR'S PLAT NO. 2	1980
PLOVER ASSESSOR'S PLAT NO. 3	1981
PLOVER ASSESSOR'S PLAT NO. 5	1981
CSM NO. 6843	1998
CSM NO. 2950	1983
CSM NO. 6792	1998
CSM NO. 3672	1986
RW PLAT NO. 1526-02-24	1994
RW PLAT NO. 6998-01-21	1981

RECOVERED MONUMENTS

Point	Y	X	Description	Point	Y	X	Description	Point	Y	X	Description
1001	178458.67	173864.50	4"x4" CONC. MON.	2135	179507.09	173662.87	1" IRON PIPE	2189	179179.28	173576.13	1" IRON PIPE
1002	178518.52	173868.21	4"x4" CONC. MON.	2136	179507.00	173662.39	CHISELED X	2190	179410.18	173589.89	1" IRON PIPE
1004	178527.60	173724.85	1" IRON PIPE	2137	179507.02	173662.39	DRILL HOLE	2191	179588.12	173601.25	3/4" IRON ROD
2110	178534.65	173612.22	1" IRON PIPE	2138	179616.54	173669.01	DRILL HOLE	2192	179708.01	173608.77	1" IRON PIPE
2111	178601.98	173606.10	DRILL HOLE	2139	179714.85	173678.14	DRILL HOLE	2198	179874.09	173695.38	CHISELED X
2118	179122.88	173638.67	1" IRON PIPE	2140	179814.41	173688.64	DRILL HOLE	2199	179865.23	173865.64	"1/4"" IRON PIPE
2119	179108.69	173907.64	1" IRON PIPE	2143	179796.08	173951.75	4"x4" CONC. MON.	2200	179856.11	173955.05	4"x4" CONC. MON.
2120	179165.05	173971.84	4"x4" CONC. MON.	2169	178472.03	173513.77	1" IRON PIPE	2311	178826.40	173554.05	1" IRON PIPE
2122	179174.88	173787.20	1" IRON PIPE	2171	178480.73	173506.53	DRILL HOLE	2610	178594.00	173729.00	1" IRON PIPE
2123	179176.27	173767.21	1" IRON PIPE	2172	178488.21	173356.33	1" IRON PIPE	2615	178989.73	173630.48	RAILROAD SPIKE
2126	179282.47	173648.48	CHISELED X	2176	178545.26	173411.28	1" IRON PIPE	2693	178785.13	173740.91	4"x4" CONC. MON.
2127	179182.73	173642.39	CHISELED X	2177	178539.62	173518.50	1" IRON PIPE	2694	178785.06	173761.04	1" IRON PIPE
2128	179447.30	173659.13	1" IRON PIPE	2178	178644.21	173539.48	1" IRON PIPE	2695	178843.36	173891.20	1" IRON PIPE
2130	179439.26	173803.72	"2"" IRON PIPE	2179	178776.36	173550.43	1" IRON PIPE	2696	178859.08	173622.53	4"x4" CONC. MON.
2131	179432.38	173928.41	4"x4" CONC. MON.	2182	178826.91	173281.06	4"x4" CONC. MON.	2700	179139.45	173369.85	1" IRON PIPE
2133	179492.30	173932.29	4"x4" CONC. MON.	2183	178983.89	173563.81	3/4" IRON ROD	2701	179142.65	173300.69	4"x4" CONC. MON.
2134	179499.69	173807.76	1" IRON PIPE								

LOCATION SKETCH
NOT TO SCALE

FND. BRASS DISK
Y= 177562.950
X= 174884.900

SCALE, FEET
0 50 100

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEET ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JASON L. CANCE — PRINTED NAME — SIGNATURE — 3-17-2014 DATE

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

BRENT L. STELLA — PRINTED NAME — SIGNATURE — 3-25-14 DATE

WISCONSIN JASON L. CANCE S-2698 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : P:\UZ\W\Witnc\112545\5-final-dsgn\51-drawings\40-TransHwy\040103 RP.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 3/17/2014 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

DOT COMPOSITE ORIGINAL LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 6414-00-25 - 4.03 AMENDMENT NO. 3

AMENDS PARCEL 41 OF TRANSPORTATION PROJECT PLAT 6414-00-25-4.03 RECORDED AS DOCUMENT NO. 765973 AND AMENDS UTILITY NO. 200 OF TRANSPORTATION PROJECT PLAT NO. 6414-00-25-4.03 AMENDMENT NO. 2 RECORDED AS DOCUMENT NO. 794552

BUS. 51, VILLAGE OF PLOVER AND WHITING (STH 54 - MINNESOTA AVE.)

PART OF LOTS 9, & 12 THRU 18 OF PLOVER ASSESSOR'S PLAT NO. 5, PART OF LOT 1 OF PLOVER ASSESSOR'S PLAT NO. 3 AND PART OF LOT 1 CSM NO. 7075, LOCATED IN AND INCLUDING PART OF THE SW 1/4 OF THE NW 1/4; PART OF LOTS 36 & 37 OF PLOVER ASSESSOR'S PLAT NO. 5 LOCATED IN AND INCLUDING PART OF THE NW 1/4 OF THE SW 1/4; PART OF LOT 4 OF PLOVER ASSESSOR'S PLAT NO. 3, PART OF LOT 18 OF PLOVER ASSESSOR'S PLAT NO. 5, PART OF LOT 1 & OUTLOT 1 OF CSM NO. 7075, PART OF LOTS 1 & 2 OF CSM NO. 4243, LOCATED IN AND INCLUDING PART OF THE SE 1/4 OF THE NW 1/4; AND PART OF LOT 1 CSM NO. 9197, PART OF LOTS 36 & 37 OF PLOVER ASSESSOR'S PLAT NO. 5, PART OF LOT 4 OF PLOVER ASSESSOR'S PLAT NO. 3, LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE SW 1/4; ALL IN SECTION 22, T23N, R8E, VILLAGE OF PLOVER, PORTAGE COUNTY, WISCONSIN

RELOCATION ORDER BUS 51 PORTAGE COUNTY

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

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

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

UTILITY INTEREST TABLE			
UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION
200	35	EASEMENT	DOC. # 368146
	38	EASEMENT	DOC. # 366890
	38	EASEMENT	DOC. # 368010
	39	EASEMENT	DOC. # 366892
	39	EASEMENT	DOC. # 367994
	41	EASEMENT	DOC. # 366889
	42	EASEMENT	DOC. # 366893
	42	EASEMENT	DOC. # 368147
	43	EASEMENT	DOC. # 368141
	47	EASEMENT	DOC. # 368016
201	36	NO EASEMENT OF RECORD	
	38	EASEMENT	DOC. # 366890
	39	EASEMENT	DOC. # 366892
	41	EASEMENT	DOC. # 366889
	42	EASEMENT	DOC. # 366893
	42	NO EASEMENT OF RECORD	
210	41	EASEMENT	DOC. # 231271
	42	NO EASEMENT OF RECORD	
	43	NO EASEMENT OF RECORD	
	44	NO EASEMENT OF RECORD	
	45	EASEMENT	DOC. # 230552
	46	EASEMENT	DOC. # 117274
	46	EASEMENT	DOC. # 230551
	47	EASEMENT	DOC. # 117274
	47	EASEMENT	DOC. # 229401
	47	EASEMENT	DOC. # 230553
	48	EASEMENT	DOC. # 230555
220	41	EASEMENT	DOC. # 674069
	41	EASEMENT	DOC. # 743853
221	41	EASEMENT	DOC. # 674069
	41	EASEMENT	DOC. # 743853

CURVE 802-132
L= 256.47'
LC= 256.01'
LCB= N12°25'20"W
R= 1230.50'

CURVE 133-134
L= 285.13'
LC= 285.11'
LCB= N17°22'52"W
R= 8069.50'

CURVE 193-194
L= 321.58'
LC= 320.81'
LCB= S11°32'47"E
R= 1345.50'

CURVE 198-199
L= 145.55'
LC= 145.48'
LCB= S03°51'38"W
R= 1345.50'

CURVE 205-156
L= 79.23'
LC= 79.22'
LCB= N05°06'53"E
R= 1230.50'

CURVE 176-206
L= 64.38'
LC= 64.37'
LCB= N00°07'44"W
R= 1230.50'

BASIS OF R/W	
INSTRUMENT	YEAR
PLOVER ASSESSOR'S PLAT NO. 3	1981
PLOVER ASSESSOR'S PLAT NO. 5	1981
CSM NO. 4760	1991
CSM NO. 9197	2006
CSM NO. 4243	1989
CSM NO. 7075	1999
RW PLAT NO. F05-3 (34)	1958
RW PLAT NO. 6998-01-21	1981

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED			TLE S.F.
			NEW	EXISTING	TOTAL	
35	DANIEL L. & MARY A. KOWALSKI	FEE/AR/TLE	6890	-	6890	2925
36	ANGELA G. ZDROIK	FEE/AR/TLE	3650	-	3650	1310
37	JERAMY E. LUKASAVAGE & EDWARD M. LUKASAVAGE	FEE/AR/TLE	3680	-	3680	1235
38	BEVERLY L. MATKE	FEE/AR/TLE	1490	-	1490	850
39	JACK & SARA STOSKOPF	FEE/AR/TLE	4570	-	4570	1310
41	POINT PLUS CREDIT UNION	FEE/AR/TLE	9100	-	9100	1915
42	CNL APF PARTNERS LP	FEE/AR/TLE	7270	-	7270	1735
43	O'BRIEN PLOVER PROPERTIES LLC	FEE/AR/TLE	4760	-	4760	1015
44	DELLA L DIESBURG	FEE/AR/TLE	5565	-	5565	1120
45	PORTAGE COUNTY BANK	FEE/AR/TLE	1925	-	1925	3440
46	HELEN G. ADAMS	FEE/AR	9230	-	9230	-
47	PLOVER 2440 POST ROAD WI LLC	FEE/AR/TLE	4030	-	4030	11820
48	VILLAGE OF PLOVER	FEE/AR/TLE	6355	-	6355	20520

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
200	VILLAGE OF PLOVER - WATER	RELEASE OF RIGHTS
201	VILLAGE OF PLOVER - SANITARY SEWER	RELEASE OF RIGHTS
210	WISCONSIN TELEPHONE COMPANY N/K/A AT&T	RELEASE OF RIGHTS
220	WISCONSIN PUBLIC SERVICE - GAS	RELEASE OF RIGHTS
221	WISCONSIN PUBLIC SERVICE - ELECTRIC	RELEASE OF RIGHTS

805890

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Portage COUNTY, WISCONSIN AT 3:05PM ON April 29, 2015 AS DOCUMENT # 805890 AND FILED IN Envl. #50

Cynthia Niedbalski
SIGNATURE OF REGISTER OF DEEDS

$31.00

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25-4.03
AMENDMENT NO. 3

PISTA 153+43.72
PIY =181,234.673
PIX =173,382.418
DELTA =03°58'14"(RT)
R =8000.00'
D =00°42'58"
T =277.30'
L =554.38'

PISTA 43+98.88
PIY =181,251.223
PIX =173,276.938
DELTA =15°19'10"(LT)
R =200.00'
D =28°38'52"
T =26.90'
L =53.48'

PISTA 143+35.58
PIY =180,268.953
PIX =173,703.544
DELTA =25°21'10"(LT)
R =1300.00'
D =04°24'26"
T =292.41'
L =575.24'

PISTA 40+88.02
PIY =181,058.719
PIX =173,533.945
DELTA =17°31'26"(RT)
R =300.00'
D =19°05'55"
T =46.24'
L =91.76'

COURSE TABLE							
From	To	Direction	Distance	From	To	Direction	Distance
109	720	N89°08'24"E	1286.80'	195	196	S02°56'53"E	72.91'
720	801	N00°51'36"W	43.33'	196	197	S01°22'11"W	60.00'
801	802	N27°46'06"E	42.79'	197	198	N88°37'49"W	122.70'
132	814	N18°23'36"W	76.58'	199	200	S06°57'34"W	78.18'
814	815	S71°36'24"W	25.00'	200	201	S38°19'25"E	29.77'
815	816	N18°23'36"W	80.00'	201	202	S86°02'20"E	61.70'
816	817	N71°36'24"E	25.00'	202	751	S03°54'48"W	29.13'
817	133	N18°23'36"W	291.42'	751	32	N86°04'46"W	130.00'
134	721	N16°15'17"W	39.96'	32	753	S89°35'55"W	121.00'
721	46	N73°54'54"E	69.50'	753	203	N00°24'05"W	31.45'
46	3198	S69°33'17"E	59.02'	203	204	N47°50'03"E	83.34'
3198	190	S15°49'11"E	113.86'	204	205	N06°57'34"E	53.18'
190	191	S17°16'26"E	32.11'	156	157	S88°47'11"W	20.56'
191	3195	S46°10'51"E	43.16'	157	158	N02°21'29"E	41.73'
3195	3194	S26°07'43"E	73.04'	158	176	S88°37'48"E	20.50'
3194	192	S16°11'39"W	54.91'	206	153	S88°47'28"W	26.24'
192	193	S18°23'36"E	431.58'	153	720	N00°51'36"W	22.68'
194	195	N89°11'40"E	124.76'				

RECOVERED MONUMENTS							
POINT	Y	X	DESCRIPTION	POINT	Y	X	DESCRIPTION
2140	179814.41	173688.64	DRILL HOLE	2217	180594.89	173625.12	3/4" IRON ROD
2198	179874.09	173695.38	CHISELED X	2218	180508.25	173649.71	1 1/4" IRON PIPE
2199	179865.23	173865.64	1 1/4" IRON PIPE	2219	180458.52	173663.81	3/4" IRON ROD
2200	179856.11	173955.05	4"X4" CONC. MON.	2241	181297.89	173348.10	4"X4" CONC. MON.
2201	180061.18	173714.58	CHISELED X	2247	181019.18	173428.78	1 1/4" IRON PIPE
2203	180118.46	173718.18	CHISELED X	2248	180853.95	173475.67	1" IRON PIPE
2204	180114.45	173886.66	1" IRON PIPE	2249	180624.39	173541.04	1" IRON PIPE
2205	180112.41	173971.22	4"X4" CONC. MON.	2250	180472.13	173583.88	CHISELED X
2209	180246.31	173708.32	CHISELED X	2252	180232.24	173377.84	1" IRON PIPE
2212	180530.74	173633.06	CHISELED X	2256	180167.87	173437.96	1" IRON PIPE
2214	180858.00	173543.23	1" IRON PIPE	2257	179880.31	173320.84	1" IRON PIPE
2215	180858.07	173550.53	4"X4" CONC. MON.	2261	180389.31	173607.36	1" IRON PIPE
2216	180594.76	173625.19	1" IRON PIPE				

FND. HARRISON MON'T
Y= 180173.980
X= 172294.460

FND. HARRISON MON'T
Y= 180252.720
X= 177540.290

P.I. 28+56.06
Y=179,846.784
X=173,508.193

P.I. 33+36.25
Y=180,201.549
X=173,512.191

P.I. 31+84.47
Y=179,835.179
X=173,836.172

P.I. 43+03.48
Y=181,249.949
X=173,181.549

P.I. 43+98.88

P.C. 43+71.98

P.T. 44+25.45

P.I. 153+43.72

P.C. 40+41.78

P.T. 41+33.54

P.I. 41+77.48
Y=181,060.086
X=173,624.112

P.I. 40+88.02

P.I. 143+35.58

P.C. 140+43.18

P.C. 150+69.54

STA 139+11.30 POST RD *
STA 30+00 CEDAR DR
Y=179,847.792
X=173,652.133

STA 142+68.88 POST RD *
STA 35+00 RIVER DR
Y=180,203.989
X=173,675.924

STA 142+59.61 POST RD *
SECTION LINE

STA 153+88.71 POST RD *
STA 45+00 GILMAN DR
Y=181,279.329
X=173,374.409

STA 151+28.95 POST RD *
STA 40+00.00 SCHOOL DR
Y=181,030.945
X=173,450.420

VILLAGE OF PLOVER

POST ROAD / BUSINESS 51

CEDAR DRIVE

RIVER DRIVE

PINE DRIVE

GILMAN DRIVE

SCHOOL DRIVE

SIXTEENTH LINE

SEC 22 T23N R8E

NW-SW

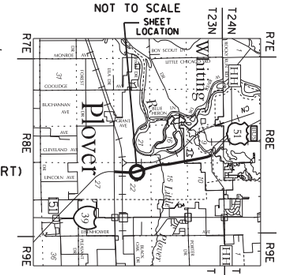
NE-SW

SE-NW

SW-NW

TLE-SLOPES 2925 SQ FT
TLE-SLOPES 1310 SQ FT
TLE-SLOPES 850 SQ FT
TLE-SLOPES 1235 SQ FT
TLE-SLOPES 3440 SQ FT
TLE-SLOPES 11820 SQ FT
TLE-SLOPES 20520 SQ FT
TLE-SLOPES 2215 SQ FT
TLE-SLOPES 1735 SQ FT
TLE-SLOPES 1015 SQ FT
TLE-SLOPES 1120 SQ FT
TLE-SLOPES 1810 SQ FT

LOCATION SKETCH
NOT TO SCALE



FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET. RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN PORTAGE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 765584.

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JASON L. CANCE — PRINTED NAME
SIGNATURE — 4-14-15 DATE

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

BRENT L. STELLA — PRINTED NAME
Brent L. Stella — SIGNATURE
4-14-15 DATE

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : P:\UZ\W\Witnc\112545\5-final-dsgn\51-drawings\40-TransHwy\040104 RP.dgn
PLOT DATE : 4/14/2015
PLOT BY : SEH
PLOT NAME :
PLOT SCALE : N/A
APPRAISAL PLAT DATE :

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 6414-00-25 - 4.04 AMENDMENT NO. 2

AMENDS UTILITY NO. 200 AND PROVIDES CLARIFICATION OF ALL UTILITY LOCATIONS TO TRANSPORATION PROJECT PLAT 6414-00-25-4.04 AMENDMENT NO. 1 RECORDED AS DOCUMENT NO. 786951

BUS 51, VILLAGE OF PLOVER & WHITING (STH 54 - MINNESOTA AVE.)

PART OF LOT 60 OF PLOVER ASSESSOR'S PLAT NO. 6, PART OF LOT 1, CSM NO. 300, PART OF LOT 1, CSM NO. 8711, PART OF LOT 1, CSM NO. 2615, PART OF LOT 1, CSM NO. 549, PART OF LOTS 1 & 2 OF CSM NO. 94, LOCATED IN AND INCLUDING PART OF THE NW 1/4 OF THE NW 1/4, PART OF LOTS 60 THRU 62 OF PLOVER ASSESSOR'S PLAT NO. 6, PART OF LOT 1 OF PLOVER ASSESSOR'S PLAT NO. 3 LOCATED IN AND INCLUDING PART OF THE SW 1/4 OF THE NW 1/4, ALL IN SECTION 22, T23N, R8E, VILLAGE OF PLOVER, PORTAGE COUNTY, WISCONSIN

RELOCATION ORDER BUS 51 PORTAGE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	R/W S.F. REQUIRED EXISTING	R/W S.F. REQUIRED TOTAL	TLE S.F.
48	VILLAGE OF PLOVER	FEE/AR/TLE	530	-	530	3125
53	JOHN A. ORLOWSKI	FEE/AR/TLE	6320	-	6320	70
54	THOMAS J. & LISA R. JAKUSZ	FEE/AR/TLE	3535	-	3535	770
55	DARYL A. & GWEN J. MOREY	FEE/AR/TLE	2970	-	2970	740
56	DORR E. & IRENE H. O'BRIEN	FEE/AR/TLE	7975	-	7975	2055
57	DAVID PANG SII & NANCY SII	FEE/AR/TLE	10640	-	10640	2740
58	EUGENE J. KATZ & BENNETT C. KATZ, D/B/A KATZ AND KATZ	FEE/AR/TLE	11065	-	11065	4265
59	TERRANCE A. ZDZIEBLOWSKI ETAL.	FEE/AR/TLE	4010	-	4010	1540
60	DONALD LEE COTE & JANICE M. SINGER & EUGENE WILLIS COTE	FEE/AR/TLE	1105	-	1105	180
61	SKY CLUB INC.	FEE/AR/TLE	315	-	315	4050
62	FREUND RENTALS LLC.	FEE/AR/TLE	2405	-	2405	2925
63	MARKOVICH PROPERTIES INC.	FEE/AR/TLE	5535	-	5535	2790
64	MARKOVICH INVESTMENT CO.	FEE/AR/TLE	4890	-	4890	1580
65	THONG D. LEE & NENG LEE, ZONG YANG & PADEE YANG	FEE/AR/TLE	2300	-	2300	2295

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
200	VILLAGE OF PLOVER - WATER	RELEASE OF RIGHTS
201	VILLAGE OF PLOVER - SANITARY SEWER	RELEASE OF RIGHTS
210	WISCONSIN TELEPHONE COMPANY N/K/A AT&T	RELEASE OF RIGHTS
220	WISCONSIN PUBLIC SERVICE - GAS	RELEASE OF RIGHTS
221	WISCONSIN PUBLIC SERVICE - ELECTRIC	RELEASE OF RIGHTS

794553

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Portage COUNTY, WISCONSIN AT 9:45AM ON April 3, 2014 AS DOCUMENT # 794553 AND FILED IN Env. # 50

Diane Hall Dorr
SIGNATURE OF REGISTER OF DEEDS

$25.00

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25-4.04
AMENDMENT NO. 2

PISTA 43+98.88
PIY =181,251.223
PIX =173,276.938
DELTA =15°19'10"(LT)
R =200.00'
D =28°38'52"
T =26.90'
L =53.48'

PISTA 48+80.04
PIY =182,509.251
PIX =172,929.901
DELTA =15°36'34"(LT)
R =200.00'
D =28°38'52"
T =27.41'
L =54.49'

PISTA 153+43.72
PIY =181,234.673
PIX =173,382.418
DELTA =03°58'14"(RT)
R =8000.00'
D =00°42'58"
T =277.30'
L =554.38'

PISTA 601+59.03
PIY =181,518.469
PIX =173,473.673
DELTA =14°03'16"(RT)
R =600.00'
D =09°32'57"
T =73.96'
L =147.18'

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
2225	181467.53	173408.23	1" IRON PIPE
2234	182256.89	173146.44	1 1/4" IRON PIPE
2236	182440.18	173094.45	1" IRON ROD
2237	182459.30	173020.49	1 1/4" IRON PIPE
2238	181977.70	173156.88	3/4" IRON ROD
2239	181712.50	173227.88	1" IRON PIPE
2240	181513.55	173280.24	SURVEY NAIL
2241	181297.89	173348.10	4"x4" CONC. MON.
2262	182473.88	172845.76	1 1/4" IRON PIPE
2268	182542.10	172996.94	4"x4" CONC. MON.

FND. HARRISON MON'T
Y= 182814.560
X= 172322.040

FND. HARRISON MON'T
Y= 182854.440
X= 174960.800

P.I. 43+03.48
Y=181,249.949
X=173,181.549

P.C. 43+71.98

P.I. 43+98.88

P.T. 44+25.45

P.I. 153+43.72

P.T. 153+88.71

P.C. 154+85.0

P.T. 155+95.62

P.C. 600+85.06

P.I. 156+20.80

P.I. 601+59.03

P.T. 602+32.24

P.I. 603+99.74
Y=181,520.021
X=173,715.127

P.I. 47+71.48
Y=182,508.932
X=172,821.341

P.C. 48+52.63

P.T. 49+07.11

P.I. 48+80.04

P.I. 166+71.26
Y=182,520.588
X=173,051.707

STA 153+88.71 POST RD = STA 45+00 GILMAN DR
Y=181,279.329
X=173,374.409

STA 155+95.62 POST RD = STA 600+00 ROOSEVELT DR
Y=181,478.860
X=173,319.659

STA 166+93.48 POST RD = STA 50+00 BEA-JAY LN
Y=182,541.971
X=173,045.663

VILLAGE OF PLOVER

POST ROAD / BUSINESS 51

GILMAN DRIVE

ROOSEVELT DRIVE

BEA-JAY LANE

SIXTEENTH LINE

SEC. LINE = S89°08'03"W 2639.06'

COURSE TABLE			
FROM	TO	DIRECTION	DISTANCE
108	725	N89°08'03"E	643.89'
725	750	S15°47'04"E	293.38'
750	749	S15°47'04"E	22.22'
749	226	N74°53'47"E	45.50'
226	820	S14°25'25"E	253.80'
820	821	N75°34'38"E	25.00'
821	822	S14°25'22"E	50.00'
822	823	S75°34'38"W	25.00'
823	824	S14°25'22"E	279.00'
824	825	N75°34'38"E	25.00'
825	826	S14°25'22"E	50.00'
826	827	S75°34'38"W	25.00'
827	227	S14°25'22"E	218.11'
227	3203	S17°44'54"E	85.94'
3203	3202	S15°50'21"E	81.19'
3202	412	N89°13'43"E	125.70'
412	411	S06°19'02"E	67.66'
411	413	S73°26'14"W	93.99'
413	3199	S24°49'17"W	27.98'
3199	3198	S13°52'42"E	177.10'
3198	46	N69°33'17"W	59.02'
46	748	S73°54'54"W	74.55'
747	135	N01°40'20"W	29.74'
135	147	N15°21'05"E	92.47'
136	137	N14°25'22"W	1022.31'
137	818	S89°12'20"W	105.62'
818	819	S00°45'35"E	17.10'
819	3458	S89°12'19"W	40.00'
3458	3413	N00°45'35"W	17.10'
3413	727	N00°10'24"W	35.00'
727	16	N89°49'36"E	56.80'
17	750	N74°13'02"E	92.88'

UTILITY INTEREST TABLE			
UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION
200	54	EASEMENT	DOC. # 368004
	55	EASEMENT	DOC. # 368004
	56	EASEMENT	DOC. # 368017
	57	EASEMENT	DOC. # 368143
	58	EASEMENT	DOC. # 368008
	59	EASEMENT	DOC. # 368029
	62	EASEMENT	DOC. # 368283
	63	EASEMENT	DOC. # 367995
201	60	EASEMENT	DOC. # 364756
210	48	EASEMENT	DOC. # 230555
	55	EASEMENT	DOC. # 115270
	56	EASEMENT	DOC. # 115270
	57	EASEMENT	DOC. # 115270
	57	EASEMENT	DOC. # 383948
	58	EASEMENT	DOC. # 115270
	59	EASEMENT	DOC. # 115270
	60	EASEMENT	DOC. # 115270
	61	EASEMENT	DOC. # 231268
	62	EASEMENT	DOC. # 231059
	63	EASEMENT	DOC. # 231269
	64	EASEMENT	DOC. # 231269
	65	EASEMENT	DOC. # 231280
220	57	EASEMENT	DOC. # 383948
	61	EASEMENT	DOC. # 347211
221	57	EASEMENT	DOC. # 383948
	62	NO EASEMENT OF RECORD	

CURVE 748-747
L= 50.31'
LC= 50.18'
LCB= S81°07'17"W
R= 200.00'

CURVE 147-136
L= 120.10'
LC= 120.10'
LCB= N14°50'57"W
R= 8069.50'

CURVE 16-17
L= 54.49'
LC= 54.32'
LCB= N82°01'19"E
R= 200.00'

BASIS OF R/W	
INSTRUMENT	YEAR
PLOVER ASSESSOR'S PLAT NO. 3	1981
PLOVER ASSESSOR'S PLAT NO. 6	1982
CSM NO. 549	1973
CSM NO. 2615	1982
CSM NO. 8711	2004
CSM NO. 300	1971
CSM NO. 94	1969
RW PLAT NO. 6414-01-21	2002
RW PLAT NO. 6998-01-21	1981

LOCATION SKETCH
NOT TO SCALE

SCALE, FEET
0 50 100

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET. RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN PORTAGE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 765584.

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JASON L. CANCE — PRINTED NAME — SIGNATURE — 3-17-2014 DATE

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

BRENT L. STELLA — PRINTED NAME — SIGNATURE — 3-25-14 DATE

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : P:\UZ\W\Witnc\112545\5-final-dsgn\51-drawings\40-TransHwy\040105 RP.dgn
PLOT DATE : 3/17/2014
PLOT BY : SEH
PLOT NAME :
PLOT SCALE : N/A
APPRAISAL PLAT DATE :

TRANSPORTATION PROJECT PLAT NO: 6414-00-25 - 4.05 AMENDMENT NO. 4

ADDS PARCEL 271 AND AMENDS PARCEL 69 OF TRANSPORATION PROJECT PLAT NO. 6414-00-25-4.05 AMENDMENT NO. 1 RECORDED AS DOCUMENT NO. 786952

BUS. 51, VILLAGE OF PLOVER AND WHITING (STH 54 - MINNESOTA AVE.)

THAT PART OF LOTS 46 THRU 49 OF PLOVER ASSESOR'S PLAT NO. 6, PART OF LOTS 1 & 4 OF CSM NO. 2871, PART OF LOT 1 CSM NO. 6446, PART OF LOTS 1 & 2 OF CSM NO. 4179, PART OF LOT 1 CSM NO. 4831, PART OF LOTS 1 & 2 OF CSM NO. 3039, LOCATED IN AND INCLUDING PART OF THE SW 1/4 OF THE SW 1/4, OF SECTION 15; PART OF LOT 4 OF CSM NO. 2871, PART OF LOT 1 OF CSM NO. 1706, LOCATED IN AND INCLUDING PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 22; ALL IN T23N, R8E, VILLAGE OF PLOVER, PORTAGE COUNTY, WISCONSIN

RELOCATION ORDER BUS 51 PORTAGE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SURVEYOR'S NOTE:
THERE APPEARS TO HAVE BEEN AN ERROR IN THE LOCATION OF THE NORTH LINE OF LOT 51 OF PLOVER ASSESSOR'S PLAT NO. 6. THE LOCATION OF THE NORTH LINE OF SAID LOT 51 WAS INTENDED TO BE USED FOR CERTFIED SURVEY MAP NO. 2871 AND THEREFORE THE LOCATION OF THE RIGHT OF WAY OF PLOVER SPRINGS DRIVE PER DOCUMENT NO. 366291. THE ERRORS AND INTENTIONS WERE CONFIRMED BY LANCE HABECK S-1444 AS HE WAS RESPONSIBLE FOR THE DRAFTING OF THE SAID ASSESSOR'S PLAT AND SEALED SAID CERTIFIED SURVEY MAP NO. 2871. THIS TRANSPORTATION PROJECT PLAT SHOWS THE INTENDED LOCATION OF PLOVER SPRINGS DRIVE AS CONFIRMED BY LANCE HABECK.

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
285	183632.31	172767.48	CHISELED X
293	183299.93	172954.04	1" IRON PIPE
294	183210.90	172892.75	CHISELED X
295	183045.13	172933.90	CHISELED X
296	183042.19	172934.60	CHISELED X
297	182823.86	172993.08	1" IRON PIPE
712	183750.92	172654.17	4"X4" CONC. MON.
713	183750.88	172646.87	4"X4" CONC. MON.
2237	182459.30	173020.49	1 1/4" IRON PIPE
2268	182542.10	172996.94	4"X4" CONC. MON.
2275	183601.17	172696.46	1" IRON PIPE
2276	183702.85	172667.67	1" IRON PIPE
2278	182908.07	172894.93	2" IRON PIPE
2593	182940.88	172959.73	CHISELED X
2594	183737.00	172733.90	CHISELED X
2595	183406.42	172837.10	UNKNOWN
2596	183376.73	172874.79	UNKNOWN

836967

CYNTHIA A. WISINSKI
REGISTER OF DEEDS
PORTAGE COUNTY
STEVENS POINT, WI
RECORDED ON
02/13/2018 8:31 AM

REC FEE: 25.00
PAGES: 1
FEE EXEMPT:

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25-4.05
AMENDMENT NO. 4

BASIS OF R/W	
INSTRUMENT	YEAR
PLOVER ASSESSOR'S PLAT NO. 6	1982
CSM NO. 2871	1983
CSM NO. 6488	1997
CSM NO. 1706	1978
CSM NO. 3039	1984
CSM NO. 1870	1979
CSM NO. 4831	1991
CSM NO. 4179	1988
CSM NO. 6446	1997
CSM NO. 2419	1981
CSM NO. 1906	1979
RW PLAT NO. F05-3134	1957

CURVE 421-767
L= 202.25'
LC= 202.04'
LCB= N12°19'00"W
R= 1269.50'

CURVE 450-424
L= 144.78'
LC= 144.68'
LCB= S15°17'18"E
R= 1154.50'

FOUND HARRISON MON.
Y= 182814.560
X= 172322.040

FND. HARRISON MON.
Y= 182854.440
X= 174960.800

P.I. 47+71.48
Y=182,508.922
X=172,821.341

PISTA 48+80.05
PIY =182,509.251
PIX =172,929.901
DELTA =15°36'34"(LT)
R =200.00'
D =28°38'52"
T =27.41'
L =54.49'

P.C. 48+52.64

P.I. 48+80.04

P.T. 49+07.11

P.I. 169+71.26
Y=181,520.568
X=173,015.707

BEA-JAY LANE

VILLAGE OF PLOVER

POST ROAD / BUSINESS 51

SEC 22 NW-NW

SEC 15 SW-SW

LOT 4 CSM NO. 2871-10-129

LOT 1 CSM NO. 2871-10-129

LOT 1 CSM NO. 1706-6-164

LOT 2 CSM NO. 3039-10-297

LOT 1 CSM NO. 3039-10-297

LOT 2 CSM NO. 4179-14-234

LOT 1 CSM NO. 4179-14-234

LOT 1 CSM NO. 6446-23-269

LOT 1 CSM NO. 6488-24-11

LOT 2 CSM NO. 6488-24-11

P.I. 173+33.45
Y=183,157.811
X=172,871.579

P.I. 695+30.13
Y=183,298.152
X=172,355.475

P.C. 697+38.04

P.I. 697+95.63

P.T. 698+53.16

P.C. 700+86.78

P.I. 701+40.27

P.T. 701+93.65

P.I. 704+64.28
Y=183,363.207
X=173,282.269

P.I. 180+52.86
PIY =183,846.217
PIX =172,662.678
DELTA =13°41'20"(RT)
R =1,200.00'
D =4°46'29"
T =144.04'
L =286.70'

PLOVER SPRINGS DRIVE

PISTA 697+95.63
PIY =183,296.969
PIX =172,620.969
DELTA =4°23'50"(LT)
R =1500.00'
D =3°49'11"
T =57.59'
L =115.09'

PISTA 701+40.27
PIY =183,348.254
PIX =172,958.195
DELTA =6°07'22"(LT)
R =1000.00'
D =5°43'47"
T =53.48'
L =106.86'

SCALE, FEET
0 50 100

N

LOCATION SKETCH
NOT TO SCALE

SHEET LOCATION

COURSE TABLE							
FROM	TO	DIRECTION	DISTANCE	FROM	TO	DIRECTION	DISTANCE
108	414	N89°08'03"E	571.97'	1060	1061	N00°28'39"W	84.06'
414	415	N15°47'02"W	327.41'	1061	883	S46°07'08"E	119.19'
415	416	N16°52'56"W	133.21'	883	426	N89°01'46"E	160.70'
416	417	S89°08'46"W	202.99'	426	427	S00°52'32"E	60.00'
417	729	N00°15'21"E	66.01'	427	428	S82°51'19"W	139.63'
729	418	N00°15'21"E	3.93'	428	429	S77°38'03"W	93.01'
418	419	N79°03'03"E	149.13'	429	430	S34°32'39"W	58.86'
419	420	N34°30'26"E	33.48'	430	431	S16°52'51"E	56.15'
420	828	N16°52'51"W	184.31'	431	432	S10°32'07"E	151.34'
828	829	S73°07'09"W	20.00'	432	435	S15°47'04"E	216.64'
829	830	N16°52'51"W	55.00'	435	226	S15°47'04"E	304.02'
830	831	N73°07'09"E	20.00'	226	749	S74°53'47"W	45.50'
831	421	N16°52'51"W	73.82'	749	750	N15°47'04"W	22.22'
767	3992	S76°26'49"E	107.00'	750	17	S74°13'02"W	92.88'
3992	450	N83°12'37"E	15.98'	17	433	N24°42'03"W	27.16'
424	425	S16°52'51"E	336.49'	433	434	N16°30'32"E	51.65'
425	2596	S51°45'50"E	36.97'	434	414	N15°47'04"W	241.41'
2596	1060	N89°01'46"E	51.22'				

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
200	VILLAGE OF PLOVER - WATER	RELEASE OF RIGHTS
210	WISCONSIN TELEPHONE COMPANY N/K/A AT&T	RELEASE OF RIGHTS
220	WISCONSIN PUBLIC SERVICE - GAS	RELEASE OF RIGHTS
221	WISCONSIN PUBLIC SERVICE - ELECTRIC	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED			TLE S.F.
			NEW	EXISTING	TOTAL	
65	THONG D. LEE & NENG LEE, ZONG YANG & PADEE YANG	FEE/AR/TLE	2180	-	2180	2060
68	ST. MICHAEL'S HOSPITAL OF STEVENS POINT INC.	FEE/AR/TLE	8950	-	8950	10195
69	ELVIS ROBERTS PROPERTIES LLC	FEE/AR/TLE	8795	-	8795	12060
71	CE & CW LP	FEE/AR/TLE	11835	-	11835	5625
72	NORBERT F. & JOSEPHINE F. SIMCAKOSKI	FEE/AR/TLE	3910	-	3910	830
73	ERIC W. WROBLEWSKI	FEE/AR/TLE	1735	-	1735	575
74	KIMBERLY S. WAHL & MARIYN M. WOLFE	FEE/AR/TLE	2795	-	2795	1355
75	SUPER BOWL ENTERPRISES INC.	FEE/AR/TLE	4040	-	4040	3525
76	ANTHONY J. OPIOLA REVOCABLE TRUST DATED JUNE 7, 2011	FEE/AR/TLE	1870	-	1870	715
77	ZRH LLP	FEE/AR/TLE	10095	-	10095	15705
79	STEPHEN C. & MELISSA W. DEBOT	FEE/AR	3560	-	3560	-
80	PLOVER PROFESSIONAL CENTER LLC.	FEE/AR/TLE	2195	-	2195	8300
81	RIVERVIEW CENTER OF PLOVER LLC.	FEE/AR/TLE	1455	-	1455	2580
271	CE & CW LP	FEE	412	-	412	-

UTILITY INTEREST TABLE			
UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION
200	72	EASEMENT	DOC. # 368026
	73	EASEMENT	DOC. # 368282
	74	EASEMENT	DOC. # 368145
	75	EASEMENT	DOC. # 368276
	77	EASEMENT	DOC. # 368013
	81	EASEMENT	DOC. # 368144
210	65	EASEMENT	DOC. # 231280
	68	EASEMENT	DOC. # 115270
	68	EASEMENT	DOC. # 231265
	69	EASEMENT	DOC. # 231265
	75	EASEMENT	DOC. # 231280
	76	EASEMENT	DOC. # 231280
	77	NO EASEMENT OF RECORD	
	81	EASEMENT	DOC. # 231276
220	71	EASEMENT	DOC. # 566686
	77	EASEMENT	DOC. # 746110
221	68	NO EASEMENT OF RECORD	
	69	NO EASEMENT OF RECORD	
	71	EASEMENT	DOC. # 566686
	77	EASEMENT	DOC. # 746110

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN PORTAGE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 765584.

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JASON L. CANCE — PRINTED NAME
SIGNATURE — 2-12-2018 DATE

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

BRENT L. STELLA — PRINTED NAME
Brent L. Stella — SIGNATURE
2-12-18 DATE

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : P:\UZ\W\Witnc\112545\5-final-dsgn\51-drawings\40-TransHwy\040106 RP.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 2/12/2018
PLOT BY : SEH
PLOT NAME :
PLOT SCALE : N/A

DOT COMPOSITE: ORIGINAL DOCUMENT LOCATED AT THE REGISTER OF DEEDS OFFICE

TRANSPORTATION PROJECT PLAT NO: 6414-00-25 - 4.06 AMENDMENT NO. 2

AMENDS UTILITY NO. 200 AND PROVIDES CLARIFICATION OF ALL UTILITY LOCATIONS TO TRANSPORTATION PROJECT PLAT NO. 6414-00-25-4.06 RECORDED AS DOCUMENT NO. 786953

BUS 51, VILLAGE OF PLOVER AND WHITING (STH 54 - MINNESOTA AVE.)

PART OF LOTS 40 THRU 43 OF PLOVER ASSESSOR'S PLAT NO. 6, PART OF LOT 2 CSM NO. 9547, PART OF OUTLOT 1 CSM NO. 5965, PART OF LOT 1 CSM NO. 5090, PART OF LOT 1 CSM NO. 4652, PART OF LOT 2 CSM NO. 4927, PART OF OUTLOT 1 SPRINGVILLE POND SUBDIVISION, PART OF LOTS 1 & 2 OF CSM NO. 6285, PART OF LOT 18 OF HALLIDAY'S SURVEY OF 1888, LOCATED IN AND INCLUDING PART OF THE NW 1/4 OF THE SW 1/4; PART OF LOT 46 OF PLOVER ASSESSOR'S PLAT NO. 6, PART OF LOT 2 CSM NO. 9547, PART OF OUTLOT 1 SPRINGVILLE POND SUBDIVISION, PART OF LOT 1 CSM NO. 2419, LOCATED IN AND INCLUDING PART OF THE SW 1/4 OF THE SW 1/4; ALL IN SECTION 15, T23N, R8E, VILLAGE OF PLOVER, PORTAGE COUNTY, WISCONSIN

RELOCATION ORDER BUS 51 PORTAGE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

UTILITY INTEREST TABLE							
UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION	UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION
200	74	EASEMENT	DOC. # 368145	210	86	EASEMENT	DOC. # 231019
	85	EASEMENT	DOC. # 325813		89	EASEMENT	DOC. # 231276
	85	EASEMENT	DOC. # 368132		89	NO EASEMENT OF RECORD	
	86	EASEMENT	DOC. # 368134		91	EASEMENT	DOC. # 115272
	86	EASEMENT	DOC. # 368133		92	EASEMENT	DOC. # 115272
	87	EASEMENT	DOC. # 368023		93	EASEMENT	DOC. # 115272
	88	EASEMENT	DOC. # 368281		93	EASEMENT	DOC. # 231277
	89	EASEMENT	DOC. # 368144		94	EASEMENT	DOC. # 115272
	90	EASEMENT	DOC. # 368005		94	EASEMENT	DOC. # 231278
	92	EASEMENT	DOC. # 368449		95	EASEMENT	DOC. # 231270
	93	EASEMENT	DOC. # 368018		95	EASEMENT	DOC. # 115278
	94	EASEMENT	DOC. # 368018		95	EASEMENT	DOC. # 231278
	95	EASEMENT	DOC. # 368018	220	85	EASEMENT	V. 229, P. 617
	95	EASEMENT	DOC. # 368030		89	NO EASEMENT OF RECORD	
	95	EASEMENT	DOC. # 368138	221	89	EASEMENT	DOC. # 145000
201	85	EASEMENT	DOC. # 325813		91	NO EASEMENT OF RECORD	
	85	EASEMENT	DOC. # 708528		92	NO EASEMENT OF RECORD	
					93	NO EASEMENT OF RECORD	
					94	NO EASEMENT OF RECORD	

794555

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Portage COUNTY, WISCONSIN AT 9:11:00 AM ON April 3, 2014 AS DOCUMENT # 794555 AND FILED IN Vol. 950

SIGNATURE OF REGISTER OF DEEDS $25.00

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25-4.06
AMENDMENT NO. 2

CURVE 442-772	CURVE 767-422	CURVE 3926-3924	CURVE 451-443
L= 337.91'	L= 46.10'	L= 258.77'	L= 355.06'
LC= 337.79'	LC= 46.10'	LC= 258.52'	LC= 354.93'
LCB= N05°50'11"W	LCB= N06°42'44"W	LCB= N05°52'59"W	LCB= S05°53'10"E
R= 3660.50'	R= 1269.50'	R= 1691.55'	R= 3775.50'

CURVE 448-450
L= 54.34'
LC= 54.33'
LCB= S08°20'51"E
R= 1154.50'

SCALE, FEET
0 50 100

FND. HARRISON MON.
Y= 182814.560
X= 172322.040

FND. 60D NAIL
Y= 180062.334
X= 173431.719

PISTA 53+55.34
PIY =183,976.079
PIX =172,511.109
DELTA =13°47'52"(RT)
R =160.00'
D =35°48'35"
T =19.36'
L =38.53'

PISTA 53+92.54
PIY =183,973.056
PIX =172,548.378
DELTA =13°42'38"(LT)
R =150.00'
D =38°11'53"
T =18.03'
L =35.89'

PISTA 180+52.86
PIY =183,846.217
PIX =172,662.678
DELTA =13°41'20"(RT)
R =1200.00'
D =4°46'29"
T =144.04'
L =286.70'

PISTA 55+94.97
PIY =184,005.252
PIX =172,748.403
DELTA =28°34'41"(LT)
R =125.00'
D =45°50'10"
T =31.84'
L =62.35'

PISTA 56+62.69
PIY =184,047.573
PIX =172,802.958
DELTA =26°11'00"(RT)
R =160.00'
D =35°48'36"
T =37.21'
L =73.12'

PISTA 60+75.68
PIY =184,865.360
PIX =172,681.614
DELTA =4°06'17"(LT)
R =700.00'
D =8°11'06"
T =25.09'
L =50.15'

PISTA 195+01.90
PIY =185,294.381
PIX =172,581.919
DELTA =7°33'13"(LT)
R =3,730.00'
D =1°32'10"
T =246.23'
L =491.75'

SUBJECT TO FLOWAGE RIGHTS PER DOC. # 49173

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
272	184858.93	172920.00	1" IRON PIPE
276	184833.20	172621.61	1" IRON PIPE
277	184536.60	172631.47	1" IRON PIPE
299	185275.27	172604.40	1" IRON PIPE
704	185318.65	172534.25	1" IRON PIPE
705	185318.60	172529.26	4"X4" CONC. MON.
706	184533.05	172556.83	4"X4" CONC. MON.
707	184534.80	172556.74	1" IRON PIPE
708	184534.79	172554.77	1" IRON PIPE
709	184001.40	172568.54	RAILROAD SPIKE
2294	184763.58	172548.09	1 1/4" IRON PIPE
2297	184875.50	172545.75	1" IRON PIPE
2298	184984.30	172543.12	1" IRON PIPE
2299	185107.19	172539.99	1" IRON PIPE
2300	185315.45	172535.26	1" IRON ROD
2598	184893.40	172619.44	2" IRON PIPE
2599	185299.82	172609.50	1" IRON PIPE
2600	185275.65	172611.46	1" IRON PIPE

FEE STATION OUT TABLE		
POINT	STATION	OUT
229	57+15.03	24.00'
284	57+15.77	19.46'
447	55+83.13	28.41'
448	181+15.78	45.50'
450	180+59.30	45.50'
422	181+43.58	69.50'
423	54+07.95	27.48'
436	53+40.95	21.86'
437	53+40.78	17.09'
767	181+00	69.50'

TLE STATION OUT TABLE		
POINT	STATION	OUT
439	53+41.1	27.0'
537	181+52.4	79.5'
547	181+25.2	65.5'
551	181+00	79.5'
667	180+58.2	65.5'
692	55+92.3	32.3'
768	57+14.1	29.4'

COURSE TABLE			
FROM	TO	DIRECTION	DISTANCE
108	771	N00°13'53"E	1114.36'
771	437	N80°49'47"E	174.65'
437	438	N07°58'29"W	33.01'
438	3926	N80°49'47"E	75.10'
3924	3923	N01°30'05"W	57.36'
3923	3922	N88°29'59"E	22.00'
3922	706	N01°30'03"W	216.65'
706	3910	S88°30'36"W	2.00'
3910	832	N03°11'56"W	306.80'
832	833	S86°48'29"W	20.02'
833	834	N03°11'31"W	50.00'
834	835	N86°48'29"E	20.00'
835	442	N03°11'31"W	155.67'
772	773	N81°31'08"E	69.50'
773	451	N73°20'57"E	45.96'
443	444	S03°11'31"E	155.49'
444	445	S27°30'10"E	65.00'
445	446	S29°16'31"W	49.85'
446	228	S03°11'31"E	738.48'
228	449	N78°33'30"E	156.71'
449	284	S11°37'08"E	50.00'
284	229	S02°21'20"E	4.59'
229	447	S63°40'07"W	128.31'
447	448	S31°52'53"W	72.77'
450	3992	S83°12'37"W	15.98'
3992	767	N76°26'49"W	107.00'
422	423	N52°13'11"W	27.66'
423	436	N86°52'20"W	68.03'
436	437	N09°12'57"W	4.77'

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN PORTAGE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 765584.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

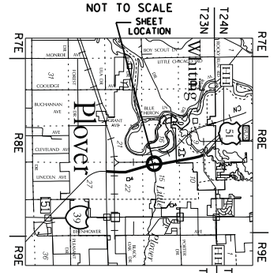
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	R/W S.F. REQUIRED EXISTING	R/W S.F. REQUIRED TOTAL	TLE S.F.
74	KIMBERLY S. WAHL & MARILYN M. WOLFE	FEE/AR/TLE	2200	-	2200	975
83	BETTY JANE IBER	AR/TLE	-	-	-	520
84	BETTY JANE KONOPANCKY SURVIVORS TRUST DATED 10/5/2008	AR/TLE	-	-	-	765
85	RANDAL T. AND LISA A. WOYAK	FEE/AR/TLE	790	-	790	2290
86	BANK ONE TRUST COMPANY N/K/A JP MORGAN CHASE BANK, AS TRUSTEE OF THE FAMILY TRUST CREATED UNDER THE LAST WILL AND TESTAMENT OF WILLIAM ADAMS DATED NOVEMBER 10, 1977	FEE/AR/TLE	3240	-	3240	1720
87	DAVID R. & MARY A. BOYLES	FEE/AR/TLE	1880	-	1880	1225
88	LOTZER JOINT REVOCABLE TRUST U/A DTD 11-17-92	FEE/AR/TLE	7250	-	7250	2750
89	PINE ROCK PROPERTIES, LLC	FEE/AR/TLE	8955	-	8955	2450
90	VILLAGE OF PLOVER	FEE/AR/TLE	16320	-	16320	9225
91	TAD C. MEIER & LISA A. MEIER, OR THEIR SUCESSOR AS TRUSTEES OF THE TAD C. MEIER AND LISA A. MEIER JOINT REVOCABLE TRUST DATED APRIL 13, 2007	FEE/AR/TLE	8495	-	8495	2755
92	THOMAS J. & KATHERINE A. DAVIES	FEE/AR/TLE	6695	-	6695	1465
93	G.F.P. LLC	FEE/AR/TLE	5965	-	5965	2035
94	RITA M. PLACEWAY	FEE/AR/TLE	4330	-	4330	2020
95	OKRAY ENTERPRISES, INC.	FEE/AR/TLE	445	-	445	1060

BASIS OF R/W	
INSTRUMENT	YEAR
PLOVER ASSESSOR'S PLAT NO. 6	1982
SPRINGVILLE POND SUBDIVISION	1973
CSM NO. 9547	2008
CSM NO. 5090	1992
CSM NO. 4927	1991
CSM NO. 2419	1981
CSM NO. 6285	1996
RW PLAT NO. F05-3 (34)	1957

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
200	VILLAGE OF PLOVER - WATER	RELEASE OF RIGHTS
201	VILLAGE OF PLOVER - SANITARY SEWER	RELEASE OF RIGHTS
210	WISCONSIN TELEPHONE COMPANY N/K/A AT&T	RELEASE OF RIGHTS
220	WISCONSIN PUBLIC SERVICE - GAS	RELEASE OF RIGHTS
221	WISCONSIN PUBLIC SERVICE - ELECTRIC	RELEASE OF RIGHTS

LOCATION SKETCH
NOT TO SCALE



SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JASON L. CANCE — PRINTED NAME — SIGNATURE — 3-17-2014 — DATE

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

BRENT L. STELLA — PRINTED NAME — SIGNATURE — 3-25-14 — DATE

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : P:\UZ\W\Witnc\112545\5-final-dsgn\51-drawings\40-TransHwy\040107 RP.dgn
PLOT DATE : 3/17/2014 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A
APPRAISAL PLAT DATE :

TRANSPORTATION PROJECT PLAT NO: 6414-00-25 - 4.07 AMENDMENT NO. 1

AMENDS PARCEL NO. 95, UTILITY NO. 210 AND PROVIDES CLARIFICATION OF ALL UTILITY LOCATIONS TO TRANSPORTATION PROJECT PLAT 6414-00-25-4.07 RECORDED AS DOCUMENT NO. 765977

BUS 51, VILLAGE OF PLOVER AND WHITING (STH 54 - MINNESOTA AVE.)

PART OF PARCEL 1 CSM NO. 7658, PART OF LOT 1 CSM NO. 4335, LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE NE 1/4; PART OF LOTS 1& 2, CSM NO. 9031, PART OF LOT 1 CSM NO. 9032, PART OF LOT 2B CSM NO. 4650, PART OF PARCEL 1 CSM NO. 7658, LOCATED IN AND INCLUDING PART OF THE SE 1/4 OF THE NE 1/4; ALL IN SECTION 16; PART OF LOTS 31, 33, 35, & 36 OF PLOVER ASSESSOR'S PLAT NO. 6, PART OF LOT 2 CSM NO. 9031, PART OF LOT 2B CSM NO. 4650, PART OF LOT 1 CSM NO. 9032, PART OF LOT 1 CSM NO. 4927, PART OF LOT 1 CSM NO. 7321, PART OF LOT 1 CSM NO. 5739, PART OF LOT 1 OF HALLIDAY'S SURVEY OF 1888, LOCATED IN AND INCLUDING PART OF THE SW 1/4 OF THE NW 1/4; PART OF LOT 2 CSM NO. 4927, PART OF LOT 18 OF HALLIDAY'S SURVEY OF 1888, LOCATED IN AND INCLUDING PART OF THE NW 1/4 OF THE SW 1/4; PART OF LOT 1 CSM NO. 4335 LOCATED IN AND INCLUDING THE NW 1/4 OF THE NW 1/4; ALL IN SECTION 15; ALL IN T23N, R8E, VILLAGE OF PLOVER, PORTAGE COUNTY, WISCONSIN.

RELOCATION ORDER BUS 51 PORTAGE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET. RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS. IN PORTAGE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 765584.

PISTA 68+10.72
PIY =186,142.407
PIX =172,225.632
DELTA =24°28'04"(RT)
R =400.00'
D =14°19'26"
T =86.73'
L =170.82'

PISTA 66+34.81
PIY =186,037.500
PIX =172,076.989
DELTA =35°12'48"(LT)
R =300.00'
D =19°05'55"
T =95.20'
L =184.38'

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
243	186860.96	172244.70	3/4" IRON ROD
244	186647.32	172300.82	3/4" IRON ROD
245	186648.45	172296.00	1" IRON PIPE
246	186625.50	172304.68	4"x4" CONC. MON.
251	186556.48	172085.00	3/4" IRON ROD
252	186559.78	172317.32	1" IRON PIPE
253	186553.33	172319.32	1/2" IRON ROD
254	186373.02	172353.25	3/4" IRON ROD
255	186255.30	172375.87	3/4" IRON ROD
260	186068.02	172404.62	1" IRON PIPE
262	186068.05	172292.13	1" IRON PIPE
300	185476.25	172597.98	1" IRON PIPE
301	185878.58	172522.13	1" IRON PIPE
302	186231.68	172456.69	3/4" IRON ROD
303	186557.55	172386.18	3/4" IRON ROD
304	186787.09	172340.94	3/4" IRON ROD
703	185544.13	172505.01	4"x4" CONC. MON.
2303	185565.08	172500.87	1" IRON PIPE
2304	185663.73	172482.00	1" IRON PIPE
2306	185890.92	172438.38	1" IRON PIPE
2448	185565.73	172300.87	3/4" IRON ROD
2449	185565.79	172288.22	1" IRON PIPE

Doc # 830151
ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Portage COUNTY, WISCONSIN AT 9:15AM ON June 27, 2017 AS DOCUMENT # 830151 AND FILED IN Env. #50
Cynthia A. Musiciati
SIGNATURE OF REGISTER OF DEEDS Pd $25

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25-4.07
AMENDMENT NO. 1

SCALE, FEET 0 50 100

FND. 60D NAIL
Y= 180062.334
X= 173431.719

R/W POINT 728 IS ON SECTION LINE. PLE POINTS 838 & 839 ARE NOT ON SECTION LINE

P.I. 197+47.42

P.I. 65+20.00
Y=186,037.500
X=171,962.177
P.C. 65+39.61

P.I. 66+34.81

P.R.C. 67+23.98

P.I. 68+10.72

P.T. 68+94.80

P.I. 73+02.24
Y=186,594.224
X=172,137.529

VILLAGE OF PLOVER

PATTON DRIVE

MACARTHUR WAY

SIXTEENTH LANE

POST ROAD / BUSINESS 51

ROBERTS ROAD

SEC. LINE = N00°16'55"E 2645.61'

SEC. LINE = S00°36'48"W 5283.05'

SE-NE SEC 16

NE-NE SEC 16

NW-SW SEC 15

SW-NW SEC 15

NW-NW SEC 15

PLOVER ASSESSOR'S PLAT NO. 6

LOT 1 HALLIDAY'S SURVEY OF 1888

LOT 18 HALLIDAY'S SURVEY OF 1888

LOT 1 CSM NO. 4927-17-182

LOT 1 CSM NO. 9032-37-112

LOT 1 CSM NO. 7321-27-1

LOT 1 CSM NO. 5739-21-55

LOT 1 CSM NO. 4335-15-130

LOT 2 CSM NO. 4650-16-145

PARCEL 1 CSM NO. 7658-28-138

TLE-SLOPES 850 SQ FT
TLE-SLOPES 950 SQ FT
TLE-SLOPES 1005 SQ FT
TLE-SLOPES 475 SQ FT
TLE-SLOPES 1200 SQ FT
TLE-SLOPES 3155 SQ FT
TLE-SLOPES 1970 SQ FT
TLE-SLOPES 1690 SQ FT
TLE-SLOPES 1880 SQ FT
TLE-SLOPES 4270 SQ FT
TLE-SLOPES 2075 SQ FT
TLE-SLOPES 2200 SQ FT
TLE-SLOPES 990 SQ FT
TLE-SLOPES 3215 SQ FT
TLE-SLOPES 305 SQ FT

R&W REQUIRED FOR RETENTION POND

OUTLOT 1

VARIABLE

STA 69+20.59 PATTON DR = SECTION LINE

STA 200+47.58 POST RD = STA 62+00 ROBERTS RD
Y=185,831.197
X=172,480.045

STA 204+00.77 POST RD = STA 70+00 PATTON DR
Y=186,178.192
X=172,414.194

STA 208+24.00 POST RD = STA 75+00 MACARTHUR WAY
Y=186,593.995
X=172,335.285

STA 196+80.87 POST RD = SECTION LINE

PISTA 195+01.90
PIY =185,294.381
PIX =172,281.919
DELTA =7°33'13"(LT)
R =3730.00'
D =1°32'10"
T =246.23'
L =491.75'

P.I. 64+02.37
Y=185,836.822
X=172,682.337

FND. CUT SANDSTONE
Y= 185545.030
X= 177615.240

FND. HARRISON MON'T
Y= 188113.230
X= 172345.770

BASIS OF R/W	
INSTRUMENT	YEAR
PLOVER ASSESSOR'S PLAT NO. 6	1982
CSM NO. 4927	1991
CSM NO. 9031	2006
CSM NO. 9032	2006
CSM NO. 937	1975
CSM NO. 7658	2001
CSM NO. 7321	1999
RW PLAT NO. 6414-00-21	1999
RW PLAT NO. F05-3 (34)	1957

SIGN NUMBER	SIGN OWNER
105-1	WHITCO METROCOM
107-1	WHITCO METROCOM

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
88	LOTZER JOINT REVOCABLE TRUST U/A DTD 11-17-92	FEE/AR/TLE	7565	-	7565	1880
95	OKRAY ENTERPRISES INC.	FEE/AR/TLE	260	-	260	4270
100	CORNERSTONE TIRE LLC	FEE/AR/TLE	5320	-	5320	970
101	KURT W. & PEGGY R. SLOWINSKI	FEE/AR/TLE	4040	-	4040	1005
102	LARRY W. BASINSKI, ALAN J. BASINSKI, BRENDA S. SUPLICKI, & DAVID R. BASINSKI	FEE/AR/TLE	3395	-	3395	850
103	DAVID R. BASINSKI, JENNIFER LYNN BASINSKI, LARRY W. BASINSKI, & KATHLEEN MARY BASINSKI	FEE/AR/TLE	8500	-	8500	475
104	CARLITO C. REYES SR. & ERLINDA B. REYES	FEE/AR/TLE	4755	-	4755	1200
105	CHESTER S. SKIPPY	FEE	76800	-	76800	-
106	RICHARD L. DANIELS	FEE/AR/TLE	5505	-	5505	3155
107	CENTRAL WISCONSIN CREDIT UNION	FEE/AR/TLE	8665	-	8665	1970
108	RAYMOND B. ZURAWSKI & CAROL A. ZURAWSKI	FEE/AR/TLE	7700	-	7700	1690
109	PLOVER INVESTMENT GROUP LTD	AR/TLE	-	-	-	2075
110	OPIOLA REVOCABLE TRUST DATED DECEMBER 9, 1991	FEE/AR/TLE	640	-	640	2200
111	PAUL RADOMSKI	FEE/AR/TLE	340	-	340	990
112	GREGORY R. & KAREN M. KURZWEIL	FEE/AR/TLE	875	-	875	3215
113	RAY N. PETERS & FRANCES J. PETERS	FEE/AR/TLE	105	-	105	305

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
200	VILLAGE OF PLOVER - WATER	RELEASE OF RIGHTS
210	WISCONSIN TELEPHONE COMPANY N/K/A AT&T	RELEASE OF RIGHTS

UTILITY INTEREST TABLE

UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION
200	88	EASEMENT	DOC. # 368281
	95	EASEMENT	DOC. # 368138
	95	EASEMENT	DOC. # 368030
	95	EASEMENT	DOC. # 368018
	100	EASEMENT	DOC. # 368148
	101	EASEMENT	DOC. # 368275
	102	EASEMENT	DOC. # 368135
	103	EASEMENT	DOC. # 368136
	104	EASEMENT	DOC. # 368279
	105	EASEMENT	DOC. # 368277
	105	EASEMENT	DOC. # 368280
	106	EASEMENT	DOC. # 368277
	107	EASEMENT	DOC. # 368278
	108	EASEMENT	DOC. # 368859
	109	EASEMENT	DOC. # 368139
	110	EASEMENT	DOC. # 368003
	111	EASEMENT	DOC. # 368020
	112	EASEMENT	DOC. # 368032
210	95	EASEMENT	DOC. # 231270
	95	EASEMENT	DOC. # 115272
	95	EASEMENT	DOC. # 231278
	95	EASEMENT	DOC. # 231277
	100	NO EASEMENT OF RECORD	
	101	NO EASEMENT OF RECORD	
	109	EASEMENT	DOC. # 231279
	110	EASEMENT	DOC. # 115277
	111	EASEMENT	DOC. # 231265
	112	EASEMENT	DOC. # 231267

CURVE 728-138	CURVE 462-451	CURVE 772-836	CURVE 3971-462
L= 54.44'	L= 67.79'	L= 44.16'	L= 88.82'
LC= 54.44'	LC= 67.79'	LC= 44.16'	LC= 88.81'
LCB= N10°19'10"W	LCB= S06°04'30"E	LCB= N08°49'36"W	LCB= S09°07'20"E
R= 3660.50'	R= 1472.55'	R= 3660.50'	R= 1472.25'

COURSE TABLE							
FROM	TO	DIRECTION	DISTANCE	FROM	TO	DIRECTION	DISTANCE
3939	728	N89°09'39"E	144.74'	453	776	N10°44'44"W	143.63'
138	840	N10°44'44"W	227.86'	776	736	N79°15'16"E	69.50'
840	841	N89°51'29"W	30.55'	736	455	N89°33'17"E	46.25'
841	842	N07°41'57"W	94.08'	455	459	S10°44'44"E	563.82'
842	843	N79°15'16"E	25.00'	459	4063	N88°50'46"E	4.08'
843	139	N10°44'44"W	166.66'	4063	4025	S10°51'02"E	403.11'
139	4192	S89°54'50"W	390.91'	4025	460	S25°17'08"E	72.14'
4192	456	N01°05'50"W	62.19'	460	461	S23°40'18"W	31.73'
456	141	N01°03'41"W	199.15'	461	3971	S10°51'02"E	217.01'
141	142	N89°12'31"E	92.09'	451	773	S73°20'57"W	45.96'
142	145	S10°51'03"E	20.31'	773	772	S81°31'08"W	69.50'
145	146	N89°10'08"E	253.28'	836	837	S80°49'40"W	20.00'
146	148	N10°44'44"W	309.83'	837	838	N09°33'28"W	49.00'
148	452	N28°58'38"W	74.86'	838	728	N89°09'39"E	20.25'
452	453	N24°04'15"E	41.02'				

LOCATION SKETCH
NOT TO SCALE

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JASON L. CANCE — PRINTED NAME — SIGNATURE — 6-12-17 DATE

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

BRENT L. STELLA — PRINTED NAME — SIGNATURE — 6-20-2017 DATE

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : P:\UZ\W\Witnc\112545\5-final-dsgn\51-drawings\40-TransHwy\040108 RP.dgn
PLOT DATE : 6/12/2017
PLOT BY : SEH
PLOT NAME :
PLOT SCALE : N/A
APPRAISAL PLAT DATE :

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W S.F. REQUIRED			TLE S.F.
			NEW	EXISTING	TOTAL	
108	RAYMOND B. & CAROL A. ZURAWSKI	FEE/AR/TLE	1780	-	1780	595
113	RAY N. & FRANCES J. PETERS	FEE/AR/TLE	1015	-	1015	2400
117	G & DS LLC	FEE/AR/TLE	16432	-	16432	1245
118	ZURAWSKI BROTHERS FAMILY TRUST DATED MAY 16, 2011	FEE/AR/TLE	3417	-	3417	1410
119	PLOVER DEVELOPMENT LLC	FEE/AR/TLE	5658	-	5658	2230
120	RABASKA STORE LLC.	FEE/AR/TLE	3218	-	3218	1880
121	PAINTER PROPERTIES LLC	FEE/AR/TLE	4145	-	4145	3235
122	GOLDEN SANDS HOME BUILDERS ASSOCIATION INC.	AR/TLE	-	-	-	285
123	FRANK JAMES SNIADAJEWSKI	AR/TLE	-	-	-	560
125	MICHAEL D. & MICHELLE L. SUCHON	AR/TLE	-	-	-	870
126	JULIE M. LEPAK	FEE/AR/TLE	180	-	180	975
127	KENNETH L. LEPAK	FEE/AR/TLE	7760	-	7760	4695
128	JEROME R. ROLSTAD	FEE/AR/TLE	3935	-	3935	2210
130	CLIFFORD J. GALLON AND HELEN T. GALLON JOINT REVOCABLE TRUST DATED AUGUST 24, 2006	FEE/AR/TLE	1035	-	1035	1550
131	PORTAGE COUNTY BANK (VENDOR) EAGLESOAR ENTERPRISE LLC (VENDEE)	FEE/AR/TLE	587	-	587	2837
132	GARY L. & KATHLEEN E. NATIONS	FEE/AR/TLE	6480	-	6480	6375
133	STEVEN S. & JANELLE R. PETERSON	FEE/AR/TLE	550	-	550	1225
134	LOUIS F. & CAROL A. GAWLIK	FEE/AR/TLE	3080	-	3080	5865

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN PORTAGE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 765584.

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
200	VILLAGE OF PLOVER - WATER	RELEASE OF RIGHTS
201	VILLAGE OF PLOVER - SANITARY SEWER	RELEASE OF RIGHTS
210	WISCONSIN TELEPHONE COMPANY N/K/A AT&T	RELEASE OF RIGHTS
220	WISCONSIN PUBLIC SERVICE - GAS	RELEASE OF RIGHTS
221	WISCONSIN PUBLIC SERVICE - ELECTRIC	RELEASE OF RIGHTS
260	VILLAGE OF WHITING - WATER	RELEASE OF RIGHTS
261	VILLAGE OF WHITING - SANITARY SEWER	RELEASE OF RIGHTS

TRANSPORTATION PROJECT PLAT NO: 6414-00-25 - 4.08 AMENDMENT NO. 4

AMENDS PARCEL 131 OF TRANSPORTATION PROJECT PLAT 6414-00-25-4.08 RECORDED AS DOCUMENT NO. 765978.

BUS 51, VILLAGE OF PLOVER AND WHITING (STH 54 - MINNESOTA AVE.)

PART OF LOTS 5 AND 6 OF PLOVER ASSESSOR'S PLAT NO. 6, PART OF LOT 1, CSM NO. 6838, PART OF LOT 1 CSM NO. 3925, PART OF LOT 1 CSM NO. 4335, PART OF LOT 1 CSM NO. 7661, PART OF LOT 1 CSM NO. 7641, PART OF PARCEL 4 CSM NO. 7655, PART OF PARCEL 3 CSM NO. 7657, PART OF PARCEL 2 CSM NO. 7656, PART OF PARCEL 1 CSM NO. 7658, LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE NE 1/4, OF SECTION 16, T23N, R8E, VILLAGE OF PLOVER; PART OF BLOCK 108 OF THE ASSESSOR'S PLAT OF THE VILLAGE OF WHITING, PART LOTS 1 THRU 4 CSM NO. 8259, PART OF LOT 1 CSM NO. 8155, PART OF LOT 1 CSM NO. 7409, LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE NE 1/4, SECTION 16, T23N R8E, VILLAGE OF WHITING; PART OF LOT 1 CSM NO. 4335, PART OF LOT 1 CSM NO. 8072, PART OF LOT 1 CSM NO. 6838 LOCATED IN AND INCLUDING PART OF THE NW 1/4 OF THE NW 1/4 OF SECTION 15, T23N R8E, VILLAGE OF PLOVER, PORTAGE COUNTY, WISCONSIN.

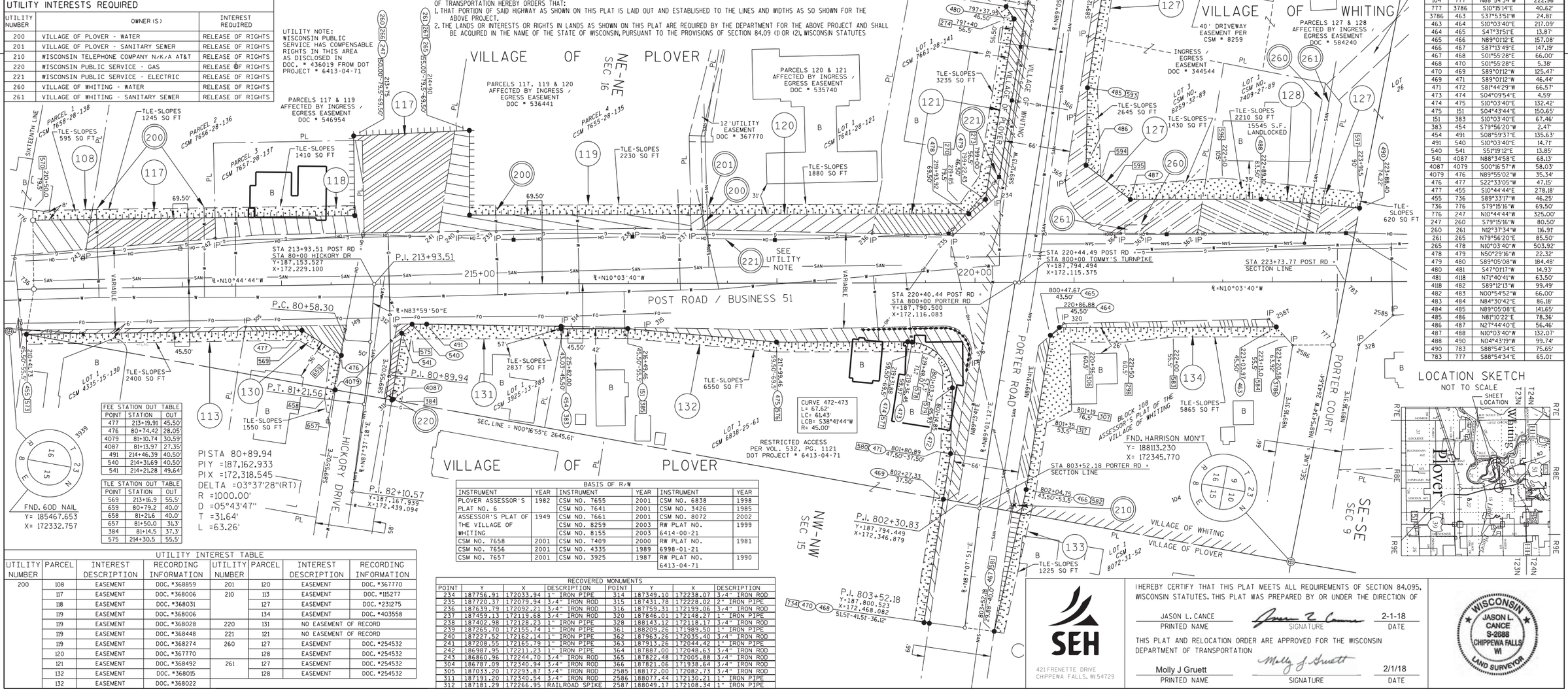
RELOCATION ORDER BUS 51 PORTAGE COUNTY

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

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

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

UTILITY NOTE:
WISCONSIN PUBLIC SERVICE HAS COMPENSABLE RIGHTS IN THIS AREA AS DISCLOSED IN DOC. # 436019 FROM DOT PROJECT # 6413-04-71



FEE STATION OUT TABLE		
POINT	STATION	OUT
477	213+19.91	45.50'
476	80+74.42	28.05'
4079	81+10.74	30.59'
4087	81+13.97	27.35'
491	214+46.39	40.50'
540	214+31.69	40.50'
541	214+21.28	49.64'

TLE STATION OUT TABLE		
POINT	STATION	OUT
569	213+16.9	55.5'
659	80+79.2	40.0'
658	81+21.6	40.0'
657	81+50.0	31.3'
384	81+14.5	37.3'
575	214+30.5	55.5'

FEE STATION OUT TABLE		
POINT	STATION	OUT
485	797+94.98	37.50'
486	798+72.59	48.29'
487	221+57.03	83.50'

TLE STATION OUT TABLE		
POINT	STATION	OUT
593	797+95.0	47.5'
594	798+81.7	65'
595	221+39.6	97'

INGRESS / EGRESS EASEMENT & SEWER EASEMENT PER CSM NO. 7409			
COURSE TABLE			
FROM	TO	DIRECTION	DISTANCE
104	777	N88°54'34"W	222.96'
777	3786	S10°15'14"E	40.62'
3786	463	S37°53'51"W	24.81'
463	464	S10°03'40"E	217.09'
464	465	S47°31'51"E	13.87'
465	466	N89°01'12"E	157.08'
466	467	S87°13'49"E	147.19'
467	468	S01°55'28"E	66.00'
468	470	S01°55'28"E	5.38'
470	469	S89°01'12"W	125.47'
469	471	S89°01'12"W	46.44'
471	472	S81°44'29"W	66.57'
473	474	S04°09'54"E	4.59'
474	475	S10°03'40"E	132.42'
475	151	S04°43'44"E	150.65'
151	383	S10°03'40"E	67.46'
383	454	S79°56'20"W	2.47'
454	491	S08°59'37"E	135.63'
491	540	S10°03'40"E	14.71'
540	541	S61°39'12"E	13.85'
541	4087	N88°34'58"E	68.13'
4087	4079	S00°16'57"W	58.03'
4079	476	N89°55'02"W	35.34'
476	477	S22°33'05"W	47.15'
477	455	S10°44'44"E	278.18'
455	736	S89°33'17"W	46.25'
736	776	S79°15'16"W	69.50'
776	247	N10°44'44"W	325.00'
247	260	S79°15'16"W	80.50'
260	261	N12°37'34"W	116.91'
261	265	N79°56'20"E	85.50'
265	478	N10°03'40"W	503.92'
478	479	N50°29'16"W	22.32'
479	480	S89°05'08"W	184.48'
480	481	S47°01'17"W	14.93'
481	4118	N71°40'41"W	63.50'
4118	482	S89°12'13"W	99.49'
482	483	N00°54'52"W	66.00'
483	484	N84°30'42"E	86.18'
484	485	N89°05'08"E	141.65'
485	486	N81°10'22"E	78.36'
486	487	N27°44'40"E	56.46'
487	488	N10°03'40"W	132.07'
488	490	N04°43'19"W	99.74'
490	783	S88°54'34"E	75.65'
783	777	S88°54'34"E	65.01'

UTILITY INTEREST TABLE							
UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION	UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION
200	108	EASEMENT	DOC. #368859	201	120	EASEMENT	DOC. #367770
	117	EASEMENT	DOC. #368006	210	113	EASEMENT	DOC. #115277
	118	EASEMENT	DOC. #368031		127	EASEMENT	DOC. #231275
	119	EASEMENT	DOC. #368006		134	EASEMENT	DOC. #403558
	119	EASEMENT	DOC. #368028	220	131	NO EASEMENT OF RECORD	
	119	EASEMENT	DOC. #368448	221	121	NO EASEMENT OF RECORD	
	119	EASEMENT	DOC. #368274	260	127	EASEMENT	DOC. #254532
	120	EASEMENT	DOC. #367770		128	EASEMENT	DOC. #254532
	121	EASEMENT	DOC. #368492	261	127	EASEMENT	DOC. #254532
	132	EASEMENT	DOC. #368015		128	EASEMENT	DOC. #254532
	132	EASEMENT	DOC. #368022				

BASIS OF R/W					
INSTRUMENT	YEAR	INSTRUMENT	YEAR	INSTRUMENT	YEAR
PLOVER ASSESSOR'S PLAT NO. 6	1982	CSM NO. 7655	2001	CSM NO. 6838	1998
		CSM NO. 7641	2001	CSM NO. 3426	1985
ASSESSOR'S PLAT OF THE VILLAGE OF WHITING	1949	CSM NO. 7661	2001	CSM NO. 8072	2002
		CSM NO. 8259	2003	RW PLAT NO. 6414-00-21	1999
		CSM NO. 8155	2003	RW PLAT NO. 6998-01-21	1981
CSM NO. 7658	2001	CSM NO. 7409	2000		
CSM NO. 7656	2001	CSM NO. 4335	1989		
CSM NO. 7657	2001	CSM NO. 3925	1987	RW PLAT NO. 6413-04-71	1990

RECOVERED MONUMENTS							
POINT	Y	X	DESCRIPTION	POINT	Y	X	DESCRIPTION
234	187756.91	172033.94	1" IRON PIPE	314	187349.10	172238.07	3/4" IRON ROD
235	187720.37	172079.94	3/4" IRON ROD	315	187431.78	172228.02	2" IRON PIPE
236	187639.79	172092.21	3/4" IRON ROD	316	187759.31	172199.06	3/4" IRON ROD
237	187459.13	172119.68	3/4" IRON ROD	320	187846.01	172148.27	1" IRON PIPE
238	187402.98	172128.23	1" IRON PIPE	328	188143.12	172118.17	3/4" IRON ROD
239	187265.70	172155.74	1" IRON PIPE	361	188209.26	171989.50	1" IRON PIPE
240	187227.52	172162.14	1" IRON PIPE	362	187963.26	172035.40	3/4" IRON ROD
241	187208.55	172165.79	1" IRON PIPE	363	187913.26	172044.42	1" IRON PIPE
242	186987.95	172211.23	1" IRON PIPE	364	187887.00	172048.63	3/4" IRON ROD
243	186860.96	172244.70	3/4" IRON ROD	365	187822.48	172005.88	3/4" IRON ROD
304	186787.09	172340.94	3/4" IRON ROD	366	187821.06	171938.64	3/4" IRON ROD
305	187033.20	172293.87	3/4" IRON ROD	2585	188172.00	172082.73	3/4" IRON ROD
311	187191.20	172340.54	3/4" IRON ROD	2586	188087.44	172130.21	1" IRON PIPE
312	187181.29	172266.95	RAILROAD SPIKE	2587	188049.17	172108.34	1" IRON PIPE

836730

CYNTHIA A. WISINSKI REGISTER OF DEEDS PORTAGE COUNTY STEVENS POINT, WI RECORDED ON 02/01/2018 2:22 PM

REC FEE: 25.00 PAGES: 1 FEE EXEMPT:

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25-4.08
AMENDMENT NO. 4

LOCATION SKETCH
NOT TO SCALE
SHEET LOCATION

421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JASON L. CANCE — PRINTED NAME
SIGNATURE — 2-1-18 DATE

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

Molly J Gruett — PRINTED NAME
SIGNATURE — 2/1/18 DATE

WISCONSIN JASON L CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : P:\UZ\W\Witnc\112545\5-final-dsgn\51-drawings\40-TransHwy\040109 RP.dgn
APPRAISAL PLAT DATE : 2-1-18
PLOT DATE : 2/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

TRANSPORTATION PROJECT PLAT NO: 6414-00-25 - 4.09 AMENDMENT NO. 2

AMENDS PARCELS 127, 136, 137, 138, 141, 145, 146, 147, & 148 AND UTILITY NO. 260, ADDS UTILITY NO. 221, & 261, AND REMOVES UTILITY NO. 220 AND PROVIDES CLAIFICATION OF ALL UTILITY LOCATIONS OF TRANSPORTATION PROJECT PLAT 6414-00-25-4.09 RECORDED AS DOCUMENT NO. 766746. ALSO AMENDS PARCELS 139, 140, 149, & 150 OF TRANSPORTATION PROJECT PLAT 6414-00-25-4.09 AMENDMENT NO. 1 RECORDED AS DOCUMENT NO. 768061.

BUS 51, VILLAGE OF PLOVER AND WHITING (STH 54 - MINNESOTA AVE.)

THAT PART OF LOTS 4, 5, & 9 THRU 26 OF BLOCK 104, LOTS 2 THRU 8 & 11 THRU 19, OF BLOCK 106 OF THE ASSESSORS PLAT OF THE VILLAGE OF WHITING, PART OF LOT 1 OF CSM NO. 8289, PART OF LOTS 1 & 3 CSM NO. 9392, PART OF RSJ CONDOMINIUM PLAT, PART OF LOTS 1 & 2 OF CSM NO. 9370, PART OF LOT 9.1 OF CSM NO. 2926, PART OF LOT 1 OF CSM NO. 9312, LOCATED IN AND INCLUDING THE SE 1/4 OF THE SE 1/4 OF SECTION 9, T23N, R8E, VILLAGE OF WHITING, PORTAGE COUNTY WISCONSIN.

RELOCATION ORDER BUS. 51 PORTAGE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
328	188143.12	172118.17	3/4" IRON ROD
336	189054.17	171899.02	3/4" IRON ROD
348	189439.56	172080.20	3/4" IRON ROD
349	189503.71	171933.68	1" IRON PIPE
356	189174.90	171808.30	
359	188570.53	171926.28	3/4" IRON ROD
360	188420.54	171954.06	3/4" IRON ROD
361	188209.26	171939.50	1" IRON PIPE
612	189505.25	171868.85	1" IRON PIPE
613	189446.95	171823.83	3/4" IRON ROD
614	189154.76	171879.91	1" IRON PIPE
615	188852.94	171938.48	1" IRON PIPE
616	188802.92	171948.18	1" IRON PIPE
617	188752.89	171958.02	2" IRON PIPE
618	188502.04	172007.14	1" IRON PIPE
619	188487.52	172010.25	1" IRON PIPE
621	188722.07	171898.31	1" IRON PIPE
622	189023.89	171837.67	3/4" IRON ROD
623	189174.84	171808.37	3/4" IRON ROD
624	189275.32	171789.17	3/4" IRON ROD
649	188602.14	171987.51	1" IRON PIPE
650	189386.74	171835.17	1" IRON PIPE
652	189426.08	171759.85	2" IRON PIPE
2590	188249.25	172065.08	3/4" IRON ROD
2591	188254.41	172063.91	1" IRON PIPE
2592	188351.33	172041.60	1" IRON PIPE

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

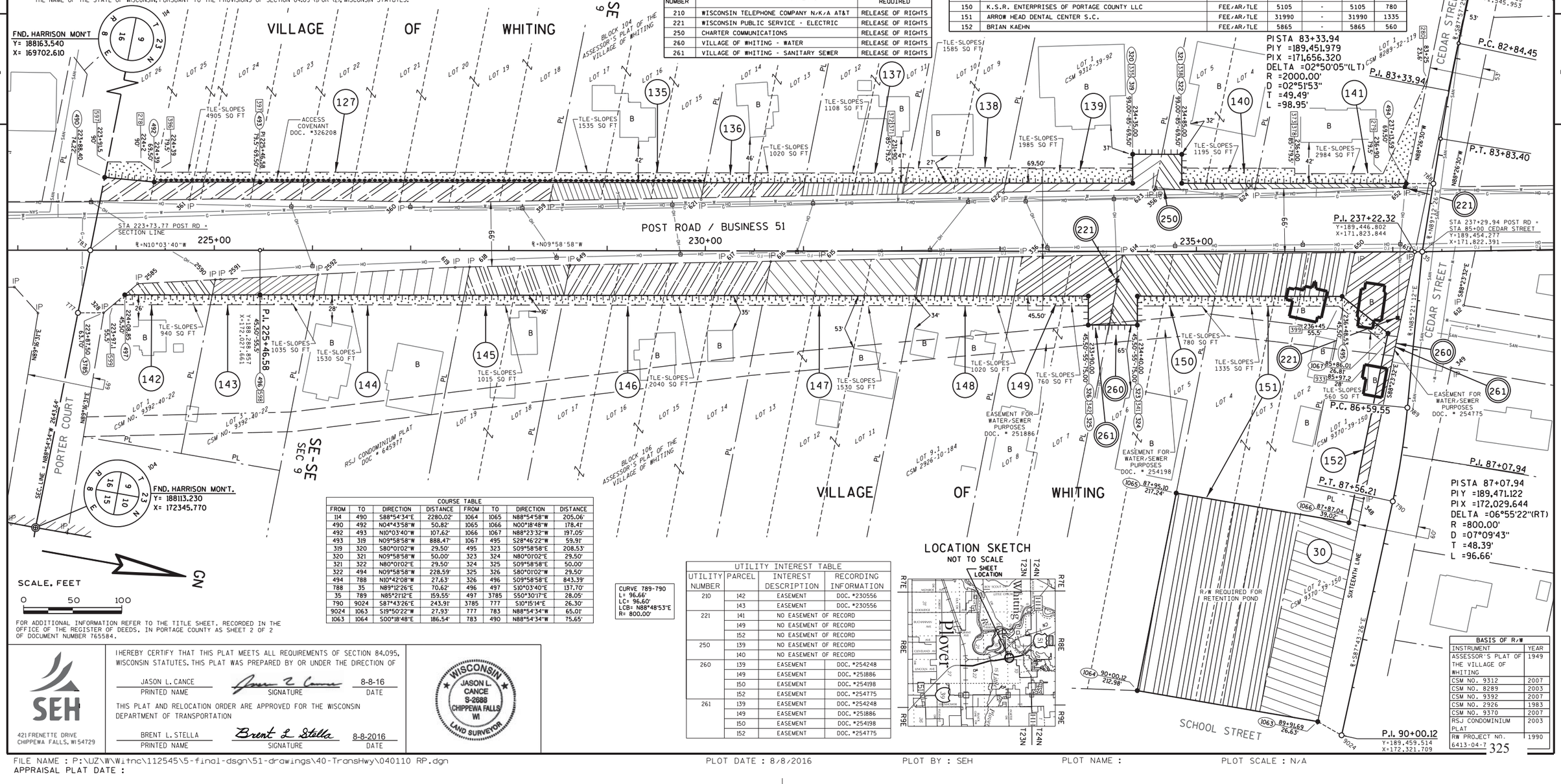
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	R/W S.F. REQUIRED EXISTING	R/W S.F. REQUIRED TOTAL	TLE S.F.
30	ZURAWSKI RENTAL PROPERTIES LLC.	FEE	12570	-	12570	-
127	KENNETH L LEPAK	FEE/AR/TLE	8746	-	8746	4905
135	JOHN C. WALKUSH & PETER J. MERONEK	FEE/AR/TLE	2605	-	2605	1535
136	TERESE L. JONAS	FEE/AR/TLE	1471	-	1471	1020
137	ELLIOTT L. KUGLER	FEE/AR/TLE	1260	-	1260	1108
138	RONALD J. & GAIL L. PECHINSKI	FEE/AR/TLE	1050	-	1050	1585
139	JAMES D. HOM	FEE/AR/TLE	1985	-	1985	1985
140	DENNIS TRZINSKI	FEE/AR/TLE	1310	-	1310	1195
141	RAYMOND E. PENDERGAST AND MARION C. PENDERGAST JOINT REVOCABLE TRUST DATED JUNE 1, 2000	FEE/AR/TLE	697	-	697	2984
142	BERVERLY A. KASDORF (VENDOR) JAYSON A. MENCE (VENDEE)	FEE/AR/TLE	1115	-	1115	940
143	BEVERLY A. NORTHWOOD, N/K/A BEVERLY A. MANCI	FEE/AR/TLE	1895	-	1895	1035
144	SCHERTZ-FAHRNER LLC (UNIT 1) RSJ ENTERPRISES LLC. (UNIT 2)	FEE/AR/TLE	3850	-	3850	1530
145	JACOB G. KURTZWEIL	FEE/AR/TLE	3034	-	3034	1015
146	CHRISTOPHER W. NORTHWOOD	FEE/AR/TLE	5540	-	5540	2040
147	ALAN J. ZURAWSKI	FEE/AR/TLE	6710	-	6710	1530
148	LOCAL UNION 388 BUILDING CORPORATION	FEE/AR/TLE	3985	-	3985	1020
149	PCT PROPERTIES LLC	FEE/AR/TLE	4905	-	4905	760
150	K.S.R. ENTERPRISES OF PORTAGE COUNTY LLC	FEE/AR/TLE	5105	-	5105	780
151	ARROW HEAD DENTAL CENTER S.C.	FEE/AR/TLE	31990	-	31990	1335
152	BRIAN KAEHN	FEE/AR/TLE	5865	-	5865	560

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
210	WISCONSIN TELEPHONE COMPANY N/K/A AT&T	RELEASE OF RIGHTS
221	WISCONSIN PUBLIC SERVICE - ELECTRIC	RELEASE OF RIGHTS
250	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS
260	VILLAGE OF WHITING - WATER	RELEASE OF RIGHTS
261	VILLAGE OF WHITING - SANITARY SEWER	RELEASE OF RIGHTS

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Portage COUNTY, WISCONSIN AT 8:50AM ON 8/16/2016 AS DOCUMENT # 782558 AND FILED IN Rec. 450
Cynthia A. Wisneski
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25-4.09
AMENDMENT NO. 2



COURSE TABLE							
FROM	TO	DIRECTION	DISTANCE	FROM	TO	DIRECTION	DISTANCE
114	490	S88°54'34"E	2280.02'	1064	1065	N88°54'58"W	205.06'
490	492	N04°43'58"W	50.82'	1065	1066	N00°18'48"W	178.41'
492	493	N10°03'40"W	107.62'	1066	1067	N88°23'32"W	197.05'
493	319	N09°58'58"W	888.47'	1067	495	S28°46'22"W	59.91'
319	320	S80°01'02"W	29.50'	495	323	S09°58'58"E	208.53'
320	321	N09°58'58"W	50.00'	323	324	N80°01'02"E	29.50'
321	322	N80°01'02"E	29.50'	324	325	S09°58'58"E	50.00'
322	494	N09°58'58"W	228.59'	325	326	S80°01'02"W	29.50'
494	788	N10°42'08"W	27.63'	326	496	S09°58'58"E	843.39'
788	35	N89°12'26"E	70.62'	496	497	S10°03'40"E	137.70'
35	789	N09°52'12"E	159.55'	497	3785	S50°30'17"E	28.05'
790	9024	S87°43'26"E	243.91'	3785	777	S10°15'14"E	26.30'
9024	1063	S19°50'22"W	27.93'	777	783	N88°54'34"W	65.01'
1063	1064	S00°18'48"E	186.54'	783	490	N88°54'34"W	75.65'

CURVE 789-790
L= 96.66'
LC= 96.60'
LCB= N88°48'53"E
R= 800.00'

UTILITY INTEREST TABLE			
UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION
210	142	EASEMENT	DOC. #230556
	143	EASEMENT	DOC. #230556
221	141	NO EASEMENT OF RECORD	
	149	NO EASEMENT OF RECORD	
	152	NO EASEMENT OF RECORD	
250	139	NO EASEMENT OF RECORD	
	140	NO EASEMENT OF RECORD	
260	139	EASEMENT	DOC. #254248
	149	EASEMENT	DOC. #251886
	150	EASEMENT	DOC. #254198
	152	EASEMENT	DOC. #254775
261	139	EASEMENT	DOC. #254248
	149	EASEMENT	DOC. #251886
	150	EASEMENT	DOC. #254198
	152	EASEMENT	DOC. #254775

LOCATION SKETCH
NOT TO SCALE
SHEET LOCATION
T23N R7E R8E R9E T24N
Plover
Whiting

BASIS OF R/W	
INSTRUMENT	YEAR
ASSESSOR'S PLAT OF THE VILLAGE OF WHITING	1949
CSM NO. 9312	2007
CSM NO. 8289	2003
CSM NO. 9392	2007
CSM NO. 2926	1983
CSM NO. 9370	2007
RSJ CONDOMINIUM PLAT	2003
RW PROJECT NO. 6413-04-7	1990

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN PORTAGE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 765584.

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JASON L. CANCE — PRINTED NAME
SIGNATURE — 8-8-16 DATE

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

BRENT L. STELLA — PRINTED NAME
Brent L Stella — SIGNATURE
8-8-2016 DATE

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : P:\UZ\W\Witnc\112545\5-final-dsgn\51-drawings\40-TransHwy\040110 RP.dgn
PLOT DATE : 8/8/2016
PLOT BY : SEH
PLOT NAME :
PLOT SCALE : N/A
APPRAISAL PLAT DATE :

TRANSPORTATION PROJECT PLAT NO: 6414-00-25 - 4.10 AMENDMENT NO. 3

AMENDS PARCEL 158 OF TRANSPORTATION PROJECT PLAT NO. 6414-00-25-4.10 AMENDMENT NO. 2 RECORDED AS DOCUMENT NO. 820587.

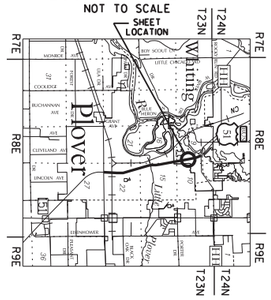
PART OF PARCEL A OF CSM V. 2, P. 34, PART OF LOT 2 OF CSM NO. 1271, PART OF LOTS 1, 7, & 8 OF BLOCK 6 OF ASSESSOR'S PLAT OF MCDILL, PART OF LOTS 3 & 4 OF BLOCK 5 ASSESSOR'S PLAT OF MCDILL, PART OF LOT 4-A OF CSM NO. 2034, PART OF LOT 2 OF CSM NO. 6607, PART OF LOT 3 OF CSM NO. 1034, PART OF LOTS 1, 4, 5, 7, 8, & OUTLOT 1 OF CSM NO. 899, PART OF LOTS 1, 2, 4, 5 & 8 OF BLOCK 3, PART OF LOTS 1 THRU 4 OF BLOCK 4, PART OF LOTS 1 & 2 OF BLOCK 5, ALL IN RICKER SECOND ADDITION TO MCDILL, PART OF LOTS 3 & 4 OF CSM NO. 6463, LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE SE 1/4 OF SECTION 9, T23N, R8E, VILLAGE OF WHITING, PORTAGE COUNTY, WISCONSIN.

RELOCATION ORDER BUS. 51 PORTAGE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LOCATION SKETCH
NOT TO SCALE



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

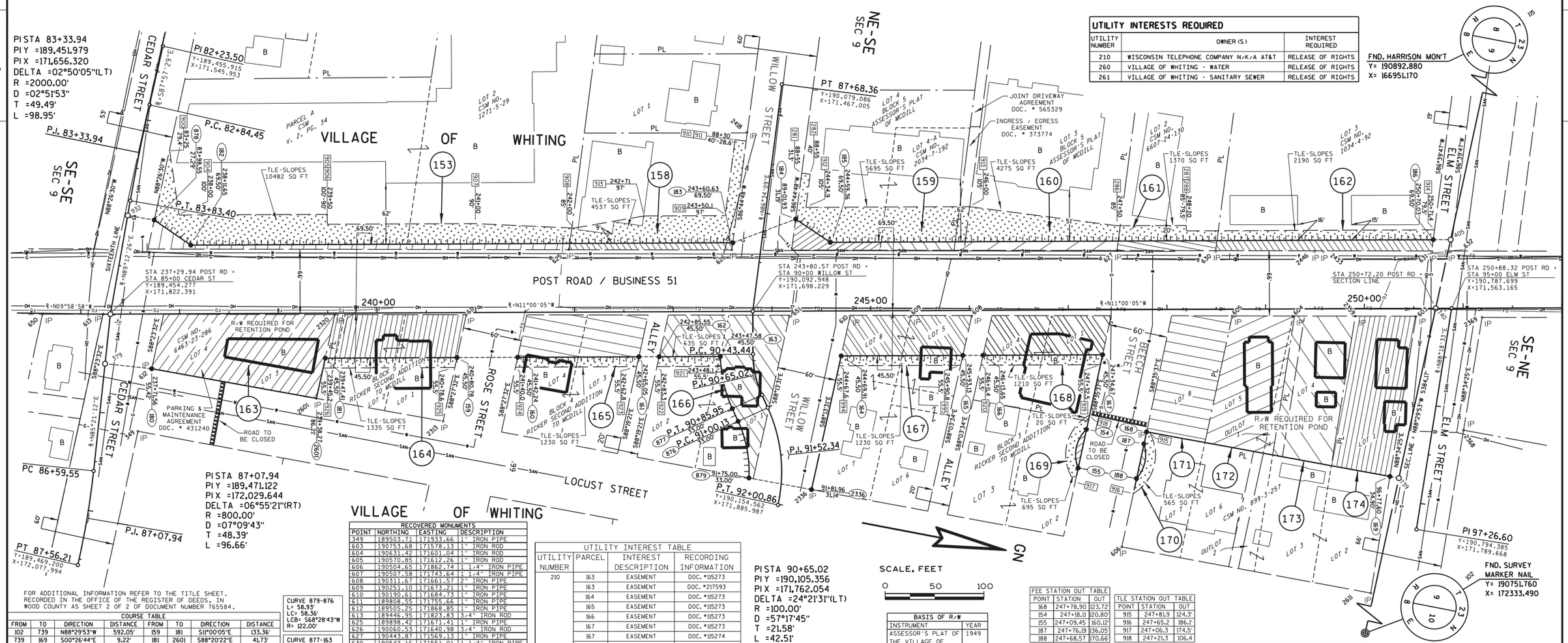
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
153	ARISTA PROPERTY LLC.	FEE/AR/TLE	2700	-	2700	10482
158	E&L ALTMANN LLC.	FEE/AR/TLE	1120	-	1120	4537
159	TEDMARK PROPERTIES LLC.	FEE/AR/TLE	1785	-	1785	5695
160	WOLFF INVESTMENTS LLC.	FEE/AR/TLE	1495	-	1495	4275
161	MARK L. & SABINE HINTZ	FEE/AR/TLE	985	-	985	1370
162	DANIEL R. BARNARD	FEE/AR/TLE	2360	-	2360	2190
163	KIMBERLY KOELEMAY	FEE	12135	-	12135	-
164	RONALD L. WILLIE, AND SUE E. WILLIE, & TME OF SP LLC.	FEE/AR/TLE	5825	-	5825	1335
165	KENNETH L. MANSKE & MARY LOU HARRIS-MANSKE	FEE/AR/TLE	5235	-	5235	1230
166	LEONARD E. & KATHLEEN A. NORTON	FEE/AR/TLE	9040	-	9040	635
167	LINDA L. DAHLMAN	FEE/AR/TLE	5015	-	5015	1230
168	BRIAN J. & DEBRA A. FREDRICKSON	FEE/AR/TLE	4815	-	4815	1230
169	CORY A. PISKA	FEE/TLE	170	-	170	595
170	THE LEPAK TRUST U/A DATED JULY 26 1991	FEE/TLE	115	-	115	565
171	LL BENDER OIL COPORATION	FEE	7540	-	7540	-
172	FREDERICK S. LANDOWSKI, SANDRA L. LANDOWSKI, & ETAL.	FEE	9010	-	9010	-
173	DONALD J. FIX	FEE	8950	-	8950	-
174	MARY ECKES	FEE	9630	-	9630	-

824811
CYNTHIA A. WISINSKI
REGISTER OF DEEDS
PORTAGE COUNTY
STEVENS POINT, WI
RECORDED ON
12/22/2016 2:05 PM
REC FEE: 25.00
PAGES: 1
FEE EXEMPT:

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25-4.10
AMENDMENT NO. 3

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
210	WISCONSIN TELEPHONE COMPANY N/K/A AT&T	RELEASE OF RIGHTS
260	VILLAGE OF WHITING - WATER	RELEASE OF RIGHTS
261	VILLAGE OF WHITING - SANITARY SEWER	RELEASE OF RIGHTS



BASIS OF R/W	
INSTRUMENT	YEAR
ASSESSOR'S PLAT OF THE VILLAGE OF WHITING A/K/A ASSESSOR'S PLAT OF MCDILL	1949
RICKER'S SECOND ADDITION TO MCDILL	2001
CSM V. 2, P. 34	2001
CSM NO. 1271	2001
CSM NO. 2034	2001
CSM NO. 6607	2001
CSM NO. 1034	2001
CSM NO. 6463	2003
CSM NO. 899	2003

FEE STATION OUT TABLE		
POINT	STATION	OUT
168	247+78.90	123.72'
154	247+18.11	120.80'
155	247+09.45	160.12'
187	247+76.19	136.05'
188	247+68.57	170.66'

TLE STATION OUT TABLE		
POINT	STATION	OUT
915	247+81.9	124.3'
916	247+65.2	186.1'
917	247+06.3	174.5'
918	247+21.3	106.4

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET. RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN WOOD COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 765584.

COURSE TABLE						
FROM	TO	DIRECTION	DISTANCE	FROM	TO	DIRECTION	DISTANCE
102	739	N88°29'53"W	592.05'	159	181	S11°00'05"E	133.36'
739	169	S00°26'44"E	9.22'	181	2601	S88°20'22"E	41.73'
169	168	S00°26'44"E	250.49'	2601	180	S00°31'56"E	169.53'
168	187	S88°35'37"E	12.62'	180	379	S04°38'47"E	47.50'
188	155	S00°53'39"E	60.05'	379	35	S85°21'12"W	50.47'
154	167	N88°35'37"W	77.10'	35	932	S89°12'26"W	101.45'
167	166	S11°00'05"E	121.02'	932	878	N00°47'20"W	27.29'
166	165	S11°00'05"E	20.52'	878	182	N23°40'25"E	44.84'
165	164	S11°00'05"E	123.23'	182	183	N11°00'05"W	548.98'
164	2336	S88°13'31"E	138.55'	183	184	N31°18'54"W	67.99'
2336	879	S00°14'57"E	64.49'	184	185	N23°01'25"E	42.18'
876	877	S54°38'24"W	14.18'	185	186	N11°00'05"W	610.67'
163	162	S11°00'05"E	62.03'	186	405	N11°00'05"W	17.59'
162	161	S11°00'05"E	20.50'	405	740	S88°29'53"E	71.19'
161	160	S11°00'05"E	122.80'	740	739	S88°29'53"E	175.46'
160	159	S11°00'05"E	61.47'				

CURVE TABLE	
CURVE 879-876	
L= 58.93'	
LC= 58.36'	
LCB= S68°28'43"W	
R= 122.00'	
CURVE 877-163	
L= 54.48'	
LC= 54.10'	
LCB= S66°22'29"W	
R= 133.00'	
CURVE 187-188	
L= 37.11'	
LC= 35.44'	
LCB= S88°35'37"E	
R= 35.50'	
CURVE 155-154	
L= 42.81'	
LC= 40.26'	
LCB= N88°35'37"W	
R= 35.50'	

RECOVERED MONUMENTS			
POINT	NORTHING	EASTING	DESCRIPTION
349	189503.71	171933.66	1" IRON PIPE
603	190753.68	171578.13	1" IRON ROD
604	190631.42	171601.04	1" IRON ROD
605	190570.85	171612.26	1" IRON ROD
606	190504.65	171862.74	1 1/4" IRON PIPE
607	190507.58	171743.64	1 1/4" IRON PIPE
608	190311.67	171661.57	2" IRON PIPE
609	190251.10	171673.21	1" IRON PIPE
610	190190.61	171684.73	1" IRON PIPE
611	189808.55	171755.66	1" IRON PIPE
612	189505.25	171868.85	1" IRON PIPE
613	189446.95	171823.83	3/4" IRON ROD
625	189898.42	171671.41	1" IRON PIPE
626	190060.53	171640.98	3/4" IRON ROD
627	190443.87	171569.13	1" IRON PIPE
630	190542.16	171551.01	1 1/4" IRON PIPE
631	190757.31	171510.94	1 1/4" IRON PIPE
632	190776.01	171507.04	3/4" IRON ROD
651	190130.48	171696.53	1" IRON PIPE
652	189426.08	171759.85	2" IRON PIPE
2313	189805.58	171865.98	2" IRON PIPE
2320	189677.75	171780.35	PK NAIL
2336	190185.04	171864.33	1 1/4" IRON PIPE
2359	190693.35	171589.27	1" IRON PIPE
2367	190827.11	171863.61	3/4" IRON ROD
2368	190822.61	171682.07	3/4" IRON ROD
2369	190819.71	171566.44	1" IRON PIPE
2433	190649.20	171530.97	SURVEY NAIL
2446	190640.45	171532.54	MAG NAIL
2601	189675.23	171867.27	1" IRON PIPE
2611	190761.26	171861.61	1" SQ. IRON BAR

UTILITY INTEREST TABLE			
UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION
210	163	EASEMENT	DOC. #115273
	163	EASEMENT	DOC. #217593
	164	EASEMENT	DOC. #115273
	165	EASEMENT	DOC. #115273
	166	EASEMENT	DOC. #115273
	167	EASEMENT	DOC. #115273
	167	EASEMENT	DOC. #115274
	168	EASEMENT	DOC. #115273
	169	EASEMENT	DOC. #115273
	170	EASEMENT	DOC. #115273
	171	EASEMENT	DOC. #115273
	172	EASEMENT	DOC. #115273
	173	EASEMENT	DOC. #115273
	174	EASEMENT	DOC. #115273
260	172	EASEMENT	DOC. #251974
	173	EASEMENT	DOC. #251974
261	172	EASEMENT	DOC. #251974
	173	EASEMENT	DOC. #251974

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JASON L. CANCE — PRINTED NAME — SIGNATURE — 12-19-16 DATE

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

BRENT L. STELLA — PRINTED NAME — Brent L Stella — SIGNATURE — 12-22-16 DATE

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : P:\UZ\W\Witnc\112545\5-final-dsgn\51-drawings\40-TransHwy\040111 RP.dgn
PLOT DATE : 12/19/2016
PLOT BY : SEH
PLOT NAME :
PLOT SCALE : N/A
APPRAISAL PLAT DATE :

COURSE TABLE			
FROM	TO	DIRECTION	DISTANCE
102	404	N88°29'53"W	720.91'
404	740	N88°29'53"W	46.61'
740	405	N88°29'53"W	71.19'
405	800	N11°00'05"W	1.59'
800	1056	N11°00'05"W	264.01'
175	4237	S79°42'50"W	12.35'
4237	4236	N10°39'59"W	128.78'
4236	4235	S80°56'54"W	2.98'
177	178	N60°07'18"W	60.27'
178	1057	N01°17'48"W	54.50'
1057	56	N88°42'12"E	90.00'
170	171	N57°52'37"E	50.00'
172	174	S70°24'24"E	36.39'
174	128	N88°42'12"E	143.43'
129	131	S81°09'12"E	47.94'
143	140	S87°16'07"E	66.17'
140	458	S86°44'04"E	95.76'
458	457	S01°36'15"E	75.13'
457	3605	S88°38'32"W	97.53'
3605	1050	S84°49'13"W	66.23'
1051	3562	S88°40'40"W	351.72'
1562	1052	S10°44'46"E	175.73'
1052	1053	S16°46'20"E	208.61'
1054	1055	S11°00'05"E	240.19'
1055	404	S11°00'05"E	50.90'

BASIS OF R/W	
INSTRUMENT	YEAR
ASSESSOR'S PLAT OF THE VILLAGE OF WHITING A/K/A ASSESSOR'S PLAT OF MCDILL	1949
CSM NO. 7212	1999
CSM NO. 3092	1984
CSM NO. 5574	1993
CSM NO. 3308	1985
CSM NO. 1074	1976
CSM NO. 10020	2010
CSM NO. 8969	2005
CSM NO. 4625	1990
CSM NO. 413	1972
CSM NO. 3916	1987
CSM NO. 8977	2005
RW PLAT NO. 6413-01-21	1981
RW PLAT NO. 6998-01-71	1997
RW PLAT NO. 6998-01-21	1993

CURVE TABLE			
CURVE 1056-175	L= 131.47'	LC= 131.45'	CB= N12°39'37"W R= 2270.50'
CURVE 128-129	L= 173.68'	LC= 173.46'	CB= S83°35'25"E R= 989.90'
CURVE 56-170	L= 129.04'	LC= 129.02'	CB= N30°08'36"W R= 2340.00'
CURVE 1050-1051	L= 99.58'	LC= 99.57'	CB= N88°49'15"W R= 2241.50'
CURVE 4235-177	L= 375.36'	LC= 374.92'	CB= N22°18'29"W R= 2241.83'
CURVE 131-143	L= 186.45'	LC= 186.38'	CB= S84°10'57"E R= 1956.50'
CURVE 171-172	L= 50.90'	LC= 50.90'	CB= S31°07'10"E R= 2390.00'
CURVE 1053-1054	L= 240.26'	LC= 240.16'	CB= S13°53'13"E R= 2385.50'

SCALE, FEET
0 50 100

GN

FND. HARRISON MON'T
Y= 190892.880
X= 166951.170

VILLAGE OF WHITING

POST ROAD / BUSINESS 51

ELM STREET

MCDILL POND

CTH HH / MCDILL AVENUE

LOCUST ST.

LOCATION SKETCH
NOT TO SCALE
SHEET LOCATION

P.I. 97+26.60
Y=190,794.385
X=171,789.668

FND. SURVEY MARKER NAIL
Y= 190751.760
X= 172333.490

PISTA 905+21.01
PIY = 191,706.865
PIX = 171,791.116
DELTA = 6°29'21"(LT)
R = 2,200.00'
D = 2°36'16"
T = 124.72'
L = 249.17'

PISTA 262+15.54
PIY = 191,894.20
PIX = 171,348.05
DELTA = 40°27'35"(LT)
R = 2340.00'
D = 2°26'55"
T = 862.33'
L = 1652.40'

PISTA 902+89.96
PIY = 191,726.557
PIX = 171,560.702
DELTA = 6°10'54"(RT)
R = 1973.00'
D = 2°54'14"
T = 106.54'
L = 212.87'

STATION OUT TABLE		
POINT	STATION	OUT
174	900+40.00	81.50'
1512	900+40.0	91.5'

RECOVERED MONUMENTS			
POINT	NORTHING	EASTING	DESCRIPTION
631	190767.312	171510.935	1 1/4" IRON PIPE
632	190776.014	171507.045	3/4" IRON ROD
633	190938.244	171476.996	3/4" IRON ROD
634	191019.959	171460.425	1" IRON PIPE
635	191165.213	171429.372	3/4" IRON ROD
637	191286.030	171373.128	1" IRON PIPE
638	191665.881	171216.869	CHISELED X
641	191273.991	171297.508	1" IRON PIPE
642	191342.191	171305.651	1" IRON PIPE
643	191338.969	171285.949	1" IRON PIPE
644	191407.060	171293.943	1" IRON PIPE
645	191408.597	171303.744	1" IRON PIPE
714	191473.371	171292.219	1" IRON PIPE
2368	190822.610	171682.070	3/4" IRON ROD
2369	190819.710	171566.440	1" IRON PIPE
2375	191063.060	171520.330	RAILROAD SPIKE
2378	191405.610	171455.320	3/4" IRON ROD
2439	191162.110	171412.280	IRON PIPE
2465	191670.230	171766.290	3/4" IRON ROD
2484	191686.840	170991.620	3/4" IRON ROD
2485	191665.850	171576.550	3/4" IRON ROD
2543	191777.890	171363.150	CHISELED X
2544	191773.390	171390.750	CHISELED X
2560	191782.590	171265.220	CHISELED X
2565	191872.390	171271.030	1" IRON PIPE
2566	191845.800	171228.680	1" IRON PIPE
2547	191747.460	171858.030	CHISELED X
2602	191422.890	171859.470	1" IRON PIPE
2603	191538.520	171858.770	3/4" IRON ROD
2604	191794.230	171392.710	SURVEY NAIL
2605	191791.330	171384.620	SURVEY NAIL
2609	191290.310	171477.180	1" IRON PIPE

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
210	WISCONSIN TELEPHONE COMPANY N/K/A AT&T	RELEASE OF RIGHTS
220	WISCONSIN PUBLIC SERVICE CORPORATION (GAS)	RELEASE OF RIGHTS
221	WISCONSIN PUBLIC SERVICE CORPORATION (ELECTRIC)	RELEASE OF RIGHTS
250	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS
260	VILLAGE OF WHITING (WATER)	RELEASE OF RIGHTS
261	VILLAGE OF WHITING (SANITARY SEWER)	RELEASE OF RIGHTS

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET. RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN PORTAGE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 765584.

UTILITY INTEREST TABLE			
UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION
210	175	NO EASEMENT OF RECORD	
	180	EASEMENT	DOC. #115275
	180	EASEMENT	DOC. #115273 & DOC. #115274
	181	EASEMENT	DOC. #115274
	182	EASEMENT	DOC. #115273
	184	NO EASEMENT OF RECORD	
	190	NO EASEMENT OF RECORD	
	192	NO EASEMENT OF RECORD	
	193	EASEMENT	DOC. #481278
220	179	EASEMENT	DOC. #559713
	179	EASEMENT	DOC. #731672
	185	NO EASEMENT OF RECORD	
	193	NO EASEMENT OF RECORD	
221	179	EASEMENT	DOC. #731672
	192	NO EASEMENT OF RECORD	
250	179	NO EASEMENT OF RECORD	
260	175	EASEMENT	DOC. #251716
	175	EASEMENT	DOC. #647248
	175	EASEMENT	DOC. #647249
	196	EASEMENT	DOC. #254195
	193	NO EASEMENT OF RECORD	
261	175	EASEMENT	DOC. #251716
	175	EASEMENT	DOC. #647248
	175	EASEMENT	DOC. #647249
	196	EASEMENT	DOC. #254195

TRANSPORTATION PROJECT PLAT NO: 6414-00-25 - 4.11 AMENDMENT NO. 4

AMENDS PARCELS 184, 196, & 197 OF TRANSPORTATION PROJECT PLAT NO. 6414-00-25-4.11 AMENDMENT NO. 2 RECORDED AS DOCUMENT NO. 820588.

PART OF LOT 4 CSM NO. 7212, LOT 3 CSM NO. 3092, LOT 1 OF BLOCK 4 OF THE ASSESSOR'S PLAT OF THE VILLAGE OF WHITING, LOT 12 CSM NO. 3308, LOT 11-O CSM NO. 1074, LOTS 1, 2A. 2B, 7 & 8 OF BLOCK 3 OF THE ASSESSOR'S PLAT OF MCDILL, LOT 1 CSM NO. 10020, LOT 1 OF CSM NO. 8969, LOT 1 OF CSM NO. 4625, PART OF LOT 4, 5, 6 & OUTLOT 3 OF BLOCK 4, LOT 3 OF BLOCK 2, IN THE ASSESSOR'S PLAT OF MCDILL, LOT 1 CSM NO. 8977, LOT 1A CSM NO. 2439, OUTLOT 2 CSM NO. 3916, LOTS 2 THRU 4 OF BLOCK 32 OF THE ASSESSOR'S PLAT OF THE VILLAGE OF WHITING, LOT 4 CSM NO. 413, LOCATED IN AND INCLUDING PART OF THE SE 1/4 OF THE NE 1/4, T23N, R8E, VILLAGE OF WHITING, PORTAGE COUNTY, WISCONSIN.

RELOCATION ORDER BUS. 51 PORTAGE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED			TLE S.F.
			NEW	EXISTING	TOTAL	
175	MLCFC 2006-4 POST ROAD CENTER LLC	FEE/AR/TLE	1975	-	1975	1630
176	POINT PROFESSIONAL IMPRESSIONS LLC	FEE/AR/TLE	1165	-	1165	915
178	LINDY M. HORN, LIFE ESTATE	AR/TLE	-	-	-	465
179	VILLAGE OF WHITING	FEE/AR/TLE	690	-	690	4527
180	LINDA J. JORGENSON	FEE/AR/TLE	8915	-	8915	2330
181	PRECISION GLASS & DOOR LLC.	FEE/AR/TLE	3860	-	3860	890
182	WILLIAM C. BASLER	FEE/AR/TLE	3065	-	3065	1130
183	KEVIN D. & PAMELA R. LAKE	FEE/AR/TLE	1810	-	1810	1637
184	MCDILL AUTO WRECKING, INC.	FEE/TLE	6395	-	6395	5150
185	POINT PROFESSIONAL IMPRESSIONS LLC	FEE/AR/TLE	4575	-	4575	1810
187	GARY R. MANSAVAGE	AR/TLE	-	-	-	700
188	GERALD J. & LYNN M. FIRKUS	FEE/AR/TLE	250	-	250	555
189	JOSEPH F. POLAREK II	AR/TLE	-	-	-	800
190	MANFRED E. DONATH & IRMGARD B. DONATH	FEE/AR/TLE	370	-	370	960
192	KURT A. GLENZER & DIANE M. GLENZER	FEE/AR/TLE	4240	-	4240	1100
193	BEVERLY A. LOPEZ	FEE/AR/TLE	3145	-	3145	885
196	MCDILL AUTO WRECKING, INC.	TLE	-	-	-	1200
197	MCDILL AUTO WRECKING, INC.	FEE/TLE	1130	-	1130	650

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JASON L. CANCE — PRINTED NAME — SIGNATURE — 2-8-18 DATE

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

BRENT L. STELLA — PRINTED NAME — SIGNATURE — 2-9-2018 DATE

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

836950
CYNTHIA A. WISINSKI
REGISTER OF DEEDS
PORTAGE COUNTY
STEVENS POINT, WI
RECORDED ON
02/12/2018 11:12 AM
REC FEE: 25.00
PAGES: 1
FEE EXEMPT:

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25-4.11
AMENDMENT NO. 4

TRANSPORTATION PROJECT PLAT NO: 6414-00-25 - 4.12 AMENDMENT NO. 1

ADDS PARCEL 185 & 195, AMENDS PARCEL 179, ADDS UTILITY NO. 221, AND AMENDS UTILITY NO. 220 OF TRANSPORTATION PROJECT PLAT NO. 6414-00-25-4.12 RECORDED AS DOCUMENT NO. 766749

PART OF BLOCK 31 OF THE ASSESSOR'S PLAT OF THE VILLAGE OF WHITING, OUTLOT 3 OF BLOCK 4 OF THE ASSESSOR'S PLAT OF MCDILL, LOCATED IN AND INCLUDING PART OF THE SW 1/4 OF THE NE 1/4 AND THE NW 1/4 OF THE NE 1/4 AND THE SE 1/4 OF THE NE 1/4 AND THE NE 1/4 OF THE NE 1/4, VILLAGE OF WHITING, PORTAGE COUNTY, WISCONSIN.

RELOCATION ORDER BUS. 51 PORTAGE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

UTILITY INTEREST TABLE			
UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION
220	179	EASEMENT	DOC. #559713
	179	EASEMENT	DOC. #731672
221	179	EASEMENT	DOC. #731672

FND. HARRISON MON'T
Y= 190892.880
X= 166951.170

CURVE 1068-130
L= 65.01'
LC= 65.00'
LCB= N82°03'33"W
R= 1028.92'

CURVE 130-3616
L= 298.33'
LC= 295.67'
LCB= N83°00'26"W
R= 643.51'

CURVE 170-56
L= 129.04'
LC= 129.03'
LCB= S30°08'36"E
R= 2340.00'

CURVE 4234-4232
L= 338.68'
LC= 338.34'
LCB= N41°33'47"W
R= 2191.83'

CURVE 179-1068
L= 121.87'
LC= 121.80'
LCB= N87°15'45"W
R= 1028.92'

FROM	TO	DIRECTION	DISTANCE
102	4216	N88°29'50"W	1337.66'
4216	1068	N00°30'40"W	880.85'
3616	1549	N69°43'20"W	223.49'
1549	1550	N20°32'24"E	40.47'
1550	1552	N20°32'24"E	126.95'
1552	3615	S38°48'49"E	101.52'
3615	3617	S82°59'49"E	284.91'
3617	3618	S87°19'50"E	161.10'
3618	4234	N00°30'40"W	109.74'
4232	4229	S87°27'29"W	315.86'
4229	1074	N38°32'20"E	342.83'
1074	655	N50°22'14"E	86.85'
655	654	S52°46'51"E	109.66'
654	653	S48°00'50"E	260.22'
653	585	S42°44'46"E	156.62'
585	566	S32°43'37"E	260.72'
566	4233	S18°26'27"E	53.33'
4233	170	S57°52'37"W	77.18'
56	1057	S88°42'12"W	90.00'
1057	178	S01°17'48"E	54.50'
178	179	S88°42'12"W	72.00'

FND. SURVEY MARKER
NAIL
Y= 190751.760
X= 172333.490

PISTA 894+91.11
PIY = 191,709.31
PIX = 170,754.57
DELTA = 21°50'12"(LT)
R = 1600.00'
D = 3°34'52"
T = 308.64'
L = 609.79'

PISTA 262+15.54
PIY = 191,894.20
PIX = 171,348.05
DELTA = 40°27'35"(LT)
R = 2340.00'
D = 2°26'55"
T = 862.33'
L = 1652.40'

STA 260+70.46 POST RD = STA 900+00.00 CTH HH
Y=191,719.996
X=171,270.811

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED			TLE S.F.
			NEW	EXISTING	TOTAL	
185	POINT PROFESSIONAL IMPRESSIONS LLC	FEE/AR	50	-	50	-
179	VILLAGE OF WHITING	FEE/AR/TLE	3490	-	3490	5552
195	VILLAGE OF WHITING	FEE/AR	14690	-	14690	-

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Portage COUNTY, WISCONSIN AT 8:56AM ON 8/16/2016 AS DOCUMENT # 820589 AND FILED IN Sec 450
Cynthia A Wisneski
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25-4.12
AMENDMENT NO. 1

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
220	WISCONSIN PUBLIC SERVICE (GAS)	RELEASE OF RIGHTS
221	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS

BASIS OF R/W	
INSTRUMENT	YEAR
ASSESSOR'S PLAT OF THE VILLAGE OF WHITING A/K/A ASSESSOR'S PLAT OF MCDILL	1949
RW PLAT NO. 6413-01-21	1981
RW PLAT NO. 6998-01-71	1997
RW PLAT NO. 6998-01-21	1993
TRANSPORTATION PROJECT PLAT NO. 6998-02-25	2010

RECOVERED MONUMENTS			
POINT	NORTHING	EASTING	DESCRIPTION
641	191273.991	171297.508	1" IRON PIPE
642	191342.191	171305.651	1" IRON PIPE
643	191338.969	171285.949	1" IRON PIPE
644	191407.060	171293.943	1" IRON PIPE
645	191408.597	171303.744	1" IRON PIPE
714	191473.371	171292.219	1" IRON PIPE
2560	191782.590	171265.220	CHISELED X
2565	191872.390	171271.030	1" IRON PIPE
2566	191845.800	171228.680	1" IRON PIPE

LOCATION SKETCH
NOT TO SCALE

GN

SCALE, FEET
0 50 100

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET. RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN PORTAGE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 765584.

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JASON L. CANCE — 7-29-16
PRINTED NAME — SIGNATURE — DATE

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

BRENT L. STELLA — 8-3-2016
PRINTED NAME — SIGNATURE — DATE

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : P:\UZ\W\Witnc\112545\5-final-dsgn\51-drawings\40-TransHwy\040113 RP.dgn
PLOT DATE : 7/29/2016 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A
APPRAISAL PLAT DATE :

TRANSPORTATION PROJECT PLAT NO: 6414-00-25 - 4.13 AMENDMENT NO. 1

ADDS PARCEL 195, AMENDS PARCEL 194 REMOVES UTILITY NO. 260 AND AMENDS UTILITY NO. 270 OF TRANSPORTATION PROJECT PLAT NO. 6414-00-25-4.13 RECORDED AS DOCUMENT NO. 766750

THAT PART OF LOT 1 OF CSM NO. 5796, LOCATED IN AND INCLUDING THE NW 1/4 OF THE NE 1/4 OF SECTION 9, T23N, R8E, VILLAGE OF WHITING, PORTAGE COUNTY, WISCONSIN.

RELOCATION ORDER BUS. 51 PORTAGE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

BASIS OF R/W	
INSTRUMENT	YEAR
ASSESSOR'S PLAT OF THE VILLAGE OF WHITING A/K/A ASSESSOR'S PLAT OF MCDILL	1949
CSM NO. 5796	1994
CSM NO. 4178	1988
RW PLAT NO. 6413-01-21	1981
TRANSPORTATION PROJECT PLAT NO. 6998-02-25	2010

TRANSPORTATION PROJECT PLAT 6998-02-25-4.01 MATCH POINTS					
PROJECT NO. 6414-00-25 POINT #	PROJECT NO. 6998-02-25 POINT #	STATION	OUT	Y	X
4253	508	279+54.81	72.02'	192,961.275	169,886.097
5509	509	282+21.40	70.08'	193,119.848	169,671.787
5311	311	282+08.62	40.69'	193,201.855	169,747.351
5506	506	280+74.47	34.85'	193,118.124	169,852.327
5507	507	279+14.48	33.69'	193,022.956	169,980.946

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN Portage COUNTY, WISCONSIN AT 8:36A ON 8/16/2016 AS DOCUMENT # 820590 AND FILED IN Book Page $30
Cynthia Anderson
SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6414-00-25-4.13
AMENDMENT NO. 1

FND. HARRISON MON'T.
Y= 188163.540
X= 169702.610

QUARTER LINE = N00°50'45"W 5296.69'

MINNESOTA AVE.

STA 284+00
STA 283+30.01 POST RD.
Y=193,243.514
X=169,627.611

FND. HARRISON MON'T.
Y= 193459.650
X= 169624.420

P.I. 282+40.32

P.I. 278+55.44
Y=192,960.305
X=170,018.878

SIXTEENTH LINE

VILLAGE OF WHITING

BLOCK 23 ASSESSOR'S PLAT TO THE VILLAGE OF WHITING

LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6

MCDILL POND

POST ROAD / BUSINESS 51

200'

SEC 9

NW-NE

275+00

280+00

P.I. 270+05.61

270+00

MCDILL POND

VILLAGE OF WHITING

R=N51°27'40"W

R=N53°55'07"W

UTILITY INTEREST TABLE			
UTILITY NUMBER	PARCEL	INTEREST DESCRIPTION	RECORDING INFORMATION
270	194	EASEMENT	DOC.# 146004

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
270	CITY OF STEVENS POINT (SANITARY SEWER)	RELEASE OF RIGHTS

FROM	TO	DIRECTION	DISTANCE
101	1081	S00°50'45"E	216.16'
1081	28	S51°27'40"E	89.70'
28	1075	S53°55'07"E	140.32'
1075	1078	N36°04'53"E	36.10'
1078	1079	N36°04'53"E	9.40'
1079	722	S53°55'07"E	170.00'
722	1554	N72°03'34"E	30.28'
1554	4250	N39°38'54"E	7.82'
4250	656	S60°41'17"E	60.35'
656	655	S51°27'40"E	849.83'
655	1074	S50°22'14"W	86.85'
1074	4229	S38°32'20"W	342.83'
4229	4225	N19°40'24"W	413.46'
4225	3535	N51°25'24"W	387.29'
3535	4253	N37°05'11"W	195.61'
4253	1077	N53°30'05"W	145.20'
1077	1075	N36°04'53"E	70.97'

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN PORTAGE COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 765584.

LOCATION SKETCH
NOT TO SCALE
SHEET LOCATION

SCALE, FEET
0 50 100

FND. HARRISON MON'T.
Y= 193,393.090
X= 172,321.060

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W S.F. REQUIRED			TLE S.F.
			NEW	EXISTING	TOTAL	
194	WELLINGTON HOMES OF WISCONSIN LLC	FEE/AR/TLE	2895	-	2895	2030
195	VILLAGE OF WHITING	FEE/AR	8755	-	8755	-

SEH
421 FRENETTE DRIVE
CHIPPEWA FALLS, WI 54729

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JASON L. CANCE — PRINTED NAME
SIGNATURE — 7-29-16 DATE

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

BRENT L. STELLA — PRINTED NAME
Brent L. Stella — SIGNATURE — 8-3-2016 DATE

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

FILE NAME : P:\UZ\W\Witnc\112545\5-final-dsgn\51-drawings\40-TransHwy\040114 RP.dgn
PLOT DATE : 7/29/2016
PLOT BY : SEH
PLOT NAME :
PLOT SCALE : N/A
APPRAISAL PLAT DATE :

PATTON DRIVE

69+00

CHARTER COMMUNICATIONS
(OH ATTACHED TO WPS)

WPS
(UG GAS)
(OH ELECT)

MACARTHUR WAY

74+00

CHARTER COMMUNICATIONS
(UG FO)

AT&T
(UG TEL)

WPS
(UG ELECT)

CHARTER COMMUNICATIONS
(OH ATTACHED TO WPS)

N

CAUTION

204+00 205+00 206+00 207+00 208+00 209+00 210+00 211+00

BUSINESS 51

+79.8

VILLAGE OF PLOVER
(SAN SEWER)
(WATER MAIN)

AT&T
(OH FO)
(UG FO IN CONDUIT)

BEGIN PROJECT
STA 208+50.00
MATCH EXISTING
SAWCUT REQ'D
Y=186619.543
X=172330.437

BM 23

SLOPE INTERCEPT
(TYP)

ASPHALTIC CURB REQ'D

STA 210+22.0 RT
CONSTRUCT 20' WIDE PE
TYPE 2

SAWCUT REQ'D

TEMPORARY ASPHALT
CONNECTION

5

(3) TYPE 3 CURB RAMP
(4B1) TYPE 4B1 CURB RAMP
(5) TYPE 5 CURB RAMP
(6) TYPE 6 CURB RAMP
(7B) TYPE 7B CURB RAMP

5

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
23	208+61.0, 88.1' RT	WESTERLY EDGE OF CARPETED CONC PORCH HSE# 1250 POST RD	1083.18

EL. 1079.42

-0.50%

FUTURE
(PHASE 4 PROFILE)

P.C. 207+35.00
EL. 1077.49

LOW PT. 207+73.49
EL. 1077.39

P.T. 208+15.00
EL. 1077.51

SSD=355'
K=77
80' V.C.

P.I. 207+75.00
EL. 1077.29

FINISHED ℄ PROFILE

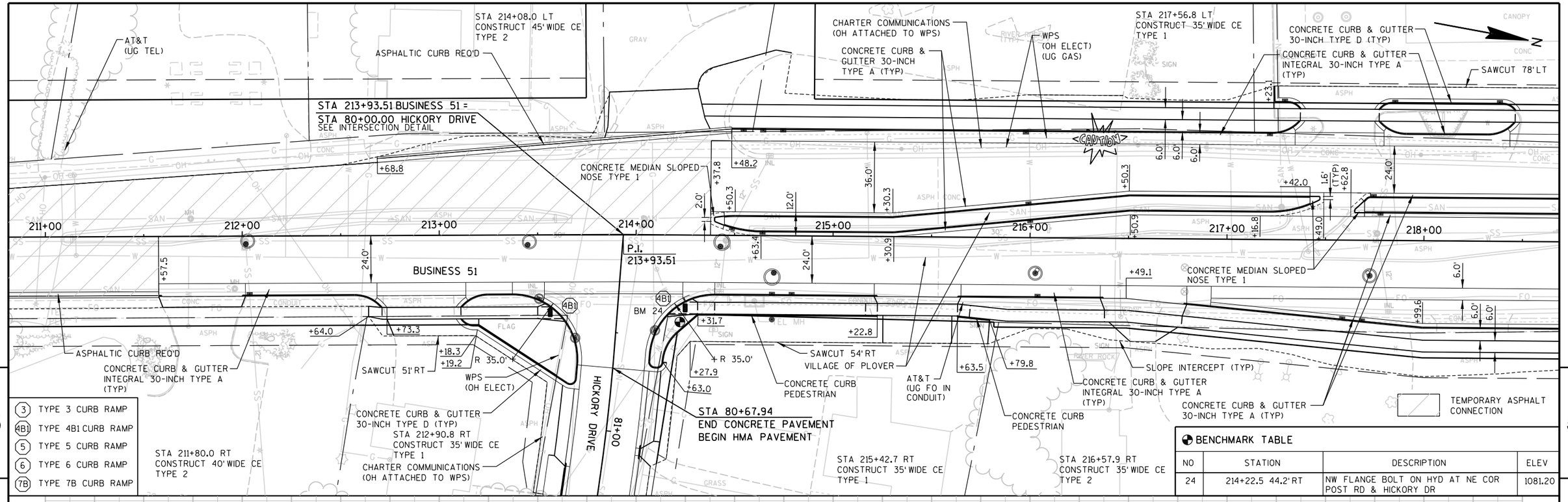
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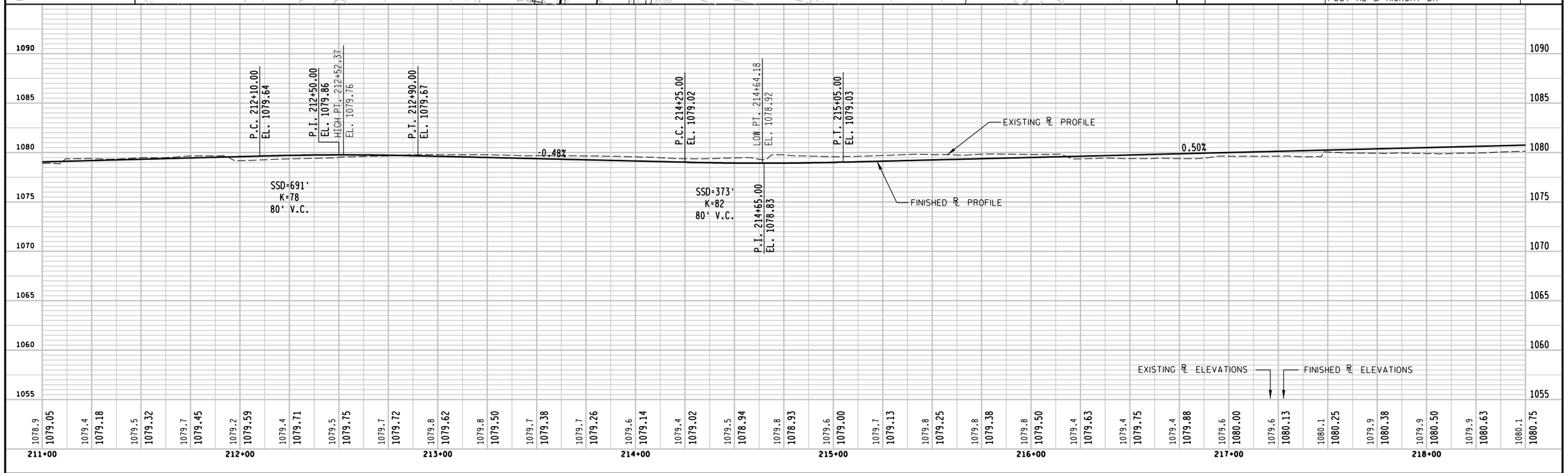
EXISTING ℄ PROFILE

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

| | | |





PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - BUSINESS 51	SHEET 331	E

STA 218+65.9 LT
CONSTRUCT 35' WIDE CE
TYPE 1

SAWCUT 78' LT

BM 41

TOMMY'S TURNPIKE

WPS
(UG GAS)
(OH ELECT)

CHARTER COMMUNICATIONS
(OH ATTACHED TO WPS)

REMOVE CONC CURB

SAWCUT REQ'D

REMOVE SIGN BASE

CONCRETE CURB & GUTTER
30-INCH TYPE A (TYP)

VILLAGE OF WHITING
(SAN SEWER)
(WATER MAIN)

STA 224+09.3 LT
CONSTRUCT 35' WIDE CE
TYPE 2

CONCRETE CURB & GUTTER
INTEGRAL 30-INCH TYPE A
(TYP)

STA 222+34 TO STA 223+53 LT
REMOVE ASPHALT PARKING LOT FROM WISDOT
PARCEL. (INCIDENTAL TO EXCAVATION COMMON).
TOPSOIL, SEED, FERTILZE AND MULCH

CONCRETE CURB & GUTTER
30-INCH TYPE A (TYP)

STA 225+61.4 LT
CONSTRUCT 35' WIDE CE
TYPE 2

VILLAGE OF PLOVER

VILLAGE OF WHITING

CONCRETE MEDIAN SLOPED
NOSE TYPE 1

CAUTION

CONCRETE MEDIAN SLOPED
NOSE TYPE 1

BUSINESS 51

CONCRETE MEDIAN SLOPED
NOSE TYPE 1

P.I.
225+46.58

VILLAGE OF PLOVER
(SAN SEWER)
WATER MAIN)

AT&T
(UG FO IN CONDUIT)

CONCRETE CURB & GUTTER
30-INCH TYPE A (TYP)

CHARTER COMMUNICATIONS
(OH ATTACHED TO WPS)

PORTER ROAD

SLOPE INTERCEPT
(TYP)

CONCRETE CURB & GUTTER
INTEGRAL 30-INCH TYPE A
(TYP)

STA 220+44.49 BUSINESS 51 =
STA 800+00.00 TOMMYS TURN PIKE
SEE INTERSECTION DETAIL

STA 220+40.44 BUSINESS 51 =
STA 800+00.00 PORTER ROAD
SEE INTERSECTION DETAIL

STA 222+76.8 RT
CONSTRUCT 20' WIDE PE
TYPE 2

STA 224+62.7 RT
CONSTRUCT 24' WIDE PE
TYPE 2

STA 225+50.2 RT
CONSTRUCT 20' WIDE PE
TYPE 2

AT&T
(UG FO IN CONDUIT)

3	TYPE 3 CURB RAMP
4B1	TYPE 4B1 CURB RAMP
5	TYPE 5 CURB RAMP
6	TYPE 6 CURB RAMP
7B	TYPE 7B CURB RAMP

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
41	219+97.0 67.3' LT	CHI "X" ON S. COR OF SIGNAL BOX AT SW COR POST RD & TOMMYS TPKE	1080.90

P.C. 218+60.00
EL. 1080.80

P.I. 219+00.00
EL. 1081.00

HIGH PT. 219+00.00
EL. 1080.90

P.T. 219+40.00
EL. 1080.80

FINISHED ℄ PROFILE

-0.50%

EXISTING ℄ PROFILE

SSD=705'
K=80
80' V.C.

P.C. 221+10.00
EL. 1079.95

LOW PT. 221+50.31
EL. 1079.85

SSD=369'
K=81
80' V.C.

P.I. 221+50.00
EL. 1079.75

P.T. 221+90.00
EL. 1079.95

0.49%

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

219+00	220+00	221+00	222+00	223+00	224+00	225+00	226+00
1080.1 1080.75	1080.3 1080.86	1080.0 1080.90	1080.1 1080.86	1080.2 1080.75	1080.3 1080.63	1080.4 1080.50	1080.5 1080.38
1080.6 1080.25	1080.7 1080.13	1080.9 1080.00	1081.5 1079.89	1081.6 1079.85	1081.7 1079.89	1081.8 1080.00	1081.9 1080.12
1081.9 1080.24	1081.5 1080.37	1081.5 1080.49	1081.6 1080.61	1081.8 1080.73	1081.8 1080.86	1081.9 1080.98	1081.9 1081.10
1082.0 1081.23	1082.1 1081.35	1082.3 1081.47	1082.3 1081.60	1082.4 1081.72	1082.5 1081.84	1082.4 1081.97	

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - BUSINESS 51	SHEET 332 E

STA 226+87.0 LT
CONSTRUCT 24' WIDE PE
TYPE 2

VILLAGE OF WHITING
(WATER MAIN)

CHARTER COMMUNICATIONS
(OH ATTACHED TO WPS)

WPS
(UG GAS)
(OH ELECT)

STA 229+04.4 LT
CONSTRUCT 14' WIDE PE
TYPE 2

CONCRETE CURB & GUTTER
30-INCH TYPE A (TYP)

STA 230+37.4 LT
CONSTRUCT 14' WIDE PE
TYPE 2

STA 231+68.8 LT
CONSTRUCT 17' WIDE PE
TYPE 2

CONCRETE CURB & GUTTER
INTEGRAL 30-INCH TYPE A
(TYP)

SAWCUT 78' LT

STA 232+22.3 LT
CONSTRUCT 20' WIDE CE
TYPE 1

CONCRETE CURB & GUTTER
30-INCH TYPE D (TYP)

STA 232+84.3 LT
CONSTRUCT 20' WIDE CE
TYPE 1

SAWCUT 78' LT

BM 25

BM 26

CAUTION

BUSINESS 51

CONCRETE MEDIAN SLOPED
NOSE TYPE 1

CONCRETE MEDIAN SLOPED
NOSE TYPE 1

STA 226+79.7 RT
CONSTRUCT 35' WIDE CE
TYPE 2

STA 227+93.3 RT
CONSTRUCT 20' WIDE PE
TYPE 2

SLOPE INTERCEPT
(TYP)

CONCRETE CURB & GUTTER
INTEGRAL 30-INCH TYPE A
(TYP)

AT&T
(OH FO)
(UG FO IN CONDUIT)

CONCRETE CURB & GUTTER
30-INCH TYPE A (TYP)

SAWCUT 46.5' RT

STA 229+63.3 RT
CONSTRUCT 18' WIDE PE
TYPE 2

STA 230+21.6 RT
CONSTRUCT 18' WIDE PE
TYPE 2

STA 230+74.1 RT
CONSTRUCT 24' WIDE CE
TYPE 2

STA 231+78.7 RT
CONSTRUCT 24' WIDE CE
TYPE 2

STA 232+64.4 RT
CONSTRUCT 24' WIDE CE
TYPE 2

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
25	228+43.5 50.6' LT	E. FLANGE BOLT/FLAG ON HYD W/S POST RD 1ST HYD N. OF TOMMY'S TP	1084.53
26	231+99.5 57.4' LT	N. FLANGE BOLT/FLAG ON HYD W/S POST RD 1ST HYD S. OF W. CEDAR	1083.10

(3) TYPE 3 CURB RAMP
(4B1) TYPE 4B1 CURB RAMP
(5) TYPE 5 CURB RAMP
(6) TYPE 6 CURB RAMP
(7B) TYPE 7B CURB RAMP

P.C. 227+60.00
EL. 1082.75

P.I. 228+00.00
EL. 1082.95

HIGH PT. 228+01.85
EL. 1082.86

P.I. 228+40.00
EL. 1082.777

SSD=746'
K=85
80' V.C.

FINISHED ℄ PROFILE

EXISTING ℄ PROFILE

-0.45%

EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

226+00	227+00	228+00	229+00	230+00	231+00	232+00	233+00
1082.4	1081.97	1082.3 1082.09	1082.3 1082.21	1082.3 1082.33	1082.2 1082.46	1082.2 1082.58	1082.3 1082.70	1082.2 1082.81	1082.0 1082.86	1082.0 1082.82	1081.9 1082.73	1081.9 1082.61	1081.8 1082.50	1081.7 1082.39	1081.8 1082.28	1081.7 1082.16	1081.5 1082.05	1081.5 1081.94	1081.4 1081.83	1081.7 1081.72	1081.6 1081.60	1081.4 1081.49	1081.2 1081.38	1080.9 1081.27	1081.1 1081.15	1081.0 1081.04	1080.8 1080.93	1080.7 1080.82	1080.8 1080.71	1080.7 1080.59	1080.6 1080.48

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - BUSINESS 51	SHEET 333	E

STA 234+58.5 LT
CONSTRUCT 35' WIDE CE
TYPE 1

CONCRETE CURB & GUTTER
30-INCH TYPE D (TYP)

SAWCUT
99' LT

SAWCUT 78' LT

CONCRETE CURB & GUTTER
INTEGRAL 30-INCH TYPE A
(TYP)

SLOPE INTERCEPT (TYP)

SAWCUT 78' LT

CHARTER
COMMUNICATIONS
(OH ATTACHED
TO WPS)

STA 236+73.5 LT
CONSTRUCT 12' WIDE PE
TYPE 2

P.T.
83+83.40

CHARTER
COMMUNICATIONS
(OH FO ATTACHED
TO WPS)

WPS
(UG GAS)
(OH ELECT)

R 35.0'

W CEDAR STREET

84+00

STA 84+06.02
END HMA PAVEMENT
BEGIN CONCRETE PAVEMENT

CONCRETE CURB & GUTTER
INTEGRAL 30-INCH TYPE A
(TYP)

CONCRETE CURB & GUTTER
30-INCH TYPE D (TYP)

STA 239+60.0 LT
CONSTRUCT 35' WIDE CE
TYPE 1

CONCRETE CURB & GUTTER
30-INCH TYPE A (TYP)

+04.0

+R 35.0'

+42.5

SAWCUT 90' LT

SAWCUT 84' LT

BM 27

CAUTION

BUSINESS 51

CONCRETE MEDIAN SLOPED
NOSE TYPE 1

234+00

235+00

236+00

237+00

238+00

239+00

240+00

241+00

P.I.
237+22.32

85+00

CONCRETE MEDIAN SLOPED
NOSE TYPE 1

SAWCUT 51' RT

SAWCUT 51' RT

SAWCUT 72' RT

CONCRETE CURB & GUTTER
INTEGRAL 30-INCH TYPE A
(TYP)

CHARTER COMMUNICATIONS
(OH FO ATTACHED TO WPS)

+R 35.0'

E CEDAR STREET

86+00

+R 35.0'
STA 237+29.94 BUSINESS 51 =
STA 85+00.00 CEDAR STREET
SEE INTERSECTION DETAIL

P.C.
10+00.00

AT&T
(UG TEL)

AT&T
(OH FO)
(UG FO IN CONDUIT)

CONCRETE CURB & GUTTER
INTEGRAL 30-INCH TYPE A
(TYP)

OBLITERATE
OLD ROAD

ROSE ST

STA 234+17.2 RT
CONSTRUCT 35' WIDE CE
TYPE 2

STA 235+43.3 RT
CONSTRUCT 35' WIDE CE
TYPE 2

STA 85+64.61
END CONCRETE PAVEMENT
BEGIN HMA PAVEMENT

VILLAGE OF WHITING
(SAN SEWER)
(WATER MAIN)

11+00 LOCUST STREET

OBLITERATE OLD ROAD

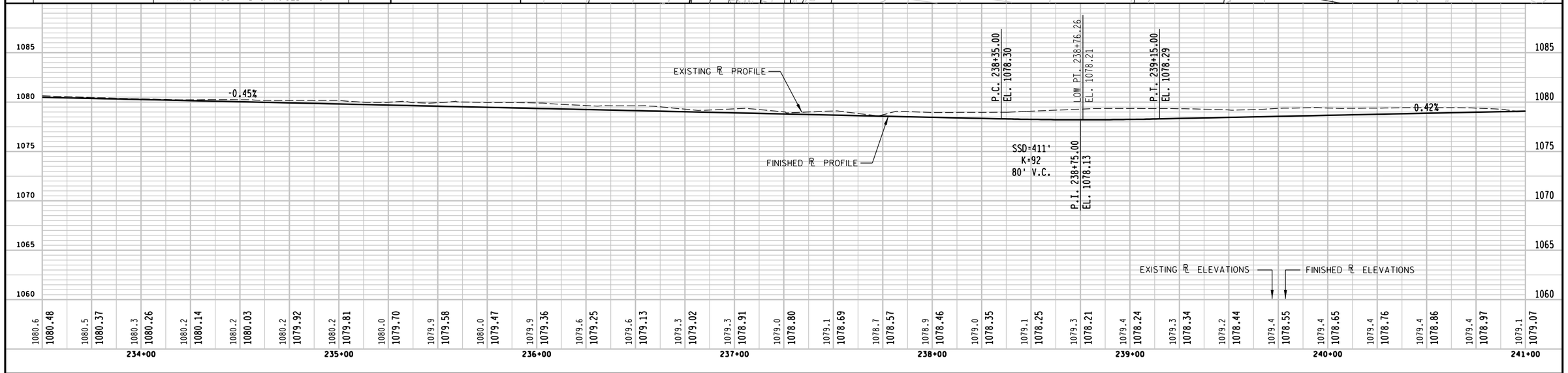
P.C.
86+59.55

SAWCUT
REQ'D

(3) TYPE 3 CURB RAMP
(4B1) TYPE 4B1 CURB RAMP
(5) TYPE 5 CURB RAMP
(6) TYPE 6 CURB RAMP
(7B) TYPE 7B CURB RAMP

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
27	237+70.0 71.3' LT	WESTERLY FLANGE BOLT/FLAG ON HYD AT NW COR POST RD & W. CEDAR ST	1081.21



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - BUSINESS 51	SHEET 334 E

STA 241+73.0 LT
CONSTRUCT 35' WIDE CE TYPE 1

AT&T (UG FO)

CHARTER COMMUNICATIONS (UG COMMUNICATIONS)

CONCRETE CURB & GUTTER 30-INCH TYPE D (TYP)

CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE A (TYP)

CONCRETE CURB & GUTTER 30-INCH TYPE D (TYP)

SAWCUT 84'LT

CONCRETE CURB & GUTTER 30-INCH TYPE A (TYP)

WILLOW STREET (W)

STA 89+11.30
BEGIN HMA PAVEMENT
END CONCRETE PAVEMENT

CHARTER COMMUNICATIONS (OH ATTACHED TO WPS)

CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE A (TYP)

STA 247+31.0 LT
CONSTRUCT 35' WIDE CE TYPE 1

CONCRETE CURB & GUTTER 30-INCH TYPE D (TYP)

STA 248+30.0 LT
CONSTRUCT 35' WIDE CE TYPE 1

SAWCUT 100'LT

VILLAGE OF WHITING (SAN SEWER) (WATER MAIN)

CONCRETE CURB & GUTTER 30-INCH TYPE A (TYP)

WPS (UG GAS) (OH ELECT)

SAWCUT 78'LT

SAWCUT 84'LT

CAUTION

BUSINESS 51

CONCRETE MEDIAN SLOPED NOSE TYPE 1

CONCRETE CURB & GUTTER 30-INCH TYPE D (TYP)

REMOVE CONC BASE & BALLARDS

STA 243+80.57 BUSINESS 51 =
STA 90+00.00 WILLOW STREET

P.C. 90+43.44

STA 90+70.23 BUS 51
END CONCRETE PAVEMENT
BEGIN HMA PAVEMENT

P.I. 20+00.00

CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE A (TYP)

SLOPE INTERCEPT (TYP)

ROSE ST

AT&T (OH FO) (UG FO IN CONDUIT)

OBLITERATE OLD ROAD

P.T. 90+85.95

P.C. 91+00.13

WILLOW STREET (E)

SAWCUT REQ'D

BEECH STREET

3	TYPE 3 CURB RAMP
4B1	TYPE 4B1 CURB RAMP
5	TYPE 5 CURB RAMP
6	TYPE 6 CURB RAMP
7B	TYPE 7B CURB RAMP

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
28		NW COR FLAGSTON PORCH ON 2724 POST RD	1080.76

P.C. 241+85.00 EL. 1079.43
P.I. 242+25.00 EL. 1079.60
HIGH PT. 242+24.52 EL. 1079.52
P.T. 242+65.00 EL. 1079.43
P.C. 244+60.00 EL. 1078.61
LOW PT. 244+99.26 EL. 1078.53
P.T. 245+40.00 EL. 1078.62
P.I. 245+00.00 EL. 1078.44

EXISTING ℄ PROFILE
FINISHED ℄ PROFILE
-0.42%
0.44%
SSD=828' K=95 80' V.C.
SSD=415' K=93 80' V.C.

EXISTING ℄ ELEVATIONS
FINISHED ℄ ELEVATIONS

241+00	242+00	243+00	244+00	245+00	246+00	247+00	248+00
1079.1 / 1079.07	1079.3 / 1079.18	1079.3 / 1079.28	1079.4 / 1079.39	1079.5 / 1079.48	1079.5 / 1079.52	1079.5 / 1079.48	1079.4 / 1079.39
1079.4 / 1079.28	1079.3 / 1079.18	1079.4 / 1079.07	1079.5 / 1078.97	1079.4 / 1078.86	1078.8 / 1078.76	1079.2 / 1078.65	1079.2 / 1078.56
1079.5 / 1078.53	1079.5 / 1078.56	1079.6 / 1078.66	1079.6 / 1078.77	1079.6 / 1078.88	1079.6 / 1078.99	1079.6 / 1079.10	1079.6 / 1079.21
1079.5 / 1079.32	1079.6 / 1079.42	1079.3 / 1079.53	1079.7 / 1079.64	1079.7 / 1079.75	1079.8 / 1079.86	1079.7 / 1079.97	

PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - BUSINESS 51	SHEET 335 E

STA 249+58.6 LT
CONSTRUCT 35' WIDE CE
TYPE 2

CONCRETE CURB & GUTTER
INTEGRAL 30-INCH TYPE A
(TYP)

CONCRETE CURB & GUTTER
30-INCH TYPE A (TYP)

STA 251+05.7 LT
CONSTRUCT 35' WIDE CE
TYPE 2

VILLAGE OF
WHITING
(SAN SEWER)
(WATER MAIN)

STA 250+88.32 BUSINESS 51 =
STA 95+00.00 E ELM STREET
SEE INTERSECTION DETAIL

STA 252+72.5 LT
CONSTRUCT 35' WIDE CE
TYPE 2

AT&T
(UG FO)

HISTORIC PROPERTY

STA 253+55.9 LT
CONSTRUCT 14' WIDE PE
TYPE 2

STA 254+68.4 LT
CONSTRUCT 15' WIDE PE
TYPE 2

BM 31

CONCRETE CURB & GUTTER
30-INCH TYPE A (TYP)

STA 255+86.4 LT
CONSTRUCT 15' WIDE PE
TYPE 2

WPS
(UG GAS)
(OH ELECT)

+37.4
+28.2
+43.7'SB'
+87.2'SB'
+64.5
249+00
250+00
251+00
252+00
253+00
254+00
255+00
256+00
+21.6
+49.3
+38.0
+42.10
+65.7
+40.4
+61.1
+53.4

P.I.
251+42.10'SB'

BUSINESS 51
252+00'SB'

P.I.
252+80.12'SB'
253+00'SB'

P.C.
253+61.09'SB'
254+00'SB'

AT&T
(OH TEL)

255+00'SB'

P.I.
256+36.0
256+00'SB'

P.C.
253+53.21

24.0'
6.0'
14.0
10.0
2.0'
12.0

CONCRETE MEDIAN SLOPED
NOSE TYPE 1

BM 30

AT&T
(OH FO)
(UG FO IN CONDUIT)

R 30.0'

8.0

E ELM STREET

SLOPE INTERCEPT
(TYP)

REMOVE CHAIN LINK FENCE

STA 95+66.15
END CONCRETE PAVEMENT
BEGIN HMA PAVEMENT

AT&T
((2) UG FO IN CONDUIT)

BEGIN PROJECT 6414-00-81
END PROJECT 6414-00-80
STA 252+50.00

STA 253+95.4 RT
CONSTRUCT 35' WIDE CE
TYPE 2

CONCRETE CURB &
GUTTER INTEGRAL
30-INCH TYPE A
(TYP)

STA 255+30 RT
CONSTRUCT 35' WIDE CE
TYPE 2

CONCRETE CURB & GUTTER
INTEGRAL 30-INCH TYPE A
(TYP)

STA 96+10.0 RT
CONSTRUCT 30'
WIDE PE

WPS
(UG GAS)

STA 96+07.0 LT
CONSTRUCT 30' WIDE CE

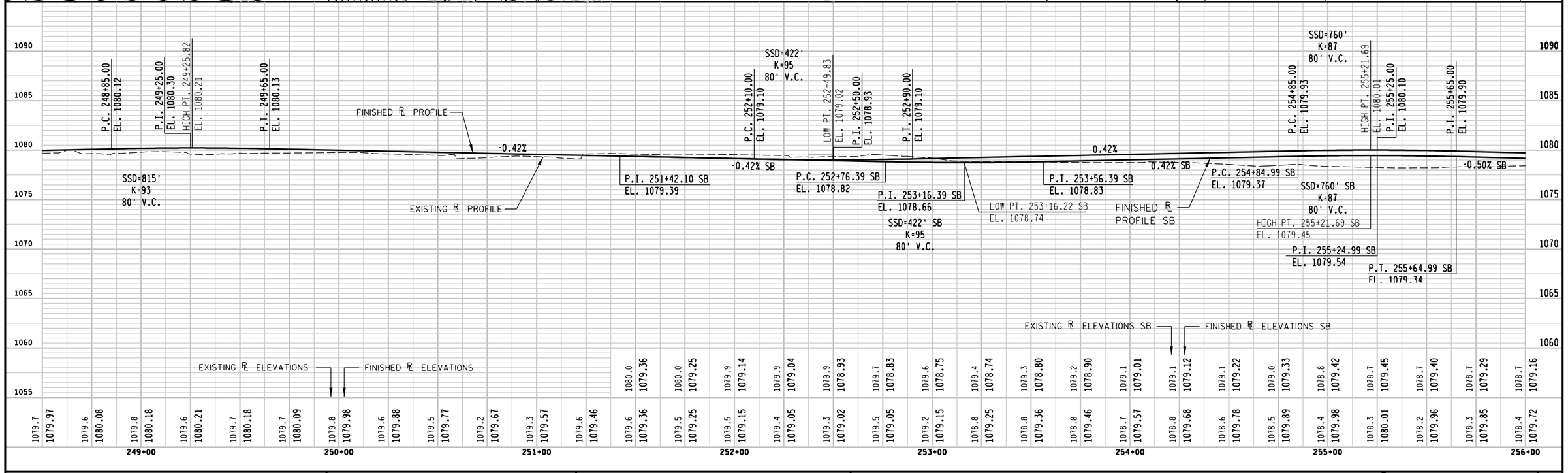
WPS (OH ELECT)

STA 252+29.8 RT
CONSTRUCT 35' WIDE CE
TYPE 2

(3)	TYPE 3 CURB RAMP
(4B1)	TYPE 4B1 CURB RAMP
(5)	TYPE 5 CURB RAMP
(6)	TYPE 6 CURB RAMP
(7B)	TYPE 7B CURB RAMP

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
30	251+11.5 25.2' RT	NORTHERLY FLANGE BOLT/FLAG OF HYD AT NE COR ELM ST & POST RD	1081.60
31	254+38.0 92.4' LT	SE COR OF FLAGSTONE DOOR STOOP OF HSE# 2323 POST RD	1081.30



| | | |

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
40	259+66.5 32.6' RT	CHI "X" ON SE COR OF SIGNAL BOX ON THE SE COR OF POST & CTH HH	1079.25

CHARTER COMMUNICATIONS (OH ATTACHED TO WPS)
CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE A (TYP)
WPS (OH ELECT)
CONCRETE CURB & GUTTER 20-INCH TYPE A SPECIAL (TYP)
SENSITIVE AREA
CONCRETE CURB & GUTTER 30-INCH TYPE A
WPS (UG GAS)
CHARTER COMMUNICATIONS (UG FO)
VILLAGE OF WHITING (WATER MAIN)
STA 260+70.46 BUSINESS 51 = STA 900+00.00 'EB' MCDILL AVE/CTH HH
SEE INTERSECTION DETAIL
P.I. 256+36.05'SB
256+00'SB
P.C. 257+49.65'SB
257+00'SB
258+00'SB
259+00'SB
BUSINESS 51
260+00'SB
261+00'SB
262+00'SB
263+00'SB
256+00
257+00
258+00
259+00
260+00
261+00
262+00
263+00
R 251.0'+
R 42.0'
R 252.0'+
CTH HH
BM 00+668
EB 00+668
BM 00+900
EB 00+900
MCDILL AVENUE
CONCRETE MEDIAN SLOPED NOSE TYPE 1
CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE A (TYP)
R 42.0'
R 252.0'+
CONCRETE MEDIAN SLOPED NOSE TYPE 1
CONCRETE CURB & GUTTER 30-INCH TYPE A
CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE A (TYP)
CONCRETE MEDIAN SLOPED NOSE TYPE 1
CONCRETE MEDIAN SLOPED NOSE TYPE 1
BM 40
R 100.0'
R 82.0'+
R 55.0'+
R 45.0'
CAUTION
CONCRETE CURB & GUTTER 30-INCH TYPE A
CONCRETE CURB & GUTTER 20-INCH TYPE A SPECIAL (TYP) SEE DETAIL
+23.90
+65.48 EAT
+02.86
AT&T ((2) UG FO IN CONDUIT)
CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE A (TYP)
SLOPE INTERCEPT (TYP)
STA 256+10.7 RT CONSTRUCT 16' WIDE PE TYPE 2
STA 257+34.0 RT CONSTRUCT 40' WIDE CE TYPE 2
CONCRETE CURB & GUTTER 30-INCH TYPE A
CONCRETE CURB PEDESTRIAN
SAWCUT REQ'D
MGS EAT REQ'D STA 262+65.48 TO STA 263+17.70
MGS THRIE BEAM TRANSITION REQ'D STA 263+17.70 TO STA 263+56.48

3	TYPE 3 CURB RAMP
4B1	TYPE 4B1 CURB RAMP
5	TYPE 5 CURB RAMP
6	TYPE 6 CURB RAMP
7B	TYPE 7B CURB RAMP

LEGEND
CONCRETE APPROACH SLAB
STRUCTURAL APPROACH SLAB (SEE BRIDGE PLANS)

1090 1085 1080 1075 1070 1065 1060

SSD=367' K=80 80' V.C.
P.C. 258+25.00 EL. 1078.60
LOW PT. 258+65.00 EL. 1078.50
P.I. 258+65.00 EL. 1078.40
P.T. 259+05.00 EL. 1078.60
SSD=703' K=80 80' V.C.
P.C. 260+35.00 EL. 1079.25
HIGH PT. 260+74.91 EL. 1079.35
P.I. 260+75.00 EL. 1079.45
P.T. 261+15.00 EL. 1079.25
P.C. 262+50.00 EL. 1078.57
SSD=1331' K=193 100' V.C.
P.I. 263+00.00 EL. 1078.32
P.T. 263+50.00
-0.50%
-0.50% SB
FINISHED ℄ PROFILE SB
P.C. 258+25.00 SB EL. 1078.04
LOW PT. 258+53.27 SB EL. 1077.97
P.I. 258+65.00 SB EL. 1077.84
SSD=279' SB K=57 80' V.C.
FINISHED ℄ PROFILE
0.50%
0.91% SB
P.C. 259+75.00 SB EL. 1078.85
P.I. 260+00.00 SB EL. 1079.07
P.T. 259+05.00 SB EL. 1078.21
P.T. 260+25.00 SB EL. 1079.20
SSD=1627' SB K=120 50' V.C.
0.50% SB
P.C. 260+35.00 SB EL. 1079.25
HIGH PT. 260+74.91 SB EL. 1079.35
P.I. 260+75.00 SB EL. 1079.45
SSD=703' SB K=80 80' V.C.
-0.50% SB
P.T. 261+15.00 SB EL. 1079.25
P.C. 261+51.89 SB EL. 1079.06
P.I. 261+91.89 SB EL. 1078.86
SSD=1321' SB K=154 80' V.C.
-0.50%
P.T. 262+31.89 SB EL. 1078.45
EXISTING ℄ PROFILE
EXISTING ℄ ELEVATIONS SB
FINISHED ℄ ELEVATIONS SB

| | | |

3 TYPE 3 CURB RAMP
4B1 TYPE 4B1 CURB RAMP
5 TYPE 5 CURB RAMP
6 TYPE 6 CURB RAMP
7B TYPE 7B CURB RAMP

MGS THRIE BEAM TRANSITION REQ'D
STA 264+77.65'SB' TO STA 265+17.59'SB'
MGS EAT REQ'D
STA 265+17.59'SB' TO STA 265+76.65'SB'

WPS (OH ELECT)
CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE A (TYP)
SLOPE INTERCEPT
SENSITIVE AREA
P.C. 1+38.74'BL'
WPS (UG ELECT)
+76.65 EAT
P.T. 264+63.41'SB'
264+00'SB'
P.C. 265+16.27'SB'
265+00'SB'
+98.49 SB'
+00.3
266+00'SB'
267+00'SB'
268+00'SB'
269+00'SB'
P.T. 1+55.40'BL'
P.T. 269+69.47'SB'
P.I. 2+00.00'BL'
271+00
270+00
269+00
268+00
267+00
266+00
265+00
264+00
+39.4
8.0'
6.0'
5.0'
5.5'
25.6'
18.7'
+27.2
+27.2
+09.92
+30.1
+38.3
P.C.C. 264+81.27
BUSINESS 51
BM 43
STRUCTURE B-49-67
STA 263+49.23 TO STA 264+94.92
CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE A (TYP)
CONCRETE CURB & GUTTER 20-INCH TYPE A SPECIAL (TYP)
SENSITIVE AREA
P.T. 269+51.83
5
5

BENCHMARK TABLE

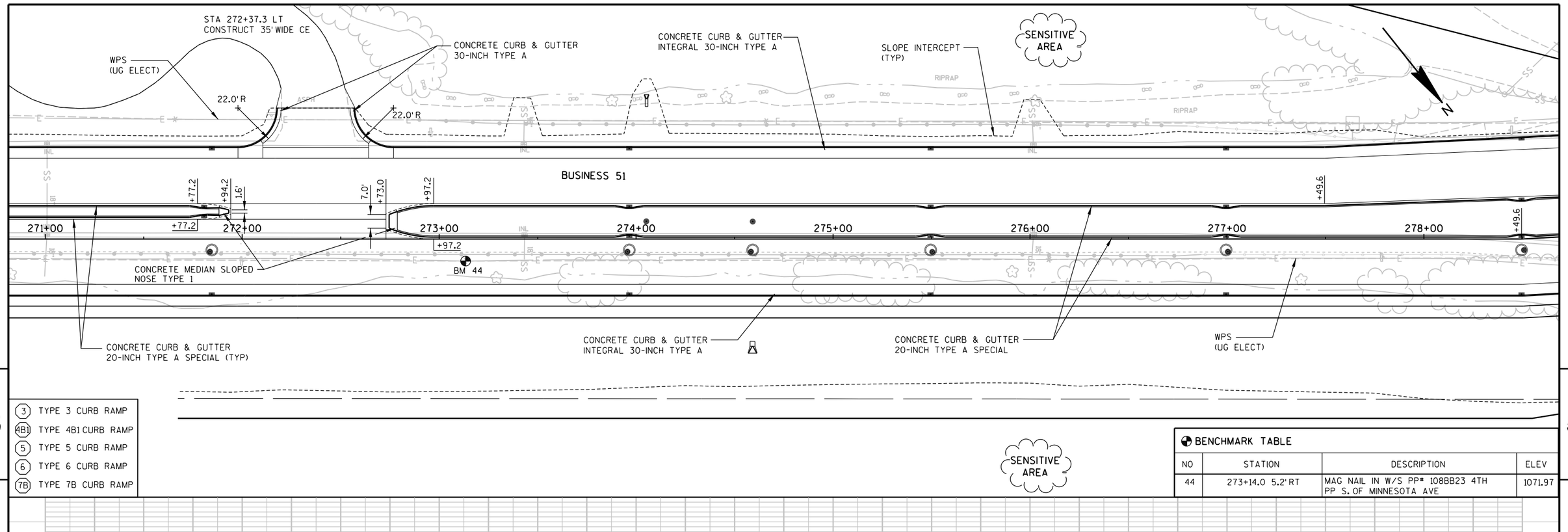
NO	STATION	DESCRIPTION	ELEV
43	264+75.0 30.0'RT	BRASS CAP IN NE COR CONC BRIDGE "B-49-67-82 OVER PLOVER RIVER	1077.29

LEGEND
CONCRETE APPROACH SLAB
STRUCTURAL APPROACH SLAB (SEE BRIDGE PLANS)

STA 264+22.08'NB'
STRUCTURE B-49-67 REQ'D
SINGLE SPAN - STEEL BEAM BRIDGE
88.0'CLEAR ROADWAY
SKEW 0°

EL.= 1077.81
HIGH WATER ELEV. 1066.0
WATER ELEV. 1065.0
STREAM BED ELEV. 1056.0
FINISHED ℄ PROFILE
-1.02%
-1.02% SB
FINISHED ℄ PROFILE SB
STA 264+22.08'NB'
REMOVE DECK AND PARTIAL
SUBSTRUCTURE B-49-67
A SINGLE SPAN - STEEL BEAM BRIDGE
106'-10" LONG X VARIES (77'-5 3/4" TO 75'-1 3/8" WIDE)
P.C. 267+41.80 SB
EL. 1073.25
P.I. 267+81.80 SB
EL. 1072.84
SSD=560' SB
K=133
80' V.C.
P.C. 268+25.00
EL. 1072.96
SSD=680'
K=166
100' V.C.
P.I. 268+75.00
EL. 1072.45
P.T. 268+21.80 SB
EL. 1072.67
P.I. 269+25.00
EL. 1072.24
-0.42% SB
P.I. 269+69.47 SB
EL. 1072.05
EXISTING ℄ PROFILE
EXISTING ℄ ELEVATIONS SB
FINISHED ℄ ELEVATIONS SB
EXISTING ℄ ELEVATIONS
FINISHED ℄ ELEVATIONS

| | | |



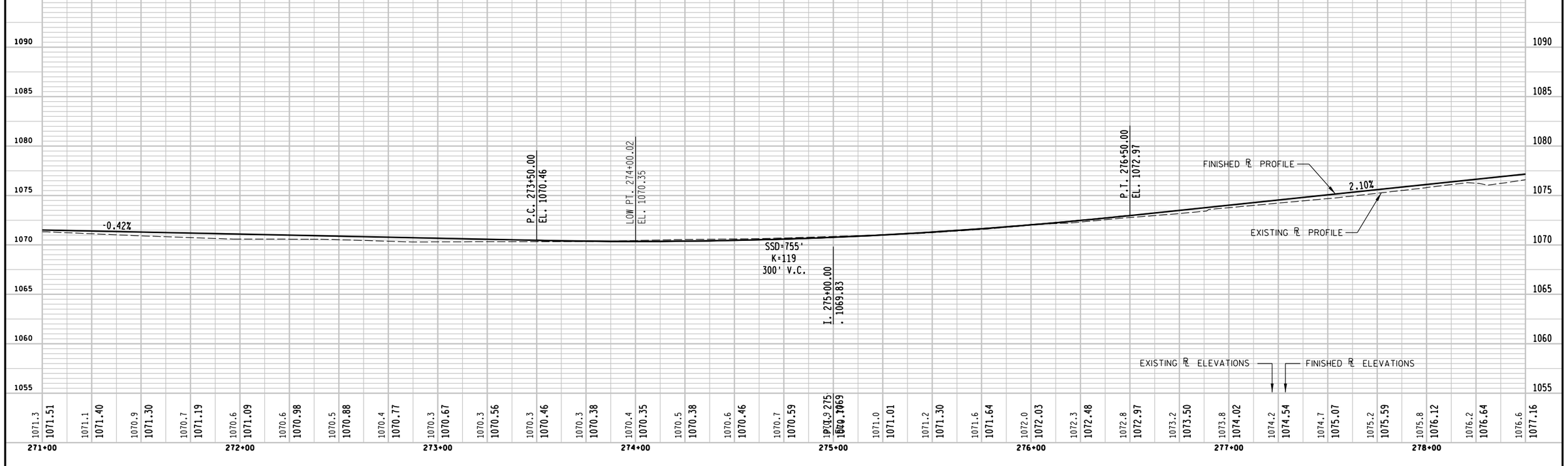
5

3	TYPE 3 CURB RAMP
4B1	TYPE 4B1 CURB RAMP
5	TYPE 5 CURB RAMP
6	TYPE 6 CURB RAMP
7B	TYPE 7B CURB RAMP

5

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
44	273+14.0 5.2' RT	MAG NAIL IN W/S PP= 108BB23 4TH PP S. OF MINNESOTA AVE	1071.97



PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - BUSINESS 51	SHEET 339 E

SLOPE INTERCEPT (TYP)

+84.7

CONCRETE CURB & GUTTER 20-INCH TYPE A SPECIAL

+02.4

MATCH EXISTING CONCRETE PAVEMENT EDGE

WPS (UG ELECT)

WPS (UG GAS (OH ELECT)

MATCH EXISTING CONCRETE PAVEMENT EDGE

CONCRETE MEDIAN SLOPED NOSE TYPE 1

+42.5

279+00

280+00

281+00

282+00

+18.0

283+00

P.I. 280+99.95

BUSINESS 51

P.I. 283+50.00

BM 45

BM 46

P.I. 278+49.57

CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE A (TYP)

STA 280+75 RT CONSTRUCT 31' WIDE PE

END PROJECT STA 281+01.00 MATCH EXISTING SAWCUT REQ'D

MINNESOTA AVENUE

SIGN

FLAG

N

(3) TYPE 3 CURB RAMP
(4B1) TYPE 4B1 CURB RAMP
(5) TYPE 5 CURB RAMP
(6) TYPE 6 CURB RAMP
(7B) TYPE 7B CURB RAMP

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
45	279+10.1 5.6' RT	MAG NAIL IN W/S PP# 108AA12 2ND S OF MINNESOTA AVE ON E/S POST R	1072.55
46	282+67.0 34.1' RT	NORTHERLY FLANGE BOLT/ FLAG ON HYD AT SE COR MINN & POST RD	1086.75

1090
1085
1080
1075
1070
1065
1060
1055

P.I. 278+84.70 EL. 1077.89

P.I. 279+50.00 EL. 1079.47

P.I. 281+01.00 EL. 1083.29

FINISHED ℄ PROFILE

2.42%

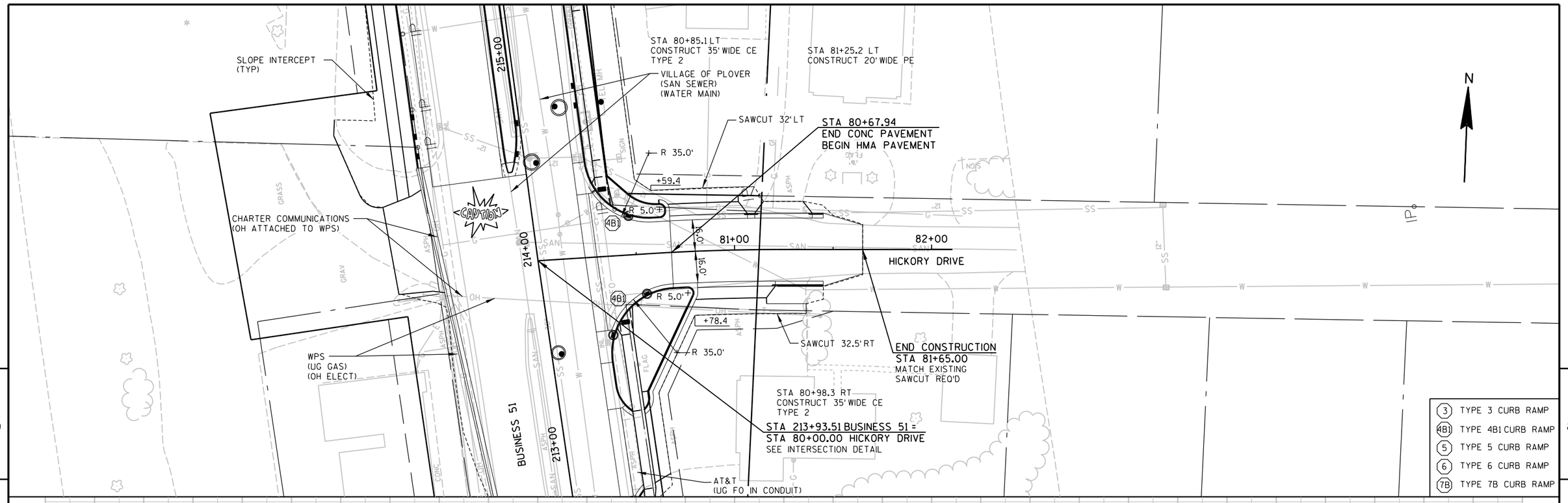
2.53%

EXISTING ℄ PROFILE

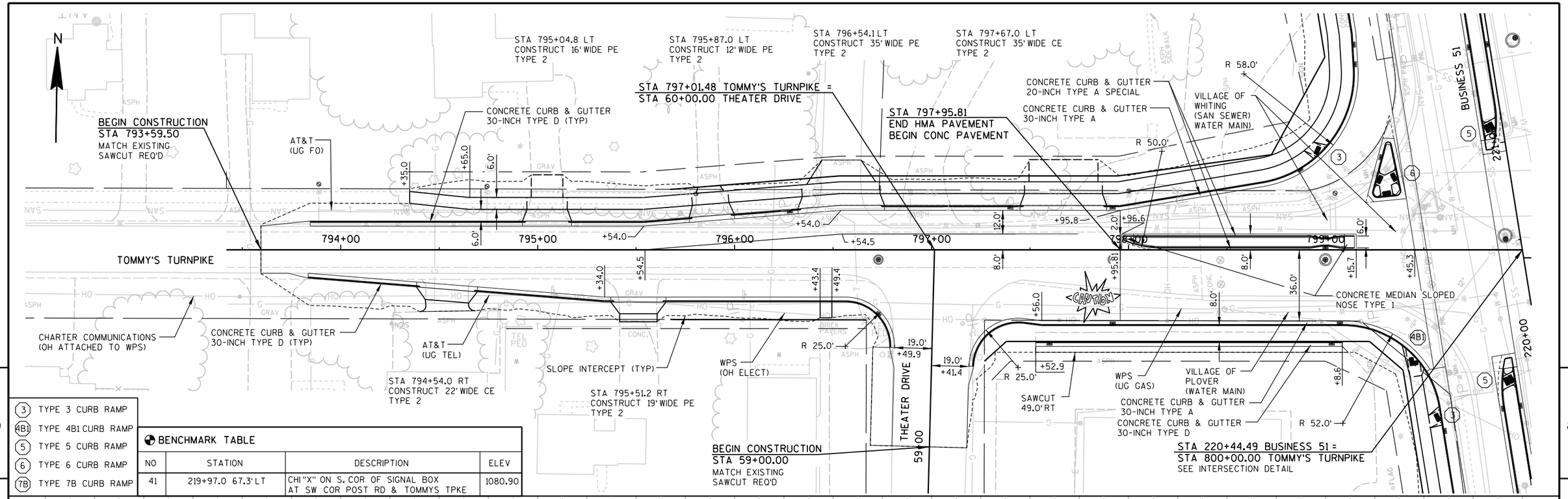
EXISTING ℄ ELEVATIONS

FINISHED ℄ ELEVATIONS

| | | |



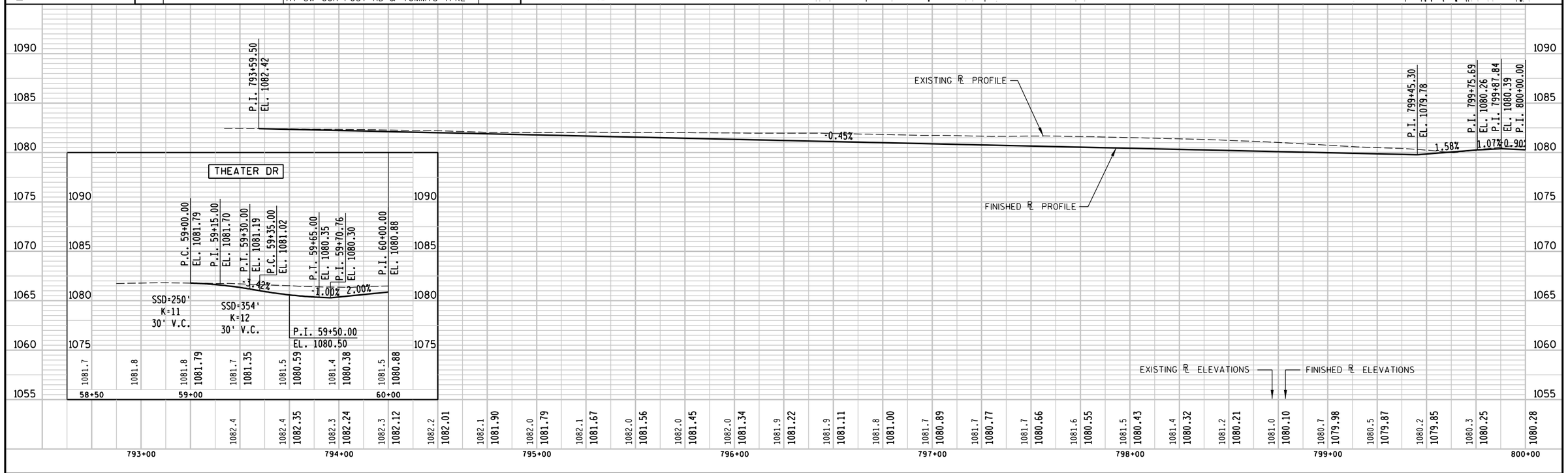
PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - HICKORY DRIVE	SHEET 341	E



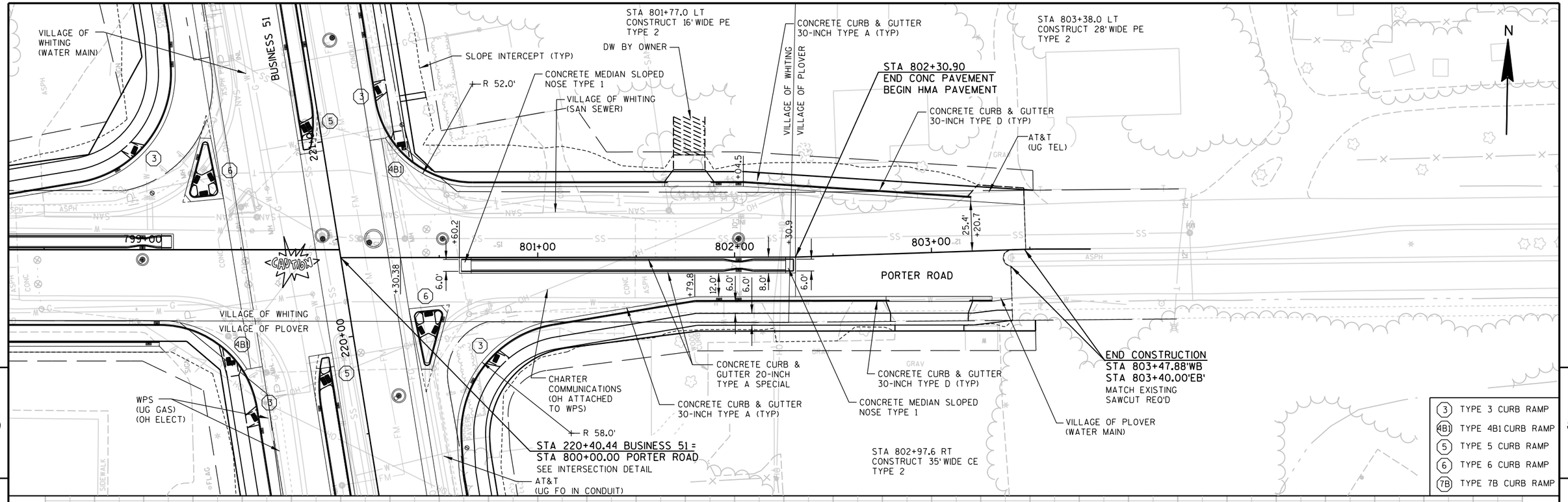
3	TYPE 3 CURB RAMP
4B1	TYPE 4B1 CURB RAMP
5	TYPE 5 CURB RAMP
6	TYPE 6 CURB RAMP
7B	TYPE 7B CURB RAMP

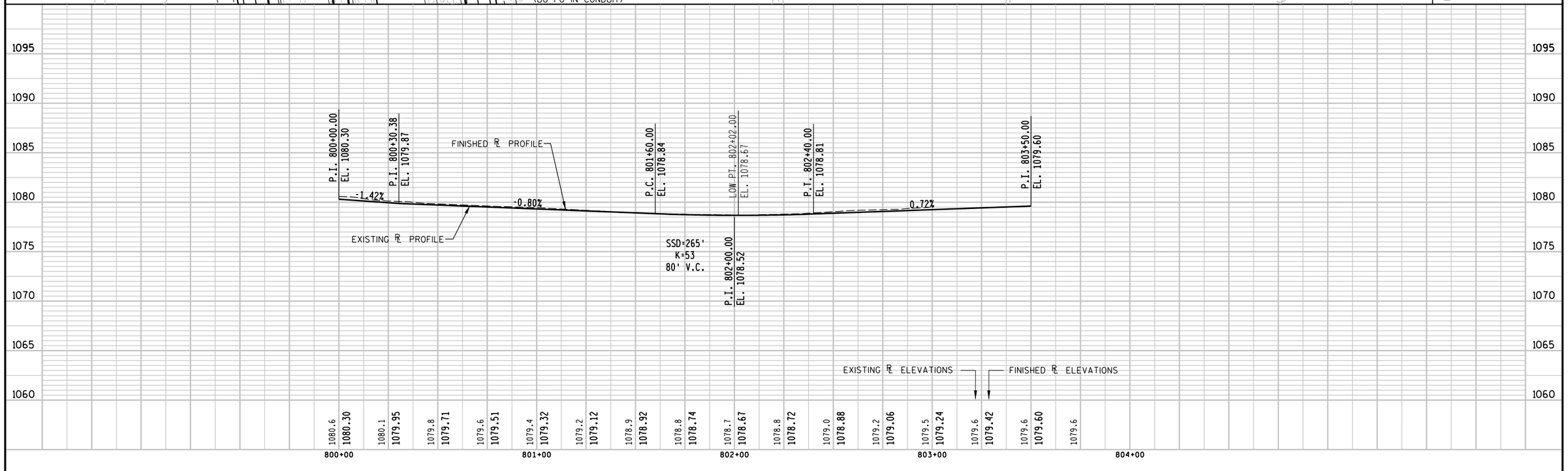
BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
41	219+97.0 67.3' LT	CHI "X" ON S. COR OF SIGNAL BOX AT SW COR POST RD & TOMMYS TPKE	1080.90

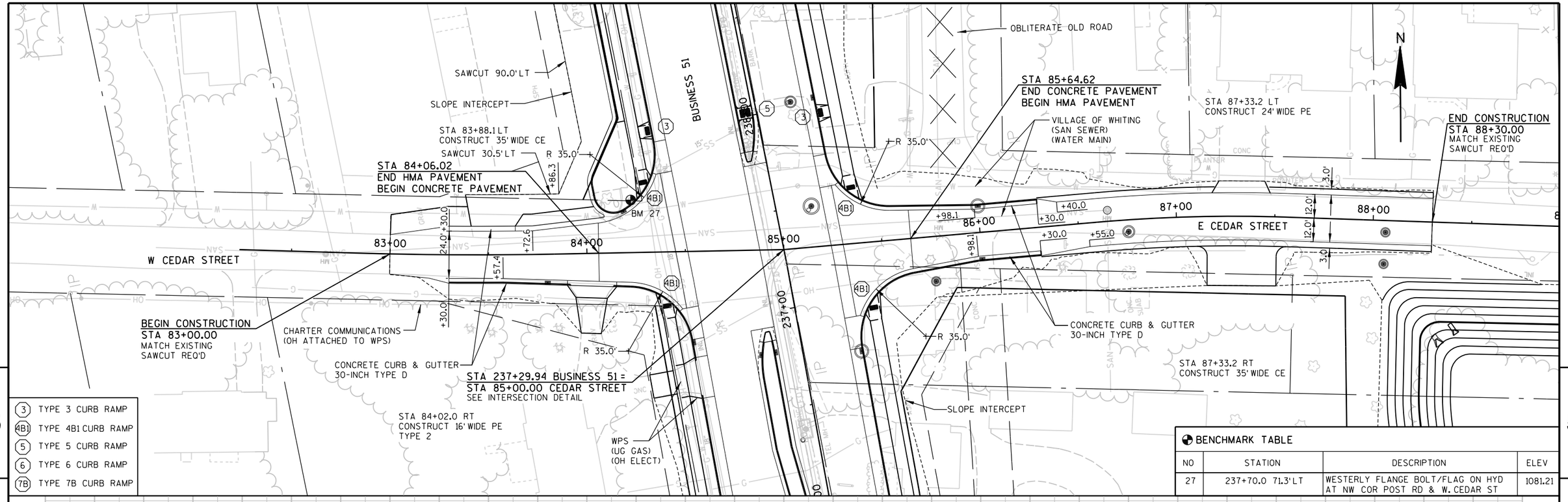


PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - TOMMY'S TURNPIKE	SHEET 342 E



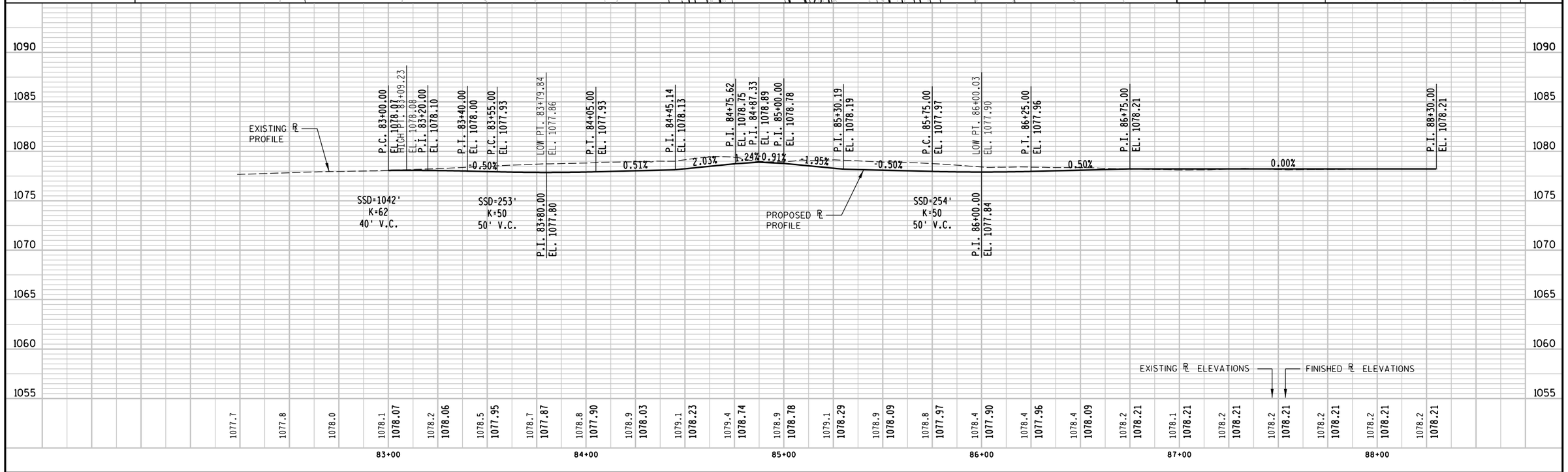


PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - PORTER ROAD	SHEET 343	E

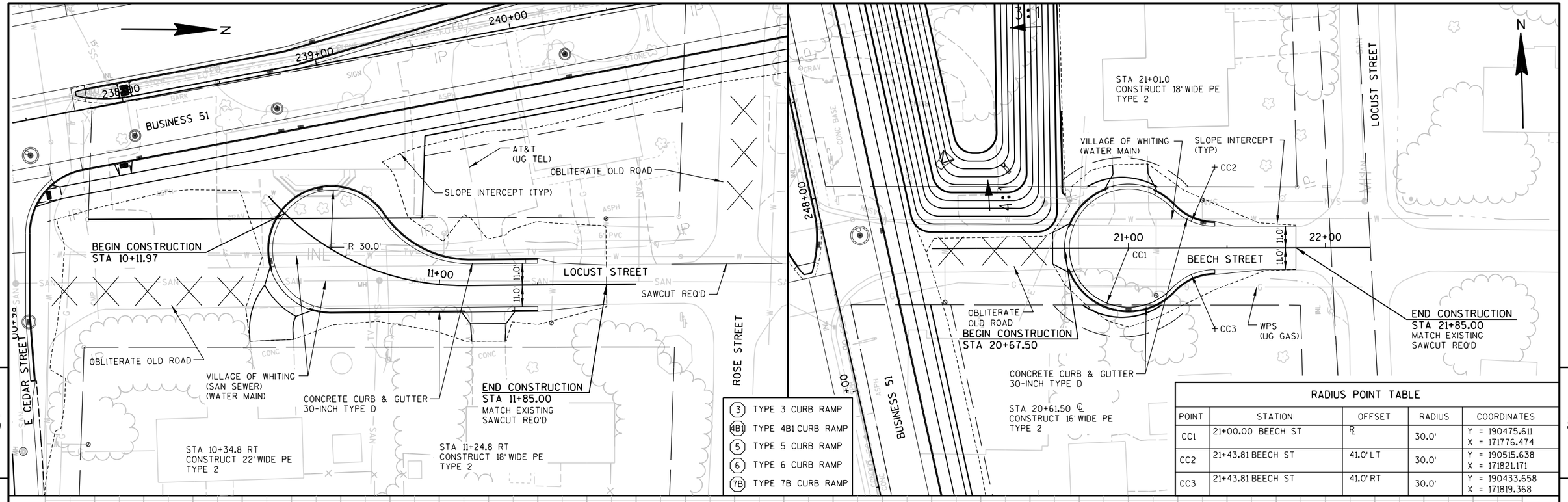


BENCHMARK TABLE

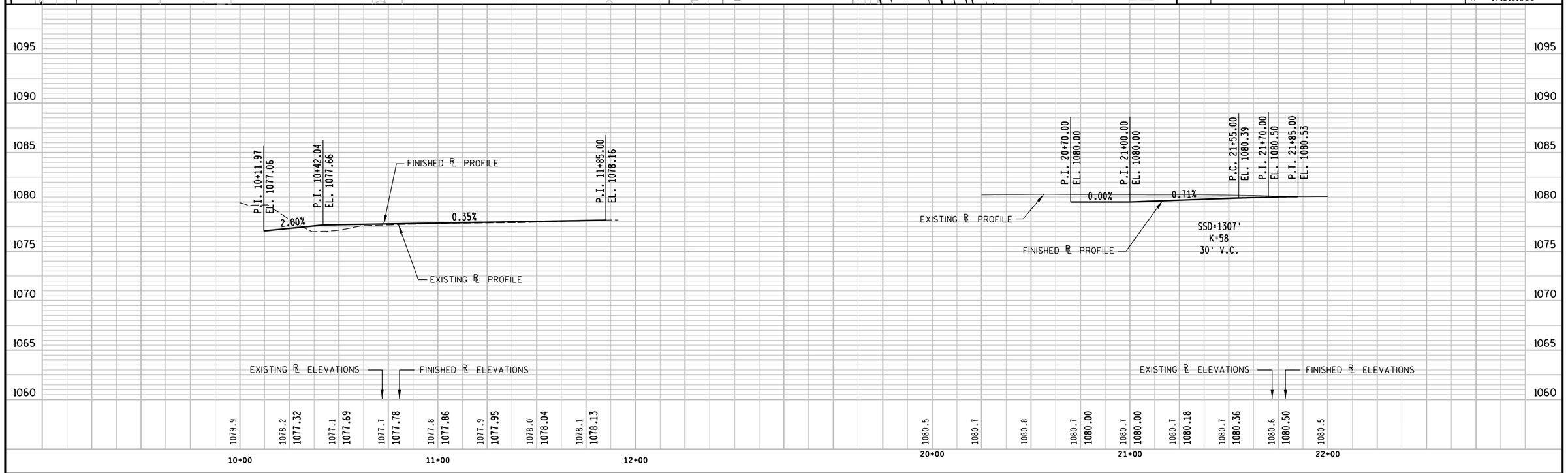
NO	STATION	DESCRIPTION	ELEV
27	237+70.0 71.3'LT	WESTERLY FLANGE BOLT/FLAG ON HYD AT NW COR POST RD & W. CEDAR ST	1081.21



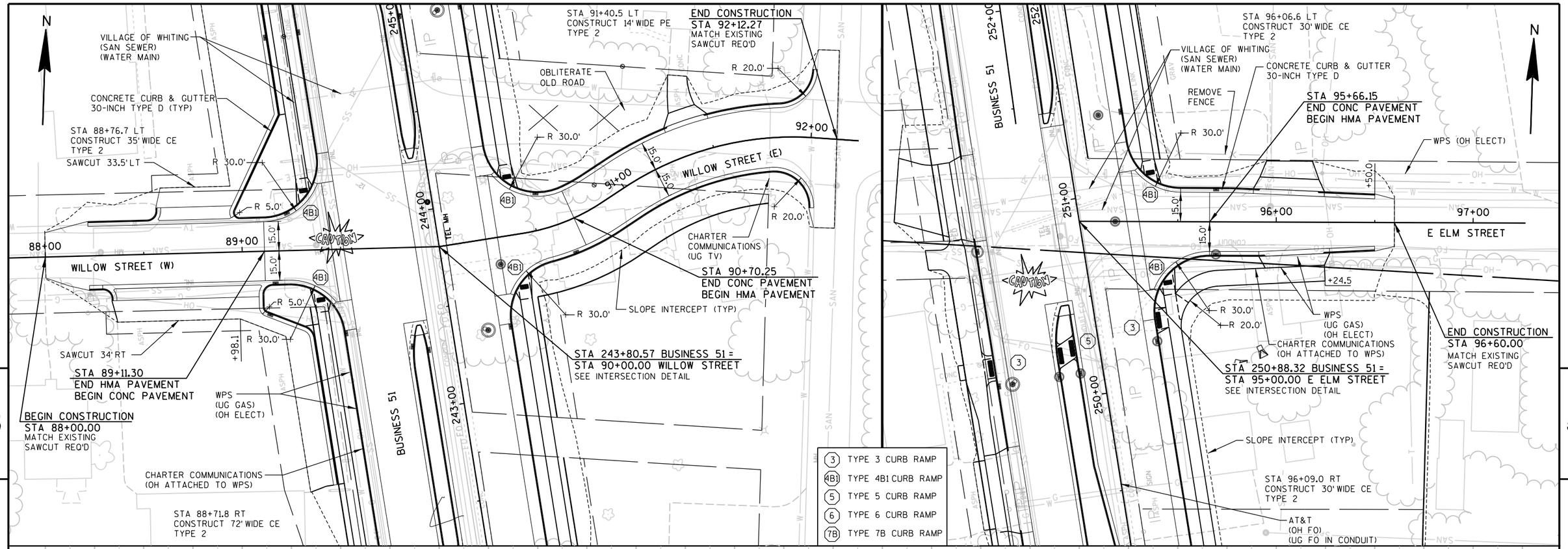
PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - CEDAR STREET	SHEET 344	E

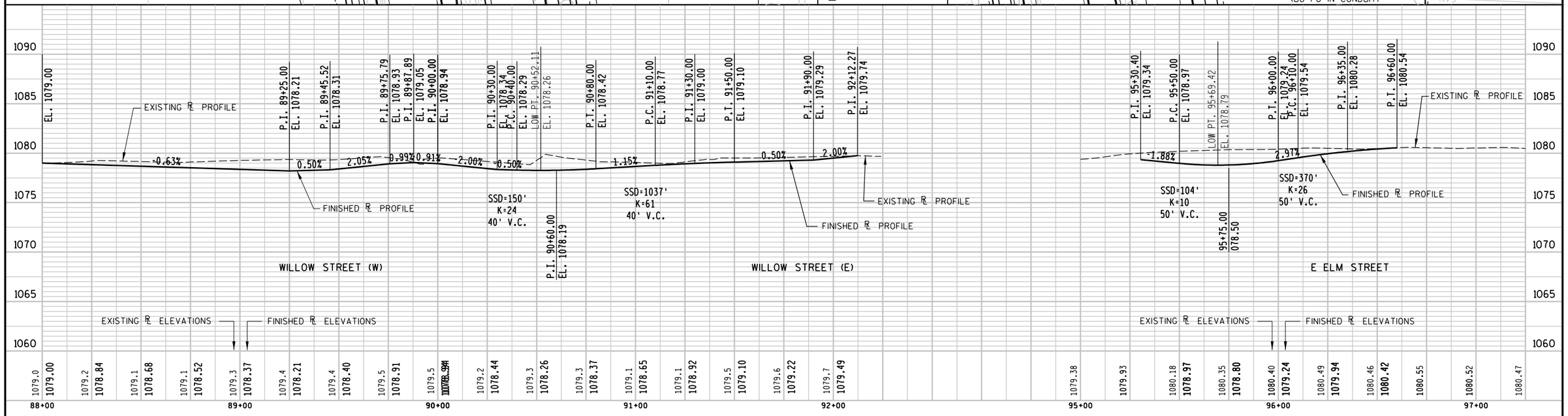


RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	21+00.00 BEECH ST	℞	30.0'	Y = 190475.611 X = 171776.474
CC2	21+43.81 BEECH ST	41.0' LT	30.0'	Y = 190515.638 X = 171821.171
CC3	21+43.81 BEECH ST	41.0' RT	30.0'	Y = 190433.658 X = 171819.368



PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - LOCUST ST & BEECH ST	SHEET 345	E





PROJECT NO: 6414-00-80	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - WILLOW STREET & ELM STREET	SHEET 346 E

3 TYPE 3 CURB RAMP
4B1 TYPE 4B1 CURB RAMP
5 TYPE 5 CURB RAMP
6 TYPE 6 CURB RAMP
7B TYPE 7B CURB RAMP

1 TRANSITION FROM CURB & GUTTER 20-INCH TYPE A SPECIAL TO CONCRETE CURB & GUTTER 30-INCH TYPE A WILL BE PAID AS CONCRETE CURB & GUTTER 30-INCH TYPE A

N

SALVAGE AND REINSTALL FENCE

CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE A

SENSITIVE AREA

+93.7'WB

+43.8'WB

CONCRETE CURB & GUTTER 30-INCH TYPE A SPECIAL

6.0'

+35.4'WB

898+00'WB'

19.0'

+03.6'EB'

P.T. 897+35.41'WB'

897+00'WB'

898+00'EB'

+23.8

P.T. 897+91.39'EB'

+27.0

SLOPE INTERCEPT (TYP)

1 CONCRETE CURB & GUTTER 30-INCH TYPE A

+00.0

P.C. 891+68.61'WB'

+02.0

28.0'

+56.9'WB

8.0'

+06.2

896+00'WB'

897+00'EB'

896+00'EB'

895+00'WB'

894+00'WB'

893+00'WB'

892+00'WB'

891+00'WB'

+01.8

CONCRETE MEDIAN SLOPED NOSE TYPE 1

+38.0

895+00'EB'

894+00'EB'

893+00'EB'

892+00'EB'

891+00'EB'

+18.93

+04.7

+75.1

CAUTION

CONCRETE CURB & GUTTER 30-INCH TYPE A

VILLAGE OF WHITING (WATER MAIN)

AT&T ((2) UG FO IN CONDUIT)

+50.8

+01.8

+38.0

CTH HH

6.0'

+28.0'

+49.9'EB

8.0'

+50.0

+37.0

8.0'

CONCRETE CURB & GUTTER 20-INCH TYPE A SPECIAL

P.I. 890+50.00'WB'

P.I. 890+50.00'EB'

+02.0

+00.0

P.C. 891+61.62'EB'

BEGIN CONSTRUCTION
STA 892+02.00
MATCH EXISTING
SAWCUT REQ'D

CONCRETE CURB & GUTTER 30-INCH TYPE A

CONCRETE CURB & GUTTER INTEGRAL 30-INCH TYPE A

SENSITIVE AREA

CONCRETE CURB & GUTTER 30-INCH TYPE A

SALVAGE AND REINSTALL FENCE

5

5

1085
1080
1075
1070
1065
1060
1055
1050

PROPOSED ℄ PROFILE 'EB'

EXISTING ℄ PROFILE 'EB'

0.33%

0.70%

2.19%

SSD=856'
K=216
80' V.C.

SSD=565'
K=134
200' V.C.

