GRE

DECEMBER 2026

PROJECT ID: 4814-04-71

WITH: N/A

COUNTY: FOND DU LAC

ORDER OF SHEETS


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


TOTAL SHEETS = 48

# STATE OF WISCONSIN
# DEPARTMENT OF TRANSPORTATION

**PLAN OF PROPOSED IMPROVEMENT**

# T ASHFORD, SUPERIOR DRIVE

**EAST BRANCH ROCK RIVER BRIDGE**

## LOC STR

## FOND DU LAC COUNTY

| STATE PROJECT | FEDERAL PROJECT | |
|---|---|---|
| | PROJECT | CONTRACT |
| 4814-04-71 | WISC 2027100 | 1 |
| | | |
| | | |
| | | |



PROJECT LOCATION

N

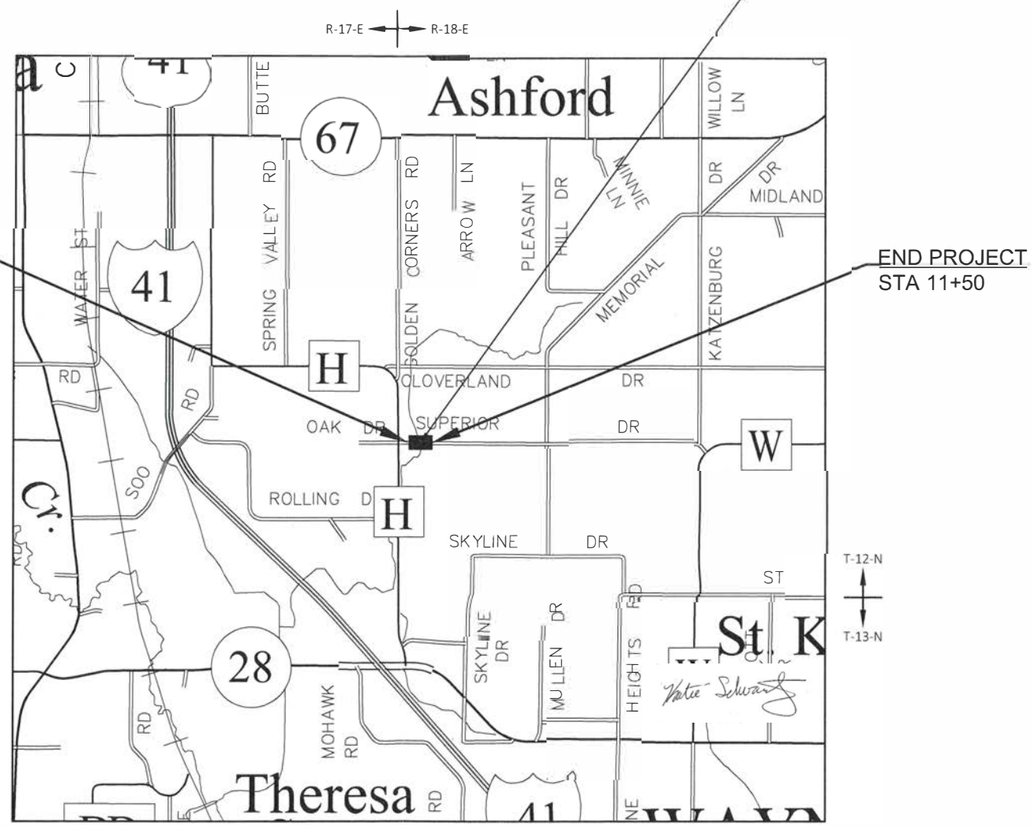
32

DESIGN DESIGNATION 4814-04-00

| | | | |
|---|---|---|---|
| A.A.D.T. | (2027) | = | <100 |
| A.A.D.T. | (2047) | = | <100 |
| D.H.V. | | = | - |
| D.D. | | = | 50/50 |
| T. | | = | 10.7% |
| DESIGN SPEED | | = | 20 MPH |
| ESALS | | = | - |

STATE PROJECT NUMBER

**4814-04-71**




STRUCTURE B-20-0270
STA 10+00

BEGIN PROJECT
STA 9+12
Y = 305689.835
X = 830129.562

END PROJECT
STA 11+50

LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.045 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCOINSIN COORDINATE REFERENCE SYSTEM (WISCRS), FOND DU LAC COUNTY, NAD83 ( 2011 ), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRIID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 ( 2012 ). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

## CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

ACCEPTED FOR
TOWN OF ASHFORD

6-26-26 Mark J Mlinar
DATE TOWN CHAIRMAN

ORIGINAL PLANS PREPARED BY
AYRES

WISCONSIN
RYAN D. SCHAITEL
44367
GREEN BAY
WI
PROFESSIONAL ENGINEER

6-23-26
(Date)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---|---|
| Surveyor | AYRES |
| Designer | AYRES |
| Project Manager | KATIE SCHWARTZ |
| Regional Supervisor | KIMBERLY SLEZAK |

APPROVED FOR THE DEPARTMENT
DATE: 7/7/2026 Katie Schwartz
(Signature)

E

FILE NAME : I:\45\450651 SUPERIOR RD_T ASHFORD\C3D\SHEETSPLAN\010101-TI.DWG PLOT DATE : 6/23/2026 2:19 PM PLOT BY : WILKE, CASSANDRA PLOT NAME :

## UTILITIES CONTACTS

FRONTIER
COMMUNICATIONS
THOMAS REKOWSKI
118 DIVISION ST
PLYMOUTH, WI 53073
PHONE: 608-844-0980
EMAIL: thomas.rekowski@verizon.com

WE ENERGIES
ELECTRIC
JOE FELLENZ
W140 N9100 LILLY ROAD
MENOMONEE FALLS, WI 53051
PHONE: 262-502-6831
EMAIL: joseph.fellenz@we-energies.com

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

## ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
TYPICAL SECTIONS
CONSTRUCTION DETAILS
EROSION CONTROL

| SUPERIOR DRIVE - 4" ASPHALTIC SURFACE | | |
|---|---|---|
| LAYER | THICKNESS | TYPE |
| UPPER | 1.75" | 12.5 MM |
| LOWER | 2.25" | 19 MM |

## WISCONSIN DNR LIAISON

MATRY DILLENBURG
NORTH EAST REGION
625 E COUNTY ROAD Y STE 700
OSHKOSH, WI 54901
PHONE: 920-410-7428
EMAIL: marty.dillenburg@wisconsin.gov

## TOWN OF ASHFORD

MARK MUELLER
ASHFORD TOWN CHAIRMAN
N352 COUNTY ROAD BB
CAMPBELLSPORT, WI 53010
PHONE: 920-533-4635
EMAIL: mueller7farm@yahoo.com

## DESIGN PROJECT MANAGER

RYAN SCHAITEL
AYRES
700 PILGRIM WAY, SUITE 180
GREEN BAY, WI 54304
PHONE: 920-327-7840
EMAIL: schaitelr@ayresassociates.com

## LOCAL PROGRAM PROJECT MANAGER

KATIE SCHWARTZ
WISDOT
944 VANDERPERREN WAY
GREEN BAY, WI 54304
PHONE: 920-492-5652
EMAIL: katiea.schwartz@dot.wi.gov

## 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.

BEARINGS SHOWN ON THE PLAN ARE TRUE BEARINGS.

ALL TIES ON THIS PLAN ARE HORIZONTAL UNLESS DESCRIBED OTHERWISE.

WISDOT WILL FURNISH A BENCHMARK MONUMENT TO BE SET BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER IN THE FIELD.

PROPERTY LINES AS SHOWN ARE APPROXIMATE.

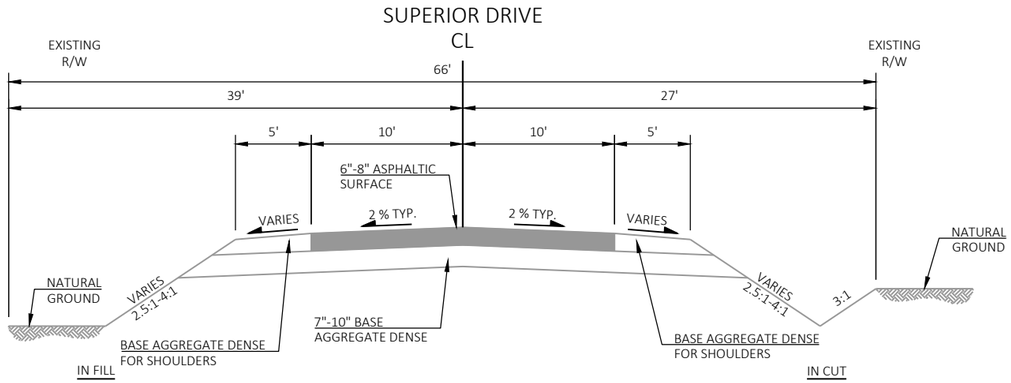
2

## 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<br>.22 | .16<br>.30 | .22<br>.38 | .12<br>.26 | .20<br>.34 | .27<br>.44 | .15<br>.30 | .24<br>.37 | .33<br>.50 | .19<br>.34 | .28<br>.41 | .38<br>.56 |
| MEDIAN STRIPTURF: | .19<br>.24 | .20<br>.26 | .24<br>.30 | .19<br>.25 | .22<br>.28 | .26<br>.33 | .20<br>.26 | .23<br>.30 | .30<br>.37 | .20<br>.27 | .25<br>.32 | .30<br>.40 |
| SIDE SLOPETURF: | | | .25<br>.32 | | | .27<br>.34 | | | .28<br>.36 | | | .30<br>.38 |
| PAVEMENT: | | | | | | | | | | | | |
| ASPHALT: | .70 - .95 | | | | | | | | | | | |
| CONCRETE: | .80 - .95 | | | | | | | | | | | |
| BRICK: | .70 - .80 | | | | | | | | | | | |
| DRIVES, WALKS: | .75 - .85 | | | | | | | | | | | |
| ROOFS: | .75 - .95 | | | | | | | | | | | |
| GRAVEL ROADS, SHOULDERS: | .40 - .60 | | | | | | | | | | | |

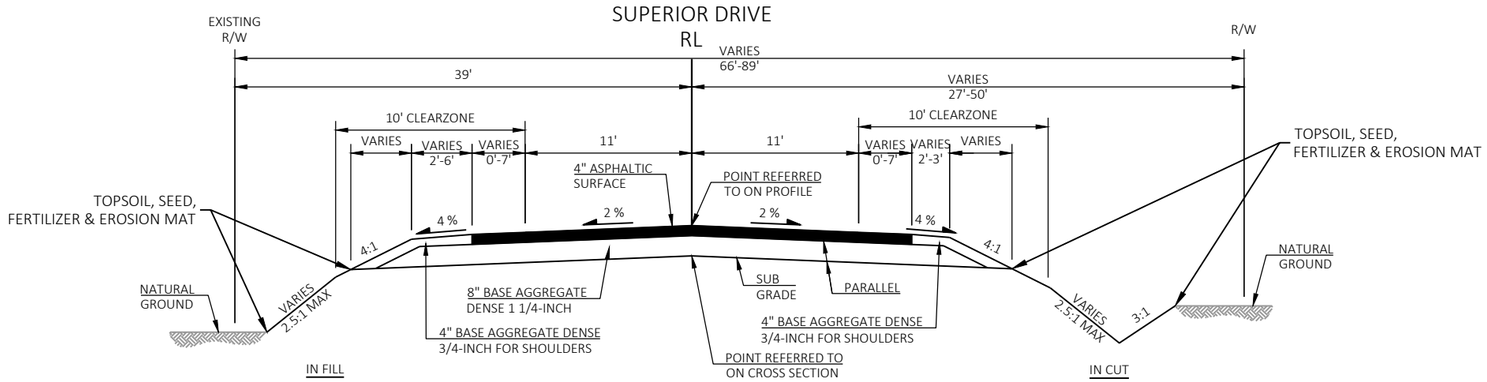
TOTAL PROJECT AREA = 0.393 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.173 ACRES

2




EXISTING TYPICAL SECTION FOR SUPERIOR DRIVE

STA 9+12 - STA 11+50



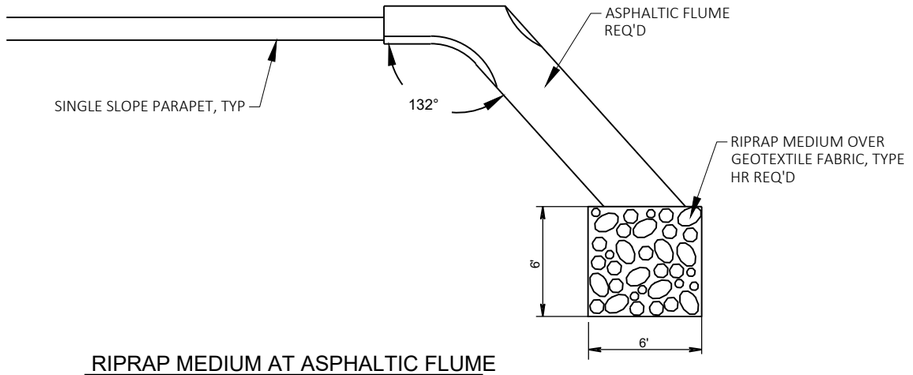

FINISHED TYPICAL SECTION FOR SUPERIOR DRIVE

STA 9+12 - STA 9+80.7

STA 10+19.3 - STA 11+50

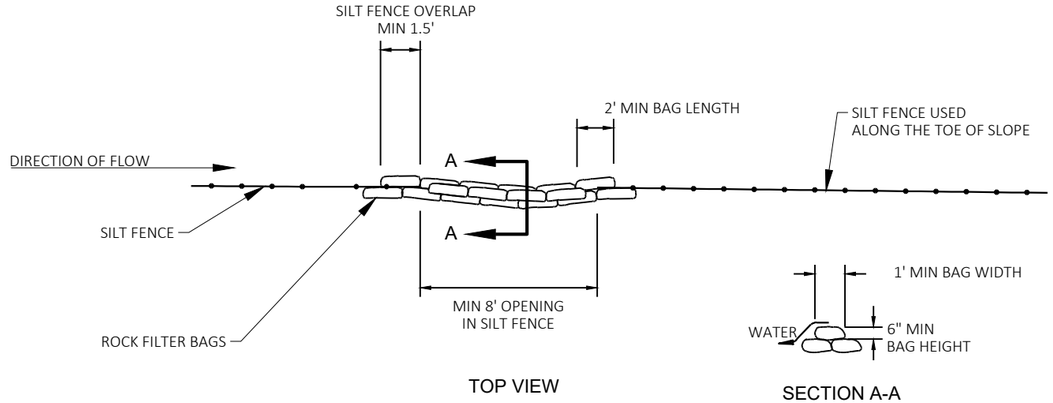
| PROJECT NO: 4814-04-71 | HWY: SUPERIOR DRIVE | COUNTY: FOND DU LAC | TYPICAL SECTIONS | SHEET 3 | E |
|---|---|---|---|---|---|

2




RIPRAP MEDIUM AT ASPHALTIC FLUME

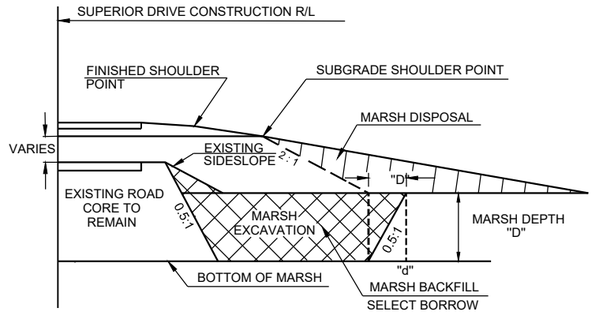
(SEE MISCELLANEOUS QUANTITIES FOR LOCATION)




TOP VIEW

SECTION A-A

ROCK BAGS USED FOR SILT FENCE RELIEF




NOTE: BACKFILL QUANTITIES COMPUTED FROM POINT "d" TO COMPENSATE FOR PROBABLE DISPLACED MARSH AREA.

TYPICAL SECTION-MARSH EXCAVATION

2

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- RIPRAP MEDIUM
- SILT FENCE
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- R — ROCK BAGS
- ASPH — ASPHALTIC FLUME
- TURBIDITY BARRIER

N

P.L.

EAST BRANCH ROCK RIVER

LIMITS OF WETLANDS

LIMITS OF WETLANDS

TLE LINE

R R R

EXISTING R/W

WOODS

CABC

FE

ASPH

PE

10" PCP

POST

SUPERIOR DR

7 8 9 10 11 12 13

72" RCP

24" RCP

BM #800

BM #801

R R

R/W LINE

LIMITS OF WETLANDS

LIMITS OF WETLANDS

BEGIN PROJECT
STA 9+12

END PROJECT
STA 11+50

STRUCTURE B-20-0270 REQ'D.

P.L.

| PROJECT NO: 4814-04-71 | HWY: SUPERIOR DRIVE | COUNTY: FOND DU LAC | EROSION CONTROL | SHEET 5 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450651 SUPERIOR RD_T ASHFORD\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-ec

PLOT DATE : 6/29/2026 1:01 PM PLOT BY : WILKE, CASSANDRA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

## Estimate Of Quantities

4814-04-71

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0002 | 201.0205 | Grubbing | STA | 3.000 | 3.000 |
| 0004 | 203.0220 | Removing Structure (structure) 01. P-20-907 | EACH | 1.000 | 1.000 |
| 0006 | 205.0100 | Excavation Common | CY | 112.000 | 112.000 |
| 0008 | 205.0400 | Excavation Marsh | CY | 9.000 | 9.000 |
| 0010 | 206.1001 | Excavation for Structures Bridges (structure) 01. B-20-270 | EACH | 1.000 | 1.000 |
| 0012 | 208.0100 | Borrow | CY | 723.000 | 723.000 |
| 0014 | 208.1100 | Select Borrow | CY | 14.000 | 14.000 |
| 0016 | 210.1500 | Backfill Structure Type A | TON | 460.000 | 460.000 |
| 0018 | 213.0100 | Finishing Roadway (project) 01. 4814-04-71 | EACH | 1.000 | 1.000 |
| 0020 | 305.0110 | Base Aggregate Dense 3/4-Inch | TON | 30.000 | 30.000 |
| 0022 | 305.0120 | Base Aggregate Dense 1 1/4-Inch | TON | 310.000 | 310.000 |
| 0024 | 455.0605 | Tack Coat | GAL | 42.000 | 42.000 |
| 0026 | 465.0105 | Asphaltic Surface | TON | 140.000 | 140.000 |
| 0028 | 465.0315 | Asphaltic Flumes | SY | 20.000 | 20.000 |
| 0030 | 502.0100 | Concrete Masonry Bridges | CY | 170.000 | 170.000 |
| 0032 | 502.3200 | Protective Surface Treatment | SY | 140.000 | 140.000 |
| 0034 | 502.3210 | Pigmented Surface Sealer | SY | 40.000 | 40.000 |
| 0036 | 505.0400 | Bar Steel Reinforcement HS Structures | LB | 5,260.000 | 5,260.000 |
| 0038 | 505.0600 | Bar Steel Reinforcement HS Coated Structures | LB | 20,720.000 | 20,720.000 |
| 0040 | 516.0500 | Rubberized Membrane Waterproofing | SY | 14.000 | 14.000 |
| 0042 | 550.0010 | Pre-Boring Unconsolidated Materials | LF | 126.000 | 126.000 |
| 0044 | 550.0500 | Pile Points | EACH | 14.000 | 14.000 |
| 0046 | 550.1120 | Piling Steel HP 12-Inch x 53 Lb | LF | 560.000 | 560.000 |
| 0048 | 606.0200 | Riprap Medium | CY | 4.000 | 4.000 |
| 0050 | 606.0300 | Riprap Heavy | CY | 245.000 | 245.000 |
| 0052 | 612.0406 | Pipe Underdrain Wrapped 6-Inch | LF | 170.000 | 170.000 |
| 0054 | 618.0100 | Maintenance and Repair of Haul Roads (project) 01. 4814-04-71 | EACH | 1.000 | 1.000 |
| 0056 | 619.1000 | Mobilization | EACH | 1.000 | 1.000 |
| 0058 | 624.0100 | Water | MGAL | 6.000 | 6.000 |
| 0060 | 625.0100 | Topsoil | SY | 1,100.000 | 1,100.000 |
| 0062 | 628.1504 | Silt Fence | LF | 470.000 | 470.000 |
| 0064 | 628.1520 | Silt Fence Maintenance | LF | 930.000 | 930.000 |
| 0066 | 628.1905 | Mobilizations Erosion Control | EACH | 5.000 | 5.000 |
| 0068 | 628.1910 | Mobilizations Emergency Erosion Control | EACH | 3.000 | 3.000 |
| 0070 | 628.2008 | Erosion Mat Urban Class I Type B | SY | 1,100.000 | 1,100.000 |
| 0072 | 628.6005 | Turbidity Barriers | SY | 120.000 | 120.000 |
| 0074 | 628.7570 | Rock Bags | EACH | 90.000 | 90.000 |
| 0076 | 629.0210 | Fertilizer Type B | CWT | 1.000 | 1.000 |
| 0078 | 630.0120 | Seeding Mixture No. 20 | LB | 51.000 | 51.000 |
| 0080 | 630.0500 | Seed Water | MGAL | 27.000 | 27.000 |
| 0082 | 634.0612 | Posts Wood 4x6-Inch x 12-FT | EACH | 4.000 | 4.000 |
| 0084 | 637.2230 | Signs Type II Reflective F | SF | 12.000 | 12.000 |
| 0086 | 638.2102 | Moving Signs Type II | EACH | 1.000 | 1.000 |
| 0088 | 638.2602 | Removing Signs Type II | EACH | 4.000 | 4.000 |
| 0090 | 638.3000 | Removing Small Sign Supports | EACH | 4.000 | 4.000 |
| 0092 | 638.4000 | Moving Small Sign Supports | EACH | 1.000 | 1.000 |
| 0094 | 642.5001 | Field Office Type B | EACH | 1.000 | 1.000 |
| 0096 | 643.0420 | Traffic Control Barricades Type III | DAY | 924.000 | 924.000 |
| 0098 | 643.0705 | Traffic Control Warning Lights Type A | DAY | 1,584.000 | 1,584.000 |

## Estimate Of Quantities

4814-04-71

| Line | Item | Item Description | Unit | Total | Qty |
|---|---|---|---|---|---|
| 0100 | 643.0900 | Traffic Control Signs | DAY | 924.000 | 924.000 |
| 0102 | 643.5000 | Traffic Control | EACH | 1.000 | 1.000 |
| 0104 | 645.0111 | Geotextile Type DF Schedule A | SY | 110.000 | 110.000 |
| 0106 | 645.0120 | Geotextile Type HR | SY | 464.000 | 464.000 |
| 0108 | 650.4500 | Construction Staking Subgrade | LF | 200.000 | 200.000 |
| 0110 | 650.5000 | Construction Staking Base | LF | 200.000 | 200.000 |
| 0112 | 650.6501 | Construction Staking Structure Layout (structure) 01. B-20-0270 | EACH | 1.000 | 1.000 |
| 0114 | 650.9911 | Construction Staking Supplemental Control (project) 01. 4814-04-71 | EACH | 1.000 | 1.000 |
| 0116 | 650.9920 | Construction Staking Slope Stakes | LF | 200.000 | 200.000 |
| 0118 | 690.0150 | Sawing Asphalt | LF | 41.000 | 41.000 |
| 0120 | 715.0502 | Incentive Strength Concrete Structures | DOL | 1,020.000 | 1,020.000 |
| 0122 | ASP.1T0A | On-the-Job Training Apprentice at $5.00/HR | HRS | 300.000 | 300.000 |
| 0124 | ASP.1T0G | On-the-Job Training Graduate at $5.00/HR | HRS | 600.000 | 600.000 |

3

3

GRUBBING

| STATION | TO | STATION | LOCATION | 201.0205 GRUBBING STA |
|---|---|---|---|---|
| 9+00 | - | 12+00 | SUPERIOR DRIVE | 3 |
| | | | TOTAL | 3 |

| DIVISION | FROM/TO STATION | LOCATION | 205.0100 EXCAVATION COMMON (1) CUT (2) | SALVAGED/UNUSABLE PAVEMENT MATERIAL (4) | AVAILABLE MATERIAL (5) | 205.0400 MARSH EXCAVATION (6) | EXPANDED MARSH BACKFILL (10) FACTOR 1.50 | UNEXPANDED FILL | EXPANDED FILL (13) FACTOR 1.30 | MASS ORDINATE +/- (14) | WASTE | 208.0100 BORROW | COMMENT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9+12 - 11+50 | SUPERIOR DRIVE | 112 | 71 | 41 | 9 | 14 | 588 | 764 | -723 | 71 | 723 | |
| | | | 112 | 71 | 41 | 9 | 14 | 588 | 764 | -723 | 71 | | |
| TOTAL COMMON EXC | | | 112 | | | | | | | | | | |

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT COLUMN. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(6) EXCAVATION MARSH - TO BE BACKFILLED WITH SELECT BORROW MATERIAL. ITEM NUMBER 208.1100.
(10) EXPANDED MARSH BACKFILL - THIS IS TO BE FILLED WITH SELECT BORROW MATERIAL. MARSH BACKFILL FACTOR = 1.50. ITEM NUMBER 208.1100
(13) EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR. EXPANDED FILL FACTOR = 1.30
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

BASE AGGREGATE DENSE

| STATION | TO | STATION | LOCATION | 305.0110 BASE AGGREGATE DENSE 3/4-INCH TON | 305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON | 624.0100 WATER MGAL | REMARKS |
|---|---|---|---|---|---|---|---|
| 9+12 | - | 9+80 | SUPERIOR DRIVE | 10 | 110 | 2 | WEST APPROACH |
| 10+19 | - | 11+50 | SUPERIOR DRIVE | 20 | 200 | 4 | EAST APPROACH |
| | | | TOTAL | 30 | 310 | 6 | |

ASPHALTIC SURFACE

| STATION | TO | STATION | LOCATION | 455.0605 TACK COAT GAL | 465.0105 ASPHALTIC SURFACE TON | REMARKS |
|---|---|---|---|---|---|---|
| 9+12 | - | 9+80 | SUPERIOR DRIVE | 14 | 46 | WEST APPROACH |
| 10+19 | - | 11+50 | SUPERIOR DRIVE | 28 | 94 | EAST APPROACH |
| | | | TOTAL | 42 | 140 | |

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED.

3

ASPHALTIC FLUMES

| STATION | LOCATION | 465.0315 SY | REMARKS |
|---|---|---|---|
| 10+20 | SUPERIOR DRIVE | 10 | NORTHEAST QUADRANT |
| 10+20 | SUPERIOR DRIVE | 10 | SOUTHEAST QUADRANT |
| | TOTAL | 20 | |

RIPRAP AND GEOTEXTILE TYPE HR

| CATEGORY | STATION | LOCATION | 606.0200 RIPRAP MEDIUM CY | * 645.0120 GEOTEXTILE TYPE HR SY |
|---|---|---|---|---|
| 0010 | 10+20 | SUPERIOR DRIVE | 2 | 7 |
| 0010 | 10+20 | SUPERIOR DRIVE | 2 | 7 |
| | | TOTAL | 4 | 14 |

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

SILT FENCE

| STATION | TO | STATION | LOCATION | 628.1504 SILT FENCE LF | 628.1520 SILT FENCE MAINTENANCE LF |
|---|---|---|---|---|---|
| 9+12 | - | 9+70 | SUPERIOR DRIVE, RT | 73 | 146 |
| 9+12 | - | 9+70 | SUPERIOR DRIVE, LT | 86 | 172 |
| 10+30 | - | 11+50 | SUPERIOR DRIVE, RT | 137 | 274 |
| 10+30 | - | 11+50 | SUPERIOR DRIVE, LT | 73 | 146 |
| UNDISTRIBUTED | | | | 101 | 192 |
| | | | TOTAL | 470 | 930 |

ROCK BAGS

| STATION | LOCATION | 628.7570 EACH |
|---|---|---|
| 9+12 | SUPERIOR DRIVE, LT | 15 |
| 9+75 | SUPERIOR DRIVE, RT | 15 |
| 9+80 | SUPERIOR DRIVE, LT | 15 |
| 10+20 | SUPERIOR DRIVE, LT | 15 |
| 10+25 | SUPERIOR DRIVE, RT | 15 |
| UNDISTRIBUTED | | 15 |
| | TOTAL | 90 |

TURBIDITY BARRIERS

| LOCATION | 628.6005 TURBIDITY BARRIERS SY | REMARKS |
|---|---|---|
| SUPERIOR DR | 60 | WEST ABUTMENT |
| SUPERIOR DR | 60 | EAST ABUTMENT |
| TOTAL 0010 | 120 | |

LANDSCAPING ITEMS

| STATION | TO | STATION | LOCATION | 625.0100 TOPSOIL SY | 628.2008 EROSION MAT URBAN CLASS I TYPE B SY | 629.0210 FERTILIZER TYPE B CWT | 630.0120 SEEDING MIXTURE NO. 20 LB | 630.0500 SEED WATER MGAL |
|---|---|---|---|---|---|---|---|---|
| 9+12 | - | 9+70 | SUPERIOR DRIVE, RT | 124 | 124 | 0.1 | 6 | 3 |
| 9+12 | - | 9+70 | SUPERIOR DRIVE, LT | 150 | 150 | 0.1 | 7 | 4 |
| 10+30 | - | 11+50 | SUPERIOR DRIVE, RT | 361 | 361 | 0.3 | 17 | 9 |
| 10+30 | - | 11+50 | SUPERIOR DRIVE, LT | 240 | 240 | 0.2 | 11 | 6 |
| UNDISTRIBUTED | | | | 225 | 225 | 0.3 | 10 | 5 |
| | | | TOTAL | 1,100 | 1,100 | 1 | 51 | 27 |

SIGNS

| STATION | LOCATION | 634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH | 637.2230 SIGNS TYPE II REFLECTIVE F SF | REMARKS |
|---|---|---|---|---|
| 9+80 | SUPERIOR DRIVE | 1 | 3 | OM3-R |
| 9+80 | SUPERIOR DRIVE | 1 | 3 | OM3-L |
| 10+20 | SUPERIOR DRIVE | 1 | 3 | OM3-R |
| 10+20 | SUPERIOR DRIVE | 1 | 3 | OM3-L |
| | TOTAL | 4 | 12 | |

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED.

