

GRE

PROJECT ID:  
WMT: N/A

4589-01-72

26

COUNTY:

BROWN

MARCH 2025  
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 = 66



DESIGN DESIGNATION 4589-01-72

|              |   |   |
|--------------|---|---|
| A.A.D.T.     | 1 | 1 |
| A.A.D.T.     | 1 | 1 |
| D.H.V.       | 1 | 1 |
| D.D.         | 1 | 1 |
| T.           | 1 | 1 |
| DESIGN SPEED | 1 | 1 |
| ESALS        | 1 | 1 |

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             |  |
| MARSH AREA                     |  |
| WOODED OR SHRUB AREA           |  |

|                                             |  |
|---------------------------------------------|--|
| PROFILE                                     |  |
| GRADE LINE                                  |  |
| ORIGINAL GROUND                             |  |
| MARSH OR ROCK PROFILE (To be noted as such) |  |
| SPECIAL DITCH                               |  |
| GRADE ELEVATION                             |  |
| CULVERT (Profile View)                      |  |
| UTILITIES                                   |  |
| ELECTRIC                                    |  |
| FIBER OPTIC                                 |  |
| GAS                                         |  |
| SANITARY SEWER                              |  |
| STORM SEWER                                 |  |
| TELEPHONE                                   |  |
| WATER                                       |  |
| UTILITY PEDESTAL                            |  |
| POWER POLE                                  |  |
| TELEPHONE POLE                              |  |

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

BROWN CO, CTH PP

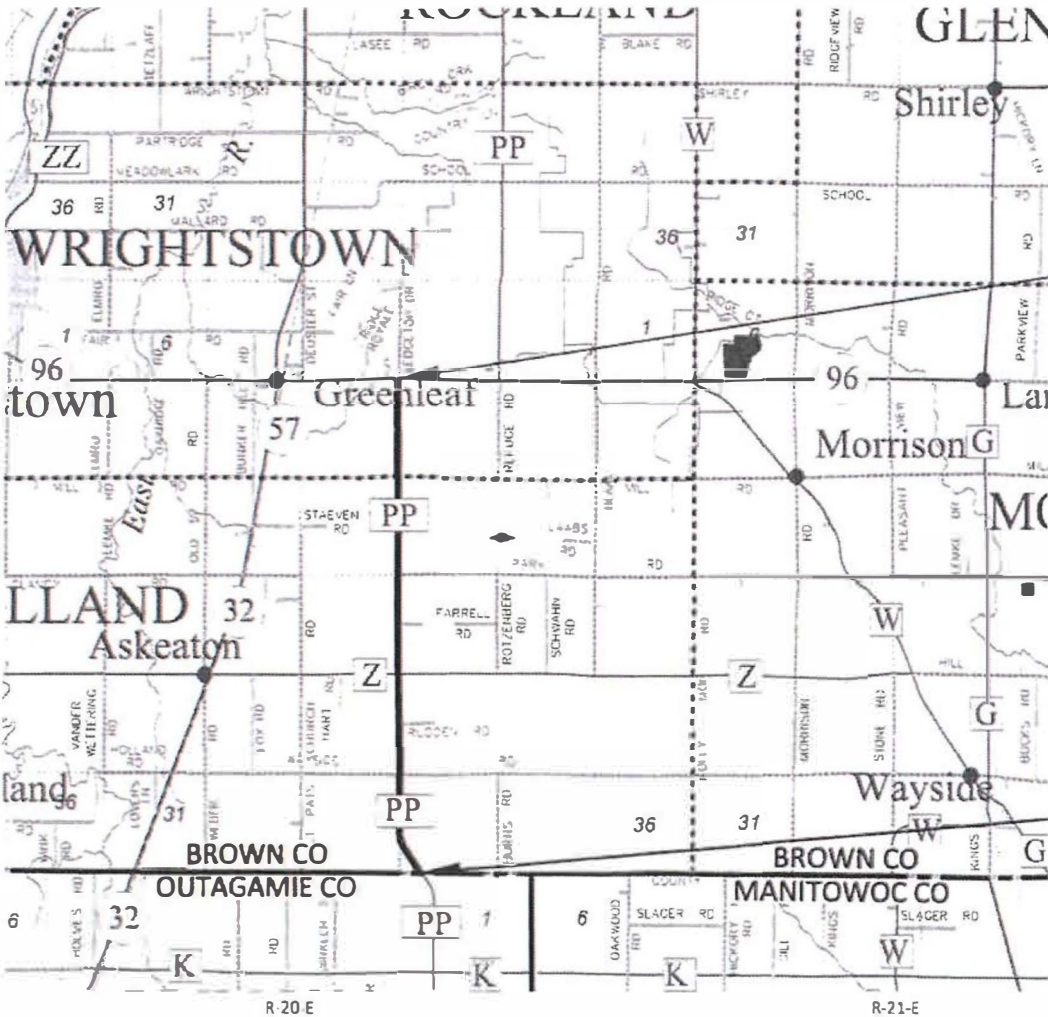
MAN CAL ROAD TO STH 96

CTH PP

BROWN COUNTY

STATE PROJECT NUMBER

4589-01-72



END PROJECT  
STA 268+85.64  
Y: 493,930.670  
X: 85,177.587

BEGIN PROJECT  
STA 1+31.82  
Y: 467,490.350  
X: 86,325.653

LAYOUT  
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 5.067 MILES

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

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

STATE PROJECT

4589-01-72

FEDERAL PROJECT

PROJECT

WISC 2025382

CONTRACT

1

ACCEPTED FOR

BROWN COUNTY

10/16/24  
Signature and Title of Official  
Highway Commissioner

ORIGINAL PLANS PREPARED BY

Westwood

WISCONSIN  
MARGARET A. HAWLEY  
E-26879  
MENASHA, WI  
PROFESSIONAL ENGINEER  
10-16-24

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY

|                     |                 |
|---------------------|-----------------|
| Surveyor            | WESTWOOD        |
| Designer            | WESTWOOD        |
| Project Manager     | JODI JAROSINSKI |
| Regional Examiner   |                 |
| Regional Supervisor | KIMBERLY SLEZAK |

APPROVED FOR THE DEPARTMENT

DATE: 10/17/2024

Jodi Jarosinski  
Signature

E

GENERAL NOTES

2

THERE ARE UTILITY FACILITES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONSTRCTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR DIRECT CALL TO THE UTILITIES THAT HAVE FACILITED IN THE AREA. NOT ALL UTILITES ARE MEMBERS OF DIGGERS HOTLINE.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE PRIOR TO THE START OF WORK. ANY UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPERATELY.

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

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES, FIELD ENTRANCES AND COMMERCIAL ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. DRIVEWAYS SHALL BE REPLACED IN KIND

UTILITIES

CONTACTS

ELECTRIC

WISCONSIN PUBLIC SERVICE CORPORATION  
2850 SOUTH ASHLAND AVENUE  
PO BOX 19001  
GREEN BAY, WI 54307-9001  
ATTN: RYAN VOSKUIL  
TELEPHONE: 920-617-5150  
CELL: 920-655-1584  
EMAIL: ryan.voskuil@wisconsinpublicservice.com

GAS

WISCONSIN PUBLIC SERVICE CORPORATION  
2850 SOUTH ASHLAND AVENUE  
GREEN BAY, WI 54307-9001  
ATTN: ADAM LEY  
PHONE: (920) 304-2053  
EMAIL: adam.ley@wisconsinpublicsevice.com

COMMUNICATION

BRIGHTSPEED  
144 N PEARL ST  
BERLIN, WI 54923  
ATTN: SCOTT HEINZELMAN  
TELEPHONE: 605-716-5964  
CELL: 920-757-4802  
EMAIL:scott.heinzelman@brightspeed.com

COMMUNICATION

AT&T  
211 W WASHIGTON ST  
APPLETON, WI  
ATTN: KYLE WEBER  
PHONE: (920) 221-5969  
EMAIL: kw175w@att.com

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               | 0.08                  | 0.16 | 0.22     | 0.12                  | 0.20 | 0.27     | 0.15                  | 0.24 | 0.33     | 0.19                  | 0.28 | 0.38     |
|                         | 0.22                  | 0.30 | 0.38     | 0.26                  | 0.34 | 0.44     | 0.30                  | 0.37 | 0.50     | 0.34                  | 0.41 | 0.56     |
| MEDIAN STRIP<br>- TURF  | 0.19                  | 0.20 | 0.24     | 0.19                  | 0.22 | 0.26     | 0.20                  | 0.23 | 0.30     | 0.20                  | 0.25 | 0.30     |
|                         | 0.24                  | 0.26 | 0.30     | 0.25                  | 0.28 | 0.33     | 0.26                  | 0.30 | 0.37     | 0.27                  | 0.32 | 0.40     |
| SIDE SLOPE -<br>TURF    |                       |      | 0.25     |                       |      | 0.27     |                       |      | 0.28     |                       |      | 0.30     |
|                         |                       |      | 0.32     |                       |      | 0.34     |                       |      | 0.36     |                       |      | 0.38     |
| 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 = 50.6 ACRES  
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 18.8 ACRES

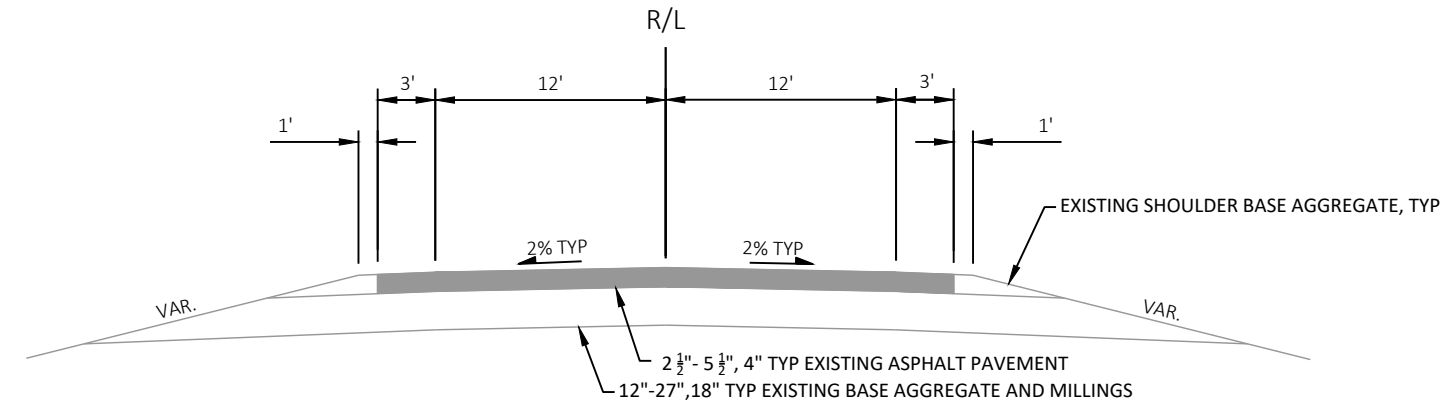


ORDER OF "SECTION 2" SHEETS

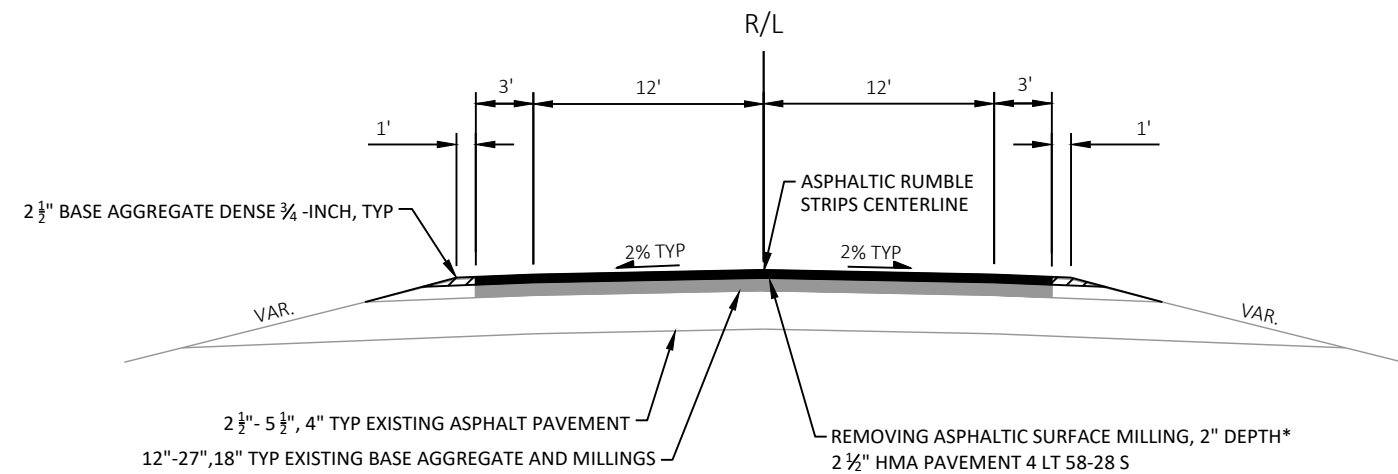
SHEET TITLE

- GENERAL NOTES
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- PERMANENT SIGNING

2

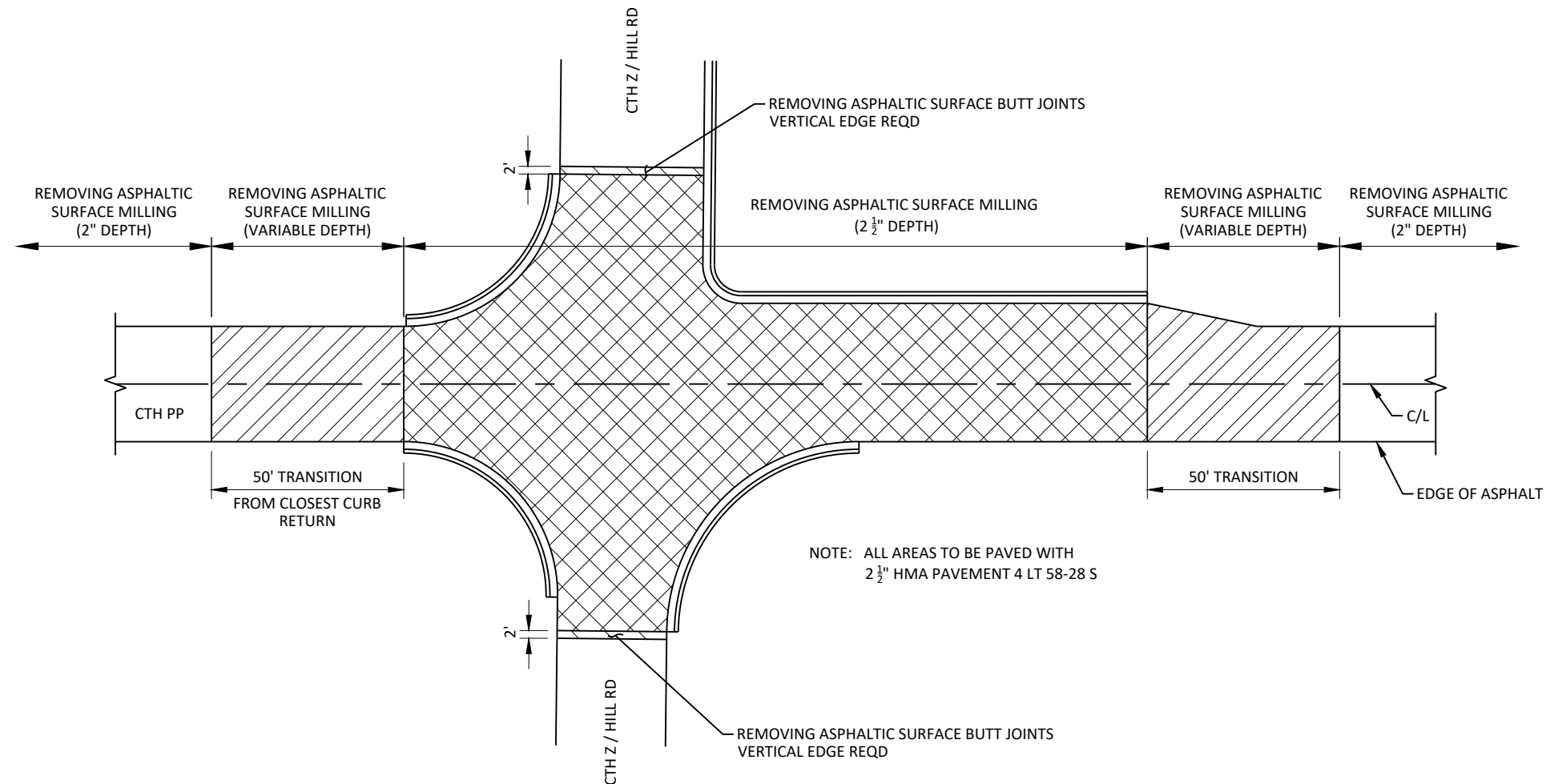


**EXISTING TYPICAL SECTION - CTH PP**  
STA 1+32 TO STA 268+86

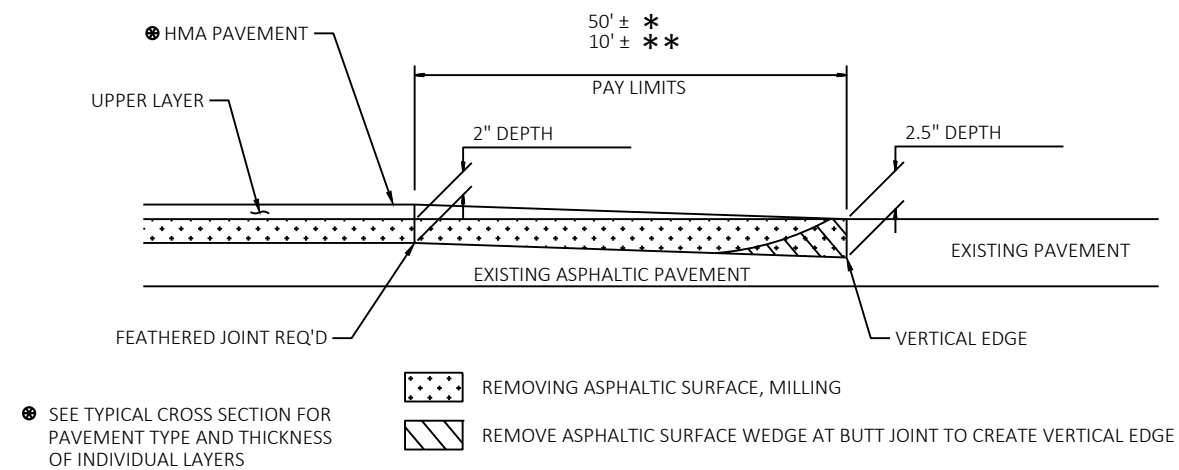


**FINISHED TYPICAL SECTION - CTH PP**  
STA 1+32 TO STA 268+86

\* STA 16+50 TO STA 28+00  
VARIABLE DEPTH MILLING (0.2" - 4.4" DEPTH) AND WEDGING (1.3" - 4" DEPTH) REQUIRED  
SEE CROSS SECTIONS

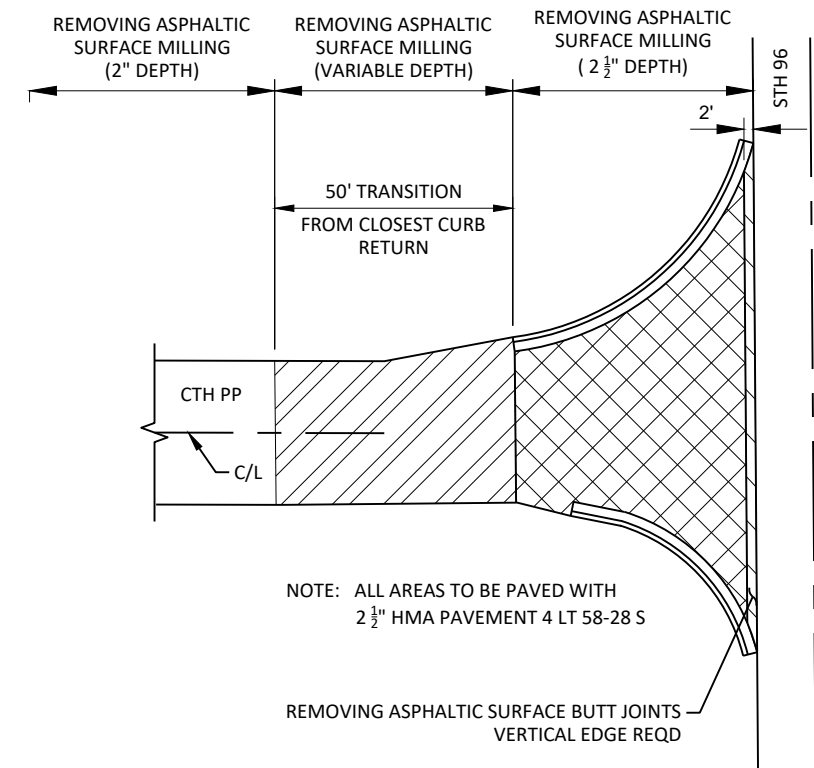


MILLING DETAIL - CTH Z / HILL RD

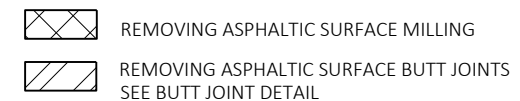
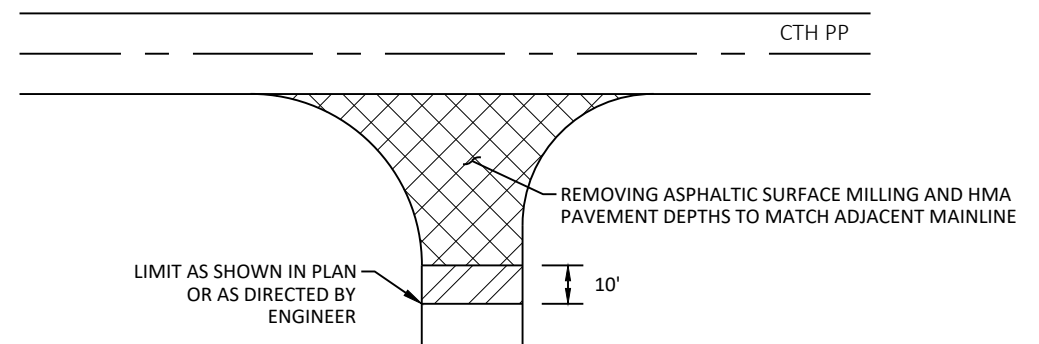


BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS (PROFILE CHANGE)

\* MAINLINE STA 1+32  
\*\* SIDEROADS WITHOUT CURB AND GUTTER AND DRIVEWAYS



MILLING DETAIL - STH 96

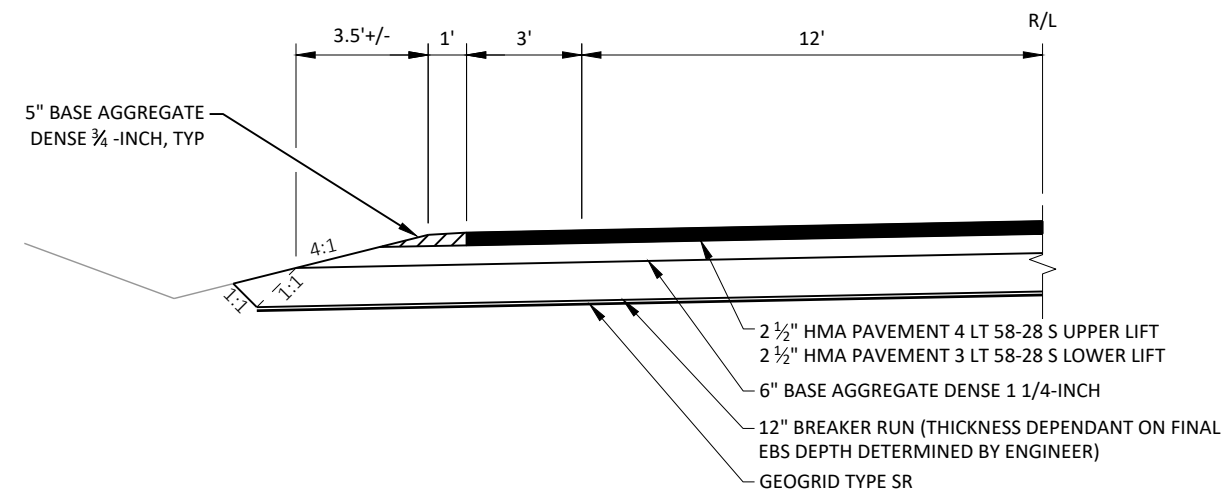


NOTE: WHEN MATCHING TO AN UNPAVED SURFACE  
BUTT JOINT IS NOT REQUIRED

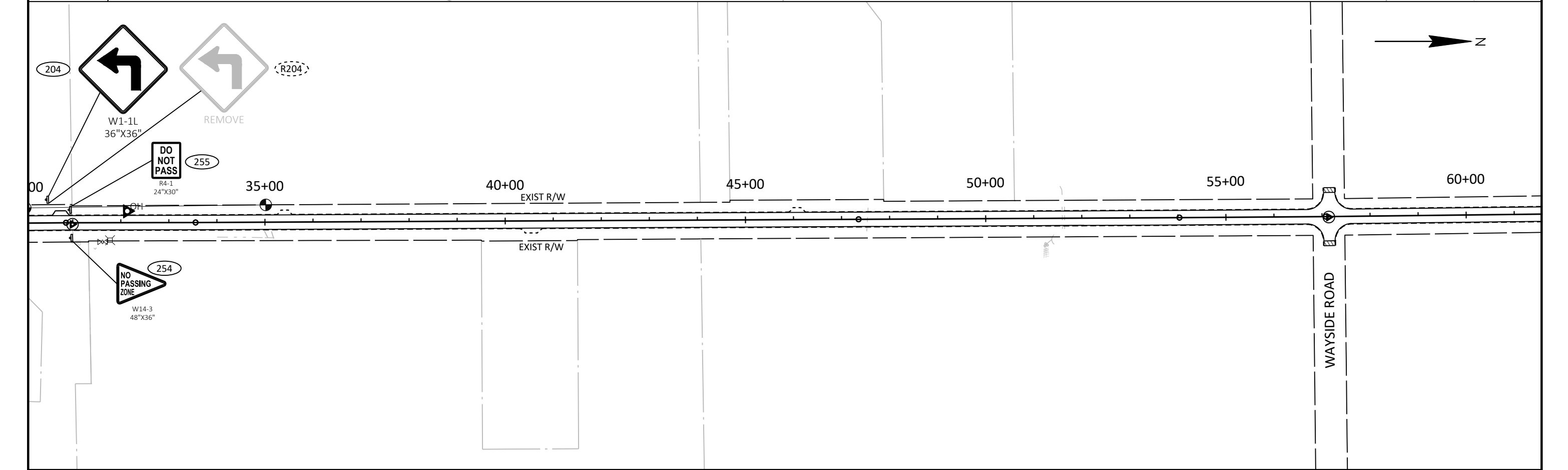
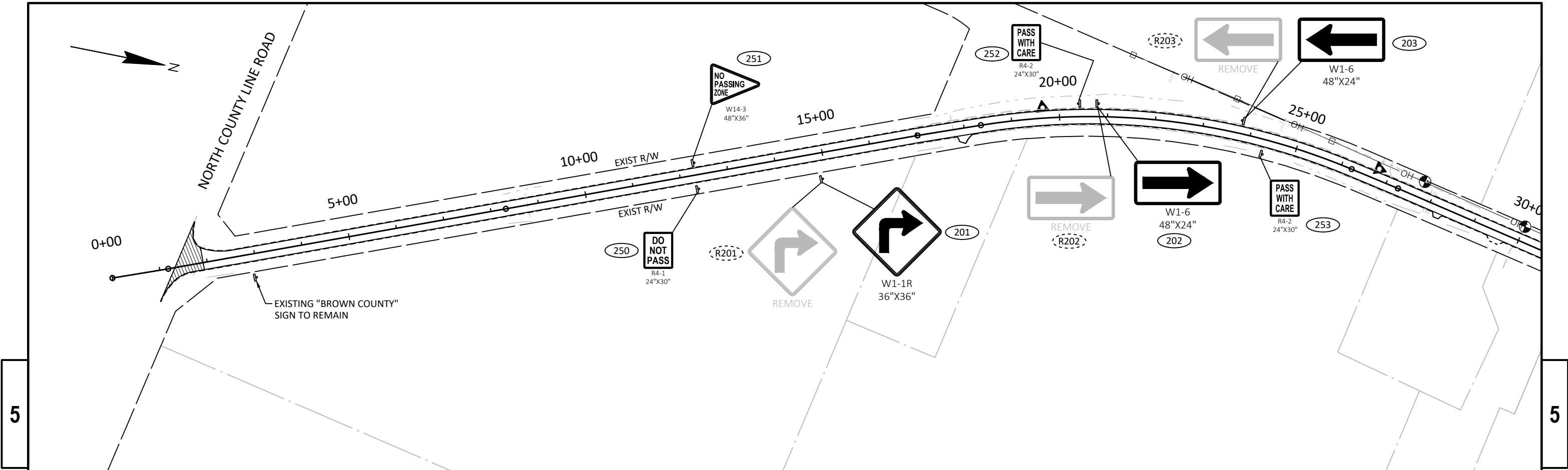
SIDE ROAD WITHOUT CURB AND GUTTER

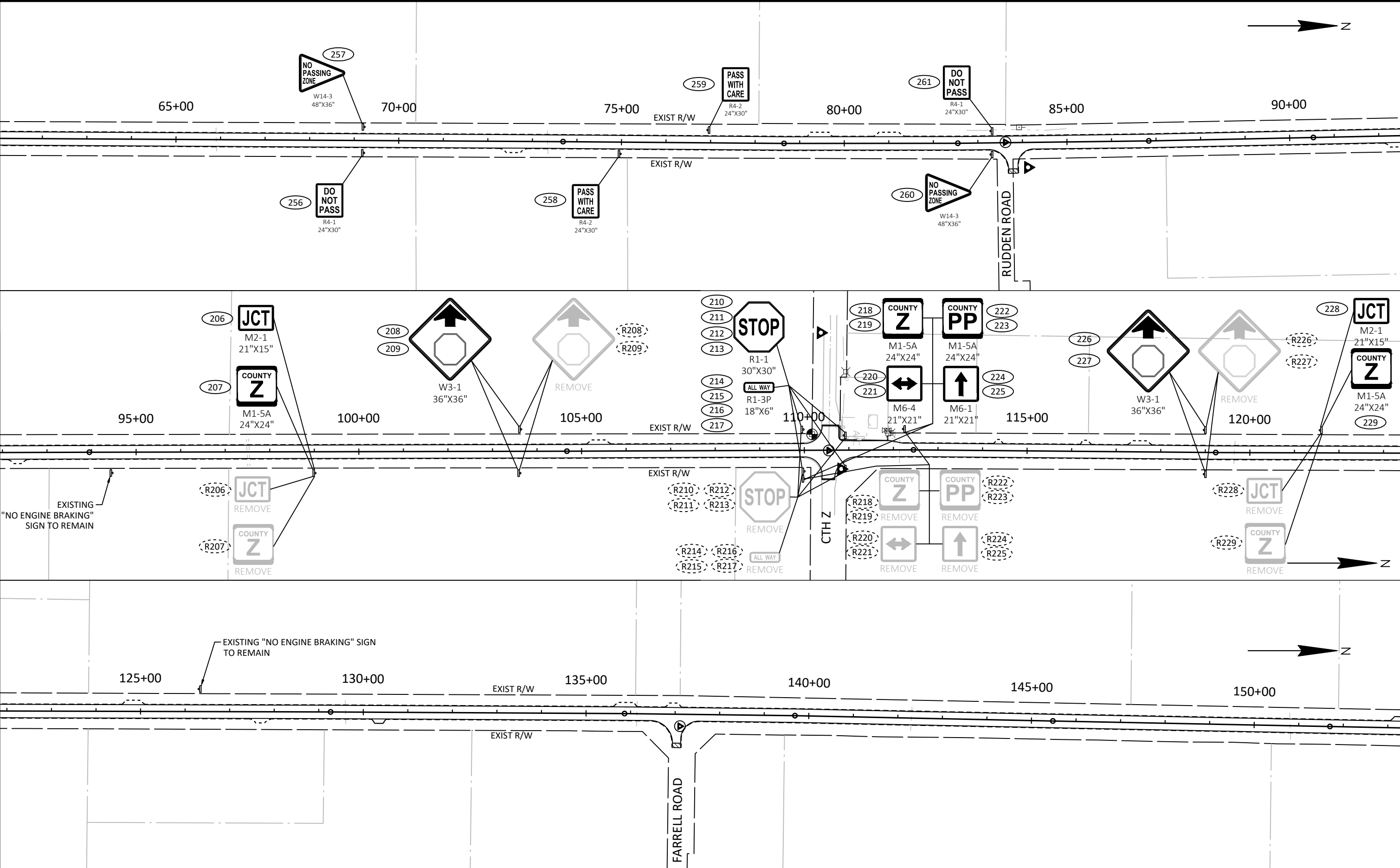
WAYSIDE RD PARK RD  
RUDDEN RD MILL RD  
FARRELL RD

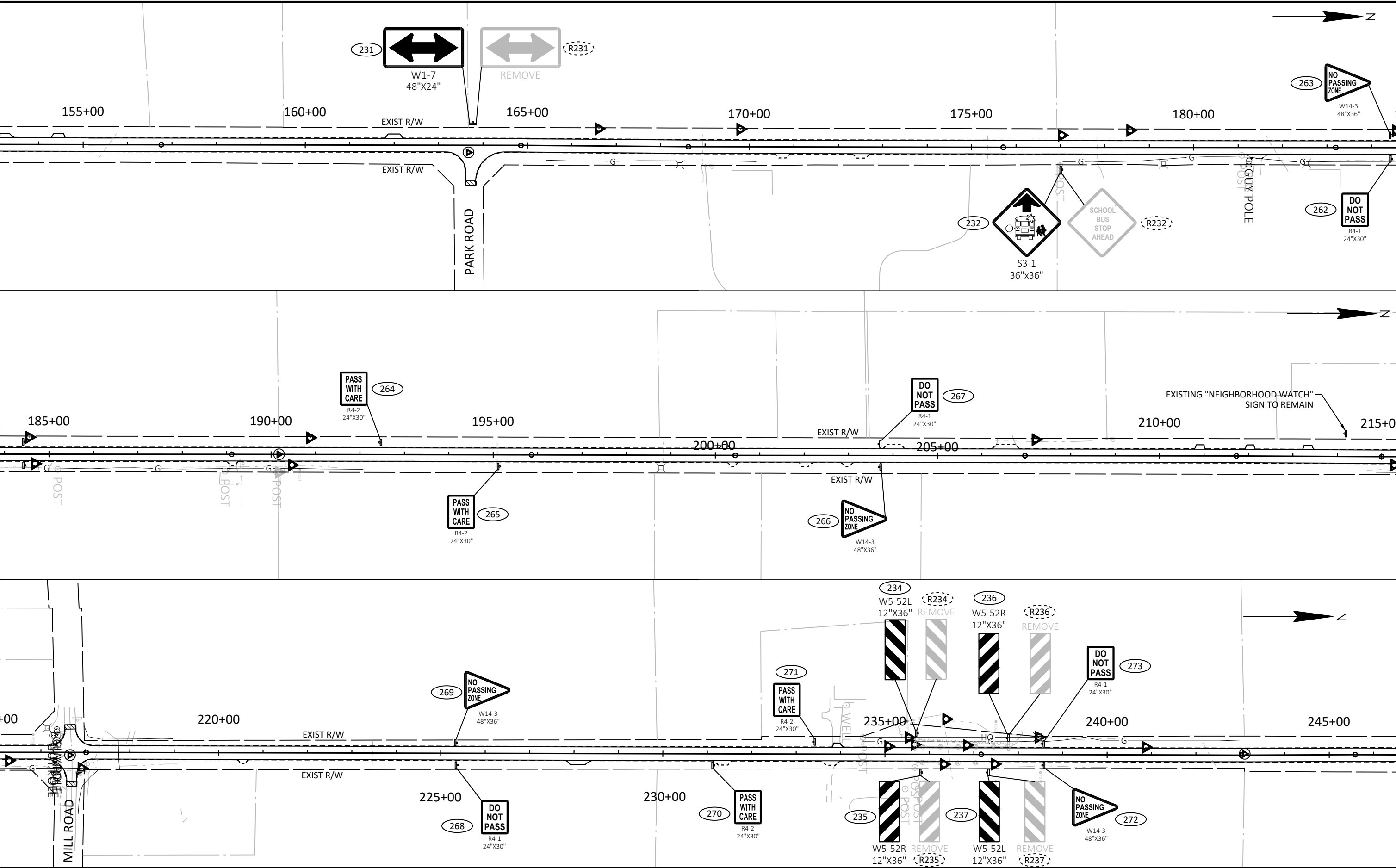


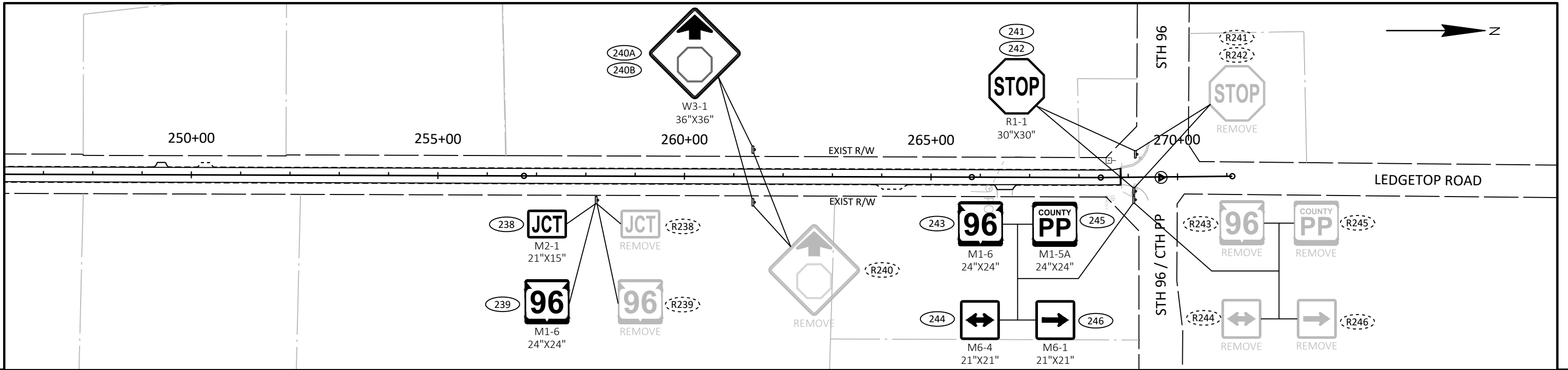


EXCAVATION BELOW SUBGRADE (EBS) HALF SECTION





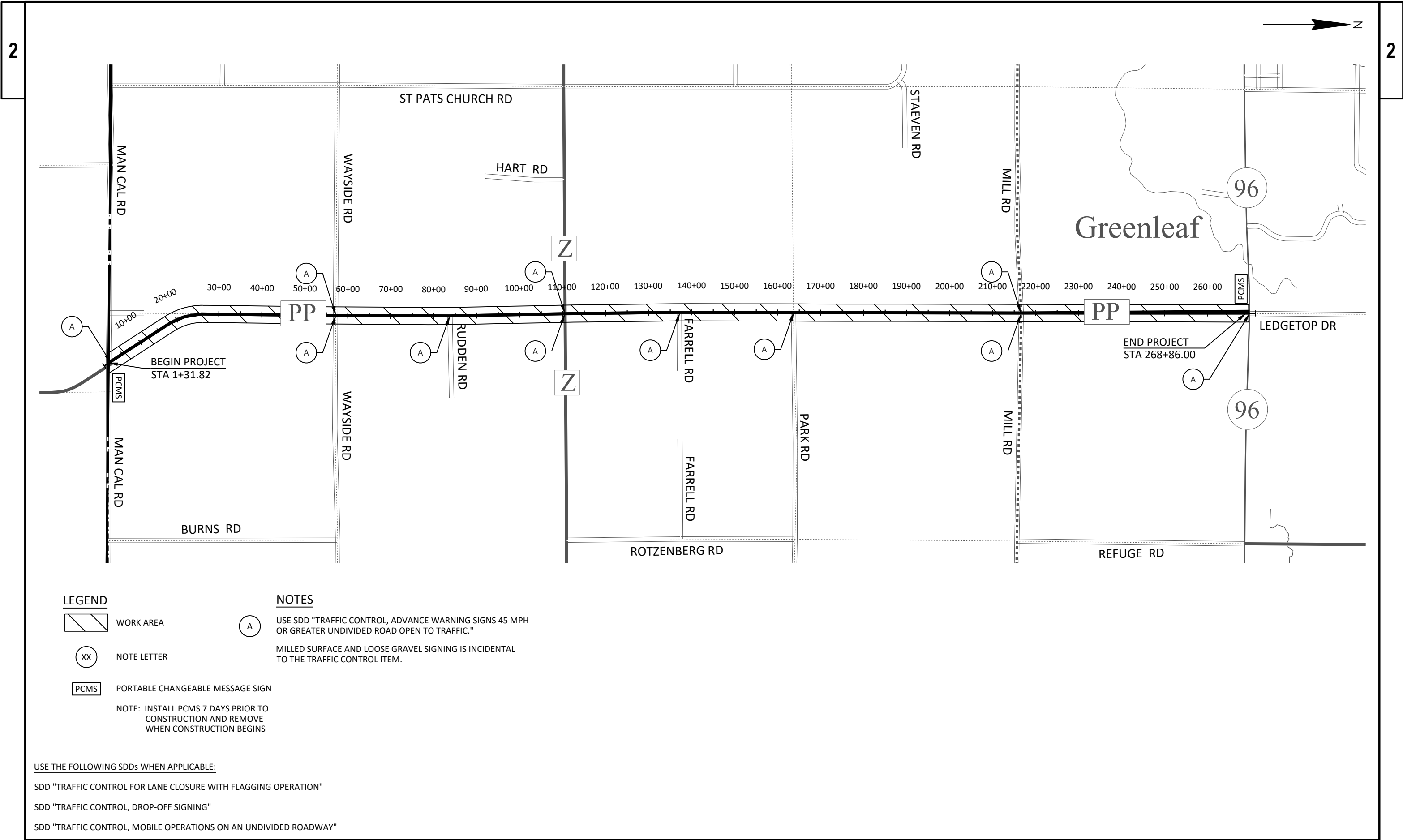




5

5





LEGEND

- WORK AREA
- NOTE LETTER
- PORTABLE CHANGEABLE MESSAGE SIGN
- NOTE: INSTALL PCMS 7 DAYS PRIOR TO CONSTRUCTION AND REMOVE WHEN CONSTRUCTION BEGINS

