



GENERAL NOTES

THE LOCATIONS 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. COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

CURB AND GUTTER GRADES ARE GIVEN TO THE FLANGE OF CURB AND GUTTER. CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE OF CURB AND GUTTER.

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

CONSTRUCT PAVEMENT CONSISTENT WITH THE PLAN TYPICAL SECTIONS. LOCATE LONGITUDINAL JOINTS IN ASPHALT PAVEMENT OUTSIDE OF DRIVING, TURNING, BIKE OR PARKING LANES UNLESS DIRECTED OTHERWISE BY THE ENGINEER. OBTAIN THE ENGINEERS APPROVAL FOR THE LOCATIONS OF JOINTS IN ASPHALT PAVEMENT PRIOR TO PAVING OPERATIONS.

SAWCUT EXISTING ASPHALT AND CONCRETE PAVEMENT AT THE MATCHLINE AS INDICATED ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

CONSTRUCT INSIDE EDGE OF SIDEWALK ½ INCH HIGHER THAN TOP OF CURB WHEN THEY ARE ADJACENT TO EACH OTHER.

PRIOR TO THE PLACEMENT OF STEEL PLATE BEAM GUARD OR MGS GUARDRAIL, THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED UNLESS SHOWN OTHERWISE.

EXISTING DRIVEWAYS AND FIELD ENTRANCES SHALL BE RESTORED IN KIND AS DIRECTED BY THE ENGINEER IN THE FIELD AND AT THE LOCATION DETERMINED BY THE ENGINEER.

RESHAPE, RESTORE AND FINISH ALL PREVIOUSLY GRASSED AREAS DISTURBED BY OPERATIONS OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AT NO EXPENSE TO THE DEPARTMENT.

TRAFFIC AND EROSION CONTROL ITEMS AS SHOWN IN THE PLAN ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

DO NOT REMOVE ANY TREES OR SHRUBS WITHOUT THE APPROVAL OF THE ENGINEER.

THE CONTRACTOR SHALL PLACE RING(S) AT REFERENCE AND/OR SECTION CORNER MONUMENTS DURING HMA PAVING OPERATIONS TO PERPETUATE THE MONUMENTS. THE RING(S) WILL BE REUSED FROM EXISTING MONUMENTS OR SUPPLIED BY THE CONTRACTOR. RING INSTALLATION SHALL BE INCIDENTAL TO HMA PAVING.

CONTACT THE PROJECT ENGINEER, THE COUNTY SURVEYOR, AND SEWRPC AT LEAST TWO WEEKS BEFORE WORKING NEAR ANY SECTION CORNER MONUMENT.

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

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

EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER REQUIRED.

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AND BUSINESSES AT ALL TIMES.

4" HMA PAVING: 2 ¼" LOWER LAYER 3 MT 58-28 S  
1 ¾" UPPER LAYER 4 MT 58-28 S

PROJECT MANAGER

WISCONSIN DEPARTMENT OF TRANSPORTATION  
GARY METZER  
141 NW BARSTOW STREET  
WAUKESHA, WI 53188  
PHONE: (262) 548-5685  
EMAIL: GARY.METZER@DOT.WI.GOV

WI DNR LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
KRISTINA BETZOLD  
2300 N DR MARTIN LUTHER KING JR DR  
MILWAUKEE, WI 53212  
PHONE: (414) 507-4946  
EMAIL: KRISTINA.BETZOLD@WISCONSIN.GOV

COMMUNICATIONS

AT&T LOCAL NETWORK  
DALE DEFEVER  
39869 LINN ST  
CANTON, MI 48147  
PHONE: (586) 242-2671  
EMAIL: DD2579@ATT.COM

COMMUNICATIONS

WINDSTREAM KDL, LLC  
LORI KETTER  
314 N DANZ AVE  
GREEN BAY, WI 54302-3526  
PHONE: (414) 274-9215  
EMAIL: LORI.KETTER@WINDSTREAM.COM

COMMUNICATIONS

PAETEC COMMUNICATIONS, LLC  
LORI KETTER  
314 N DANZ AVE  
GREEN BAY, WI 54302-3526  
PHONE: (414) 274-9215  
EMAIL: LORI.KETTER@WINDSTREAM.COM

COMMUNICATIONS

SPECTRUM  
DAVE YOPPS  
1320 N DR MARTIN LUTHER KING JR DR  
MILWAUKEE, WI 53212  
PHONE: (414) 277-4281  
EMAIL: DAVE.YOPPS@CHARTER.COM

WISCONSIN SIGNAL

WISCONSIN DEPARTMENT OF TRANSPORTATION  
DERRIN WOLFORD  
141 NW BARSTOW STREET  
WAUKESHA, WI 53188  
PHONE: (262) 521-4409  
EMAIL: DERRIN.WOLFORD@DOT.WI.GOV

COMMUNICATIONS

AT&T WISCONSIN  
MIKE VANBOVEN  
411 7TH STREET  
RACINE, WI 53403  
PHONE: (262) 676-3958  
EMAIL: MV3658@ATT.COM

COMMUNICATIONS

MIDWEST FIBER NETWORKS LLC  
RICHARD TRGOVEC  
6070 NORTH FLINT RD  
GLENDALE, WI 53209  
PHONE: (414) 459-3554  
EMAIL: RTRGOVEC@MIDWESTFIBERNETWORKS.COM

SEWER

RACINE WASTEWATER UTILITY  
MIKE GITTER  
800 CENTER ST.  
RACINE, WI 53403  
PHONE: (262) 636-9430  
EMAIL: MIKE.GITTER@CITYOFRACINE.ORG

SEWER

VILLAGE OF MOUNT PLEASANT  
TONY BEYER  
8811 CAMPUS DR  
MOUNT PLEASANT, WI 53406  
PHONE: (262) 664-7849  
EMAIL: TBAYER@MTPLEASANTWI.GOV

ELECTRICITY

WE ENERGIES  
WE ENERGIES UTILITY COORDINATOR  
500 S 116TH STREET  
WEST ALLIS, WI 53214  
PHONE: (414) 221-2738  
EMAIL: WE-UTILITY-RELOCATIONS@WE-ENERGIES.COM

ELECTRICITY-TRANSMISSION

ATC MANAGEMENT, INC.  
TRANS 220 MAILBOX  
801 O'KEEFE ROAD  
DE PERE, WI 54115  
PHONE: (920) 338-6582  
EMAIL: DL-ATCDOTNOTIFICATIONS@ATCLLC.COM

SEWER

MOUNT PLEASANT STORM WATER DIST. 1  
TONY BEYER  
8811 CAMPUS DR  
MOUNT PLEASANT, WI 53406  
PHONE: (262) 664-7849  
EMAIL: TBAYER@MTPLEASANTWI.GOV

WATER

RACINE WATER WORKS COMMISSION  
MIKE GITTER  
800 CENTER ST.  
RACINE, WI 53403  
PHONE: (262) 636-9430  
EMAIL: MIKE.GITTER@CITYOFRACINE.ORG

STREET LIGHTING

WISCONSIN DEPARTMENT OF TRANSPORTATION  
ERIC PEREA  
141 NW BARSTOW STREET  
WAUKESHA, WI 53188  
PHONE: (262) 574-5422  
EMAIL: ERIC.PEREA@DOT.WI.GOV

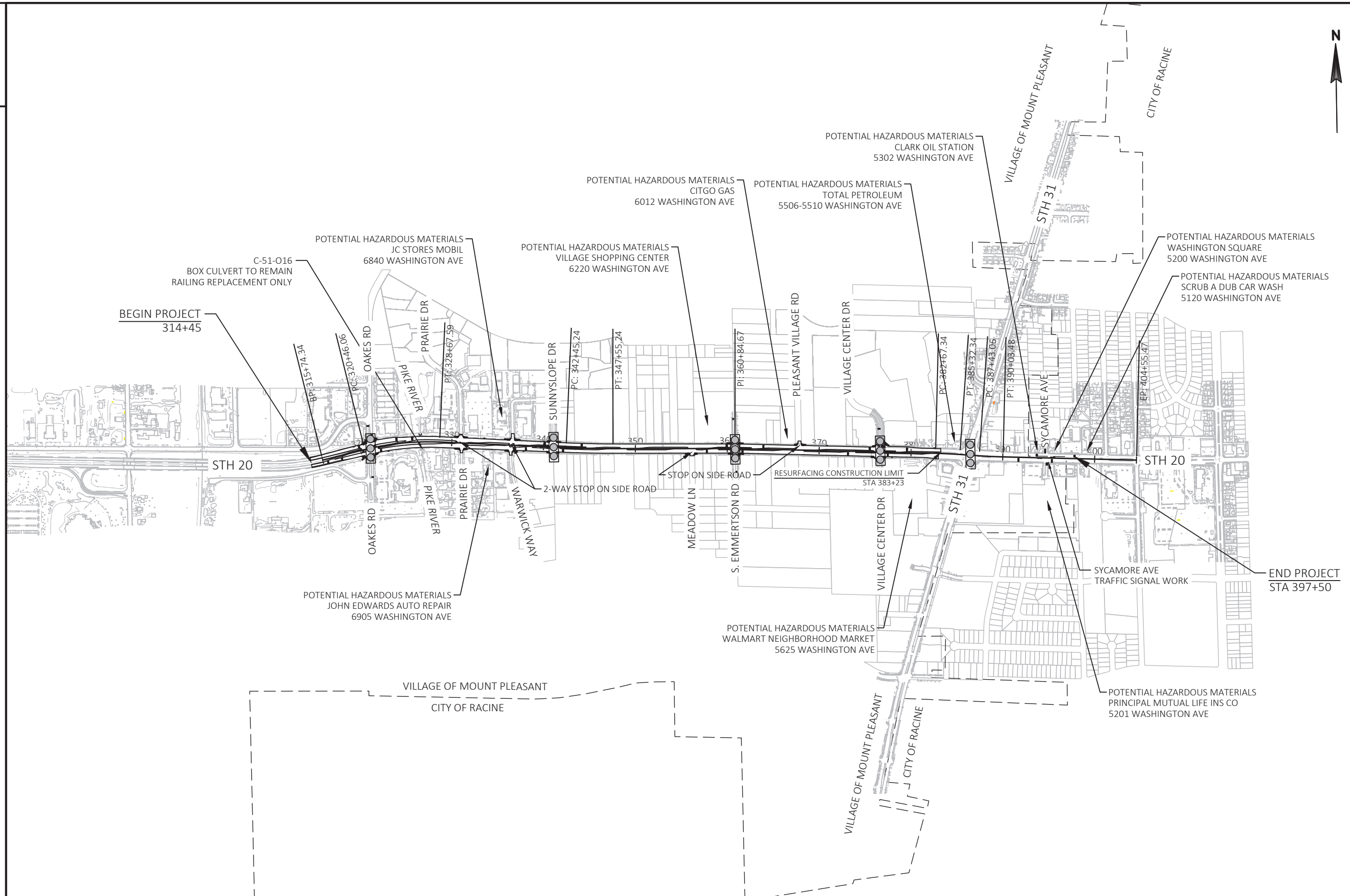
GAS/PETROLEUM

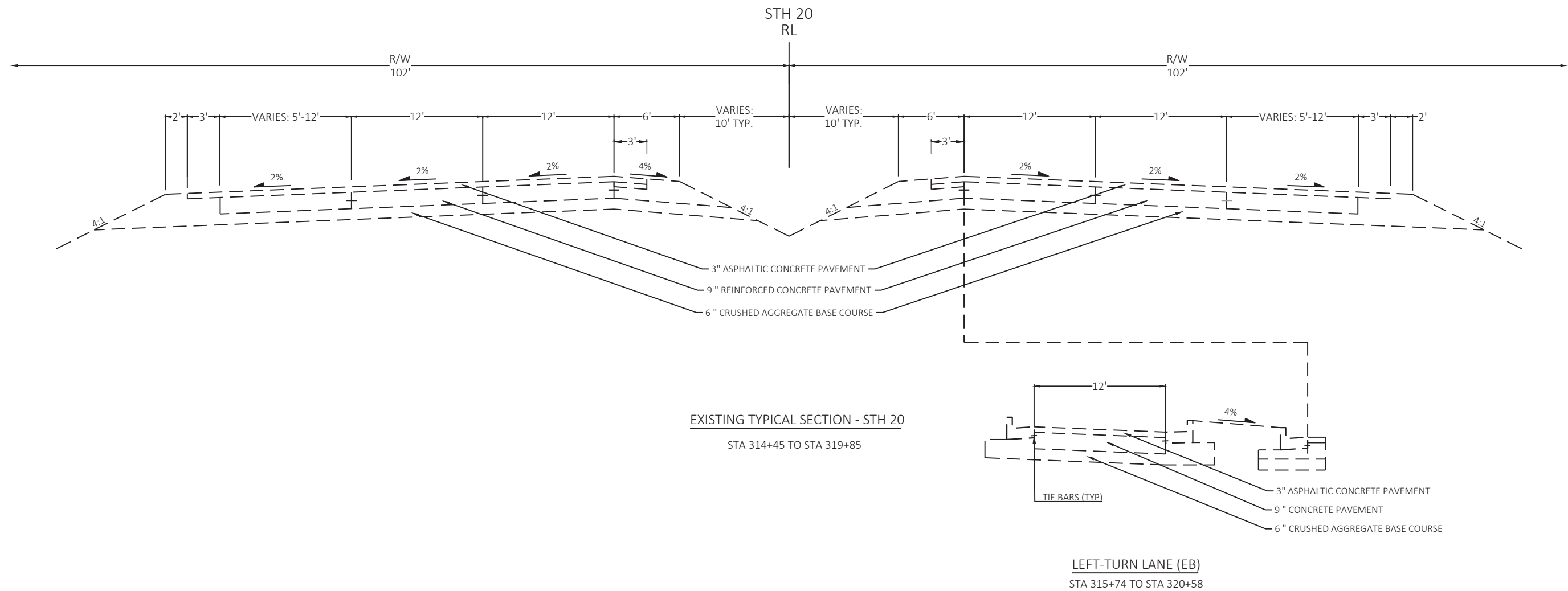
WE ENERGIES  
WE ENERGIES UTILITY COORDINATOR  
500 S 116TH STREET  
WEST ALLIS, WI 53214  
PHONE: (414) 221-2738  
EMAIL: WE-UTILITY-RELOCATIONS@WE-ENERGIES.COM

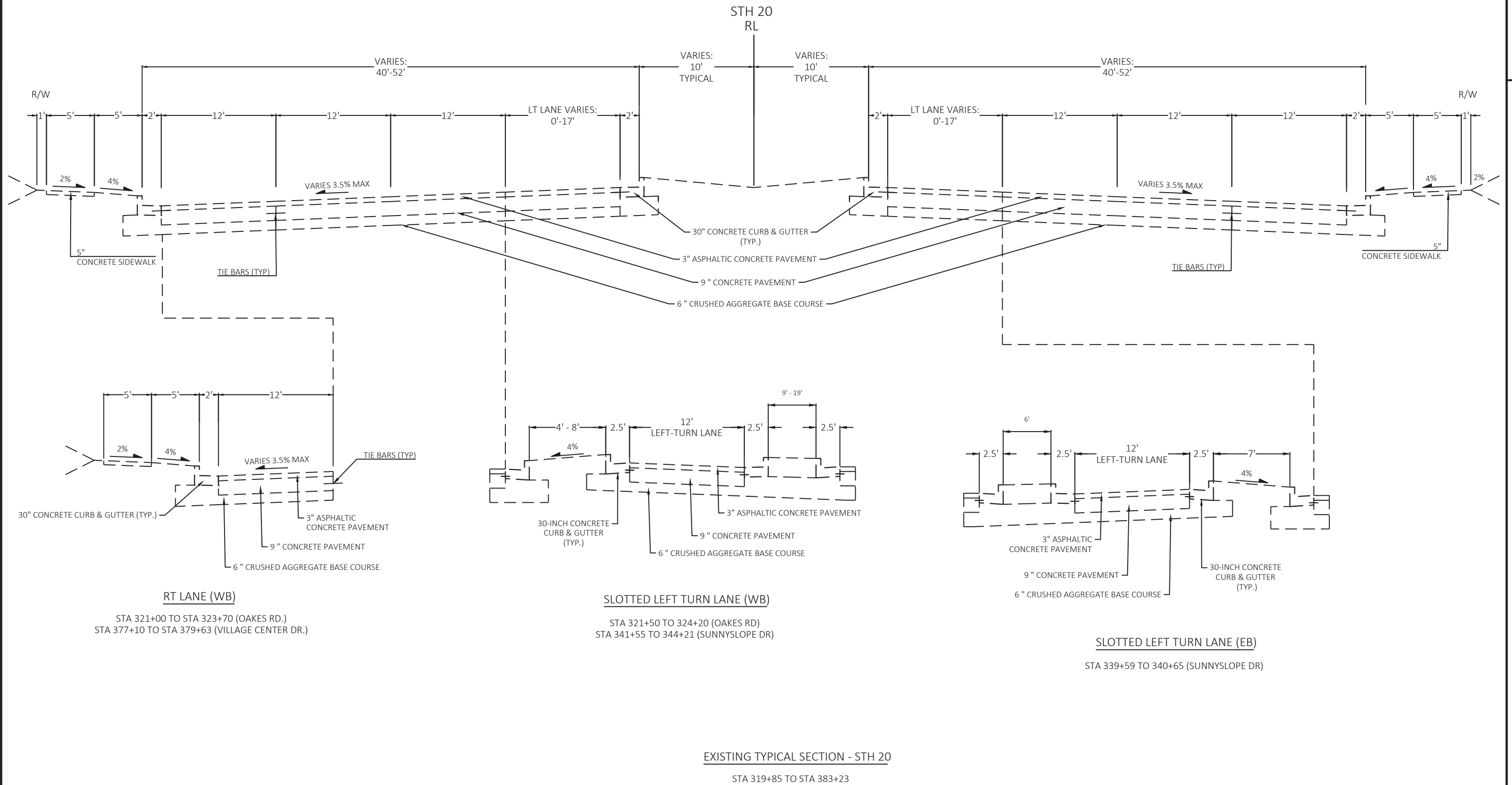


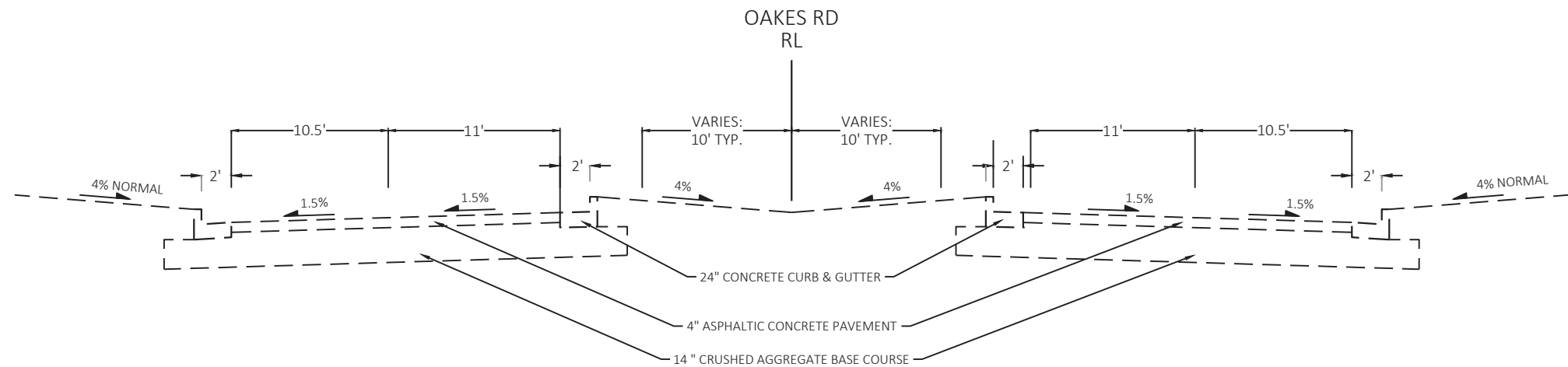
Dial 811 or (800)242-8511

www.DiggersHotline.com



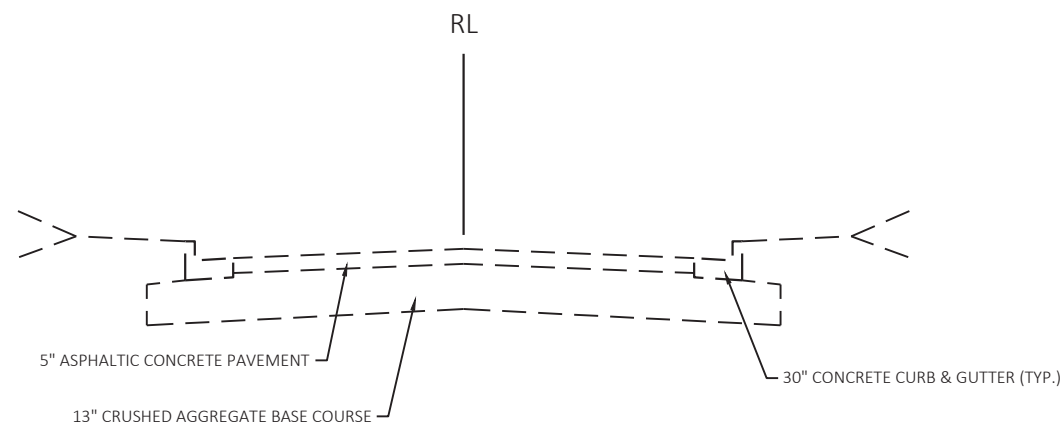






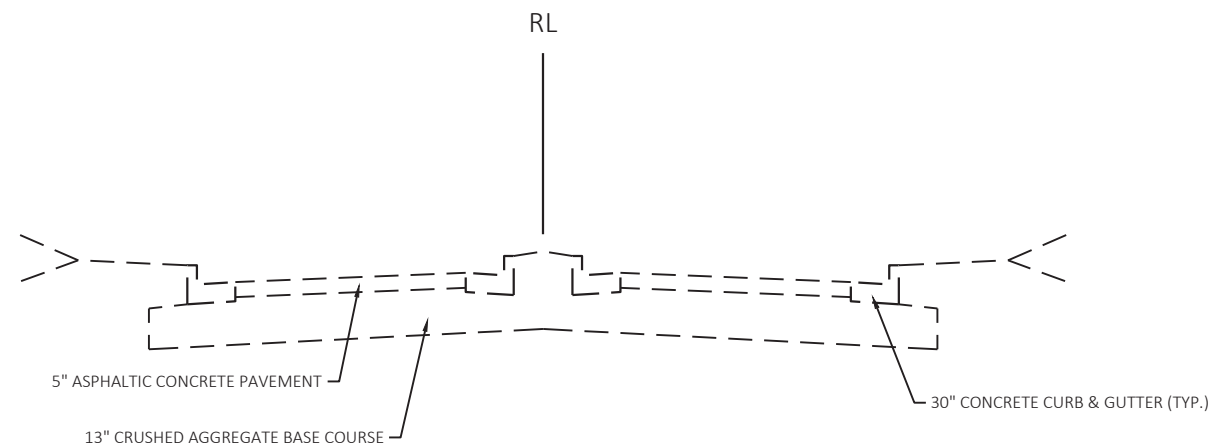
EXISTING TYPICAL SECTION - OAKES RD.

STA 4+75 TO STA 7+76



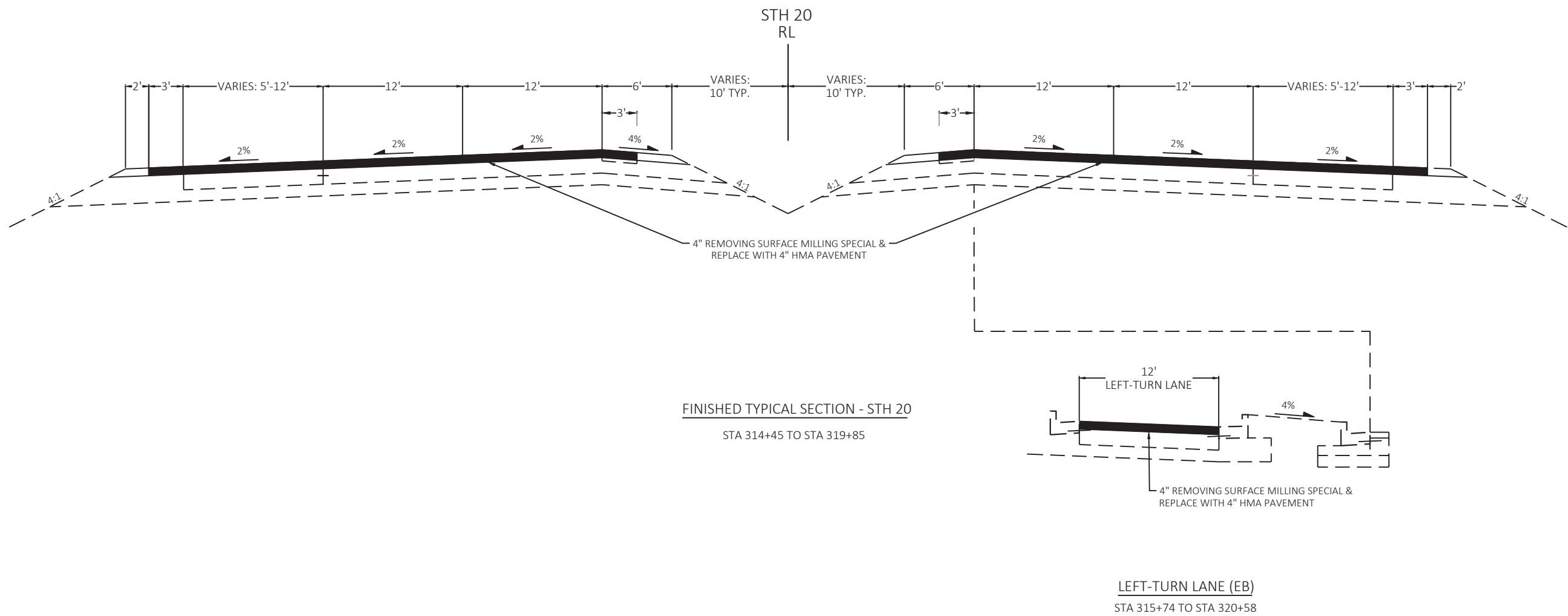
EXISTING TYPICAL SECTION

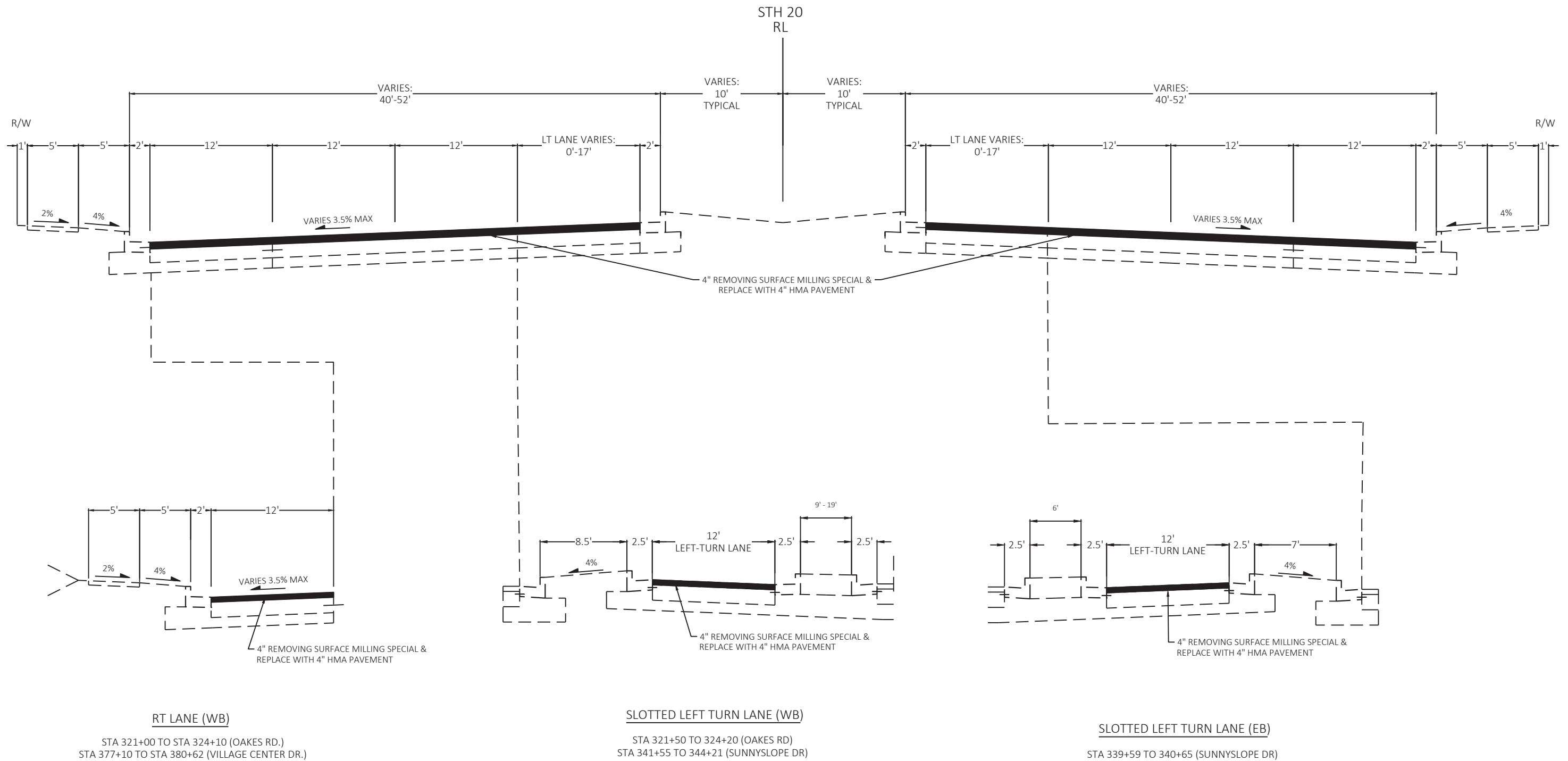
PRAIRIE DR  
WARWICK WAY  
SUNNYSLOPE DR  
MEADOW LANE AVE  
EMMERTSEN RD  
HUNTER DR  
VILLAGE CENTER DR S