3

## REMOVING SIGNS

| STATION | LOCATION | 638.2602 REMOVING SIGNS TYPE II EACH | 638.3000 REMOVING SMALL SIGN SUPPORTS EACH | REMARKS |
|---|---|---|---|---|
| 9+87 | SUPERIOR DRIVE | 1 | 1 | BRIDGE SIGN |
| 9+87 | SUPERIOR DRIVE | 1 | 1 | BRIDGE SIGN |
| 10+12 | SUPERIOR DRIVE | 1 | 1 | BRIDGE SIGN |
| 10+12 | SUPERIOR DRIVE | 1 | 1 | BRIDGE SIGN |
| | TOTAL | 4 | 4 | |

## MOVING SIGNS

| STATION | LOCATION | 638.2102 MOVING SIGNS TYPE II EACH | 638.4000 MOVING SMALL SIGN SUPPORTS EACH | REMARKS |
|---|---|---|---|---|
| 11+25 | SUPERIOR DRIVE | 1 | 1 | "STOP SIGN AHEAD" |
| | TOTAL | 1 | 1 | |

3

## TRAFFIC CONTROL SUMMARY

| LOCATION | APPROXIMATE SERVICE DAYS | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO. IN SERVICE | 643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO. IN SERVICE | 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY | 643.0900 TRAFFIC CONTROL SIGNS NO. IN SERVICE | 643.0900 TRAFFIC CONTROL SIGNS DAY | REMARKS |
|---|---|---|---|---|---|---|---|---|
| CTH H INTERSECTION | 66 | 4 | 264 | 8 | 528 | 6 | 396 | "BRIDGE OUT 0.2 MILES AHEAD". SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL C |
| WEST WORK ZONE LIMITS | 66 | 3 | 198 | 4 | 264 | 1 | 66 | SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL D |
| EAST WORK ZONE LIMITS | 66 | 3 | 198 | 4 | 264 | 1 | 66 | SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL D |
| MEMORIAL DR INTERSECTION | 66 | 4 | 264 | 8 | 528 | 6 | 396 | "BRIDGE OUT 0.8 MILES AHEAD". SEE BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL C |
| TOTAL | | | 924 | | 1,584 | | 924 | |

## CONSTRUCTION STAKING

| CATEGORY | STATION | TO | STATION | LOCATION | 650.4500 CONSTRUCTION STAKING SUBGRADE LF | 650.5000 CONSTRUCTION STAKING BASE LF | 650.6501.01 CONSTRUCTION STAKING STRUCTURE LAYOUT B-20-270 EACH | 650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL 4814-04-71 EACH | 650.9920 CONSTRUCTION STAKING SLOPE STAKES LF | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| 0010 | 9+12 | - | 9+81 | SUPERIOR DRIVE | 69 | 69 | - | 1 | 69 | |
| 0010 | 10+19 | - | 11+50 | SUPERIOR DRIVE | 131 | 131 | - | - | 131 | |
| | | | | TOTAL 0010 | 200 | 200 | 0 | 1 | 200 | |
| 0020 | | 10+00 | | SUPERIOR DRIVE | - | - | 1 | - | - | B-20-270 |
| | | | | TOTAL 0020 | 0 | 0 | 1 | 0 | 0 | |
| | | | | PROJECT TOTAL | 200 | 200 | 1 | 1 | 200 | |

## SAWING ASPHALT

| STATION | LOCATION | 690.0150 SAWING ASPHALT LF |
|---|---|---|
| 9+12 | SUPERIOR DRIVE | 20 |
| 11+50 | SUPERIOR DRIVE | 21 |
| | TOTAL 0010 | 41 |

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE STATED.

## CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE, AND OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMP. LIMITED EASEMENT AREA
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
BUILDING (TO BE REMOVED)
BRIDGE

PARCEL NUMBER
PRW POINT NUMBER
SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
UTILITY NUMBER
TLE POINT NUMBER
R/W MONUMENT
NON-MONUMENTED R/W POINT
FOUND IRON PIN
VALVE (GAS, WATER, ETC.)
SIGN
OFF-PREMISE SIGN

ACCESS CONTROLLED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
NATIONAL GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
PARALLEL OFFSETS

## CONVENTIONAL ABBREVIATIONS

| | | | |
|---|---|---|---|
| ACCESS RIGHTS | AR | OUTLOT | OL |
| ACRES | AC | PAGE | P |
| AHEAD | AH | POINT OF TANGENCY | PT |
| ALUMINUM | AUM | PROPERTY LINE | PL |
| AND OTHERS | ET AL | RECORDED AS | (100') |
| BACK | BK | REEL / IMAGE | R/I |
| BLOCK | BLK | REFERENCE LINE | R/L |
| CENTERLINE | C/L | PERMANENT LIMITED EASEMENT | PLE |
| CERTIFIED SURVEY MAP | CSM | POINT OF BEGINNING | POB |
| CONCRETE | CONC | POINT OF CURVATURE | PC |
| COUNTY | CO | POINT OF COMPOUND CURVE | PCC |
| COUNTY TRUNK HIGHWAY | CTH | POINT OF INTERSECTION | PI |
| DISTANCE | DIST | REMAINING | REM |
| CORNER | COR | RESTRICTIVE DEVELOPMENT EASEMENT | RDE |
| DOCUMENT NUMBER | DOC | RIGHT | RT |
| EASEMENT | EASE | RIGHT OF WAY | R/W |
| EXISTING | EX | SECTION | SEC |
| GAS VALVE | GV | SEPTIC VENT | SEPV |
| GRID NORTH | GN | SQUARE FEET | SF |
| HIGHWAY EASEMENT | HE | STATE TRUNK HIGHWAY | STH |
| IDENTIFICATION | ID | STATION | STA |
| LAND CONTRACT | LC | TELEPHONE PEDESTAL | TP |
| LEFT | LT | TEMPORARY LIMITED EASEMENT | TLE |
| MONUMENT | MON | TRANSPORTATION PROJECT PLAT | TPP |
| NATIONAL GEODETIC SURVEY | NGS | UNITED STATES HIGHWAY | USH |
| NUMBER | NO | VOLUME | V |

## CONVENTIONAL UTILITY SYMBOLS

| | NON-COMPENSABLE | COMPENSABLE |
|---|---|---|
| WATER | | W |
| GAS | | G |
| TELEPHONE | | T |
| OVERHEAD TRANSMISSION LINES | | OH |
| ELECTRIC | | E |
| CABLE TELEVISION | | TV |
| FIBER OPTIC | | FO |
| SANITARY SEWER | | SAN |
| STORM SEWER | | SS |
| ELECTRIC TOWER | | ⊠ |
| POWER POLE | △ | ▲ |
| TELEPHONE POLE | ⊘ | ⊘ |
| TELEPHONE PEDESTAL | ⊠ | ⊠ |

## CURVE DATA ABBREVIATIONS

| | |
|---|---|
| LONG CHORD | LCH |
| LONG CHORD BEARING | LCB |
| RADIUS | R |
| DEGREE OF CURVE | D |
| CENTRAL ANGLE | Δ / DELTA |
| LENGTH OF CURVE | L |
| TANGENT | T |
| DIRECTION AHEAD | DA |
| DIRECTION BACK | DB |

## SCHEDULE OF LANDS AND INTERESTS REQUIRED

| PARCEL NO. | OWNER(S) | INTEREST REQUIRED | FEE R/W REQUIRED (SF) NEW | EXISTING | TOTAL | TLE SF |
|---|---|---|---|---|---|---|
| 1 | DANIEL P. ZAHN AND SANDRA L. ZAHN | TLE | ------ | ------ | ------ | 719 |
| 2 | DEAN G. EMMER AND RAENELL A. EMMER | FEE | 3860 | ------ | 3860 | ------ |
| 3 | ARTHUR E. KLEMME, III AND AMBER KREWALD | FEE | 1253 | ------ | 1253 | ------ |

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE TOWN.
TLE'S ARE FOR SLOPING AND GRADING UNLESS NOTED.

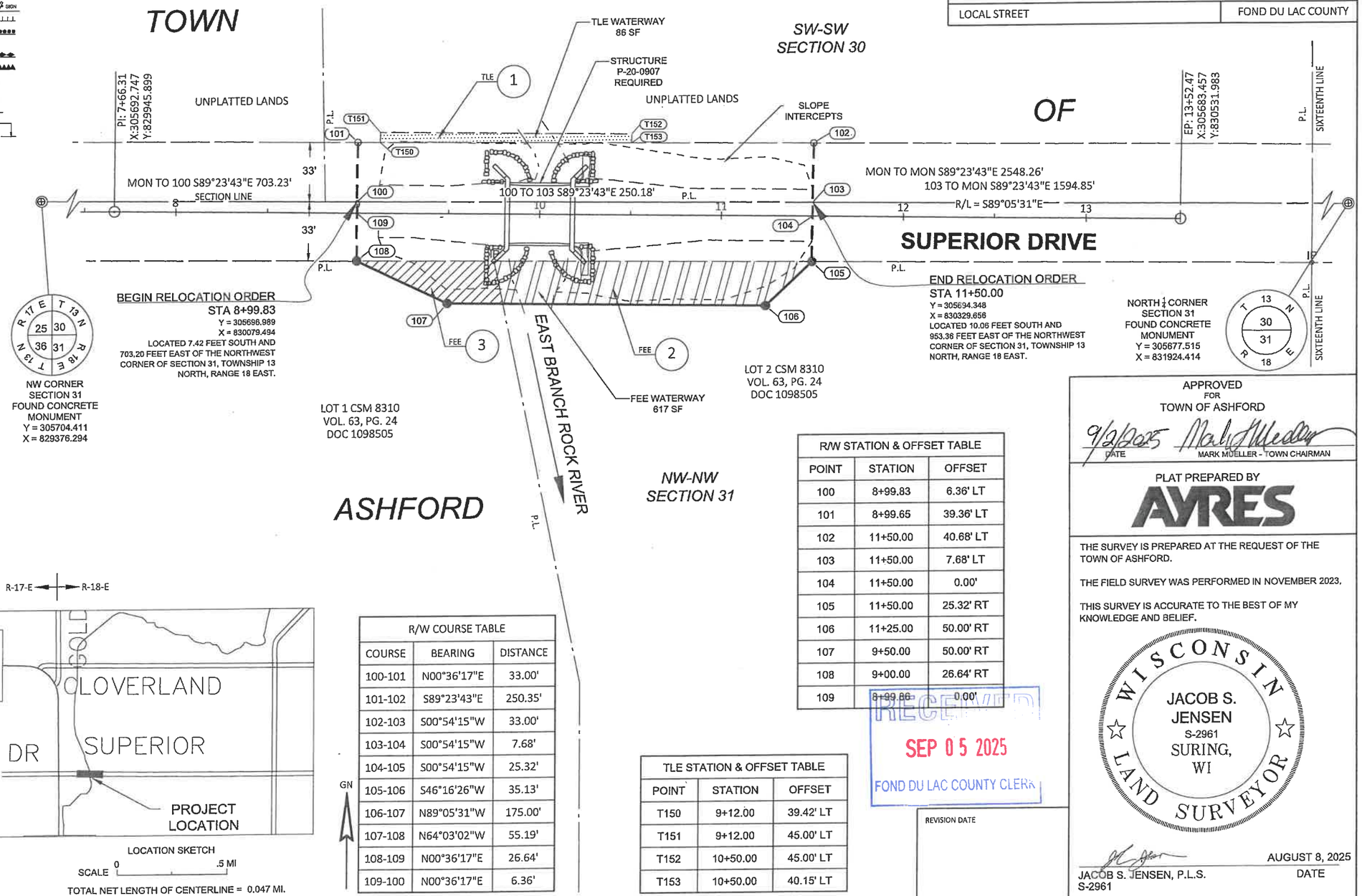
| R/W PROJECT NUMBER | SHEET NUMBER | TOTAL SHEETS |
|---|---|---|
| 4814-04-00 | | |
| CONSTRUCTION PROJECT NUMBER 4814-04-71 | 4.01 | 1 |

PLAT OF RIGHT OF WAY REQUIRED FOR

# T ASHFORD, SUPERIOR DRIVE

EAST BRANCH ROCK RIVER
BRIDGE P-20-0907

LOCAL STREET | FOND DU LAC COUNTY




R-17-E ◄► R-18-E




LOCATION SKETCH
SCALE 0 .5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.047 MI.

| R/W COURSE TABLE | | |
|---|---|---|
| COURSE | BEARING | DISTANCE |
| 100-101 | N00°36'17"E | 33.00' |
| 101-102 | S89°23'43"E | 250.35' |
| 102-103 | S00°54'15"W | 33.00' |
| 103-104 | S00°54'15"W | 7.68' |
| 104-105 | S00°54'15"W | 25.32' |
| 105-106 | S46°16'26"W | 35.13' |
| 106-107 | N89°05'31"W | 175.00' |
| 107-108 | N64°03'02"W | 55.19' |
| 108-109 | N00°36'17"E | 26.64' |
| 109-100 | N00°36'17"E | 6.36' |

| R/W STATION & OFFSET TABLE | | |
|---|---|---|
| POINT | STATION | OFFSET |
| 100 | 8+99.83 | 6.36' LT |
| 101 | 8+99.65 | 39.36' LT |
| 102 | 11+50.00 | 40.68' LT |
| 103 | 11+50.00 | 7.68' LT |
| 104 | 11+50.00 | 0.00' |
| 105 | 11+50.00 | 25.32' RT |
| 106 | 11+25.00 | 50.00' RT |
| 107 | 9+50.00 | 50.00' RT |
| 108 | 9+00.00 | 26.64' RT |
| 109 | 8+99.86 | 0.00' |

| TLE STATION & OFFSET TABLE | | |
|---|---|---|
| POINT | STATION | OFFSET |
| T150 | 9+12.00 | 39.42' LT |
| T151 | 9+12.00 | 45.00' LT |
| T152 | 10+50.00 | 45.00' LT |
| T153 | 10+50.00 | 40.15' LT |

RECEIVED
SEP 05 2025
FOND DU LAC COUNTY CLERK

REVISION DATE

APPROVED FOR TOWN OF ASHFORD
9/2/2025 DATE
Mark Mueller MARK MUELLER - TOWN CHAIRMAN

PLAT PREPARED BY AYRES

THE SURVEY IS PREPARED AT THE REQUEST OF THE TOWN OF ASHFORD.

THE FIELD SURVEY WAS PERFORMED IN NOVEMBER 2023.

THIS SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

WISCONSIN
JACOB S. JENSEN
S-2961
SURING, WI
LAND SURVEYOR

AUGUST 8, 2025
JACOB S. JENSEN, P.L.S. DATE
S-2961

## NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), FOND DU LAC COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

THIS PLAT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSE ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES AND ACCESS RIGHTS

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (¾"x24" CAPPED IRON REBAR WEIGHING 1.50 LBS.LIN. FT.) AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

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.

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

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, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING ROAD RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE:

EXISTING RIGHT OF WAY OF SUPERIOR DRIVE WAS DETERMINED FROM CSM 8310.

## LEGEND

XXXX SAW CUT ASPHALT

| BENCH MARKS | | | |
|---|---|---|---|
| NO. | STATION | ELEV. | DESCRIPTION |
| 800 | 8+96 | 1000.01 | RR SPIKE IN PPOL 18-5649, 36' RT |
| 801 | 12+02 | 997.26 | RR SPIKE IN PPOL E56-15885, 34' RT |

N

DANIEL P & SANDRA L ZAHN

PI: 7+66.31
Y = 305692.747
X = 829945.899

P.L.

LIMITS OF WETLANDS

EAST BRANCH ROCK RIVER

SLOPE INTERCEPTS

TLE LINE

BURIED TELEPHONE CABLE (APPROXIMATE LOCATION)

MOVING TYPE II SIGNS AND SMALL SIGN SUPPORTS

CP #901
1" IRON PIPE W/CAP
STA 12+53.71, 11.40' LT
Y = 305696.417
X = 830433.416

EXISTING R/W

WOODS

CABC FE

ASPH PE

10" PCP

POST

66'

7 S89°30'42"E SUPERIOR DR 8 S89°05'31"E 9 10 11 12 13

72" WCP

OH

BM #800

BM #801

R/W LINE

CP #900
5/8" IRON PIPE W/CAP
STA 7+01.99, 13.13' RT
Y = 305680.162
X = 829881.467

ARTHUR E KLEMME & AMBER KERWALD

BEGIN PROJECT
STA 9+12
Y = 305690.438
X = 830091.567

STRUCTURE B-20-0270 REQ'D.

CP #902
MAG NAIL
STA 10+08.20, 7.69' RT
Y = 305681.223
X = 830187.632

DEAN G & RAENELL A EMMER

END PROJECT
STA 11+50
Y = 305686.666
X = 830329.537

5

5

STA 9+12.00
EL 997.25

VCL = 75.00
K = 44.91

VCL = 125.00
K = 21.13

VPT STA 9+97.50
VPT EL 996.03

VPC STA 10+22.50
VPC EL 995.90

STA 11+50.00
EL 999.11

-2.17%

-0.50%

5.42%

FINISHED GRADE

EXISTING PROFILE

VPC STA 9+22.50
VPC EL 997.03

VPI STA 9+60.00
VPI EL 996.21

LP STA 10+33.07
LP EL 995.87

VPI STA 10+85.00
VPI EL 995.59

VPT STA 11+47.50
VPT EL 998.97

STA 10+00
REMOVE STRUCTURE P-20-907
TRIPLE 72" GALVANIZED STEEL PIPE CULVERT
21.6 FEET LONG
31.4 FOOT CLEAR ROADWAY

STA 10+00
STRUCTURE B-20-0270
SINGLE SPAN CONCRETE FLAT SLAB BRIDGE
38.5 FEET LONG
32 FOOT CLEAR ROADWAY

HIGH WATER $Q_{100}$ ELEV. = 989.76

WATER ELEV. = 985.00 (09/27/2023)

HIGH WATER $Q_2$ ELEV. = 987.11

EXISTING GRADE

FINISHED GRADE

1002 1000 998 996 994 992 990 988

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000.01 | 1000.16 | 1000.25 | 1000.17 | 1000.05 | 999.63 | 999.16 | 998.43 | 997.66 | 996.80 | 996.97 | 995.94 | 996.51 | 995.45 | 996.19 | 995.14 | 996.01 | 995.35 | 995.89 | 995.67 | 995.94 | 996.24 | 996.29 | 996.91 | 996.93 |
| 998.01 | 997.87 | 999.11 | 999.11 | 1000.72 | 1002.33 | 1004.30 | 1006.27 | 1008.19 | 1010.11 | | | | | | | | | | | | | | | |

7+00 7+50 8+00 8+50 9+00 9+50 10+00 10+50 11+00 11+50 12+00 12+50 13+00

| PROJECT NO: 4814-04-71 | HWY: SUPERIOR DRIVE | COUNTY: FOND DU LAC | PLAN AND PROFILE: SUPERIOR DRIVE | SHEET 12 | E |
|---|---|---|---|---|---|

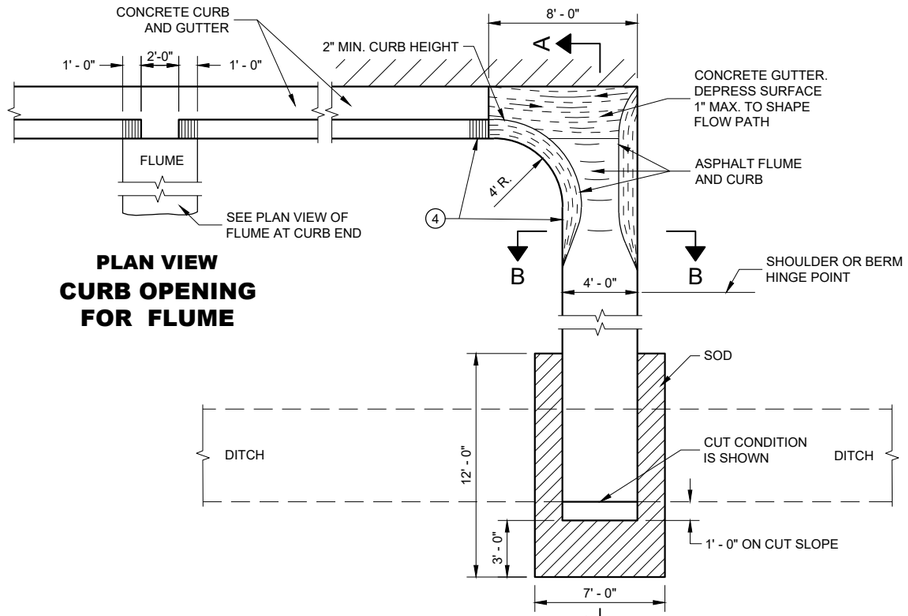
FILE NAME : I:\45\450651 SUPERIOR RD_T ASHFORD\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp
PLOT DATE : 6/29/2026 1:01 PM
PLOT BY : WILKE, CASSANDRA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

# Standard Detail Drawing List

| | |
|---|---|
| 08D04-07 | CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES |
| 08E09-06 | SILT FENCE |
| 08E11-02 | TURBIDITY BARRIER |
| 12A03-10 | NAME PLATE (STRUCTURES) |
| 13C19-03 | HMA LONGITUDINAL JOINTS |
| 14B29-01 | SAFETY EDGE |
| 15C02-10A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-10B | BARRICADES AND SIGNS FOR VARIOUS CLOSURES |
| 15C06-12 | SIGNING AND MARKING FOR TWO LANE BRIDGES |
| 15C11-11B | CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS |

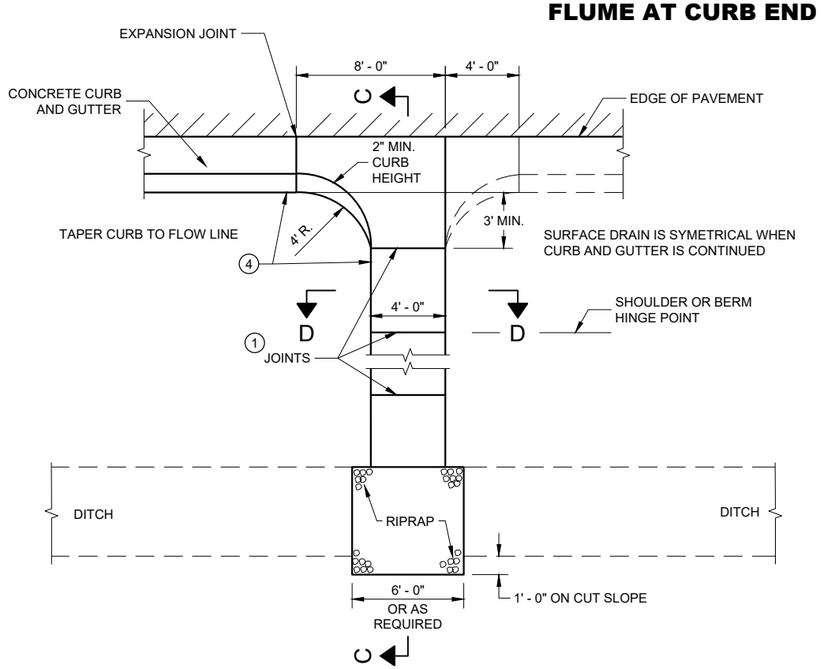
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

## ASPHALTIC FLUME




**PLAN VIEW**
**CURB OPENING FOR FLUME**

**PLAN VIEW**
**FLUME AT CURB END**



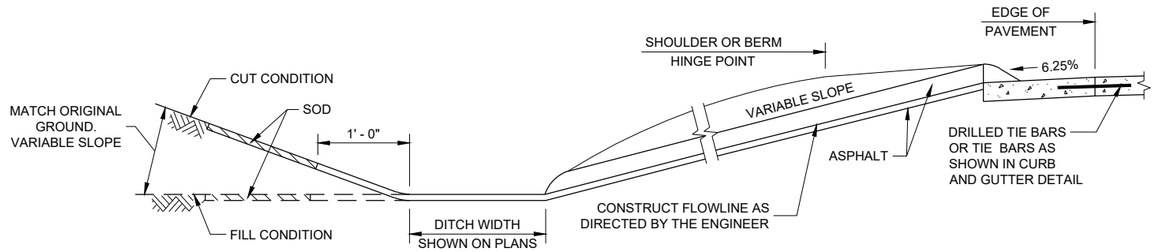

**PLAN VIEW**
**CONCRETE SURFACE DRAIN**

## GENERAL NOTES

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

4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

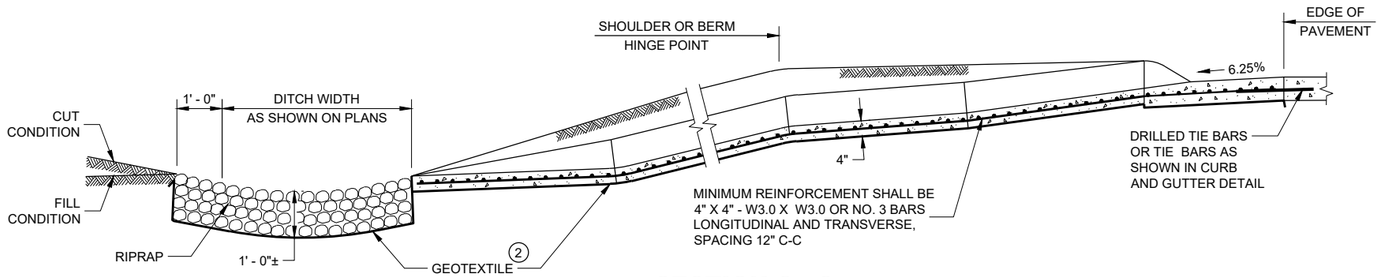
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.