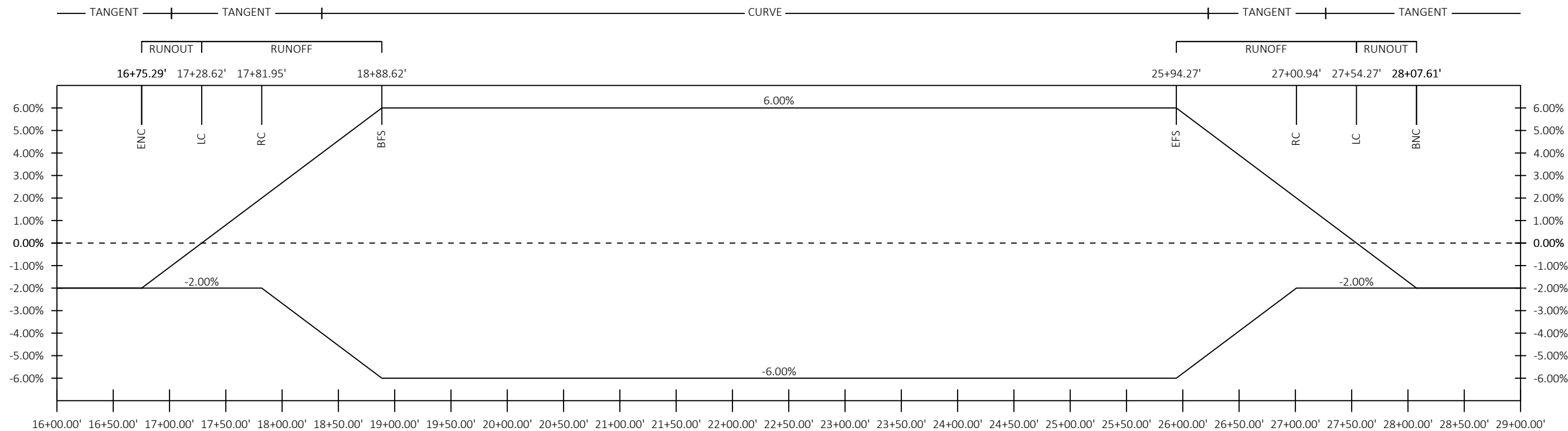
NOTES

- USE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER UNDIVIDED ROAD OPEN TO TRAFFIC."
- MILLED SURFACE AND LOOSE GRAVEL SIGNING IS INCIDENTAL TO THE TRAFFIC CONTROL ITEM.

USE THE FOLLOWING SDDs WHEN APPLICABLE:

- SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"
- SDD "TRAFFIC CONTROL, DROP-OFF SIGNING"
- SDD "TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY"

|                        |             |               |                 |          |   |
|------------------------|-------------|---------------|-----------------|----------|---|
| PROJECT NO: 4589-01-72 | HWY: CTH PP | COUNTY: BROWN | TRAFFIC CONTROL | SHEET 10 | E |
|------------------------|-------------|---------------|-----------------|----------|---|



NOTE: WEDGING REQUIRED, SEE CROSS SECTIONS FOR ADDITIONAL DETAIL

Estimate Of Quantities

4589-01-72

| Line | Item       | Item Description                                                 | Unit | Total      | Qty        |
|------|------------|------------------------------------------------------------------|------|------------|------------|
| 0002 | 204.0115   | Removing Asphaltic Surface Butt Joints                           | SY   | 1,020.000  | 1,020.000  |
| 0004 | 204.0120   | Removing Asphaltic Surface Milling                               | SY   | 90,940.000 | 90,940.000 |
| 0006 | 205.0100   | Excavation Common                                                | CY   | 14,100.000 | 14,100.000 |
| 0008 | 211.0101   | Prepare Foundation for Asphaltic Paving (project) 01. 4589-01-72 | EACH | 1.000      | 1.000      |
| 0010 | 213.0100   | Finishing Roadway (project) 01. 4589-01-72                       | EACH | 1.000      | 1.000      |
| 0012 | 305.0110   | Base Aggregate Dense 3/4-Inch                                    | TON  | 1,210.000  | 1,210.000  |
| 0014 | 305.0120   | Base Aggregate Dense 1 1/4-Inch                                  | TON  | 7,815.000  | 7,815.000  |
| 0016 | 311.0110   | Breaker Run                                                      | TON  | 16,450.000 | 16,450.000 |
| 0018 | 455.0605   | Tack Coat                                                        | GAL  | 7,770.000  | 7,770.000  |
| 0020 | 460.0105.S | HMA Percent Within Limits (PWL) Test Strip Volumetrics           | EACH | 1.000      | 1.000      |
| 0022 | 460.0110.S | HMA Percent Within Limits (PWL) Test Strip Density               | EACH | 1.000      | 1.000      |
| 0024 | 460.2000   | Incentive Density HMA Pavement                                   | DOL  | 3,080.000  | 3,080.000  |
| 0026 | 460.2005   | Incentive Density PWL HMA Pavement                               | DOL  | 8,210.000  | 8,210.000  |
| 0028 | 460.2007   | Incentive Density HMA Pavement Longitudinal Joints               | DOL  | 5,360.000  | 5,360.000  |
| 0030 | 460.2010   | Incentive Air Voids HMA Pavement                                 | DOL  | 13,180.000 | 13,180.000 |
| 0032 | 460.5223   | HMA Pavement 3 LT 58-28 S                                        | TON  | 2,740.000  | 2,740.000  |
| 0034 | 460.5224   | HMA Pavement 4 LT 58-28 S                                        | TON  | 13,165.000 | 13,165.000 |
| 0036 | 465.0105   | Asphaltic Surface                                                | TON  | 40.000     | 40.000     |
| 0038 | 465.0110   | Asphaltic Surface Patching                                       | TON  | 240.000    | 240.000    |
| 0040 | 465.0120   | Asphaltic Surface Driveways and Field Entrances                  | TON  | 60.000     | 60.000     |
| 0042 | 465.0560   | Asphaltic Rumble Strips, Centerline                              | LF   | 24,060.000 | 24,060.000 |
| 0044 | 619.1000   | Mobilization                                                     | EACH | 1.000      | 1.000      |
| 0046 | 624.0100   | Water                                                            | MGAL | 90.000     | 90.000     |
| 0048 | 625.0100   | Topsoil                                                          | SY   | 500.000    | 500.000    |
| 0050 | 628.1504   | Silt Fence                                                       | LF   | 500.000    | 500.000    |
| 0052 | 628.1520   | Silt Fence Maintenance                                           | LF   | 500.000    | 500.000    |
| 0054 | 628.1905   | Mobilizations Erosion Control                                    | EACH | 1.000      | 1.000      |
| 0056 | 628.1910   | Mobilizations Emergency Erosion Control                          | EACH | 1.000      | 1.000      |
| 0058 | 628.2008   | Erosion Mat Urban Class I Type B                                 | SY   | 500.000    | 500.000    |
| 0060 | 628.7504   | Temporary Ditch Checks                                           | LF   | 50.000     | 50.000     |
| 0062 | 629.0210   | Fertilizer Type B                                                | CWT  | 0.300      | 0.300      |
| 0064 | 630.0130   | Seeding Mixture No. 30                                           | LB   | 23.000     | 23.000     |
| 0066 | 630.0500   | Seed Water                                                       | MGAL | 11.000     | 11.000     |
| 0068 | 634.0614   | Posts Wood 4x6-Inch X 14-FT                                      | EACH | 52.000     | 52.000     |
| 0070 | 637.2210   | Signs Type II Reflective H                                       | SF   | 167.040    | 167.040    |
| 0072 | 637.2230   | Signs Type II Reflective F                                       | SF   | 161.480    | 161.480    |
| 0074 | 638.2602   | Removing Signs Type II                                           | EACH | 44.000     | 44.000     |
| 0076 | 638.3000   | Removing Small Sign Supports                                     | EACH | 28.000     | 28.000     |
| 0078 | 642.5001   | Field Office Type B                                              | EACH | 1.000      | 1.000      |
| 0080 | 643.0300   | Traffic Control Drums                                            | DAY  | 370.000    | 370.000    |
| 0082 | 643.0900   | Traffic Control Signs                                            | DAY  | 2,796.000  | 2,796.000  |
| 0084 | 643.1050   | Traffic Control Signs PCMS                                       | DAY  | 14.000     | 14.000     |
| 0086 | 643.3165   | Temporary Marking Line Paint 6-Inch                              | LF   | 10,600.000 | 10,600.000 |
| 0088 | 643.5000   | Traffic Control                                                  | EACH | 1.000      | 1.000      |
| 0090 | 645.0220   | Geogrid Type SR                                                  | SY   | 24,370.000 | 24,370.000 |
| 0092 | 646.2020   | Marking Line Epoxy 6-Inch                                        | LF   | 52,610.000 | 52,610.000 |
| 0094 | 646.4720   | Marking Line Same Day Epoxy 6-Inch                               | LF   | 15,000.000 | 15,000.000 |
| 0096 | 648.0100   | Locating No-Passing Zones                                        | MI   | 5.070      | 5.070      |
| 0098 | 650.4500   | Construction Staking Subgrade                                    | LF   | 5,350.000  | 5,350.000  |

Estimate Of Quantities

4589-01-72

| Line | Item     | Item Description                                                | Unit | Total      | Qty        |
|------|----------|-----------------------------------------------------------------|------|------------|------------|
| 0100 | 650.5000 | Construction Staking Base                                       | LF   | 5,350.000  | 5,350.000  |
| 0102 | 650.8000 | Construction Staking Resurfacing Reference                      | LF   | 26,754.000 | 26,754.000 |
| 0104 | 740.0440 | Incentive IRI Ride                                              | DOL  | 20,270.000 | 20,270.000 |
| 0106 | ASP.1T0A | On-the-Job Training Apprentice at \$5.00/HR                     | HRS  | 2,000.000  | 2,000.000  |
| 0108 | ASP.1T0G | On-the-Job Training Graduate at \$5.00/HR                       | HRS  | 1,200.000  | 1,200.000  |
| 0110 | SPV.0090 | Special 01. Construction Staking Subgrade Improvement Reference | LF   | 5,350.000  | 5,350.000  |

REMOVING ASPHALTIC SURFACE

| STATION TO STATION |   |        | ROADWAY   | 204.0115<br>REMOVING<br>ASPHALTIC<br>SURFACE BUTT<br>JOINTS<br>SY | 204.0120<br>REMOVING<br>ASPHALTIC<br>SURFACE<br>MILLING<br>SY | COMMENTS |
|--------------------|---|--------|-----------|-------------------------------------------------------------------|---------------------------------------------------------------|----------|
| PROJECT 4589-01-72 |   |        |           |                                                                   |                                                               |          |
| CATEGORY 0010      |   |        |           |                                                                   |                                                               |          |
| 1+32               | - | 268+86 | CTH PP    | 410                                                               | 90,940                                                        |          |
| ---                | - | ---    | SIDEROADS | 185                                                               | ---                                                           |          |
| ---                | - | ---    | DRIVEWAYS | 425                                                               | ---                                                           |          |

PROJECT TOTALS      1,020      90,940

EXCAVATION COMMON

| STATION TO STATION | ROADWAY | 205.0100<br><br>CY | COMMENTS                                                      |
|--------------------|---------|--------------------|---------------------------------------------------------------|
| PROJECT 4589-01-72 |         |                    |                                                               |
| CATEGORY 0010      |         |                    |                                                               |
| UNDISTRUBUTED      | CTH PP  | 14,100             | SUBGRADE IMPROVEMENT AREAS<br>(ASSUMED 20% OF PROJECT LENGTH) |

PROJECT TOTAL      14,100

PREPARE FOUNDATION FOR ASPHALTIC PAVING

| STATION            | TO | STATION | ROADWAY | 211.0101<br><br>EA | COMMENT |
|--------------------|----|---------|---------|--------------------|---------|
| PROJECT 4589-01-72 |    |         |         |                    |         |
| CATEGORY 0010      |    |         |         |                    |         |
| UNDISTRUBUTED      |    |         | CTH PP  | 1                  |         |

PROJECT TOTAL      1

BASE AGGREGATE DENSE

| STATION TO STATION |   |        | ROADWAY   | 305.0110<br><br>3/4-INCH<br><br>TON | 305.0120<br><br>1 1/4-INCH<br><br>TON | 311.0110<br><br>BREAKER RUN<br><br>TON | 624.0100<br><br>WATER<br><br>MGAL | COMMENTS                   |
|--------------------|---|--------|-----------|-------------------------------------|---------------------------------------|----------------------------------------|-----------------------------------|----------------------------|
| PROJECT 4589-01-72 |   |        |           |                                     |                                       |                                        |                                   |                            |
| CATEGORY 0010      |   |        |           |                                     |                                       |                                        |                                   |                            |
| 1+32               | - | 268+86 | CTH PP    | 1,210                               | ---                                   | ---                                    | 12                                | SHOULDER                   |
| ---                | - | ---    | DRIVEWAYS | ---                                 | 115                                   | ---                                    | 1                                 | 2" DEPTH                   |
| UNDISTRIBUTED      |   |        | CTH PP    | ---                                 | 7,700                                 | 16,450                                 | 77                                | SUBGRADE IMPROVEMENT AREAS |

PROJECT TOTALS      1,210      7,815      16,450      90

ASPHALTIC ITEMS

| STATION TO STATION |   |        | ROADWAY   | 455.0605<br><br>TACK COAT<br><br>GAL | 460.5223<br><br>HMA PAVEMENT<br>3 LT 58-28 S<br><br>TON | 460.5224<br><br>HMA PAVEMENT<br>4 LT 58-28 S<br><br>TON | 465.0105<br><br>ASPHALTIC<br>SURFACE<br><br>TON | 465.0120<br>ASPHALTIC<br>SURFACE<br>DRIVEWAYS<br>AND FIELD<br>ENTRANCES<br>TON | 465.0560<br><br>ASPHALTIC<br>RUMBLE<br>STRIPS<br>CENTERLINE<br><br>LF | COMMENTS                                 |
|--------------------|---|--------|-----------|--------------------------------------|---------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------|
| PROJECT 4589-01-72 |   |        |           |                                      |                                                         |                                                         |                                                 |                                                                                |                                                                       |                                          |
| CATEGORY 0010      |   |        |           |                                      |                                                         |                                                         |                                                 |                                                                                |                                                                       |                                          |
| 1+32               | - | 268+86 | CTH PP    | 6,410                                | ---                                                     | 13,165                                                  | ---                                             | ---                                                                            | 24,060                                                                |                                          |
| ---                | - | ---    | DRIVEWAYS | 30                                   | ---                                                     | ---                                                     | ---                                             | 60                                                                             | ---                                                                   | 2.5" DEPTH                               |
| 16+50              | - | 27+50  | CTH PP    | ---                                  | ---                                                     | ---                                                     | 40                                              | ---                                                                            | ---                                                                   | WEDGING FOR SE CORRECTION                |
| UNDISTRIBUTED      |   |        | CTH PP    | 1,330                                | 2,740                                                   | ---                                                     | ---                                             | ---                                                                            | ---                                                                   | 2.5" DEPTH IN SUBGRADE IMPROVEMENT AREAS |
| PROJECT TOTALS     |   |        |           | 7,770                                | 2,740                                                   | 13,165                                                  | 40                                              | 60                                                                             | 24,060                                                                |                                          |

HMA MIXTURE ACCEPTANCE

| STATION TO STATION |   | ROADWAY | LOCATION | UNDERLAYING SURFACE | MIXTURE USE  | BID ITEM | LAYER DEPTH (IN) | TONNAGE | QMP TO BE USED FOR: |                                               |                                                                              |
|--------------------|---|---------|----------|---------------------|--------------|----------|------------------|---------|---------------------|-----------------------------------------------|------------------------------------------------------------------------------|
|                    |   |         |          |                     |              |          |                  |         | MIXTURE ACCEPTANCE  | DENSITY ACCEPTANCE                            |                                                                              |
| PROJECT 4589-01-72 |   |         |          |                     |              |          |                  |         |                     |                                               |                                                                              |
| CATEGORY 0010      |   |         |          |                     |              |          |                  |         |                     |                                               |                                                                              |
| 1+32               | - | 268+86  | CTH PP   | DRIVING LANE        | MILLED HMA   | UPPER    | 4 LT 58-28 S     | 2.50    | 8,208               | PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010 | INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005                                  |
|                    |   |         |          | SHLDS / SIDE ROADS  | MILLED HMA   | UPPER    | 4 LT 58-28 S     | 2.50    | 2,905               |                                               | ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE |
|                    |   |         |          | EBS AREA UPPER LIFT | 3 LT 58-28 S | UPPER    | 4 LT 58-28 S     | 2.50    | 2,052               |                                               | INCENTIVE DENSITY HMA PAVEMENT 460.2000                                      |
|                    |   |         |          | EBS AREA LOWER LIFT | BASE COURSE  | LOWER    | 3 LT 58-28 S     | 2.50    | 2,740               | QMP (SS 460.2.8)                              |                                                                              |

ASPHALTIC SURFACE PATCHING

| STATION            | TO | STATION | ROADWAY | 465.0110<br><br>TON | COMMENT       |
|--------------------|----|---------|---------|---------------------|---------------|
| PROJECT 4589-01-72 |    |         |         |                     |               |
| CATEGORY 0010      |    |         |         |                     |               |
| UNDISTRUBUTED      |    |         | CTH PP  | 40                  | TEMP RAMPING  |
| UNDISTRUBUTED      |    |         | CTH PP  | 200                 | MINOR REPAIRS |
| PROJECT TOTAL      |    |         |         | 240                 |               |

HMA PAVEMENT PWL TEST STRIP

| ROADWAY            | 460.0105.S<br><br>VOLUMETRICS<br><br>EACH | 460.0110.S<br><br>DENSITY<br><br>EACH | COMMENTS |
|--------------------|-------------------------------------------|---------------------------------------|----------|
| PROJECT 4589-01-72 |                                           |                                       |          |
| CATEGORY 0010      |                                           |                                       |          |
| STH 153            | 1                                         | 1                                     |          |
| PROJECT TOTALS     |                                           | 1                                     | 1        |



PERMANENT SIGNS

| SIGN NO.           | STATION | FACE TRAFFIC DIRECTION | LOCATION | SIGN CODE | W X H  | 637.2210        | 637.2230        | 634.0614  | REMARKS |            |
|--------------------|---------|------------------------|----------|-----------|--------|-----------------|-----------------|-----------|---------|------------|
|                    |         |                        |          |           |        | SIGNS TYPE II   |                 |           |         | POSTS WOOD |
|                    |         |                        |          |           |        | REFLECTIVE H SF | REFLECTIVE F SF | 4x6x14 EA |         |            |
| PROJECT 4589-01-72 |         |                        |          |           |        |                 |                 |           |         |            |
| CATEGORY 0010      |         |                        |          |           |        |                 |                 |           |         |            |
| R201               | 14+86   | RT                     | NB       | CTH PP    | W1-1R  | 36"X36"         | ---             | 9.00      | 1       |            |
| R202               | 20+80   | LT                     | NB       | CTH PP    | W1-6   | 48"X24"         | ---             | 8.00      | 1       |            |
| R203               | 23+76   | LT                     | SB       | CTH PP    | W1-6   | 48"X24"         | ---             | 8.00      | 1       |            |
| R204               | 30+46   | LT                     | SB       | CTH PP    | W1-1L  | 36"X36"         | ---             | 9.00      | 1       |            |
| R206               | 99+00   | RT                     | NB       | CTH PP    | M2-1   | 21"X15"         | 2.20            | ---       | 1       |            |
| R207               |         |                        |          | CTH PP    | M1-5A  | 24"X24"         | 4.00            | ---       |         |            |
| R208               | 103+62  | LT                     | NB       | CTH PP    | W3-1   | 36"X36"         | ---             | 9.00      | 1       |            |
| R209               | 103+62  | RT                     | NB       | CTH PP    | W3-1   | 36"X36"         | ---             | 9.00      | 1       |            |
| R210               | 109+96  | LT                     | NB       | CTH PP    | R1-1   | 30"X30"         | 5.18            | ---       | 1       |            |
| R214               |         |                        |          | CTH PP    | R1-3P  | 18"X6"          | 0.75            | ---       |         |            |
| R211               | 109+96  | RT                     | NB       | CTH PP    | R1-1   | 30"X30"         | 5.18            | ---       | 1       |            |
| R215               |         |                        |          | CTH PP    | R1-3P  | 18"X6"          | 0.75            | ---       |         |            |
| R212               | 110+90  | LT                     | SB       | CTH PP    | R1-1   | 30"X30"         | 5.18            | ---       | 1       |            |
| R216               |         |                        |          | CTH PP    | R1-3P  | 18"X6"          | 0.75            | ---       |         |            |
| R213               | 110+90  | RT                     | SB       | CTH PP    | R1-1   | 30"X30"         | 5.18            | ---       | 1       |            |
| R217               |         |                        |          | CTH PP    | R1-3P  | 18"X6"          | 0.75            | ---       |         |            |
| R218               | 109+98  | RT                     | NB       | CTH PP    | M1-5A  | 24"X24"         | 2.00            | ---       | 1       |            |
| R220               |         |                        |          | CTH PP    | M6-4   | 21"X21"         | 3.06            | ---       |         |            |
| R222               |         |                        |          | CTH PP    | M1-5A  | 24"X24"         | 2.00            | ---       |         |            |
| R224               |         |                        |          | CTH PP    | M6-1   | 21"X21"         | 3.06            | ---       |         |            |
| R219               | 112+23  | LT                     | SB       | CTH PP    | M1-5A  | 24"X24"         | 2.00            | ---       | 1       |            |
| R221               |         |                        |          | CTH PP    | M6-4   | 21"X21"         | 3.06            | ---       |         |            |
| R223               |         |                        |          | CTH PP    | M1-5A  | 24"X24"         | 2.00            | ---       |         |            |
| R225               |         |                        |          | CTH PP    | M6-1   | 21"X21"         | 3.06            | ---       |         |            |
| R226               | 118+98  | LT                     | SB       | CTH PP    | W3-1   | 36"X36"         | ---             | 9.00      | 1       |            |
| R227               | 118+98  | RT                     | SB       | CTH PP    | W3-1   | 36"X36"         | ---             | 9.00      | 1       |            |
| R228               | 121+59  | LT                     | SB       | CTH PP    | M2-1   | 21"X15"         | 2.20            | ---       | 1       |            |
| R229               |         |                        |          | CTH PP    | M1-5A  | 24"X24"         | 4.00            | ---       |         |            |
| R231               | 163+77  | LT                     | WB       | CTH PP    | W1-7   | 48"X24"         | ---             | 8.00      | 1       |            |
| R232               | 177+02  | RT                     | NB       | CTH PP    | S3-1   | 36"X36"         | ---             | 9.00      | 1       |            |
| R234               | 235+72  | LT                     | NB       | CTH PP    | W5-52L | 12"X36"         | ---             | 3.00      | 1       |            |
| R235               | 235+81  | RT                     | NB       | CTH PP    | W5-52R | 12"X36"         | ---             | 3.00      | 1       |            |
| R236               | 237+76  | LT                     | SB       | CTH PP    | W5-52R | 12"X36"         | ---             | 3.00      | 1       |            |
| R237               | 237+31  | RT                     | SB       | CTH PP    | W5-52L | 12"X36"         | ---             | 3.00      | 1       |            |
| R238               | 258+23  | RT                     | NB       | CTH PP    | M2-1   | 21"X15"         | 2.20            | ---       | 1       |            |
| R239               |         |                        |          | CTH PP    | M1-6   | 24"X24"         | 4.00            | ---       |         |            |
| R240A              | 261+40  | LT                     | NB       | CTH PP    | W3-1   | 36"X36"         | ---             | 9.00      | 1       |            |
| R240B              | 261+40  | RT                     | NB       | CTH PP    | W3-1   | 36"X36"         | ---             | 9.00      | 1       |            |
| R241               | 269+16  | LT                     | NB       | CTH PP    | R1-1   | 30"X30"         | 5.18            | ---       | 1       |            |
| R242               | 269+16  | RT                     | NB       | CTH PP    | R1-1   | 30"X30"         | 5.18            | ---       | 1       |            |
| R243               | 269+16  | RT                     | NB       | CTH PP    | M1-6   | 24"X24"         | 4.00            | ---       | 1       |            |
| R244               |         |                        | NB       | CTH PP    | M6-4   | 21"X21"         | 3.06            | ---       |         |            |
| R245               |         |                        | NB       | CTH PP    | M1-5A  | 24"X24"         | 4.00            | ---       |         |            |
| R246               |         |                        | NB       | CTH PP    | M6-1   | 21"X21"         | 3.06            | ---       |         |            |

REMOVING SIGNS

|                    |         |    |          | 638.2602       | 638.3000       |
|--------------------|---------|----|----------|----------------|----------------|
|                    |         |    |          | REMOVING SIGNS | REMOVING SMALL |
| SIGN NO.           | STATION |    | LOCATION | TYPE II        | SIGN SUPPORTS  |
|                    |         |    |          | EA             | EA             |
| PROJECT 4589-01-72 |         |    |          |                |                |
| CATEGORY 0010      |         |    |          |                |                |
| R201               | 14+86   | RT | CTH PP   | 1              | 1              |
| R202               | 20+80   | LT | CTH PP   | 1              | 1              |
| R203               | 23+76   | LT | CTH PP   | 1              | 1              |
| R204               | 30+46   | LT | CTH PP   | 1              | 1              |
| R206               | 99+00   | RT | CTH PP   | 1              | 1              |
| R207               |         |    | CTH PP   | 1              |                |
| R208               | 103+62  | LT | CTH PP   | 1              | 1              |
| R209               | 103+62  | RT | CTH PP   | 1              | 1              |
| R210               | 109+96  | LT | CTH PP   | 1              | 1              |
| R214               |         |    | CTH PP   | 1              |                |
| R211               | 109+96  | RT | CTH PP   | 1              | 1              |
| R215               |         |    | CTH PP   | 1              |                |
| R212               | 110+90  | LT | CTH PP   | 1              | 1              |
| R216               |         |    | CTH PP   | 1              |                |
| R213               | 110+90  | RT | CTH PP   | 1              | 1              |
| R217               |         |    | CTH PP   | 1              |                |
| R218               | 109+98  | RT | CTH PP   | 1              | 1              |
| R220               |         |    | CTH PP   | 1              |                |
| R222               |         |    | CTH PP   | 1              |                |
| R224               |         |    | CTH PP   | 1              |                |
| R219               | 112+23  | LT | CTH PP   | 1              | 1              |
| R221               |         |    | CTH PP   | 1              |                |
| R223               |         |    | CTH PP   | 1              |                |
| R225               |         |    | CTH PP   | 1              |                |
| R226               | 118+98  | LT | CTH PP   | 1              | 1              |
| R227               | 118+98  | RT | CTH PP   | 1              | 1              |
| R228               | 121+59  | LT | CTH PP   | 1              | 1              |
| R229               |         |    | CTH PP   | 1              |                |
| R231               | 163+77  | LT | CTH PP   | 1              | 1              |
| R232               | 177+02  | RT | CTH PP   | 1              | 1              |
| R234               | 235+72  | LT | CTH PP   | 1              | 1              |
| R235               | 235+81  | RT | CTH PP   | 1              | 1              |
| R236               | 237+76  | LT | CTH PP   | 1              | 1              |
| R237               | 237+31  | RT | CTH PP   | 1              | 1              |
| R238               | 258+23  | RT | CTH PP   | 1              | 1              |
| R239               |         |    | CTH PP   | 1              |                |
| R240A              | 261+40  | LT | CTH PP   | 1              | 1              |
| R240B              | 261+40  | RT | CTH PP   | 1              | 1              |
| R241               | 269+16  | LT | CTH PP   | 1              | 1              |
| R242               | 269+16  | RT | CTH PP   | 1              | 1              |
| R243               | 269+16  | RT | CTH PP   | 1              | 1              |
| R244               |         |    | CTH PP   | 1              |                |
| R245               |         |    | CTH PP   | 1              |                |
| R246               |         |    | CTH PP   | 1              |                |

PERMANENT SIGNS - CONTINUED

| SIGN NO.           | STATION | FACE<br>TRAFFIC<br>DIRECTION | LOCATION | SIGN CODE | W X H | 637.2210           | 637.2230           | 634.0614     | REMARKS |  |
|--------------------|---------|------------------------------|----------|-----------|-------|--------------------|--------------------|--------------|---------|--|
|                    |         |                              |          |           |       | SIGNS TYPE II      |                    | POSTS WOOD   |         |  |
|                    |         |                              |          |           |       | REFLECTIVE H<br>SF | REFLECTIVE F<br>SF | 4x6x14<br>EA |         |  |
| PROJECT 4589-01-72 |         |                              |          |           |       |                    |                    |              |         |  |
| CATEGORY 0010      |         |                              |          |           |       |                    |                    |              |         |  |
| 250                | 12+30   | RT                           | NB       | CTH PP    | R4-1  | 24"X30"            | 5.00               | ---          | 1       |  |
| 251                | 12+30   | LT                           | NB       | CTH PP    | W14-3 | 48"X36"            | ---                | 5.56         | 1       |  |
| 252                | 20+40   | LT                           | SB       | CTH PP    | R4-2  | 24"X30"            | 5.00               | ---          | 1       |  |
| 253                | 24+35   | RT                           | NB       | CTH PP    | R4-2  | 24"X30"            | 5.00               | ---          | 1       |  |
| 254                | 30+94   | RT                           | SB       | CTH PP    | W14-3 | 48"X36"            | ---                | 5.56         | 1       |  |
| 255                | 30+94   | LT                           | SB       | CTH PP    | R4-1  | 24"X30"            | 5.00               | ---          | 1       |  |
| 256                | 69+16   | RT                           | NB       | CTH PP    | R4-1  | 24"X30"            | 5.00               | ---          | 1       |  |
| 257                | 69+16   | LT                           | NB       | CTH PP    | W14-3 | 48"X36"            | ---                | 5.56         | 1       |  |
| 258                | 74+93   | RT                           | NB       | CTH PP    | R4-2  | 24"X30"            | 5.00               | ---          | 1       |  |
| 259                | 76+98   | LT                           | SB       | CTH PP    | R4-2  | 24"X30"            | 5.00               | ---          | 1       |  |
| 260                | 83+30   | RT                           | SB       | CTH PP    | W14-3 | 48"X36"            | ---                | 5.56         | 1       |  |
| 261                | 83+30   | LT                           | SB       | CTH PP    | R4-1  | 24"X30"            | 5.00               | ---          | 1       |  |
| 262                | 184+40  | RT                           | NB       | CTH PP    | R4-1  | 24"X30"            | 5.00               | ---          | 1       |  |
| 263                | 184+40  | LT                           | NB       | CTH PP    | W14-3 | 48"X36"            | ---                | 5.56         | 1       |  |
| 264                | 192+50  | LT                           | SB       | CTH PP    | R4-2  | 24"X30"            | 5.00               | ---          | 1       |  |
| 265                | 195+09  | RT                           | NB       | CTH PP    | R4-2  | 24"X30"            | 5.00               | ---          | 1       |  |
| 266                | 203+70  | RT                           | SB       | CTH PP    | W14-3 | 48"X36"            | ---                | 5.56         | 1       |  |
| 267                | 203+70  | LT                           | SB       | CTH PP    | R4-1  | 24"X30"            | 5.00               | ---          | 1       |  |
| 268                | 225+30  | RT                           | NB       | CTH PP    | R4-1  | 24"X30"            | 5.00               | ---          | 1       |  |
| 269                | 225+30  | LT                           | NB       | CTH PP    | W14-3 | 48"X36"            | ---                | 5.56         | 1       |  |
| 270                | 231+10  | RT                           | NB       | CTH PP    | R4-2  | 24"X30"            | 5.00               | ---          | 1       |  |
| 271                | 223+40  | LT                           | SB       | CTH PP    | R4-2  | 24"X30"            | 5.00               | ---          | 1       |  |
| 272                | 238+56  | RT                           | SB       | CTH PP    | W14-3 | 48"X36"            | ---                | 5.56         | 1       |  |
| 273                | 238+56  | LT                           | SB       | CTH PP    | R4-1  | 24"X30"            | 5.00               | ---          | 1       |  |

|                |        |        |    |
|----------------|--------|--------|----|
| SUBTOTALS      | 80.00  | 44.48  | 24 |
| PROJECT TOTALS | 167.04 | 161.48 | 52 |

RESTORATION AND EROSION CONTROL

| STATION TO STATION | DIR | ROADWAY | 625.0100<br>TOPSOIL<br>SY | 628.1504<br>SILT FENCE<br>LF | 628.1520<br>SILT FENCE<br>MAINTENANCE<br>LF | 628.2008<br>EROSION MAT<br>URBAN CLASS I<br>TYPE B<br>SY | 628.1905<br>MOBILIZATIONS<br>EROSION<br>CONTROL<br>EA | 628.1910<br>MOBILZATIONS<br>EMERGENCY<br>EROSION<br>CONTROL<br>EA | 628.7504<br>TEMPORARY<br>DITCH CHECKS<br>LF | 629.0210<br>FERTILIZER<br>TYPE B<br>CWT | 630.0130<br>SEEDING<br>MIXTURE #30<br>LB | 630.0500<br>SEED WATER<br>MGAL | COMMENT                    |
|--------------------|-----|---------|---------------------------|------------------------------|---------------------------------------------|----------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------|-----------------------------------------|------------------------------------------|--------------------------------|----------------------------|
| PROJECT 4589-01-72 |     |         |                           |                              |                                             |                                                          |                                                       |                                                                   |                                             |                                         |                                          |                                |                            |
| CATRGORY 0010      |     |         |                           |                              |                                             |                                                          |                                                       |                                                                   |                                             |                                         |                                          |                                |                            |
| UNDISTRIBUTED      |     | CTH PP  | 500                       | 500                          | 500                                         | 500                                                      | 1                                                     | 1                                                                 | 50                                          | 0.3                                     | 23                                       | 11                             | SUBGRADE IMPROVEMENT AREAS |
| PROJECT TOTALS     |     |         | 500                       | 500                          | 500                                         | 500                                                      | 1                                                     | 1                                                                 | 50                                          | 0.3                                     | 23                                       | 11                             |                            |



