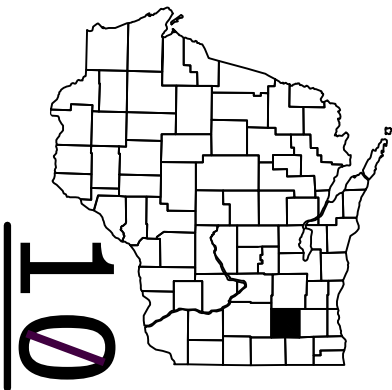


MAY 2013

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 = 44



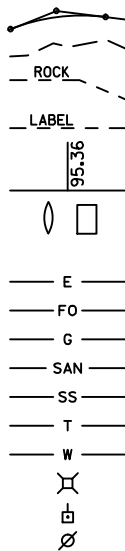
DESIGN DESIGNATION

| | | |
|-----------------|---|-----------|
| A.A.D.T. (2009) | = | 5,400 |
| A.A.D.T. (2023) | = | 6,500 |
| D.H.V. | = | 4.9% |
| D.D. | = | 62/38 |
| T. | = | 6.1% |
| DESIGN SPEED | = | 40/25 MPH |
| ESALS | = | 1,100,000 |

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 | |

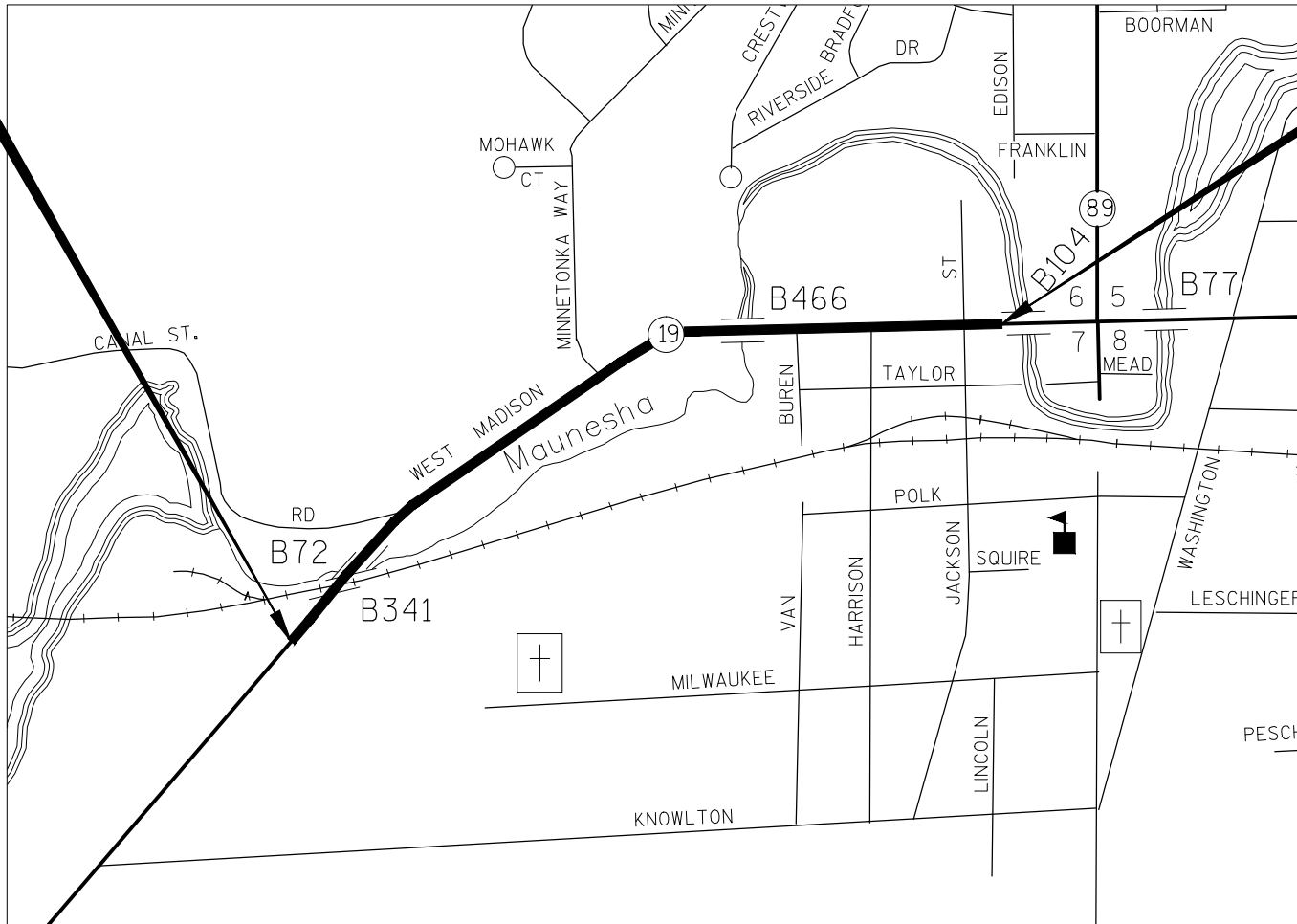


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
SUN PRAIRIE - WATERTOWN
B-28-72 TO JACKSON STREET
STH 19
JEFFERSON COUNTY

| |
|----------------------|
| STATE PROJECT NUMBER |
| 3050-02-62 |

R-13-E
Town of Portland

Town of Medina
T-8-N



LAYOUT
SCALE 0 0.09 MILES

TOTAL NET LENGTH OF CENTERLINE = 0.72 MILES

| STATE PROJECT | FEDERAL PROJECT | |
|---------------|-----------------|----------|
| | PROJECT | CONTRACT |
| 3050-02-62 | _____ | _____ |
| | | |
| | | |
| | | |

END PROJECT
STA. 57+80

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---------------------|----------------|
| Surveyor | _____ |
| Designer | STEFAN CIOBANU |
| Project Manager | JEREMY HALL |
| Regional Examiner | _____ |
| Regional Supervisor | KURT JOHNSON |
| C.O. Examiner | _____ |

APPROVED FOR THE DEPARTMENT

DATE: 1/29/13

E

UTILITY CONTACTS

| | |
|---|---|
| ROBERT CHURCH FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION LINE 118 DIVISION STREET PLYMOUTH, WI 53073 (608) 837-1881 ROBERT.CHURCH@FTR.COM | BRANDON STORM CHARTER COMMUNICATIONS - COMMUNICATION LINE 2701 DANIELS ST. MADISON, WI 53718 (608) 274-3822 BRANDON.STORM@CHARTERCOM.COM |
| DAN SANDE WE ENERGIES - GAS/PETROLEUM 333 W EVERETT ST, A299 MILWAUKEE, WI 53203 (414) 221-4578 DAN.SANDE@WE-ENERGIES.COM | WATERLOO WATER AND LIGHT COMMISSION - WATER 575 COMMERCIAL AVE WATERLOO, WI 53594-2400 (920) 478-2260 |

DNR & RR CONTACTS

| | |
|--|---|
| ERIC HEGGELUND 3911 FISH HATCHERY ROAD MADISON, WI 53711 (608) 275-3301 eric.heggelund@wisconsin.gov | WISCONSIN AND SOUTHERN RAILROAD BEN MEIGHAN 1890 EAST JOHNSON STREET MADISON, WI 53704 (608) 243-9129 EXT. 201 FAX (608) 243-9225 bmeighan@wsorrailroad.com |
|--|---|

GENERAL NOTES

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO "DIGGER'S HOTLINE"AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

IF UTILITY CONFLICTS OCCUR DURING CONSTRUCTION, ADJUSTMENTS WILL BE COORDINATED WITH CONTRACTOR. IF THERE ARE CONFLICTS WITH SIGNS OR OTHER WORK UNDER PROJECT, THE CONTRACTOR WILL WORK AROUND THE UTILITY FACILITIES.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112LB/SY/INCH.

APPLY TACK COAT TO MILLED SURFACES. THE RATE OF APPLICATION IS 0.025 GALLONS PER SQUARE YARD OR AS DIRECTED BY THE ENGINEER.

ALL EXISTING SIGNS SHALL REMAIN IN PLACE UNTIL CONSTRUCTION OPERATIONS REQUIRE THEIR REMOVAL OR UNLESS THE ENGINEER APPROVES THEIR REMOVAL.

THE LOCATION OF STOP LINES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, ALL SIGNS RELATED TO THIS OPERATION SHOULD BE COVERED OR REMOVED AND THE FACILITY RESTORED TO NORMAL OPERATIONS.

THE EXACT LOCATIONS AND LIMITS OF PRIVATE AND FIELD ENTRANCES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

PAVING LIMITS AT INTERSECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

EXISTING SIGNS OTHER THAN THE ONES SHOWN ON THE PLANS SHALL REMAIN IN PLACE.

CURVE INFORMATION SHOWN ON THE PLANS HAS NOT BEEN FIELD VERIFIED BY A SURVEYOR. THE ENGINEER SHALL DETERMINE THE APPROPRIATE SUPER-ELEVATION AND RUN-OFF INFORMATION AND PROVIDE IT TO THE CONTRACTOR PRIOR TO PAVING.

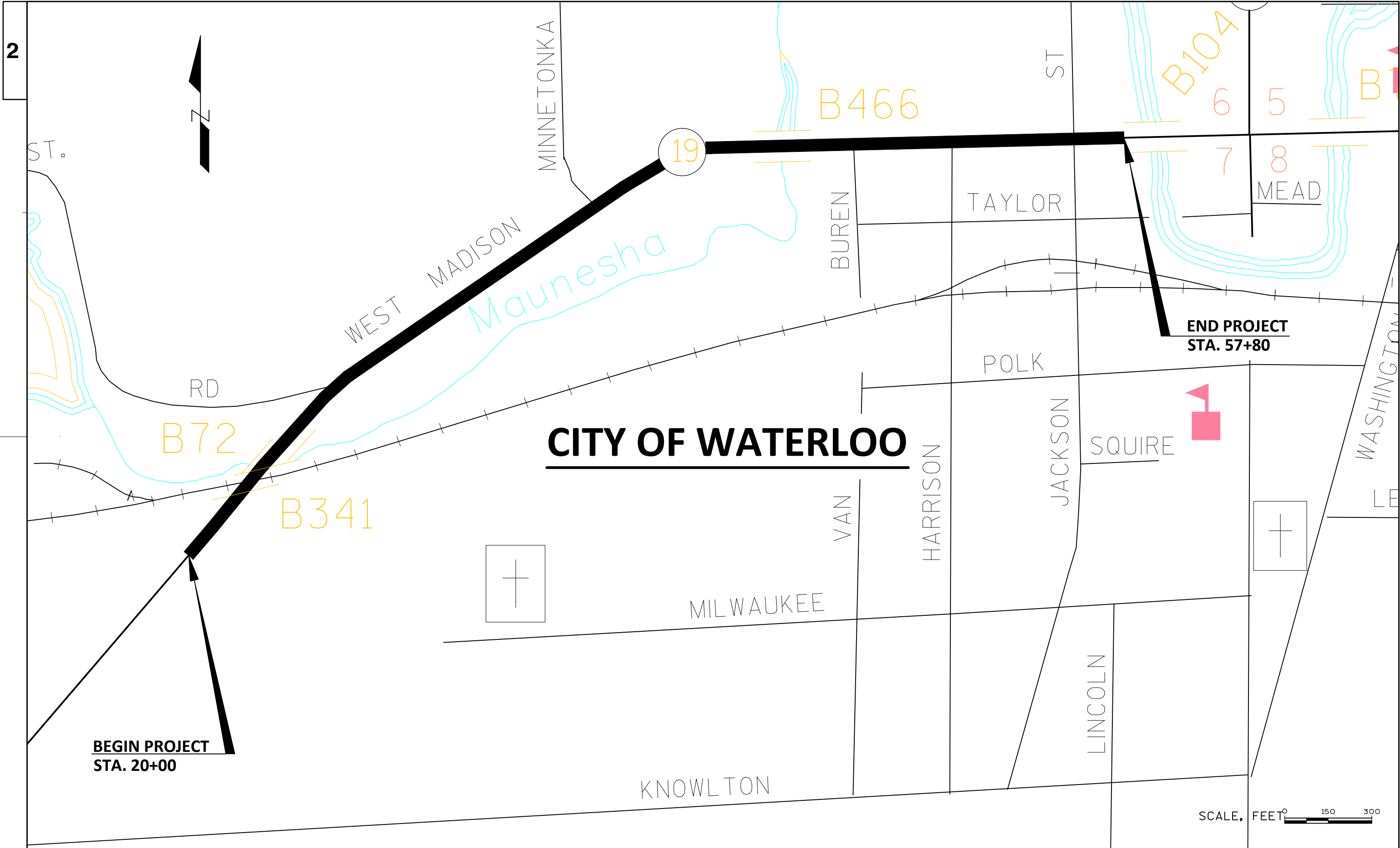
REMOVE AND REPLACE ALL SIGNS AND POSTS WITH NEW SIGNS AND POSTS IN THE SAME GENERAL LOCATION UNLESS OTHERWISE NOTED ON THE PLANS.

HMA PAVEMENT SHALL BE PLACED IN ONE LAYER FOR A TOTAL DEPTH OF 2".

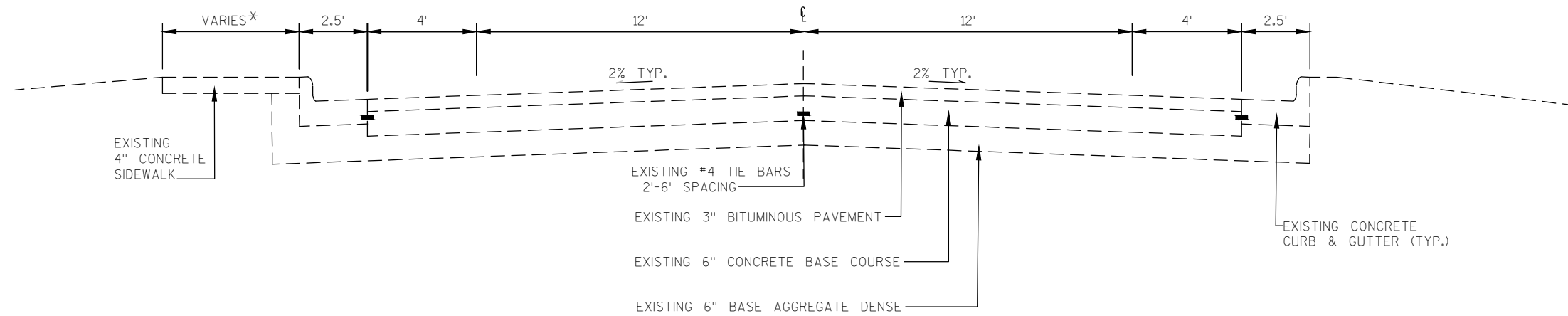
THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN'S TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING OR PARKING LANE.



Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com



| | | | | | |
|------------------------|-------------|-------------------|------------------|-------------|----------|
| PROJECT NO: 3050-02-62 | HWY: STH 19 | COUNTY: JEFFERSON | PROJECT OVERVIEW | SHEET ----- | E |
|------------------------|-------------|-------------------|------------------|-------------|----------|

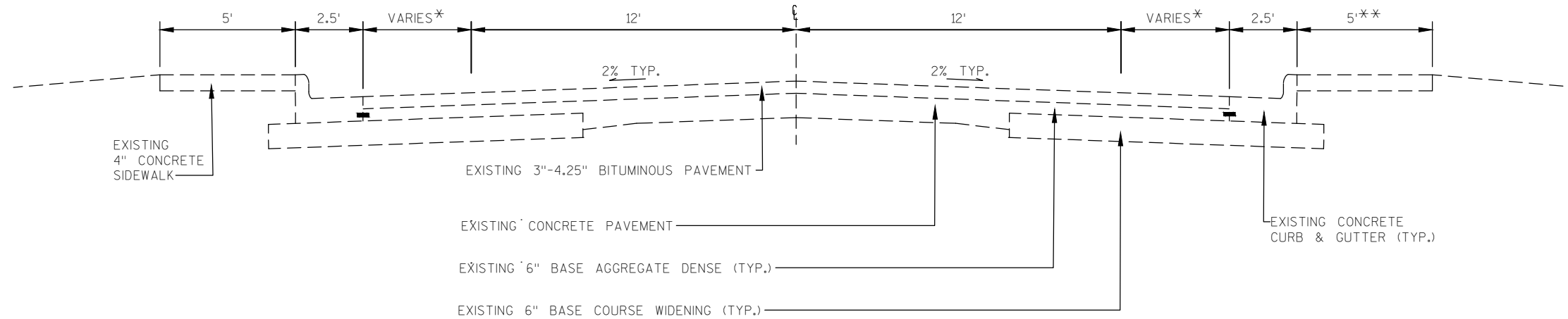


TYPICAL EXISTING SECTION

STH 19

STA. 20+00 - STA. 30+00

***DISTANCE BETWEEN SIDEWALK AND B.O.C. VARIES**



TYPICAL EXISTING SECTION

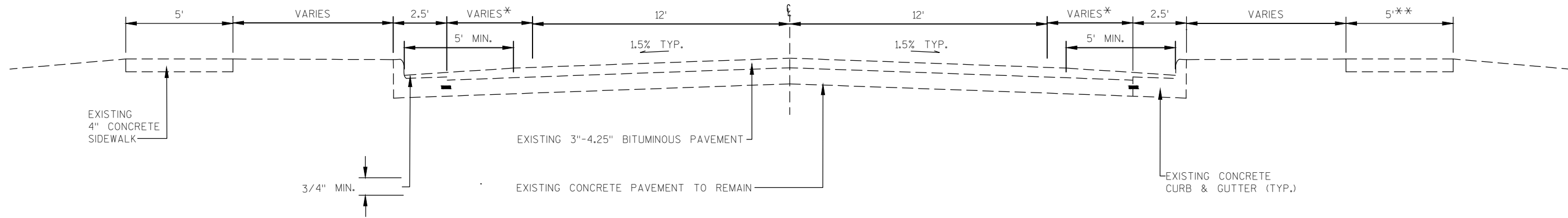
STH 19

STA. 30+00 - STA. 46+50

***STA. 30+00 - STA. 45+30 - 4'**

***STA. 45+80 - STA. 46+50 - 6'**

****PARTIAL RT SIDEWALK**

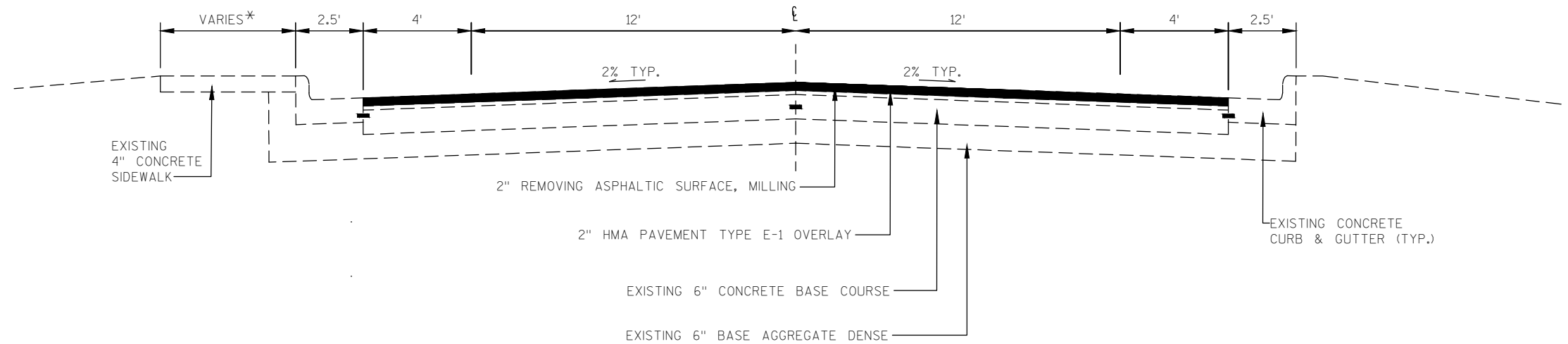


TYPICAL EXISTING SECTION

STH 19
STA. 46+50 - STA. 57+80

- *STA. 46+50 - STA. 48+00 - 6'
- *STA. 48+00 - STA. 51+30 - 1'
- *STA. 51+30 - STA. 55+50 - 3'
- *STA. 55+50 - STA. 57+80 - 10.5'

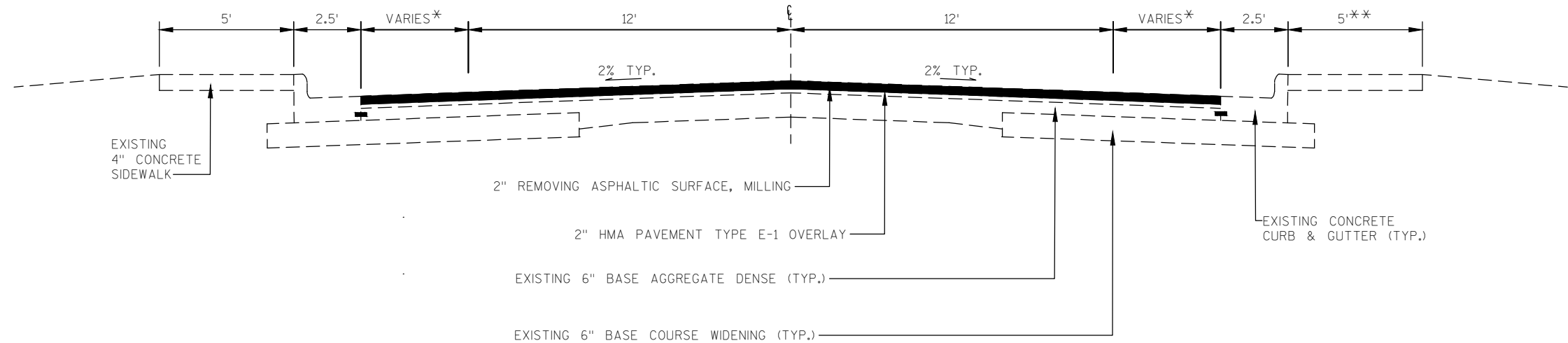
**STA. 46+50 - 48+00, PARTIAL RT SIDEWALK



TYPICAL PROPOSED SECTION

STH 19
STA. 20+00 - STA. 30+00

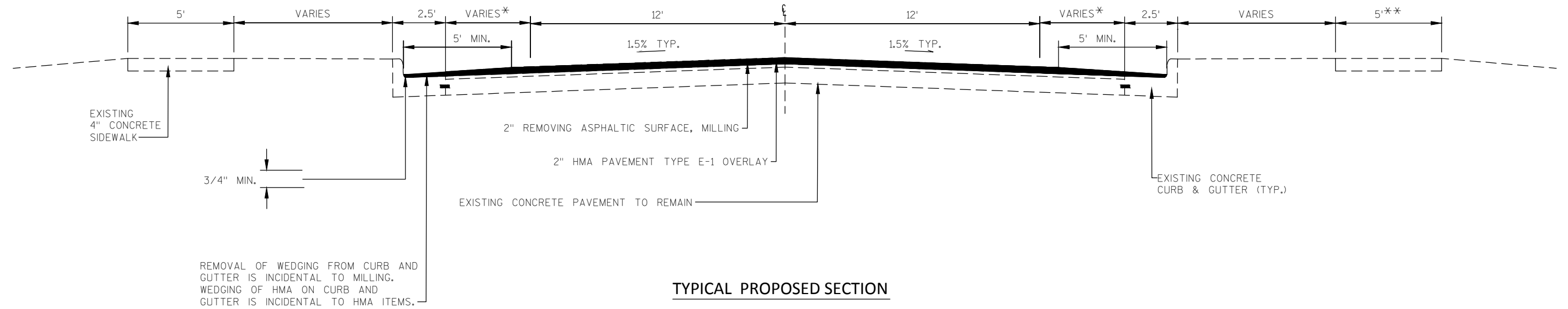
*DISTANCE BETWEEN SIDEWALK AND B.O.C. VARIES



TYPICAL PROPOSED SECTION

STH 19
STA. 30+00 - STA. 46+50
*STA. 30+00 - STA. 45+30 - 4'
*STA. 45+80 - STA. 46+50 - 6'

**PARTIAL RT SIDEWALK



TYPICAL PROPOSED SECTION

STH 19

STA. 46+50 - STA. 57+80

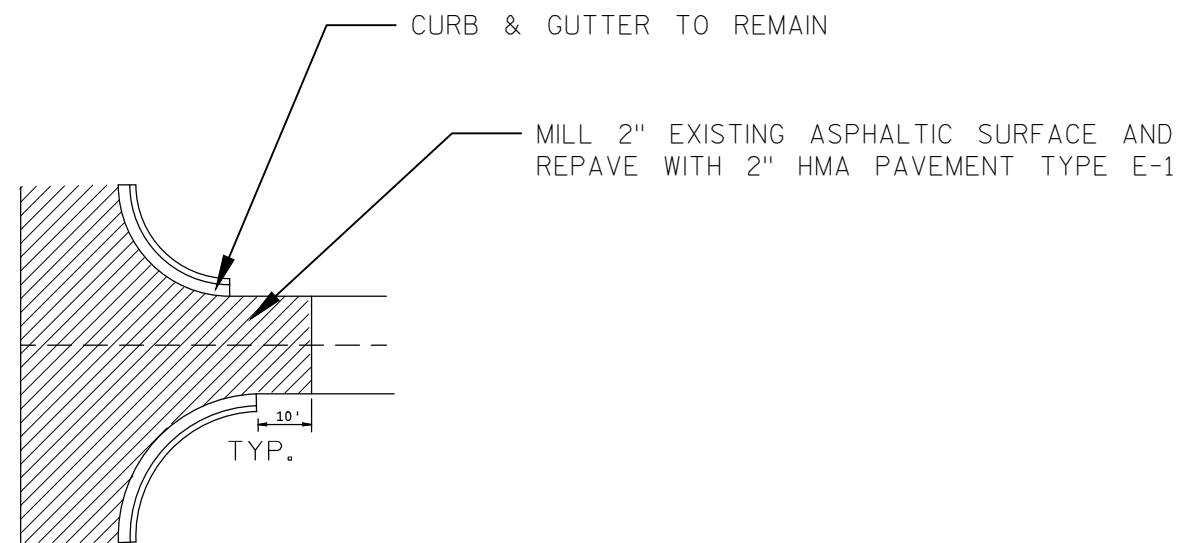
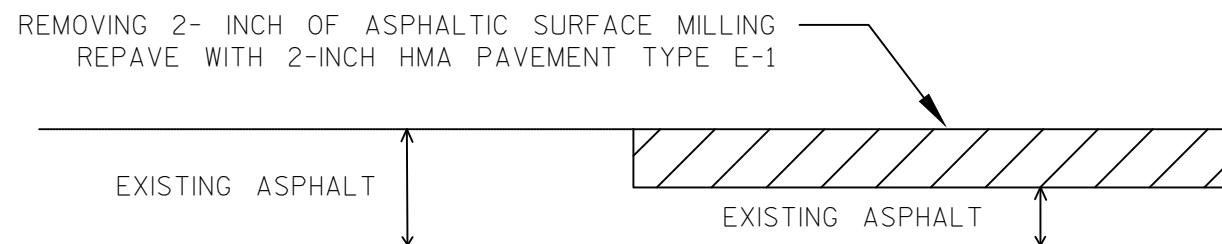
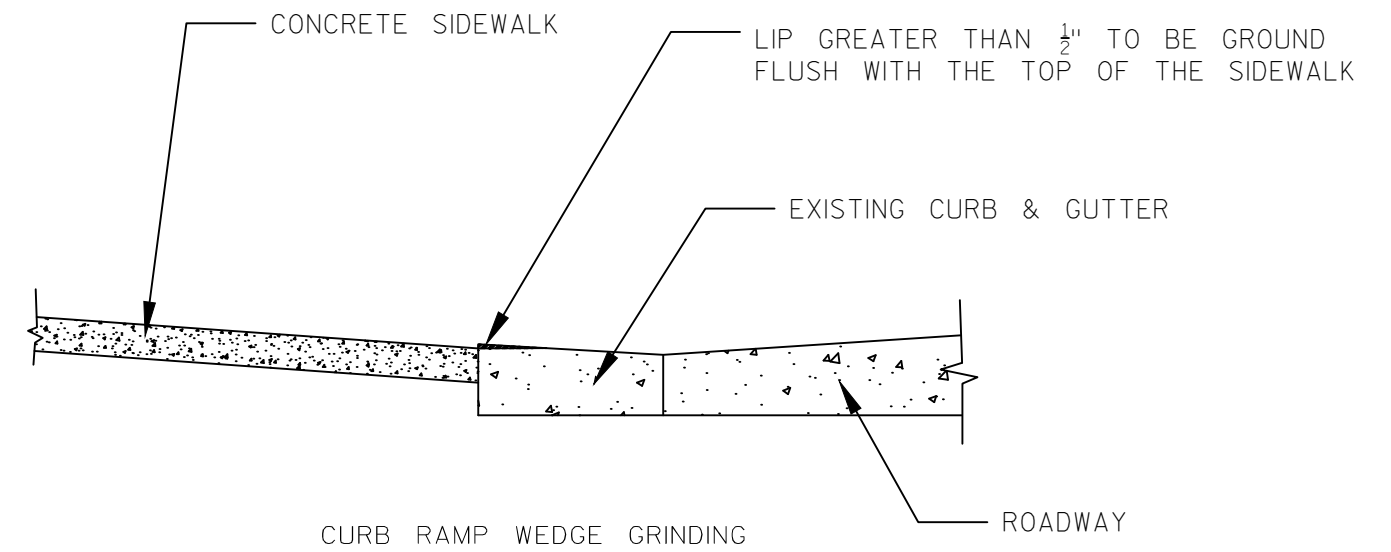
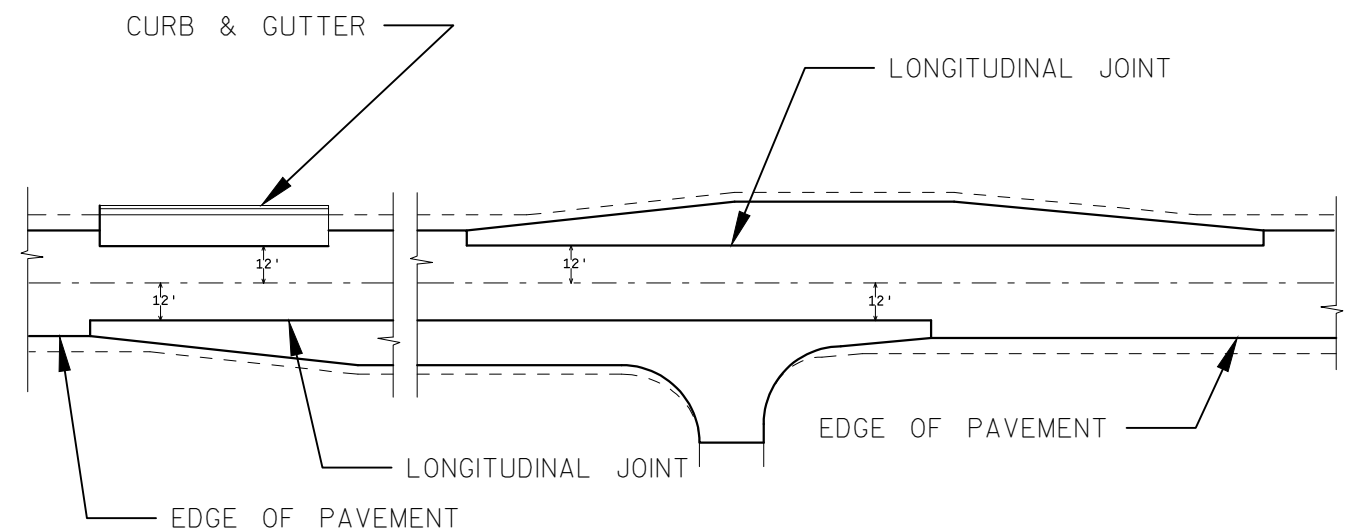
*STA. 46+50 - STA. 48+00 - 6'

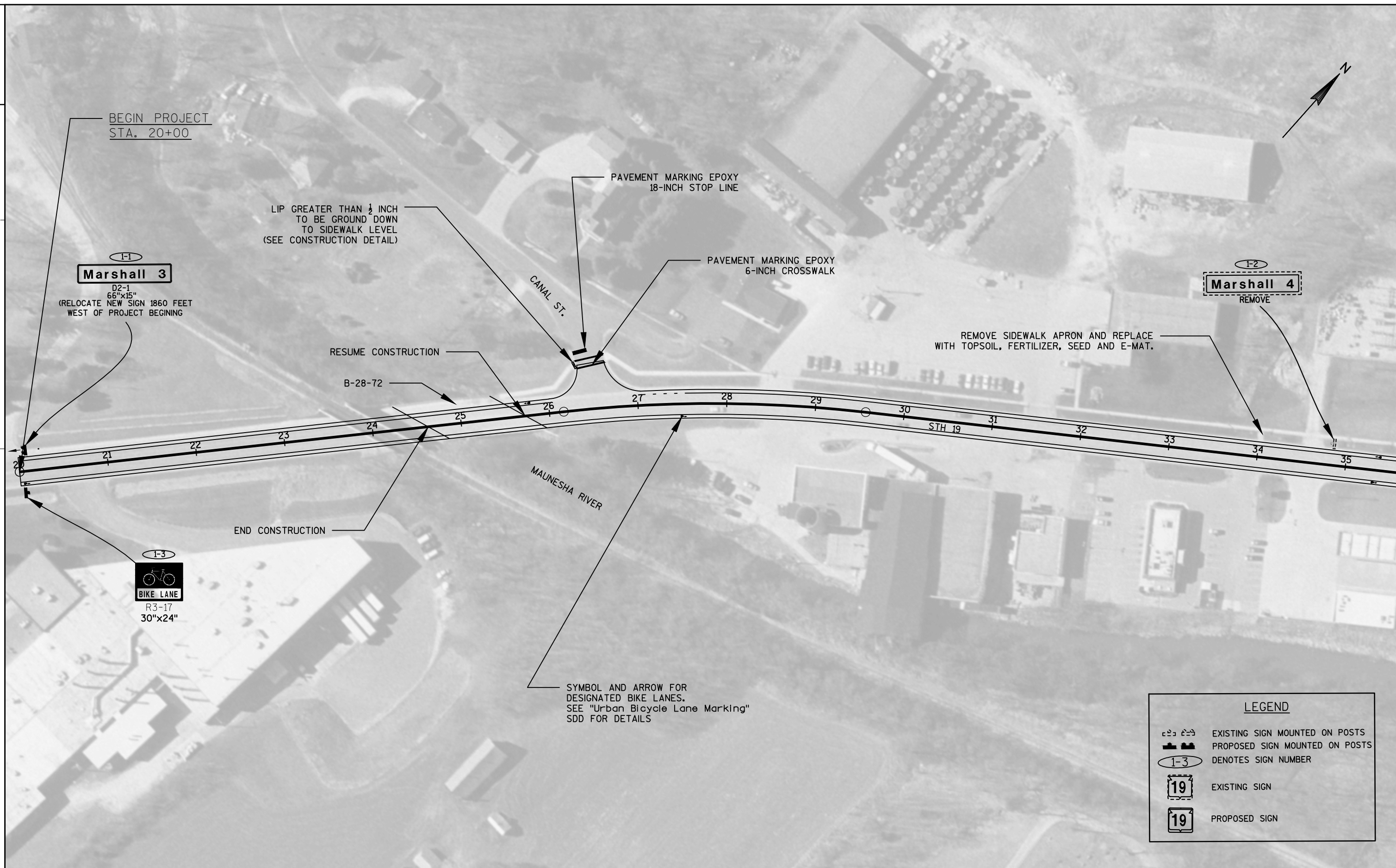
*STA. 48+00 - STA. 51+30 - 1'

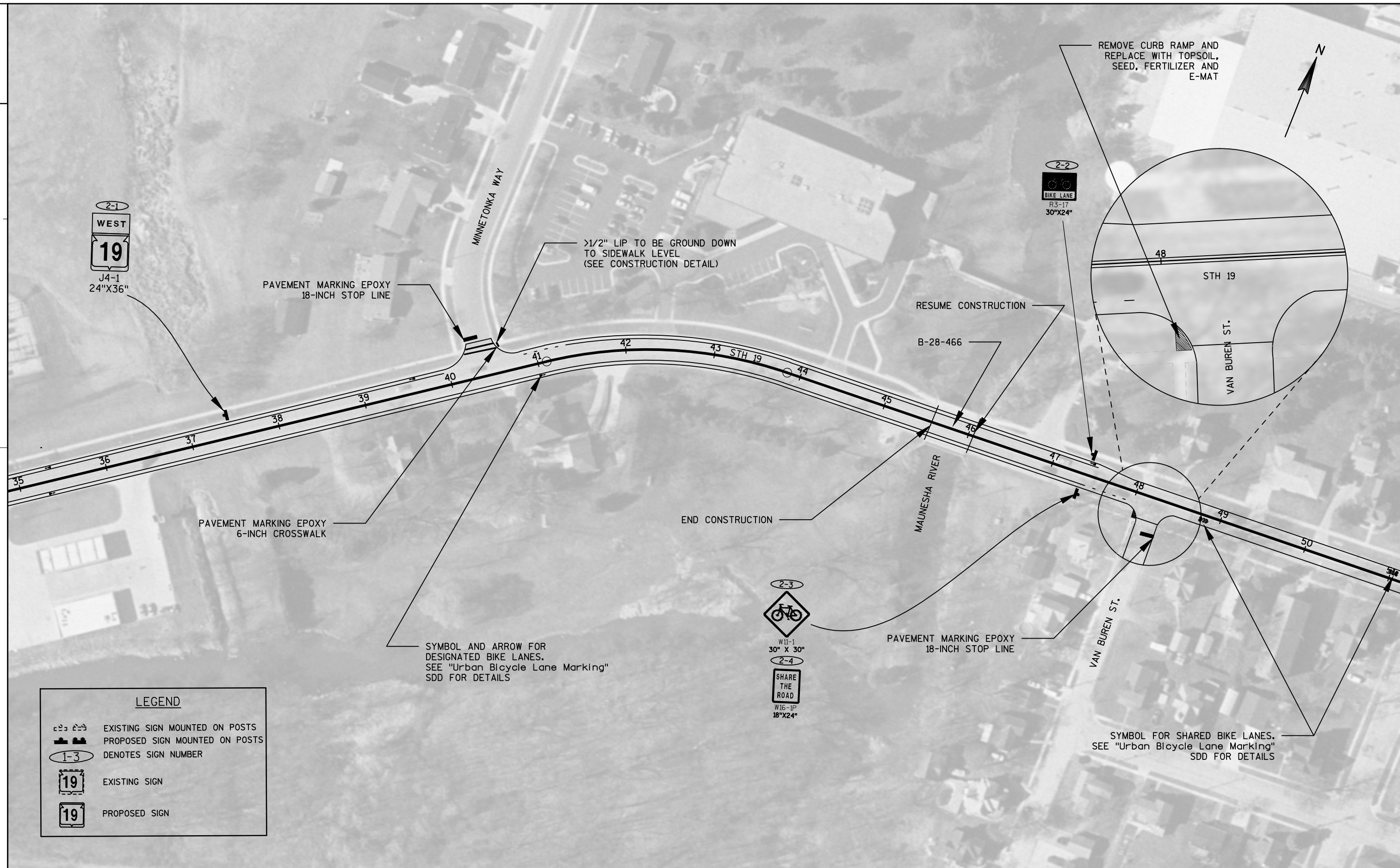
*STA. 51+30 - STA. 55+50 - 3'

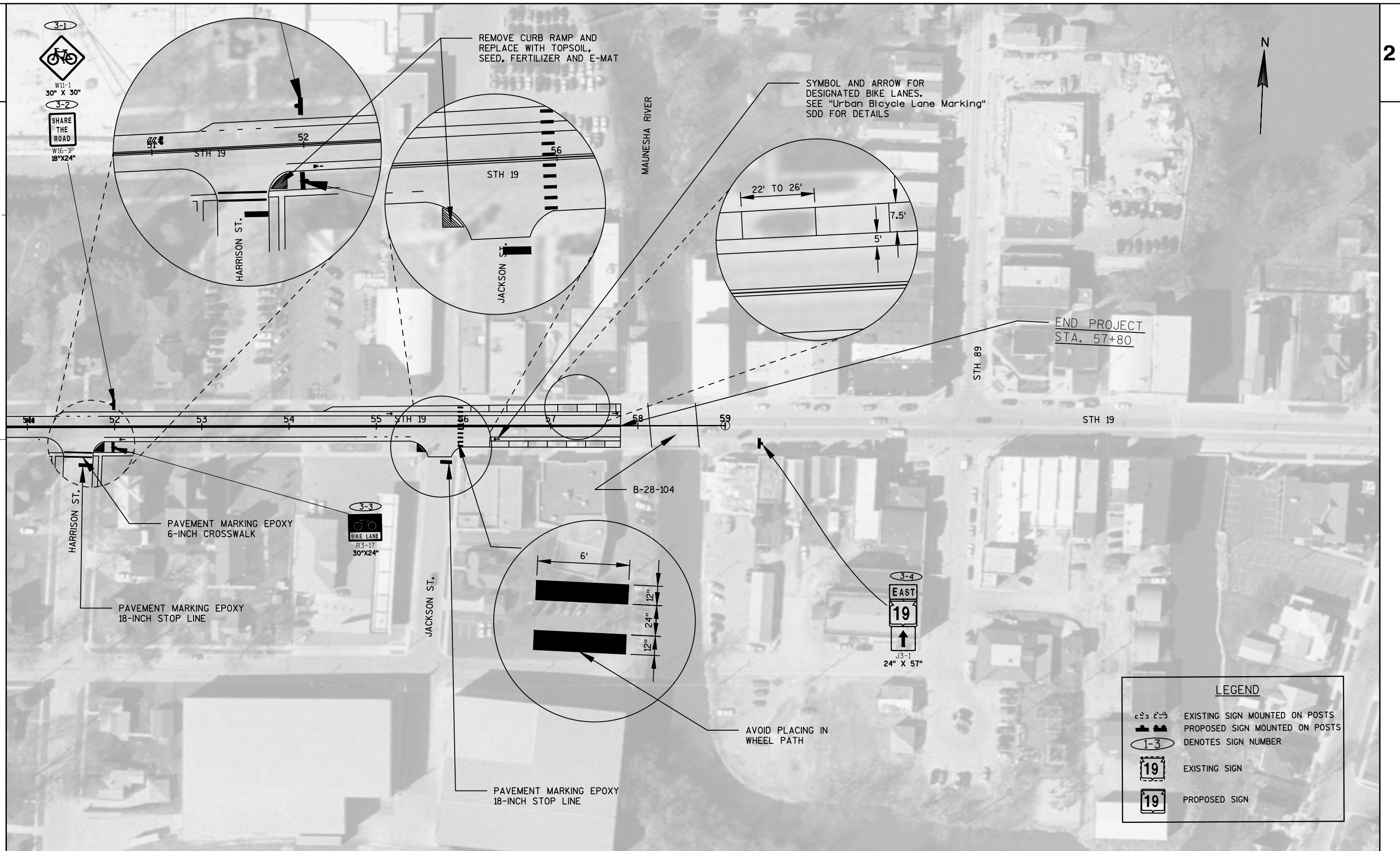
*STA. 55+50 - STA. 57+80 - 10.5'

**STA. 46+50 - 48+00, PARTIAL RT SIDEWALK

SIDEROAD DETAILBUTT JOINT DETAILHMA LONGITUDINAL JOINT DETAIL







A



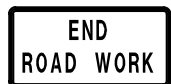
48"x48"

B



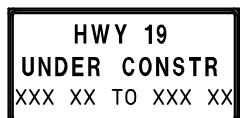
48"x48"

C



48"x24"

*



96"x48"

* PLACE FIXED MESSAGE SIGN AT THE LIMITS OF THE PROJECT 10 WORKING DAYS PRIOR TO BEGINING CONSTRUCTION

TRAFFIC CONTROL:
FOR MOVING OPERATIONS STA. 20+00 TO STA. 57+80 SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATION)"

**BEGIN PROJECT
STA. 20+00**

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL
ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO
WAY UNDIVIDED ROAD OPEN TO TRAFFIC.

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL
ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO
WAY UNDIVIDED ROAD OPEN TO TRAFFIC.

**END PROJECT
STA. 57+80**

SCALE, FEET 0 200 400

| DATE 19MAR13 | | E S T I M A T E O F Q U A N T I T I E S | | | |
|--------------|------------|--|------|------------|------------|
| LINE | | | | | 3050-02-62 |
| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTITY |
| 0020 | 204.0120 | REMOVING ASPHALTIC SURFACE MILLING | SY | 14,300.000 | 14,300.000 |
| 0030 | 204.0150 | REMOVING CURB & GUTTER | LF | 29.000 | 29.000 |
| 0040 | 204.0155 | REMOVING CONCRETE SIDEWALK | SY | 30.000 | 30.000 |
| 0060 | 213.0100 | FINISHING ROADWAY (PROJECT) 01. | EACH | 1.000 | 1.000 |
| | | 3050-02-62 | | | |
| 0080 | 305.0110 | BASE AGGREGATE DENSE 3/4-INCH | TON | 2.000 | 2.000 |
| 0100 | 440.4410.S | INCENTIVE IRI RIDE | DOL | 2,870.000 | 2,870.000 |
| 0110 | 455.0105 | ASPHALTIC MATERIAL PG58-28 | TON | 92.000 | 92.000 |
| 0120 | 455.0605 | TACK COAT | GAL | 370.000 | 370.000 |
| 0130 | 460.1101 | HMA PAVEMENT TYPE E-1 | TON | 1,670.000 | 1,670.000 |
| 0140 | 460.2000 | INCENTIVE DENSITY HMA PAVEMENT | DOL | 1,070.000 | 1,070.000 |
| 0170 | 601.0411 | CONCRETE CURB & GUTTER 30-INCH TYPE D | LF | 29.000 | 29.000 |
| 0180 | 611.8110 | ADJUSTING MANHOLE COVERS | EACH | 7.000 | 7.000 |
| 0190 | 618.0100 | MAINTENANCE AND REPAIR OF HAUL ROADS | EACH | 1.000 | 1.000 |
| | | (PROJECT) 01. 3050-02-62 | | | |
| 0210 | 619.1000 | MOBILIZATION | EACH | 0.100 | 0.100 |
| 0220 | 625.0100 | TOPSOIL | SY | 30.000 | 30.000 |
| 0250 | 628.1905 | MOBILIZATIONS EROSION CONTROL | EACH | 1.000 | 1.000 |
| 0260 | 628.1910 | MOBILIZATIONS EMERGENCY EROSION CONTROL | EACH | 1.000 | 1.000 |
| 0280 | 628.2006 | EROSION MAT URBAN CLASS I TYPE A | SY | 30.000 | 30.000 |
| 0290 | 628.7015 | INLET PROTECTION TYPE C | EACH | 15.000 | 15.000 |
| 0300 | 629.0210 | FERTILIZER TYPE B | CWT | 0.050 | 0.050 |
| 0320 | 630.0140 | SEEDING MIXTURE NO. 40 | LB | 0.900 | 0.900 |
| 0340 | 634.0616 | POSTS WOOD 4X6-INCH X 16-FT | EACH | 6.000 | 6.000 |
| 0350 | 634.0618 | POSTS WOOD 4X6-INCH X 18-FT | EACH | 2.000 | 2.000 |
| 0360 | 637.0202 | SIGNS REFLECTIVE TYPE II | SF | 55.880 | 55.880 |
| 0380 | 638.2602 | REMOVING SIGNS TYPE II | EACH | 3.000 | 3.000 |
| 0390 | 638.3000 | REMOVING SMALL SIGN SUPPORTS | EACH | 3.000 | 3.000 |
| 0400 | 642.5001 | FIELD OFFICE TYPE B | EACH | 0.100 | 0.100 |
| 0410 | 643.0100 | TRAFFIC CONTROL (PROJECT) 01. 3050-02-62 | EACH | 1.000 | 1.000 |
| 0430 | 643.0300 | TRAFFIC CONTROL DRUMS | DAY | 300.000 | 300.000 |
| 0460 | 643.0900 | TRAFFIC CONTROL SIGNS | DAY | 160.000 | 160.000 |
| 0490 | 643.1000 | TRAFFIC CONTROL SIGNS FIXED MESSAGE | SF | 64.000 | 64.000 |
| 0520 | 646.0106 | PAVEMENT MARKING EPOXY 4-INCH | LF | 6,200.000 | 6,200.000 |
| 0540 | 646.0406 | PAVEMENT MARKING SAME DAY EPOXY 4-INCH | LF | 7,200.000 | 7,200.000 |
| 0560 | 647.0206 | PAVEMENT MARKING ARROWS BIKE LANE EPOXY | EACH | 12.000 | 12.000 |
| 0570 | 647.0306 | PAVEMENT MARKING SYMBOLS BIKE LANE EPOXY | EACH | 12.000 | 12.000 |
| 0580 | 647.0336 | PAVEMENT MARKING SYMBOLS BIKE SHARED LANE EPOXY | EACH | 2.000 | 2.000 |
| 0590 | 647.0566 | PAVEMENT MARKING STOP LINE EPOXY 18-INCH | LF | 100.000 | 100.000 |
| 0600 | 647.0656 | PAVEMENT MARKING PARKING STALL EPOXY | LF | 170.000 | 170.000 |
| 0610 | 647.0766 | PAVEMENT MARKING CROSSWALK EPOXY 6-INCH | LF | 310.000 | 310.000 |
| 0620 | 647.0776 | PAVEMENT MARKING CROSSWALK EPOXY 12-INCH | LF | 100.000 | 100.000 |
| 0640 | 650.8000 | CONSTRUCTION STAKING RESURFACING REFERENCE | LF | 3,800.000 | 3,800.000 |
| 0650 | 650.9910 | CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 3050-02-62 | LS | 1.000 | 1.000 |
| 0670 | 690.0250 | SAWING CONCRETE | LF | 84.000 | 84.000 |
| 0700 | SPV.0165 | SPECIAL 01. CURB RAMP GRINDING | SF | 10.000 | 10.000 |

3

| HMA PAVEMENT | | | | | | | |
|--------------|---|-------|-----------|-----------|-----------|----------|----------|
| | | | | 204.0120 | 455.0105 | 455.0605 | 460.1101 |
| | | | | REMOVING | | | |
| | | | | ASPHALTIC | ASPHALTIC | | HMA |
| | | | | SURFACE | MATERIAL | TACK | PAVEMENT |
| | | | | MILLING | PG58-28 | COAT | TYPE E-1 |
| STA | - | STA | LOCATION | SY | TON | GAL | TON |
| 20+00 | - | 57+80 | MAINLINE | 13,700 | 88 | 350 | 1,600 |
| 20+00 | - | 57+80 | SIDEROADS | 600 | 4 | 20 | 70 |
| TOTAL | | | | 14,300 | 92 | 370 | 1,670 |

| TRAFFIC CONTROL | | | | | |
|------------------------|------|----------|----------|----------|----------|
| | | 643.0100 | 643.0300 | 643.0900 | 643.1000 |
| | | TRAFFIC | | | SIGNS |
| | | CONTROL | | | FIXED |
| | | * | PROJECT | DRUMS | MESSAGE |
| LOCATION | DAYS | EACH | DAYS | DAYS | SF |
| MAINLINE | 10 | - | - | 80 | 64 |
| SIDEROADS | 10 | - | - | 60 | - |
| UNDISTRIBUTED | - | 1 | 300 | 20 | - |
| TOTAL: | | 1 | 300 | 160 | 64 |
| * FOR INFORMATION ONLY | | | | | |

| ADJUSTING MANHOLE COVERS | |
|--------------------------|------|
| | |
| 611.8110 | |
| ADJUSTING | |
| MANHOLE | |
| COVERS | |
| LOCATION | EACH |
| PROJECT | 7 |

| CONSTRUCTION STAKING | | |
|----------------------|-------|-------------------|
| 650.8000 | | 650.9910 |
| RESURFACING | | SUPPLEMENTAL |
| REFERENCE | | CONTROL (PROJECT) |
| LOCATION | LF | LS |
| PROJECT | 3,800 | 1 |

3

| CURB RAMP & EROSION CONTROL ITEMS | | | | | | | | | | | | | | |
|-----------------------------------|----------|----------|-------------|---------------|-------------|----------|--------------|--------------|----------|------------|------------|----------|----------|--|
| | 204.0150 | 204.0155 | 305.0110 | 601.0411 | SPV.0165.01 | 625.0100 | 628.1905 | 628.1910 | 628.2006 | 628.7015 | 629.0210 | 630.0140 | 690.0250 | |
| | REMOVING | REMOVING | BASE | CONCRETE | CURB | | MOBILIZATION | MOBILIZATION | EMAT | | | | | |
| | CURB & | CONCRETE | AGGREGATE | CURB & GUTTER | RAMP | | EROSION | EROSION | CLASS I | INLET | FERTILIZER | MIXTURE | SAWING | |
| | GUTTER | SIDEWALK | DENSE, 3/4" | 30-INCH | GRINDING | TOPSOIL | CONTROL | CONTROL | URBAN | PROTECTION | TYPE B | NO. 40 | CONCRETE | |
| LOCATION | LF | SY | TON | LF | SF | SY | EACH | EACH | SY | EACH | CWT | LB | LF | |
| 26+40 LT | - | - | - | - | 4 | - | - | - | - | - | - | - | - | |
| 34+00 LT | 10 | 8 | 0.5 | 10 | - | 8 | - | - | 8 | - | 0.01 | 0.2 | 21 | |
| 40+80 LT | - | - | - | - | 4 | - | - | - | - | - | - | - | - | |
| 48+10 RT | - | 3 | - | - | - | 3 | - | - | 3 | - | 0.01 | 0.1 | 10 | |
| 51+90 RT | - | 8 | - | - | - | 8 | - | - | 8 | - | 0.01 | 0.2 | 10 | |
| 55+50 RT | 14 | 6 | 0.5 | 14 | - | 6 | - | - | 6 | - | 0.01 | 0.2 | 29 | |
| UNDISTRIBUTED | 5 | 5 | 1 | 5 | 2 | 5 | 1 | 1 | 5 | 15 | 0.01 | 0.2 | 14 | |
| TOTAL | 29 | 30 | 2 | 29 | 10 | 30 | 1 | 1 | 30 | 15 | 0.05 | 0.9 | 84 | |

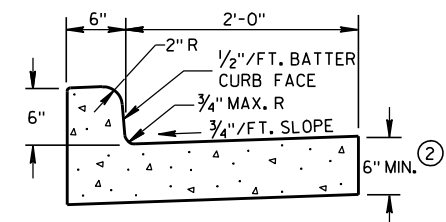
| PERMANENT SIGNING | | | | | | | | | | | |
|-------------------|----------|--|--------|---------|--------------------|----------|------------|----------|----------|------|-----------------------|
| | | | | | 634.0616 | 634.0618 | 637.0202 | 638.2602 | 638.3000 | | |
| | | | | | POSTS | POSTS | | | REMOVING | | |
| | | | | | WOOD | WOOD | SIGNS | REMOVING | SMALL | | |
| | | | | | 4X6 INCH | 4X6 INCH | REFLECTIVE | SIGNS | SIGN | | |
| | | | | | 16 FT | 18 FT | TYPE II | TYPE II | SUPPORTS | | |
| SIGN | | | SIGN | SIGN | MESSAGE | EACH | EACH | SF | EACH | EACH | REMARKS |
| NUMBER | LOCATION | | CODE | W x H | | | | | | | |
| 1-1 | 1+40 LT | | D2-1 | 66 x 15 | MARSHALL 3 | 2 | - | 6.88 | - | - | 1860' WEST OF PROJECT |
| 1-2 | 34+80 LT | | - | - | MARSHALL 4 | - | - | - | 1 | 2 | - |
| 1-3 | 20+00 RT | | R3-17 | 30 x 24 | BIKE LANE | 1 | - | 5.00 | - | - | - |
| 2-1 | 37+50 LT | | J4-1 | 24 x 36 | REASSURANCE MARKER | 1 | - | 6.00 | 1 | 1 | J-ASSEMBLY |
| | | | M3-4 | 24 x 12 | WEST | - | - | - | - | - | J-ASSEMBLY |
| | | | M1-6 | 24 x 24 | STH 19 | - | - | - | - | - | J-ASSEMBLY |
| 2-2 | 47+40 LT | | R3-17 | 30 x 24 | BIKE LANE | 1 | - | 5.00 | - | - | - |
| 2-3 | 47+40 RT | | W11-1 | 30 x 30 | BIKE CROSSING | - | 1 | 6.25 | - | - | - |
| 2-4 | 47+40 RT | | W16-1P | 18 x 24 | SHARE THE ROAD | - | - | 3.00 | - | - | POSTED WITH 2-3 |
| 3-1 | 52+00 LT | | W11-1 | 30 x 30 | BIKE CROSSING | - | 1 | 6.25 | - | - | - |
| 3-2 | 52+00 LT | | W16-1P | 18 x 24 | SHARE THE ROAD | - | - | 3.00 | - | - | POSTED WITH 3-1 |
| 3-3 | 52+00 RT | | R3-17 | 30 x 24 | BIKE LANE | 1 | - | 5.00 | - | - | - |
| 3-4 | 59+50 RT | | J3-1 | 24 x 57 | REASSURANCE MARKER | - | - | 9.50 | 1 | - | ON UTILITY POLE |
| | | | M3-2 | 24 x 12 | EAST | - | - | - | - | - | J-ASSEMBLY |
| | | | M1-6 | 24 x 24 | STH 19 | - | - | - | - | - | J-ASSEMBLY |
| | | | M6-1 | 21 x 21 | AHEAD | - | - | - | - | - | J-ASSEMBLY |
| TOTAL | | | | | | 6 | 2 | 55.88 | 3 | 3 | |

| | | | | | | |
|------------------------|-------------|-------------------|--------------------------|-------|-------|---|
| PROJECT NO: 3050-02-62 | HWY: STH 19 | COUNTY: JEFFERSON | MISCELLANEOUS QUANTITIES | SHEET | ----- | E |
|------------------------|-------------|-------------------|--------------------------|-------|-------|---|

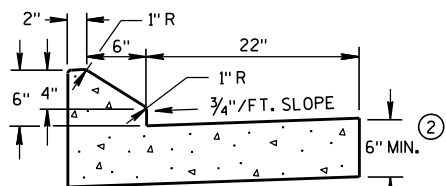
| PAVEMENT MARKING ITEMS | | | | | | | | | | | | |
|------------------------|---|-------|------------|----------|----------|-----------|-----------|-------------|-----------|----------|-----------|-----------|
| | | | | 646.0106 | 646.0406 | 647.0206 | 647.0306 | 647.0336 | 647.0566 | 647.0656 | 647.0766 | 647.0776 |
| | | | | PAVEMENT | PAVEMENT | PAVEMENT | PAVEMENT | PAVEMENT | PAVEMENT | PAVEMENT | PAVEMENT | PAVEMENT |
| | | | | MARKING | MARKING | MARKING | MARKING | MARKING | MARKING | MARKING | MARKING | MARKING |
| | | | | MARKING | SAME DAY | ARROWS | SYMBOLS | SYMBOLS | STOP LINE | PARKING | CROSSWALK | CROSSWALK |
| | | | | EPOXY | EPOXY | BIKE LANE | BIKE LANE | BIKE SHARED | EPOXY | STALL | EPOXY | EPOXY |
| | | | | 4-INCH | 4-INCH | EPOXY | EPOXY | LANE EPOXY | 18-INCH | EPOXY | 6-INCH | 12-INCH |
| | | | | WHITE | YELLOW | WHITE | WHITE | WHITE | WHITE | WHITE | WHITE | WHITE |
| STA | - | STA | LOCATION | LF | LF | EACH | EACH | EACH | LF | LF | LF | LF |
| 20+00 | - | 57+80 | MAINLINE | 6,200 | 7,200 | - | - | - | - | 170 | - | 100 |
| 20+00 | - | 57+80 | SIDE ROADS | - | - | - | - | - | 100 | - | 310 | - |
| | | 20+10 | RT | - | - | 1 | 1 | - | - | - | - | - |
| | | 25+80 | LT | - | - | 1 | 1 | - | - | - | - | - |
| | | 27+50 | RT | - | - | 1 | 1 | - | - | - | - | - |
| | | 35+50 | LT | - | - | 1 | 1 | - | - | - | - | - |
| | | 35+50 | RT | - | - | 1 | 1 | - | - | - | - | - |
| | | 39+70 | LT | - | - | 1 | 1 | - | - | - | - | - |
| | | 41+00 | RT | - | - | 1 | 1 | - | - | - | - | - |
| | | 47+40 | LT | - | - | 1 | 1 | - | - | - | - | - |
| | | 48+80 | RT | - | - | - | - | 1 | - | - | - | - |
| | | 51+00 | LT | - | - | - | - | 1 | - | - | - | - |
| | | 52+10 | RT | - | - | 1 | 1 | - | - | - | - | - |
| | | 55+20 | LT | - | - | 1 | 1 | - | - | - | - | - |
| | | 56+40 | RT | - | - | 1 | 1 | - | - | - | - | - |
| | | 57+70 | LT | - | - | 1 | 1 | - | - | - | - | - |
| TOTAL | | | | 6,200 | 7,200 | 12 | 12 | 2 | 100 | 170 | 310 | 100 |

Standard Detail Drawing List

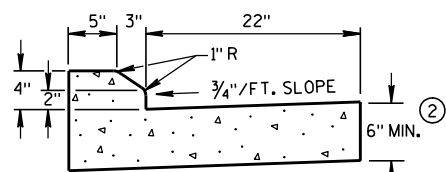
| | |
|-----------|--|
| 08D01-17 | CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES |
| 08E10-02 | INLET PROTECTION TYPE A, B, C AND D |
| 15C05-01 | TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M. P. H. OR LESS |
| 15C08-15A | PAVEMENT MARKING (MAINLINE) |
| 15C08-15B | PAVEMENT MARKING (INTERSECTIONS) |
| 15C08-15F | PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK) |
| 15C12-03 | TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS) |
| 15C19-01A | MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY |
| 15C29-02C | URBAN BICYCLE LANE MARKING |
| 15C29-02D | URBAN BICYCLE LANE MARKING |
| 15C29-02E | PAVEMENT MARKING FOR BIKE LANES |
| 15C29-02F | PAVEMENT MARKING FOR SHARED LANE |
| 15D28-01 | TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY |



TYPES A & D ①



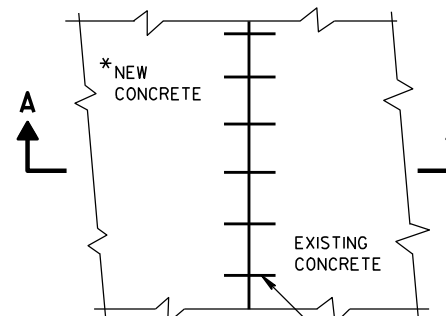
6" SLOPED CURB TYPES G & J ①



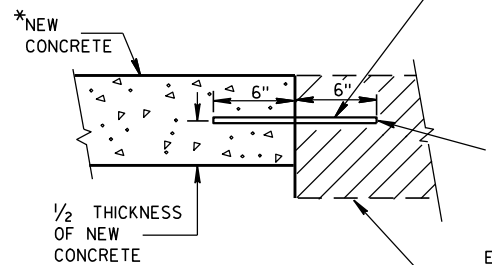
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

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



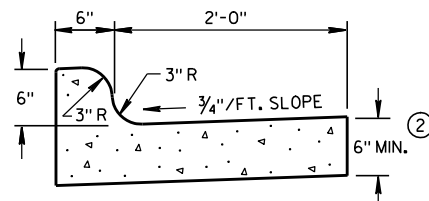
PLAN VIEW

SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

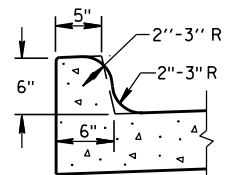
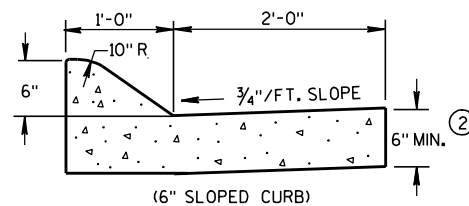
NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

MAXIMUM DRILL HOLE
SIZE IS 1/8" GREATER
THAN TIE BAR DIAMETER

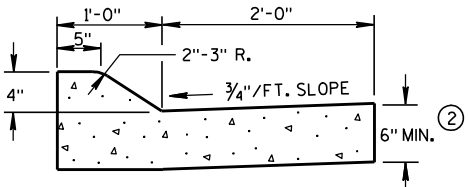
EXISTING
CONCRETE



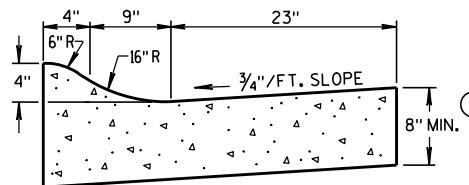
TYPES K & L ①

OPTIONAL CURB SHAPE
FOR TYPES K & L ①

(6" SLOPED CURB)

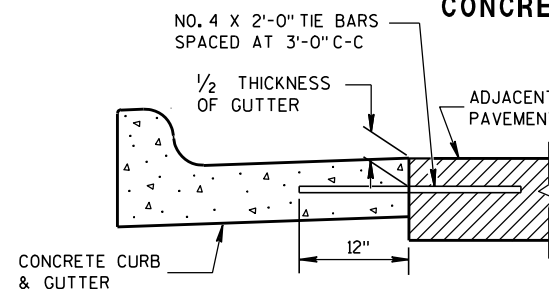


TYPES A & D ①

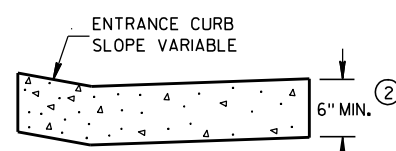


4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

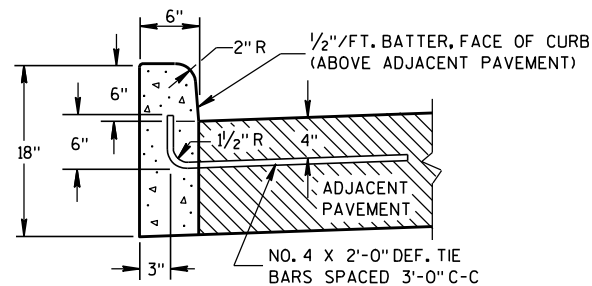


TYPICAL TIE BAR LOCATION ①



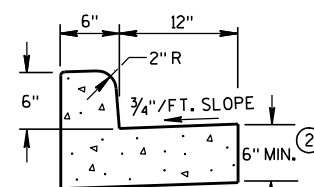
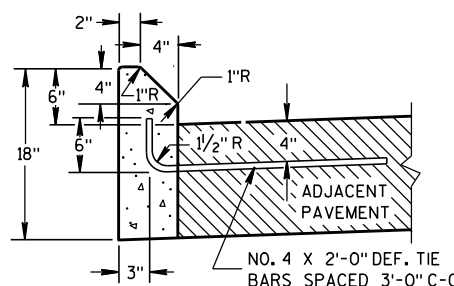
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



TYPES A & D ①

CONCRETE CURB

TYPES A & D
CONCRETE CURB & GUTTER 18"

TYPES G & J ①

GENERAL NOTES

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

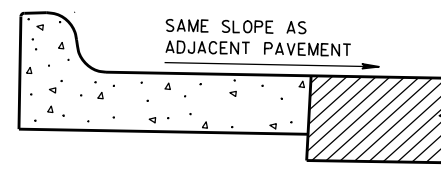
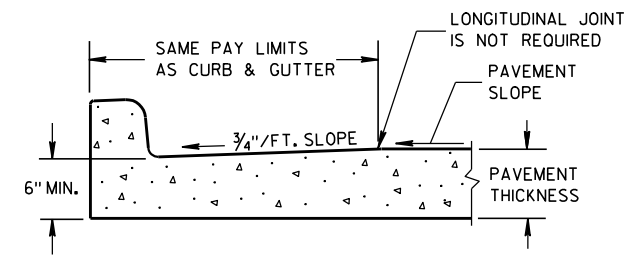
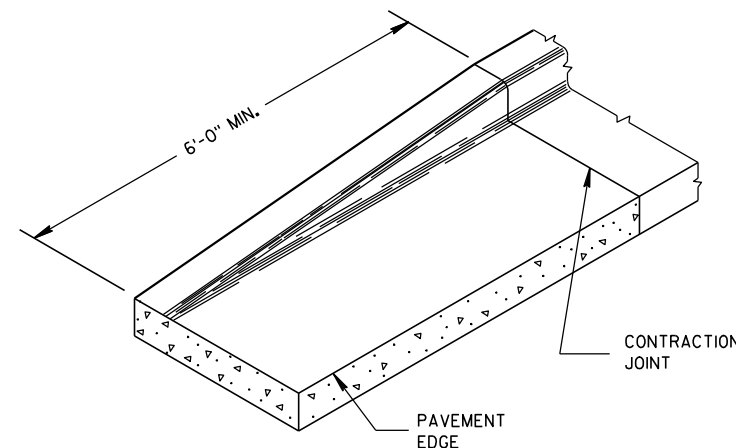
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

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

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

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER

END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

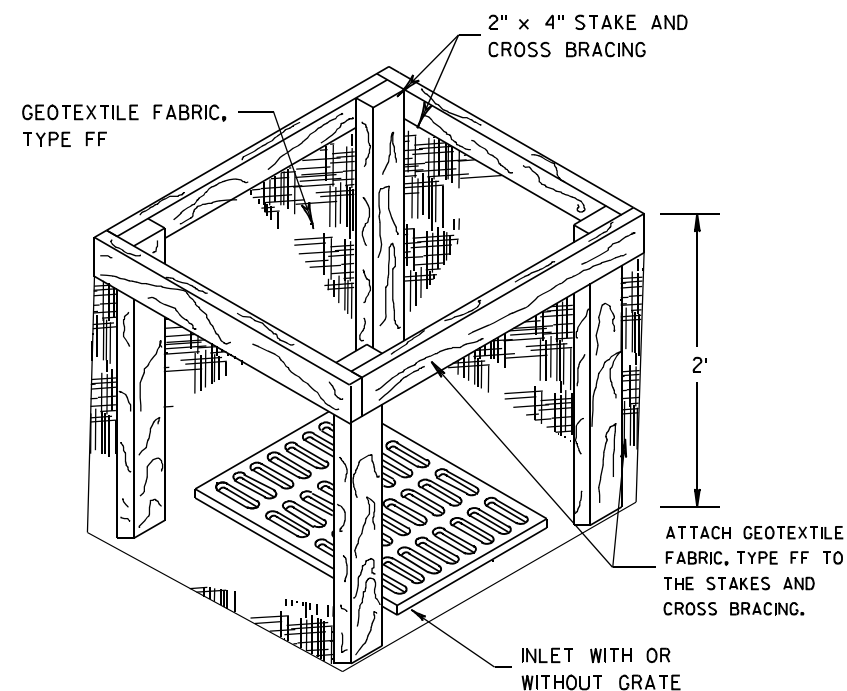
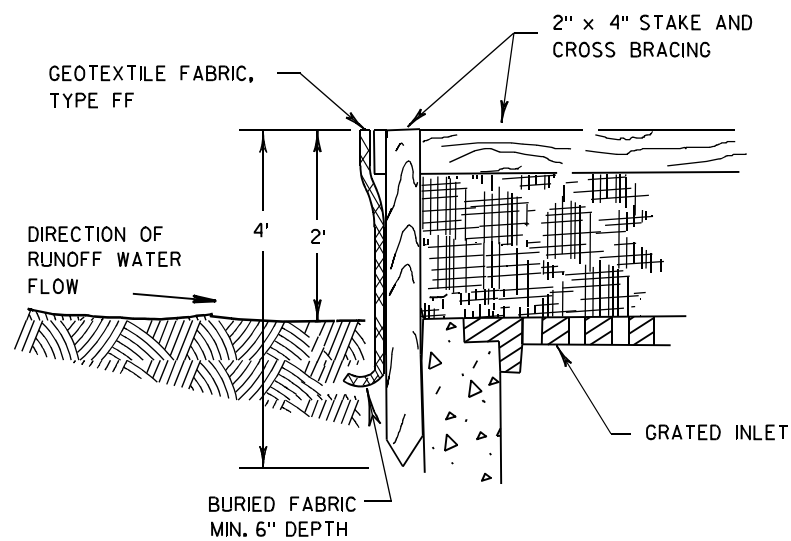
APPROVED