P.I. 892+02.00'EB'
EL. 1069.88

P.C. 892+60.00'EB'
EL. 1070.07

P.I. 893+00.00'EB'
EL. 1070.20

P.T. 893+40.00'EB'
EL. 1070.48

P.C. 895+50.00'EB'
EL. 1071.94

P.I. 896+50.00'EB'
EL. 1072.64

P.T. 897+50.00'EB'
EL. 1074.83

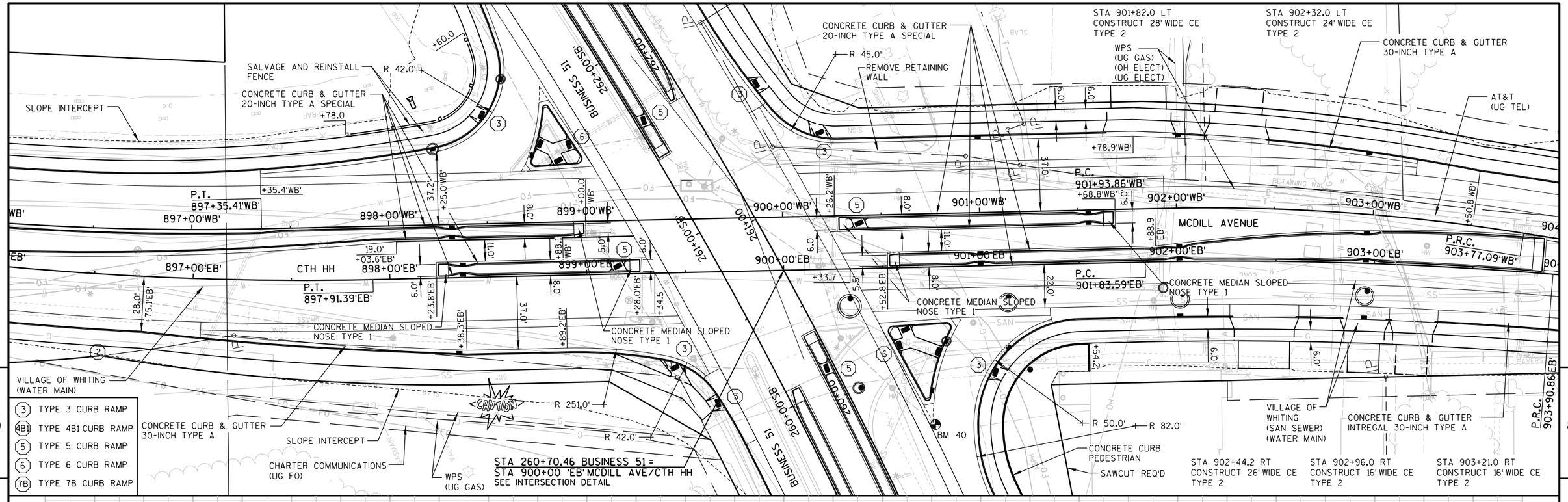
EXISTING ℄ ELEVATIONS 'EB'

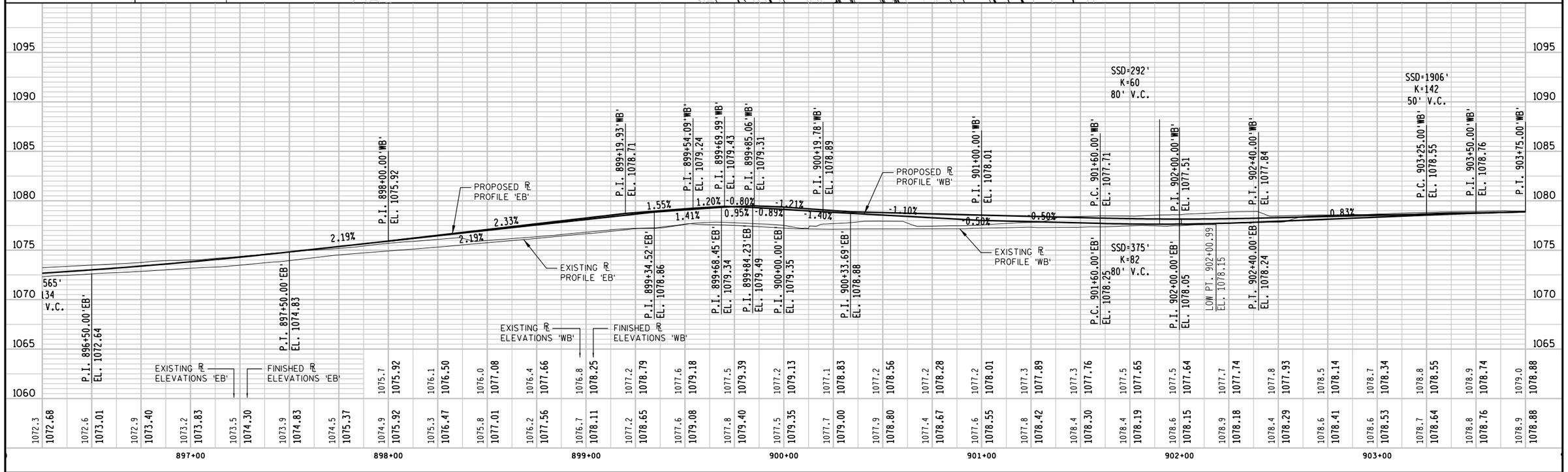
FINISHED ℄ ELEVATIONS 'EB'

1070.1	1070.0	1070.0	1069.8	1069.7	1069.8
1069.9	1069.96	1069.9	1070.04	1070.1	1070.12
1070.2	1070.24	1070.3	1070.38	1070.5	1070.55
1070.7	1070.72	1070.8	1070.90	1071.1	1071.07
1071.3	1071.25	1071.5	1071.42	1071.7	1071.59
1071.9	1071.77	1072.0	1071.94	1072.1	1072.14
1072.2	1072.38	1072.3	1072.68	1072.6	1073.01
1072.9	1073.40	1073.2	1073.83	1073.5	1074.30
1073.9	1074.83	1074.5	1075.37	1074.9	1075.92

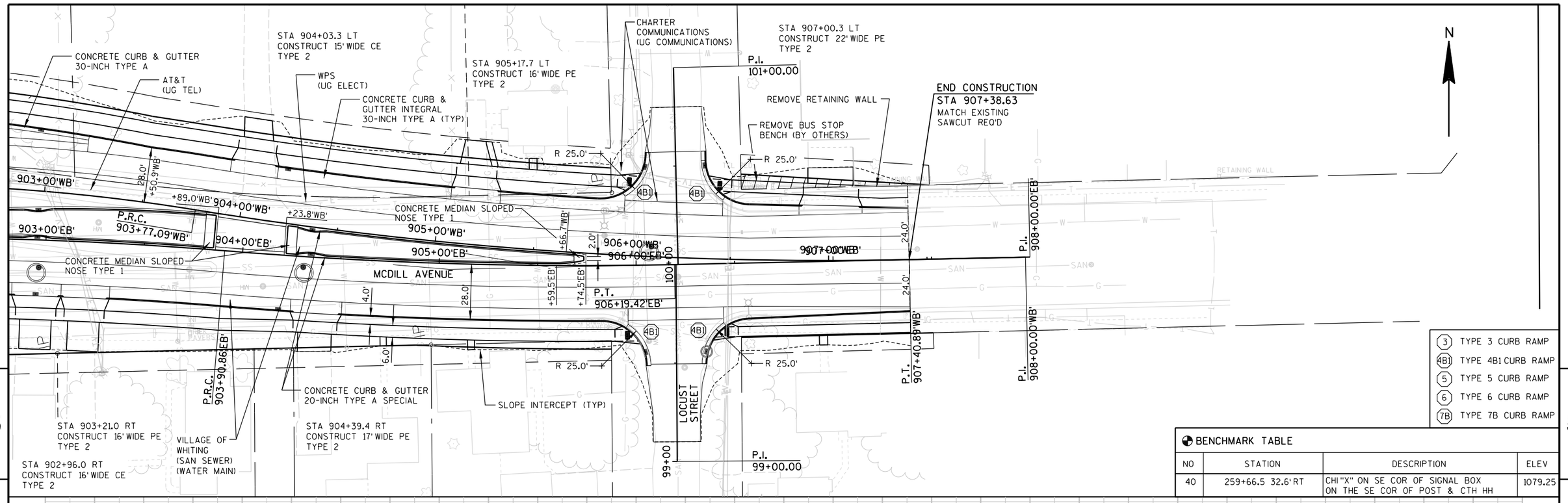
890+50 891+00 892+00 893+00 894+00 895+00 896+00 897+00 898+00

PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - CTH HH	SHEET 347	E

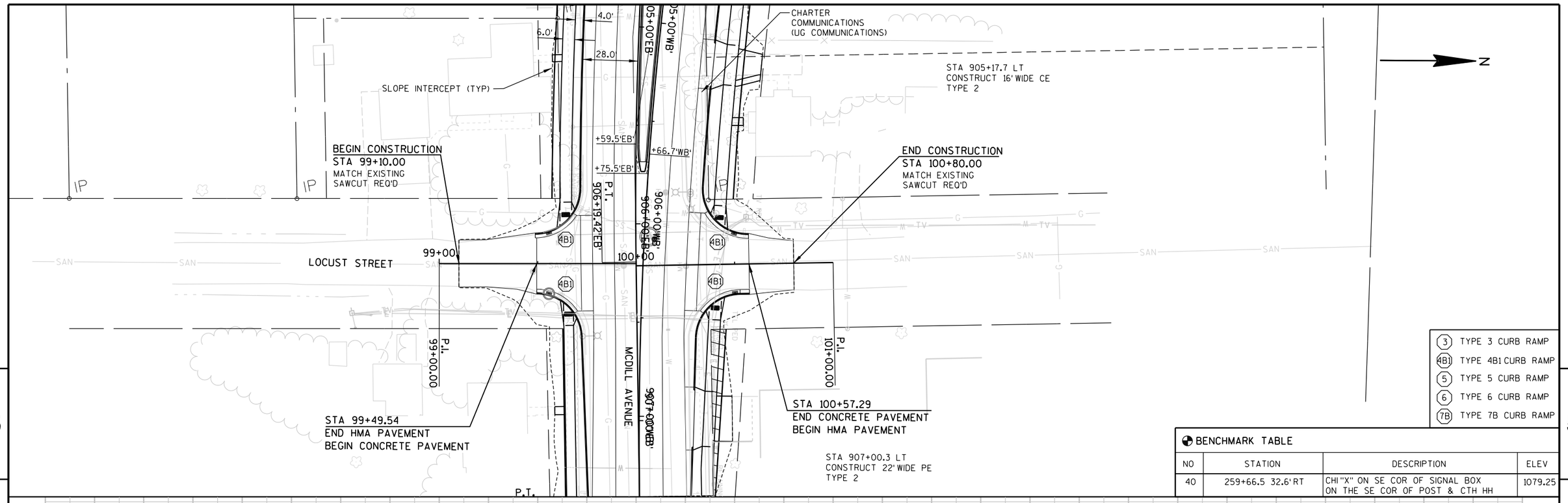




PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - CTH HH & McDILL AVENUE	SHEET 348	E



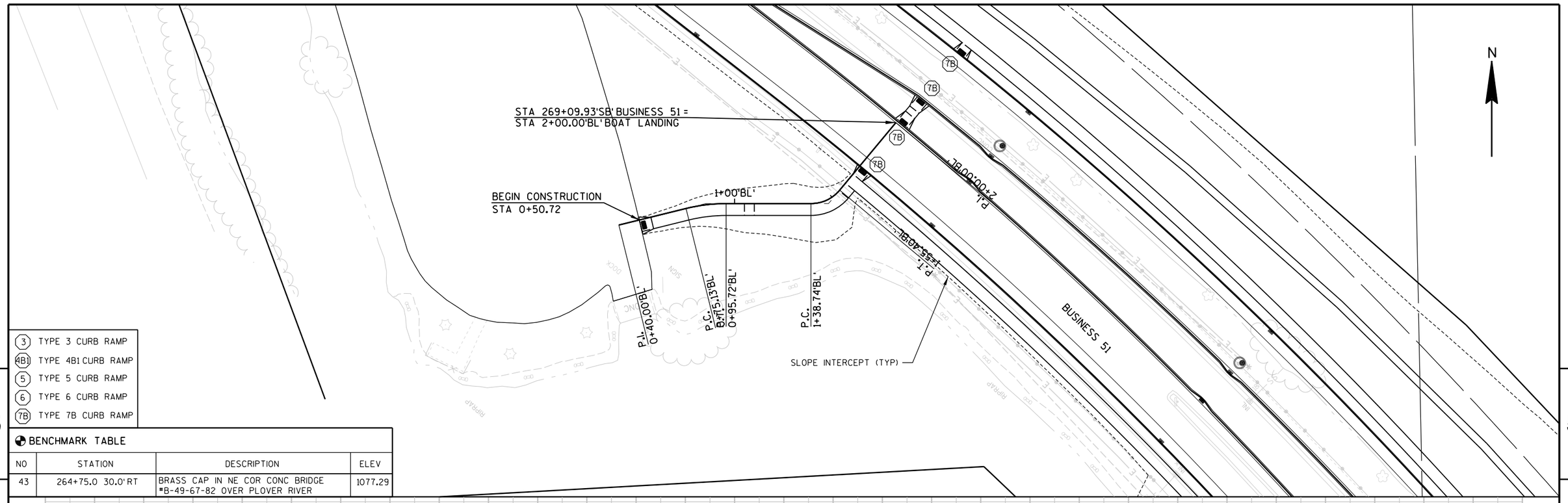
PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - McDILL AVENUE	SHEET 349	E



BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
40	259+66.5 32.6'RT	CHI "X" ON SE COR OF SIGNAL BOX ON THE SE COR OF POST & CTH HH	1079.25

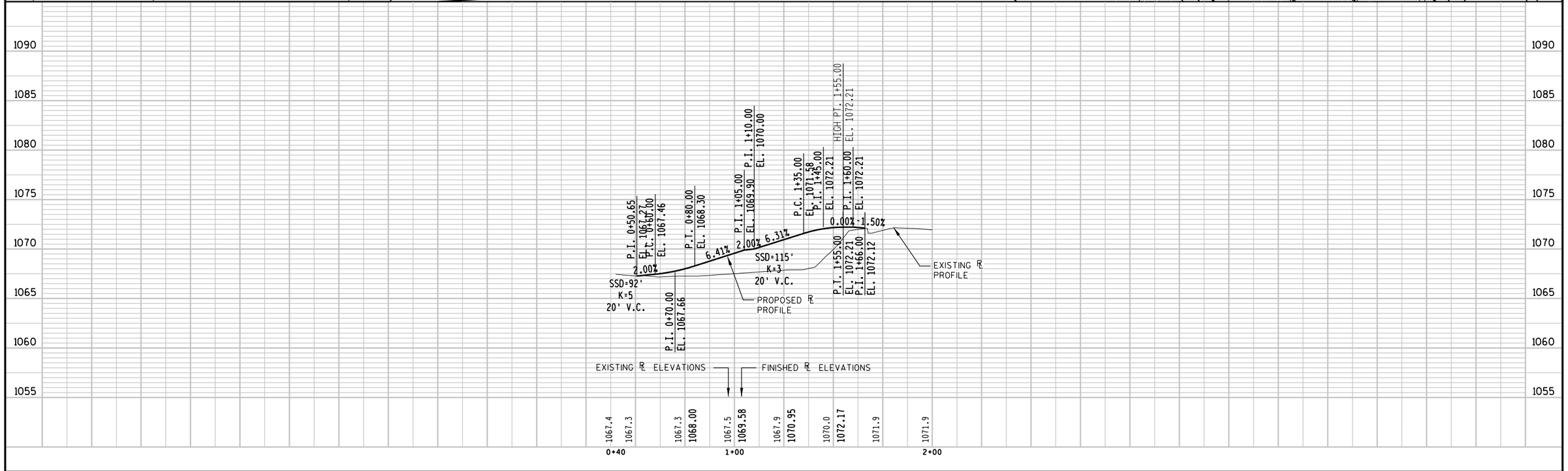
PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - LOCUST STREET	SHEET 350	E



3	TYPE 3 CURB RAMP
4B1	TYPE 4B1 CURB RAMP
5	TYPE 5 CURB RAMP
6	TYPE 6 CURB RAMP
7B	TYPE 7B CURB RAMP

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
43	264+75.0 30.0'RT	BRASS CAP IN NE COR CONC BRIDGE #B-49-67-82 OVER PLOVER RIVER	1077.29



PROJECT NO: 6414-00-81	HWY: BUSINESS 51	COUNTY: PORTAGE	PLAN AND PROFILE - BOAT LANDING	SHEET 351 E

Standard Detail Drawing List

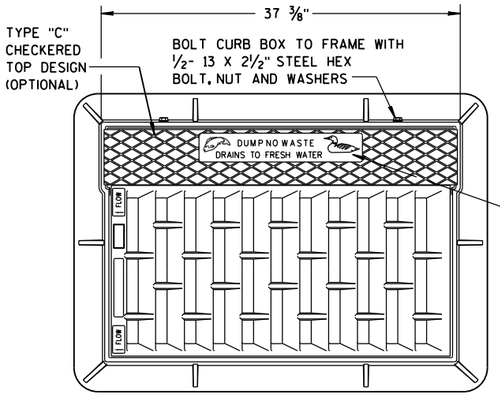
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-19F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-19G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D18-01	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08D19-01	DRIVEWAY AND SIDEWALK RAMPS TYPE Z
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B16-01	PULL BOX NON-CONDUCTIVE
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-10	CONCRETE BASE TYPE 10
09C12-09B	CONCRETE BASE TYPE 13
09C14-02	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09D04-02	LIGHTING CONTROL CABINET 120/240 VOLT
09E01-14C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-14D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-14E	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-08A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-08B	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-08E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
09G01-04A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
11B02-02	CONCRETE MEDIAN NOSE
12A03-10	NAME PLATE (STRUCTURES)
13B02-08A	CONCRETE PAVEMENT APPROACH SLAB
13B02-08B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-05A	CONCRETE PAVEMENT JOINTING
13C18-05B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-05C	CONCRETE PAVEMENT JOINT TYPES
13C18-05D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14B42-05A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-05B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-05C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-05D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-03A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-03B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

6

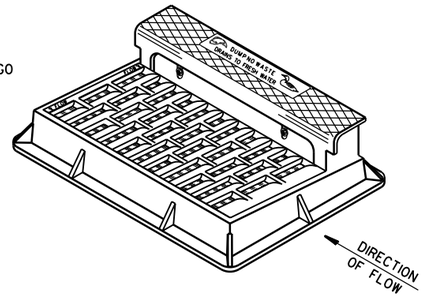
Standard Detail Drawing List

14B44-03C	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)
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C07-14A	PAVEMENT MARKING SYMBOLS
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C07-14E	PAVEMENT MARKING FOR BIKE LANES
15C08-18A	LONGITUDINAL MARKING (MAINLINE)
15C08-18B	PAVEMENT MARKING (TURN LANES)
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C29-05A	BICYCLE LANE MARKING
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

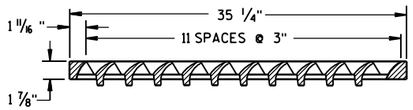
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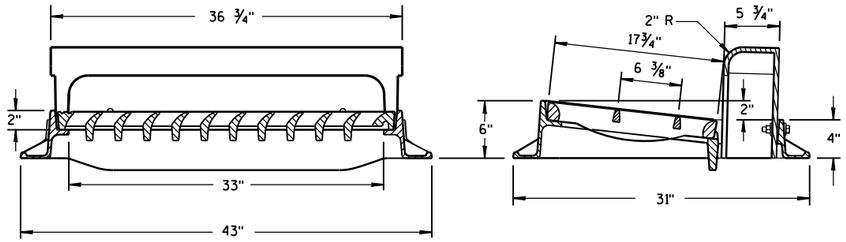


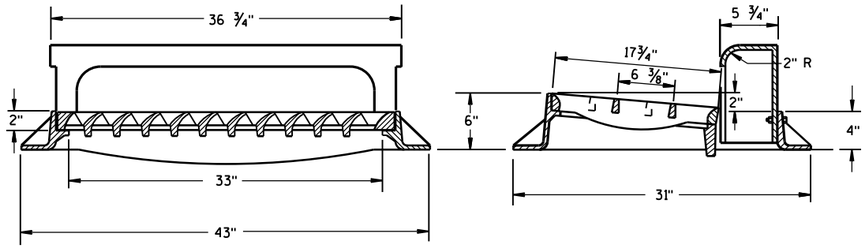
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

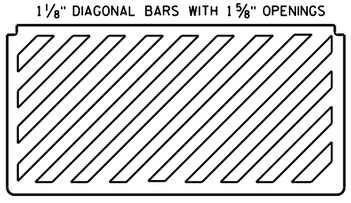






TYPE "H"

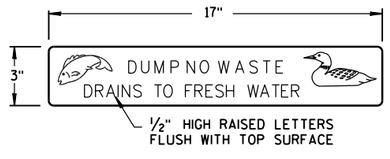
NOTE: EITHER CASTING IS ACCEPTABLE



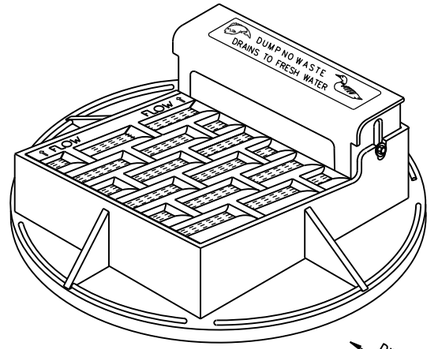
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

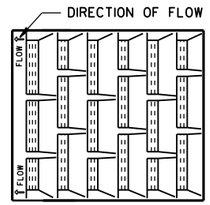
NOTE:
GRATE IS REVERSIBLE.

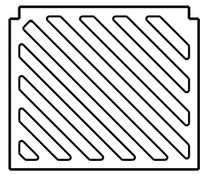
GENERAL NOTES

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

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

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

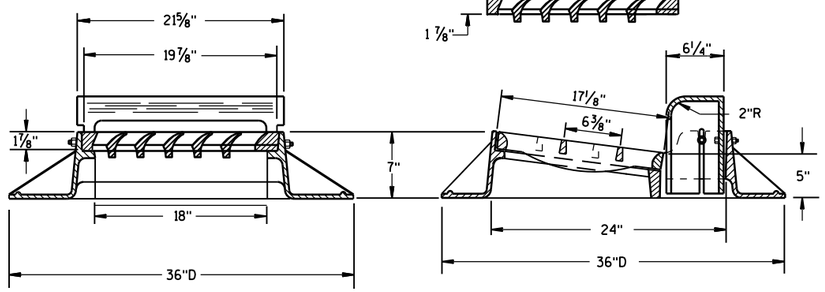




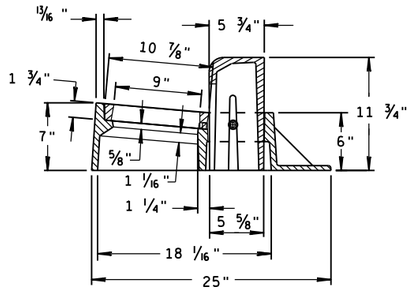
SPECIAL GRATE FOR TYPE "A" COVER

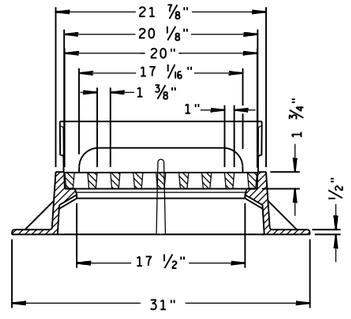
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

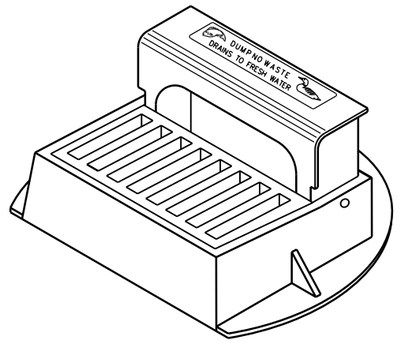


TYPE "A"





TYPE "Z"



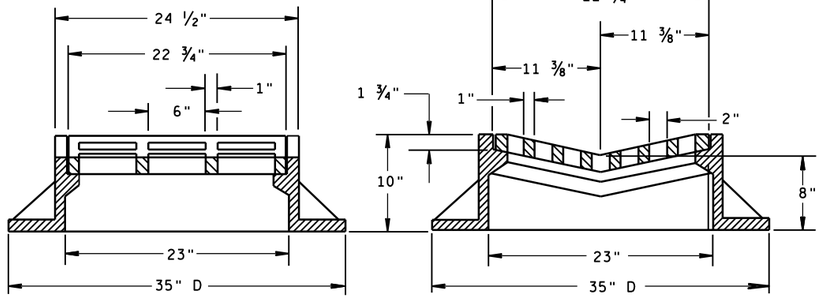
INLET COVERS
TYPE A, H, A-S, H-S & Z

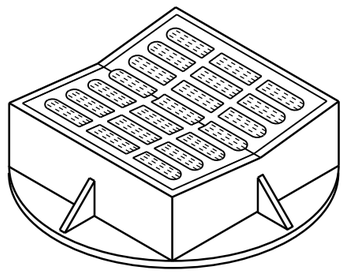
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

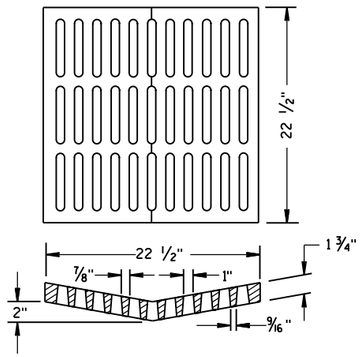
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S.D.D. 8 A 5-19a



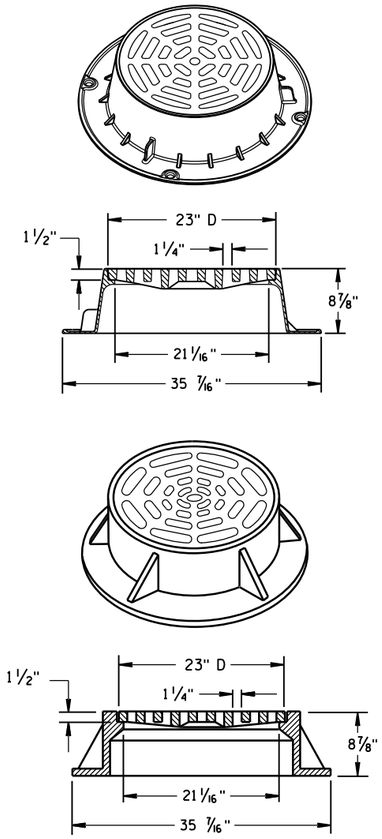


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

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



TYPE "C"

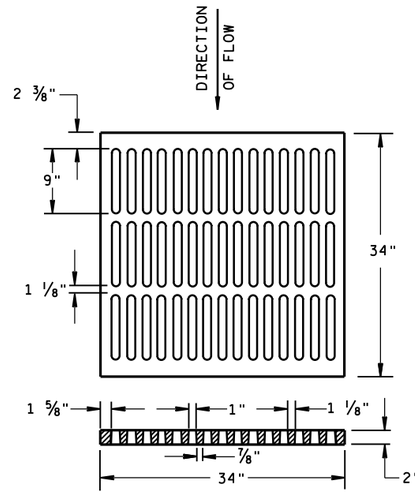
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

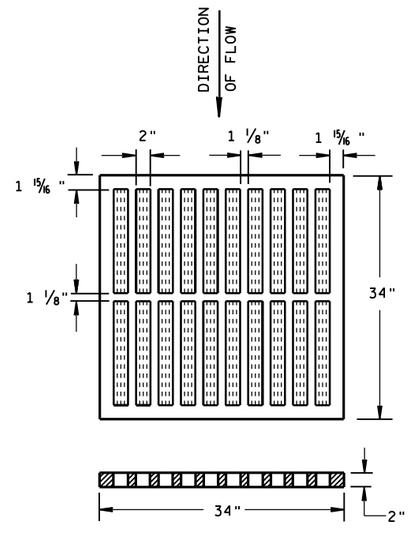
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



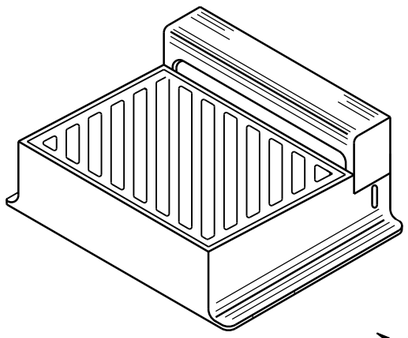
ALTERNATIVE TYPE "MS"

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

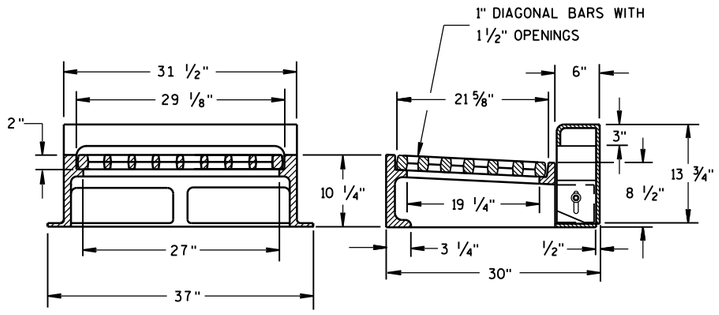


TYPE "MS"

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



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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

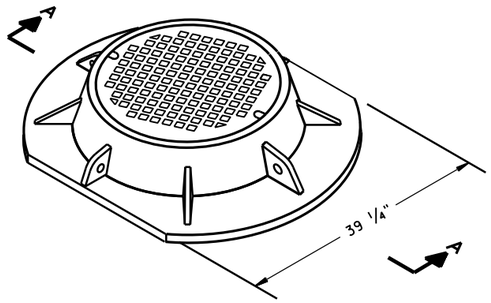
INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

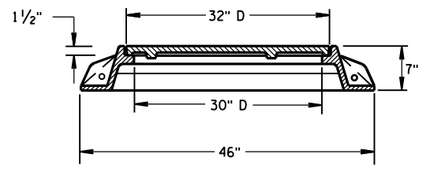
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

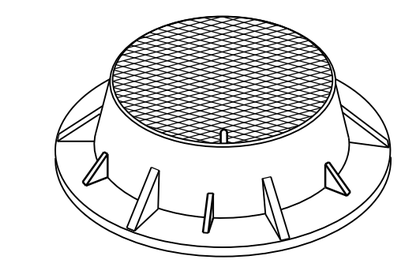
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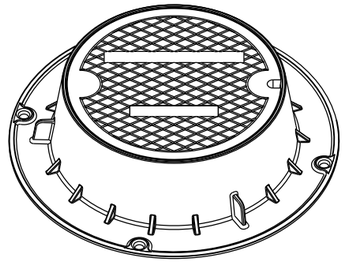
S.D.D. 8 A 5-19b

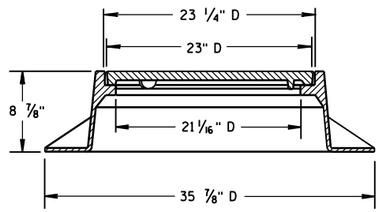


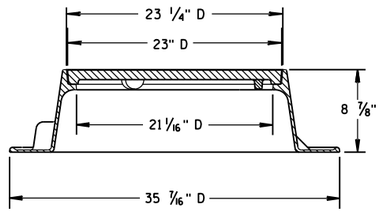


SECTION A-A
TYPE "K"









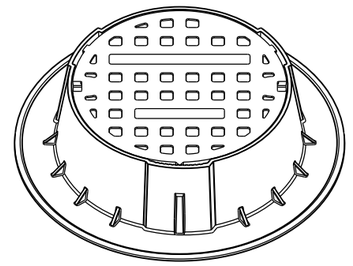
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

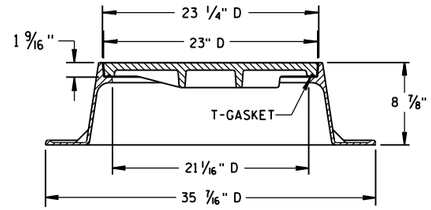
GENERAL NOTES

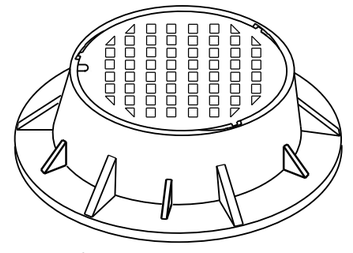
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

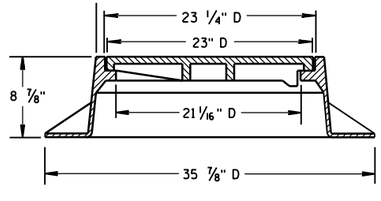
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

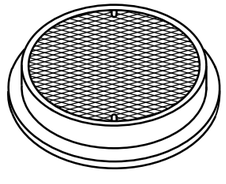


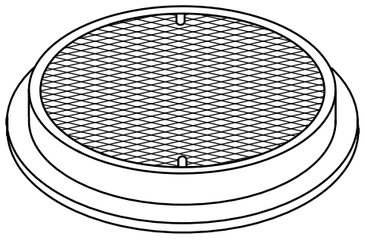


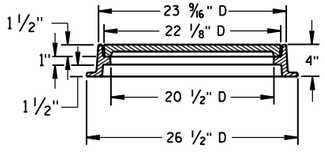




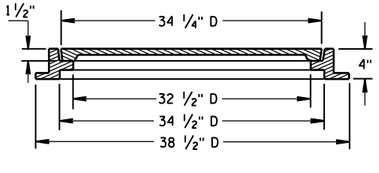
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



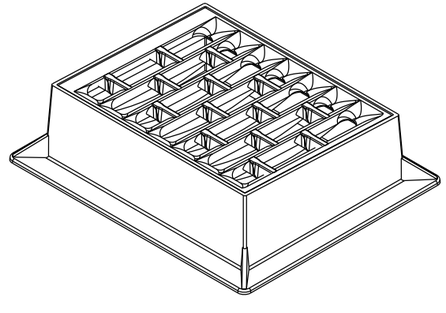


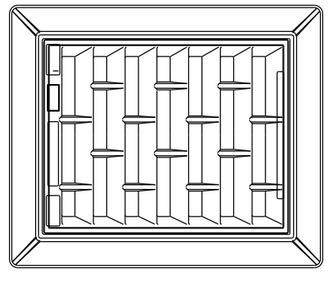


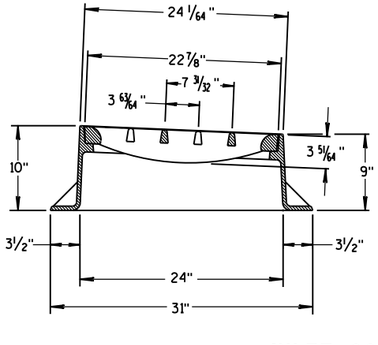
TYPE "L"

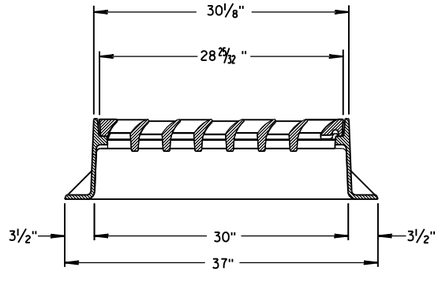


TYPE "M"









INLET COVER TYPE "BW"

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

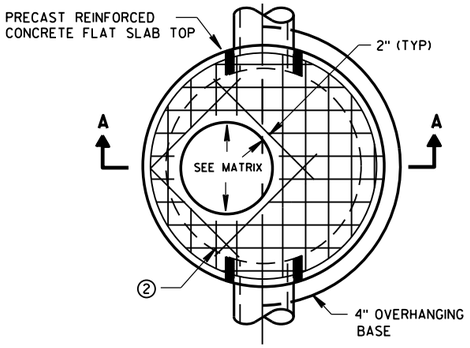
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

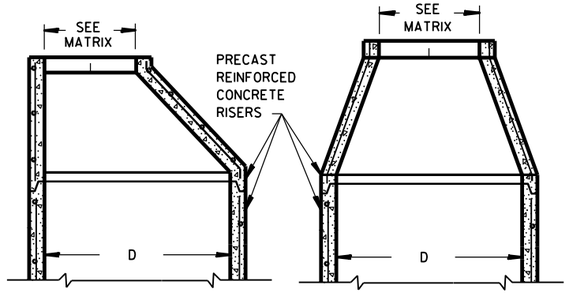
S.D.D. 8 A 5-19d

6

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

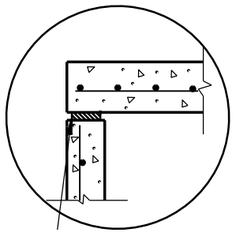


PLAN VIEW CIRCULAR OPENING

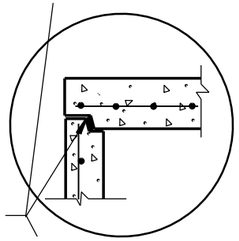


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

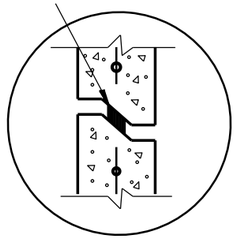


TOP WITH PLAIN END JOINT



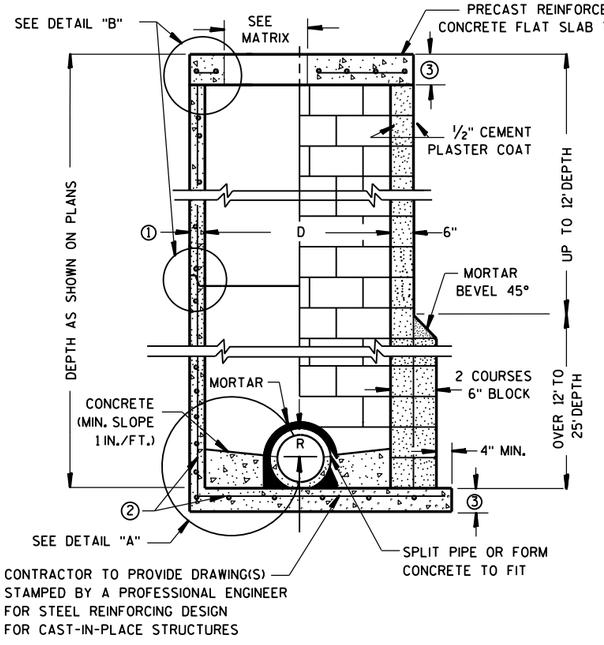
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



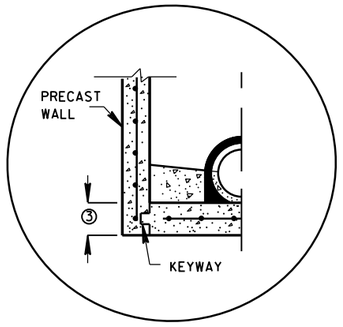
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

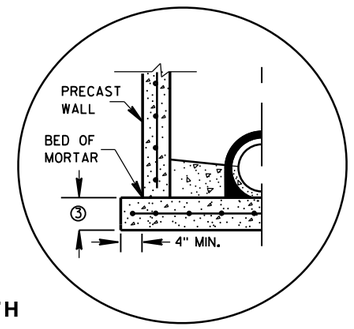


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

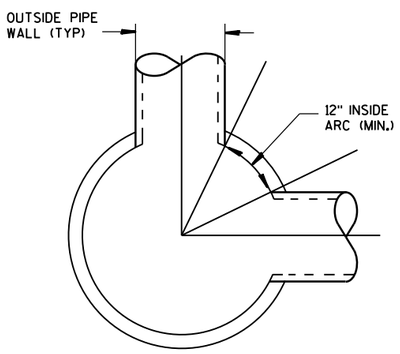


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

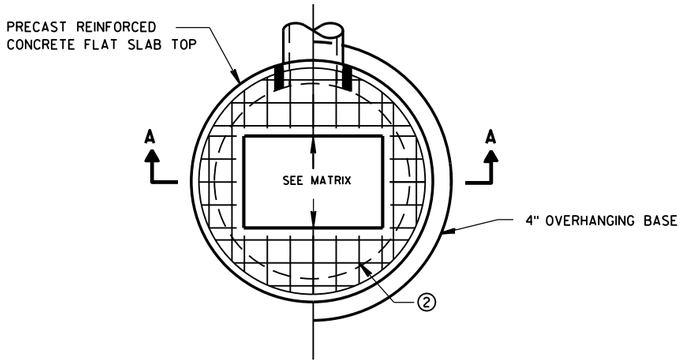
Sept., 2016
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

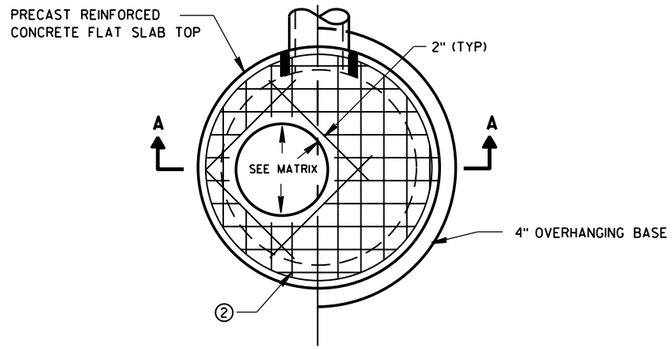
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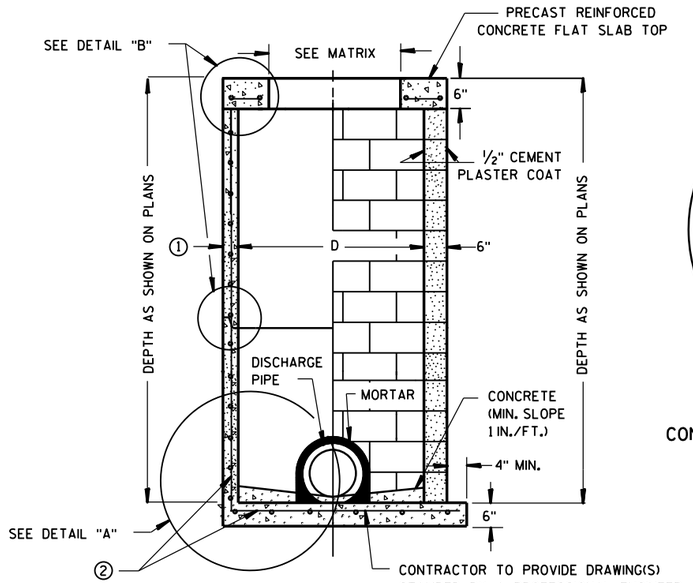
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S.D.D. 8 B 9-2



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

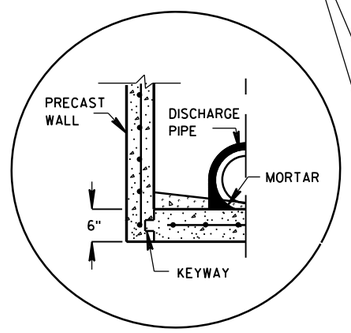


SECTION A-A

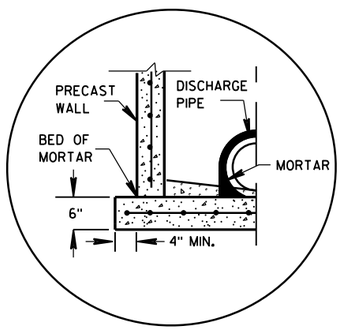
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

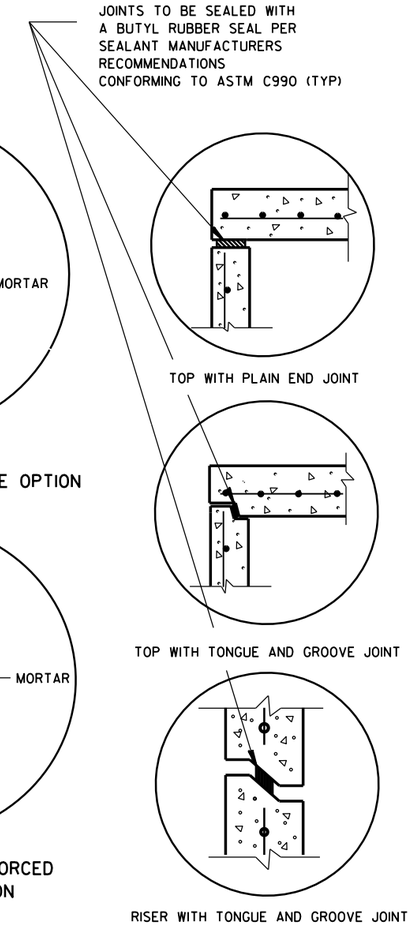


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

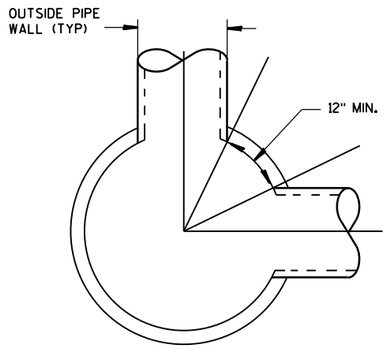
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

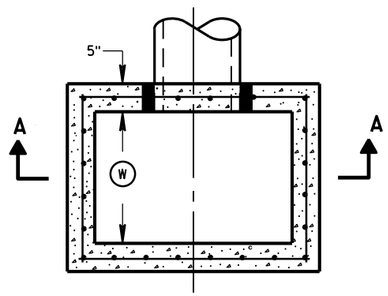
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS | UNIT SUPERVI ENT
FHWA

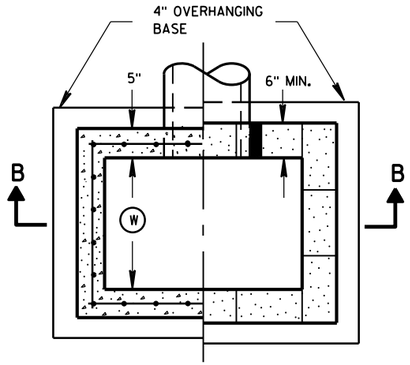
INLETS 3-FT AND 4-FT DIAMETER

6

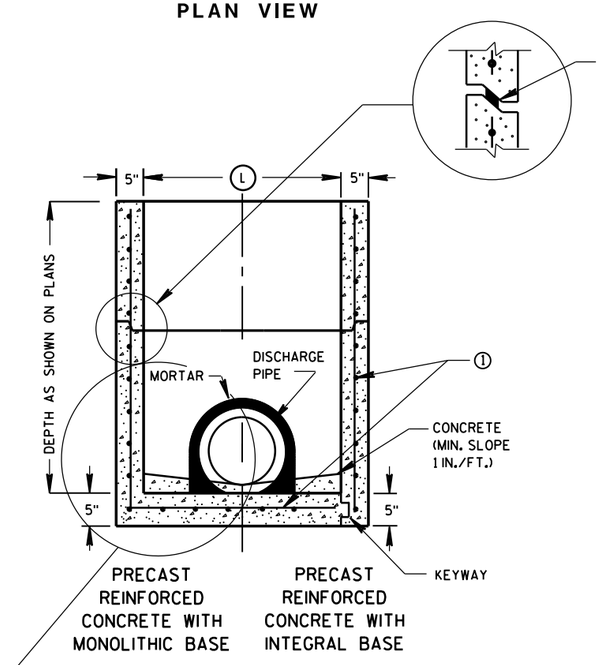
S.D.D. 8 C 6-2



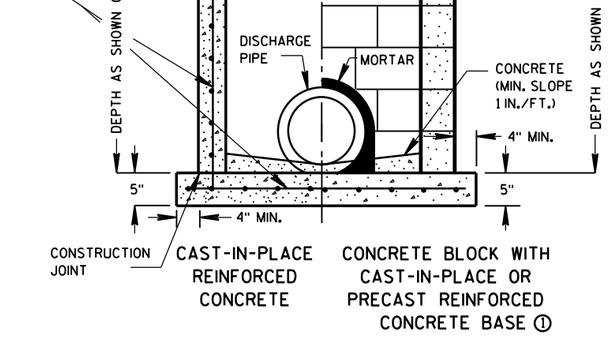
PLAN VIEW



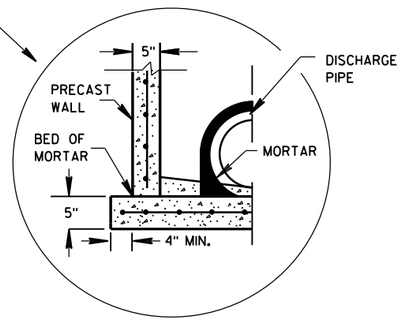
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

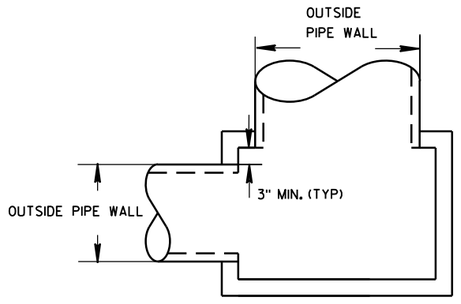
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT
UNIT SUPERVIS
FHWA

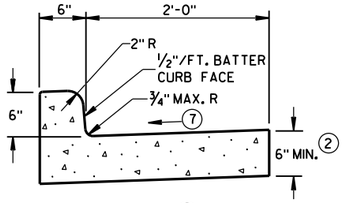
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

6

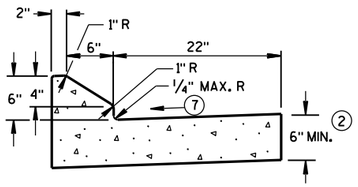
S.D.D. 8 C 7-2

6

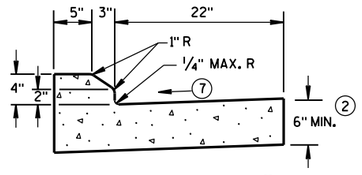
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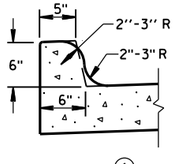
TYPES A (1) & D



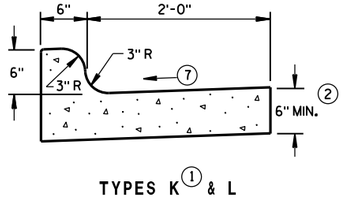
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

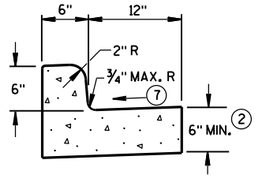


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



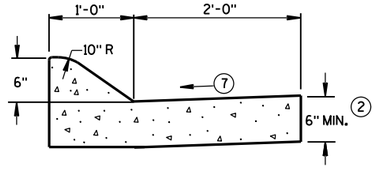
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

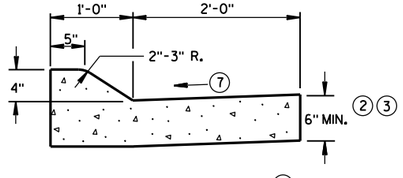


TYPES A (1) & D

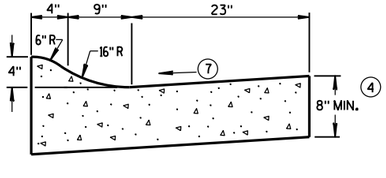
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

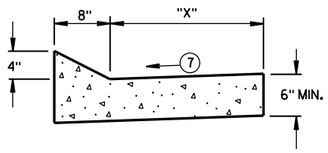


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

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

GENERAL NOTES

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

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

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

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

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

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

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

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

(5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

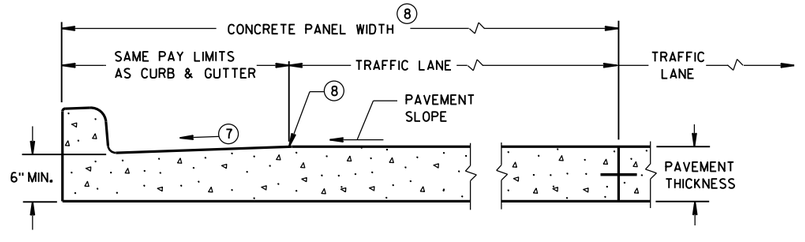
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

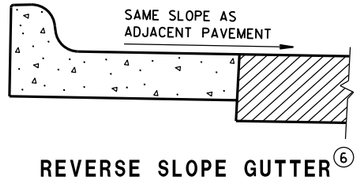
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER

* BIKE LANE IS NOT SHOWN.



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB & GUTTER

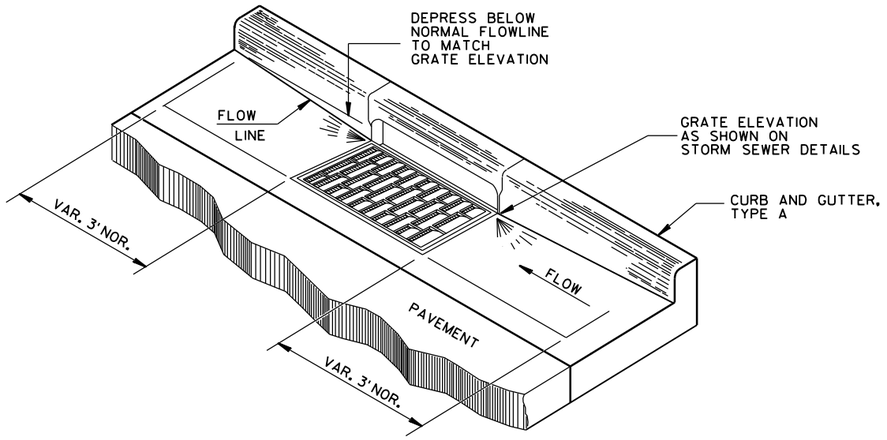
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 1-20a

6

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

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

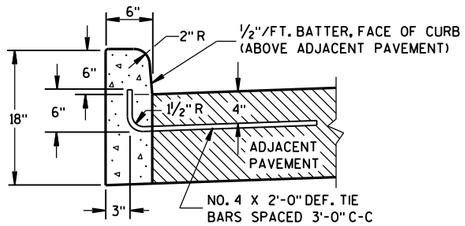
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

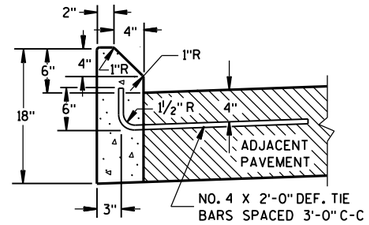
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

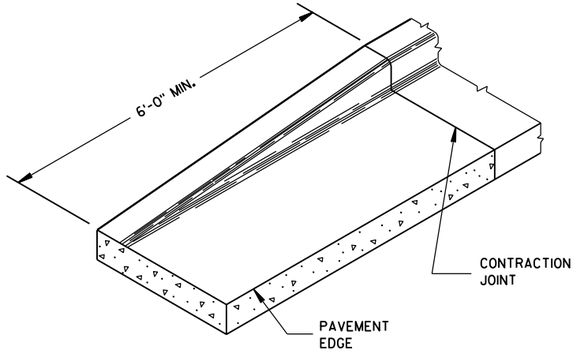


TYPES A(1) & D

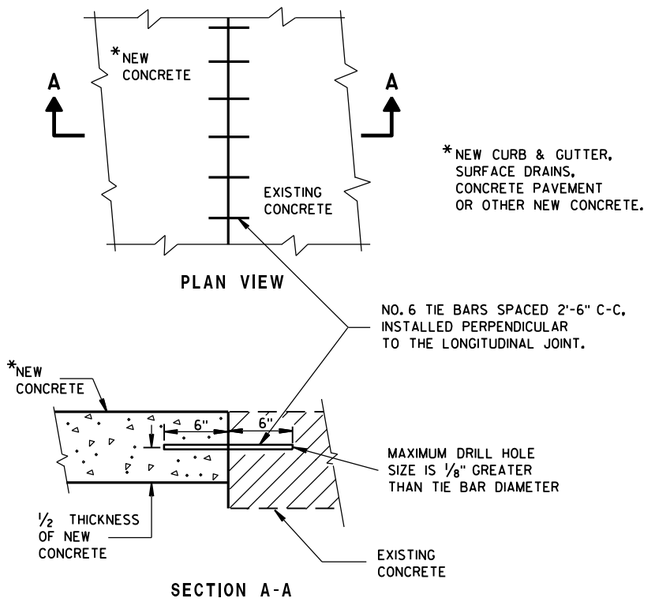


TYPES G(1) & J

CONCRETE CURB



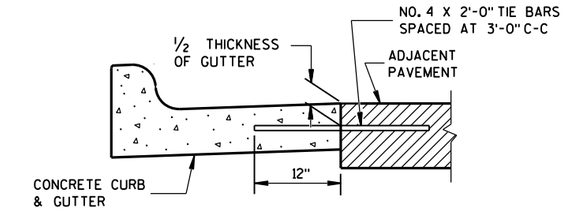
END SECTION CURB & GUTTER



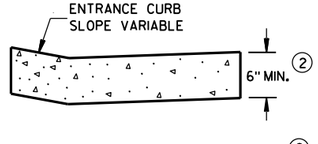
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

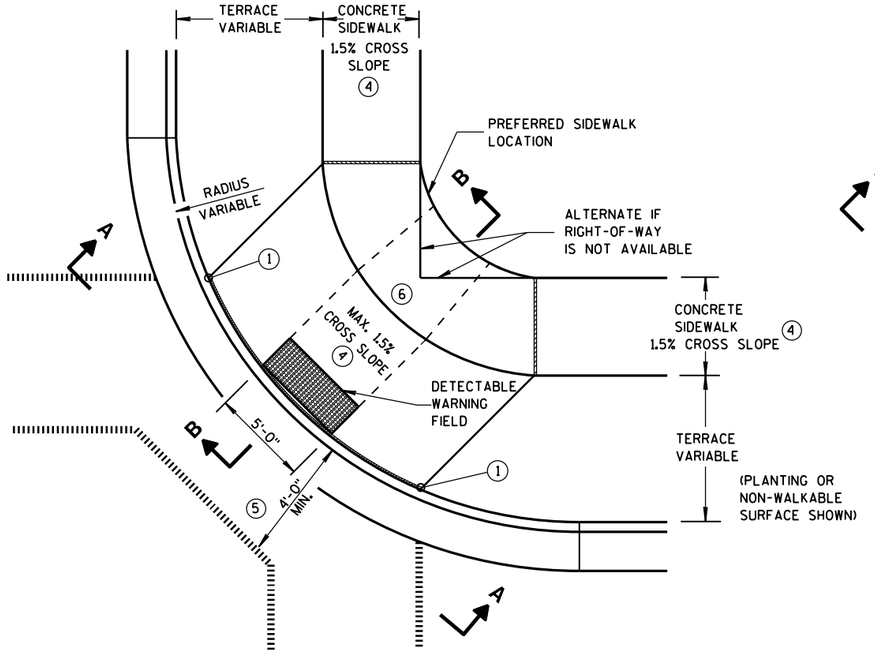
APPROVED
June, 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS 361 ENT
UNIT SUPERVISOR
FHWA

6

S.D.D. 8 D 1-20b

6

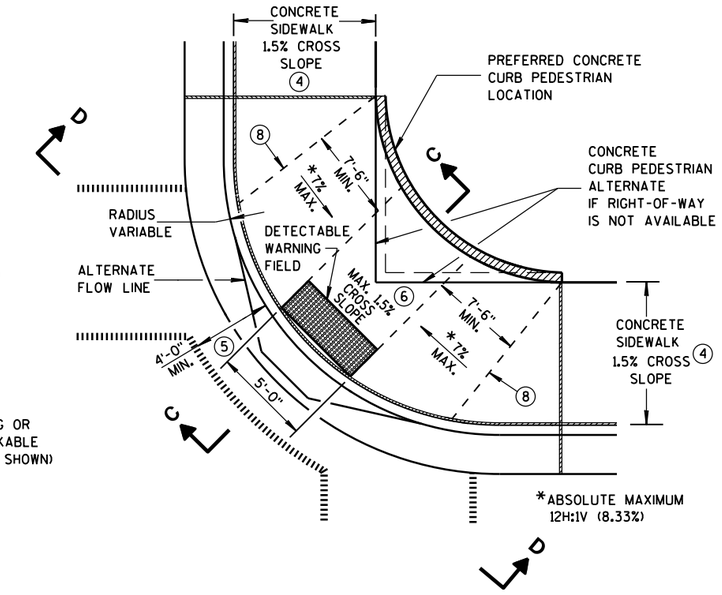
S.D.D. 8 D 1-20b



PLAN VIEW

TYPE 1 RAMP

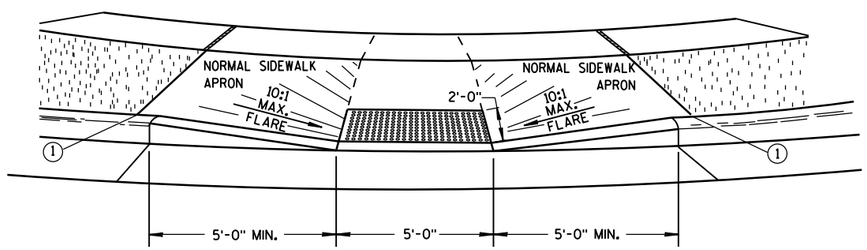
(CENTER OF CORNER RADIUS)



PLAN VIEW

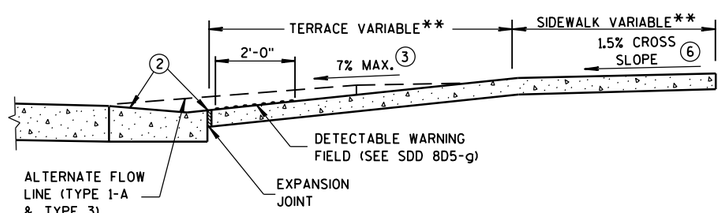
TYPE 1-A RAMP

(NO TERRACE)

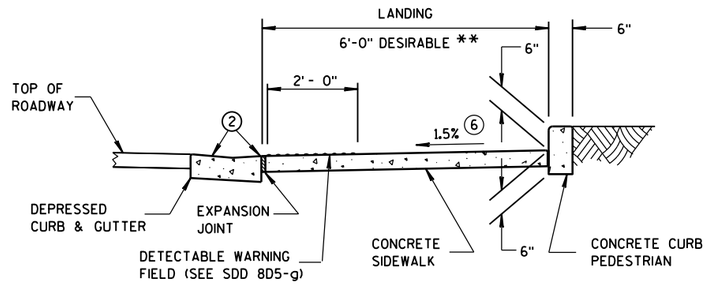


VIEW A-A

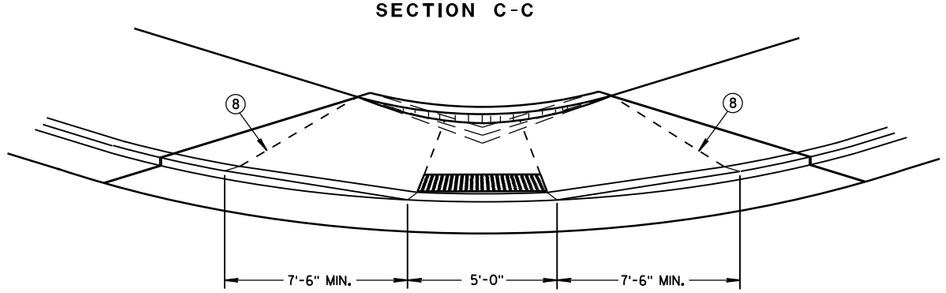
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

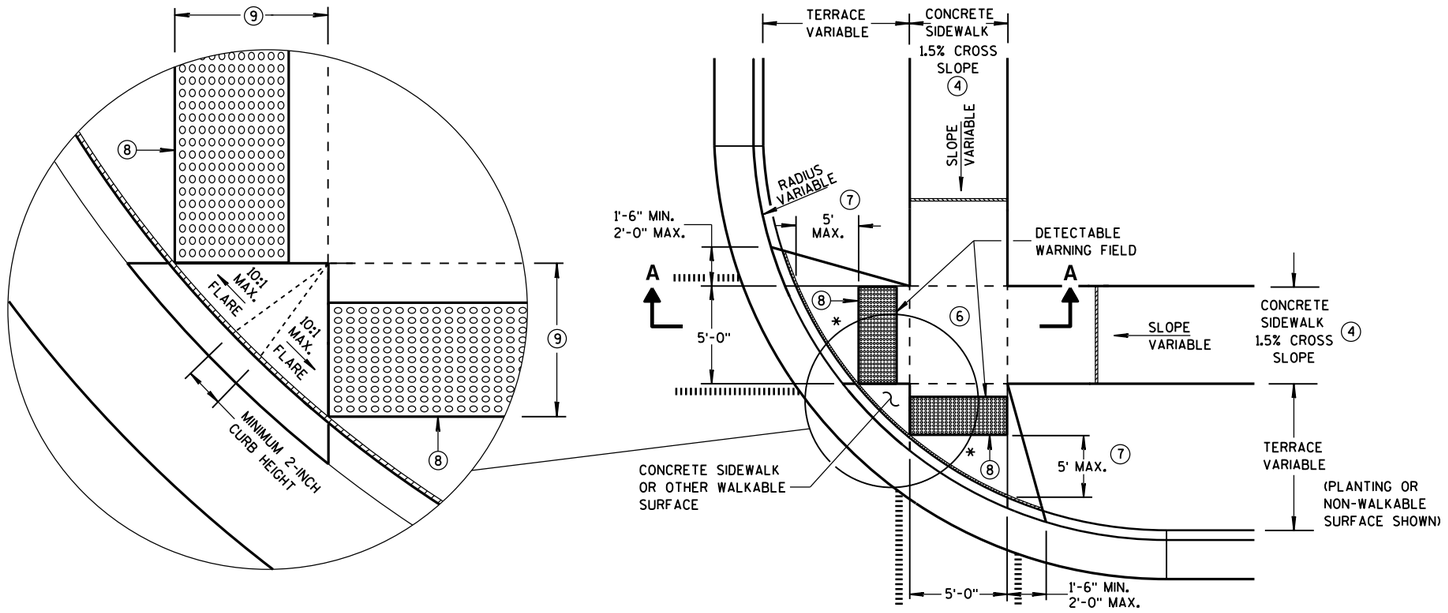
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

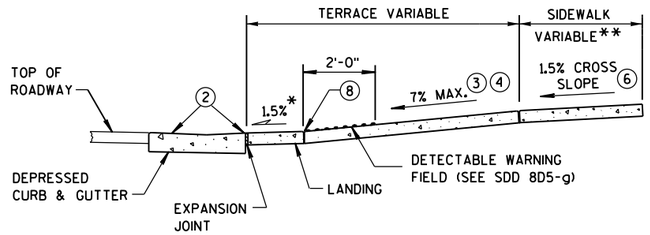
6

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



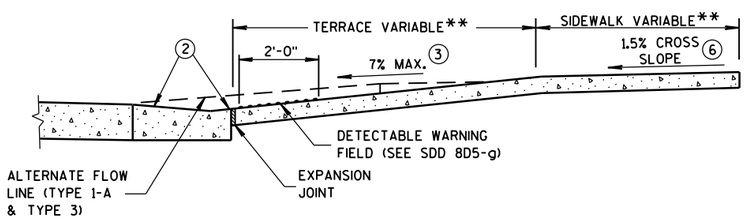
PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

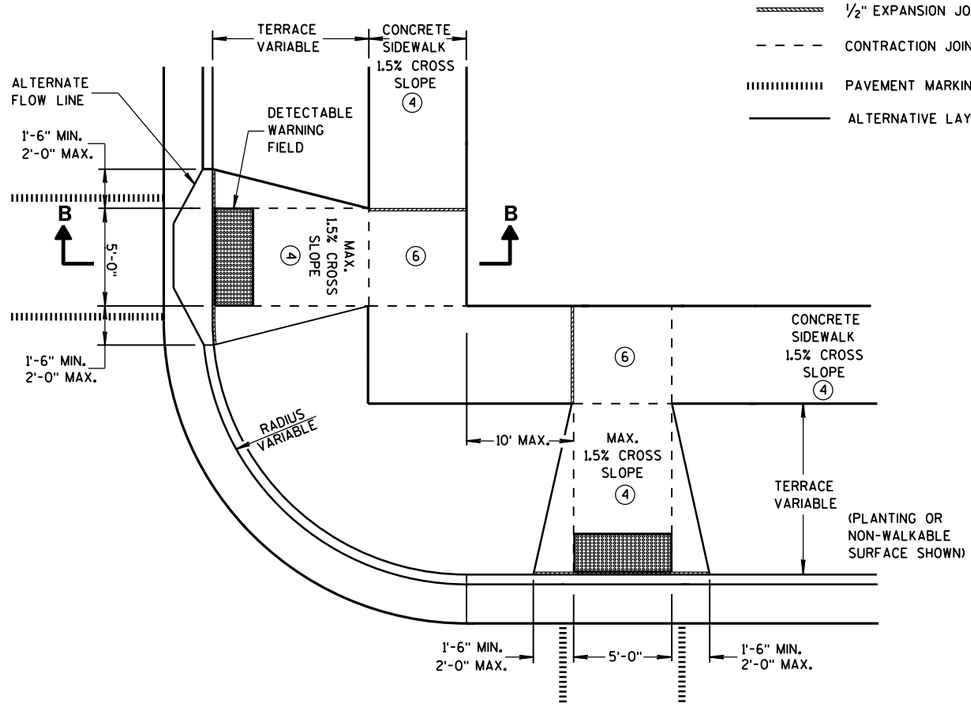


SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

6

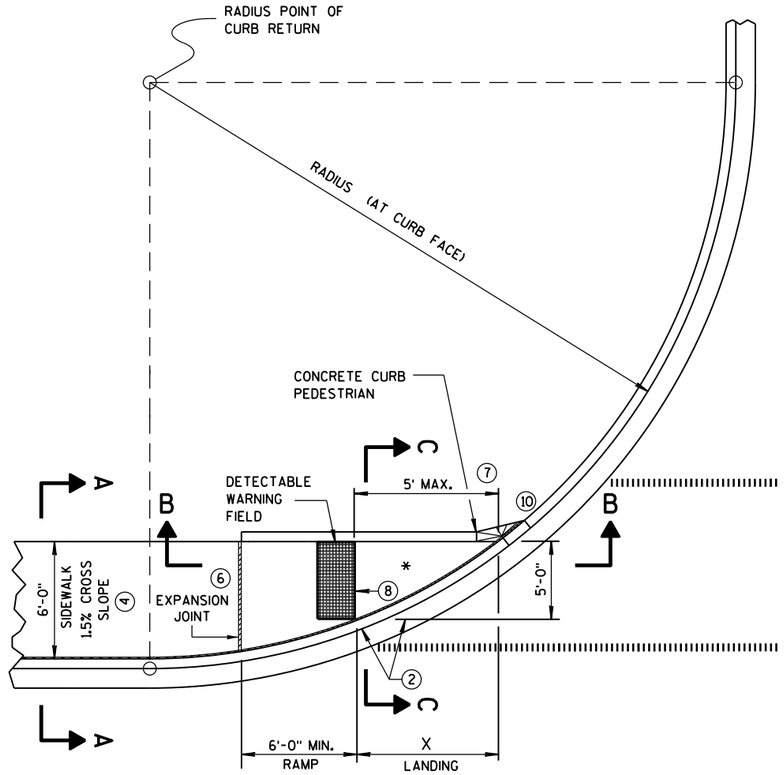
S.D.D. 8 D 5-19b

6

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

CURB RAMPS TYPES 2 AND 3

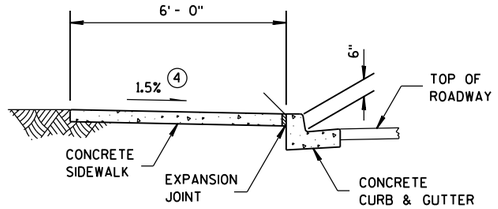
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO



CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X
10 FEET	4'-7"
15 FEET	6'-5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

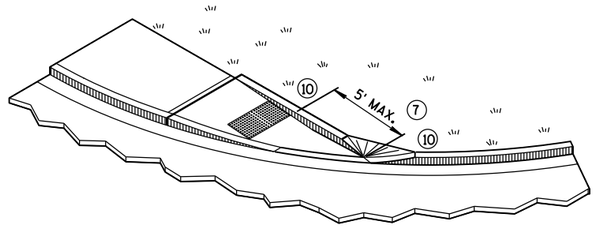
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

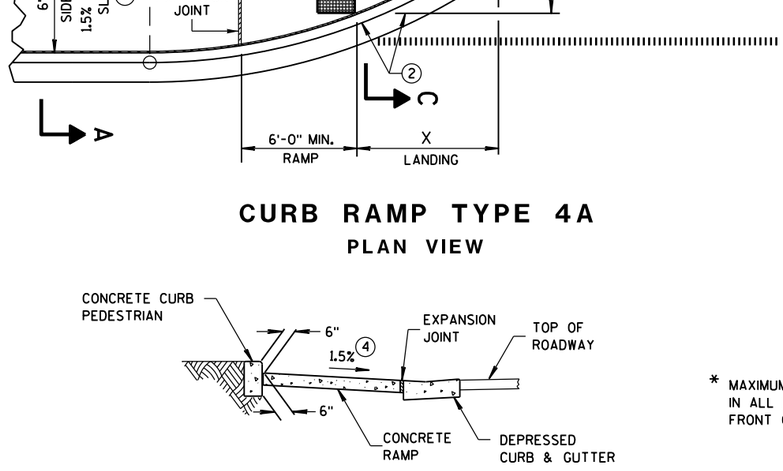
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

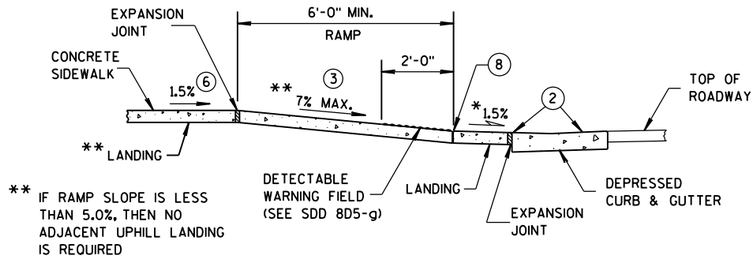
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4A



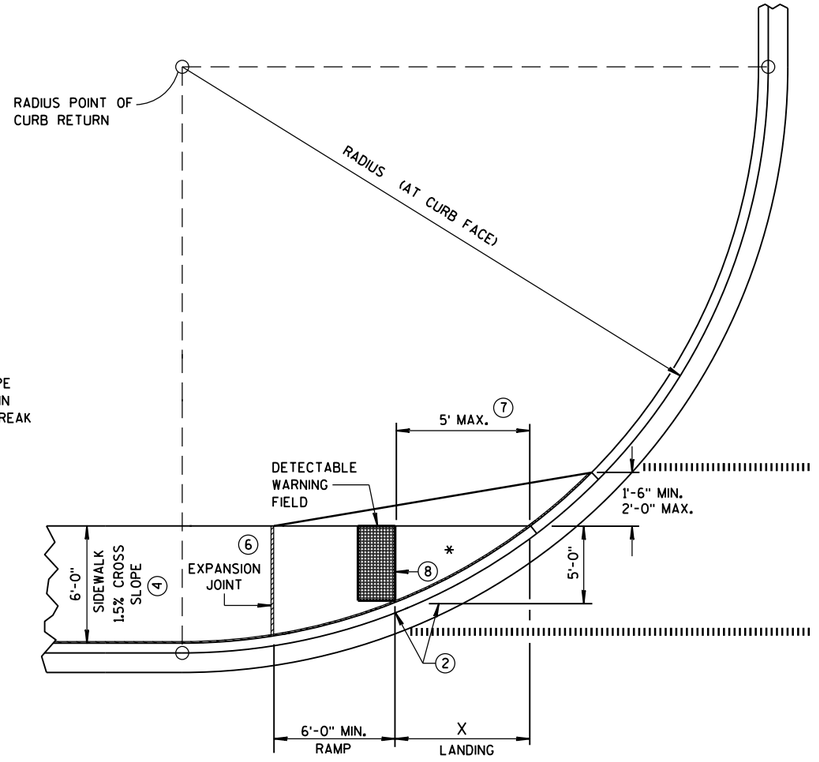
SECTION C-C FOR TYPE 4A



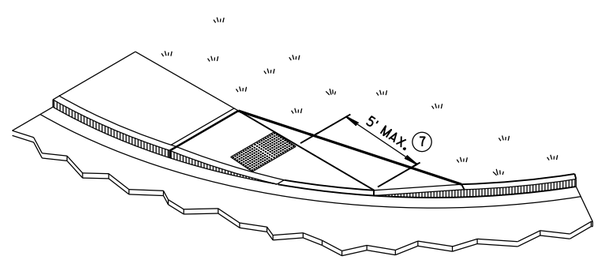
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

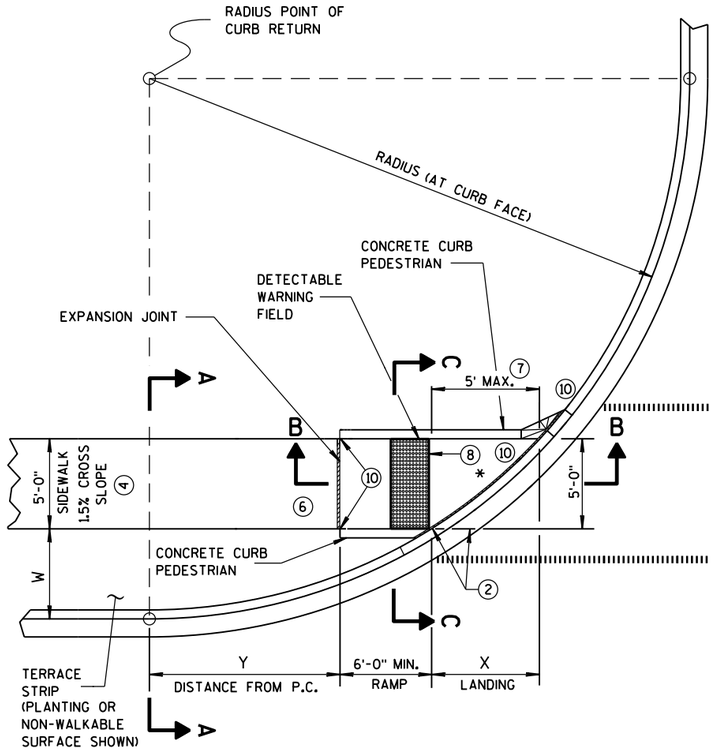
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

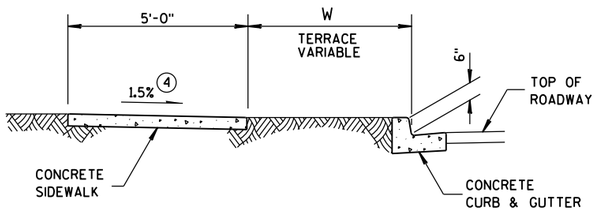
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

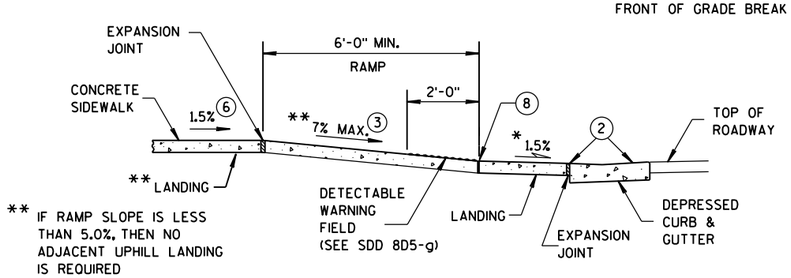
S.D.D. 8 D 5-19c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



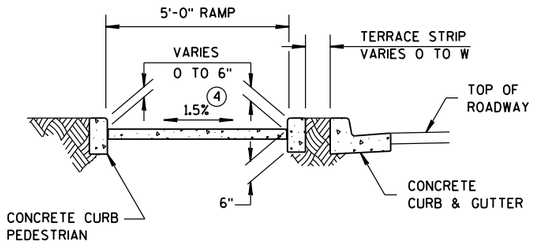
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"		W = 8'-0"		W = 9'-0"		W = 10'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2'-10¼"	0'-5"	2'-1"	1'-4½"	1'-5"	2'-1"	0'-10"	2'-7½"	0'-3¼"	3'-0¼"						
15 FEET	4'-6¾"	2'-1¾"	3'-9"	3'-5¼"	3'-1¼"	4'-6"	2'-6¾"	5'-4½"	2'-1"	6'-1"	1'-8"	6'-8½"	1'-3¼"	7'-2½"	0'-10¾"	7'-7¼"
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-7"	3'-3"	8'-6½"	2'-10"	9'-4½"	2'-5½"	10'-1¼"	2'-1¼"	10'-9"
30 FEET			6'-9¼"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"	4'-5½"	13'-7¾"	4'-0¾"	14'-8½"	3'-8½"	15'-8¼"
40 FEET									6'-1¾"	15'-8½"	5'-8"	17'-2"	5'-3"	18'-5¾"	4'-10¾"	19'-8¼"
50 FEET															5'-10¼"	23'-2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C-C FOR TYPE 4B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

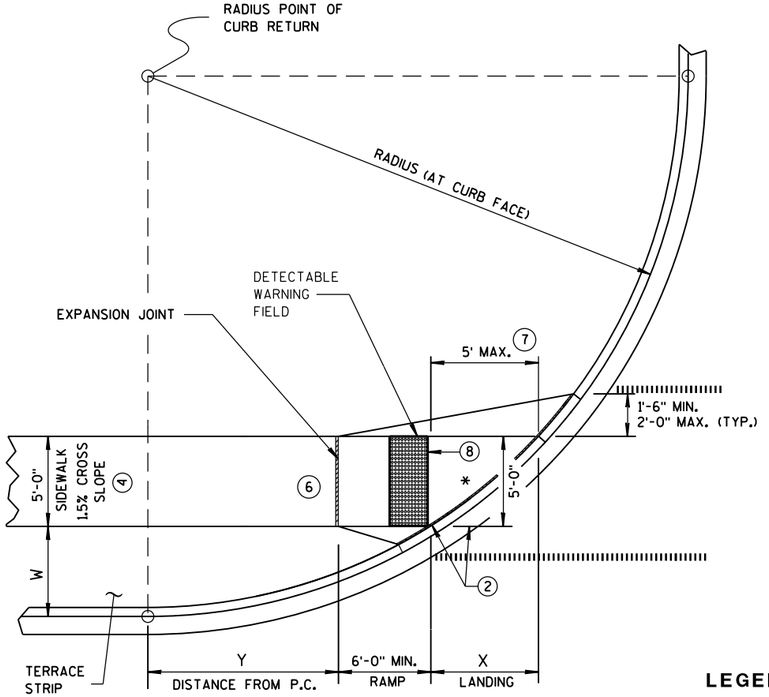
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

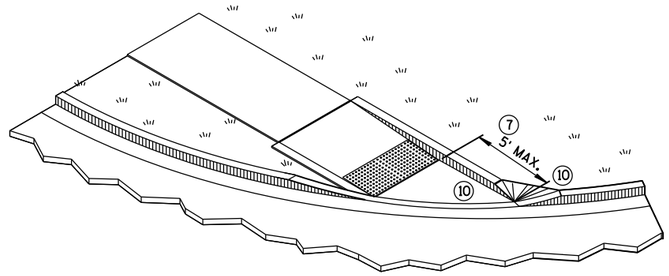
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

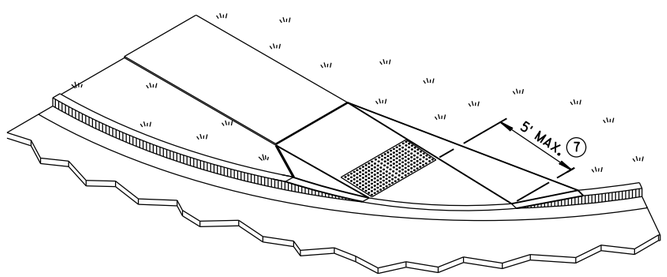
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

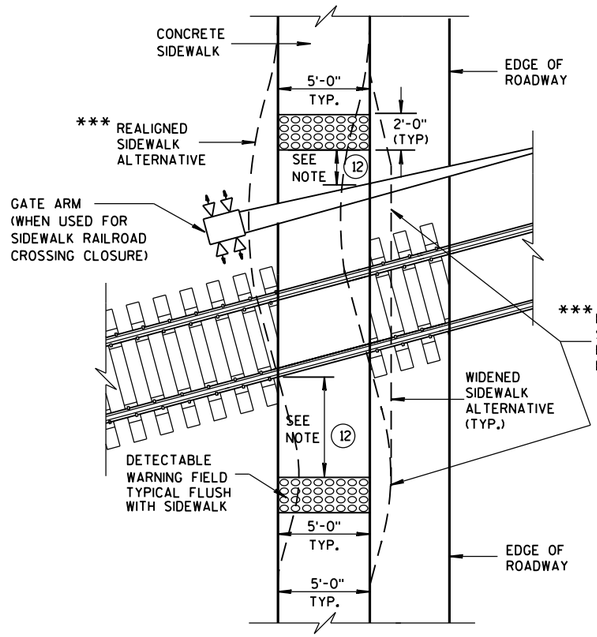
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

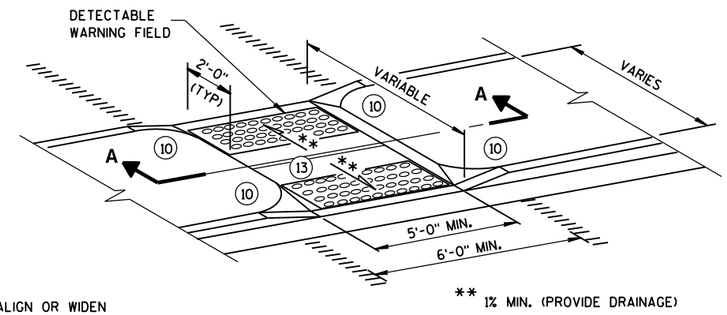
6

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



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING

*** DETAILS TO BE DETERMINED BY DESIGNER



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING
TYPE 5

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

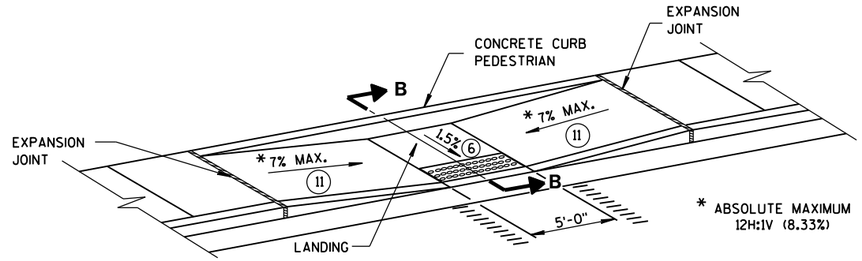
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

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

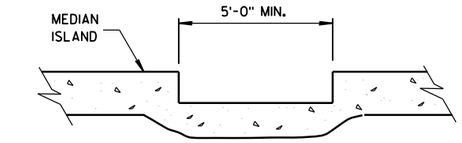
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

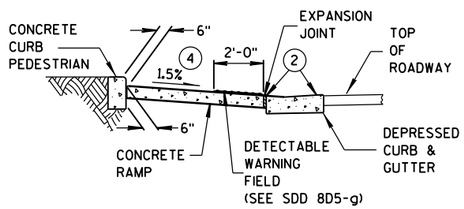
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.



MID-BLOCK CROSSING
TYPE 7A

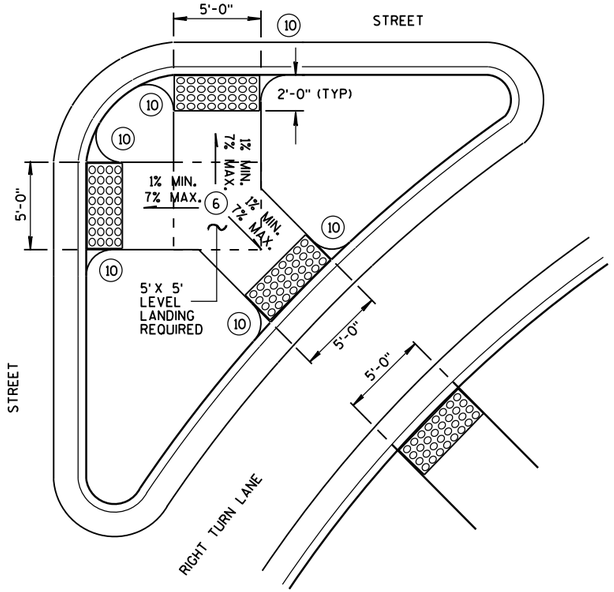


SECTION A-A

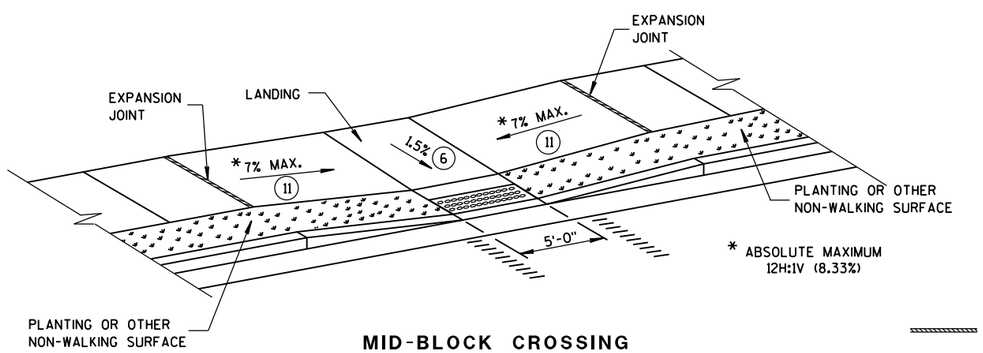


SECTION B-B

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

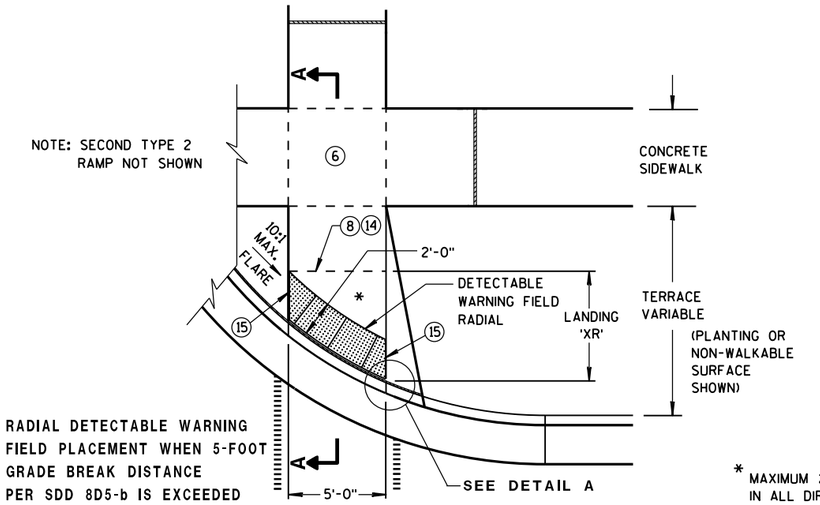
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

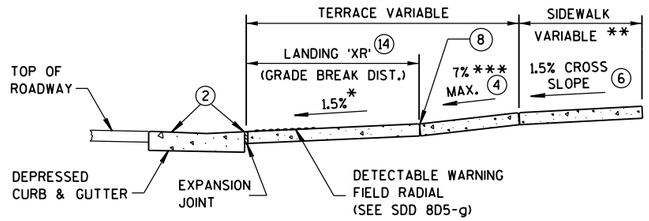
S.D.D. 8 D 5-19e
S.D.D. 8 D 5-19e



TYPE 2 RAMP
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION A-A

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS (DWFs) THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

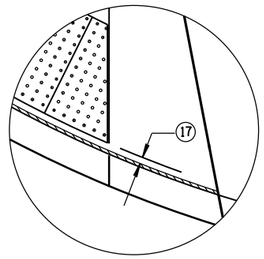
(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION 'XR') REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

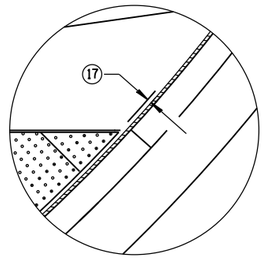
(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1'X 2' RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2'-0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

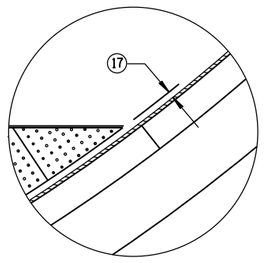
(17) A MAXIMUM 3-INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.



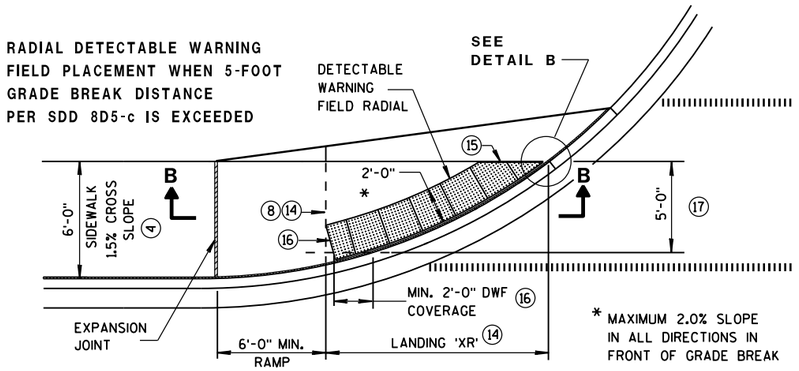
DETAIL A



DETAIL C

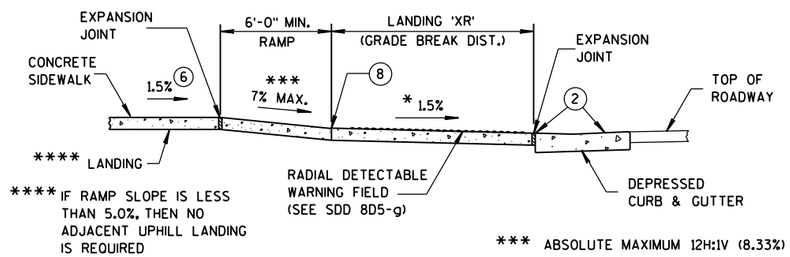


DETAIL B



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

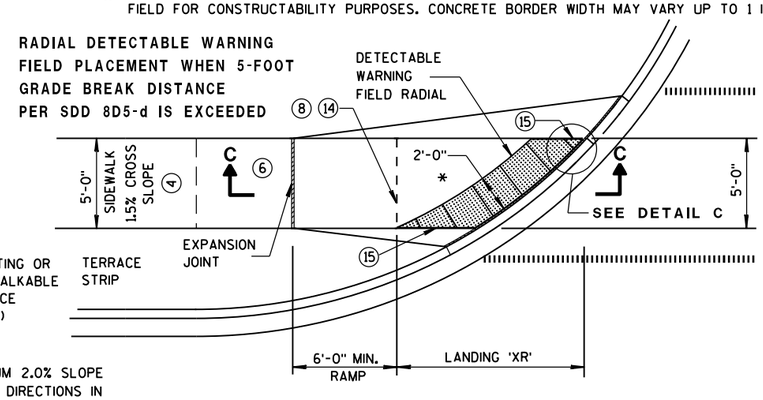
CURB RAMP TYPE 4A1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

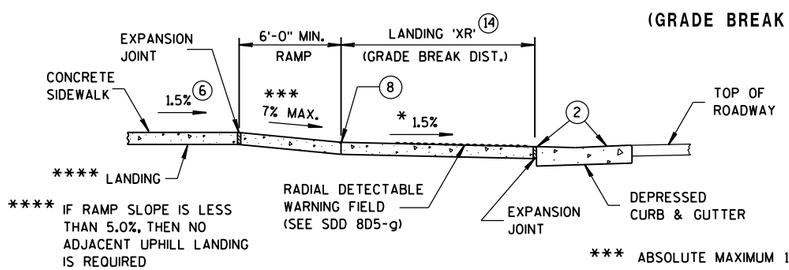
*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION B-B FOR TYPE 4A1



* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

CURB RAMP TYPE 4B1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION C-C FOR TYPE 4B1

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

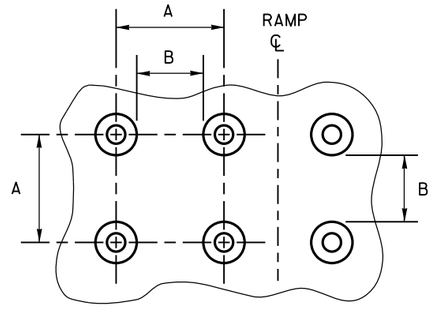
S.D.D. 8 D 5-19f

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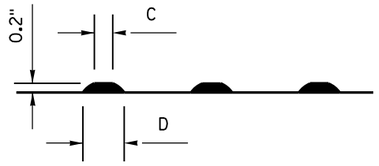
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	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES

DETECTABLE WARNING PATTERN DETAIL

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

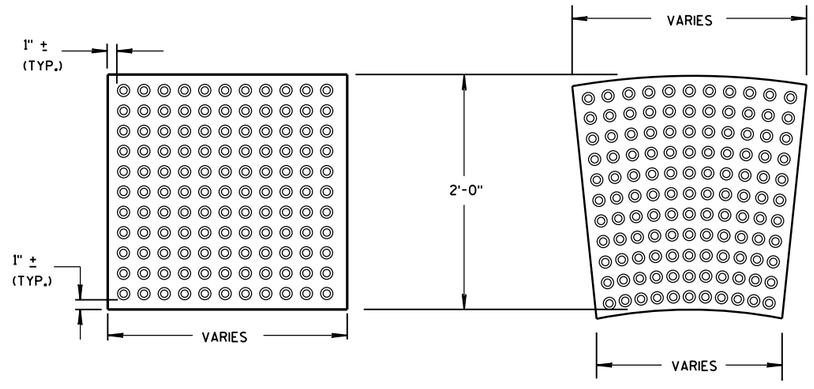
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGES IN COMBINATION WITH SQUARE PANELS ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

⑮ FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

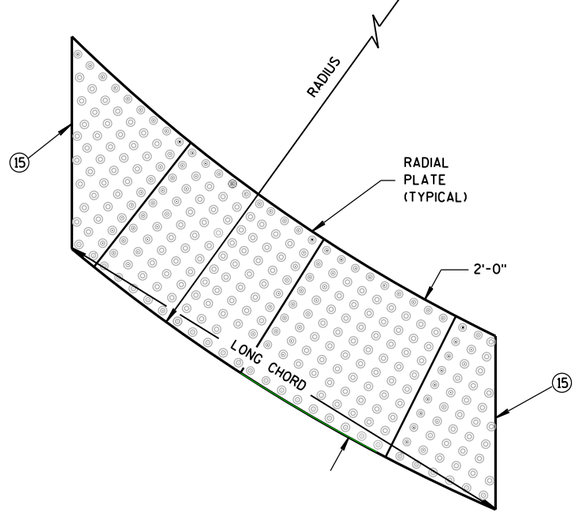


RECTANGULAR PLATES

RADIAL PLATES

DETECTABLE WARNING FIELDS (TYPICAL)

PLAN VIEW



RADIAL DETECTABLE WARNING FIELD ATTRIBUTES

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

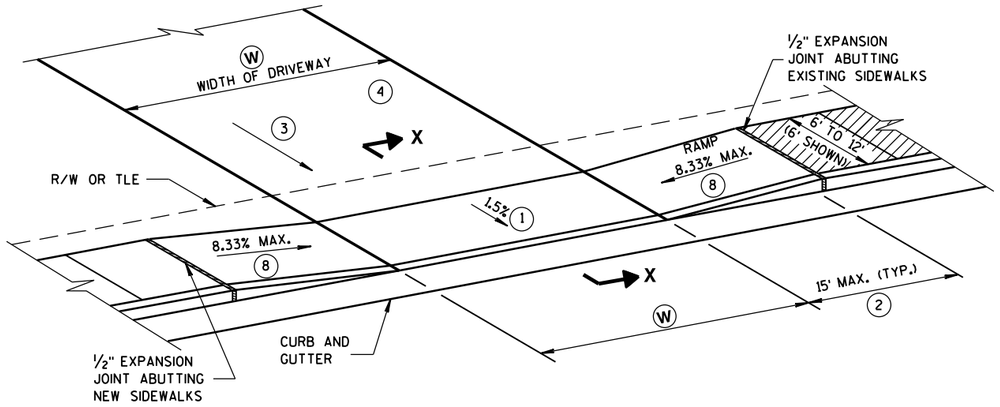
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June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
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FHWA

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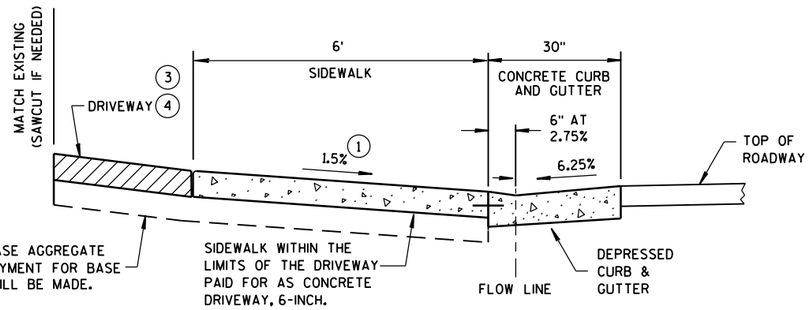
S.D.D. 8 D 5-19g

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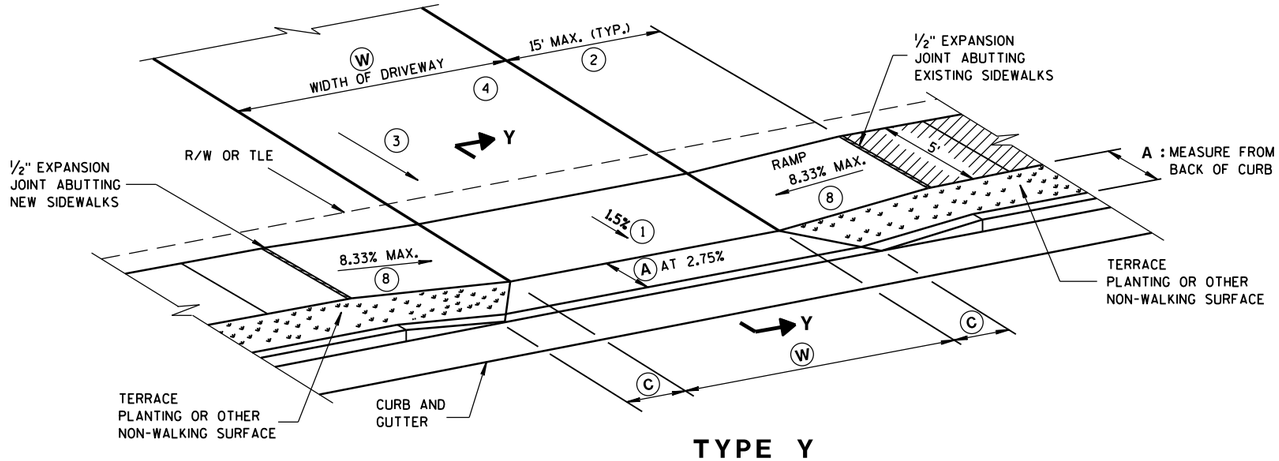
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TYPE X
SIDEWALK ABUTS CURB & GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X-X

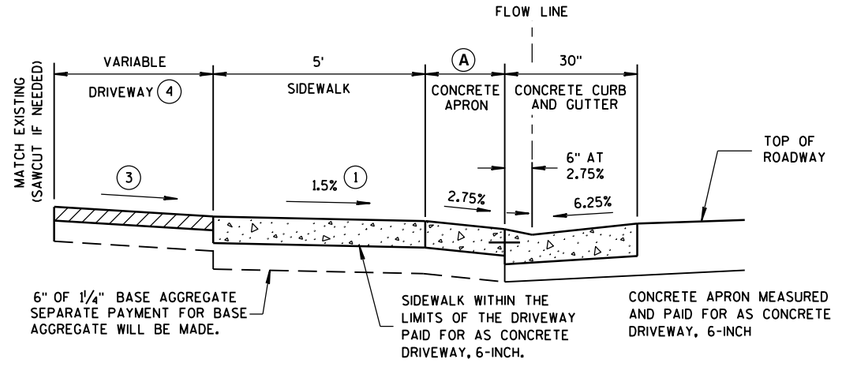


TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET

W: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)
16' MIN. - 35' MAX. COMMERCIAL (CE)

GENERAL NOTES

1. CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
2. THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.
3. DRIVEWAY SLOPES: DESIRABLE MAXIMUM
   - 10.5% UP AWAY FROM SIDEWALK (SAG)
   - 8.5% DOWN AWAY FROM SIDEWALK (CREST)
   - ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG
4. DRIVEWAY TYPES
   - 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
   - 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
   - 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)
5. PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.
6. (W) IS SHOWN ON PLAN AND PROFILE SHEETS.
7. OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.
8. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.



NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y-Y

DRIVEWAY DETAIL
WITH CONCRETE CURB & GUTTER
(URBAN AND SUBURBAN)

TABLE Y

(A) FEET	(C) FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

NOT TO SCALE

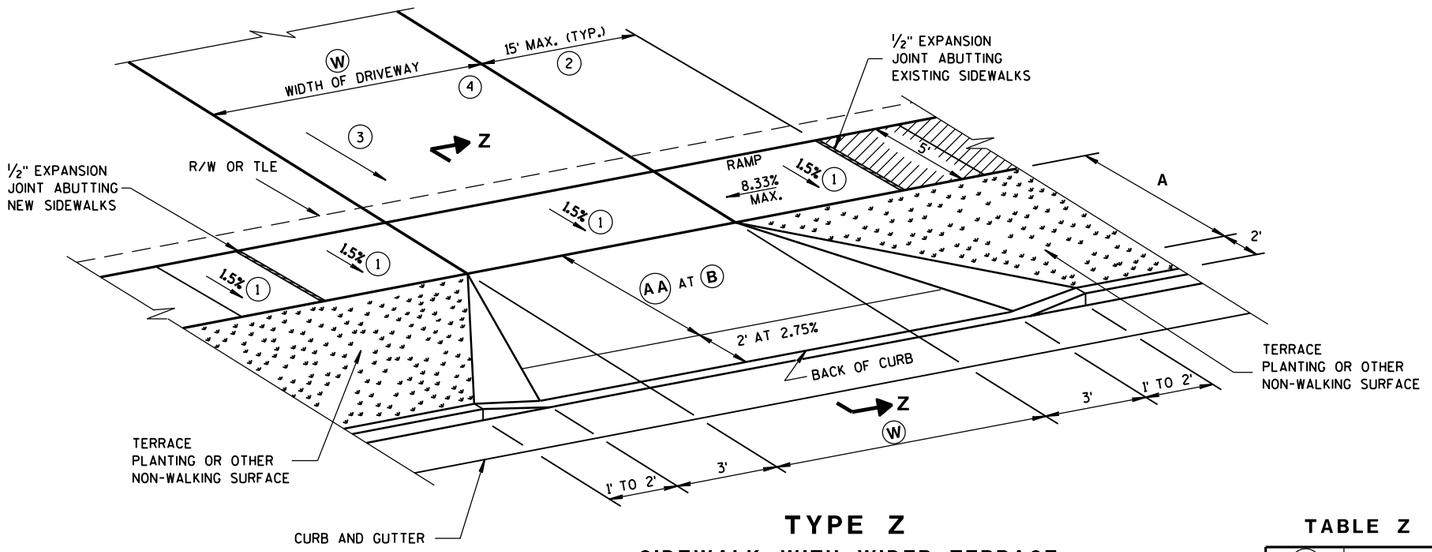
DRIVEWAY AND SIDEWALK RAMPS
TYPES X & Y

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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December, 2016 — /S/ Rodney Taylor
DATE — ROADWAY STANDARDS UNIT SUPERV
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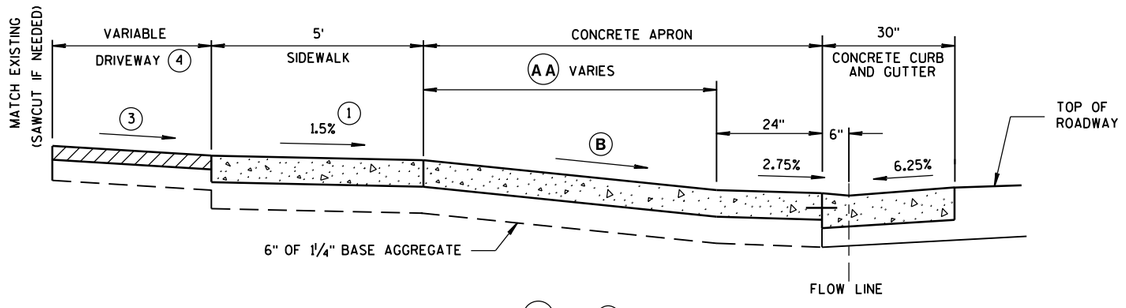


TYPE Z

SIDEWALK WITH WIDER TERRACE
TERRACE VARIES 7 TO 12 FEET

TABLE Z

(AA) FEET	(B) %
4.5'	11.5%
5.5'	9-11.5%
6.5'	8-11.5%
7.5'	7-11.5%
8.5'	6-11.5%
9.5'	5-11.5%



PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS FOR **B** VALUES NOT SHOWN IN TABLE Z.

SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY, 6-INCH.

SEPARATE PAYMENT FOR BASE AGGREGATE WILL BE MADE.

CONCRETE APRON MEASURED AND PAID FOR AS CONCRETE DRIVEWAY, 6-INCH

SECTION Z-Z

DRIVEWAY DETAIL WITH CONCRETE CURB & GUTTER

(URBAN AND SUBURBAN)

(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)
16' MIN. - 35' MAX. COMMERCIAL (CE)

GENERAL NOTES

1. CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

2. THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.

3. DRIVEWAY SLOPES: DESIRABLE MAXIMUM
   10.5% UP AWAY FROM SIDEWALK (SAG)
   8.5% DOWN AWAY FROM SIDEWALK (CREST)
   ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

4. DRIVEWAY TYPES
   - 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
   - 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
   - 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)

5. PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

6. (W) IS SHOWN ON PLAN AND PROFILE SHEETS.

7. OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

NOT TO SCALE

DRIVEWAY AND SIDEWALK RAMPS TYPE Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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December, 2016 — /S/ Rodney Taylor
DATE — ROADWAY STANDARDS UNIT SUPERV

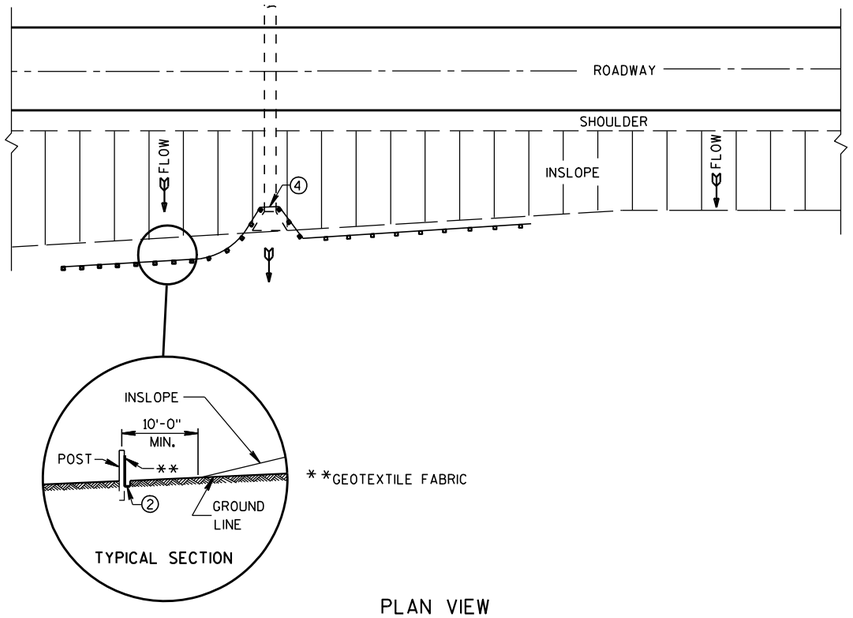
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S.D.D. 8 D 19-1

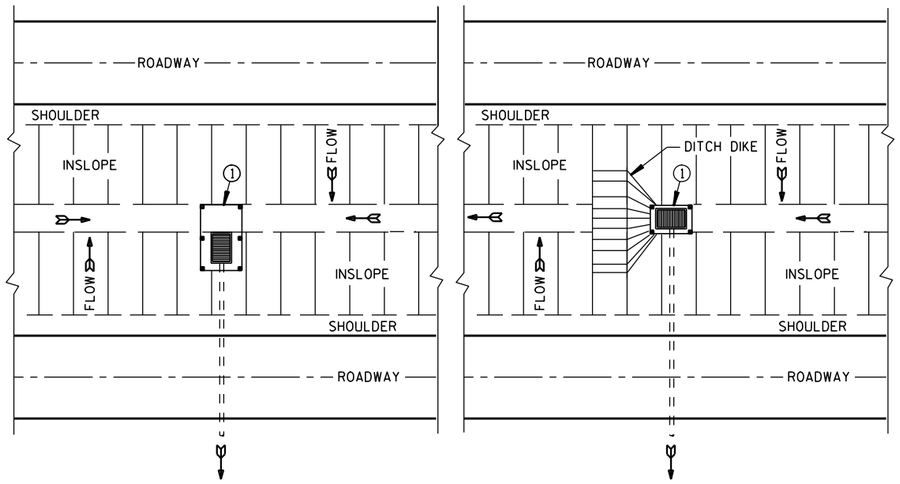
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PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



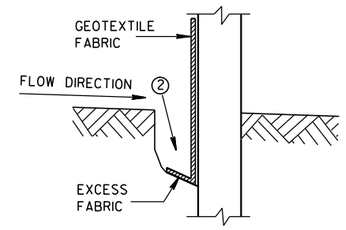
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

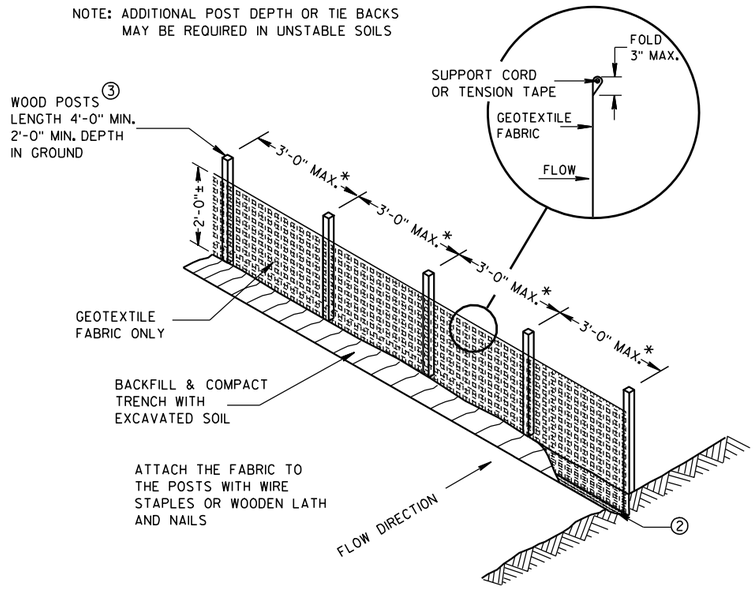
GENERAL NOTES

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

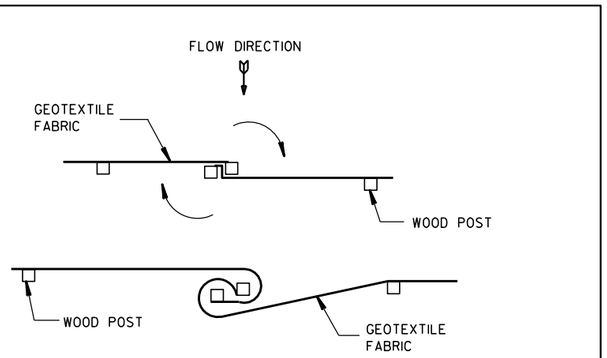
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



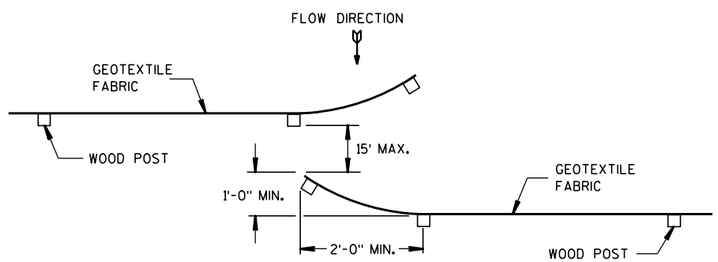
TRENCH DETAIL



SILT FENCE

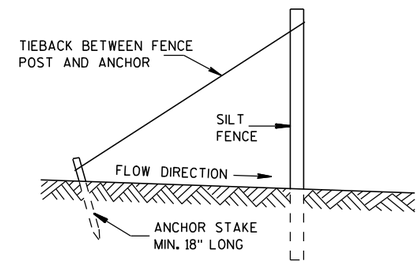


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

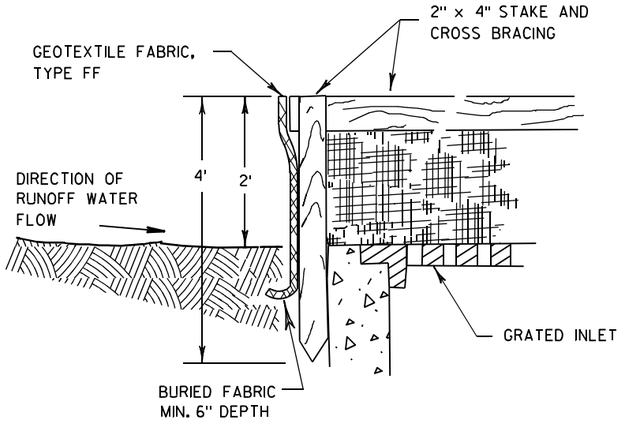
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4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
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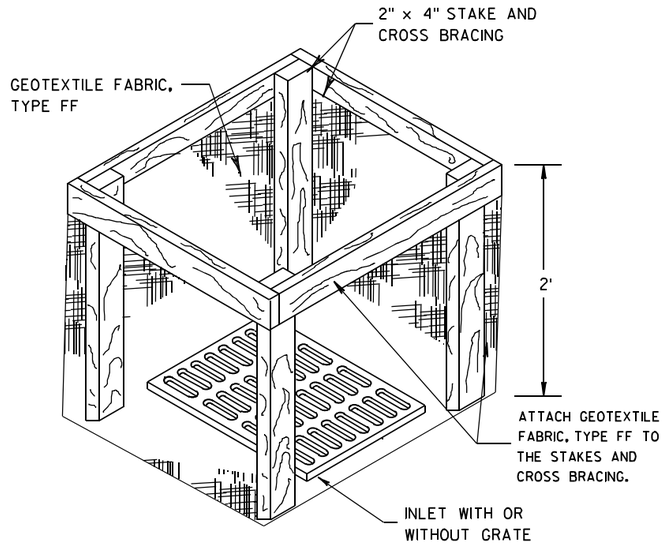
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S.D.D. 8 E 9-6

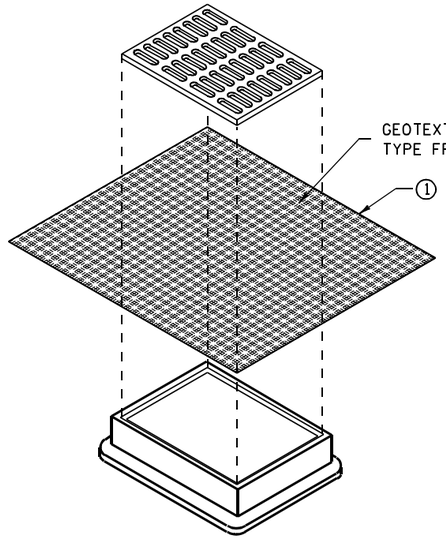
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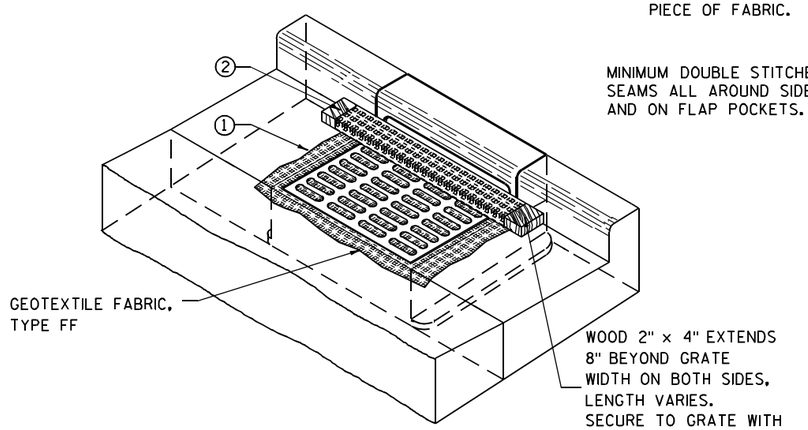


INLET PROTECTION, TYPE A

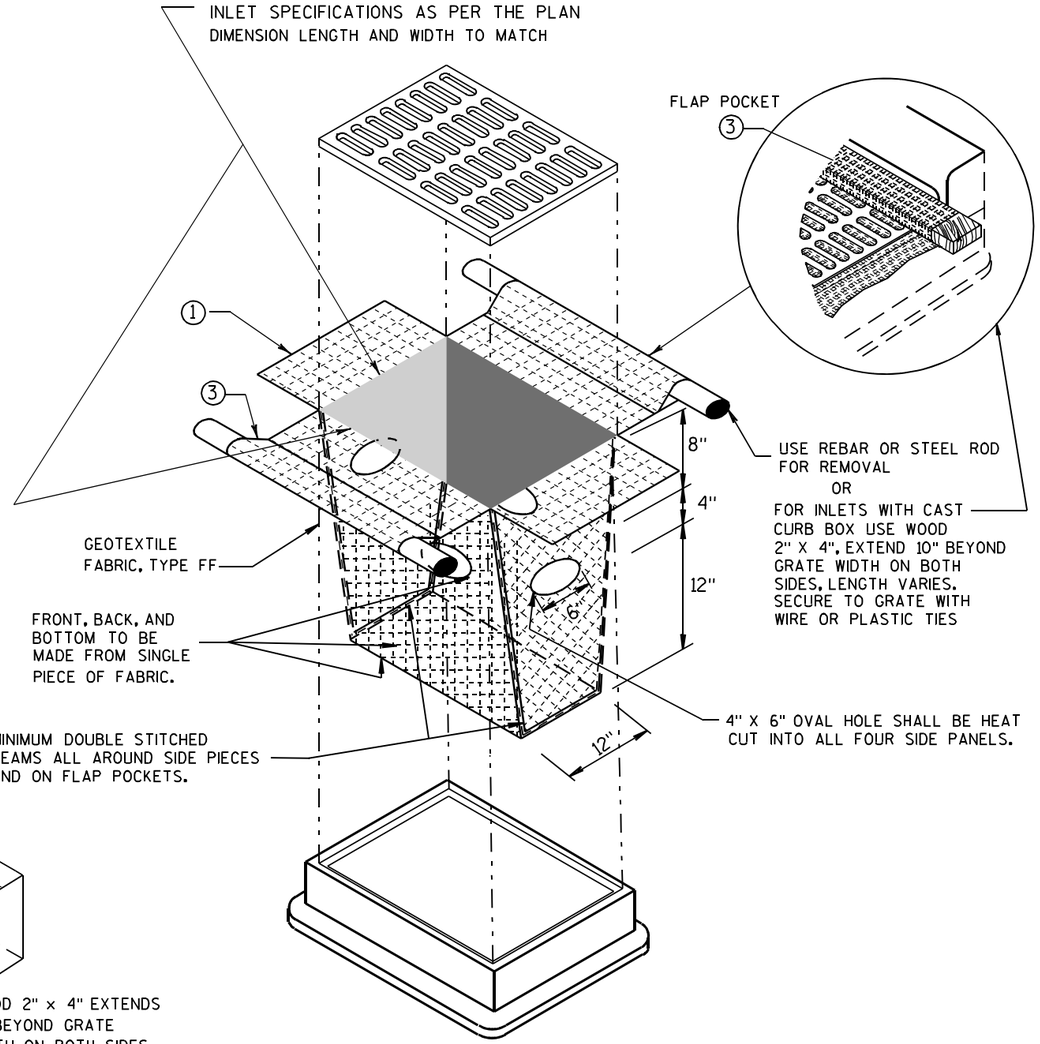


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

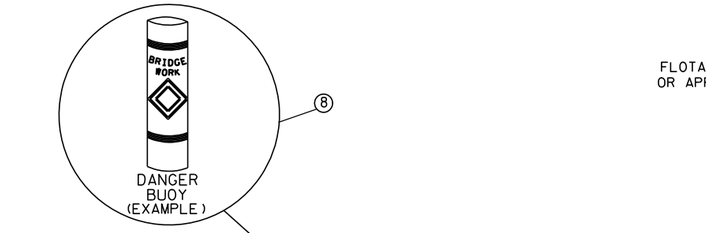
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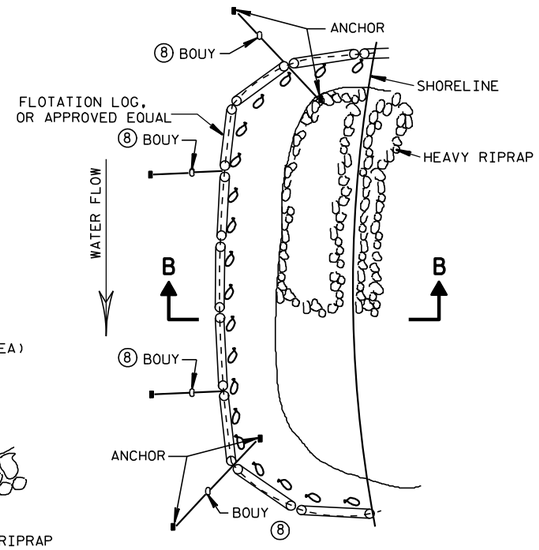
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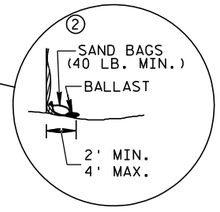
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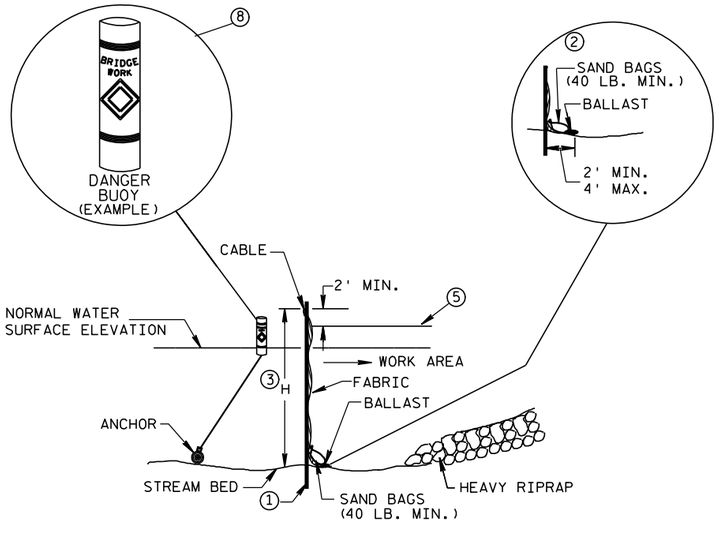


SECTION B-B

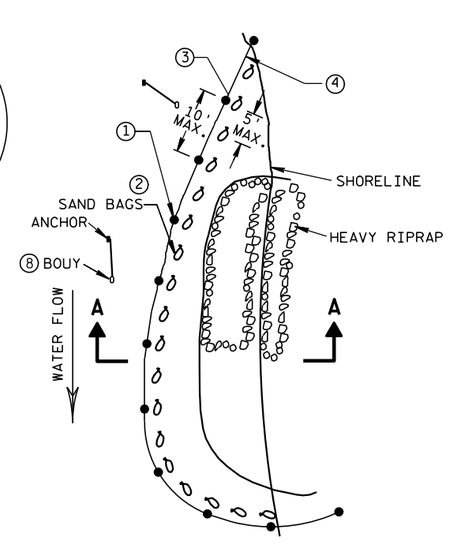




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT 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.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.

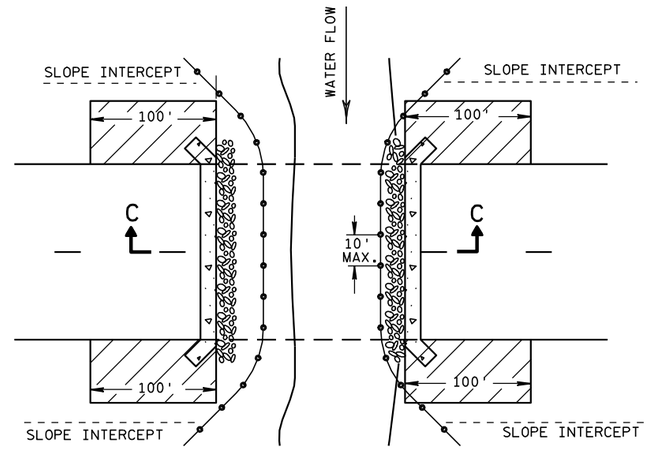
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE 02 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

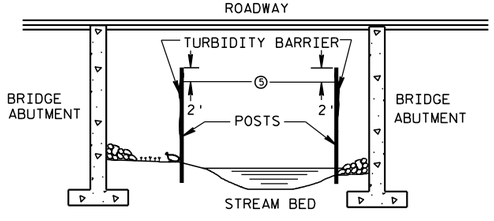
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

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 11-2

6

S.D.D. 8 E 11-2

METAL APRON ENDWALLS

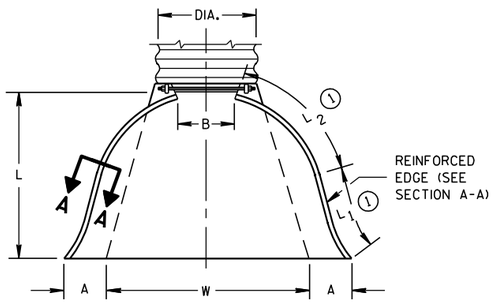
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

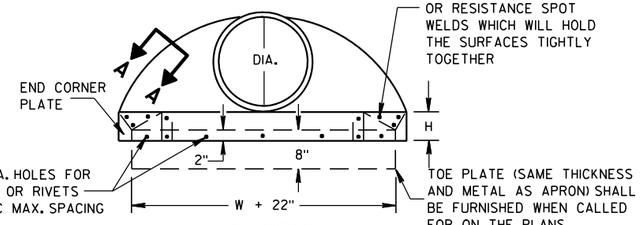
REINFORCED CONCRETE APRON ENDWALLS

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

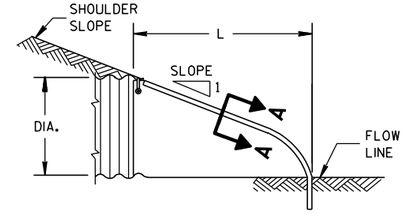
* MINIMUM
** MAXIMUM



PLAN VIEW

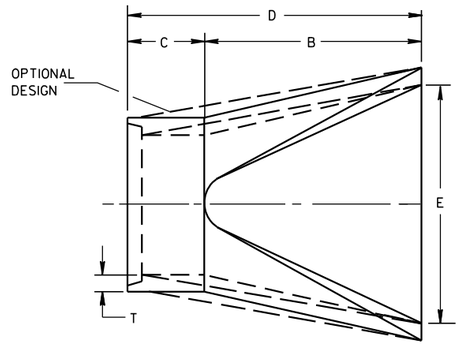


END VIEW

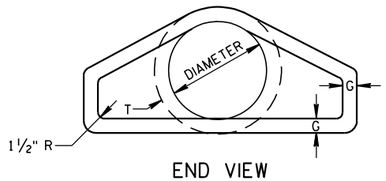


SIDE ELEVATION

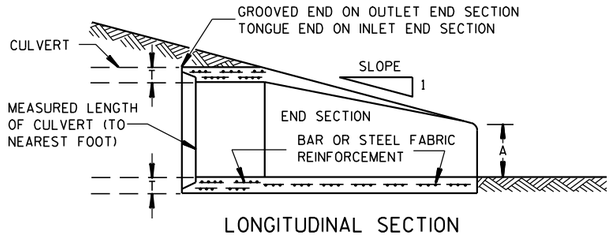
METAL ENDWALLS



PLAN

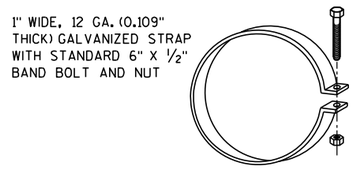


END VIEW



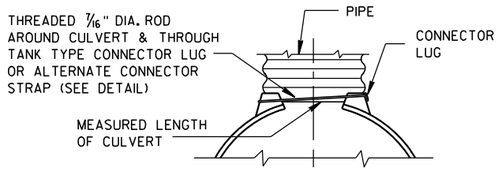
LONGITUDINAL SECTION

CONCRETE ENDWALLS

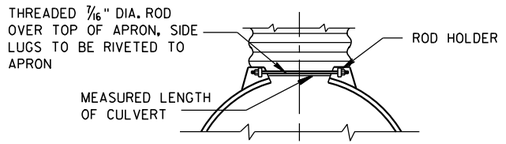


ALTERNATE FOR TYPE 1 CONNECTION

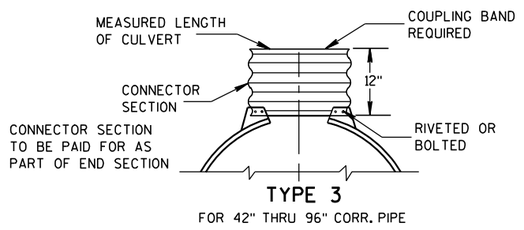
END SECTION CONNECTOR STRAP



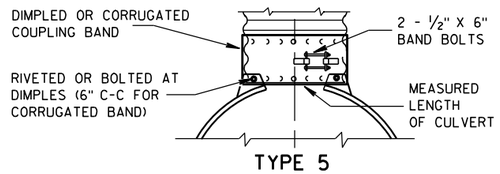
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

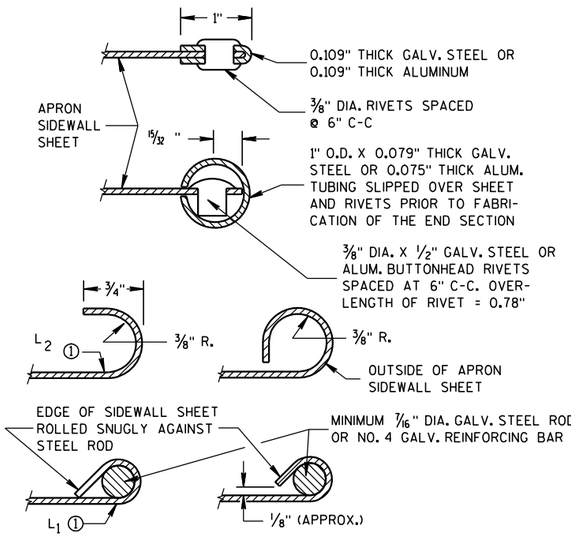
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

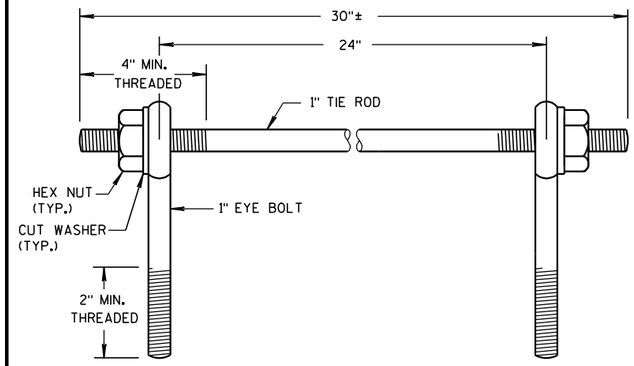
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

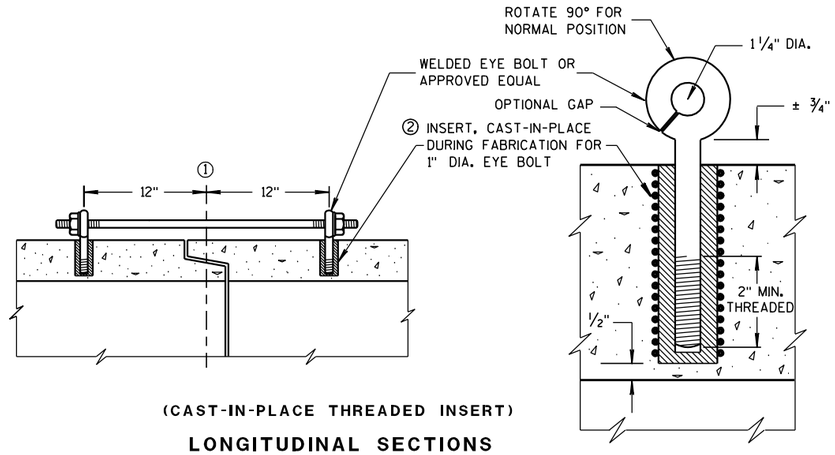
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOP 374 NEER
FHWA



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

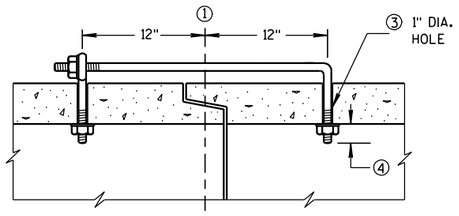
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

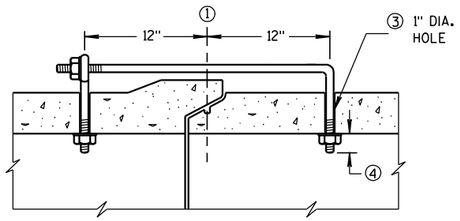
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

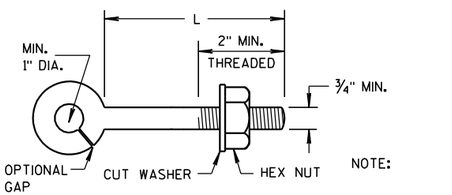


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

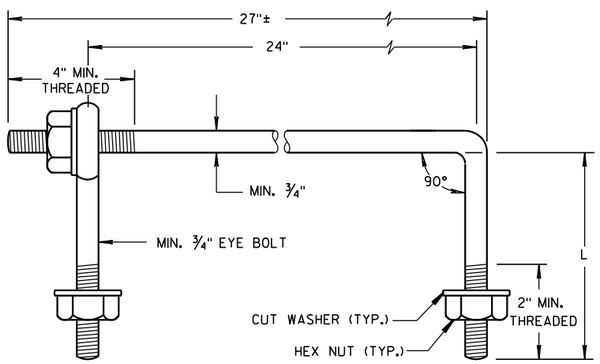
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

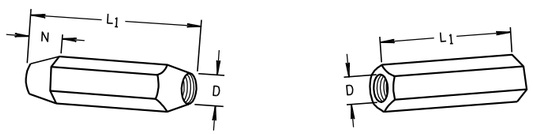
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

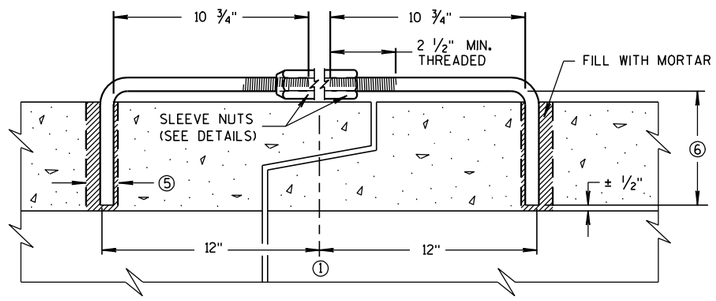
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

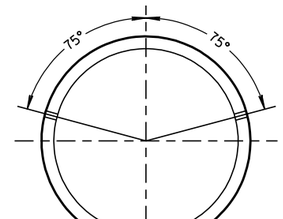
SLEEVE NUTS



LONGITUDINAL SECTION

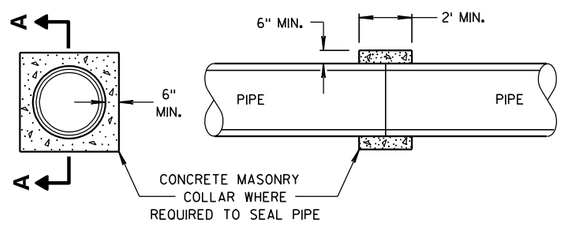
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

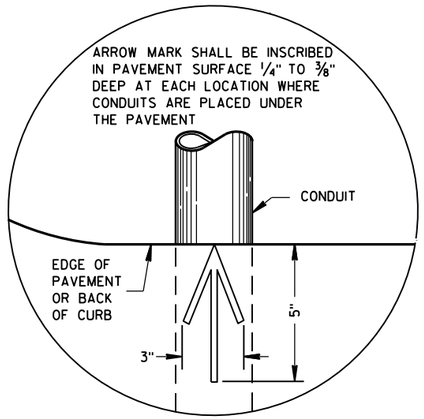
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
375 — 'MENT
FHWA

6

S.D.D. 8 F 4-7

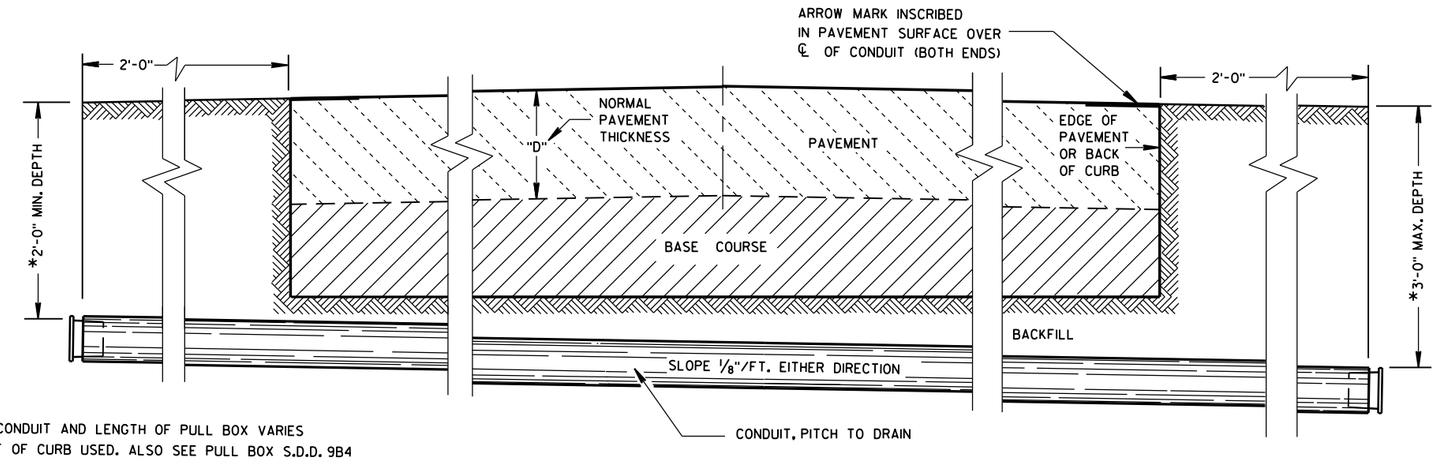
6

S.D.D. 8 F 4-7



PLAN VIEW

ARROW MARK



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

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

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

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

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

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

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

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

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

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

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

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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		NON-CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 1/2	22 1/2
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

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".

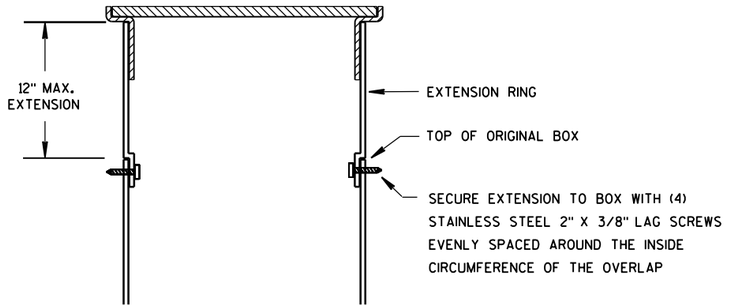
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

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

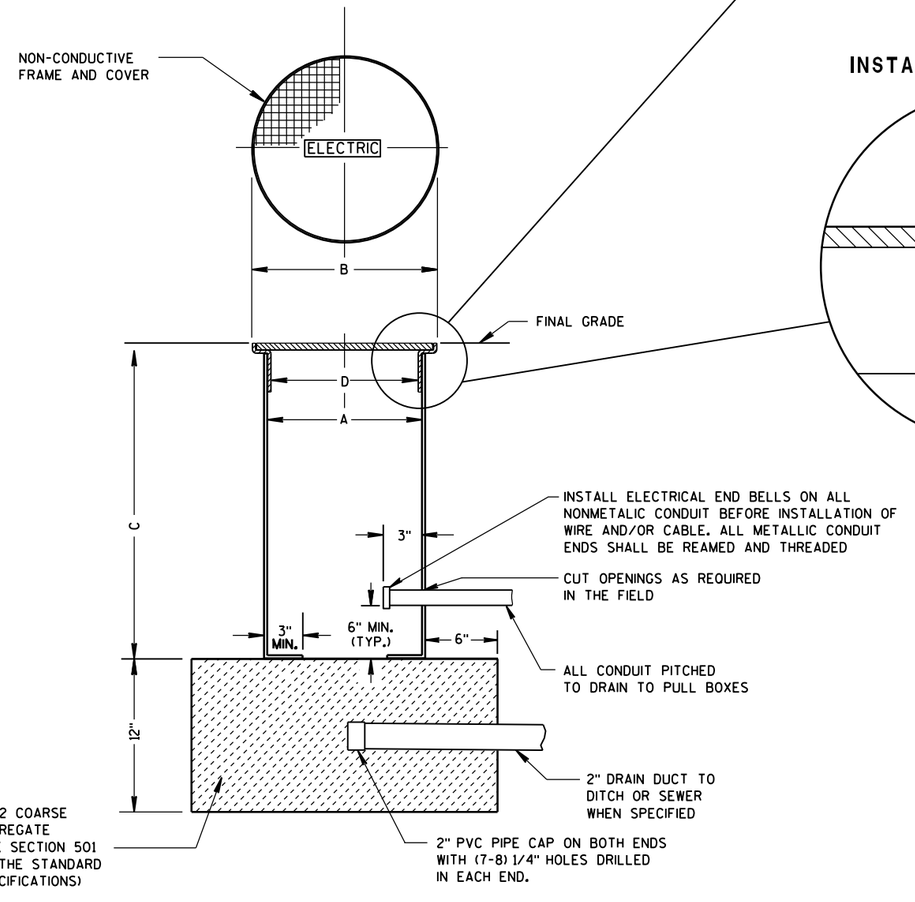
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.

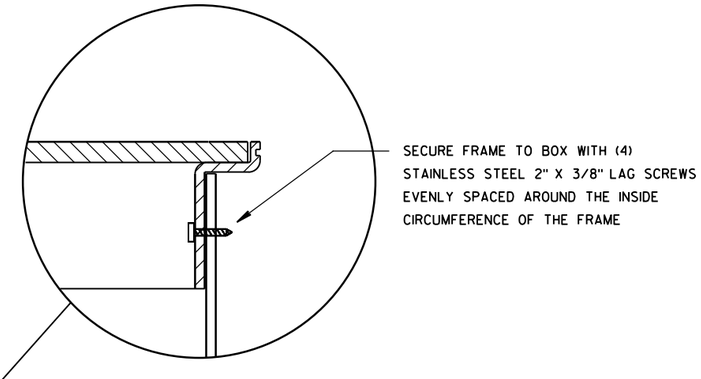


BOX EXTENSION

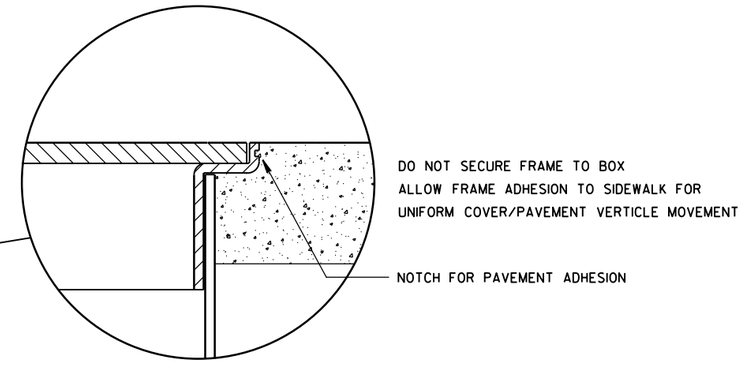


NON-CONDUCTIVE PULL BOX

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



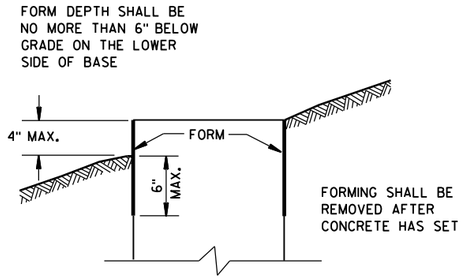
PULL BOX NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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FORMING DETAIL

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

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

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

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

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

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

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

GENERAL NOTES (CONTINUED)

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

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

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

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

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

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

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

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

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

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

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

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

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

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

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

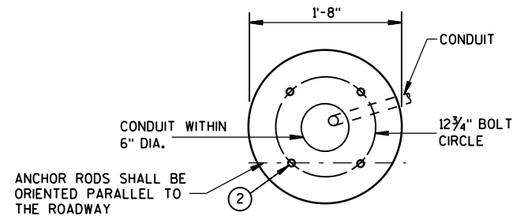
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

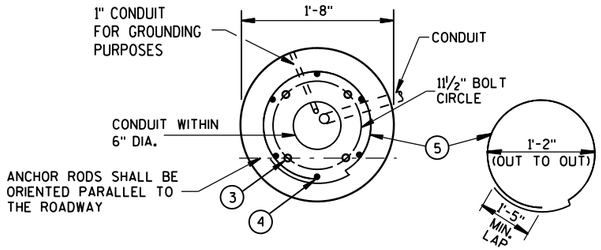
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

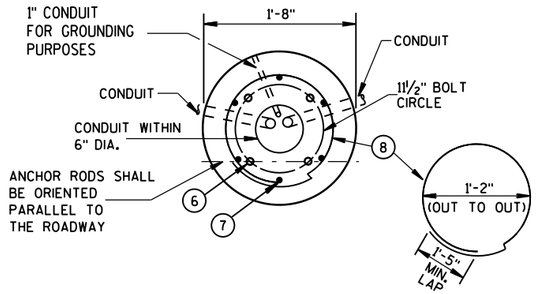
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

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

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

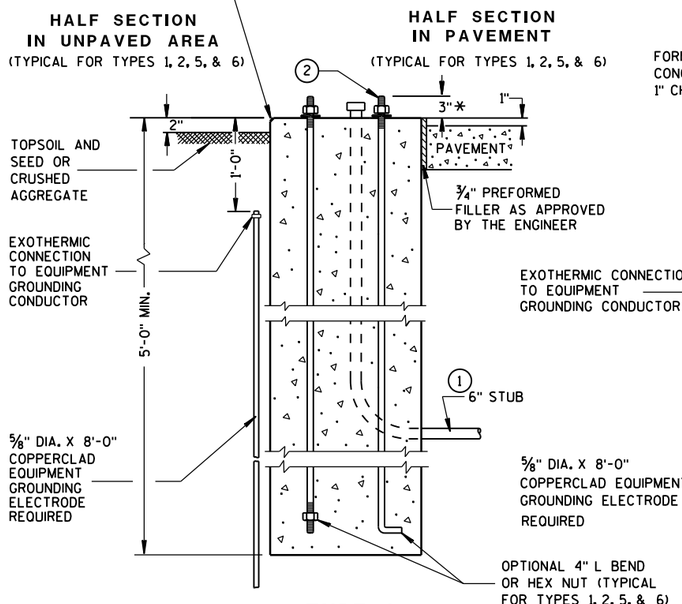




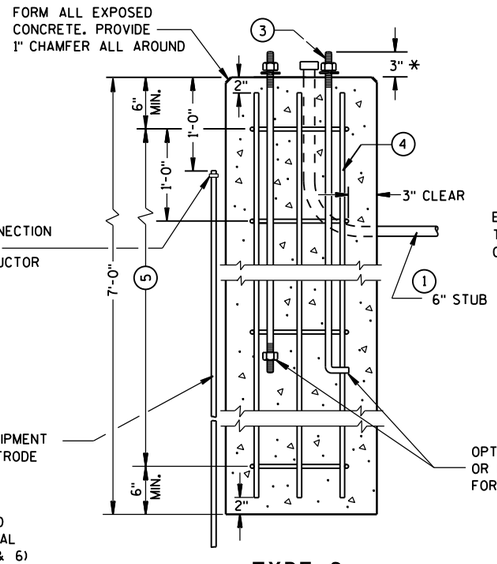


HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5, & 6)

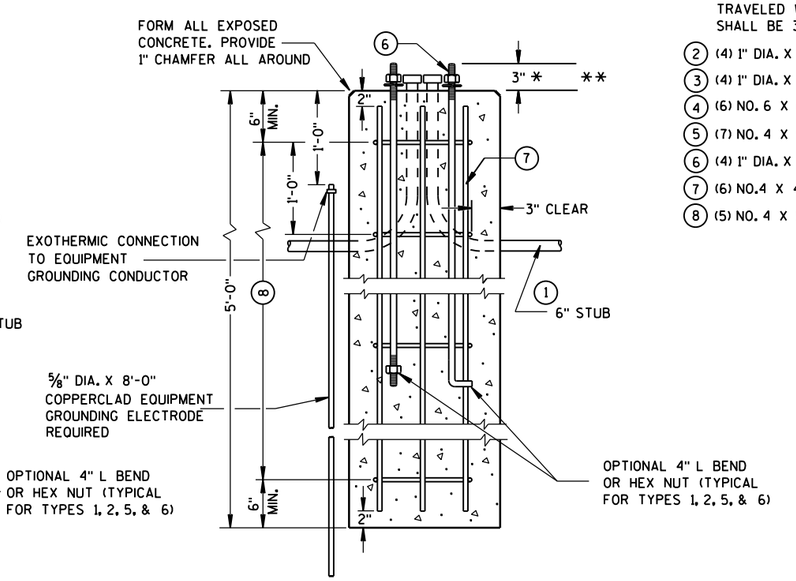
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 1



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 378
FHWA

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S.D.D. 9 C 2-7

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GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

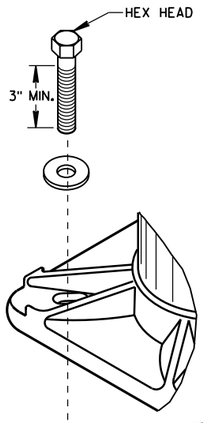
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

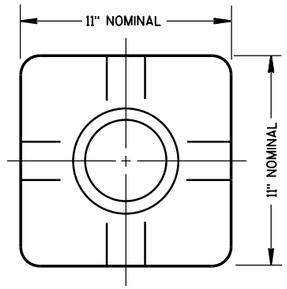
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

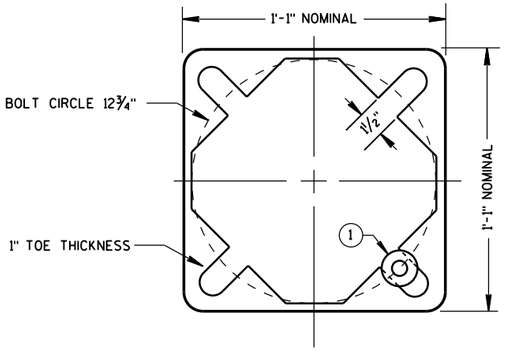
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

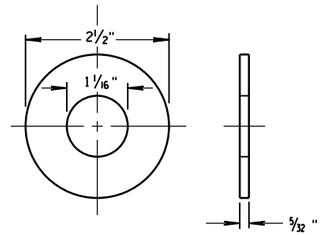




TOP VIEW
(PEDESTAL BASE)

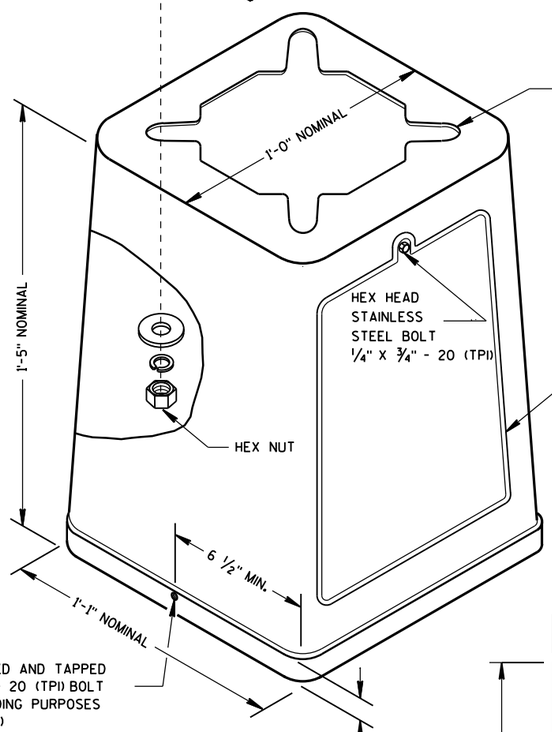


BOTTOM VIEW
(PEDESTAL BASE)

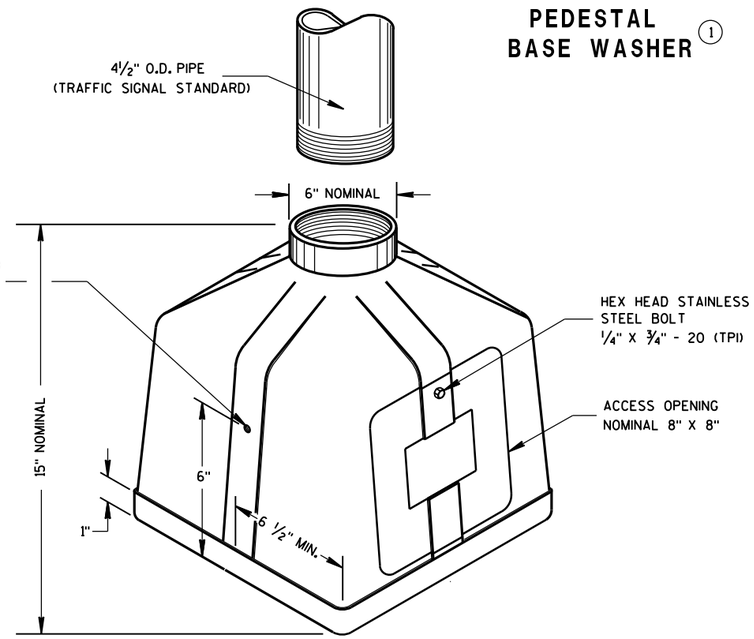


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

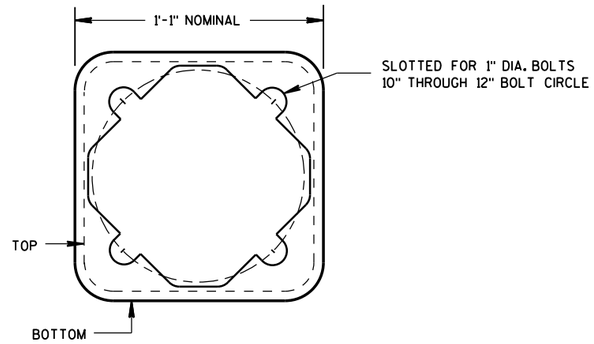


ISOMETRIC VIEW

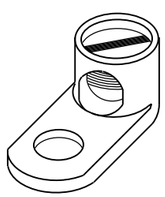


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

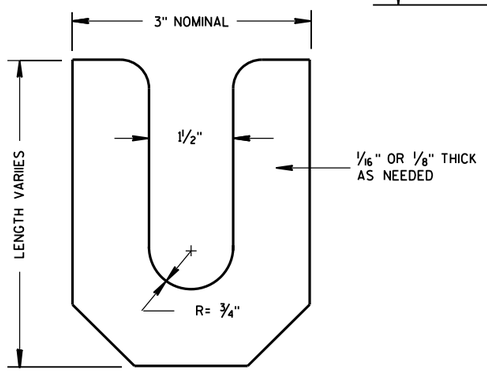


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

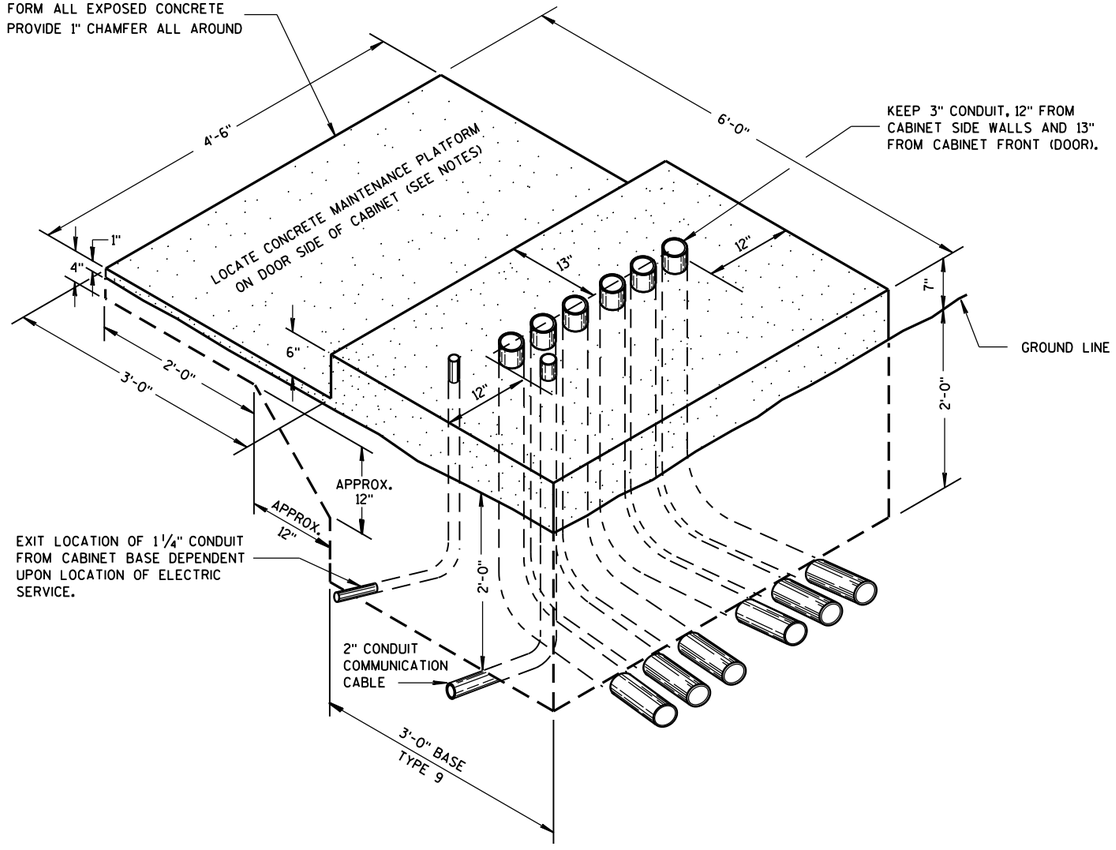
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Sept. 2014 — DATE
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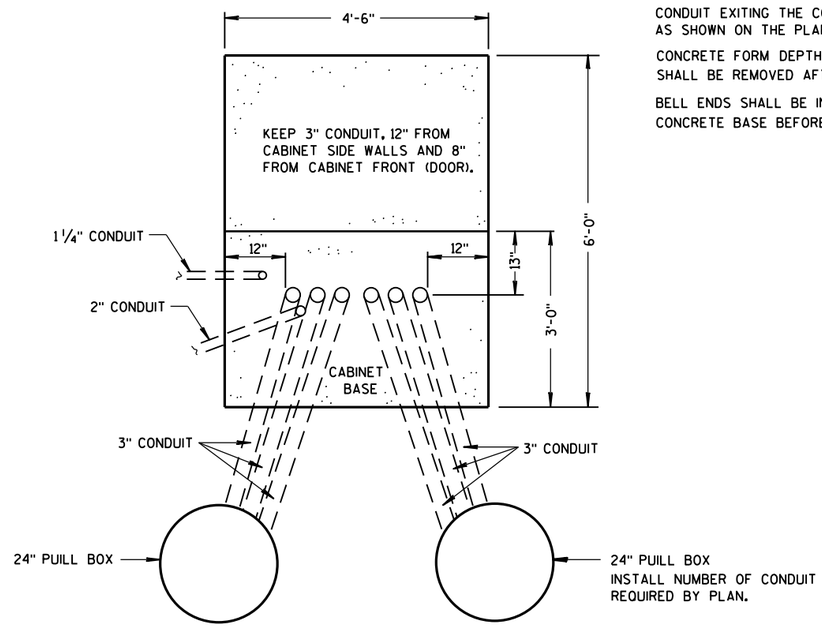
S.D.D. 9 C 3-4



ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

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

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

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

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

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

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
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/S/ Ahmet Demirbilek — STATE ELECTRICAL 380
FHWA

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

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

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

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

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

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

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

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

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

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

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

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

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

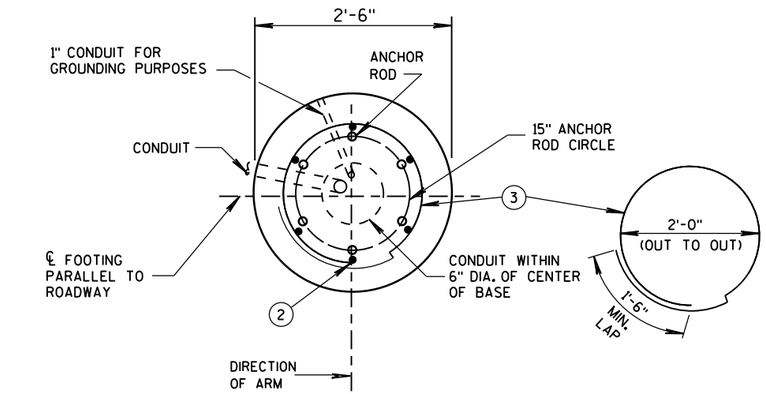
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

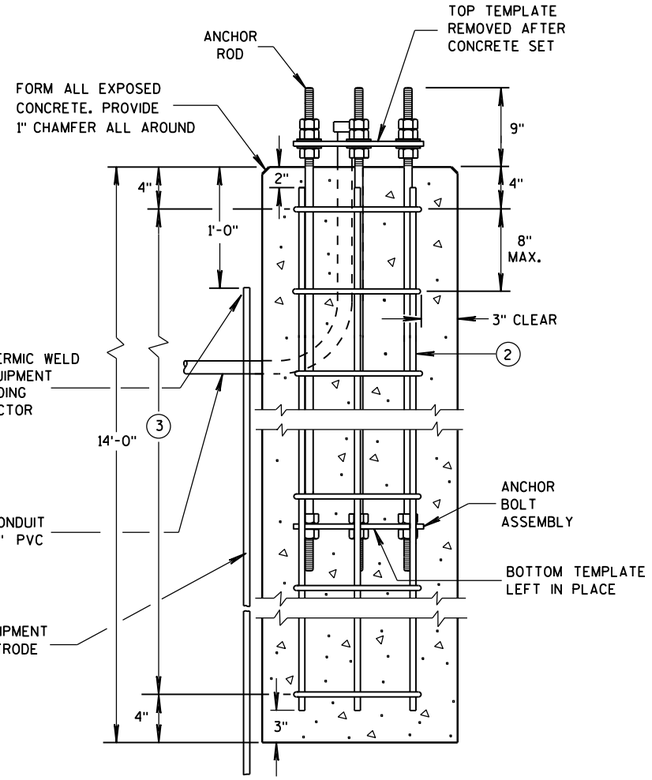
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN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

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATION)	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.

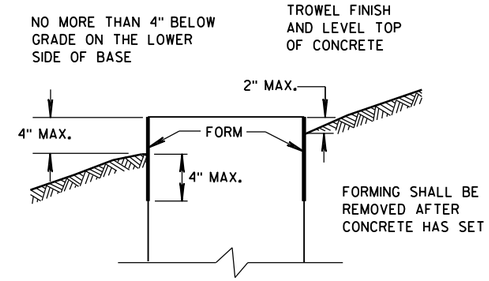




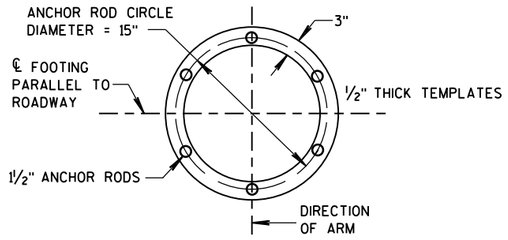
CONCRETE BASE TYPE 10

(FOR TYPE 9 & 10 & OVER HEIGHT (OH) POLES)

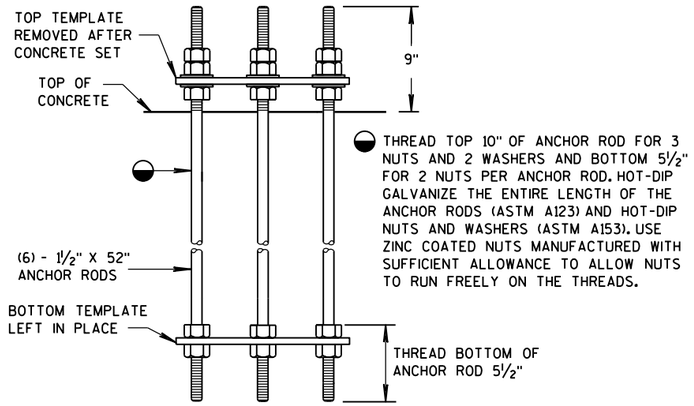
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

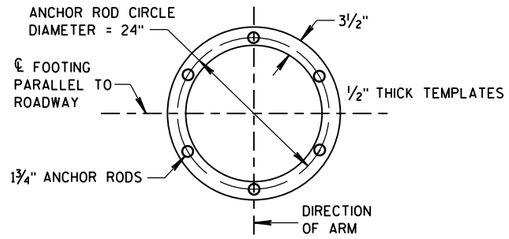
APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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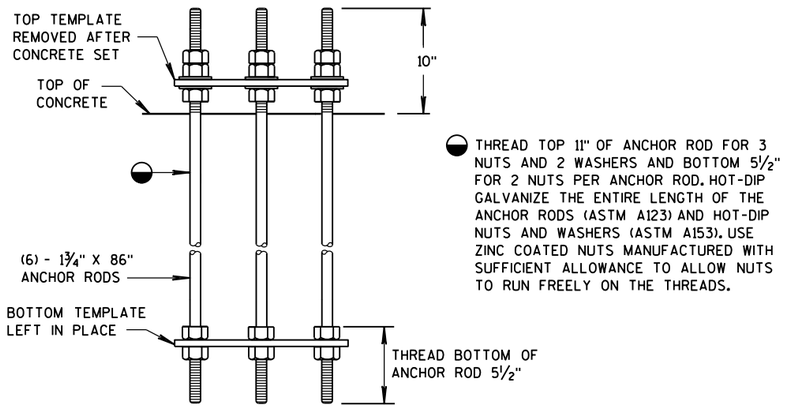
S.D.D. 9 C 11-10

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S.D.D. 9 C 11-10

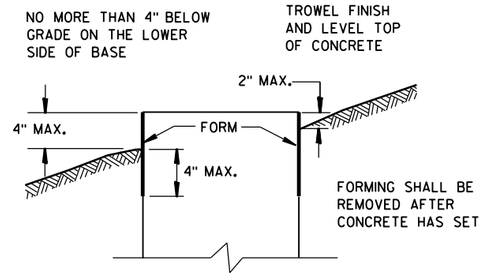


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



FORMING DETAIL

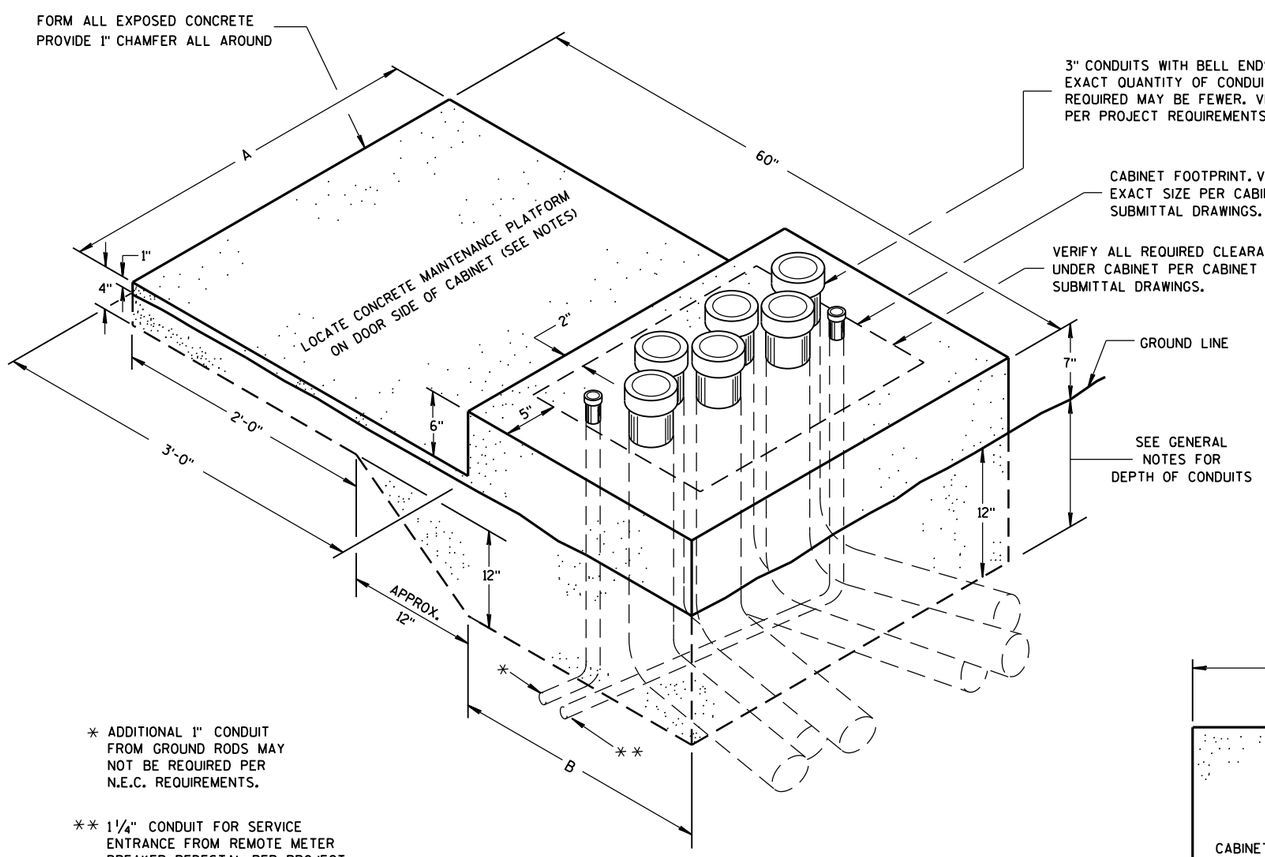
CONCRETE BASE TYPE 13	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2017 DATE FHWA	/S/ Ahmet Demirbilek STATE ELECTRICAL

6

S.D.D. 9 C 12-9b

6

S.D.D. 9 C 12-9b



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

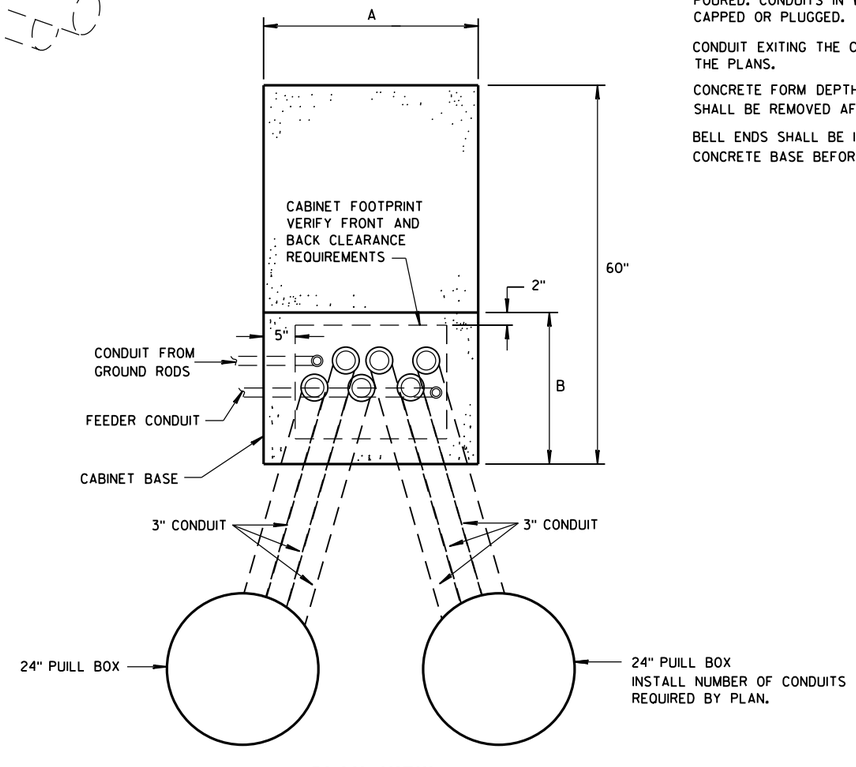
** 1¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

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

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

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

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

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

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

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

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

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

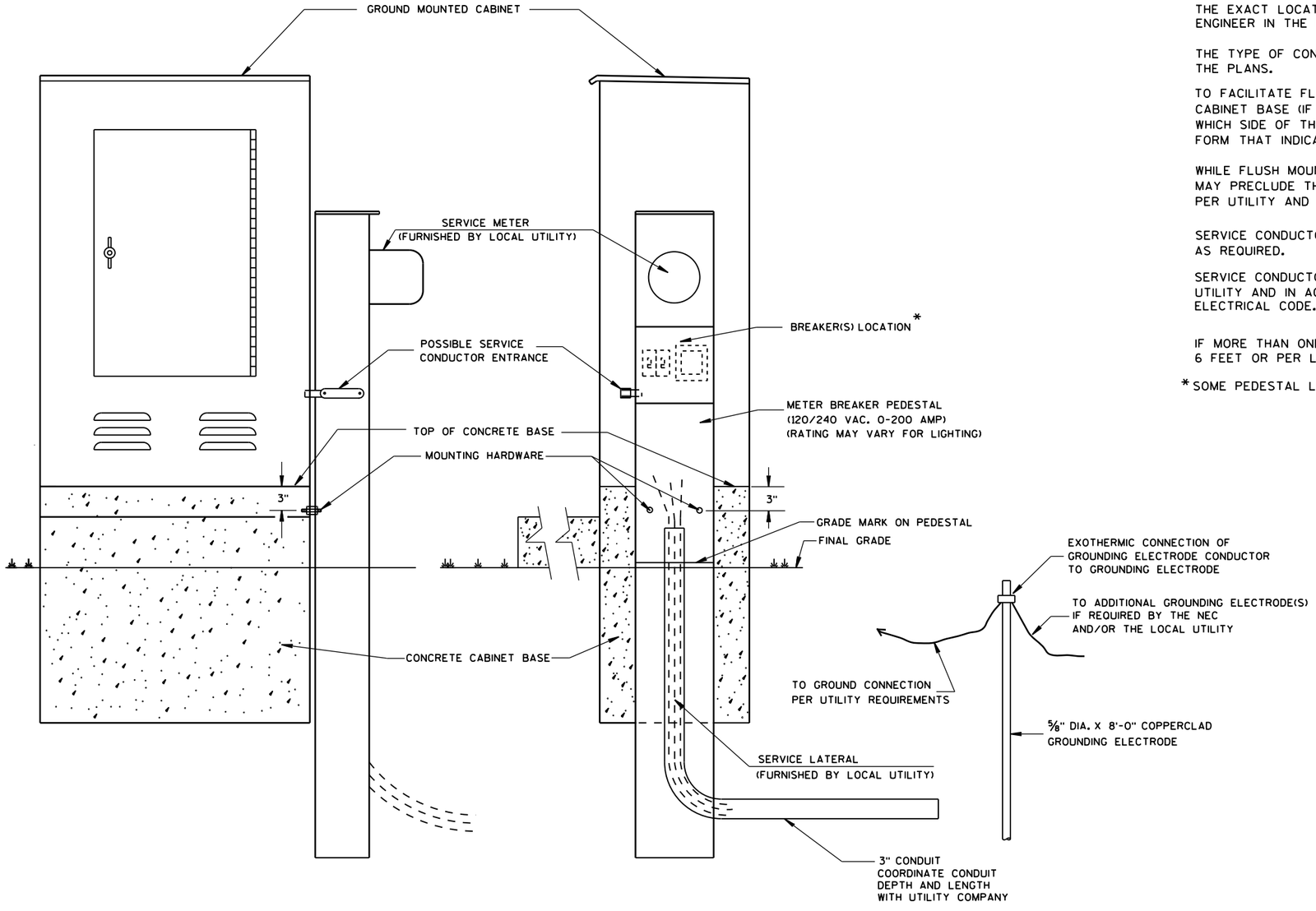
CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Thomas Gonring — STATE LIGHTING ENGINE
FHWA

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S.D.D. 9 C 14-2



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

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

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

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

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

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

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

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

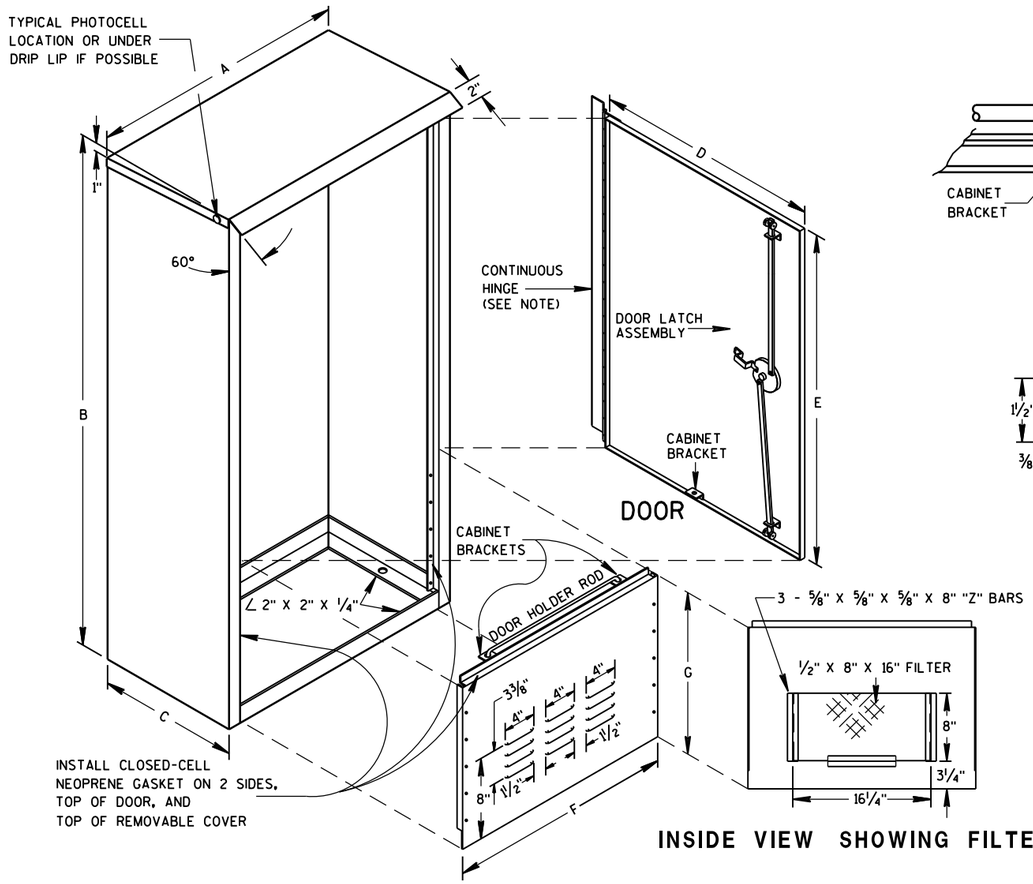
*SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

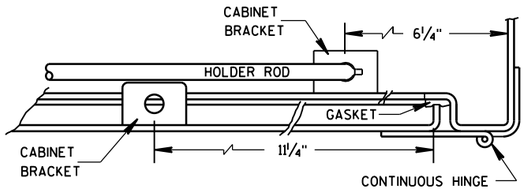
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 D 1-5

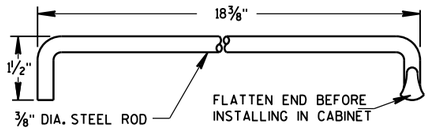


INSIDE VIEW SHOWING FILTER

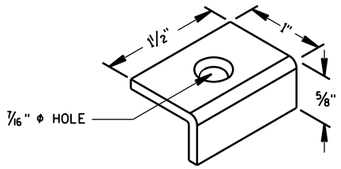
REMOVABLE COVER



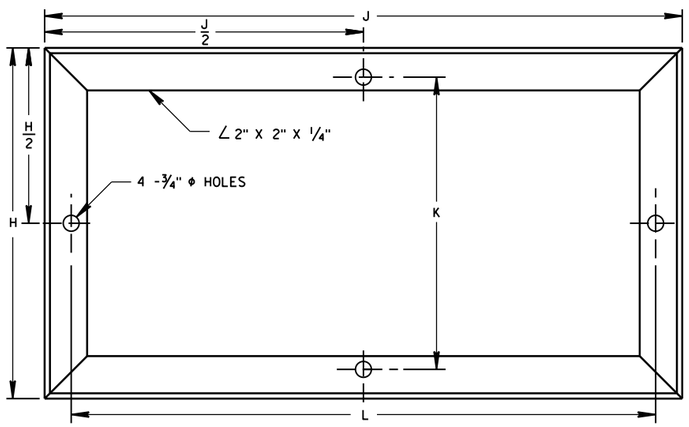
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

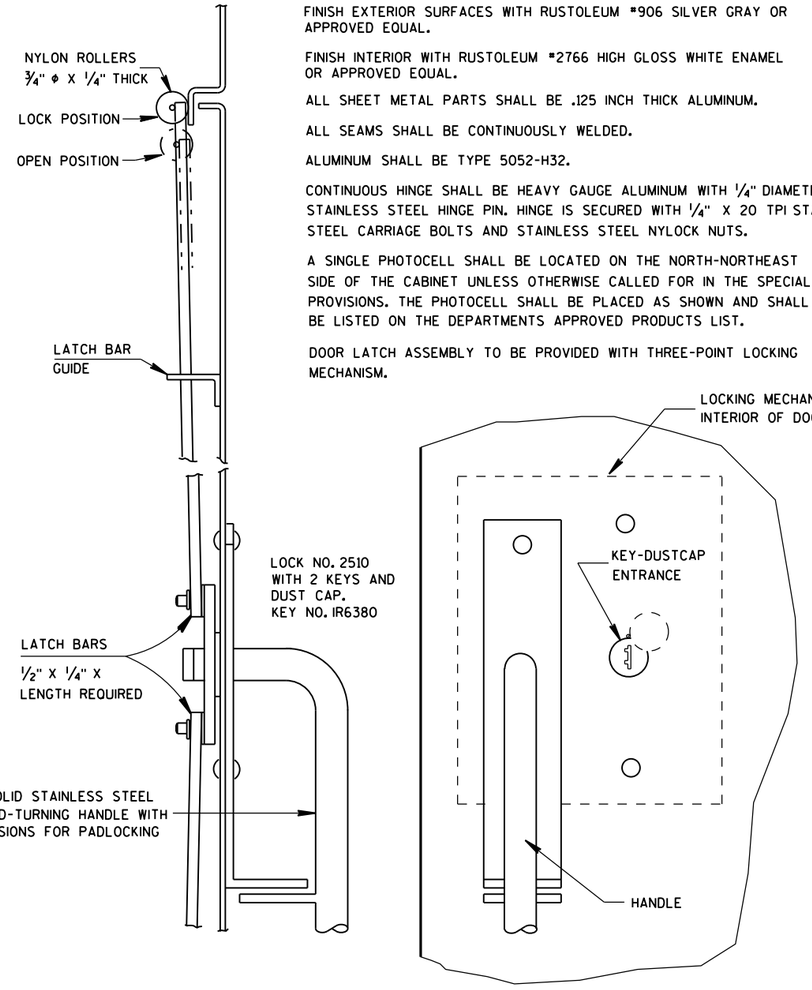
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

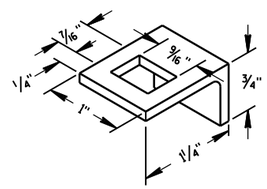
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL 385
FHWA

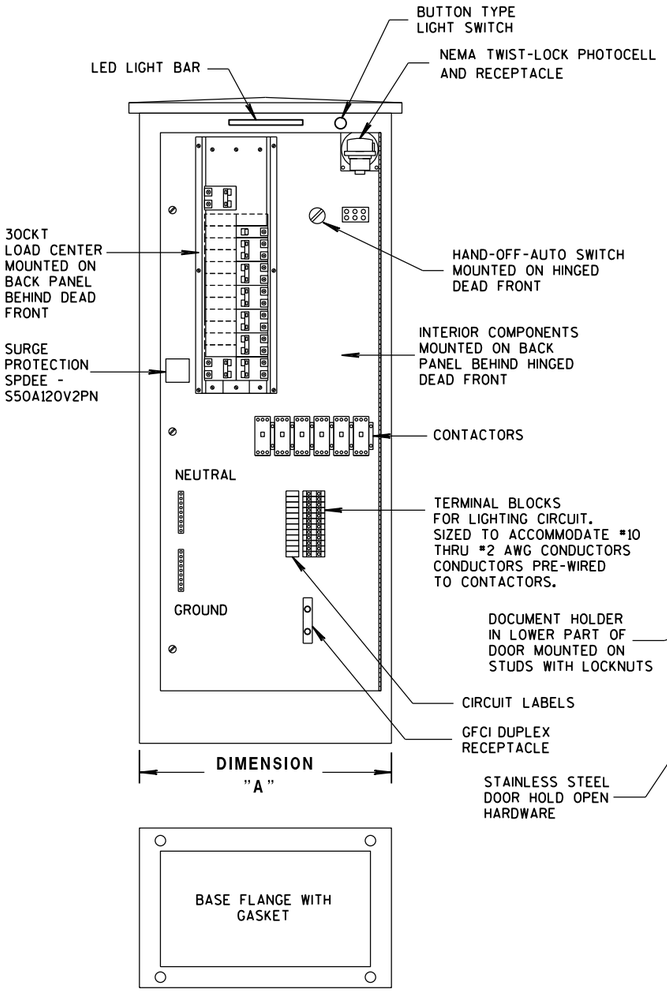
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S.D.D. 9 D 2-3

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S.D.D. 9 D 2-3

FRONT INTERIOR ELEVATION



SIDE VIEW

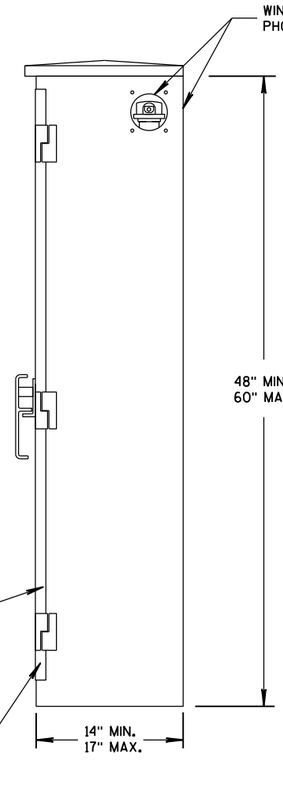
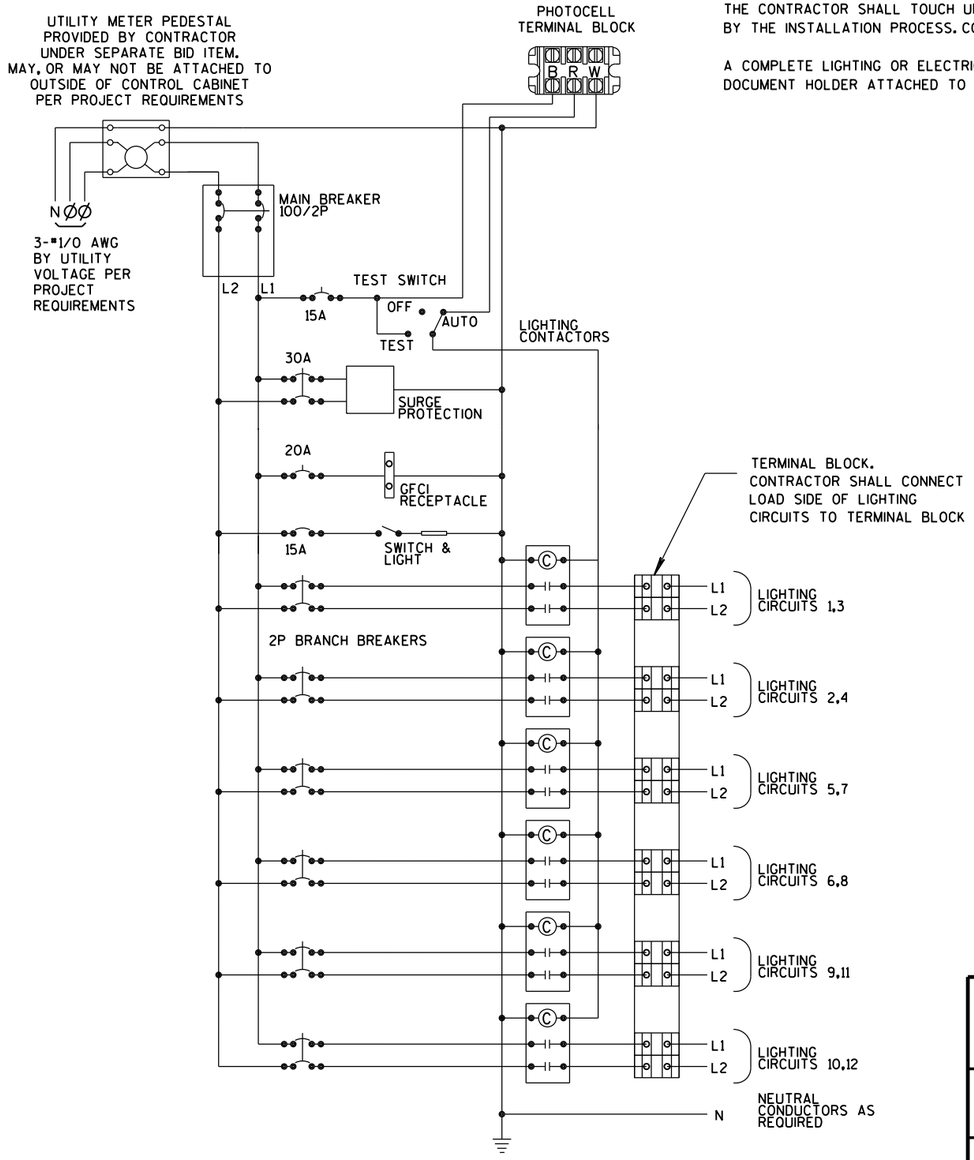


TABLE OF DIMENSIONS (INCHES)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

GENERAL NOTES

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

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

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

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

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

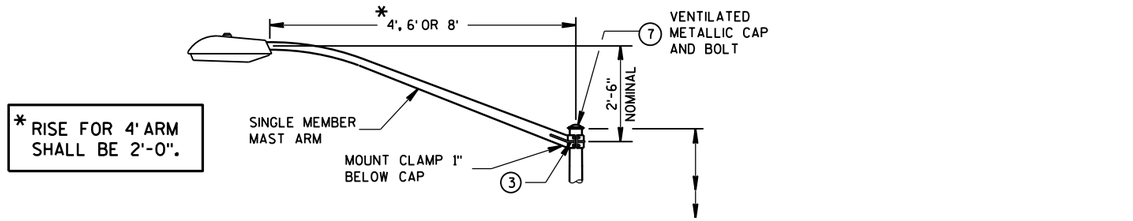
A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

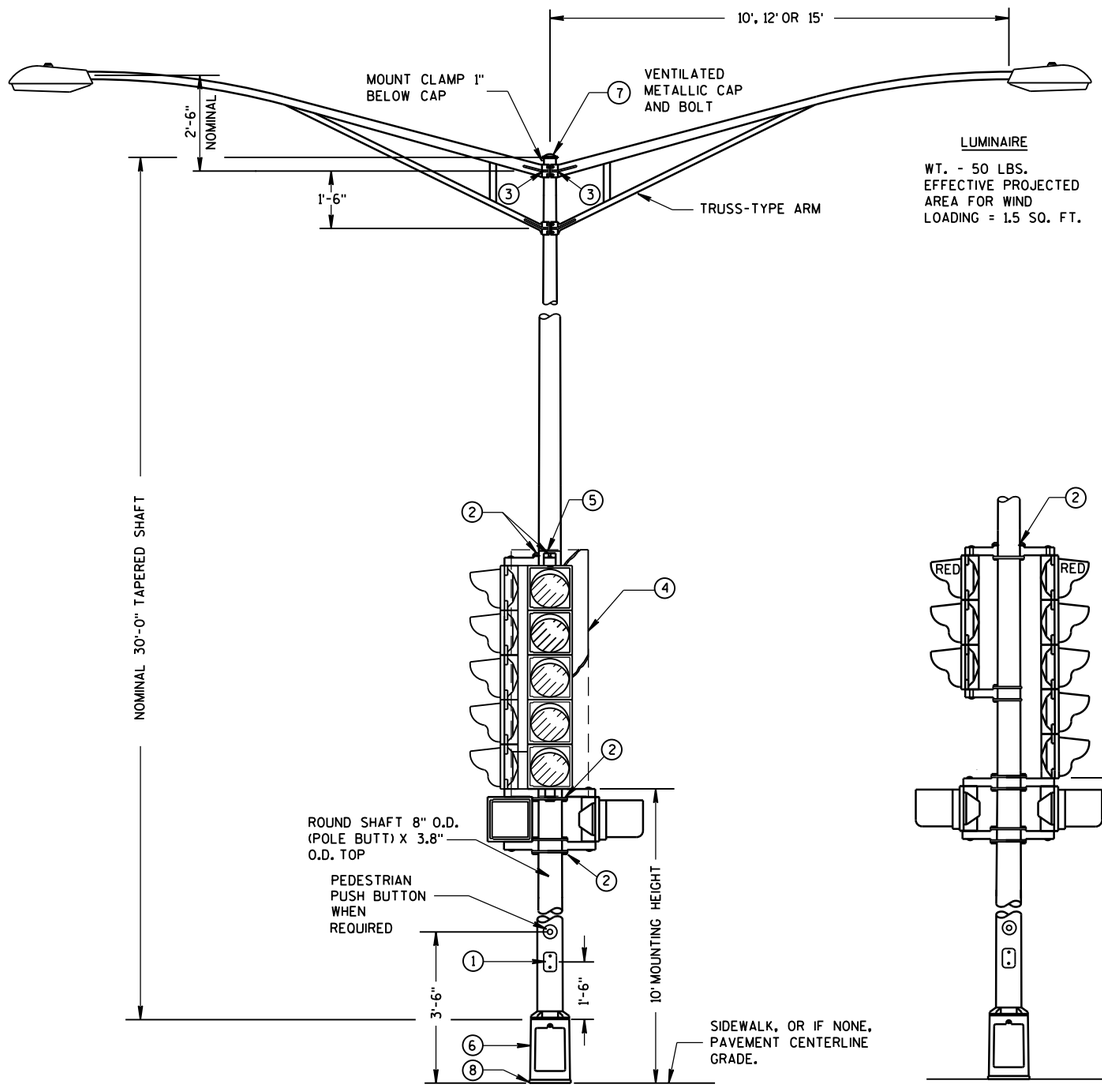
LIGHTING CONTROL CABINET 120/240 VOLT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 DATE
/S/ Thomas Gonring STATE LIGHTING ENGINEER
386
FHWA

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S.D.D. 9 D 4-2

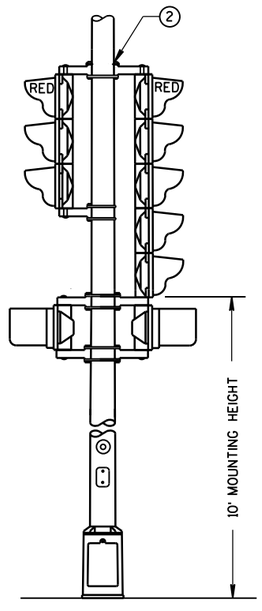




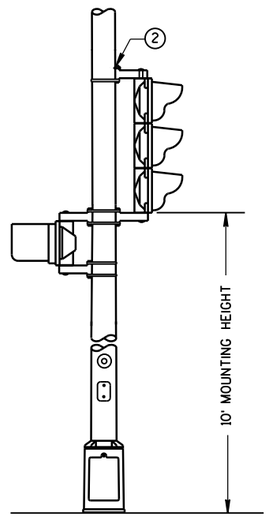
LUMINAIRE

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

(MAXIMUM LOAD)

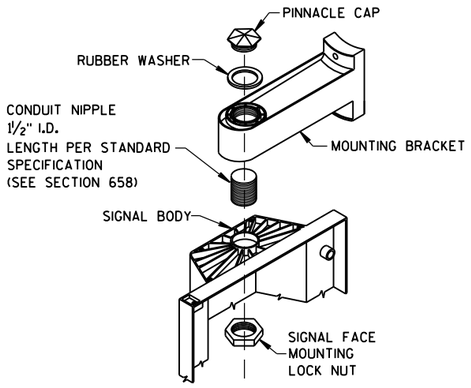


TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 4 POLE MOUNTING CONFIGURATION



SIGNAL FACE MOUNTING DETAIL
(BANDED)

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

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

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, 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.

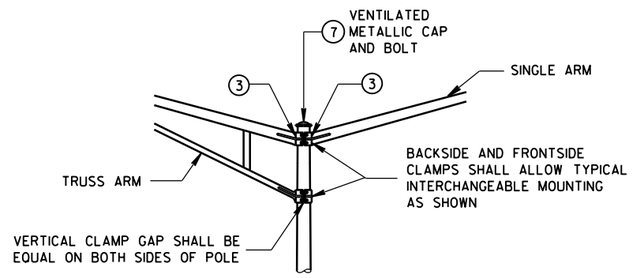
(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(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) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

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

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



INTERCHANGEABLE MOUNTING DETAIL

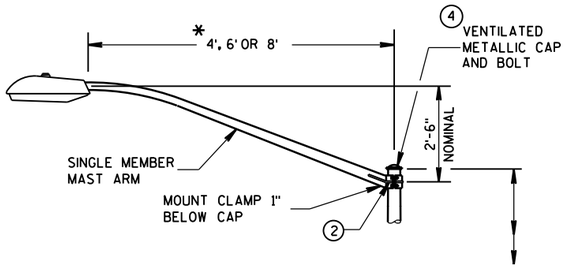
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

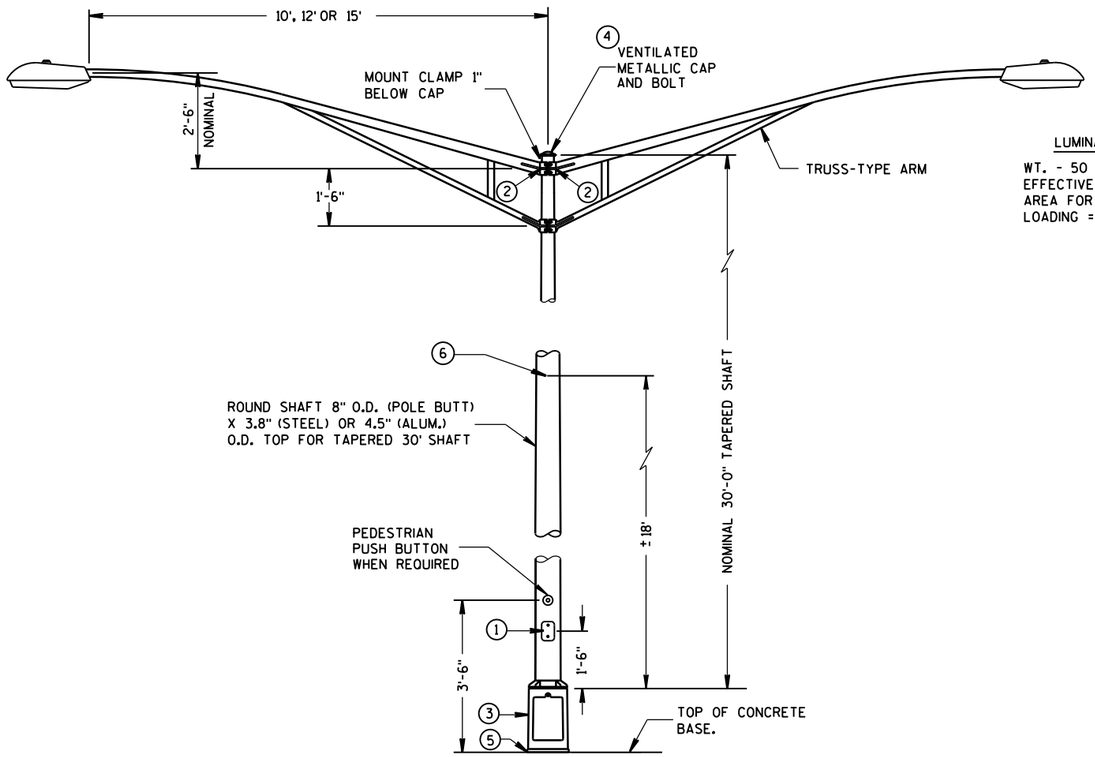
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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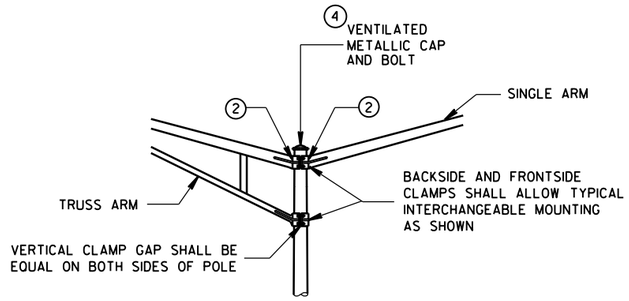
S.D.D. 9 E 1-14c

*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.

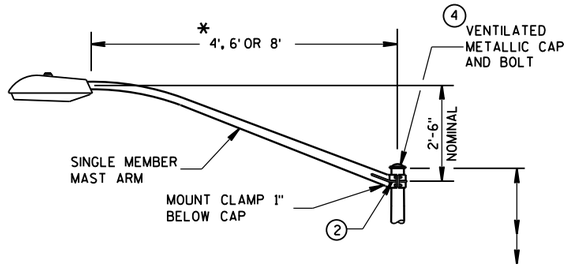
POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

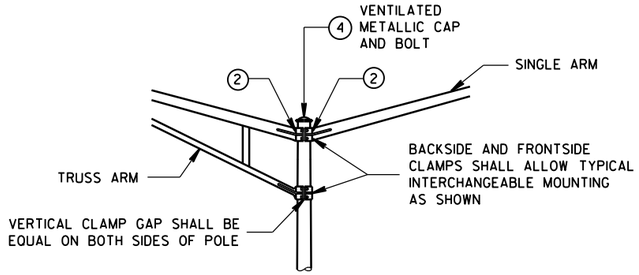
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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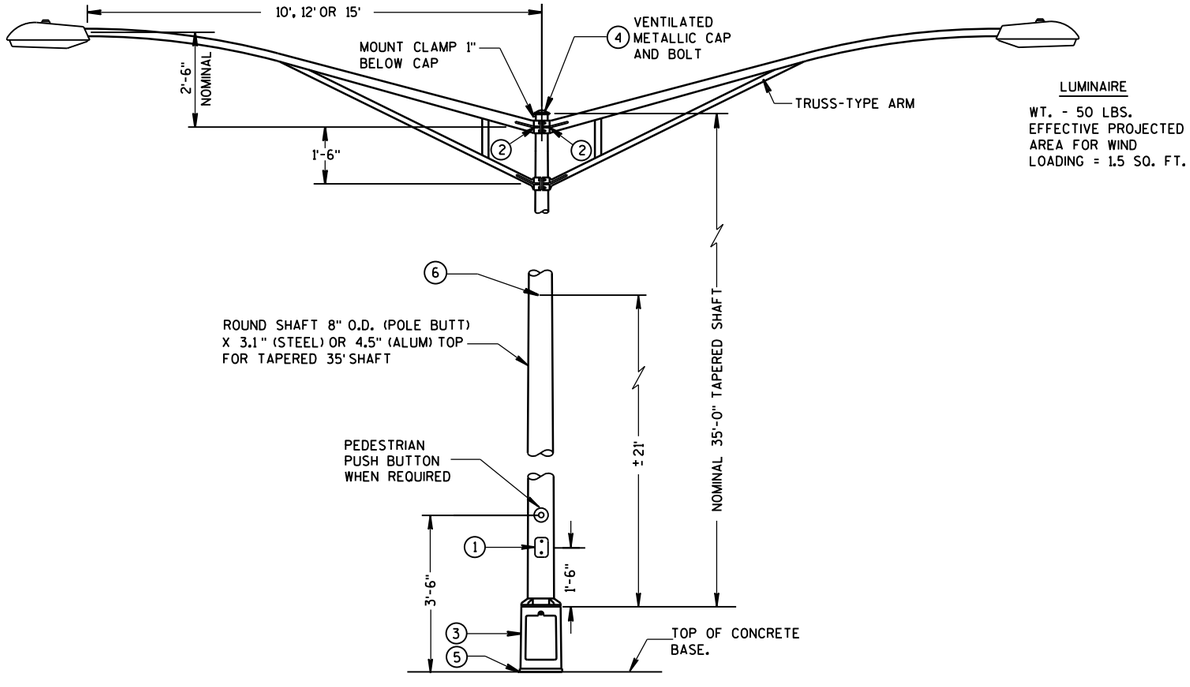
S.D.D. 9 E 1-14d

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





INTERCHANGEABLE MOUNTING DETAIL



TYPE 6 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY

GENERAL NOTES

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

ALL TYPE 6 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

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

TYPE 6 ALUMINUM POLES, SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 6 ALUMINUM POLES SHALL HAVE MINIMUM WALL THICKNESS OF 0.219".

TYPE 6 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 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) 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.