TRAFFIC CONTROL

| STAGE              | LOCATION                   | APPROX.<br>SERVICE<br>PERIOD<br>DAYS | 643.0900<br><br>SIGNS<br>NO. DAYS |       | 643.1050<br><br>SIGNS PCMS<br>NO. DAYS |    | 643.0300<br><br>DRUMS<br>NO. DAYS |     | NOTES                                                                                                                        |
|--------------------|----------------------------|--------------------------------------|-----------------------------------|-------|----------------------------------------|----|-----------------------------------|-----|------------------------------------------------------------------------------------------------------------------------------|
| PROJECT 4589-01-72 |                            |                                      |                                   |       |                                        |    |                                   |     |                                                                                                                              |
| CATEGORY 0010      |                            |                                      |                                   |       |                                        |    |                                   |     |                                                                                                                              |
| NO<br>DETOUR       | CTH PP AT MAN CAL RD       | 62                                   | 5                                 | 310   | 1                                      | 7  | 5                                 | 35  | INSTALL PCMS 7 DAYS PRIOR TO CONSTRUCTION<br>AND REMOVE WHEN CONSTRUCTION BEGINS<br>PCMS MESSAGE: "ROADWORK BEGINS XX/XX/XX" |
|                    | CTH PP AT STH 96           | 62                                   | 5                                 | 310   | 1                                      | 7  | 5                                 | 35  |                                                                                                                              |
|                    | SIDEROADS                  | 62                                   | 9                                 | 558   | --                                     | -- | --                                | --  |                                                                                                                              |
|                    | CTH PP (GROOVED PAVEMENT)  | 62                                   | 11                                | 682   | --                                     | -- | --                                | --  |                                                                                                                              |
|                    | CTH PP (UNEVEN LANES)      | 62                                   | 11                                | 682   | --                                     | -- | --                                | --  |                                                                                                                              |
|                    | SUBGRADE IMPROVEMENT AREAS | 12                                   | --                                | --    | --                                     | -- | 25                                | 300 |                                                                                                                              |
| SUBTOTALS          |                            |                                      |                                   | 2,542 |                                        | 14 |                                   | 370 |                                                                                                                              |
| UNDISTRIBUTED      |                            |                                      |                                   | 254   |                                        | 0  |                                   | 0   |                                                                                                                              |
| PROJECT TOTALS     |                            |                                      |                                   | 2,796 |                                        | 14 |                                   | 370 |                                                                                                                              |

PAVEMENT MARKING

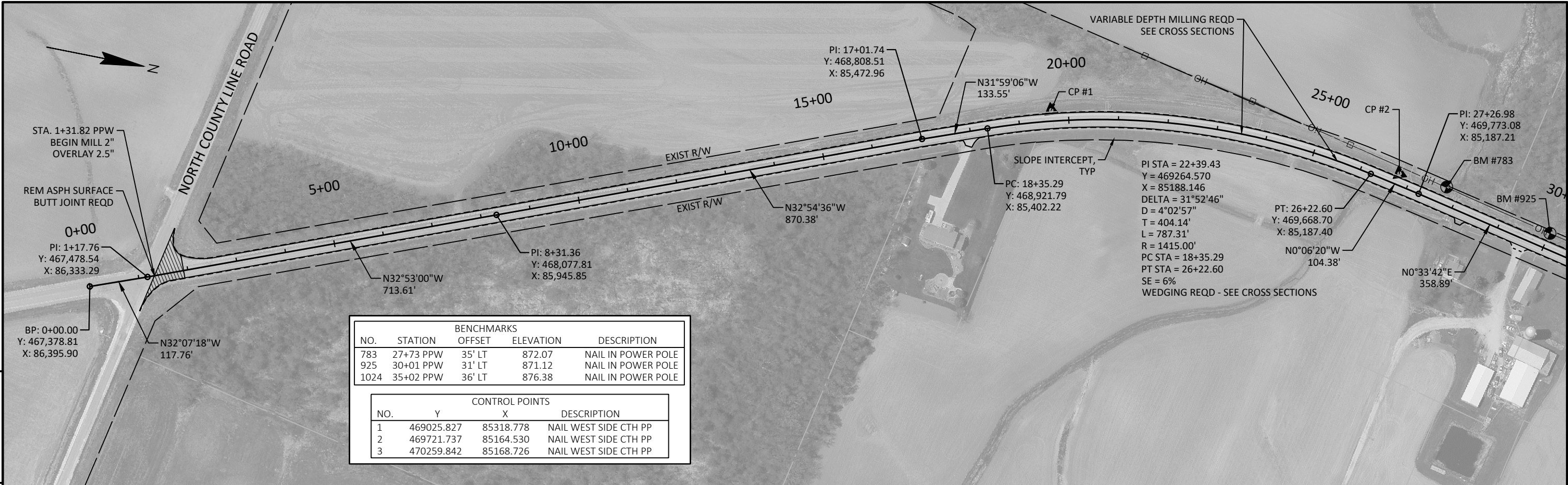
| STATION TO STATION |   |        | LOCATION | 646.2020<br><br>MARKING LINE<br>EPOXY<br>6-INCH<br><br>(WHITE)<br><br>LF | 646.4720<br><br>MARKING LINE<br>SAME DAY<br>EPOXY<br>6-INCH<br>(YELLOW)<br>(YELLOW)<br>LF | 643.3165<br><br>TEMPORARY<br>MARKING LINE<br>PAINT<br>6-INCH<br>(YELLOW)<br>LF | 648.0100<br><br>LOCATING<br>NO PASSING<br>ZONES<br><br>MI |
|--------------------|---|--------|----------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------|
| PROJECT 4589-01-72 |   |        |          |                                                                          |                                                                                           |                                                                                |                                                           |
| CATEGORY 0010      |   |        |          |                                                                          |                                                                                           |                                                                                |                                                           |
| 1+32               | - | 268+86 | CTH PP   | 52,610                                                                   | 15,000                                                                                    | 10,600                                                                         | 5.07                                                      |
| PROJECT TOTALS     |   |        |          | 52,610                                                                   | 15,000                                                                                    | 10,600                                                                         | 5.07                                                      |

GEOGRID

| STATION TO STATION | LOCATION | 645.0220<br><br>TYPE SR<br><br>SY | COMMENTS             |
|--------------------|----------|-----------------------------------|----------------------|
| PROJECT 4589-01-72 |          |                                   |                      |
| CATEGORY 0010      |          |                                   |                      |
| UNDISTRIBUTED      | CTH PP   | 24,370                            | SUBGRADE IMPROVEMENT |
| PROJECT TOTAL      |          | 24,370                            |                      |

CONSTRUCTION STAKING

| STATION TO STATION |   |        | LOCATION | 650.4500<br><br>SUBGRADE<br><br>LF | 650.5000<br><br>BASE<br><br>LF | 650.8000<br><br>RESURFACING<br>REFERENCE<br><br>LF | SPV.0090.01<br><br>SUBGRADE<br>IMPROVEMENT<br>REFERENCE<br><br>LF | COMMENT                    |
|--------------------|---|--------|----------|------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------------------------------------|----------------------------|
| PROJECT 4589-01-72 |   |        |          |                                    |                                |                                                    |                                                                   |                            |
| CATEGORY 0010      |   |        |          |                                    |                                |                                                    |                                                                   |                            |
| 1+32               | - | 268+86 | CTH PP   | ---                                | ---                            | 26,754                                             | ---                                                               |                            |
| UNDISTRUBUTED      |   |        | CTH PP   | 5,350                              | 5,350                          | ---                                                | 5,350                                                             | SUBGRADE IMPROVEMENT AREAS |
| PROJECT TOTALS     |   |        |          | 5,350                              | 5,350                          | 26,754                                             | 5,350                                                             |                            |



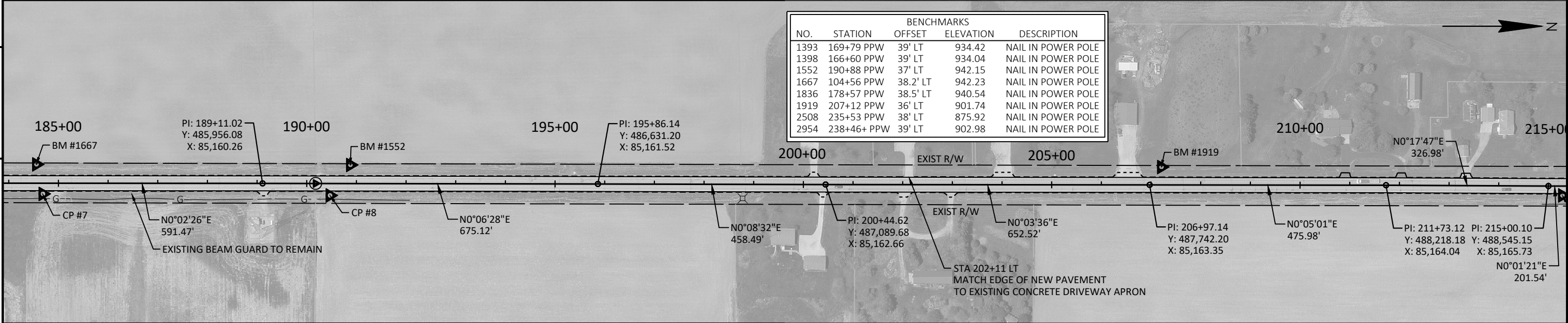
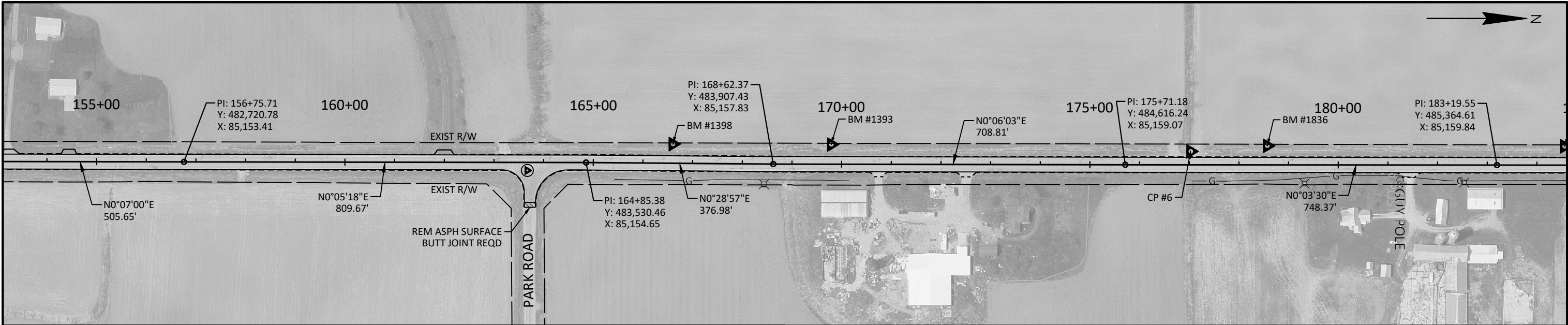




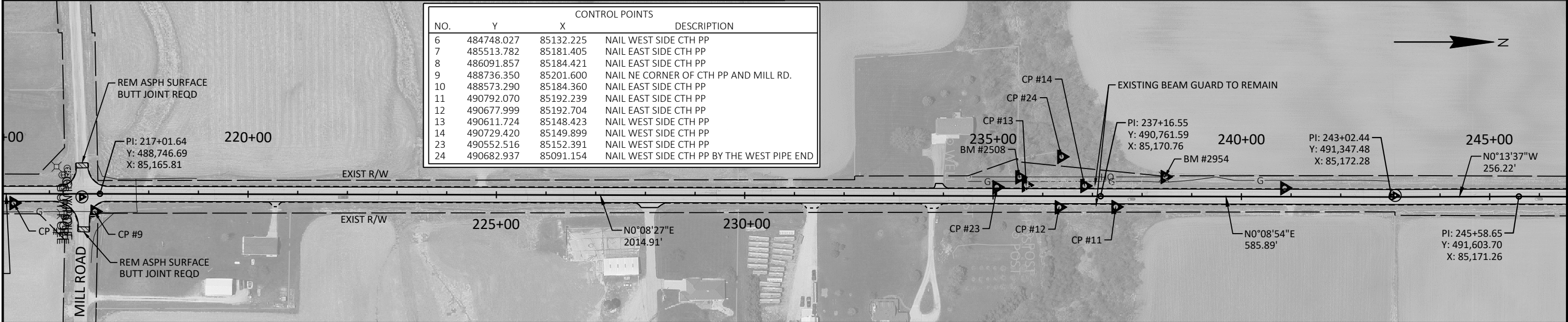
| BENCHMARKS |            |        |           |                    |  |
|------------|------------|--------|-----------|--------------------|--|
| NO.        | STATION    | OFFSET | ELEVATION | DESCRIPTION        |  |
| 1048       | 84+12 PPW  | 56' RT | 902.85    | NAIL IN POWER POLE |  |
| 1275       | 110+17 PPW | 35' LT | 909.65    | NAIL IN POWER POLE |  |

| CONTROL POINTS |            |           |                                                    |
|----------------|------------|-----------|----------------------------------------------------|
| NO.            | Y          | X         | DESCRIPTION                                        |
| 4              | 478128.800 | 85224.960 | NAIL NE CORNER OF CTH PP AND CTH Z INTERSECTION    |
| 5              | 478077.570 | 84920.060 | NAIL SOUTH SIDE CTH Z, WEST OF CTH PP INTERSECTION |





| BENCHMARKS |             |          |           |                    |
|------------|-------------|----------|-----------|--------------------|
| NO.        | STATION     | OFFSET   | ELEVATION | DESCRIPTION        |
| 1393       | 169+79 PPW  | 39' LT   | 934.42    | NAIL IN POWER POLE |
| 1398       | 166+60 PPW  | 39' LT   | 934.04    | NAIL IN POWER POLE |
| 1552       | 190+88 PPW  | 37' LT   | 942.15    | NAIL IN POWER POLE |
| 1667       | 104+56 PPW  | 38.2' LT | 942.23    | NAIL IN POWER POLE |
| 1836       | 178+57 PPW  | 38.5' LT | 940.54    | NAIL IN POWER POLE |
| 1919       | 207+12 PPW  | 36' LT   | 901.74    | NAIL IN POWER POLE |
| 2508       | 235+53 PPW  | 38' LT   | 875.92    | NAIL IN POWER POLE |
| 2954       | 238+46+ PPW | 39' LT   | 902.98    | NAIL IN POWER POLE |



| CONTROL POINTS |            |           |                                            |
|----------------|------------|-----------|--------------------------------------------|
| NO.            | Y          | X         | DESCRIPTION                                |
| 6              | 484748.027 | 85132.225 | NAIL WEST SIDE CTH PP                      |
| 7              | 485513.782 | 85181.405 | NAIL EAST SIDE CTH PP                      |
| 8              | 486091.857 | 85184.421 | NAIL EAST SIDE CTH PP                      |
| 9              | 488736.350 | 85201.600 | NAIL NE CORNER OF CTH PP AND MILL RD.      |
| 10             | 488573.290 | 85184.360 | NAIL EAST SIDE CTH PP                      |
| 11             | 490792.070 | 85192.239 | NAIL EAST SIDE CTH PP                      |
| 12             | 490677.999 | 85192.704 | NAIL EAST SIDE CTH PP                      |
| 13             | 490611.724 | 85148.423 | NAIL WEST SIDE CTH PP                      |
| 14             | 490729.420 | 85149.899 | NAIL WEST SIDE CTH PP                      |
| 23             | 490552.516 | 85152.391 | NAIL WEST SIDE CTH PP                      |
| 24             | 490682.937 | 85091.154 | NAIL WEST SIDE CTH PP BY THE WEST PIPE END |



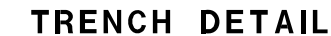
Standard Detail Drawing List

|           |                                                                                                    |
|-----------|----------------------------------------------------------------------------------------------------|
| 08E09-06  | SILT FENCE                                                                                         |
| 13A11-04A | CENTERLINE RUMBLE STRIPS - ASPHALT                                                                 |
| 13A11-04D | CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS                            |
| 13C19-03  | HMA LONGITUDINAL JOINTS                                                                            |
| 15C04-05  | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC |
| 15C08-23A | PERMANENT LONGITUDINAL PAVEMENT MARKINGS                                                           |
| 15C08-23B | TEMPORARY LONGITUDINAL PAVEMENT MARKING                                                            |
| 15C12-09A | TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION                                           |
| 15C12-09B | TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE                             |
| 15C19-09A | MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY                                         |
| 15D39-02  | TRAFFIC CONTROL, DROP-OFF SIGNING                                                                  |
| 15D44-02  | TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES                                          |
| 15D45-03  | TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL                                             |
| 15D51-01  | TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY                                         |





- 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 1½" X 1½" 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.



**SILT FENCE**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

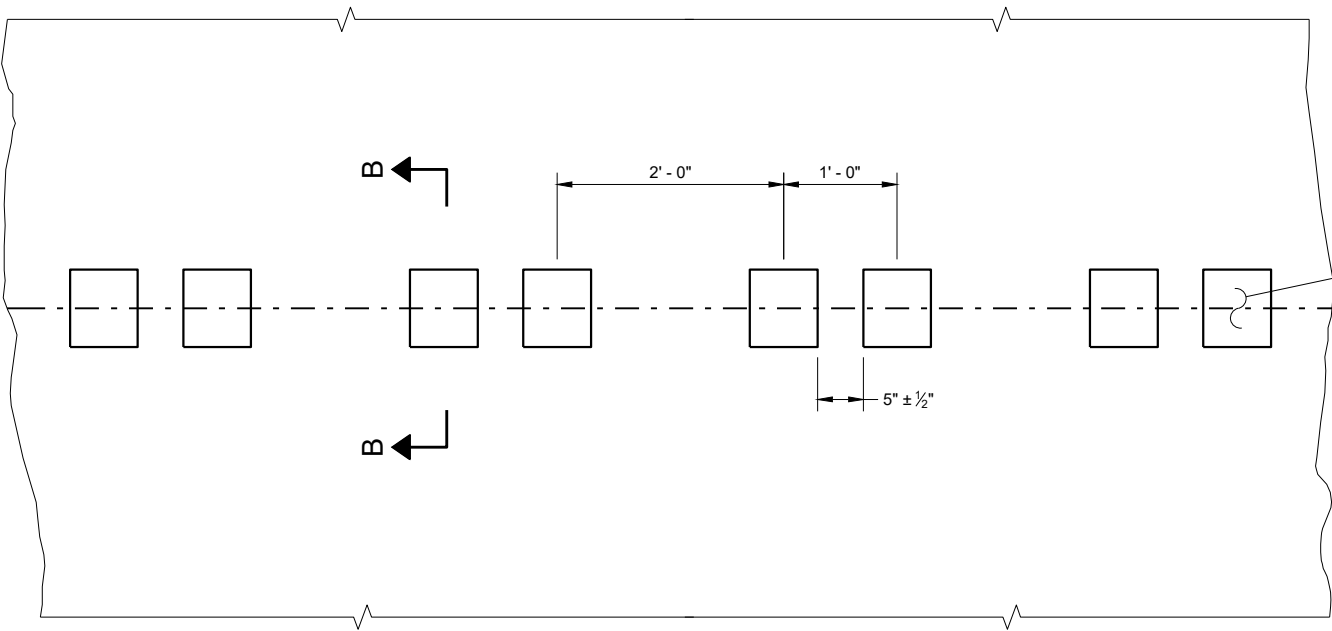
APPROVED  
4-29-05  
DATE

/S/ Beth Cannata  
CHIEF ROADWAY DEVELOPMENT

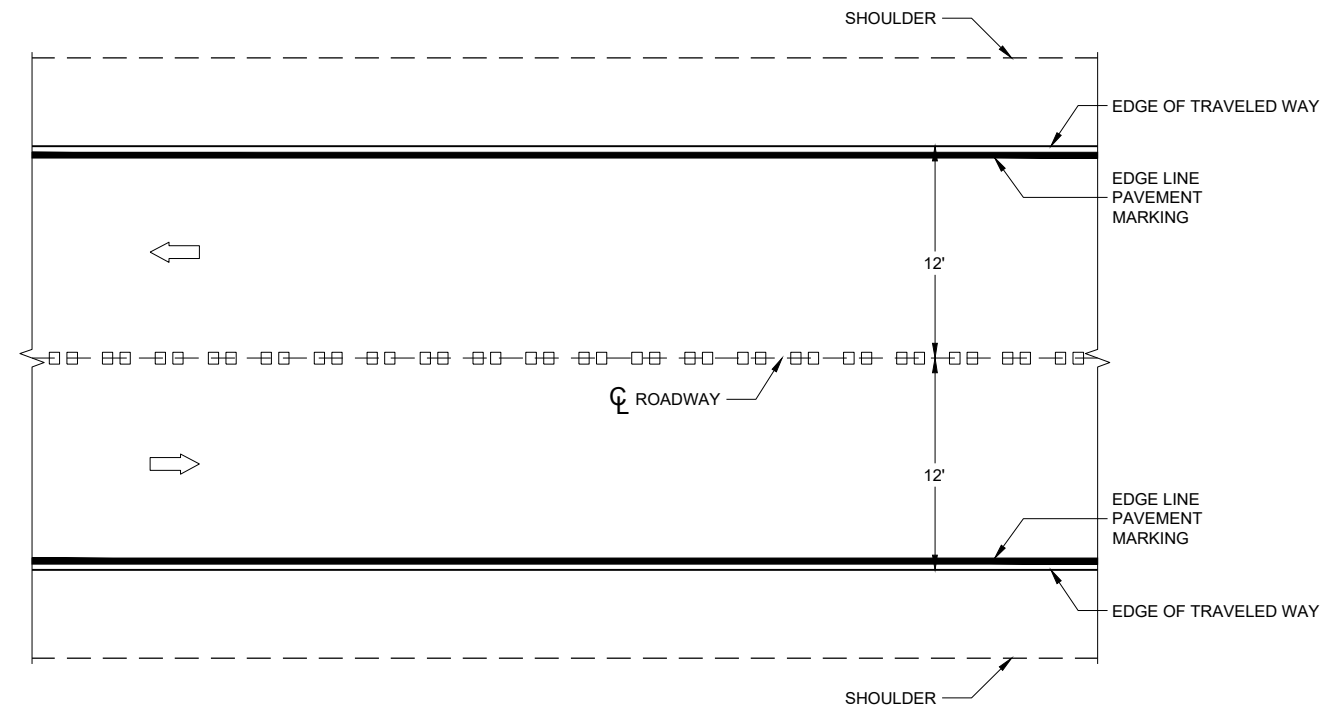
24

ENGINEER

FHWA

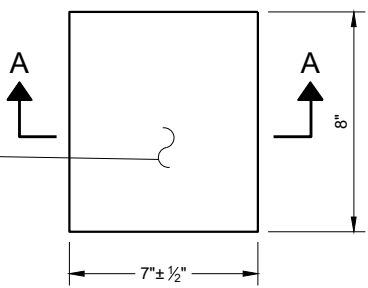


PLAN DETAIL VIEW

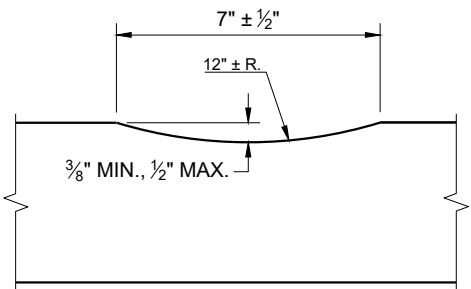


PLAN VIEW

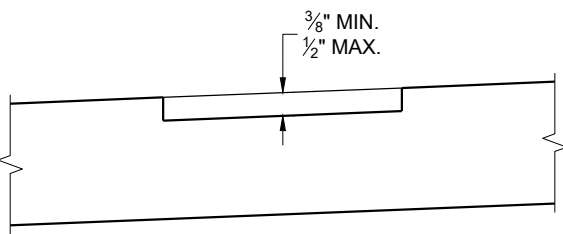
CENTERLINE RUMBLE STRIPS - ASPHALT



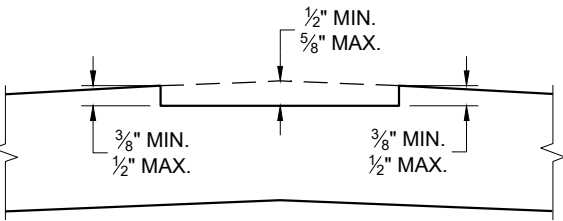
PLAN VIEW  
(SINGLE GROOVE)



SECTION A - A



SECTION B - B  
SUPERELEVATED ROADWAY

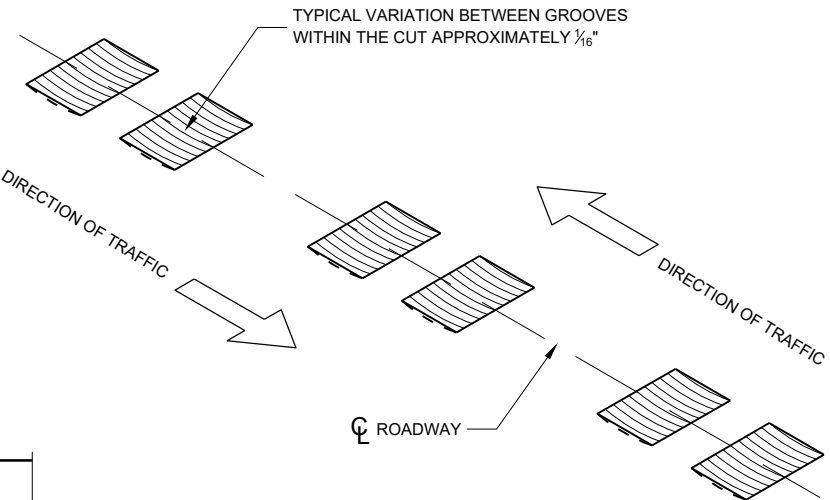


SECTION B - B  
CROWNED ROADWAY

GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A11 SHEETS "d" AND "e".

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

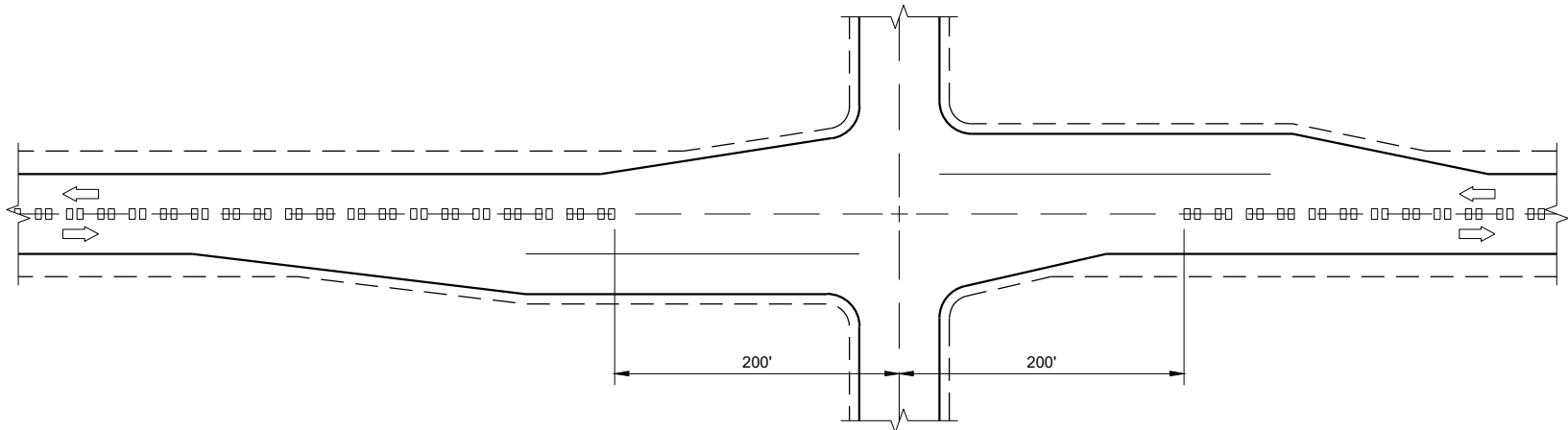


ISOMETRIC

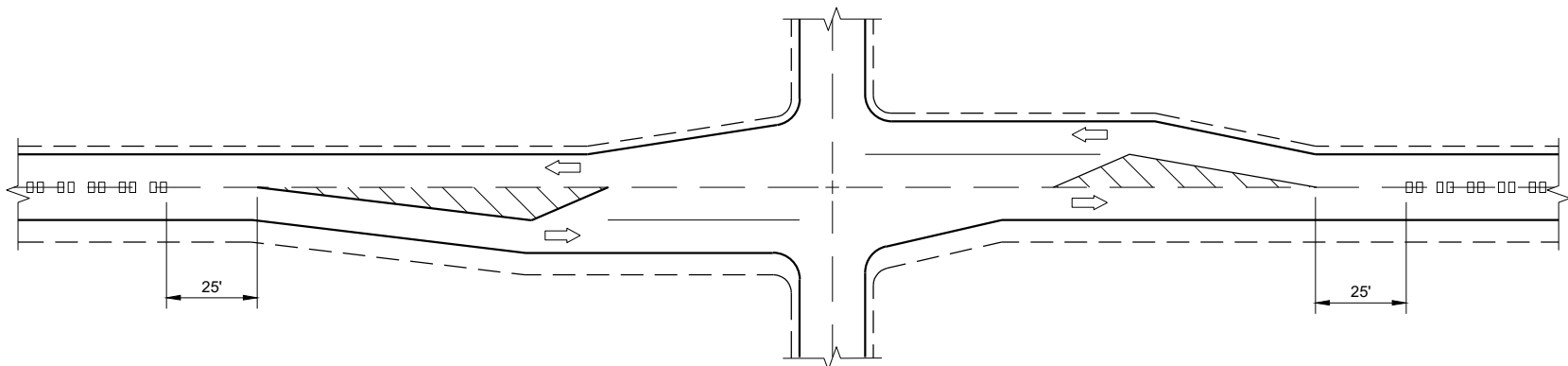
CENTERLINE RUMBLE STRIPS - ASPHALT

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

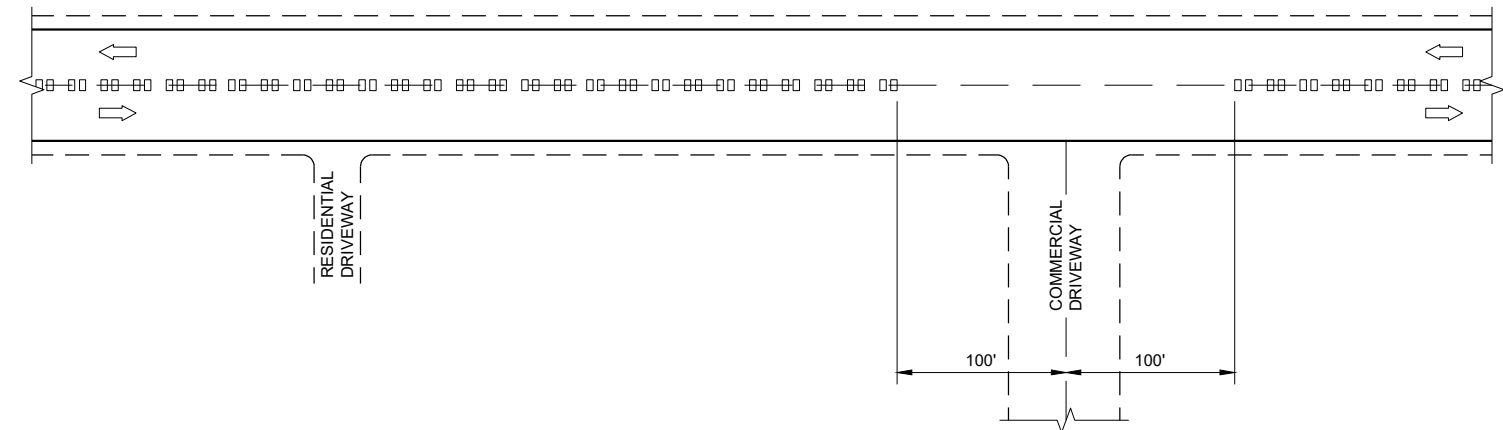




CENTERLINE GROOVES AT INTERSECTIONS



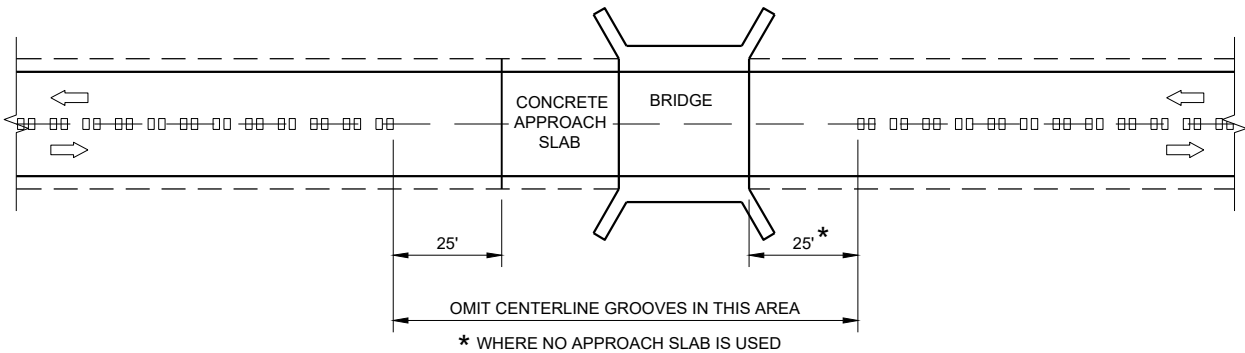
CENTERLINE GROOVES AT INTERSECTIONS  
(WITH LEFT TURN LANES)



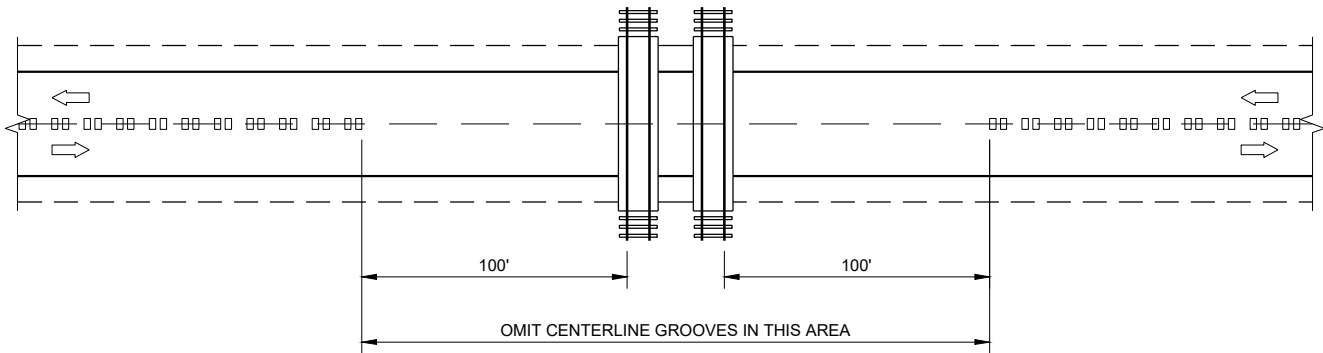
CENTERLINE GROOVES AT DRIVEWAYS<sup>①</sup>

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES

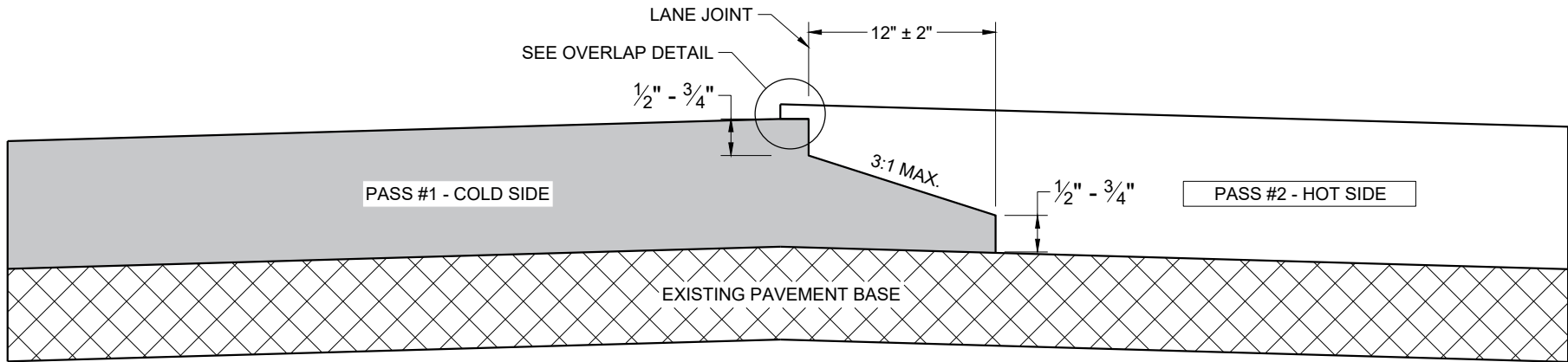


CENTERLINE GROOVES AT RAILROADS

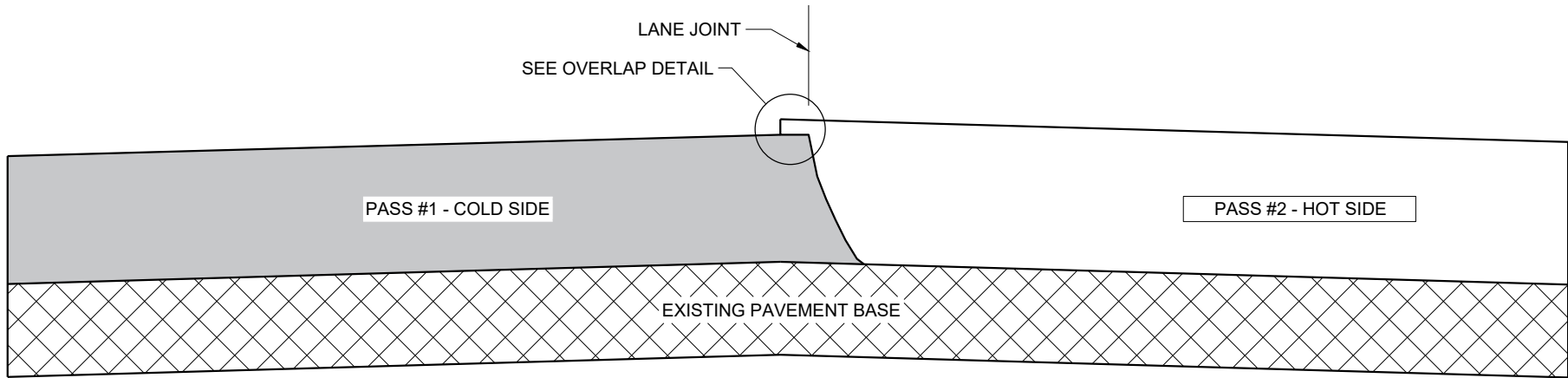
CENTER LINE  
RUMBLE STRIPS -  
INTERSECTIONS, DRIVEWAYS,  
BRIDGES, RAIL ROADS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