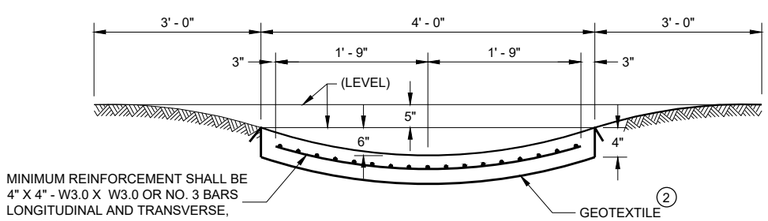

**SECTION A - A**




**SECTION B - B**




**SECTION C - C**




**SECTION D - D**

**CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES**

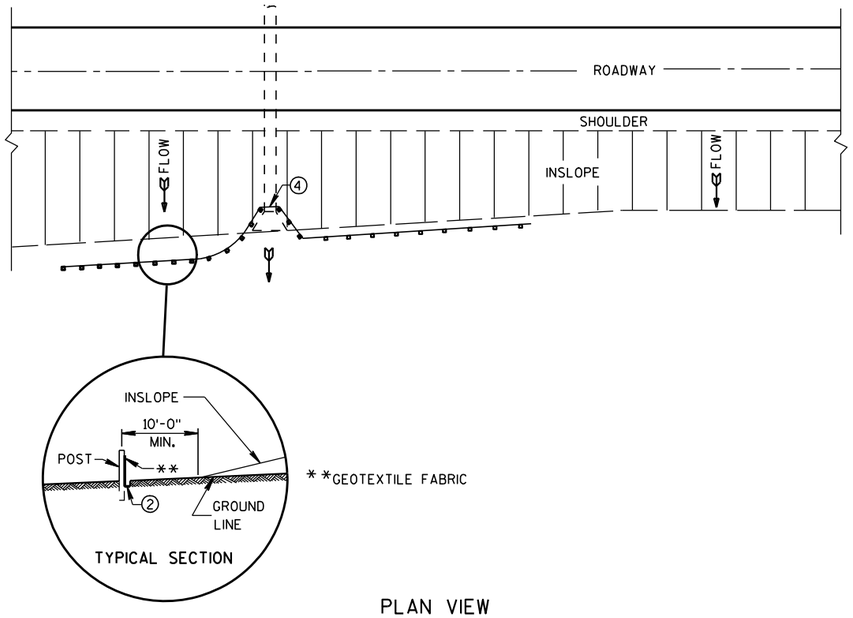
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

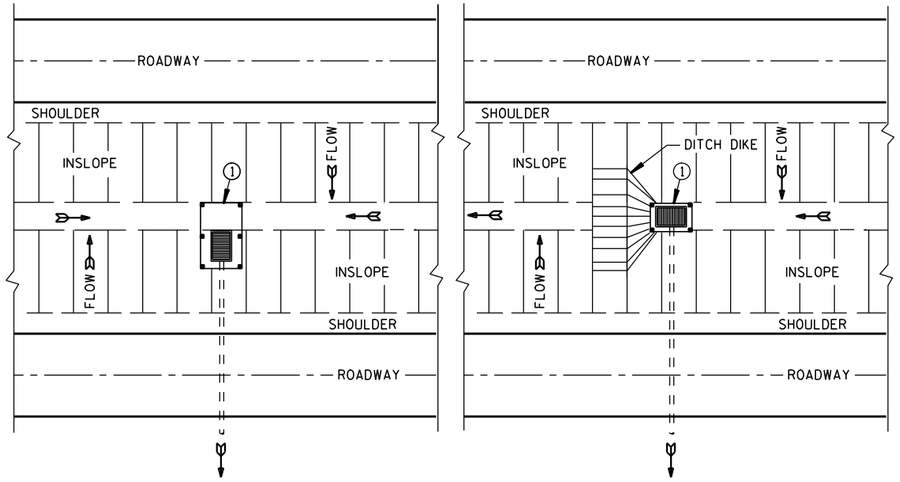



6
SDD 08D04 - 07




PLAN VIEW

## TYPICAL APPLICATION OF SILT FENCE



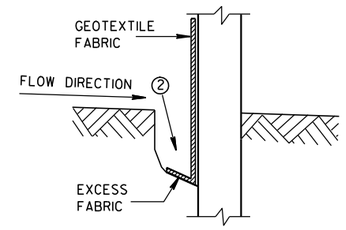

PLAN VIEW

## SILT FENCE AT MEDIAN SURFACE DRAINS

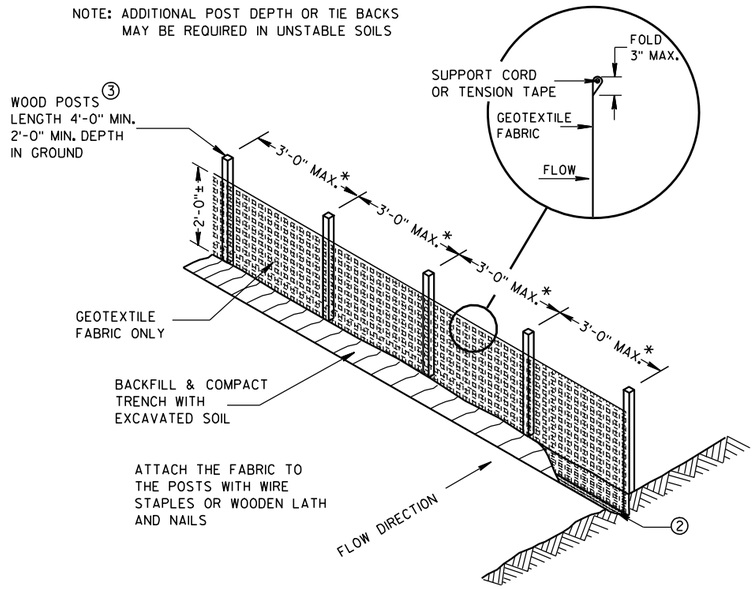
## GENERAL NOTES

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

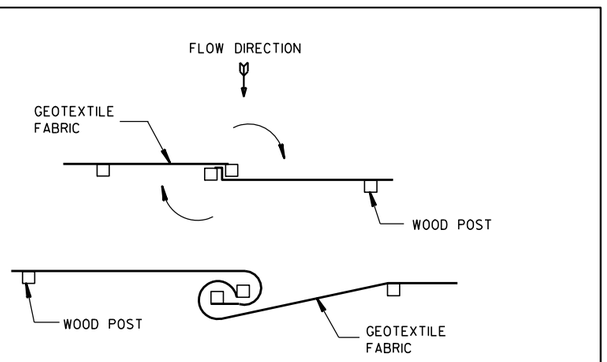
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL 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.



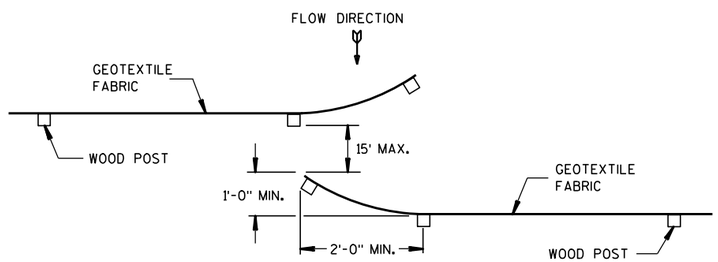

## TRENCH DETAIL




## SILT FENCE

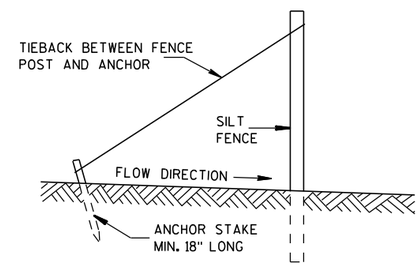



TWIST METHOD




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

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

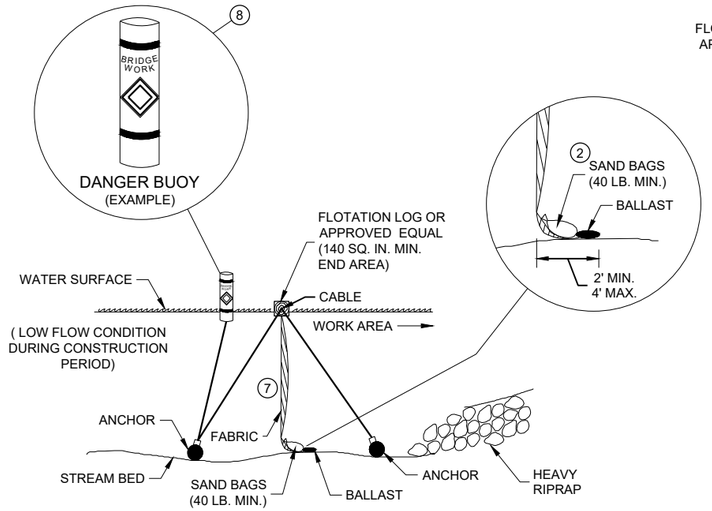


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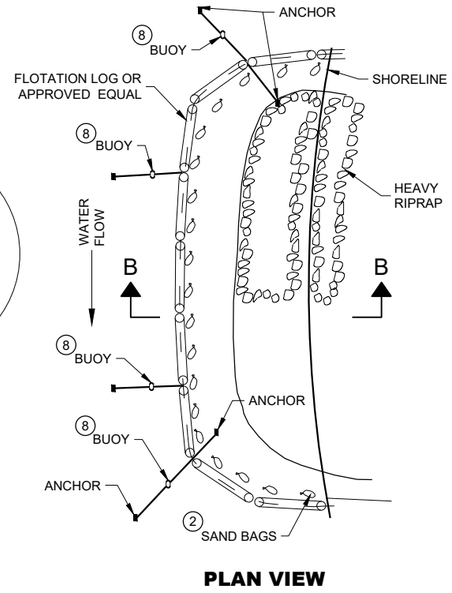
S.D.D. 8 E 9-6

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S.D.D. 8 E 9-6

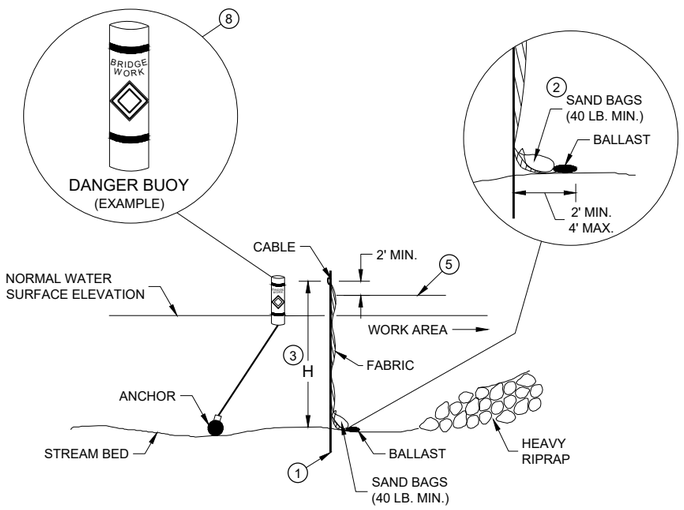



**SECTION B - B**

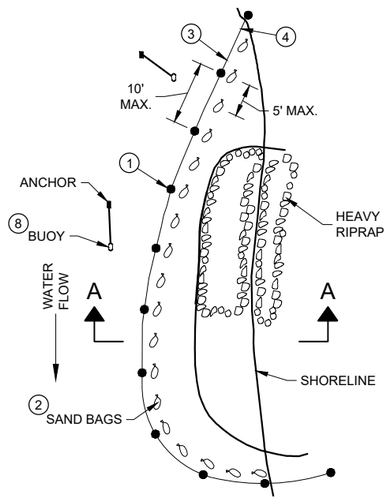



**PLAN VIEW**

**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) SAND BAGS 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 FEET, POST SPACING MAY NEED TO BE DECREASED.

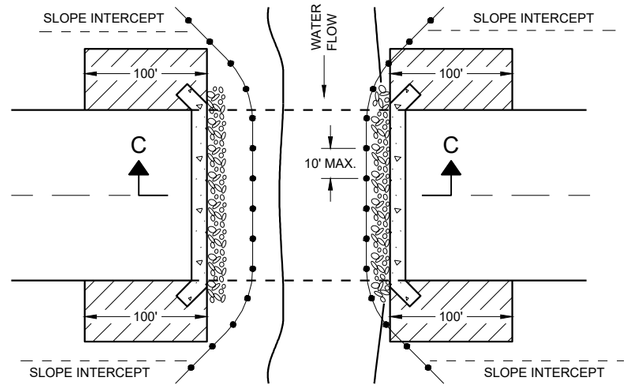
(4) IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

(5) ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.

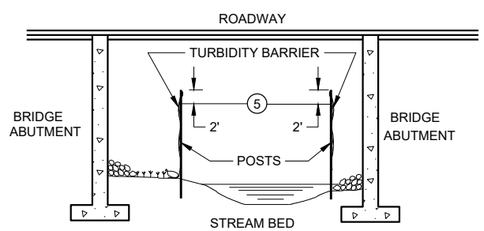
(6) FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.

(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**

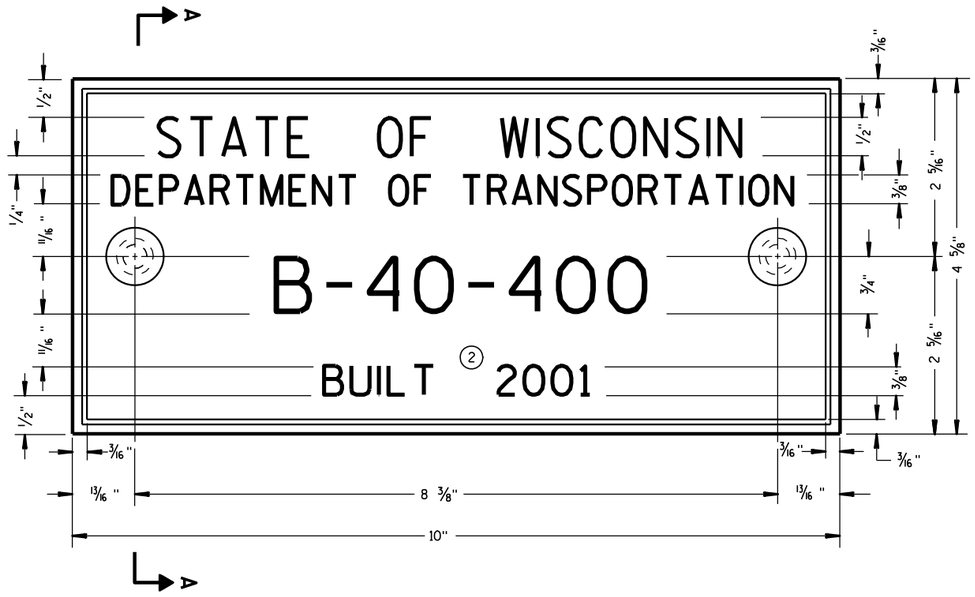
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/4/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

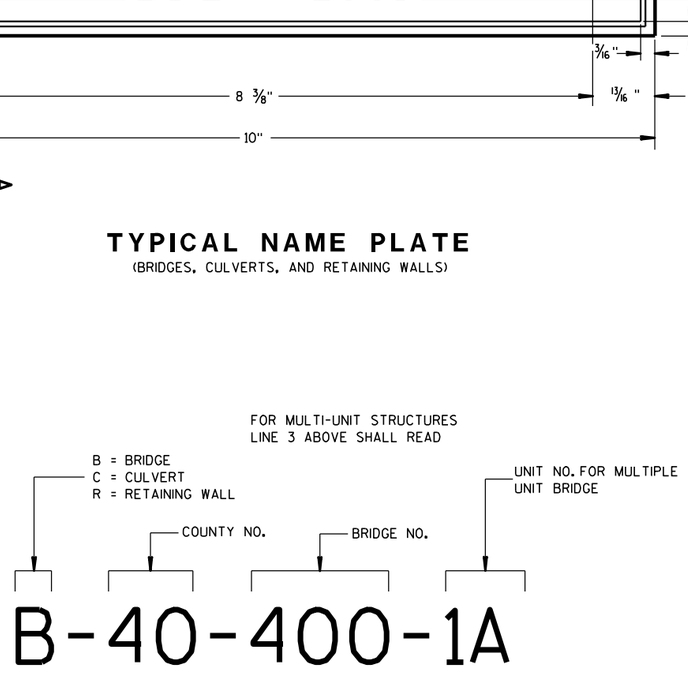
FHWA




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SDD 08E11 - 02




**TYPICAL NAME PLATE**
(BRIDGES, CULVERTS, AND RETAINING WALLS)




**NUMBERING DESIGNATION**
**MULTI-UNIT STRUCTURES**

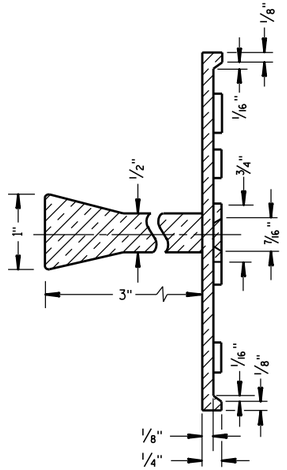
## GENERAL NOTES

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.

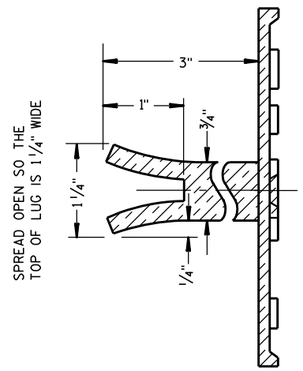
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

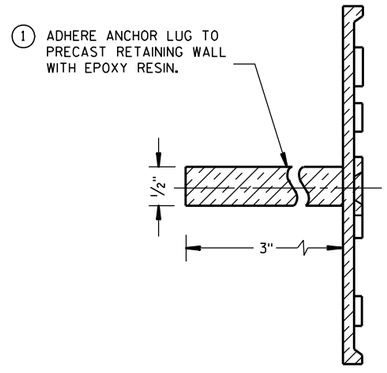
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.




**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 DEVELOPMENT ENGINEER

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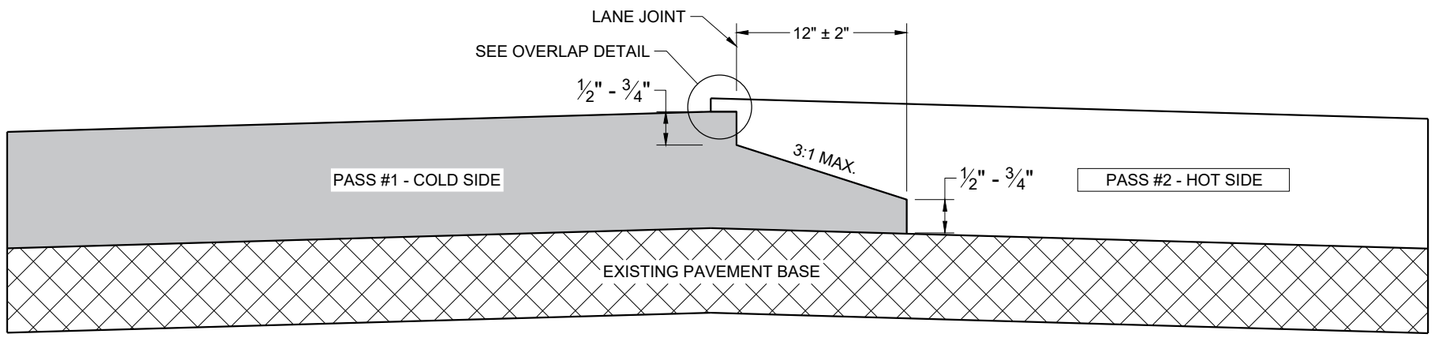


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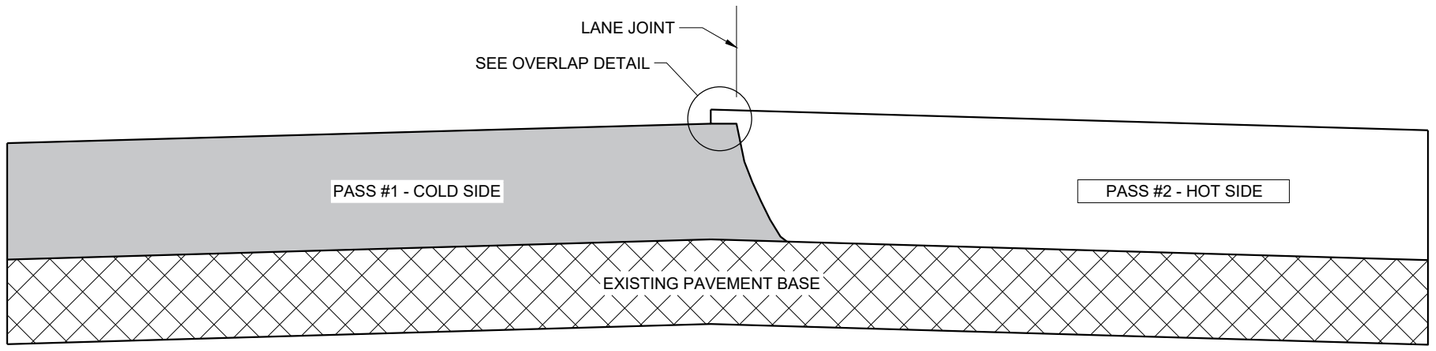
S.D.D. 12 A 3-10

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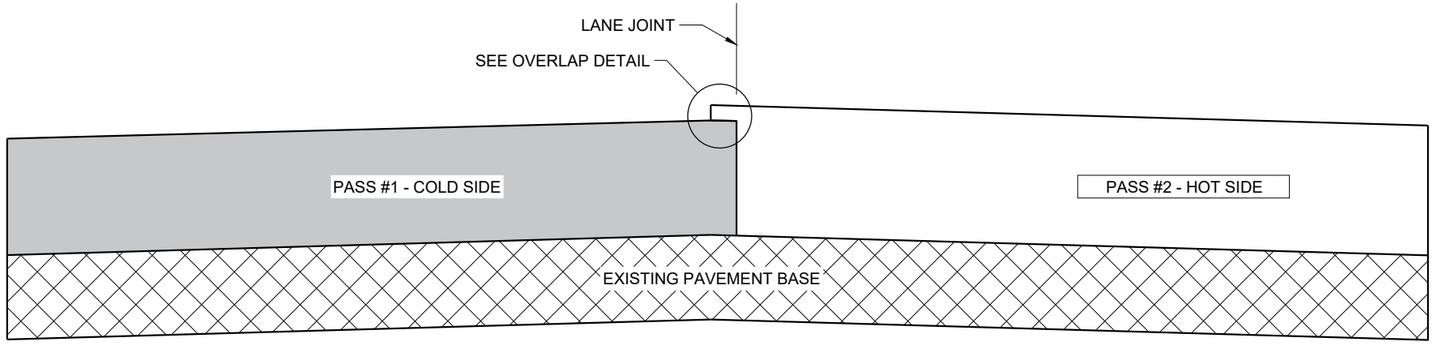
S.D.D. 12 A 3-10




**TYPICAL PAVEMENT CROSS SECTION**
**NOTCHED WEDGE JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT**




**TYPICAL PAVEMENT CROSS SECTION**
**VERTICAL JOINT (MILLED)**

## GENERAL NOTES

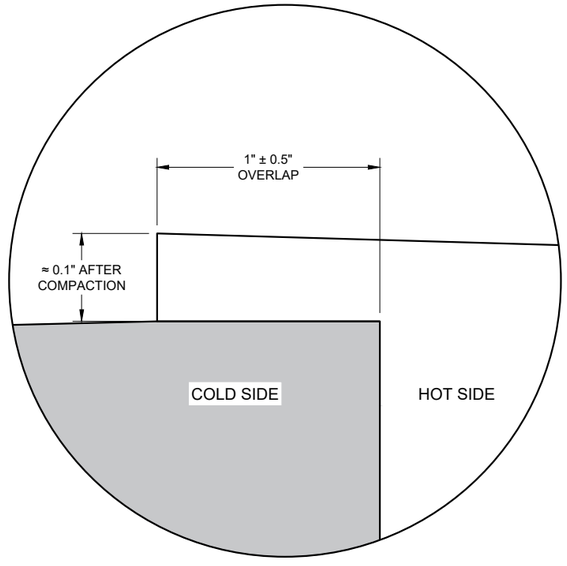
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.




**OVERLAP DETAIL (TYPICAL)**

6

6

SDD 13C19 - 03

SDD 13C19 - 03

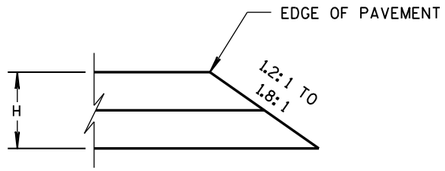
**HMA LONGITUDINAL JOINTS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

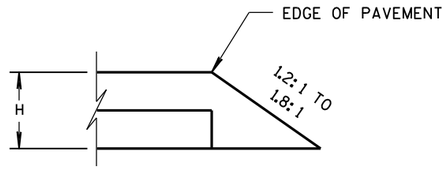
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



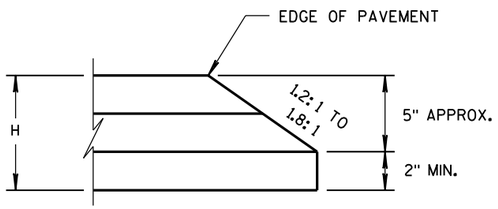

CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



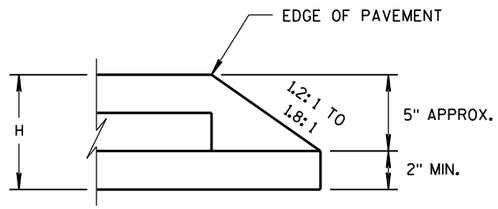

CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS




CONSTRUCTED WITH FINAL TWO LAYERS

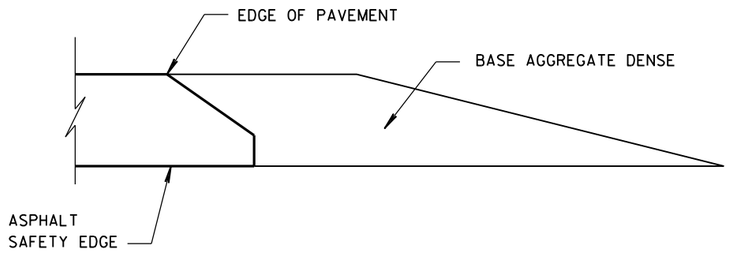
FOR H GREATER THAN 5"




CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

## HMA PAVEMENT AND HMA OVERLAYS




## FINISHED SHOULDER AGGREGATE PLACEMENT

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

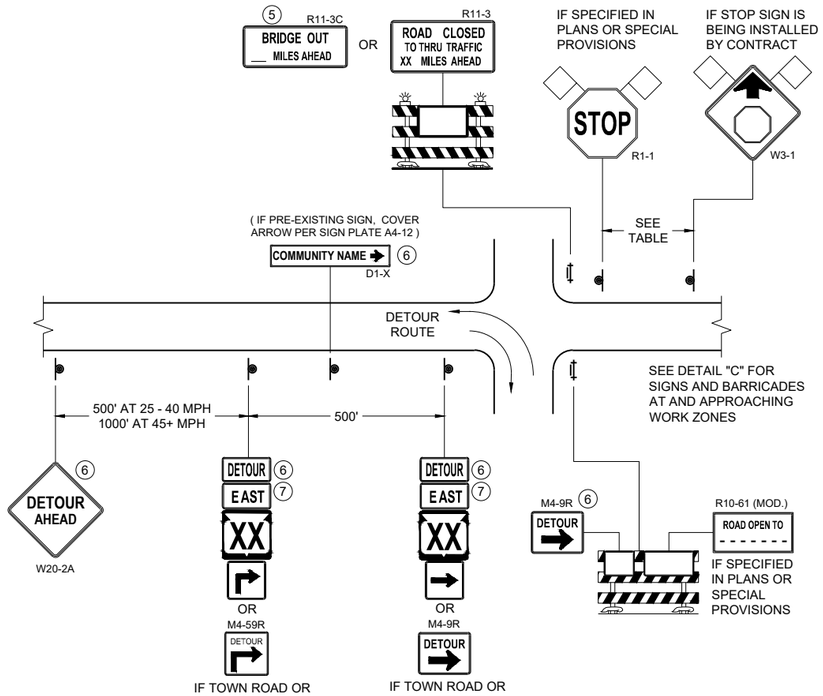
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