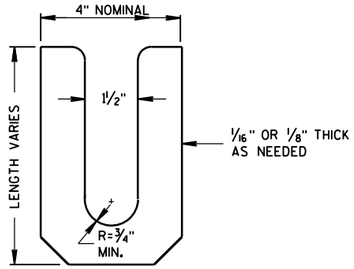
(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)

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DEPARTMENT OF TRANSPOI

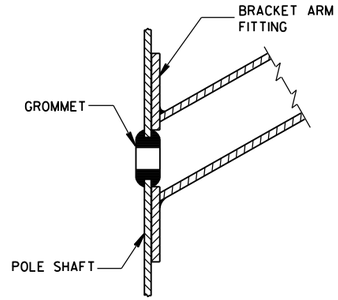
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S.D.D. 9 E 1-14e

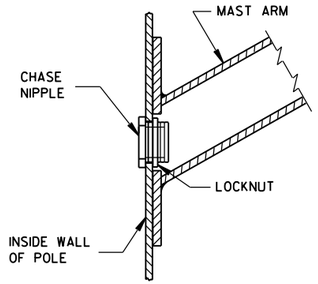


LEVELING SHIM (13)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

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

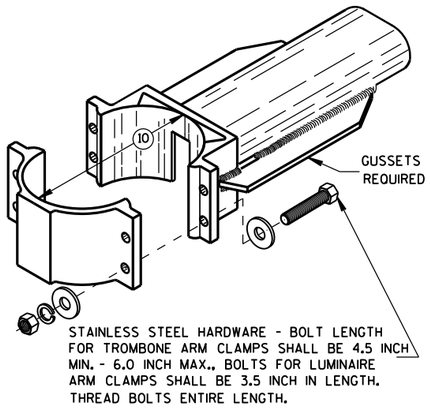
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

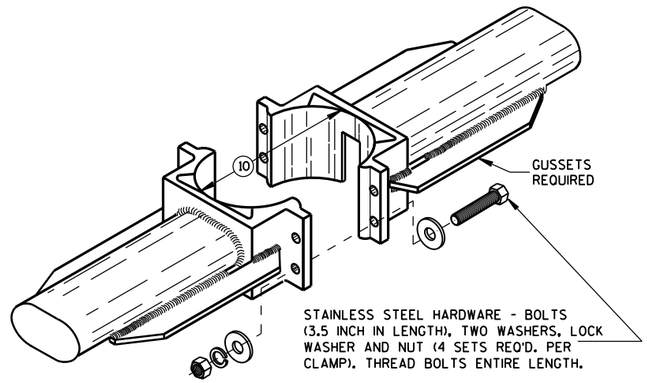
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

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

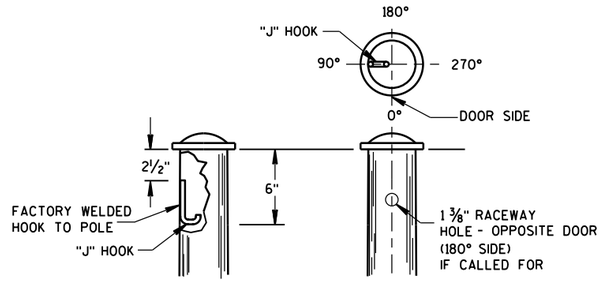
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



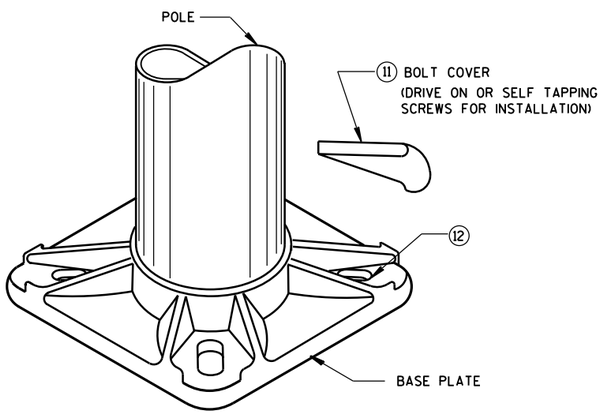
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



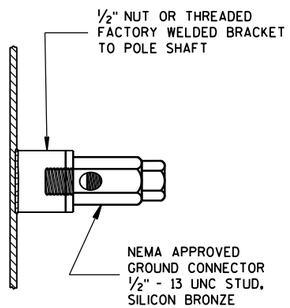
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

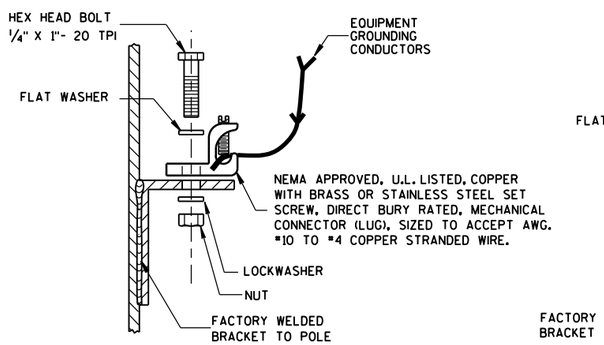


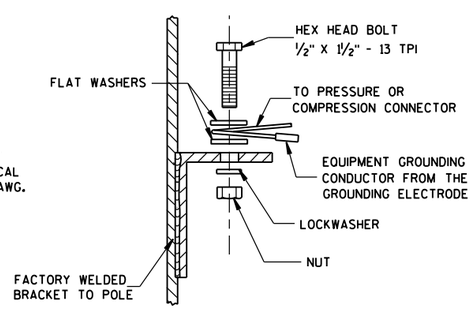
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

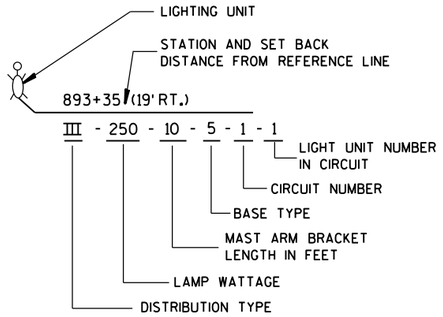
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015
DATE

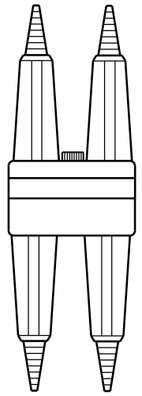
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

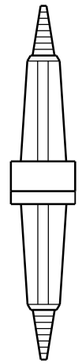
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S.D.D. 9 E 1-14g



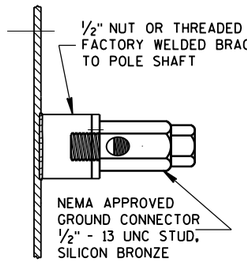
LIGHTING UNIT CODE
(TYPICAL)

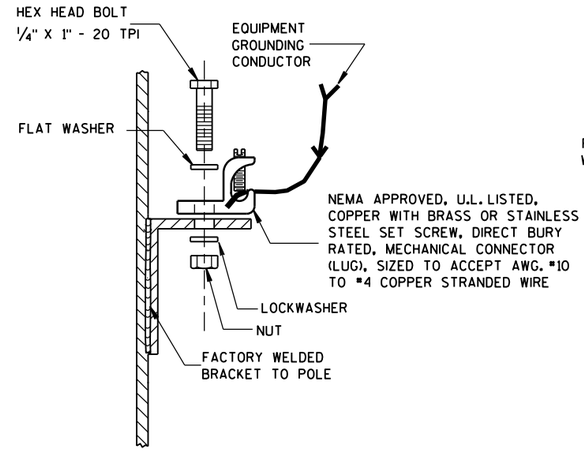


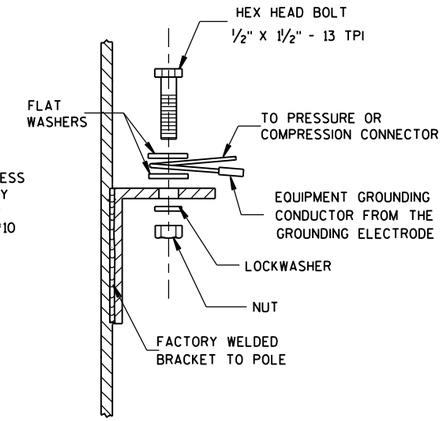
DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



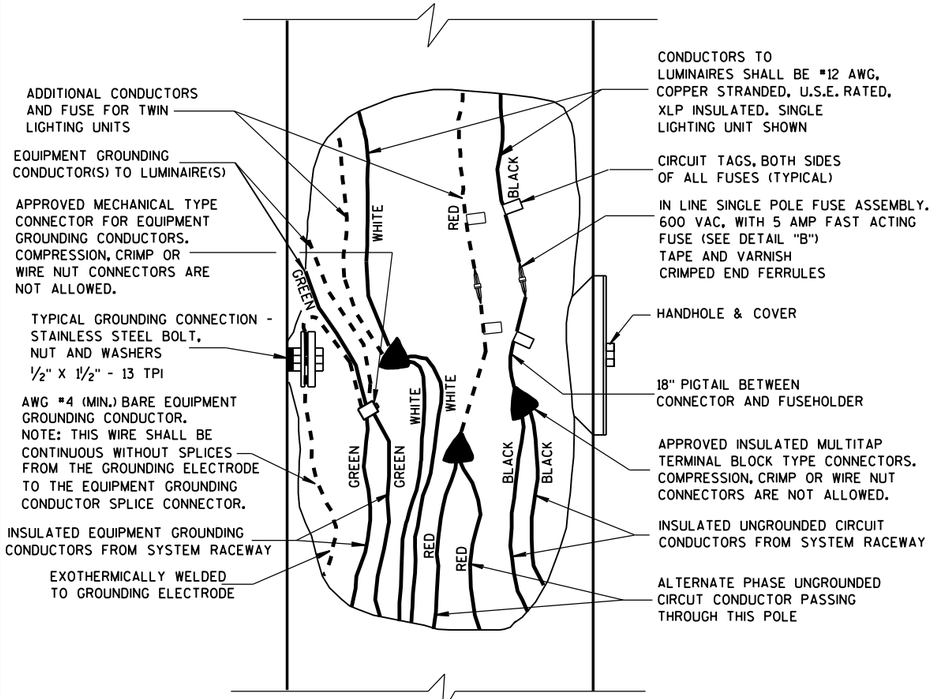
DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT



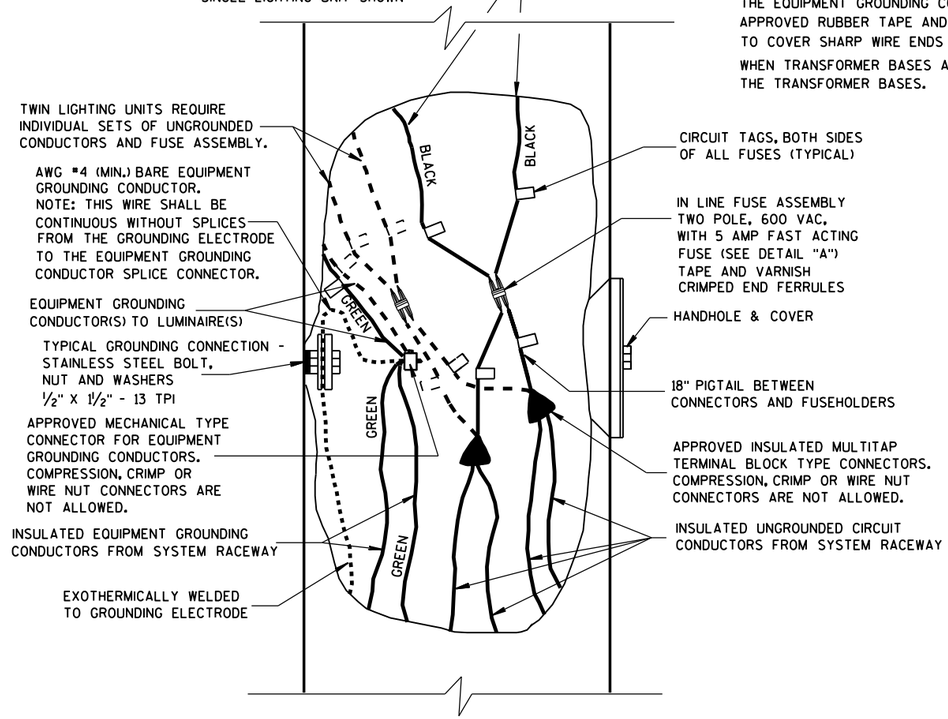




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



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



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

GENERAL NOTES

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

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

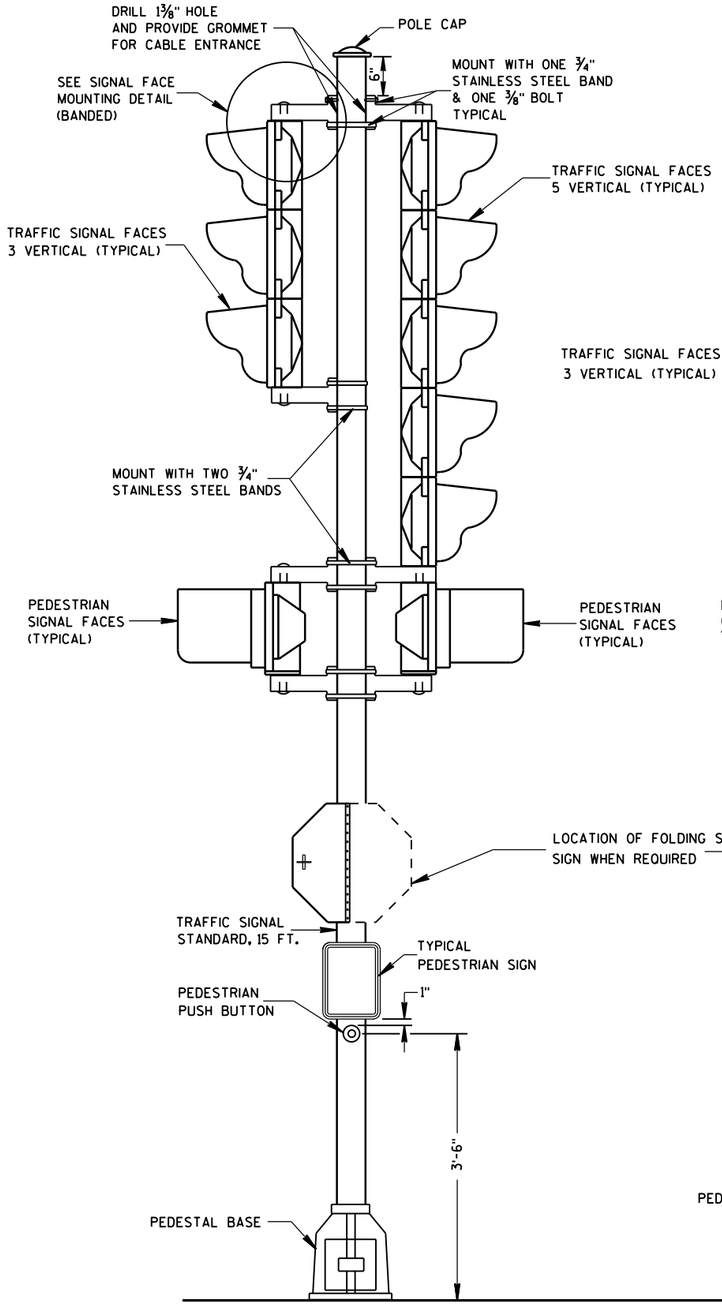
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

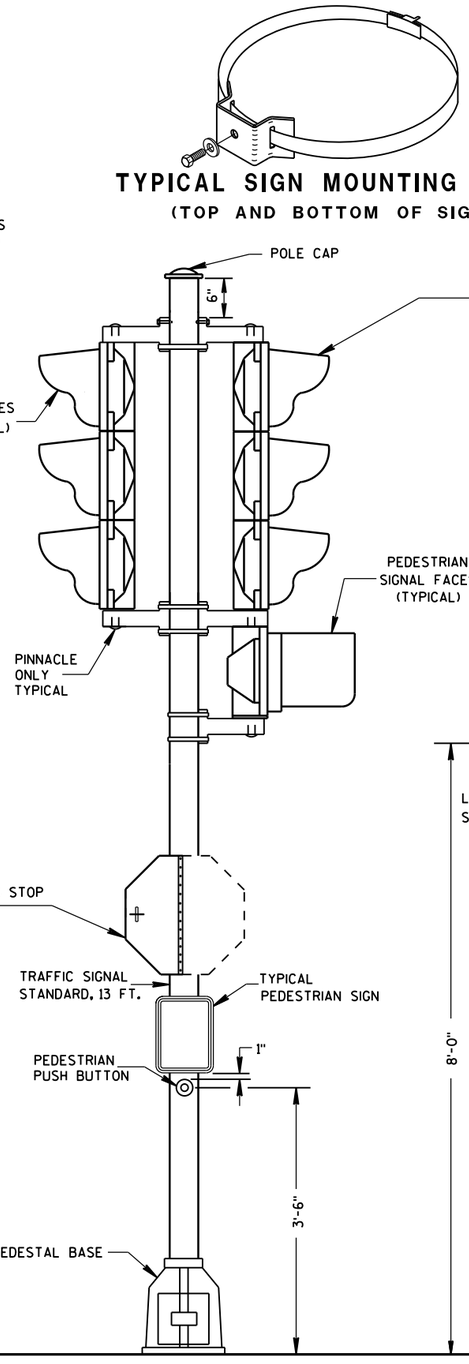
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 9 E 3-5

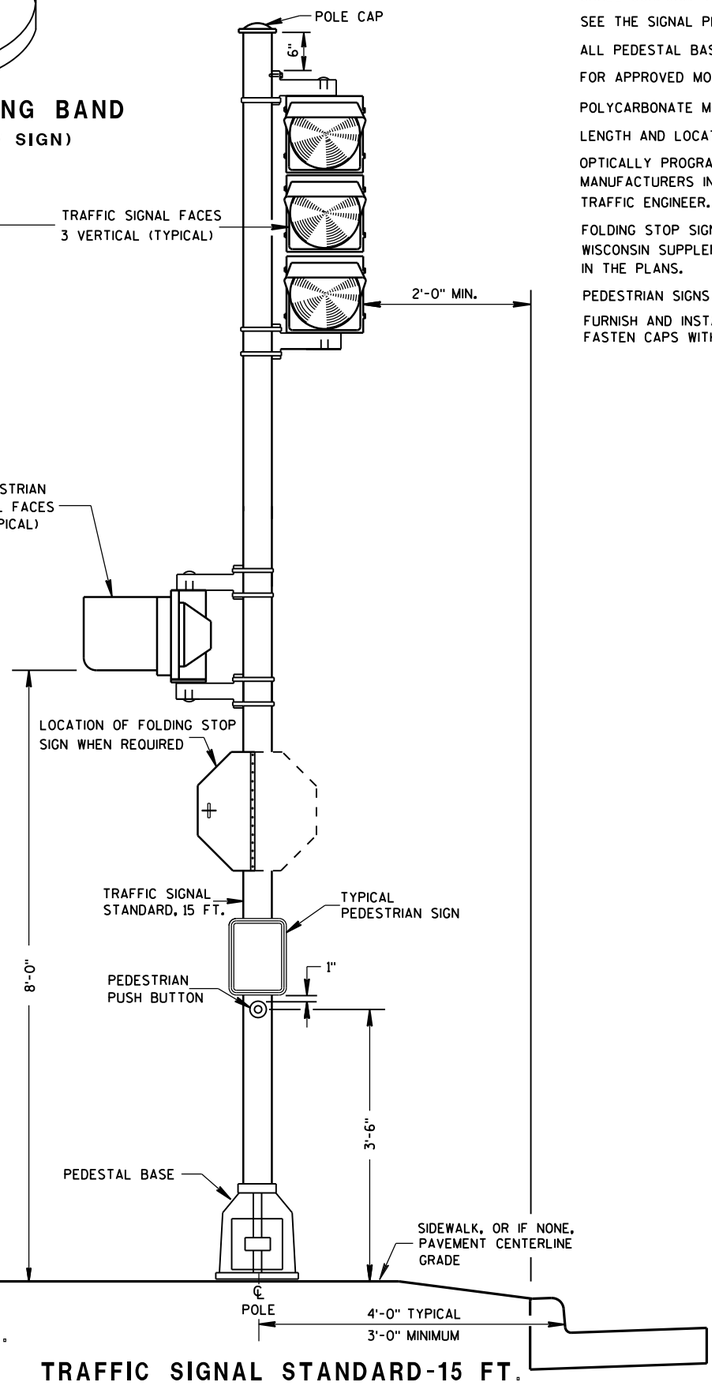


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



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

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

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

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

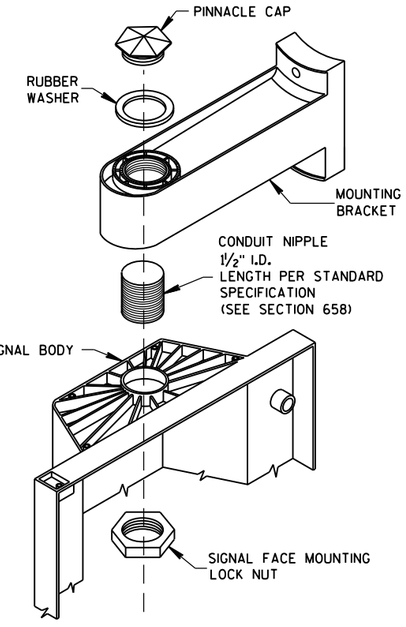
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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

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

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

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



SIGNAL FACE MOUNTING DETAIL
(BANDED)

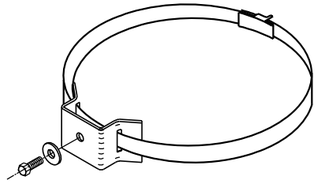
TRAFFIC SIGNAL STANDARD
POLY BRACKET MOUNTINGS
(TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
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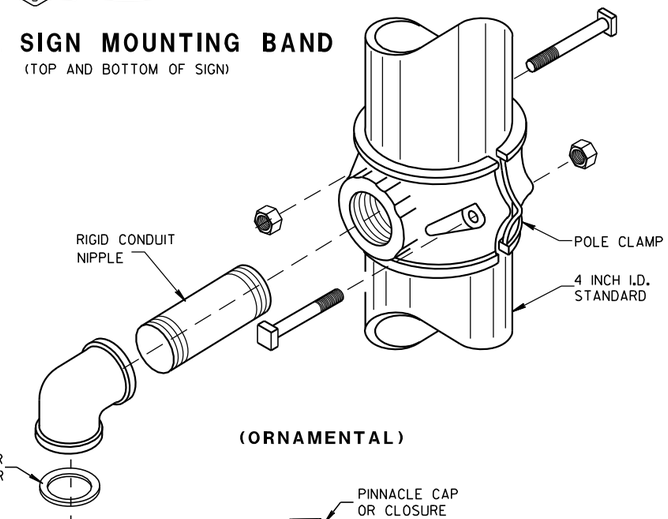
APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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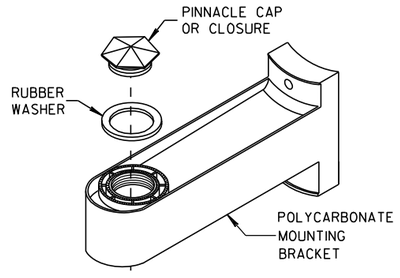
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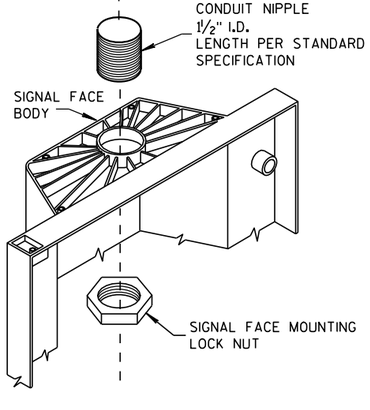
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



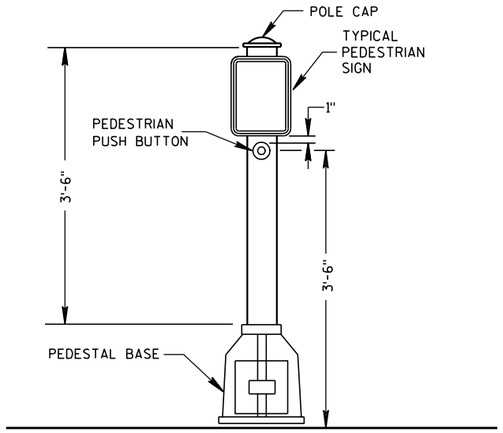
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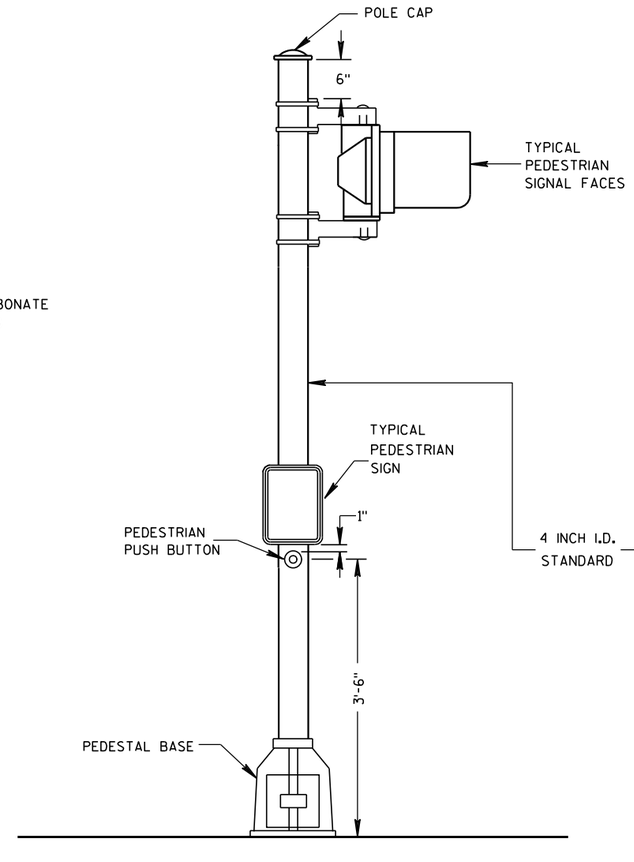
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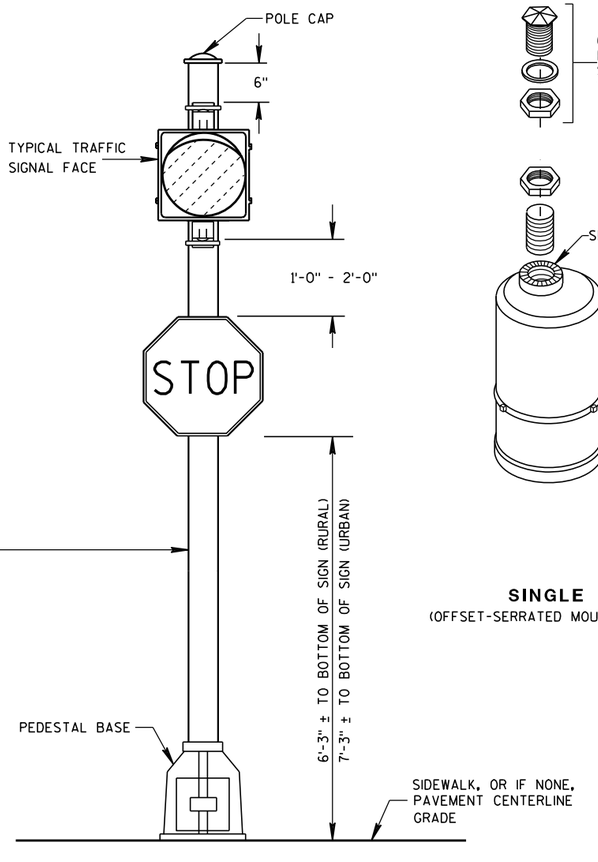
SIGNAL FACE MOUNTING DETAILS



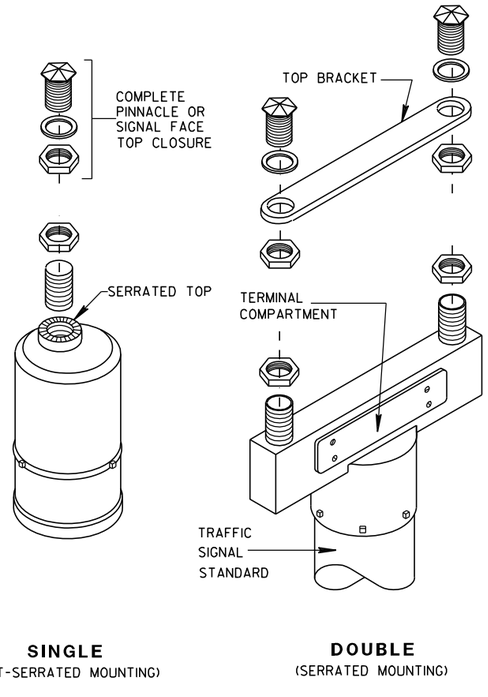
PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING



PEDESTRIAN FACE STANDARD-10 FT.
(WALK-DON'T WALK)



STANDARD FLASHER.
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET-SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

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

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

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

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

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

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/11/10
DATE

/S/ John Corbin
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30'-0" MAX.

8'-0" *

15'-0" MAX.

SEE ARM CONNECTION DETAIL

SIGN 18" X 108"

**

* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

25'-6" MAXIMUM MOUNTING HEIGHT

17'-6" MINIMUM MOUNTING HEIGHT

ROADWAY PAVEMENT

R4-7
24" x 30"

19'-0"

10'-0"

FOLDING STOP SIGN
30" x 30"

POLE: (.14"/FT. TAPER)
1 PIECE (NO WELDED POLE SECTIONS)
POLE BUTT DIA. = 11.50"

TYPICAL PEDESTRIAN SIGN

PEDESTRIAN PUSH BUTTON

ANCHOR RODS:
FY=55 KSI
ASTM F1554 GR 55
ROD CIRCLE = 15"
ANCHOR ROD DIAM. 1½"
GALVANIZED. (6 ANCHOR RODS)

3'-6"

MAXIMUM BASE PLATE THICKNESS = 2½"

POLE

RING PLATE ⅜" MIN. THICKNESS

GUSSET PLATE ¼" MIN. THICKNESS

ARM

ARM CONNECTION PLATES

1" X 6" HIGH STRENGTH CONNECTION BOLTS

FLANGE CONNECTION
PLATE BOLT HOLES TO BE BOLT NOMINAL DIAMETER + ⅛" CONFORMING TO ASTM A 325

6 BOLT ARM CONNECTION DETAIL

FLAT WASHER

BOLT HEAD

NUT

DTI WASHER

RECOMMENDED BOLT ASSEMBLY DETAIL

DIRECTION OF ARM

ORIENTATION OF 6 ANCHOR RODS

℄ FOOTING PARALLEL TO ROADWAY

ANCHOR ROD LOCATION

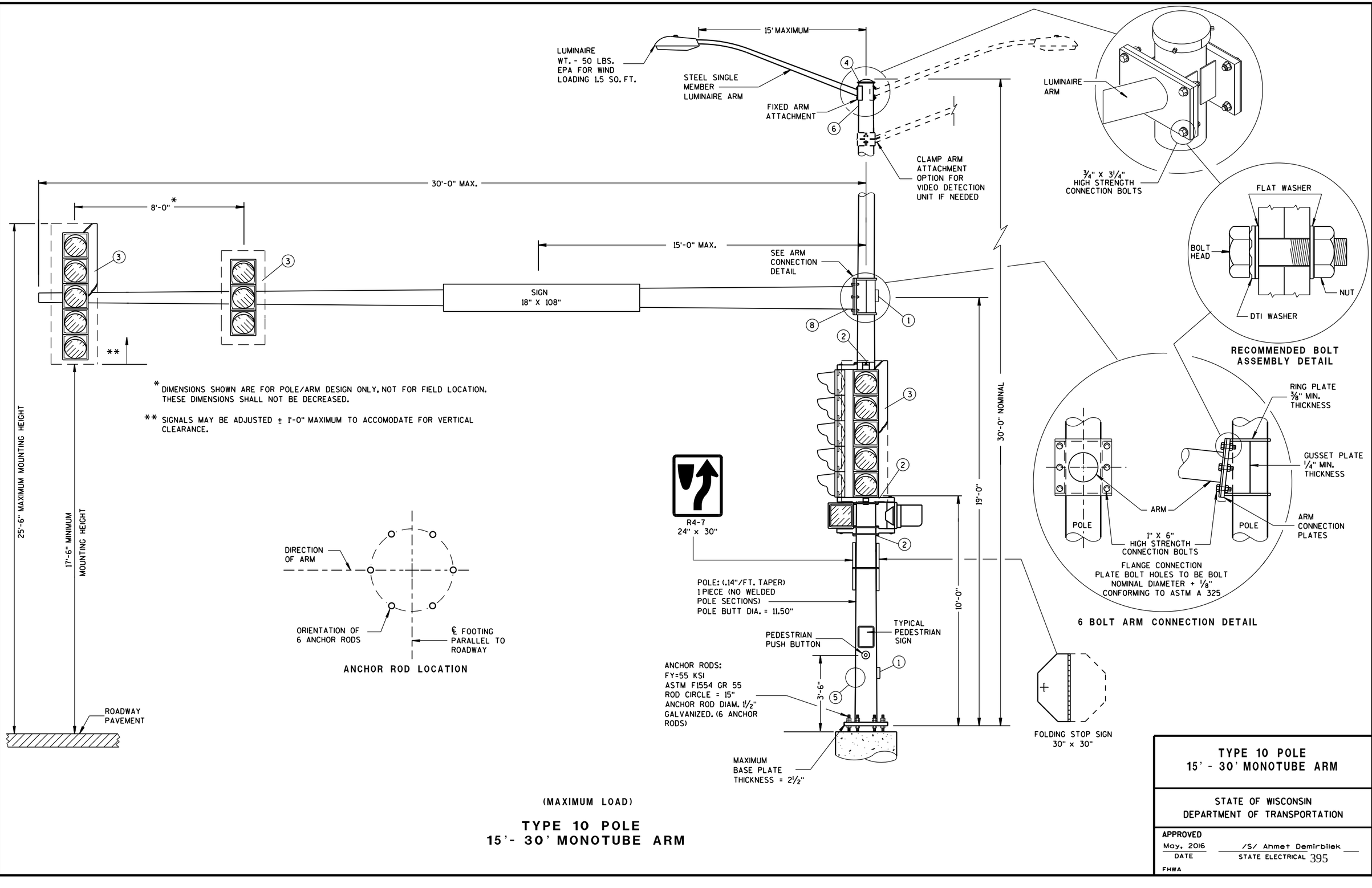
(MAXIMUM LOAD)

TYPE 9 POLE 15'- 30' MONOTUBE ARM

TYPE 9 POLE 15' - 30' MONOTUBE ARM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May, 2016 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA	

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* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

(MAXIMUM LOAD)

TYPE 10 POLE
15'- 30' MONOTUBE ARM

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 395
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GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

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

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

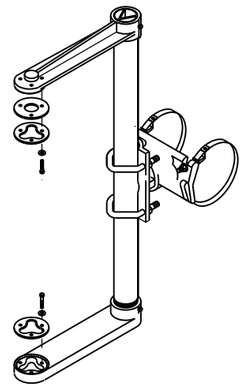
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

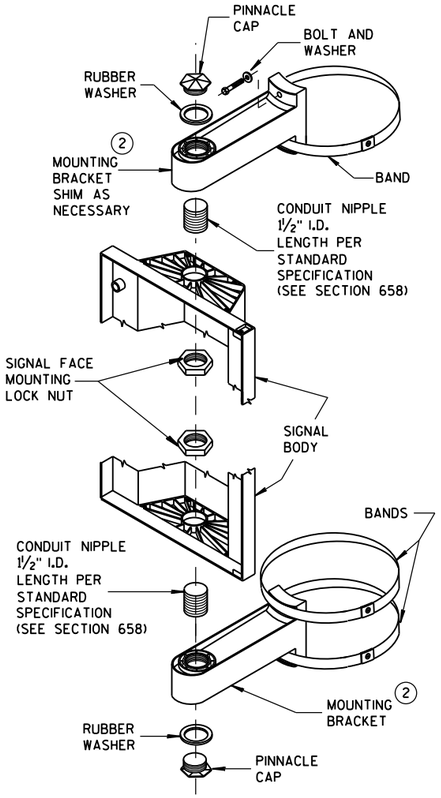
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

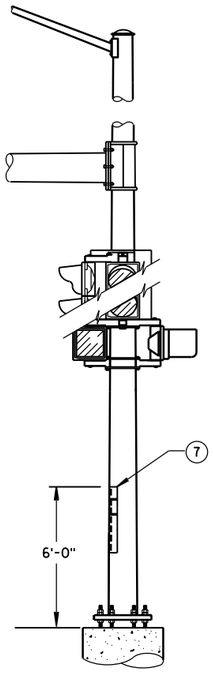


SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM

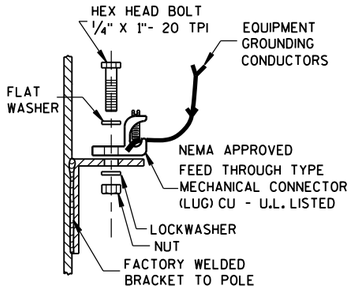
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE
VERTICAL MOUNTING DETAIL

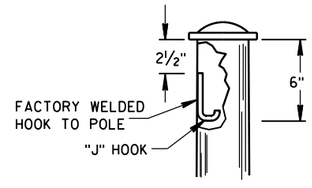


STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL
BE STAINLESS STEEL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL 396

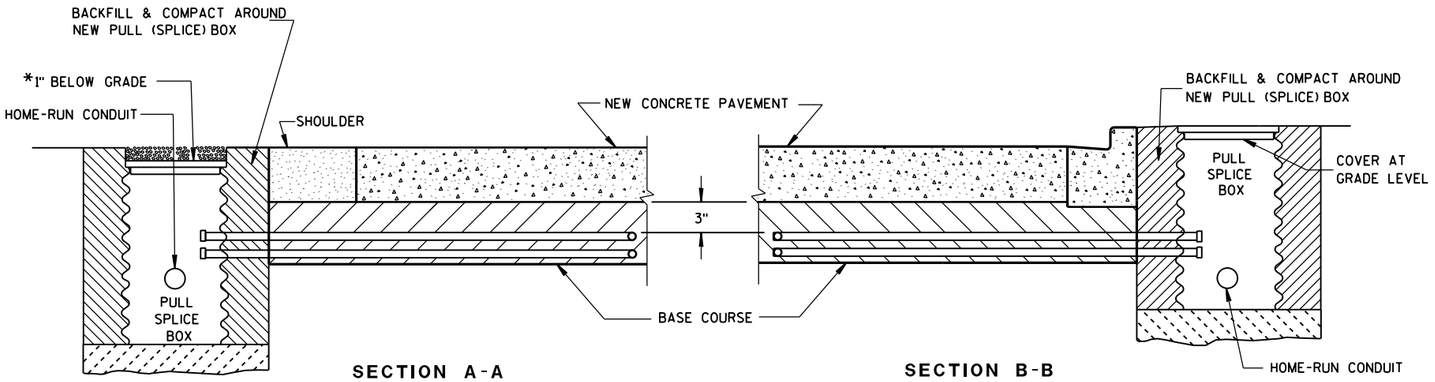
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S.D.D. 9 E 8-8e



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.

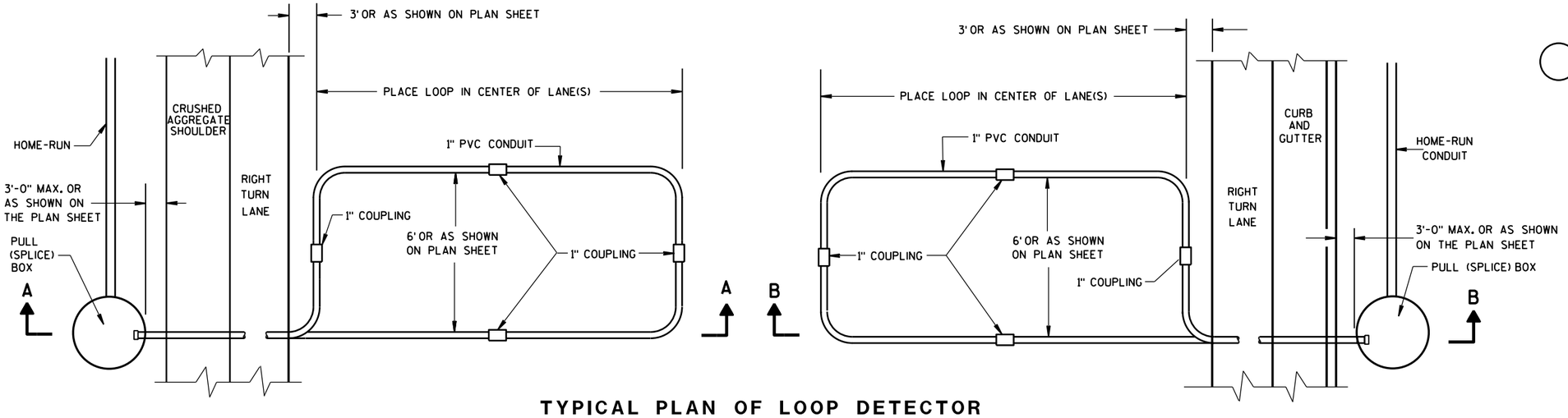
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

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

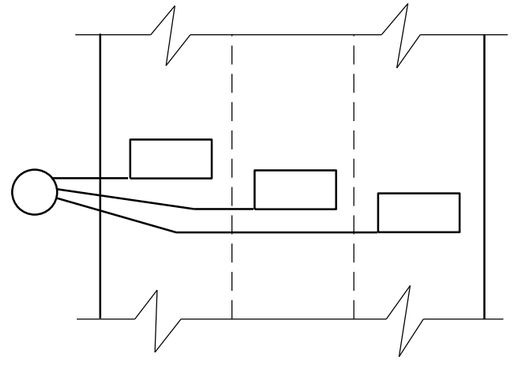
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

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
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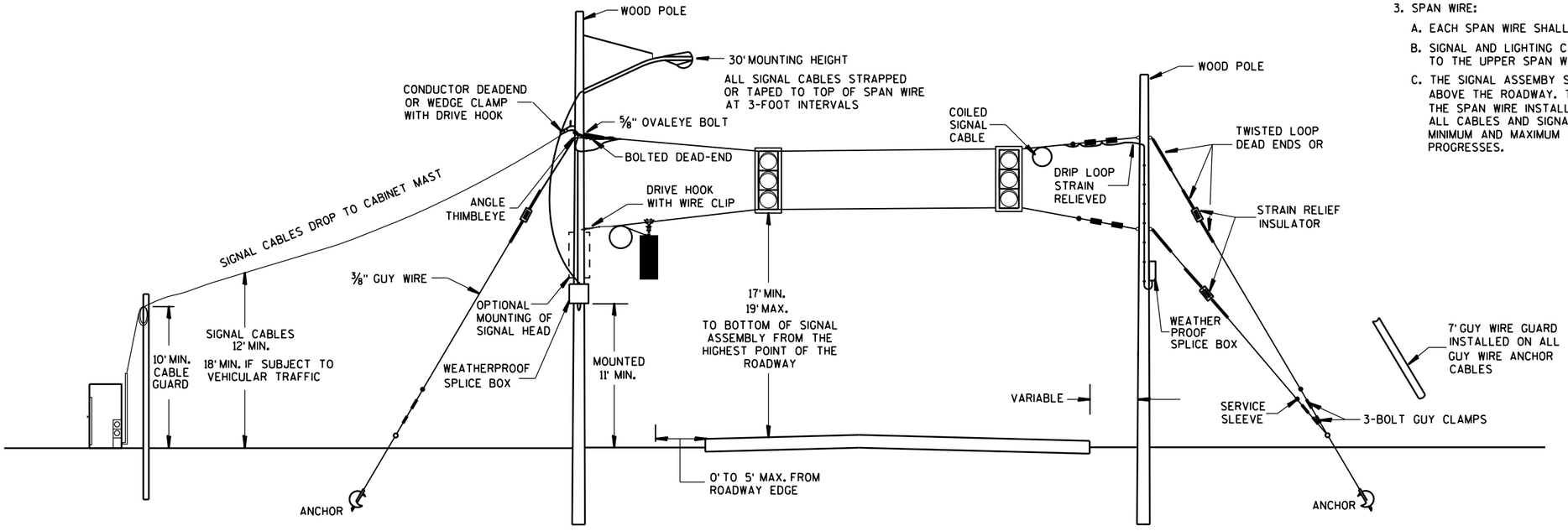
GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

MINIMUM POLE LENGTHS	POLE BURIEL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

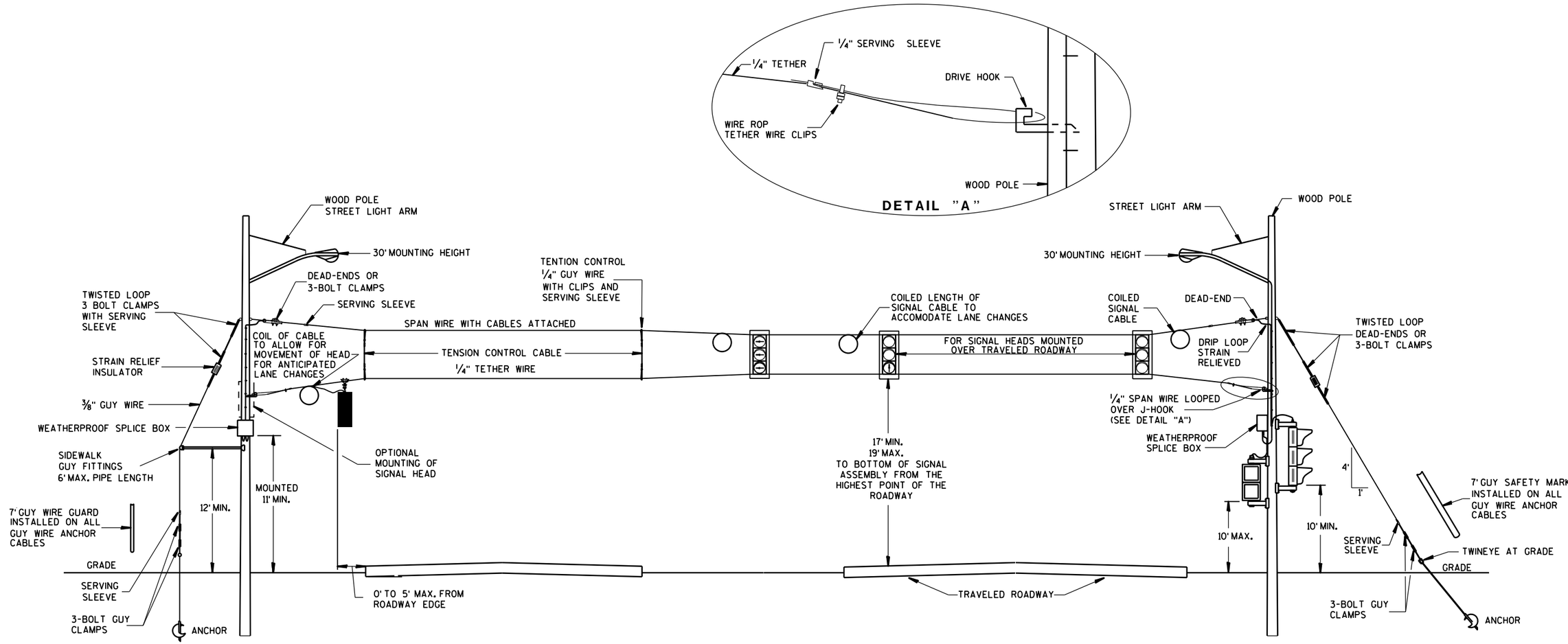
SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
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   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

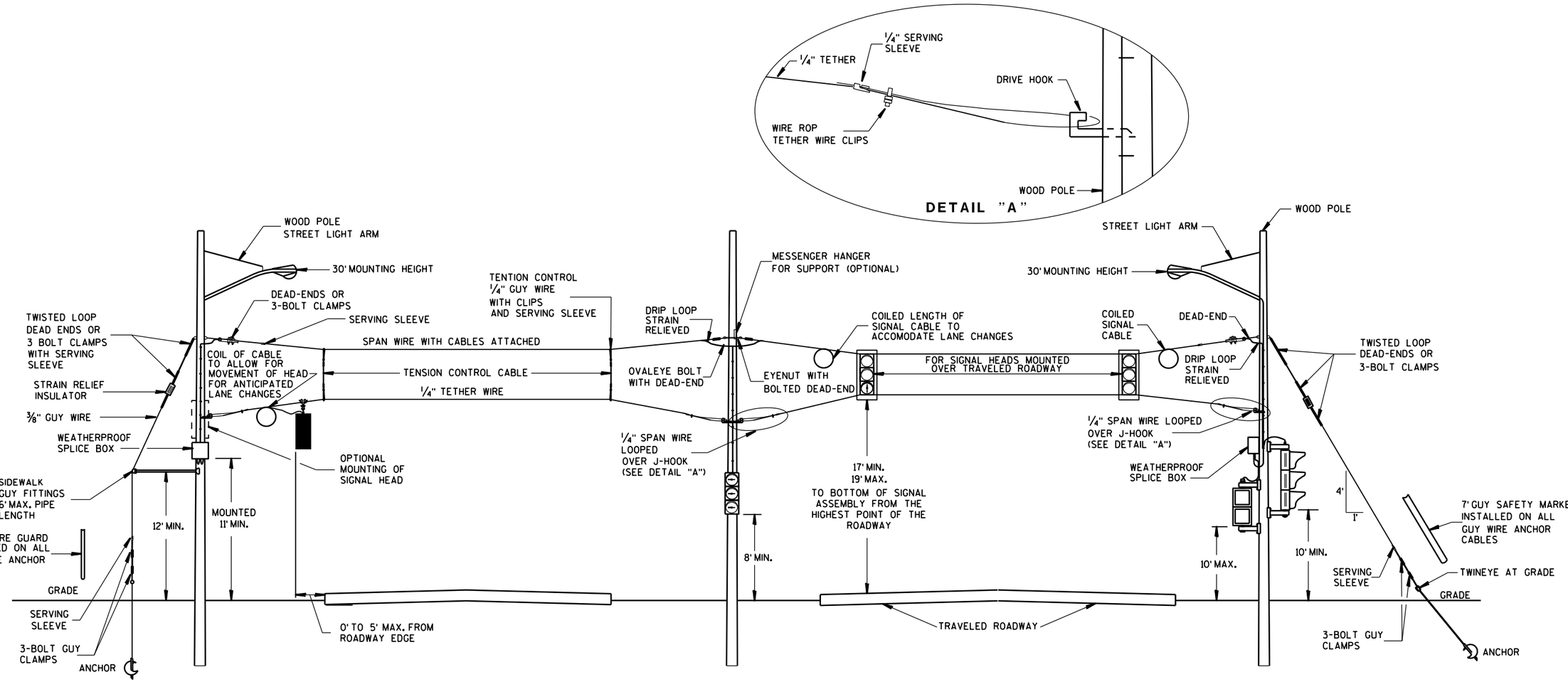
SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 9 G 1-4b



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

GENERAL NOTES

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

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   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

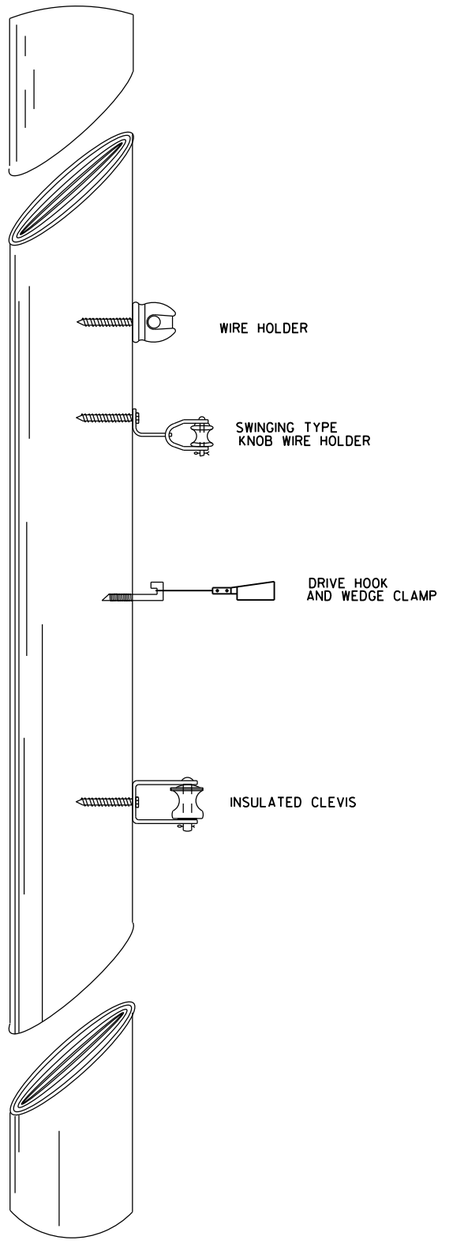
SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

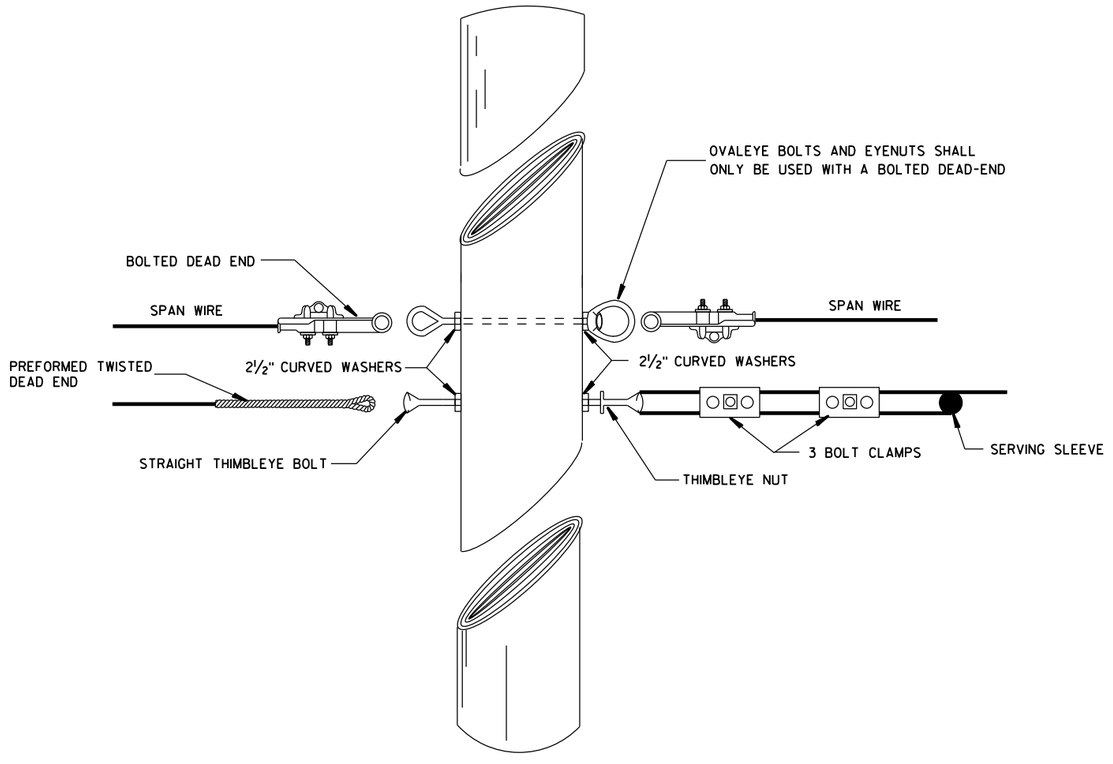
APPROVED
June. 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 9 G 1-4c



TYPICAL CABLE HANGERS



TYPICAL DEAD-ENDING

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
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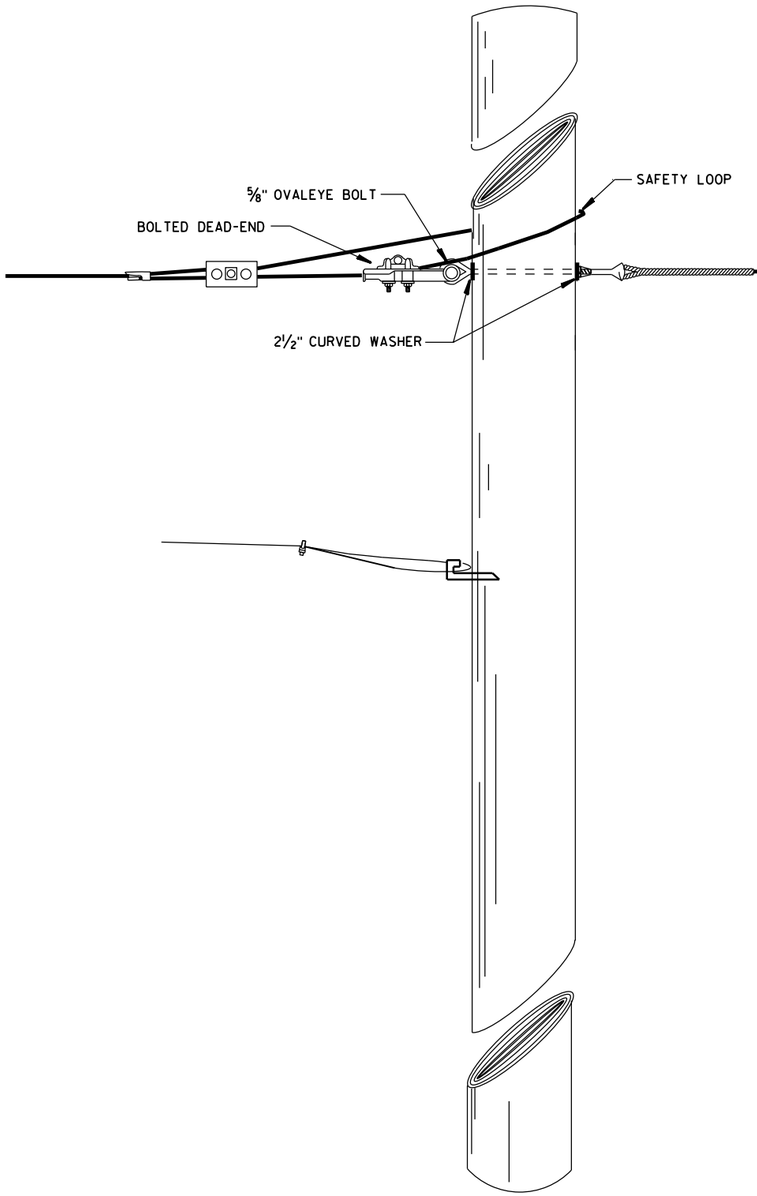
S.D.D. 9 G 1-4d

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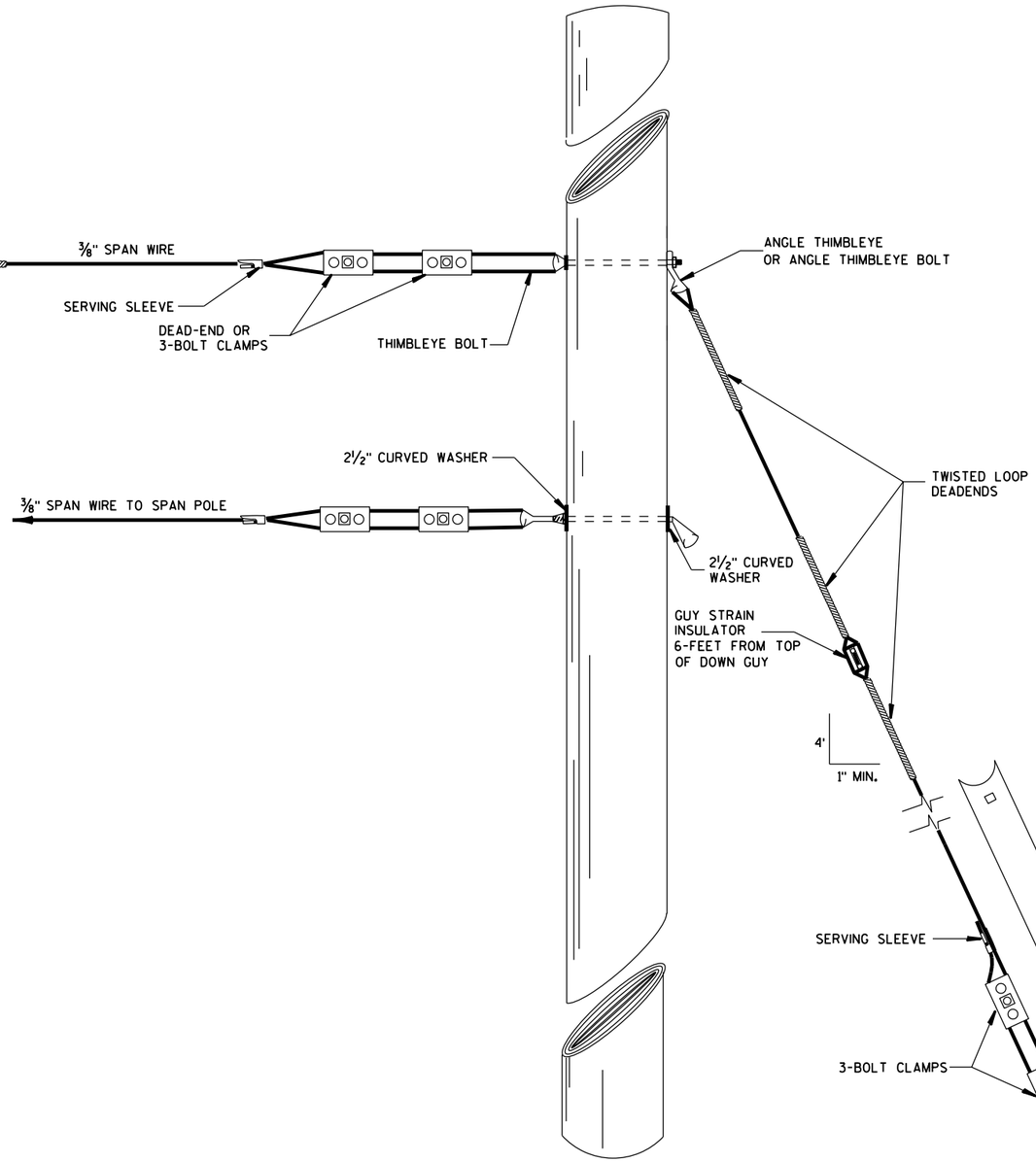
S.D.D. 9 G 1-4d

GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR ⅝" BOLTS.
2. SAFTY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE



GUY POLE

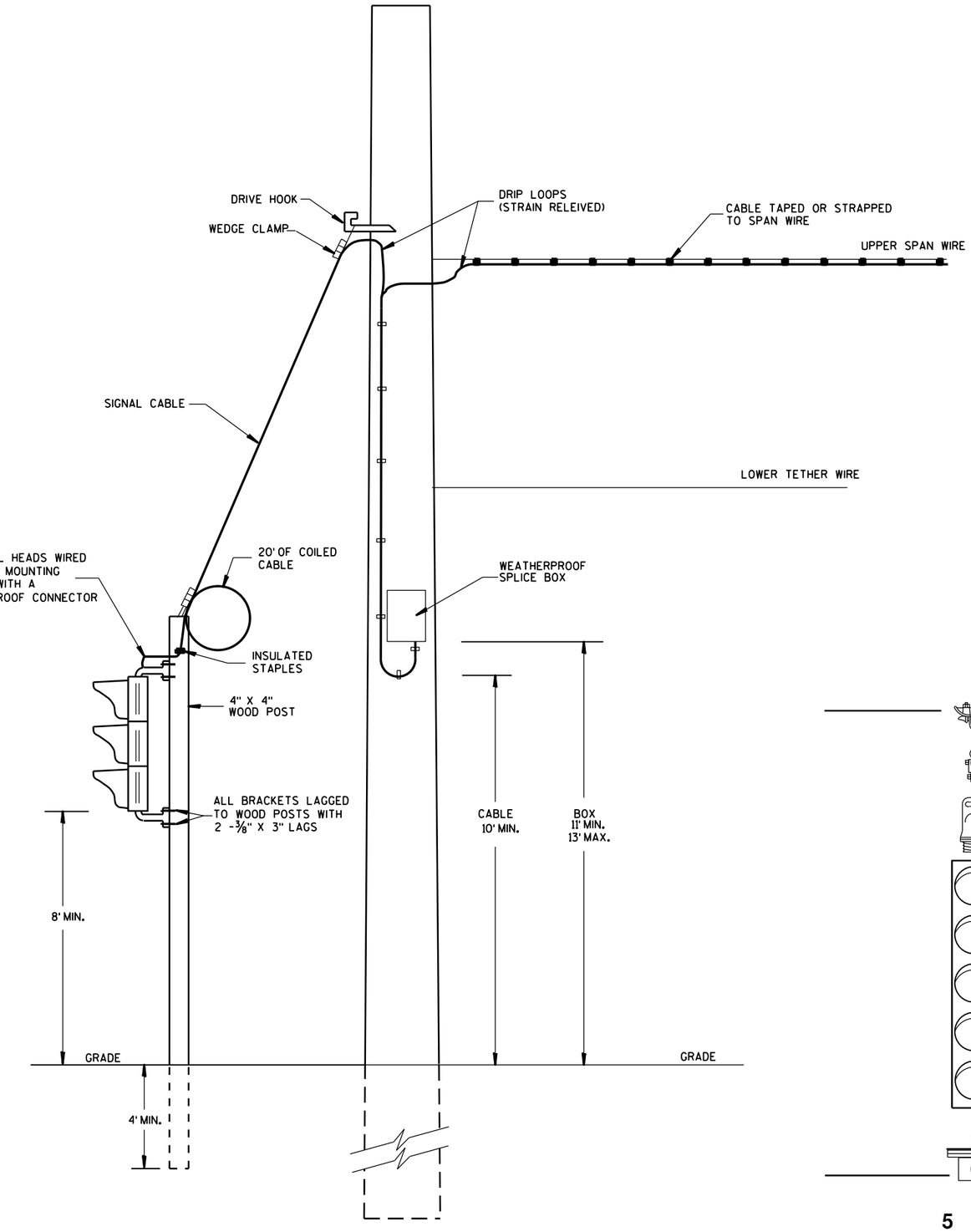
TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

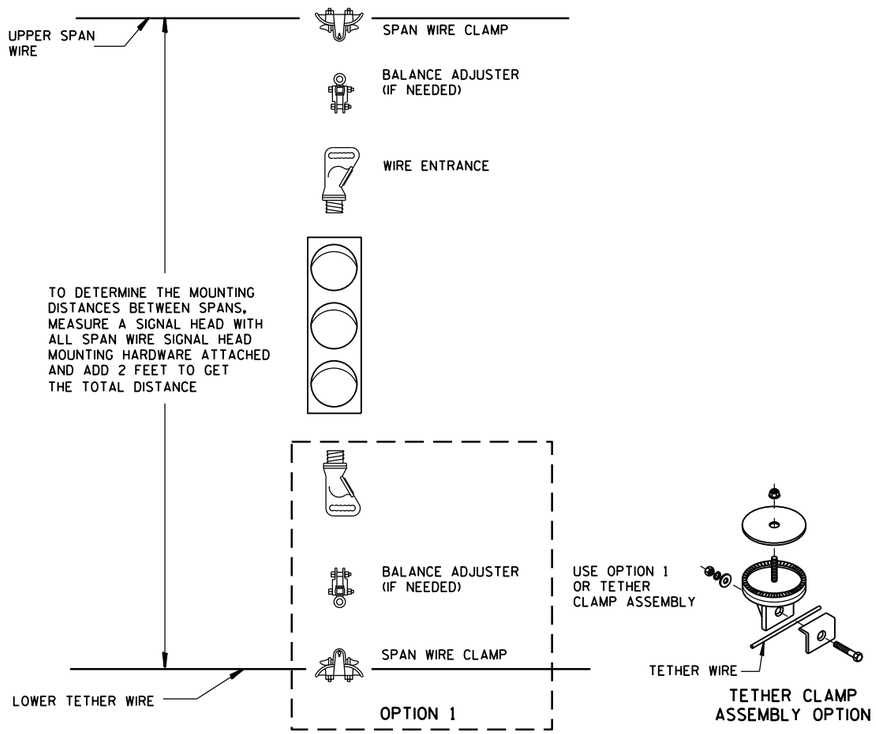
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

S.D.D. 9 G 1-4e
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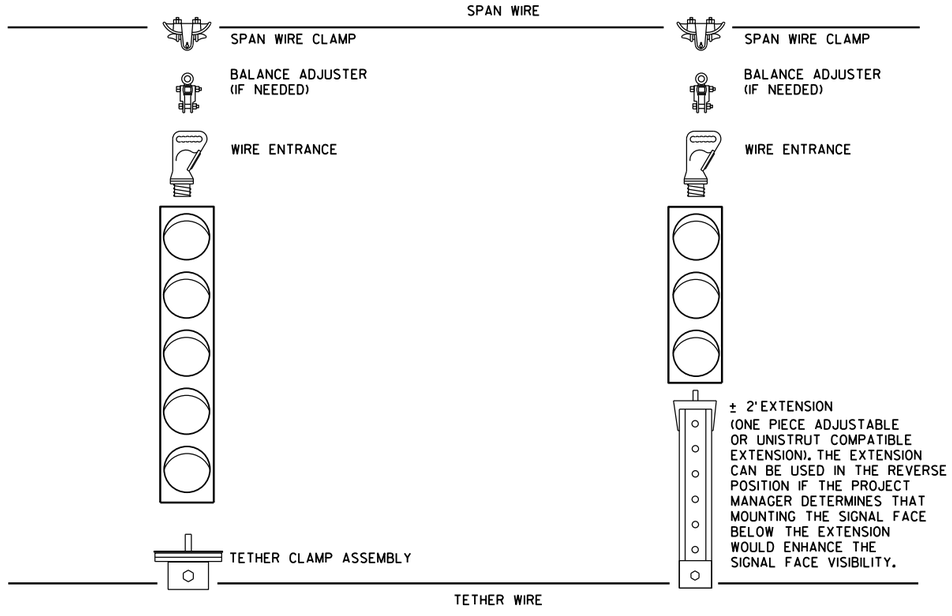


TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



TETHER CLAMP ASSEMBLY OPTION

TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

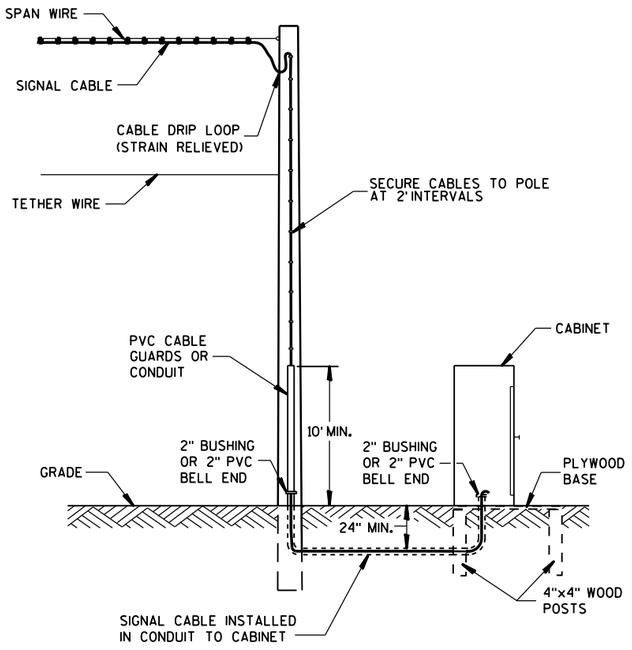
APPROVED
June. 2015 — DATE
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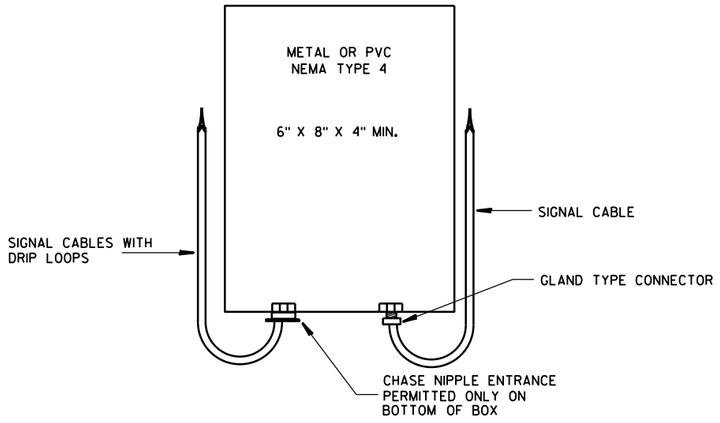
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S.D.D. 9 G 1-4f

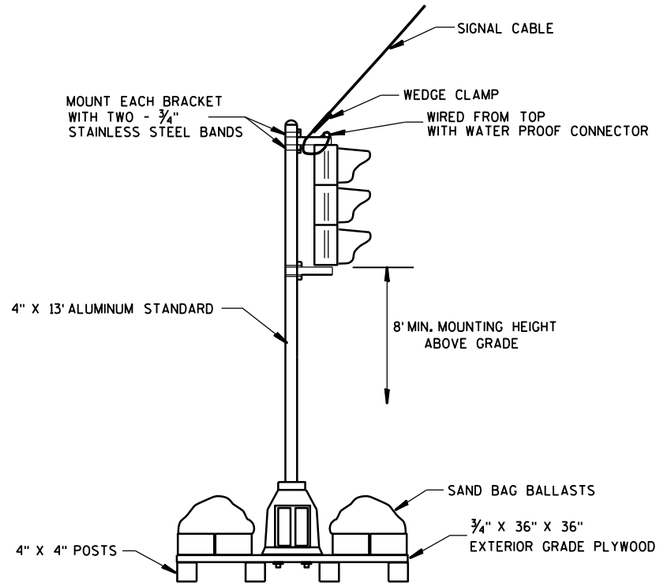
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S.D.D. 9 G 1-4f

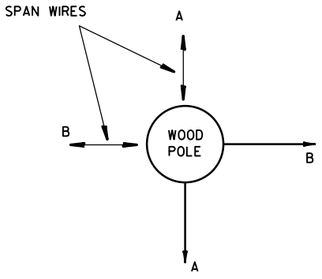




SPLICE BOX

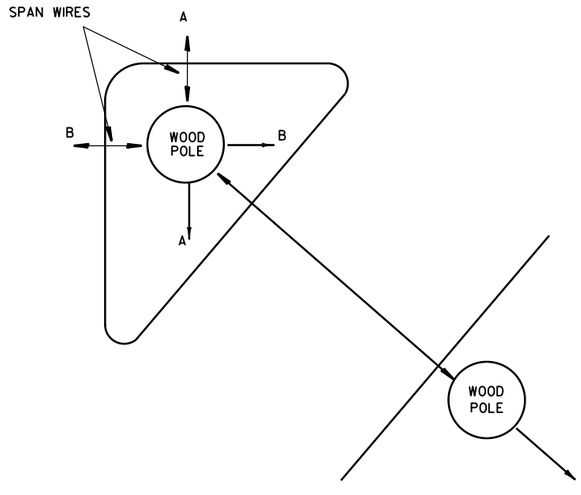


TYPICAL SKID TYPE TEMPORARY

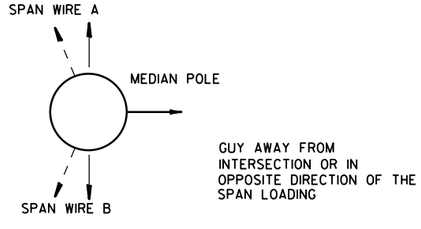


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF THE
SPAN LOADING

MEDIAN POLES

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

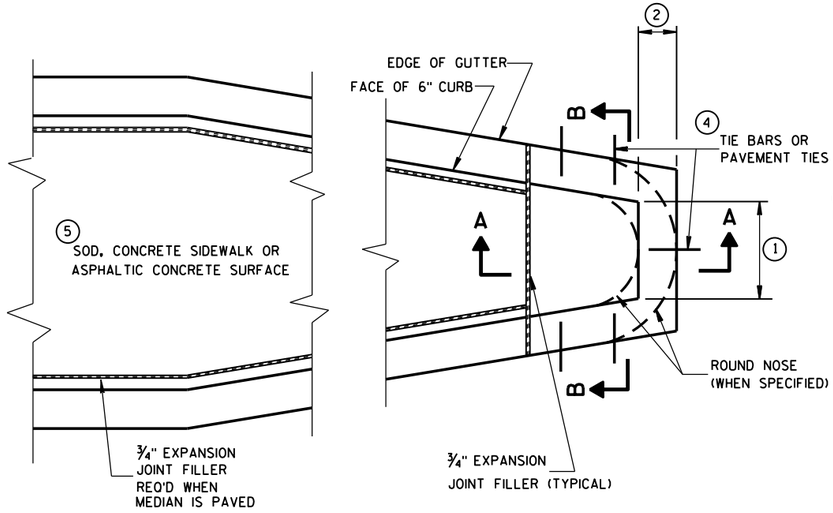
APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

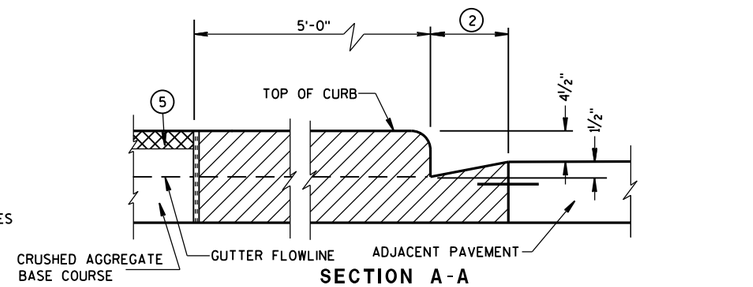
6

S.D.D. 9 G 1-4g

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S.D.D. 9 G 1-4g





CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

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

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

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

(1) NEW OR EXISTING CONCRETE PAVEMENT.

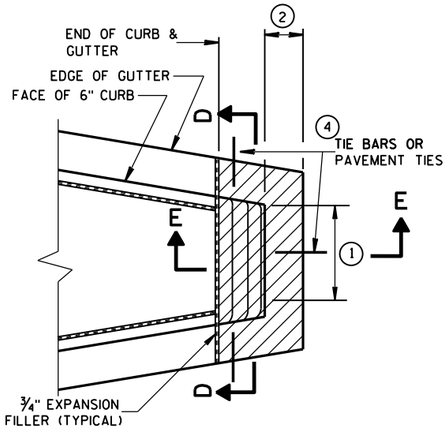
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

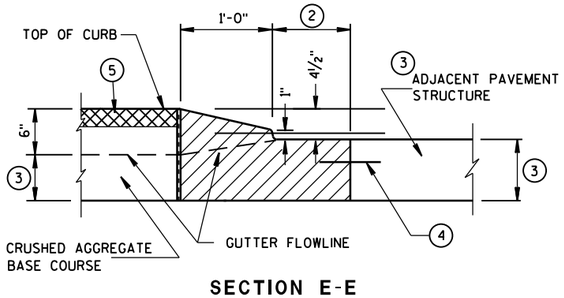
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

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

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

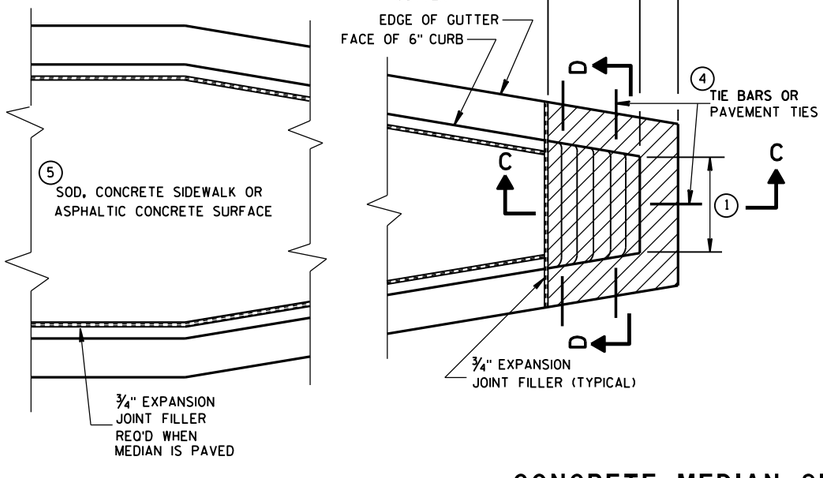
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

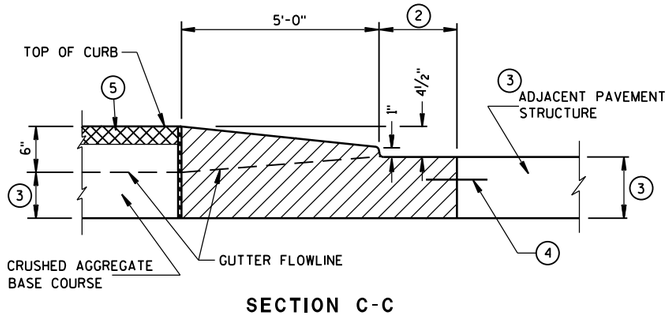




SECTION E-E

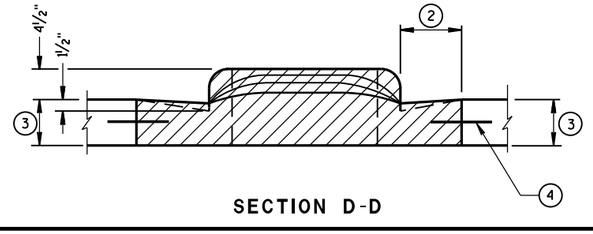
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

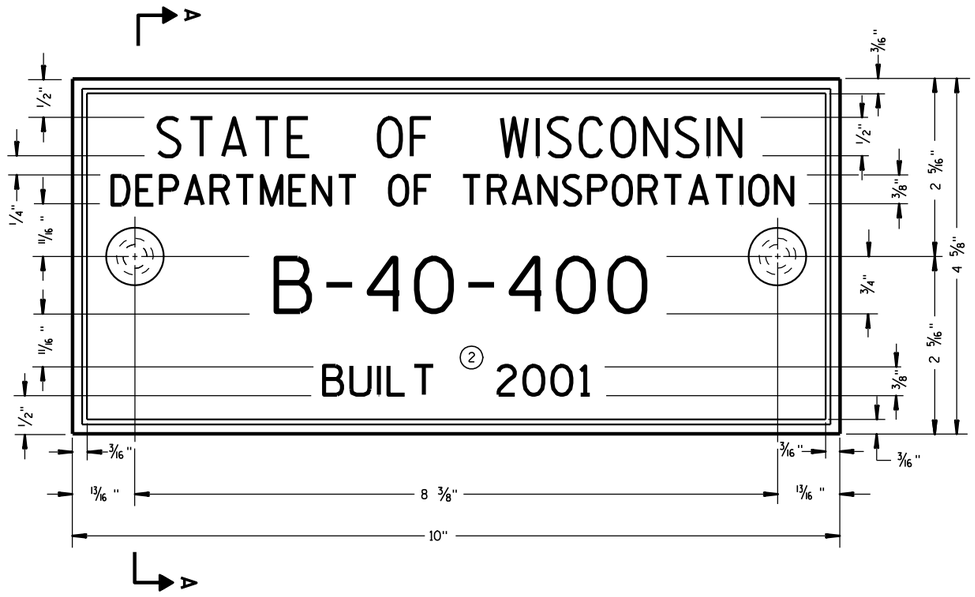
APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

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S.D.D. 11 B 2-2

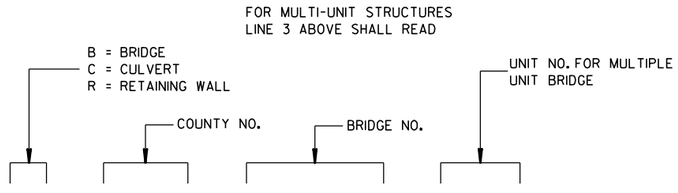
6

S.D.D. 11 B 2-2



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

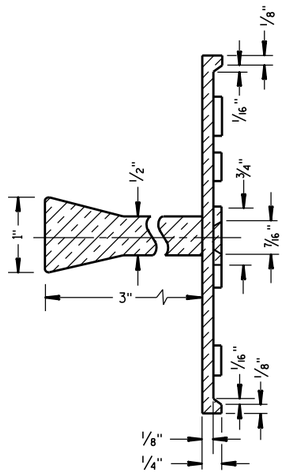
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

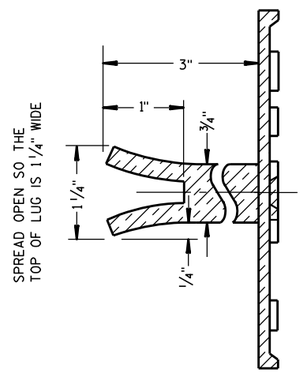
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

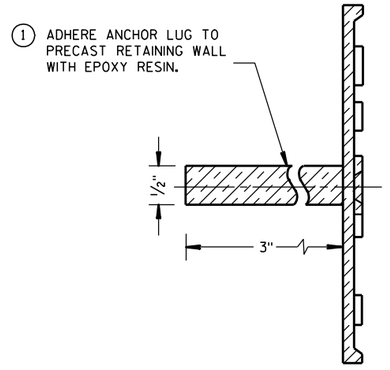
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP 406 ENGINEER

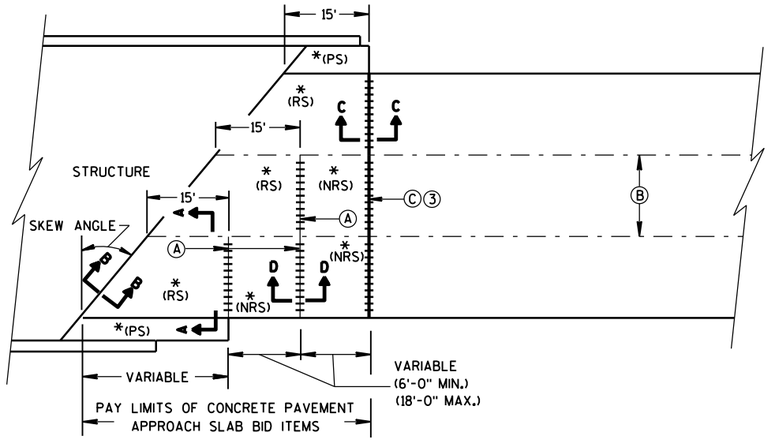
FHWA

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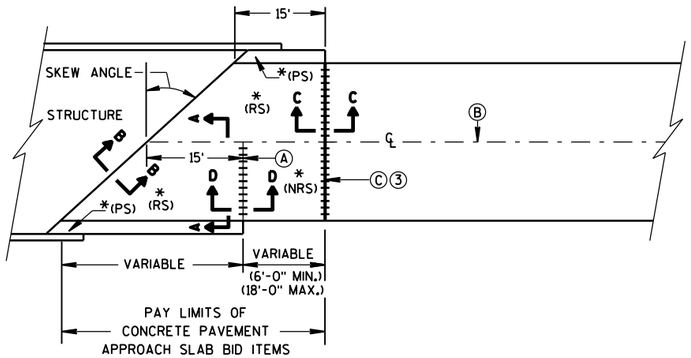
S.D.D. 12 A 3-10

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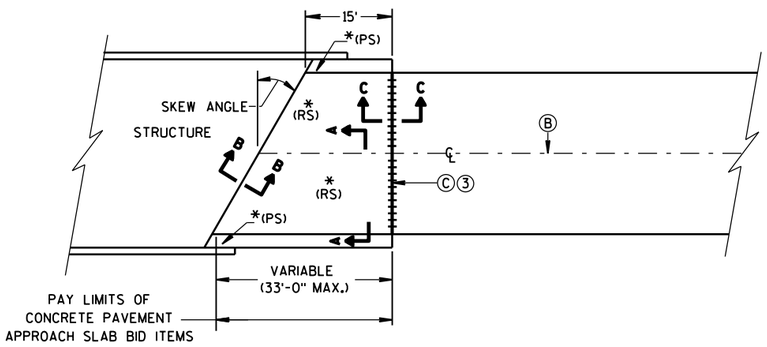
S.D.D. 12 A 3-10



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >20°
(PAVEMENT WIDTH ≤30')



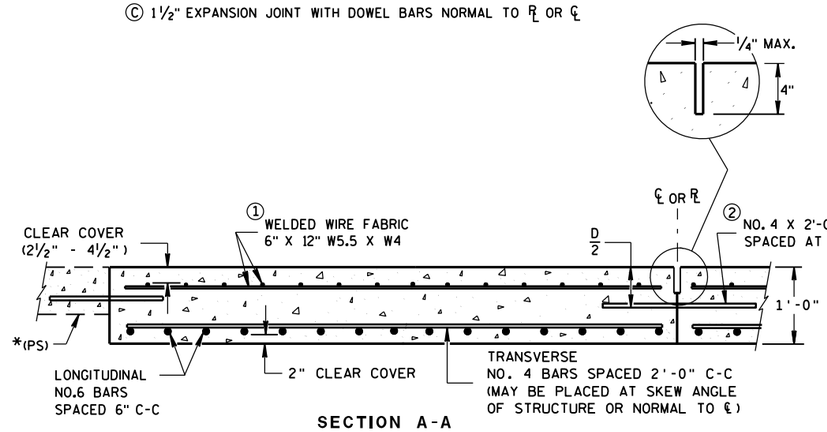
SKEWS ≤20°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

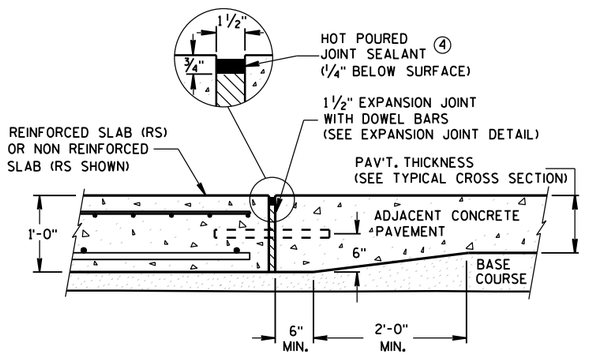
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

***STANDARD DOWEL BAR DIAMETER
(SEE SDD 13C11, & SDD 13C13)

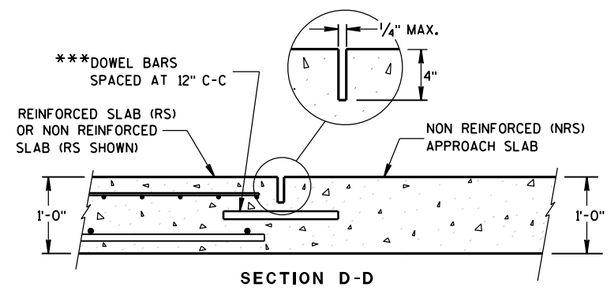
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
Ⓑ STANDARD LONGITUDINAL JOINT WITH TIE BARS.
Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

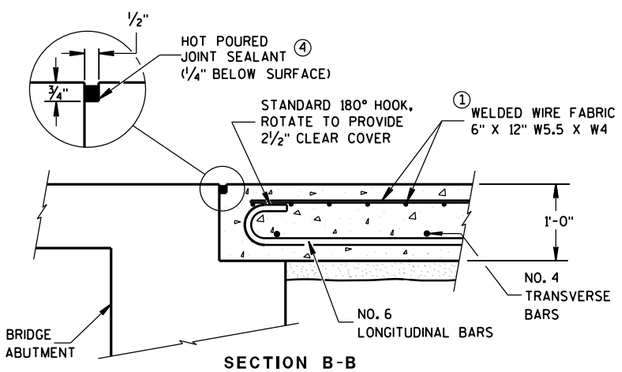
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

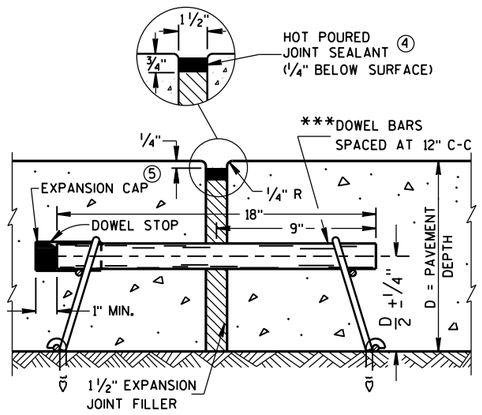
③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

④ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.

⑤ PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

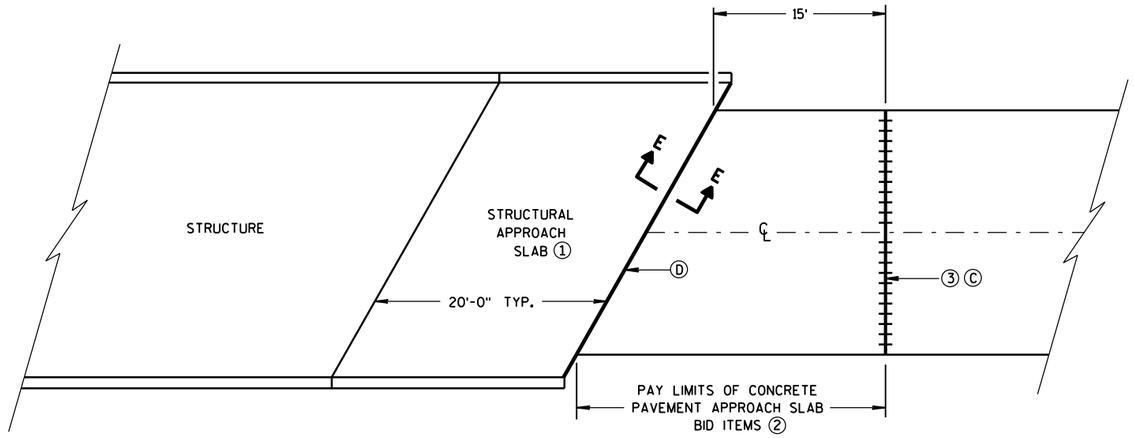
APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

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S.D.D. 13 B 2-8a

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S.D.D. 13 B 2-8a



GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

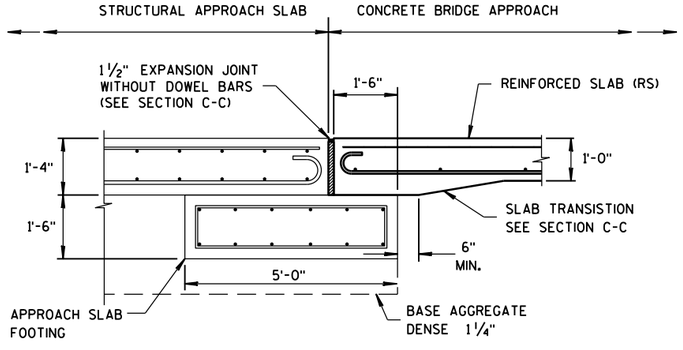
① SEE BRIDGE PLAN.

② CONFORM TO SHEET 13 B 2(A) FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS.

③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

Ⓒ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄

Ⓓ 1½" EXPANSION JOINT (NO DOWELS)



SECTION E-E

FOOTING DETAIL

STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

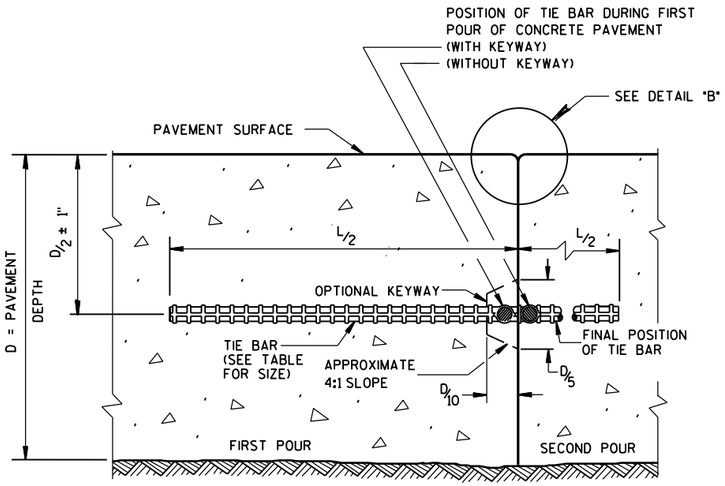
June, 2015
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPEF

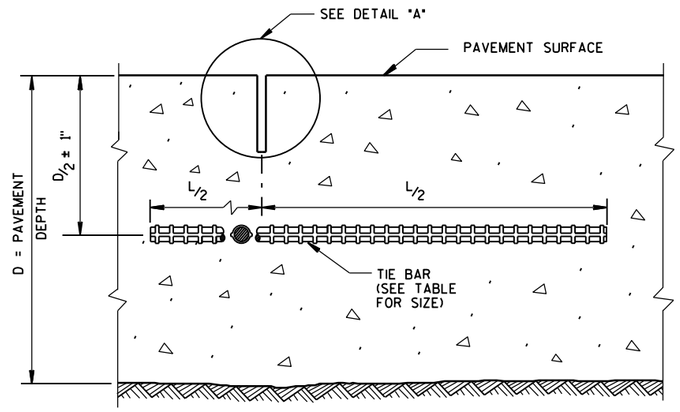
FHWA

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S.D.D. 13 B 2-8b



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

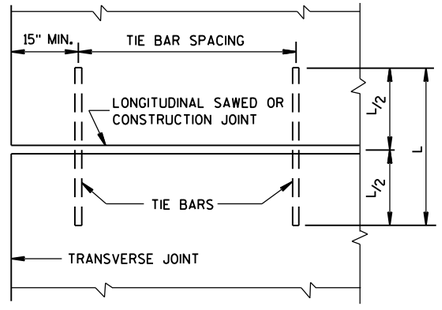
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

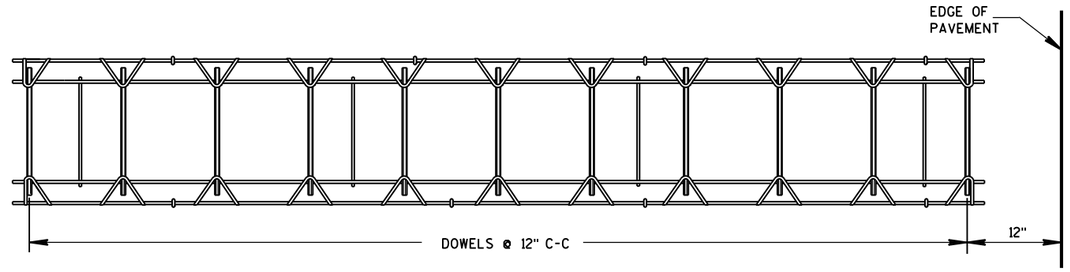
CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

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S.D.D. 13 C 1-18

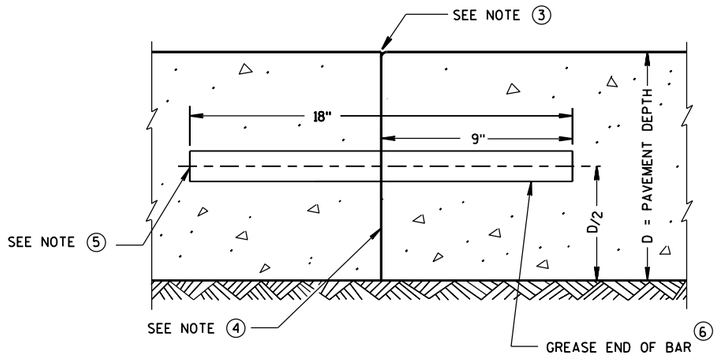


PLAN VIEW

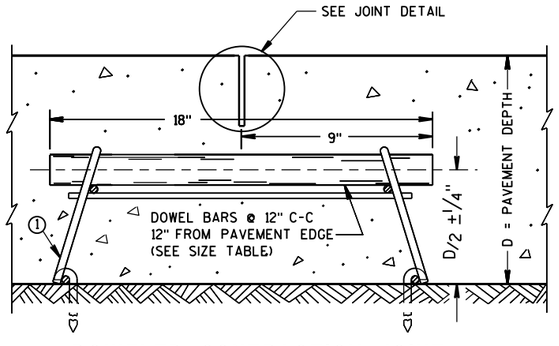


SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



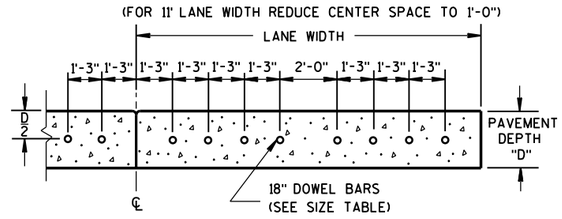
TRANSVERSE CONSTRUCTION JOINT



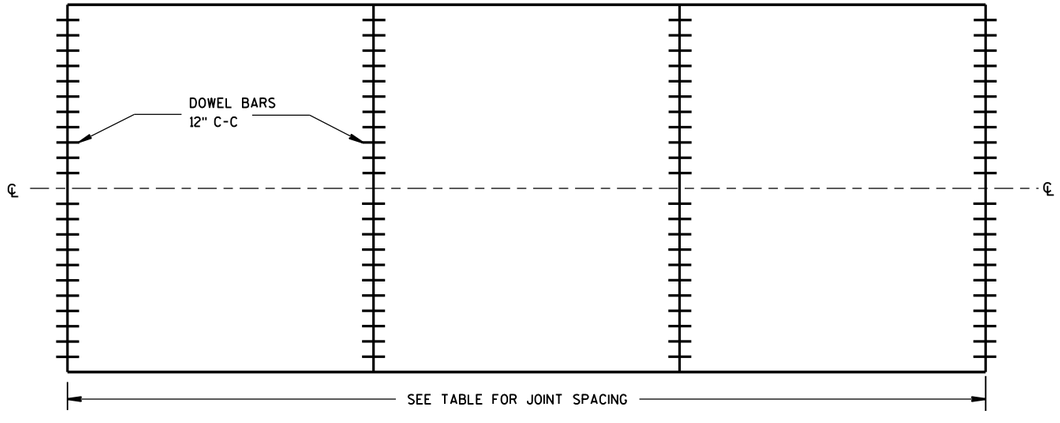
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① **OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.**

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

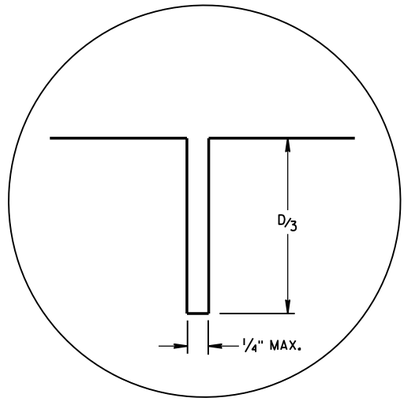
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

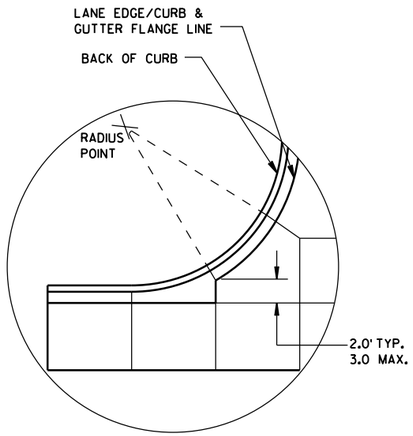
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

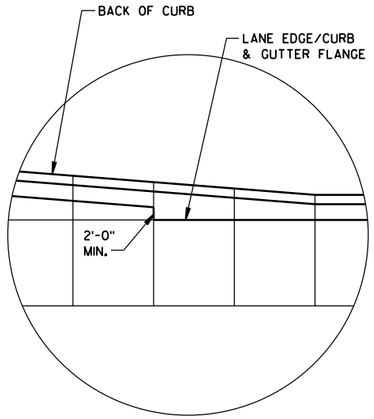
APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER
FHWA

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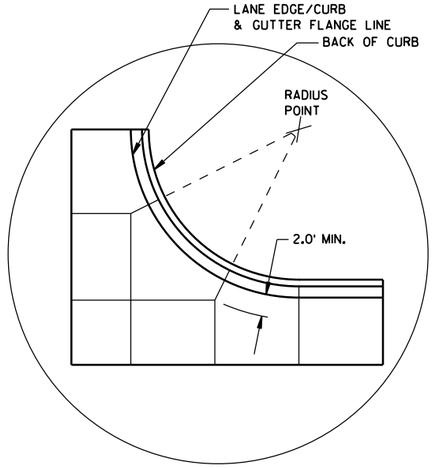
S.D.D. 13 C 13-8



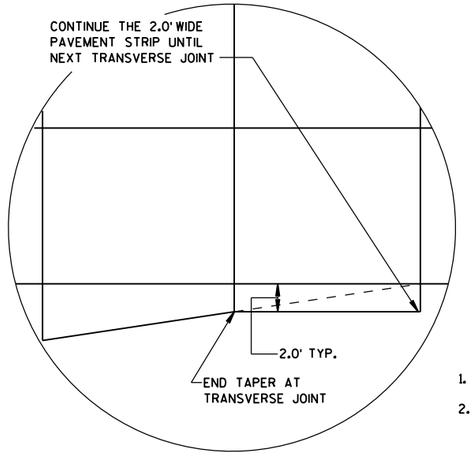
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

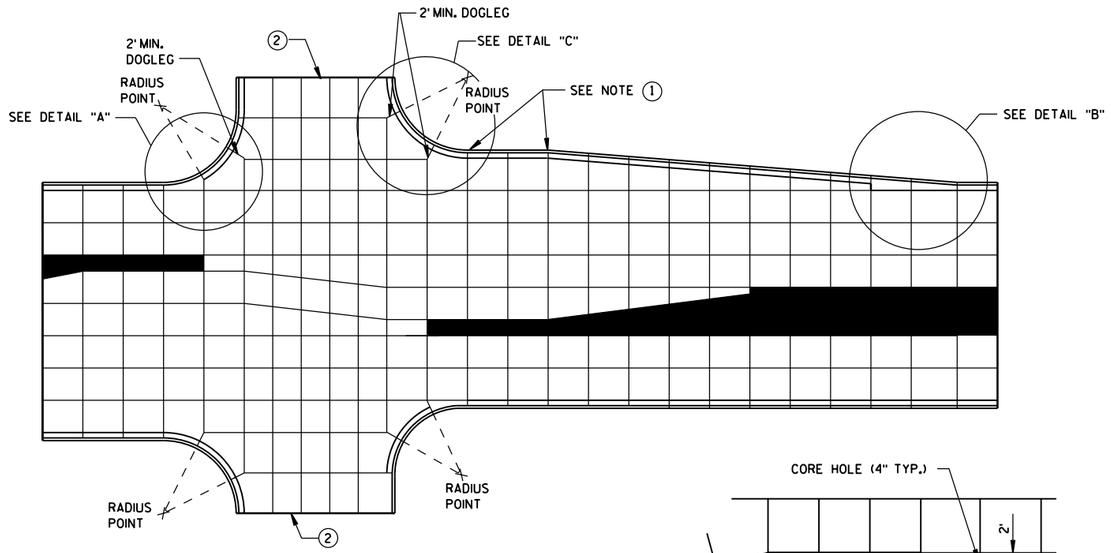
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

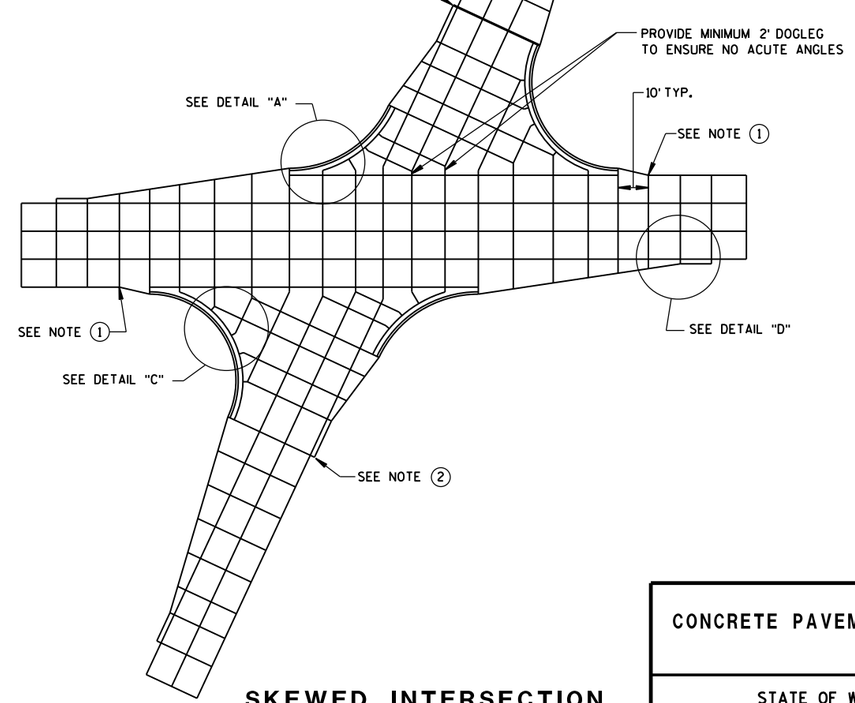
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



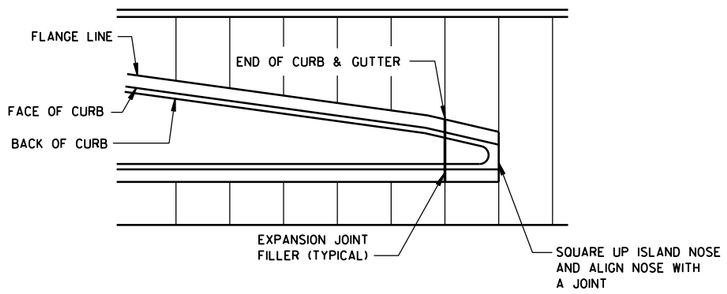
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

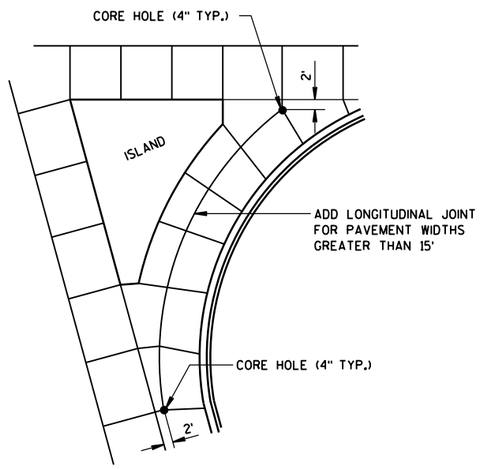
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

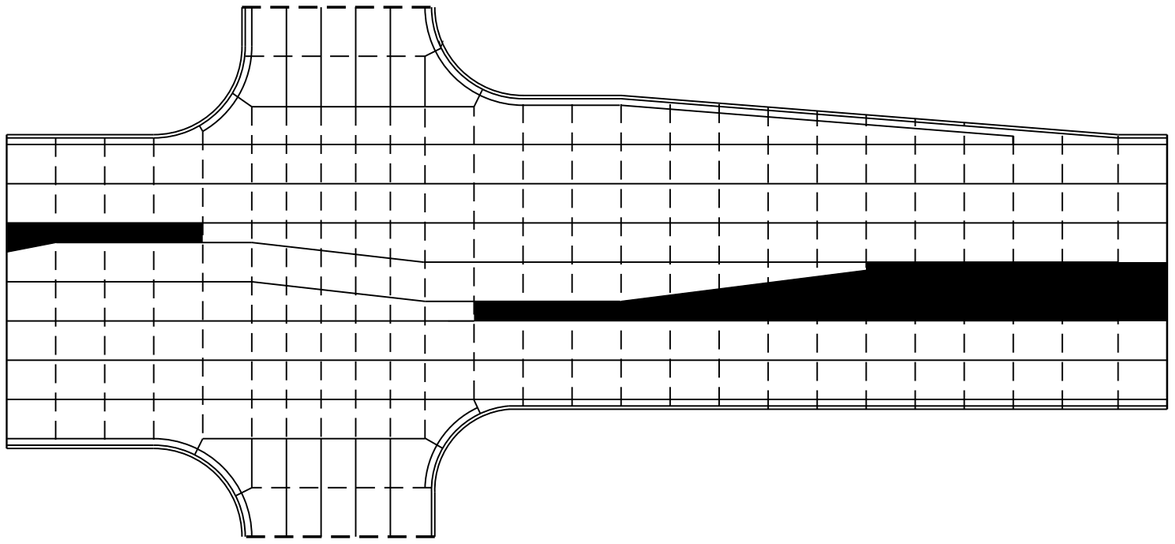
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S.D.D. 13 C 18-5a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

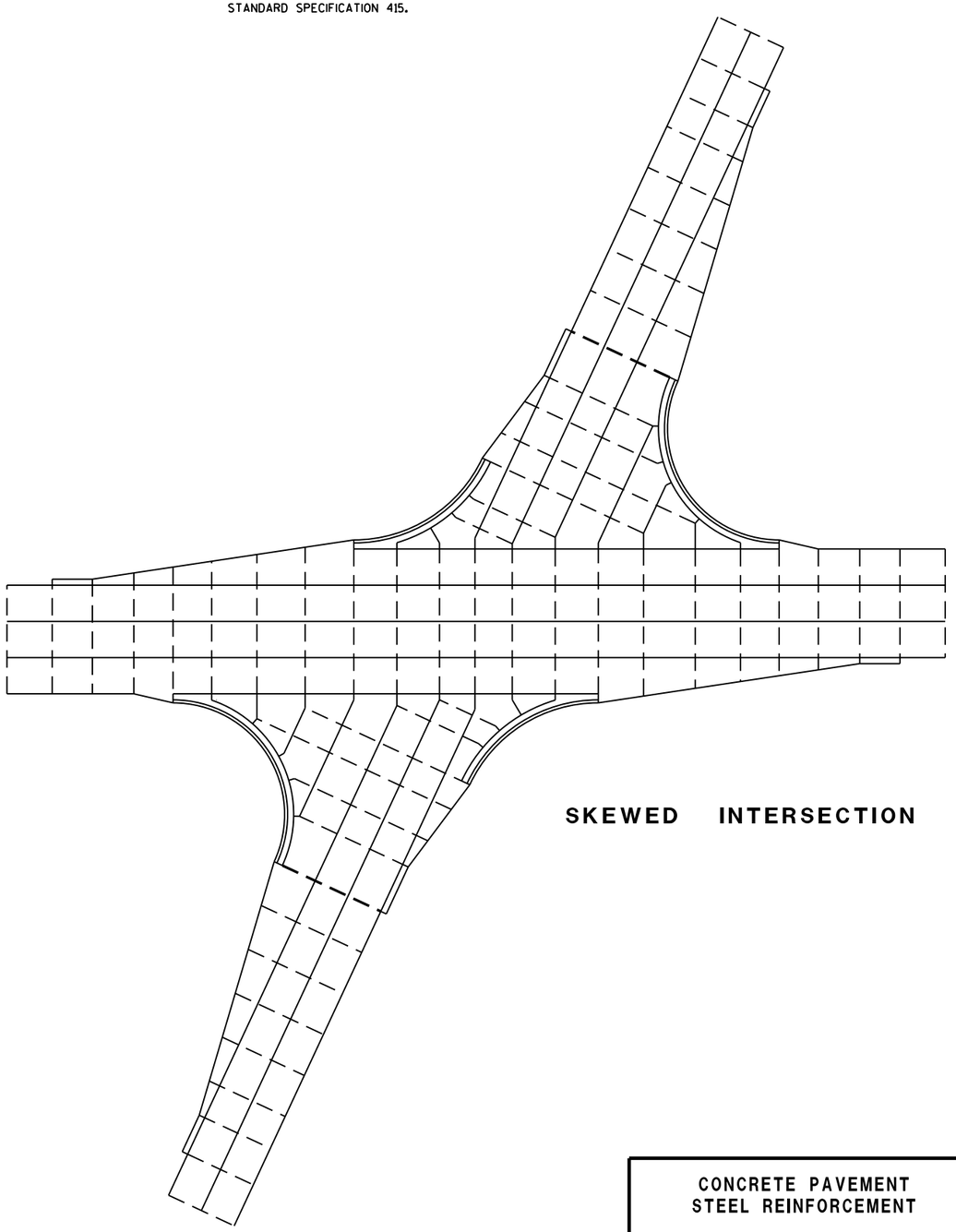
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

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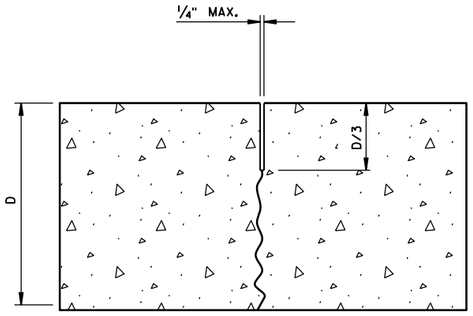
S.D.D. 13 C 18-5b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

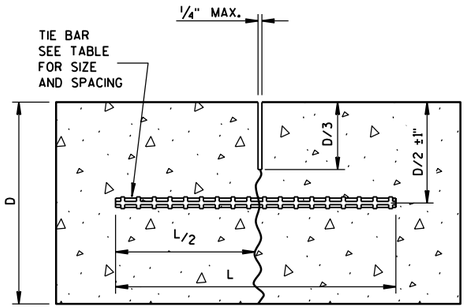
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 13 C 18-5b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

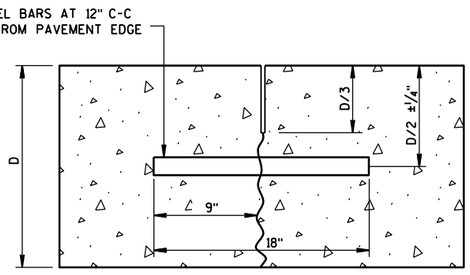
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

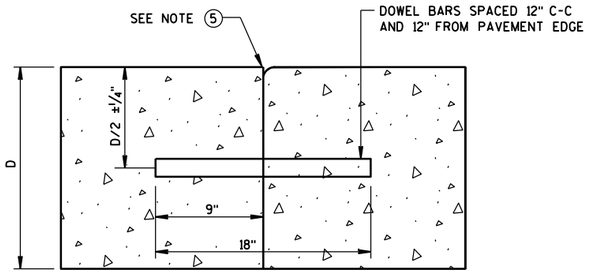
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



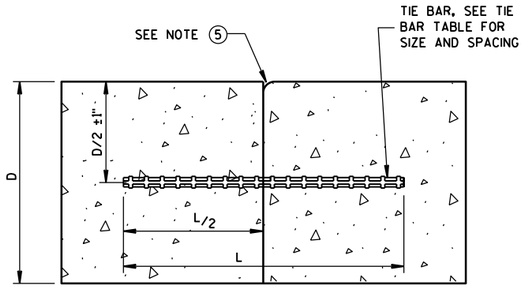
DOWELED-TRANSVERSE

CONTRACTION JOINTS

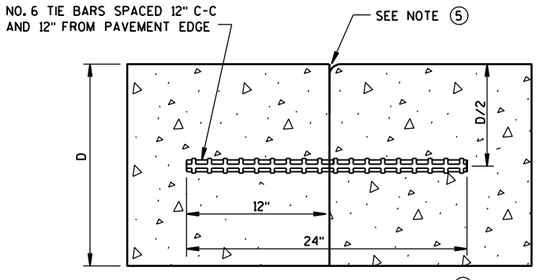
SEE NOTE (2)



DOWELED TRANSVERSE (3)

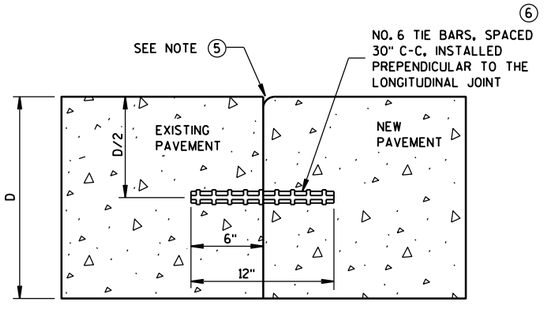


TIED LONGITUDINAL



TIED TRANSVERSE (3)

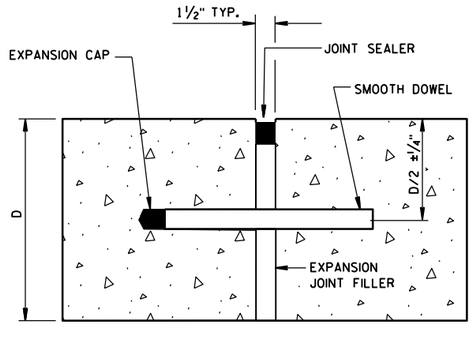
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

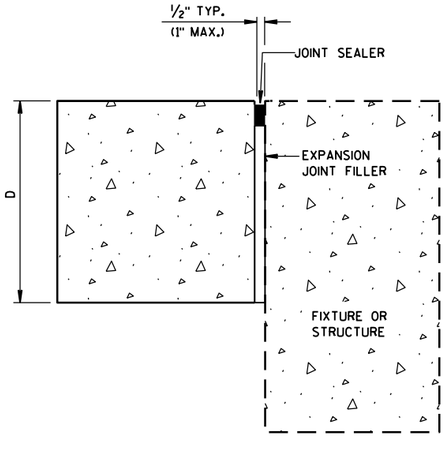
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

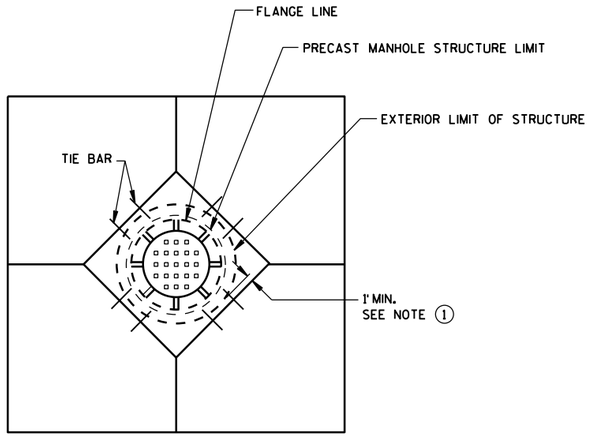
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 413

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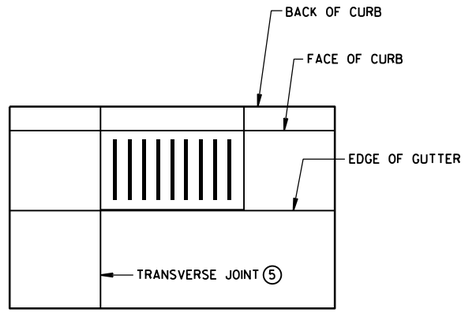
S.D.D. 13 C 18-5c

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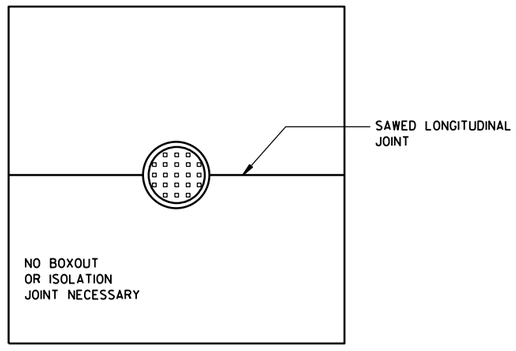
S.D.D. 13 C 18-5c



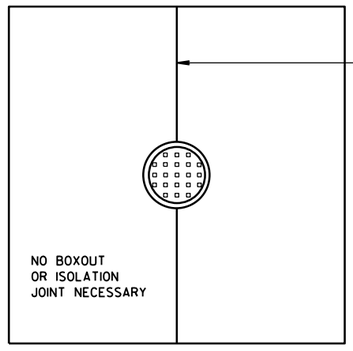
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



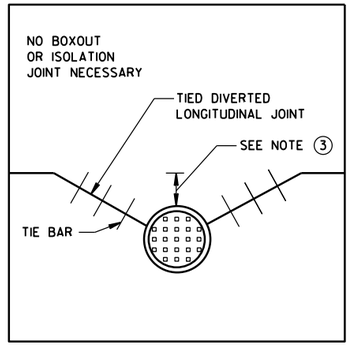
INLET WITH TRANSVERSE JOINT



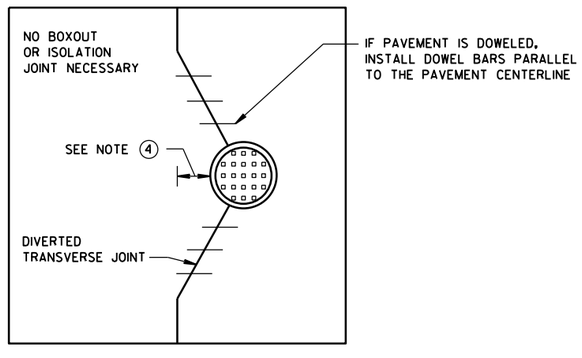
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 — /S/ Peter Kemp, P.E.
DATE — PAVEMENT SUPEF
FHWA

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S.D.D. 13 C 18-5d

(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.

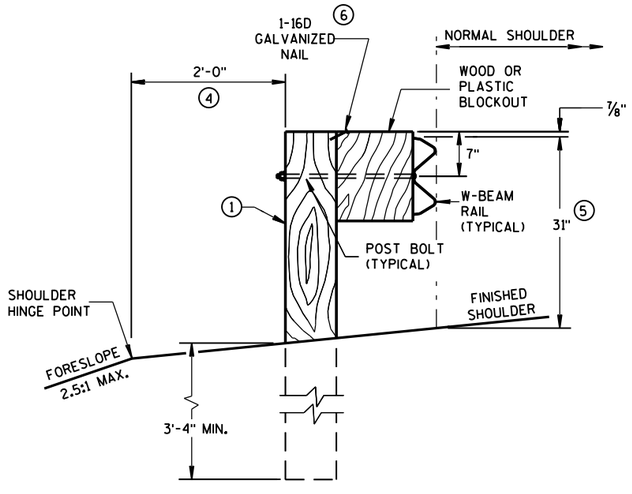
(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

(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).

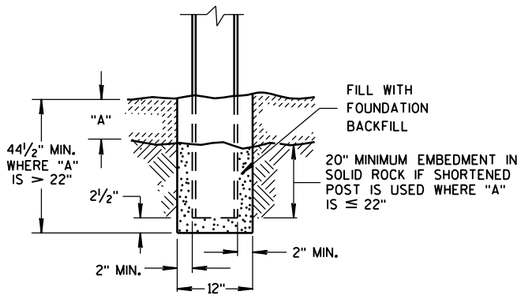
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

(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.



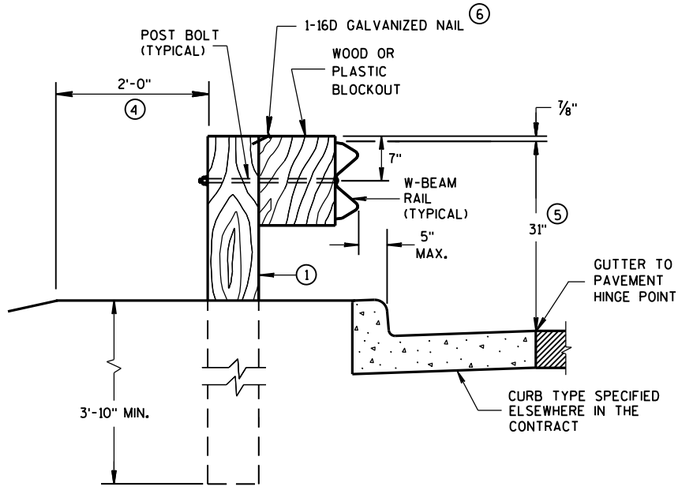
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



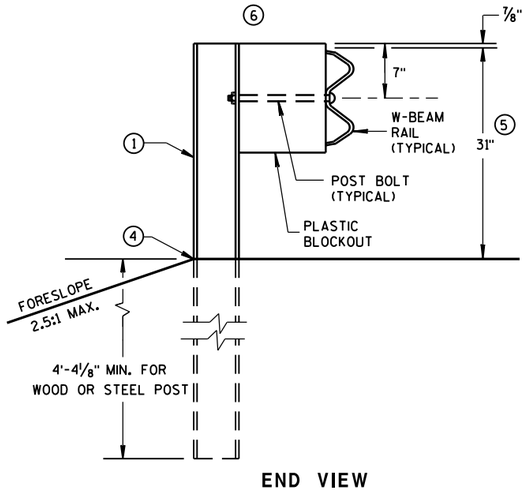
END VIEW

SETTING STEEL OR WOOD POST IN ROCK (3)



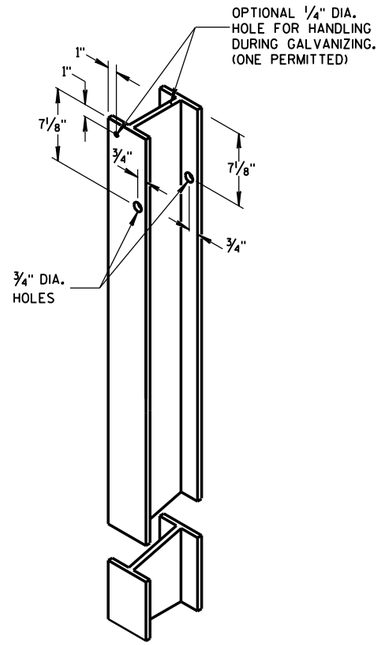
END VIEW

LOCATED ALONG A CURBED ROADWAY

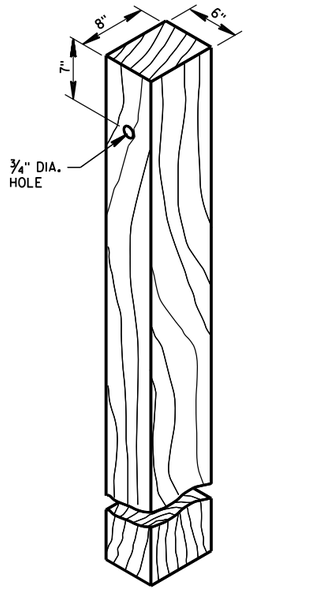


END VIEW

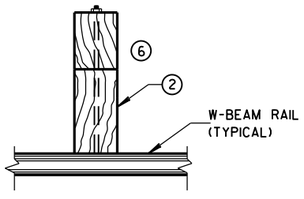
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



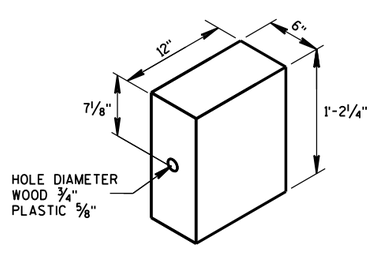
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) (1)



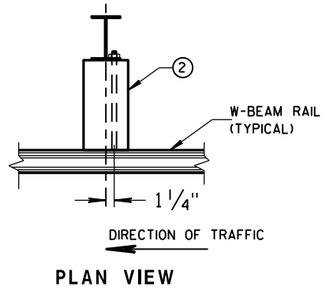
WOOD POST
(6" X 8") NOMINAL (1)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT (2)

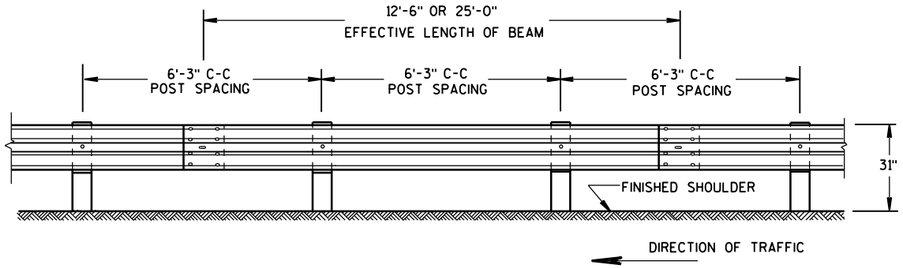


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

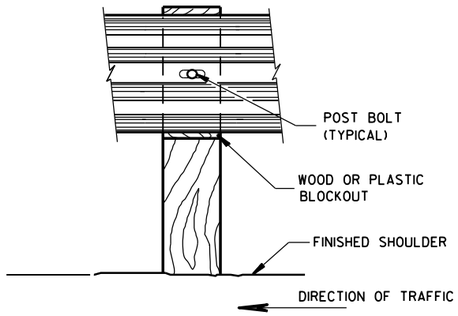
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
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FRONT VIEW

POST SPACING STANDARD INSTALLATION



FRONT VIEW AT WOOD POST

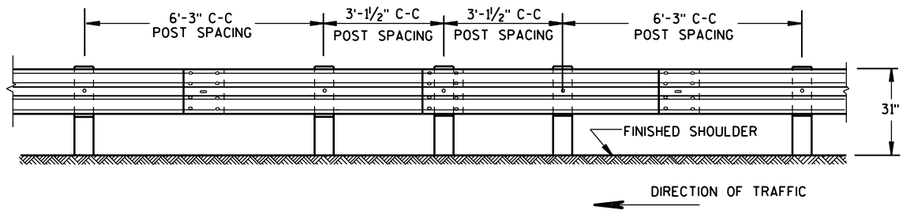
GENERAL NOTES

(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.

(11) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

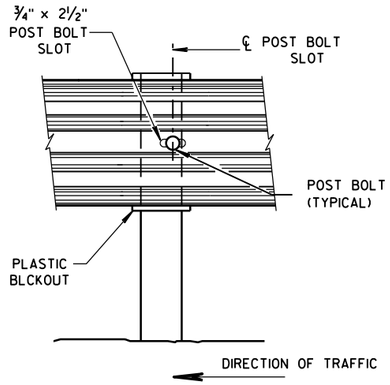
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

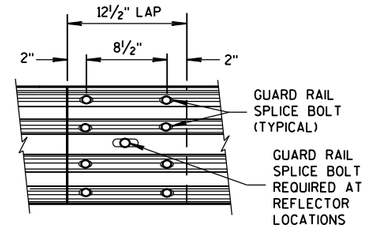


FRONT VIEW

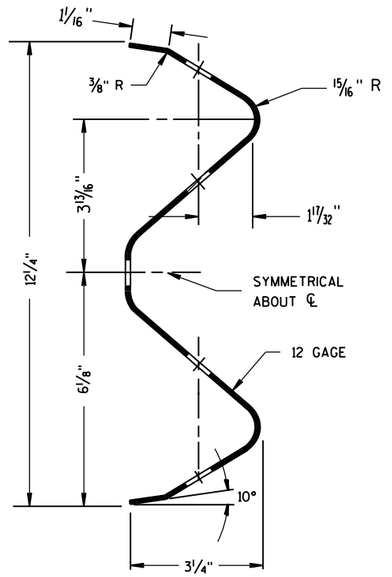
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



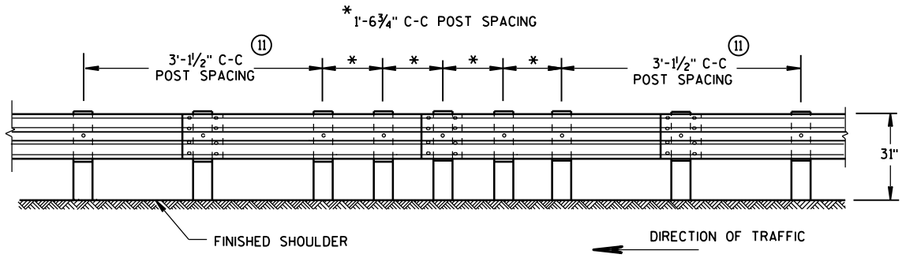
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

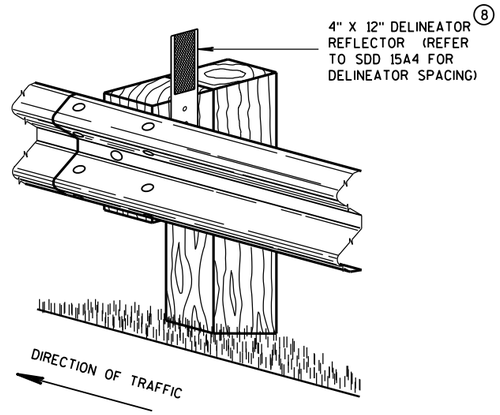


SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)



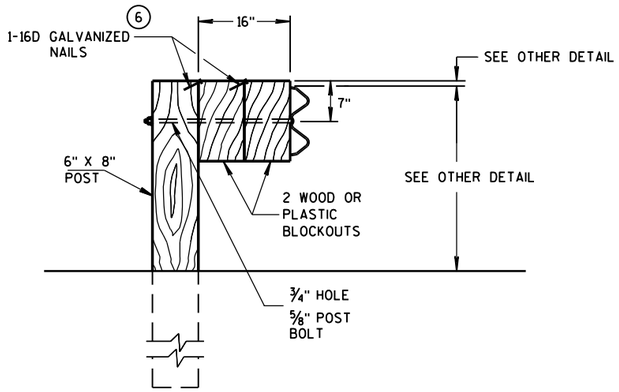
ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

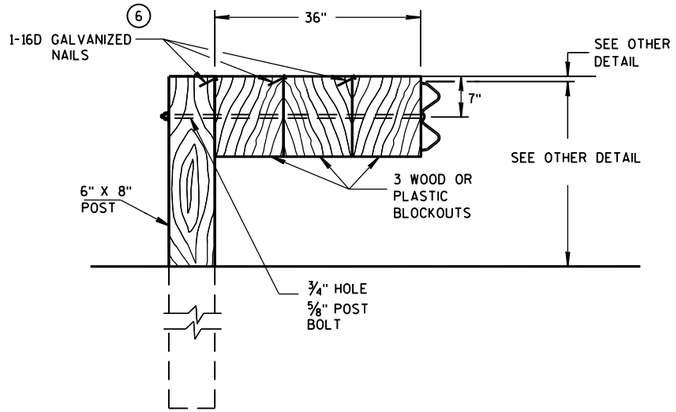
6

S.D.D. 14 B 42-5b



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.

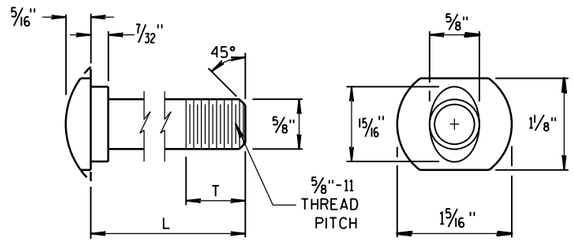


DETAIL FOR 36" BLOCKOUT DEPTH

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.

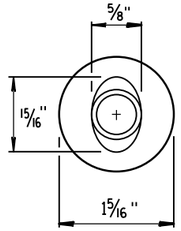
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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.

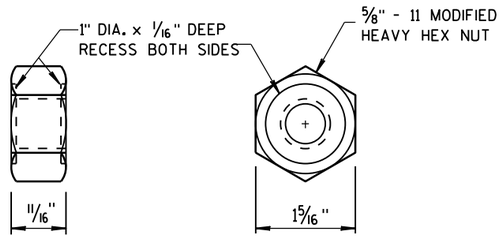


POST BOLT TABLE

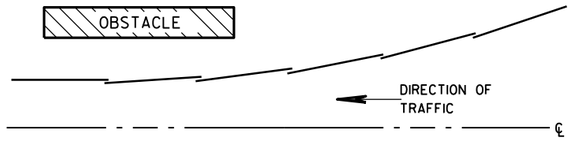
L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

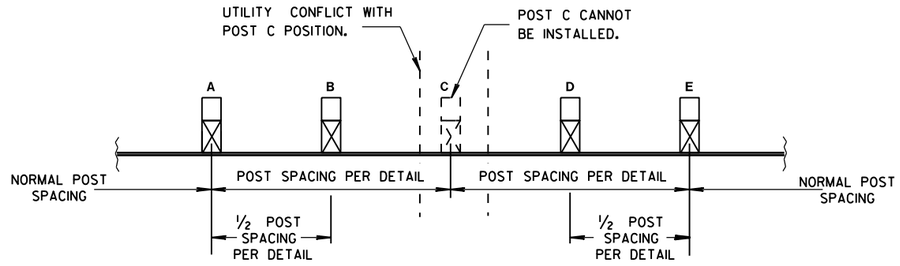


POST BOLT, SPLICE BOLT AND RECESS NUT

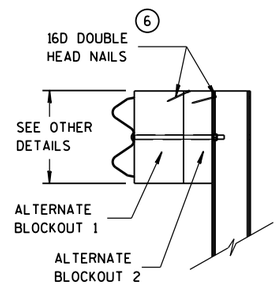


PLAN VIEW

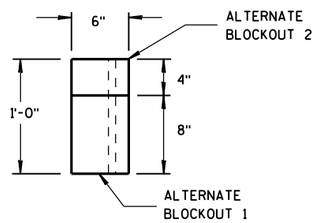
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

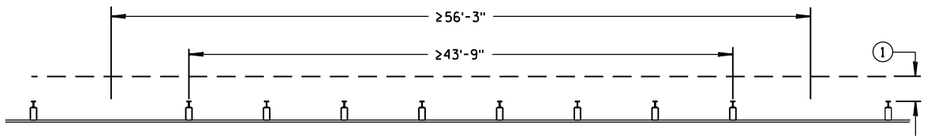
ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

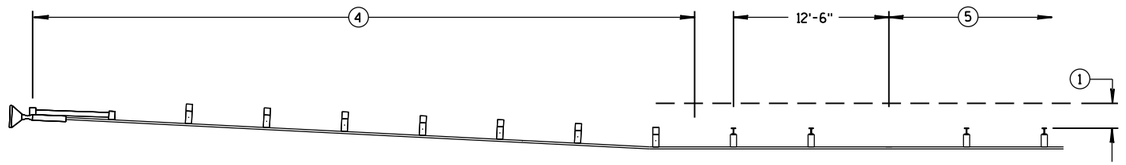
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

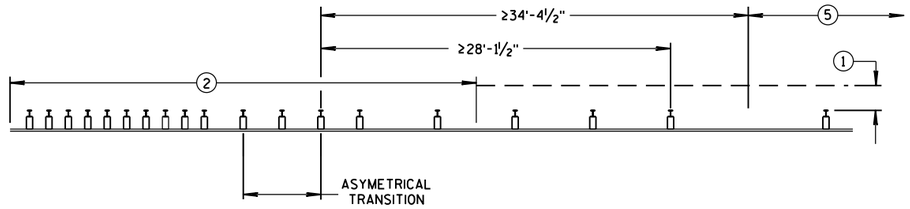
S.D.D. 14 B 42-5c



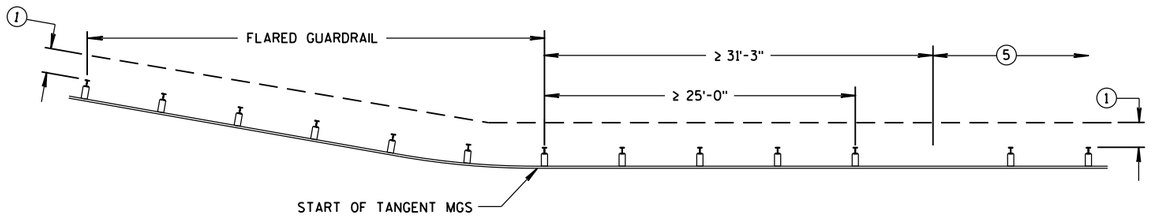
MISSING POST IN NORMAL BEAM GUARD RUN



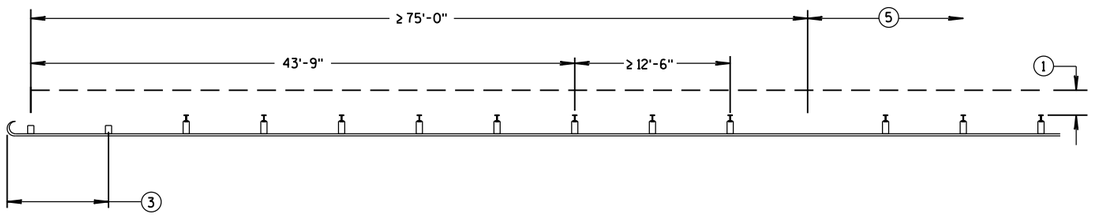
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



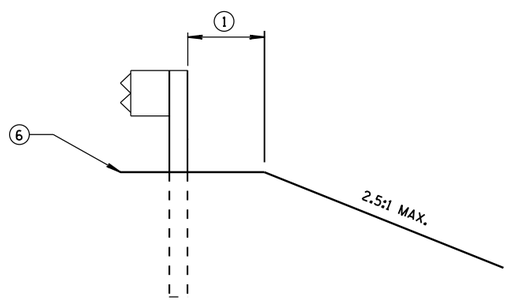
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN
NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN
NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

(1) MINIMUM OF 2 FEET OF GRADING BEHIND POST.

(2) SEE SDD 14B45 FOR MORE DETAILS.

(3) SEE SDD 14B47 FOR MORE DETAILS.

(4) SEE SDD 14B44 FOR MORE DETAILS.

(5) SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.

(6) SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

6

S.D.D. 14 B 42-5d

6

S.D.D. 14 B 42-5d

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.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

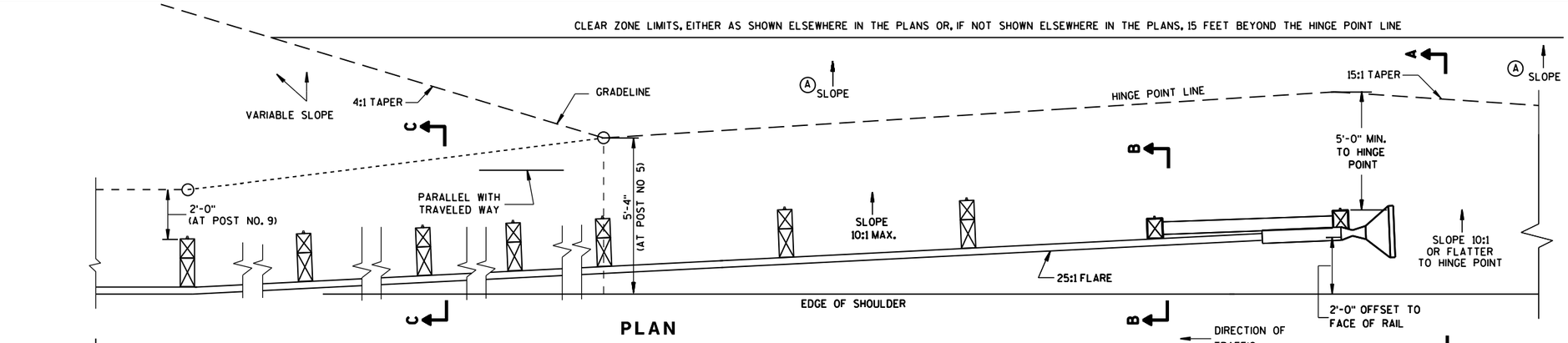
SEE SDD 14B42 FOR MORE INFORMATION.

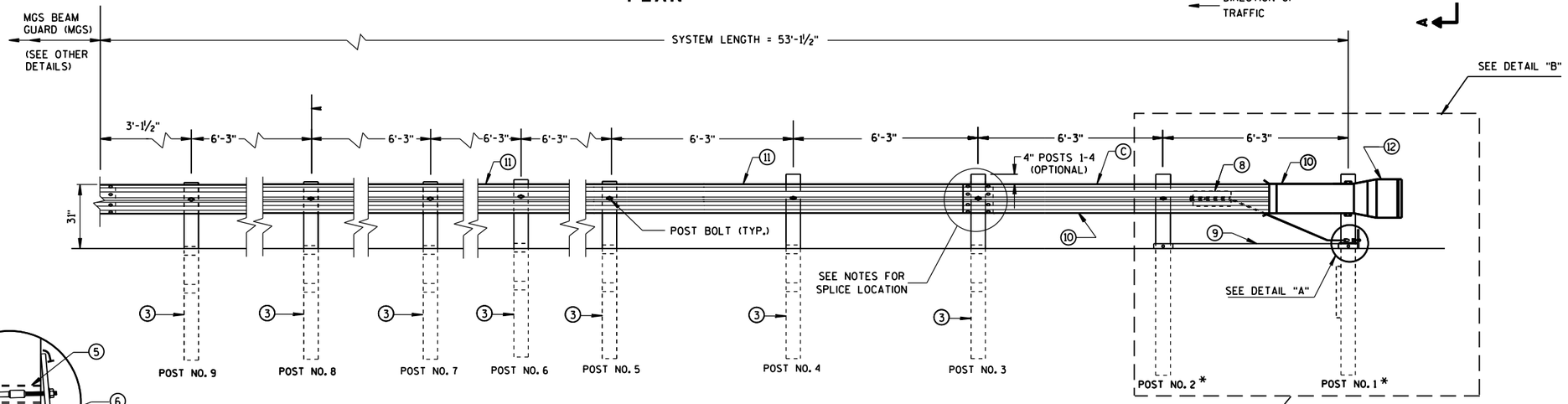
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

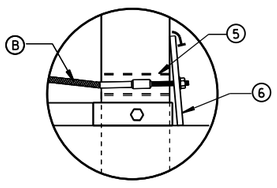
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

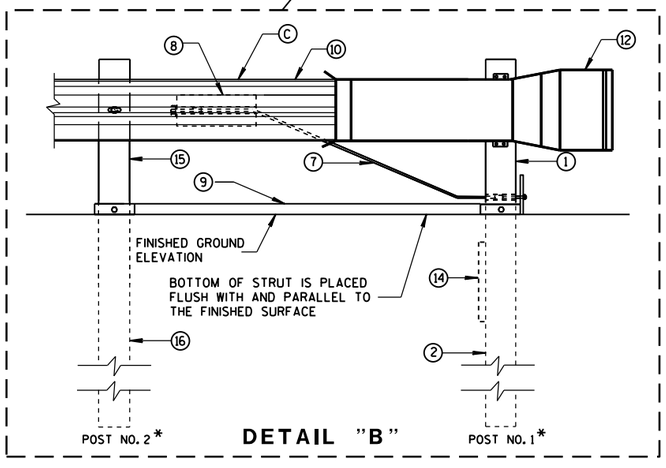
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

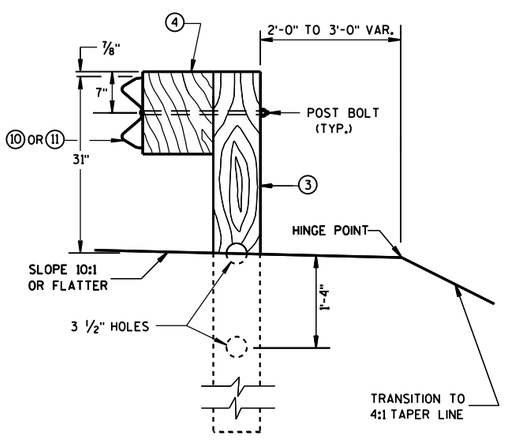
THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.

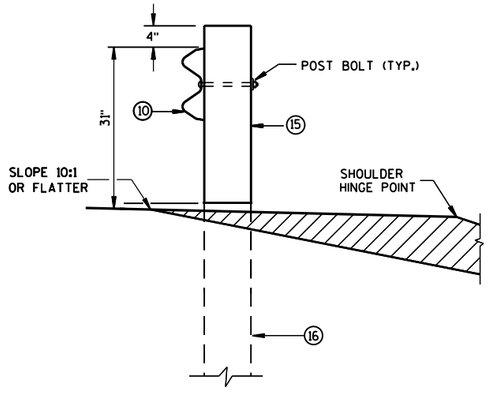


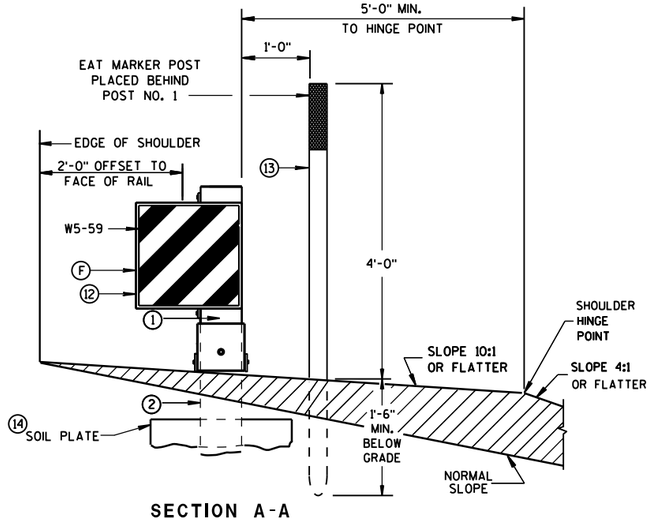






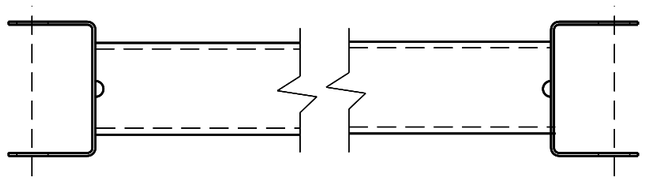




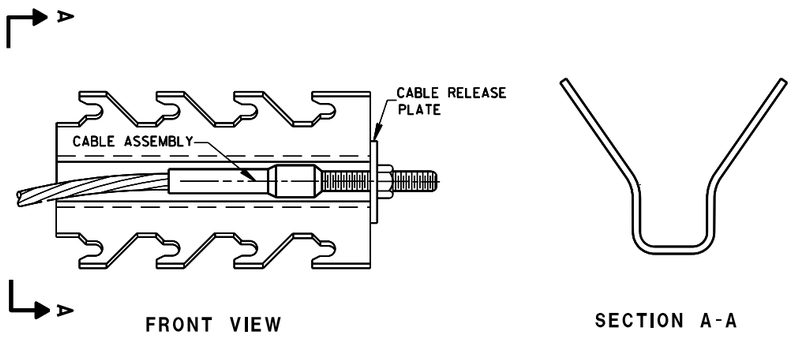


MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
STATE OF WISCONSIN DEPARTMENT OF TRANSPO

6 S.D.D. 14 B 44-3a



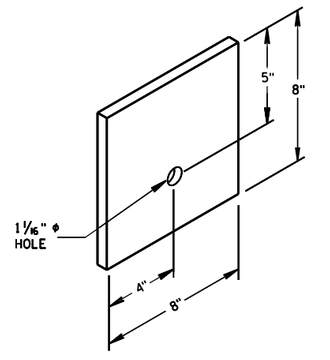
GENERIC GROUND STRUT (9) (H)



GENERIC ANCHOR CABLE BOX (8) (H)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	UPPER POST NO. 1 6" X 6" TUBE
(2)	LOWER POST NO. 1
(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)	IMPACT HEAD
(13)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
(14)	SOIL PLATE
(15)	UPPER POST NO. 2
(16)	LOWER POST NO. 2



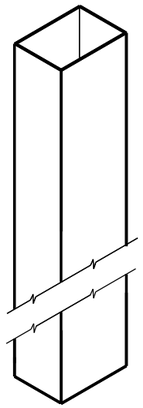
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

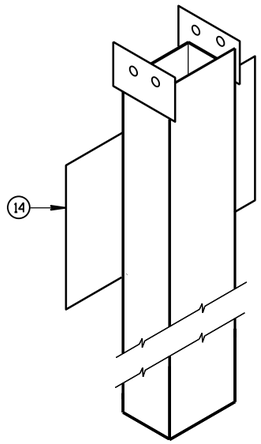
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

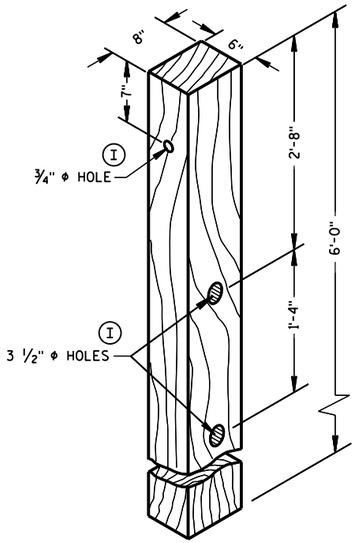
S.D.D. 14 B 44-3b



UPPER POST NO. 1 (1)

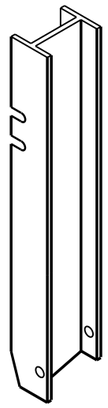


LOWER POST NO. 1 (2)

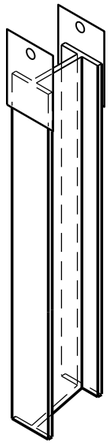


POSTS NUMBER 3-9

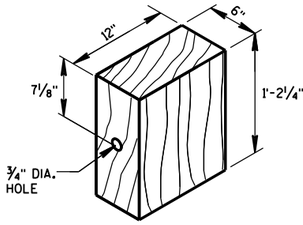
WOOD CRT POST (3)



UPPER POST NO. 2 (15)

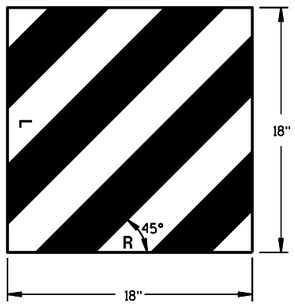


LOWER POST NO. 2 (16)



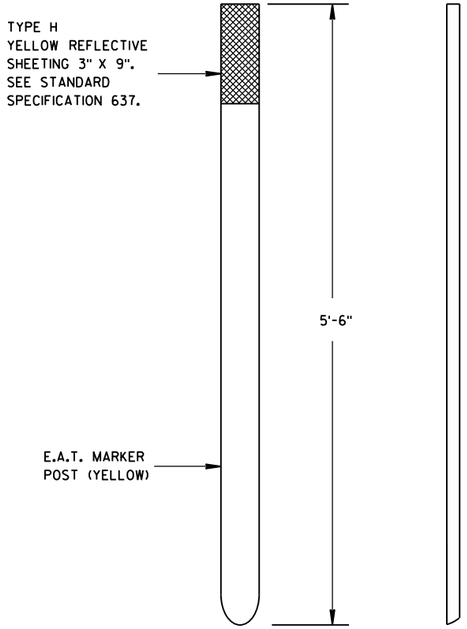
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



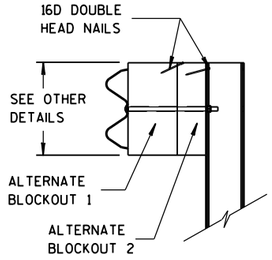
W5-59

REFLECTIVE SHEETING DETAIL (H)

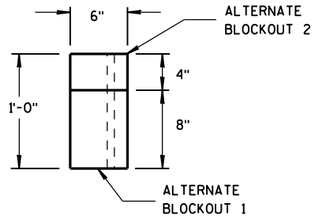


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERVISOR

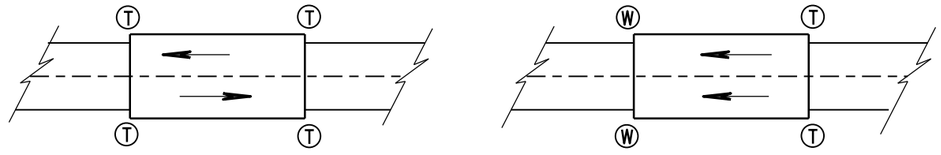
FHWA

6

S.D.D. 14 B 44-3c

6

S.D.D. 14 B 44-3c



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

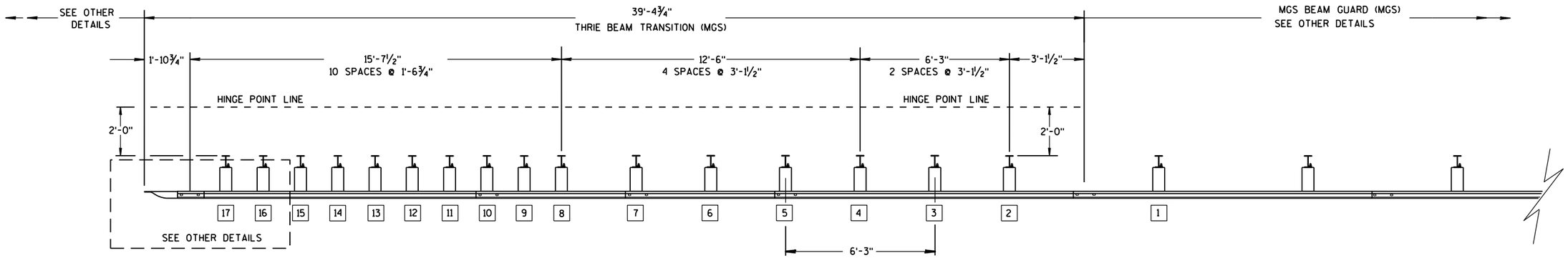
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

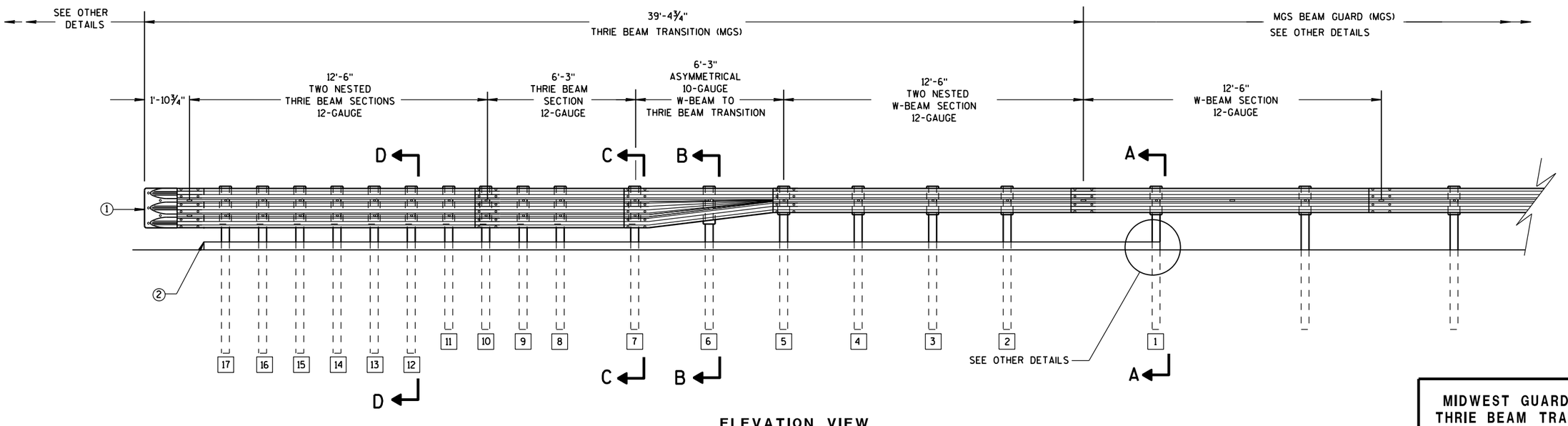
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

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 TRANSPOI

6

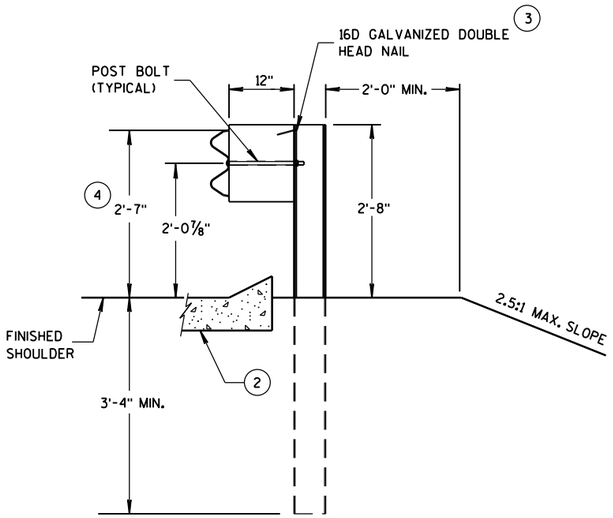
S.D.D. 14 B 45-4a

GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE_FEATURE SEE PLAN FOR INFORMATION.

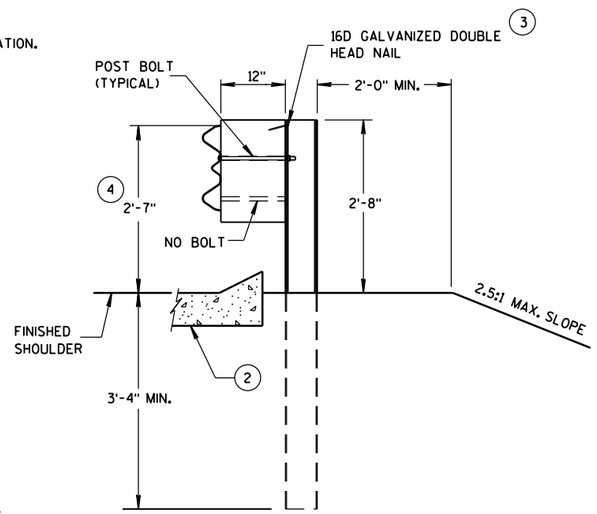
(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



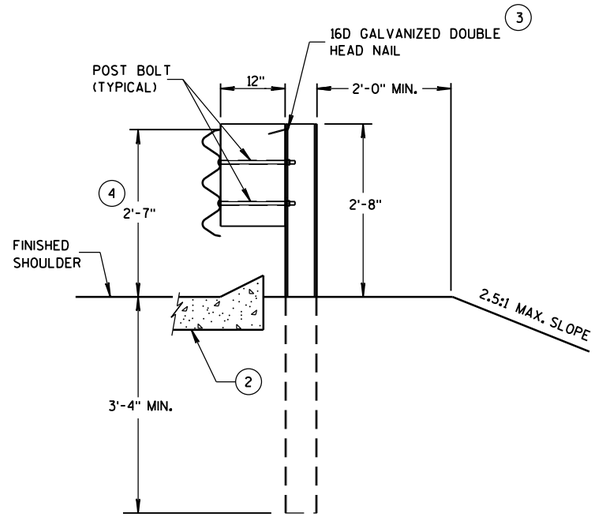
SECTION A-A

POSTS 1-5



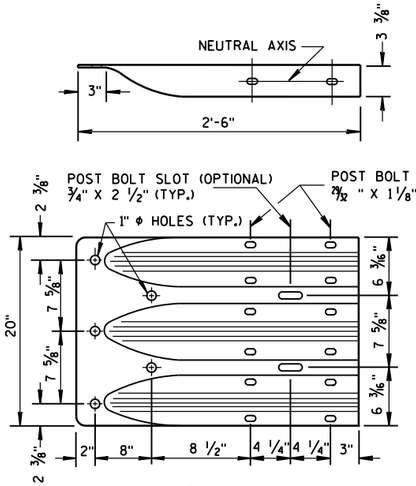
SECTION B-B

POST 6



SECTION C-C

POSTS 7-11



THRIE BEAM TERMINAL CONNECTOR

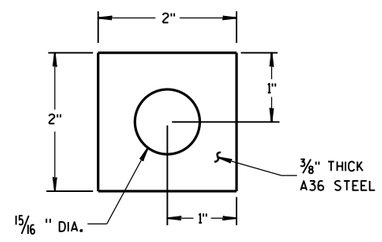
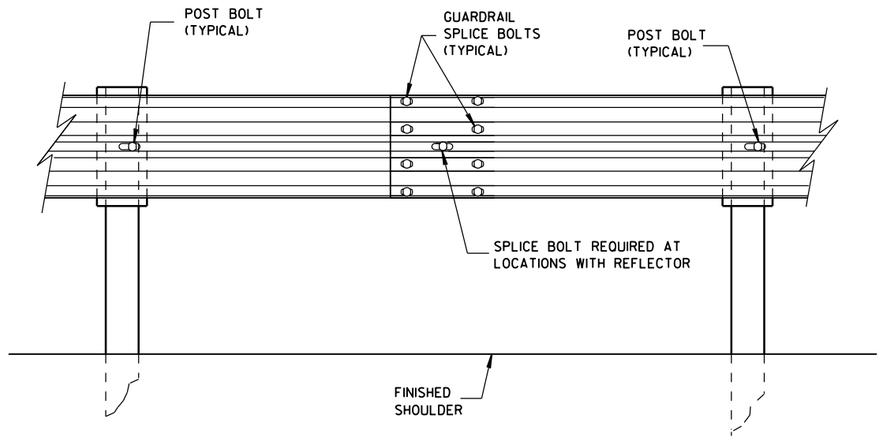
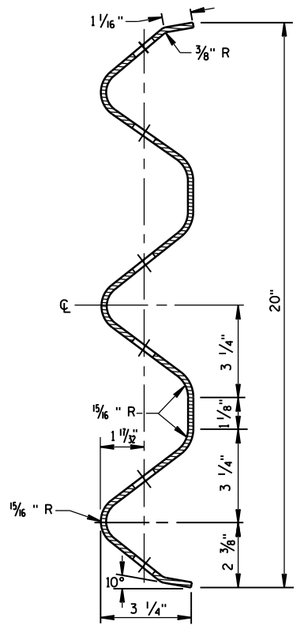


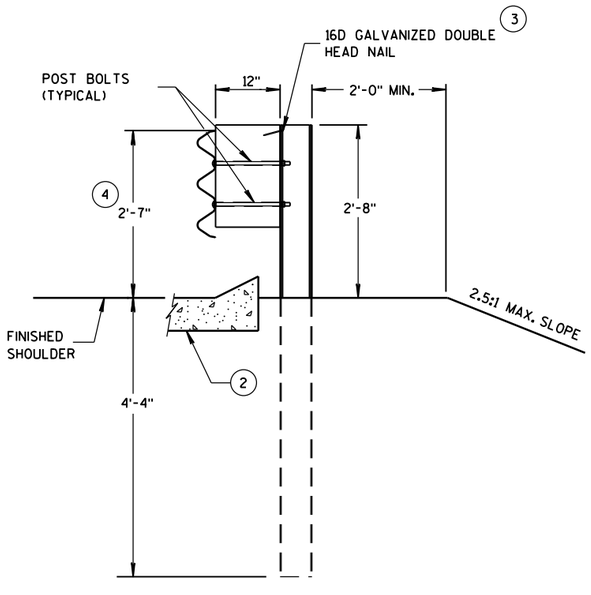
PLATE WASHER DETAIL



SPLICE DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

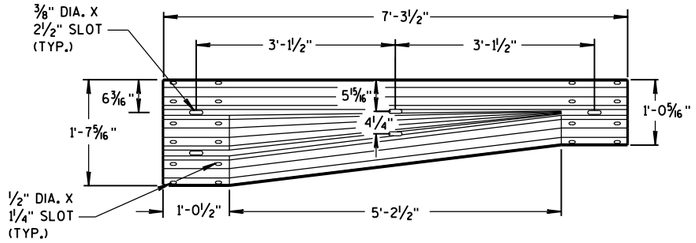


SECTION D-D

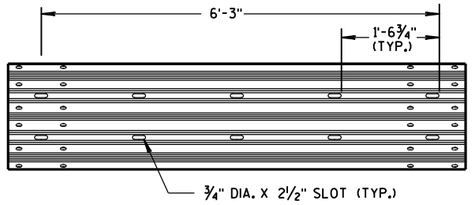
POSTS 12-17

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

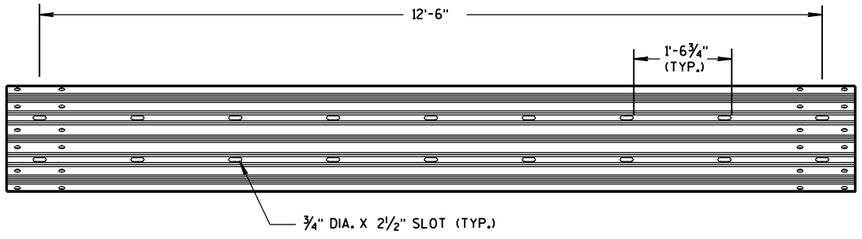
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



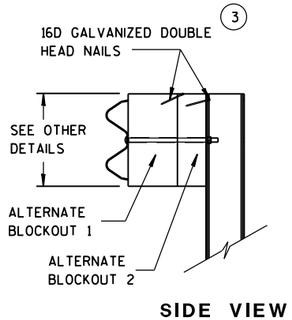
W-BEAM TO THRIE BEAM TRANSITION SECTION



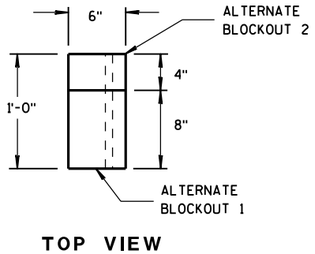
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

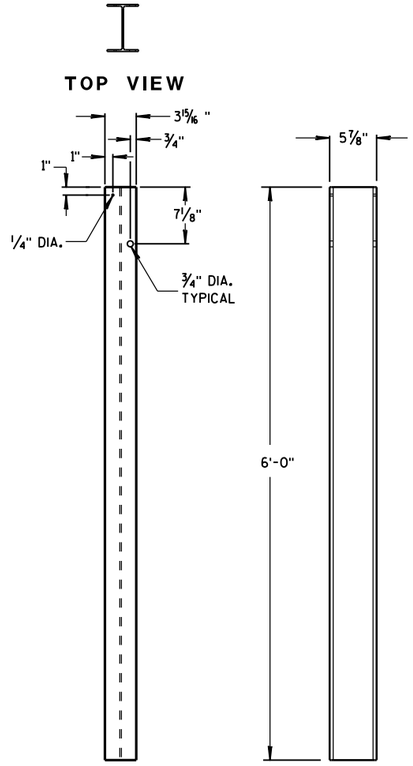


SIDE VIEW

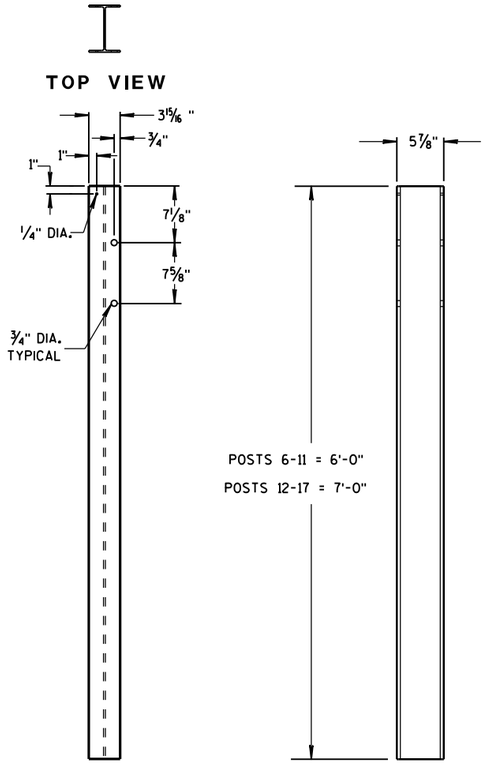


TOP VIEW

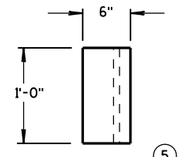
ALTERNATE WOOD BLOCKOUT DETAIL



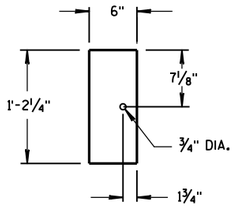
STEEL POSTS 1-5



STEEL POSTS 6-17

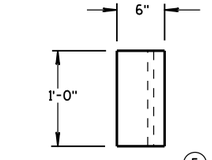


TOP VIEW

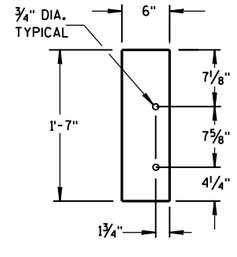


FRONT VIEW

BLOCKOUT POSTS 1-5



TOP VIEW



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.

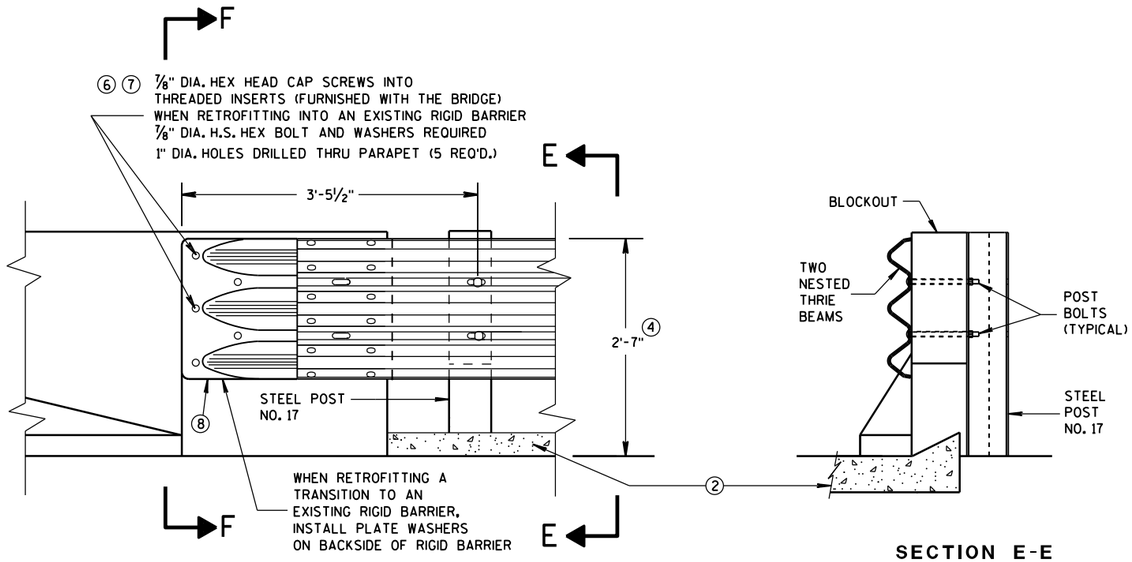
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 45-4c
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.

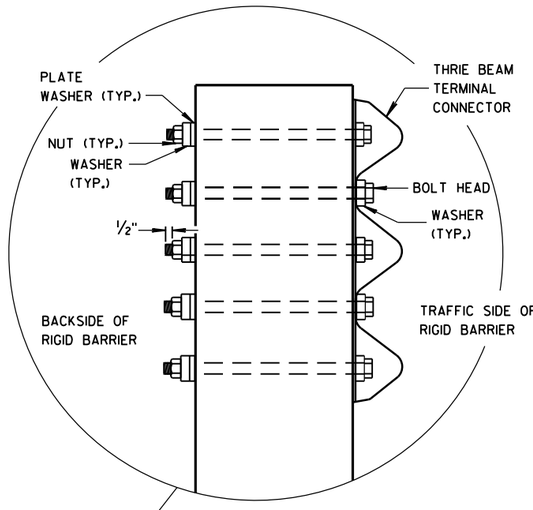
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

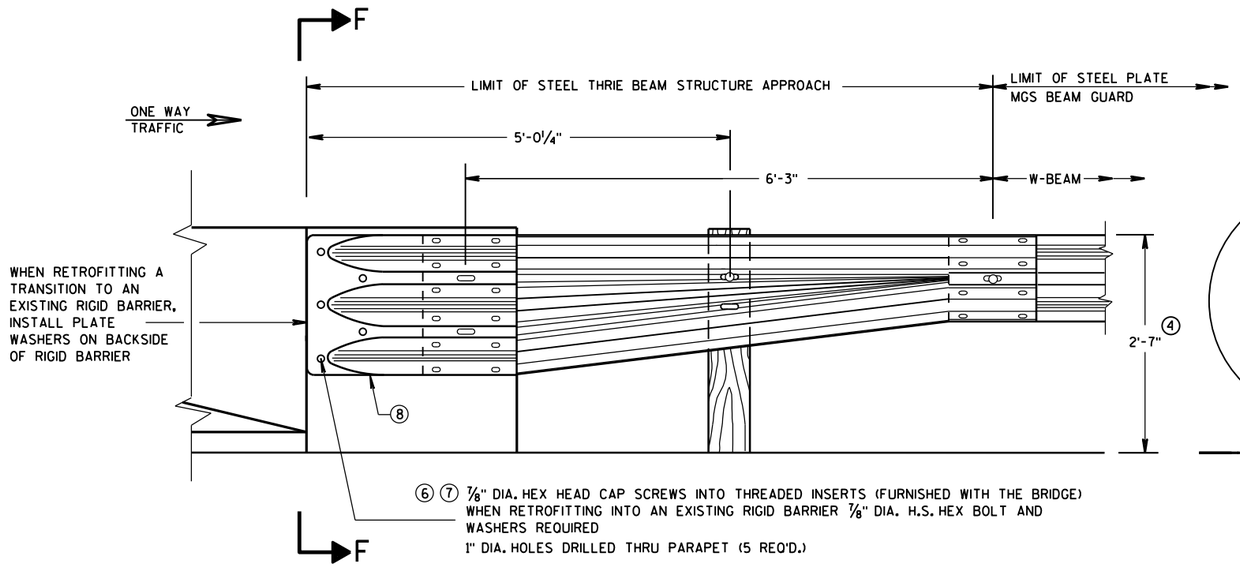
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

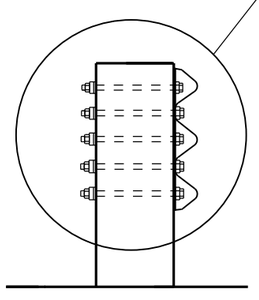
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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".

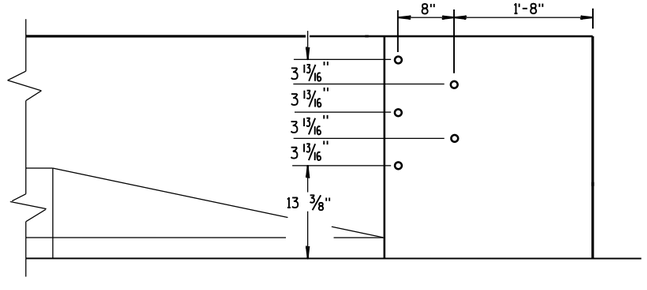




FRONT VIEW



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

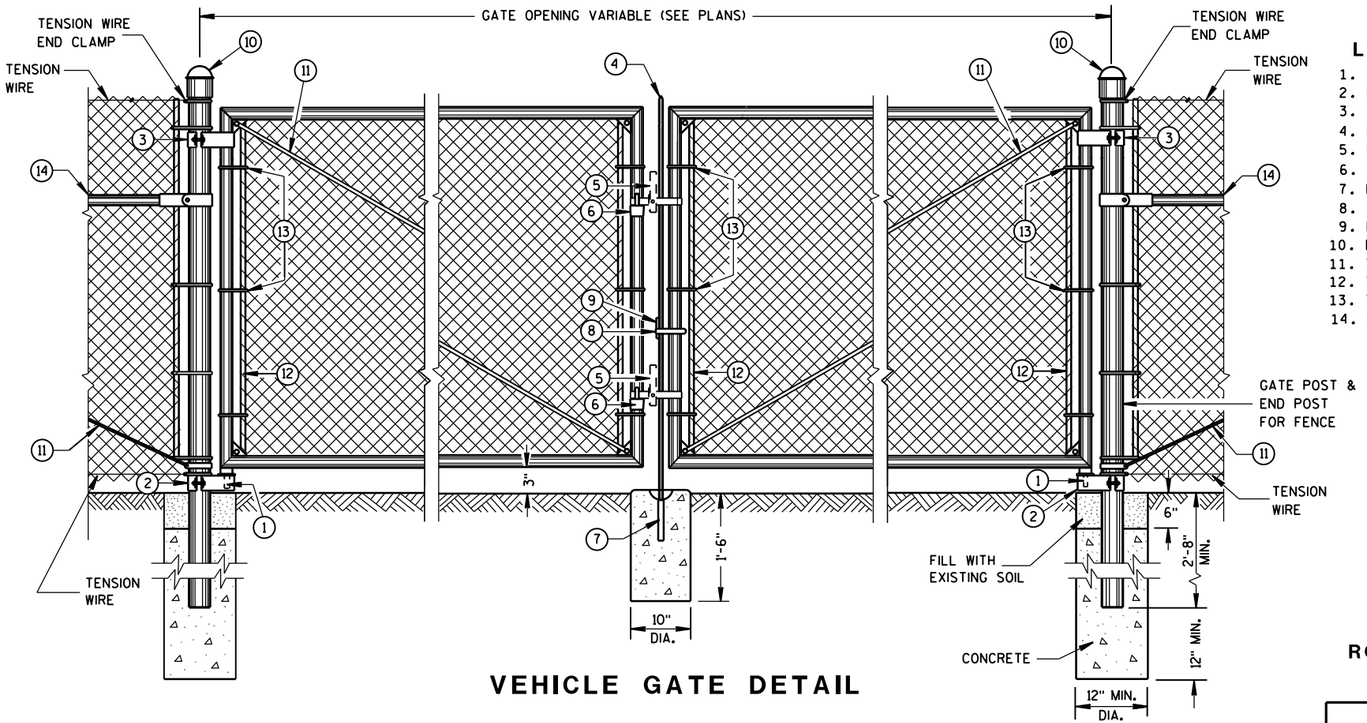
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

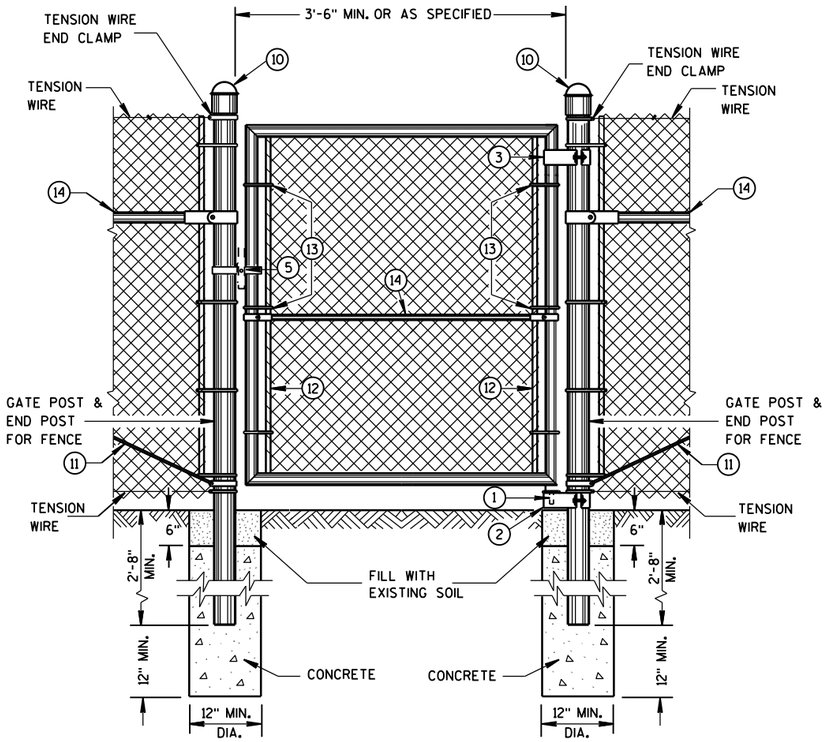
S.D.D. 14 B 45-4d

6

S.D.D. 14 B 45-4d



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

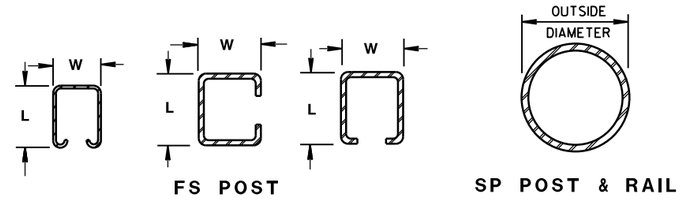
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



FS POST — SP POST & RAIL

CROSS SECTIONS OF POSTS AND RAILS

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

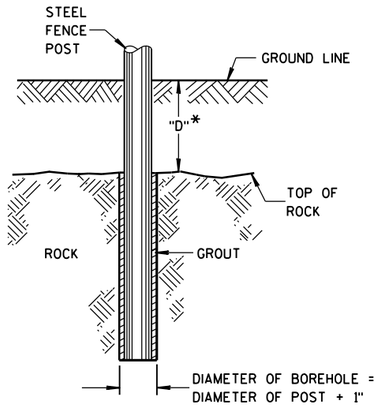
POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

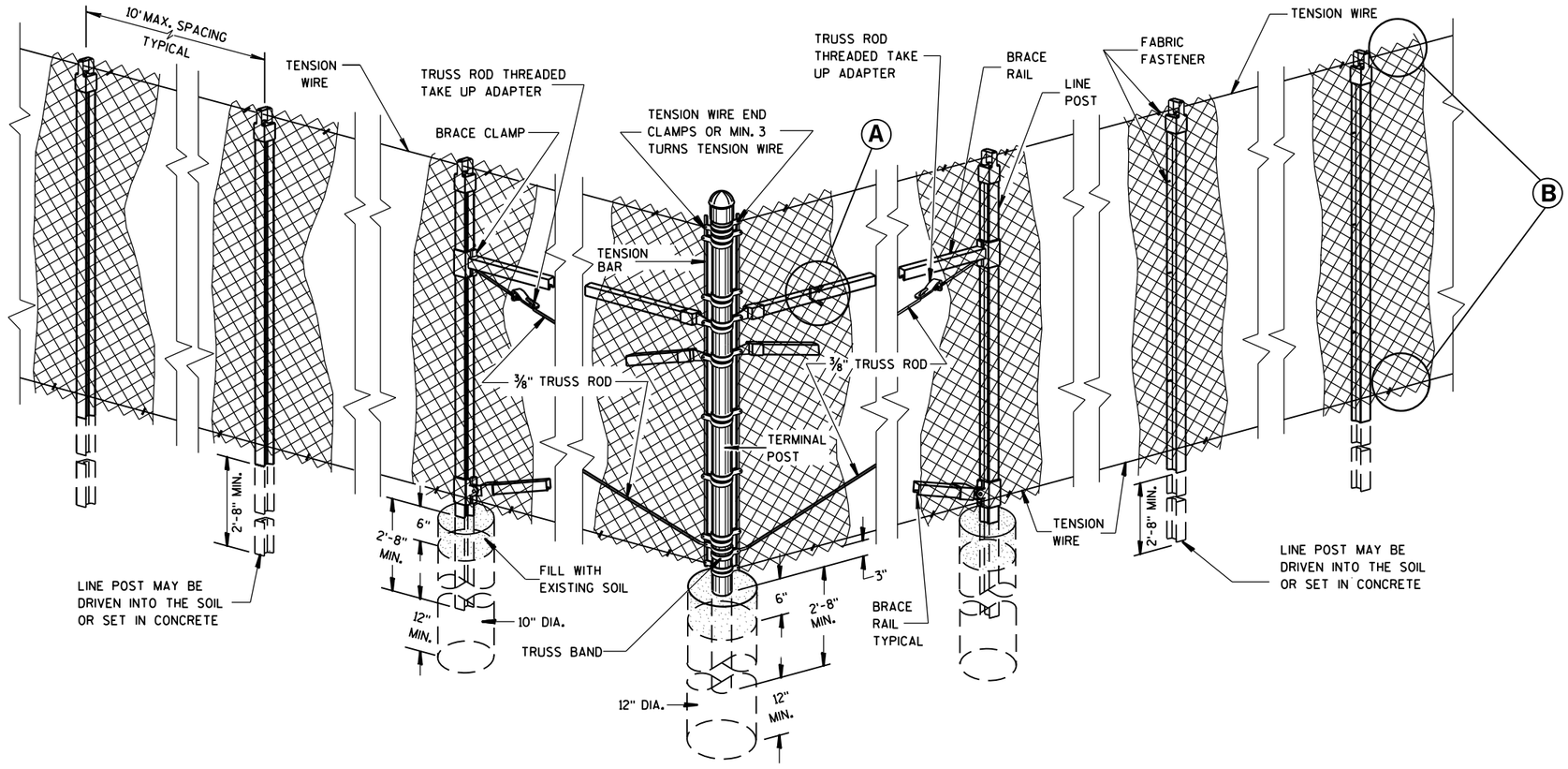
6

S.D.D. 15 B 3-15a

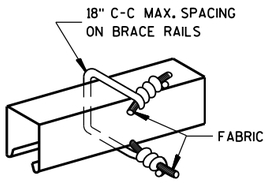


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



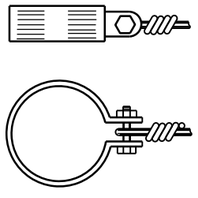
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



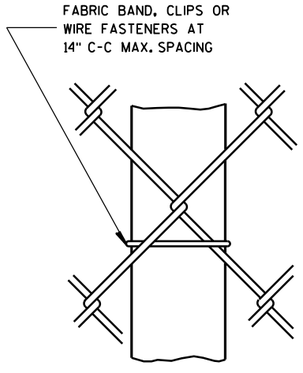
BRACE RAIL

FABRIC FASTENER

Ⓐ



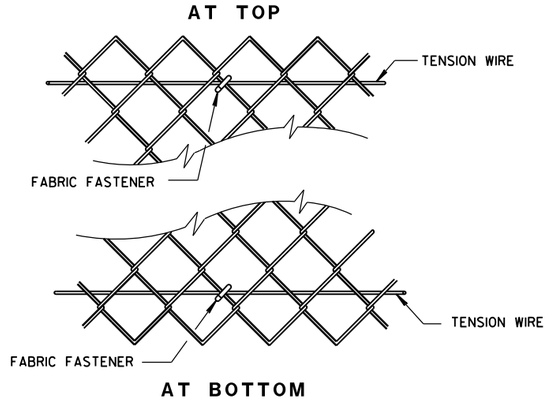
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

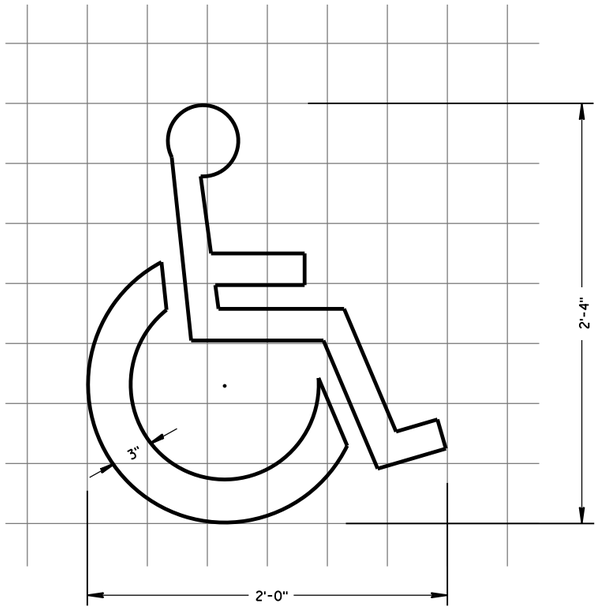
APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

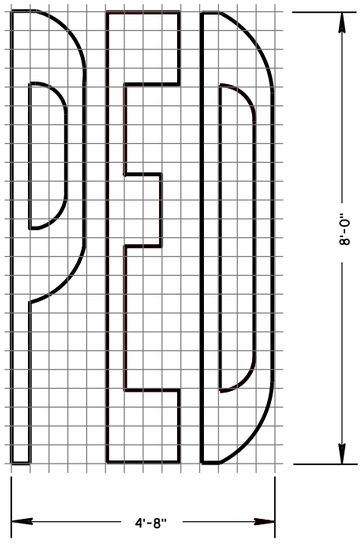
S.D.D. 15 B 3-15b

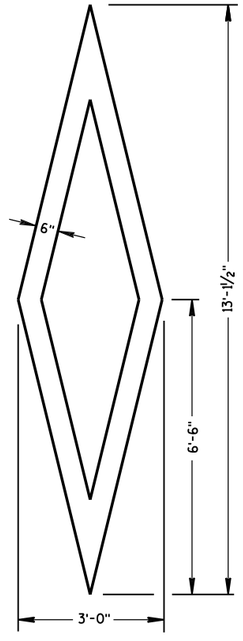
GENERAL NOTES

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



HANDICAP SYMBOL





PREFERENTIAL LANE SYMBOL

6

6

S.D.D. 15 C 7-14a

S.D.D. 15 C 7-14a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

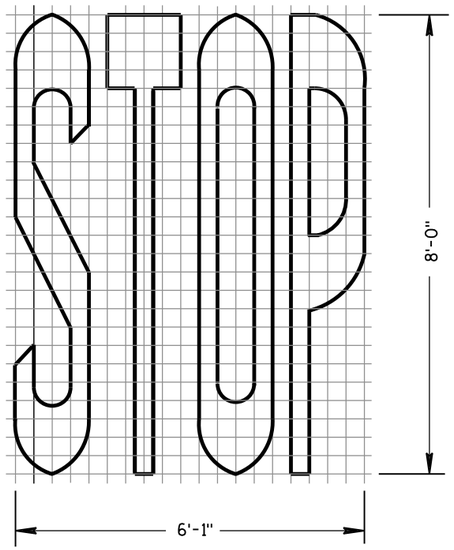
June 2017 — DATE

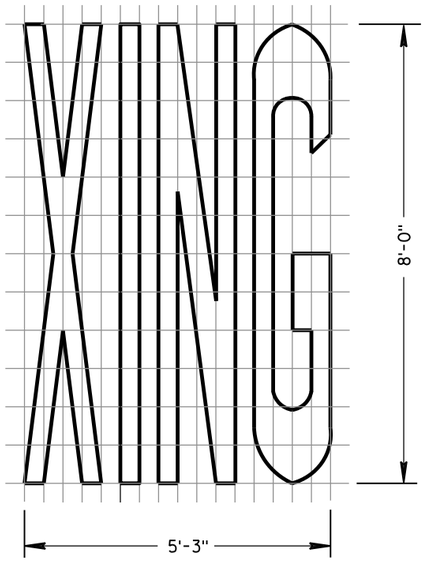
/S/ Matthew R. Rauch — STATE SIGNING AND MARK EER

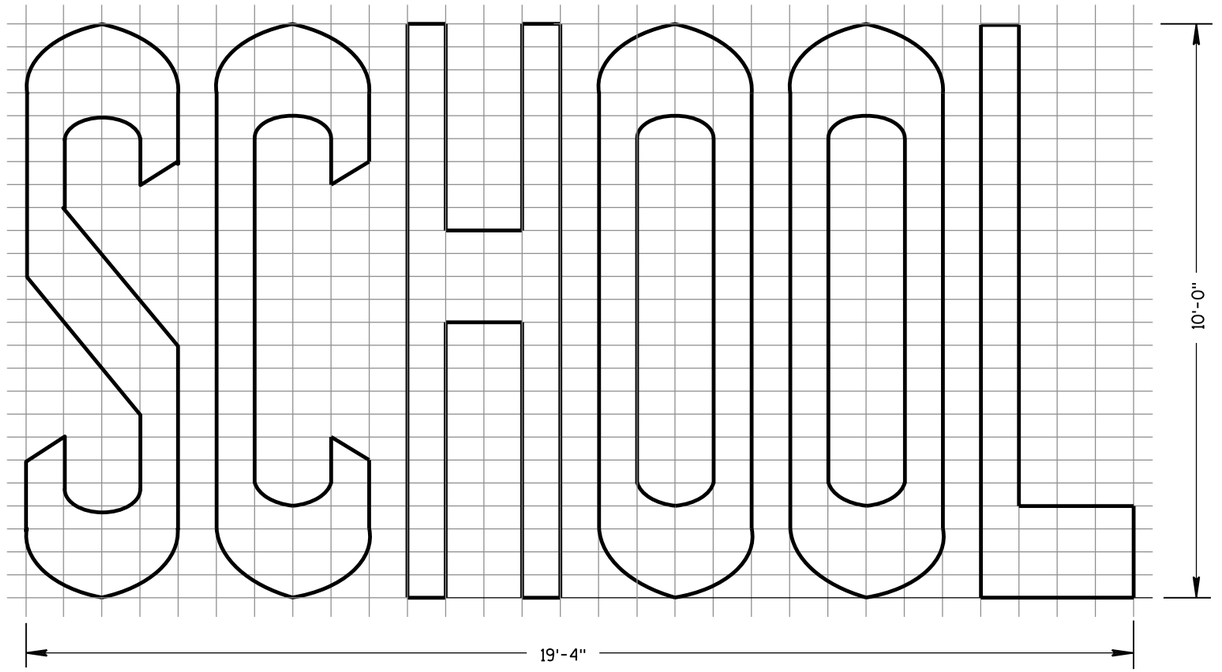
FHWA

GENERAL NOTES

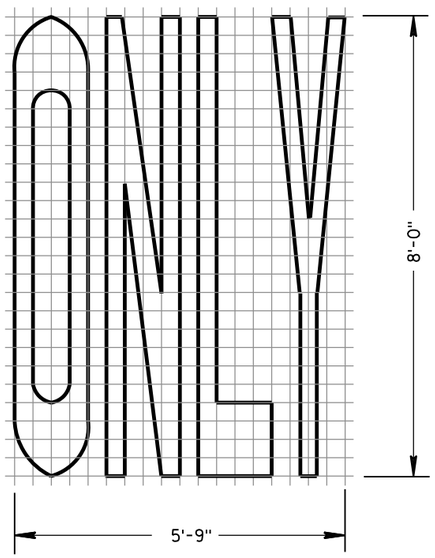
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

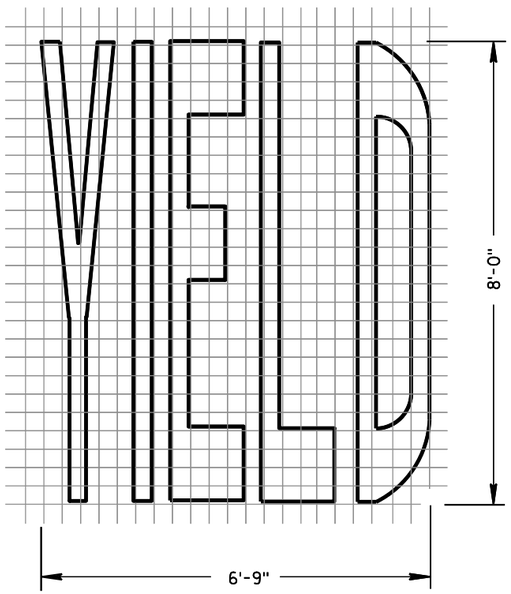


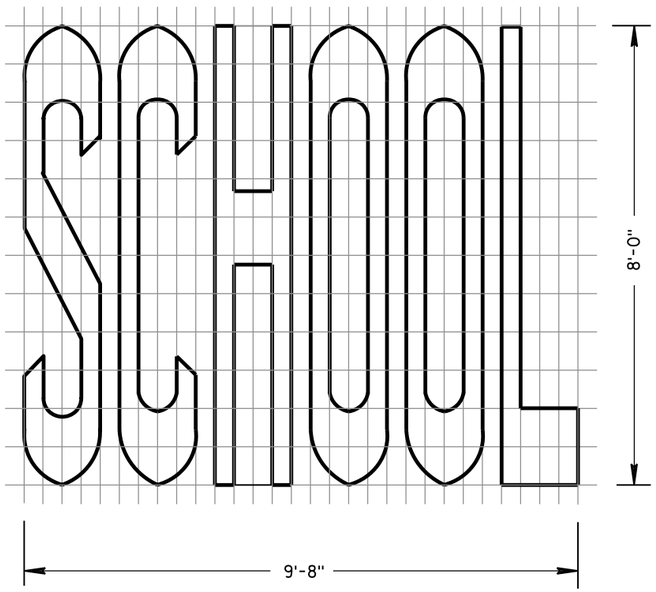




TWO-LANE







SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
EER
FHWA

6

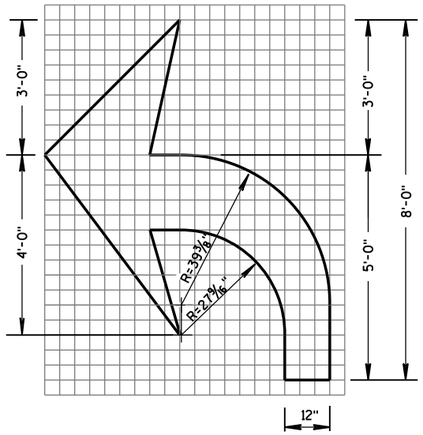
S.D.D. 15 C 7-14b

6

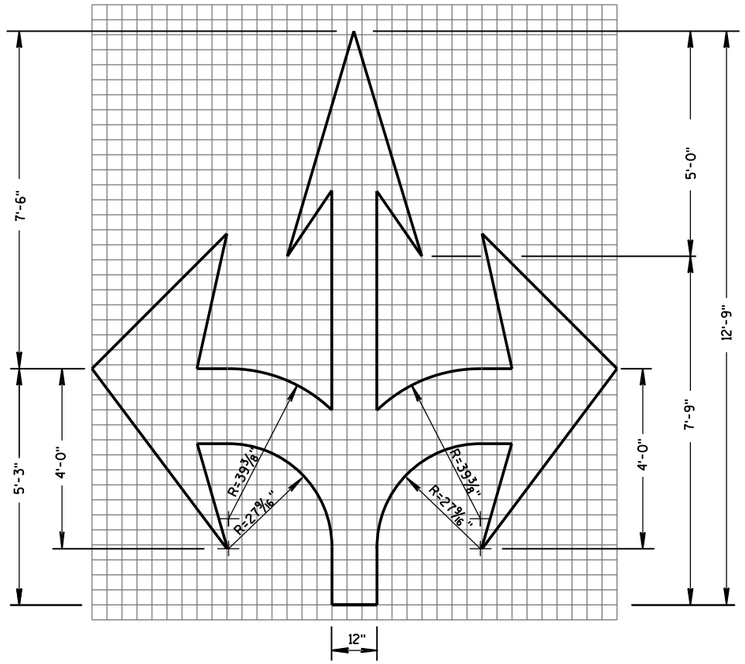
S.D.D. 15 C 7-14b

GENERAL NOTES

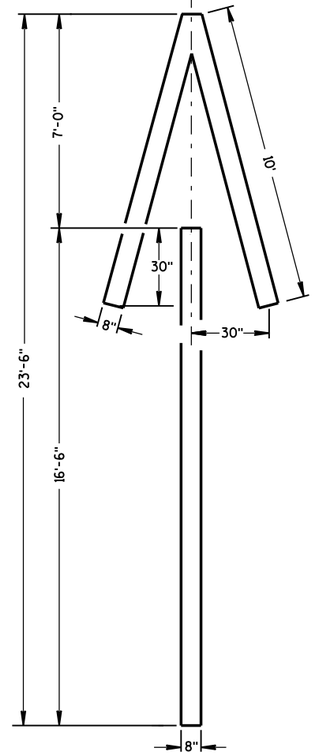
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



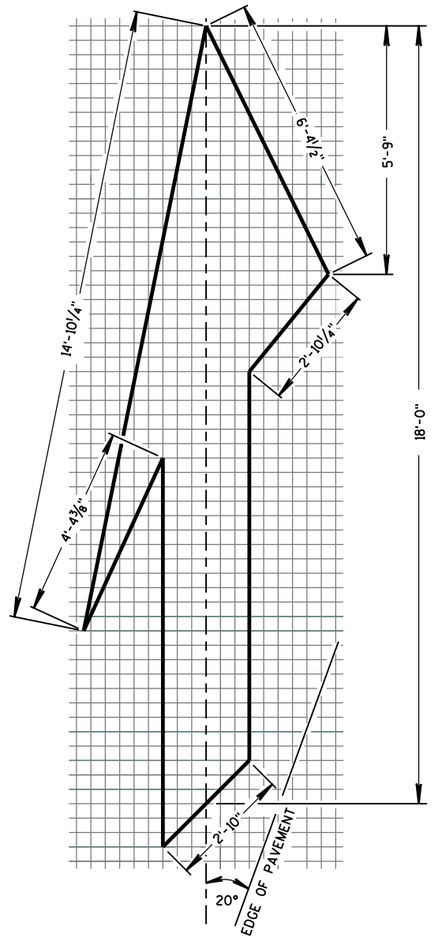
TYPE 2



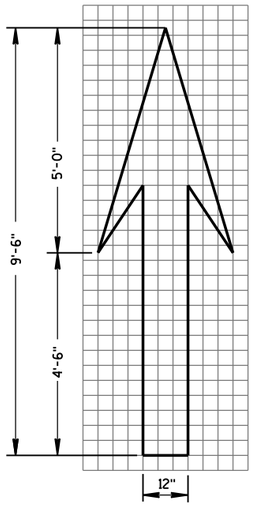
TYPE 6



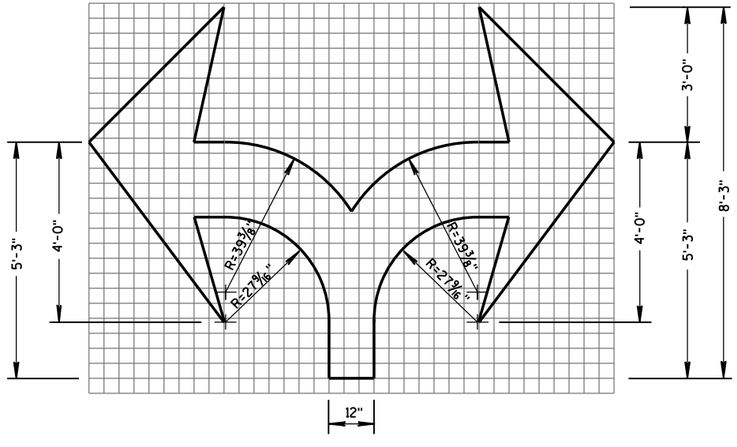
TYPE 4



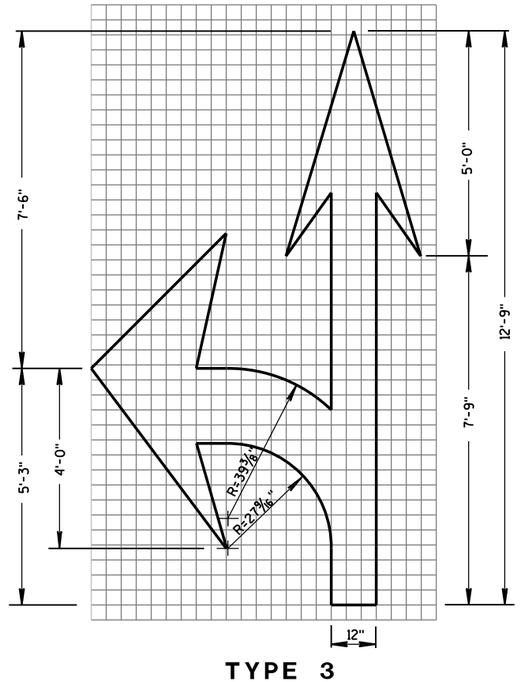
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

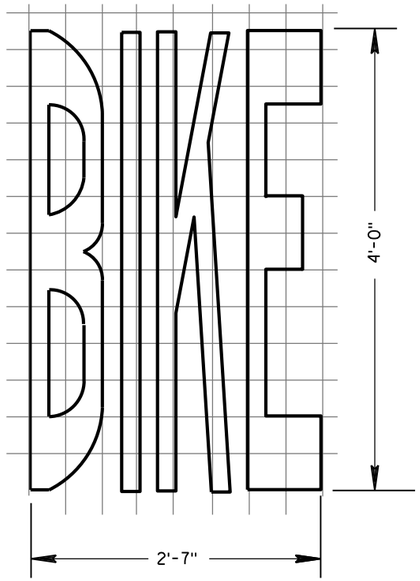
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]NEER
FHWA

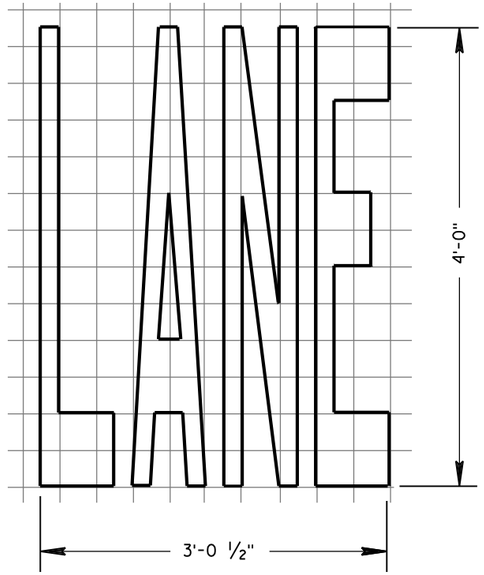
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S.D.D. 15 C 7-14c

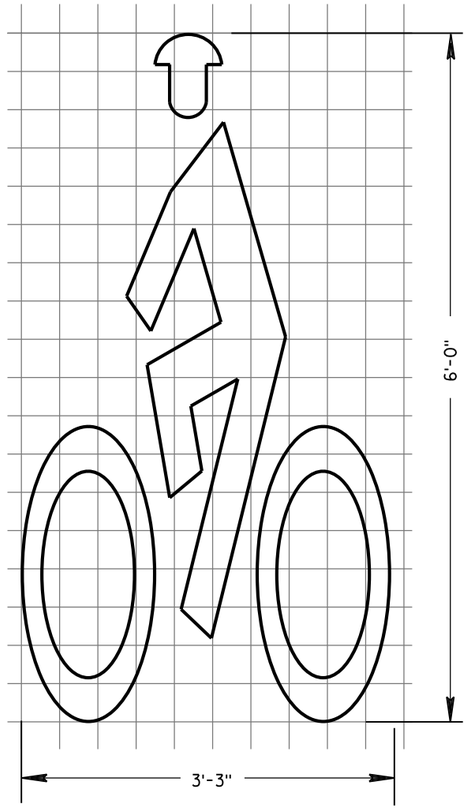
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S.D.D. 15 C 7-14c

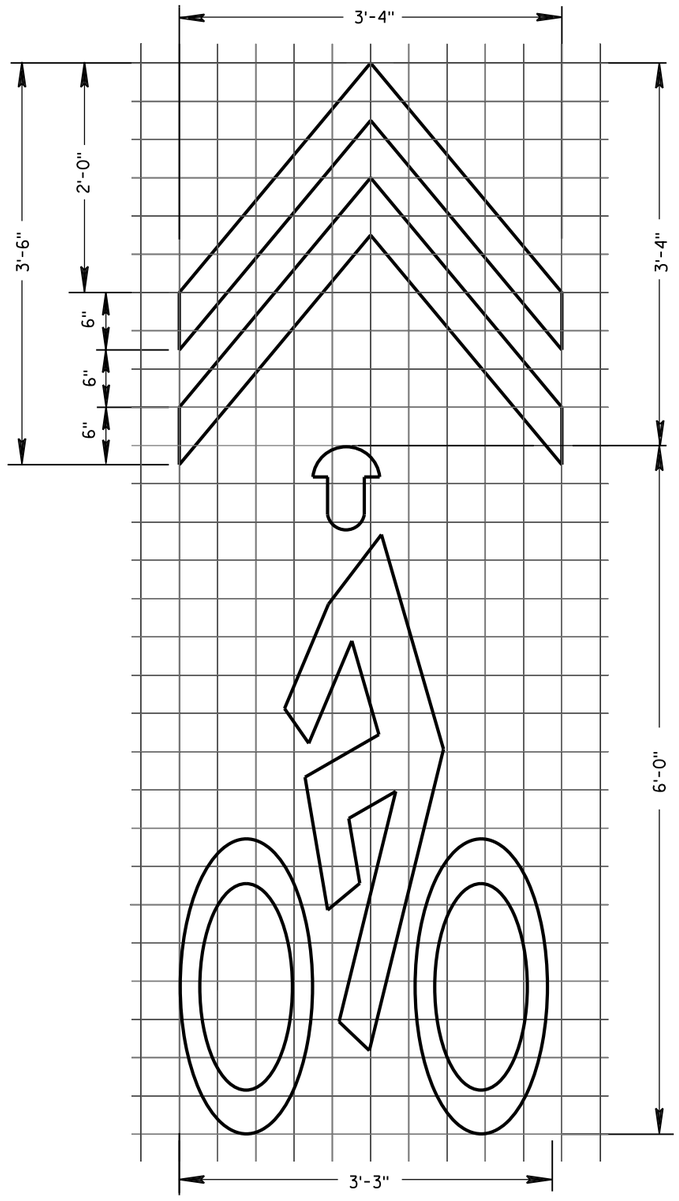




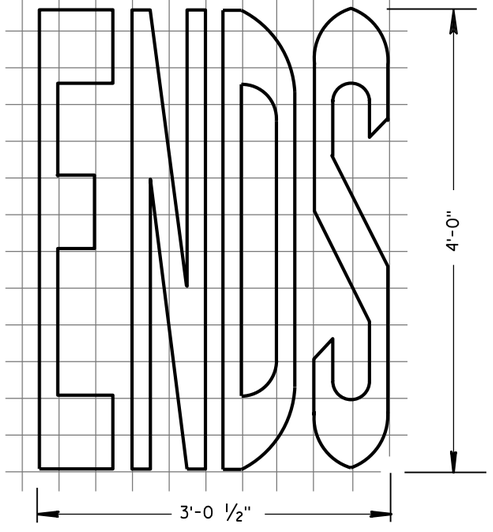
BIKE LANE WORDS



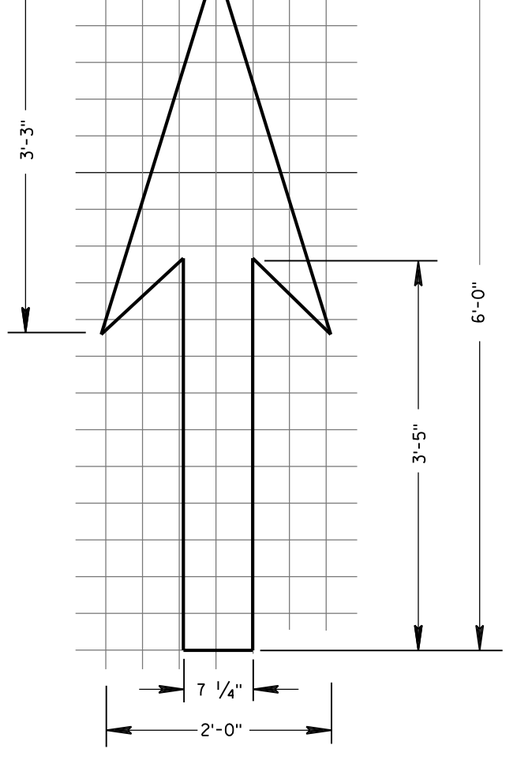
BIKE LANE SYMBOL



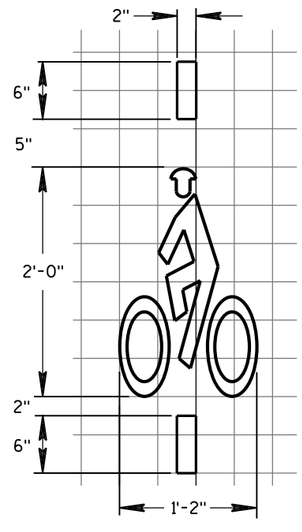
BIKE SYMBOL FOR SHARED LANE



BIKE LANE WORDS



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING

GENERAL NOTES

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

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

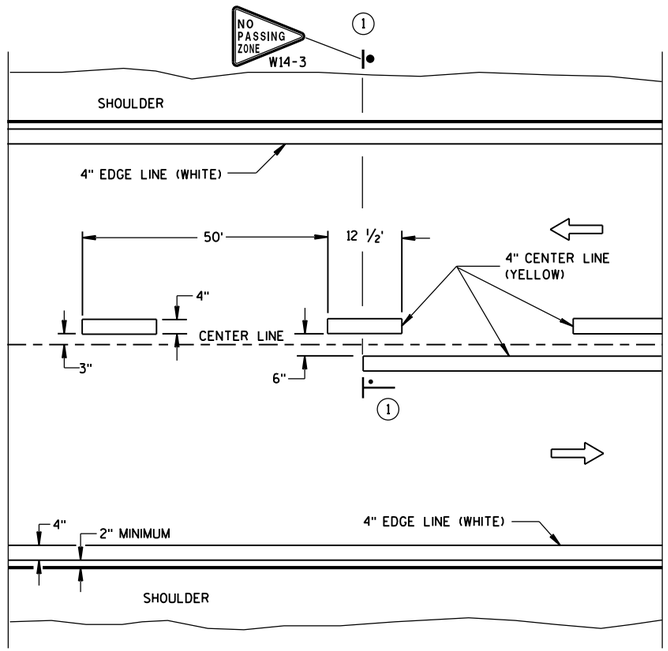
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

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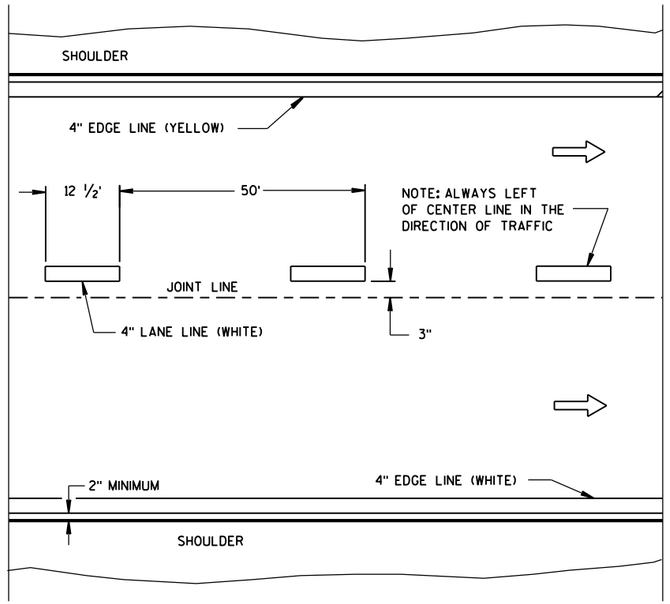
S.D.D. 15 C 7-14e

6

S.D.D. 15 C 7-14e



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

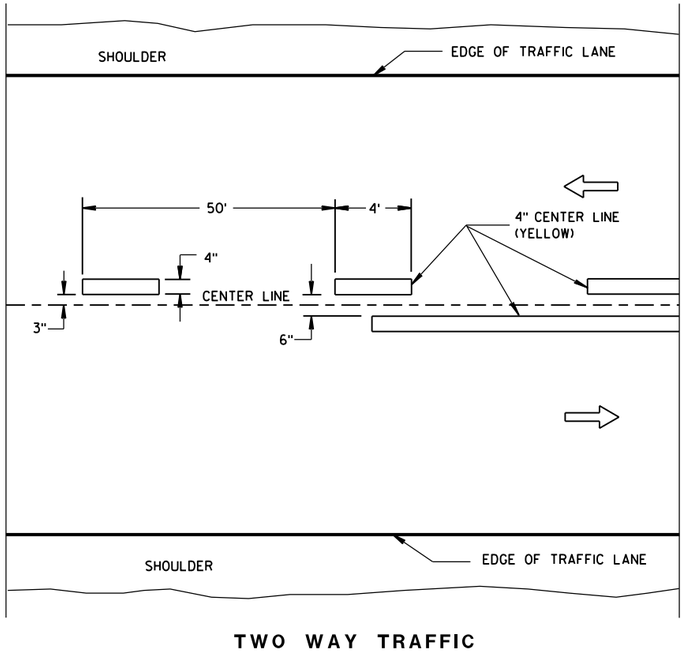
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

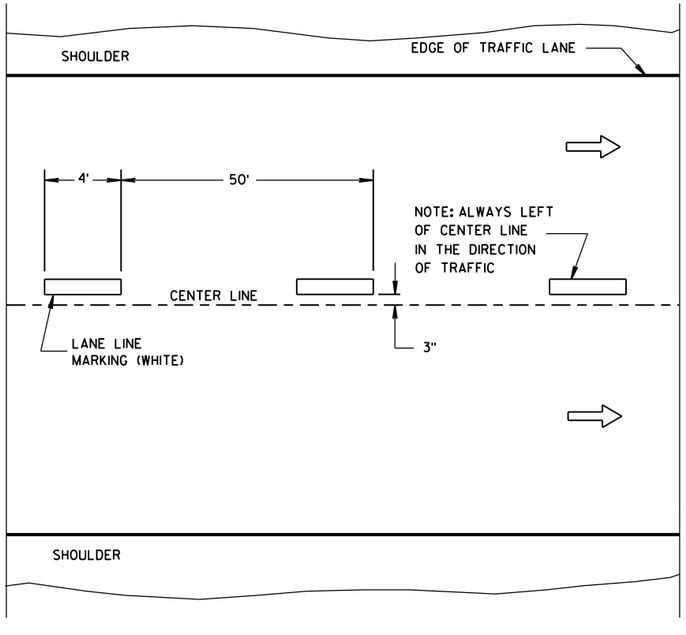
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



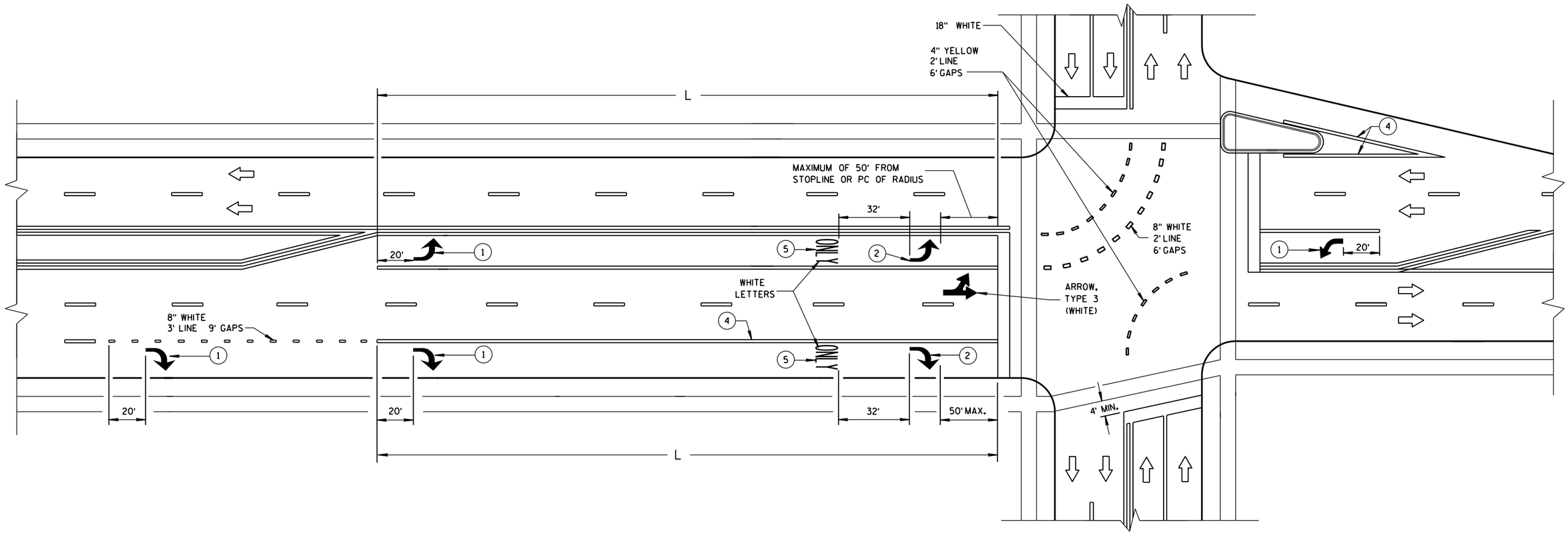
ONE WAY TRAFFIC

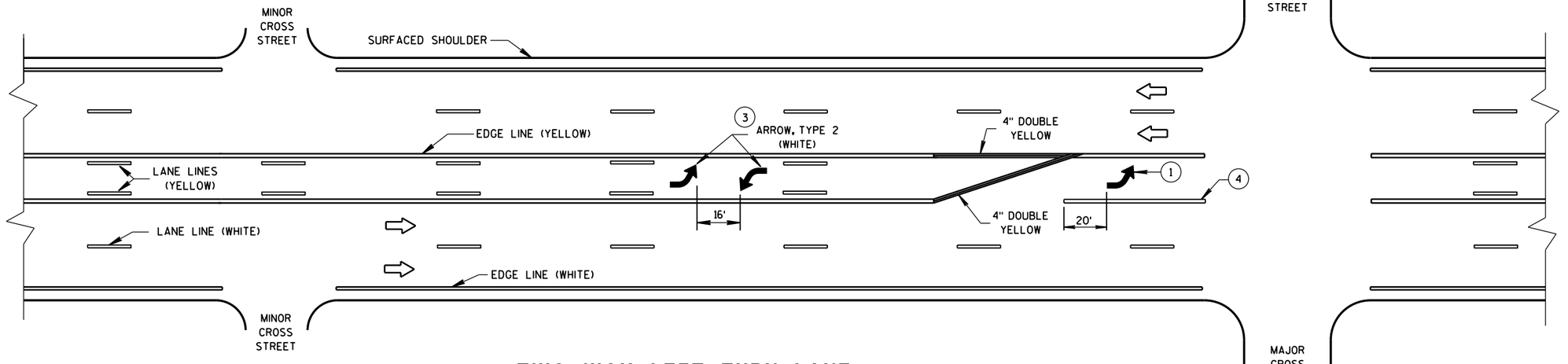
TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]INEER
FHWA





GENERAL NOTES

(1) REQUIRED ARROW, TYPE 2 (WHITE).