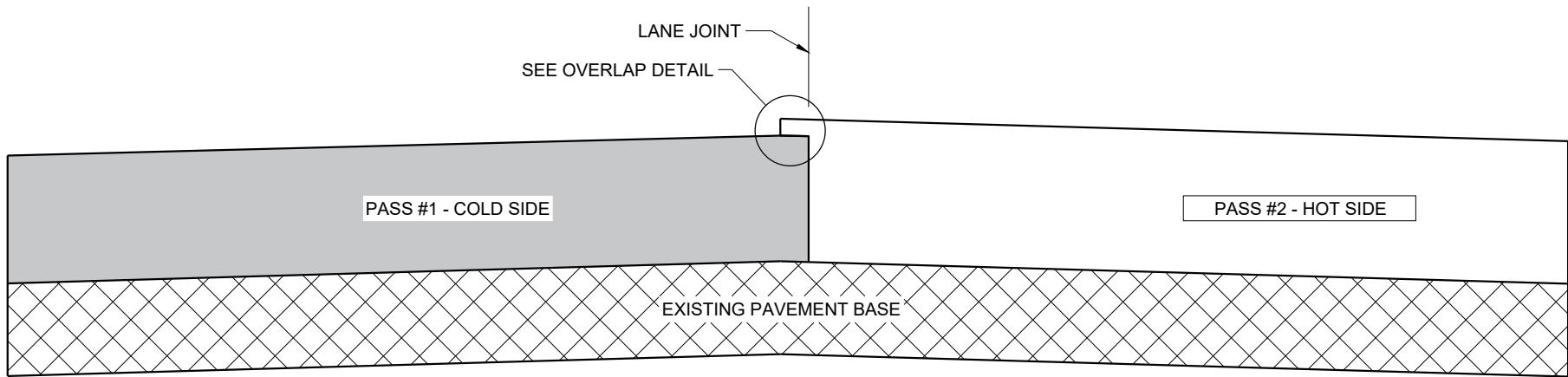
APPROVED  
May 2023 /S/ John Jenkins  
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER 26  
FHWA



TYPICAL PAVEMENT CROSS SECTION  
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION  
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION  
VERTICAL JOINT (MILLED)

GENERAL NOTES

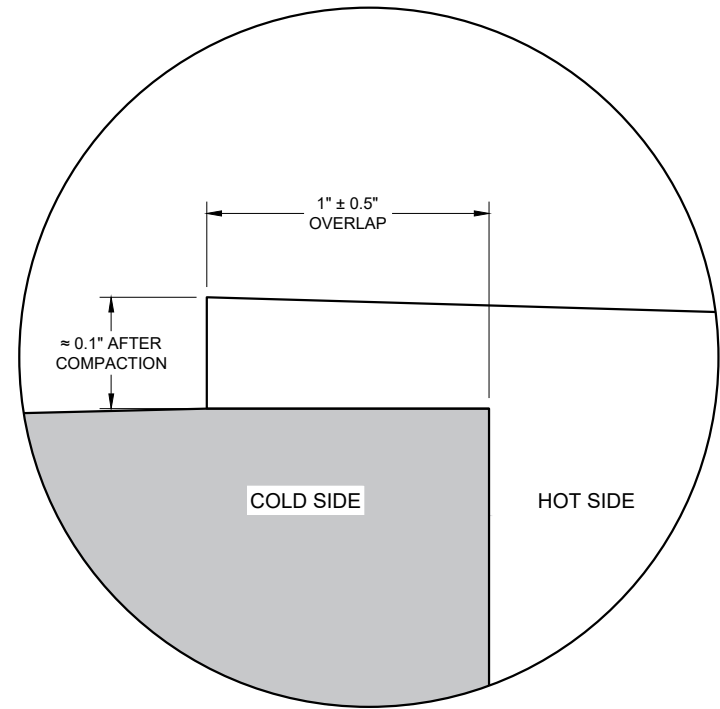
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY  $1" \pm 0.5"$  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)

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
November 2020 /S/ Steven Hefel  
DATE HMA PAVEMENT ENGIN 27  
FHWA

GENERAL NOTES

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

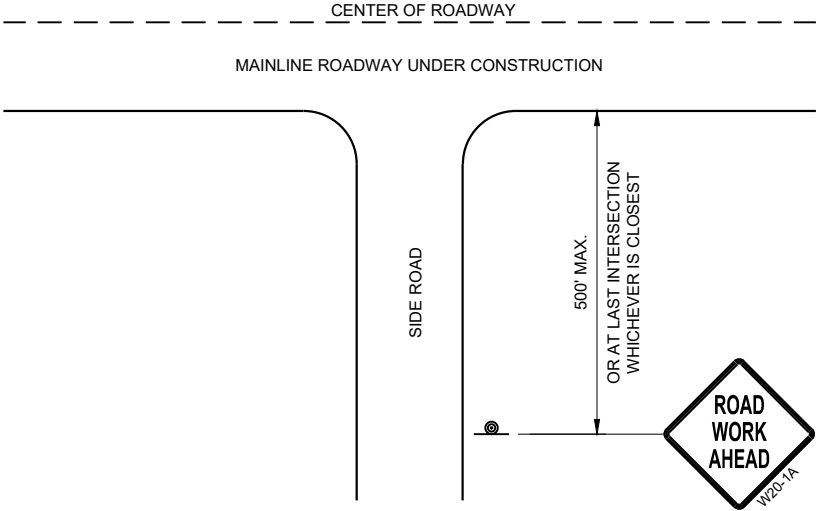
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

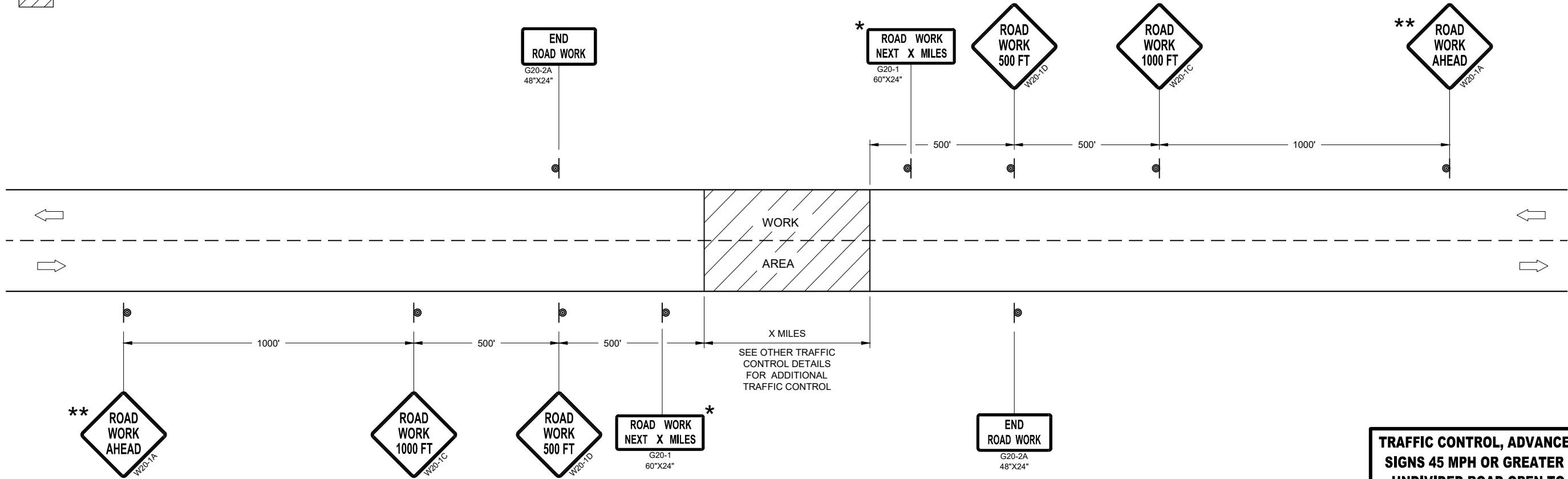
- \* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- \*\* PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA



TYPICAL SIDE ROAD APPROACH  
WARNING SIGN DETAIL

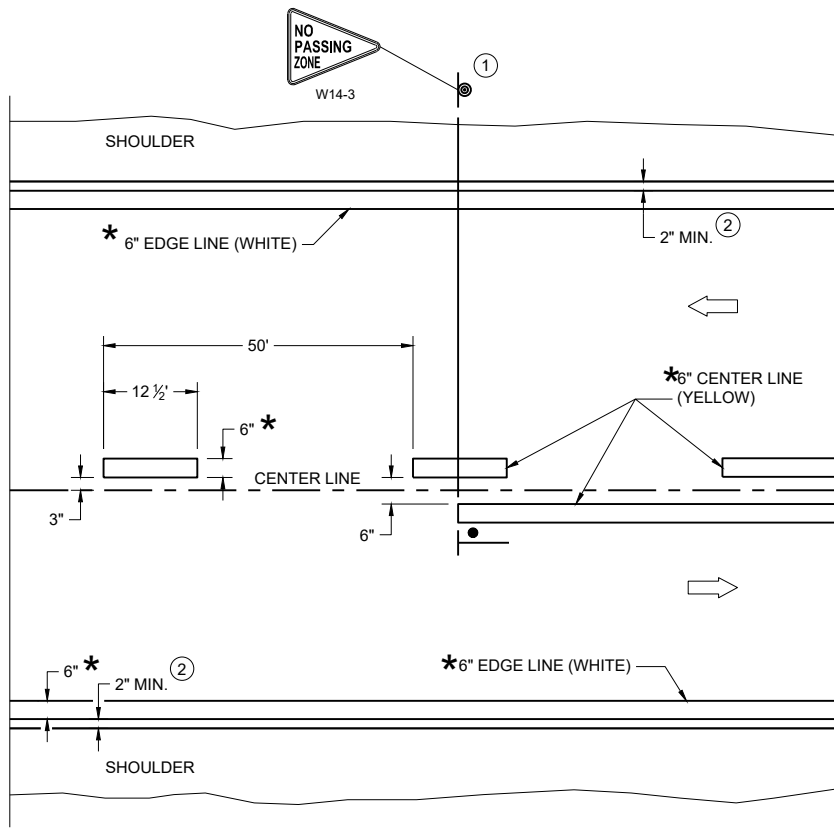


TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

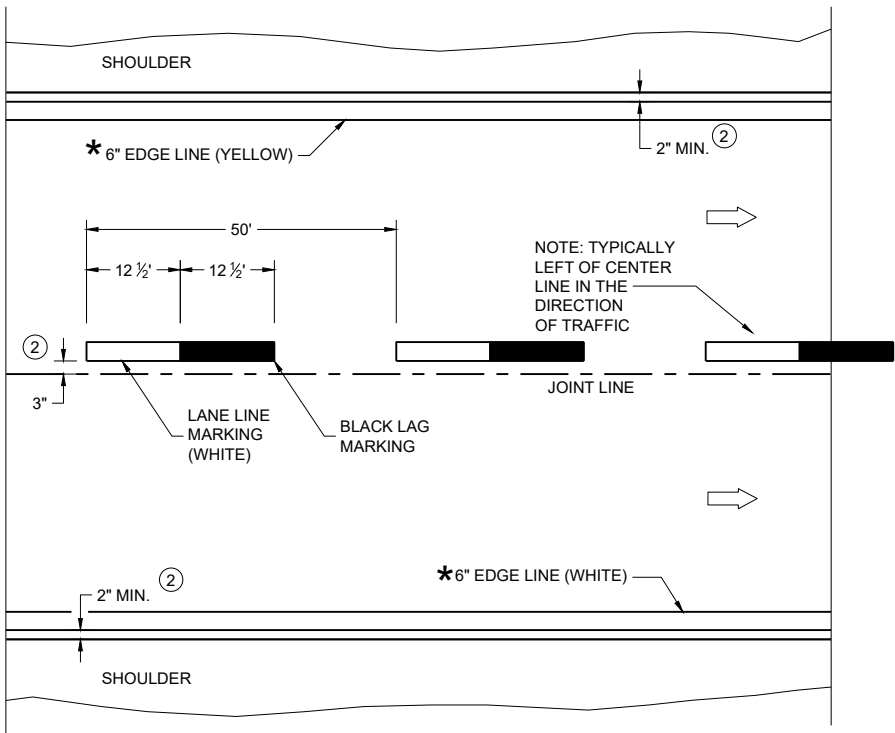
TRAFFIC CONTROL, ADVANCE WARNING  
SIGNS 45 MPH OR GREATER TWO-WAY  
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
July 2018 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER 28  
FHWA



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

\* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

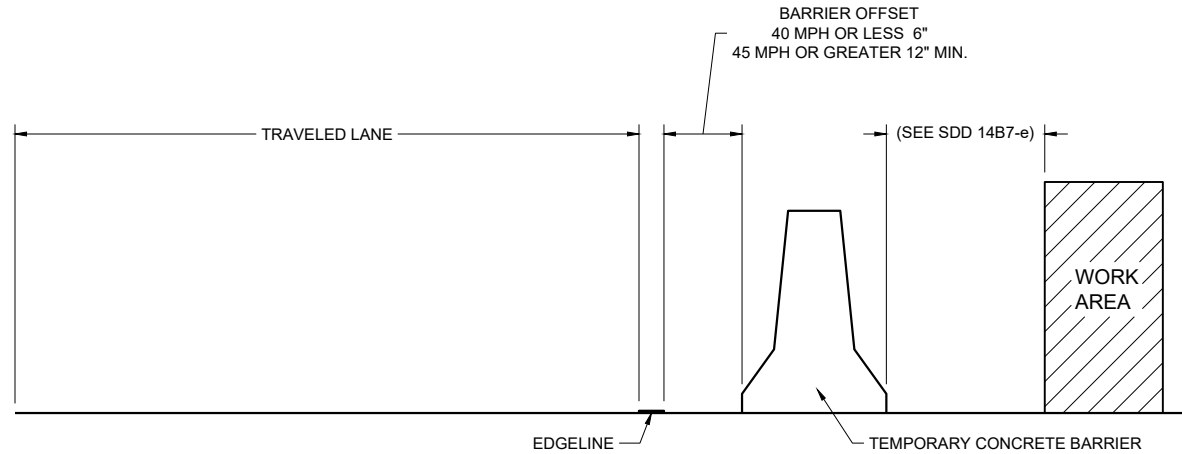
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

| PERMANENT LONGITUDINAL PAVEMENT MARKINGS           |                                                           |
|----------------------------------------------------|-----------------------------------------------------------|
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION |                                                           |
| APPROVED<br>May 2023<br>DATE                       | /S/ Jeannie Silver<br>Statewide Pavement Marking Engineer |
| FHWA                                               | 29                                                        |



TEMPORARY BARRIER OFFSET FROM EDGE LINE

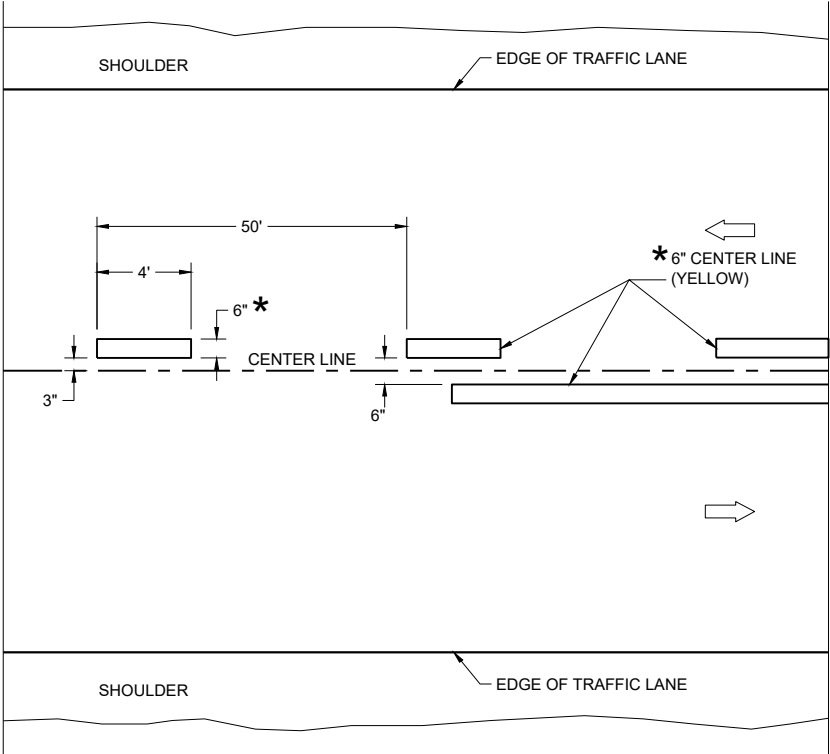
GENERAL NOTES

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

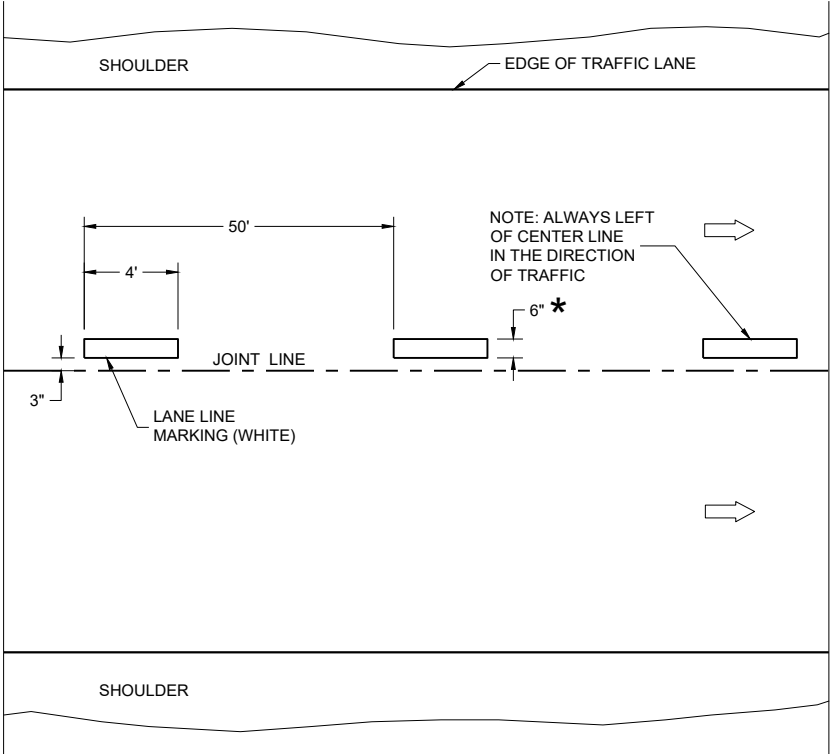
LEGEND

DIRECTION OF TRAFFIC

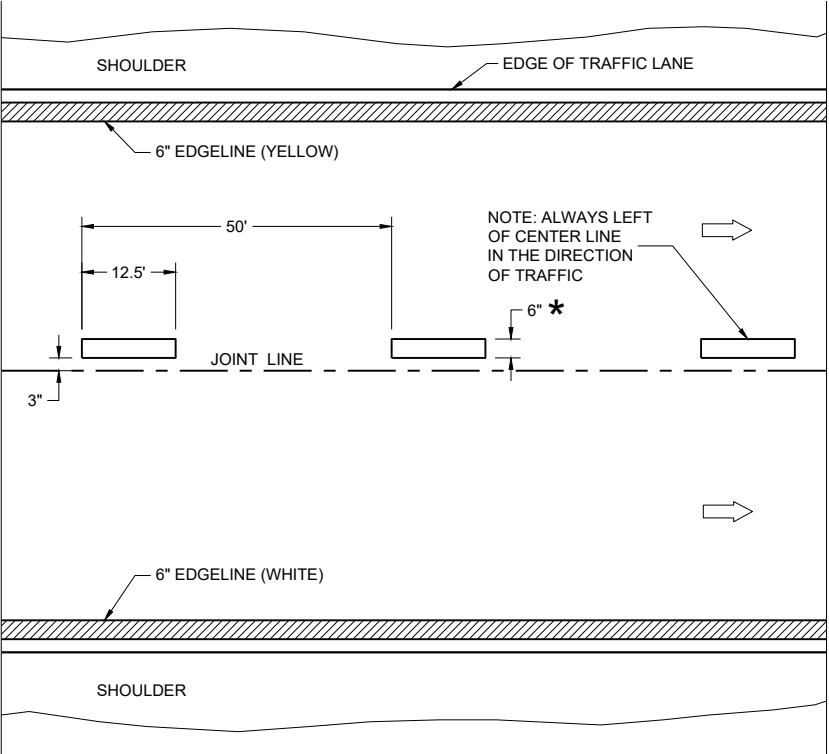
\* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

| TEMPORARY LONGITUDINAL PAVEMENT MARKING            |                                                           |
|----------------------------------------------------|-----------------------------------------------------------|
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION |                                                           |
| APPROVED<br>May 2023<br>DATE                       | /S/ Jeannie Silver<br>Statewide Pavement Marking Engineer |

LEGEND

-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  TEMPORARY PORTABLE RUMBLE STRIP ARRAY
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

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

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

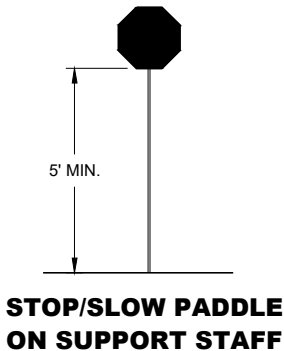
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- ① FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

- UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.
- INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.
- PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.
- DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

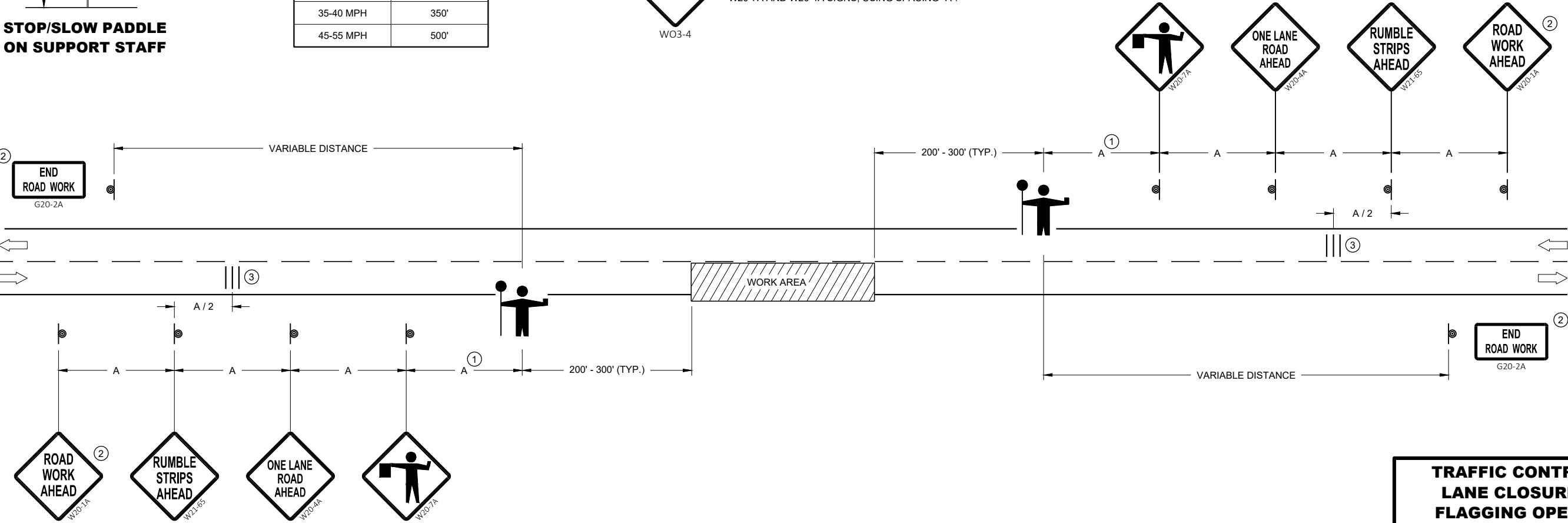


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

| SPEED LIMIT | SPACING "A" |
|-------------|-------------|
| 25-30 MPH   | 200'        |
| 35-40 MPH   | 350'        |
| 45-55 MPH   | 500'        |



USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



|                                                                 |                                             |
|-----------------------------------------------------------------|---------------------------------------------|
| <b>TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION</b> |                                             |
| STATE OF WISCONSIN<br>DEPARTMENT OF TRANSPORTATION              |                                             |
| APPROVED<br>May 2022<br>DATE                                    | /S/ Andrew Heidtke<br>WORK ZONE ENGINEER 31 |
| FHWA                                                            |                                             |



|                                                                                   |                                                   |
|-----------------------------------------------------------------------------------|---------------------------------------------------|
|  | SIGN ON PERMANENT SUPPORT                         |
|  | TRAFFIC CONTROL CONE 42-INCH                      |
|  | TRAFFIC CONTROL DRUM                              |
|  | TEMPORARY PORTABLE RUMBLE STRIP ARRAY             |
|  | DIRECTION OF TRAFFIC                              |
|  | WORK AREA                                         |
| <b>AFAD</b>                                                                       | <b>AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)</b> |

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

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

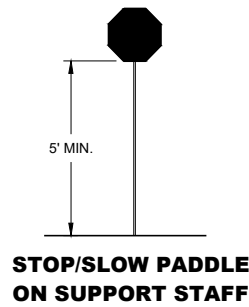
WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

IF THE AUTOMATED FLAGGING ASSISTANCE DEVICE (AFAD) STOPS WORKING, FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

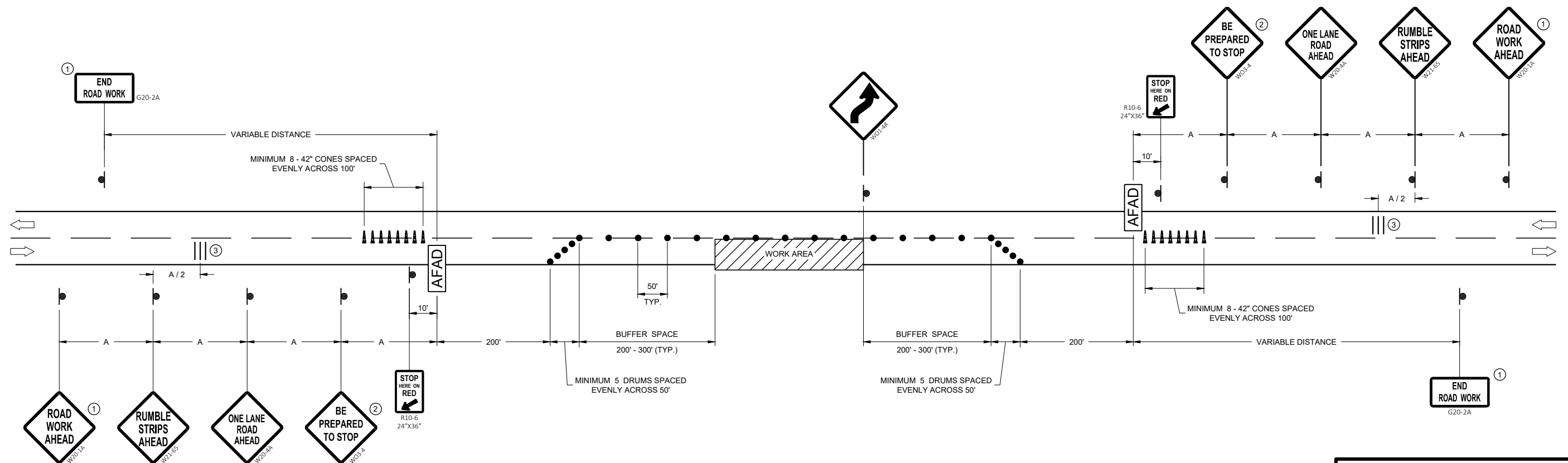
WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

- ① SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- ② IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE W03-4 SIGNS WITH W20-7A SIGNS.

- UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.
- PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.
- DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



| SPEED LIMIT | SPACING "A" |
|-------------|-------------|
| 25-30 MPH   | 200'        |
| 35-40 MPH   | 350'        |
| 45-55 MPH   | 500'        |



**TRAFFIC CONTROL, LANE  
CLOSURE WITH AUTOMATED  
FLAGGER ASSISTANCE DEVICE**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
May 2022  
 DATE

/S/ Andrew Heidtke  
 WORK ZONE ENGINEER 32

FHWA

LEGEND

- V1

LEAD VEHICLE
- V2

MARKING VEHICLE
- V3

SHADOW VEHICLE
- 

TRUCK MOUNTED ATTENUATOR (TMA)
- 

SIGN ON TEMPORARY SUPPORT
- 

DIRECTION OF TRAFFIC

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

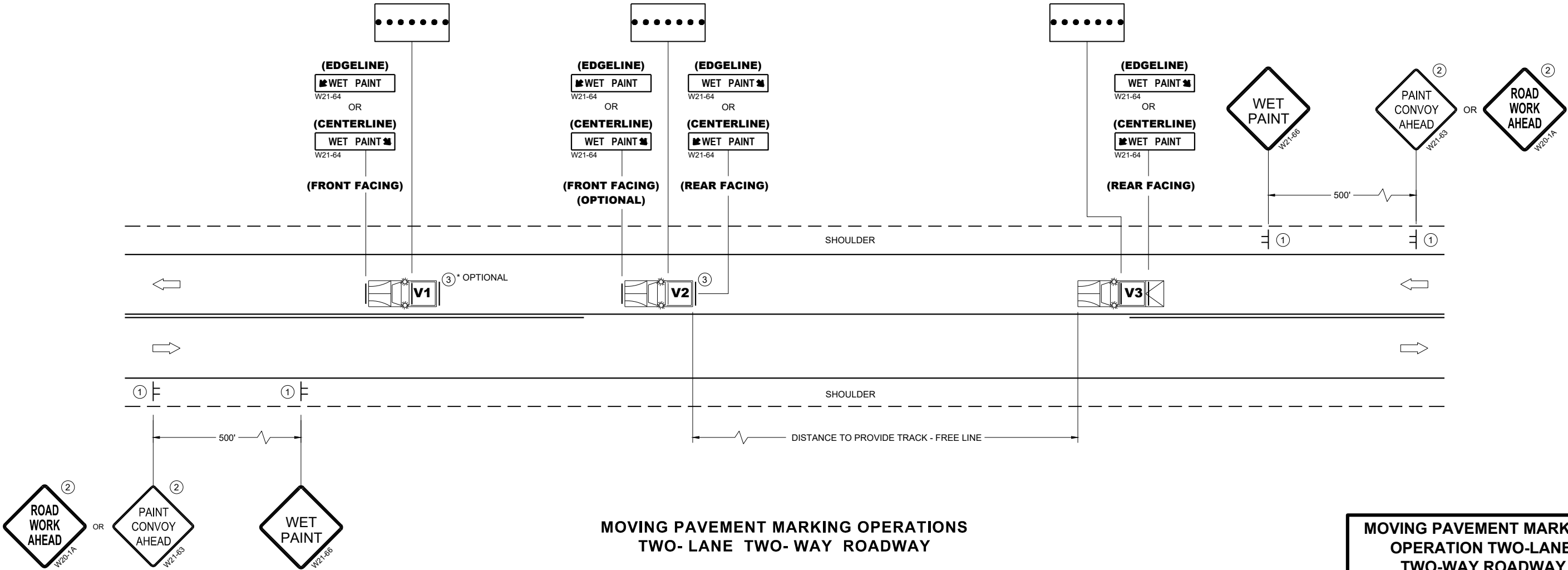
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH

UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.
- ③ V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



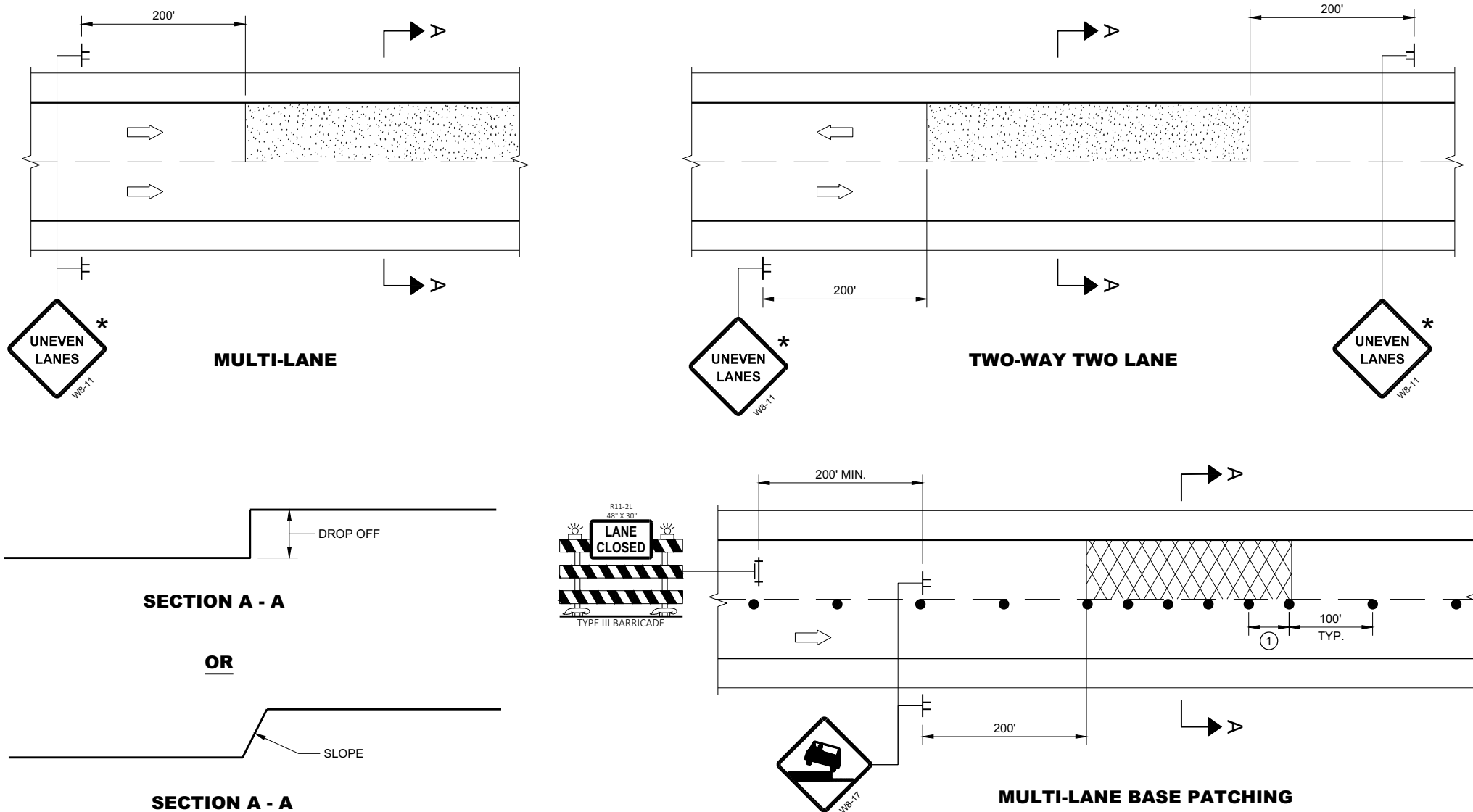
MOVING PAVEMENT MARKING OPERATIONS  
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING  
OPERATION TWO-LANE  
TWO-WAY ROADWAY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
March 2024 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER

FHWA

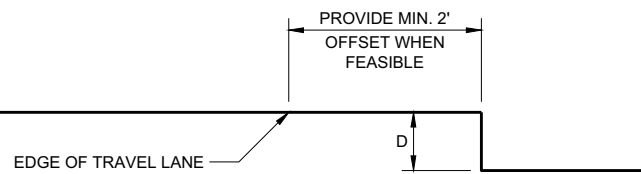
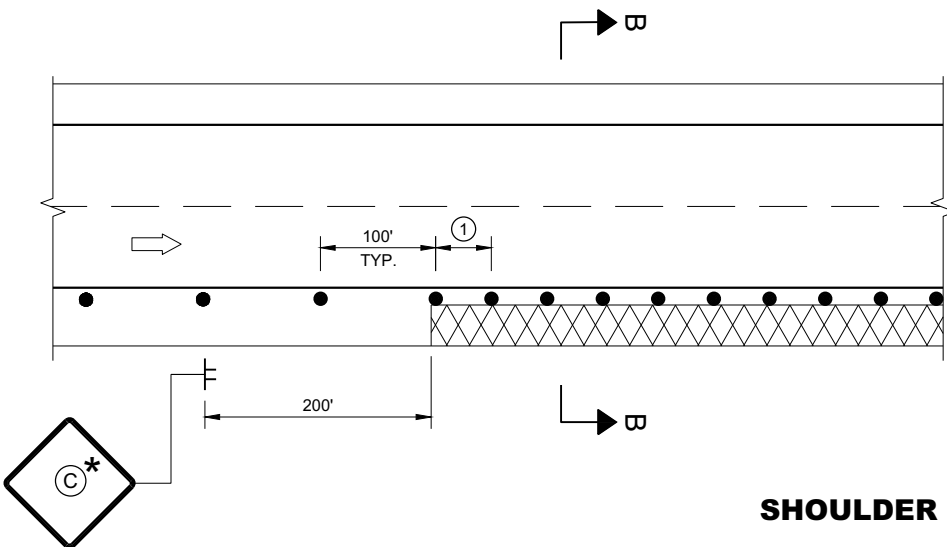


GENERAL NOTES

- FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.
- \* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.
- ① USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE



SECTION B - B

SHOULDER DROP-OFFS

| D                                     | SIGN C                                                                                              |
|---------------------------------------|-----------------------------------------------------------------------------------------------------|
| < 2" WITH A SLOPE STEEPER THAN 3:1    | LOW SHOULDER<br>WO8-9                                                                               |
| 2" < 6" WITH A SLOPE STEEPER THAN 3:1 | SHOULDER DROP - OFF<br>W8-9A<br>PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT |

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
March 2018 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER 34  
FHWA

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

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

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

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

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

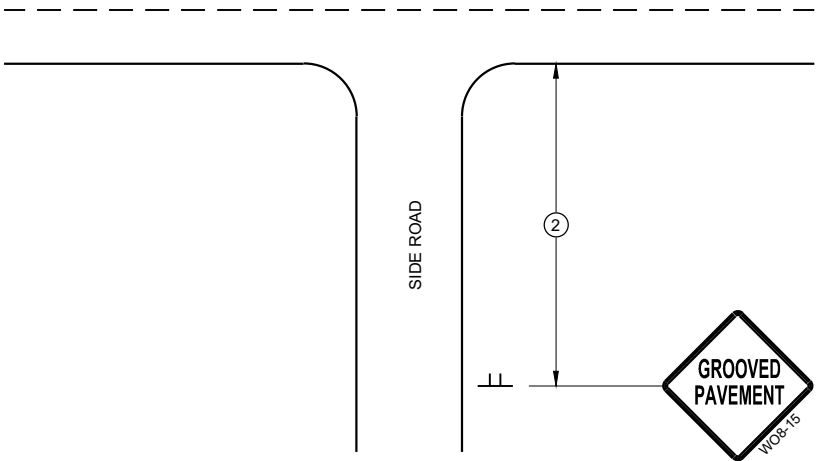
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