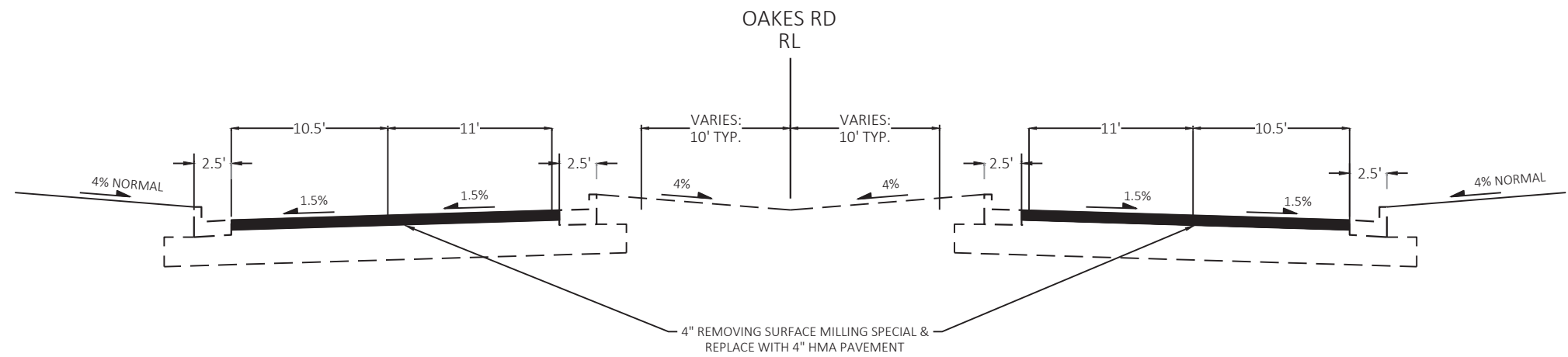


EXISTING TYPICAL SECTION

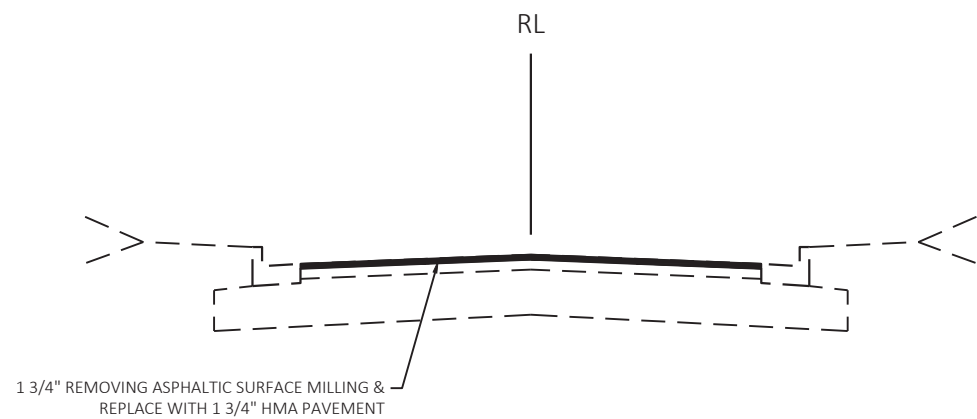
VILLAGE CENTER DR N



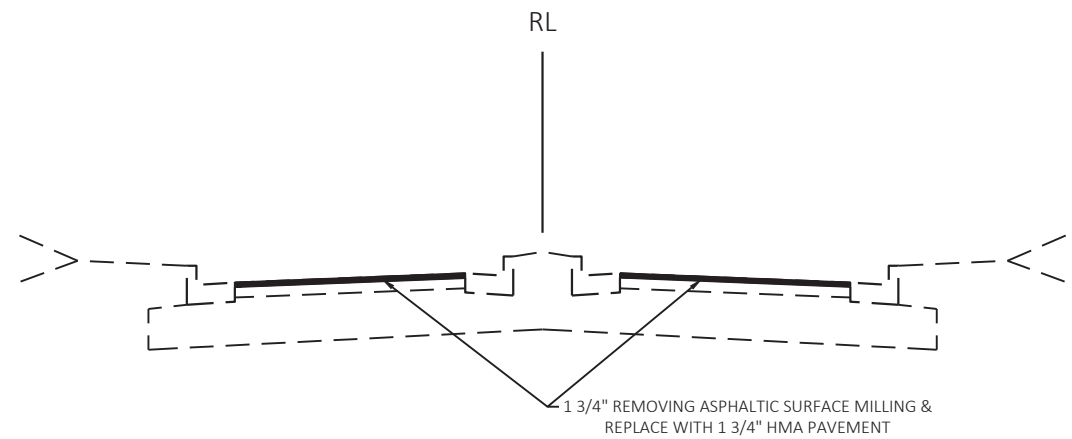




FINISHED TYPICAL SECTION - OAKES RD.  
STA 4+75 TO STA 7+76

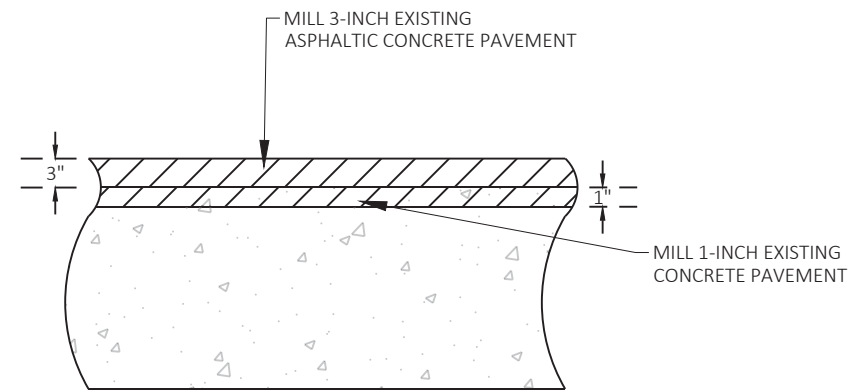


FINISHED TYPICAL SECTION  
PRAIRIE DR  
WARWICK WAY  
SUNNYSLOPE DR  
MEADOW LANE AVE  
EMMERTSEN RD  
HUNTER DR  
VILLAGE CENTER DR S

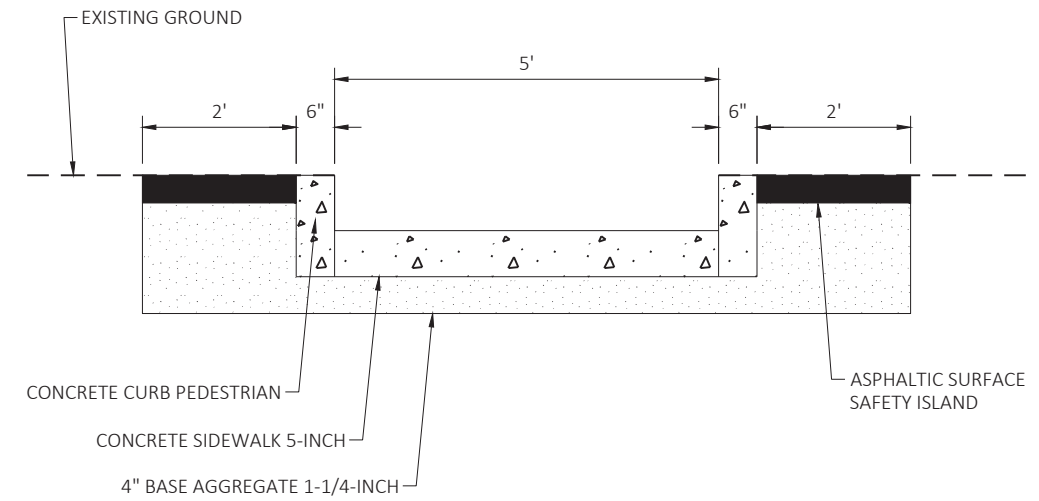


FINISHED TYPICAL SECTION  
VILLAGE CENTER DR N

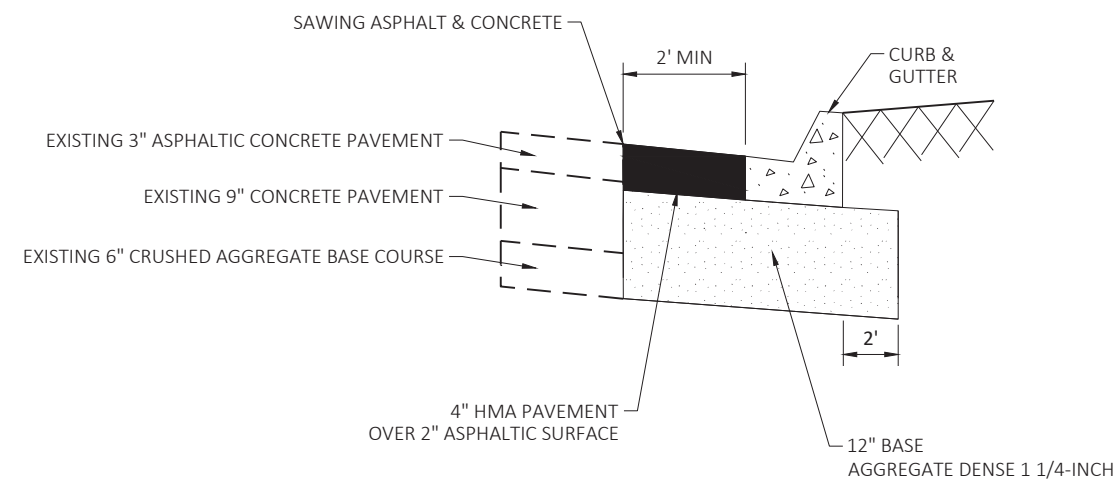
2



## REMOVING SURFACE MILLING SPECIAL DETAIL



TYPICAL SECTION  
SAFETY ISLAND SIDEWALK



### CURB & GUTTER DETAIL

NOTE: REMOVAL OF PAVEMENT STRUCTURE WILL BE PAID FOR AS EXCAVATION COMMON AND REMOVING CONCRETE PAVEMENT

PROJECT NO:	2250-15-70
-------------	------------

HWY: STH 20

COUNTY: RACINE

## CONSTRUCTION DETAILS

SHEET

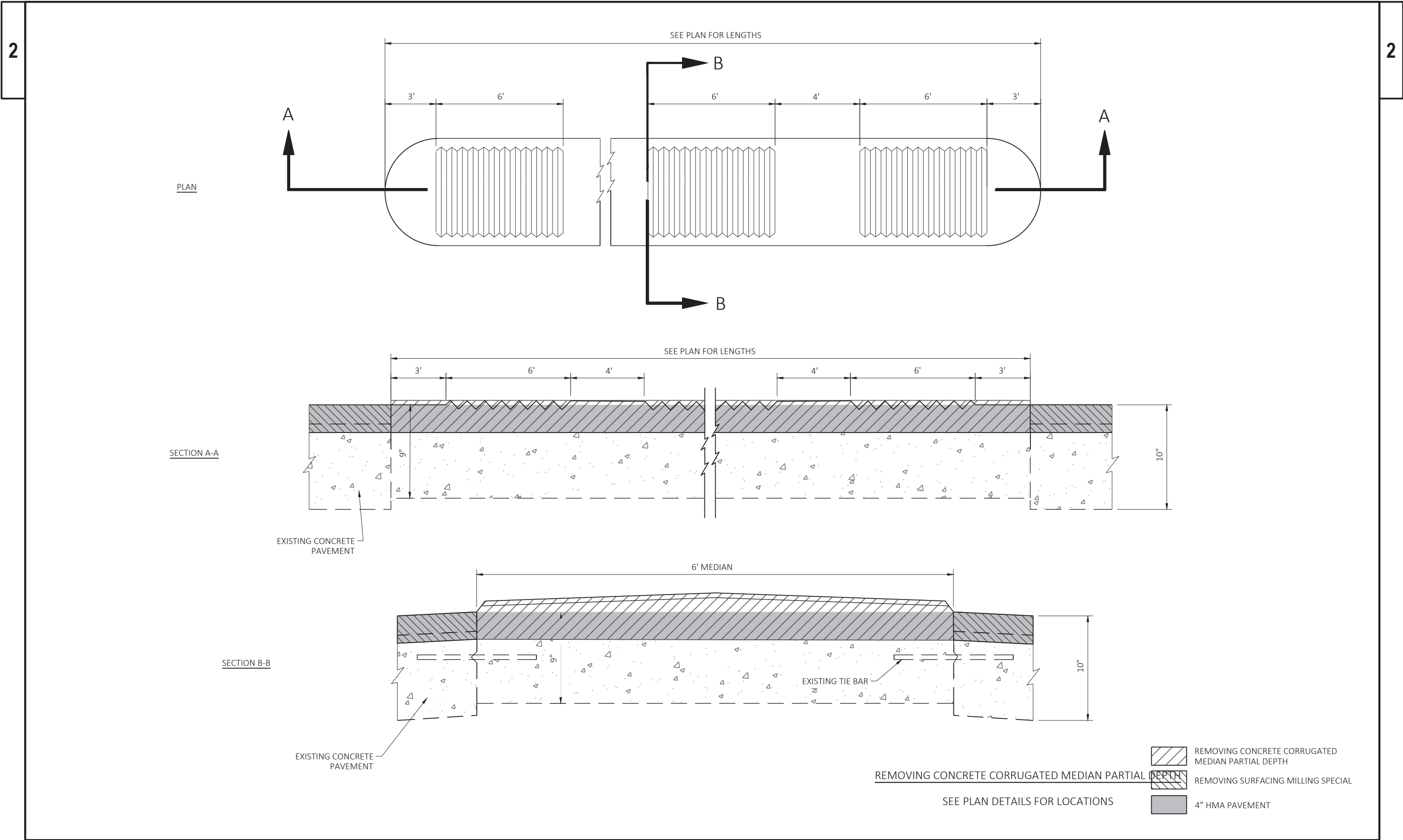
2

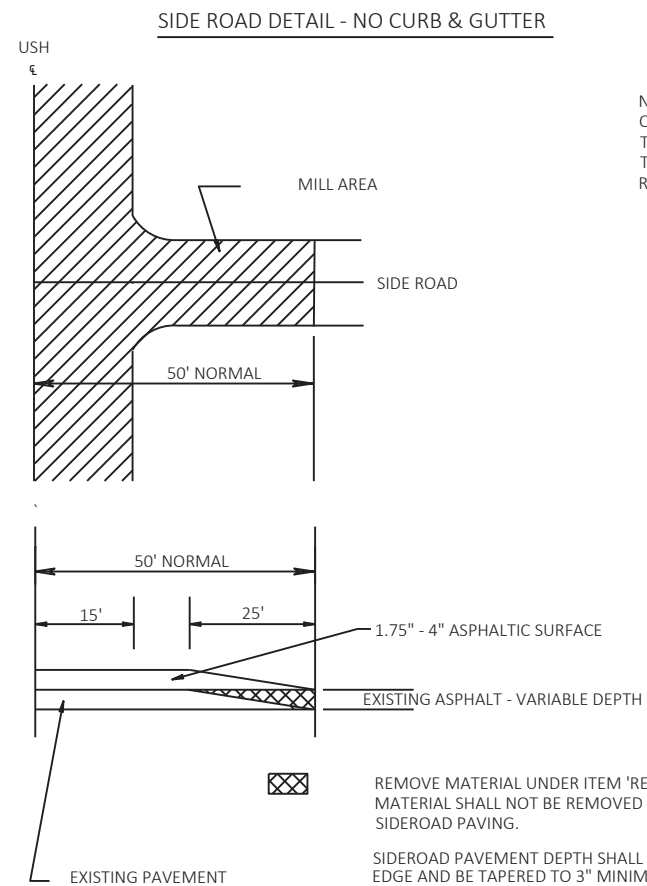
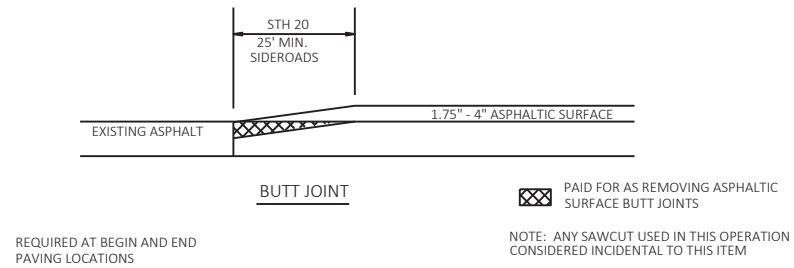


- 1) MAINTAIN ACCESS TO BUS STOPS.
- 2) GAP SIDEWALK WORK TO MAINTAIN PEDESTRIAN ACCESS WHERE APPLICABLE.
- 3) ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.



\*  $\pm 0.5\%$

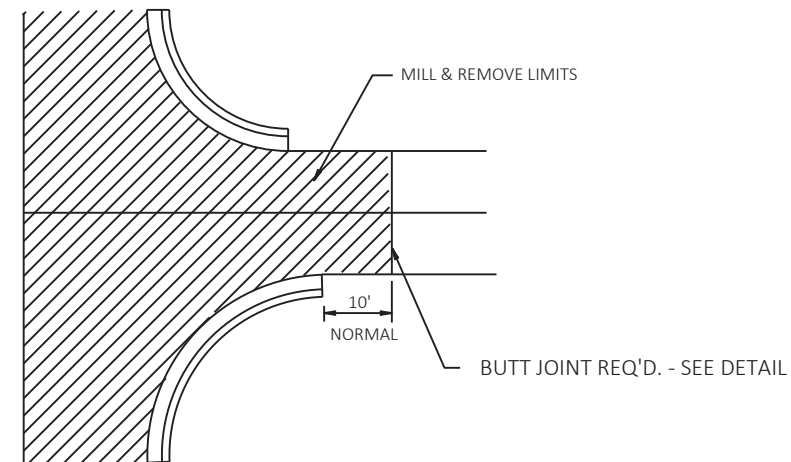




NOTE: IF THE EXISTING SIDEROAD CONSISTS OF A BASE COURSE SURFACE, THE NEW ASPHALT SHALL BE PLACED TO THE ENDS OF THE EXISTING SIDEROAD RADIUS'.

NOT TO SCALE

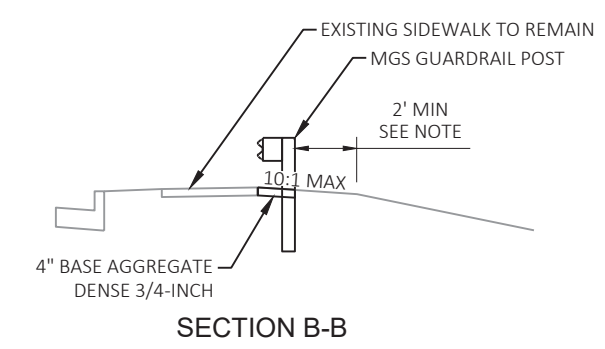
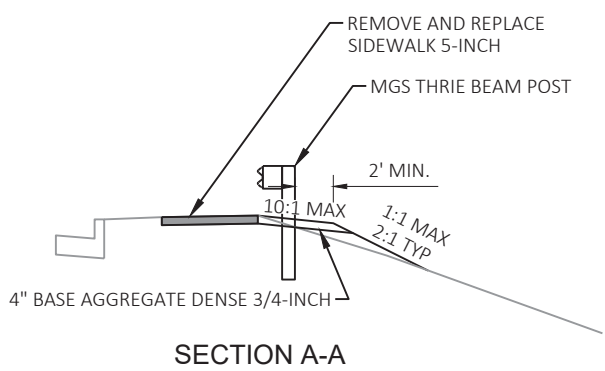
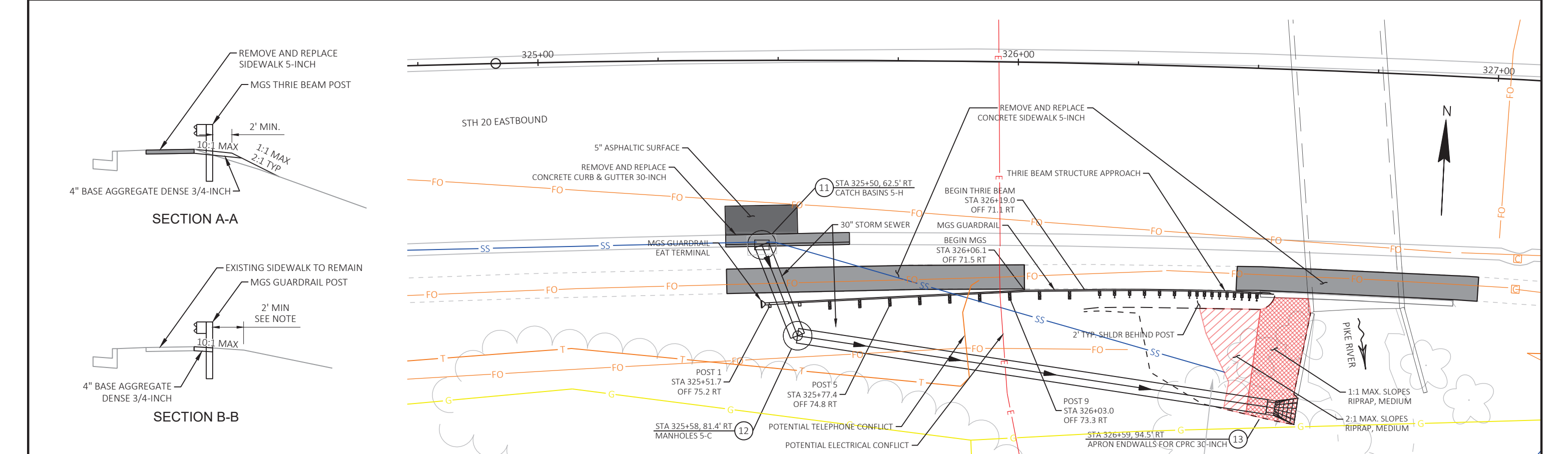
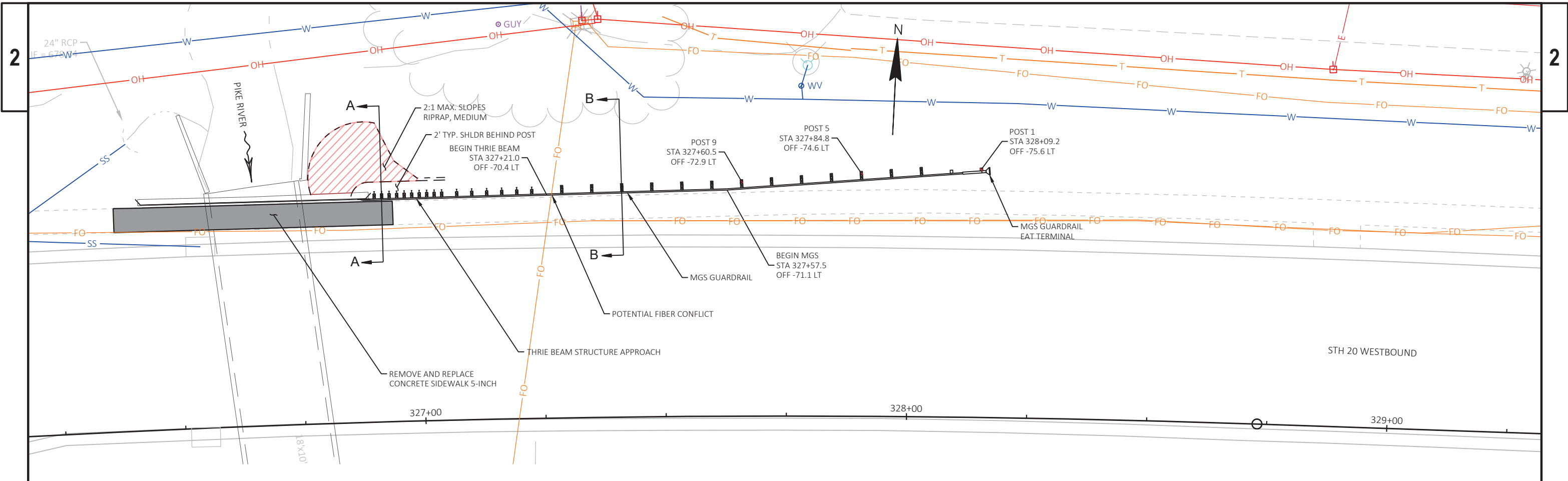
**SIDEROAD DETAIL - CURB & GUTTER TO REMAIN**  
NOT TO SCALE

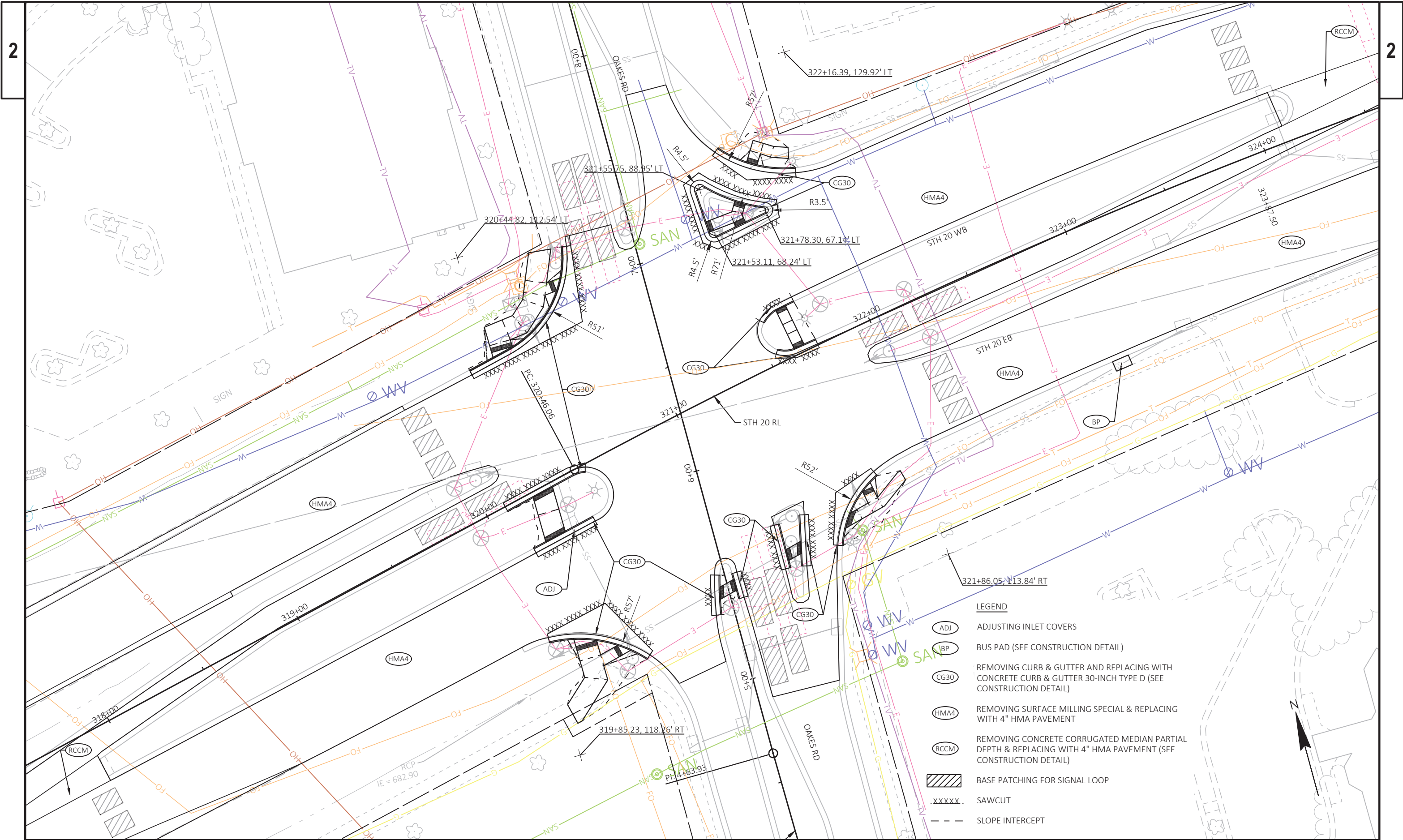


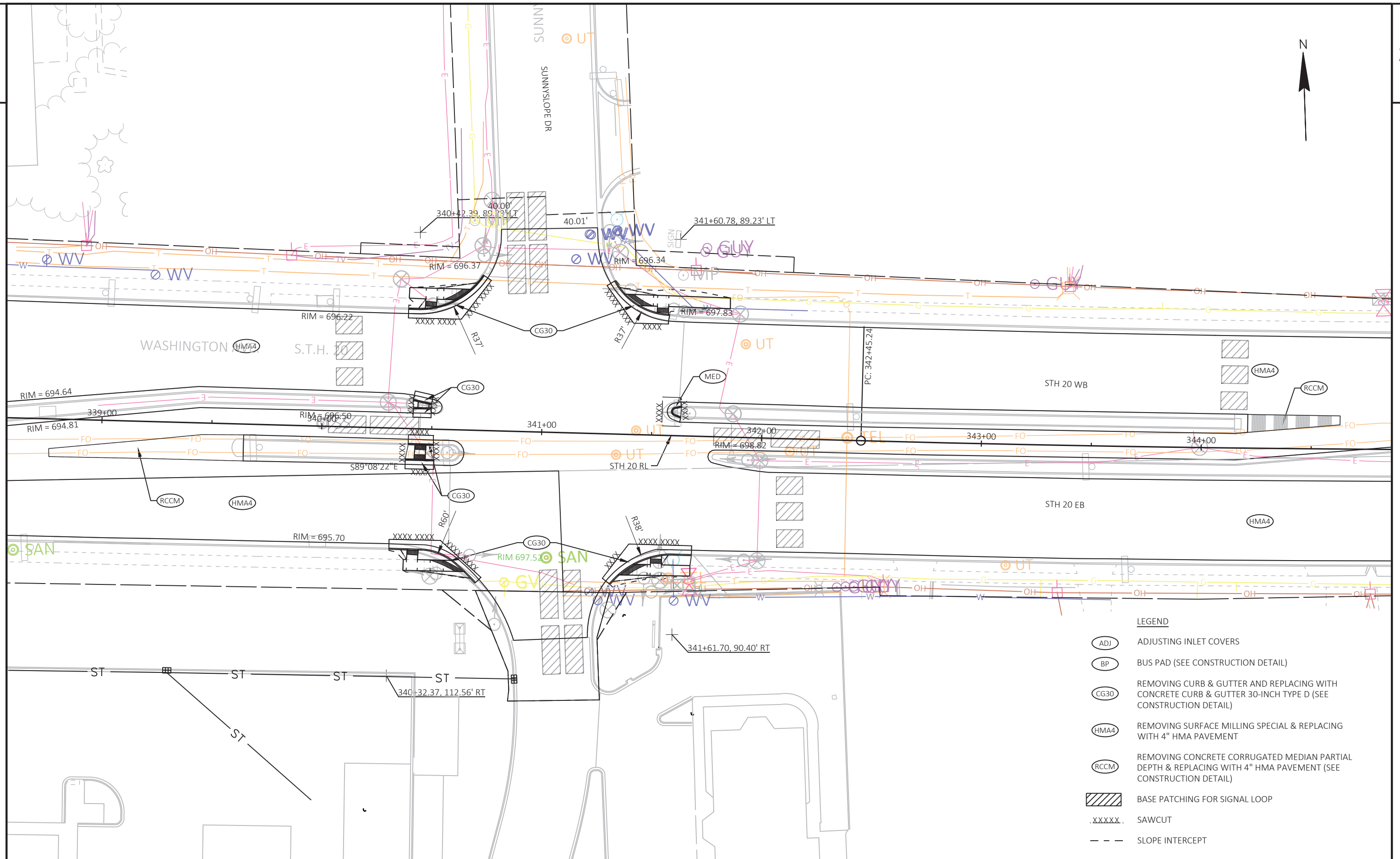
REMOVE MATERIAL UNDER ITEM 'REMOVING ASPHALT SURFACE , BUTT JOINTS' MATERIAL SHALL NOT BE REMOVED UNDER THIS ITEM UNTIL 24 HOURS BEFORE SIDEROAD PAVING.

SIDEROAD PAVEMENT DEPTH SHALL MATCH AT MAINLINE PAVEMENT EDGE AND BE TAPERED TO 3" MINIMUM AT JOINT

NOTE: ANY SAWCUT USED WILL BE CONSIDERED INCIDENTAL TO THE ITEM "REMOVING ASPHALTIC SURFACE, BUTT JOINTS."