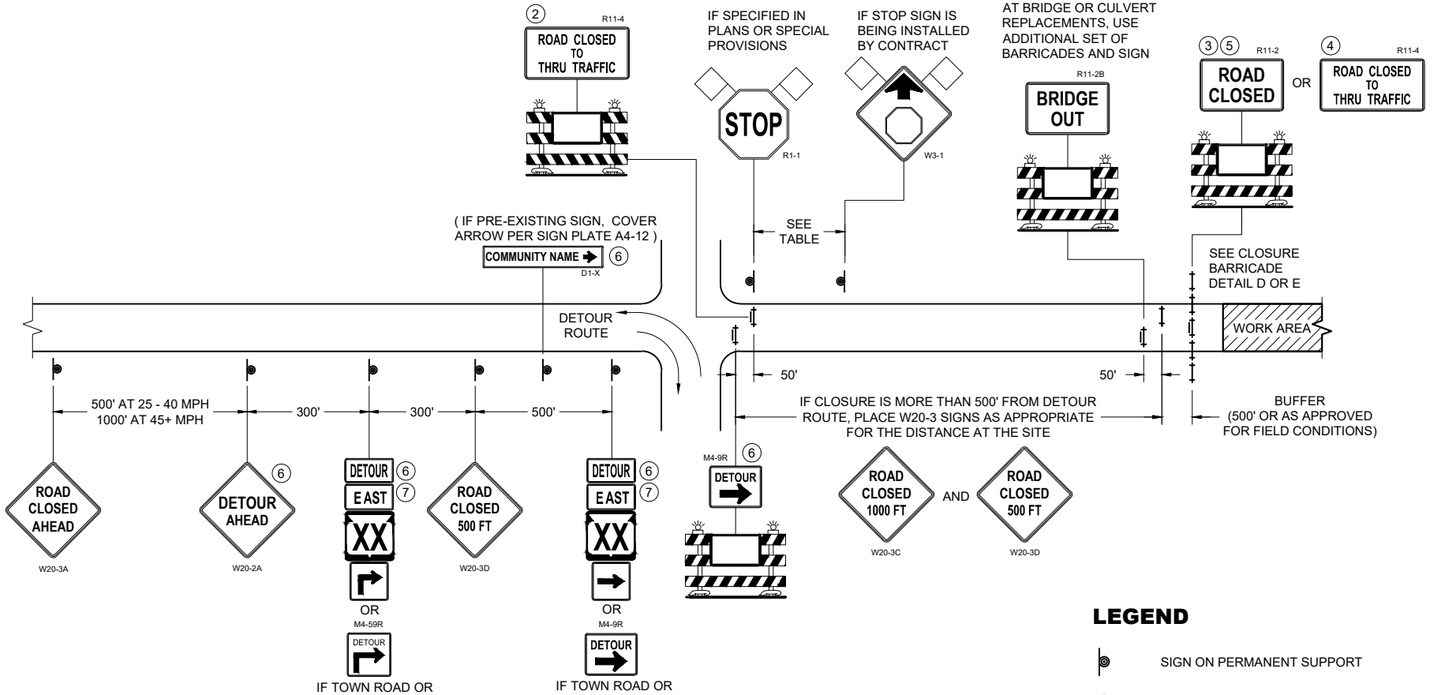
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

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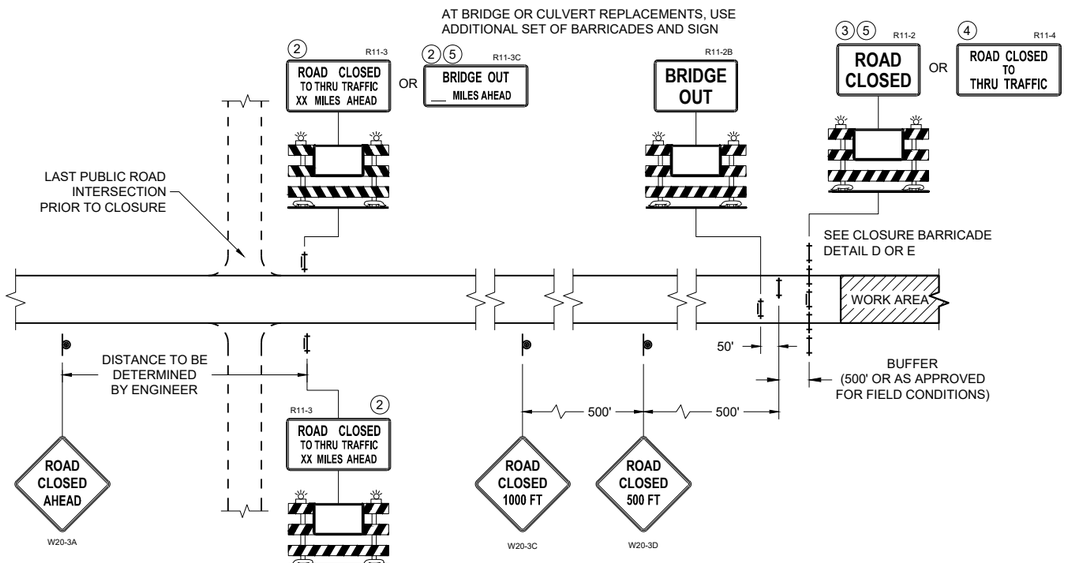

## DETAIL A
## MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )




## DETAIL B
## MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )




## DETAIL C
## MAINLINE CLOSURE, NO POSTED DETOUR

| SPEED LIMIT (MPH) | "STOP AHEAD" ADVANCE WARNING DISTANCE (FT) |
|---|---|
| 25 | 200 |
| 30 | 200 |
| 35 | 350 |
| 40 | 350 |
| 45 | 500 |
| 50 | 550 |
| 55 | 750 |

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES (1) THROUGH (7)

## LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

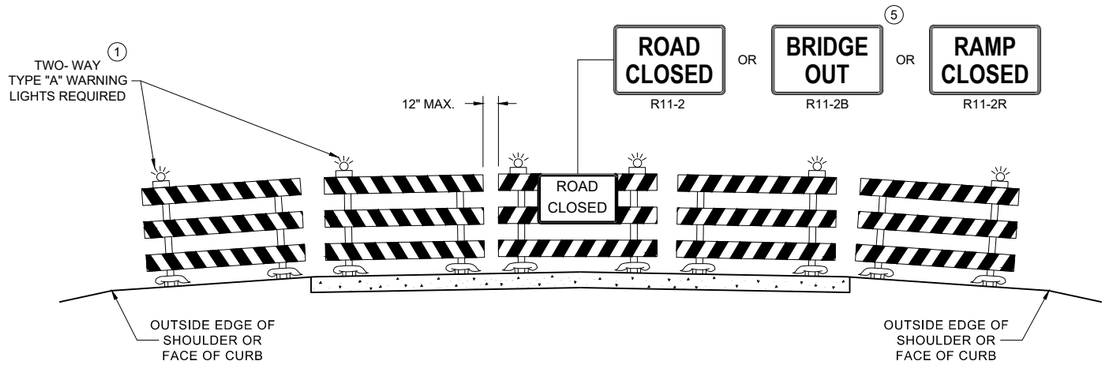
# BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA



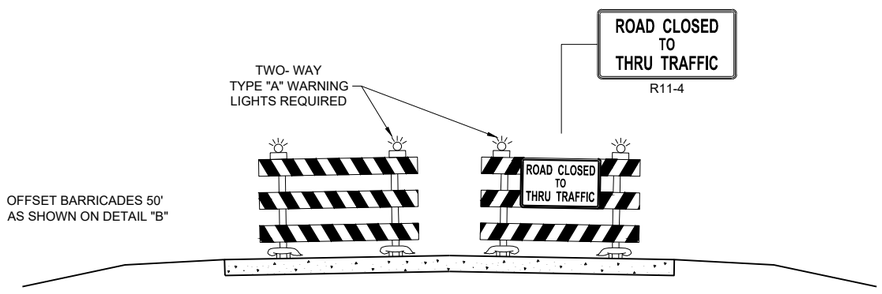
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SDD 15C02-10a




**DETAIL D**

**ROAD CLOSURE BARRICADE DETAIL**

**APPROACH VIEW**




**DETAIL E**

**LANE CLOSURE BARRICADE DETAIL**

**APPROACH VIEW**

SEE SDD 15C2 - SHEET "a" FOR LEGEND

## GENERAL NOTES

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

PARTIAL NUMBERS ON SIGNS SHALL BE DISPLAYED AS A WHOLE NUMBER(AS NEEDED) FOLLOWED BY A FRACTION. SIGNS SHALL NOT DISPLAY NUMBERS IN DECIMAL FORM.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

SIGNS PLACED ON TYPE III BARRICADES THAT ARE SIZES OTHER THAN 48"X30" SHALL HAVE A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE.

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

**BARRICADES AND SIGNS FOR VARIOUS CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

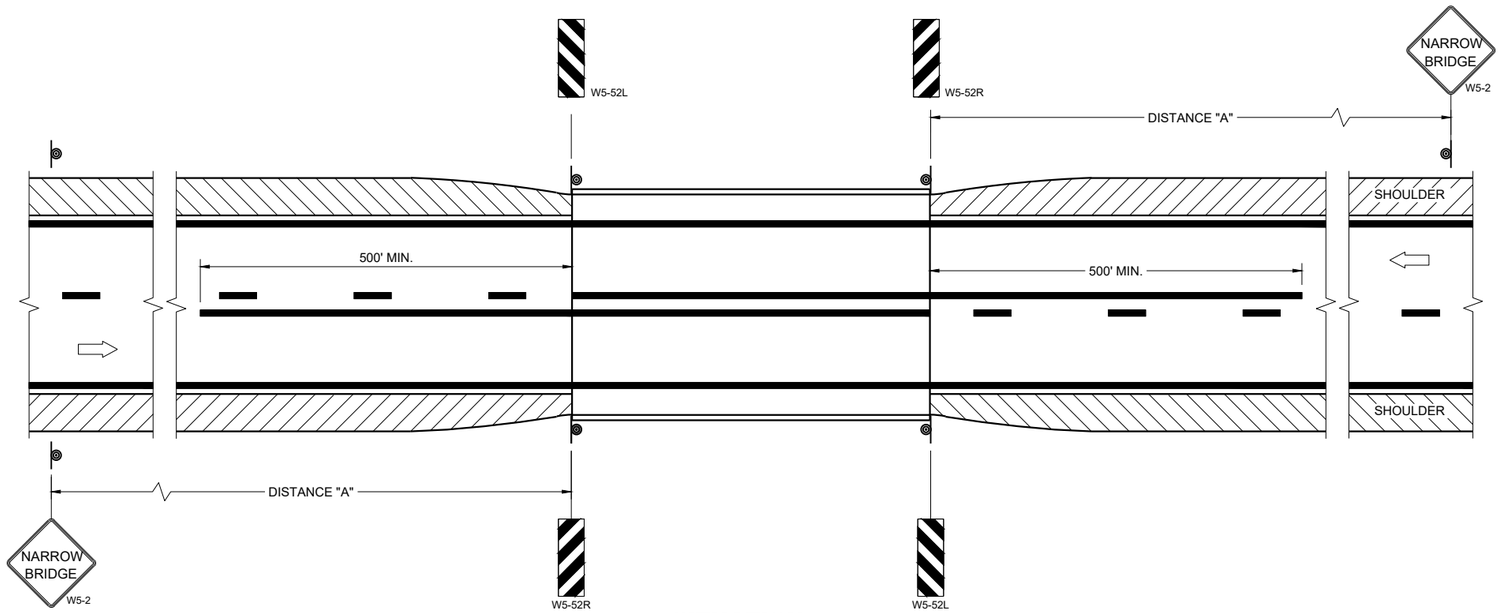
APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA



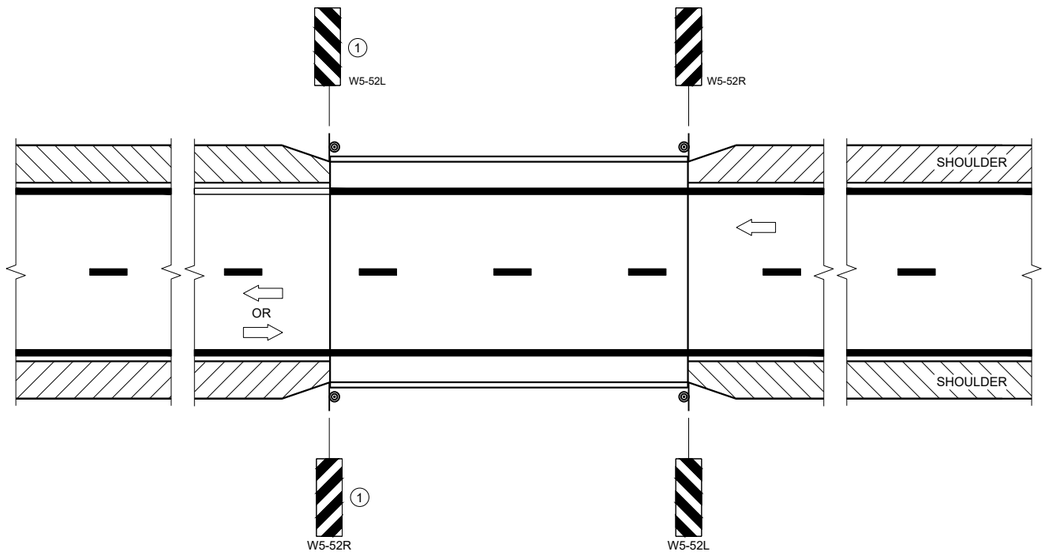

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SDD 15C02-10b




## SITUATION 1

WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.




## SITUATION 2

WARRANTING CRITERIA:
1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET

## GENERAL NOTES

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

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

ON BRIDGE ONLY PROJECTS, PLACE 300 FEET OF EDGELINE.

OMIT EDGELINES ON ROADWAYS WITHOUT EXISTING EDGELINES.

(1) OMIT ON ONE-WAY TRAVELED WAYS.

## LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

### DISTANCE TABLE

| POSTED OR 85TH PERCENTILE SPEED | DISTANCE "A" |
|---|---|
| 25 | 150' |
| 30 | 200' |
| 35 | 250' |
| 40 | 300' |
| 45 | 400' |
| 50 | 550' |
| 55 | 700' |

**SIGNING AND MARKING FOR TWO LANE BRIDGES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

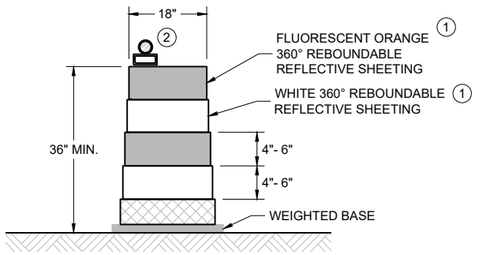
APPROVED
May 2023
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer
FHWA


6
SDD 15C06-12

## GENERAL NOTES

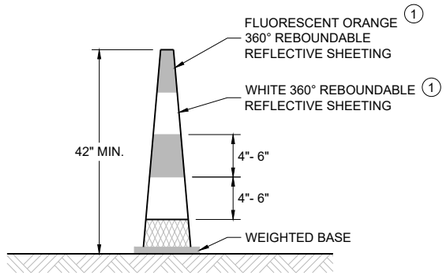
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.




### DRUM

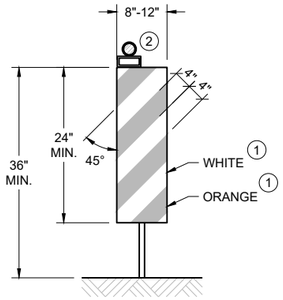
BALLAST WIDTHS
RANGE FROM 24"-36"




### 42" CONE

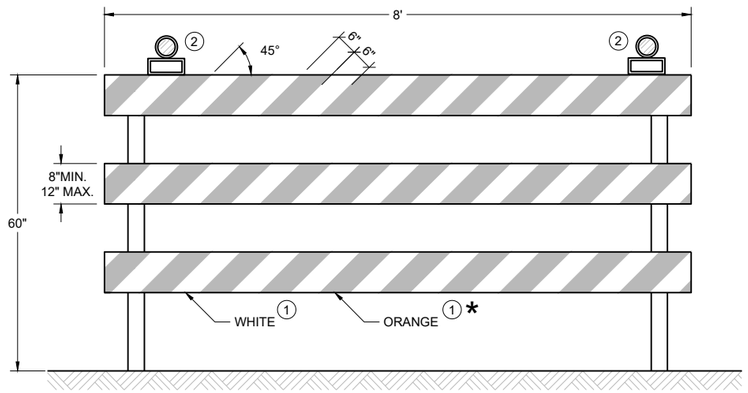
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"




### VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.




### TYPE III 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

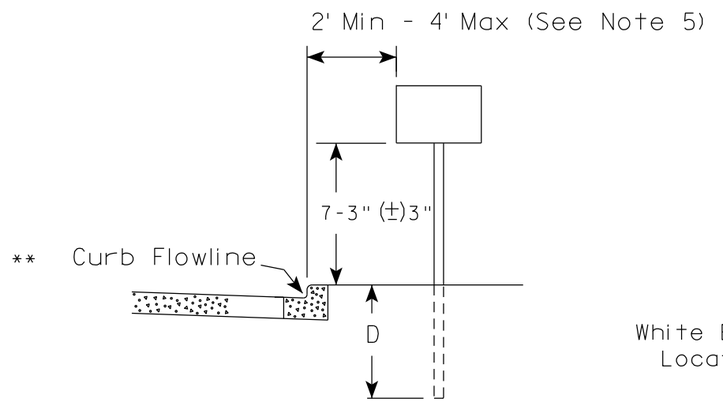
APPROVED
February 2026 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

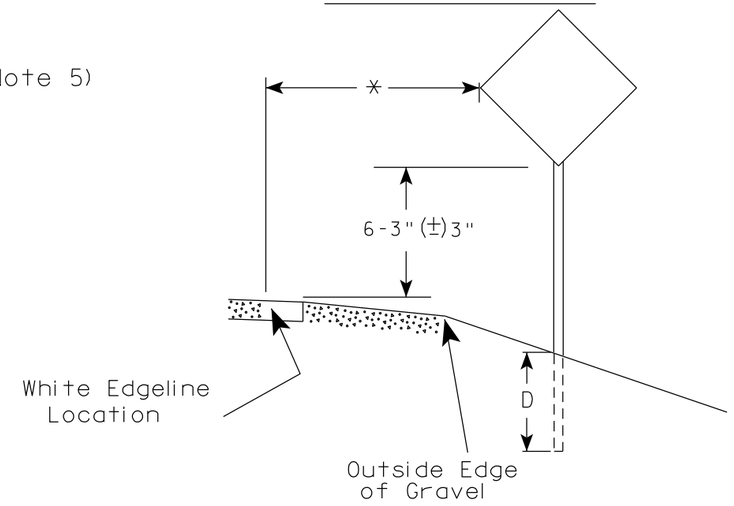


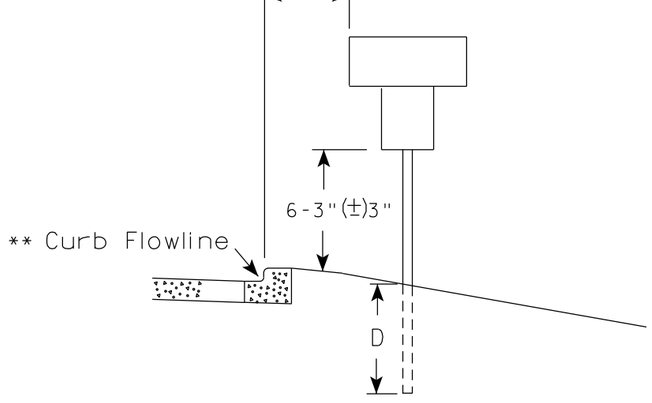
6
SDD 15C11-11b

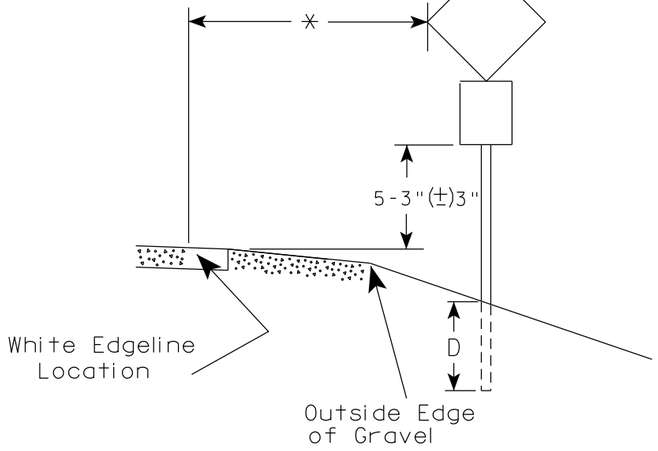
## URBAN AREA




## 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 or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 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" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

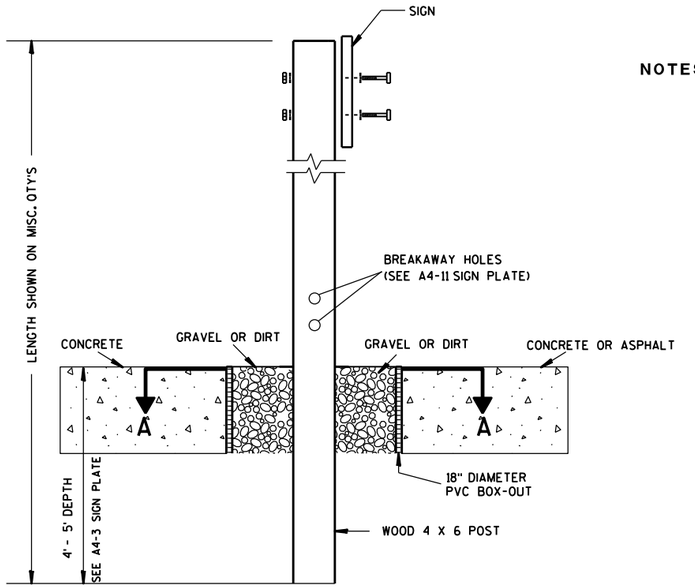
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

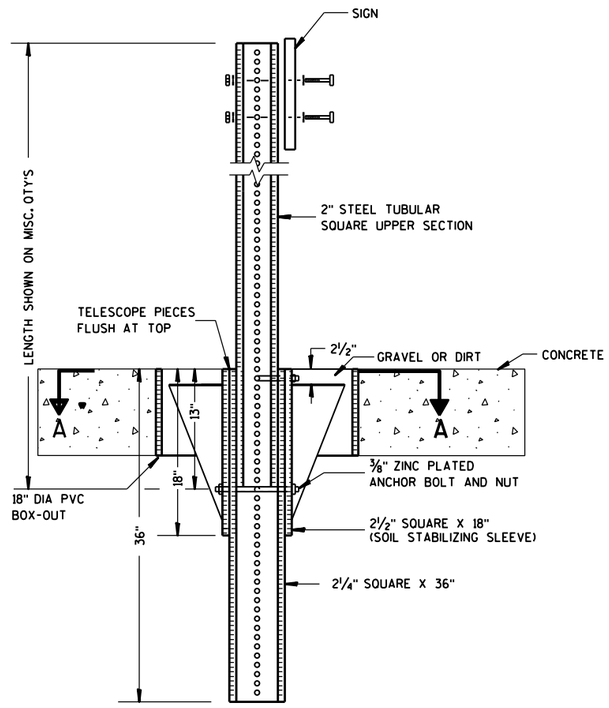
| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 24 | E |
|---|---|---|---|---|---|




**ELEVATION VIEW**

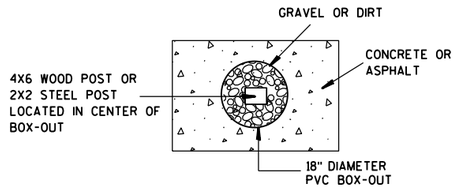
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

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

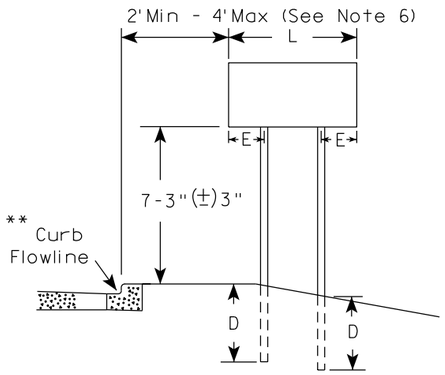
DATE 1/27/14 PLATE NO. A4-3B.1

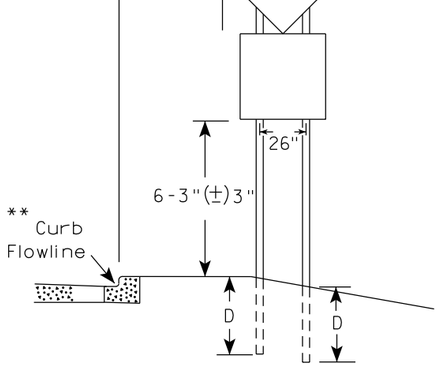


| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

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

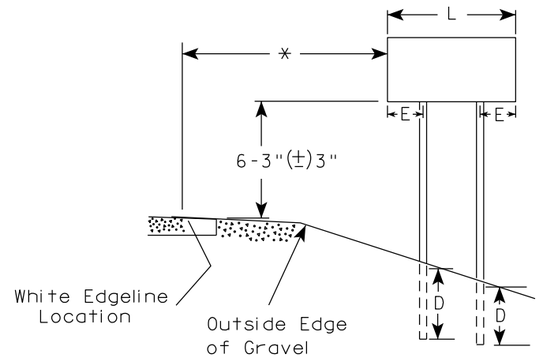
## URBAN AREA

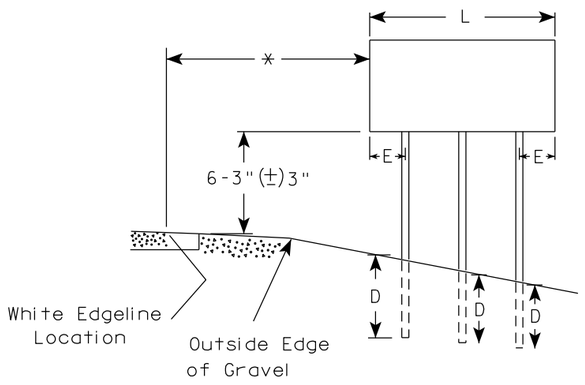


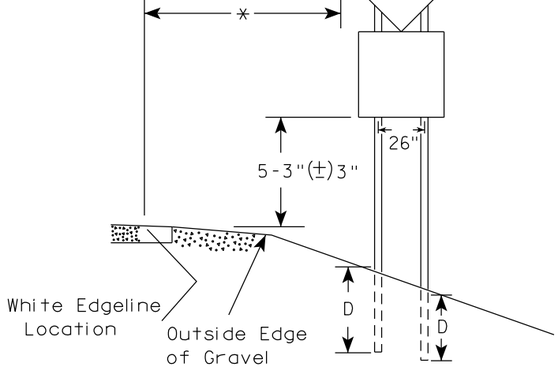




48" DIAMOND WARNING SIGN

## RURAL AREA (See Note 3)




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" (±) 3" or 6'-3" (±) 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" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 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" (±) 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' |

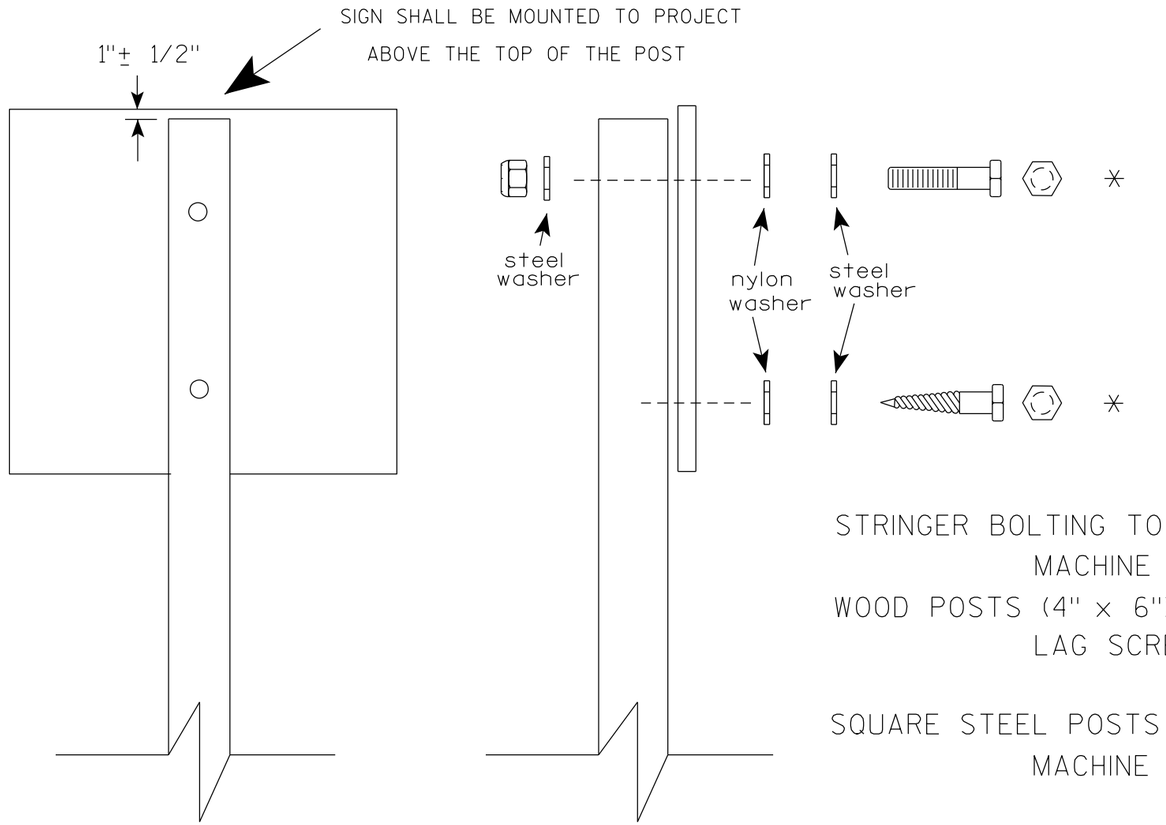
# TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