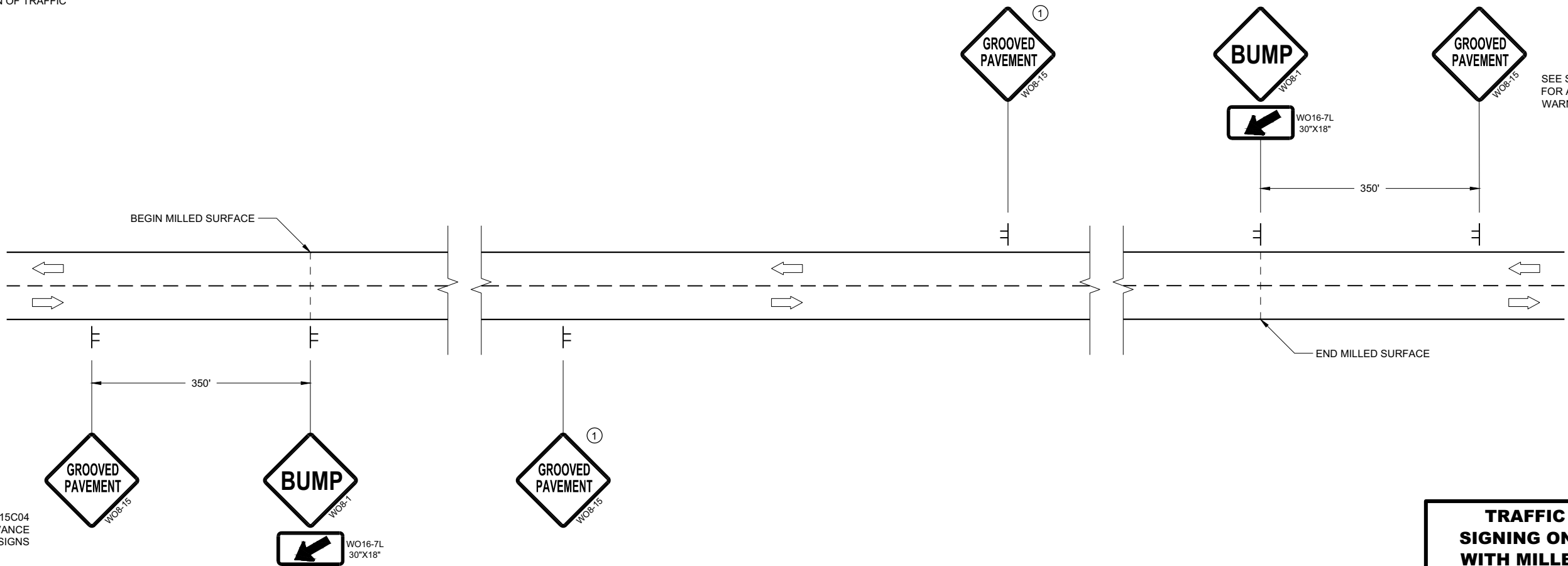
- 1 PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- 2 PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH  
SIGN DETAIL



SEE SDD15C04  
FOR ADVANCE  
WARNING SIGNS

SEE SDD15C04  
FOR ADVANCE  
WARNING SIGNS

DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL,  
SIGNING ON ROADWAYS  
WITH MILLED SURFACES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
February 2020 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER 35

FHWA

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

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

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

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

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

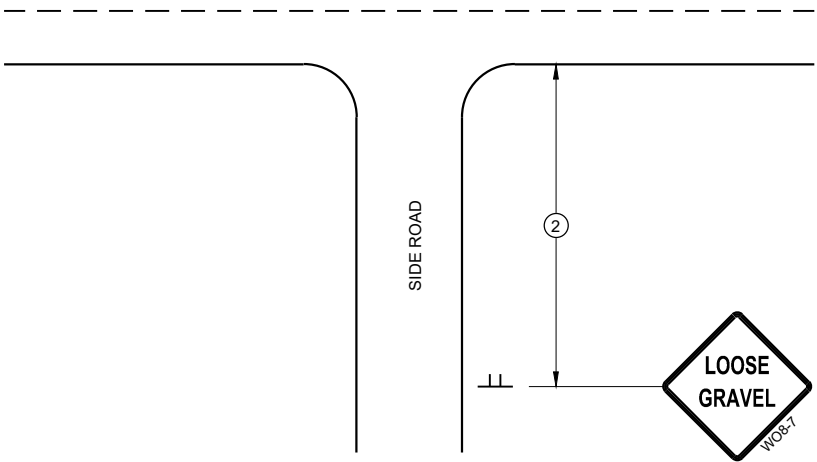
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

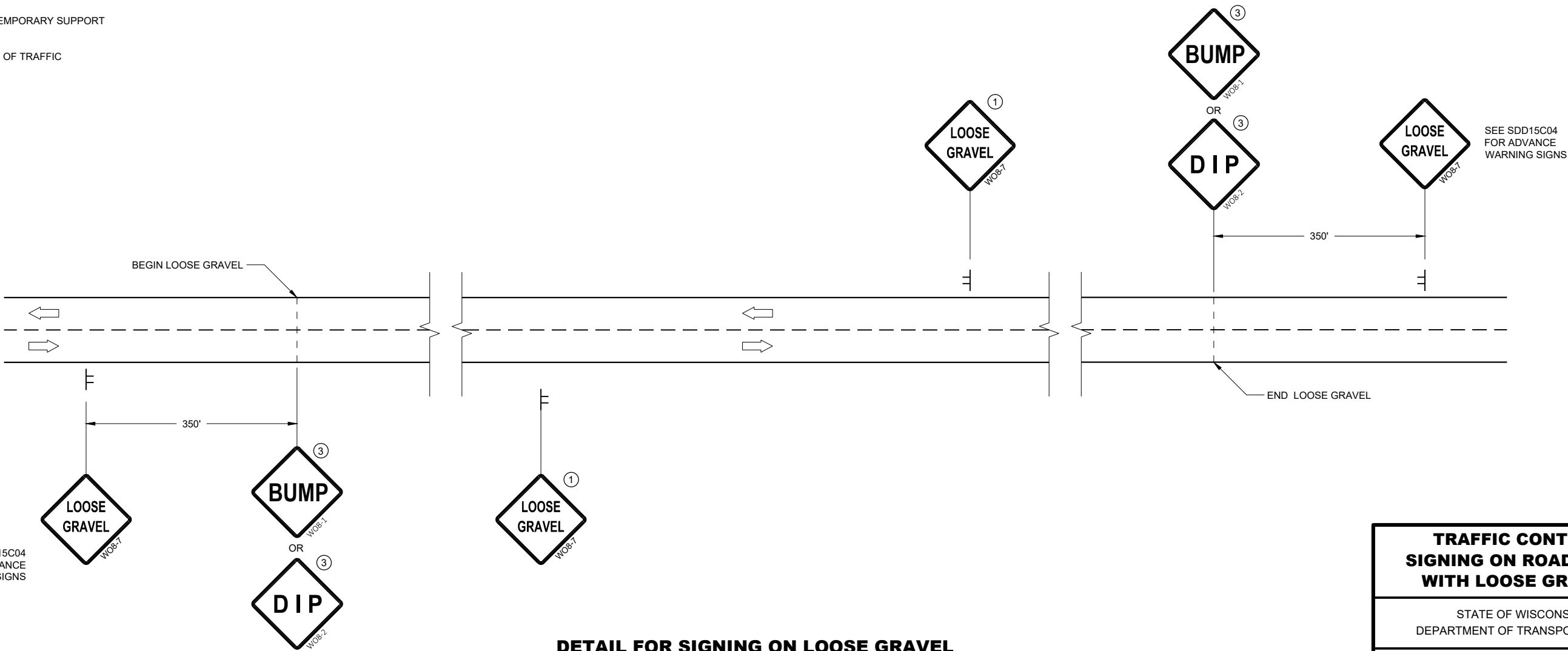
- 1 PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- 2 PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.
- 3 ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH  
SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL  
OR CHIP SEALED SURFACES

TRAFFIC CONTROL  
SIGNING ON ROADWAYS  
WITH LOOSE GRAVEL

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
February 2021 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER 36

FHWA

LEGEND

- V1

WORK VEHICLE
- V2

SHADOW VEHICLE
- 

TRUCK MOUNTED ATTENUATOR (TMA)
- 

FLASHING ARROW PANEL (CAUTION)
- 

WORK AREA
- 

DIRECTION OF TRAFFIC

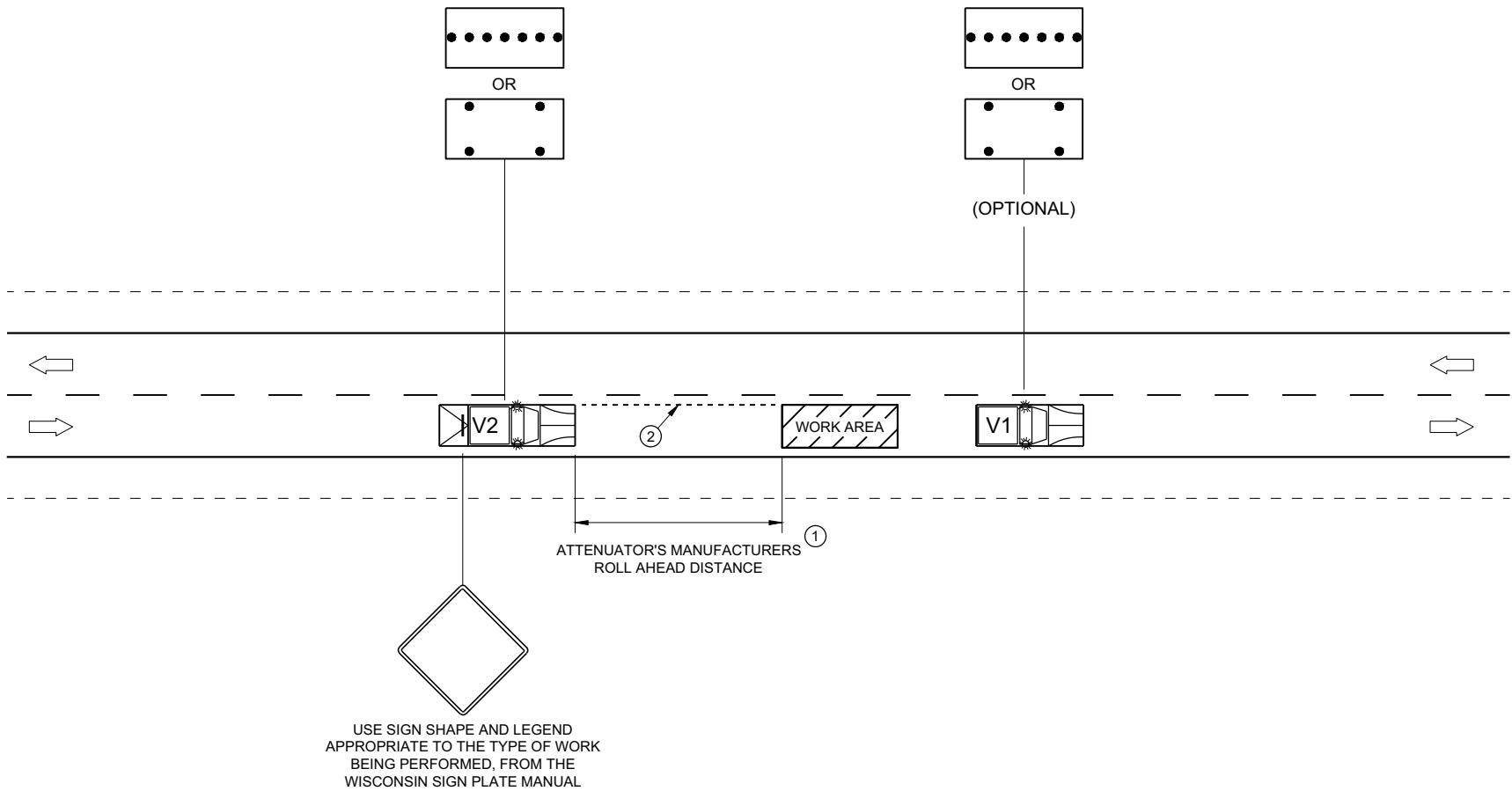
| POSTED SPEED PRIOR TO<br>WORK STARTING (MPH) | DECISION SIGHT<br>DISTANCE (D) |
|----------------------------------------------|--------------------------------|
| 0 - 25                                       | 550'                           |
| 30                                           | 550'                           |
| 35                                           | 700'                           |
| 40                                           | 700'                           |
| 45                                           | 900'                           |
| 50                                           | 900'                           |
| 55                                           | 1200'                          |

GENERAL NOTES

- ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
- MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.
- ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.
- ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.
- USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.
- ①

DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
- ②

ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



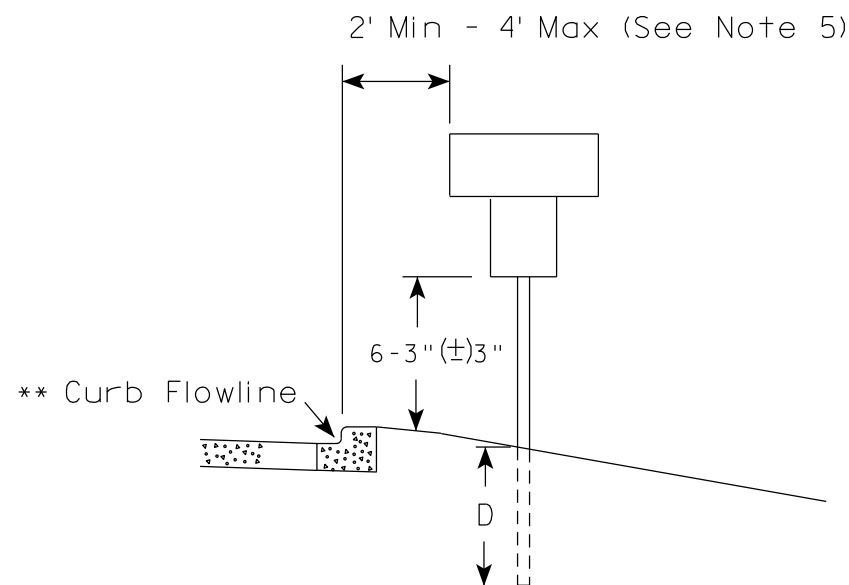
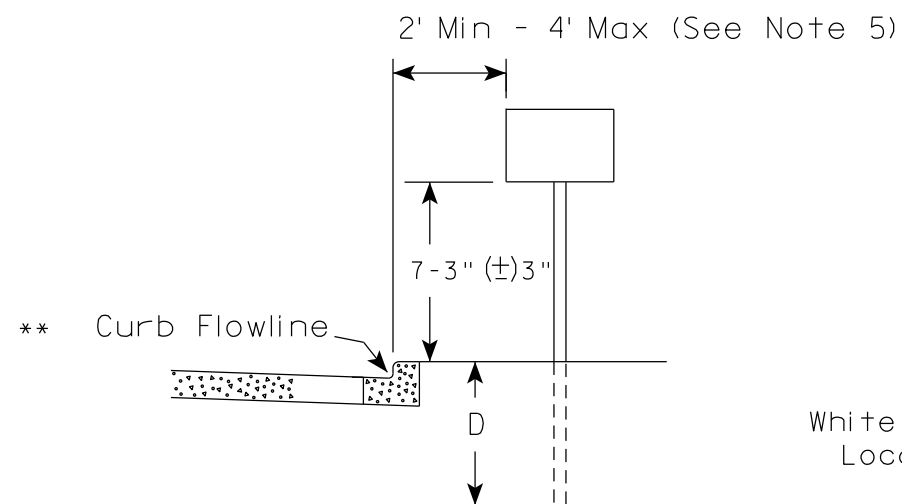
TRAFFIC CONTROL,  
MOBILE OPERATIONS ON  
AN UNDIVIDED ROADWAY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
February 2021 /S/ Andrew Heidtke  
DATE STATEWIDE WORK ZONE T SAFETY ENGINEER 37  
FHWA

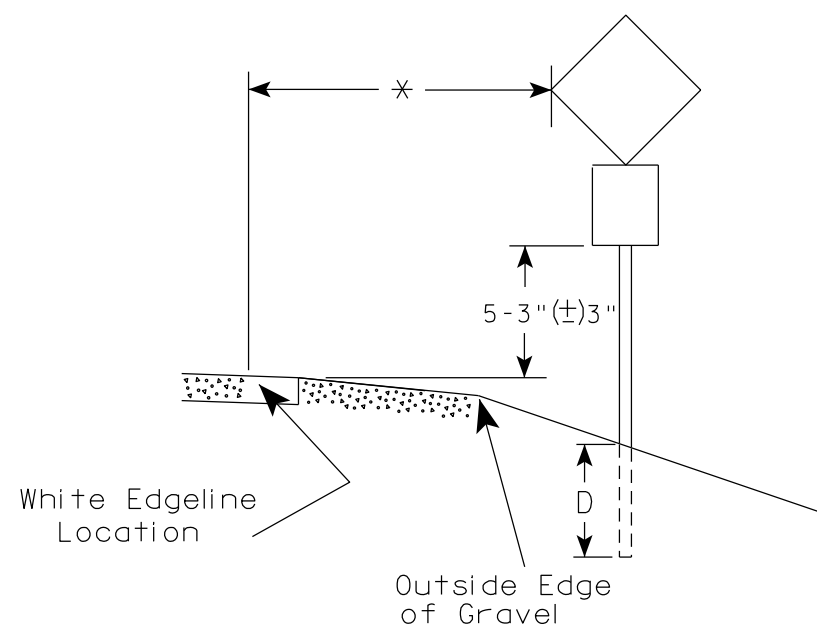
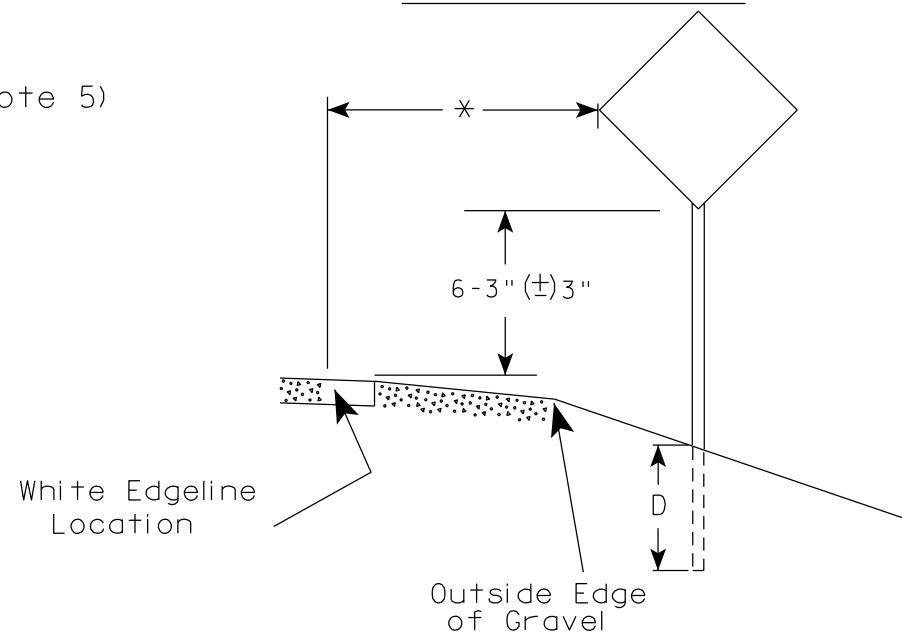


## URBAN AREA



\* \* 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.

## RURAL AREA (See Note 2)



\* 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.

## GENERAL NOTES

- Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
- 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".
- For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
- Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the Engineer.

## POST EMBEDMENT DEPTH

| Area of Sign Installation ( Sq. Ft. ) | D ( Min ) |
|---------------------------------------|-----------|
| 20 or Less                            | 4'        |
| Greater than 20                       | 5'        |

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:

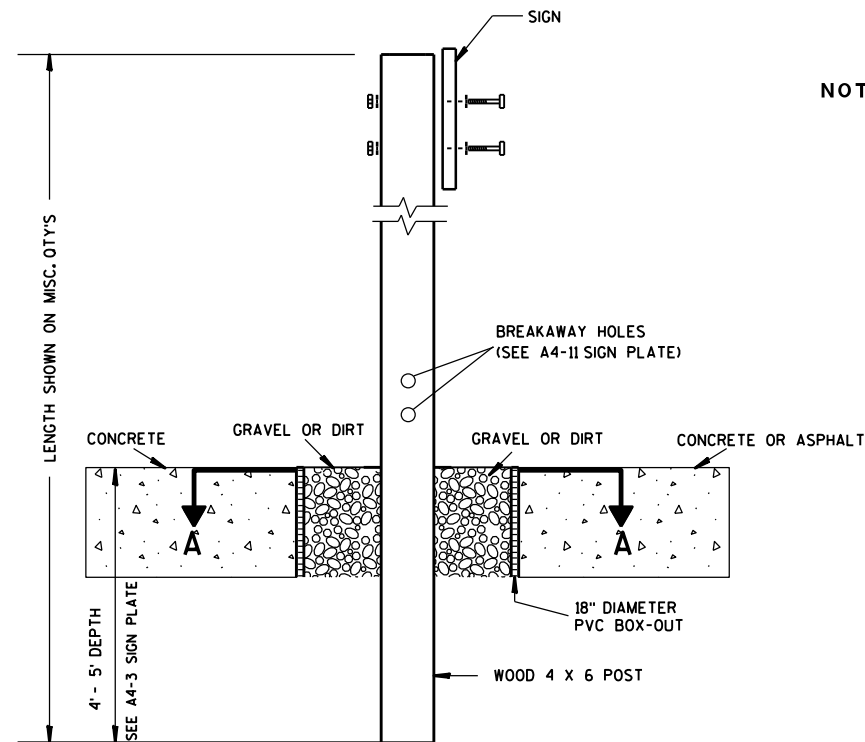
HWY:

COUNTY:

SHEET NO: 38

E

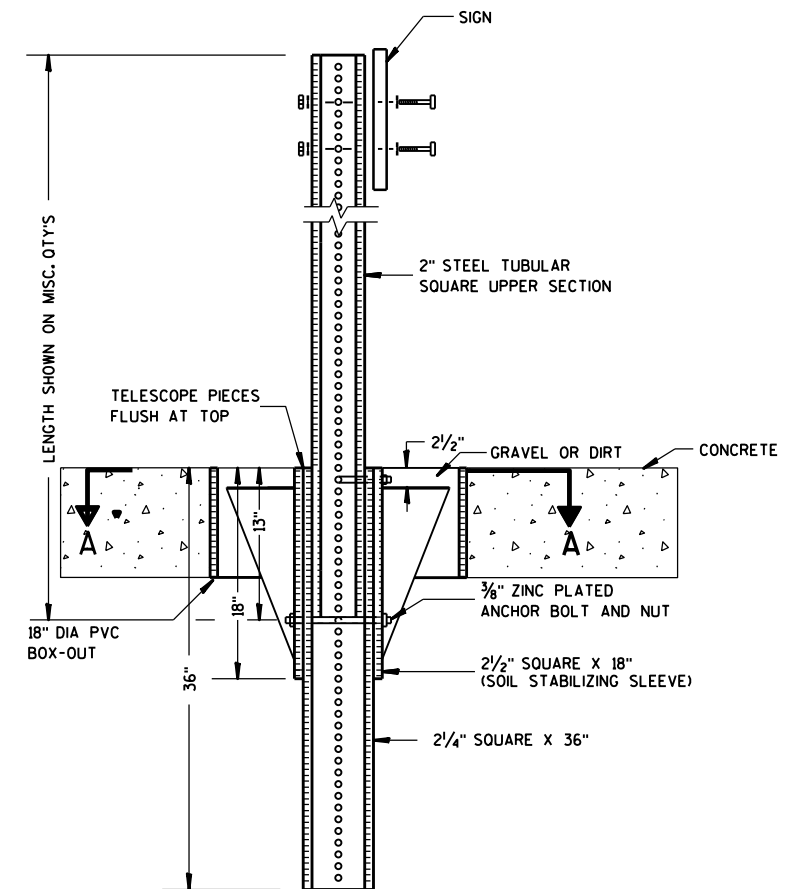




### ELEVATION VIEW

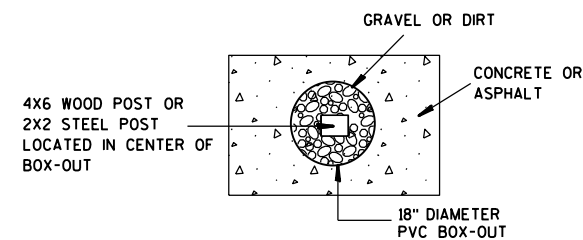
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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 PLAT 39 A4-3B.1

PROJECT NO:

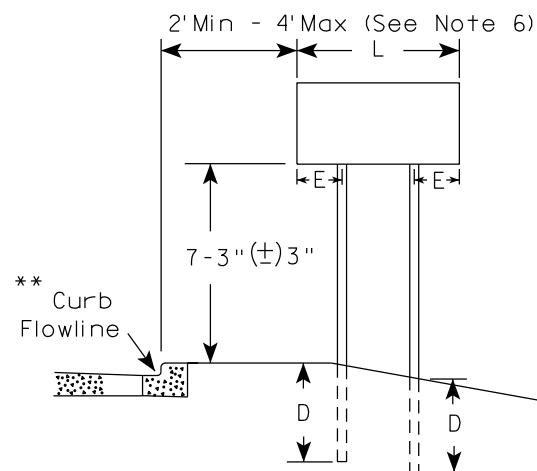
HWY:

COUNTY:

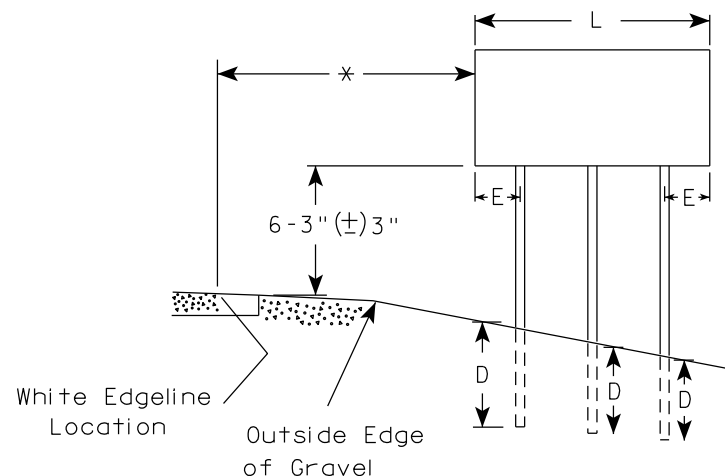
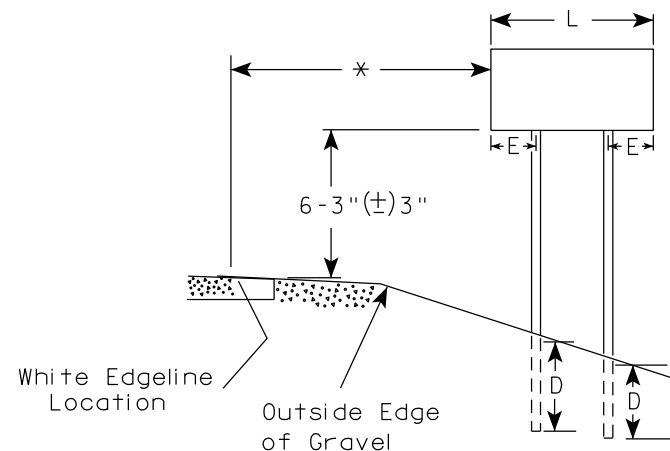
SHEET NO:

E

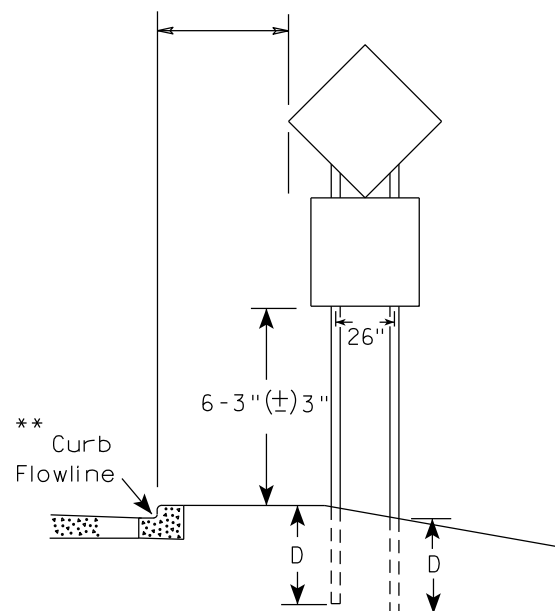
URBAN AREA



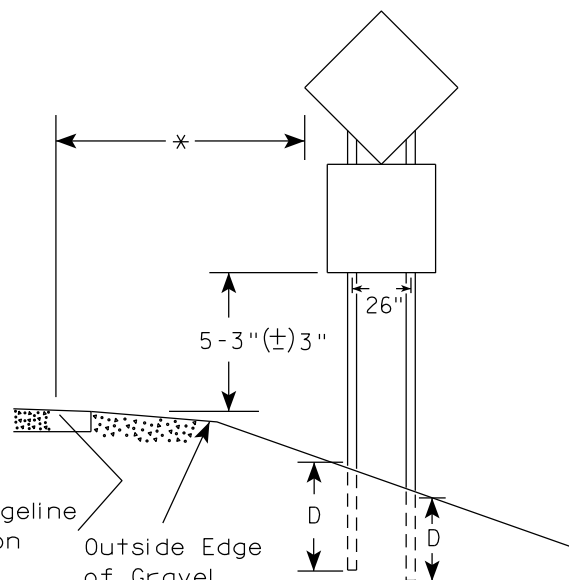
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

\*\*\*

| SIGN SHAPE OTHER THAN DIAMOND<br>(TWO POSTS REQUIRED) |     |
|-------------------------------------------------------|-----|
| L                                                     | E   |
| Greater than 48"<br>Less than 60"                     | 12" |
| 60" to 108"                                           | L/5 |

| SIGN SHAPE OTHER THAN DIAMOND<br>(THREE POSTS REQUIRED) |     |
|---------------------------------------------------------|-----|
| L                                                       | E   |
| Greater than 108"<br>to 144"                            | 12" |

POST EMBEDMENT DEPTH

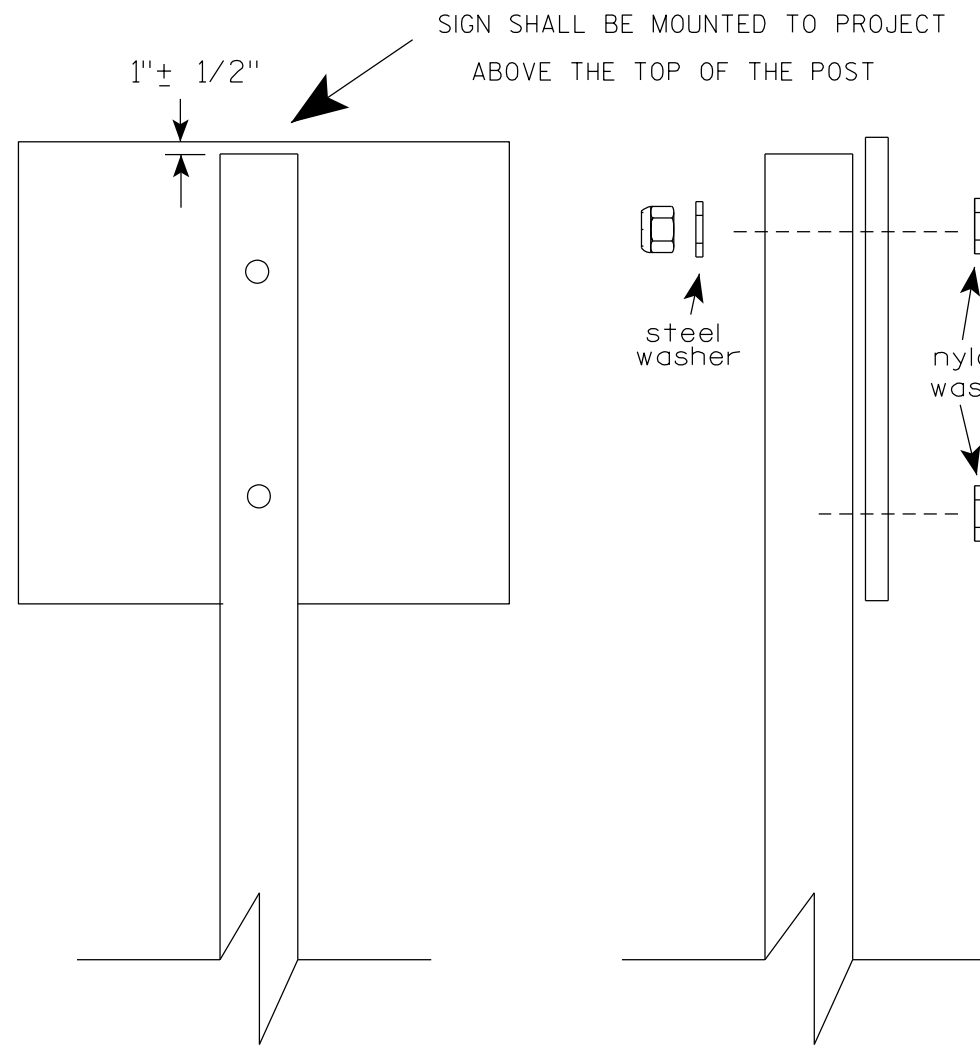
| Area of Sign<br>Installation<br>( Sq.Ft. ) | D<br>( Min ) |
|--------------------------------------------|--------------|
| 20 or Less                                 | 4'           |
| Greater than 20                            | 5'           |

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



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.