PROJECT NO: 2250-15-70

HWY: STH 20

COUNTY: RACINE

INTERSECTION DETAILS: STH 20 &amp; SUNNYSLOPE DR

SHEET

E

FILE NAME : \\WKTOV\FILP\01.DOT.STATE.WI.US\N3PUBLIC\PD\3\C3D\22501500\021101\_ID.DWG  
LAYOUT NAME - 021102

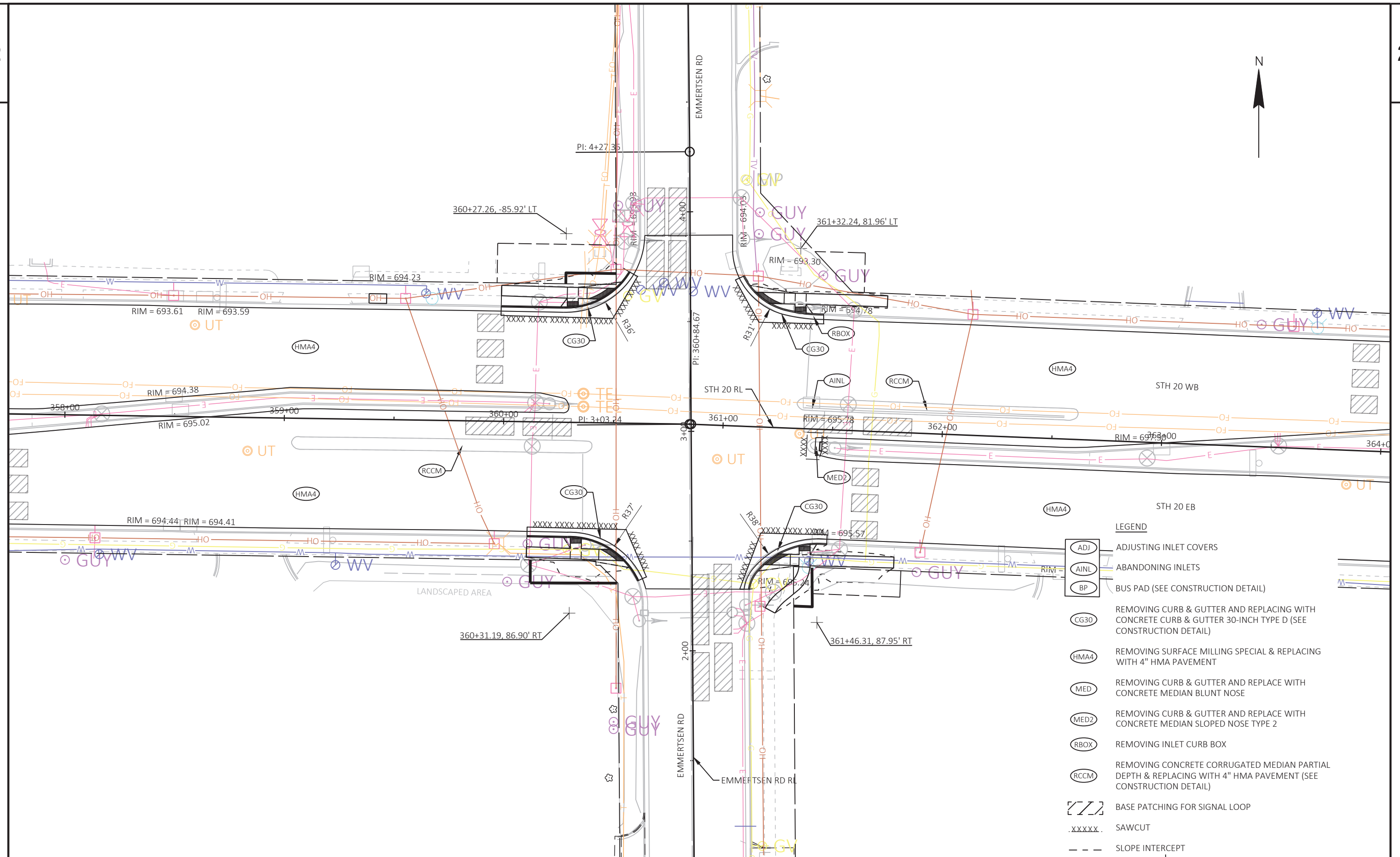
PLOT DATE : 1/20/2022 10:25 AM

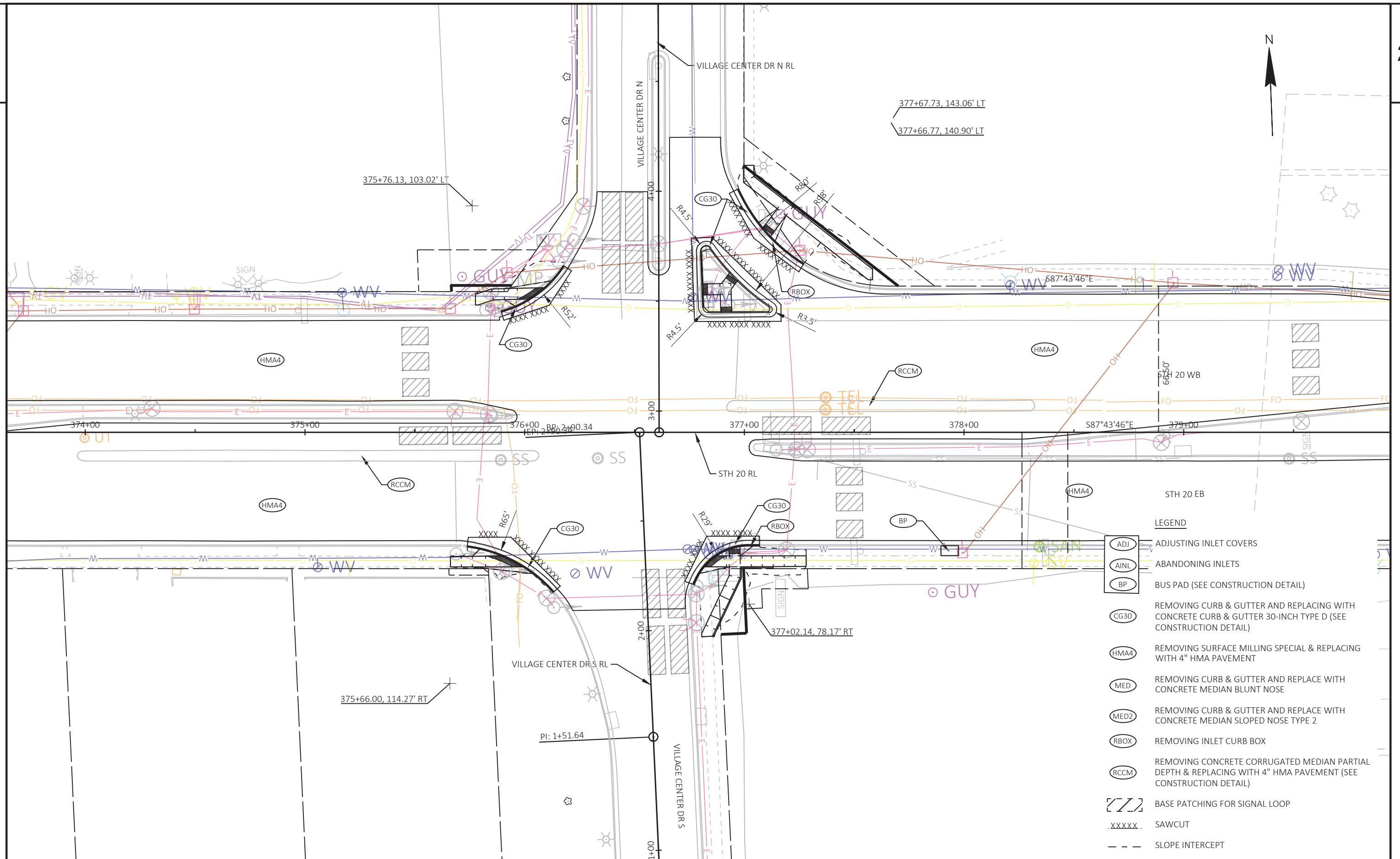
PLOT BY : SKIFFINGTON, NICHOLA

PLOT NAME :

PLOT SCALE : 1 IN=40 FT

WISDOT/CADDs SHEET 42





PROJECT NO: 2250-15-70

HWY: STH 20

COUNTY: RACINE

INTERSECTION DETAILS: STH 20 &amp; VILLAGE CENTER DR

SHEET

E

FILE NAME: \\WKERTOVFILP01.DOT.STATE.WI.US\N3PUBLIC\PD\SC3D\22501500\SHEETPLAN\021101\_ID.DWG  
LAYOUT NAME - 021104

PLOT DATE: 1/20/2022 10:26 AM

PLOT BY: SKIFFINGTON, NICHOLA

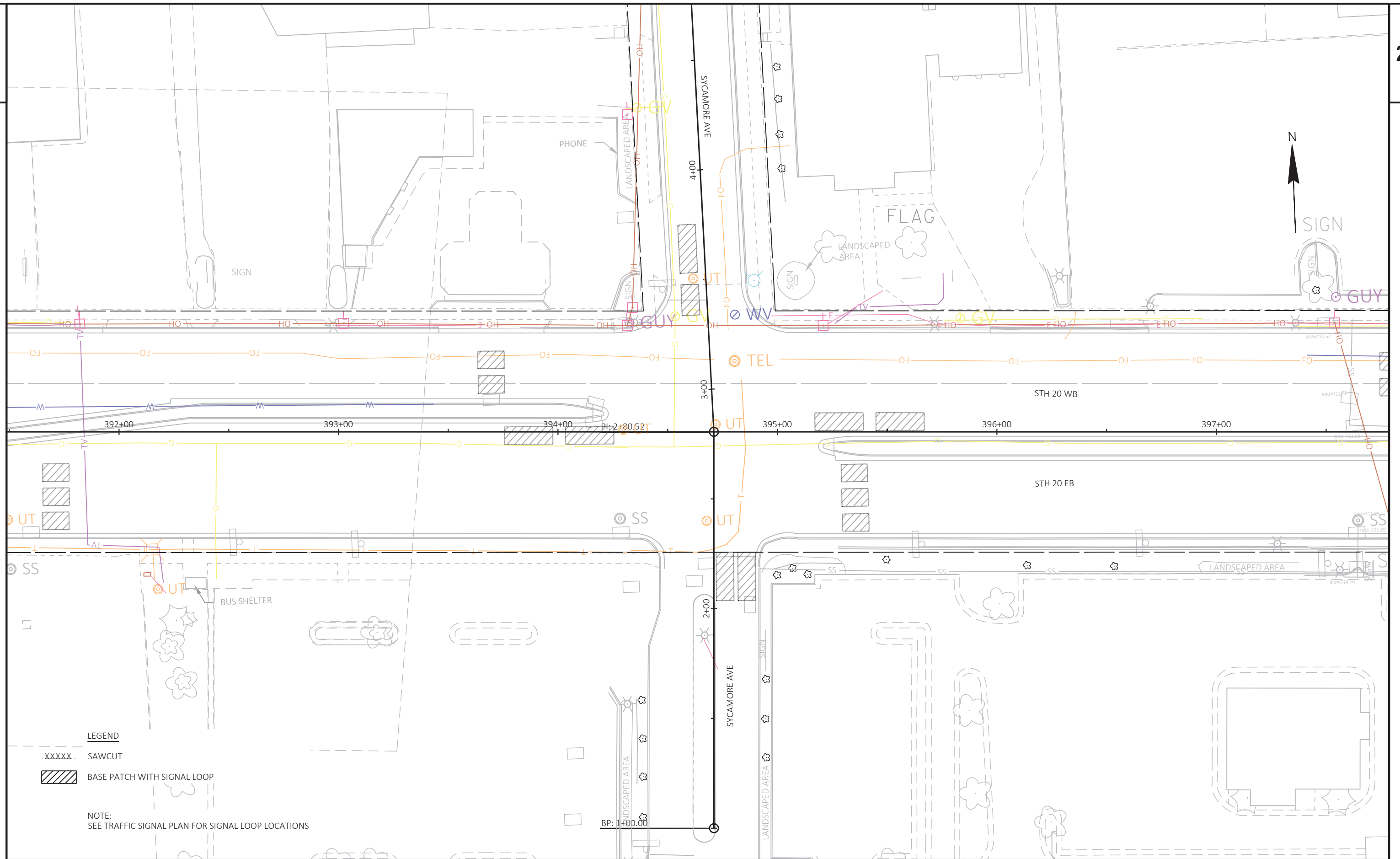
PLOT NAME:

PLOT SCALE: 1 IN=40 FT

WISDOT/CADDs SHEET 42

2

2 |



PROJECT NO:	2250-15-70
-------------	------------

HWY: STH 20

COUNTY: RACINE

INTERSECTION DETAILS: STH 20 &amp; SYCAMORE AVE

SHEET

3

FILE NAME : \\WKERTOVFILP01.DOT.STATE.WI.US\N3PUBLIC\PDS\C3D\22501500\SHETSPLAN\021101\_ID.DWG  
LAYOUT NAME - 021105

PLOT DATE : 1/20/2022 10:27 AM

---

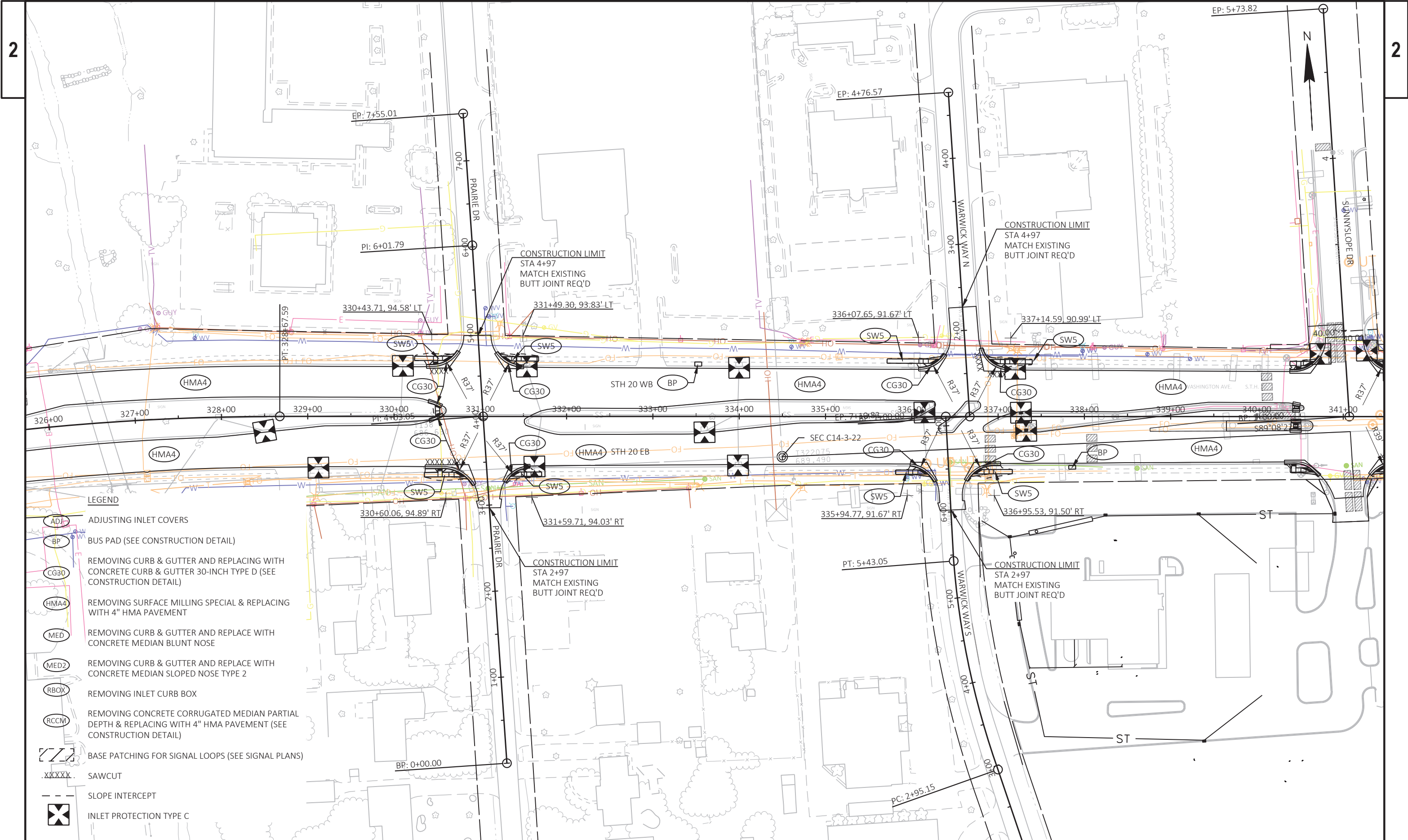
PLOT BY : SKIFFINGTON, NICHOLA

PLOT NAME :

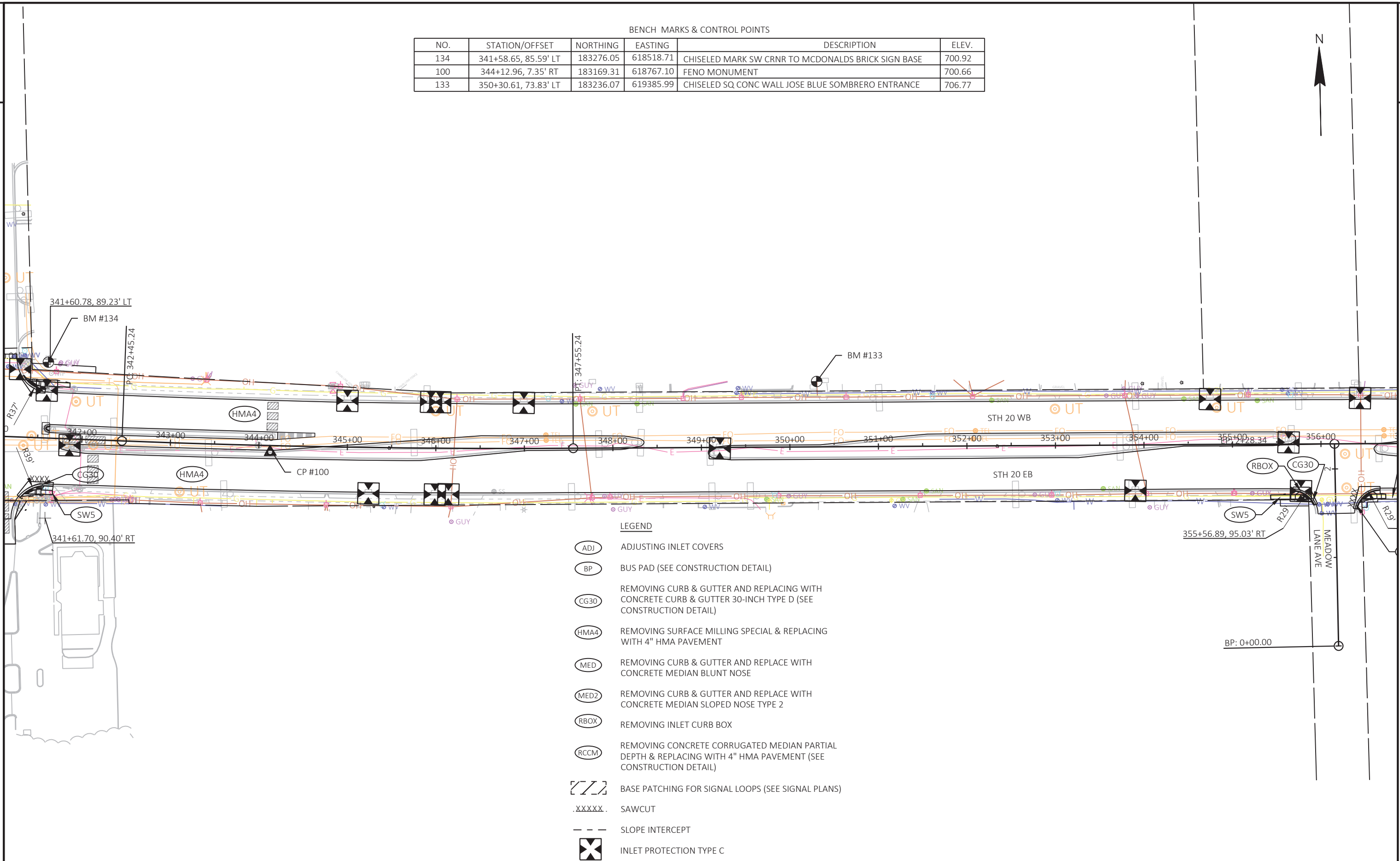
PLOT SCALE : 1 IN:40 FT

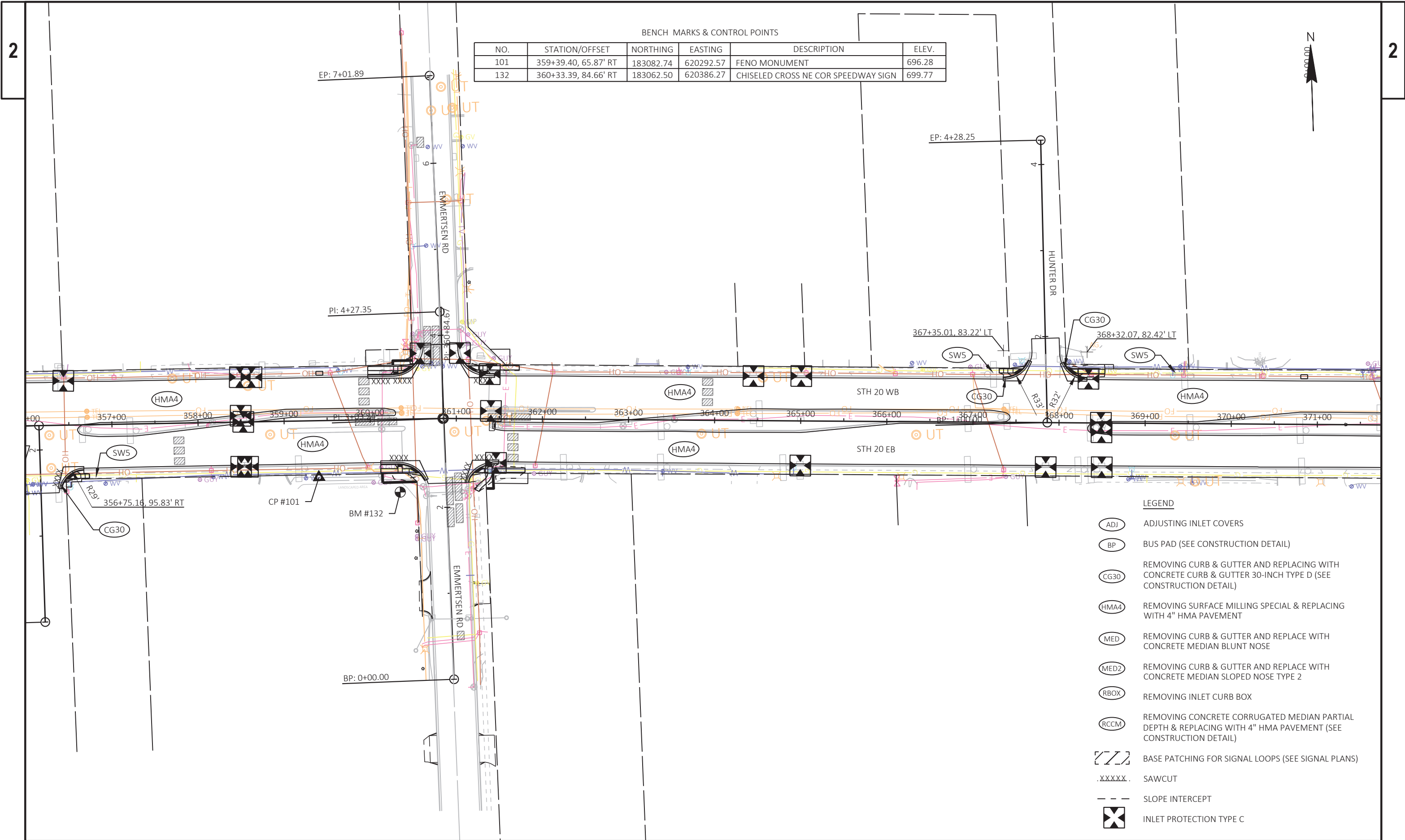
WISDOT/CADDS SHEET 42





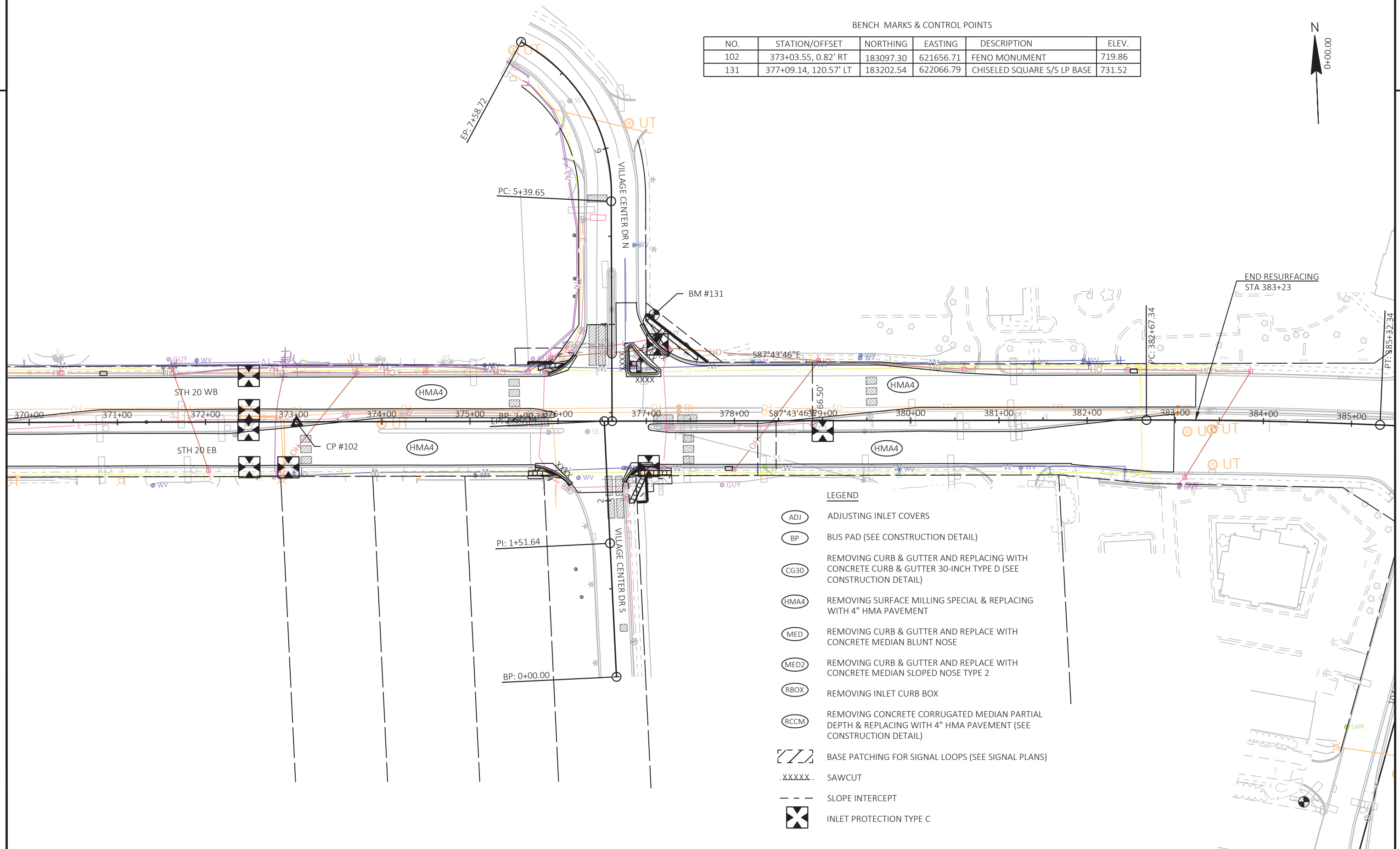
BENCH MARKS & CONTROL POINTS					
NO.	STATION/OFFSET	NORTHING	EASTING	DESCRIPTION	ELEV.
134	341+58.65, 85.59' LT	183276.05	618518.71	CHISELED MARK SW CRNR TO MCDONALDS BRICK SIGN BASE	700.92
100	344+12.96, 7.35' RT	183169.31	618767.10	FENO MONUMENT	700.66
133	350+30.61, 73.83' LT	183236.07	619385.99	CHISELED SQ CONC WALL JOSE BLUE SOMBRERO ENTRANCE	706.77





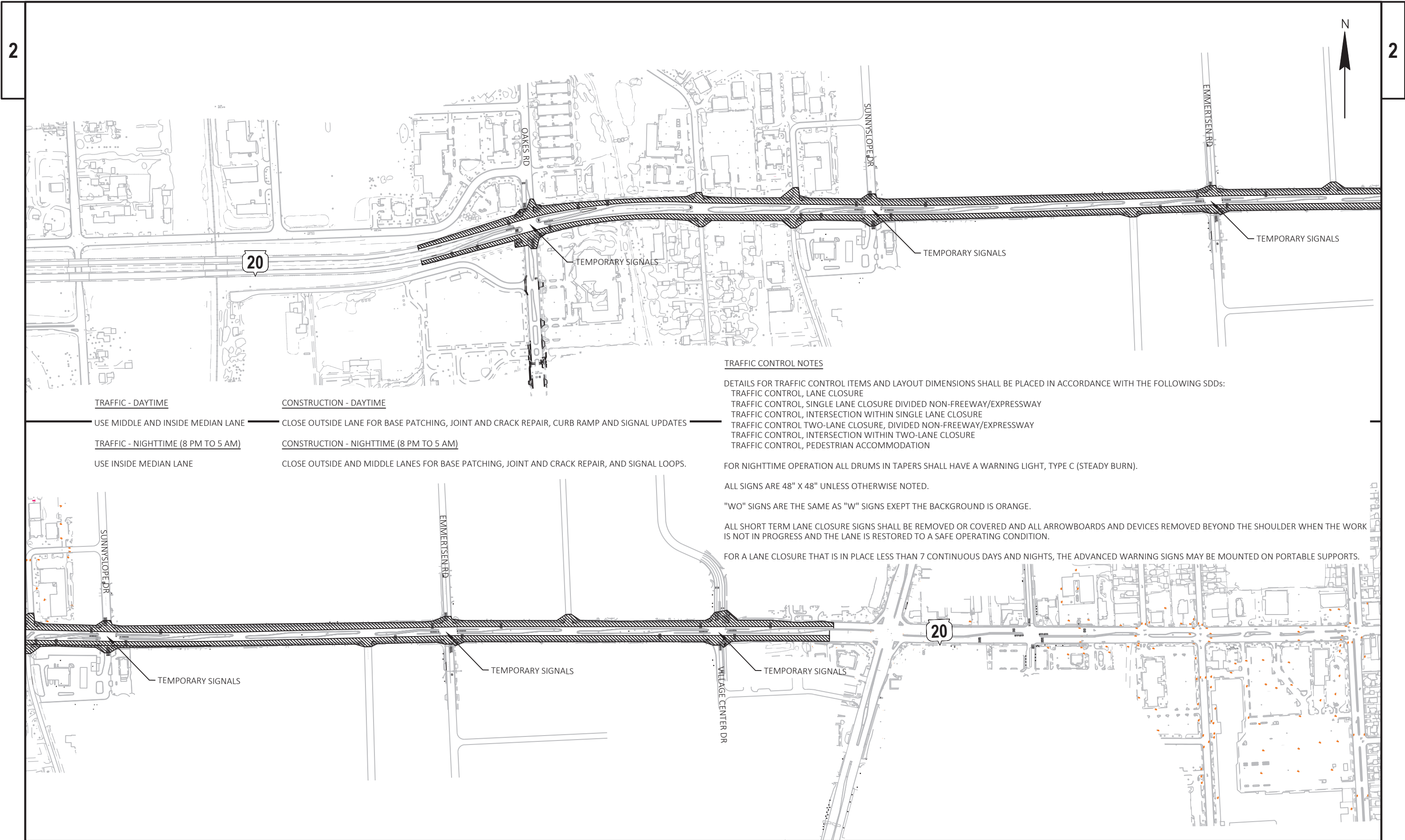
BENCH MARKS & CONTROL POINTS					
NO.	STATION/OFFSET	NORTHING	EASTING	DESCRIPTION	ELEV.
101	359+39.40, 65.87' RT	183082.74	620292.57	FENO MONUMENT	696.28
132	360+33.39, 84.66' RT	183062.50	620386.27	CHISELED CROSS NE COR SPEEDWAY SIGN	699.77

- LEGEND
- (ADJ) ADJUSTING INLET COVERS
  - (BP) BUS PAD (SEE CONSTRUCTION DETAIL)
  - (CG30) REMOVING CURB & GUTTER AND REPLACING WITH CONCRETE CURB & GUTTER 30-INCH TYPE D (SEE CONSTRUCTION DETAIL)
  - (HMA4) REMOVING SURFACE MILLING SPECIAL & REPLACING WITH 4" HMA PAVEMENT
  - (MED) REMOVING CURB & GUTTER AND REPLACE WITH CONCRETE MEDIAN BLUNT NOSE
  - (MED2) REMOVING CURB & GUTTER AND REPLACE WITH CONCRETE MEDIAN SLOPED NOSE TYPE 2
  - (RBOX) REMOVING INLET CURB BOX
  - (RCCM) REMOVING CONCRETE CORRUGATED MEDIAN PARTIAL DEPTH & REPLACING WITH 4" HMA PAVEMENT (SEE CONSTRUCTION DETAIL)
  - [//] BASE PATCHING FOR SIGNAL LOOPS (SEE SIGNAL PLANS)
  - .XXXX. SAWCUT
  - SLOPE INTERCEPT
  - [X] INLET PROTECTION TYPE C



BENCH MARKS & CONTROL POINTS					
NO.	STATION/OFFSET	NORTHING	EASTING	DESCRIPTION	ELEV.
102	373+03.55, 0.82' RT	183097.30	621656.71	FENO MONUMENT	719.86
131	377+09.14, 120.57' LT	183202.54	622066.79	CHISELED SQUARE S/S LP BASE	731.52

- LEGEND
- (ADI) ADJUSTING INLET COVERS
  - (BP) BUS PAD (SEE CONSTRUCTION DETAIL)
  - (CG30) REMOVING CURB & GUTTER AND REPLACING WITH CONCRETE CURB & GUTTER 30-INCH TYPE D (SEE CONSTRUCTION DETAIL)
  - (HMA4) REMOVING SURFACE MILLING SPECIAL & REPLACING WITH 4" HMA PAVEMENT
  - (MED) REMOVING CURB & GUTTER AND REPLACE WITH CONCRETE MEDIAN BLUNT NOSE
  - (MED2) REMOVING CURB & GUTTER AND REPLACE WITH CONCRETE MEDIAN SLOPED NOSE TYPE 2
  - (RBOX) REMOVING INLET CURB BOX
  - (RCCM) REMOVING CONCRETE CORRUGATED MEDIAN PARTIAL DEPTH & REPLACING WITH 4" HMA PAVEMENT (SEE CONSTRUCTION DETAIL)
  - [ZZZZ] BASE PATCHING FOR SIGNAL LOOPS (SEE SIGNAL PLANS)
  - .XXXX. SAWCUT
  - SLOPE INTERCEPT
  - [X] INLET PROTECTION TYPE C



TRAFFIC - DAYTIME

USE MIDDLE AND INSIDE MEDIAN LANE

TRAFFIC - NIGHTTIME (8 PM TO 5 AM)

USE INSIDE MEDIAN LANE

CONSTRUCTION - DAYTIME

CLOSE OUTSIDE LANE FOR BASE PATCHING, JOINT AND CRACK REPAIR, CURB RAMP AND SIGNAL UPDATES

CONSTRUCTION - NIGHTTIME (8 PM TO 5 AM)

CLOSE OUTSIDE AND MIDDLE LANES FOR BASE PATCHING, JOINT AND CRACK REPAIR, AND SIGNAL LOOPS.