*WISCONSIN DEPT OF TRANSPORTATION*

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 26 | 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 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

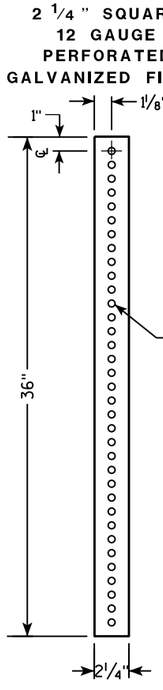
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

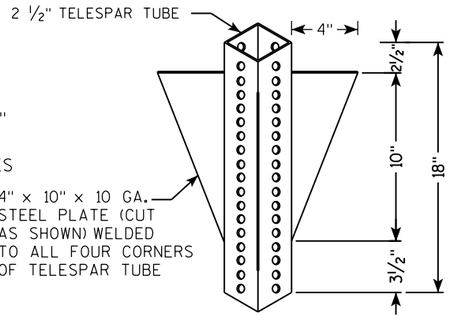
DATE 4/1/2020 PLATE NO. A4-8.9

## TELESCOPIC TUBING ANCHORS
## TWO PIECE SYSTEM

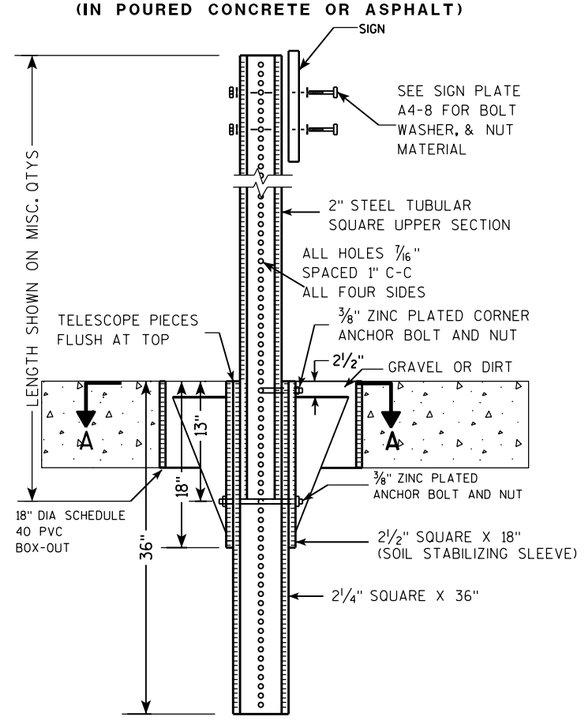
**2 1/4 " SQUARE**
**12 GAUGE**
**PERFORATED**
**GALVANIZED FINISH**



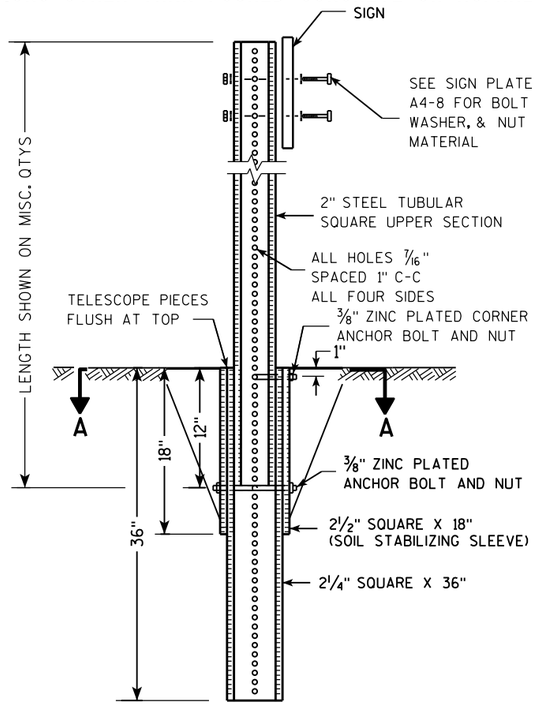

**2 1/2 " SQUARE**
**12 GAUGE**
**OMNI-DIRECTIONAL**
**PERFORATED**
**SOIL STABILIZING SLEEVE**
**GALVANIZED FINISH**

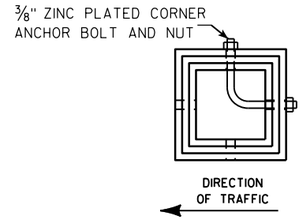



## DETAIL OF TUBULAR STEEL SIGN POST
**(IN POURED CONCRETE OR ASPHALT)**




## 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*

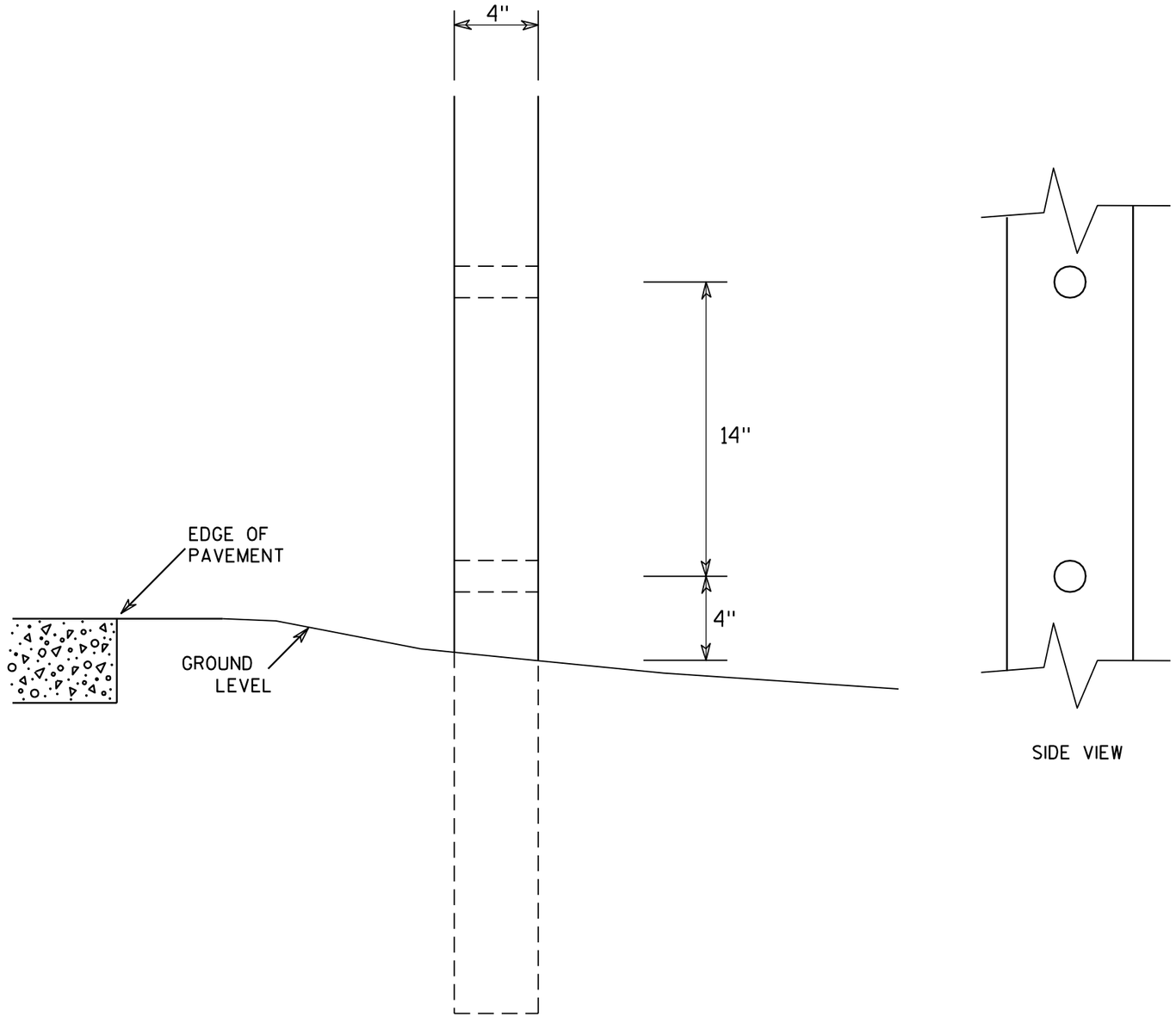
APPROVED Matthew R Rauch
*for* State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9



| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000
WISDOT/CADDS SHEET 42






SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

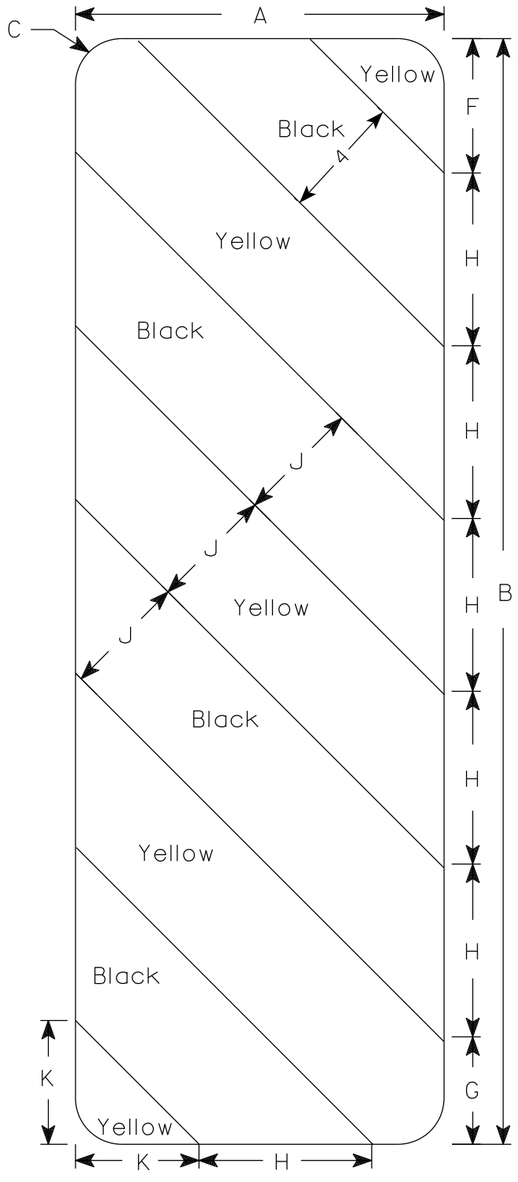
# 4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

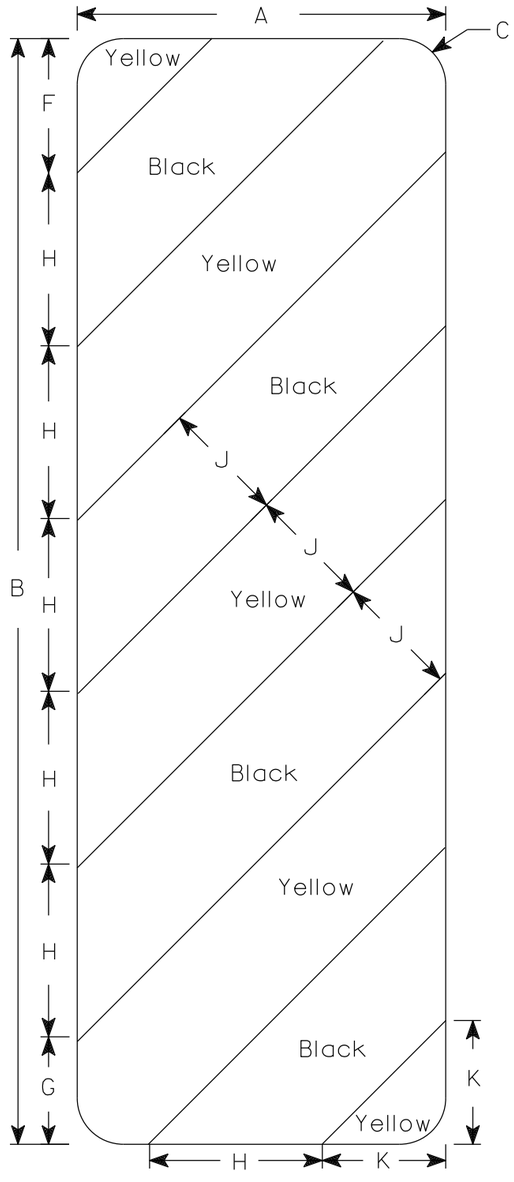
APPROVED Chester J Spang
for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 29 | E |
|---|---|---|---|---|---|




OM3-L




OM3-R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Alternate colors of stripes as shown.

| 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 | 12 | 36 | 1 1/2 | | | 4 3/8 | 3 1/2 | 5 5/8 | 45° | 4 | 4 | | | | | | | | | | | | | | | | 3.0 |
| 2M | 12 | 36 | 1 1/2 | | | 4 3/8 | 3 1/2 | 5 5/8 | 45° | 4 | 4 | | | | | | | | | | | | | | | | 3.0 |
| 3 | 18 | 54 | 1 1/2 | | | 6 | 5 1/2 | 8 1/2 | 45° | 6 | 6 9/16 | | | | | | | | | | | | | | | | 6.75 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
OM3-L & OM3-R

WISCONSIN DEPT OF TRANSPORTATION

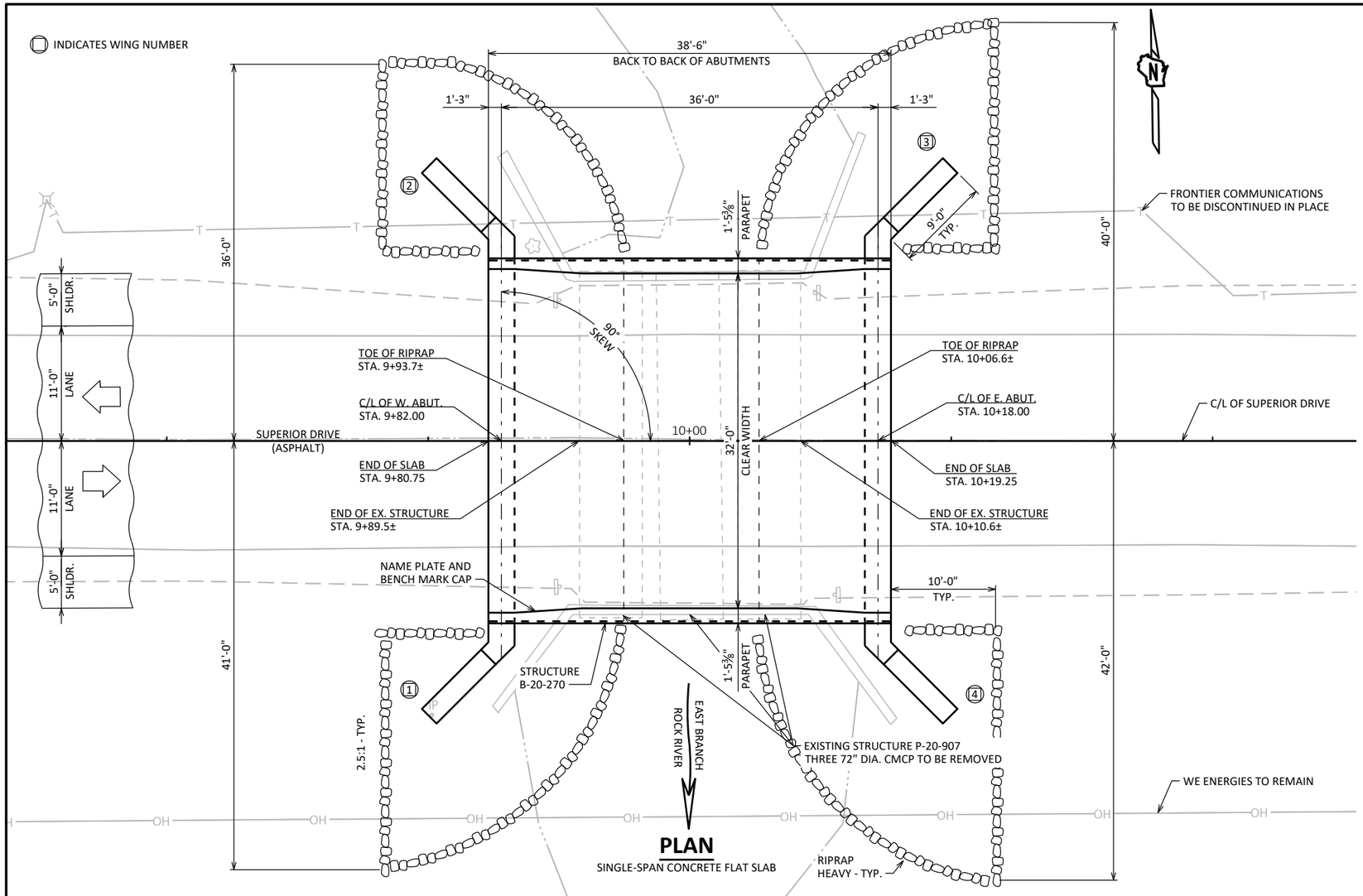
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 9/2/25 PLATE NO. OM3.1

| PROJECT NO: | HWY: | COUNTY: | | SHEET NO: | E |
|---|---|---|---|---|---|

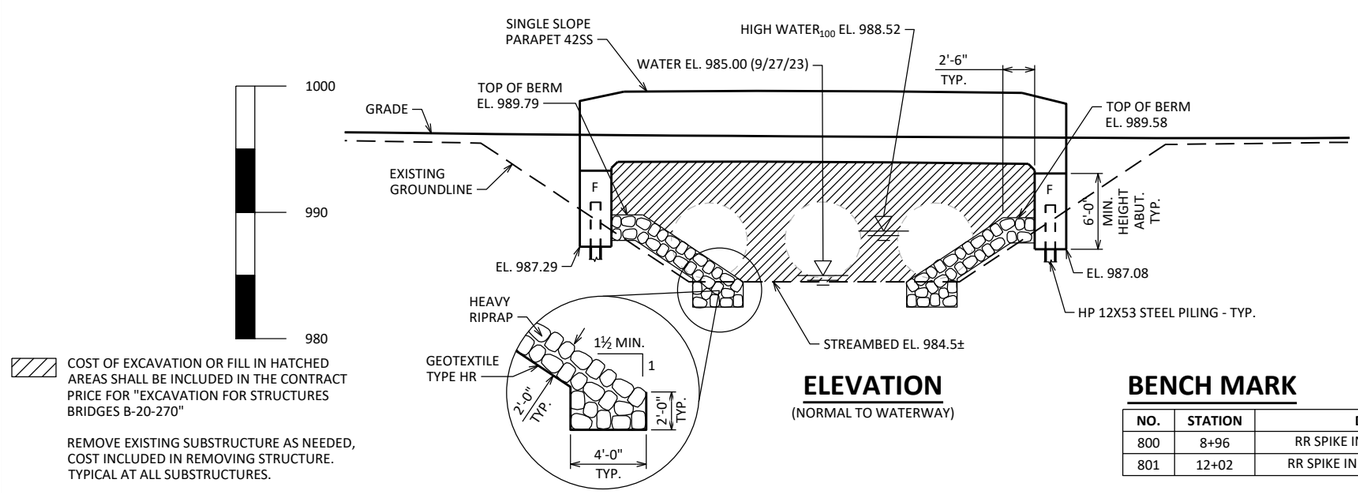
STATE PROJECT NUMBER

**4814-04-71**




## PLAN

SINGLE-SPAN CONCRETE FLAT SLAB




## ELEVATION

(NORMAL TO WATERWAY)

COST OF EXCAVATION OR FILL IN HATCHED AREAS SHALL BE INCLUDED IN THE CONTRACT PRICE FOR "EXCAVATION FOR STRUCTURES BRIDGES B-20-270"

REMOVE EXISTING SUBSTRUCTURE AS NEEDED, COST INCLUDED IN REMOVING STRUCTURE. TYPICAL AT ALL SUBSTRUCTURES.

## BENCH MARK

| NO. | STATION | DESCRIPTION | ELEV. |
|---|---|---|---|
| 800 | 8+96 | RR SPIKE IN PPOL 18-5649, 36' RT | 1000.01 |
| 801 | 12+02 | RR SPIKE IN PPOL E56-15885, 34' RT | 997.26 |

## DESIGN DATA

**LIVE LOAD:**

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.07
OPERATING RATING: RF = 1.38
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

**MATERIAL PROPERTIES:**

CONCRETE MASONRY:
SUPERSTRUCTURE — $f'_c$ = 4,000 PSI
ALL OTHER — $f'_c$ = 3,500 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — $f_y$ = 60,000 PSI

## FOUNDATION DATA

WEST ABUTMENT TO BE SUPPORTED ON HP 12X53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 140 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

ESTIMATED 40'-0" LONG WITH PILE POINTS.

EAST ABUTMENT TO BE SUPPORTED ON HP 12X53 STEEL PILING. PRE-BORE ALL PILES TO EL. 969.3 AND THEN DRIVE TO A REQUIRED DRIVING RESISTANCE OF 140 TONS. COBBLES AND BOULDERS MAY BE ENCOUNTERED DURING PRE-BORING

ESTIMATED 40'-0" LONG WITH PRE-BORING AND PILE POINTS.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE PILE CAPACITY.

## HYDRAULIC DATA

**100-YEAR FREQUENCY:**

$Q_{100}$= 350 C.F.S.
$V_{100}$= 8.6 F.P.S.
$HW_{100}$= EL. 988.52
WATERWAY AREA = 41 SQ. FT.
DRAINAGE AREA = 4.2 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 5

**2-YEAR FREQUENCY:**

$Q_2$= 85 C.F.S.
$V_2$= 6.0 F.P.S.
$HW_2$= EL. 986.63

## TRAFFIC DATA

**FEATURE ON: SUPERIOR DRIVE**

ADT = <100 (2027)
ADT = <100 (2047)
R.D.S. = 20 MPH

## LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION, QUANTITIES, AND NOTES
3. STRUCTURE DETAILS
4. SUBSTRUCTURE EXPLORATION
5. WEST ABUTMENT
6. WEST ABUTMENT WING 1 DETAILS
7. WEST ABUTMENT BILL OF BARS
8. EAST ABUTMENT
9. EAST ABUTMENT WING 3 DETAILS
10. EAST ABUTMENT BILL OF BARS
11. SUPERSTRUCTURE
12. SUPERSTRUCTURE PLAN
13. SINGLE SLOPED PARAPET 42SS

WISCONSIN
KRISTOFER R. OLSON
E-35236
APPLETON, WI
PROFESSIONAL ENGINEER

9/22/2026

**STRUCTURE DESIGN CONTACTS:**

AARON BONK 608-261-0261
KRISTOFER OLSON 920-498-1200

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

ORIGINAL PLANS PREPARED BY


AYRES
700 Pilgrim Way, Suite 180
Green Bay, WI 54304
www.AyresAssociates.com


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 09/22/26
CHIEF STRUCTURES DESIGN ENGINEER — DATE

**STRUCTURE B-20-270**

SUPERIOR DRIVE OVER EAST BRANCH ROCK RIVER

| COUNTY | TOWN |
|---|---|
| FOND DU LAC | ASHFORD |

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

| DESIGNED BY | DESIGN CK'D | DRAWN BY | PLANS CK'D |
|---|---|---|---|
| JMC | RCP | JMC | KRO |

**GENERAL PLAN**

SHEET 1 OF 13
31

I.D.

DATE:

8

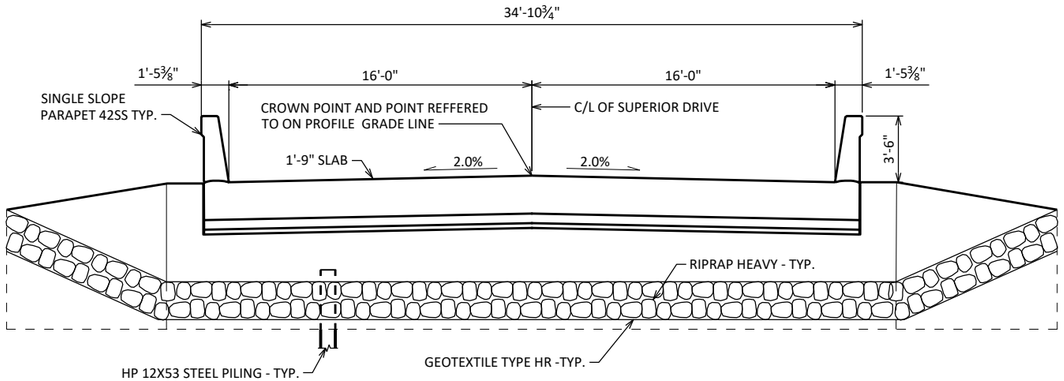
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STATE PROJECT NUMBER

**4814-04-71**

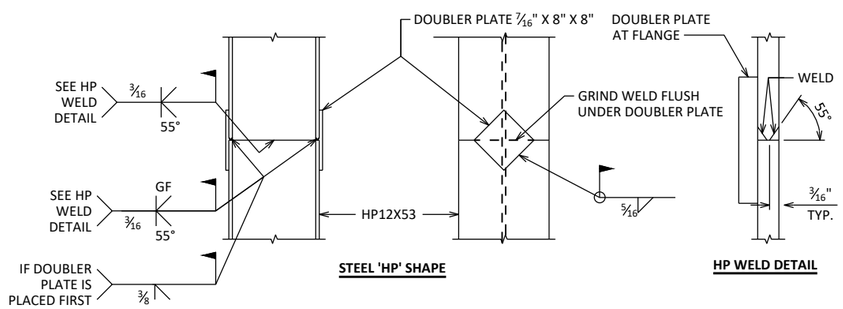
## TOTAL ESTIMATED QUANTITIES

| BID ITEM NUMBER | BID ITEMS | UNIT | SUPER | W ABUT. | E ABUT. | TOTALS |
|---|---|---|---|---|---|---|
| 203.0220 | REMOVE STRUCTURE P-20-907 | EACH | --- | --- | --- | 1 |
| 206.1001 | EXCAVATION FOR STRUCTURES BRIDGES B-20-270 | EACH | --- | --- | --- | 1 |
| 210.1500 | BACKFILL STRUCTURE TYPE A | TON | --- | 230 | 230 | 460 |
| 502.0100 | CONCRETE MASONRY BRIDGES | CY | 101.9 | 34.2 | 34.2 | 170 |
| 502.3200 | PROTECTIVE SURFACE TREATMENT | SY | 140 | --- | --- | 140 |
| 502.3210 | PIGMENTED SURFACE SEALER | SY | 40 | --- | --- | 40 |
| 505.0400 | BAR STEEL REINFORCEMENT HS STRUCTURES | LB | --- | 2,630 | 2,630 | 5,260 |
| 505.0600 | BAR STEEL REINFORCEMENT HS COATED STRUCTURES | LB | 17,840 | 1,440 | 1,440 | 20,720 |
| 516.0500 | RUBBERIZED MEMBRANE WATERPROOFING | SY | --- | 7 | 7 | 14 |
| 550.0010 | PRE-BORING UNCONSOLIDATED MATERIALS | LF | --- | --- | 126 | 126 |
| 550.0500 | PILE POINTS | EACH | --- | 7 | 7 | 14 |
| 550.1120 | PILING STEEL HP 12-INCH X 53 LB | LF | --- | 280 | 280 | 560 |
| 606.0300 | RIPRAP HEAVY | CY | --- | 110 | 135 | 245 |
| 612.0406 | PIPE UNDERDRAIN WRAPPED 6 - INCH | LF | --- | 85 | 85 | 170 |
| 645.0111 | GEOTEXTILE TYPE DF SCHEDULE A | SY | --- | 55 | 55 | 110 |
| 645.0120 | GEOTEXTILE TYPE HR | SY | --- | 205 | 245 | 450 |
| | | | | | | |
| | NON-BID ITEMS | | | | | |
| | FILLER | SIZE | --- | --- | --- | ½", ¾" |
| | | | | | | |

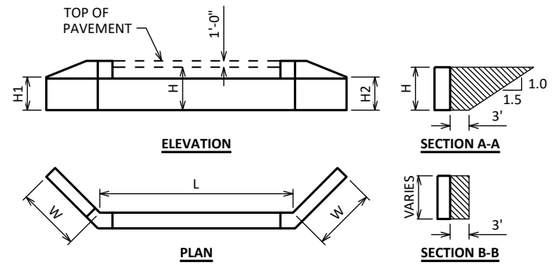



## CROSS SECTION THRU BRIDGE

LOOKING EAST

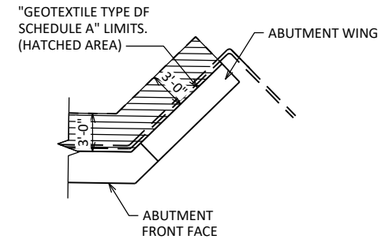



## 'HP' PILE DETAILS

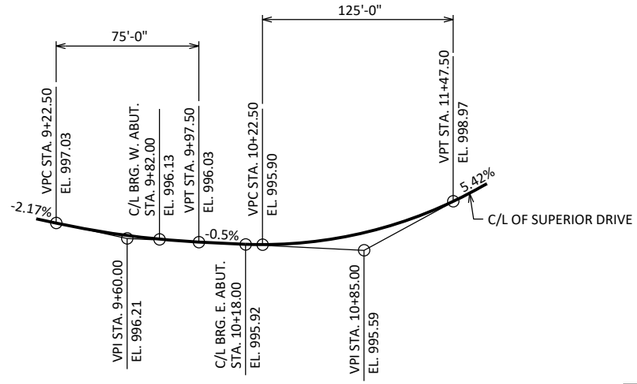



## ABUTMENT BACKFILL DIAGRAM

L = ABUTMENT BODY LENGTH AT BACKFACE (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
H1 = WING 1 HEIGHT AT TIP (FT)
H2 = WING 2 HEIGHT AT TIP (FT)
W = WING LENGTH (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
$V_{CF}$ = (L)(3.0')(H) + (L)(0.5)(1.5H)(H) + (3')(0.5)(H1+H2+H+H)(W)
$V_{CY}$ = $V_{CF}$(EF)/27
$V_{TON}$ = $V_{CY}$(2.0)

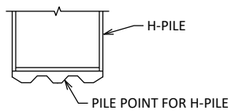



## BACKFILL STRUCTURE LIMITS
## ABUTMENT PLAN WITH WING




## PROFILE GRADE LINE

**(SUPERIOR DRIVE)**




## PILE POINT FOR H-PILING

PILE POINT SHALL BE INSTALLED ACCORDING TO THE PILE POINT MANUFACTURE'S INSTRUCTIONS

## GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES B-20-270" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

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 SHEET 1 AND THE ABUTMENT DETAILS.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

PROTECTIVE SURFACE TREATMENT AND PIGMENTED SURFACE SEALER TO BE APPLIED AS SHOWN ON STRUCTURE DETAILS SHEET.