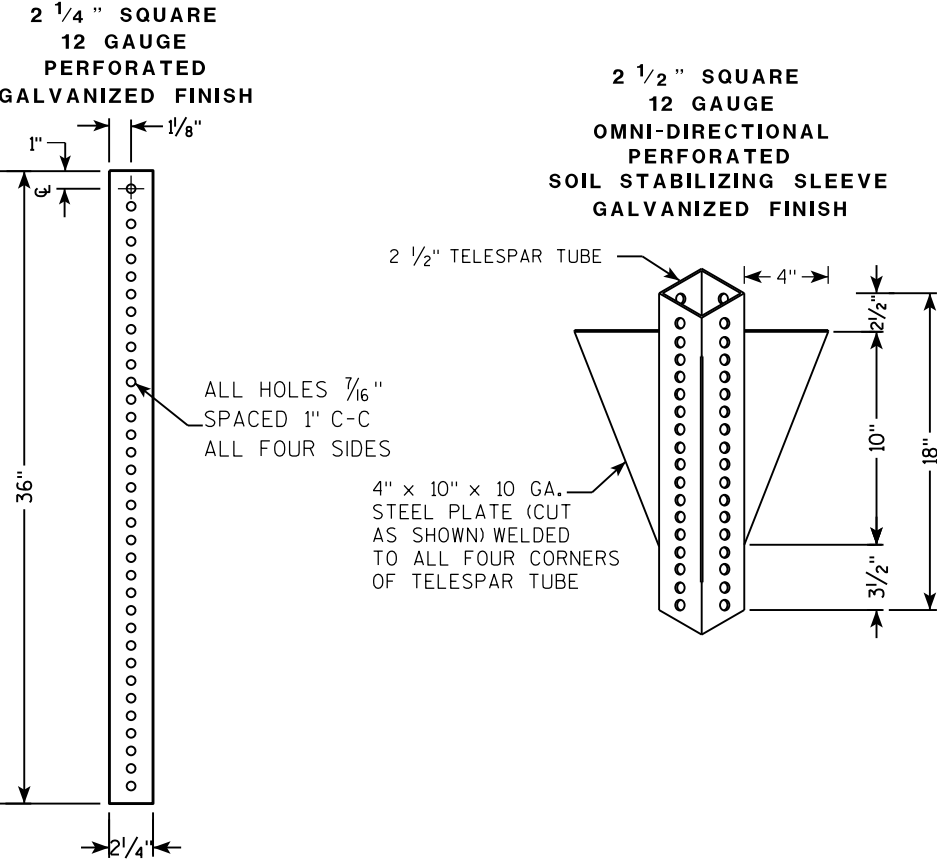
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS -  $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS -  $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)  
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS -  $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)  
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS -  $\frac{9}{32}$ " (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  $\frac{3}{8}$ " I.D. X  $\frac{1}{16}$ " STEEL
  - 1-1/4" O.D. X  $\frac{3}{8}$ " I.D. X .080 NYLON

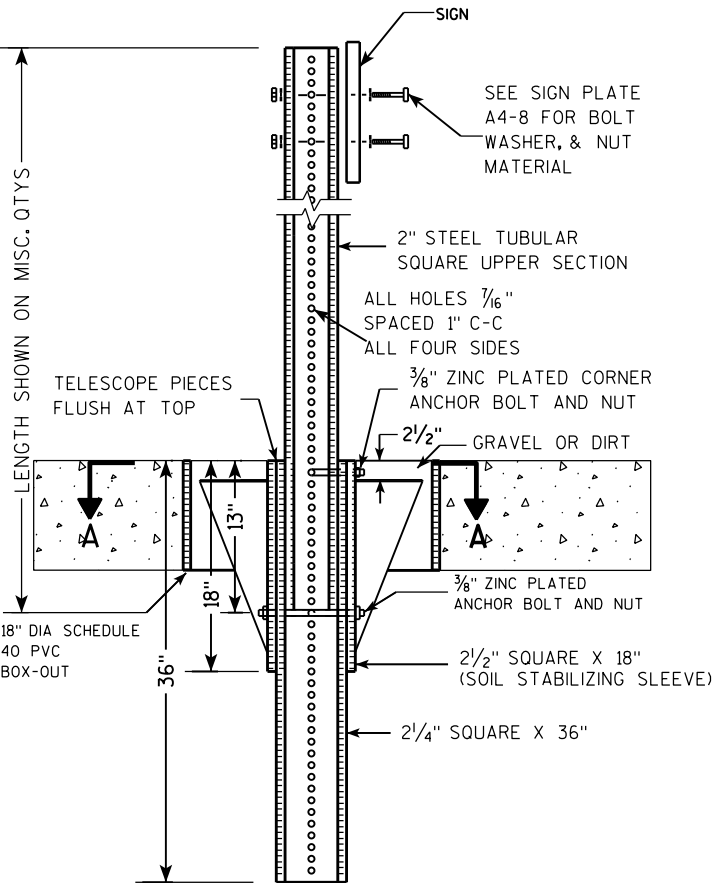
\* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

|                                  |                                                       |
|----------------------------------|-------------------------------------------------------|
| ATTACHMENT OF SIGNS<br>TO POSTS  |                                                       |
| WISCONSIN DEPT OF TRANSPORTATION |                                                       |
| APPROVED                         | <i>Matthew R. Rauch</i><br>For State Traffic Engineer |
| DATE 4/1/2020                    | PLATE NO. A4-8.9                                      |

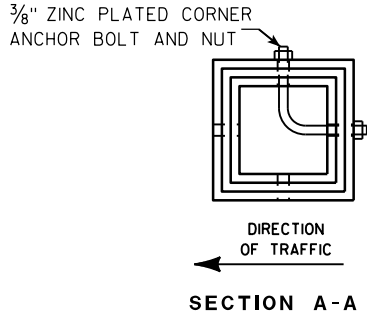
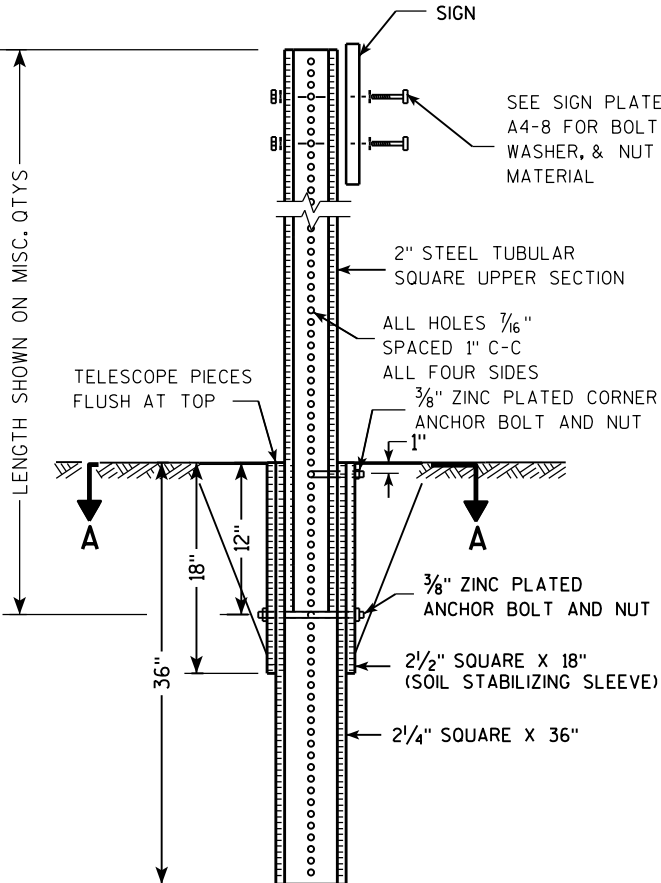
TELESCOPIC TUBING ANCHORS  
TWO PIECE SYSTEM



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)



| 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                        |

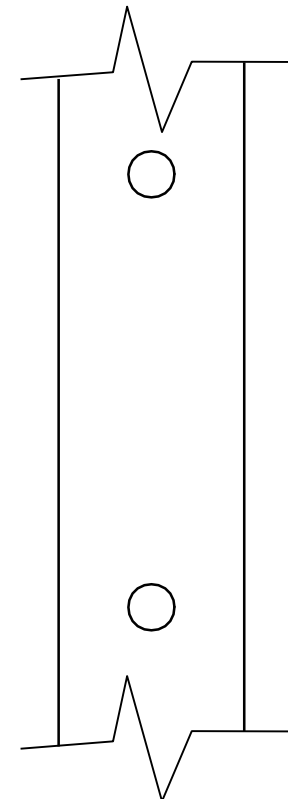
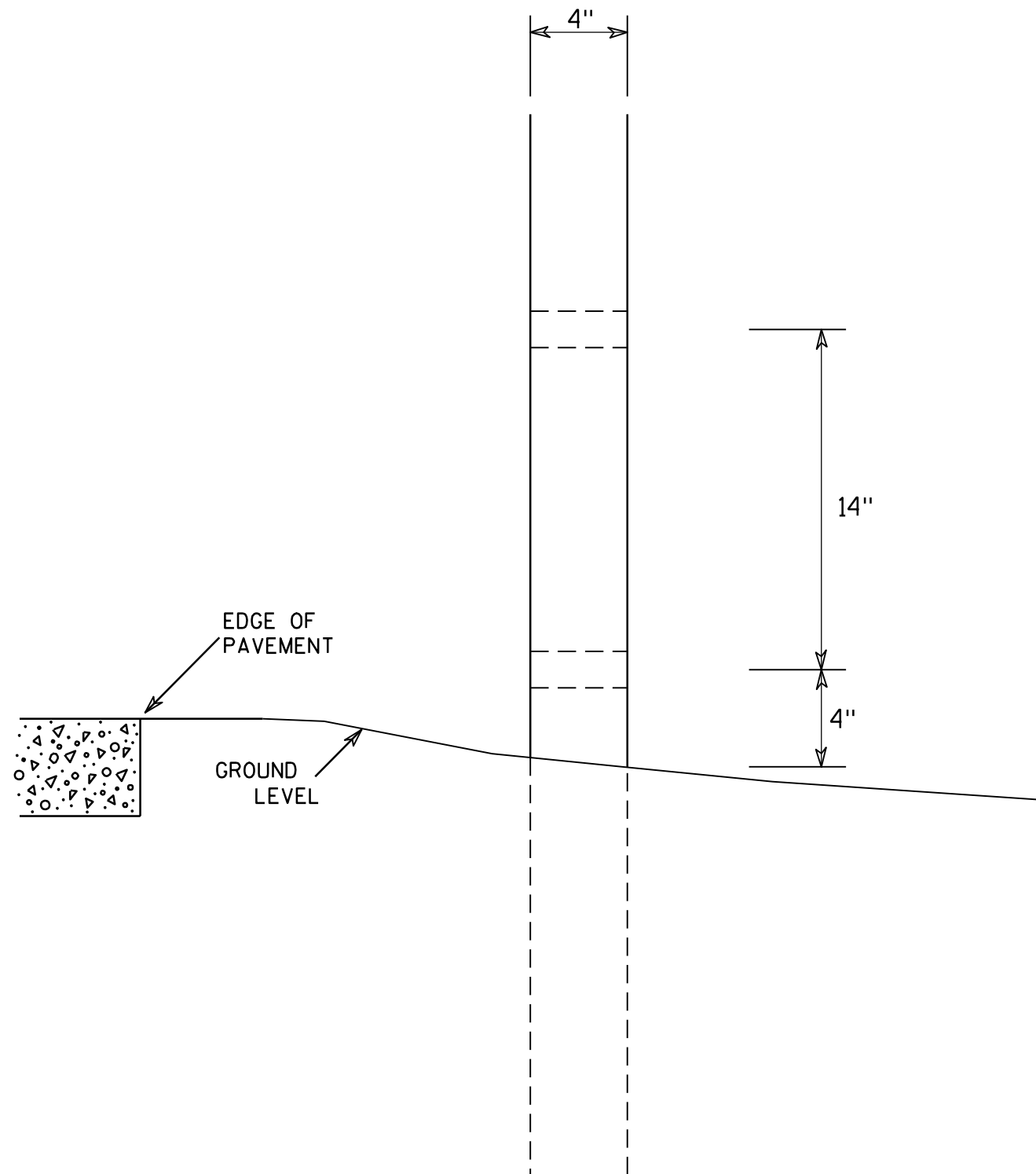
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL  
SIGN POST  
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 2/05/15 PLAT 42 14-9.9



SIDE VIEW

# GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1 1/2" diameter holes drilled perpendicular to the roadway centerline.

## 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:

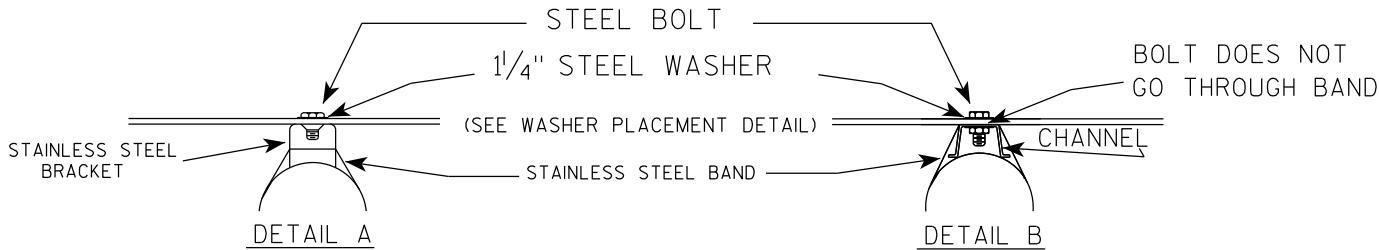
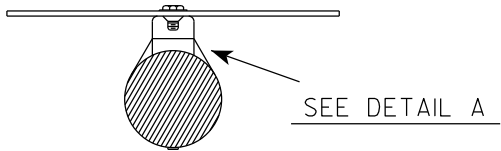
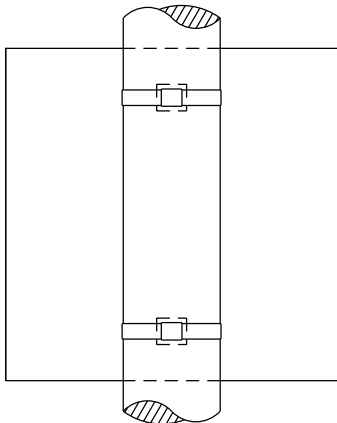
COUNTY:

SHEET NO: 43

E

BANDING

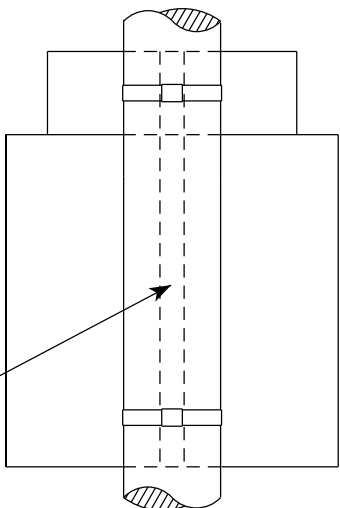
SINGLE SIGN



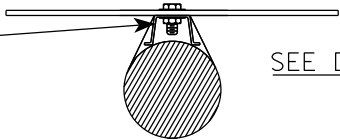
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be  $\frac{3}{4}$ " in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
  - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
  - b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

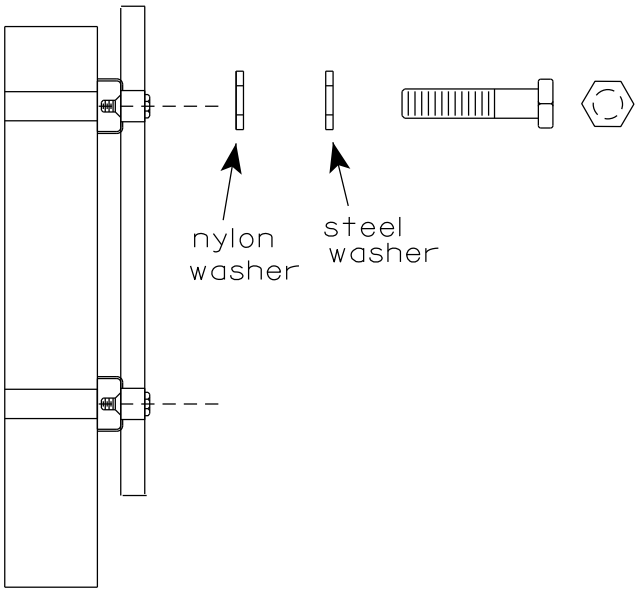
"J" ASSEMBLY



CHANNEL  
SEE TYPICAL PANEL  
INSTALLATION SHEET



WASHER PLACEMENT



WASHERS (ALL POSTS) -  
1-1/4" O.D. X  $\frac{3}{8}$ " I.D. X  $\frac{1}{16}$ " STEEL  
1-1/4" O.D. X  $\frac{3}{8}$ " I.D. X .080 NYLON  
FOR ALL TYPE H SIGNS

STANDARD SIGN  
SIGN BANDING DETAILS

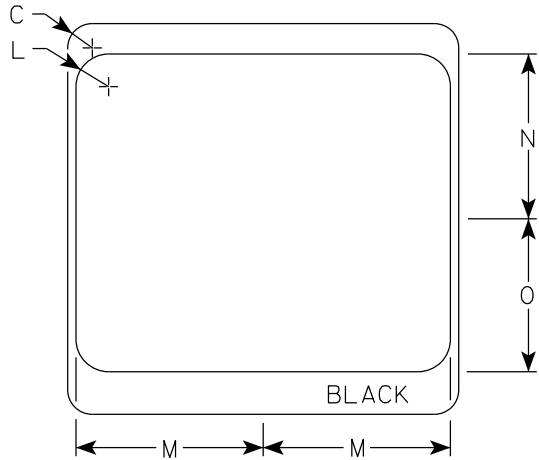
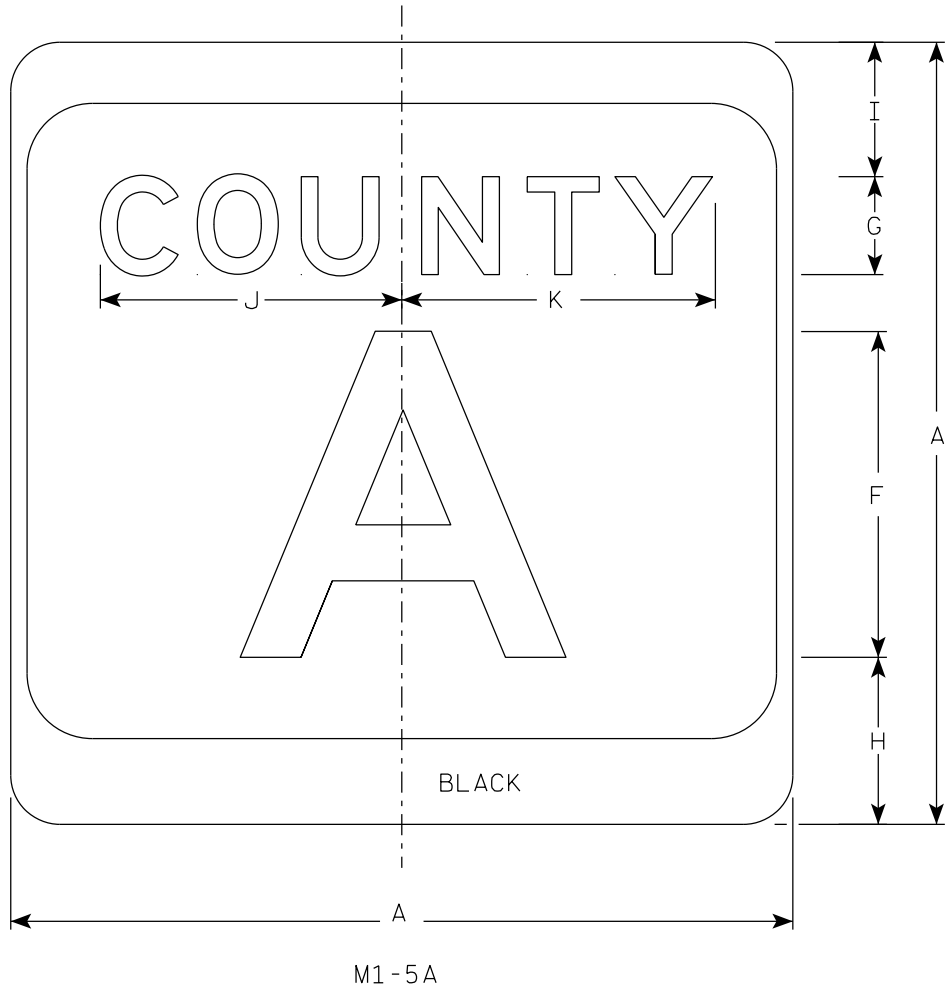
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer  
DATE 6/10/19 PLATE NO. A5-9.4

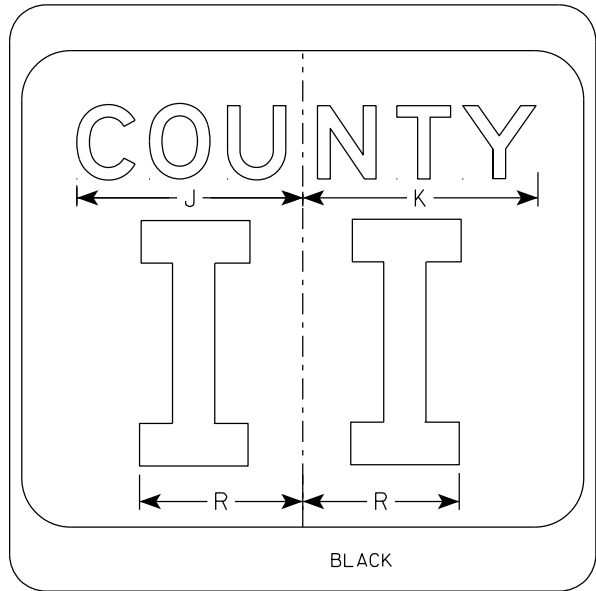
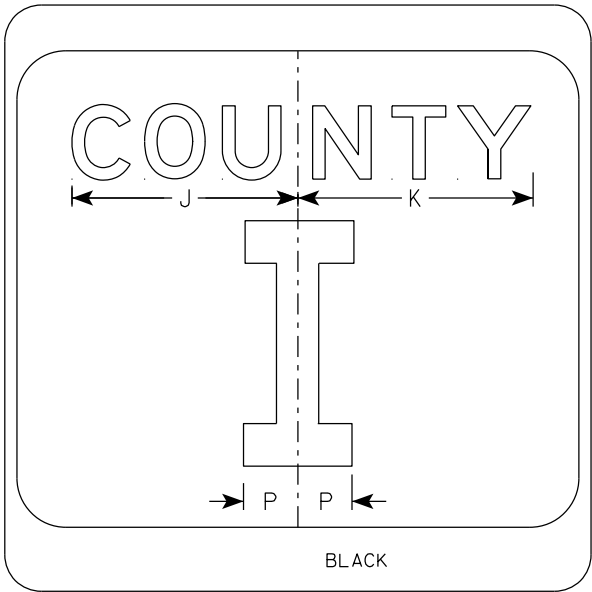




7



- NOTES
- Sign is Type II - Type H Reflective
  - Color:  
Background - White & Black  
Message - Black
  - Message Series - see Note 4
  - Message Series E for 1 letter.  
Message Series D for 2 letters unless message is too big then Series C.  
Message Series C for 3 letters unless message is too big then Series B.
  - Substitute appropriate letters & optically center to achieve proper balance.



| SIZE | A  | B | C     | D | E | F  | G | H     | I     | J      | K      | L | M      | N      | O     | P     | Q | R     | S | T | U | V | W | X | Y | Z | Area<br>sq. ft. |
|------|----|---|-------|---|---|----|---|-------|-------|--------|--------|---|--------|--------|-------|-------|---|-------|---|---|---|---|---|---|---|---|-----------------|
| 1    |    |   |       |   |   |    |   |       |       |        |        |   |        |        |       |       |   |       |   |   |   |   |   |   |   |   |                 |
| 2    | 24 |   | 1 1/2 |   |   | 10 | 3 | 5 1/8 | 4 1/8 | 9 1/4  | 9 5/8  | 2 | 11 1/2 | 10 1/8 | 9 3/8 | 2 1/4 |   | 6 5/8 |   |   |   |   |   |   |   |   | 4.0             |
| 2M   | 24 |   | 1 1/2 |   |   | 10 | 3 | 5 1/8 | 4 1/8 | 9 1/4  | 9 5/8  | 2 | 11 1/2 | 10 1/8 | 9 3/8 | 2 1/4 |   | 6 5/8 |   |   |   |   |   |   |   |   | 4.0             |
| 3    | 36 |   | 2 1/4 |   |   | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14    | 3 3/8 |   | 10    |   |   |   |   |   |   |   |   | 9.0             |
| 4    | 36 |   | 2 1/4 |   |   | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14    | 3 3/8 |   | 10    |   |   |   |   |   |   |   |   | 9.0             |
| 5    | 36 |   | 2 1/4 |   |   | 16 | 4 | 7 5/8 | 5 5/8 | 12 1/4 | 12 7/8 | 3 | 17 1/8 | 15 1/4 | 14    | 3 3/8 |   | 10    |   |   |   |   |   |   |   |   | 9.0             |

CTH MARKER

M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

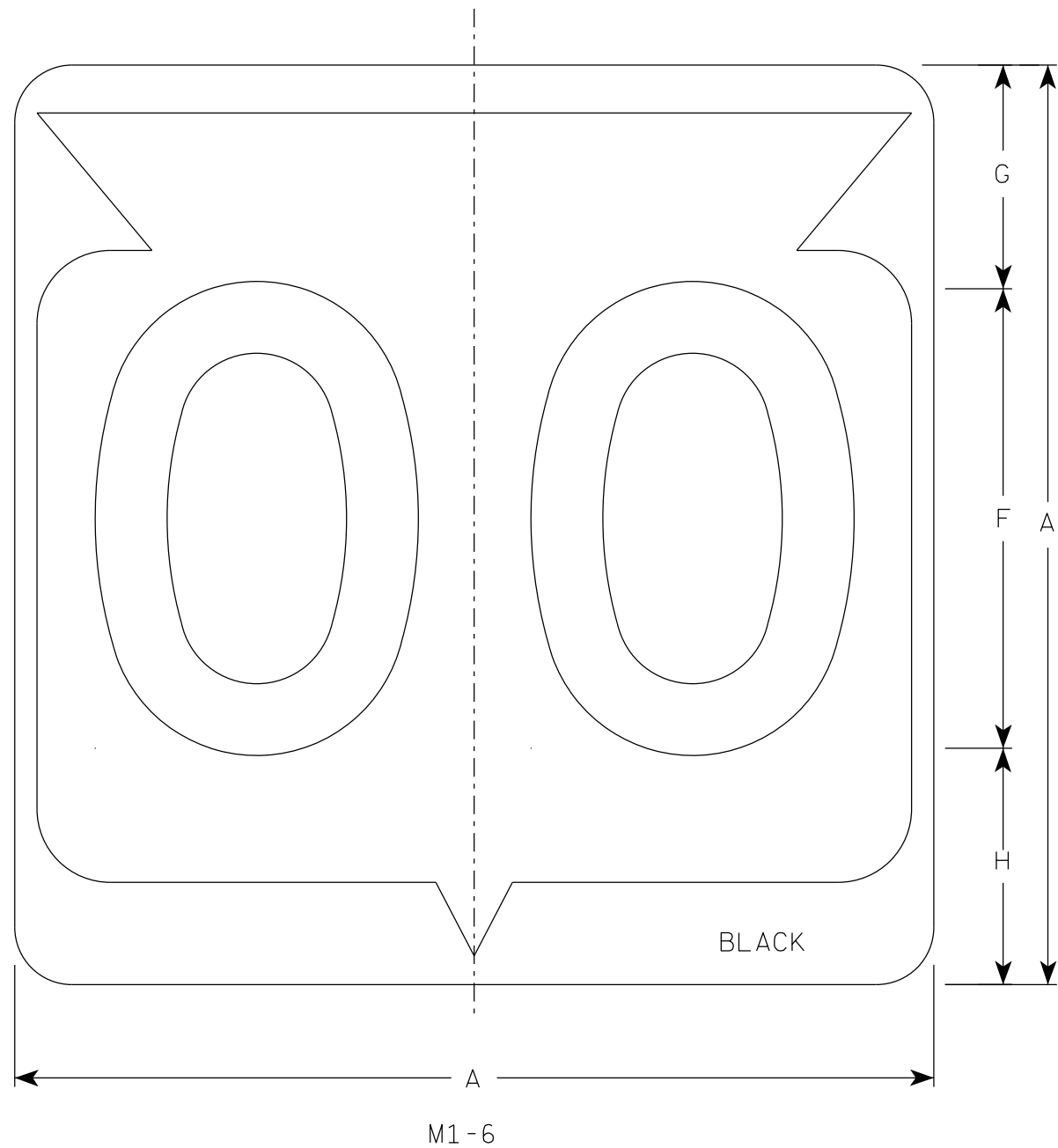
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-5A.9

7

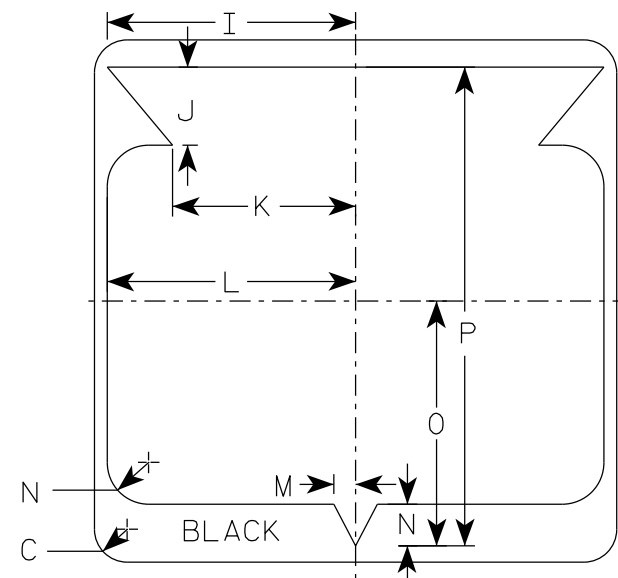


7



NOTES

1. Sign is Type II - Type H Reflective
2. Color:  
Background - White  
Message - Black
3. Message Series - D except 3 number signs Series C



7

| 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<br>sq. ft. |
|------|----|---|-------|---|---|----|-------|-------|--------|-------|--------|--------|-------|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1    |    |   |       |   |   |    |       |       |        |       |        |        |       |       |        |        |   |   |   |   |   |   |   |   |   |   |                 |
| 2    | 24 |   | 1 1/2 |   |   | 12 | 5 1/2 | 6 1/2 | 10 1/4 | 2 1/2 | 8 7/8  | 11 1/2 | 1     | 1 7/8 | 11 1/4 | 21 7/8 |   |   |   |   |   |   |   |   |   |   | 4.0             |
| 2M   | 24 |   | 1 1/2 |   |   | 12 | 5 1/2 | 6 1/2 | 10 1/4 | 2 1/2 | 8 7/8  | 11 1/2 | 1     | 1 7/8 | 11 1/4 | 21 7/8 |   |   |   |   |   |   |   |   |   |   | 4.0             |
| 3    | 36 |   | 2 1/4 |   |   | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33     |   |   |   |   |   |   |   |   |   |   | 9.0             |
| 4    | 36 |   | 2 1/4 |   |   | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33     |   |   |   |   |   |   |   |   |   |   | 9.0             |
| 5    | 36 |   | 2 1/4 |   |   | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33     |   |   |   |   |   |   |   |   |   |   | 9.0             |

STATE ROUTE MARKER  
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

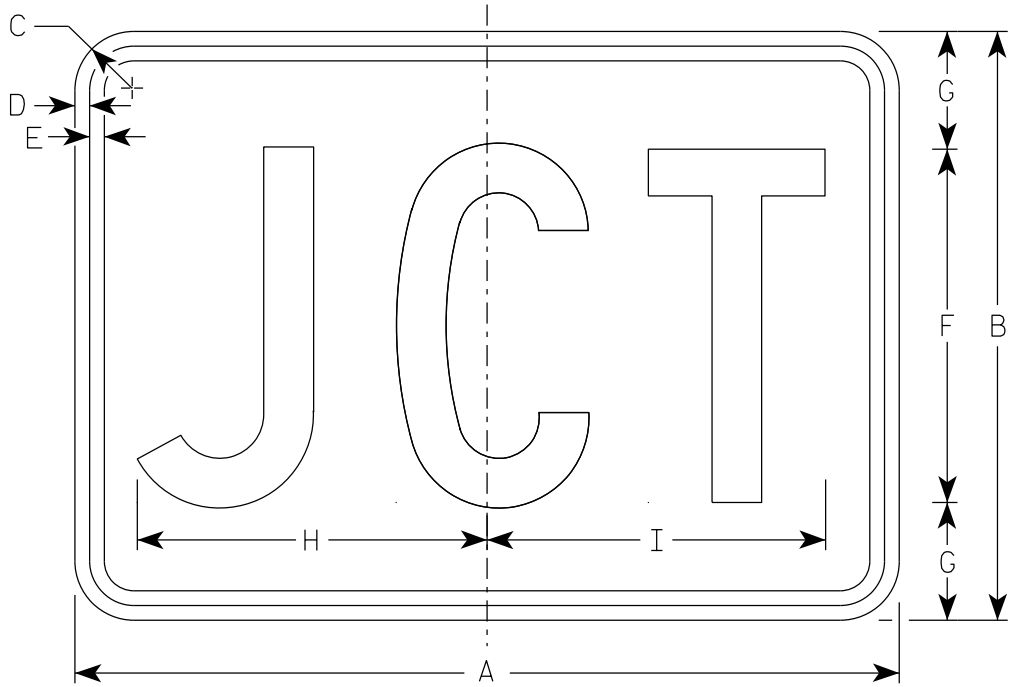
DATE 11/8/2022 PLATE NO. M1-6.11

PROJECT NO: HWY: COUNTY:

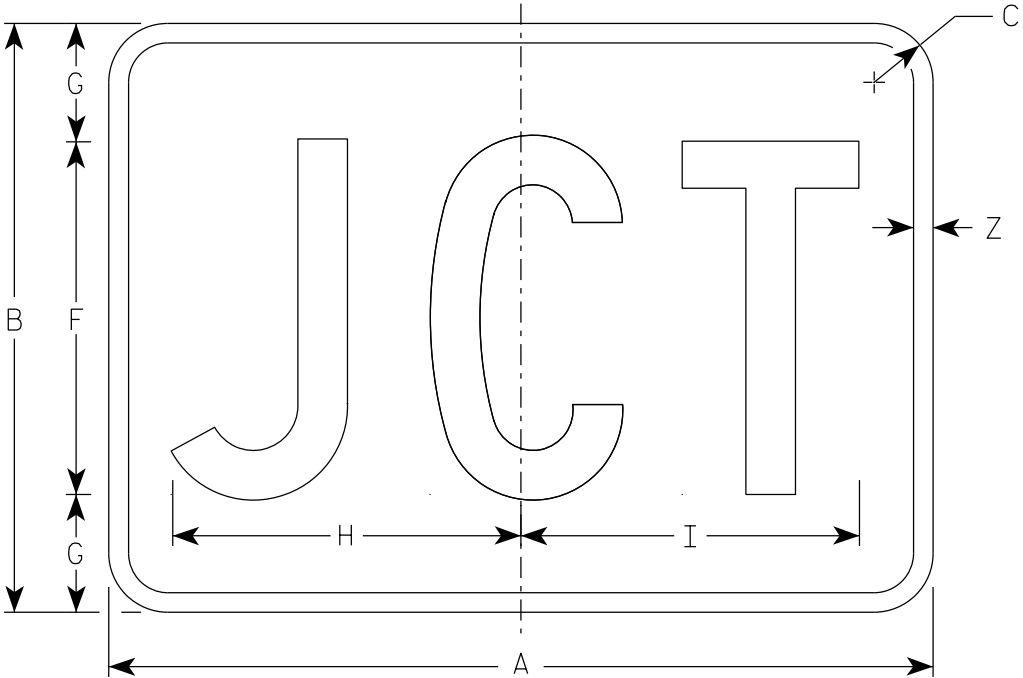
SHEET NO: 47

E

7



M2-1  
MM2-1  
MP2-1



MB2-1  
MK2-1  
MN2-1  
MR2-1

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
  - Background - See note 5
  - Message - See note 5
- 3. Message Series - C
- 4. M2-1 Background - White  
Message - Black
- MB2-1 Background - Blue  
Message - White
- MK2-1 Background - Green  
Message - White
- MM2-1 Background - White  
Message - Green
- MN2-1 Background - Brown  
Message - White
- MP2-1 Background - White  
Message - Blue
- MR2-1 Background - Brown  
Message - Yellow

7

| 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<br>sq. ft. |
|------|----|----|-------|-----|-----|----|---|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|-----------------|
| 1    |    |    |       |     |     |    |   |        |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |     |                 |
| 2S   | 21 | 15 | 1 1/2 | 3/8 | 3/8 | 9  | 3 | 8 7/8  | 8 5/8  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1/2 | 2.20            |
| 2M   | 21 | 15 | 1 1/2 | 3/8 | 3/8 | 9  | 3 | 8 7/8  | 8 5/8  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1/2 | 2.20            |
| 3    | 30 | 21 | 1 1/2 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1/2 | 4.40            |
| 4    | 30 | 21 | 1 1/2 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1/2 | 4.40            |
| 5    | 30 | 21 | 1 1/2 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1/2 | 4.40            |

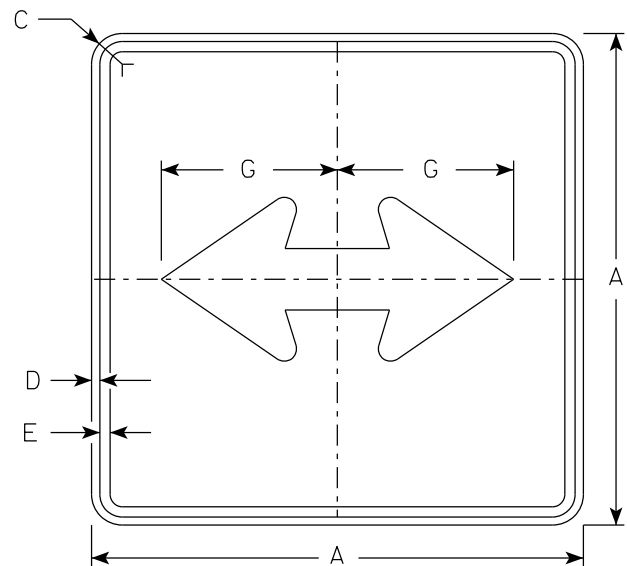
PROJECT NO:

HWY:

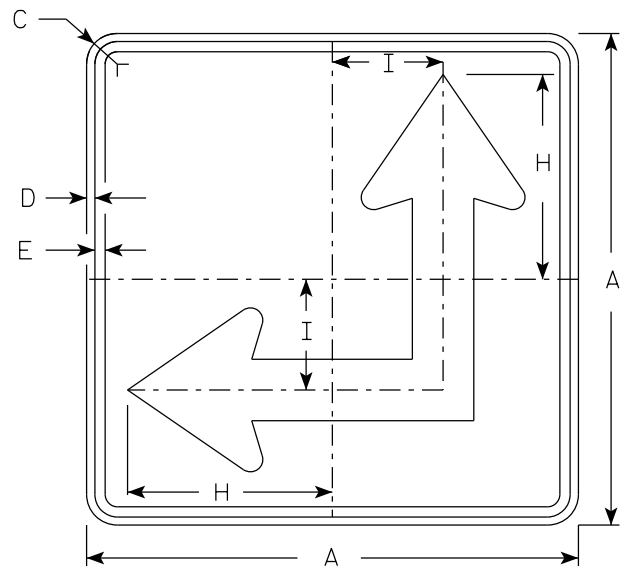
COUNTY:

SHEET NO: 48

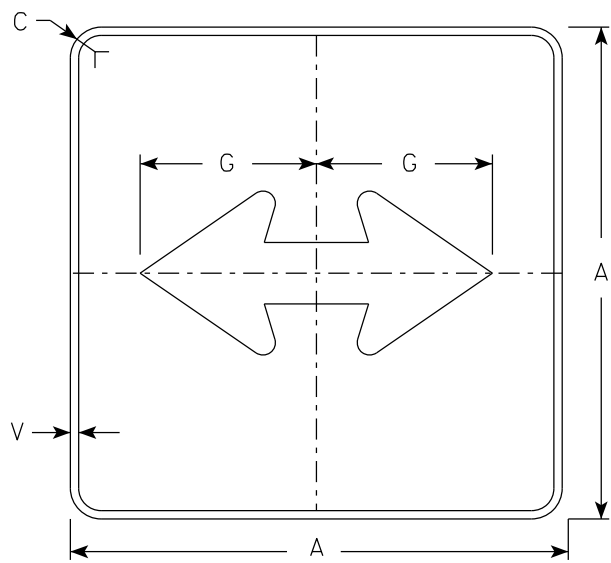
E



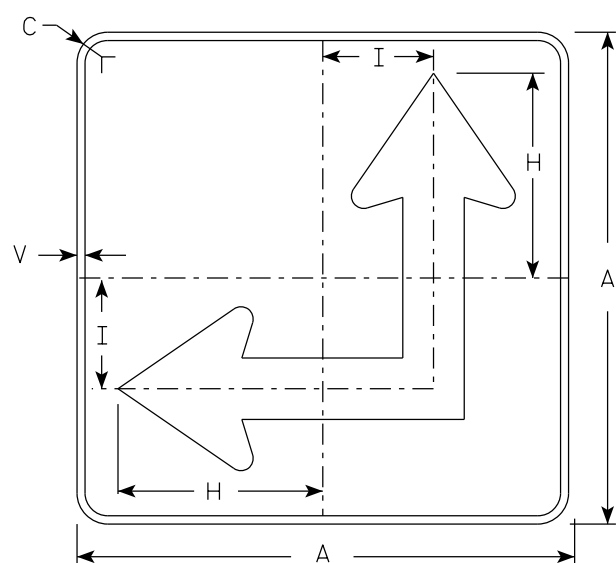
M6 - 4  
MM6 - 4  
M06 - 4  
MP6 - 4



M6 - 6  
MM6 - 6  
M06 - 6  
MP6 - 6



MB6 - 4  
MK6 - 4  
MN6 - 4  
MR6 - 4

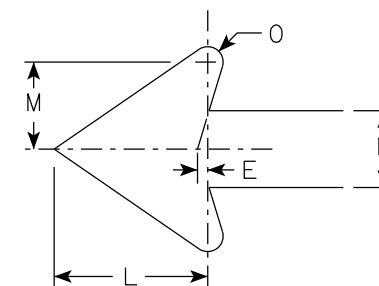


MB6 - 6  
MK6 - 6  
MN6 - 6  
MR6 - 6

NOTES

- Signs are Type II - Type H Reflective except as Shown
- Color:  
Background - See Note 4  
Message - See Note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-4 and M6-6 Background - White  
Message - Black  
MB6-4 and MB6-6 Background - Blue  
Message - White  
MK6-4 and MK6-6 Background - Green  
Message - White  
MM6-4 and MM6-6 Background - White  
Message - Green  
MN6-4 and MN6-6 Background - Brown  
Message - White  
M06-4 and M06-6 Background - Orange - Type F Reflective  
Message - Black  
MP6-4 and MP6-6 Background - White  
Message - Blue  
MR6-4 and MR6-6 Background - Brown  
Message - Yellow
- M6-6R same as M6-6L except arrow points ahead and right.