TRAFFIC CONTROL NOTES

DETAILS FOR TRAFFIC CONTROL ITEMS AND LAYOUT DIMENSIONS SHALL BE PLACED IN ACCORDANCE WITH THE FOLLOWING SDDs:

- TRAFFIC CONTROL, LANE CLOSURE
- TRAFFIC CONTROL, SINGLE LANE CLOSURE DIVIDED NON-FREEWAY/EXPRESSWAY
- TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
- TRAFFIC CONTROL TWO-LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
- TRAFFIC CONTROL, INTERSECTION WITHIN TWO-LANE CLOSURE
- TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

ALL SHORT TERM LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL ARROWBOARDS AND DEVICES REMOVED BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PROJECT NO: 2250-15-70

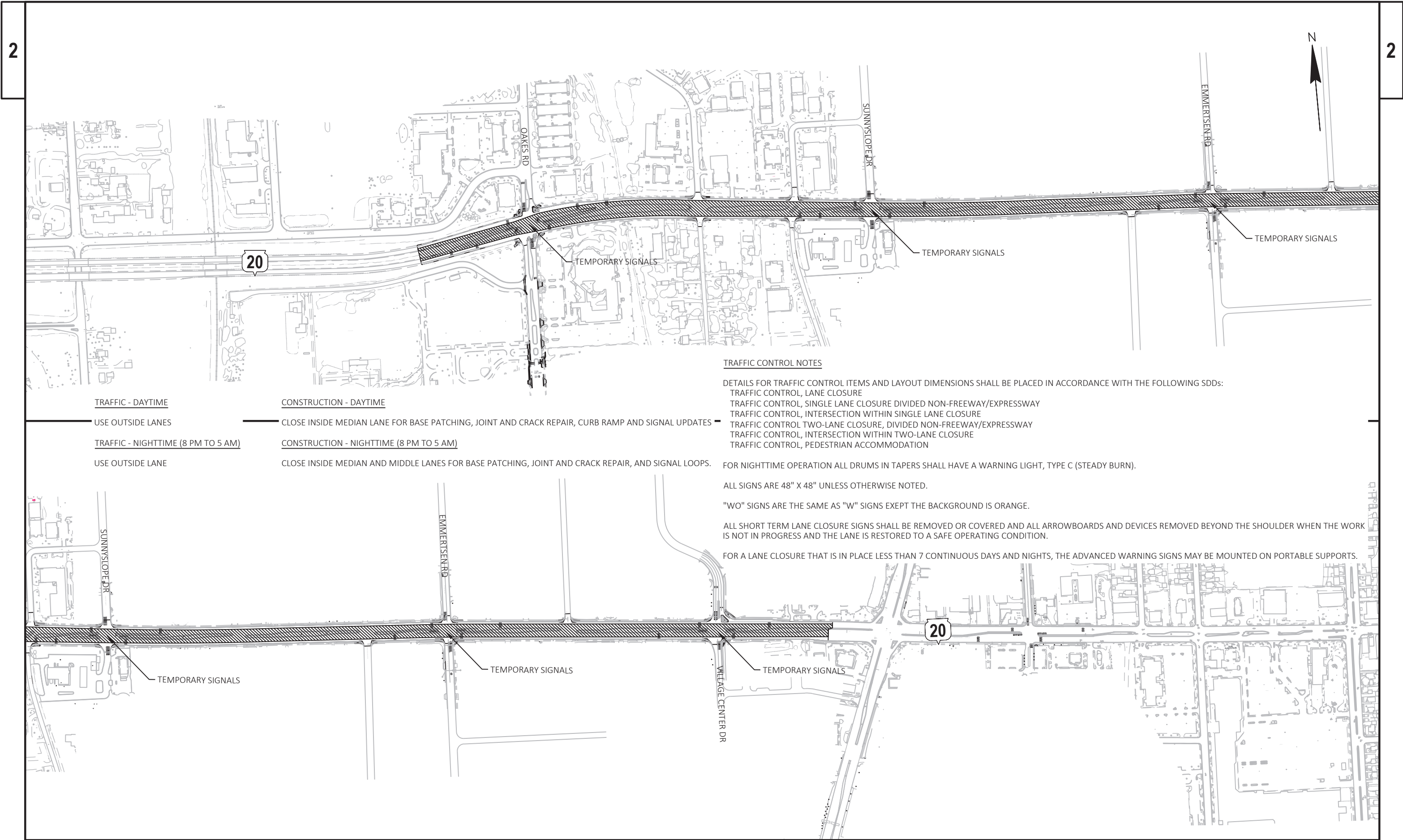
HWY: STH 20

COUNTY: RACINE

TRAFFIC CONTROL OVERVIEW - STAGE 1

SHEET

E



TRAFFIC - DAYTIME

USE OUTSIDE LANES

TRAFFIC - NIGHTTIME (8 PM TO 5 AM)

USE OUTSIDE LANE

CONSTRUCTION - DAYTIME

CLOSE INSIDE MEDIAN LANE FOR BASE PATCHING, JOINT AND CRACK REPAIR, CURB RAMP AND SIGNAL UPDATES

CONSTRUCTION - NIGHTTIME (8 PM TO 5 AM)

CLOSE INSIDE MEDIAN AND MIDDLE LANES FOR BASE PATCHING, JOINT AND CRACK REPAIR, AND SIGNAL LOOPS.

TRAFFIC CONTROL NOTES

DETAILS FOR TRAFFIC CONTROL ITEMS AND LAYOUT DIMENSIONS SHALL BE PLACED IN ACCORDANCE WITH THE FOLLOWING SDDs:

- TRAFFIC CONTROL, LANE CLOSURE
- TRAFFIC CONTROL, SINGLE LANE CLOSURE DIVIDED NON-FREEWAY/EXPRESSWAY
- TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
- TRAFFIC CONTROL TWO-LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
- TRAFFIC CONTROL, INTERSECTION WITHIN TWO-LANE CLOSURE
- TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

ALL SHORT TERM LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL ARROWBOARDS AND DEVICES REMOVED BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PROJECT NO: 2250-15-70

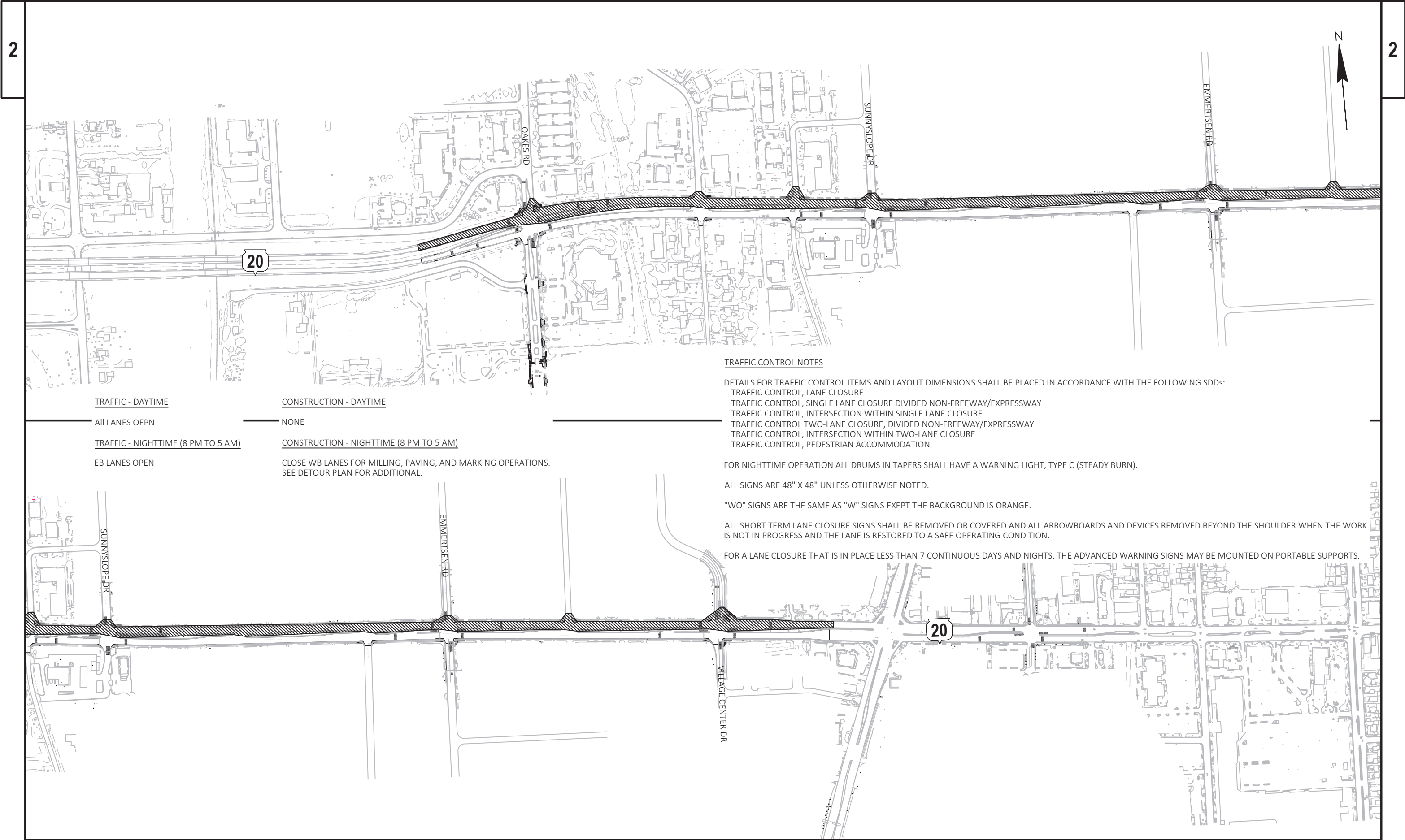
HWY: STH 20

COUNTY: RACINE

TRAFFIC CONTROL OVERVIEW - STAGE 2

SHEET

E



TRAFFIC - DAYTIME

ALL LANES OEPN

TRAFFIC - NIGHTTIME (8 PM TO 5 AM)

EB LANES OPEN

CONSTRUCTION - DAYTIME

NONE

CONSTRUCTION - NIGHTTIME (8 PM TO 5 AM)

CLOSE WB LANES FOR MILLING, PAVING, AND MARKING OPERATIONS.  
SEE DETOUR PLAN FOR ADDITIONAL.

TRAFFIC CONTROL NOTES

DETAILS FOR TRAFFIC CONTROL ITEMS AND LAYOUT DIMENSIONS SHALL BE PLACED IN ACCORDANCE WITH THE FOLLOWING SDDs:

- TRAFFIC CONTROL, LANE CLOSURE
- TRAFFIC CONTROL, SINGLE LANE CLOSURE DIVIDED NON-FREEWAY/EXPRESSWAY
- TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
- TRAFFIC CONTROL TWO-LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
- TRAFFIC CONTROL, INTERSECTION WITHIN TWO-LANE CLOSURE
- TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXEPT THE BACKGROUND IS ORANGE.

ALL SHORT TERM LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL ARROWBOARDS AND DEVICES REMOVED BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PROJECT NO: 2250-15-70

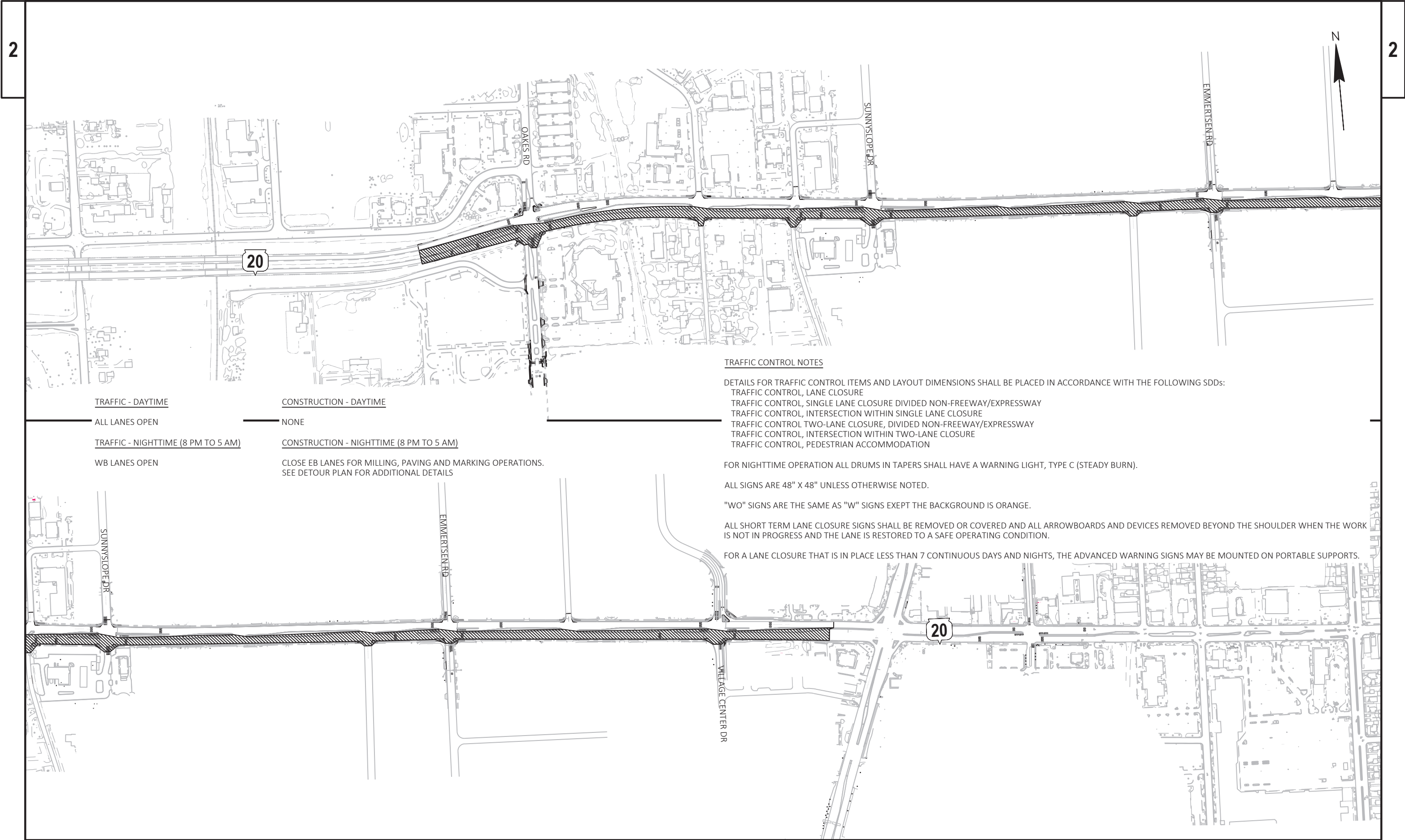
HWY: STH 20

COUNTY: RACINE

TRAFFIC CONTROL OVERVIEW - STAGE 3

SHEET

E



TRAFFIC - DAYTIME

ALL LANES OPEN

TRAFFIC - NIGHTTIME (8 PM TO 5 AM)

WB LANES OPEN

CONSTRUCTION - DAYTIME

NONE

CONSTRUCTION - NIGHTTIME (8 PM TO 5 AM)

CLOSE EB LANES FOR MILLING, PAVING AND MARKING OPERATIONS.  
SEE DETOUR PLAN FOR ADDITIONAL DETAILS

TRAFFIC CONTROL NOTES

DETAILS FOR TRAFFIC CONTROL ITEMS AND LAYOUT DIMENSIONS SHALL BE PLACED IN ACCORDANCE WITH THE FOLLOWING SDDs:

- TRAFFIC CONTROL, LANE CLOSURE
- TRAFFIC CONTROL, SINGLE LANE CLOSURE DIVIDED NON-FREEWAY/EXPRESSWAY
- TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
- TRAFFIC CONTROL TWO-LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
- TRAFFIC CONTROL, INTERSECTION WITHIN TWO-LANE CLOSURE
- TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

ALL SHORT TERM LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL ARROWBOARDS AND DEVICES REMOVED BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PROJECT NO: 2250-15-70

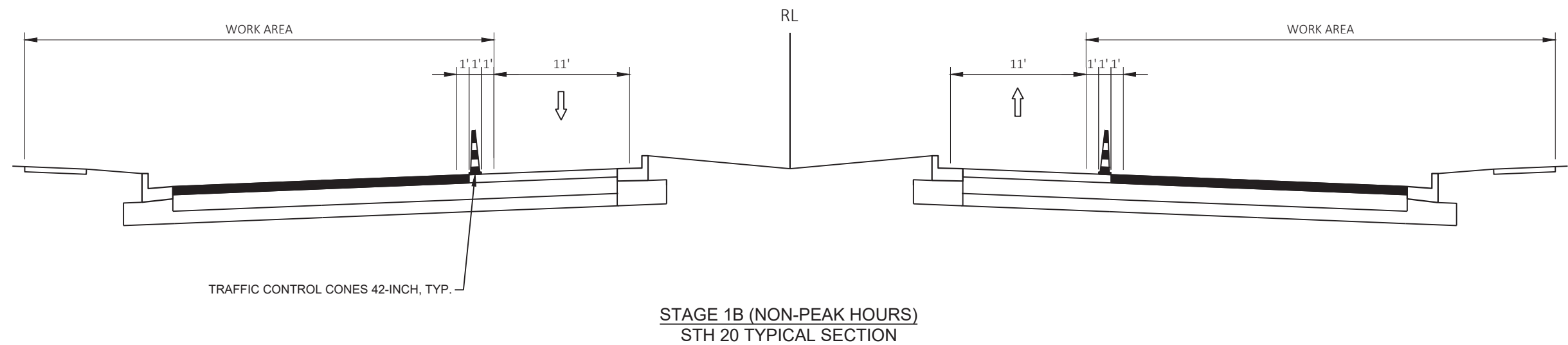
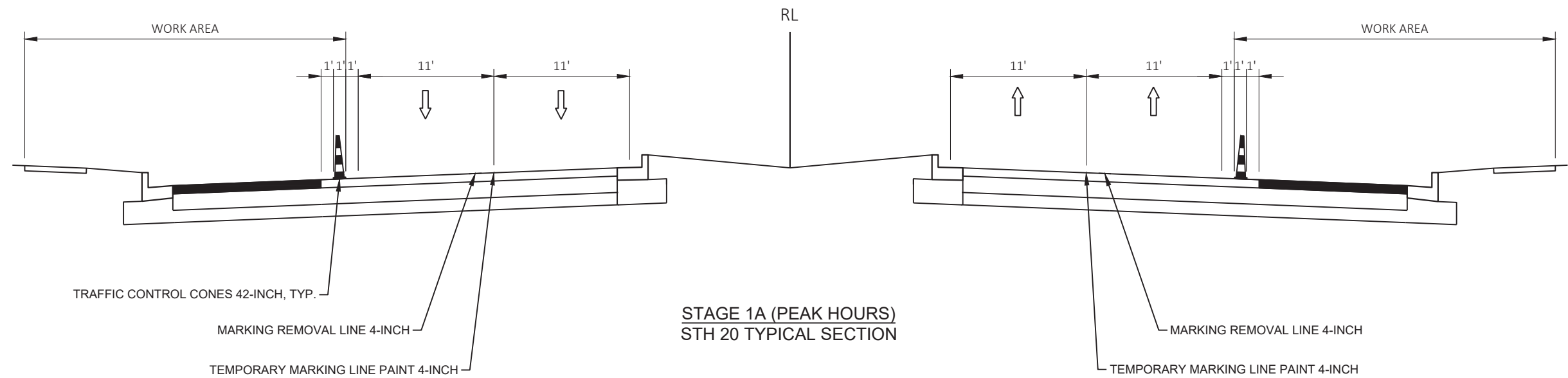
HWY: STH 20

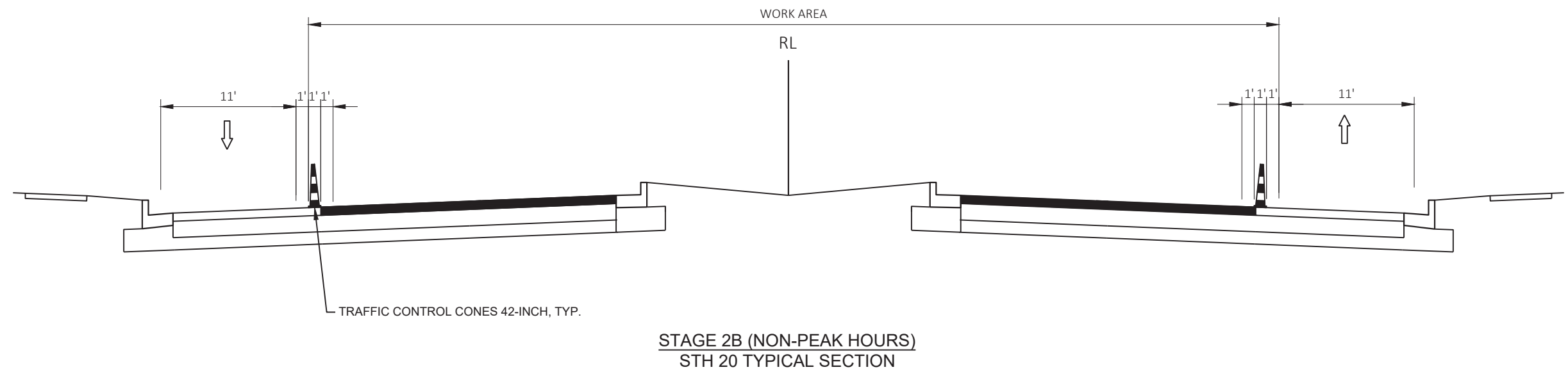
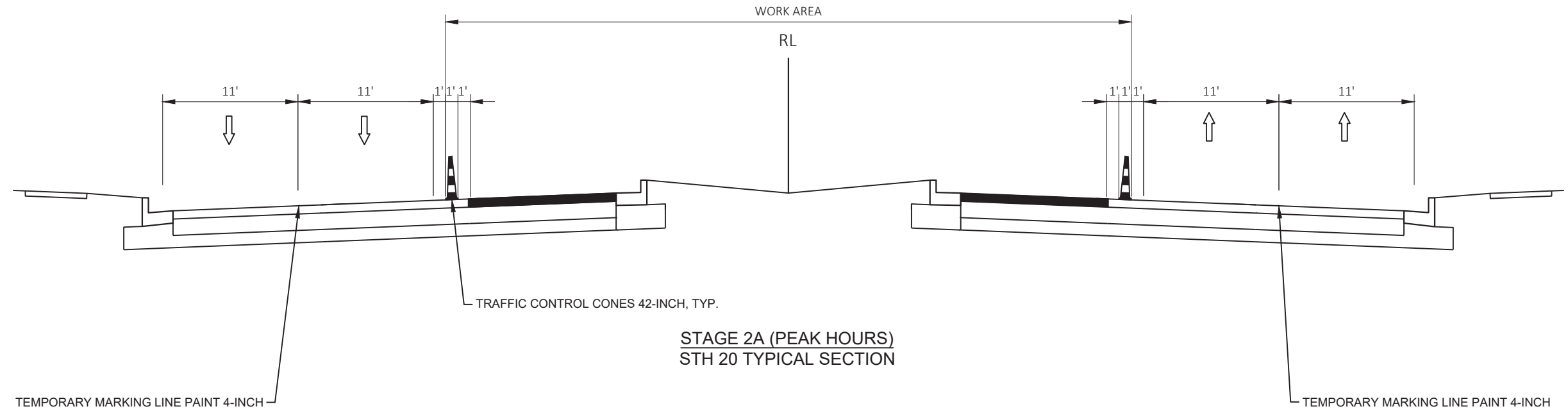
COUNTY: RACINE

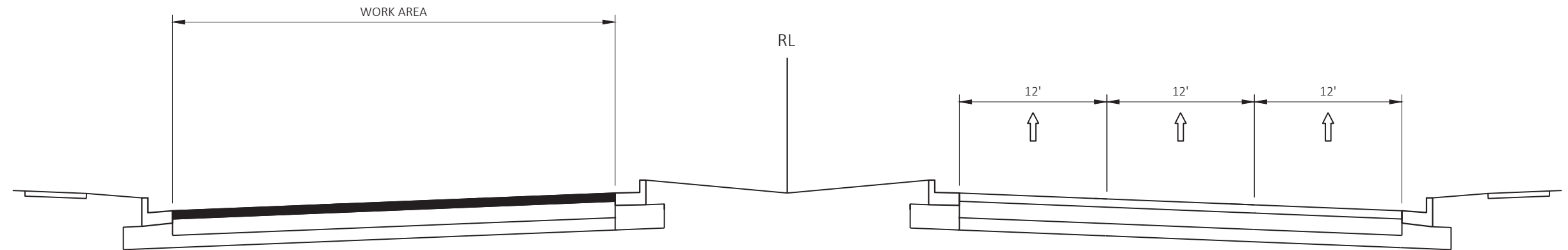
TRAFFIC CONTROL OVERVIEW - STAGE 4

SHEET

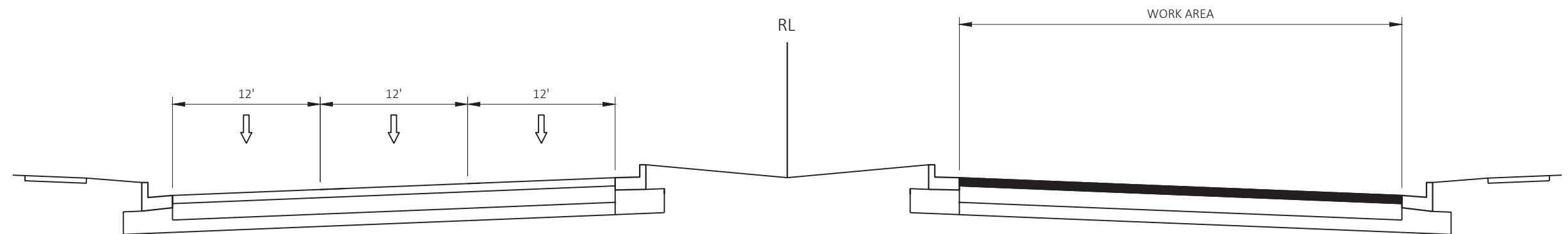
E







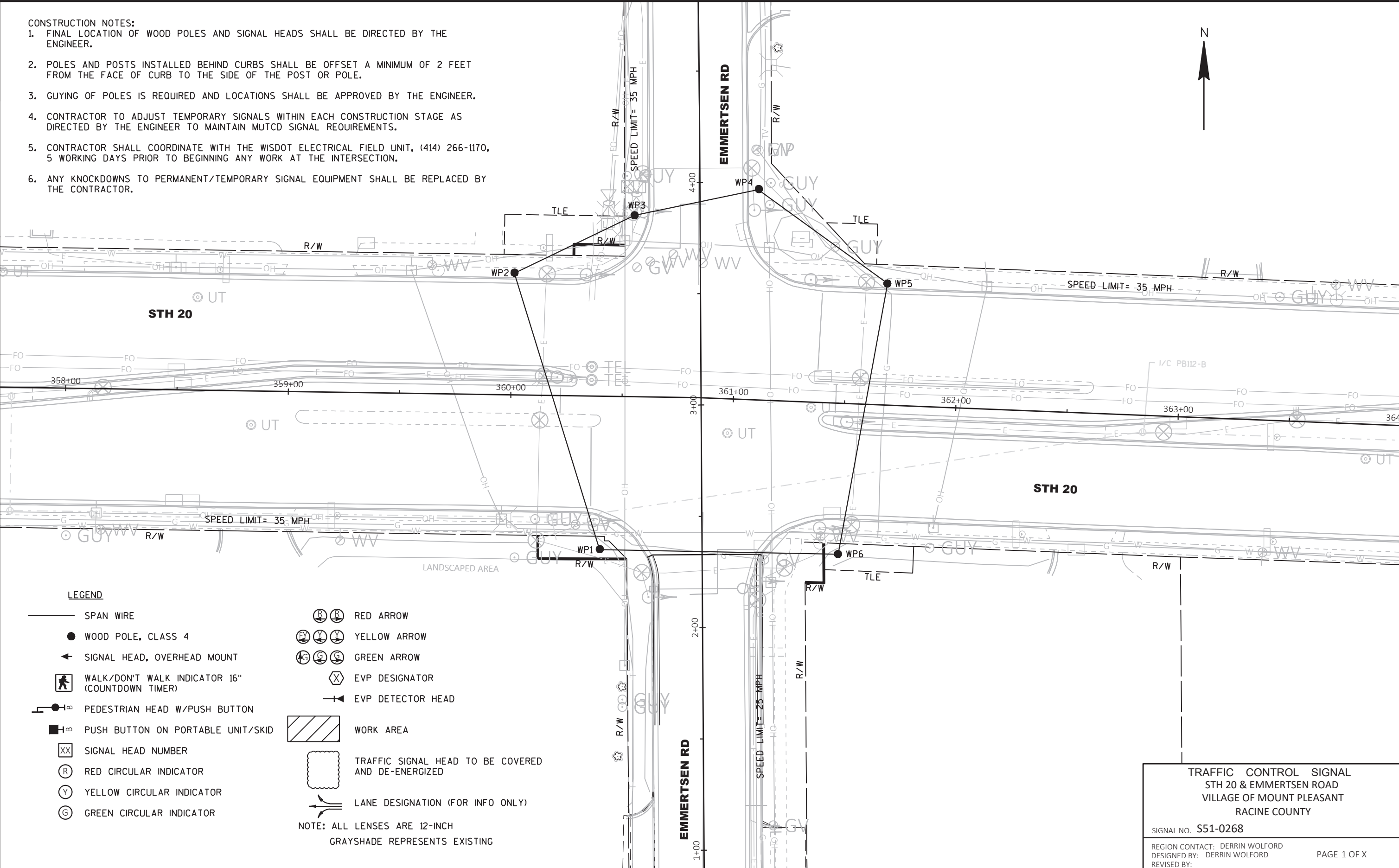
STAGE 3A  
STH 20 TYPICAL SECTION



STAGE 3B  
STH 20 TYPICAL SECTION

CONSTRUCTION NOTES:

- 1. FINAL LOCATION OF WOOD POLES AND SIGNAL HEADS SHALL BE DIRECTED BY THE ENGINEER.
- 2. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
- 3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
- 4. CONTRACTOR TO ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
- 5. CONTRACTOR SHALL COORDINATE WITH THE WISDOT ELECTRICAL FIELD UNIT, (414) 266-1170, 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.
- 6. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR.