(2) REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.

(3) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(4) 8" WHITE

(5) REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

L = LENGTH OF TURN BAY

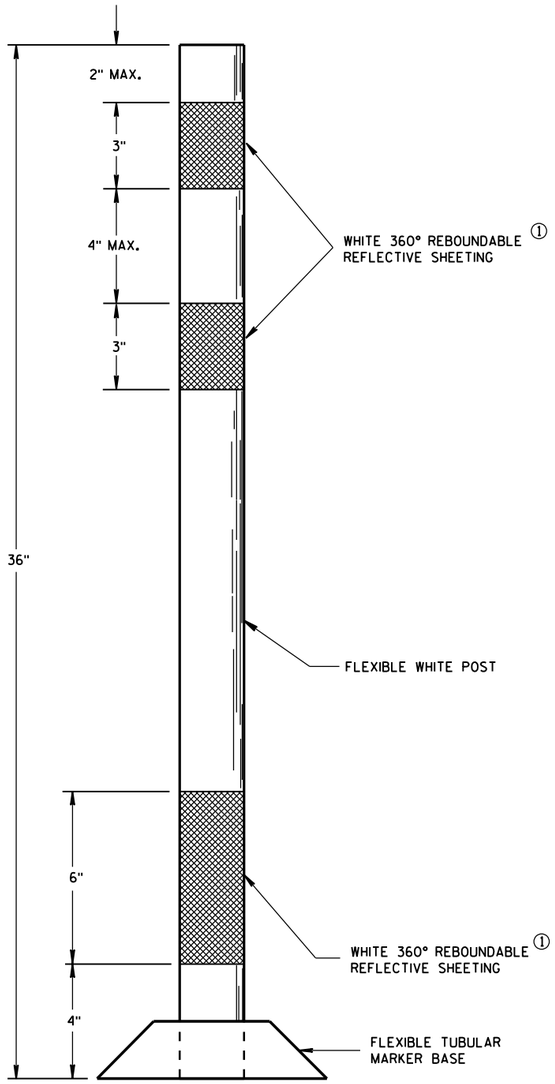
TWO WAY LEFT TURN LANE

PAVEMENT MARKING
(TURN LANES)

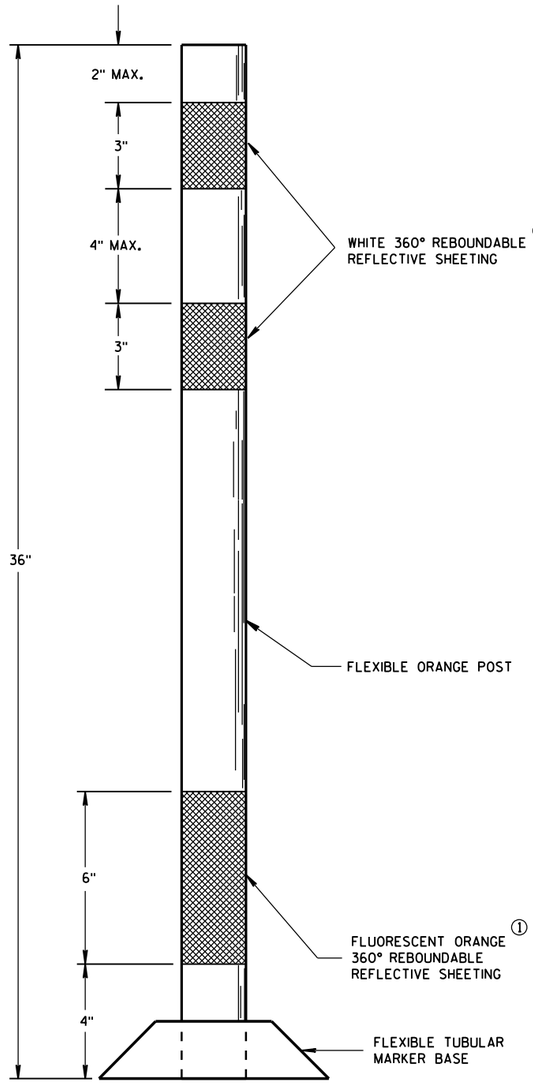
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 15 C 8-18b



FLEXIBLE
TUBULAR MARKER POST
PERMANENT CROSSOVER



FLEXIBLE
TUBULAR MARKER POST
WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

6

S.D.D. 15 C 11-7a

CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

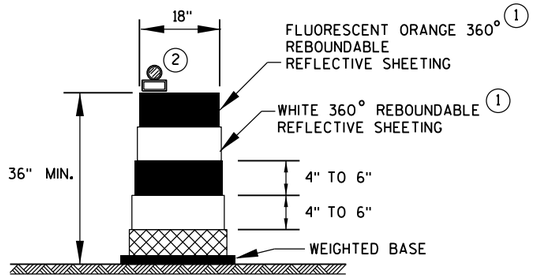
June 2017 — DATE

/S/ Andrew Heldtke — WORK ZONE ENGR

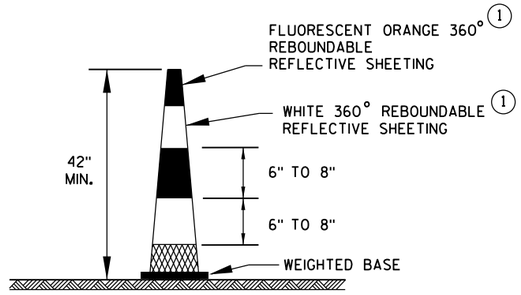
FHWA

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S.D.D. 15 C 11-7a



DRUM

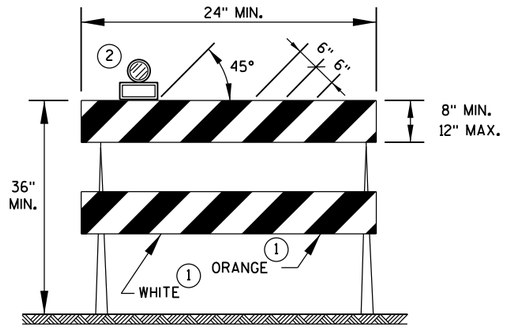


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

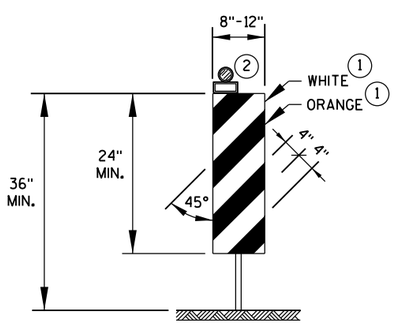
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



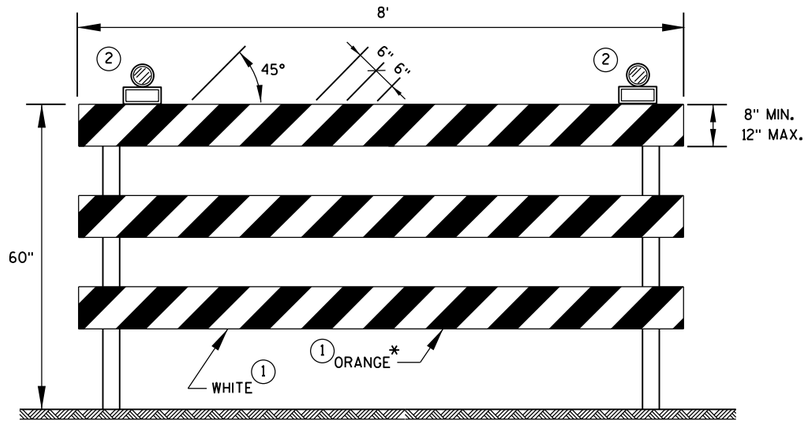
TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE 3 BARRICADE

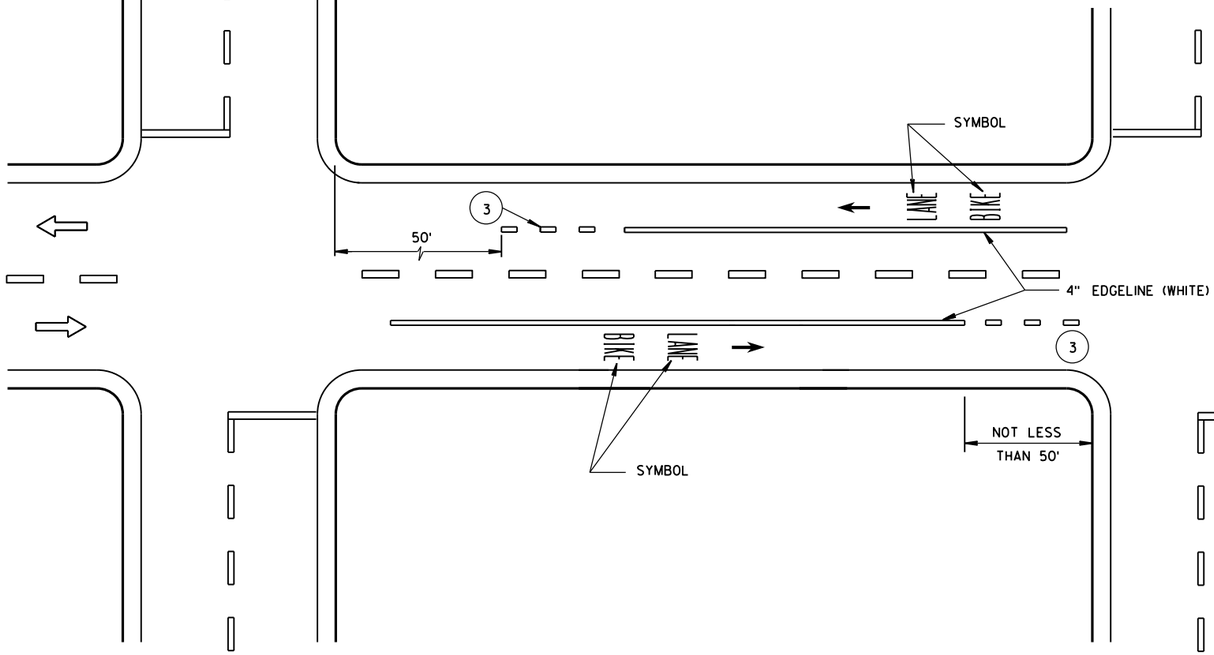
IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

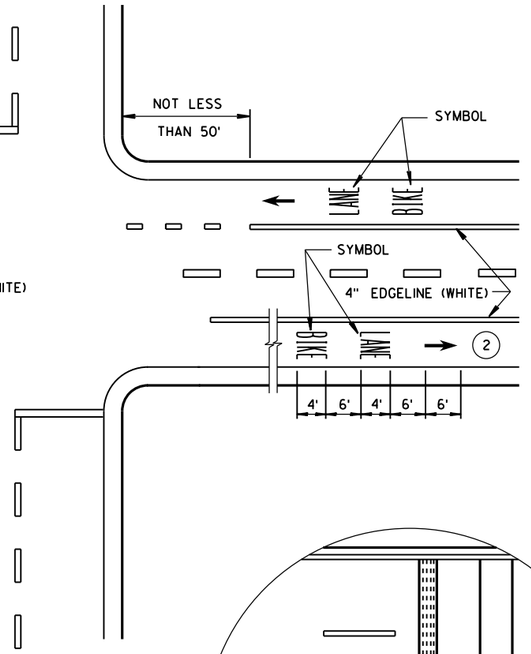
* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
June 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENG
FHWA	

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S.D.D. 15 C 11-7b



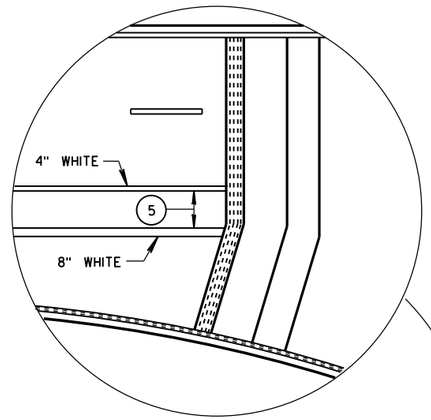


DESIGNATED BICYCLE LANE
NO PARKING

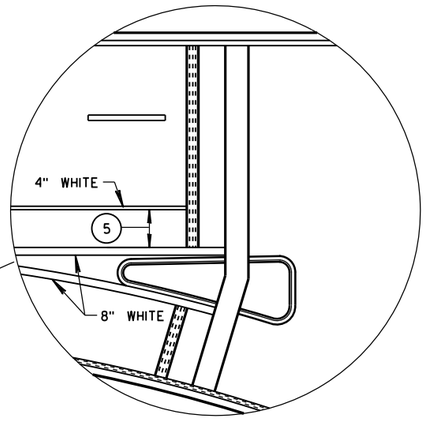
GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3'LINE, 9'GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMODATION FOR CONCRETE PAVEMENT IS 5 FEET WIDE. BIKE ACCOMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4 FEET. USE 5 FEET AT ≥45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FEET WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

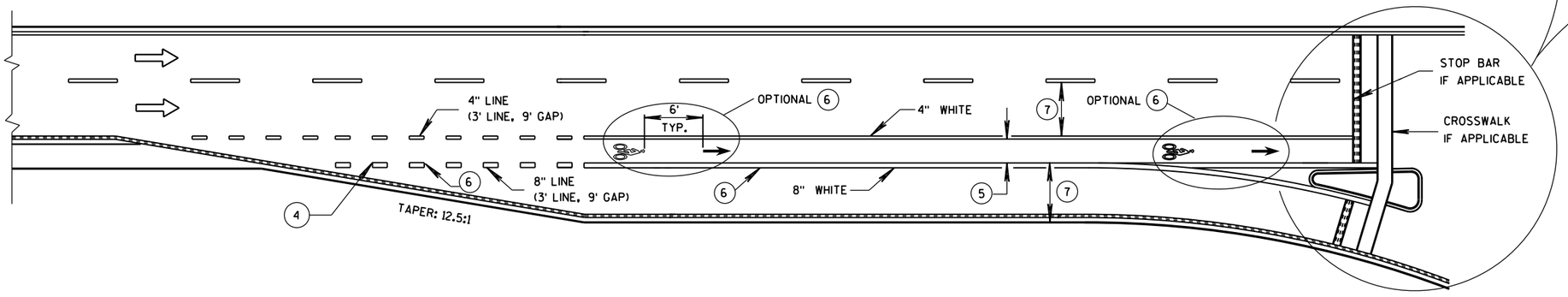
⇨ DIRECTION OF TRAVEL



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS
(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

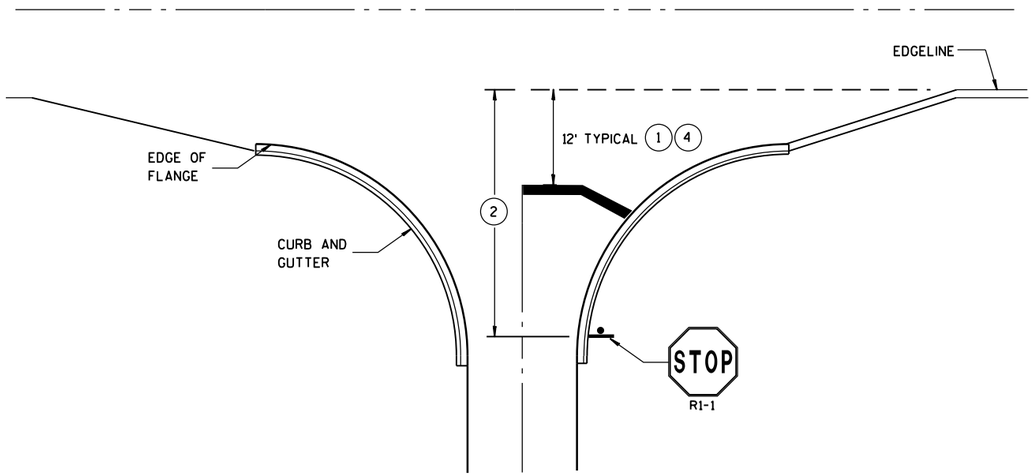
APPROVED
12-2016 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER
FHWA

6

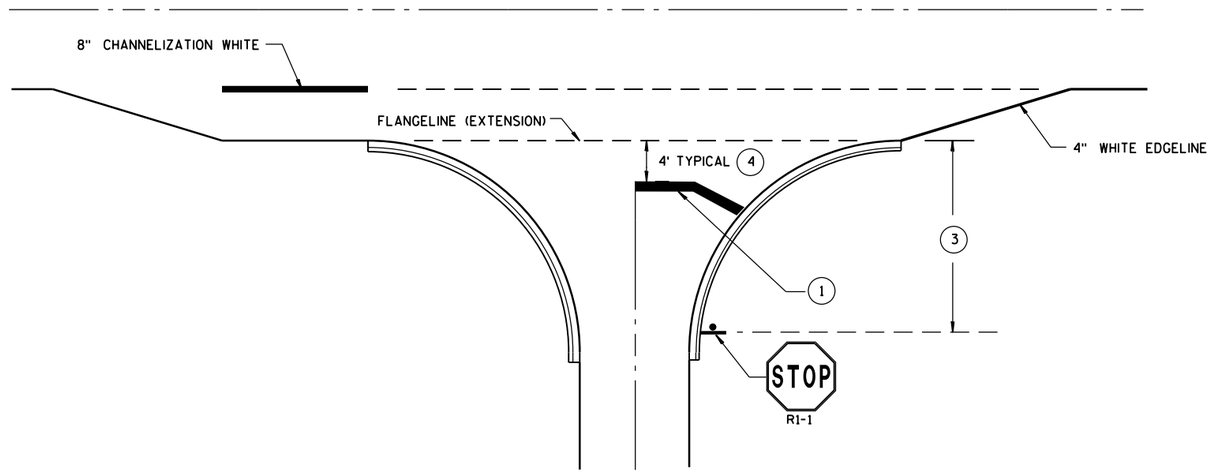
S.D.D. 15 C 29-5a

6

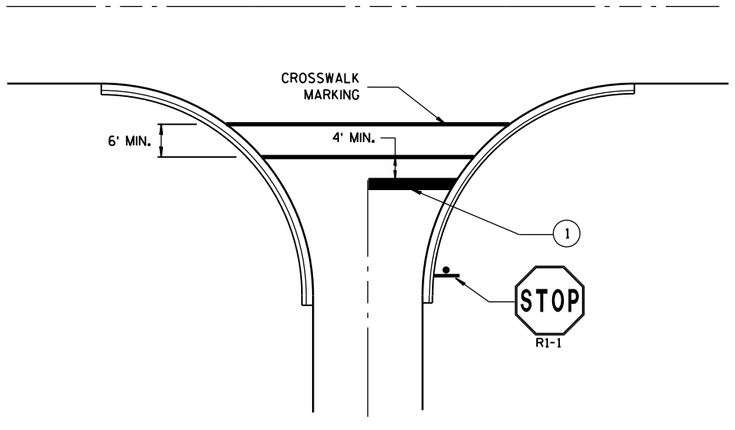
S.D.D. 15 C 29-5a



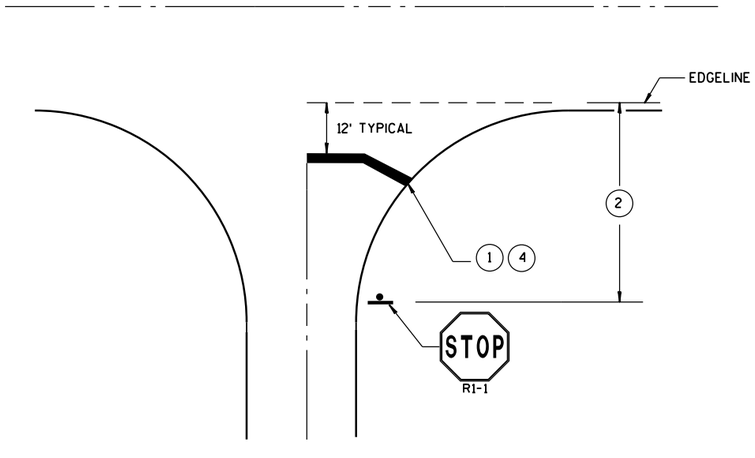
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

(1) 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

(2) IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.

(3) IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.

(4) MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

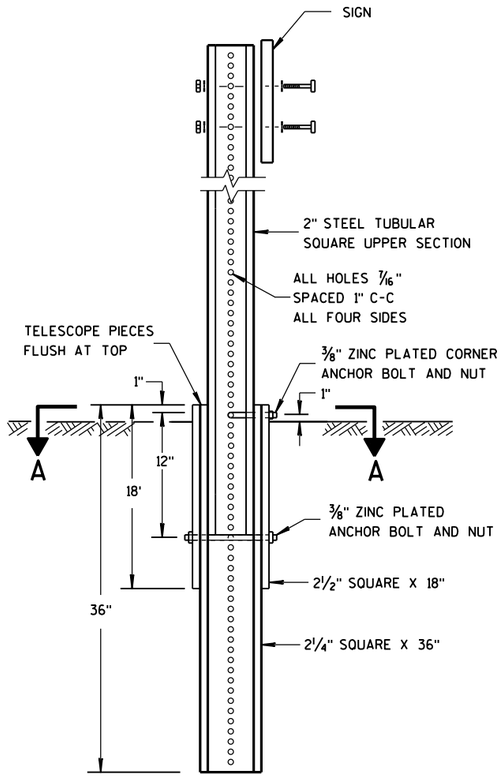
Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]NEER

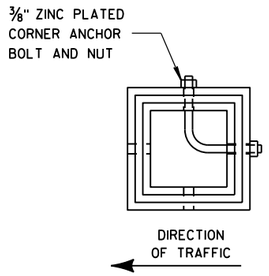
FHWA

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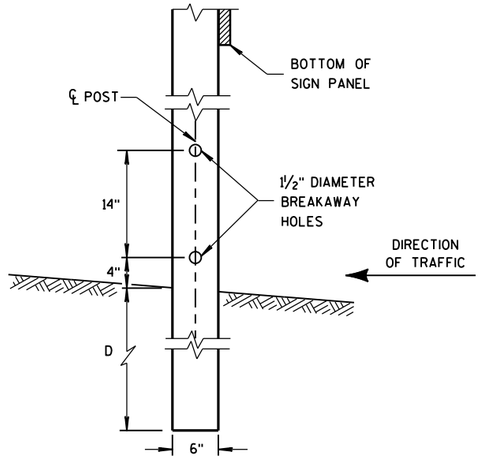
S.D.D. 15 C 33-3



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



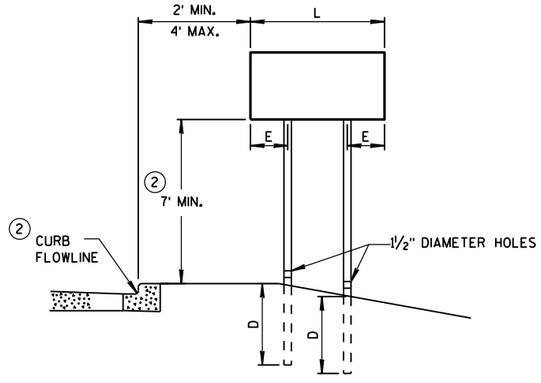
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

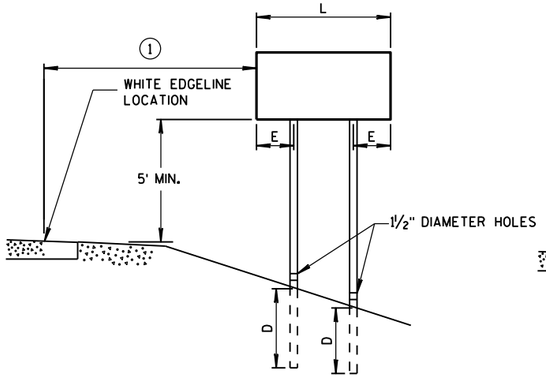
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

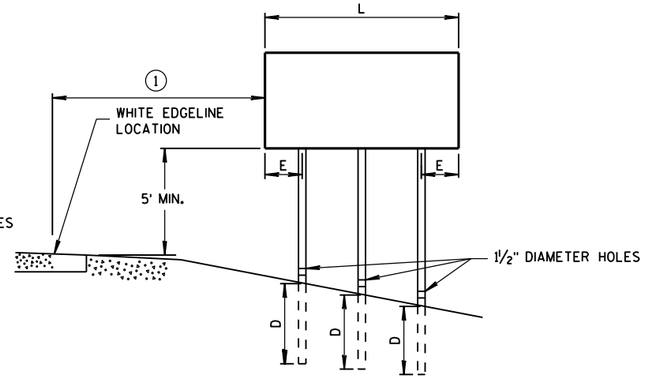
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

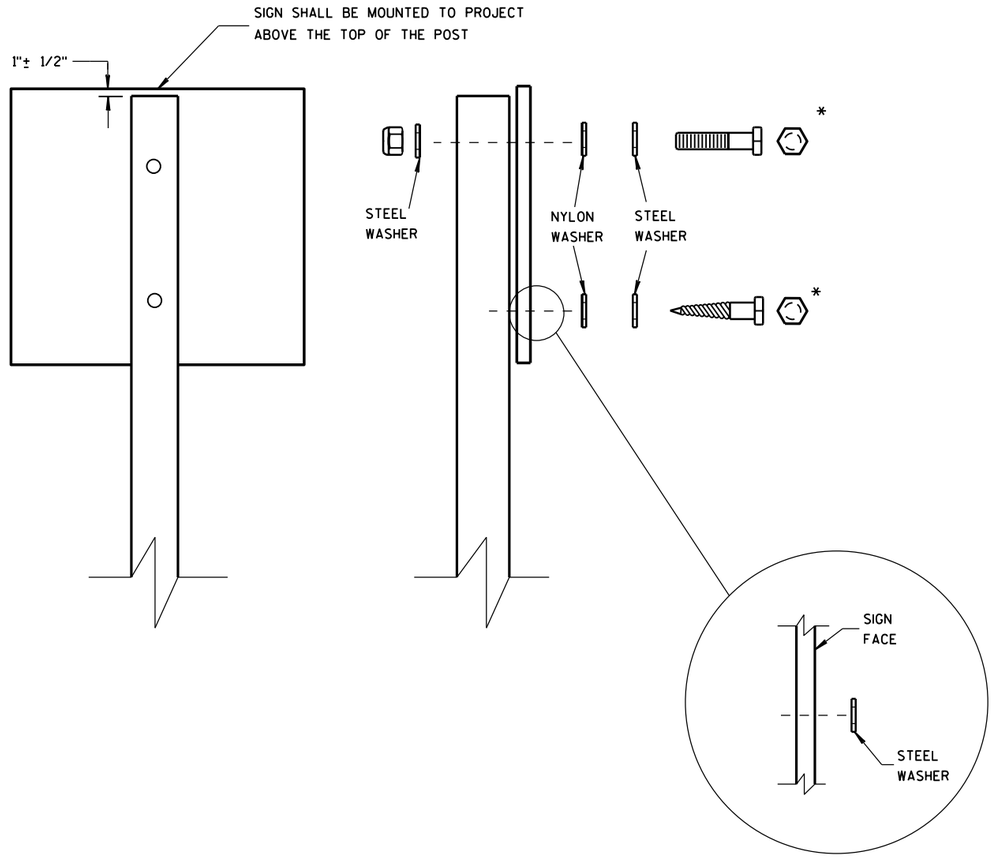
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

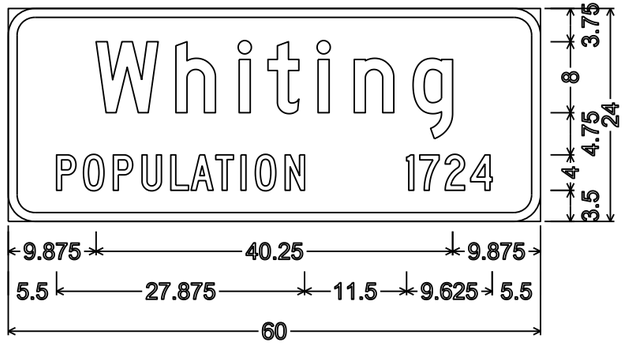
June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

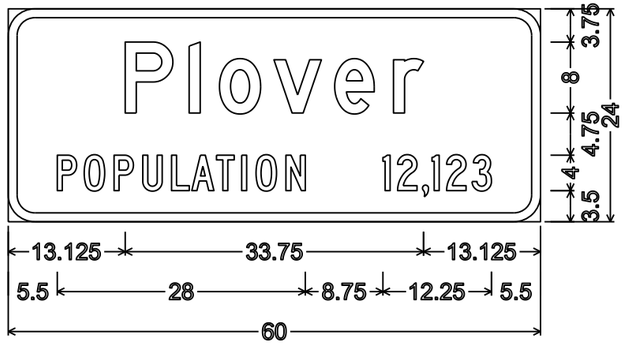
FHWA

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - As noted



I2-3;
3.000" Radius, 1.000" Border,
"Whiting" D; "POPULATION" C; "1724" C



I2-3;
3.000" Radius, 1.000" Border,
"Plover" D; "POPULATION" C; "12,123" C

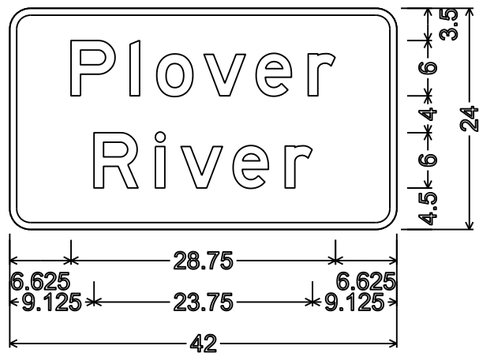
7

7

PROJECT NO: 6414-00-80	HWY: BUS 51	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET NO: 440	E

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



I3-1;
2.250" Radius, 0.750" Border

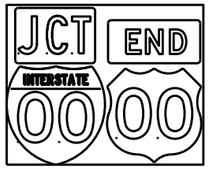
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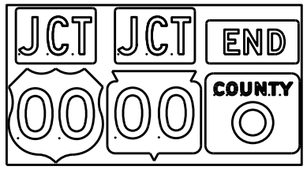
TYPICAL ASSEMBLIES



J1-1



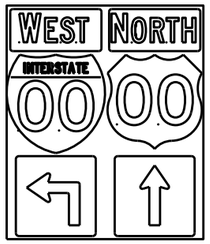
J1-2



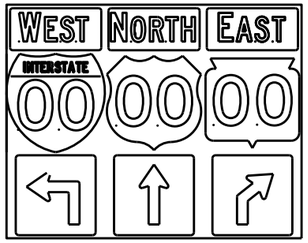
J1-3



J2-1



J2-2

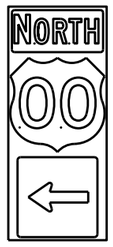


J2-3

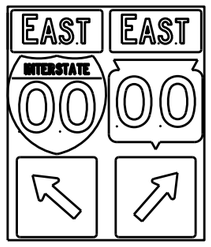


JV

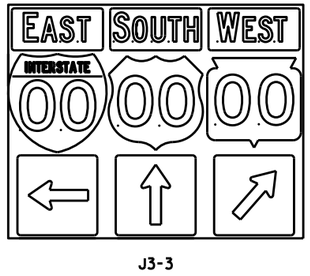
(Typical Vertical J-Assembly
See Note 10 and 11)



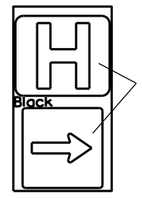
J3-1



J3-2



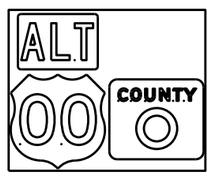
J3-3



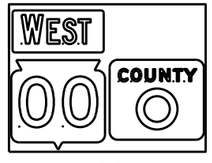
JH-1



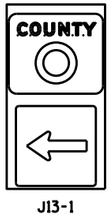
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

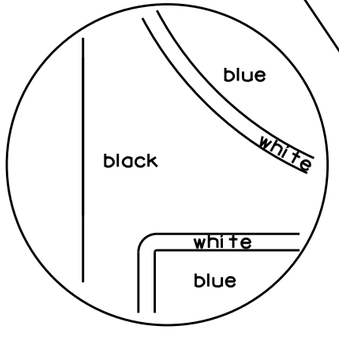


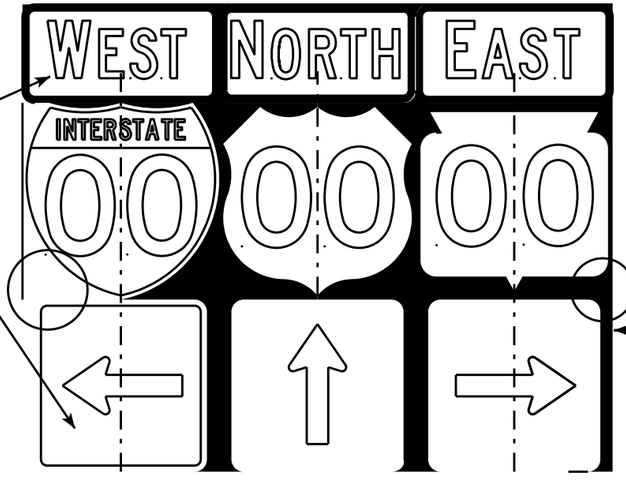
J23-1

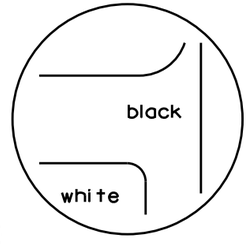


J22-1

[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

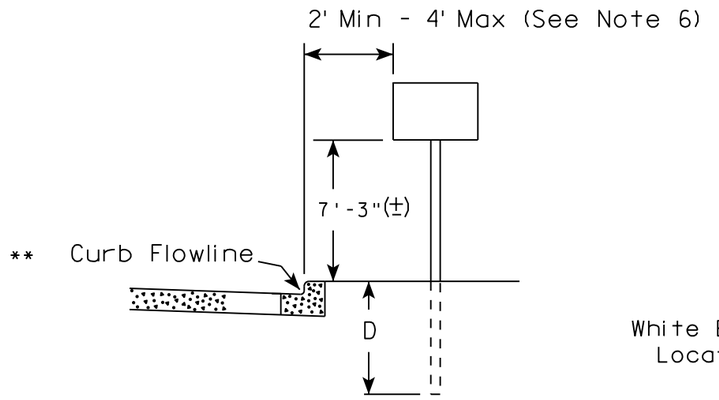
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

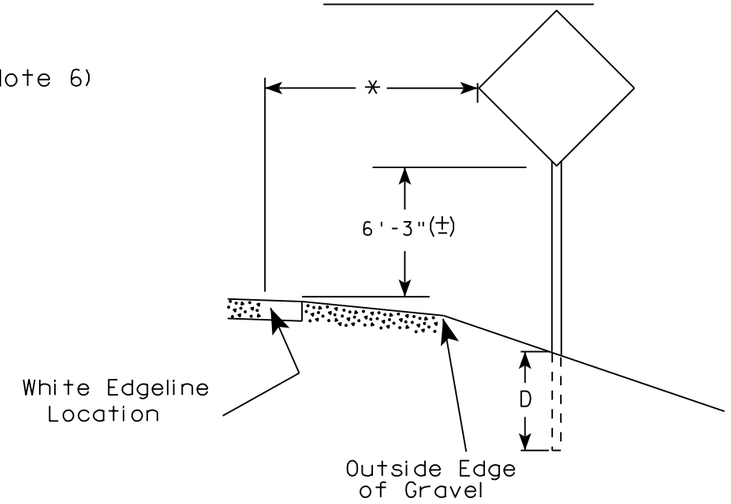
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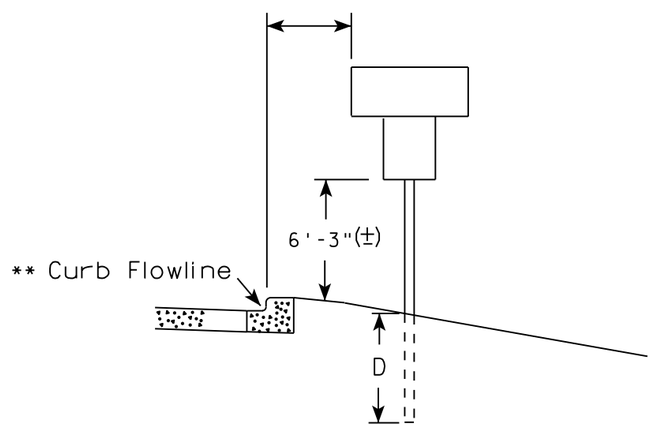
WISDOT/CADDS SHEET 42

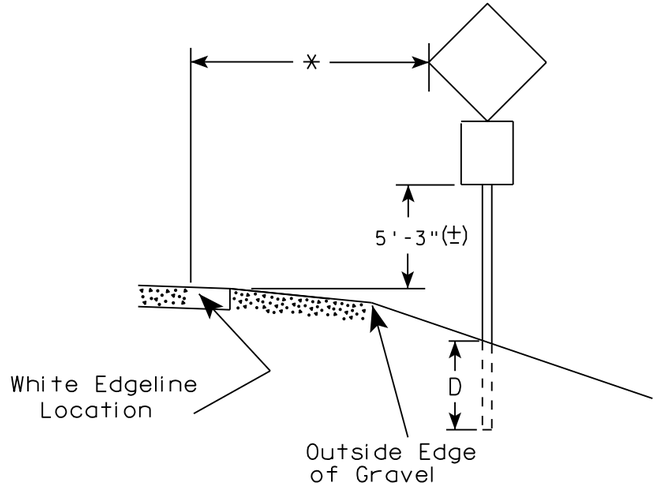
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

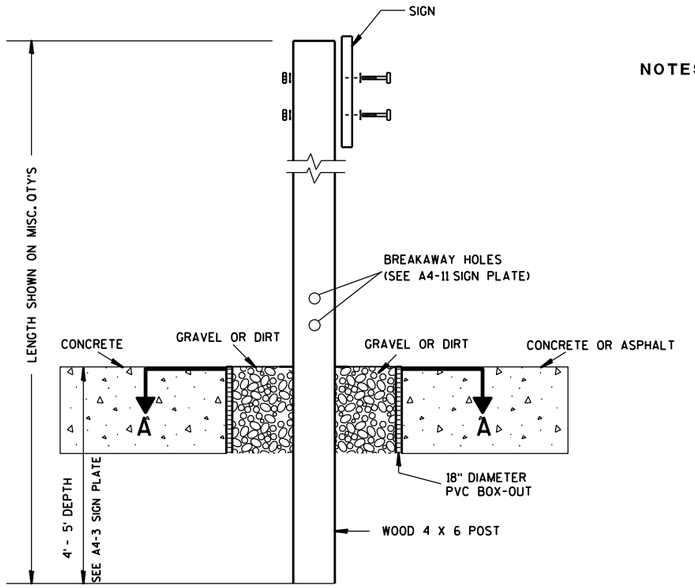
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

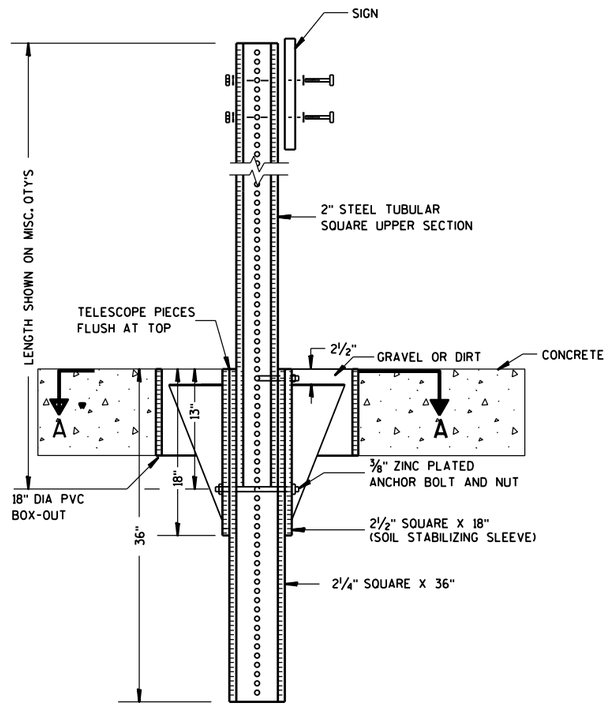
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 443	E



ELEVATION VIEW

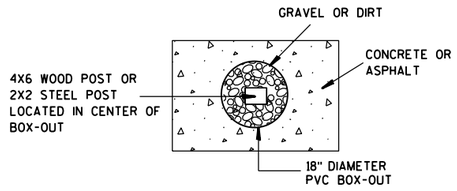
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

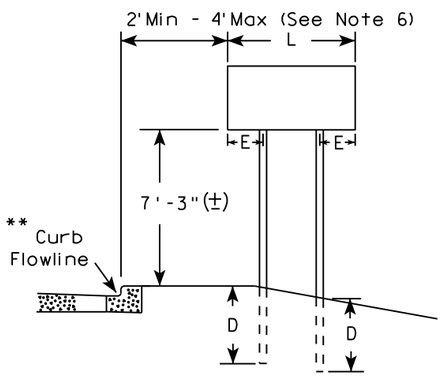
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

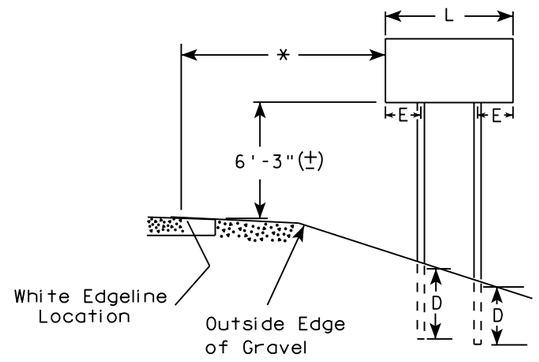
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

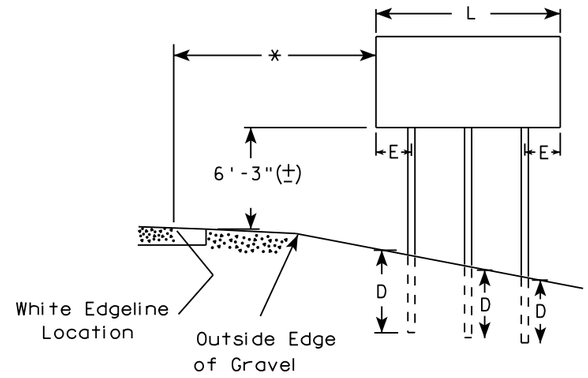
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

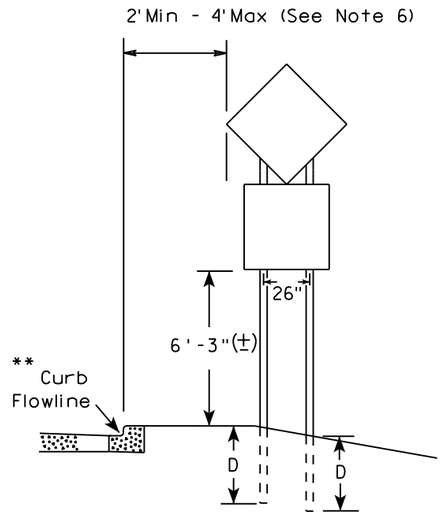
URBAN AREA



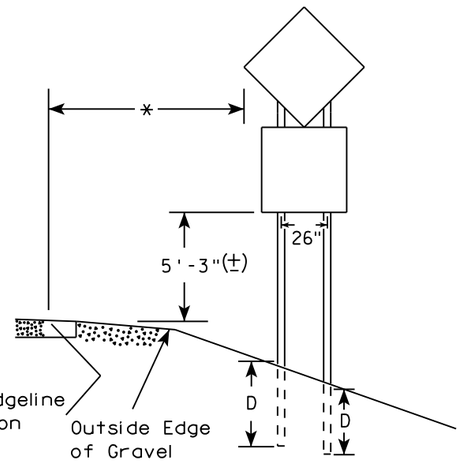
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

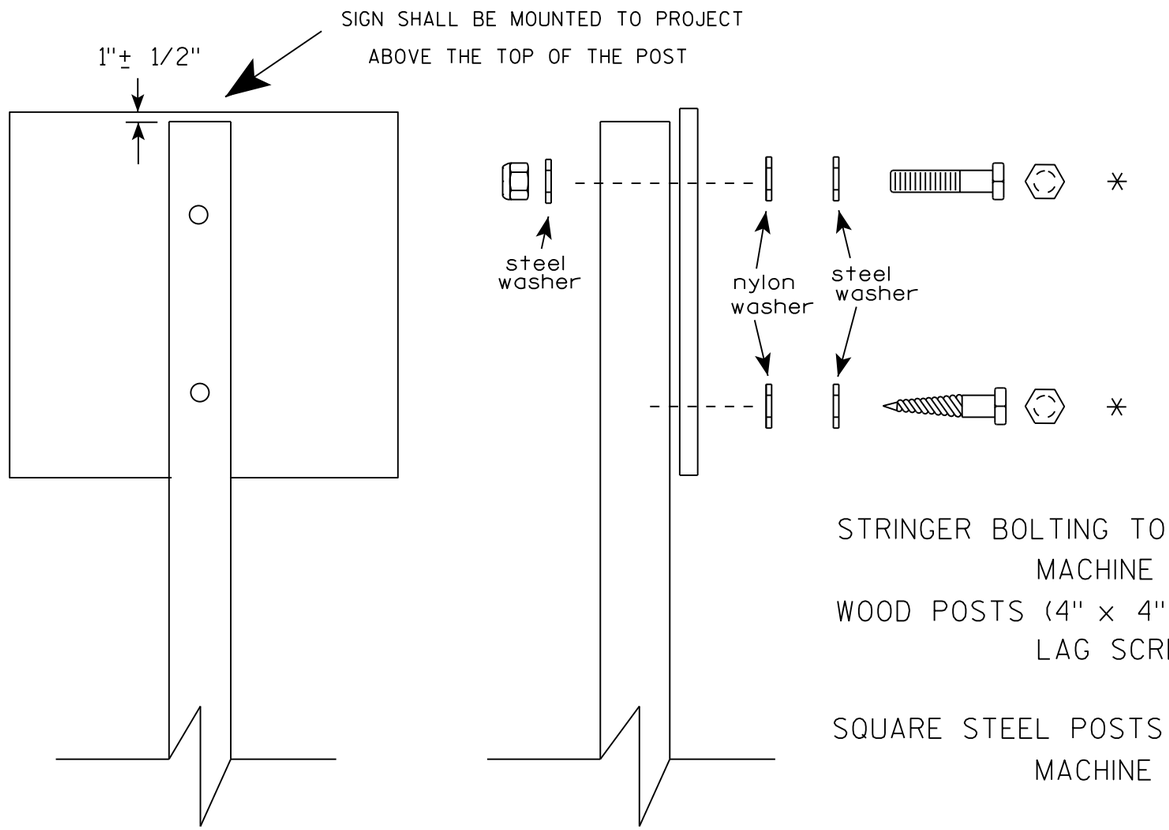
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 445	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

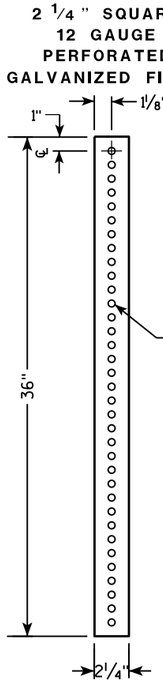
PROJECT NO:

SHEET NO: E

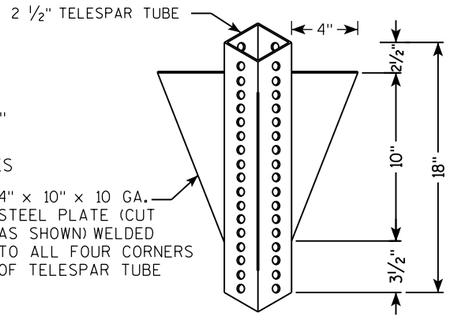
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

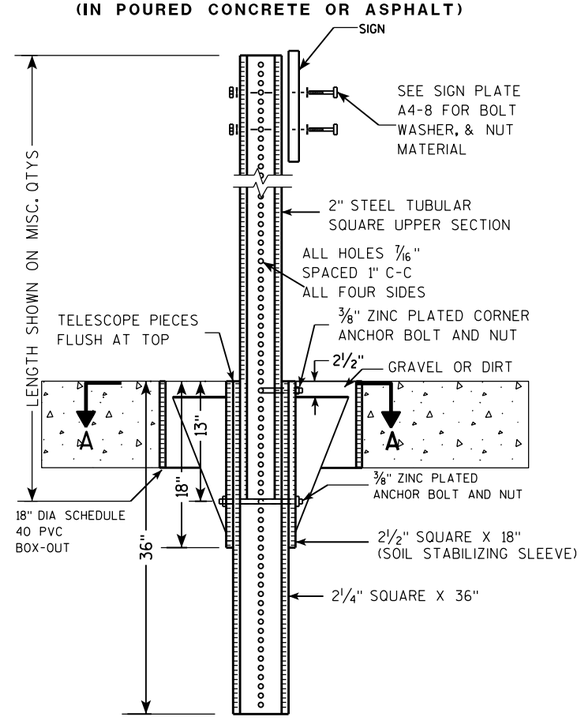
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



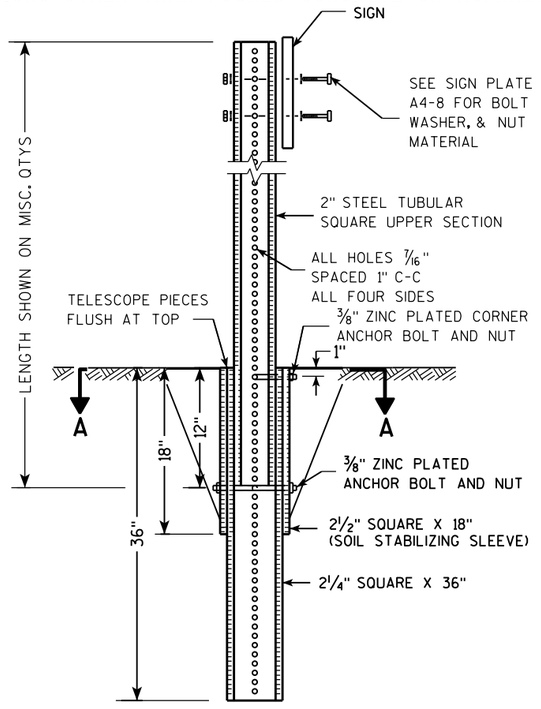
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

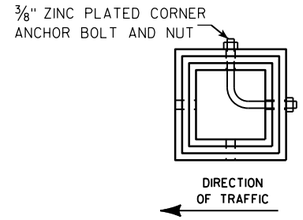


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

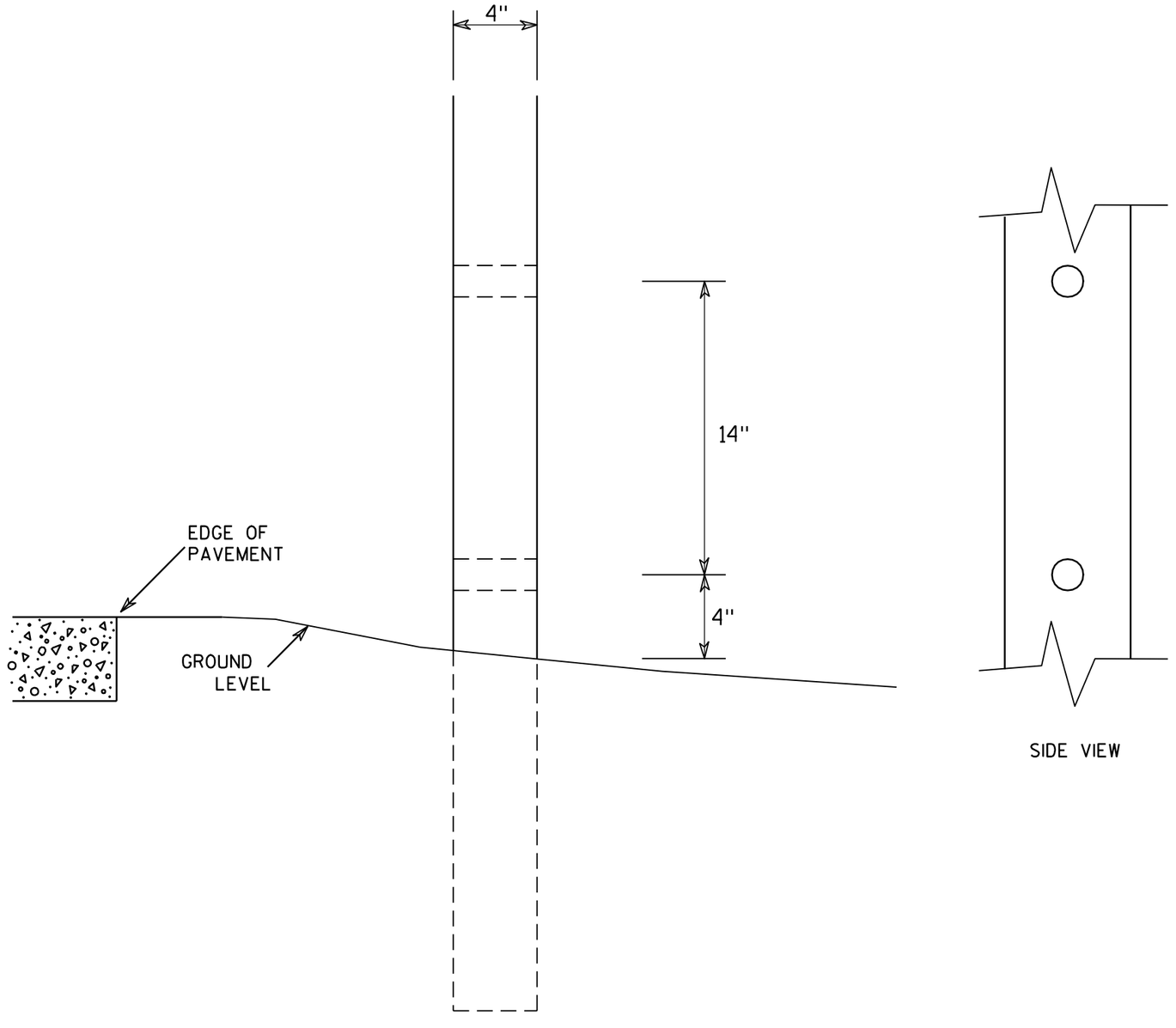
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 447 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

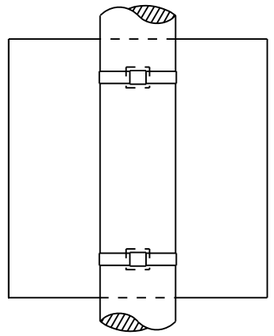
APPROVED Chester J Spang for State Traffic Engineer

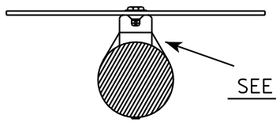
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 448	E

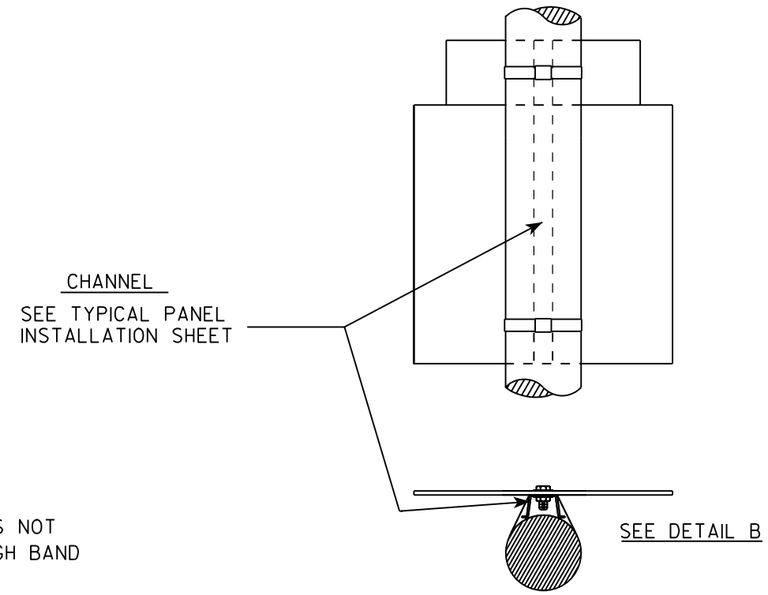
BANDING

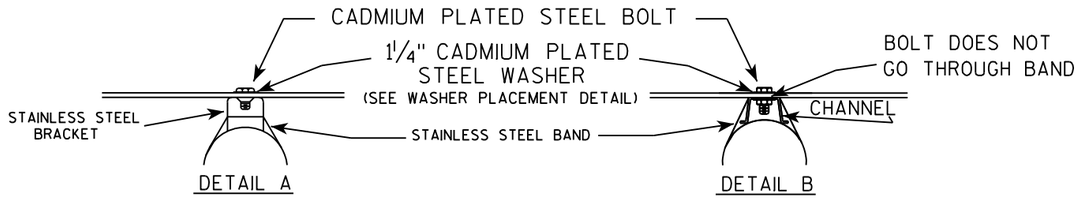
SINGLE SIGN



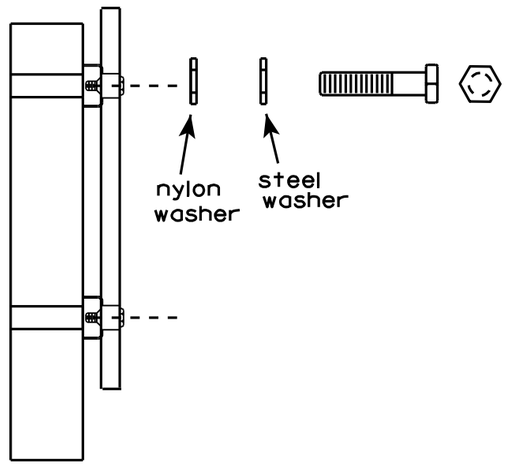


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

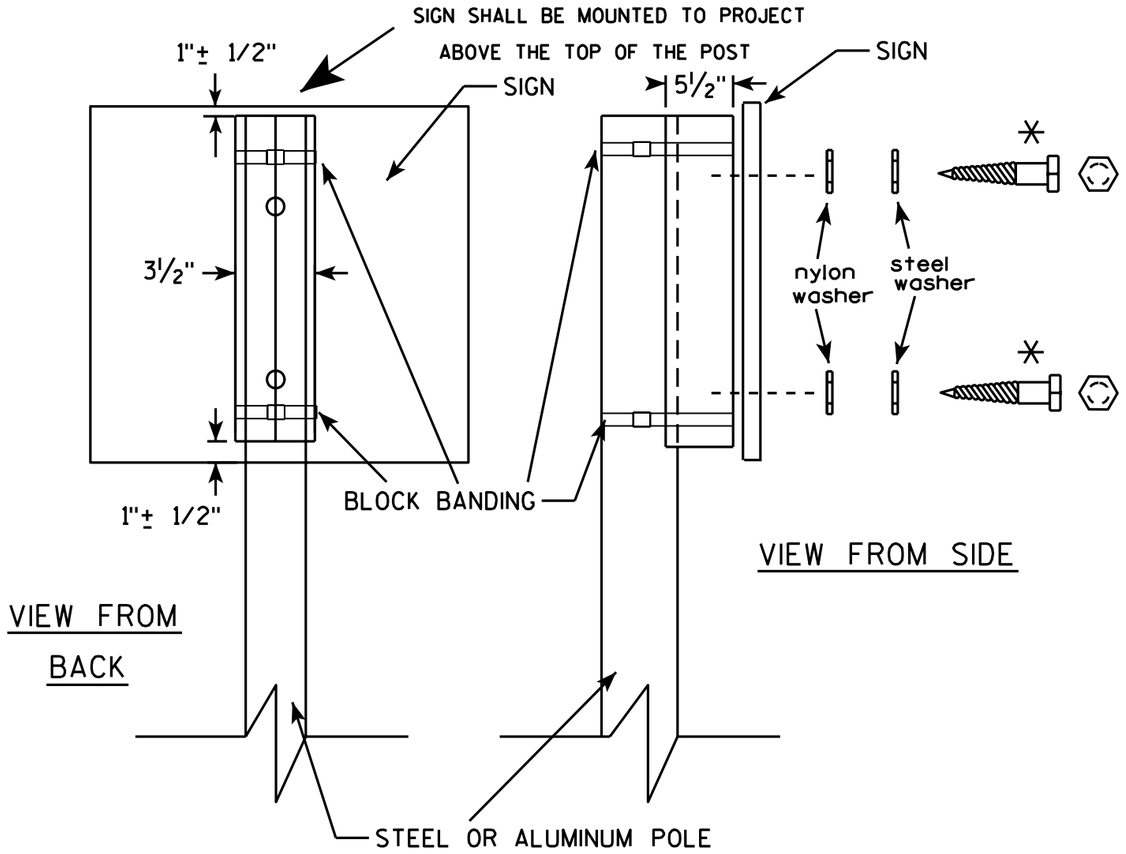
STANDARD SIGN
SIGN BANDING DETAILS

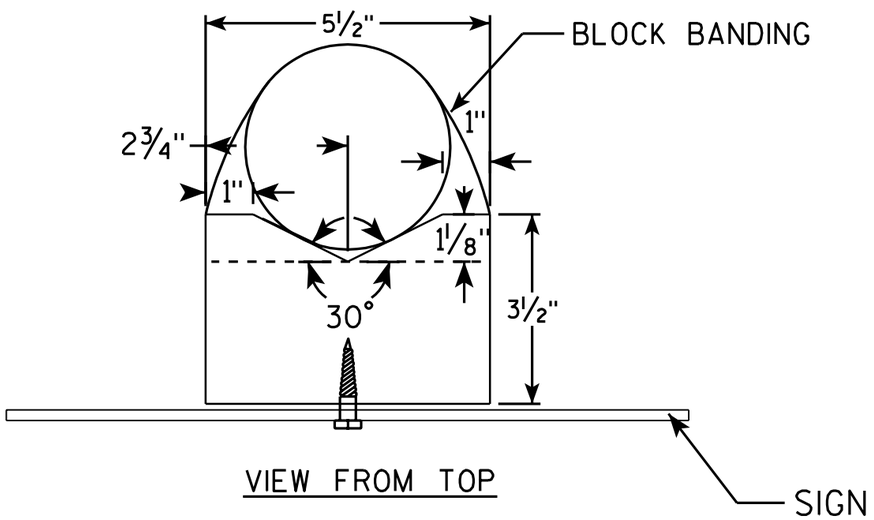
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 449	E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

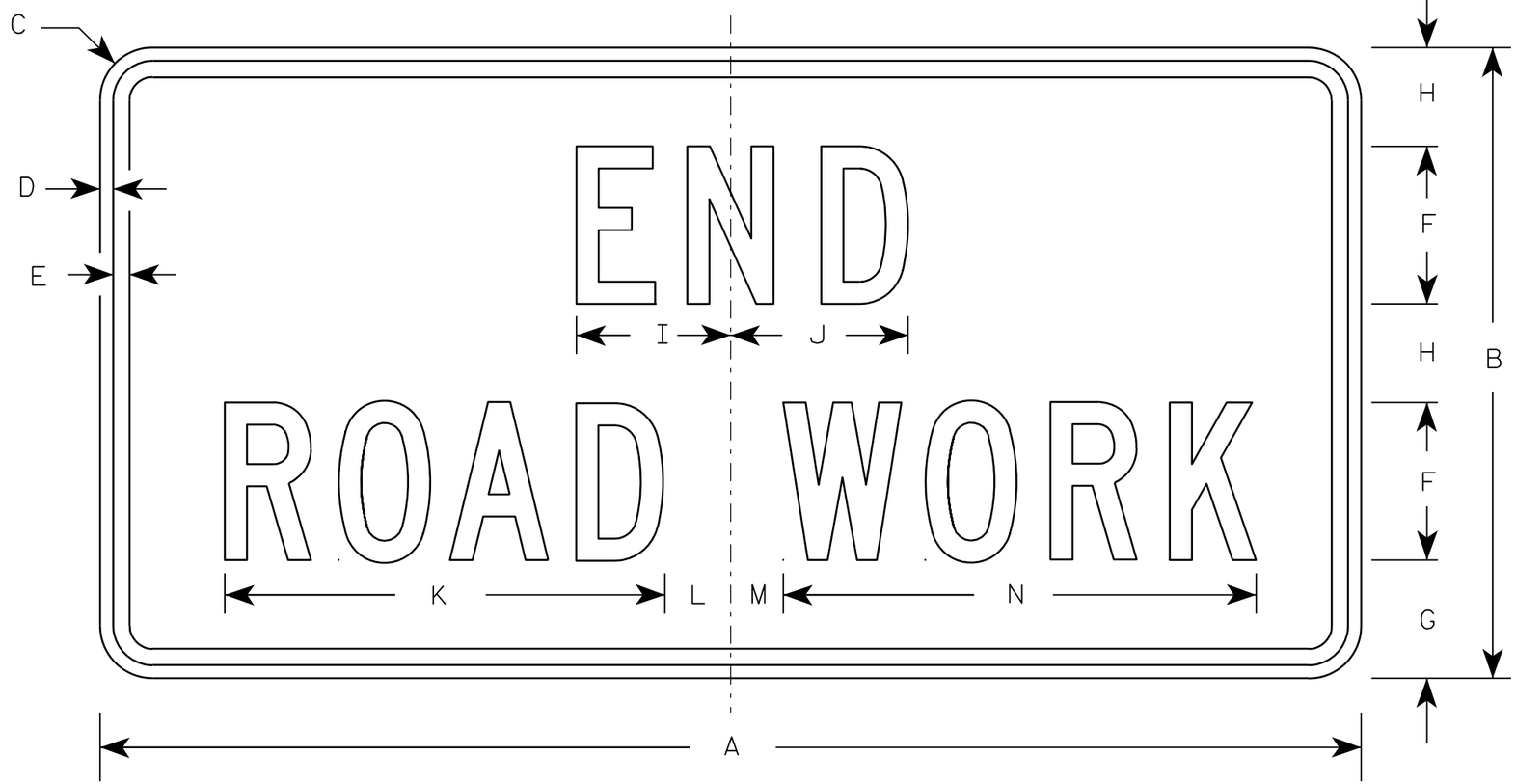
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 450 E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

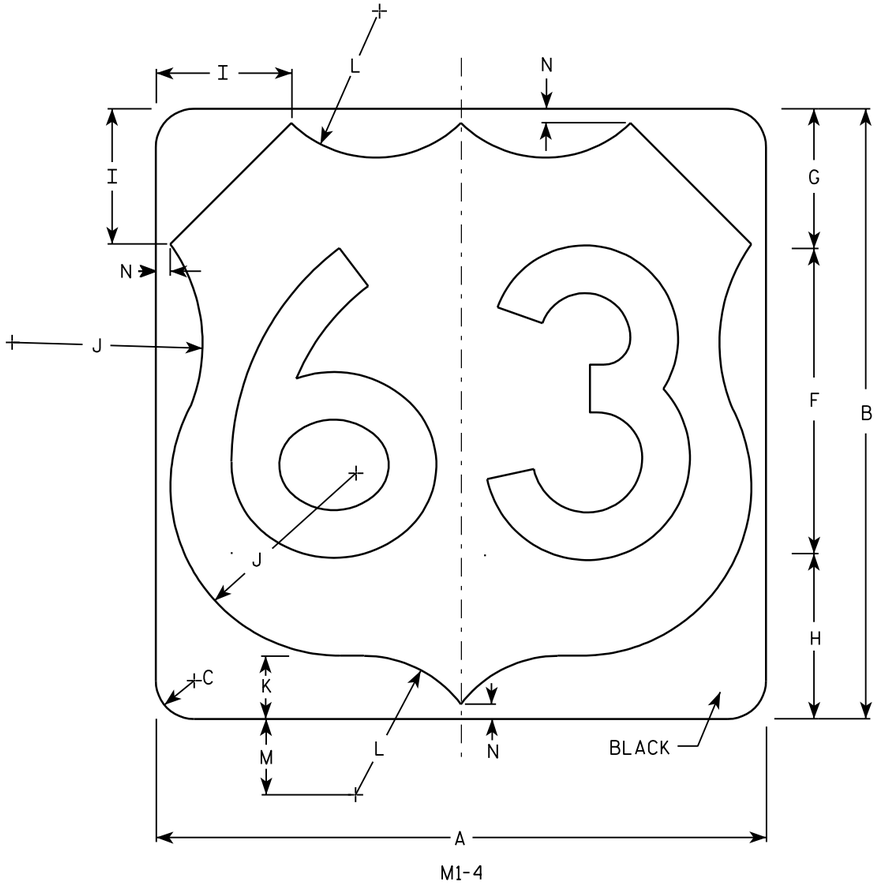
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

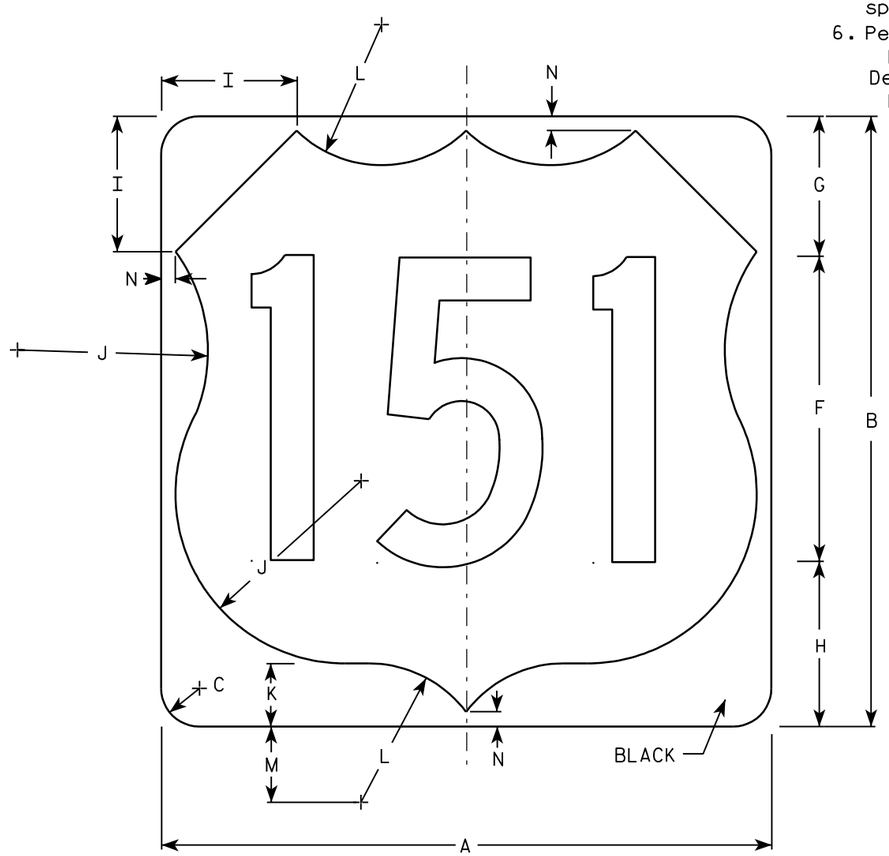
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 451	E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

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	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

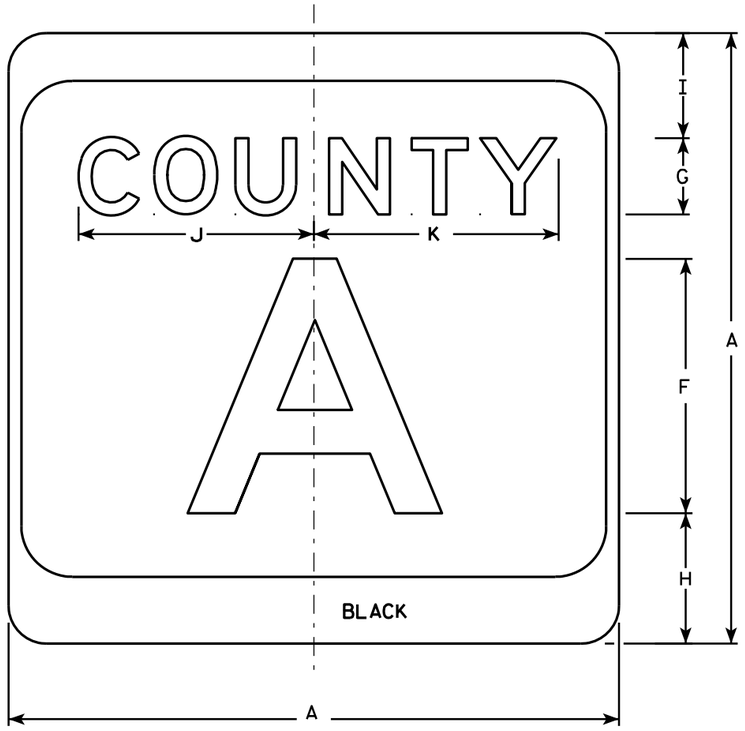
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

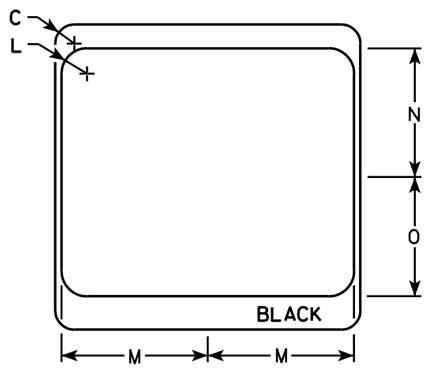
APPROVED Matthew R Rauch
for State Traffic Engineer

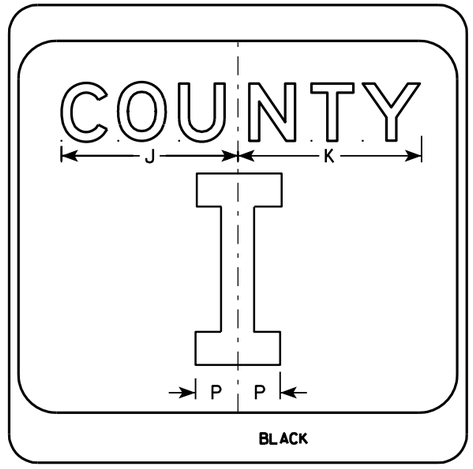
DATE 08/25/05 PLATE NO. M1-4.9

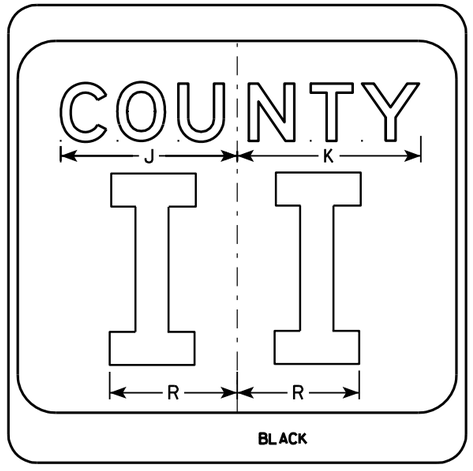
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 452 | E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

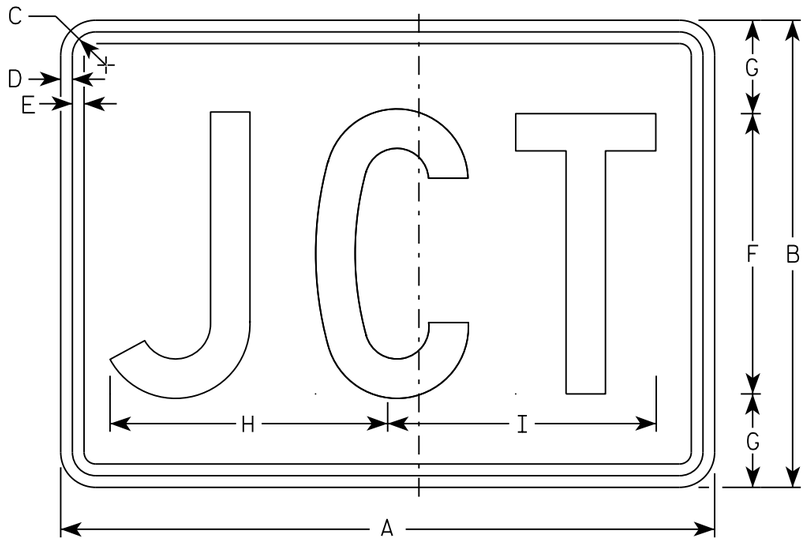
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

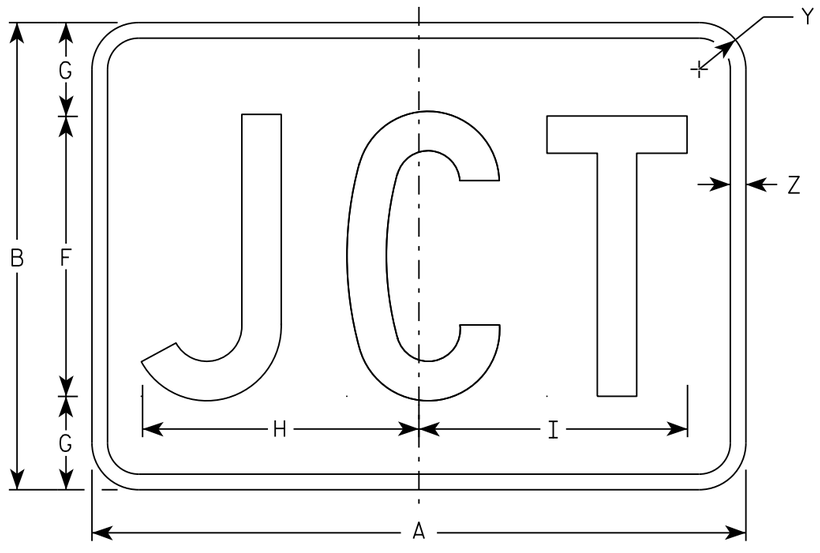
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 453 | 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

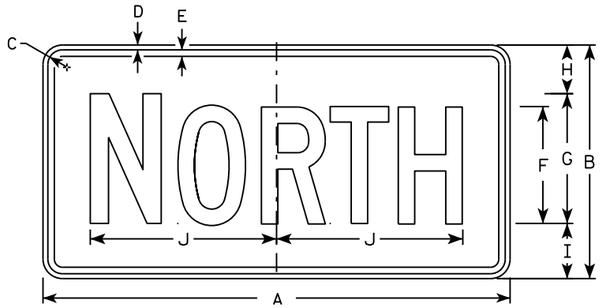
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

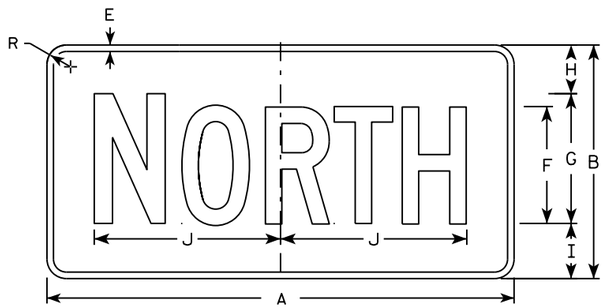
DATE 10/15/15 PLATE 454 12-1.12

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



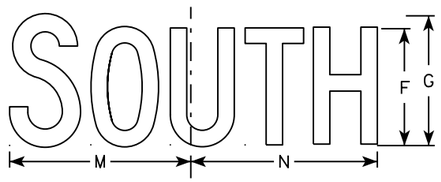
MB3-1
MK3-1
MN3-1



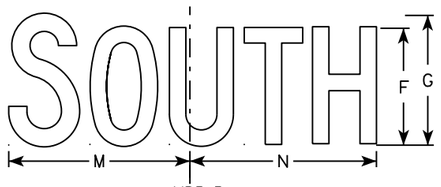
M3-2
MM3-2
MP3-2



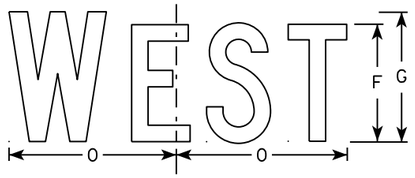
MB3-2
MK3-2
MN3-2



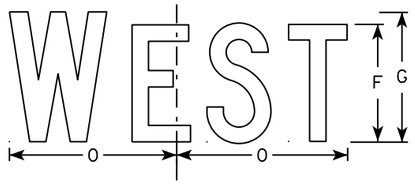
M3-3
MM3-3
MP3-3



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

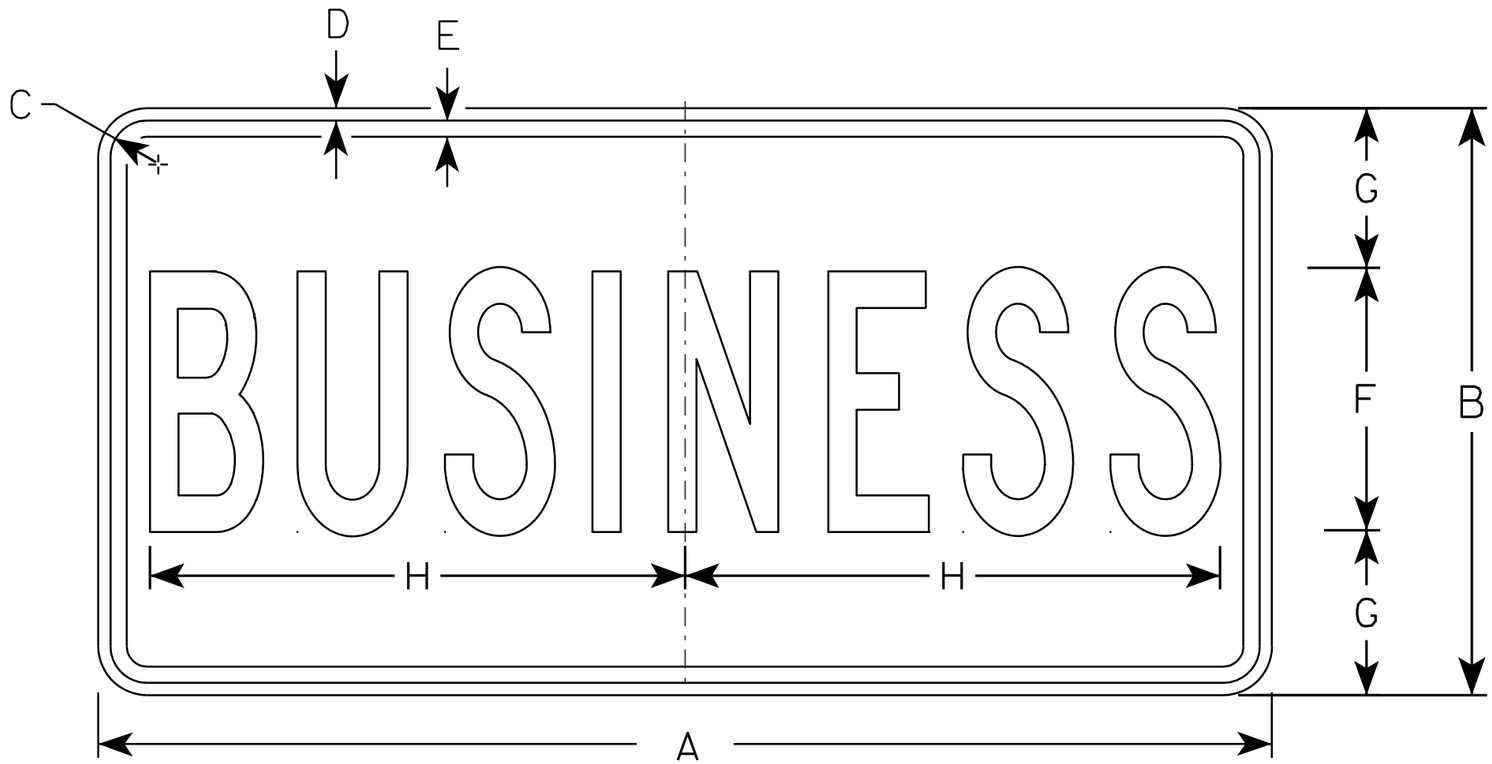
WISCONSIN DEPT OF TRANSPORTATION

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



M4-3

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White - See Note 5
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	5	3 1/2	9 5/8																			2.0
3	36	18	1 1/8	3/8	1/2	8	5	16 3/8																			4.5
4																											
5																											

STANDARD SIGN
M4-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-3.5

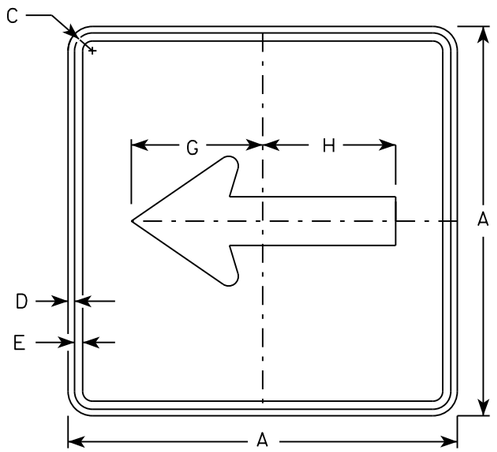
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 456	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M43.DGN PLOT DATE : 10-NOV-2010 10:45 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.648056:1.000000

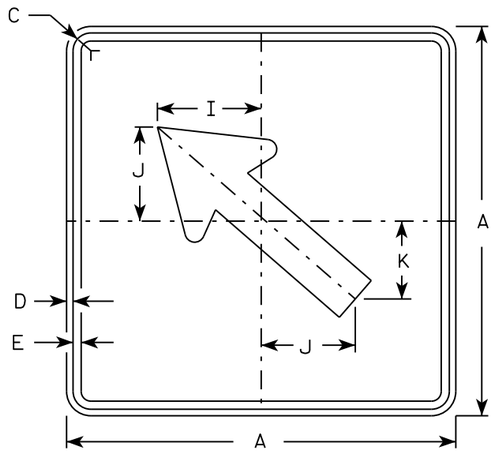
WISDOT/CADDS SHEET 42

7

7



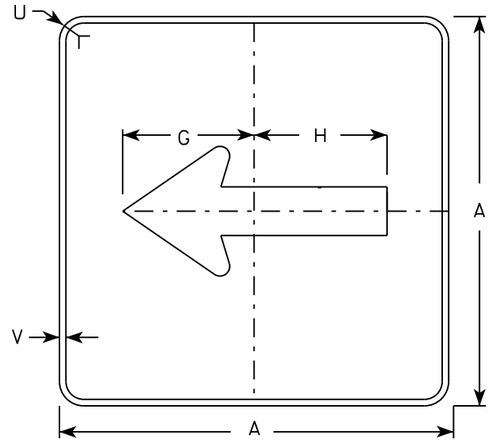
M6-1
MM6-1
MO6-1
MP6-1



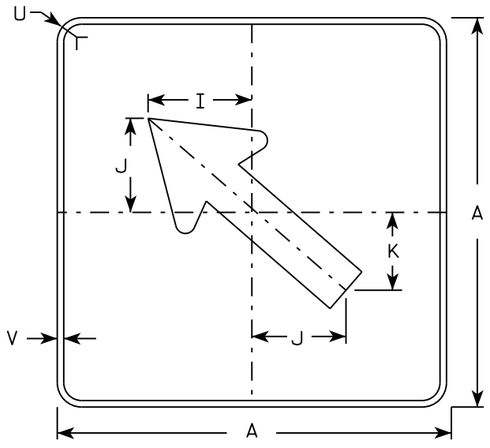
M6-2
MM6-2
MO6-2
MP6-2

NOTES

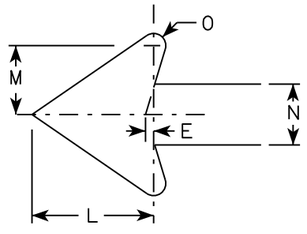
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

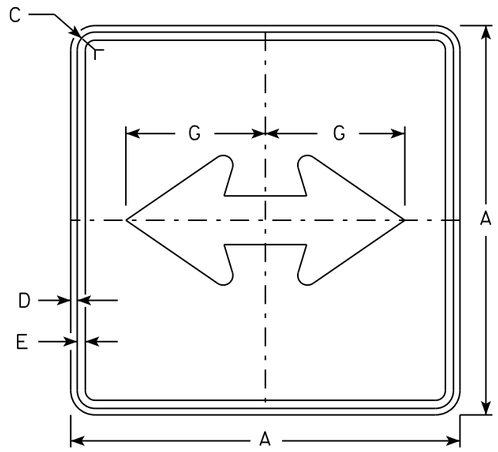
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

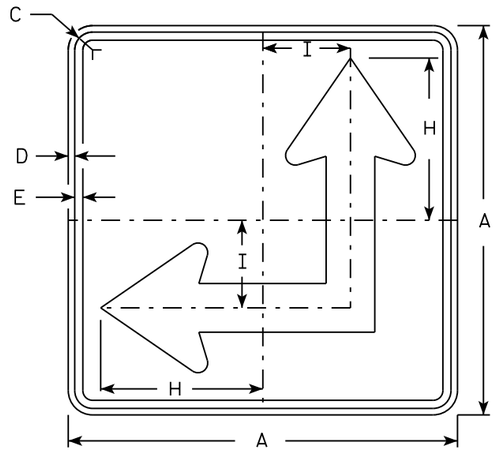
DATE 10/15/15 PLATE 457 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



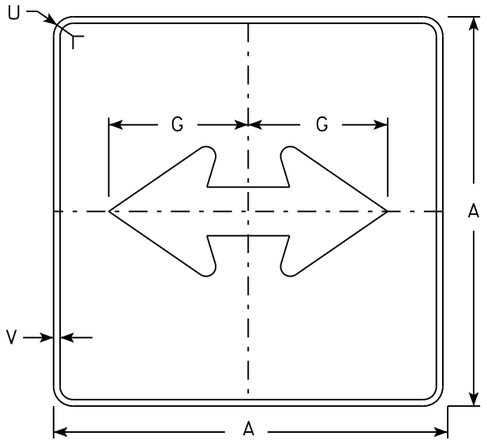
M6-4
MM6-4
MO6-4
MP6-4



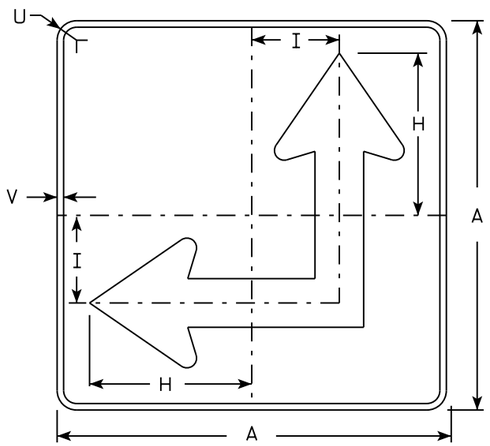
M6-6
MM6-6
MO6-6
MP6-6

NOTES

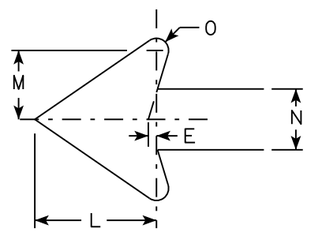
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

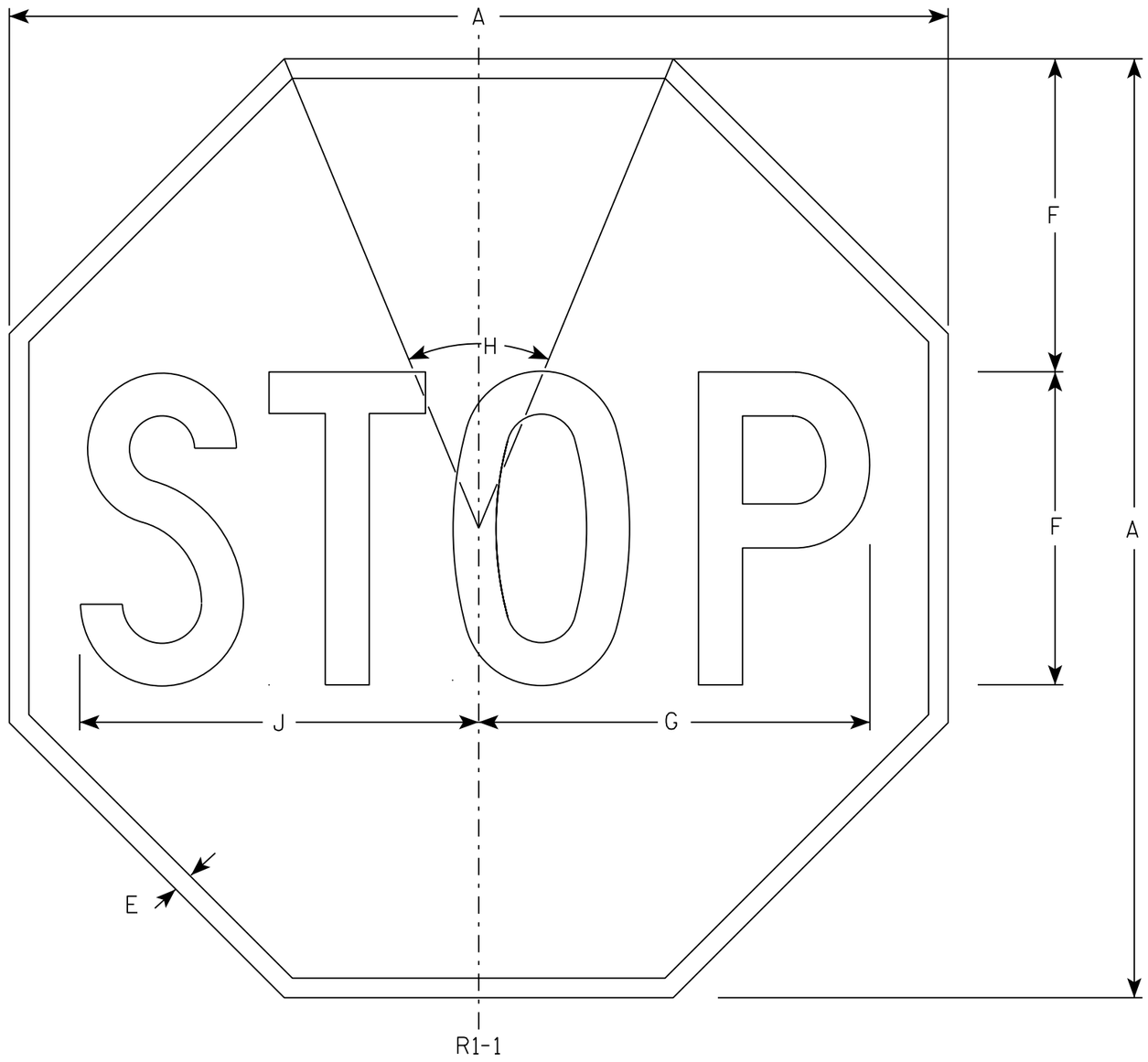
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 458 M6-4.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

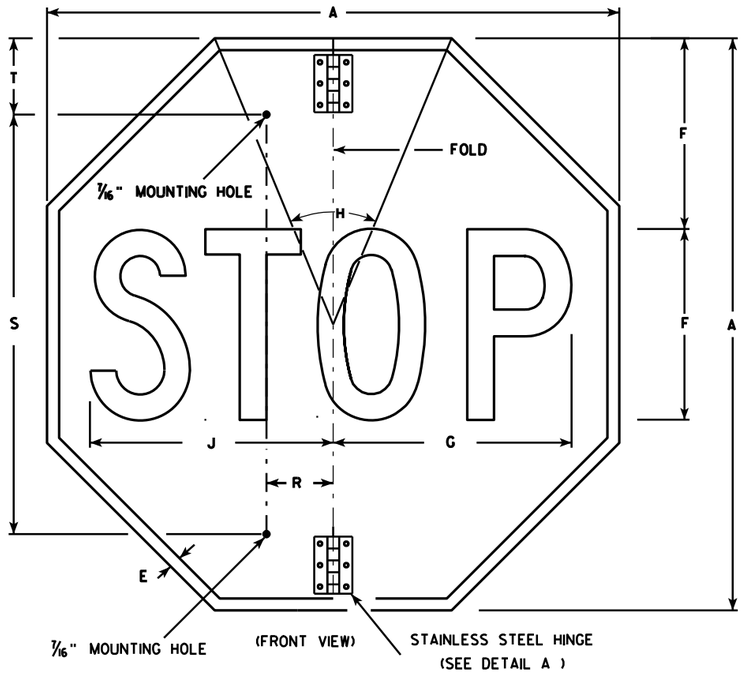
STANDARD SIGN
R1-1

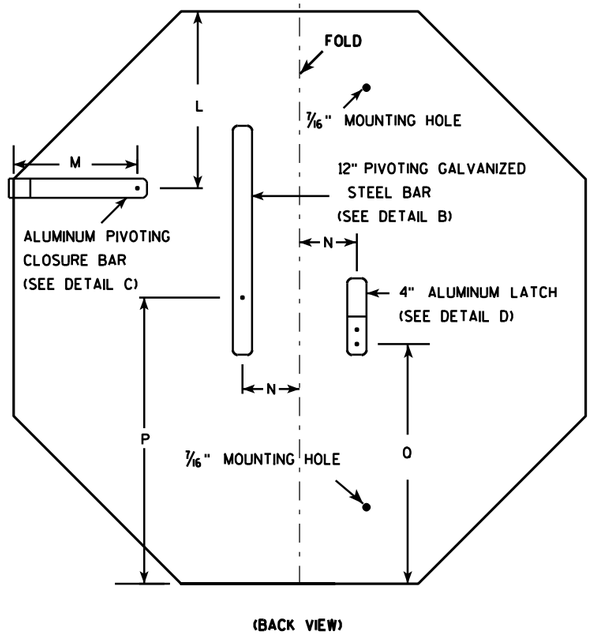
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

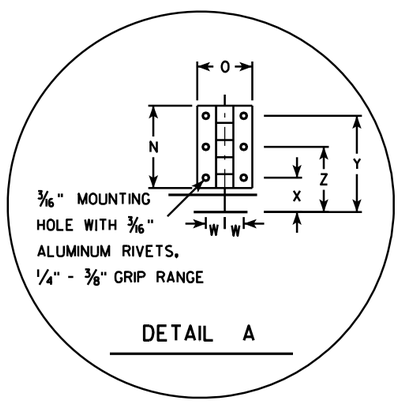
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 459	E



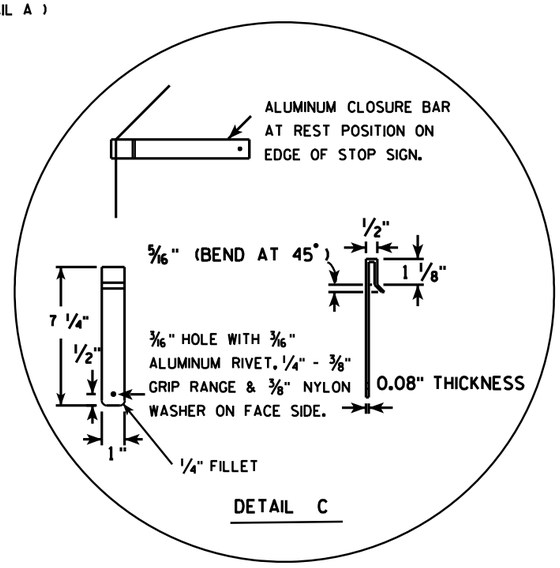


NOTES

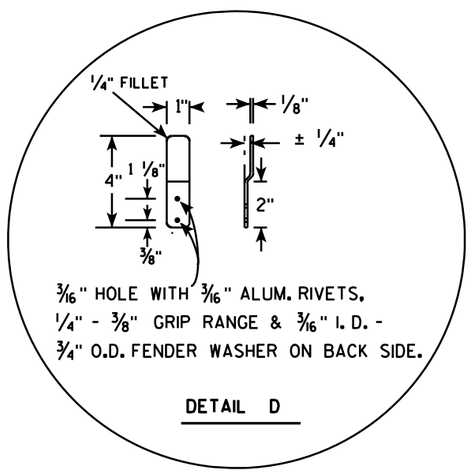
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



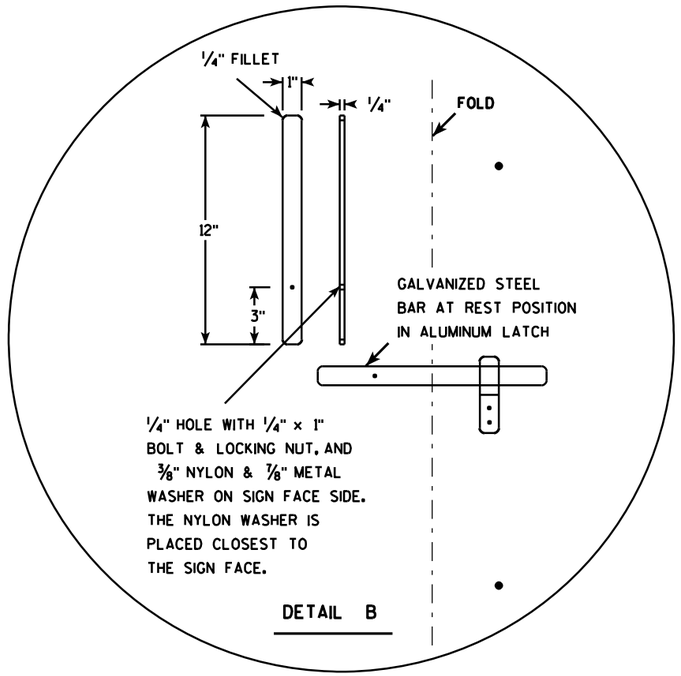
DETAIL A



DETAIL C



DETAIL D



DETAIL B

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																											

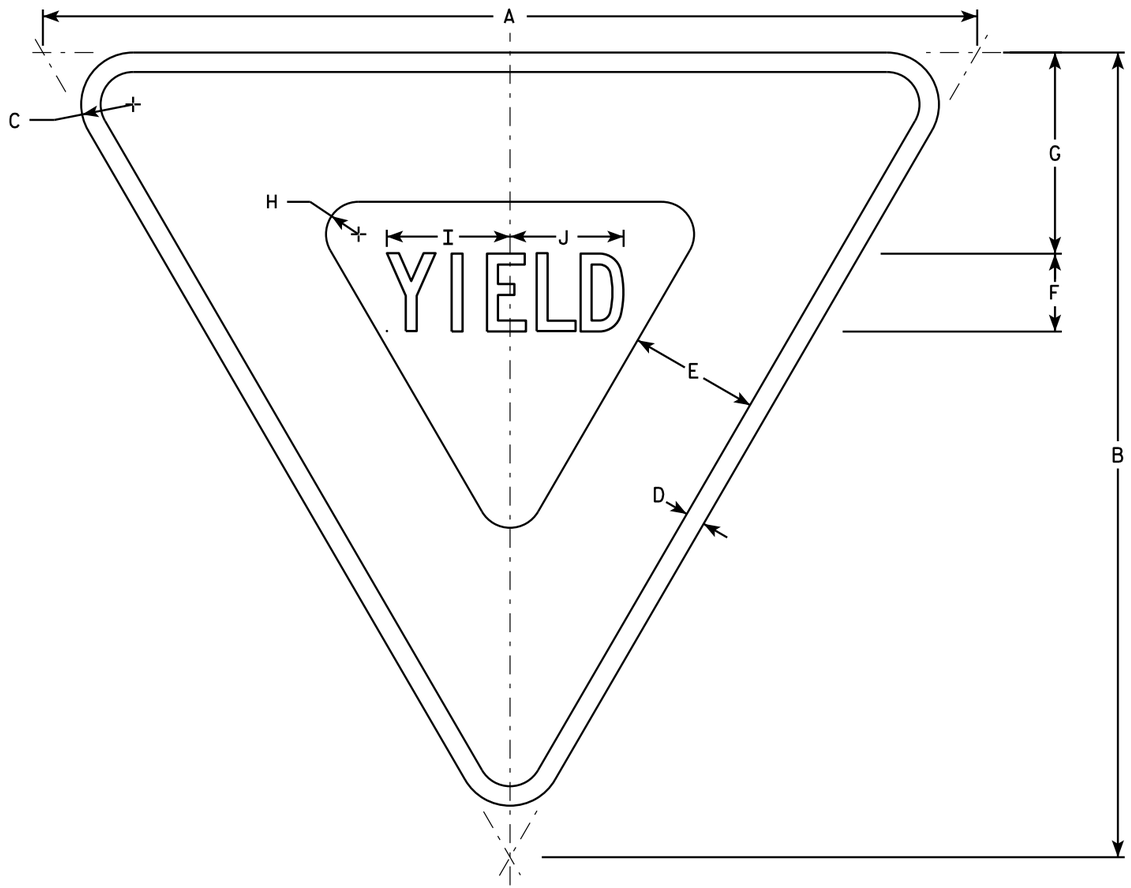
STANDARD SIGN
R1-1F

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: 460	E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

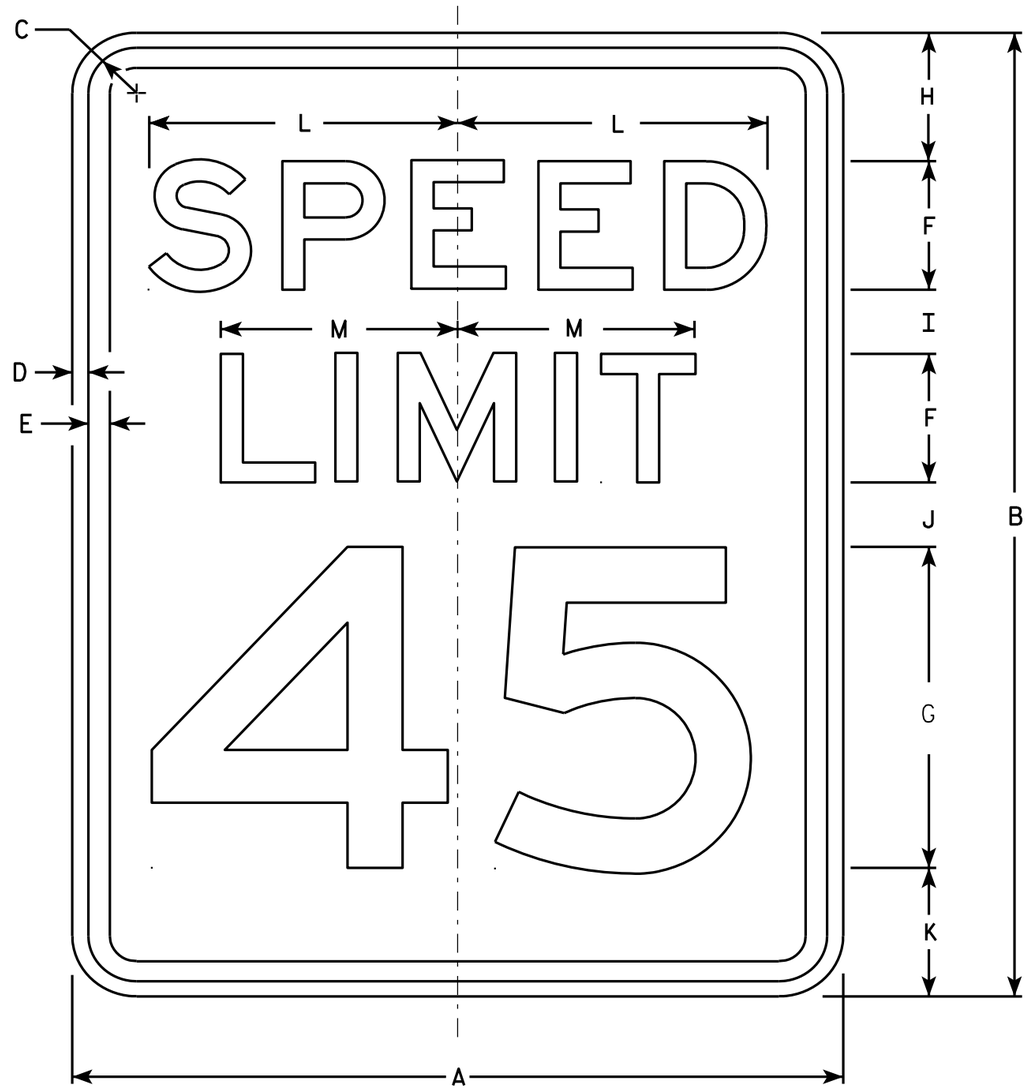
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE P1-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

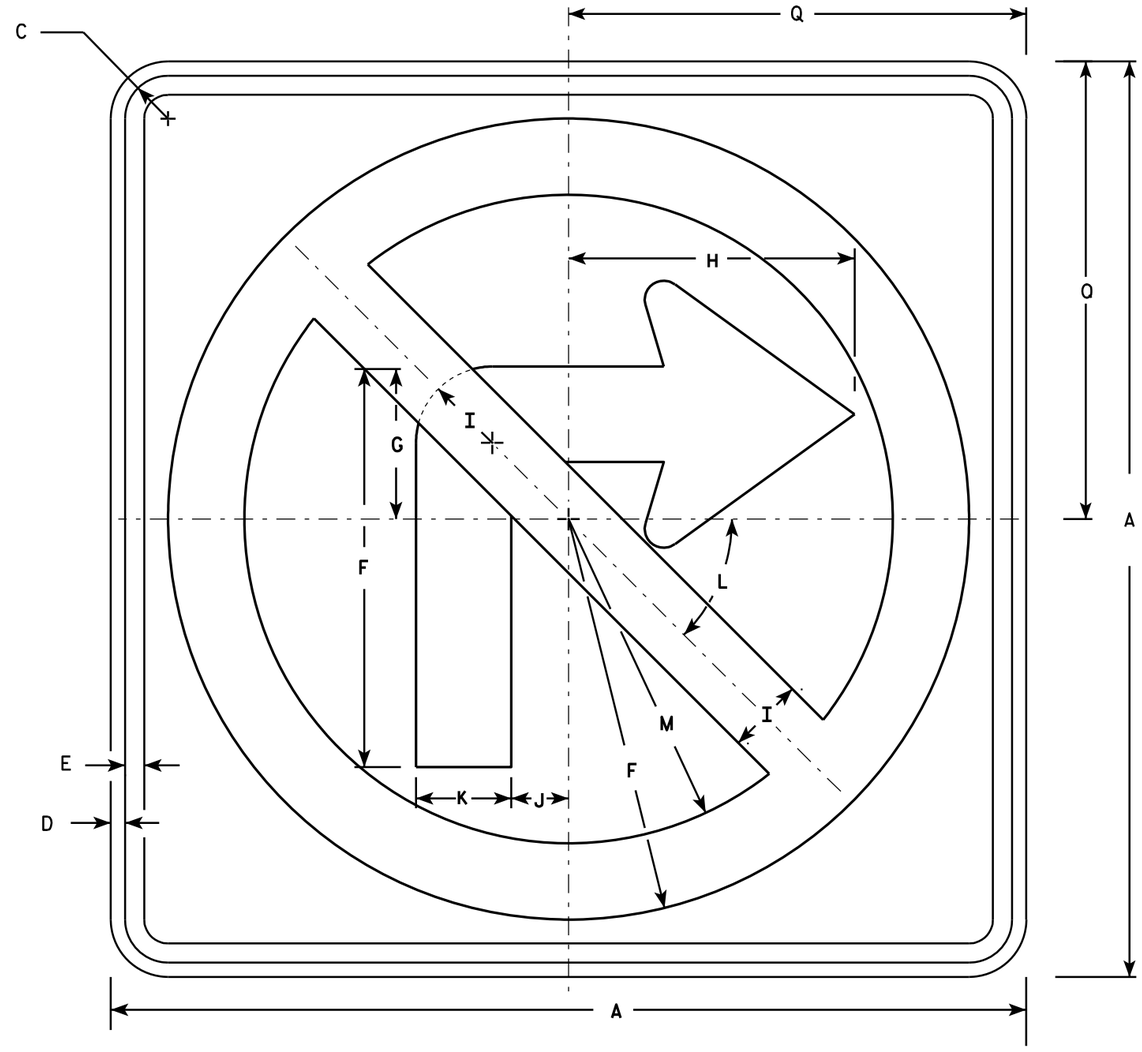
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

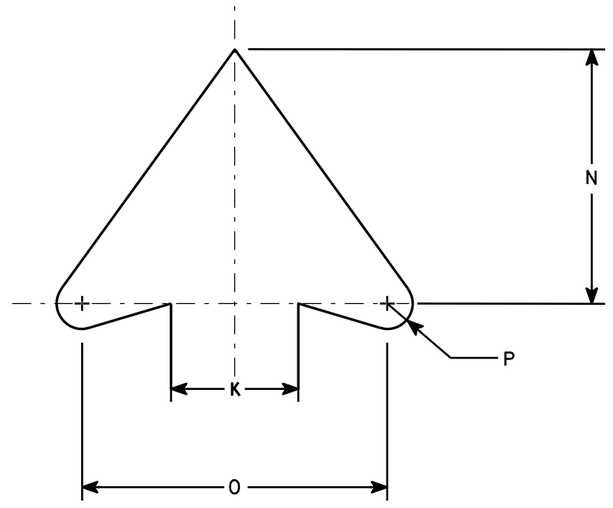
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 462 | E



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

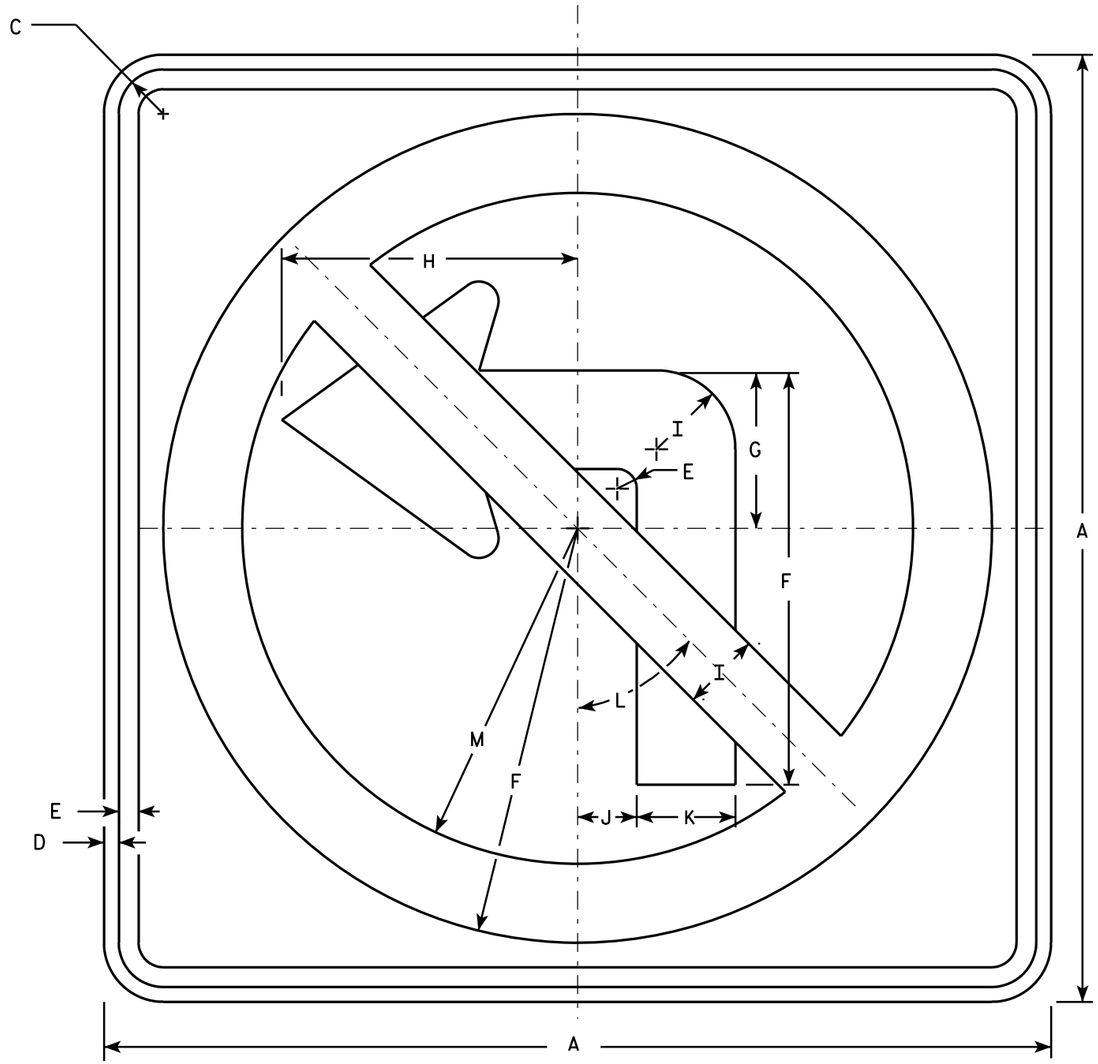
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

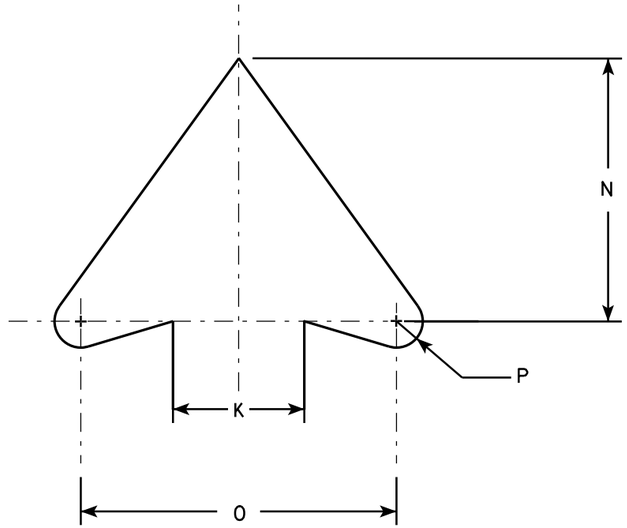
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 463	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

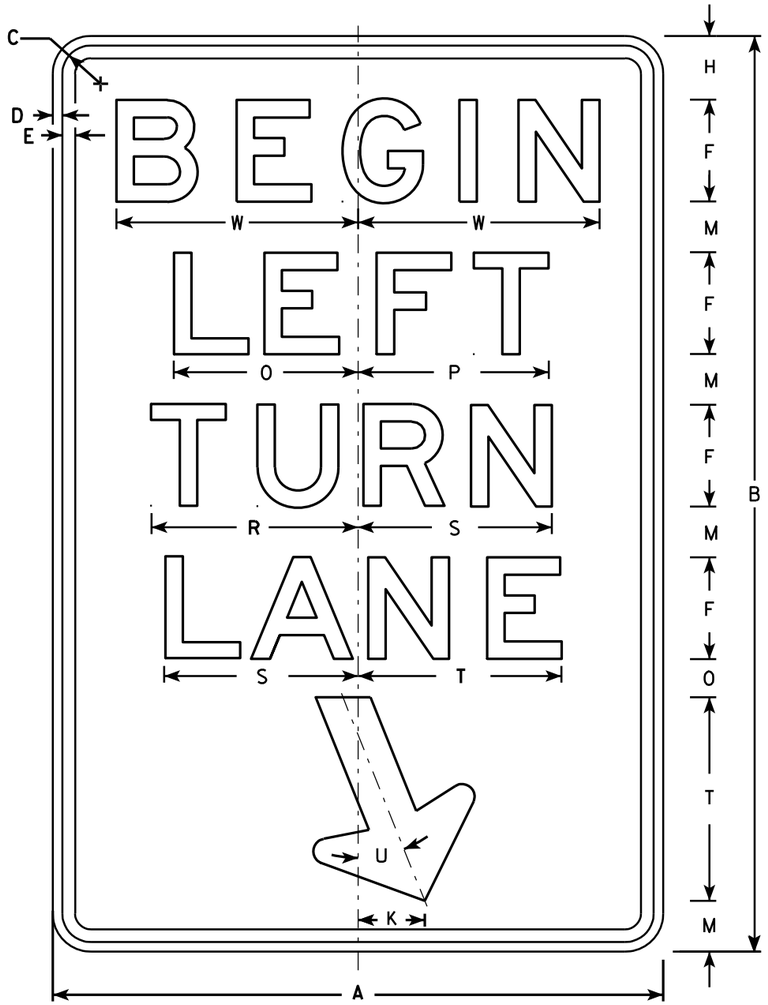
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

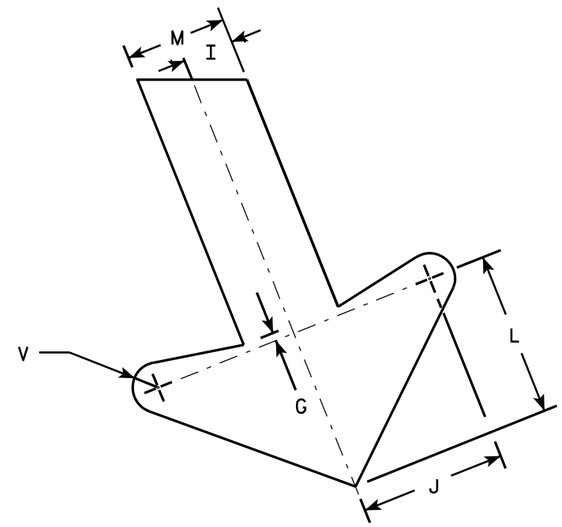
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 464	E



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

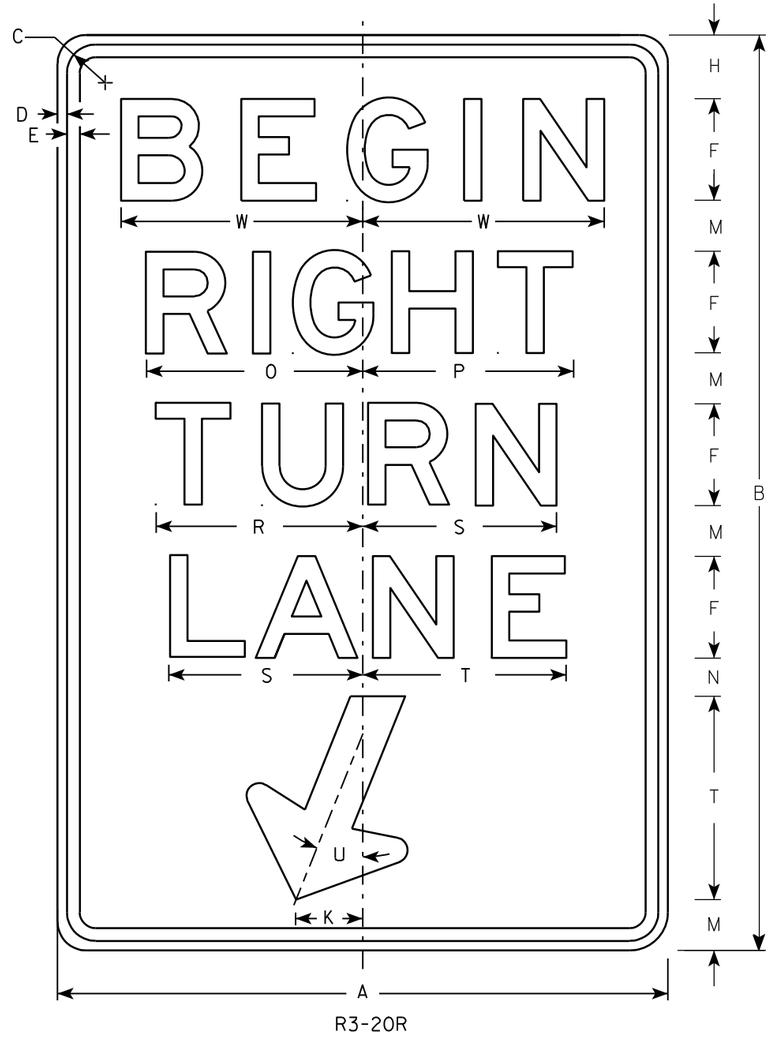
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

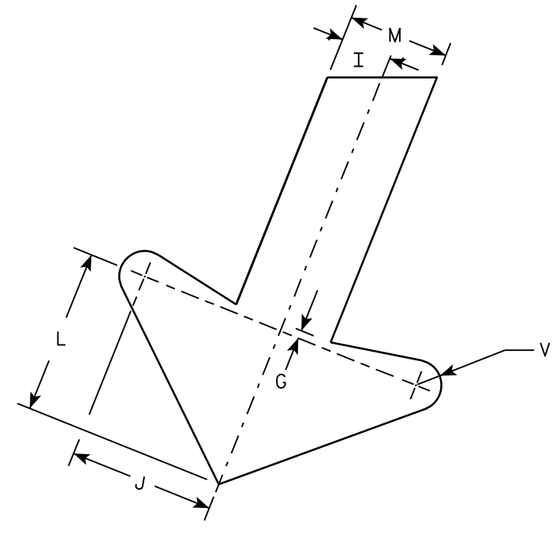
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 465 | E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

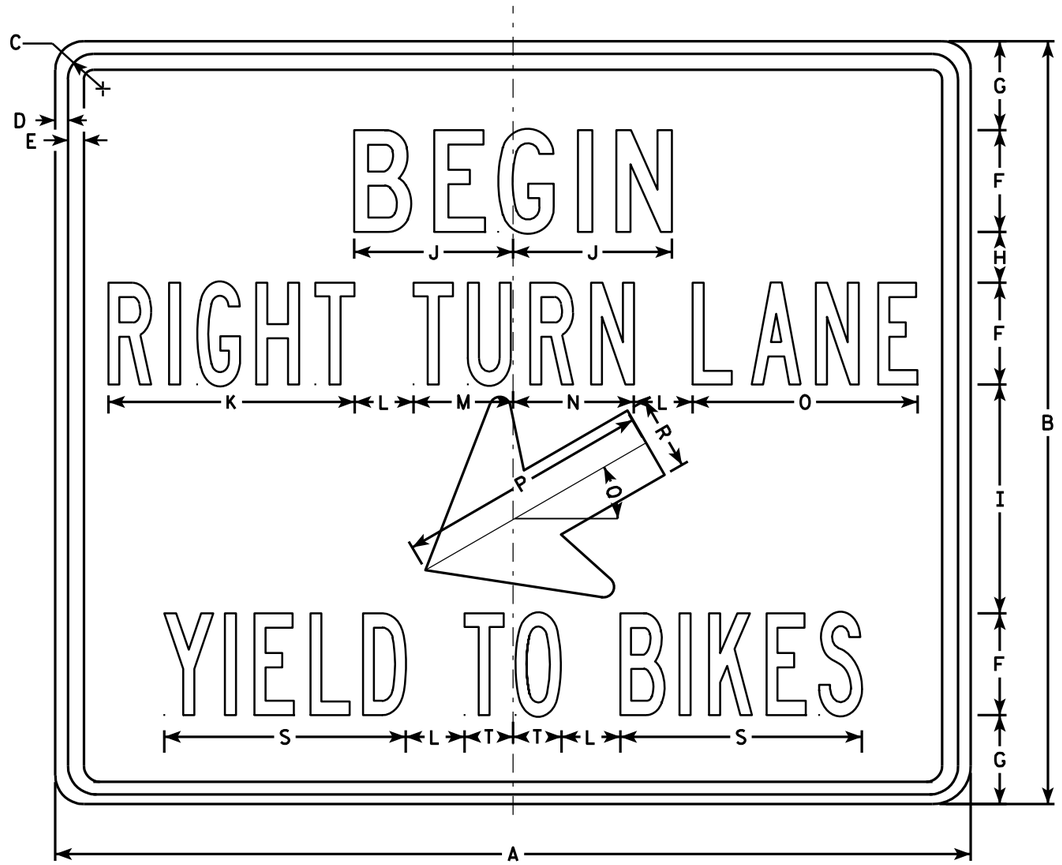
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 466 | E



R4-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C
   Lines 2 & 3 are Series B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	30	1 3/8	1/2	5/8	4	3 1/2	2	9	6 1/4	9 3/4	2 3/8	3 7/8	4 3/4	8 7/8	10	30°	2 7/8	9 1/2	1 7/8							7.5
2M	36	30	1 3/8	1/2	5/8	4	3 1/2	2	9	6 1/4	9 3/4	2 3/8	3 7/8	4 3/4	8 7/8	10	30°	2 7/8	9 1/2	1 7/8							7.5
3																											
4																											
5																											

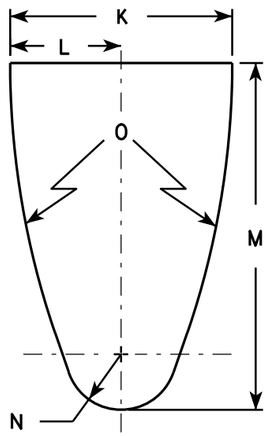
STANDARD SIGN
R4-4

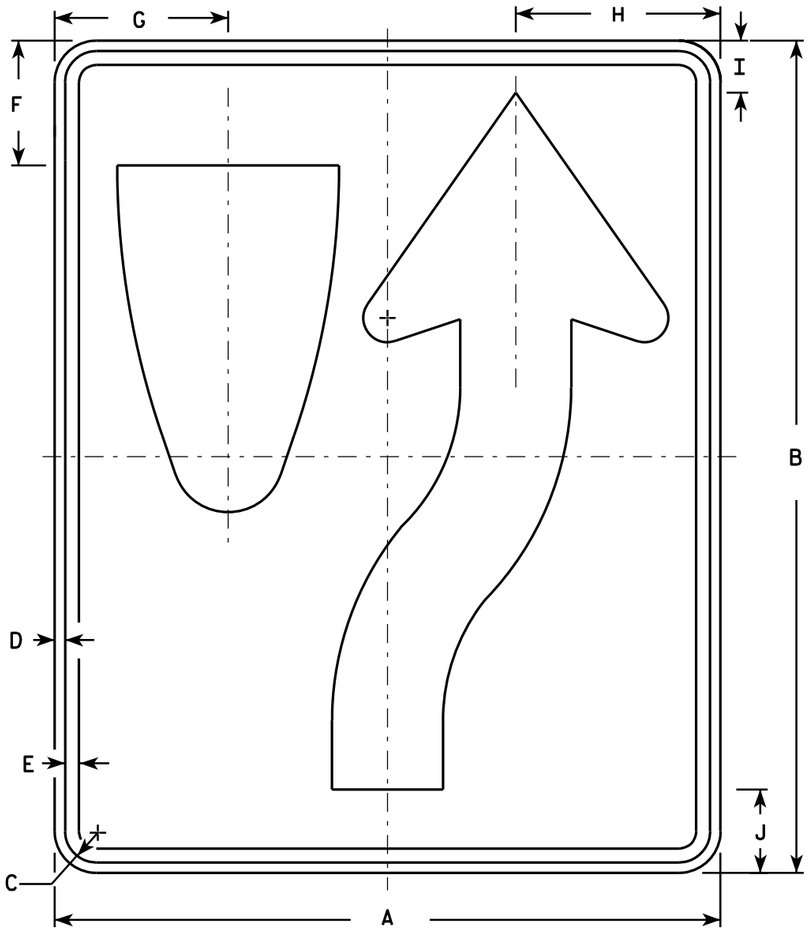
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew L Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-4.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 467 | E

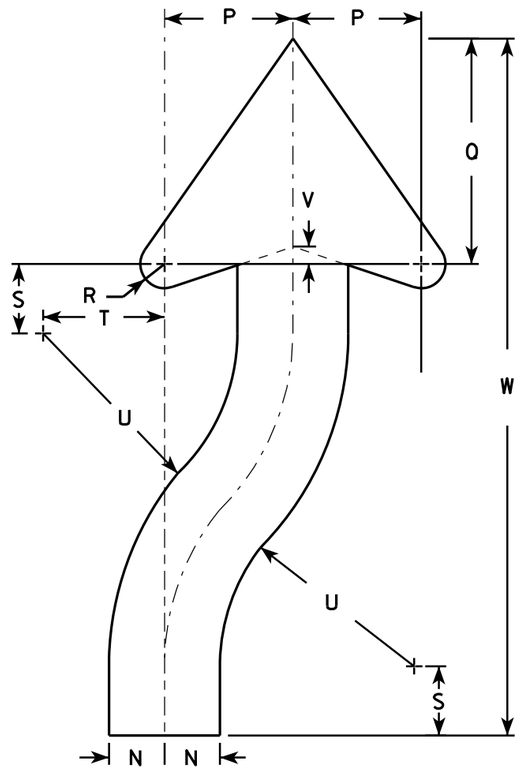




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

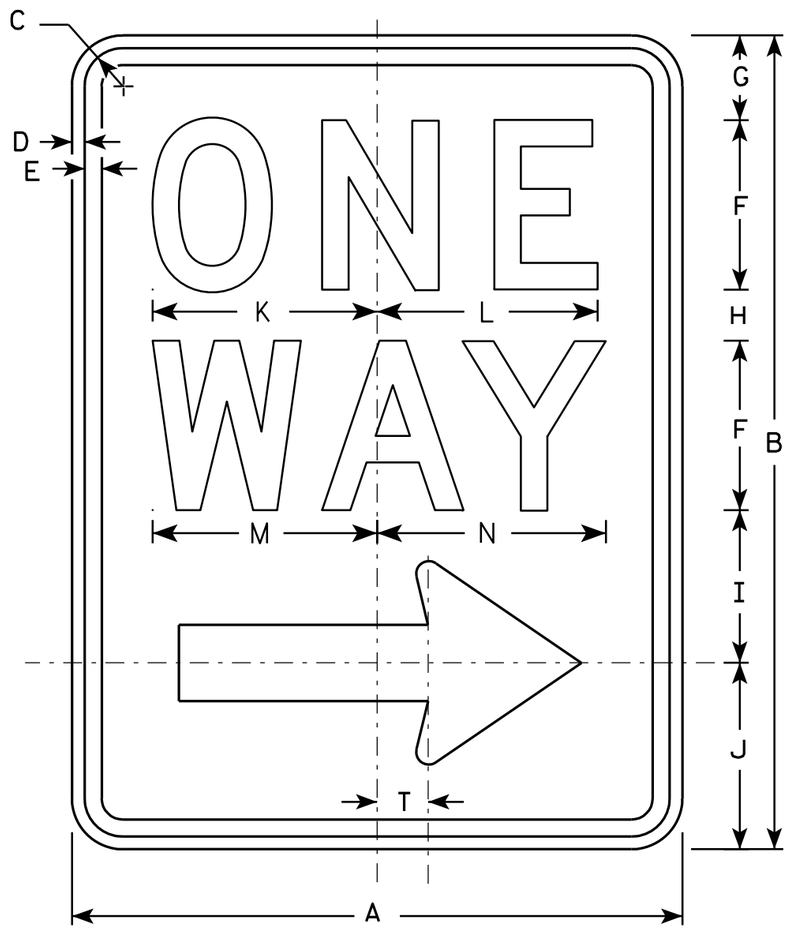
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

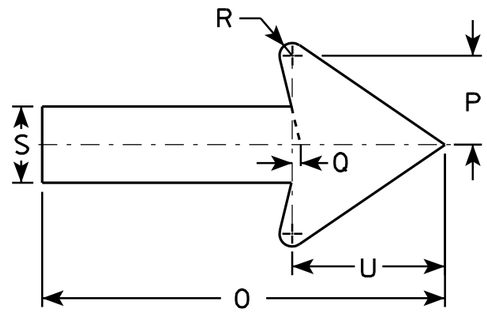
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 468	E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

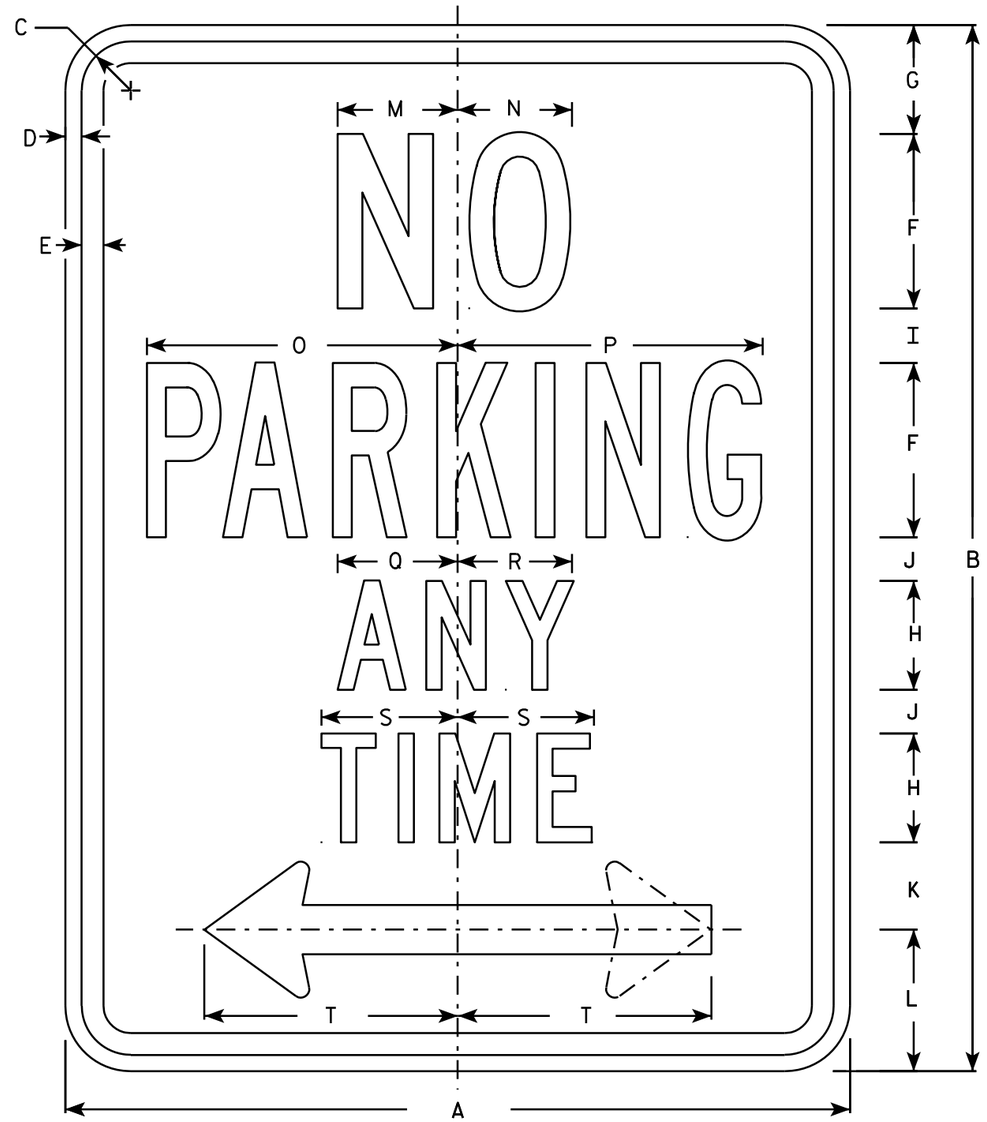
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

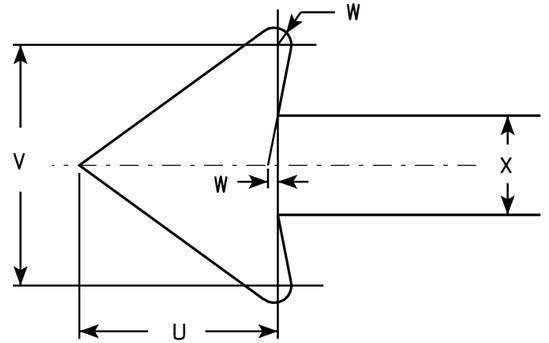
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 469	E



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																											

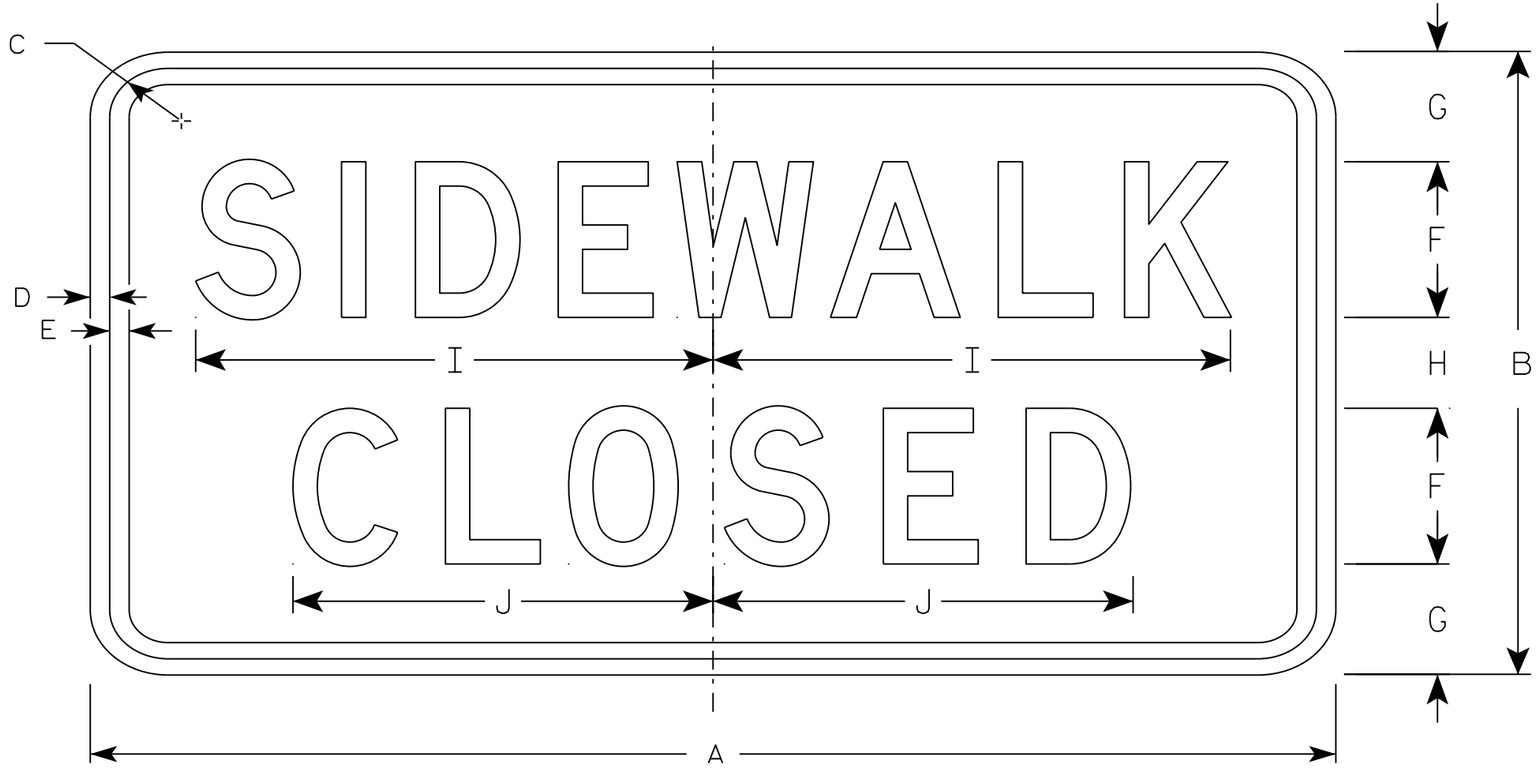
STANDARD SIGN
R7-1

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: 470	E



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 471 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-55

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series E.
   Lines 2, 3 and 4 are Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	18	24	1 1/8	3/8	1/2	4	3	2 1/2	1 7/8	2 1/8	1 1/4	2 1/4	3 3/4	7 1/4	7 1/2	5 1/2											3.0
2M	18	24	1 1/8	3/8	1/2	4	3	2 1/2	1 7/8	2 1/8	1 1/4	2 1/4	3 3/4	7 1/4	7 1/2	5 1/2											3.0
3																											
4																											
5																											

STANDARD SIGN
R9-55

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/2011 PLATE NO. R9-55.6

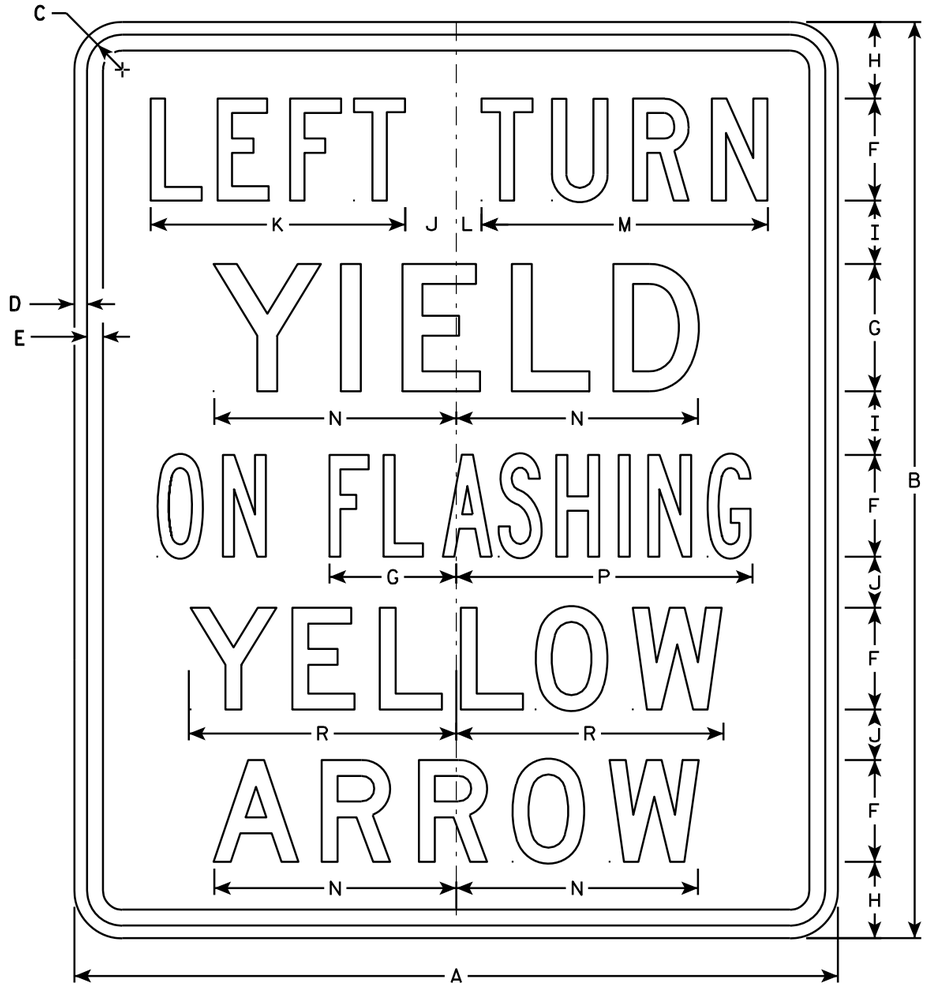
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 472	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R955.DGN PLOT DATE : 04-APR-2011 14:38 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.972696:1.000000

WISDOT/CADDS SHEET 42

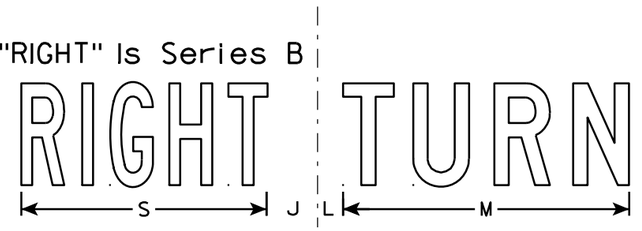
7

7



R10-50L

"RIGHT" Is Series B



R10-50R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C.
   Lines 2, 4 and 5 are Series D.
   Line 3 is Series B.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
2M	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
3																											
4																											
5																											

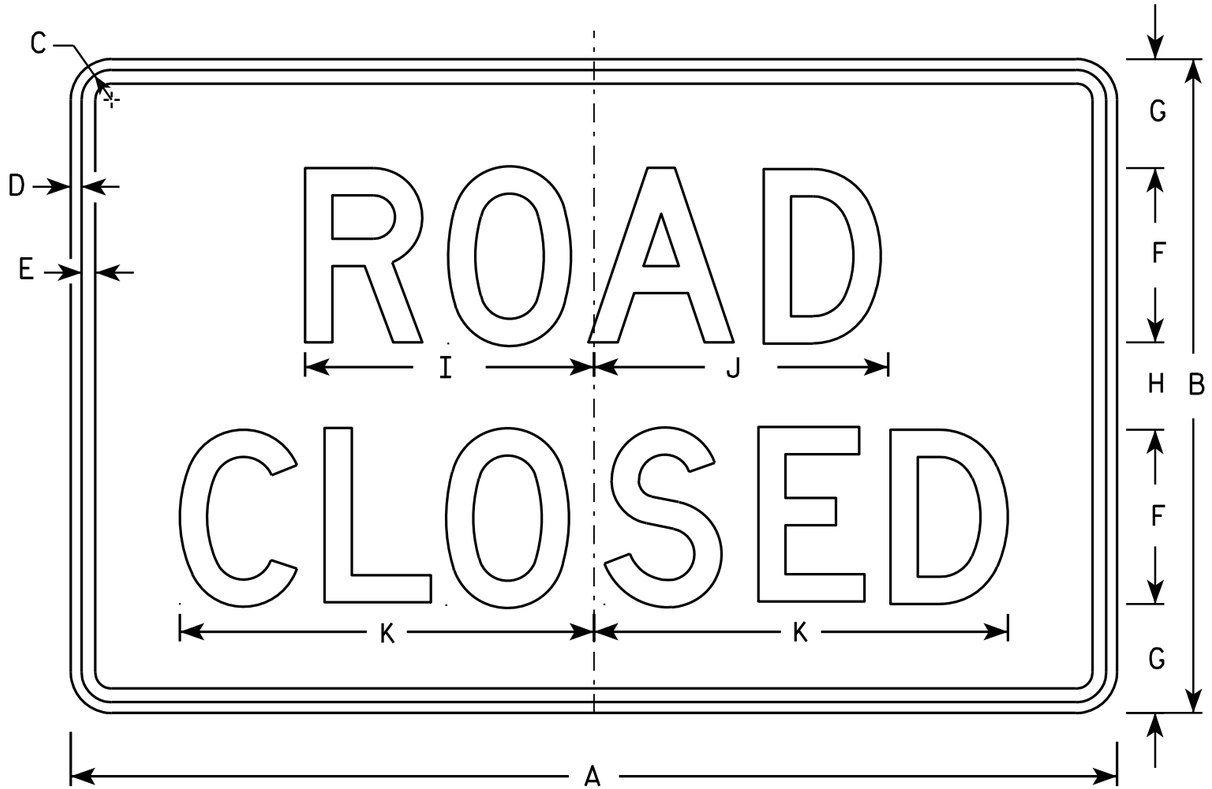
STANDARD SIGN
R10-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/11/13 PLATE NO. R10-50.2

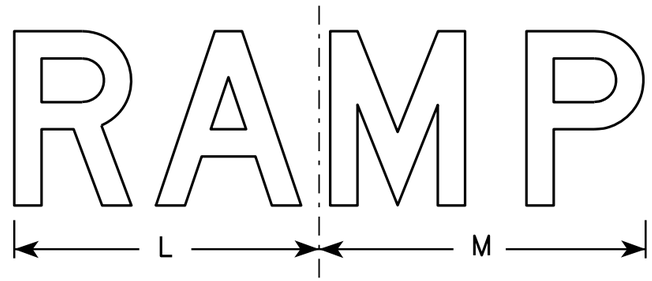
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 473	E



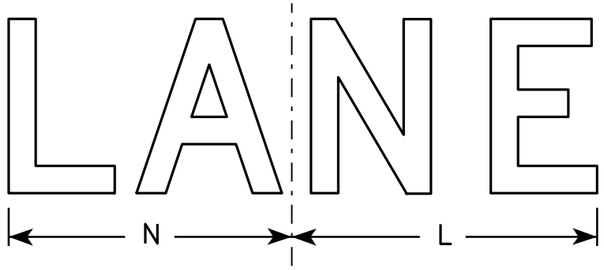
R11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

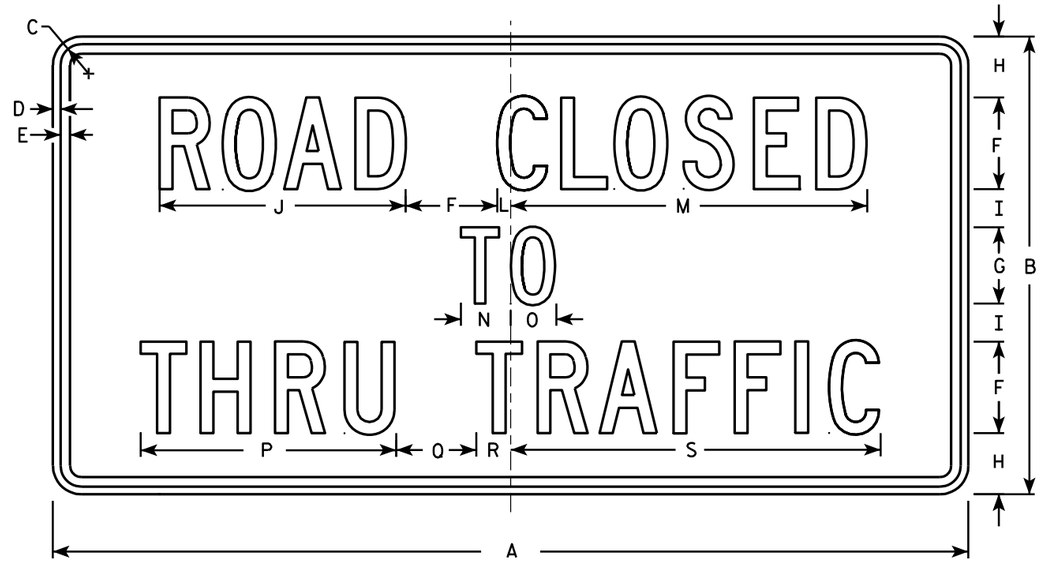
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 474	E



R11-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

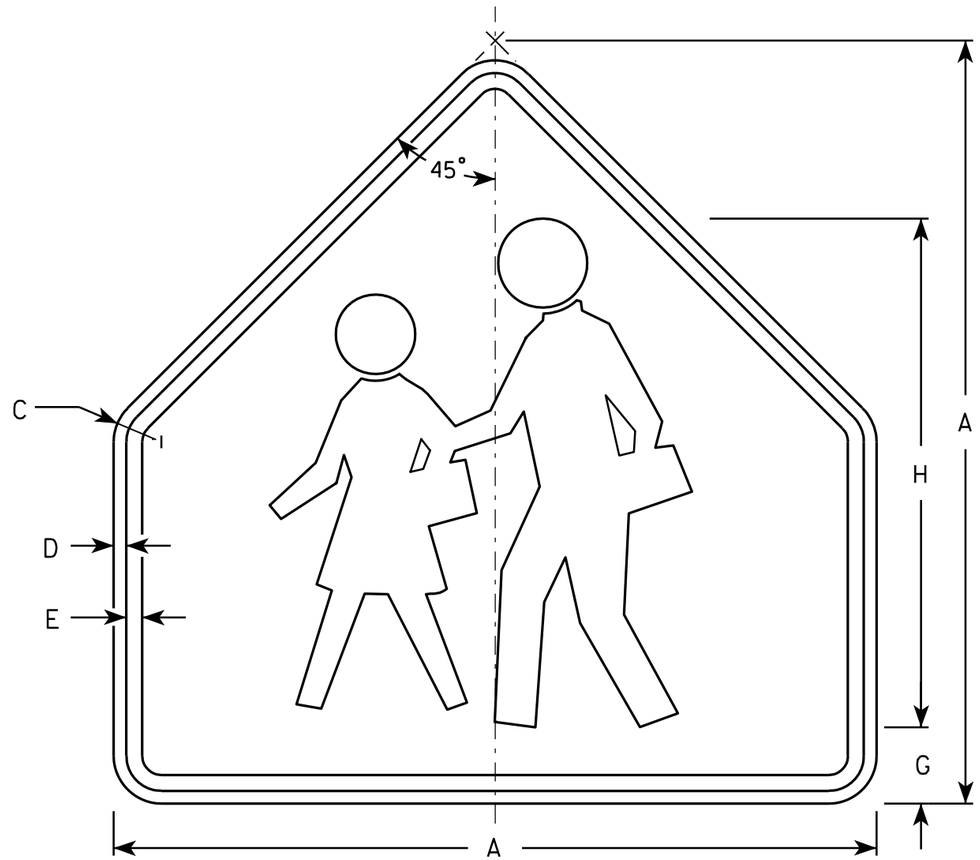
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 475 | E



S1-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

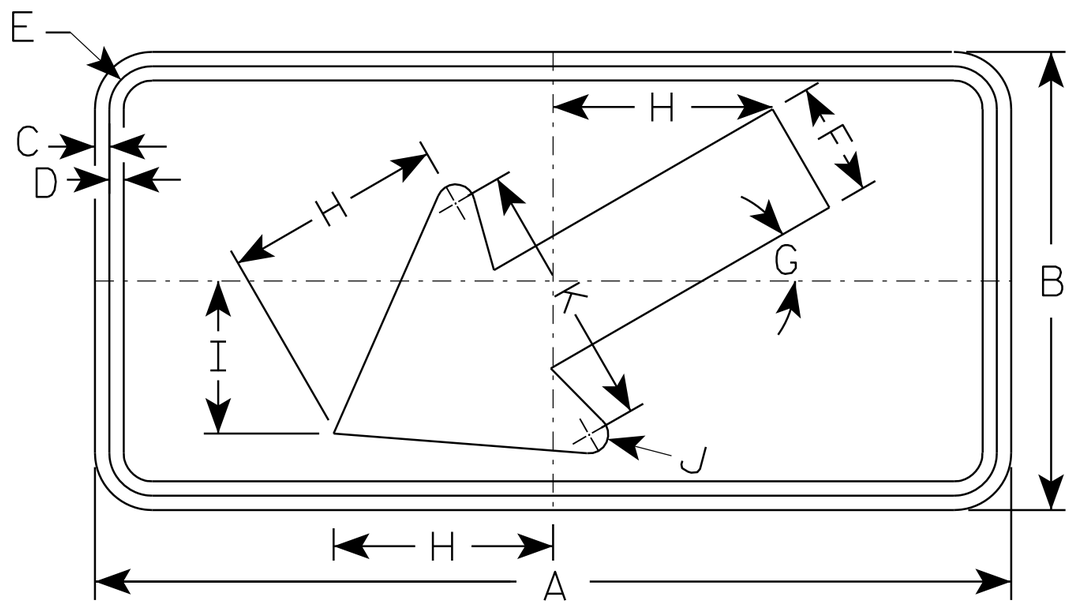
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 476	E



S16-7L

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. S16-7R are the same as S16-7L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

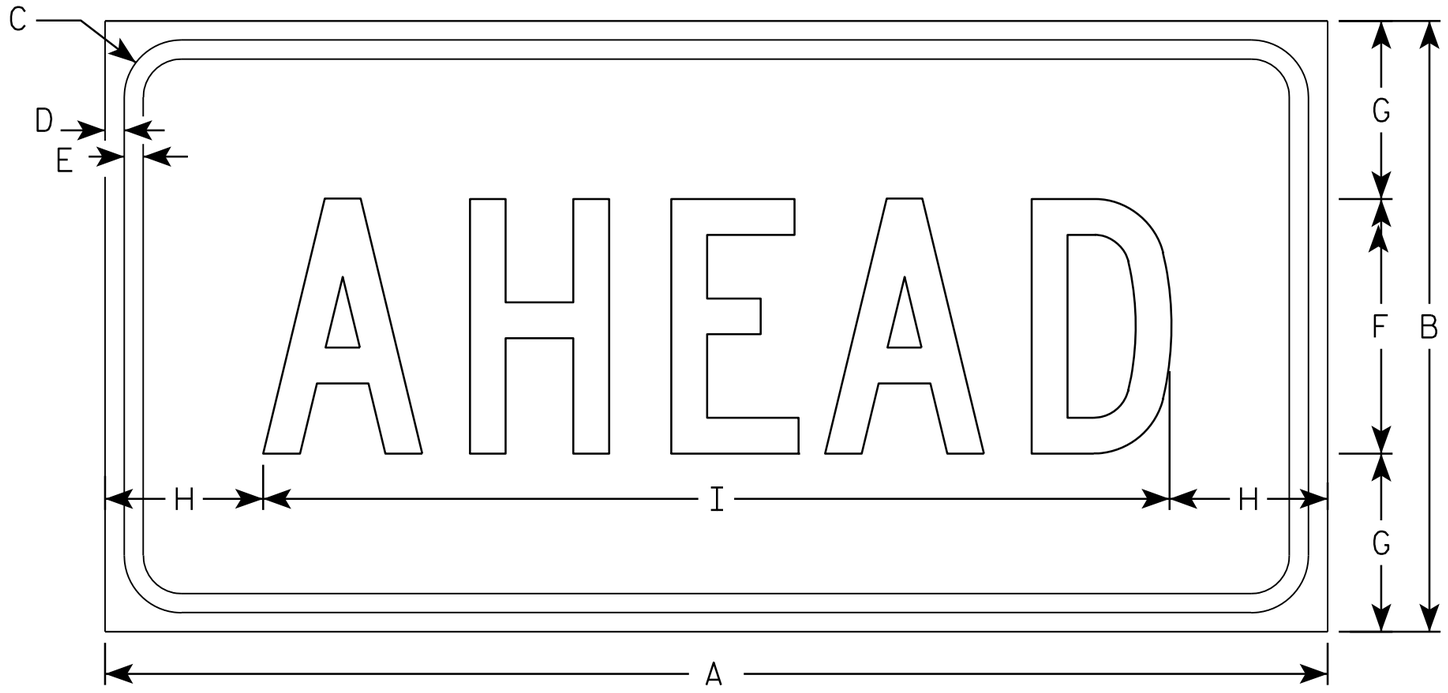
STANDARD SIGN
S16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-7.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 477 | E



S16-9P

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

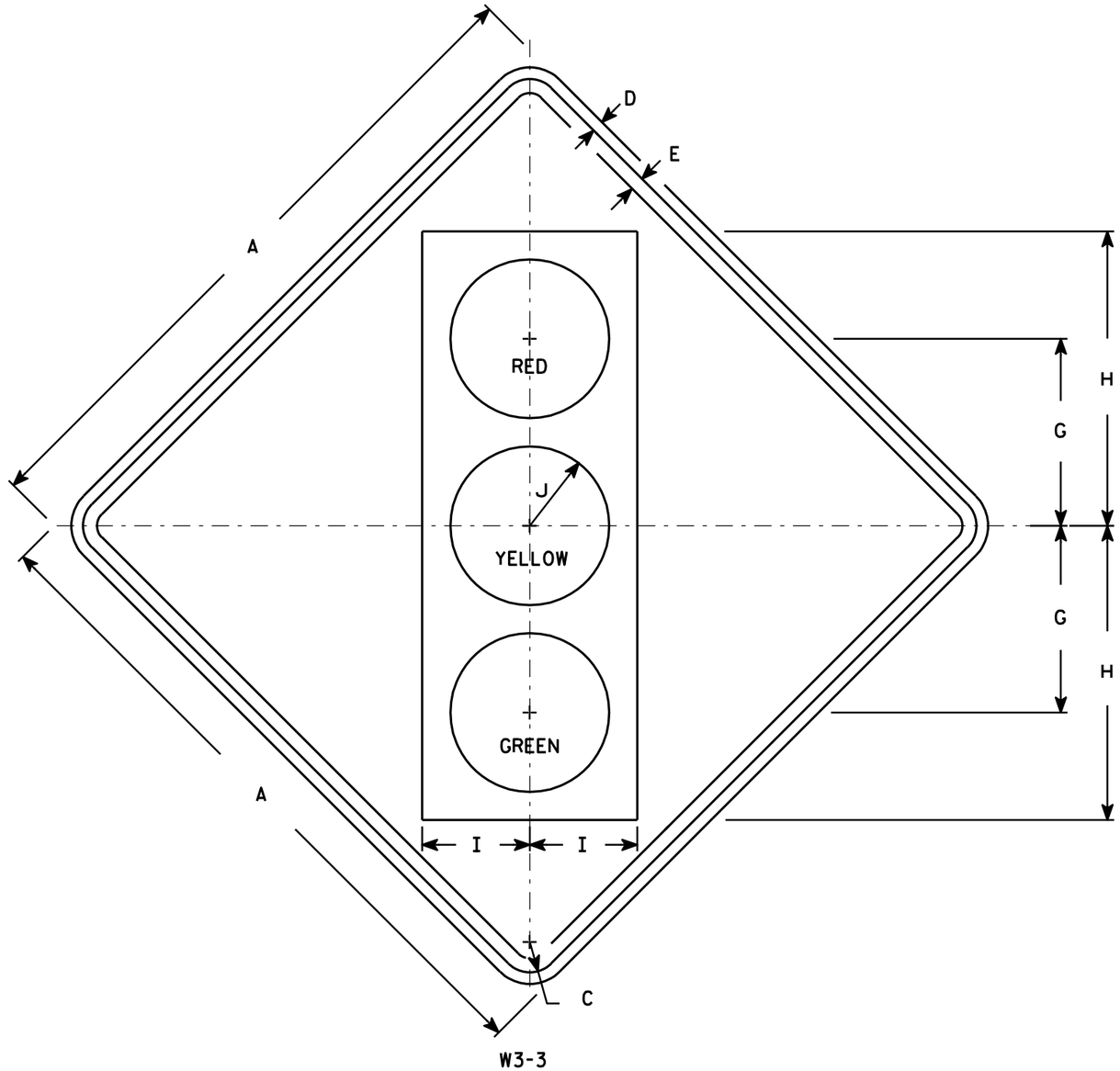
STANDARD SIGN
S16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 478 | 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

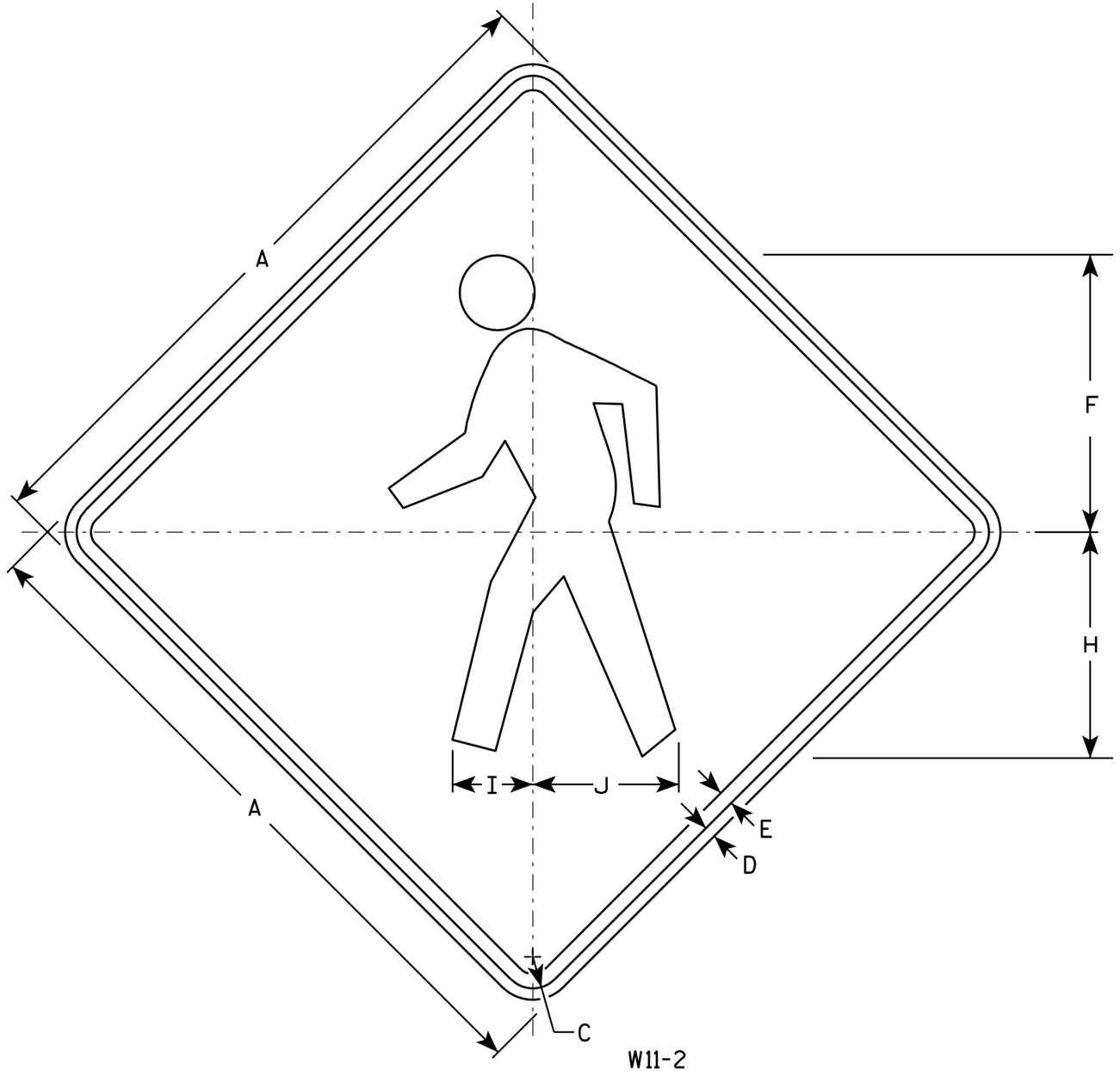
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 479 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W33.DGN PLOT DATE : 07-JUN-2010 13:07 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 7.448805:1.000000
WISDOT/CADDS SHEET 42



W11-2

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

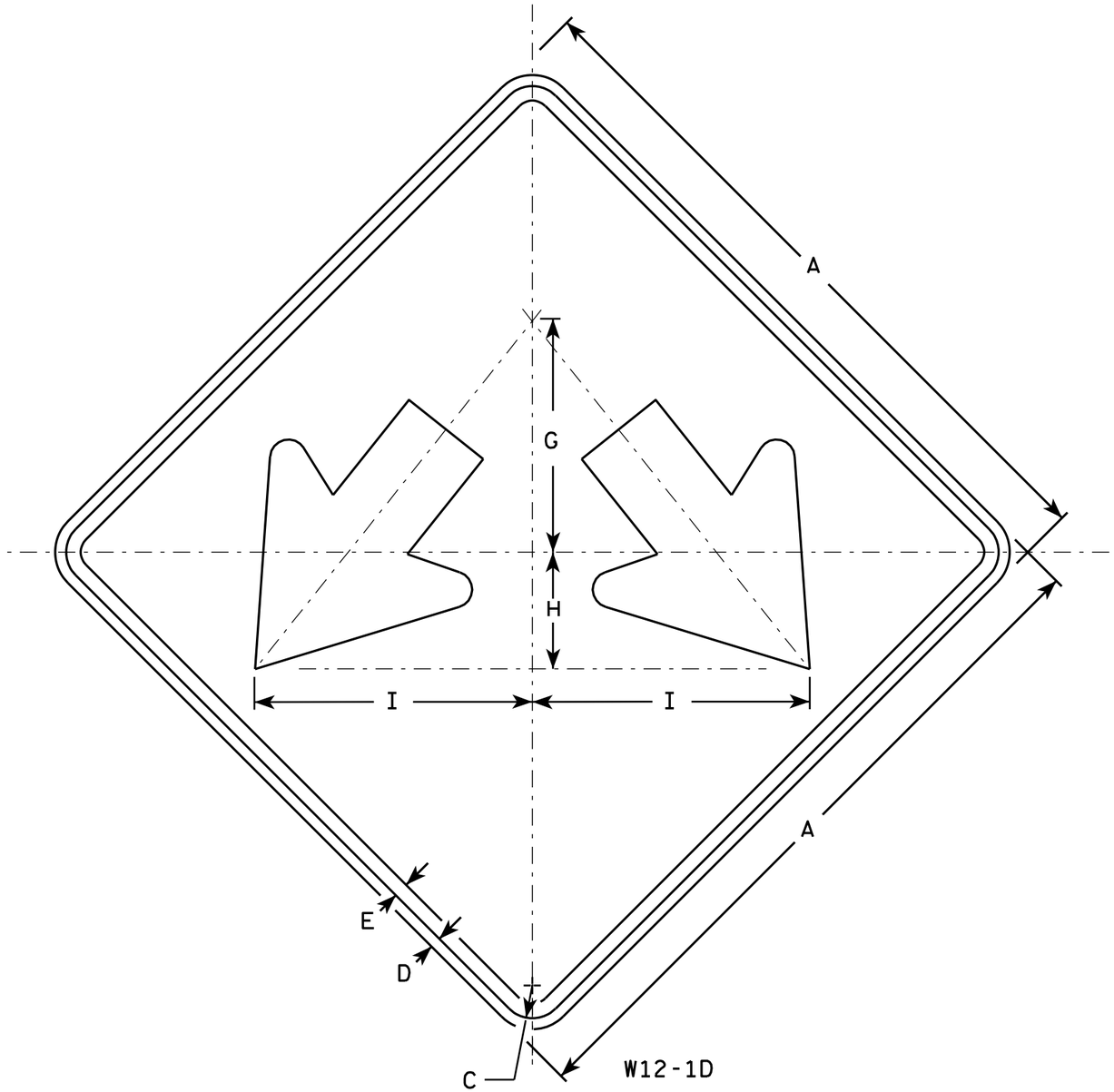
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

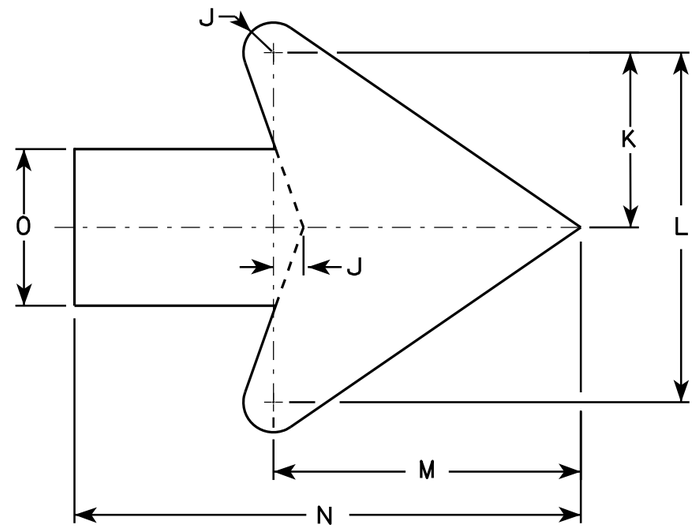
DATE 6/7/10 PLATE NO. W11-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 480	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

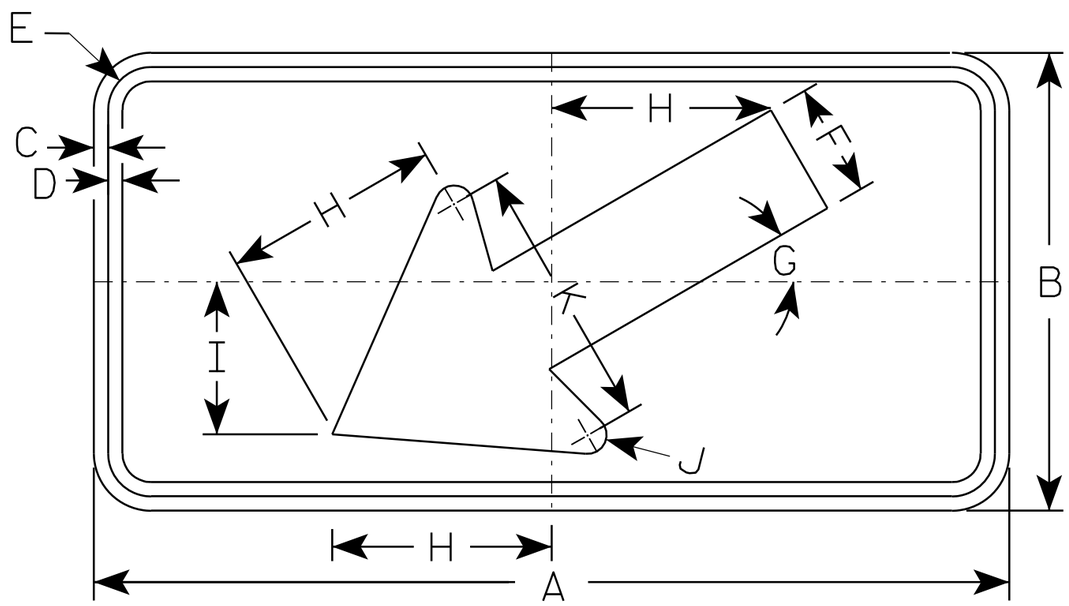
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 481	E



W16-7L

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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. W16-7R is the same as W16-L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4																											8
5																											8

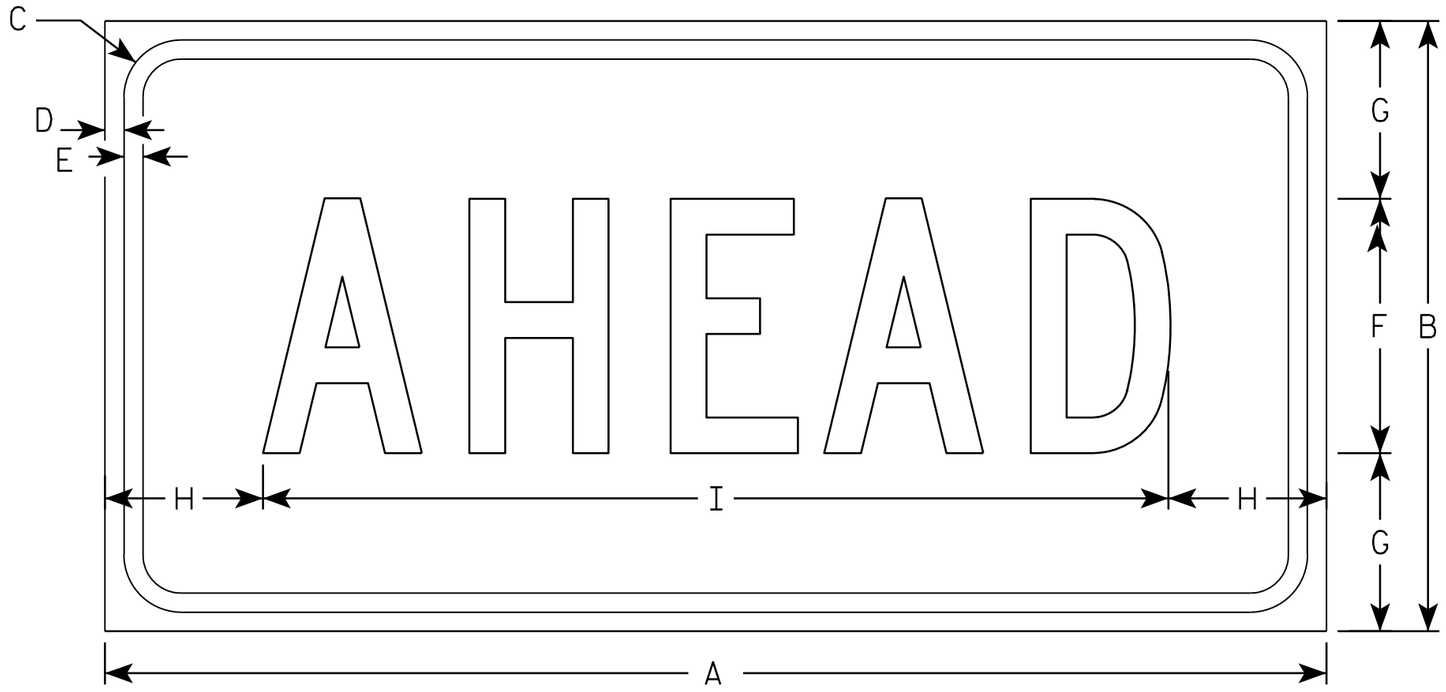
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. W16-7.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 482	E



W16-9P

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
W16-9P

WISCONSIN DEPT OF TRANSPORTATION

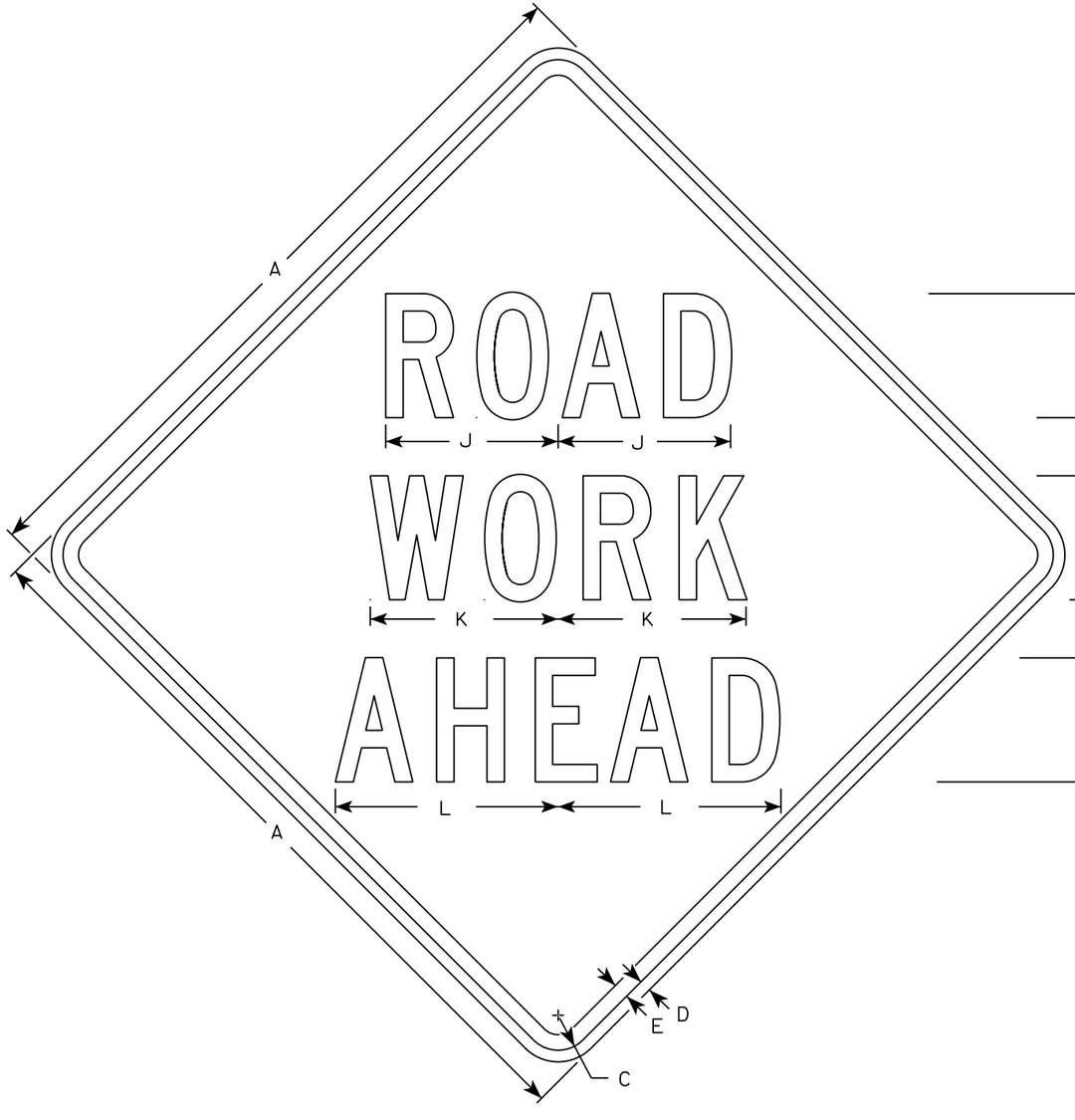
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/28/10 PLATE NO. W16-9P.6

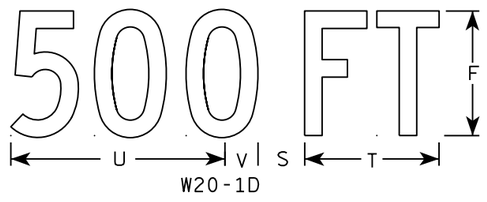
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 483 | E

7

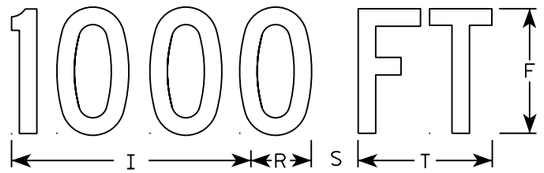
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W169P.DGN PLOT DATE : 28-DEC-2010 13:39 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 2.979524:1.000000
WISDOT/CADDS SHEET 42



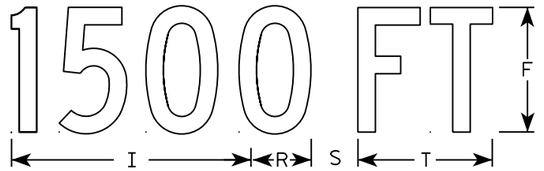
W20-1A



W20-1D



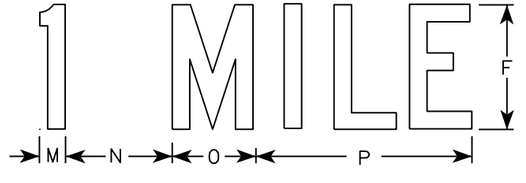
W20-1C



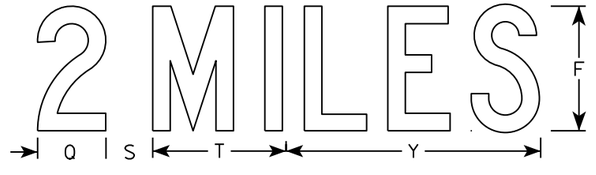
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

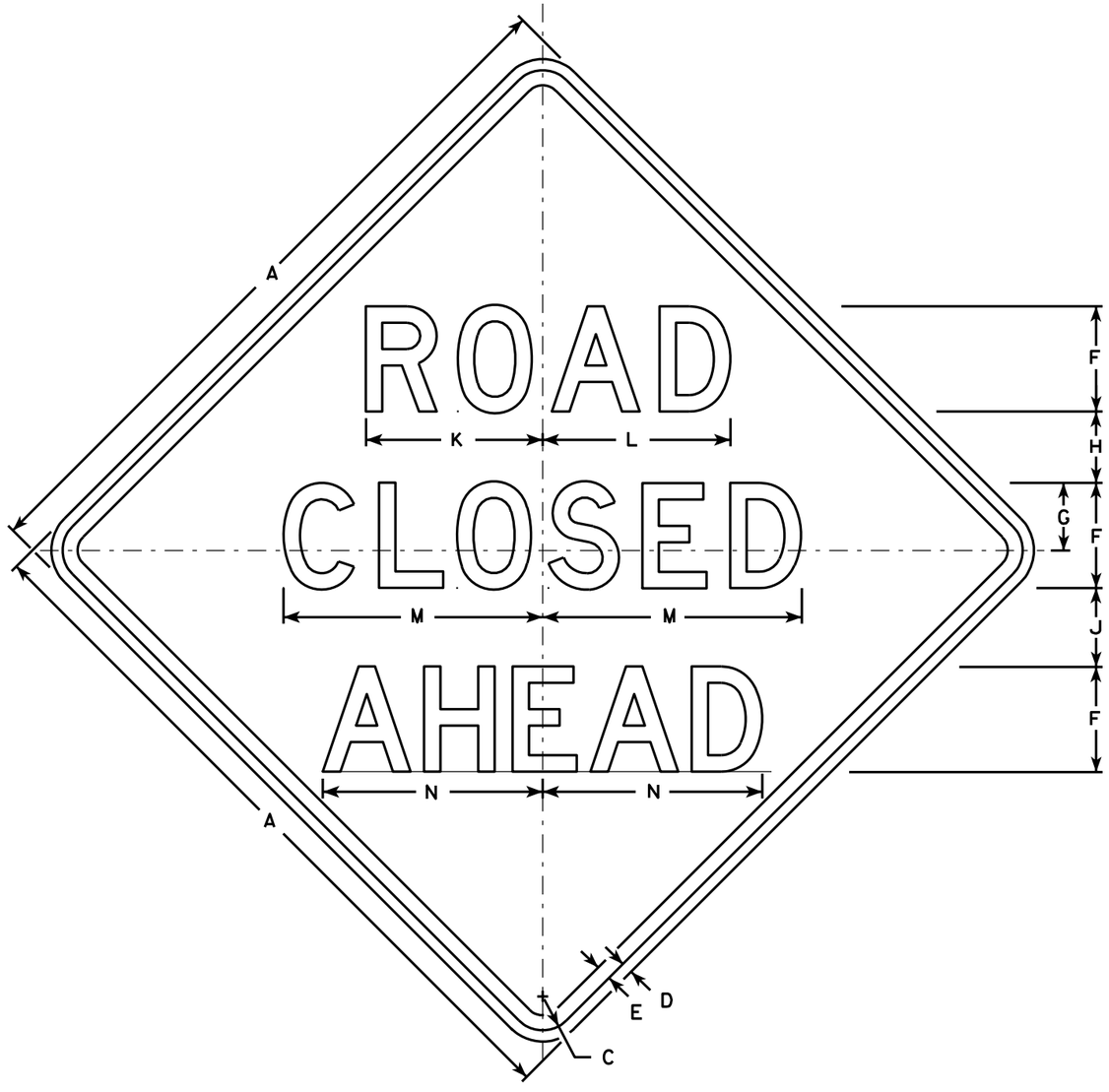
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

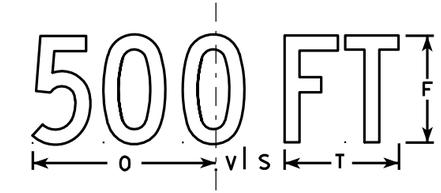
PROJECT NO:

SHEET NO: E

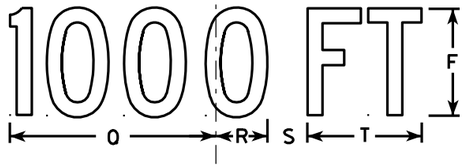
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



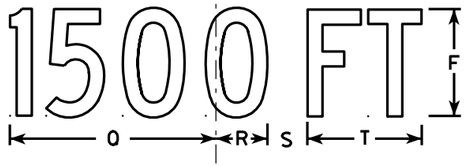
W20-3A



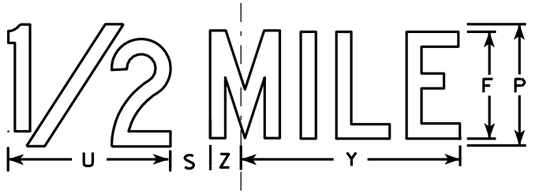
W20-3D



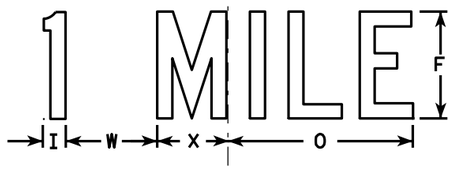
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

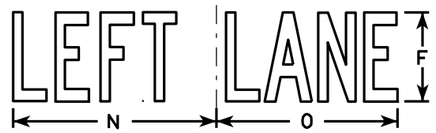
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 485 | E

7

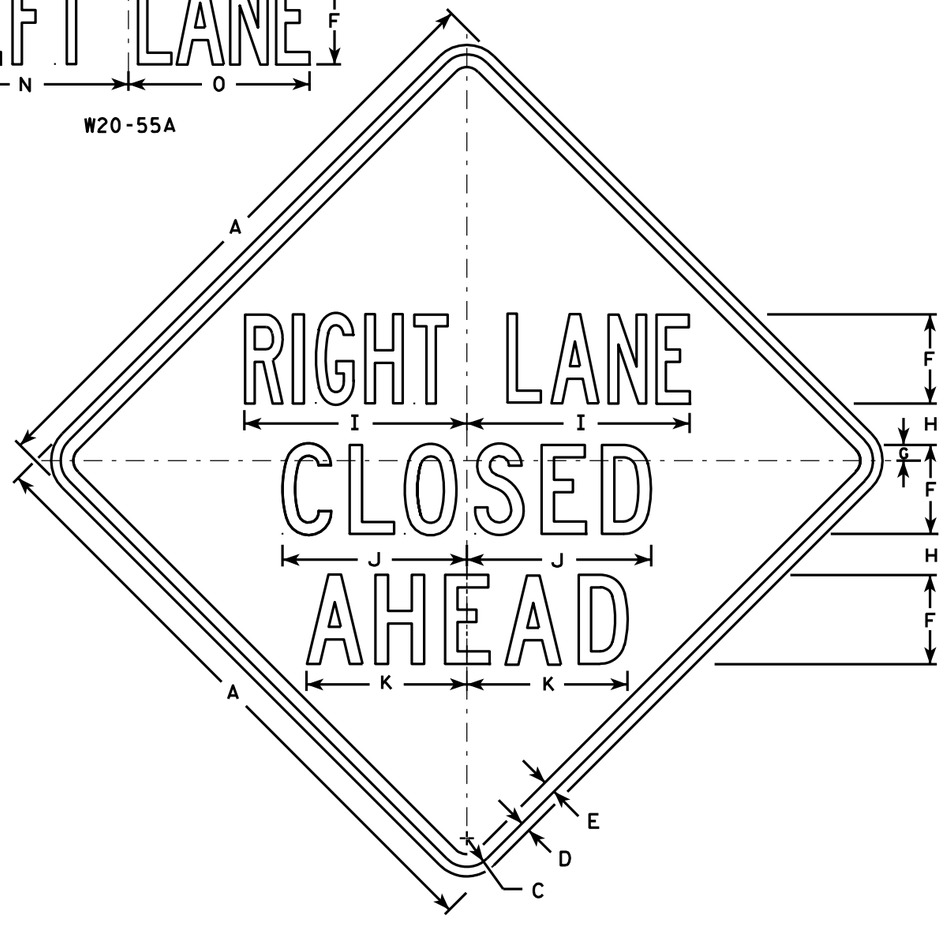
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



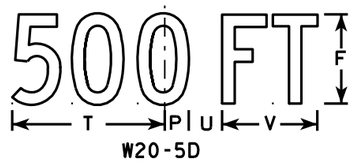
W20-56A



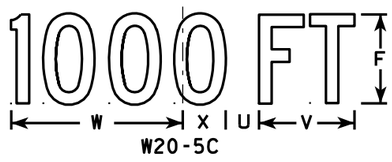
W20-55A



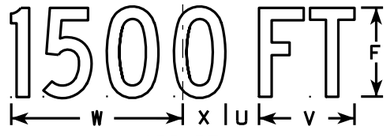
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

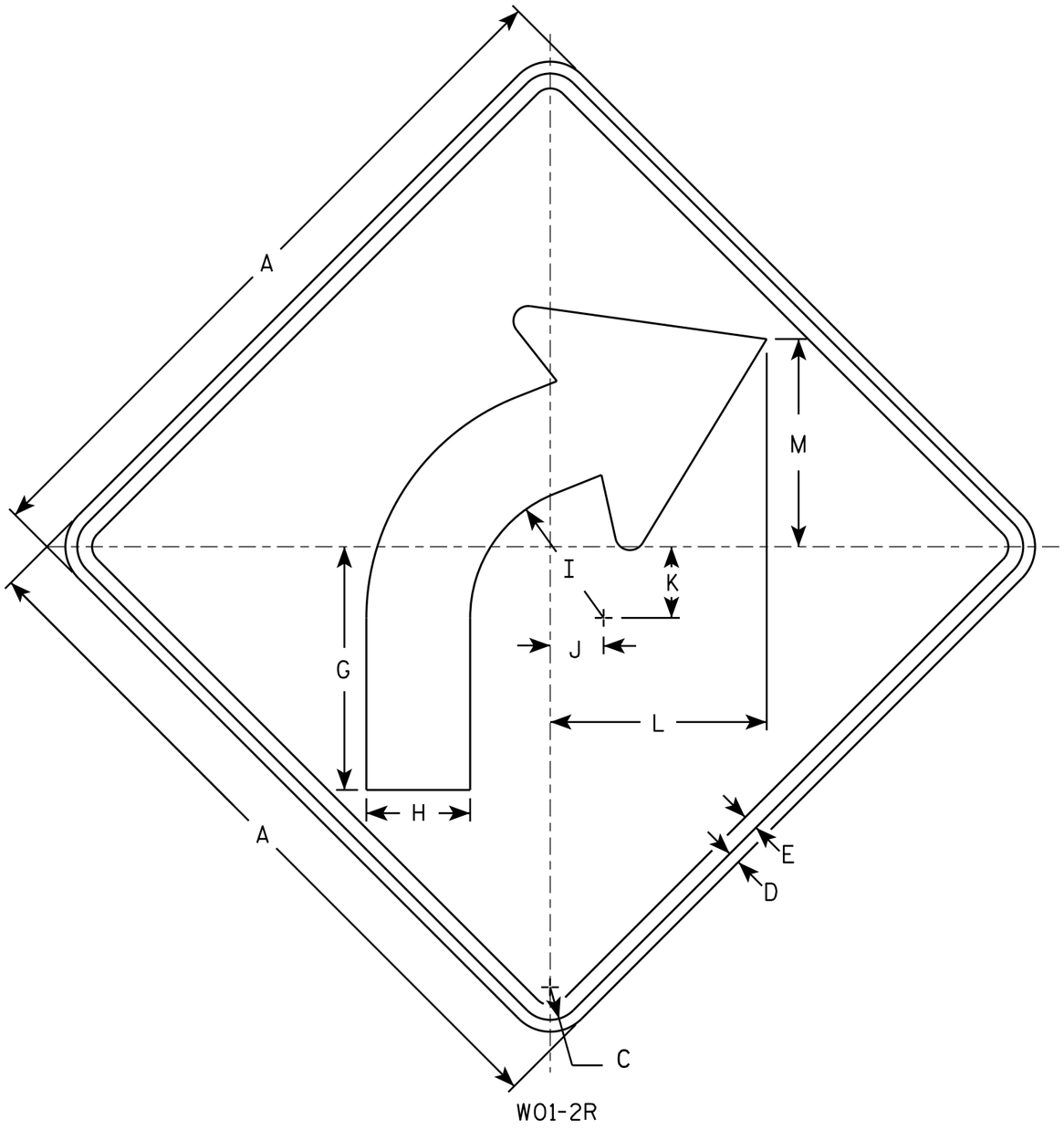
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 486 | E

7

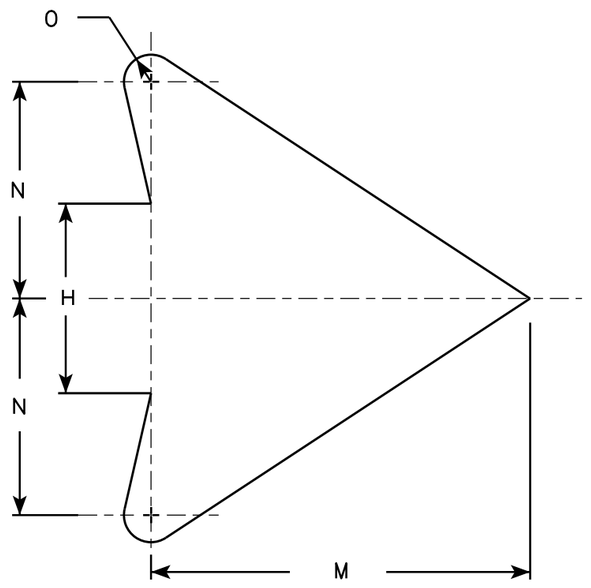
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W01-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-2L is the same as W01-2R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												4.0
2S	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
2M	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
3	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
4	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W01-2

WISCONSIN DEPT OF TRANSPORTATION

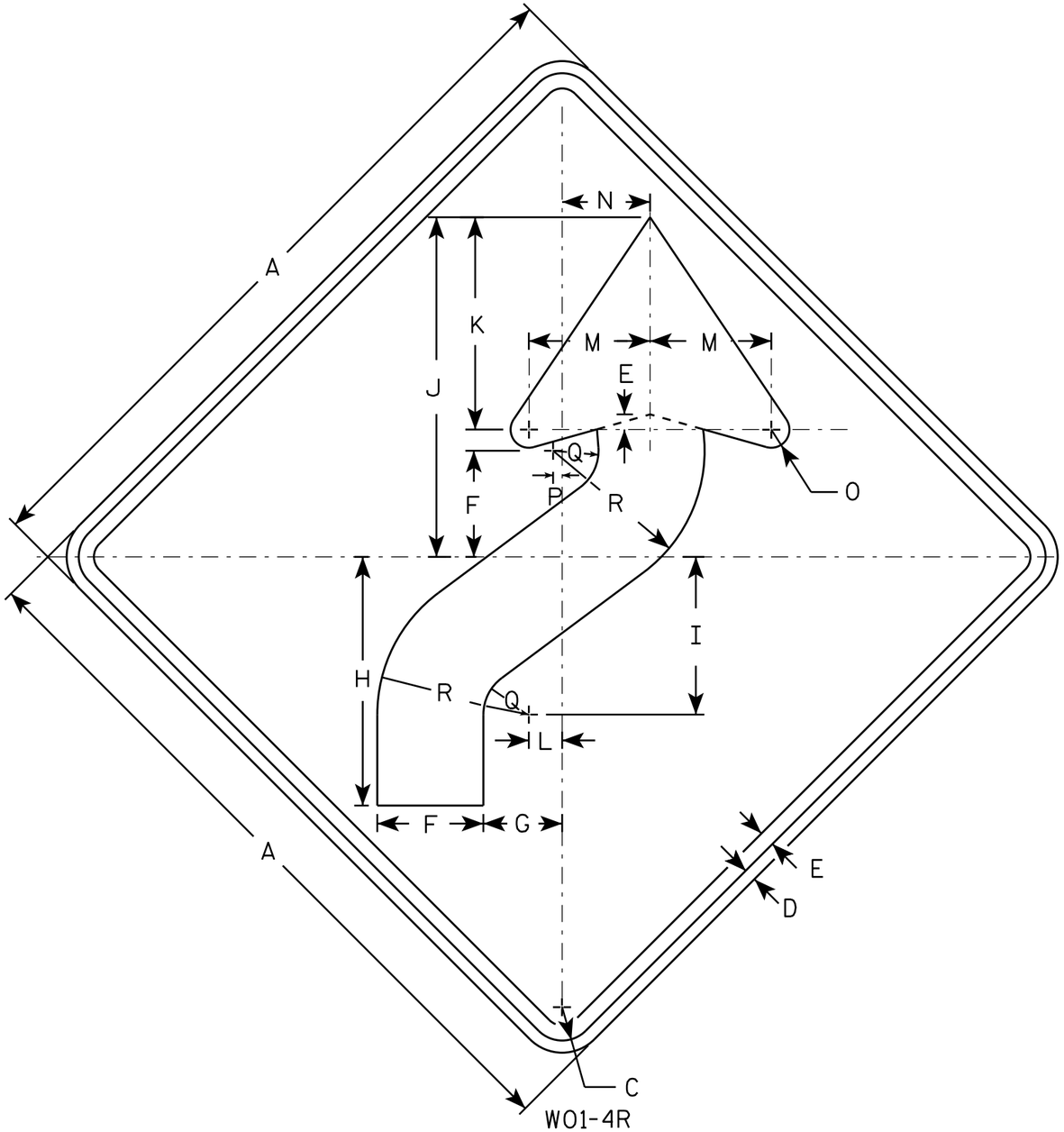
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-1.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

7

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W012.DGN PLOT DATE : 28-FEB-2014 11:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.992871:1.000000 WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

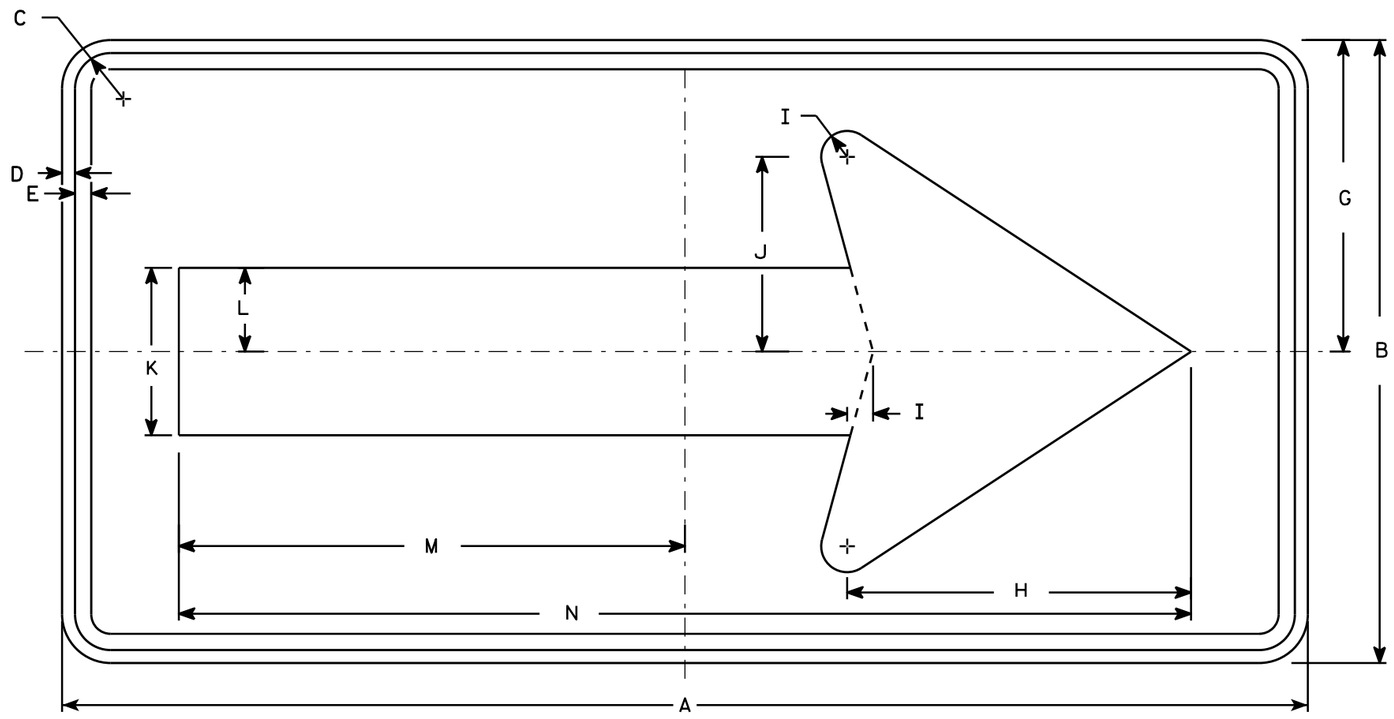
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

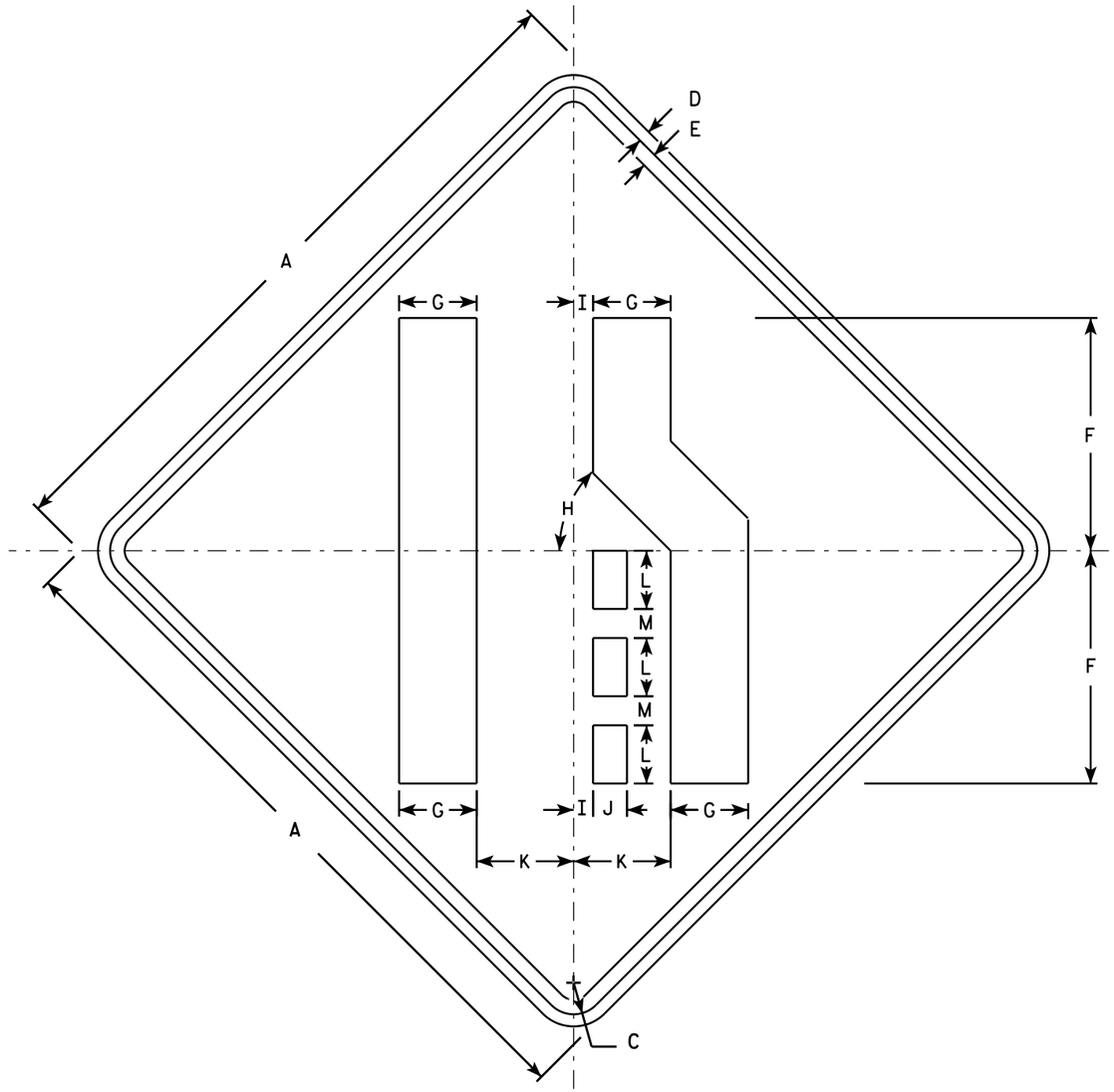
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

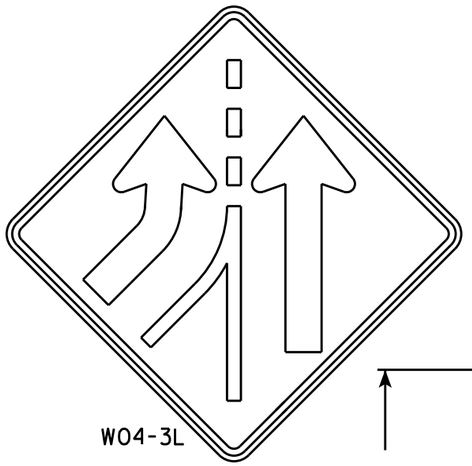
WISCONSIN DEPT OF TRANSPORTATION

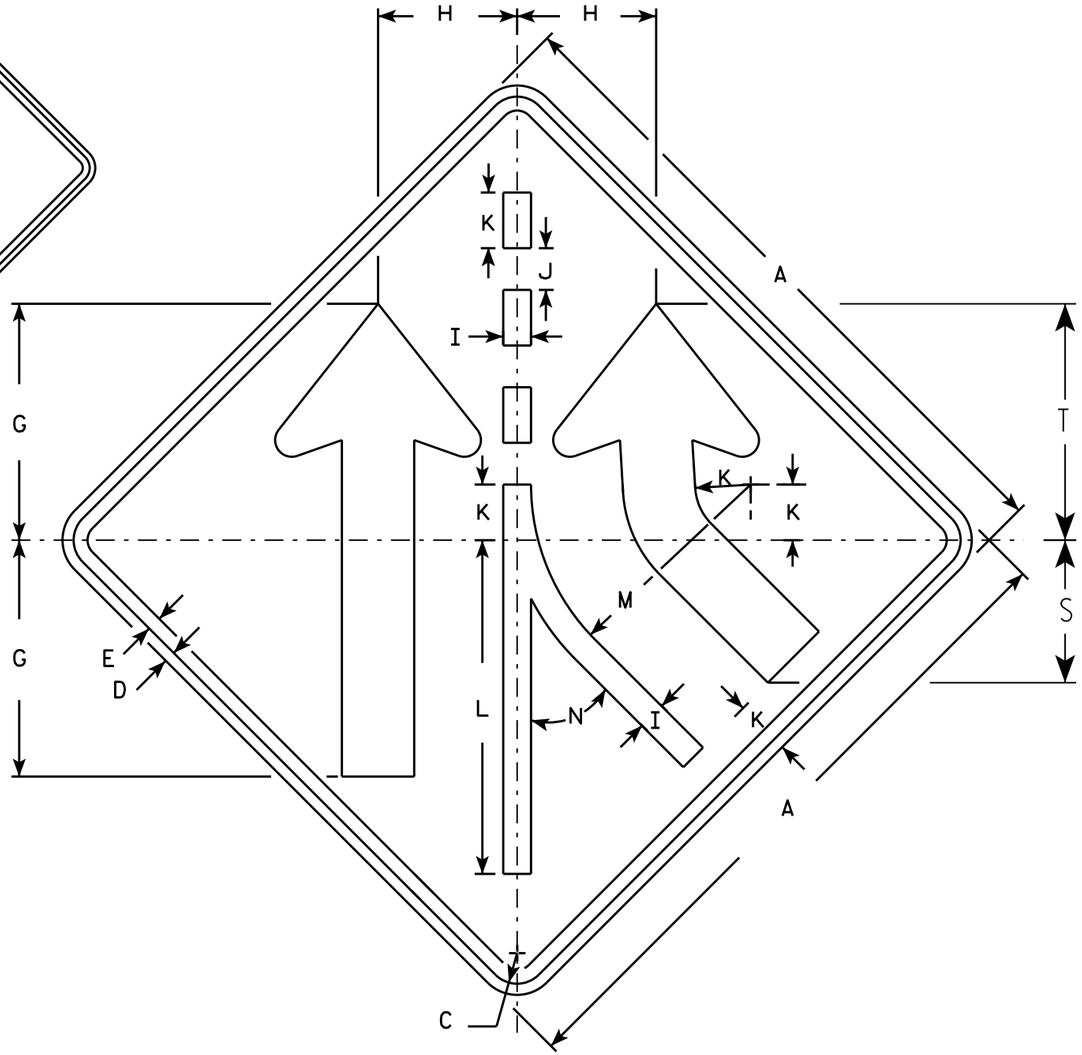
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 490 W04-2.1

PROJECT NO:

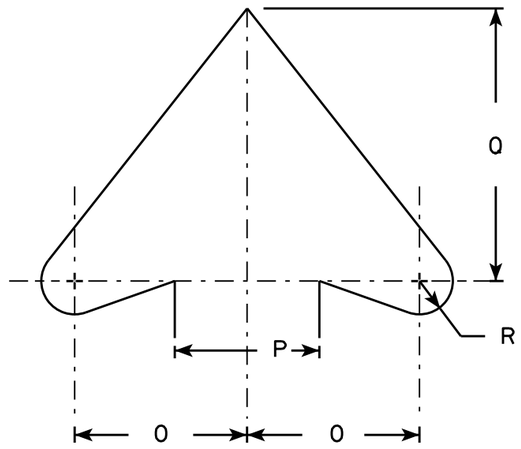
SHEET NO: E





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. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-3 L is the same as W04-3 R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
2S	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
2M	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
3	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
4	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
5	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0

STANDARD SIGN

W0433

WISCONSIN DEPT OF TRANSPORTATION

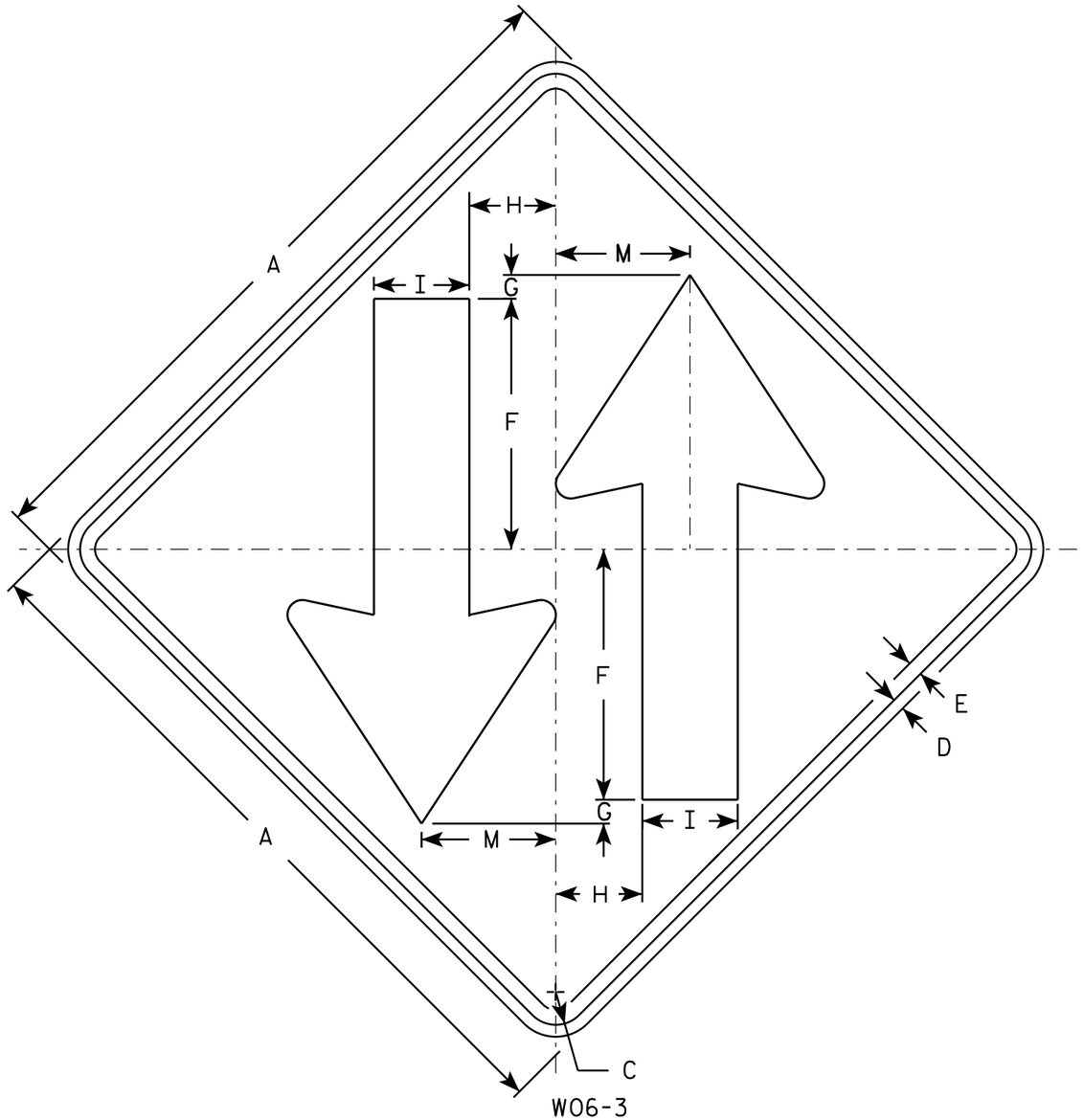
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 11/20/13 PLATE W04-3.1

PROJECT NO:

SHEET NO: E

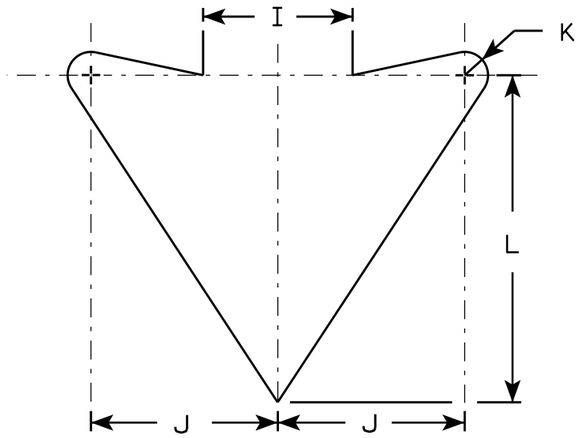
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W043.DGN PLOT DATE : 20-NOV-2013 11:49 PLOT BY : mscsja 6.810449:1.000000 WISDOT/CADDS SHEET 42



W06-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2S	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
2M	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
3	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

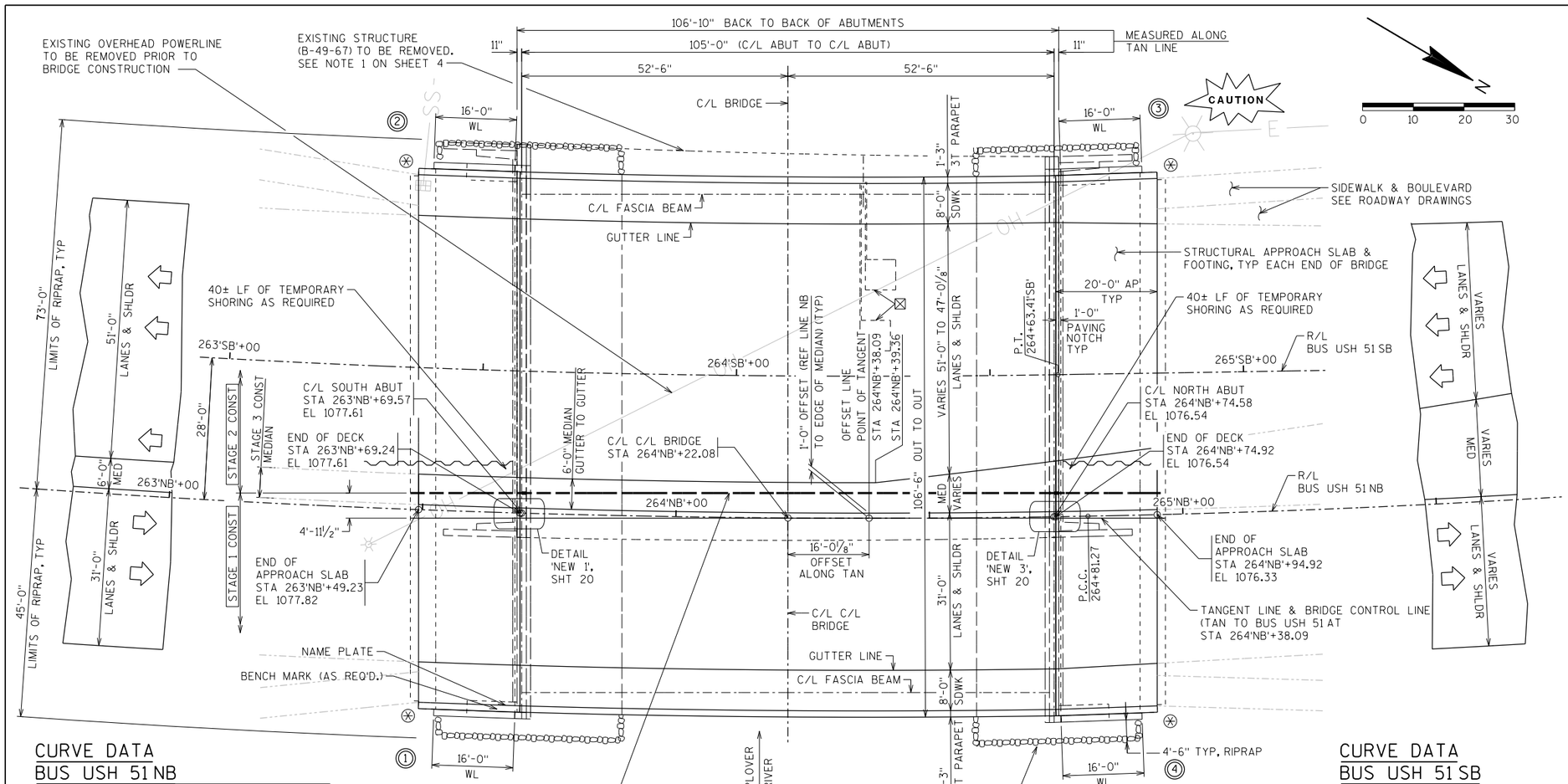
STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 492 W06-3.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



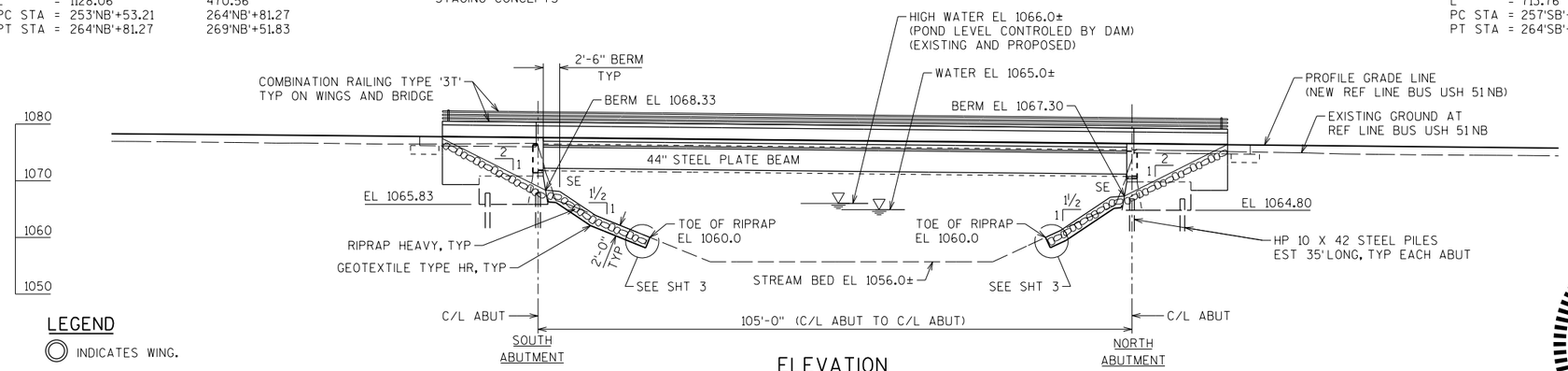
PLAN
SINGLE SPAN - STEEL BEAM BRIDGE

CURVE DATA
BUS USH 51 NB

PI STA	= 259'NB+28.42	267'NB+17.54
Δ	= 27° 37' 15.81" LEFT	12° 50' 18.82" LEFT
D	= 2° 26' 54.74"	2° 43' 42.13"
T	= 575.22	236.27'
R	= 2340'	2100'
L	= 1128.06'	470.56
PC STA	= 253'NB'+53.21	264'NB'+81.27
PT STA	= 264'NB'+81.27	269'NB'+51.83

CURVE DATA
BUS USH 51 SB

PI STA	= 261'SB+09.39
Δ	= 17° 41' 17.98" LEFT
D	= 2° 28' 41.49"
T	= 359.74'
R	= 2312'
L	= 713.76
PC STA	= 257'SB'+49.65
PT STA	= 264'SB'+63.41



ELEVATION
(LOOKING WEST)

LEGEND
- ◎ INDICATES WING.
- ⊛ LOCATION OF ANCHOR ASSEMBLIES FOR THRIE BEAM.
  - WL = WING LENGTH
  - AP = APPROACH SLAB
  - SE = SEMI-EXPANSION
- ☒ 2- 6'x6' DETECTOR LOOPS CENTERED IN SB LANES AT STA 264'SB'+25, SEE 'CONDUIT AND ELECTRICAL SHEETS.