9/4/08

DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



INLET PROTECTION, TYPE A

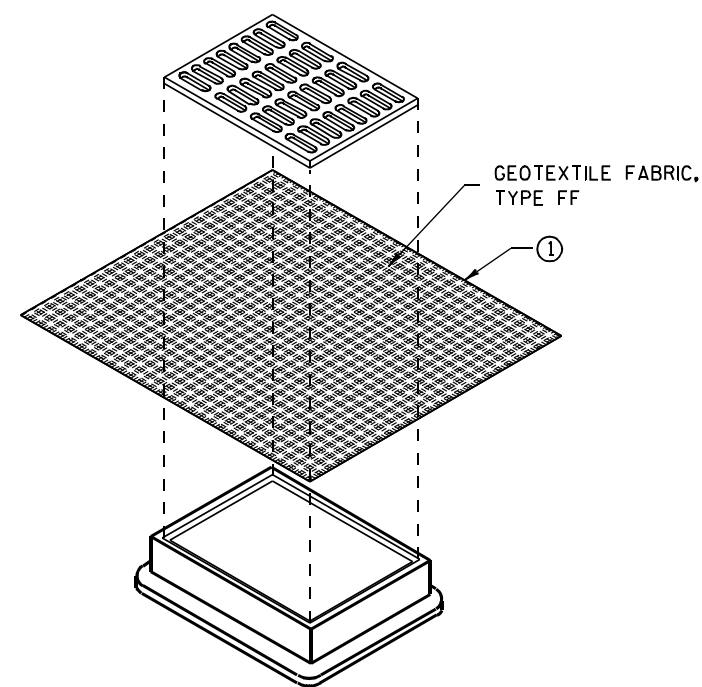
GENERAL NOTES

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

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

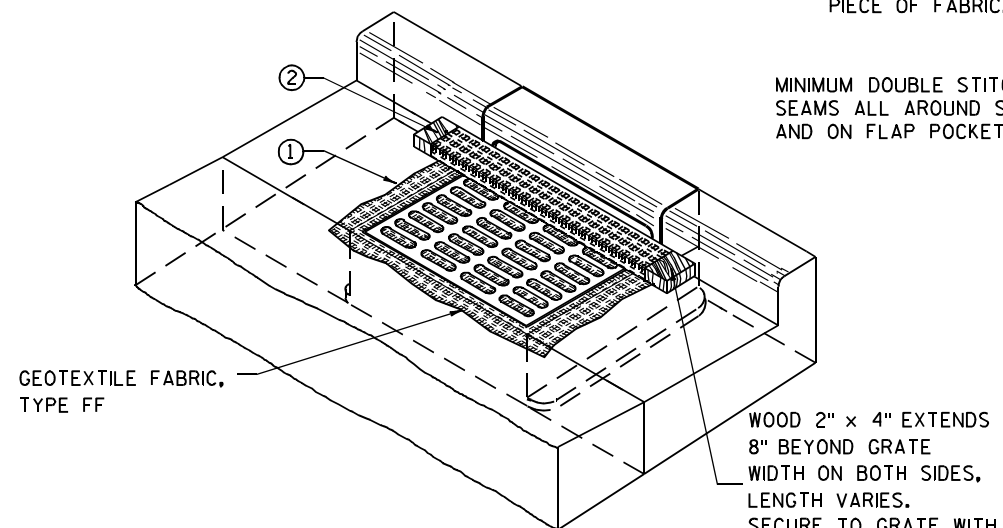
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

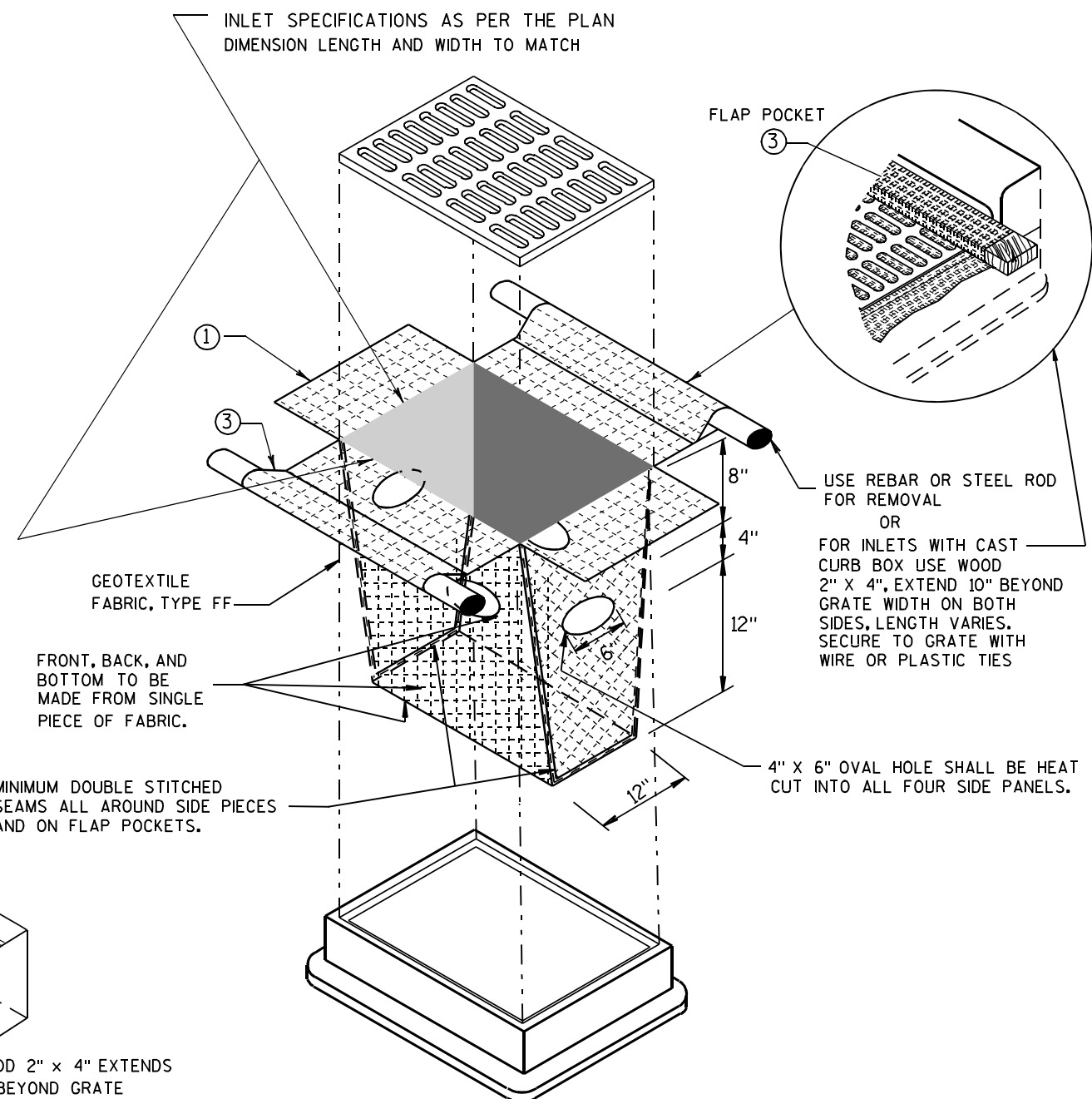
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

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



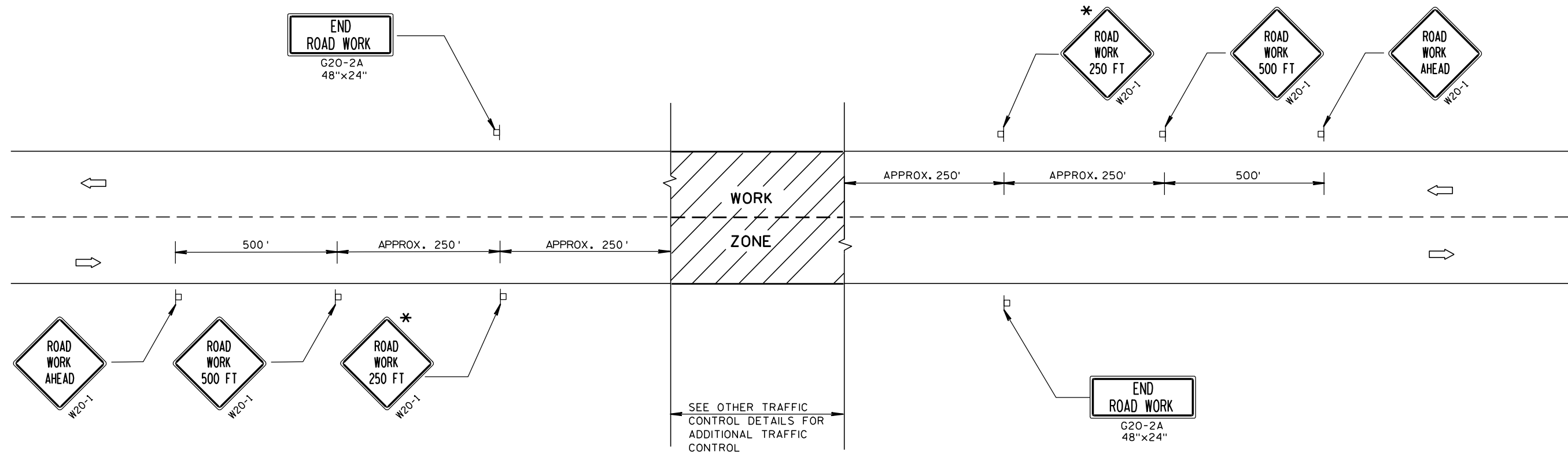
INLET PROTECTION, TYPE D

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

**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

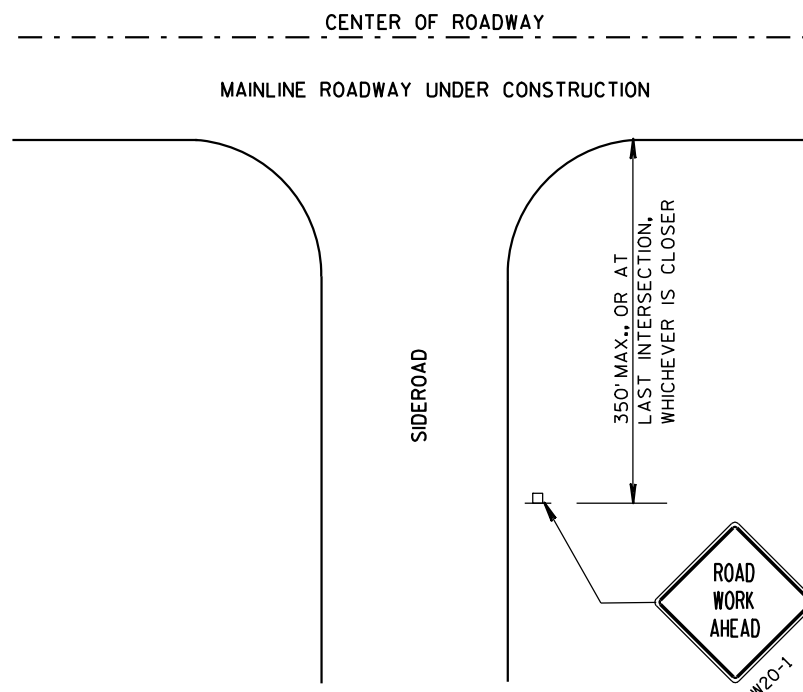
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

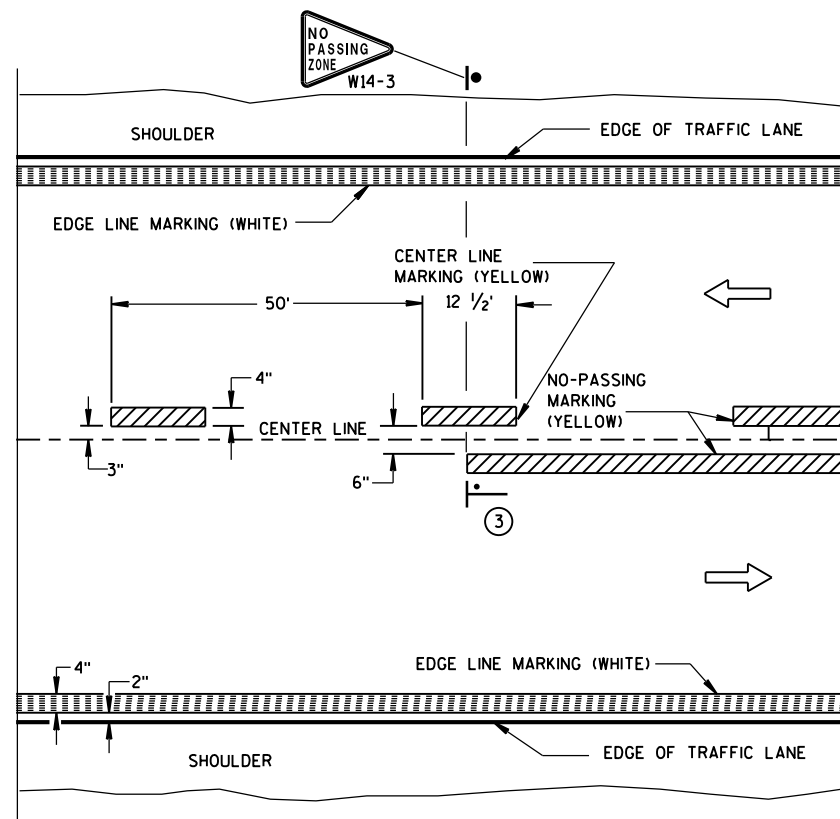
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



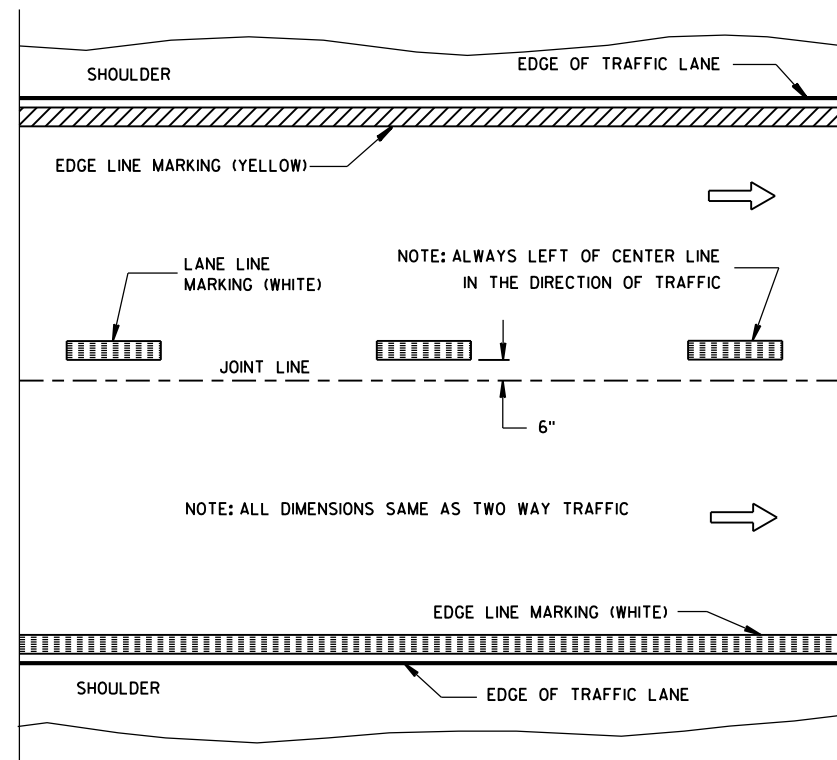
LEGEND

- POST MOUNTED SIGN
- ➡ DIRECTION OF TRAFFIC FLOW

| | |
|--|--|
| TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED 5/23/00 DATE | /S/ Chester J. Spang CHIEF SIGNS AND MARKING ENGINEER |
| FHWA | |

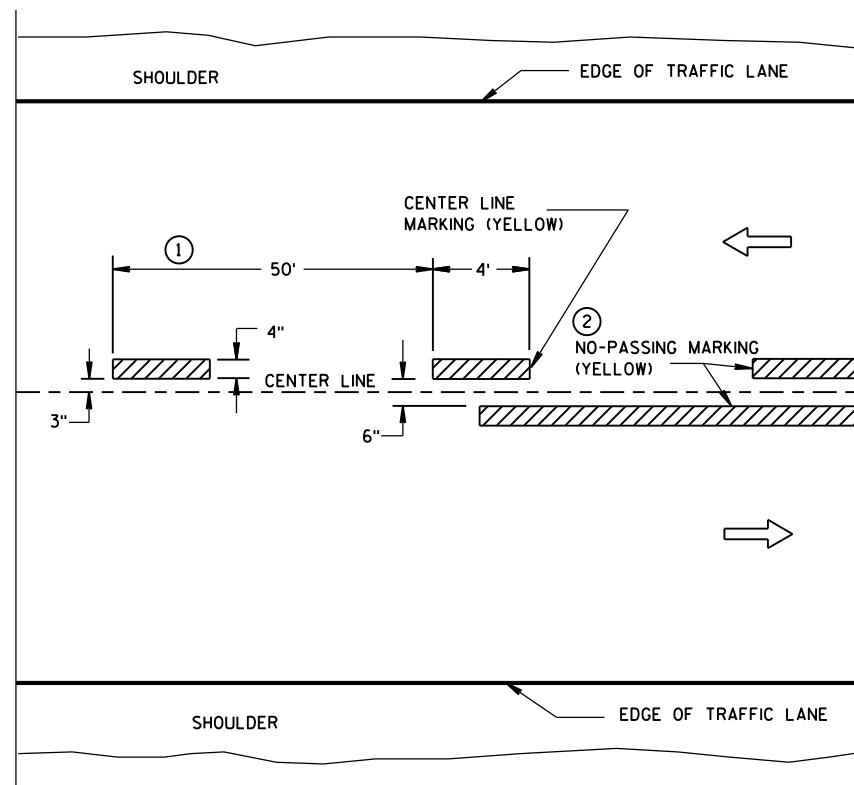


TWO WAY TRAFFIC

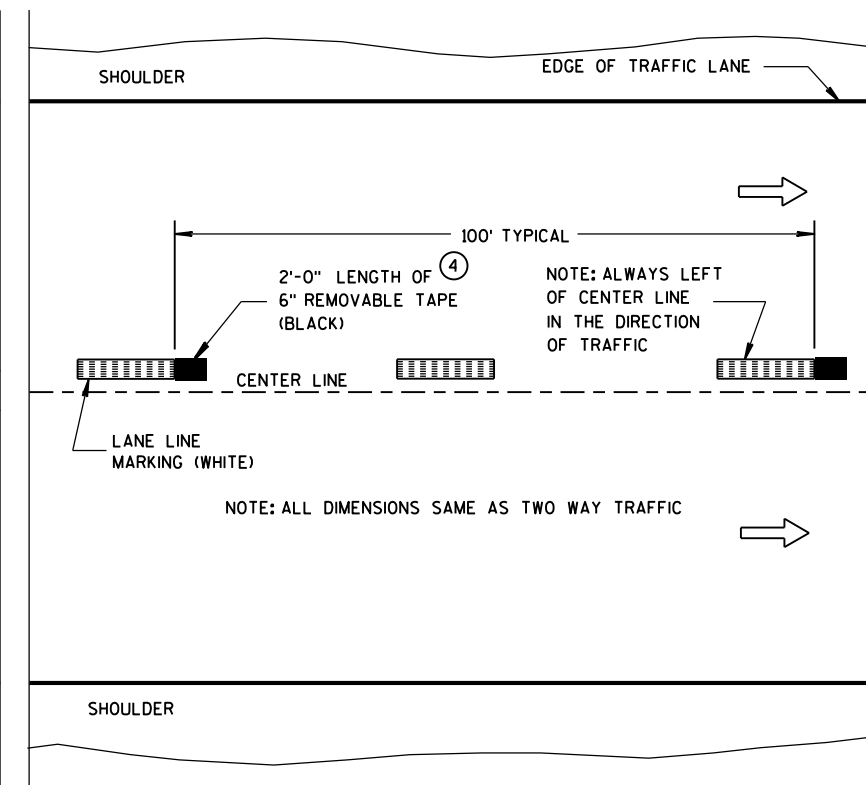


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

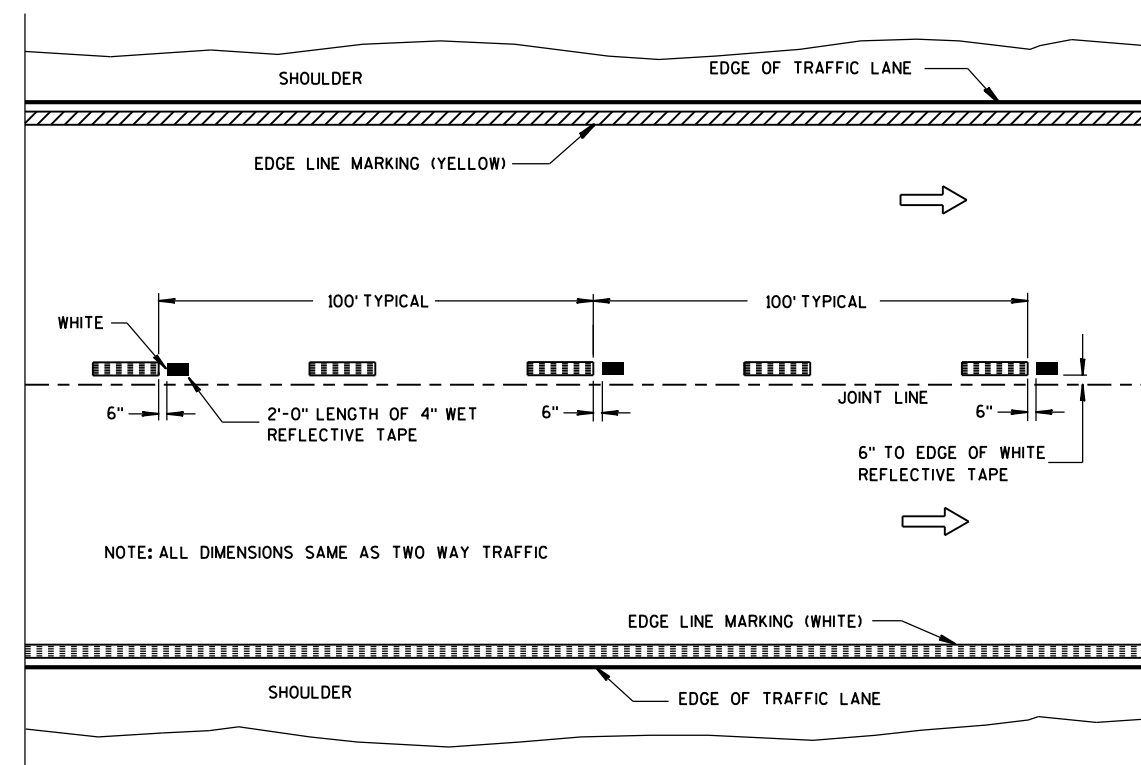
GENERAL NOTES

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

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

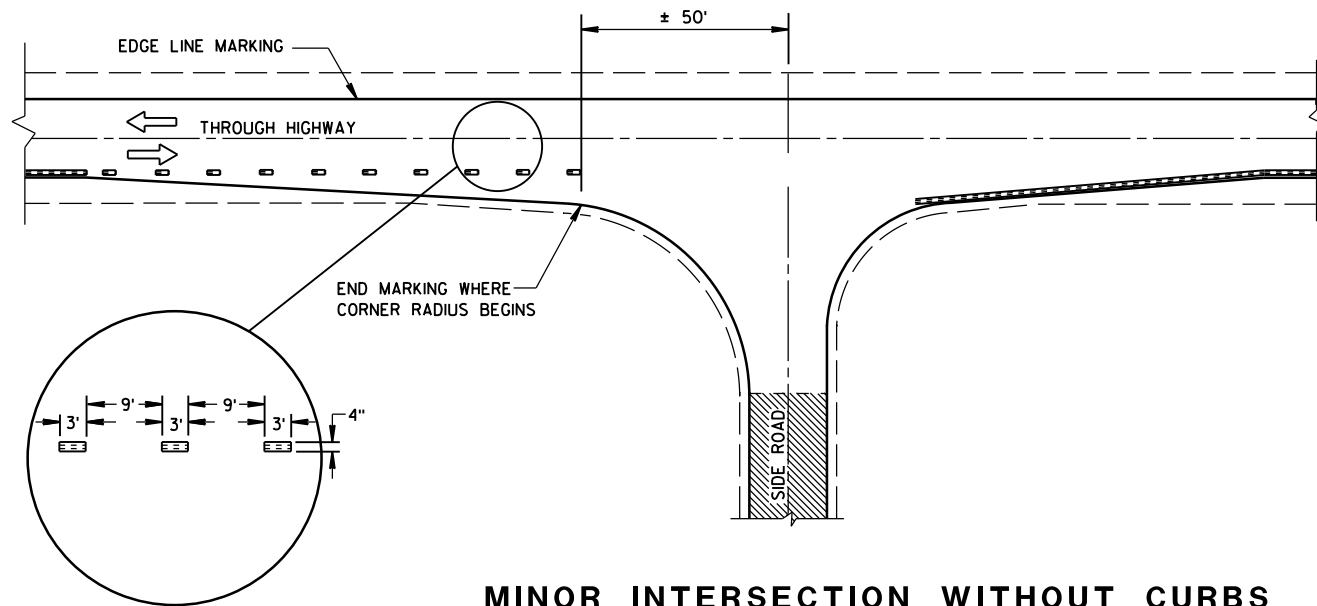
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

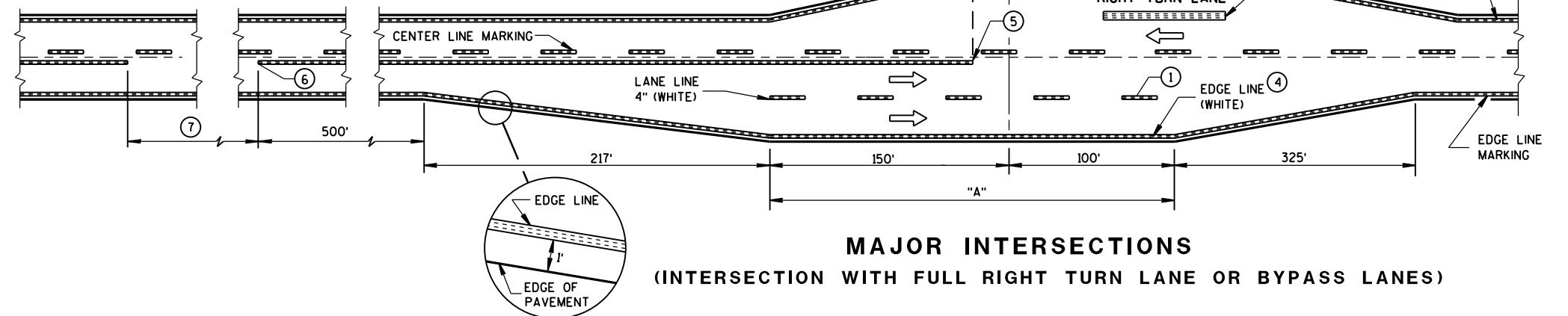
APPROVED
10-1-2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



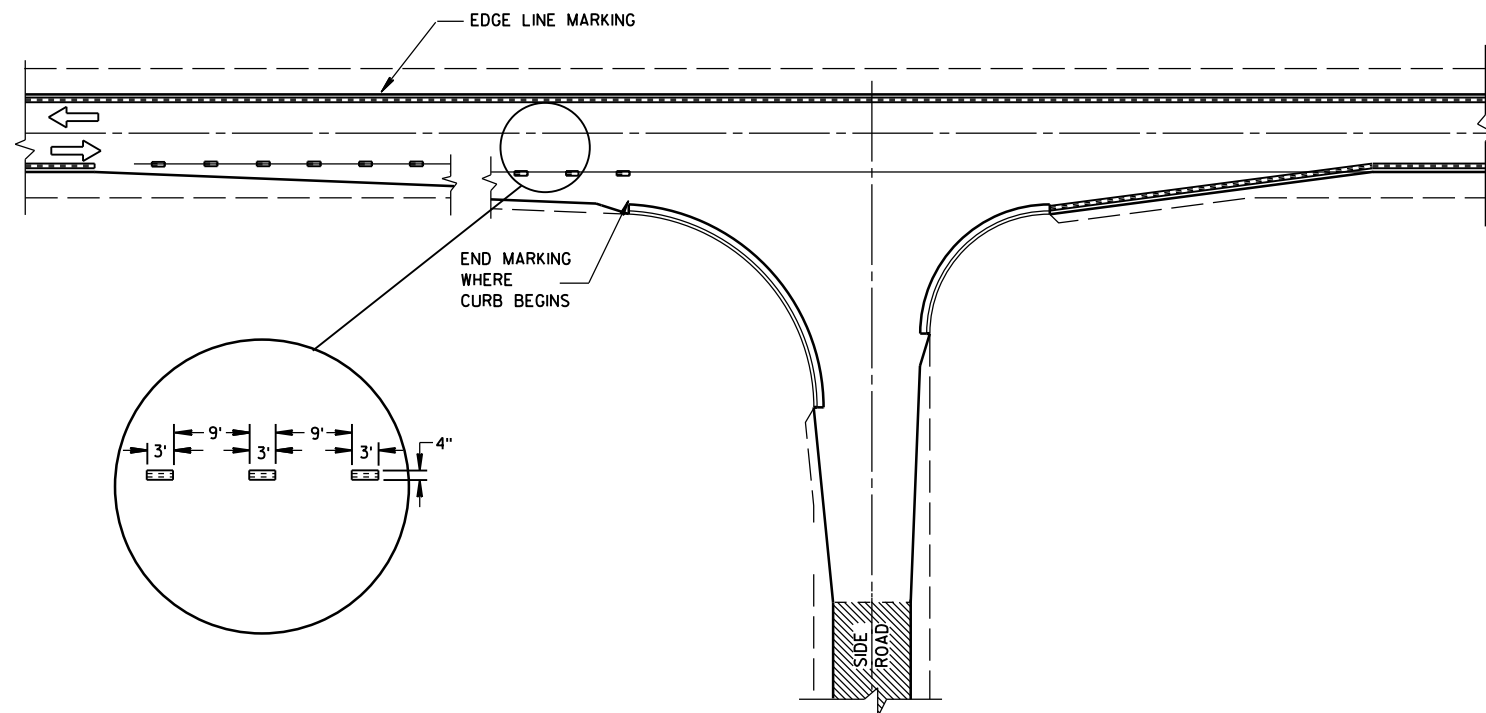
MINOR INTERSECTION WITHOUT CURBS

⑦

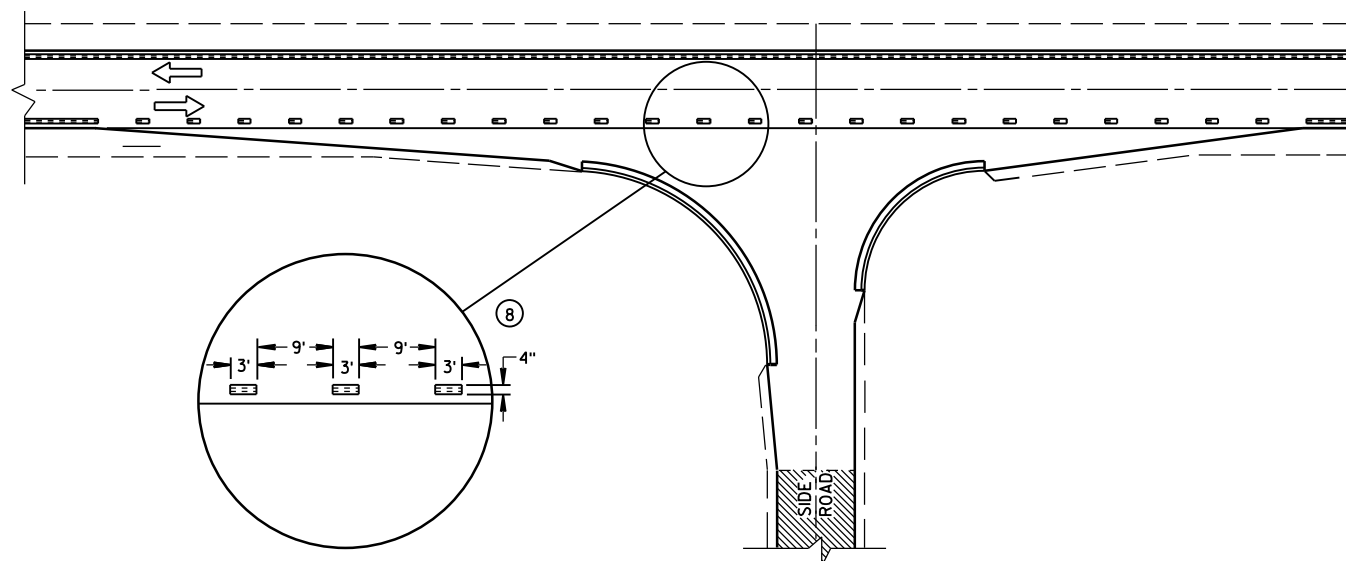
| POSTED SPEED (MPH) | MINIMUM DISTANCE BETWEEN ZONES (FEET) |
|--------------------|---------------------------------------|
| 25 - 30 | 528 |
| 35 - 40 | 528 |
| 45 - 50 | 686 |
| 55 | 792 |



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



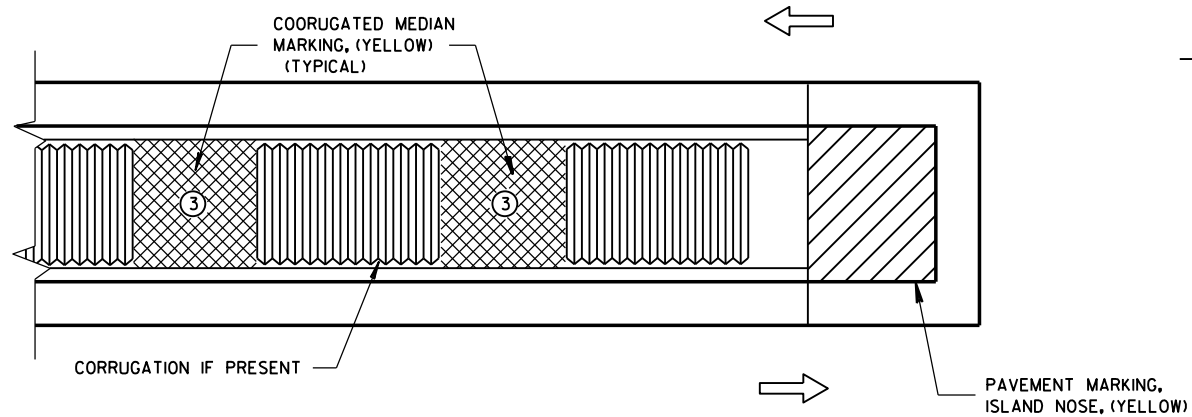
MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



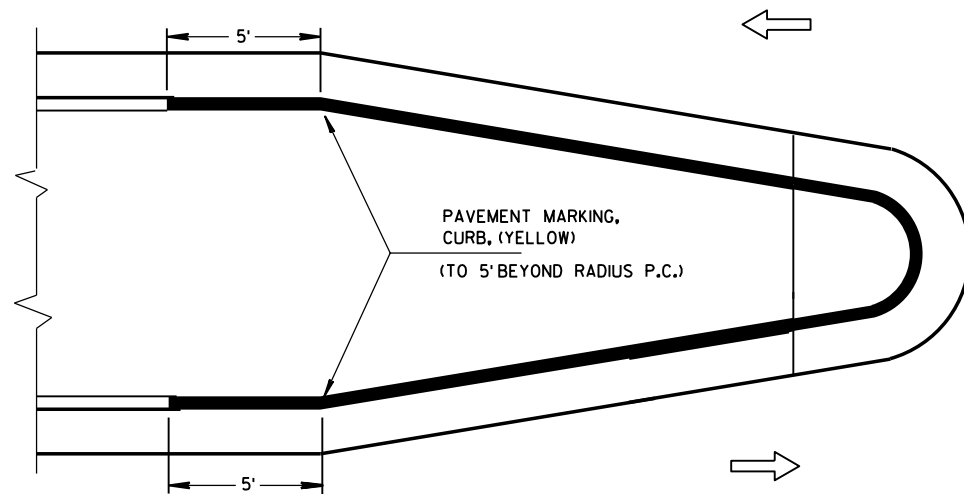
MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES

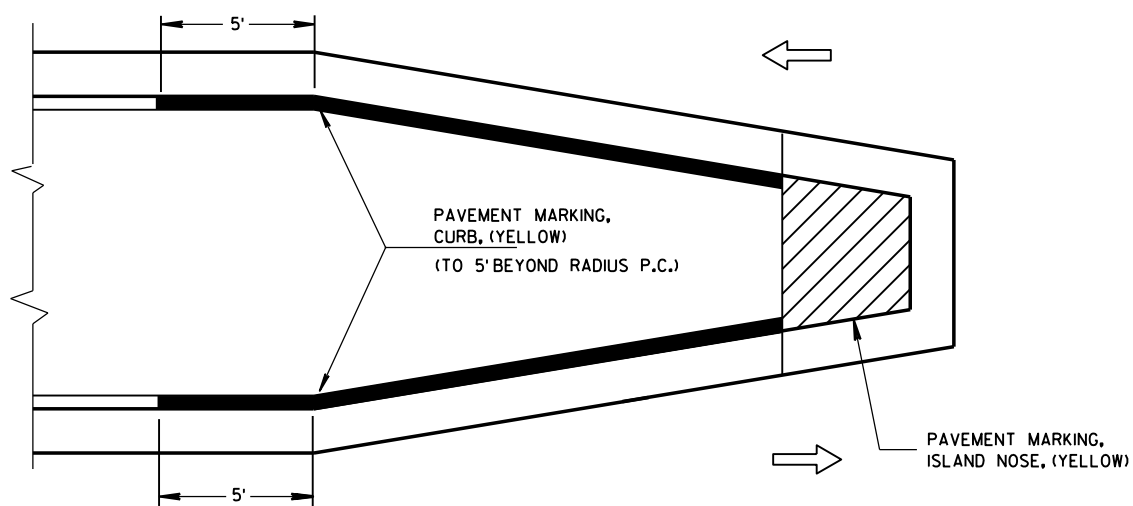
- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
 - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
 - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
 - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
 - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
 - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

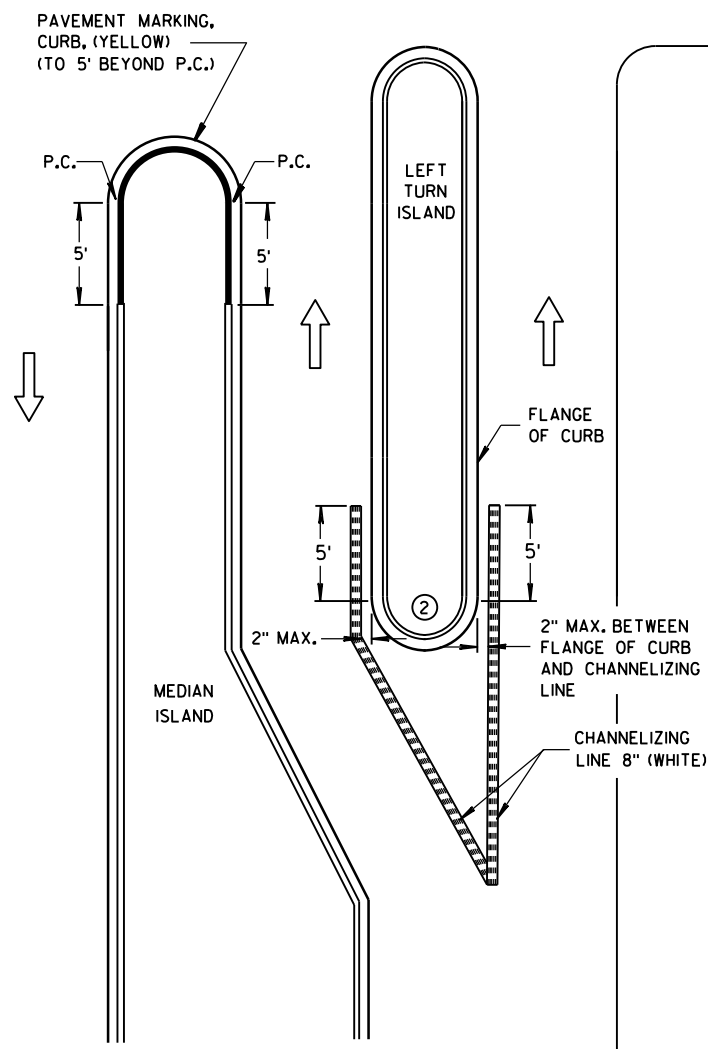


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

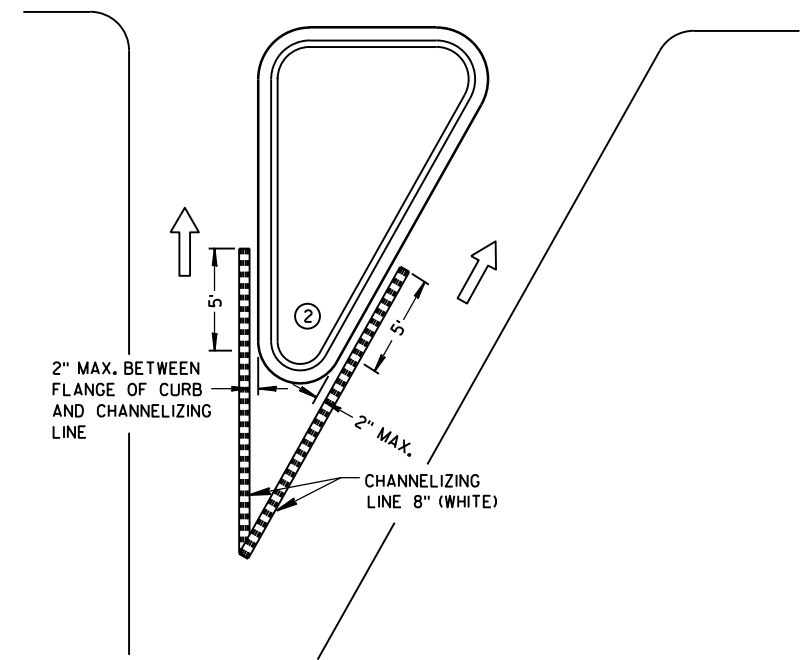
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

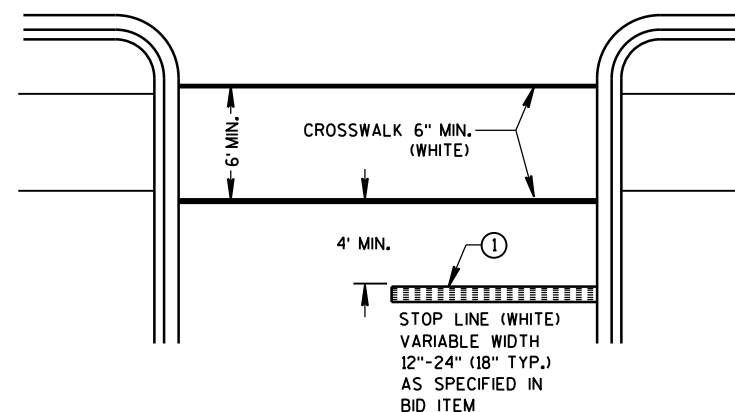
- ① STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- ③ WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL




STOP LINE AND CROSSWALK

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TWO-LANE ROADWAY


SYMBOLS



WORK AREA



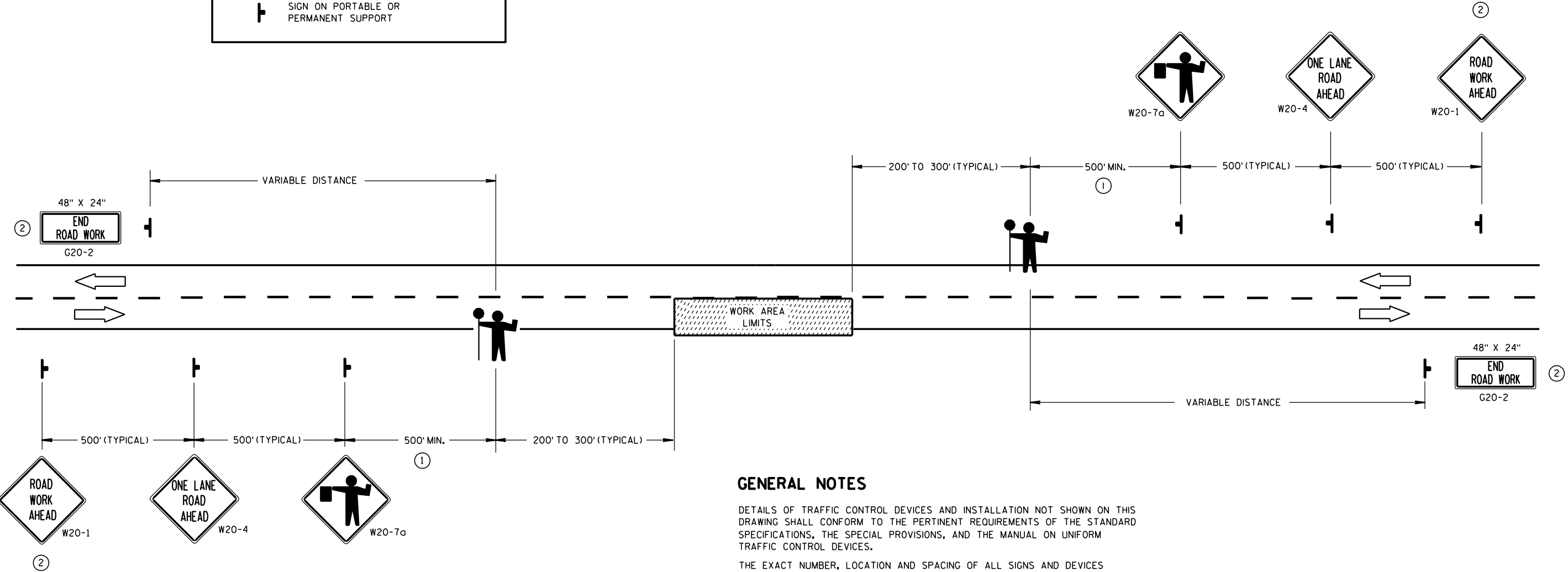
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



SIGN ON PORTABLE OR PERMANENT SUPPORT



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



GENERAL NOTES

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

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

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

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

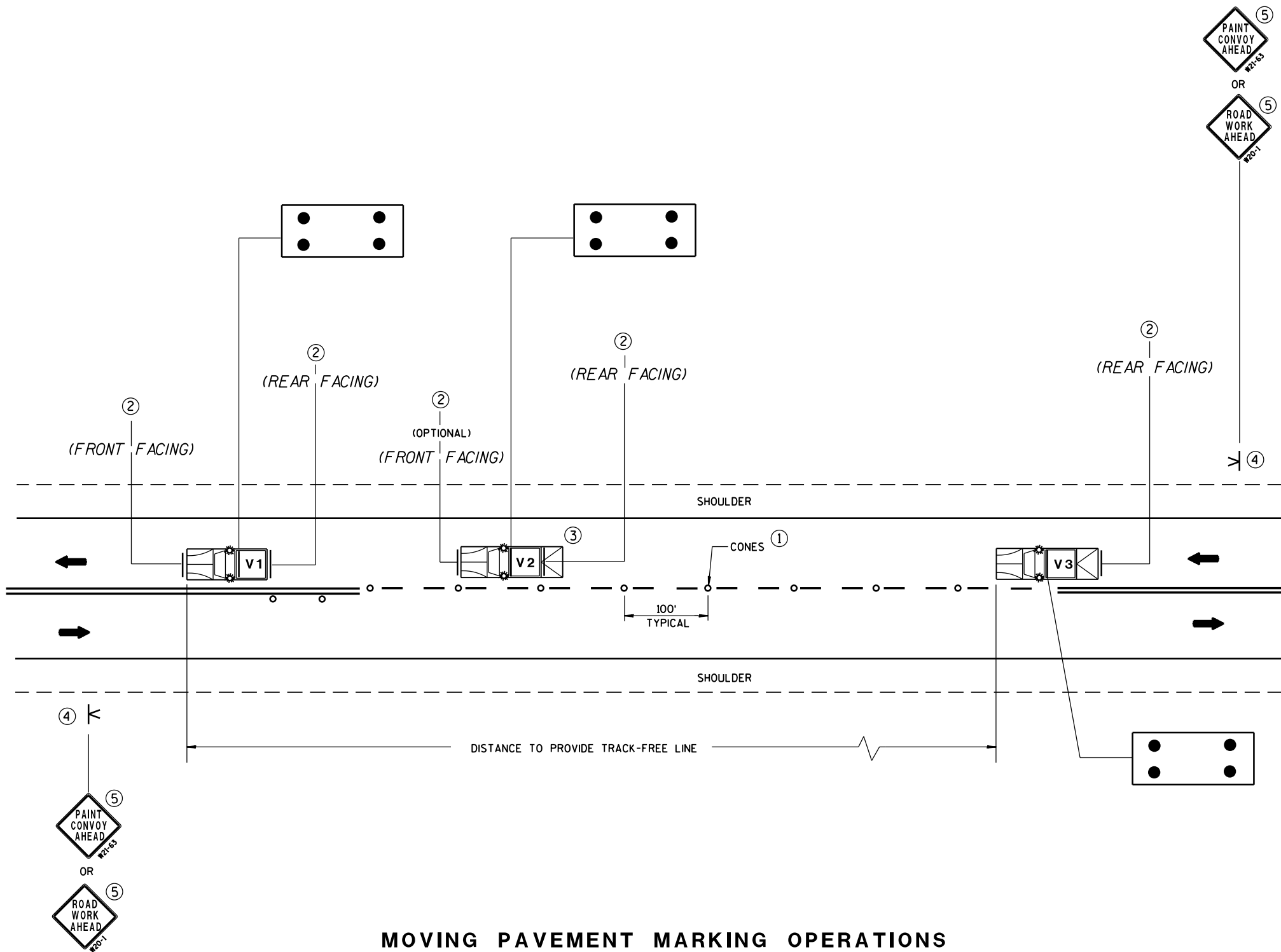
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/5/06
DATE

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN

FHWA



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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

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

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.



ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

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






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

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

- ① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- ② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.
 OR 
W21-64 W21-64
- ③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.
- ④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

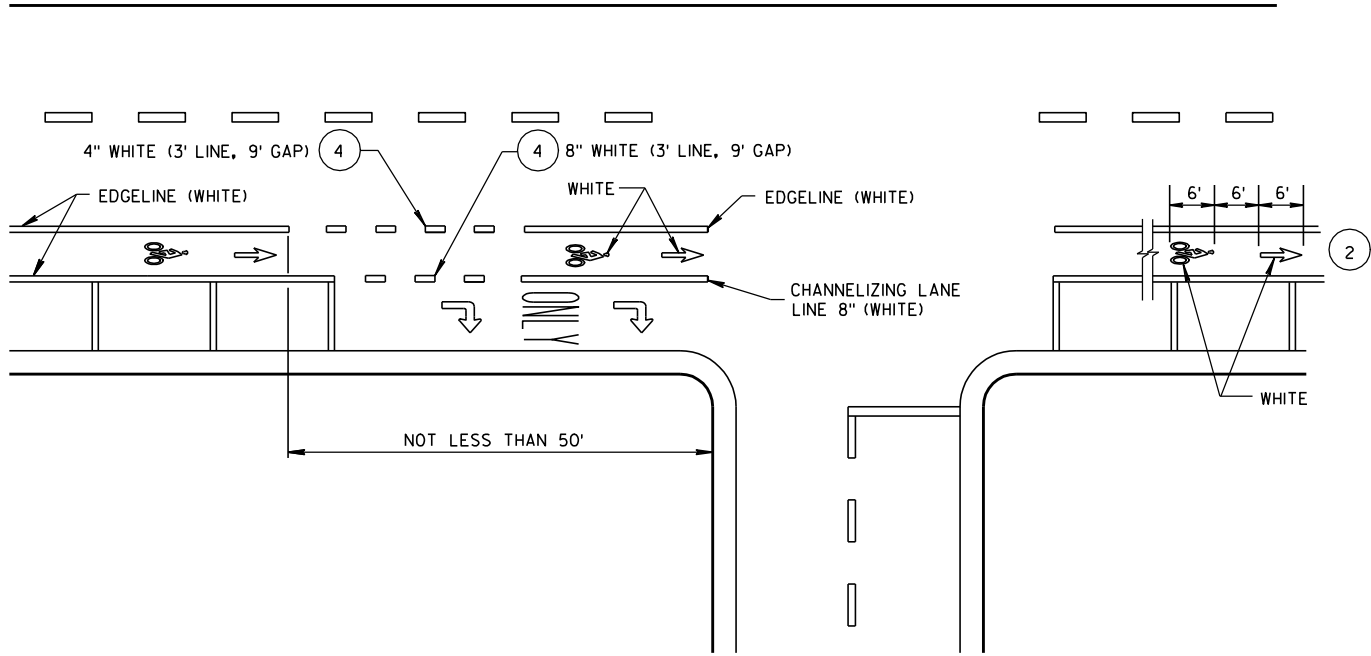
LEGEND

- V1** LEAD VEHICLE
- V2** SHADOW VEHICLE
- V3** TRAIL VEHICLE WITH TMA
-  **TMA** TRUCK-MOUNTED ATTENUATOR
-  SIGN ON PORTABLE SUPPORT
-  DIRECTION OF TRAVEL
-  CONES
-  FLASHING ARROW PANEL (CAUTION)

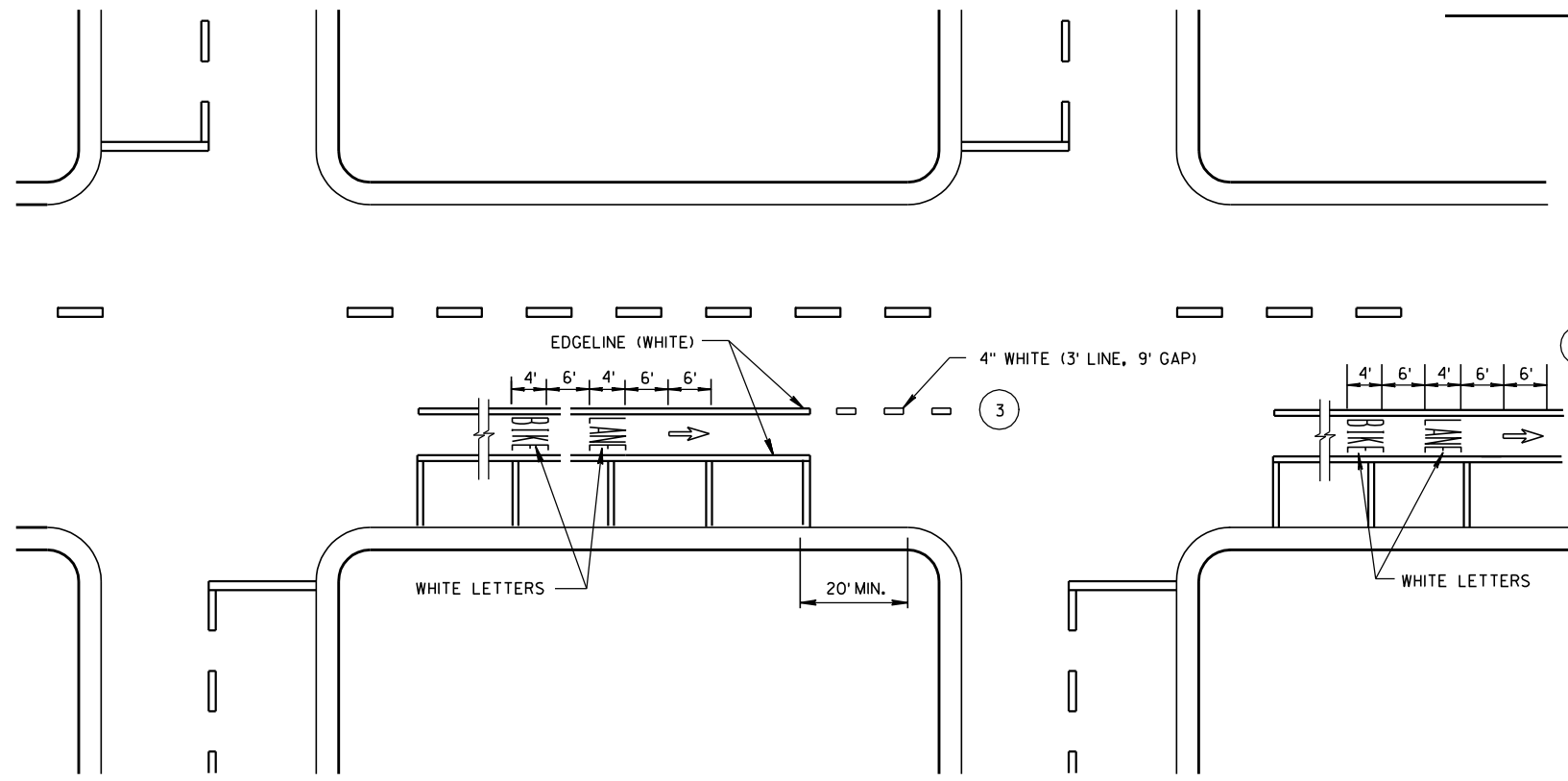
MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

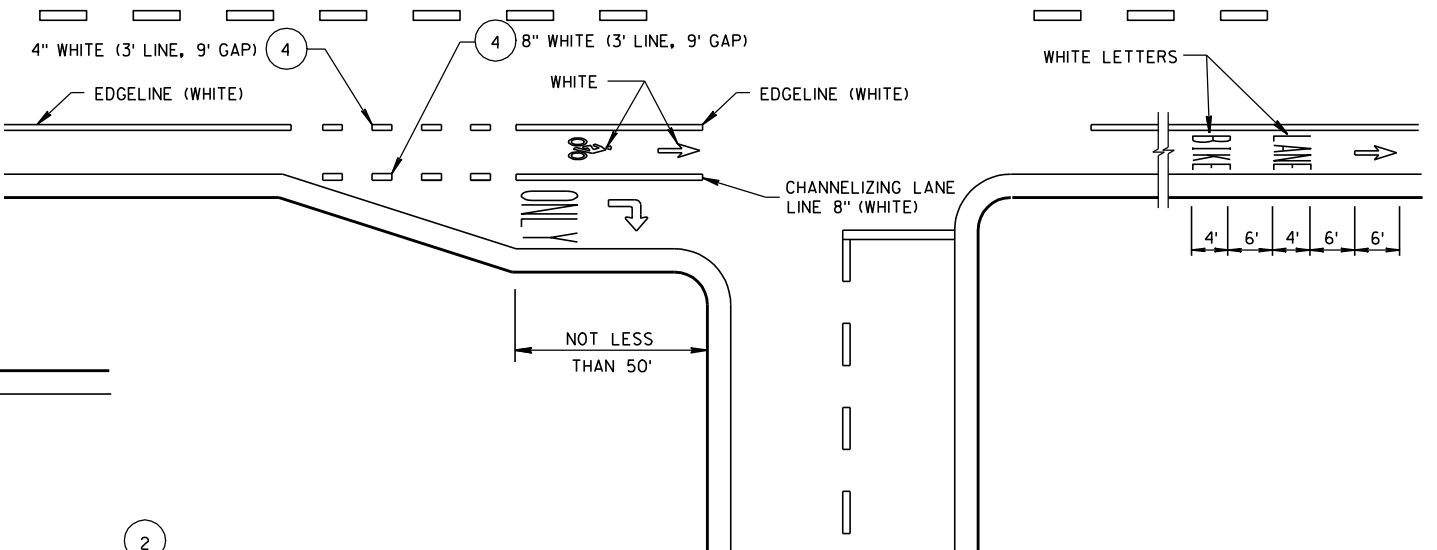
APPROVED
12/6/2011 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



DESIGNATED BICYCLE LANE



**DESIGNATED BICYCLE LANE
WITH PARKING, NO RIGHT TURN LANE**

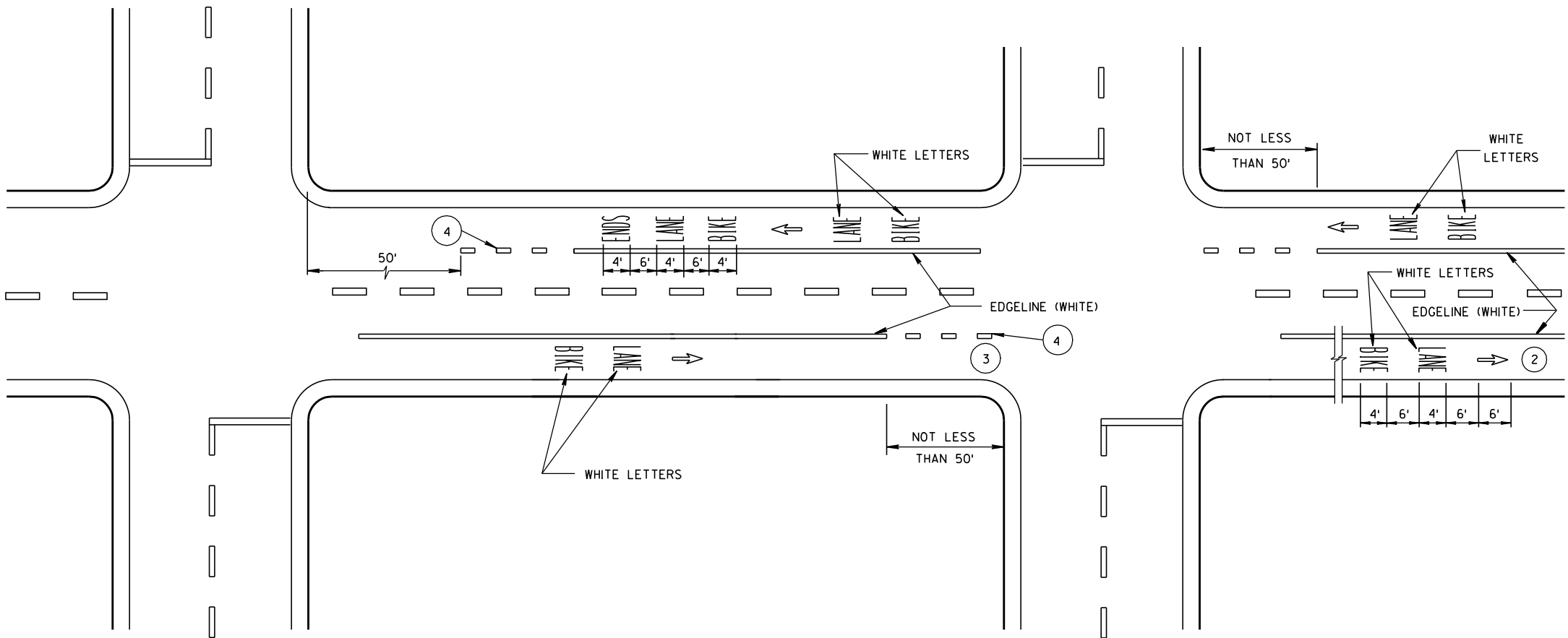


**DESIGNATED BICYCLE LANE
NO PARKING, RIGHT TURN LANE**

GENERAL NOTES

- ① DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- ② THE SERIES OF PAVEMENT MARKING SYMBOLS SHALL BE REPEATED AFTER INTERSECTIONS AND SPACED A MAXIMUM OF 250'. NO PAVEMENT MARKING WILL TAKE PLACE IN THE CROSSWALK.
- ③ DOTTED LINES SHOULD BE USED 50' TO 200' IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
- ④ WHEN SPECIFIED IN THE CONTRACT.

| | |
|--|---|
| URBAN BICYCLE LANE MARKING | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED 2/6/2012 DATE | /S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER OF DESIGN |
| FHWA | |



DESIGNATED BICYCLE LANE
NO PARKING

GENERAL NOTES

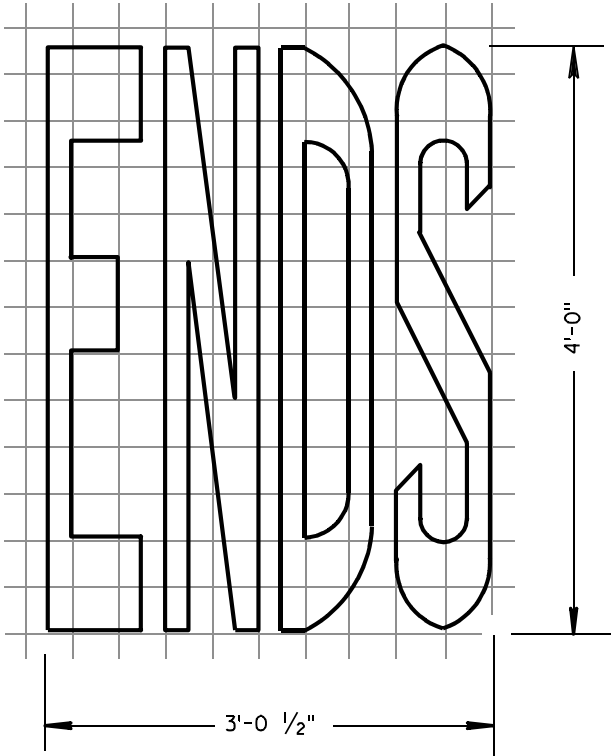
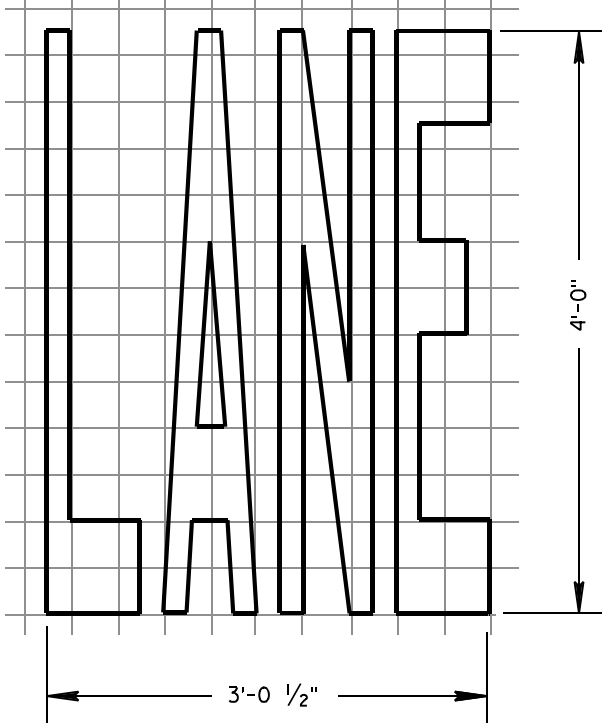
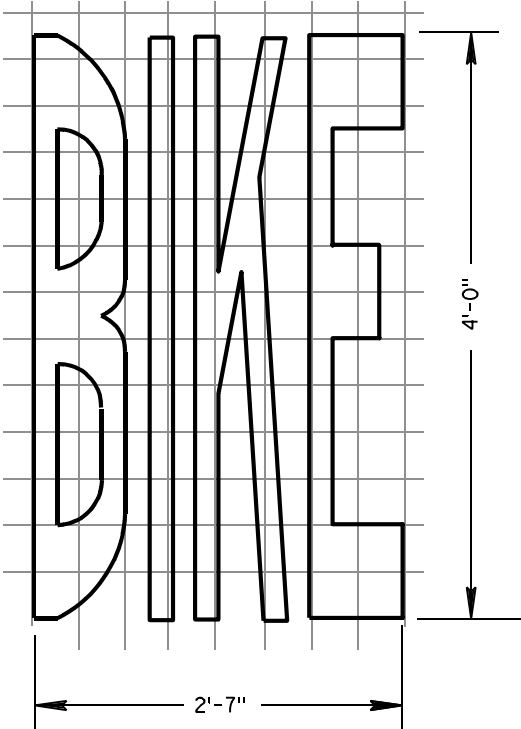
- 1 DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- 2 THE SERIES OF PAVEMENT MARKING SYMBOLS SHALL BE REPEATED AFTER INTERSECTIONS AND SPACED A MAXIMUM OF 250'. NO PAVEMENT MARKING WILL TAKE PLACE IN THE CROSSWALK.
- 3 DOTTED LINES SHOULD BE USED 50' TO 200' IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
- 4 3' LINE, 9' GAP - 4" WIDE, WHITE.

| URBAN BICYCLE LANE MARKING | |
|--|---|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED 2/6/2012 DATE | /S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER OF DESIGN |
| FHWA | |

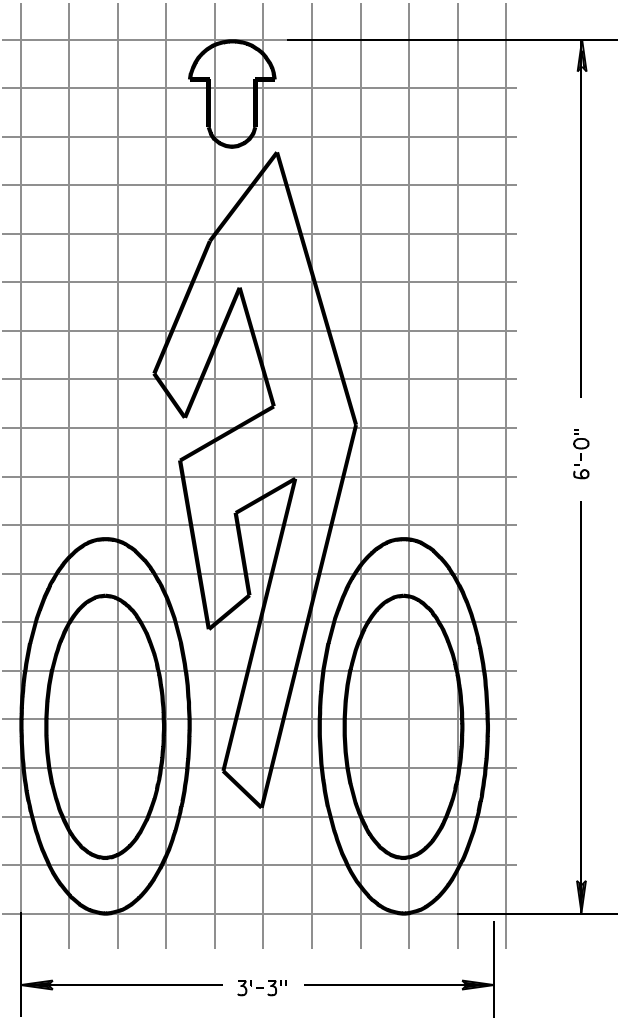
GENERAL NOTES

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

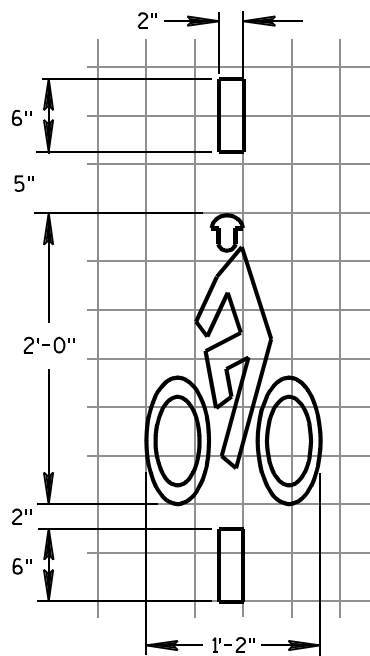
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



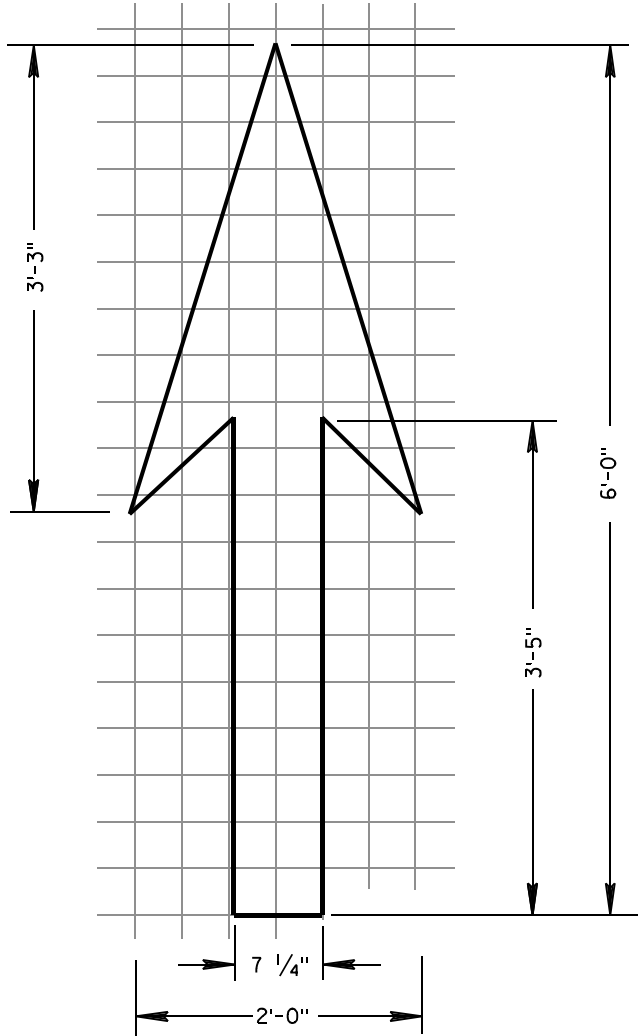
BIKE LANE WORDS



BIKE LANE SYMBOL

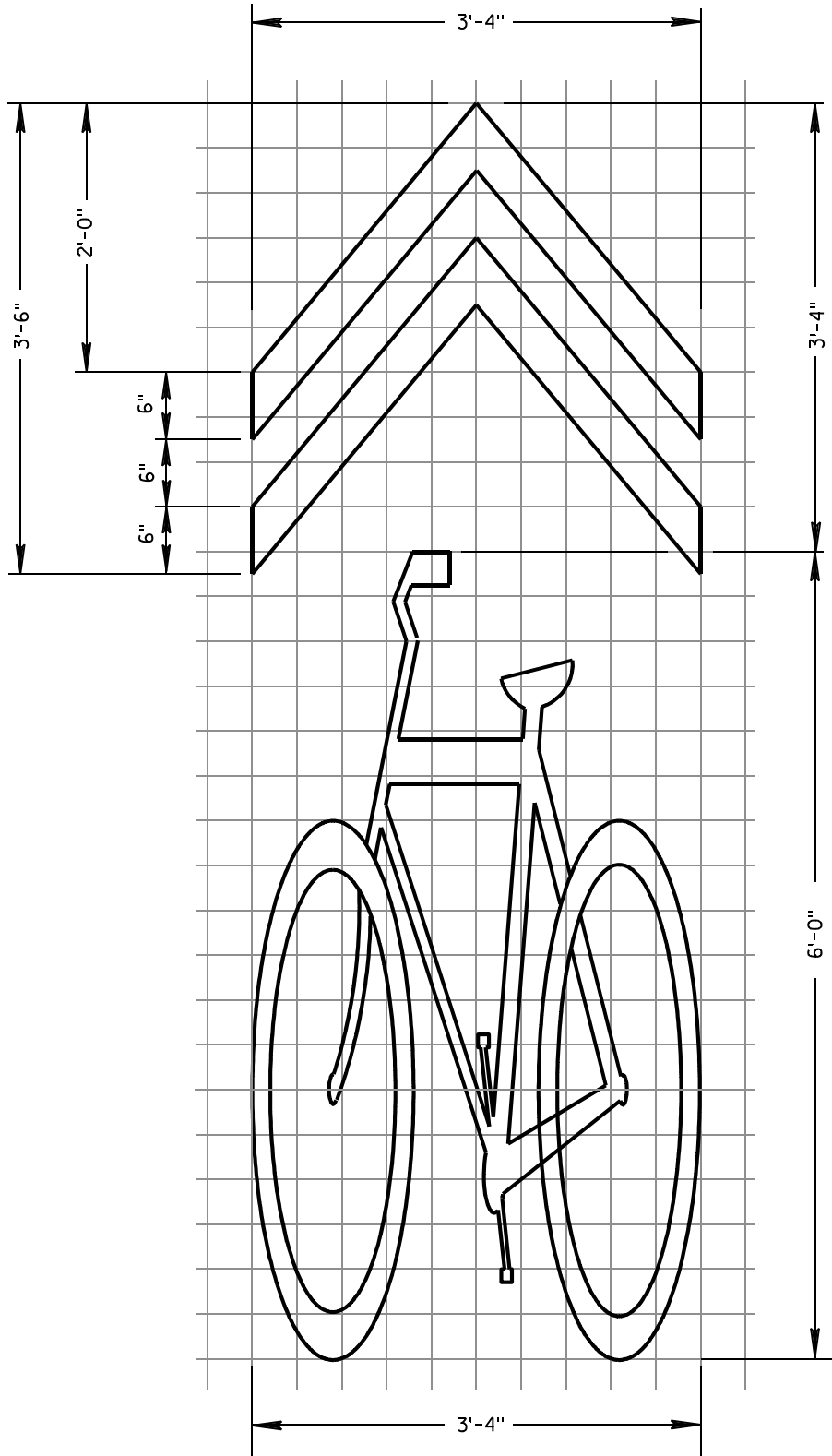


BICYCLE DETECTOR
PAVEMENT MARKING



BIKE LANE ARROW

| PAVEMENT MARKING FOR BIKE LANES | |
|--|---|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED 2-6-2012 DATE | /S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER OF DESIGN FHWA |

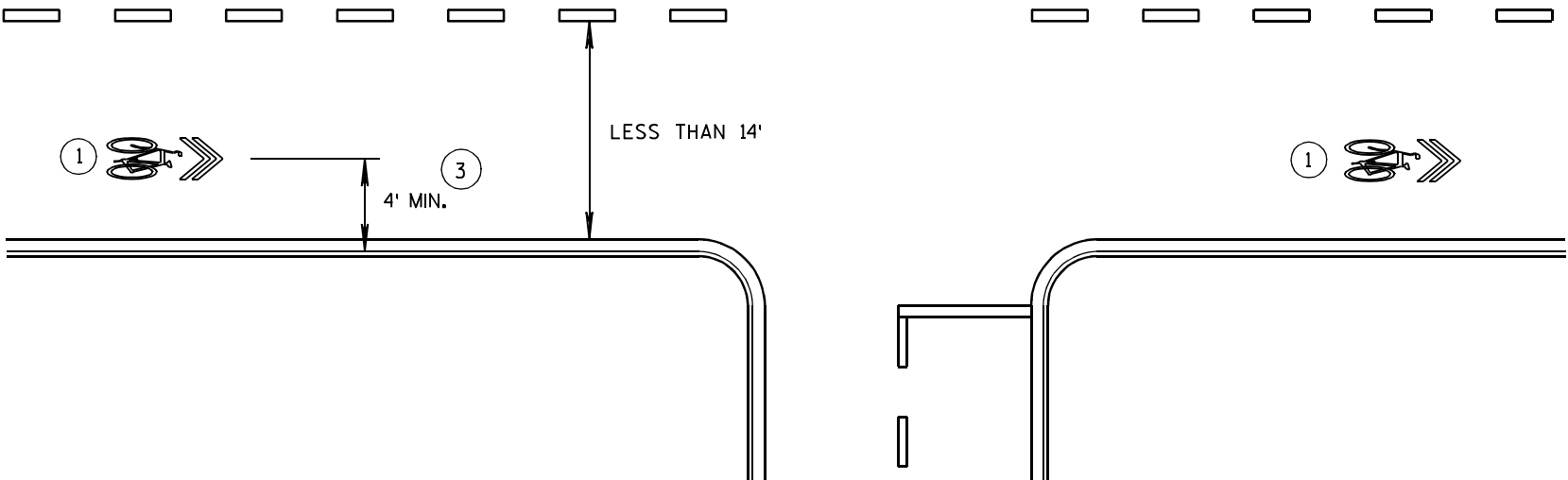


BIKE SYMBOL FOR SHARED LANE

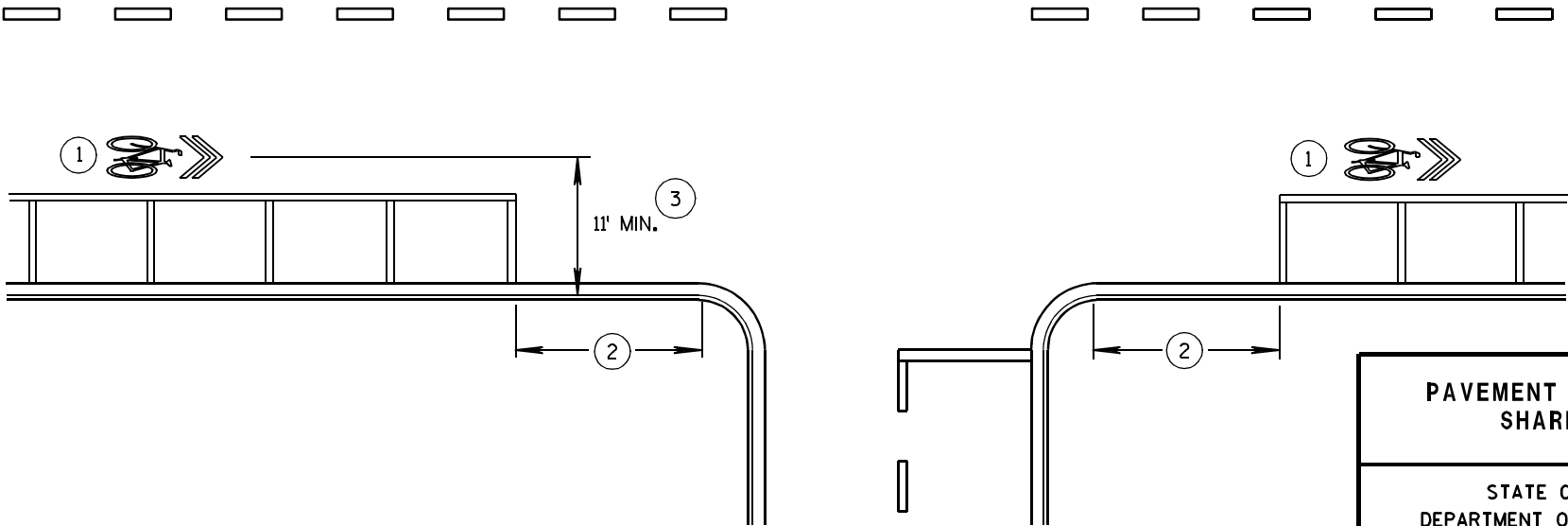
GENERAL NOTES

ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

- ① SPACED A MAXIMUM OF 250 FEET.
- ② 20 FOOT MINIMUM FROM CURB RADIUS.
- ③ OR TO EDGE OF PAVEMENT WITHOUT CURB.