LEGEND

- SPAN WIRE

● WOOD POLE, CLASS 4

← SIGNAL HEAD, OVERHEAD MOUNT

WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)

PEDESTRIAN HEAD W/PUSH BUTTON

PUSH BUTTON ON PORTABLE UNIT/SKID

SIGNAL HEAD NUMBER

RED CIRCULAR INDICATOR

YELLOW CIRCULAR INDICATOR

GREEN CIRCULAR INDICATOR
- RED ARROW

YELLOW ARROW

GREEN ARROW

EVP DESIGNATOR

EVP DETECTOR HEAD

WORK AREA

TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED

LANE DESIGNATION (FOR INFO ONLY)
- NOTE: ALL LENSES ARE 12-INCH  
GRAYSHADE REPRESENTS EXISTING

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

SIGNAL NO. S51-0268

REGION CONTACT: DERRIN WOLFORD  
DESIGNED BY: DERRIN WOLFORD  
REVISED BY:

PAGE 1 OF X

PROJECT NO: 2250-15-70

HWY: STH 20

COUNTY: RACINE

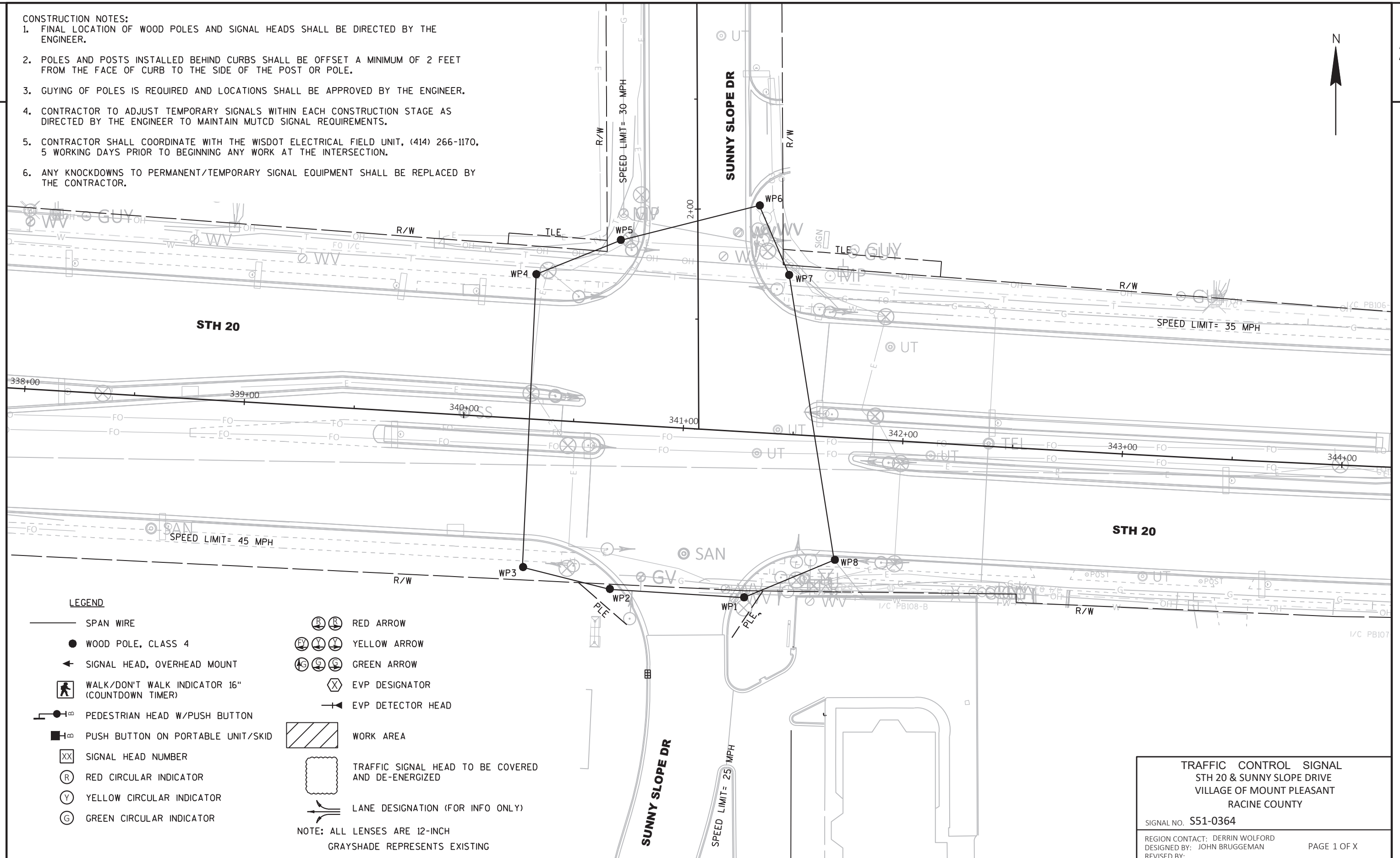
TEMPORARY TRAFFIC SIGNAL PLAN - PRECONSTRUCTION

SHEET

E

## CONSTRUCTION NOTES:

1. FINAL LOCATION OF WOOD POLES AND SIGNAL HEADS SHALL BE DIRECTED BY THE ENGINEER.
2. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. CONTRACTOR TO ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
5. CONTRACTOR SHALL COORDINATE WITH THE WISDOT ELECTRICAL FIELD UNIT, (414) 266-1170, 5 WORKING DAYS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.
6. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR.



PROJECT NO: 2250-15-70

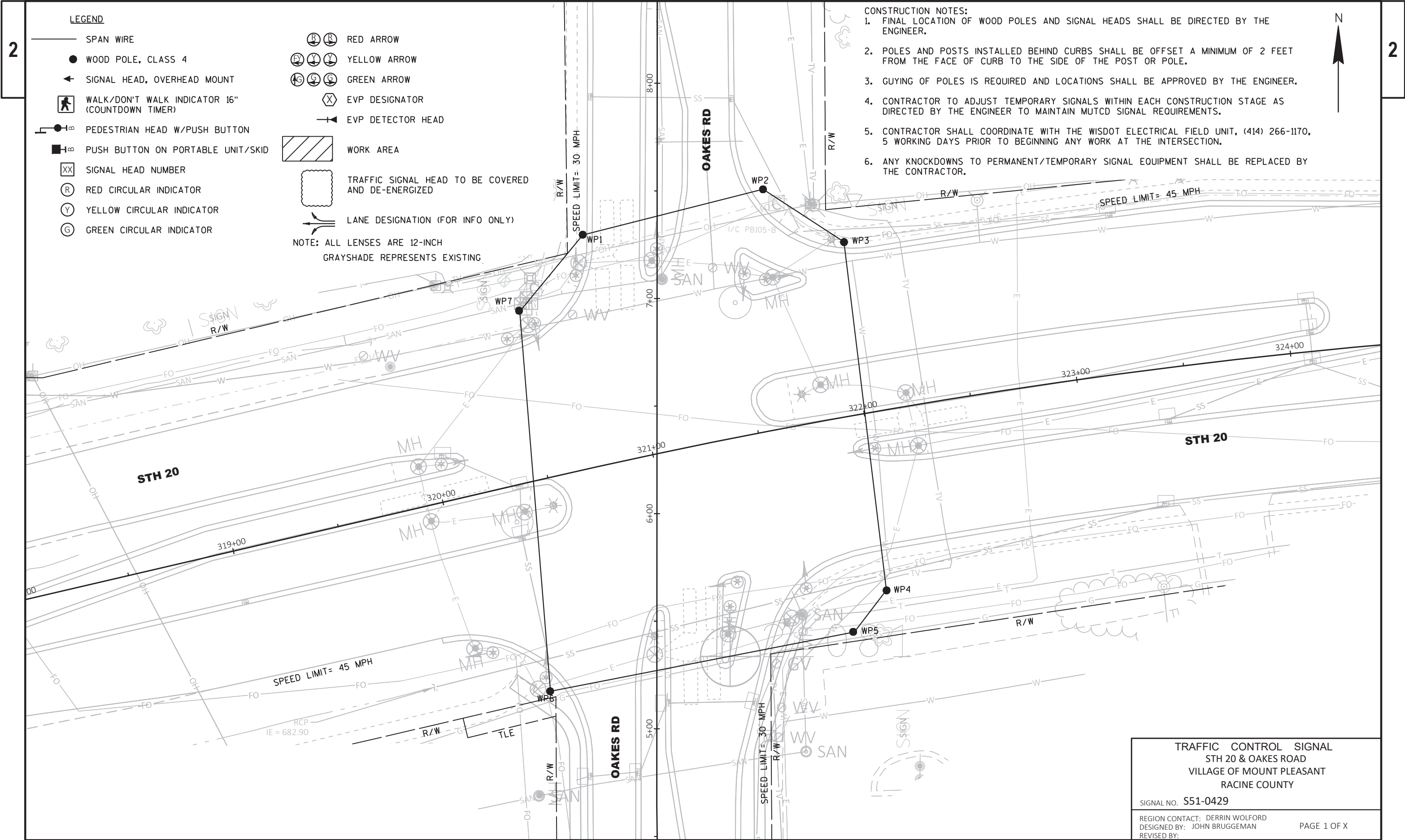
HWY: STH 20

COUNTY: RACINE

TEMPORARY TRAFFIC SIGNAL PLAN - PRECONSTRUCTION

SHEET

E

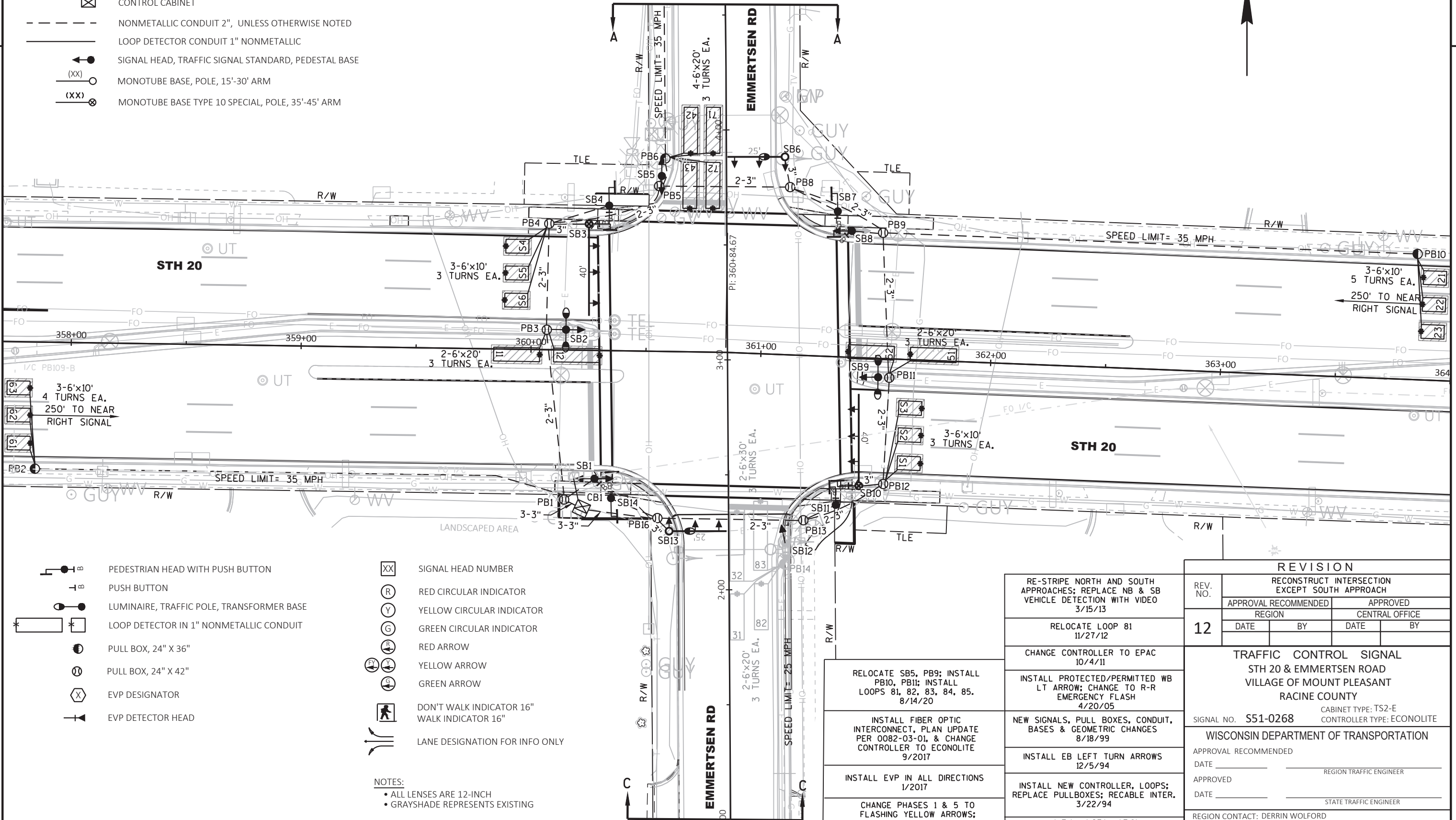






LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- MONOTUBE BASE, POLE, 15'-30' ARM
- MONOTUBE BASE TYPE 10 SPECIAL, POLE, 35'-45' ARM



- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- EVP DESIGNATOR
- EVP DETECTOR HEAD

- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- DON'T WALK INDICATOR 16"
- WALK INDICATOR 16"
- LANE DESIGNATION FOR INFO ONLY

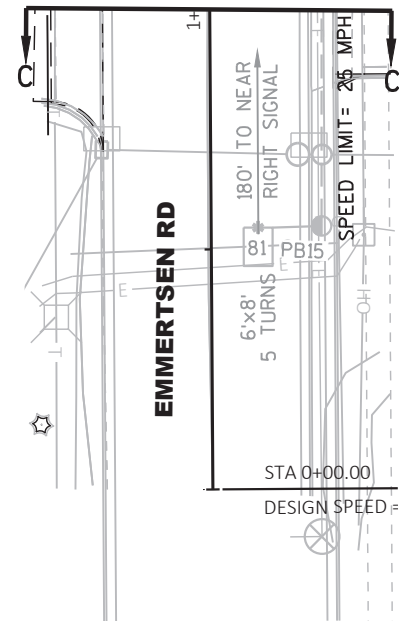
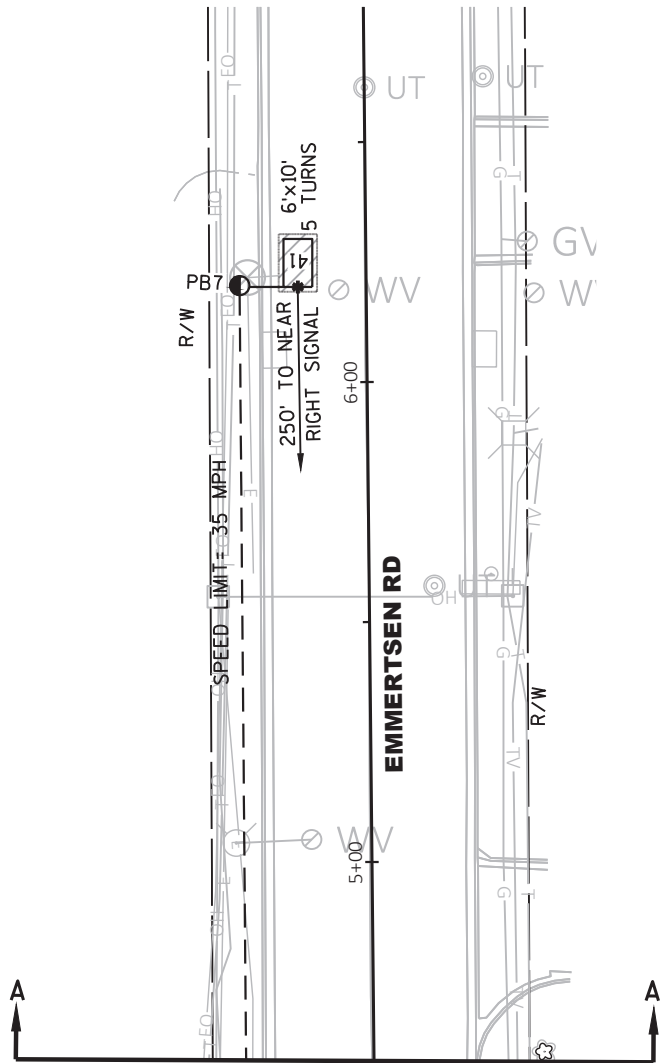
NOTES:

- ALL LENSES ARE 12-INCH
- GRAYSHADE REPRESENTS EXISTING

RE-STRIPE NORTH AND SOUTH APPROACHES; REPLACE NB & SB VEHICLE DETECTION WITH VIDEO 3/15/13			
RELOCATE LOOP 81 11/27/12			
CHANGE CONTROLLER TO EPAC 10/4/11			
INSTALL PROTECTED/PERMITTED WB LT ARROW; CHANGE TO R-R EMERGENCY FLASH 4/20/05			
NEW SIGNALS, PULL BOXES, CONDUIT, BASES & GEOMETRIC CHANGES 8/18/99			
INSTALL EB LEFT TURN ARROWS 12/5/94			
INSTALL NEW CONTROLLER, LOOPS; REPLACE PULLBOXES; RECALC INTER. 3/22/94			
INITIAL INSTALLATION 12/10/80			

RELOCATE SB5, PB9; INSTALL PB10, PB11; INSTALL LOOPS 81, 82, 83, 84, 85. 8/14/20
INSTALL FIBER OPTIC INTERCONNECT, PLAN UPDATE PER 0082-03-01, & CHANGE CONTROLLER TO ECONOLITE 9/2017
INSTALL EVP IN ALL DIRECTIONS 1/2017
CHANGE PHASES 1 & 5 TO FLASHING YELLOW ARROWS; CHANGE CABINET TO TS2 10/2013

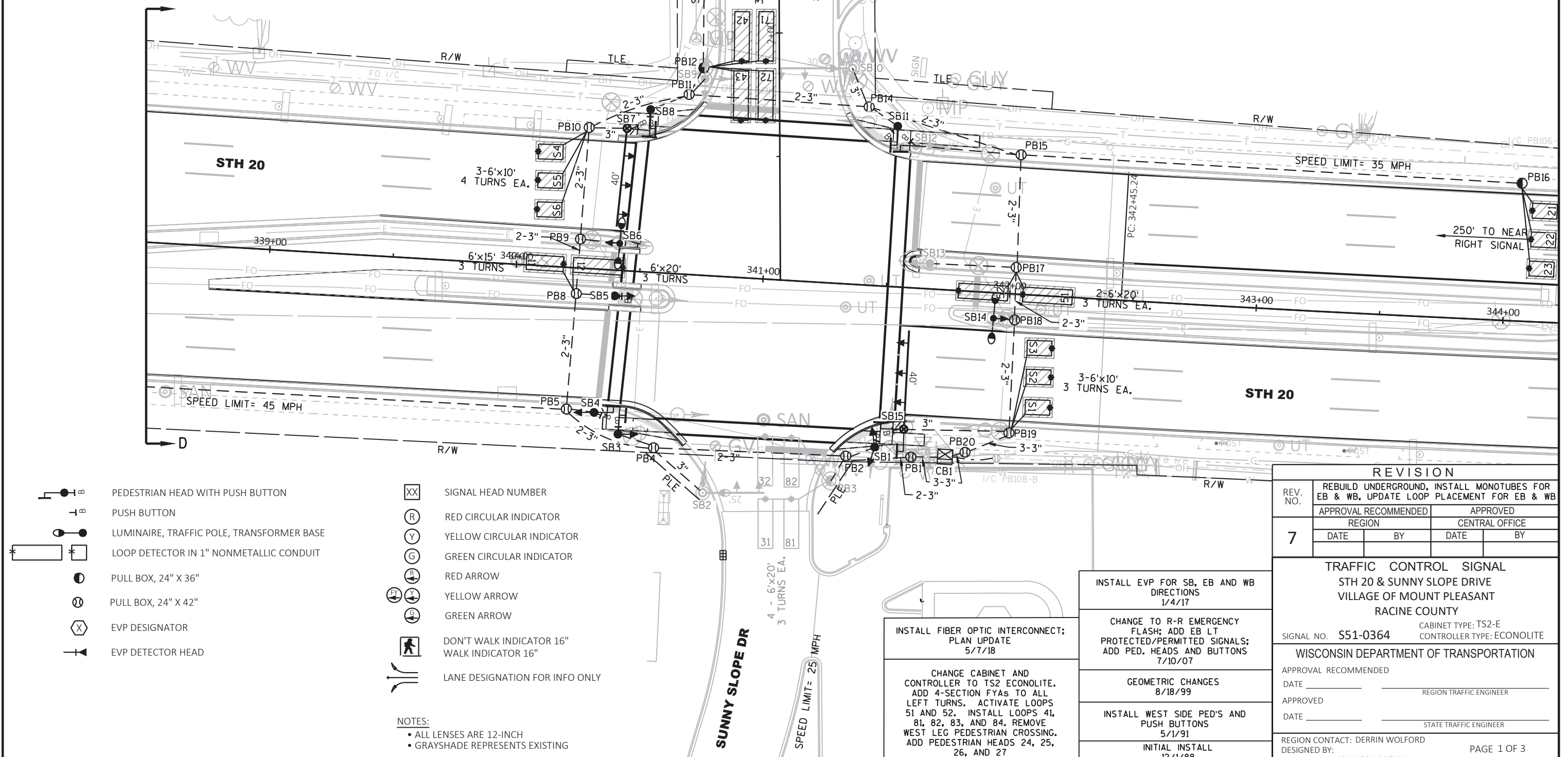
REVISION				
REV. NO.	RECONSTRUCT INTERSECTION EXCEPT SOUTH APPROACH			
	APPROVAL RECOMMENDED		APPROVED	
12	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY
TRAFFIC CONTROL SIGNAL STH 20 & EMMERTSEN ROAD VILLAGE OF MOUNT PLEASANT RACINE COUNTY				
SIGNAL NO. S51-0268		CABINET TYPE: TS2-E CONTROLLER TYPE: ECONOLITE		
WISCONSIN DEPARTMENT OF TRANSPORTATION				
APPROVAL RECOMMENDED				
DATE _____		_____ REGION TRAFFIC ENGINEER		
APPROVED				
DATE _____		_____ STATE TRAFFIC ENGINEER		
REGION CONTACT: DERRIN WOLFORD				
DESIGNED BY: DERRIN WOLFORD				
REVISED BY:				
			PAGE 1 OF 3	



TRAFFIC CONTROL SIGNAL STH 20 & EMMERTSEN ROAD VILLAGE OF MOUNT PLEASANT RACINE COUNTY	
SIGNAL NO. S51-0268	
REGION CONTACT: DERRIN WOLFORD DESIGNED BY: DERRIN WOLFORD REVISED BY:	PAGE 2 OF 3

## LEGEND

- ☒ CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- ◀● SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) ○ MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) ⊗ MONOTUBE BASE TYPE 10 SPECIAL, POLE, 35'-45' ARM



- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- \* LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- ⊗ EVP DESIGNATOR
- EVP DETECTOR HEAD

- (XX) SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y) YELLOW ARROW
- (G) GREEN ARROW
- ⊗ DON'T WALK INDICATOR 16"
- ⊗ WALK INDICATOR 16"
- LANE DESIGNATION FOR INFO ONLY

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

INSTALL FIBER OPTIC INTERCONNECT;  
PLAN UPDATE  
5/7/18

CHANGE CABINET AND  
CONTROLLER TO TS2 ECONOLITE.  
ADD 4-SECTION FYAS TO ALL  
LEFT TURNS. ACTIVATE LOOPS  
51 AND 52. INSTALL LOOPS 41,  
81, 82, 83, AND 84. REMOVE  
WEST LEG PEDESTRIAN CROSSING.  
ADD PEDESTRIAN HEADS 24, 25,  
26, AND 27

INSTALL EVP FOR SB, EB AND WB  
DIRECTIONS  
1/4/17

CHANGE TO R-R EMERGENCY  
FLASH; ADD EB LT  
PROTECTED/PERMITTED SIGNALS;  
ADD PED. HEADS AND BUTTONS  
7/10/07

GEOMETRIC CHANGES  
8/18/99

INSTALL WEST SIDE PED'S AND  
PUSH BUTTONS  
5/1/91

INITIAL INSTALL  
12/1/88

## REVISION

REV. NO.	REBUILD UNDERGROUND, INSTALL MONOTUBES FOR EB & WB, UPDATE LOOP PLACEMENT FOR EB & WB			
	APPROVAL RECOMMENDED		APPROVED	
7	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY

TRAFFIC CONTROL SIGNAL  
STH 20 & SUNNY SLOPE DRIVE  
VILLAGE OF MOUNT PLEASANT  
RACINE COUNTY

SIGNAL NO. S51-0364

CABINET TYPE: TS2-E  
CONTROLLER TYPE: ECONOLITE

## WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED  
DATE \_\_\_\_\_ REGION TRAFFIC ENGINEER

APPROVED  
DATE \_\_\_\_\_ STATE TRAFFIC ENGINEER

REGION CONTACT: DERRIN WOLFORD  
DESIGNED BY: \_\_\_\_\_  
REVISED BY: JOHN BRUGGEMAN

PAGE 1 OF 3

PROJECT NO: 2250-15-70

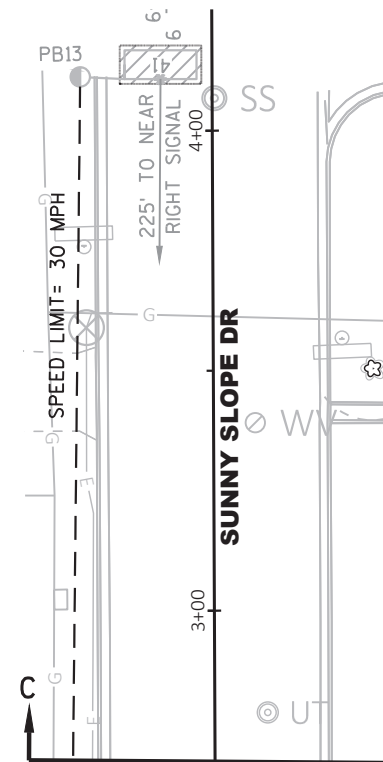
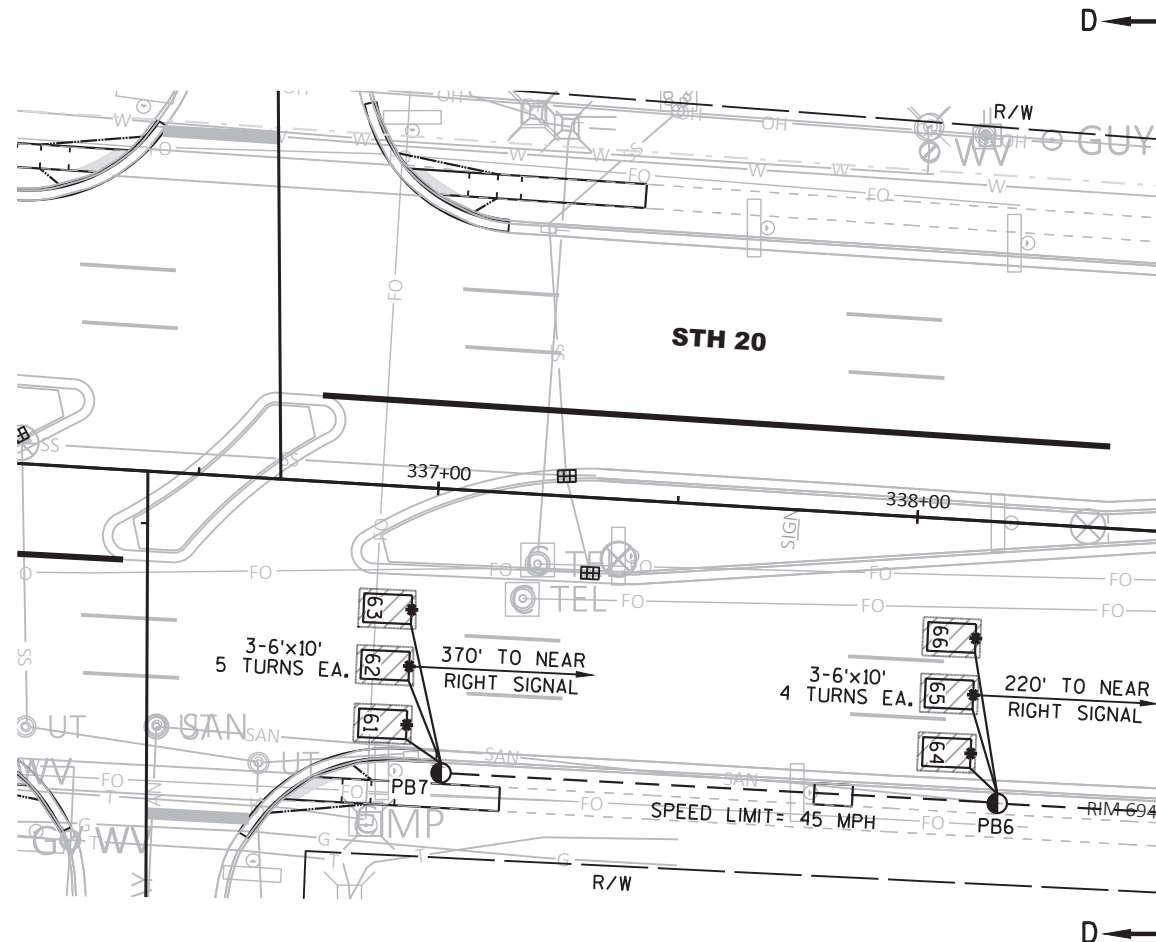
HWY: STH 20