BENCHMARK

NO	STATION	DESCRIPTION	ELEV
43	264+75.0 30.0' RT	BRASS CAP IN NE COR CONC BRIDGE *B-49-67-82 OVER PLOVER RIVER	1077.29

TRAFFIC DATA

ADT (2015)	= 18,700
ADT (2035)	= 22,900
DHV (2035)	= 2420
DD	= 59/41 %
T	= 6.8 %
DESIGN SPEED	= 40 MPH

BRIDGE STAGE 1 = TRAFFIC STAGE 2A
BRIDGE STAGE 2 = TRAFFIC STAGE 3A
BRIDGE STAGE 3 = TRAFFIC STAGE 4A

STATE PROJECT NUMBER
6414-00-81

DESIGN DATA

LRFD DESIGN FOR NEW BEAM AND DECK

LIVE LOAD:
- DESIGN LOADING: HL-93
- INVENTORY RATING FACTOR: RF = 1.48 (NEW BEAMS)
- OPERATING RATING FACTOR: RF = 2.59 (NEW BEAMS)
- WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS
- STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 PSF

LFR RATINGS:
- DESIGN RATING: = HS20
- INVENTORY RATING: = 24.2
- OPERATING RATING: = 40.6
- WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

MATERIAL PROPERTIES:
- CONCRETE MASONRY - SUPERSTRUCTURE _____ f'c = 4,000 psi
- ALL OTHER (GRADE A) ____ f'c = 3,500 psi
- HIGH STRENGTH BAR STEEL REINFORCEMENT - AASHTO GRADE 60_____ fy = 60,000 psi
- STRUCTURE STEEL ASTM A709 GRADE 50W ____ fy = 50,000 psi
- STEEL DIAPHRAGMS _____ fy = 36,000 psi

FOUNDATION DATA

ABUTMENT WIDENING TO BE SUPPORTED ON HP 10X42 STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS* PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 35 FEET LONG AT EACH ABUTMENT WIDENING. IT IS ANTICIPATED THAT THE PILES WILL BE DRIVEN TO REFUSAL.

*THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

LIST OF DRAWINGS

1 ..... DECK REPLACEMENT AND WIDENING
2 ..... CROSS SECTION AND PROFILES
3 ..... GENERAL NOTES
4 ..... QUANTITIES STAGE 1
5 ..... QUANTITIES STAGE 2 AND 3
6 ..... SUBSURFACE EXPLORATION
7 ..... SOUTH & NORTH ABUTMENT NOTES
8 ..... SOUTH & NORTH ABUTMENT REMOVALS
9-13 ..... SOUTH ABUTMENT DETAILS
14-18 ..... NORTH ABUTMENT DETAILS
19 ..... FRAMING PLAN
20 ..... FRAMING TANGENT OFFSETS
21-22 ..... BEAM DETAILS
23 ..... BLOCKING AND DEFLECTION DIAGRAMS
24-25 ..... SUPERSTRUCTURE LAYOUT
26-30 ..... SUPERSTRUCTURE DETAILS
31-33 ..... STRUCTURAL APPROACH SLABS DETAILS
34-35 ..... COMBINATION RAILING TYPE "3T"
36-37 ..... CONDUIT AND ELECTRICAL WORK
38 ..... MEDIAN STAGE 3
39-41 ..... BRIDGE TRAFFIC STAGING CONCEPT

NO.	DATE	REVISION	BY

SEH
SHORT ELLIOTT HENDRICKSON INC.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 02/06/18
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-49-67

BUSINESS 51 OVER PLOVER RIVER

COUNTY	~~TOWN/CITY~~ VILLAGE
PORTAGE	WHITING

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
NCK	MHD	DLF	NCK

DECK REPLACEMENT AND WIDENING

SHEET 1 OF 41
493

WISCONSIN PROFESSIONAL ENGINEER
NATHAN C. KLOPP
E-39850
ST PAUL
MN

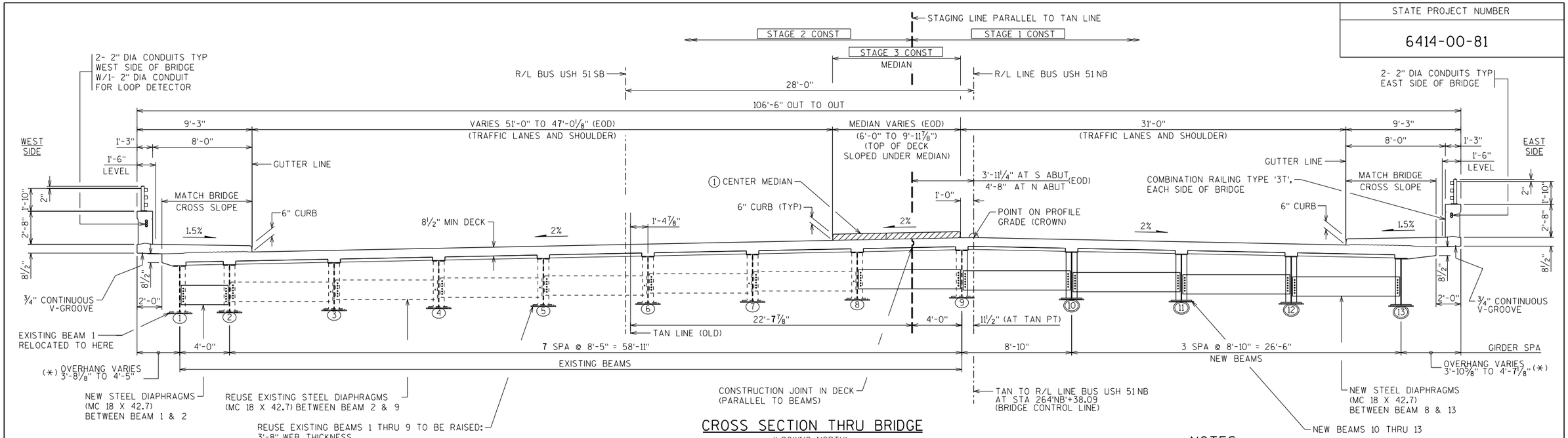
1/5/2018

SEH CONTACT: CHRIS BLUM, PE, 608.620.6192
WISDOT BRIDGE OFFICE CONTACT: BILL DREHER, PE, 608.266.8489

PLOT TIME: 8:08:50 AM
PLOT DATE: 1/5/2018
FILE NAME : S:\UZ\W\Wtnc\V28397\5-final-dsgn\5i-drawings\20-Struct\bridge\b28397gl.dgn

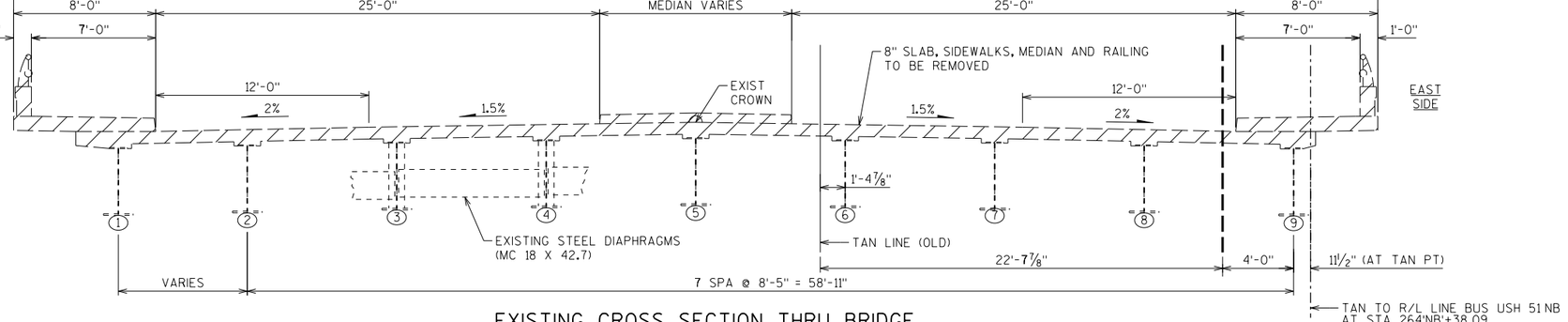
8
8

STATE PROJECT NUMBER
6414-00-81



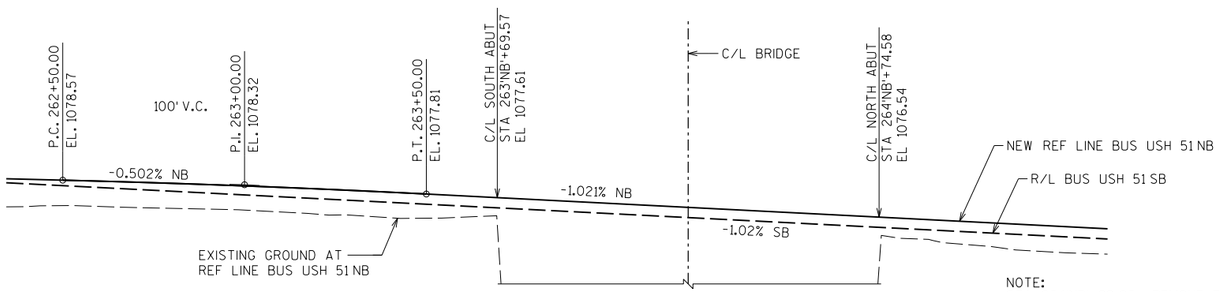
CROSS SECTION THRU BRIDGE

(LOOKING NORTH)



EXISTING CROSS SECTION THRU BRIDGE

(LOOKING NORTH)



PROFILE GRADE LINE

(NEW REF LINE BUS USH 51 NB)

NOTE:
STA 264'NB'+22.08 REMOVE EXISTING DECK AND PARTIAL SUBSTRUCTURE (B-49-67). A SINGLE-SPAN STEEL BEAM BRIDGE 106'-10" LONG x (VARIES 77'-5 3/4" TO 75'-1 3/8" WIDE)

NOTES

SEE ROADWAY PLAN FOR LANE STAGING AND TRAFFIC SHIFT.
COORDINATE WITH THESE STRUCTURE PLANS THE BRIDGE STAGING.

BRIDGE STAGE 1	=	TRAFFIC STAGE 2A
BRIDGE STAGE 2	=	TRAFFIC STAGE 3A
BRIDGE STAGE 3	=	TRAFFIC STAGE 4A

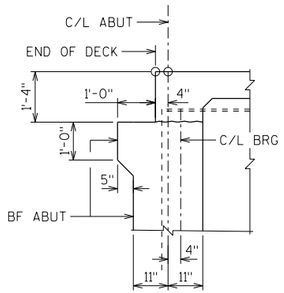
(1) HATCHED AREA INDICATED MEDIAN CONCRETE TO BE PLACED WITH STAGE 3 CONSTRUCTION.

INDICATES EXISTING BEAM LINE

INDICATES NEW BEAM LINE

EOD = EDGE OF DECK

(*) = DIMENSION IS MEASURED ALONG C/L ABUT TO THEORETICAL EDGE OF SIDEWALK.



DETAIL B

TYPICAL AT EACH ABUT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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CROSS SECTION AND PROFILES

SHEET 2 OF 41

494

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PLOT DATE: 1/5/2018
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STATE PROJECT NUMBER
6414-00-81

SLAB POURING SEQUENCE NOTES

IF OPTIONAL JOINTS ARE PROVIDED, TWO OR MORE SEQUENTIAL POURS MAY BE COMBINED AND PLACED IN ONE CONTINUOUS OPERATION. TWO OR MORE ALTERNATE DECK POURS (E.G. 1 & 3) MAY BE PLACED ON THE SAME DAY.

THE NEXT DECK POUR CAN BE MADE NO LESS THAN 72 HOURS AFTER THE PREVIOUS POUR.

THE CONTRACTOR MAY SUBMIT AN ALTERNATE POURING SEQUENCE SUBJECT TO THE APPROVAL OF THE STRUCTURES DESIGN SECTION.
(NOTE: APPLICABLE WHEN OPTIONAL TRANSVERSE CONSTRUCTION JOINTS ARE SHOWN)

THE CONTRACTOR SHALL POUR THE ENTIRE DECK PER THE DECK POUR SEQUENCE IF REQUIRED TRANSVERSE CONSTRUCTION JOINTS ARE SHOWN ON THE PLANS, THE CONTRACTOR MAY SUBMIT AN ALTERNATE POURING SEQUENCE SUBJECT TO THE APPROVAL OF THE STRUCTURES DESIGN SECTION.
(NOTE: REQUIRED WHEN REQUIRED TRANSVERSE CONSTRUCTION JOINTS ARE SHOWN)

OPTIONAL TRANSVERSE CONST JTS. SUBJECT TO THE APPROVAL OF THE STRUCTURES DESIGN SECTION. MULTIPLE POURS AND SEQUENCE OF POURS FOR A GIVEN CONSTRUCTION STAGE MUST BE APPROVED BY THE STRUCTURES DESIGN SECTION.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

FOR EXISTING STRUCTURE DESCRIPTION SEE 'PROFILE GRADE LINE' ON SHEET 2.

SEE ROADWAY PLANS FOR EXISTING UTILITY LOCATIONS. LOCATIONS OF UTILITIES SHOWN IN THESE STRUCTURE PLANS ARE INTENDED TO SHOW UTILITIES IN THE VICINITY OF STRUCTURES.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.

ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NAVD 88 (2007) DATUM.

DIMENSIONS AND ELEVATIONS SHOWN ARE BASED ON EXISTING ORIGINAL STRUCTURE PLANS, SURVEY AND INSPECTION REPORTS. EXISTING BRIDGE PLANS AVAILABLE AT WISDOT.
VARIATIONS TO THE NEW GRADE LINE OVER 1/4" MUST BE SUBMITTED BY THE FIELD ENGINEER TO STRUCTURES DESIGN SECTION FOR REVIEW.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST DIGIT OF A THREE DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF AASHTO DESIGNATION M153 TYPE 1, 2, OR 3 OR AASHTO DESIGNATION M213.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON THE GENERAL PLAN SHEET AND IN THE ABUTMENTS DETAILS.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

EXCAVATION BELOW THE ABUTMENTS AND ABUTMENTS BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT

AT THE BACKFACE OF ABUTMENTS ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

THE QUANTITY FOR BACKFILL STRUCTURE TYPE A, BID ITEM 210.1500 IS CALCULATED BASED ON THE BACKFILL STRUCTURE LIMITS DETAILS SHOWN ON SHEET 7.

BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO "EXCAVATION FOR STRUCTURES". LIMITS OF EXCAVATION SHALL BE DETERINED BY THE CONTRACTOR.

THE CONTRACTOR SHALL SUPPLY A NEW NAMEPLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR, 1982.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAWCUT UNLESS OTHERWISE NOTED.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

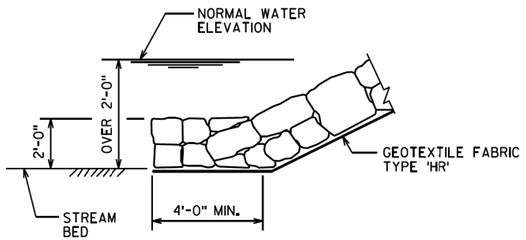
SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF 1/2" FILLER WITH NON-STAINING NON-ASPHALTIC JOINT SEALER (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE).

SEE ROADWAY PLAN FOR LANE STAGING AND TRAFFIC SHIFT. COORDINATE WITH THESE STRUCTURE PLANS THE BRIDGE STAGING.

BRIDGE STAGE 1	=	TRAFFIC STAGE 2A
BRIDGE STAGE 2	=	TRAFFIC STAGE 3A
BRIDGE STAGE 3	=	TRAFFIC STAGE 4A

IT IS RECOMMENDED THAT THE CONTRACTOR REVIEW THE SOILS REPORT FOR ADDITIONAL INFORMATION ON GEOTECHNICAL RELATED CONCERNS AT THIS SITE PERTAINING TO SUBSTRUCTURE SUPPORT AND STRUCTURE EXCAVATION. REPORT IS AVAILABLE AT THE WISDOT SW REGION OFFICE.

ALL FIELD CONNECTIONS SHALL BE MADE WITH 3/4" DIAMETER FRICTION TYPE HIGH-TENSILE STRENGTH BOLTS UNLESS SHOWN OR NOTED OTHERWISE.



TOE DETAIL
NORMAL WATER ELEVATION > 2'-0" ABOVE STREAM BED

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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GENERAL NOTES

SHEET 3 OF 41
495

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PLOT DATE: 1/5/2018 PLOT TIME: 8:08:51 AM

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STATE PROJECT NUMBER
6414-00-81

STAGE 1 (TRAFFIC STAGE 2A)

TOTAL ESTIMATED QUANTITIES - B-49-67

	BID ITEM NUMBER	BID ITEMS	UNIT	SOUTH STRUCTURAL APPROACH SLAB	SOUTH ABUT	NORTH ABUT	NORTH STRUCTURAL APPROACH SLAB	SUPER	TOTALS
(1)	203.0200	REMOVING OLD STRUCTURE STATION 264'NB'+22.08	LS	-	-	-	-	-	0.5
	203.0225.S	DEBRIS CONTAINMENT B-49-67	LS	-	-	-	-	-	0.5
	206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-49-67	LS	-	-	-	-	-	0.5
(3)	210.1500	BACKFILL STRUCTURE TYPE A	TON	-	195	195	-	-	390
(3)	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	155	-	-	155	-	310
(7)(6)	502.0100	CONCRETE MASONRY BRIDGES	CY	54.0	35	35.1	53.9	204.0	382
(4)	502.3200	PROTECTIVE SURFACE TREATMENT	SY	94	-	-	94	517	705
(5)	502.3210	PIGMENTED SURFACE SEALER	SY	10	-	-	10	46	66
	502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	-	16	16	-	-	32
	502.4206	ADHESIVE ANCHORS NO. 6 BAR	EACH	-	12	12	-	-	24
	505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	2,590	4,170	4,190	2,590	1,740	15,280
(8)	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	6,420	-	-	6,420	35,440	48,280
	505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	230	-	-	230	-	460
(18)	506.0105	STRUCTURAL STEEL CARBON	LB	-	-	-	-	5810	5810
(13)	506.0605	STRUCTURAL STEEL HS	LB	-	-	-	-	94,530	94,530
	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EA	-	-	-	-	10	10
(9)	506.3010	WELDED STUD SHEAR CONNECTORS 7/8x5-INCH	EACH	-	-	-	-	1740	1740
	506.7050.S	REMOVING BEARINGS B-49-67	EACH	-	1	1	-	-	2
(10)	506.7060.S	BRIDGE JACKING B-49-67	LS	-	-	-	-	-	0.5
(2)	511.1200	TEMPORARY SHORING B-49-67	SF	-	300	300	-	-	600
(11)	513.8040	RAILING STEEL TYPE 3T B-49-67	LF	-	-	-	-	146	146
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	-	11	11	-	-	22
(12)	517.0600	PAINTING EPOXY SYSTEM B-49-67	LS	-	-	-	-	-	0.5
	517.0900.S	PREPARATION AND COATING OF TOP FLANGES B-49-67	LS	-	-	-	-	-	0.5
	550.1100	PILING STEEL HP 10-INCH x 42 LB	LF	-	245	245	-	-	490
	606.0300	RIPRAP HEAVY	CY	-	84	66	-	-	150
(14)	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	-	76	76	-	-	152
	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EA	1	-	-	1	-	2
(17)	614.0920	SALVAGED RAIL	LF	-	-	-	-	134	134
	645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	-	44	44	-	-	88
	645.0120	GEOTEXTILE TYPE HR	SY	-	158	131	-	-	289
(15)	652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	-	-	-	-	124	124
	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	-	-	-	-	191	191
	653.0222	JUNCTION BOX 18x12x6-INCH	EACH	-	-	-	-	1	1
(16)	690.0250	SAWING CONCRETE	LF	-	18	18	-	-	36
		NON-BID ITEMS							
		FILLER	SIZE	———	———	———	———	———	1/2 & 3/4
		NAMEPLATE	EACH	———	———	———	———	———	1
		BENCHMARK	EACH	———	———	———	———	———	1

QUANTITY NOTES

LS = LUMP SUM ITEMS AND ARE BASED ON 0.5 FOR STAGE 1 AND 0.5 FOR STAGE 2.

CONTACT THE DOT REGARDING SITE STORAGE AND PICK-UP OF SALVAGED MATERIAL.

(1) REMOVAL OF DECK, MEDIAN, WINGWALLS & PORTION OF ABUTMENTS. STEEL BEAMS, STEEL DIAPHRAGMS, AND PARTS OF SUBSTRUCTURES TO REMAIN. PROTECT ITEMS TO REMAIN DURING REMOVALS.

(2) TEMPORARY SHORING IS BASED ON THE SQUARE FOOT OF EXPOSED PILE SURFACE BETWEEN THE UPPER & LOWER GRADES.

(3) A FACTOR OF 2.0 WAS USED TO CONVERT CU YDS TO TONS.

(4) APPLY A PROTECTIVE SURFACE TREATMENT TO TOP OF BRIDGE DECK AND SIDEWALKS, TOP OF APPROACH SLABS AND TOP OF APPROACH SLAB NOTCH. AND TOP OF SLAB UNDER MEDIAN. PER THE STANDARD SPECIFICATIONS AND THE SUPERSTRUCTURE DETAILS SHEET.

(5) APPLY PIGMENTED SURFACE SEALER TO TOP AND INSIDE FACES OF PARAPET INCLUDING PARAPET LOCATED ON THE APPROACH SLAB. PER THE STANDARD SPECIFICATIONS AND THE SUPERSTRUCTURE DETAILS SHEET.

(6) SUPERSTRUCTURE CONCRETE QUANTITY INCLUDES BRIDGE DECK AND ALL SIDEWALKS & PARAPETS ON BRIDGE AND APPROACH SLABS.

(7) FOR CONCRETE QUANTITY PURPOSES, AN AVERAGE HT OF 3" WAS USED TO CALCULATE THE BEAM HAUNCHES.

(8) SUPERSTRUCTURE REINFORCEMENT QUANTITY INCLUDES BRIDGE DECK AND SIDEWALK & PARAPET ON BRIDGE DECK.

(9) INCLUDES 1392 STUDS FOR NEW BEAMS AND 3132 FOR EXISTING BEAMS.

(10) ITEM: "BRIDGE JACKING B-49-67" INCLUDES THE FOLLOWING TASKS. BID PRICES SHALL INCLUDED THE COST FOR THE FOLLOWING: RAISING AND RESETTING THE EXISTING STEEL FRAME (BEAMS AND THE EXISTING STEEL DIAPHRAGMS.) THE FRAME SHALL BE SHORED OR DISASSEMBLED WHILE THE NEW BEARING LOCATIONS AND ELEVATIONS ARE BEING CONSTRUCTED. THE EXISTING STEEL DIAPHRAGMS BETWEEN BEAM 1 AND BEAM 2 SHALL BE REMOVED AND SALVAGED. ALL OTHER EXISTING STEEL DIAPHRAGMS SHALL REQUIRE DISASSEMBLY AND REASSEMBLY TO FIT THE NEW CROWN OF THE BRIDGE. THE EXISTING STEEL DIAPHRAGMS HAVE WELDED CONNECTIONS TO THE BEAMS. BOLTS SHALL BE USED TO REASSEMBLY THE EXISTING STEEL DIAPHRAGMS. DRILL HOLES FOR THE BOLTS IN THE EXISTING STEEL DIAPHRAGMS AND THE STIFFENER PLATE. FOR REASSEMBLY, REUSING EXISTING BOLTS WILL NOT BE ALLOWED. RESETTING OF THE FRAME ONTO THE BEARING SEATS SHALL TAKE PLACE AFTER THE APPROVAL OF THE ENGINEER.

(11) ITEM: "RAILING STEEL TYPE 3T B-49-67" INCLUDES ALL RAILING STEEL ITEMS AND PAINTING. SEE RAILING NOTES FOR PAINTING.

(12) SEE SPECS:
ITEM: "PAINTING EPOXY SYSTEM B-49-67" SHALL BE USED TO PAINT THE FOLLOWING SURFACES:
FOR THE EXISTING BEAMS REMOVE ALL EXISTING PAINT AT THE BEAM ENDS AND REPAINT THE BEAM ENDS PER A DISTANCE OF 6 FEET FROM EACH END. FOR THE NEW BEAMS SHOP PAINT THE BEAM ENDS FOR A DISTANCE OF 6 FEET FROM EACH END.
THE COLOR SHALL BE FEDREAL STANDARD 595B COLOR 20122 (BROWN).

(13) ITEM : "STRUCTURAL STEEL HS" INCLUDES THE STEEL COMPONENTS THAT MAKE UP THE NEW AND EXISTING FRAME INCLUDING BUT NOT LIMITED TOO: BEAM WEB & FLANGES, SPLICE PLATES, STIFFENER PLATES, CONNECTOR PLATES, BOLTS, NUTS, WASHERS AND HARDWARE.

(14) INCLUDES RODENT SHIELD FOR PIPE UNDERDRAIN PER SDD 8F6-4.

(15) EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCEDENTAL TO "CONDUIT RIGID METALLIC 2-INCH". GROUNDING SYSTEM IS INCLUDED IN THIS ITEM.

(16) SAWING OF CONCRETE FOR REMOVAL AREAS.

(17) ITEM: "SALVAGED RAIL" INCLUDES SALVAGING THE FOLLOWING ITEMS:
DOUBLE ALUMINUM RAILING, RAILING POST AND HARDWARE. SALVAGE THE EXISTING NAMEPLATE.

(18) ITEM: "STRUCTURAL STEEL CARBON" INCLUDES THE FOLLOWING ITEMS; STEEL DIAPHRAGMS MC18X42.7.

SEE ROADWAY PLAN FOR LANE STAGING AND TRAFFIC SHIFT.
COORDINATE WITH THESE STRUCTURE PLANS THE BRIDGE STAGING.

BRIDGE STAGE 1	=	TRAFFIC STAGE 2A
BRIDGE STAGE 2	=	TRAFFIC STAGE 3A
BRIDGE STAGE 3	=	TRAFFIC STAGE 4A

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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QUANTITIES
STAGE 1

SHEET 4 OF 41
496

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STATE PROJECT NUMBER
6414-00-81

STAGE 2 (TRAFFIC STAGE 3A)

TOTAL ESTIMATED QUANTITIES - B-49-67

	BID ITEM NUMBER	BID ITEMS	UNIT	SOUTH STRUCTURAL APPROACH SLAB	SOUTH ABUT	NORTH ABUT	NORTH STRUCTURAL APPROACH SLAB	SUPER	TOTALS
(1)	203.0200	REMOVING OLD STRUCTURE STATION 264'NB'+22.08	LS	-	-	-	-	-	0.5
	203.0225.S	DEBRIS CONTAINMENT B-49-67	LS	-	-	-	-	-	0.5
	206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-49-67	LS	-	-	-	-	-	0.5
(3)	210.1500	BACKFILL STRUCTURE TYPE A	TON	-	36	36	-	-	72
(3)	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	230	-	-	227	-	457
(7)(6)	502.0100	CONCRETE MASONRY BRIDGES	CY	80.5	19.8	19.7	79.7	272.3	472
	502.1100	CONCRETE MASONRY SEAL	CY	-	2	-	-	-	2
(4)	502.3200	PROTECTIVE SURFACE TREATMENT	SY	139	-	-	139	740	1018
(5)	502.3210	PIGMENTED SURFACE SEALER	SY	10	-	-	10	46	66
	502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	-	122	120	-	-	242
	502.4208	ADHESIVE ANCHORS NO. 8 BAR	EACH	-	12	12	-	-	24
	505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	3,250	2,690	2,680	3,250	2,460	14,330
(8)	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	9,030	-	-	9,030	46,710	64,770
	505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	340	-	-	340	-	680
(18)	506.0105	STRUCTURAL STEEL CARBON	LB	-	-	-	-	2050	2050
(13)	506.0605	STRUCTURAL STEEL HS	LB	-	-	-	-	210	210
	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EA	-	-	-	-	16	16
(9)	506.3010	WELDED STUD SHEAR CONNECTORS 7/8x5-INCH	EACH	-	-	-	-	2784	2784
	506.7050.S	REMOVING BEARINGS B-49-67	EACH	-	8	8	-	-	16
(10)	506.7060.S	BRIDGE JACKING B-49-67	LS	-	-	-	-	-	0.5
(11)	513.8040	RAILING STEEL TYPE 3T B-49-67	LF	-	-	-	-	146	146
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	-	15	15	-	-	30
(12)	517.0600	PAINTING EPOXY SYSTEM B-49-67	LS	-	-	-	-	-	0.5
	517.0900.S	PREPARATION AND COATING OF TOP FLANGES B-49-67	LS	-	-	-	-	-	0.5
	550.1100	PILING STEEL HP 10-INCH x 42 LB	LF	-	70	70	-	-	140
	606.0300	RIPRAP HEAVY	CY	-	114	88	-	-	202
(14)	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	-	96	96	-	-	192
	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EA	1	-	-	1	-	2
(17)	614.0920	SALVAGED RAIL	LF	-	-	-	-	134	134
	645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	-	9	9	-	-	18
	645.0120	GEOTEXTILE TYPE HR	SY	-	214	173	-	-	387
(15)	652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	-	-	-	-	155	155
	652.0210	CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH	LF	-	-	-	-	137	137
	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	-	-	-	-	255	255
	653.0222	JUNCTION BOX 18x12x6-INCH	EACH	-	-	-	-	1	1
(16)	690.0250	SAWING CONCRETE	LF	-	132	132	-	-	264
		NON-BID ITEMS							
		FILLER	SIZE	———	———	———	———	———	1/2 & 3/4

QUANTITY NOTES

SEE SHEET 4 FOR QUANTITY NOTES.

STAGE 3 (TRAFFIC STAGE 4A)

TOTAL ESTIMATED QUANTITIES - B-49-67

BID ITEM NUMBER	BID ITEMS	UNIT					SUPER	TOTALS
502.0100	CONCRETE MASONRY BRIDGES	CY	-	-	-	-	19	19
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	-	-	-	133	133
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	-	-	-	-	1,060	1060

SEE ROADWAY PLAN FOR LANE STAGING AND TRAFFIC SHIFT.
COORDINATE WITH THESE STRUCTURE PLANS THE BRIDGE STAGING.

BRIDGE STAGE 1	=	TRAFFIC STAGE 2A
BRIDGE STAGE 2	=	TRAFFIC STAGE 3A
BRIDGE STAGE 3	=	TRAFFIC STAGE 4A

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

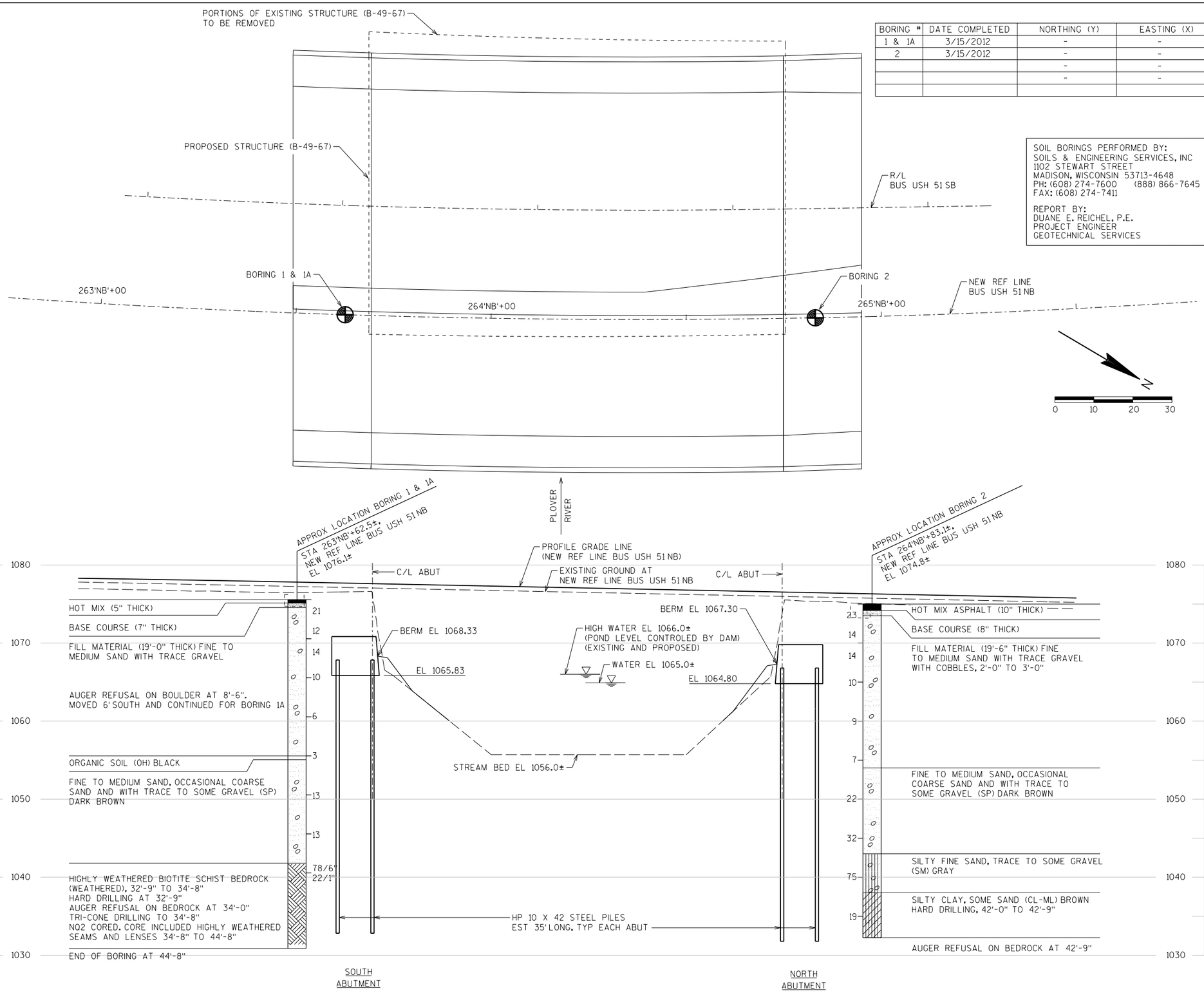
QUANTITIES
STAGE 2 AND 3

SHEET 5 OF 41
497

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BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1 & 1A	3/15/2012	-	-
2	3/15/2012	-	-
		-	-
		-	-

SOIL BORINGS PERFORMED BY:
SOILS & ENGINEERING SERVICES, INC
1102 STEWART STREET
MADISON, WISCONSIN 53713-4648
PH: (608) 274-7600 (888) 866-7645
FAX: (608) 274-7411

REPORT BY:
DUANE E. REICHEL, P.E.
PROJECT ENGINEER
GEOTECHNICAL SERVICES

STATE PROJECT NUMBER

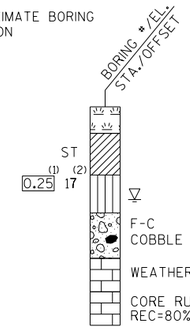
6414-00-81

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING

APPROXIMATE BORING LOCATION



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

SUBSURFACE EXPLORATION

SHEET 6 OF 41

498

8

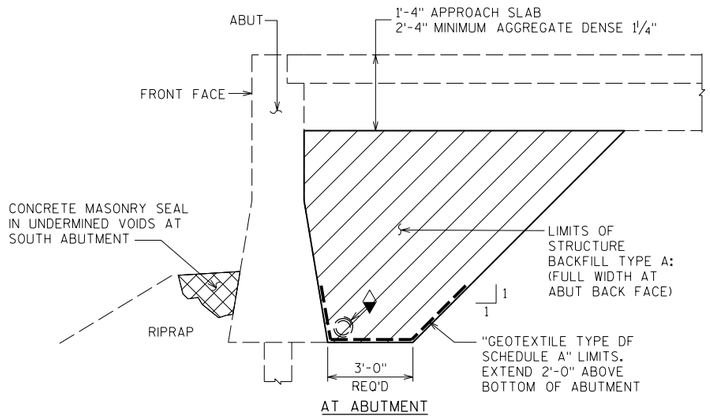
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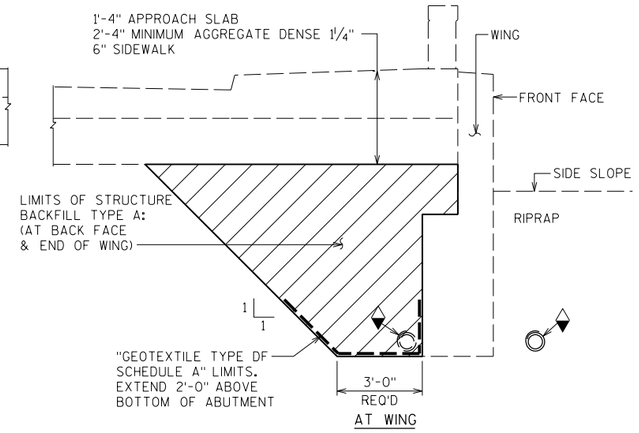
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STATE PROJECT NUMBER

6414-00-81



AT ABUTMENT



AT WING

BACKFILL STRUCTURE LIMITS

A FACTOR OF 2.0 WAS USED TO
CONVERT CU YDS TO TONS

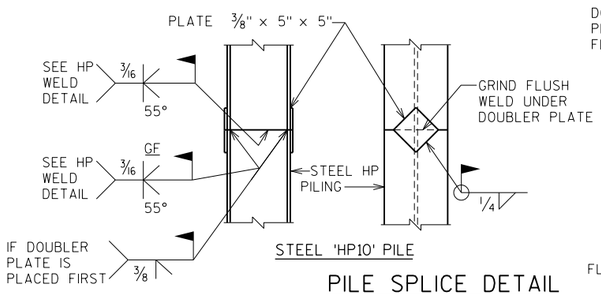


RODENT SHEILD

**NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.

RODENT SHIELD, PIPE COUPLING, AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMLAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



STEEL 'HP10' PILE

'HP10' WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE SPLICE DETAIL

BRIDGE STAGE 1 = TRAFFIC STAGE 2A
BRIDGE STAGE 2 = TRAFFIC STAGE 3A
BRIDGE STAGE 3 = TRAFFIC STAGE 4A

NOTES / LEGEND

✳ DIMENSIONS & ELEVATIONS ARE TAKEN AT C/L ABUTMENT & PILING.

⊕ ELEVATION SHOWN IS BASED ON EXISTING DIMENSIONS AND ELEVATONS FROM THE ORIGINAL STRUCTURE PLANS DATED 11-16-1981. VARIATIONS TO THE NEW ELEVATIONS OF (¼") PLUS/MINUS MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW. COORDINATE WITH THE SURVEY AND INSPECTION REPORTS, AND ROADWAY DRAWINGS.

① 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ & VERT JOINTS ON BACKFACE. VERTICAL RUBBERIZED MEMBRANE WATERPROOFING (RMW) TO EXTEND FROM BOT OF FOOTING TO TOP OF FOOTING AND FROM TOP FOOTING TO TOP OF WING. SEAL ALL HORIZ AND VERT JOINTS.

② FILLER INCULDED IN WING LENGTH. SEAL ALL EXPOSED HORIZ AND VERT SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-ASPHALTIC JOINT SEALER, (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONC).

◐ CONST JOINT FORMED BY BEVELED 2"X 6" KEYWAY. (NO V-GROOVE ON FRONT FACE.

▽ ½" V-GROOVE FULL HEIGHT ON FACE OF ABUT AND ABUT DIAPHRAGM TO A STRAIGHT AND VERICAL LINE.

▬ PLACE BOTTOM HALF OF RUBBERIZED MEMBRANE WATERPROOFING (RMW) HORIZ IN THIS AREA ON LEVEL PORTION.

⊗ STEEL TROWEL TOP SURFACE OF ABUTMENT, PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03"

◆ PIPE UNDERDRAIN WRAPPED (6-INCH) BEHIND ABUTMENT BODY AND WINGS. SLOPE 0.5% MIN TO SUITABLE DRAINAGE. PIPE UNDERDRAIN UNPERFORATED TO BE PLACED OUTSIDE WINGS. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

◍ ATTACH RODENT SHIELD PER SDD 8F6-4.

◪ REMOVE TO EXIST CJ OR REMOVAL LINE. ROUGHEN SURFACE OF CONCRETE ¼" DEEP MIN ALL AREAS OF NEW TO EXISTING CONCRETE CONTACT. PLACE NEW CONC AND REPAIR AREAS. DEFINE REMOVAL AREAS WITH 1" DEEP SAWCUT WHEN CJ NOT PRESENT. IF THE DIMENSIONS VARY BY MORE THAN 6", VERIFY WITH ENGINEER

◑ PRESERVE EXISTING HORIZ REINFORCEMENT AND EXTEND FULL LENGTH INTO NEW WORK.

▨ HATCHED AREA INDICATES REMOVAL AS SHOWN OR NOTED OTHERWISE ON REMOVAL SHEET.

▨ HATCHED AREA INDICATES REMOVAL BELOW NEW GRADE AS SHOWN OR NOTED OTHERWISE ON REMOVAL SHEET.

▨ HATCHED AREA INDICATES STURCTURE BACKFILL LIMITS.

▨ HATCHED AREA INDICATES CONCRETE MASONRY SEAL IN UNDERMINED VOIDS AT SOUTH ABUTMENT.

▲ THESE BARS ARE LISTED IN THE "BILL OF BARS" AND WEIGHT INCLUDED IN THE QUANTITIES. DRILLING AND GROUTING OF THESE BARS INTO EXISTING CONCRETE TO BE PAID FOR AS "ADHESIVE ANCHORS NO. 5 BAR" & "ADHESIVE ANCHORS NO. 6 BAR".

ADHESIVE ANCHORS:
NO. 5 BARS MAXIMUM EMBED = 12½" (20 TIMES DOWEL BAR DIAMETER)
MINIMUM EDGE DISTANCE = 3¾" (6 TIMES DOWEL BAR DIAMETER)

ADHESIVE ANCHORS:
NO. 6 BARS MAXIMUM EMBED = 1'-3" (20 TIMES DOWEL BAR DIAMETER)
MINIMUM EDGE DISTANCE = 4½" (6 TIMES DOWEL BAR DIAMETER)

▲ B813, A813 BARS USE IN STAGE 2 CONSTRUCTION
THESE BARS ARE LISTED IN THE "BILL OF BARS" AND WEIGHT INCLUDED IN THE QUANTITIES. DRILLING AND GROUTING OF THESE BARS INTO EXISTING CONCRETE TO BE PAID FOR AS "ADHESIVE ANCHORS NO. 8 BAR"

ADHESIVE ANCHORS:
NO. 8 BARS MAXIMUM EMBED = 1'-8" (20 TIMES DOWEL BAR DIAMETER)
MINIMUM EDGE DISTANCE = 6" (6 TIMES DOWEL BAR DIAMETER)

◯ INDICATES EXISTING BEAM LINE

◎ INDICATES NEW BEAM LINE

◎ INDICATES WING

W1 = WING 1
W2 = WING 2
W3 = WING 3
W4 = WING 4
} ALTERNATE WING LABELS

T = TOP
B = BOTTOM
UN = UNLESS NOTED
FF = FRONT FACE
BF = BACK FACE
EF = EACH FACE
EXIST = EXISTING
DBL = DOUBLE
BAR MARK "A" = SOUTH ABUT BARS
BAR MARK "B" = NORTH ABUT BARS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

SOUTH & NORTH ABUTMENT NOTES

SHEET 7 OF 41

499

8

8

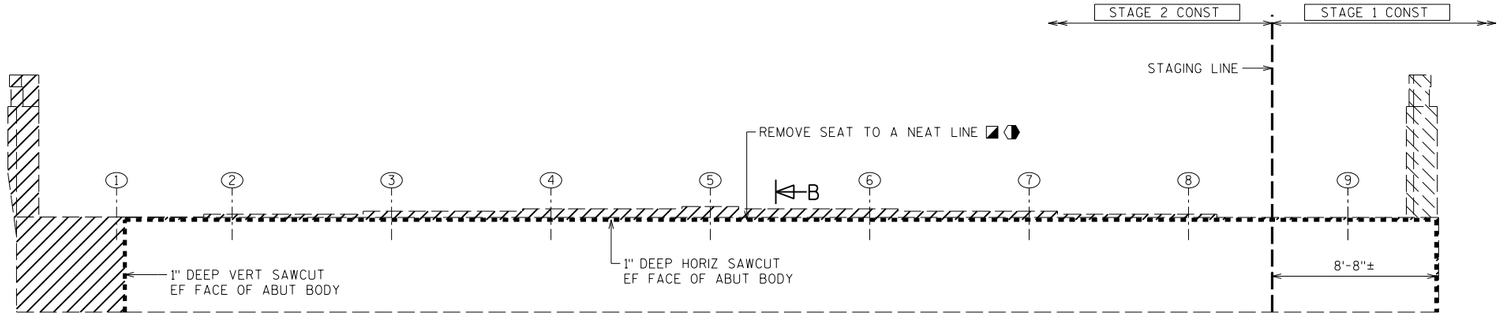
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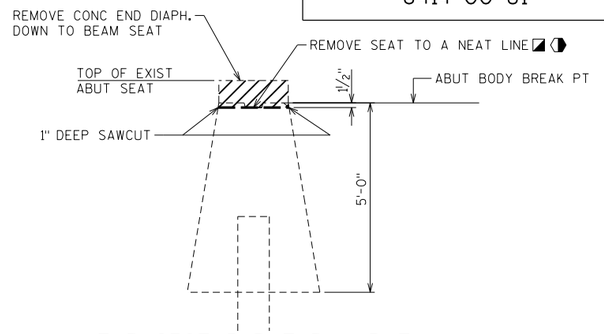
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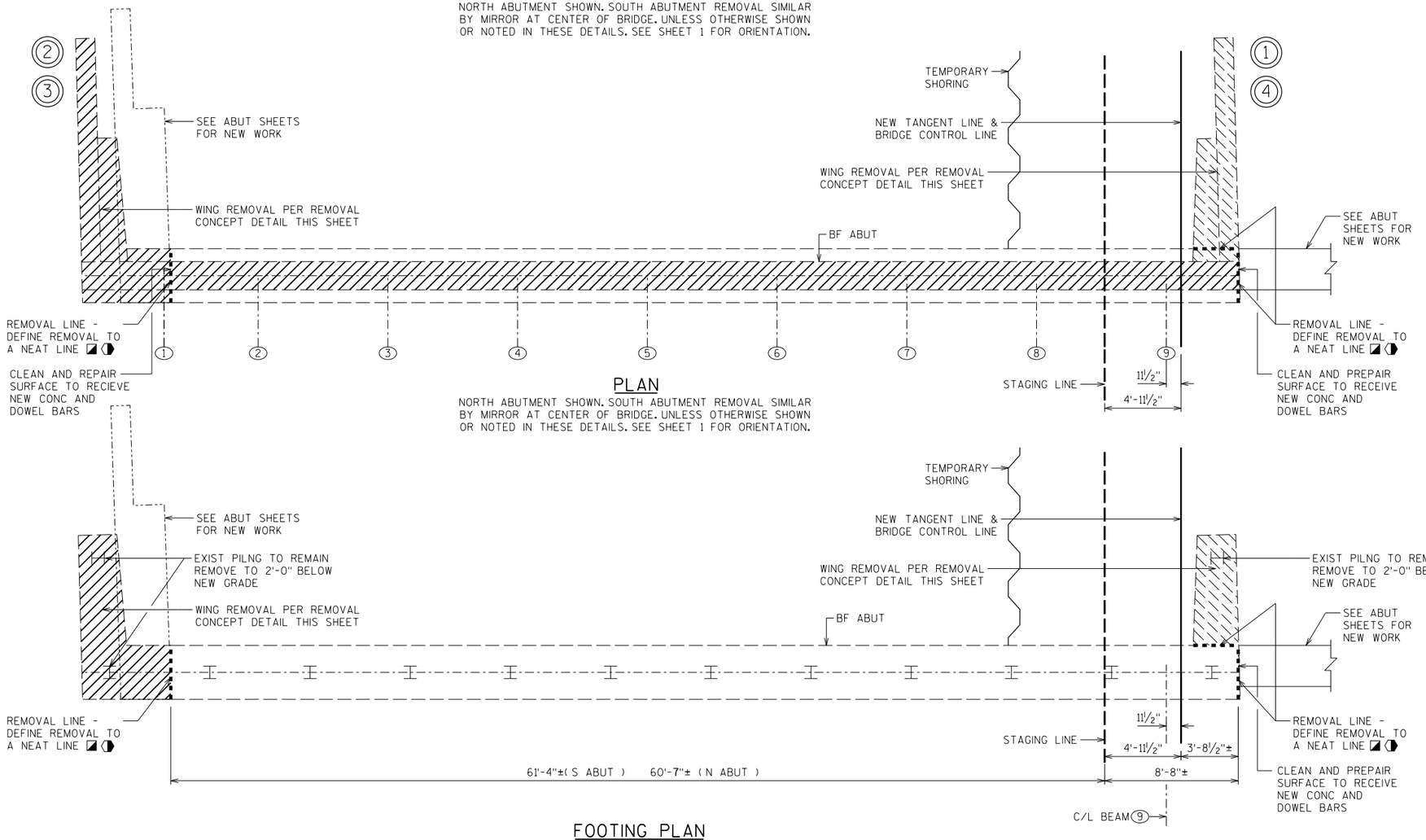


ELEVATION

NORTH ABUTMENT SHOWN. SOUTH ABUTMENT REMOVAL SIMILAR BY MIRROR AT CENTER OF BRIDGE. UNLESS OTHERWISE SHOWN OR NOTED IN THESE DETAILS. SEE SHEET 1 FOR ORIENTATION.

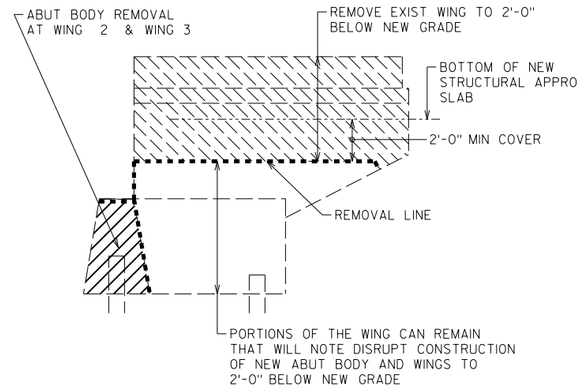


TYP SECT B-B THRU ABUT



PLAN

NORTH ABUTMENT SHOWN. SOUTH ABUTMENT REMOVAL SIMILAR BY MIRROR AT CENTER OF BRIDGE. UNLESS OTHERWISE SHOWN OR NOTED IN THESE DETAILS. SEE SHEET 1 FOR ORIENTATION.



TYPICAL WINGWALLS REMOVAL CONCEPT

FOOTING PLAN

NORTH ABUTMENT SHOWN. SOUTH ABUTMENT REMOVAL SIMILAR BY MIRROR AT C/L C/L BRIDGE UNLESS OTHERWISE SHOWN OR NOTED IN THESE DETAILS. SEE SHEET 1 FOR ORIENTATION.

REMOVAL NOTES

SEE SHEET 7 FOR NOTES AND LEGEND.

SEE ABUTMENT SHEETS FOR NEW WORK AND ADDITIONAL NOTES.

ENTIRE DECK, SIDEWALK, PARAPETS AND CONCRETE END DIAPHRAMS REMOVED DOWN TO THE ABUTMENT SEATS. (NOT SHOWN IN THESE DETAILS FOR CLARITY)

NORTH ABUTMENT SHOWN. SOUTH ABUTMENT REMOVAL SIMILAR BY MIRROR AT CENTER OF BRIDGE. UNLESS OTHERWISE SHOWN OR NOTED IN THESE DETAILS. SEE SHEET 1 FOR ORIENTATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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SOUTH & NORTH ABUTMENT REMOVALS

SHEET 8 OF 41

500

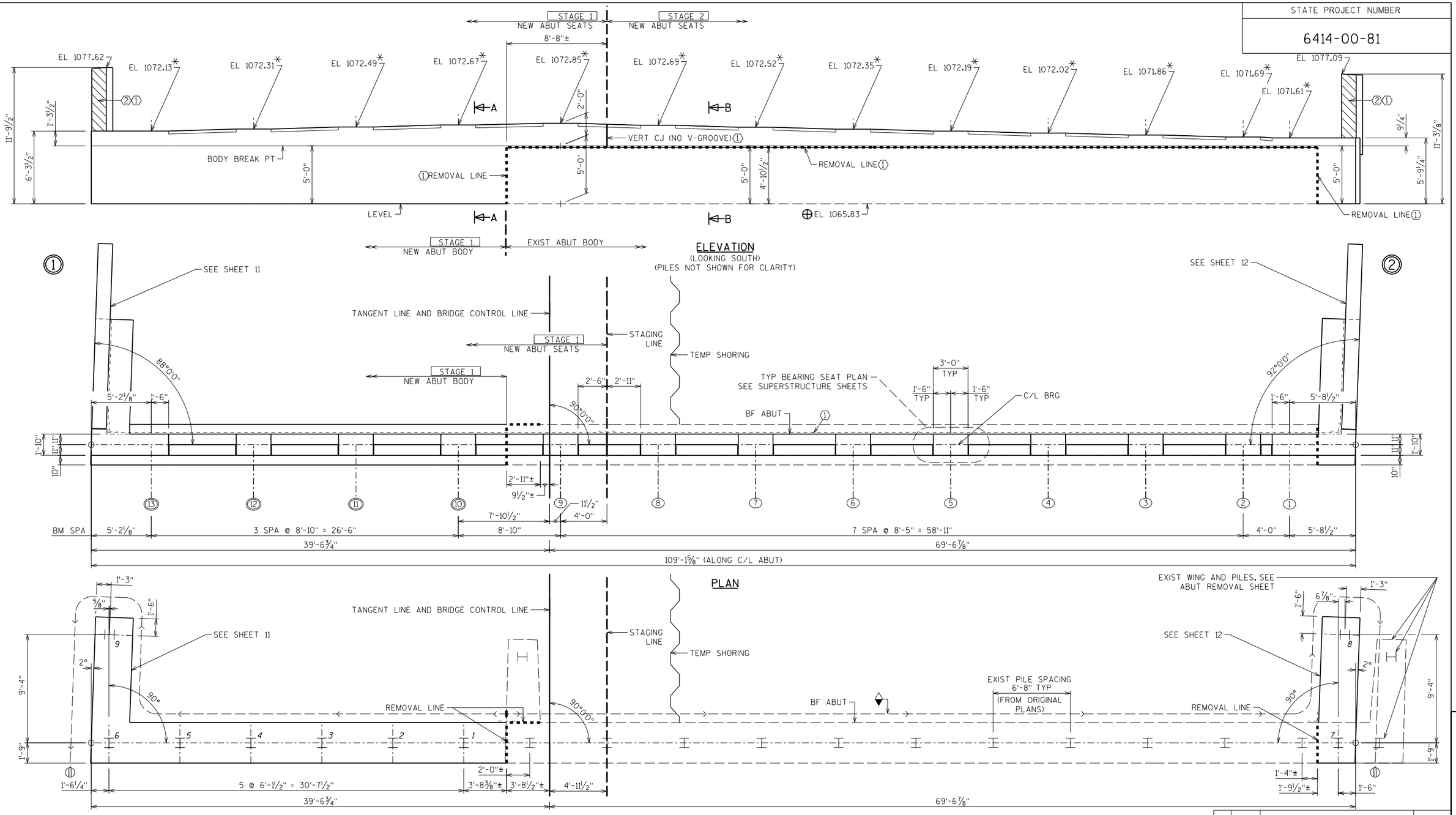
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STATE PROJECT NUMBER
6414-00-81



NOTES

SEE SHEET 7 FOR LEGEND AND ABUTMENT NOTES / LEGEND.

REFER TO SHEET 13 FOR SECTION A-A, SECTION B-B AND BILL OF BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

SOUTH ABUTMENT

SHEET 9 OF 41

501

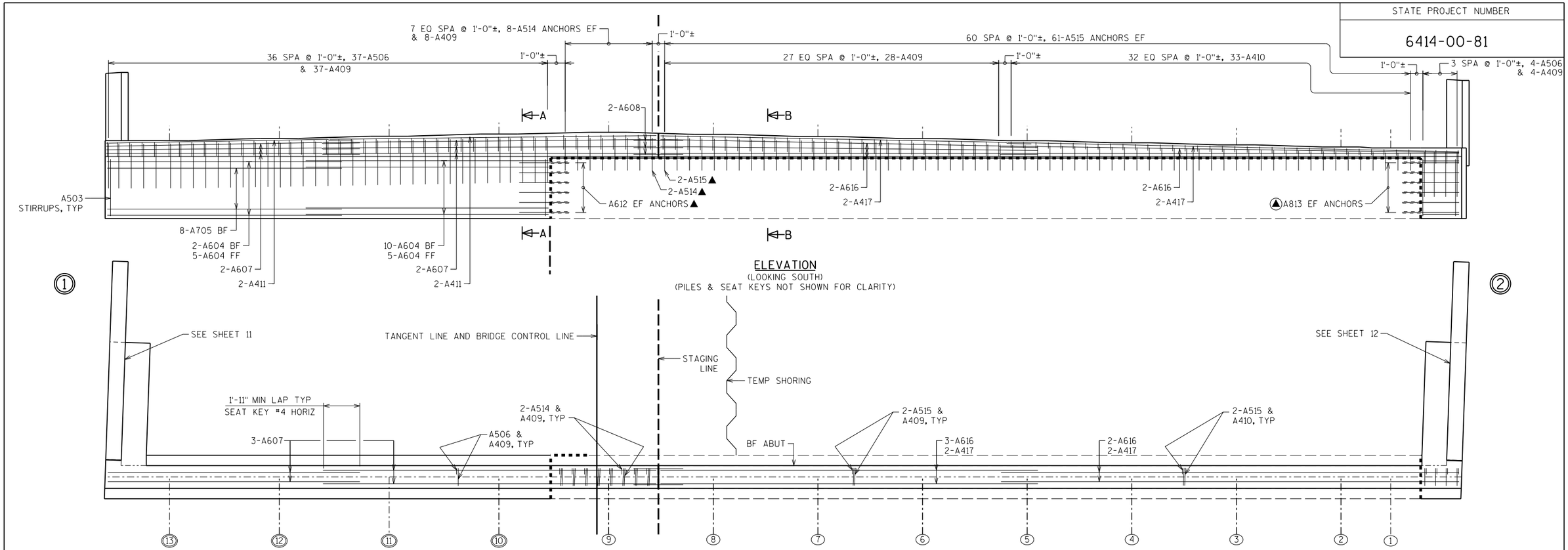
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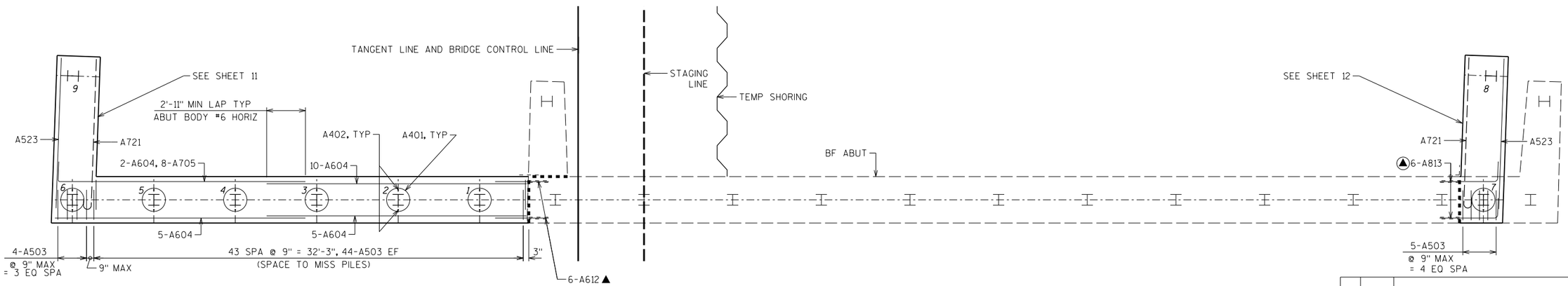
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STATE PROJECT NUMBER
6414-00-81



PLAN



FOOTING & PILE PLAN

N

NOTES

SEE SHEET 7 FOR LEGEND AND ABUTMENT NOTES / LEGEND.

REFER TO SHEET 13 FOR SECTION A-A, SECTION B-B AND BILL OF BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

SOUTH ABUTMENT

SHEET 10 OF 41

502

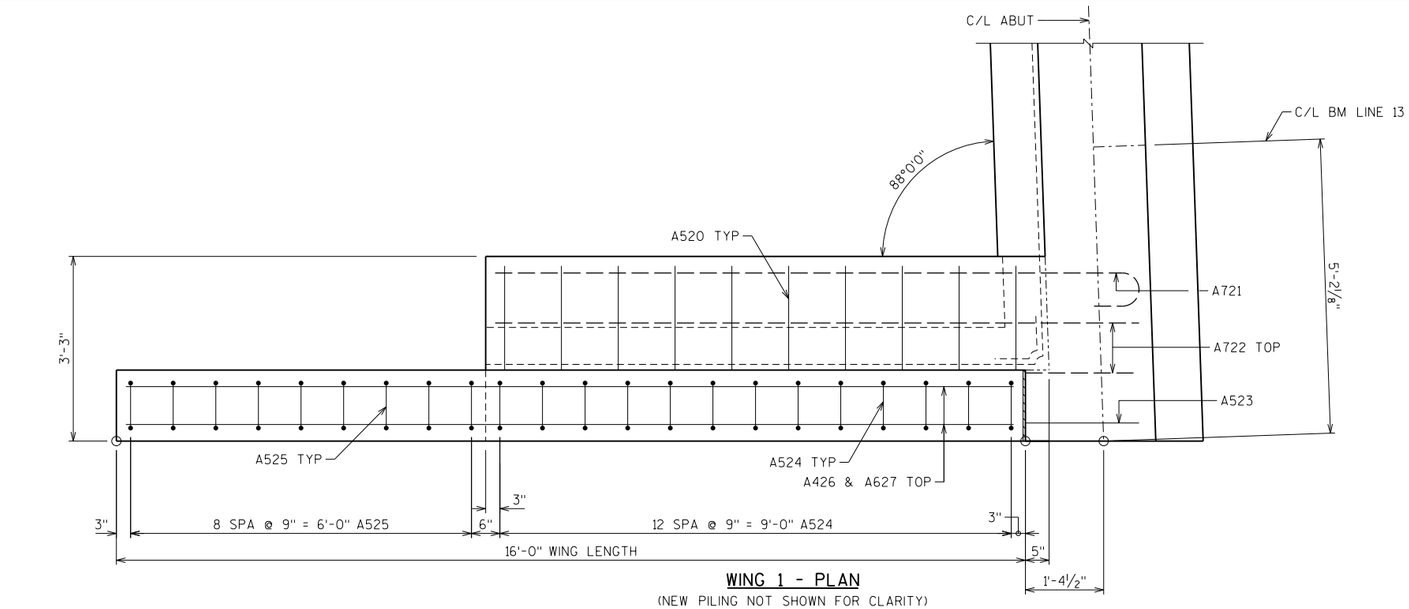
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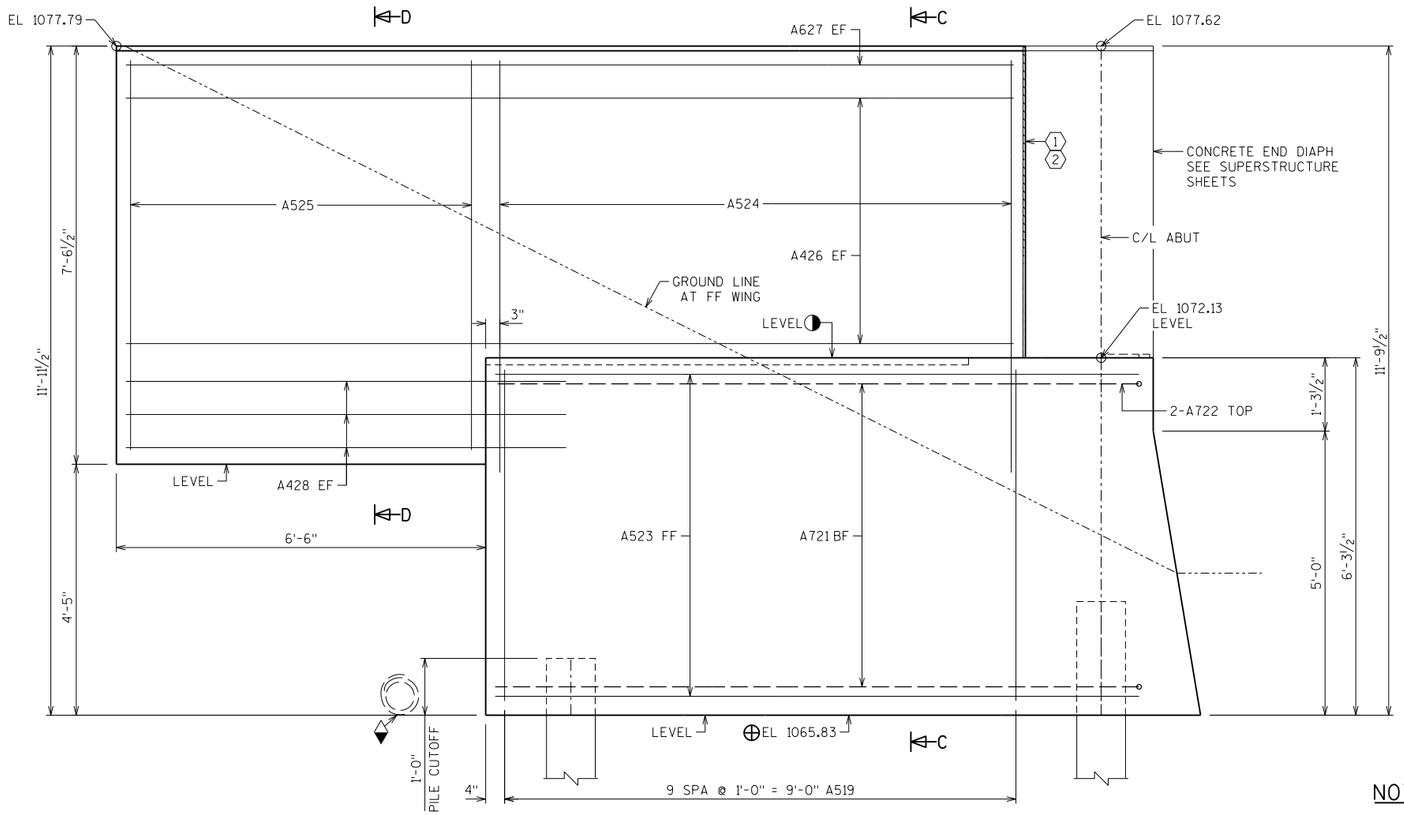
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STATE PROJECT NUMBER
6414-00-81

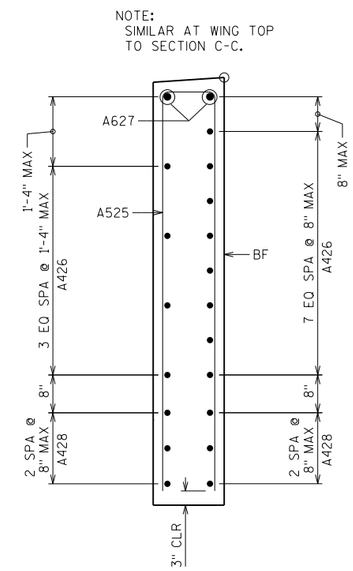


WING 1 - PLAN

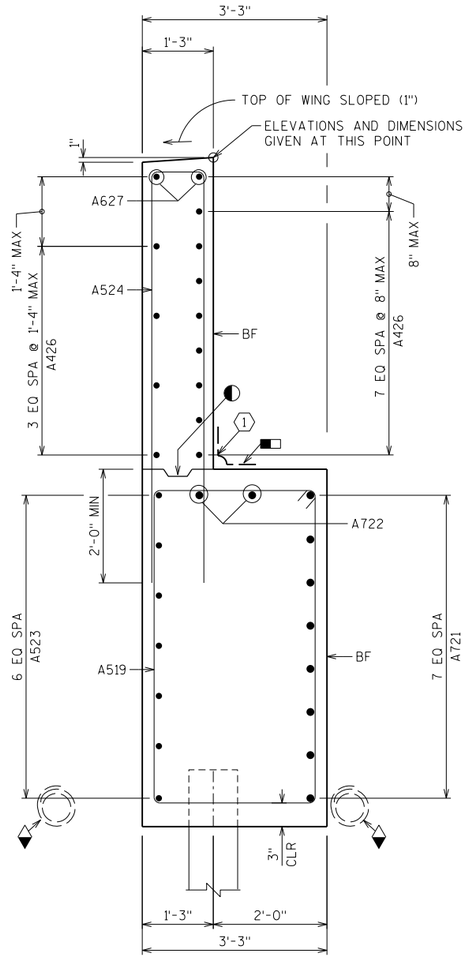
(NEW PILING NOT SHOWN FOR CLARITY)



WING 1 - ELEVATION



SECTION D-D



SECTION C-C

NOTES

SEE SHEET 7 FOR LEGEND AND ABUTMENT NOTES / LEGEND.

REFER TO SHEET 13 FOR SECTION A-A, SECTION B-B AND BILL OF BARS.

STAGE 1

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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SOUTH ABUTMENT
WING 1

SHEET 11 OF 41
503

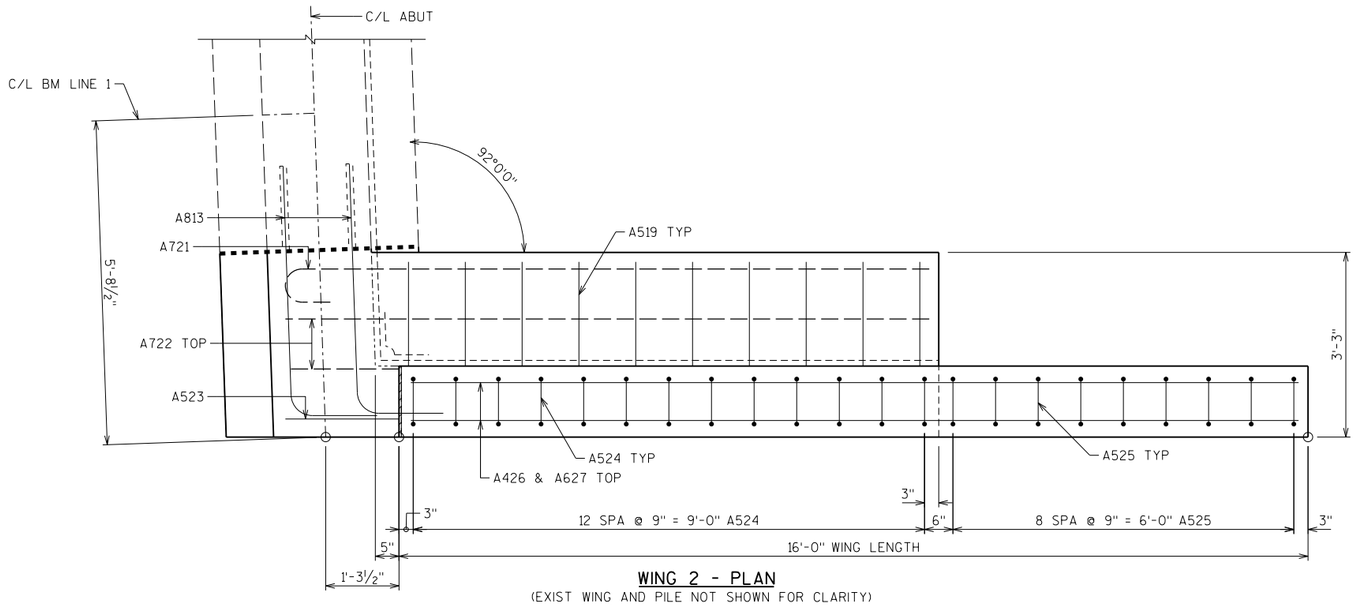
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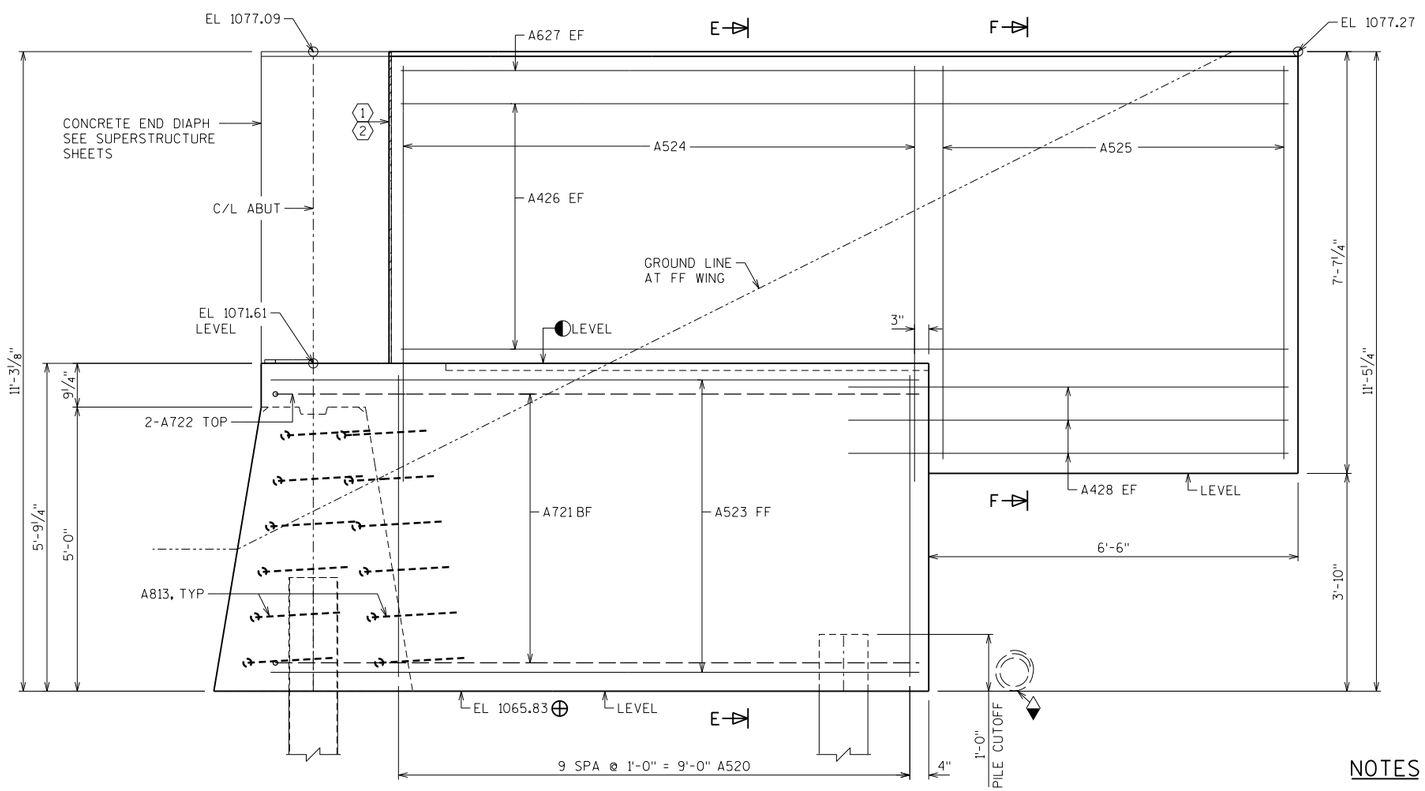
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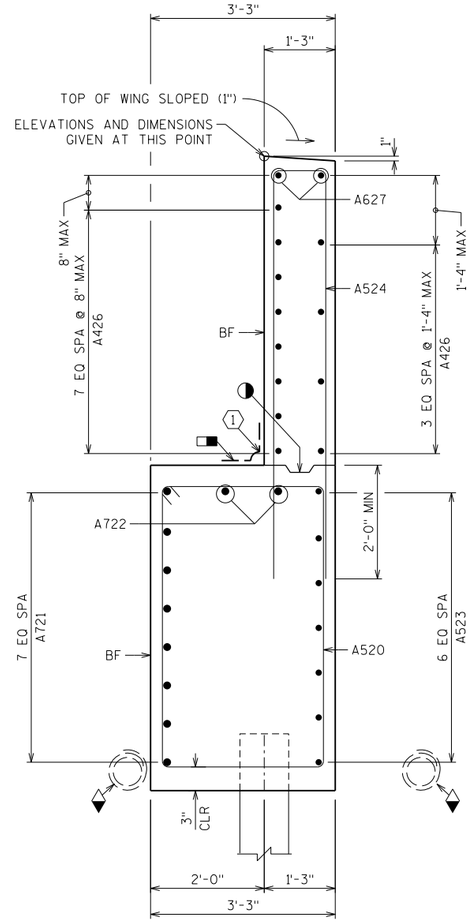


WING 2 - PLAN

(EXIST WING AND PILE NOT SHOWN FOR CLARITY)
(NEW PILING NOT SHOWN FOR CLARITY)

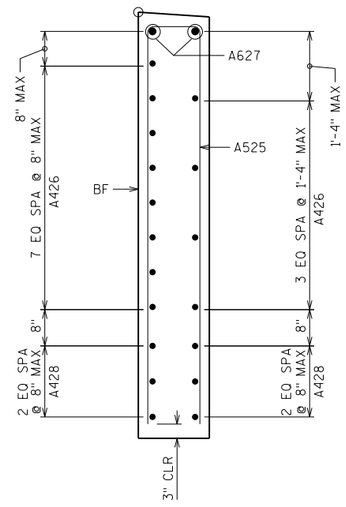


WING 2 - ELEVATION



SECTION E-E

NOTE:
SIMILAR AT WING TOP
TO SECTION E-E.



SECTION F-F

NOTES

SEE SHEET 7 FOR LEGEND AND ABUTMENT NOTES / LEGEND.

REFER TO SHEET 13 FOR SECTION A-A, SECTION B-B AND BILL OF BARS.

STAGE 2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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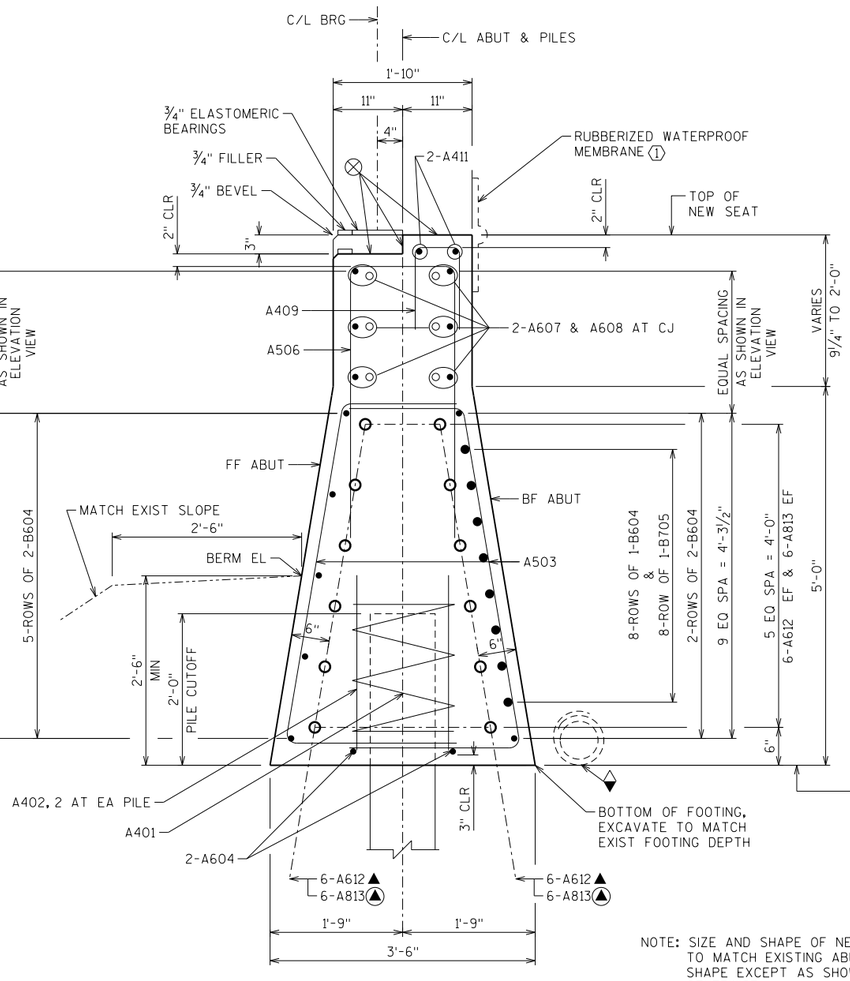
SOUTH ABUTMENT
WING 2

SHEET 12 OF 41
504

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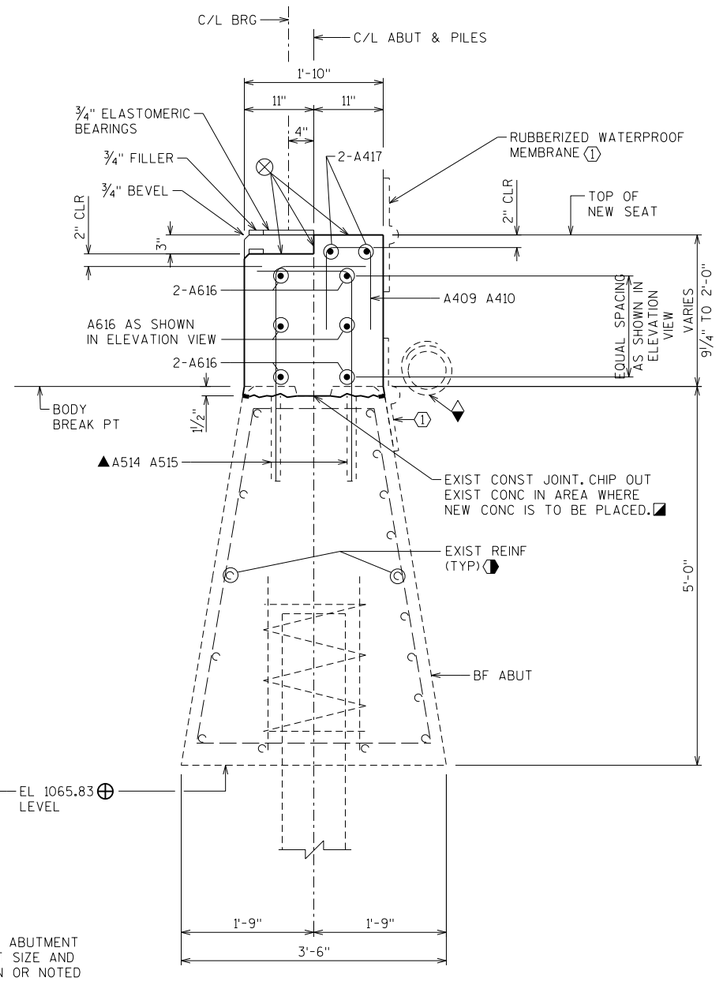
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NOTE: SIZE AND SHAPE OF NEW ABUTMENT TO MATCH EXISTING ABUT SIZE AND SHAPE EXCEPT AS SHOWN OR NOTED OTHERWISE.

SECTION A-A
(FROM SHEET 9 & 10)



SECTION B-B
(FROM SHEET 9 & 10)

STATE PROJECT NUMBER

6414-00-81

NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE ENGLISH BAR DIAMETER SIZE.

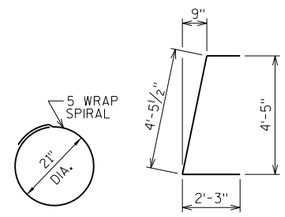
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

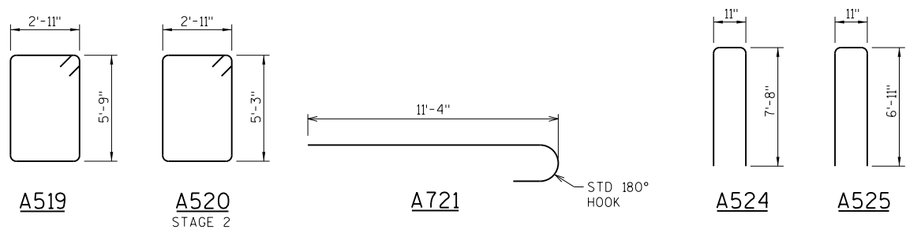
NU = BAR MARK NOT USED

LENGTH SHOWN FOR BAR SERIES BARS IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE AND BENDING DETAILS FOR ACTUAL LENGTHS.

BILL OF BARS — SOUTH ABUTMENT

BAR MARK	COAT	NO. REQ'D.	LENGTH (FT-IN)	BAR SERIES	BENT	LOCATION	STG 1	STG 2
A401		6	28 - 0		X	BODY AT PILES	X	
"		1	28 - 0		X	BODY AT PILES		X
A402		12	2 - 3			BODY AT PILES	X	
"		2	2 - 3			BODY AT PILES		X
A503		92	8 - 0		X	BODY STIRRUP	X	
"		5	8 - 0		X	BODY STIRRUP		X
A604		26	19 - 7			BODY HORIZ	X	
A705		8	22 - 0		X	BODY HORIZ BF	X	
A506		37	8 - 5		X	SEAT TIE	X	
"		4	8 - 5		X	SEAT TIE		X
A607		12	21 - 3			SEAT HORIZ	X	
A608		6	6 - 0			SEAT HORIZ LAP	X	
A409		45	2 - 9		X	KEY TIE	X	
"		32	2 - 9		X	KEY TIE		X
A410		33	1 - 5		X	KEY TIE		X
A411		4	20 - 7			KEY HORIZ	X	
▲ A612		12	4 - 6			ANCHOR BODY HORIZ EF	X	
ⓐ A813		12	6 - 0		X	ANCHOR BODY HORIZ EF		X
▲ A514		16	3 - 10		X	ANCHOR SEAT TIE	X	
▲ A515		122	3 - 3	X	X	ANCHOR SEAT TIE		X
A616		10	36 - 6			SEAT HORIZ		X
A417		4	36 - 0			KEY HORIZ		X
NU								
A519		10	18 - 0		X	WING 1 STIRRUP	X	
A520		10	17 - 0		X	WING 2 STIRRUP		X
A721		8	12 - 5		X	WING 1 BF	X	
"		8	12 - 5		X	WING 2 BF		X
A722		2	11 - 4			WING 1 TOP	X	
"		2	11 - 4			WING 2 TOP		X
A523		7	11 - 4			WING 1 FF	X	
"		7	11 - 4			WING 2 FF		X
A524		13	16 - 0		X	WING 1 VERT	X	
"		13	16 - 0		X	WING 2 VERT		X
A525		9	14 - 6		X	WING 1 VERT	X	
"		9	14 - 6		X	WING 2 VERT		X
A426		12	15 - 7			WING 1 HORIZ	X	
"		12	15 - 7			WING 2 HORIZ		X
A627		2	15 - 7			WING 1 HORIZ TOP	X	
"		2	15 - 7			WING 2 HORIZ TOP		X
A428		6	7 - 9			WING 1 HORIZ BOTTOM	X	
"		6	7 - 9			WING 2 HORIZ BOTTOM		X





NOTES

SEE SHEET 7 FOR LEGEND AND ABUTMENT NOTES / LEGEND.

BAR SERIES TABLE — SOUTH ABUTMENT

BAR MARK	NO. REQ'D.	LENGTH	BENT	LOCATION	STG 1	STG 2
B515	2 SETS OF 61	2'-7" TO 3'-10"	X	ANCHOR SEAT TIE		X

BUNDLE AND TAG EACH SERIES SEPARATELY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

SOUTH ABUTMENT

SHEET 13 OF 41

505

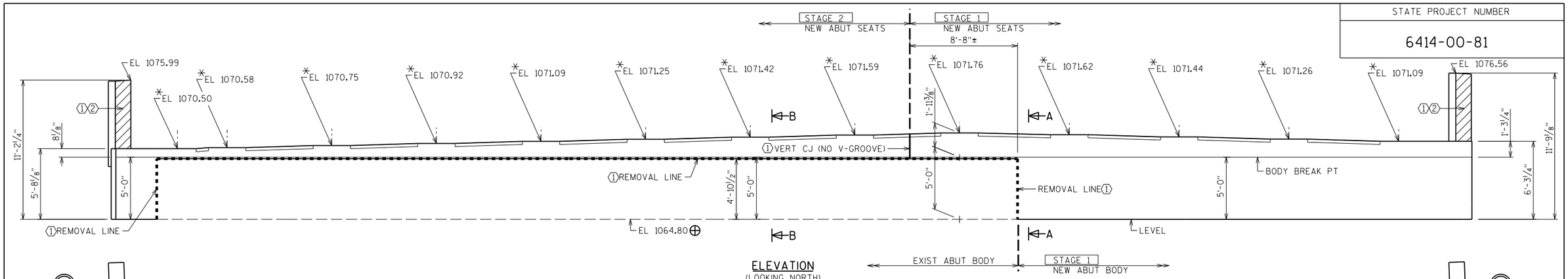
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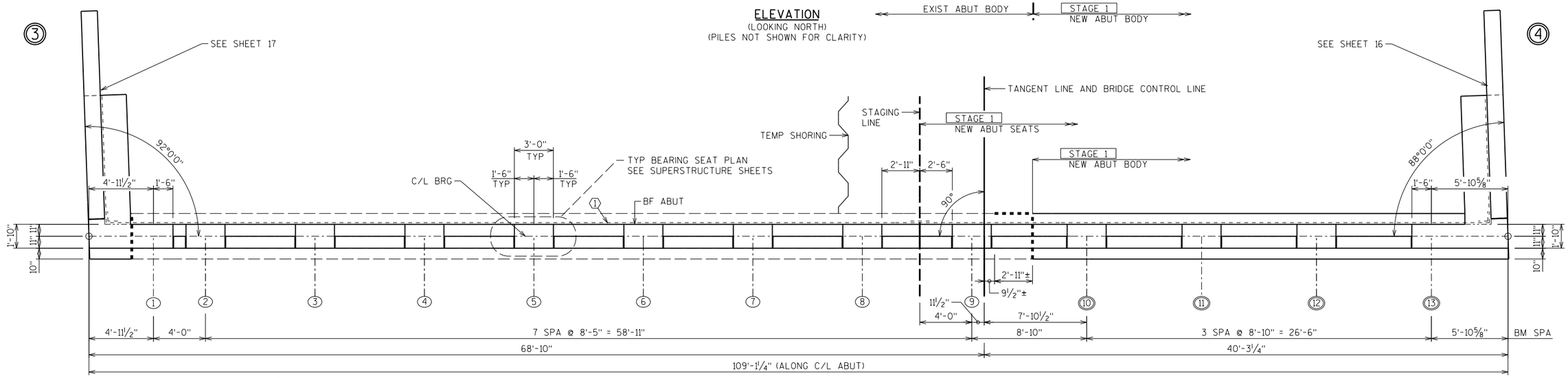
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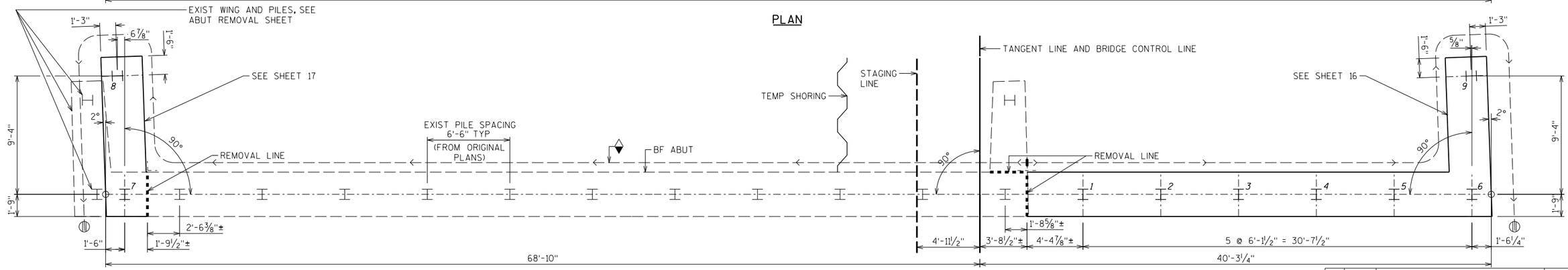
STATE PROJECT NUMBER
6414-00-81



ELEVATION
(LOOKING NORTH)
(PILES NOT SHOWN FOR CLARITY)



PLAN



FOOTING & PILE PLAN

NOTES

SEE SHEET 7 FOR LEGEND AND ABUTMENT NOTES / LEGEND.

REFER TO SHEET 18 FOR SECTION A-A, SECTION B-B AND BILL OF BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

NORTH ABUTMENT

SHEET 14 OF 41
506

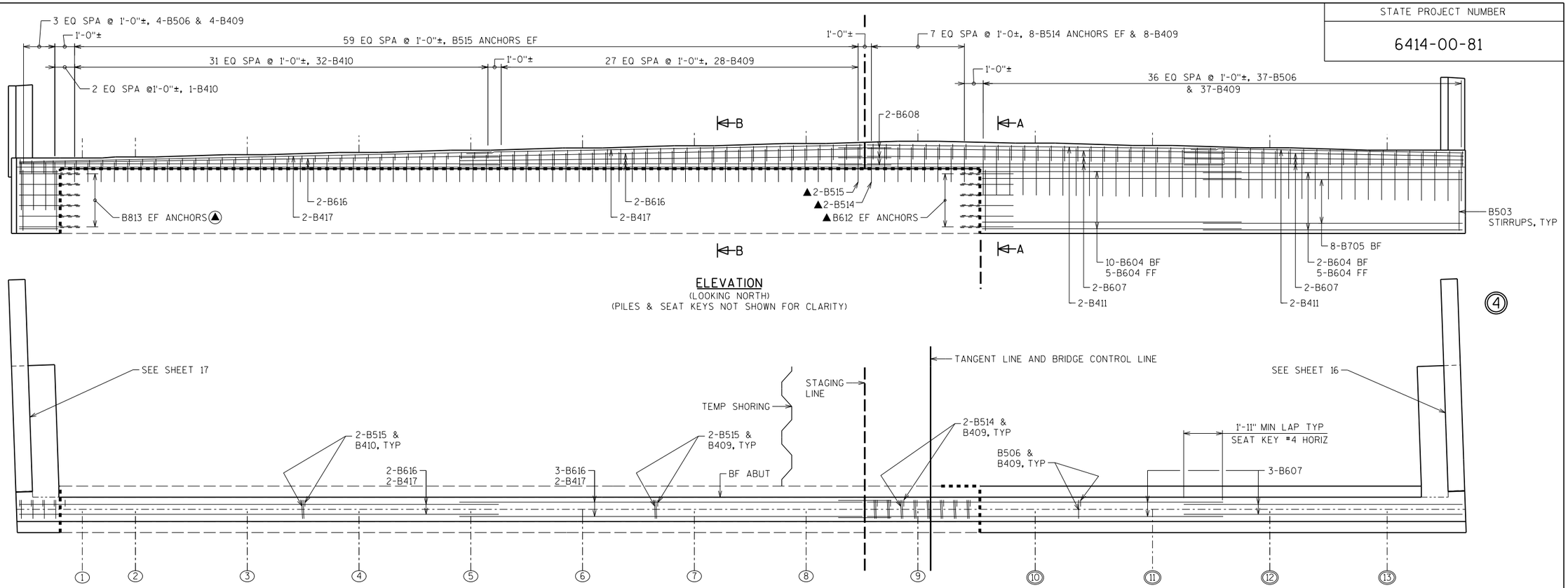
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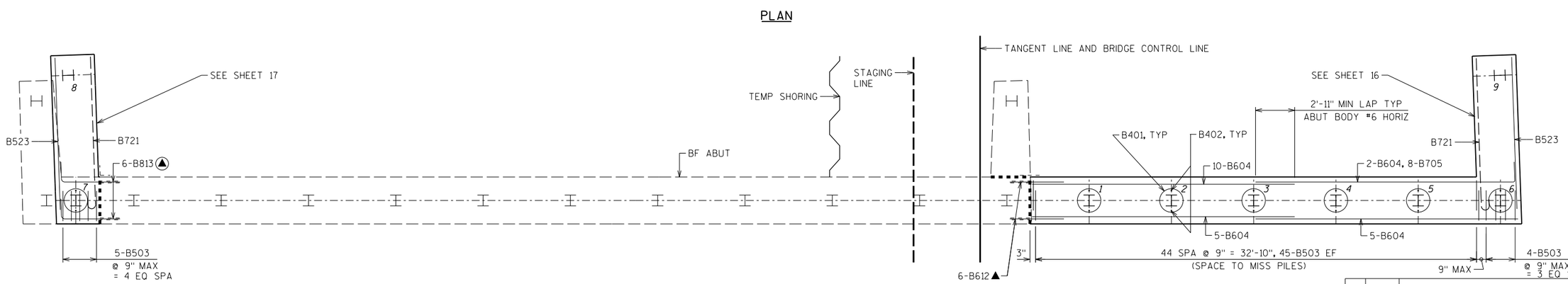
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STATE PROJECT NUMBER
6414-00-81





NOTES

SEE SHEET 7 FOR LEGEND AND ABUTMENT NOTES / LEGEND.

REFER TO SHEET 18 FOR SECTION A-A, SECTION B-B AND BILL OF BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

NORTH ABUTMENT

SHEET 15 OF 41

507

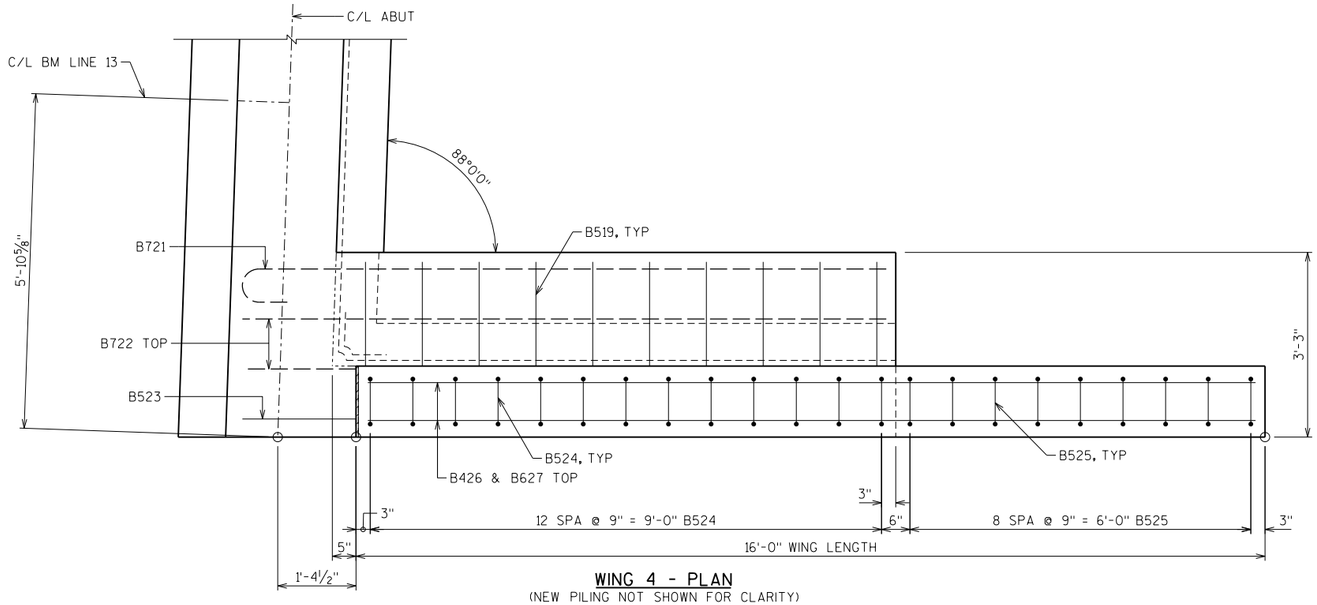
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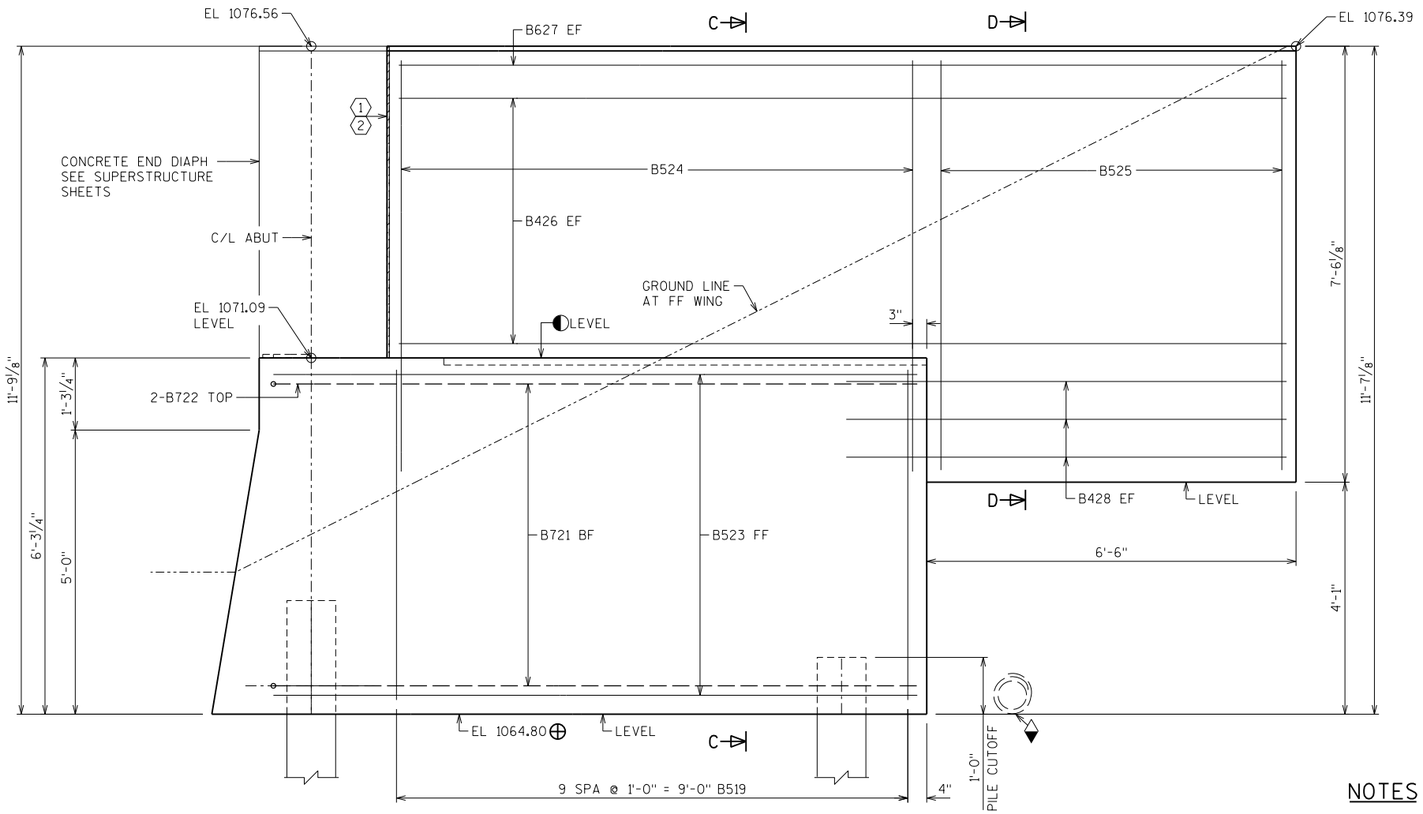
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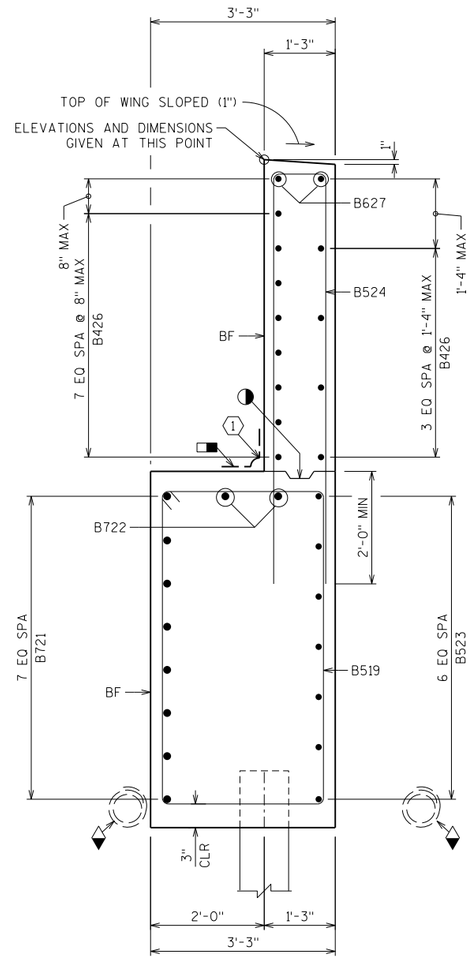
STATE PROJECT NUMBER
6414-00-81



WING 4 - PLAN
(NEW PILING NOT SHOWN FOR CLARITY)

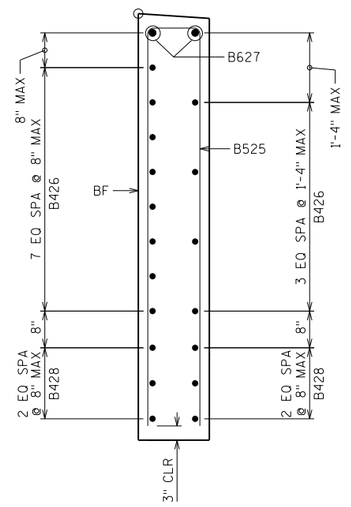


WING 4 - ELEVATION



SECTION C-C

NOTE:
SIMILAR AT WING TOP
TO SECTION C-C.



SECTION D-D

NOTES

SEE SHEET 7 FOR LEGEND AND ABUTMENT NOTES / LEGEND.

REFER TO SHEET 18 FOR SECTION A-A, SECTION B-B AND BILL OF BARS.

STAGE 1

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

NORTH ABUTMENT
WING 4

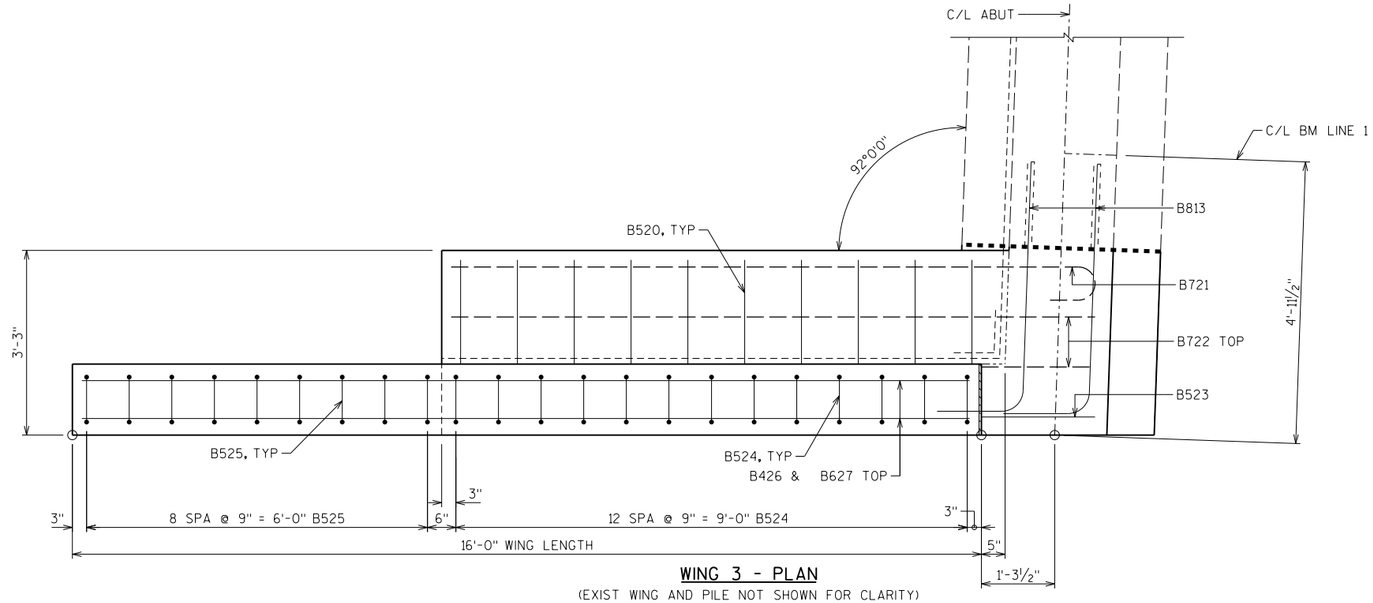
SHEET 16 OF 41
508

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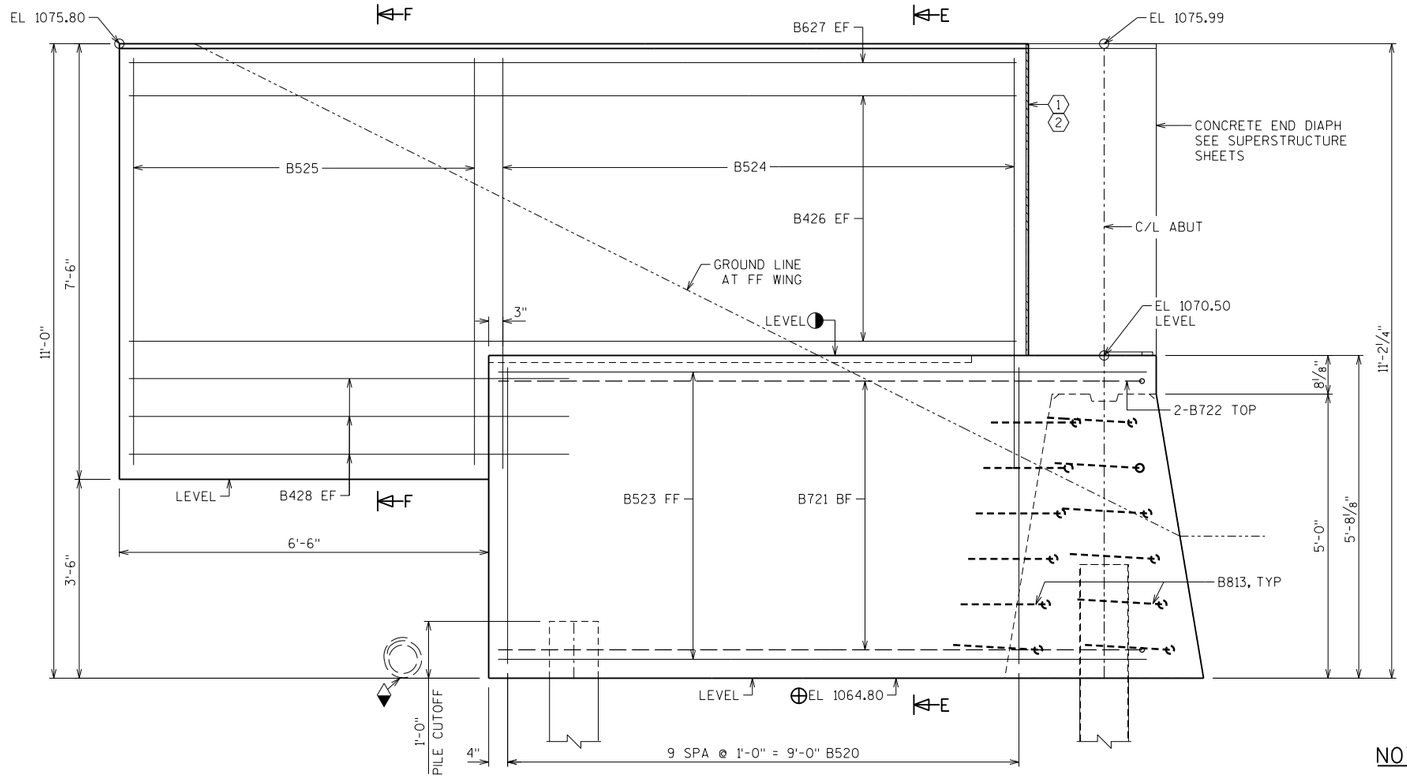
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STATE PROJECT NUMBER
6414-00-81



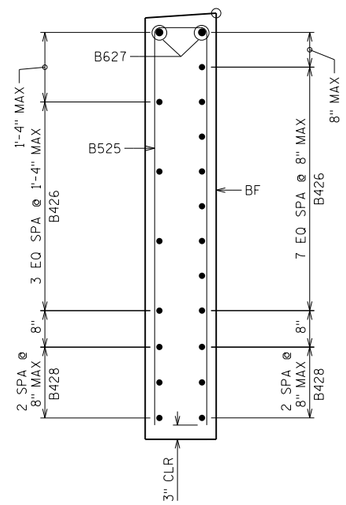
WING 3 - PLAN

(EXIST WING AND PILE NOT SHOWN FOR CLARITY)
(NEW PILING NOT SHOWN FOR CLARITY)

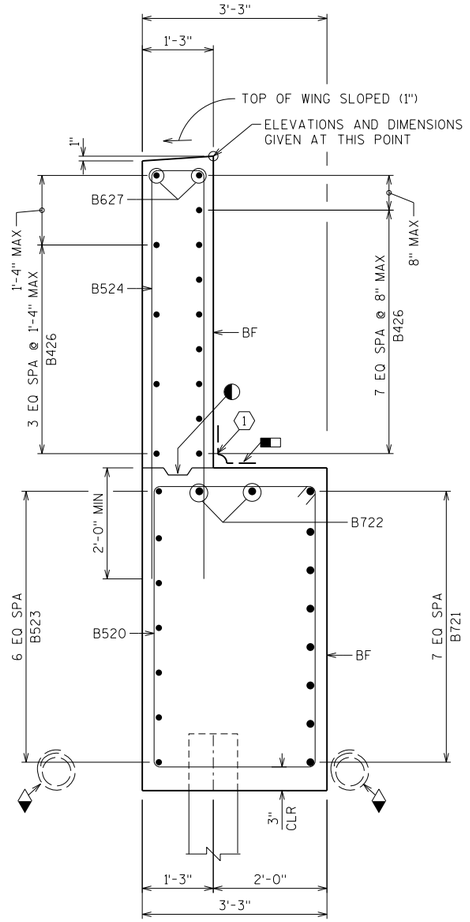


WING 3 - ELEVATION

NOTE:
SIMILAR AT WING TOP
TO SECTION E-E.



SECTION F-F



SECTION E-E

NOTES

SEE SHEET 7 FOR LEGEND AND ABUTMENT NOTES / LEGEND.

REFER TO SHEET 18 FOR SECTION A-A, SECTION B-B AND BILL OF BARS.

STAGE 2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

NORTH ABUTMENT
WING 3

SHEET 17 OF 41
509

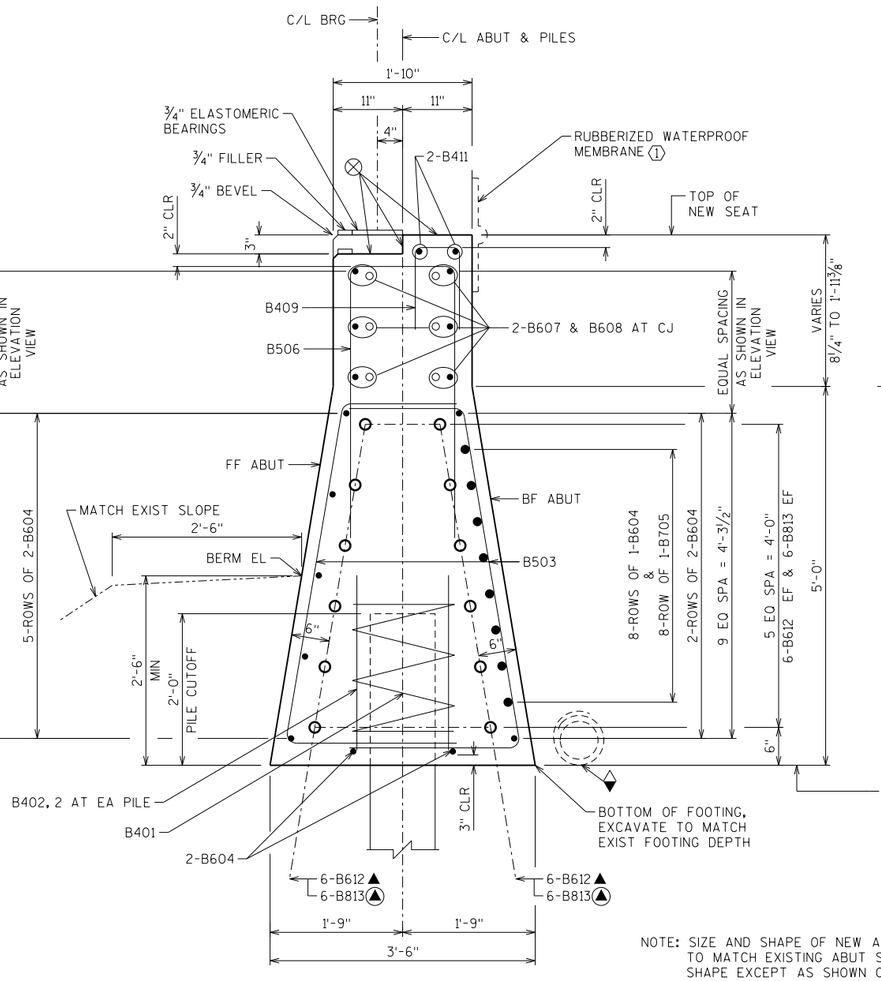
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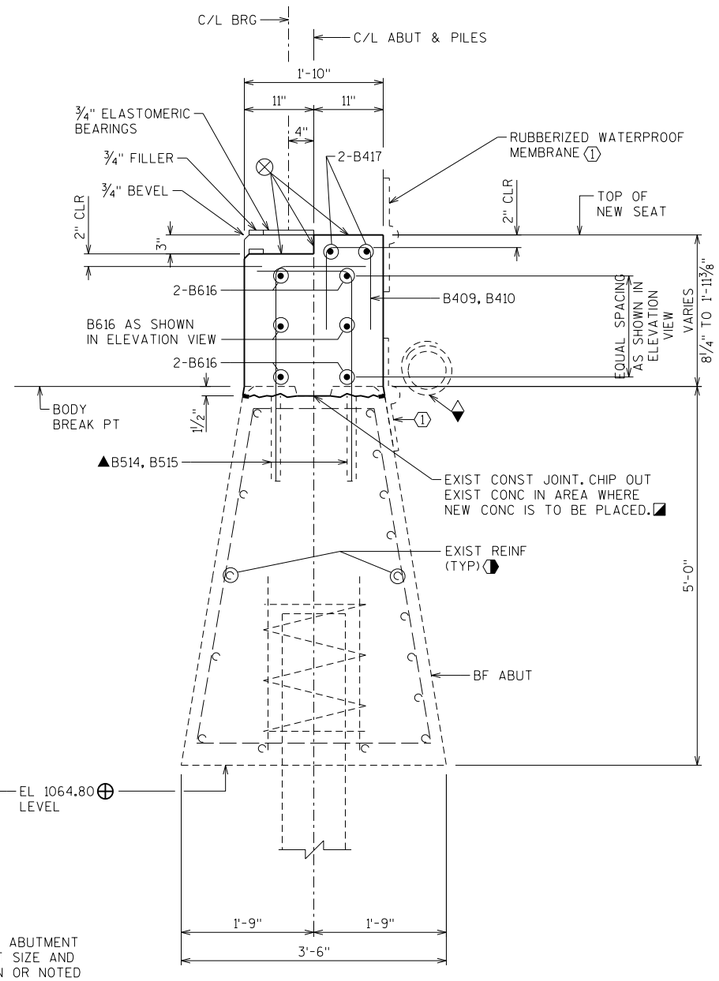
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STATE PROJECT NUMBER
6414-00-81



SECTION A-A
(FROM SHEET 14 & 15)

NOTE: SIZE AND SHAPE OF NEW ABUTMENT TO MATCH EXISTING ABUT SIZE AND SHAPE EXCEPT AS SHOWN OR NOTED OTHERWISE.



SECTION B-B
(FROM SHEET 14 & 15)

NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE ENGLISH BAR DIAMETER SIZE.

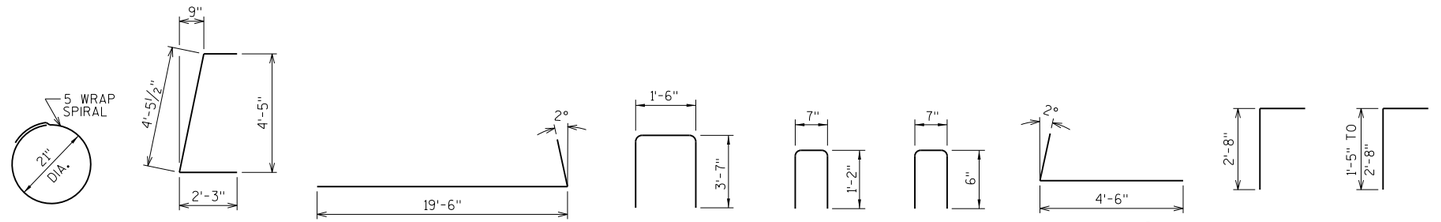
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

NU = BAR MARK NOT USED

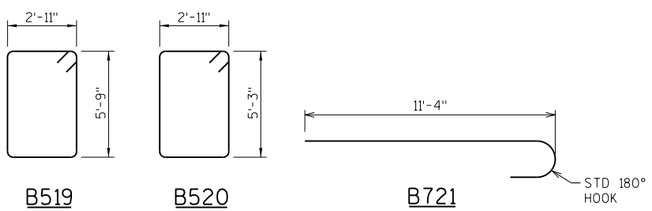
LENGTH SHOWN FOR BAR SERIES BARS IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE AND BENDING DETAILS FOR ACTUAL LENGTHS.

BILL OF BARS — NORTH ABUTMENT

BAR MARK	COAT	NO. REQ'D.	LENGTH (FT-IN)	BAR SERIES	BENT	LOCATION	STG 1	STG 2
B401		6	28 - 0		X	BODY AT PILES	X	
"		1	28 - 0		X	BODY AT PILES		X
B402		12	2 - 3			BODY AT PILES	X	
"		2	2 - 3			BODY AT PILES		X
B503		94	8 - 0		X	BODY STIRRUP	X	
"		5	8 - 0		X	BODY STIRRUP		X
B604		26	19 - 7			BODY HORIZ	X	
B705		8	22 - 0		X	BODY HORIZ BF	X	
B506		37	8 - 5		X	SEAT TIE	X	
"		4	8 - 5		X	SEAT TIE		X
B607		12	21 - 3			SEAT HORIZ	X	
B608		6	6 - 0			SEAT HORIZ LAP	X	
B409		45	2 - 9		X	KEY TIE	X	
"		32	2 - 9		X	KEY TIE		X
B410		33	1 - 5		X	KEY TIE		X
B411		4	20 - 7			KEY HORIZ	X	
▲ B612		12	4 - 6			ANCHOR BODY HORIZ EF	X	
(▲) B813		12	6 0		X	ANCHOR BODY HORIZ EF		X
▲ B514		16	3 - 10		X	ANCHOR SEAT TIE	X	
▲ B515		120	3 - 3	X	X	ANCHOR SEAT TIE		X
B616		10	36 - 6			SEAT HORIZ		X
B417		4	36 - 0			KEY HORIZ		X
NU								
B519		10	18 - 0		X	WING 4 STIRRUP	X	
B520		10	17 0		X	WING 3 STIRRUP		X
B721		8	12 - 5		X	WING 4 BF	X	
"		8	12 - 5		X	WING 3 BF		X
B722		2	11 - 4			WING 4 TOP	X	
"		2	11 - 4			WING 3 TOP		X
B523		7	11 - 4			WING 4 FF	X	
"		7	11 - 4			WING 3 FF		X
B524		13	16 - 0		X	WING 4 VERT	X	
"		13	16 - 0		X	WING 3 VERT		X
B525		9	14 - 6		X	WING 4 VERT	X	
"		9	14 - 6		X	WING 3 VERT		X
B426		12	15 - 7			WING 4 HORIZ	X	
"		12	15 - 7			WING 3 HORIZ		X
B627		2	15 - 7			WING 4 HORIZ TOP	X	
"		2	15 - 7			WING 3 HORIZ TOP		X
B428		6	7 - 9			WING 4 HORIZ BOTTOM	X	
"		6	7 - 9			WING 3 HORIZ BOTTOM		X



B401 | B503 | B705 | B506 | B409 | B410 | B813 (▲) | B514 ▲ | B515 ▲ CUT SET STAGE 2



B519 | B520 STAGE 2 | B721 | B524 | B525

BAR SERIES TABLE — NORTH ABUTMENT

BAR MARK	NO. REQ'D.	LENGTH	BENT	LOCATION	STG 1	STG 2
B515	2 SETS OF 60	2'-7" TO 3'-10"	X	ANCHOR SEAT TIE		X

BUNDLE AND TAG EACH SERIES SEPARATELY

NOTES

SEE SHEET 7 FOR LEGEND AND ABUTMENT NOTES / LEGEND.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

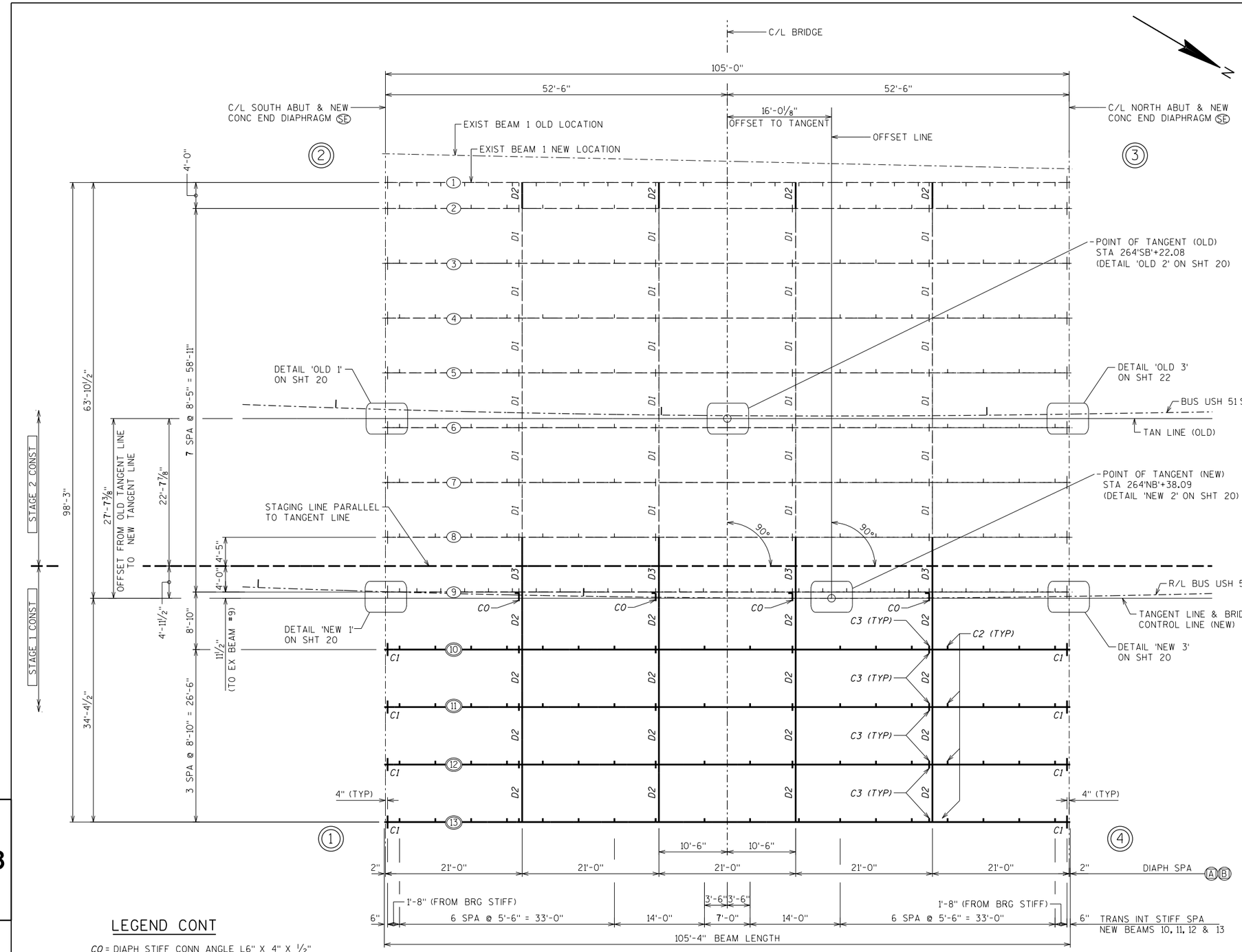
DRAWN BY DLF | PLANS CK'D. NCK

NORTH ABUTMENT

SHEET 18 OF 41
510

8

8



FRAMING PLAN

LEGEND CONT

C0 = DIAPH STIFF CONN ANGLE L6" X 4" X 1/2"
-EAST SIDE OF BEAM OPPOSITE EXISTING CONN

C1 = BRG STIFF CONN PLs 2-PLs 3/4" X (5" TO 9")
-EACH SIDE OF BEAM AT BEAM BRGS

C2 = TRANS INT STIFF CONN PLs 3/8" X 6".
-INTERIOR & EXTERIOR BEAMS.

C3 = DIAPH STIFF CONN PLs 1/2" X 6"
-AT NEW DIAPHRAGMS UNLESS NOTED OTHERWISE

STATE PROJECT NUMBER

6414-00-81

FRAMING & BEAM NOTES

OPTIONAL WELDED SHOP SPLICES MAY BE USED FOR ALL FLG. & WEB PLS OVER 60'-0" LONG. IF USED, THE LOCATION OF THE SPLICE SHALL BE SHOWN ON SHOP DRAWINGS & WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

AT EXTERIOR GIRDERS PLACE INTERMEDIATE STIFFENERS ON INTERIOR FACE OF GIRDER.

AT INTERIOR GIRDERS PLACE INTERMEDIATE STIFFENER PLS ON ONE SIDE OF GIRDER.

ALL GIRDERS ARE STRAIGHT AND PARALLEL TO THE TANGENT LINE AND ARE NOT HORIZONTALLY CURVED.

ALL CONNECTION STIFFENER PLATES TO BE PERPENDICULAR TO WEB AND TO MATCH VERT PLUMB OF EXIST DIAPHRAGMS & CONNECTIONS.

ALL BEARING STIFFENER PLATES TO BE PERPENDICULAR TO WEB AND VERTICAL AND ARE ON EACH SIDE OF GIRDER.

ALL NEW STRUCTURAL STEEL, INCLUDING CONNECTIONS, SHALL BE STRUCTURAL STEEL ASTM A709 GRADE 50W.

ALL BOLTED CONNECTIONS SHALL BE FRICTION TYPE USING 3"4" Φ HIGH STRENGTH BOLTS. (A.S.T.M. A325) WITH DOUBLE WASHERS UNLESS OTHERWISE SHOWN OR NOTED.

ALL NEW STRUCTURAL STEEL SHALL BE PAINTED. THE COLOR AND FINISH COATING SHALL MATCH COLOR NO. 20122 (BROWN) IN ACCORDANCE WITH FEDERAL STANDARD NO. 595B.

ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

LEGEND

(SE) NEW SEMI-EXPANSION BEARING SEAT (ALL BEAMS)

INDICATES EXISTING BEAM LINE

INDICATES NEW BEAM LINE

■ 4" MIN., 1'-2" MAX.

(A) ALL NEW DIAPHRAGM CONNECTOR PLATES (5 1/2" X 1/2") AND DIAPHRAGMS (MC 18X42.7) ARE TO LINE WITH EXIST DIAPHRAGMS. NEW DIAPH SPACING TO MATCH EXISING SPACING. FIELD VERIFY SPACING & LOCATION.

(B) ADJUST EXISTING INTERMEDIATE DIAPHRAGMS AFTER BEAMS HAVE BEEN REPOSITIONED ONTO NEW BEARING SEATS. THE HIGHER END OF THE EXISTING CONNECTION TO THE BEAM STIFF CAN REMAIN WELDED TO THE BEAM. INSPECT ALL EXIST WELDED CONNECTIONS. REPAIR WELD AS NECESSARY. DETACH/CUT THE WELD ON THE LOWER END OF THE DIAPHRAGMS CONNECTION TO THE STIFF TO A CLEAN SURFACE FINISH. REAM NEW HOLES AS REQUIRED FOR BOLTED CONNECTION ONTO THE EXISTING STIFFENER. PROVIDE NEW BOLTS AS REQUIRED. INCLUDED UNDER ITEM "BRIDGE JACKING B-49-67".

D1 = EXIST (MC 18X42.7) STEEL DIAPHRAGM TO BE ADUSTED.

D2 = NEW (MC 18X42.7) STEEL DIAPHRAGM.

D3 = NEW (MC 18X42.7) DIAPHRAGM IN STAGING BAY BETWEEN BM 8 AND BM 9 PLACED DURING STAGE 2 CONSTRUCTION. (EXISTING MC 18X42.7 DIA CAN BE SALVAGED AT THE DISCRESION OF THE DESIGN ENGINEER

NOTE : OPEN END OF CHANNEL TO BE POSTIONED TO MATCH OPEN END OF EXISTING CHANNELS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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FRAMING PLAN

SHEET 19 OF 41

511

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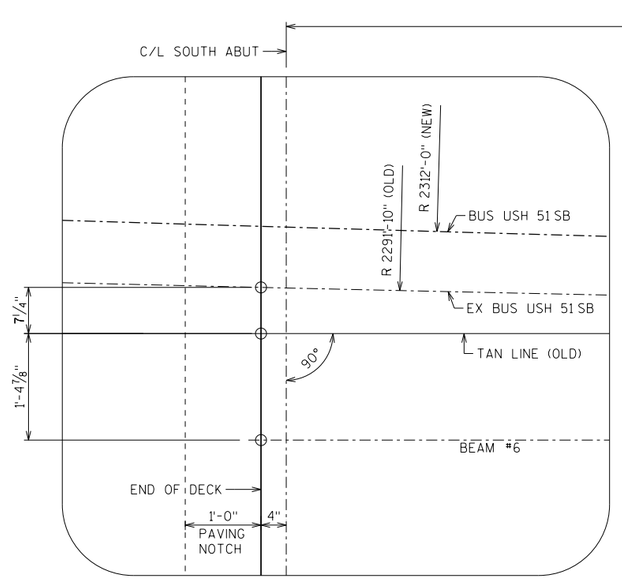
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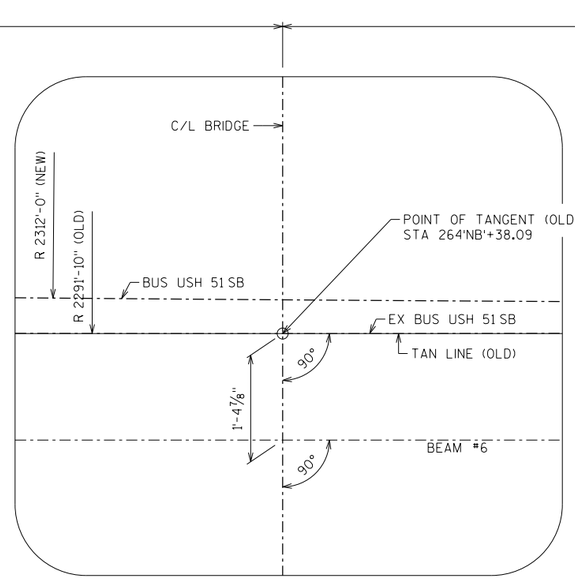
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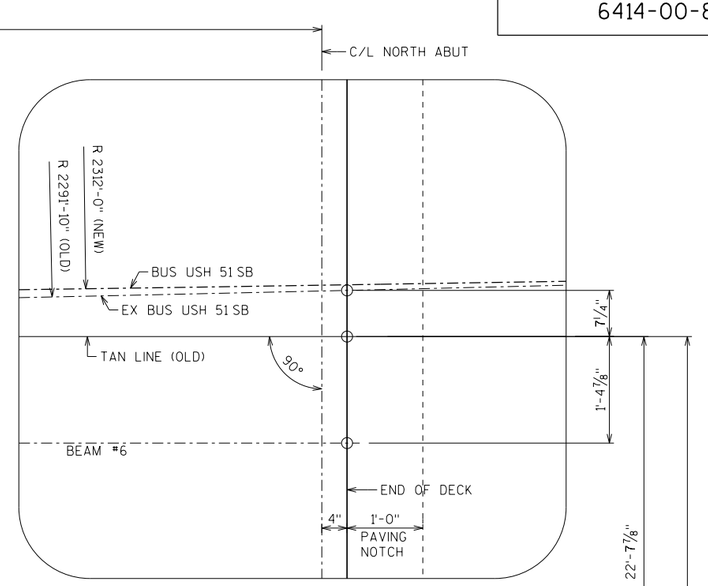
STATE PROJECT NUMBER
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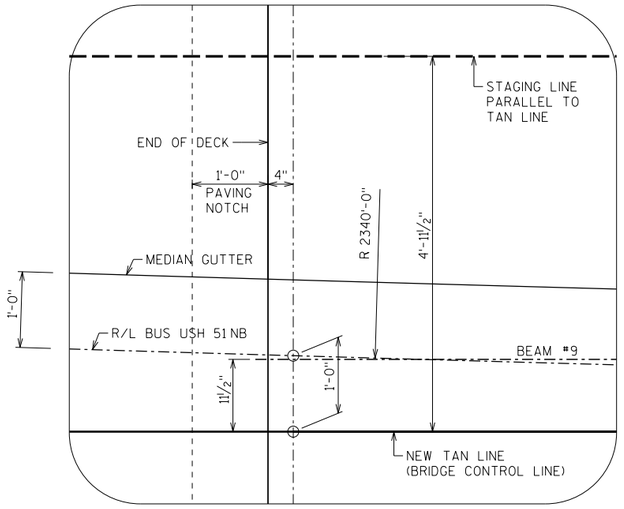
DETAIL 'OLD 1'
SOUTH ABUTMENT



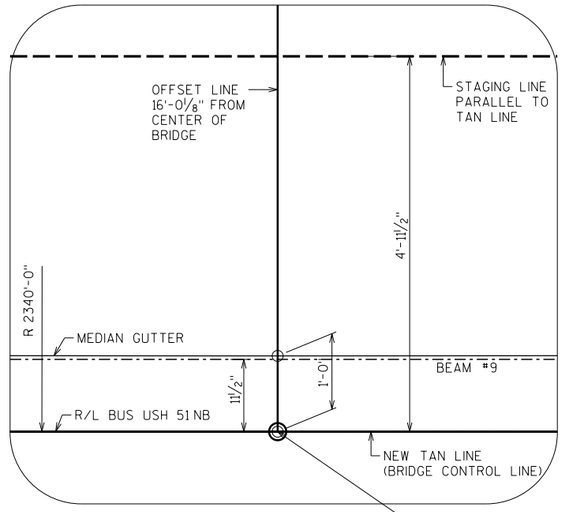
DETAIL 'OLD 2'



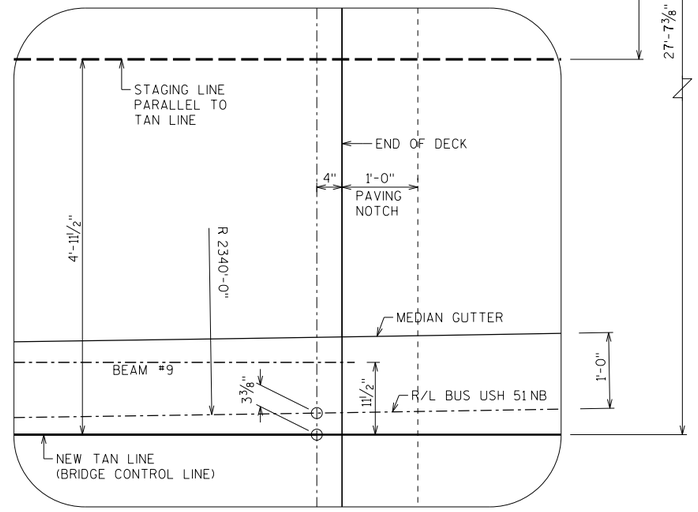
DETAIL 'OLD 3'
NORTH ABUTMENT



DETAIL 'NEW 1'
SOUTH ABUTMENT



DETAIL 'NEW 2'



DETAIL 'NEW 3'
NORTH ABUTMENT

NOTES

SEE SHEET 19 FOR FRAMING PLAN, "FRAMING PLAN & BEAM NOTES" & LEGEND.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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FRAMING TANGENT OFFSETS

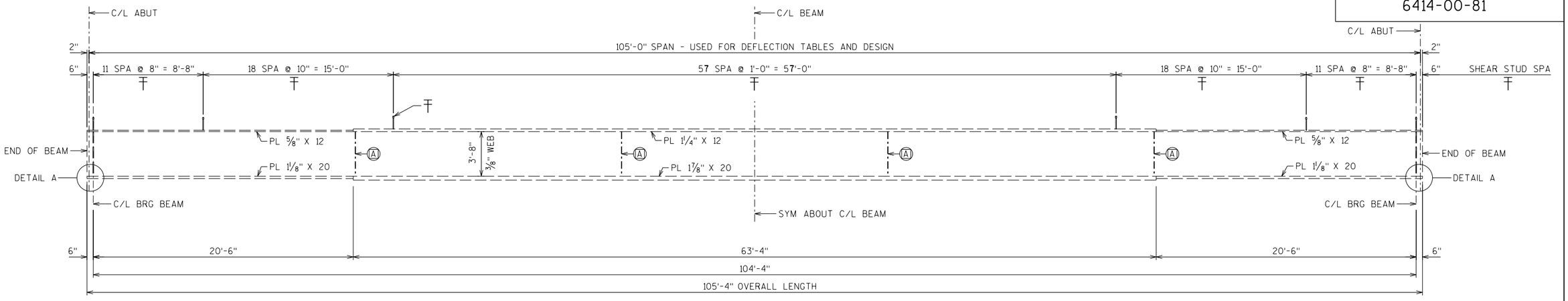
SHEET 20 OF 41

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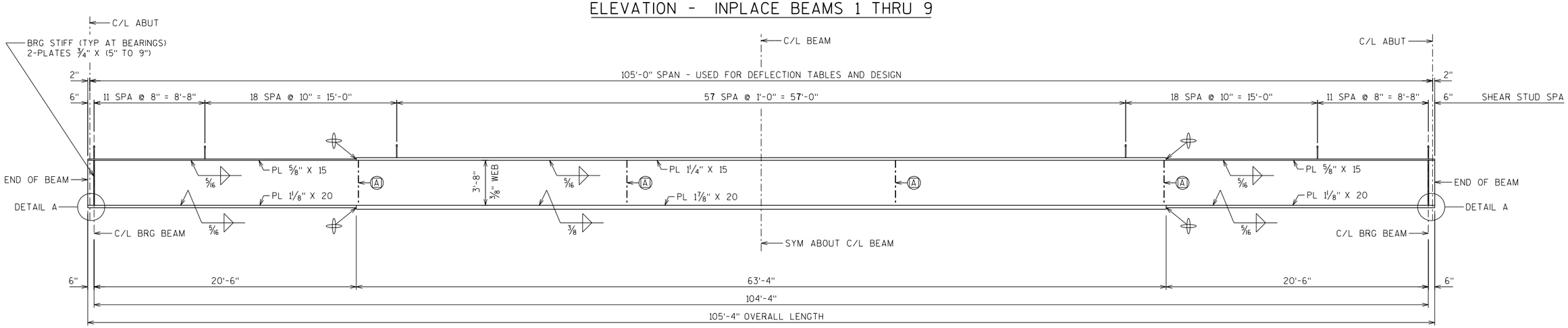
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STATE PROJECT NUMBER
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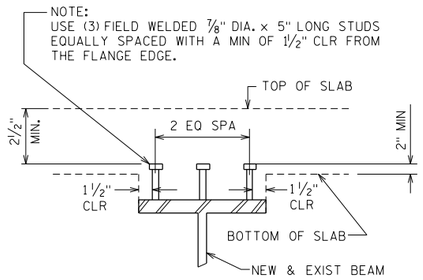


ELEVATION - INPLACE BEAMS 1 THRU 9



ELEVATION - NEW BEAMS 10 THRU 13

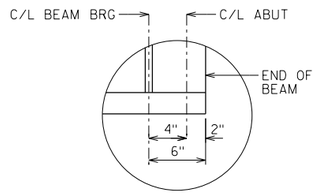
(PROVIDE 4" CAMBER IN BEAM)



NOTE: USE DIFFERENT LENGTH STUDS IF 2" MIN CLEARANCE OR EXTENSION CRITERIA IS VIOLATED.

SHEAR STUD DETAILS

AT NEW & EXIST BEAMS



DETAIL A

(TYP EACH END OF BEAM)

NOTES

REFER TO SHEET 19 FOR FRAMING PLAN, "FRAMING PLAN & BEAM NOTES" & "LEGEND".

⊕ OPTIONAL FLG BUTT SPLICES. THE 1 7/8" OR 1 1/4" THICK. FLG PLATE MAY BE FURNISHED FULL LENGTH. PAY WEIGHT S BASED ON SECTION AS DETAILED.

∓ CUTOFF EXIST STUDS 1" (PLUS OR MINUS) FROM TOP OF FLG. ADJUST NEW STUDS TO MISS EXIST STUD CUTOFFS.

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BEAM DETAILS

SHEET 21 OF 41

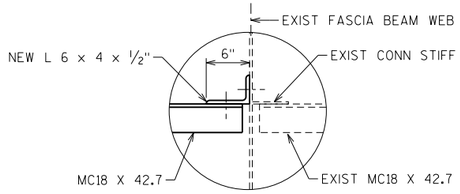
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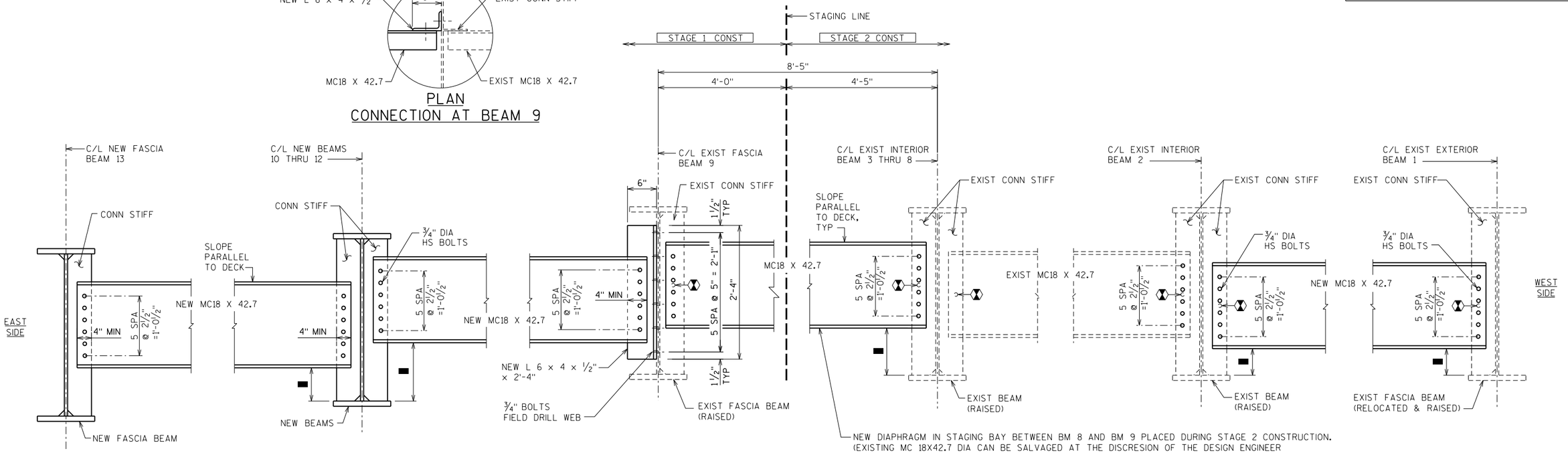
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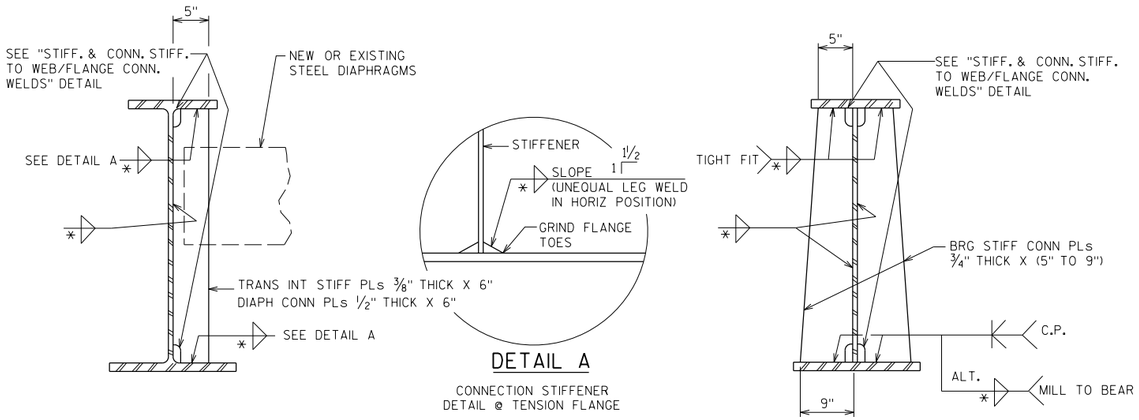
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PLAN
CONNECTION AT BEAM 9

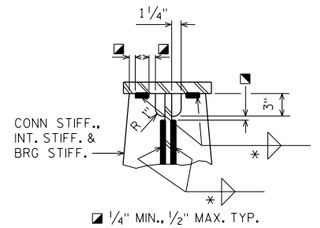


INTERMEDIATE DIAPHRAGM IN SPANS



CONNECTION STIFF. DETAILS
(NEW BEAMS)

BRG. STIFF. DETAILS
TYP. AT ABUTS.
(NEW BEAMS)



STIFF. & CONN. STIFF. TO
WEB/FLANGE CONN. WELDS

✳TABLE OF FILLET WELD SIZES

MATERIAL THICKNESS OF THICKER PART JOINED.	ǂ MIN. SIZE OF FILLET WELD
TO ½" INCLUSIVE	3/16"
OVER ½" TO ¾"	¼"
OVER ¾" TO 1½"	△ 5/16"
OVER 1½" TO 2¼"	△ ⅜"
OVER 2¼" TO 6"	△ ½"

ǂ EXCEPT THAT THE WELD SIZE SHALL NOT EXCEED THE THICKNESS OF THE THINNER PART JOINED.

△ MIN. PASS SIZE IS 5/16"

NOTES

REFER TO SHEET 19 FOR FRAMING PLAN, "FRAMING PLAN & BEAM NOTES" & "LEGEND".

Ⓧ INPLACE ¾" DIA ERECTION BOLT FOR EXISTING INPLACE WELDED CONNECTION TO DIAPHRAGM. SEE NOTE Ⓑ ON SHEET 19.

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BEAM DETAILS

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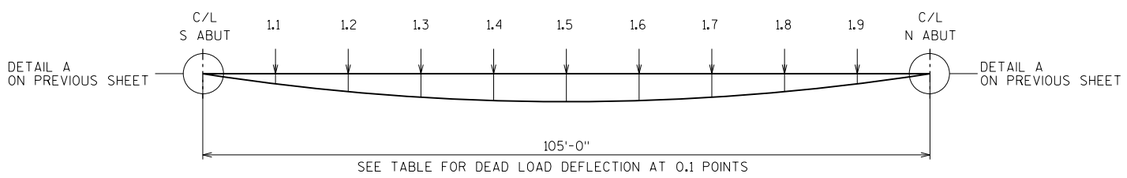
BEAM DEFLECTIONS

CONCRETE DEAD LOAD DEFLECTIONS (INCHES)

BEAMS	C/L S ABUT	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	C/L N ABUT
1	0	0.2	0.3	0.5	0.5	0.6	0.5	0.5	0.3	0.2	0
2	0	0.2	0.3	0.4	0.5	0.5	0.5	0.4	0.3	0.2	0
3	0	0.2	0.3	0.4	0.5	0.5	0.5	0.4	0.3	0.2	0
4	0	0.2	0.3	0.4	0.4	0.5	0.4	0.4	0.3	0.2	0
5	0	0.2	0.3	0.4	0.4	0.5	0.4	0.4	0.3	0.2	0
6	0	0.2	0.3	0.4	0.4	0.5	0.4	0.4	0.3	0.2	0
7	0	0.2	0.3	0.4	0.4	0.5	0.4	0.4	0.3	0.2	0
8	0	0.2	0.3	0.4	0.4	0.5	0.4	0.4	0.3	0.2	0
9	0	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0
10	0	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0
11	0	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0
12	0	0.2	0.3	0.4	0.4	0.5	0.4	0.4	0.3	0.2	0
13	0	0.2	0.3	0.4	0.5	0.5	0.5	0.4	0.3	0.2	0

CONCRETE AND STEEL DEAD LOAD DEFLECTIONS (INCHES)

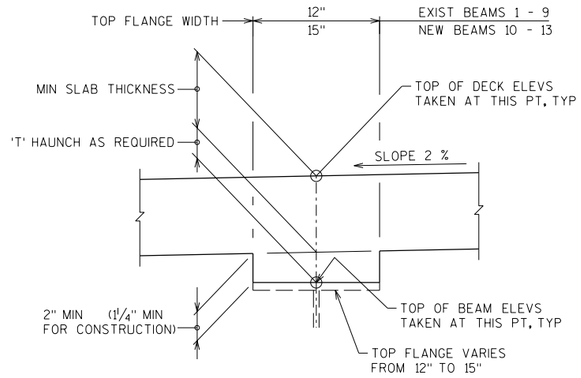
BEAMS	C/L S ABUT	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	C/L N ABUT
1	0	1.1	1.9	2.6	3	3.2	3	2.6	1.9	1.1	0
2	0	1.2	2.1	2.8	3.3	3.4	3.3	2.8	2.1	1.2	0
3	0	1.3	2.4	3.2	3.7	3.9	3.7	3.2	2.4	1.3	0
4	0	1.5	2.6	3.5	4	4.2	4	3.5	2.6	1.4	0
5	0	1.5	2.7	3.6	4.2	4.4	4.2	3.6	2.7	1.5	0
6	0	1.5	2.7	3.6	4.2	4.4	4.2	3.6	2.7	1.5	0
7	0	1.5	2.7	3.6	4.2	4.4	4.2	3.6	2.7	1.5	0
8	0	1.5	2.7	3.6	4.2	4.3	4.2	3.6	2.7	1.5	0
9	0	1.5	2.6	3.5	4.1	4.3	4.1	3.6	2.6	1.5	0
10	0	1.4	2.6	3.4	4	4.2	4	3.5	2.6	1.4	0
11	0	1.4	2.5	3.3	3.9	4	3.9	3.3	2.5	1.4	0
12	0	1.3	2.4	3.1	3.7	3.8	3.7	3.2	2.4	1.3	0
13	0	1.2	2.2	2.9	3.4	3.5	3.4	2.9	2.2	1.2	0



NOTE

DEFLECTIONS ARE THEORETICAL AND MAY VARY IN FIELD.

DEFLECTIONS USED FOR COMPUTING GIRDER ELEVATION SHALL BE CALCULATED BY TAKING GIRDER ELEVATION BEFORE & AFTER THE EXISTING DECK IS REMOVED. THE DEFLECTIONS GIVEN ON THIS PLAN SHALL BE USED AS REFERENCE ONLY.



SLAB THICKNESS DIAGRAM

NOTES

'T' = HAUNCH HEIGHT AT CENTERLINE OF BEAM.

TO DETERMINE THE 'T': AFTER ALL STRUCTURAL STEEL HAS BEEN ERECTED, ELEVATIONS AT THE TOP FLANGES SHALL BE TAKEN ALONG THE CENTERLINE OF THE BEAMS AT 0.1 POINTS.

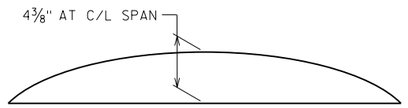
TOP OF DECK ELEVATION AT FINAL GRADE

\- TOP OF STEEL ELEVATION AFTER STEEL ERECTION

\+ CONC ONLY DEFLECTION: DOWNWARD DEFLECTION IS ADDED, UPWARD DEFLECTION IS SUBTRACTED

\- SLAB THICKNESS

= 'T' VALUE FOR SETTING HAUNCH ('T' = 2⅛" AT ABUTS)



CAMBER DIAGRAM

(FOR BEAMS 10, 11, 12 & 13)

NOTES

REFER TO SHEET 19 FOR FRAMING PLAN, "FRAMING PLAN & BEAM NOTES" & "LEGEND".

SEE SHEET 25 FOR FINISHED DECK ELEVATIONS.

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TOP OF STEEL ELEVATIONS

BEAMS	C/L S ABUT	C/L N ABUT
1	1075.49	1074.37
2	1075.57	1074.45
3	1075.73	1074.62
4	1075.90	1074.79
5	1076.06	1074.96
6	1076.23	1075.13
7	1076.39	1075.30
8	1076.56	1075.47
9	1076.72	1075.64
10	1076.54	1075.49
11	1076.36	1075.32
12	1076.19	1075.14
13	1076.01	1074.96

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BLOCKING AND DEFLECTION DIAGRAMS

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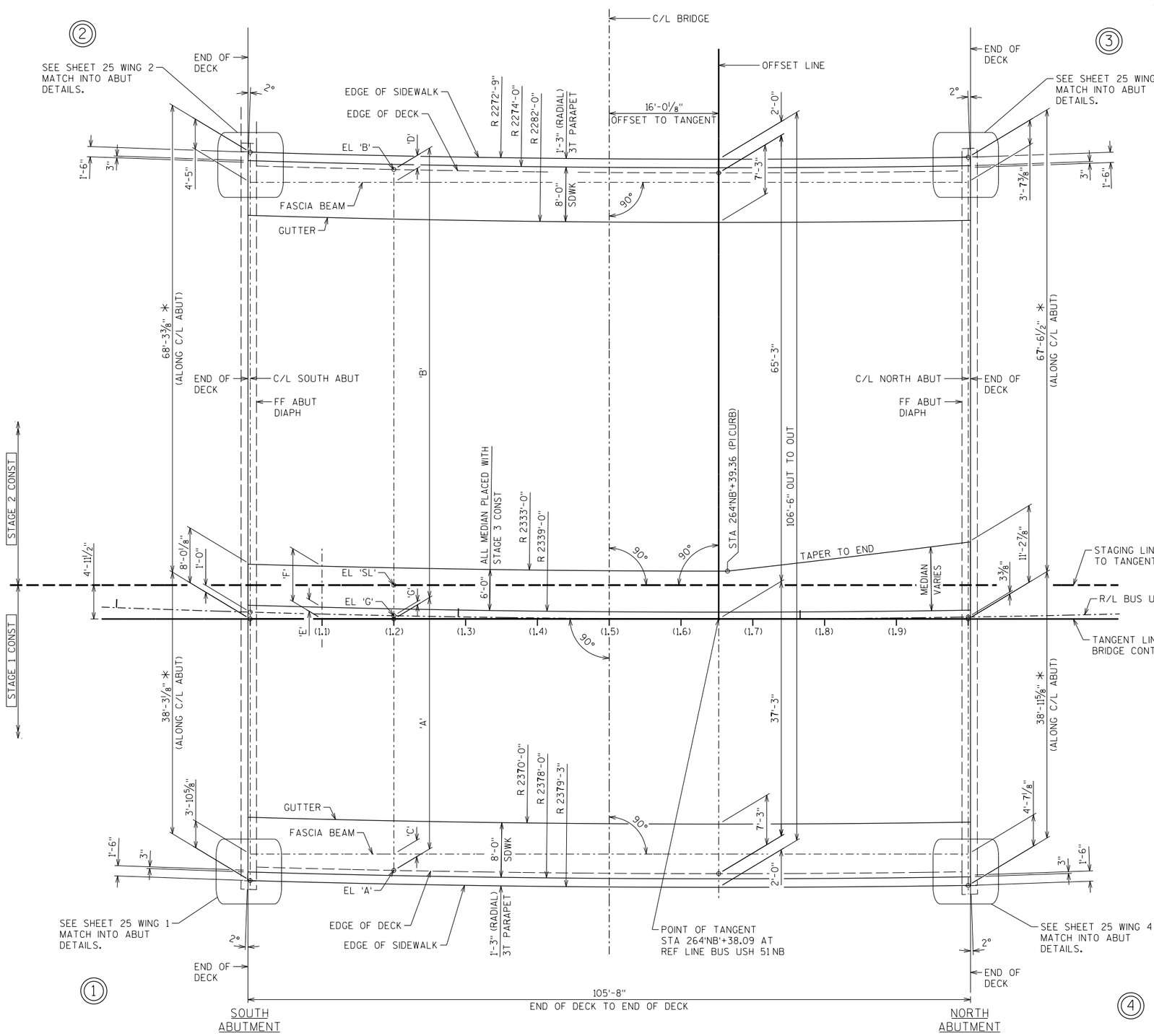
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TANGENT OFFSET TABLE

STAGE 1 & STAGE 2

BM 10TH PT.	'A'	'B'	'C'	'D'	'G' PROFILE GRADE
1.1	36'-6 1/2"	65'-11 7/8"	2'-2"	2'-1 3/8"	0'-8 5/8"
1.2	36'-9 1/4"	65'-9"	2'-4 3/4"	1'-10 1/2"	0'-5 3/4"
1.3	36'-11 1/2"	65'-6 5/8"	2'-7"	1'-8 1/8"	0'-3 1/2"
1.4	37'-1 1/4"	65'-4 7/8"	2'-8 5/8"	1'-6 3/8"	0'-1 3/4"
1.5	37'-2 3/8"	65'-3 5/8"	2'-9 3/4"	1'-5 1/4"	0'-0 5/8"
1.6	37'-2 7/8"	65'-3 1/8"	2'-10 3/8"	1'-4 5/8"	0'-0 1/8"
1.7	37'-3"	65'-3"	2'-10 3/8"	1'-4 5/8"	0'-0"
1.8	37'-2 3/8"	65'-3 5/8"	2'-9 7/8"	1'-5 1/8"	0'-0 5/8"
1.9	37'-1 1/4"	65'-4 3/4"	2'-8 3/4"	1'-6 3/8"	0'-1 3/4"

TANGENT OFFSET TABLE

STAGE 3
MEDIAN

BM 10TH PT.	'E'	'F'
1.1	1'-8 5/8"	7'-8 5/8"
1.2	1'-5 3/4"	7'-5 3/4"
1.3	1'-3 1/2"	7'-3 1/2"
1.4	1'-1 3/4"	7'-1 3/4"
1.5	1'-0 5/8"	7'-0 5/8"
1.6	1'-0 1/8"	7'-0 1/8"
1.7	1'-0"	7'-5"
1.8	1'-0 5/8"	8'-7 3/4"
1.9	1'-1 3/4"	9'-11"

LAYOUT NOTES

ALL MEDIAN CONCRETE PLACED UNDER STAGE 3 CONSTRUCTION.

SEE SHEET 1 FOR LOOP DETECTOR LOCATION.

SEE SHEET 1 FOR ADDITIONAL NOTES AND DIMENSIONS.
SEE SHEET 2 FOR "CROSS SECTION THRU BRIDGE", GENERAL NOTES AND POURING SEQUENCE NOTES.

SEE SHEET 25 FOR 'FINAL TOP OF DECK ELEVATIONS TABLE'.

(1.1) THRU (1.9) = BM 10TH PT. ALONG 10TH POINTS OF BEAM FROM C/L ABUTMENT TO C/L ABUTMENT.

'A', 'B', 'C', 'D', 'E', 'F' & 'G' OFFSETS ARE AT RIGHT ANGLES TO TANGENT LINE.

'A', 'B', 'G' & 'SL' ELEVATIONS ARE IN THE 'FINAL TOP OF DECK ELEVATIONS TABLE.

* AT RIGHT ANGLES TO TANGENT LINE.

SUPERSTRUCTURE PLAN LAYOUT

REFER TO SHEET 31 FOR STRUCTURAL APPROACH SLAB PLAN LAYOUT AT BOTH ENDS OF BRIDGE

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SUPERSTRUCTURE LAYOUT

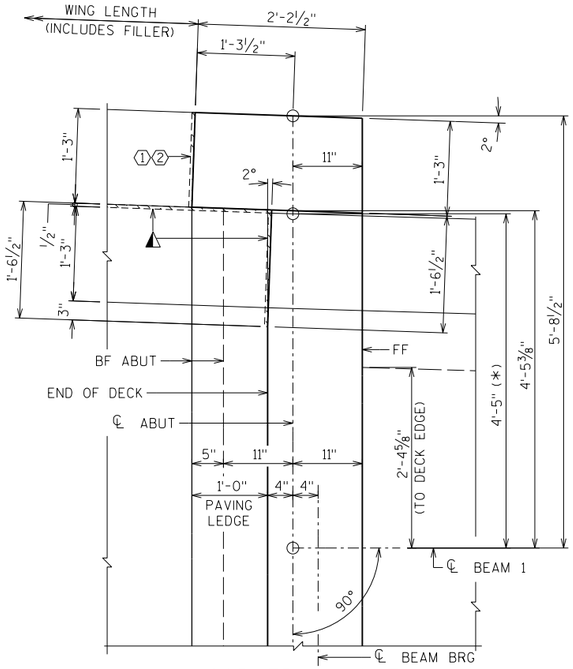
SHEET 24 OF 41

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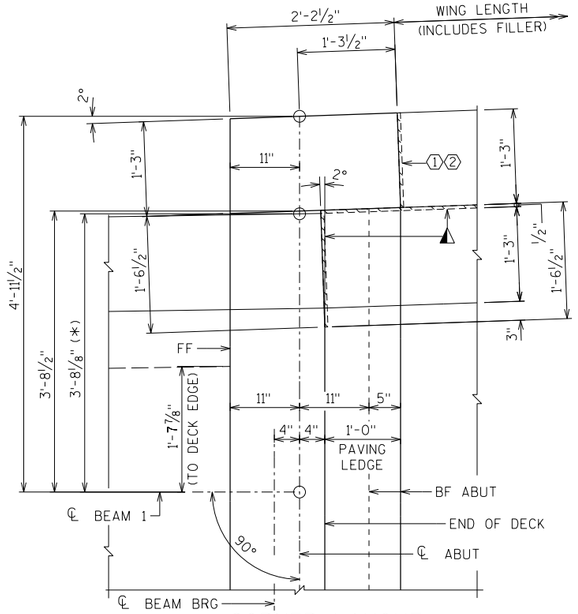
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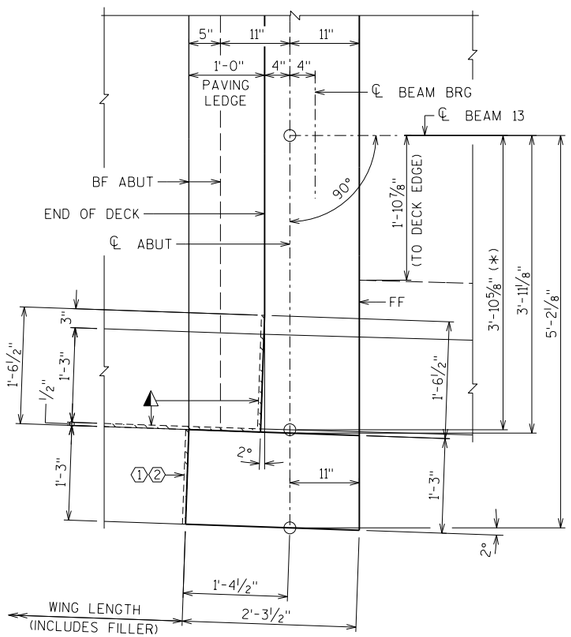
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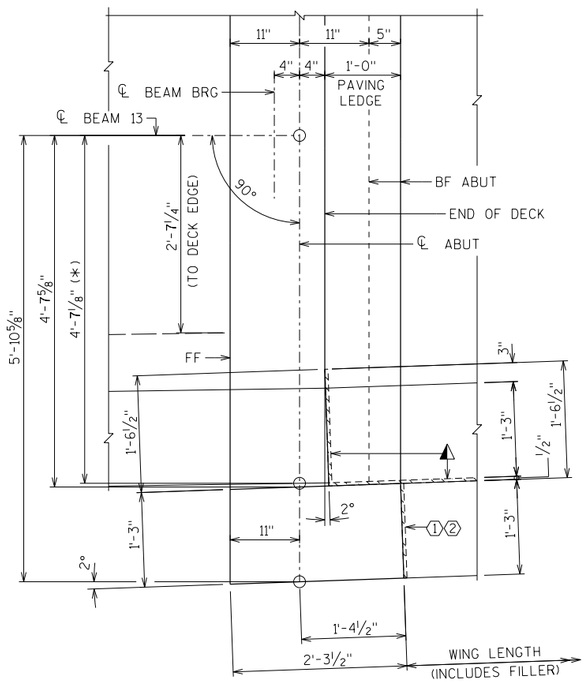
CORNER LAYOUT
WING 2



CORNER LAYOUT
WING 3



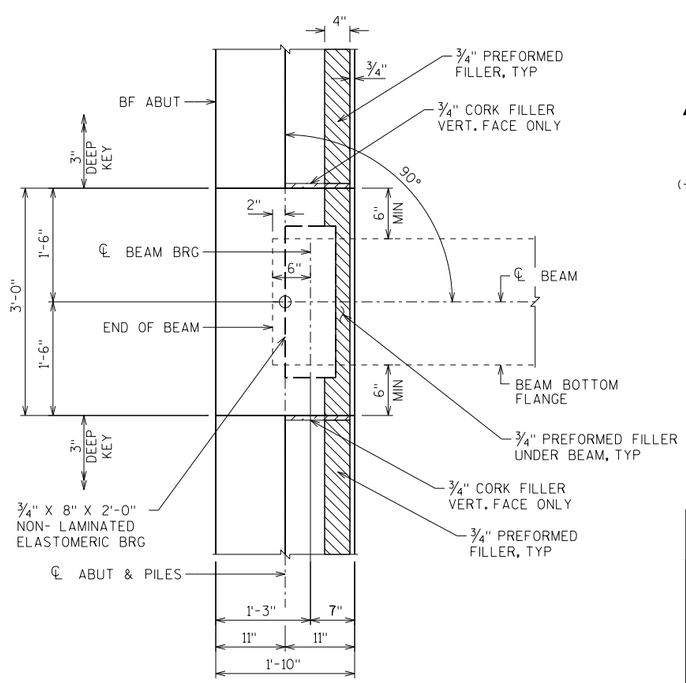
CORNER LAYOUT
WING 1



CORNER LAYOUT
WING 4

FINAL TOP OF DECK ELEVATIONS

	ELEV	C/L S ABUT	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	C/L N ABUT
W DECK EDGE	'B'	1076.33	1076.22	1076.10	1075.99	1075.88	1075.77	1075.66	1075.55	1075.44	1075.33	1075.22
GIRDER 1		1076.37	1076.26	1076.14	1076.03	1075.91	1075.80	1075.69	1075.58	1075.47	1075.36	1075.26
GIRDER 2		1076.45	1076.34	1076.22	1076.11	1075.99	1075.88	1075.77	1075.66	1075.55	1075.44	1075.34
GIRDER 3		1076.62	1076.50	1076.39	1076.27	1076.16	1076.05	1075.94	1075.83	1075.72	1075.61	1075.51
GIRDER 4		1076.78	1076.67	1076.55	1076.44	1076.33	1076.22	1076.11	1076.00	1075.89	1075.78	1075.68
GIRDER 5		1076.95	1076.83	1076.72	1076.61	1076.50	1076.38	1076.28	1076.17	1076.06	1075.95	1075.85
GIRDER 6		1077.11	1077.00	1076.89	1076.77	1076.66	1076.55	1076.44	1076.33	1076.23	1076.12	1076.02
GIRDER 7		1077.28	1077.17	1077.05	1076.94	1076.83	1076.72	1076.61	1076.50	1076.40	1076.29	1076.18
GIRDER 8		1077.44	1077.33	1077.22	1077.11	1077.00	1076.89	1076.78	1076.67	1076.57	1076.46	1076.35
STAGING LINE	'SL'	1077.53	1077.42	1077.31	1077.20	1077.09	1076.98	1076.87	1076.76	1076.65	1076.55	1076.44
GIRDER 9		1077.61	1077.50	1077.39	1077.27	1077.16	1077.06	1076.95	1076.84	1076.73	1076.63	1076.52
PROFILE GRADE	'G'	1077.61	1077.50	1077.40	1077.29	1077.18	1077.07	1076.97	1076.86	1076.75	1076.64	1076.54
GIRDER 10		1077.43	1077.33	1077.23	1077.12	1077.02	1076.91	1076.81	1076.70	1076.59	1076.49	1076.38
GIRDER 11		1077.25	1077.15	1077.05	1076.95	1076.84	1076.74	1076.63	1076.53	1076.42	1076.31	1076.20
GIRDER 12		1077.07	1076.97	1076.87	1076.77	1076.66	1076.56	1076.45	1076.35	1076.24	1076.13	1076.03
GIRDER 13		1076.89	1076.79	1076.69	1076.59	1076.49	1076.38	1076.28	1076.17	1076.07	1075.96	1075.85
E DECK EDGE	'A'	1076.85	1076.75	1076.64	1076.54	1076.43	1076.33	1076.22	1076.12	1076.01	1075.90	1075.80



BEARING PAD DETAIL

LEGEND

SEE SHEET 7 FOR ①②

◭ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES WITH ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ½" BELOW SURFACE OF CONCRETE).

(*) = DIMENSION IS MEASURED ALONG C/L ABUT TO THEORETICAL EDGE OF DECK.

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STRUCTURE B-49-67

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SUPERSTRUCTURE LAYOUT

SHEET 25 OF 41
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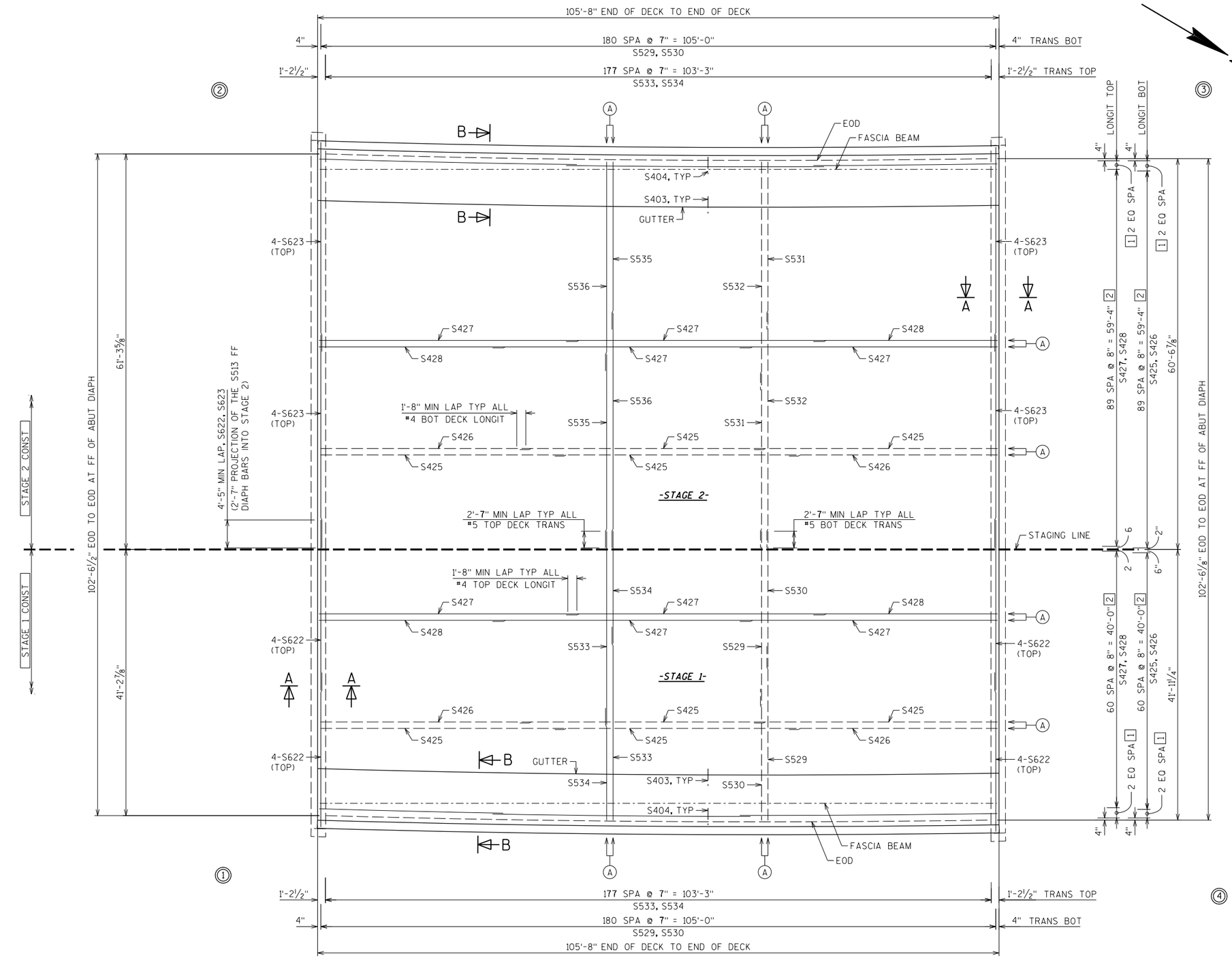
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PLAN STAGE 1 & STAGE 2
SHOWING REINFORCEMENT

SUPERSTRUCTURE NOTES:

BOTTOM TRANSVERSE BAR STEEL SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS WITH A CENTER TO CENTER SPACING NOT TO EXCEED 4'-0". ONE LINE OF CONTINUOUS BAR CHAIRS SHALL BE PLACED NEAR EACH EDGE OF SLAB TO SUPPORT THE END OF THE BOTTOM TRANSVERSE BAR STEEL.

TOP LONGITUDINAL BAR STEEL SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS IN TRANSVERSE DIRECTION ON 4'-0" CENTERS.

REFER TO SHEET 30 FOR SECTION A-A, B-B AND BILL OF BARS.

LEGEND

(A) ALTERNATE ROWS SO LAPS ARE STAGGERED.

[1] LONGIT BARS SPACED AT 8" MAX , FAN.

[2] PLACED PARELLEL TO STAGING LINE AND BEAMS.

◎ INDICATES WING

◎ INDICATES NEW GIRDER LINE

○ INDICATES EXISTING GIRDER LINE

——— INDICATES TOP BAR REINFORCEMENT

· — — — INDICATES BOTTOM BAR REINFORCEMENT

FF = FRONT FACE
BF = BACK FACE
EF = EACH FACE
EXIST = EXISTING
EOD = EDGE OF DECK
T = TOP
BOT = BOTTOM

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

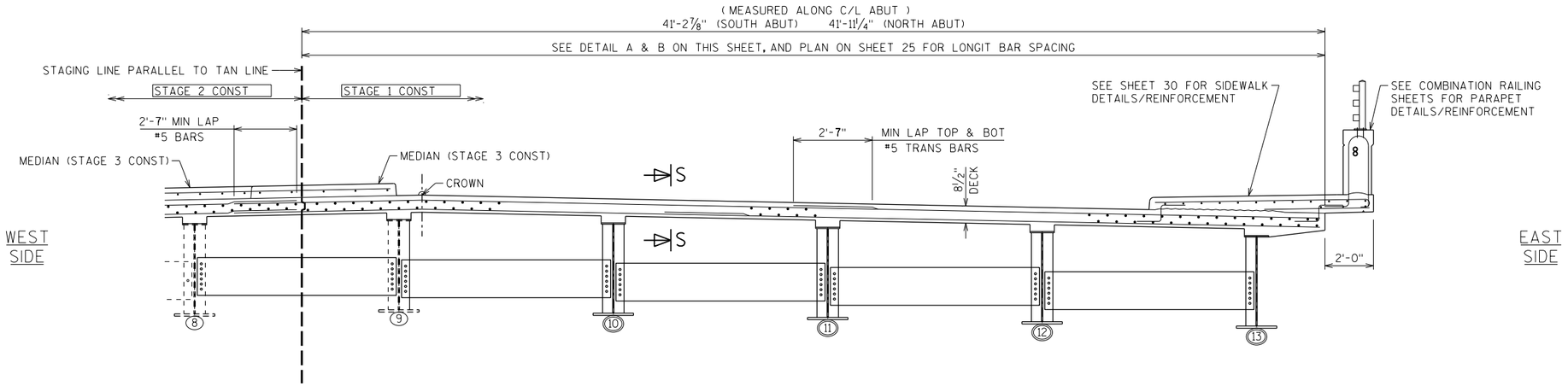
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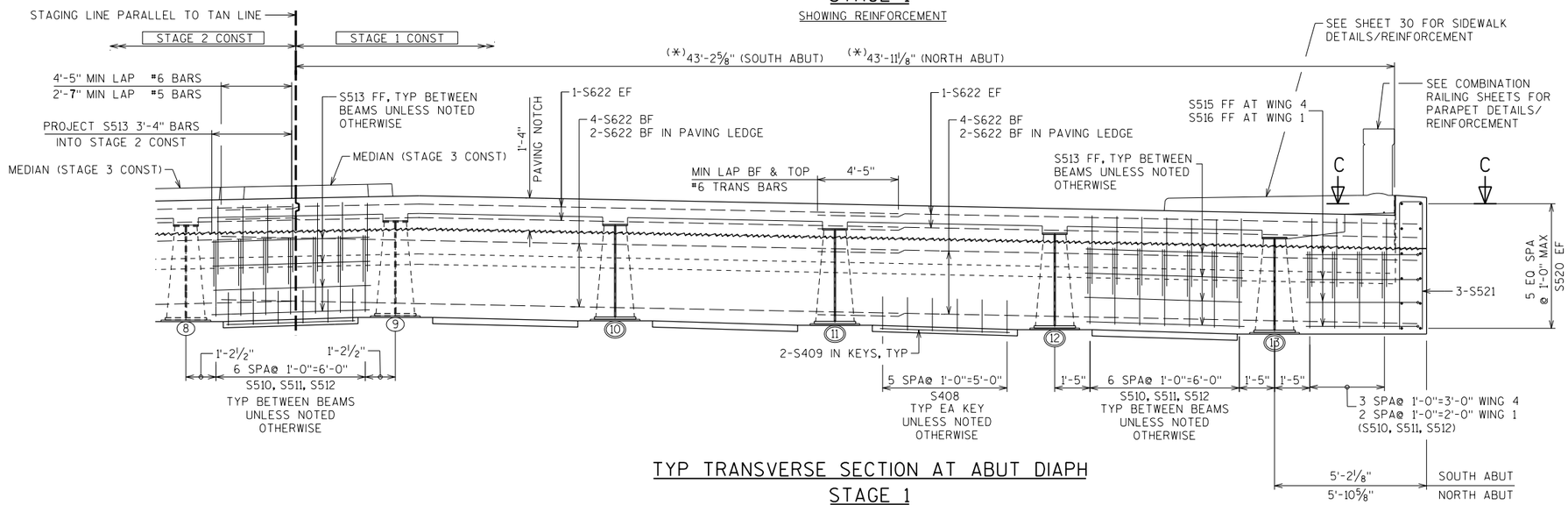
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STATE PROJECT NUMBER
6414-00-81

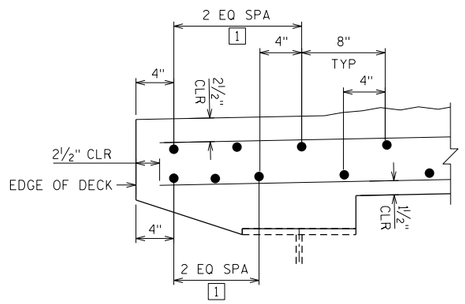


CROSS SECTION THRU BRIDGE
STAGE 1
SHOWING REINFORCEMENT

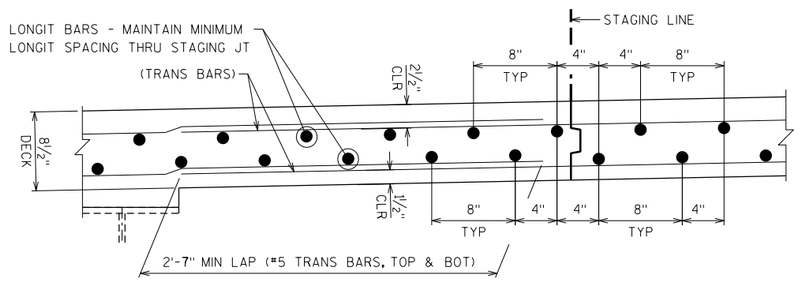


TYP TRANSVERSE SECTION AT ABUT DIAPH
STAGE 1
SHOWING REINFORCEMENT

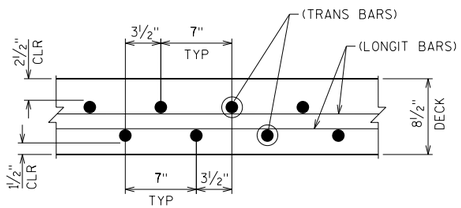
NORTH ABUTMENT SHOWN. SOUTH ABUTMENT REINFORCEMENT SIMILAR BY MIRROR AT C/L BRIDGE UNLESS OTHERWISE SHOWN OR NOTED.



DETAIL B
(TYP LONGITUDINAL BARS AT EDGE)



DETAIL A
(TYP LONGITUDINAL BAR SPACING)
(SHOWN AT STAGING JOINT)



SECTION S-S
(TYP TRANS BAR SPACING)

SECTION C-C
STAGE 1

NOTES

REFER TO SHEET 26 FOR SUPERSTRUCTURE NOTES & LEGEND.

REFER TO SHEET 30 FOR BILL OF BARS.

SEE SHEET 39 TO 41 FOR STAGING CONCEPT.

(*) = DIMENSION IS MEASURED ALONG C/L ABUT TO THEORETICAL EDGE OF SIDEWALK.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

SUPERSTRUCTURE DETAILS

SHEET 27 OF 41
519

STAGE 1

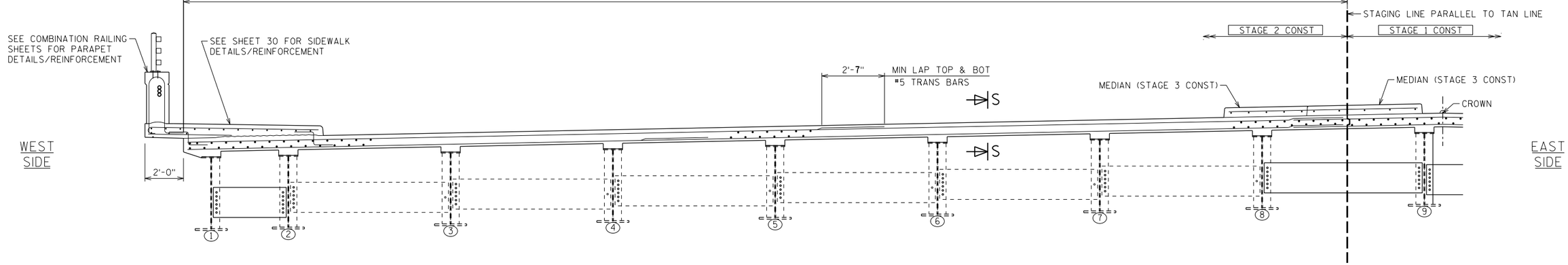
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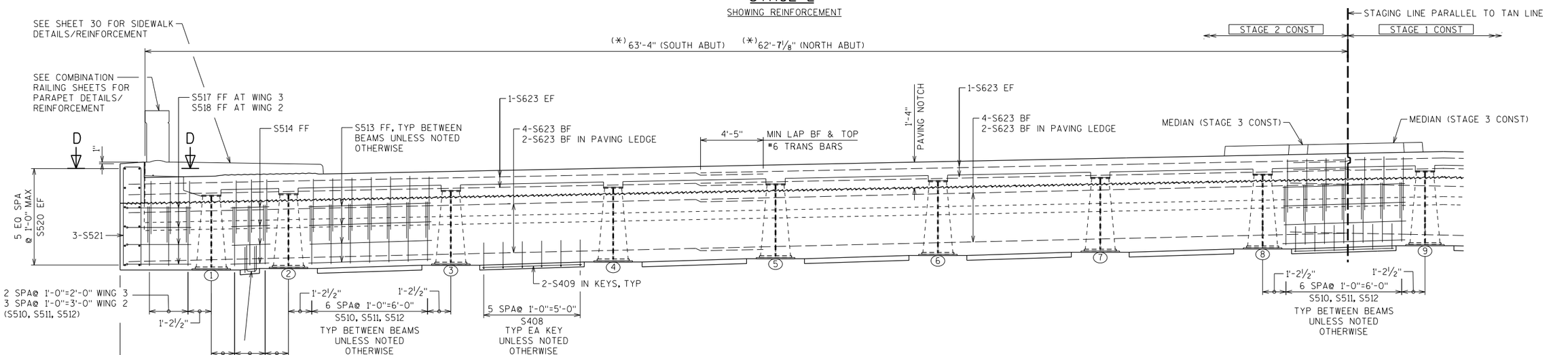
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STATE PROJECT NUMBER
6414-00-81

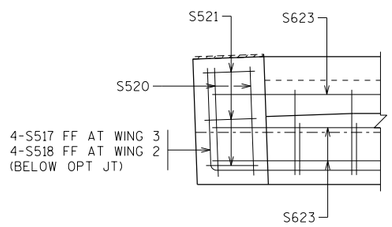


CROSS SECTION THRU BRIDGE
STAGE 2
SHOWING REINFORCEMENT



TYP TRANSVERSE SECTION AT ABUT DIAPH
STAGE 2
SHOWING REINFORCEMENT

NORTH ABUTMENT SHOWN. SOUTH ABUTMENT REINFORCEMENT SIMILAR BY MIRROR AT C/L BRIDGE UNLESS OTHERWISE SHOWN OR NOTED.



SECTION D-D
STAGE 2

NOTES

REFER TO SHEET 26 FOR SUPERSTRUCTURE NOTES & LEGEND.

REFER TO SHEET 30 FOR BILL OF BARS.

SEE SHEET 27 FOR SECTION S-S.

SEE SHEET 39 TO 41 FOR STAGING CONCEPT.

(*) = DIMENSION IS MEASURED ALONG C/L ABUT TO THEORETICAL EDGE OF SIDEWALK.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

SUPERSTRUCTURE DETAILS

SHEET 28 OF 41

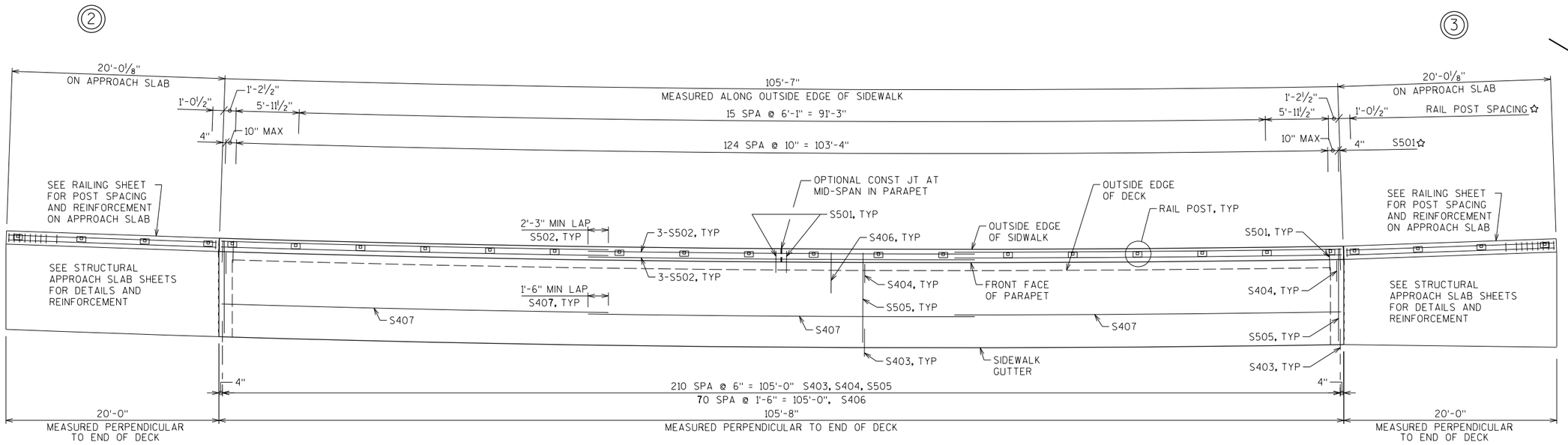
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STAGE 2

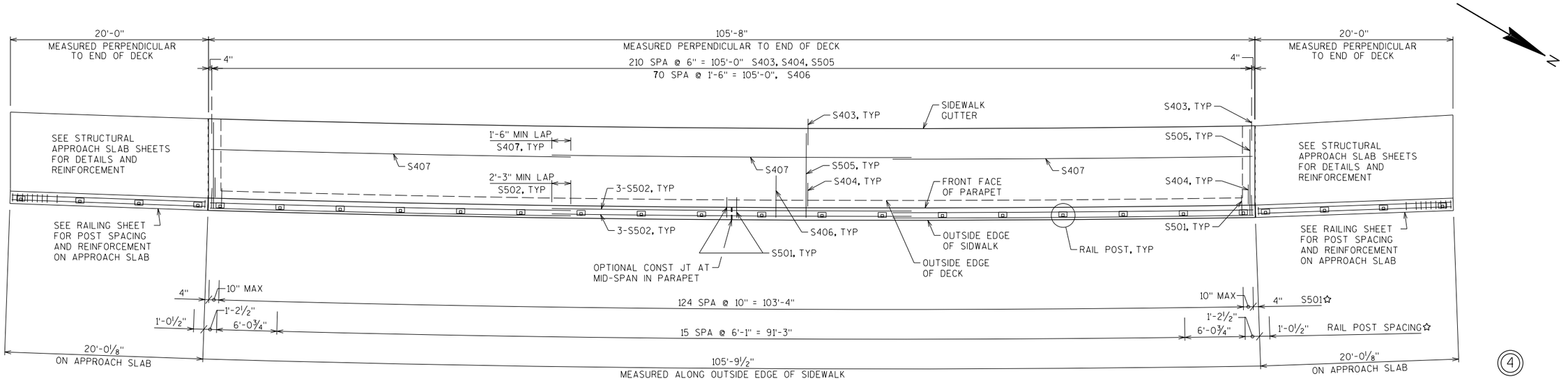
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STATE PROJECT NUMBER
6414-00-81



WEST SIDE PARAPET AND SIDEWALK



EAST SIDE PARAPET AND SIDEWALK

NOTES

REFER TO SHEET 26 FOR SUPERSTRUCTURE NOTES & LEGEND.

REFER TO SHEET 30 FOR BILL OF BARS.

☆ RAIL POST SPACING & REINFOREMENT SPACING MEASURED ALONG OUTSIDE EDGE OF SIDEWALK

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPET MAY BE USED. RUN BAR REINFORCEMENT THRU THE JOINT. LAP BARS A MIN OF 2'-3". MIN JOINT SPACING OF 80'-0". DEFINE CONSTRUCTION JOINT WITH A ¾" "V"-GROOVE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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SUPERSTRUCTURE DETAILS

SHEET 29 OF 41

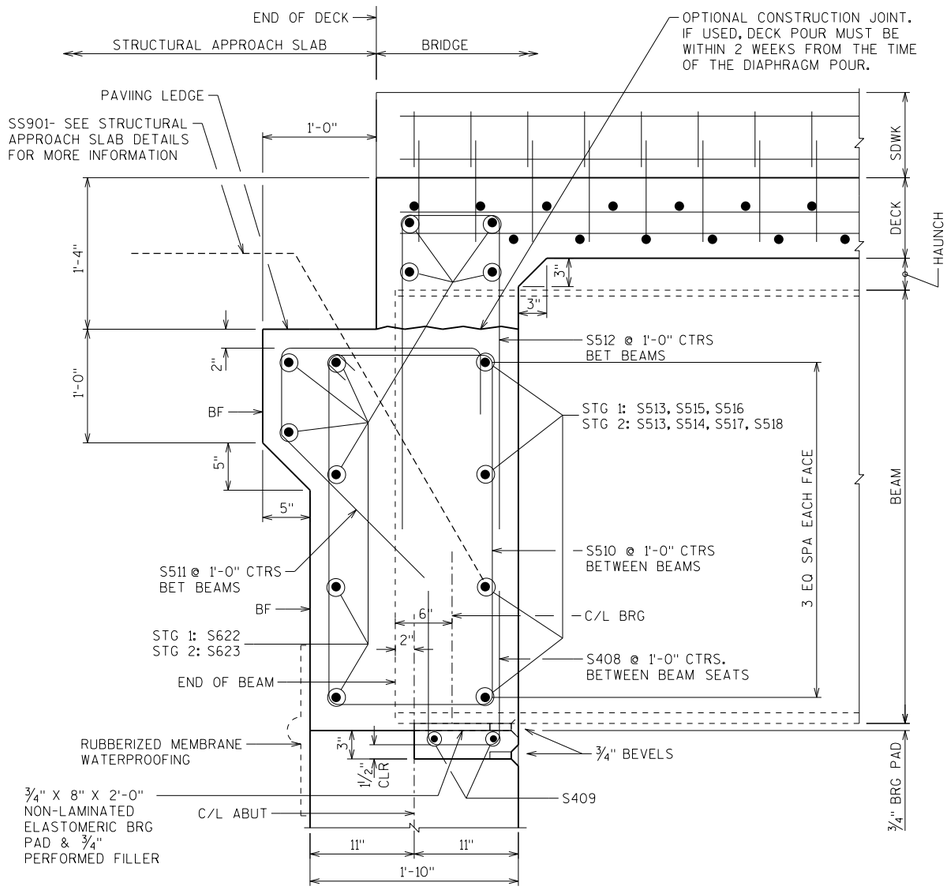
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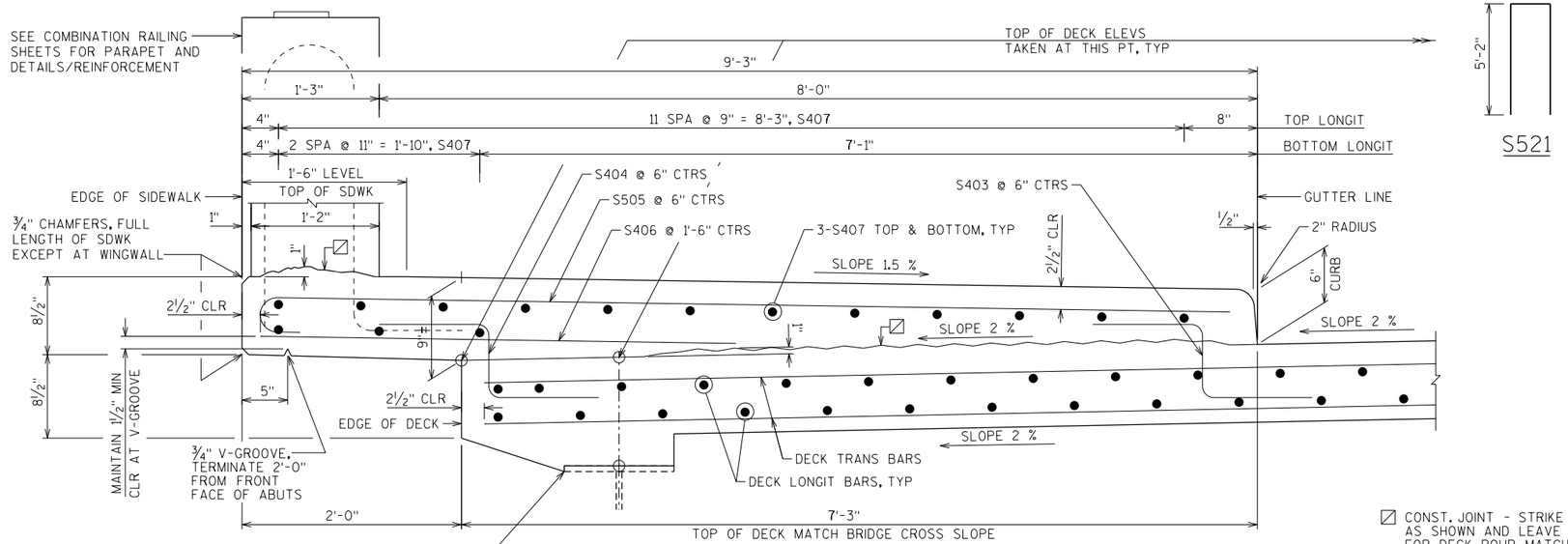
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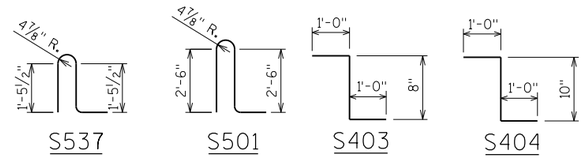
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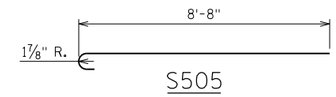


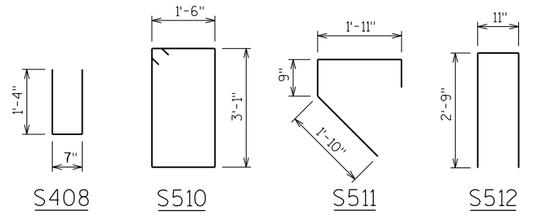
PART. LONGIT SECTION A-A

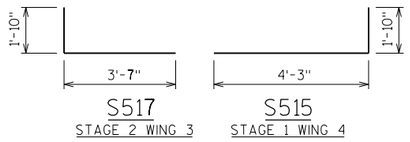


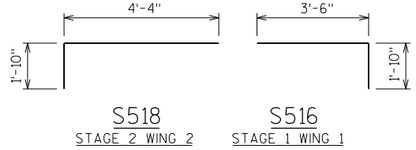
SECTION B-B THRU PARAPET & SIDEWALK ON BRIDGE

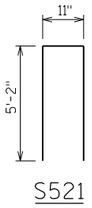












☒ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE CROSS SLOPE.