EXISTING PIPE LOCATIONS ARE BASED ON SURVEY. EXTENT OF BELOW GRADE FEATURES ARE NOT KNOWN. REMOVE EXISTING STRUCTURE AS NEEDED TO BUILD NEW SUBSTRUCTURE. COST OF SUBSTRUCTURE REMOVAL IS CONSIDERED INCIDENTAL TO THE "REMOVE STRUCTURE P-20-907" BID ITEM.

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-20-270**

DRAWN BY JMC | PLANS CK'D SAP

**TYPICAL SECTION, QUANTITIES, AND NOTES**

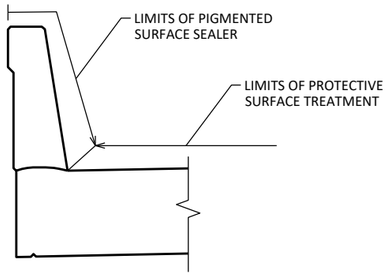
SHEET 2 OF 13



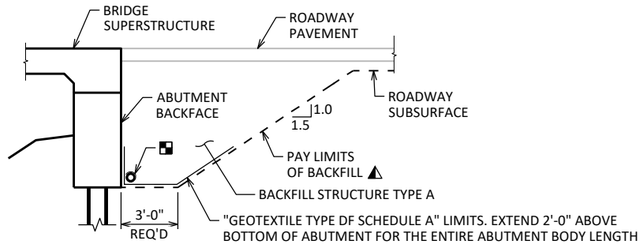
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| STATE PROJECT NUMBER |
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| **4814-04-71** |



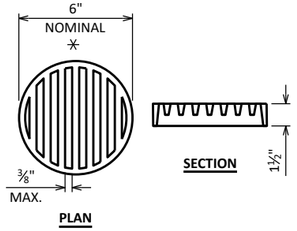

## PROTECTIVE SURFACE TREATMENT DETAIL




## TYPICAL SECTION THRU ABUTMENT

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

▪ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



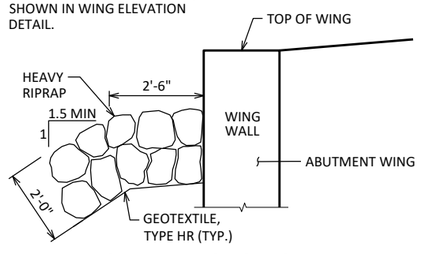

## RODENT SHIELD DETAIL

⚹ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

NOTE: PLACE HEAVY RIPRAP AS SHOWN IN WING ELEVATION DETAIL.




## TYPICAL FILL SECTION AT WING

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-20-270**

DRAWN BY JMC | PLANS CK'D SAP

**STRUCTURE DETAILS**

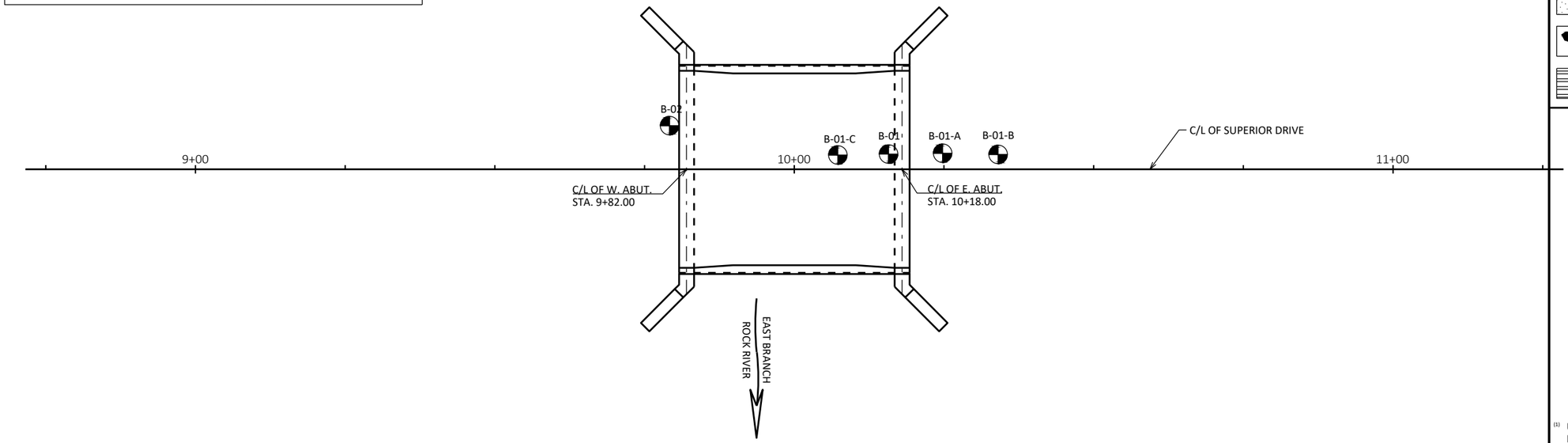
SHEET 3 OF 13

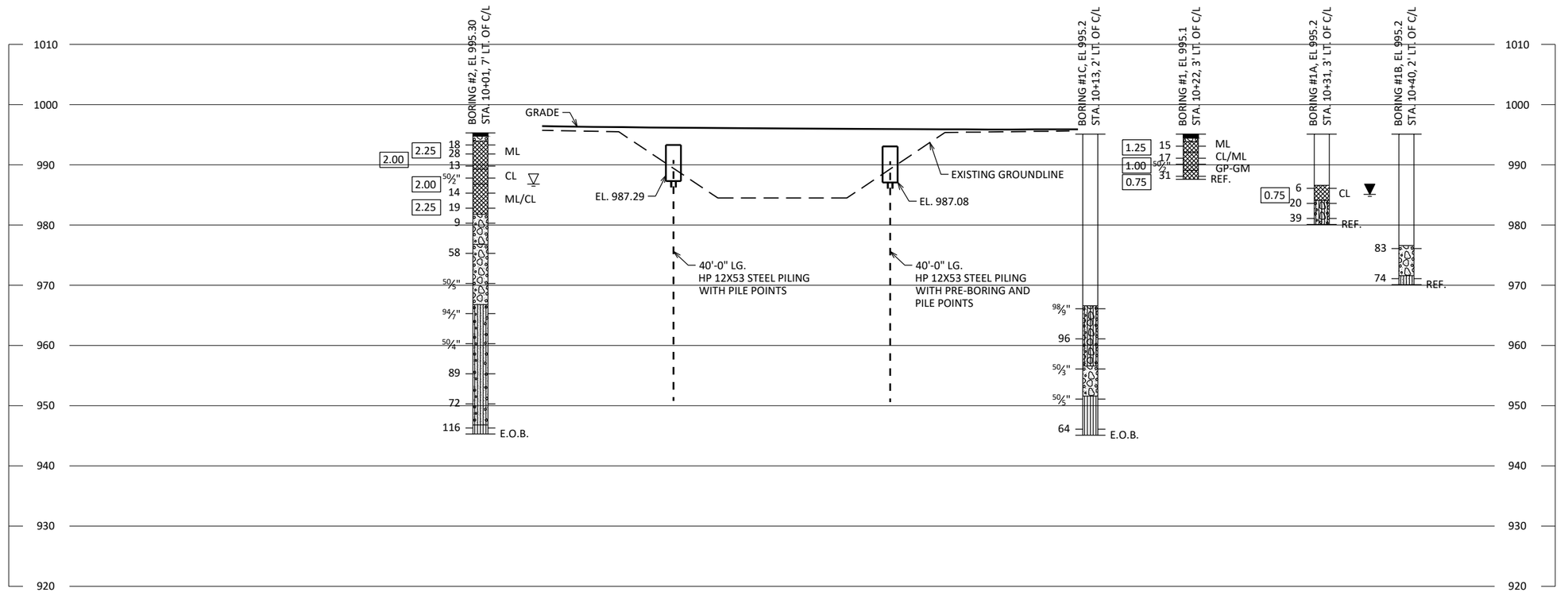


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| BORING # | DATE COMPLETED | NORTHING (Y) | EASTING (X) |
|---|---|---|---|
| B-01 | 12/3/2024 | 305691.22 | 830201.10 |
| B-01-A | 12/3/2024 | 305691.23 | 830210.12 |
| B-01-B | 12/3/2024 | 305690.88 | 830219.40 |
| B-01-C | 12/3/2024 | 305691.21 | 830192.62 |
| B-02 | 12/4/2024 | 305696.53 | 830165.15 |
| BORINGS COMPLETED BY: ECS MIDWEST, LLC | | | |
| REPORT COMPLETED BY: ECS MIDWEST, LLC | | | |
| ALL COORDINATES REFERENCED TO WCCS NAD 83(91) FOND DU LAC COUNTY | | | |



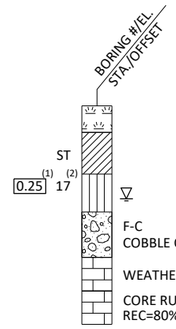

STATE PROJECT NUMBER

**4814-04-71**

**MATERIAL SYMBOLS**

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

**LEGEND OF BORING**




(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

**GROUND WATER ELEVATION**

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

**ABBREVIATIONS**

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-20-270**

DRAWN BY JMC | PLANS CK'D SAP

**SUBSTRUCTURE EXPLORATION**

SHEET 4 OF 13

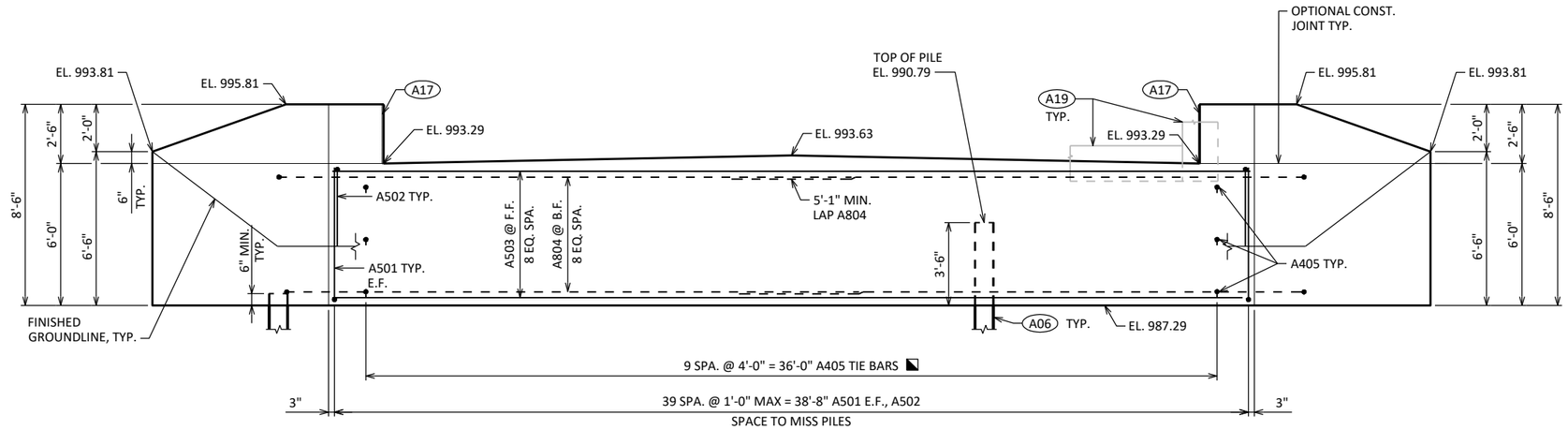
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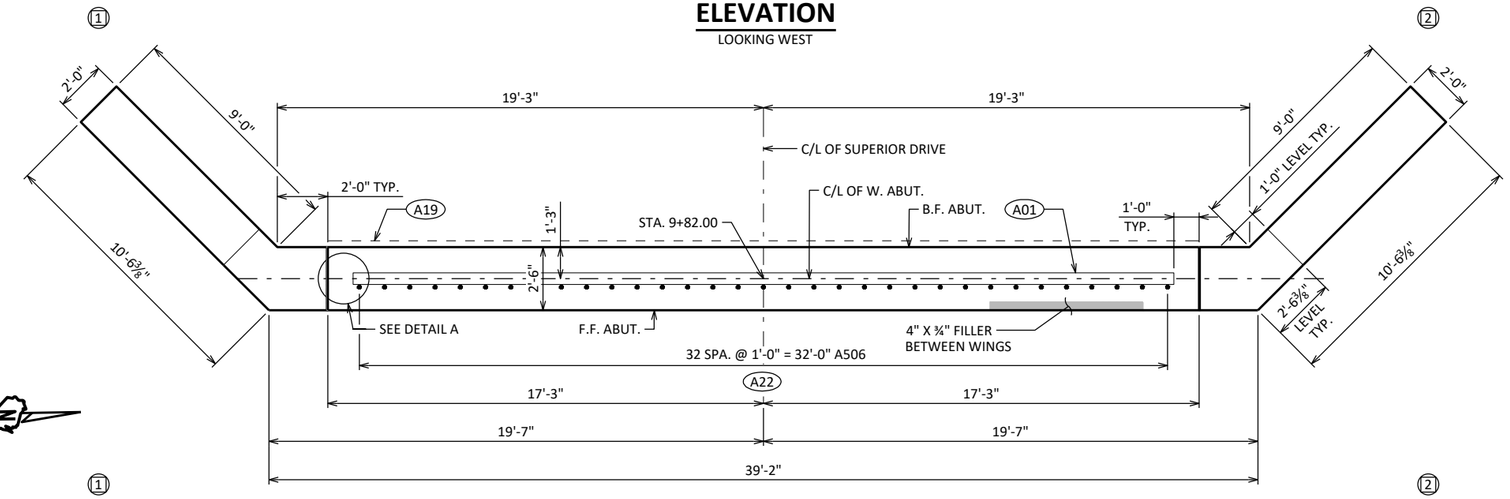
STATE PROJECT NUMBER

**4814-04-71**

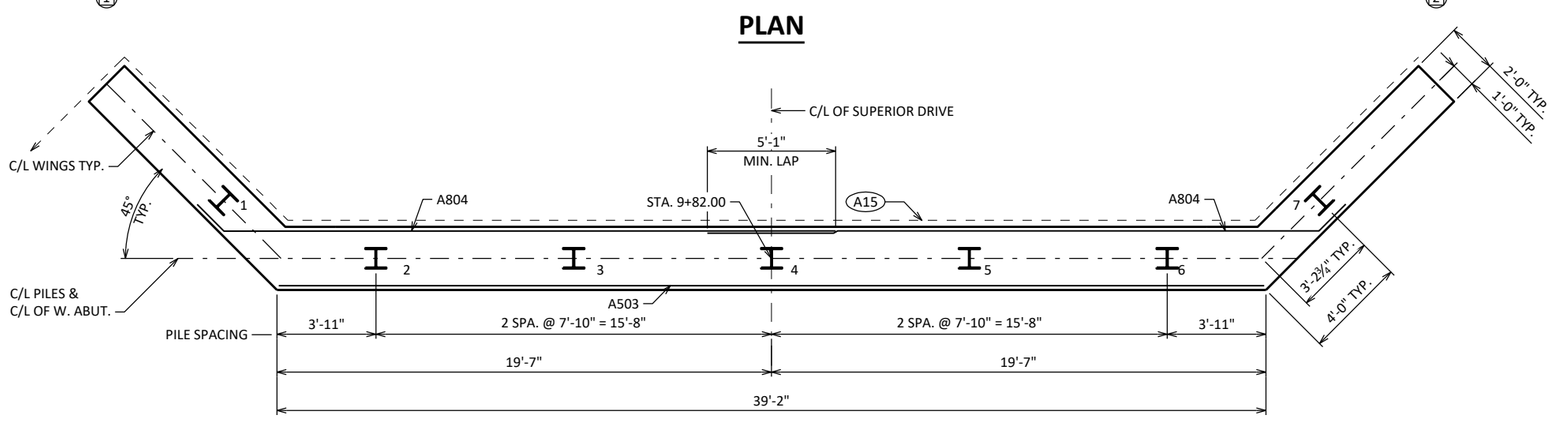



## ELEVATION

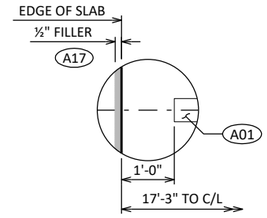
LOOKING WEST




## PLAN




## PILE PLAN




## DETAIL A

(A01) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6.

(A06) SUPPORT ABUTMENT ON HP 12X53 STEEL PILING, ESTIMATED 40' LONG WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS PER PILE. PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) ½" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A22) A506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

◪ ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-20-270**

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**WEST ABUTMENT**

SHEET 5 OF 13

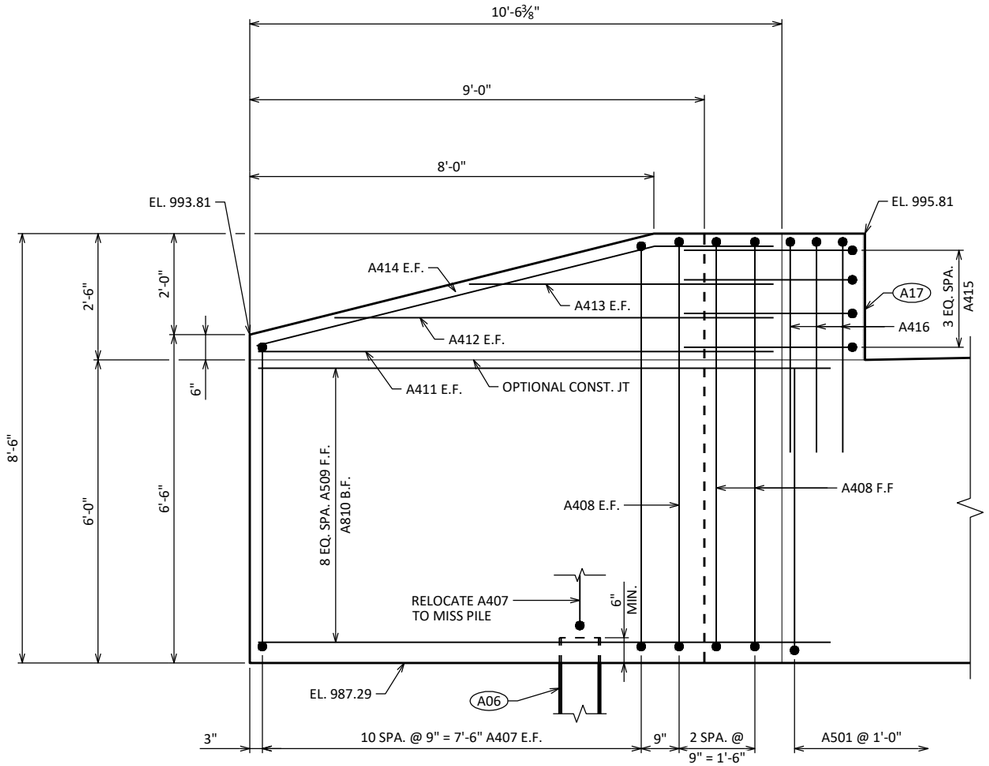
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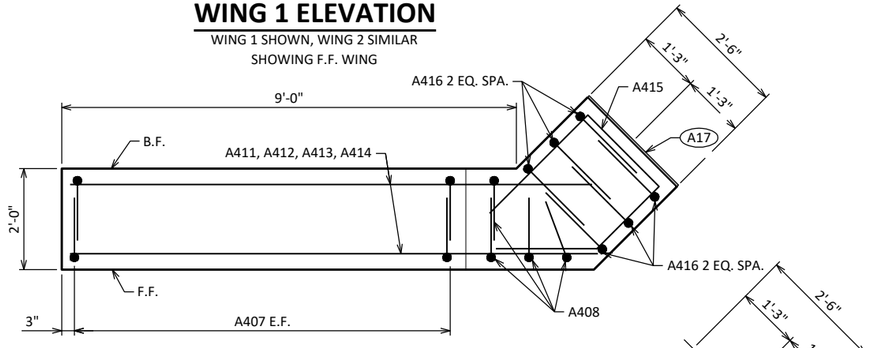
STATE PROJECT NUMBER

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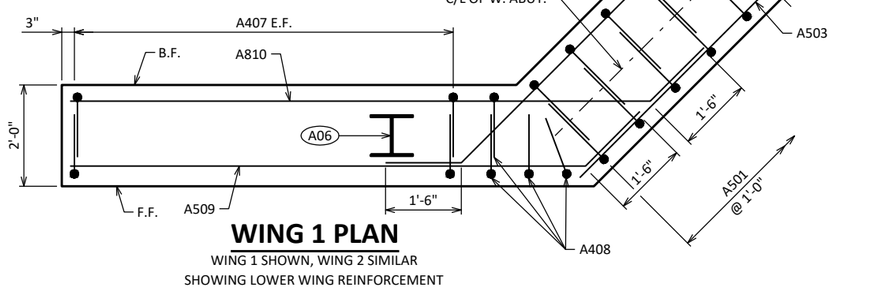

## WING 1 ELEVATION

WING 1 SHOWN, WING 2 SIMILAR
SHOWING F.F. WING



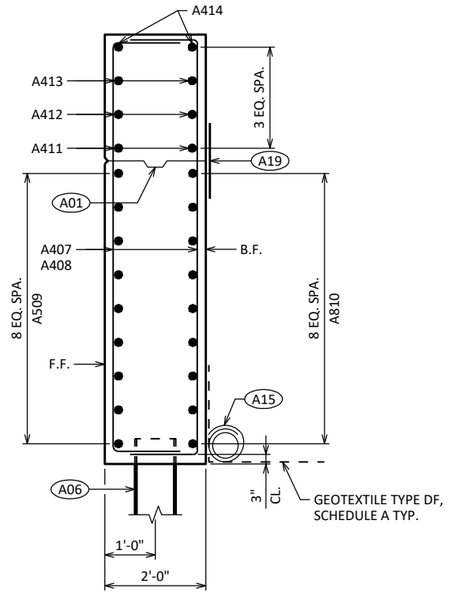

## WING 1 PLAN

WING 1 SHOWING, WING 2 SIMILAR
SHOWING UPPER WING REINFORCEMENT




## WING 1 PLAN

WING 1 SHOWING, WING 2 SIMILAR
SHOWING LOWER WING REINFORCEMENT




## SECTION THRU WING 1

(A01) OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6. PROVIDE ¾" "V" GROOVE ON F.F. OF WINGWALL IF JOINT IS USED.

(A06) SUPPORT ABUTMENT ON HP 12X53 STEEL PILING, ESTIMATED 40' LONG WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS PER PILE. PILE POINT REQUIRED

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

| NO. | DATE | REVISION | BY |
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-20-270**

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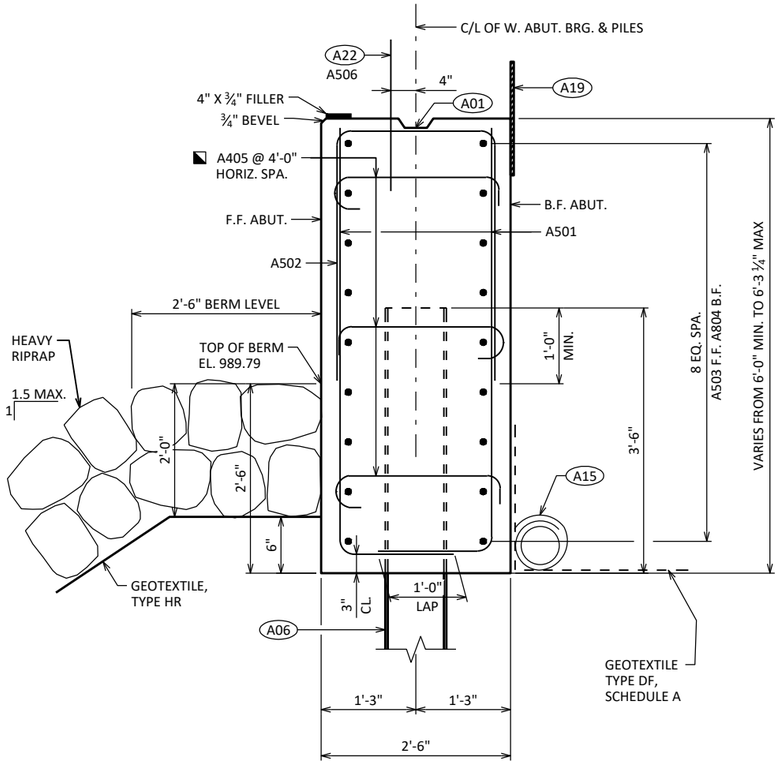
**WEST ABUTMENT WING 1 DETAILS**

SHEET 6 OF 13

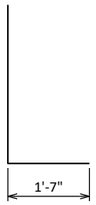


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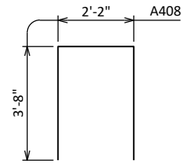
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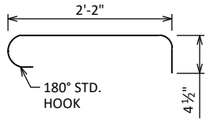

## SECTION THRU BODY



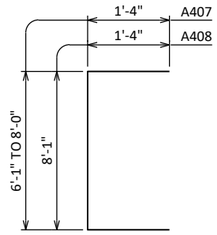

## A501



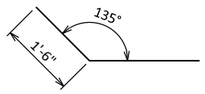

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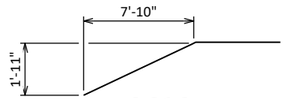

## A405



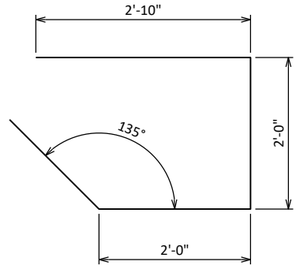

## A407, A408




## A804, A509, A810




## A414




## A415




## A416

## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| A501 | | 80 | 7'-0" | X | | ABUT. BODY STIRRUPS |
| A502 | | 40 | 9'-3" | X | | ABUT. BODY STIRRUPS - TOP U-BAR |
| A503 | | 9 | 39'-0" | | | ABUT. BODY HORIZ. - F.F. |
| A804 | | 18 | 25'-9" | X | | ABUT. BODY HORIZ. - B.F. |
| A405 | | 30 | 3'-0" | X | | ABUT. BODY TIE BARS |
| A506 | X | 33 | 2'-0" | | | ABUT. BODY DOWEL BARS |
| A407 | X | 44 | 9'-7" | X | ⚠ | WINGS 1 & 2 STIRRUPS |
| A408 | X | 8 | 10'-7" | X | | WINGS 1 & 2 STIRRUPS |
| A509 | X | 18 | 11'-8" | X | | WINGS 1 & 2 LOWER HORIZ - F.F. |
| A810 | X | 18 | 13'-2" | X | | WINGS 1 & 2 LOWER HORIZ. - B.F. |
| A411 | X | 4 | 10'-3" | | | WINGS 1 & 2 UPPER HORIZ. |
| A412 | X | 4 | 8'-9" | | | WINGS 1 & 2 UPPER HORIZ. |
| A413 | X | 4 | 5'-10" | | | WINGS 1 & 2 UPPER HORIZ. |
| A414 | X | 4 | 10'-5" | X | | WINGS 1 & 2 UPPER DIAG. |
| A415 | X | 8 | 8'-2" | X | | WINGS 1 & 2 TOP HORIZ. CORNER |
| A416 | X | 12 | 5'-10" | X | | WINGS 1 & 2 TOP VERT. CORNER |

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

## BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

| BAR MARK | NO. REQ'D. | LENGTH |
|---|---|---|
| A407 | 4 SERIES OF 11 | 8'-7" TO 10'-6" |

(A01) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6.