COUNTY: RACINE

TRAFFIC SIGNAL PLAN

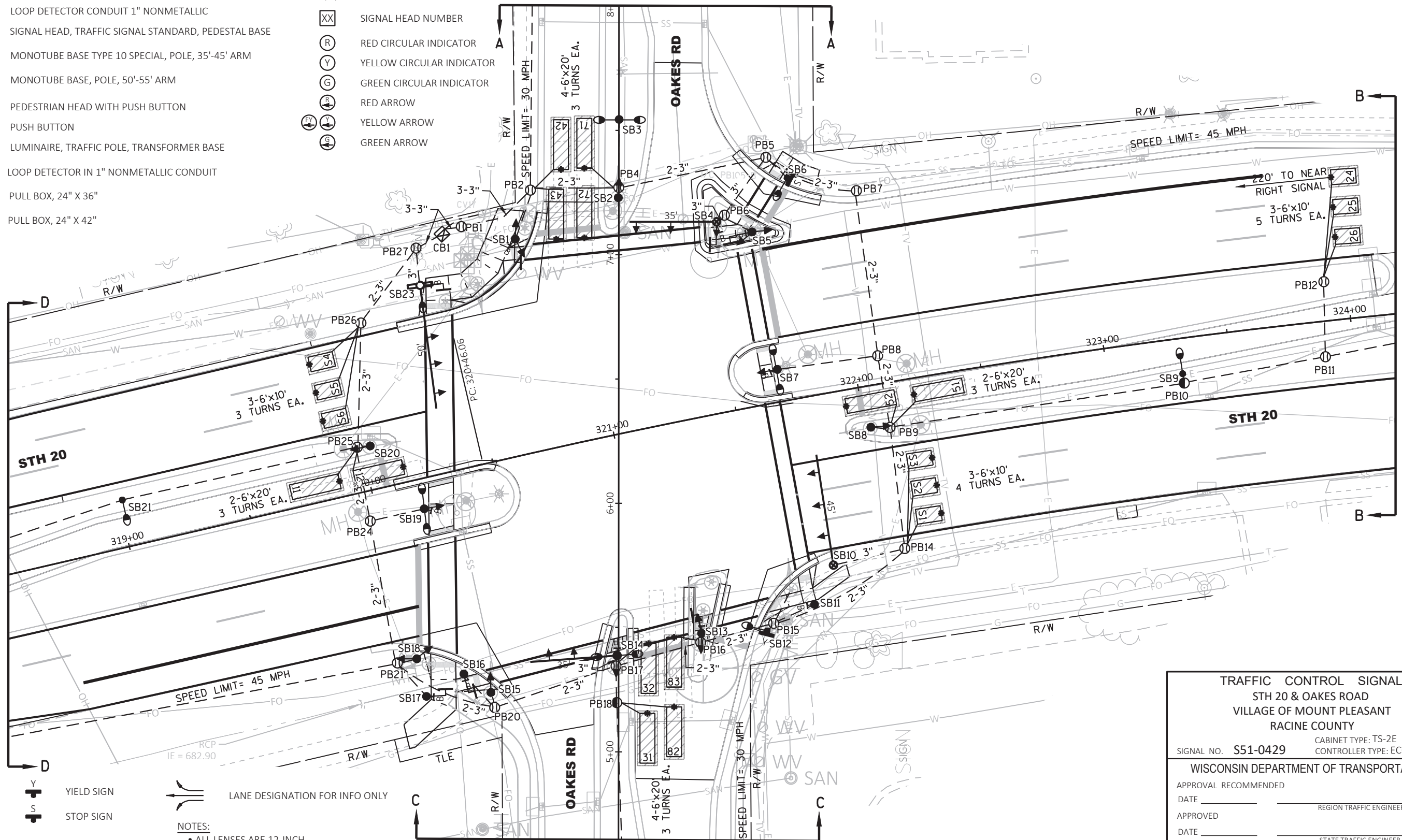
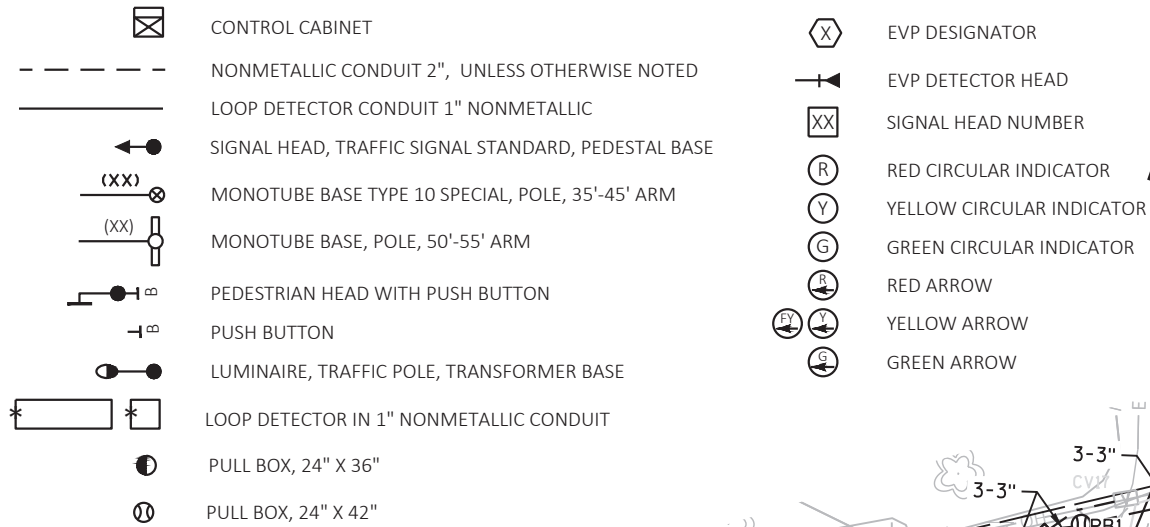
SHEET

E



TRAFFIC CONTROL SIGNAL STH 20 & SUNNY SLOPE DRIVE VILLAGE OF MOUNT PLEASANT RACINE COUNTY	
SIGNAL NO. S51-0364	
REGION CONTACT: DERRIN WOLFORD DESIGNED BY: REVISED BY: JOHN BRUGGEMAN	PAGE 2 OF 3

## LEGEND



Y  
S  
YIELD SIGN  
STOP SIGN

LANE DESIGNATION FOR INFO ONLY

## NOTES:

- ALL LENSES ARE 12-INCH
- GRAYSHADE REPRESENTS EXISTING

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

SIGNAL NO. S51-0429  
CABINET TYPE: TS-2E  
CONTROLLER TYPE: ECONOLITE

## WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

DATE \_\_\_\_\_ REGION TRAFFIC ENGINEER

APPROVED \_\_\_\_\_

DATE \_\_\_\_\_ STATE TRAFFIC ENGINEER

REGION CONTACT: DERRIN WOLFORD

DESIGNED BY: JOHN BRUGGEMAN

REVISED BY:

PAGE 1 OF 4

PROJECT NO: 2250-15-70

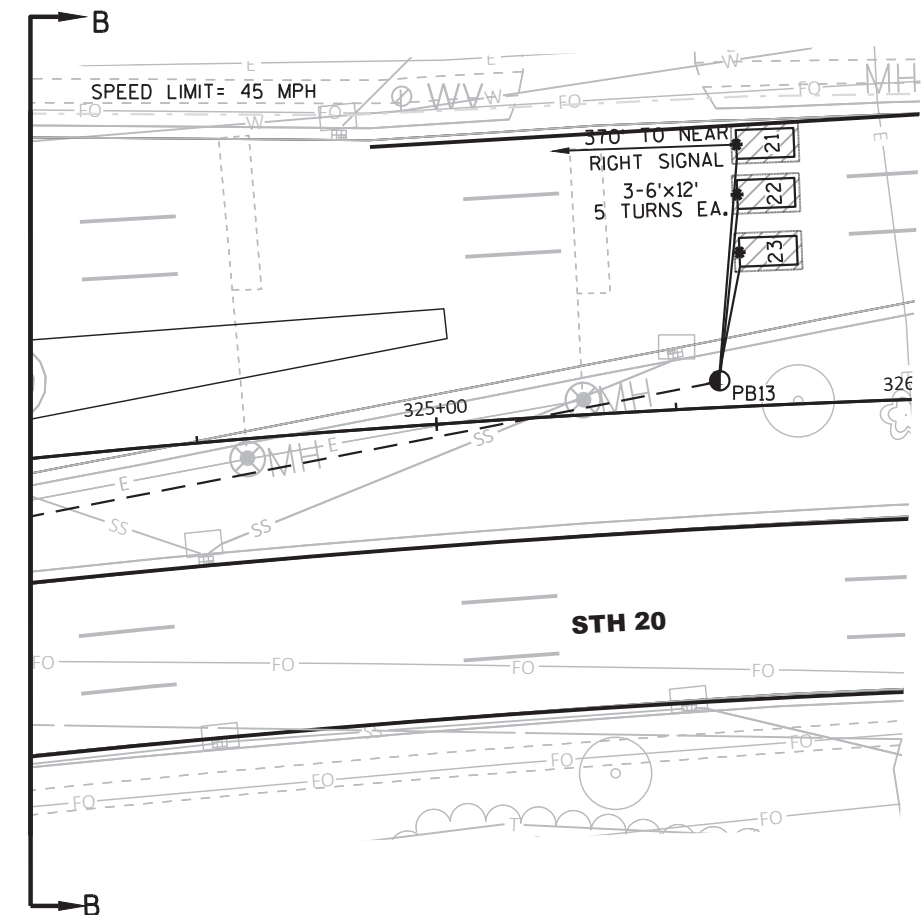
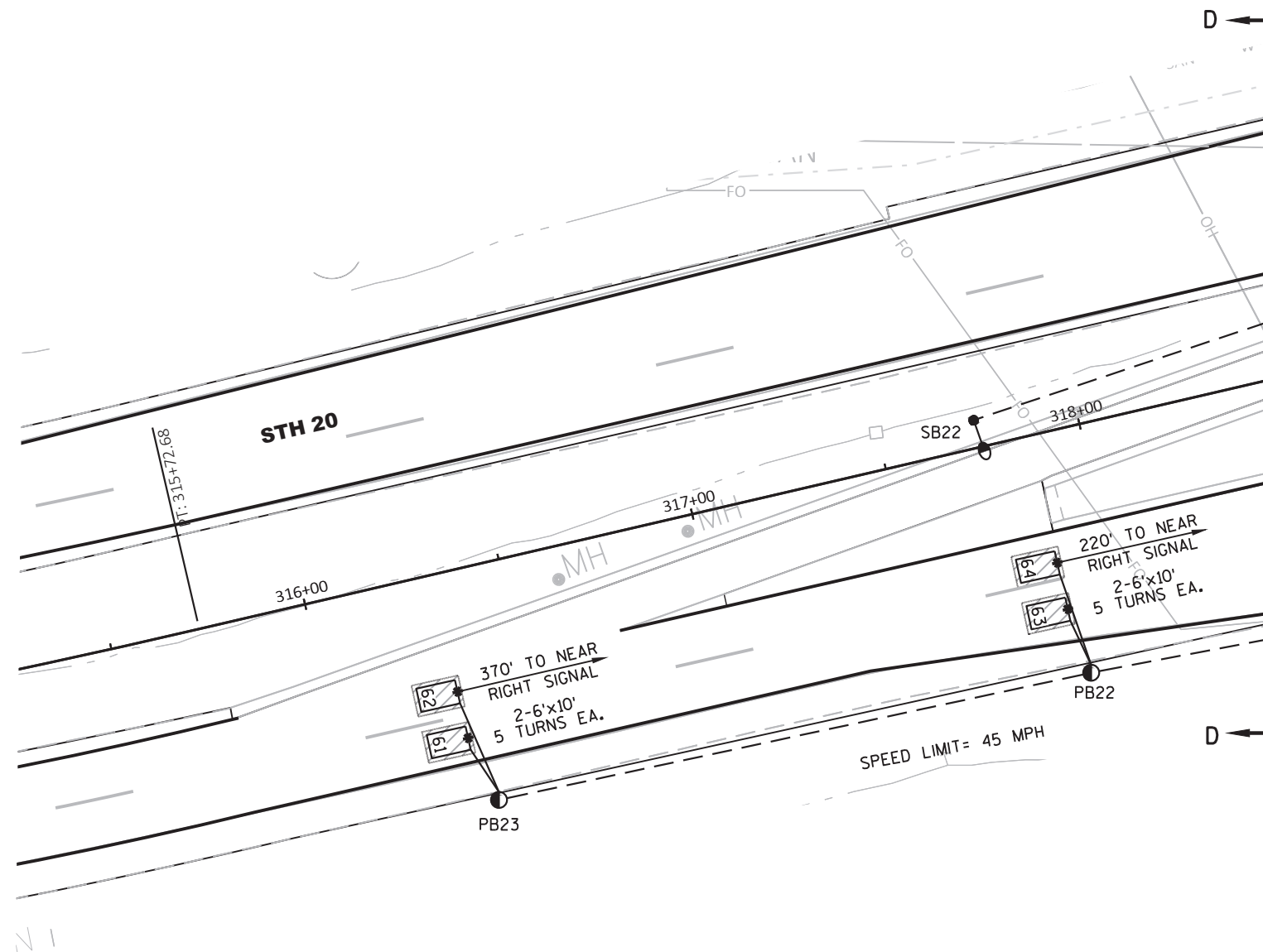
HWY: STH 20

COUNTY: RACINE

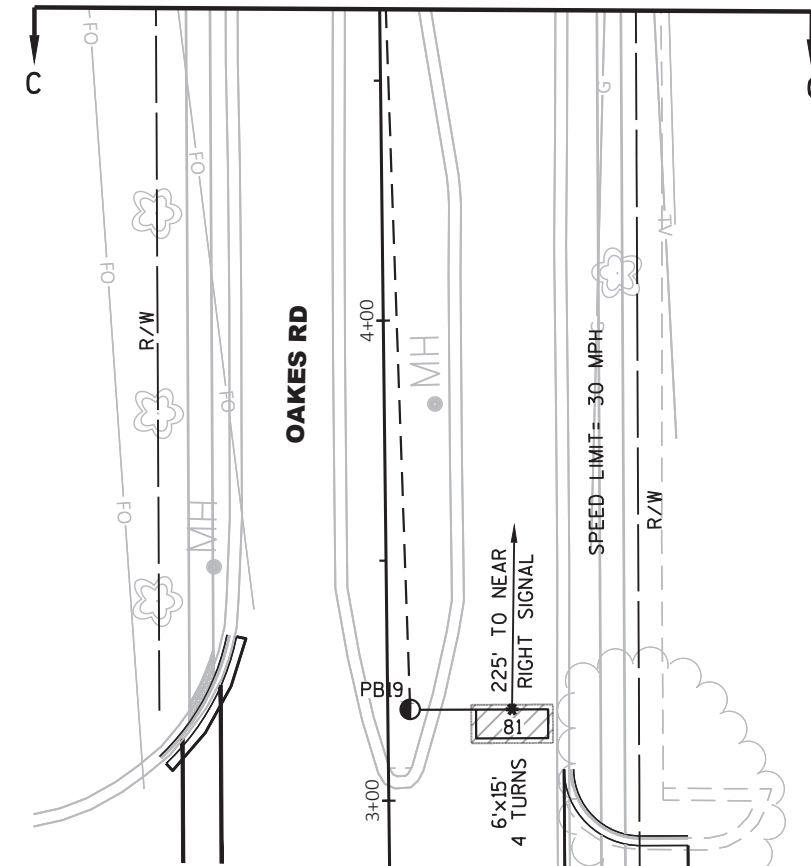
TRAFFIC SIGNAL PLAN

SHEET

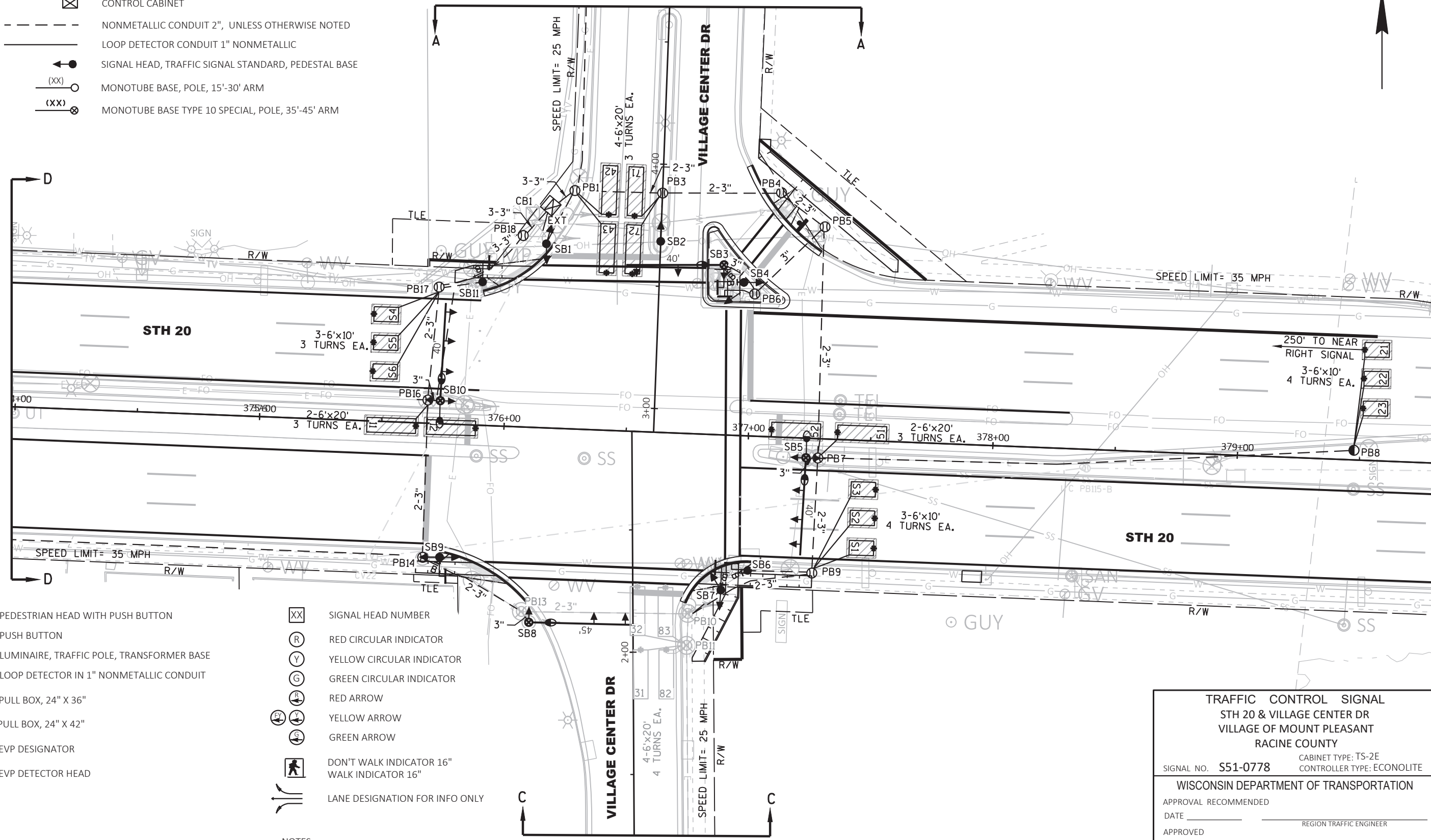
E



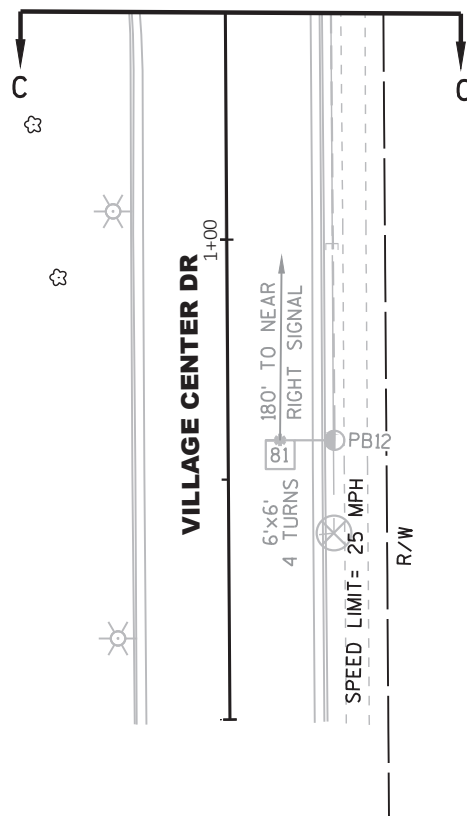
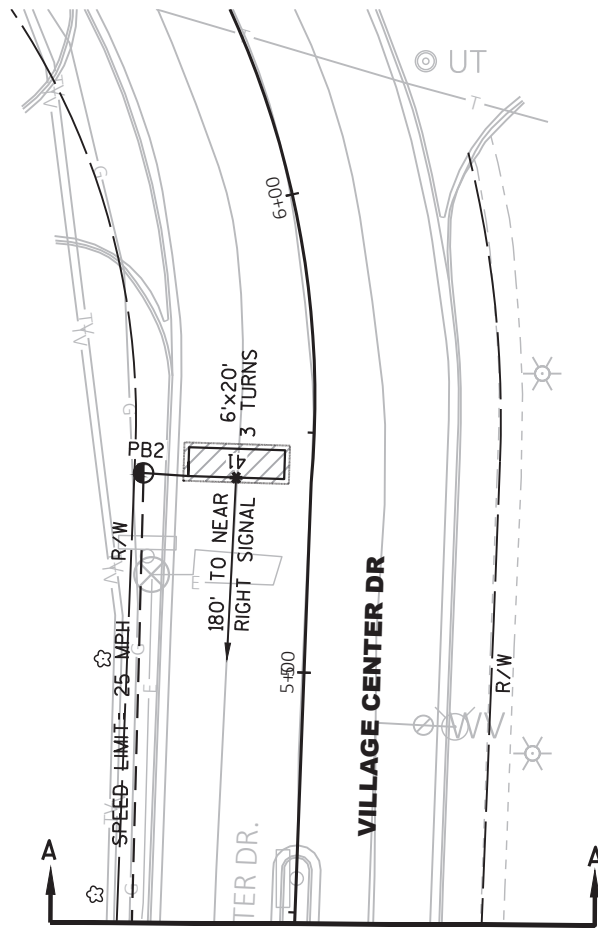
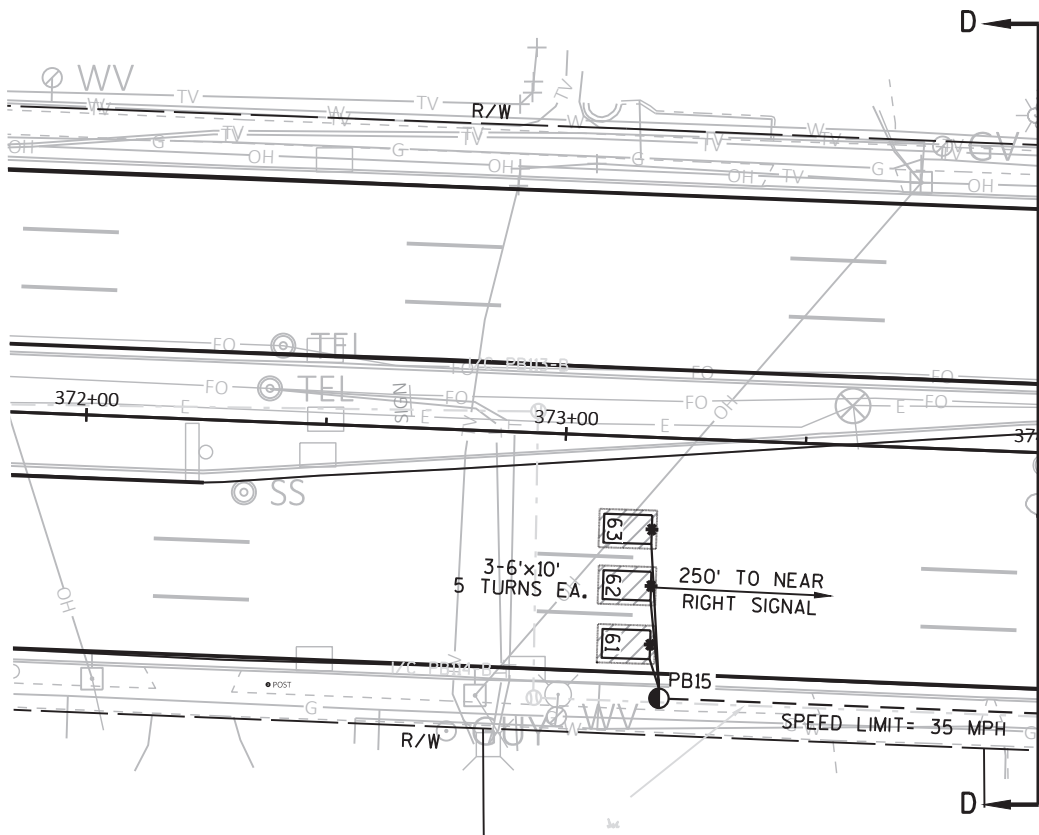
TRAFFIC CONTROL SIGNAL STH 20 & OAKES ROAD VILLAGE OF MOUNT PLEASANT RACINE COUNTY	
SIGNAL NO. S51-0429	
REGION CONTACT: DERRIN WOLFORD DESIGNED BY: JOHN BRUGGEMAN REVISED BY:	PAGE 2 OF 4



3



<b>SIGNAL</b>	
<b>STH 20 &amp; VILLAGE CENTER DR</b>	
<b>VILLAGE OF MOUNT PLEASANT</b>	
<b>RACINE COUNTY</b>	
<b>SIGNAL NO. <u>S51-0778</u></b>	<b>CABINET TYPE: TS-2E</b>
<b>CONTROLLER TYPE: ECONOLITE</b>	
<b>WISCONSIN DEPARTMENT OF TRANSPORTATION</b>	
<b>APPROVAL RECOMMENDED</b>	
<b>DATE _____</b>	<b>REGION TRAFFIC ENGINEER _____</b>
<b>APPROVED</b>	
<b>DATE _____</b>	<b>STATE TRAFFIC ENGINEER _____</b>
<b>REGION CONTACT: DERRIN WOLFORD</b>	
<b>DESIGNED BY: JOHN BRUGGEMAN</b>	
<b>REVISD BY:</b>	
<b>PAGE 1 OF 3</b>	



PROJECT NO: 2250-15-70

HWY: STH 20

COUNTY: RACINE

TRAFFIC SIGNAL PLAN

SHEET

E

TRAFFIC CONTROL SIGNAL  
STH 20 & VILLAGE CENTER DR  
VILLAGE OF MOUNT PLEASANT  
RACINE COUNTY  
SIGNAL NO. S51-0778  
REGION CONTACT: DERRIN WOLFORD  
DESIGNED BY: JOHN BRUGGEMAN  
REVISED BY: PAGE 2 OF 3

## LEGEND

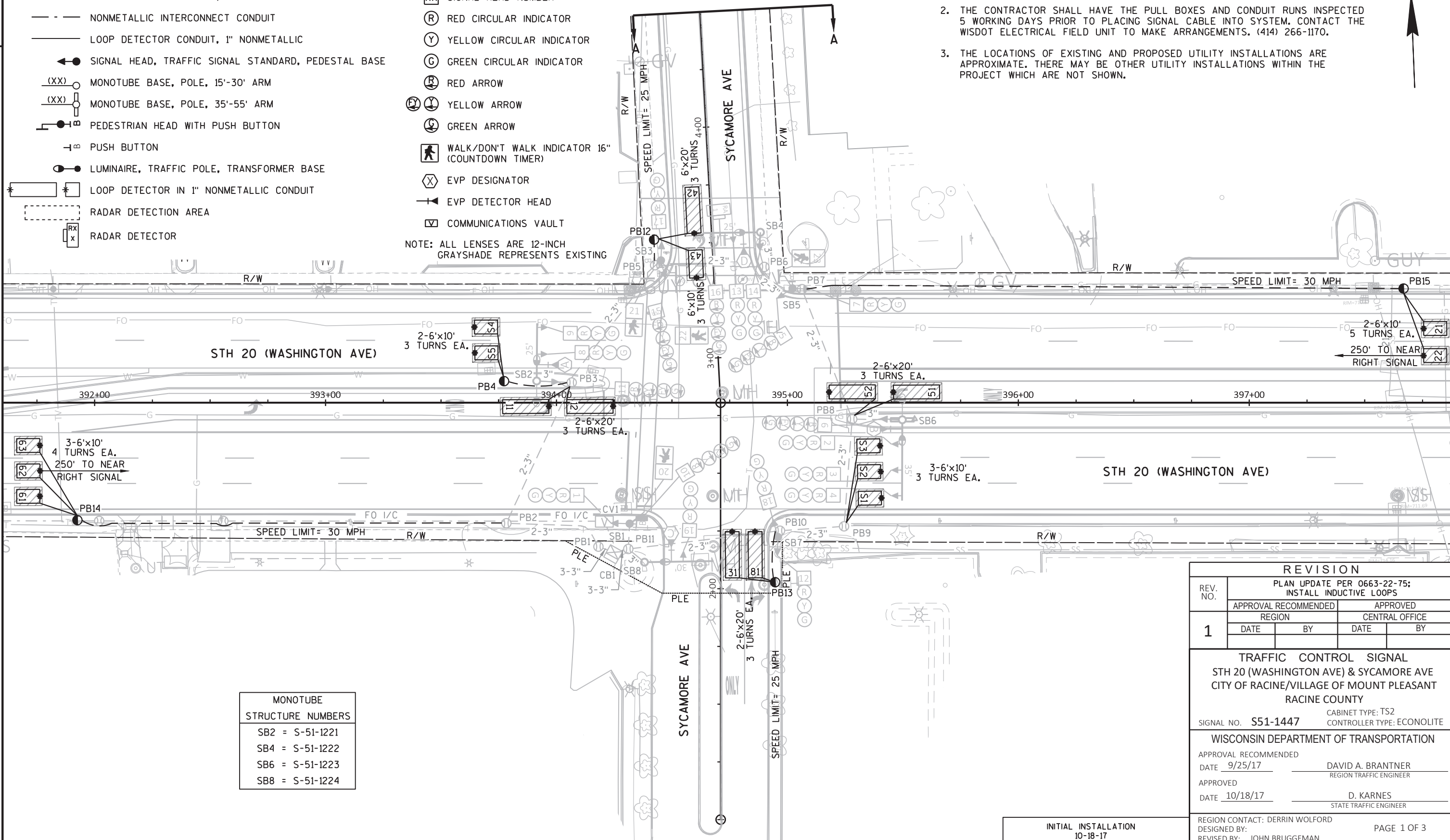
- — — NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED  
— - — NONMETALLIC INTERCONNECT CONDUIT  
— LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE  
(XX) ○ MONOTUBE BASE, POLE, 15'-30' ARM  
(XX) ○ MONOTUBE BASE, POLE, 35'-55' ARM  
● PEDESTRIAN HEAD WITH PUSH BUTTON  
— ∞ PUSH BUTTON  
● LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- \* LOOP DETECTOR IN 1" NONMETALLIC CONDUIT  
RADAR DETECTION AREA  
RX x RADAR DETECTOR

- PULL BOX, 24' X 36"  
○ PULL BOX, 24" X 42"  
XX SIGNAL HEAD NUMBER  
(R) RED CIRCULAR INDICATOR  
(Y) YELLOW CIRCULAR INDICATOR  
(G) GREEN CIRCULAR INDICATOR  
(R) RED ARROW  
(Y) YELLOW ARROW  
(G) GREEN ARROW  
WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)  
(X) EVP DESIGNATOR  
EVP DETECTOR HEAD  
COMMUNICATIONS VAULT

NOTE: ALL LENSES ARE 12-INCH  
GRAYSHADE REPRESENTS EXISTING

## CONSTRUCTION NOTES:

- \* LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
- THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.