STATE PROJECT NUMBER

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NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE ENGLISH BAR DIAMETER SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

BILL OF BARS — SUPERSTRUCTURE

BAR MARK	COAT	NO. REQ'D.	LENGTH (FT-IN)	BAR SERIES	BENT	LOCATION	STG 1	STG 2
S501	X	127	7 - 0		X	PARAPET VERT	X	
"	X	127	7 - 0		X	PARAPET VERT		X
S502	X	18	37 - 5			PARAPET HORIZ	X	
"	X	18	37 - 5			PARAPET HORIZ		X
S403	X	211	2 - 6		X	SIDWALK DOWEL	X	
"	X	211	2 - 6		X	SIDWALK DOWEL		X
S404	X	211	2 - 8		X	SIDWALK DOWEL	X	
"	X	211	2 - 8		X	SIDWALK DOWEL		X
S505	X	211	9 - 1		X	SIDEWALK TRANS TOP	X	
"	X	211	9 - 1		X	SIDEWALK TRANS TOP		X
S406	X	71	4 - 4			SIDEWALK TRANS	X	
"	X	71	4 - 4			SIDEWALK TRANS		X
S407	X	45	36 - 4			SIDEWALK LONGIT	X	
"	X	45	36 - 4			SIDEWALK LONGIT		X
S408		54	3 - 1		X	DIAPH KEY VERT	X	
"		86	3 - 1		X	DIAPH KEY VERT		X
S409		20	5 - 2			DIAPH KEY HORIZ	X	
"		24	5 - 2			DIAPH KEY HORIZ		X
S510		69	9 - 10		X	DIAPH STIRRUP	X	
"		105	9 - 10		X	DIAPH STIRRUP		X
S511		69	5 - 3		X	DIAPH LEDGE	X	
"		105	5 - 3		X	DIAPH LEDGE		X
S512	X	69	6 - 2		X	DIAPH STIRRUP TIE	X	
"	X	105	6 - 2		X	DIAPH STIRRUP TIE		X
S513		40	6 - 4			DIAPH FF	X	
"		48	6 - 4			DIAPH FF		X
S514		8	2 - 0			DIAPH FF		X
S515		8	6 - 0		X	DIAPH FF WING 4	X	
S516		8	5 - 3		X	DIAPH FF WING 1	X	
S517		8	5 - 4		X	DIAPH FF WING 3		X
S518		8	6 - 1		X	DIAPH FF WING 2		X
NU			-					
S520		24	2 - 0			DIAPH COR	X	
"		24	2 - 0			DIAPH COR		X
S521		6	11 - 0		X	DIAPH COR	X	
"		6	11 - 0		X	DIAPH COR		X
S622	X	40	26 - 11			DIAPH BF & TOP	X	
S623	X	40	36 - 11			DIAPH BF & TOP		X
NU			-					
S425	X	126	38 - 0			DECK LONGIT B	X	
"	X	184	38 - 0			DECK LONGIT B		X
S426	X	63	33 - 2			DECK LONGIT B	X	
"	X	92	33 - 2			DECK LONGIT B		X
S427	X	126	40 - 0			DECK LONGIT T	X	
"	X	184	40 - 0			DECK LONGIT T		X
S428	X	63	29 - 2			DECK LONGIT T	X	
"	X	92	29 - 2			DECK LONGIT T		X
S529	X	181	27 - 0			DECK TRANS B	X	
S530	X	181	21 - 0			DECK TRANS B	X	
S531	X	181	27 - 6			DECK TRANS B		X
S532	X	181	37 - 0			DECK TRANS B		X
S533	X	178	30 - 0			DECK TRANS T	X	
S534	X	178	17 - 6			DECK TRANS T	X	
S535	X	178	30 - 6			DECK TRANS T		X
S536	X	178	33 - 6			DECK TRANS T		X
S537	X	3	4 - 11		X	AT JUNC BOX		X
S538	X	3	2 - 5			AT JUNC BOX		X

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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SUPERSTRUCTURE DETAILS

SHEET 30 OF 41

522

RAILCOMB3T
7-15

1.000

8

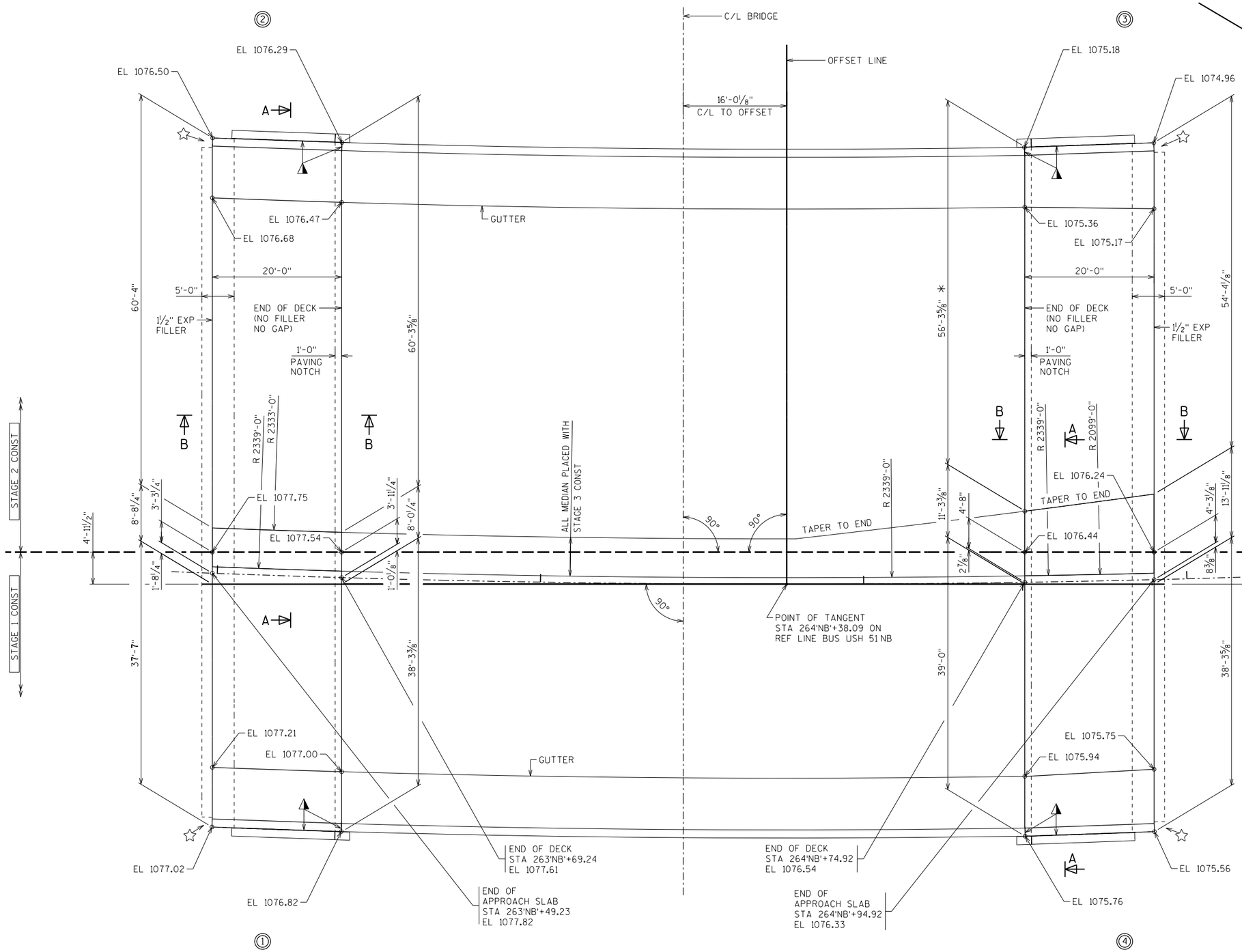
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LAYOUT NOTES

ALL MEDIAN CONCRETE PLACED UNDER STAGE 3 CONSTRUCTION.

SEE SHEET 1& 24 FOR ADDITIONAL NOTES AND DIMENSIONS FOR SUPERSTRUCTURE LAYOUT.

SEE SHEET 2 FOR "CROSS SECTION THRU BRIDGE", GENERAL NOTES AND POURING SEQUENCE NOTES.

SEE SHEET 25 FOR 'FINAL TOP OF DECK ELEVATIONS TABLE'.

SEE SHEET 32 FOR SECTION A-A & B-B.

ALL MEASUREMENTS ARE MADE PARALLEL OR PERPENDICULAR TO REFERENCE LINE UNLESS OTHERWISE NOTED.

THIS SHEET IS TO BE USED IN CONJUNCTION WITH THE ROADWAY DRAWINGS.

LEGEND

☆ NOTCH APPROACH SLAB FOOTING TO ALLOW FOR THRIE BEAM POST INSTALLATION, (ADJUST BAR STEEL AS NECESSARY).

◭ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES WITH ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ½" BELOW SURFACE OF CONCRETE).

STRUCTURAL APPROACH SLAB PLAN LAYOUT

REFER TO SHEET 23 & 24 FOR SUPERSTRUCTURE PLAN LAYOUT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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STRUCTURAL APPROACH SLABS DETAILS

SHEET 31 OF 41

523

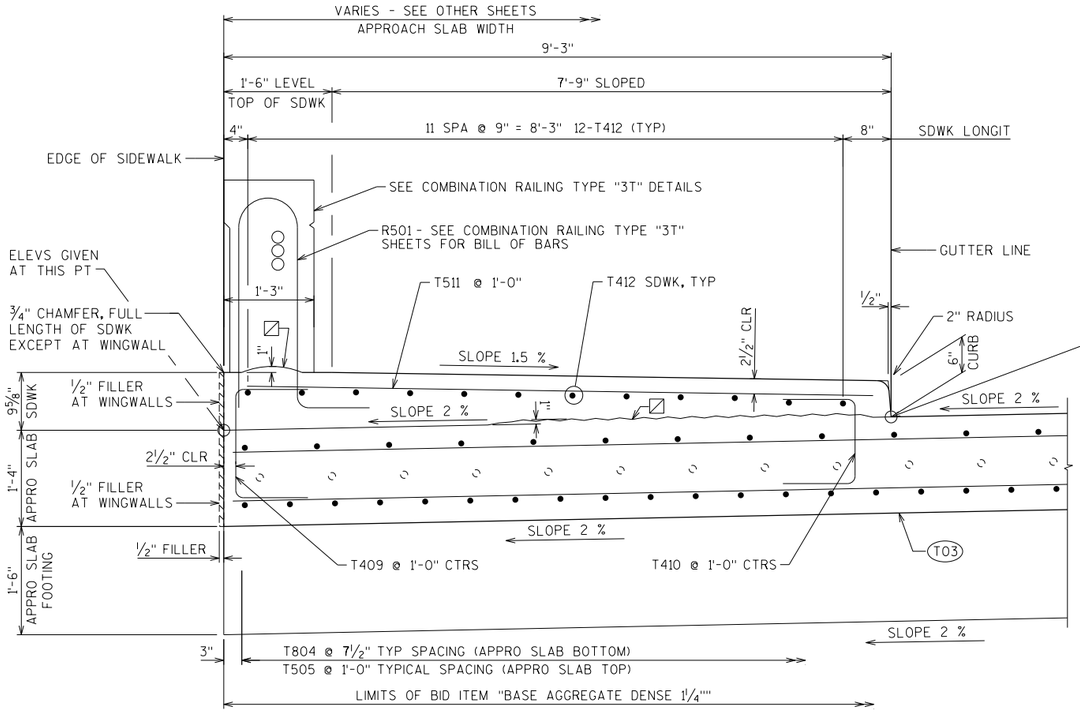
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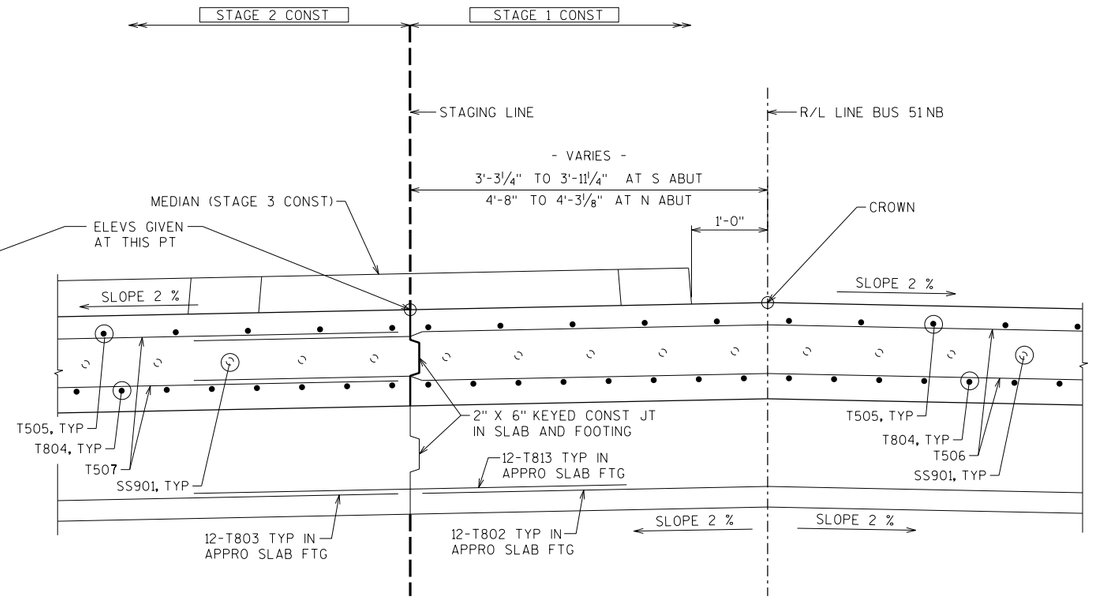
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STATE PROJECT NUMBER
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TYPICAL SIDEWALK AT
EACH SIDE OF APPROACH SLABS

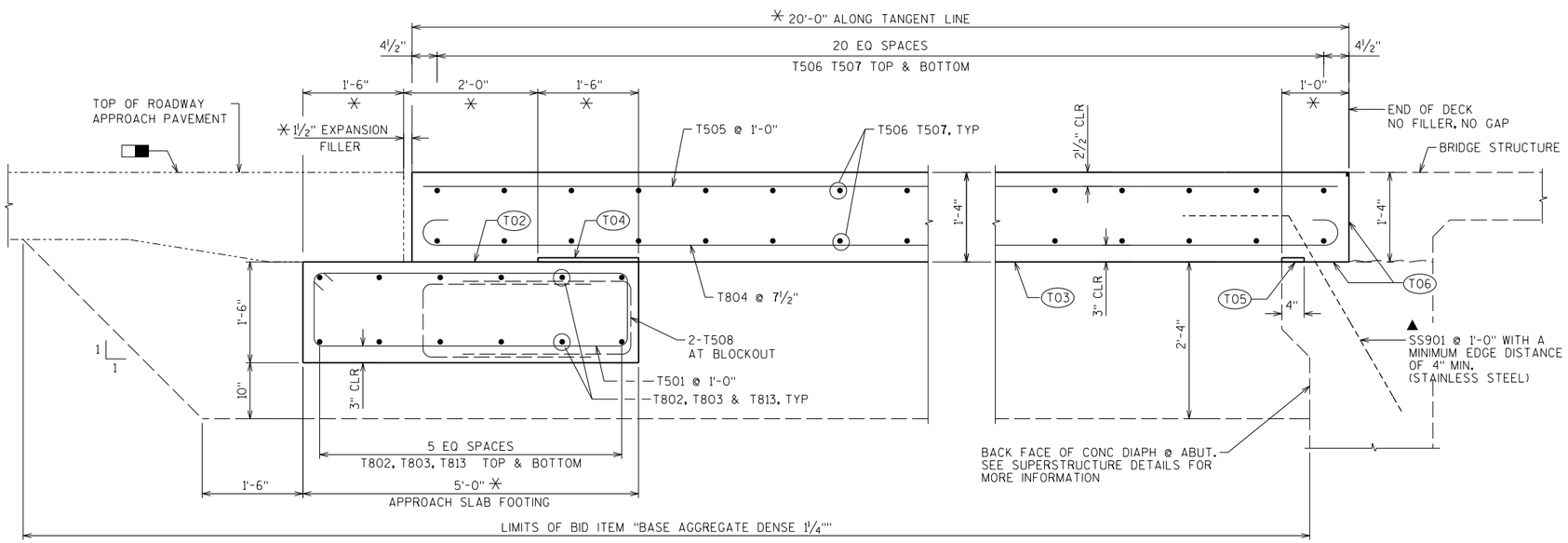


SECTION A-A

(TYPICAL AT EACH ABUTMENT)
(TYPICAL AT STAGE 1 AND STAGE 2)

NOTES:

PREFORMED JOINT FILLER AND POLYETHYLENE SHEETS ARE INCLUDED IN THE BID ITEM "CONCRETE MASONRY BRIDGES".



SECTION B-B

(TYPICAL AT EACH ABUTMENT)
(TYPICAL AT STAGE 1 AND STAGE 2)

LEGEND

- (T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN TOTAL THK) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.
- (T03) PLACE MULTIPLE LAYERS (0.03" MIN TOTAL THK) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.
- (T04) 3/4" PREFORMED JOINT FILLER ACCORDING TO STD SPEC 502.2.7 (1'-6" WIDE x FTG LENGTH).
- (T05) 3/4" PREFORMED JOINT FILLER ACCORDING TO STD SPEC 502.2.7 (4" WIDE x PAVING NOTCH LENGTH).
- (T06) APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH, AND VERTICAL SURFACE OF PARAPET PRIOR TO PLACING CONCRETE APPROACH SLAB.
- CONCRETE PAVEMENT APPROACH ROADWAY. SEE ROADWAY DRAWINGS FOR DETAILS.
- * MEASURED NORMAL TO THE ABUTMENT.
- ▲ THE BID ITEM FOR SS901 BARS SHALL BE STANDARD SPECIAL PROVISION "BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES"
- CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE CROSS SLOPE.

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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STRUCTURAL APPROACH SLAB DETAILS

SHEET 32 OF 41

524

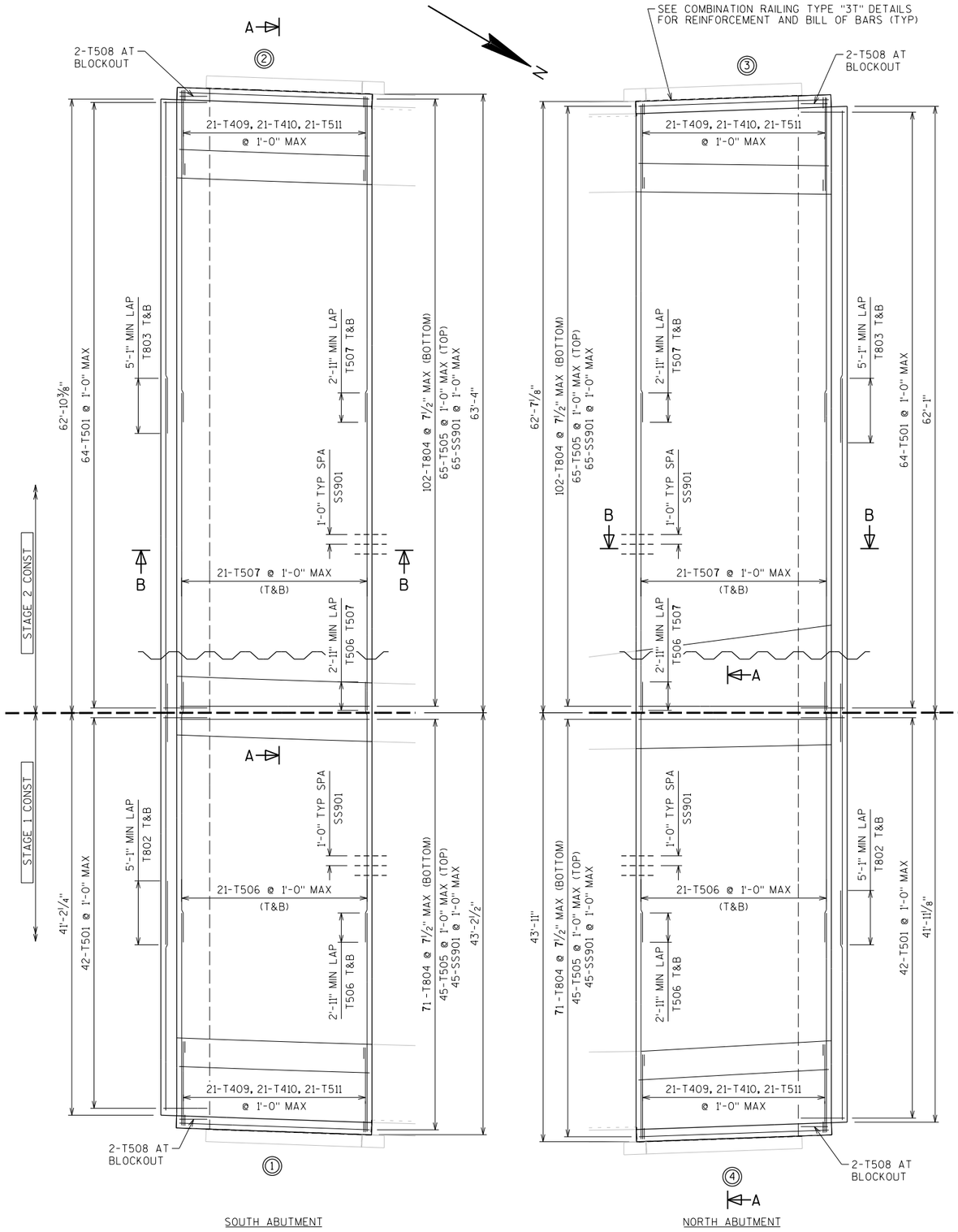
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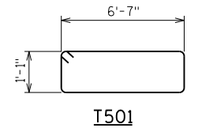
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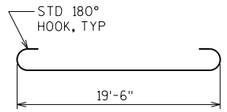
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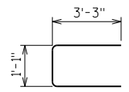
STRUCTURAL APPROACH SLAB SHOWING REINFORCEMENT



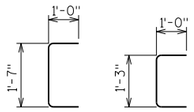
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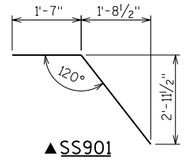
T804



T508



T409 T410



▲SS901

NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE ENGLISH BAR DIAMETER SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

BILL OF BARS — APPROACH SLABS

BAR MARK	COAT	SOUTH APPRO SLAB	NORTH APPRO SLAB	LENGTH (FT-IN)	BAR SERIES	BENT	LOCATION	STG 1	STG 2
T501		42		16 - 0		X	FOOTING STIRRUP	X	
"			42	16 - 0		X	FOOTING STIRRUP	X	
"		64		16 - 0		X	FOOTING STIRRUP		X
"			64	16 - 0		X	FOOTING STIRRUP		X
T802		24		23 - 6			FOOTING TRANS	X	
"			24	23 - 6			FOOTING TRANS	X	
T803		24		34 - 0			FOOTING TRANS		X
"			24	34 - 0			FOOTING TRANS		X
T804	X	71		21 - 4		X	SLAB LONGIT - BOTTOM	X	
"	X		71	21 - 4		X	SLAB LONGIT - BOTTOM	X	
"	X	102		21 - 4		X	SLAB LONGIT - BOTTOM		X
"	X		102	21 - 4		X	SLAB LONGIT - BOTTOM		X
T505	X	45		19 - 6			SLAB LONGIT - TOP	X	
"	X		45	19 - 6			SLAB LONGIT - TOP	X	
"	X	65		19 - 6			SLAB LONGIT - TOP		X
"	X		65	19 - 6			SLAB LONGIT - TOP		X
T506	X	42		23 - 0			SLAB TRANS - TOP & BOTTOM	X	
"	X		42	23 - 0			SLAB TRANS - TOP & BOTTOM	X	
T507	X	42		33 - 0			SLAB TRANS - TOP & BOTTOM		X
"	X		42	33 - 0			SLAB TRANS - TOP & BOTTOM		X
T508	X	2		7 - 4		X	STIRRUP AT BLOCKOUT	X	
"	X		2	7 - 4		X	STIRRUP AT BLOCKOUT	X	
"	X	2		7 - 4		X	STIRRUP AT BLOCKOUT		X
"	X		2	7 - 4		X	STIRRUP AT BLOCKOUT		X
T409	X	21		3 - 5		X	SIDEWALK DOWEL	X	
"	X		21	3 - 5		X	SIDEWALK DOWEL	X	
"	X	21		3 - 5		X	SIDEWALK DOWEL		X
"	X		21	3 - 5		X	SIDEWALK DOWEL		X
T410	X	21		3 - 1		X	SIDEWALK DOWEL	X	
"	X		21	3 - 1		X	SIDEWALK DOWEL	X	
"	X	21		3 - 1		X	SIDEWALK DOWEL		X
"	X		21	3 - 1		X	SIDEWALK DOWEL		X
T511	X	21		8 - 8			SIDEWALK TRANS	X	
"	X		21	8 - 8			SIDEWALK TRANS	X	
"	X	21		8 - 8			SIDEWALK TRANS		X
"	X		21	8 - 8			SIDEWALK TRANS		X
T412	X	12		19 - 5			SIDEWALK LONGIT	X	
"	X		12	19 - 5			SIDEWALK LONGIT	X	
"	X	12		19 - 5			SIDEWALK LONGIT		X
"	X		12	19 - 5			SIDEWALK LONGIT		X
T813		12	12	6 - 0			FOOTING TRANS	X	

BILL OF BARS — STAINLESS STEEL

BAR MARK	COAT	SOUTH APPRO SLAB	NORTH APPRO SLAB	LENGTH (FT-IN)	BAR SERIES	BENT	LOCATION	STG 1	STG 2
▲ SS901	SS	45		5 - 0		X	ABUT DIAPH TO APPROACH SLAB	X	
▲ "	SS		45	5 - 0		X	ABUT DIAPH TO APPROACH SLAB	X	
▲ "	SS	65		5 - 0		X	ABUT DIAPH TO APPROACH SLAB		X
▲ "	SS		65	5 - 0		X	ABUT DIAPH TO APPROACH SLAB		X

NOTES

SEE SHEET 32 FOR APPROACH SLAB NOTES AND LEGEND.

SEE SHEET 32 FOR SECTION A-A & B-B.

T&B = TOP & BOTTOM BARS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-49-67

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STRUCTURAL APPROACH SLAB DETAILS

SHEET 33 OF 41

525

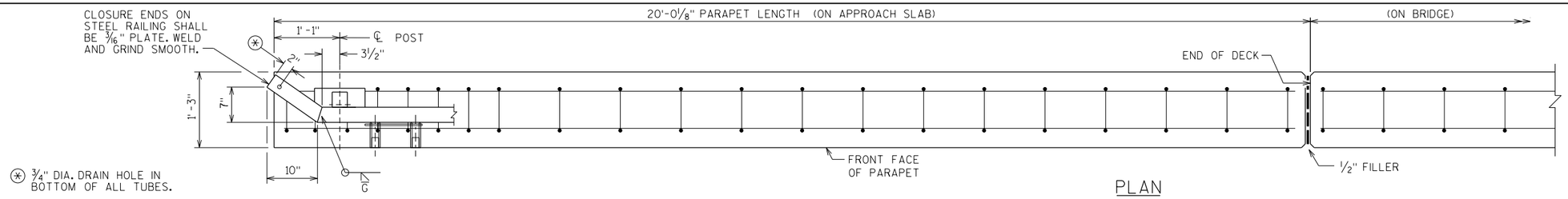
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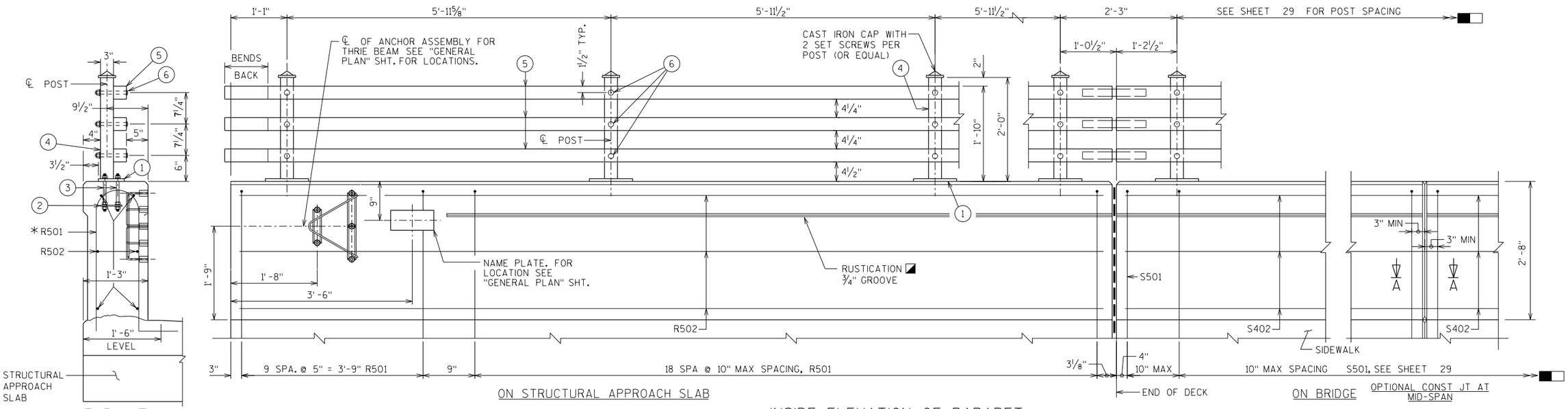
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STATE PROJECT NUMBER
6414-00-81



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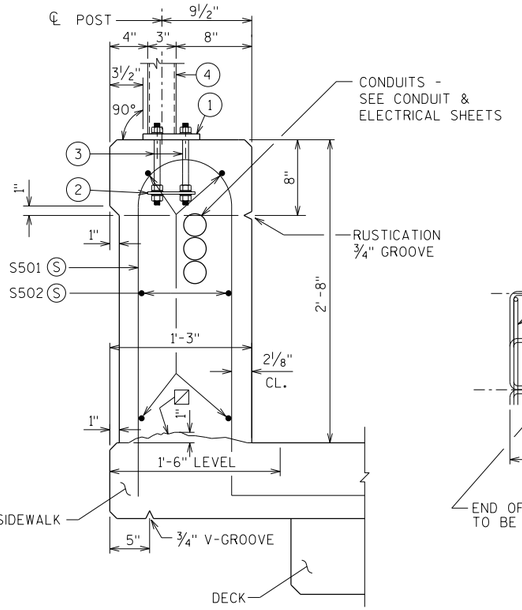


ON STRUCTURAL APPROACH SLAB

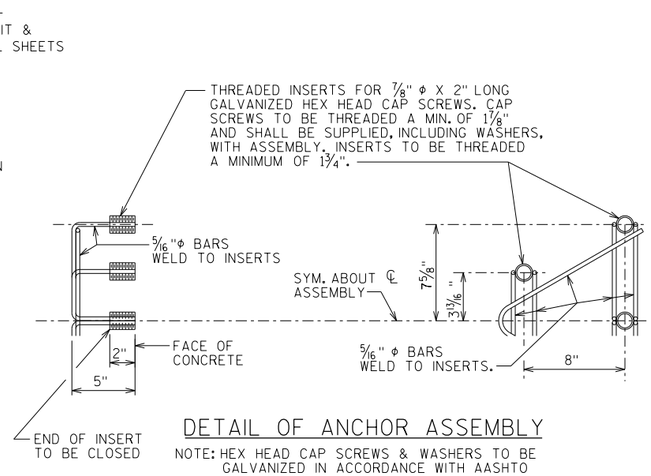
INSIDE ELEVATION OF PARAPET

END VIEW

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF THRU THE JOINT. LAP LONGIT BARS A MIN OF 1'-9". MIN JOINT SPACING OF 80'-0". DEFINE CONSTR JT WITH A 3/4" "V"-GROOVE.



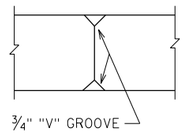
SECTION THRU PARAPET ON BRIDGE



DETAIL OF ANCHOR ASSEMBLY

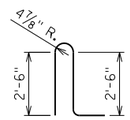
NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY BID ITEM SHALL BE "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.



SECTION A-A

OPTIONAL CONST JT AT MID-SPAN



R501

NOTES

SEE SHEET 35 FOR METAL RAILING NOTES AND LEGEND.

NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE ENGLISH BAR DIAMETER SIZE.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

BILL OF BARS — APPROACH SLABS PARAPETS

BAR MARK	COAT	SOUTH APPRO SLAB	NORTH APPRO SLAB	LENGTH (FT-IN)	BAR SERIES	BENT	LOCATION	STG 1	STG 2
R501	X	29		7 - 0		X	PARAPET VERT AT WINGS	X	
"	X		29	7 - 0		X	PARAPET VERT AT WINGS	X	
"	X	29		7 - 0		X	PARAPET VERT AT WINGS		X
"	X		29	7 - 0		X	PARAPET VERT AT WINGS		X
R502	X	6		19 - 7			PARAPET HORIZ AT WINGS	X	
"	X		6	19 - 7			PARAPET HORIZ AT WINGS	X	
"	X	6		19 - 7			PARAPET HORIZ AT WINGS		X
"	X		6	19 - 7			PARAPET HORIZ AT WINGS		X

LEGEND

- (S) SEE SUPERSTRUCTURE SHEETS FOR BILL OF BARS FOR CONCRETE PARAPET.
- RAIL POST SPACING & REINFOREMENT SPACING MEASURED ALONG OUTSIDE EDGE OF SIDEWALK.
- CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE CROSS SLOPE.
- * ADJUST LOCATIONS OF BARS TO ALLOW PLACEMENT OF ANCHOR ASSEMBLY FOR RAILING AND BEAM GUARD.
- END 3/4" GROOVE 3" FROM NAME PLATE OR BEAM GUARD (IF NAME PLATE IS NOT PRESENT). OTHERWISE RUN TO END OF PARAPET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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COMBINATION RAILING TYPE "3T"

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RAILCOMB3T
7-15

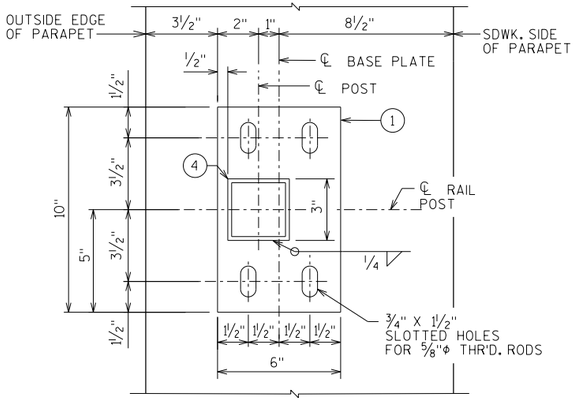
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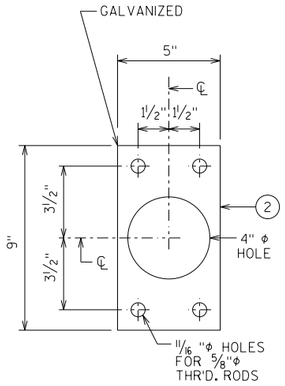
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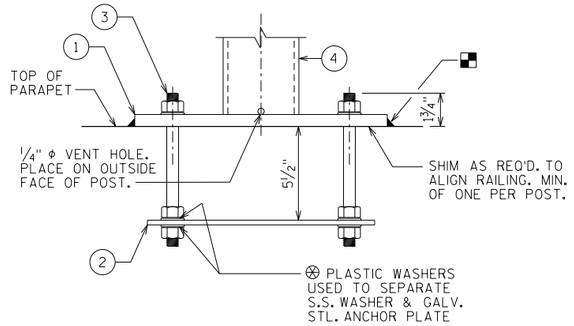
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TYPICAL RAIL POST BASE PLATE

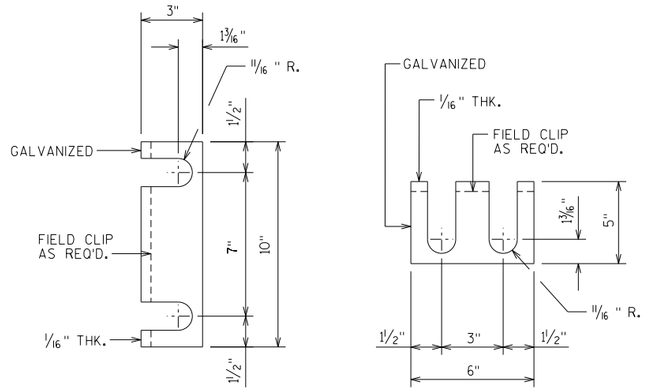


ANCHOR PLATE



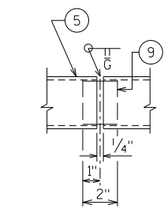
ANCHORAGE FOR RAIL POSTS

☆NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



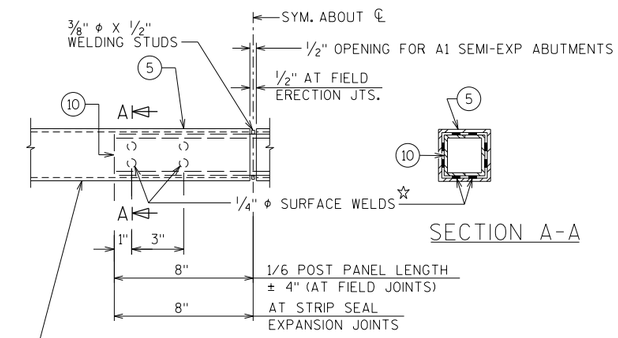
RAIL POST SHIM DETAIL

(2 SETS PER POST)



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



SECTION A-A

FIELD ERECTION JOINT DETAIL

☆ MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.

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LEGEND

(1) BASE PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES FOR THR'D RODS NO. 3. WELD TO NO. 4 AS SHOWN. SLOTS PARALLEL TO LONG SIDE OF PLATE.

(2) ¼" X 5" X 9" ANCHOR PLATE (GALVANIZED) WITH 11/16 " DIA. HOLES FOR THR'D. RODS NO. 3.

(3) ⅝" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. ☆

(4) STRUCTURAL TUBING 3" X 3" X 3/16" POSTS, PLACE VERTICAL. WELD TO NO. 1, AND USE 1" DIA. HOLES (FRONT AND BACK) FOR BOLT NO. 6.

(5) STRUCTURAL TUBING 3" X 3" X 3/16" RAILS, WITH 11/16 " DIA. HOLES (FRONT AND BACK) FOR BOLT NO. 6. BOLT TO NO. 4.

(6) ⅝" DIA. A325 SLOTTED ROUND HEAD BOLT WITH HEX NUT, 3/16" X 1½" X 1½" WASHER, AND LOCK WASHER.

(9) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".

(10) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ STRIP SEAL EXP. JTS.)

(11) SLEEVE FABRICATED FROM STRUCTURAL TUBING 2½" X 2½" X 3/16" X '- " LONG. SLOTTED HOLES IN TOP AND BOTTOM.

(12) ½" DIA. STAINLESS STEEL BOLT WITH NUT AND LOCKWASHER.

☆ ALTERNATIVE ANCHORAGE: 4 EQUIVALENT STAINLESS STEEL CONCRETE ADHESIVE ANCHORS ⅝-INCH. EMBED 7" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTION 502.2.12 OF THE STANDARD SPECIFICATIONS.

RAILING NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE 3T B-49-67", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN. LENGTH FOR PAYMENT MEASURED END TO END OF RAILS.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ENDS OF STRUCTURAL TUBING SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.

ALL PLATES, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATE NO. 1, WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

◪ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS IN CONCRETE PARAPET ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3 & 12) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

PAINT OVER GALVANIZING (EXCEPT NO. 2) WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED FEDERAL COLOR NO. 20122, BROWN.

INSIDE OF TUBES TO BE PAINTED AT ALL FIELD ERECTION AND EXPANSION JOINTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

COMBINATION RAILING TYPE "3T"

SHEET 35 OF 41

527

RAILCOMB3TDET
9-16

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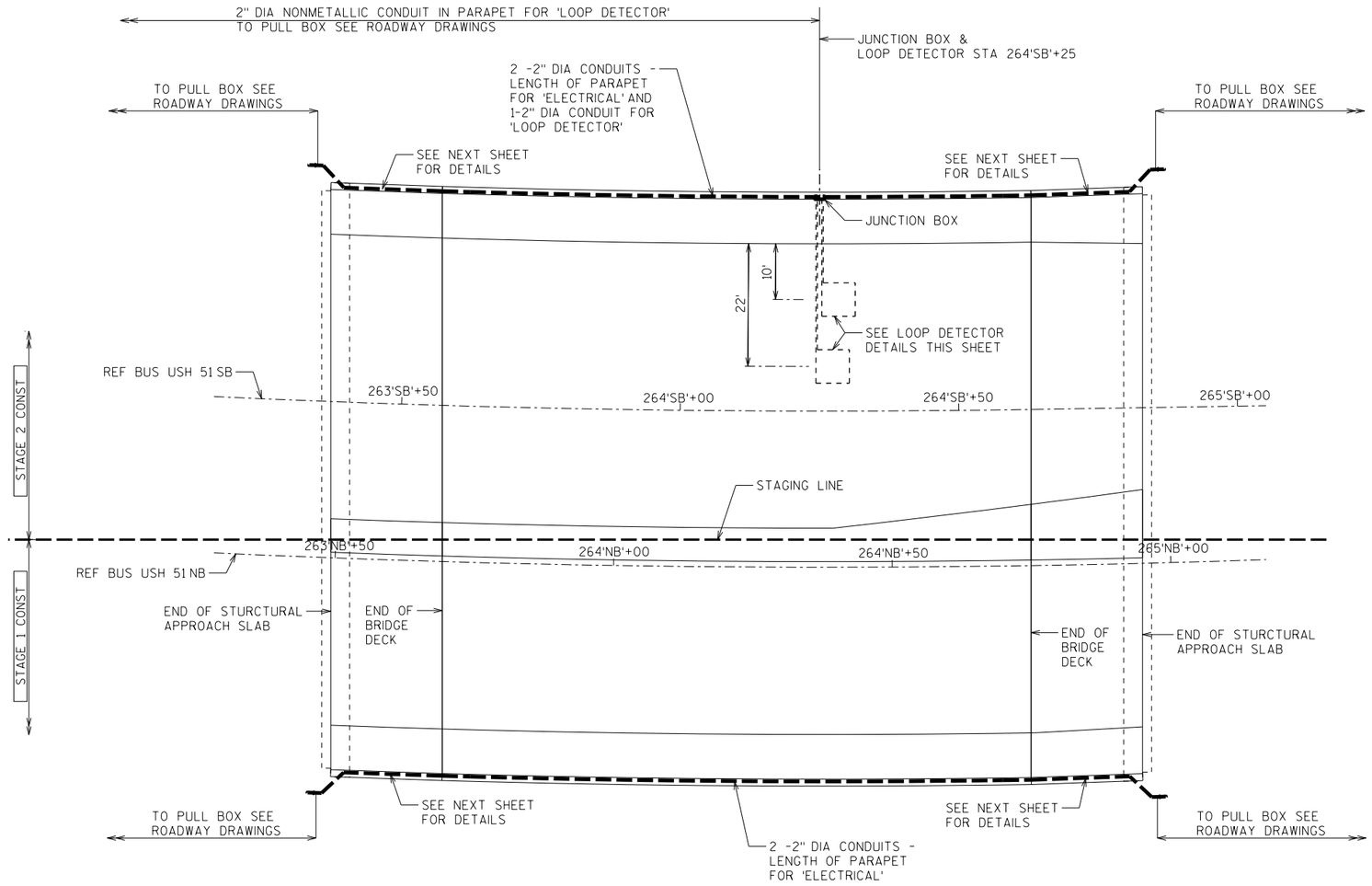
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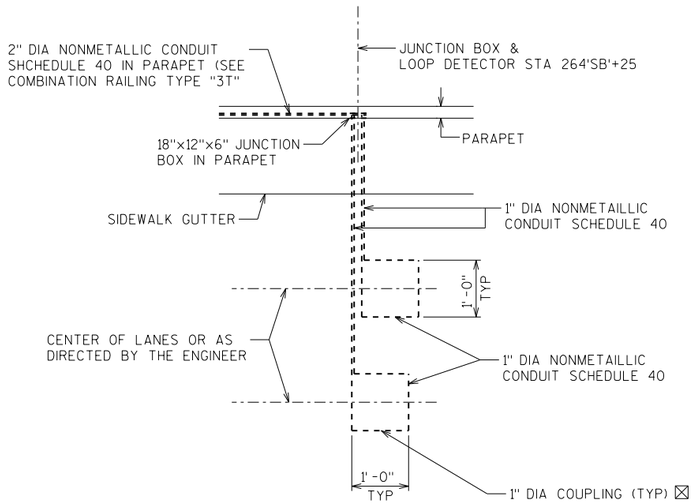
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CONDUIT LAYOUT



LOOP DETECTOR DETAIL

THE LOOP DETECTORS TO THE BOTTOM SIDE OF THE TOP MAT OF REINFORCEMENT.

☒ INCLUDED IN BID ITEM "CONDUIT RIGID NONMETALLIC SUCHEDULE 40 1-INCH".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-49-67

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CONDUIT AND ELECTRICAL WORK

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528

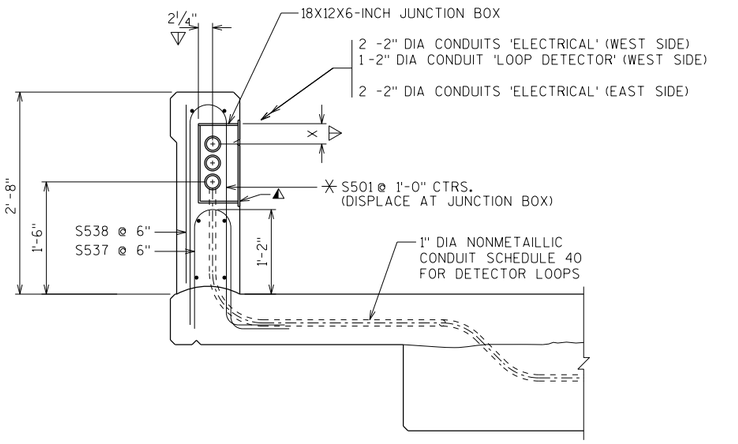
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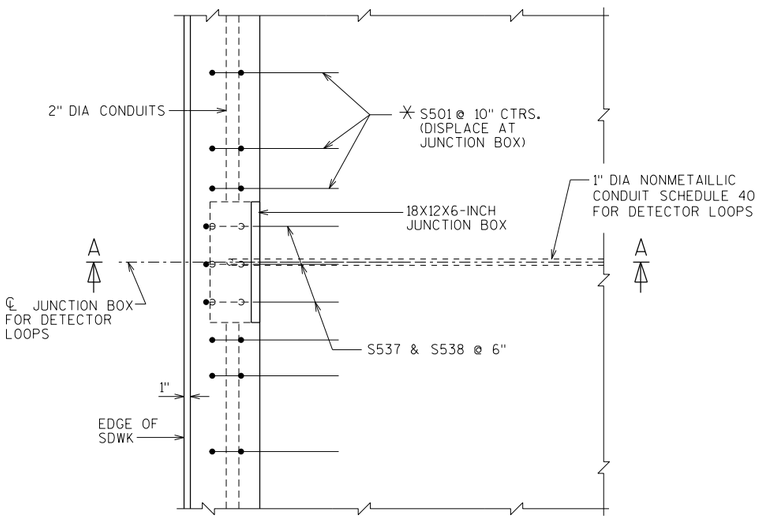
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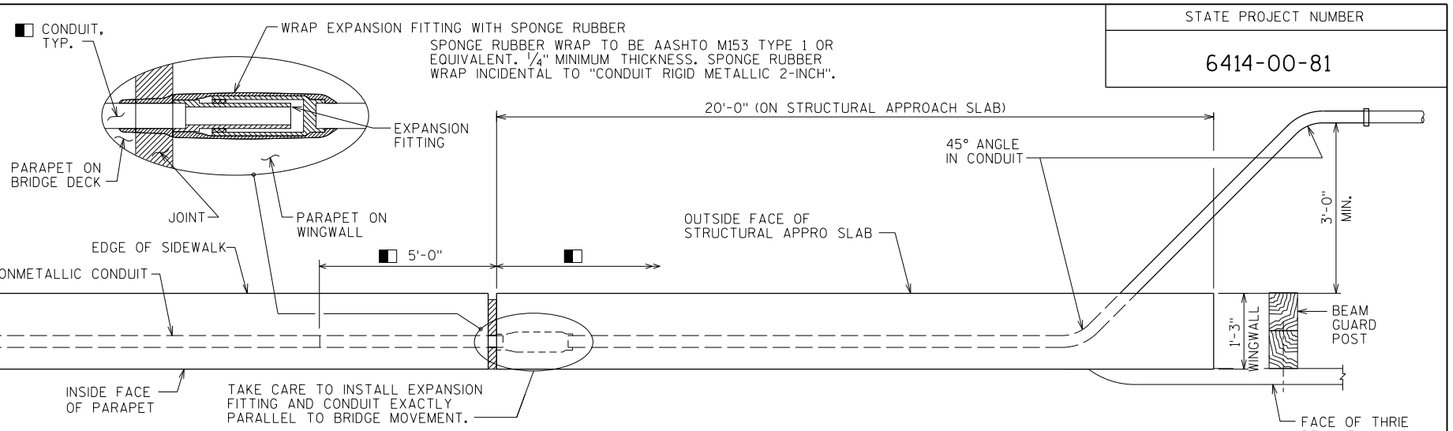
STATE PROJECT NUMBER
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SECTION A-A

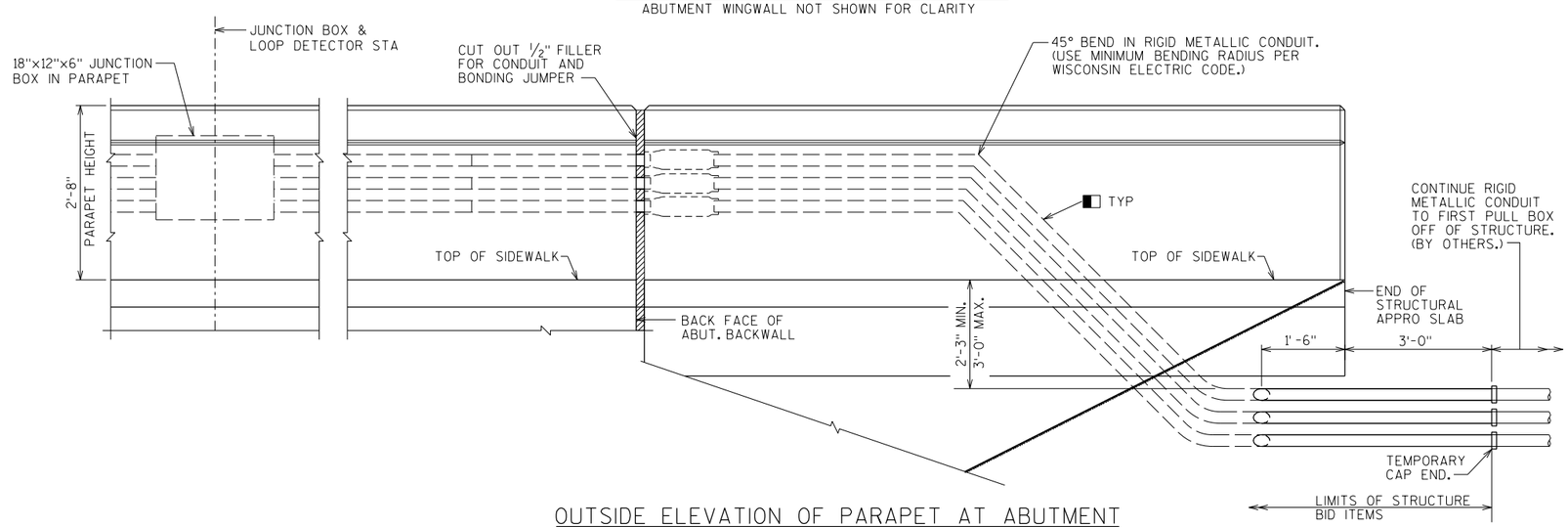


PLAN AT JUNCTION BOX



PLAN OF PARAPET AT ABUTMENT

ABUTMENT WINGWALL NOT SHOWN FOR CLARITY



OUTSIDE ELEVATION OF PARAPET AT ABUTMENT

ABUTMENT WINGWALL NOT SHOWN FOR CLARITY
(3RD LINE OF CONDUIT SHOWN FOR LOOP DETECTOR ONLY)

■ USE RIGID METALLIC CONDUIT 5'-0" INTO PARAPET ON DECK SIDE AND THRU PARAPET AND STRUCTURAL APPROACH SLAB TO A MINIMUM OF 6" BEYOND END OF STRUCTURAL APPROACH SLAB. (FOR GROUNDING PURPOSES.)

◭ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.

▽ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.

✳ SEE "COMBINATION RAILING TYPE "3T" FOR ADDITIONAL BAR STEEL DETAILS.

NOTES

APPROVED MANUFACTURERS - JUNCTION BOXES:
SEE APPROVED MATERIAL LIST.

USE A JUNCTION BOX TO KEEP A CONTINUOUS RUN OF CONDUT (PUL LENGTH) TO A MAX OF 190 FT.

BID ITEMS

"CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH"
"CONDUIT RIGID METALLIC 2-INCH"
"JUNCTION BOXES 18X12X6-INCH", EACH.
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"

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STRUCTURE B-49-67

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CONDUIT AND ELECTRICAL WORK

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PPTAELEC
7-13

8

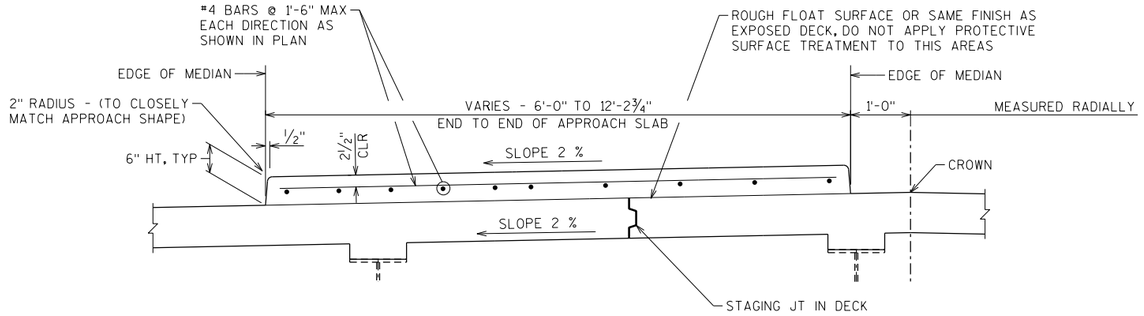
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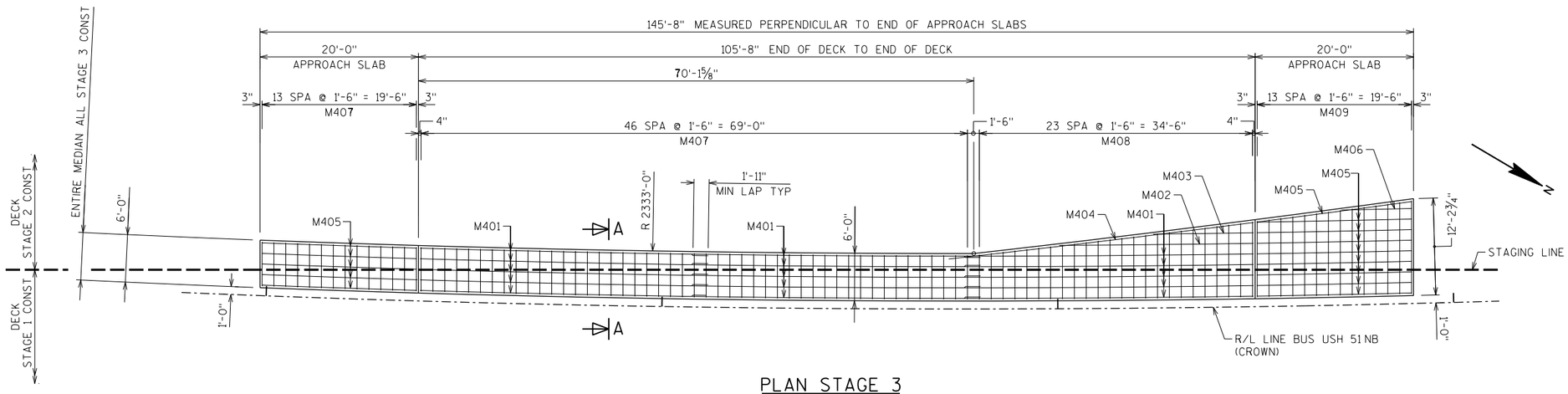
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TYPICAL SECTION A-A

CLEAN ALL LOOSE MATERIAL ON THE DECK AT THE MEDIAN LOCATION PRIOR TO MEDIAN PLACEMENT USING HIGH PRESSURE WATER OR AIR, ENSURING ALL FREE-STANDING WATER IS REMOVED PRIOR TO MEDIAN PLACEMENT. NEAT CEMENT IS REQUIRED PER 509.3.9.2 OF THE STANDARD SPECIFICATIONS UNLESS THE MEDIAN IS POURED WITHIN 45 DAYS OF COMPLETING THE DECK POUR.



PLAN STAGE 3

SHOWING REINFORCEMENT

NOTES

REFER TO "SUPERSTRUCTURE PLAN LAYOUT" AND "STRUCTURAL APPROACH SLAB PLAN LAYOUT" DETAILS SHEETS.

NOTE: THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE ENGLISH BAR DIAMETER SIZE.

LENGTH SHOWN FOR BAR SERIES BARS IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE AND BENDING DETAILS FOR ACTUAL LENGTHS.

BAR SERIES TABLE — MEDAIAN STAGE 3

BAR MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
M408	1 SET OF 24	5'-8" TO 9'-6"		TRANS
M409	1 SET OF 14	9'-7" TO 11'-9"		TRANS

BUNDLE AND TAG EACH SERIES SEPARATELY

BILL OF BARS — MEDAIAN STAGE 3

BAR MARK	COAT	NO. REQ'D.	LENGTH (FT-IN)	BAR SERIES	BENT	LOCATION
M401	X	15	36 - 9			LONGIT ON DECK
M402	X	1	24 - 6			LONGIT ON DECK
M403	X	1	12 - 6			LONGIT ON DECK
M404	X	1	40 - 0			LONGIT ON DECK
M405	X	14	19 - 7			LONGIT ON APPRO SLABS
M406	X	1	8 - 11			LONGIT ON APPRO SLABS
M407	X	61	5 - 7			TRANS
M408	X	24	7 - 7	X		TRANS
M409	X	14	10 - 8	X		TRANS ON N APPRO SLAB

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STRUCTURE B-49-67

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MEDIAN STAGE 3

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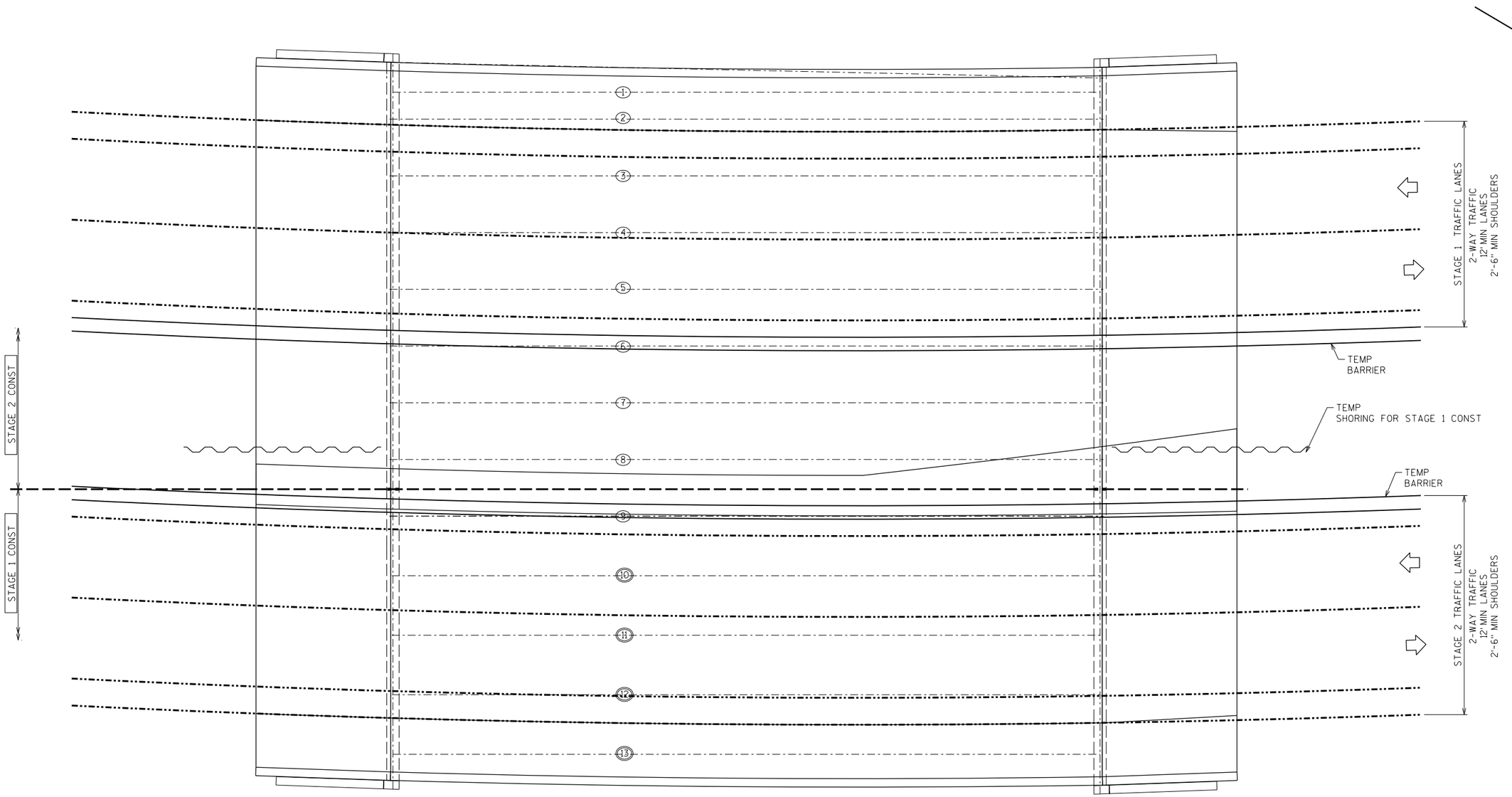
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PLAN BRIDGE TRAFFIC STAGING SCHEMATIC

(STAGE 3 NOT SHOWN FOR CLARITY)

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

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BRIDGE TRAFFIC STAGING CONCEPT

SHEET 39 OF 41

531

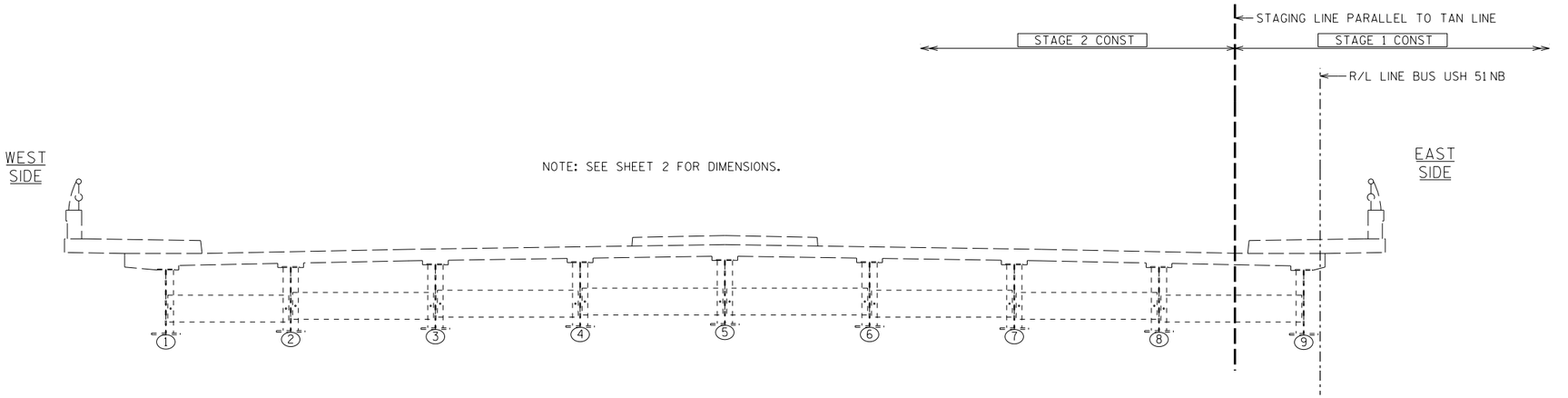
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PLOT DATE: 1/5/2018 PLOT TIME: 8:09:29 AM

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STATE PROJECT NUMBER
6414-00-81

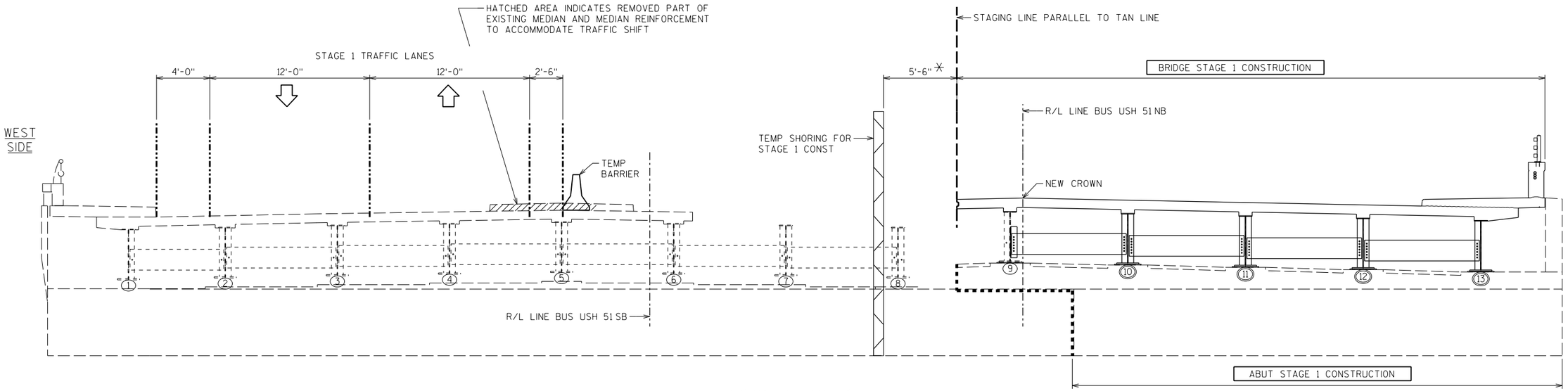


EXISTING CROSS SECTION THRU RDWY.
(LOOKING NORTH)

LEGEND

- INDICATES EXISTING GIRDER LINE
- INDICATES NEW GIRDER LINE
- INDICATES TEMPORARY BARRIER. SEE WISCONSIN (FDM) MANUAL FOR ANCHORING REQUIREMENTS.
- ✳ ACTUAL SPACING SHALL BE DETERMINED BY THE CONTRACTOR TO ACCOMMODATE NEW CONSTRUCTION

NOTE:
COORDINATE BRIDGE STAGING WITH THE ROADWAY STAGING.



BRIDGE STAGE 1
(LOOKING NORTH) (SHOWING ABUTMENT STAGING)

-SHIFT TRAFFIC AS SHOWN. (SEE ROADWAY DRAWINGS)

-CONSTRUCT NEW NORTH BOUND LANES WIDENING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

BRIDGE TRAFFIC STAGING CONCEPT

SHEET 40 OF 41

532

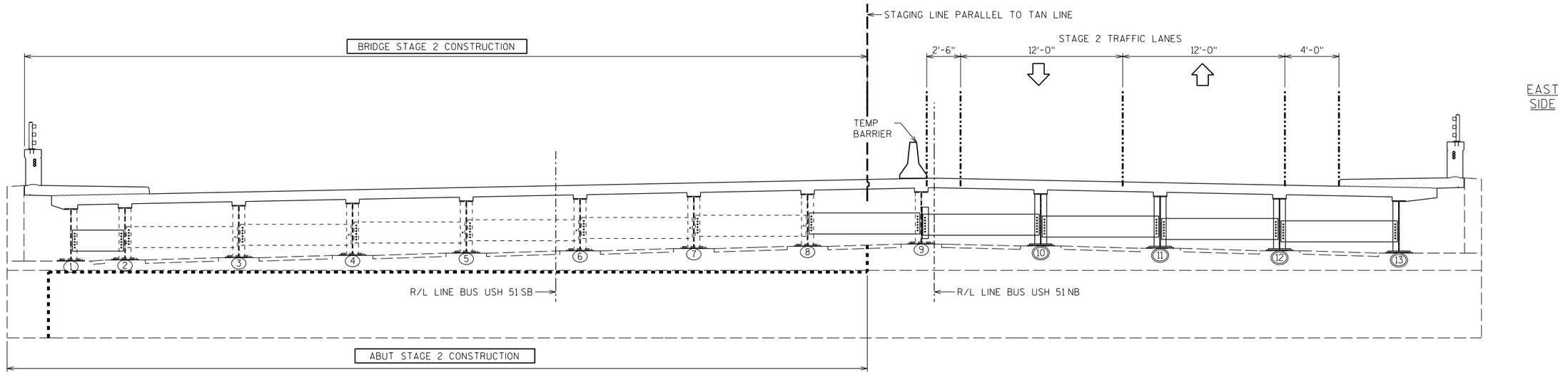
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PLOT DATE: 1/5/2018 PLOT TIME: 8:09:29 AM

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STATE PROJECT NUMBER
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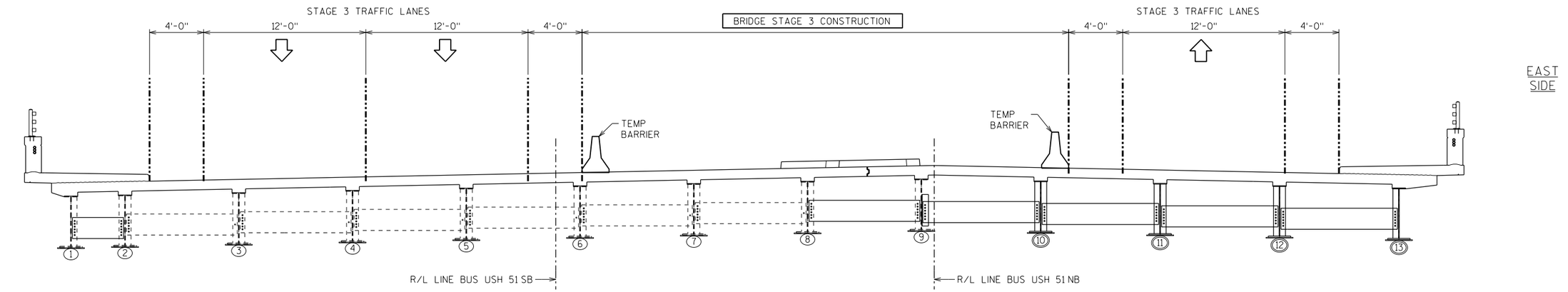


BRIDGE STAGE 2

(LOOKING NORTH) (SHOWING ABUTMENT STAGING)

-SHIFT TRAFFIC AS SHOWN. (SEE ROADWAY DRAWINGS)

-CONSTRUCT NEW SOUTH BOUND LANES WIDENING.



BRIDGE STAGE 3

(LOOKING NORTH)

-SHIFT TRAFFIC AS SHOWN. (SEE ROADWAY DRAWINGS)

-CONSTRUCT NEW CENTER MEDIAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-49-67

DRAWN BY DLF | PLANS CK'D. NCK

BRIDGE TRAFFIC STAGING CONCEPT

SHEET 41 OF 41

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PLOT DATE: 1/5/2018 PLOT TIME: 8:09:29 AM

FILE NAME : S:\UZ\WI\tnc\128397\5-final-dsgn\5i-drawings\20-Struct\bridge\bi28397stoging2.dgn

BUSINESS 51 208+50 - 252+50 - STAGE 2 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
208+50	46.2	0.0					
208+80	54.0	0.1	55.0	0.0	55	0	55
209+00	64.9	0.0	45.0	0.0	100	0	100
209+50	56.8	0.6	115.0	0.0	215	0	215
210+00	50.5	4.1	100.0	5.0	315	5	310
210+22	71.4	0.0	50.0	0.0	365	5	360
210+50	53.1	0.0	65.0	0.0	430	5	425
211+00	52.1	0.0	95.0	0.0	525	5	520
211+50	47.7	0.1	90.0	0.0	615	5	610
211+80	54.1	0.0	55.0	0.0	670	5	665
212+00	51.6	0.0	40.0	0.0	710	5	705
212+50	39.4	1.2	85.0	0.0	795	5	790
213+00	72.3	0.0	105.0	0.0	900	5	895
213+37	60.8	0.0	90.0	0.0	990	5	985
213+50	52.4	0.0	25.0	0.0	1015	5	1010
214+00	57.0	0.0	100.0	0.0	1115	5	1110
214+08	57.0	0.0	20.0	0.0	1135	5	1130
214+38	73.0	0.0	70.0	0.0	1205	5	1200
214+50	78.0	0.0	35.0	0.0	1240	5	1235
215+00	75.0	0.0	140.0	0.0	1380	5	1375
215+38	79.0	0.0	110.0	0.0	1490	5	1485
215+50	77.0	0.0	35.0	0.0	1525	5	1520
216+00	52.0	0.7	120.0	0.0	1645	5	1640
216+50	55.0	0.0	100.0	0.0	1745	5	1740
216+58	54.0	0.0	15.0	0.0	1760	5	1755
217+00	37.0	5.0	70.0	5.0	1830	10	1820
217+50	37.0	12.0	70.0	20.0	1900	30	1870
218+00	27.0	18.0	60.0	35.0	1960	65	1895
218+50	23.0	10.0	45.0	35.0	2005	100	1905
218+66	22.0	7.0	15.0	5.0	2020	105	1915
219+00	25.0	4.0	30.0	10.0	2050	115	1935
219+50	50.0	3.1	70.0	10.0	2120	125	1995
220+00	39.0	0.0	80.0	5.0	2200	130	2070
220+50	54.0	0.0	85.0	0.0	2285	130	2155
221+00	95.0	0.0	140.0	0.0	2425	130	2295
221+17	99.0	0.0	60.0	0.0	2485	130	2355
221+50	118.0	0.0	135.0	0.0	2620	130	2490
222+00	113.0	0.0	215.0	0.0	2835	130	2705
222+50	107.0	0.0	205.0	0.0	3040	130	2910
222+77	117.0	0.0	110.0	0.0	3150	130	3020
223+00	104.0	0.0	95.0	0.0	3245	130	3115
223+50	106.0	0.0	195.0	0.0	3440	130	3310
224+00	104.0	0.0	195.0	0.0	3635	130	3505
224+50	97.0	0.0	185.0	0.0	3820	130	3690
224+75	118.0	0.0	100.0	0.0	3920	130	3790
225+00	90.0	0.0	95.0	0.0	4015	130	3885
225+50	114.0	0.0	190.0	0.0	4205	130	4075
226+00	91.0	0.0	190.0	0.0	4395	130	4265
226+50	77.0	0.0	155.0	0.0	4550	130	4420
226+80	80.0	0.0	85.0	0.0	4635	130	4505
227+00	62.0	0.0	55.0	0.0	4690	130	4560
227+50	42.0	11.6	95.0	15.0	4785	145	4640
228+00	60.0	0.0	95.0	15.0	4880	160	4720
228+50	40.0	7.7	95.0	10.0	4975	170	4805
229+00	48.0	1.9	80.0	10.0	5055	180	4875
229+50	56.0	0.0	95.0	0.0	5150	180	4970
229+63	68.0	0.0	30.0	0.0	5180	180	5000
230+00	55.0	0.8	85.0	0.0	5265	180	5085
230+22	71.0	0.0	50.0	0.0	5315	180	5135
230+38	56.0	0.7	40.0	0.0	5355	180	5175
230+50	56.0	1.2	25.0	0.0	5380	180	5200
230+74	63.0	0.0	55.0	0.0	5435	180	5255
231+00	42.0	9.1	50.0	5.0	5485	185	5300
231+50	48.0	3.1	85.0	15.0	5570	200	5370
231+75	63.0	0.0	50.0	0.0	5620	200	5420
232+00	60.0	0.3	55.0	0.0	5675	200	5475
232+22	54.0	0.5	45.0	0.0	5720	200	5520
232+50	59.0	0.2	60.0	0.0	5780	200	5580

BUSINESS 51 208+50 - 252+50 - STAGE 2 (CONT'D) EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
232+65	74.0	0.0	35.0	0.0	5815	200	5615
232+84	58.0	0.3	45.0	0.0	5860	200	5660
233+00	84.0	0.1	40.0	0.0	5900	200	5700
233+50	42.0	2.7	115.0	5.0	6015	205	5810
234+00	103.0	0.0	135.0	5.0	6150	210	5940
234+15	105.0	0.0	60.0	0.0	6210	210	6000
234+32	115.0	0.0	70.0	0.0	6280	210	6070
234+50	83.0	0.0	65.0	0.0	6345	210	6135
234+59	85.0	0.0	30.0	0.0	6375	210	6165
235+00	98.0	0.0	140.0	0.0	6515	210	6305
235+50	108.0	0.0	190.0	0.0	6705	210	6495
236+00	96.0	0.0	190.0	0.0	6895	210	6685
236+50	76.0	0.0	160.0	0.0	7055	210	6845
236+74	68.0	0.6	65.0	0.0	7120	210	6910
237+00	62.0	0.0	65.0	0.0	7185	210	6975
237+50	69.0	0.0	120.0	0.0	7305	210	7095
237+97	92.0	0.0	140.0	0.0	7445	210	7235
238+00	96.0	0.0	10.0	0.0	7455	210	7245
238+50	150.0	0.0	230.0	0.0	7685	210	7475
239+00	92.0	21.2	225.0	25.0	7910	235	7675
239+50	107.0	0.0	185.0	25.0	8095	260	7835
240+00	117.0	0.0	205.0	0.0	8300	260	8040
240+50	105.0	0.0	205.0	0.0	8505	260	8245
241+00	65.0	0.0	155.0	0.0	8660	260	8400
241+50	70.0	0.0	125.0	0.0	8785	260	8525
241+73	73.0	0.0	60.0	0.0	8845	260	8585
242+00	63.0	0.3	70.0	0.0	8915	260	8655
242+50	35.0	17.9	90.0	20.0	9005	280	8725
243+00	45.0	7.5	75.0	30.0	9080	310	8770
243+36	54.0	2.3	65.0	10.0	9145	320	8825
243+44	62.0	1.7	15.0	0.0	9160	320	8840
243+50	60.0	0.0	15.0	0.0	9175	320	8855
244+00	67.0	0.0	120.0	0.0	9295	320	8975
244+28	84.0	0.0	80.0	0.0	9375	320	9055
244+50	92.0	0.0	70.0	0.0	9445	320	9125
245+00	105.0	0.0	180.0	0.0	9625	320	9305
245+25	110.0	0.0	100.0	0.0	9725	320	9405
245+50	119.0	0.0	105.0	0.0	9830	320	9510
246+00	106.0	0.0	210.0	0.0	10040	320	9720
246+50	114.0	0.0	205.0	0.0	10245	320	9925
247+00	104.0	0.0	200.0	0.0	10445	320	10125
247+31	95.0	0.0	115.0	0.0	10560	320	10240
247+50	74.0	0.0	60.0	0.0	10620	320	10300
248+00	85.0	0.0	145.0	0.0	10765	320	10445
248+30	84.0	0.0	95.0	0.0	10860	320	10540
248+50	76.0	0.0	60.0	0.0	10920	320	10600
249+00	59.0	0.0	125.0	0.0	11045	320	10725
249+50	46.0	0.0	95.0	0.0	11140	320	10820
250+00	64.0	0.0	100.0	0.0	11240	320	10920
250+33	71.0	0.0	85.0	0.0	11325	320	11005
250+50	51.0	0.0	40.0	0.0	11365	320	11045
251+00	45.0	0.0	90.0	0.0	11455	320	11135
251+06	44.0	0.0	10.0	0.0	11465	320	11145
251+25	68.0	0.0	40.0	0.0	11505	320	11185
251+40	68.0	0.0	40.0	0.0	11545	320	11225
251+50	62.0	0.0	25.0	0.0	11570	320	11250
251+85	54.0	0.2	75.0	0.0	11645	320	11325
252+00	66.0	0.0	35.0	0.0	11680	320	11360
252+30	75.0	0.0	80.0	0.0	11760	320	11440
252+50	80.0	0.0	55.0	0.0	11815	320	11495

BUSINESS 51 208+50 - 252+50 - STAGE 3 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
208+50	14.0	0.0					
208+80	10.0	0.0	15.0	0.0	15	0	15
209+00	12.0	0.0	10.0	0.0	25	0	25
209+50	16.0	0.0	25.0	0.0	50	0	50
210+00	20.0	0.0	35.0	0.0	85	0	85
210+22	22.0	0.0	15.0	0.0	100	0	100
210+50	25.0	0.0	25.0	0.0	125	0	125
211+00	30.0	0.0	50.0	0.0	175	0	175
211+50	32.0	0.0	55.0	0.0	230	0	230
211+80	36.0	0.0	40.0	0.0	270	0	270
212+00	36.0	0.0	25.0	0.0	295	0	295
212+50	46.0	0.0	75.0	0.0	370	0	370
213+00	69.0	0.0	105.0	0.0	475	0	475
213+37	90.0	0.0	110.0	0.0	585	0	585
213+50	93.0	0.0	45.0	0.0	630	0	630
214+00	84.0	0.0	165.0	0.0	795	0	795
214+08	87.0	0.0	25.0	0.0	820	0	820
214+38	62.0	0.0	80.0	0.0	900	0	900
214+50	72.0	0.0	30.0	0.0	930	0	930
215+00	65.0	0.0	125.0	0.0	1055	0	1055
215+38	54.0	0.4	85.0	0.0	1140	0	1140
215+50	51.0	0.5	25.0	0.0	1165	0	1165
216+00	44.0	1.0	90.0	0.0	1255	0	1255
216+50	35.0	0.9	75.0	0.0	1330	0	1330
216+58	32.0	0.5	10.0	0.0	1340	0	1340
217+00	34.0	0.0	50.0	0.0	1390	0	1390
217+50	37.0	0.0	65.0	0.0	1455	0	1455
218+00	37.0	0.1	70.0	0.0	1525	0	1525
218+50	30.0	2.0	60.0	5.0	1585	5	1580
218+66	26.0	3.0	15.0	0.0	1600	5	1595
219+00	30.0	2.0	35.0	5.0	1635	10	1625
219+50	24.0	0.0	50.0	0.0	1685	10	1675
220+00	30.0	0.0	50.0	0.0	1735	10	1725
220+50	46.0	0.0	70.0	0.0	1805	10	1795
221+00	58.0	0.0	95.0	0.0	1900	10	1890
221+17	68.0	0.0	40.0	0.0	1940	10	1930
221+50	198.0	0.0	165.0	0.0	2105	10	2095
222+00	172.0	0.0	345.0	0.0	2450	10	2440
222+50	202.0	0.0	345.0	0.0	2795	10	2785
222+77	195.0	0.0	200.0	0.0	2995	10	2985
223+00	177.0	0.0	160.0	0.0	3155	10	3145
223+50	137.0	0.0	290.0	0.0	3445	10	3435
224+00	119.0	0.0	235.0	0.0	3680	10	3670
224+50	92.0	0.0	195.0	0.0	3875	10	3865
224+75	86.0	0.0	80.0	0.0	3955	10	3945
225+00	85.0	0.0	80.0	0.0	4035	10	4025
225+50	111.0	0.0	180.0	0.0	4215	10	4205
226+00	95.0	0.0	190.0	0.0	4405	10	4395
226+50	78.0	0.0	160.0	0.0	4565	10	4555
226+80	83.0	0.0	90.0	0.0	4655	10	4645
227+00	55.0	1.5	50.0	0.0	4705	10	4695
227+50	41.0	9.8	90.0	15.0	4795	25	4770
228+00	32.0	11.0	70.0	25.0	4865	50	4815
228+50	46.0	0.0	70.0	15.0	4935	65	4870
229+00	56.0	0.0	95.0	0.0	5030	65	4965
229+50	50.0	0.3	100.0	0.0	5130	65	5065
229+63	50.0	0.5	25.0	0.0	5155	65	5090
230+00	52.0	1.6	70.0	0.0	5225	65	5160
230+22	48.0	2.6	40.0	0.0	5265	65	5200
230+38	66.0	0.0	35.0	0.0	5300	65	5235
230+50	50.0	2.6	25.0	0.0	5325	65	5260
230+74	57.0	0.7	50.0	0.0	5375	65	5310
231+00	57.0	0.3	55.0	0.0	5430	65	5365
231+50	67.0	0.0	115.0	0.0	5545	65	5480
231+75	73.0	0.0	65.0	0.0	5610	65	5545
232+00	56.0	0.0	60.0	0.0	5670	65	5605
232+22	71.0	0.0	50.0	0.0	5720	65	5655
232+50	62.0	0.0	70.0	0.0	5790	65	5725

BUSINESS 51 208+50 - 252+50 - STAGE 3 (CONT'D) EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
232+65	62.0	0.0	35.0	0.0	5825	65	5760
232+84	77.0	0.0	50.0	0.0	5875	65	5810
233+00	57.0	0.9	40.0	0.0	5915	65	5850
233+50	77.0	0.0	125.0	0.0	6040	65	5975
234+00	72.0	0.0	140.0	0.0	6180	65	6115
234+15	69.0	0.0	40.0	0.0	6220	65	6155
234+32	66.0	0.0	40.0	0.0	6260	65	6195
234+50	78.0	0.0	50.0	0.0	6310	65	6245
234+59	78.0	0.0	25.0	0.0	6335	65	6270
235+00	71.0	0.0	115.0	0.0	6450	65	6385
235+50	77.0	0.0	135.0	0.0	6585	65	6520
236+00	77.0	0.0	145.0	0.0	6730	65	6665
236+50	80.0	0.0	145.0	0.0	6875	65	6810
236+74	98.0	0.0	80.0	0.0	6955	65	6890
237+00	65.0	0.0	80.0	0.0	7035	65	6970
237+50	71.0	0.0	125.0	0.0	7160	65	7095
237+97	85.0	0.0	135.0	0.0	7295	65	7230
238+00	99.0	0.0	10.0	0.0	7305	65	7240
238+50	122.0	0.0	205.0	0.0	7510	65	7445
239+00	129.0	0.0	230.0	0.0	7740	65	7675
239+50	118.0	0.0	230.0	0.0	7970	65	7905
240+00	97.0	0.0	200.0	0.0	8170	65	8105
240+50	90.0	0.0	175.0	0.0	8345	65	8280
241+00	80.0	0.0	155.0	0.0	8500	65	8435
241+50	76.0	0.0	145.0	0.0	8645	65	8580
241+73	75.0	0.0	65.0	0.0	8710	65	8645
242+00	53.0	1.1	65.0	0.0	8775	65	8710
242+50	62.0	0.0	105.0	0.0	8880	65	8815
243+00	78.0	0.0	130.0	0.0	9010	65	8945
243+36	84.0	0.0	110.0	0.0	9120	65	9055
243+44	85.0	0.0	25.0	0.0	9145	65	9080
243+50	59.0	0.0	15.0	0.0	9160	65	9095
244+00	73.0	0.0	120.0	0.0	9280	65	9215
244+28	93.0	2.9	85.0	0.0	9365	65	9300
244+50	109.0	0.0	80.0	0.0	9445	65	9380
245+00	128.0	0.0	220.0	0.0	9665	65	9600
245+25	129.0	0.0	120.0	0.0	9785	65	9720
245+50	124.0	0.0	115.0	0.0	9900	65	9835
246+00	110.0	0.0	215.0	0.0	10115	65	10050
246+50	95.0	0.0	190.0	0.0	10305	65	10240
247+00	80.0	0.0	160.0	0.0	10465	65	10400
247+31	87.0	0.0	95.0	0.0	10560	65	10495
247+50	85.0	0.0	60.0	0.0	10620	65	10555
248+00	64.0	0.0	140.0	0.0	10760	65	10695
248+30	72.0	0.0	75.0	0.0	10835	65	10770
248+50	74.0	0.0	55.0	0.0	10890	65	10825
249+00	47.0	0.4	110.0	0.0	11000	65	10935
249+50	63.0	0.0	100.0	0.0	11100	65	11035
250+00	56.0	0.0	110.0	0.0	11210	65	11145
250+33	60.0	0.0	70.0	0.0	11280	65	11215
250+50	62.0	0.0	40.0	0.0	11320	65	11255
251+00	92.0	0.0	145.0	0.0	11465	65	11400
251+06	93.0	0.0	20.0	0.0	11485	65	11420
251+25	93.0	0.0	65.0	0.0	11550	65	11485
251+40	63.0	0.0	45.0	0.0	11595	65	11530
251+50	66.0	0.0	25.0	0.0	11620	65	11555
251+85	74.0	0.0	90.0	0.0	11710	65	11645
252+00	76.0	0.0	40.0	0.0	11750	65	11685
252+30	75.0	0.0	85.0	0.0	11835	65	11770
252+50	78.0	0.0	55.0	0.0	11890	65	11825

BUSINESS 51 208+50 - 252+50 - STAGE 4 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
208+50	0.0	0.0					
208+80	0.0	0.0	0.0	0.0	0	0	0
209+00	0.0	0.0	0.0	0.0	0	0	0
209+50	0.0	0.0	0.0	0.0	0	0	0
210+00	0.0	0.0	0.0	0.0	0	0	0
210+22	0.0	0.0	0.0	0.0	0	0	0
210+50	0.0	0.0	0.0	0.0	0	0	0
211+00	0.0	0.0	0.0	0.0	0	0	0
211+50	0.0	0.0	0.0	0.0	0	0	0
211+80	0.0	0.0	0.0	0.0	0	0	0
212+00	0.0	0.0	0.0	0.0	0	0	0
212+50	0.0	0.0	0.0	0.0	0	0	0
213+00	0.0	0.0	0.0	0.0	0	0	0
213+37	0.0	0.0	0.0	0.0	0	0	0
213+50	0.0	0.0	0.0	0.0	0	0	0
214+00	26.7	0.0	25.0	0.0	25	0	25
214+08	29.5	0.0	10.0	0.0	35	0	35
214+38	24.2	0.0	30.0	0.0	65	0	65
214+50	24.9	0.0	10.0	0.0	75	0	75
215+00	21.7	0.0	45.0	0.0	120	0	120
215+38	19.3	0.0	30.0	0.0	150	0	150
215+50	19.0	0.0	10.0	0.0	160	0	160
216+00	17.1	0.0	35.0	0.0	195	0	195
216+50	16.2	0.0	30.0	0.0	225	0	225
216+58	14.5	0.0	5.0	0.0	230	0	230
217+00	14.6	0.0	25.0	0.0	255	0	255
217+50	4.0	0.3	15.0	0.0	270	0	270
218+00	3.4	1.4	5.0	0.0	275	0	275
218+50	3.7	1.7	5.0	5.0	280	5	275
218+66	3.6	1.3	0.0	0.0	280	5	275
219+00	3.4	1.5	5.0	0.0	285	5	280
219+50	7.4	0.0	10.0	0.0	295	5	290
220+00	23.9	0.0	30.0	0.0	325	5	320
220+50	23.1	0.0	45.0	0.0	370	5	365
221+00	31.1	0.0	50.0	0.0	420	5	415
221+17	33.0	0.0	20.0	0.0	440	5	435
221+50	36.9	0.0	45.0	0.0	485	5	480
222+00	38.8	0.0	70.0	0.0	555	5	550
222+50	38.9	0.0	70.0	0.0	625	5	620
222+77	38.3	0.0	40.0	0.0	665	5	660
223+00	35.7	0.0	30.0	0.0	695	5	690
223+50	34.3	0.0	65.0	0.0	760	5	755
224+00	31.2	0.0	60.0	0.0	820	5	815
224+50	32.2	0.0	60.0	0.0	880	5	875
224+75	33.4	0.0	30.0	0.0	910	5	905
225+00	33.7	0.0	30.0	0.0	940	5	935
225+50	29.9	0.0	60.0	0.0	1000	5	995
226+00	26.3	0.0	50.0	0.0	1050	5	1045
226+50	22.5	0.0	45.0	0.0	1095	5	1090
226+80	20.3	0.0	25.0	0.0	1120	5	1115
227+00	18.6	0.0	15.0	0.0	1135	5	1130
227+50	15.1	0.0	30.0	0.0	1165	5	1160
228+00	10.8	0.0	25.0	0.0	1190	5	1185
228+50	13.8	0.0	25.0	0.0	1215	5	1210
229+00	16.5	0.0	30.0	0.0	1245	5	1240
229+50	16.7	0.0	30.0	0.0	1275	5	1270
229+63	15.2	0.0	10.0	0.0	1285	5	1280
230+00	17.3	0.0	20.0	0.0	1305	5	1300
230+22	17.9	0.0	15.0	0.0	1320	5	1315
230+38	16.2	0.0	10.0	0.0	1330	5	1325
230+50	17.6	0.0	10.0	0.0	1340	5	1335
230+74	17.5	0.0	15.0	0.0	1355	5	1350
231+00	16.6	0.0	15.0	0.0	1370	5	1365
231+50	8.0	0.0	25.0	0.0	1395	5	1390
231+75	14.7	0.0	10.0	0.0	1405	5	1400
232+00	15.3	0.0	15.0	0.0	1420	5	1415
232+22	16.3	0.0	15.0	0.0	1435	5	1430
232+50	17.1	0.0	15.0	0.0	1450	5	1445

BUSINESS 51 208+50 - 252+50 - STAGE 4 (CONT'D) EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
232+65	16.9	0.0	10.0	0.0	1460	5	1455
232+84	15.1	0.0	10.0	0.0	1470	5	1465
233+00	14.5	0.0	10.0	0.0	1480	5	1475
233+50	14.0	0.0	25.0	0.0	1505	5	1500
234+00	17.3	0.0	30.0	0.0	1535	5	1530
234+15	15.2	0.0	10.0	0.0	1545	5	1540
234+32	11.9	0.0	10.0	0.0	1555	5	1550
234+50	15.9	0.0	10.0	0.0	1565	5	1560
234+59	17.4	0.0	5.0	0.0	1570	5	1565
235+00	18.3	0.0	25.0	0.0	1595	5	1590
235+50	18.0	0.0	35.0	0.0	1630	5	1625
236+00	19.8	0.0	35.0	0.0	1665	5	1660
236+50	18.2	0.0	35.0	0.0	1700	5	1695
236+74	19.8	0.0	15.0	0.0	1715	5	1710
237+00	37.0	0.0	25.0	0.0	1740	5	1735
237+50	34.8	0.0	65.0	0.0	1805	5	1800
237+97	20.6	0.0	50.0	0.0	1855	5	1850
238+00	21.0	0.0	0.0	0.0	1855	5	1850
238+50	24.3	0.0	40.0	0.0	1895	5	1890
239+00	29.3	0.0	50.0	0.0	1945	5	1940
239+50	26.6	0.0	50.0	0.0	1995	5	1990
240+00	24.4	0.0	45.0	0.0	2040	5	2035
240+50	22.4	0.0	45.0	0.0	2085	5	2080
241+00	18.9	0.0	40.0	0.0	2125	5	2120
241+50	16.8	0.0	35.0	0.0	2160	5	2155
241+73	16.1	0.0	15.0	0.0	2175	5	2170
242+00	12.5	0.0	15.0	0.0	2190	5	2185
242+50	13.7	0.0	25.0	0.0	2215	5	2210
243+00	15.9	0.0	25.0	0.0	2240	5	2235
243+36	18.9	0.0	25.0	0.0	2265	5	2260
243+44	19.6	0.0	5.0	0.0	2270	5	2265
243+50	37.6	0.0	5.0	0.0	2275	5	2270
244+00	29.9	0.0	65.0	0.0	2340	5	2335
244+28	23.3	0.0	30.0	0.0	2370	5	2365
244+50	25.6	0.0	20.0	0.0	2390	5	2385
245+00	26.7	0.0	50.0	0.0	2440	5	2435
245+25	30.1	0.0	25.0	0.0	2465	5	2460
245+50	29.0	0.0	25.0	0.0	2490	5	2485
246+00	25.6	0.0	50.0	0.0	2540	5	2535
246+50	24.0	0.0	45.0	0.0	2585	5	2580
247+00	21.9	0.0	45.0	0.0	2630	5	2625
247+31	19.6	0.0	25.0	0.0	2655	5	2650
247+50	19.9	0.0	15.0	0.0	2670	5	2665
248+00	18.8	10.5	35.0	15.0	2705	20	2685
248+30	16.4	13.7	20.0	15.0	2725	35	2690
248+50	15.2	14.0	10.0	15.0	2735	50	2685
249+00	12.0	12.6	25.0	30.0	2760	80	2680
249+50	9.7	0.0	20.0	15.0	2780	95	2685
250+00	12.7	0.0	20.0	0.0	2800	95	2705
250+33	13.3	0.0	15.0	0.0	2815	95	2720
250+50	24.6	0.0	10.0	0.0	2825	95	2730
251+00	23.3	0.0	45.0	0.0	2870	95	2775
251+06	19.0	0.0	5.0	0.0	2875	95	2780
251+25	19.8	0.0	15.0	0.0	2890	95	2795
251+40	20.9	0.0	10.0	0.0	2900	95	2805
251+50	20.4	0.0	10.0	0.0	2910	95	2815
251+85	21.0	0.0	25.0	0.0	2935	95	2840
252+00	22.6	0.0	10.0	0.0	2945	95	2850
252+30	23.0	0.0	25.0	0.0	2970	95	2875
252+50	23.9	0.0	15.0	0.0	2985	95	2890

HICKORY DRIVE - STAGE 2 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
80+28	97.7	0.1					
80+50	96.3	0.2	80.0	0.0	80	0	80
80+59	88.8	0.0	30.0	0.0	110	0	110
80+68	101.7	0.0	30.0	0.0	140	0	140
80+87	105.1	0.0	75.0	0.0	215	0	215
81+00	98.9	0.0	50.0	0.0	265	0	265
81+25	73.3	0.3	80.0	0.0	345	0	345
81+50	45.8	0.0	55.0	0.0	400	0	400
81+65	32.4	0.0	20.0	0.0	420	0	420

PORTER ROAD - STAGE 2 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
800+30	248.0	0.0					
800+67	199.3	0.0	305.0	0.0	305	0	305
800+88	170.2	0.0	140.0	0.0	445	0	445
801+00	150.9	0.0	75.0	0.0	520	0	520
801+50	97.5	0.9	230.0	0.0	750	0	750
801+77	95.3	2.0	95.0	0.0	845	0	845
802+00	84.1	3.1	75.0	5.0	920	5	915
802+50	93.3	4.6	165.0	10.0	1085	15	1070
803+00	103.4	0.0	180.0	5.0	1265	20	1245
803+40	59.1	0.9	120.0	0.0	1385	20	1365
803+48	38.0	0.0	15.0	0.0	1400	20	1380

CEDAR STREET E. - STAGE 2 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
85+30	150.0	0.0					
85+50	105.4	0.0	95.0	0.0	95	0	95
86+00	73.5	0.0	165.0	0.0	260	0	260
86+50	55.4	0.0	120.0	0.0	380	0	380
87+00	37.9	0.1	85.0	0.0	465	0	465
87+33	49.4	0.0	55.0	0.0	520	0	520
87+50	41.9	0.2	30.0	0.0	550	0	550
88+00	38.0	0.1	75.0	0.0	625	0	625
88+30	38.6	0.0	45.0	0.0	670	0	670

LOCUST STREET CUL-DE-SAC - STAGE 2 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
10+18	121.6	26.6					
10+42	184.6	0.0	135.0	15.0	135	15	120
10+50	139.0	0.0	50.0	0.0	185	15	170
10+75	59.3	0.1	90.0	0.0	275	15	260
11+00	41.9	2.1	45.0	0.0	320	15	305
11+25	54.7	1.6	45.0	0.0	365	15	350
11+50	35.4	22.6	40.0	15.0	405	30	375
11+85	28.4	4.1	40.0	20.0	445	50	395

WILLOW STREET E. - STAGE 2 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
90+30	182.0	0.0					
90+54	111.5	0.0	130.0	0.0	130	0	130
90+75	96.5	0.0	80.0	0.0	210	0	210
91+00	73.6	0.0	80.0	0.0	290	0	290
91+40	97.8	0.9	125.0	0.0	415	0	415
91+50	68.9	0.7	30.0	0.0	445	0	445
91+79	62.1	5.4	70.0	5.0	515	5	510
91+96	70.4	12.2	45.0	5.0	560	10	550
92+00	80.6	11.0	10.0	0.0	570	10	560
92+02	116.0	0.0	10.0	0.0	580	10	570
92+12	113.4	0.0	40.0	0.0	620	10	610

BEECH STREET CUL-DE-SAC - STAGE 2 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
20+75	75.8	1.2					
20+75	75.8	1.2	0.0	0.0	0	0	0
21+00	140.8	0.0	100.0	0.0	100	0	100
21+25	72.9	0.4	100.0	0.0	200	0	200
21+44	47.4	3.5	40.0	0.0	240	0	240
21+50	40.1	0.0	10.0	0.0	250	0	250
21+75	30.8	0.0	35.0	0.0	285	0	285
21+85	30.0	0.0	10.0	0.0	295	0	295

ELM STREET E. - STAGE 2 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
95+30	168.0	0.0					
95+54	117.3	0.0	125.0	0.0	125	0	125
96+00	133.1	0.0	215.0	0.0	340	0	340
96+08	115.5	0.0	35.0	0.0	375	0	375
96+50	40.4	28.4	120.0	30.0	495	30	465
96+60	32.3	0.0	15.0	5.0	510	35	475

TOMMY'S TURNPIKE - STAGE 3 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
793+60	32.3	0.0					
794+00	45.8	33.9	60.0	35.0	60	35	25
794+50	66.2	16.5	105.0	60.0	165	95	70
795+00	73.8	1.4	130.0	20.0	295	115	180
795+50	87.9	4.0	150.0	5.0	445	120	325
795+87	108.0	0.0	135.0	5.0	580	125	455
796+00	98.6	0.5	50.0	0.0	630	125	505
796+50	135.2	0.0	215.0	0.0	845	125	720
796+56	132.0	0.0	30.0	0.0	875	125	750
797+00	119.8	0.0	205.0	0.0	1080	125	955
797+44	133.6	0.0	205.0	0.0	1285	125	1160
797+50	175.7	0.0	35.0	0.0	1320	125	1195
797+67	186.5	0.3	115.0	0.0	1435	125	1310
797+95	170.4	0.3	185.0	0.0	1620	125	1495
798+00	162.0	0.3	30.0	0.0	1650	125	1525
798+50	193.0	0.3	330.0	0.0	1980	125	1855
799+00	254.9	0.4	415.0	0.0	2395	125	2270
799+46	285.0	0.0	460	0	2855	125	2730

THEATER DRIVE - STAGE 3 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
59+00	58.2	0.0					
59+19	68.1	0.0	45.0	0.0	45	0	45
59+31	81.4	0.2	35.0	0.0	80	0	80
59+41	94.9	0.8	35.0	0.0	115	0	115
59+50	97.9	1.3	30.0	0.0	145	0	145
59+70	230.0	0.0	120.0	0.0	265	0	265

CEDAR STREET W. - STAGE 3 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
83+00	30.8	0.0					
83+30	55.6	0.8	50.0	0.0	50	0	50
83+50	72.4	0.5	45.0	0.0	95	0	95
83+72	89.4	0.0	65.0	0.0	160	0	160
84+00	132.3	0.0	115.0	0.0	275	0	275
84+22	110.0	0.2	100.0	0.0	375	0	375
84+46	153.0	0.0	120.0	0.0	495	0	495

WILLOW STREET W. - STAGE 3 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
88+00	31.8	0.0					
88+22	62.3	0.8	40.0	0.0	40	0	40
88+50	81.7	0.0	75.0	0.0	115	0	115
88+77	106.8	0.0	95.0	0.0	210	0	210
89+00	108.8	0.0	95.0	0.0	305	0	305
89+11	91.5	0.1	40.0	0.0	345	0	345
89+23	100.9	0.0	45.0	0.0	390	0	390
89+46	182.0	0.0	120.0	0.0	510	0	510

BUSINESS 51 252+50 - 263+49 - STAGE 2 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
252+50	79.6	0.0					
252+73	76.3	0.0	65.0	0.0	65	0	65
253+00	72.8	0.0	75.0	0.0	140	0	140
253+50	50.1	0.5	115.0	0.0	255	0	255
254+00	56.8	0.0	100.0	0.0	355	0	355
254+50	37.6	0.1	85.0	0.0	440	0	440
254+73	25.6	1.5	25.0	0.0	465	0	465
255+00	34.3	1.4	30.0	0.0	495	0	495
255+30	37.6	2.8	40.0	5.0	535	5	530
255+50	35.7	3.4	25.0	5.0	560	10	550
255+75	32.1	1.1	30.0	5.0	590	15	575
255+87	35.8	0.8	15.0	0.0	605	15	590
256+00	18.4	28.3	15.0	10.0	620	25	595
256+20	22.9	6.8	15.0	15.0	635	40	595
256+50	39.0	9.4	35.0	10.0	670	50	620
256+65	41.6	0.9	20.0	5.0	690	55	635
257+00	61.0	0.0	65.0	0.0	755	55	700
257+50	81.1	0.0	130.0	0.0	885	55	830
258+00	89.2	0.0	160.0	0.0	1045	55	990
258+25	96.9	0.0	85.0	0.0	1130	55	1075
258+33	83.5	0.0	25.0	0.0	1155	55	1100
258+50	92.4	0.0	55.0	0.0	1210	55	1155
258+65	95.1	0.0	50.0	0.0	1260	55	1205
259+00	91.8	0.0	120.0	0.0	1380	55	1325
259+50	77.5	0.0	155.0	0.0	1535	55	1480
260+00	0.0	6.7	70.0	10.0	1605	65	1540
260+50	0.0	16.0	0.0	25.0	1605	90	1515
261+00	0.0	23.3	0.0	45.0	1605	135	1470
261+50	17.2	6.5	15.0	35.0	1620	170	1450
262+00	0.0	147.8	15.0	185.0	1635	355	1280
262+50	0.0	381.6	0.0	635.0	1635	990	645
262+60	0.0	371.6	0.0	180.0	1635	1170	465
263+00	0.0	347.6	0.0	695.0	1635	1865	-230
263+49	0.0	337.3	0.0	810.0	1635	2675	-1040

BUSINESS 51 264+95 - 280+01 - STAGE 2 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
264+95	0.0	335.1					
265+00	0.1	335.1	0.0	80.0	0	80	-80
265+50	0.0	327.1	0.0	795.0	0	875	-875
266+00	0.0	289.3	0.0	740.0	0	1615	-1615
266+50	0.0	266.4	0.0	670.0	0	2285	-2285
267+00	0.0	243.8	0.0	615.0	0	2900	-2900
267+50	3.9	207.6	5.0	545.0	5	3445	-3440
268+00	5.4	188.0	10.0	475.0	15	3920	-3905
268+50	8.3	164.8	15.0	425.0	30	4345	-4315
269+00	11.8	148.1	20.0	375.0	50	4720	-4670
269+50	10.8	139.1	20.0	345.0	70	5065	-4995
270+00	10.8	126.8	20.0	320.0	90	5385	-5295
270+50	14.9	118.4	25.0	295.0	115	5680	-5565
271+00	14.9	109.1	30.0	275.0	145	5955	-5810
271+50	12.4	100.9	25.0	255.0	170	6210	-6040
272+00	12.4	86.4	25.0	225.0	195	6435	-6240
272+38	12.9	85.0	20.0	155.0	215	6590	-6375
272+50	10.9	85.0	5.0	50.0	220	6640	-6420
273+00	11.2	81.5	20.0	200.0	240	6840	-6600
273+50	14.0	74.1	25.0	185.0	265	7025	-6760
274+00	17.4	69.0	30.0	170.0	295	7195	-6900
274+50	16.0	75.5	30.0	175.0	325	7370	-7045
275+00	16.2	86.5	30.0	195.0	355	7565	-7210
275+50	15.2	106.0	30.0	230.0	385	7795	-7410
276+00	15.5	133.2	30.0	290.0	415	8085	-7670
276+50	12.4	167.7	25.0	360.0	440	8445	-8005
277+00	11.2	205.9	20.0	450.0	460	8895	-8435
277+50	9.9	255.5	20.0	555.0	480	9450	-8970
278+00	11.3	288.2	20.0	655.0	500	10105	-9605
278+50	19.0	322.0	30.0	735.0	530	10840	-10310
278+85	26.5	300.5	30.0	520.0	560	11360	-10800
279+00	29.9	281.5	15.0	215.0	575	11575	-11000
279+50	57.5	0.0	80.0	340.0	655	11915	-11260
280+00	59.4	1.2	110.0	0.0	765	11915	-11150
280+50	48.3	1.0	100.0	5.0	865	11920	-11055
280+77	62.0	0.4	55.0	0.0	920	11920	-11000
281+00	41.7	1.7	45.0	0.0	965	11920	-10955
281+01	41.7	1.7	0.0	0.0	965	11920	-10955

BUSINESS 51 252+50 - 263+49 - STAGE 3 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
252+50	78.9	0.0					
252+73	93.2	0.0	75.0	0.0	75	0	75
253+00	75.3	0.0	85.0	0.0	160	0	160
253+50	71.8	0.0	135.0	0.0	295	0	295
254+00	54.8	0.0	115.0	0.0	410	0	410
254+50	40.5	0.0	90.0	0.0	500	0	500
254+73	40.0	0.0	35.0	0.0	535	0	535
255+00	31.1	6.1	35.0	5.0	570	5	565
255+30	28.4	7.9	35.0	10.0	605	15	590
255+50	28.5	6.4	20.0	5.0	625	20	605
255+75	32.6	6.3	30.0	10.0	655	30	625
255+87	50.9	0.0	20.0	0.0	675	30	645
256+00	38.2	6.5	20.0	0.0	695	30	665
256+20	44.6	1.9	30.0	5.0	725	35	690
256+50	53.2	0.4	55.0	0.0	780	35	745
256+65	57.7	0.9	30.0	0.0	810	35	775
257+00	65.4	0.0	80.0	0.0	890	35	855
257+50	72.9	0.0	130.0	0.0	1020	35	985
258+00	76.5	0.0	140.0	0.0	1160	35	1125
258+25	76.4	0.0	70.0	0.0	1230	35	1195
258+33	75.5	0.0	25.0	0.0	1255	35	1220
258+50	73.4	0.0	45.0	0.0	1300	35	1265
258+65	72.8	0.0	40.0	0.0	1340	35	1305
259+00	59.9	0.0	85.0	0.0	1425	35	1390
259+50	36.4	6.3	90.0	10.0	1515	45	1470
260+00	17.6	12.2	50.0	20.0	1565	65	1500
260+50	0.3	1.7	15.0	15.0	1580	80	1500
261+00	0.0	10.2	0.0	15.0	1580	95	1485
261+50	0.0	9.2	0.0	25.0	1580	120	1460
262+00	2.7	1.5	0.0	15.0	1580	135	1445
262+50	10.3	114.4	10.0	140.0	1590	275	1315
262+60	12.4	145.4	5.0	65.0	1595	340	1255
263+00	26.2	112.2	30.0	250.0	1625	590	1035
263+49	28.5	8.7	50.0	145.0	1675	735	940

BUSINESS 51 264+95 - 280+01 - STAGE 3 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
264+95	14.0	13.0					
265+00	14.0	13.2	5.0	5.0	5	5	0
265+50	8.8	16.4	20.0	35.0	25	40	-15
266+00	5.4	23.8	15.0	50.0	40	90	-50
266+50	2.7	27.5	10.0	60.0	50	150	-100
267+00	6.5	21.5	10.0	60.0	60	210	-150
267+50	15.4	15.4	20.0	45.0	80	255	-175
268+00	26.1	11.5	40.0	30.0	120	285	-165
268+50	36.8	6.7	60.0	20.0	180	305	-125
269+00	42.8	4.3	75.0	15.0	255	320	-65
269+50	40.5	3.8	75.0	10.0	330	330	0
270+00	41.3	3.2	75.0	10.0	405	340	65
270+50	44.9	1.5	80.0	5.0	485	345	140
271+00	45.4	2.1	85.0	5.0	570	350	220
271+50	45.6	1.2	85.0	5.0	655	355	300
272+00	47.3	1.1	85.0	5.0	740	360	380
272+38	59.3	0.0	75.0	0.0	815	360	455
272+50	59.0	0.0	25.0	0.0	840	360	480
273+00	42.0	3.3	95.0	5.0	935	365	570
273+50	44.7	2.5	80.0	5.0	1015	370	645
274+00	49.5	1.5	85.0	5.0	1100	375	725
274+50	52.7	1.2	95.0	5.0	1195	380	815
275+00	53.2	1.2	100.0	5.0	1295	385	910
275+50	47.3	1.8	95.0	5.0	1390	390	1000
276+00	43.3	2.2	85.0	5.0	1475	395	1080
276+50	40.9	3.1	80.0	5.0	1555	400	1155
277+00	35.9	4.3	70.0	10.0	1625	410	1215
277+50	33.7	5.5	65.0	10.0	1690	420	1270
278+00	34.2	3.1	65.0	10.0	1755	430	1325
278+50	37.6	2.2	65.0	5.0	1820	435	1385
278+85	41.1	1.4	50.0	5.0	1870	440	1430
279+00	5.9	13.1	15.0	5.0	1885	445	1440
279+50	6.1	11.6	10.0	30.0	1895	475	1420
280+00	3.4	5.4	10.0	20.0	1905	495	1410
280+50	3.6	2.2	5.0	10.0	1910	505	1405
280+77	3.6	1.3	5.0	0.0	1915	505	1410
281+00	3.8	0.8	5.0	0.0	1920	505	1415
281+01	3.8	0.8	0.0	0.0	1920	505	1415

BUSINESS 51 252+50 - 263+49 - STAGE 4 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
252+50	23.3	0.0					
252+73	22.3	0.0	20.0	0.0	20	0	20
253+00	20.2	0.0	20.0	0.0	40	0	40
253+50	16.1	0.0	35.0	0.0	75	0	75
254+00	10.5	0.0	25.0	0.0	100	0	100
254+50	6.7	0.0	15.0	0.0	115	0	115
254+73	4.7	0.0	5.0	0.0	120	0	120
255+00	2.8	0.3	5.0	0.0	125	0	125
255+30	1.7	1.0	0.0	0.0	125	0	125
255+50	2.0	0.9	0.0	0.0	125	0	125
255+75	3.3	0.3	0.0	0.0	125	0	125
255+87	4.3	0.1	0.0	0.0	125	0	125
256+00	6.0	0.0	0.0	0.0	125	0	125
256+20	9.6	0.0	5.0	0.0	130	0	130
256+50	15.0	0.0	15.0	0.0	145	0	145
256+65	17.9	0.0	10.0	0.0	155	0	155
257+00	21.2	0.0	25.0	0.0	180	0	180
257+50	25.6	0.0	45.0	0.0	225	0	225
258+00	26.2	0.0	50.0	0.0	275	0	275
258+20	26.6	0.0	20.0	0.0	295	0	295
258+33	26.7	0.0	15.0	0.0	310	0	310
258+50	26.6	0.0	15.0	0.0	325	0	325
258+65	26.5	0.0	15.0	0.0	340	0	340
259+00	22.9	0.0	30.0	0.0	370	0	370
259+50	13.6	0.0	35.0	0.0	405	0	405
260+00	4.0	0.0	15.0	0.0	420	0	420
260+50	0.0	6.9	5.0	10.0	425	10	415
261+00	0.0	9.4	0.0	20.0	425	30	395
261+50	0.0	12.4	0.0	25.0	425	55	370
262+00	0.0	8.2	0.0	25.0	425	80	345
262+50	0.2	3.1	0.0	15.0	425	95	330
262+60	0.2	3.9	0.0	0.0	425	95	330
263+00	1.2	3.3	0.0	5.0	425	100	325
263+49	1.1	3.7	0.0	10.0	425	110	315

BUSINESS 51 264+95 - 280+01 - STAGE 4 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
264+95	0.1	21.7					
265+00	0.1	21.7	0.0	5.0	0	5	-5
265+50	0.0	31.1	0.0	65.0	0	70	-70
266+00	0.0	40.6	0.0	85.0	0	155	-155
266+50	0.0	37.9	0.0	95.0	0	250	-250
267+00	0.0	34.4	0.0	85.0	0	335	-335
267+50	0.0	27.8	0.0	75.0	0	410	-410
268+00	0.0	22.1	0.0	60.0	0	470	-470
268+50	0.0	16.9	0.0	45.0	0	515	-515
269+00	0.0	14.0	0.0	35.0	0	550	-550
269+50	0.7	12.0	0.0	30.0	0	580	-580
270+00	3.1	5.4	5.0	20.0	5	600	-595
270+50	0.0	6.6	5.0	15.0	10	615	-605
271+00	0.0	6.1	0.0	15.0	10	630	-620
271+50	0.0	5.3	0.0	15.0	10	645	-635
272+00	0.0	5.7	0.0	15.0	10	660	-650
272+38	0.0	13.2	0.0	15.0	10	675	-665
272+50	0.0	13.1	0.0	10.0	10	685	-675
273+00	0.0	12.3	0.0	30.0	10	715	-705
273+50	0.0	10.5	0.0	25.0	10	740	-730
274+00	0.0	7.6	0.0	20.0	10	760	-750
274+50	0.0	6.8	0.0	15.0	10	775	-765
275+00	0.0	6.6	0.0	15.0	10	790	-780
275+50	0.0	8.1	0.0	20.0	10	810	-800
276+00	0.0	9.3	0.0	20.0	10	830	-820
276+50	0.0	10.8	0.0	25.0	10	855	-845
277+00	0.0	11.6	0.0	25.0	10	880	-870
277+50	0.0	12.7	0.0	30.0	10	910	-900
278+00	0.0	14.8	0.0	35.0	10	945	-935
278+50	0.0	14.5	0.0	35.0	10	980	-970
278+85	0.0	10.7	0.0	20.0	10	1000	-990
279+00	0.0	0.0	0.0	5.0	10	1005	-995
279+50	0.0	0.0	0.0	0.0	10	1005	-995
280+00	0.0	0.0	0.0	0.0	10	1005	-995
280+50	0.0	0.0	0.0	0.0	10	1005	-995
280+77	0.0	0.0	0.0	0.0	10	1005	-995
281+00	0.0	0.0	0.0	0.0	10	1005	-995
281+01	0.0	0.0	0.0	0.0	10	1005	-995

MCDILL AVENUE - STAGE 2 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
900+20	2.9	27.4					
900+40	10.9	20.4	5.0	25.0	5	25	-20
900+44	8.9	18.2	0.0	5.0	5	30	-25
900+48	13.8	19.3	0.0	5.0	5	35	-30
900+50	14.7	16.8	0.0	0.0	5	35	-30
900+75	26.4	2.4	20.0	10.0	25	45	-20
901+00	61.5	0.0	40.0	0.0	65	45	20
901+25	104.1	0.0	75.0	0.0	140	45	95
901+50	140.9	11.4	115.0	5.0	255	50	205
901+82	203.1	2.1	205.0	10.0	460	60	400
902+00	218.1	1.3	140.0	0.0	600	60	540
902+25	243.0	2.1	215.0	0.0	815	60	755
902+50	255.9	0.0	230.0	0.0	1045	60	985
902+75	217.1	2.6	220.0	0.0	1265	60	1205
903+00	218.0	0.0	200.0	0.0	1465	60	1405
903+21	219.3	0.0	170.0	0.0	1635	60	1575
903+50	140.2	1.6	195.0	0.0	1830	60	1770
904+00	139.2	0.9	260.0	5.0	2090	65	2025
904+39	140.0	0.0	200.0	0.0	2290	65	2225
904+50	140.0	0.0	55.0	0.0	2345	65	2280
905+00	115.0	0.4	235.0	0.0	2580	65	2515
905+18	134.7	0.1	85.0	0.0	2665	65	2600
905+50	99.6	0.0	140.0	0.0	2805	65	2740
906+00	75.0	0.0	160.0	0.0	2965	65	2900
906+50	86.6	0.1	150.0	0.0	3115	65	3050
907+00	97.0	0.0	170.0	0.0	3285	65	3220
907+39	95.0	0.0	135.0	0.0	3420	65	3355

LOCUST STREET N. - STAGE 2 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
100+35	82.3	0.3					
100+50	59.4	0.2	40.0	0.0	40	0	40
100+80	33.4	0.0	50.0	0.0	90	0	90

LOCUST STREET S. - STAGE 2 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
99+10	32.3	0.0					
99+25	33.8	0.0	20.0	0.0	20	0	20
99+50	61.7	0.1	45.0	0.0	65	0	65
99+56	63.2	0.0	15.0	0.0	80	0	80
99+72	90.7	0.8	45.0	0.0	125	0	125

CTH HH - STAGE 3 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
892+02	88.84	0.18					
892+50	100	0.08	170	0	170	0	170
893+00	107.22	0.62	190	0	360	0	360
893+50	109.79	1.53	200	5	560	5	555
894+00	113.23	0.48	205	0	765	5	760
894+50	132.18	0	225	0	990	5	985
895+00	143.19	0.55	255	0	1245	5	1240
895+50	151.95	1.04	275	0	1520	5	1515
896+00	144.73	3.13	275	5	1795	10	1785
896+50	126.16	6.17	250	10	2045	20	2025
897+00	104.65	10.92	215	20	2260	40	2220
897+50	79.36	18.77	170	35	2430	75	2355
898+00	54.45	23.71	125	50	2555	125	2430
898+25	43.83	16.73	45	25	2600	150	2450
898+50	22.31	19.37	30	20	2630	170	2460
898+75	8.8	32.0	15	30	2645	200	2445
899+00	3.16	40.89	5	45	2650	245	2405
899+04	2.54	43.43	0	10	2650	255	2395
899+20	0.26	52.4	0	35	2650	290	2360
899+35	0	65.03	0	40	2650	330	2320

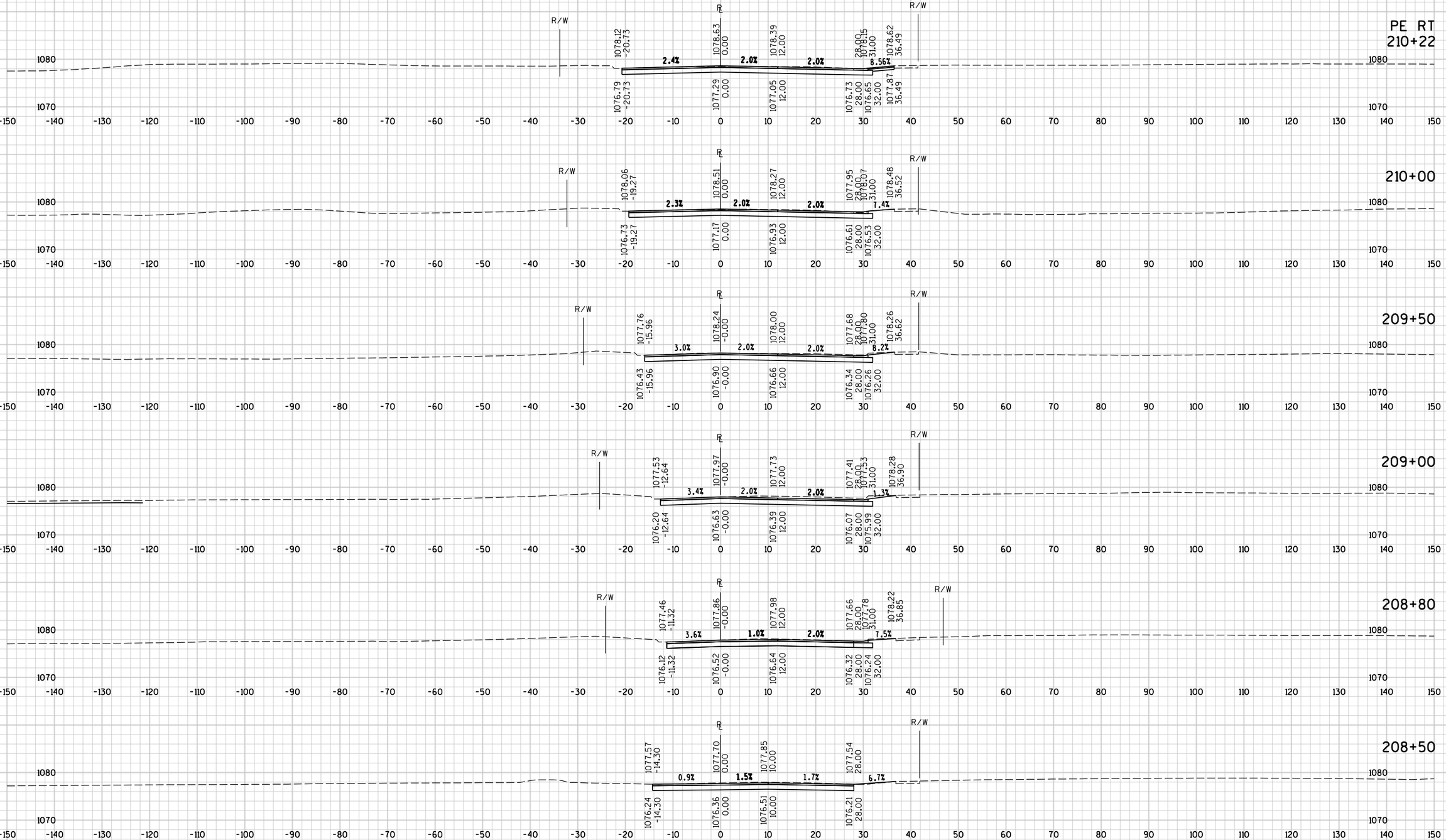
BOAT LANDING SIDEWALK - STAGE 3 EXP Fact= 1.3

STATION	END AREA CUT (SF)	END AREA FILL (SF)	VOLUME CUT (CY)	VOLUME FILL (CY)	CUMULATIVE VOLUME CUT (CY)	CUMULATIVE VOLUME FILL (CY)	MASS HAUL (CY)
0+51	2.5	0.3					
0+75	0.0	5.0	1.0	3.0	1	3	-2
1+00	0.0	27.4	0.0	19.0	1	22	-21
1+25	0.0	52.4	0.0	48.0	1	70	-69
1+50	0.0	38.8	0.0	55.0	1	125	-124
1+60	1.0	1.0	0.0	10.0	1	135	-134

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FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\090101 ew.dgn PLOT TIME : 3:55:51 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

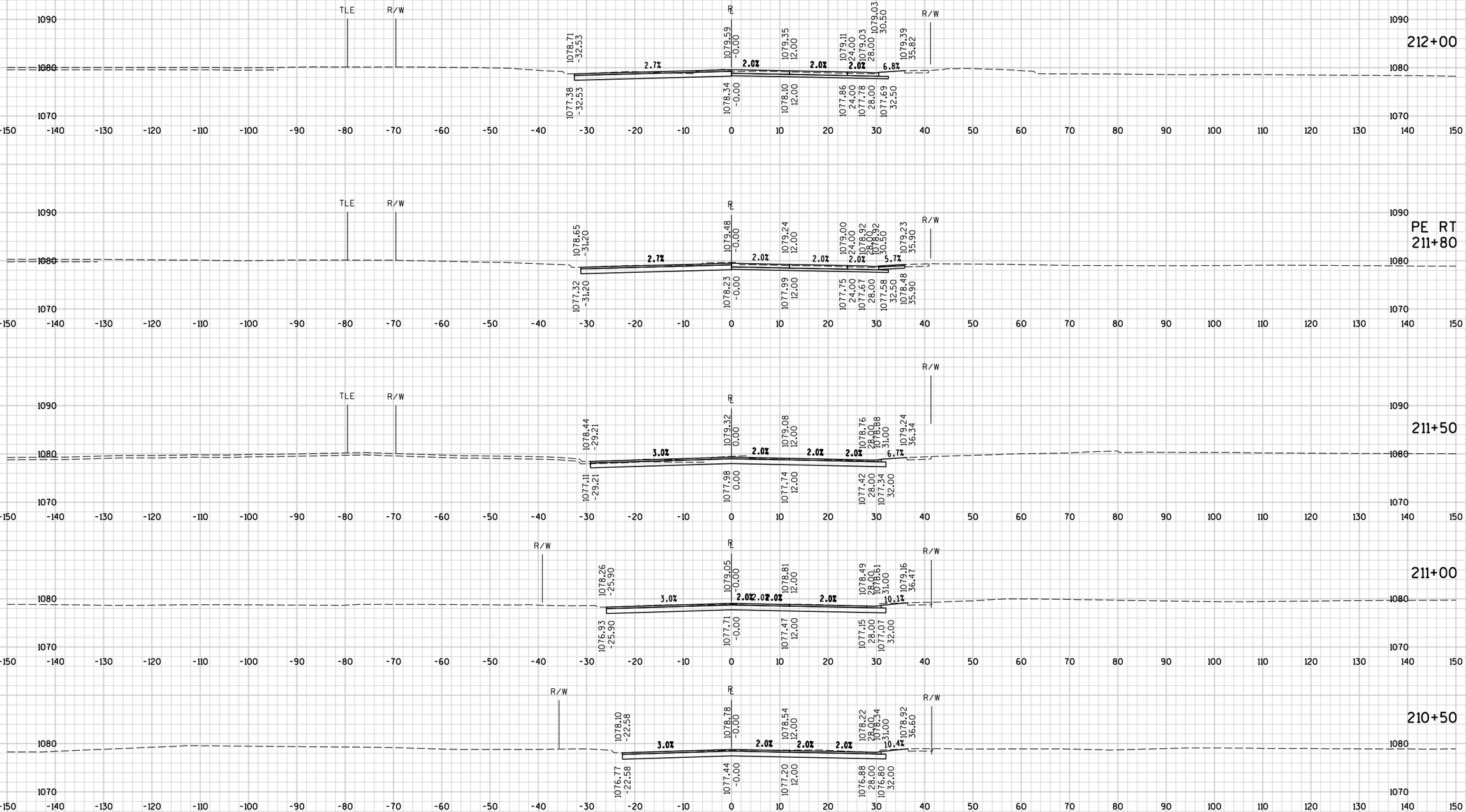


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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 543	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:06 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

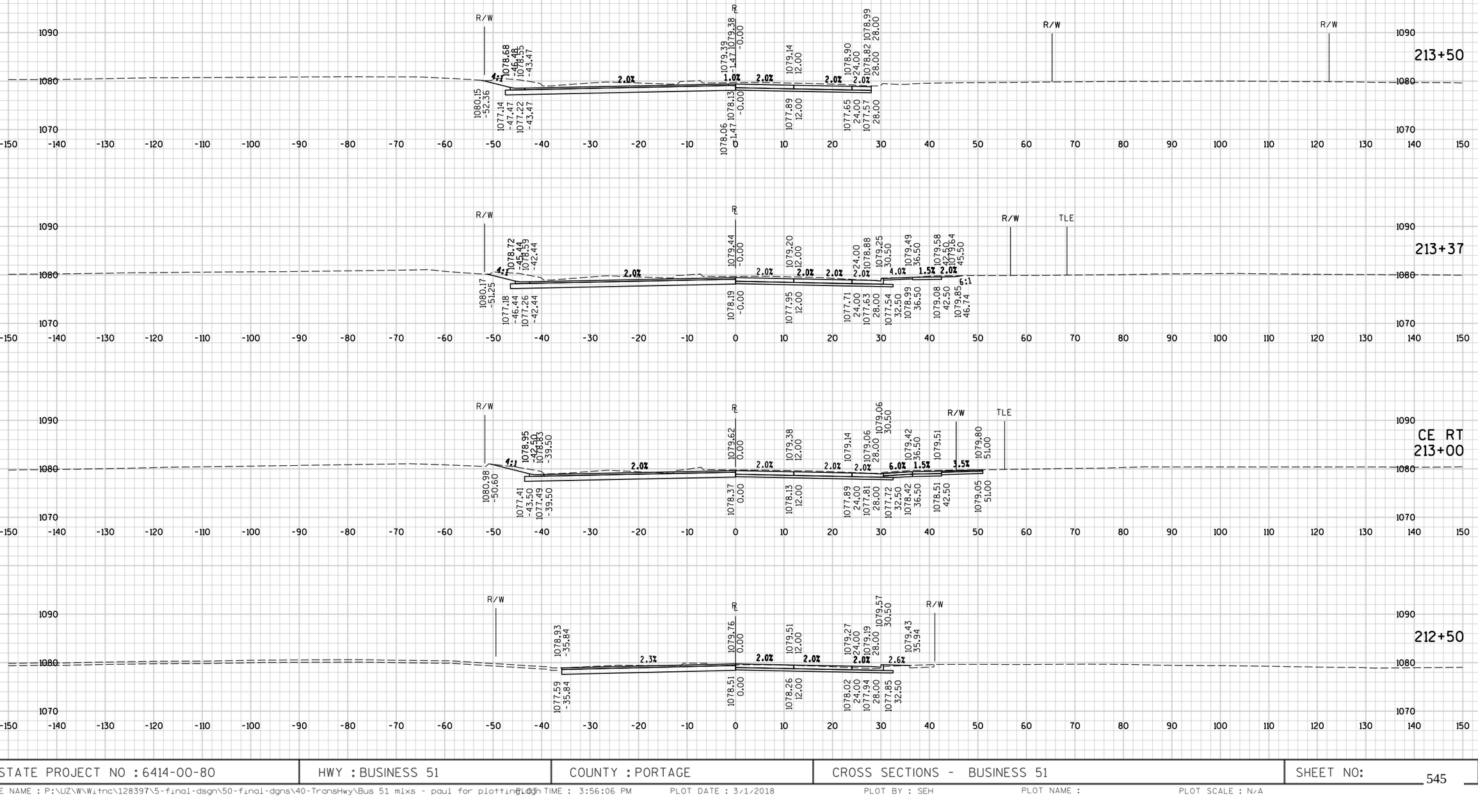


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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 544	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:06 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

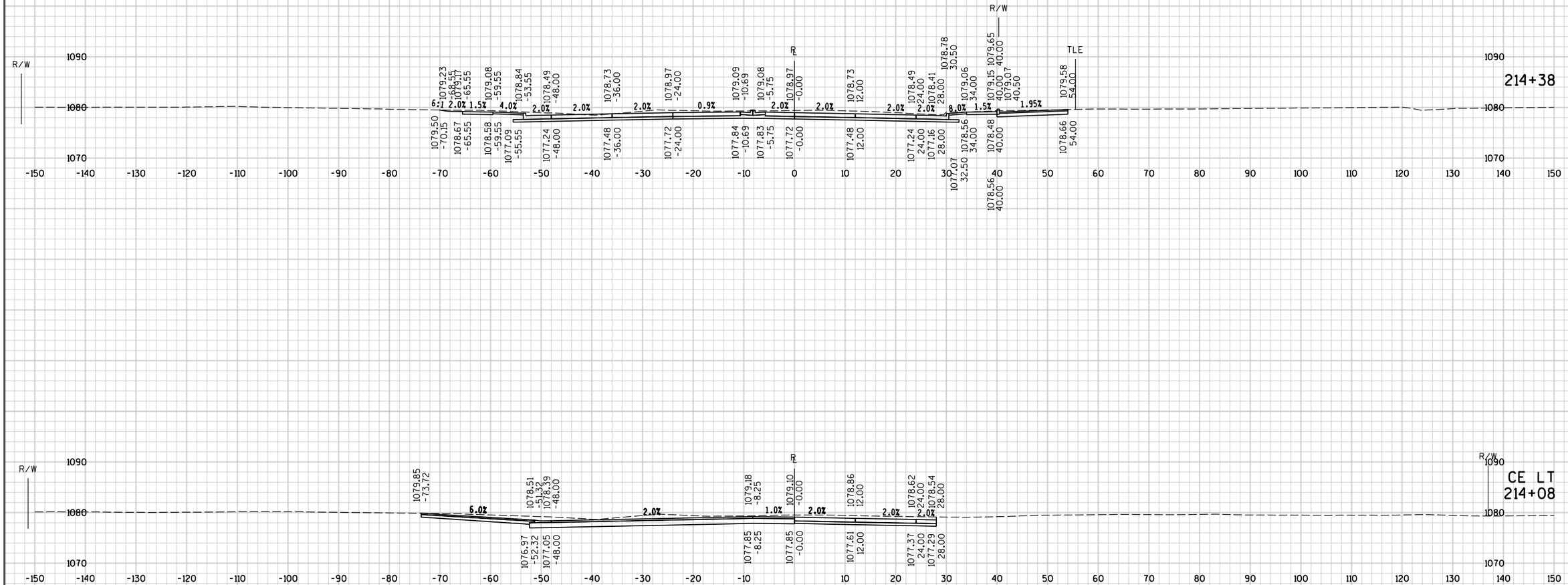


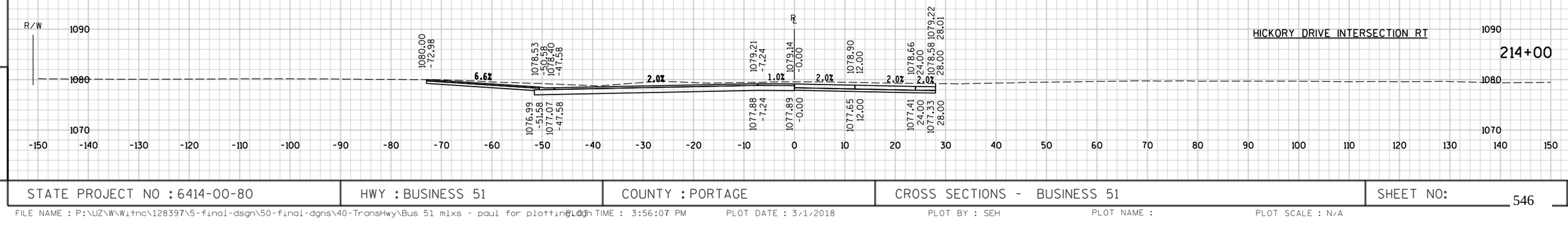
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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 545	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:06 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



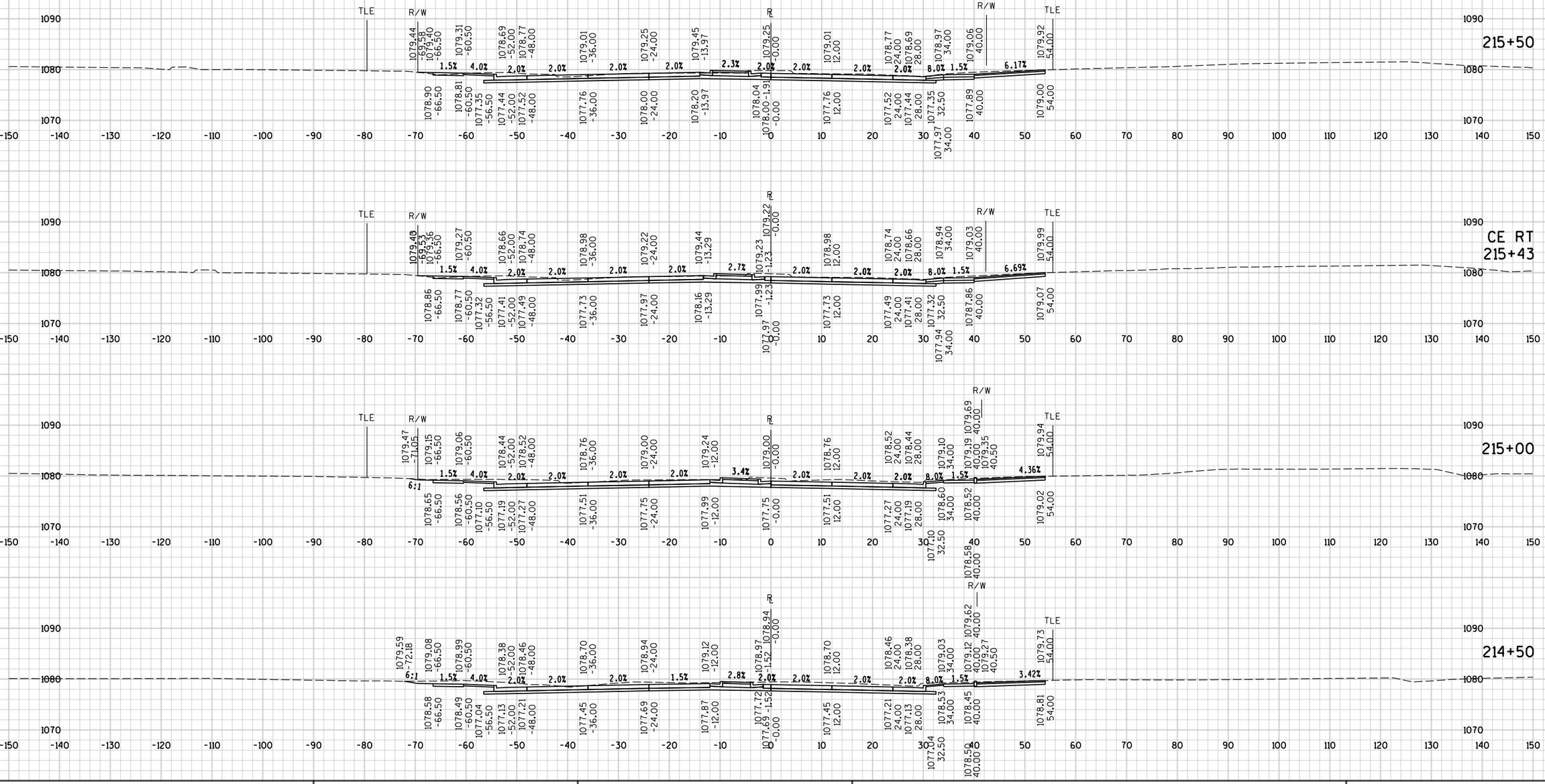


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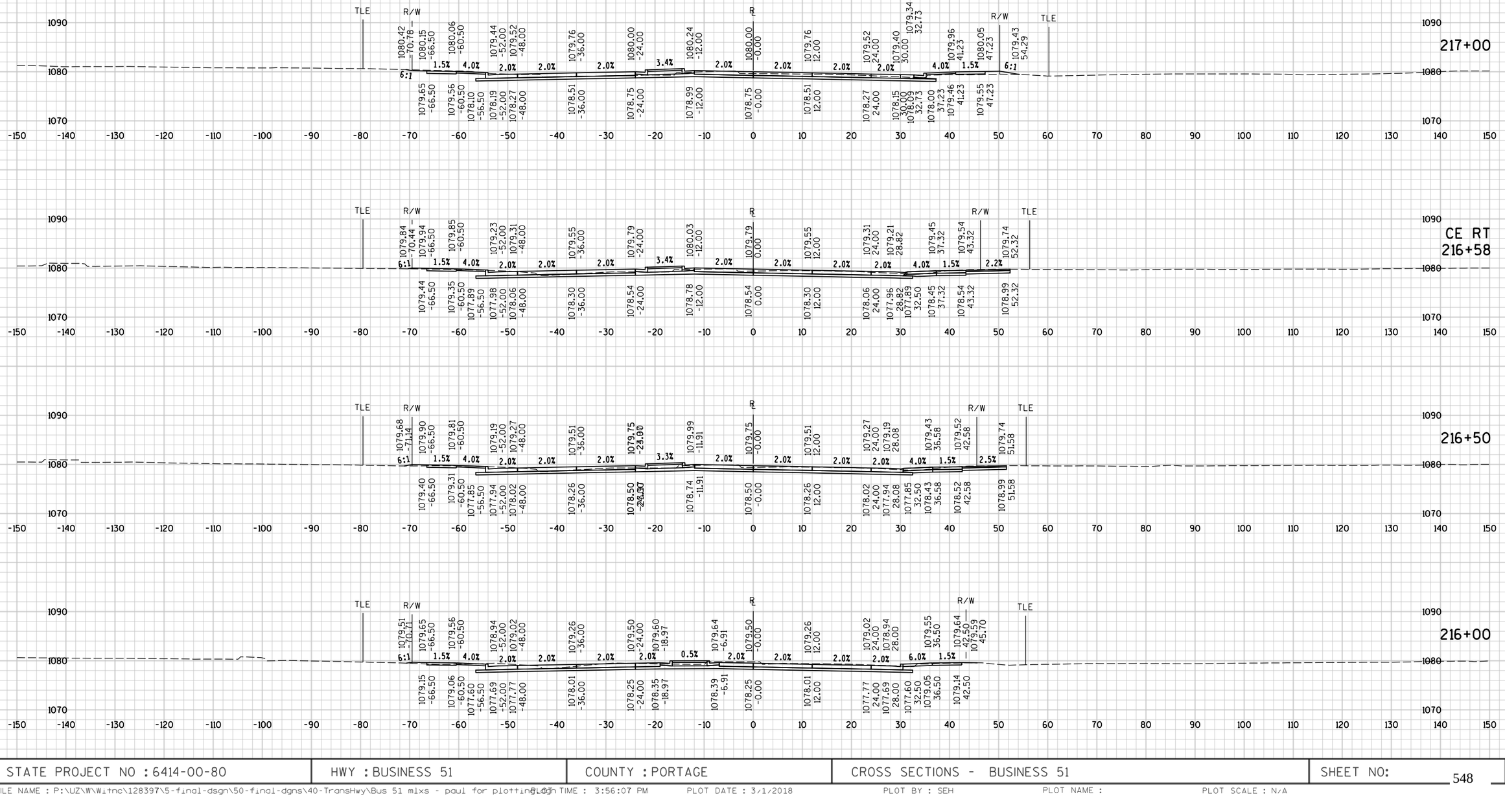
STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 546	E

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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 547 E

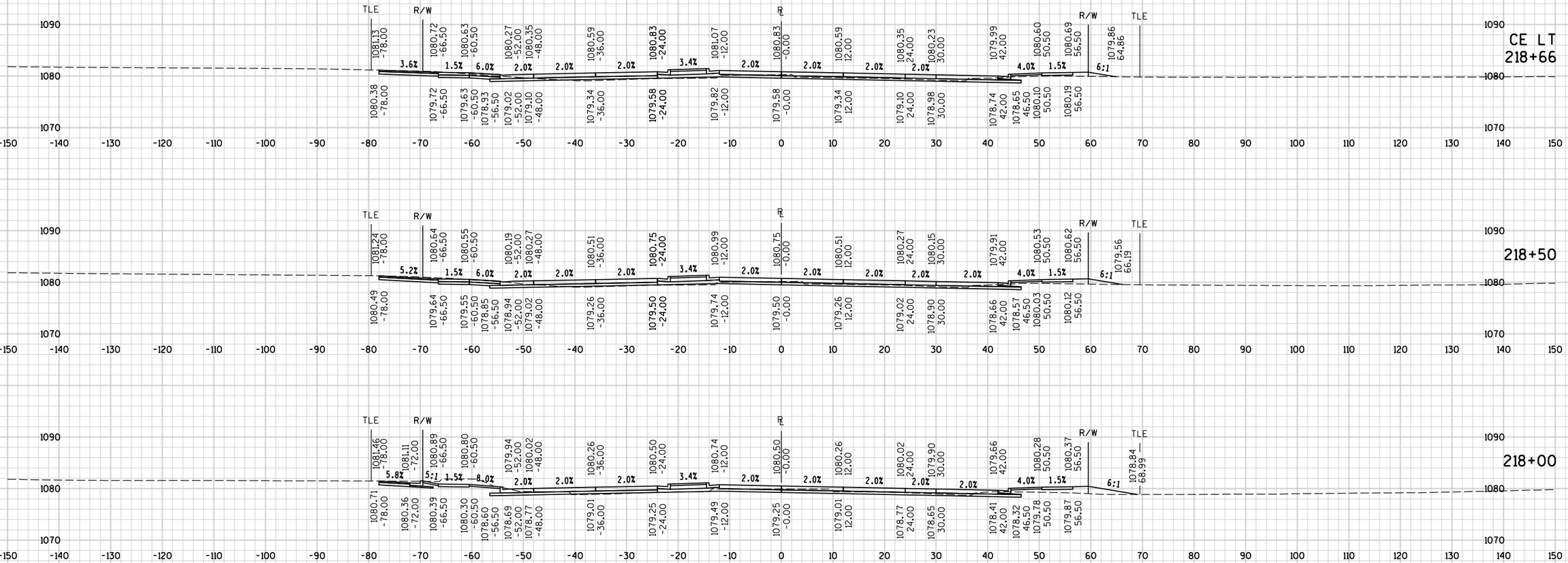
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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 548	E



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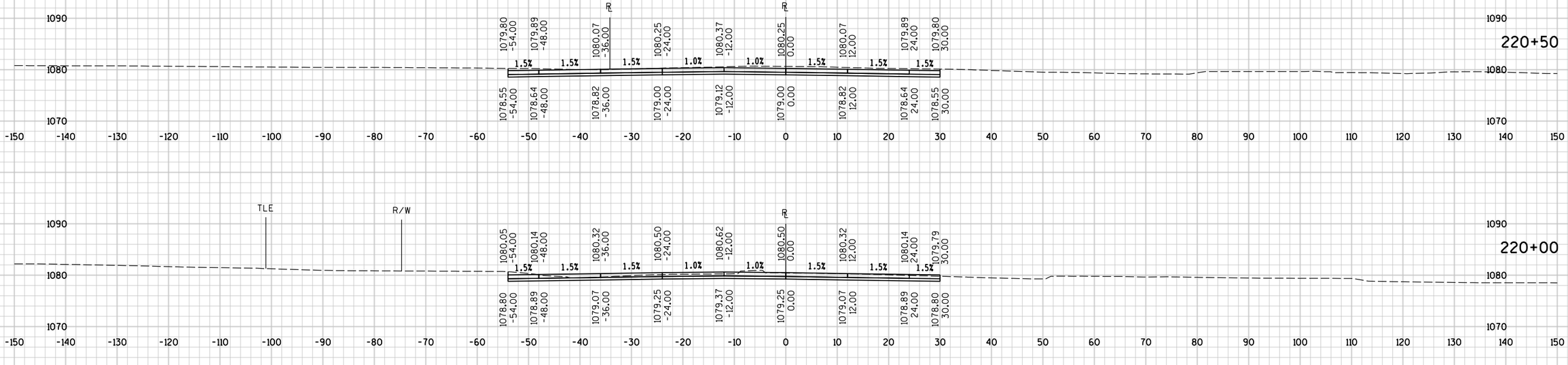
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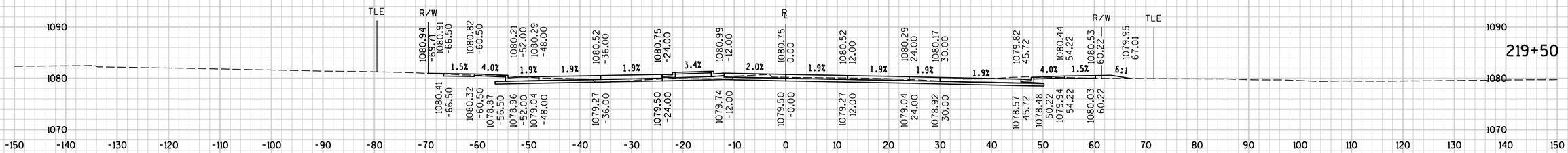
STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 549	E

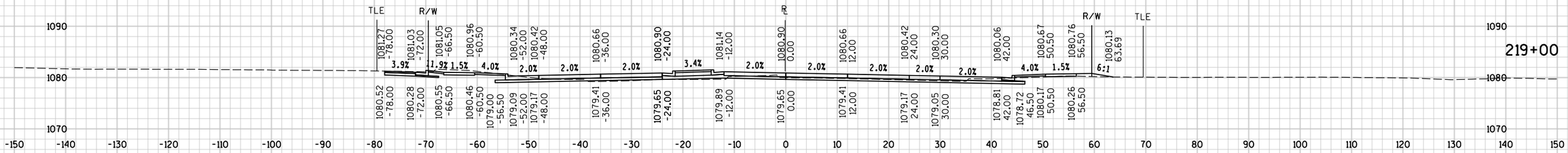
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TOMMY'S TURN PIKE LT

PORTER ROAD RT



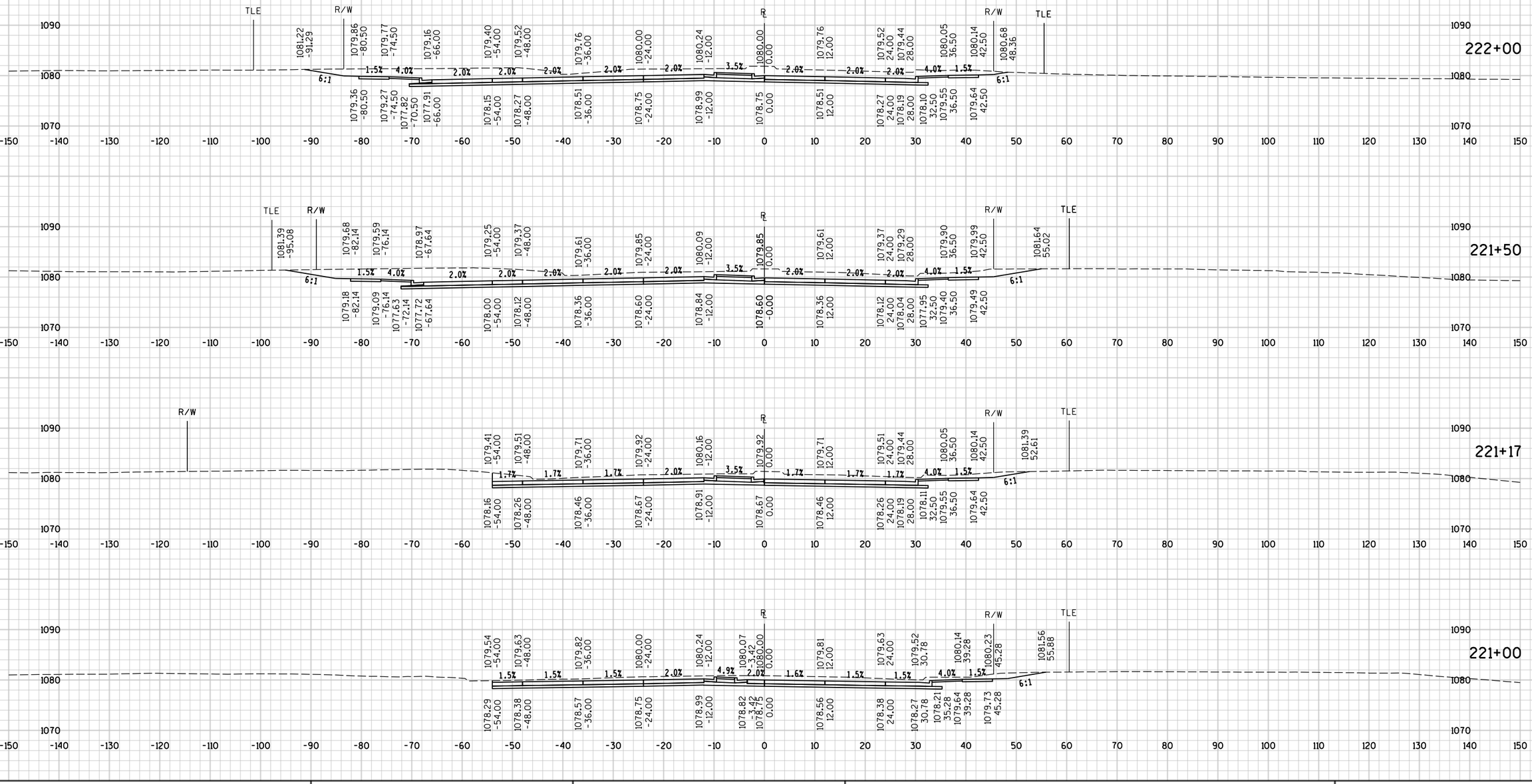




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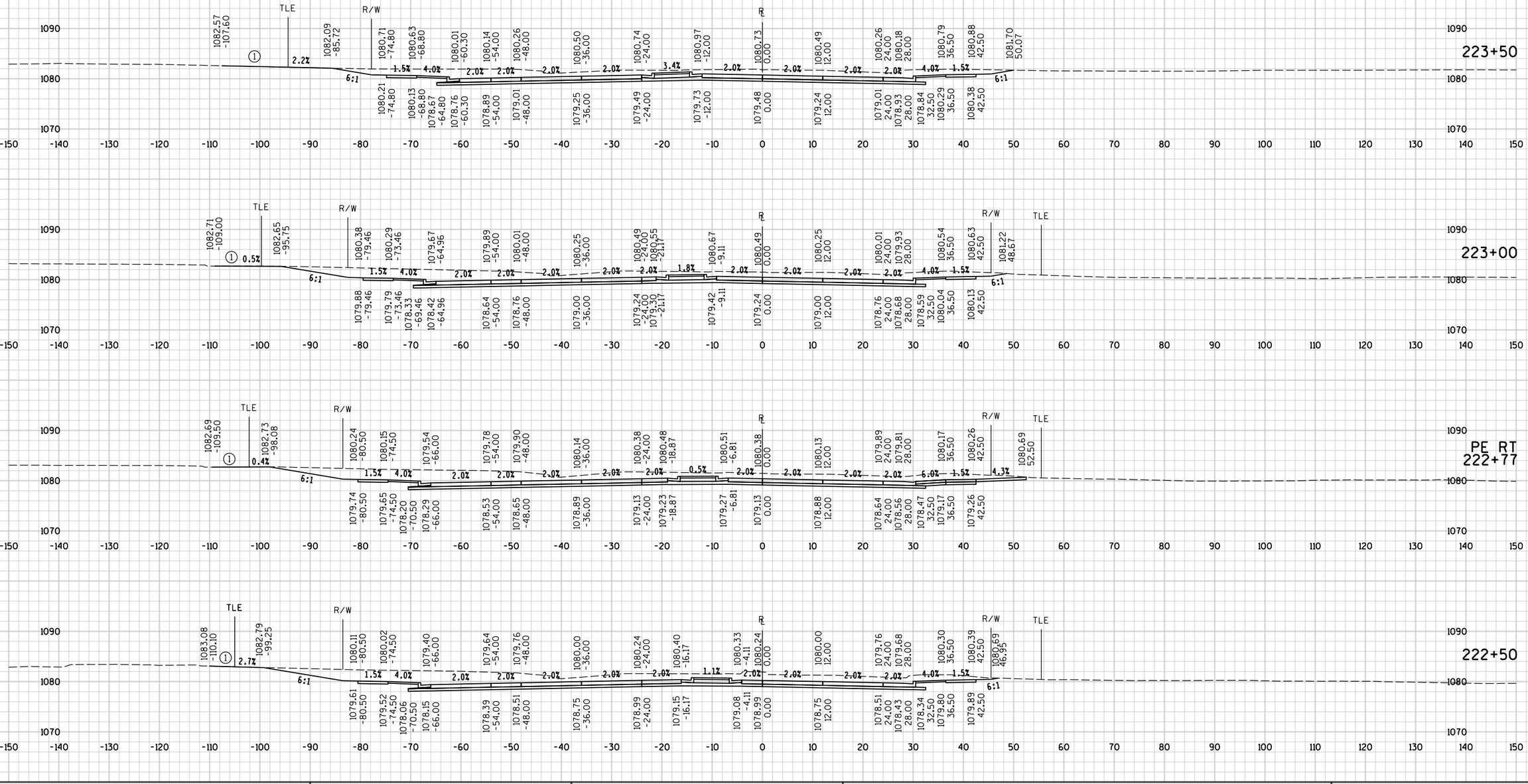
STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 550	E



STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 551	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:08 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

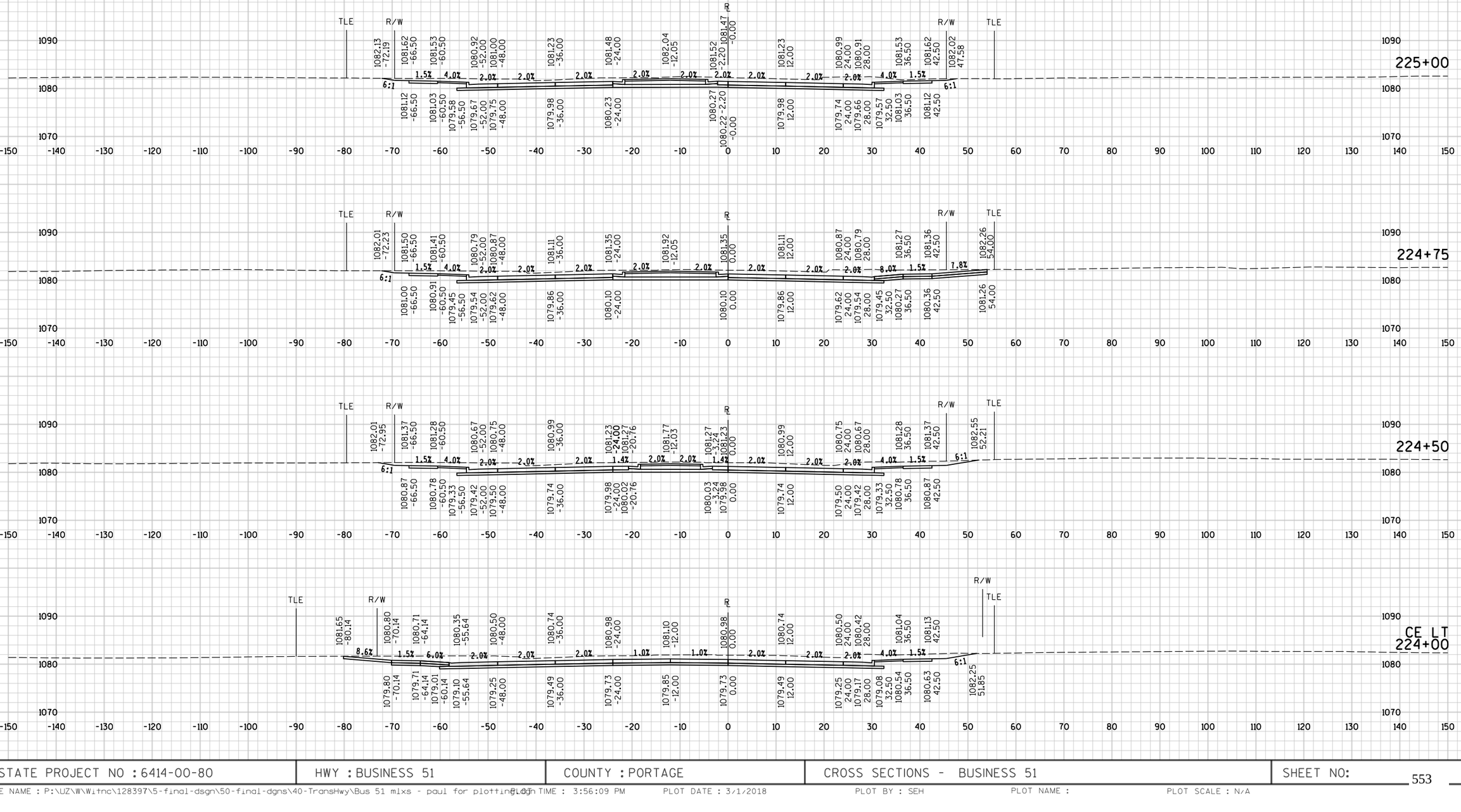
① REMOVE ASPHALT PARKING LOT FROM WISDOT PARCEL (INCIDENTAL TO EXCAVATION COMMON) TOPSOIL, SEED, FERTILIZE AND MULCH



9

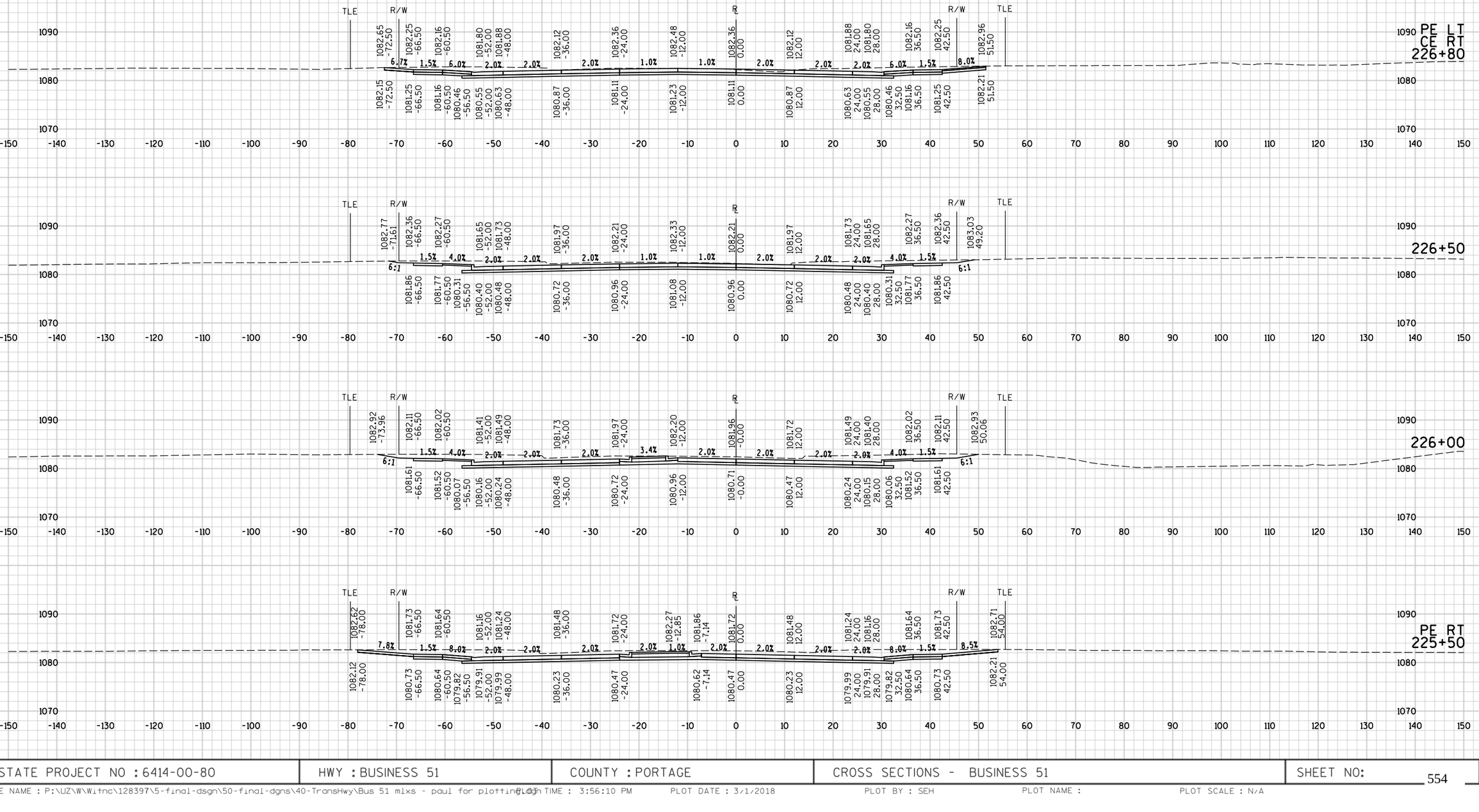
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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 552	E



STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 553

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:09 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

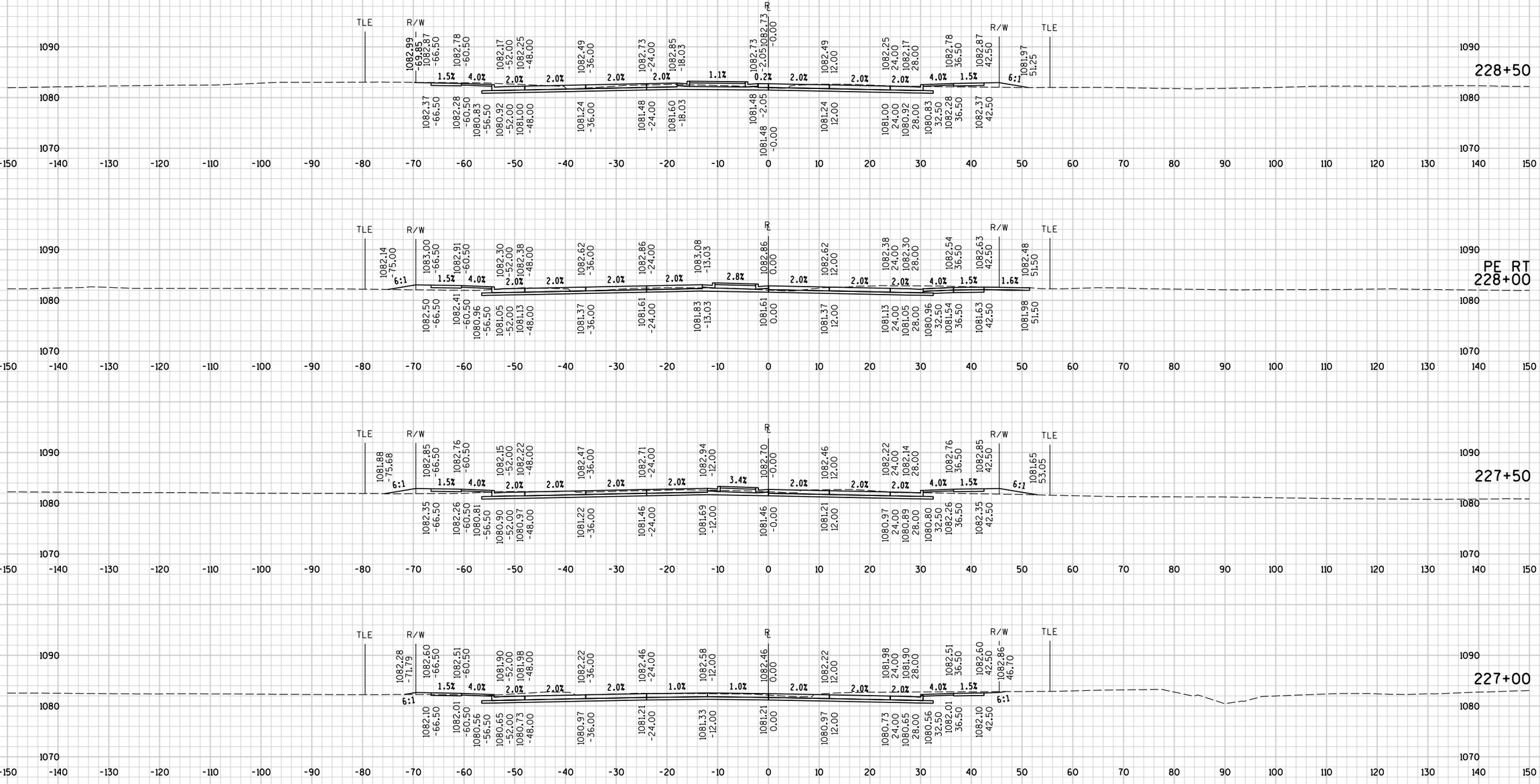


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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 554	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:10 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

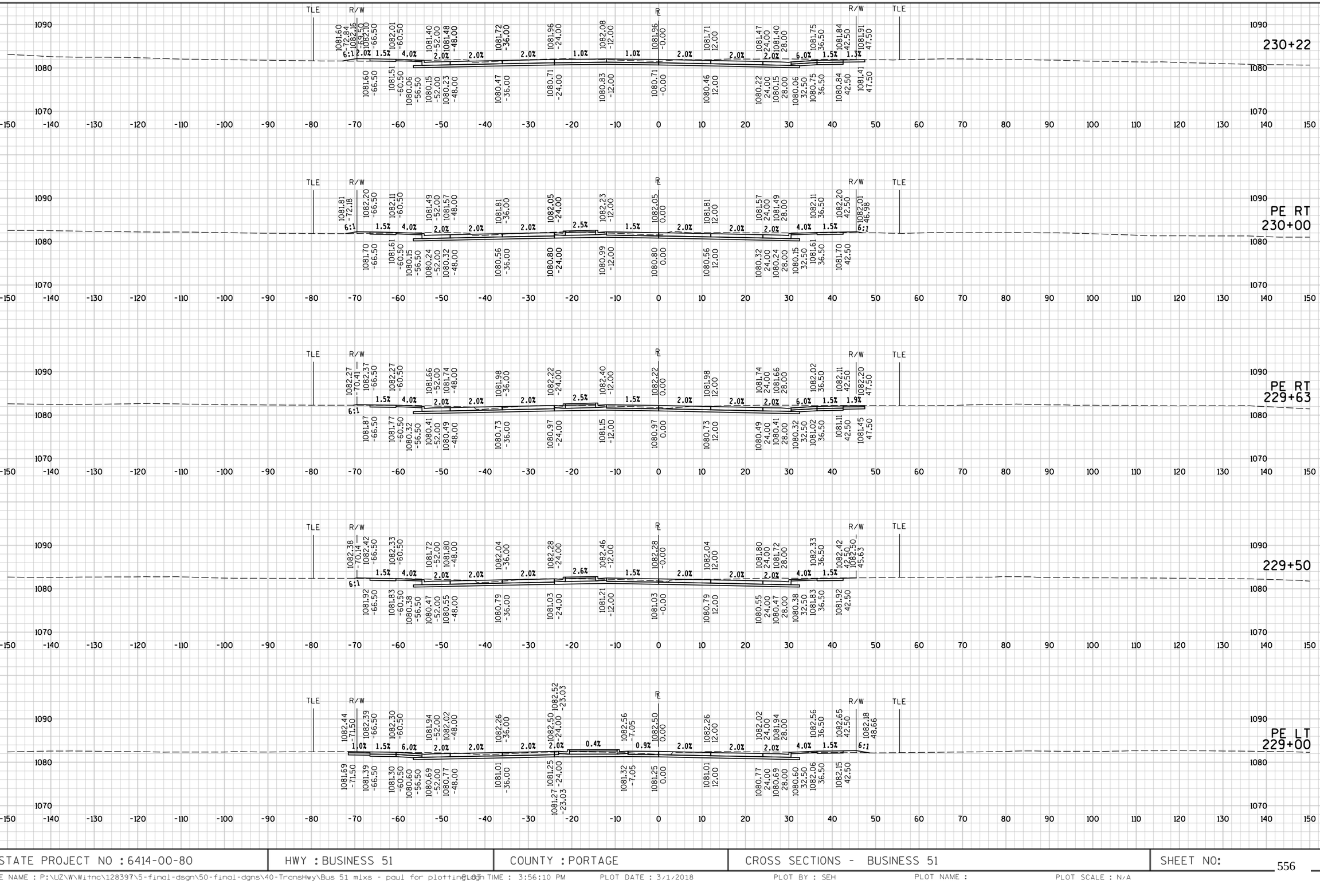


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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 555	E

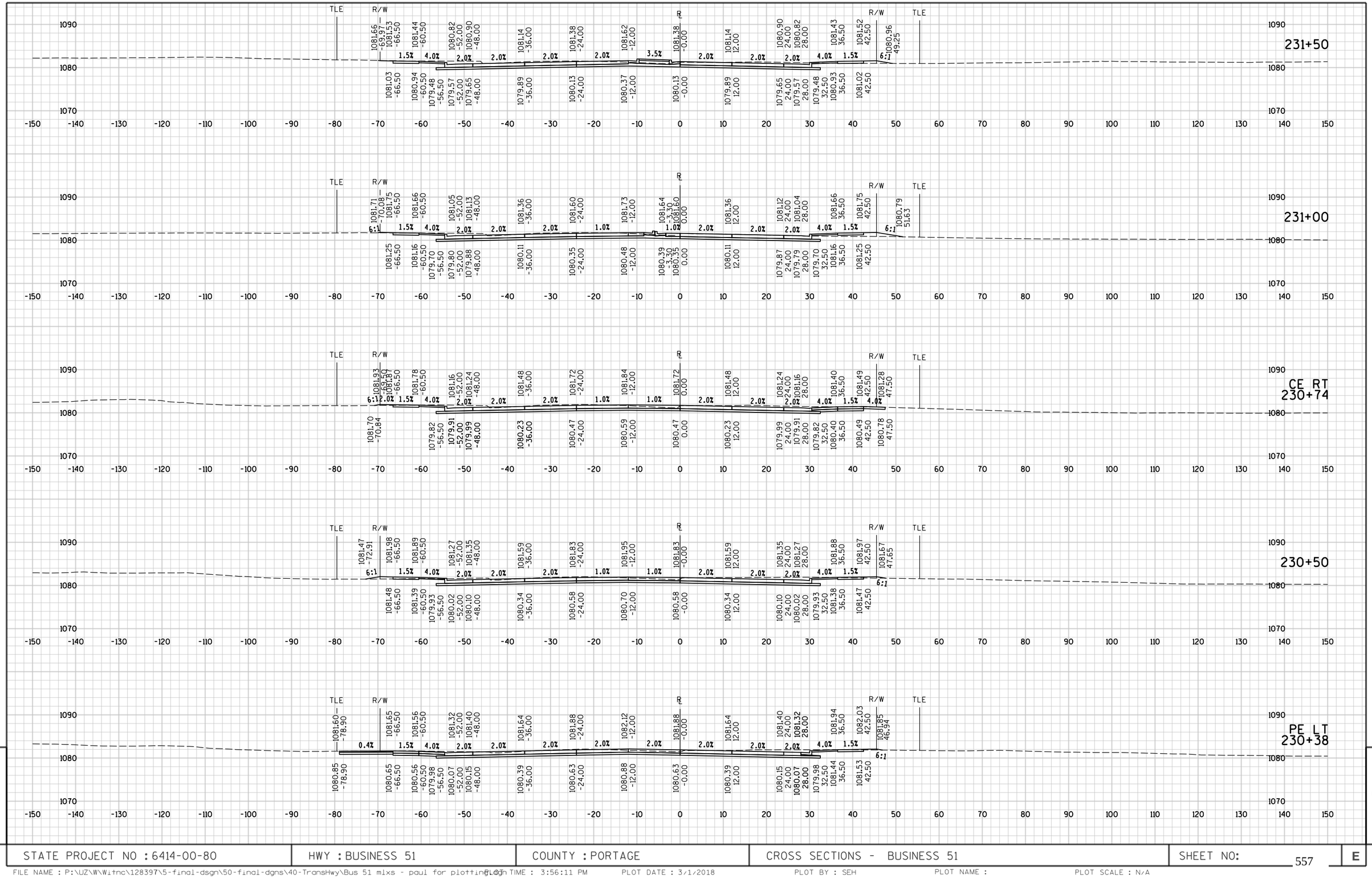
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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 556	E



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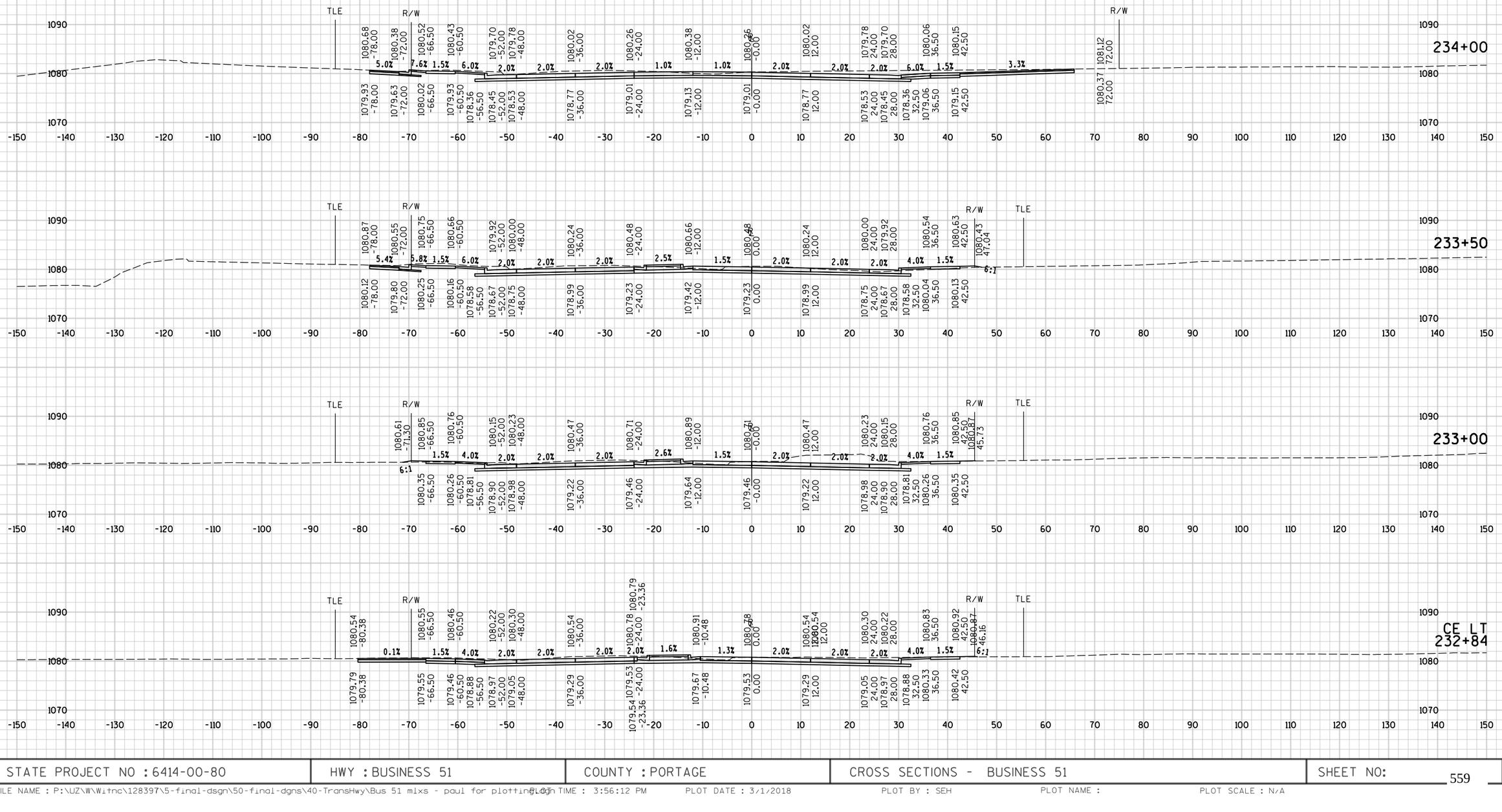
STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 557	E

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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 558 E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:11 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

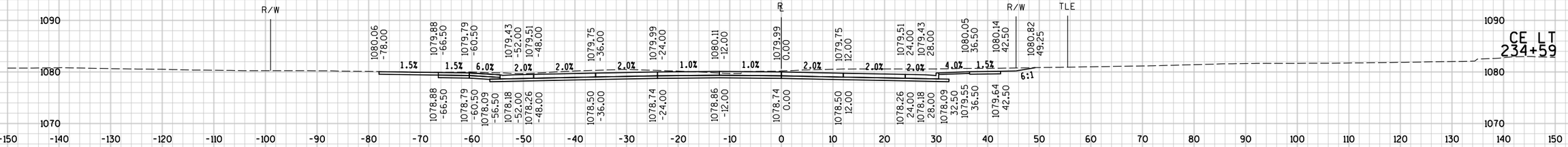


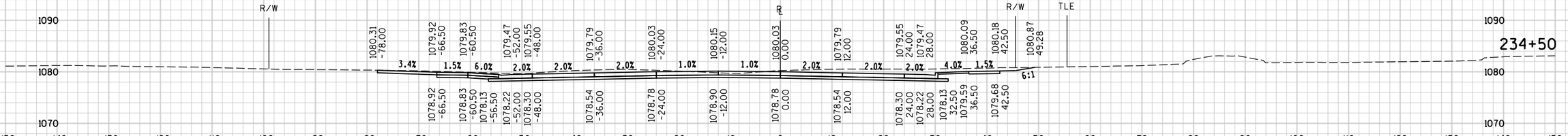
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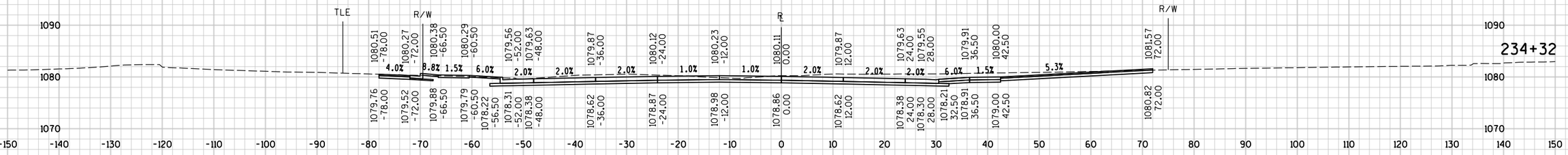
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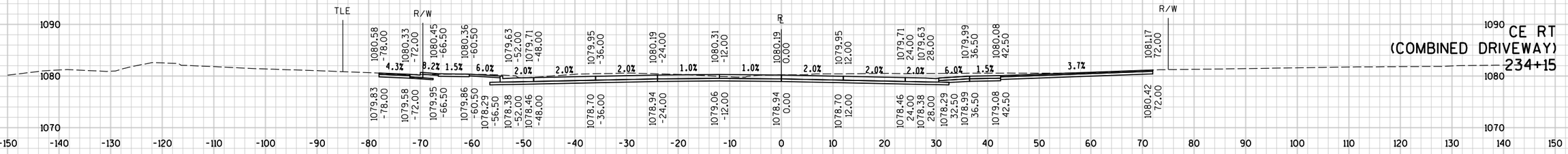
STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 559	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:12 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A







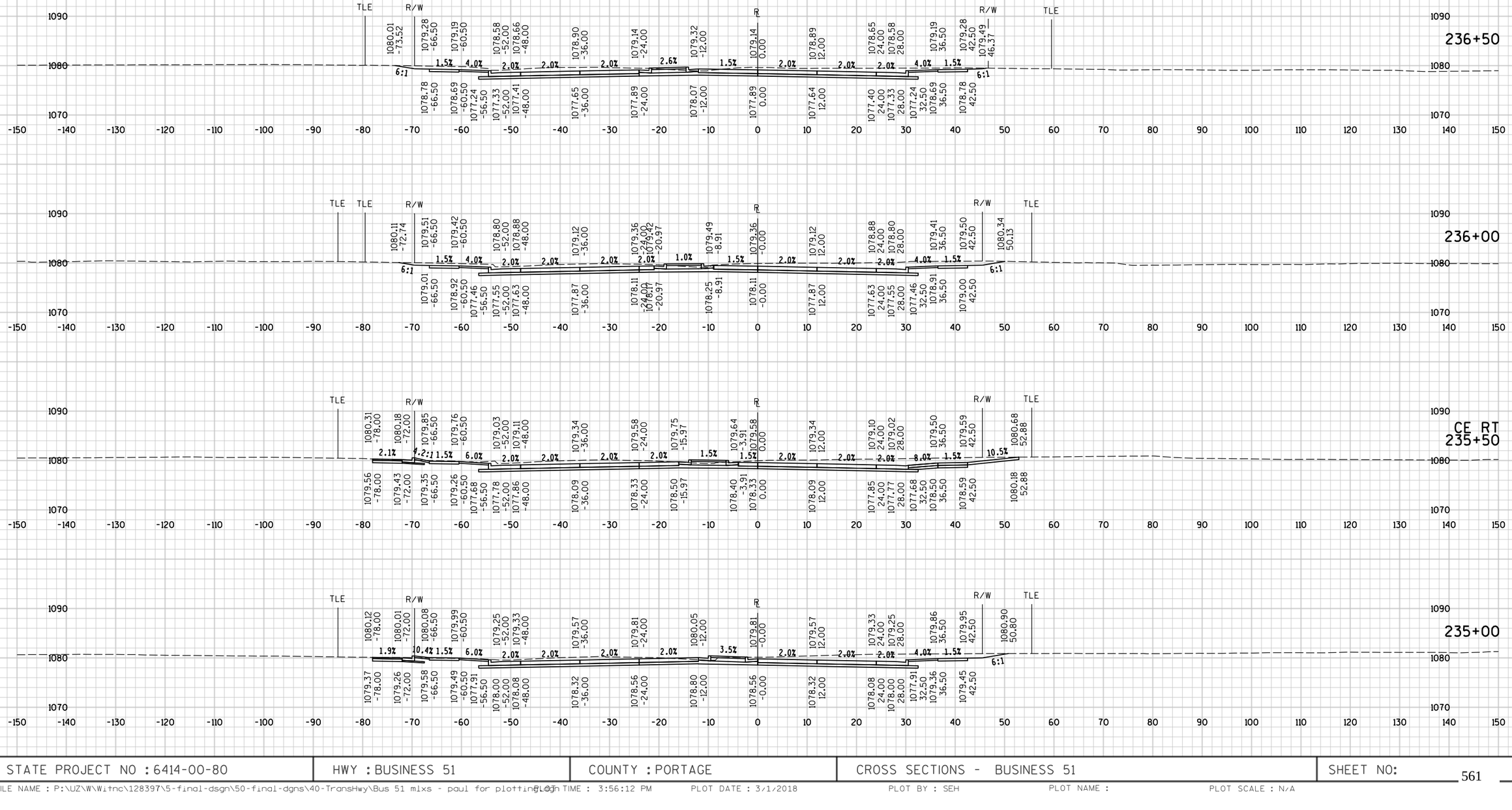


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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 560	E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:12 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

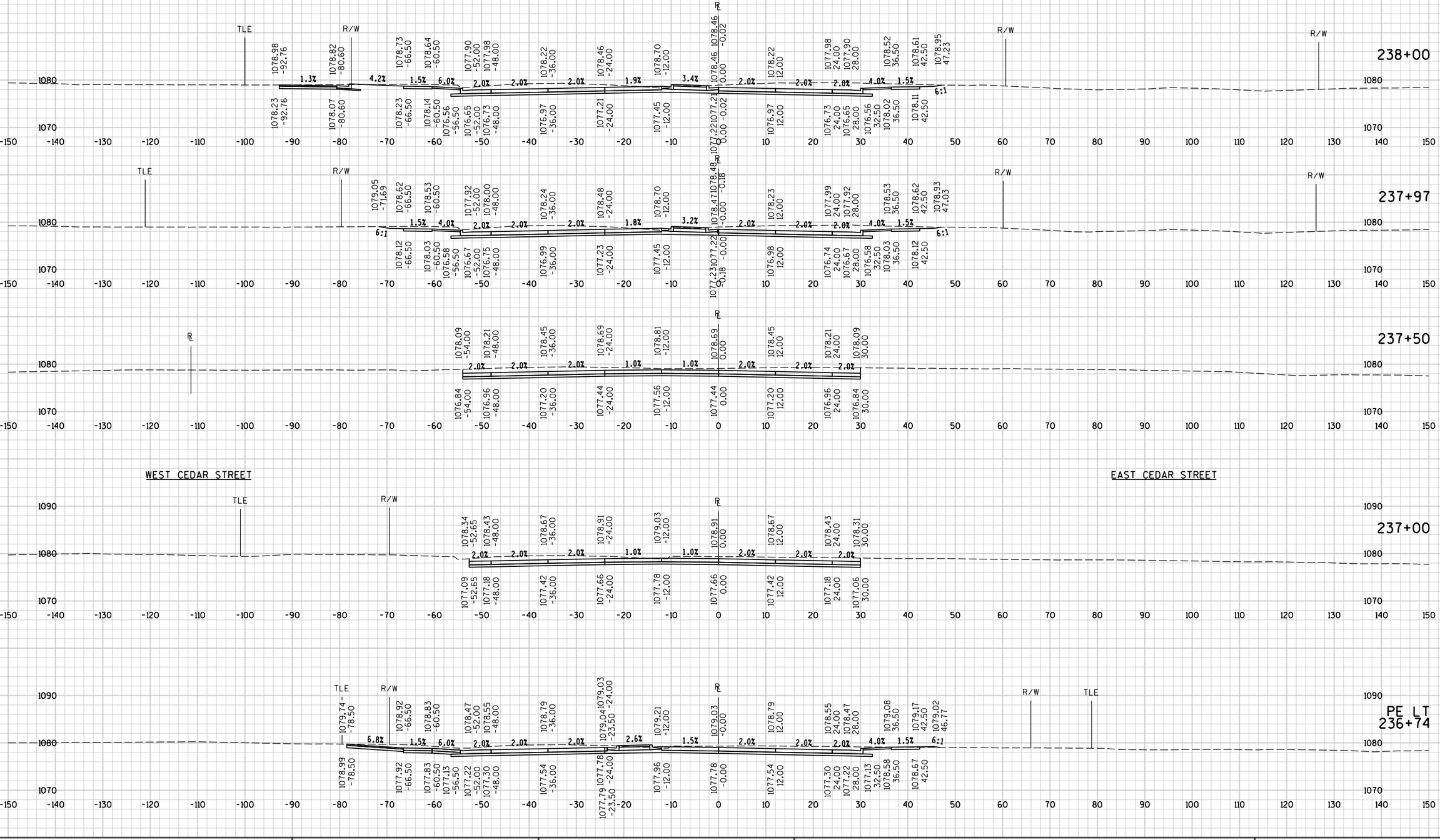


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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 561	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:12 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

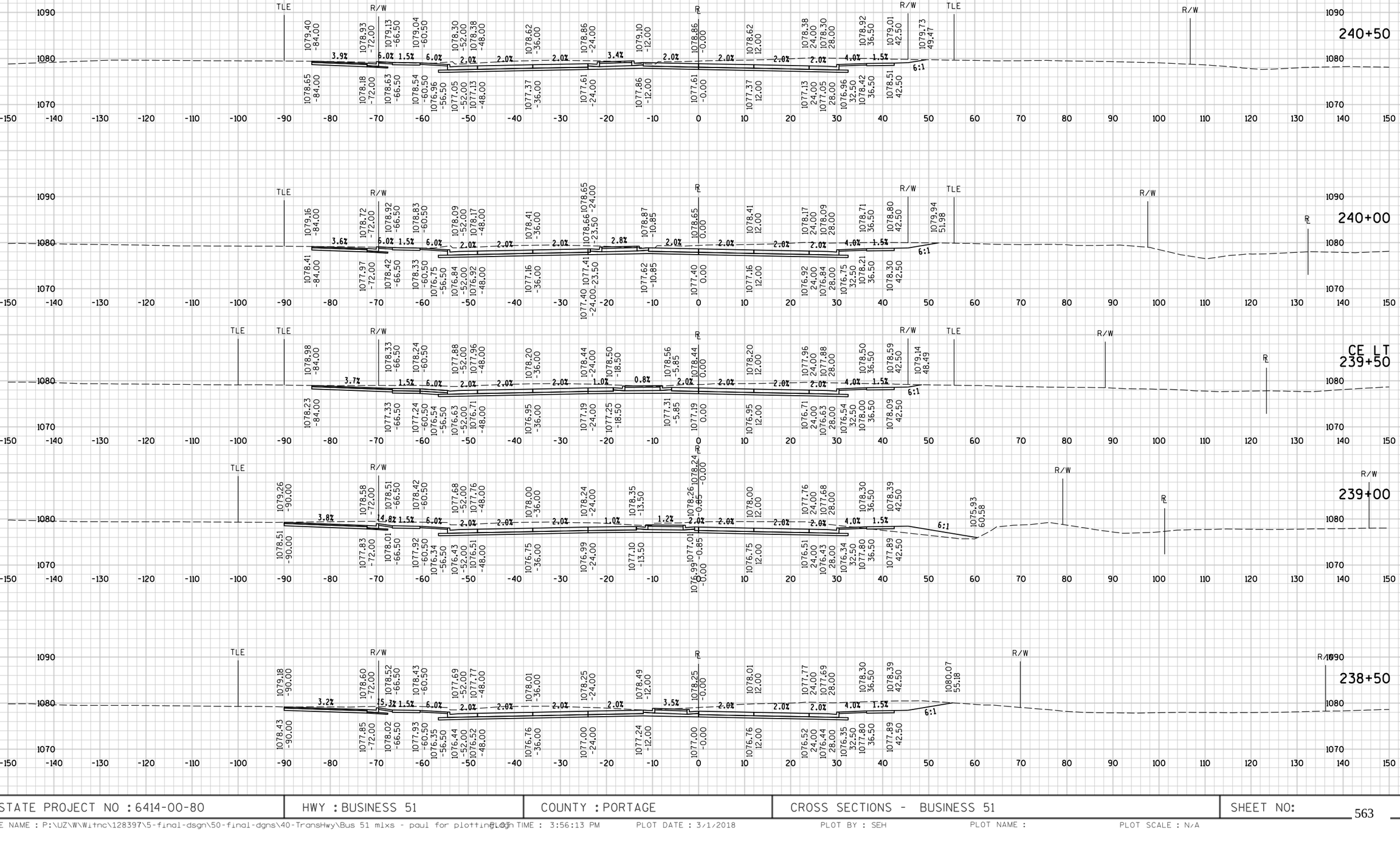


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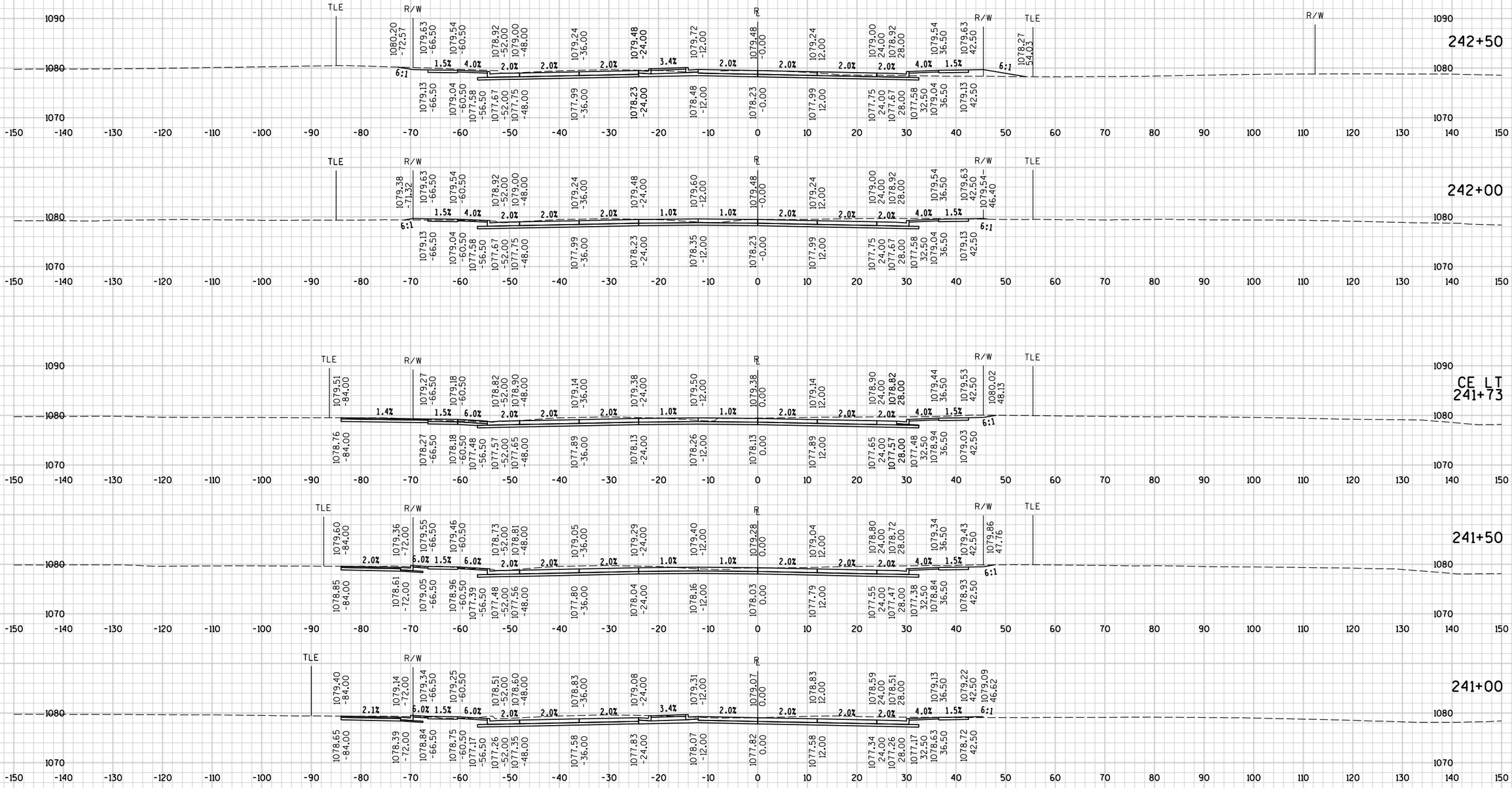
STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 562	E

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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 563	E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:13 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

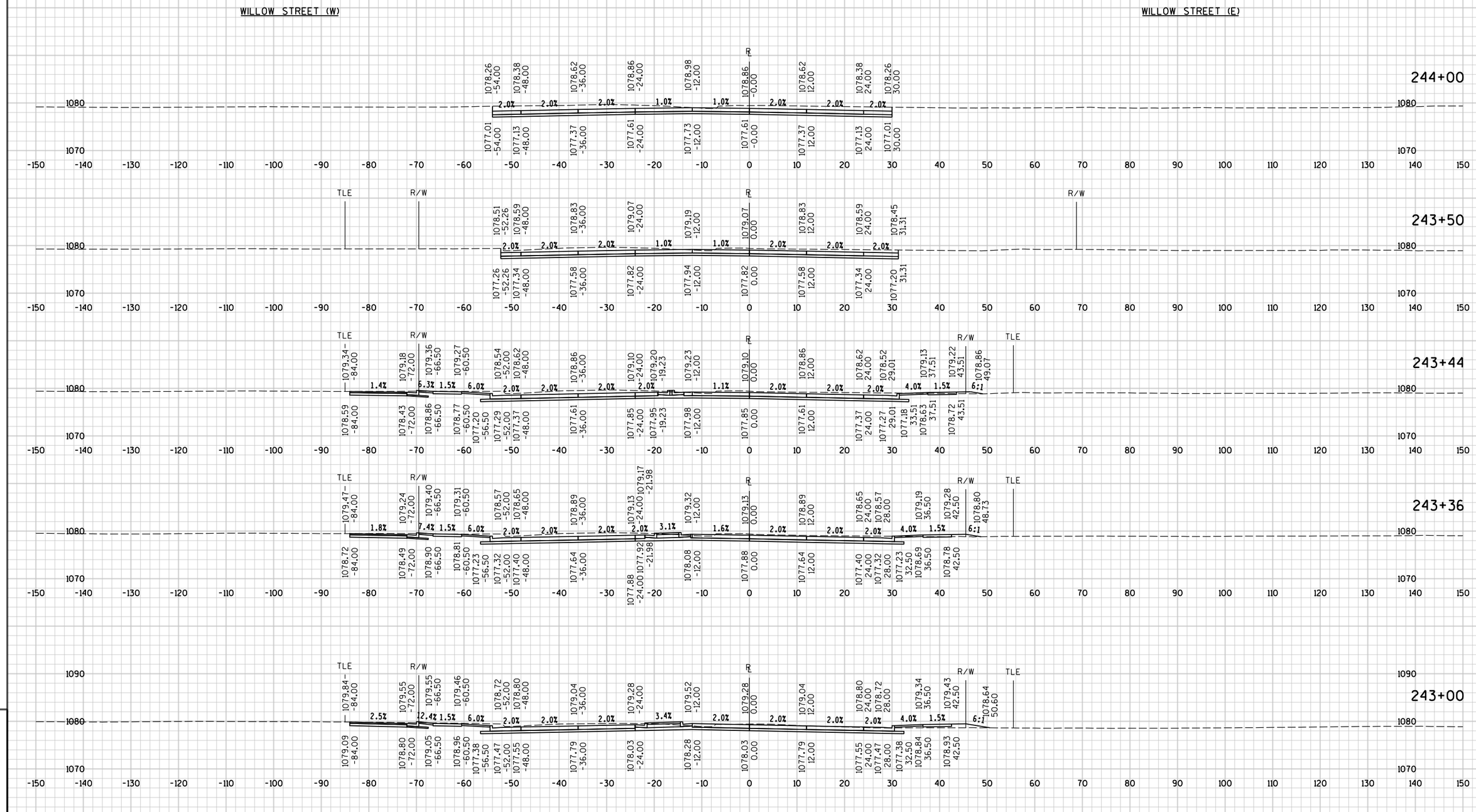


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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 564	E

FILE NAME : P:\UZW\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:14 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

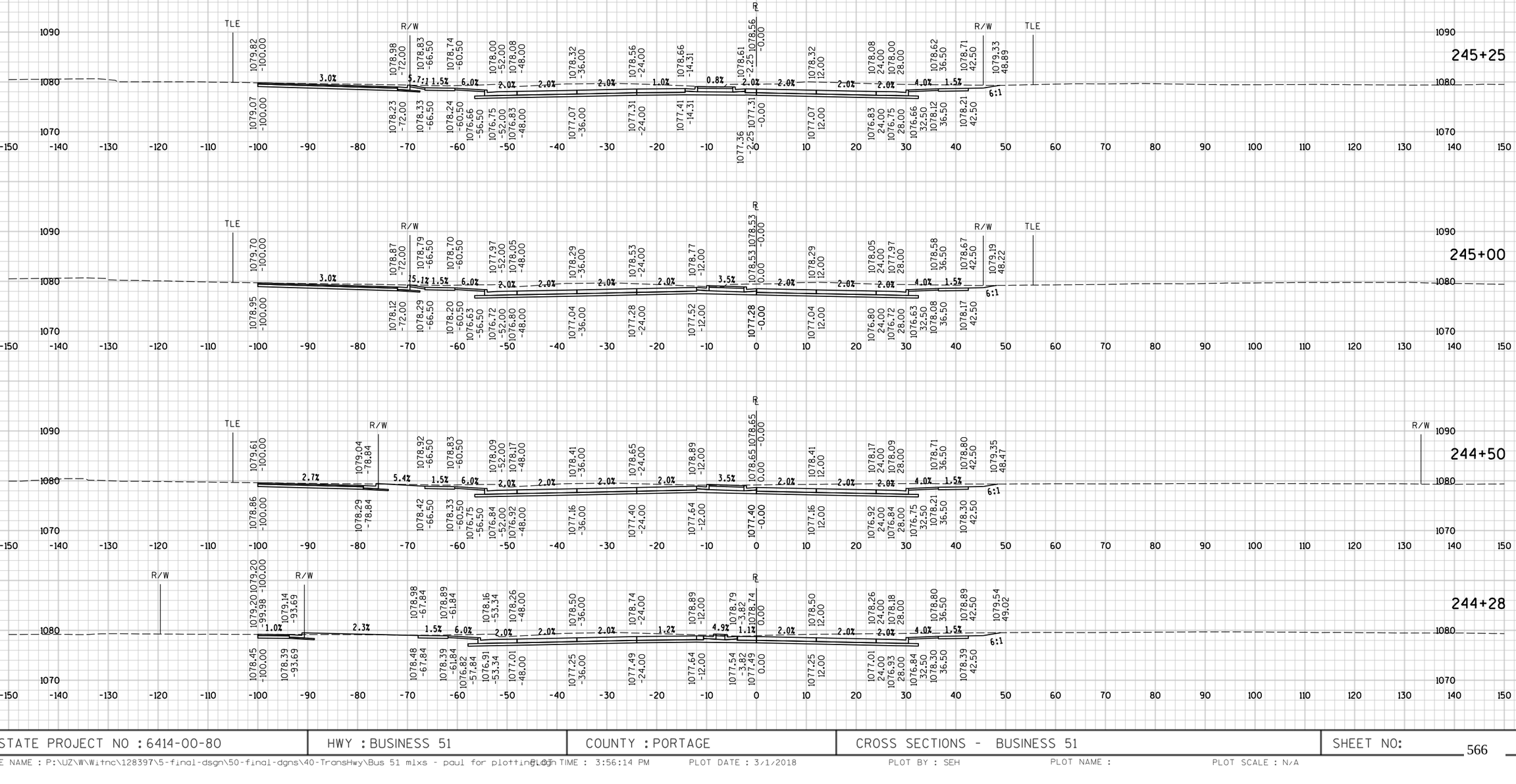


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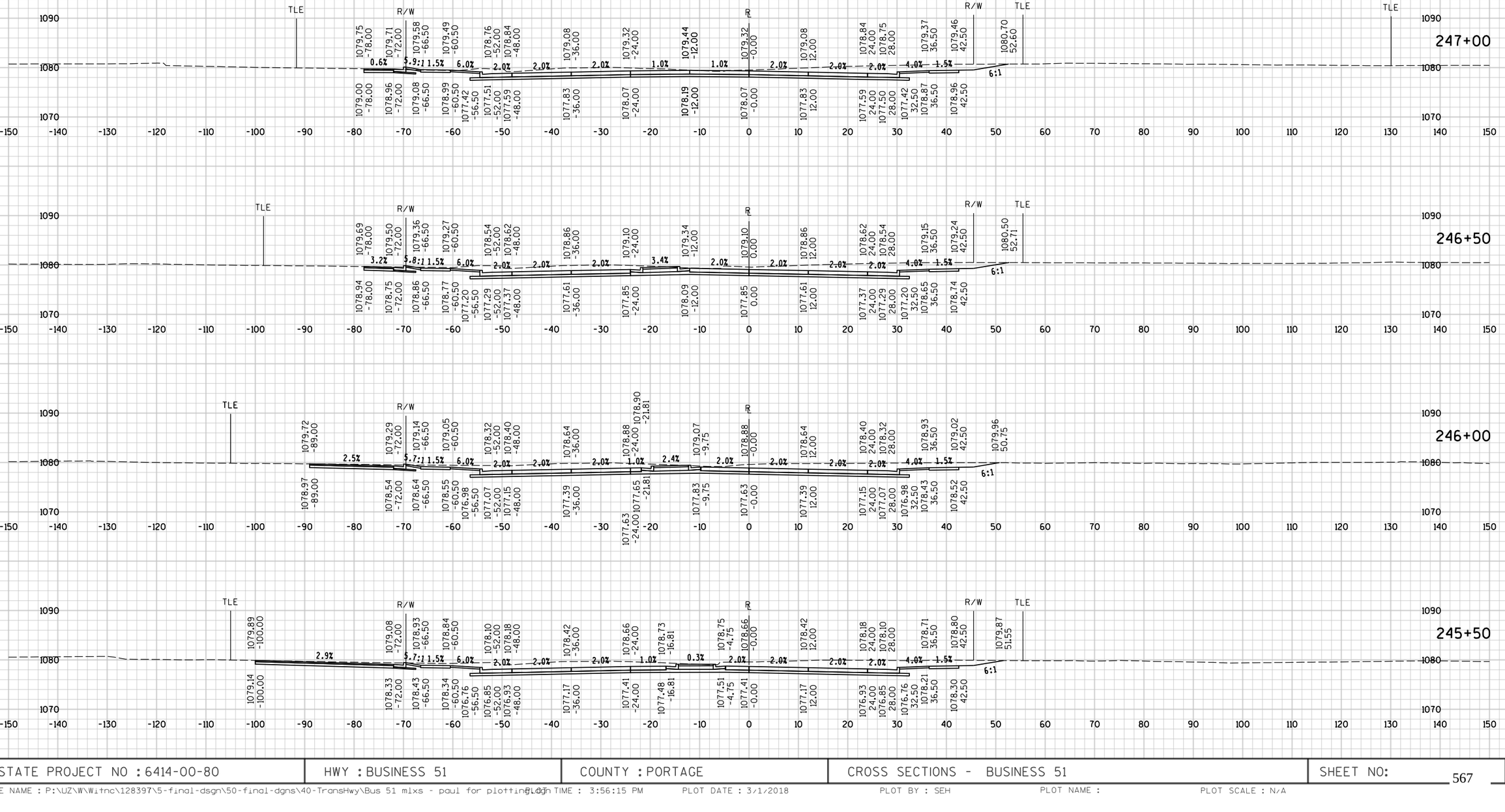
STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 565	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:14 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 566	E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:14 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