(A06) SUPPORT ABUTMENT ON HP 12X53 STEEL PILING, ESTIMATED 40' LONG WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS PER PILE. PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) ½" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A22) A506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

◪ ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-20-270**

DRAWN BY JMC | PLANS CK'D RCP

**WEST ABUTMENT BILL OF BARS**

SHEET 7 OF 13

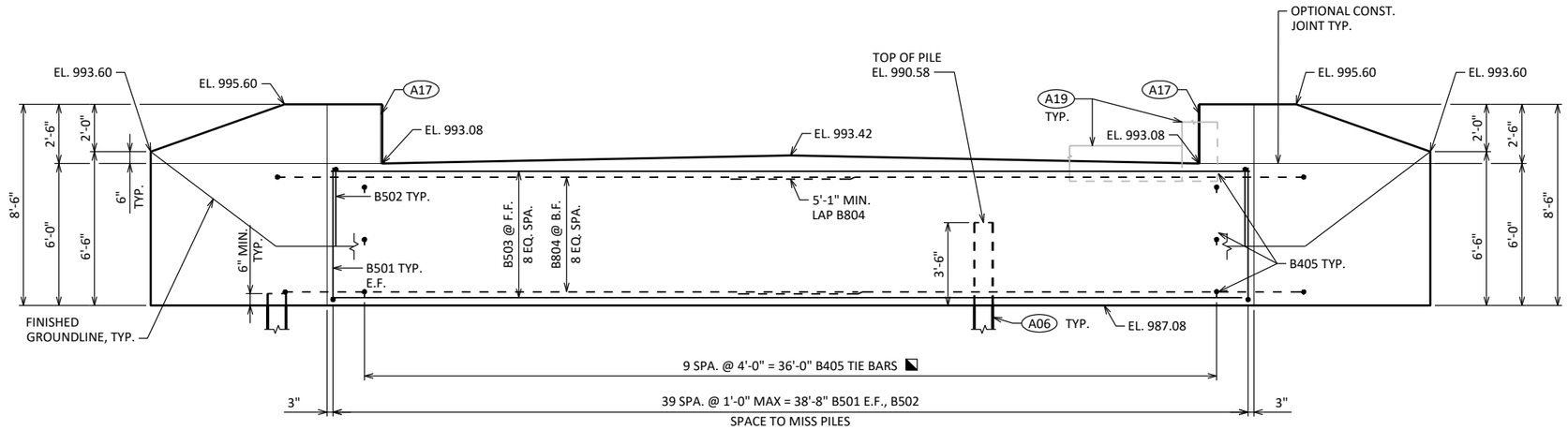


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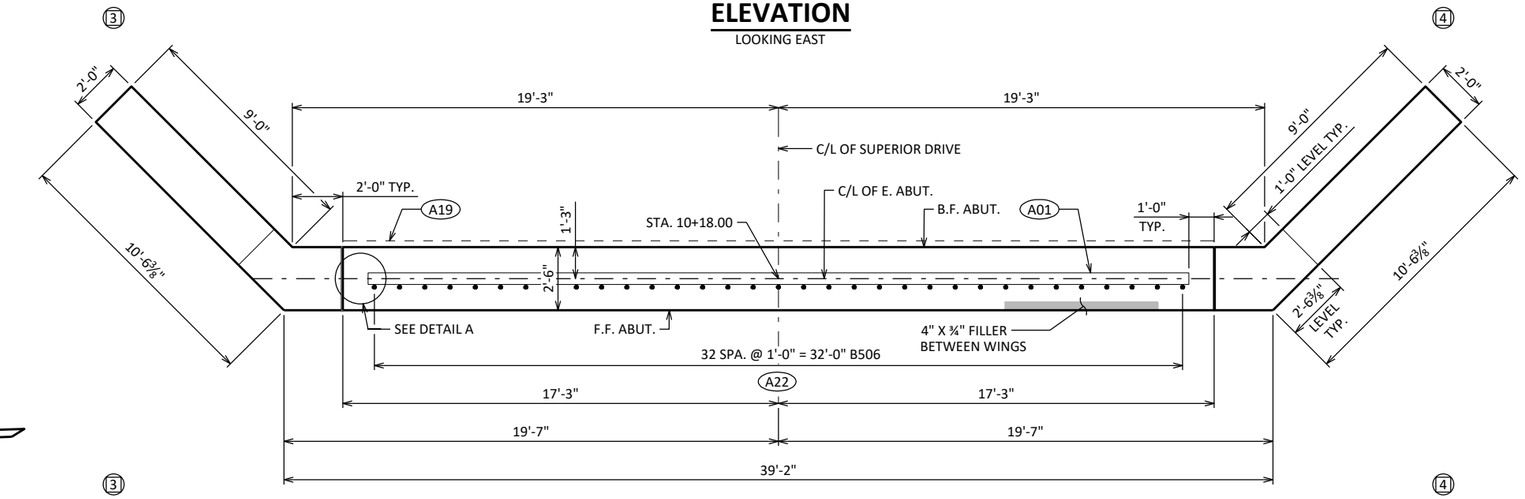
STATE PROJECT NUMBER

**4814-04-71**

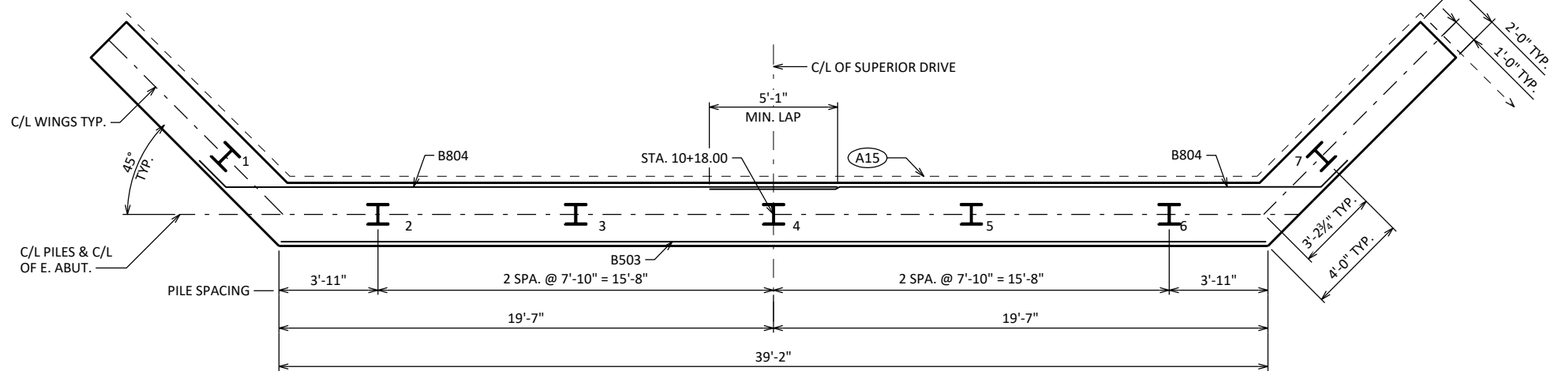



## ELEVATION

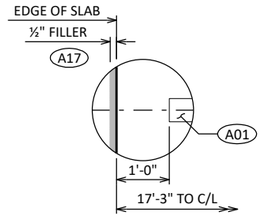
LOOKING EAST




## PLAN




## PILE PLAN




## DETAIL A

A01 CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6.

A06 SUPPORT ABUTMENT ON HP 12X53 STEEL PILING, ESTIMATED 40' LONG WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS PER PILE. PRE-BORING AND PILE POINTS REQUIRED.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

A17 ½" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

A19 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

A22 B505 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

◪ ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-20-270**

DRAWN BY JMC | PLANS CK'D RCP

**EAST ABUTMENT**

SHEET 8 OF 13

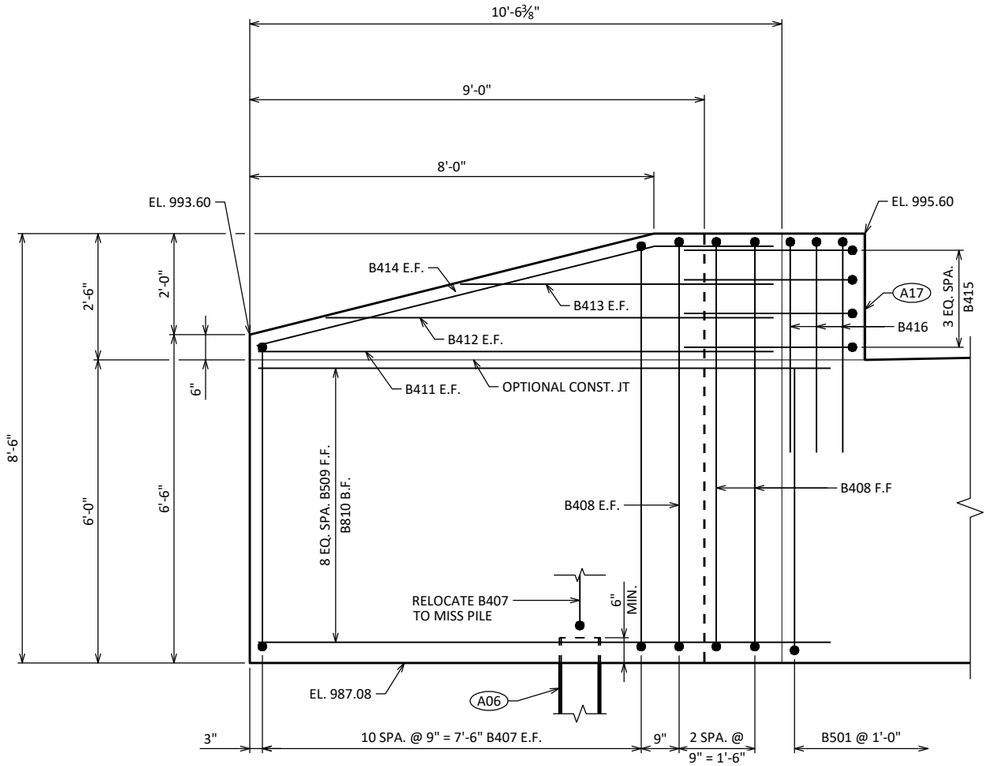
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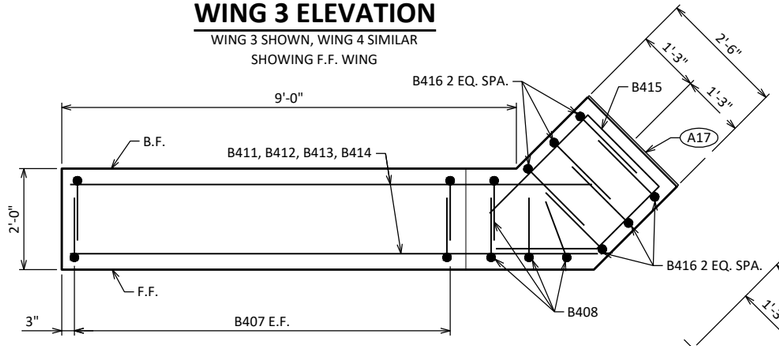
STATE PROJECT NUMBER

**4814-04-71**



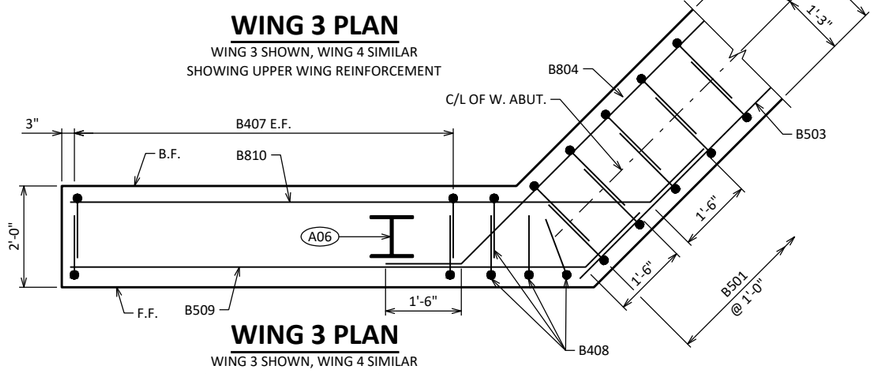

## WING 3 ELEVATION

WING 3 SHOWN, WING 4 SIMILAR
SHOWING F.F. WING



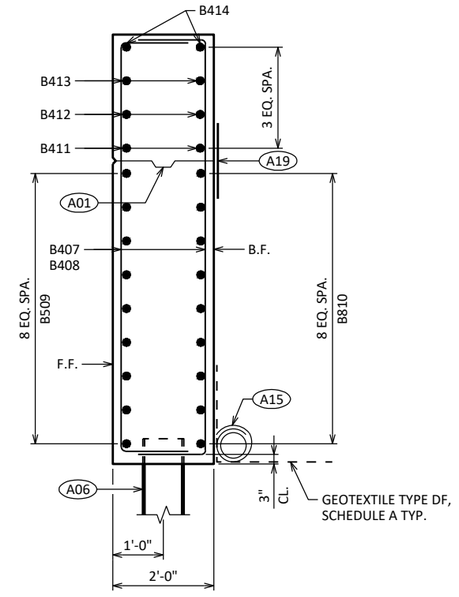

## WING 3 PLAN

WING 3 SHOWING, WING 4 SIMILAR
SHOWING UPPER WING REINFORCEMENT




## WING 3 PLAN

WING 3 SHOWING, WING 4 SIMILAR
SHOWING LOWER WING REINFORCEMENT




## SECTION THRU WING 3

(A01) OPTIONAL CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6. PROVIDE ¾" "V" GROOVE ON F.F. OF WINGWALL IF JOINT IS USED.

(A06) SUPPORT ABUTMENT ON HP 12X53 STEEL PILING, ESTIMATED 40' LONG WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS PER PILE. PRE-BORING AND PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-20-270**

DRAWN BY JMC | PLANS CK'D RCP

**EAST ABUTMENT WING 3 DETAILS**

SHEET 9 OF 13

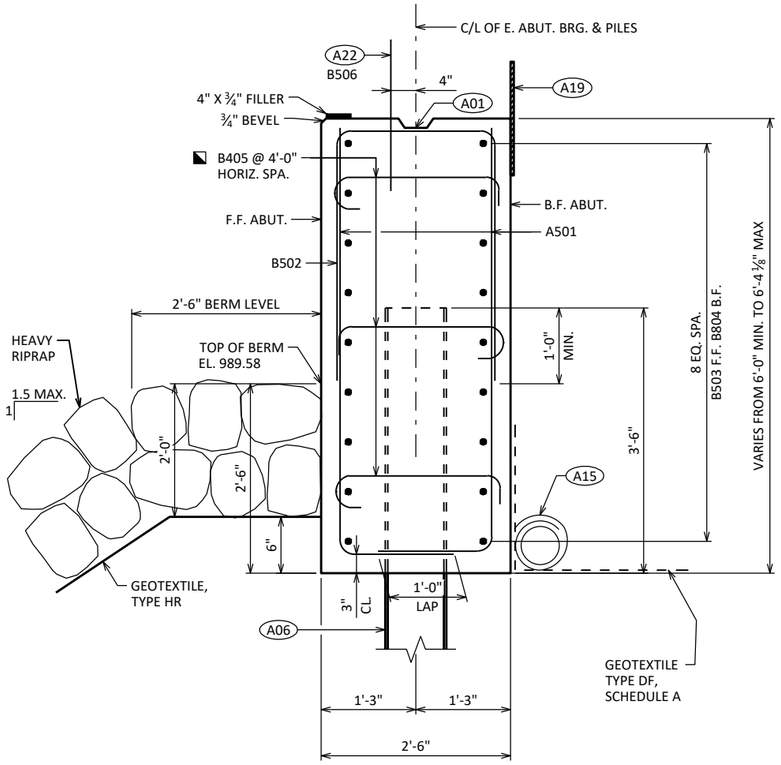


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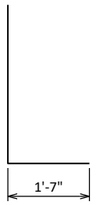
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STATE PROJECT NUMBER

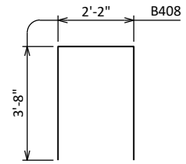
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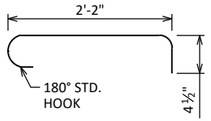

## SECTION THRU BODY



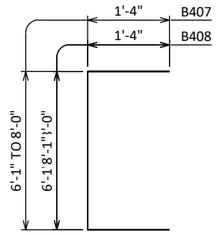

**B501**



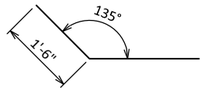

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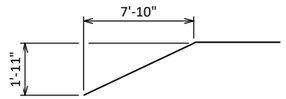

**B405**



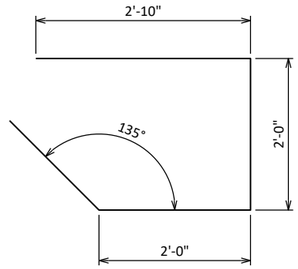

**B407, B408**




**B804, B509, B810**




**B414**




**B415**




**B416**

## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| B501 | | 80 | 7'-0" | X | | ABUT. BODY STIRRUPS |
| B502 | | 40 | 9'-3" | X | | ABUT. BODY STIRRUPS - TOP U-BAR |
| B503 | | 9 | 39'-0" | | | ABUT. BODY HORIZ. - F.F. |
| B804 | | 18 | 25'-9" | X | | ABUT. BODY HORIZ. - B.F. |
| B405 | | 30 | 3'-0" | X | | ABUT. BODY TIE BARS |
| B506 | | 33 | 2'-0" | | | ABUT. BODY DOWEL BARS |
| B407 | | 44 | 9'-7" | X | ⚠ | WINGS 3 & 4 STIRRUPS |
| B408 | | 8 | 10'-7" | X | | WINGS 3 & 4 STIRRUPS |
| B509 | X | 18 | 11'-8" | X | | WINGS 3 & 4 LOWER HORIZ - F.F. |
| B810 | X | 18 | 13'-2" | X | | WINGS 3 & 4 LOWER HORIZ. - B.F. |
| B411 | X | 4 | 10'-3" | | | WINGS 3 & 4 UPPER HORIZ. |
| B412 | X | 4 | 8'-6" | | | WINGS 3 & 4 UPPER HORIZ. |
| B413 | X | 4 | 5'-10" | | | WINGS 3 & 4 UPPER HORIZ. |
| B414 | X | 4 | 10'-5" | X | | WINGS 3 & 4 UPPER DIAG. |
| B415 | X | 8 | 8'-2" | X | | WINGS 3 & 4 TOP HORIZ. CORNER |
| B416 | X | 12 | 5'-10" | X | | WINGS 3 & 4 TOP VERT. CORNER |

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

A01 CONST. JOINT: KEYWAY FORMED BY A BEVELED 2X6.

A06 SUPPORT ABUTMENT ON HP 12X53 PILING, ESTIMATED 40' LONG WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS PER PILE. PRE-BORING AND PILE POINTS REQUIRED.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

A17 ½" FILLER: SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

A19 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

A22 B505 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

◥ ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES.

## BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

| BAR MARK | NO. REQ'D. | LENGTH |
|---|---|---|
| B407 | 4 SERIES OF 11 | 8'-7" TO 10'-6" |

| NO. | DATE | REVISION | BY |
|---|---|---|---|
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-20-270**

DRAWN BY JMC | PLANS CK'D RCP

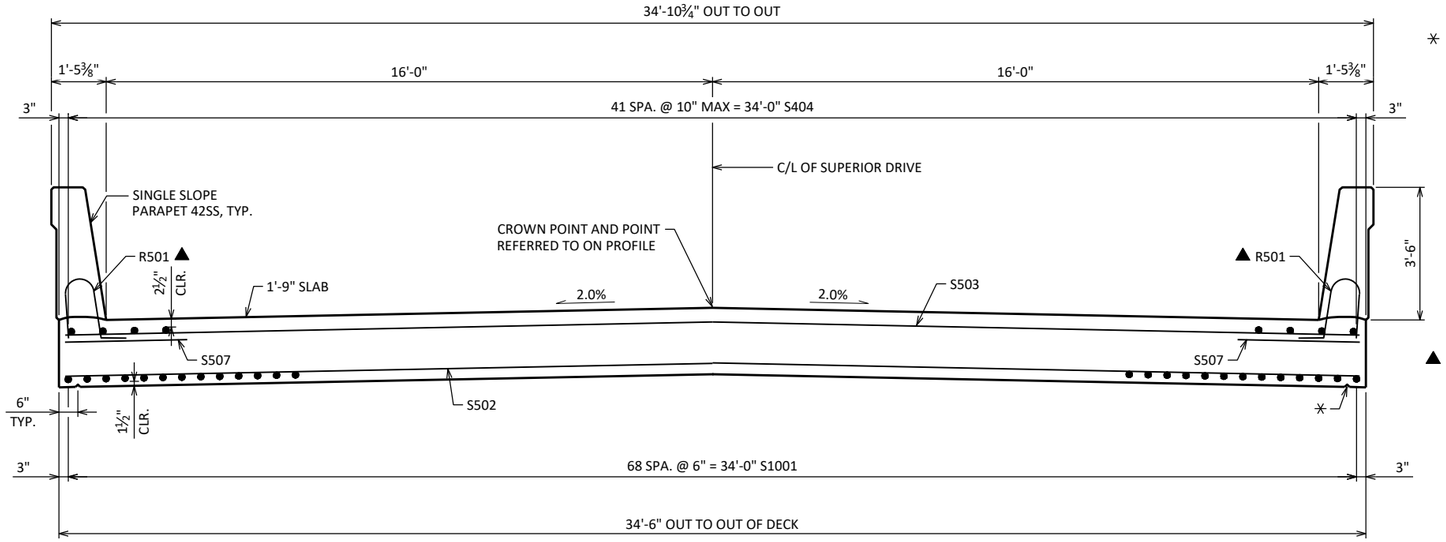
**EAST ABUTMENT BILL OF BARS**

SHEET 10 OF 13

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⚹ ¾" V-GROOVE REQ'D. EXTEND TO 6" FROM F.F. OF ABUT. BODY.

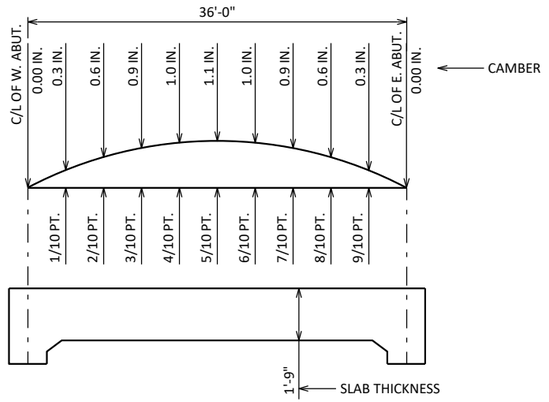
V-GROOVES ARE REQUIRED.

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCE NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

▲ R503 AND R504 BARS NOT SHOWN. SEE SHEET 13 FOR DETAILS.

## TYPICAL SECTION THRU BRIDGE




## CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

PARAPETS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

| | |
|---|---|
| | TOP OF SLAB ELEVATION AT FINAL GRADE |
| LESS | SLAB THICKNESS |
| PLUS | CAMBER |
| PLUS | FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR) |
| EQUALS | TOP OF SLAB FALSEWORK ELEVATION |

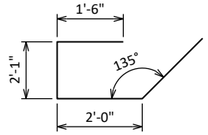
## TOP OF SLAB ELEVATIONS

| LOCATION | C/L W. ABUT | 1/10 PT. | 2/10 PT. | 3/10 PT. | 4/10 PT. | 5/10 PT. | 6/10 PT. | 7/10 PT. | 8/10 PT. | 9/10 PT. | C/L E. ABUT. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| N. EDGE OF SLAB | 995.81 | 995.78 | 995.76 | 995.74 | 995.72 | 995.70 | 995.68 | 995.66 | 995.64 | 995.62 | 995.60 |
| C/L OF SUPERIOR DRIVE | 996.13 | 996.10 | 996.08 | 996.06 | 996.04 | 996.02 | 996.00 | 995.98 | 995.96 | 995.94 | 995.92 |
| S. EDGE OF SLAB | 995.81 | 995.78 | 995.76 | 995.74 | 995.72 | 995.70 | 995.68 | 995.66 | 995.64 | 995.62 | 995.60 |

## BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | |
|---|---|---|---|---|---|---|
| S1001 | X | 69 | 33'-5" | | | SLAB LONG. BOT. |
| S502 | X | 58 | 34'-2" | | | SLAB TRANS. BOT. |
| S503 | X | 39 | 34'-2" | | | SLAB TRANS. TOP |
| S404 | X | 42 | 38'-2" | | | SLAB LONG. TOP |
| S505 | X | 70 | 7'-4" | X | | SLAB @ ABUT. DIAPHRAGM STIRRUPS |
| S506 | X | 4 | 34'-2" | | | SLAB @ ABUT. DIAPHRAGM TRANS. |
| S507 | X | 76 | 5'-0" | | | SLAB TRANS. TOP @ EDGES |




**S505**

## SURVEY TOP OF SLAB ELEVATIONS

| | W. ABUTMENT | 5/10 PT. | E. ABUTMENT |
|---|---|---|---|
| N. EDGE OF SLAB | | | |
| C/L OF SUPERIOR DRIVE | | | |
| S. EDGE OF SLAB | | | |

PRIOR TO RELEASING SLAB FORMWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS, AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF SLAB AND C/L.. RECORD ELEVATIONS IN THE TABLE ABOVE FOR THE "AS BUILT" PLANS.