PROJECT NO: 2250-15-70

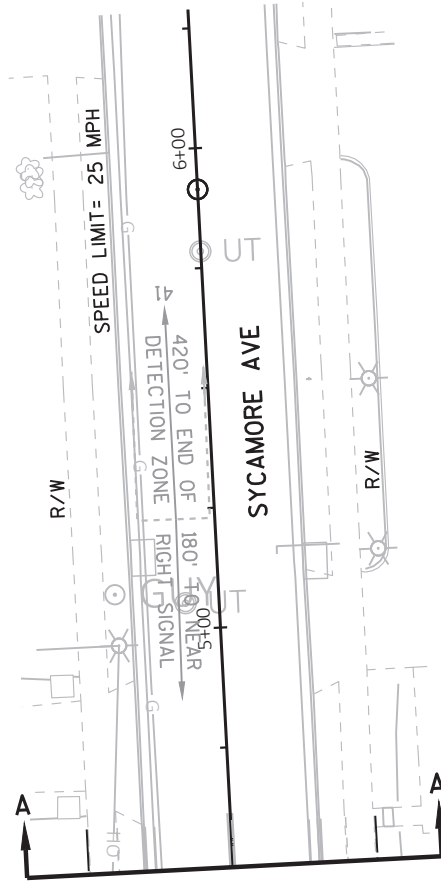
HWY: STH 20

COUNTY: RACINE

TRAFFIC SIGNAL PLAN

SHEET

E



TRAFFIC CONTROL SIGNAL  
STH 20 (WASHINGTON AVE) & SYCAMORE AVE  
CITY OF RACINE/VILLAGE OF MOUNT PLEASANT  
RACINE COUNTY

SIGNAL NO. **S51-1447**

REGION CONTACT: DERRIN WOLFORD  
DESIGNED BY:  
REVISED BY: DERRIN WOLFORD

PAGE 2 OF 3

PROJECT NO: 2250-15-70

HWY: STH 20

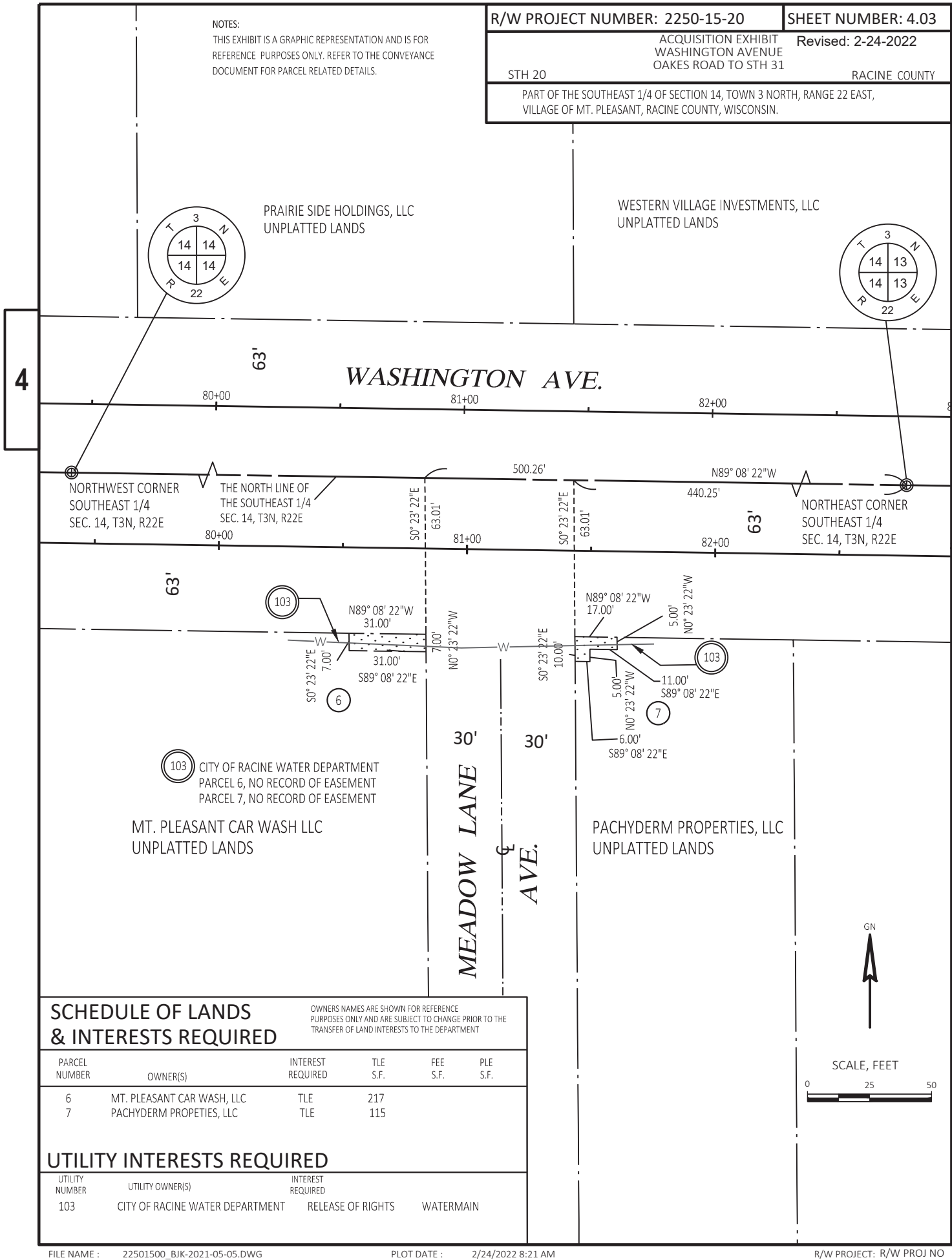
COUNTY: RACINE

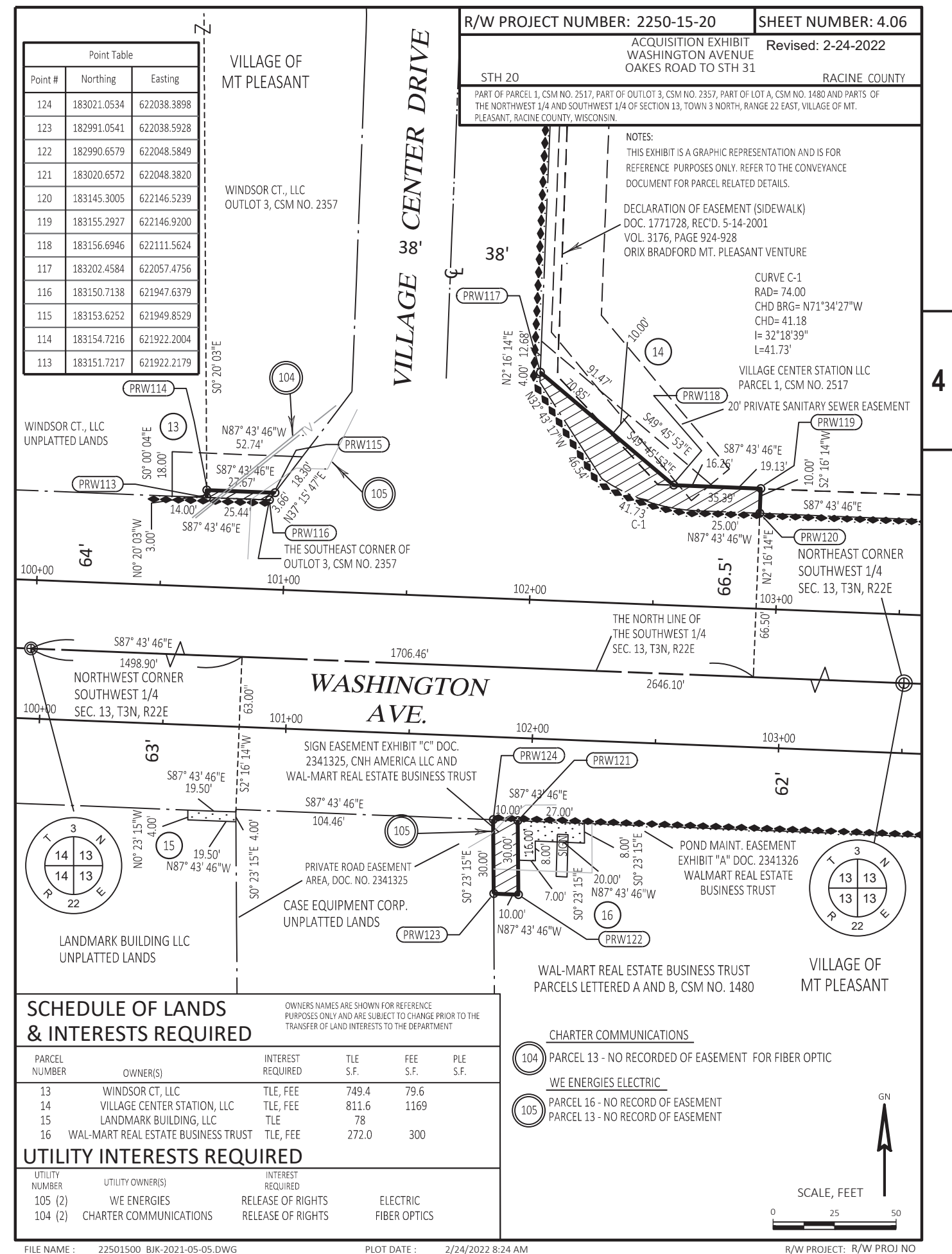
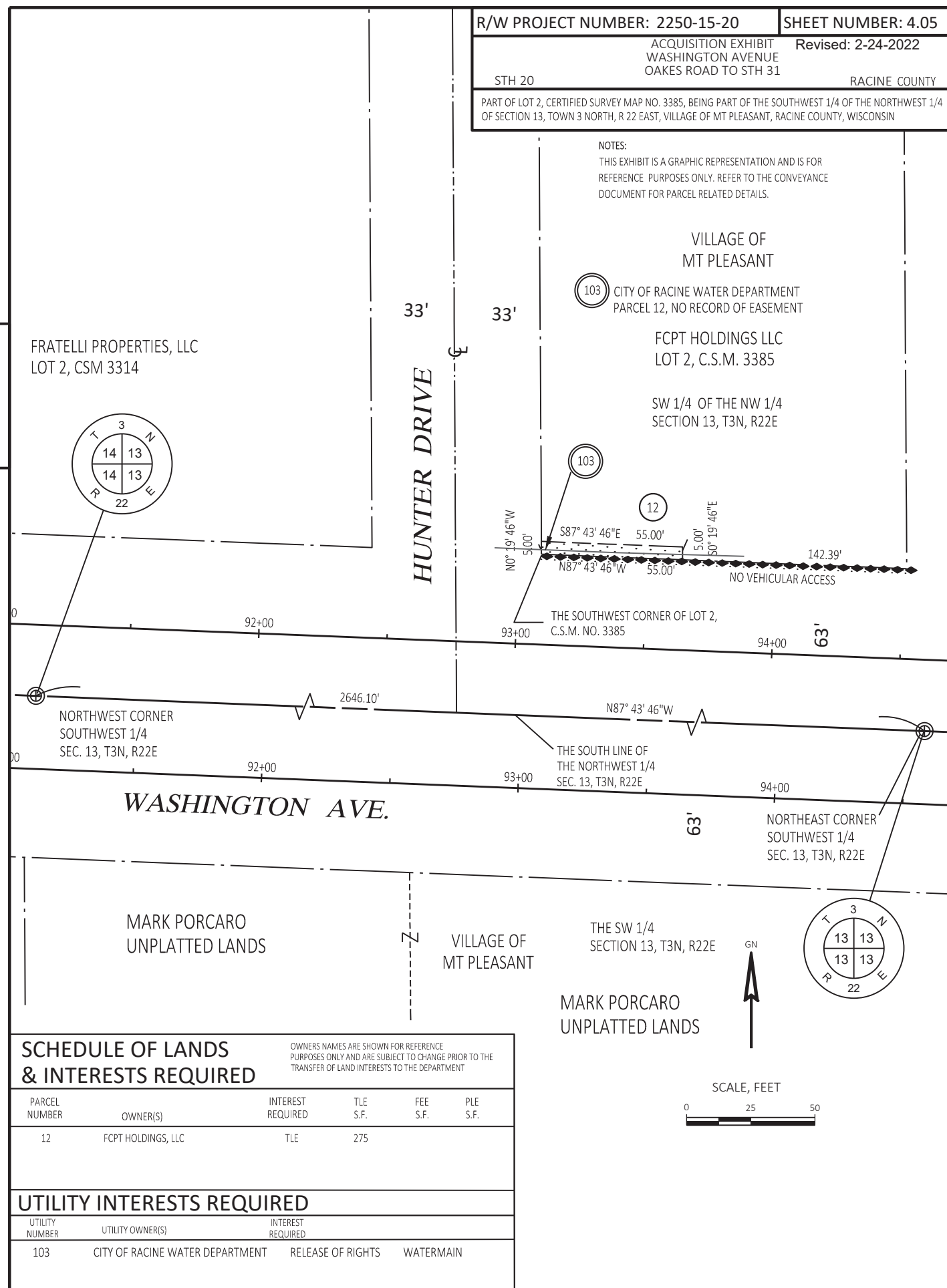
TRAFFIC SIGNAL PLAN

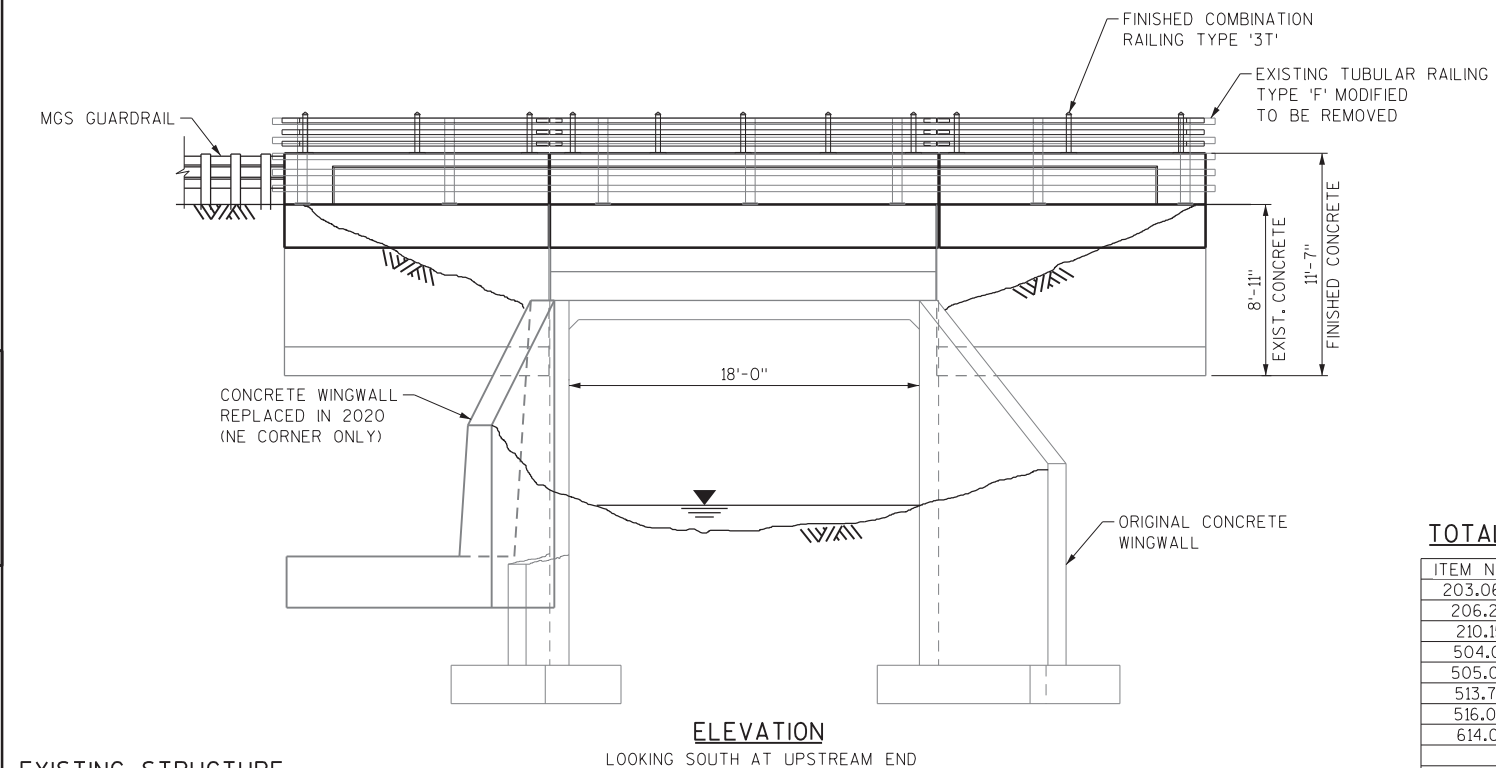
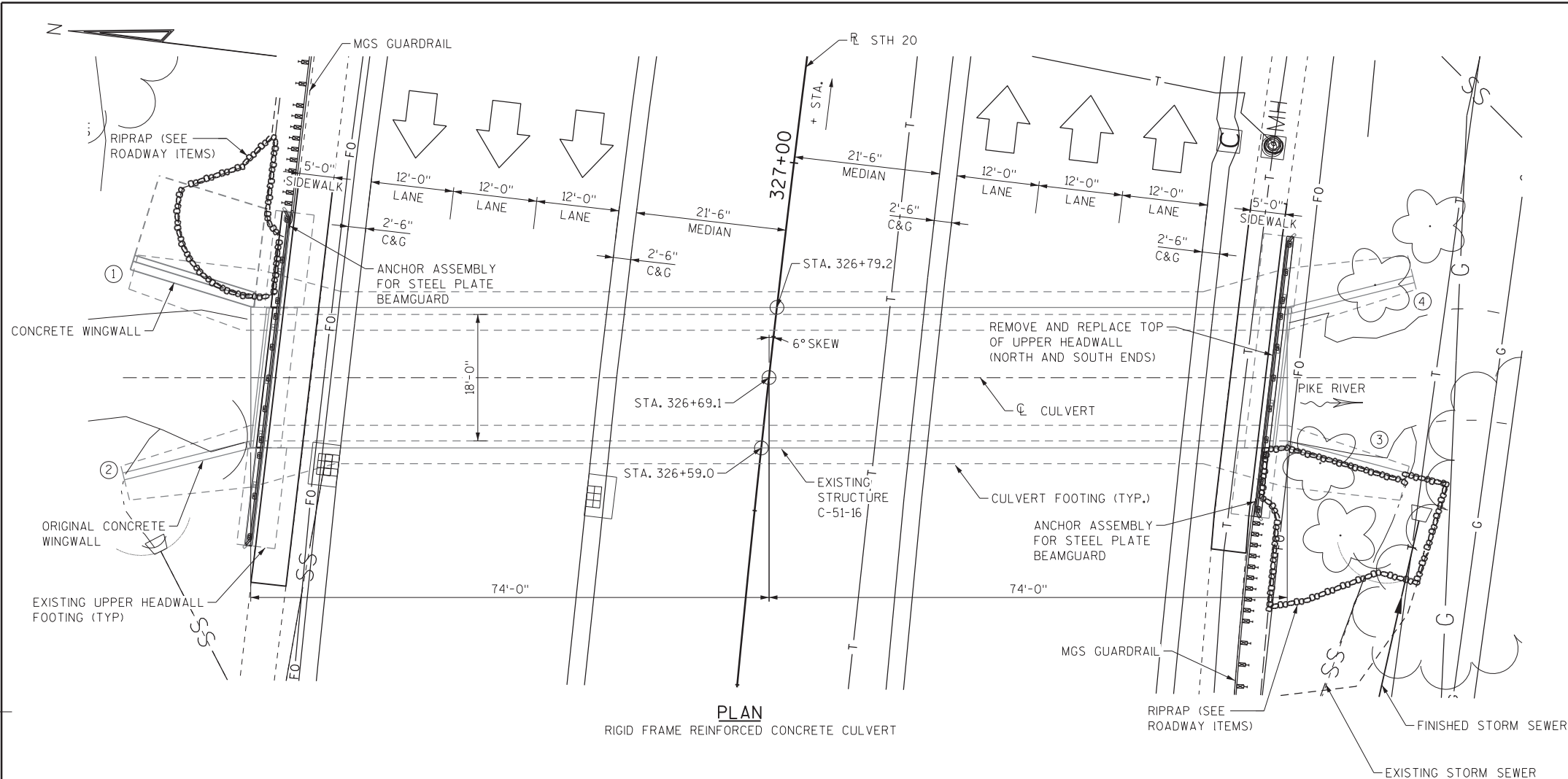
SHEET

E









**EXISTING STRUCTURE**  
THE EXISTING STRUCTURE IS A THREE SIDED RIGID FRAME CAST IN PLACE CONCRETE CULVERT WITH AN 18FT CLEAR OPENING AND PARALLEL WINGS ADDED ABOVE THE CULVERT ENDS.

**DESIGN DATA**  
**LIVE LOAD:**  
ORIGINAL BOX DESIGN LOADING HS20

**MATERIAL PROPERTIES:**  
CONCRETE MASONRY.....f'c = 3,500 psi  
BAR STEEL REINFORCEMENT.....fy = 60,000 psi

**TRAFFIC DATA**  
AADT (2017) = 33400  
DESIGN SPEED = 60 MPH

**LEGEND**  
⊗ INDICATES WINGWALL NUMBER  
\* EXISTING WINGWALL

**GENERAL NOTES**  
DRAWINGS SHALL NOT BE SCALED.  
EXISTING STRUCTURE DIMENSIONS ARE BASED ON THE ORIGINAL STRUCTURE PLANS.  
BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.  
THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.  
ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.  
BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.  
ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS NOTED OTHERWISE.  
ALL STATIONS AND ELEVATIONS ARE IN FEET.  
THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS C-51-16" SHALL BE THE EXISTING GROUND LINE.  
BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO THE EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.  
AT THE BACK FACE OF THE WINGWALL, ALL VOLUME WHICH CANNOT BE PLACED BEFORE WINGWALL CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

**STRUCTURES DESIGN CONTACTS**  
**BRIDGE OFFICE:** AARON BONK, PE (608) 261-0261  
**CONSULTANT:** WILLIAM J. ZIPPEL, PE, SE ALFRED BENESCH & CO. 1300 W CANAL ST, SUITE 150 MILWAUKEE, WI 53233 (414) 308-1321


- LIST OF DRAWINGS**
1. GENERAL PLAN & ELEVATION
  2. NORTH WALL DETAILS
  3. SOUTH WALL DETAILS (NOT INCL THIS SUBMITTAL)
  4. COMBINATION RAILING TYPE "3T" DETAILS

ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 326+69	LS	1
206.2000	EXCAVATION FOR STRUCTURES CULVERTS C-51-16	LS	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	999
504.0100	CONCRETE MASONRY CULVERTS	CY	999
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	999
513.7093	RAILING STEEL TYPE 3T	LF	999
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	999
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EA	2
	NON-BID ITEMS		
	JOINT FILLER - 1", 1/2"		

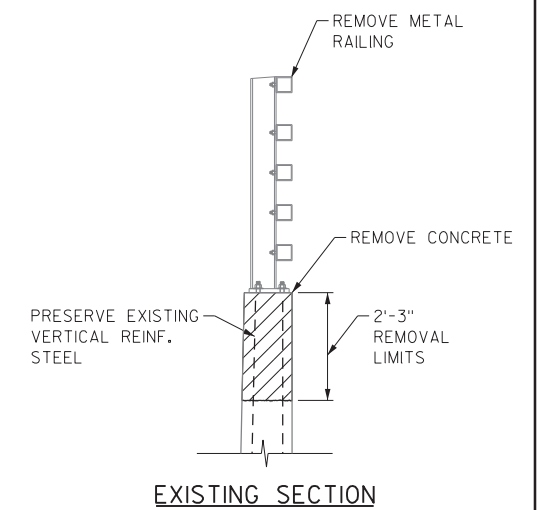
STATE PROJECT NUMBER

2250-15-70

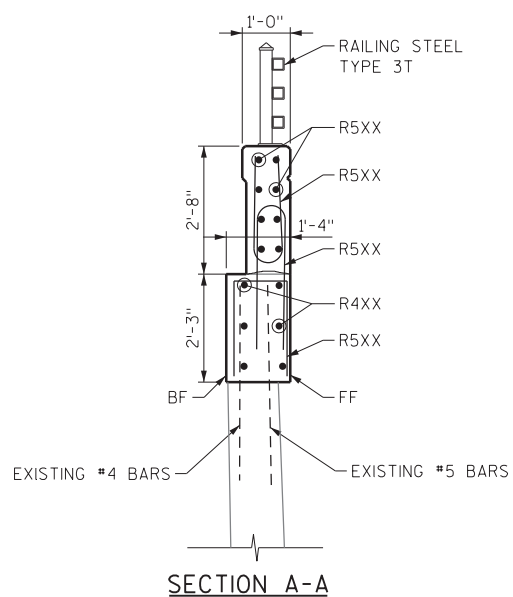
PRELIMINARY PLAN SUBMITTAL

NO.	DATE	REVISION	BY
 Alfred Benesch & Company 1300 West Canal Street, Suite 150 Milwaukee, Wisconsin 53233 414-308-1310 Job No. 20298.01			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED _____ CHIEF STRUCTURES DESIGN ENGINEER		DATE _____	
STRUCTURE C-51-16			
STH 20 OVER PIKE RIVER			
COUNTY	RACINE	TOWN/CITY/VILLAGE	YORKVILLE
DESIGN SPEC.	REHABILITATION	N/A	
DESIGNED BY	JAP	DESIGN CK'D.	WJZ
DRAWN BY	BJW	PLANS CK'D.	WJZ
GENERAL PLAN & ELEVATION			SHEET 1 OF 4

FILE= C-51-0016\_10-GP.DGN  
SCALE = 1:20

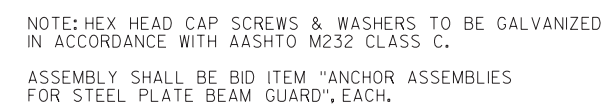


### PLAN



Technical drawing of a railing assembly. The drawing shows a side elevation of a railing system. Key dimensions and components are labeled:

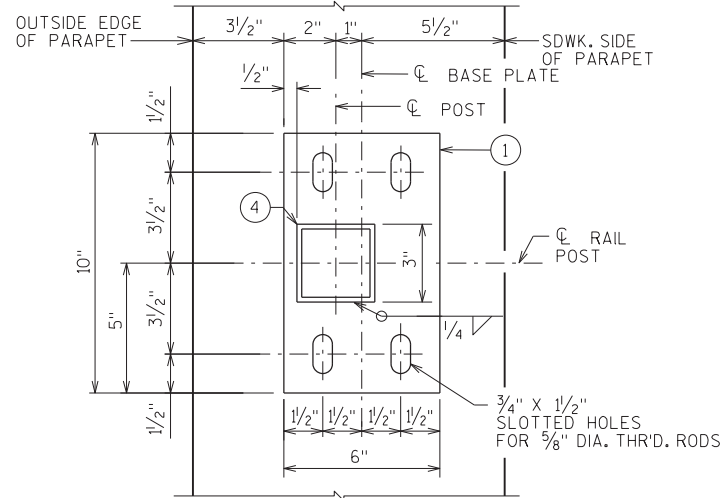
- RAILING STEEL TYPE 3T**: Points to the top rail.
- R5XX**: Points to the vertical balusters.
- R4XX**: Points to the bottom rail.
- BF**: Points to the base flange.
- FF**: Points to the foot flange.
- Dimensions**:
  - 1'-0"**: Horizontal dimension across the top rail.
  - 2'-8"**: Vertical dimension from the base flange (BF) to the top rail.
  - 2'-3"**: Vertical dimension from the foot flange (FF) to the bottom rail.
  - 1'-0"**: Horizontal dimension between the vertical balusters.



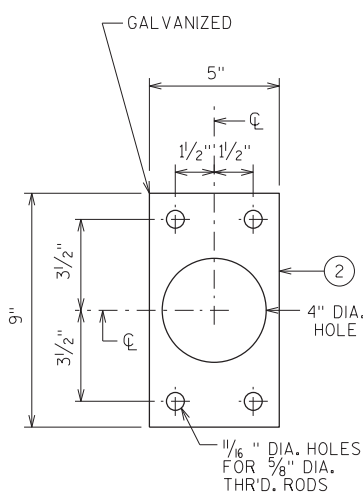
ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES  
FOR STEEL PLATE BEAM GUARD", EACH.

PRELIMINARY PLAN SUBMITTAL

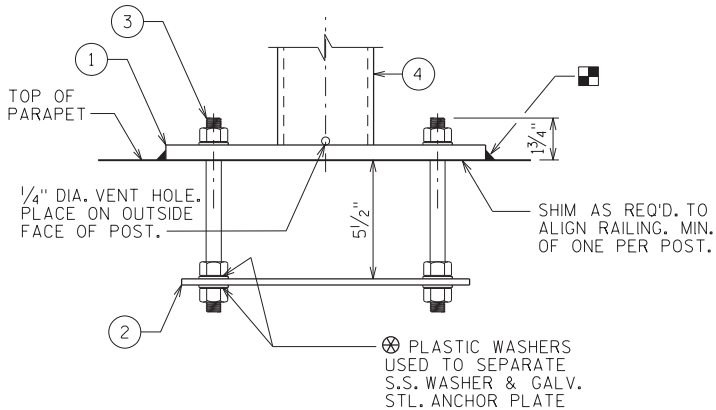
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		C-51-16	
		DRAWN BY	BGS PLANS CK'D. WJZ
NORTH WALL DETAILS		SHEET 2 OF 4	



TYPICAL RAIL POST BASE PLATE

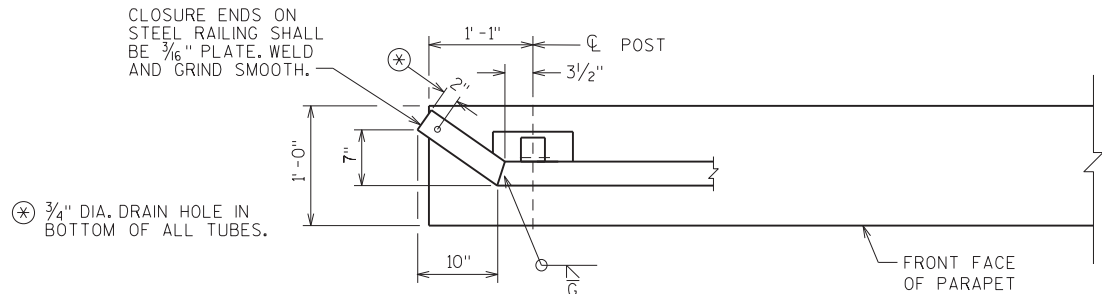


ANCHOR PLATE

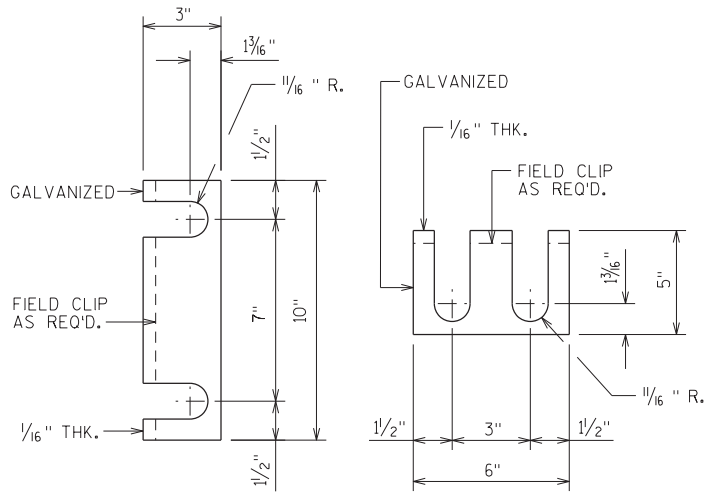


ANCHORAGE FOR RAIL POSTS

☆NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.