WITHOUT PARKING



WITH PARKING

| | |
|--|---|
| PAVEMENT MARKING FOR SHARED LANE | |
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED 2-6-2012 DATE | /S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER OF DESIGN |
| FHWA | |

GENERAL NOTES

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

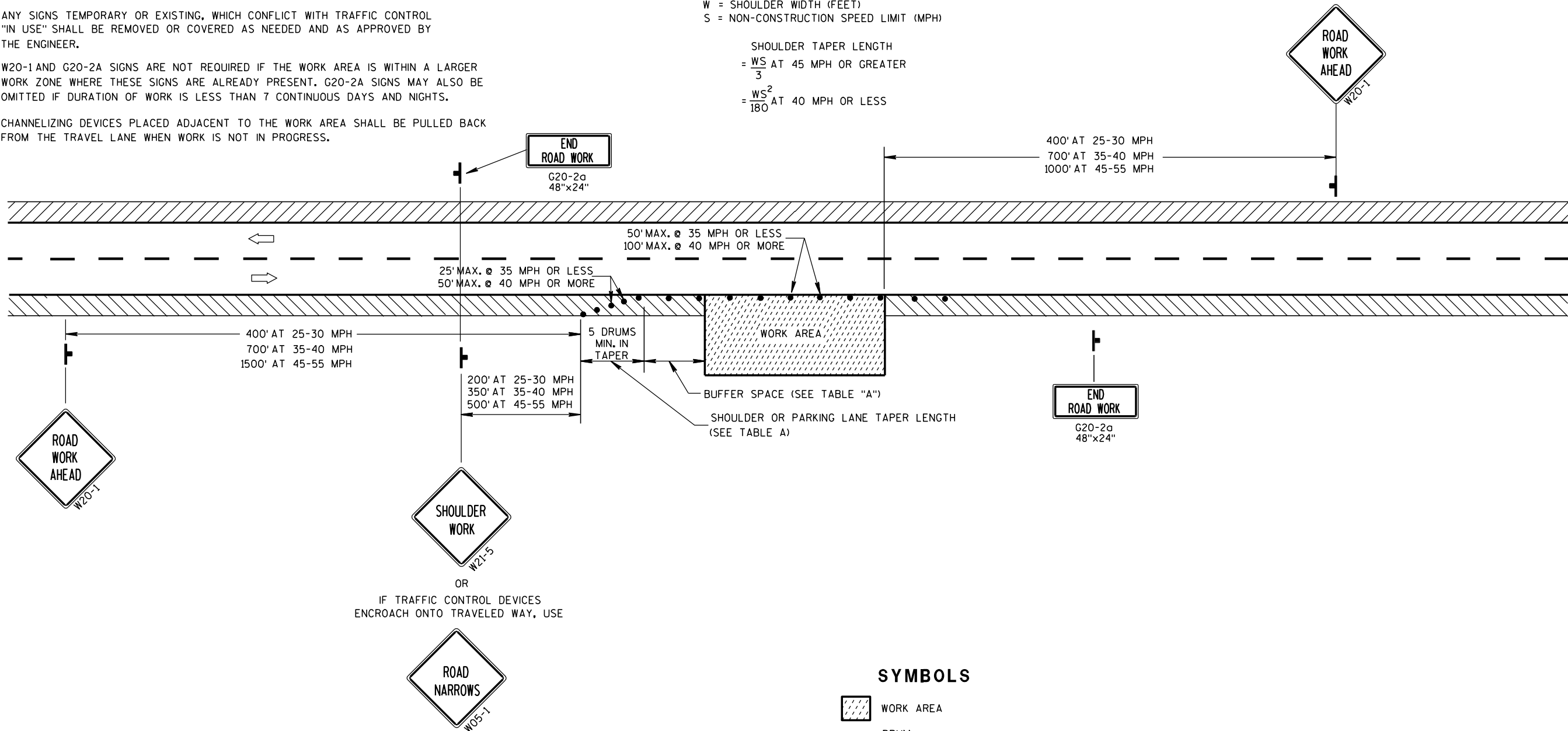
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

| SHOULDER TAPER LENGTH (FEET) | | | | | BUFFER SPACE (FEET) |
|------------------------------|----|-----|-----|-----|---------------------|
| S \ W | 4 | 6 | 8 | 10 | |
| 30 | 20 | 30 | 40 | 50 | 85 |
| 35 | 30 | 45 | 55 | 70 | 120 |
| 40 | 40 | 55 | 75 | 90 | 170 |
| 45 | 60 | 90 | 120 | 150 | 220 |
| 50 | 70 | 100 | 135 | 170 | 280 |
| 55 | 75 | 110 | 150 | 185 | 335 |

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
= $\frac{WS}{3}$ AT 45 MPH OR GREATER
= $\frac{WS^2}{180}$ AT 40 MPH OR LESS



SYMBOLS

- WORK AREA
- DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

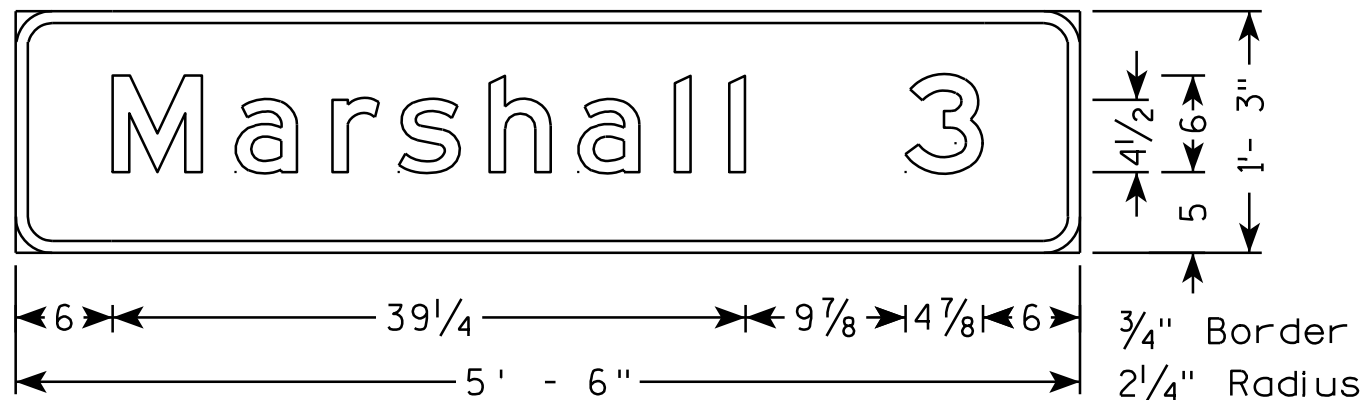
TRAFFIC CONTROL,
WORK ON SHOULDER OR
PARKING LANE,
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 /S/ Chester J. Spang
DATE CHIEF SIGNS AND MARKING ENGINEER
FHWA

NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White
3. Message Series - E

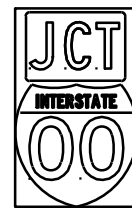


D2-1

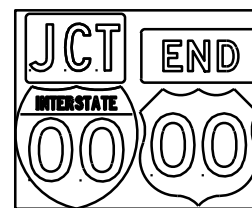
7

7

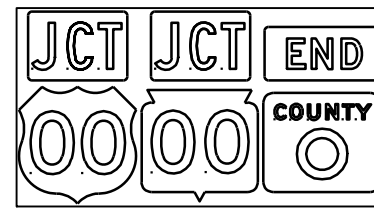
TYPICAL ASSEMBLIES



J1-1



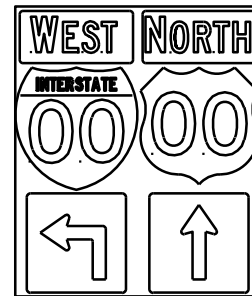
J1-2



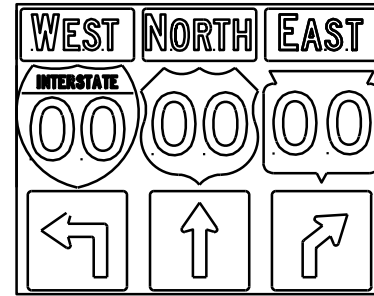
J1-3



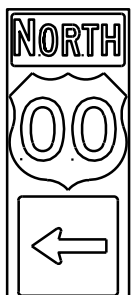
J2-1



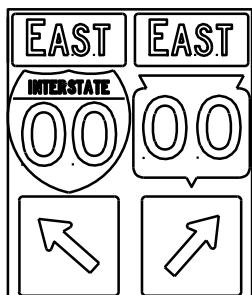
J2-2



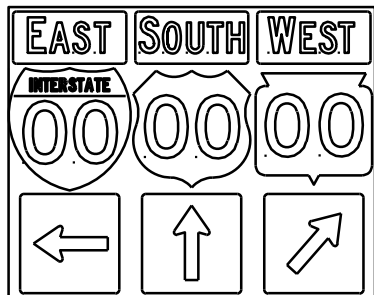
J2-3



J3-1



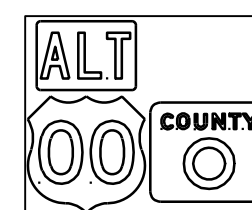
J3-2



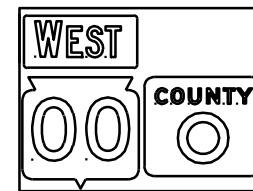
J3-3



J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1



J22-1

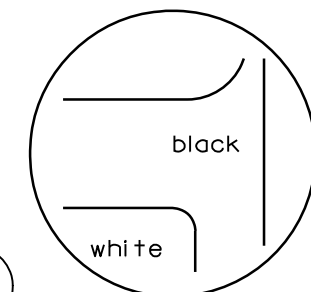
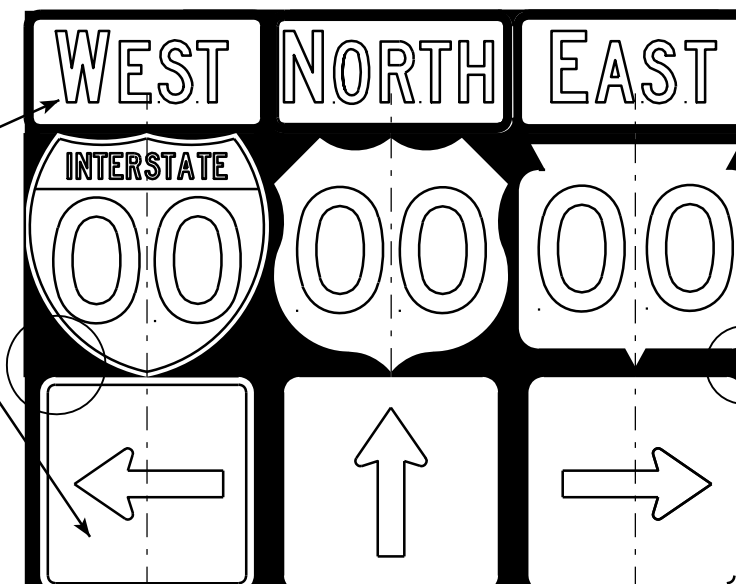
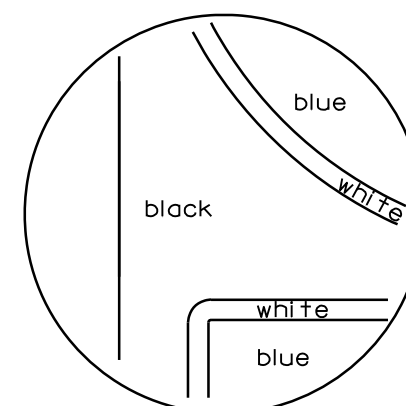


JV

NOTES

- Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Black Non-reflective
Message - see Note 5
- Message Series - See Note 5
- Corners shall be square since base material is plywood.
- The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
- Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
- Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
- Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
- Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.

[blue background with interstate]



[black background]

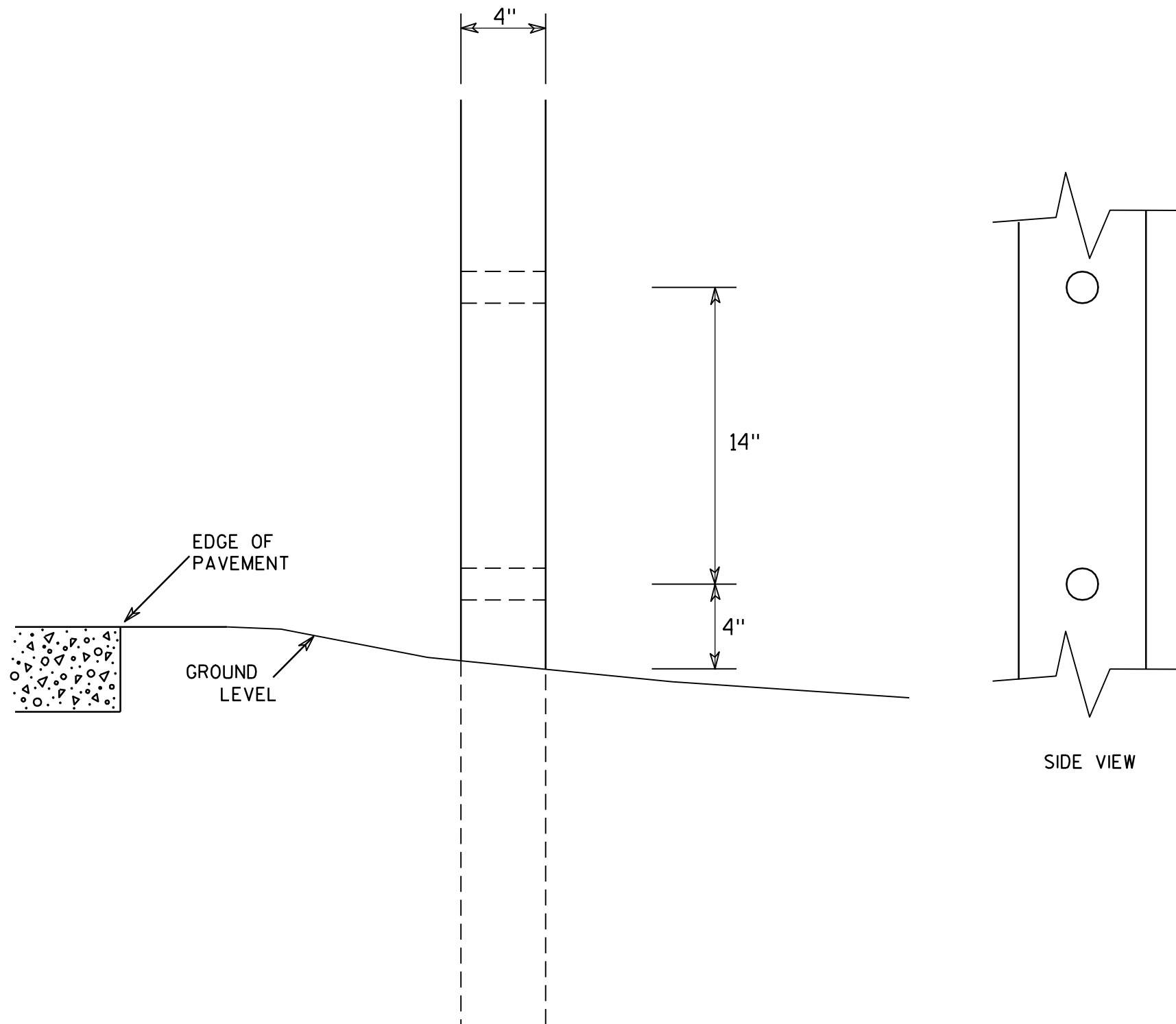
| ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES | |
|---|---|
| WISCONSIN DEPT OF TRANSPORTATION | |
| APPROVED | <i>Matthew R. Rauch</i> For State Traffic Engineer |
| DATE 10/21/09 | PLATE NO. A2-1S.6 |

PROJECT NO:

SHEET NO:

E

7



GENERAL NOTES

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

7

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:

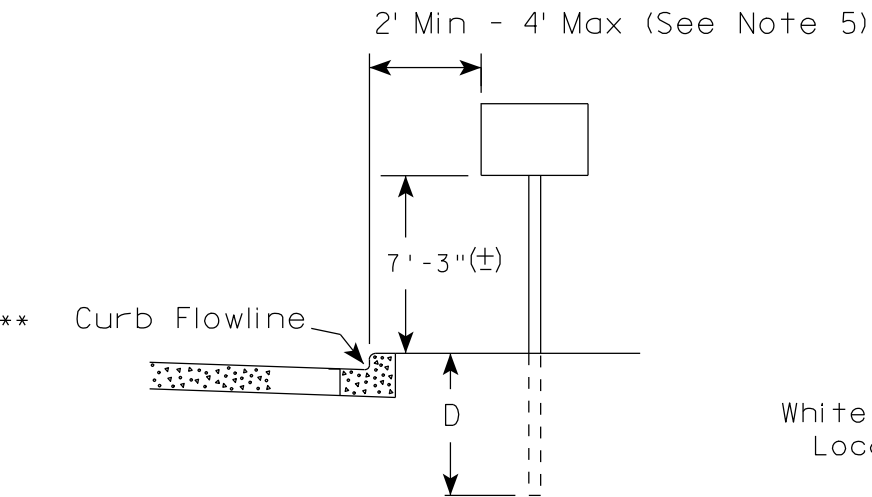
HWY:

COUNTY:

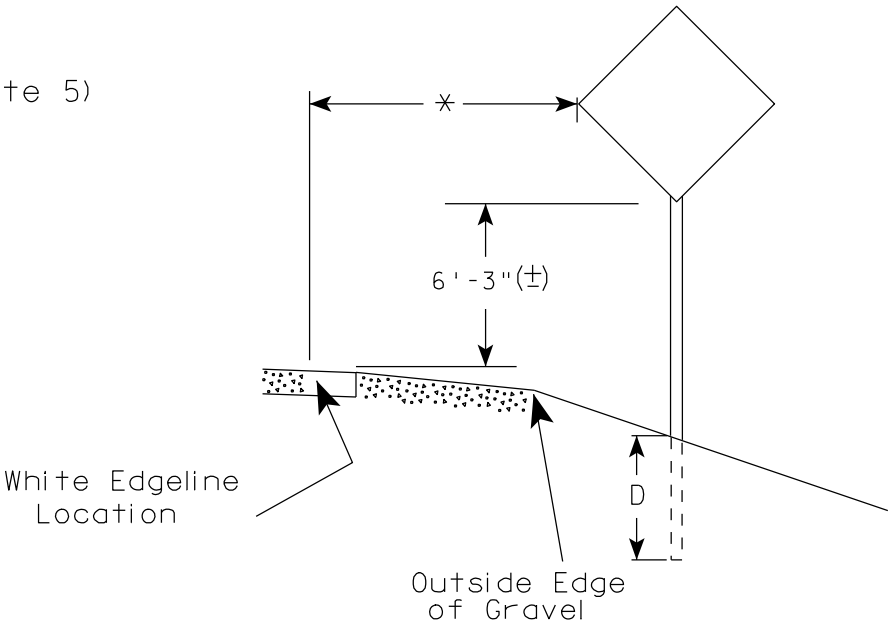
SHEET NO:

E

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

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

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

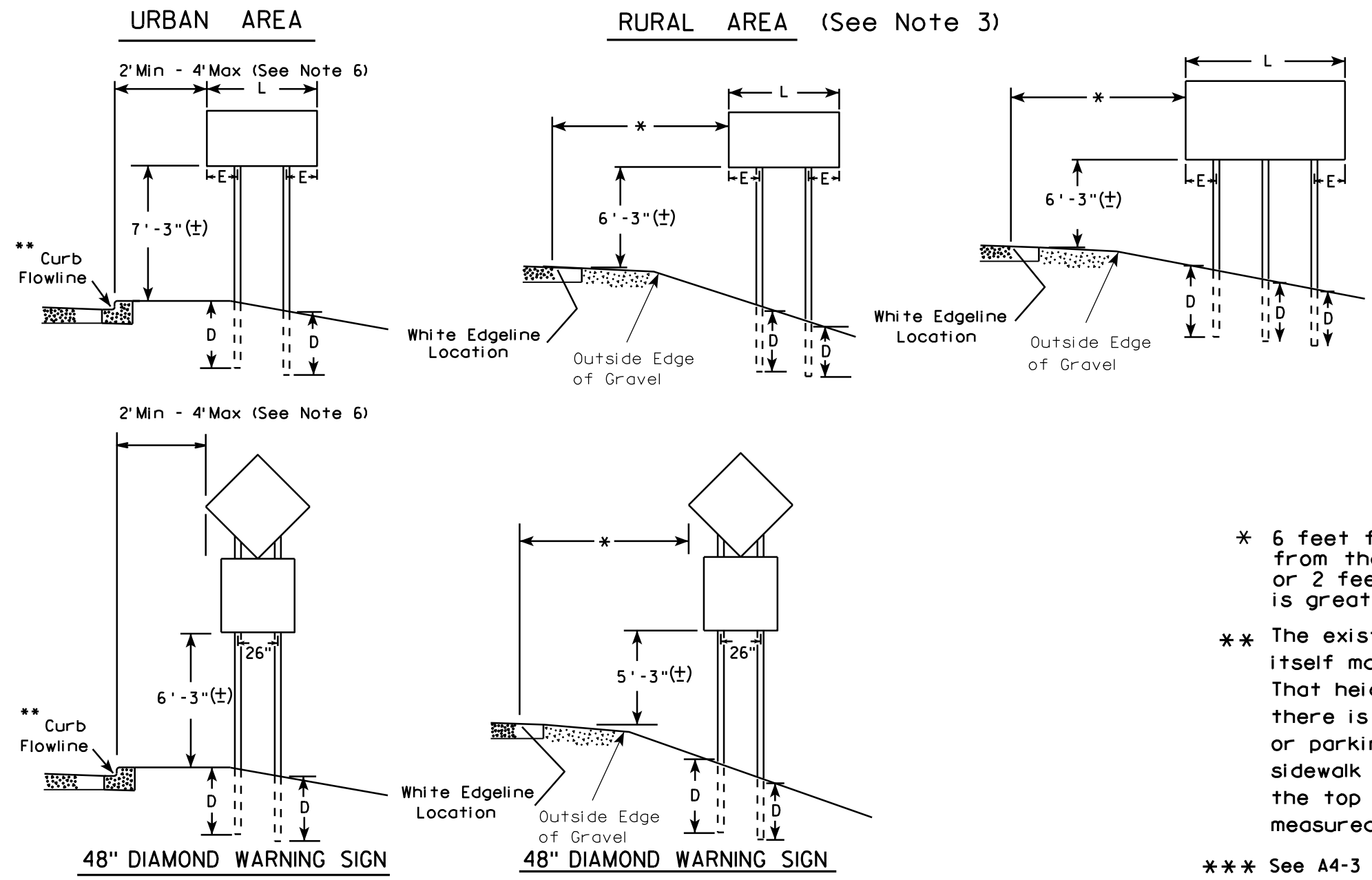
✱✱ The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-3.16



GENERAL NOTES

1. For multiple post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width or 20 S.F. or less in area.

| SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED) | |
|---|-----|
| L | E |
| Greater than 48" Less than 60" | 12" |
| 60" to 120" | L/5 |

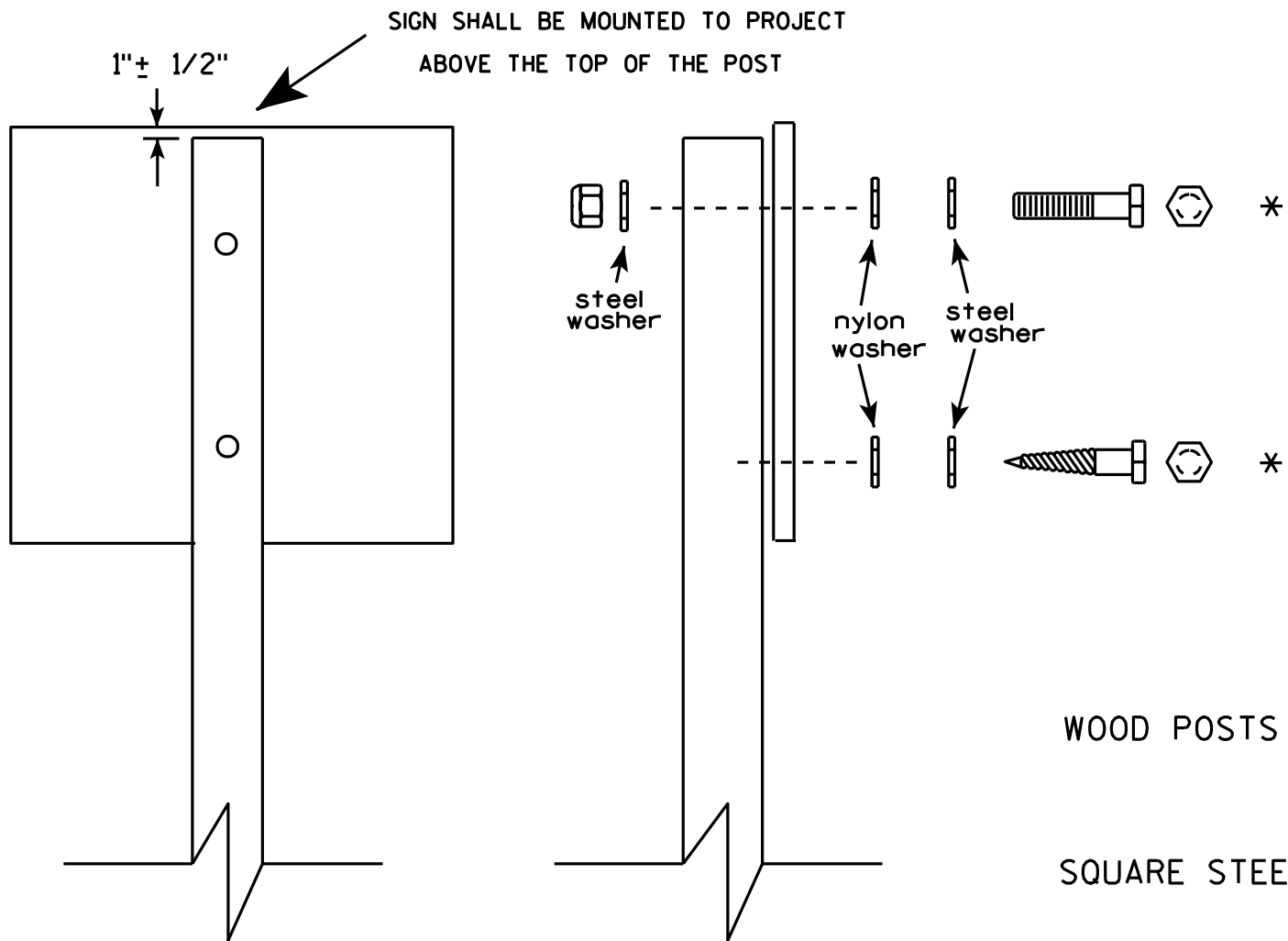
| SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED) | |
|---|-----|
| L | E |
| Greater than 120" less than 168" | 12" |

| SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED) | |
|--|-----|
| L | E |
| 168" and greater | 12" |

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

| | |
|---|---|
| TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS | |
| WISCONSIN DEPT OF TRANSPORTATION | |
| APPROVED | <i>Matthew R. Rauch</i> For State Traffic Engineer |
| DATE 9/21/2011 | PLATE NO. A4-4.11 |

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

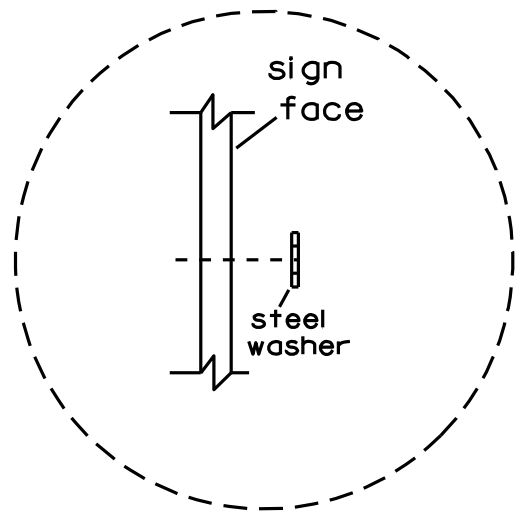


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.

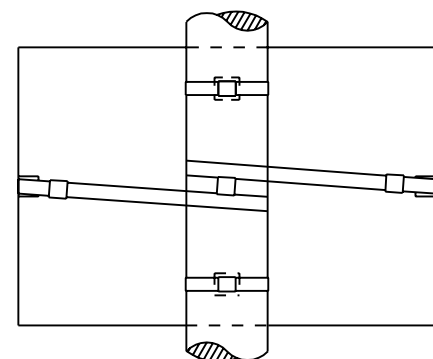
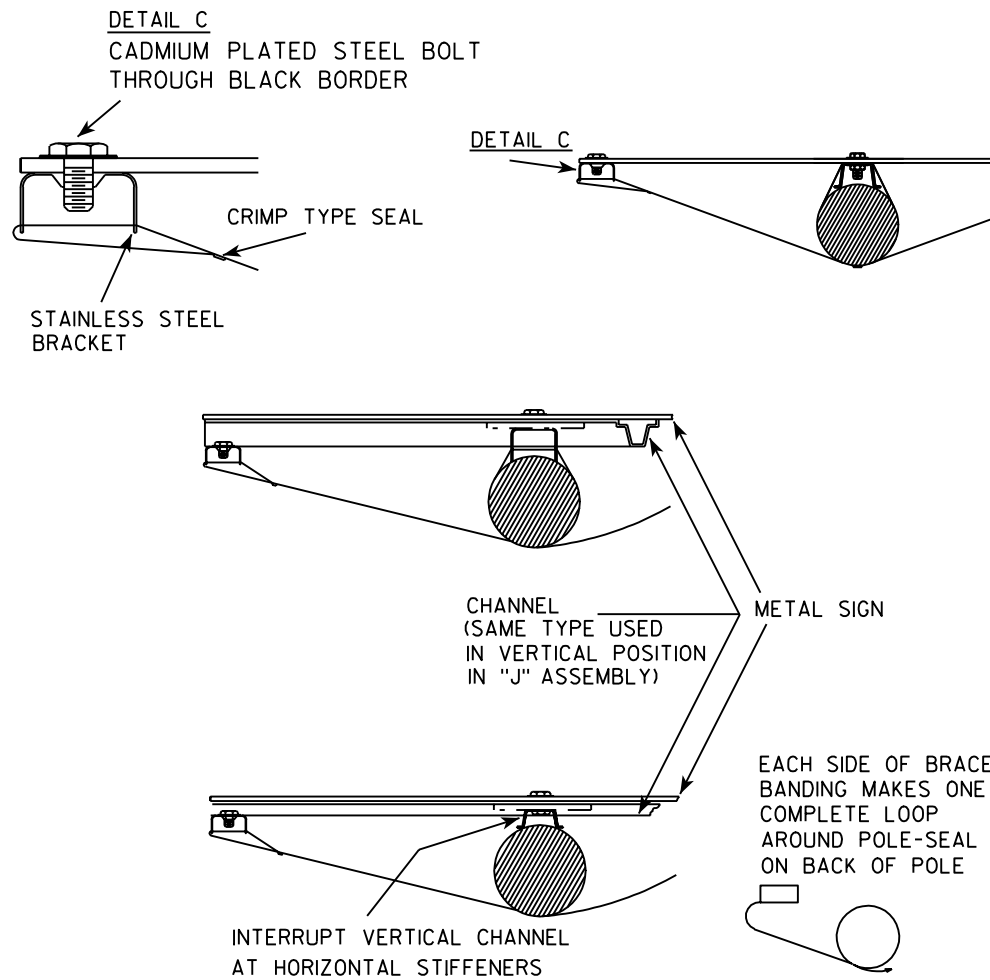


Washer Placement when Sign Has Other Than Type H or Type F Face

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

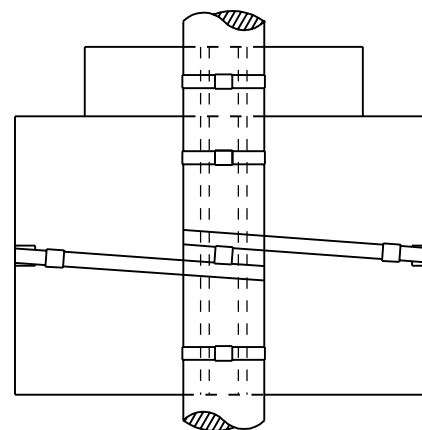
| | |
|----------------------------------|---|
| ATTACHMENT OF SIGNS TO POSTS | |
| WISCONSIN DEPT OF TRANSPORTATION | |
| APPROVED | <i>Matthew R. Rauch</i> For State Traffic Engineer |
| DATE 3/23/10 | PLATE NO. A4-8.7 |

BRACE BANDING



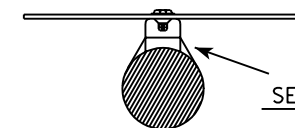
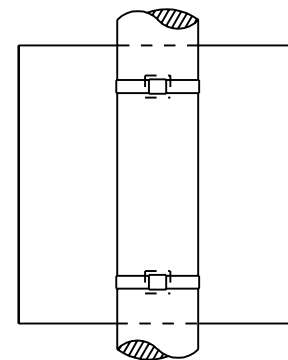
BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY
BUT NOT SO TIGHT AS TO APPRECIABLY
CURVE FACE OF SIGN.



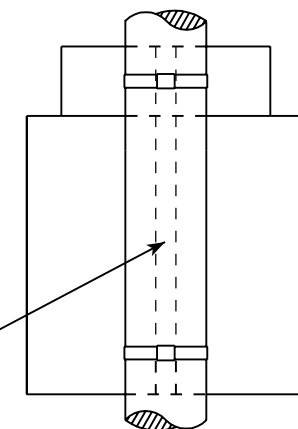
BRACKET BANDING

SINGLE SIGN



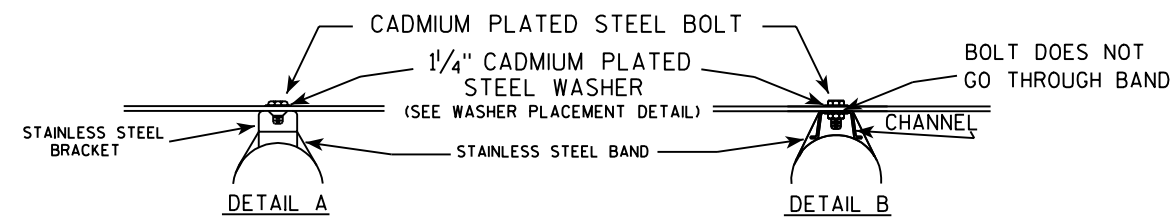
SEE DETAIL A

"J" ASSEMBLY

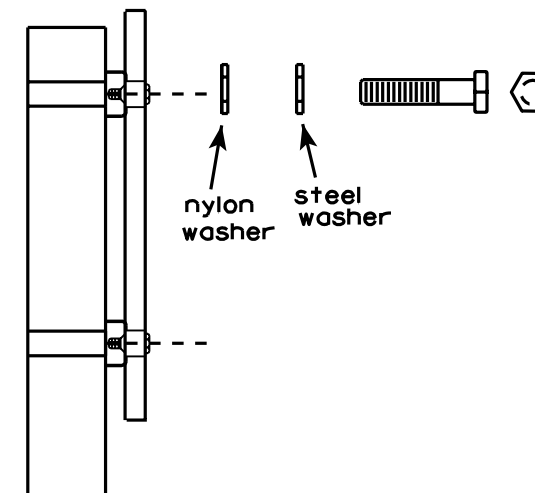


SEE DETAIL B

CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



WASHER PLACEMENT



WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

STANDARD SIGN SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2

PROJECT NO:

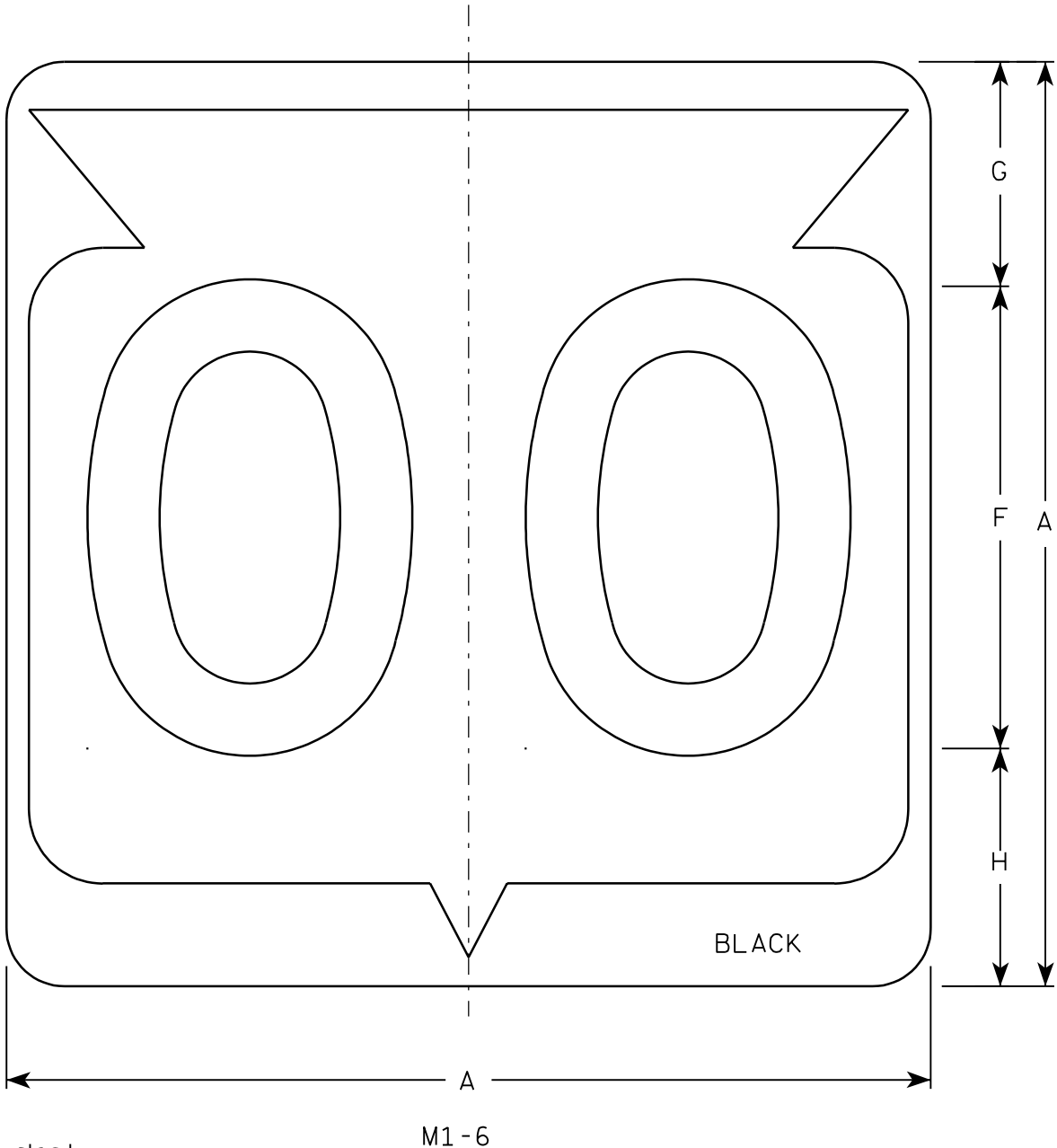
HWY:

COUNTY:

SHEET NO:

E

7



Metric equivalent
for this sign is:

| SIZE | |
|------|-----------------|
| 1 | |
| 2 | 600 mm X 600 mm |
| 3 | 900 mm X 900 mm |
| 4 | 900 mm X 900 mm |
| 5 | 900 mm X 900 mm |

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m ² |
|------|----|---|-------|---|---|----|-------|-------|--------|-------|--------|--------|-------|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|-----------------|------------------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | | 1 1/2 | | | 12 | 5 1/2 | 6 1/2 | 10 1/4 | 2 1/2 | 8 7/8 | 11 1/2 | 1 | 1 7/8 | 11 1/4 | 21 7/8 | | | | | | | | | | | 4.0 | .36 |
| 3 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 | .81 |
| 4 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 | .81 |
| 5 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 | .81 |

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

FILE NAME : C:\Users\Projects\tr_stdp\late\M16.DGN

PLOT DATE : 13-OCT-2005 14:55

PLOT BY : DITJPH

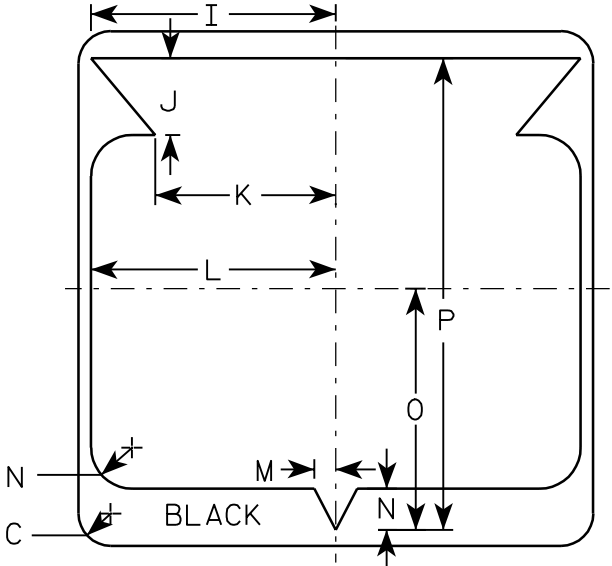
PLOT NAME :

PLOT SCALE : 6.715871:1.000000

WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - See Note 6 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
5. Substitute appropriate Series numerals and
adjust spacing as per plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective



STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

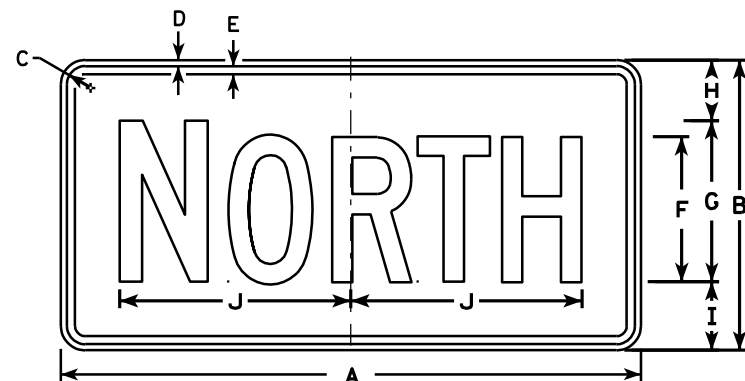
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/20/02

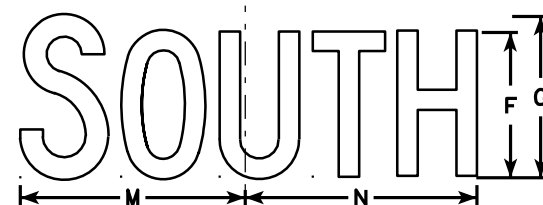
PLATE NO. M1-6.9



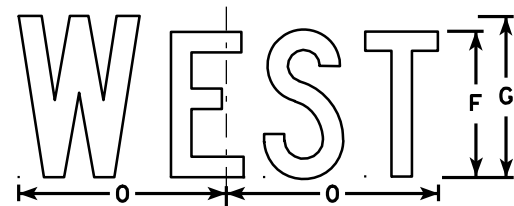
M3-1
MK3-1
M03-1



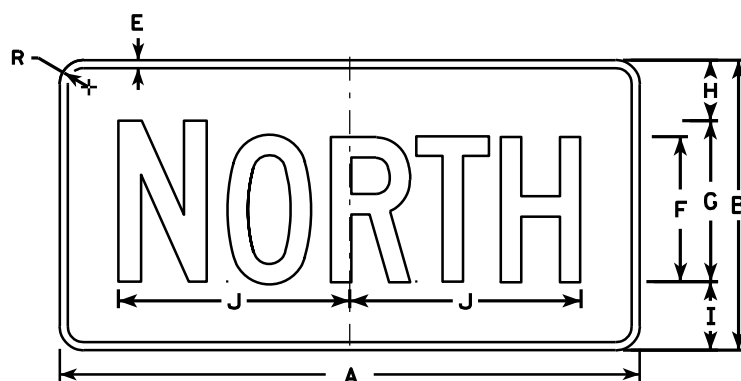
M3-2
MK3-2
M03-2



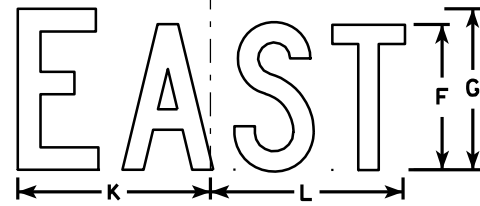
M3-3
MK3-3
M03-3



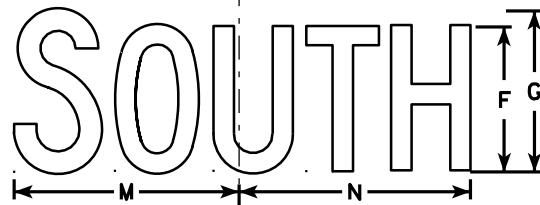
M3-4
MK3-4
M03-4



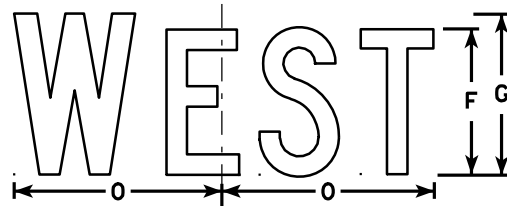
MB3-1
MG3-1
MM3-1
MN3-1



MB3-2
MG3-2
MM3-2
MN3-2



MB3-3
MG3-3
MM3-3
MN3-3



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective)
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White - Type H Reflective (Detour or temporary signs - Reflective)
MG3-1 thru MG3-4 Background - Green
Message - White - Type H Reflective
MK3-1 thru MK3-4 Background - Green
Message - White - Type H Reflective
MM3-1 thru MM3-4 Background - White - Type H Reflective
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White - Type H Reflective
M03-1 thru M03-4 Background - Orange - Reflective
Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|----|-------|-------|--------|-------|--------|--------|--------|-------|---|---|-------|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 7 | 2 1/4 | 2 3/4 | 10 1/4 | 7 7/8 | 8 3/8 | 10 1/4 | 9 3/4 | 8 3/4 | | | 1 1/2 | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |

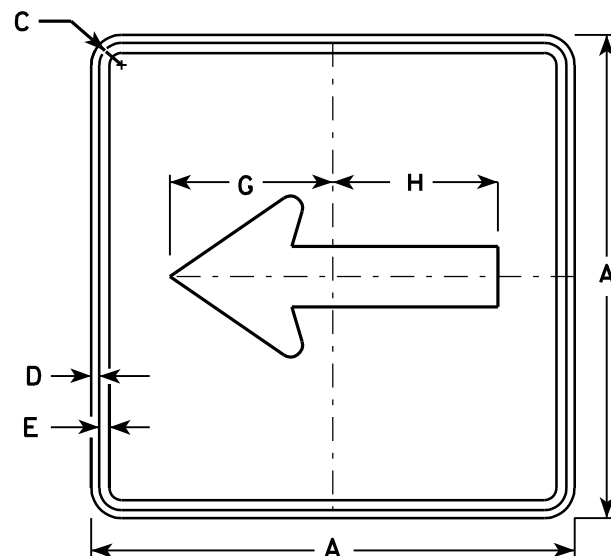
PROJECT NO: HWY: COUNTY: SHEET NO: E

STANDARD SIGNS M3-1 thru M3-4 SERIES

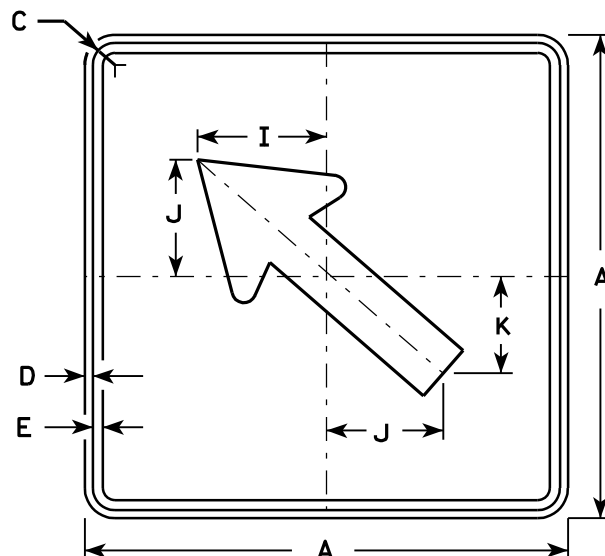
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

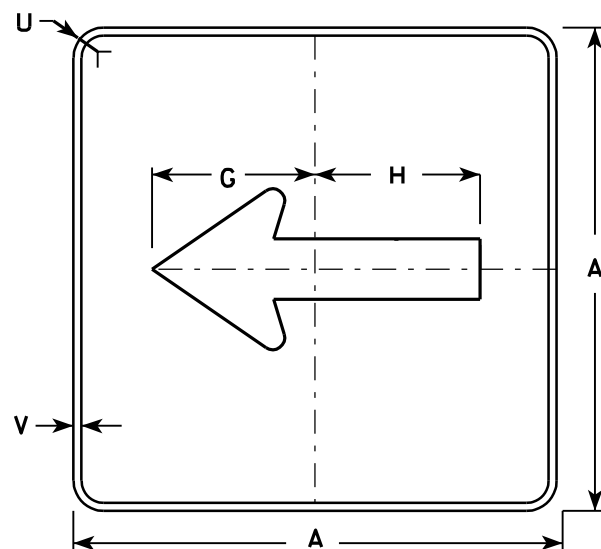
DATE 11/10/10 PLATE NO. M3-1.12



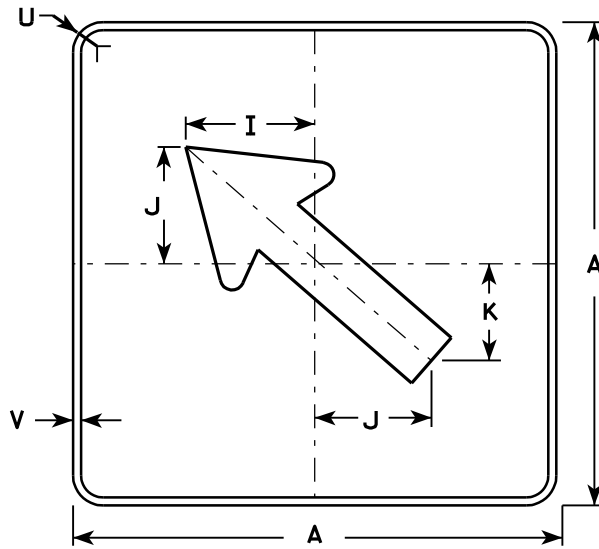
M6-1
MK6-1
MM6-1
MO6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MR6-2



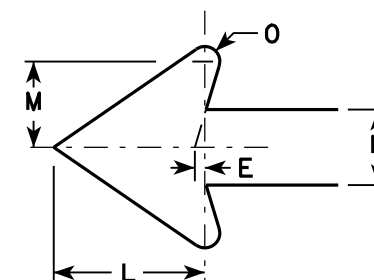
MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 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.
- M6-1 and M6-2 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG6-1 and MG6-2 Background - Green
Message - White - Type H Reflective
MK6-1 and MK6-2 Background - Green
Message - White - Type H Reflective
MM6-1 and MM6-2 Background - White - Type H Reflective
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White - Type H Reflective
MO6-1 and MO6-2 Background - Orange - Reflective
Message - Black
MR6-1 and MR6-2 Background - Brown
Message - Yellow - Type H Reflective



Metric equivalent
for this sign is:

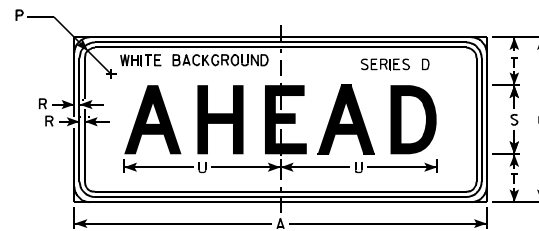
| SIZE | |
|------|-----------------|
| 1 | |
| 2 | 525 mm X 525 mm |
| 3 | 750 mm X 750 mm |
| 4 | 750 mm X 750 mm |
| 5 | 750 mm X 750 mm |

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m2 |
|------|----|---|-------|-----|-----|---|--------|--------|-------|-------|-------|-------|-------|-------|-----|---|---|---|---|---|-------|-----|---|---|---|---|-----------------|------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 1/2 | 7 1/8 | 5 5/8 | 5 | 4 1/4 | 5 1/4 | 3 | 2 5/8 | 1/2 | | | | | | 1 1/2 | 1/2 | | | | | 3.06 | 0.28 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 | 0.56 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 | 0.56 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 10 1/4 | 8 | 7 1/4 | 6 | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 | 0.56 |

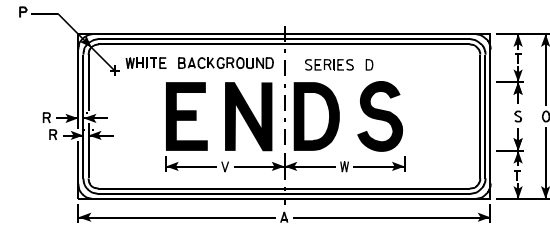
PROJECT NO: HWY: COUNTY: SHEET NO: E



R3-17



R3-17ap



R3-17bp

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - AS SHOWN
Message - BLACK
3. Message Series - C or as noted on the Signs.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | R3-17 in. ft. | R3-17ap in. ft. | R3-17bp in. ft. |
|------|----|----|-------|-----|-----|---|---|-------|-------|-------|-------|-------|-----|----|----|-------|-------|-----|---|-------|--------|-------|-------|-------|--------|---|------------------|--------------------|--------------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 30 | 24 | 1 1/8 | 3/8 | 1/2 | 2 | 4 | 4 1/8 | 7 7/8 | 6 3/8 | 9 1/2 | 2 5/8 | 7/8 | 13 | 12 | 1 1/8 | 3 3/8 | 3/8 | 5 | 3 1/2 | 11 3/8 | 8 5/8 | 8 3/4 | 2 3/8 | 15 5/8 | 8 | 5.0 | 2.5 | 2.5 |
| 2M | 30 | 24 | 1 1/8 | 3/8 | 1/2 | 2 | 4 | 4 1/8 | 7 7/8 | 6 3/8 | 9 1/2 | 2 5/8 | 7/8 | 13 | 12 | 1 1/8 | 3 3/8 | 3/8 | 5 | 3 1/2 | 11 3/8 | 8 5/8 | 8 3/4 | 2 3/8 | 15 5/8 | 8 | 5.0 | 2.5 | 2.5 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

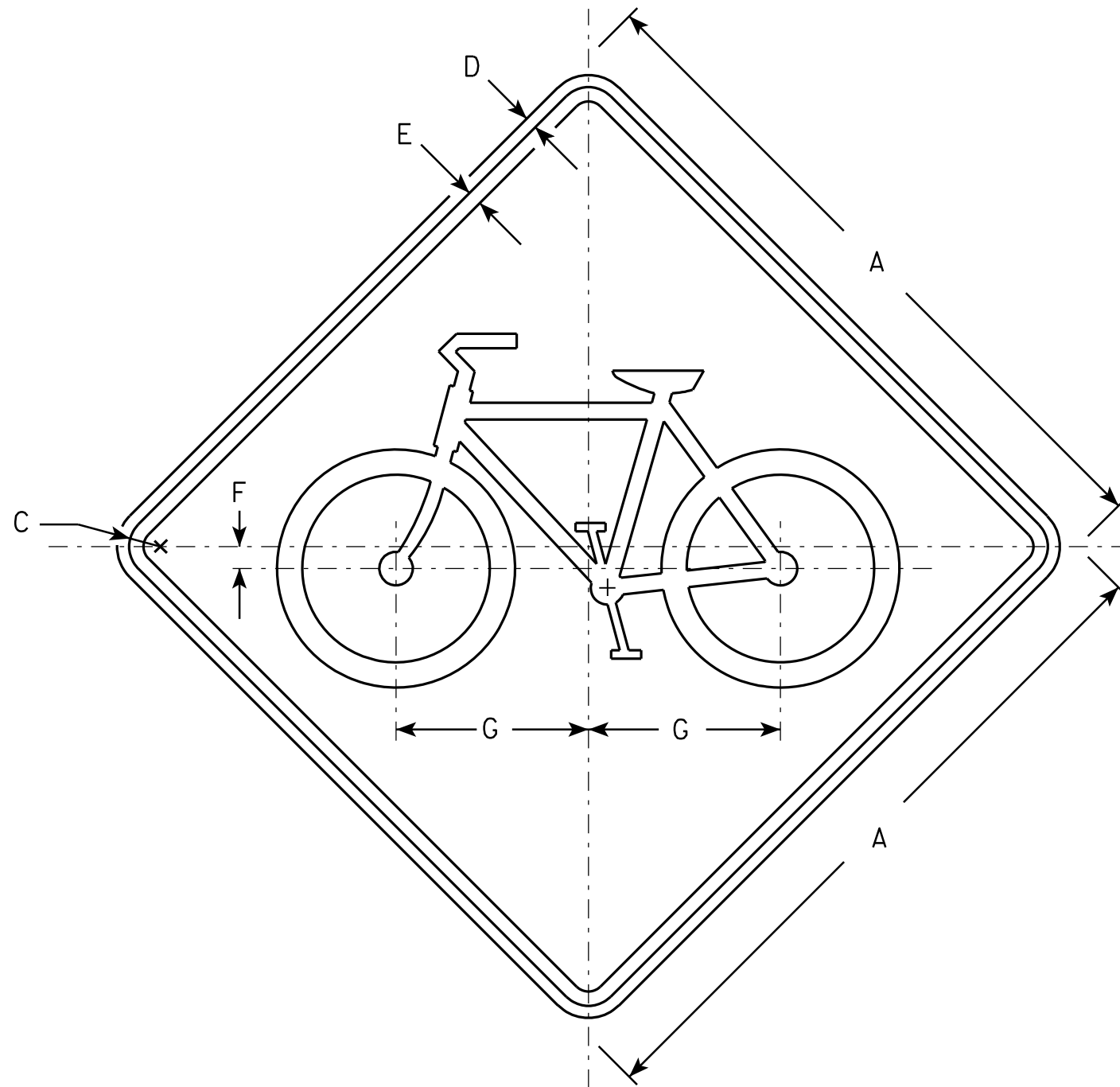
PROJECT NO: _____ SHEET NO: _____ E

STANDARD SIGN
R3-17 & R3-17a&bp

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/12/2011 PLATE NO. R3-17.2



W11-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|-------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | | 1 1/8 | 3/4 | 1/2 | 3/4 | 6 5/8 | | | | | | | | | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | 1 | 8 1/2 | | | | | | | | | | | | | | | | | | | | 6.25 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | 1 1/4 | 10 | | | | | | | | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | 1 1/4 | 10 | | | | | | | | | | | | | | | | | | | | 9.0 |
| 4 | 48 | | 2 1/4 | 3/4 | 1 | 1 5/8 | 13 3/8 | | | | | | | | | | | | | | | | | | | | 16.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | 16.0 |

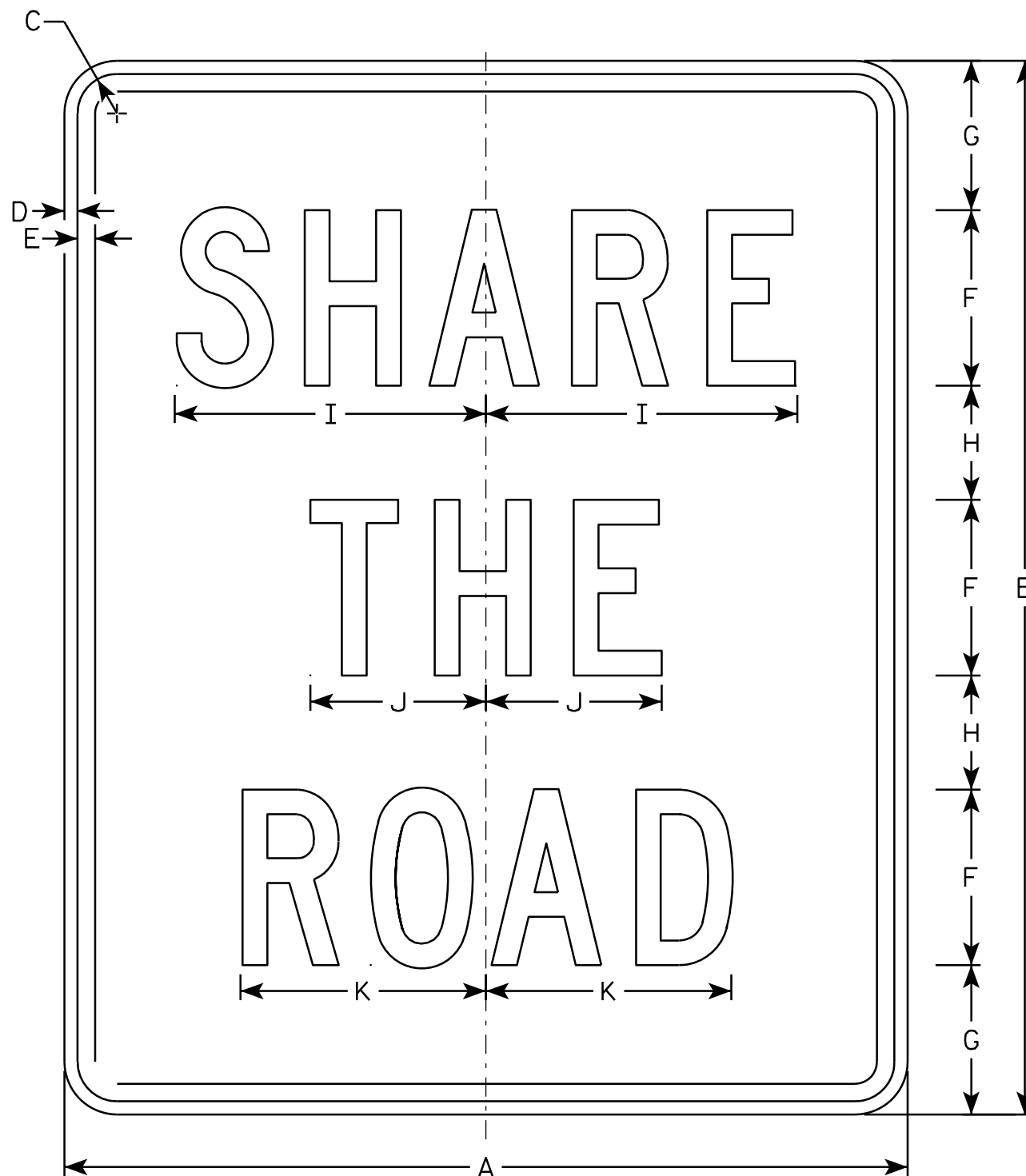
STANDARD SIGN
W11-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/21/10 PLATE NO. W11-1.9

PROJECT NO: HWY: COUNTY: SHEET NO: E



W16-1P

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | O | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|-------|-------|-------|-------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 18 | 24 | 1 1/8 | 3/8 | 1/2 | 4 | 3 3/8 | 2 5/8 | 6 5/8 | 3 3/4 | 5 3/8 | | | | | | | | | | | | | | | | 3.0 |
| 2M | 18 | 24 | 1 1/8 | 3/8 | 1/2 | 4 | 3 3/8 | 2 5/8 | 6 5/8 | 3 3/4 | 5 3/8 | | | | | | | | | | | | | | | | 3.0 |
| 3 | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 5 | 4 1/4 | 3 1/4 | 8 7/8 | 5 | 7 | | | | | | | | | | | | | | | | 5.0 |
| 4 | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 5 | 4 1/4 | 3 1/4 | 8 7/8 | 5 | 7 | | | | | | | | | | | | | | | | 5.0 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W16-1P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/2/10 PLATE NO. W16-1P.1

PROJECT NO: HWY: COUNTY: SHEET NO: E

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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

MAD WITH: PROJECT ID: 3290-00-60 COUNTY: JEFFERSON

MAY 2013

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. 5 | Plan |
| Section No. 6 | Standard Detail Drawings |
| Section No. 7 | Sign Plates |
| Section No. 8 | Structure Plans |

TOTAL SHEETS = 76

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY REHABILITATION-MAINTENANCE PROJECT

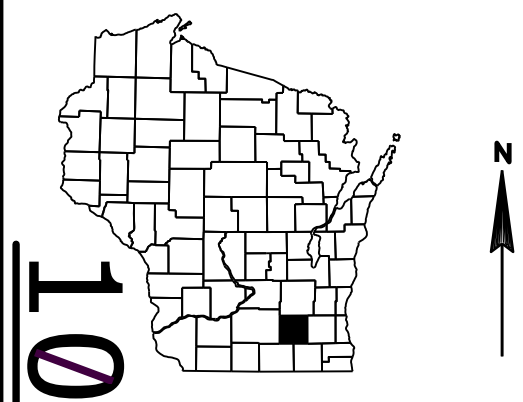
LAKE MILLS - WATERLOO

(IH 94 - SVL WATERLOO)

STH 89

JEFFERSON COUNTY

| STATE PROJECT | FEDERAL PROJECT | |
|---------------|-----------------|----------|
| | PROJECT | CONTRACT |
| 3290-00-60 | _____ | — |
| | | |
| | | |
| | | |

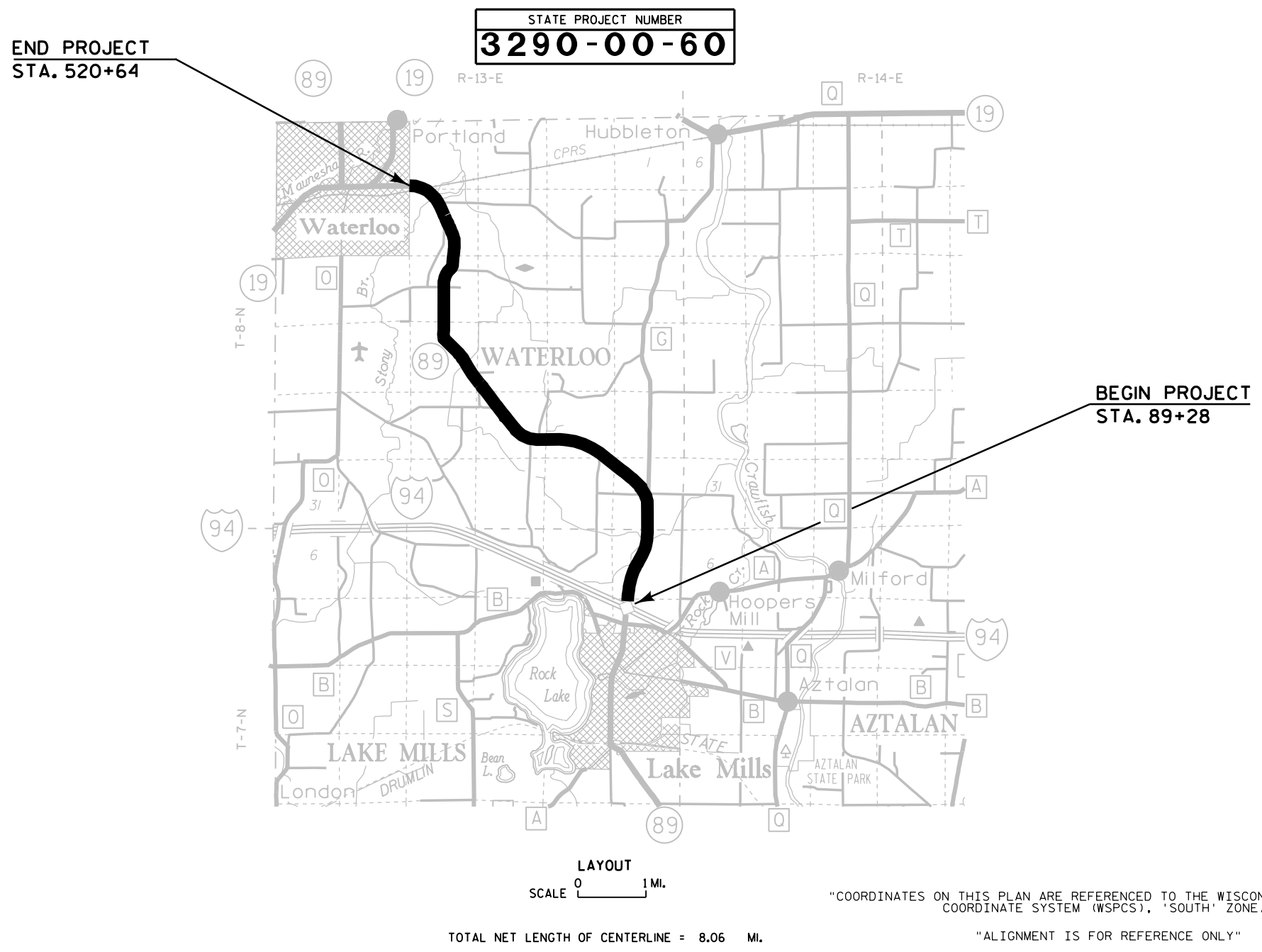


DESIGN DESIGNATION

| | | |
|-----------------|---|--------|
| A.A.D.T. (2010) | = | 2800 |
| A.A.D.T. (2023) | = | 3800 |
| D.H.V. | = | 6.5 |
| D.D. | = | 60/40 |
| T. | = | 7.8% |
| DESIGN SPEED | = | 55 mph |
| ESALS | = | N/A |

CONVENTIONAL SYMBOLS

| | |
|--------------------|---------|
| PLAN | |
| CORPORATE LIMITS | |
| REFERENCE LINE | |
| COMBUSTIBLE FLUIDS | |
| UTILITIES | |
| ELECTRIC | — E — |
| FIBER OPTIC | — FO — |
| GAS | — G — |
| SANITARY SEWER | — SAN — |
| STORM SEWER | — SS — |
| TELEPHONE | — T — |
| WATER | — W — |
| UTILITY PEDESTAL | |
| POWER POLE | |
| TELEPHONE POLE | |



ORIGINAL PLANS PREPARED BY



PEOPLE WHO CARE.
CREATING QUALITY TRANSPORTATION
TODAY AND TOMORROW

WISDOT SOUTHWEST REGION - MADISON OFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

| | |
|---------------------|----------------|
| Surveyor | _____ |
| Designer | GREG SYZMANSKI |
| Project Manager | TERI SCHOPP |
| Regional Examiner | _____ |
| Regional Supervisor | KURT JOHNSON |
| C.O. Examiner | _____ |

APPROVED FOR THE DEPARTMENT

DATE: 1/29/13 

(Signature)

E

GENERAL NOTES

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATION HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS' HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

IF UTILITY CONFLICTS OCCUR DURING CONSTRUCTION FACILITIES ADJUSTMENTS WILL BE COORDINATED WITH CONTRACTOR. IF THERE ARE CONFLICTS WITH SIGNS, OR OTHER WORK UNDER PROJECT, THE CONTRACTOR WILL WORK AROUND THE UTILITY FACILITIES.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/INCH.