ARROW DETAIL



| SIZE | A  | B | C     | D   | E   | F | G      | H      | I     | J | K | L     | M     | N     | O   | P | Q | R | S | T | U | V   | W | X | Y | Z | Area<br>sq. ft. |
|------|----|---|-------|-----|-----|---|--------|--------|-------|---|---|-------|-------|-------|-----|---|---|---|---|---|---|-----|---|---|---|---|-----------------|
| 1    |    |   |       |     |     |   |        |        |       |   |   |       |       |       |     |   |   |   |   |   |   |     |   |   |   |   |                 |
| 2S   | 21 |   | 1 1/2 | 3/8 | 3/8 |   | 7 1/2  | 8 3/4  | 4 1/4 |   |   | 5 1/4 | 3     | 2 5/8 | 1/2 |   |   |   |   |   |   | 1/2 |   |   |   |   | 3.06            |
| 2M   | 21 |   | 1 1/2 | 3/8 | 3/8 |   | 7 1/2  | 8 3/4  | 4 1/4 |   |   | 5 1/4 | 3     | 2 5/8 | 1/2 |   |   |   |   |   |   | 1/2 |   |   |   |   | 3.06            |
| 3    | 30 |   | 1 7/8 | 1/2 | 5/8 |   | 10 3/4 | 12 1/2 | 6 3/4 |   |   | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 |   |   |   |   |   |   | 1/2 |   |   |   |   | 6.25            |
| 4    | 30 |   | 1 7/8 | 1/2 | 5/8 |   | 10 3/4 | 12 1/2 | 6 3/4 |   |   | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 |   |   |   |   |   |   | 1/2 |   |   |   |   | 6.25            |
| 5    | 30 |   | 1 7/8 | 1/2 | 5/8 |   | 10 3/4 | 12 1/2 | 6 3/4 |   |   | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 |   |   |   |   |   |   | 1/2 |   |   |   |   | 6.25            |

STANDARD SIGN  
M6 - 4 & M6 - 6  
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-4.11

PROJECT NO:

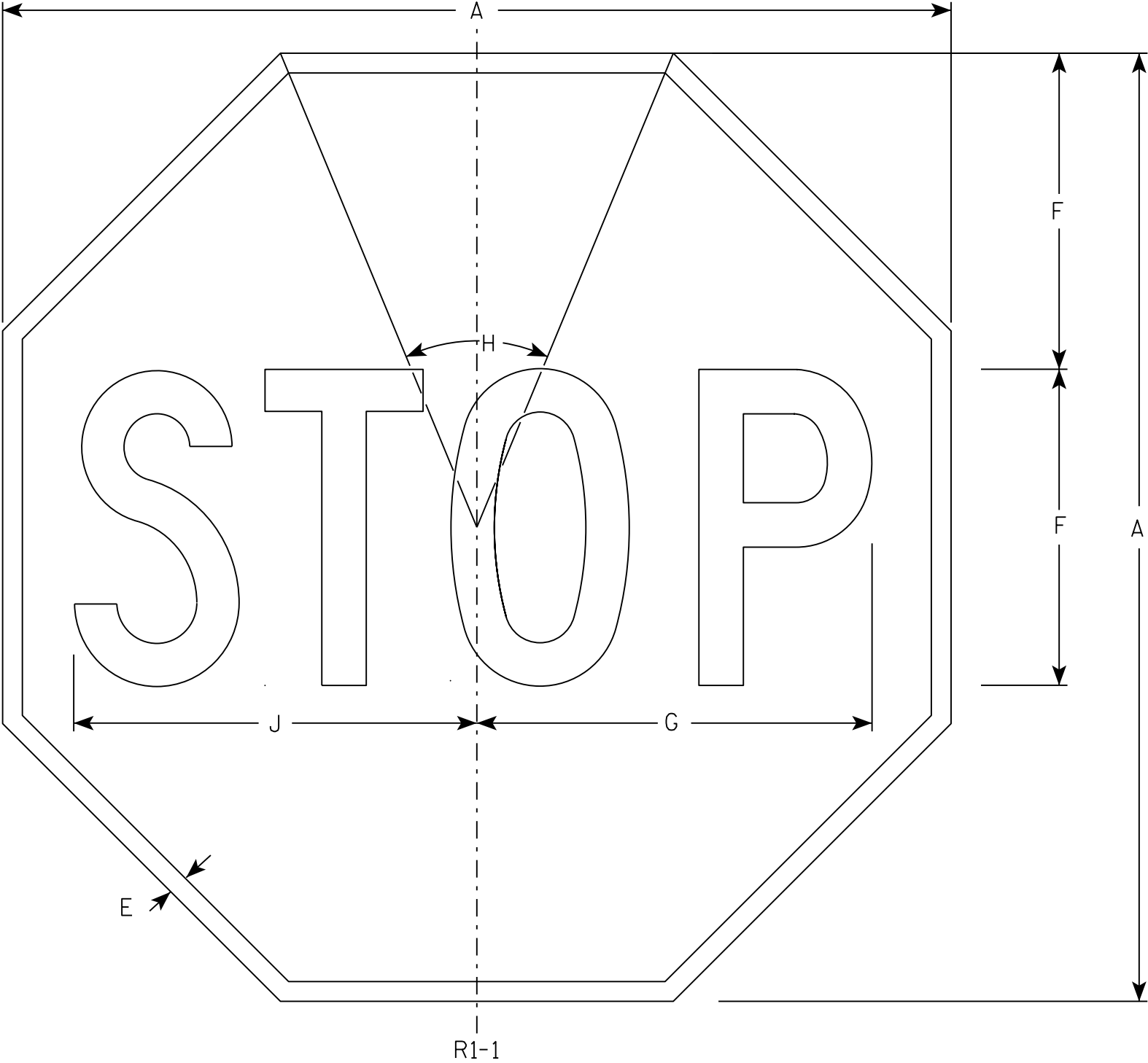
HWY:

COUNTY:

SHEET NO: 49

E

7



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:  
Background - Red  
Message - White
- 3. Message Series - C

7

R1-1

| 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<br>sq. ft. |
|------|----|---|---|---|-----|----|--------|-----|---|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1    | 30 |   |   |   | 5/8 | 10 | 12 1/2 | 45° |   | 12 3/4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5.18            |
| 2S   | 30 |   |   |   | 5/8 | 10 | 12 1/2 | 45° |   | 12 3/4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 5.18            |
| 2M   | 36 |   |   |   | 3/4 | 12 | 15     | 45° |   | 15 3/8 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 7.46            |
| 3    | 36 |   |   |   | 3/4 | 12 | 15     | 45° |   | 15 3/8 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 7.46            |
| 4    | 48 |   |   |   | 1   | 16 | 20     | 45° |   | 20 1/2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 13.25           |
| 5    | 48 |   |   |   | 1   | 16 | 20     | 45° |   | 20 1/2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 13.25           |
| 6    | 18 |   |   |   | 3/8 | 6  | 7 3/4  | 45° |   | 7 3/4  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1.86            |
| 7    | 12 |   |   |   | 1/4 | 4  | 5      | 45° |   | 5 1/8  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0.78            |

STANDARD SIGN  
R1 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

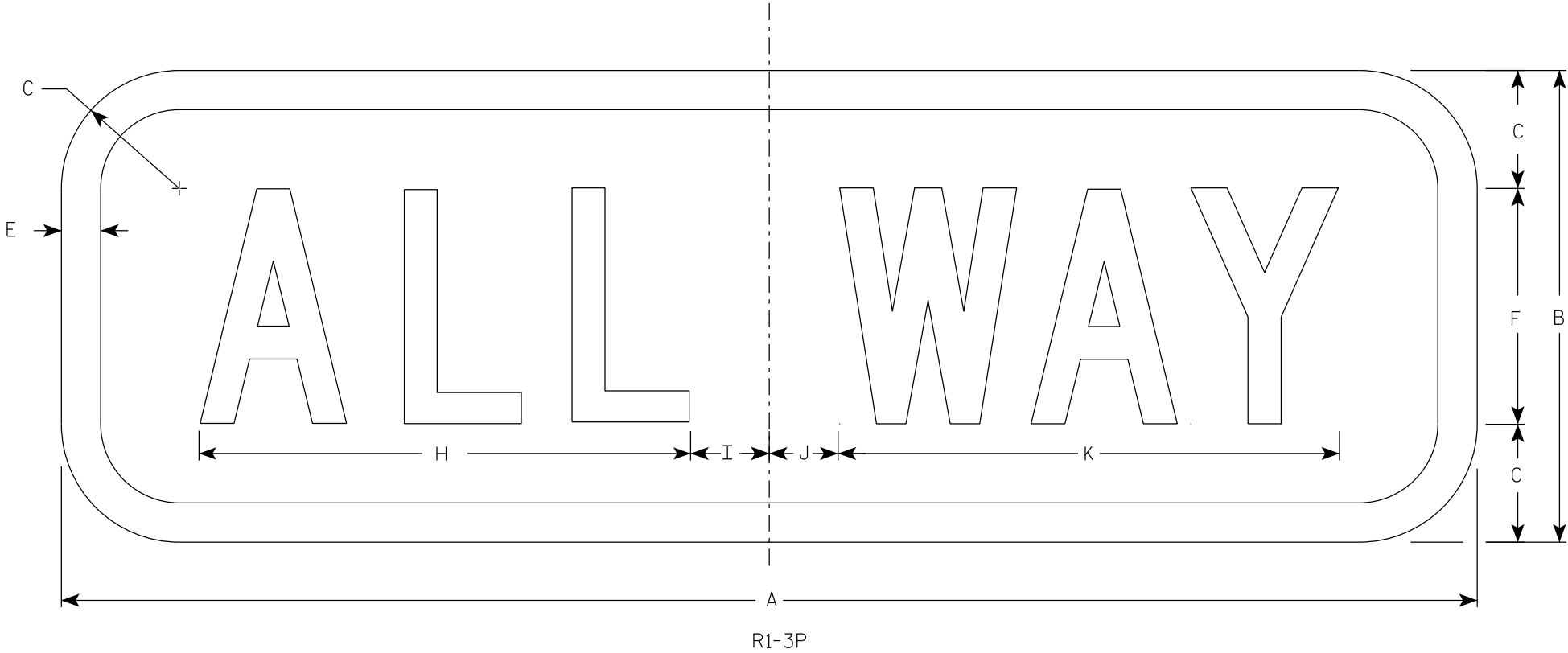
DATE 11/12/15 PLATE NO. R1-1.13

7

7

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
  - Background - Red
  - Message - White
- 3. Message Series - C
- 4. For 30"x30" R1-1 use 18"x6" R1-3P sign
- For 36"x36" R1-1 use 24"x9" R1-3P sign
- For 48"x48" R1-1 use 30"x12" R1-3P sign



| 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<br>sq. ft. |
|------|----|----|-------|---|-----|---|---|-------|-------|-------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1    | 18 | 6  | 1 1/2 |   | 1/2 | 3 |   | 6 1/4 | 1 1/4 | 7/8   | 6 3/8  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0.75            |
| 2S   | 18 | 6  | 1 1/2 |   | 1/2 | 3 |   | 6 1/4 | 1 1/4 | 7/8   | 6 3/8  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 0.75            |
| 2M   | 24 | 9  | 1 1/2 |   | 1/2 | 5 |   | 9 1/4 | 1 1/4 | 3/4   | 9 3/4  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1.5             |
| 3    | 24 | 9  | 1 1/2 |   | 1/2 | 5 |   | 9 1/4 | 1 1/4 | 3/4   | 9 3/4  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 1.5             |
| 4    | 30 | 12 | 1 1/2 |   | 5/8 | 6 |   | 11    | 2 1/4 | 1 1/2 | 11 3/4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2.5             |
| 5    | 30 | 12 | 1 1/2 |   | 5/8 | 6 |   | 11    | 2 1/4 | 1 1/2 | 11 3/4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 2.5             |

PROJECT NO:

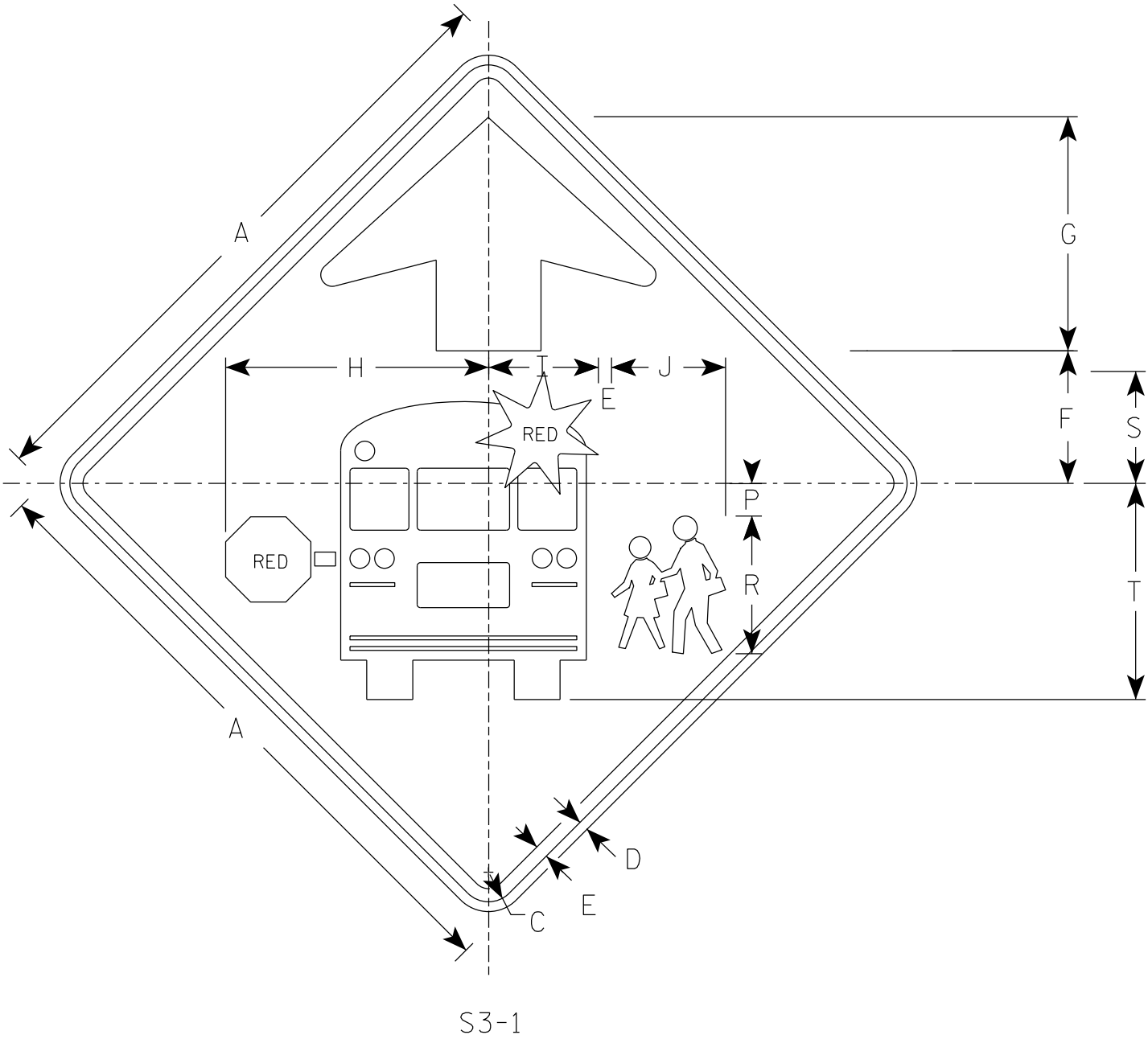
HWY:

COUNTY:

SHEET NO: 51

E

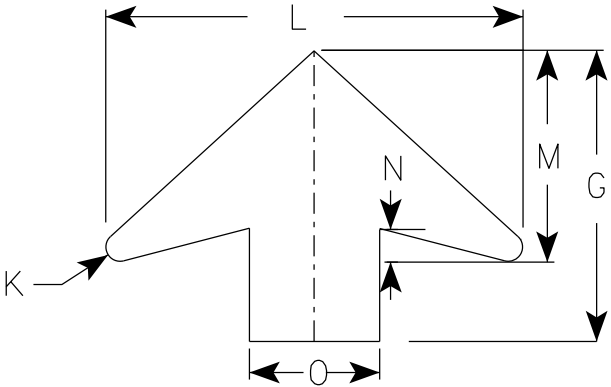
7



S3-1

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
  - Background - YELLOW-GREEN
  - Message - BLACK except as noted
  - Circles except PEDS- RED BACKGROUND



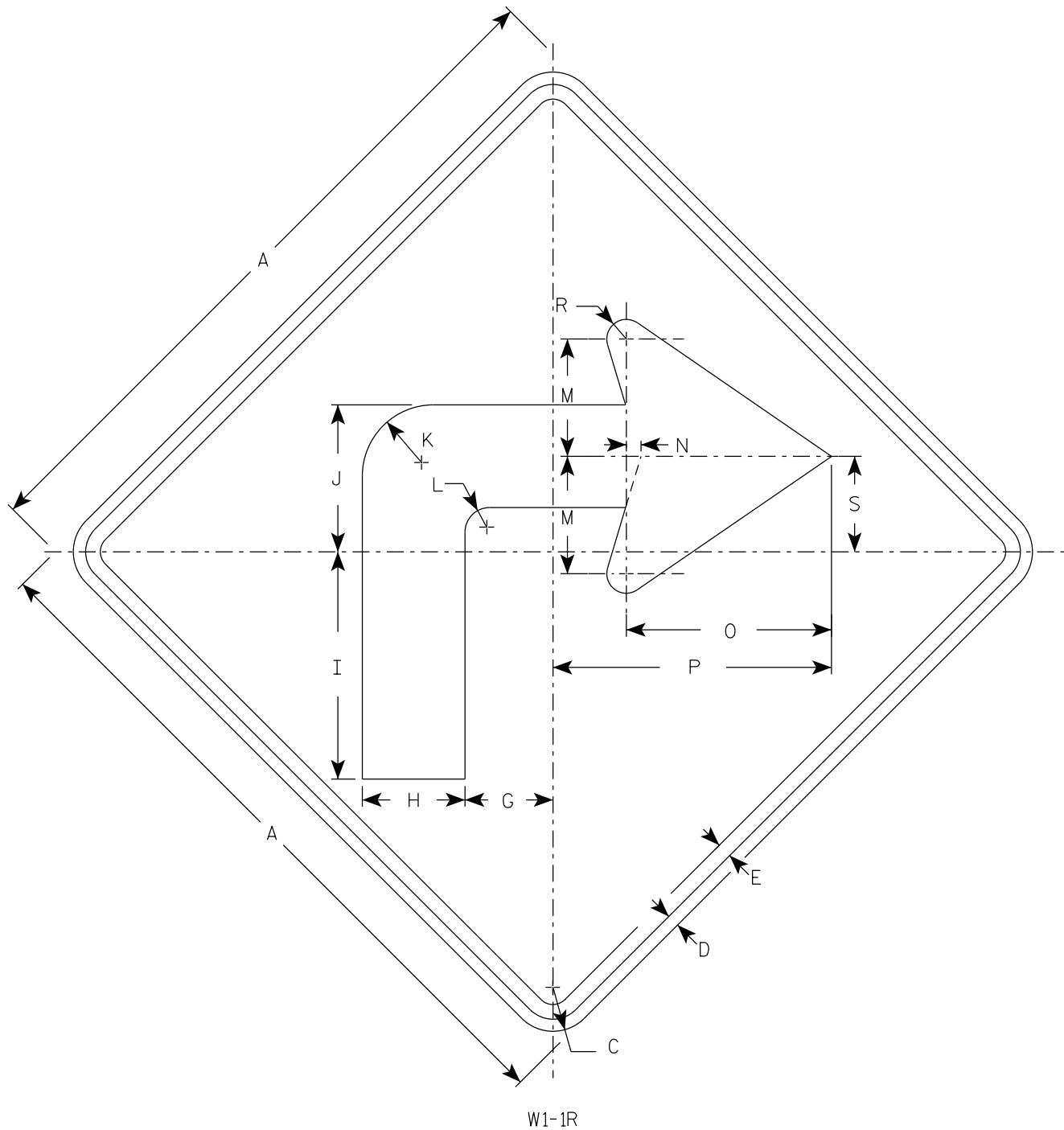
ARROW DETAIL

7

| 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<br>sq. ft. |
|------|----|---|-------|-----|-----|-------|--------|--------|-------|-------|-----|--------|-------|-------|---|-------|---|--------|-------|--------|---|---|---|---|---|---|-----------------|
| 1    | 30 |   | 1 7/8 | 1/2 | 5/8 | 6 1/4 | 11 1/4 | 12 1/2 | 5 1/4 | 5 1/2 | 1/2 | 16     | 8     | 1 1/4 | 5 | 1 1/2 |   | 6 5/8  | 5 3/8 | 10 3/8 |   |   |   |   |   |   | 6.25            |
| 2S   | 36 |   | 2 1/4 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 15 1/8 | 6 1/4 | 6 1/2 | 5/8 | 19 1/4 | 9 3/4 | 1 5/8 | 6 | 1 7/8 |   | 7 7/8  | 6 3/8 | 12 3/8 |   |   |   |   |   |   | 9.0             |
| 2M   | 36 |   | 2 1/4 | 5/8 | 3/4 | 7 1/2 | 13 1/2 | 15 1/8 | 6 1/4 | 6 1/2 | 5/8 | 19 1/4 | 9 3/4 | 1 5/8 | 6 | 1 7/8 |   | 7 7/8  | 6 3/8 | 12 3/8 |   |   |   |   |   |   | 9.0             |
| 3    | 48 |   | 3     | 3/4 | 1   | 10    | 17 7/8 | 20 1/8 | 8 3/8 | 8 3/4 | 7/8 | 25 5/8 | 13    | 2     | 8 | 2 1/2 |   | 10 1/2 | 8 1/2 | 16 1/2 |   |   |   |   |   |   | 16.0            |
| 4    | 48 |   | 3     | 3/4 | 1   | 10    | 17 7/8 | 20 1/8 | 8 3/8 | 8 3/4 | 7/8 | 25 5/8 | 13    | 2     | 8 | 2 1/2 |   | 10 1/2 | 8 1/2 | 16 1/2 |   |   |   |   |   |   | 16.0            |
| 5    |    |   |       |     |     |       |        |        |       |       |     |        |       |       |   |       |   |        |       |        |   |   |   |   |   |   |                 |



7



NOTES

1. Sign is Type II - Type F Reflective
2. Color:  
Background - Yellow  
Message - Black
3. W1-1L is the same as W1-1R except the arrow is reversed along the vertical centerline.

7

| 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<br>sq. ft. |
|------|----|---|-------|-----|-----|---|-------|-------|--------|-------|-------|-------|---|-----|--------|--------|---|-------|-------|---|---|---|---|---|---|---|-----------------|
| 1    | 24 |   | 1 1/2 | 3/8 | 1/2 |   | 3     | 3 1/2 | 7 3/4  | 5     | 2 1/2 | 7/8   | 4 | 1/2 | 7      | 9 1/2  |   | 5/8   | 3 1/4 |   |   |   |   |   |   |   | 4.0             |
| 2S   | 36 |   | 2 1/4 | 5/8 | 3/4 |   | 4 1/2 | 5 1/4 | 11 5/8 | 7 1/2 | 3 5/8 | 1 1/4 | 6 | 3/4 | 10 1/2 | 14 1/4 |   | 1     | 4 7/8 |   |   |   |   |   |   |   | 9.0             |
| 2M   | 36 |   | 2 1/4 | 5/8 | 3/4 |   | 4 1/2 | 5 1/4 | 11 5/8 | 7 1/2 | 3 5/8 | 1 1/4 | 6 | 3/4 | 10 1/2 | 14 1/4 |   | 1     | 4 7/8 |   |   |   |   |   |   |   | 9.0             |
| 3    | 36 |   | 2 1/4 | 5/8 | 3/4 |   | 4 1/2 | 5 1/4 | 11 5/8 | 7 1/2 | 3 5/8 | 1 1/4 | 6 | 3/4 | 10 1/2 | 14 1/4 |   | 1     | 4 7/8 |   |   |   |   |   |   |   | 9.0             |
| 4    | 48 |   | 3     | 3/4 | 1   |   | 6     | 7     | 15 1/2 | 10    | 4 7/8 | 1 5/8 | 8 | 1   | 14     | 19     |   | 1 1/4 | 6 1/2 |   |   |   |   |   |   |   | 16.0            |
| 5    | 48 |   | 3     | 3/4 | 1   |   | 6     | 7     | 15 1/2 | 10    | 4 7/8 | 1 5/8 | 8 | 1   | 14     | 19     |   | 1 1/4 | 6 1/2 |   |   |   |   |   |   |   | 16.0            |

STANDARD SIGN  
W1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/22/2023 PLATE NO. W1-1.12

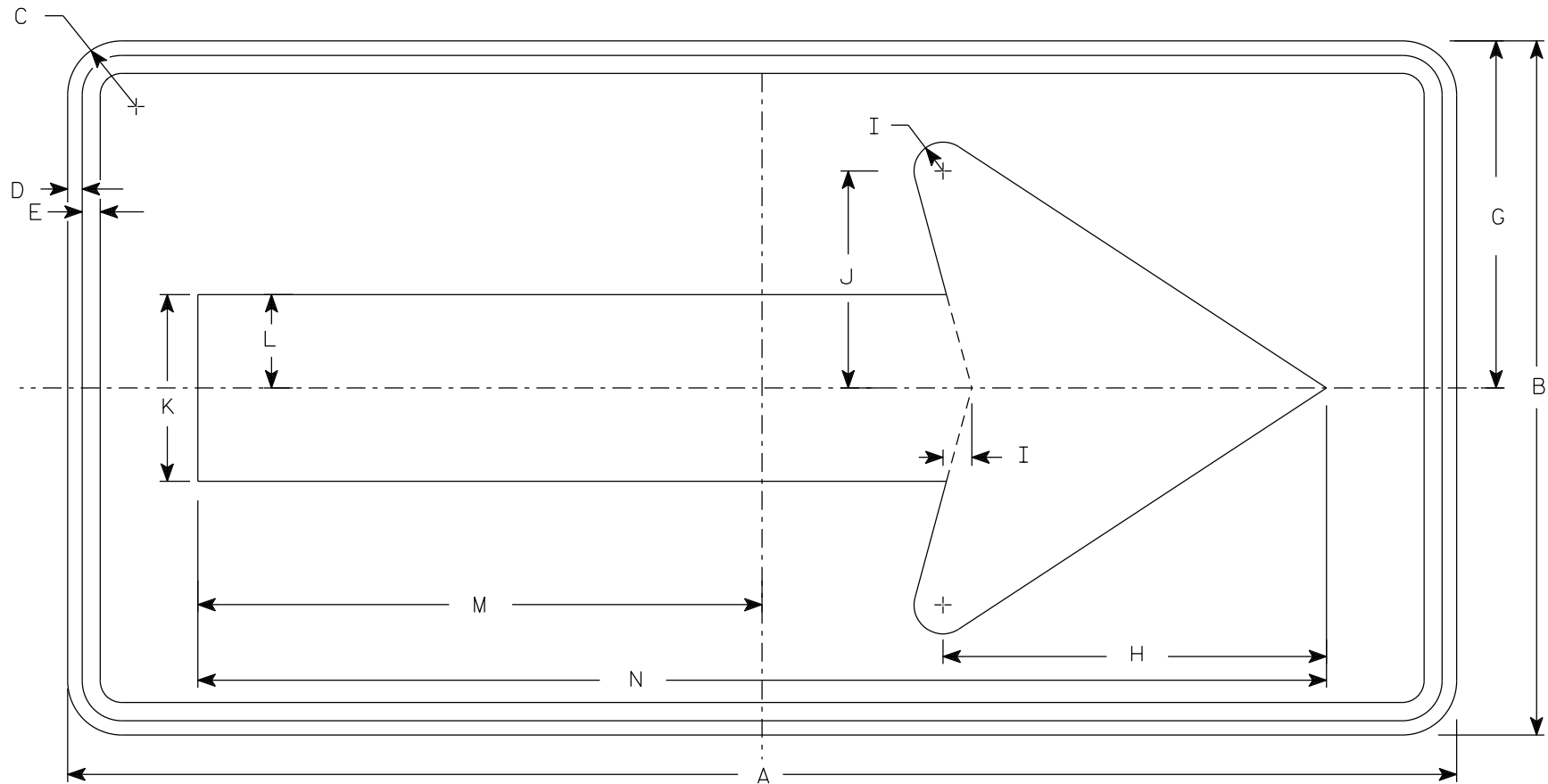
|             |      |         |              |   |
|-------------|------|---------|--------------|---|
| PROJECT NO: | HWY: | COUNTY: | SHEET NO: 53 | E |
|-------------|------|---------|--------------|---|

7

7

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:  
Background - Yellow  
Message - Black



W1-6

| SIZE | A  | B  | C     | D   | E   | F | G  | H      | I     | J     | K     | L     | M      | N      | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area<br>sq. ft. |
|------|----|----|-------|-----|-----|---|----|--------|-------|-------|-------|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1    | 36 | 18 | 1 1/2 | 3/8 | 3/8 |   | 9  | 10     | 3/4   | 5 5/8 | 4 3/4 | 2 3/8 | 14 5/8 | 29 1/4 |   |   |   |   |   |   |   |   |   |   |   |   | 4.5             |
| 2S   | 48 | 24 | 1 7/8 | 1/2 | 5/8 |   | 12 | 13 1/4 | 1     | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39     |   |   |   |   |   |   |   |   |   |   |   |   | 8.0             |
| 2M   | 48 | 24 | 1 7/8 | 1/2 | 5/8 |   | 12 | 13 1/4 | 1     | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39     |   |   |   |   |   |   |   |   |   |   |   |   | 8.0             |
| 3    | 60 | 30 | 1 7/8 | 1/2 | 5/8 |   | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8     | 4     | 24 3/8 | 48 3/4 |   |   |   |   |   |   |   |   |   |   |   |   | 12.5            |
| 4    | 60 | 30 | 1 7/8 | 1/2 | 5/8 |   | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8     | 4     | 24 3/8 | 48 3/4 |   |   |   |   |   |   |   |   |   |   |   |   | 12.5            |
| 5    | 96 | 48 | 3     | 3/4 | 1   |   | 24 | 26 1/2 | 2     | 15    | 13    | 6 1/2 | 39     | 78     |   |   |   |   |   |   |   |   |   |   |   |   | 32.0            |

PROJECT NO:

HWY:

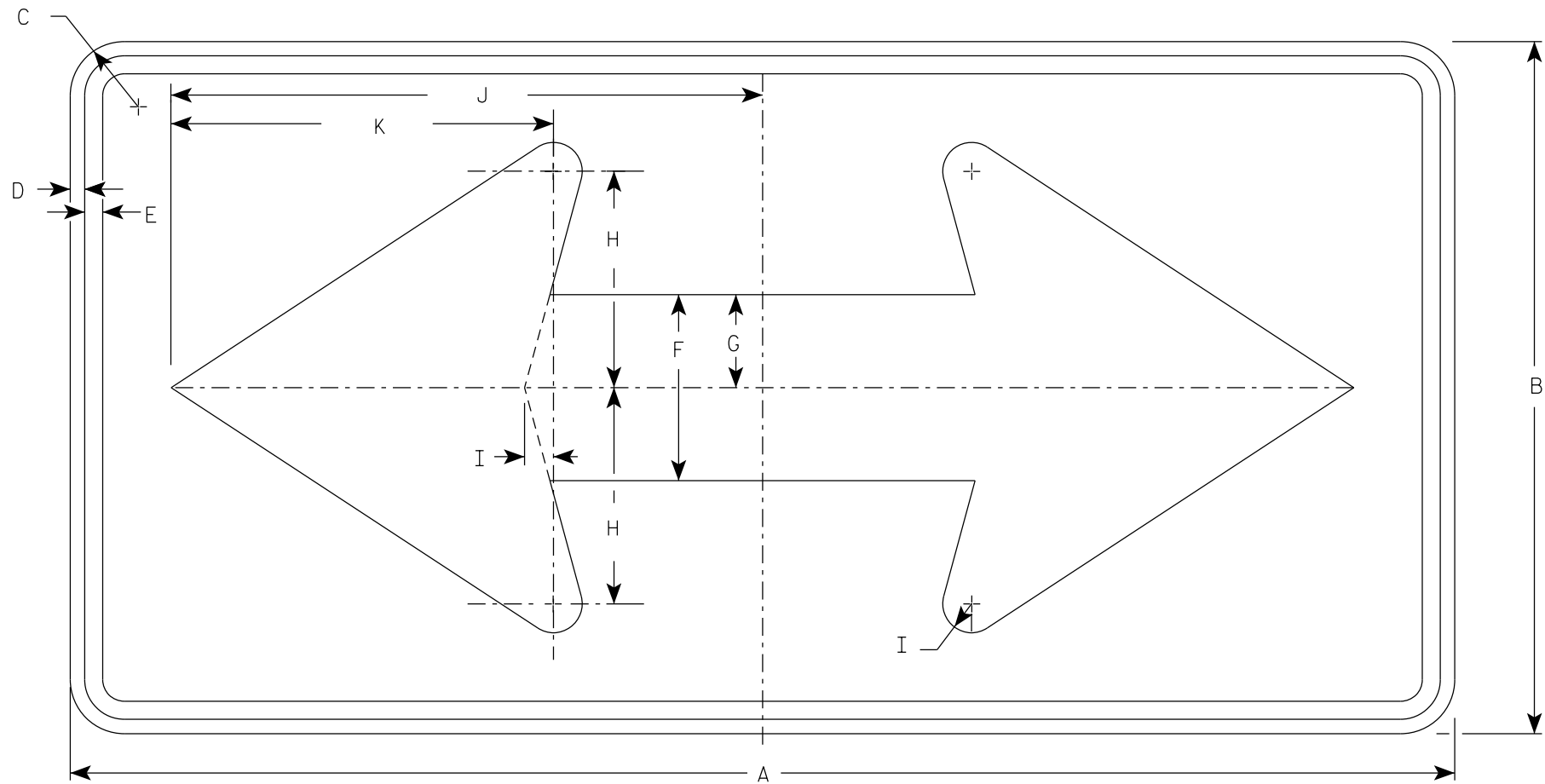
COUNTY:

SHEET NO: 54

E



7



W1-7

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:  
Background - Yellow  
Message - Black

7

| 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<br>sq. ft. |
|------|----|----|-------|-----|-----|-------|-------|-------|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1    | 36 | 18 | 1 1/2 | 3/8 | 1/2 | 5     | 2 1/2 | 5 3/4 | 3/4   | 15 5/8 | 10 1/8 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 4.5             |
| 2S   | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 1/2 | 3 1/4 | 7 1/2 | 1     | 20 1/2 | 13 1/4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 8.0             |
| 2M   | 48 | 24 | 1 7/8 | 1/2 | 5/8 | 6 1/2 | 3 1/4 | 7 1/2 | 1     | 20 1/2 | 13 1/4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 8.0             |
| 3    | 60 | 30 | 1 7/8 | 1/2 | 5/8 | 8     | 4     | 9 1/4 | 1 1/4 | 25 3/8 | 16 1/4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 12.5            |
| 4    | 60 | 30 | 1 7/8 | 1/2 | 5/8 | 8     | 4     | 9 1/4 | 1 1/4 | 25 3/8 | 16 1/4 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 12.5            |
| 5    | 96 | 48 | 3     | 3/4 | 1   | 13    | 6 1/2 | 15    | 2     | 41     | 26 1/2 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   | 32.0            |

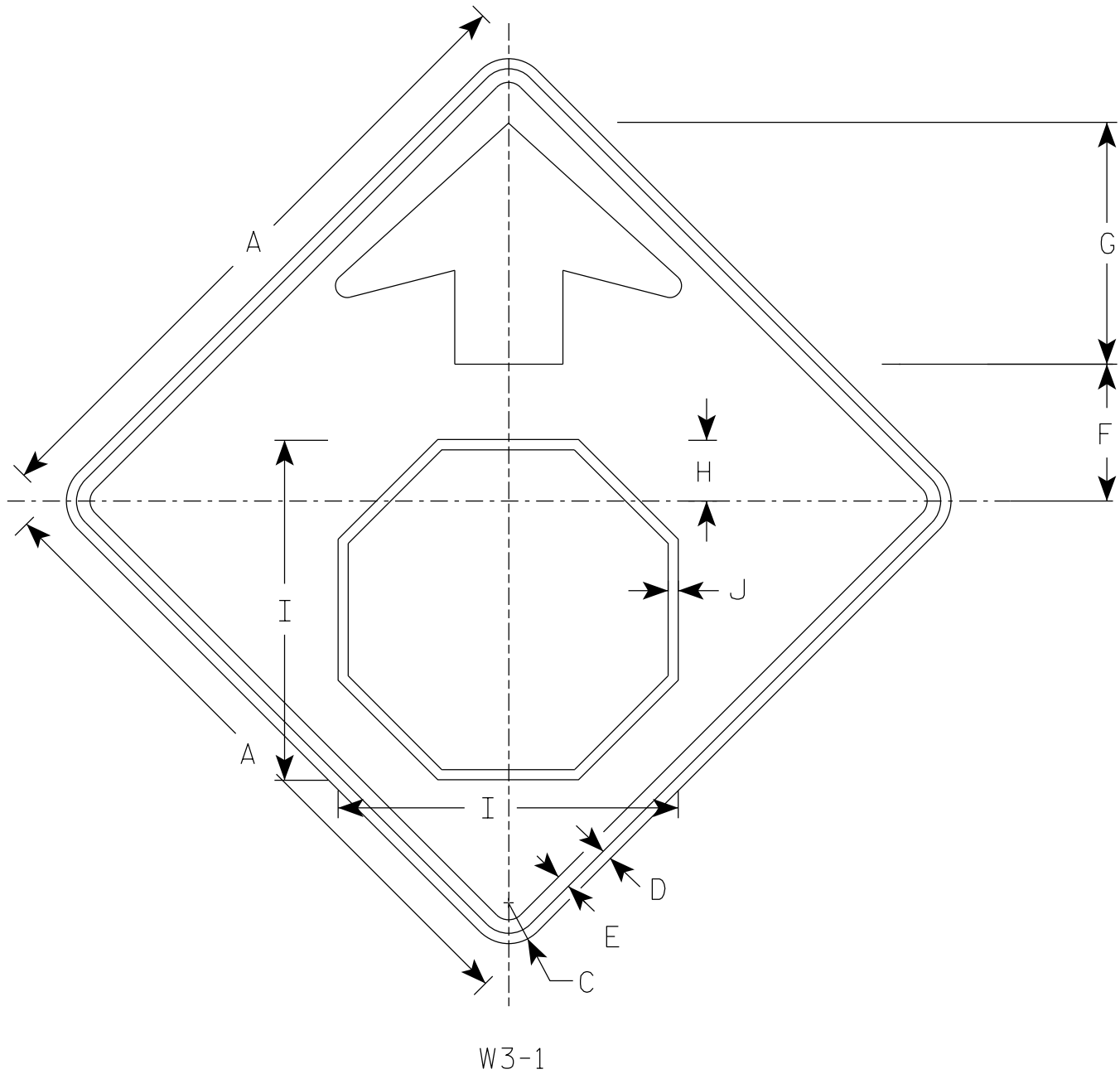
STANDARD SIGN  
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 5/10/2023 PLATE NO. W1-7.8