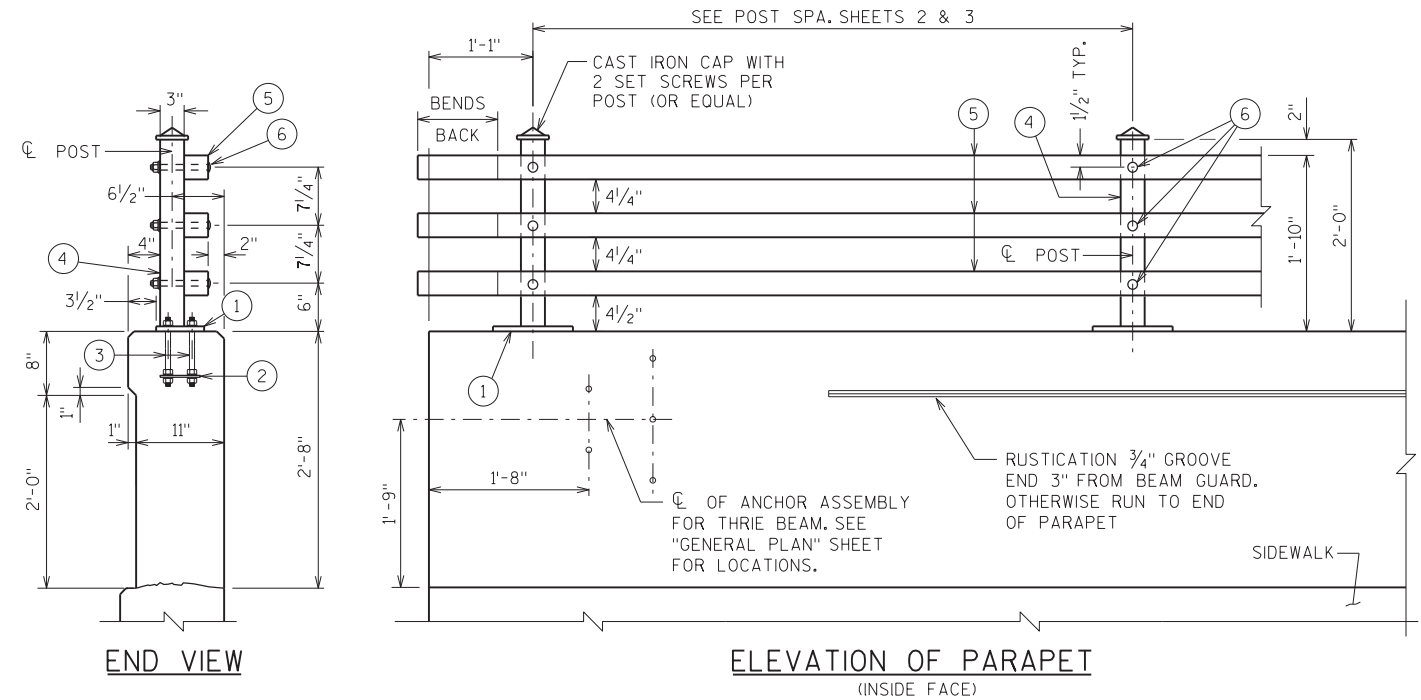


PLAN



RAIL POST SHIM DETAIL

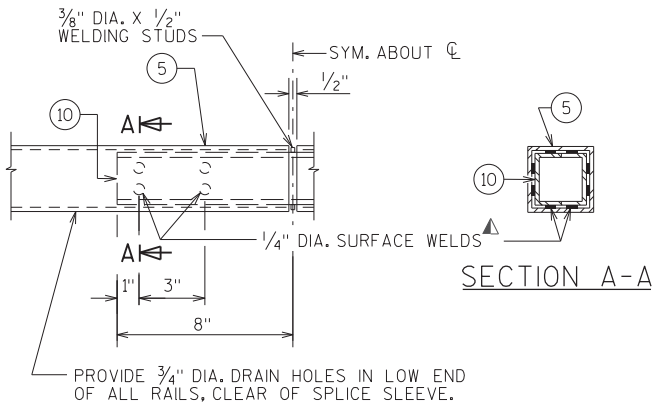
(2 SETS PER POST)



END VIEW

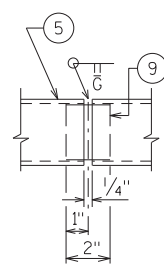
ELEVATION OF PARAPET

(INSIDE FACE)



FIELD ERECTION JOINT DETAIL

▲ MIN. 5/16" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)

LEGEND

1. BASE PLATE 5/8" X 6" X 10" WITH 3/4" X 1 1/2" SLOTTED HOLES FOR THR'D RODS NO. 3. WELD TO NO. 4 AS SHOWN. SLOTS PARALLEL TO LONG SIDE OF PLATE.
2. 1/4" X 5" X 9" ANCHOR PLATE (GALVANIZED) WITH 1/16" DIA. HOLES FOR THR'D. RODS NO. 3.
3. 5/8" 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 1/16" DIA. HOLES (FRONT AND BACK) FOR BOLT NO. 6. BOLT TO NO. 4.
6. 5/8" DIA. A325 SLOTTED ROUND HEAD BOLT WITH HEX NUT, 3/16" X 1 1/2" X 1 1/2" WASHER, AND LOCK WASHER.
7. RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".
8. RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.) (1'-4" @ STRIP SEAL EXP. JTS.)

☆ ALTERNATIVE ANCHORAGE: 4 EQUIVALENT STAINLESS STEEL CONCRETE ADHESIVE ANCHORS 5/8-INCH. EMBED 7" IN CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE STANDARD SPECIFICATIONS.

RAILING NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE 3T", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME 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.

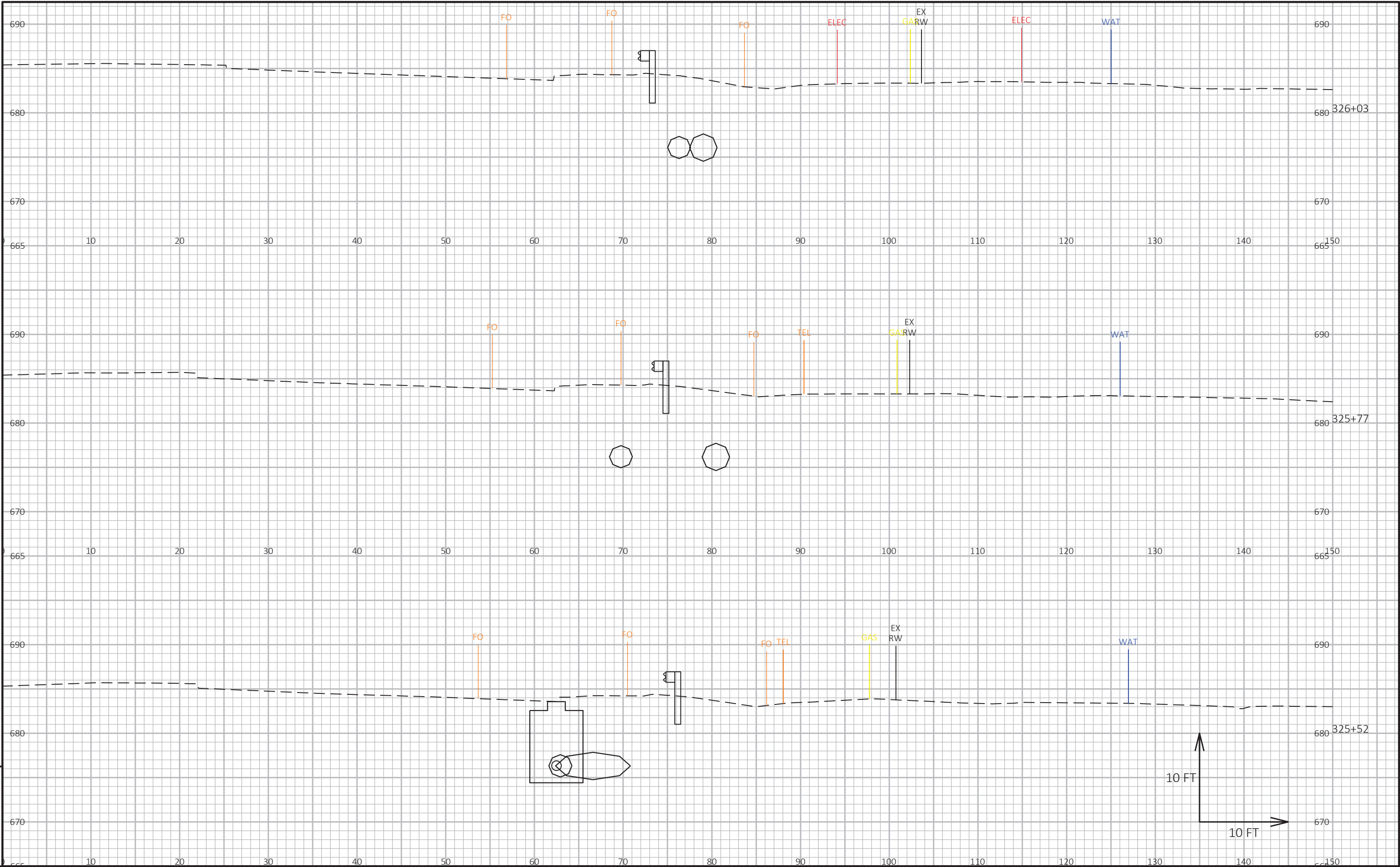
ALL MATERIAL (EXCEPT NO. 3 & 12) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS.

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 TO 5 POSTS.

PRELIMINARY PLAN SUBMITTAL

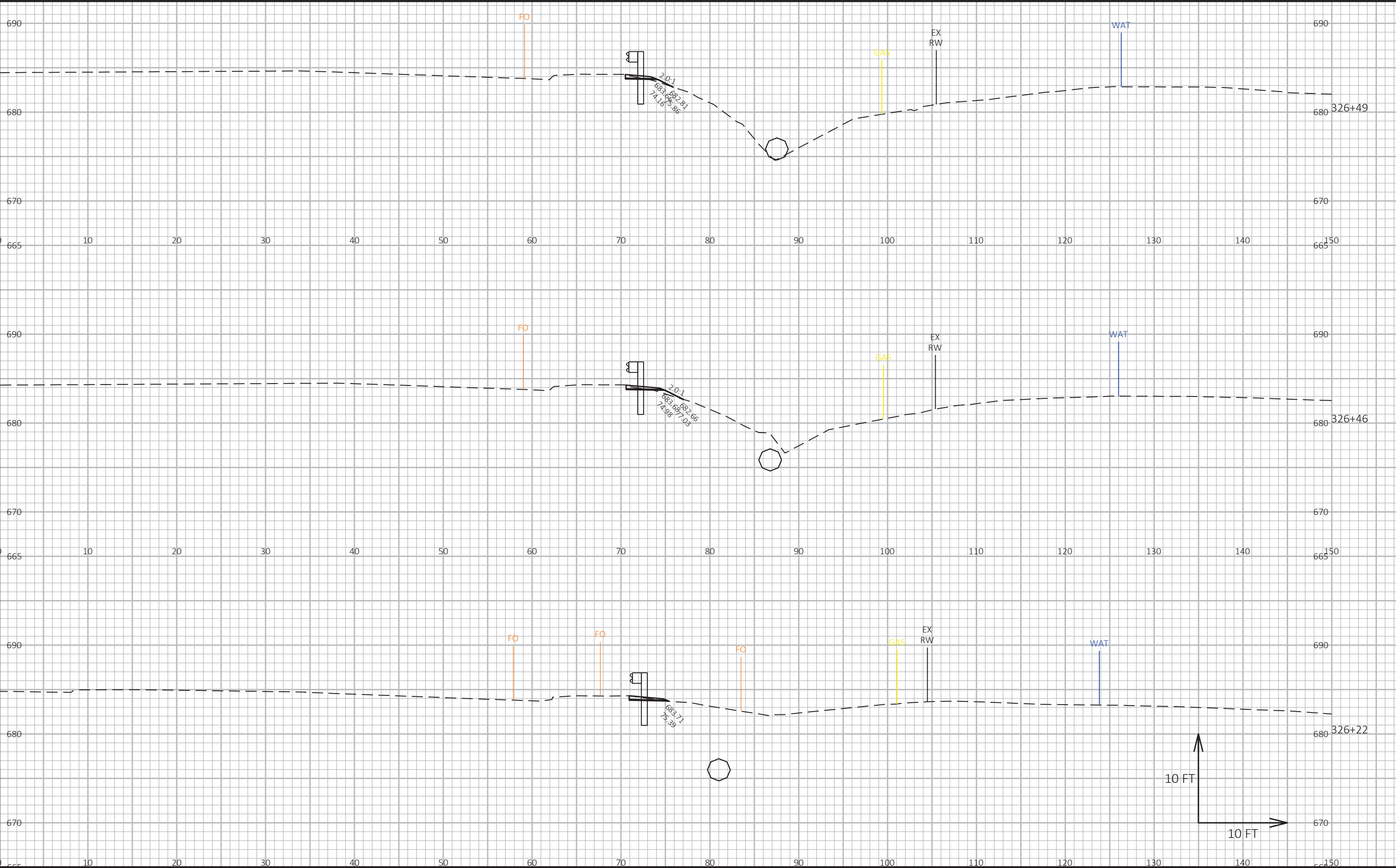
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE		C-51-16	
DRAWN BY		BGS	PLANS CKD. WJZ
COMBINATION RAILING TYPE "3T" DETAILS		SHEET 4 OF 4	



9

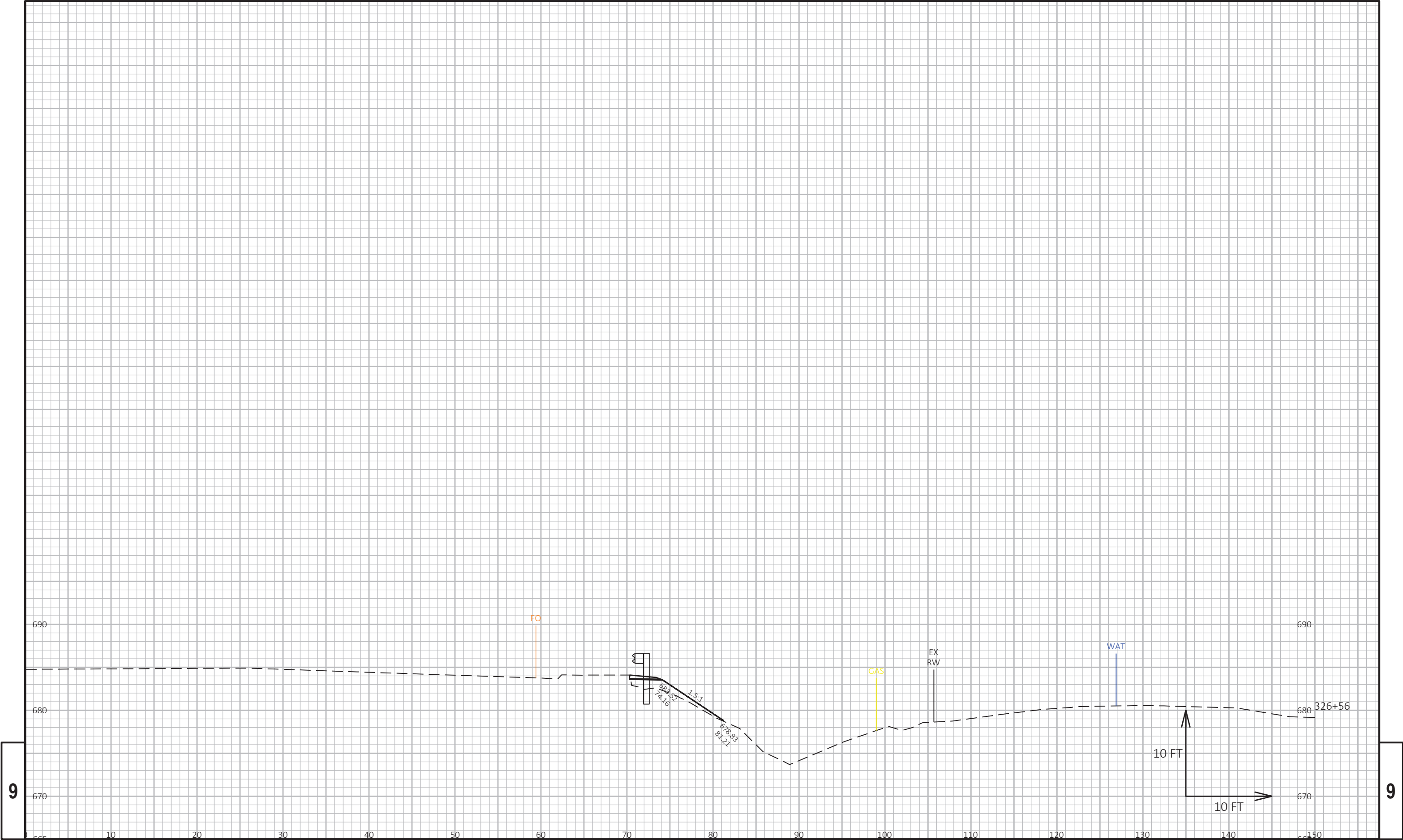
9

PROJECT NO: 2250-15-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20 BEAMGUARD	SHEET	PRE_67 E
------------------------	-------------	----------------	----------------------------------	-------	----------



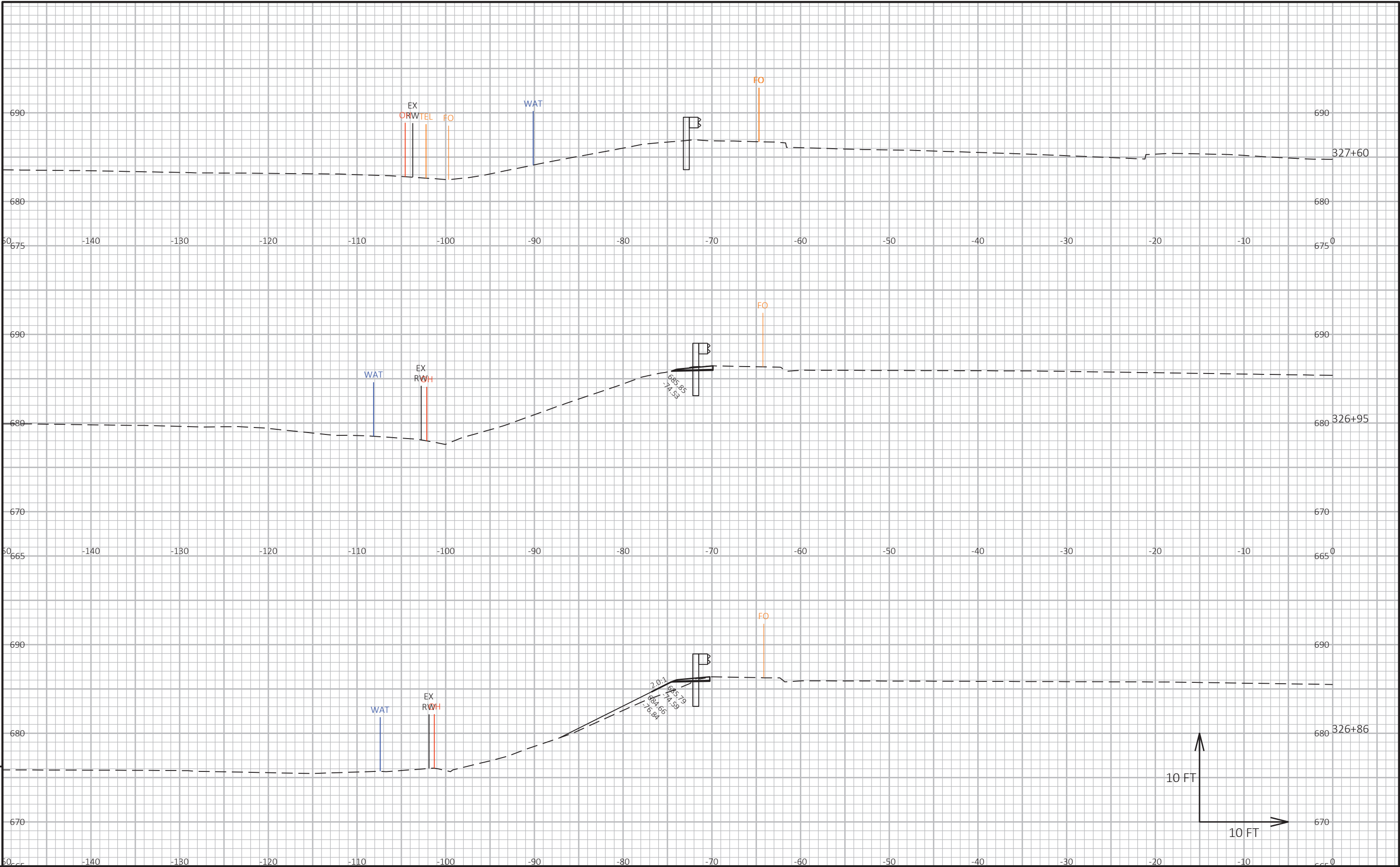
9

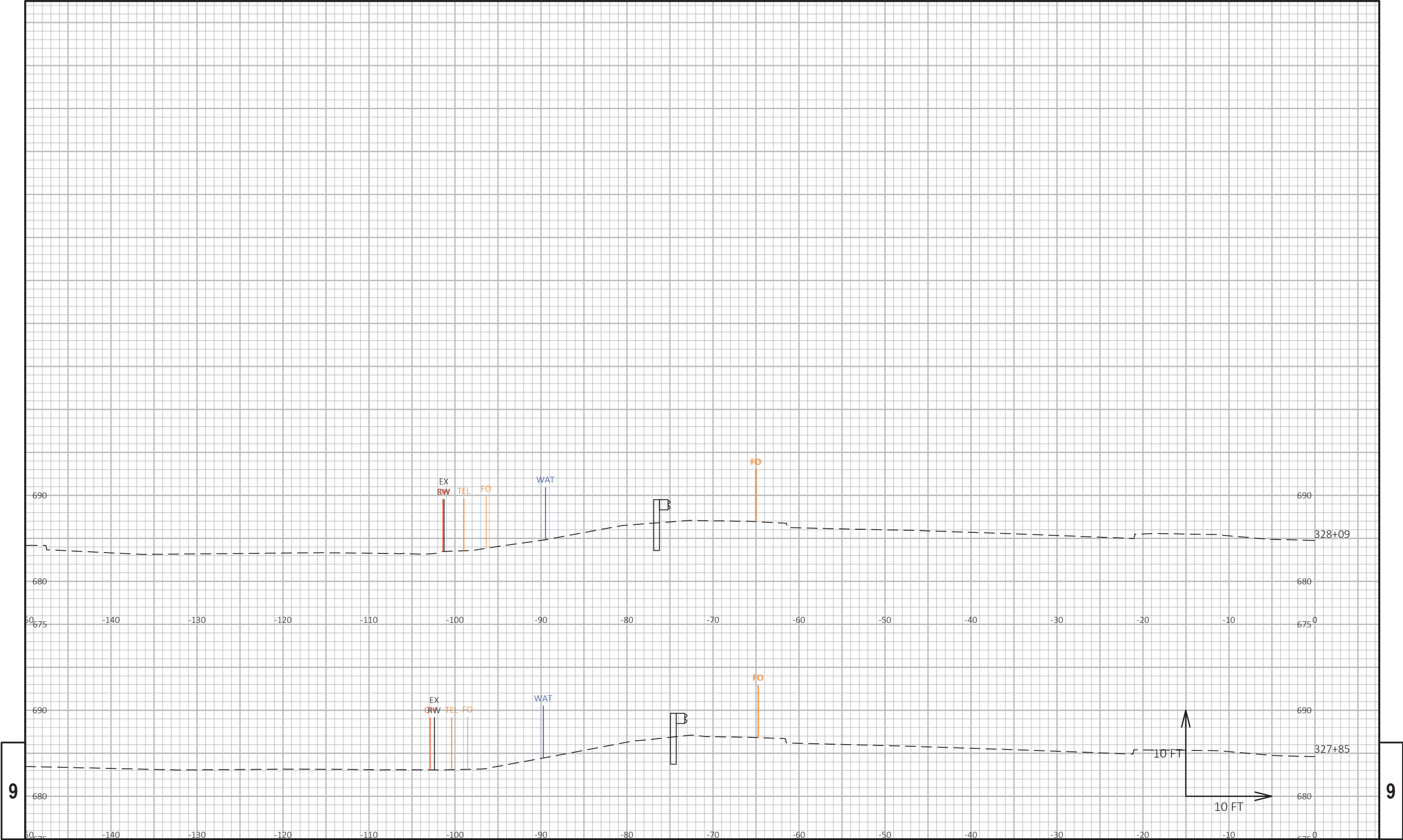
9



9

9





9

9

**Design Project ID: 2250-15-00**  
**Construction Project ID: 2250-15-70**  
Washington Ave. – Village of Mount Pleasant  
Oakes Rd – WIS 31  
WIS 20  
Racine County

## **Project Synopsis**

### **Description of Proposed Action**

The Wisconsin Department of Transportation is preparing plans to rehabilitate a 1.6-mile segment of WIS 20 from Oakes Rd to WIS 31. This resurfacing project will mill 3-inches of asphalt and 1-inch of concrete pavement. The underlying concrete will be base patched and joint and crack repair will be performed as needed.

Existing traffic signals and lighting at Oakes Road, Sunnyslope Drive, Emmertsen Road, Village Center Drive, and Sycamore Avenue will be updated, along with curb ramps and bus stop locations. There will be minor right of way acquisition on this project because of the curb ramps and traffic signal improvements.

New pavement marking and permanent signing will be installed, and the beam guard at box culvert C-51-016 over the Pike River will be updated.

Construction of this project is tentatively scheduled to occur in 2023.

### **Traffic Control**

The project will be constructed in stages, with a minimum of one access point remaining open to adjacent properties.

Through traffic will be detoured via CTH V to CTH C to WIS 31.

BEGIN RESURFACING

WIS 20

OAKES RD

OAKES RD

PIKE RIVER

SUNNYSLOPE DR

20

MEADOW LN

S. EMMERTSON RD

VILLAGE CENTER DR

TC SIM

END RESURFACING

SYCAMORE AVE

31



CITY OF RACINE  
VILLAGE OF MOUNT PLEASANT



VILLAGE OF MOUNT PLEASANT

CITY OF RACINE

ID 2340-10-70  
Washington Ave. – Village of Mount Pleasant  
Oakes Rd – STH 31  
STH 20  
Racine County

List of Potential Utility Conflicts

This listing may not be all-inclusive. Final responsibility for identifying conflicts remains with the utility owner. All stationing and offsets are measured from the STH 20 reference line unless noted otherwise.

Poles

- 1. STA 360+52, 67’ LT (S51-0268/SB5 – Emmertsen Rd)
- 2. STA 360+54, 71’ LT (S51-0268/PB5 – Emmertsen Rd)

Underground Gas Lines

- 1. STA 341+38, 70’ RT (S51-0364/PB2 – Sunnyslope Rd)
- 2. STA 341+78, 66’ RT (S51-0364/CB1 – Sunnyslope Rd)
- 3. STA 360+28, 56’ RT (S51-0268/SB1 – Emmertsen Rd)
- 4. STA 361+22, 72’ RT (S51-0364/PB13 – Emmertsen Rd)
- 5. STA 361+45, 56’ RT (S51-0268/SB11 – Emmertsen Rd)
- 6. STA 375+69, 54’ RT (S51-0778/PB14 – Village Center Dr)
- 7. STA 375+76, 55’ RT (S51-0778/SB9 – Village Center Dr)
- 8. STA 375+89, 59’ LT (S51-0778/SB11 – Village Center Dr)
- 9. STA 376+26, 250’ LT (S51-0778/PB2 – Village Center Dr)

Underground Fiber Optic Lines

- 1. STA 320+19, 80’ RT (S51-0429/SB16 – Oakes Rd)
- 2. STA 320+39, 91’ LT (S51-0429/PB27 – Oakes Rd)
- 3. STA 320+79, 86’ LT (S51-0429/SB1 – Oakes Rd)
- 4. STA 325+80, 70’ RT (Storm sewer @ Pike River bridge beam guard)
- 5. STA 327+44, 70’ LT (Storm sewer @ Pike River bridge beam guard)
- 6. STA 340+25, 11’ RT (S51-0364/PB8 – Sunnyslope Rd)
- 7. STA 340+40, 10’ RT (S51-0364/SB5 – Sunnyslope Rd)
- 8. STA 360+07, 9’ LT (S51-0268/PB3 – Emmertsen Rd)
- 9. STA 360+15, 9’ LT (S51-0268/SB2 – Emmertsen Rd)
- 10. STA 360+52, 316’ LT (S51-0268/PB7 – Emmertsen Rd)
- 11. STA 375+68, 9’ LT (S51-0778/PB16 – Village Center Dr)
- 12. STA 375+74, 9’ LT (S51-0778/SB10 – Village Center Dr)

### **Underground Telephone Lines**

1. STA 320+51, 93’ LT (S51-0429/CB1 – Oakes Rd)
2. STA 320+58, 95’ LT (S51-0429/PB1 – Oakes Rd)
3. STA 341+49, 67’ RT (S51-0361/SB1 – Sunnyslope Rd)
4. STA 341+51, 65’ LT (S51-0364/SB11 – Sunnyslope Rd)
5. STA 360+52, 316’ LT (S51-0268/SB11 – Emmertsen Rd)

### **Underground Water Lines**

1. STA 321+70, 69’ LT (S51-0429/SB5 – Oakes Rd)
2. STA 361+45, 56’ RT (S51-0268/SB10 – Emmertsen Rd)
3. STA 375+69, 54’ RT (S51-0778/PB14 – Village Center Dr)
4. STA 375+76, 55’ RT (S51-0778/SB9 – Village Center Dr)
5. STA 376+96, 63’ LT (S51-0778/SB4 – Village Center Dr)
6. STA 377+00, 58’ LT (S51-0778/PB6 – Village Center Dr)
7. STA 377+02, 55’ RT (S51-0778/SB6 – Village Center Dr)
8. STA 377+28, 54’ RT (S51-0778/PB9 – Village Center Dr)

### **Underground TV Lines**

1. STA 321+67, 83’ RT (S51-0429/SB11 – Oakes Rd)

**TUMS Utility Owners List - As of January 20, 2022**

**RE:** Design Project ID: 2250-15-00  
Construction Project ID: 2250-15-70  
WASHINGTON AVE - VIL OF MT PLEASANT  
OAKES RD TO STH 31  
STH 020, Racine County

Dale DeFever  
AT&T Local Network - Communication Line  
39869 Linn St  
Canton, MI 48147  
(586) 242-2671  
dd2579@att.com

Mike Vanboven  
AT&T Wisconsin - Communication Line  
411 7th Street  
Racine, WI 53403  
(262) 676-3958  
MV3658@ATT.COM

Trans 220 Mailbox  
ATC Management, Inc. - Electricity-transmission  
801 O'keefe Road  
De Pere, WI 54115  
(920) 338-6582  
dl-ATCDOTNotifications@atcllc.com

Richard Trgovec  
Midwest Fiber Networks LLC - Communication Line  
6070 North Flint Rd  
Glendale, WI 53209  
(414) 459-3554  
rtrgovec@midwestfibernetworks.com

Tony Beyer  
Mount Pleasant Storm Water Dist. 1 - Sewer  
8811 Campus Dr  
Mount Pleasant, WI 53406  
(262) 664-7849  
tbeyer@mtpleasantwi.gov

Lori Ketter  
PaeTec Communications, LLC - Communication Line  
314 N. Danz Avenue  
Green Bay, WI 54302-3526  
(414) 274-9215  
Lori.Ketter@windstream.com

Mike Gitter  
Racine Wastewater Utility - Sewer  
800 Center St  
Racine, WI 53403  
(262) 636-9430  
mike.gitter@cityofracine.org

Mike Gitter  
Racine Water Works Commission - Water  
800 Center St  
Racine, WI 53403  
(262) 636-9430  
mike.gitter@cityofracine.org

Dave Yopps  
Spectrum - Communication Line  
1320 N. Dr. Martin Luther King Jr Drive  
Milwaukee, WI 53212  
(414) 277-4281  
dave.yopps@charter.com

Tony Beyer  
Village of Mount Pleasant - Sewer  
8811 Campus Dr  
Mount Pleasant, WI 53406  
(262) 664-7849  
tbeyer@mtpleasantwi.gov

Eric Perea  
Wisconsin Department of Transportation - Street Lighting  
141 NW Barstow Street  
Waukesha, WI 53188  
(262) 574-5422  
Eric.Perea@dot.wi.gov

Derrin Wolford  
Wisconsin Department of Transportation - Wisconsin Signal  
141 NW Barstow Street  
Waukesha, WI 53188  
(262) 521-4409  
derrin.wolford@dot.wi.gov

We Energies Utility Coordinator  
We Energies - Electricity  
500 S 116th Street  
West Allis, WI 53214  
(414) 221-2738  
We-Utility-relocations@we-energies.com

We Energies Utility Coordinator  
We Energies - Gas/Petroleum  
500 S 116th Street  
West Allis, WI 53214  
(414) 221-2738  
We-Utility-relocations@we-energies.com

Lori Ketter  
Windstream KDL, LLC - Communication Line  
314 N. Danz Avenue  
Green Bay, WI 54302-3526  
(414) 274-9215  
Lori.Ketter@windstream.com