APPLY TACK COAT TO MILLED SURFACES. THE RATE OF APPLICATION IS 0.025 GALLONS PER SQUARE YARD OR AS DIRECTED BY THE ENGINEER.

ALL EXISTING SIGNS SHALL REMAIN IN PLACE UNTIL CONSTRUCTION OPERATIONS REQUIRE THEIR REMOVAL OR UNLESS THE ENGINEER APPROVES THEIR REMOVAL.

THE LOCATION OF STOP LINES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, ALL SIGNS RELATING TO THIS OPERATION SHALL BE COVERED OR REMOVED AND FACILITY RESTORED TO NORMAL OPERATION.

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES AND FIELD ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

PAVING LIMITS AT INTERSECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER AND SHALL HAVE BUTT JOINTS.

EXISTING SHOULDER AGGREGATE SHALL BE INCORPORATED INTO THE NEW SHOULDERS UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN THE FIELD.

CURVE INFORMATION SHOWN ON THE PLANS HAS NOT BEEN VERIFIED BY A FIELD SURVEY. THE ENGINEER SHALL DETERMINE THE APPROPRIATE SUPER-ELEVATION AND RUN-OFF INFORMATION AND PROVIDE TO THE CONTRACTOR PRIOR TO PAVING.

REMOVE AND REPLACE ALL SIGNS AND POSTS WITH NEW SIGNS AND POSTS IN THE SAME GENERAL LOCATION UNLESS OTHERWISE NOTED ON THE PLANS.

HMA PAVEMENT OVERLAY WILL BE PLACED IN ONE LAYER FOR A TOTAL DEPTH OF 2".

SHOULDER WIDENING TO BE PLACED IN 2 LIFTS (2" BINDER, 2" SURFACE).

THE CONTACTOR'S PAVING OPERATIONS SHALL BE CONSISTANT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

EROSION CONTROL ITEMS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATIONS IN THE FIELD. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY. AT THAT TIME, THE CONTRACTOR SHALL REMOVE THE TEMPORARY EROSION CONTROL ITEM.

PROTECT WETLANDS AND OTHER WATERWAYS THAT ARE PRESENT WITHIN THE PROJECT LIMITS.

KEEP ALL EQUIPMENT AND MATERIALS OUT OF ENVIRONMENTALLY SENSITIVE AREAS. DO NOT PARK IN THESE AREAS.

DNR CONTACT

Eric Heggelund
3911 Fish Hatchery Road
Fitchburg, WI 53711
(608) 275-3301
Eric.Heggelund@wisconsin.gov



Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

UTILITY/MUNICIPALITY

AT&T LEGACY - COMMUNICATION LINE

CONTACT/ADDRESS

Carl Donahue
AT&T Legacy Communication Line
866 Rock Creek Rd
Plano, IL 60545
(715) 833-2054
cdonahue@att.com

UTILITY TYPE

COMMUNICATION

CHARTER COMMUNICATIONS

Brandon Storm
Charter Communications- Communication Line
2701 Daniels St.
Madison, WI 53718
(608) 274-3822
brandon.storm@chartercom.com

COMMUNICATION

FRONTIER COMMUNICATIONS

Robert Church
Frontier Communications of WI LLC -
Communication Line
118 Division Street
Plymouth, WI 53073
(608) 837-1881
robert.church@ftr.net

COMMUNICATION

WISCONSIN DEPT. OF TRANSPORTATION

Jeff Madson
Wisconsin Department of Transportation -
Communication Line
Ste. 300
433 W. St. Paul Ave.
Milwaukee, WI 53203-3007
(414) 225-3723
Jeffrey.Madson@dot.wi.gov

COMMUNICATION

MCLEOD USA TELCOMMUNICATION

Jim Kostuch
McLeod USA Telcommunication Services Inc -
Communication Line
13935 Bishops Dr
Brookfield, WI 53005
(262) 792-7938
James.Kostuch@windstream.com

COMMUNICATION

AMERICAN TRANSMISSION CO

Mike Olsen
ATC Management, Inc. - Electricity
801 O'keefe Rd
P.O. Box 6113
De Pere, WI 54115-6113
(920) 338-6582
molsen@atcllc.com

ELECTRIC

WE ENERGIES

Dan Sande
We Energies - Electricity
A299
333 W Everett St
Milwaukee, WI 53203
(414) 221-4578
Dan.Sande@we-energies.com

ELECTRIC & GAS/PETROLEUM

LAKE MILLS LIGHT AND WATER DEPT.

Steve Wilke
Lake Mills Light And Water Dept -
Electricity/ Water
307 N Cp Ave
Lake Mills, WI 53551
(920) 648-8934
twhitcomb@wppisys.org

ELECTRIC & WATER

WATERLOO WATER & LIGHT

Frederick Holaus
Waterloo Water & Light - Electricity
122 S Monroe St
Waterloo, WI 53594
(920) 478-2260
wlooch@hurleycomputers.com

ELECTRIC

PORTLAND TOWN OF SANITARY DISTRICT #1

Nancy Thompson
Portland Town of Sanit Dist #1 - Sewer
N197 Columbus St
Waterloo, WI 53594
(920) 478-9735

SEWER

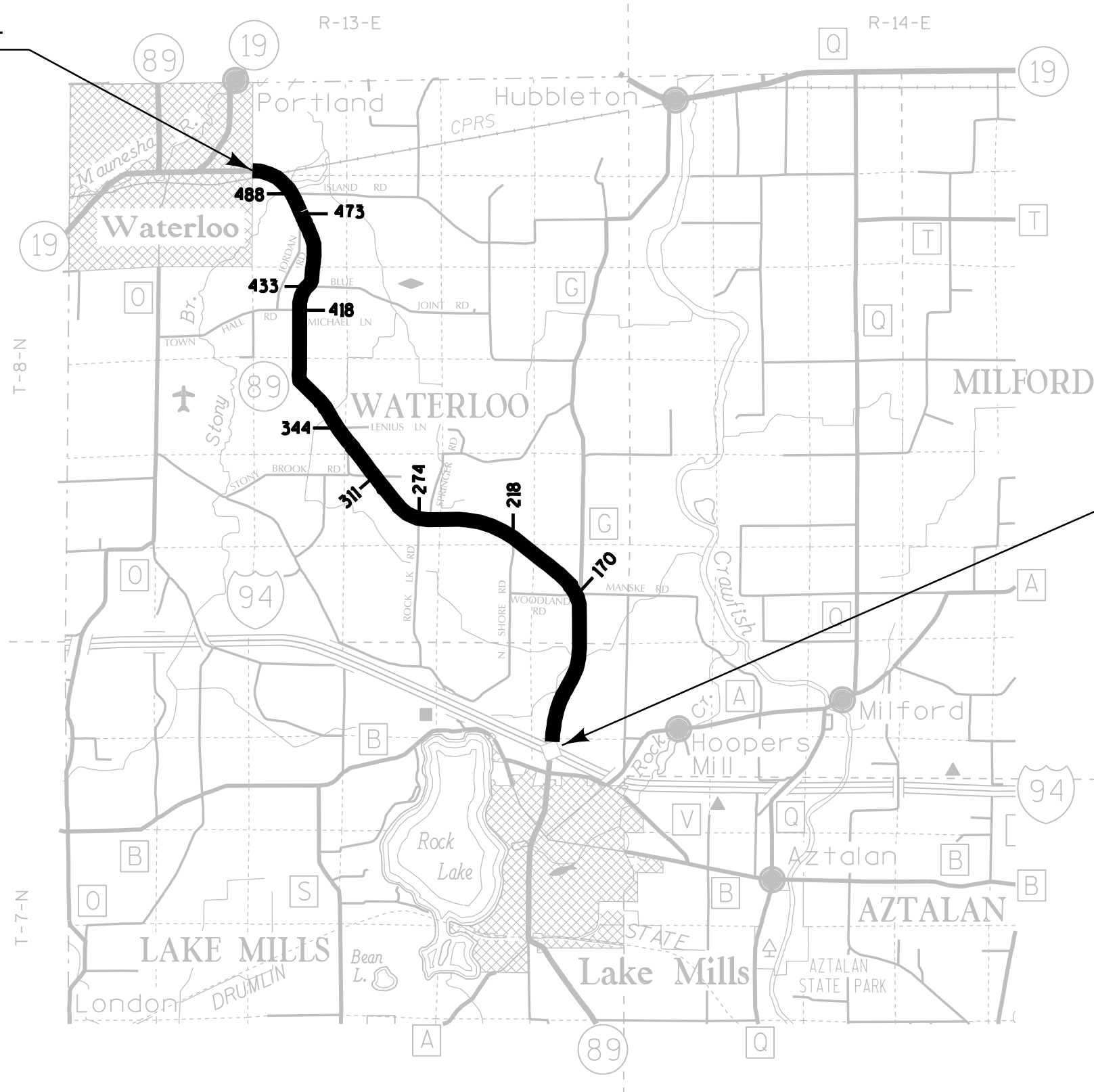
WATERLOO WATER & LIGHT COMMISSION

Waterloo Water And Light Commission
575 Commercial Ave
Waterloo, WI 53594-2400

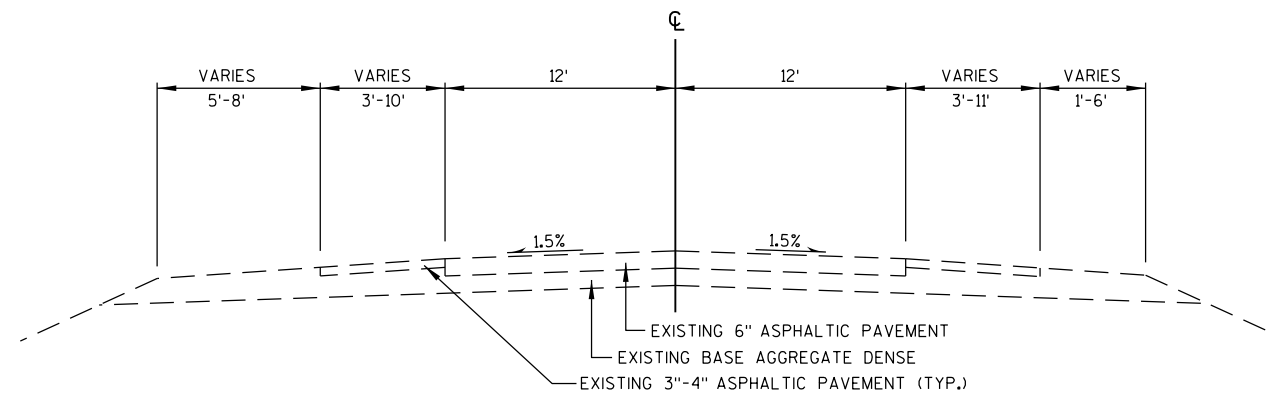
WATER



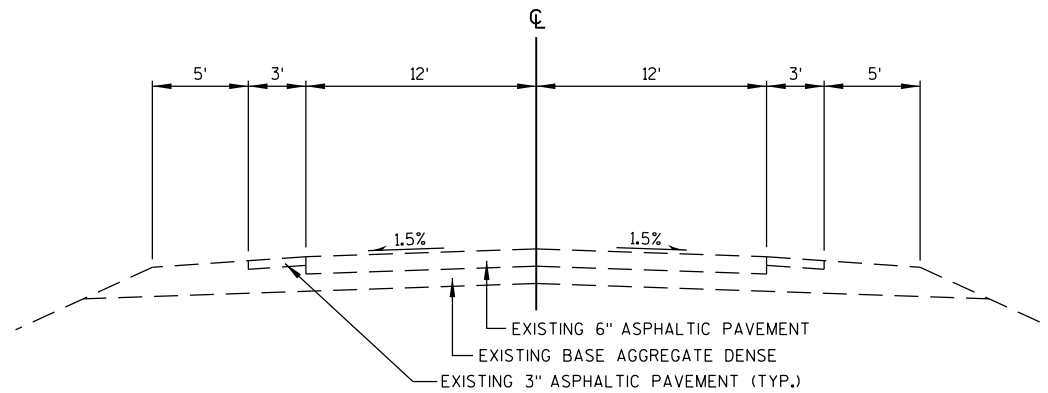
END PROJECT
STA. 520+64



BEGIN PROJECT
STA. 89+28



TYPICAL EXISTING SECTION
STA. 89+28 - STA. 95+63



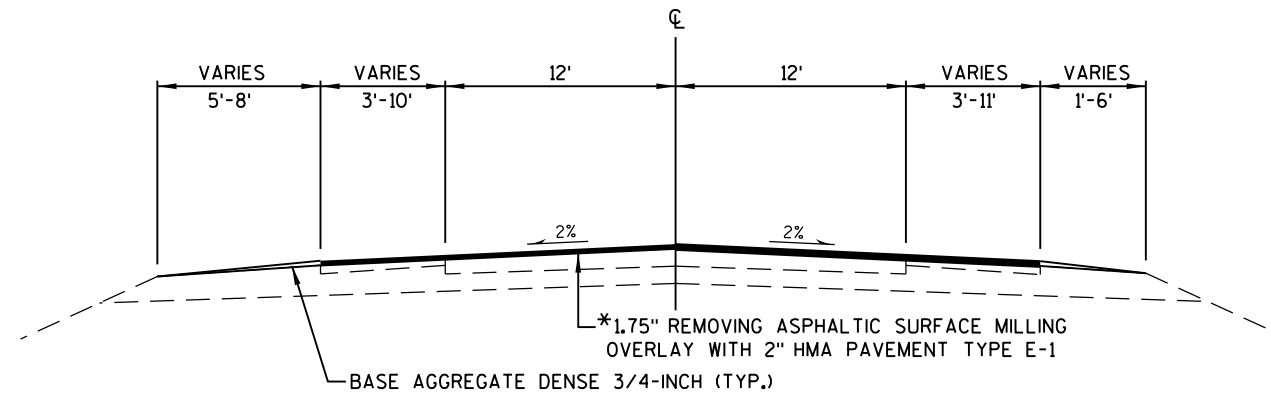
TYPICAL EXISTING SECTION
STA. 95+63 - STA. 520+64

ROADWAY BORING TABLE

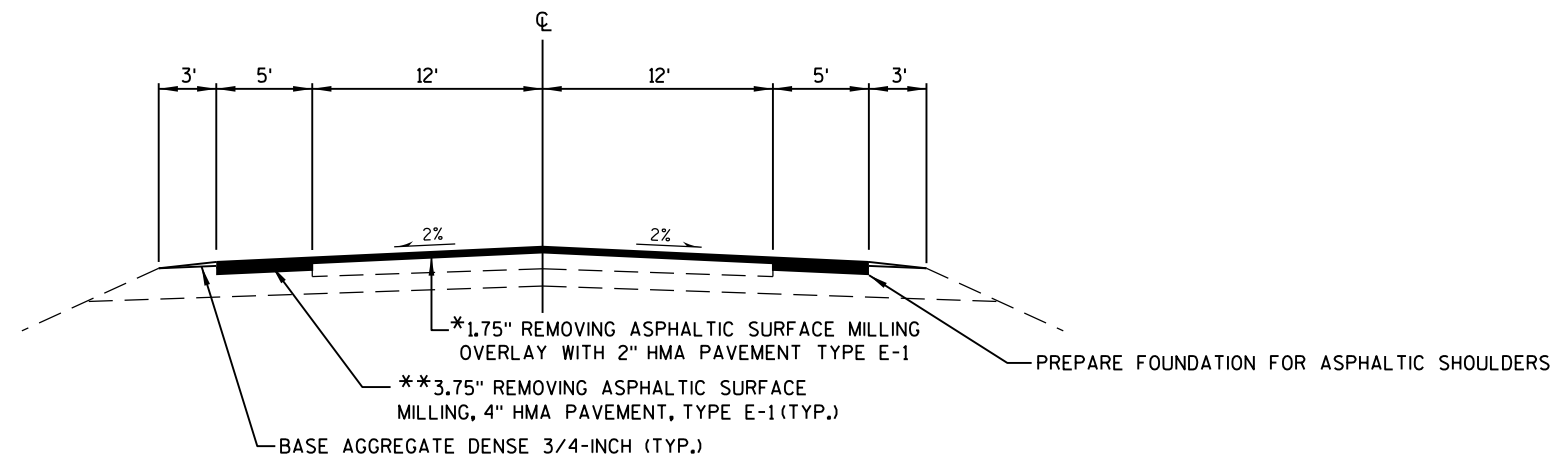
| BORING | STATION | LOCATION | ASPHATIC SURFACE | SUBGRADE MATERIAL |
|--------|---------|----------|------------------|-------------------|
| 1 | 120+00 | SHOULDER | 3" | SAND |
| 2 | 120+00 | LANE | 8.4" | SAND |
| 3 | 140+25 | LANE | 7.8" | SAND |
| 4 | 175+00 | SHOULDER | 3" | REPROCESSED BASE |
| 5 | 175+00 | LANE | 7.8" | REPROCESSED BASE |
| 6 | 205+00 | SHOULDER | 3.6" | SAND |
| 7 | 205+00 | LANE | 6" | SAND |
| 8 | 238+75 | LANE | 7.2" | SAND |
| 9 | 275+25 | SHOULDER | 3.6" | SAND |
| 10 | 275+25 | LANE | 6" | SAND |
| 11 | 303+25 | LANE | 6" | SAND |
| 12 | 330+25 | SHOULDER | 3.6" | SAND |
| 13 | 330+25 | LANE | 6" | SAND |

* 1.75" MILL DEPTH AT SHOULDER
AND A 2% CROWNED CROSS-SLOPE

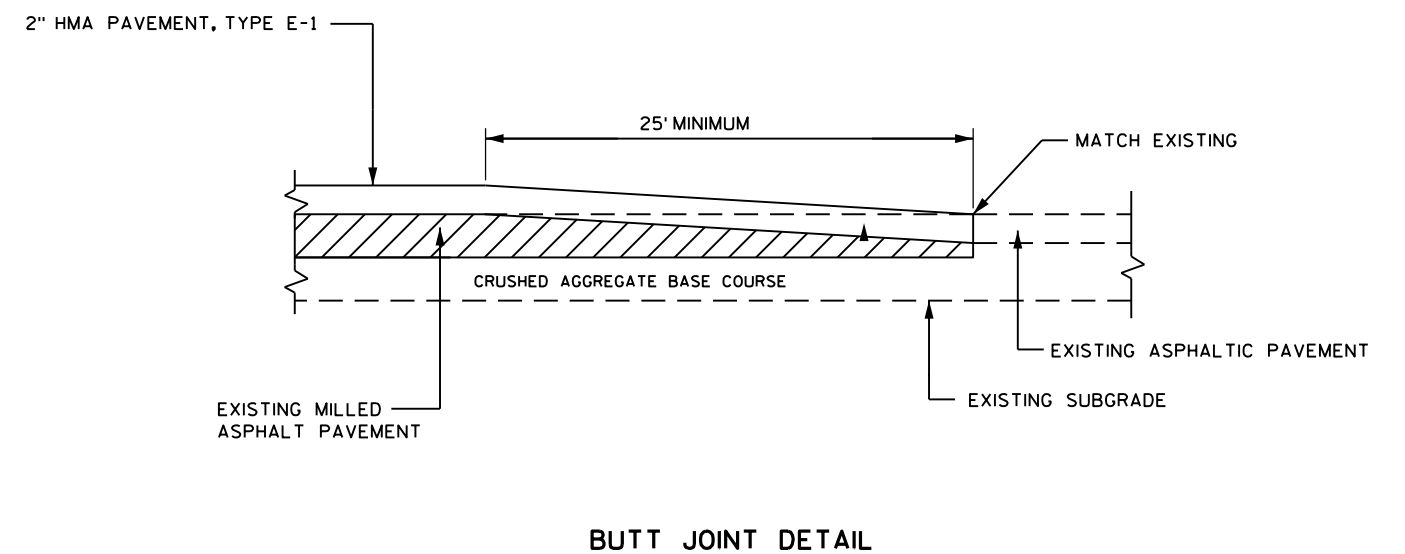
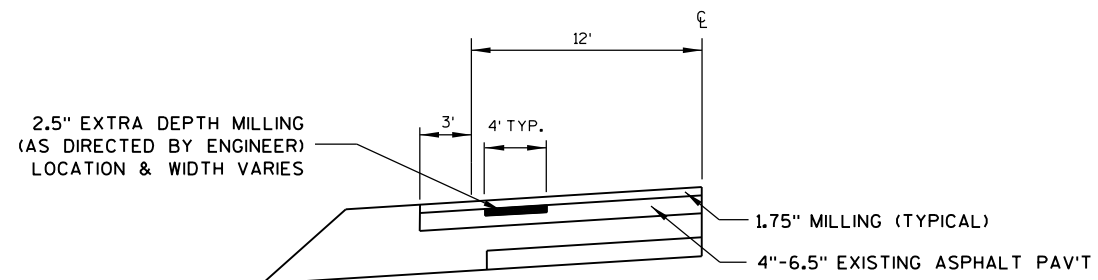
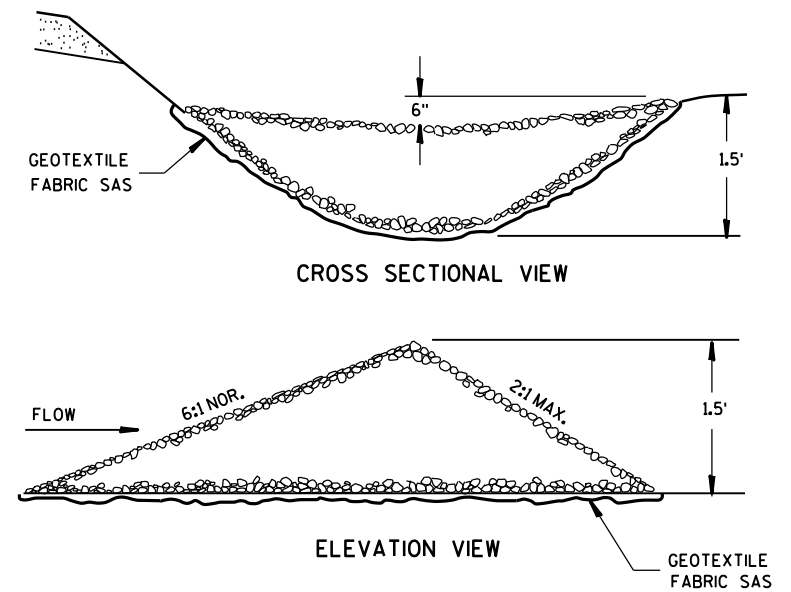
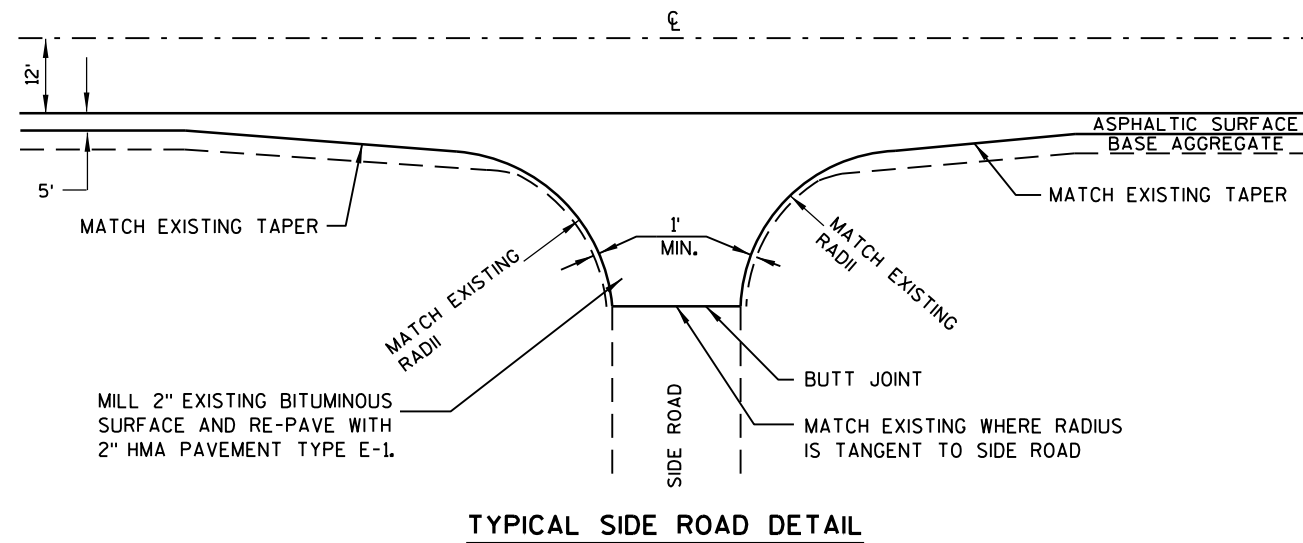
** 4" HMA PAVEMENT, TYPE E-1 SHALL
BE CONSTRUCTED WITH ONE 2" LOWER
LAYER & ONE 2" UPPER LAYER. UPPER
LAYER SHALL BE PAVED INTERGRALLY
WITH MAINLINE DRIVING LANES.



TYPICAL FINISHED SECTION
STA. 89+28 - STA. 95+63



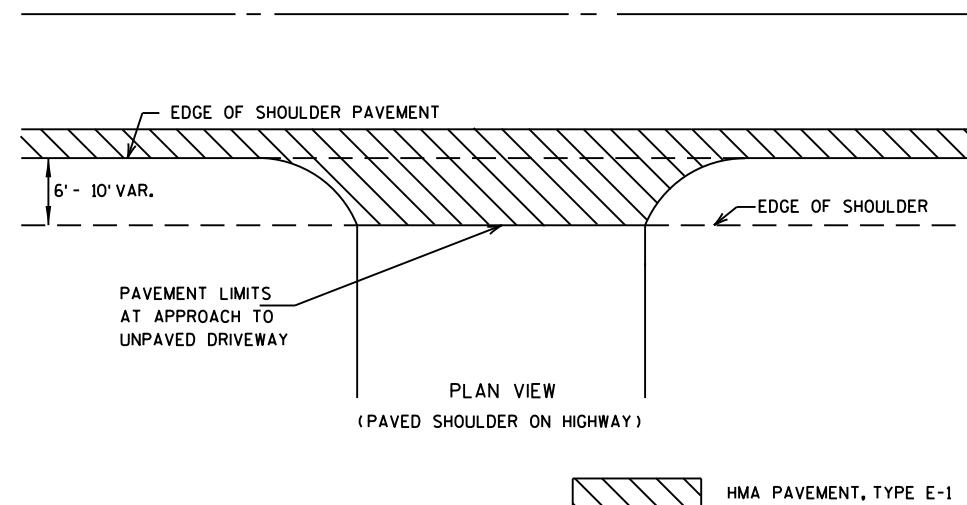
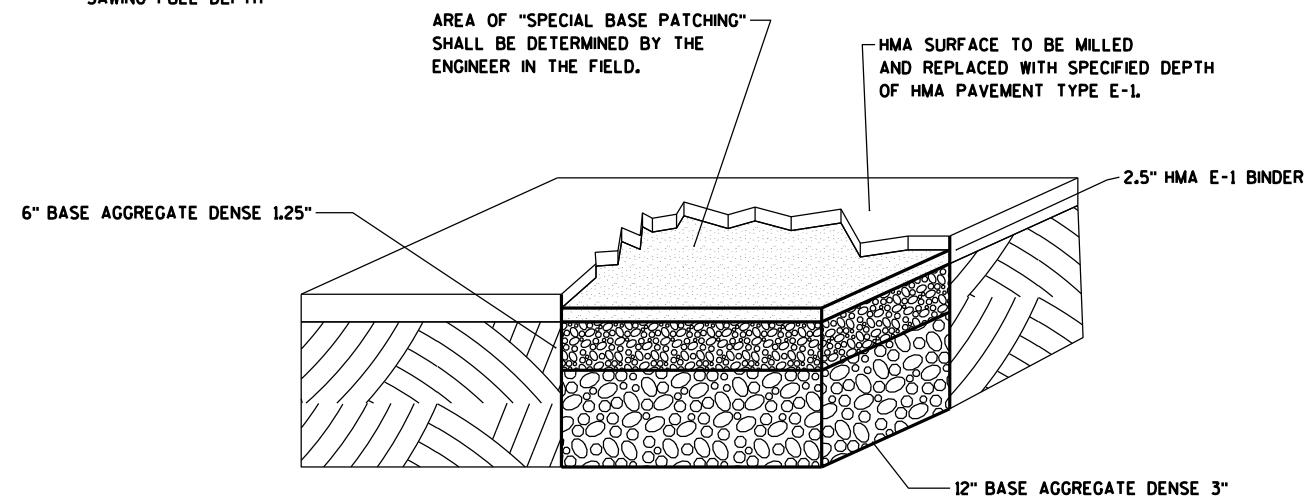
TYPICAL FINISHED SECTION
STA. 95+63 - STA. 520+64



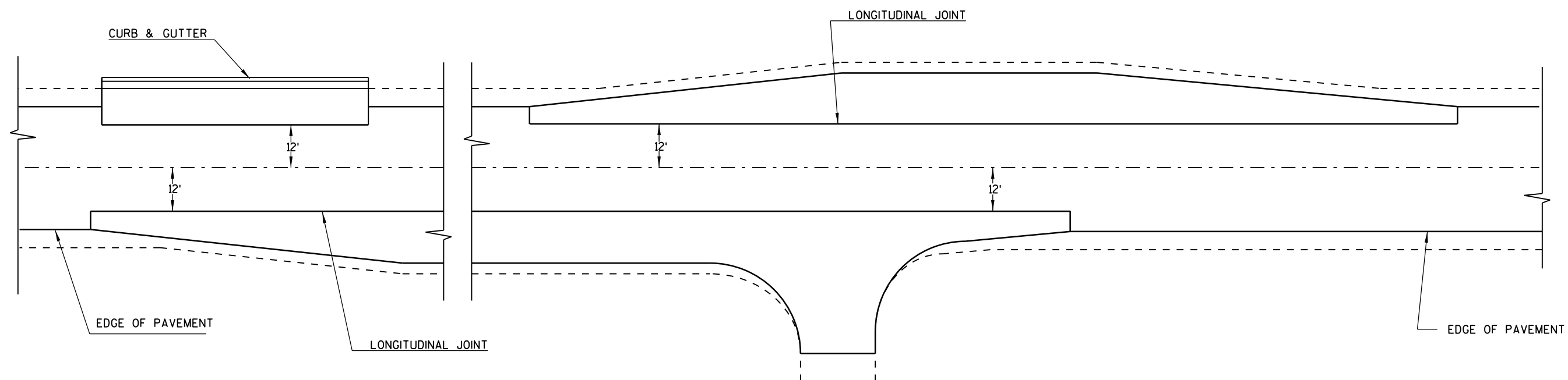
SPECIAL BASE PATCHING SECTION

* TO BE INCLUDED IN "SPECIAL BASE PATCHING" ITEM:

- * 20.5" OF COMMON EXCAVATION
- * 12" OF BASE AGGREGATE DENSE 3-INCH
- * 6" OF BASE AGGREGATE DENSE 1.25-INCH
- * 2.5" OF HMA BINDER MATERIAL
- * SAWING FULL DEPTH

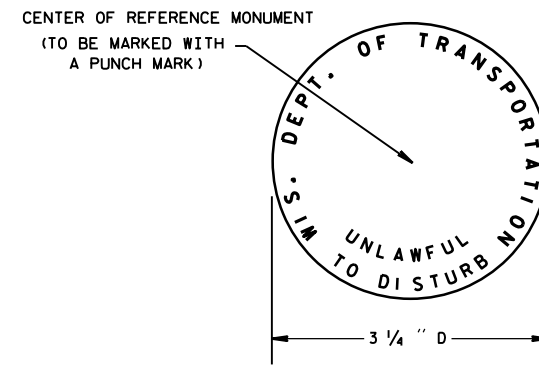


RURAL DRIVEWAY INTERSECTION DETAIL

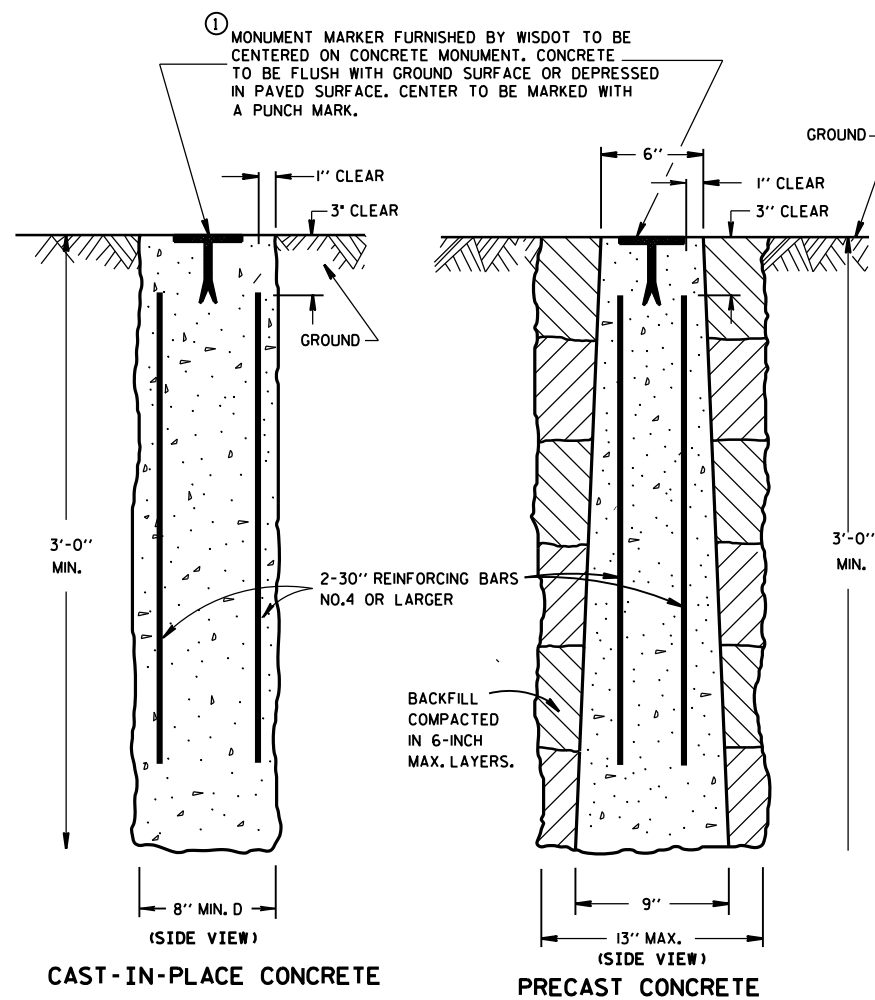


HMA LONGITUDINAL JOINT DETAIL *

* TO BE USED AT ALL INTERSECTIONS, BYPASS,
PASSING LANE AND RURAL CURB SECTIONS

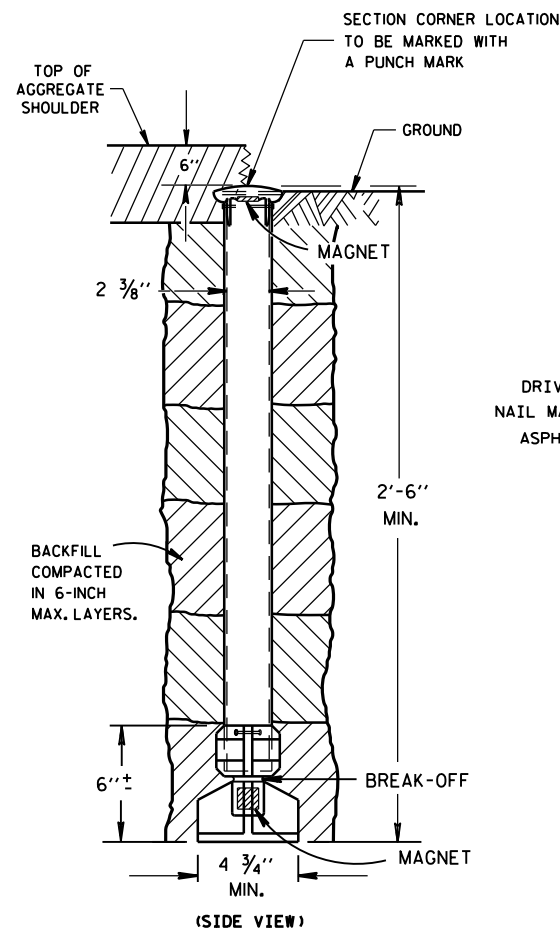


① WIS DOT MONUMENT MARKER LOGO

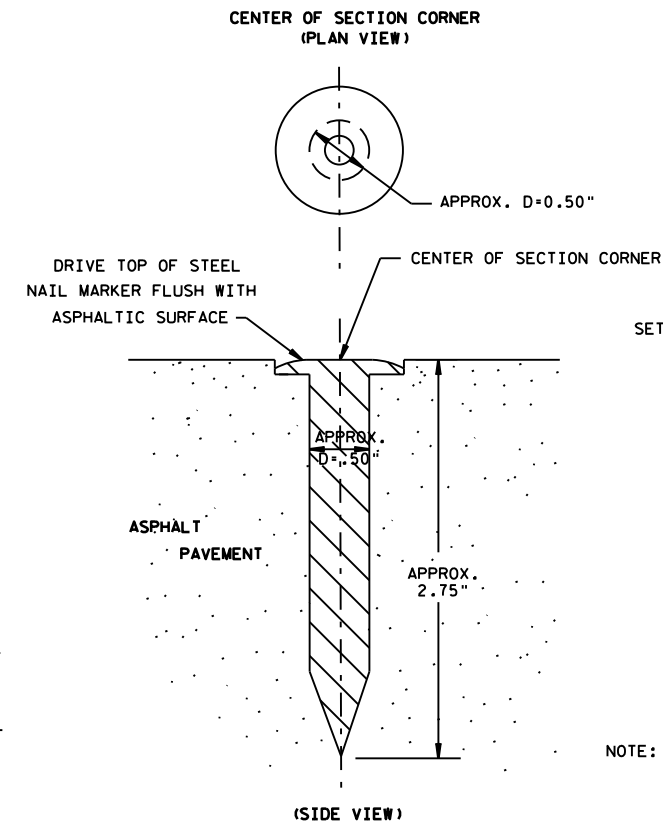


LANDMARK REFERENCE MONUMENTS (TIES ONLY)

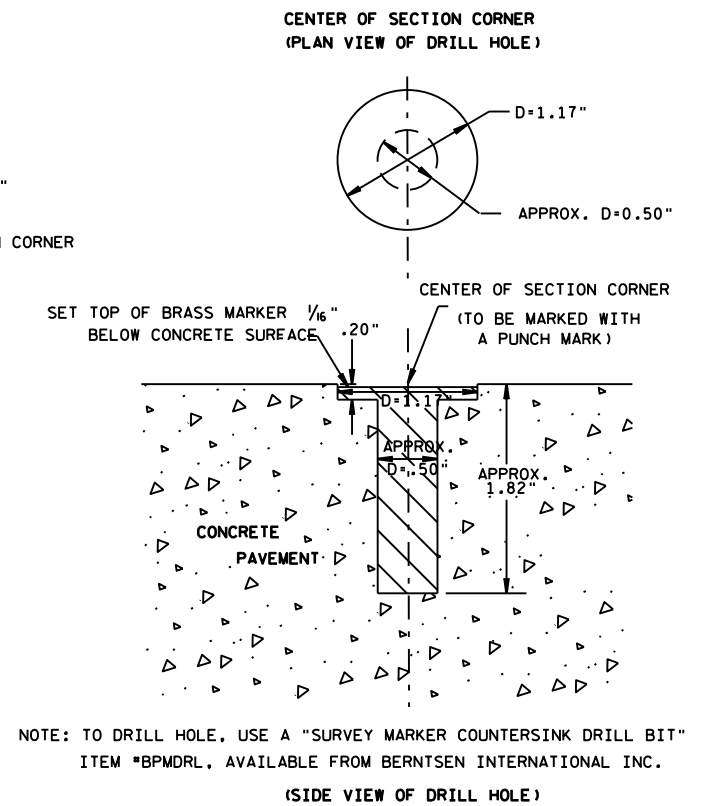
SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT SPECIAL DETAIL



① BERNSTEN A1BR30 ALUMINUM BREAK-OFF MONUMENT



① BERNSTEN SNM1 STEEL NAIL MARKER



① BERNSTEN BP -1 BRASS MARKER WITH ANCHOR PLUG

SECTION CORNER MONUMENTS

GENERAL NOTES

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

LOCATE LANDMARK REFERENCE MONUMENTS OUTSIDE THE CONSTRUCTION LIMITS AND WITHIN WISDOT RIGHT OF WAY. LOCATION TO BE APPROVED BY THE ENGINEER.

① THE DISTRICT SURVEY COORDINATOR WILL SUPPLY.





PROJECT NO: 3290-00-60

HWY: STH 89

COUNTY: JEFFERSON

PLAN DETAILS

SHEET

E

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

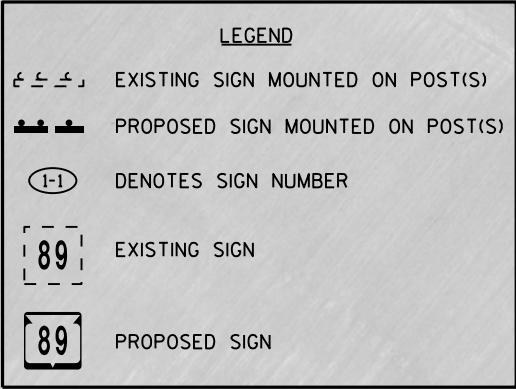
PROPOSED SIGN MOUNTED ON POST(S)

(1-1) DENOTES SIGN NUMBER

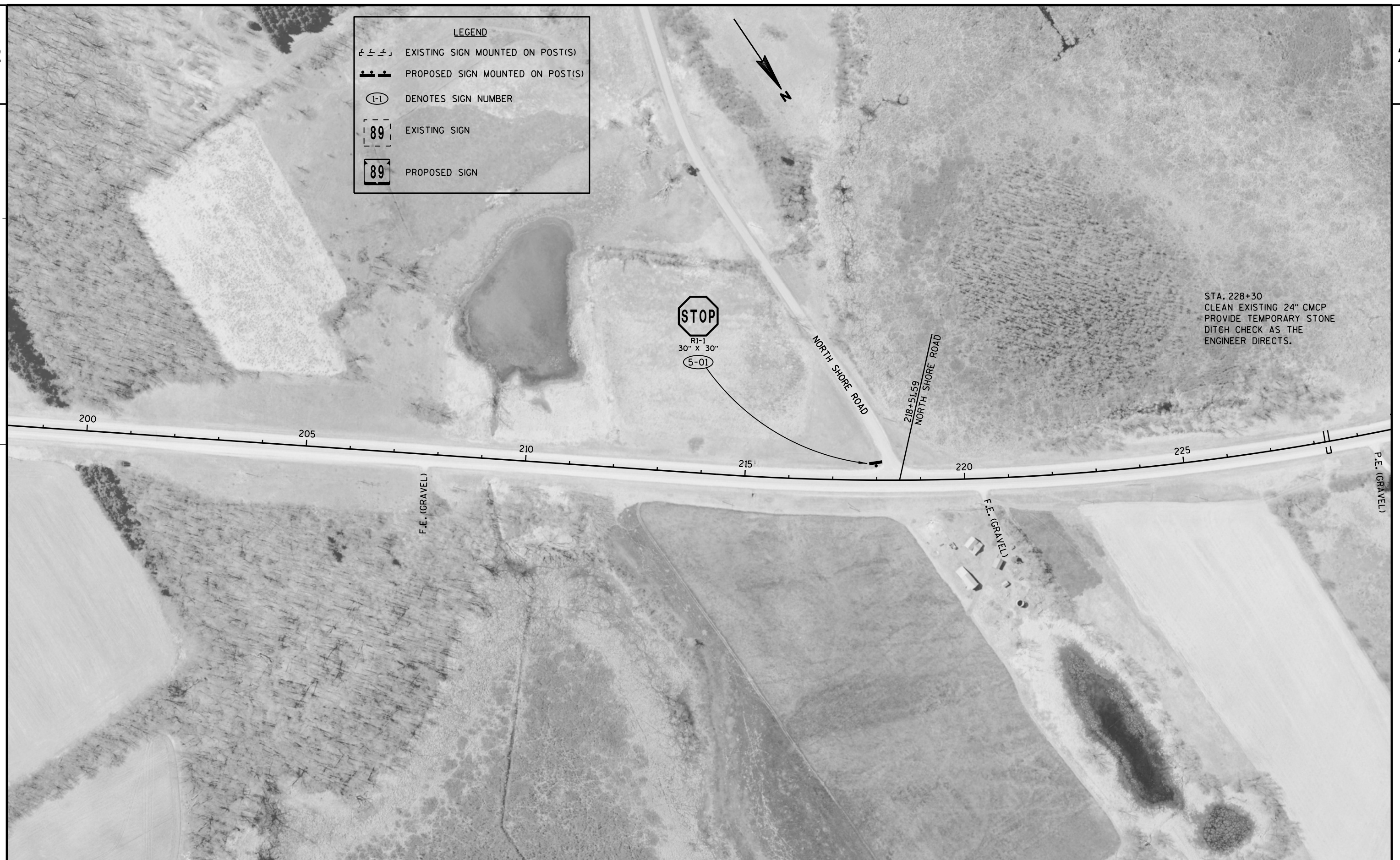
89 EXISTING SIGN

89 PROPOSED SIGN





| LEGEND | |
|--------|----------------------------------|
| | EXISTING SIGN MOUNTED ON POST(S) |
| | PROPOSED SIGN MOUNTED ON POST(S) |
| | DENOTES SIGN NUMBER |
| | EXISTING SIGN |
| | PROPOSED SIGN |



STA. 228+30
CLEAN EXISTING 24" CMCP
PROVIDE TEMPORARY STONE
DITCH CHECK AS THE
ENGINEER DIRECTS.



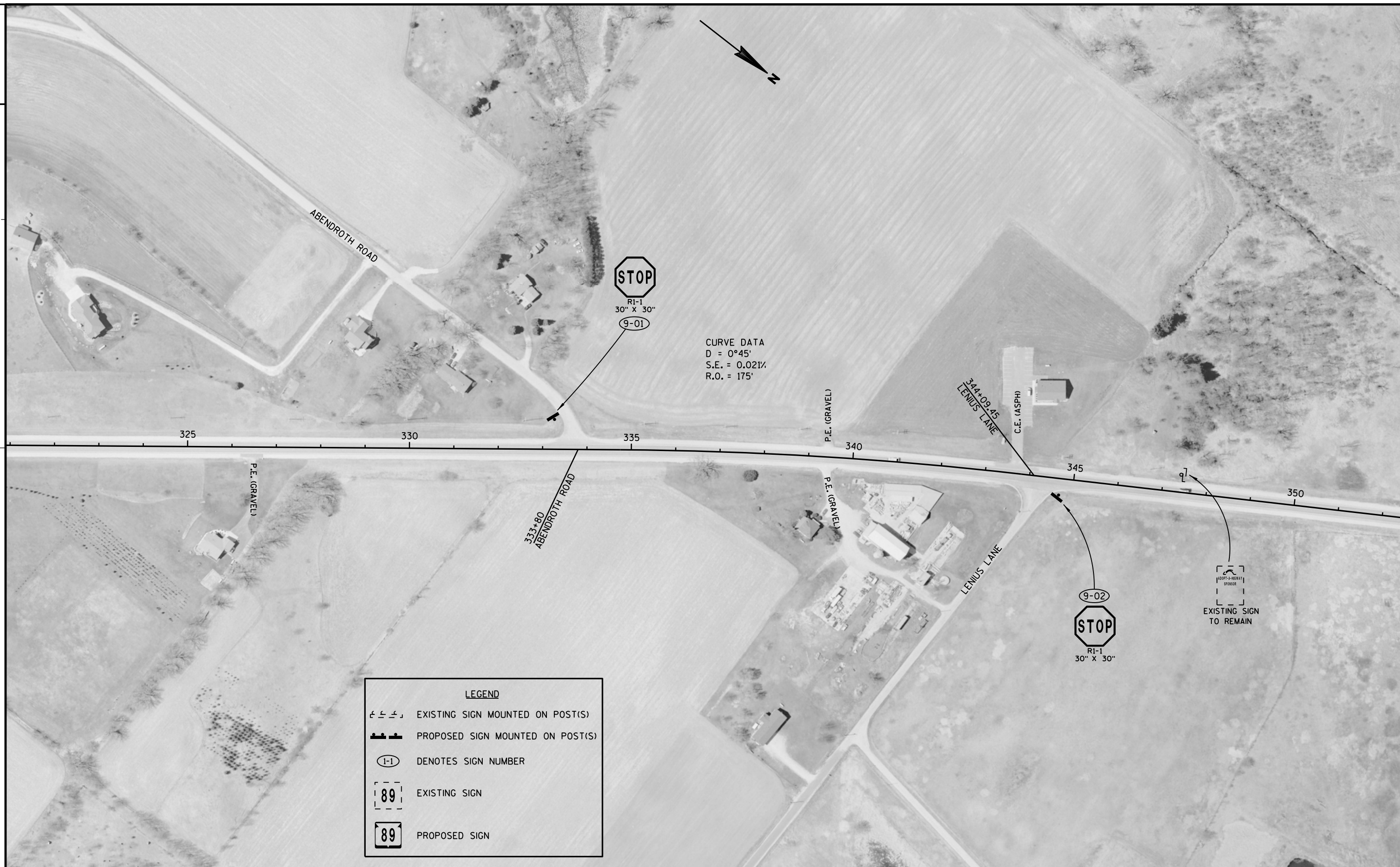
NOTE:
KEEP ALL EQUIPMENT AND MATERIALS
OUT OF ENVIRONMENTALLY SENSITIVE AREAS.






LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
PROPOSED SIGN MOUNTED ON POST(S)
(1-1) DENOTES SIGN NUMBER
89 EXISTING SIGN
89 PROPOSED SIGN







| LEGEND | |
|---|----------------------------------|
|  | EXISTING SIGN MOUNTED ON POST(S) |
|  | PROPOSED SIGN MOUNTED ON POST(S) |
|  | DENOTES SIGN NUMBER |
|  | EXISTING SIGN |
|  | PROPOSED SIGN |







LEGEND

EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

DENOTES SIGN NUMBER

EXISTING SIGN

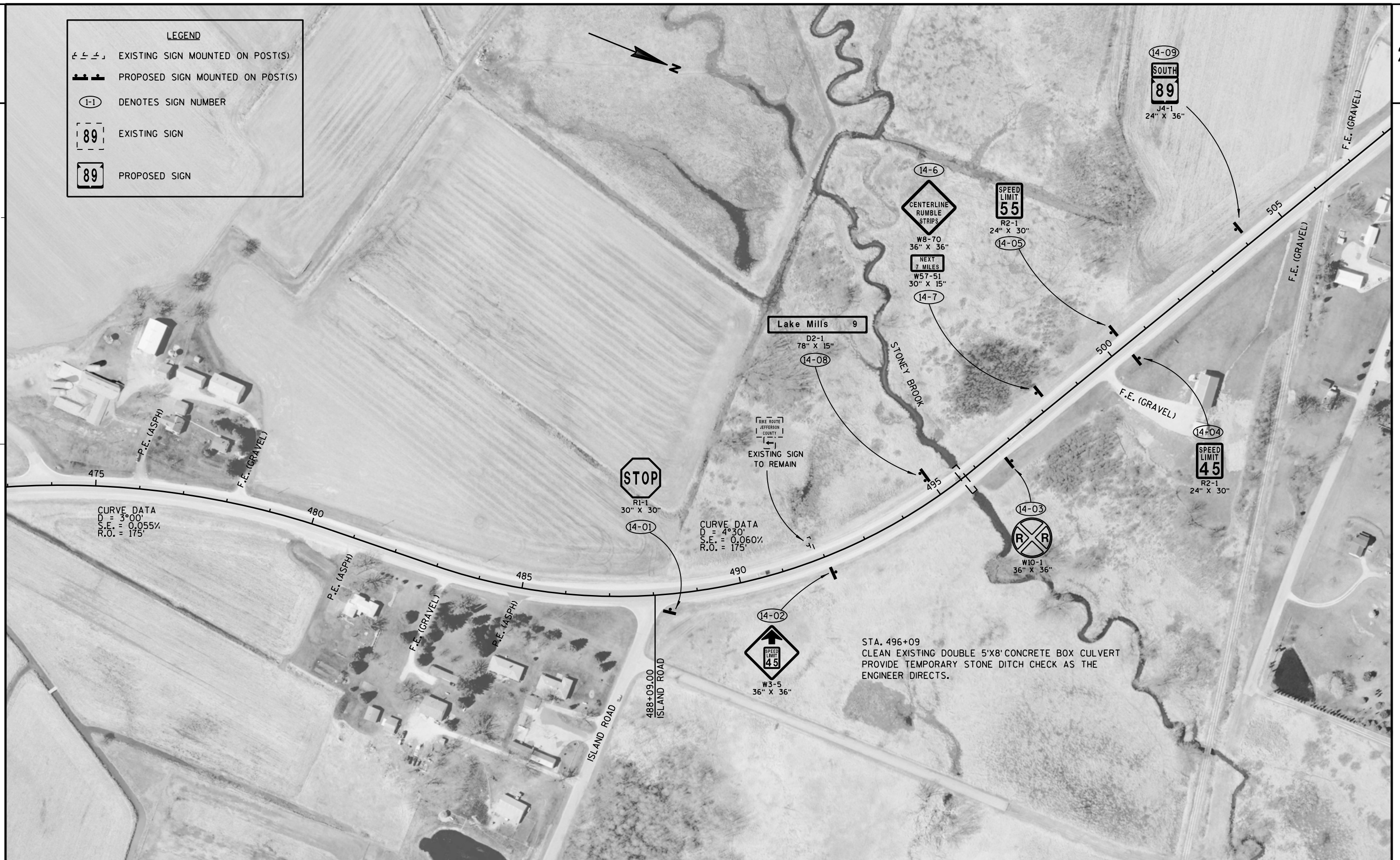
PROPOSED SIGN

**LEGEND**

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- DENOTES SIGN NUMBER
- EXISTING SIGN
- PROPOSED SIGN

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
PROPOSED SIGN MOUNTED ON POST(S)
(1-1) DENOTES SIGN NUMBER
89 EXISTING SIGN
89 PROPOSED SIGN





SEE STANDARD DETAIL DRAWING "BARRICADES
AND SIGNS FOR MAINLINE CLOSURES".

END PROJECT
STA. 520+64

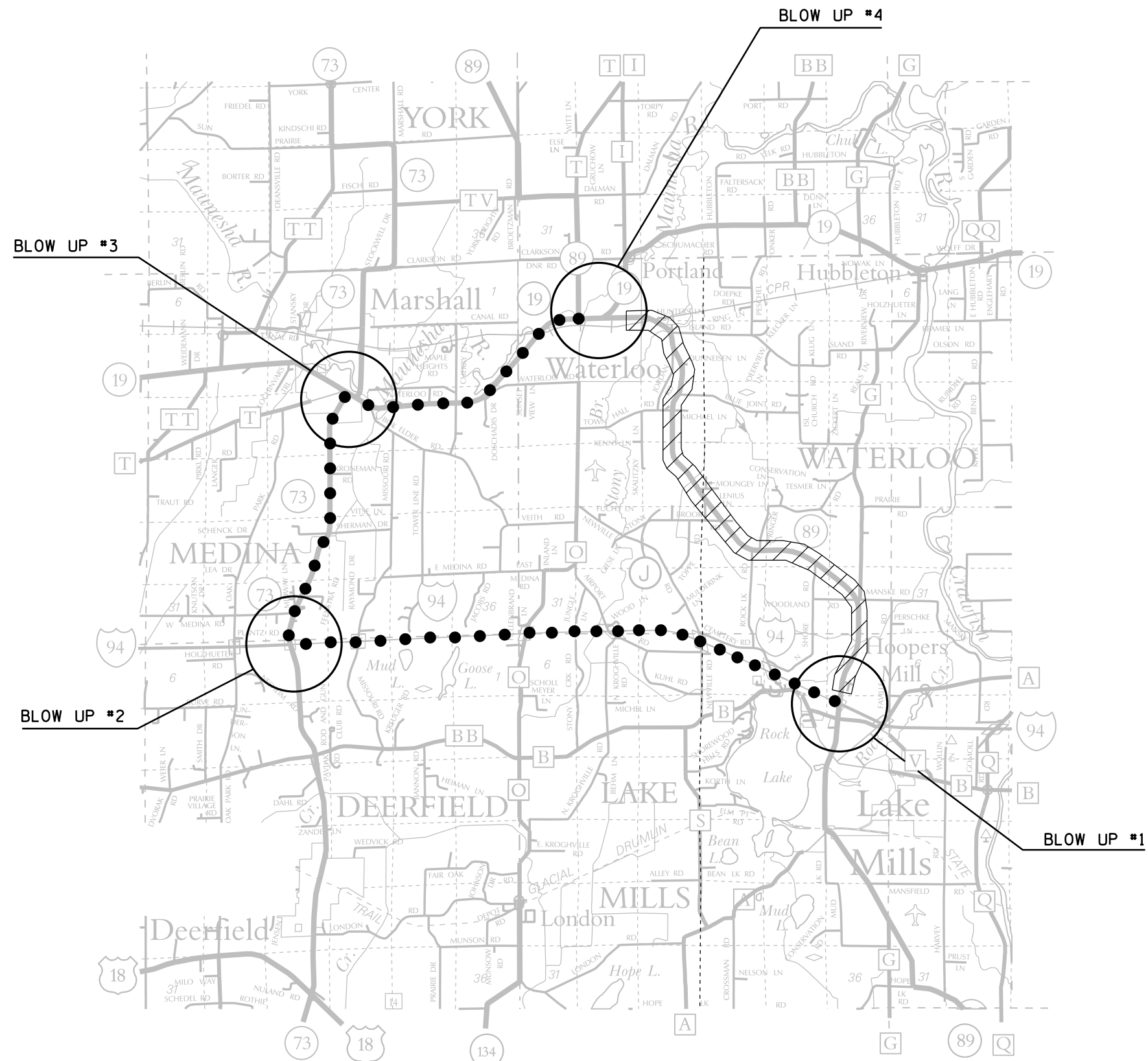
PROVIDE FULL CLOSURE ON BOTH SIDES OF
RAILROAD CROSSING. PROVIDE ROAD CLOSED
ADVANCED WARNING ON BOTH SIDES OF
CROSSING.

A.) SEE STANDARD DETAIL DRAWING "BARRICADES
AND SIGNS FOR SIDE ROAD CLOSURES". 'DETAILS #4
(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS
TO PROJECT.)





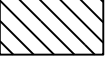
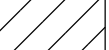


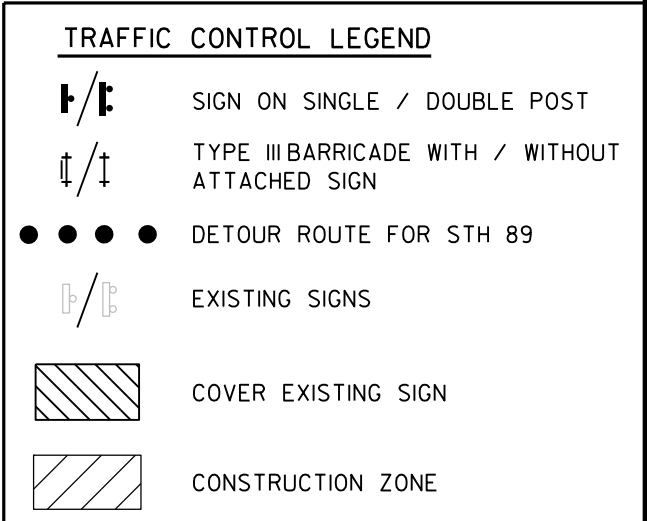
BEGIN PROJECT
STA. 89+28

SEE STANDARD DETAIL DRAWING "BARRICADES
AND SIGNS FOR MAINLINE CLOSURES".