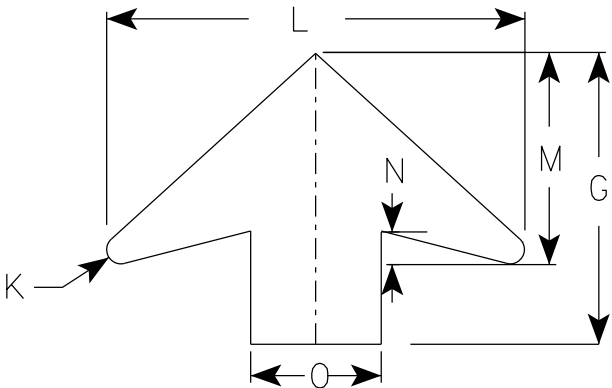
7



W3-1

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
  - Background - Yellow
  - Arrow & Border - Black
  - Stop Symbol - White Border on Red Background



ARROW DETAIL

7

| 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<br>sq. ft. |
|------|----|---|-------|-----|-----|-------|--------|-------|--------|-----|-----|--------|-------|-------|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1    | 30 |   | 1 7⁄8 | 1⁄2 | 5⁄8 | 6 1⁄4 | 11 1⁄4 | 2 3⁄8 | 15 3⁄4 | 1⁄2 | 1⁄2 | 16     | 8     | 1 1⁄4 | 5 |   |   |   |   |   |   |   |   |   |   |   | 6.25            |
| 2S   | 36 |   | 2 1⁄4 | 5⁄8 | 3⁄4 | 7 1⁄2 | 13 1⁄2 | 3 1⁄2 | 19     | 5⁄8 | 5⁄8 | 19 1⁄4 | 9 3⁄4 | 1 5⁄8 | 6 |   |   |   |   |   |   |   |   |   |   |   | 9.0             |
| 2M   | 36 |   | 2 1⁄4 | 5⁄8 | 3⁄4 | 7 1⁄2 | 13 1⁄2 | 3 1⁄2 | 19     | 5⁄8 | 5⁄8 | 19 1⁄4 | 9 3⁄4 | 1 5⁄8 | 6 |   |   |   |   |   |   |   |   |   |   |   | 9.0             |
| 3    | 36 |   | 2 1⁄4 | 5⁄8 | 3⁄4 | 7 1⁄2 | 13 1⁄2 | 3 1⁄2 | 19     | 5⁄8 | 5⁄8 | 19 1⁄4 | 9 3⁄4 | 1 5⁄8 | 6 |   |   |   |   |   |   |   |   |   |   |   | 9.0             |
| 4    | 48 |   | 3     | 3⁄4 | 1   | 10    | 17 7⁄8 | 4 1⁄2 | 25 1⁄8 | 3⁄4 | 7⁄8 | 25 5⁄8 | 13    | 2     | 8 |   |   |   |   |   |   |   |   |   |   |   | 16.0            |
| 5    | 48 |   | 3     | 3⁄4 | 1   | 10    | 17 7⁄8 | 4 1⁄2 | 25 1⁄8 | 3⁄4 | 7⁄8 | 25 5⁄8 | 13    | 2     | 8 |   |   |   |   |   |   |   |   |   |   |   | 16.0            |

STANDARD SIGN

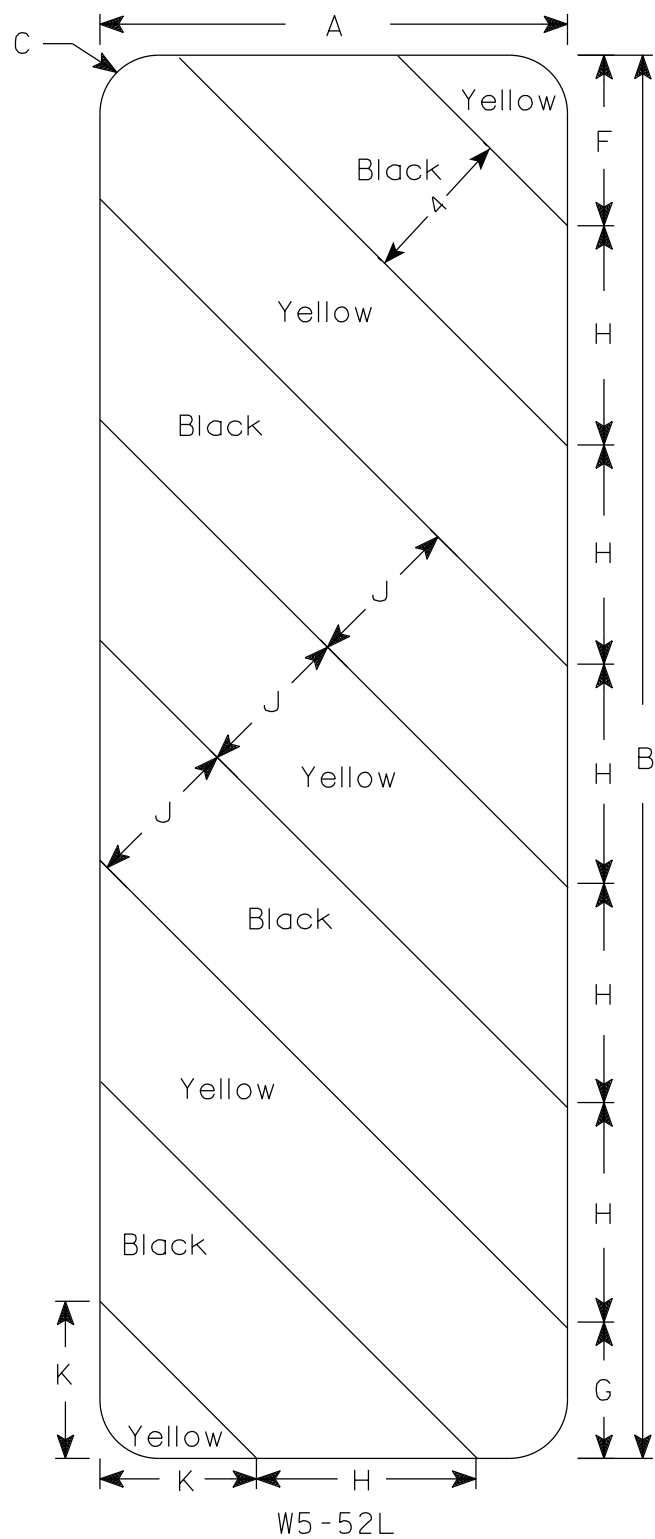
W3-1

WISCONSIN DEPT OF TRANSPORTATION

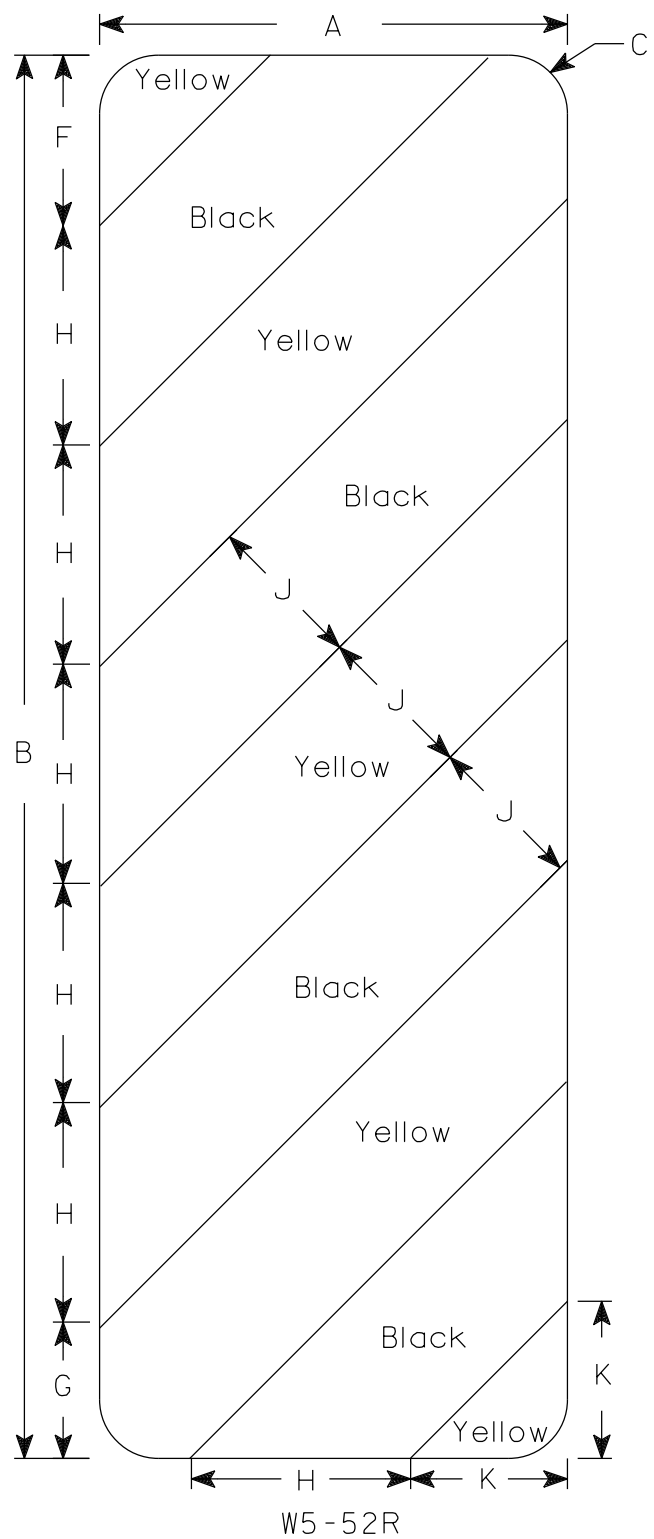
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 8/17/2023

PLATE NO. W3-1.13



W5-52L



W5-52R

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<br>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    |    |    |       |   |   |       |       |       |     |   |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |                 |

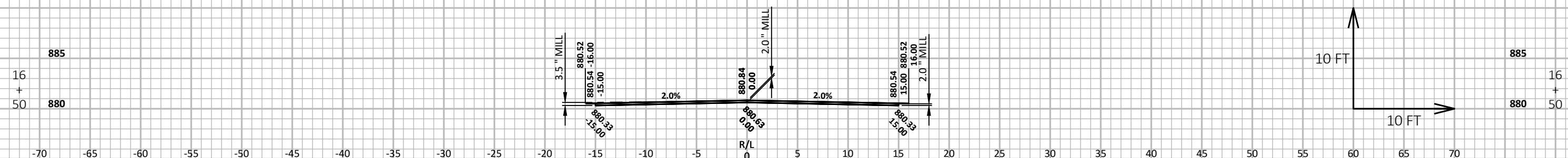
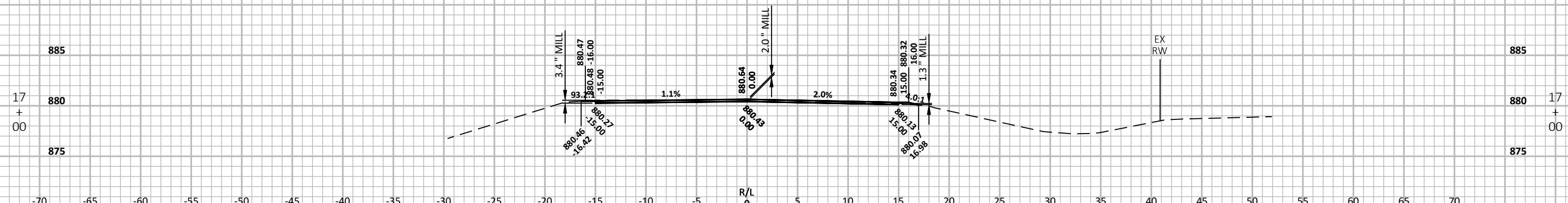
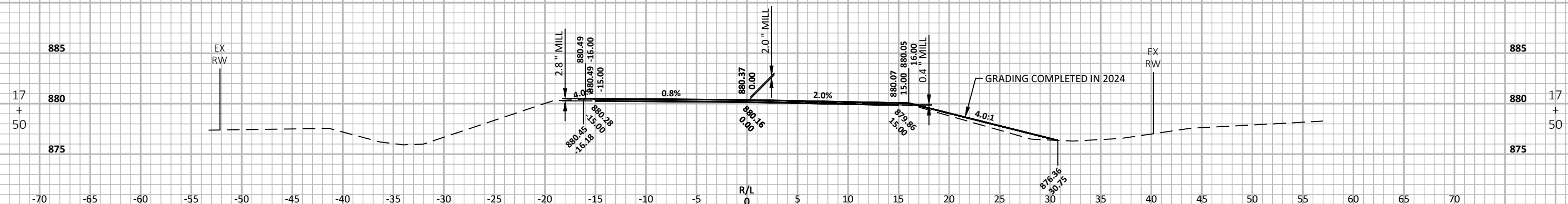
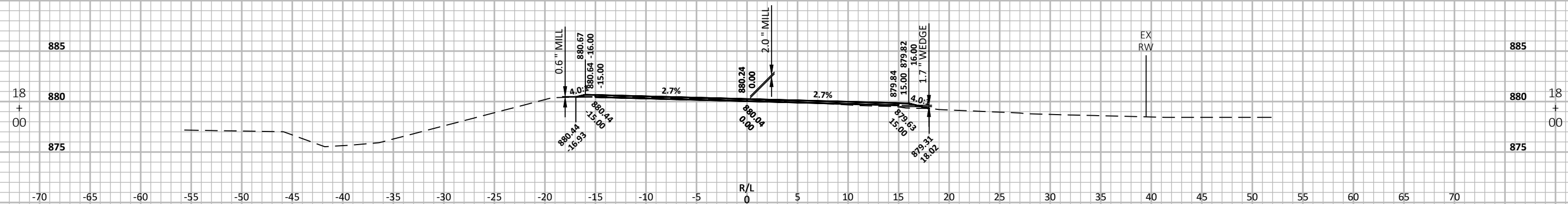
STANDARD SIGN  
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

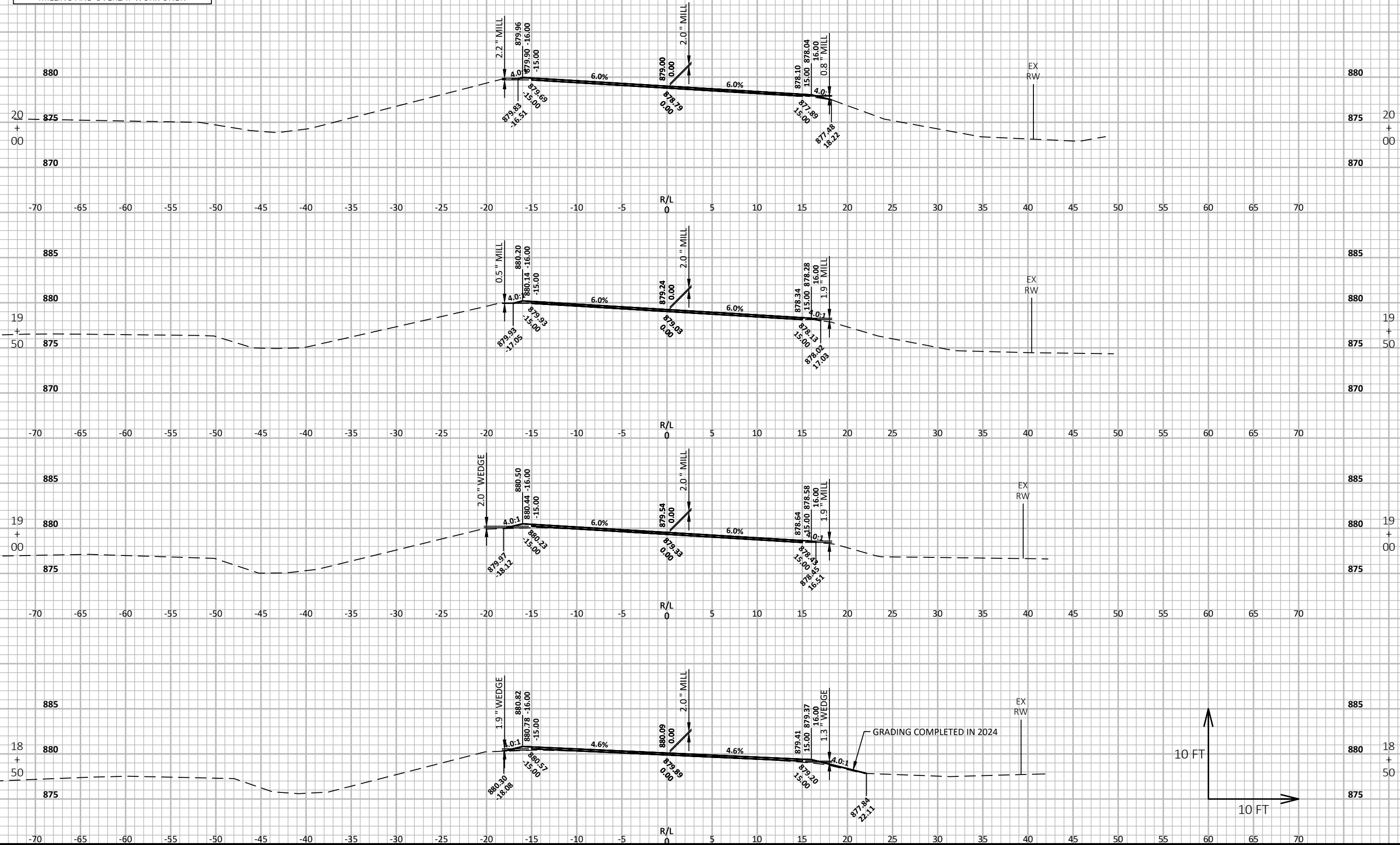
APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

DATE 3/4/2024 PLATE NO. W5-52.10

NOTE: INFORMATION ON THIS SHEET FOR  
MILLING AND OVERLAY WORK ONLY.



NOTE: INFORMATION ON THIS SHEET FOR  
MILLING AND OVERLAY WORK ONLY.



PROJECT NO: 4589-01-72

HWY: CTH PP

COUNTY: BROWN

CROSS SECTIONS: CTH PP

SHEET 59

FILE NAME : N:\3001545.00\CIVIL 3D\SHEETS\PLAN\SOUTH PROJECT DOT\45890172-090201-XS.DWG  
LAYOUT NAME - 45890172-090202-xs

PLOT DATE : 1/10/2025 10:59 AM

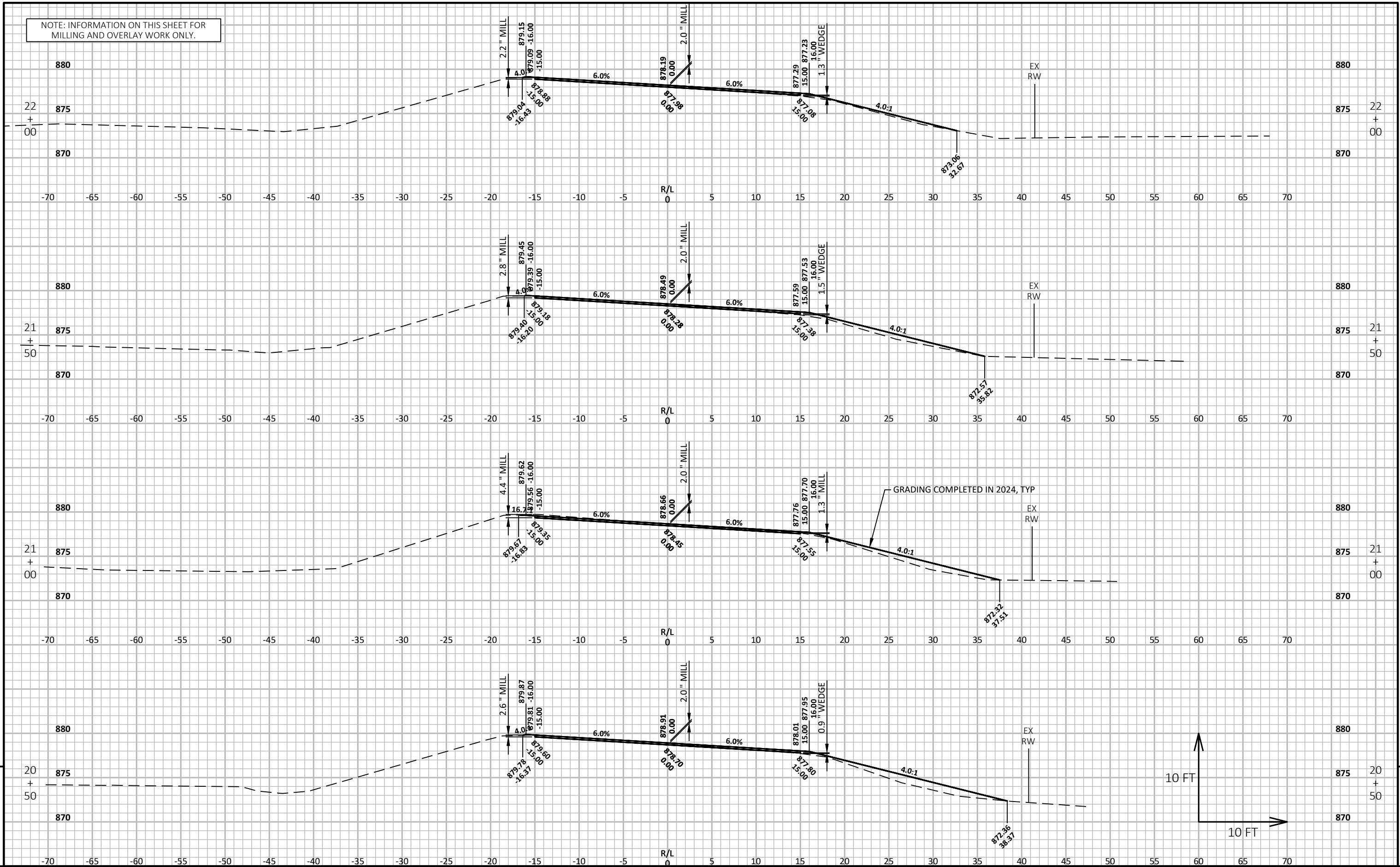
PLOT BY : ANDY WESTBROOK

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

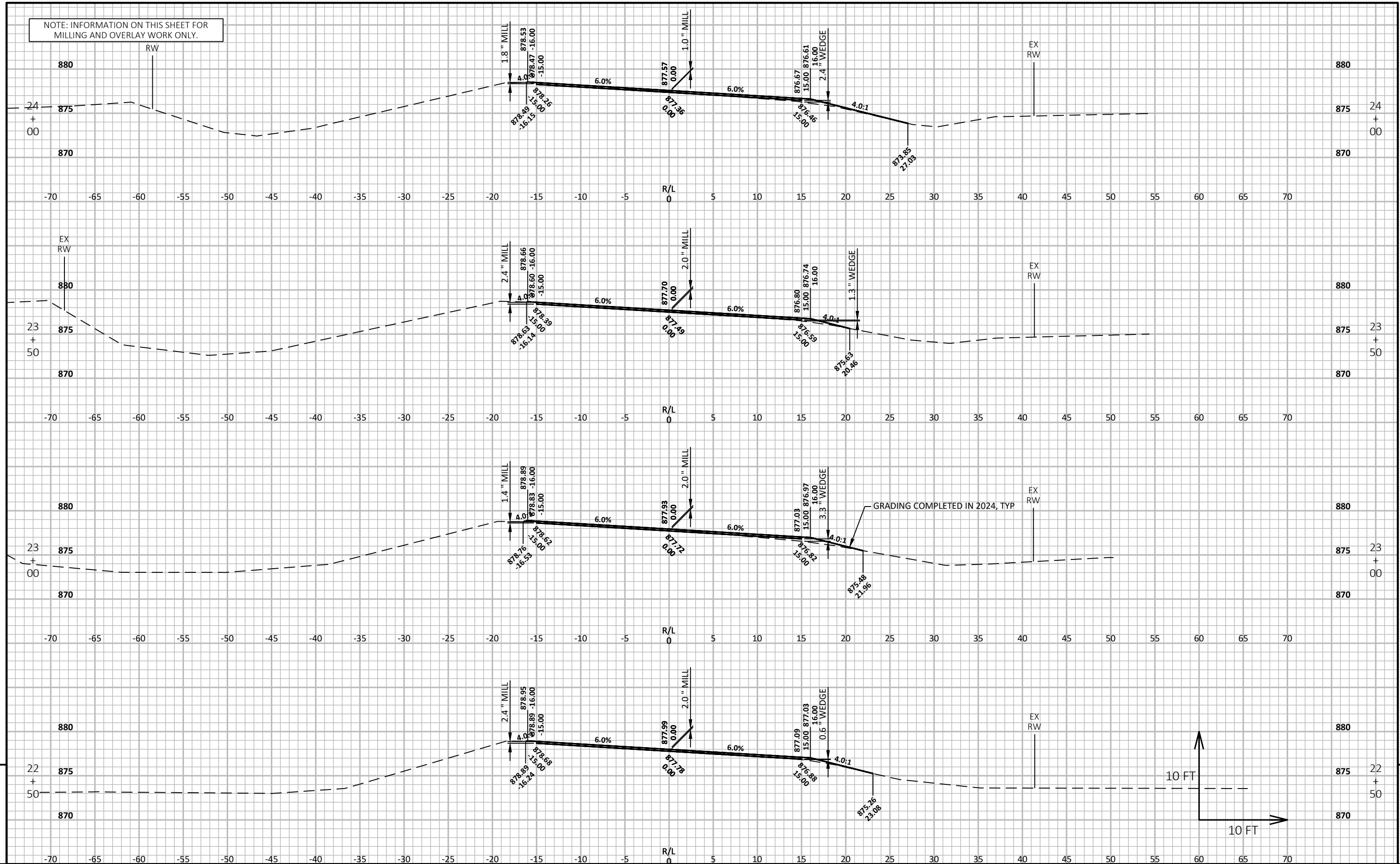
WISDOT/CADDs SHEET 49

NOTE: INFORMATION ON THIS SHEET FOR  
MILLING AND OVERLAY WORK ONLY.

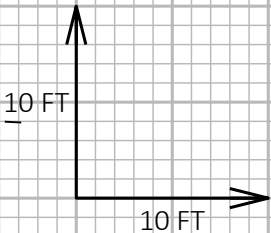
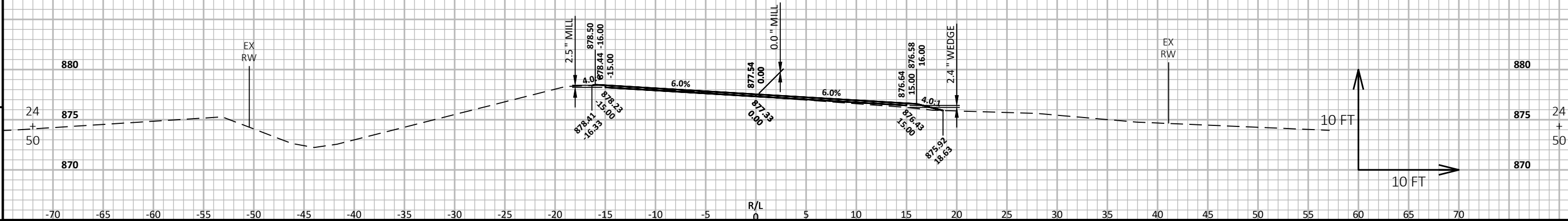
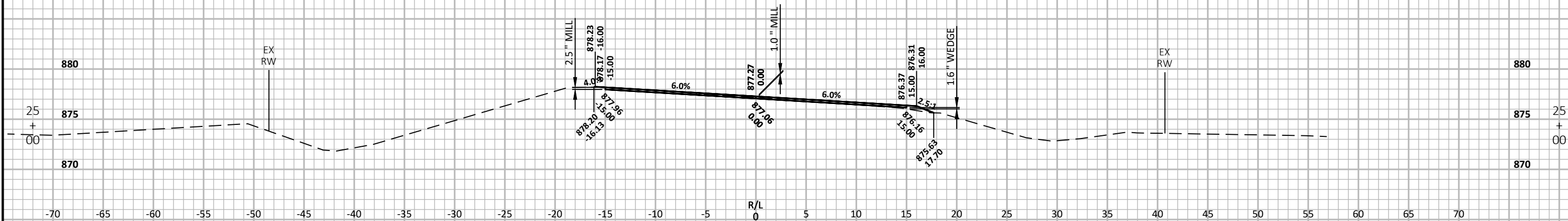
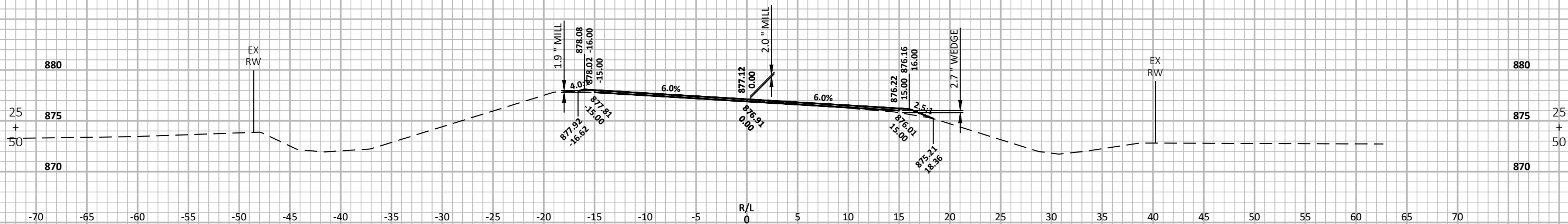




NOTE: INFORMATION ON THIS SHEET FOR  
MILLING AND OVERLAY WORK ONLY.

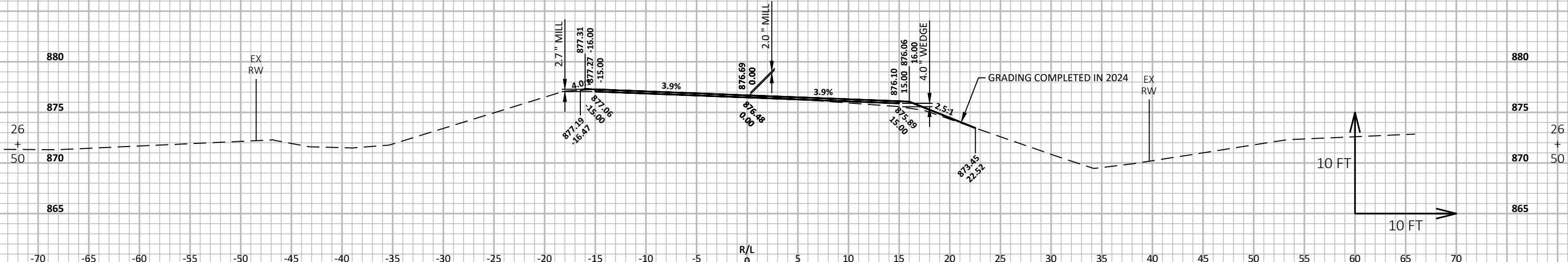
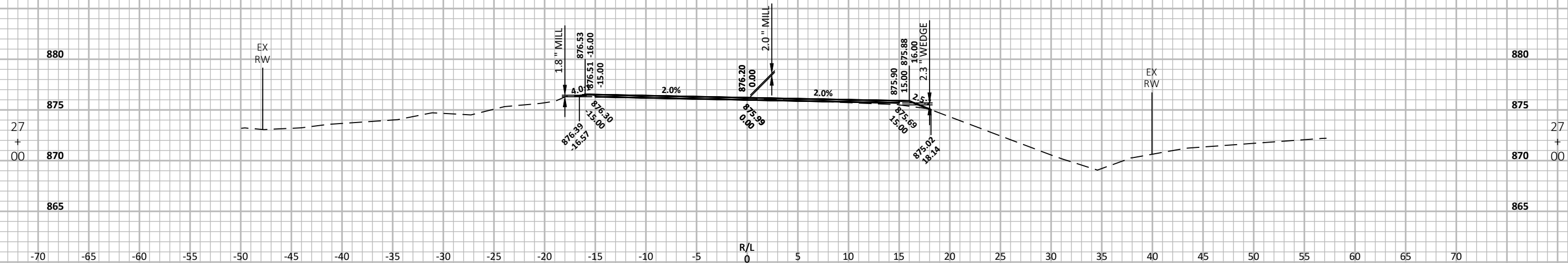
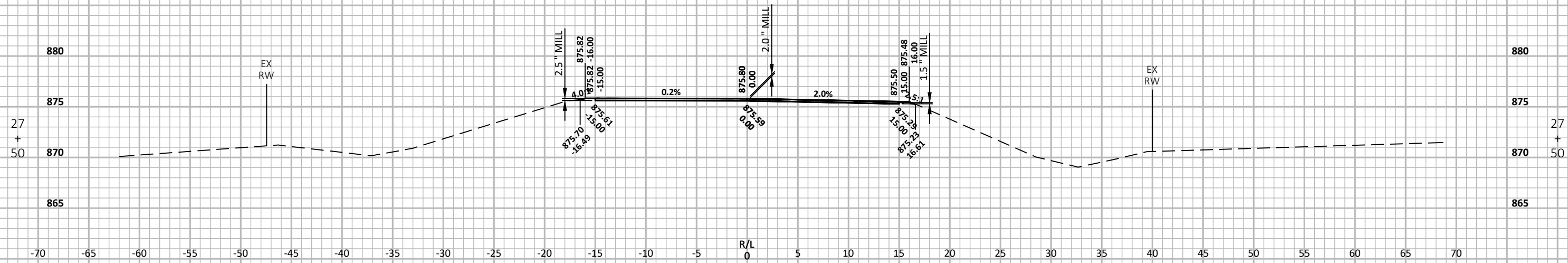


NOTE: INFORMATION ON THIS SHEET FOR  
MILLING AND OVERLAY WORK ONLY.





NOTE: INFORMATION ON THIS SHEET FOR  
MILLING AND OVERLAY WORK ONLY.



|             |            |
|-------------|------------|
| PROJECT NO: | 4589-01-72 |
|-------------|------------|

HWY: CTH PP

COUNTY: BROWN

CROSS SECTIONS: CTH PP

SHEET 63

FILE NAME : N:\3001545.00\CIVIL 3D\SHEETSPLAN\SOUTH PROJECT DOT\45890172-090201-XS.DWG  
LAYOUT NAME - 45890172-090206-xs

PLOT DATE : 1/10/2025 10:59 AM

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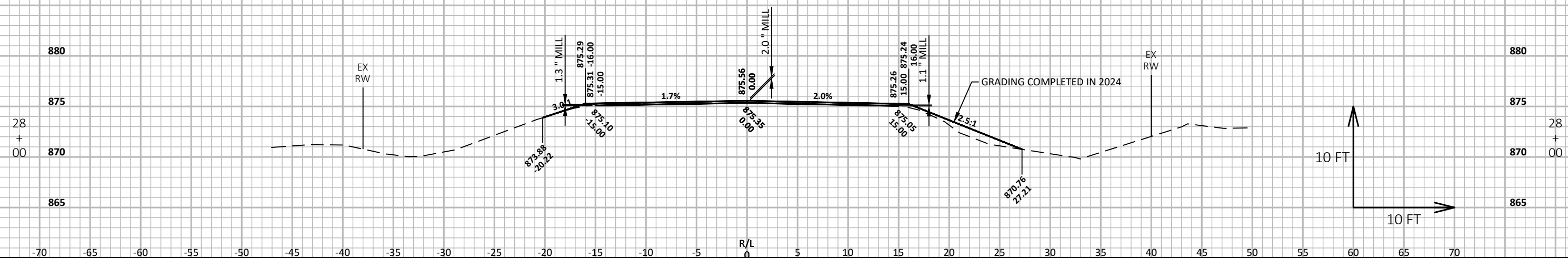
PLOT BY :        ANDY WESTBROOK

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

NOTE: INFORMATION ON THIS SHEET FOR  
MILLING AND OVERLAY WORK ONLY.



PROJECT NO: 4589-01-72

HWY: CTH PP

COUNTY: BROWN

CROSS SECTIONS: CTH PP

SHEET

64

E

FILE NAME : N:\3001545.00\CIVIL 3D\SHEETS\PLAN\SOUTH PROJECT DOT\45890172-090201-XS.DWG  
LAYOUT NAME - 45890172-090207-xs

PLOT DATE : 1/10/2025 10:59 AM

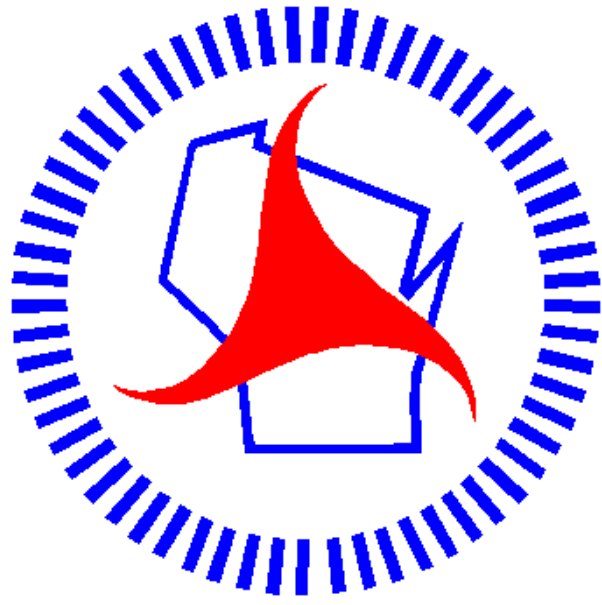
PLOT BY : ANDY WESTBROOK

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDs SHEET 49

## Notes



## ***Wisconsin Department of Transportation***

Dedicated people creating transportation solutions through innovation and exceptional service.

<http://www.dot.wisconsin.gov>