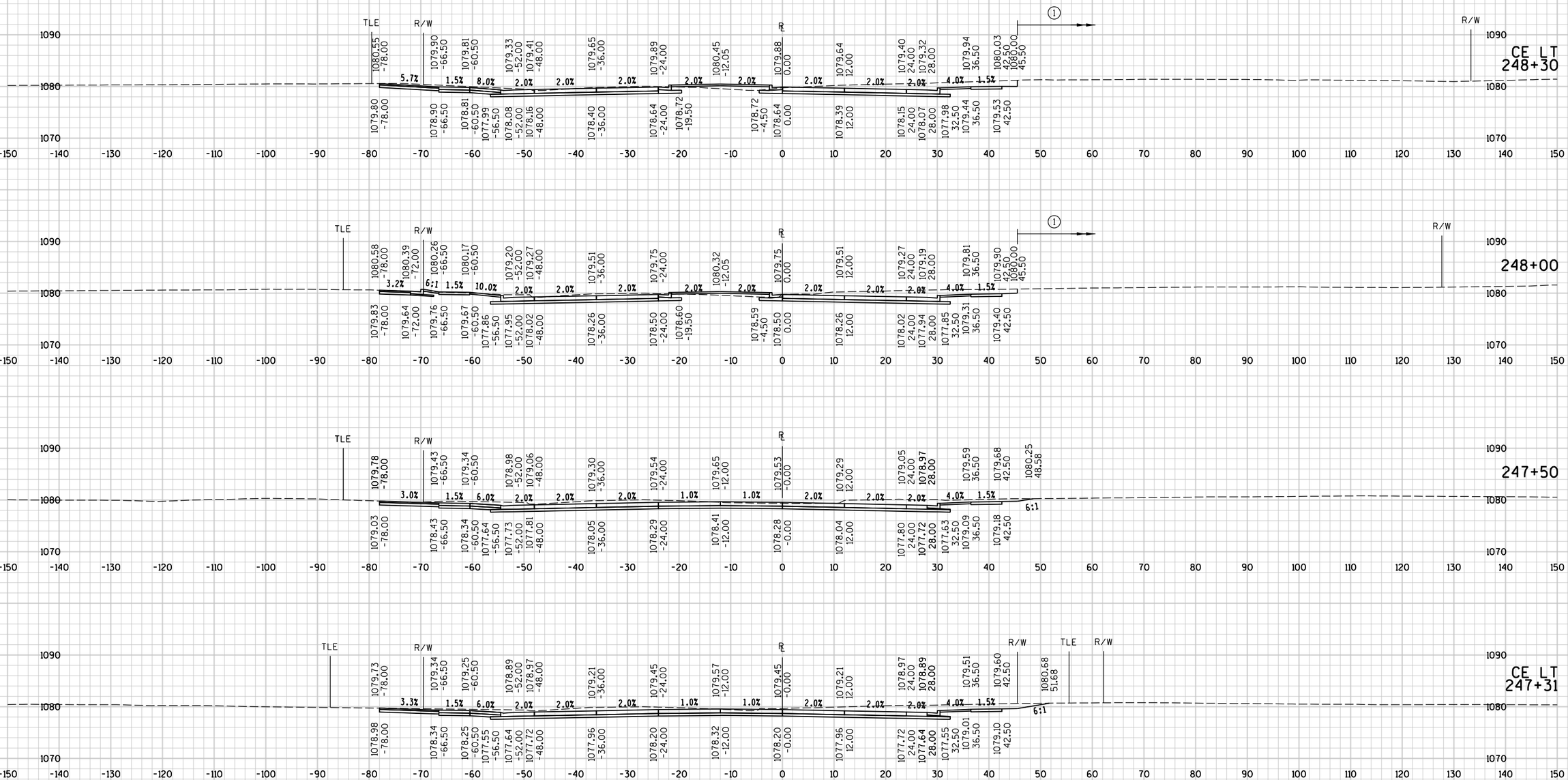


STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 567	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:15 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

NOTES:

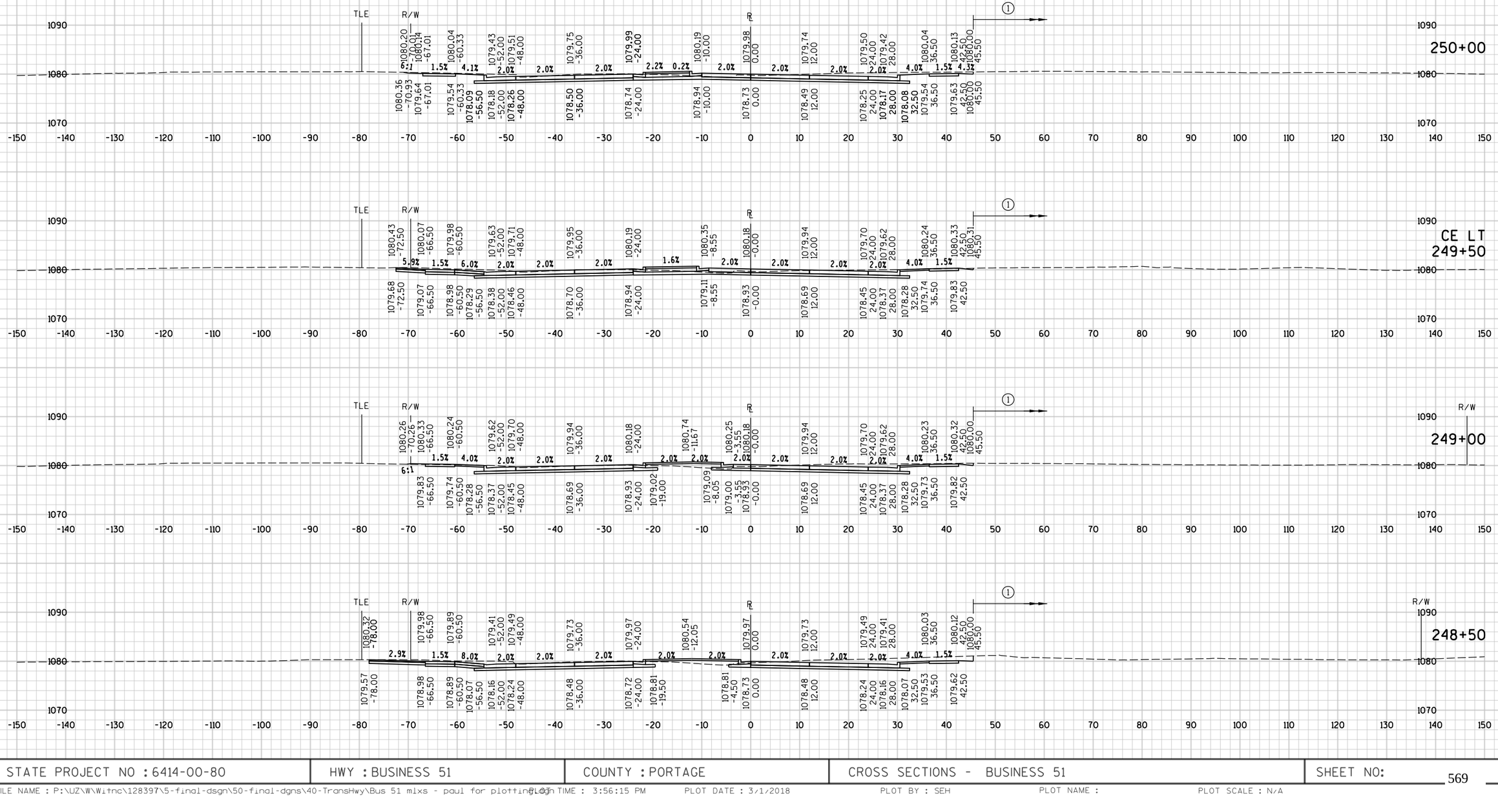
① SEE CONSTRUCTION DETAILS FOR INFILTRATION BASIN



STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 568	E

NOTES:

① SEE CONSTRUCTION DETAILS FOR INFILTRATION BASIN

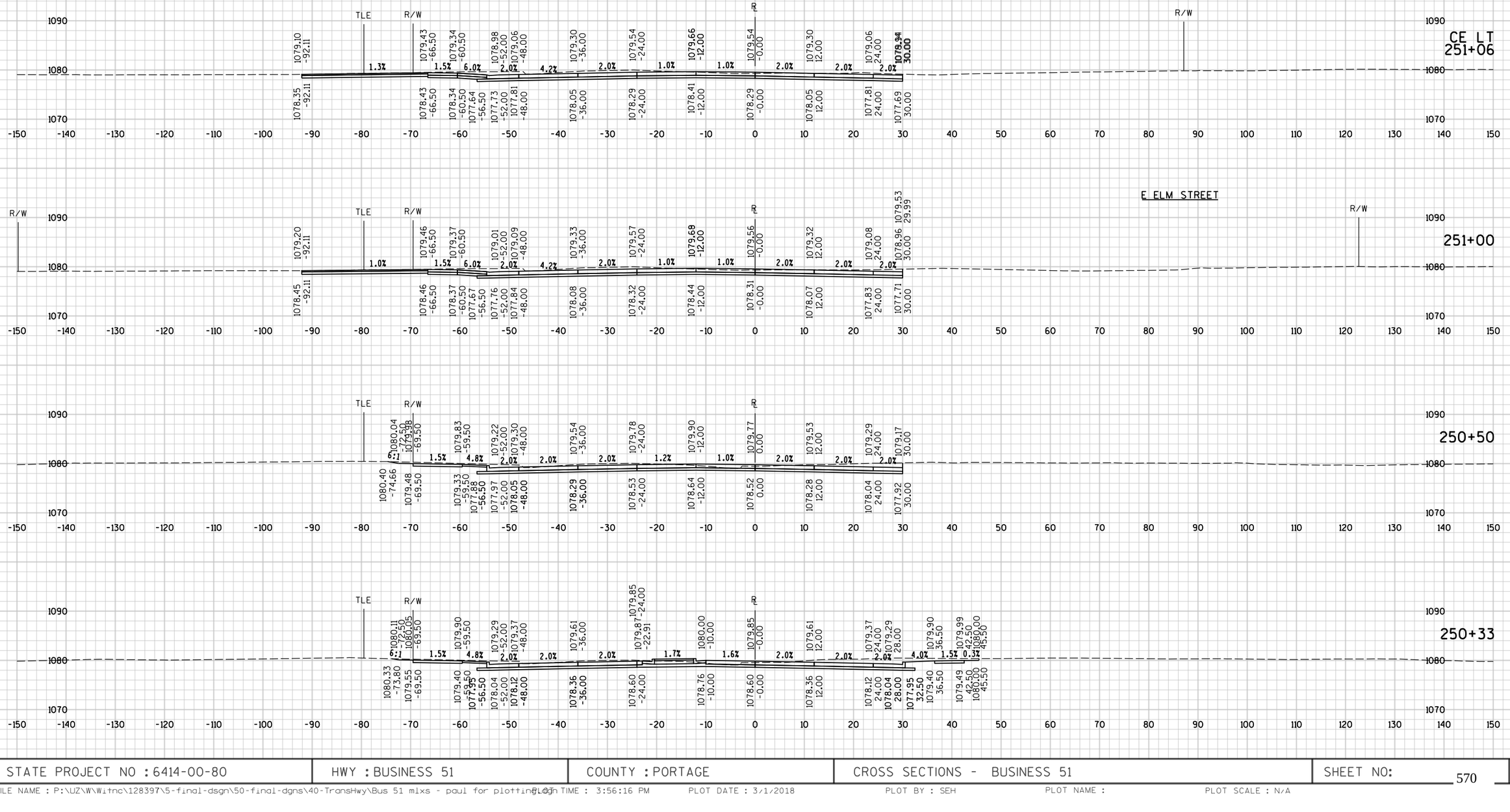


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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 569	E

9

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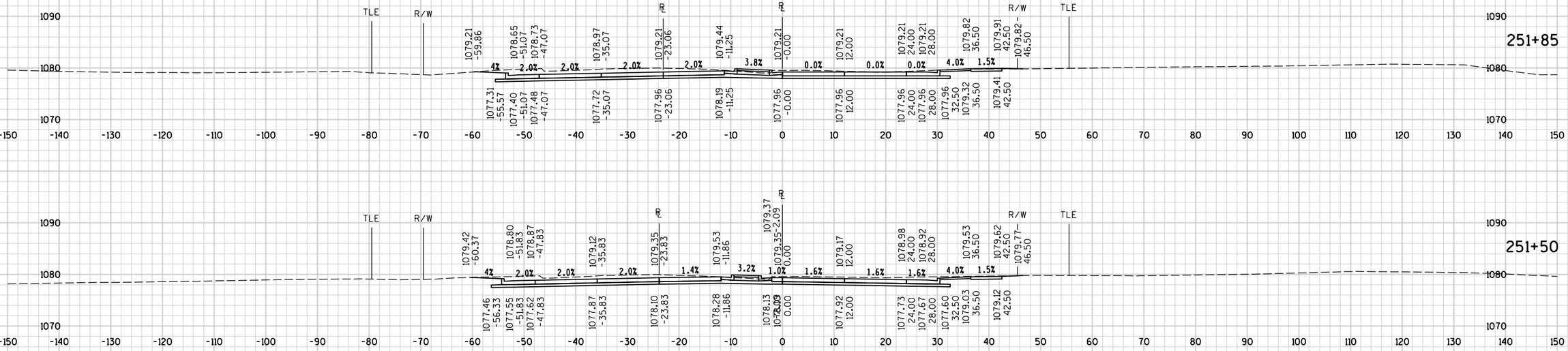


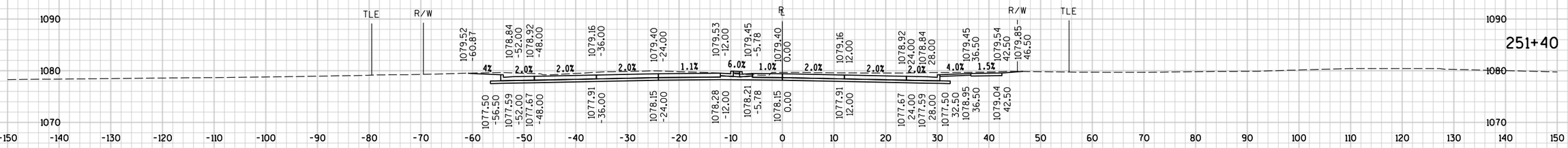
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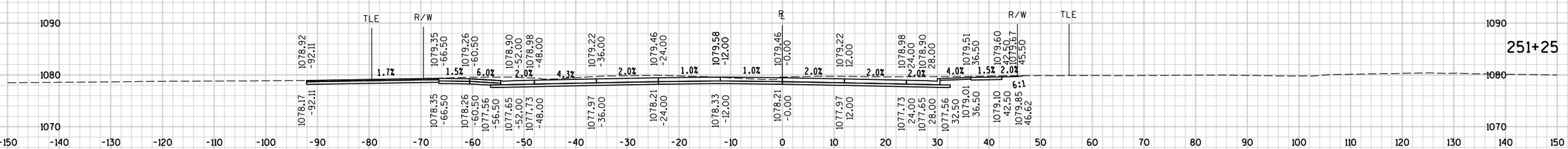
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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 570	E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:16 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A





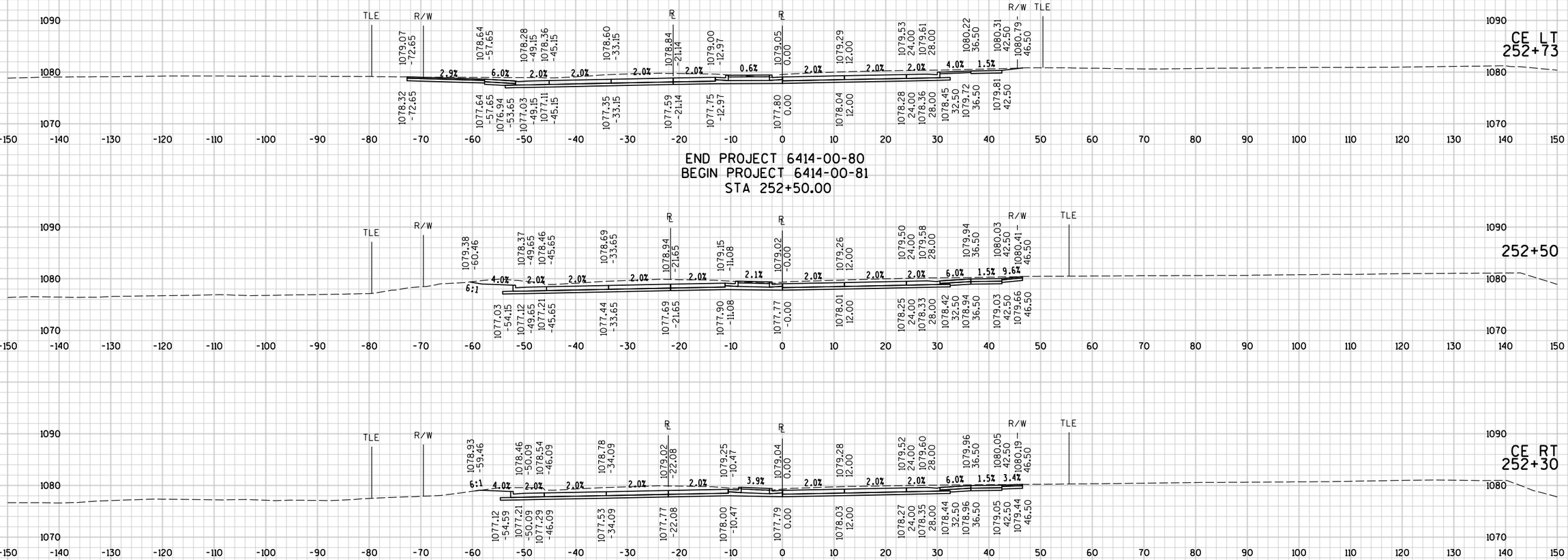


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9

STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 571	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:16 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

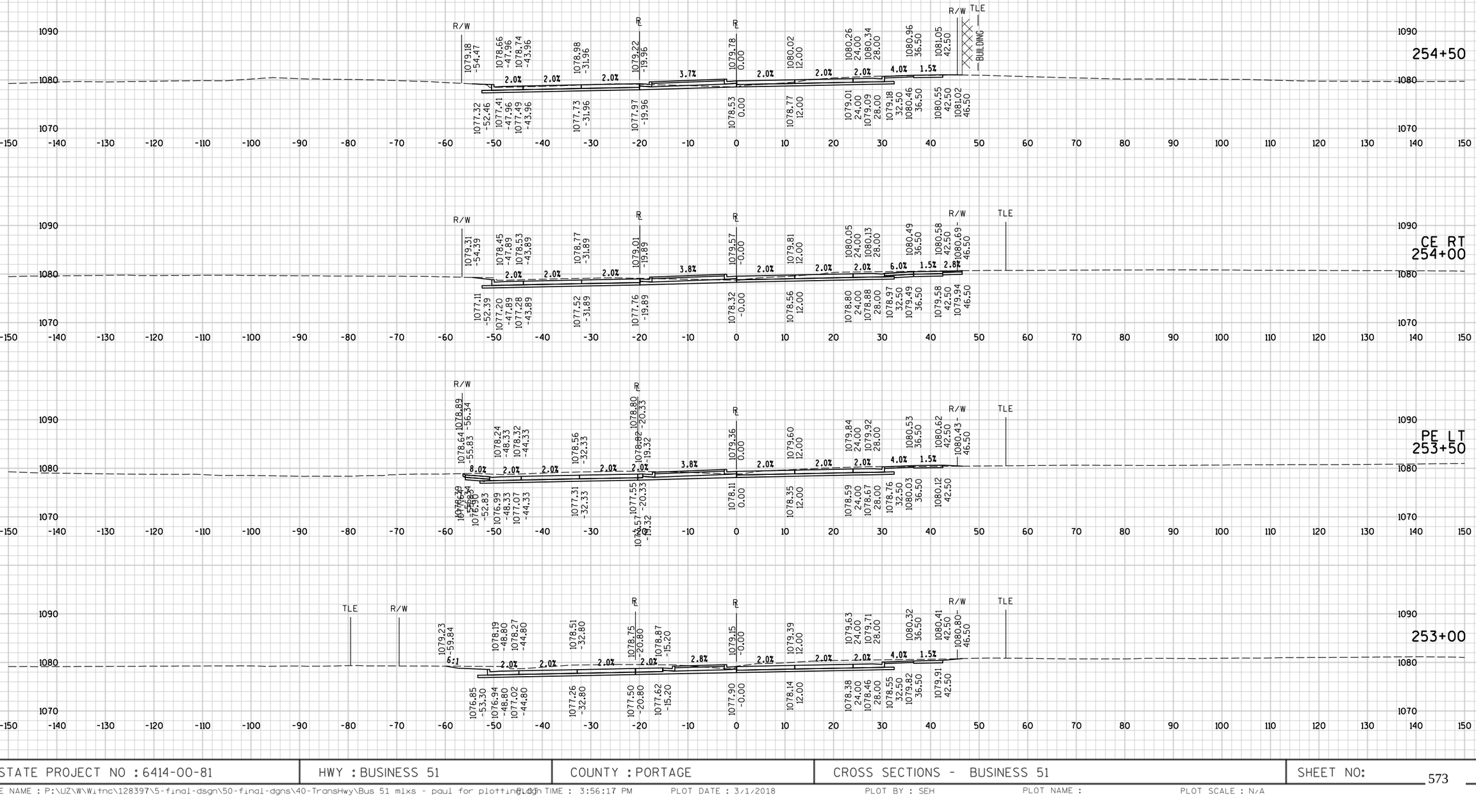


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STATE PROJECT NO : 6414-00-80/81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 572	E

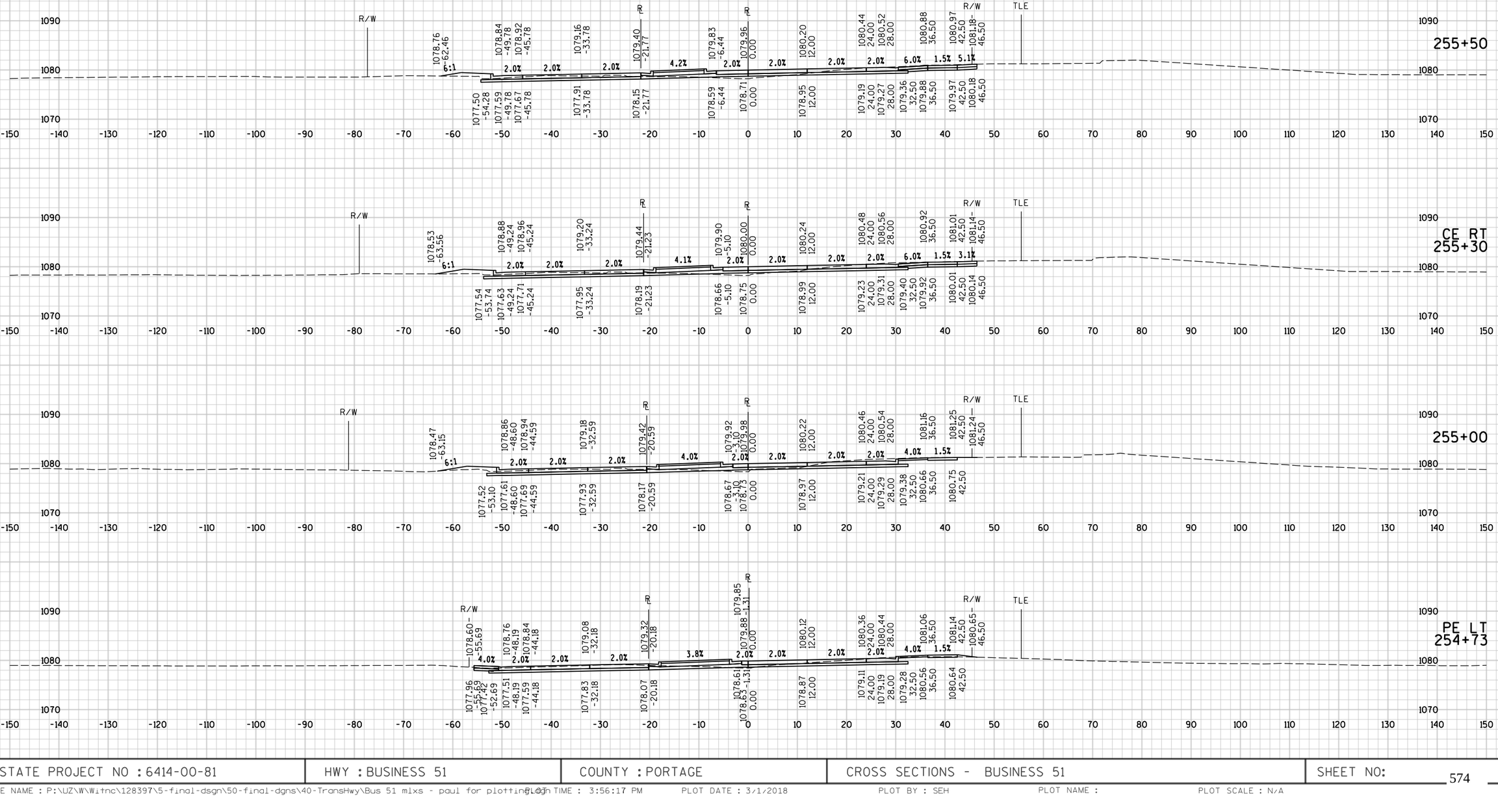
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9



STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 573	E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:17 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

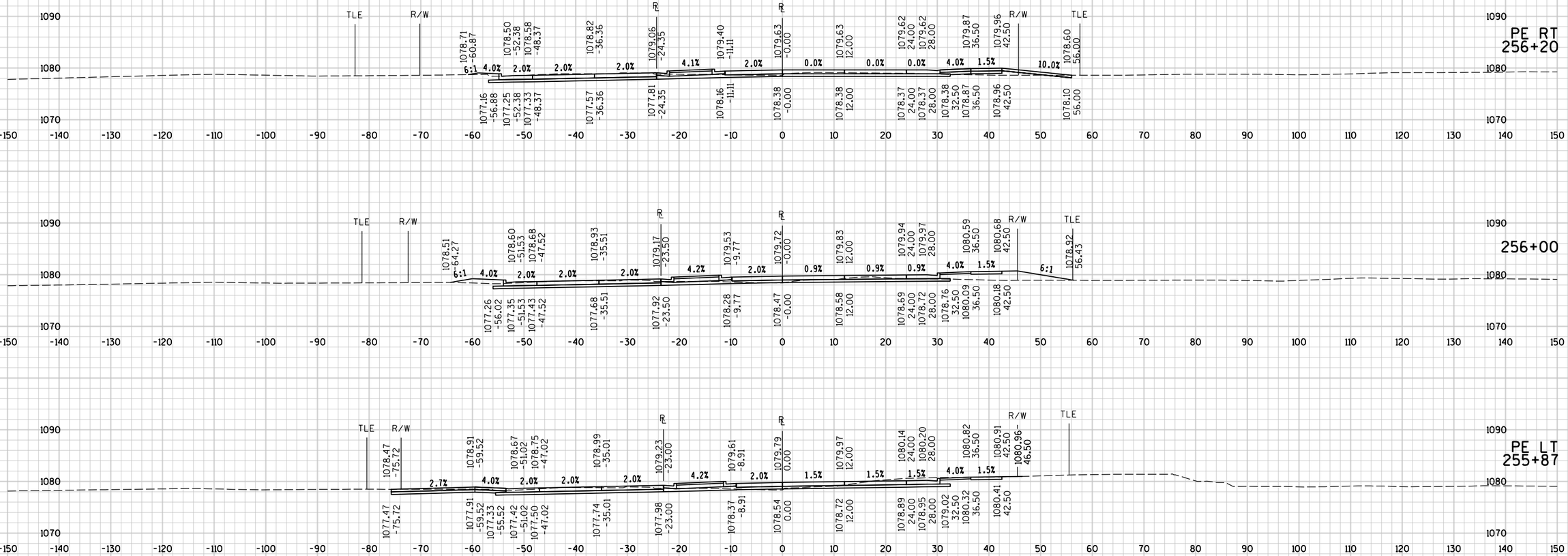


9

9

STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 574	E

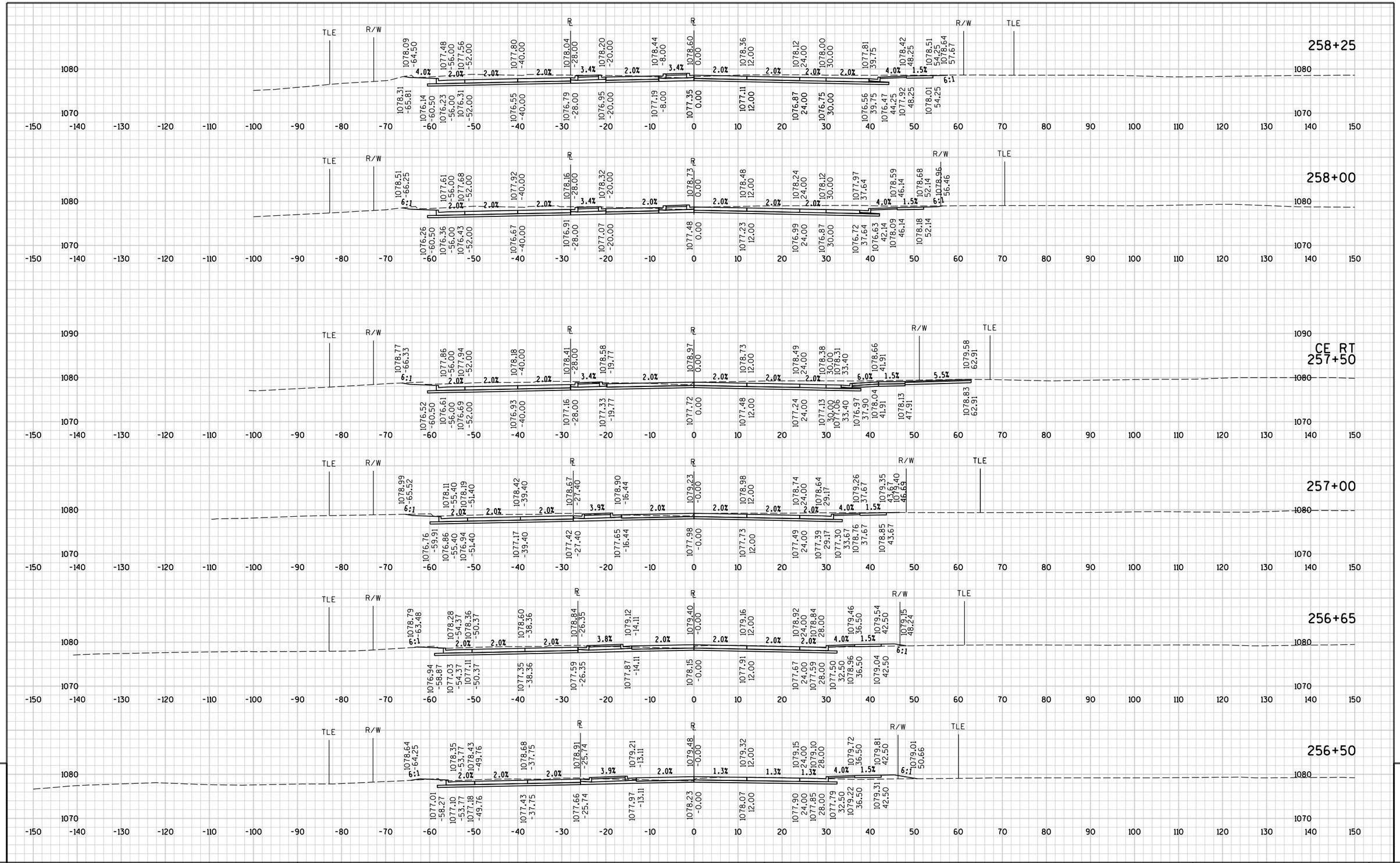
FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:17 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 575 E

9

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:18 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

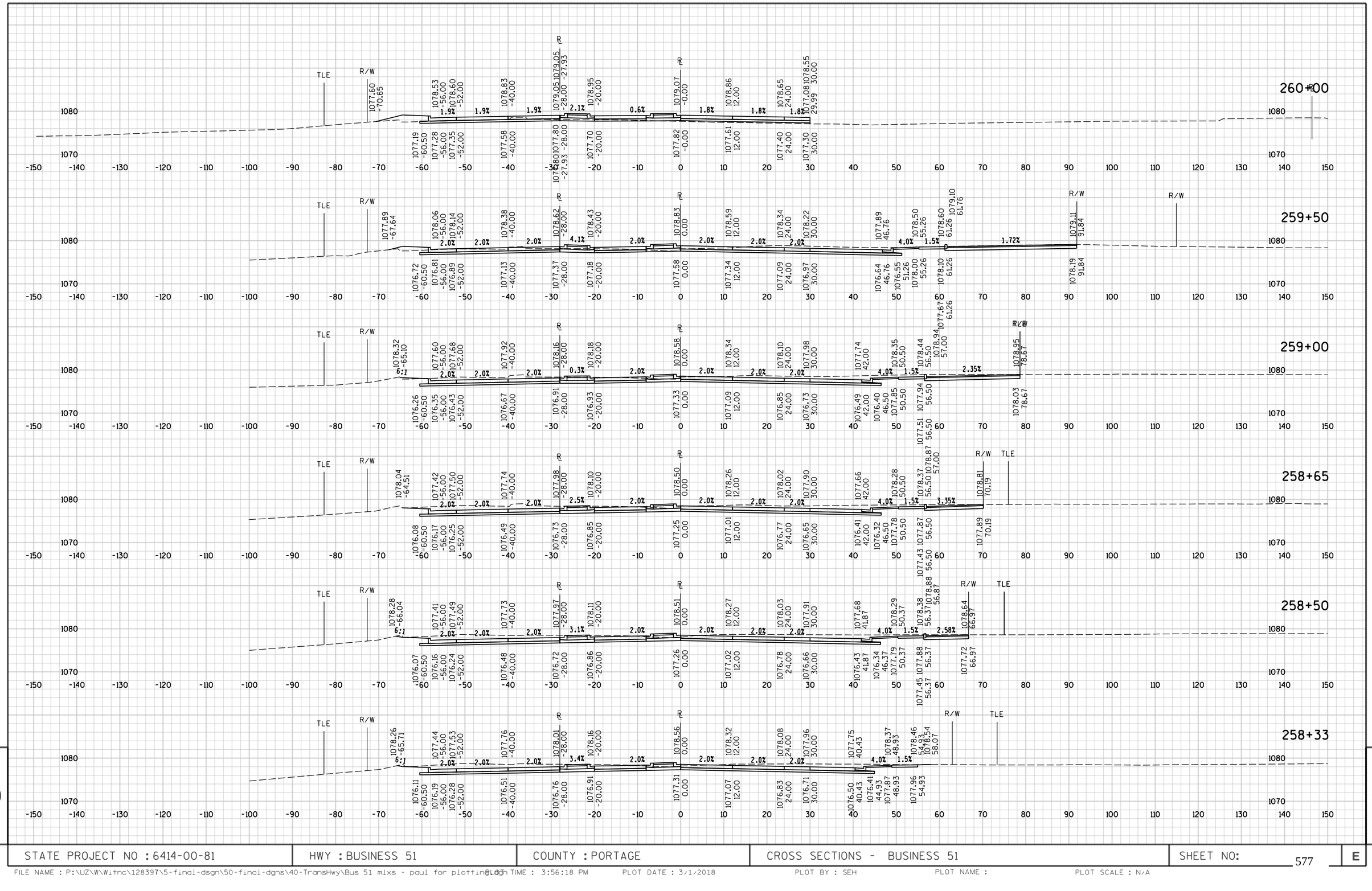


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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 576	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:18 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

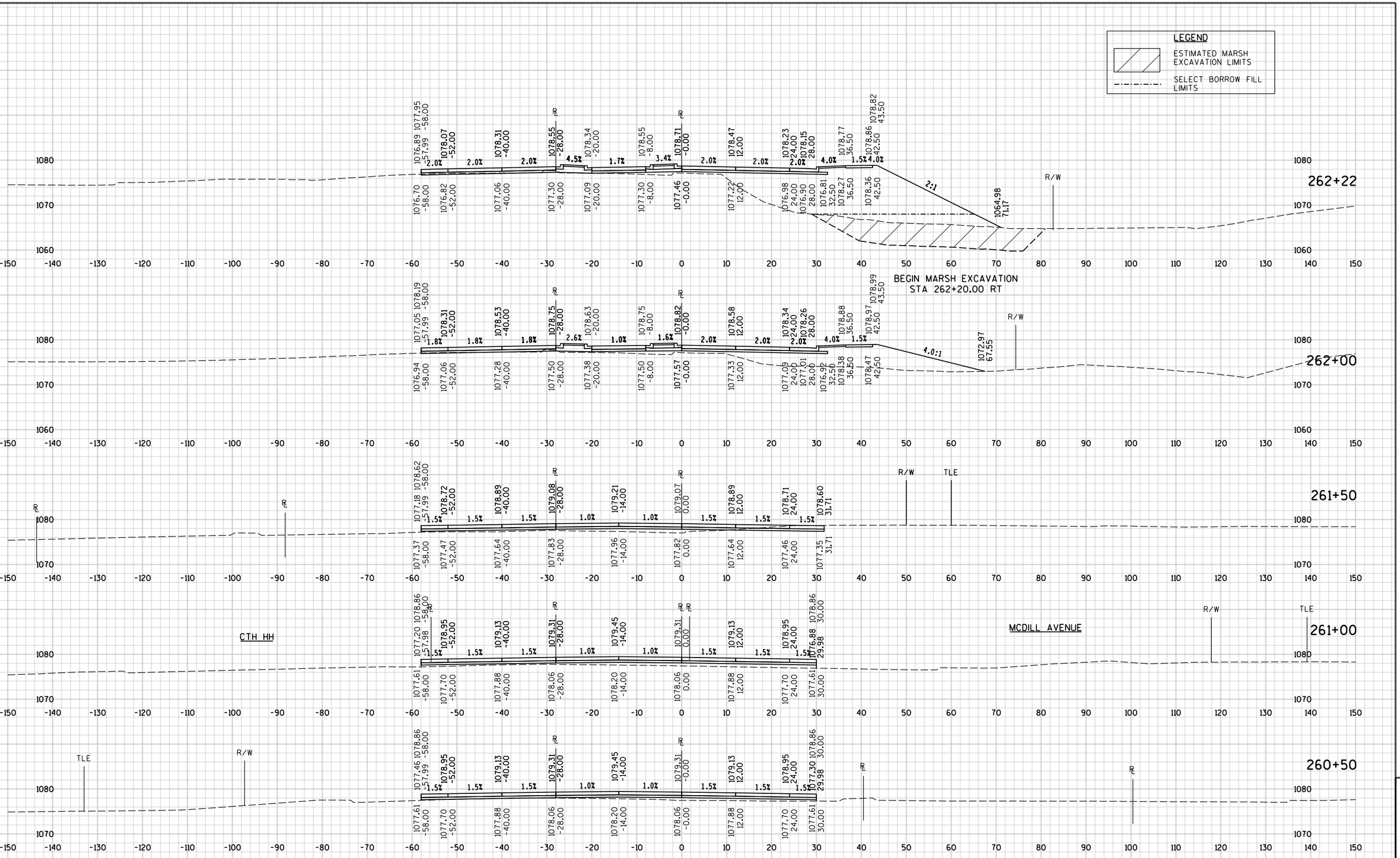


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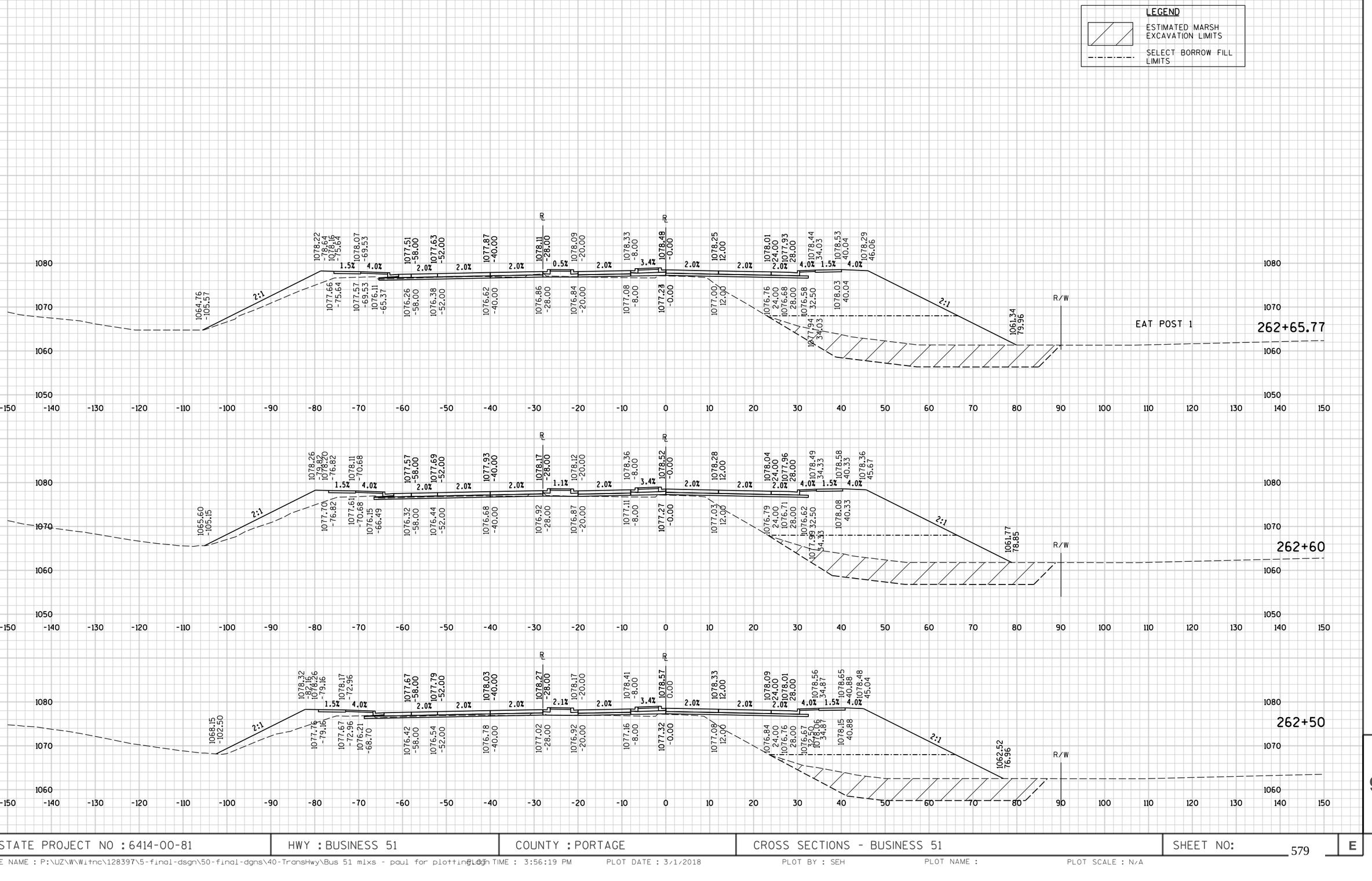
STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 577	E

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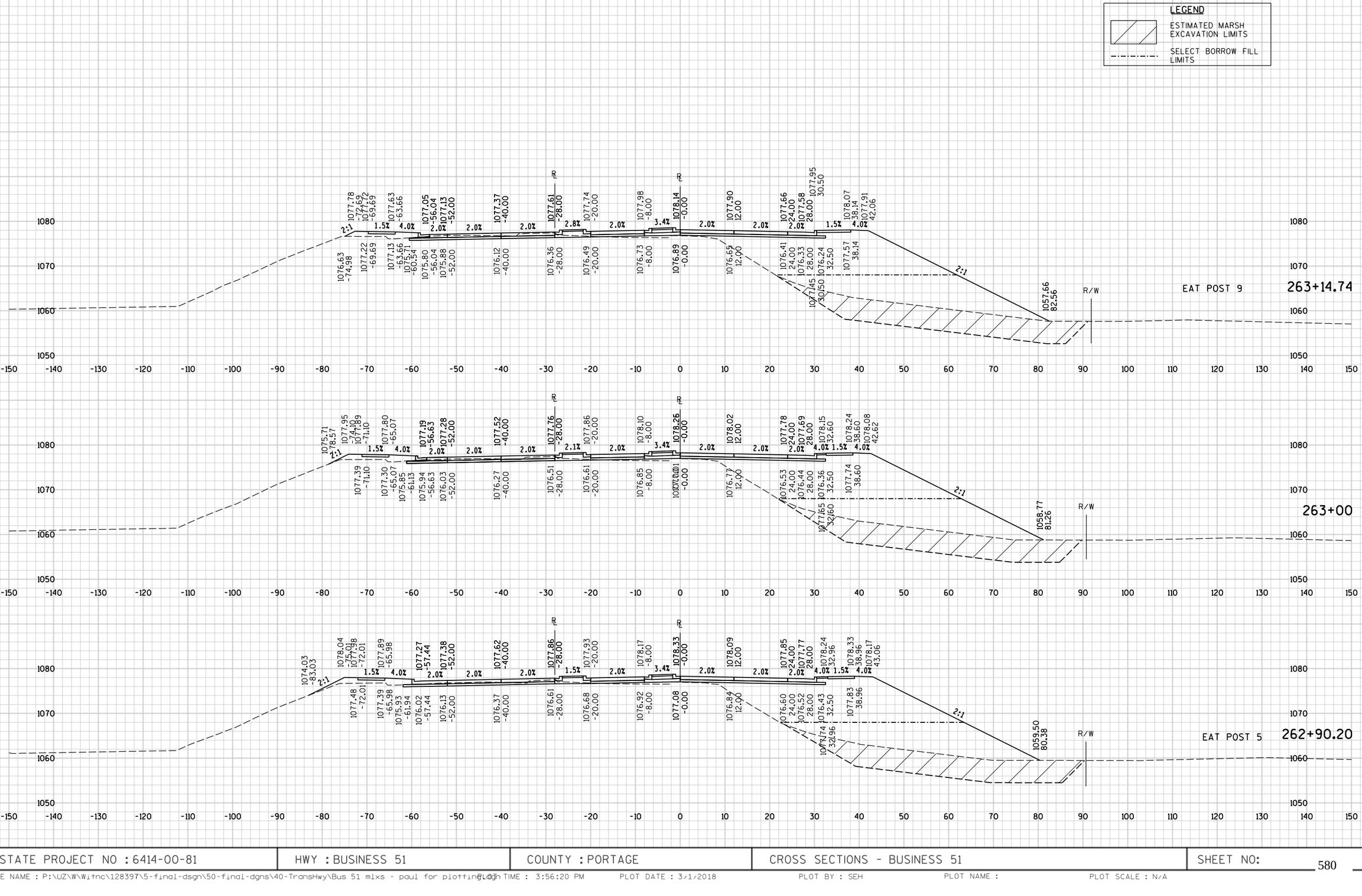
STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 578 E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:19 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 579 E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:19 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 580	E

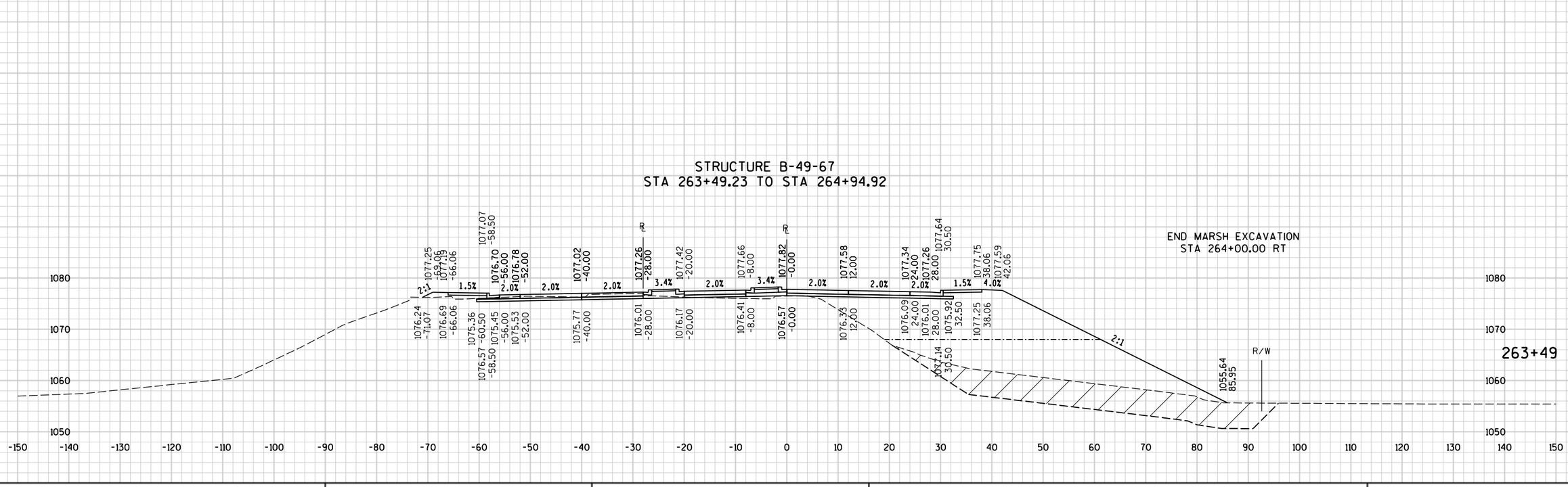
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LEGEND

ESTIMATED MARSH EXCAVATION LIMITS

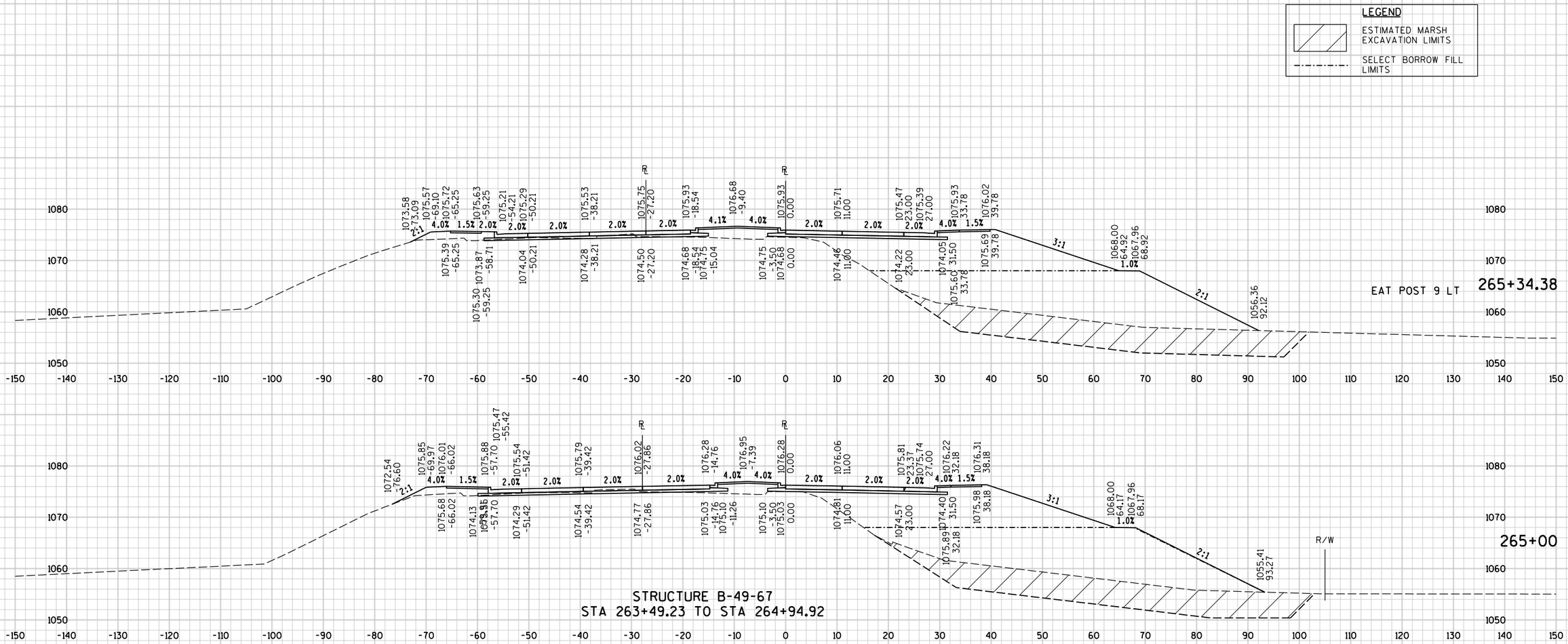
SELECT BORROW FILL LIMITS

STRUCTURE B-49-67
STA 263+49.23 TO STA 264+94.92



STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 581	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - paul for plotting.dgn PLOT TIME : 3:56:20 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

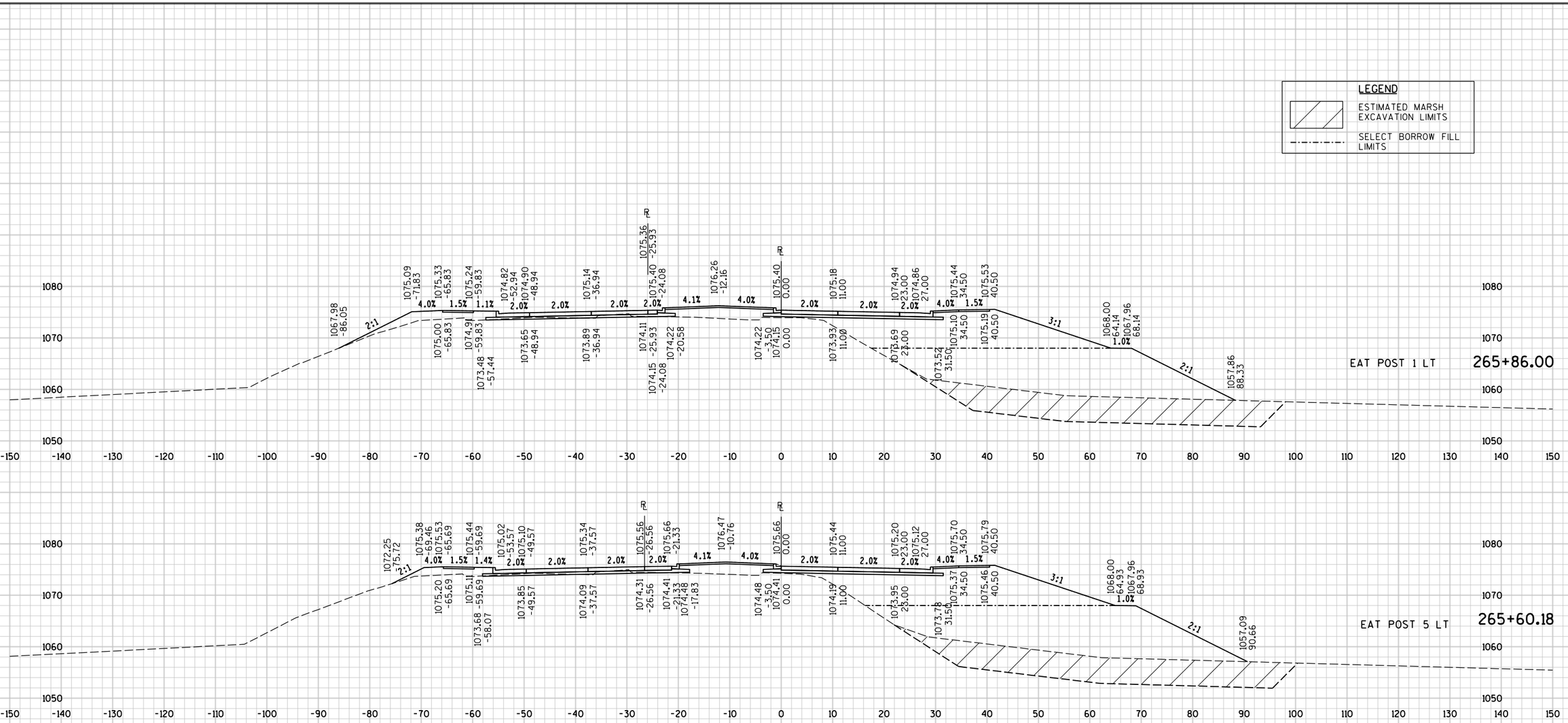


9

9

STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 582	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - vance for plotting.dgn TIME : 3:56:27 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



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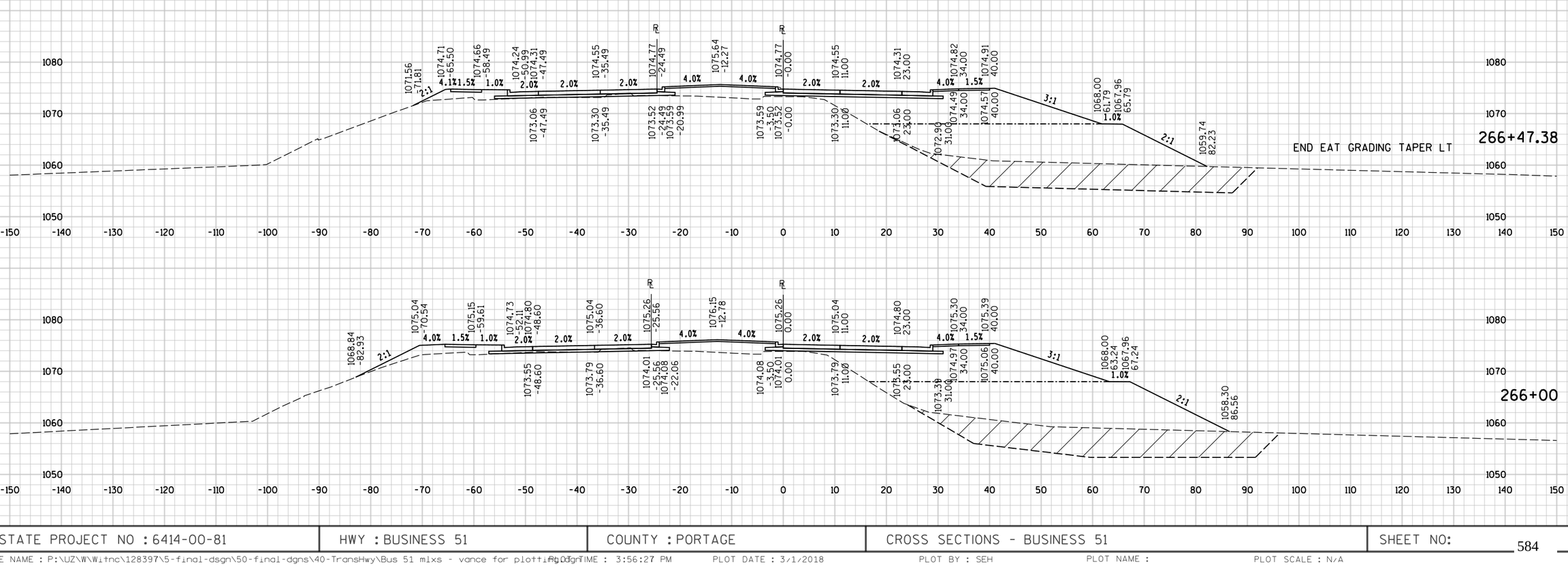
STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 583	E

FILE NAME : P:\UZW\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - vance for plotting.dgn PLOT TIME : 3:56:27 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

LEGEND

ESTIMATED MARSH EXCAVATION LIMITS

SELECT BORROW FILL LIMITS

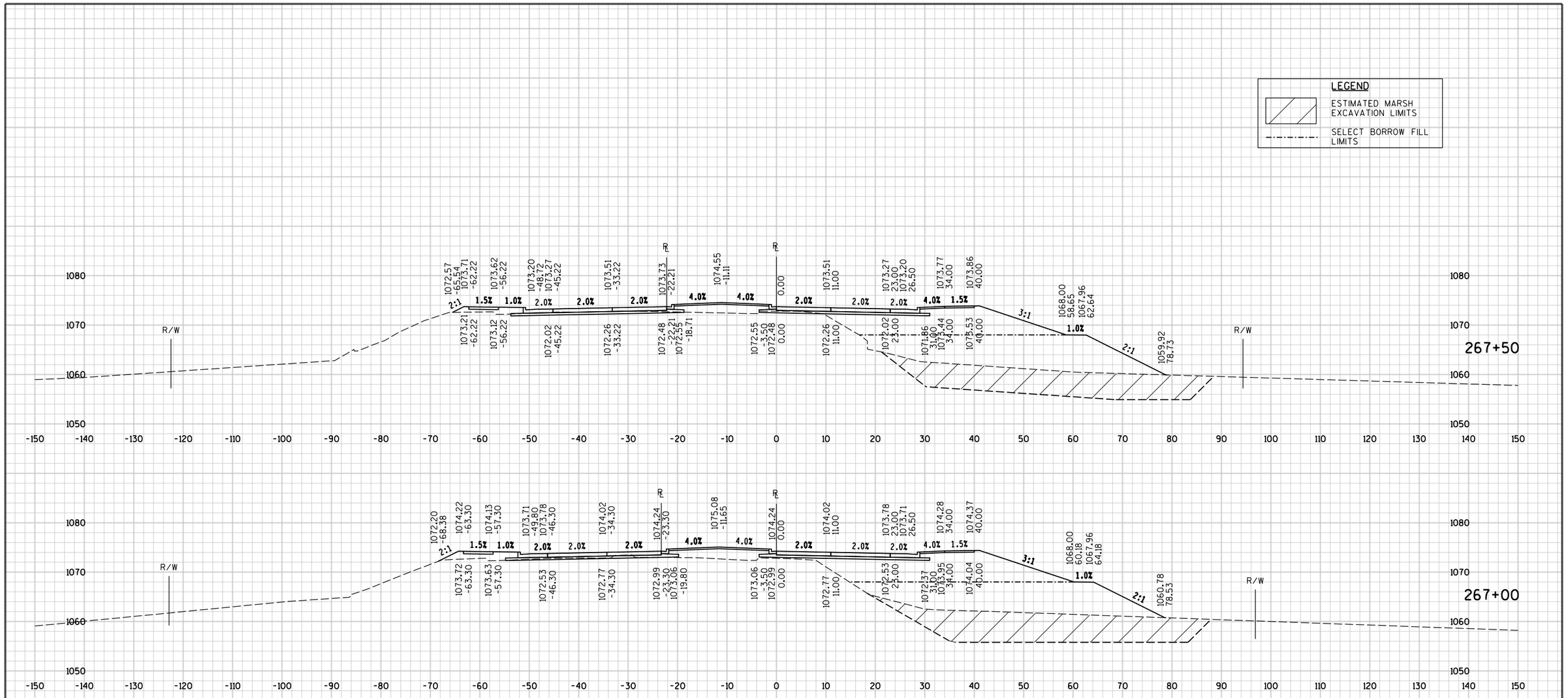


9

9

STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 584	E

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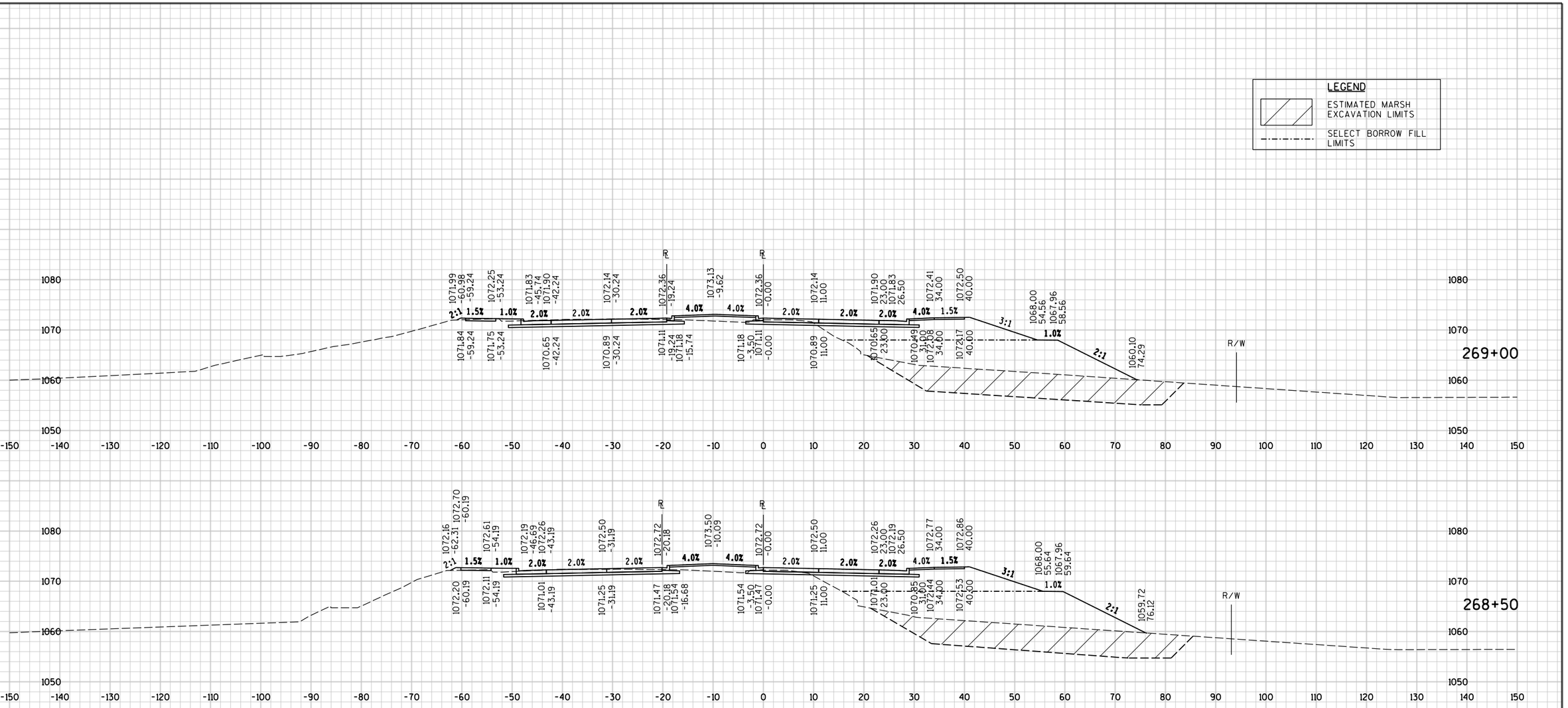


9

9

STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 585	E

FILE NAME : P:\UZW\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - vance for plotting.dgn PLOT TIME : 3:56:27 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

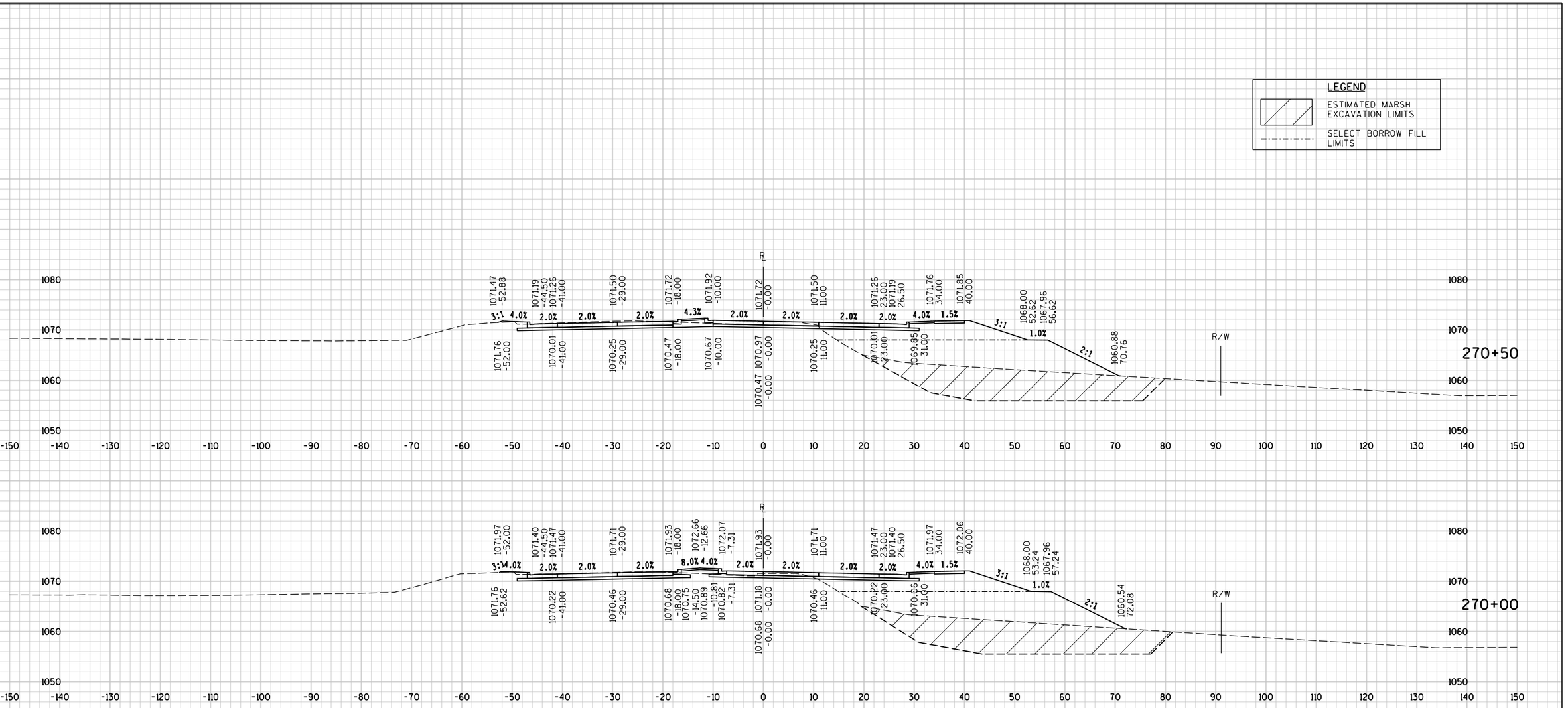


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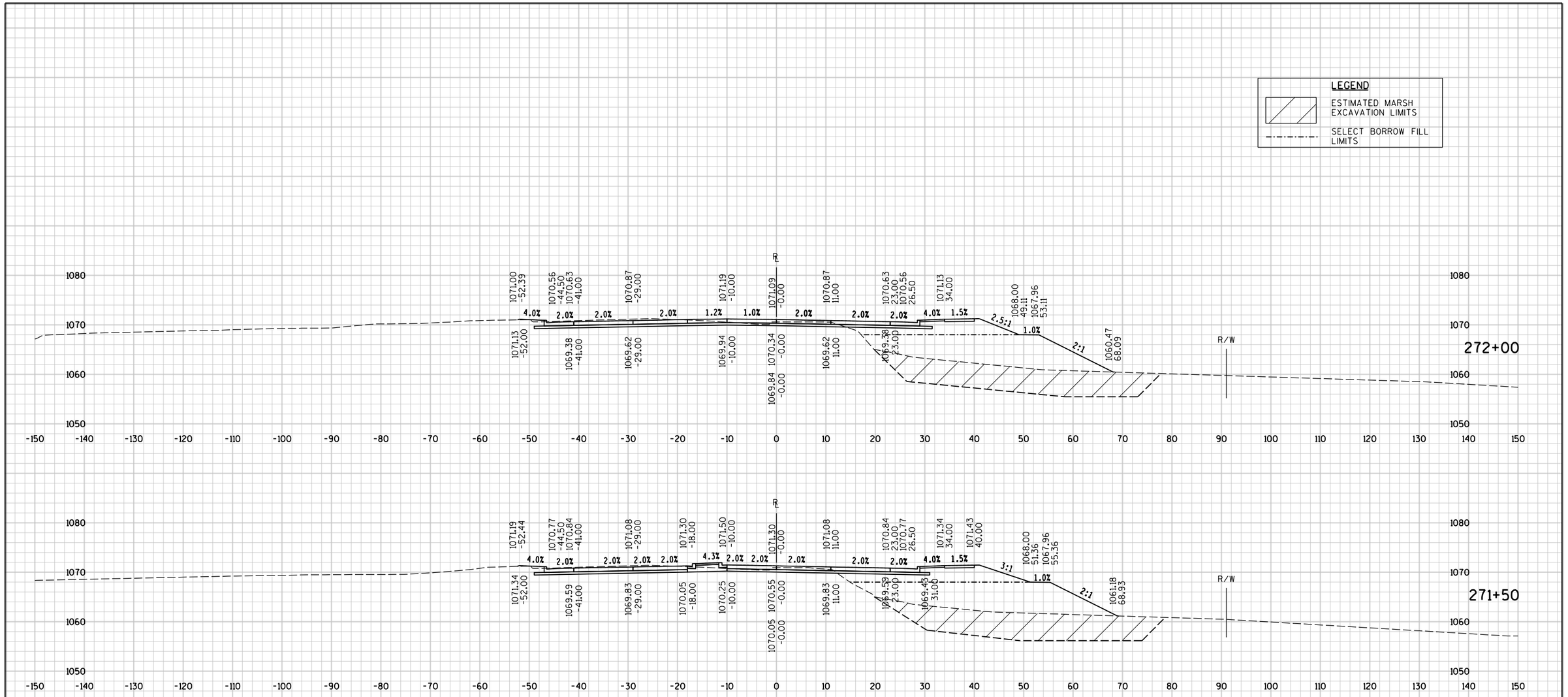
STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 586	E

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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 587 E

FILE NAME : P:\UZW\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - vance for plotting.dgn PLOT TIME : 3:56:28 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



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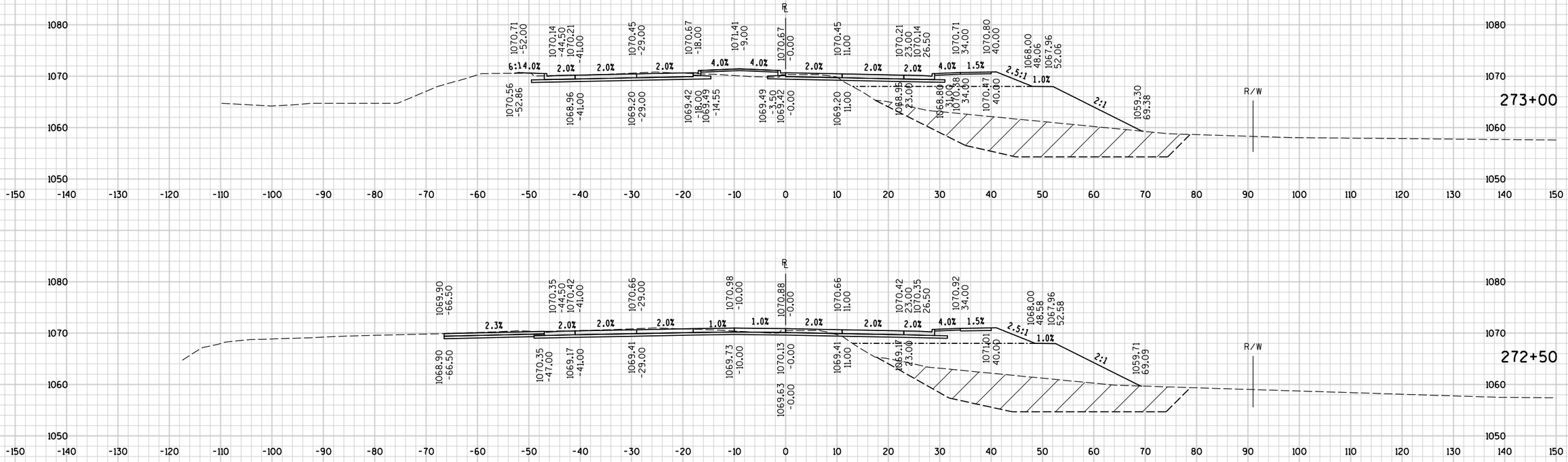
STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 588	E

FILE NAME : P:\UZW\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - vance for plotting.dgn PLOT TIME : 3:56:28 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

LEGEND

ESTIMATED MARSH EXCAVATION LIMITS

SELECT BORROW FILL LIMITS

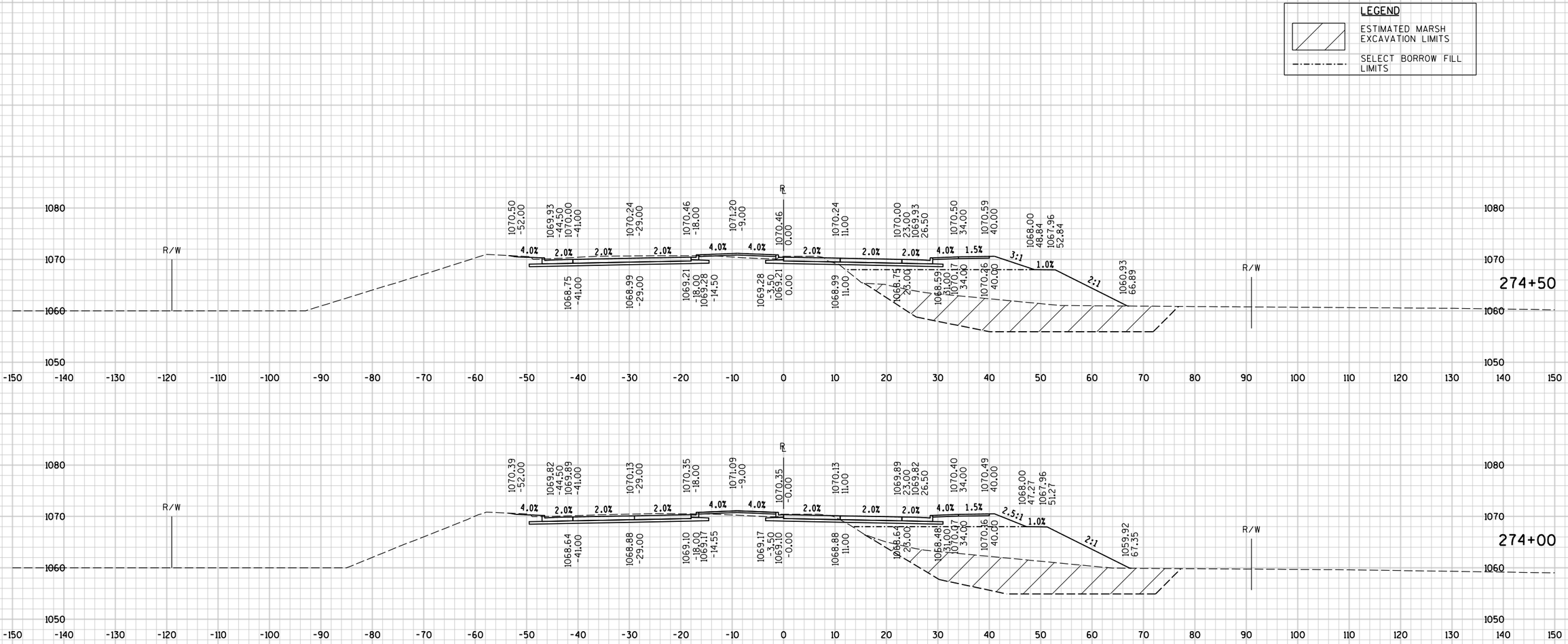


9

9

STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 589	E

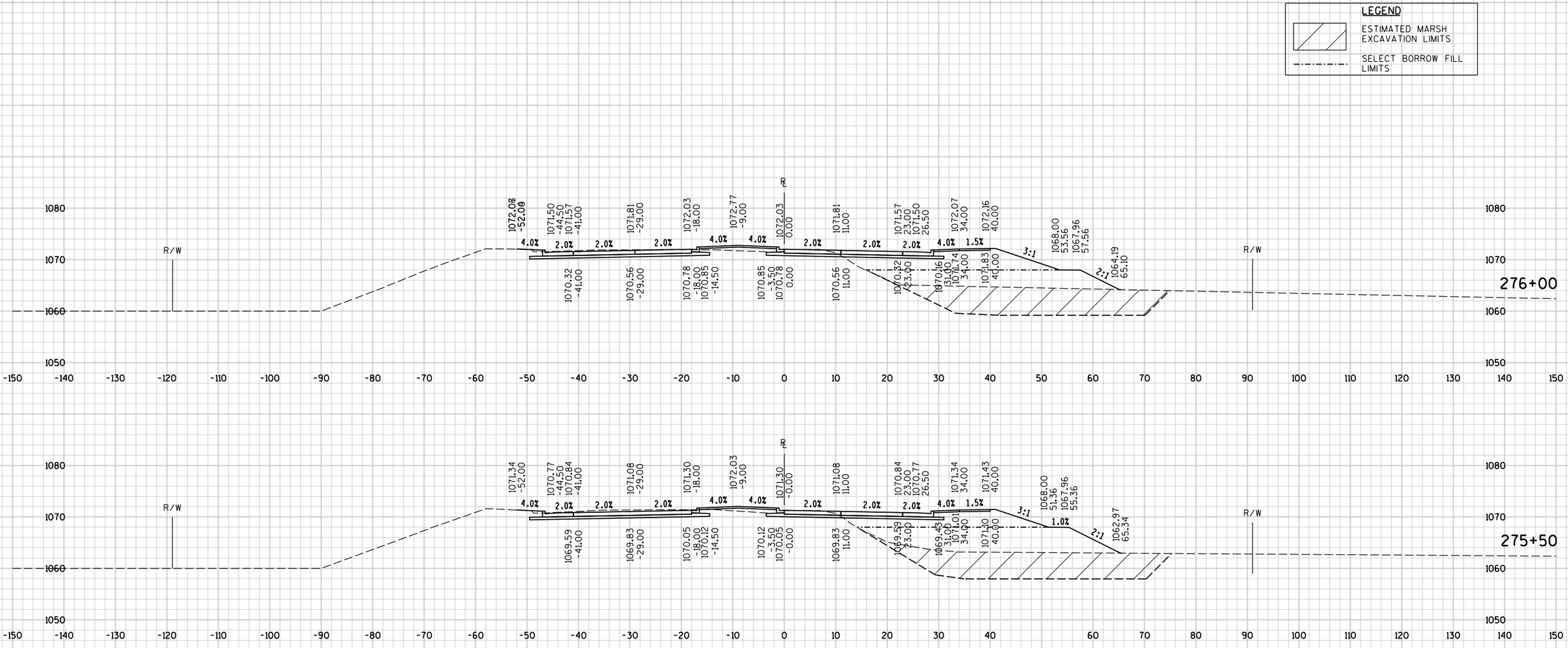
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9

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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 590	E



9

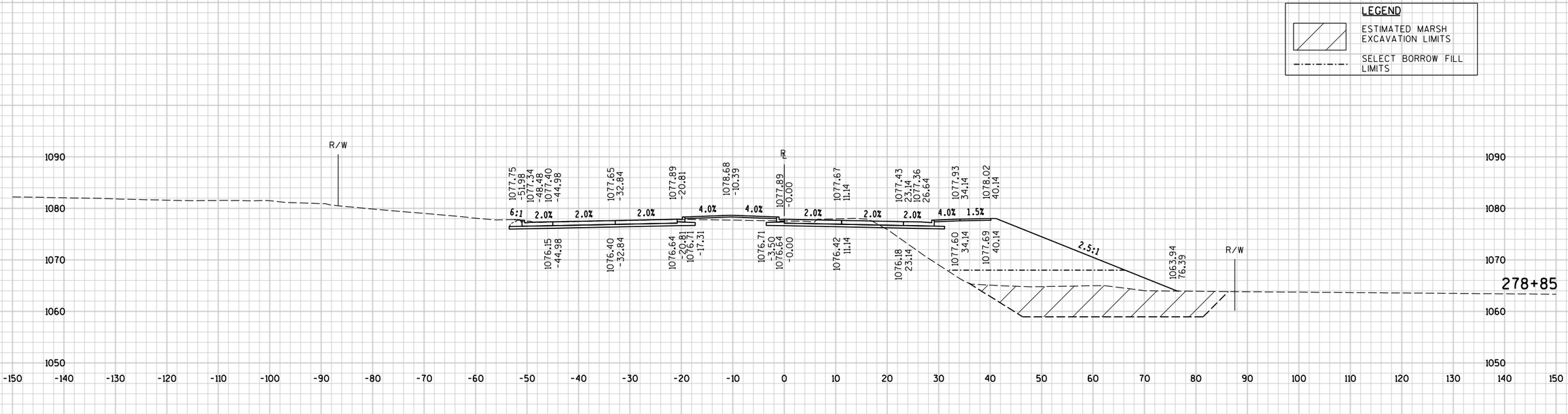
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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 591	E

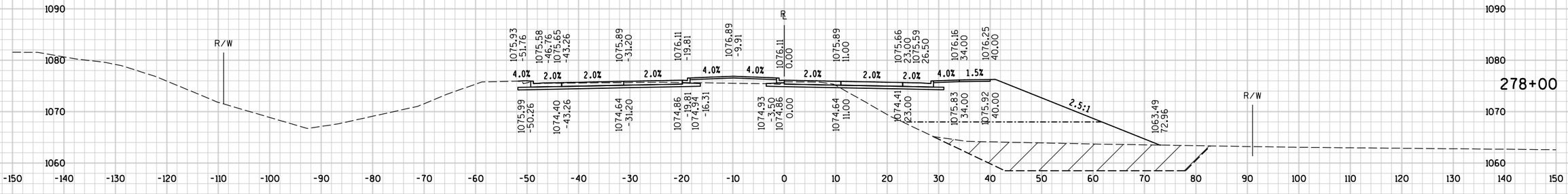
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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 592 E

FILE NAME : P:\UZW\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - vance for plotting.dgn PLOT TIME : 3:56:30 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A





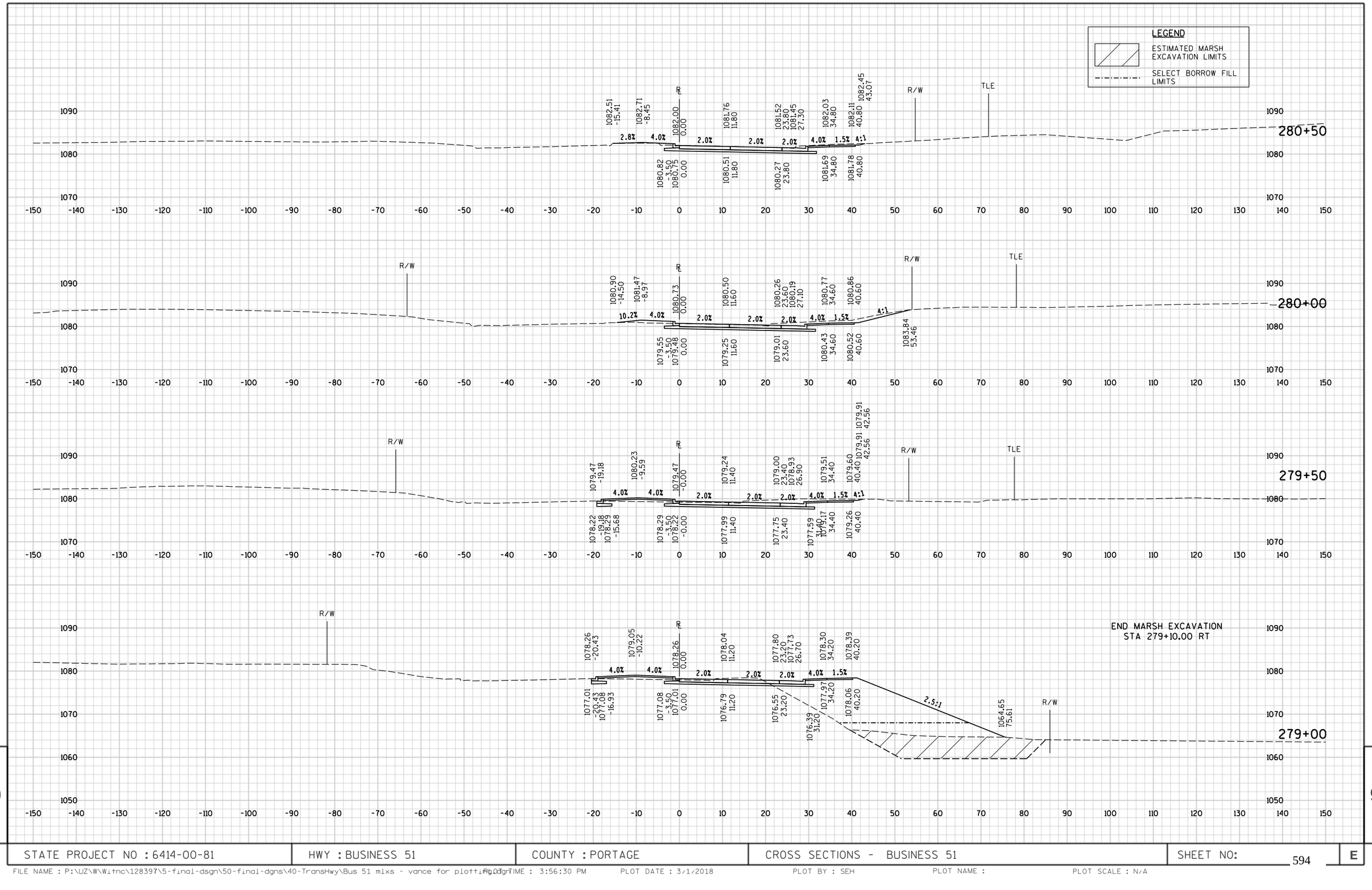


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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 593	E

FILE NAME : P:\UZW\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - vance for plotting.dgn PLOT TIME : 3:56:30 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



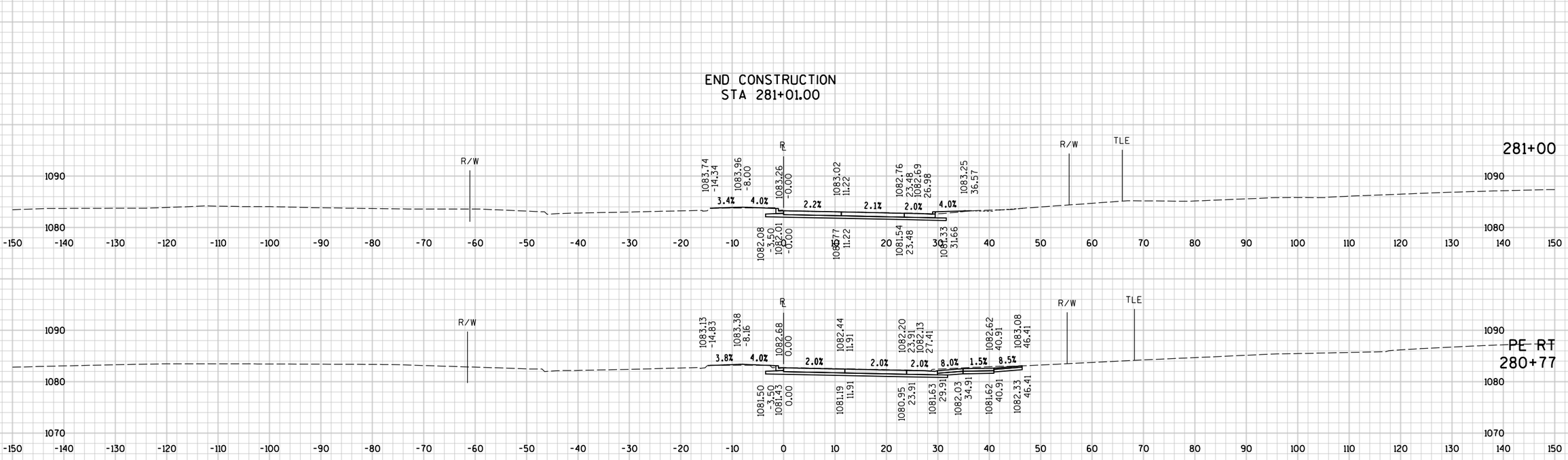
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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 594	E

9

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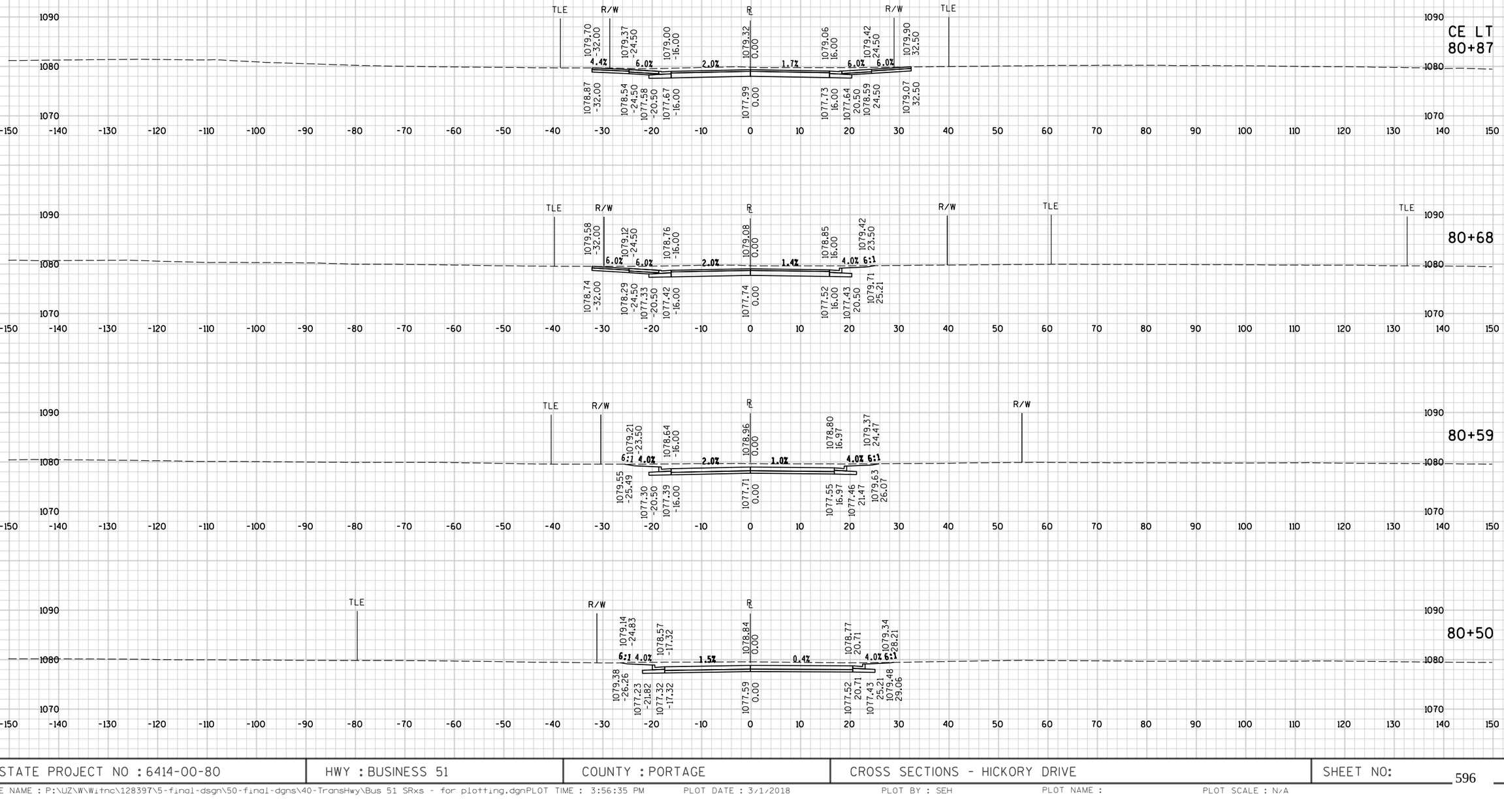
END CONSTRUCTION
STA 281+01.00



9 9

STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BUSINESS 51	SHEET NO: 595	E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 mlxs - vance for plotting.dgn TIME : 3:56:31 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



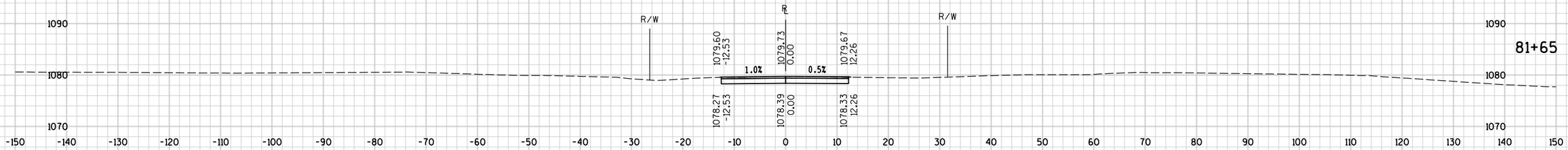
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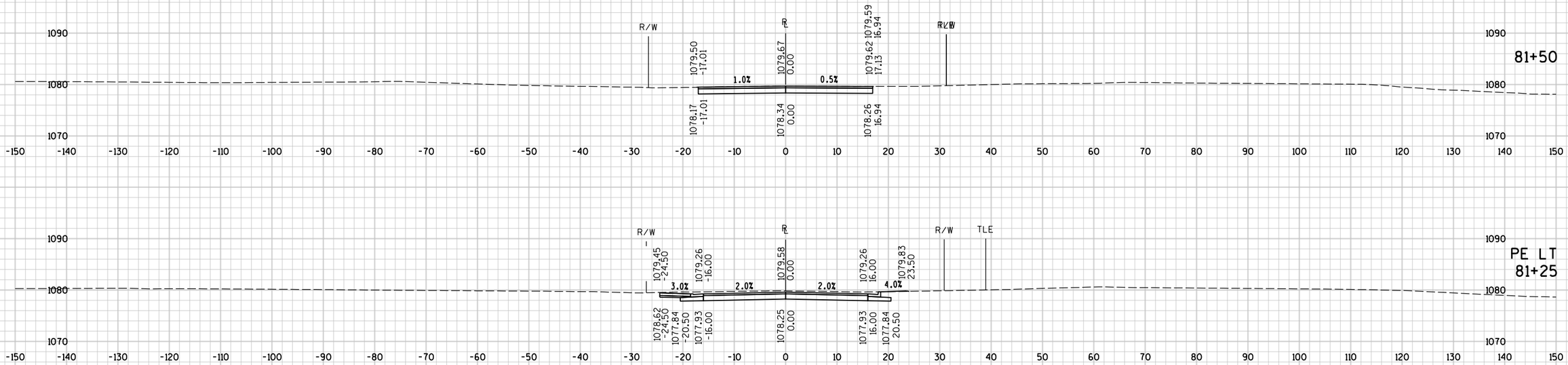
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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - HICKORY DRIVE	SHEET NO: 596	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:35 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

END CONSTRUCTION
STA 81+65.00





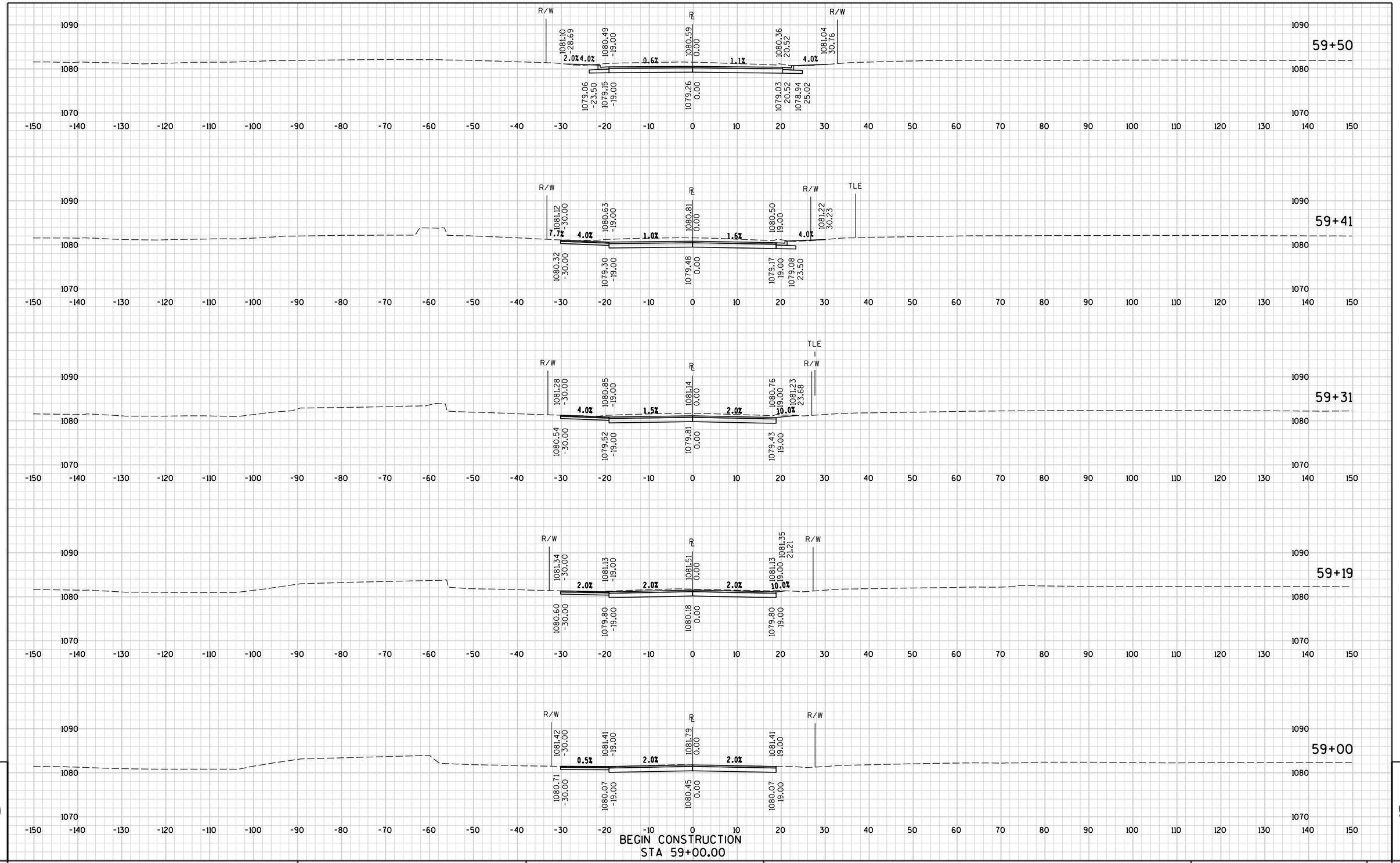


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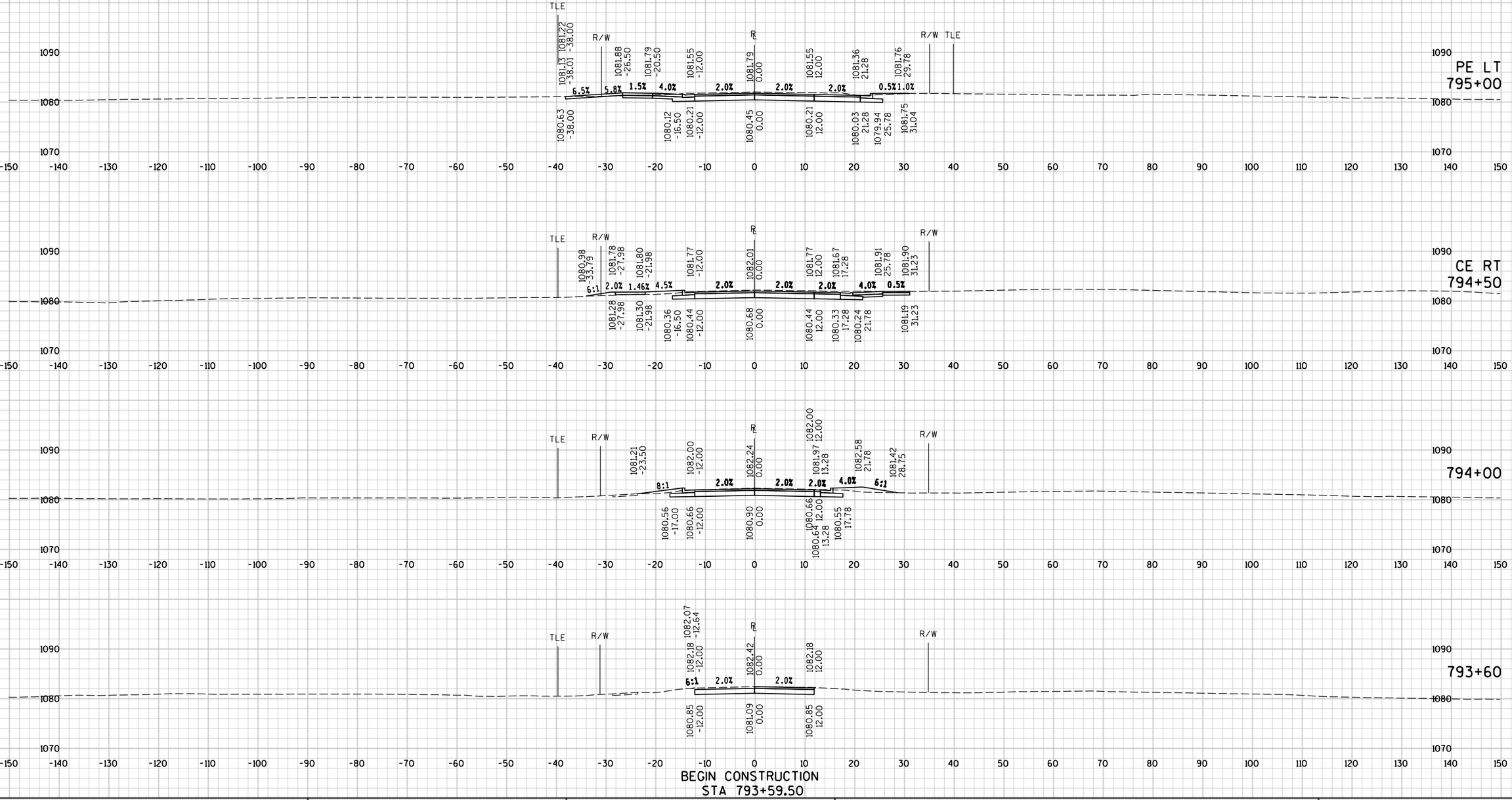
STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - HICKORY DRIVE	SHEET NO: 597	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:35 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



BEGIN CONSTRUCTION
STA 59+00.00

STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - THEATER DRIVE	SHEET NO: 598	E

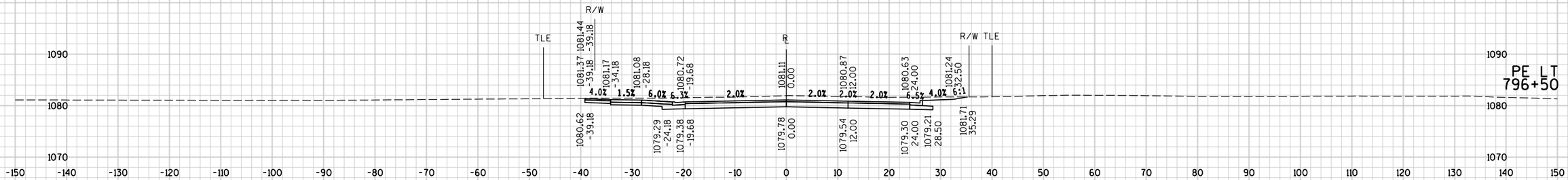


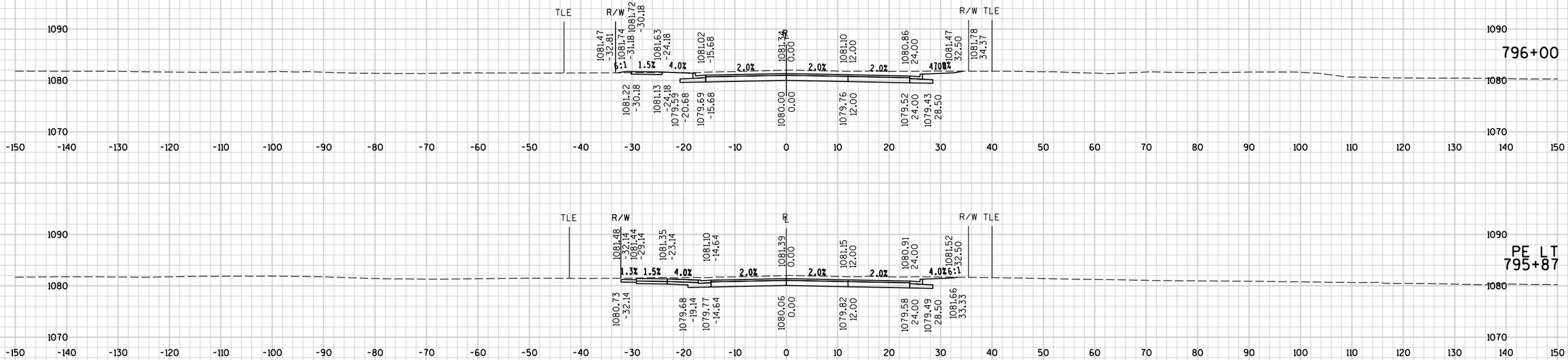
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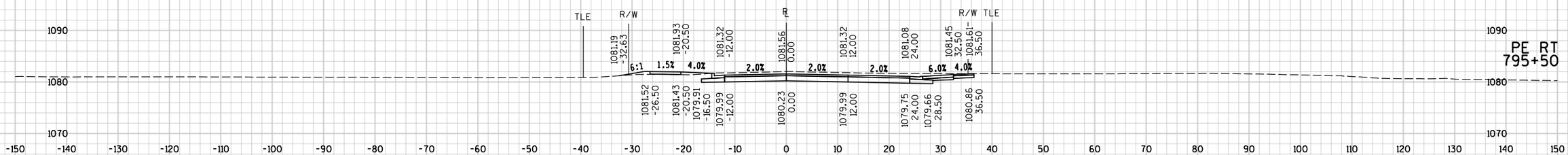
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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - TOMMY'S TURNPIKE	SHEET NO: 599	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:36 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A





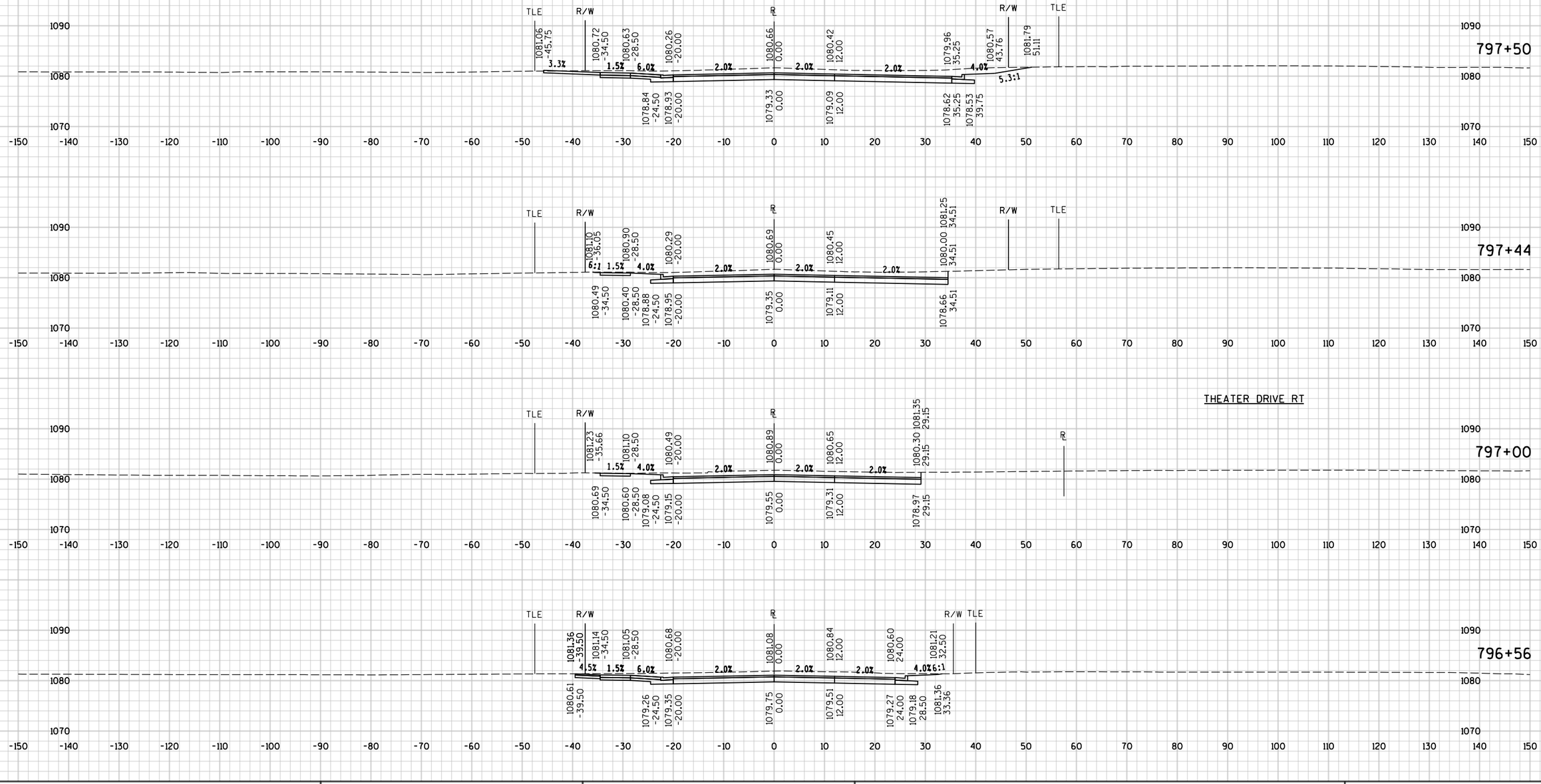


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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - TOMMY'S TURNPIKE	SHEET NO: 600	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:36 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

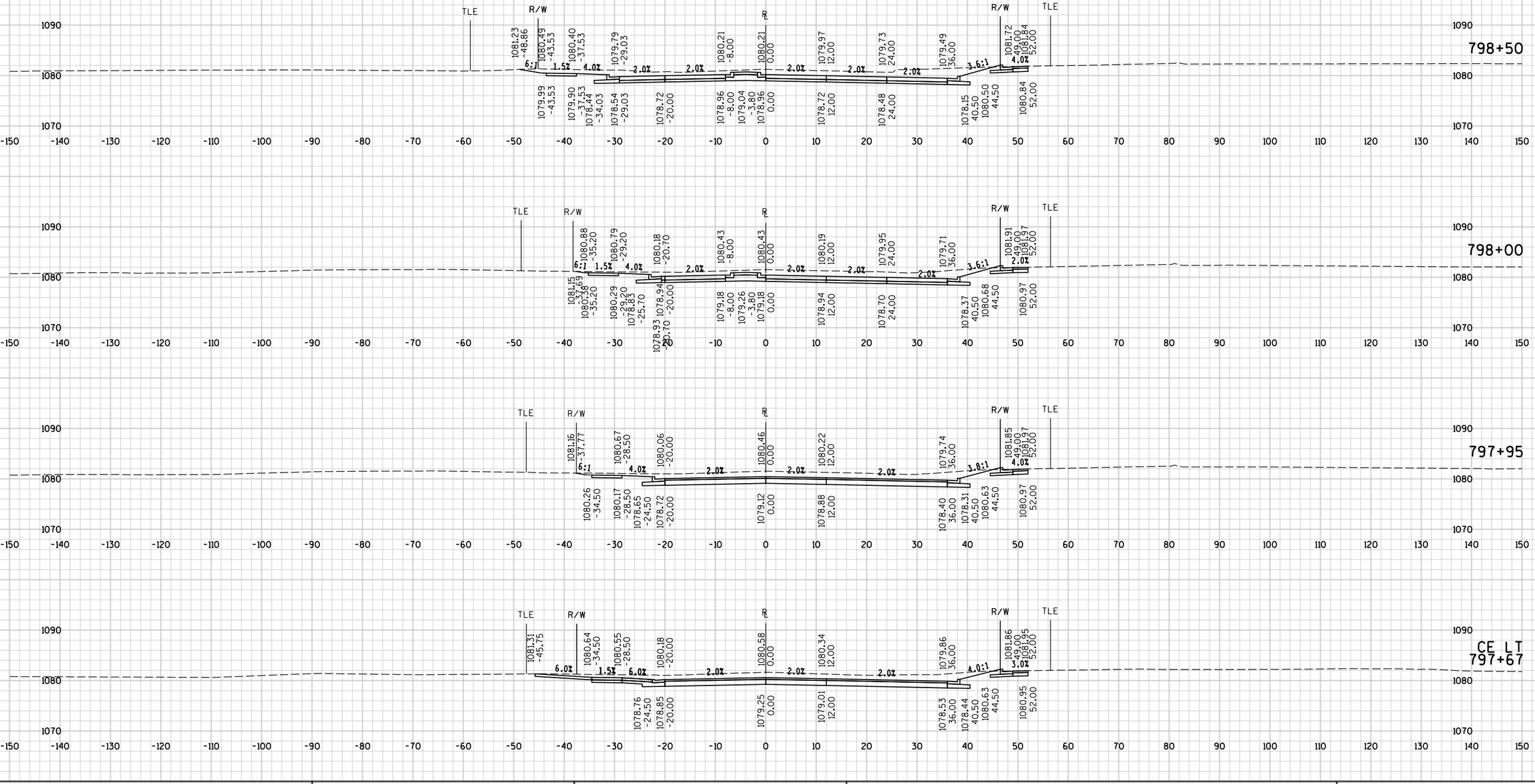


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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - TOMMY'S TURNPIKE	SHEET NO: 601	E

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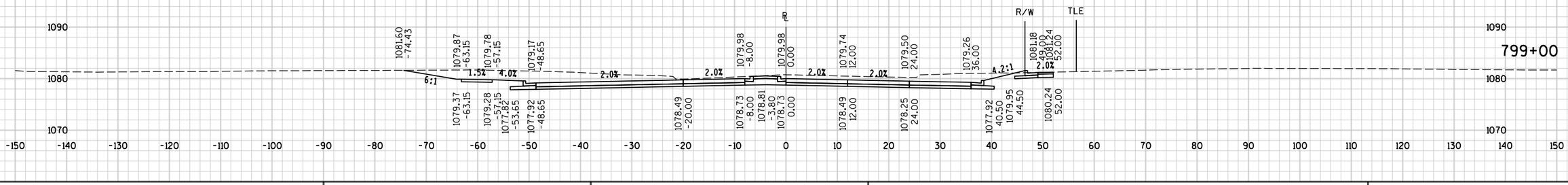


9

9

STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - TOMMY'S TURNPIKE	SHEET NO: 602	E

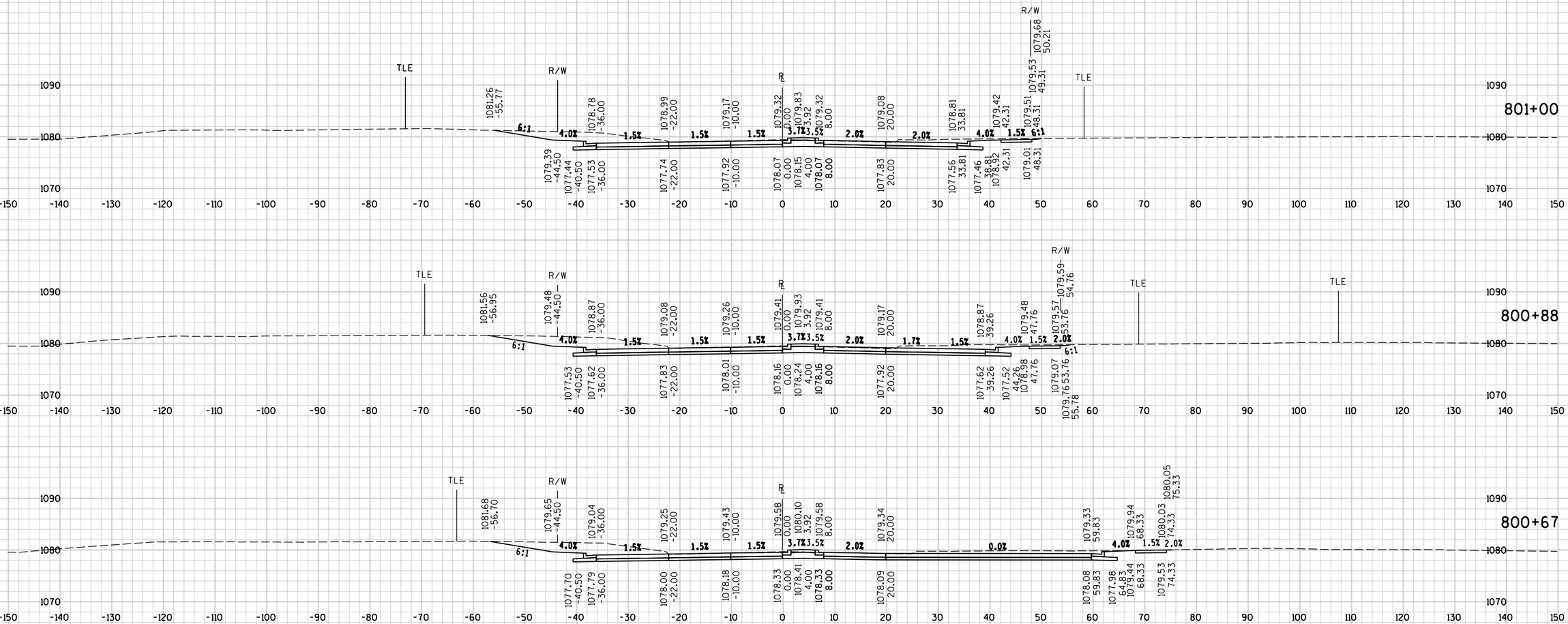
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9 9

STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - TOMMY'S TURNPIKE	SHEET NO: 603	E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:37 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

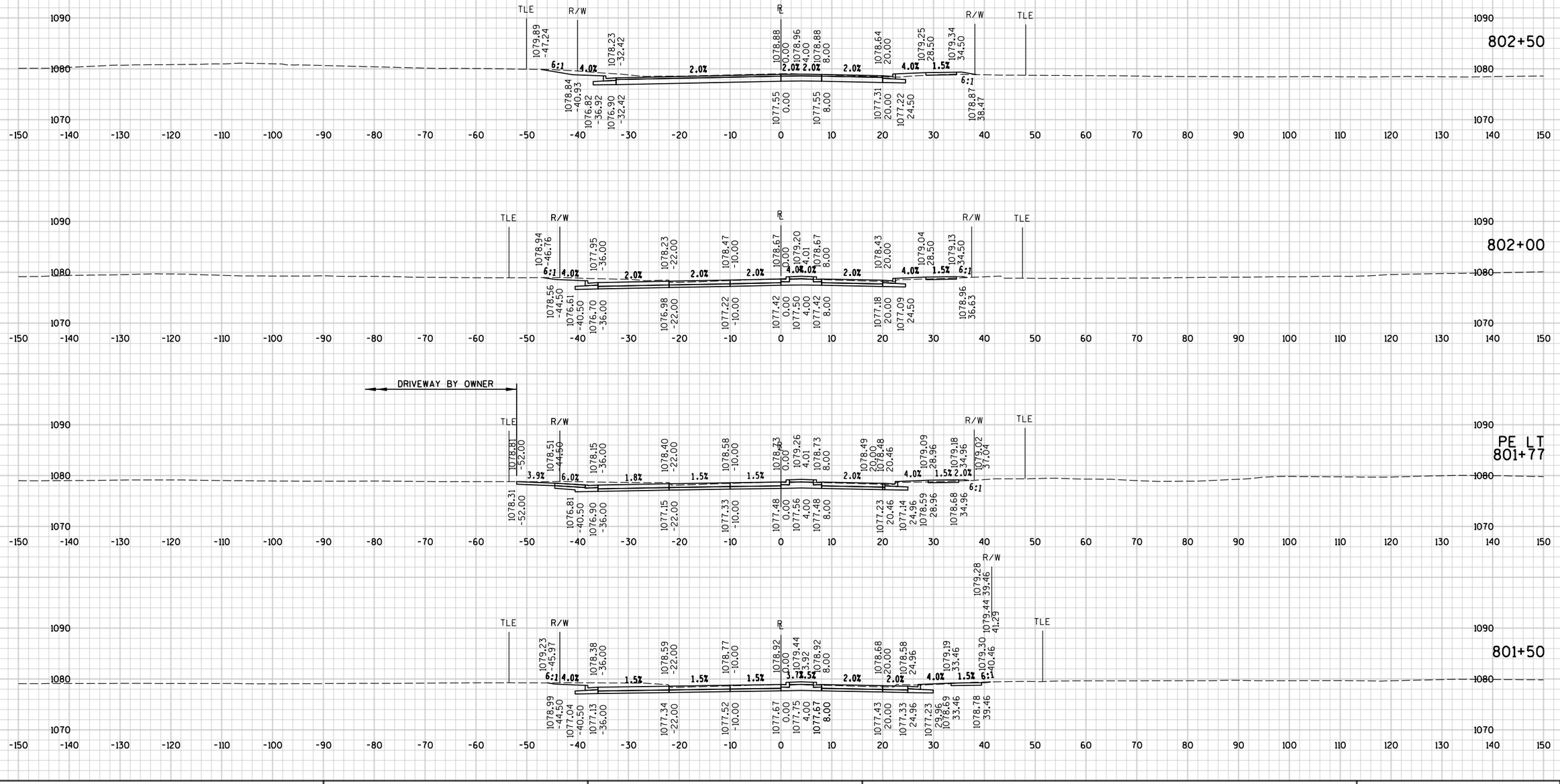


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9

STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - PORTER ROAD	SHEET NO: 604	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:37 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



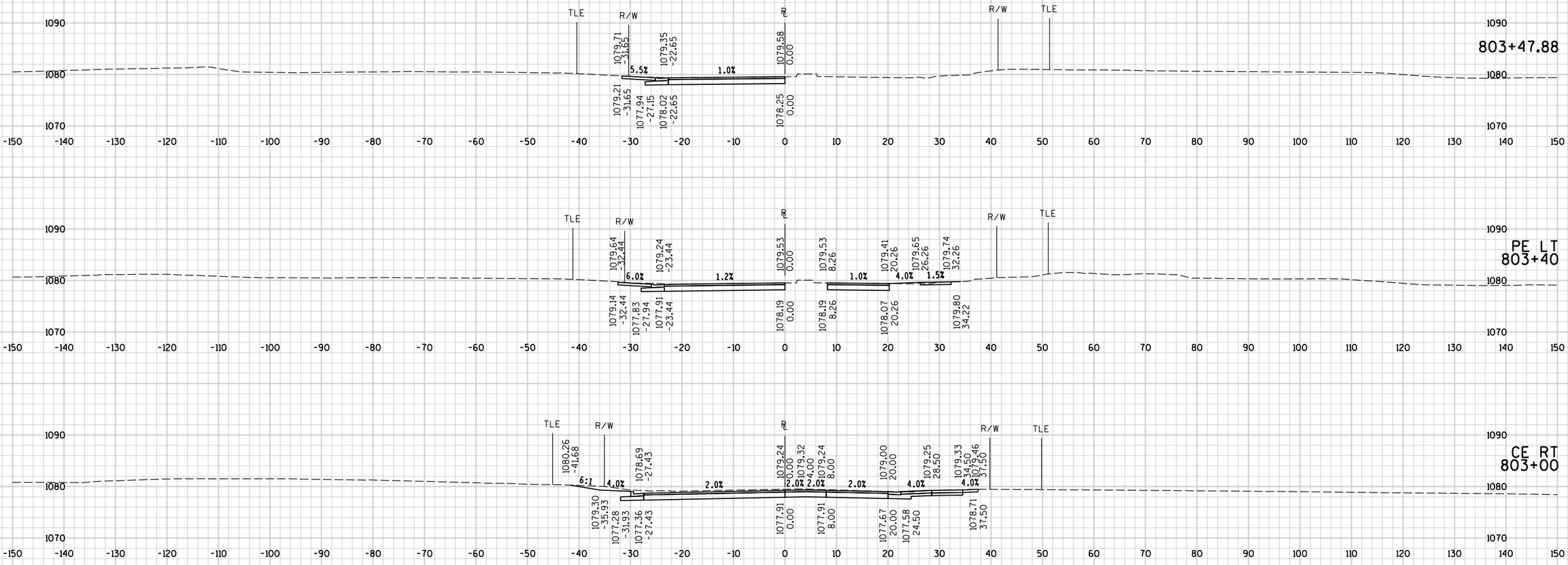
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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - PORTER ROAD	SHEET NO: 605	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:37 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

END CONSTRUCTION
STA 803+47.88

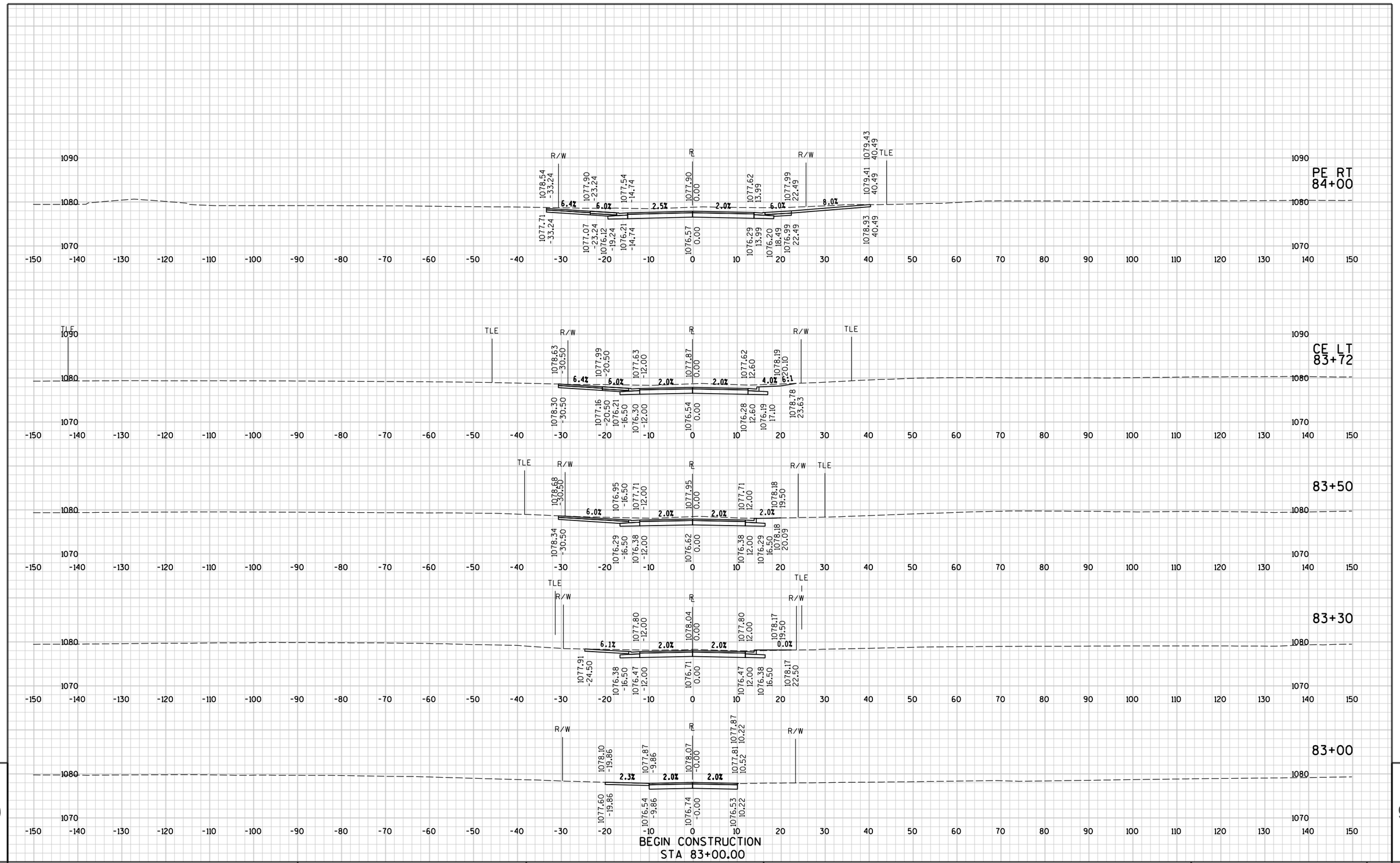


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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - PORTER ROAD	SHEET NO: 606	E

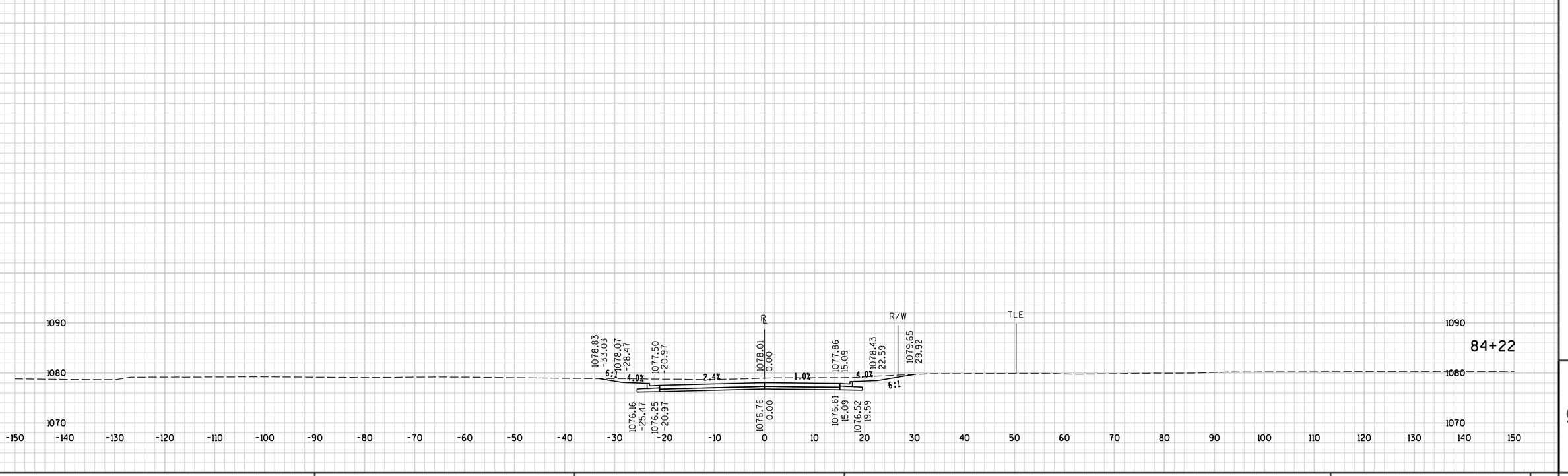
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BEGIN CONSTRUCTION
STA 83+00.00

STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - W CEDAR STREET	SHEET NO: 607	E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:38 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

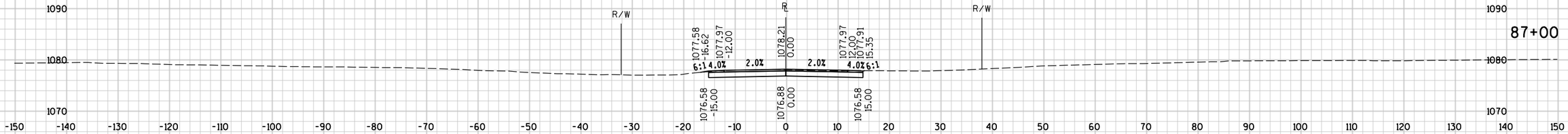


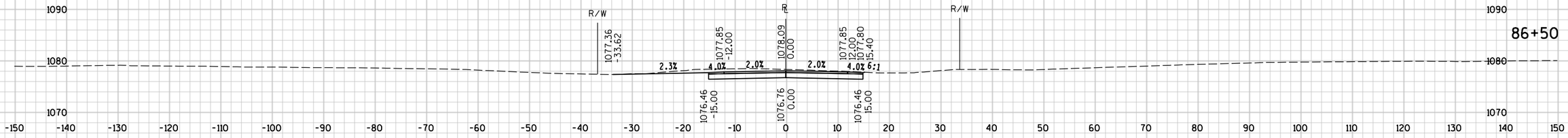
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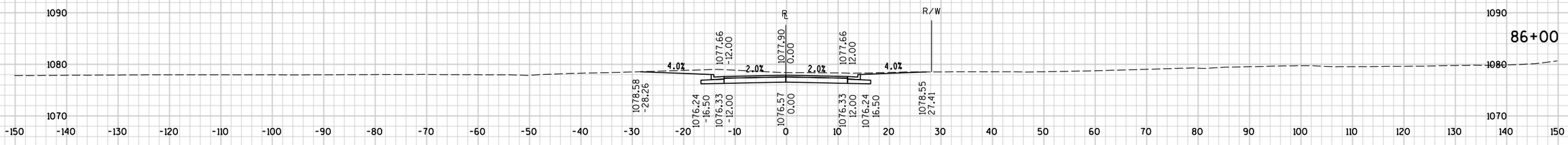
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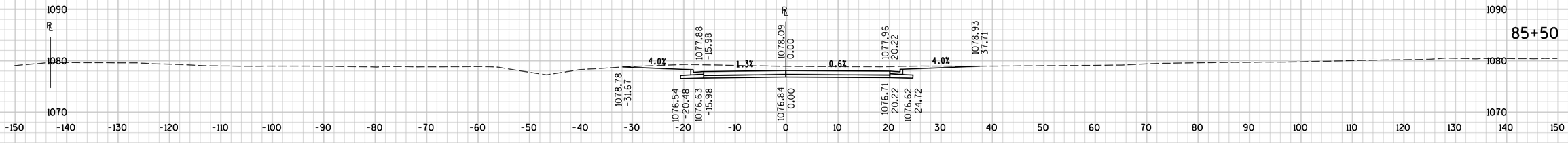
STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - W CEDAR STREET	SHEET NO: 608	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:38 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A









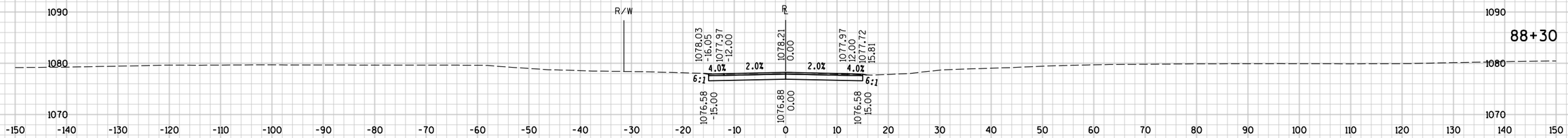
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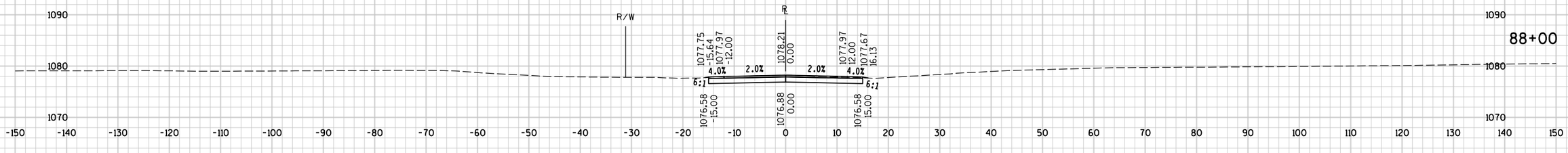
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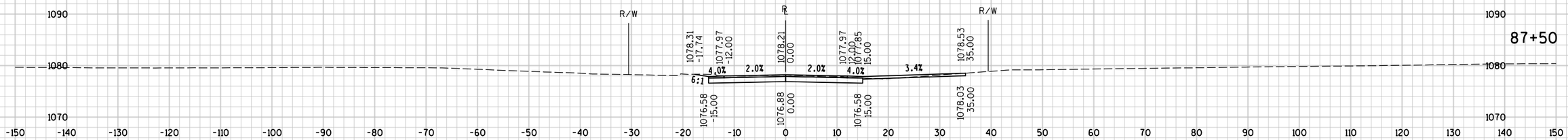
STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - E CEDAR STREET	SHEET NO: 609	E

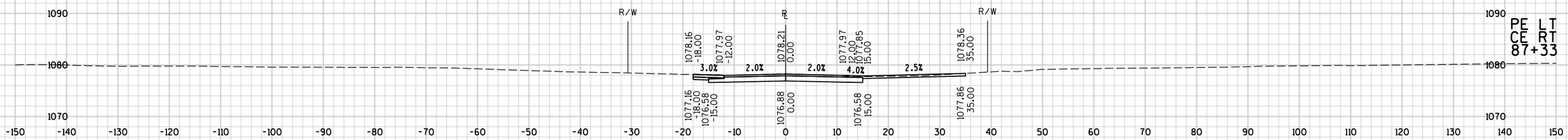
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END CONSTRUCTION
STA 88+30.00







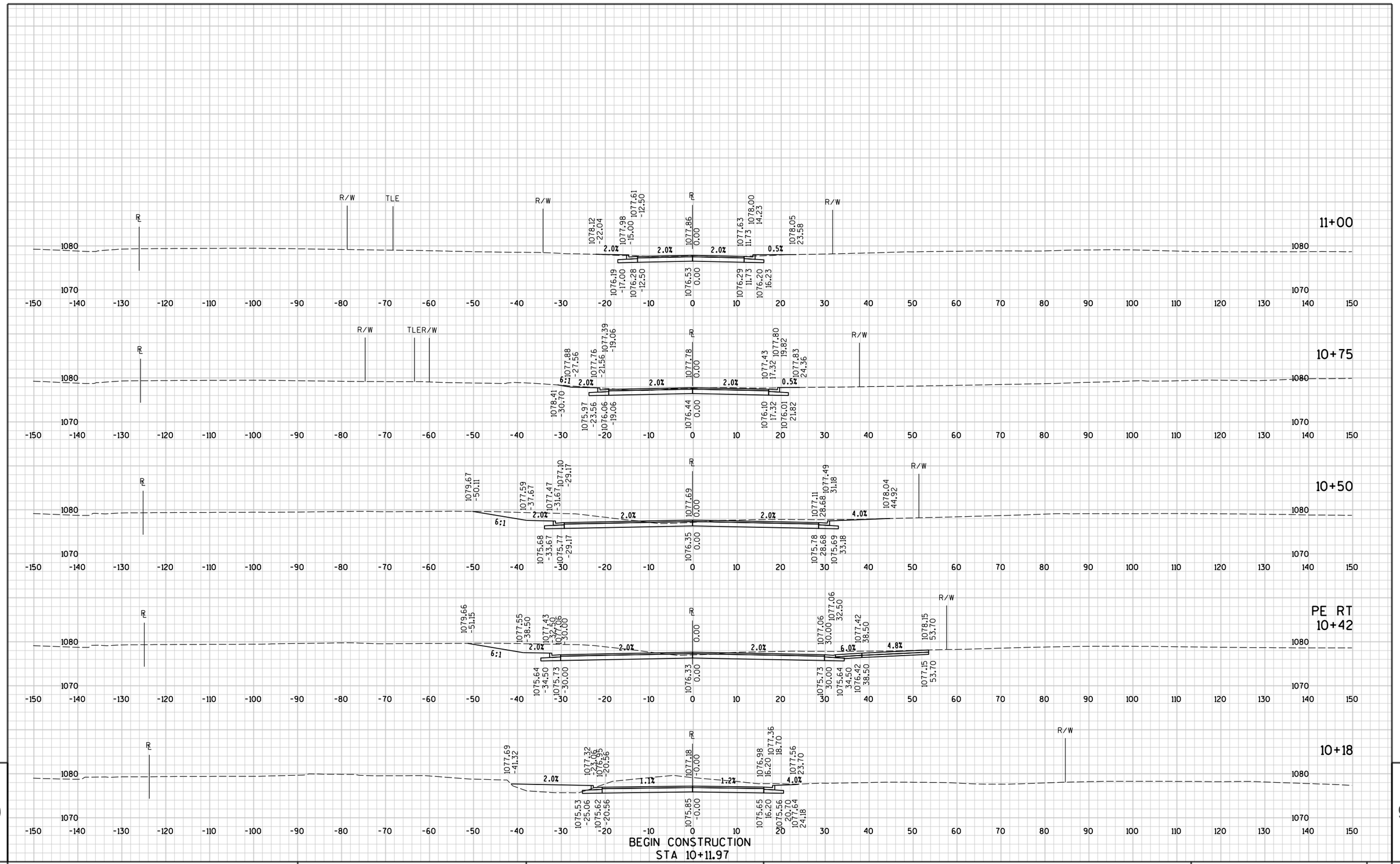


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9

STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - E CEDAR STREET	SHEET NO: 610	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:39 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



BEGIN CONSTRUCTION
STA 10+11.97

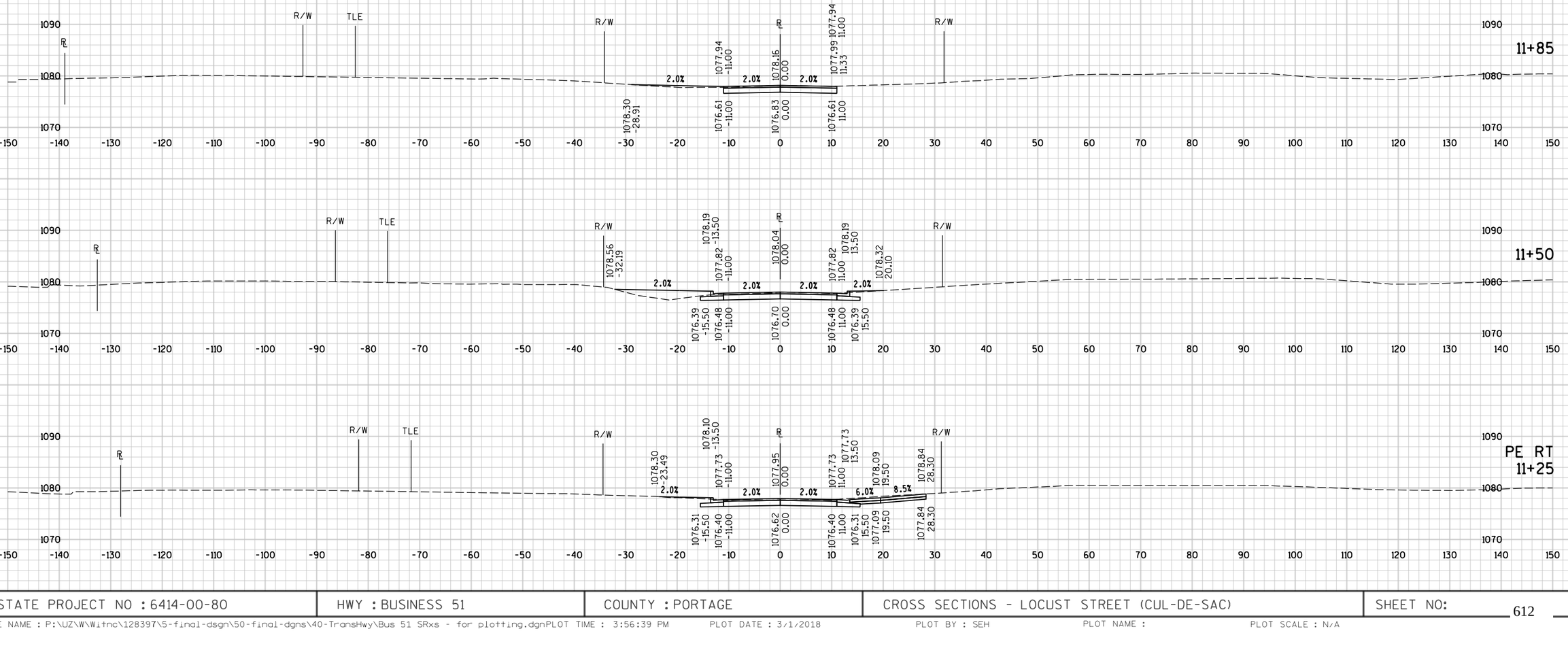
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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - LOCUST STREET (CUL-DE-SAC)	SHEET NO: 611	E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:39 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

END CONSTRUCTION
STA 11+85.00

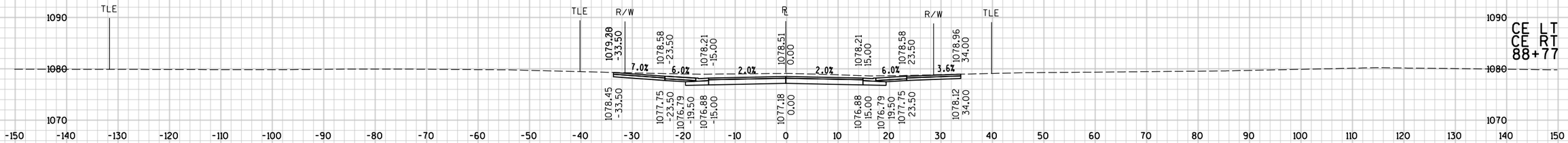


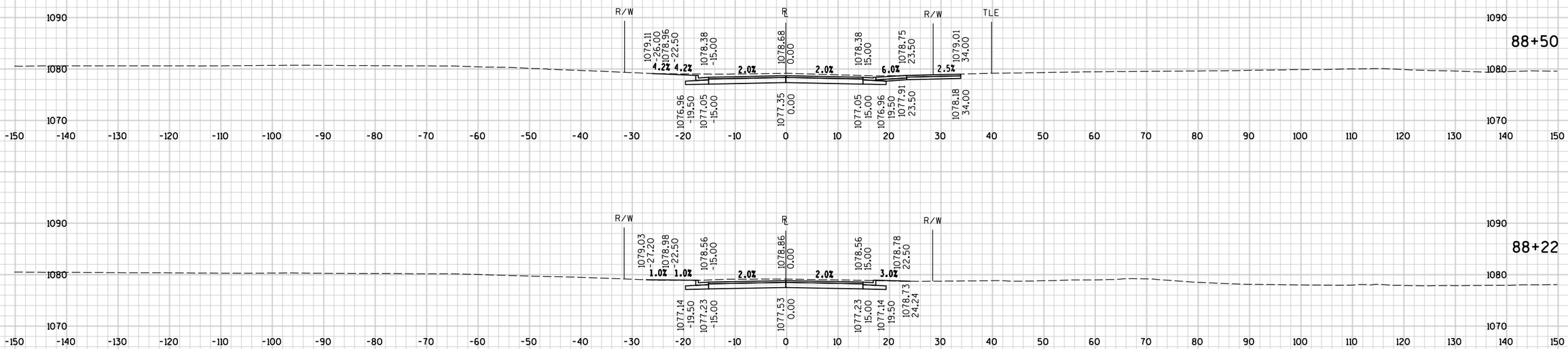
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9

STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - LOCUST STREET (CUL-DE-SAC)	SHEET NO: 612	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:39 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



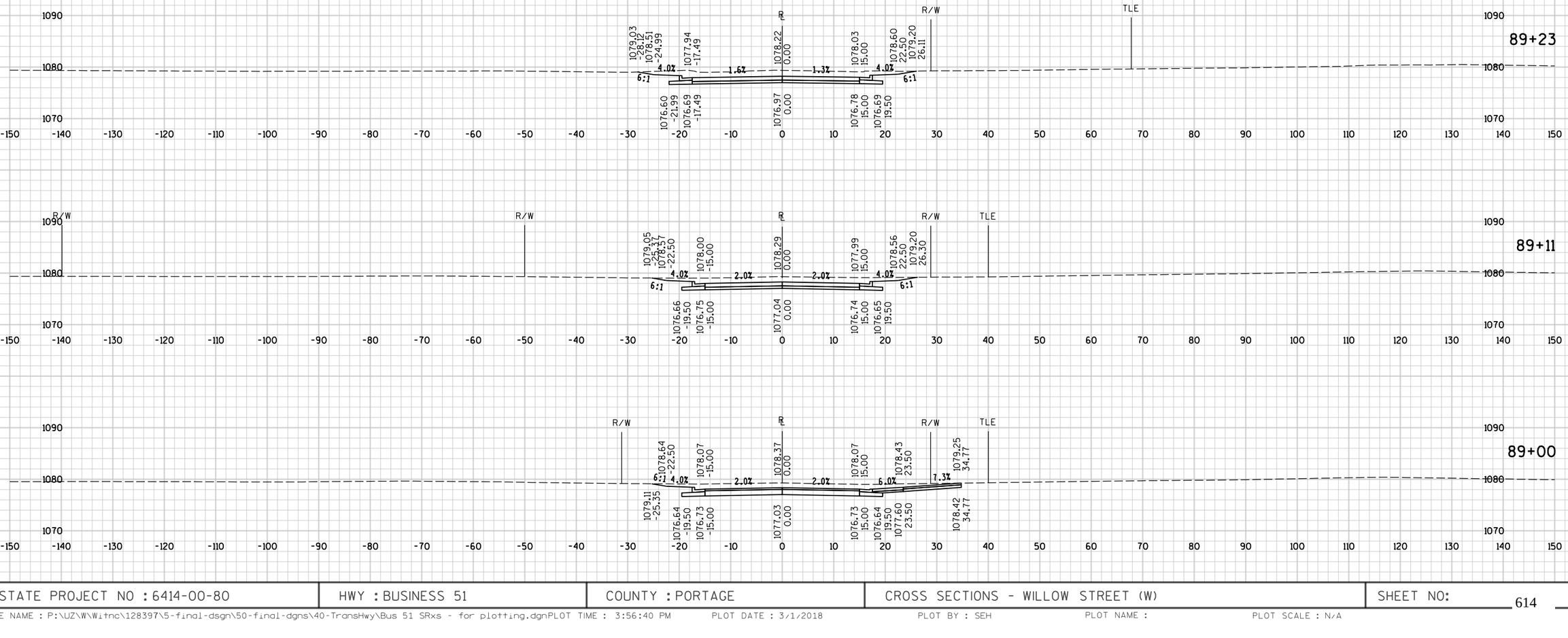


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9

STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - WILLOW STREET (W)	SHEET NO: 613	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:39 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

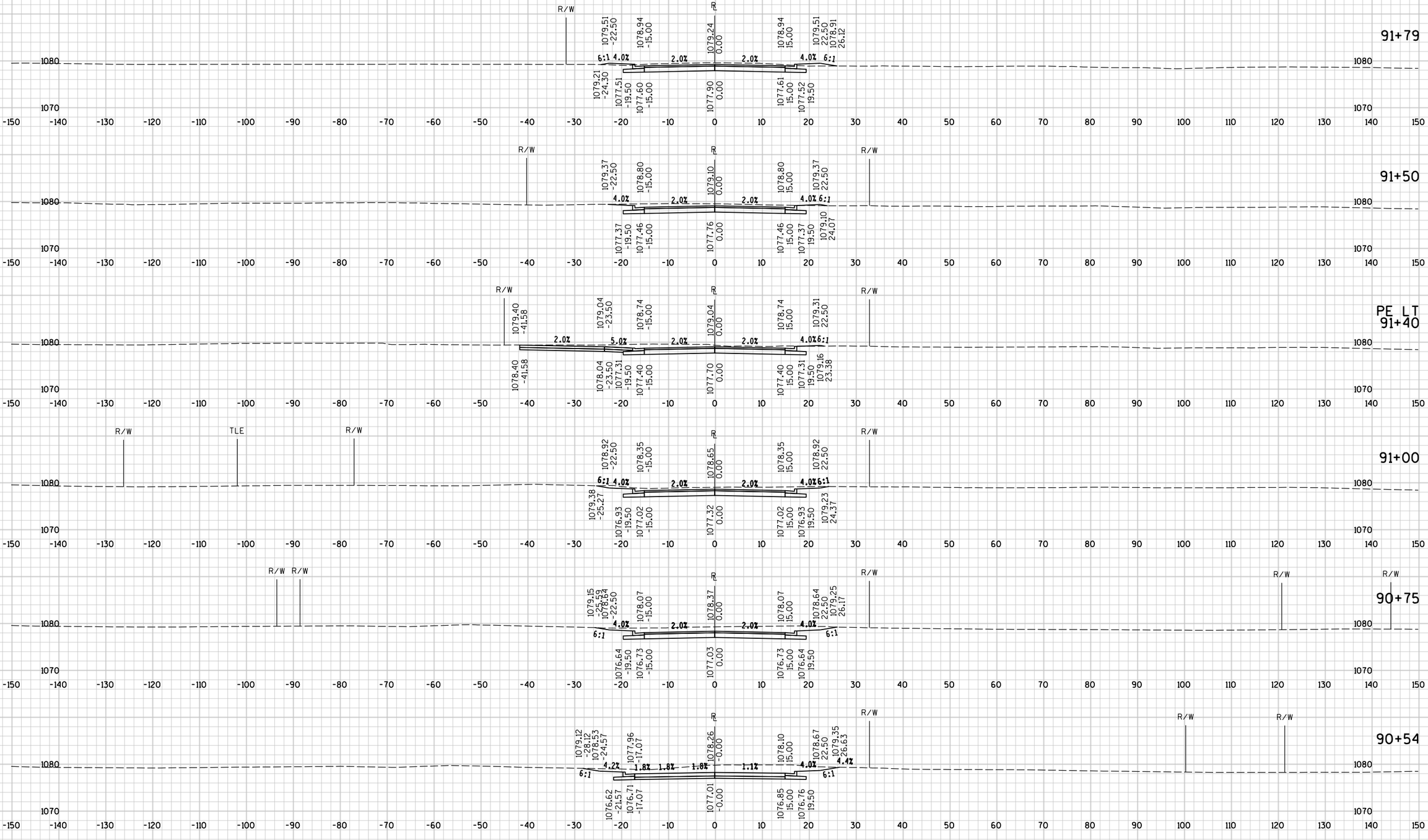


9

9

STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - WILLOW STREET (W)	SHEET NO: 614	E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:40 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



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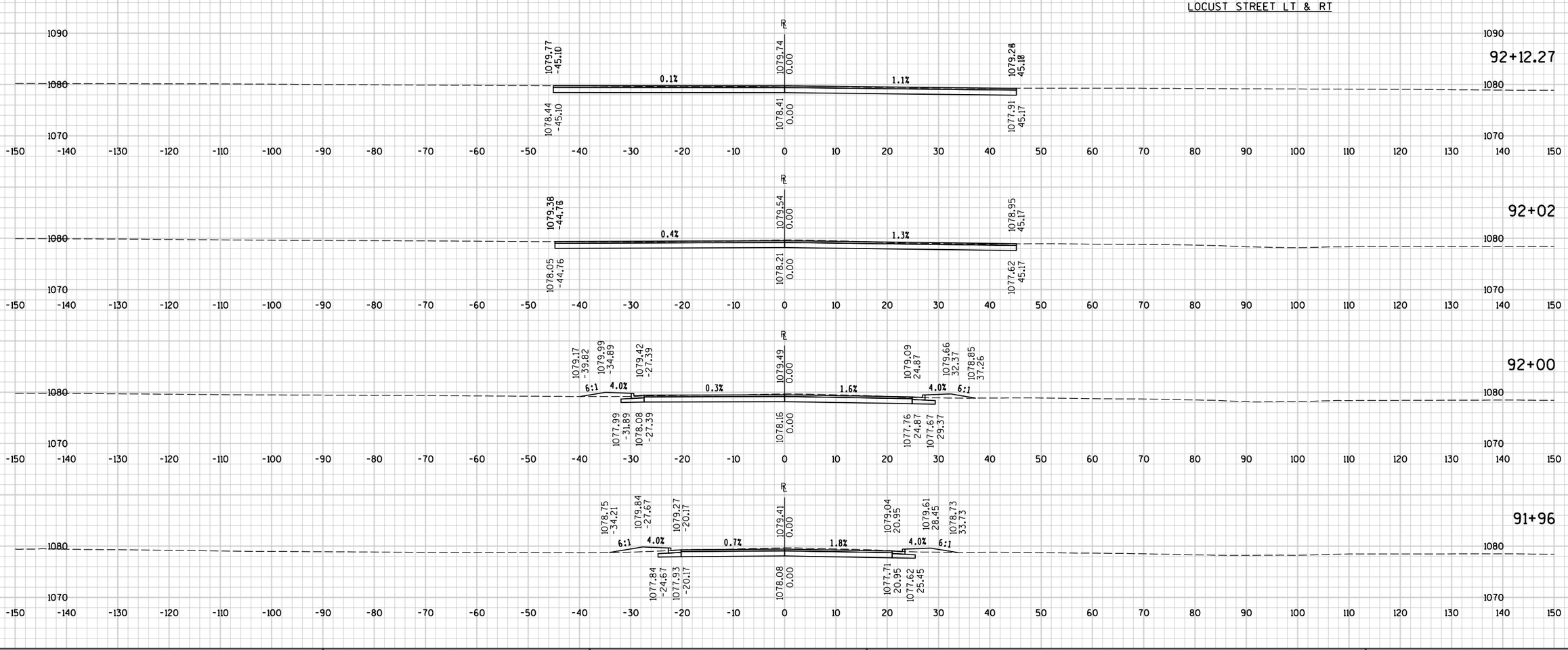
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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - WILLOW STREET (E)	SHEET NO: 615	E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:40 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

END CONSTRUCTION
STA 92+12.27

LOCUST STREET LT & RT

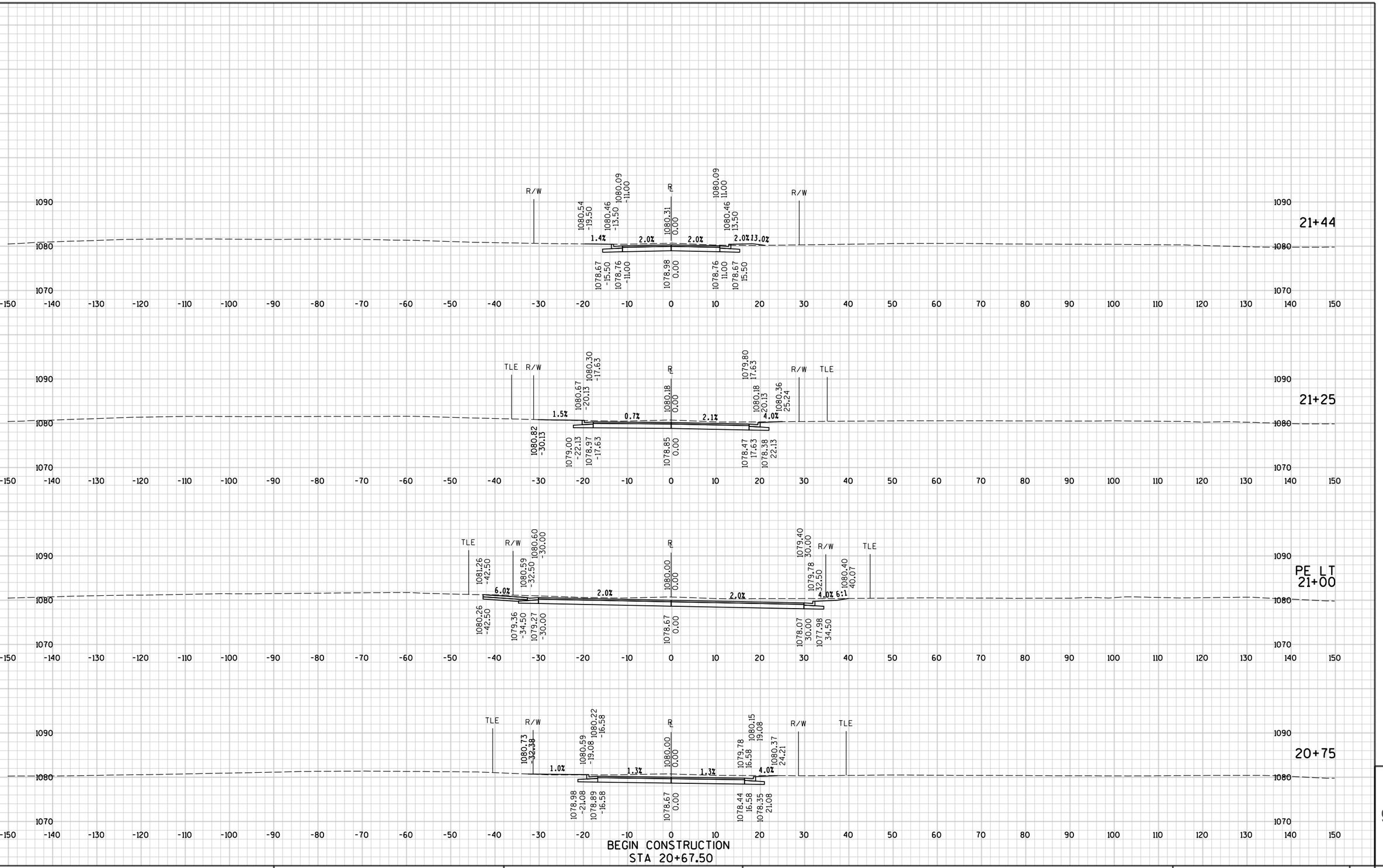


9

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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - WILLOW STREET (E)	SHEET NO: 616	E

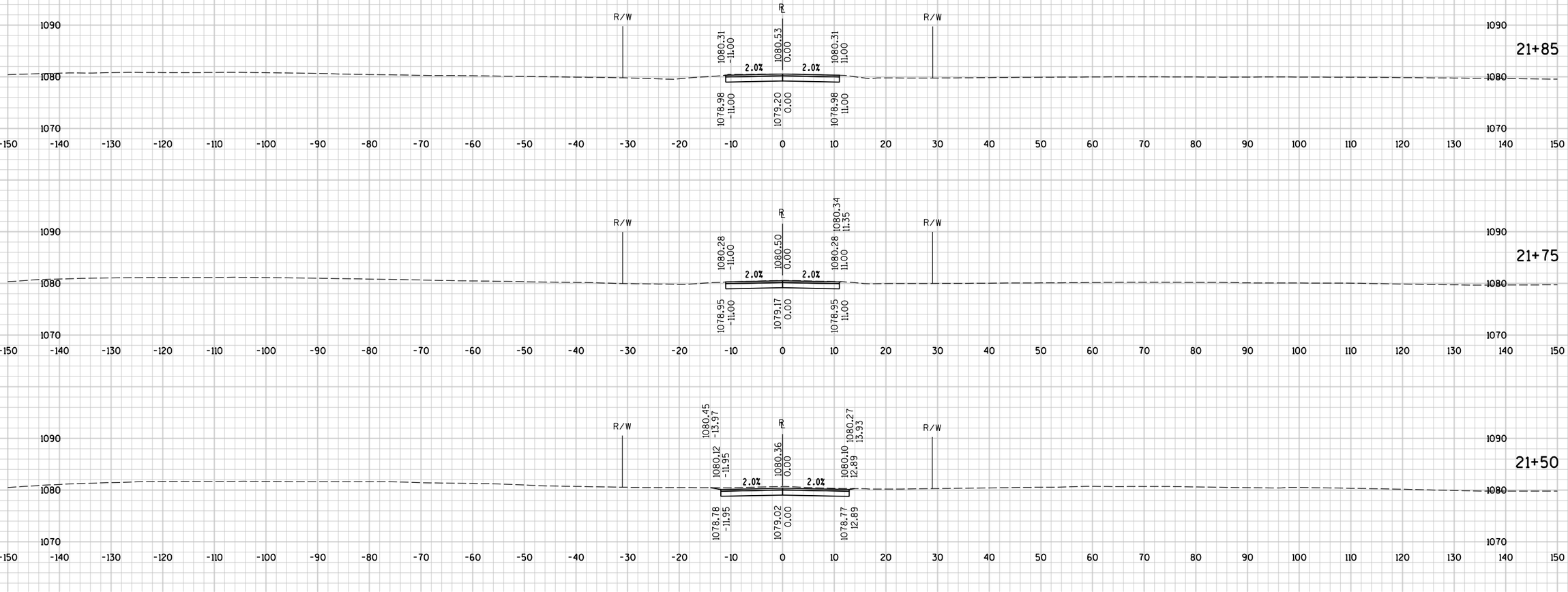
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STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BEECH STREET (CUL-DE-SAC)	SHEET NO: 617	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:40 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

END CONSTRUCTION
STA 21+85.00



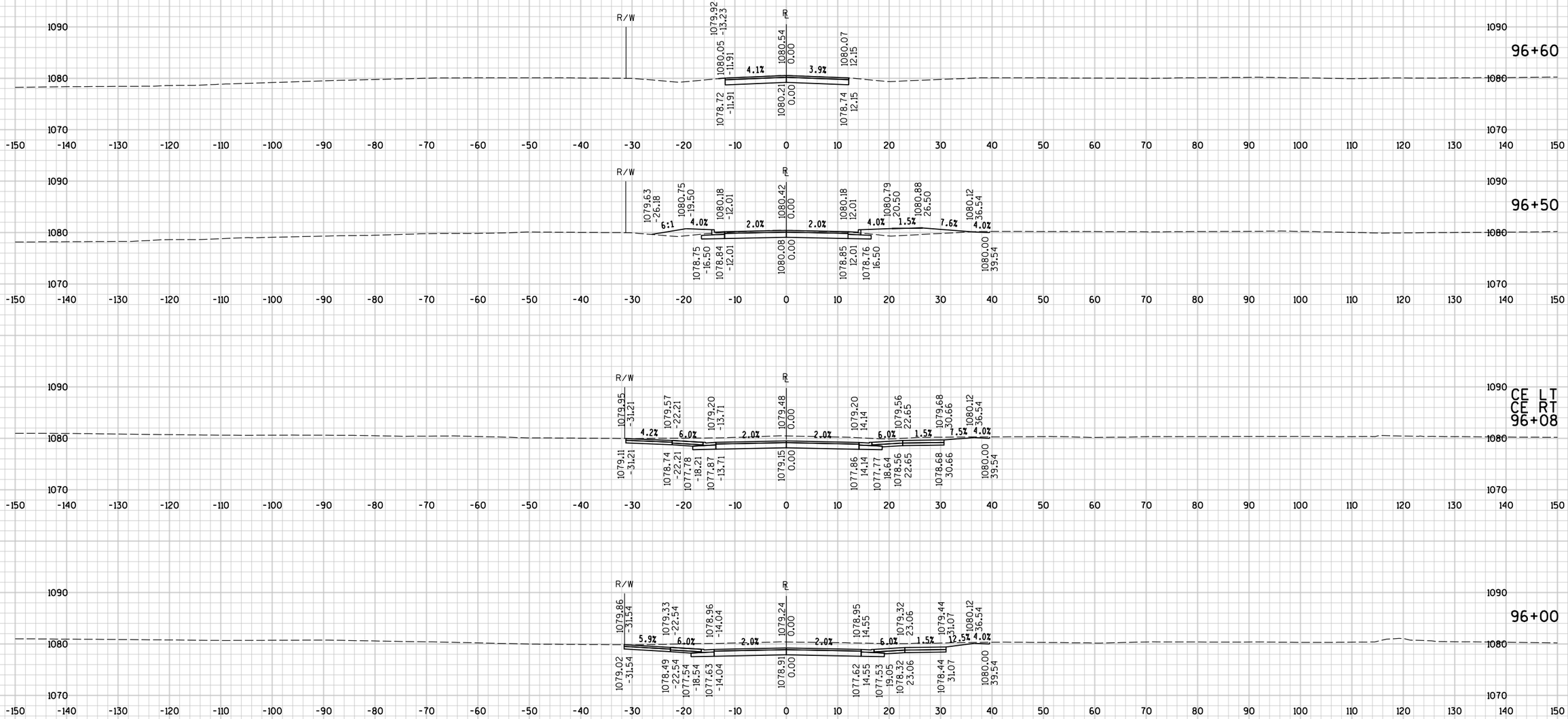
9

9

STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - BEECH STREET (CUL-DE-SAC)	SHEET NO: 618	E

FILE NAME : P:\UZW\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:41 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

END CONSTRUCTION
STA 96+60.00

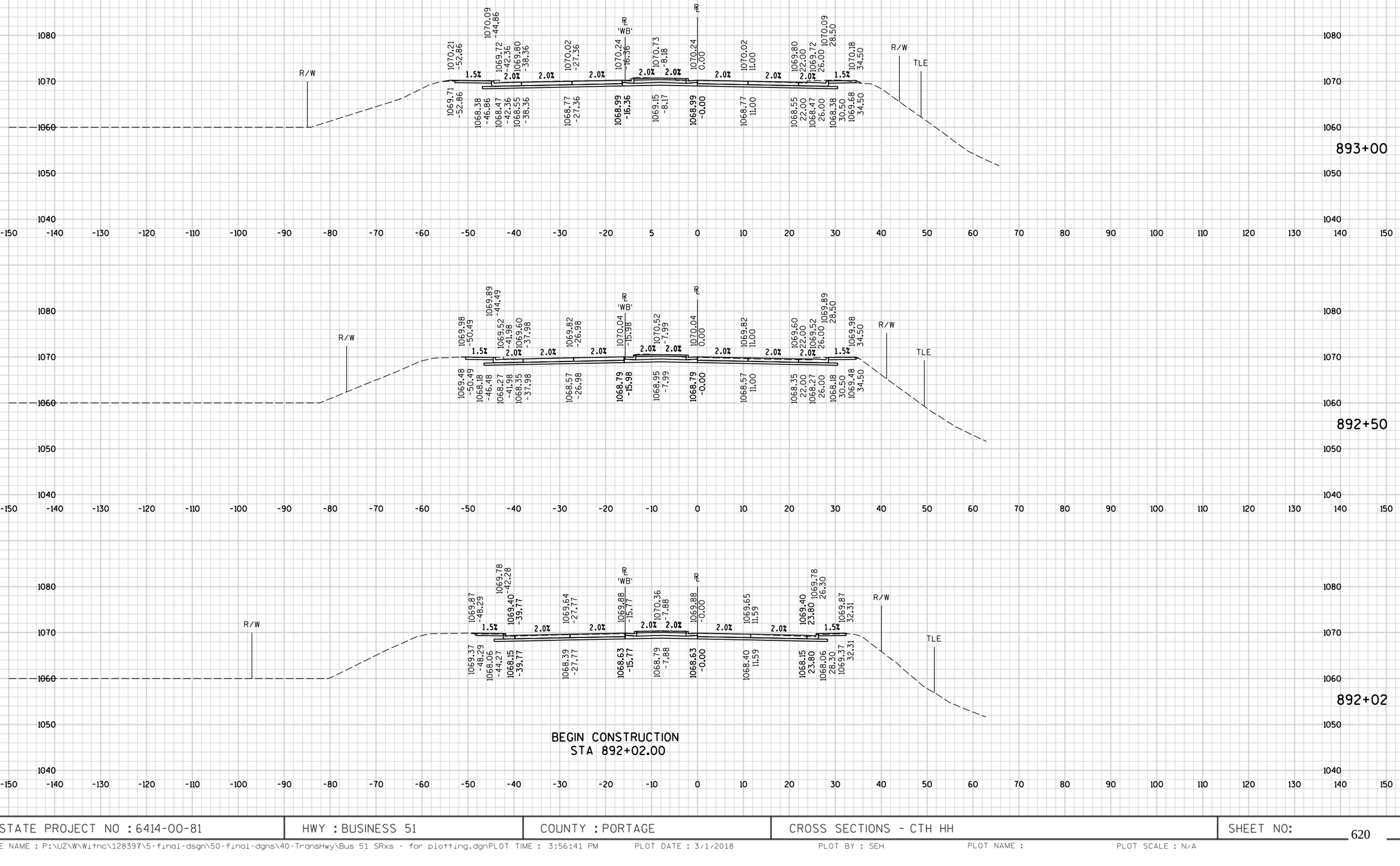


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9

STATE PROJECT NO : 6414-00-80	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - E ELM STREET	SHEET NO: 619	E

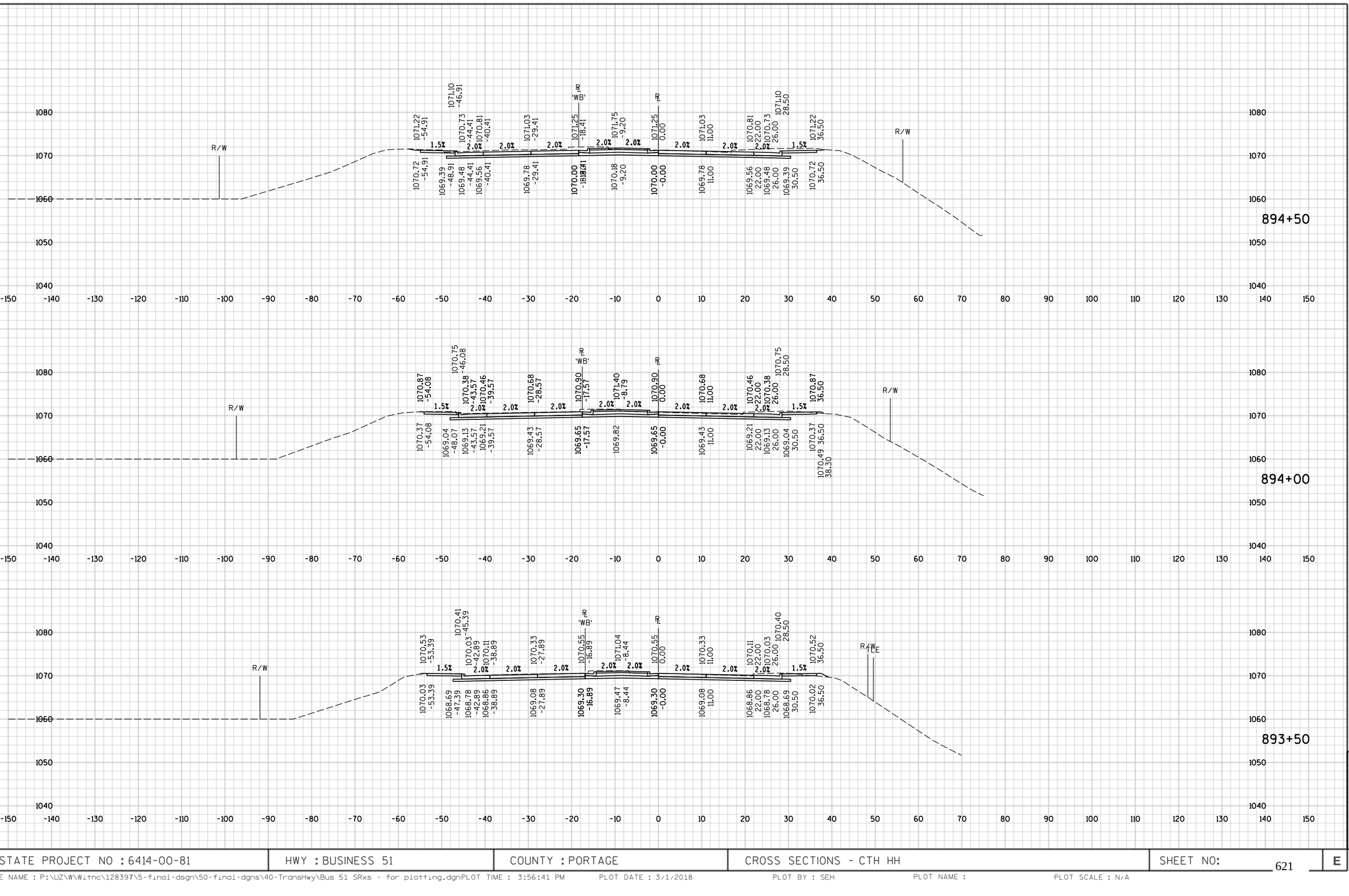
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BEGIN CONSTRUCTION
STA 892+02.00

STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - CTH HH	SHEET NO: 620	E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:41 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

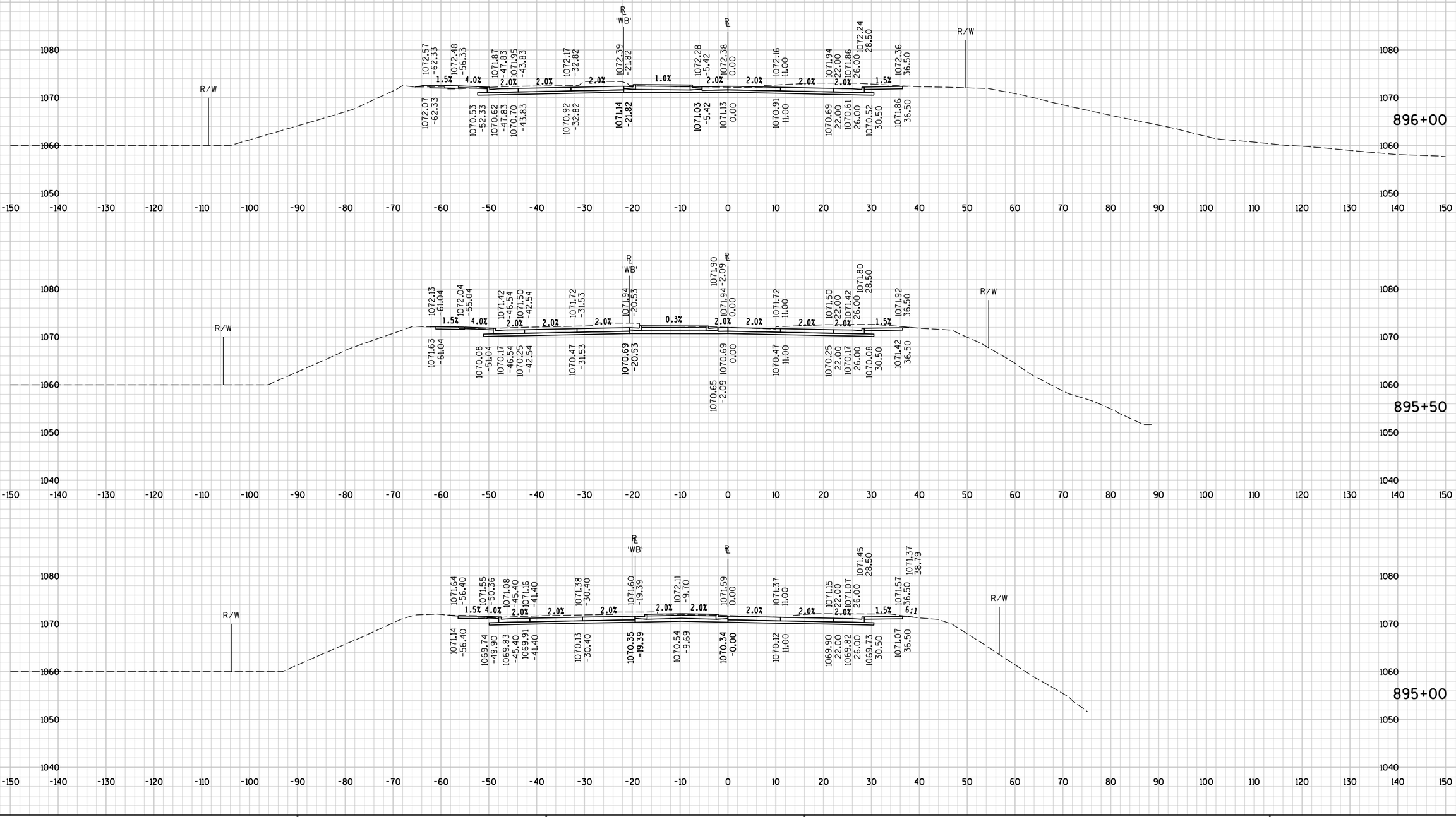


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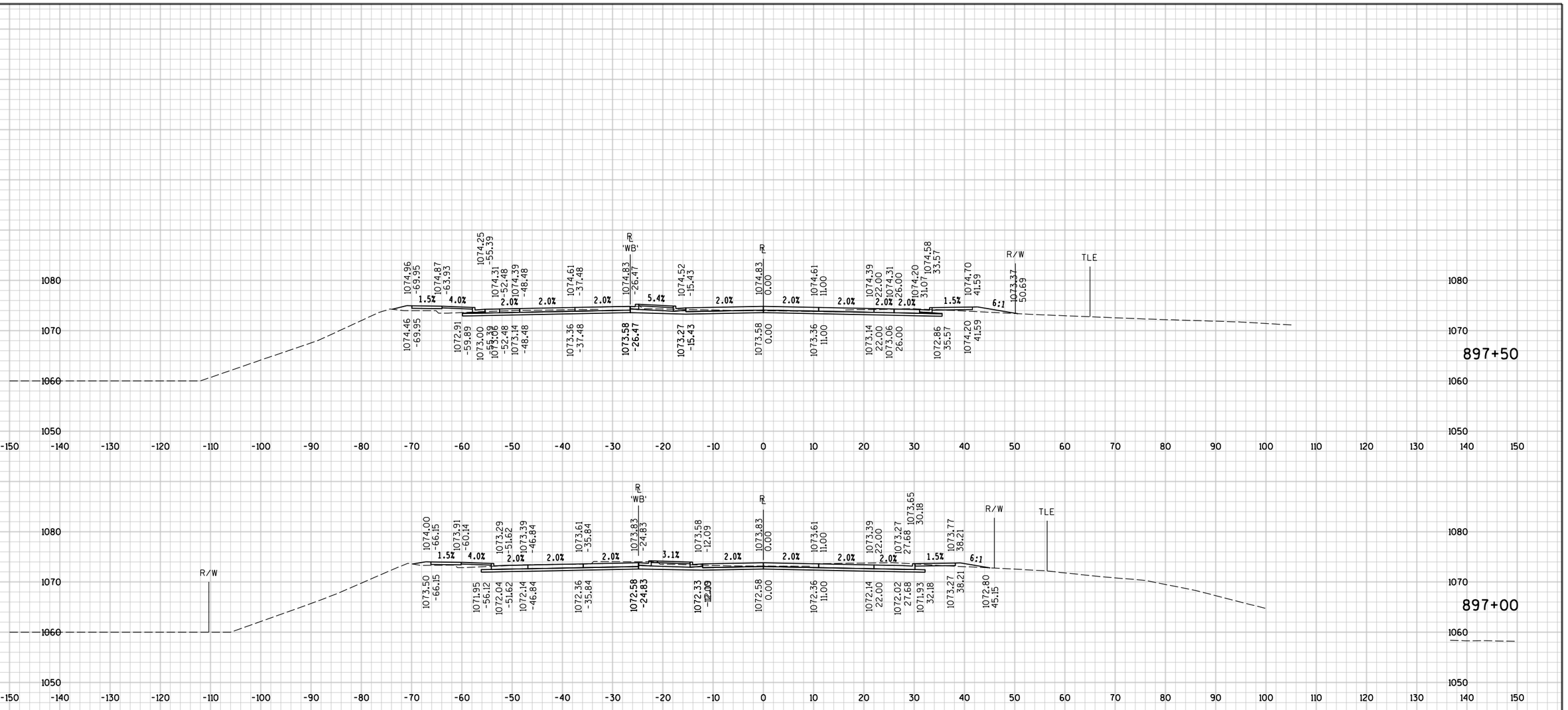
STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - CTH HH	SHEET NO: 621	E

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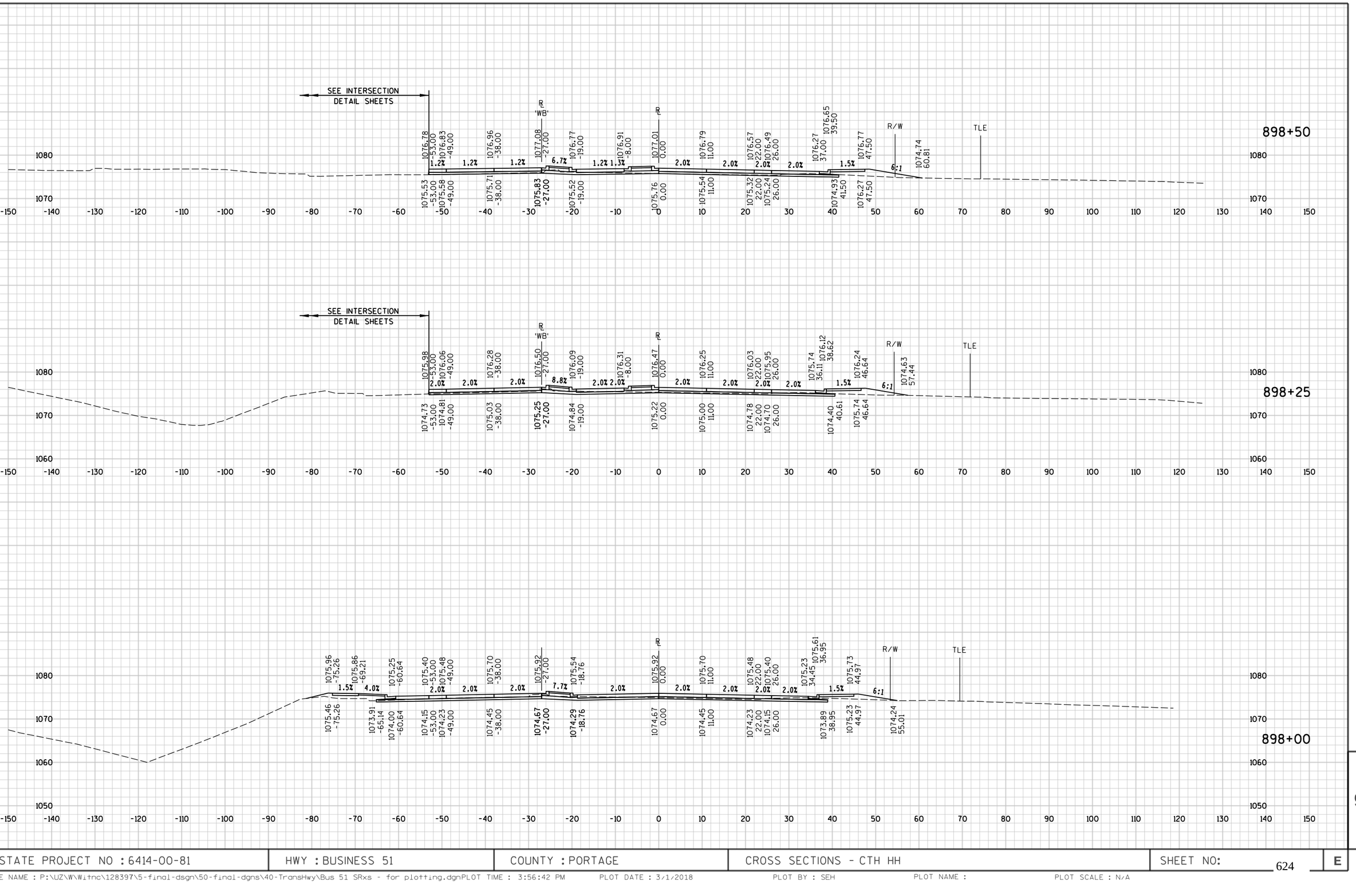
STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - CTH HH	SHEET NO: 622 E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:42 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - CTH HH	SHEET NO: 623	E

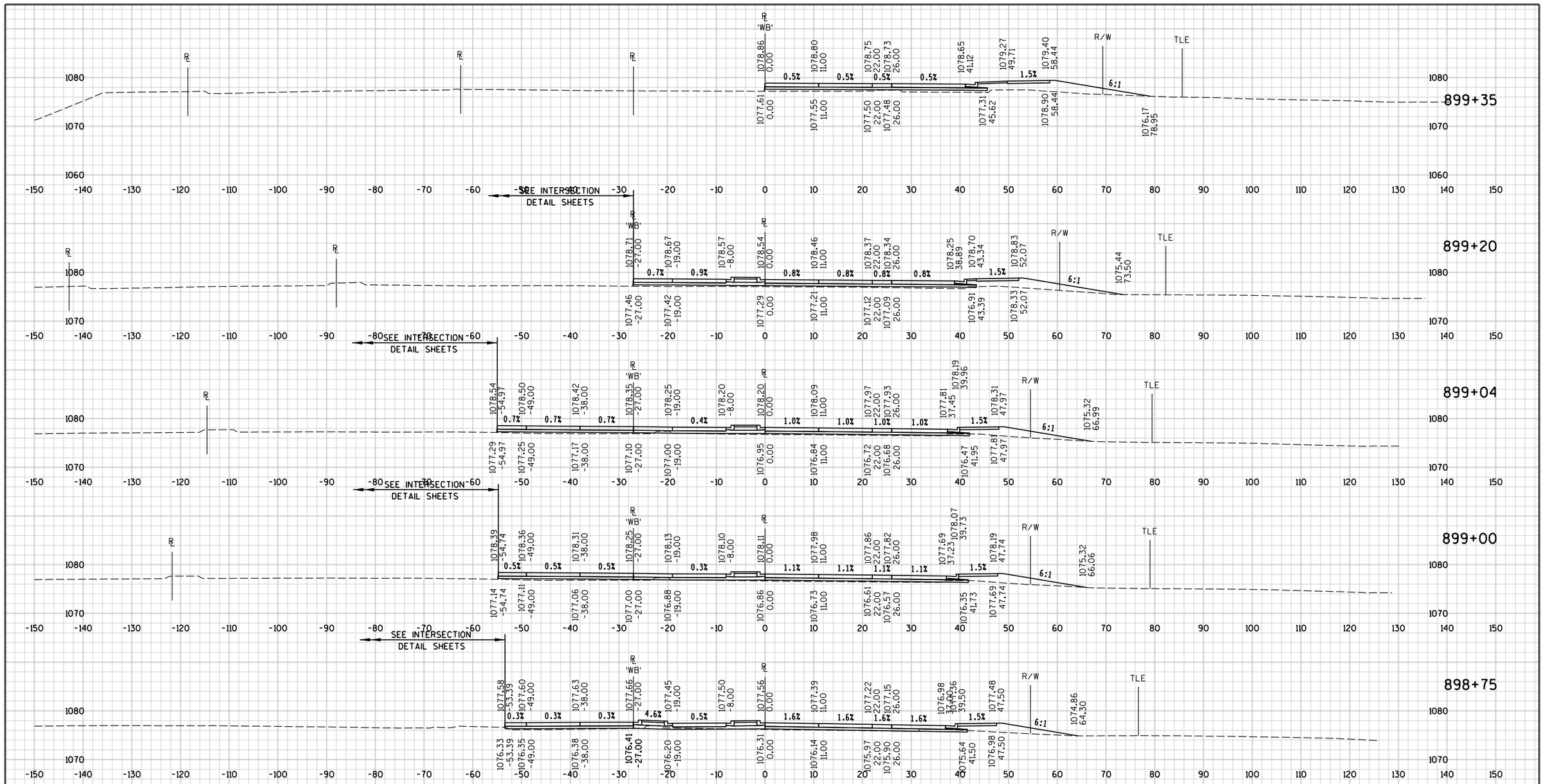
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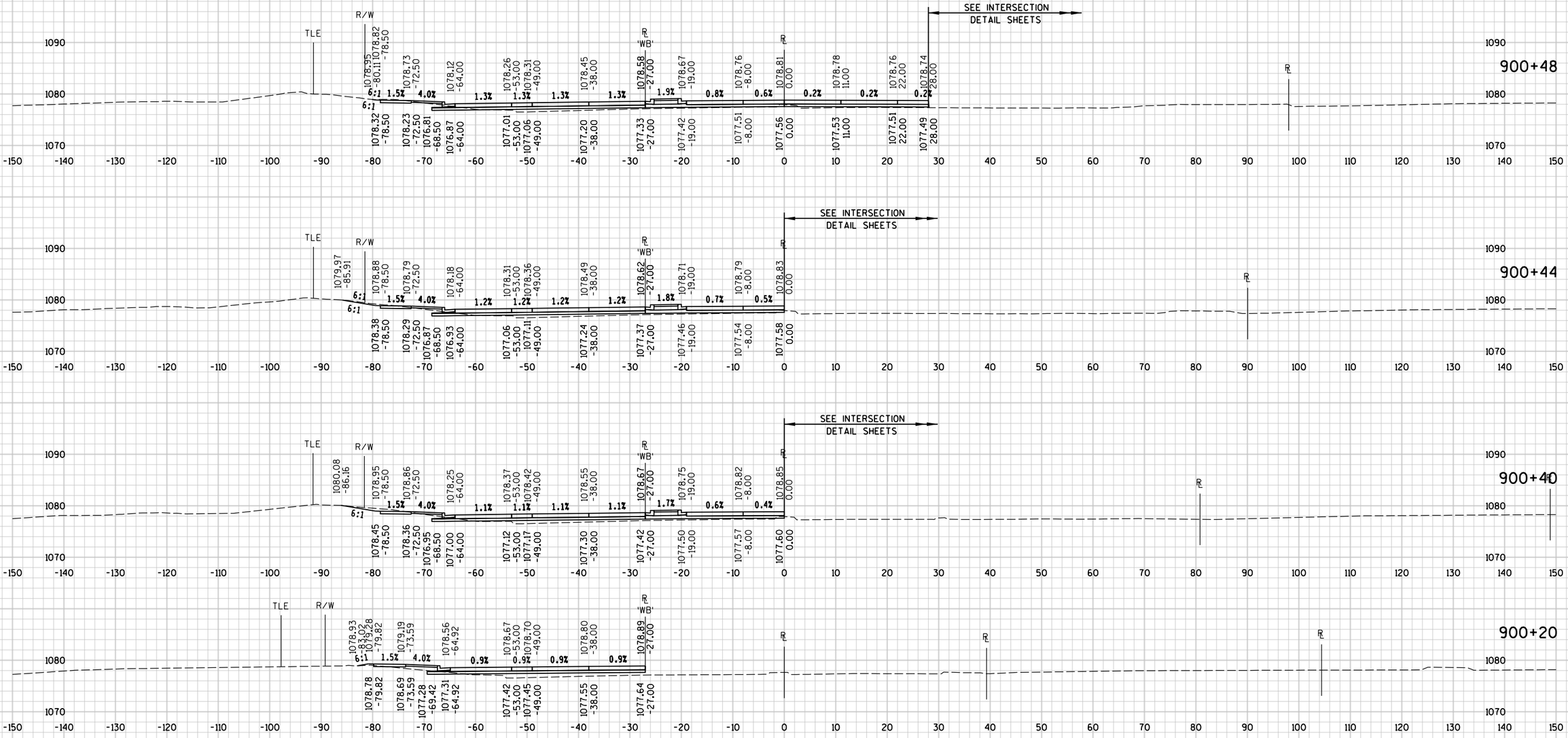


STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - CTH HH	SHEET NO: 624	E

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9 9


899+35
899+20
899+04
899+00
898+75
SEE INTERSECTION DETAIL SHEETS
R/W
TLE
6:1
'WB'

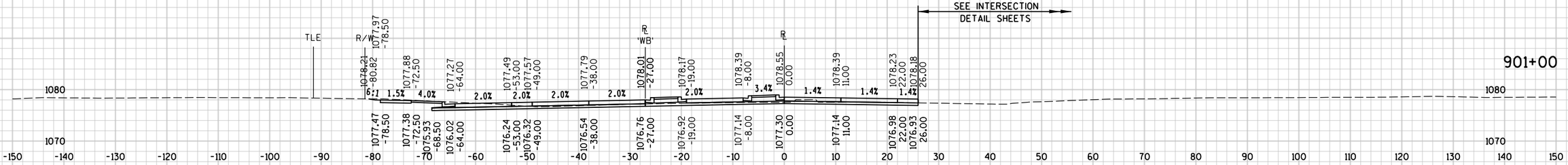


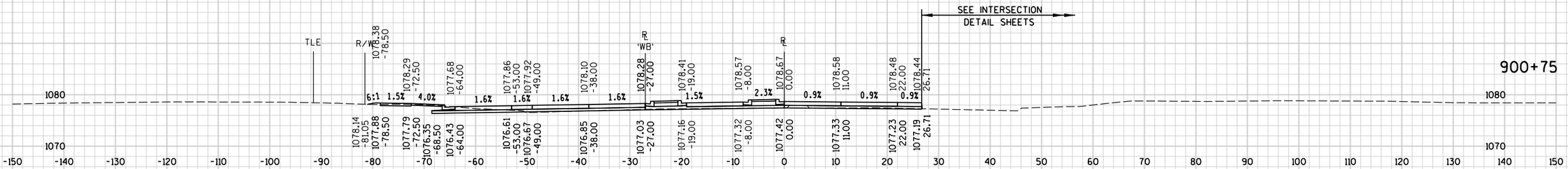
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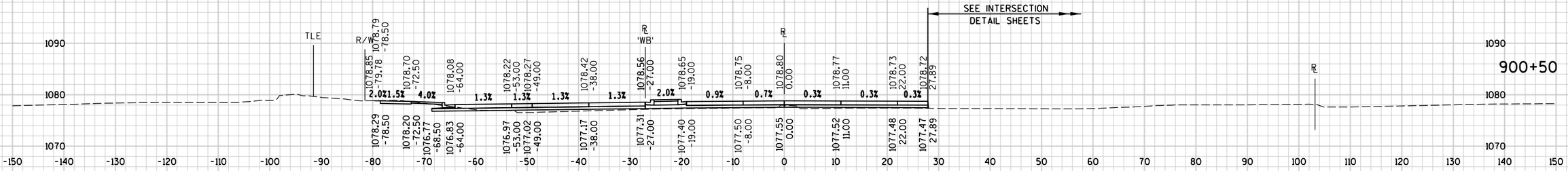
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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - MCDILL AVENUE	SHEET NO: 626	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:43 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A







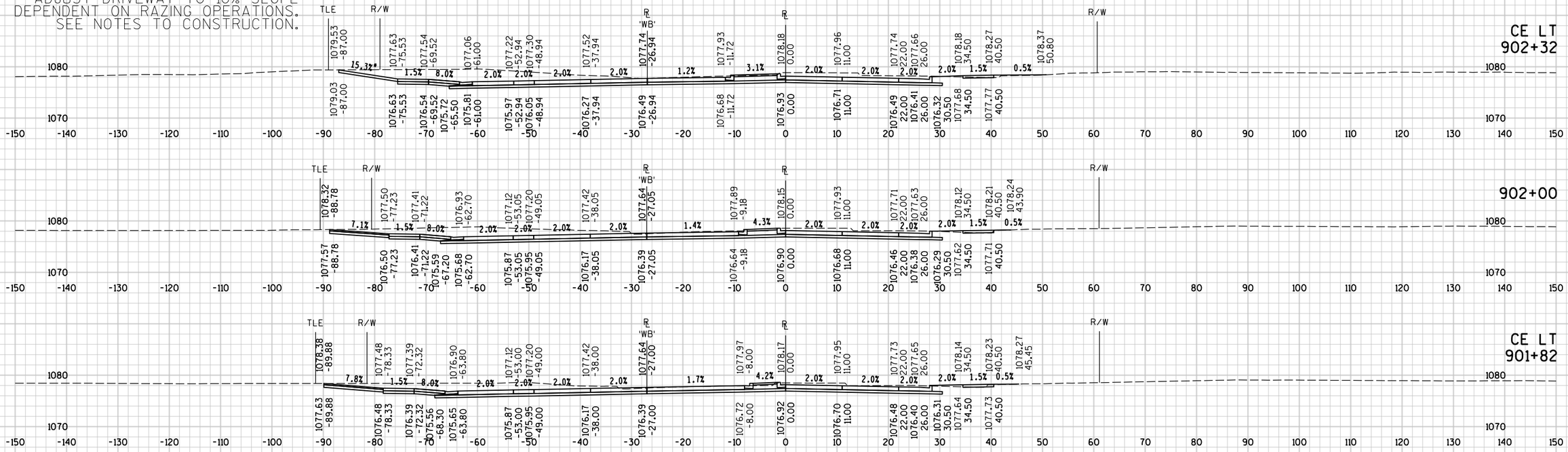
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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - MCDILL AVENUE	SHEET NO: 627	E

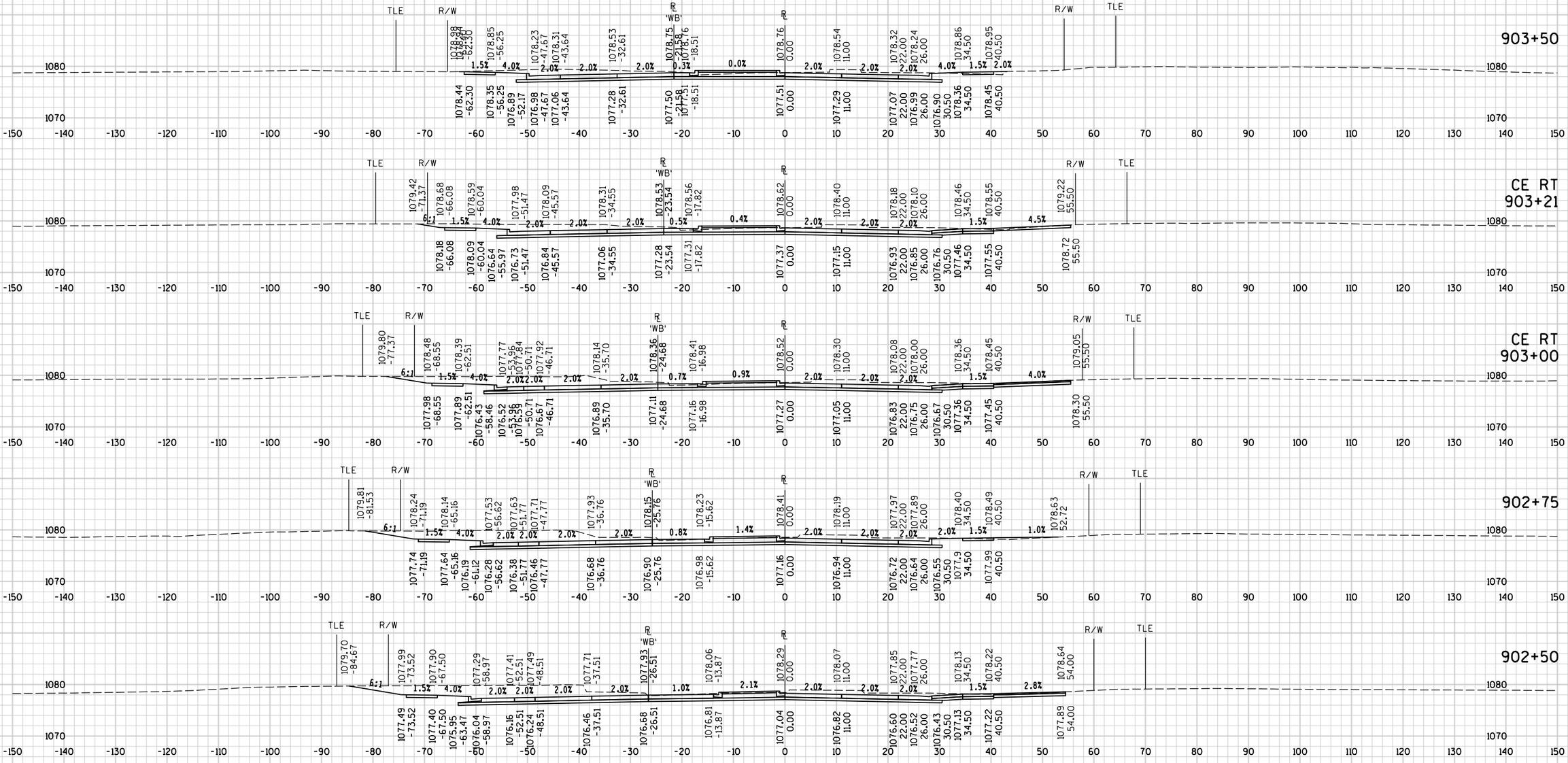
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* ADJUST DRIVEWAY TO 10% SLOPE DEPENDENT ON RAZING OPERATIONS. SEE NOTES TO CONSTRUCTION.



STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - MCDILL AVENUE	SHEET NO: 628

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:44 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

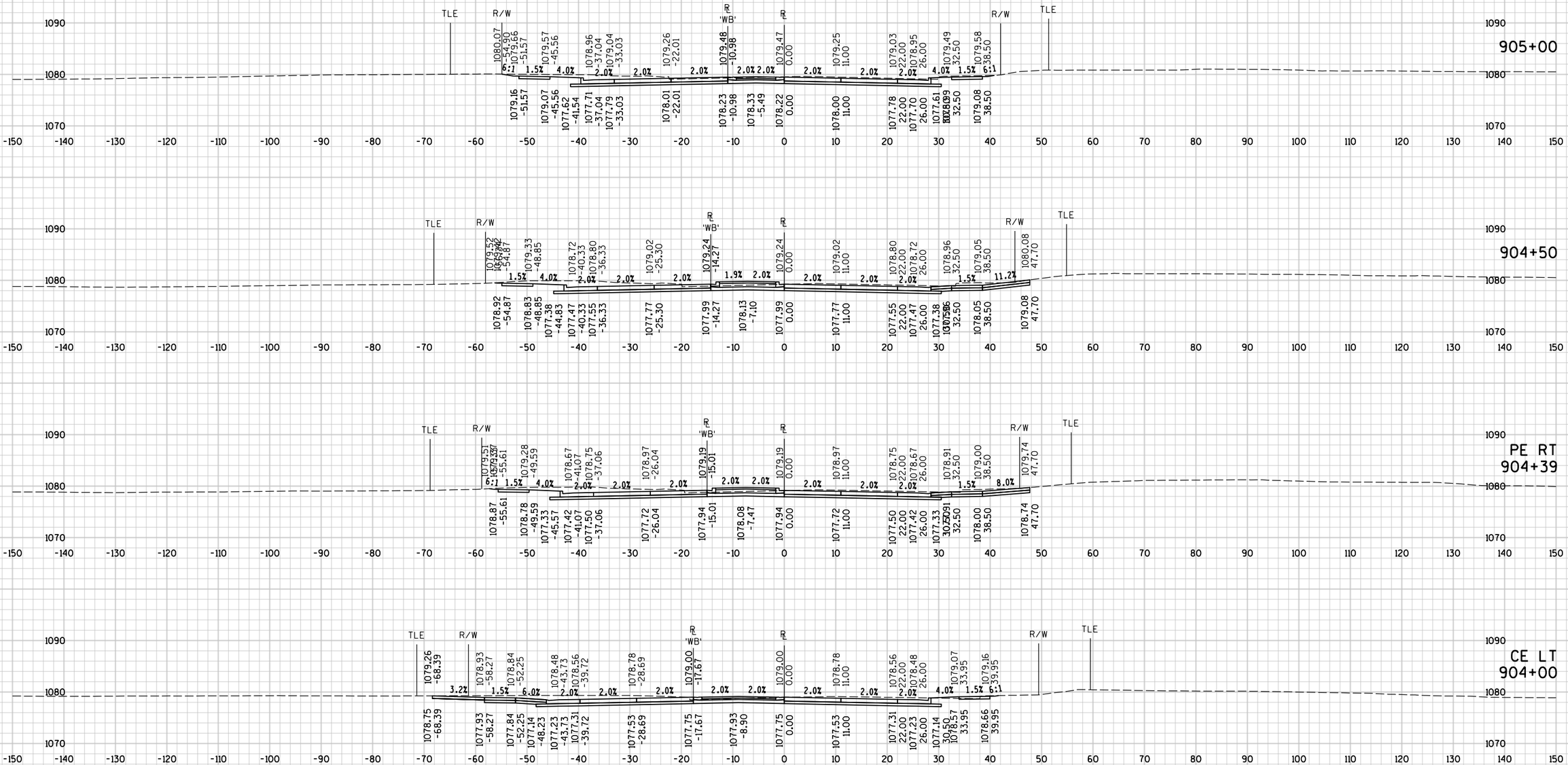


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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - MCDILL AVENUE	SHEET NO: 629	E

FILE NAME : P:\UZW\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:44 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

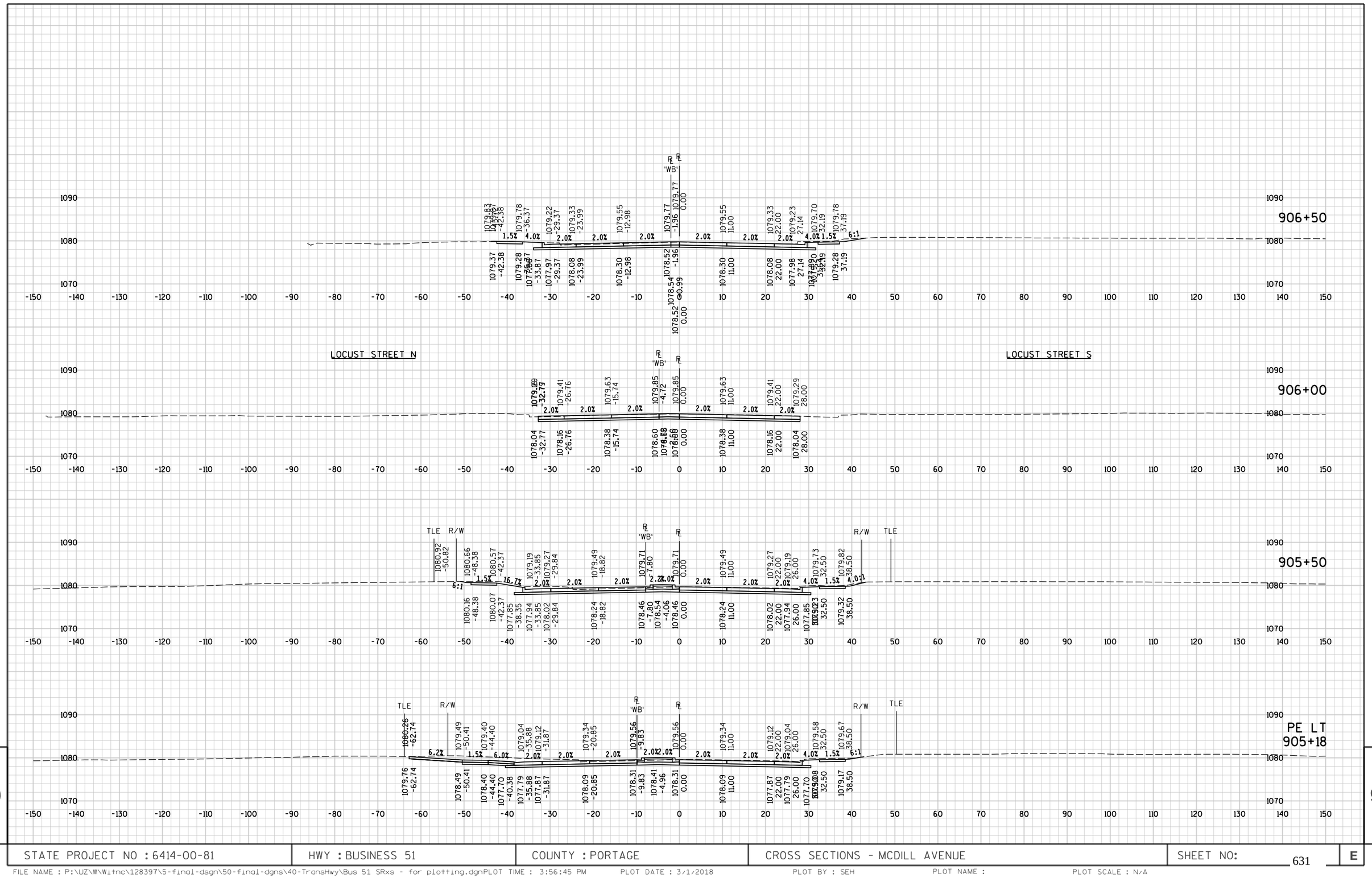


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9

STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - MCDILL AVENUE	SHEET NO: 630	E

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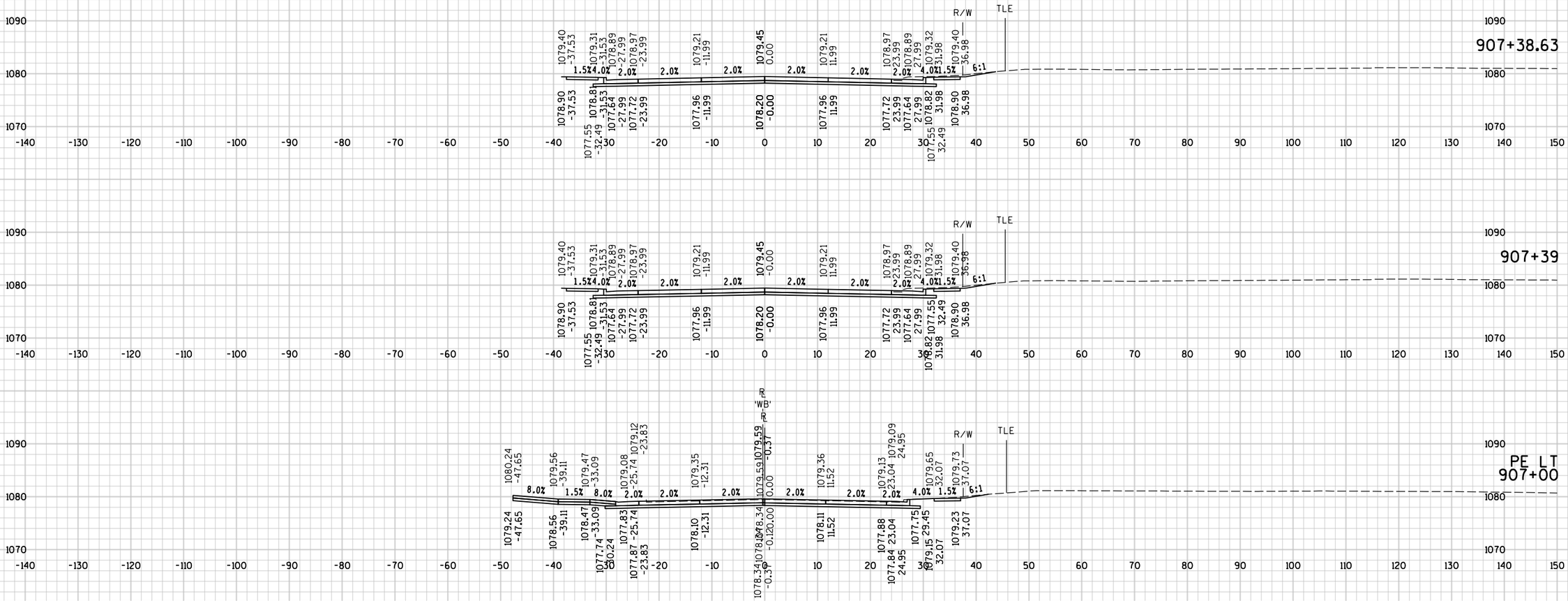
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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - MCDILL AVENUE	SHEET NO: 631	E

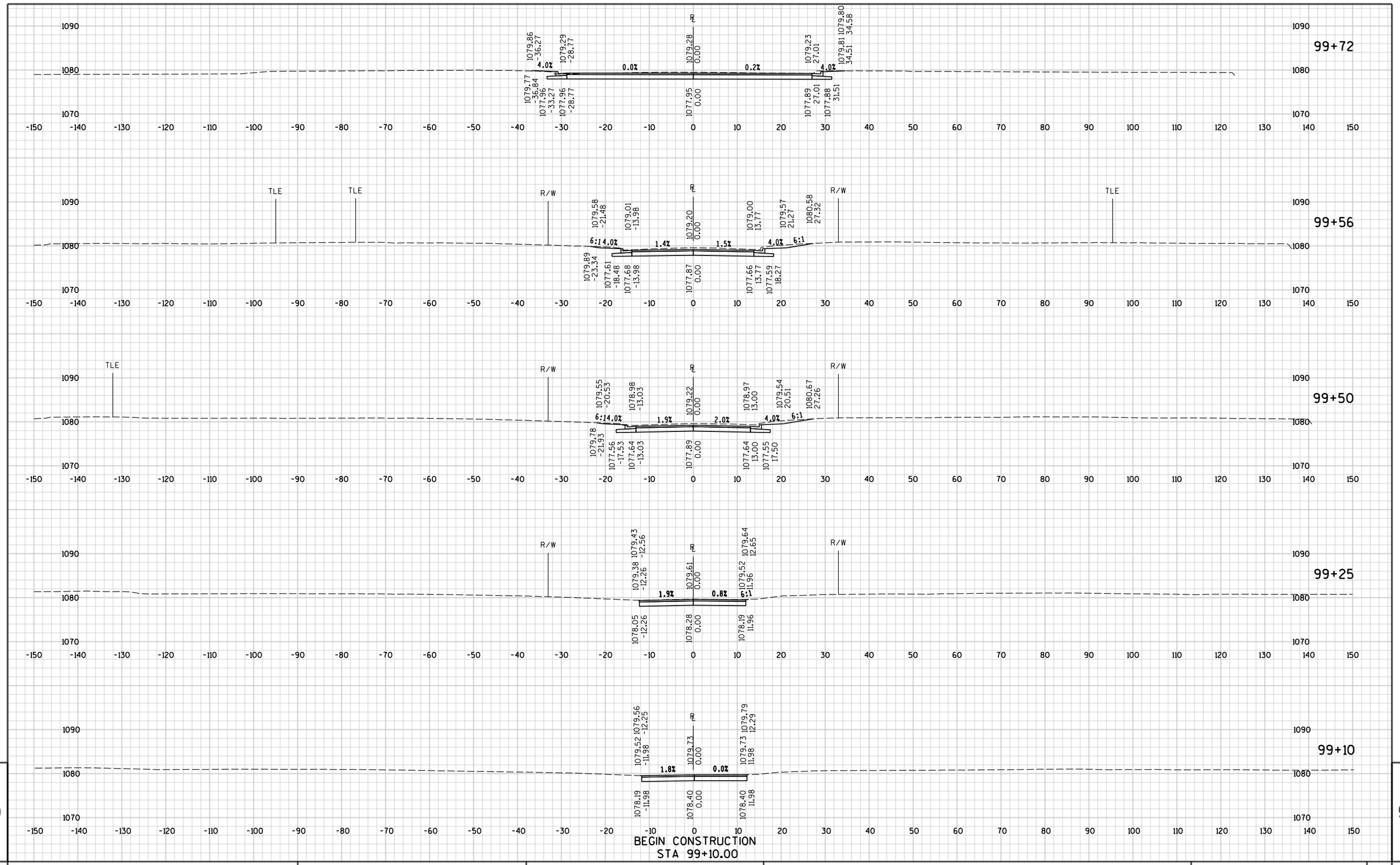
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END CONSTRUCTION
STA 907+38.63



STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - MCDILL AVENUE	SHEET NO: 632	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:46 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



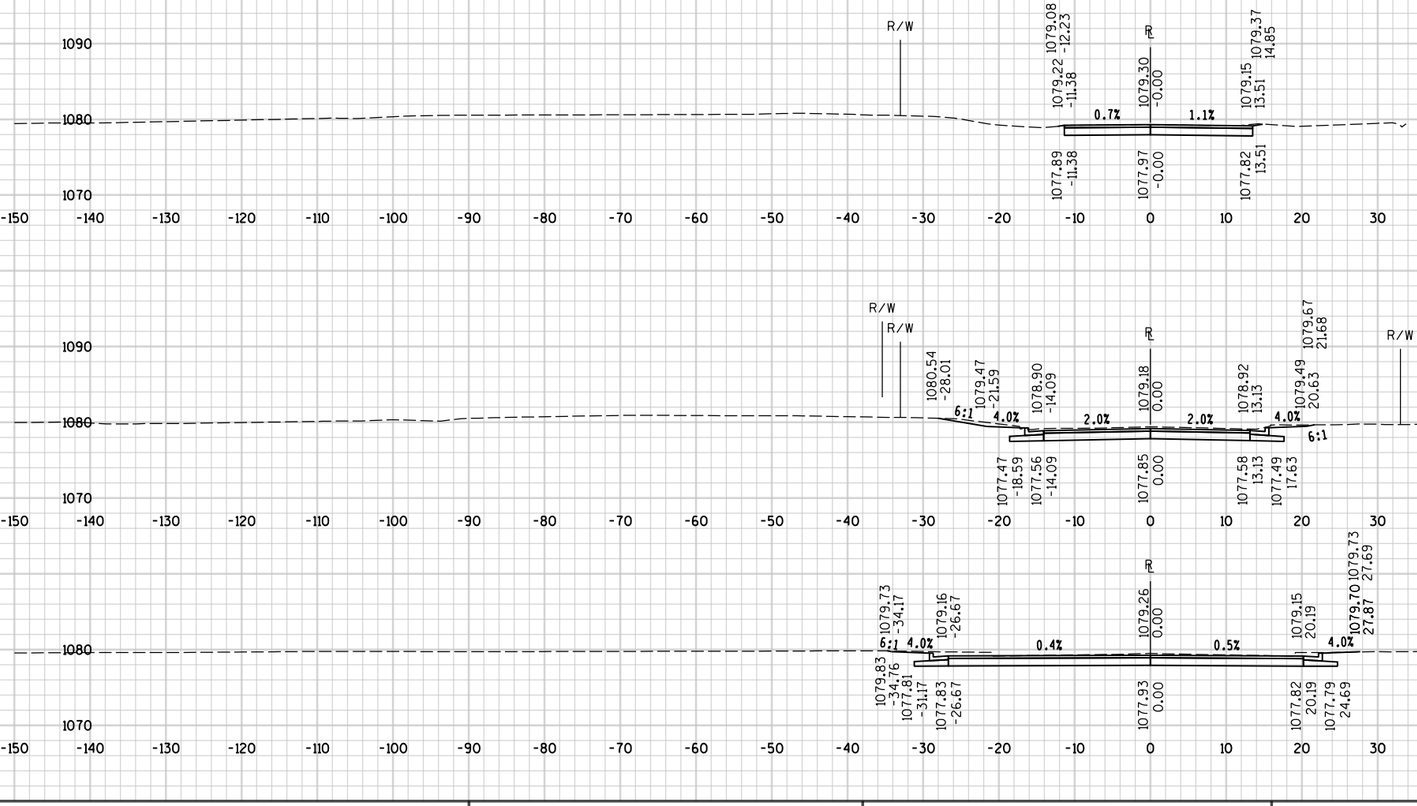
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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - LOCUST STREET S	SHEET NO: 633	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:46 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

END CONSTRUCTION
STA 100+80.00

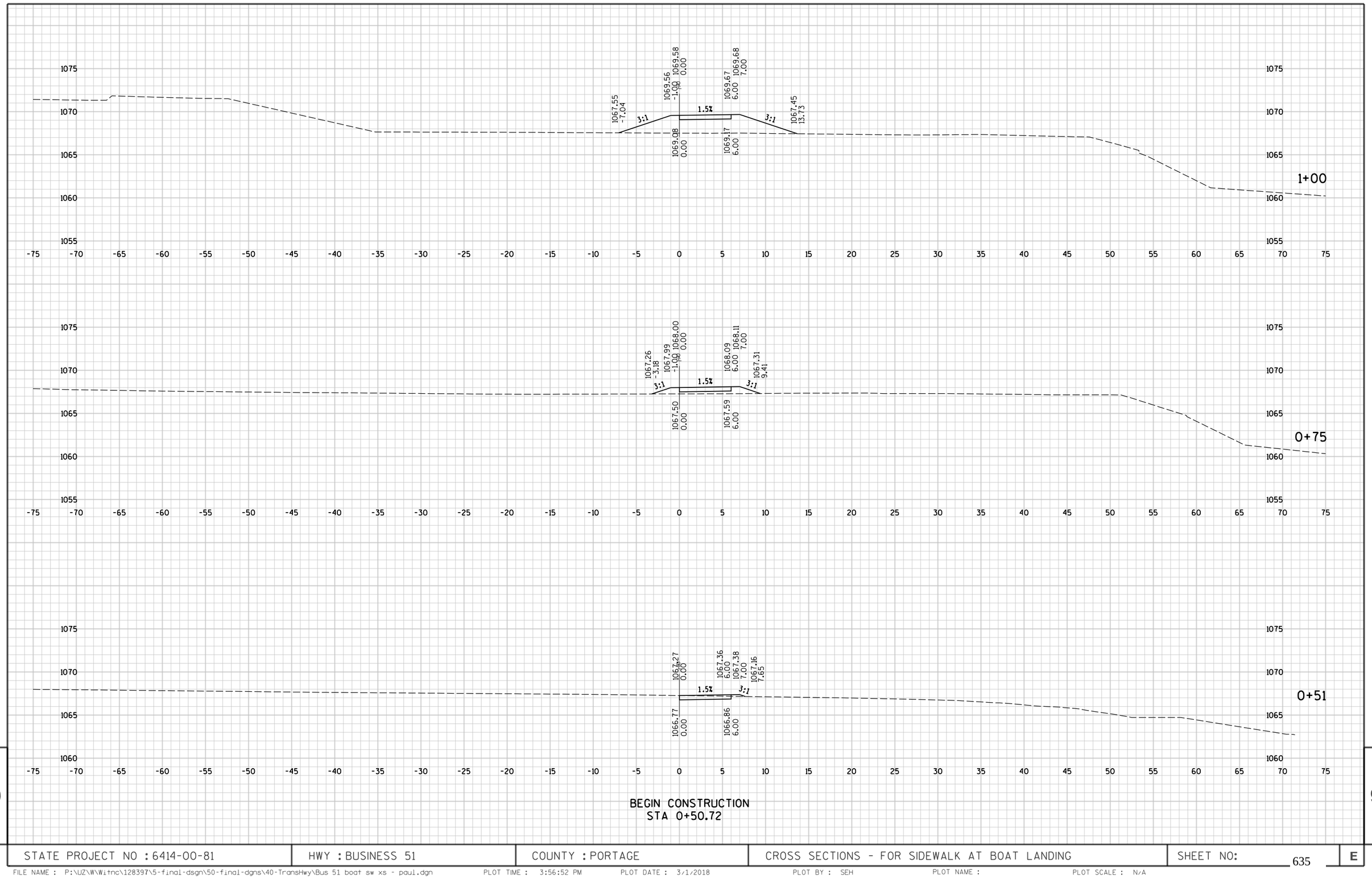


9

9

STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - LOCUST STREET N	SHEET NO: 634	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 SRxs - for plotting.dgnPLOT TIME : 3:56:46 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A



BEGIN CONSTRUCTION
STA 0+50.72

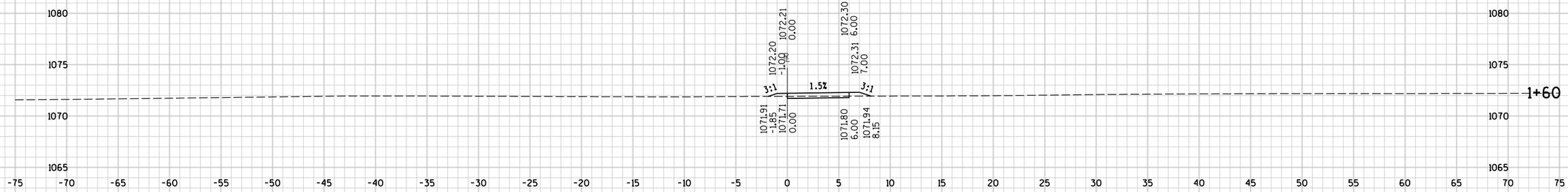
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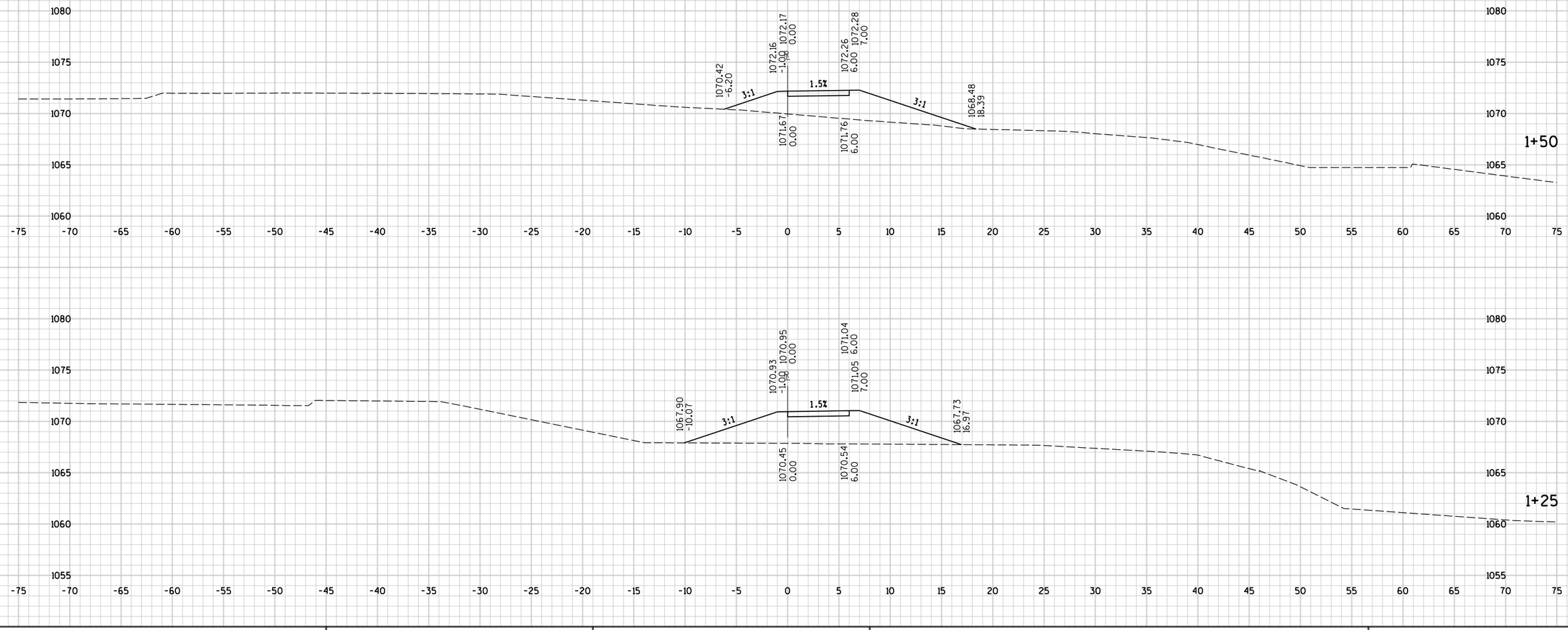
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STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - FOR SIDEWALK AT BOAT LANDING	SHEET NO: 635	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 boat sw xs - paul.dgn PLOT TIME : 3:56:52 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

END CONSTRUCTION
STA 1+60.00
MATCH BACK OF BUSINESS 51
SIDEWALK





9 9

STATE PROJECT NO : 6414-00-81	HWY : BUSINESS 51	COUNTY : PORTAGE	CROSS SECTIONS - FOR SIDEWALK AT BOAT LANDING	SHEET NO: 636	E

FILE NAME : P:\UZ\W\Witnc\128397\5-final-dsgn\50-final-dgns\40-TransHwy\Bus 51 boat sw xs - paul.dgn PLOT TIME : 3:56:52 PM PLOT DATE : 3/1/2018 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

WIS

MAY 2018

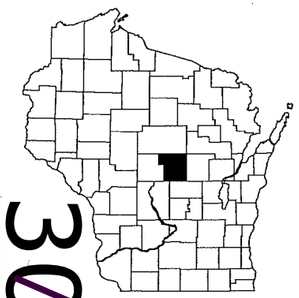
PROJECT ID: 6414-00-84/6414-00-85
WITH: 6414-00-80/6414-00-81

COUNTY: PORTAGE

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 = 38



30

N

DESIGN DESIGNATION

A.A.D.T. 2015	=	18,700
A.A.D.T. 2035	=	22,900
D.H.V. 2035	=	2,420
D.D.	=	59/41%
T.	=	6.8% ADT
DESIGN SPEED	=	35/40 MPH
ESALS	=	3,255,800

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

VILLAGE OF WHITING, POST ROAD

TOMMY'S TURNPIKE TO ELM STREET

BUSINESS 51
LOCAL UTILITY
PORTAGE COUNTY

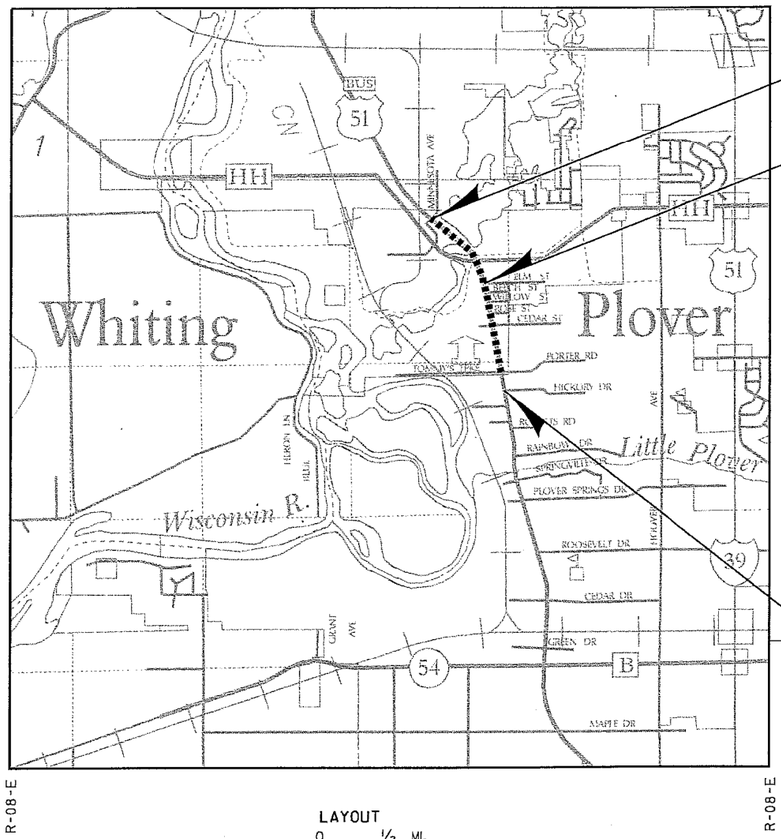
STATE PROJECT NUMBER
6414-00-84

ELM STREET TO MINNESOTA AVENUE

BUSINESS 51
LOCAL UTILITY
PORTAGE COUNTY

STATE PROJECT NUMBER
6414-00-85

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6414-00-84	———	———
6414-00-85	———	———



END PROJECT 6414-00-85
STA 278+91.00

BEGIN PROJECT 6414-00-85
END PROJECT 6414-00-84
STA 252+50.00
Y = 190,946.404
X = 171,532.311

BEGIN PROJECT 6414-00-84
STA 208+80.00
Y = 186,649.017
X = 172,324.843

LAYOUT
SCALE 0 ½ MI.

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), PORTAGE COUNTY.

ACCEPTED FOR VILLAGE OF WHITING
BY
1-26-18 (DATE) VILLAGE PRESIDENT

ACCEPTED FOR VILLAGE OF PLOVER
BY
1-25-18 (DATE) VILLAGE PRESIDENT

ORIGINAL PLANS PREPARED BY

AECOM

WISCONSIN
RYAN N. BARZ
E-37634
AMHERST
WI
PROFESSIONAL ENGINEER

1/26/18 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SEH
Designer	RYAN BARZ
Project Manager	JEFF STEWART
Regional Examiner	CHERYL SIMON
Regional Supervisor	NICHOLE LYSNE
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 1/29/18 (Signature)

E

GENERAL NOTES

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

UTILITY CONTACTS

CHUCK BARTELT
AT&T WISCONSIN-COMMUNICATIONS LINE
70 DIVISION STREET
FOND DU LAC, WI 54935
(920) 929-1013 (OFFICE)
(920) 410-5104 (MOBILE)
cb1461@att.com

RUDI RUDIGER
CHARTER COMMUNICATIONS-COMMUNICATION LINE
5024 HEFFRON STREET
STEVENS POINT, WI 54481
(715) 204-5339
rudi.rudiger@charter.com

DON LUTZOW
WISCONSIN PUBLIC SERVICE CORPORATION-ELECTRICITY
1700 SHERMAN STREET
PO BOX 1166
WAUSAU, WI 54402-1166
(715) 848-7487 (OFFICE)
(715) 493-7802 (MOBILE)
dalutzow@wisconsinpublicservice.com

RICH BODEN
VILLAGE OF PLOVER-SEWER
PO BOX 37
PLOVER, WI 54467
(715) 345-5259 (OFFICE)
(715) 340-2417 (MOBILE)
rboden@ploverwi.gov

MATT SALOUN
VILLAGE OF PLOVER-WATER
PO BOX 37
PLOVER, WI 54467
(715) 345-5254 (OFFICE)
(715) 347-9463 (MOBILE)
msaloun@ploverwi.gov

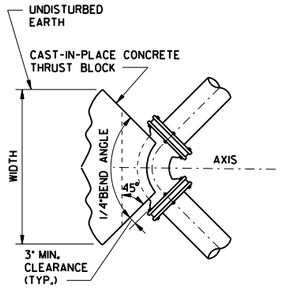
MATT CURTIN
WISCONSIN PUBLIC SERVICE CORPORATION-GAS/PETROLEUM
1700 SHERMAN STREET
PO BOX 1166
WAUSAU, WI 54402-1166
(715) 848-7463 (OFFICE)
(715) 493-0050 (MOBILE)
mjcurtin@wisconsinpublicservice.com

NIC SCHMEISER
VILLAGE OF WHITING-SEWER AND WATER
3600 WATER STREET
STEVENS POINT, WI 54481
(715) 344-4545 (OFFICE)
(715) 340-7582 (MOBILE)
nicschmeiser@villageofwhiting.com

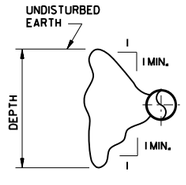
DNR CONTACT

JIM DOPERALSKI
DNR NORTHEAST REGION HEADQUARTERS
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
(920) 412-0165
james.doperalski@wisconsin.gov

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



PLAN



SECTION

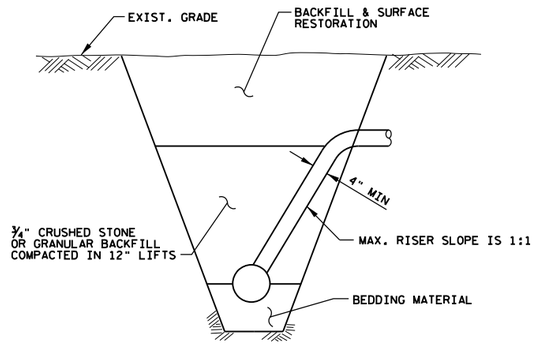
NOTE:
THE BELOW TABLE BASED ON SOIL EQUIVALANT TO SAND AND GRAVEL CEMENTED WITH CLAY. FOR OTHER SOILS USE THE FOLLOWING FACTORS:

SOFT CLAY	4.00
SAND	2.00
SAND AND GRAVEL	1.33
SHALE	0.40

AREA OF FACE CONCRETE THRUST BLOCKS			
PIPE SIZES INCHES	1/6 BEND SQ. FT.	1/6 BEND SQ. FT.	TEES PLUGS, CAPS, & HYDRANTS SQ. FT.
6	5	3	4
8	8	5	6
10	13	7	9
12	15	10	13
14	25	14	18

THRUST RESTRAINT DETAIL

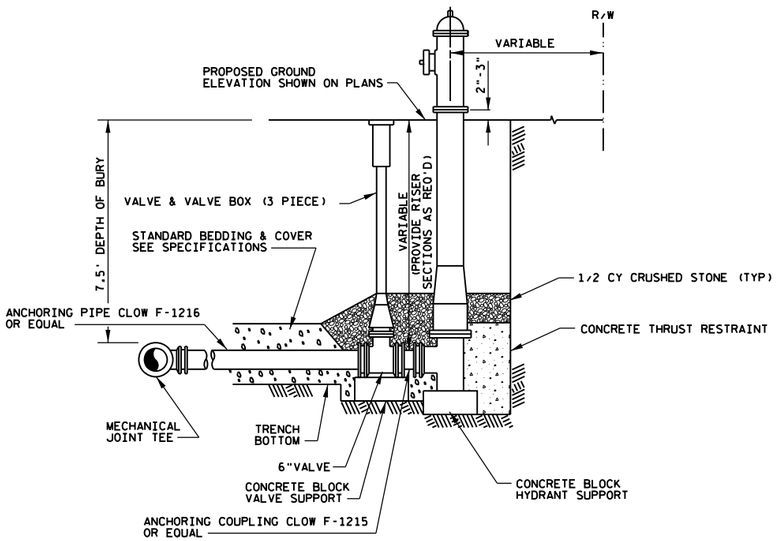
NTS



NOTE:
RISER PIPE SHALL MATCH LATERAL MATERIAL

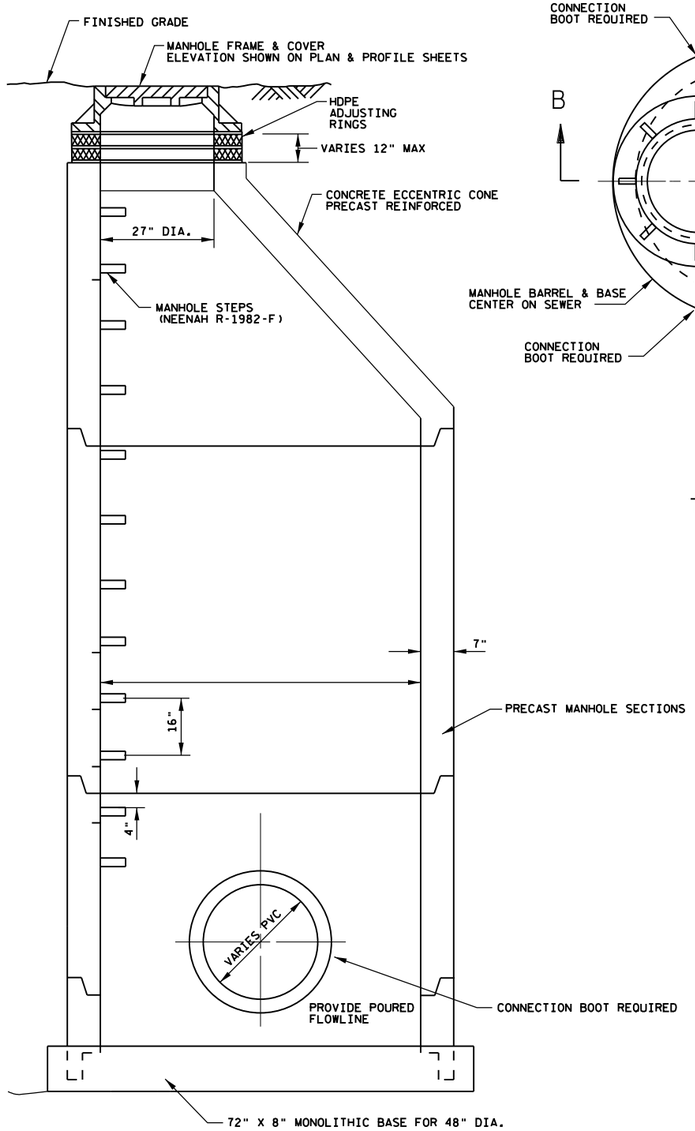
RISER DETAIL

NTS

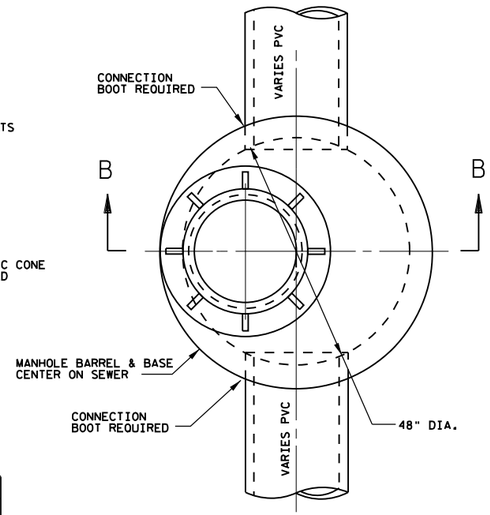


TYPICAL HYDRANT DETAIL

NTS

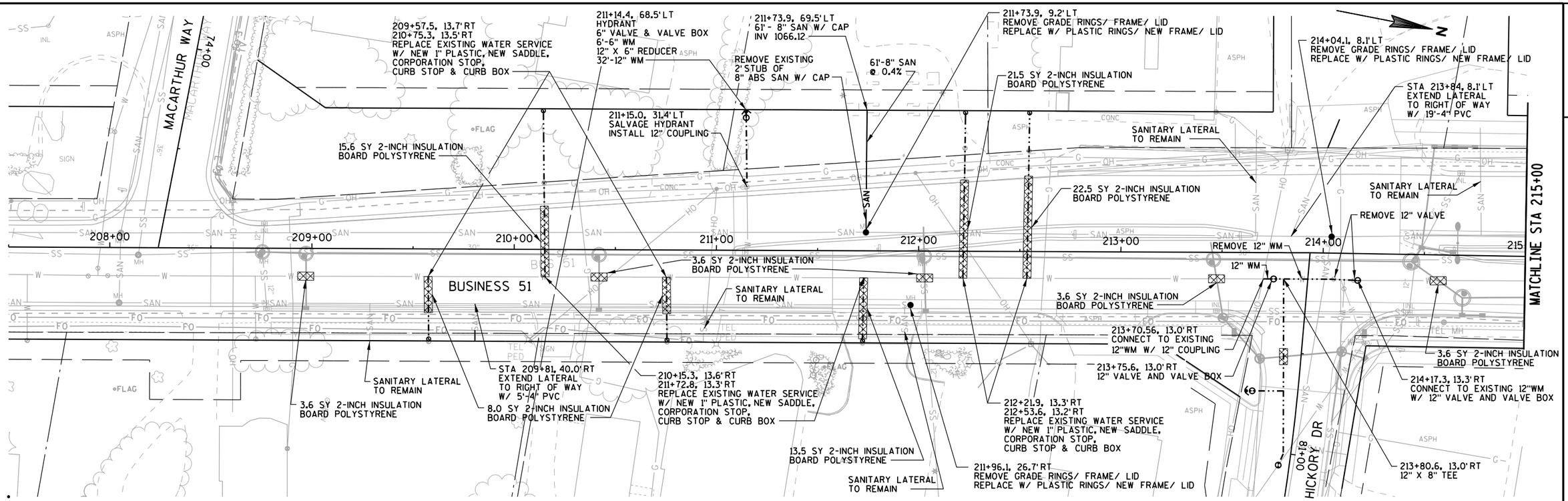


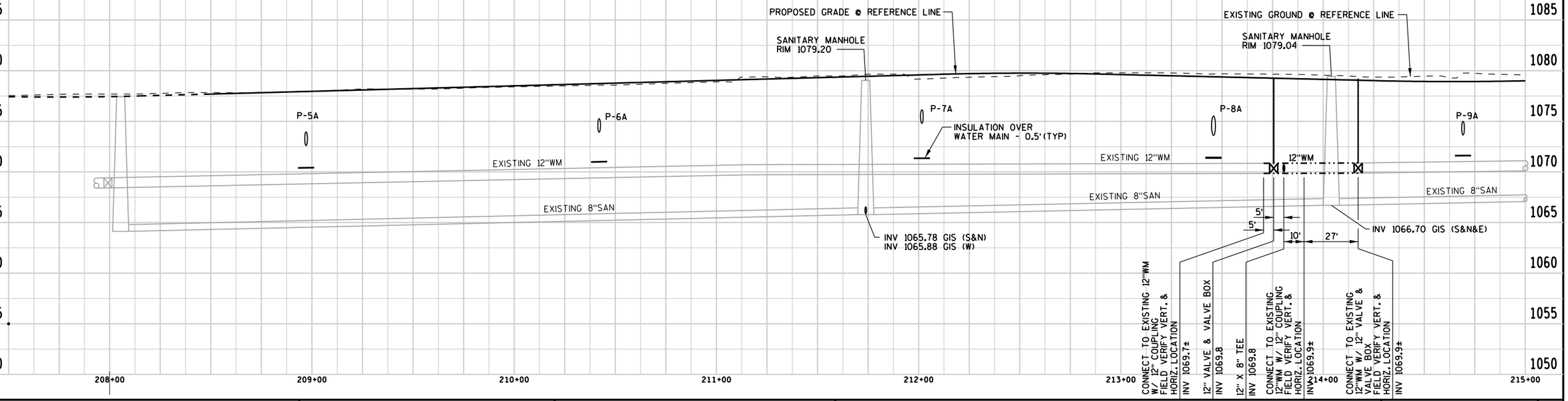
SECTION VIEW B
NTS



PLAN VIEW
NTS

48" SANITARY MANHOLE
NTS





PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 5	E

FILE NAME: L:\Work\Projects\66136\task_119_post_road _utilities_phase 2_design\000_CAD\20-SHEETS\023001_up.dgn
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PLOT DATE: 1/26/2018
PLOT TIME: 8:07:42 AM
PLOT SCALE: 1:49.9999
WISDOT/CADDS SHEET 41

MATCHLINE STA 215+00

MATCHLINE STA 222+50

STA 216+02, 13.4'LT
EXTEND LATERAL
TO RIGHT OF WAY
W/ 15'-4" PVC

216+45.7, 10.2'RT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

217+14.6, 68.5'LT
HYDRANT
6" VALVE & VALVE BOX
78'-6" WM
12" X 6" TAPPING SLEEVE

SALVAGE HYDRANT

217+27.6, 16.5'LT
REMOVE GRADE RINGS/ FRAME/ LID
REPLACE W/ PLASTIC RINGS/ NEW FRAME/ LID

218+97.5, 6.0'LT
219+30.2, 9.0'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

30.0 SY 2-INCH INSULATION
BOARD POLYSTYRENE

28.9 SY 2-INCH INSULATION
BOARD POLYSTYRENE

SANITARY LATERAL
TO REMAIN

28.6 SY 2-INCH INSULATION
BOARD POLYSTYRENE

SANITARY LATERAL
TO REMAIN

TOMMYS TURNPIKE

00+992

STA 215+79, 12.8'LT
EXTEND LATERAL
TO RIGHT OF WAY
W/ 15'-4" PVC

REMOVE 8" WM

BUSINESS 51

3.6 SY 2-INCH INSULATION
BOARD POLYSTYRENE

REMOVE 8" VALVE

REMOVE 8" WM

12" WM

STA 219+23, 17.6'LT
EXTEND LATERAL
TO RIGHT OF WAY
W/ 15'-4" PVC

220+11.7, 16.6'LT
ADJUST WATER VALVE

217+41.4, 5.9'RT
REMOVE 8" VALVE
8" CAP REQUIRED

23.0 SY 2-INCH INSULATION
BOARD POLYSTYRENE

3.6 SY 2-INCH INSULATION
BOARD POLYSTYRENE

215+18.3, 11.9'RT
216+10.8, 10.6'RT
217+02.7, 9.4'RT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

STA 216+10, 13.4'LT
REMOVE LATERAL
28'RT TO RIGHT OF WAY
EXTEND LATERAL
TO RIGHT OF WAY
W/ 17'-4" PVC

14.8 SY 2-INCH INSULATION
BOARD POLYSTYRENE

3.6 SY 2-INCH INSULATION
BOARD POLYSTYRENE

217+86.7, 4.3'RT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

STA 219+30, 17.8'LT
EXTEND LATERAL
TO RIGHT OF WAY
W/ 15'-4" PVC

25.0 SY 2-INCH INSULATION
BOARD POLYSTYRENE

220+30.7, 17.1'LT
12" X 90° BEND

220+22.5, 16.9'LT
12" VALVE AND VALVE BOX

220+17.5, 16.8'LT
REMOVE 12" X 8" REDUCER
CONNECT TO EXISTING
12"WM TEE

VILLAGE OF PLOVER
ACTUAL LOCATION UNKNOWN

219+26.2, 17.7'LT
REMOVE GRADE RINGS/ FRAME/ LID
REPLACE W/ PLASTIC RINGS/ NEW FRAME/ LID

00+108

PORTER RD

215+00 216+00 217+00 218+00 219+00 220+00 221+00 222+00

PROPOSED GRADE ℄ REFERENCE LINE

EXISTING GROUND ℄ REFERENCE LINE

SANITARY MANHOLE
RIM 1080.75

SANITARY MANHOLE
RIM 1081.37

P-10A

P-11A

INSULATION OVER
WATER MAIN - 0.5'(TYP)

12A

EXISTING 12"WM

EXISTING 12"WM

EXISTING 8"SAN

EXISTING 8"SAN

INV 1067.99 GIS (S&N)

INV 1068.97 GIS (S)

12"WM

5'

8'

CONNECT TO EXISTING 12"WM TEE
FIELD VERIFY VERT.&
HORIZ. LOCATION
INV 1071.4±

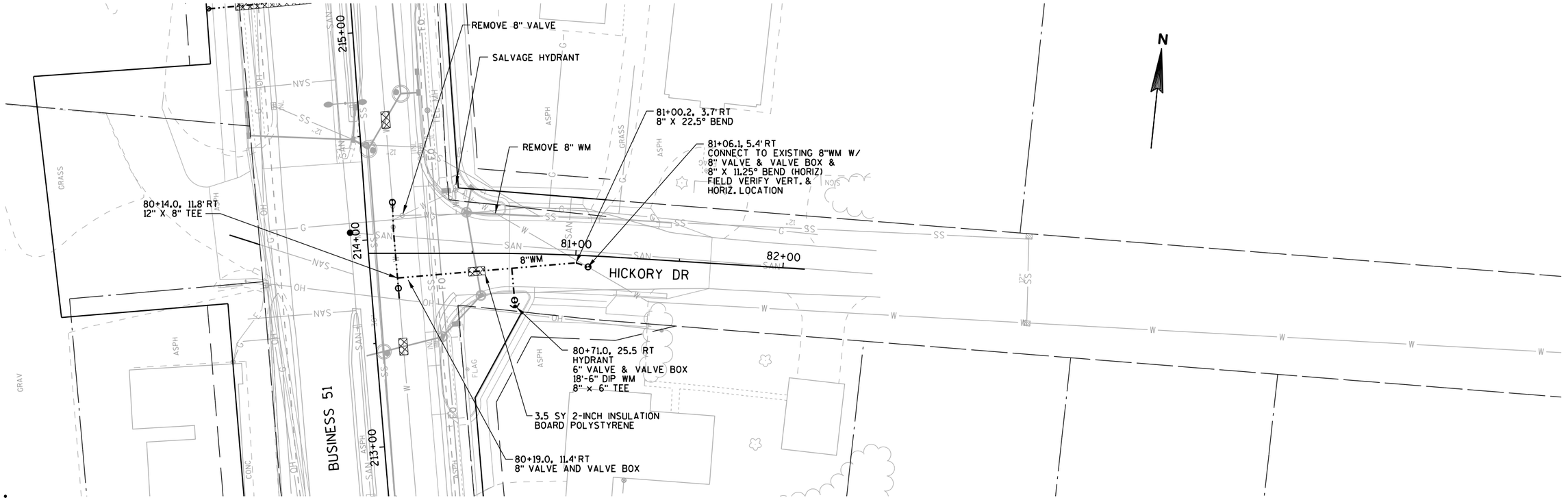
12" VALVE & VALVE BOX
INV 1071.5

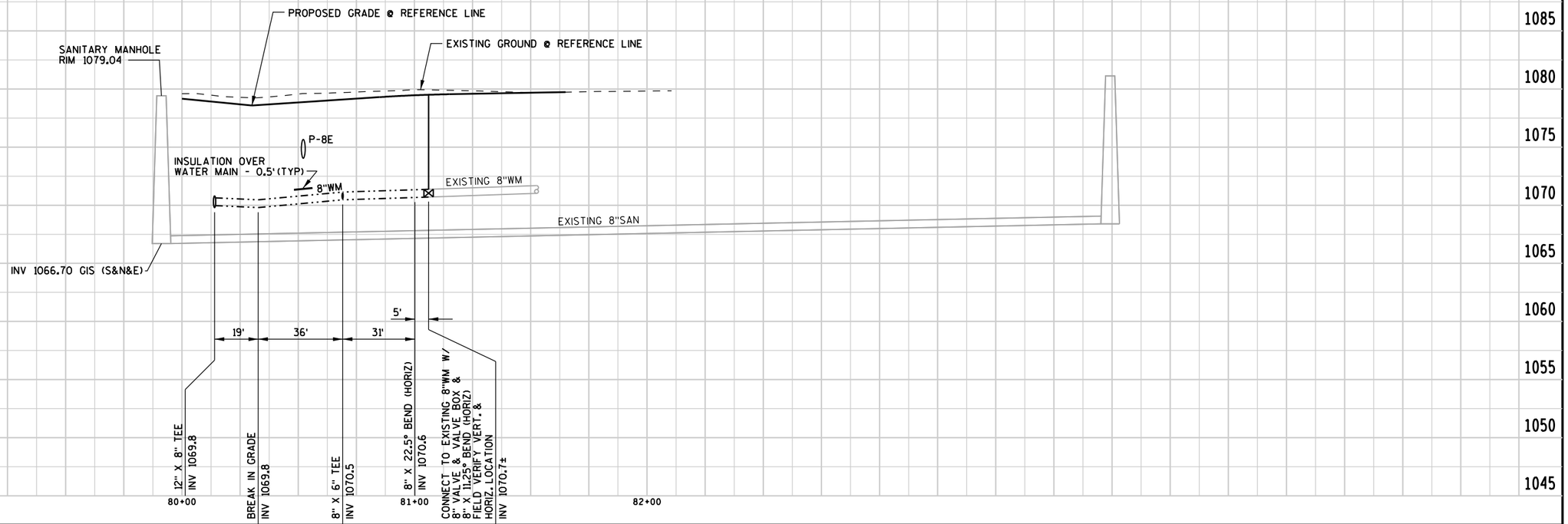
12" X 90° BEND
INV 1071.6

NOTE:
EXISTING UTILITIES SHOWN, IN PLAN AND PROFILE ARE INDICATED IN ACCORDANCE WITH AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING EXACT LOCATIONS AND ELEVATIONS OF ALL UTILITIES, INCLUDING SEWER AND WATER FROM THE OWNERS OF THE RESPECTIVE UTILITIES. ALL UTILITY OWNERS SHALL BE NOTIFIED BY THE CONTRACTOR 3 WORKING DAYS PRIOR TO EXCAVATION.

PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 6	E

FILE NAME: L:\Work\Projects\66136\task_119_post_road _utilities_phase 2_design\000_CAD\20-SHEETS\023002_up.dgn
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WISDOT/CADDS SHEET 41

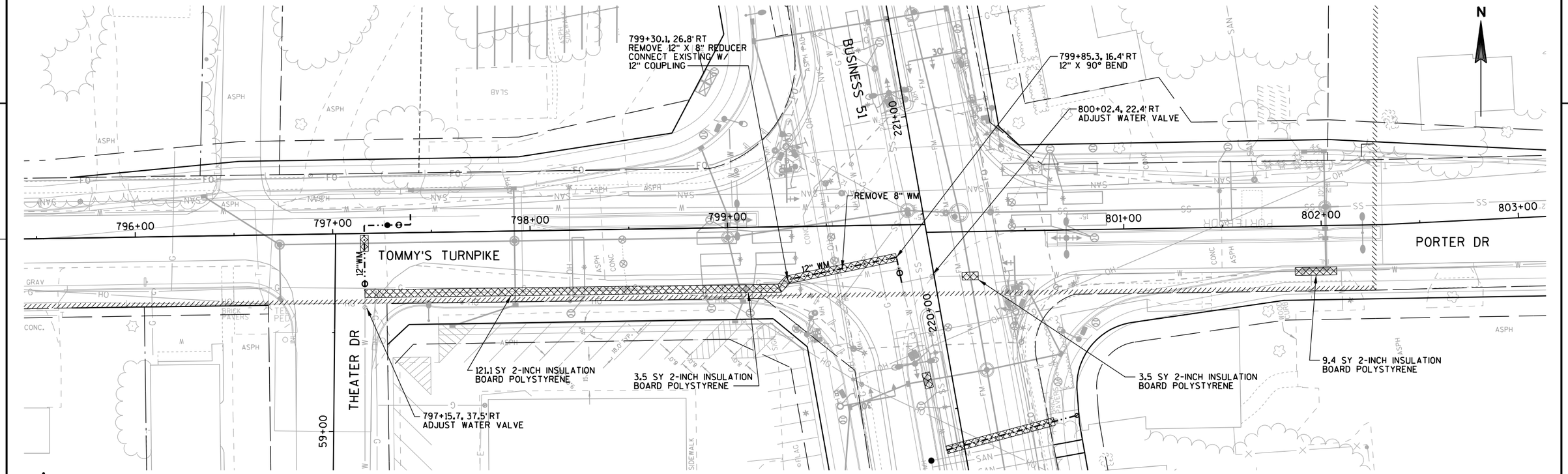


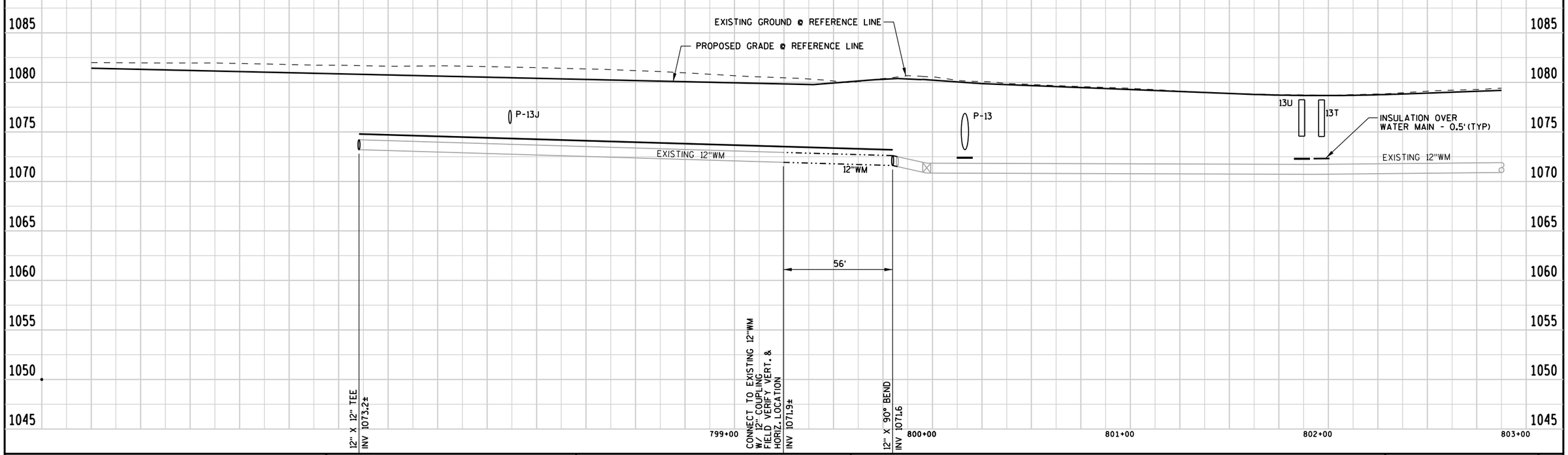


PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 7	E

FILE NAME: L:\Work\Projects\66136\task_119_post_road _utilities_phase 2_design\000_CAD\20-SHEETS\023003_up.dgn
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WISDOT/CADDS SHEET 41

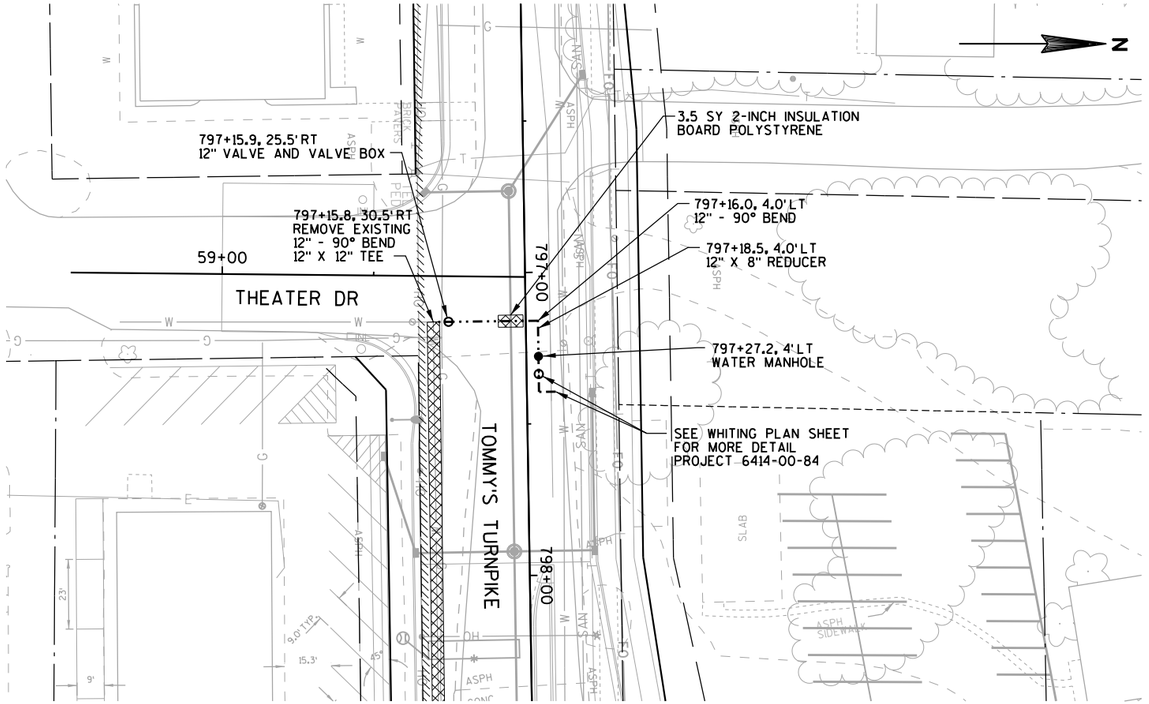
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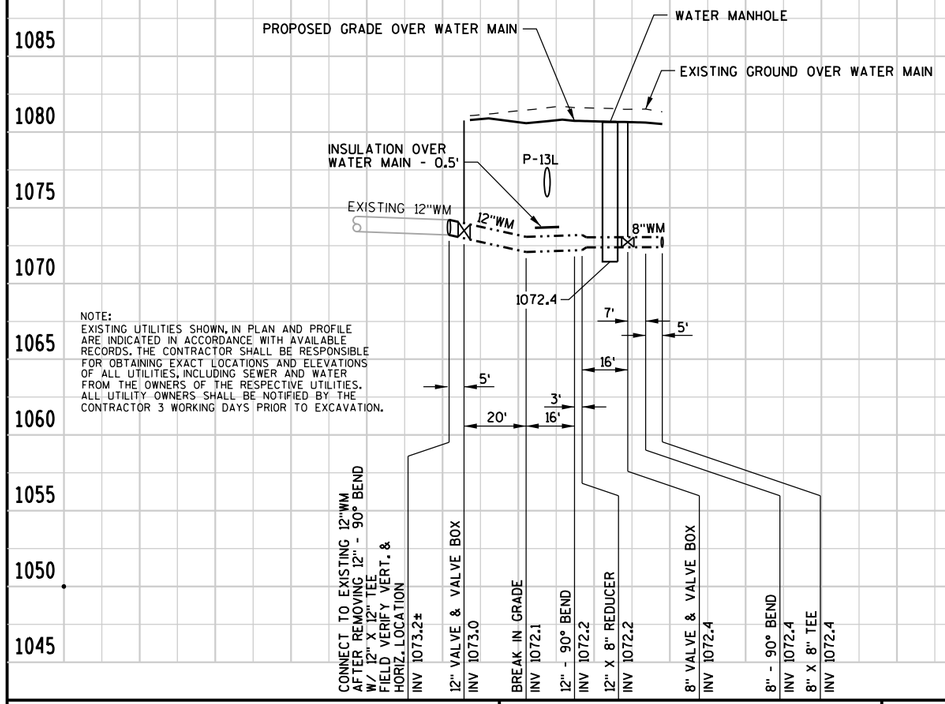




PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 8	E

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WISDOT/CADDS SHEET 41





PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 9	E

FILE NAME: L:\Work\Projects\66136\task_119_post_road _utilities_phase 2_design\000_CAD\20-SHEETS\023005_up.dgn
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PLOT DATE: 1/26/2018
PLOT TIME: 8:07:56 AM
PLOT SCALE: 1:49.9999
WISDOT/CADDS SHEET 41

2

220+69.8, 55.0'LT
REMOVE EXISTING SANITARY MANHOLE
SANITARY OUTSIDE DROP MANHOLE
4-FT DIA-J-SPECIAL

TOMMY'S TURNPIKE

221+29.3, 47.0'LT
8" x 45° BEND
(HORIZ)

221+34.3, 47.0'LT
8" VALVE AND VALVE BOX

221+74.8, 82.0'LT
HYDRANT
6" VALVE & VALVE BOX
35'-6" DIP WM
8" x 6" TEE

222+50.0, 47.0'LT
222+61.7, 47.0'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

223+39.6, 78.5'LT
CONNECT 8"SAN TO
EXISTING 8" SAN W/ 8" SLEEVE
FIELD VERIFY VERT. &
HORIZ. LOCATION
1071.2±

12.7 SY 2-INCH INSULATION
BOARD POLYSTYRENE

223+39.6, 47.0'LT
223+92.0, 47.0'LT
224+21.6, 47.0'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

9.1 SY 2-INCH INSULATION
BOARD POLYSTYRENE

REMOVE HYDRANT

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

REMOVE 8" SAN

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

REMOVE 8" SAN
REMOVE 6" WM

REMOVE
6" VALVE

BUSINESS 51

MATCHLINE STA 225+00

REMOVE 6" VALVE

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

223+35.7, 55.0'LT
REMOVE EXISTING SANITARY MANHOLE
SANITARY MANHOLE 4-FT DIA-J-SPECIAL

39.8 SY 2-INCH INSULATION
BOARD POLYSTYRENE

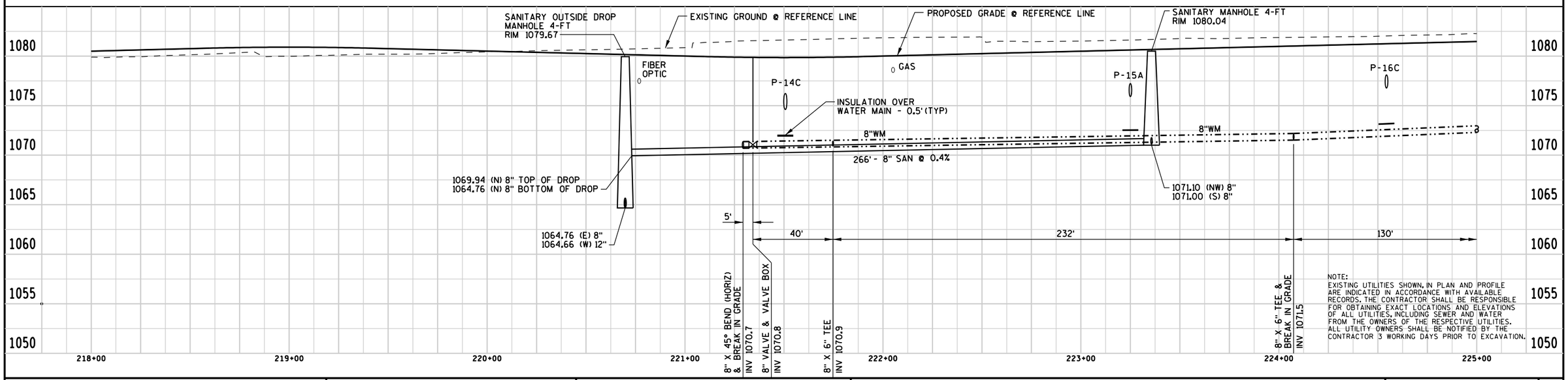
39.8 SY 2-INCH INSULATION
BOARD POLYSTYRENE

VILLAGE OF PLOVER 6"FM
ACTUAL LOCATION UNKNOWN

VILLAGE OF PLOVER 6"FM
ACTUAL LOCATION UNKNOWN

PORTER DR

224+07.5, 44.0'RT
HYDRANT
6" VALVE & VALVE BOX
91'-6" DIP WM
12" x 6" TEE



NOTE:
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PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 10	E

FILE NAME: L:\Work\Projects\46174\Task_18_Business51-Utilities\000_CAD\20-SHEETS\023006_up.dgn
BATCH PRINT SHEET 1 OF 15
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PLOT DATE: 1/30/2018
PLOT TIME: 8:03:33 AM
PLOT SCALE: 1:49.9999

2

225+36.3, 47.0' LT
225+41.1, 47.0' LT
226+76.9, 47.0' LT
REPLACE EXISTING WATER SERVICE W/ NEW 1" PLASTIC, NEW SADDLE, CORPORATION STOP, CURB STOP & CURB BOX

3.5 SY 2-INCH INSULATION BOARD POLYSTYRENE

227+11.3, 68.1' LT
HYDRANT
6" VALVE & VALVE BOX
21'-6" DIP WM
8" x 6" TEE

227+44.7, 47.0' LT
228+04.7, 47.0' LT
229+10.6, 47.0' LT
229+29.7, 47.0' LT
REPLACE EXISTING WATER SERVICE W/ NEW 1" PLASTIC, NEW SADDLE, CORPORATION STOP, CURB STOP & CURB BOX

8.7 SY 2-INCH INSULATION BOARD POLYSTYRENE

230+40.7, 47.0' LT
231+08.6, 47.0' LT
231+81.6, 47.0' LT
REPLACE EXISTING WATER SERVICE W/ NEW 1" PLASTIC, NEW SADDLE, CORPORATION STOP, CURB STOP & CURB BOX

231+96.5, 68.0' LT
HYDRANT
6" VALVE & VALVE BOX
21'-6" DIP WM
8" x 6" TEE

REMOVE HYDRANT AND VALVE

REMOVE HYDRANT

REMOVE 6" WM

8.7 SY 2-INCH INSULATION BOARD POLYSTYRENE

8"WM

225+48.1, 47.0' LT
8" VALVE AND VALVE BOX

225+42.7, 47.0' LT
HORIZONTAL DEFLECTION

8.7 SY 2-INCH INSULATION BOARD POLYSTYRENE

REMOVE 6" VALVE

3.5 SY 2-INCH INSULATION BOARD POLYSTYRENE

230+48.4, 47.0' LT
8" VALVE AND VALVE BOX

3.5 SY 2-INCH INSULATION BOARD POLYSTYRENE

MATCHLINE STA 225+00

MATCHLINE STA 232+00

BUSINESS 51

BUS 51

39.8 SY 2-INCH INSULATION BOARD POLYSTYRENE

39.8 SY 2-INCH INSULATION BOARD POLYSTYRENE

39.8 SY 2-INCH INSULATION BOARD POLYSTYRENE

NOTE:
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PROPOSED GRADE @ REFERENCE LINE

EXISTING GROUND @ REFERENCE LINE

P-17A

P-18C

GAS

GAS

INSULATION OVER WATER MAIN - 0.5'(TYP)

8"WM

8"WM

8"WM

130'

5'

163'

337'

148'

352'

HORIZONTAL DEFLECTION INV 1072.6

8" VALVE & VALVE BOX & BREAK IN GRADE INV 1072.7

8" X 6" TEE & BREAK IN GRADE INV 1073.5

8" VALVE & VALVE BOX & BREAK IN GRADE INV 1072.8

8" X 6" TEE & BREAK IN GRADE INV 1072.2

1090 1085 1080 1075 1070 1065 1060 1055 1050

225+00 226+00 227+00 228+00 229+00 230+00 231+00 232+00

PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 11	E

232+00.2, 47.0'LT
232+58.7, 47.0'LT
232+68.4, 47.0'LT
233+27.5, 47.0'LT
233+39.5, 47.0'LT
REPLACE EXISTING WATER SERVICE W/ NEW 1" PLASTIC, NEW SADDLE, CORPORATION STOP, CURB STOP & CURB BOX

3.5 SY 2-INCH INSULATION BOARD POLYSTYRENE

8.7 SY 2-INCH INSULATION BOARD POLYSTYRENE

REMOVE 6" WM

234+83.3, 47.0'LT
234+89.2, 47.0'LT
REPLACE EXISTING WATER SERVICE W/ NEW 1" PLASTIC, NEW SADDLE, CORPORATION STOP, CURB STOP & CURB BOX

236+02.7, 47.0'LT
236+49.9, 47.0'LT
REPLACE EXISTING WATER SERVICE W/ NEW 1" PLASTIC, NEW SADDLE, CORPORATION STOP, CURB STOP & CURB BOX

8.7 SY 2-INCH INSULATION BOARD POLYSTYRENE

237+66.4, 47.0'LT
8" VALVE AND VALVE BOX

237+21.9, 47.0'LT
HORIZONTAL DEFLECTION

8.7 SY 2-INCH INSULATION BOARD POLYSTYRENE

REMOVE 6" VALVE

REMOVE 12" VALVE

237+71.4, 47.0'LT
12" CROSS W/ 8" REDUCER (S & E)

237+76.4, 47.0'LT
12" VALVE AND VALVE BOX

REMOVE 12" WM

MATCHLINE STA 232+00

MATCHLINE STA 239+50

BUSINESS 51

W CEDAR ST

E CEDAR ST

3.5 SY 2-INCH INSULATION BOARD POLYSTYRENE

235+48.7, 47.0'LT
8" VALVE AND VALVE BOX

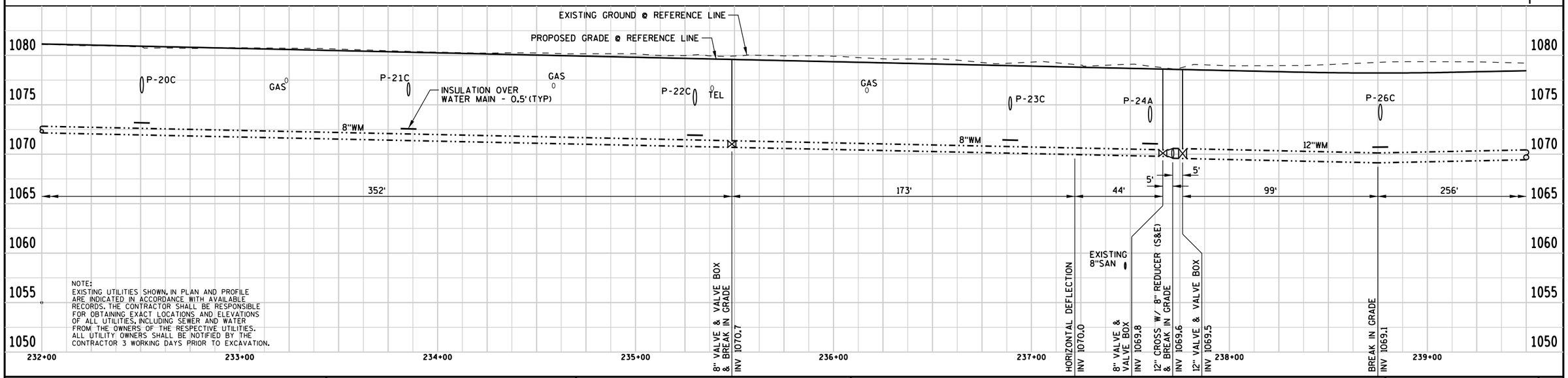
3.5 SY 2-INCH INSULATION BOARD POLYSTYRENE

3.5 SY 2-INCH INSULATION BOARD POLYSTYRENE

39.8 SY 2-INCH INSULATION BOARD POLYSTYRENE

39.8 SY 2-INCH INSULATION BOARD POLYSTYRENE

8"WM
12"WM
6"WM
8"SAN
SAN
STONE
ASPH
CONC
BRICK RETAINING WALL
BARK
SIGN
CMP



NOTE:
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PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 12	E

FILE NAME: L:\Work\Projects\46174\Task_18_Business51-Utilities\000_CAD\20-SHEETS\023008_up.dgn
BATCH PRINT SHEET 3 OF 15
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PLOT DATE: 1/30/2018
PLOT TIME: 3:20:37 PM
PLOT SCALE: 1:49.9999

2

241+36.1, 47.0'LT
12" X 8" TEE

241+41.1, 47.0'LT
12" VALVE AND VALVE BOX

241+31.1, 47.0'LT
12" VALVE AND VALVE BOX

240+87.5, 47.0'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

REMOVE 12" WM

242+30.7, 47.0'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

243+91.2, 61.4'LT
REMOVE EXISTING SANITARY MANHOLE
SANITARY MANHOLE 4-FT DIA-J-SPECIAL

243+95.3, 47.0'LT
12" VALVE AND VALVE BOX

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

REMOVE
12" VALVE

WILLOW ST W

245+81.9, 59.9'
REPLACE LATERAL
W/ 10'-4" PVC

245+65.7, 60.0'LT
REPLACE LATERAL
W/ 10'-4" PVC

244+00.3, 47.0'LT
12" X 8" TEE

244+32.3, 47.0'LT
12" X 8" TEE

244+37.3, 47.0'LT
12" VALVE AND VALVE BOX

8.7 SY 2-INCH INSULATION
BOARD POLYSTYRENE

244+98.2, 47.0'LT
245+68.6, 47.0'LT
246+87.4, 47.0'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

ABANDON WATER
SERVICE AT MAIN

REMOVE 8"SAN

REMOVE 12" WM

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

8.7 SY 2-INCH INSULATION
BOARD POLYSTYRENE

8.7 SY 2-INCH INSULATION
BOARD POLYSTYRENE

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

MATCHLINE STA 239+50

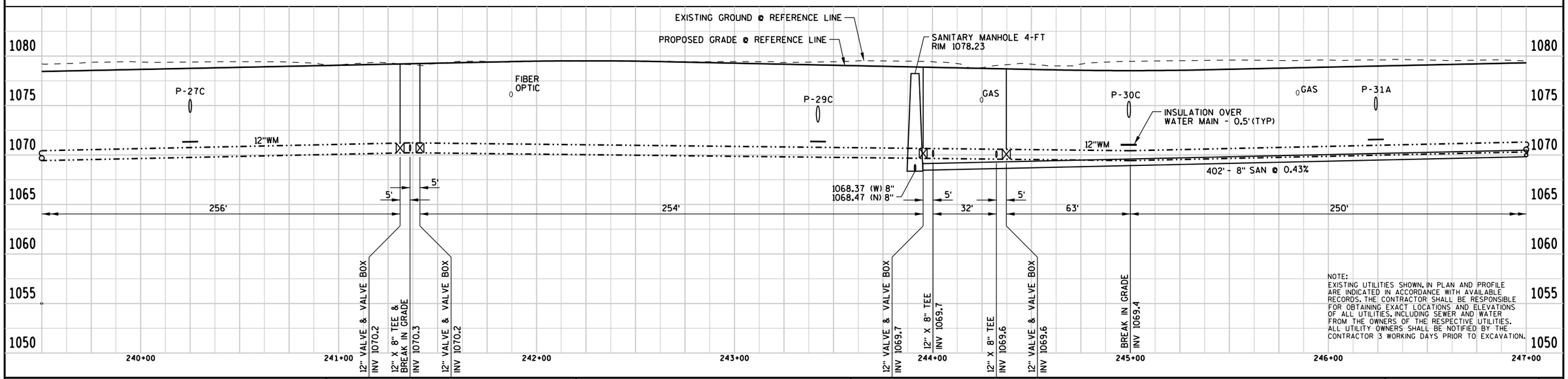
MATCHLINE STA 247+00

BUSINESS 51

ROSE ST

WILLOW ST E

N



NOTE:
EXISTING UTILITIES SHOWN, IN PLAN AND PROFILE ARE INDICATED IN ACCORDANCE WITH AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING EXACT LOCATIONS AND ELEVATIONS OF ALL UTILITIES, INCLUDING SEWER AND WATER FROM THE OWNERS OF THE RESPECTIVE UTILITIES. ALL UTILITY OWNERS SHALL BE NOTIFIED BY THE CONTRACTOR 3 WORKING DAYS PRIOR TO EXCAVATION.

PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 13	E

FILE NAME: L:\Work\Projects\46174\Task_18_Business51-Utilities\000_CAD\20-SHEETS\023009_up.dgn
BATCH PRINT SHEET 4 OF 15
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PEN TABLE: L:\Work\Projects\46174\Task_18_Business51-Utilities\000_CAD\20-SHEETS\MS_Printing\Pen_Tables\ET_WisDOT.tbl
PLOT DATE: 1/30/2018
PLOT TIME: 8:03:43 AM
PLOT SCALE: 1:49.9999

247+99.7, 47.0' LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

247+92.8, 58.1' LT
REMOVE EXISTING SANITARY MANHOLE
SANITARY MANHOLE 4-FT DIA-J-SPECIAL

250+22.0, 45.6' LT
12" x 45° BEND (VERT)

250+32.0, 45.1' LT
12" x 45° BEND (VERT)

250+19.5, 45.7' LT
12" x 45° BEND (VERT)

250+34.1, 45.0' LT
12" x 45° BEND (VERT)

247+60.8, 47.0' LT
12" VALVE AND VALVE BOX

248+02.8, 58.1' LT
REPLACE LATERAL
W/ 11'-4"PVC

248+80.4, 47.0' LT
250+17.4, 45.9' LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

250+95.4, 42.6' LT
12" x 45° BEND (VERT)

247+55.8, 47.0' LT
12" X 8" TEE

250+93.3, 42.6' LT
12" x 45° BEND (VERT)

251+09.0, 42.6' L.
12" VALVE AND VALVE BOX

252+24.9, 42.6' LT
252+28.0, 42.6' LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

253+11.1, 42.6' LT
253+39.5, 42.6' LT
254+37.6, 41.1' LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

247+50.8, 47.0' LT
12" VALVE AND VALVE BOX

248+90.7, 57.6' LT
SANITARY MANHOLE
4-FT DIA-J-SPECIAL

250+83.3, 42.6' LT
12" x 45° BEND (VERT)

251+14.0, 42.6' LT
12" X 12" TEE

REMOVE 12" VALVE

REMOVE
8"SAN

REMOVE
12" WM

REMOVE
8"SAN

249+08.0, 68.0' LT
HYDRANT
6" VALVE & VALVE BOX
21'-6" DIP WM
12" x 6" TEE

250+81.3, 42.6' LT
12" x 45° BEND (VERT)

251+19.0, 42.6' LT
12" VALVE AND VALVE BOX

9.8 SY 2-INCH INSULATION
BOARD POLYSTYRENE

REMOVE 12" WM

249+95.6, 47.0' LT
HORIZONTAL DEFLECTION

MATCHLINE STA 247+00

MATCHLINE STA 254+50

BUSINESS 51

247+00.9, 58.9' LT
247+04.9, 58.9' LT
REPLACE LATERAL
W/ 11'-4"PVC

8.7 SY 2-INCH INSULATION
BOARD POLYSTYRENE

9.6 SY 2-INCH INSULATION
BOARD POLYSTYRENE

7.1 SY 2-INCH INSULATION
BOARD POLYSTYRENE

REMOVE 12" VALVE

10.2 SY 2-INCH INSULATION
BOARD POLYSTYRENE

10.9 SY 2-INCH INSULATION
BOARD POLYSTYRENE

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

ABANDON WATER
SERVICE AT MAIN

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

250+78.8, 42.6' LT
HORIZONTAL DEFLECTION

EXISTING
WHITING 18"WM & CASING PIPE
ACTUAL LOCATION UNKNOWN

37.9 SY 2-INCH INSULATION
BOARD POLYSTYRENE

E ELM ST

SANITARY MANHOLE 4-FT
RIM 1079.94

SANITARY MANHOLE 4-FT
RIM 1080.32

PROPOSED GRADE @ REFERENCE LINE

EXISTING GROUND @ REFERENCE LINE

P-32C

GAS

FIBER
OPTIC
TEL

EXISTING
WHITING 18"WM
ACTUAL LOCATION
UNKNOWN

INSULATION OVER
WATER MAIN - 0.5' (TYP)

P-37C

P-37F

TEL

12"WM

402' - 8" SAN @ 0.43%

98' - 8" SAN @ 0.40%

1070.20 (S) 8"
1070.30 (N) 8"

1070.69 (S) 8"

EXISTING 12"SAN

12" VALVE & VALVE BOX
INV 1070.5

12" X 8" TEE
INV 1070.6

12" VALVE & VALVE BOX
INV 1070.7

12" X 6" TEE
INV 1071.0

HORIZONTAL DEFLECTION
& BREAK IN GRADE
INV 1071.0

12" X 45° BEND (VERT)
INV 1070.9

12" X 45° BEND (VERT)
INV 1068.3

12" X 45° BEND (VERT)
INV 1068.3

12" X 45° BEND (VERT)
INV 1070.4

HORIZONTAL DEFLECTION
INV 1070.5

12" X 45° BEND (VERT)
INV 1070.5

12" X 45° BEND (VERT)
INV 1068.4

12" X 45° BEND (VERT)
INV 1068.4

12" X 45° BEND (VERT)
INV 1070.5

12" VALVE & VALVE BOX
INV 1070.5

12" X 12" TEE
INV 1070.6

12" VALVE & VALVE BOX
INV 1070.5

BREAK IN GRADE
INV 1069.7

250' | 147' | 88' | 24' | 10' | 45' | 10' | 14' | 197' | 178'

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PROJECT NUMBER: 6414-00-84/85	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 14	E

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PLOT DATE: 1/30/2018
PLOT TIME: 3:20:45 PM
PLOT SCALE: 1:49.9999

254+69.1, 39.8'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

254+95.3, 56.9'LT
HYDRANT
6" VALVE & VALVE BOX
18'-6" DIP WM
12" x 6" TEE

255+51.8, 34.3'LT
255+76.3, 35.7'LT
256+39.3, 42.0'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

257+70.4, 49.5'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

260+52.3, 41.4'LT
12" X 22.5° BEND (HORIZ)

260+59.1, 37.9'LT
12" X 11.25° BEND (VERT)

260+39.1, 42.5'LT
12" X 11.25° BEND (VERT)

260+71.1, 31.6'LT
12" X 11.25° BEND (VERT)

260+29.2, 43.3'LT
12" X 11.25° BEND (VERT)

259+95.7, 45.7'LT
12" VALVE AND VALVE BOX

REMOVE 12"WM

255+59.0, 33.7'LT
12" X 11.25° BEND (HORIZ)

14.7 SY 2-INCH INSULATION
BOARD POLYSTYRENE

REMOVE
HYDRANT

REMOVE 12"WM

MATCHLINE STA 254+50

12"WM

255+81.4, 36.3'LT
12" VALVE AND VALVE BOX

REMOVE
12" VALVE

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

12"WM

REMOVE
12" VALVE

CTH HH

8"WM

8"WM

260+78.1, 27.9'LT
12" X 12" TEE
W/ 10" REDUCER (E)

255+00
256+00
257+00
258+00
259+00
260+00
261+00
262

BUSINESS 51

34.1 SY 2-INCH INSULATION
BOARD POLYSTYRENE

36.8 SY 2-INCH INSULATION
BOARD POLYSTYRENE

37.7 SY 2-INCH INSULATION
BOARD POLYSTYRENE

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

44.3 SY 2-INCH INSULATION
BOARD POLYSTYRENE

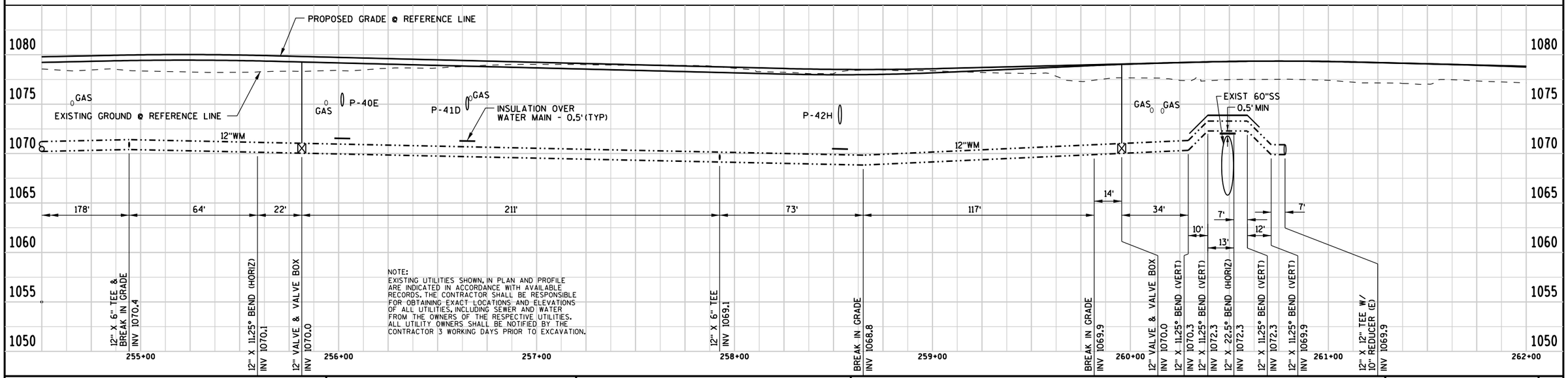
257+92.5, 53.6'RT
HYDRANT
6" VALVE & VALVE BOX
18'-6" DIP WM
12" x 6" TEE

10"WM

8"WM

8"WM

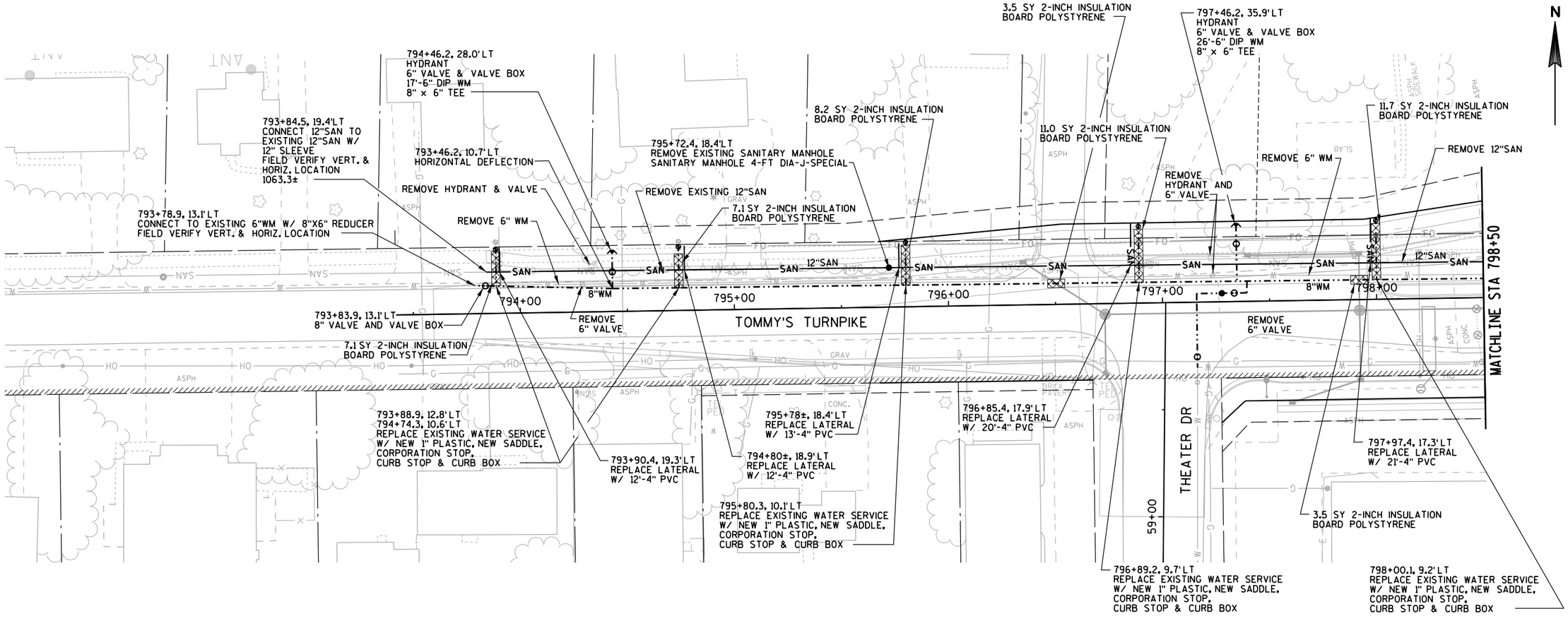
WHITING 12" WATER MAIN
ACTUAL LOCATION UNKNOWN

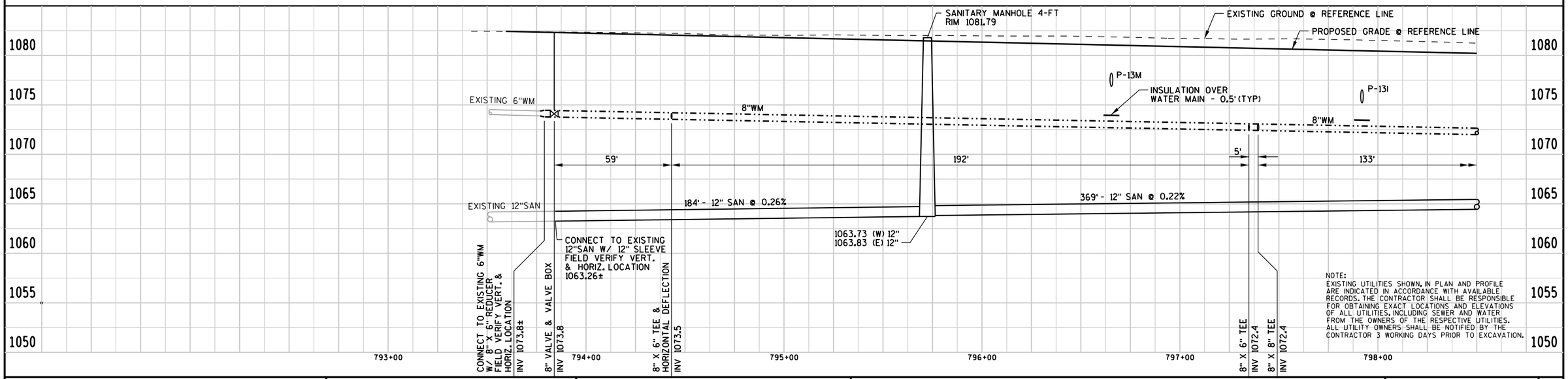


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PROJECT NUMBER: 6414-00-85	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 15	E

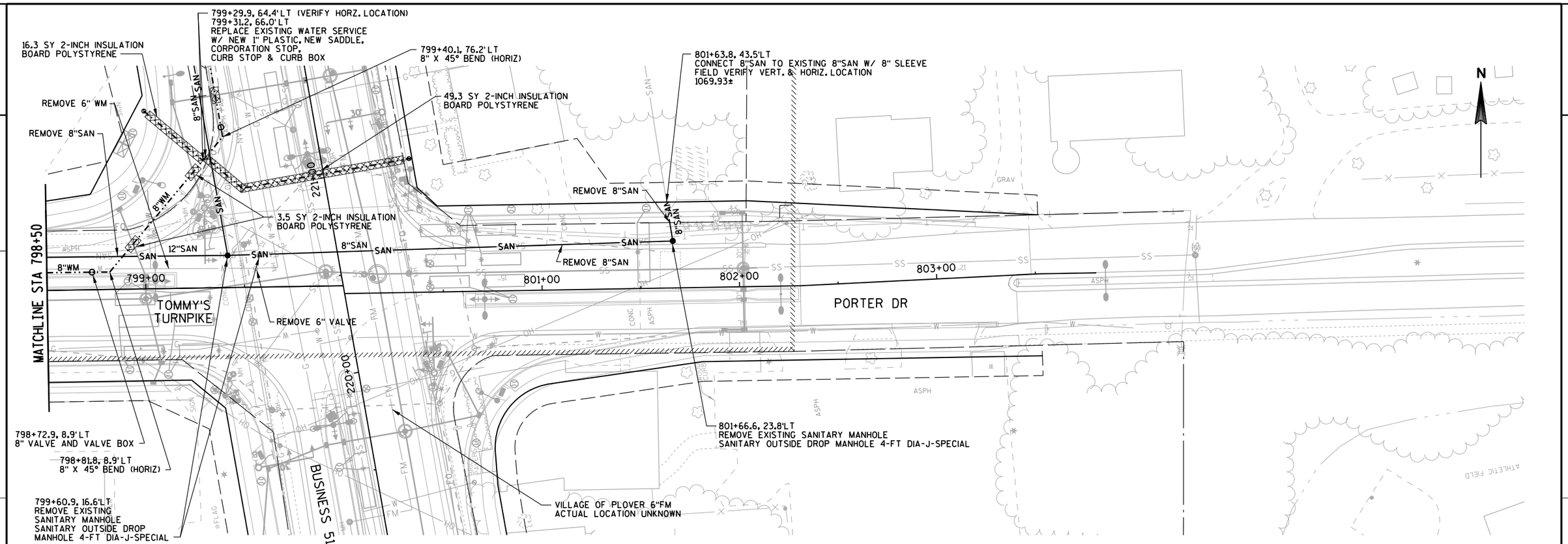
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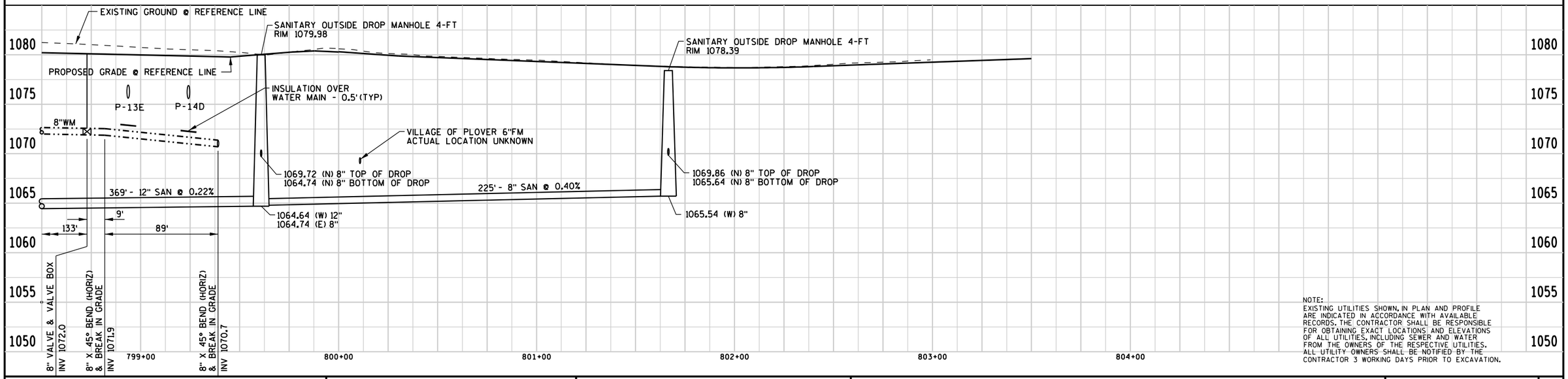




PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 16	E

FILE NAME: L:\Work\Projects\46174\Task_18_Business51-Utilities\000.CAD\20-SHEETS\023012_up.dgn
BATCH PRINT SHEET 7 OF 15
PRINTER DRIVER: S:_acm-CADstds_Libraries\WisDOT\MicroStation\Resources\MS_Printing\Printer_Drivers\ET_PDF_11 x 17.plt
PEN TABLE: L:\Work\Projects\46174\Task_18_Business51-Utilities\000.CAD\20-SHEETS\MS_Printing\Pen_Tables\ET_WisDOT.tbl
PLOT DATE: 1/30/2018
PLOT TIME: 8:03:54 AM
PLOT SCALE: 1:49.9999





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PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 17	E

FILE NAME: L:\Work\Projects\46174\Task_18_Business51-Utilities\000_CAD\20-SHEETS\023013_up.dgn
BATCH PRINT SHEET 8 OF 15
PRINTER DRIVER: S:_acm-CADstds_Libraries\WisDOT\MicroStation\Resources\MS_Printing\Printer_Drivers\ET_PDF_11 x 17.plt
PEN TABLE: L:\Work\Projects\46174\Task_18_Business51-Utilities\000_CAD\20-SHEETS\MS_Printing\Pen_Tables\ET_WisDOT.tbl
PLOT DATE: 1/30/2018
PLOT TIME: 8:03:57 AM
PLOT SCALE: 1:49.9999

2

N

84+46.4, 32.4'LT
12" X 12" CROSS W/ 8" REDUCER (E)

84+41.5, 31.5'LT
12" VALVE AND VALVE BOX

3.8 SY 2-INCH INSULATION BOARD POLYSTYRENE

84+20.7, 37.1'LT
HYDRANT
6" VALVE & VALVE BOX
9'-6" DIP WM
12" x 6" TEE

83+20.2, 21.0'LT
CONNECT TO EXISTING 12"WM W/ 12" COUPLING
FIELD VERIFY VERT. & HORIZ. LOCATION

83+76.3, 19.8'LT
12" x 11.25° BEND
(HORIZ)

REMOVE HYDRANT AND VALVE

REMOVE 12" WM

REMOVE 12" VALVE

W CEDAR ST

83+00

84+00

83+25.2, 20.9'LT
12" VALVE AND VALVE BOX

MAINTAIN EXISTING 8" SANITARY

83+37.3, 4.3'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

83+34±, 4.3'LT
REPLACE LATERAL
W/ 25'-4" PVC

STATION UNKNOWN, 6.0'LT
REPLACE LATERAL
W/ 31'-4" PVC

84+51.3, 33.3'LT
8" VALVE AND VALVE BOX

84+66.3, 36.0'LT
8" x 11.25° BEND
(HORIZ)

238+00

237+00

235+00

BUSINESS 51

REMOVE 6" VALVE

85+00

3.5 SY 2-INCH INSULATION BOARD POLYSTYRENE

85+67.2, 29.8'LT
8" X 8" TEE

85+79.9, 8.1'LT
REMOVE EXISTING SANITARY MANHOLE
SANITARY OUTSIDE DROP MANHOLE
4-FT DIA-J-SPECIAL

5.1 SY 2-INCH INSULATION BOARD POLYSTYRENE

REMOVE 8"SAN

REMOVE 6" WM

REMOVE EXISTING 8"SAN

87+00

88+00

E CEDAR ST

86+62.7, 21.6'LT
87+52.4, 19.3'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

87+92.7, 20.7'LT
8" x 22.5° BEND
(HORIZ)

4.0 SY 2-INCH INSULATION BOARD POLYSTYRENE

88+04.0, 16.5'LT
8" x 22.5° BEND
(HORIZ)

88+14.0, 16.8'LT
CONNECT TO EXISTING 6"WM W/ 8"X6" REDUCER
FIELD VERIFY VERT. & HORIZ. LOCATION

88+09.0, 16.7'LT
8" VALVE AND VALVE BOX

86+65.3, 5.7'LT
REMOVE EXISTING SANITARY MANHOLE
SANITARY MANHOLE 4-FT DIA-J-SPECIAL

85+63.7, 8.6'LT
REPLACE LATERAL
W/ 70'-4" PVC

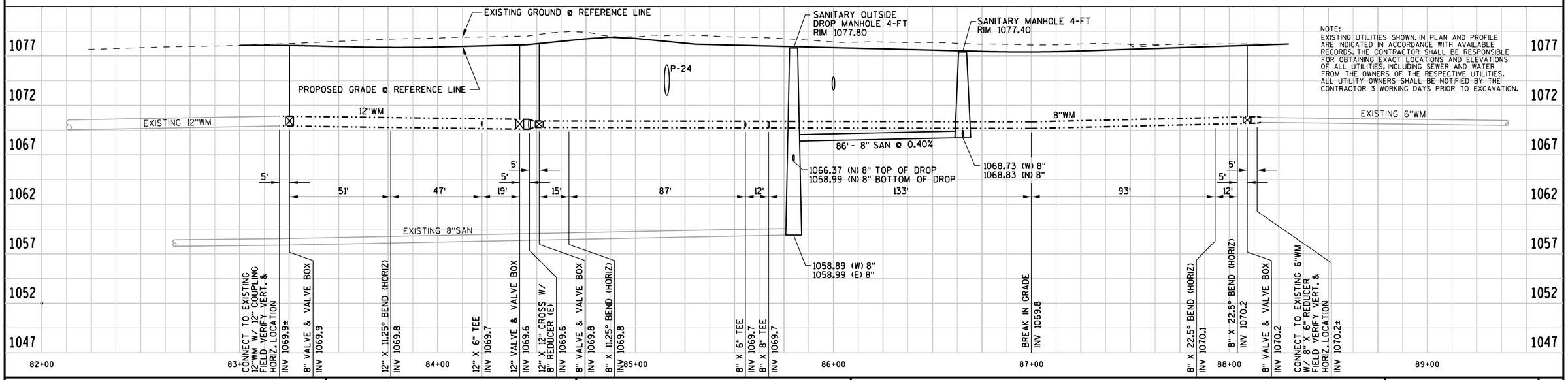
86+61.8, 35.1'RT
CONNECT 8"SAN TO
EXISTING 8"SAN W/
8" SLEEVE
FIELD VERIFY VERT. &
HORIZ. LOCATION
1070.1±

85+51.1, 35.4'RT
HYDRANT
6" VALVE & VALVE BOX
67'-6" DIP WM
8" x 6" TEE

1075

1080

1075



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PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 18	E

FILE NAME: L:\Work\Projects\46174\Task_18_Business51-Utilities\000_CAD\20-SHEETS\023014_up.dgn
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PLOT DATE: 1/30/2018
PLOT TIME: 8:04:00 AM
PLOT SCALE: 1:49.9999

2

N

REMOVE HYDRANT & VALVE

241+36.1, 15.6'RT
8" x 11.25° BEND (HORIZ)

241+39.3, 44.9'RT
HYDRANT
6" VALVE & VALVE BOX
9'-6" DIP WM
8" x 6" TEE

241+29.9, 46.9'RT
8" VALVE AND VALVE BOX

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

BUSINESS 51

LOCUST ST

ROSE ST

8"WM

REMOVE 6" WM

241+29.3, 49.8'RT
CONNECT TO EXISTING 6"WM
W/ 8"X6" REDUCER
FIELD VERIFY VERT. &
HORIZ. LOCATION

241+36.1, 47.0'LT
12" X 8" TEE

241+36.1, 42.0'LT
8" VALVE AND VALVE BOX

242+00

241+00

12"WM

WM 21

95+22.3, 21.3'LT
12" x 45° BEND (VERT)

95+20.3, 21.3'LT
12" x 45° BEND (VERT)

95+10.3, 21.0'LT
12" x 45° BEND (VERT)

95+08.3, 21.0'LT
12" x 45° BEND (VERT)

95+46.3, 30.0'LT
STANDARD HYDRANT
6" VALVE & VALVE BOX
8'-6" DIP WM
12" x 6" TEE

REMOVE 12"WM

95+70.9, 22.5'LT
HORIZONTAL
DEFLECTION

REMOVE
HYDRANT
& VALVE

95+97.3, 31.5'LT
CONNECT 8"SAN TO
EXISTING 8"SAN W/
8" SLEEVE
FIELD VERIFY VERT.
& HORIZ. LOCATION
1068.7±

96+34.0, 22.5'LT
12" x 45° BEND
(HORIZ)

96+38.5, 18.0'LT
12" x 45° BEND
(HORIZ)

12"WM

8"SAN

12"SAN

SAN

96+00

97+00

E ELM ST

251+14.0, 42.6'LT
12"X12" TEE

REMOVE 12" VALVE

REMOVE 8"SAN

REMOVE
12"SAN

96+43.5, 18.0'LT
CONNECT TO EXISTING 12"WM
W/ 12" VALVE & VALVE BOX
FIELD VERIFY VERT. &
HORIZ. LOCATION

MAINTAIN EXISTING
12" SANITARY

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

96+44.0, 8.0'LT
CONNECT 12"SAN TO
EXISTING 12"SAN W/
12" SLEEVE
FIELD VERIFY VERT. &
HORIZ. LOCATION
1060.35±

251+14.0, 37.6'LT
12" VALVE AND VALVE BOX

251+14.0, 34.1'LT
12"X11.25° BEND (HORIZ)

95+97.1, 8.0'LT
REMOVE EXISTING SANITARY MANHOLE
SANITARY OUTSIDE DROP MANHOLE
4-FT DIA-J-SPECIAL

EXISTING
WHITING 18"WM & CASING PIPE
ACTUAL LOCATION UNKNOWN

BUSINESS 51

250+00

249+01.6, 146.7'RT
REMOVE EXISTING SANITARY MANHOLE
SANITARY MANHOLE 4-FT DIA-J-SPECIAL
CONNECT EXISTING 8"SAN (E) AT MANHOLE
RIM 1080.16
1070.86 (E) 8"

N

REMOVE 8"SAN

2

EXISTING GROUND ⊗ REFERENCE LINE

PROPOSED GRADE ⊗ REFERENCE LINE

P-27

INSULATION OVER
WATER MAIN - 0.5'

8"WM

8"WM

EXISTING 6"WM

5'

58'

28'

3'

4'

1080
1075
1070
1065
1060
1055
1050
1045
1040

12" X 8" TEE
INV 1070.3

8" VALVE & VALVE BOX
INV 1070.4

12" X 11.25° BEND (HORIZ)
W/ BREAK IN GRADE
INV 1070.0

8" X 6" TEE
INV 1070.6

8" VALVE & VALVE BOX
INV 1070.7

CONNECT TO EXISTING 6"WM
W/ 8" X 6" REDUCER
INV 1070.8

0+00

1+00

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EXISTING GROUND ⊗ REFERENCE LINE

PROPOSED GRADE ⊗ REFERENCE LINE

SANITARY MANHOLE 4-FT
RIM 1079.00

INSULATION OVER
WATER MAIN - 0.5'(TYP)

P-35B

P-36

12"WM

12"WM

EXISTING 12"WM

1068.61 (N) 8" TOP OF DROP
1060.25 (N) 8" BOTTOM OF DROP

4'

5'

2'

2'

46'

10'

25'

24'

63'

5'

5'

47' - 12"SAN
@ 0.21%

EXISTING 12"SAN

EXISTING 12"SAN

1060.15 (SW) 12"
1060.25 (E) 12"

CONNECT TO
EXISTING 12"
1060.35±

1080
1075
1070
1065
1060
1055
1050
1045

12" X 12" TEE
INV 1070.5

12" VALVE & VALVE BOX
INV 1070.5

12" X 11.25° BEND (HORIZ)
INV 1070.5

12" X 45° BEND (VERT)
INV 1070.5

12" X 45° BEND (VERT)
INV 1069.0

12" X 45° BEND (VERT)
INV 1069.0

12" X 45° BEND (VERT)
INV 1070.5

12" X 6" TEE
INV 1070.6

HORIZONTAL DEFLECTION
INV 1070.7

12" X 45° BEND (HORIZ)
INV 1070.8

12" X 45° BEND (HORIZ)
INV 1070.8

CONNECT TO EXISTING 12"WM
W/ 12" VALVE & VALVE BOX
INV 1070.8

95+00

96+00

97+00

PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 19	E

2

N

88+23.1, 15.7'LT
CONNECT TO EXISTING 6"WM
W/ 8"X6" REDUCER (W)
FIELD VERIFY VERT. &
HORIZ. LOCATION

88+28.1, 15.7'LT
8" VALVE AND VALVE BOX

88+33.1, 15.8'LT
8"X45° BEND (HORIZ)

88+39.3, 9.7'LT
8" x 45° BEND
(HORIZ)

89+11.2, 24.1'LT
HYDRANT
6" VALVE & VALVE BOX
14'-6" DIP WM
8" x 6" TEE

REMOVE HYDRANT
AND VALVE

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

REMOVE 6" WM

REMOVE 8"SAN

88+28.2, 1.6'LT
REMOVE EXISTING SANITARY MANHOLE
SANITARY MANHOLE 4-FT DIA-J-SPECIAL
CONNECT EXISTING 8"SAN (W)
FIELD VERIFY VERT. & HORIZ. LOCATION

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

89+28.0, 10.4'LT
8" x 11.25° BEND (HORIZ)

89+37.7, 2.4'LT
REMOVE EXISTING SANITARY MANHOLE
SANITARY MANHOLE 4-FT DIA-J-SPECIAL

88+32.2, 28.6'RT
CONNECT 8"SAN TO EXISTING
8"SAN W/ 8" SLEEVE
FIELD VERIFY VERT. &
HORIZ. LOCATION
1068.0±

89+50.8, 13.4'LT
12"X8" TEE

89+45.8, 12.7'LT
8" VALVE AND VALVE BOX

WILLOW ST E
WILLOW ST W
BUSINESS 51
245+00
244+00
243+00
88+00
89+00
8"WM
8"SAN
12"WM

REMOVE
6" VALVE

91+77.4, 28.8'LT
HYDRANT
6" VALVE & VALVE BOX
7'-6" DIP WM
8" x 6" TEE

91+74.2, 22.1'LT
8" x 11.25° BEND (HORIZ)

10.0 SY 2-INCH INSULATION
BOARD POLYSTYRENE

REMOVE 6" WM

REMOVE
HYDRANT

ABANDON WATER
SERVICE AT MAIN

89+46.6, 45.1'LT
12"X8" TEE

89+51.5, 45.7'LT
8" VALVE AND VALVE BOX

REMOVE MANHOLE

REMOVE
6" VALVE

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

REMOVE 8"SAN

91+88.1, 20.3'LT
8" VALVE AND VALVE BOX

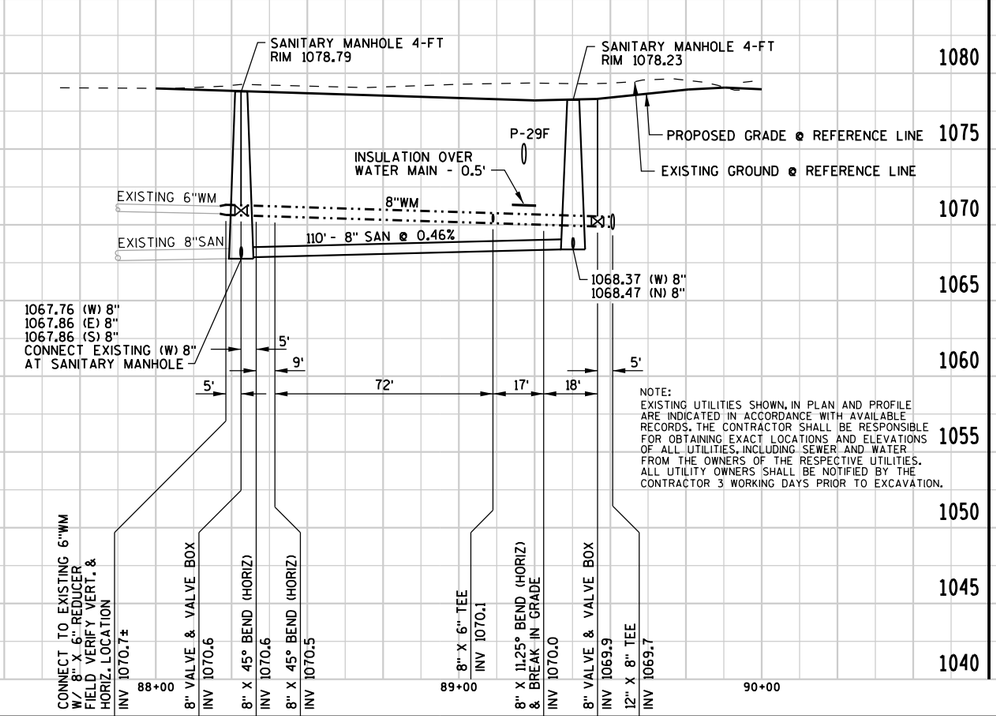
91+92.5, 20.0'LT
CONNECT TO EXISTING 6"WM
W/ 8"X6" REDUCER
FIELD VERIFY VERT. &
HORIZ. LOCATION

91+19.2, 30.7'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

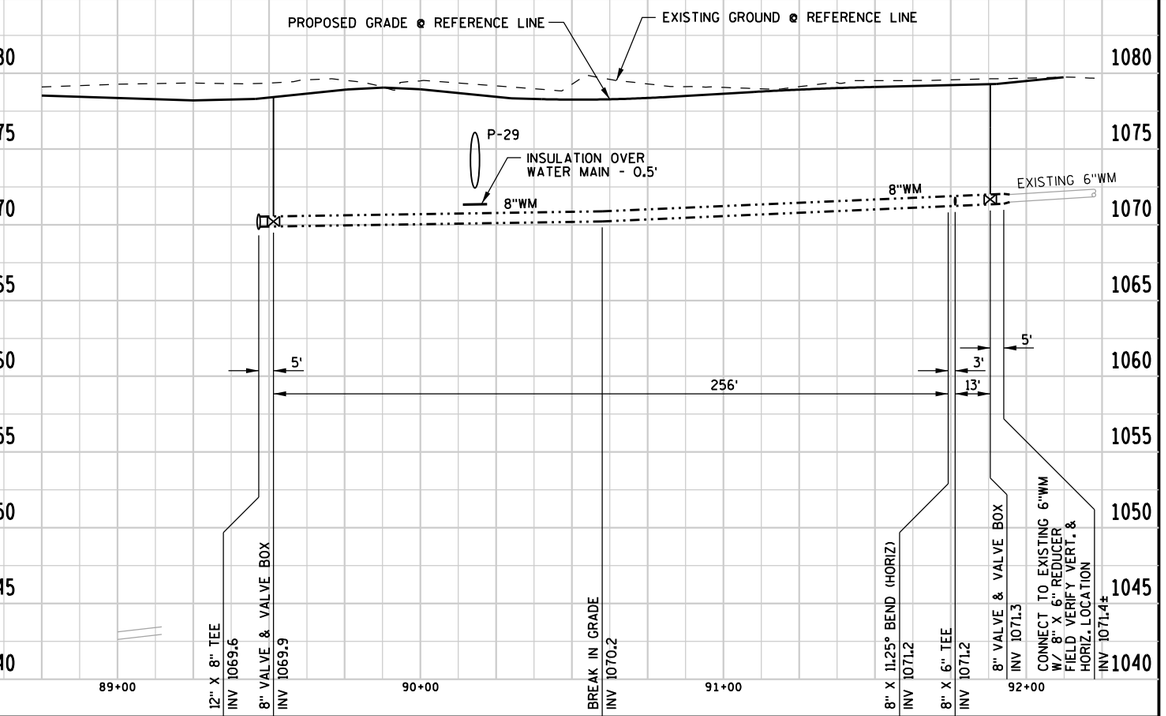
92+03.0, 23.5'RT
REMOVE 8"SAN TO WEST
ABANDON 8" SAN TO
MANHOLE ON LOCUST

WILLOW ST E
WILLOW ST W
BUSINESS 51
245+00
244+00
243+00
91+00
92+00
89+00
8"WM
8"SAN
12"WM

2



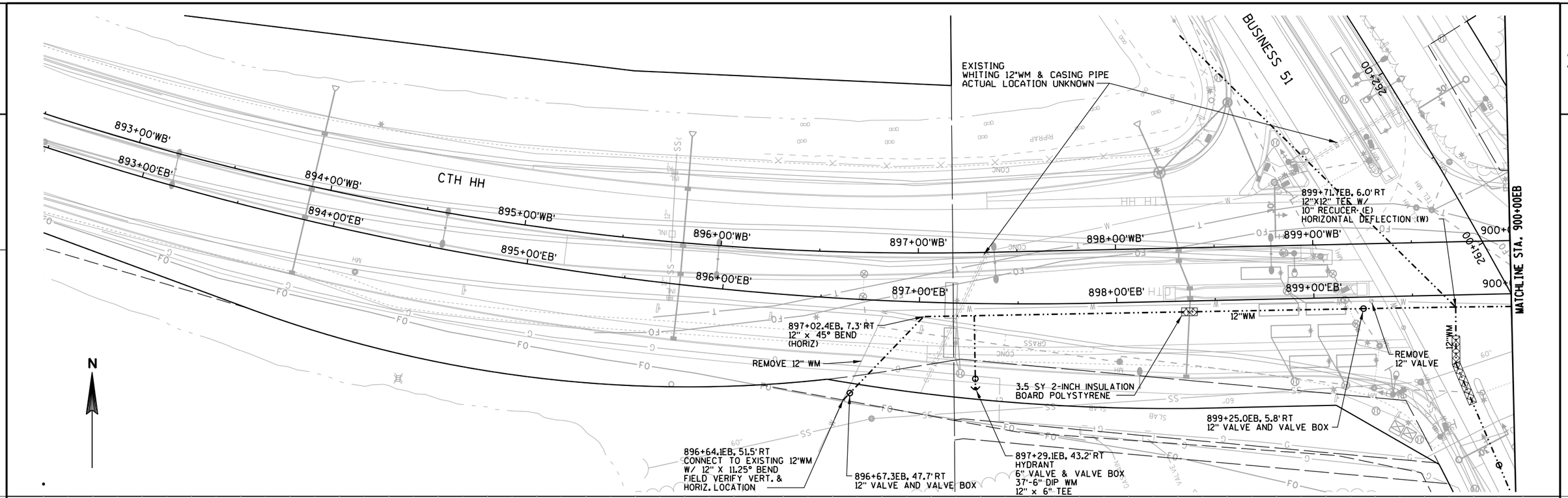
NOTE:
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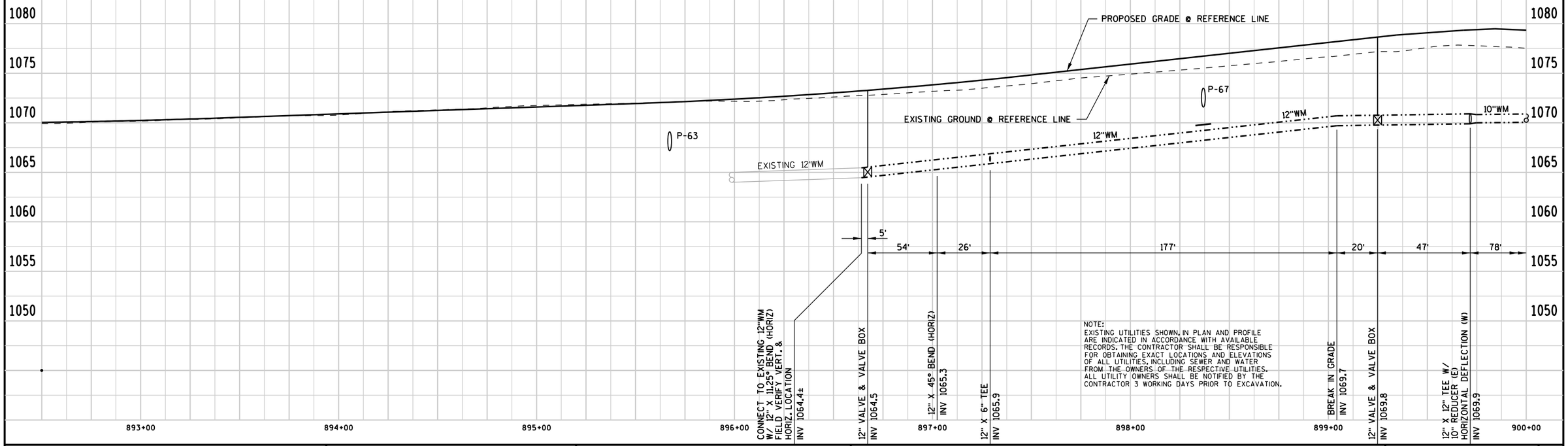


PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 20	E

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WISDOT/CADDS SHEET 41

2





PROJECT NUMBER: 6414-00-85	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 21	E

900+18.6, 6.7'RT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

38.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

900+56.9, 39.1'LT
REMOVE GRADE RINGS/ FRAME/ LID
REPLACE W/ PLASTIC RINGS/ NEW FRAME/ LID

900+92.2, 80.0'LT
HYDRANT
6" VALVE & VALVE BOX
88'-6" DIP WM
10" x 6" TEE

38.3 SY 2-INCH INSULATION
BOARD POLYSTYRENE

901+90.9, 8.2'RT
902+22.6, 7.8'RT
902+83.4, 5.5'RT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

34.0 SY 2-INCH INSULATION
BOARD POLYSTYRENE

903+47.0, 11.5'LT
SANITARARY LATERAL
56'-4" PVC

28.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

903+50.0, 0.8'RT
903+65.0, 0.6'LT
904+50.0, 8.6'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

904+47.0, 19.8'LT
SANITARARY LATERAL
39'-4" PVC

20.8 SY 2-INCH INSULATION
BOARD POLYSTYRENE

906+04.7, 15.8'LT
10" X 45° BEND
(VERT)

REMOVE HYDRANT
& VALVE

905+94.6, 15.7'LT
10" X 45° BEND
(VERT)

905+87.5, 47.6'LT
HYDRANT
6" VALVE & VALVE BOX
32'-6" DIP WM
10" x 6" TEE

905+93.1, 15.7'LT
10" X 45° BEND
(VERT)

EXISTING
WHITING 12" WM
ACTUAL LOCATION
UNKNOWN

905+37.5, 14.1'LT
10" VALVE AND VALVE BOX

907+29.1, 16.4'LT
CONNECT TO EXISTING
10"WM W/ 10" VALVE
AND VALVE BOX
FIELD VERIFY VERT.
& HORIZ. LOCATION

907+24.6, 16.3'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

906+06.3, 15.8'LT
10" X 45° BEND
(VERT)

N

MATCHLINE STA. 900+00 EB

REMOVE HYDRANT
& VALVE

901+00'WB' REMOVE 10" VALVE

901+35.7, 8.4'RT
HORIZONTAL DEFLECTION

901+00'EB'

10"WM

EXISTING
WHITING 12" WM
ACTUAL LOCATION UNKNOWN

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

900+95.4, 29.0'RT
REMOVE EXISTING SANITARY MANHOLE

900+50.0, 7.2'RT
10" VALVE AND VALVE BOX

902+15.3, 31.5'RT
SANITARY MANHOLE
4-FT DIA-J-SPECIAL

902+00'WB'

902+00'EB'

902+33.2, 28.4'RT
REPLACE LATERAL
W/ 33'-4" PVC

14.6 SY 2-INCH INSULATION
BOARD POLYSTYRENE

903+00'WB'

903+00'EB'

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

903+26.2, 10.2'LT
REMOVE GRADE RINGS/ FRAME/ LID
REPLACE W/ PLASTIC RINGS/ NEW FRAME/ LID

3.5 SY 2-INCH INSULATION
BOARD POLYSTYRENE

904+00'WB'

904+00'EB'

REMOVE 8"SAN

18.4 SY 2-INCH INSULATION
BOARD POLYSTYRENE

21.1 SY 2-INCH INSULATION
BOARD POLYSTYRENE

904+11.5, 16.4'RT
REMOVE EXISTING SANITARY MANHOLE
SANITARY MANHOLE 4-FT DIA-J-SPECIAL

904+15.4, 47.9'RT
CONNECT 8"SAN TO
EXISTING 8"SAN W"
8" SLEEVE
FIELD VERIFY VERT. &
HORIZ. LOCATION
1068.4±

904+50.6, 8.8'LT
REPLACE EXISTING WATER SERVICE
W/ NEW 1" PLASTIC, NEW SADDLE,
CORPORATION STOP,
CURB STOP & CURB BOX

905+00'WB'

905+00'EB'

905+99.7, 15.8'LT
10" X 8" CROSS

REMOVE 8"SAN

REMOVE 10" VALVE

CTH HH

906+00'EB'

907+00'WB'
907+00'EB'

REMOVE 10" VALVE

REMOVE 8"SAN

20.2 SY 2-INCH INSULATION
BOARD POLYSTYRENE

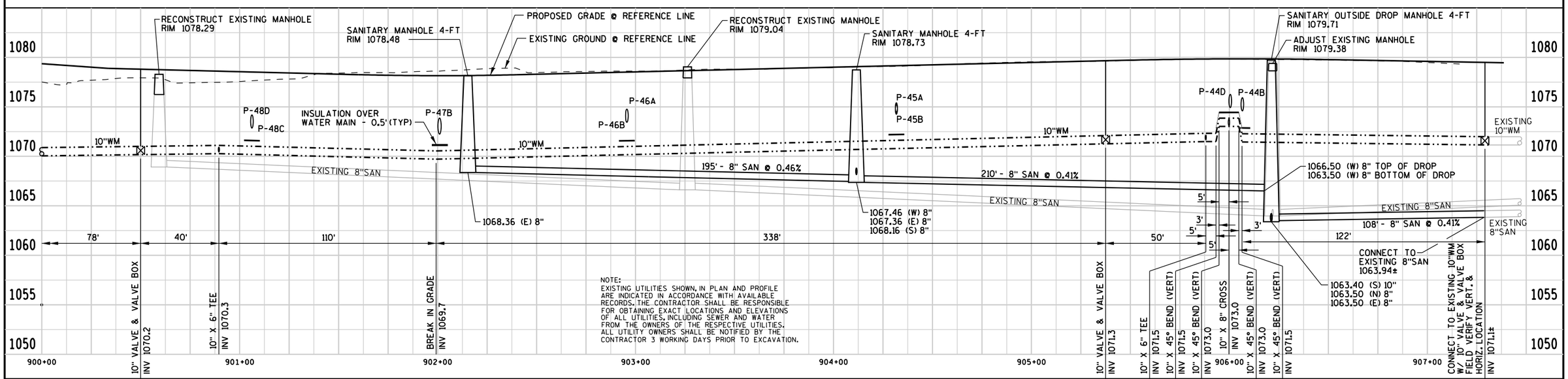
906+21.2, 6.3'RT
REMOVE EXISTING SANITARY MANHOLE
SANITARY OUTSIDE DROP MANHOLE
4-FT DIA-J-SPECIAL

12.4 SY 2-INCH INSULATION
BOARD POLYSTYRENE

907+28.7, 5.4'RT
CONNECT 8"SAN TO
EXISTING 8"SAN W/
8" SLEEVE
FIELD VERIFY VERT. &
HORIZ. LOCATION
1063.94±

LOCUST ST

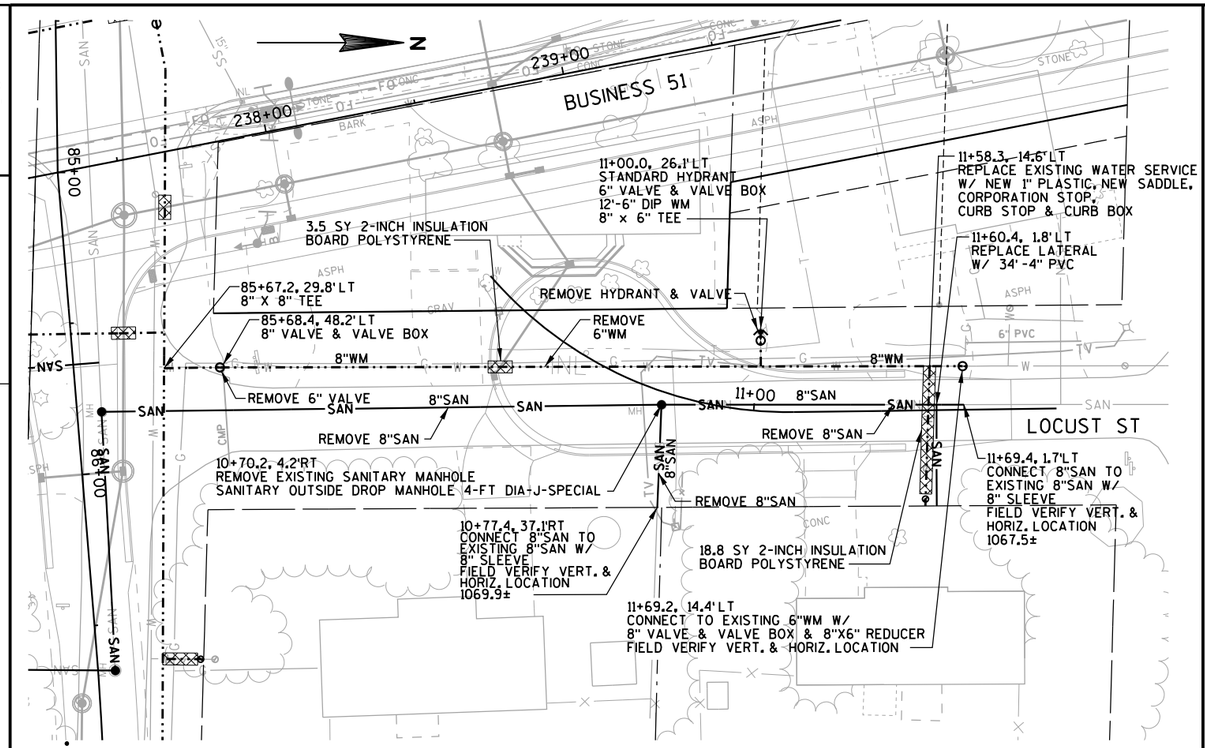
BUSINESS 51

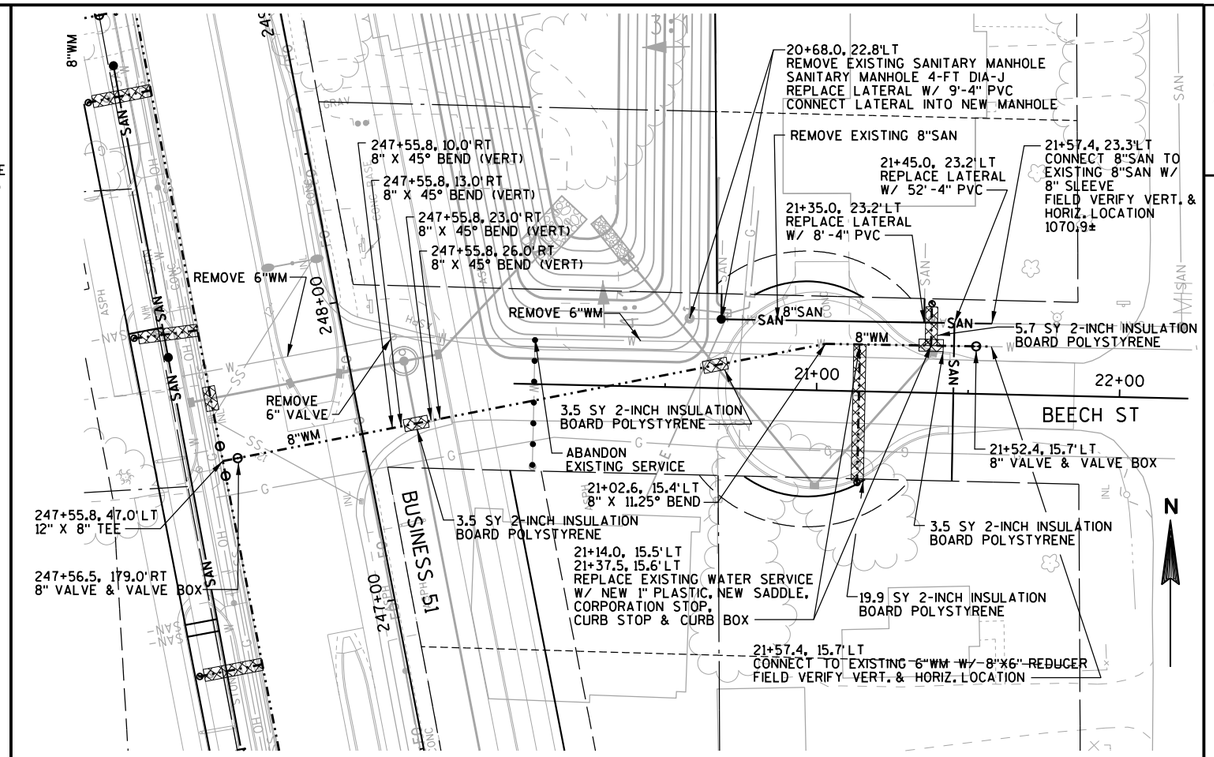


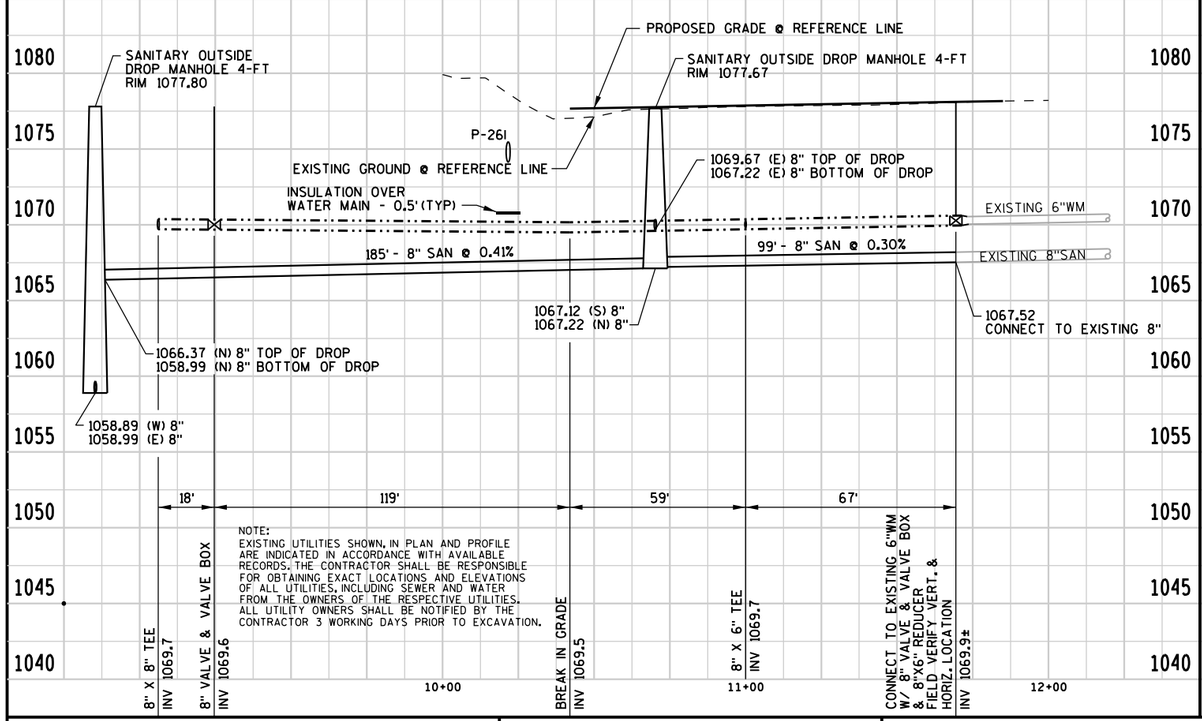
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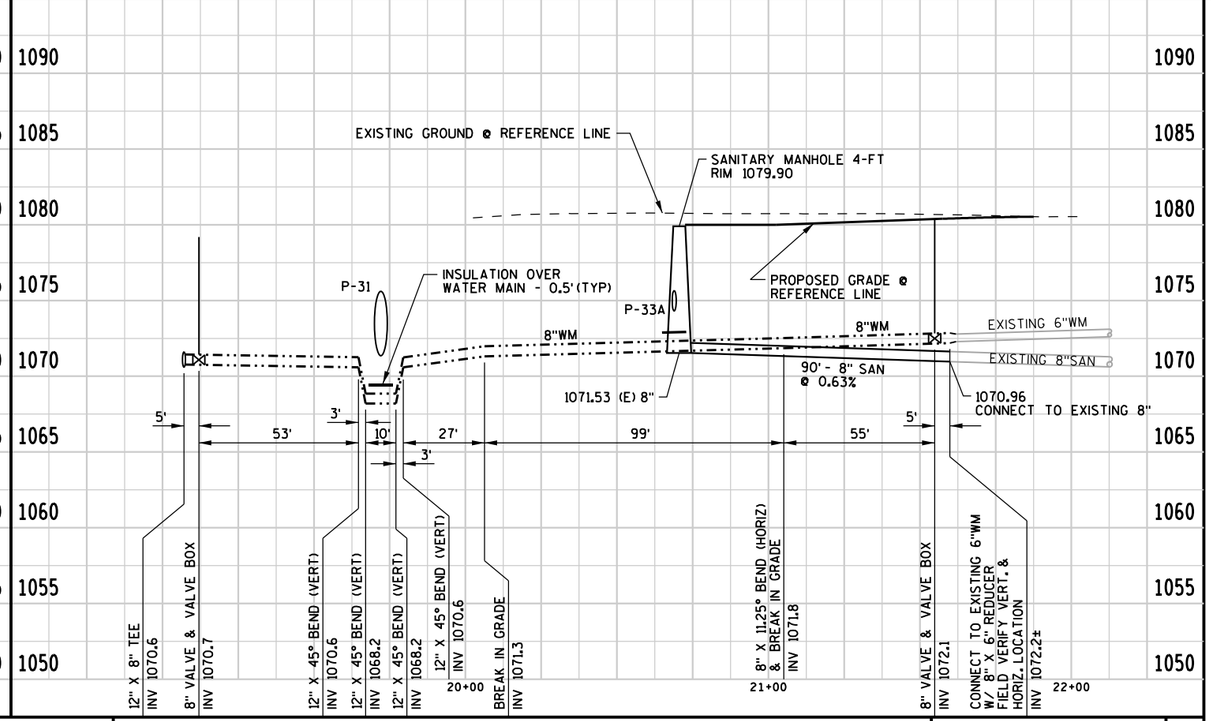
PROJECT NUMBER: 6414-00-85	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 22	E

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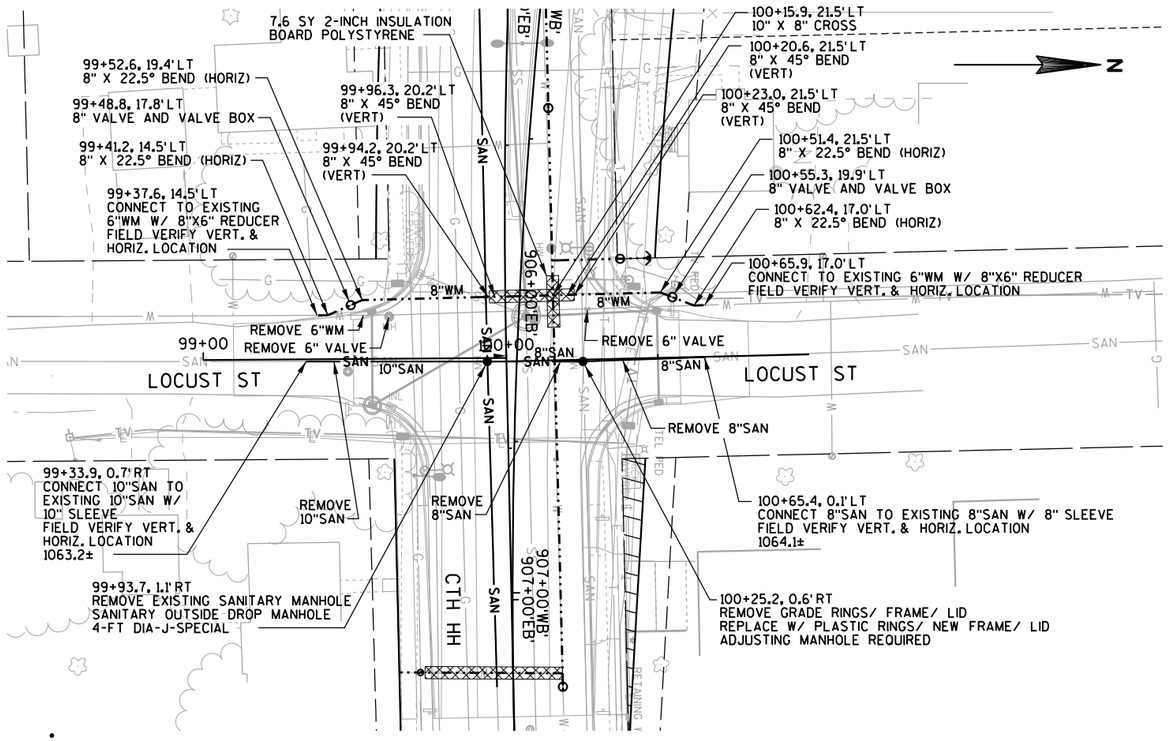


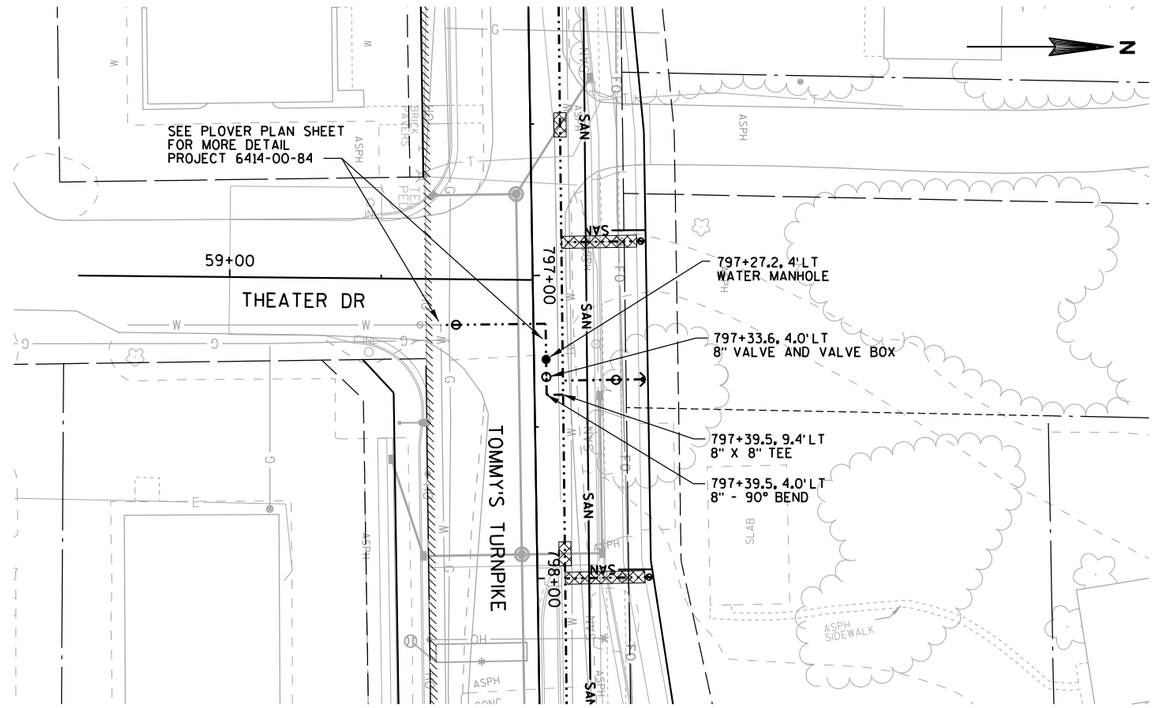




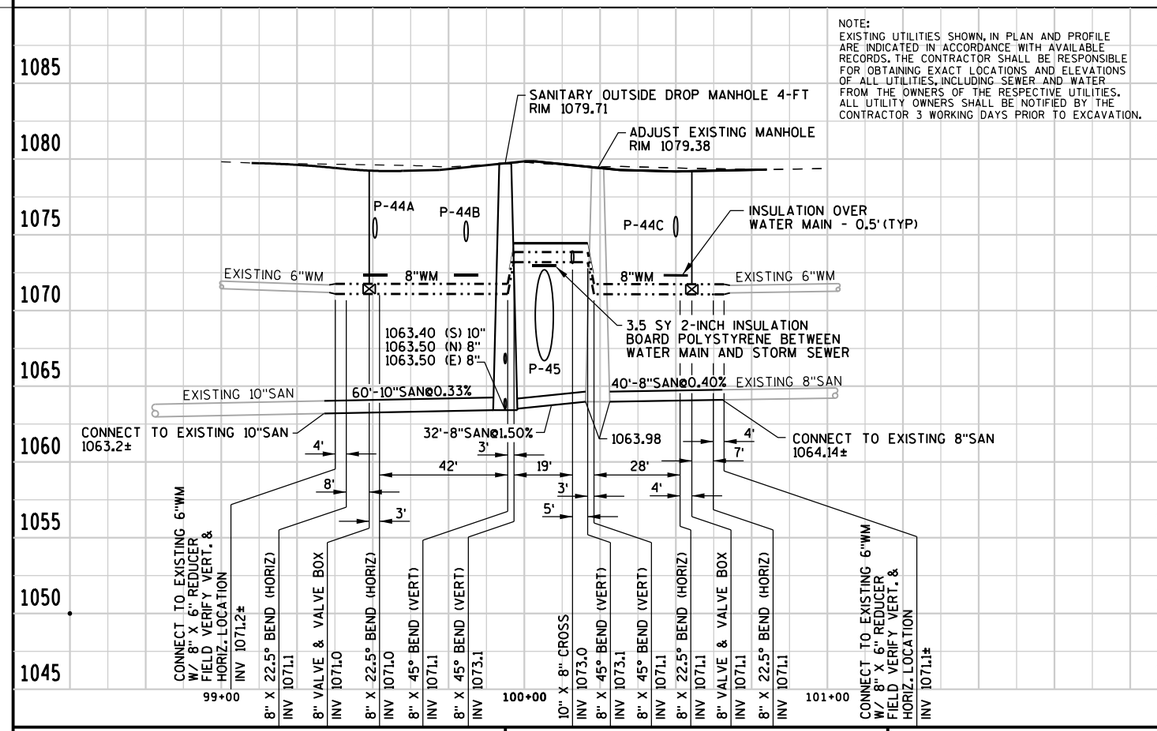


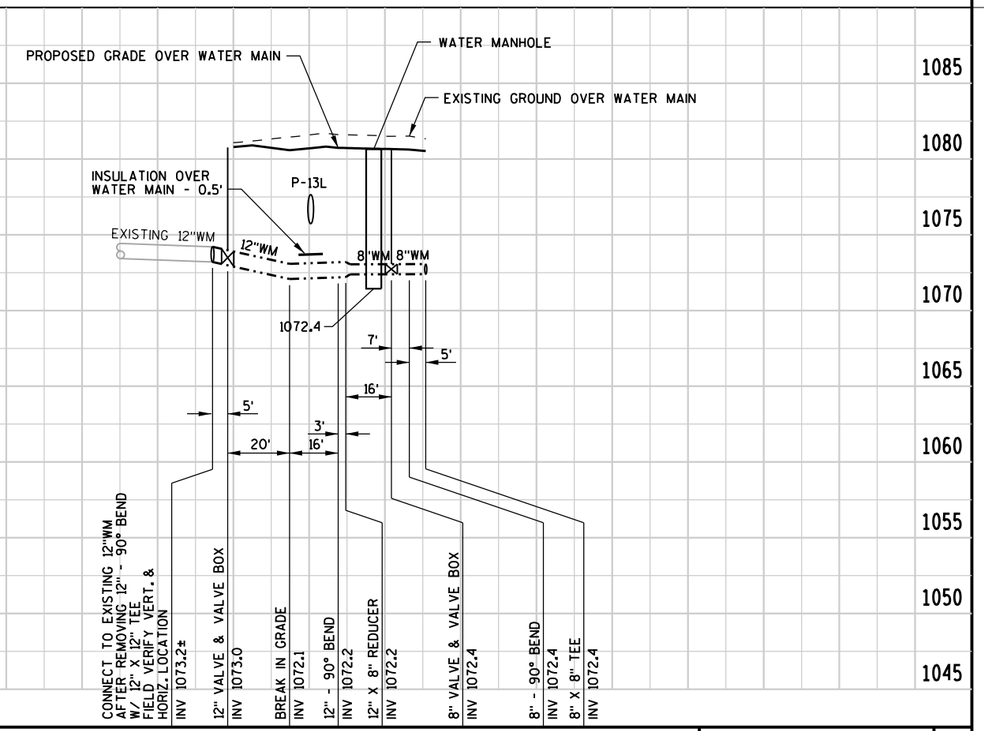
PROJECT NUMBER: 6414-00-84	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 23	E





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PROJECT NUMBER: 6414-00-84/85	HWY: BUSINESS 51	COUNTY: PORTAGE	UTILITY IMPROVEMENTS	SHEET 24 E

					6414-00-84	6414-00-85
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0048	204.9060.S	Removing (item description) 01. Removing Watermain Valve Box and Valves	EACH	42.000	32.000	10.000
0050	204.9060.S	Removing (item description) 02. Removing Hydrants	EACH	14.000	11.000	3.000
0052	204.9060.S	Removing (item description) 03. Removing Sanitary Manhole	EACH	15.000	12.000	3.000
0054	204.9090.S	Removing (item description) 01. Removing Watermain	LF	8,129.000	6,578.000	1,551.000
0056	204.9090.S	Removing (item description) 02. Removing Sanitary Sewer	LF	3,411.000	2,609.000	802.000
0252	611.8120.S	Cover Plates Temporary	EACH	25.000	18.000	7.000
0258	612.0902.S	Insulation Board Polystyrene (inch) 01. 2-Inch	SY	1,947.400	1,391.400	556.000
0274	619.1000	Mobilization	EACH	0.150	0.110	0.040
0562	SPV.0060	Special 01. Salvage Hydrant	EACH	3.000	3.000	
0564	SPV.0060	Special 02. Abandoning Water Service	EACH	5.000	5.000	
0566	SPV.0060	Special 03. Adjusting Watermain Valve Box	EACH	3.000	3.000	
0568	SPV.0060	Special 04. Hydrant	EACH	22.000	17.000	5.000
0570	SPV.0060	Special 05. Watermain Gate Valve and Box 6-Inch	EACH	22.000	17.000	5.000
0572	SPV.0060	Special 06. Watermain Gate Valve and Box 8-Inch	EACH	22.000	20.000	2.000
0574	SPV.0060	Special 07. Watermain Gate Valve and Box 10-Inch	EACH	3.000		3.000
0576	SPV.0060	Special 08. Watermain Gate Valve and Box 12-Inch	EACH	21.000	17.000	4.000
0578	SPV.0060	Special 09. Watermain Coupling 12-Inch	EACH	4.000	4.000	
0580	SPV.0060	Special 10. Watermain Bend 11-1/4 Degree 8-Inch	EACH	5.000	5.000	
0582	SPV.0060	Special 11. Watermain Bend 22-1/2 Degree 8-Inch	EACH	7.000	3.000	4.000
0584	SPV.0060	Special 12. Watermain Bend 45 Degree 8-Inch	EACH	12.000	8.000	4.000
0586	SPV.0060	Special 13. Watermain Bend 45 Degree 10-Inch	EACH	4.000		4.000
0588	SPV.0060	Special 14. Watermain Bend 11-1/4 Degree 12-Inch	EACH	9.000	3.000	6.000
0590	SPV.0060	Special 15. Watermain Bend 22-1/2 Degree 12-Inch	EACH	1.000		1.000
0592	SPV.0060	Special 16. Watermain Bend 45 Degree 12-Inch	EACH	15.000	14.000	1.000
0594	SPV.0060	Special 17. Watermain Bend 90 Degree 12-Inch	EACH	3.000	3.000	
0596	SPV.0060	Special 18. Watermain Tee 8-Inch X 6-Inch	EACH	8.000	8.000	
0598	SPV.0060	Special 19. Watermain Tee 8-Inch	EACH	2.000	2.000	
0600	SPV.0060	Special 20. Watermain Tee 10-Inch X 6-Inch	EACH	2.000		2.000
0602	SPV.0060	Special 21. Watermain Tee 12-Inch X 6-Inch	EACH	10.000	7.000	3.000
0604	SPV.0060	Special 22. Watermain Tee 12-Inch X 8-Inch	EACH	5.000	5.000	
0606	SPV.0060	Special 23. Watermain Tee 12-Inch	EACH	3.000	2.000	1.000
0608	SPV.0060	Special 24. Watermain Cross 8 X 10-Inch	EACH	1.000		1.000
0610	SPV.0060	Special 25. Watermain Cross 12-Inch	EACH	1.000	1.000	
0612	SPV.0060	Special 26. Watermain Reduver 6 X 8-Inch	EACH	9.000	7.000	2.000
0614	SPV.0060	Special 27. Watermain Reducer 6 X 12-Inch	EACH	1.000	1.000	
0616	SPV.0060	Special 28. Watermain Reducer 8 X 12-Inch	EACH	3.000	3.000	
0618	SPV.0060	Special 29. Watermain Reducer 10 X 12-Inch	EACH	1.000		1.000

					6414-00-84	6414-00-85
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0620	SPV.0060	Special 30. Watermain Tapping Sleeve 12-Inch X 6-Inch	EACH	1.000	1.000	
0622	SPV.0060	Special 31. Cap Watermain To Remain In Service	EACH	1.000	1.000	
0624	SPV.0060	Special 32. Tracer Wire Access Box	EACH	24.000	21.000	3.000
0626	SPV.0060	Special 33. Reconditioning Sanitary Manhole	EACH	4.000	3.000	1.000
0628	SPV.0060	Special 34. Reconstructing Sanitary Manhole	EACH	4.000	2.000	2.000
0630	SPV.0060	Special 35. Sanitary Manhole Casting	EACH	25.000	18.000	7.000
0632	SPV.0060	Special 36. Sanitary Manhole	EACH	11.000	8.000	3.000
0634	SPV.0060	Special 37. Flow Meter Magnetic	EACH	1.000	1.000	
0636	SPV.0060	Special 38. Water Manhole	EACH	1.000	1.000	
0638	SPV.0060	Special 39. Water Manhole Casting	EACH	1.000	1.000	
0662	SPV.0090	Special 01. Abandoning Sanitary Sewer	LF	10.000	10.000	
0664	SPV.0090	Special 02. Watermain 6-Inch	LF	739.000	460.000	279.000
0666	SPV.0090	Special 03. Watermain 8-Inch	LF	3,849.000	3,720.000	129.000
0668	SPV.0090	Special 04. Watermain 10-Inch	LF	757.000		757.000
0670	SPV.0090	Special 05. Watermain 12-Inch	LF	3,134.000	1,985.000	1,149.000
0672	SPV.0090	Special 06. Water Service 1-Inch	LF	4,178.000	2,976.000	1,202.000
0674	SPV.0090	Special 07. Water Service 2-Inch	LF	240.000	120.000	120.000
0676	SPV.0090	Special 08. Sanitary Sewer 8-Inch	LF	2,397.000	1,778.000	619.000
0678	SPV.0090	Special 09. Sanitary Sewer 10-Inch	LF	60.000		60.000
0680	SPV.0090	Special 10. Sanitary Sewer 12-Inch	LF	624.000	624.000	
0682	SPV.0090	Special 11. Sanitary Lateral 4-Inch	LF	477.000	349.000	128.000
0684	SPV.0090	Special 12. Sanitary Sewer Televising	LF	3,081.000	2,402.000	679.000
0686	SPV.0090	Special 13. Class B Bedding	LF	150.000	100.000	50.000
0696	SPV.0105	Special 01. Temporary Water Service Project 6414-00-84	LS	1.000	1.000	
0712	SPV.0105	Special 11. Temporary Water Service Project 6414-00-85	LS	1.000		1.000
0722	SPV.0200	Special 01. Sanitary Drop Manhole	VF	88.600	73.000	15.600

3

REMOVING WATERMAIN

CATEGORY	STATION	TO	STATION	LOCATION	204.9060.S.01 REMOVING WATERMAIN VALVE BOX & VALVES EACH	SPV.0060.01 SALVAGE HYDRANT EACH	SPV.0060.03 ADJUSTING WATERMAIN VALVE BOX EACH	204.9090.S.01 REMOVING WATERMAIN LF	REMARKS
0010		211+15		LT	---	1	---		BUSINESS 51
	213+71	-	214+17	RT	2	---	---	46	BUSINESS 51
		217+41		RT	1	---	---	---	BUSINESS 51
	217+27	-	217+41	LT	---	1	---	13	BUSINESS 51
		220+12		LT	---	---	1	---	BUSINESS 51
	220+18	-	220+31	LT	1	---	---	14	BUSINESS 51
	80+12	-	81+06	LT/ RT	1	---	---	101	HICKORY
		80+42		LT	---	1	---	14	HICKORY
		794+16		RT	---	---	1	---	TOMMY'S TURNPIKE
	799+30	-	799+85	RT	---	---	---	57	TOMMY'S TURNPIKE
		800+02		RT	---	---	1	---	PORTER
		---		---	---	---	---	---	---
CATEGORY 0010 TOTALS PROJECT 6414-00-84					**5**	**3**	**3**	**245**	

WATER SERVICE

CATEGORY	STATION	LOCATION	SPV.0090.06 WATER SERVICE 1-INCH LF	REMARKS
0010	209+58	RT	31	BUSINESS 51
	210+15	LT	83	BUSINESS 51
	210+75	RT	31	BUSINESS 51
	211+73	RT	31	BUSINESS 51
	212+22	RT/ LT	82	BUSINESS 51
	212+54	RT/ LT	82	BUSINESS 51
	215+18	RT/ LT	81	BUSINESS 51
	216+11	RT/ LT	80	BUSINESS 51
	216+46	RT	35	BUSINESS 51
	217+03	RT/ LT	78	BUSINESS 51
	217+87	RT/ LT	73	BUSINESS 51
	218+98	LT/ RT	65	BUSINESS 51
	219+30	LT/ RT	68	BUSINESS 51
	---	---	---	---
	---	---	---	---
CATEGORY 0010 TOTALS PROJECT 6414-00-84			**820**	

REMOVING SANITARY SEWER

CATEGORY	STATION	TO	STATION	LOCATION	204.9090.S.02 REMOVING SANITARY SEWER LF	REMARKS
0010		211+73.9		LT	2	BUSINESS 51
		---		---	---	---
CATEGORY 0010 TOTALS PROJECT 6414-00-84					**2**	

HYDRANTS

CATEGORY	STATION	LOCATION	SPV.0060.04 HYDRANT EACH	REMARKS
0010	211+14	LT	1	BUSINESS 51
	217+15	LT	1	BUSINESS 51
	80+71	RT	1	HICKORY
	---	---	---	---
	---	---	---	---
CATEGORY 0010 TOTALS PROJECT 6414-00-84			**3**	

SANITARY MANHOLES

CATEGORY	STATION	LOCATION	611.8120.S COVER PLATES TEMPORARY EACH	SPV.0060.34 RECONSTRUCTING SANITARY MANHOLE EACH	SPV.0060.33 RECONDITIONING SANITARY MANHOLE EACH	SPV.0060.35 SANITARY MANHOLE CASTING EACH	REMARKS
0010	211+74	LT	1	---	1	1	BUSINESS 51
	211+96	RT	1	---	1	1	BUSINESS 51
	214+04	LT	1	---	1	1	BUSINESS 51
	217+28	LT	1	1	---	1	BUSINESS 51
	219+26	LT	1	1	---	1	BUSINESS 51
CATEGORY 0010 TOTALS PROJECT 6414-00-84			**5**	**2**	**3**	**5**	

WATER MAIN

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.02 WATERMAIN 6-INCH LF	SPV.0090.03 WATERMAIN 8-INCH LF	SPV.0090.05 WATERMAIN 12-INCH LF	SPV.0060.09 WATERMAIN COUPLING 12-INCH EACH	SPV.0060.05 WATERMAIN GATE VALVE AND BOX 6-INCH EACH	SPV.0060.06 WATERMAIN GATE VALVE AND BOX 8-INCH EACH	SPV.0060.08 WATERMAIN GATE VALVE AND BOX 12-INCH EACH	SPV.0060.10 WATERMAIN BEND 11-1/4 DEGREE 8-INCH EACH	SPV.0060.11 WATERMAIN BEND 22-1/2 DEGREE 8-INCH EACH	SPV.0060.17 WATERMAIN BEND 90 DEGREE 12-INCH EACH	REMARKS
0010		211+14.4		LT	6	---	32	1	1	---	---	---	---	---	BUSINESS 51
	213+70.6	-	214+17.3	RT	---	---	46	1	---	---	2	---	---	---	BUSINESS 51
		217+14.6		RT	78	---	---	---	1	---	---	---	---	---	BUSINESS 51
	220+17.5	-	220+30.7	LT	---	---	14	---	---	---	1	---	---	1	BUSINESS 51
	80+14.0	-	81+06.1	RT	---	93	---	---	---	1	---	1	1	---	HICKORY
		80+71.0		RT	18	---	---	---	1	---	---	---	---	---	HICKORY
	797+15.8	-	797+27.8	RT/ LT	---	10	37	---	---	---	1	---	---	1	TOMMY'S TURNPIKE
	799+30.1	-	799+85.3	RT	---	---	56	1	---	---	---	---	---	---	TOMMY'S TURNPIKE
CATEGORY 0010 TOTALS PROJECT 6414-00-84					**102**	**103**	**185**	**3**	**3**	**1**	**4**	**1**	**1**	**2**	

WATER MAIN

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0060.18 WATERMAIN TEE 8 X 6-INCH EACH	SPV.0060.22 WATERMAIN TEE 12 X 8-INCH EACH	SPV.0060.23 WATERMAIN TEE 12-INCH EACH	SPV.0060.30 WATERMAIN TAPPING SLEEVE 12 X 6-INCH EACH	SPV.0060.27 WATERMAIN REDUCER 6 X 12 INCH EACH	SPV.0060.28 WATERMAIN REDUCER 8 X 12 INCH EACH	SPV.0060.31 CAP WATERMAIN TO REMAIN IN SERVICE EACH	REMARKS
0010		211+14.4		LT	---	---	---	---	1	---	---	BUSINESS 51
		213+80.6		RT	---	1	---	---	---	---	---	BUSINESS 51
		217+14.6		RT	---	---	---	1	---	---	---	BUSINESS 51
		217+41.4		RT	---	---	---	---	---	---	1	BUSINESS 51
		80+71.0		RT	1	---	---	---	---	---	---	HICKORY
	797+15.8	-	797+27.8	RT/ LT	---	---	1	---	---	1	---	TOMMY'S TURNPIKE
CATEGORY 0010 TOTALS PROJECT 6414-00-84					**1**	**1**	**1**	**1**	**1**	**1**	**1**	

SANITARY SEWER

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.08 SANITARY SEWER 8-INCH LF	SPV.0090.11 SANITARY LATERAL 4-INCH LF	SPV.0060.32 TRACER WIRE ACCESS BOX EACH	SPV.0090.12 SANITARY SEWER TELEVISING LF	REMARKS
0010		211+73.9		LT	61	---	---	61	BUSINESS 51
		209+81		RT	---	5	1	---	BUSINESS 51
		213+84		LT	---	19	1	---	BUSINESS 51
		215+79		LT	---	15	1	---	BUSINESS 51
		216+02		LT	---	15	1	---	BUSINESS 51
		216+10		LT	---	17	1	---	BUSINESS 51
		219+23		LT	---	15	1	---	BUSINESS 51
		219+30		LT	---	15	1	---	BUSINESS 51
CATEGORY 0010 TOTALS PROJECT 6414-00-84					**61**	**101**	**7**	**61**	

VILLAGE INTERCONNECT

CATEGORY	STATION	LOCATION	SPV.0060.37 FLOW METER MAGNETIC EACH	SPV.0060.38 WATER MANHOLE EACH	SPV.0060.39 WATER MANHOLE CASTING EACH
0010	797+28	LT	0.5	0.5	0.5
CATEGORY 0010 TOTALS PROJECT 6414-00-84			**0.5**	**0.5**	**0.5**

INSULATION BOARD

CATEGORY	STATION	-	STATION	LOCATION	612.0902.S INSULATION BOARD POLYSTYRENE 2-INCH SY	REMARKS
0010		208+95		RT	3.5	BUSINESS 51
		209+57		RT	8.0	BUSINESS 51
		210+15		RT	15.6	BUSINESS 51
		210+42		RT	3.5	BUSINESS 51
		210+75		RT	8.0	BUSINESS 51
		211+73		RT	13.5	BUSINESS 51
		212+03		RT	3.5	BUSINESS 51
		212+22		RT	21.5	BUSINESS 51
		212+54		RT	22.5	BUSINESS 51
		213+47		RT	3.5	BUSINESS 51
		214+64		RT	3.5	BUSINESS 51
		215+18		RT	30.0	BUSINESS 51
		216+02		RT	3.5	BUSINESS 51
		216+11		RT	30.0	BUSINESS 51
		216+46		RT	14.8	BUSINESS 51
		217+03		RT	28.9	BUSINESS 51
		217+75		RT	3.5	BUSINESS 51
		217+87		RT	28.6	BUSINESS 51
		218+98		LT	23.0	BUSINESS 51
		219+30		LT	25.0	BUSINESS 51
		219+67		LT	3.5	BUSINESS 51
		80+52		RT	3.5	HICKORY
		797+16		RT	3.5	TOMMY'S TURNPIKE
	797+16	-	799+85	RT	121.1	TOMMY'S TURNPIKE
		800+21		RT	3.5	PORTER DRIVE
		801+97		RT	9.4	PORTER DRIVE
		---		---	---	---
		---		---	---	---
CATEGORY 0010 TOTALS PROJECT 6414-00-84					**438.4**	

REMOVING WATERMAIN

CATEGORY	STATION	TO	STATION	LOCATION	204.9060.S.01 REMOVING WATERMAIN VALVE BOX & VALVES EACH	204.9060.S.02 REMOVING HYDRANTS EACH	SPV.0060.02 ABANDONING WATER SERVICE EACH	204.9090.S.01 REMOVING WATERMAIN LF	REMARKS
0020	220+59.4	-	260+96.4	LT	---	---	---	4019	BUSINESS 51
		220+81		LT	1	---	---	---	BUSINESS 51
		221+00		RT	---	---	---	---	BUSINESS 51
		223+40		LT	---	---	---	---	BUSINESS 51
		224+22		RT	---	---	---	---	BUSINESS 51
		224+30		LT	1	---	---	---	BUSINESS 51
		224+36		LT	---	1	---	17	BUSINESS 51
		225+36		LT	---	---	---	---	BUSINESS 51
		225+75		LT	---	---	---	---	BUSINESS 51
		226+35		LT	---	---	---	---	BUSINESS 51
		226+76		RT	---	---	---	---	BUSINESS 51
		227+45		LT	---	---	---	---	BUSINESS 51
		228+05		RT	---	---	---	---	BUSINESS 51
		228+36		LT	1	---	---	---	BUSINESS 51
		228+43		LT	---	1	---	4	BUSINESS 51
		229+11		LT	---	---	---	---	BUSINESS 51
		229+30		RT	---	---	---	---	BUSINESS 51
		230+41		LT	---	---	---	---	BUSINESS 51
		231+82		LT	---	---	---	---	BUSINESS 51
		231+92		LT	1	---	---	---	BUSINESS 51
		231+99		RT	---	---	---	---	BUSINESS 51
		232+00		LT	1	1	---	5	BUSINESS 51
		232+59		RT	---	---	---	---	BUSINESS 51
		232+69		LT	---	---	---	---	BUSINESS 51
		233+28		RT	---	---	---	---	BUSINESS 51
		233+40		LT	---	---	---	---	BUSINESS 51
		234+83		RT	---	---	---	---	BUSINESS 51
		234+89		LT	---	---	---	---	BUSINESS 51
		236+03		RT	---	---	---	---	BUSINESS 51
		236+50		LT	---	---	---	---	BUSINESS 51
		237+00		LT	1	---	---	---	BUSINESS 51
		237+75		LT	1	---	---	---	BUSINESS 51
		240+88		LT	---	---	---	---	BUSINESS 51
		242+31		LT	---	---	---	---	BUSINESS 51
		243+60		LT	1	---	---	---	BUSINESS 51
		244+98		LT	---	---	---	---	BUSINESS 51
		245+69		LT	---	---	---	---	BUSINESS 51
		245+85		RT	---	---	1	---	BUSINESS 51
		246+87		LT	---	---	---	---	BUSINESS 51
		247+54		LT	1	---	---	---	BUSINESS 51
		248+00		LT	---	---	---	---	BUSINESS 51
		248+80		LT	---	---	---	---	BUSINESS 51
		249+08		RT	---	---	1	---	BUSINESS 51
		249+49		RT	---	---	1	---	BUSINESS 51
		250+17		LT	---	---	---	---	BUSINESS 51
		250+59		LT	1	---	---	---	BUSINESS 51
		251+29		LT	1	---	---	---	BUSINESS 51
		252+25		LT	---	---	---	---	BUSINESS 51
		252+28		LT	---	---	---	---	BUSINESS 51
793+78.9	-	799+67.1		LT	---	---	---	589	TOMMY'S TURNPIKE

REMOVING WATERMAIN

CATEGORY	STATION	TO	STATION	LOCATION	204.9060.S.01 REMOVING WATERMAIN VALVE BOX & VALVES EACH	204.9060.S.02 REMOVING HYDRANTS EACH	SPV.0060.02 ABANDONING WATER SERVICE EACH	204.9090.S.01 REMOVING WATERMAIN LF	REMARKS
0020		793+89		LT	---	---	---	---	TOMMY'S TURNPIKE
		794+29		LT	1	---	---	---	TOMMY'S TURNPIKE
		794+34		LT	1	1	---	8	TOMMY'S TURNPIKE
		794+74		LT	---	---	---	---	TOMMY'S TURNPIKE
		795+80		LT	---	---	---	---	TOMMY'S TURNPIKE
		796+89		LT	---	---	---	---	TOMMY'S TURNPIKE
		797+24		LT	1	1	---	9	TOMMY'S TURNPIKE
		798+00		LT	---	---	---	---	TOMMY'S TURNPIKE
		799+05		LT	---	---	---	---	TOMMY'S TURNPIKE
		799+56		LT	1	---	---	---	TOMMY'S TURNPIKE
	83+20.2	-	88+14.0	LT	---	---	---	495	CEDAR STREET
		83+37		LT	---	---	---	---	CEDAR STREET
		84+16		LT	2	1	---	10	CEDAR STREET
		85+08		LT	1	---	---	---	CEDAR STREET
		86+63		LT	---	---	---	---	CEDAR STREET
		87+53		LT	---	---	---	---	CEDAR STREET
	85+67.2	-	11+69.2	LT	---	---	---	267	LOCUST
		85+68		LT	1	---	---	---	LOCUST
		11+01		LT	1	1	---	12	LOCUST
		11+58		RT	---	---	---	---	LOCUST
	241+35.8	-	241+29.9	RT	---	---	---	28	ROSE
		241+43		RT	1	1	---	8	ROSE
	88+23.1	-	89+39.4	LT	---	---	---	117	WILLOW
	89+32.1	-	91+92.5	LT	---	---	---	255	WILLOW
		89+20		LT	---	1	---	8	WILLOW
		89+25		LT	1	---	---	---	WILLOW
		90+14		LT	1	---	---	---	WILLOW
		91+18		LT	---	---	1	---	WILLOW
		91+27		LT	---	---	---	---	WILLOW
		91+80		LT	---	1	---	5	WILLOW
		91+83		LT	1	---	---	---	WILLOW
	247+55.8	-	21+57.4	LT	---	---	---	269	BEECH
		247+85.3		RT	1	---	---	---	BEECH
		20+07		LT	---	---	1	---	BEECH
		21+14		RT	---	---	---	---	BEECH
		21+38		LT	---	---	---	---	BEECH
	251+04.3	-	96+43.5	LT	---	---	---	199	ELM
		95+17		LT	1	---	---	---	ELM
		95+21		LT	1	1	---	9	ELM
		---		---	---	---	---	---	---
CATEGORY 0020 TOTALS PROJECT 6414-00-84					**27**	**11**	**5**	**6,333**	

REMOVING WATERMAIN

CATEGORY	STATION	TO	STATION	LOCATION	204.9060.S.01 REMOVING WATERMAIN VALVE BOX & VALVES EACH	204.9060.S.02 REMOVING HYDRANTS EACH	204.9090.S.01 REMOVING WATERMAIN LF	REMARKS
0010		253+11		LT	---	---	---	BUSINESS 51
		253+40		RT	---	---	---	BUSINESS 51
		254+38		LT	---	---	---	BUSINESS 51
		254+69		RT	---	---	---	BUSINESS 51
		255+51		RT	---	---	---	BUSINESS 51
		255+76		LT	---	---	---	BUSINESS 51
		256+24		LT	1	---	---	BUSINESS 51
		256+32		LT	---	1	10	BUSINESS 51
		256+39		RT	---	---	---	BUSINESS 51
		257+70		RT	---	---	---	BUSINESS 51
		260+80		LT	1	---	---	BUSINESS 51
	894+05.5	-	907+29.1	LT/RT	---	---	1,331	CTH HH
		899+29		RT	1	---	---	CTH HH
		900+19		LT	---	---	---	CTH HH
		901+28		RT	1	---	---	CTH HH
		901+80		LT	1	1	59	CTH HH
		901+91		LT	---	---	---	CTH HH
		902+23		RT	---	---	---	CTH HH
		902+83		LT	---	---	---	CTH HH
		903+65		RT	---	---	---	CTH HH
		904+51		RT	---	---	---	CTH HH
		905+52		RT	---	---	---	CTH HH
		905+84		LT	1	---	---	CTH HH
		905+93		LT	1	1	26	CTH HH
		906+54		LT	1	---	---	CTH HH
		907+25		RT	---	---	---	CTH HH
	99+37.6	-	100+62.3	LT	---	---	125	LOCUST
		99+61		LT	1	---	---	LOCUST
		100+27		LT	1	---	---	LOCUST
		---		---	---	---	---	---
PROJECT 6414-00-85 TOTALS					**10**	**3**	**1,551**	

REMOVING SANITARY SEWER

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.01 ABANDONING SANITARY SEWER LF	204.9060.S.03 REMOVING SANITARY MANHOLE EACH	204.9090.S.02 REMOVING SANITARY SEWER LF	REMARKS
0020	220+67.4	-	223+32.7	LT	---	2	273	BUSINESS 51
	223+32.7	-	223+39.6	LT	---	---	41	BUSINESS 51
	243+91.2	-	248+08.7	LT	---	2	418	BUSINESS 51
		245+65.8		LT	---	---	---	BUSINESS 51
		245+81.9		LT	---	---	---	BUSINESS 51
		247+00.9		LT	---	---	---	BUSINESS 51
		247+04.9		LT	---	---	---	BUSINESS 51
		248+02.8		LT	---	---	---	BUSINESS 51
	248+08.7	-	248+90.7	LT	---	---	82	BUSINESS 51
	793+84.5	-	795+72.4	LT	---	1	188	TOMMY'S TURNPIKE
		793+90.4		LT	---	---	---	TOMMY'S TURNPIKE
		794+80		LT	---	---	---	TOMMY'S TURNPIKE
	795+72.4	-	799+60.9	LT	---	---	389	TOMMY'S TURNPIKE
		795+78		LT	---	---	---	TOMMY'S TURNPIKE
		796+86.2		LT	---	---	---	TOMMY'S TURNPIKE
		797+97.2		LT	---	---	---	TOMMY'S TURNPIKE
	799+60.9	-	801+66.6	LT	---	1	206	PORTER
	801+66.6	-	801+63.8	LT	---	---	20	PORTER
		83+34.4		LT	---	---	---	CEDAR
		83+69.9		LT	---	---	---	CEDAR
		85+63.4		RT	---	---	---	CEDAR
	85+79.9	-	86+65.3	LT	---	---	86	CEDAR
	86+65.3	-	86+61.8	RT	---	---	41	CEDAR
	88+28.2	-	89+37.7	LT	---	1	110	WILLOW
	88+28.2	-	88+32.2	RT	---	---	31	WILLOW
	90+51.6	-	92+03.0	LT/RT	---	1	152	WILLOW
	92+03.0	-	92+13.1	RT	10	---	---	WILLOW
		90+85.9		LT	---	---	---	WILLOW
		95+97.1		LT	---	1	---	ELM
	95+97.1	-	96+44.0	LT	---	---	47	ELM
	95+97.1	-	95+97.3	LT	---	---	24	ELM
	85+79.9	-	10+70.2	LT/RT	---	1	185	LOCUST
	10+70.2	-	10+77.4	RT	---	---	34	LOCUST
	10+70.2	-	11+69.4	LT/RT	---	---	100	LOCUST
		11+60.4		RT	---	---	---	LOCUST
	20+57.5	-	21+57.4	LT	---	1	100	BEECH
		20+68.0		LT	---	---	---	BEECH
		21+35.0		LT	---	---	---	BEECH
		21+45.0		RT	---	---	---	BEECH
	249+17.4	-	249+01.6	RT	---	1	80	POND AREA
		---		---	---	---	---	---
CATEGORY 0020 TOTALS PROJECT 6414-00-84					**10**	**12**	**2,607**	

WATER SERVICE

CATEGORY	STATION	LOCATION	SPV.0090.06 WATER SERVICE 1-INCH LF	SPV.0090.07 WATER SERVICE 2-INCH LF	REMARKS
0200	222+50.0	LT	36	---	BUSINESS 51
	222+61.7	RT/ LT	93	---	BUSINESS 51
	223+39.6	LT	32	---	BUSINESS 51
	223+92.0	LT	27	---	BUSINESS 51
	224+21.6	RT/ LT	93	---	BUSINESS 51
	225+36.3	RT/ LT	93	---	BUSINESS 51
	225+41.1	LT	23	---	BUSINESS 51
	226+76.9	RT	93	---	BUSINESS 51
	227+44.7	LT	23	---	BUSINESS 51
	228+04.7	RT/ LT	93	---	BUSINESS 51
	229+10.6	LT	23	---	BUSINESS 51
	229+29.7	RT/ LT	93	---	BUSINESS 51
	230+40.7	LT	23	---	BUSINESS 51
	231+08.6	RT/ LT	93	---	BUSINESS 51
	231+81.6	LT	23	---	BUSINESS 51
	232+00.2	RT/ LT	93	---	BUSINESS 51
	232+58.7	RT/ LT	93	---	BUSINESS 51
	232+68.4	LT	23	---	BUSINESS 51
	233+27.5	RT/ LT	93	---	BUSINESS 51
	233+39.5	LT	23	---	BUSINESS 51
	234+83.3	RT/ LT	93	---	BUSINESS 51
	234+89.2	LT	23	---	BUSINESS 51
	236+02.7	RT/ LT	93	---	BUSINESS 51
	236+49.9	LT	23	---	BUSINESS 51
	240+87.5	LT	23	---	BUSINESS 51
	242+30.7	LT	23	---	BUSINESS 51
	244+98.2	LT	23	---	BUSINESS 51
	245+68.6	LT	23	---	BUSINESS 51
	246+87.4	LT	23	---	BUSINESS 51
	247+99.7	LT	23	---	BUSINESS 51
	248+80.4	LT	23	---	BUSINESS 51
	250+17.4	LT	25	---	BUSINESS 51
	252+24.9	LT	27	---	BUSINESS 51
	252+28.0	LT	27	---	BUSINESS 51
	793+88.9	LT	19	---	TOMMY'S TURNPIKE
	794+74.3	LT	21	---	TOMMY'S TURNPIKE
	795+80.3	LT	22	---	TOMMY'S TURNPIKE
	796+89.2	LT	28	---	TOMMY'S TURNPIKE
	798+00.1	LT	30	---	TOMMY'S TURNPIKE
	799+29.9	LT	39	---	TOMMY'S TURNPIKE
	799+31.2	LT	108	---	TOMMY'S TURNPIKE
	83+37.3	LT	10	---	CEDAR
	86+62.7	LT	14	---	CEDAR
	87+52.4	LT	12	---	CEDAR
	11+58.3	RT	47	---	LOCUST
	91+19.2	LT	25	---	WILLOW
	21+14.0	RT/ LT	47	---	BEECH
	21+37.5	LT	16	---	BEECH
	UNDISTRIBUTED	---	60	120	---
	---	---	---	---	---
CATEGORY 0020 TOTALS PROJECT 6414-00-84			**2,156**	**120**	

REMOVING SANITARY SEWER

CATEGORY	STATION	TO	STATION	LOCATION	204.9060.S.03 REMOVING SANITARY MANHOLE EACH	204.9090.S.02 REMOVING SANITARY SEWER LF	REMARKS
0010	900+92.6	-	904+11.5	RT	2	320	CTH HH
		902+33.2		RT	---	---	CTH HH
	904+11.5	-	904+15.4	RT	---	32	CTH HH
	904+11.5	-	906+21.2	RT	1	210	CTH HH
	906+21.2	-	907+28.7	RT	---	108	CTH HH
	99+33.9	-	99+93.7	LT/RT	---	60	LOCUST
	99+93.7	-	100+25.2	LT/RT	---	32	LOCUST
	100+25.2	-	100_65.4	LT/RT	---	40	LOCUST
		---		---	---	---	---
PROJECT 6414-00-85 TOTALS					**3**	**802**	

WATER SERVICE

CATEGORY	STATION	LOCATION	SPV.0090.06 WATER SERVICE 1-INCH LF	SPV.0090.07 WATER SERVICE 2-INCH LF	REMARKS
0010	253+11.1	LT	27	---	BUSINESS 51
	253+39.5	RT/ LT	89	---	BUSINESS 51
	254+37.6	LT	29	---	BUSINESS 51
	254+69.1	RT/ LT	86	---	BUSINESS 51
	255+51.8	RT/ LT	80	---	BUSINESS 51
	255+76.3	LT	40	---	BUSINESS 51
	256+39.3	RT/ LT	89	---	BUSINESS 51
	257+70.4	RT/ LT	103	---	BUSINESS 51
	900+18.6	LT/ RT	96	---	CTH HH
	901+90.9	LT/ RT	90	---	CTH HH
	902+22.5	RT	53	---	CTH HH
	902+83.5	LT/ RT	80	---	CTH HH
	903+50.0	LT/ RT	68	---	CTH HH
	903+65.0	RT	54	---	CTH HH
	904+50.0	LT/ RT	50	---	CTH HH
	904+50.6	RT	54	---	CTH HH
	907+24.6	RT	54	---	CTH HH
	UNDISTRIBUTED	---	60	120	---
	---	---	---	---	---
PROJECT 6414-00-85 TOTALS			**1,202**	**120**	

HYDRANTS

CATEGORY	STATION	LOCATION	SPV.0060.04 HYDRANT EACH	REMARKS
0020	221+74.8	LT	1	BUSINESS 51
	224+07.5	RT	1	BUSINESS 51
	227+11.3	LT	1	BUSINESS 51
	231+96.5	LT	1	BUSINESS 51
	241+39.3	RT	1	BUSINESS 51/ ROSE
	249+08.0	LT	1	BUSINESS 51
	794+46.2	LT	1	TOMMY'S TURNPIKE
	797+46.2	LT	1	TOMMY'S TURNPIKE
	84+20.7	LT	1	CEDAR STREET
	85+51.2	RT	1	CEDAR STREET
	11+00.0	LT	1	LOCUST SOUTH
	89+11.2	LT	1	WILLOW STREET
	91+77.4	LT	1	WILLOW STREET
	95+46.3	LT	1	ELM STREET
	---	---	---	---
CATEGORY 0020 TOTALS PROJECT 6414-00-84			**14**	

HYDRANTS

CATEGORY	STATION	LOCATION	SPV.0060.04 HYDRANT EACH	REMARKS
0010	254+95.3	LT	1	BUSINESS 51
	257+92.5	RT	1	BUSINESS 51
	897+29.1	RT	1	CTH HH
	900+92.2	LT	1	CTH HH
	905+87.5	LT	1	CTH HH
	---	---	---	---
PROJECT 6414-00-85 TOTALS			**5**	

SANITARY MANHOLES

CATEGORY	STATION	LOCATION	611.8120.S COVER PLATES TEMPORARY EACH	SPV.0060.35 SANITARY MANHOLE CASTING EACH	SPV.0060.36 SANITARY MANHOLE EACH	SPV.0200.01 SANITARY DROP MANHOLE VF	REMARKS
0020	220+70	LT	1	1	---	14.3	BUSINESS 51
	223+35	LT	1	1	1	---	BUSINESS 51
	243+91	LT	1	1	1	---	BUSINESS 51
	247+93	LT	1	1	1	---	BUSINESS 51
	248+91	LT	1	1	1	---	BUSINESS 51
	795+72	LT	1	1	1	---	TOMMY'S TURNPIKE
	801+67	LT	1	1	---	12.1	PORTER
	85+80	LT	1	1	---	18.2	CEDAR
	86+65	LT	1	1	1	---	CEDAR
	88+28	LT	1	1	1	---	WILLOW
	20+68	LT	1	1	1	---	BEECH
	95+97	LT	1	1	---	18.1	ELM
	10+70	RT	1	1	---	9.8	LOCUST
CATEGORY 0020 TOTALS PROJECT 6414-00-84			**13**	**13**	**8**	**72.5**	

SANITARY MANHOLES

CATEGORY	STATION	LOCATION	611.8120.S COVER PLATES TEMPORARY EACH	SPV.0060.34 RECONSTRUCTING SANITARY MANHOLE EACH	SPV.0060.33 RECONDITIONING SANITARY MANHOLE EACH	SPV.0060.35 SANITARY MANHOLE CASTING EACH	SPV.0060.36 SANITARY MANHOLE EACH	SPV.0200.01 SANITARY DROP MANHOLE VF	REMARKS
0010	900+57	LT	1	1	---	1	---	---	CTH HH
	902+15	RT	1	---	---	1	1	---	CTH HH
	903+26	LT	1	1	---	1	---	---	CTH HH
	904+12	RT	1	---	---	1	1	---	CTH HH
	906+21	RT	1	---	---	1	---	15.6	CTH HH
	100+25.2	RT	1	---	1	1	---	---	LOCUST
	249+02	RT	1	---	---	1	1	---	POND AREA
PROJECT 6414-00-85 TOTALS			**7**	**2**	**1**	**7**	**3**	**15.6**	

WATER MAIN

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.02 WATERMAIN 6-INCH LF	SPV.0090.03 WATERMAIN 8-INCH LF	SPV.0090.05 WATERMAIN 12-INCH LF	SPV.0060.09 WATERMAIN COUPLING 12-INCH EACH	SPV.0060.05 WATERMAIN GATE VALVE AND BOX 6-INCH EACH	SPV.0060.06 WATERMAIN GATE VALVE AND BOX 8-INCH EACH	SPV.0060.08 WATERMAIN GATE VALVE AND BOX 12-INCH EACH	SPV.0060.10 WATERMAIN BEND 11-1/4 DEGREE 8-INCH EACH	SPV.0060.11 WATERMAIN BEND 22-1/2 DEGREE 8-INCH EACH	SPV.0060.12 WATERMAIN BEND 45 DEGREE 8-INCH EACH	SPV.0060.14 WATERMAIN BEND 11-1/4 DEGREE 12-INCH EACH	SPV.0060.16 WATERMAIN BEND 45 DEGREE 12-INCH EACH	SPV.0060.17 WATERMAIN BEND 90 DEGREE 8-INCH EACH	REMARKS
0020		221+74.8		LT	35	---	---	---	1	---	---	---	---	---	---	---	---	BUSINESS 51
	221+29.3	-	237+71.4	LT	---	1,642	---	---	---	---	---	---	---	1	---	---	---	BUSINESS 51
		221+34.3		LT	---	---	---	---	---	1	---	---	---	---	---	---	---	BUSINESS 51
		224+07.5		RT	91	---	---	---	1	---	---	---	---	---	---	---	---	BUSINESS 51
		225+48.1		LT	---	---	---	---	---	1	---	---	---	---	---	---	---	BUSINESS 51
		227+11.3		LT	21	---	---	---	1	---	---	---	---	---	---	---	---	BUSINESS 51
		230+48.4		LT	---	---	---	---	---	1	---	---	---	---	---	---	---	BUSINESS 51
		231+96.5		LT	21	---	---	---	1	---	---	---	---	---	---	---	---	BUSINESS 51
		235+48.7		LT	---	---	---	---	---	1	---	---	---	---	---	---	---	BUSINESS 51
		237+66.4		LT	---	---	---	---	---	1	---	---	---	---	---	---	---	BUSINESS 51
	237+71.4	-	241+36.1	LT	---	---	365	---	---	---	---	---	---	---	---	---	---	BUSINESS 51
		237+76.4		LT	---	---	---	---	---	---	1	---	---	---	---	---	---	BUSINESS 51
		241+31.1		LT	---	---	---	---	---	---	1	---	---	---	---	---	---	BUSINESS 51
	241+36.1	-	244+00.3	LT	---	---	265	---	---	---	---	---	---	---	---	---	---	BUSINESS 51
		241+41.1		LT	---	---	---	---	---	---	1	---	---	---	---	---	---	BUSINESS 51
		243+95.3		LT	---	---	---	---	---	---	1	---	---	---	---	---	---	BUSINESS 51
	244+00.3	-	244+32.3	LT	---	---	32	---	---	---	---	---	---	---	---	---	---	BUSINESS 51
	244+32.3	-	247+55.8	LT	---	---	324	---	---	---	---	---	---	---	---	---	---	BUSINESS 51
		244+37.3		LT	---	---	---	---	---	---	1	---	---	---	---	---	---	BUSINESS 51
		247+50.8		LT	---	---	---	---	---	---	1	---	---	---	---	---	---	BUSINESS 51
	247+55.8	-	251+14.0	LT	---	---	359	---	---	---	---	---	---	---	---	---	---	BUSINESS 51
		247+60.8		LT	---	---	---	---	---	---	1	---	---	---	---	---	---	BUSINESS 51
		249+08.0		LT	21	---	---	---	1	---	---	---	---	---	---	---	---	BUSINESS 51
	250+19.5	-	250+34.1	LT	---	---	---	---	---	---	---	---	---	---	---	4	---	BUSINESS 51
	250+81.3	-	250+95.4	LT	---	---	---	---	---	---	---	---	---	---	---	4	---	BUSINESS 51
		251+09.0		LT	---	---	---	---	---	---	1	---	---	---	---	---	---	BUSINESS 51
	251+14.0	-	252+50	LT	---	---	136	---	---	---	---	---	---	---	---	---	---	BUSINESS 51
		251+19.0		LT	---	---	---	---	---	---	1	---	---	---	---	---	---	BUSINESS 51
	793+78.9	-	798+81.8	LT	---	503	---	---	---	---	---	---	---	1	---	---	---	TOMMY'S TURNPIKE
		793+83.9		LT	---	---	---	---	---	1	---	---	---	---	---	---	---	TOMMY'S TURNPIKE
		794+46.2		LT	17	---	---	---	1	---	---	---	---	---	---	---	---	TOMMY'S TURNPIKE
		797+46.2		LT	26	---	---	---	1	---	---	---	---	---	---	---	---	TOMMY'S TURNPIKE
		798+72.9		LT	---	---	---	---	---	1	---	---	---	---	---	---	---	TOMMY'S TURNPIKE
	798+81.8	-	799+40.1	LT	---	90	---	---	---	---	---	---	---	---	---	---	---	TOMMY'S TURNPIKE
	797+27.8	-	797+39.5	LT	---	19	---	---	---	1	---	---	---	---	---	---	1	TOMMY'S TURNPIKE
	83+20.2	-	84+46.4	LT	---	---	127	1	---	---	---	---	---	---	---	---	---	CEDAR
		83+25.2		LT	---	---	---	---	---	---	1	---	---	---	---	---	---	CEDAR
		83+76.3		LT	---	---	---	---	---	---	---	---	---	---	1	---	---	CEDAR
		84+20.7		LT	9	---	---	---	1	---	---	---	---	---	---	---	---	CEDAR
		84+41.5		LT	---	---	---	---	---	---	1	---	---	---	---	---	---	CEDAR
	84+46.4	-	88+14.0	LT	---	370	---	---	---	---	---	---	---	---	---	---	---	CEDAR
		84+51.3		LT	---	---	---	---	---	1	---	---	---	---	---	---	---	CEDAR
		84+66.3		LT	---	---	---	---	---	---	---	1	---	---	---	---	---	CEDAR
		85+51.2		RT	67	---	---	---	1	---	---	---	---	---	---	---	---	CEDAR
	87+92.7	-	88+09.0	LT	---	---	---	---	---	1	---	---	2	---	---	---	---	CEDAR
	85+67.2	-	11+69.2	LT	---	264	---	---	---	1	---	---	---	---	---	---	---	LOCUST
		85+68.5		LT	---	---	---	---	---	1	---	---	---	---	---	---	---	LOCUST
		11+00.0			12	---	---	---	1	---	---	---	---	---	---	---	---	LOCUST
	241+36.1	-	241+29.3	LT/RT	---	95	---	---	---	---	---	---	---	---	---	---	---	ROSE
		241+36.1		LT/ RT	---	---	---	---	---	1	---	1	---	---	---	---	---	ROSE

WATER MAIN

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.02 WATERMAIN 6-INCH LF	SPV.0090.03 WATERMAIN 8-INCH LF	SPV.0090.05 WATERMAIN 12-INCH LF	SPV.0060.09 WATERMAIN COUPLING 12-INCH EACH	SPV.0060.05 WATERMAIN GATE VALVE AND BOX 6-INCH EACH	SPV.0060.06 WATERMAIN GATE VALVE AND BOX 8-INCH EACH	SPV.0060.08 WATERMAIN GATE VALVE AND BOX 12-INCH EACH	SPV.0060.10 WATERMAIN BEND 11-1/4 DEGREE 8-INCH EACH	SPV.0060.11 WATERMAIN BEND 22-1/2 DEGREE 8-INCH EACH	SPV.0060.12 WATERMAIN BEND 45 DEGREE 8-INCH EACH	SPV.0060.14 WATERMAIN BEND 11-1/4 DEGREE 12-INCH EACH	SPV.0060.16 WATERMAIN BEND 45 DEGREE 12-INCH EACH	SPV.0060.17 WATERMAIN BEND 90 DEGREE 12-INCH EACH	REMARKS
0020		241+39.3		RT	9	---	---	---	1	---	---	---	---	---	---	---	---	ROSE
		241+29.9		RT	---	---	---	---	---	1	---	---	---	---	---	---	---	ROSE
	88+23.1	-	89+50.8	LT	---	136	---	---	---	---	---	---	---	2	---	---	---	WILLOW
		88+28.1		LT	---	---	---	---	---	1	---	---	---	---	---	---	---	WILLOW
		89+11.2		LT	14	---	---	---	1	---	---	---	---	---	---	---	---	WILLOW
		89+28.0		LT	---	---	---	---	---	---	---	1	---	---	---	---	---	WILLOW
		89+45.8		LT	---	---	---	---	---	1	---	---	---	---	---	---	---	WILLOW
	89+46.6	-	91+92.5	LT	---	240	---	---	---	---	---	---	---	---	---	---	---	WILLOW
		89+51.5		LT	---	---	---		---	1	---	---	---	---	---	---	---	WILLOW
	91+74.2	-	91+88.1	LT	---	---	---	---	---	1	---	1	---	---	---	---	---	WILLOW
		91+77.4		LT	7	---	---	---	1	---	---	---	---	---	---	---	---	WILLOW
	247+55.8	-	21+57.4	LT	---	258	---	---	---	1	---	---	---	4	---	---	---	BEECH
		247+56.5		LT	---	---	---	---	---	1	---	---	---	---	---	---	---	BEECH
		21+02.6		LT	---	---	---	---	---	---	---	1	---	---	---	---	---	BEECH
	251+14.0	-	96+43.5	LT	---	---	192	---	---	---	2	---	---	---	2	---	---	ELM
	95+08.3	-	95+22.3	LT	---	---	---	---	---	---	---	---	---	---	---	4	---	ELM
		95+46.3		LT	8	---	---	---	1	---	---	---	---	---	---	---	---	ELM
	96+34.0	-	96+38.5	LT	---	---	---	---	---	---	---	---	---	---	---	2	---	ELM
		---		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
CATEGORY 0020 TOTALS PROJECT 6414-00-84					**358**	**3,617**	**1,800**	**1**	**14**	**19**	**13**	**4**	**2**	**8**	**3**	**14**	**1**	

WATER MAIN

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.02 WATERMAIN 6-INCH LF	SPV.0090.03 WATERMAIN 8-INCH LF	SPV.0090.04 WATERMAIN 10-INCH LF	SPV.0090.05 WATERMAIN 12-INCH LF	SPV.0060.05 WATERMAIN GATE VALVE AND BOX 6-INCH EACH	SPV.0060.06 WATERMAIN GATE VALVE AND BOX 8-INCH EACH	SPV.0060.07 WATERMAIN GATE VALVE AND BOX 10-INCH EACH	SPV.0060.08 WATERMAIN GATE VALVE AND BOX 12-INCH EACH	SPV.0060.11 WATERMAIN BEND 22-1/2 DEGREE 8-INCH EACH	SPV.0060.12 WATERMAIN BEND 45 DEGREE 8-INCH EACH	SPV.0060.13 WATERMAIN BEND 45 DEGREE 10-INCH EACH	SPV.0060.14 WATERMAIN BEND 11-1/4 DEGREE 12-INCH EACH	SPV.0060.15 WATERMAIN BEND 22-1/2 DEGREE 12-INCH EACH	SPV.0060.16 WATERMAIN BEND 45 DEGREE 12-INCH EACH	REMARKS
0010	252+50	-	260+78.1	LT	---	---	---	820	---	---	---	---	---	---	---	---	---	---	BUSINESS 51
		254+95.3		LT	18	---	---	---	1	---	---	---	---	---	---	---	---	---	BUSINESS 51
		255+59.0		LT	---	---	---	---	---	---	---	---	---	---	---	1	---	---	BUSINESS 51
		255+81.4		LT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	BUSINESS 51
		257+92.5		RT	104	---	---	---	1	---	---	---	---	---	---	---	---	---	BUSINESS 51
		259+95.7		LT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	BUSINESS 51
	260+29.2	-	260+71.1	LT	---	---	---	---	---	---	---	---	---	---	---	4	1	---	BUSINESS 51
	896+64.1	-	899+71.7	RT	37	---	---	329	1	---	---	---	---	---	---	1	---	1	CTH HH
		896+67.3		RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	CTH HH
		899+25.0		RT	---	---	---	---	---	---	---	1	---	---	---	---	---	---	CTH HH
	899+71.7	-	907+29.1	RT/LT	---	---	757	---	---	---	---	---	---	---	4	---	---	---	CTH HH
		900+50.0		RT	---	---	---	---	---	---	1	---	---	---	---	---	---	---	CTH HH
		900+92.2		LT	88	---	---	---	1	---	---	---	---	---	---	---	---	---	CTH HH
		905+37.5		LT	---	---	---	---	---	---	1	---	---	---	---	---	---	---	CTH HH
		905+87.8		LT	32	---	---	---	1	---	---	---	---	---	---	---	---	---	CTH HH
		907+29.1		LT	---	---	---	---	---	---	1	---	---	---	---	---	---	---	CTH HH
	99+37.6	-	100+15.9	LT	---	79	---	---	---	1	---	---	2	2	---	---	---	---	LOCUST
	100+15.9	-	100+65.9	LT	---	50	---	---	---	1	---	---	2	2	---	---	---	---	LOCUST
		---		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PROJECT 6414-00-85 TOTALS					**279**	**129**	**757**	**1,149**	**5**	**2**	**3**	**4**	**4**	**4**	**4**	**6**	**1**	**1**	

WATER MAIN

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0060.18 8 X 6-INCH EACH	SPV.0060.19 8-INCH EACH	SPV.0060.21 WATERMAIN TEE 12 X 6-INCH EACH	SPV.0060.22 12 X 8-INCH EACH	SPV.0060.23 12-INCH EACH	SPV.0060.25 WATERMAIN CROSS 12-INCH EACH	SPV.0060.26 WATERMAIN REDUCER 6 X 8 INCH EACH	SPV.0060.28 WATERMAIN REDUCER 8 X 12 INCH EACH	REMARKS
0020		221+74.8		LT	---	---	1	---	---	---	---	---	BUSINESS 51
		237+71.4		LT	---	---	---	---	---	1	---	2	BUSINESS 51
		224+07.5		RT	---	---	1	---	---	---	---	---	BUSINESS 51
		227+11.3		LT	---	---	1	---	---	---	---	---	BUSINESS 51
		231+96.5		LT	---	---	1	---	---	---	---	---	BUSINESS 51
	237+71.4	-	241+36.1	LT	---	---	---	1	---	---	---	---	BUSINESS 51
	241+36.1	-	244+00.3	LT	---	---	---	1	---	---	---	---	BUSINESS 51
	244+00.3	-	244+32.3	LT	---	---	---	1	---	---	---	---	BUSINESS 51
	244+32.3	-	247+55.8	LT	---	---	---	1	---	---	---	---	BUSINESS 51
	247+55.8	-	251+14.0	LT	---	---	---	---	1	---	---	---	BUSINESS 51
		248+60.5		LT	---	---	1	---	---	---	---	---	BUSINESS 51
	793+78.9	-	798+81.8	LT	---	---	---	---	---	---	1	---	TOMMY'S TURNPIKE
		794+46.2		LT	1	---	---	---	---	---	---	---	TOMMY'S TURNPIKE
		797+46.2		LT	1	---	---	---	---	---	---	---	TOMMY'S TURNPIKE
	797+27.8	-	797+39.5	LT	---	1	---	---	---	---	---	---	TOMMY'S TURNPIKE
		84+20.7		LT	---	---	1	---	---	---	---	---	CEDAR
	84+46.4	-	88+14.0	LT	---	---	---	---	---	---	1	---	CEDAR
		85+51.2		RT	1	---	---	---	---	---	---	---	CEDAR
		85+67.2		LT	---	1	---	---	---	---	---	---	CEDAR
	85+67.2	-	11+69.2	LT	---	---	---	---	---	---	1	---	LOCUST
		11+00.0			1	---	---	---	---	---	---	---	LOCUST
	241+36.1	-	241+29.3	LT/RT	---	---	---	---	---	---	1	---	ROSE
		241+39.3		RT	1	---	---	---	---	---	---	---	ROSE
	88+23.1	-	89+50.8	LT	---	---	---	---	---	---	1	---	WILLOW
		89+11.2		LT	1	---	---	---	---	---	---	---	WILLOW
	89+46.6	-	91+92.5	LT	---	---	---	---	---	---	1	---	WILLOW
		91+77.4		LT	1	---	---	---	---	---	---	---	WILLOW
	247+55.8	-	21+57.4	LT	---	---	---	---	---	---	1	---	BEECH
		95+46.3		LT	---	---	1	---	---	---	---	---	ELM
		---		---	---	---	---	---	---	---	---	---	---
CATEGORY 0020 TOTALS PROJECT 6414-00-84					**7**	**2**	**7**	**4**	**1**	**1**	**7**	**2**	

WATER MAIN

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0060.20 WATERMAIN TEE 10 X 6-INCH EACH	SPV.0060.21 12 X 6-INCH EACH	SPV.0060.23 12 -INCH EACH	SPV.0060.24 WATERMAIN CROSS 8 X 10 INCH EACH	SPV.0060.26 WATERMAIN REDUCER 6 X 8 INCH EACH	SPV.0060.29 WATERMAIN REDUCER 10 X 12 INCH EACH	REMARKS
0010		254+95.3		LT	---	1	---	---	---	---	BUSINESS 51
		259+81.5		LT	---	1	---	---	---	---	BUSINESS 51
	896+64.1	-	899+71.7	RT	---	1	1	---	---	1	CTH HH
		900+92.2		LT	1	---	---	---	---	---	CTH HH
		905+87.5		LT	1	---	---	---	---	---	CTH HH
		905+99.7		LT	---	---	---	1	---	---	CTH HH
	99+37.6	-	100+15.9	LT	---	---	---	---	1	---	LOCUST
	100+15.9	-	100+62.3	LT	---	---	---	---	1	---	LOCUST
		---		---	---	---	---	---	---	---	---
PROJECT 6414-00-85 TOTALS					**2**	**3**	**1**	**1**	**2**	**1**	

SANITARY SEWER

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.08 SANITARY SEWER 8-INCH LF	SPV.0090.10 SANITARY SEWER 12-INCH LF	SPV.0090.11 SANITARY LATERAL 4-INCH LF	SPV.0060.32 TRACER WIRE ACCESS BOX EACH	SPV.0090.12 SANITARY SEWER TELEVISING LF	SPV.0090.13 CLASS B BEDDING LF	REMARKS
0020	220+69.8	-	223+32.5	LT	266	---	---	---	266	---	BUSINESS 51
	223+32.5	-	223+39.6	LT	24	---	---	---	24	---	BUSINESS 51
	243+91.2	-	247+92.8	LT	402	---	---	---	402	---	BUSINESS 51
		245+65.7		LT	---	---	10	1	---	---	BUSINESS 51
		245+81.9		LT	---	---	10	1	---	---	BUSINESS 51
		247+00.9		LT	---	---	11	1	---	---	BUSINESS 51
		247+04.9		LT	---	---	11	1	---	---	BUSINESS 51
	247+92.8	-	248+90.7	LT	98	---	---	---	98	---	BUSINESS 51
	793+84.5	-	795+72.4	LT	---	188	---	---	188	---	TOMMY'S TURNPIKE
		793+90.4		LT	---	---	12	1	---	---	TOMMY'S TURNPIKE
		794+80		LT	---	---	12	1	---	---	TOMMY'S TURNPIKE
		795+78		LT	---	---	13	1	---	---	TOMMY'S TURNPIKE
	795+72.4	-	799+60.9	LT	---	389	---	---	389	---	TOMMY'S TURNPIKE
		796+85.4		LT	---	---	20	1	---	---	TOMMY'S TURNPIKE
		797+97.4		LT	---	---	21	1	---	---	TOMMY'S TURNPIKE
	799+60.9	-	801+66.6	LT	206	---	---	---	206	---	TOMMY'S TURNPIKE
	801+66.6	-	801+63.8	LT	20	---	---	---	20	---	TOMMY'S TURNPIKE
		83+34.4		LT	---	---	25	1	---	---	CEDAR
		83+69.9		LT	---	---	31	1	---	---	CEDAR
		85+63.4		RT	---	---	70	1	---	---	CEDAR
	85+79.9	-	86+65.3	LT	86	---	---	---	86	---	CEDAR
	86+65.3	-	86+61.8	RT	41	---	---	---	41	---	CEDAR
	85+79.9	-	10+70.2	LT/RT	185	---	---	---	185	---	LOCUST
	10+70.2	-	10+77.4	RT	34	---	---	---	34	---	LOCUST
	10+70.2	-	11+69.4	LT/RT	100	---	---	---	100	---	LOCUST
		11+60.0		RT	---	---	34	1	---	---	LOCUST
	88+28.2	-	89+37.7	LT	110	---	---	---	110	---	WILLOW
	88+28.2	-	88+32.2	RT	31	---	---	---	31	---	WILLOW
	20+68.0	-	21+57.4	LT	90	---	---	---	90	---	BEECH
		20+68.0		LT	---	---	9	1	---	---	BEECH
		21+35.0		LT	---	---	8	1	---	---	BEECH
		21+45.0		RT	---	---	52	1	---	---	BEECH
	95+97.1	-	95+97.3	LT	24	---	---	---	24	---	ELM
	95+97.1	-	96+44.0	LT	---	47	---	---	47	---	ELM
		UNDISTRIBUTED			---	---	---	---	---	100	---
		---		---	---	---	---	---	---	---	---
CATEGORY 0020 TOTALS PROJECT 6414-00-84					**1,717**	**624**	**349**	**16**	**2,341**	**100**	

SANITARY SEWER

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.08 SANITARY SEWER 8-INCH LF	SPV.0090.09 SANITARY SEWER 10-INCH LF	SPV.0090.11 SANITARY LATERAL 4-INCH LF	SPV.0060.32 TRACER WIRE ACCESS BOX EACH	SPV.0090.12 SANITARY SEWER TELEVISING LF	SPV.0090.13 CLASS B BEDDING LF	REMARKS
0010	902+15.3	-	904+11.5	RT	197	---	---	---	197	---	CTH HH
		902+33.2		RT	---	---	33	1	---	---	CTH HH
		903+47.0		LT	---	---	56	1	---	---	CTH HH
	904+11.5	-	904+15.4	RT	32	---	---	---	32	---	CTH HH
		904+47.0		LT	---	---	39	1	---	---	CTH HH
	904+11.5	-	906+21.2	RT	210	---	---	---	210	---	CTH HH
	906+21.2	-	907+28.7	RT	108	---	---	---	108	---	CTH HH
	99+33.9	-	99+93.7	RT	---	60	---	---	60	---	LOCUST
	99+93.7	-	100+25.2	RT/LT	32	---	---	---	32	---	LOCUST
	100+25.2	-	100+65.4	RT/LT	40	---	---	---	40	---	LOCUST
		UNDISTRIBUTED			---	---	---	---	---	50	---
		---			---	---	---	---	---	---	---
PROJECT 6414-00-85 TOTALS					**619**	**60**	**128**	**3**	**679**	**50**	

VILLAGE INTERCONNECT

CATEGORY	STATION	LOCATION	SPV.0060.37 FLOW METER MAGNETIC EACH	SPV.0060.38 WATER MANHOLE EACH	SPV.0060.39 WATER MANHOLE CASTING EACH
0020	797+28	LT	0.5	0.5	0.5
CATEGORY 0020 TOTALS PROJECT 6414-00-84			**0.5**	**0.5**	**0.5**

TEMPORARY WATER

CATEGORY	STATION	LOCATION	SPV.0105.01 TEMPORARY WATER SERVICE LS
0020	PROJECT	LT/RT	1
CATEGORY 0020 TOTALS PROJECT 6414-00-84			**1**

TEMPORARY WATER

CATEGORY	STATION	LOCATION	SPV.0105.01 TEMPORARY WATER SERVICE LS
0010	PROJECT	LT/RT	1
PROJECT 6414-00-85 TOTALS			**1**

FILE NAME: L:\Work\Projects\46174\Task_18_Business51-Utilities\000_CAD\20-SHEETS\030201_mq.dgn
BATCH PRINT SHEET 1 OF 1
PRINTER DRIVER: S:_acm-CADstds_Libraries\WisDOT\MicroStation\Resources\MS_Printing\Printer_Drivers\ET_PDF_11 x 17.plt
PEN TABLE: L:\Work\Projects\46174\Task_18_Business51-Utilities\000_CAD\20-SHEETS\MS_Printing\Pen_Tables\ET_WisDOT.tbl
PLOT DATE: 1/30/2018
PLOT TIME: 8:40:20 AM
PLOT SCALE: 1:2
WISDOT/CADDS SHEET 43

INSULATION BOARD

612.0902.S
INSULATION BOARD
POLYSTYRENE 2-INCH

CATEGORY	STATION	-	STATION	LOCATION	SY	REMARKS
0020	221+51			LT	3.5	BUSINESS 51
	222+50			LT	14.9	BUSINESS 51
	222+62			LT/RT	39.8	BUSINESS 51
	223+25			LT	3.5	BUSINESS 51
	223+40			LT	12.7	BUSINESS 51
	223+95			LT	10.6	BUSINESS 51
	224+08			RT	3.5	BUSINESS 51
	224+22			LT/RT	39.8	BUSINESS 51
	224+54			LT	3.5	BUSINESS 51
	225+36			LT/RT	39.8	BUSINESS 51
	225+41			LT	8.7	BUSINESS 51
	226+30			LT	3.5	BUSINESS 51
	226+77			LT/RT	39.8	BUSINESS 51
	227+45			LT	8.7	BUSINESS 51
	228+05			LT/RT	39.8	BUSINESS 51
	229+11			LT	8.7	BUSINESS 51
	229+30			LT/RT	39.8	BUSINESS 51
	230+10			LT	3.5	BUSINESS 51
	230+41			LT	8.7	BUSINESS 51
	231+09			LT/RT	39.8	BUSINESS 51
	231+82			LT	8.7	BUSINESS 51
	231+97			LT	3.5	BUSINESS 51
	232+00			LT/RT	39.8	BUSINESS 51
	232+50			LT	3.5	BUSINESS 51
	232+59			LT/RT	39.8	BUSINESS 51

INSULATION BOARD

612.0902.S
INSULATION BOARD
POLYSTYRENE 2-INCH

CATEGORY	STATION	-	STATION	LOCATION	SY	REMARKS
0020	232+68			LT	8.7	BUSINESS 51
	233+28			LT/RT	39.8	BUSINESS 51
	233+40			LT	8.7	BUSINESS 51
	233+85			LT	3.5	BUSINESS 51
	234+83			LT/RT	39.8	BUSINESS 51
	234+89			LT	8.7	BUSINESS 51
	235+30			LT	3.5	BUSINESS 51
	236+03			LT/RT	39.8	BUSINESS 51
	236+50			LT	8.7	BUSINESS 51
	236+90			LT	3.5	BUSINESS 51
	237+60			LT	3.5	BUSINESS 51
	238+76			LT	3.5	BUSINESS 51
	240+25			LT	3.5	BUSINESS 51
	240+88			LT	8.7	BUSINESS 51
	242+31			LT	8.7	BUSINESS 51
	243+43			LT	3.5	BUSINESS 51
	245+00			LT	3.5	BUSINESS 51
	245+00			LT	8.7	BUSINESS 51
	245+70			LT	8.7	BUSINESS 51
	246+24			LT	3.5	BUSINESS 51
	246+88			LT	8.7	BUSINESS 51
	247+77			LT	3.5	BUSINESS 51
	248+00			LT	8.7	BUSINESS 51
	248+80			LT	8.7	BUSINESS 51
	250+17			LT	9.6	BUSINESS 51
	250+25			LT	7.1	BUSINESS 51
	793+89			LT	7.1	TOMMY'S TURNPIKE
	794+74			LT	7.1	TOMMY'S TURNPIKE
	795+80			LT	8.2	TOMMY'S TURNPIKE
	796+50			LT	3.5	TOMMY'S TURNPIKE
	796+89			LT	11.0	TOMMY'S TURNPIKE
	797+92			LT	3.5	TOMMY'S TURNPIKE
	798+00			LT	11.7	TOMMY'S TURNPIKE
	798+94			LT	3.5	TOMMY'S TURNPIKE
	799+30			LT	16.3	TOMMY'S TURNPIKE
	799+27			LT	3.5	TOMMY'S TURNPIKE
	799+31			LT	49.3	TOMMY'S TURNPIKE
	83+37			LT	3.8	CEDAR
	85+14			LT	3.5	CEDAR
	85+54			LT	3.5	CEDAR
	86+63			LT	5.1	CEDAR
	87+52			LT	4.0	CEDAR
	10+21			RT	3.5	LOCUST
	11+58			LT/RT	18.8	LOCUST
	241+36			RT	3.5	ROSE
	89+21			LT	3.5	WILLOW
	90+24			LT	3.5	WILLOW
	91+19			LT	10.0	WILLOW
	19+68			RT	3.5	BEECH
	20+66			LT	3.5	BEECH
	21+14			LT/RT	19.9	BEECH
	21+38			LT	3.5	BEECH
	21+38			LT	5.7	BEECH
	95+15			LT	3.5	ELM
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CATEGORY 0020 TOTALS PROJECT 6414-00-84					**953.0**	

INSULATION BOARD

612.0902.S
INSULATION BOARD
POLYSTYRENE 2-INCH

CATEGORY	STATION	-	STATION	LOCATION	SY	REMARKS
0010	252+25			LT	10.2	BUSINESS 51
	252+28			LT	10.2	BUSINESS 51
	252+50			LT	3.5	BUSINESS 51
	253+11			LT	9.8	BUSINESS 51
	253+17			LT	3.5	BUSINESS 51
	253+40			LT/RT	37.9	BUSINESS 51
	254+38			LT	10.9	BUSINESS 51
	254+69			LT/RT	36.8	BUSINESS 51
	255+52			LT/RT	34.1	BUSINESS 51
	255+76			LT	14.7	BUSINESS 51
	256+03			LT	3.5	BUSINESS 51
	256+39			LT/RT	37.7	BUSINESS 51
	256+65			LT	3.5	BUSINESS 51
	257+70			LT/RT	44.3	BUSINESS 51
	258+54			LT	3.5	BUSINESS 51
	260+30 - 260+65			LT	16.0	BUSINESS 51
	100+07			LT	3.5	LOCUST
	100+15			LT	7.6	LOCUST
	898+37			RT	3.5	CTH HH
	900+19			LT/RT	38.5	CTH HH
	901+06			RT	3.5	CTH HH
	901+91			LT/RT	38.3	CTH HH
	902+01			RT	3.5	CTH HH
	902+22			RT	14.6	CTH HH
	902+83			LT/RT	34.0	CTH HH
	902+95			RT	3.5	CTH HH
	903+50			LT/RT	28.5	CTH HH
	903+65			LT/RT	18.4	CTH HH
	904+35			LT	3.5	CTH HH
	904+50			LT	20.8	CTH HH
	904+51			LT/RT	21.1	CTH HH
	906+01			LT/RT	12.4	CTH HH
	907+24			LT/RT	20.2	CTH HH
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PROJECT 6414-00-85 TOTALS					**556**	

Notes

Wisconsin Department of Transportation

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