TRAFFIC CONTROL LEGEND

-  SIGN ON SINGLE / DOUBLE POST
-  TYPE III BARRICADE WITH / WITHOUT ATTACHED SIGN
-  DETOUR ROUTE FOR STH 89
-  EXISTING SIGNS
-  COVER EXISTING SIGN
-  CONSTRUCTION ZONE



| DATE 19MAR13 | | E S T I M A T E O F Q U A N T I T I E S | | | |
|--------------|------------|--|------|-------------|---------------------|
| LINE NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | 3290-00-60 QUANTITY |
| 0010 | 204.0115 | REMOVING ASPHALTIC SURFACE BUTT JOINTS | SY | 1,500.000 | 1,500.000 |
| 0020 | 204.0120 | REMOVING ASPHALTIC SURFACE MILLING | SY | 158,300.000 | 158,300.000 |
| 0050 | 211.0400 | PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS | STA | 852.000 | 852.000 |
| 0070 | 213.0100 | FINISHING ROADWAY (PROJECT) 02. 3290-00-60 | EACH | 1.000 | 1.000 |
| 0080 | 305.0110 | BASE AGGREGATE DENSE 3/4-INCH | TON | 6,100.000 | 6,100.000 |
| 0090 | 305.0500 | SHAPING SHOULDERS | STA | 14.000 | 14.000 |
| 0100 | 440.4410.S | INCENTIVE IRI RIDE | DOL | 32,240.000 | 32,240.000 |
| 0110 | 455.0105 | ASPHALTIC MATERIAL PG58-28 | TON | 1,420.000 | 1,420.000 |
| 0120 | 455.0605 | TACK COAT | GAL | 4,500.000 | 4,500.000 |
| 0130 | 460.1101 | HMA PAVEMENT TYPE E-1 | TON | 25,550.000 | 25,550.000 |
| 0140 | 460.2000 | INCENTIVE DENSITY HMA PAVEMENT | DOL | 16,360.000 | 16,360.000 |
| 0150 | 465.0475.S | ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL | LF | 33,200.000 | 33,200.000 |
| 0160 | 520.7000 | CLEANING CULVERT PIPES | EACH | 11.000 | 11.000 |
| 0200 | 618.0100 | MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 02. 3290-00-60 | EACH | 1.000 | 1.000 |
| 0210 | 619.1000 | MOBILIZATION | EACH | 0.900 | 0.900 |
| 0230 | 628.1504 | SILT FENCE | LF | 500.000 | 500.000 |
| 0240 | 628.1520 | SILT FENCE MAINTENANCE | LF | 500.000 | 500.000 |
| 0250 | 628.1905 | MOBILIZATIONS EROSION CONTROL | EACH | 1.000 | 1.000 |
| 0260 | 628.1910 | MOBILIZATIONS EMERGENCY EROSION CONTROL | EACH | 1.000 | 1.000 |
| 0270 | 628.2004 | EROSION MAT CLASS I TYPE B | SY | 630.000 | 630.000 |
| 0300 | 629.0210 | FERTILIZER TYPE B | CWT | 0.500 | 0.500 |
| 0310 | 630.0130 | SEEDING MIXTURE NO. 30 | LB | 12.000 | 12.000 |
| 0330 | 633.5200 | MARKERS CULVERT END | EACH | 20.000 | 20.000 |
| 0340 | 634.0616 | POSTS WOOD 4X6-INCH X 16-FT | EACH | 54.000 | 54.000 |
| 0350 | 634.0618 | POSTS WOOD 4X6-INCH X 18-FT | EACH | 10.000 | 10.000 |
| 0360 | 637.0202 | SIGNS REFLECTIVE TYPE II | SF | 415.840 | 415.840 |
| 0370 | 638.2102 | MOVING SIGNS TYPE II | EACH | 5.000 | 5.000 |
| 0380 | 638.2602 | REMOVING SIGNS TYPE II | EACH | 56.000 | 56.000 |
| 0390 | 638.3000 | REMOVING SMALL SIGN SUPPORTS | EACH | 58.000 | 58.000 |
| 0400 | 642.5001 | FIELD OFFICE TYPE B | EACH | 0.900 | 0.900 |
| 0420 | 643.0100 | TRAFFIC CONTROL (PROJECT) 02. 3290-00-60 | EACH | 1.000 | 1.000 |
| 0430 | 643.0300 | TRAFFIC CONTROL DRUMS | DAY | 300.000 | 300.000 |
| 0440 | 643.0420 | TRAFFIC CONTROL BARRICADES TYPE III | DAY | 2,970.000 | 2,970.000 |
| 0450 | 643.0705 | TRAFFIC CONTROL WARNING LIGHTS TYPE A | DAY | 5,940.000 | 5,940.000 |
| 0460 | 643.0900 | TRAFFIC CONTROL SIGNS | DAY | 3,620.000 | 3,620.000 |
| 0470 | 643.0910 | TRAFFIC CONTROL COVERING SIGNS TYPE I | EACH | 5.000 | 5.000 |
| 0480 | 643.0920 | TRAFFIC CONTROL COVERING SIGNS TYPE II | EACH | 8.000 | 8.000 |
| 0490 | 643.1000 | TRAFFIC CONTROL SIGNS FIXED MESSAGE | SF | 96.000 | 96.000 |
| 0500 | 643.2000 | TRAFFIC CONTROL DETOUR (PROJECT) 01. 3290-00-60 | EACH | 1.000 | 1.000 |
| 0510 | 643.3000 | TRAFFIC CONTROL DETOUR SIGNS | DAY | 3,370.000 | 3,370.000 |
| 0520 | 646.0106 | PAVEMENT MARKING EPOXY 4-INCH | LF | 128,000.000 | 128,000.000 |
| 0530 | 646.0126 | PAVEMENT MARKING EPOXY 8-INCH | LF | 450.000 | 450.000 |
| 0550 | 647.0110 | PAVEMENT MARKING RAILROAD CROSSINGS EPOXY | EACH | 2.000 | 2.000 |
| 0590 | 647.0566 | PAVEMENT MARKING STOP LINE EPOXY 18-INCH | LF | 360.000 | 360.000 |
| 0630 | 648.0100 | LOCATING NO-PASSING ZONES | MI | 8.060 | 8.060 |
| 0640 | 650.8000 | CONSTRUCTION STAKING RESURFACING REFERENCE | LF | 43,200.000 | 43,200.000 |
| 0660 | 650.9910 | CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 02. 3290-00-60 | LS | 1.000 | 1.000 |

| | | | | | |
|-------------------|-----------|--|---|-----------|-----------|
| DATE 19MAR13 | | | E S T I M A T E O F Q U A N T I T I E S | | |
| LINE | | | 3290-00-60 | | |
| NUMBER | ITEM | ITEM DESCRIPTION | UNIT | TOTAL | QUANTITY |
| 0680 | SPV. 0035 | SPECIAL 01. TEMPORARY STONE DITCH CHECKS | CY | 50.000 | 50.000 |
| 0690 | SPV. 0060 | SPECIAL 01. LANDMARK REFERENCE | EACH | 4.000 | 4.000 |
| MONUMENTS SPECIAL | | | | | |
| 0710 | SPV. 0180 | SPECIAL 01. SPECIAL BASE PATCHING | SY | 3,290.000 | 3,290.000 |

HMA PAVEMENT

| 204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS | | 204.0120 REMOVING ASPHALTIC SURFACE MILLING | | 455.0105 ASPHALTIC MATERIAL PG58-28 | 455.0605 TACK COAT GAL | 460.1101 HMA PAVEMENT TYPE E-1 TON |
|---|----------|---|-------|--|---------------------------------|--|
| STA | - STA | LOCATION | SY | SY | TON | TON |
| 89+28 | - 520+64 | MAINLINE | 400 | 144,000 | 1,310 | 23,700 |
| 89+28 | - 520+64 | SIDEROADS & DRIVEWAYS | 1,100 | 9,600 | 70 | 1,190 |
| UNDISTRIBUTED EXTRA DEPTH MILL & FILL | | | - | 4,700 | 40 | 660 |
| TOTAL | | | 1,500 | 158,300 | 1,420 | 25,550 |

BASE ITEMS

| 211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS | | 305.0110 BASE AGGREGATE DENSE, 3/4" | | 305.0500 SHAPING SHOULDERS | SPV.0180.01 SPECIAL BASE PATCHING SY |
|---|------------|--|-----|----------------------------------|--|
| STATION | TO STATION | LOCATION | STA | TON | STA |
| 89+28 | - 95+63 | MAINLINE | - | 100 | 14 |
| 95+63 | - 520+64 | MAINLINE | 852 | 5,440 | - |
| UNDISTRIBUTED | | | - | 560 | 3,290 |
| TOTAL | | | 852 | 6,100 | 14 |

CLEANING CULVERT PIPES

| 520.7000 CLEANING CULVERT PIPES EACH | | 633.5200 MARKERS CULVERT END EACH | |
|--|--------------|---|--------|
| STA | TYPE | SIZE | LENGTH |
| 121+57 | METAL | 24" | 92' |
| 152+16 | METAL | 24" | 106' |
| 171+25 | METAL | 24" | 92' |
| 188+78 | METAL | 24" | 108' |
| 228+30 | METAL | 24" | 72' |
| 389+13 | METAL | 24" | 76' |
| 446+71 | METAL | 24" | 66' |
| 469+75 | METAL | 48" | 68' |
| 496+09 | CONCRETE BOX | TWIN 8' x 5' | 75' |
| 509+75 | METAL | 30" | 75' |
| TOTAL | | 11 | 20 |

LANDMARK REFERENCE MONUMENTS

| SPV.0060.01 LANDMARK REFERENCE MONUMENTS SPECIAL EACH | |
|--|----------------|
| LOCATION | DESCRIPTION |
| N 1/4 CORNER SEC 1, T7N R13E | QUARTER CORNER |
| S 1/4 CORNER SEC 16, T8N R13E | QUARTER CORNER |
| NW CORNER SEC 9, T8N R13E | SECTION CORNER |
| CENTER CORNER SEC 16, T8N R13E | CENTER CORNER |
| TOTAL | |

RUMBLE STRIPS

| 465.0475.S ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL LF | |
|--|----------|
| STA | - STA |
| 117+20 | - 499+00 |
| LOCATION | |
| CENTER LINE | |
| 33,200 | |

EROSION CONTROL

| 628.1504 SILT FENCE LF | | 628.1520 SILT FENCE MAINTENANCE LF | | 628.1905 MOBILIZATION EROSION CONTROL EACH | 628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH | 628.2004 EMAT CLASS I TYPE B SY | 629.0210 FERTILIZER TYPE B CWT | 630.0130 SEEDING MIXTURE NO. 30 LB | SPV.0035.01 TEMPORARY STONE DITCH CHECKS CY |
|---------------------------------|--|--|--|--|---|---|---|--|--|
| LOCATION | | LOCATION | | LOCATION | | LOCATION | | LOCATION | |
| CULVERT AREA RESTORATION | | CULVERT AREA RESTORATION | | CULVERT AREA RESTORATION | | CULVERT AREA RESTORATION | | CULVERT AREA RESTORATION | |
| UNDISRIBUTED | | UNDISRIBUTED | | UNDISRIBUTED | | UNDISRIBUTED | | UNDISRIBUTED | |
| TOTAL | | TOTAL | | TOTAL | | TOTAL | | TOTAL | |

PERMANENT SIGNING

| SIGN NUMBER | LOCATION | SIGN CODE | SIGN W x H | MESSAGE | 634.0616 | 634.0618 | 637.0202 | 638.2102 | 638.2602 | 638.3000 | REMARKS |
|----------------|-----------|--------------|---------------|--------------------------------|--|--|--------------------------------------|------------------------------------|--------------------------------------|---|------------------|
| | | | | | POSTS WOOD 4X6 INCH 16 FT EACH | POSTS WOOD 4X6 INCH 18 FT EACH | SIGNS REFLECTIVE TYPE II SF | MOVING SIGNS TYPE II EACH | REMOVING SIGNS TYPE II EACH | REMOVING SMALL SIGN SUPPORTS EACH | |
| 1-01 | 85+80 LT | D1-3 | 72 x 36 | MILWAUKEE, LAKE MILLS, MADISON | 1 | 1 | 18.00 | - | 1 | 2 | |
| 1-02 | 107+25 RT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 1-03 | 97+25 RT | D2-1 | 66 x 15 | WATERLOO 9 | 2 | - | 6.88 | - | 1 | 2 | |
| 1-04 | 90+00 RT | W14-3 | 48 x 36 | NO PASSING ZONE | 1 | - | 6.00 | - | 1 | 1 | |
| 1-05 | 100+80 LT | W3-5 | 36 x 36 | REDUCE SPEED 40 MPH | - | 1 | 9.00 | - | 1 | 1 | |
| 1-06 | 91+00 LT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 1-07 | 93+00 RT | R2-1 | 24 x 30 | SPEED LIMIT 55 | 1 | - | 5.00 | - | 1 | 1 | |
| 1-08 | 92+25 LT | D7-52 | 60 x 42 | AZTALAN STATE PARK | 1 | 1 | 17.50 | - | 1 | 2 | |
| 1-09 | 93+25 LT | R2-1 | 24 x 30 | SPEED LIMIT 40 | 1 | - | 5.00 | - | 1 | 1 | |
| 1-10 | 97+75 LT | J1-1 | 24 x 39 | ROUTE MARKER ASSEMBLY | 1 | - | 6.50 | - | 1 | 1 | J-ASSEMBLY |
| | | MB2-1 | 21 x 15 | JCT | - | - | - | - | - | - | J-ASSEMBLY |
| | | M1-1 | 24 x 24 | IH 94 | - | - | - | - | - | - | J-ASSEMBLY |
| 2-01 | 117+20 RT | W8-70 | 36 x 36 | CENTERLINE RUMBLE STRIPS | - | 1 | 9.00 | - | - | - | |
| 2-02 | 117+20 RT | W57-51 | 30 x 15 | NEXT 7 MILES | - | - | 3.13 | - | - | - | MOUNT WITH 2-01 |
| 3-01 | 154+50 LT | W14-3 | 48 x 36 | NO PASSING ZONE | 1 | - | 6.00 | - | 1 | 1 | |
| 3-02 | 167+20 LT | W57-51 | 30 x 15 | NEXT 1 MILE | - | - | 3.13 | - | - | - | MOUNT WITH 3-03 |
| 3-03 | 167+20 LT | W8-70 | 36 x 36 | CENTERLINE RUMBLE STRIPS | - | 1 | 9.00 | - | - | - | |
| 4-01 | 169+90 LT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 4-02 | 172+00 RT | W8-70 | 36 x 36 | CENTERLINE RUMBLE STRIPS | - | 1 | 9.00 | - | - | - | |
| 4-03 | 172+00 RT | W57-51 | 30 x 15 | NEXT 6 MILES | - | - | 3.13 | - | - | - | MOUNT WITH 4-02 |
| 4-04 | 170+60 RT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 4-05 | 170+60 RT | J13-2 | 48 x 45 | ROUTE MARKER ASSEMBLY | 1 | - | 15.00 | - | 1 | 1 | J-ASSEMBLY |
| | | M1-5A | 24 x 24 | CTH G | - | - | - | - | - | - | J-ASSEMBLY |
| | | M6-1 | 21 x 21 | LEFT ARROW | - | - | - | - | - | - | J-ASSEMBLY |
| | | M1-6 | 24 x 24 | STH 89 | - | - | - | - | - | - | J-ASSEMBLY |
| | | M6-4 | 21 x 21 | TWO-DIRECTION ARROW | - | - | - | - | - | - | J-ASSEMBLY |
| 4-06 | 190+25 RT | W14-3 | 48 x 36 | NO PASSING ZONE | 1 | - | 6.00 | - | 1 | 1 | |
| 4-07 | 169+90 RT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | - | - | |
| 5-01 | 218+00 LT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 7-01 | 262+50 LT | W14-3 | 48 x 36 | NO PASSING ZONE | 1 | - | 6.00 | - | 1 | 1 | |
| 7-02 | 268+25 RT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 7-03 | 274+25 LT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 7-04 | 290+00 RT | W14-3 | 48 x 36 | NO PASSING ZONE | 1 | - | 6.00 | - | 1 | 1 | |
| 8-01 | 311+25 LT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 8-02 | 311+25 RT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 9-01 | 333+25 LT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 9-02 | 344+75 RT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 10-01 | 352+50 LT | W14-3 | 48 x 36 | NO PASSING ZONE | 1 | - | 6.00 | - | 1 | 1 | |
| 10-02 | 367+50 RT | W1-2R | 30 x 30 | CURVE RIGHT | 1 | - | 6.25 | - | 1 | 1 | |
| 10-03 | 367+50 LT | W14-3 | 48 x 36 | NO PASSING ZONE | 1 | - | 6.00 | - | 1 | 1 | |
| 10-04 | 368+50 RT | W14-3 | 48 x 36 | NO PASSING ZONE | 1 | - | 6.00 | - | 1 | 1 | |
| 10-05 | 375+50 LT | W1-6R | 48 x 24 | RIGHT ARROW | 1 | - | 8.00 | - | - | - | |
| 10-06 | 381+00 LT | W1-6L | 48 x 24 | LEFT ARROW | 1 | - | 8.00 | - | - | - | |
| 11-01 | 390+20 LT | W1-2L | 30 x 30 | CURVE LEFT | 1 | - | 6.25 | - | 1 | 1 | |
| 11-02 | 390+75 RT | W14-3 | 48 x 36 | NO PASSING ZONE | 1 | - | 6.00 | - | 1 | 1 | |
| 12-01 | 412+90 LT | W14-3 | 48 x 36 | NO PASSING ZONE | 1 | - | 6.00 | - | 1 | 1 | |
| 12-02 | 418+00 LT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 12-03 | 418+75 RT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 12-04 | 433+75 RT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 13-01 | 460+10 RT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 13-02 | 468+50 RT | W14-3 | 48 x 36 | NO PASSING ZONE | 1 | - | 6.00 | - | 1 | 1 | |
| 13-03 | 470+10 LT | W14-3 | 48 x 36 | NO PASSING ZONE | 1 | - | 6.00 | - | 1 | 1 | |
| 13-04 | 473+50 LT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 14-01 | 488+25 RT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 14-02 | 492+00 RT | W3-5 | 36 x 36 | REDUCE SPEED 45 MPH | - | 1 | 9.00 | - | 1 | 1 | |
| 14-03 | 496+50 RT | W10-1 | 36 x 36 | RAILROAD CROSSING | 1 | - | 7.07 | - | 1 | 1 | |
| 14-04 | 500+25 RT | R2-1 | 24 x 30 | SPEED LIMIT 45 | 1 | - | 5.00 | - | 1 | 1 | |
| 14-05 | 500+25 LT | R2-1 | 24 x 30 | SPEED LIMIT 55 | 1 | - | 5.00 | - | 1 | 1 | |
| 14-06 | 498+20 LT | W8-70 | 36 x 36 | CENTERLINE RUMBLE STRIPS | - | 1 | 9.00 | - | - | - | |
| 14-07 | 498+20 LT | W57-51 | 30 x 15 | NEXT 7 MILES | - | - | 3.13 | - | - | - | MOUNT WITH 14-06 |
| 14-08 | 495+20 LT | D2-1 | 78 x 15 | LAKE MILLS 9 | 2 | - | 8.13 | 1 | 1 | 2 | |
| 14-09 | 503+75 LT | J4-1 | 24 x 36 | REASSURANCE MARKER | 1 | - | 6.00 | - | 1 | - | J-ASSEMBLY |
| | | M3-3 | 24 x 12 | SOUTH | - | - | - | - | - | - | J-ASSEMBLY |
| | | M1-6 | 24 x 24 | STH 89 | - | - | - | - | - | - | J-ASSEMBLY |
| 15-01 | 508+90 RT | R1-1 | 30 x 30 | STOP | 1 | - | 5.18 | - | 1 | 1 | |
| 15-02 | 511+00 RT | W3-5 | 36 x 36 | REDUCE SPEED 30 MPH | - | 1 | 9.00 | - | 1 | 1 | |
| 15-03 | 515+75 LT | W10-1 | 36 x 36 | RAILROAD CROSSING | 1 | - | 7.07 | - | 1 | 1 | |
| 15-04 | 516+90 LT | R2-1 | 24 x 30 | SPEED LIMIT 45 | 1 | - | 5.00 | - | 1 | 1 | |
| 15-05 | 516+90 RT | R2-1 | 24 x 30 | SPEED LIMIT 30 | 1 | - | 5.00 | - | 1 | 1 | |
| 15-06 | 523+00 LT | D11-1 | 24 x 18 | BIKE ROUTE | 1 | - | 3.00 | - | 1 | - | |
| 15-07 | 518+00 RT | R10-64F | 30 x 54 | NO ENGINE BRAKING | - | 1 | 11.25 | - | 1 | 1 | |
| 15-08 | 520+75 RT | R2-1 | 24 x 30 | SPEED LIMIT 30 | 1 | - | 5.00 | - | 1 | 1 | |
| UNDISTRIBUTED | | | | | - | - | - | 4 | 3 | 3 | |
| TOTAL | | | | | 54 | 10 | 415.84 | 5 | 56 | 58 | |

PAVEMENT MARKING

| STATION - STATION | LOCATION | 646.0106 | | 646.0126 | 647.0110 | 647.0566 | 648.0100 |
|-------------------|---------------------|--|--|---|---|------------------------------------|----------|
| | | PAVEMENT MARKING EPOXY 4-INCH | PAVEMENT MARKING EPOXY 8-INCH | PAVEMENT MARKING RAILROAD CROSSING | PAVEMENT MARKING STOP LINE EPOXY 18-INCH | LOCATING NO PASSING ZONES | |
| | | WHITE LF | YELLOW LF | WHITE LF | EPOXY EACH | WHITE LF | MI |
| 89+28 - 520+64 | MAINLINE - EDGELINE | 86,600 | 41,400 | - | 2 | - | 8.06 |
| | OASIS LN | - | - | 200 | - | 20 | - |
| | GALLUP RD | - | - | - | - | 20 | - |
| | CTH G | - | - | 250 | - | 20 | - |
| | WOODLAND RD | - | - | - | - | 20 | - |
| | NORTH SHORE RD | - | - | - | - | 20 | - |
| | SPRINGER ROAD | - | - | - | - | 20 | - |
| | ROCK LAKE ROAD | - | - | - | - | 20 | - |
| | STONEY BROOK ROAD | - | - | - | - | 20 | - |
| | WOEFLER ROAD | - | - | - | - | 20 | - |
| | ABENDROTH ROAD | - | - | - | - | 20 | - |
| | LENIUS ROAD | - | - | - | - | 20 | - |
| | MICHEAL LANE | - | - | - | - | 20 | - |
| | TOWN HALL ROAD | - | - | - | - | 20 | - |
| | BLUE JOINT ROAD | - | - | - | - | 20 | - |
| | DUNNISEN ROAD | - | - | - | - | 20 | - |
| | JORDAN ROAD | - | - | - | - | 20 | - |
| | ISLAND ROAD | - | - | - | - | 20 | - |
| | HUNTER LANE | - | - | - | - | 20 | - |
| TOTAL | | 128,000 | 450 | 2 | 360 | 8.06 | |

TRAFFIC CONTROL

| LOCATION | DAYS | 643.0100 | 643.0300 | 643.0420 | 643.0705 | 643.0900 | 643.0910 | 643.0920 | 643.1000 | 643.2000 | 643.3000 |
|---------------|------|-------------------------------|----------|------------------------|-----------------------------|----------|-----------------------------|------------------------------|---------------------------|--------------------------------------|-----------------|
| | | TRAFFIC CONTROL PROJECT | DRUMS | BARRICADES TYPE III | WARNING LIGHTS TYPE A | SIGNS | COVERING SIGNS TYPE I | COVERING SIGNS TYPE II | SIGNS FIXED MESSAGE | TRAFFIC CONTROL DETOUR PROJECT | DETOUR SIGNS |
| | | EACH | DAYS | DAYS | DAYS | DAYS | EACH | EACH | SF | EACH | DAYS |
| MAINLINE | 45 | - | - | 2,520 | 5,040 | 3,200 | - | - | - | - | - |
| STH 89 DETOUR | 45 | - | - | 180 | 360 | 90 | 4 | 7 | 96 | - | 3,060 |
| UNDISTRIBUTED | - | 1 | 300 | 270 | 540 | 330 | 1 | 1 | - | 1 | 310 |
| TOTAL: | | 1 | 300 | 2,970 | 5,940 | 3,620 | 5 | 8 | 96 | 1 | 3,370 |

* FOR INFORMATION ONLY

CONSTRUCTION STAKING

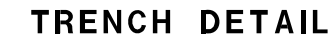
| LOCATION PROJECT | 650.8000 | 650.9910 |
|---------------------|--------------------------------|---|
| | RESURFACING REFERENCE LF | SUPPLEMENTAL CONTROL (PROJECT) LS |
| | 43,200 | 1 |

Standard Detail Drawing List

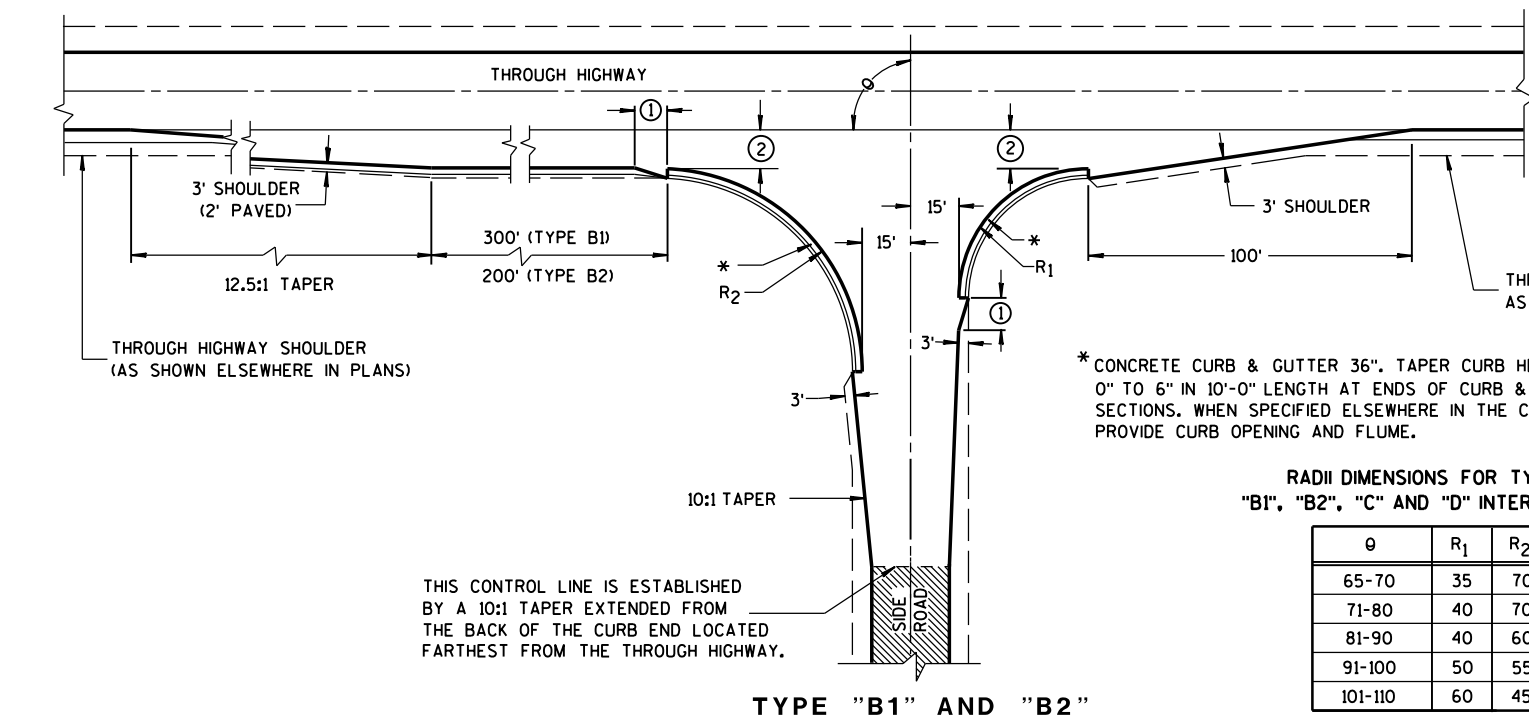
| | |
|-----------|---|
| 08E09-06 | SILT FENCE |
| 09A01-13A | AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE |
| 09A01-13B | AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2" |
| 13A11-01A | 2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING |
| 13A11-01B | 2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING |
| 13B01-10 | PAVEMENT DETAILS FOR RAILROAD APPROACH |
| 15A03-02A | FLEXIBLE MARKER POST FOR CULVERT END |
| 15A03-02B | FLEXIBLE MARKER POST FOR CULVERT END |
| 15C02-04A | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-04B | BARRICADES AND SIGNS FOR MAINLINE CLOSURES |
| 15C02-04C | DETOUR SIGNING FOR MAINLINE CLOSURES |
| 15C03-01 | BARRICADES AND SIGNS FOR SIDEROAD CLOSURES |
| 15C08-15A | PAVEMENT MARKING (MAINLINE) |
| 15C08-15B | PAVEMENT MARKING (INTERSECTIONS) |
| 15C08-15F | PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK) |
| 15C09-09A | SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS |
| 15C12-03 | TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS) |
| 15D28-01 | TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, 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 <u>4-29-05</u> DATE | <u>/S/ Beth Cannestra</u> CHIEF ROADWAY DEVELOPMENT ENGINEER |



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

| θ | R ₁ | R ₂ |
|---------|----------------|----------------|
| 65-70 | 35 | 70 |
| 71-80 | 40 | 70 |
| 81-90 | 40 | 60 |
| 91-100 | 50 | 55 |
| 101-110 | 60 | 45 |

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

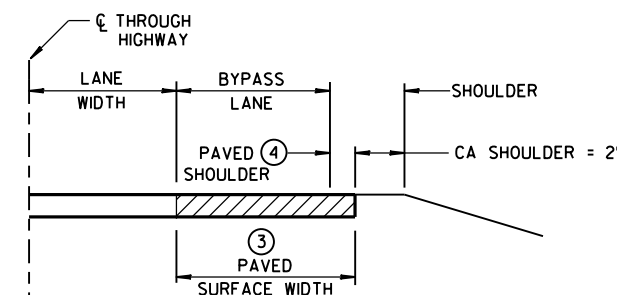
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

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

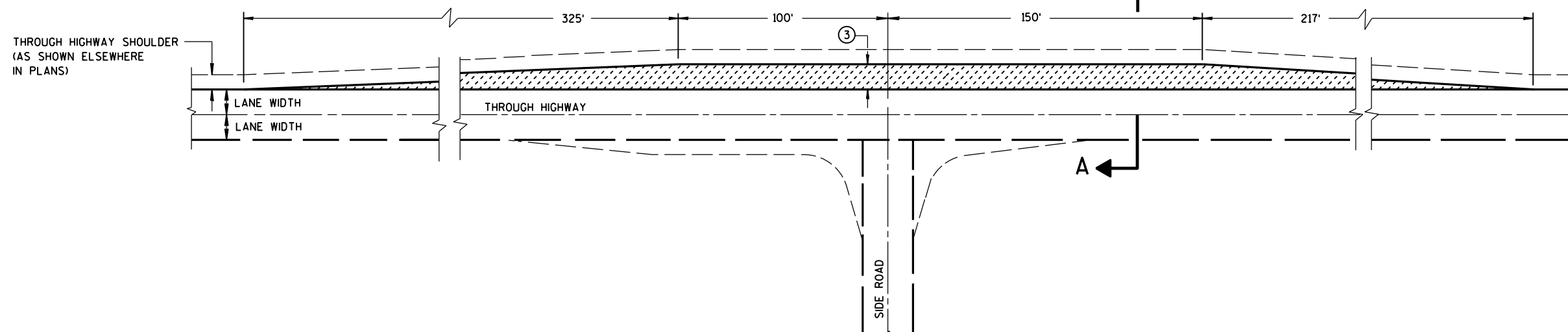
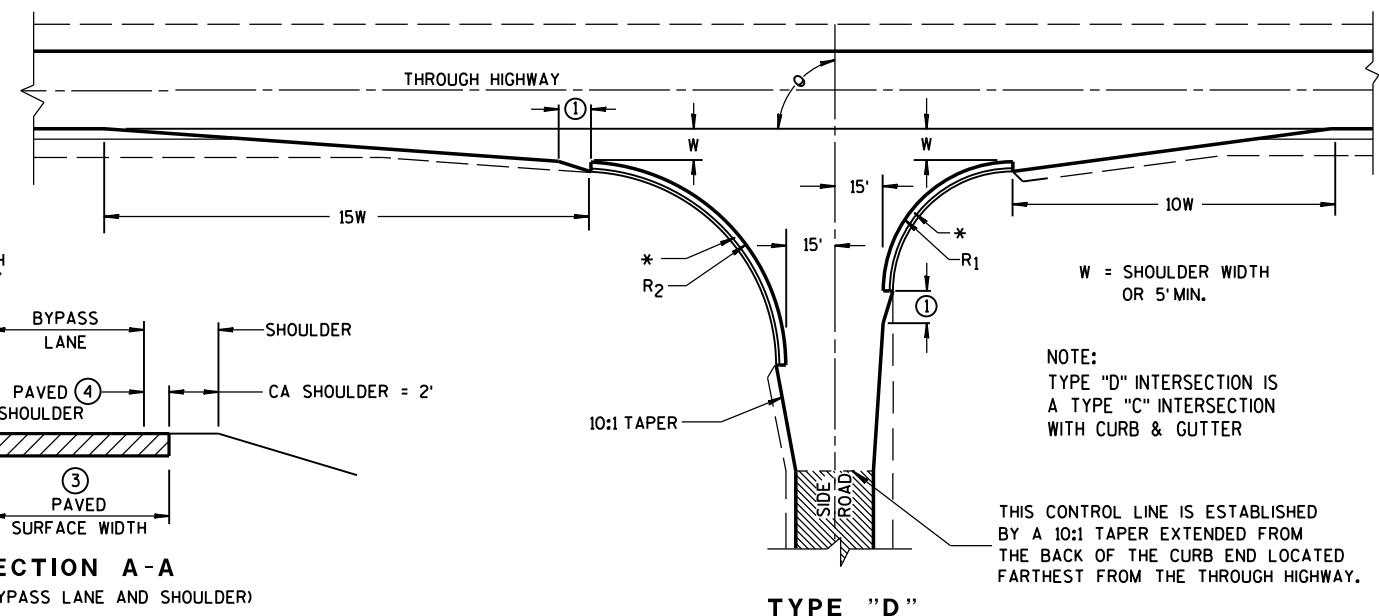
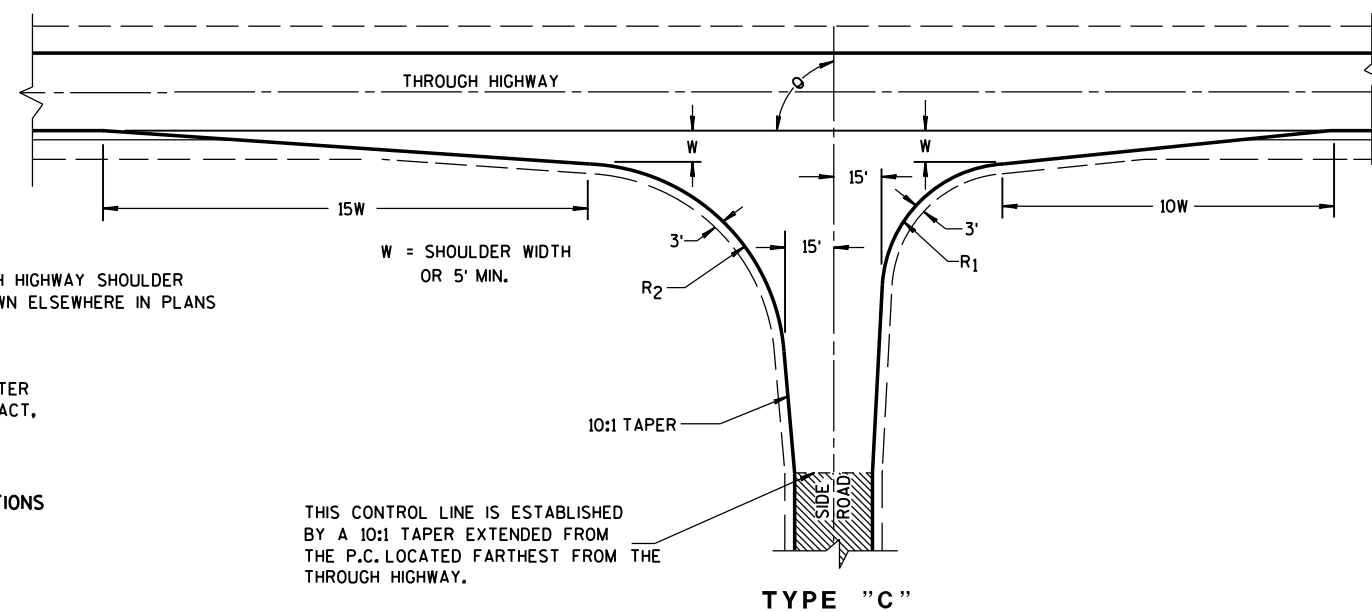
EXISTING PAVED SURFACE

BYPASS LANE

- ① 10-FT TYPICAL.
- ② 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.
- **10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.
- ③ BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CONCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.
- ④ BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



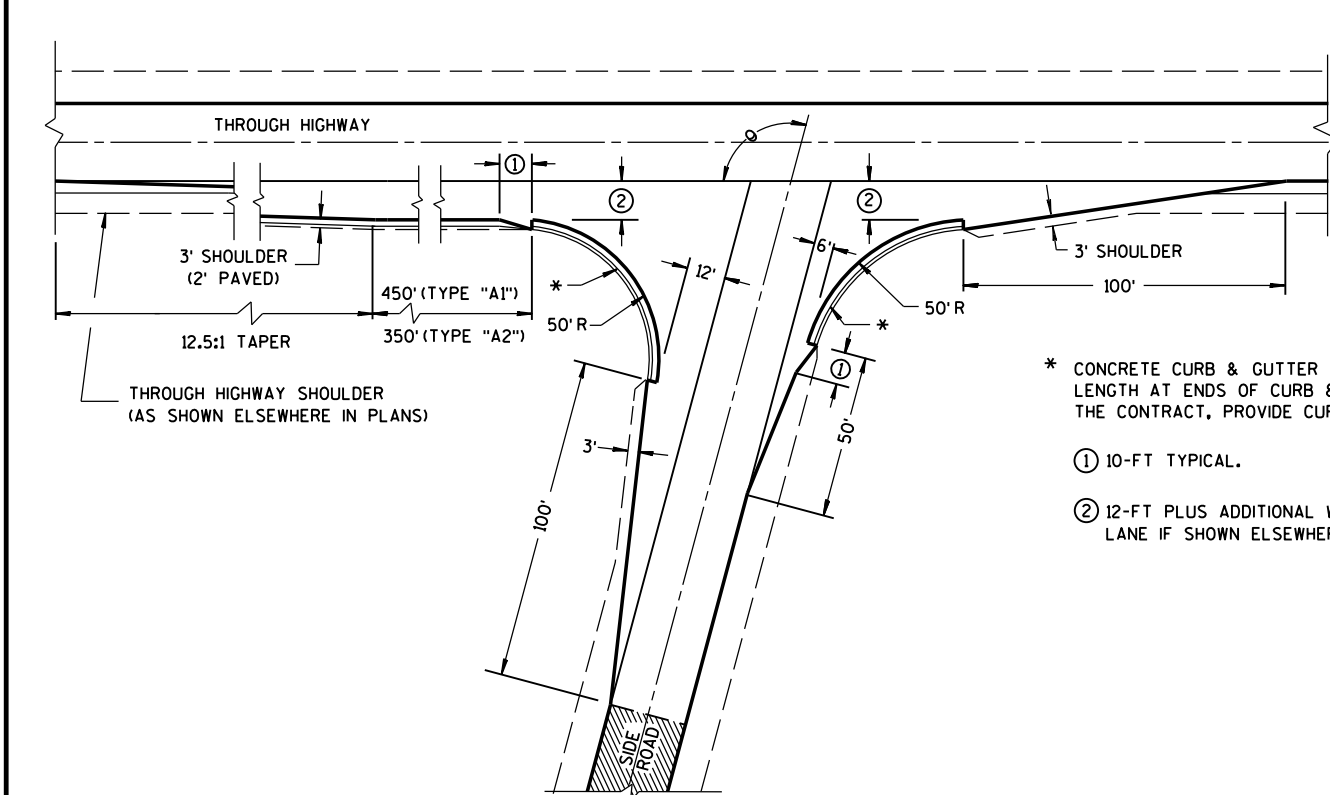
SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



TEE INTERSECTION BYPASS LANE DETAIL

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

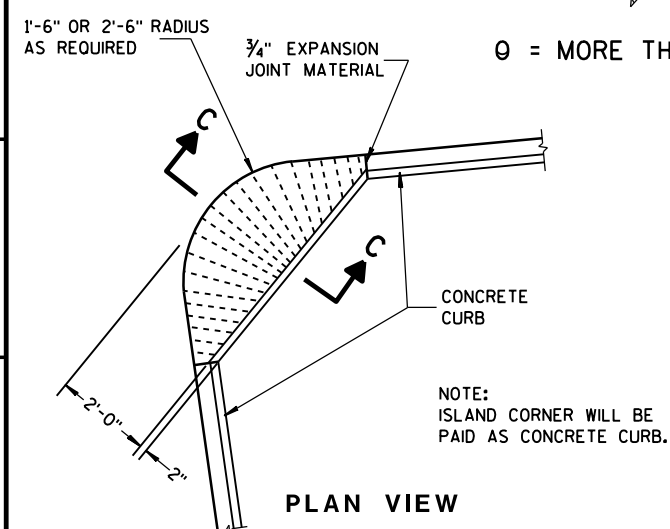
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



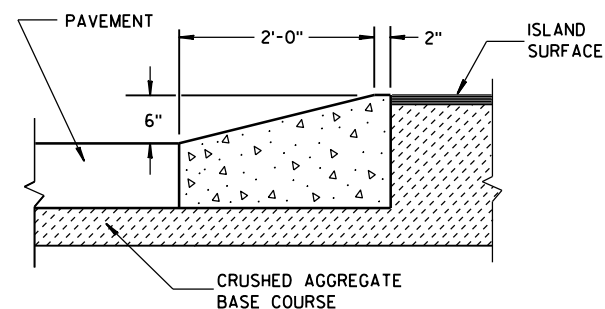
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

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



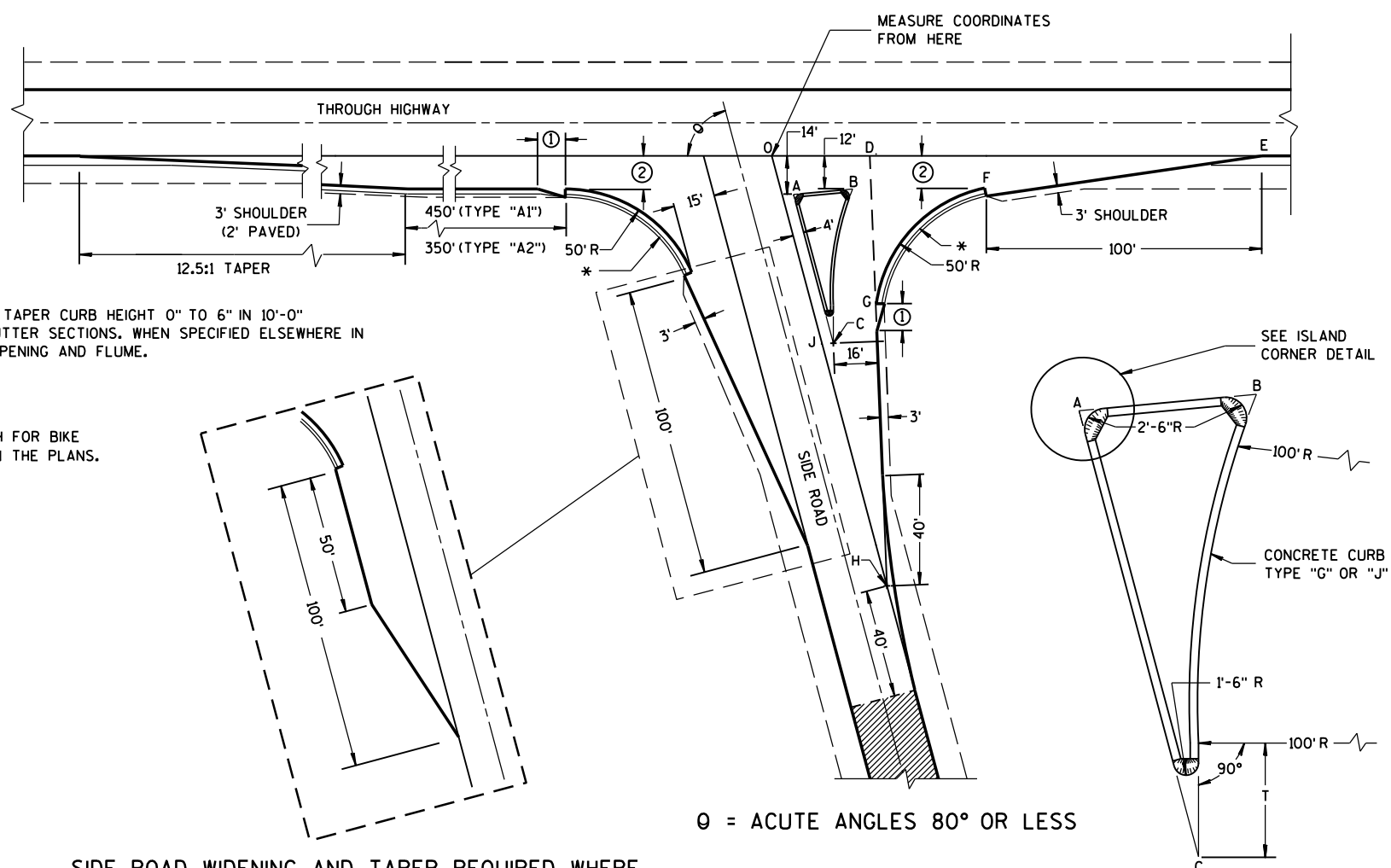
PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)



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

TABLE OF DIMENSIONS FOR
 VARIABLE SIDE ROAD INTERSECTION ANGLES

(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

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

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

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

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED

12/18/12

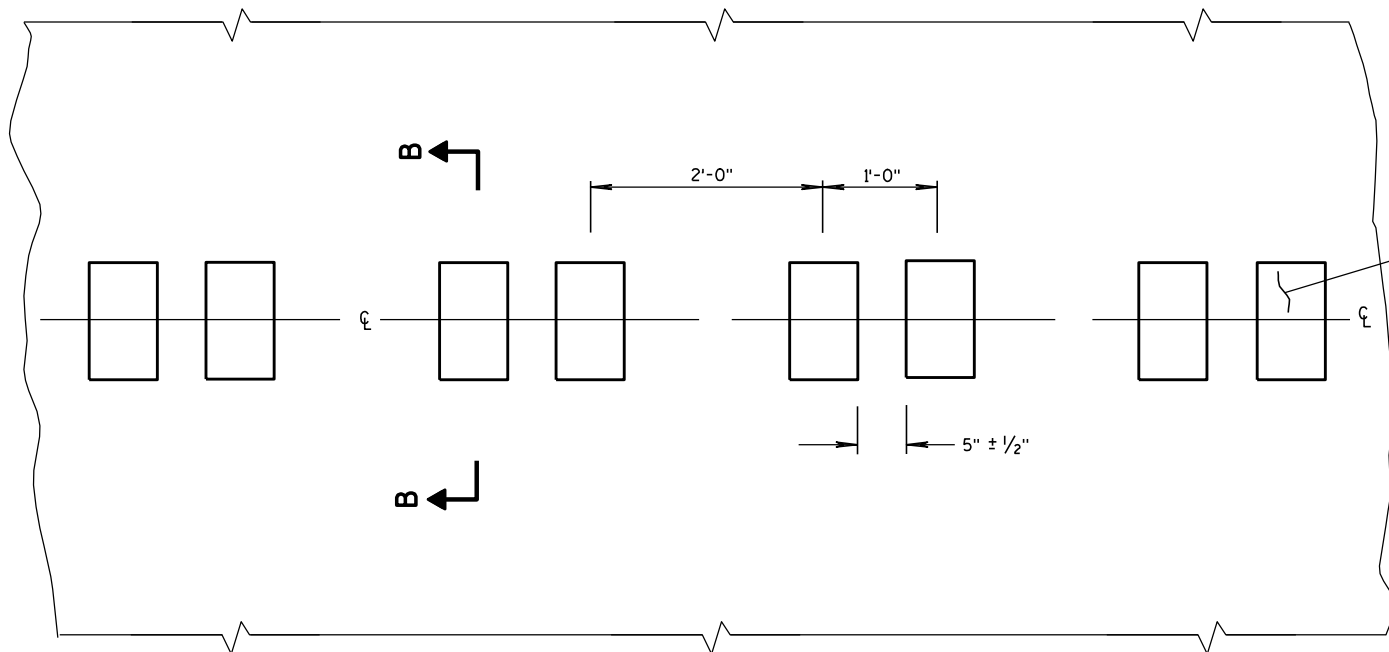
DATE

FHWA

/S/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT

ENGINEER

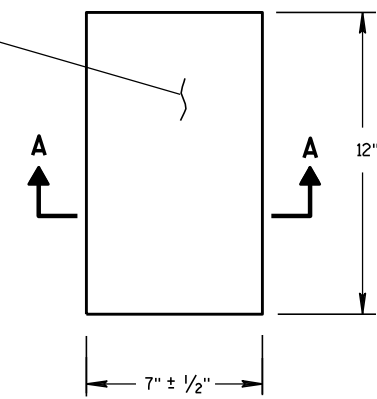


PLAN VIEW
CENTER LINE WITH GROOVES

6

6

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP



PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

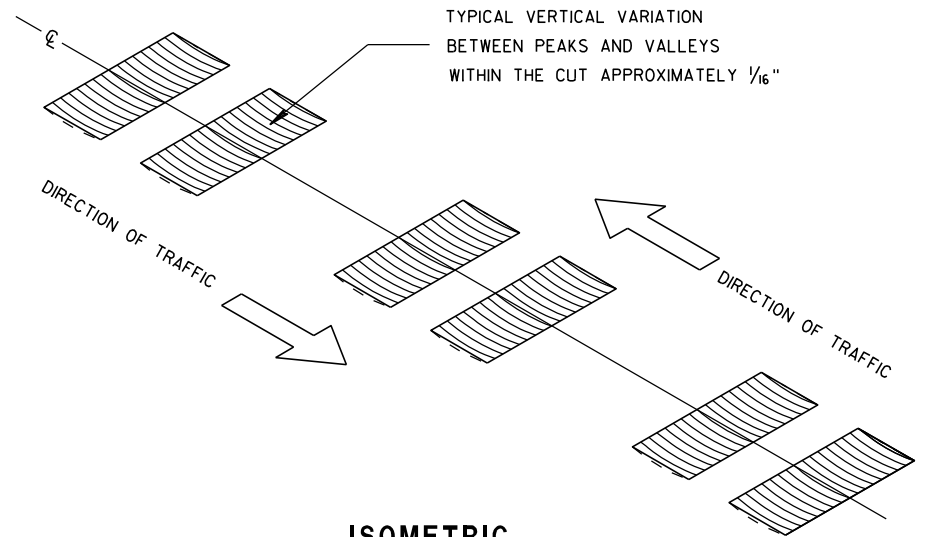
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

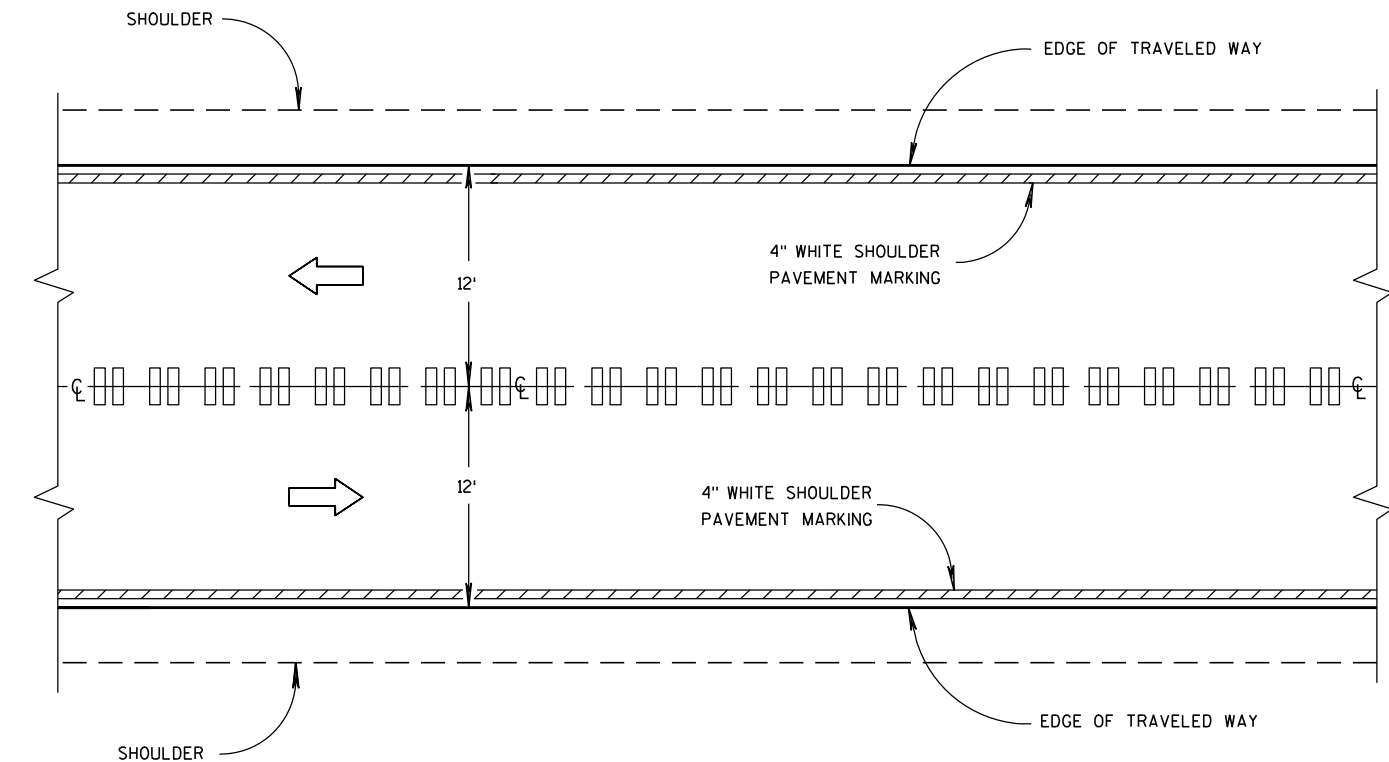
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

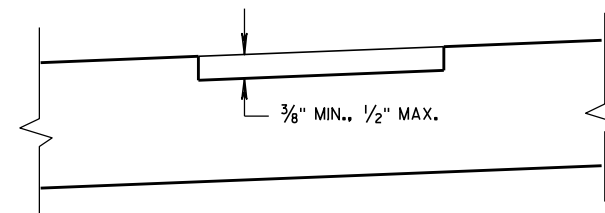
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



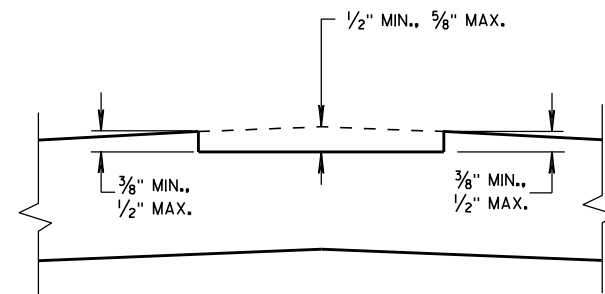
ISOMETRIC



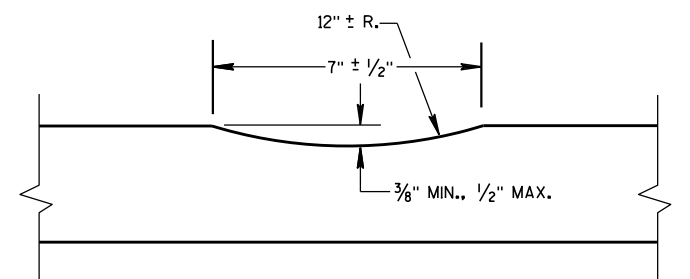
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



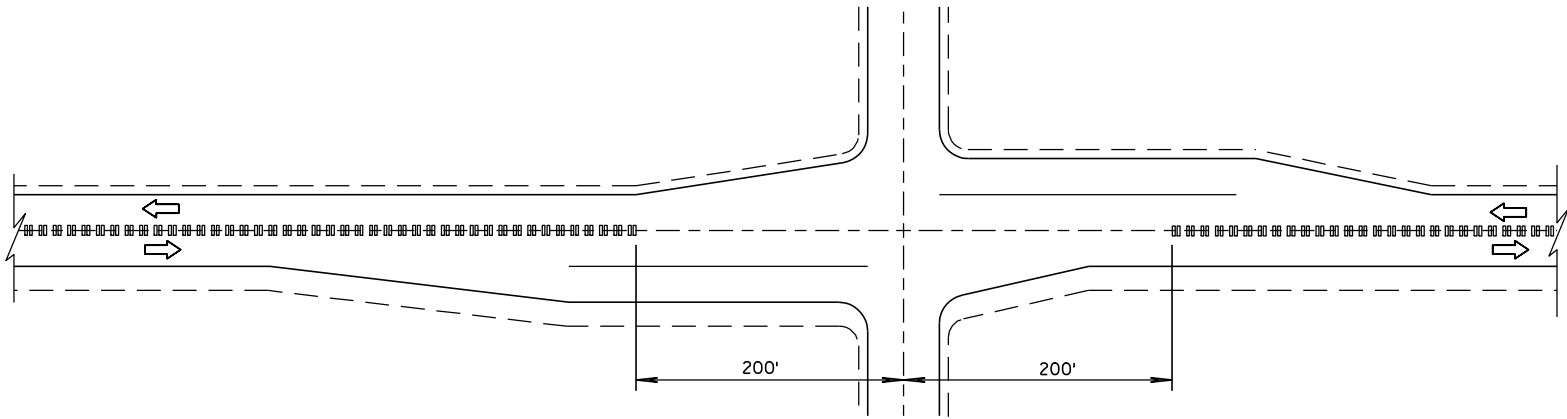
SECTION B-B
CROWNED ROADWAY



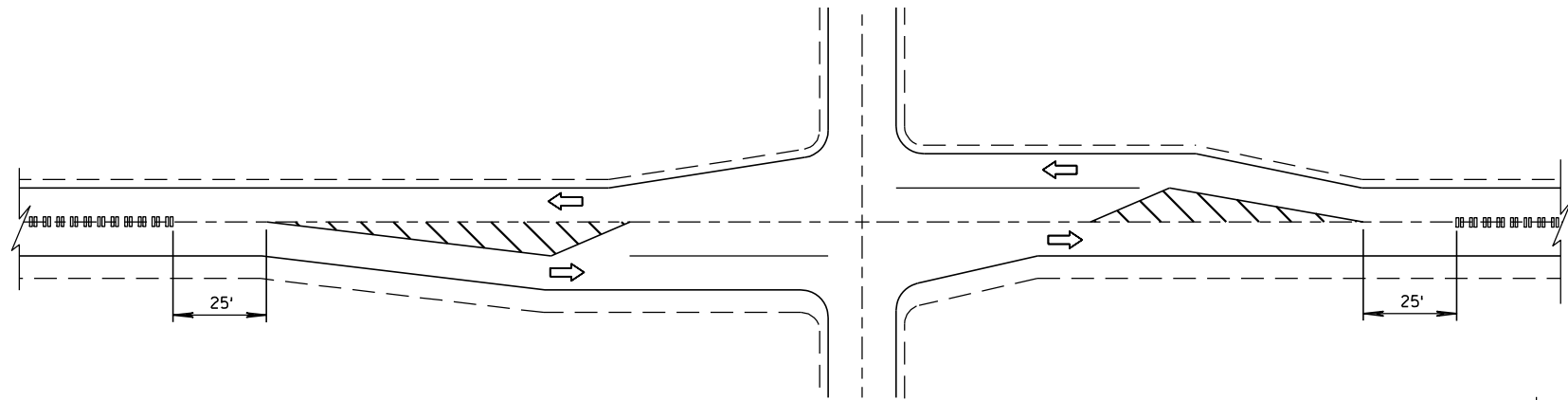
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

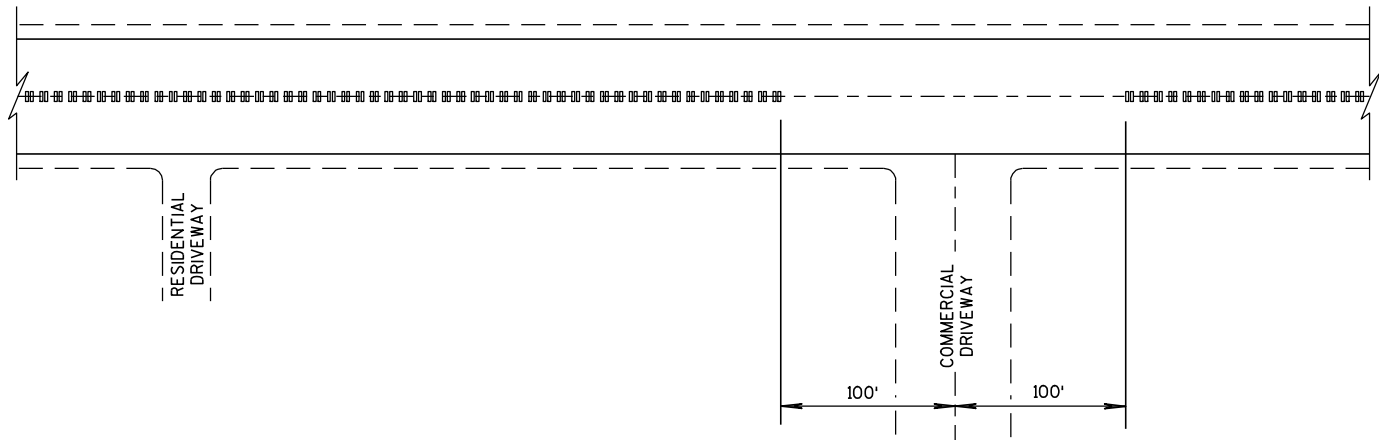
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

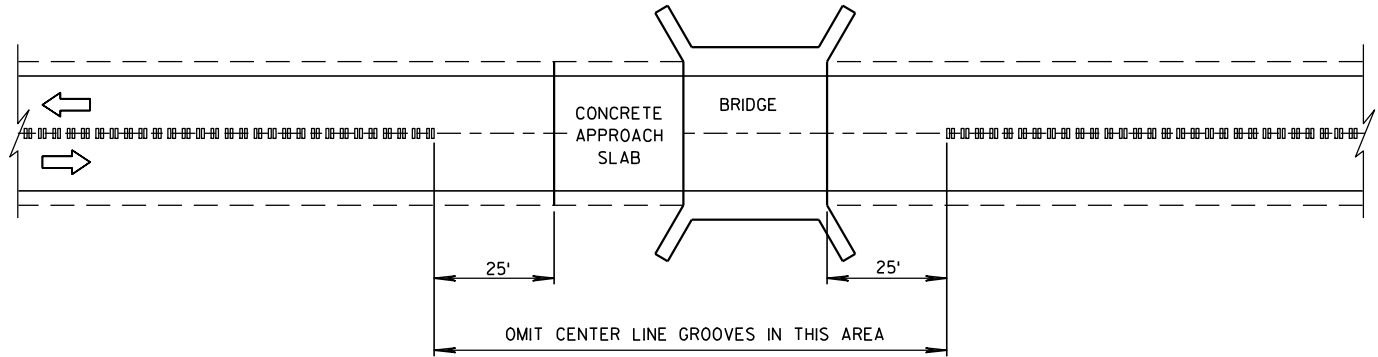


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

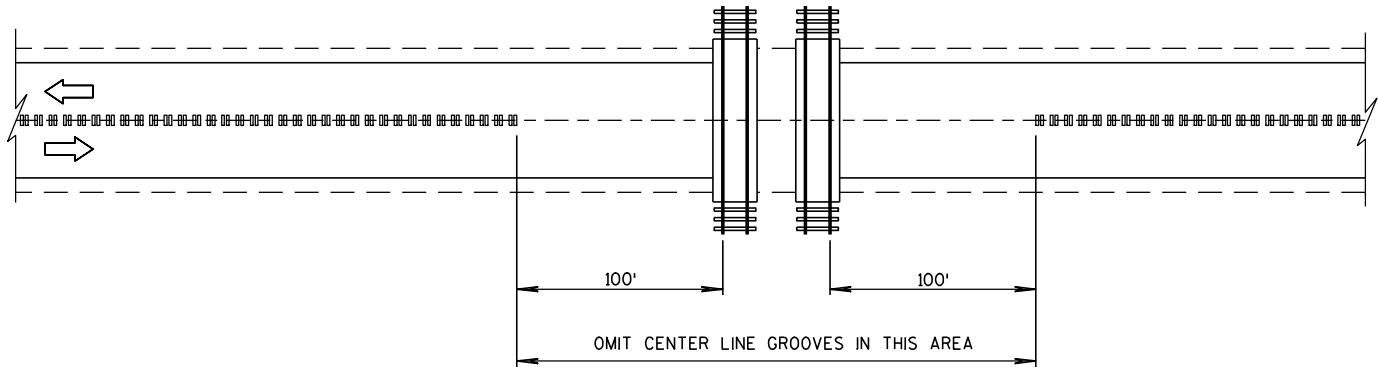


CENTER LINE GROOVES AT DRIVEWAYS^①

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



CENTER LINE GROOVES AT BRIDGES

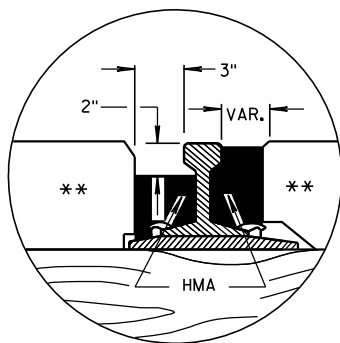
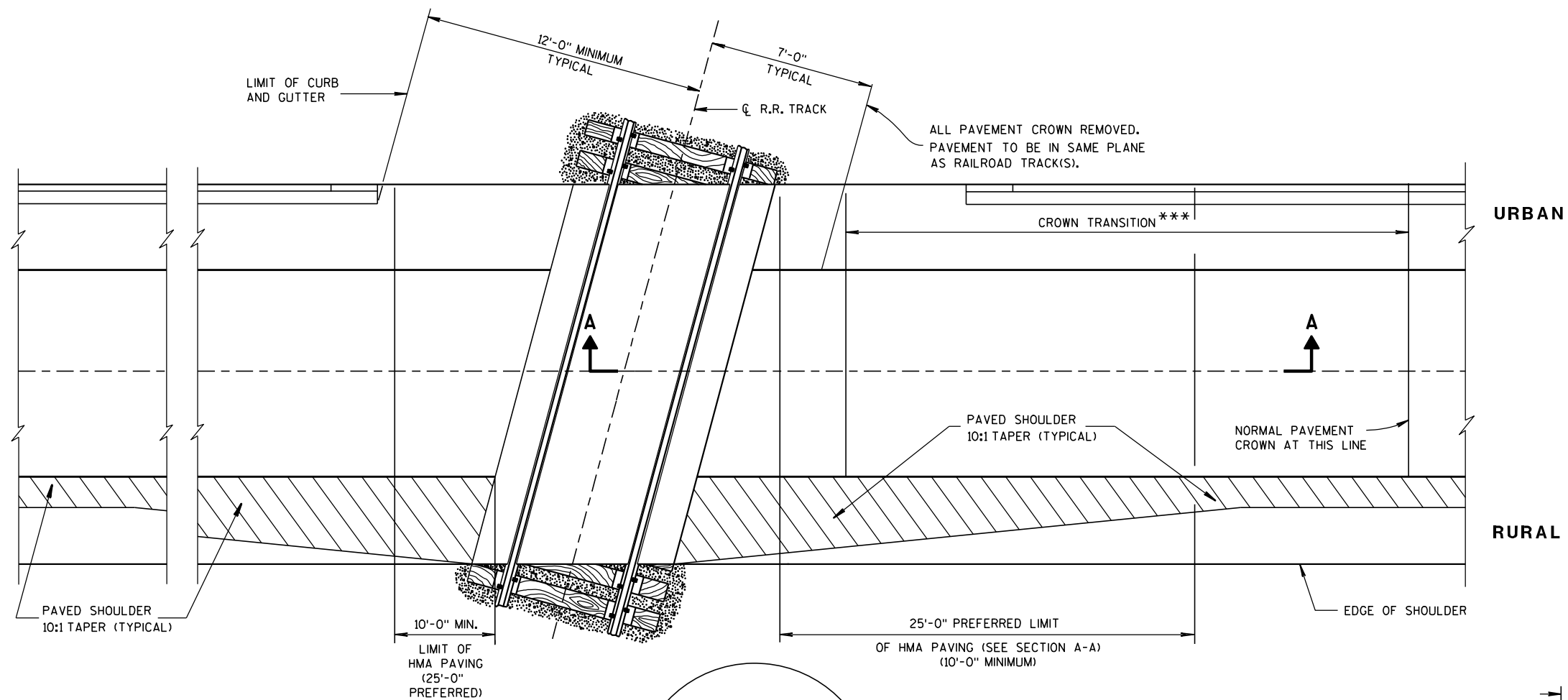


CENTER LINE GROOVES AT RAILROADS

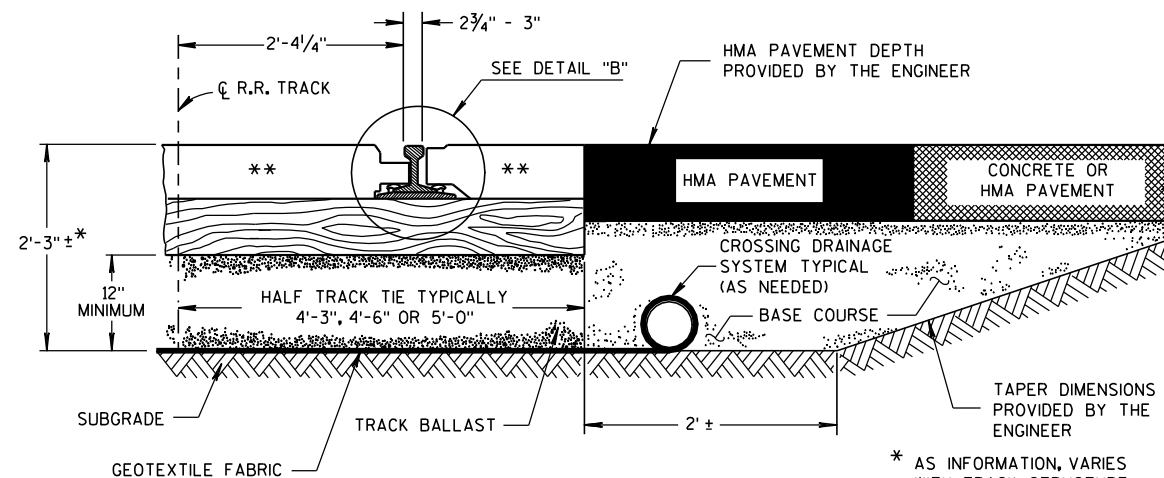
2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/28/2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

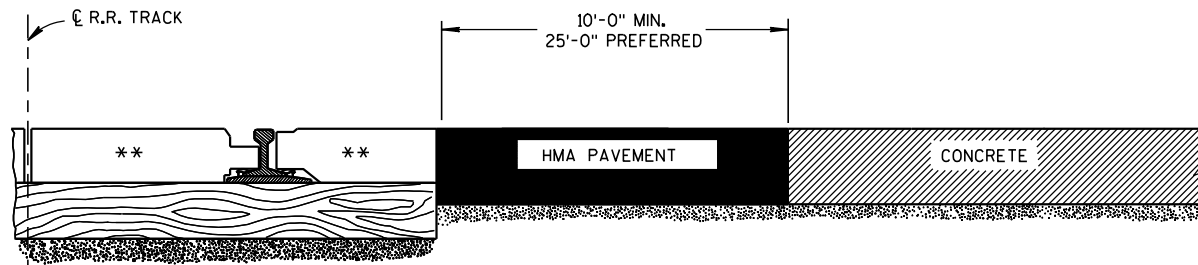


DETAIL B
HMA FLANGEWAY
AND FIELD FILLERS



TYPICAL HALF SECTION

* AS INFORMATION, VARIES WITH TRACK STRUCTURE AND SOIL CONDITIONS



SECTION A-A
CONCRETE PAVEMENT APPROACH



SECTION A-A
HMA PAVEMENT APPROACH

EXAMPLES OF PAVEMENT APPROACHES

GENERAL NOTES

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

TIMBER, CONCRETE OR RUBBER CROSSING SURFACE MATERIAL, RAILS, TIES, BALLAST, GEOTEXTILE FABRIC AND CROSSING DRAINAGE SYSTEM BY OTHERS UNLESS OTHERWISE PROVIDED.

HMA PAVEMENT APPROACHES AND HMA PAVEMENT CROSSING SURFACES TO BE PLACED BY CONTRACTOR UNLESS OTHERWISE PROVIDED.

HMA FLANGEWAY AND FIELD FILLERS TO BE PLACED AND THOROUGHLY HAND COMPACTED BY THE CONTRACTOR WHEN NOT PROVIDED BY OTHERS. SEE DETAIL B. HMA FILLERS NOT REQUIRED WHEN RUBBER FILLERS ARE PROVIDED.

HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

** CROSSING SURFACE MAY BE TIMBER, RUBBER, CONCRETE, HMA PAVEMENT OR A COMBINATION OF SUCH MATERIALS.

*** CROWN TRANSITION LENGTH SHOWN ELSEWHERE IN THE PLAN.

PAVEMENT DETAILS FOR RAILROAD APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

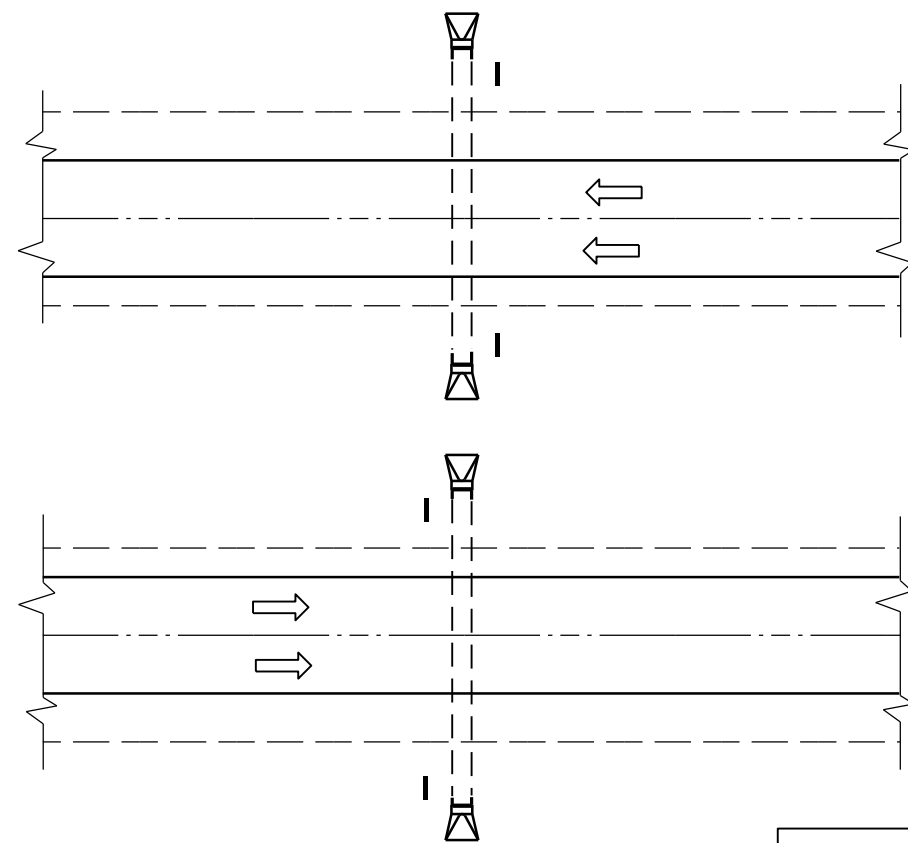
APPROVED

8-28-09

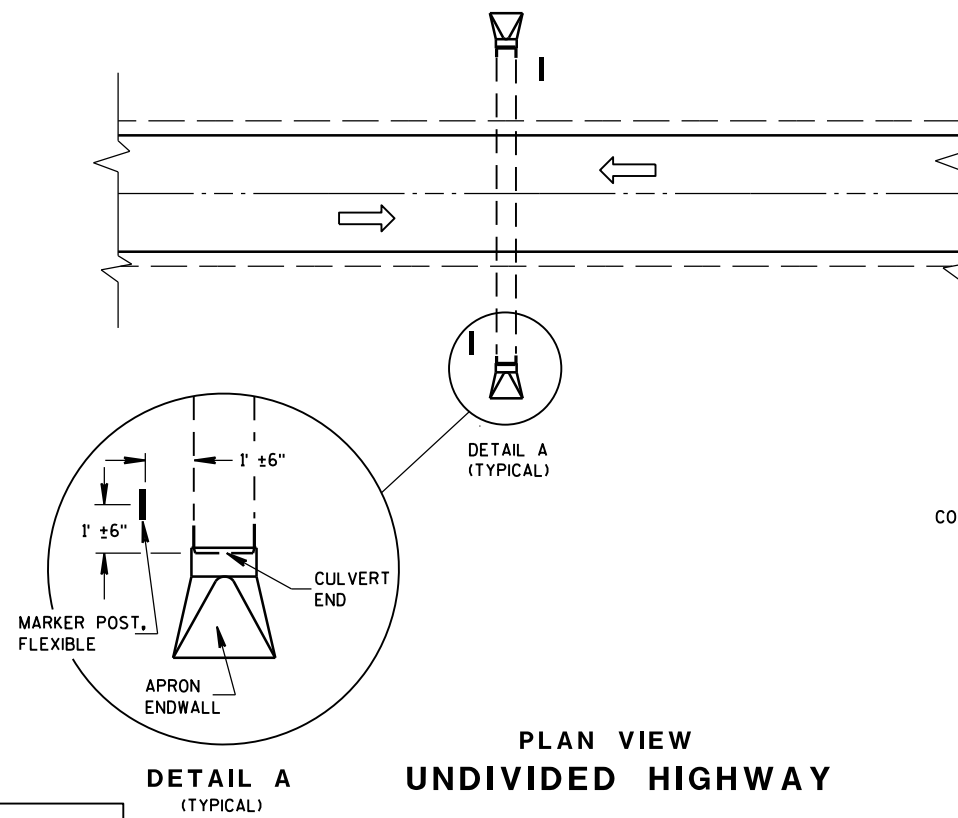
DATE

FHWA

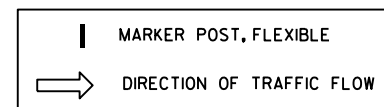
/S/ Ronald E. Adams
CHIEF, RAILROADS & HARBORS SECTION



PLAN VIEW
DIVIDED HIGHWAY



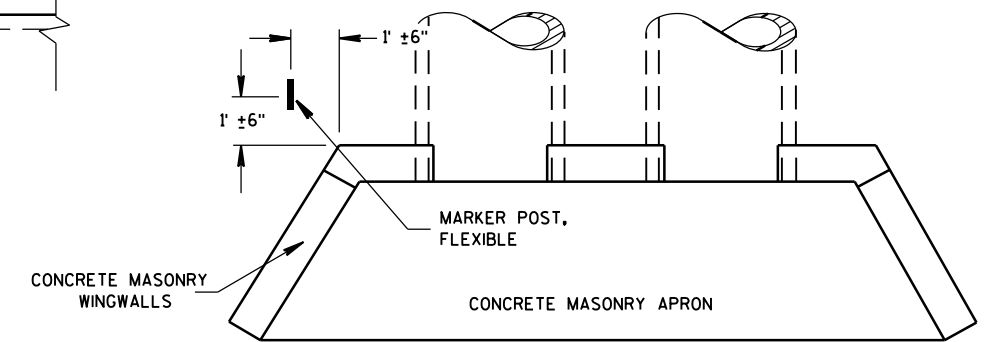
PLAN VIEW
UNDIVIDED HIGHWAY



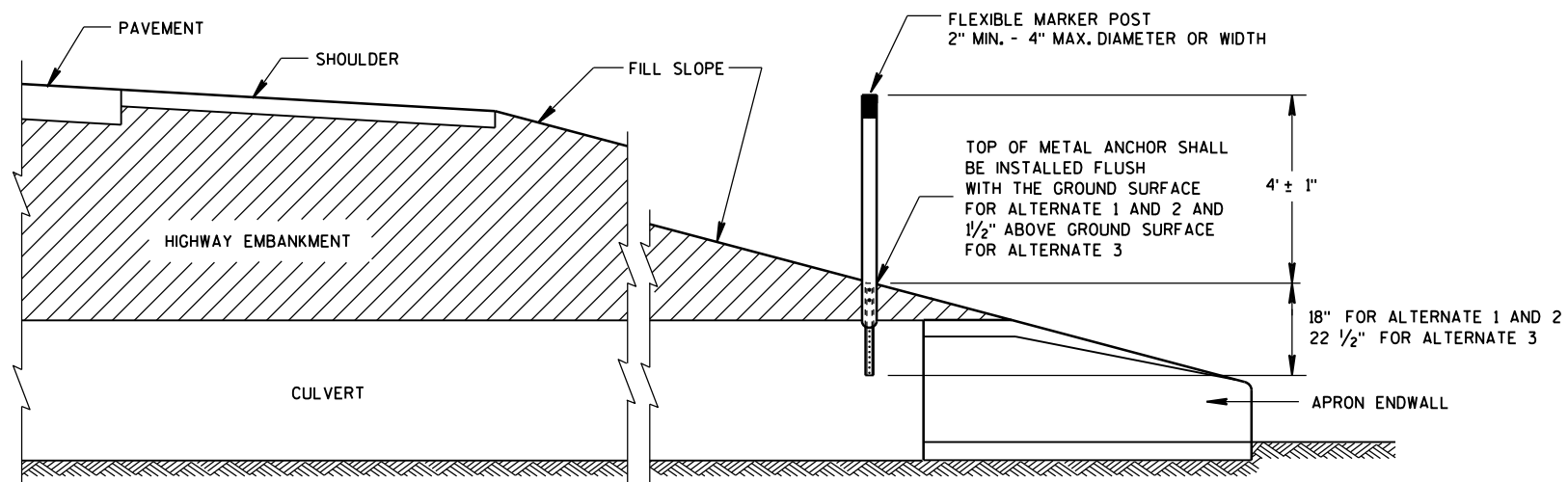
FLEXIBLE MARKER POST LOCATION

GENERAL NOTES

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



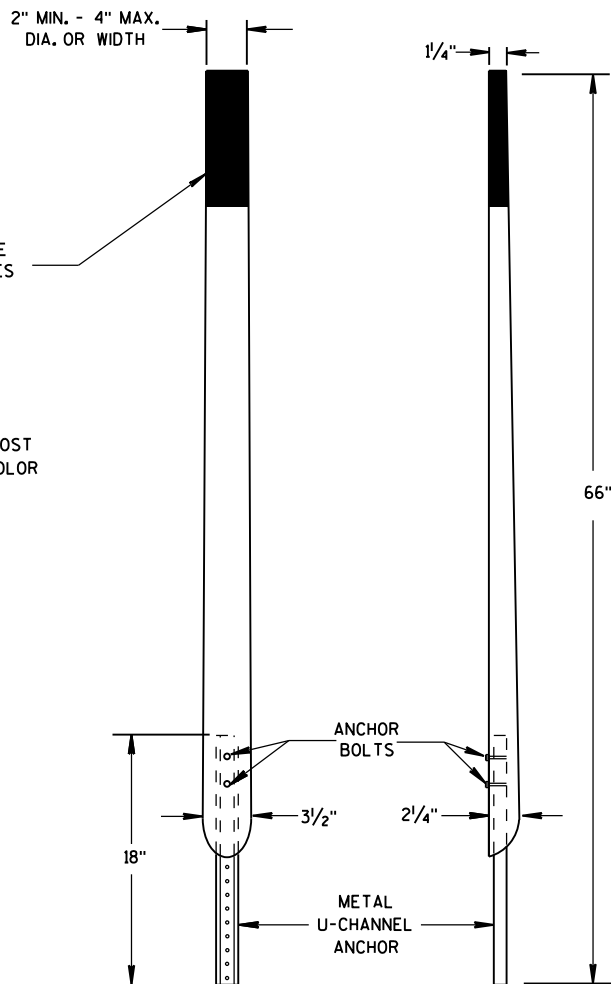
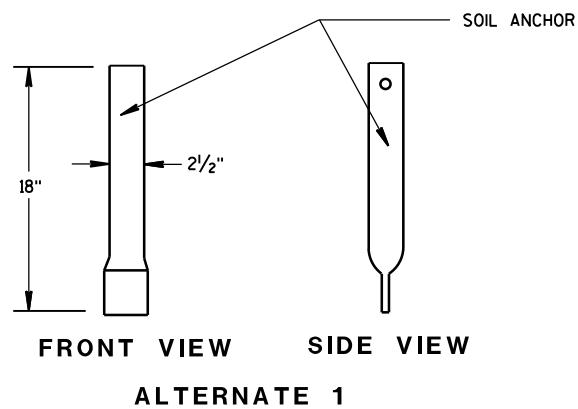
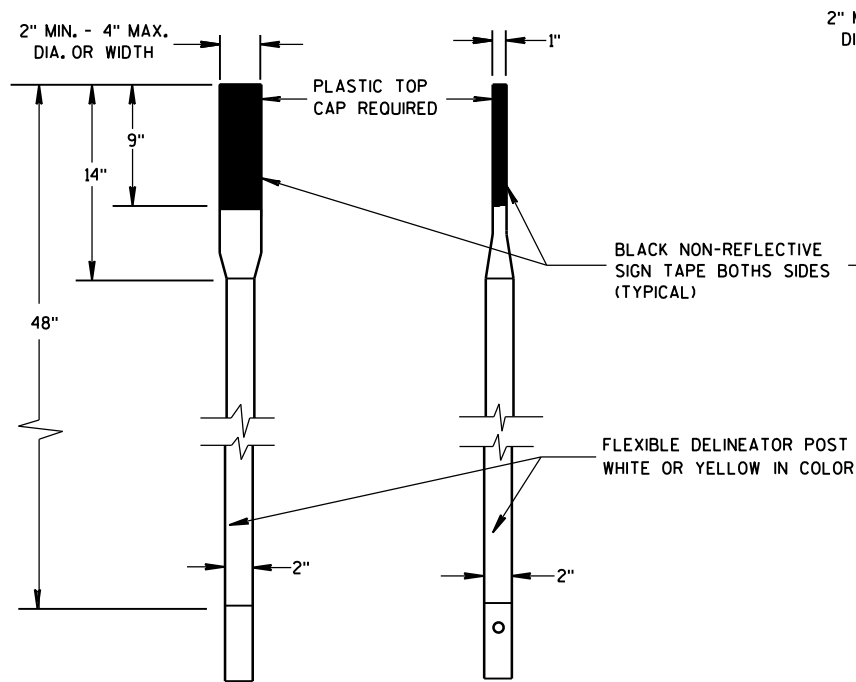
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



CROSS SECTION
FLEXIBLE MARKER POST

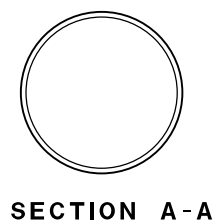
FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

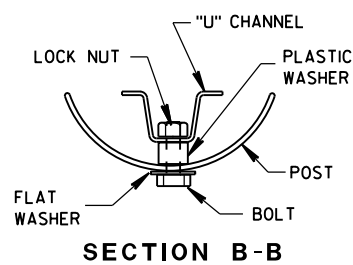
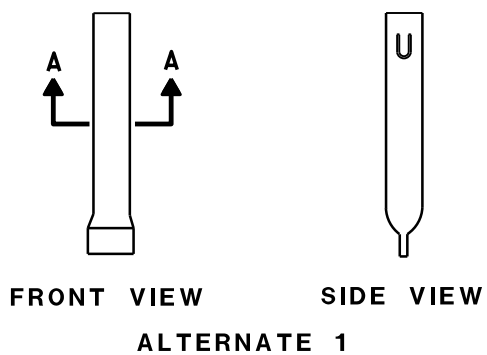


FRONT VIEW SIDE VIEW
ALTERNATE 2

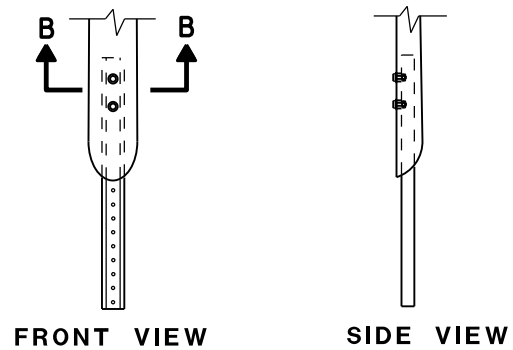
FLEXIBLE MARKER POSTS



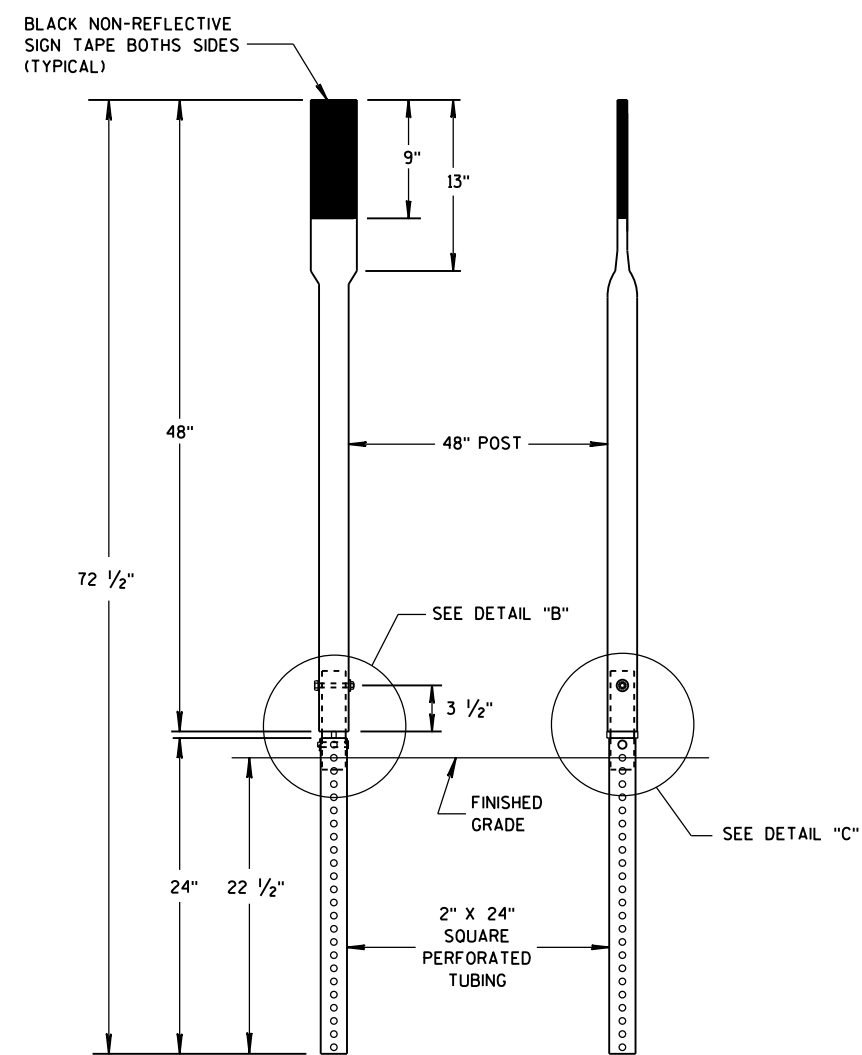
SECTION A-A



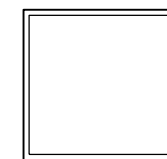
SECTION B-B



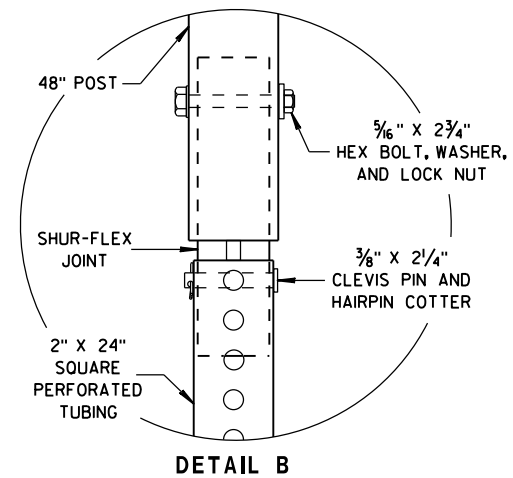
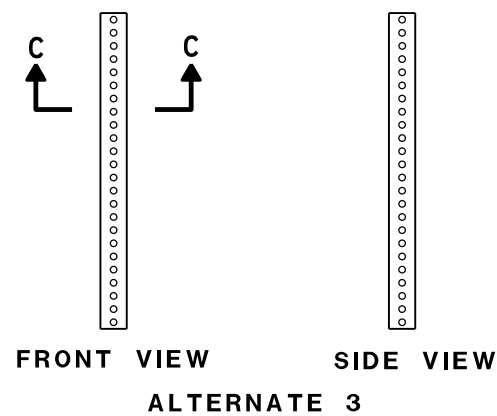
FRONT VIEW SIDE VIEW
ALTERNATE 2
FLEXIBLE MARKER POST ANCHORS



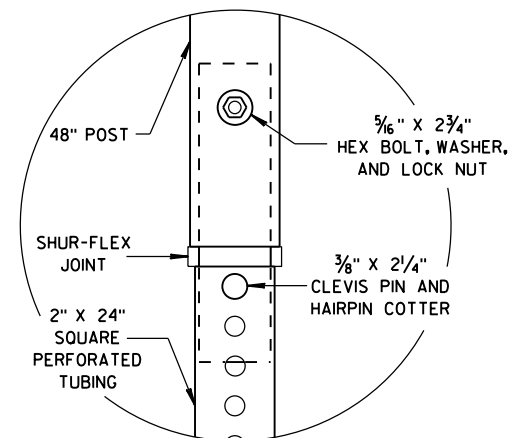
FRONT VIEW SIDE VIEW
ALTERNATE 3



SECTION C-C



DETAIL B



DETAIL C

FLEXIBLE MARKER POST FOR CULVERT END

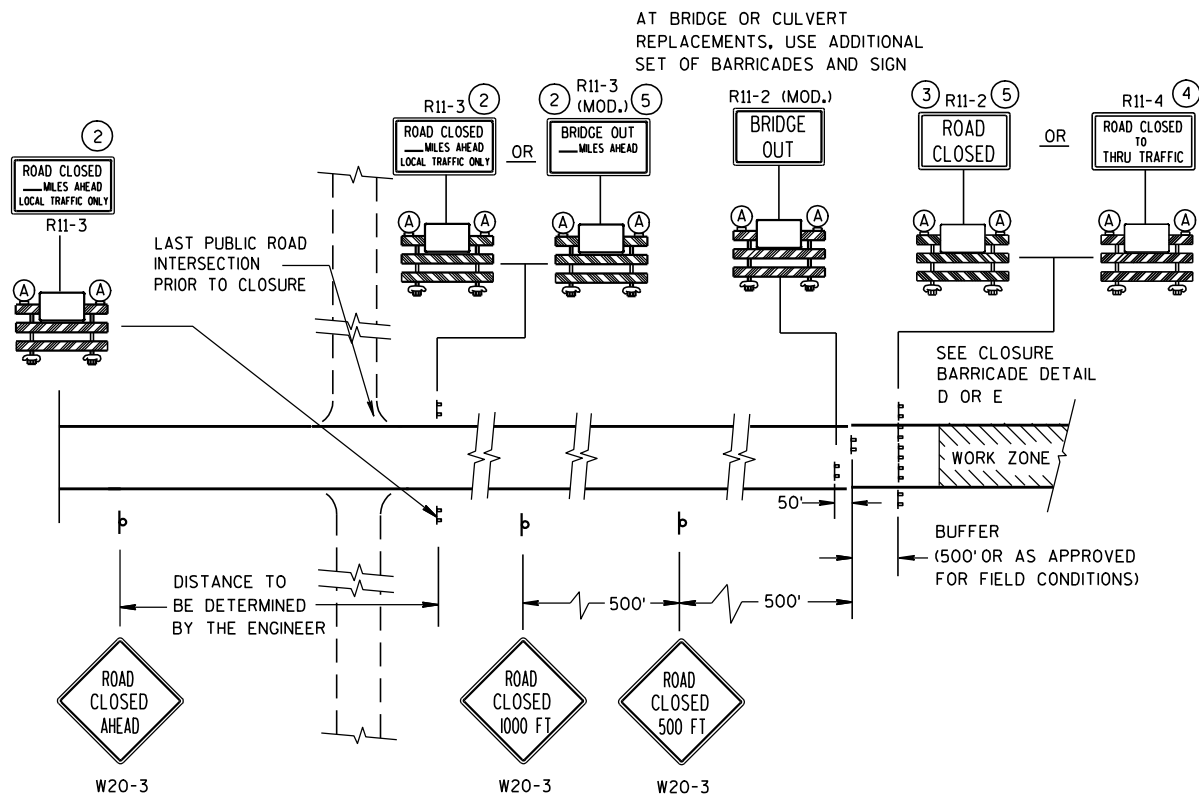
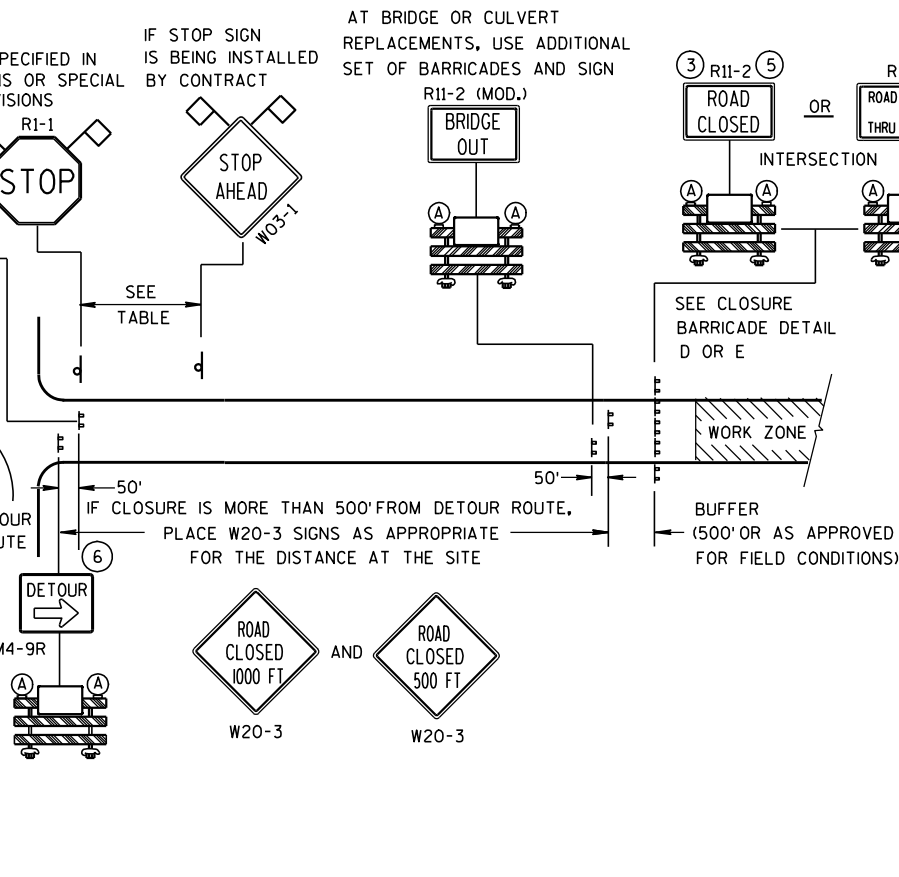
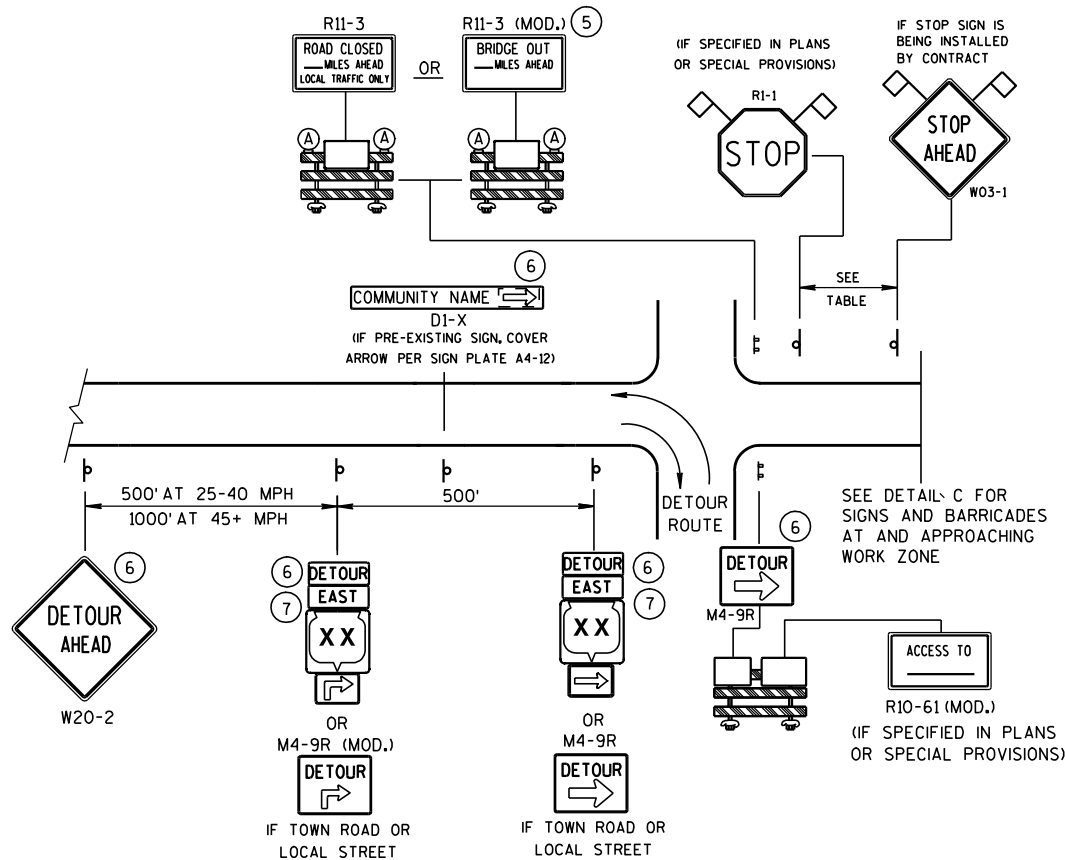
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/1/2012
DATE

FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER OF DESIGN



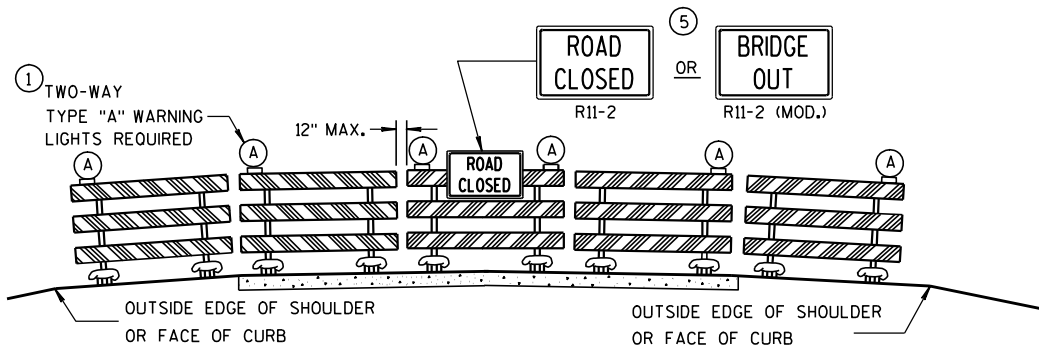
| SPEED LIMIT (MPH) | "STOP AHEAD" ADVANCE WARNING DISTANCE (FT) |
|-------------------|--|
| 25 | 200 |
| 30 | 200 |
| 35 | 350 |
| 40 | 350 |
| 45 | 500 |
| 50 | 550 |
| 55 | 750 |

SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

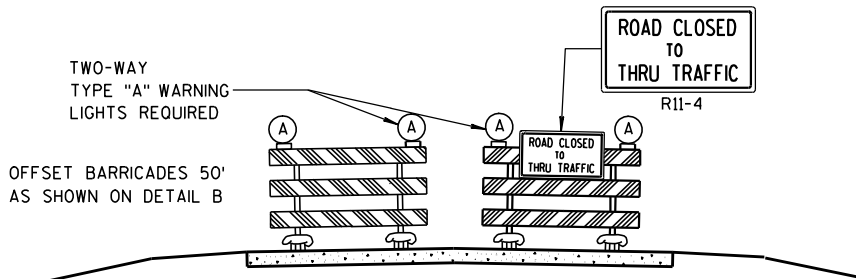
- LEGEND**
- POST MOUNTED SIGN
 - TYPE III BARRICADES
 - TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
 - WORK ZONE
 - DETOUR EAST M4-8 M3-X
 - MI-4 OR MI-5A OR MI-6
 - MO5-1 OR MO6-1
 - FLAGS, 16" X 16" MIN., (ORANGE)

**BARRICADES AND SIGNS
FOR
MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

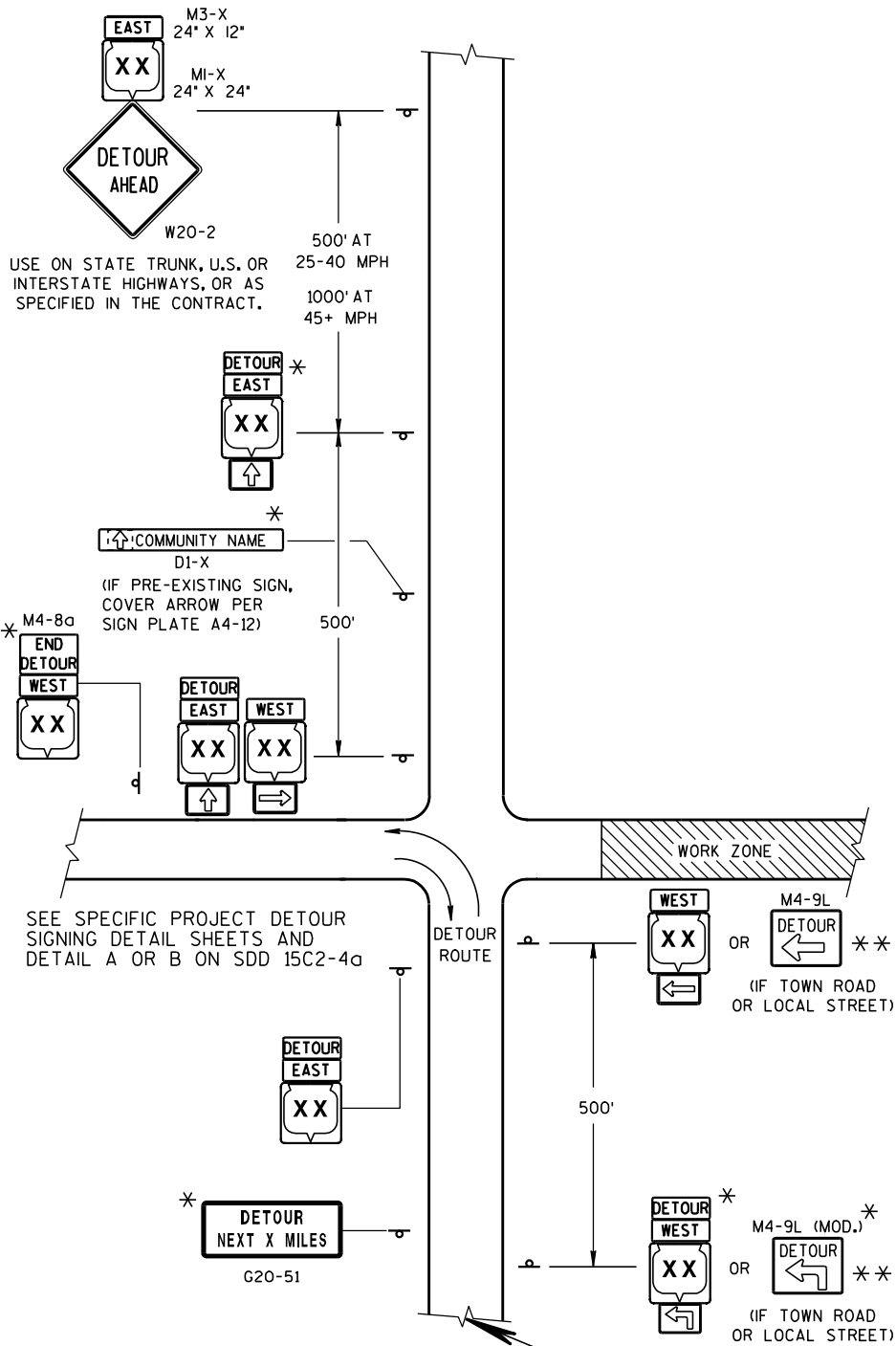
"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

| BARRICADES AND SIGNS FOR MAINLINE CLOSURES | |
|--|---|
| STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION | |
| APPROVED | |
| 9/16/03 DATE | /S/ Thomas N. Notbohm CHIEF SIGNS AND MARKING ENGINEER |
| FHWA | |



SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-4a

LEGEND

POST MOUNTED SIGN

WORK ZONE

DETOUR EAST M4-8 M3-X

M1-4 OR COUNTY M1-5A OR M1-6

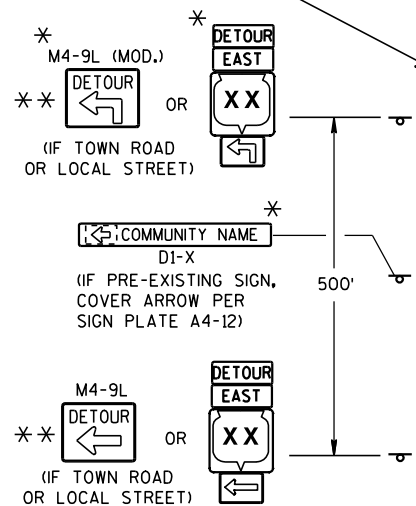
M05-1 OR M06-1 OR M06-1

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

MATCH POINT

DETAIL F
DETOUR SIGNING

USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT.



GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

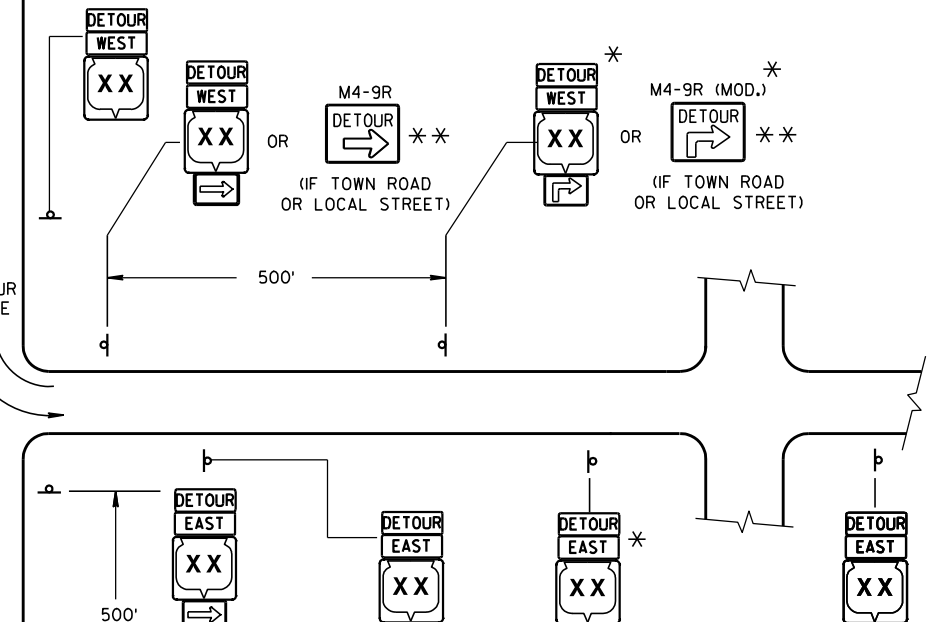
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA.)

DETOUR SIGNING FOR
MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED





9-16-03
DATE

FHWA

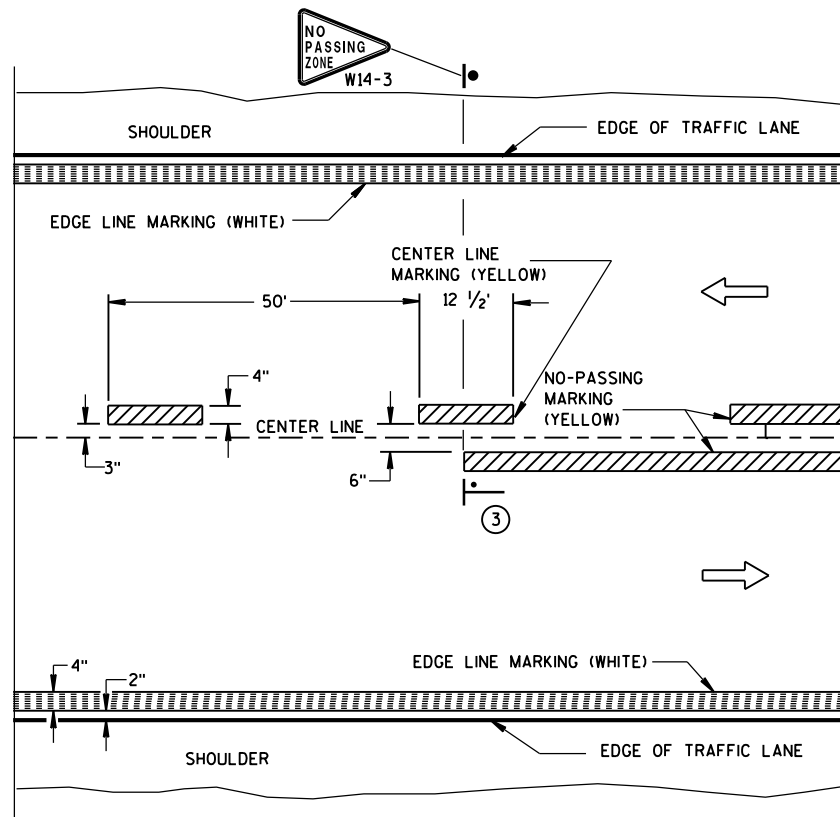
/S/ Thomas N. Notbohm
CHIEF SIGNS AND MARKING ENGINEER



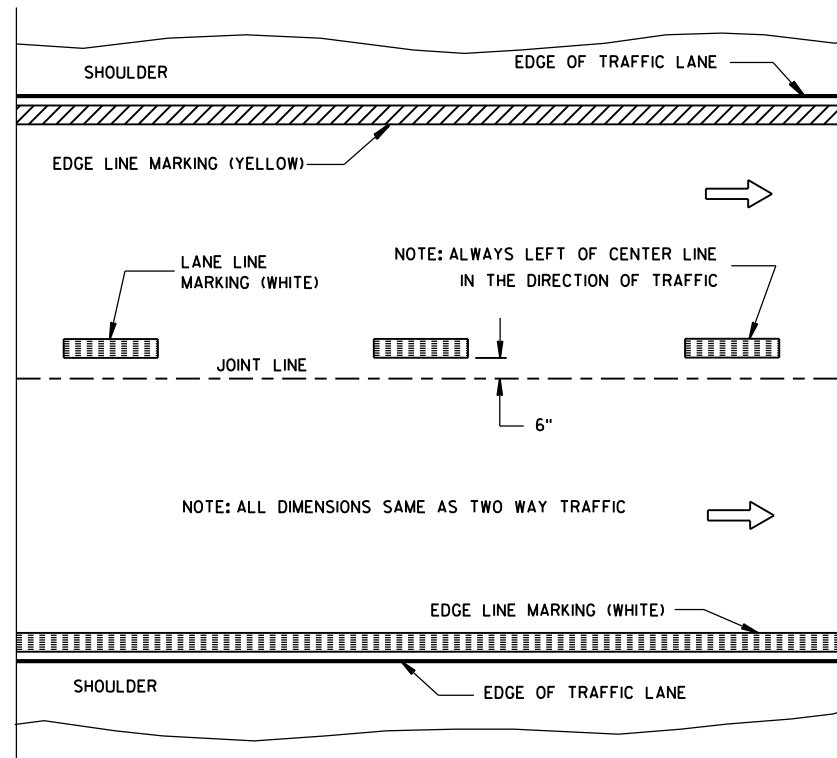
R11-4 AND R11-3 SHALL BE 60" X 30".

-  POST MOUNTED WARNING SIGN
-  TYPE III BARRICADES
-  TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
-  WORK AREA

FHWA

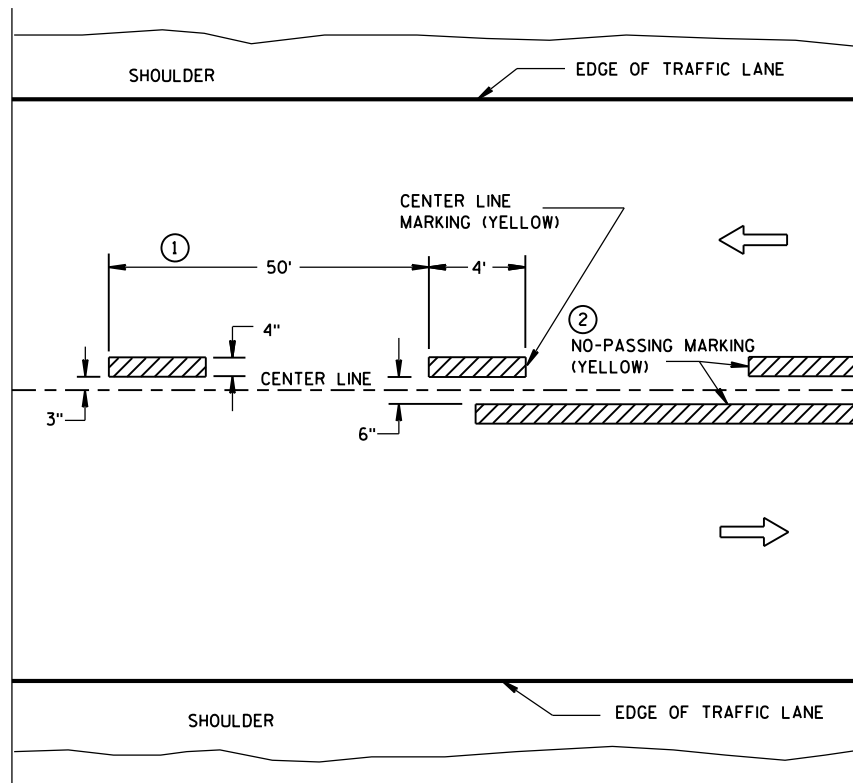


TWO WAY TRAFFIC

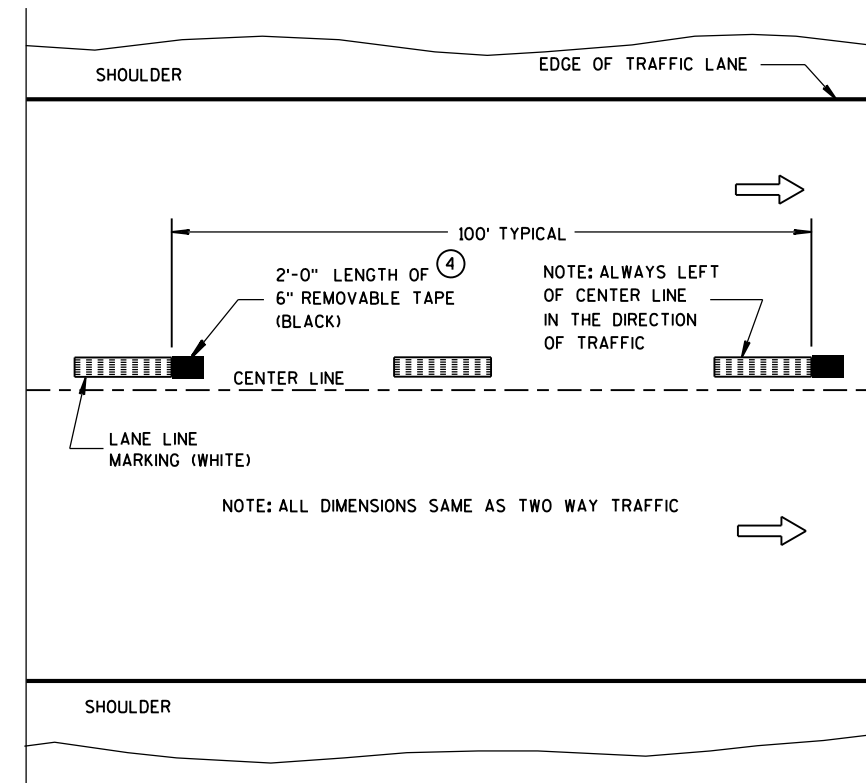


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

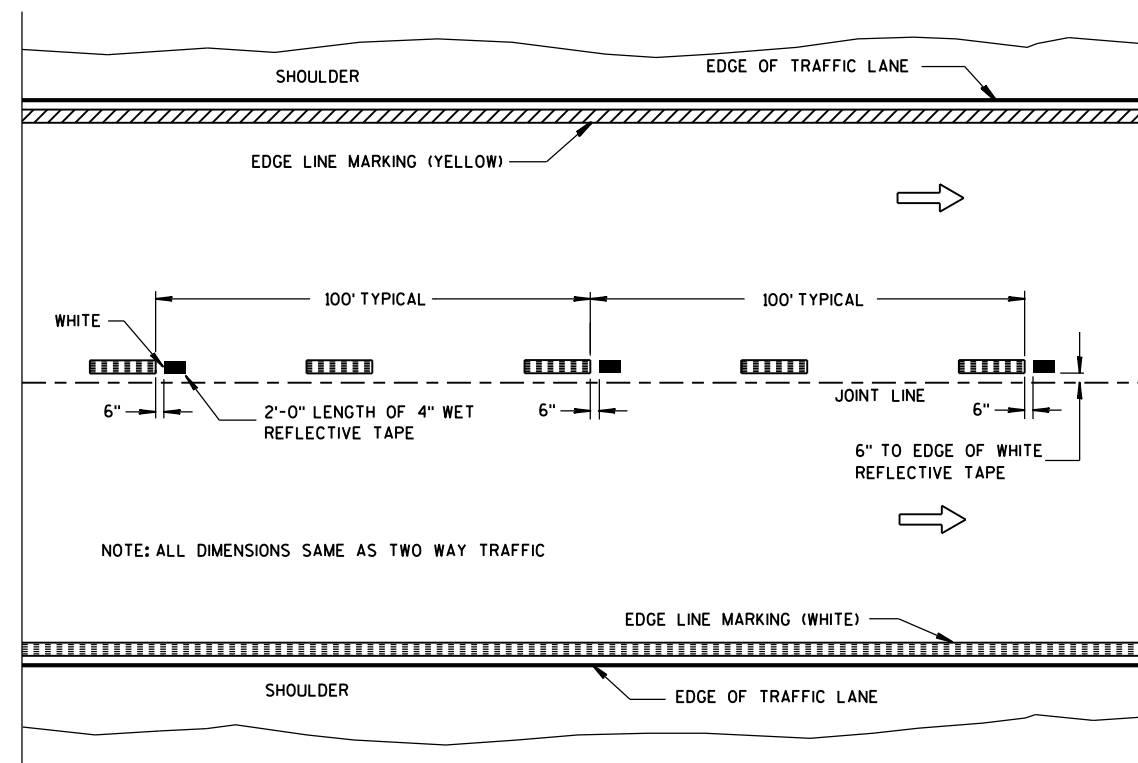
GENERAL NOTES

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

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



**WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE**

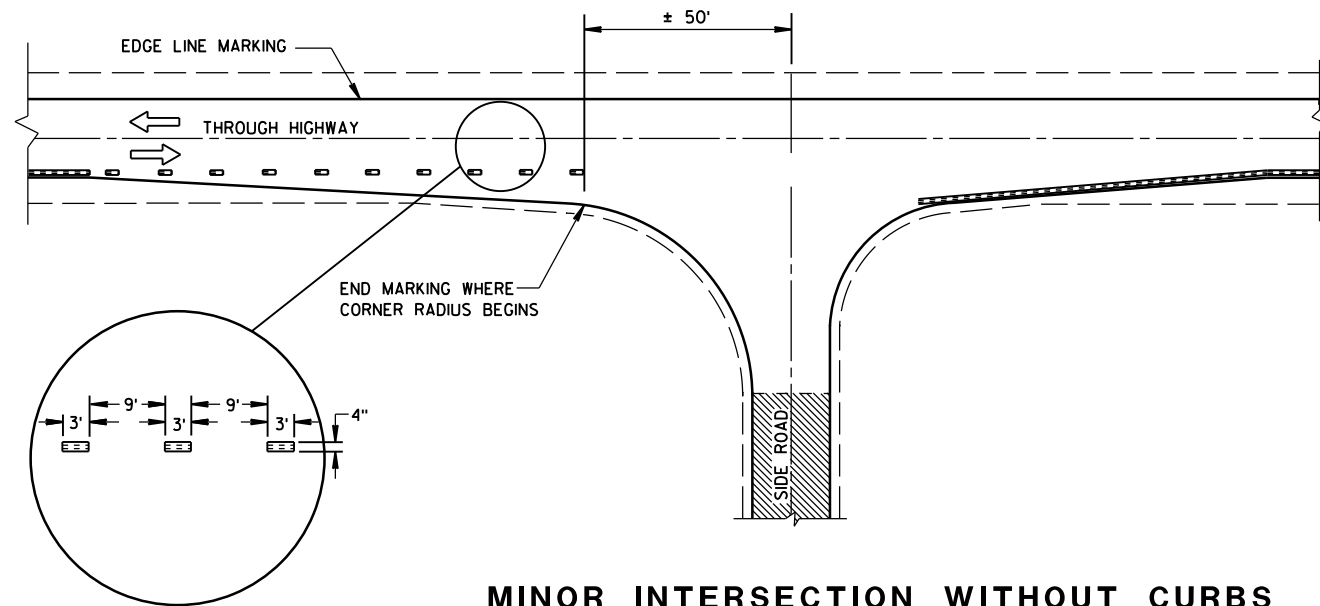
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

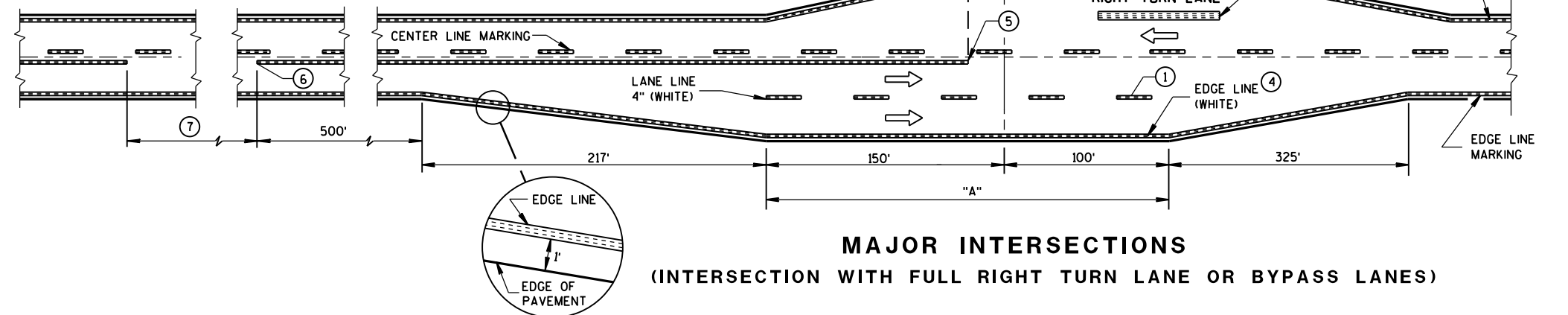
APPROVED
10-1-2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



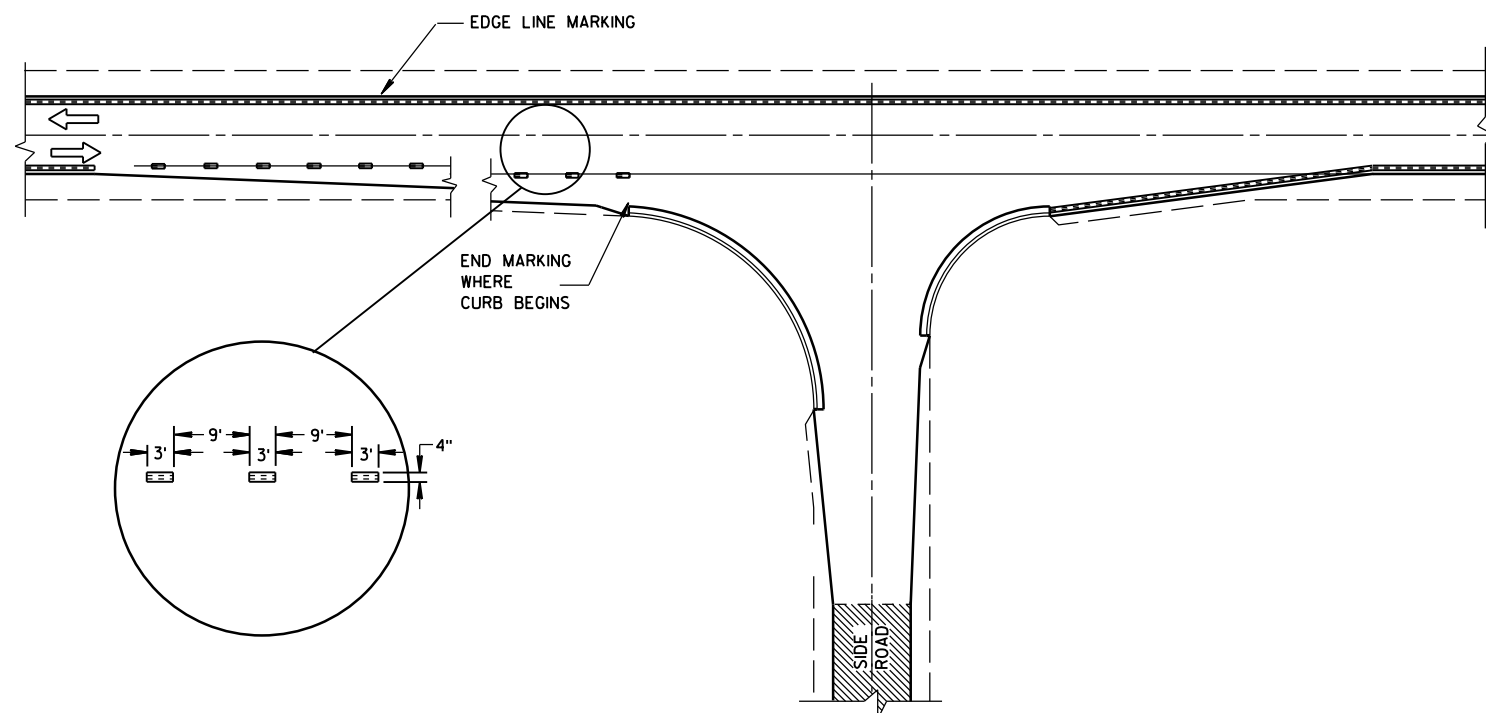
MINOR INTERSECTION WITHOUT CURBS

⑦

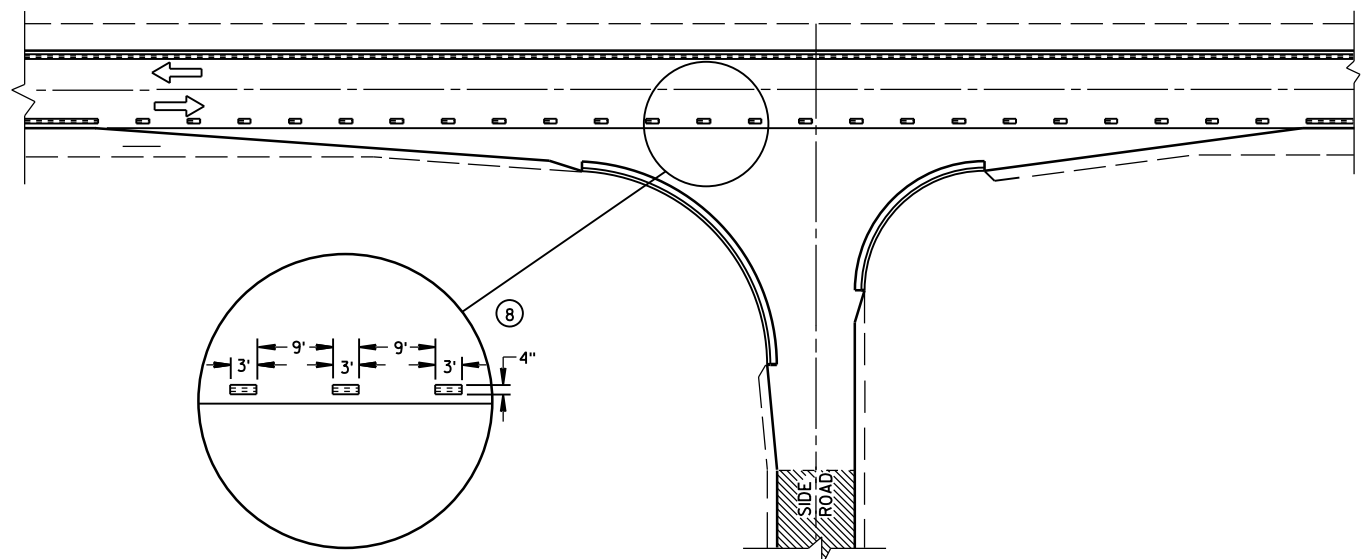
| POSTED SPEED (MPH) | MINIMUM DISTANCE BETWEEN ZONES (FEET) |
|--------------------|---------------------------------------|
| 25 - 30 | 528 |
| 35 - 40 | 528 |
| 45 - 50 | 686 |
| 55 | 792 |



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



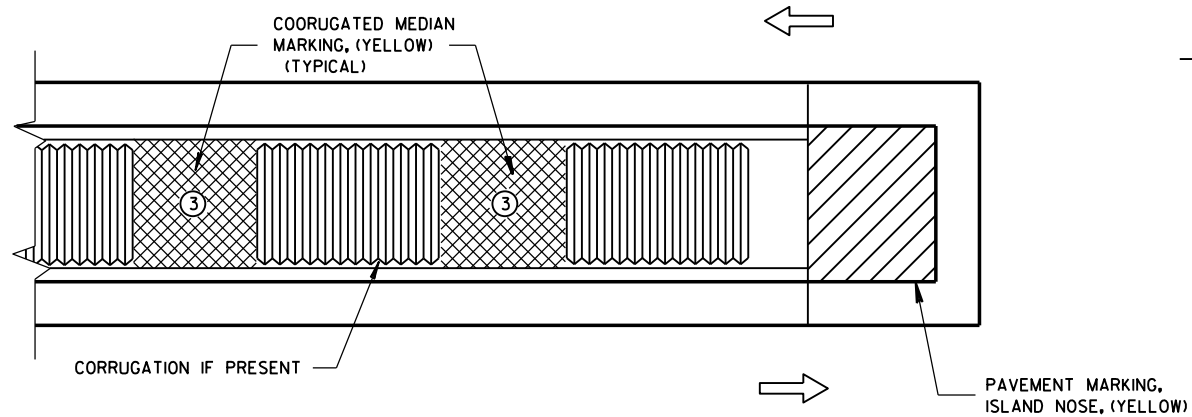
MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES

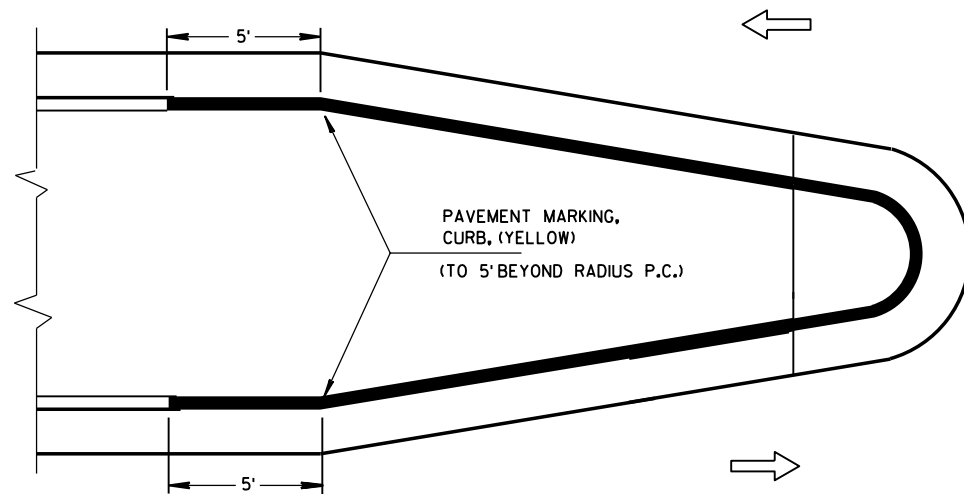
- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
 - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
 - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
 - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
 - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
 - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(INTERSECTIONS)

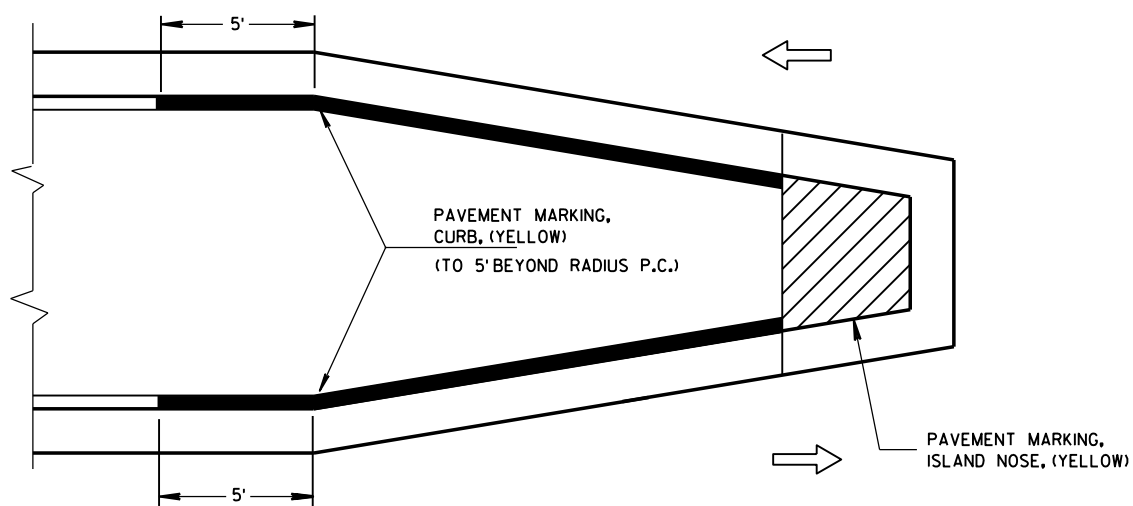
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

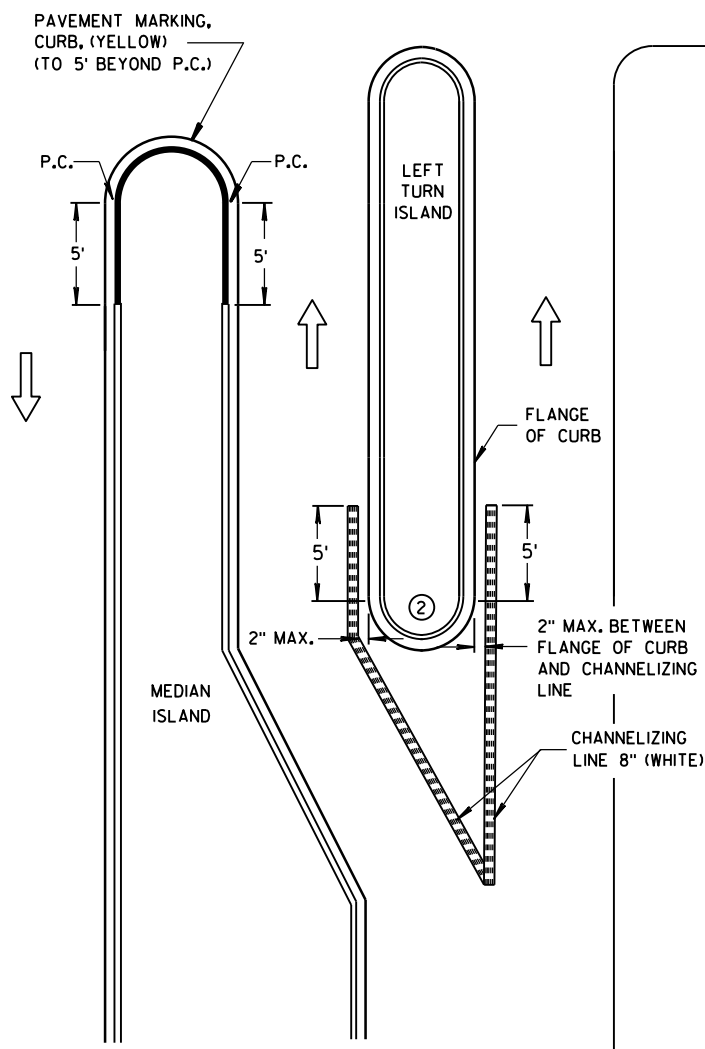


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

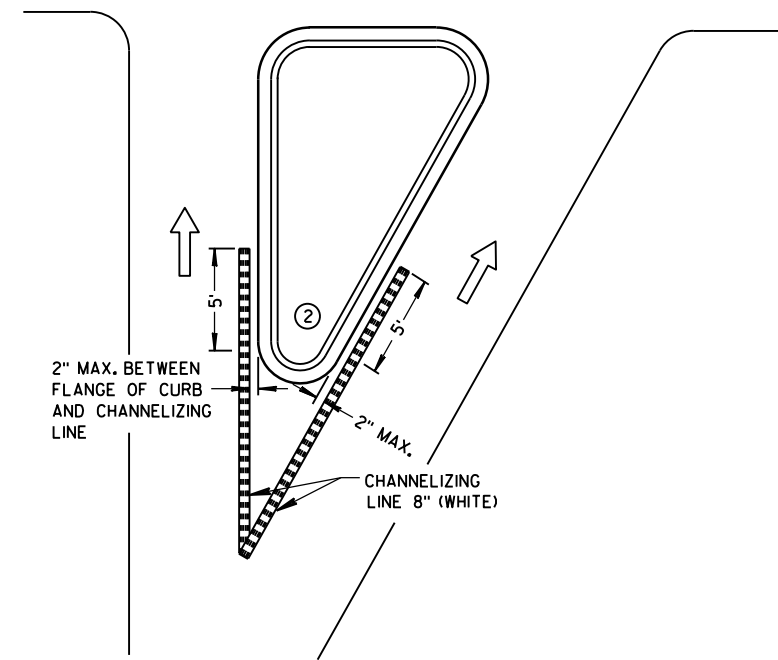
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

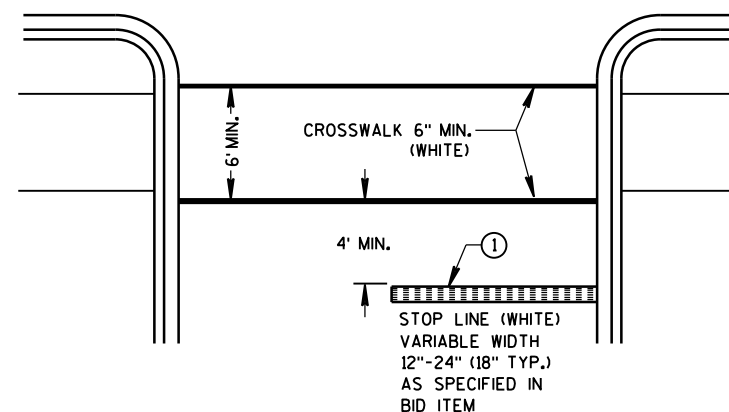
- ① STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- ③ WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

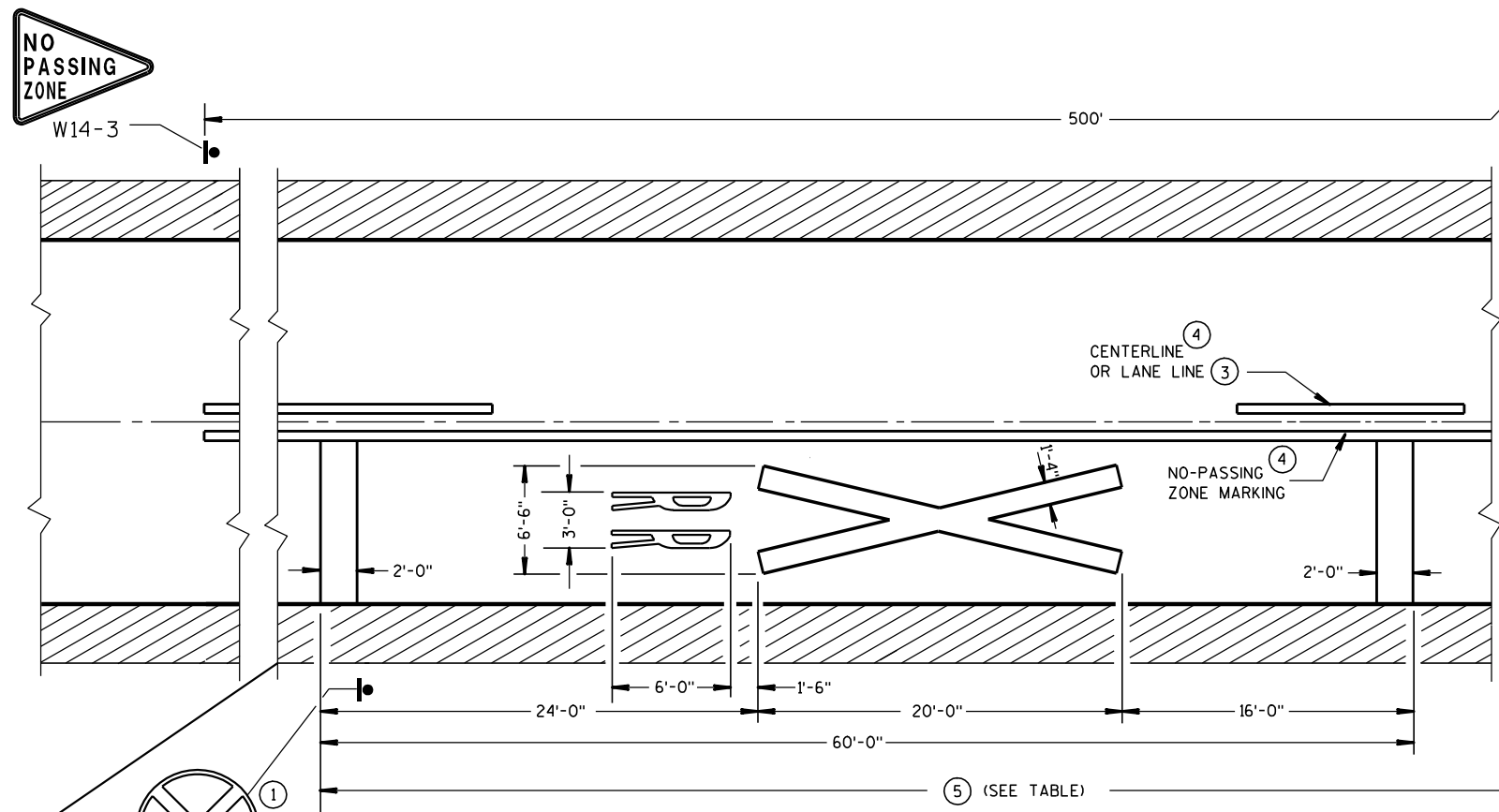
- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL



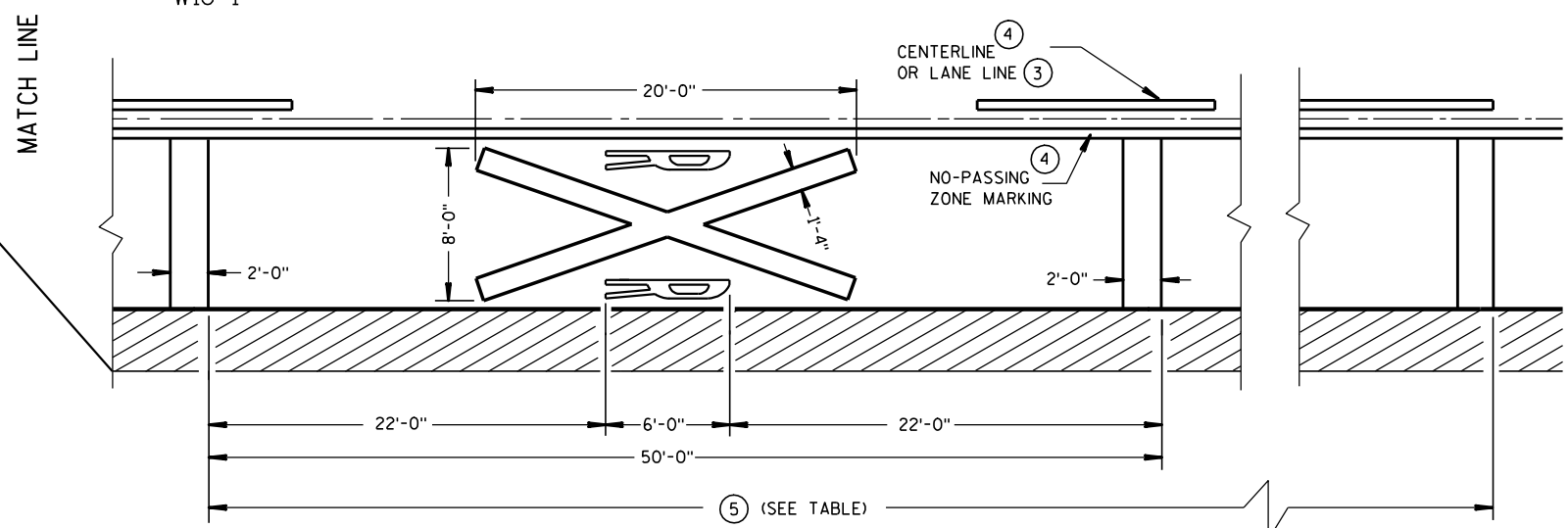
STOP LINE AND CROSSWALK

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



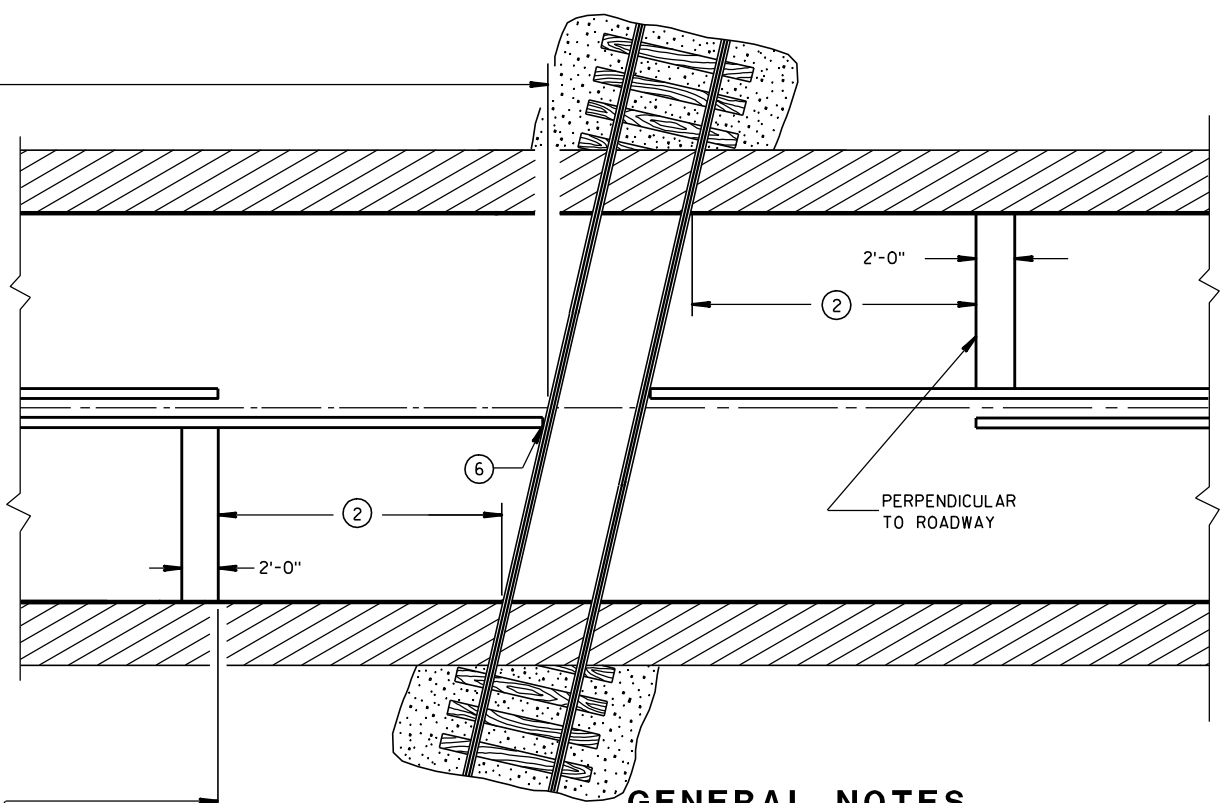
PREFERRED PAVEMENT MARKING



ALTERNATE PAVEMENT MARKING

| Posted Speed (M.P.H.) | Dimension Range (Feet) |
|-----------------------|------------------------|
| 25 | 150*- 250 |
| 30 | 200*- 300 |
| 35 | 250*- 450 |
| 40 | 300*- 500 |
| 45 | 400*- 650 |
| 50 | 550*- 800 |
| 55 | 750*- 1000 |
| 60 | 1000*- 1250 |
| 65 | 1000*- 1250 |

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSE PROXIMITY OF DRIVEWAYS, BRIDGES, SIDEROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.



GENERAL NOTES

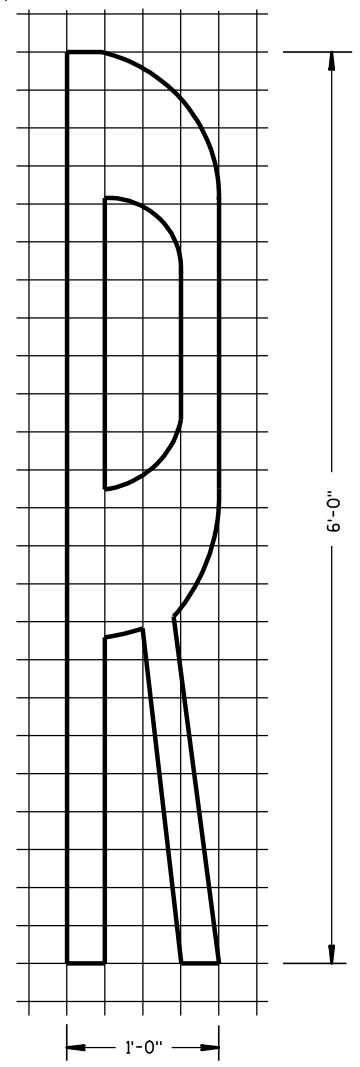
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A THREE-LANE ROADWAY SHOULD BE MARKED WITH A CENTERLINE FOR TWO-LANE APPROACH OPERATION ON THE APPROACH TO A CROSSING.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE. ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" (ADOPTED BY THE FEDERAL HIGHWAY ADMINISTRATION).

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

- ① A PORTION OF THE PAVEMENT MARKING SYMBOL SHOULD BE DIRECTLY OPPOSITE THE ADVANCE WARNING SIGN (W10-1).
- ② MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.
- ③ REFLECTIVE WHITE.
- ④ REFLECTIVE YELLOW 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.
- ⑤ TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- ⑥ FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.