STATE PROJECT NUMBER

**4814-04-71**

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-20-270**

DRAWN BY JMC | PLANS CK'D RCP

**SUPERSTRUCTURE**

SHEET 11 OF 13

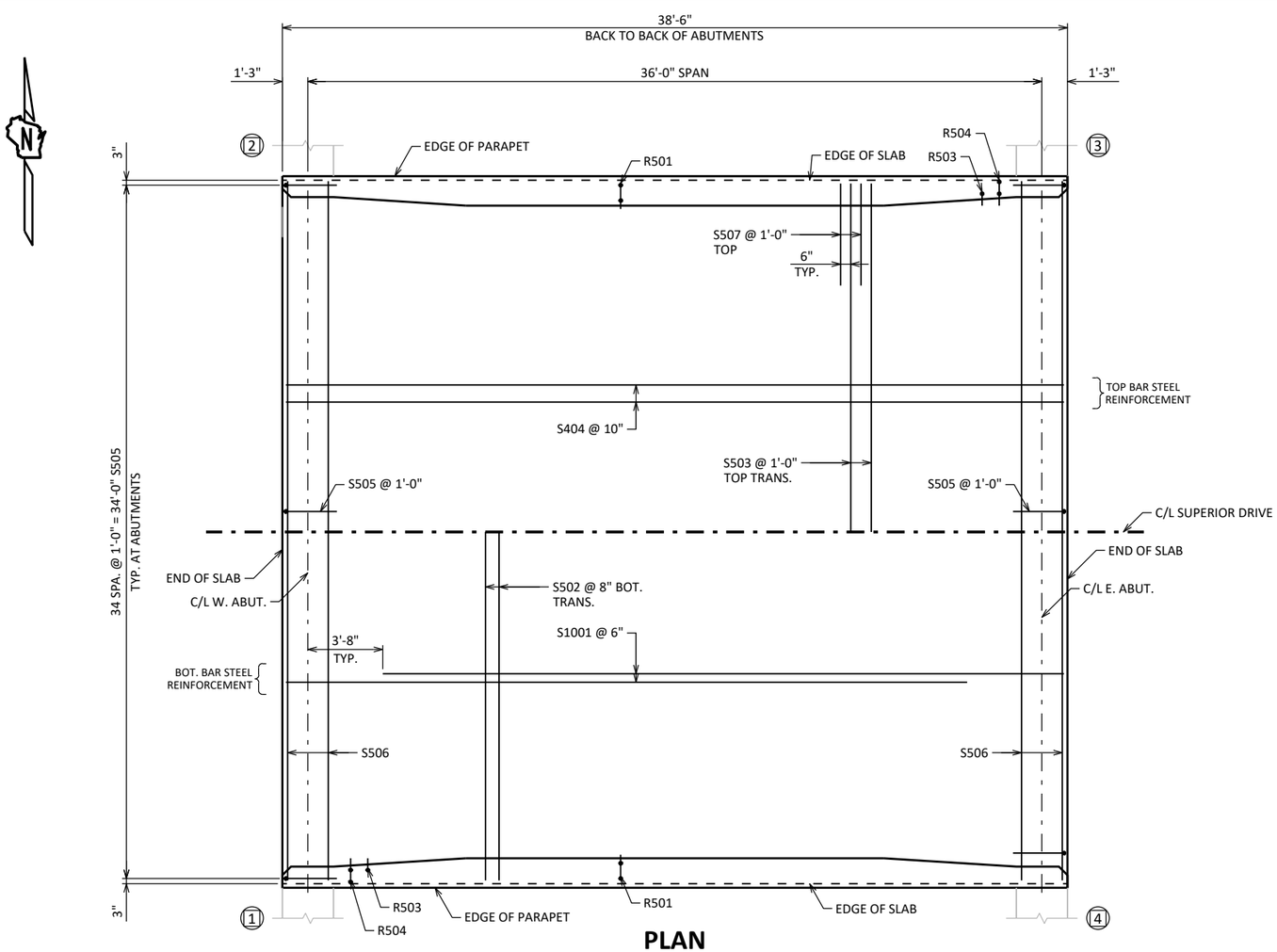
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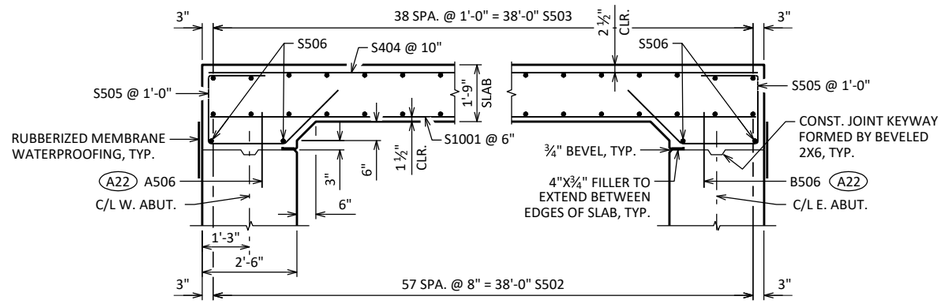
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STATE PROJECT NUMBER

**4814-04-71**




## PLAN




## LONGITUDINAL SECTION

DIMENSIONS ARE GIVEN PARALLEL TO ℄ ROADWAY UNLESS OTHERWISE NOTED.

(A22) A506, B506 BARS SPACED @ 1'-0" CNTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

8

8

| NO. | DATE | REVISION | BY |
|---|---|---|---|

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

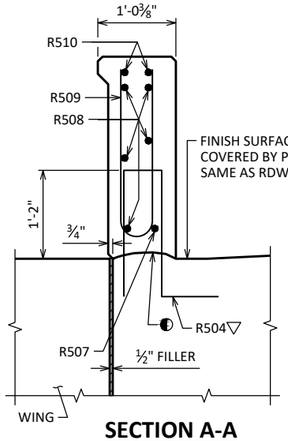
**STRUCTURE B-20-270**

DRAWN BY JMC | PLANS CK'D RCP

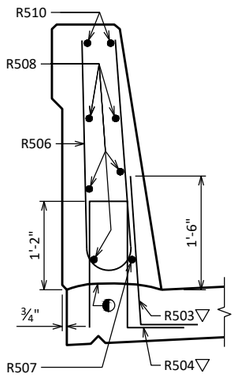
**SUPERSTRUCTURE PLAN**

SHEET 12 OF 13

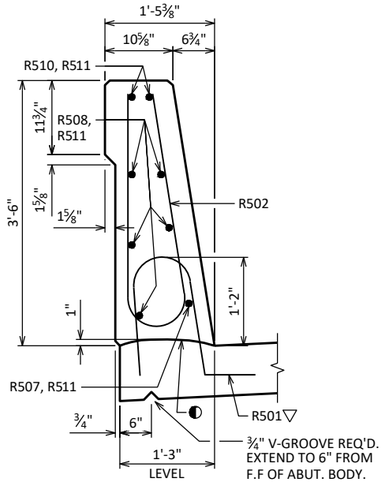
42



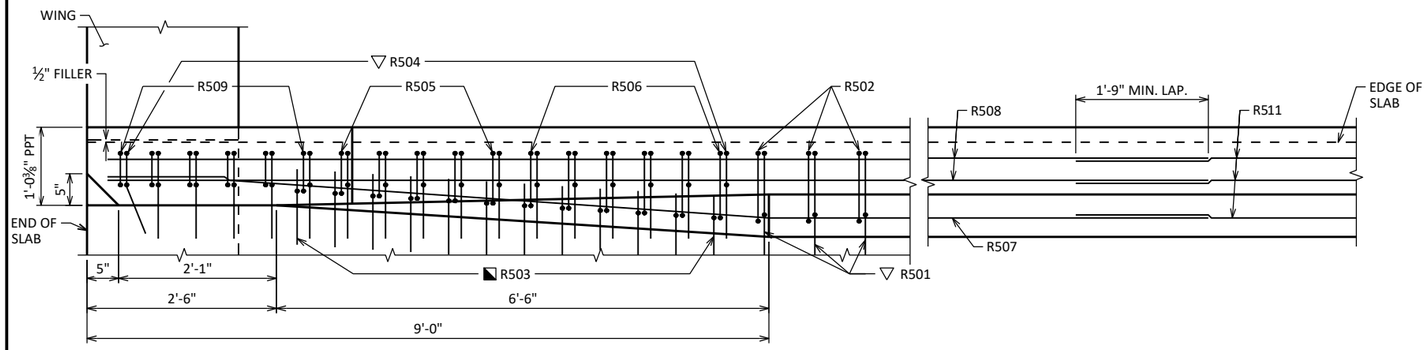

**SECTION A-A**




**SECTION B-B**

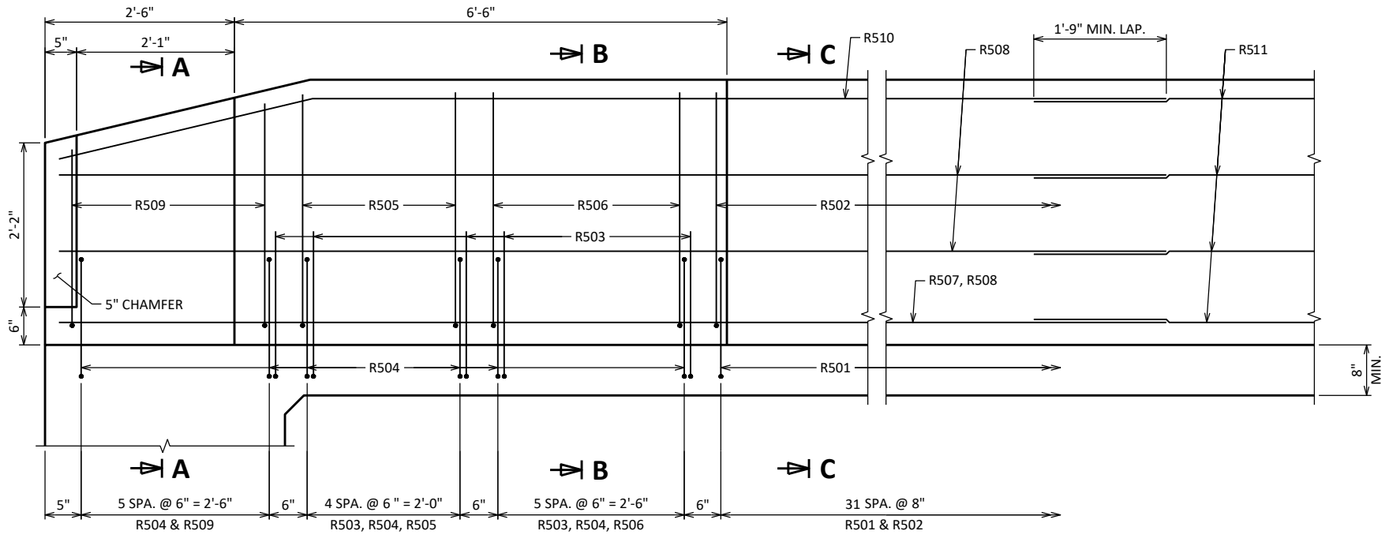



**SECTION C-C**



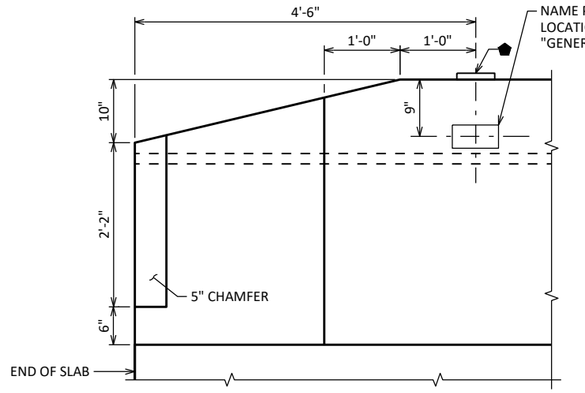

**PLAN**

TYPICAL ALL CORNERS




**INSIDE ELEVATION**

TYPICAL ALL CORNERS




**PARAPET END TREATMENT DETAIL**

LOOKING AT INSIDE FACE OF PARAPET

STATE PROJECT NUMBER

**4814-04-71**

## BILL OF BARS

FOR DECK PARAPETS

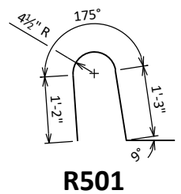
| BAR MARK | COAT | NO. REQ'D. | LENGTH | BENT | BAR SERIES | LOCATION |
|---|---|---|---|---|---|---|
| R501 | X | 64 | 4'-5" | X | | PARAPET VERT. |
| R502 | X | 64 | 6'-8" | X | | PARAPET VERT. |
| R503 | X | 48 | 2'-9" | X | | PARAPET VERT. |
| R504 | X | 68 | 4'-4" | X | | PARAPET VERT. |
| R505 | X | 20 | 6'-5" | X | | PARAPET VERT. |
| R506 | X | 24 | 6'-6" | X | | PARAPET VERT. |
| R507 | X | 4 | 12'-8" | X | | PARAPET HORIZ. |
| R508 | X | 20 | 12'-9" | | | PARAPET HORIZ. |
| R509 | X | 24 | 5'-5" | X | ⚠ | PARAPET VERT. |
| R510 | X | 8 | 12'-8" | X | | PARAPET HORIZ. |
| R511 | X | 16 | 16'-4" | | | PARAPET HORIZ. |
| | | | | | | |
| | | | | | | |

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

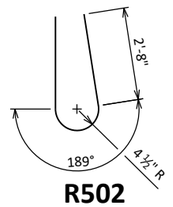
## BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

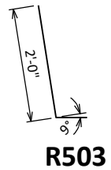
| BAR MARK | NO. REQ'D. | LENGTH |
|---|---|---|
| R509 | 4 SERIES OF 6 | 4'-9" TO 6'-1" |



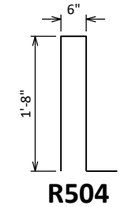

**R501**



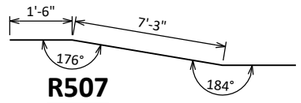

**R502**



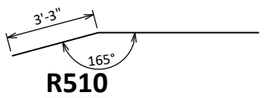

**R503**



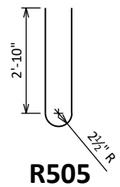

**R504**



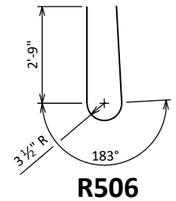

**R507**



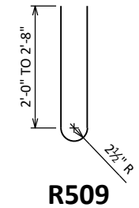

**R510**




**R505**




**R506**




**R509**

- CONST. JOINT - STRIKE OFF AS SHOWN
- R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 OR S503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.
- R501, R503 AND R504 BARS TO BE TIED TO SLAB STEEL BEFORE SLAB IS POURED.
- BENCH MARK CAP.

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| | | | |

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**STRUCTURE B-20-270**

DRAWN BY JMC | PLANS CK'D RCP

**SINGLE SLOPED PARAPET 42SS**

SHEET 13 OF 13

43

8

8

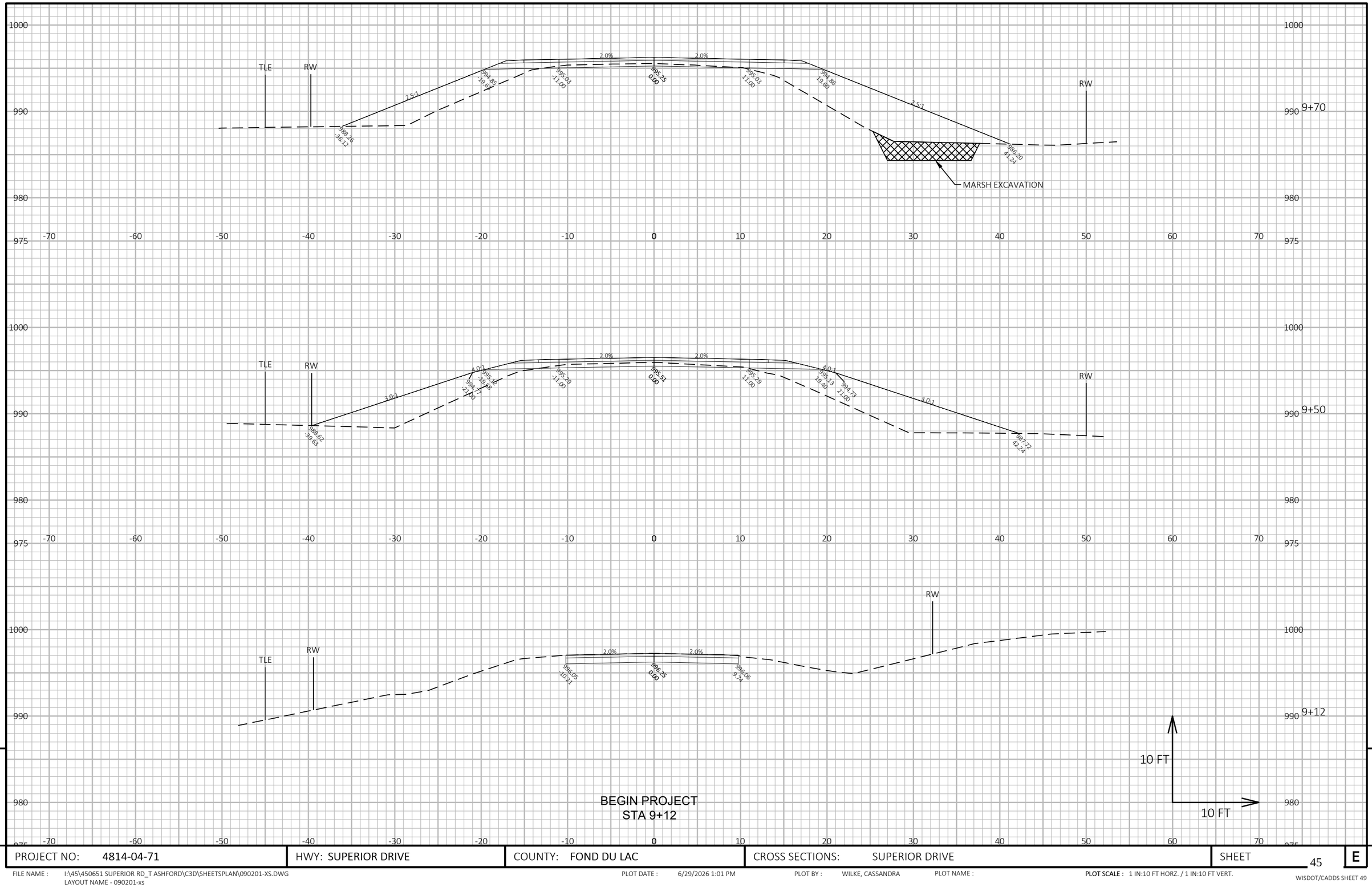
DIVISION - LCL-SUPERIORDRIVE

| STATION | AREA (SF) | | | | INCREMENTAL VOL (CY) (UNADJUSTED) | | | | CUMULATIVE VOL (CY) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | MARSH EXC | CUT | SALVAGED/UNUSABLE PAVEMENT MATERIAL | FILL | MARSH EXC | CUT | EXPANDED FILL | EXPANDED MARSH BACKFILL | MASS ORDINATE |
| | | | | | | | | | 1.00 | 1.30 | 1.50 | |
| | | | | | NOTE 1 | NOTE 2 | NOTE 3 | | NOTE 1 | | NOTE 4 | NOTE 8 |
| 9+12.00 | 20 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9+50.00 | 8 | 11 | 122 | 0 | 19 | 15 | 86 | 0 | 19 | 112 | 0 | -108 |
| 9+70.00 | 5 | 11 | 128 | 24 | 5 | 8 | 93 | 9 | 24 | 233 | 14 | -232 |
| B-20-0270 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 233 | 14 | -232 |
| 10+30.00 | 10 | 11 | 175 | 0 | 0 | 0 | 0 | 0 | 24 | 233 | 14 | -232 |
| 10+50.00 | 16 | 11 | 133 | 0 | 10 | 8 | 118 | 0 | 34 | 386 | 14 | -383 |
| 11+00.00 | 24 | 11 | 90 | 0 | 37 | 20 | 207 | 0 | 71 | 655 | 14 | -635 |
| 11+50.00 | 20 | 11 | 0 | 0 | 41 | 20 | 84 | 0 | 112 | 764 | 14 | -723 |
| | | | | | 112 | 71 | 588 | 9 | | | | |

| NOTES: | |
|---|---|
| 1 - CUT | CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL |
| 2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL | THIS DOES NOT SHOW UP IN CROSS SECTIONS |
| 3 - FILL | DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME |
| 4 - EXPANDED MARSH BACKFILL | WILL BE BACKFILLED WITH SELECT BORROW |
| 8 - MASS ORDINATE | CUT - SALVAGED PAVT - (FILL * FILL FACTOR) |

9

9

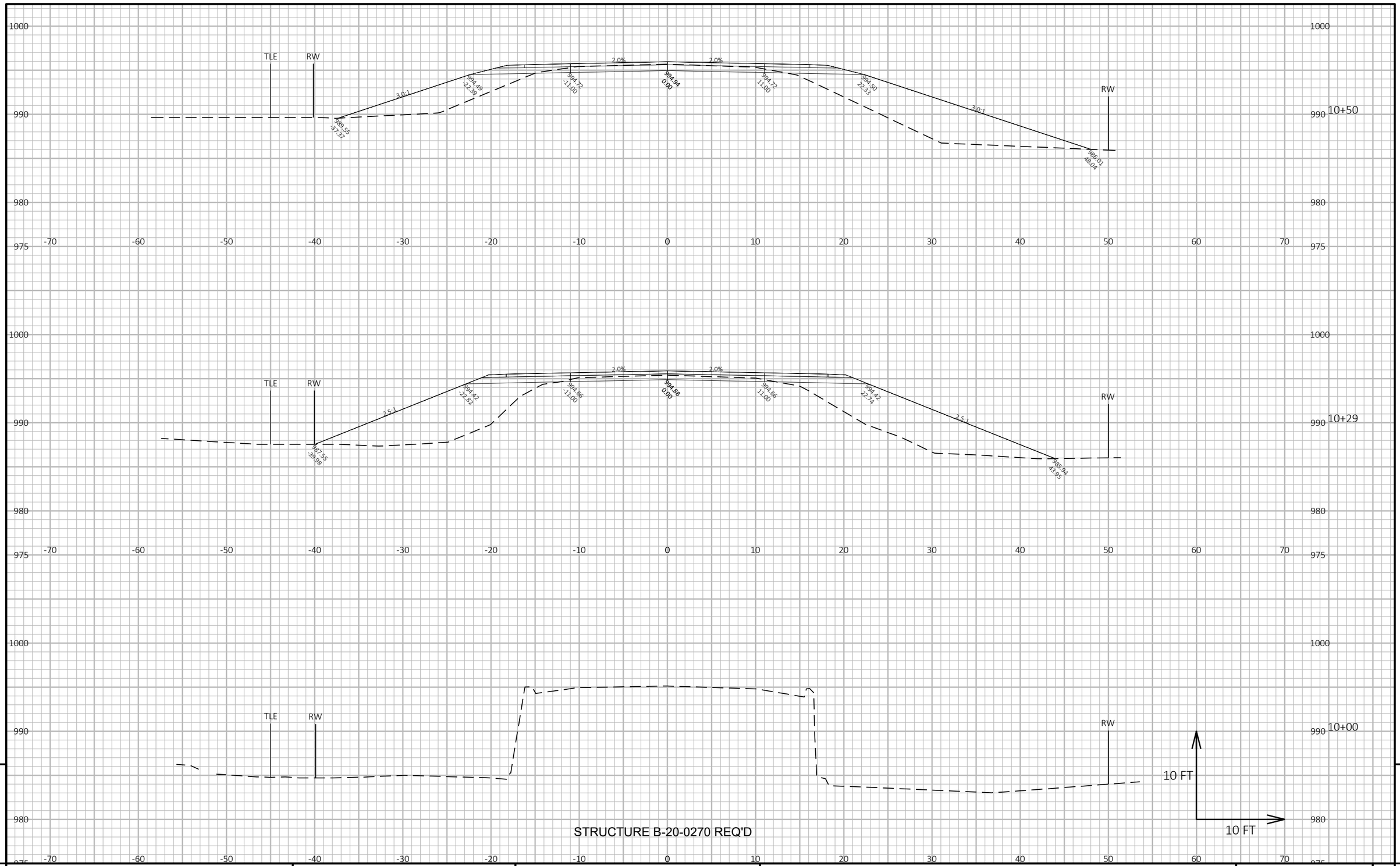



| PROJECT NO: 4814-04-71 | HWY: SUPERIOR DRIVE | COUNTY: FOND DU LAC | CROSS SECTIONS: SUPERIOR DRIVE | SHEET 45 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450651 SUPERIOR RD_T ASHFORD\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090201-xs

PLOT DATE : 6/29/2026 1:01 PM PLOT BY : WILKE, CASSANDRA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



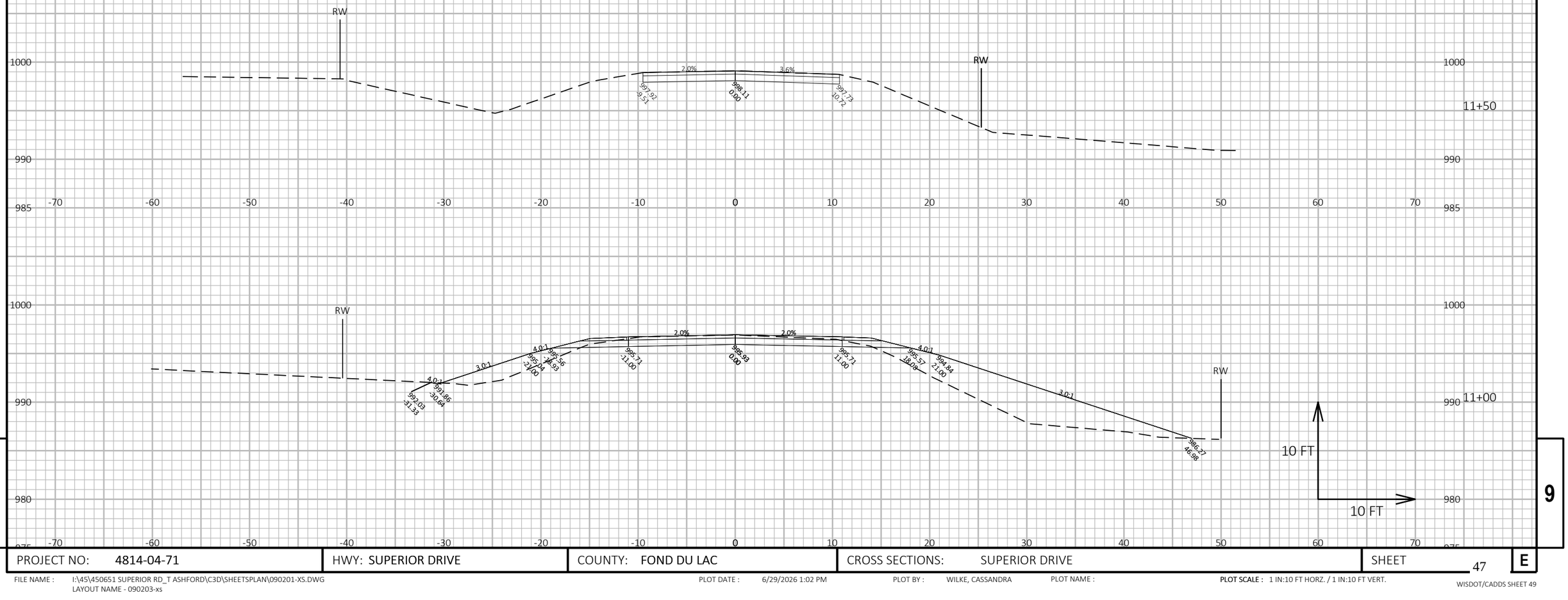

| | | | | |
|---|---|---|---|---|
| PROJECT NO: 4814-04-71 | HWY: SUPERIOR DRIVE | COUNTY: FOND DU LAC | CROSS SECTIONS: SUPERIOR DRIVE | SHEET 46 E |

FILE NAME : I:\45\450651 SUPERIOR RD_T ASHFORD\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090202-xs

PLOT DATE : 6/29/2026 1:02 PM PLOT BY : WILKE, CASSANDRA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END PROJECT
STA 11+50




9

9

| PROJECT NO: 4814-04-71 | HWY: SUPERIOR DRIVE | COUNTY: FOND DU LAC | CROSS SECTIONS: SUPERIOR DRIVE | SHEET 47 | E |
|---|---|---|---|---|---|

FILE NAME : I:\45\450651 SUPERIOR RD_T ASHFORD\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090203-xs

PLOT DATE : 6/29/2026 1:02 PM PLOT BY : WILKE, CASSANDRA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

**Wisconsin Department of Transportation**

Dedicated people creating transportation solutions
through innovation and exceptional service.

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