**SIGNING AND PAVEMENT MARKING
DETAILS FOR RAILROAD-HIGHWAY
GRADE CROSSINGS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION


APPROVED
1-9-2012 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA

TWO-LANE ROADWAY


SYMBOLS



WORK AREA



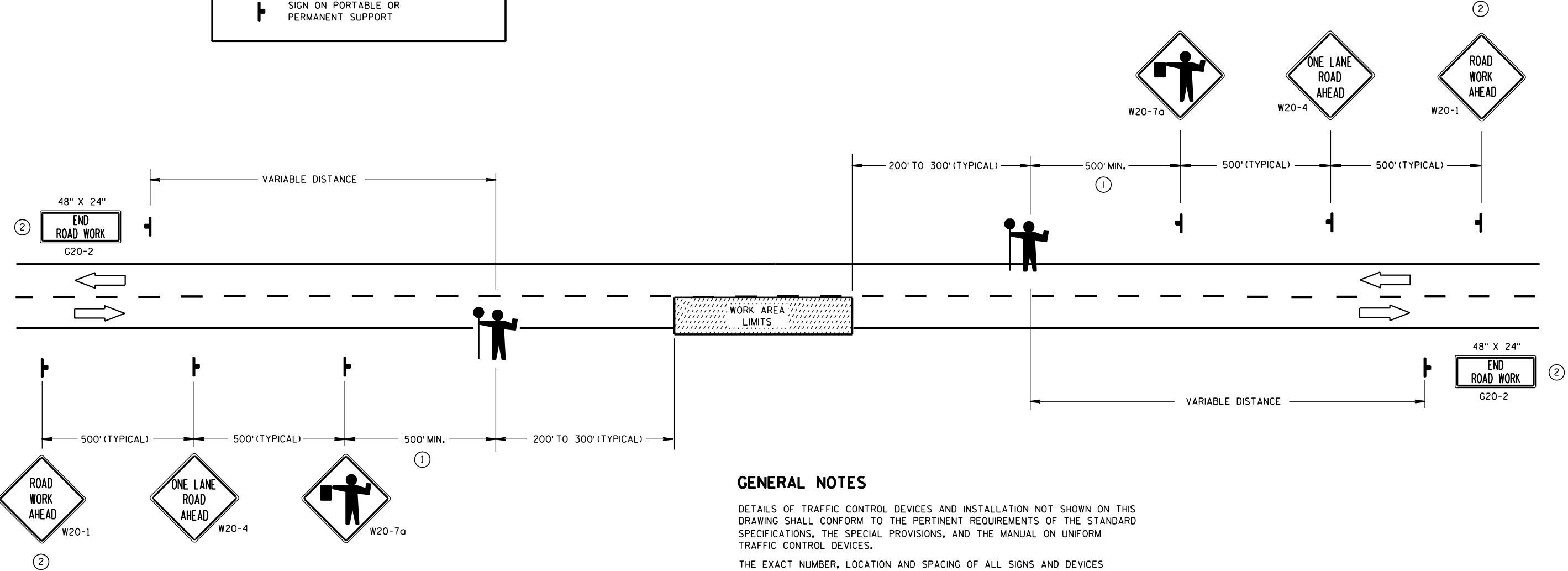
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



SIGN ON PORTABLE OR PERMANENT SUPPORT



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



GENERAL NOTES

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

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

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

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/5/06
DATE

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN

FHWA

GENERAL NOTES

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

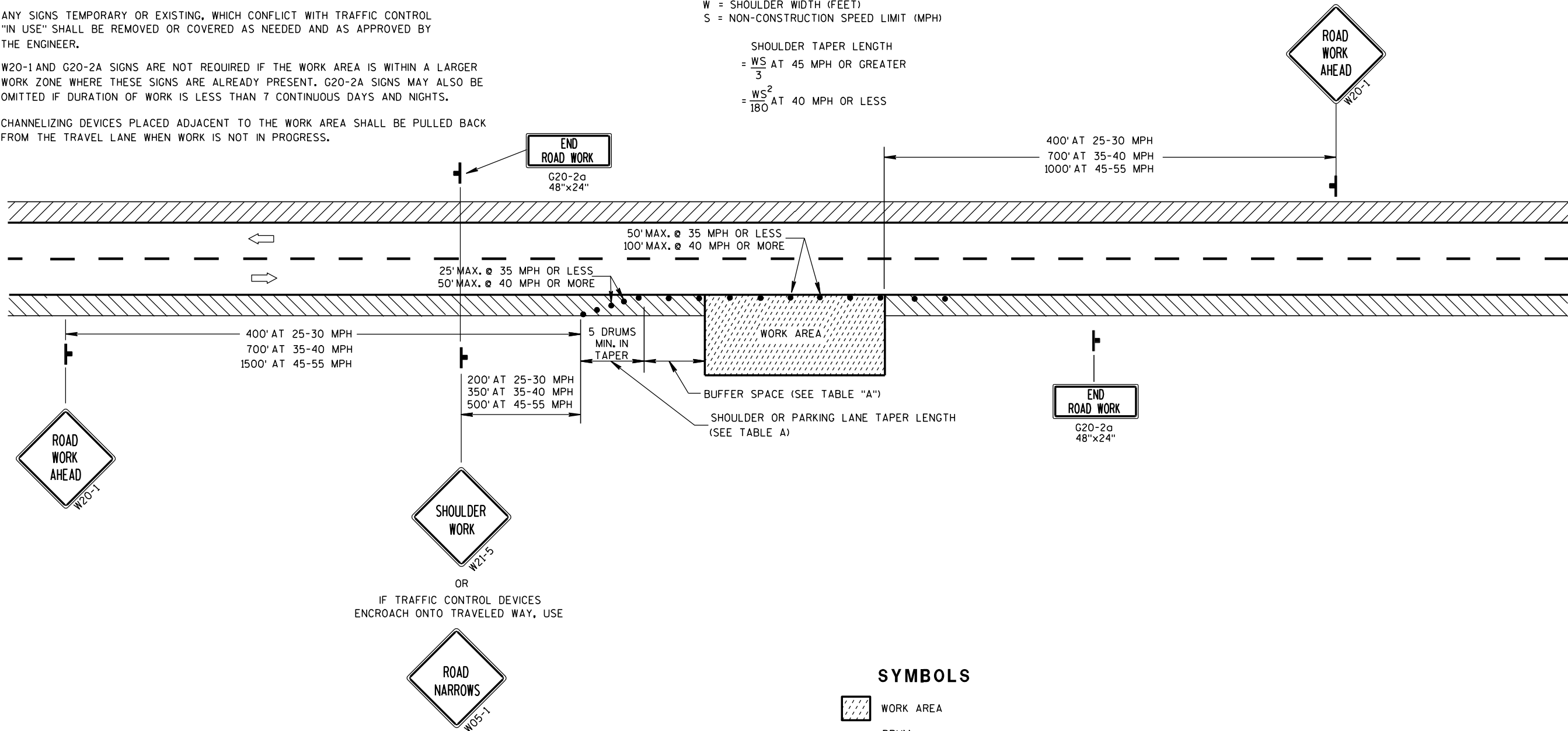
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

| SHOULDER TAPER LENGTH (FEET) | | | | | BUFFER SPACE (FEET) |
|------------------------------|----|-----|-----|-----|---------------------|
| S \ W | 4 | 6 | 8 | 10 | |
| 30 | 20 | 30 | 40 | 50 | 85 |
| 35 | 30 | 45 | 55 | 70 | 120 |
| 40 | 40 | 55 | 75 | 90 | 170 |
| 45 | 60 | 90 | 120 | 150 | 220 |
| 50 | 70 | 100 | 135 | 170 | 280 |
| 55 | 75 | 110 | 150 | 185 | 335 |

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
= $\frac{WS}{3}$ AT 45 MPH OR GREATER
= $\frac{WS^2}{180}$ AT 40 MPH OR LESS



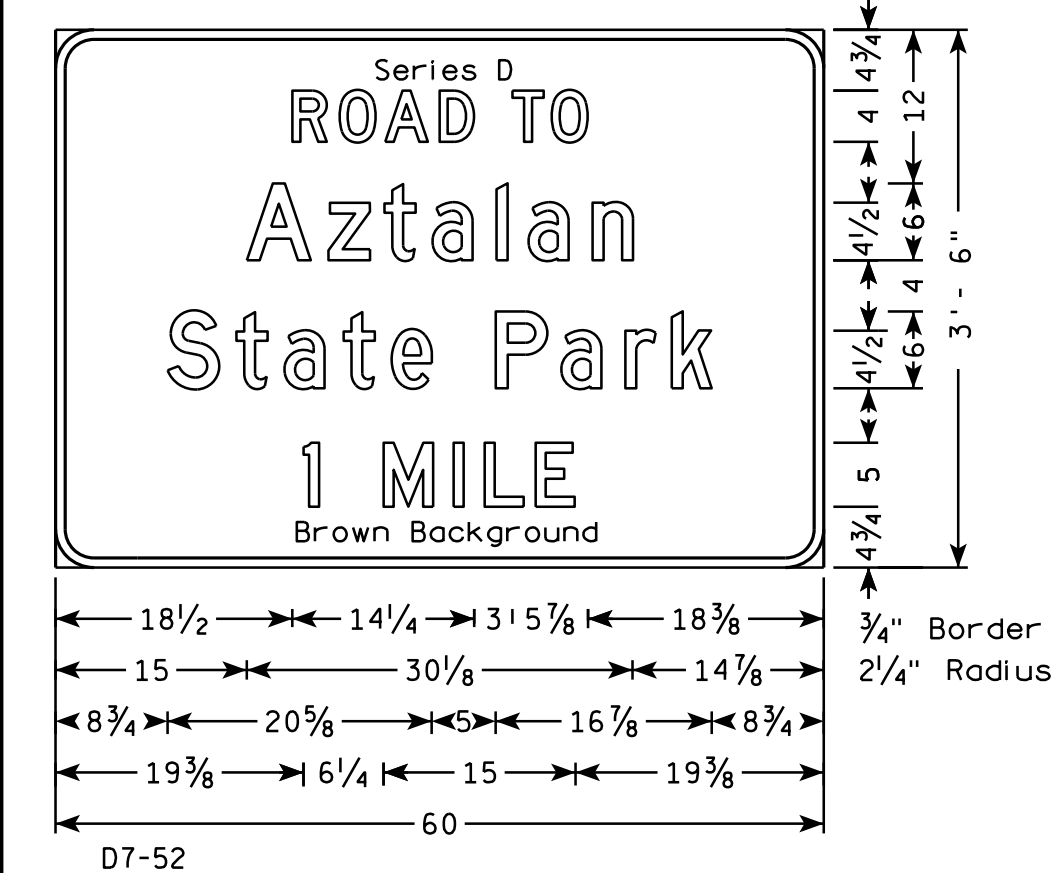
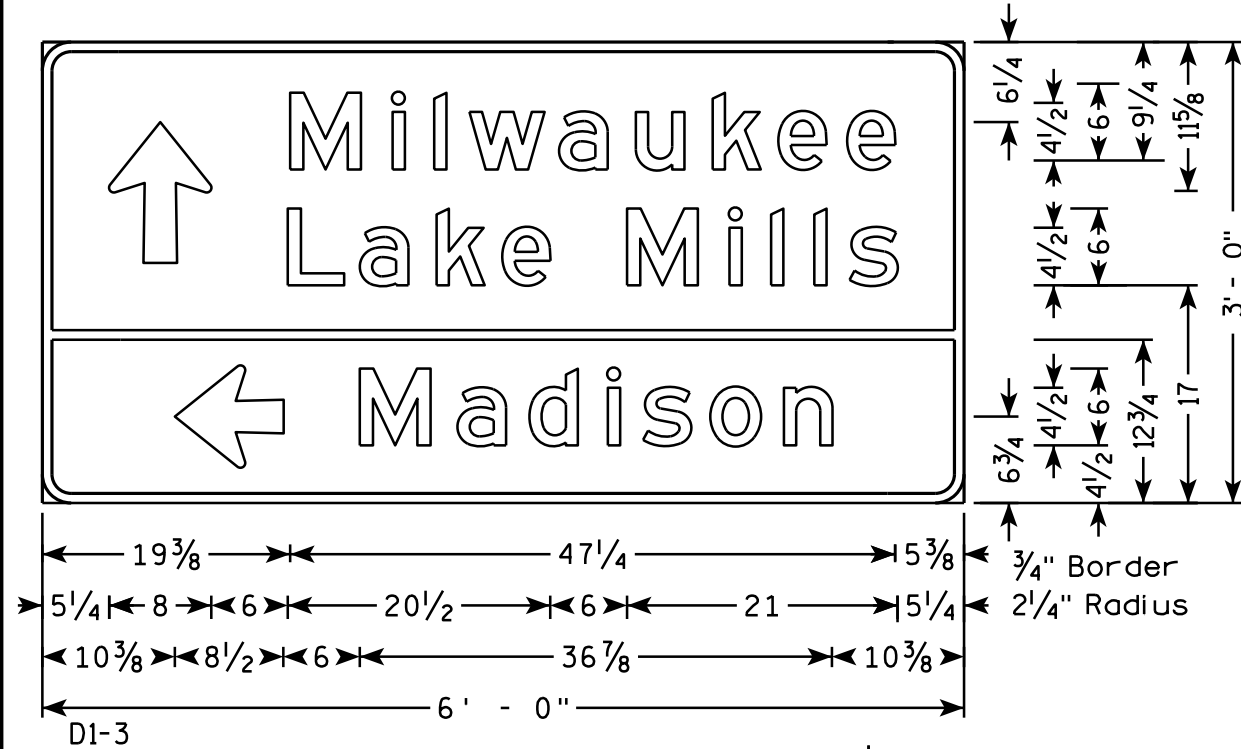
SYMBOLS

- WORK AREA
- DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL,
WORK ON SHOULDER OR
PARKING LANE,
UNDIVIDED ROADWAY

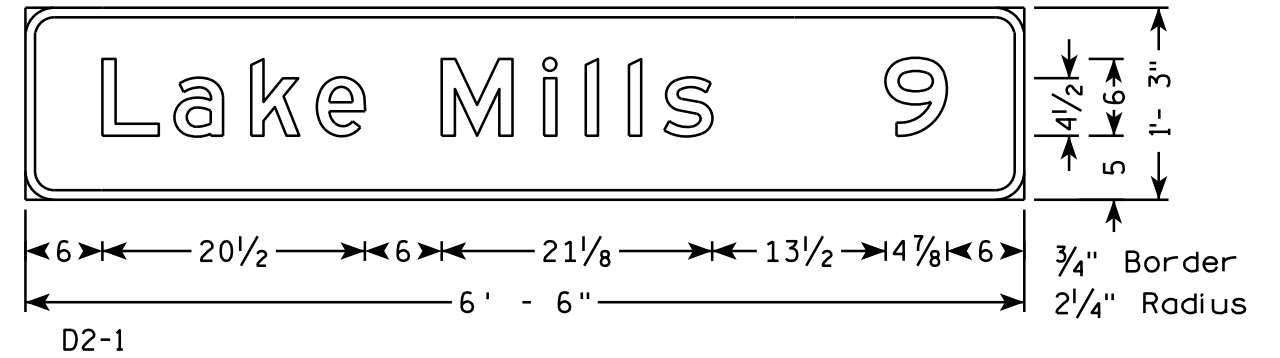
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 /S/ Chester J. Spang
DATE CHIEF SIGNS AND MARKING ENGINEER
FHWA

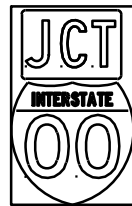


NOTES

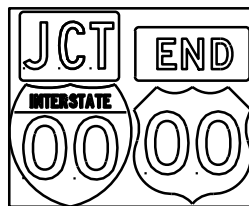
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green except as noted
Message - White
3. Message Series - E except as noted



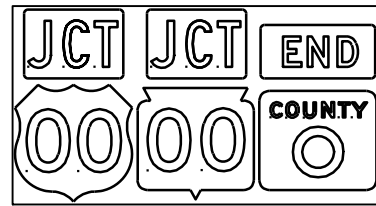
TYPICAL ASSEMBLIES



J1-1



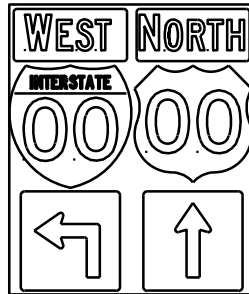
J1-2



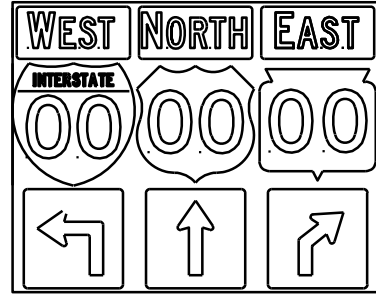
J1-3



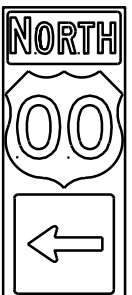
J2-1



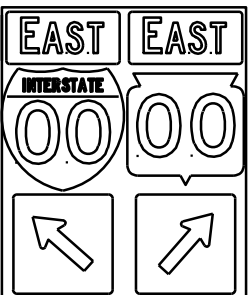
J2-2



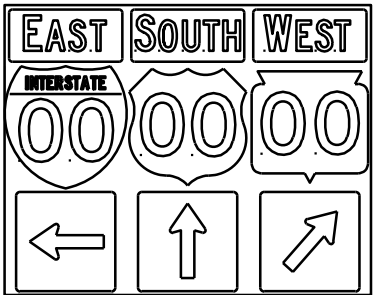
J2-3



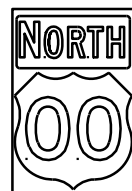
J3-1



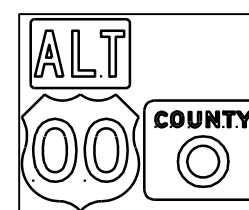
J3-2



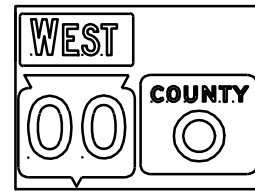
J3-3



J4-1



J4-2

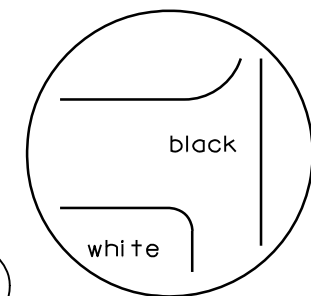
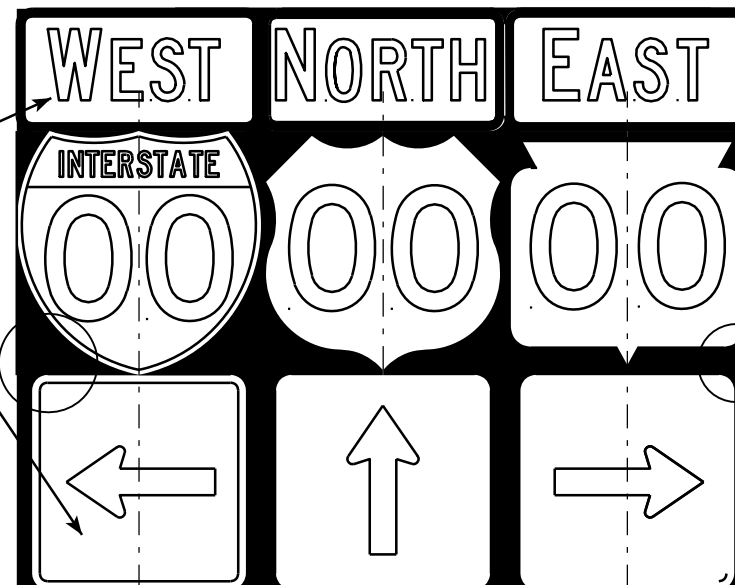
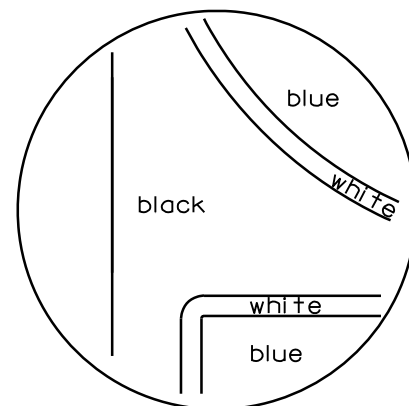


J4-2

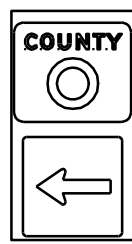


JV

[blue background with interstate]



[black background]



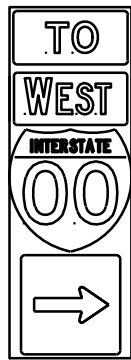
J13-1



J12-1



J32-1



J33-1



J23-1



J22-1

NOTES

- Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Black Non-reflective
Message - see Note 5
- Message Series - See Note 5
- Corners shall be square since base material is plywood.
- The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
- Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
- Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
- Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
- Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.

ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

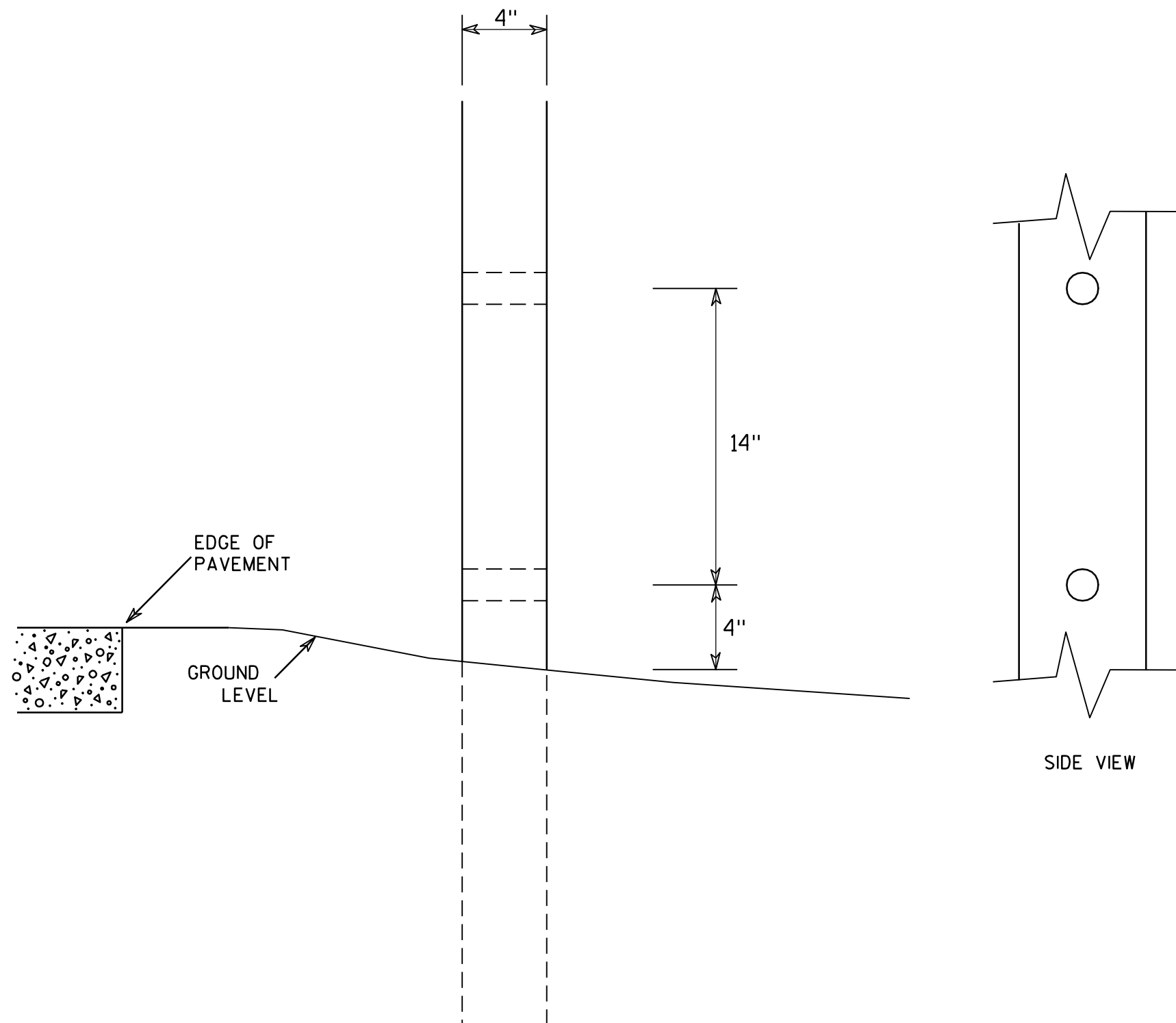
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 10/21/09 PLATE NO. A2-1S.6

PROJECT NO:

SHEET NO:

E

7



GENERAL NOTES

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

7

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:

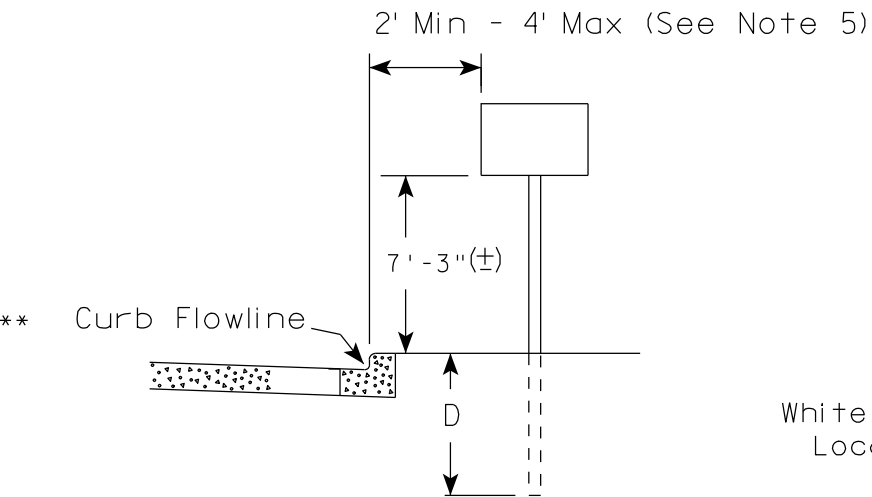
HWY:

COUNTY:

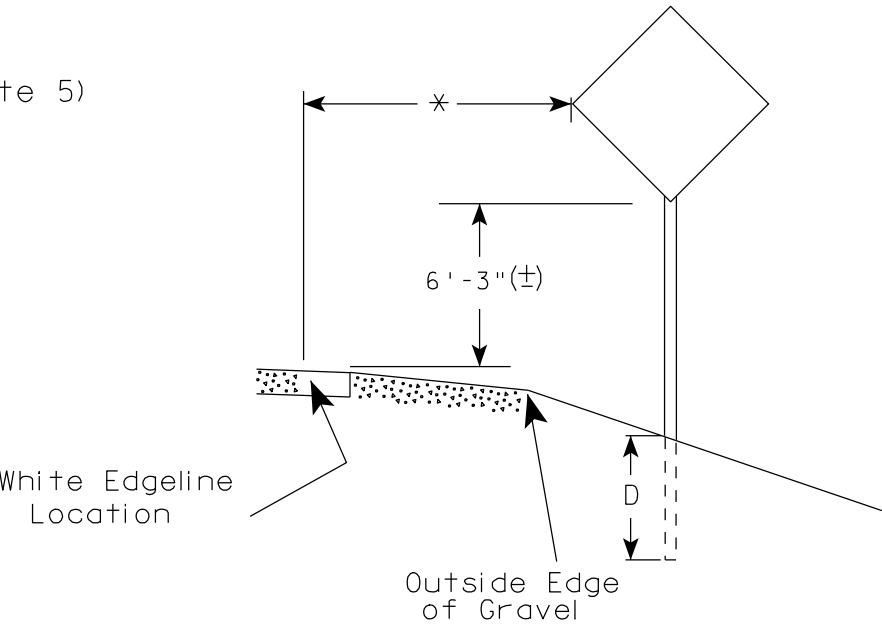
SHEET NO:

E

URBAN AREA



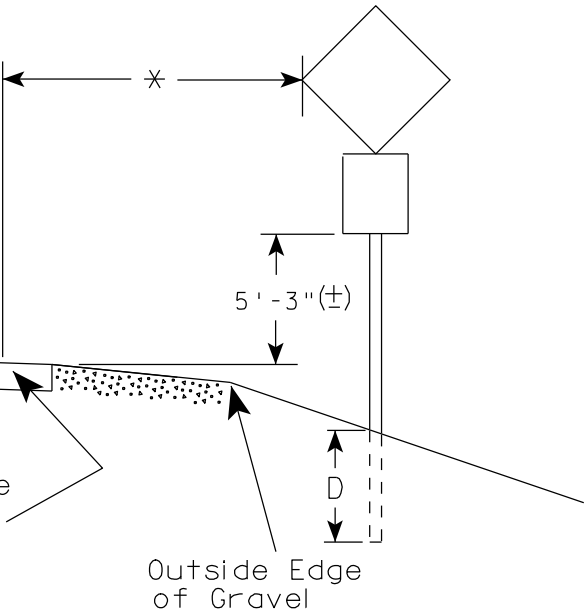
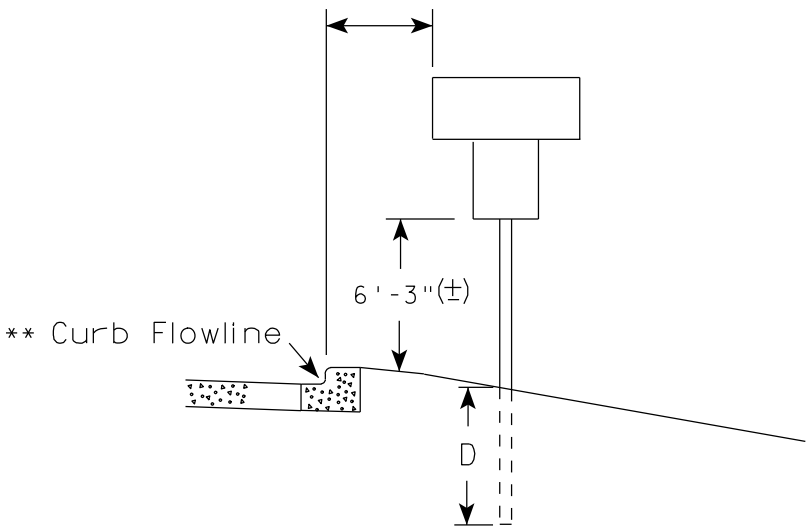
RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

2' Min - 4' Max (See Note 5)



POST EMBEDMENT DEPTH

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

* * The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-3.16

GENERAL NOTES

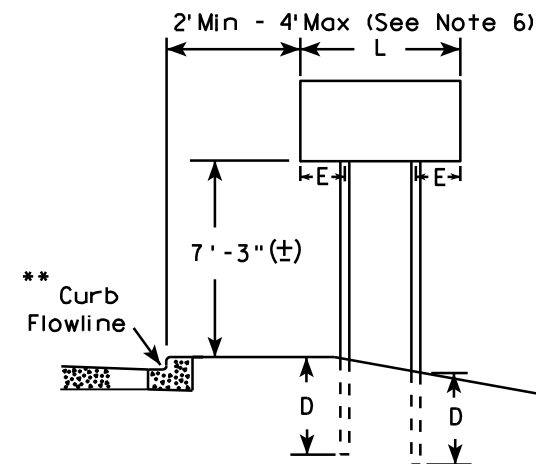
- For multiple post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
- The (±) tolerance for mounting height is 3 inches.
- Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
- The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

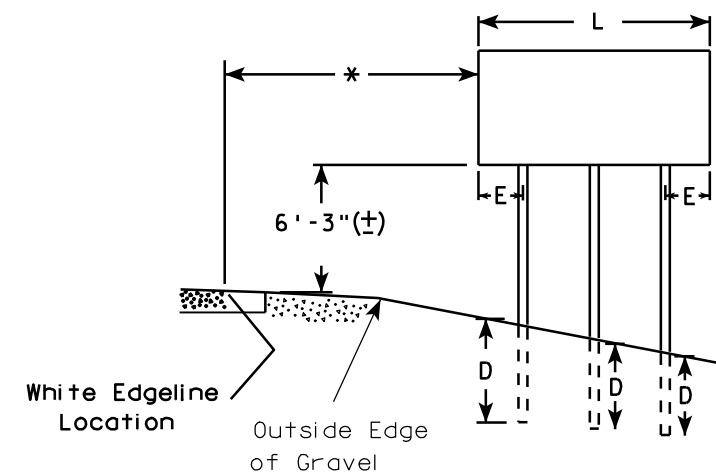
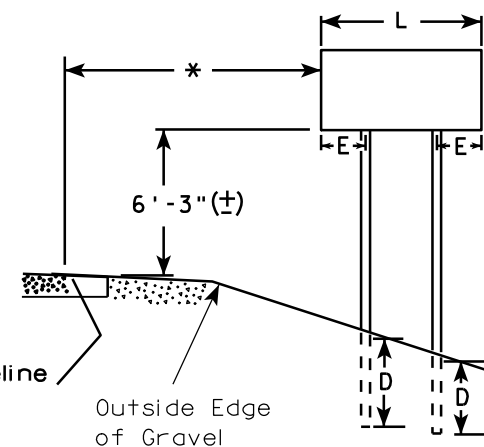
** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width or 20 S.F. or less in area.

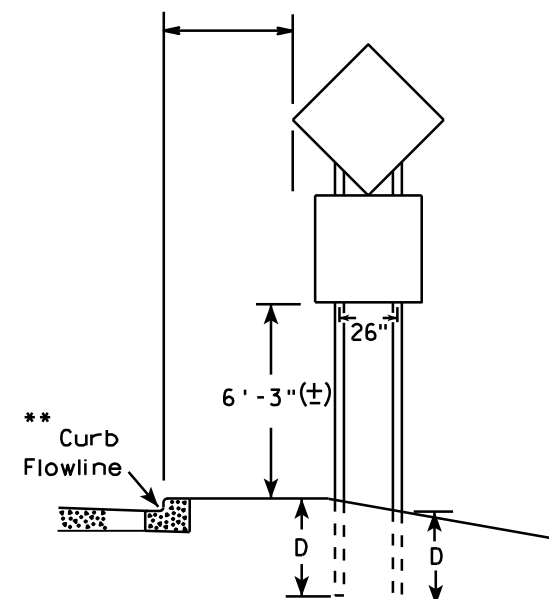
URBAN AREA



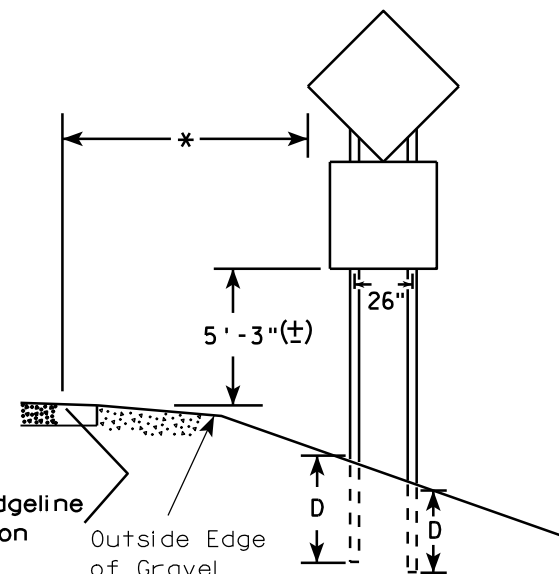
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

| SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED) | |
|---|-----|
| L | E |
| Greater than 48" Less than 60" | 12" |
| 60" to 120" | L/5 |

| SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED) | |
|---|-----|
| L | E |
| Greater than 120" less than 168" | 12" |

| SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED) | |
|--|-----|
| L | E |
| 168" and greater | 12" |

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-4.11

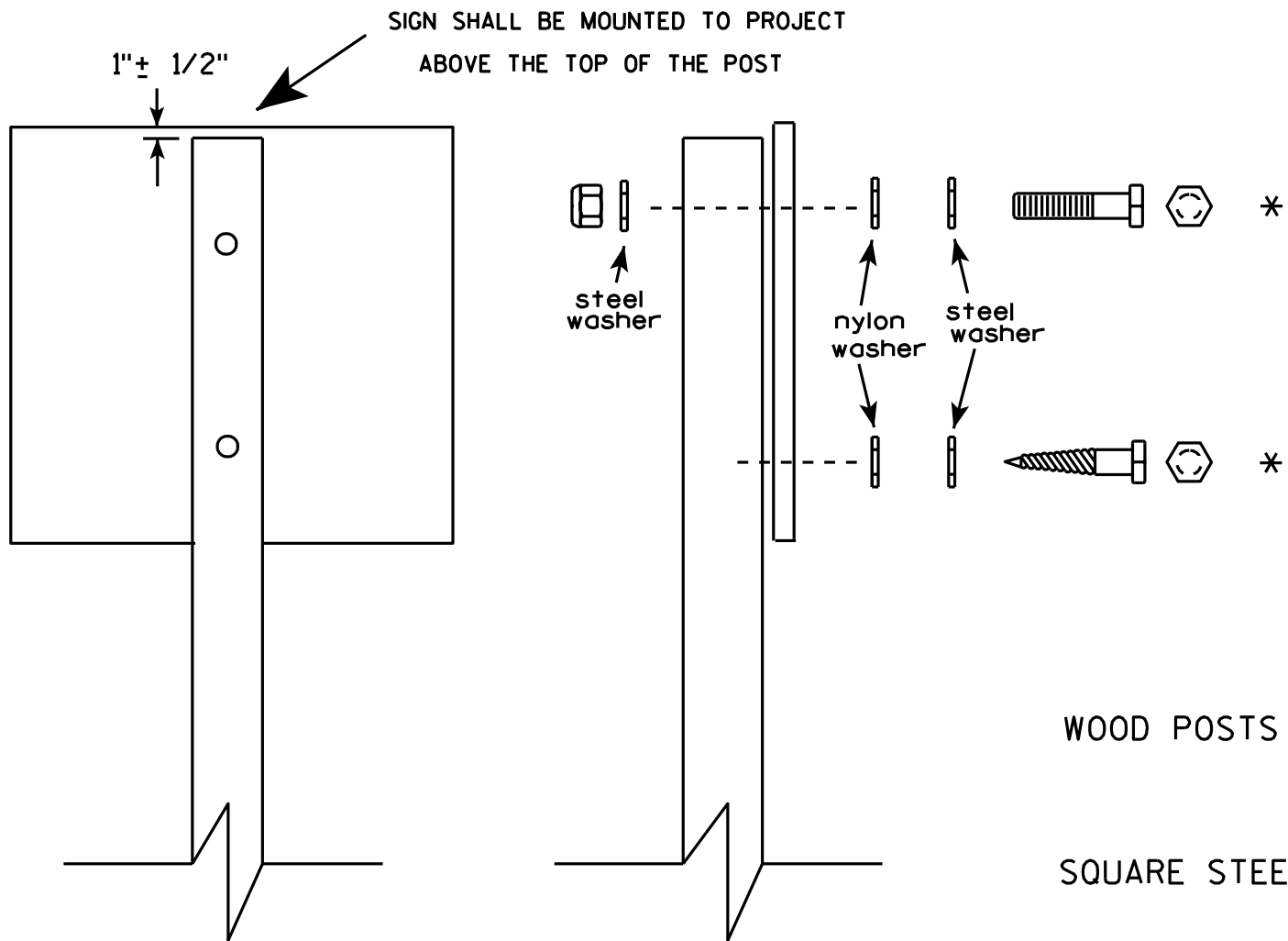
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

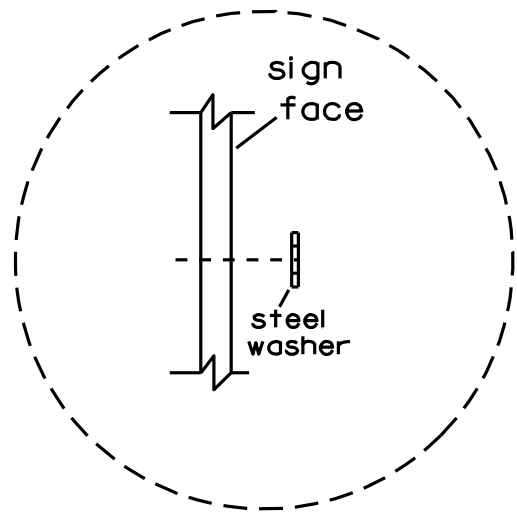


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" X 3"
- MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
- RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
- O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
- 1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.

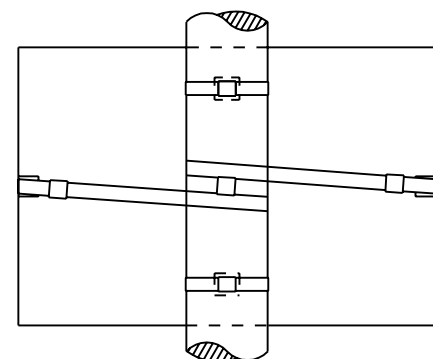
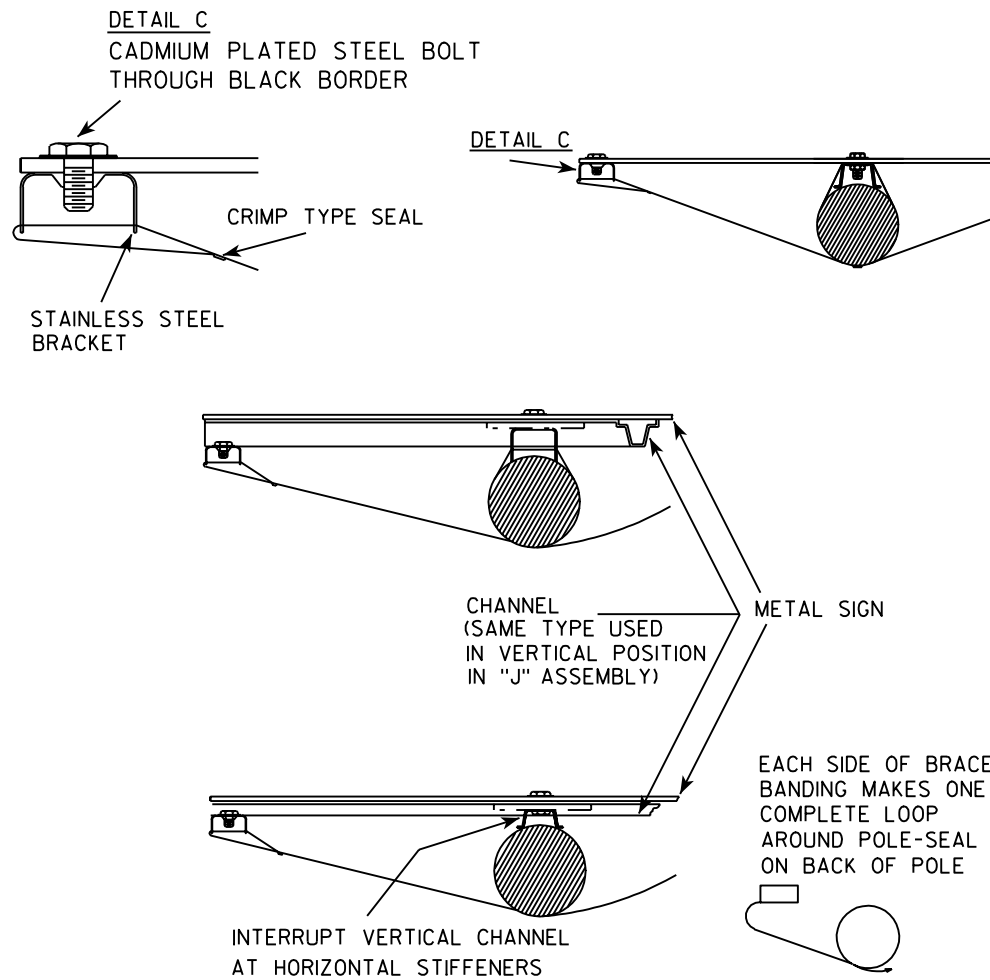


Washer Placement when Sign Has Other Than Type H or Type F Face

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

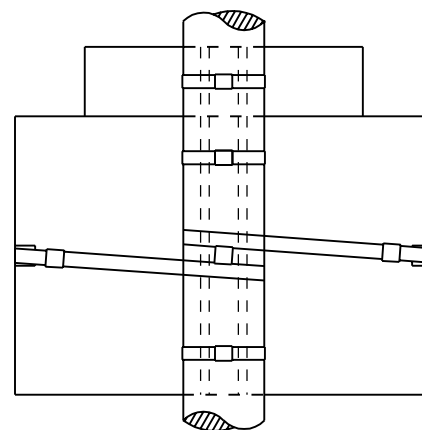
| | |
|----------------------------------|---|
| ATTACHMENT OF SIGNS TO POSTS | |
| WISCONSIN DEPT OF TRANSPORTATION | |
| APPROVED | <i>Matthew R. Rauch</i> For State Traffic Engineer |
| DATE 3/23/10 | PLATE NO. A4-8.7 |

BRACE BANDING



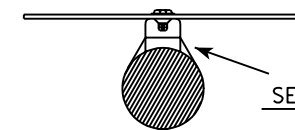
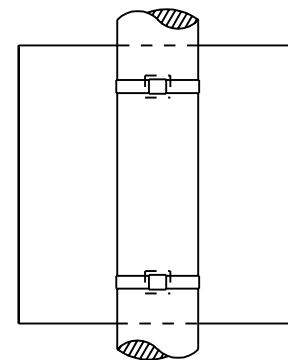
BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY
BUT NOT SO TIGHT AS TO APPRECIABLY
CURVE FACE OF SIGN.



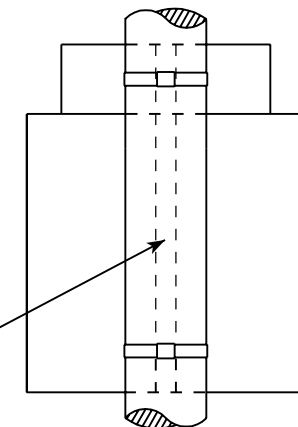
BRACKET BANDING

SINGLE SIGN

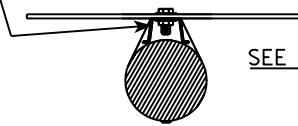


SEE DETAIL A

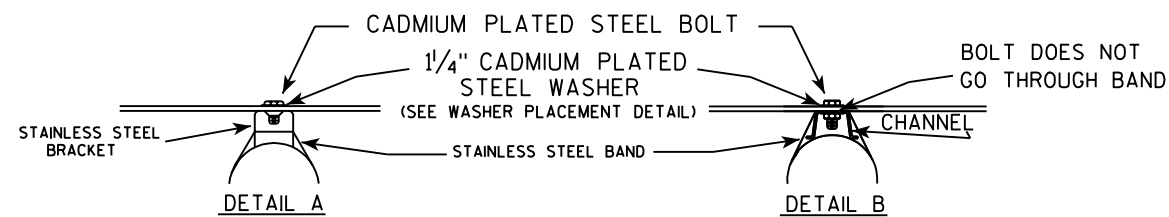
"J" ASSEMBLY



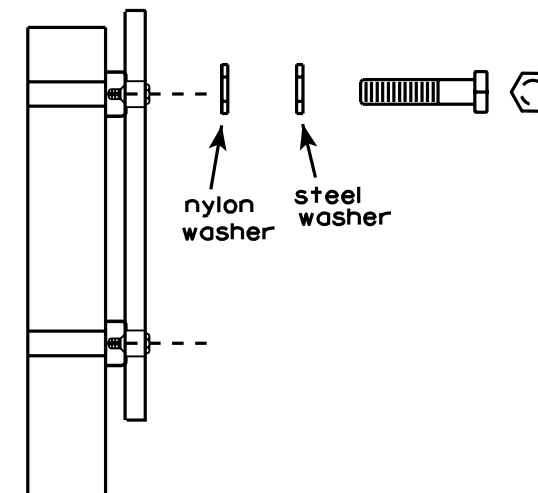
CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



SEE DETAIL B



WASHER PLACEMENT



WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

STANDARD SIGN SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2

PROJECT NO:

HWY:

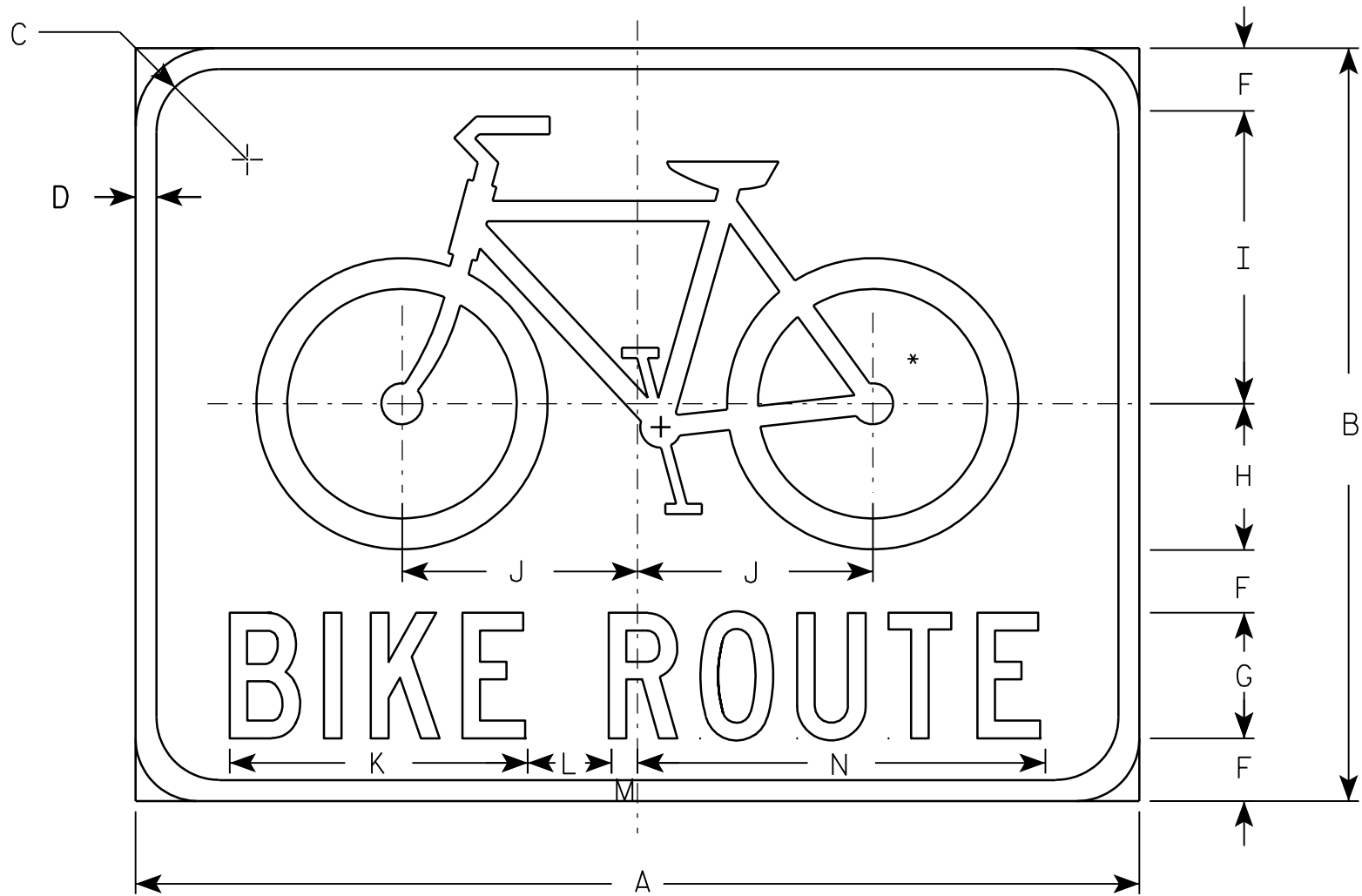
COUNTY:

SHEET NO:

E

7

7



D11-1

Metric equivalent
for this sign is:

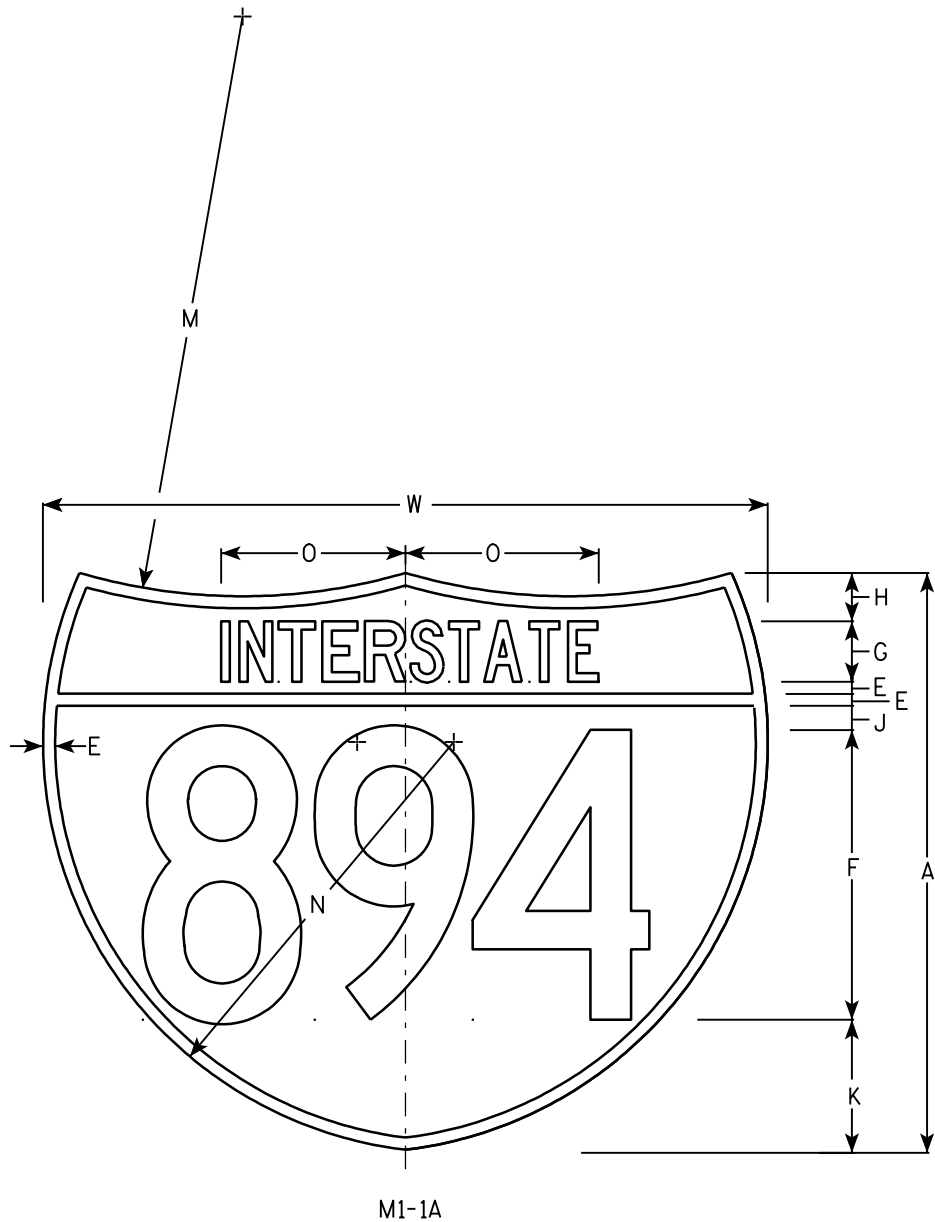
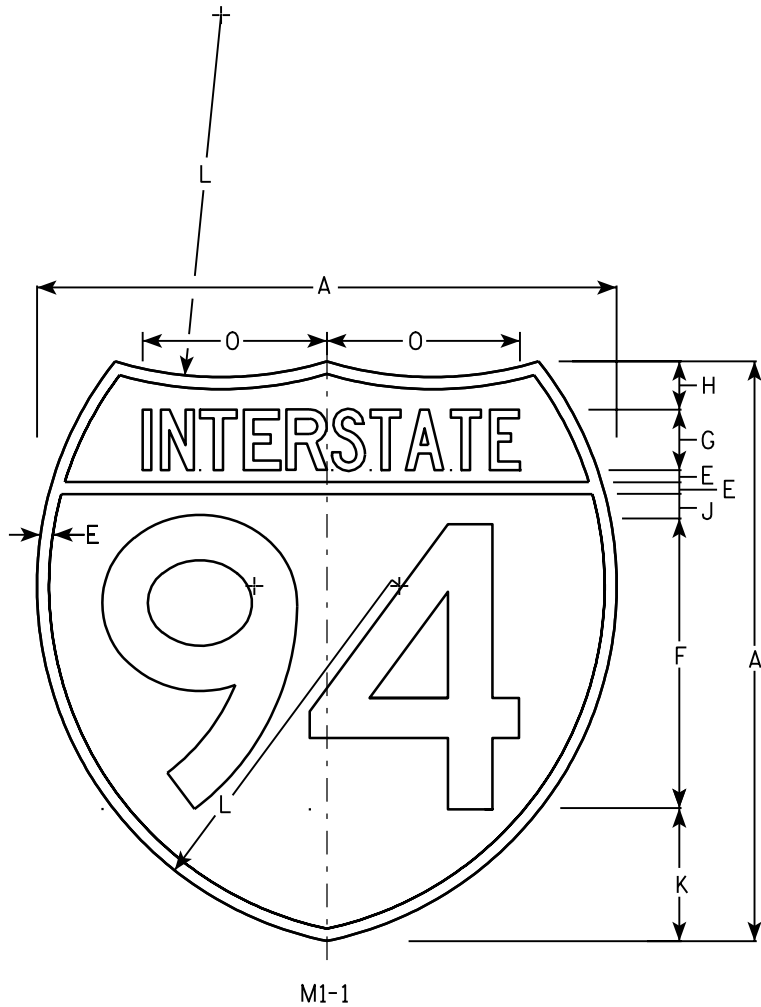
| SIZE | |
|------|-----------------|
| 1 | |
| 2 | 600 mm X 450 mm |
| 3 | 750 mm X 600 mm |
| 4 | |
| 5 | |

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m ² |
|------|----|----|-------|-----|---|-------|---|-------|-------|-------|-------|-------|-----|-------|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|------------------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 18 | 1 1/2 | 1/2 | | 1 1/2 | 3 | 3 1/2 | 7 | 5 5/8 | 7 1/8 | 2 | 5/8 | 9 3/4 | | | | | | | | | | | | | 3.0 | 0.27 |
| 3 | 30 | 24 | 1 1/4 | 5/8 | | 2 | 4 | 4 3/4 | 9 1/4 | 7 1/2 | 9 1/2 | 2 5/8 | 7/8 | 13 | | | | | | | | | | | | | 5.0 | 0.45 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

NOTES

1. Sign is Type II - Type H Reflective - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - GREEN
Message - WHITE
3. Message Series - C
4. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.

* See W11-1 for symbol design



NOTES

- 1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Top Red - Bottom Blue (See Note 6)
Message - White - See Note 6
- 3. Message Series - See note 5
- 4. Substitute appropriate numerals & adjust spacing as per plate A10-1.
- 5. M1-1 - Numerals - D
Interstate - C
M1-1A - All copy - C
- 6. Permanent Signs
Message - Type H Reflective
Detour or other temporary signs
Background - Reflective
Message - Reflective

Metric equivalent for these signs are:

| SIZE | M1 - 1 | SIZE | M1 - 1A |
|------|-----------------|------|------------------|
| 1 | | | |
| 2 | 600 mm X 600 mm | 2 | 600 mm X 750 mm |
| 3 | 900 mm X 900 mm | 3 | 900 mm X 1125 mm |
| 4 | 900 mm X 900 mm | 4 | 900 mm X 1125 mm |
| 5 | 900 mm X 900 mm | 5 | 900 mm X 1125 mm |

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Area sq. ft. | Area sq. ft. | Area m ² | Area m ² |
|------|----|---|---|---|-----|----|-------|---|---|-------|-------|--------|----|--------|--------|---|---|---|---|---|---|---|----|---|---|-----------------|-----------------|------------------------|------------------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | | | | 1/2 | 12 | 2 1/2 | 2 | | 1 | 5 1/2 | 15 | 24 | 17 | 7 7/8 | | | | | | | | 30 | | | 3.13 | 3.91 | .36 | .46 |
| 3 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 | .81 | 1.05 |
| 4 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 | .81 | 1.05 |
| 5 | 36 | | | | 3/4 | 18 | 3 3/4 | 3 | | 1 1/2 | 8 1/4 | 22 1/2 | 36 | 25 1/2 | 11 3/4 | | | | | | | | 45 | | | 7.03 | 8.79 | .81 | 1.05 |

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

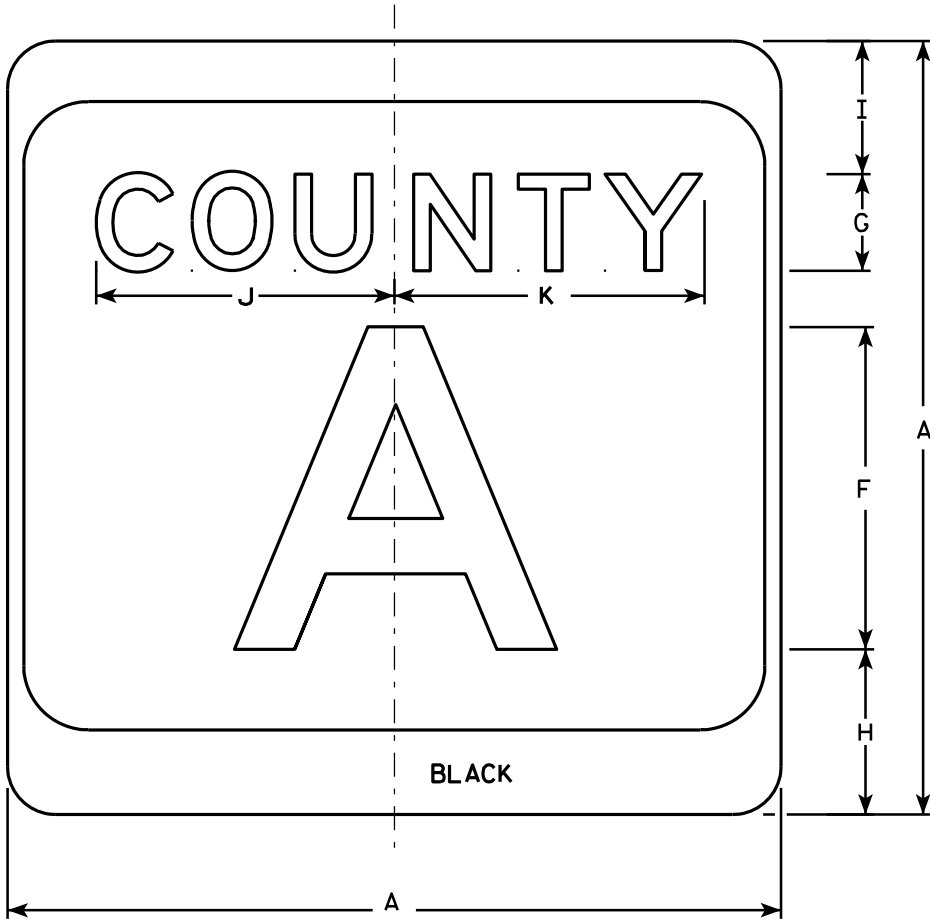
E

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

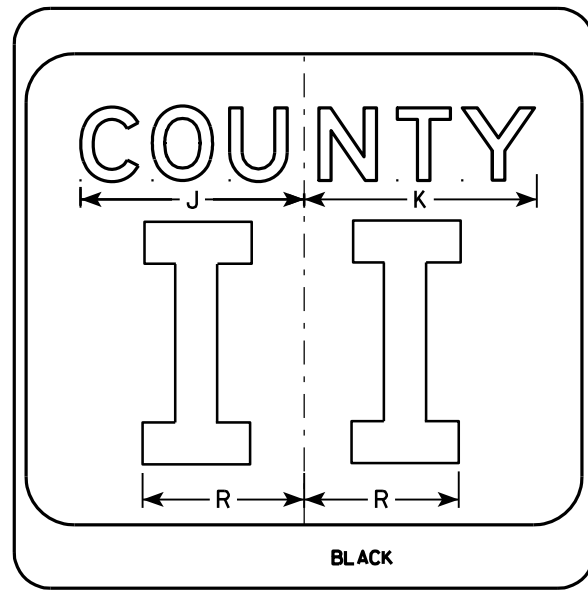
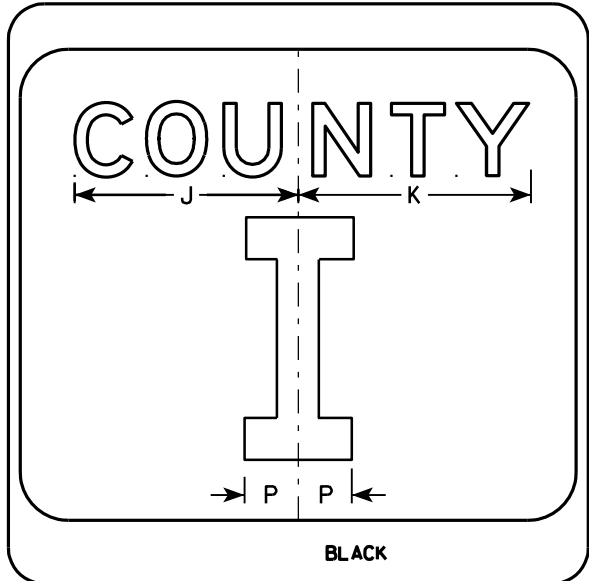
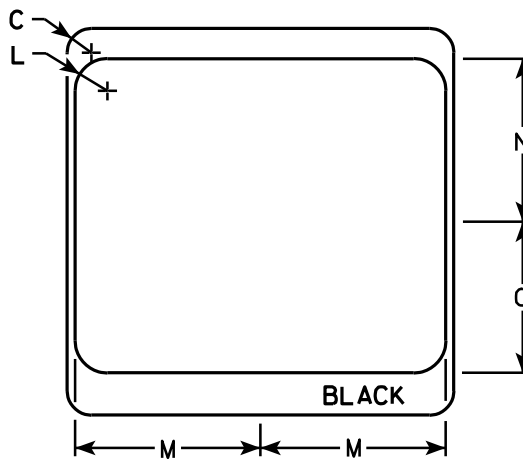
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8



M1-5A



NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 7
Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

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

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO:

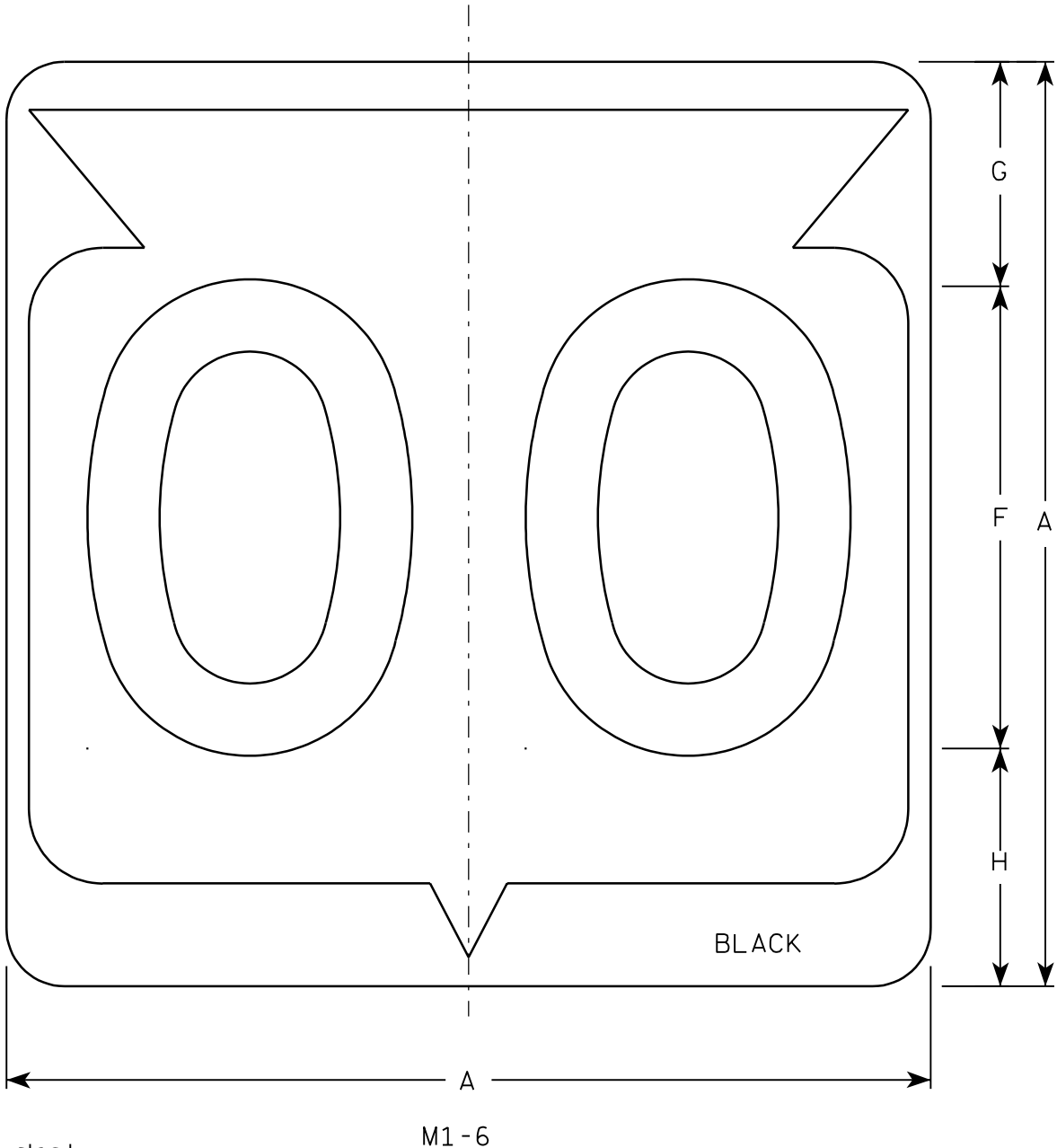
HWY:

COUNTY:

SHEET NO:

E

7



Metric equivalent
for this sign is:

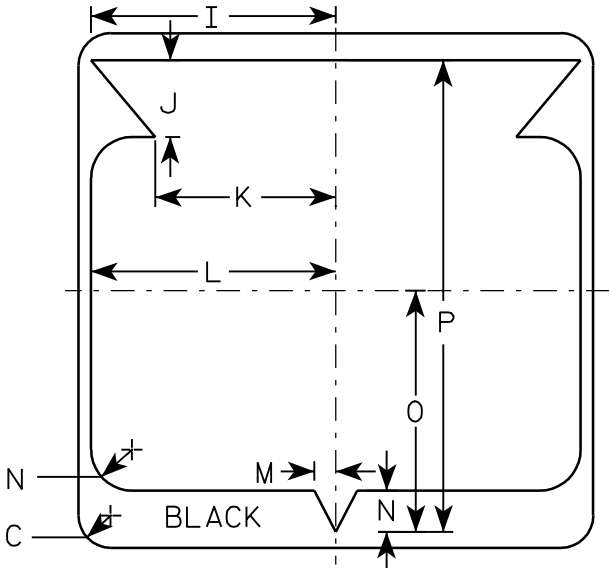
| SIZE | |
|------|-----------------|
| 1 | |
| 2 | 600 mm X 600 mm |
| 3 | 900 mm X 900 mm |
| 4 | 900 mm X 900 mm |
| 5 | 900 mm X 900 mm |

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m ² |
|------|----|---|-------|---|---|----|-------|-------|--------|-------|--------|--------|-------|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|-----------------|------------------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | | 1 1/2 | | | 12 | 5 1/2 | 6 1/2 | 10 1/4 | 2 1/2 | 8 7/8 | 11 1/2 | 1 | 1 7/8 | 11 1/4 | 21 7/8 | | | | | | | | | | | 4.0 | .36 |
| 3 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 | .81 |
| 4 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 | .81 |
| 5 | 36 | | 2 1/4 | | | 18 | 8 3/4 | 9 1/4 | 15 3/8 | 5 3/8 | 12 5/8 | 17 1/8 | 1 1/2 | 2 7/8 | 16 7/8 | 33 | | | | | | | | | | | 9.0 | .81 |

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

NOTES

- Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White & Black - See Note 6
Message - Black
- Message Series - See note 5
- 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.
- Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
- Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

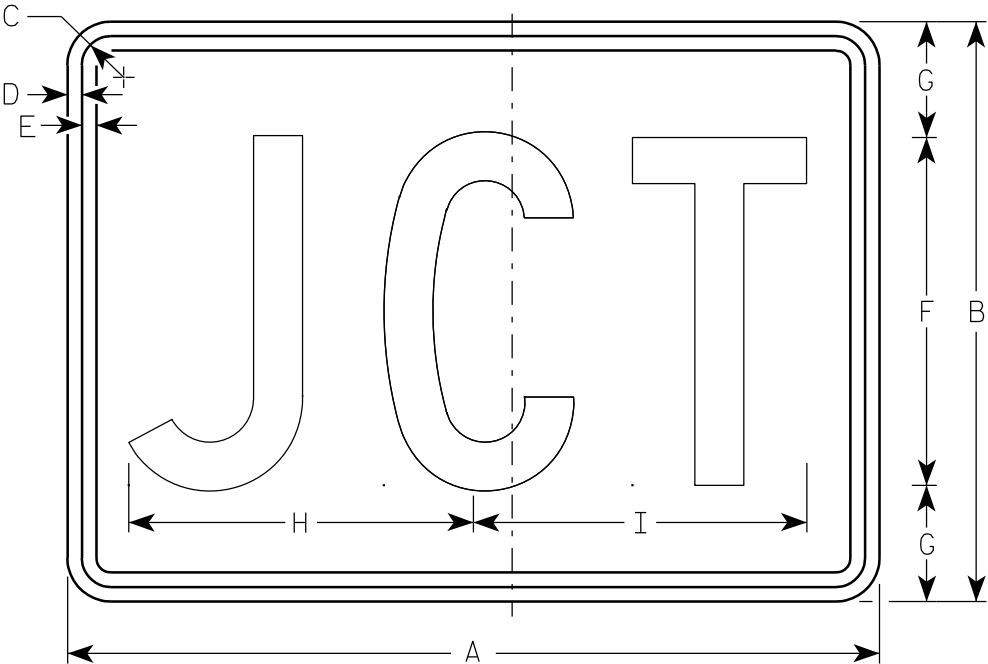


STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chester J. Spang
for State Traffic Engineer
DATE 3/20/02 PLATE NO. M1-6.9

7



M2-1
MK2-1
MM2-1
MR2-1

Metric equivalent
for this sign is:

| SIZE | |
|------|-----------------|
| 1 | |
| 2 | 525 mm X 375 mm |
| 3 | 750 mm X 525 mm |
| 4 | 750 mm X 525 mm |
| 5 | 750 mm X 525 mm |

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m ² |
|------|----|----|-------|-----|-----|----|---|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-------|-----|-----------------|------------------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | 15 | 1 1/8 | 3/8 | 3/8 | 9 | 3 | 8 7/8 | 8 5/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 2.20 | 0.20 |
| 3 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 | 0.20 |
| 4 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 | 0.20 |
| 5 | 30 | 21 | 1 1/8 | 3/8 | 3/8 | 13 | 4 | 12 7/8 | 12 3/8 | | | | | | | | | | | | | | | | 1 1/2 | 1/2 | 4.40 | 0.20 |

PROJECT NO:

HWY:

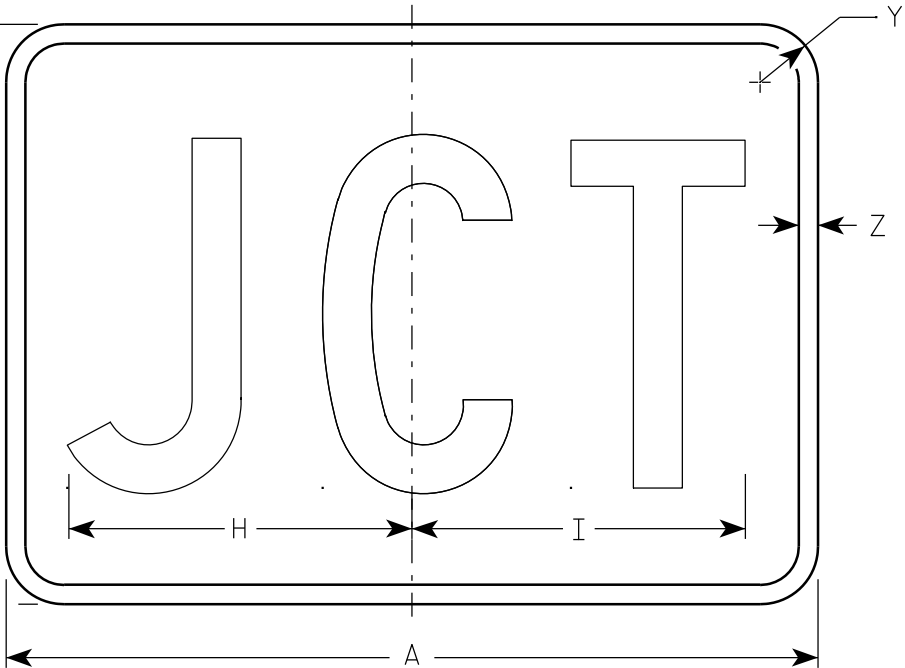
COUNTY:

SHEET NO:

E

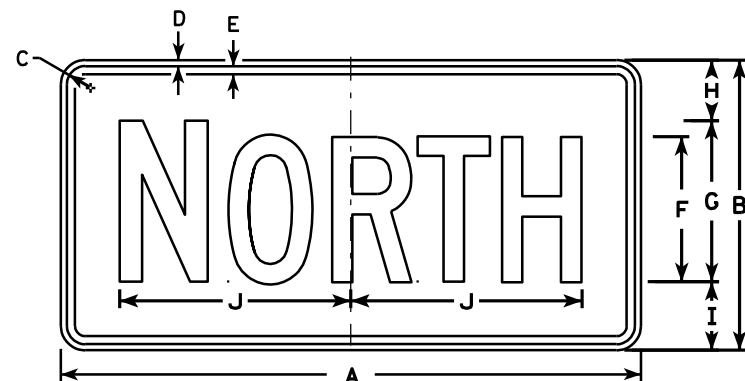
NOTES

- Sign is Type II - See Note 5 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 5
Message - See note 5
- Message Series - C
- 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.
- M2-1 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB2-1 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG2-1 Background - Green
Message - White - Type H Reflective
MK2-1 Background - Green
Message - White - Type H Reflective
MM2-1 Background - White - Type H Reflective
Message - Green
MN2-1 Background - Brown
Message - White - Type H Reflective
MR2-1 Background - Brown
Message - Yellow - Type H Reflective



MB2-1
MG2-1
MN2-1

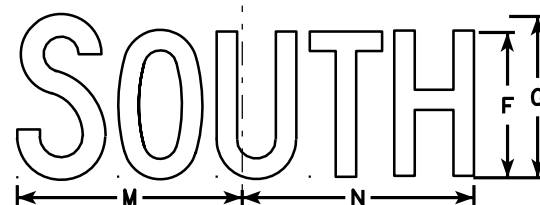
7



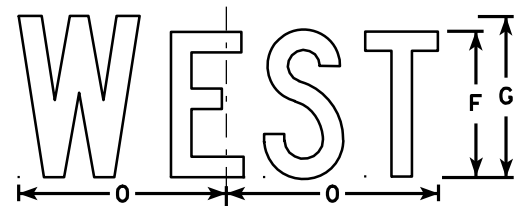
M3-1
MK3-1
M03-1



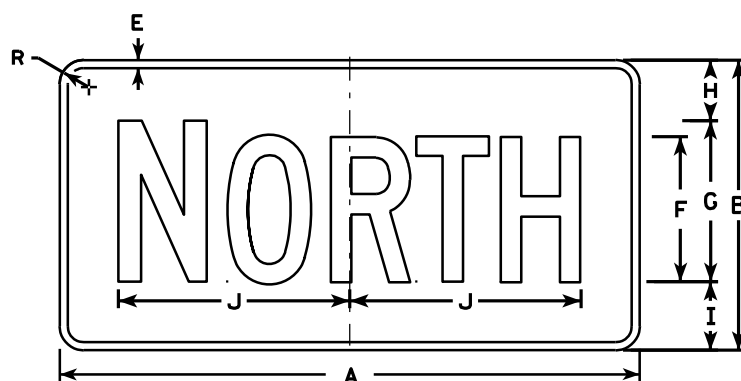
M3-2
MK3-2
M03-2



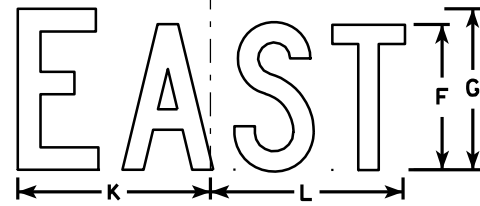
M3-3
MK3-3
M03-3



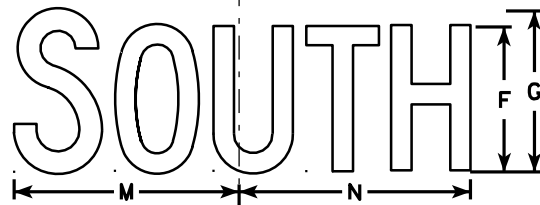
M3-4
MK3-4
M03-4



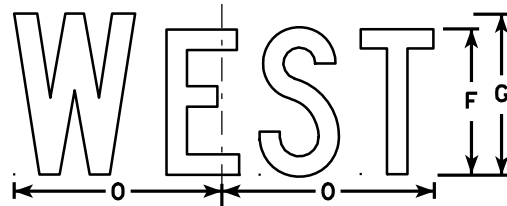
MB3-1
MG3-1
MM3-1
MN3-1



MB3-2
MG3-2
MM3-2
MN3-2



MB3-3
MG3-3
MM3-3
MN3-3



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective)
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White - Type H Reflective (Detour or temporary signs - Reflective)
MG3-1 thru MG3-4 Background - Green
Message - White - Type H Reflective
MK3-1 thru MK3-4 Background - Green
Message - White - Type H Reflective
MM3-1 thru MM3-4 Background - White - Type H Reflective
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White - Type H Reflective
M03-1 thru M03-4 Background - Orange - Reflective
Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|----|-------|-------|--------|-------|--------|--------|--------|-------|---|---|-------|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 6 | 7 | 2 1/4 | 2 3/4 | 10 1/4 | 7 7/8 | 8 3/8 | 10 1/4 | 9 3/4 | 8 3/4 | | | 1 1/2 | | | | | | | | | 2.00 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 4 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |
| 5 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 9 | 10 | 3 3/4 | 4 1/4 | 14 3/8 | 12 | 12 1/8 | 14 | 14 1/8 | 13 | | | 1 1/2 | | | | | | | | | 4.5 |

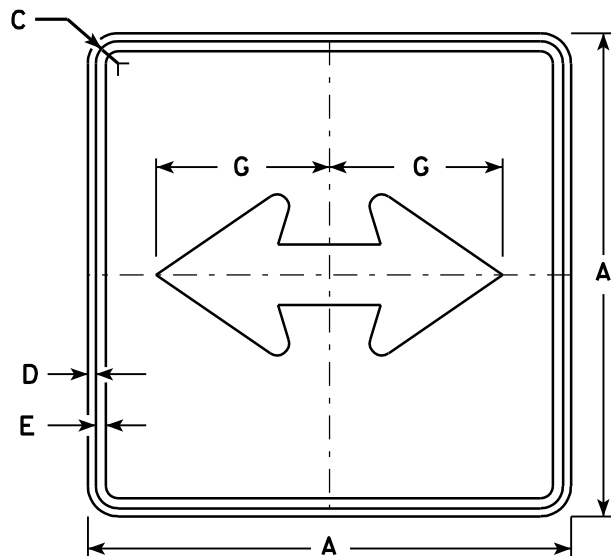
PROJECT NO: HWY: COUNTY: SHEET NO: E

STANDARD SIGNS M3-1 thru M3-4 SERIES

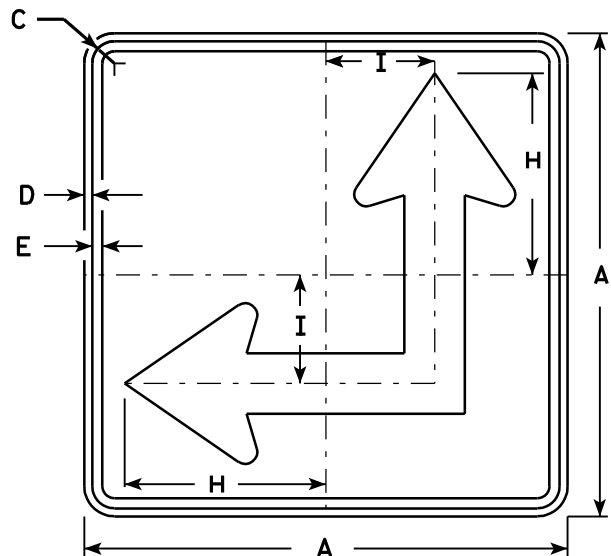
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

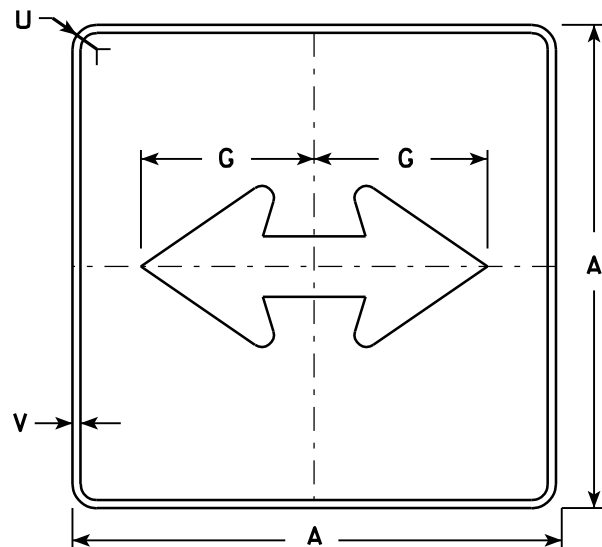
DATE 11/10/10 PLATE NO. M3-1.12



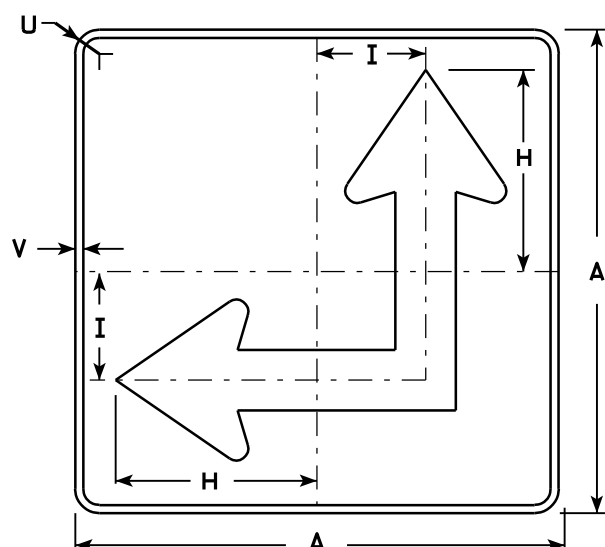
M6 - 4
MK6 - 4
MM6 - 4
MO6 - 4
MR6 - 4



M6 - 6
MK6 - 6
MM6 - 6
MO6 - 6
MR6 - 6



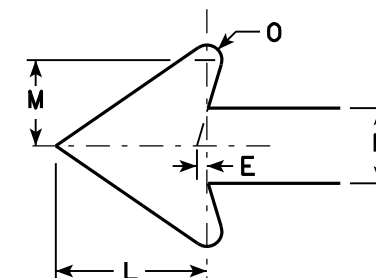
MB6 - 4
MG6 - 4
MN6 - 4



MB6 - 6
MG6 - 6
MN6 - 6

NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 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 - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG6-4 and MG6-6 Background - Green
Message - White - Type H Reflective
MK6-4 and MK6-6 Background - Green
Message - White - Type H Reflective
MM6-4 and MM6-6 Background - White - Type H Reflective
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White - Type H Reflective
MO6-4 and MO6-6 Background - Orange - Reflective
Message - Black
MR6-4 and MR6-6 Background - Brown
Message - Yellow - Type H Reflective
- M6-6R same as M6-6L except arrow points ahead and right.



Metric equivalent
for this sign is:

| SIZE | |
|------|-----------------|
| 1 | |
| 2 | 525 mm X 525 mm |
| 3 | 750 mm X 750 mm |
| 4 | 750 mm X 750 mm |
| 5 | 750 mm X 750 mm |

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. | Area m ² |
|------|----|---|-------|-----|-----|---|--------|--------|-------|---|---|-------|-------|-------|-----|---|---|---|---|---|-------|-----|---|---|---|---|-----------------|------------------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | | 1 1/8 | 3/8 | 3/8 | | 7 1/2 | 8 3/4 | 4 1/4 | | | 5 1/4 | 3 | 2 5/8 | 1/2 | | | | | | 1 1/2 | 1/2 | | | | | 3.06 | 0.28 |
| 3 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 | 0.56 |
| 4 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 | 0.56 |
| 5 | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 3/4 | 12 1/2 | 6 3/4 | | | 7 1/2 | 4 1/4 | 3 3/4 | 3/4 | | | | | | 1 7/8 | 1/2 | | | | | 6.25 | 0.56 |

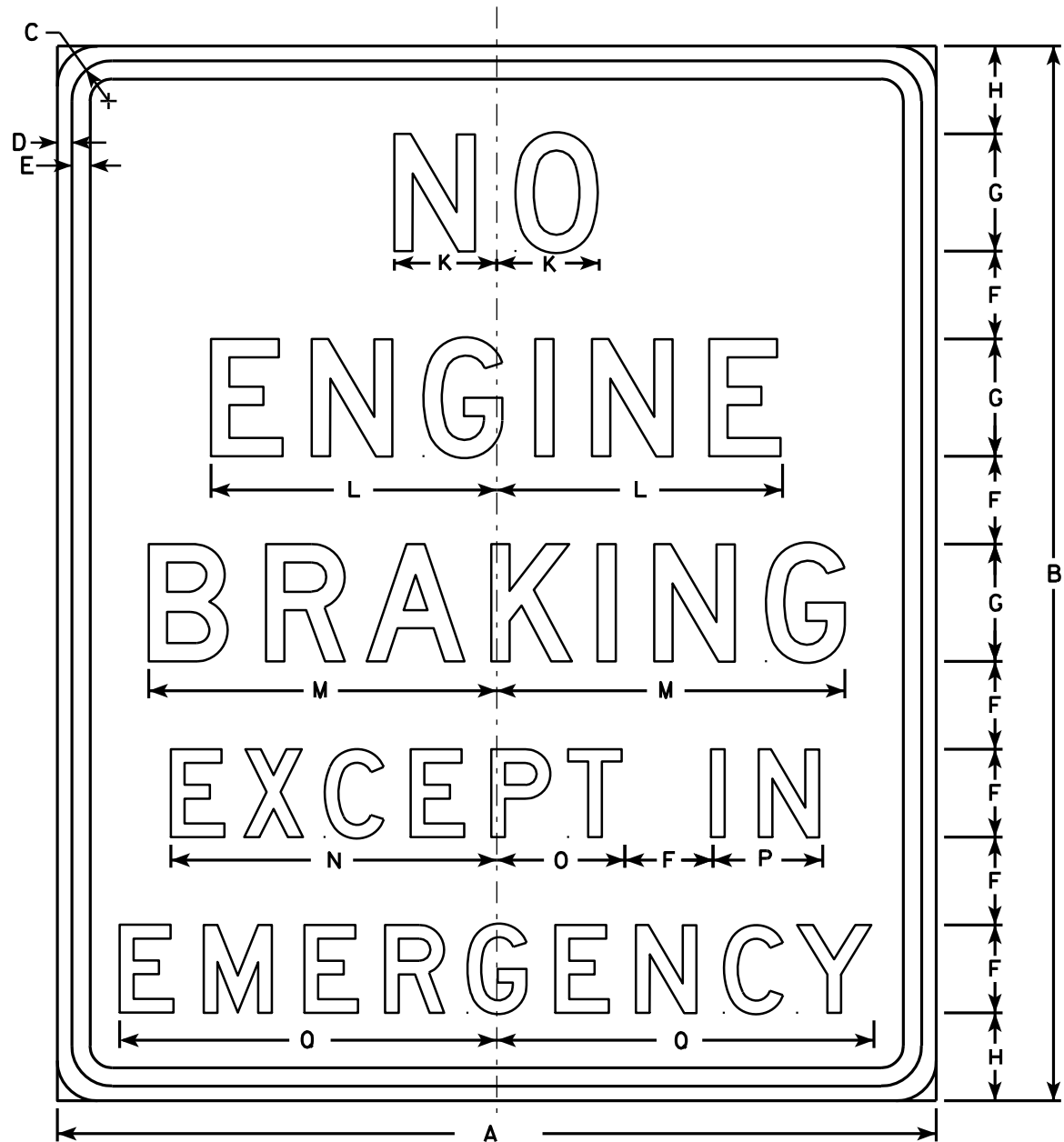
| | | | | |
|-------------|------|---------|-----------|---|
| PROJECT NO: | HWY: | COUNTY: | SHEET NO: | E |
|-------------|------|---------|-----------|---|

STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

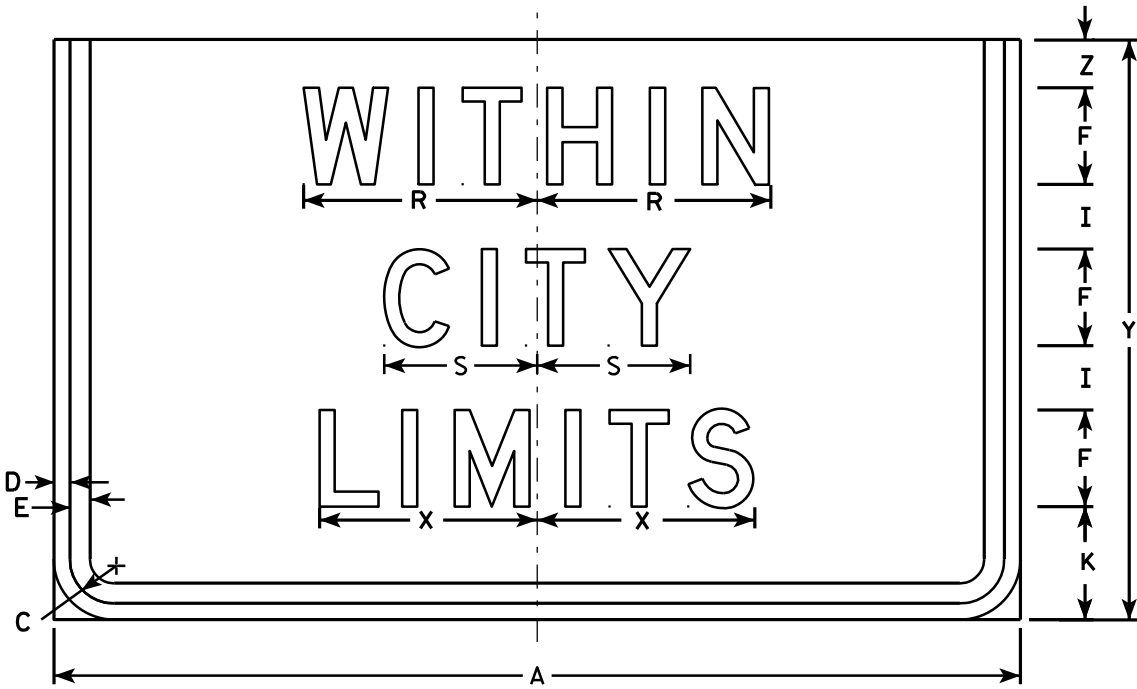
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M6-4.7

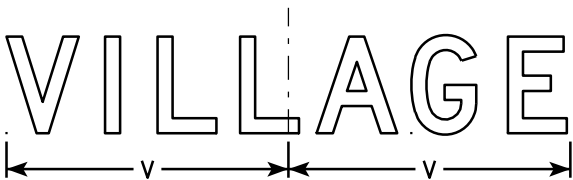


R10-64



R10-64F

| Area sq. ft. |
|-----------------|
| 3.75 |
| 7.0 |



| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | O | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------------------------------|-----------------------------|-----------------------------|---|---|-------------------------------|---|---|-------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|--------------------------------|-------------------------------|-------------------------------|---|-------------------------------|--------------------------------|-------------------------------|-------------------------------|----|-------------------------------|-----------------|
| 1 | 30 | 36 | 1 ³ / ₈ | ¹ / ₂ | ⁵ / ₈ | 3 | 4 | 3 | 2 | | 3 ¹ / ₂ | 9 ³ / ₄ | 11 ⁷ / ₈ | 11 ¹ / ₈ | 4 ³ / ₈ | 3 ³ / ₄ | 12 ⁷ / ₈ | 7 ¹ / ₄ | 4 ³ / ₄ | | 8 ¹ / ₄ | 8 ³ / ₄ | ⁵ / ₈ | 6 ³ / ₄ | 18 | 1 ¹ / ₂ | 7.5 |
| 2S | 30 | 36 | 1 ³ / ₈ | ¹ / ₂ | ⁵ / ₈ | 3 | 4 | 3 | 2 | | 3 ¹ / ₂ | 9 ³ / ₄ | 11 ⁷ / ₈ | 11 ¹ / ₈ | 4 ³ / ₈ | 3 ³ / ₄ | 12 ⁷ / ₈ | 7 ¹ / ₄ | 4 ³ / ₄ | | 8 ¹ / ₄ | 8 ³ / ₄ | ⁵ / ₈ | 6 ³ / ₄ | 18 | 1 ¹ / ₂ | 7.5 |
| 2M | 30 | 36 | 1 ³ / ₈ | ¹ / ₂ | ⁵ / ₈ | 3 | 4 | 3 | 2 | | 3 ¹ / ₂ | 9 ³ / ₄ | 11 ⁷ / ₈ | 11 ¹ / ₈ | 4 ³ / ₈ | 3 ³ / ₄ | 12 ⁷ / ₈ | 7 ¹ / ₄ | 4 ³ / ₄ | | 8 ¹ / ₄ | 8 ³ / ₄ | ⁵ / ₈ | 6 ³ / ₄ | 18 | 1 ¹ / ₂ | 7.5 |
| 3 | 42 | 48 | 1 ³ / ₈ | ¹ / ₂ | ⁵ / ₈ | 4 | 5 | 4 ¹ / ₂ | 3 | | 4 | 12 ¹ / ₄ | 14 ⁷ / ₈ | 14 ¹ / ₈ | 5 ¹ / ₄ | 4 ³ / ₄ | 16 ¹ / ₄ | 9 | 6 | | 11 | 11 ¹ / ₄ | 1 ¹ / ₂ | 8 ¹ / ₂ | 24 | 2 | 14.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

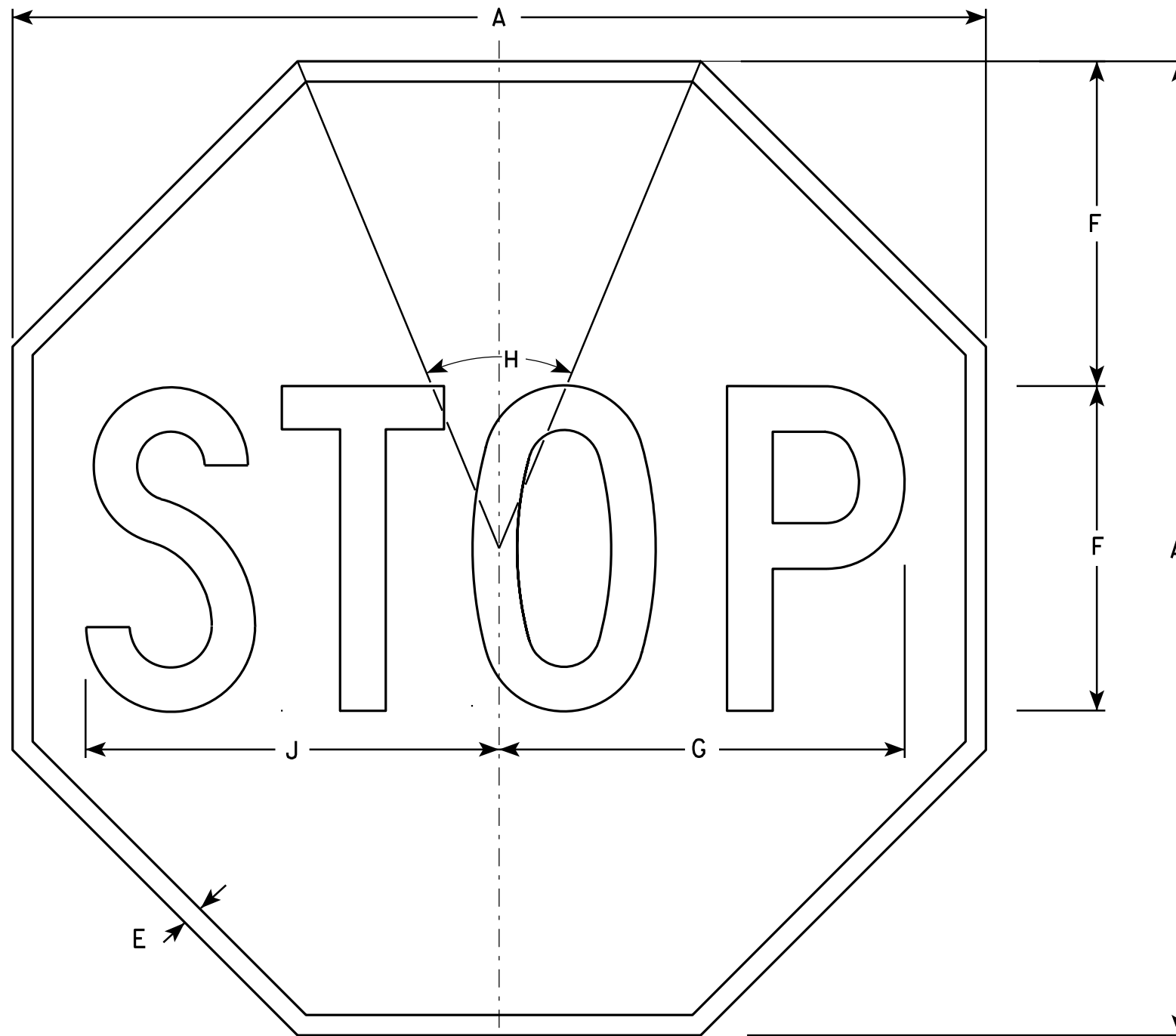
E

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:

Background - White

Message - Black
3. Message Series - D See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 2 of R10-64F is Series C for "TOWNSHIP" Only



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

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 sq. ft. |
|------|----|---|---|---|-----|----|--------|-----|---|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | | | | 3/8 | 8 | 10 | 45° | | 10 1/4 | | | | | | | | | | | | | | | | | 3.31 |
| 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 |

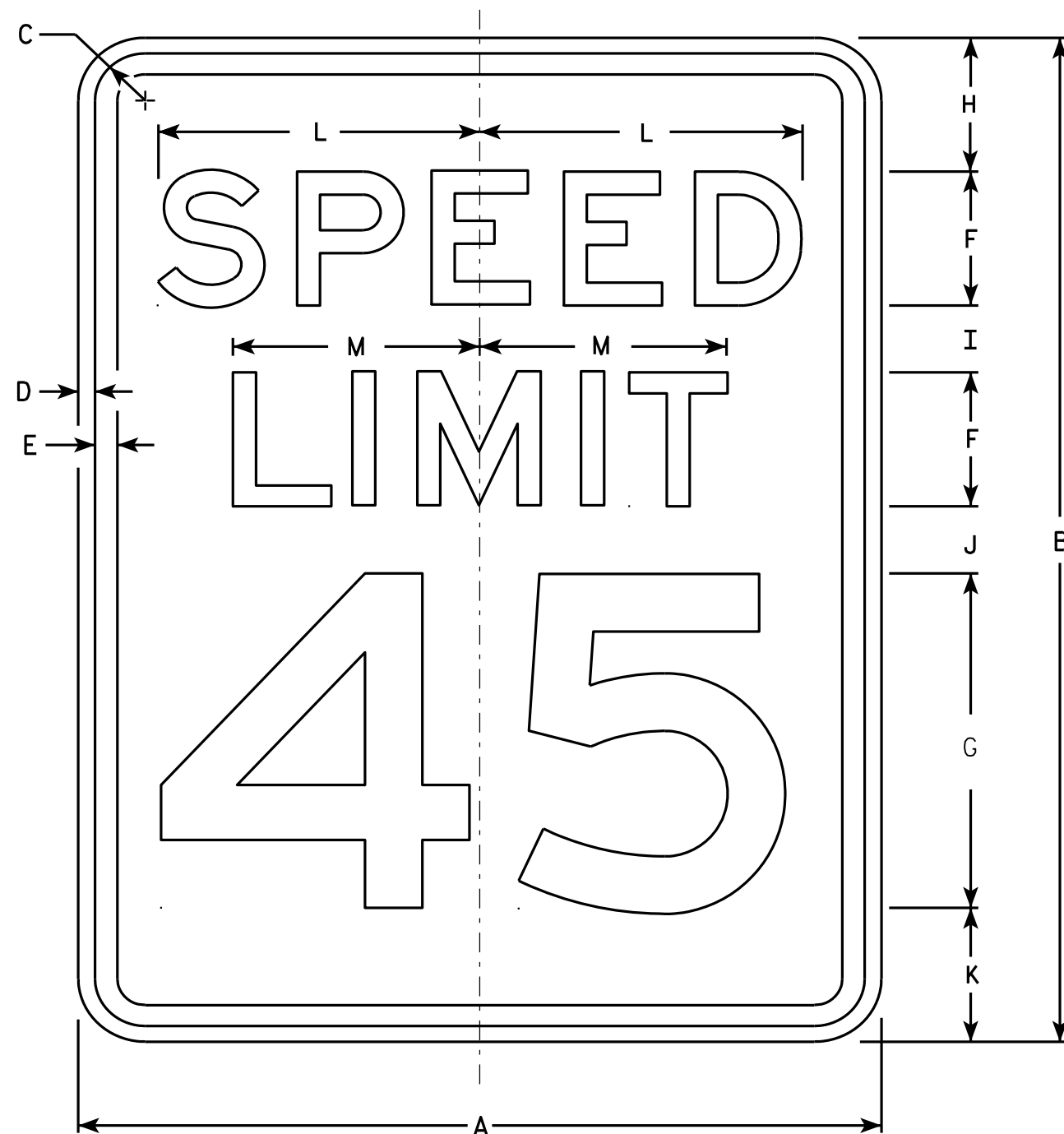
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

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



R2-1

NOTES

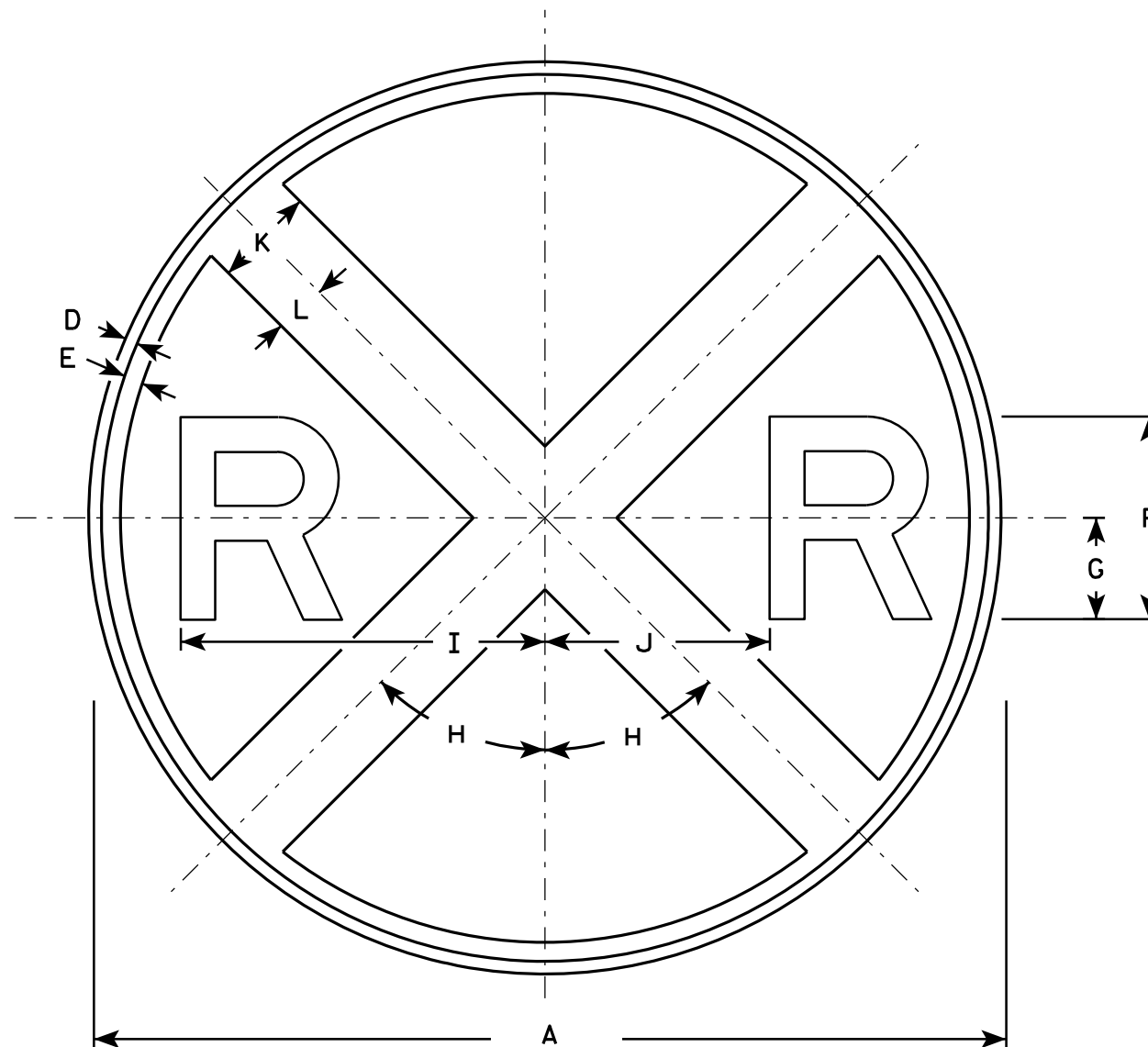
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|----|---|-------|-------|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 18 | 24 | 1 1/8 | 3/8 | 1/2 | 3 | 8 | 3 | 2 | 2 | 3 | 7 1/4 | 5 1/2 | | | | | | | | | | | | | | 3.0 |
| 2S | 24 | 30 | 1 1/8 | 3/8 | 1/2 | 4 | 10 | 3 | 2 1/4 | 3 3/8 | 3 3/8 | 9 5/8 | 7 3/8 | | | | | | | | | | | | | | 5.0 |
| 2M | 30 | 36 | 1 3/8 | 1/2 | 5/8 | 5 | 12 | 5 | 2 1/2 | 2 1/2 | 4 | 12 | 9 1/4 | | | | | | | | | | | | | | 7.5 |
| 3 | 36 | 48 | 1 3/8 | 1/2 | 5/8 | 6 | 14 | 6 | 5 | 5 | 6 | 14 3/8 | 11 | | | | | | | | | | | | | | 12.0 |
| 4 | 36 | 48 | 1 3/8 | 1/2 | 5/8 | 6 | 14 | 6 | 5 | 5 | 6 | 14 3/8 | 11 | | | | | | | | | | | | | | 12.0 |
| 5 | 48 | 60 | 2 1/4 | 3/4 | 1 | 8 | 20 | 6 | 4 1/2 | 6 3/4 | 6 3/4 | 19 1/4 | 14 5/8 | | | | | | | | | | | | | | 20.0 |

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: E



W10-1

NOTES

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

7

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 sq. ft. |
|------|----|---|---|---------------|----------------|----|----------------|-----|-----------------|-----------------|---|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 30 | | | $\frac{3}{8}$ | $\frac{5}{8}$ | 7 | $3\frac{1}{2}$ | 45° | $12\frac{3}{8}$ | $7\frac{1}{8}$ | 3 | $1\frac{1}{2}$ | | | | | | | | | | | | | | | 4.91 |
| 2S | 36 | | | $\frac{5}{8}$ | $\frac{3}{4}$ | 8 | 4 | 45° | $14\frac{3}{8}$ | $8\frac{5}{8}$ | 4 | 2 | | | | | | | | | | | | | | | 7.07 |
| 2M | 36 | | | $\frac{5}{8}$ | $\frac{3}{4}$ | 8 | 4 | 45° | $14\frac{3}{8}$ | $8\frac{5}{8}$ | 4 | 2 | | | | | | | | | | | | | | | 7.07 |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 48 | | | $\frac{3}{4}$ | $1\frac{1}{4}$ | 10 | 5 | 45° | $18\frac{3}{8}$ | $11\frac{5}{8}$ | 5 | $2\frac{1}{2}$ | | | | | | | | | | | | | | | 12.57 |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W10-1

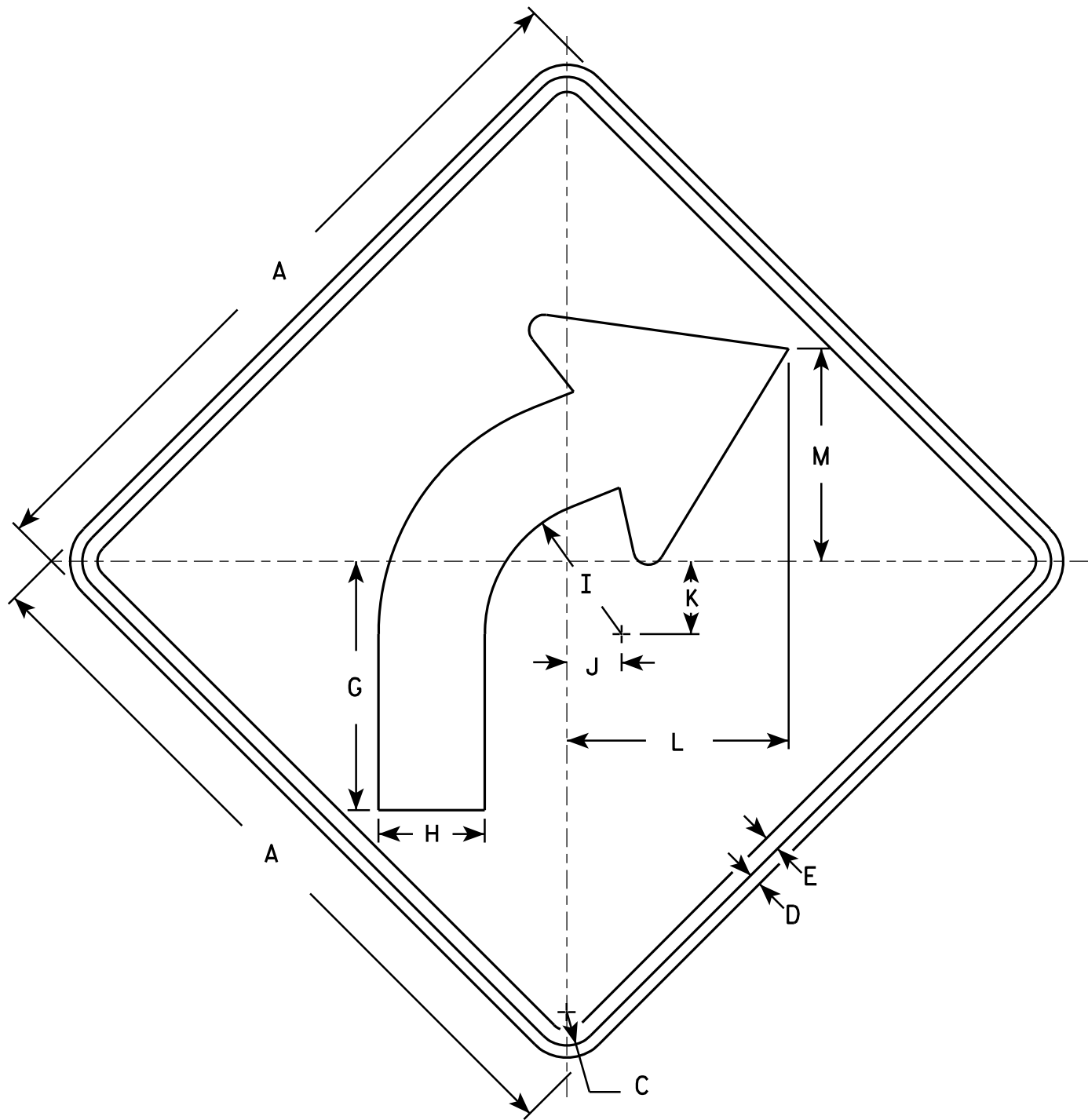
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/15/11 PLATE NO. W10-1.7

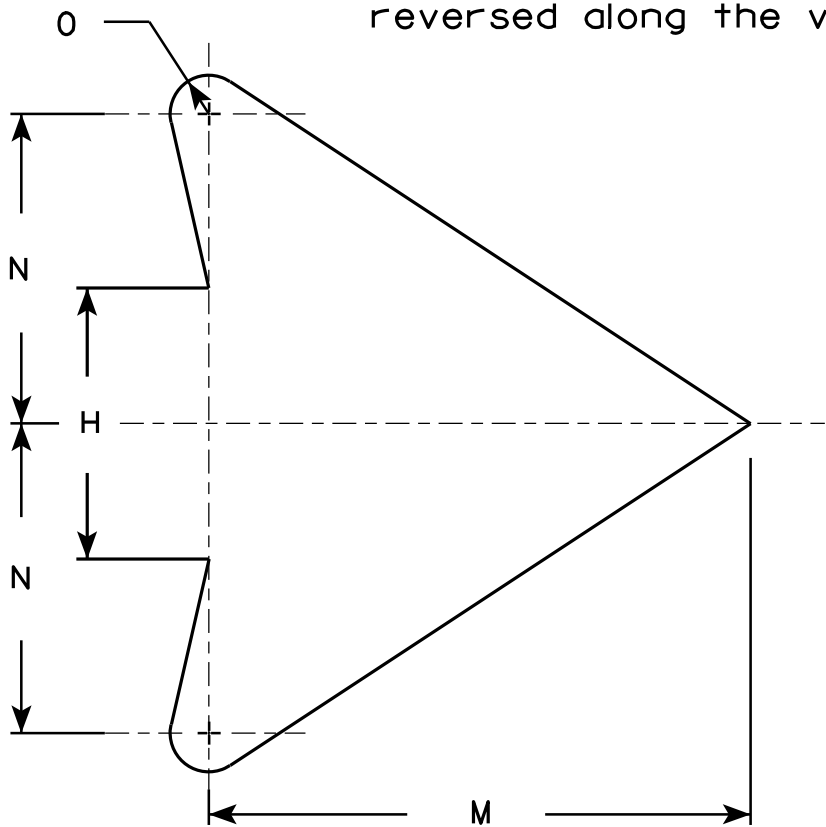
PROJECT NO: HWY: COUNTY: SHEET NO: E

NOTES

1. Sign is Type II - Type F Reflective - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is
reversed along the vertical centerline.



W1-2R



ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|--------|-------|-------|-------|-------|--------|--------|---|-----|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | | 1 1/8 | 3/8 | 1/2 | | 8 1/4 | 3 1/2 | 4 1/2 | 1 3/4 | 2 3/8 | 7 1/4 | 7 | 4 | 1/2 | | | | | | | | | | | | 4.0 |
| 2S | 30 | | 1 3/8 | 1/2 | 5/8 | | 10 1/4 | 4 3/8 | 5 5/8 | 2 1/4 | 3 | 9 1/8 | 8 3/4 | 5 | 5/8 | | | | | | | | | | | | 6.25 |
| 2M | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/8 | 5 1/4 | 6 3/4 | 2 5/8 | 3 1/2 | 10 7/8 | 10 1/2 | 6 | 3/4 | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/8 | 5 1/4 | 6 3/4 | 2 5/8 | 3 1/2 | 10 7/8 | 10 1/2 | 6 | 3/4 | | | | | | | | | | | | 9.0 |
| 4 | 36 | | 1 5/8 | 5/8 | 3/4 | | 12 3/8 | 5 1/4 | 6 3/4 | 2 5/8 | 3 1/2 | 10 7/8 | 10 1/2 | 6 | 3/4 | | | | | | | | | | | | 9.0 |
| 5 | 48 | | 2 1/4 | 3/4 | 1 | | 16 1/2 | 7 | 9 | 3 1/2 | 4 5/8 | 14 1/2 | 14 | 8 | 1 | | | | | | | | | | | | 16.0 |

STANDARD SIGN
W1-2

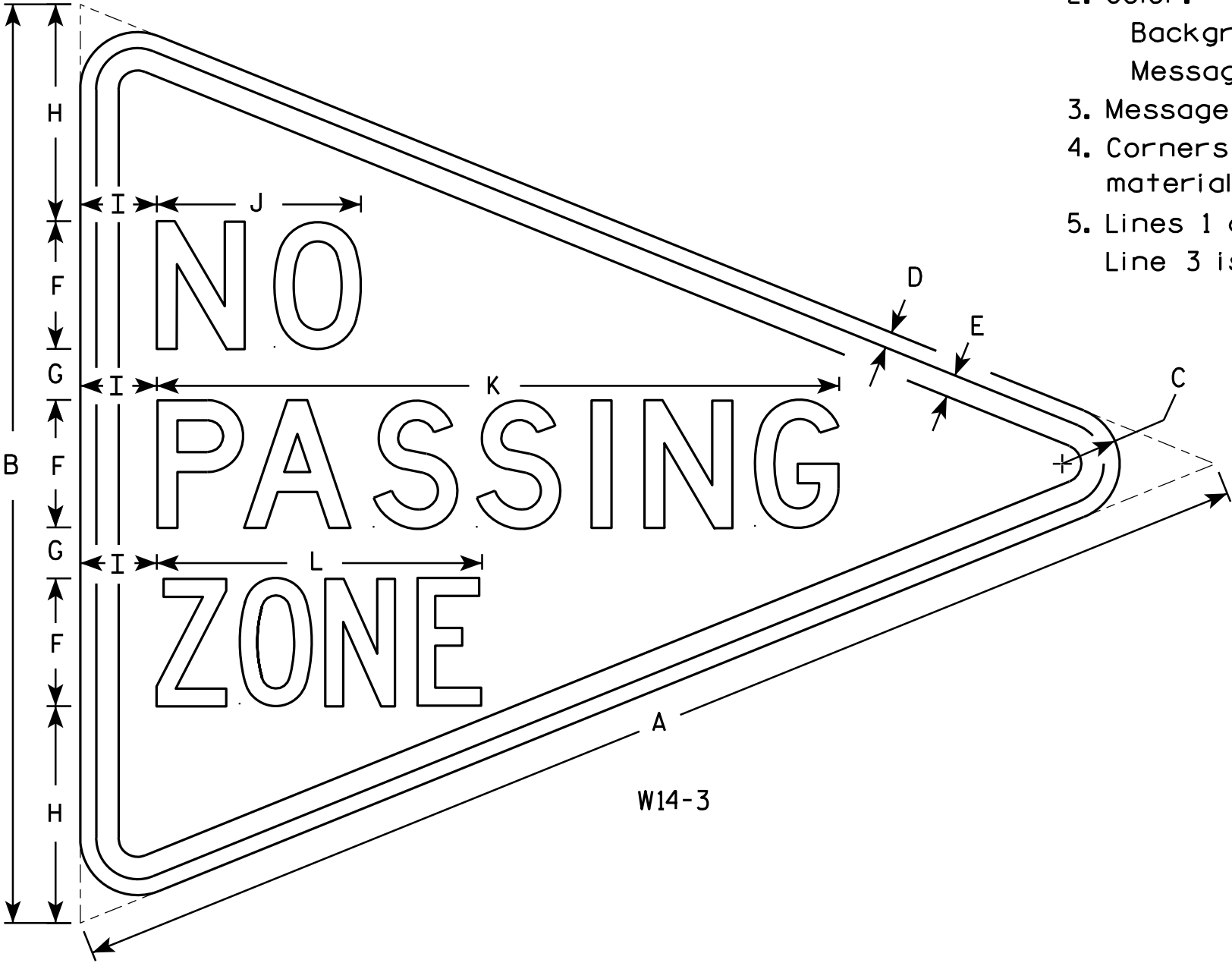
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - See note 5
- 4. Corners and borders shall be rounded on all base materials for this sign.
- 5. Lines 1 and 2 are Series D.
Line 3 is series C.



W14-3

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-------|---|---|-------|---|--------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 48 | 36 | 2 1/4 | 5/8 | 7/8 | 5 | 2 | 8 1/2 | 3 | 8 | 26 3/4 | 12 3/4 | | | | | | | | | | | | | | | 6.0 |
| 2M | 48 | 36 | 2 1/4 | 5/8 | 7/8 | 5 | 2 | 8 1/2 | 3 | 8 | 26 3/4 | 12 3/4 | | | | | | | | | | | | | | | 6.0 |
| 3 | 64 | 48 | 3 | 3/4 | 1 1/4 | 6 | 3 | 12 | 4 | 10 3/4 | 33 5/8 | 16 1/2 | | | | | | | | | | | | | | | 10.7 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W14-3

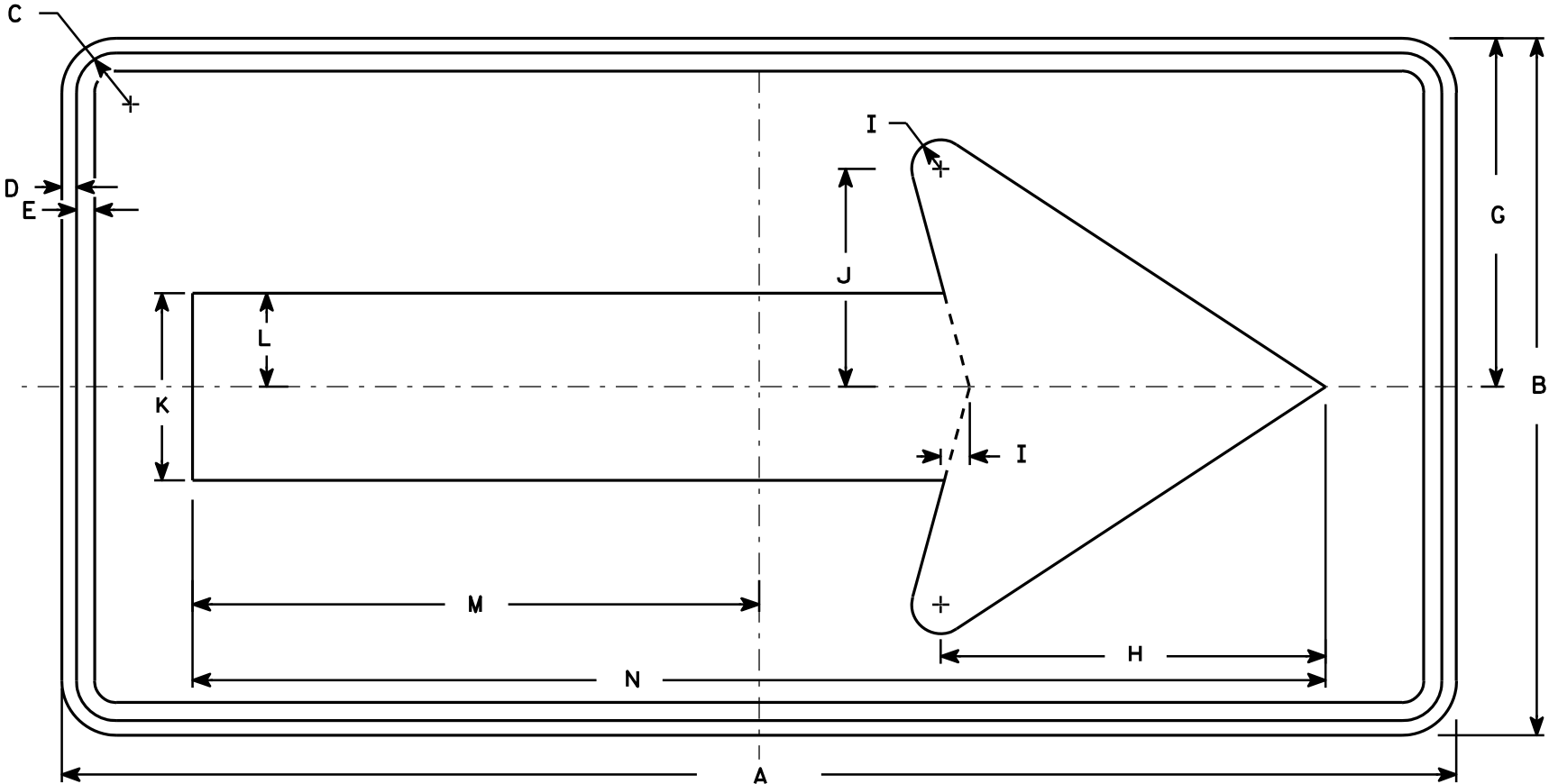
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

NOTES

1. Sign is Type II - Type F Reflective - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.



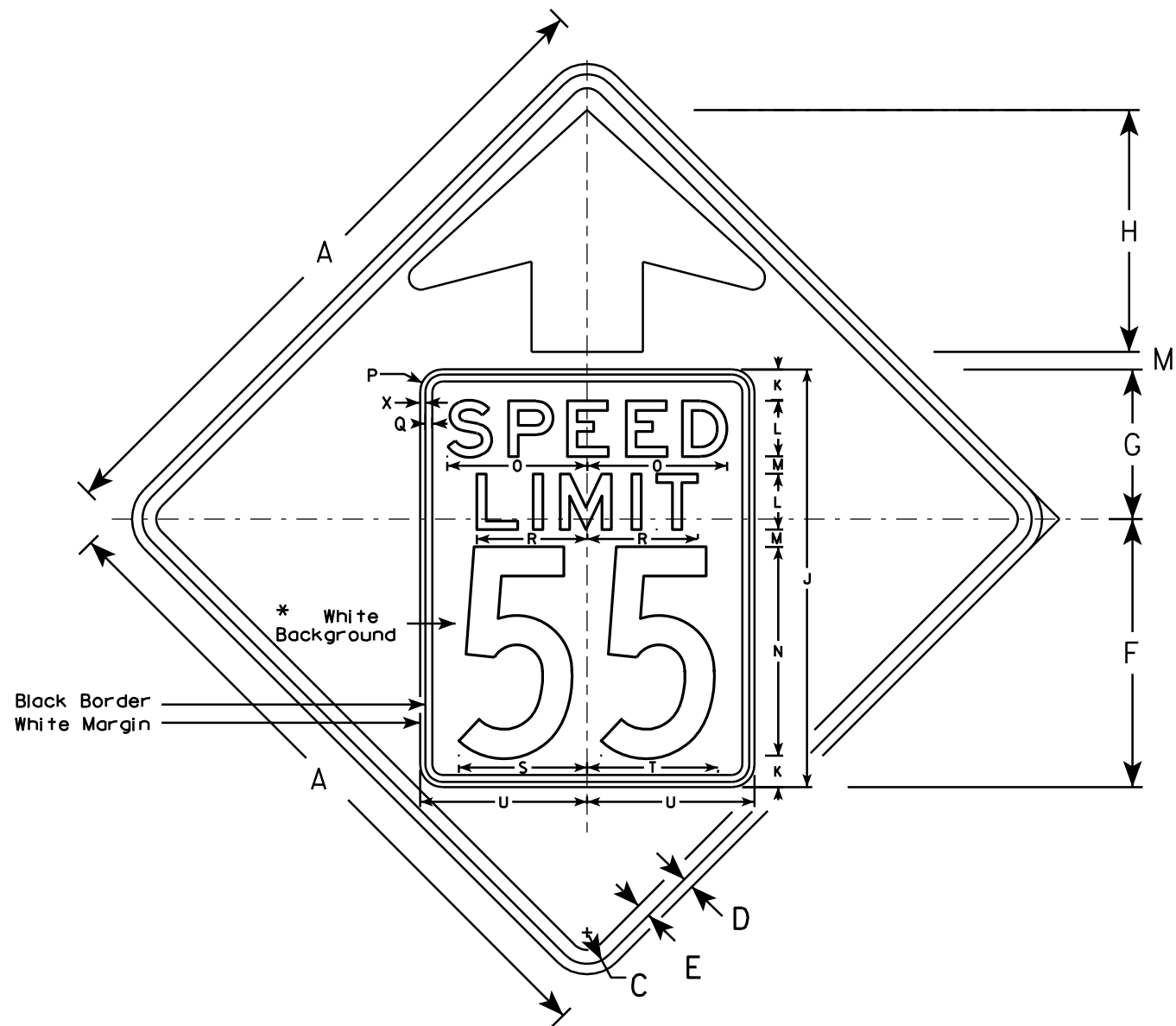
W1-6

| 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 sq. ft. |
|------|----|----|-------|-----|-----|---|----|--------|-------|-------|-------|-------|--------|--------|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 36 | 18 | 1 1/8 | 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 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 2M | 48 | 24 | 1 3/8 | 1/2 | 5/8 | | 12 | 13 1/4 | 1 | 7 1/2 | 6 1/2 | 3 1/4 | 19 1/2 | 39 | | | | | | | | | | | | | 8.0 |
| 3 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 4 | 60 | 30 | 1 3/8 | 1/2 | 5/8 | | 15 | 16 1/4 | 1 1/4 | 9 1/4 | 8 | 4 | 24 3/8 | 48 3/4 | | | | | | | | | | | | | 12.5 |
| 5 | 96 | 48 | 2 1/4 | 3/4 | 1 | | 24 | 26 1/2 | 2 | 15 | 13 | 6 1/2 | 39 | 78 | | | | | | | | | | | | | 32.0 |

STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W1-6.8

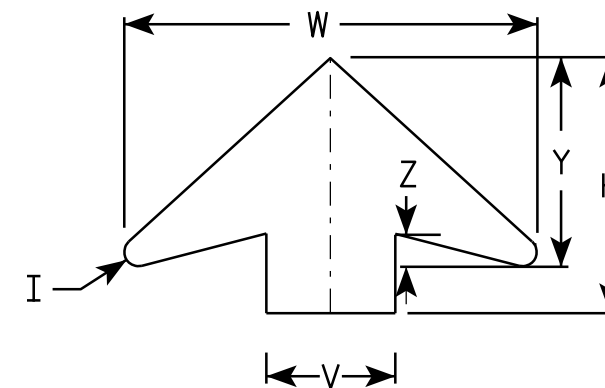


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
Background - YELLOW*
Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|--------|--------|--------|-----|----|-------|---|-------|----|-------|-------|-----|-------|-------|-------|----|---|--------|-----|-------|-------|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 36 | | 1 5⁄8 | 5⁄8 | 3⁄4 | 14 1⁄2 | 9 1⁄2 | 11 1⁄2 | 5⁄8 | 24 | 2 | 3 | 1 | 12 | 7 1⁄8 | 1 1⁄2 | 3⁄8 | 5 3⁄4 | 7 1⁄4 | 7 1⁄8 | 9 | 6 | 19 1⁄4 | 3⁄8 | 9 3⁄4 | 1 5⁄8 | 9.0 |
| 2M | 36 | | 1 5⁄8 | 5⁄8 | 3⁄4 | 14 1⁄2 | 9 1⁄2 | 11 1⁄2 | 5⁄8 | 24 | 2 | 3 | 1 | 12 | 7 1⁄8 | 1 1⁄2 | 3⁄8 | 5 3⁄4 | 7 1⁄4 | 7 1⁄8 | 9 | 6 | 19 1⁄4 | 3⁄8 | 9 3⁄4 | 1 5⁄8 | 9.0 |
| 3 | 36 | | 1 5⁄8 | 5⁄8 | 3⁄4 | 14 1⁄2 | 9 1⁄2 | 11 1⁄2 | 5⁄8 | 24 | 2 | 3 | 1 | 12 | 7 1⁄8 | 1 1⁄2 | 3⁄8 | 5 3⁄4 | 7 1⁄4 | 7 1⁄8 | 9 | 6 | 19 1⁄4 | 3⁄8 | 9 3⁄4 | 1 5⁄8 | 9.0 |
| 4 | 48 | | 2 1⁄4 | 3⁄4 | 1 | 19 1⁄4 | 10 3⁄4 | 17 3⁄8 | 7⁄8 | 30 | 2 1⁄4 | 4 | 1 1⁄4 | 15 | 10 | 1 5⁄8 | 1⁄2 | 8 | 9 1⁄4 | 9 3⁄8 | 12 | 8 | 25 5⁄8 | 3⁄8 | 13 | 2 | 16.0 |
| 5 | 48 | | 2 1⁄4 | 3⁄4 | 1 | 19 1⁄4 | 10 3⁄4 | 17 3⁄8 | 7⁄8 | 30 | 2 1⁄4 | 4 | 1 1⁄4 | 15 | 10 | 1 5⁄8 | 1⁄2 | 8 | 9 1⁄4 | 9 3⁄8 | 12 | 8 | 25 5⁄8 | 3⁄8 | 13 | 2 | 16.0 |

STANDARD SIGN

W3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

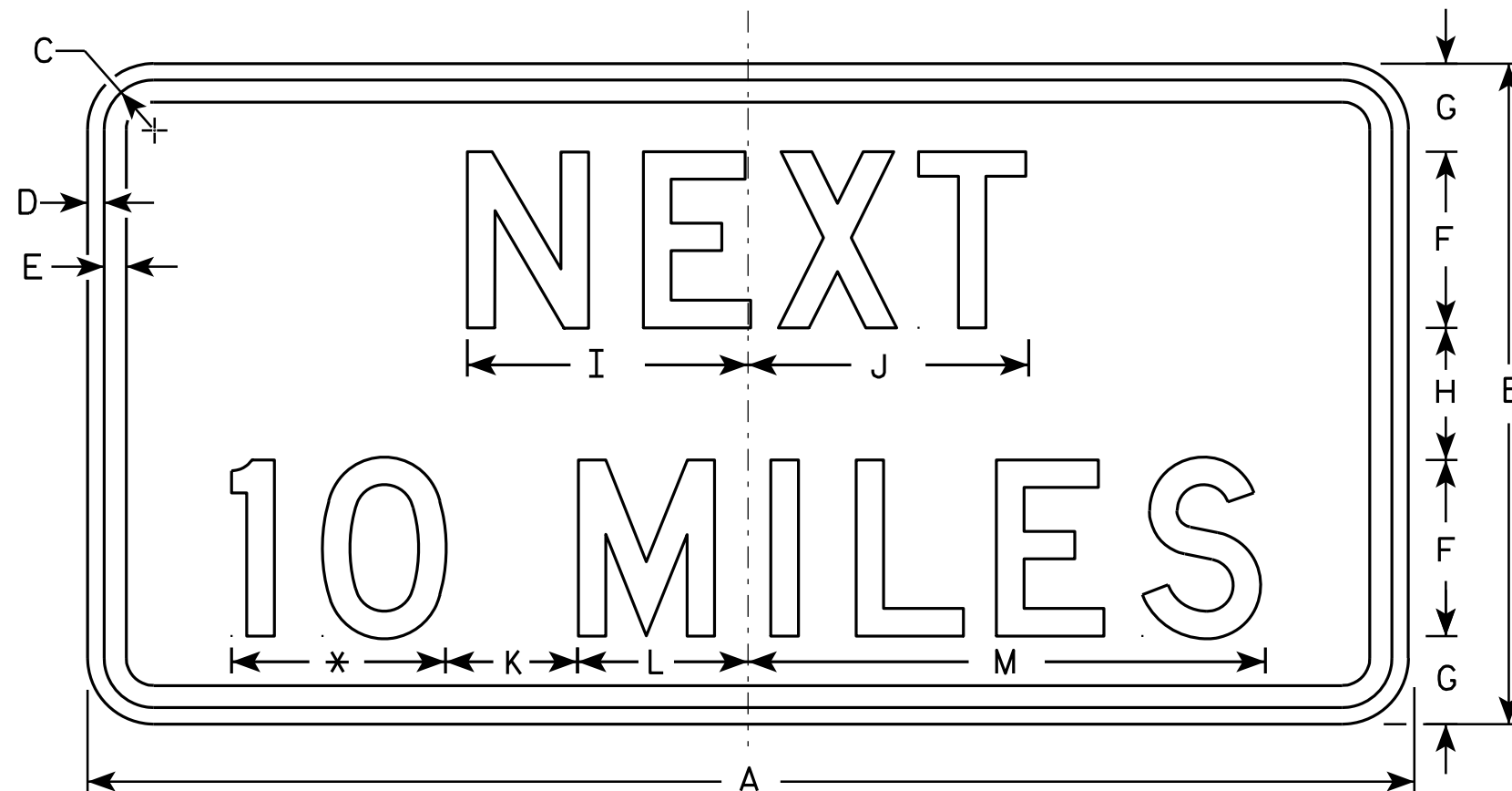
SHEET NO:

E

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

* See note 5



W57-51

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|----|-------|-----|-----|---|-------|-------|-------|--------|---|-------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | 24 | 12 | 1 1/8 | 3/8 | 3/8 | 3 | 1 3/4 | 2 1/2 | 5 | 5 1/8 | 3 | 2 3/4 | 9 5/8 | | | | | | | | | | | | | | 2.0 |
| 2S | 30 | 15 | 1 1/8 | 3/8 | 1/2 | 4 | 2 | 3 | 6 3/8 | 6 3/8 | 3 | 3 7/8 | 11 3/4 | | | | | | | | | | | | | | 3.13 |
| 2M | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 5 | 2 5/8 | 2 3/4 | 7 7/8 | 8 | 5 | 4 1/8 | 15 3/8 | | | | | | | | | | | | | | 4.5 |
| 3 | 36 | 18 | 1 1/8 | 3/8 | 1/2 | 5 | 2 5/8 | 2 3/4 | 7 7/8 | 8 | 5 | 4 1/8 | 15 3/8 | | | | | | | | | | | | | | 4.5 |
| 4 | 48 | 24 | 1 3/8 | 1/2 | 5/8 | 6 | 3 1/2 | 5 | 10 | 10 1/8 | 6 | 5 5/8 | 19 | | | | | | | | | | | | | | 8.0 |
| 5 | 48 | 24 | 1 3/8 | 1/2 | 5/8 | 6 | 3 1/2 | 5 | 10 | 10 1/8 | 6 | 5 5/8 | 19 | | | | | | | | | | | | | | 8.0 |

STANDARD SIGN

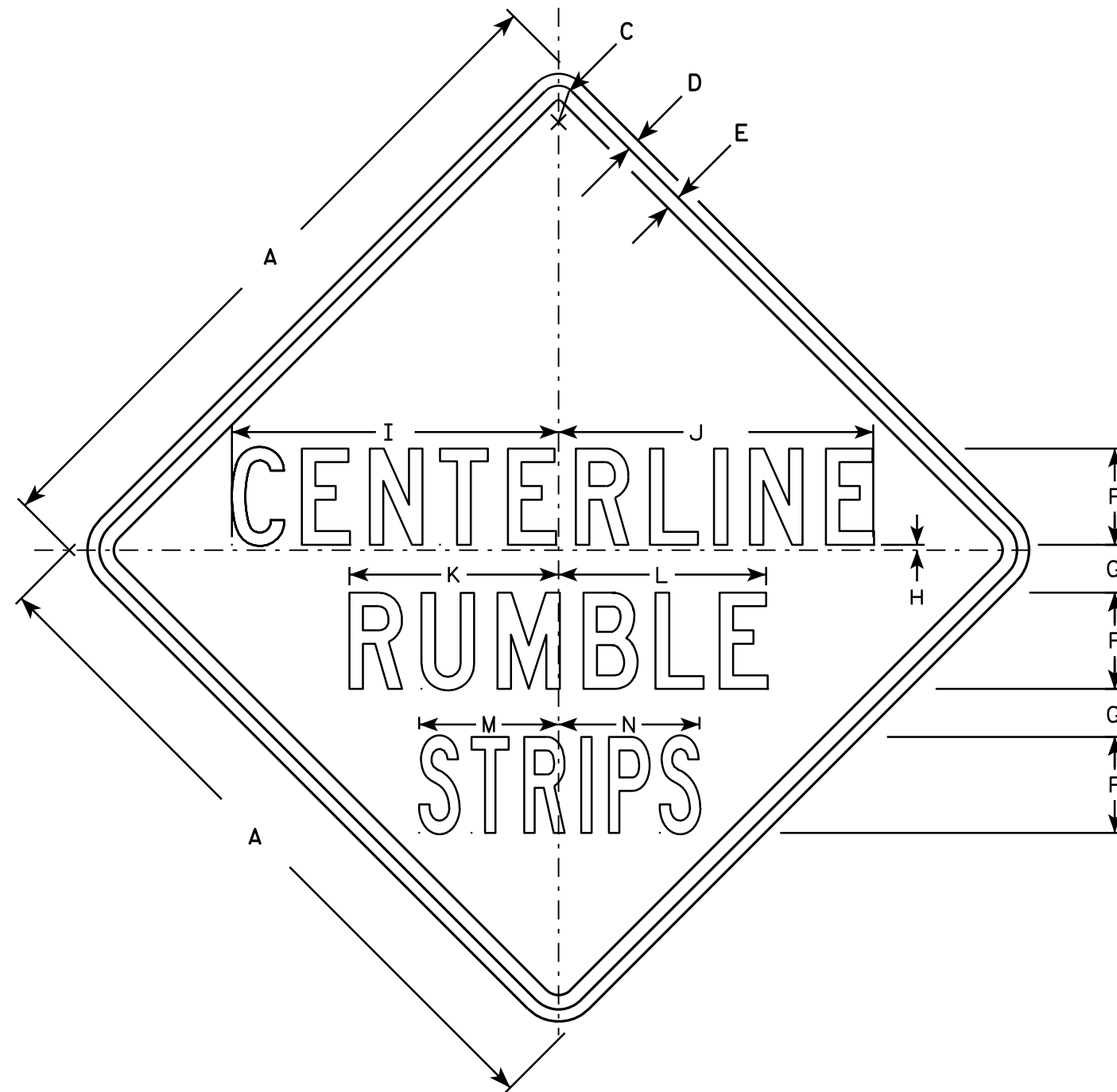
W57-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/18/11 PLATE NO. W57-51.8

PROJECT NO: HWY: COUNTY: SHEET NO: E



W8-70

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW
Message - BLACK
3. Message Series - SEE NOTE 5.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 and 2 are Series C.
Line 3 is Series B.

| SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | Area sq. ft. |
|------|----|---|-------|-----|-----|---|-------|-----|----|--------|--------|--------|-------|-------|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2S | 36 | | 1 5⁄8 | 5⁄8 | 3⁄4 | 5 | 2 1⁄2 | 1⁄4 | 17 | 16 3⁄8 | 10 7⁄8 | 10 3⁄4 | 7 1⁄4 | 7 3⁄8 | | | | | | | | | | | | | 9.0 |
| 2M | 36 | | 1 5⁄8 | 5⁄8 | 3⁄4 | 5 | 2 1⁄2 | 1⁄4 | 17 | 16 3⁄8 | 10 7⁄8 | 10 3⁄4 | 7 1⁄4 | 7 3⁄8 | | | | | | | | | | | | | 9.0 |
| 3 | 36 | | 1 5⁄8 | 5⁄8 | 3⁄4 | 5 | 2 1⁄2 | 1⁄4 | 17 | 16 3⁄8 | 10 7⁄8 | 10 3⁄4 | 7 1⁄4 | 7 3⁄8 | | | | | | | | | | | | | 9.0 |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STANDARD SIGN
W8-70

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/23/11 PLATE NO. W8-70.2



Wisconsin Department of Transportation

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